RTI Laboratories, Inc.

Date: *13-Jun.-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: 1205939

CASE NARRATIVE

SAMPLE RECEIPT:
Samples were received at the RTI Laboratory, Livonia, MI via commercial delivery on 5/23/2012 in good condition. The sample set consisted of 46 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 48955:

- Sample ID 1205939-001Adup elevated RPD results for m,p-Xylene (200%) and Xylenes, total (200%) due to low sample concentration.

Air-Phase Petroleum Hydrocarbons Analyses:

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

Surrogate recoveries were within established control limits.

Analytical Sequence ID 48954:

- Sample ID 1205846-005Adup exhibited elevated RPD result for C9-C12 Aliphatic Hydrocarbons (200%) due to low sample concentration.

Analytical Sequence ID 48985:

- Sample ID 1205939-012Adup exhibited elevated RPD result for C9-C12 Aliphatic Hydrocarbons (200%) due to low sample concentration.

RTI Laboratories, Inc.

Date: *13-Jun.-12*

CLIENT: Shaw Environmental & Infrastructure, Inc.

Project: Kirtland AFB
CO#: 501
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CASE NARRATIVE

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: June 13, 2012_
Charles O'Bryan, Director, Quality Management

RTI Laboratories - Definitions and Acronyms

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Definitions:

% REC: Percent Recovery; a measure of accuracy expressed as a percentage of a measured (recovered) concentration compared to the known concentration added to the sample.

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

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

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 mass of target analytes to a specified amount of de-ionized water and prepared with the batch of samples, used to calculate Accuracy (%REC).

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

MBLK: Method Blank; a sample of similar matrix that is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedure, and in which no target analytes
or interferences are present at concentrations that impact the analytical results for sample analyses.

MS: Matrix Spike; prepared by adding a known mass 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: The duplicate sample of the MS, used to calculate both Accuracy (%REC) and Precision (%RPD)

PL: Permit limit; only applicable to wastewater reports.

Qual: Qualifier that applies to the analyte reported

Result: Analyte concentration reported

RL: Reporting Limit/Limit of Quantitation; the limit to which data is compared for reporting. Analyte concentrations below the reporting limit are reported as ND or with a “J” qualifier.

Units: The units in which the analyte concentration is reported.

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
J	Estimated concentration
M	Manual Integration used to determine area response
ND	Not Detected at the Reporting Limit
PL	Permit Limit
R	RPD outside accepted recovery limits
RL	Reporting Limit
S	Spike Recovery outside accepted recovery limits

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV087

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

Samples Shipment Date: 17 MAY 2012
Lab Destination: RTI Laboratories
Lab Contact: Mike Truchan
Project Contact: Pamela Moss
Carrier/Waybill No.: UPS/2323121360

1205939

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

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

Special Instructions:

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

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

1. Relinquished By (Signature/Affiliation)	Date: 5-17-12 Time: 14:30	1. Received By (Signature/Affiliation) Andrew Flores/RTI Labs	Date: 5-23-12 Time: 10:21
2. Relinquished By (Signature/Affiliation)	Date: Time:	2. Received By (Signature/Affiliation)	Date: Time:
3. Relinquished 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
VA1316	SVMW-01-050-GS-VA1316-REG	17 MAY 2012	10:33	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1181
VA1316	SVMW-01-050-GS-VA1316-REG	17 MAY 2012	10:33	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1317	SVMW-01-100-GS-VA1317-REG	17 MAY 2012	11:03	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1182
VA1317	SVMW-01-100-GS-VA1317-REG	17 MAY 2012	11:03	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1318	SVMW-01-250-GS-VA1318-REG	17 MAY 2012	11:37	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1185
VA1318	SVMW-01-250-GS-VA1318-REG	17 MAY 2012	11:37	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1319	SVMW-01-300-GS-VA1319-REG	17 MAY 2012	12:07	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by			N		1133

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1205939

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV087

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
							MA DEP, VOCs / TPH by TO-15					
VA1319	SVMW-01-300-GS-VA1319-REG	17 MAY 2012	12:07	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1323	SVMW-03-050-GS-VA1323-REG	17 MAY 2012	8:59	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0812
VA1323	SVMW-03-050-GS-VA1323-REG	17 MAY 2012	8:59	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1324	SVMW-03-100-GS-VA1324-REG	17 MAY 2012	9:32	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0636
VA1324	SVMW-03-100-GS-VA1324-REG	17 MAY 2012	9:32	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1325	SVMW-03-250-GS-VA1325-REG	17 MAY 2012	10:12	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0627
VA1325	SVMW-03-250-GS-VA1325-REG	17 MAY 2012	10:12	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1326	SVMW-03-250-GS-VA1326-FD	17 MAY 2012	10:12	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0711
VA1326	SVMW-03-250-GS-VA1326-FD	17 MAY 2012	10:12	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1327	SVMW-03-300-GS-VA1327-REG	17 MAY 2012	10:58	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0514
VA1327	SVMW-03-300-GS-VA1327-REG	17 MAY 2012	10:58	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1345	SVMW-08-050-GS-VA1345-REG	15 MAY 2012	13:36	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1209
VA1345	SVMW-08-050-GS-VA1345-REG	15 MAY 2012	13:36	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1346	SVMW-08-100-GS-VA1346-REG	15 MAY 2012	14:04	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0692
VA1346	SVMW-08-100-GS-VA1346-REG	15 MAY 2012	14:04	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1347	SVMW-08-250-GS-VA1347-REG	15 MAY 2012	14:32	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0684
VA1347	SVMW-08-250-GS-VA1347-REG	15 MAY 2012	14:32	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1398	KAFB-106108-025-GS-VA1398-REG	15 MAY 2012	14:52	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1191
VA1398	KAFB-106108-025-GS-VA1398-REG	15 MAY 2012	14:52	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1399	KAFB-106108-050-GS-VA1399-REG	15 MAY 2012	15:34	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1192
VA1399	KAFB-106108-050-GS-VA1399-REG	15 MAY 2012	15:34	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1400	KAFB-106108-050-GS-VA1400-FD	15 MAY 2012	15:34	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1190
VA1400	KAFB-106108-050-GS-VA1400-FD	15 MAY 2012	15:34	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1401	KAFB-106108-150-GS-VA1401-REG	16 MAY 2012	8:30	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0695
VA1401	KAFB-106108-150-GS-VA1401-REG	16 MAY 2012	8:30	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1402	KAFB-106108-250-GS-VA1402-REG	16 MAY 2012	9:08	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0662
VA1402	KAFB-106108-250-GS-VA1402-REG	16 MAY 2012	9:08	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV087

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1403	KAFB-106108-350-GS-VA1403-REG	16 MAY 2012	9:44	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0656
VA1403	KAFB-106108-350-GS-VA1403-REG	16 MAY 2012	9:44	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1404	KAFB-106108-450-GS-VA1404-REG	16 MAY 2012	10:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		554
VA1404	KAFB-106108-450-GS-VA1404-REG	16 MAY 2012	10:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1408	KAFB-106109-250-GS-VA1408-REG	15 MAY 2012	12:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0579
VA1408	KAFB-106109-250-GS-VA1408-REG	15 MAY 2012	12:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1409	KAFB-106109-350-GS-VA1409-REG	15 MAY 2012	13:00	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0689
VA1409	KAFB-106109-350-GS-VA1409-REG	15 MAY 2012	13:00	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1410	KAFB-106109-350-GS-VA1410-FD	15 MAY 2012	13:00	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0797
VA1410	KAFB-106109-350-GS-VA1410-FD	15 MAY 2012	13:00	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1411	KAFB-106109-450-GS-VA1411-REG	15 MAY 2012	13:55	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0749
VA1411	KAFB-106109-450-GS-VA1411-REG	15 MAY 2012	13:55	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1417	KAFB-106110-450-GS-VA1417-REG	15 MAY 2012	12:26	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1223
VA1417	KAFB-106110-450-GS-VA1417-REG	15 MAY 2012	12:26	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1497	KAFB-106123-025-GS-VA1497-REG	16 MAY 2012	12:12	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1127
VA1497	KAFB-106123-025-GS-VA1497-REG	16 MAY 2012	12:12	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1498	KAFB-106123-050-GS-VA1498-REG	16 MAY 2012	12:37	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1128
VA1498	KAFB-106123-050-GS-VA1498-REG	16 MAY 2012	12:37	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1499	KAFB-106123-050-GS-VA1499-FD	16 MAY 2012	12:37	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		528
VA1499	KAFB-106123-050-GS-VA1499-FD	16 MAY 2012	12:37	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1500	KAFB-106123-150-GS-VA1500-REG	16 MAY 2012	13:45	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0691
VA1500	KAFB-106123-150-GS-VA1500-REG	16 MAY 2012	13:45	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1501	KAFB-106123-250-GS-VA1501-REG	16 MAY 2012	14:21	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0648
VA1501	KAFB-106123-250-GS-VA1501-REG	16 MAY 2012	14:21	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1502	KAFB-106123-350-GS-VA1502-REG	16 MAY 2012	15:02	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1218
VA1502	KAFB-106123-350-GS-VA1502-REG	16 MAY 2012	15:02	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1503	KAFB-106123-450-GS-VA1503-REG	16 MAY 2012	15:43	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1503	KAFB-106123-450-GS-VA1503-REG	16 MAY 2012	15:43	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1219

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV087

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1563	KAFB-106133-025-GS-VA1563-REG	16 MAY 2012	8:29	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1183
VA1563	KAFB-106133-025-GS-VA1563-REG	16 MAY 2012	8:29	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1564	KAFB-106133-050-GS-VA1564-REG	16 MAY 2012	8:46	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1186
VA1564	KAFB-106133-050-GS-VA1564-REG	16 MAY 2012	8:46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1565	KAFB-106133-050-GS-VA1565-FD	16 MAY 2012	8:46	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1136
VA1565	KAFB-106133-050-GS-VA1565-FD	16 MAY 2012	8:46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1566	KAFB-106133-170-GS-VA1566-REG	16 MAY 2012	9:45	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1132
VA1566	KAFB-106133-170-GS-VA1566-REG	16 MAY 2012	9:45	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1567	KAFB-106133-250-GS-VA1567-REG	16 MAY 2012	10:28	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1142
VA1567	KAFB-106133-250-GS-VA1567-REG	16 MAY 2012	10:28	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1568	KAFB-106133-350-GS-VA1568-REG	16 MAY 2012	11:03	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1139
VA1568	KAFB-106133-350-GS-VA1568-REG	16 MAY 2012	11:03	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1569	KAFB-106133-450-GS-VA1569-REG	16 MAY 2012	12:07	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		537
VA1569	KAFB-106133-450-GS-VA1569-REG	16 MAY 2012	12:07	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1590	KAFB-106137-025-GS-VA1590-REG	16 MAY 2012	14:16	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1189
VA1590	KAFB-106137-025-GS-VA1590-REG	16 MAY 2012	14:16	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1591	KAFB-106137-050-GS-VA1591-REG	16 MAY 2012	14:46	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1187
VA1591	KAFB-106137-050-GS-VA1591-REG	16 MAY 2012	14:46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1592	KAFB-106137-150-GS-VA1592-REG	16 MAY 2012	15:30	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1592	KAFB-106137-150-GS-VA1592-REG	16 MAY 2012	15:30	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1184
VA1593	KAFB-106137-250-GS-VA1593-REG	17 MAY 2012	08:25	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0802
VA1593	KAFB-106137-250-GS-VA1593-REG	17 MAY 2012	08:25	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1594	KAFB-106137-350-GS-VA1594-REG	16 MAY 2012	13:30	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1188
VA1594	KAFB-106137-350-GS-VA1594-REG	16 MAY 2012	13:30	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1595	KAFB-106137-450-GS-VA1595-REG	17 MAY 2012	9:02	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0821
VA1595	KAFB-106137-450-GS-VA1595-REG	17 MAY 2012	9:02	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1596	KAFB-106137-450-GS-VA1596-FD	17 MAY 2012	09:02	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0789
VA1596	KAFB-106137-450-GS-VA1596-FD	17 MAY 2012	09:02	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV087

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA8087-TB	FIELDQC-AQ-VA8087-TB-TB	16 MAY 2012	08:00	1 L BOTTLEVAC	1	None Required	VOCs / TPH by TO-15			N		060 2

ROM:
ONDA BAILEY
05) 917-0645
AFB BFF/SHAW E & I, INC.
202 RANDOLPH AVE SE
RTLAND AFB NM 87117

20 LBS 1 OF 5
DWT: 21,14,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4038 4171

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

REF 1:140705
REF 2:BB010030

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

CUSTODY SEAL
DATE 5/17/12
SIGNATURE T Nagel

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

WS 15.0.16 HP Las . 27.0A 04/2012

Fold here and place in label pouch

VA 1323 0812
TB VA 8087 - TB 0602
VA 1345 1209
VA 1592 1184
VA 1325 0627
VA 1324 0636
VA 1596 0789
VA 1591 1187

VA 1327 0814
VA 1326 0711
VA 1590 1189
VA 1400 1190

FROM:
RONDA BAILEY
(505) 917-0645
KAFB BFF/SHAW E & I, INC.
1202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

4 LBS 2 OF 5
DWT: 26,17,15

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4101 5988

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

REF 1:140705
REF 2:BB010030

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

CUSTODY SEAL
DATE 5/17/12
SIGNATURE T Nager

WS 15.0.16 HP LaserJet 4 27.0A 04/2012

Tedlar Bags

FROM:
RONDA BAILEY
(505) 917-0645
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

20 LBS **3 OF 5**
DWT: 19,17,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4133 0397

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

REF 1:140705
REF 2:BB010030

BILLING: P/P

CUSTODY SEAL
DATE 5/17/12
SIGNATURE T Dozier

QEC
Quality Environmental Containe
800-255-3950 • 304-255-390

el pouch

VA 1316	1181
VA 1317	1182
VA 1318	1185
VA 1319	1133
VA 1563	1183
VA 1564	1186
VA 1565	1136
VA 1566	1132
VA 1567	1142
VA 1568	1139
VA 1569	537
VA 1595	0821

ROM:
ONDA BAILEY
05) 917-0645
AFB BFF/SHAW E & I, INC.
202 RANDOLPH AVE SE
IRTLAND AFB NM 87117

28 LBS **4 OF 5**
DWT: 19,17,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4232 3401

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

REF 1:140705
REF 2:BB010030

BILLING: P/P

CUSTODY SEAL
DATE 5/17/12
SIGNATURE T Nagy

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

serJet 4 27.0A 04/2012

e in label pouch

VA1346 0692
1347 0684
1398 1191
1399 1192
1408 0579

VA1409 0689
1410 0797
1411 0749
1417 1223
1594 1188

FROM:
RONDA BAILEY
(505) 917-0645
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

20 LBS **5 OF 5**
DWT: 21,14,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4115 1018

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

REF 1:140705
REF 2:BB010030

BILLING: P/P

CUSTODY SEAL
DATE 5/17/12
SIGNATURE T Roger

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

0A 04/2012

Fold here and place in label pouch

VA 1501 0648
VA 1403 0656
VA 1401 0695
VA 1402 0662
VA 1498 1128
VA 1497 1127
VA 1404 554
VA 1502 1218
VA 1499 528
VA 1593 0802
VA 1503 1219
VA 1500 0691

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV087

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

Samples Shipment Date: 17 MAY 2012
Lab Destination: RTI Laboratories
Lab Contact: Mike Truchan
Project Contact: Pamela Moss
Carrier/Waybill No.: UPS/2323121360

1205939

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

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

Special Instructions:

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

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

1. Relinquished By (Signature/Affiliation) Date: 5-17-12 Time: 14:30
1. Received By (Signature/Affiliation) [illegible]/RTI Labs Date: 5-23-12 Time: 10:21
2. Relinquished By (Signature/Affiliation) Date: Time:
2. Received By (Signature/Affiliation) Date: Time:
3. Relinquished 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
VA1316	SVMW-01-050-GS-VA1316-REG	17 MAY 2012	10:33	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1181
VA1316	SVMW-01-050-GS-VA1316-REG	17 MAY 2012	10:33	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1317	SVMW-01-100-GS-VA1317-REG	17 MAY 2012	11:03	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1182
VA1317	SVMW-01-100-GS-VA1317-REG	17 MAY 2012	11:03	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1318	SVMW-01-250-GS-VA1318-REG	17 MAY 2012	11:37	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1185
VA1318	SVMW-01-250-GS-VA1318-REG	17 MAY 2012	11:37	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1319	SVMW-01-300-GS-VA1319-REG	17 MAY 2012	12:07	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by			N		1133

Shaw™
Shaw E & I, Inc.

1205939

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV087

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
							MA DEP, VOCs / TPH by TO-15					
VA1319	SVMW-01-300-GS-VA1319-REG	17 MAY 2012	12:07	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1323	SVMW-03-050-GS-VA1323-REG	17 MAY 2012	8:59	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0812
VA1323	SVMW-03-050-GS-VA1323-REG	17 MAY 2012	8:59	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1324	SVMW-03-100-GS-VA1324-REG	17 MAY 2012	9:32	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0636
VA1324	SVMW-03-100-GS-VA1324-REG	17 MAY 2012	9:32	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1325	SVMW-03-250-GS-VA1325-REG	17 MAY 2012	10:12	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0627
VA1325	SVMW-03-250-GS-VA1325-REG	17 MAY 2012	10:12	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1326	SVMW-03-250-GS-VA1326-FD	17 MAY 2012	10:12	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0711
VA1326	SVMW-03-250-GS-VA1326-FD	17 MAY 2012	10:12	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1327	SVMW-03-300-GS-VA1327-REG	17 MAY 2012	10:58	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0814
VA1327	SVMW-03-300-GS-VA1327-REG	17 MAY 2012	10:58	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1345	SVMW-08-050-GS-VA1345-REG	15 MAY 2012	13:36	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1209
VA1345	SVMW-08-050-GS-VA1345-REG	15 MAY 2012	13:36	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1346	SVMW-08-100-GS-VA1346-REG	15 MAY 2012	14:04	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0692
VA1346	SVMW-08-100-GS-VA1346-REG	15 MAY 2012	14:04	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1347	SVMW-08-250-GS-VA1347-REG	15 MAY 2012	14:32	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0684
VA1347	SVMW-08-250-GS-VA1347-REG	15 MAY 2012	14:32	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1398	KAFB-106108-025-GS-VA1398-REG	15 MAY 2012	14:52	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1191
VA1398	KAFB-106108-025-GS-VA1398-REG	15 MAY 2012	14:52	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1399	KAFB-106108-050-GS-VA1399-REG	15 MAY 2012	15:34	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1192
VA1399	KAFB-106108-050-GS-VA1399-REG	15 MAY 2012	15:34	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1400	KAFB-106108-050-GS-VA1400-FD	15 MAY 2012	15:34	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1190
VA1400	KAFB-106108-050-GS-VA1400-FD	15 MAY 2012	15:34	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1401	KAFB-106108-150-GS-VA1401-REG	16 MAY 2012	8:30	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0655
VA1401	KAFB-106108-150-GS-VA1401-REG	16 MAY 2012	8:30	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1402	KAFB-106108-250-GS-VA1402-REG	16 MAY 2012	9:08	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0662
VA1402	KAFB-106108-250-GS-VA1402-REG	16 MAY 2012	9:08	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		

Shaw™ 1205939

Shaw E & I, Inc.

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV087

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1403	KAFB-106108-350-GS-VA1403-REG	16 MAY 2012	9:44	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0656
VA1403	KAFB-106108-350-GS-VA1403-REG	16 MAY 2012	9:44	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1404	KAFB-106108-450-GS-VA1404-REG	16 MAY 2012	10:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		554
VA1404	KAFB-106108-450-GS-VA1404-REG	16 MAY 2012	10:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1408	KAFB-106109-250-GS-VA1408-REG	15 MAY 2012	12:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0579
VA1408	KAFB-106109-250-GS-VA1408-REG	15 MAY 2012	12:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1409	KAFB-106109-350-GS-VA1409-REG	15 MAY 2012	13:00	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0689
VA1409	KAFB-106109-350-GS-VA1409-REG	15 MAY 2012	13:00	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1410	KAFB-106109-350-GS-VA1410-FD	15 MAY 2012	13:00	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0797
VA1410	KAFB-106109-350-GS-VA1410-FD	15 MAY 2012	13:00	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1411	KAFB-106109-450-GS-VA1411-REG	15 MAY 2012	13:55	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0749
VA1411	KAFB-106109-450-GS-VA1411-REG	15 MAY 2012	13:55	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1417	KAFB-106110-450-GS-VA1417-REG	15 MAY 2012	12:26	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1223
VA1417	KAFB-106110-450-GS-VA1417-REG	15 MAY 2012	12:26	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1497	KAFB-106123-025-GS-VA1497-REG	16 MAY 2012	12:12	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1127
VA1497	KAFB-106123-025-GS-VA1497-REG	16 MAY 2012	12:12	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1498	KAFB-106123-050-GS-VA1498-REG	16 MAY 2012	12:37	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1128
VA1498	KAFB-106123-050-GS-VA1498-REG	16 MAY 2012	12:37	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1499	KAFB-106123-050-GS-VA1499-FD	16 MAY 2012	12:37	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		528
VA1499	KAFB-106123-050-GS-VA1499-FD	16 MAY 2012	12:37	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1500	KAFB-106123-150-GS-VA1500-REG	16 MAY 2012	13:45	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0691
VA1500	KAFB-106123-150-GS-VA1500-REG	16 MAY 2012	13:45	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1501	KAFB-106123-250-GS-VA1501-REG	16 MAY 2012	14:21	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0648
VA1501	KAFB-106123-250-GS-VA1501-REG	16 MAY 2012	14:21	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1502	KAFB-106123-350-GS-VA1502-REG	16 MAY 2012	15:02	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1218
VA1502	KAFB-106123-350-GS-VA1502-REG	16 MAY 2012	15:02	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1503	KAFB-106123-450-GS-VA1503-REG	16 MAY 2012	15:43	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1503	KAFB-106123-450-GS-VA1503-REG	16 MAY 2012	15:43	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1219

Shaw™
Shaw E & I, Inc.

1205939

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV087

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1563	KAFB-106133-025-GS-VA1563-REG	16 MAY 2012	8:29	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1183
VA1563	KAFB-106133-025-GS-VA1563-REG	16 MAY 2012	8:29	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1564	KAFB-106133-050-GS-VA1564-REG	16 MAY 2012	8:46	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1186
VA1564	KAFB-106133-050-GS-VA1564-REG	16 MAY 2012	8:46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1565	KAFB-106133-050-GS-VA1565-FD	16 MAY 2012	8:46	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1136
VA1565	KAFB-106133-050-GS-VA1565-FD	16 MAY 2012	8:46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1566	KAFB-106133-170-GS-VA1566-REG	16 MAY 2012	9:45	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1132
VA1566	KAFB-106133-170-GS-VA1566-REG	16 MAY 2012	9:45	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1567	KAFB-106133-250-GS-VA1567-REG	16 MAY 2012	10:28	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1142
VA1567	KAFB-106133-250-GS-VA1567-REG	16 MAY 2012	10:28	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1568	KAFB-106133-350-GS-VA1568-REG	16 MAY 2012	11:03	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1139
VA1568	KAFB-106133-350-GS-VA1568-REG	16 MAY 2012	11:03	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1569	KAFB-106133-450-GS-VA1569-REG	16 MAY 2012	12:07	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		537
VA1569	KAFB-106133-450-GS-VA1569-REG	16 MAY 2012	12:07	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1590	KAFB-106137-025-GS-VA1590-REG	16 MAY 2012	14:16	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1189
VA1590	KAFB-106137-025-GS-VA1590-REG	16 MAY 2012	14:16	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1591	KAFB-106137-050-GS-VA1591-REG	16 MAY 2012	14:46	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1187
VA1591	KAFB-106137-050-GS-VA1591-REG	16 MAY 2012	14:46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1592	KAFB-106137-150-GS-VA1592-REG	16 MAY 2012	15:30	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1592	KAFB-106137-150-GS-VA1592-REG	16 MAY 2012	15:30	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1184
VA1593	KAFB-106137-250-GS-VA1593-REG	17 MAY 2012	08:25	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0802
VA1593	KAFB-106137-250-GS-VA1593-REG	17 MAY 2012	08:25	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1594	KAFB-106137-350-GS-VA1594-REG	16 MAY 2012	13:30	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1188
VA1594	KAFB-106137-350-GS-VA1594-REG	16 MAY 2012	13:30	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1595	KAFB-106137-450-GS-VA1595-REG	17 MAY 2012	9:02	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0821
VA1595	KAFB-106137-450-GS-VA1595-REG	17 MAY 2012	9:02	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1596	KAFB-106137-450-GS-VA1596-FD	17 MAY 2012	09:02	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0789
VA1596	KAFB-106137-450-GS-VA1596-FD	17 MAY 2012	09:02	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		

Shaw™
Shaw E & I, Inc.

1205939

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV087

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA8087-TB	FIELDQC-AQ-VA8087-TB-TB	16 MAY 2012	08:00	1 L BOTTLEVAC	1	None Required	VOCs / TPH by TO-15			N		060 2

FROM:
RONDA BAILEY
(505) 917-0645
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

20 LBS **1 OF 5**
DWT: 21,14,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4038 4171

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

REF 1:140705
REF 2:BB010030

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

CUSTODY SEAL
DATE 5/17/12
SIGNATURE T Nagel

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

WS 15.0.16 HP Laser . 27.0A 04/2012

Fold here and place in label pouch

VA 1323 0812
TB VA 8087-TB 0602
VA 1345 1209
VA 1592 1184
VA 1325 0627
VA 1324 0636
VA 1596 0789
VA 1591 1187

VA 1327 0814
VA 1326 0711
VA 1590 1189
VA 1400 1190

FROM:
RONDA BAILEY
(505) 917-0645
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

4 LBS **2 OF 5**
DWT: 26,17,15

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4101 5988

SHIP TO:

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

REF 1:140705
REF 2:BB010030

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

CUSTODY SEAL
DATE 5/17/12
SIGNATURE T Nager

WS 15.0.16 HP LaserJet 4 27.0A 04/2012

Tedlar Bags

FROM:
RONDA BAILEY
(505) 917-0645
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

20 LBS **3 OF 5**
DWT: 19,17,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4133 0397

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

REF 1:140705
REF 2:BB010030

BILLING: P/P

CUSTODY SEAL
DATE 5/17/12
SIGNATURE [illegible]

QEC
Quality Environmental Containe
800-255-3950 • 304-255-390

el pouch

VA 1316	1181
VA 1317	1182
VA 1318	1185
VA 1319	1133
VA 1563	1183
VA 1564	1186
VA 1565	1136
VA 1566	1132
VA 1567	1142
VA 1568	1139
VA 1569	537
VA 1595	0821

FROM:
RONDA BAILEY
(505) 917-0645
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

28 LBS **4 OF 5**
DWT: 19,17,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4232 3401

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

REF 1:140705
REF 2:BB010030

BILLING: P/P

CUSTODY SEAL
DATE 5/17/12
SIGNATURE T Dagen

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

erJet 4 27.0A 04/2012

e in label pouch

VA1346 0692
1347 0684
1398 1191
1399 1192
1408 0579

VA1409 0689
1410 0797
1411 0749
1417 1223
1594 1188

FROM:
RONDA BAILEY
(505) 917-0645
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

20 LBS **5 OF 5**
DWT: 21,14,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4115 1018

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

REF 1:140705
REF 2:BB010030

BILLING: P/P

CUSTODY SEAL
DATE 5/17/12
SIGNATURE

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

0A 04/2012

Fold here and place in label pouch

VA 1501 0648
VA 1403 0656
VA 1401 0695
VA 1402 0662
VA 1498 1128
VA 1497 1127
VA 1404 554
VA 1502 1218
VA 1499 528
VA 1593 0802
VA 1503 1219
VA 1500 0691

RTI LABORATORIES, INC.

RTI Laboratories
31628 Glendale St.
Livonia, MI 48150
TEL: (734) 422-8000 FAX: (734) 422-5342
Website: www.rtilab.com

Sample Receipt Checklist

Client Name: **SHA04**

Date and Time Received **5/23/2012 10:21:00 AM**

Work Order Number **1205939** RcptNo: **1**

Received by: **Armando Flores**

Completed by

Reviewed by:

Completed Date: 5/23/2012 4:43:39 PM

Reviewed Date: 5/24/2012 5:29:34 PM

Carrier name: UPS

Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐	Not Present	☐
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐		
Is it clear what analyses were requested?	Yes ☑	No ☐		
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present	☑
Samples in proper container/bottle?	Yes ☑	No ☐		
Were correct preservatives used and noted?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
Were container lables complete (ID, Pres, Date)?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Was an attempt made to cool the samples?	Yes ☐	No ☑		
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☐	No ☑		
Response when temperature is outside of range:	Not required			
Preservative added to bottles:				
Sample Temp. taken and recorded upon receipt?	Yes ☐	No ☑	To	ºC
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials	☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA	☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	No Water	☑
Are Samples considered acceptable?	Yes ☑	No ☐		
Custody Seals present?	Yes ☑	No ☐		
Traffic Report or Packing Lists present?	Yes ☐	No ☑		
Airbill or Sticker?	Air Bill ☑	Sticker ☐	Not Present	☐
Airbill No:	See Comments			
Sample Tags Present?	Yes ☐	No ☑		
Sample Tags Listed on COC?	Yes ☐	No ☑		
Tag Numbers:				
Sample Condition?	Intact ☑	Broken ☐	Leaking	☐

Case Number: SDG: SAS:

Cooler Information

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By
5 Cardboard	n/a	Good	Yes		5/17/2012	See COC

Adjusted? _____ Checked by _____

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

RTI LABORATORIES, INC.

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Website: www.rtilab.com

Sample Receipt Checklist

Client Name: **SHA04**

Date and Time Received **5/23/2012 10:21:00 AM**

Work Order Number **1205939**

RcptNo: **1**

Received by: **Armando Flores**

SampID	ContainerID	Type	Org pH	Adj pH	Req Min pH	Req Max pH
1205939-012B	Container-01 of 01	Bottle				
1205939-044A	Container-01 of 01	Bottle				
1205939-019A	Container-01 of 01	Bottle				
1205939-035B	Container-01 of 01	Bottle				
1205939-017A	Container-01 of 01	Bottle				
1205939-027B	Container-01 of 01	Bottle				
1205939-004B	Container-01 of 01	Bottle				
1205939-025B	Container-01 of 01	Bottle				
1205939-008A	Container-01 of 01	Bottle				
1205939-001B	Container-01 of 01	Bottle				
1205939-015A	Container-01 of 01	Bottle				
1205939-005B	Container-01 of 01	Bottle				
1205939-041A	Container-01 of 01	Bottle				
1205939-014B	Container-01 of 01	Bottle				
1205939-023B	Container-01 of 01	Bottle				
1205939-020B	Container-01 of 01	Bottle				
1205939-045B	Container-01 of 01	Bottle				
1205939-028A	Container-01 of 01	Bottle				
1205939-022B	Container-01 of 01	Bottle				
1205939-032A	Container-01 of 01	Bottle				
1205939-011A	Container-01 of 01	Bottle				
1205939-039A	Container-01 of 01	Bottle				
1205939-040A	Container-01 of 01	Bottle				
1205939-026A	Container-01 of 01	Bottle				
1205939-042B	Container-01 of 01	Bottle				
1205939-023A	Container-01 of 01	Bottle				
1205939-019B	Container-01 of 01	Bottle				
1205939-037A	Container-01 of 01	Bottle				
1205939-009B	Container-01 of 01	Bottle				

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Website: www.rtilab.com

Sample Receipt Checklist

Client Name: **SHA04**

Date and Time Received **5/23/2012 10:21:00 AM**

Work Order Number **1205939** RcptNo: **1**

Received by: **Armando Flores**

1205939-029A	Container-01 of 01	Bottle
1205939-046A	Container-01 of 01	Bottle
1205939-041B	Container-01 of 01	Bottle
1205939-038B	Container-01 of 01	Bottle
1205939-025A	Container-01 of 01	Bottle
1205939-028B	Container-01 of 01	Bottle
1205939-007A	Container-01 of 01	Bottle
1205939-010B	Container-01 of 01	Bottle
1205939-016B	Container-01 of 01	Bottle
1205939-034B	Container-01 of 01	Bottle
1205939-002B	Container-01 of 01	Bottle
1205939-001A	Container-01 of 01	Bottle
1205939-013A	Container-01 of 01	Bottle
1205939-018A	Container-01 of 01	Bottle
1205939-030B	Container-01 of 01	Bottle
1205939-043A	Container-01 of 01	Bottle
1205939-021A	Container-01 of 01	Bottle
1205939-020A	Container-01 of 01	Bottle
1205939-011B	Container-01 of 01	Bottle
1205939-045A	Container-01 of 01	Bottle
1205939-036B	Container-01 of 01	Bottle
1205939-032B	Container-01 of 01	Bottle
1205939-022A	Container-01 of 01	Bottle
1205939-039B	Container-01 of 01	Bottle
1205939-002A	Container-01 of 01	Bottle
1205939-016A	Container-01 of 01	Bottle
1205939-017B	Container-01 of 01	Bottle
1205939-038A	Container-01 of 01	Bottle
1205939-035A	Container-01 of 01	Bottle
1205939-006B	Container-01 of 01	Bottle

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Livonia, MI 48150
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Website: www.rtilab.com

Sample Receipt Checklist

Client Name: **SHA04**

Date and Time Received **5/23/2012 10:21:00 AM**

Work Order Number **1205939** RcptNo: **1**

Received by: **Armando Flores**

1205939-024B	Container-01 of 01	Bottle
1205939-031B	Container-01 of 01	Bottle
1205939-012A	Container-01 of 01	Bottle
1205939-029B	Container-01 of 01	Bottle
1205939-004A	Container-01 of 01	Bottle
1205939-027A	Container-01 of 01	Bottle
1205939-033B	Container-01 of 01	Bottle
1205939-003A	Container-01 of 01	Bottle
1205939-031A	Container-01 of 01	Bottle
1205939-013B	Container-01 of 01	Bottle
1205939-036A	Container-01 of 01	Bottle
1205939-007B	Container-01 of 01	Bottle
1205939-021B	Container-01 of 01	Bottle
1205939-015B	Container-01 of 01	Bottle
1205939-044B	Container-01 of 01	Bottle
1205939-030A	Container-01 of 01	Bottle
1205939-043B	Container-01 of 01	Bottle
1205939-040B	Container-01 of 01	Bottle
1205939-037B	Container-01 of 01	Bottle
1205939-024A	Container-01 of 01	Bottle
1205939-006A	Container-01 of 01	Bottle
1205939-009A	Container-01 of 01	Bottle
1205939-008B	Container-01 of 01	Bottle
1205939-010A	Container-01 of 01	Bottle
1205939-005A	Container-01 of 01	Bottle
1205939-033A	Container-01 of 01	Bottle
1205939-018B	Container-01 of 01	Bottle
1205939-026B	Container-01 of 01	Bottle
1205939-042A	Container-01 of 01	Bottle
1205939-034A	Container-01 of 01	Bottle

RTI LABORATORIES, INC.

RTI Laboratories
31628 Glendale St.
Livonia, MI 48150
TEL: (734) 422-8000 FAX: (734) 422-5342
Website: www.rtilab.com

Sample Receipt Checklist

Client Name: **SHA04**

Date and Time Received **5/23/2012 10:21:00 AM**

Work Order Number **1205939** RcptNo: **1**

Received by: **Armando Flores**

1205939-003B	Container-01 of 01	Bottle
1205939-014A	Container-01 of 01	Bottle

Client Contacted? ☐ Yes ☑ No ☐ NA Person Contacted:

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

Client Instructions:

Date Contacted: Contacted By:

Regarding:

CorrectiveAction:

Comments:
UPS Tracking Nos.
1Z10335E0340384171
1Z10335E0341015988
1Z10335E0341330397
1Z10335E0342323401
1Z10335E0341151018

RTI Laboratories - Workorder Sample Summary

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1205939-001A	VA1316		5/17/2012 10:33 AM	5/23/2012 10:21 AM	Air
1205939-001B	VA1316		5/17/2012 10:33 AM	5/23/2012 10:21 AM	Air
1205939-002A	VA1317		5/17/2012 11:03 AM	5/23/2012 10:21 AM	Air
1205939-002B	VA1317		5/17/2012 11:03 AM	5/23/2012 10:21 AM	Air
1205939-003A	VA1318		5/17/2012 11:37 AM	5/23/2012 10:21 AM	Air
1205939-003B	VA1318		5/17/2012 11:37 AM	5/23/2012 10:21 AM	Air
1205939-004A	VA1319		5/17/2012 12:07 PM	5/23/2012 10:21 AM	Air
1205939-004B	VA1319		5/17/2012 12:07 PM	5/23/2012 10:21 AM	Air
1205939-005A	VA1323		5/17/2012 8:59 AM	5/23/2012 10:21 AM	Air
1205939-005B	VA1323		5/17/2012 8:59 AM	5/23/2012 10:21 AM	Air
1205939-006A	VA1324		5/17/2012 9:32 AM	5/23/2012 10:21 AM	Air
1205939-006B	VA1324		5/17/2012 9:32 AM	5/23/2012 10:21 AM	Air
1205939-007A	VA1325		5/17/2012 10:12 AM	5/23/2012 10:21 AM	Air
1205939-007B	VA1325		5/17/2012 10:12 AM	5/23/2012 10:21 AM	Air
1205939-008A	VA1326		5/17/2012 10:12 AM	5/23/2012 10:21 AM	Air
1205939-008B	VA1326		5/17/2012 10:12 AM	5/23/2012 10:21 AM	Air
1205939-009A	VA1327		5/17/2012 10:58 AM	5/23/2012 10:21 AM	Air
1205939-009B	VA1327		5/17/2012 10:58 AM	5/23/2012 10:21 AM	Air
1205939-010A	VA1345		5/15/2012 1:36 PM	5/23/2012 10:21 AM	Air
1205939-010B	VA1345		5/15/2012 1:36 PM	5/23/2012 10:21 AM	Air
1205939-011A	VA1346		5/15/2012 2:04 PM	5/23/2012 10:21 AM	Air
1205939-011B	VA1346		5/15/2012 2:04 PM	5/23/2012 10:21 AM	Air
1205939-012A	VA1347		5/15/2012 2:32 PM	5/23/2012 10:21 AM	Air
1205939-012B	VA1347		5/15/2012 2:32 PM	5/23/2012 10:21 AM	Air
1205939-013A	VA1398		5/15/2012 2:52 PM	5/23/2012 10:21 AM	Air
1205939-013B	VA1398		5/15/2012 2:52 PM	5/23/2012 10:21 AM	Air
1205939-014A	VA1399		5/15/2012 3:34 PM	5/23/2012 10:21 AM	Air
1205939-014B	VA1399		5/15/2012 3:34 PM	5/23/2012 10:21 AM	Air
1205939-015A	VA1400		5/15/2012 3:34 PM	5/23/2012 10:21 AM	Air
1205939-015B	VA1400		5/15/2012 3:34 PM	5/23/2012 10:21 AM	Air
1205939-016A	VA1401		5/16/2012 8:30 AM	5/23/2012 10:21 AM	Air
1205939-016B	VA1401		5/16/2012 8:30 AM	5/23/2012 10:21 AM	Air
1205939-017A	VA1402		5/16/2012 9:08 AM	5/23/2012 10:21 AM	Air
1205939-017B	VA1402		5/16/2012 9:08 AM	5/23/2012 10:21 AM	Air
1205939-018A	VA1403		5/16/2012 9:44 AM	5/23/2012 10:21 AM	Air
1205939-018B	VA1403		5/16/2012 9:44 AM	5/23/2012 10:21 AM	Air
1205939-019A	VA1404		5/16/2012 10:22 AM	5/23/2012 10:21 AM	Air
1205939-019B	VA1404		5/16/2012 10:22 AM	5/23/2012 10:21 AM	Air
1205939-020A	VA1408		5/15/2012 12:22 PM	5/23/2012 10:21 AM	Air
1205939-020B	VA1408		5/15/2012 12:22 PM	5/23/2012 10:21 AM	Air
1205939-021A	VA1409		5/15/2012 1:00 PM	5/23/2012 10:21 AM	Air
1205939-021B	VA1409		5/15/2012 1:00 PM	5/23/2012 10:21 AM	Air
1205939-022A	VA1410		5/15/2012 1:00 PM	5/23/2012 10:21 AM	Air
1205939-022B	VA1410		5/15/2012 1:00 PM	5/23/2012 10:21 AM	Air
1205939-023A	VA1411		5/15/2012 1:55 PM	5/23/2012 10:21 AM	Air

RTI Laboratories - Workorder Sample Summary

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1205939-023B	VA1411		5/15/2012 1:55 PM	5/23/2012 10:21 AM	Air
1205939-024A	VA1417		5/15/2012 12:26 PM	5/23/2012 10:21 AM	Air
1205939-024B	VA1417		5/15/2012 12:26 PM	5/23/2012 10:21 AM	Air
1205939-025A	VA1497		5/16/2012 12:12 PM	5/23/2012 10:21 AM	Air
1205939-025B	VA1497		5/16/2012 12:12 PM	5/23/2012 10:21 AM	Air
1205939-026A	VA1498		5/16/2012 12:37 PM	5/23/2012 10:21 AM	Air
1205939-026B	VA1498		5/16/2012 12:37 PM	5/23/2012 10:21 AM	Air
1205939-027A	VA1499		5/16/2012 12:37 PM	5/23/2012 10:21 AM	Air
1205939-027B	VA1499		5/16/2012 12:37 PM	5/23/2012 10:21 AM	Air
1205939-028A	VA1500		5/16/2012 1:45 PM	5/23/2012 10:21 AM	Air
1205939-028B	VA1500		5/16/2012 1:45 PM	5/23/2012 10:21 AM	Air
1205939-029A	VA1501		5/16/2012 2:21 PM	5/23/2012 10:21 AM	Air
1205939-029B	VA1501		5/16/2012 2:21 PM	5/23/2012 10:21 AM	Air
1205939-030A	VA1502		5/16/2012 3:02 PM	5/23/2012 10:21 AM	Air
1205939-030B	VA1502		5/16/2012 3:02 PM	5/23/2012 10:21 AM	Air
1205939-031A	VA1503		5/16/2012 3:43 PM	5/23/2012 10:21 AM	Air
1205939-031B	VA1503		5/16/2012 3:43 PM	5/23/2012 10:21 AM	Air
1205939-032A	VA1563		5/16/2012 8:29 AM	5/23/2012 10:21 AM	Air
1205939-032B	VA1563		5/16/2012 8:29 AM	5/23/2012 10:21 AM	Air
1205939-033A	VA1564		5/16/2012 8:46 AM	5/23/2012 10:21 AM	Air
1205939-033B	VA1564		5/16/2012 8:46 AM	5/23/2012 10:21 AM	Air
1205939-034A	VA1565		5/16/2012 8:46 AM	5/23/2012 10:21 AM	Air
1205939-034B	VA1565		5/16/2012 8:46 AM	5/23/2012 10:21 AM	Air
1205939-035A	VA1566		5/16/2012 9:45 AM	5/23/2012 10:21 AM	Air
1205939-035B	VA1566		5/16/2012 9:45 AM	5/23/2012 10:21 AM	Air
1205939-036A	VA1567		5/16/2012 10:28 AM	5/23/2012 10:21 AM	Air
1205939-036B	VA1567		5/16/2012 10:28 AM	5/23/2012 10:21 AM	Air
1205939-037A	VA1568		5/16/2012 11:03 AM	5/23/2012 10:21 AM	Air
1205939-037B	VA1568		5/16/2012 11:03 AM	5/23/2012 10:21 AM	Air
1205939-038A	VA1569		5/16/2012 12:07 PM	5/23/2012 10:21 AM	Air
1205939-038B	VA1569		5/16/2012 12:07 PM	5/23/2012 10:21 AM	Air
1205939-039A	VA1590		5/16/2012 2:16 PM	5/23/2012 10:21 AM	Air
1205939-039B	VA1590		5/16/2012 2:16 PM	5/23/2012 10:21 AM	Air
1205939-040A	VA1591		5/16/2012 2:46 PM	5/23/2012 10:21 AM	Air
1205939-040B	VA1591		5/16/2012 2:46 PM	5/23/2012 10:21 AM	Air
1205939-041A	VA1592		5/16/2012 3:30 PM	5/23/2012 10:21 AM	Air
1205939-041B	VA1592		5/16/2012 3:30 PM	5/23/2012 10:21 AM	Air
1205939-042A	VA1593		5/17/2012 8:25 AM	5/23/2012 10:21 AM	Air
1205939-042B	VA1593		5/17/2012 8:25 AM	5/23/2012 10:21 AM	Air
1205939-043A	VA1594		5/16/2012 1:30 PM	5/23/2012 10:21 AM	Air
1205939-043B	VA1594		5/16/2012 1:30 PM	5/23/2012 10:21 AM	Air
1205939-044A	VA1595		5/17/2012 9:02 AM	5/23/2012 10:21 AM	Air
1205939-044B	VA1595		5/17/2012 9:02 AM	5/23/2012 10:21 AM	Air
1205939-045A	VA1596		5/17/2012 9:02 AM	5/23/2012 10:21 AM	Air
1205939-045B	VA1596		5/17/2012 9:02 AM	5/23/2012 10:21 AM	Air

RTI Laboratories - Workorder Sample Summary

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1205939-046A	VA8087-TB		5/16/2012 8:00 AM	5/23/2012 10:21 AM	Air

RTI Laboratories - DATES REPORT

WO#: 1205939

Date Reported: 6/11/2012
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
1205939-001A	VA1316	5/17/2012 10:33 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			5/25/2012 10:17 PM
				EPA_TO15-Volatile Organic Compounds			5/29/2012 7:36 PM
				EPA_TO15-Volatile Organic Compounds			5/30/2012 5:30 PM
1205939-001B	VA1316	5/17/2012 10:33 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/5/2012 11:53 AM
1205939-002A	VA1317	5/17/2012 11:03 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			5/29/2012 8:14 PM
				EPA_TO15-Volatile Organic Compounds			5/29/2012 9:02 PM
1205939-002B	VA1317	5/17/2012 11:03 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/5/2012 12:08 PM
1205939-003A	VA1318	5/17/2012 11:37 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			5/29/2012 9:39 PM
				EPA_TO15-Volatile Organic Compounds			5/29/2012 9:43 PM
1205939-003B	VA1318	5/17/2012 11:37 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/5/2012 12:23 PM
1205939-004A	VA1319	5/17/2012 12:07 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			5/29/2012 10:21 PM
				EPA_TO15-Volatile Organic Compounds			5/30/2012 6:15 PM
1205939-004B	VA1319	5/17/2012 12:07 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/5/2012 1:27 PM
1205939-005A	VA1323	5/17/2012 8:59 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			5/30/2012 6:17 PM
				EPA_TO15-Volatile Organic Compounds			5/29/2012 11:09 PM
1205939-005B	VA1323	5/17/2012 8:59 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/5/2012 1:49 PM
1205939-006A	VA1324	5/17/2012 9:32 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			5/26/2012 2:44 AM
				EPA_TO15-Volatile Organic Compounds			5/29/2012 11:51 PM

RTI Laboratories - DATES REPORT

WO#: 1205939

Date Reported: 6/11/2012
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
1205939-006B	VA1324	5/17/2012 9:32 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/5/2012 2:04 PM
1205939-007A	VA1325	5/17/2012 10:12 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			5/26/2012 3:27 AM
				EPA_TO15-Volatile Organic Compounds			5/30/2012 12:32 AM
1205939-007B	VA1325	5/17/2012 10:12 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/5/2012 2:20 PM
1205939-008A	VA1326	5/17/2012 10:12 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			5/29/2012 11:53 PM
				EPA_TO15-Volatile Organic Compounds			5/30/2012 1:14 AM
1205939-008B	VA1326	5/17/2012 10:12 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/5/2012 2:35 PM
1205939-009A	VA1327	5/17/2012 10:58 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			5/30/2012 12:36 AM
				EPA_TO15-Volatile Organic Compounds			5/30/2012 1:56 AM
1205939-009B	VA1327	5/17/2012 10:58 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/5/2012 2:49 PM
1205939-010A	VA1345	5/15/2012 1:36 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			5/30/2012 1:18 AM
				EPA_TO15-Volatile Organic Compounds			5/30/2012 2:37 AM
1205939-010B	VA1345	5/15/2012 1:36 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/5/2012 3:05 PM
1205939-011A	VA1346	5/15/2012 2:04 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			5/30/2012 3:59 PM
				EPA_TO15-Volatile Organic Compounds			5/30/2012 7:48 PM
1205939-011B	VA1346	5/15/2012 2:04 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/5/2012 3:20 PM

RTI Laboratories - DATES REPORT

WO#: 1205939

Date Reported: 6/11/2012
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
1205939-012A	VA1347	5/15/2012 2:32 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			5/30/2012 4:45 PM
				EPA_TO15-Volatile Organic Compounds			5/30/2012 8:32 PM
				EPA_TO15-Volatile Organic Compounds			5/31/2012 8:20 PM
1205939-012B	VA1347	5/15/2012 2:32 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/5/2012 3:35 PM
1205939-013A	VA1398	5/15/2012 2:52 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			5/31/2012 2:09 PM
				EPA_TO15-Volatile Organic Compounds			5/31/2012 9:01 PM
1205939-013B	VA1398	5/15/2012 2:52 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/5/2012 3:50 PM
1205939-014A	VA1399	5/15/2012 3:34 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			5/31/2012 2:52 PM
				EPA_TO15-Volatile Organic Compounds			6/1/2012 8:39 AM
1205939-014B	VA1399	5/15/2012 3:34 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/6/2012 10:09 AM
1205939-015A	VA1400	5/15/2012 3:34 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			5/31/2012 3:37 PM
				EPA_TO15-Volatile Organic Compounds			6/1/2012 10:46 AM
1205939-015B	VA1400	5/15/2012 3:34 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/6/2012 10:24 AM
1205939-016A	VA1401	5/16/2012 8:30 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			5/31/2012 6:38 PM
				EPA_TO15-Volatile Organic Compounds			5/30/2012 11:44 PM
1205939-016B	VA1401	5/16/2012 8:30 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/6/2012 10:40 AM
1205939-017A	VA1402	5/16/2012 9:08 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			5/31/2012 7:27 PM
				EPA_TO15-Volatile Organic Compounds			5/31/2012 12:26 AM

RTI Laboratories - DATES REPORT

WO#: 1205939

Date Reported: 6/11/2012
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
1205939-017A	VA1402	5/16/2012 9:08 AM	Air				
				EPA_TO15-Volatile Organic Compounds			5/31/2012 11:09 PM
1205939-017B	VA1402	5/16/2012 9:08 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/6/2012 10:56 AM
1205939-018A	VA1403	5/16/2012 9:44 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/5/2012 4:09 AM
				EPA_TO15-Volatile Organic Compounds			5/31/2012 1:10 AM
1205939-018B	VA1403	5/16/2012 9:44 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/6/2012 11:11 AM
1205939-019A	VA1404	5/16/2012 10:22 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			5/31/2012 9:46 PM
				EPA_TO15-Volatile Organic Compounds			5/31/2012 1:59 AM
1205939-019B	VA1404	5/16/2012 10:22 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/6/2012 11:26 AM
1205939-020A	VA1408	5/15/2012 12:22 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			5/31/2012 10:35 PM
				EPA_TO15-Volatile Organic Compounds			6/1/2012 12:34 AM
1205939-020B	VA1408	5/15/2012 12:22 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/6/2012 11:41 AM
1205939-021A	VA1409	5/15/2012 1:00 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			5/31/2012 11:24 PM
				EPA_TO15-Volatile Organic Compounds			6/1/2012 1:16 AM
1205939-021B	VA1409	5/15/2012 1:00 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/6/2012 11:56 AM
1205939-022A	VA1410	5/15/2012 1:00 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/1/2012 12:14 AM
				EPA_TO15-Volatile Organic Compounds			6/1/2012 11:28 AM

RTI Laboratories - DATES REPORT

WO#: 1205939

Date Reported: 6/11/2012
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
1205939-022B	VA1410	5/15/2012 1:00 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/6/2012 12:10 PM
1205939-023A	VA1411	5/15/2012 1:55 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/1/2012 1:00 AM
				EPA_TO15-Volatile Organic Compounds			6/1/2012 2:51 AM
1205939-023B	VA1411	5/15/2012 1:55 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/6/2012 12:25 PM
1205939-024A	VA1417	5/15/2012 12:26 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			5/30/2012 7:45 PM
				EPA_TO15-Volatile Organic Compounds			6/1/2012 3:36 AM
				EPA_TO15-Volatile Organic Compounds			6/1/2012 9:21 AM
1205939-024B	VA1417	5/15/2012 12:26 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/6/2012 1:12 PM
1205939-025A	VA1497	5/16/2012 12:12 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/1/2012 1:50 AM
				EPA_TO15-Volatile Organic Compounds			6/1/2012 4:23 AM
1205939-025B	VA1497	5/16/2012 12:12 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/6/2012 1:27 PM
1205939-026A	VA1498	5/16/2012 12:37 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/1/2012 2:33 AM
				EPA_TO15-Volatile Organic Compounds			6/1/2012 9:21 PM
1205939-026B	VA1498	5/16/2012 12:37 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/6/2012 1:42 PM
1205939-027A	VA1499	5/16/2012 12:37 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/1/2012 3:17 AM
				EPA_TO15-Volatile Organic Compounds			6/1/2012 12:08 PM
1205939-027B	VA1499	5/16/2012 12:37 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/6/2012 1:57 PM

RTI Laboratories - DATES REPORT

WO#: 1205939

Date Reported: 6/11/2012
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
1205939-028A	VA1500	5/16/2012 1:45 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/1/2012 4:00 AM
				EPA_TO15-Volatile Organic Compounds			6/1/2012 10:02 AM
1205939-028B	VA1500	5/16/2012 1:45 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/6/2012 2:18 PM
1205939-029A	VA1501	5/16/2012 2:21 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			5/31/2012 4:20 PM
				EPA_TO15-Volatile Organic Compounds			6/1/2012 12:49 PM
1205939-029B	VA1501	5/16/2012 2:21 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/6/2012 2:33 PM
1205939-030A	VA1502	5/16/2012 3:02 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			5/31/2012 5:04 PM
				EPA_TO15-Volatile Organic Compounds			6/1/2012 10:02 PM
1205939-030B	VA1502	5/16/2012 3:02 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/6/2012 2:49 PM
1205939-031A	VA1503	5/16/2012 3:43 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/1/2012 4:43 AM
				EPA_TO15-Volatile Organic Compounds			6/1/2012 11:25 PM
1205939-031B	VA1503	5/16/2012 3:43 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/6/2012 3:05 PM
1205939-032A	VA1563	5/16/2012 8:29 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/4/2012 5:32 PM
				EPA_TO15-Volatile Organic Compounds			6/2/2012 6:56 AM
1205939-032B	VA1563	5/16/2012 8:29 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/6/2012 3:20 PM
1205939-033A	VA1564	5/16/2012 8:46 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/4/2012 6:15 PM
				EPA_TO15-Volatile Organic Compounds			6/2/2012 8:19 AM

RTI Laboratories - DATES REPORT

WO#: 1205939

Date Reported: 6/11/2012
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
1205939-033B	VA1564	5/16/2012 8:46 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/6/2012 3:35 PM
1205939-034A	VA1565	5/16/2012 8:46 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/5/2012 5:43 AM
				EPA_TO15-Volatile Organic Compounds			6/2/2012 9:00 AM
				EPA_TO15-Volatile Organic Compounds			6/4/2012 11:53 AM
1205939-034B	VA1565	5/16/2012 8:46 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/7/2012 11:19 AM
1205939-035A	VA1566	5/16/2012 9:45 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/5/2012 5:25 PM
				EPA_TO15-Volatile Organic Compounds			6/5/2012 12:23 AM
1205939-035B	VA1566	5/16/2012 9:45 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/7/2012 11:46 AM
1205939-036A	VA1567	5/16/2012 10:28 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/4/2012 8:35 PM
				EPA_TO15-Volatile Organic Compounds			6/4/2012 3:30 PM
1205939-036B	VA1567	5/16/2012 10:28 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/7/2012 12:11 PM
1205939-037A	VA1568	5/16/2012 11:03 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/4/2012 9:24 PM
				EPA_TO15-Volatile Organic Compounds			6/4/2012 1:19 PM
1205939-037B	VA1568	5/16/2012 11:03 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/7/2012 1:31 PM
1205939-038A	VA1569	5/16/2012 12:07 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/4/2012 10:13 PM
				EPA_TO15-Volatile Organic Compounds			6/4/2012 5:44 PM
1205939-038B	VA1569	5/16/2012 12:07 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/7/2012 1:47 PM

RTI Laboratories - DATES REPORT

WO#: 1205939

Date Reported: 6/11/2012
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
1205939-039A	VA1590	5/16/2012 2:16 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/5/2012 4:36 PM
				EPA_TO15-Volatile Organic Compounds			6/4/2012 4:56 PM
1205939-039B	VA1590	5/16/2012 2:16 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/7/2012 2:13 PM
1205939-040A	VA1591	5/16/2012 2:46 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/5/2012 6:15 PM
				EPA_TO15-Volatile Organic Compounds			6/5/2012 1:46 AM
1205939-040B	VA1591	5/16/2012 2:46 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/7/2012 2:33 PM
1205939-041A	VA1592	5/16/2012 3:30 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/6/2012 9:55 AM
				EPA_TO15-Volatile Organic Compounds			6/5/2012 2:28 AM
1205939-041B	VA1592	5/16/2012 3:30 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/7/2012 2:50 PM
1205939-042A	VA1593	5/17/2012 8:25 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/5/2012 3:47 PM
				EPA_TO15-Volatile Organic Compounds			6/5/2012 3:52 AM
1205939-042B	VA1593	5/17/2012 8:25 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/7/2012 3:14 PM
1205939-043A	VA1594	5/16/2012 1:30 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/6/2012 2:55 PM
				EPA_TO15-Volatile Organic Compounds			6/5/2012 4:34 AM
1205939-043B	VA1594	5/16/2012 1:30 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/7/2012 3:31 PM
1205939-044A	VA1595	5/17/2012 9:02 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/5/2012 2:42 AM
				EPA_TO15-Volatile Organic Compounds			6/4/2012 10:57 PM
				EPA_TO15-Volatile Organic Compounds			6/5/2012 5:15 AM

RTI Laboratories - DATES REPORT

WO#: 1205939

Date Reported: 6/11/2012
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
1205939-044B	VA1595	5/17/2012 9:02 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/7/2012 4:45 PM
1205939-045A	VA1596	5/17/2012 9:02 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/6/2012 3:45 PM
				EPA_TO15-Volatile Organic Compounds			6/4/2012 11:42 PM
				EPA_TO15-Volatile Organic Compounds			6/5/2012 5:57 AM
1205939-045B	VA1596	5/17/2012 9:02 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/7/2012 5:07 PM
1205939-046A	VA8087-TB	5/16/2012 8:00 AM	Air				
				EPA_TO15-Volatile Organic Compounds			6/2/2012 9:48 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 10:33:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-001	**Matrix:**	Air
Client Sample ID:	VA1316		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	5.8	0.10		%	1	6/5/2012 11:53 AM
Carbon Monoxide	ND	0.10	U	%	1	6/5/2012 11:53 AM
Methane	ND	0.50	U	%	1	6/5/2012 11:53 AM
Nitrogen	83	0.10		%	1	6/5/2012 11:53 AM
Oxygen	11	0.10		%	1	6/5/2012 11:53 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	200	U	ppbv	200	5/30/2012 5:30 PM
1,1,2,2-Tetrachloroethane	ND	200	U	ppbv	200	5/30/2012 5:30 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	200	U	ppbv	200	5/30/2012 5:30 PM
1,1,2-Trichloroethane	ND	200	U	ppbv	200	5/30/2012 5:30 PM
1,1-Dichloroethane	ND	200	U	ppbv	200	5/30/2012 5:30 PM
1,1-Dichloroethene	ND	200	U	ppbv	200	5/30/2012 5:30 PM
1,2,4-Trichlorobenzene	ND	200	U	ppbv	200	5/30/2012 5:30 PM
1,2,4-Trimethylbenzene	ND	200	U	ppbv	200	5/30/2012 5:30 PM
1,2-Dibromoethane	ND	200	U	ppbv	200	5/30/2012 5:30 PM
1,2-Dichlorobenzene	ND	200	U	ppbv	200	5/30/2012 5:30 PM
1,2-Dichloroethane	ND	200	U	ppbv	200	5/30/2012 5:30 PM
1,2-Dichloropropane	ND	200	U	ppbv	200	5/30/2012 5:30 PM
1,3,5-Trimethylbenzene	ND	200	U	ppbv	200	5/30/2012 5:30 PM
1,3-Butadiene	ND	200	U	ppbv	200	5/30/2012 5:30 PM
1,3-Dichlorobenzene	ND	200	U	ppbv	200	5/30/2012 5:30 PM
1,4-Dichlorobenzene	ND	200	U	ppbv	200	5/30/2012 5:30 PM
2-Butanone	ND	200	U	ppbv	200	5/30/2012 5:30 PM
2-Hexanone	ND	200	U	ppbv	200	5/30/2012 5:30 PM
4-Methyl-2-pentanone	ND	200	U	ppbv	200	5/30/2012 5:30 PM
Acetone	300	200		ppbv	200	5/30/2012 5:30 PM
Benzene	740	200		ppbv	200	5/30/2012 5:30 PM
Benzyl chloride	ND	200	U	ppbv	200	5/30/2012 5:30 PM
Bromodichloromethane	ND	200	U	ppbv	200	5/30/2012 5:30 PM
Bromoform	ND	200	U	ppbv	200	5/30/2012 5:30 PM
Bromomethane	ND	200	U	ppbv	200	5/30/2012 5:30 PM
Carbon disulfide	ND	200	U	ppbv	200	5/30/2012 5:30 PM
Carbon tetrachloride	ND	200	U	ppbv	200	5/30/2012 5:30 PM
Chlorobenzene	ND	200	U	ppbv	200	5/30/2012 5:30 PM
Chlorodibromomethane	ND	200	U	ppbv	200	5/30/2012 5:30 PM
Chloroethane	ND	200	U	ppbv	200	5/30/2012 5:30 PM
Chloroform	ND	200	U	ppbv	200	5/30/2012 5:30 PM
Chloromethane	ND	200	U	ppbv	200	5/30/2012 5:30 PM
cis-1,2-Dichloroethene	ND	200	U	ppbv	200	5/30/2012 5:30 PM
cis-1,3-dichloropropene	ND	200	U	ppbv	200	5/30/2012 5:30 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 10:33:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-001	**Matrix:**	Air
Client Sample ID:	VA1316		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,200	400		ppbv	200	5/30/2012 5:30 PM
Dichlorodifluoromethane	ND	200	U	ppbv	200	5/30/2012 5:30 PM
Ethyl acetate	ND	200	U	ppbv	200	5/30/2012 5:30 PM
Ethylbenzene	ND	400	U	ppbv	200	5/30/2012 5:30 PM
Heptane	1,100	200		ppbv	200	5/30/2012 5:30 PM
Hexachlorobutadiene	ND	400	U	ppbv	200	5/30/2012 5:30 PM
m,p-Xylene	410	400		ppbv	200	5/30/2012 5:30 PM
Methylene chloride	ND	1,000	U	ppbv	200	5/30/2012 5:30 PM
n-Hexane	1,000	400		ppbv	200	5/30/2012 5:30 PM
Naphthalene	ND	200	U	ppbv	200	5/30/2012 5:30 PM
o-Xylene	ND	200	U	ppbv	200	5/30/2012 5:30 PM
Propylene	ND	200	U	ppbv	200	5/30/2012 5:30 PM
Styrene	ND	200	U	ppbv	200	5/30/2012 5:30 PM
tert-Butyl Methyl Ether	ND	200	U	ppbv	200	5/30/2012 5:30 PM
Tetrachloroethene	ND	200	U	ppbv	200	5/30/2012 5:30 PM
Tetrahydrofuran	ND	200	U	ppbv	200	5/30/2012 5:30 PM
Toluene	1,700	200		ppbv	200	5/30/2012 5:30 PM
trans-1,2-Dichloroethene	ND	200	U	ppbv	200	5/30/2012 5:30 PM
trans-1,3-dichloropropene	ND	200	U	ppbv	200	5/30/2012 5:30 PM
Trichloroethene	ND	200	U	ppbv	200	5/30/2012 5:30 PM
Trichlorofluoromethane	ND	200	U	ppbv	200	5/30/2012 5:30 PM
Vinyl acetate	ND	200	U	ppbv	200	5/30/2012 5:30 PM
Vinyl chloride	ND	200	U	ppbv	200	5/30/2012 5:30 PM
Xylenes, Total	410	600	J	ppbv	200	5/30/2012 5:30 PM
Surr: 4-Bromofluorobenzene	95.5	70-130		%REC	200	5/30/2012 5:30 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	260,000	94,000		µg/m³	800	5/25/2012 10:17 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	5/25/2012 10:17 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	5/25/2012 10:17 PM
Surr: 4-Bromofluorobenzene	95.6	70-130		%REC	800	5/25/2012 10:17 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 11:03:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-002	**Matrix:**	Air
Client Sample ID:	VA1317		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	7.8	0.10		%	1	6/5/2012 12:08 PM
Carbon Monoxide	ND	0.10	U	%	1	6/5/2012 12:08 PM
Methane	ND	0.50	U	%	1	6/5/2012 12:08 PM
Nitrogen	84	0.10		%	1	6/5/2012 12:08 PM
Oxygen	7.7	0.10		%	1	6/5/2012 12:08 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
1,3-Butadiene	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
2-Butanone	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
2-Hexanone	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Acetone	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Benzene	73,000	20,000		ppbv	20000	5/29/2012 9:02 PM
Benzyl chloride	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Bromodichloromethane	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Bromoform	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Bromomethane	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Carbon disulfide	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Chlorobenzene	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Chloroethane	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Chloroform	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Chloromethane	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 11:03:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-002	**Matrix:**	Air
Client Sample ID:	VA1317		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	700,000	40,000		ppbv	20000	5/29/2012 9:02 PM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Ethyl acetate	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Ethylbenzene	ND	40,000	U	ppbv	20000	5/29/2012 9:02 PM
Heptane	250,000	20,000		ppbv	20000	5/29/2012 9:02 PM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	5/29/2012 9:02 PM
m,p-Xylene	ND	40,000	U	ppbv	20000	5/29/2012 9:02 PM
Methylene chloride	ND	100,000	U	ppbv	20000	5/29/2012 9:02 PM
n-Hexane	890,000	40,000		ppbv	20000	5/29/2012 9:02 PM
Naphthalene	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
o-Xylene	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Propylene	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Styrene	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Tetrachloroethene	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Toluene	46,000	20,000		ppbv	20000	5/29/2012 9:02 PM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Trichloroethene	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Vinyl acetate	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Vinyl chloride	ND	20,000	U	ppbv	20000	5/29/2012 9:02 PM
Xylenes, Total	ND	60,000	U	ppbv	20000	5/29/2012 9:02 PM
Surr: 4-Bromofluorobenzene	95.5	70-130		%REC	20000	5/29/2012 9:02 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	15,000,000	2,300,000		µg/m³	20000	5/29/2012 8:14 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	5/29/2012 8:14 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	5/29/2012 8:14 PM
Surr: 4-Bromofluorobenzene	95.6	70-130		%REC	20000	5/29/2012 8:14 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 11:37:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-003	**Matrix:**	Air
Client Sample ID:	VA1318		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.73	0.10		%	1	6/5/2012 12:23 PM
Carbon Monoxide	ND	0.10	U	%	1	6/5/2012 12:23 PM
Methane	ND	0.50	U	%	1	6/5/2012 12:23 PM
Nitrogen	80	0.10		%	1	6/5/2012 12:23 PM
Oxygen	19	0.10		%	1	6/5/2012 12:23 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
2-Butanone	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
2-Hexanone	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Acetone	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Benzene	9,400	8,000		ppbv	8000	5/29/2012 9:43 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Bromoform	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Bromomethane	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Chloroethane	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Chloroform	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Chloromethane	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 11:37:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-003	**Matrix:**	Air
Client Sample ID:	VA1318		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	59,000	16,000		ppbv	8000	5/29/2012 9:43 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	5/29/2012 9:43 PM
Heptane	30,000	8,000		ppbv	8000	5/29/2012 9:43 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	5/29/2012 9:43 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	5/29/2012 9:43 PM
Methylene chloride	ND	40,000	U	ppbv	8000	5/29/2012 9:43 PM
n-Hexane	56,000	16,000		ppbv	8000	5/29/2012 9:43 PM
Naphthalene	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
o-Xylene	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Propylene	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Styrene	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Toluene	12,000	8,000		ppbv	8000	5/29/2012 9:43 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Trichloroethene	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	5/29/2012 9:43 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	5/29/2012 9:43 PM
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	8000	5/29/2012 9:43 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,600,000	940,000		µg/m³	8000	5/29/2012 9:39 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	5/29/2012 9:39 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	5/29/2012 9:39 PM
Surr: 4-Bromofluorobenzene	94.1	70-130		%REC	8000	5/29/2012 9:39 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 12:07:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-004	**Matrix:**	Air
Client Sample ID:	VA1319		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.37	0.10		%	1	6/5/2012 1:27 PM
Carbon Monoxide	ND	0.10	U	%	1	6/5/2012 1:27 PM
Methane	ND	0.50	U	%	1	6/5/2012 1:27 PM
Nitrogen	80	0.10		%	1	6/5/2012 1:27 PM
Oxygen	20	0.10		%	1	6/5/2012 1:27 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	5/30/2012 6:15 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	5/30/2012 6:15 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	5/30/2012 6:15 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	5/30/2012 6:15 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	5/30/2012 6:15 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	5/30/2012 6:15 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	5/30/2012 6:15 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	5/30/2012 6:15 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	5/30/2012 6:15 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	5/30/2012 6:15 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	5/30/2012 6:15 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	5/30/2012 6:15 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	5/30/2012 6:15 PM
1,3-Butadiene	ND	800	U	ppbv	800	5/30/2012 6:15 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	5/30/2012 6:15 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	5/30/2012 6:15 PM
2-Butanone	ND	800	U	ppbv	800	5/30/2012 6:15 PM
2-Hexanone	ND	800	U	ppbv	800	5/30/2012 6:15 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	5/30/2012 6:15 PM
Acetone	ND	800	U	ppbv	800	5/30/2012 6:15 PM
Benzene	10,000	800		ppbv	800	5/30/2012 6:15 PM
Benzyl chloride	ND	800	U	ppbv	800	5/30/2012 6:15 PM
Bromodichloromethane	ND	800	U	ppbv	800	5/30/2012 6:15 PM
Bromoform	ND	800	U	ppbv	800	5/30/2012 6:15 PM
Bromomethane	ND	800	U	ppbv	800	5/30/2012 6:15 PM
Carbon disulfide	ND	800	U	ppbv	800	5/30/2012 6:15 PM
Carbon tetrachloride	ND	800	U	ppbv	800	5/30/2012 6:15 PM
Chlorobenzene	ND	800	U	ppbv	800	5/30/2012 6:15 PM
Chlorodibromomethane	ND	800	U	ppbv	800	5/30/2012 6:15 PM
Chloroethane	ND	800	U	ppbv	800	5/30/2012 6:15 PM
Chloroform	ND	800	U	ppbv	800	5/30/2012 6:15 PM
Chloromethane	ND	800	U	ppbv	800	5/30/2012 6:15 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	5/30/2012 6:15 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	5/30/2012 6:15 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 12:07:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-004	**Matrix:**	Air
Client Sample ID:	VA1319		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	20,000	1,600		ppbv	800	5/30/2012 6:15 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	5/30/2012 6:15 PM
Ethyl acetate	ND	800	U	ppbv	800	5/30/2012 6:15 PM
Ethylbenzene	ND	1,600	U	ppbv	800	5/30/2012 6:15 PM
Heptane	8,400	800		ppbv	800	5/30/2012 6:15 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	5/30/2012 6:15 PM
m,p-Xylene	1,500	1,600	J	ppbv	800	5/30/2012 6:15 PM
Methylene chloride	ND	4,000	U	ppbv	800	5/30/2012 6:15 PM
n-Hexane	19,000	1,600		ppbv	800	5/30/2012 6:15 PM
Naphthalene	ND	800	U	ppbv	800	5/30/2012 6:15 PM
o-Xylene	ND	800	U	ppbv	800	5/30/2012 6:15 PM
Propylene	860	800		ppbv	800	5/30/2012 6:15 PM
Styrene	ND	800	U	ppbv	800	5/30/2012 6:15 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	5/30/2012 6:15 PM
Tetrachloroethene	ND	800	U	ppbv	800	5/30/2012 6:15 PM
Tetrahydrofuran	ND	800	U	ppbv	800	5/30/2012 6:15 PM
Toluene	4,400	800		ppbv	800	5/30/2012 6:15 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	5/30/2012 6:15 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	5/30/2012 6:15 PM
Trichloroethene	ND	800	U	ppbv	800	5/30/2012 6:15 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	5/30/2012 6:15 PM
Vinyl acetate	ND	800	U	ppbv	800	5/30/2012 6:15 PM
Vinyl chloride	ND	800	U	ppbv	800	5/30/2012 6:15 PM
Xylenes, Total	1,500	2,400	J	ppbv	800	5/30/2012 6:15 PM
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	800	5/30/2012 6:15 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,600,000	940,000		µg/m³	8000	5/29/2012 10:21 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	5/29/2012 10:21 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	5/29/2012 10:21 PM
Surr: 4-Bromofluorobenzene	93.8	70-130		%REC	8000	5/29/2012 10:21 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 8:59:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-005	**Matrix:**	Air
Client Sample ID:	VA1323		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	7.5	0.10		%	1	6/5/2012 1:49 PM
Carbon Monoxide	ND	0.10	U	%	1	6/5/2012 1:49 PM
Methane	ND	0.50	U	%	1	6/5/2012 1:49 PM
Nitrogen	86	0.10		%	1	6/5/2012 1:49 PM
Oxygen	7.7	0.10		%	1	6/5/2012 1:49 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	5/29/2012 11:09 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	5/29/2012 11:09 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	5/29/2012 11:09 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	5/29/2012 11:09 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	5/29/2012 11:09 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	5/29/2012 11:09 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	5/29/2012 11:09 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	5/29/2012 11:09 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	5/29/2012 11:09 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	5/29/2012 11:09 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	5/29/2012 11:09 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	5/29/2012 11:09 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	5/29/2012 11:09 PM
1,3-Butadiene	ND	800	U	ppbv	800	5/29/2012 11:09 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	5/29/2012 11:09 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	5/29/2012 11:09 PM
2-Butanone	ND	800	U	ppbv	800	5/29/2012 11:09 PM
2-Hexanone	ND	800	U	ppbv	800	5/29/2012 11:09 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Acetone	2,400	800		ppbv	800	5/29/2012 11:09 PM
Benzene	16,000	800		ppbv	800	5/29/2012 11:09 PM
Benzyl chloride	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Bromodichloromethane	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Bromoform	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Bromomethane	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Carbon disulfide	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Carbon tetrachloride	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Chlorobenzene	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Chlorodibromomethane	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Chloroethane	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Chloroform	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Chloromethane	ND	800	U	ppbv	800	5/29/2012 11:09 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	5/29/2012 11:09 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	5/29/2012 11:09 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 8:59:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-005	**Matrix:**	Air
Client Sample ID:	VA1323		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	820	1,600	J	ppbv	800	5/29/2012 11:09 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Ethyl acetate	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Ethylbenzene	ND	1,600	U	ppbv	800	5/29/2012 11:09 PM
Heptane	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	5/29/2012 11:09 PM
m,p-Xylene	ND	1,600	U	ppbv	800	5/29/2012 11:09 PM
Methylene chloride	2,700	4,000	J	ppbv	800	5/29/2012 11:09 PM
n-Hexane	ND	1,600	U	ppbv	800	5/29/2012 11:09 PM
Naphthalene	ND	800	U	ppbv	800	5/29/2012 11:09 PM
o-Xylene	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Propylene	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Styrene	ND	800	U	ppbv	800	5/29/2012 11:09 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Tetrachloroethene	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Tetrahydrofuran	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Toluene	2,400	800		ppbv	800	5/29/2012 11:09 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	5/29/2012 11:09 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Trichloroethene	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Vinyl acetate	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Vinyl chloride	ND	800	U	ppbv	800	5/29/2012 11:09 PM
Xylenes, Total	ND	2,400	U	ppbv	800	5/29/2012 11:09 PM
Surr: 4-Bromofluorobenzene	98.4	70-130		%REC	800	5/29/2012 11:09 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	9,300	4,700		µg/m³	40	5/30/2012 6:17 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	5/30/2012 6:17 PM
C9-C12 Aliphatic Hydrocarbons	3,400	7,600	J	µg/m³	40	5/30/2012 6:17 PM
Surr: 4-Bromofluorobenzene	94.3	70-130		%REC	40	5/30/2012 6:17 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 9:32:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-006	**Matrix:**	Air
Client Sample ID:	VA1324		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	9.1	0.10		%	1	6/5/2012 2:04 PM
Carbon Monoxide	ND	0.10	U	%	1	6/5/2012 2:04 PM
Methane	ND	0.50	U	%	1	6/5/2012 2:04 PM
Nitrogen	84	0.10		%	1	6/5/2012 2:04 PM
Oxygen	6.1	0.10		%	1	6/5/2012 2:04 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
1,3-Butadiene	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
2-Butanone	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
2-Hexanone	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Acetone	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Benzene	270,000	20,000		ppbv	20000	5/29/2012 11:51 PM
Benzyl chloride	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Bromodichloromethane	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Bromoform	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Bromomethane	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Carbon disulfide	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Chlorobenzene	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Chloroethane	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Chloroform	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Chloromethane	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 9:32:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-006	**Matrix:**	Air
Client Sample ID:	VA1324		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	940,000	40,000		ppbv	20000	5/29/2012 11:51 PM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Ethyl acetate	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Ethylbenzene	ND	40,000	U	ppbv	20000	5/29/2012 11:51 PM
Heptane	320,000	20,000		ppbv	20000	5/29/2012 11:51 PM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	5/29/2012 11:51 PM
m,p-Xylene	23,000	40,000	J	ppbv	20000	5/29/2012 11:51 PM
Methylene chloride	ND	100,000	U	ppbv	20000	5/29/2012 11:51 PM
n-Hexane	550,000	40,000		ppbv	20000	5/29/2012 11:51 PM
Naphthalene	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
o-Xylene	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Propylene	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Styrene	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Tetrachloroethene	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Toluene	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Trichloroethene	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Vinyl acetate	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Vinyl chloride	ND	20,000	U	ppbv	20000	5/29/2012 11:51 PM
Xylenes, Total	23,000	60,000	J	ppbv	20000	5/29/2012 11:51 PM
Surr: 4-Bromofluorobenzene	94.7	70-130		%REC	20000	5/29/2012 11:51 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	21,000,000	2,300,000		µg/m³	20000	5/26/2012 2:44 AM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	5/26/2012 2:44 AM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	5/26/2012 2:44 AM
Surr: 4-Bromofluorobenzene	93.3	70-130		%REC	20000	5/26/2012 2:44 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 10:12:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-007	**Matrix:**	Air
Client Sample ID:	VA1325		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	1.5	0.10		%	1	6/5/2012 2:20 PM
Carbon Monoxide	ND	0.10	U	%	1	6/5/2012 2:20 PM
Methane	ND	0.50	U	%	1	6/5/2012 2:20 PM
Nitrogen	81	0.10		%	1	6/5/2012 2:20 PM
Oxygen	18	0.10		%	1	6/5/2012 2:20 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
1,3-Butadiene	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
2-Butanone	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
2-Hexanone	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
Acetone	27,000	20,000		ppbv	20000	5/30/2012 12:32 AM
Benzene	280,000	20,000		ppbv	20000	5/30/2012 12:32 AM
Benzyl chloride	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
Bromodichloromethane	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
Bromoform	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
Bromomethane	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
Carbon disulfide	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
Chlorobenzene	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
Chloroethane	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
Chloroform	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
Chloromethane	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 10:12:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-007	**Matrix:**	Air
Client Sample ID:	VA1325		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	710,000	40,000		ppbv	20000	5/30/2012 12:32 AM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
Ethyl acetate	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
Ethylbenzene	ND	40,000	U	ppbv	20000	5/30/2012 12:32 AM
Heptane	340,000	20,000		ppbv	20000	5/30/2012 12:32 AM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	5/30/2012 12:32 AM
m,p-Xylene	29,000	40,000	J	ppbv	20000	5/30/2012 12:32 AM
Methylene chloride	ND	100,000	U	ppbv	20000	5/30/2012 12:32 AM
n-Hexane	720,000	40,000		ppbv	20000	5/30/2012 12:32 AM
Naphthalene	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
o-Xylene	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
Propylene	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
Styrene	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
Tetrachloroethene	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
Toluene	280,000	20,000		ppbv	20000	5/30/2012 12:32 AM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
Trichloroethene	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
Vinyl acetate	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
Vinyl chloride	ND	20,000	U	ppbv	20000	5/30/2012 12:32 AM
Xylenes, Total	29,000	60,000	J	ppbv	20000	5/30/2012 12:32 AM
Surr: 4-Bromofluorobenzene	95.5	70-130		%REC	20000	5/30/2012 12:32 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	16,000,000	2,300,000		µg/m³	20000	5/26/2012 3:27 AM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	5/26/2012 3:27 AM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	5/26/2012 3:27 AM
Surr: 4-Bromofluorobenzene	93.7	70-130		%REC	20000	5/26/2012 3:27 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 10:12:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-008	**Matrix:**	Air
Client Sample ID:	VA1326		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	1.6	0.10		%	1	6/5/2012 2:35 PM
Carbon Monoxide	ND	0.10	U	%	1	6/5/2012 2:35 PM
Methane	ND	0.50	U	%	1	6/5/2012 2:35 PM
Nitrogen	81	0.10		%	1	6/5/2012 2:35 PM
Oxygen	17	0.10		%	1	6/5/2012 2:35 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
1,3-Butadiene	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
2-Butanone	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
2-Hexanone	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
Acetone	34,000	20,000		ppbv	20000	5/30/2012 1:14 AM
Benzene	330,000	20,000		ppbv	20000	5/30/2012 1:14 AM
Benzyl chloride	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
Bromodichloromethane	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
Bromoform	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
Bromomethane	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
Carbon disulfide	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
Chlorobenzene	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
Chloroethane	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
Chloroform	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
Chloromethane	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 10:12:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-008	**Matrix:**	Air
Client Sample ID:	VA1326		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	770,000	40,000		ppbv	20000	5/30/2012 1:14 AM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
Ethyl acetate	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
Ethylbenzene	21,000	40,000	J	ppbv	20000	5/30/2012 1:14 AM
Heptane	380,000	20,000		ppbv	20000	5/30/2012 1:14 AM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	5/30/2012 1:14 AM
m,p-Xylene	40,000	40,000	J	ppbv	20000	5/30/2012 1:14 AM
Methylene chloride	ND	100,000	U	ppbv	20000	5/30/2012 1:14 AM
n-Hexane	750,000	40,000		ppbv	20000	5/30/2012 1:14 AM
Naphthalene	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
o-Xylene	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
Propylene	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
Styrene	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
Tetrachloroethene	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
Toluene	360,000	20,000		ppbv	20000	5/30/2012 1:14 AM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
Trichloroethene	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
Vinyl acetate	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
Vinyl chloride	ND	20,000	U	ppbv	20000	5/30/2012 1:14 AM
Xylenes, Total	40,000	60,000	J	ppbv	20000	5/30/2012 1:14 AM
Surr: 4-Bromofluorobenzene	95.3	70-130		%REC	20000	5/30/2012 1:14 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	16,000,000	2,300,000		µg/m³	20000	5/29/2012 11:53 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	5/29/2012 11:53 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	5/29/2012 11:53 PM
Surr: 4-Bromofluorobenzene	96.0	70-130		%REC	20000	5/29/2012 11:53 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 10:58:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-009	**Matrix:**	Air
Client Sample ID:	VA1327		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	2.6	0.10		%	1	6/5/2012 2:49 PM
Carbon Monoxide	ND	0.10	U	%	1	6/5/2012 2:49 PM
Methane	ND	0.50	U	%	1	6/5/2012 2:49 PM
Nitrogen	81	0.10		%	1	6/5/2012 2:49 PM
Oxygen	16	0.10		%	1	6/5/2012 2:49 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
1,3-Butadiene	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
2-Butanone	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
2-Hexanone	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Acetone	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Benzene	200,000	20,000		ppbv	20000	5/30/2012 1:56 AM
Benzyl chloride	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Bromodichloromethane	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Bromoform	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Bromomethane	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Carbon disulfide	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Chlorobenzene	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Chloroethane	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Chloroform	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Chloromethane	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 10:58:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-009	**Matrix:**	Air
Client Sample ID:	VA1327		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	970,000	40,000		ppbv	20000	5/30/2012 1:56 AM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Ethyl acetate	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Ethylbenzene	ND	40,000	U	ppbv	20000	5/30/2012 1:56 AM
Heptane	710,000	20,000		ppbv	20000	5/30/2012 1:56 AM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	5/30/2012 1:56 AM
m,p-Xylene	40,000	40,000	J	ppbv	20000	5/30/2012 1:56 AM
Methylene chloride	ND	100,000	U	ppbv	20000	5/30/2012 1:56 AM
n-Hexane	570,000	40,000		ppbv	20000	5/30/2012 1:56 AM
Naphthalene	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
o-Xylene	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Propylene	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Styrene	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Tetrachloroethene	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Toluene	400,000	20,000		ppbv	20000	5/30/2012 1:56 AM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Trichloroethene	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Vinyl acetate	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Vinyl chloride	ND	20,000	U	ppbv	20000	5/30/2012 1:56 AM
Xylenes, Total	40,000	60,000	J	ppbv	20000	5/30/2012 1:56 AM
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	20000	5/30/2012 1:56 AM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	19,000,000	2,300,000		µg/m³	20000	5/30/2012 12:36 AM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	5/30/2012 12:36 AM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	5/30/2012 12:36 AM
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	20000	5/30/2012 12:36 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/15/2012 1:36:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-010	**Matrix:**	Air
Client Sample ID:	VA1345		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	7.3	0.10		%	1	6/5/2012 3:05 PM
Carbon Monoxide	ND	0.10	U	%	1	6/5/2012 3:05 PM
Methane	ND	0.50	U	%	1	6/5/2012 3:05 PM
Nitrogen	84	0.10		%	1	6/5/2012 3:05 PM
Oxygen	8.5	0.10		%	1	6/5/2012 3:05 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
1,3-Butadiene	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
2-Butanone	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
2-Hexanone	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Acetone	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Benzene	140,000	20,000		ppbv	20000	5/30/2012 2:37 AM
Benzyl chloride	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Bromodichloromethane	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Bromoform	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Bromomethane	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Carbon disulfide	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Chlorobenzene	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Chloroethane	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Chloroform	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Chloromethane	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/15/2012 1:36:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-010	**Matrix:**	Air
Client Sample ID:	VA1345		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	540,000	40,000		ppbv	20000	5/30/2012 2:37 AM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Ethyl acetate	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Ethylbenzene	ND	40,000	U	ppbv	20000	5/30/2012 2:37 AM
Heptane	130,000	20,000		ppbv	20000	5/30/2012 2:37 AM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	5/30/2012 2:37 AM
m,p-Xylene	ND	40,000	U	ppbv	20000	5/30/2012 2:37 AM
Methylene chloride	92,000	100,000	J	ppbv	20000	5/30/2012 2:37 AM
n-Hexane	460,000	40,000		ppbv	20000	5/30/2012 2:37 AM
Naphthalene	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
o-Xylene	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Propylene	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Styrene	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Tetrachloroethene	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Toluene	90,000	20,000		ppbv	20000	5/30/2012 2:37 AM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Trichloroethene	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Vinyl acetate	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Vinyl chloride	ND	20,000	U	ppbv	20000	5/30/2012 2:37 AM
Xylenes, Total	ND	60,000	U	ppbv	20000	5/30/2012 2:37 AM
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	20000	5/30/2012 2:37 AM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	16,000,000	2,300,000		µg/m³	20000	5/30/2012 1:18 AM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	5/30/2012 1:18 AM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	5/30/2012 1:18 AM
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	20000	5/30/2012 1:18 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/15/2012 2:04:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-011	**Matrix:**	Air
Client Sample ID:	VA1346		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	7.0	0.10		%	1	6/5/2012 3:20 PM
Carbon Monoxide	ND	0.10	U	%	1	6/5/2012 3:20 PM
Methane	ND	0.50	U	%	1	6/5/2012 3:20 PM
Nitrogen	84	0.10		%	1	6/5/2012 3:20 PM
Oxygen	9.3	0.10		%	1	6/5/2012 3:20 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	5/30/2012 7:48 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	5/30/2012 7:48 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	5/30/2012 7:48 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	5/30/2012 7:48 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	5/30/2012 7:48 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	5/30/2012 7:48 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	5/30/2012 7:48 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	5/30/2012 7:48 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	5/30/2012 7:48 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	5/30/2012 7:48 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	5/30/2012 7:48 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	5/30/2012 7:48 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	5/30/2012 7:48 PM
1,3-Butadiene	ND	400	U	ppbv	400	5/30/2012 7:48 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	5/30/2012 7:48 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	5/30/2012 7:48 PM
2-Butanone	ND	400	U	ppbv	400	5/30/2012 7:48 PM
2-Hexanone	ND	400	U	ppbv	400	5/30/2012 7:48 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	5/30/2012 7:48 PM
Acetone	890	400		ppbv	400	5/30/2012 7:48 PM
Benzene	7,900	400		ppbv	400	5/30/2012 7:48 PM
Benzyl chloride	ND	400	U	ppbv	400	5/30/2012 7:48 PM
Bromodichloromethane	ND	400	U	ppbv	400	5/30/2012 7:48 PM
Bromoform	ND	400	U	ppbv	400	5/30/2012 7:48 PM
Bromomethane	ND	400	U	ppbv	400	5/30/2012 7:48 PM
Carbon disulfide	ND	400	U	ppbv	400	5/30/2012 7:48 PM
Carbon tetrachloride	ND	400	U	ppbv	400	5/30/2012 7:48 PM
Chlorobenzene	ND	400	U	ppbv	400	5/30/2012 7:48 PM
Chlorodibromomethane	ND	400	U	ppbv	400	5/30/2012 7:48 PM
Chloroethane	ND	400	U	ppbv	400	5/30/2012 7:48 PM
Chloroform	ND	400	U	ppbv	400	5/30/2012 7:48 PM
Chloromethane	ND	400	U	ppbv	400	5/30/2012 7:48 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	5/30/2012 7:48 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	5/30/2012 7:48 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/15/2012 2:04:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-011	**Matrix:**	Air
Client Sample ID:	VA1346		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	16,000	800		ppbv	400	5/30/2012 7:48 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	5/30/2012 7:48 PM
Ethyl acetate	ND	400	U	ppbv	400	5/30/2012 7:48 PM
Ethylbenzene	930	800		ppbv	400	5/30/2012 7:48 PM
Heptane	6,300	400		ppbv	400	5/30/2012 7:48 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	5/30/2012 7:48 PM
m,p-Xylene	2,000	800		ppbv	400	5/30/2012 7:48 PM
Methylene chloride	3,600	2,000		ppbv	400	5/30/2012 7:48 PM
n-Hexane	9,500	800		ppbv	400	5/30/2012 7:48 PM
Naphthalene	ND	400	U	ppbv	400	5/30/2012 7:48 PM
o-Xylene	630	400		ppbv	400	5/30/2012 7:48 PM
Propylene	ND	400	U	ppbv	400	5/30/2012 7:48 PM
Styrene	ND	400	U	ppbv	400	5/30/2012 7:48 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	5/30/2012 7:48 PM
Tetrachloroethene	ND	400	U	ppbv	400	5/30/2012 7:48 PM
Tetrahydrofuran	ND	400	U	ppbv	400	5/30/2012 7:48 PM
Toluene	12,000	400		ppbv	400	5/30/2012 7:48 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	5/30/2012 7:48 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	5/30/2012 7:48 PM
Trichloroethene	ND	400	U	ppbv	400	5/30/2012 7:48 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	5/30/2012 7:48 PM
Vinyl acetate	ND	400	U	ppbv	400	5/30/2012 7:48 PM
Vinyl chloride	ND	400	U	ppbv	400	5/30/2012 7:48 PM
Xylenes, Total	2,600	1,200		ppbv	400	5/30/2012 7:48 PM
Surr: 4-Bromofluorobenzene	94.7	70-130		%REC	400	5/30/2012 7:48 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	490,000	47,000		µg/m³	400	5/30/2012 3:59 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	5/30/2012 3:59 PM
C9-C12 Aliphatic Hydrocarbons	39,000	76,000	J	µg/m³	400	5/30/2012 3:59 PM
Surr: 4-Bromofluorobenzene	94.4	70-130		%REC	400	5/30/2012 3:59 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/15/2012 2:32:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-012	**Matrix:**	Air
Client Sample ID:	VA1347		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.25	0.10		%	1	6/5/2012 3:35 PM
Carbon Monoxide	ND	0.10	U	%	1	6/5/2012 3:35 PM
Methane	ND	0.50	U	%	1	6/5/2012 3:35 PM
Nitrogen	80	0.10		%	1	6/5/2012 3:35 PM
Oxygen	20	0.10		%	1	6/5/2012 3:35 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	5/30/2012 8:32 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	5/30/2012 8:32 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	5/30/2012 8:32 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	5/30/2012 8:32 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	5/30/2012 8:32 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	5/30/2012 8:32 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	5/30/2012 8:32 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	5/30/2012 8:32 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	5/30/2012 8:32 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	5/30/2012 8:32 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	5/30/2012 8:32 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	5/30/2012 8:32 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	5/30/2012 8:32 PM
1,3-Butadiene	ND	800	U	ppbv	800	5/30/2012 8:32 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	5/30/2012 8:32 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	5/30/2012 8:32 PM
2-Butanone	ND	800	U	ppbv	800	5/30/2012 8:32 PM
2-Hexanone	ND	800	U	ppbv	800	5/30/2012 8:32 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Acetone	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Benzene	7,100	800		ppbv	800	5/30/2012 8:32 PM
Benzyl chloride	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Bromodichloromethane	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Bromoform	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Bromomethane	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Carbon disulfide	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Carbon tetrachloride	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Chlorobenzene	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Chlorodibromomethane	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Chloroethane	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Chloroform	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Chloromethane	ND	800	U	ppbv	800	5/30/2012 8:32 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	5/30/2012 8:32 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	5/30/2012 8:32 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/15/2012 2:32:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-012	**Matrix:**	Air
Client Sample ID:	VA1347		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	62,000	16,000		ppbv	8000	5/31/2012 8:20 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Ethyl acetate	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Ethylbenzene	ND	1,600	U	ppbv	800	5/30/2012 8:32 PM
Heptane	25,000	800		ppbv	800	5/30/2012 8:32 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	5/30/2012 8:32 PM
m,p-Xylene	1,100	1,600	J	ppbv	800	5/30/2012 8:32 PM
Methylene chloride	ND	4,000	U	ppbv	800	5/30/2012 8:32 PM
n-Hexane	63,000	16,000		ppbv	8000	5/31/2012 8:20 PM
Naphthalene	ND	800	U	ppbv	800	5/30/2012 8:32 PM
o-Xylene	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Propylene	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Styrene	ND	800	U	ppbv	800	5/30/2012 8:32 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Tetrachloroethene	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Tetrahydrofuran	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Toluene	6,100	800		ppbv	800	5/30/2012 8:32 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	5/30/2012 8:32 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Trichloroethene	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Vinyl acetate	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Vinyl chloride	ND	800	U	ppbv	800	5/30/2012 8:32 PM
Xylenes, Total	1,100	2,400	J	ppbv	800	5/30/2012 8:32 PM
Surr: 4-Bromofluorobenzene	96.4	70-130		%REC	800	5/30/2012 8:32 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,200,000	94,000		µg/m³	800	5/30/2012 4:45 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	5/30/2012 4:45 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	5/30/2012 4:45 PM
Surr: 4-Bromofluorobenzene	98.7	70-130		%REC	800	5/30/2012 4:45 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/15/2012 2:52:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-013	**Matrix:**	Air
Client Sample ID:	VA1398		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.49	0.10		%	1	6/5/2012 3:50 PM
Carbon Monoxide	ND	0.10	U	%	1	6/5/2012 3:50 PM
Methane	ND	0.50	U	%	1	6/5/2012 3:50 PM
Nitrogen	80	0.10		%	1	6/5/2012 3:50 PM
Oxygen	20	0.10		%	1	6/5/2012 3:50 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	5/31/2012 9:01 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	5/31/2012 9:01 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	5/31/2012 9:01 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	5/31/2012 9:01 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	5/31/2012 9:01 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	5/31/2012 9:01 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	5/31/2012 9:01 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	5/31/2012 9:01 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	5/31/2012 9:01 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	5/31/2012 9:01 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	5/31/2012 9:01 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	5/31/2012 9:01 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	5/31/2012 9:01 PM
1,3-Butadiene	ND	40	U	ppbv	40	5/31/2012 9:01 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	5/31/2012 9:01 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	5/31/2012 9:01 PM
2-Butanone	ND	40	U	ppbv	40	5/31/2012 9:01 PM
2-Hexanone	ND	40	U	ppbv	40	5/31/2012 9:01 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Acetone	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Benzene	52	40		ppbv	40	5/31/2012 9:01 PM
Benzyl chloride	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Bromodichloromethane	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Bromoform	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Bromomethane	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Carbon disulfide	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Carbon tetrachloride	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Chlorobenzene	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Chlorodibromomethane	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Chloroethane	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Chloroform	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Chloromethane	ND	40	U	ppbv	40	5/31/2012 9:01 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	5/31/2012 9:01 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	5/31/2012 9:01 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/15/2012 2:52:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-013	**Matrix:**	Air
Client Sample ID:	VA1398		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	260	80		ppbv	40	5/31/2012 9:01 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Ethyl acetate	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Ethylbenzene	ND	80	U	ppbv	40	5/31/2012 9:01 PM
Heptane	64	40		ppbv	40	5/31/2012 9:01 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	5/31/2012 9:01 PM
m,p-Xylene	ND	80	U	ppbv	40	5/31/2012 9:01 PM
Methylene chloride	ND	200	U	ppbv	40	5/31/2012 9:01 PM
n-Hexane	120	80		ppbv	40	5/31/2012 9:01 PM
Naphthalene	ND	40	U	ppbv	40	5/31/2012 9:01 PM
o-Xylene	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Propylene	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Styrene	ND	40	U	ppbv	40	5/31/2012 9:01 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Tetrachloroethene	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Tetrahydrofuran	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Toluene	170	40		ppbv	40	5/31/2012 9:01 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	5/31/2012 9:01 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Trichloroethene	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Vinyl acetate	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Vinyl chloride	ND	40	U	ppbv	40	5/31/2012 9:01 PM
Xylenes, Total	ND	120	U	ppbv	40	5/31/2012 9:01 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	40	5/31/2012 9:01 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	25,000	4,700		µg/m³	40	5/31/2012 2:09 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	5/31/2012 2:09 PM
C9-C12 Aliphatic Hydrocarbons	2,700	7,600	J	µg/m³	40	5/31/2012 2:09 PM
Surr: 4-Bromofluorobenzene	95.1	70-130		%REC	40	5/31/2012 2:09 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/15/2012 3:34:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-014	**Matrix:**	Air
Client Sample ID:	VA1399		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	1.3	0.10		%	1	6/6/2012 10:09 AM
Carbon Monoxide	ND	0.10	U	%	1	6/6/2012 10:09 AM
Methane	ND	0.50	U	%	1	6/6/2012 10:09 AM
Nitrogen	80	0.10		%	1	6/6/2012 10:09 AM
Oxygen	19	0.10		%	1	6/6/2012 10:09 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
1,1,2,2-Tetrachloroethane	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	6.7	4.0		ppbv	4	6/1/2012 8:39 AM
1,1,2-Trichloroethane	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
1,1-Dichloroethane	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
1,1-Dichloroethene	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
1,2,4-Trichlorobenzene	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
1,2,4-Trimethylbenzene	6.0	4.0		ppbv	4	6/1/2012 8:39 AM
1,2-Dibromoethane	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
1,2-Dichlorobenzene	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
1,2-Dichloroethane	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
1,2-Dichloropropane	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
1,3,5-Trimethylbenzene	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
1,3-Butadiene	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
1,3-Dichlorobenzene	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
1,4-Dichlorobenzene	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
2-Butanone	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
2-Hexanone	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
4-Methyl-2-pentanone	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
Acetone	8.7	4.0		ppbv	4	6/1/2012 8:39 AM
Benzene	25	4.0		ppbv	4	6/1/2012 8:39 AM
Benzyl chloride	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
Bromodichloromethane	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
Bromoform	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
Bromomethane	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
Carbon disulfide	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
Carbon tetrachloride	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
Chlorobenzene	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
Chlorodibromomethane	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
Chloroethane	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
Chloroform	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
Chloromethane	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
cis-1,2-Dichloroethene	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
cis-1,3-dichloropropene	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/15/2012 3:34:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-014	**Matrix:**	Air
Client Sample ID:	VA1399		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	130	8.0		ppbv	4	6/1/2012 8:39 AM
Dichlorodifluoromethane	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
Ethyl acetate	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
Ethylbenzene	12	8.0		ppbv	4	6/1/2012 8:39 AM
Heptane	38	4.0		ppbv	4	6/1/2012 8:39 AM
Hexachlorobutadiene	ND	8.0	U	ppbv	4	6/1/2012 8:39 AM
m,p-Xylene	30	8.0		ppbv	4	6/1/2012 8:39 AM
Methylene chloride	ND	20	U	ppbv	4	6/1/2012 8:39 AM
n-Hexane	49	8.0		ppbv	4	6/1/2012 8:39 AM
Naphthalene	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
o-Xylene	13	4.0		ppbv	4	6/1/2012 8:39 AM
Propylene	4.2	4.0		ppbv	4	6/1/2012 8:39 AM
Styrene	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
tert-Butyl Methyl Ether	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
Tetrachloroethene	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
Tetrahydrofuran	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
Toluene	110	4.0		ppbv	4	6/1/2012 8:39 AM
trans-1,2-Dichloroethene	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
trans-1,3-dichloropropene	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
Trichloroethene	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
Trichlorofluoromethane	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
Vinyl acetate	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
Vinyl chloride	ND	4.0	U	ppbv	4	6/1/2012 8:39 AM
Xylenes, Total	43	12		ppbv	4	6/1/2012 8:39 AM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	4	6/1/2012 8:39 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	17,000	4,700		µg/m³	40	5/31/2012 2:52 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	5/31/2012 2:52 PM
C9-C12 Aliphatic Hydrocarbons	2,800	7,600	J	µg/m³	40	5/31/2012 2:52 PM
Surr: 4-Bromofluorobenzene	97.7	70-130		%REC	40	5/31/2012 2:52 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/15/2012 3:34:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-015	**Matrix:**	Air
Client Sample ID:	VA1400		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	1.9	0.10		%	1	6/6/2012 10:24 AM
Carbon Monoxide	ND	0.10	U	%	1	6/6/2012 10:24 AM
Methane	ND	0.50	U	%	1	6/6/2012 10:24 AM
Nitrogen	80	0.10		%	1	6/6/2012 10:24 AM
Oxygen	18	0.10		%	1	6/6/2012 10:24 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
1,1,2,2-Tetrachloroethane	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
1,1,2-Trichloroethane	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
1,1-Dichloroethane	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
1,1-Dichloroethene	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
1,2,4-Trichlorobenzene	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
1,2,4-Trimethylbenzene	4.6	4.0		ppbv	4	6/1/2012 10:46 AM
1,2-Dibromoethane	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
1,2-Dichlorobenzene	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
1,2-Dichloroethane	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
1,2-Dichloropropane	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
1,3,5-Trimethylbenzene	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
1,3-Butadiene	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
1,3-Dichlorobenzene	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
1,4-Dichlorobenzene	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
2-Butanone	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
2-Hexanone	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
4-Methyl-2-pentanone	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
Acetone	5.9	4.0		ppbv	4	6/1/2012 10:46 AM
Benzene	25	4.0		ppbv	4	6/1/2012 10:46 AM
Benzyl chloride	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
Bromodichloromethane	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
Bromoform	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
Bromomethane	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
Carbon disulfide	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
Carbon tetrachloride	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
Chlorobenzene	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
Chlorodibromomethane	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
Chloroethane	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
Chloroform	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
Chloromethane	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
cis-1,2-Dichloroethene	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
cis-1,3-dichloropropene	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/15/2012 3:34:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-015	**Matrix:**	Air
Client Sample ID:	VA1400		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	150	8.0		ppbv	4	6/1/2012 10:46 AM
Dichlorodifluoromethane	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
Ethyl acetate	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
Ethylbenzene	11	8.0		ppbv	4	6/1/2012 10:46 AM
Heptane	33	4.0		ppbv	4	6/1/2012 10:46 AM
Hexachlorobutadiene	ND	8.0	U	ppbv	4	6/1/2012 10:46 AM
m,p-Xylene	26	8.0		ppbv	4	6/1/2012 10:46 AM
Methylene chloride	ND	20	U	ppbv	4	6/1/2012 10:46 AM
n-Hexane	44	8.0		ppbv	4	6/1/2012 10:46 AM
Naphthalene	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
o-Xylene	12	4.0		ppbv	4	6/1/2012 10:46 AM
Propylene	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
Styrene	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
tert-Butyl Methyl Ether	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
Tetrachloroethene	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
Tetrahydrofuran	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
Toluene	110	4.0		ppbv	4	6/1/2012 10:46 AM
trans-1,2-Dichloroethene	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
trans-1,3-dichloropropene	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
Trichloroethene	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
Trichlorofluoromethane	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
Vinyl acetate	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
Vinyl chloride	ND	4.0	U	ppbv	4	6/1/2012 10:46 AM
Xylenes, Total	37	12		ppbv	4	6/1/2012 10:46 AM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	4	6/1/2012 10:46 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	24,000	4,700		µg/m³	40	5/31/2012 3:37 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	5/31/2012 3:37 PM
C9-C12 Aliphatic Hydrocarbons	3,300	7,600	J	µg/m³	40	5/31/2012 3:37 PM
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	40	5/31/2012 3:37 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 8:30:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-016	**Matrix:**	Air
Client Sample ID:	VA1401		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	2.2	0.10		%	1	6/6/2012 10:40 AM
Carbon Monoxide	ND	0.10	U	%	1	6/6/2012 10:40 AM
Methane	ND	0.50	U	%	1	6/6/2012 10:40 AM
Nitrogen	81	0.10		%	1	6/6/2012 10:40 AM
Oxygen	18	0.10		%	1	6/6/2012 10:40 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	5/30/2012 11:44 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	5/30/2012 11:44 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	5/30/2012 11:44 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	5/30/2012 11:44 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	5/30/2012 11:44 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	5/30/2012 11:44 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	5/30/2012 11:44 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	5/30/2012 11:44 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	5/30/2012 11:44 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	5/30/2012 11:44 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	5/30/2012 11:44 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	5/30/2012 11:44 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	5/30/2012 11:44 PM
1,3-Butadiene	ND	400	U	ppbv	400	5/30/2012 11:44 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	5/30/2012 11:44 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	5/30/2012 11:44 PM
2-Butanone	ND	400	U	ppbv	400	5/30/2012 11:44 PM
2-Hexanone	ND	400	U	ppbv	400	5/30/2012 11:44 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	5/30/2012 11:44 PM
Acetone	610	400		ppbv	400	5/30/2012 11:44 PM
Benzene	1,900	400		ppbv	400	5/30/2012 11:44 PM
Benzyl chloride	ND	400	U	ppbv	400	5/30/2012 11:44 PM
Bromodichloromethane	ND	400	U	ppbv	400	5/30/2012 11:44 PM
Bromoform	ND	400	U	ppbv	400	5/30/2012 11:44 PM
Bromomethane	ND	400	U	ppbv	400	5/30/2012 11:44 PM
Carbon disulfide	ND	400	U	ppbv	400	5/30/2012 11:44 PM
Carbon tetrachloride	ND	400	U	ppbv	400	5/30/2012 11:44 PM
Chlorobenzene	ND	400	U	ppbv	400	5/30/2012 11:44 PM
Chlorodibromomethane	ND	400	U	ppbv	400	5/30/2012 11:44 PM
Chloroethane	ND	400	U	ppbv	400	5/30/2012 11:44 PM
Chloroform	ND	400	U	ppbv	400	5/30/2012 11:44 PM
Chloromethane	ND	400	U	ppbv	400	5/30/2012 11:44 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	5/30/2012 11:44 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	5/30/2012 11:44 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 8:30:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-016	**Matrix:**	Air
Client Sample ID:	VA1401		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	6,000	800		ppbv	400	5/30/2012 11:44 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	5/30/2012 11:44 PM
Ethyl acetate	ND	400	U	ppbv	400	5/30/2012 11:44 PM
Ethylbenzene	ND	800	U	ppbv	400	5/30/2012 11:44 PM
Heptane	560	400		ppbv	400	5/30/2012 11:44 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	5/30/2012 11:44 PM
m,p-Xylene	ND	800	U	ppbv	400	5/30/2012 11:44 PM
Methylene chloride	1,700	2,000	J	ppbv	400	5/30/2012 11:44 PM
n-Hexane	1,900	800		ppbv	400	5/30/2012 11:44 PM
Naphthalene	ND	400	U	ppbv	400	5/30/2012 11:44 PM
o-Xylene	ND	400	U	ppbv	400	5/30/2012 11:44 PM
Propylene	ND	400	U	ppbv	400	5/30/2012 11:44 PM
Styrene	ND	400	U	ppbv	400	5/30/2012 11:44 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	5/30/2012 11:44 PM
Tetrachloroethene	ND	400	U	ppbv	400	5/30/2012 11:44 PM
Tetrahydrofuran	ND	400	U	ppbv	400	5/30/2012 11:44 PM
Toluene	1,300	400		ppbv	400	5/30/2012 11:44 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	5/30/2012 11:44 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	5/30/2012 11:44 PM
Trichloroethene	ND	400	U	ppbv	400	5/30/2012 11:44 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	5/30/2012 11:44 PM
Vinyl acetate	ND	400	U	ppbv	400	5/30/2012 11:44 PM
Vinyl chloride	ND	400	U	ppbv	400	5/30/2012 11:44 PM
Xylenes, Total	ND	1,200	U	ppbv	400	5/30/2012 11:44 PM
Surr: 4-Bromofluorobenzene	97.5	70-130		%REC	400	5/30/2012 11:44 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	230,000	47,000		µg/m³	400	5/31/2012 6:38 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	5/31/2012 6:38 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	5/31/2012 6:38 PM
Surr: 4-Bromofluorobenzene	97.1	70-130		%REC	400	5/31/2012 6:38 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 9:08:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-017	**Matrix:**	Air
Client Sample ID:	VA1402		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.33	0.10		%	1	6/6/2012 10:56 AM
Carbon Monoxide	ND	0.10	U	%	1	6/6/2012 10:56 AM
Methane	ND	0.50	U	%	1	6/6/2012 10:56 AM
Nitrogen	81	0.10		%	1	6/6/2012 10:56 AM
Oxygen	20	0.10		%	1	6/6/2012 10:56 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	5/31/2012 11:09 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	5/31/2012 11:09 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	5/31/2012 11:09 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	5/31/2012 11:09 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	5/31/2012 11:09 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	5/31/2012 11:09 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	5/31/2012 11:09 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	5/31/2012 11:09 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	5/31/2012 11:09 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	5/31/2012 11:09 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	5/31/2012 11:09 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	5/31/2012 11:09 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	5/31/2012 11:09 PM
1,3-Butadiene	ND	800	U	ppbv	800	5/31/2012 11:09 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	5/31/2012 11:09 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	5/31/2012 11:09 PM
2-Butanone	ND	800	U	ppbv	800	5/31/2012 11:09 PM
2-Hexanone	ND	800	U	ppbv	800	5/31/2012 11:09 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Acetone	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Benzene	33,000	800		ppbv	800	5/31/2012 11:09 PM
Benzyl chloride	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Bromodichloromethane	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Bromoform	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Bromomethane	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Carbon disulfide	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Carbon tetrachloride	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Chlorobenzene	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Chlorodibromomethane	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Chloroethane	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Chloroform	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Chloromethane	ND	800	U	ppbv	800	5/31/2012 11:09 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	5/31/2012 11:09 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	5/31/2012 11:09 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 9:08:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-017	**Matrix:**	Air
Client Sample ID:	VA1402		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	4,800	1,600		ppbv	800	5/31/2012 11:09 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Ethyl acetate	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Ethylbenzene	ND	1,600	U	ppbv	800	5/31/2012 11:09 PM
Heptane	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	5/31/2012 11:09 PM
m,p-Xylene	2,100	1,600		ppbv	800	5/31/2012 11:09 PM
Methylene chloride	ND	4,000	U	ppbv	800	5/31/2012 11:09 PM
n-Hexane	4,500	1,600		ppbv	800	5/31/2012 11:09 PM
Naphthalene	ND	800	U	ppbv	800	5/31/2012 11:09 PM
o-Xylene	1,300	800		ppbv	800	5/31/2012 11:09 PM
Propylene	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Styrene	ND	800	U	ppbv	800	5/31/2012 11:09 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Tetrachloroethene	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Tetrahydrofuran	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Toluene	69,000	8,000		ppbv	8000	5/31/2012 12:26 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	5/31/2012 11:09 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Trichloroethene	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Vinyl acetate	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Vinyl chloride	ND	800	U	ppbv	800	5/31/2012 11:09 PM
Xylenes, Total	3,500	2,400		ppbv	800	5/31/2012 11:09 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	800	5/31/2012 11:09 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	380,000	47,000		µg/m³	400	5/31/2012 7:27 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	5/31/2012 7:27 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	5/31/2012 7:27 PM
Surr: 4-Bromofluorobenzene	96.9	70-130		%REC	400	5/31/2012 7:27 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 9:44:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-018	**Matrix:**	Air
Client Sample ID:	VA1403		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.19	0.10		%	1	6/6/2012 11:11 AM
Carbon Monoxide	ND	0.10	U	%	1	6/6/2012 11:11 AM
Methane	ND	0.50	U	%	1	6/6/2012 11:11 AM
Nitrogen	80	0.10		%	1	6/6/2012 11:11 AM
Oxygen	20	0.10		%	1	6/6/2012 11:11 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	5/31/2012 1:10 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	5/31/2012 1:10 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	5/31/2012 1:10 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	5/31/2012 1:10 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	5/31/2012 1:10 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	5/31/2012 1:10 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	5/31/2012 1:10 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	5/31/2012 1:10 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	5/31/2012 1:10 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	5/31/2012 1:10 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	5/31/2012 1:10 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	5/31/2012 1:10 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	5/31/2012 1:10 AM
1,3-Butadiene	ND	800	U	ppbv	800	5/31/2012 1:10 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	5/31/2012 1:10 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	5/31/2012 1:10 AM
2-Butanone	ND	800	U	ppbv	800	5/31/2012 1:10 AM
2-Hexanone	ND	800	U	ppbv	800	5/31/2012 1:10 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	5/31/2012 1:10 AM
Acetone	ND	800	U	ppbv	800	5/31/2012 1:10 AM
Benzene	11,000	800		ppbv	800	5/31/2012 1:10 AM
Benzyl chloride	ND	800	U	ppbv	800	5/31/2012 1:10 AM
Bromodichloromethane	ND	800	U	ppbv	800	5/31/2012 1:10 AM
Bromoform	ND	800	U	ppbv	800	5/31/2012 1:10 AM
Bromomethane	ND	800	U	ppbv	800	5/31/2012 1:10 AM
Carbon disulfide	ND	800	U	ppbv	800	5/31/2012 1:10 AM
Carbon tetrachloride	ND	800	U	ppbv	800	5/31/2012 1:10 AM
Chlorobenzene	ND	800	U	ppbv	800	5/31/2012 1:10 AM
Chlorodibromomethane	ND	800	U	ppbv	800	5/31/2012 1:10 AM
Chloroethane	ND	800	U	ppbv	800	5/31/2012 1:10 AM
Chloroform	ND	800	U	ppbv	800	5/31/2012 1:10 AM
Chloromethane	ND	800	U	ppbv	800	5/31/2012 1:10 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	5/31/2012 1:10 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	5/31/2012 1:10 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 9:44:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-018	**Matrix:**	Air
Client Sample ID:	VA1403		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	13,000	1,600		ppbv	800	5/31/2012 1:10 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	5/31/2012 1:10 AM
Ethyl acetate	ND	800	U	ppbv	800	5/31/2012 1:10 AM
Ethylbenzene	ND	1,600	U	ppbv	800	5/31/2012 1:10 AM
Heptane	1,700	800		ppbv	800	5/31/2012 1:10 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	5/31/2012 1:10 AM
m,p-Xylene	920	1,600	J	ppbv	800	5/31/2012 1:10 AM
Methylene chloride	ND	4,000	U	ppbv	800	5/31/2012 1:10 AM
n-Hexane	13,000	1,600		ppbv	800	5/31/2012 1:10 AM
Naphthalene	ND	800	U	ppbv	800	5/31/2012 1:10 AM
o-Xylene	ND	800	U	ppbv	800	5/31/2012 1:10 AM
Propylene	870	800		ppbv	800	5/31/2012 1:10 AM
Styrene	ND	800	U	ppbv	800	5/31/2012 1:10 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	5/31/2012 1:10 AM
Tetrachloroethene	ND	800	U	ppbv	800	5/31/2012 1:10 AM
Tetrahydrofuran	ND	800	U	ppbv	800	5/31/2012 1:10 AM
Toluene	25,000	800		ppbv	800	5/31/2012 1:10 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	5/31/2012 1:10 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	5/31/2012 1:10 AM
Trichloroethene	ND	800	U	ppbv	800	5/31/2012 1:10 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	5/31/2012 1:10 AM
Vinyl acetate	ND	800	U	ppbv	800	5/31/2012 1:10 AM
Vinyl chloride	ND	800	U	ppbv	800	5/31/2012 1:10 AM
Xylenes, Total	920	2,400	J	ppbv	800	5/31/2012 1:10 AM
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	800	5/31/2012 1:10 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,200,000	190,000		µg/m³	1600	6/5/2012 4:09 AM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	6/5/2012 4:09 AM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	6/5/2012 4:09 AM
Surr: 4-Bromofluorobenzene	95.3	70-130		%REC	1600	6/5/2012 4:09 AM

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WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 10:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-019	**Matrix:**	Air
Client Sample ID:	VA1404		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.16	0.10		%	1	6/6/2012 11:26 AM
Carbon Monoxide	ND	0.10	U	%	1	6/6/2012 11:26 AM
Methane	ND	0.50	U	%	1	6/6/2012 11:26 AM
Nitrogen	80	0.10		%	1	6/6/2012 11:26 AM
Oxygen	20	0.10		%	1	6/6/2012 11:26 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	5/31/2012 1:59 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	5/31/2012 1:59 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	5/31/2012 1:59 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	5/31/2012 1:59 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	5/31/2012 1:59 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	5/31/2012 1:59 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	5/31/2012 1:59 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	5/31/2012 1:59 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	5/31/2012 1:59 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	5/31/2012 1:59 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	5/31/2012 1:59 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	5/31/2012 1:59 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	5/31/2012 1:59 AM
1,3-Butadiene	ND	400	U	ppbv	400	5/31/2012 1:59 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	5/31/2012 1:59 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	5/31/2012 1:59 AM
2-Butanone	ND	400	U	ppbv	400	5/31/2012 1:59 AM
2-Hexanone	ND	400	U	ppbv	400	5/31/2012 1:59 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	5/31/2012 1:59 AM
Acetone	420	400		ppbv	400	5/31/2012 1:59 AM
Benzene	2,500	400		ppbv	400	5/31/2012 1:59 AM
Benzyl chloride	ND	400	U	ppbv	400	5/31/2012 1:59 AM
Bromodichloromethane	ND	400	U	ppbv	400	5/31/2012 1:59 AM
Bromoform	ND	400	U	ppbv	400	5/31/2012 1:59 AM
Bromomethane	ND	400	U	ppbv	400	5/31/2012 1:59 AM
Carbon disulfide	ND	400	U	ppbv	400	5/31/2012 1:59 AM
Carbon tetrachloride	ND	400	U	ppbv	400	5/31/2012 1:59 AM
Chlorobenzene	ND	400	U	ppbv	400	5/31/2012 1:59 AM
Chlorodibromomethane	ND	400	U	ppbv	400	5/31/2012 1:59 AM
Chloroethane	ND	400	U	ppbv	400	5/31/2012 1:59 AM
Chloroform	ND	400	U	ppbv	400	5/31/2012 1:59 AM
Chloromethane	ND	400	U	ppbv	400	5/31/2012 1:59 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	5/31/2012 1:59 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	5/31/2012 1:59 AM

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WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 10:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-019	**Matrix:**	Air
Client Sample ID:	VA1404		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	5,000	800		ppbv	400	5/31/2012 1:59 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	5/31/2012 1:59 AM
Ethyl acetate	ND	400	U	ppbv	400	5/31/2012 1:59 AM
Ethylbenzene	ND	800	U	ppbv	400	5/31/2012 1:59 AM
Heptane	660	400		ppbv	400	5/31/2012 1:59 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	5/31/2012 1:59 AM
m,p-Xylene	ND	800	U	ppbv	400	5/31/2012 1:59 AM
Methylene chloride	ND	2,000	U	ppbv	400	5/31/2012 1:59 AM
n-Hexane	3,400	800		ppbv	400	5/31/2012 1:59 AM
Naphthalene	ND	400	U	ppbv	400	5/31/2012 1:59 AM
o-Xylene	ND	400	U	ppbv	400	5/31/2012 1:59 AM
Propylene	ND	400	U	ppbv	400	5/31/2012 1:59 AM
Styrene	ND	400	U	ppbv	400	5/31/2012 1:59 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	5/31/2012 1:59 AM
Tetrachloroethene	ND	400	U	ppbv	400	5/31/2012 1:59 AM
Tetrahydrofuran	ND	400	U	ppbv	400	5/31/2012 1:59 AM
Toluene	6,200	400		ppbv	400	5/31/2012 1:59 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	5/31/2012 1:59 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	5/31/2012 1:59 AM
Trichloroethene	ND	400	U	ppbv	400	5/31/2012 1:59 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	5/31/2012 1:59 AM
Vinyl acetate	ND	400	U	ppbv	400	5/31/2012 1:59 AM
Vinyl chloride	ND	400	U	ppbv	400	5/31/2012 1:59 AM
Xylenes, Total	ND	1,200	U	ppbv	400	5/31/2012 1:59 AM
Surr: 4-Bromofluorobenzene	95.3	70-130		%REC	400	5/31/2012 1:59 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	610,000	94,000		µg/m³	800	5/31/2012 9:46 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	5/31/2012 9:46 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	5/31/2012 9:46 PM
Surr: 4-Bromofluorobenzene	94.9	70-130		%REC	800	5/31/2012 9:46 PM

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WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/15/2012 12:22:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-020	**Matrix:**	Air
Client Sample ID:	VA1408		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.25	0.10		%	1	6/6/2012 11:41 AM
Carbon Monoxide	ND	0.10	U	%	1	6/6/2012 11:41 AM
Methane	ND	0.50	U	%	1	6/6/2012 11:41 AM
Nitrogen	80	0.10		%	1	6/6/2012 11:41 AM
Oxygen	20	0.10		%	1	6/6/2012 11:41 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/1/2012 12:34 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/1/2012 12:34 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/1/2012 12:34 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/1/2012 12:34 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/1/2012 12:34 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 12:34 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/1/2012 12:34 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	6/1/2012 12:34 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/1/2012 12:34 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 12:34 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/1/2012 12:34 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/1/2012 12:34 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/1/2012 12:34 AM
1,3-Butadiene	ND	40	U	ppbv	40	6/1/2012 12:34 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 12:34 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 12:34 AM
2-Butanone	ND	40	U	ppbv	40	6/1/2012 12:34 AM
2-Hexanone	ND	40	U	ppbv	40	6/1/2012 12:34 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Acetone	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Benzene	150	40		ppbv	40	6/1/2012 12:34 AM
Benzyl chloride	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Bromodichloromethane	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Bromoform	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Bromomethane	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Carbon disulfide	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Carbon tetrachloride	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Chlorobenzene	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Chlorodibromomethane	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Chloroethane	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Chloroform	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Chloromethane	ND	40	U	ppbv	40	6/1/2012 12:34 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 12:34 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/1/2012 12:34 AM

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WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/15/2012 12:22:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-020	**Matrix:**	Air
Client Sample ID:	VA1408		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	240	80		ppbv	40	6/1/2012 12:34 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Ethyl acetate	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Ethylbenzene	ND	80	U	ppbv	40	6/1/2012 12:34 AM
Heptane	54	40		ppbv	40	6/1/2012 12:34 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/1/2012 12:34 AM
m,p-Xylene	ND	80	U	ppbv	40	6/1/2012 12:34 AM
Methylene chloride	ND	200	U	ppbv	40	6/1/2012 12:34 AM
n-Hexane	67	80	J	ppbv	40	6/1/2012 12:34 AM
Naphthalene	ND	40	U	ppbv	40	6/1/2012 12:34 AM
o-Xylene	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Propylene	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Styrene	ND	40	U	ppbv	40	6/1/2012 12:34 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Tetrachloroethene	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Tetrahydrofuran	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Toluene	140	40		ppbv	40	6/1/2012 12:34 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 12:34 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Trichloroethene	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Vinyl acetate	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Vinyl chloride	ND	40	U	ppbv	40	6/1/2012 12:34 AM
Xylenes, Total	ND	120	U	ppbv	40	6/1/2012 12:34 AM
Surr: 4-Bromofluorobenzene	99.6	70-130		%REC	40	6/1/2012 12:34 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	91,000	47,000		µg/m³	400	5/31/2012 10:35 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	5/31/2012 10:35 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	5/31/2012 10:35 PM
Surr: 4-Bromofluorobenzene	97.8	70-130		%REC	400	5/31/2012 10:35 PM

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WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/15/2012 1:00:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-021	**Matrix:**	Air
Client Sample ID:	VA1409		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.16	0.10		%	1	6/6/2012 11:56 AM
Carbon Monoxide	ND	0.10	U	%	1	6/6/2012 11:56 AM
Methane	ND	0.50	U	%	1	6/6/2012 11:56 AM
Nitrogen	80	0.10		%	1	6/6/2012 11:56 AM
Oxygen	20	0.10		%	1	6/6/2012 11:56 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/1/2012 1:16 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/1/2012 1:16 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/1/2012 1:16 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/1/2012 1:16 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/1/2012 1:16 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 1:16 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/1/2012 1:16 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	6/1/2012 1:16 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/1/2012 1:16 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 1:16 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/1/2012 1:16 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/1/2012 1:16 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/1/2012 1:16 AM
1,3-Butadiene	ND	40	U	ppbv	40	6/1/2012 1:16 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 1:16 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 1:16 AM
2-Butanone	ND	40	U	ppbv	40	6/1/2012 1:16 AM
2-Hexanone	ND	40	U	ppbv	40	6/1/2012 1:16 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/1/2012 1:16 AM
Acetone	ND	40	U	ppbv	40	6/1/2012 1:16 AM
Benzene	500	40		ppbv	40	6/1/2012 1:16 AM
Benzyl chloride	ND	40	U	ppbv	40	6/1/2012 1:16 AM
Bromodichloromethane	ND	40	U	ppbv	40	6/1/2012 1:16 AM
Bromoform	ND	40	U	ppbv	40	6/1/2012 1:16 AM
Bromomethane	ND	40	U	ppbv	40	6/1/2012 1:16 AM
Carbon disulfide	ND	40	U	ppbv	40	6/1/2012 1:16 AM
Carbon tetrachloride	ND	40	U	ppbv	40	6/1/2012 1:16 AM
Chlorobenzene	ND	40	U	ppbv	40	6/1/2012 1:16 AM
Chlorodibromomethane	ND	40	U	ppbv	40	6/1/2012 1:16 AM
Chloroethane	ND	40	U	ppbv	40	6/1/2012 1:16 AM
Chloroform	ND	40	U	ppbv	40	6/1/2012 1:16 AM
Chloromethane	ND	40	U	ppbv	40	6/1/2012 1:16 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 1:16 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/1/2012 1:16 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/15/2012 1:00:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-021	**Matrix:**	Air
Client Sample ID:	VA1409		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,300	80		ppbv	40	6/1/2012 1:16 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/1/2012 1:16 AM
Ethyl acetate	ND	40	U	ppbv	40	6/1/2012 1:16 AM
Ethylbenzene	ND	80	U	ppbv	40	6/1/2012 1:16 AM
Heptane	190	40		ppbv	40	6/1/2012 1:16 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/1/2012 1:16 AM
m,p-Xylene	93	80		ppbv	40	6/1/2012 1:16 AM
Methylene chloride	ND	200	U	ppbv	40	6/1/2012 1:16 AM
n-Hexane	780	80		ppbv	40	6/1/2012 1:16 AM
Naphthalene	ND	40	U	ppbv	40	6/1/2012 1:16 AM
o-Xylene	41	40		ppbv	40	6/1/2012 1:16 AM
Propylene	96	40		ppbv	40	6/1/2012 1:16 AM
Styrene	ND	40	U	ppbv	40	6/1/2012 1:16 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/1/2012 1:16 AM
Tetrachloroethene	ND	40	U	ppbv	40	6/1/2012 1:16 AM
Tetrahydrofuran	ND	40	U	ppbv	40	6/1/2012 1:16 AM
Toluene	810	40		ppbv	40	6/1/2012 1:16 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 1:16 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/1/2012 1:16 AM
Trichloroethene	ND	40	U	ppbv	40	6/1/2012 1:16 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/1/2012 1:16 AM
Vinyl acetate	ND	40	U	ppbv	40	6/1/2012 1:16 AM
Vinyl chloride	ND	40	U	ppbv	40	6/1/2012 1:16 AM
Xylenes, Total	130	120		ppbv	40	6/1/2012 1:16 AM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	40	6/1/2012 1:16 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	250,000	47,000		µg/m³	400	5/31/2012 11:24 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	5/31/2012 11:24 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	5/31/2012 11:24 PM
Surr: 4-Bromofluorobenzene	98.1	70-130		%REC	400	5/31/2012 11:24 PM

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WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/15/2012 1:00:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-022	**Matrix:**	Air
Client Sample ID:	VA1410		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	ND	0.10	U	%	1	6/6/2012 12:10 PM
Carbon Monoxide	ND	0.10	U	%	1	6/6/2012 12:10 PM
Methane	ND	0.50	U	%	1	6/6/2012 12:10 PM
Nitrogen	80	0.10		%	1	6/6/2012 12:10 PM
Oxygen	21	0.10		%	1	6/6/2012 12:10 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/1/2012 11:28 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/1/2012 11:28 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/1/2012 11:28 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/1/2012 11:28 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/1/2012 11:28 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 11:28 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/1/2012 11:28 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	6/1/2012 11:28 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/1/2012 11:28 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 11:28 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/1/2012 11:28 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/1/2012 11:28 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/1/2012 11:28 AM
1,3-Butadiene	ND	40	U	ppbv	40	6/1/2012 11:28 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 11:28 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 11:28 AM
2-Butanone	ND	40	U	ppbv	40	6/1/2012 11:28 AM
2-Hexanone	ND	40	U	ppbv	40	6/1/2012 11:28 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/1/2012 11:28 AM
Acetone	ND	40	U	ppbv	40	6/1/2012 11:28 AM
Benzene	450	40		ppbv	40	6/1/2012 11:28 AM
Benzyl chloride	ND	40	U	ppbv	40	6/1/2012 11:28 AM
Bromodichloromethane	ND	40	U	ppbv	40	6/1/2012 11:28 AM
Bromoform	ND	40	U	ppbv	40	6/1/2012 11:28 AM
Bromomethane	ND	40	U	ppbv	40	6/1/2012 11:28 AM
Carbon disulfide	ND	40	U	ppbv	40	6/1/2012 11:28 AM
Carbon tetrachloride	ND	40	U	ppbv	40	6/1/2012 11:28 AM
Chlorobenzene	ND	40	U	ppbv	40	6/1/2012 11:28 AM
Chlorodibromomethane	ND	40	U	ppbv	40	6/1/2012 11:28 AM
Chloroethane	ND	40	U	ppbv	40	6/1/2012 11:28 AM
Chloroform	ND	40	U	ppbv	40	6/1/2012 11:28 AM
Chloromethane	ND	40	U	ppbv	40	6/1/2012 11:28 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 11:28 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/1/2012 11:28 AM

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WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/15/2012 1:00:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-022	**Matrix:**	Air
Client Sample ID:	VA1410		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,000	80		ppbv	40	6/1/2012 11:28 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/1/2012 11:28 AM
Ethyl acetate	ND	40	U	ppbv	40	6/1/2012 11:28 AM
Ethylbenzene	ND	80	U	ppbv	40	6/1/2012 11:28 AM
Heptane	110	40		ppbv	40	6/1/2012 11:28 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/1/2012 11:28 AM
m,p-Xylene	53	80	J	ppbv	40	6/1/2012 11:28 AM
Methylene chloride	ND	200	U	ppbv	40	6/1/2012 11:28 AM
n-Hexane	760	80		ppbv	40	6/1/2012 11:28 AM
Naphthalene	ND	40	U	ppbv	40	6/1/2012 11:28 AM
o-Xylene	ND	40	U	ppbv	40	6/1/2012 11:28 AM
Propylene	110	40		ppbv	40	6/1/2012 11:28 AM
Styrene	ND	40	U	ppbv	40	6/1/2012 11:28 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/1/2012 11:28 AM
Tetrachloroethene	ND	40	U	ppbv	40	6/1/2012 11:28 AM
Tetrahydrofuran	ND	40	U	ppbv	40	6/1/2012 11:28 AM
Toluene	520	40		ppbv	40	6/1/2012 11:28 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 11:28 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/1/2012 11:28 AM
Trichloroethene	ND	40	U	ppbv	40	6/1/2012 11:28 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/1/2012 11:28 AM
Vinyl acetate	ND	40	U	ppbv	40	6/1/2012 11:28 AM
Vinyl chloride	ND	40	U	ppbv	40	6/1/2012 11:28 AM
Xylenes, Total	53	120	J	ppbv	40	6/1/2012 11:28 AM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	40	6/1/2012 11:28 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	190,000	23,000		µg/m³	200	6/1/2012 12:14 AM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	6/1/2012 12:14 AM
C9-C12 Aliphatic Hydrocarbons	7,500	38,000	J	µg/m³	200	6/1/2012 12:14 AM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	200	6/1/2012 12:14 AM

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WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/15/2012 1:55:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-023	**Matrix:**	Air
Client Sample ID:	VA1411		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.66	0.10		%	1	6/6/2012 12:25 PM
Carbon Monoxide	ND	0.10	U	%	1	6/6/2012 12:25 PM
Methane	ND	0.50	U	%	1	6/6/2012 12:25 PM
Nitrogen	83	0.10		%	1	6/6/2012 12:25 PM
Oxygen	17	0.10		%	1	6/6/2012 12:25 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	200	U	ppbv	200	6/1/2012 2:51 AM
1,1,2,2-Tetrachloroethane	ND	200	U	ppbv	200	6/1/2012 2:51 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	200	U	ppbv	200	6/1/2012 2:51 AM
1,1,2-Trichloroethane	ND	200	U	ppbv	200	6/1/2012 2:51 AM
1,1-Dichloroethane	ND	200	U	ppbv	200	6/1/2012 2:51 AM
1,1-Dichloroethene	ND	200	U	ppbv	200	6/1/2012 2:51 AM
1,2,4-Trichlorobenzene	ND	200	U	ppbv	200	6/1/2012 2:51 AM
1,2,4-Trimethylbenzene	ND	200	U	ppbv	200	6/1/2012 2:51 AM
1,2-Dibromoethane	ND	200	U	ppbv	200	6/1/2012 2:51 AM
1,2-Dichlorobenzene	ND	200	U	ppbv	200	6/1/2012 2:51 AM
1,2-Dichloroethane	ND	200	U	ppbv	200	6/1/2012 2:51 AM
1,2-Dichloropropane	ND	200	U	ppbv	200	6/1/2012 2:51 AM
1,3,5-Trimethylbenzene	ND	200	U	ppbv	200	6/1/2012 2:51 AM
1,3-Butadiene	ND	200	U	ppbv	200	6/1/2012 2:51 AM
1,3-Dichlorobenzene	ND	200	U	ppbv	200	6/1/2012 2:51 AM
1,4-Dichlorobenzene	ND	200	U	ppbv	200	6/1/2012 2:51 AM
2-Butanone	ND	200	U	ppbv	200	6/1/2012 2:51 AM
2-Hexanone	ND	200	U	ppbv	200	6/1/2012 2:51 AM
4-Methyl-2-pentanone	ND	200	U	ppbv	200	6/1/2012 2:51 AM
Acetone	300	200		ppbv	200	6/1/2012 2:51 AM
Benzene	410	200		ppbv	200	6/1/2012 2:51 AM
Benzyl chloride	ND	200	U	ppbv	200	6/1/2012 2:51 AM
Bromodichloromethane	ND	200	U	ppbv	200	6/1/2012 2:51 AM
Bromoform	ND	200	U	ppbv	200	6/1/2012 2:51 AM
Bromomethane	ND	200	U	ppbv	200	6/1/2012 2:51 AM
Carbon disulfide	ND	200	U	ppbv	200	6/1/2012 2:51 AM
Carbon tetrachloride	ND	200	U	ppbv	200	6/1/2012 2:51 AM
Chlorobenzene	ND	200	U	ppbv	200	6/1/2012 2:51 AM
Chlorodibromomethane	ND	200	U	ppbv	200	6/1/2012 2:51 AM
Chloroethane	ND	200	U	ppbv	200	6/1/2012 2:51 AM
Chloroform	ND	200	U	ppbv	200	6/1/2012 2:51 AM
Chloromethane	ND	200	U	ppbv	200	6/1/2012 2:51 AM
cis-1,2-Dichloroethene	ND	200	U	ppbv	200	6/1/2012 2:51 AM
cis-1,3-dichloropropene	ND	200	U	ppbv	200	6/1/2012 2:51 AM

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WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/15/2012 1:55:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-023	**Matrix:**	Air
Client Sample ID:	VA1411		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	3,500	400		ppbv	200	6/1/2012 2:51 AM
Dichlorodifluoromethane	ND	200	U	ppbv	200	6/1/2012 2:51 AM
Ethyl acetate	ND	200	U	ppbv	200	6/1/2012 2:51 AM
Ethylbenzene	ND	400	U	ppbv	200	6/1/2012 2:51 AM
Heptane	390	200		ppbv	200	6/1/2012 2:51 AM
Hexachlorobutadiene	ND	400	U	ppbv	200	6/1/2012 2:51 AM
m,p-Xylene	ND	400	U	ppbv	200	6/1/2012 2:51 AM
Methylene chloride	ND	1,000	U	ppbv	200	6/1/2012 2:51 AM
n-Hexane	3,600	400		ppbv	200	6/1/2012 2:51 AM
Naphthalene	ND	200	U	ppbv	200	6/1/2012 2:51 AM
o-Xylene	ND	200	U	ppbv	200	6/1/2012 2:51 AM
Propylene	270	200		ppbv	200	6/1/2012 2:51 AM
Styrene	ND	200	U	ppbv	200	6/1/2012 2:51 AM
tert-Butyl Methyl Ether	ND	200	U	ppbv	200	6/1/2012 2:51 AM
Tetrachloroethene	ND	200	U	ppbv	200	6/1/2012 2:51 AM
Tetrahydrofuran	ND	200	U	ppbv	200	6/1/2012 2:51 AM
Toluene	620	200		ppbv	200	6/1/2012 2:51 AM
trans-1,2-Dichloroethene	ND	200	U	ppbv	200	6/1/2012 2:51 AM
trans-1,3-dichloropropene	ND	200	U	ppbv	200	6/1/2012 2:51 AM
Trichloroethene	ND	200	U	ppbv	200	6/1/2012 2:51 AM
Trichlorofluoromethane	ND	200	U	ppbv	200	6/1/2012 2:51 AM
Vinyl acetate	ND	200	U	ppbv	200	6/1/2012 2:51 AM
Vinyl chloride	ND	200	U	ppbv	200	6/1/2012 2:51 AM
Xylenes, Total	ND	600	U	ppbv	200	6/1/2012 2:51 AM
Surr: 4-Bromofluorobenzene	98.8	70-130		%REC	200	6/1/2012 2:51 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	450,000	94,000		µg/m³	800	6/1/2012 1:00 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	6/1/2012 1:00 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	6/1/2012 1:00 AM
Surr: 4-Bromofluorobenzene	99.4	70-130		%REC	800	6/1/2012 1:00 AM

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WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/15/2012 12:26:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-024	**Matrix:**	Air
Client Sample ID:	VA1417		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.23	0.10		%	1	6/6/2012 1:12 PM
Carbon Monoxide	ND	0.10	U	%	1	6/6/2012 1:12 PM
Methane	ND	0.50	U	%	1	6/6/2012 1:12 PM
Nitrogen	81	0.10		%	1	6/6/2012 1:12 PM
Oxygen	19	0.10		%	1	6/6/2012 1:12 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/1/2012 3:36 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/1/2012 3:36 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/1/2012 3:36 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/1/2012 3:36 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/1/2012 3:36 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/1/2012 3:36 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/1/2012 3:36 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/1/2012 3:36 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/1/2012 3:36 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/1/2012 3:36 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/1/2012 3:36 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/1/2012 3:36 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/1/2012 3:36 AM
1,3-Butadiene	ND	800	U	ppbv	800	6/1/2012 3:36 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/1/2012 3:36 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/1/2012 3:36 AM
2-Butanone	ND	800	U	ppbv	800	6/1/2012 3:36 AM
2-Hexanone	ND	800	U	ppbv	800	6/1/2012 3:36 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/1/2012 3:36 AM
Acetone	820	800		ppbv	800	6/1/2012 3:36 AM
Benzene	4,100	800		ppbv	800	6/1/2012 3:36 AM
Benzyl chloride	ND	800	U	ppbv	800	6/1/2012 3:36 AM
Bromodichloromethane	ND	800	U	ppbv	800	6/1/2012 3:36 AM
Bromoform	ND	800	U	ppbv	800	6/1/2012 3:36 AM
Bromomethane	ND	800	U	ppbv	800	6/1/2012 3:36 AM
Carbon disulfide	ND	800	U	ppbv	800	6/1/2012 3:36 AM
Carbon tetrachloride	ND	800	U	ppbv	800	6/1/2012 3:36 AM
Chlorobenzene	ND	800	U	ppbv	800	6/1/2012 3:36 AM
Chlorodibromomethane	ND	800	U	ppbv	800	6/1/2012 3:36 AM
Chloroethane	ND	800	U	ppbv	800	6/1/2012 3:36 AM
Chloroform	ND	800	U	ppbv	800	6/1/2012 3:36 AM
Chloromethane	ND	800	U	ppbv	800	6/1/2012 3:36 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/1/2012 3:36 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/1/2012 3:36 AM

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WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/15/2012 12:26:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-024	**Matrix:**	Air
Client Sample ID:	VA1417		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	32,000	1,600		ppbv	800	6/1/2012 3:36 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/1/2012 3:36 AM
Ethyl acetate	ND	800	U	ppbv	800	6/1/2012 3:36 AM
Ethylbenzene	ND	1,600	U	ppbv	800	6/1/2012 3:36 AM
Heptane	12,000	800		ppbv	800	6/1/2012 3:36 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/1/2012 3:36 AM
m,p-Xylene	ND	1,600	U	ppbv	800	6/1/2012 3:36 AM
Methylene chloride	ND	4,000	U	ppbv	800	6/1/2012 3:36 AM
n-Hexane	56,000	16,000		ppbv	8000	6/1/2012 9:21 AM
Naphthalene	ND	800	U	ppbv	800	6/1/2012 3:36 AM
o-Xylene	ND	800	U	ppbv	800	6/1/2012 3:36 AM
Propylene	1,800	800		ppbv	800	6/1/2012 3:36 AM
Styrene	ND	800	U	ppbv	800	6/1/2012 3:36 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/1/2012 3:36 AM
Tetrachloroethene	ND	800	U	ppbv	800	6/1/2012 3:36 AM
Tetrahydrofuran	ND	800	U	ppbv	800	6/1/2012 3:36 AM
Toluene	8,000	800		ppbv	800	6/1/2012 3:36 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/1/2012 3:36 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/1/2012 3:36 AM
Trichloroethene	ND	800	U	ppbv	800	6/1/2012 3:36 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/1/2012 3:36 AM
Vinyl acetate	ND	800	U	ppbv	800	6/1/2012 3:36 AM
Vinyl chloride	ND	800	U	ppbv	800	6/1/2012 3:36 AM
Xylenes, Total	ND	2,400	U	ppbv	800	6/1/2012 3:36 AM
Surr: 4-Bromofluorobenzene	97.7	70-130		%REC	800	6/1/2012 3:36 AM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,600,000	940,000		µg/m³	8000	5/30/2012 7:45 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	5/30/2012 7:45 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	5/30/2012 7:45 PM
Surr: 4-Bromofluorobenzene	96.0	70-130		%REC	8000	5/30/2012 7:45 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 12:12:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-025	**Matrix:**	Air
Client Sample ID:	VA1497		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.90	0.10		%	1	6/6/2012 1:27 PM
Carbon Monoxide	ND	0.10	U	%	1	6/6/2012 1:27 PM
Methane	ND	0.50	U	%	1	6/6/2012 1:27 PM
Nitrogen	80	0.10		%	1	6/6/2012 1:27 PM
Oxygen	20	0.10		%	1	6/6/2012 1:27 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	200	U	ppbv	200	6/1/2012 4:23 AM
1,1,2,2-Tetrachloroethane	ND	200	U	ppbv	200	6/1/2012 4:23 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	200	U	ppbv	200	6/1/2012 4:23 AM
1,1,2-Trichloroethane	ND	200	U	ppbv	200	6/1/2012 4:23 AM
1,1-Dichloroethane	ND	200	U	ppbv	200	6/1/2012 4:23 AM
1,1-Dichloroethene	ND	200	U	ppbv	200	6/1/2012 4:23 AM
1,2,4-Trichlorobenzene	ND	200	U	ppbv	200	6/1/2012 4:23 AM
1,2,4-Trimethylbenzene	ND	200	U	ppbv	200	6/1/2012 4:23 AM
1,2-Dibromoethane	ND	200	U	ppbv	200	6/1/2012 4:23 AM
1,2-Dichlorobenzene	ND	200	U	ppbv	200	6/1/2012 4:23 AM
1,2-Dichloroethane	ND	200	U	ppbv	200	6/1/2012 4:23 AM
1,2-Dichloropropane	ND	200	U	ppbv	200	6/1/2012 4:23 AM
1,3,5-Trimethylbenzene	ND	200	U	ppbv	200	6/1/2012 4:23 AM
1,3-Butadiene	ND	200	U	ppbv	200	6/1/2012 4:23 AM
1,3-Dichlorobenzene	ND	200	U	ppbv	200	6/1/2012 4:23 AM
1,4-Dichlorobenzene	ND	200	U	ppbv	200	6/1/2012 4:23 AM
2-Butanone	ND	200	U	ppbv	200	6/1/2012 4:23 AM
2-Hexanone	ND	200	U	ppbv	200	6/1/2012 4:23 AM
4-Methyl-2-pentanone	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Acetone	410	200		ppbv	200	6/1/2012 4:23 AM
Benzene	890	200		ppbv	200	6/1/2012 4:23 AM
Benzyl chloride	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Bromodichloromethane	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Bromoform	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Bromomethane	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Carbon disulfide	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Carbon tetrachloride	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Chlorobenzene	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Chlorodibromomethane	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Chloroethane	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Chloroform	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Chloromethane	ND	200	U	ppbv	200	6/1/2012 4:23 AM
cis-1,2-Dichloroethene	ND	200	U	ppbv	200	6/1/2012 4:23 AM
cis-1,3-dichloropropene	ND	200	U	ppbv	200	6/1/2012 4:23 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 12:12:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-025	**Matrix:**	Air
Client Sample ID:	VA1497		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	610	400		ppbv	200	6/1/2012 4:23 AM
Dichlorodifluoromethane	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Ethyl acetate	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Ethylbenzene	ND	400	U	ppbv	200	6/1/2012 4:23 AM
Heptane	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Hexachlorobutadiene	ND	400	U	ppbv	200	6/1/2012 4:23 AM
m,p-Xylene	280	400	J	ppbv	200	6/1/2012 4:23 AM
Methylene chloride	930	1,000	J	ppbv	200	6/1/2012 4:23 AM
n-Hexane	430	400		ppbv	200	6/1/2012 4:23 AM
Naphthalene	ND	200	U	ppbv	200	6/1/2012 4:23 AM
o-Xylene	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Propylene	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Styrene	ND	200	U	ppbv	200	6/1/2012 4:23 AM
tert-Butyl Methyl Ether	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Tetrachloroethene	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Tetrahydrofuran	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Toluene	3,500	200		ppbv	200	6/1/2012 4:23 AM
trans-1,2-Dichloroethene	ND	200	U	ppbv	200	6/1/2012 4:23 AM
trans-1,3-dichloropropene	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Trichloroethene	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Trichlorofluoromethane	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Vinyl acetate	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Vinyl chloride	ND	200	U	ppbv	200	6/1/2012 4:23 AM
Xylenes, Total	280	600	J	ppbv	200	6/1/2012 4:23 AM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	200	6/1/2012 4:23 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	90,000	47,000		µg/m³	400	6/1/2012 1:50 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	6/1/2012 1:50 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	6/1/2012 1:50 AM
Surr: 4-Bromofluorobenzene	97.5	70-130		%REC	400	6/1/2012 1:50 AM

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WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 12:37:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-026	**Matrix:**	Air
Client Sample ID:	VA1498		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.80	0.10		%	1	6/6/2012 1:42 PM
Carbon Monoxide	ND	0.10	U	%	1	6/6/2012 1:42 PM
Methane	ND	0.50	U	%	1	6/6/2012 1:42 PM
Nitrogen	80	0.10		%	1	6/6/2012 1:42 PM
Oxygen	20	0.10		%	1	6/6/2012 1:42 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/1/2012 9:21 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/1/2012 9:21 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/1/2012 9:21 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/1/2012 9:21 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/1/2012 9:21 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 9:21 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/1/2012 9:21 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	6/1/2012 9:21 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/1/2012 9:21 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 9:21 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/1/2012 9:21 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/1/2012 9:21 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/1/2012 9:21 PM
1,3-Butadiene	ND	40	U	ppbv	40	6/1/2012 9:21 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 9:21 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 9:21 PM
2-Butanone	ND	40	U	ppbv	40	6/1/2012 9:21 PM
2-Hexanone	ND	40	U	ppbv	40	6/1/2012 9:21 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/1/2012 9:21 PM
Acetone	ND	40	U	ppbv	40	6/1/2012 9:21 PM
Benzene	330	40		ppbv	40	6/1/2012 9:21 PM
Benzyl chloride	ND	40	U	ppbv	40	6/1/2012 9:21 PM
Bromodichloromethane	ND	40	U	ppbv	40	6/1/2012 9:21 PM
Bromoform	ND	40	U	ppbv	40	6/1/2012 9:21 PM
Bromomethane	ND	40	U	ppbv	40	6/1/2012 9:21 PM
Carbon disulfide	ND	40	U	ppbv	40	6/1/2012 9:21 PM
Carbon tetrachloride	50	40		ppbv	40	6/1/2012 9:21 PM
Chlorobenzene	ND	40	U	ppbv	40	6/1/2012 9:21 PM
Chlorodibromomethane	ND	40	U	ppbv	40	6/1/2012 9:21 PM
Chloroethane	ND	40	U	ppbv	40	6/1/2012 9:21 PM
Chloroform	ND	40	U	ppbv	40	6/1/2012 9:21 PM
Chloromethane	ND	40	U	ppbv	40	6/1/2012 9:21 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 9:21 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/1/2012 9:21 PM

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WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 12:37:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-026	**Matrix:**	Air
Client Sample ID:	VA1498		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	250	80		ppbv	40	6/1/2012 9:21 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/1/2012 9:21 PM
Ethyl acetate	ND	40	U	ppbv	40	6/1/2012 9:21 PM
Ethylbenzene	ND	80	U	ppbv	40	6/1/2012 9:21 PM
Heptane	50	40		ppbv	40	6/1/2012 9:21 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/1/2012 9:21 PM
m,p-Xylene	110	80		ppbv	40	6/1/2012 9:21 PM
Methylene chloride	ND	200	U	ppbv	40	6/1/2012 9:21 PM
n-Hexane	110	80		ppbv	40	6/1/2012 9:21 PM
Naphthalene	ND	40	U	ppbv	40	6/1/2012 9:21 PM
o-Xylene	66	40		ppbv	40	6/1/2012 9:21 PM
Propylene	ND	40	U	ppbv	40	6/1/2012 9:21 PM
Styrene	ND	40	U	ppbv	40	6/1/2012 9:21 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/1/2012 9:21 PM
Tetrachloroethene	ND	40	U	ppbv	40	6/1/2012 9:21 PM
Tetrahydrofuran	ND	40	U	ppbv	40	6/1/2012 9:21 PM
Toluene	1,400	40		ppbv	40	6/1/2012 9:21 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 9:21 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/1/2012 9:21 PM
Trichloroethene	ND	40	U	ppbv	40	6/1/2012 9:21 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/1/2012 9:21 PM
Vinyl acetate	ND	40	U	ppbv	40	6/1/2012 9:21 PM
Vinyl chloride	ND	40	U	ppbv	40	6/1/2012 9:21 PM
Xylenes, Total	180	120		ppbv	40	6/1/2012 9:21 PM
Surr: 4-Bromofluorobenzene	99.0	70-130		%REC	40	6/1/2012 9:21 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	25,000	4,700		µg/m³	40	6/1/2012 2:33 AM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	6/1/2012 2:33 AM
C9-C12 Aliphatic Hydrocarbons	4,300	7,600	J	µg/m³	40	6/1/2012 2:33 AM
Surr: 4-Bromofluorobenzene	96.4	70-130		%REC	40	6/1/2012 2:33 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 12:37:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-027	**Matrix:**	Air
Client Sample ID:	VA1499		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.47	0.10		%	1	6/6/2012 1:57 PM
Carbon Monoxide	ND	0.10	U	%	1	6/6/2012 1:57 PM
Methane	ND	0.50	U	%	1	6/6/2012 1:57 PM
Nitrogen	80	0.10		%	1	6/6/2012 1:57 PM
Oxygen	20	0.10		%	1	6/6/2012 1:57 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/1/2012 12:08 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/1/2012 12:08 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/1/2012 12:08 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/1/2012 12:08 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/1/2012 12:08 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 12:08 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/1/2012 12:08 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	6/1/2012 12:08 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/1/2012 12:08 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 12:08 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/1/2012 12:08 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/1/2012 12:08 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/1/2012 12:08 PM
1,3-Butadiene	ND	40	U	ppbv	40	6/1/2012 12:08 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 12:08 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 12:08 PM
2-Butanone	ND	40	U	ppbv	40	6/1/2012 12:08 PM
2-Hexanone	ND	40	U	ppbv	40	6/1/2012 12:08 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/1/2012 12:08 PM
Acetone	ND	40	U	ppbv	40	6/1/2012 12:08 PM
Benzene	460	40		ppbv	40	6/1/2012 12:08 PM
Benzyl chloride	ND	40	U	ppbv	40	6/1/2012 12:08 PM
Bromodichloromethane	ND	40	U	ppbv	40	6/1/2012 12:08 PM
Bromoform	ND	40	U	ppbv	40	6/1/2012 12:08 PM
Bromomethane	ND	40	U	ppbv	40	6/1/2012 12:08 PM
Carbon disulfide	ND	40	U	ppbv	40	6/1/2012 12:08 PM
Carbon tetrachloride	44	40		ppbv	40	6/1/2012 12:08 PM
Chlorobenzene	ND	40	U	ppbv	40	6/1/2012 12:08 PM
Chlorodibromomethane	ND	40	U	ppbv	40	6/1/2012 12:08 PM
Chloroethane	ND	40	U	ppbv	40	6/1/2012 12:08 PM
Chloroform	40	40		ppbv	40	6/1/2012 12:08 PM
Chloromethane	ND	40	U	ppbv	40	6/1/2012 12:08 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 12:08 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/1/2012 12:08 PM

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WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 12:37:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-027	**Matrix:**	Air
Client Sample ID:	VA1499		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	460	80		ppbv	40	6/1/2012 12:08 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/1/2012 12:08 PM
Ethyl acetate	ND	40	U	ppbv	40	6/1/2012 12:08 PM
Ethylbenzene	42	80	J	ppbv	40	6/1/2012 12:08 PM
Heptane	89	40		ppbv	40	6/1/2012 12:08 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/1/2012 12:08 PM
m,p-Xylene	160	80		ppbv	40	6/1/2012 12:08 PM
Methylene chloride	ND	200	U	ppbv	40	6/1/2012 12:08 PM
n-Hexane	160	80		ppbv	40	6/1/2012 12:08 PM
Naphthalene	ND	40	U	ppbv	40	6/1/2012 12:08 PM
o-Xylene	88	40		ppbv	40	6/1/2012 12:08 PM
Propylene	ND	40	U	ppbv	40	6/1/2012 12:08 PM
Styrene	ND	40	U	ppbv	40	6/1/2012 12:08 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/1/2012 12:08 PM
Tetrachloroethene	ND	40	U	ppbv	40	6/1/2012 12:08 PM
Tetrahydrofuran	ND	40	U	ppbv	40	6/1/2012 12:08 PM
Toluene	1,900	40		ppbv	40	6/1/2012 12:08 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 12:08 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/1/2012 12:08 PM
Trichloroethene	ND	40	U	ppbv	40	6/1/2012 12:08 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/1/2012 12:08 PM
Vinyl acetate	ND	40	U	ppbv	40	6/1/2012 12:08 PM
Vinyl chloride	ND	40	U	ppbv	40	6/1/2012 12:08 PM
Xylenes, Total	250	120		ppbv	40	6/1/2012 12:08 PM
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	40	6/1/2012 12:08 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	40,000	4,700		µg/m³	40	6/1/2012 3:17 AM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	6/1/2012 3:17 AM
C9-C12 Aliphatic Hydrocarbons	4,500	7,600	J	µg/m³	40	6/1/2012 3:17 AM
Surr: 4-Bromofluorobenzene	96.5	70-130		%REC	40	6/1/2012 3:17 AM

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WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 1:45:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-028	**Matrix:**	Air
Client Sample ID:	VA1500		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.18	0.10		%	1	6/6/2012 2:18 PM
Carbon Monoxide	ND	0.10	U	%	1	6/6/2012 2:18 PM
Methane	ND	0.50	U	%	1	6/6/2012 2:18 PM
Nitrogen	82	0.10		%	1	6/6/2012 2:18 PM
Oxygen	20	0.10		%	1	6/6/2012 2:18 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/1/2012 10:02 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/1/2012 10:02 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/1/2012 10:02 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/1/2012 10:02 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/1/2012 10:02 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 10:02 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/1/2012 10:02 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	6/1/2012 10:02 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/1/2012 10:02 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 10:02 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/1/2012 10:02 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/1/2012 10:02 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/1/2012 10:02 AM
1,3-Butadiene	ND	40	U	ppbv	40	6/1/2012 10:02 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 10:02 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 10:02 AM
2-Butanone	ND	40	U	ppbv	40	6/1/2012 10:02 AM
2-Hexanone	ND	40	U	ppbv	40	6/1/2012 10:02 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Acetone	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Benzene	200	40		ppbv	40	6/1/2012 10:02 AM
Benzyl chloride	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Bromodichloromethane	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Bromoform	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Bromomethane	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Carbon disulfide	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Carbon tetrachloride	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Chlorobenzene	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Chlorodibromomethane	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Chloroethane	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Chloroform	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Chloromethane	ND	40	U	ppbv	40	6/1/2012 10:02 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 10:02 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/1/2012 10:02 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 1:45:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-028	**Matrix:**	Air
Client Sample ID:	VA1500		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	180	80		ppbv	40	6/1/2012 10:02 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Ethyl acetate	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Ethylbenzene	ND	80	U	ppbv	40	6/1/2012 10:02 AM
Heptane	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/1/2012 10:02 AM
m,p-Xylene	67	80	J	ppbv	40	6/1/2012 10:02 AM
Methylene chloride	ND	200	U	ppbv	40	6/1/2012 10:02 AM
n-Hexane	63	80	J	ppbv	40	6/1/2012 10:02 AM
Naphthalene	ND	40	U	ppbv	40	6/1/2012 10:02 AM
o-Xylene	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Propylene	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Styrene	ND	40	U	ppbv	40	6/1/2012 10:02 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Tetrachloroethene	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Tetrahydrofuran	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Toluene	680	40		ppbv	40	6/1/2012 10:02 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 10:02 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Trichloroethene	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Vinyl acetate	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Vinyl chloride	ND	40	U	ppbv	40	6/1/2012 10:02 AM
Xylenes, Total	67	120	J	ppbv	40	6/1/2012 10:02 AM
Surr: 4-Bromofluorobenzene	99.4	70-130		%REC	40	6/1/2012 10:02 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	27,000	4,700		µg/m³	40	6/1/2012 4:00 AM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	6/1/2012 4:00 AM
C9-C12 Aliphatic Hydrocarbons	4,000	7,600	J	µg/m³	40	6/1/2012 4:00 AM
Surr: 4-Bromofluorobenzene	95.7	70-130		%REC	40	6/1/2012 4:00 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 2:21:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-029	**Matrix:**	Air
Client Sample ID:	VA1501		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.22	0.10		%	1	6/6/2012 2:33 PM
Carbon Monoxide	ND	0.10	U	%	1	6/6/2012 2:33 PM
Methane	ND	0.50	U	%	1	6/6/2012 2:33 PM
Nitrogen	80	0.10		%	1	6/6/2012 2:33 PM
Oxygen	20	0.10		%	1	6/6/2012 2:33 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/1/2012 12:49 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/1/2012 12:49 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/1/2012 12:49 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/1/2012 12:49 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/1/2012 12:49 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 12:49 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/1/2012 12:49 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	6/1/2012 12:49 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/1/2012 12:49 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 12:49 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/1/2012 12:49 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/1/2012 12:49 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/1/2012 12:49 PM
1,3-Butadiene	ND	40	U	ppbv	40	6/1/2012 12:49 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 12:49 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 12:49 PM
2-Butanone	ND	40	U	ppbv	40	6/1/2012 12:49 PM
2-Hexanone	ND	40	U	ppbv	40	6/1/2012 12:49 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/1/2012 12:49 PM
Acetone	ND	40	U	ppbv	40	6/1/2012 12:49 PM
Benzene	220	40		ppbv	40	6/1/2012 12:49 PM
Benzyl chloride	ND	40	U	ppbv	40	6/1/2012 12:49 PM
Bromodichloromethane	ND	40	U	ppbv	40	6/1/2012 12:49 PM
Bromoform	ND	40	U	ppbv	40	6/1/2012 12:49 PM
Bromomethane	ND	40	U	ppbv	40	6/1/2012 12:49 PM
Carbon disulfide	ND	40	U	ppbv	40	6/1/2012 12:49 PM
Carbon tetrachloride	ND	40	U	ppbv	40	6/1/2012 12:49 PM
Chlorobenzene	ND	40	U	ppbv	40	6/1/2012 12:49 PM
Chlorodibromomethane	ND	40	U	ppbv	40	6/1/2012 12:49 PM
Chloroethane	ND	40	U	ppbv	40	6/1/2012 12:49 PM
Chloroform	ND	40	U	ppbv	40	6/1/2012 12:49 PM
Chloromethane	ND	40	U	ppbv	40	6/1/2012 12:49 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 12:49 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/1/2012 12:49 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 2:21:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-029	**Matrix:**	Air
Client Sample ID:	VA1501		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	190	80		ppbv	40	6/1/2012 12:49 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/1/2012 12:49 PM
Ethyl acetate	ND	40	U	ppbv	40	6/1/2012 12:49 PM
Ethylbenzene	ND	80	U	ppbv	40	6/1/2012 12:49 PM
Heptane	44	40		ppbv	40	6/1/2012 12:49 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/1/2012 12:49 PM
m,p-Xylene	120	80		ppbv	40	6/1/2012 12:49 PM
Methylene chloride	ND	200	U	ppbv	40	6/1/2012 12:49 PM
n-Hexane	65	80	J	ppbv	40	6/1/2012 12:49 PM
Naphthalene	ND	40	U	ppbv	40	6/1/2012 12:49 PM
o-Xylene	68	40		ppbv	40	6/1/2012 12:49 PM
Propylene	ND	40	U	ppbv	40	6/1/2012 12:49 PM
Styrene	ND	40	U	ppbv	40	6/1/2012 12:49 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/1/2012 12:49 PM
Tetrachloroethene	ND	40	U	ppbv	40	6/1/2012 12:49 PM
Tetrahydrofuran	ND	40	U	ppbv	40	6/1/2012 12:49 PM
Toluene	1,100	40		ppbv	40	6/1/2012 12:49 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 12:49 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/1/2012 12:49 PM
Trichloroethene	ND	40	U	ppbv	40	6/1/2012 12:49 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/1/2012 12:49 PM
Vinyl acetate	ND	40	U	ppbv	40	6/1/2012 12:49 PM
Vinyl chloride	ND	40	U	ppbv	40	6/1/2012 12:49 PM
Xylenes, Total	190	120		ppbv	40	6/1/2012 12:49 PM
Surr: 4-Bromofluorobenzene	99.7	70-130		%REC	40	6/1/2012 12:49 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	18,000	4,700		µg/m³	40	5/31/2012 4:20 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	5/31/2012 4:20 PM
C9-C12 Aliphatic Hydrocarbons	2,500	7,600	J	µg/m³	40	5/31/2012 4:20 PM
Surr: 4-Bromofluorobenzene	97.0	70-130		%REC	40	5/31/2012 4:20 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 3:02:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-030	**Matrix:**	Air
Client Sample ID:	VA1502		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.23	0.10		%	1	6/6/2012 2:49 PM
Carbon Monoxide	ND	0.10	U	%	1	6/6/2012 2:49 PM
Methane	ND	0.50	U	%	1	6/6/2012 2:49 PM
Nitrogen	81	0.10		%	1	6/6/2012 2:49 PM
Oxygen	20	0.10		%	1	6/6/2012 2:49 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/1/2012 10:02 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/1/2012 10:02 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/1/2012 10:02 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/1/2012 10:02 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/1/2012 10:02 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 10:02 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/1/2012 10:02 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	6/1/2012 10:02 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/1/2012 10:02 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 10:02 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/1/2012 10:02 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/1/2012 10:02 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/1/2012 10:02 PM
1,3-Butadiene	ND	40	U	ppbv	40	6/1/2012 10:02 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 10:02 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 10:02 PM
2-Butanone	ND	40	U	ppbv	40	6/1/2012 10:02 PM
2-Hexanone	ND	40	U	ppbv	40	6/1/2012 10:02 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/1/2012 10:02 PM
Acetone	ND	40	U	ppbv	40	6/1/2012 10:02 PM
Benzene	160	40		ppbv	40	6/1/2012 10:02 PM
Benzyl chloride	ND	40	U	ppbv	40	6/1/2012 10:02 PM
Bromodichloromethane	ND	40	U	ppbv	40	6/1/2012 10:02 PM
Bromoform	ND	40	U	ppbv	40	6/1/2012 10:02 PM
Bromomethane	ND	40	U	ppbv	40	6/1/2012 10:02 PM
Carbon disulfide	ND	40	U	ppbv	40	6/1/2012 10:02 PM
Carbon tetrachloride	ND	40	U	ppbv	40	6/1/2012 10:02 PM
Chlorobenzene	ND	40	U	ppbv	40	6/1/2012 10:02 PM
Chlorodibromomethane	ND	40	U	ppbv	40	6/1/2012 10:02 PM
Chloroethane	ND	40	U	ppbv	40	6/1/2012 10:02 PM
Chloroform	ND	40	U	ppbv	40	6/1/2012 10:02 PM
Chloromethane	ND	40	U	ppbv	40	6/1/2012 10:02 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 10:02 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/1/2012 10:02 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 3:02:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-030	**Matrix:**	Air
Client Sample ID:	VA1502		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	170	80		ppbv	40	6/1/2012 10:02 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/1/2012 10:02 PM
Ethyl acetate	ND	40	U	ppbv	40	6/1/2012 10:02 PM
Ethylbenzene	ND	80	U	ppbv	40	6/1/2012 10:02 PM
Heptane	41	40		ppbv	40	6/1/2012 10:02 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/1/2012 10:02 PM
m,p-Xylene	110	80		ppbv	40	6/1/2012 10:02 PM
Methylene chloride	ND	200	U	ppbv	40	6/1/2012 10:02 PM
n-Hexane	53	80	J	ppbv	40	6/1/2012 10:02 PM
Naphthalene	ND	40	U	ppbv	40	6/1/2012 10:02 PM
o-Xylene	65	40		ppbv	40	6/1/2012 10:02 PM
Propylene	ND	40	U	ppbv	40	6/1/2012 10:02 PM
Styrene	ND	40	U	ppbv	40	6/1/2012 10:02 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/1/2012 10:02 PM
Tetrachloroethene	ND	40	U	ppbv	40	6/1/2012 10:02 PM
Tetrahydrofuran	ND	40	U	ppbv	40	6/1/2012 10:02 PM
Toluene	920	40		ppbv	40	6/1/2012 10:02 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 10:02 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/1/2012 10:02 PM
Trichloroethene	ND	40	U	ppbv	40	6/1/2012 10:02 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/1/2012 10:02 PM
Vinyl acetate	ND	40	U	ppbv	40	6/1/2012 10:02 PM
Vinyl chloride	ND	40	U	ppbv	40	6/1/2012 10:02 PM
Xylenes, Total	180	120		ppbv	40	6/1/2012 10:02 PM
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	40	6/1/2012 10:02 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	17,000	4,700		µg/m³	40	5/31/2012 5:04 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	5/31/2012 5:04 PM
C9-C12 Aliphatic Hydrocarbons	2,600	7,600	J	µg/m³	40	5/31/2012 5:04 PM
Surr: 4-Bromofluorobenzene	96.7	70-130		%REC	40	5/31/2012 5:04 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 3:43:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-031	**Matrix:**	Air
Client Sample ID:	VA1503		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.48	0.10		%	1	6/6/2012 3:05 PM
Carbon Monoxide	ND	0.10	U	%	1	6/6/2012 3:05 PM
Methane	ND	0.50	U	%	1	6/6/2012 3:05 PM
Nitrogen	80	0.10		%	1	6/6/2012 3:05 PM
Oxygen	20	0.10		%	1	6/6/2012 3:05 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/1/2012 11:25 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/1/2012 11:25 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/1/2012 11:25 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/1/2012 11:25 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/1/2012 11:25 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 11:25 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/1/2012 11:25 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	6/1/2012 11:25 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/1/2012 11:25 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 11:25 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/1/2012 11:25 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/1/2012 11:25 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/1/2012 11:25 PM
1,3-Butadiene	ND	40	U	ppbv	40	6/1/2012 11:25 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 11:25 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/1/2012 11:25 PM
2-Butanone	ND	40	U	ppbv	40	6/1/2012 11:25 PM
2-Hexanone	ND	40	U	ppbv	40	6/1/2012 11:25 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/1/2012 11:25 PM
Acetone	ND	40	U	ppbv	40	6/1/2012 11:25 PM
Benzene	240	40		ppbv	40	6/1/2012 11:25 PM
Benzyl chloride	ND	40	U	ppbv	40	6/1/2012 11:25 PM
Bromodichloromethane	ND	40	U	ppbv	40	6/1/2012 11:25 PM
Bromoform	ND	40	U	ppbv	40	6/1/2012 11:25 PM
Bromomethane	ND	40	U	ppbv	40	6/1/2012 11:25 PM
Carbon disulfide	ND	40	U	ppbv	40	6/1/2012 11:25 PM
Carbon tetrachloride	ND	40	U	ppbv	40	6/1/2012 11:25 PM
Chlorobenzene	ND	40	U	ppbv	40	6/1/2012 11:25 PM
Chlorodibromomethane	ND	40	U	ppbv	40	6/1/2012 11:25 PM
Chloroethane	ND	40	U	ppbv	40	6/1/2012 11:25 PM
Chloroform	ND	40	U	ppbv	40	6/1/2012 11:25 PM
Chloromethane	ND	40	U	ppbv	40	6/1/2012 11:25 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 11:25 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/1/2012 11:25 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 3:43:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-031	**Matrix:**	Air
Client Sample ID:	VA1503		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	250	80		ppbv	40	6/1/2012 11:25 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/1/2012 11:25 PM
Ethyl acetate	ND	40	U	ppbv	40	6/1/2012 11:25 PM
Ethylbenzene	44	80	J	ppbv	40	6/1/2012 11:25 PM
Heptane	88	40		ppbv	40	6/1/2012 11:25 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/1/2012 11:25 PM
m,p-Xylene	110	80		ppbv	40	6/1/2012 11:25 PM
Methylene chloride	ND	200	U	ppbv	40	6/1/2012 11:25 PM
n-Hexane	160	80		ppbv	40	6/1/2012 11:25 PM
Naphthalene	ND	40	U	ppbv	40	6/1/2012 11:25 PM
o-Xylene	54	40		ppbv	40	6/1/2012 11:25 PM
Propylene	ND	40	U	ppbv	40	6/1/2012 11:25 PM
Styrene	ND	40	U	ppbv	40	6/1/2012 11:25 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/1/2012 11:25 PM
Tetrachloroethene	ND	40	U	ppbv	40	6/1/2012 11:25 PM
Tetrahydrofuran	ND	40	U	ppbv	40	6/1/2012 11:25 PM
Toluene	1,100	40		ppbv	40	6/1/2012 11:25 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/1/2012 11:25 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/1/2012 11:25 PM
Trichloroethene	ND	40	U	ppbv	40	6/1/2012 11:25 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/1/2012 11:25 PM
Vinyl acetate	ND	40	U	ppbv	40	6/1/2012 11:25 PM
Vinyl chloride	ND	40	U	ppbv	40	6/1/2012 11:25 PM
Xylenes, Total	160	120		ppbv	40	6/1/2012 11:25 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	40	6/1/2012 11:25 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	19,000	4,700		µg/m³	40	6/1/2012 4:43 AM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	6/1/2012 4:43 AM
C9-C12 Aliphatic Hydrocarbons	2,000	7,600	J	µg/m³	40	6/1/2012 4:43 AM
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	40	6/1/2012 4:43 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 8:29:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-032	**Matrix:**	Air
Client Sample ID:	VA1563		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.61	0.10		%	1	6/6/2012 3:20 PM
Carbon Monoxide	ND	0.10	U	%	1	6/6/2012 3:20 PM
Methane	ND	0.50	U	%	1	6/6/2012 3:20 PM
Nitrogen	80	0.10		%	1	6/6/2012 3:20 PM
Oxygen	20	0.10		%	1	6/6/2012 3:20 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/2/2012 6:56 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/2/2012 6:56 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/2/2012 6:56 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/2/2012 6:56 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/2/2012 6:56 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/2/2012 6:56 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/2/2012 6:56 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	6/2/2012 6:56 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/2/2012 6:56 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/2/2012 6:56 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/2/2012 6:56 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/2/2012 6:56 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/2/2012 6:56 AM
1,3-Butadiene	ND	40	U	ppbv	40	6/2/2012 6:56 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/2/2012 6:56 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/2/2012 6:56 AM
2-Butanone	ND	40	U	ppbv	40	6/2/2012 6:56 AM
2-Hexanone	ND	40	U	ppbv	40	6/2/2012 6:56 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/2/2012 6:56 AM
Acetone	ND	40	U	ppbv	40	6/2/2012 6:56 AM
Benzene	470	40		ppbv	40	6/2/2012 6:56 AM
Benzyl chloride	ND	40	U	ppbv	40	6/2/2012 6:56 AM
Bromodichloromethane	ND	40	U	ppbv	40	6/2/2012 6:56 AM
Bromoform	ND	40	U	ppbv	40	6/2/2012 6:56 AM
Bromomethane	ND	40	U	ppbv	40	6/2/2012 6:56 AM
Carbon disulfide	ND	40	U	ppbv	40	6/2/2012 6:56 AM
Carbon tetrachloride	ND	40	U	ppbv	40	6/2/2012 6:56 AM
Chlorobenzene	ND	40	U	ppbv	40	6/2/2012 6:56 AM
Chlorodibromomethane	ND	40	U	ppbv	40	6/2/2012 6:56 AM
Chloroethane	ND	40	U	ppbv	40	6/2/2012 6:56 AM
Chloroform	ND	40	U	ppbv	40	6/2/2012 6:56 AM
Chloromethane	ND	40	U	ppbv	40	6/2/2012 6:56 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/2/2012 6:56 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/2/2012 6:56 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 8:29:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-032	**Matrix:**	Air
Client Sample ID:	VA1563		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,300	80		ppbv	40	6/2/2012 6:56 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/2/2012 6:56 AM
Ethyl acetate	ND	40	U	ppbv	40	6/2/2012 6:56 AM
Ethylbenzene	74	80	J	ppbv	40	6/2/2012 6:56 AM
Heptane	680	40		ppbv	40	6/2/2012 6:56 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/2/2012 6:56 AM
m,p-Xylene	180	80		ppbv	40	6/2/2012 6:56 AM
Methylene chloride	ND	200	U	ppbv	40	6/2/2012 6:56 AM
n-Hexane	890	80		ppbv	40	6/2/2012 6:56 AM
Naphthalene	ND	40	U	ppbv	40	6/2/2012 6:56 AM
o-Xylene	63	40		ppbv	40	6/2/2012 6:56 AM
Propylene	ND	40	U	ppbv	40	6/2/2012 6:56 AM
Styrene	ND	40	U	ppbv	40	6/2/2012 6:56 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/2/2012 6:56 AM
Tetrachloroethene	ND	40	U	ppbv	40	6/2/2012 6:56 AM
Tetrahydrofuran	ND	40	U	ppbv	40	6/2/2012 6:56 AM
Toluene	890	40		ppbv	40	6/2/2012 6:56 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/2/2012 6:56 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/2/2012 6:56 AM
Trichloroethene	ND	40	U	ppbv	40	6/2/2012 6:56 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/2/2012 6:56 AM
Vinyl acetate	ND	40	U	ppbv	40	6/2/2012 6:56 AM
Vinyl chloride	ND	40	U	ppbv	40	6/2/2012 6:56 AM
Xylenes, Total	240	120		ppbv	40	6/2/2012 6:56 AM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	40	6/2/2012 6:56 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	30,000	4,700		µg/m³	40	6/4/2012 5:32 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	6/4/2012 5:32 PM
C9-C12 Aliphatic Hydrocarbons	1,600	7,600	J	µg/m³	40	6/4/2012 5:32 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	40	6/4/2012 5:32 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 8:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-033	**Matrix:**	Air
Client Sample ID:	VA1564		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.48	0.10		%	1	6/6/2012 3:35 PM
Carbon Monoxide	ND	0.10	U	%	1	6/6/2012 3:35 PM
Methane	ND	0.50	U	%	1	6/6/2012 3:35 PM
Nitrogen	80	0.10		%	1	6/6/2012 3:35 PM
Oxygen	20	0.10		%	1	6/6/2012 3:35 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/2/2012 8:19 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/2/2012 8:19 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/2/2012 8:19 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/2/2012 8:19 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/2/2012 8:19 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/2/2012 8:19 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/2/2012 8:19 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	6/2/2012 8:19 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/2/2012 8:19 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/2/2012 8:19 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/2/2012 8:19 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/2/2012 8:19 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/2/2012 8:19 AM
1,3-Butadiene	ND	40	U	ppbv	40	6/2/2012 8:19 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/2/2012 8:19 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/2/2012 8:19 AM
2-Butanone	ND	40	U	ppbv	40	6/2/2012 8:19 AM
2-Hexanone	ND	40	U	ppbv	40	6/2/2012 8:19 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/2/2012 8:19 AM
Acetone	ND	40	U	ppbv	40	6/2/2012 8:19 AM
Benzene	430	40		ppbv	40	6/2/2012 8:19 AM
Benzyl chloride	ND	40	U	ppbv	40	6/2/2012 8:19 AM
Bromodichloromethane	ND	40	U	ppbv	40	6/2/2012 8:19 AM
Bromoform	ND	40	U	ppbv	40	6/2/2012 8:19 AM
Bromomethane	ND	40	U	ppbv	40	6/2/2012 8:19 AM
Carbon disulfide	ND	40	U	ppbv	40	6/2/2012 8:19 AM
Carbon tetrachloride	ND	40	U	ppbv	40	6/2/2012 8:19 AM
Chlorobenzene	ND	40	U	ppbv	40	6/2/2012 8:19 AM
Chlorodibromomethane	ND	40	U	ppbv	40	6/2/2012 8:19 AM
Chloroethane	ND	40	U	ppbv	40	6/2/2012 8:19 AM
Chloroform	ND	40	U	ppbv	40	6/2/2012 8:19 AM
Chloromethane	ND	40	U	ppbv	40	6/2/2012 8:19 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/2/2012 8:19 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/2/2012 8:19 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 8:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-033	**Matrix:**	Air
Client Sample ID:	VA1564		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,200	80		ppbv	40	6/2/2012 8:19 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/2/2012 8:19 AM
Ethyl acetate	ND	40	U	ppbv	40	6/2/2012 8:19 AM
Ethylbenzene	84	80		ppbv	40	6/2/2012 8:19 AM
Heptane	700	40		ppbv	40	6/2/2012 8:19 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/2/2012 8:19 AM
m,p-Xylene	210	80		ppbv	40	6/2/2012 8:19 AM
Methylene chloride	ND	200	U	ppbv	40	6/2/2012 8:19 AM
n-Hexane	670	80		ppbv	40	6/2/2012 8:19 AM
Naphthalene	ND	40	U	ppbv	40	6/2/2012 8:19 AM
o-Xylene	73	40		ppbv	40	6/2/2012 8:19 AM
Propylene	ND	40	U	ppbv	40	6/2/2012 8:19 AM
Styrene	ND	40	U	ppbv	40	6/2/2012 8:19 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/2/2012 8:19 AM
Tetrachloroethene	ND	40	U	ppbv	40	6/2/2012 8:19 AM
Tetrahydrofuran	ND	40	U	ppbv	40	6/2/2012 8:19 AM
Toluene	930	40		ppbv	40	6/2/2012 8:19 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/2/2012 8:19 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/2/2012 8:19 AM
Trichloroethene	ND	40	U	ppbv	40	6/2/2012 8:19 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/2/2012 8:19 AM
Vinyl acetate	ND	40	U	ppbv	40	6/2/2012 8:19 AM
Vinyl chloride	ND	40	U	ppbv	40	6/2/2012 8:19 AM
Xylenes, Total	280	120		ppbv	40	6/2/2012 8:19 AM
Surr: 4-Bromofluorobenzene	96.4	70-130		%REC	40	6/2/2012 8:19 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	28,000	4,700		µg/m³	40	6/4/2012 6:15 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	6/4/2012 6:15 PM
C9-C12 Aliphatic Hydrocarbons	1,300	7,600	J	µg/m³	40	6/4/2012 6:15 PM
Surr: 4-Bromofluorobenzene	99.1	70-130		%REC	40	6/4/2012 6:15 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 8:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-034	**Matrix:**	Air
Client Sample ID:	VA1565		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	0.71	0.10		%	1	6/7/2012 11:19 AM
Carbon Monoxide	ND	0.10	U	%	1	6/7/2012 11:19 AM
Methane	ND	0.50	U	%	1	6/7/2012 11:19 AM
Nitrogen	78	0.10		%	1	6/7/2012 11:19 AM
Oxygen	20	0.10		%	1	6/7/2012 11:19 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/2/2012 9:00 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/2/2012 9:00 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/2/2012 9:00 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/2/2012 9:00 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/2/2012 9:00 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/2/2012 9:00 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/2/2012 9:00 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	6/2/2012 9:00 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/2/2012 9:00 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/2/2012 9:00 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/2/2012 9:00 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/2/2012 9:00 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/2/2012 9:00 AM
1,3-Butadiene	ND	40	U	ppbv	40	6/2/2012 9:00 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/2/2012 9:00 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/2/2012 9:00 AM
2-Butanone	ND	40	U	ppbv	40	6/2/2012 9:00 AM
2-Hexanone	ND	40	U	ppbv	40	6/2/2012 9:00 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/2/2012 9:00 AM
Acetone	ND	40	U	ppbv	40	6/2/2012 9:00 AM
Benzene	620	40		ppbv	40	6/2/2012 9:00 AM
Benzyl chloride	ND	40	U	ppbv	40	6/2/2012 9:00 AM
Bromodichloromethane	ND	40	U	ppbv	40	6/2/2012 9:00 AM
Bromoform	ND	40	U	ppbv	40	6/2/2012 9:00 AM
Bromomethane	ND	40	U	ppbv	40	6/2/2012 9:00 AM
Carbon disulfide	ND	40	U	ppbv	40	6/2/2012 9:00 AM
Carbon tetrachloride	ND	40	U	ppbv	40	6/2/2012 9:00 AM
Chlorobenzene	ND	40	U	ppbv	40	6/2/2012 9:00 AM
Chlorodibromomethane	ND	40	U	ppbv	40	6/2/2012 9:00 AM
Chloroethane	ND	40	U	ppbv	40	6/2/2012 9:00 AM
Chloroform	ND	40	U	ppbv	40	6/2/2012 9:00 AM
Chloromethane	ND	40	U	ppbv	40	6/2/2012 9:00 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/2/2012 9:00 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/2/2012 9:00 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 8:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-034	**Matrix:**	Air
Client Sample ID:	VA1565		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,000	400		ppbv	200	6/4/2012 11:53 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/2/2012 9:00 AM
Ethyl acetate	ND	40	U	ppbv	40	6/2/2012 9:00 AM
Ethylbenzene	110	80		ppbv	40	6/2/2012 9:00 AM
Heptane	1,100	40		ppbv	40	6/2/2012 9:00 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/2/2012 9:00 AM
m,p-Xylene	280	80		ppbv	40	6/2/2012 9:00 AM
Methylene chloride	ND	200	U	ppbv	40	6/2/2012 9:00 AM
n-Hexane	1,200	80		ppbv	40	6/2/2012 9:00 AM
Naphthalene	ND	40	U	ppbv	40	6/2/2012 9:00 AM
o-Xylene	99	40		ppbv	40	6/2/2012 9:00 AM
Propylene	ND	40	U	ppbv	40	6/2/2012 9:00 AM
Styrene	ND	40	U	ppbv	40	6/2/2012 9:00 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/2/2012 9:00 AM
Tetrachloroethene	ND	40	U	ppbv	40	6/2/2012 9:00 AM
Tetrahydrofuran	ND	40	U	ppbv	40	6/2/2012 9:00 AM
Toluene	1,300	40		ppbv	40	6/2/2012 9:00 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/2/2012 9:00 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/2/2012 9:00 AM
Trichloroethene	ND	40	U	ppbv	40	6/2/2012 9:00 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/2/2012 9:00 AM
Vinyl acetate	ND	40	U	ppbv	40	6/2/2012 9:00 AM
Vinyl chloride	ND	40	U	ppbv	40	6/2/2012 9:00 AM
Xylenes, Total	380	120		ppbv	40	6/2/2012 9:00 AM
Surr: 4-Bromofluorobenzene	97.6	70-130		%REC	40	6/2/2012 9:00 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	96,000	23,000		µg/m³	200	6/5/2012 5:43 AM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	6/5/2012 5:43 AM
C9-C12 Aliphatic Hydrocarbons	12,000	38,000	J	µg/m³	200	6/5/2012 5:43 AM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	200	6/5/2012 5:43 AM

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WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 9:45:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-035	**Matrix:**	Air
Client Sample ID:	VA1566		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	0.22	0.10		%	1	6/7/2012 11:46 AM
Carbon Monoxide	ND	0.10	U	%	1	6/7/2012 11:46 AM
Methane	ND	0.50	U	%	1	6/7/2012 11:46 AM
Nitrogen	79	0.10		%	1	6/7/2012 11:46 AM
Oxygen	20	0.10		%	1	6/7/2012 11:46 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/5/2012 12:23 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/5/2012 12:23 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/5/2012 12:23 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/5/2012 12:23 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/5/2012 12:23 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/5/2012 12:23 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/5/2012 12:23 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	6/5/2012 12:23 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/5/2012 12:23 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/5/2012 12:23 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/5/2012 12:23 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/5/2012 12:23 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/5/2012 12:23 AM
1,3-Butadiene	ND	40	U	ppbv	40	6/5/2012 12:23 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/5/2012 12:23 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/5/2012 12:23 AM
2-Butanone	ND	40	U	ppbv	40	6/5/2012 12:23 AM
2-Hexanone	ND	40	U	ppbv	40	6/5/2012 12:23 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/5/2012 12:23 AM
Acetone	ND	40	U	ppbv	40	6/5/2012 12:23 AM
Benzene	460	40		ppbv	40	6/5/2012 12:23 AM
Benzyl chloride	ND	40	U	ppbv	40	6/5/2012 12:23 AM
Bromodichloromethane	ND	40	U	ppbv	40	6/5/2012 12:23 AM
Bromoform	ND	40	U	ppbv	40	6/5/2012 12:23 AM
Bromomethane	ND	40	U	ppbv	40	6/5/2012 12:23 AM
Carbon disulfide	ND	40	U	ppbv	40	6/5/2012 12:23 AM
Carbon tetrachloride	ND	40	U	ppbv	40	6/5/2012 12:23 AM
Chlorobenzene	ND	40	U	ppbv	40	6/5/2012 12:23 AM
Chlorodibromomethane	ND	40	U	ppbv	40	6/5/2012 12:23 AM
Chloroethane	ND	40	U	ppbv	40	6/5/2012 12:23 AM
Chloroform	ND	40	U	ppbv	40	6/5/2012 12:23 AM
Chloromethane	ND	40	U	ppbv	40	6/5/2012 12:23 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/5/2012 12:23 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/5/2012 12:23 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 9:45:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-035	**Matrix:**	Air
Client Sample ID:	VA1566		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,300	80		ppbv	40	6/5/2012 12:23 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/5/2012 12:23 AM
Ethyl acetate	ND	40	U	ppbv	40	6/5/2012 12:23 AM
Ethylbenzene	110	80		ppbv	40	6/5/2012 12:23 AM
Heptane	760	40		ppbv	40	6/5/2012 12:23 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/5/2012 12:23 AM
m,p-Xylene	260	80		ppbv	40	6/5/2012 12:23 AM
Methylene chloride	ND	200	U	ppbv	40	6/5/2012 12:23 AM
n-Hexane	650	80		ppbv	40	6/5/2012 12:23 AM
Naphthalene	ND	40	U	ppbv	40	6/5/2012 12:23 AM
o-Xylene	94	40		ppbv	40	6/5/2012 12:23 AM
Propylene	ND	40	U	ppbv	40	6/5/2012 12:23 AM
Styrene	ND	40	U	ppbv	40	6/5/2012 12:23 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/5/2012 12:23 AM
Tetrachloroethene	ND	40	U	ppbv	40	6/5/2012 12:23 AM
Tetrahydrofuran	ND	40	U	ppbv	40	6/5/2012 12:23 AM
Toluene	1,100	40		ppbv	40	6/5/2012 12:23 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/5/2012 12:23 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/5/2012 12:23 AM
Trichloroethene	ND	40	U	ppbv	40	6/5/2012 12:23 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/5/2012 12:23 AM
Vinyl acetate	ND	40	U	ppbv	40	6/5/2012 12:23 AM
Vinyl chloride	ND	40	U	ppbv	40	6/5/2012 12:23 AM
Xylenes, Total	350	120		ppbv	40	6/5/2012 12:23 AM
Surr: 4-Bromofluorobenzene	96.0	70-130		%REC	40	6/5/2012 12:23 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	190,000	23,000		µg/m³	200	6/5/2012 5:25 PM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	6/5/2012 5:25 PM
C9-C12 Aliphatic Hydrocarbons	11,000	38,000	J	µg/m³	200	6/5/2012 5:25 PM
Surr: 4-Bromofluorobenzene	99.0	70-130		%REC	200	6/5/2012 5:25 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 10:28:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-036	**Matrix:**	Air
Client Sample ID:	VA1567		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	0.52	0.10		%	1	6/7/2012 12:11 PM
Carbon Monoxide	ND	0.10	U	%	1	6/7/2012 12:11 PM
Methane	ND	0.50	U	%	1	6/7/2012 12:11 PM
Nitrogen	81	0.10		%	1	6/7/2012 12:11 PM
Oxygen	19	0.10		%	1	6/7/2012 12:11 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/4/2012 3:30 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/4/2012 3:30 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/4/2012 3:30 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/4/2012 3:30 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/4/2012 3:30 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/4/2012 3:30 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/4/2012 3:30 PM
1,2,4-Trimethylbenzene	44	40		ppbv	40	6/4/2012 3:30 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/4/2012 3:30 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/4/2012 3:30 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/4/2012 3:30 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/4/2012 3:30 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/4/2012 3:30 PM
1,3-Butadiene	ND	40	U	ppbv	40	6/4/2012 3:30 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/4/2012 3:30 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/4/2012 3:30 PM
2-Butanone	ND	40	U	ppbv	40	6/4/2012 3:30 PM
2-Hexanone	ND	40	U	ppbv	40	6/4/2012 3:30 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/4/2012 3:30 PM
Acetone	ND	40	U	ppbv	40	6/4/2012 3:30 PM
Benzene	500	40		ppbv	40	6/4/2012 3:30 PM
Benzyl chloride	ND	40	U	ppbv	40	6/4/2012 3:30 PM
Bromodichloromethane	ND	40	U	ppbv	40	6/4/2012 3:30 PM
Bromoform	ND	40	U	ppbv	40	6/4/2012 3:30 PM
Bromomethane	ND	40	U	ppbv	40	6/4/2012 3:30 PM
Carbon disulfide	ND	40	U	ppbv	40	6/4/2012 3:30 PM
Carbon tetrachloride	ND	40	U	ppbv	40	6/4/2012 3:30 PM
Chlorobenzene	ND	40	U	ppbv	40	6/4/2012 3:30 PM
Chlorodibromomethane	ND	40	U	ppbv	40	6/4/2012 3:30 PM
Chloroethane	ND	40	U	ppbv	40	6/4/2012 3:30 PM
Chloroform	ND	40	U	ppbv	40	6/4/2012 3:30 PM
Chloromethane	ND	40	U	ppbv	40	6/4/2012 3:30 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/4/2012 3:30 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/4/2012 3:30 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 10:28:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-036	**Matrix:**	Air
Client Sample ID:	VA1567		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,600	80		ppbv	40	6/4/2012 3:30 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/4/2012 3:30 PM
Ethyl acetate	ND	40	U	ppbv	40	6/4/2012 3:30 PM
Ethylbenzene	120	80		ppbv	40	6/4/2012 3:30 PM
Heptane	860	40		ppbv	40	6/4/2012 3:30 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/4/2012 3:30 PM
m,p-Xylene	300	80		ppbv	40	6/4/2012 3:30 PM
Methylene chloride	ND	200	U	ppbv	40	6/4/2012 3:30 PM
n-Hexane	700	80		ppbv	40	6/4/2012 3:30 PM
Naphthalene	ND	40	U	ppbv	40	6/4/2012 3:30 PM
o-Xylene	110	40		ppbv	40	6/4/2012 3:30 PM
Propylene	ND	40	U	ppbv	40	6/4/2012 3:30 PM
Styrene	ND	40	U	ppbv	40	6/4/2012 3:30 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/4/2012 3:30 PM
Tetrachloroethene	ND	40	U	ppbv	40	6/4/2012 3:30 PM
Tetrahydrofuran	ND	40	U	ppbv	40	6/4/2012 3:30 PM
Toluene	1,300	40		ppbv	40	6/4/2012 3:30 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/4/2012 3:30 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/4/2012 3:30 PM
Trichloroethene	ND	40	U	ppbv	40	6/4/2012 3:30 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/4/2012 3:30 PM
Vinyl acetate	ND	40	U	ppbv	40	6/4/2012 3:30 PM
Vinyl chloride	ND	40	U	ppbv	40	6/4/2012 3:30 PM
Xylenes, Total	410	120		ppbv	40	6/4/2012 3:30 PM
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	40	6/4/2012 3:30 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	94,000	23,000		µg/m³	200	6/4/2012 8:35 PM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	6/4/2012 8:35 PM
C9-C12 Aliphatic Hydrocarbons	6,500	38,000	J	µg/m³	200	6/4/2012 8:35 PM
Surr: 4-Bromofluorobenzene	99.3	70-130		%REC	200	6/4/2012 8:35 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 11:03:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-037	**Matrix:**	Air
Client Sample ID:	VA1568		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	0.046	0.10	J	%	1	6/7/2012 1:31 PM
Carbon Monoxide	ND	0.10	U	%	1	6/7/2012 1:31 PM
Methane	ND	0.50	U	%	1	6/7/2012 1:31 PM
Nitrogen	79	0.10		%	1	6/7/2012 1:31 PM
Oxygen	21	0.10		%	1	6/7/2012 1:31 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/4/2012 1:19 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/4/2012 1:19 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/4/2012 1:19 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/4/2012 1:19 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/4/2012 1:19 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/4/2012 1:19 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/4/2012 1:19 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	6/4/2012 1:19 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/4/2012 1:19 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/4/2012 1:19 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/4/2012 1:19 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/4/2012 1:19 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/4/2012 1:19 PM
1,3-Butadiene	ND	40	U	ppbv	40	6/4/2012 1:19 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/4/2012 1:19 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/4/2012 1:19 PM
2-Butanone	ND	40	U	ppbv	40	6/4/2012 1:19 PM
2-Hexanone	ND	40	U	ppbv	40	6/4/2012 1:19 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/4/2012 1:19 PM
Acetone	ND	40	U	ppbv	40	6/4/2012 1:19 PM
Benzene	580	40		ppbv	40	6/4/2012 1:19 PM
Benzyl chloride	ND	40	U	ppbv	40	6/4/2012 1:19 PM
Bromodichloromethane	ND	40	U	ppbv	40	6/4/2012 1:19 PM
Bromoform	ND	40	U	ppbv	40	6/4/2012 1:19 PM
Bromomethane	ND	40	U	ppbv	40	6/4/2012 1:19 PM
Carbon disulfide	ND	40	U	ppbv	40	6/4/2012 1:19 PM
Carbon tetrachloride	ND	40	U	ppbv	40	6/4/2012 1:19 PM
Chlorobenzene	ND	40	U	ppbv	40	6/4/2012 1:19 PM
Chlorodibromomethane	ND	40	U	ppbv	40	6/4/2012 1:19 PM
Chloroethane	ND	40	U	ppbv	40	6/4/2012 1:19 PM
Chloroform	ND	40	U	ppbv	40	6/4/2012 1:19 PM
Chloromethane	ND	40	U	ppbv	40	6/4/2012 1:19 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/4/2012 1:19 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/4/2012 1:19 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 11:03:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-037	**Matrix:**	Air
Client Sample ID:	VA1568		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,400	80		ppbv	40	6/4/2012 1:19 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/4/2012 1:19 PM
Ethyl acetate	ND	40	U	ppbv	40	6/4/2012 1:19 PM
Ethylbenzene	69	80	J	ppbv	40	6/4/2012 1:19 PM
Heptane	580	40		ppbv	40	6/4/2012 1:19 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/4/2012 1:19 PM
m,p-Xylene	170	80		ppbv	40	6/4/2012 1:19 PM
Methylene chloride	ND	200	U	ppbv	40	6/4/2012 1:19 PM
n-Hexane	580	80		ppbv	40	6/4/2012 1:19 PM
Naphthalene	ND	40	U	ppbv	40	6/4/2012 1:19 PM
o-Xylene	64	40		ppbv	40	6/4/2012 1:19 PM
Propylene	140	40		ppbv	40	6/4/2012 1:19 PM
Styrene	ND	40	U	ppbv	40	6/4/2012 1:19 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/4/2012 1:19 PM
Tetrachloroethene	ND	40	U	ppbv	40	6/4/2012 1:19 PM
Tetrahydrofuran	ND	40	U	ppbv	40	6/4/2012 1:19 PM
Toluene	830	40		ppbv	40	6/4/2012 1:19 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/4/2012 1:19 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/4/2012 1:19 PM
Trichloroethene	ND	40	U	ppbv	40	6/4/2012 1:19 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/4/2012 1:19 PM
Vinyl acetate	ND	40	U	ppbv	40	6/4/2012 1:19 PM
Vinyl chloride	ND	40	U	ppbv	40	6/4/2012 1:19 PM
Xylenes, Total	230	120		ppbv	40	6/4/2012 1:19 PM
Surr: 4-Bromofluorobenzene	99.7	70-130		%REC	40	6/4/2012 1:19 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	200,000	23,000		µg/m³	200	6/4/2012 9:24 PM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	6/4/2012 9:24 PM
C9-C12 Aliphatic Hydrocarbons	15,000	38,000	J	µg/m³	200	6/4/2012 9:24 PM
Surr: 4-Bromofluorobenzene	99.0	70-130		%REC	200	6/4/2012 9:24 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 12:07:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-038	**Matrix:**	Air
Client Sample ID:	VA1569		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	0.22	0.10		%	1	6/7/2012 1:47 PM
Carbon Monoxide	ND	0.10	U	%	1	6/7/2012 1:47 PM
Methane	ND	0.50	U	%	1	6/7/2012 1:47 PM
Nitrogen	79	0.10		%	1	6/7/2012 1:47 PM
Oxygen	20	0.10		%	1	6/7/2012 1:47 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	200	U	ppbv	200	6/4/2012 5:44 PM
1,1,2,2-Tetrachloroethane	ND	200	U	ppbv	200	6/4/2012 5:44 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	200	U	ppbv	200	6/4/2012 5:44 PM
1,1,2-Trichloroethane	ND	200	U	ppbv	200	6/4/2012 5:44 PM
1,1-Dichloroethane	ND	200	U	ppbv	200	6/4/2012 5:44 PM
1,1-Dichloroethene	ND	200	U	ppbv	200	6/4/2012 5:44 PM
1,2,4-Trichlorobenzene	ND	200	U	ppbv	200	6/4/2012 5:44 PM
1,2,4-Trimethylbenzene	ND	200	U	ppbv	200	6/4/2012 5:44 PM
1,2-Dibromoethane	ND	200	U	ppbv	200	6/4/2012 5:44 PM
1,2-Dichlorobenzene	ND	200	U	ppbv	200	6/4/2012 5:44 PM
1,2-Dichloroethane	ND	200	U	ppbv	200	6/4/2012 5:44 PM
1,2-Dichloropropane	ND	200	U	ppbv	200	6/4/2012 5:44 PM
1,3,5-Trimethylbenzene	ND	200	U	ppbv	200	6/4/2012 5:44 PM
1,3-Butadiene	ND	200	U	ppbv	200	6/4/2012 5:44 PM
1,3-Dichlorobenzene	ND	200	U	ppbv	200	6/4/2012 5:44 PM
1,4-Dichlorobenzene	ND	200	U	ppbv	200	6/4/2012 5:44 PM
2-Butanone	ND	200	U	ppbv	200	6/4/2012 5:44 PM
2-Hexanone	ND	200	U	ppbv	200	6/4/2012 5:44 PM
4-Methyl-2-pentanone	ND	200	U	ppbv	200	6/4/2012 5:44 PM
Acetone	470	200		ppbv	200	6/4/2012 5:44 PM
Benzene	710	200		ppbv	200	6/4/2012 5:44 PM
Benzyl chloride	ND	200	U	ppbv	200	6/4/2012 5:44 PM
Bromodichloromethane	ND	200	U	ppbv	200	6/4/2012 5:44 PM
Bromoform	ND	200	U	ppbv	200	6/4/2012 5:44 PM
Bromomethane	ND	200	U	ppbv	200	6/4/2012 5:44 PM
Carbon disulfide	ND	200	U	ppbv	200	6/4/2012 5:44 PM
Carbon tetrachloride	ND	200	U	ppbv	200	6/4/2012 5:44 PM
Chlorobenzene	ND	200	U	ppbv	200	6/4/2012 5:44 PM
Chlorodibromomethane	ND	200	U	ppbv	200	6/4/2012 5:44 PM
Chloroethane	ND	200	U	ppbv	200	6/4/2012 5:44 PM
Chloroform	ND	200	U	ppbv	200	6/4/2012 5:44 PM
Chloromethane	ND	200	U	ppbv	200	6/4/2012 5:44 PM
cis-1,2-Dichloroethene	ND	200	U	ppbv	200	6/4/2012 5:44 PM
cis-1,3-dichloropropene	ND	200	U	ppbv	200	6/4/2012 5:44 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 12:07:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-038	**Matrix:**	Air
Client Sample ID:	VA1569		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,100	400		ppbv	200	6/4/2012 5:44 PM
Dichlorodifluoromethane	ND	200	U	ppbv	200	6/4/2012 5:44 PM
Ethyl acetate	ND	200	U	ppbv	200	6/4/2012 5:44 PM
Ethylbenzene	ND	400	U	ppbv	200	6/4/2012 5:44 PM
Heptane	770	200		ppbv	200	6/4/2012 5:44 PM
Hexachlorobutadiene	ND	400	U	ppbv	200	6/4/2012 5:44 PM
m,p-Xylene	300	400	J	ppbv	200	6/4/2012 5:44 PM
Methylene chloride	780	1,000	J	ppbv	200	6/4/2012 5:44 PM
n-Hexane	1,500	400		ppbv	200	6/4/2012 5:44 PM
Naphthalene	ND	200	U	ppbv	200	6/4/2012 5:44 PM
o-Xylene	ND	200	U	ppbv	200	6/4/2012 5:44 PM
Propylene	280	200		ppbv	200	6/4/2012 5:44 PM
Styrene	ND	200	U	ppbv	200	6/4/2012 5:44 PM
tert-Butyl Methyl Ether	ND	200	U	ppbv	200	6/4/2012 5:44 PM
Tetrachloroethene	ND	200	U	ppbv	200	6/4/2012 5:44 PM
Tetrahydrofuran	ND	200	U	ppbv	200	6/4/2012 5:44 PM
Toluene	1,400	200		ppbv	200	6/4/2012 5:44 PM
trans-1,2-Dichloroethene	ND	200	U	ppbv	200	6/4/2012 5:44 PM
trans-1,3-dichloropropene	ND	200	U	ppbv	200	6/4/2012 5:44 PM
Trichloroethene	ND	200	U	ppbv	200	6/4/2012 5:44 PM
Trichlorofluoromethane	ND	200	U	ppbv	200	6/4/2012 5:44 PM
Vinyl acetate	ND	200	U	ppbv	200	6/4/2012 5:44 PM
Vinyl chloride	ND	200	U	ppbv	200	6/4/2012 5:44 PM
Xylenes, Total	300	600	J	ppbv	200	6/4/2012 5:44 PM
Surr: 4-Bromofluorobenzene	98.0	70-130		%REC	200	6/4/2012 5:44 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	430,000	47,000		µg/m³	400	6/4/2012 10:13 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	6/4/2012 10:13 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	6/4/2012 10:13 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	400	6/4/2012 10:13 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 2:16:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-039	**Matrix:**	Air
Client Sample ID:	VA1590		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	0.22	0.10		%	1	6/7/2012 2:13 PM
Carbon Monoxide	ND	0.10	U	%	1	6/7/2012 2:13 PM
Methane	ND	0.50	U	%	1	6/7/2012 2:13 PM
Nitrogen	80	0.10		%	1	6/7/2012 2:13 PM
Oxygen	21	0.10		%	1	6/7/2012 2:13 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/4/2012 4:56 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/4/2012 4:56 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/4/2012 4:56 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/4/2012 4:56 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/4/2012 4:56 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/4/2012 4:56 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/4/2012 4:56 PM
1,2,4-Trimethylbenzene	40	40		ppbv	40	6/4/2012 4:56 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/4/2012 4:56 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/4/2012 4:56 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/4/2012 4:56 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/4/2012 4:56 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/4/2012 4:56 PM
1,3-Butadiene	ND	40	U	ppbv	40	6/4/2012 4:56 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/4/2012 4:56 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/4/2012 4:56 PM
2-Butanone	ND	40	U	ppbv	40	6/4/2012 4:56 PM
2-Hexanone	ND	40	U	ppbv	40	6/4/2012 4:56 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/4/2012 4:56 PM
Acetone	ND	40	U	ppbv	40	6/4/2012 4:56 PM
Benzene	460	40		ppbv	40	6/4/2012 4:56 PM
Benzyl chloride	ND	40	U	ppbv	40	6/4/2012 4:56 PM
Bromodichloromethane	ND	40	U	ppbv	40	6/4/2012 4:56 PM
Bromoform	ND	40	U	ppbv	40	6/4/2012 4:56 PM
Bromomethane	ND	40	U	ppbv	40	6/4/2012 4:56 PM
Carbon disulfide	ND	40	U	ppbv	40	6/4/2012 4:56 PM
Carbon tetrachloride	ND	40	U	ppbv	40	6/4/2012 4:56 PM
Chlorobenzene	ND	40	U	ppbv	40	6/4/2012 4:56 PM
Chlorodibromomethane	ND	40	U	ppbv	40	6/4/2012 4:56 PM
Chloroethane	ND	40	U	ppbv	40	6/4/2012 4:56 PM
Chloroform	ND	40	U	ppbv	40	6/4/2012 4:56 PM
Chloromethane	ND	40	U	ppbv	40	6/4/2012 4:56 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/4/2012 4:56 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/4/2012 4:56 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 2:16:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-039	**Matrix:**	Air
Client Sample ID:	VA1590		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,300	80		ppbv	40	6/4/2012 4:56 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/4/2012 4:56 PM
Ethyl acetate	ND	40	U	ppbv	40	6/4/2012 4:56 PM
Ethylbenzene	98	80		ppbv	40	6/4/2012 4:56 PM
Heptane	660	40		ppbv	40	6/4/2012 4:56 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/4/2012 4:56 PM
m,p-Xylene	240	80		ppbv	40	6/4/2012 4:56 PM
Methylene chloride	ND	200	U	ppbv	40	6/4/2012 4:56 PM
n-Hexane	520	80		ppbv	40	6/4/2012 4:56 PM
Naphthalene	ND	40	U	ppbv	40	6/4/2012 4:56 PM
o-Xylene	90	40		ppbv	40	6/4/2012 4:56 PM
Propylene	ND	40	U	ppbv	40	6/4/2012 4:56 PM
Styrene	ND	40	U	ppbv	40	6/4/2012 4:56 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/4/2012 4:56 PM
Tetrachloroethene	ND	40	U	ppbv	40	6/4/2012 4:56 PM
Tetrahydrofuran	ND	40	U	ppbv	40	6/4/2012 4:56 PM
Toluene	980	40		ppbv	40	6/4/2012 4:56 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/4/2012 4:56 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/4/2012 4:56 PM
Trichloroethene	ND	40	U	ppbv	40	6/4/2012 4:56 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/4/2012 4:56 PM
Vinyl acetate	ND	40	U	ppbv	40	6/4/2012 4:56 PM
Vinyl chloride	ND	40	U	ppbv	40	6/4/2012 4:56 PM
Xylenes, Total	330	120		ppbv	40	6/4/2012 4:56 PM
Surr: 4-Bromofluorobenzene	97.2	70-130		%REC	40	6/4/2012 4:56 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	110,000	47,000		µg/m³	400	6/5/2012 4:36 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	6/5/2012 4:36 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	6/5/2012 4:36 PM
Surr: 4-Bromofluorobenzene	97.5	70-130		%REC	400	6/5/2012 4:36 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 2:46:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-040	**Matrix:**	Air
Client Sample ID:	VA1591		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	0.22	0.10		%	1	6/7/2012 2:33 PM
Carbon Monoxide	ND	0.10	U	%	1	6/7/2012 2:33 PM
Methane	ND	0.50	U	%	1	6/7/2012 2:33 PM
Nitrogen	80	0.10		%	1	6/7/2012 2:33 PM
Oxygen	21	0.10		%	1	6/7/2012 2:33 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/5/2012 1:46 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/5/2012 1:46 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/5/2012 1:46 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/5/2012 1:46 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/5/2012 1:46 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/5/2012 1:46 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/5/2012 1:46 AM
1,2,4-Trimethylbenzene	45	40		ppbv	40	6/5/2012 1:46 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/5/2012 1:46 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/5/2012 1:46 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/5/2012 1:46 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/5/2012 1:46 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/5/2012 1:46 AM
1,3-Butadiene	ND	40	U	ppbv	40	6/5/2012 1:46 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/5/2012 1:46 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/5/2012 1:46 AM
2-Butanone	ND	40	U	ppbv	40	6/5/2012 1:46 AM
2-Hexanone	ND	40	U	ppbv	40	6/5/2012 1:46 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/5/2012 1:46 AM
Acetone	ND	40	U	ppbv	40	6/5/2012 1:46 AM
Benzene	380	40		ppbv	40	6/5/2012 1:46 AM
Benzyl chloride	ND	40	U	ppbv	40	6/5/2012 1:46 AM
Bromodichloromethane	ND	40	U	ppbv	40	6/5/2012 1:46 AM
Bromoform	ND	40	U	ppbv	40	6/5/2012 1:46 AM
Bromomethane	ND	40	U	ppbv	40	6/5/2012 1:46 AM
Carbon disulfide	ND	40	U	ppbv	40	6/5/2012 1:46 AM
Carbon tetrachloride	ND	40	U	ppbv	40	6/5/2012 1:46 AM
Chlorobenzene	ND	40	U	ppbv	40	6/5/2012 1:46 AM
Chlorodibromomethane	ND	40	U	ppbv	40	6/5/2012 1:46 AM
Chloroethane	ND	40	U	ppbv	40	6/5/2012 1:46 AM
Chloroform	ND	40	U	ppbv	40	6/5/2012 1:46 AM
Chloromethane	ND	40	U	ppbv	40	6/5/2012 1:46 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/5/2012 1:46 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/5/2012 1:46 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 2:46:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-040	**Matrix:**	Air
Client Sample ID:	VA1591		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	880	80		ppbv	40	6/5/2012 1:46 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/5/2012 1:46 AM
Ethyl acetate	ND	40	U	ppbv	40	6/5/2012 1:46 AM
Ethylbenzene	93	80		ppbv	40	6/5/2012 1:46 AM
Heptane	440	40		ppbv	40	6/5/2012 1:46 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/5/2012 1:46 AM
m,p-Xylene	230	80		ppbv	40	6/5/2012 1:46 AM
Methylene chloride	ND	200	U	ppbv	40	6/5/2012 1:46 AM
n-Hexane	350	80		ppbv	40	6/5/2012 1:46 AM
Naphthalene	ND	40	U	ppbv	40	6/5/2012 1:46 AM
o-Xylene	88	40		ppbv	40	6/5/2012 1:46 AM
Propylene	98	40		ppbv	40	6/5/2012 1:46 AM
Styrene	ND	40	U	ppbv	40	6/5/2012 1:46 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/5/2012 1:46 AM
Tetrachloroethene	ND	40	U	ppbv	40	6/5/2012 1:46 AM
Tetrahydrofuran	ND	40	U	ppbv	40	6/5/2012 1:46 AM
Toluene	850	40		ppbv	40	6/5/2012 1:46 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/5/2012 1:46 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/5/2012 1:46 AM
Trichloroethene	ND	40	U	ppbv	40	6/5/2012 1:46 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/5/2012 1:46 AM
Vinyl acetate	ND	40	U	ppbv	40	6/5/2012 1:46 AM
Vinyl chloride	ND	40	U	ppbv	40	6/5/2012 1:46 AM
Xylenes, Total	320	120		ppbv	40	6/5/2012 1:46 AM
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	40	6/5/2012 1:46 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	67,000	23,000		µg/m³	200	6/5/2012 6:15 PM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	6/5/2012 6:15 PM
C9-C12 Aliphatic Hydrocarbons	22,000	38,000	J	µg/m³	200	6/5/2012 6:15 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	200	6/5/2012 6:15 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 3:30:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-041	**Matrix:**	Air
Client Sample ID:	VA1592		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	0.18	0.10		%	1	6/7/2012 2:50 PM
Carbon Monoxide	ND	0.10	U	%	1	6/7/2012 2:50 PM
Methane	ND	0.50	U	%	1	6/7/2012 2:50 PM
Nitrogen	79	0.10		%	1	6/7/2012 2:50 PM
Oxygen	20	0.10		%	1	6/7/2012 2:50 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/5/2012 2:28 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/5/2012 2:28 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/5/2012 2:28 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/5/2012 2:28 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/5/2012 2:28 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/5/2012 2:28 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/5/2012 2:28 AM
1,2,4-Trimethylbenzene	57	40		ppbv	40	6/5/2012 2:28 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/5/2012 2:28 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/5/2012 2:28 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/5/2012 2:28 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/5/2012 2:28 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/5/2012 2:28 AM
1,3-Butadiene	ND	40	U	ppbv	40	6/5/2012 2:28 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/5/2012 2:28 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/5/2012 2:28 AM
2-Butanone	ND	40	U	ppbv	40	6/5/2012 2:28 AM
2-Hexanone	ND	40	U	ppbv	40	6/5/2012 2:28 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/5/2012 2:28 AM
Acetone	ND	40	U	ppbv	40	6/5/2012 2:28 AM
Benzene	380	40		ppbv	40	6/5/2012 2:28 AM
Benzyl chloride	ND	40	U	ppbv	40	6/5/2012 2:28 AM
Bromodichloromethane	ND	40	U	ppbv	40	6/5/2012 2:28 AM
Bromoform	ND	40	U	ppbv	40	6/5/2012 2:28 AM
Bromomethane	ND	40	U	ppbv	40	6/5/2012 2:28 AM
Carbon disulfide	ND	40	U	ppbv	40	6/5/2012 2:28 AM
Carbon tetrachloride	ND	40	U	ppbv	40	6/5/2012 2:28 AM
Chlorobenzene	ND	40	U	ppbv	40	6/5/2012 2:28 AM
Chlorodibromomethane	ND	40	U	ppbv	40	6/5/2012 2:28 AM
Chloroethane	ND	40	U	ppbv	40	6/5/2012 2:28 AM
Chloroform	ND	40	U	ppbv	40	6/5/2012 2:28 AM
Chloromethane	ND	40	U	ppbv	40	6/5/2012 2:28 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/5/2012 2:28 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/5/2012 2:28 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 3:30:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-041	**Matrix:**	Air
Client Sample ID:	VA1592		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	930	80		ppbv	40	6/5/2012 2:28 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/5/2012 2:28 AM
Ethyl acetate	ND	40	U	ppbv	40	6/5/2012 2:28 AM
Ethylbenzene	120	80		ppbv	40	6/5/2012 2:28 AM
Heptane	530	40		ppbv	40	6/5/2012 2:28 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/5/2012 2:28 AM
m,p-Xylene	310	80		ppbv	40	6/5/2012 2:28 AM
Methylene chloride	ND	200	U	ppbv	40	6/5/2012 2:28 AM
n-Hexane	380	80		ppbv	40	6/5/2012 2:28 AM
Naphthalene	ND	40	U	ppbv	40	6/5/2012 2:28 AM
o-Xylene	110	40		ppbv	40	6/5/2012 2:28 AM
Propylene	130	40		ppbv	40	6/5/2012 2:28 AM
Styrene	ND	40	U	ppbv	40	6/5/2012 2:28 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/5/2012 2:28 AM
Tetrachloroethene	ND	40	U	ppbv	40	6/5/2012 2:28 AM
Tetrahydrofuran	ND	40	U	ppbv	40	6/5/2012 2:28 AM
Toluene	1,200	40		ppbv	40	6/5/2012 2:28 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/5/2012 2:28 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/5/2012 2:28 AM
Trichloroethene	ND	40	U	ppbv	40	6/5/2012 2:28 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/5/2012 2:28 AM
Vinyl acetate	ND	40	U	ppbv	40	6/5/2012 2:28 AM
Vinyl chloride	ND	40	U	ppbv	40	6/5/2012 2:28 AM
Xylenes, Total	420	120		ppbv	40	6/5/2012 2:28 AM
Surr: 4-Bromofluorobenzene	96.8	70-130		%REC	40	6/5/2012 2:28 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	61,000	23,000		µg/m³	200	6/6/2012 9:55 AM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	6/6/2012 9:55 AM
C9-C12 Aliphatic Hydrocarbons	13,000	38,000	J	µg/m³	200	6/6/2012 9:55 AM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	200	6/6/2012 9:55 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 8:25:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-042	**Matrix:**	Air
Client Sample ID:	VA1593		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	0.13	0.10		%	1	6/7/2012 3:14 PM
Carbon Monoxide	ND	0.10	U	%	1	6/7/2012 3:14 PM
Methane	ND	0.50	U	%	1	6/7/2012 3:14 PM
Nitrogen	80	0.10		%	1	6/7/2012 3:14 PM
Oxygen	21	0.10		%	1	6/7/2012 3:14 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
1,1,2,2-Tetrachloroethane	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
1,1,2-Trichloroethane	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
1,1-Dichloroethane	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
1,1-Dichloroethene	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
1,2,4-Trichlorobenzene	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
1,2,4-Trimethylbenzene	8.0	8.0		ppbv	8	6/5/2012 3:52 AM
1,2-Dibromoethane	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
1,2-Dichlorobenzene	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
1,2-Dichloroethane	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
1,2-Dichloropropane	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
1,3,5-Trimethylbenzene	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
1,3-Butadiene	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
1,3-Dichlorobenzene	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
1,4-Dichlorobenzene	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
2-Butanone	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
2-Hexanone	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
4-Methyl-2-pentanone	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
Acetone	14	8.0		ppbv	8	6/5/2012 3:52 AM
Benzene	76	8.0		ppbv	8	6/5/2012 3:52 AM
Benzyl chloride	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
Bromodichloromethane	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
Bromoform	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
Bromomethane	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
Carbon disulfide	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
Carbon tetrachloride	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
Chlorobenzene	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
Chlorodibromomethane	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
Chloroethane	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
Chloroform	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
Chloromethane	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
cis-1,2-Dichloroethene	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
cis-1,3-dichloropropene	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 8:25:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-042	**Matrix:**	Air
Client Sample ID:	VA1593		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	140	16		ppbv	8	6/5/2012 3:52 AM
Dichlorodifluoromethane	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
Ethyl acetate	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
Ethylbenzene	17	16		ppbv	8	6/5/2012 3:52 AM
Heptane	90	8.0		ppbv	8	6/5/2012 3:52 AM
Hexachlorobutadiene	ND	16	U	ppbv	8	6/5/2012 3:52 AM
m,p-Xylene	44	16		ppbv	8	6/5/2012 3:52 AM
Methylene chloride	ND	40	U	ppbv	8	6/5/2012 3:52 AM
n-Hexane	67	16		ppbv	8	6/5/2012 3:52 AM
Naphthalene	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
o-Xylene	16	8.0		ppbv	8	6/5/2012 3:52 AM
Propylene	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
Styrene	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
tert-Butyl Methyl Ether	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
Tetrachloroethene	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
Tetrahydrofuran	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
Toluene	160	8.0		ppbv	8	6/5/2012 3:52 AM
trans-1,2-Dichloroethene	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
trans-1,3-dichloropropene	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
Trichloroethene	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
Trichlorofluoromethane	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
Vinyl acetate	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
Vinyl chloride	ND	8.0	U	ppbv	8	6/5/2012 3:52 AM
Xylenes, Total	60	24		ppbv	8	6/5/2012 3:52 AM
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	8	6/5/2012 3:52 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	8,900	4,700		µg/m³	40	6/5/2012 3:47 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	6/5/2012 3:47 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	6/5/2012 3:47 PM
Surr: 4-Bromofluorobenzene	96.2	70-130		%REC	40	6/5/2012 3:47 PM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 1:30:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-043	**Matrix:**	Air
Client Sample ID:	VA1594		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	0.055	0.10	J	%	1	6/7/2012 3:31 PM
Carbon Monoxide	ND	0.10	U	%	1	6/7/2012 3:31 PM
Methane	ND	0.50	U	%	1	6/7/2012 3:31 PM
Nitrogen	78	0.10		%	1	6/7/2012 3:31 PM
Oxygen	21	0.10		%	1	6/7/2012 3:31 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/5/2012 4:34 AM
1,1,2,2-Tetrachloroethane	43	40		ppbv	40	6/5/2012 4:34 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/5/2012 4:34 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/5/2012 4:34 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/5/2012 4:34 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/5/2012 4:34 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/5/2012 4:34 AM
1,2,4-Trimethylbenzene	65	40		ppbv	40	6/5/2012 4:34 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/5/2012 4:34 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/5/2012 4:34 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/5/2012 4:34 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/5/2012 4:34 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/5/2012 4:34 AM
1,3-Butadiene	ND	40	U	ppbv	40	6/5/2012 4:34 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/5/2012 4:34 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/5/2012 4:34 AM
2-Butanone	ND	40	U	ppbv	40	6/5/2012 4:34 AM
2-Hexanone	ND	40	U	ppbv	40	6/5/2012 4:34 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/5/2012 4:34 AM
Acetone	46	40		ppbv	40	6/5/2012 4:34 AM
Benzene	710	40		ppbv	40	6/5/2012 4:34 AM
Benzyl chloride	ND	40	U	ppbv	40	6/5/2012 4:34 AM
Bromodichloromethane	ND	40	U	ppbv	40	6/5/2012 4:34 AM
Bromoform	ND	40	U	ppbv	40	6/5/2012 4:34 AM
Bromomethane	ND	40	U	ppbv	40	6/5/2012 4:34 AM
Carbon disulfide	ND	40	U	ppbv	40	6/5/2012 4:34 AM
Carbon tetrachloride	ND	40	U	ppbv	40	6/5/2012 4:34 AM
Chlorobenzene	ND	40	U	ppbv	40	6/5/2012 4:34 AM
Chlorodibromomethane	ND	40	U	ppbv	40	6/5/2012 4:34 AM
Chloroethane	ND	40	U	ppbv	40	6/5/2012 4:34 AM
Chloroform	ND	40	U	ppbv	40	6/5/2012 4:34 AM
Chloromethane	ND	40	U	ppbv	40	6/5/2012 4:34 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/5/2012 4:34 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/5/2012 4:34 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 1:30:00 PM
Project:	Kirtland AFB		
Lab ID:	1205939-043	**Matrix:**	Air
Client Sample ID:	VA1594		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,900	80		ppbv	40	6/5/2012 4:34 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/5/2012 4:34 AM
Ethyl acetate	ND	40	U	ppbv	40	6/5/2012 4:34 AM
Ethylbenzene	180	80		ppbv	40	6/5/2012 4:34 AM
Heptane	1,000	40		ppbv	40	6/5/2012 4:34 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/5/2012 4:34 AM
m,p-Xylene	440	80		ppbv	40	6/5/2012 4:34 AM
Methylene chloride	ND	200	U	ppbv	40	6/5/2012 4:34 AM
n-Hexane	760	80		ppbv	40	6/5/2012 4:34 AM
Naphthalene	ND	40	U	ppbv	40	6/5/2012 4:34 AM
o-Xylene	160	40		ppbv	40	6/5/2012 4:34 AM
Propylene	ND	40	U	ppbv	40	6/5/2012 4:34 AM
Styrene	ND	40	U	ppbv	40	6/5/2012 4:34 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/5/2012 4:34 AM
Tetrachloroethene	ND	40	U	ppbv	40	6/5/2012 4:34 AM
Tetrahydrofuran	ND	40	U	ppbv	40	6/5/2012 4:34 AM
Toluene	2,000	40		ppbv	40	6/5/2012 4:34 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/5/2012 4:34 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/5/2012 4:34 AM
Trichloroethene	ND	40	U	ppbv	40	6/5/2012 4:34 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/5/2012 4:34 AM
Vinyl acetate	ND	40	U	ppbv	40	6/5/2012 4:34 AM
Vinyl chloride	ND	40	U	ppbv	40	6/5/2012 4:34 AM
Xylenes, Total	600	120		ppbv	40	6/5/2012 4:34 AM
Surr: 4-Bromofluorobenzene	97.1	70-130		%REC	40	6/5/2012 4:34 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	92,000	23,000		µg/m³	200	6/6/2012 2:55 PM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	6/6/2012 2:55 PM
C9-C12 Aliphatic Hydrocarbons	8,300	38,000	J	µg/m³	200	6/6/2012 2:55 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	200	6/6/2012 2:55 PM

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WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 9:02:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-044	**Matrix:**	Air
Client Sample ID:	VA1595		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	0.29	0.10		%	1	6/7/2012 4:45 PM
Carbon Monoxide	ND	0.10	U	%	1	6/7/2012 4:45 PM
Methane	ND	0.50	U	%	1	6/7/2012 4:45 PM
Nitrogen	78	0.10		%	1	6/7/2012 4:45 PM
Oxygen	20	0.10		%	1	6/7/2012 4:45 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/5/2012 5:15 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/5/2012 5:15 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/5/2012 5:15 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/5/2012 5:15 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/5/2012 5:15 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/5/2012 5:15 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/5/2012 5:15 AM
1,2,4-Trimethylbenzene	58	40		ppbv	40	6/5/2012 5:15 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/5/2012 5:15 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/5/2012 5:15 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/5/2012 5:15 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/5/2012 5:15 AM
1,3,5-Trimethylbenzene	41	40		ppbv	40	6/5/2012 5:15 AM
1,3-Butadiene	ND	40	U	ppbv	40	6/5/2012 5:15 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/5/2012 5:15 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/5/2012 5:15 AM
2-Butanone	ND	40	U	ppbv	40	6/5/2012 5:15 AM
2-Hexanone	ND	40	U	ppbv	40	6/5/2012 5:15 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/5/2012 5:15 AM
Acetone	42	40		ppbv	40	6/5/2012 5:15 AM
Benzene	7,800	800		ppbv	800	6/4/2012 10:57 PM
Benzyl chloride	ND	40	U	ppbv	40	6/5/2012 5:15 AM
Bromodichloromethane	ND	40	U	ppbv	40	6/5/2012 5:15 AM
Bromoform	ND	40	U	ppbv	40	6/5/2012 5:15 AM
Bromomethane	ND	40	U	ppbv	40	6/5/2012 5:15 AM
Carbon disulfide	ND	40	U	ppbv	40	6/5/2012 5:15 AM
Carbon tetrachloride	ND	40	U	ppbv	40	6/5/2012 5:15 AM
Chlorobenzene	ND	40	U	ppbv	40	6/5/2012 5:15 AM
Chlorodibromomethane	ND	40	U	ppbv	40	6/5/2012 5:15 AM
Chloroethane	ND	40	U	ppbv	40	6/5/2012 5:15 AM
Chloroform	ND	40	U	ppbv	40	6/5/2012 5:15 AM
Chloromethane	ND	40	U	ppbv	40	6/5/2012 5:15 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/5/2012 5:15 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/5/2012 5:15 AM

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WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 9:02:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-044	**Matrix:**	Air
Client Sample ID:	VA1595		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	25,000	1,600		ppbv	800	6/4/2012 10:57 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/5/2012 5:15 AM
Ethyl acetate	ND	40	U	ppbv	40	6/5/2012 5:15 AM
Ethylbenzene	520	80		ppbv	40	6/5/2012 5:15 AM
Heptane	11,000	800		ppbv	800	6/4/2012 10:57 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/5/2012 5:15 AM
m,p-Xylene	1,300	80		ppbv	40	6/5/2012 5:15 AM
Methylene chloride	ND	200	U	ppbv	40	6/5/2012 5:15 AM
n-Hexane	17,000	1,600		ppbv	800	6/4/2012 10:57 PM
Naphthalene	ND	40	U	ppbv	40	6/5/2012 5:15 AM
o-Xylene	370	40		ppbv	40	6/5/2012 5:15 AM
Propylene	480	40		ppbv	40	6/5/2012 5:15 AM
Styrene	ND	40	U	ppbv	40	6/5/2012 5:15 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/5/2012 5:15 AM
Tetrachloroethene	ND	40	U	ppbv	40	6/5/2012 5:15 AM
Tetrahydrofuran	ND	40	U	ppbv	40	6/5/2012 5:15 AM
Toluene	12,000	800		ppbv	800	6/4/2012 10:57 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/5/2012 5:15 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/5/2012 5:15 AM
Trichloroethene	ND	40	U	ppbv	40	6/5/2012 5:15 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/5/2012 5:15 AM
Vinyl acetate	ND	40	U	ppbv	40	6/5/2012 5:15 AM
Vinyl chloride	ND	40	U	ppbv	40	6/5/2012 5:15 AM
Xylenes, Total	1,700	120		ppbv	40	6/5/2012 5:15 AM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	40	6/5/2012 5:15 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,600,000	940,000		µg/m³	8000	6/5/2012 2:42 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	6/5/2012 2:42 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	6/5/2012 2:42 AM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	8000	6/5/2012 2:42 AM

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WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 9:02:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-045	**Matrix:**	Air
Client Sample ID:	VA1596		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	0.37	0.10		%	1	6/7/2012 5:07 PM
Carbon Monoxide	ND	0.10	U	%	1	6/7/2012 5:07 PM
Methane	ND	0.50	U	%	1	6/7/2012 5:07 PM
Nitrogen	79	0.10		%	1	6/7/2012 5:07 PM
Oxygen	20	0.10		%	1	6/7/2012 5:07 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/5/2012 5:57 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/5/2012 5:57 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/5/2012 5:57 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/5/2012 5:57 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/5/2012 5:57 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/5/2012 5:57 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/5/2012 5:57 AM
1,2,4-Trimethylbenzene	42	40		ppbv	40	6/5/2012 5:57 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/5/2012 5:57 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/5/2012 5:57 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/5/2012 5:57 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/5/2012 5:57 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/5/2012 5:57 AM
1,3-Butadiene	ND	40	U	ppbv	40	6/5/2012 5:57 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/5/2012 5:57 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/5/2012 5:57 AM
2-Butanone	ND	40	U	ppbv	40	6/5/2012 5:57 AM
2-Hexanone	ND	40	U	ppbv	40	6/5/2012 5:57 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/5/2012 5:57 AM
Acetone	45	40		ppbv	40	6/5/2012 5:57 AM
Benzene	940	40		ppbv	40	6/5/2012 5:57 AM
Benzyl chloride	ND	40	U	ppbv	40	6/5/2012 5:57 AM
Bromodichloromethane	ND	40	U	ppbv	40	6/5/2012 5:57 AM
Bromoform	ND	40	U	ppbv	40	6/5/2012 5:57 AM
Bromomethane	ND	40	U	ppbv	40	6/5/2012 5:57 AM
Carbon disulfide	ND	40	U	ppbv	40	6/5/2012 5:57 AM
Carbon tetrachloride	ND	40	U	ppbv	40	6/5/2012 5:57 AM
Chlorobenzene	ND	40	U	ppbv	40	6/5/2012 5:57 AM
Chlorodibromomethane	ND	40	U	ppbv	40	6/5/2012 5:57 AM
Chloroethane	ND	40	U	ppbv	40	6/5/2012 5:57 AM
Chloroform	ND	40	U	ppbv	40	6/5/2012 5:57 AM
Chloromethane	ND	40	U	ppbv	40	6/5/2012 5:57 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/5/2012 5:57 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/5/2012 5:57 AM

RTI Laboratories - Analytical Report

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/17/2012 9:02:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-045	**Matrix:**	Air
Client Sample ID:	VA1596		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,700	1,600		ppbv	800	6/4/2012 11:42 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/5/2012 5:57 AM
Ethyl acetate	ND	40	U	ppbv	40	6/5/2012 5:57 AM
Ethylbenzene	210	80		ppbv	40	6/5/2012 5:57 AM
Heptane	1,200	40		ppbv	40	6/5/2012 5:57 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/5/2012 5:57 AM
m,p-Xylene	590	80		ppbv	40	6/5/2012 5:57 AM
Methylene chloride	ND	200	U	ppbv	40	6/5/2012 5:57 AM
n-Hexane	1,200	80		ppbv	40	6/5/2012 5:57 AM
Naphthalene	ND	40	U	ppbv	40	6/5/2012 5:57 AM
o-Xylene	170	40		ppbv	40	6/5/2012 5:57 AM
Propylene	ND	40	U	ppbv	40	6/5/2012 5:57 AM
Styrene	ND	40	U	ppbv	40	6/5/2012 5:57 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/5/2012 5:57 AM
Tetrachloroethene	ND	40	U	ppbv	40	6/5/2012 5:57 AM
Tetrahydrofuran	ND	40	U	ppbv	40	6/5/2012 5:57 AM
Toluene	3,400	800		ppbv	800	6/4/2012 11:42 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/5/2012 5:57 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/5/2012 5:57 AM
Trichloroethene	ND	40	U	ppbv	40	6/5/2012 5:57 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/5/2012 5:57 AM
Vinyl acetate	ND	40	U	ppbv	40	6/5/2012 5:57 AM
Vinyl chloride	ND	40	U	ppbv	40	6/5/2012 5:57 AM
Xylenes, Total	750	120		ppbv	40	6/5/2012 5:57 AM
Surr: 4-Bromofluorobenzene	95.5	70-130		%REC	40	6/5/2012 5:57 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	110,000	23,000		µg/m³	200	6/6/2012 3:45 PM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	6/6/2012 3:45 PM
C9-C12 Aliphatic Hydrocarbons	ND	38,000	U	µg/m³	200	6/6/2012 3:45 PM
Surr: 4-Bromofluorobenzene	97.9	70-130		%REC	200	6/6/2012 3:45 PM

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Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-046	**Matrix:**	Air
Client Sample ID:	VA8087-TB		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
1,1,2,2-Tetrachloroethane	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
1,1,2-Trichloroethane	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
1,1-Dichloroethane	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
1,1-Dichloroethene	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
1,2,4-Trichlorobenzene	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
1,2,4-Trimethylbenzene	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
1,2-Dibromoethane	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
1,2-Dichlorobenzene	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
1,2-Dichloroethane	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
1,2-Dichloropropane	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
1,3,5-Trimethylbenzene	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
1,3-Butadiene	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
1,3-Dichlorobenzene	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
1,4-Dichlorobenzene	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
2-Butanone	3.1	1.0		ppbv	1	6/2/2012 9:48 AM
2-Hexanone	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
4-Methyl-2-pentanone	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
Acetone	12	1.0		ppbv	1	6/2/2012 9:48 AM
Benzene	7.8	1.0		ppbv	1	6/2/2012 9:48 AM
Benzyl chloride	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
Bromodichloromethane	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
Bromoform	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
Bromomethane	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
Carbon disulfide	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
Carbon tetrachloride	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
Chlorobenzene	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
Chlorodibromomethane	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
Chloroethane	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
Chloroform	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
Chloromethane	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
cis-1,2-Dichloroethene	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
cis-1,3-dichloropropene	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
Cyclohexane	21	2.0		ppbv	1	6/2/2012 9:48 AM
Dichlorodifluoromethane	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
Ethyl acetate	3.9	1.0		ppbv	1	6/2/2012 9:48 AM
Ethylbenzene	1.4	2.0	J	ppbv	1	6/2/2012 9:48 AM
Heptane	8.9	1.0		ppbv	1	6/2/2012 9:48 AM
Hexachlorobutadiene	ND	2.0	U	ppbv	1	6/2/2012 9:48 AM
m,p-Xylene	3.5	2.0		ppbv	1	6/2/2012 9:48 AM
Methylene chloride	23	5.0		ppbv	1	6/2/2012 9:48 AM

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Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/16/2012 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1205939-046	**Matrix:**	Air
Client Sample ID:	VA8087-TB		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
n-Hexane	18	2.0		ppbv	1	6/2/2012 9:48 AM
Naphthalene	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
o-Xylene	1.4	1.0		ppbv	1	6/2/2012 9:48 AM
Propylene	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
Styrene	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
tert-Butyl Methyl Ether	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
Tetrachloroethene	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
Tetrahydrofuran	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
Toluene	15	1.0		ppbv	1	6/2/2012 9:48 AM
trans-1,2-Dichloroethene	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
trans-1,3-dichloropropene	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
Trichloroethene	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
Trichlorofluoromethane	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
Vinyl acetate	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
Vinyl chloride	ND	1.0	U	ppbv	1	6/2/2012 9:48 AM
Xylenes, Total	4.9	3.0		ppbv	1	6/2/2012 9:48 AM
Surr: 4-Bromofluorobenzene	92.5	70-130		%REC	1	6/2/2012 9:48 AM

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WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R48916**

Sample ID:	**MBLK VOA9 052512**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**48916**
Client ID:	**PBW**	Batch ID:	**R48916**	TestNo:	**MA_APH**			Analysis Date:	**5/25/2012**	SeqNo:	**956275**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	ND	120									U
C9-C10 Aromatic Hydrocarbons	ND	130									U
C9-C12 Aliphatic Hydrocarbons	ND	190									U
Surr: 4-Bromofluorobenzene	83		89.50		93.0	70	130				

Sample ID:	**1205846-027Adup**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**48916**
Client ID:	**ZZZZZZ**	Batch ID:	**R48916**	TestNo:	**MA_APH**			Analysis Date:	**5/25/2012**	SeqNo:	**956280**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	1,600,000	190,000						1,638,000	2.72	30	
C9-C10 Aromatic Hydrocarbons	ND	210,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	ND	300,000						0	0	30	U
Surr: 4-Bromofluorobenzene	140,000		143,200		94.7	70	130		0	30	

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WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R48954**

Sample ID:	**MBLK VOA9 052912**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**48954**
Client ID:	**PBW**	Batch ID:	**R48954**	TestNo:	**MA_APH**			Analysis Date:	**5/29/2012**	SeqNo:	**956828**

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

Sample ID:	**1205846-005Adup**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**48954**
Client ID:	**ZZZZZZ**	Batch ID:	**R48954**	TestNo:	**MA_APH**			Analysis Date:	**5/29/2012**	SeqNo:	**956830**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	7,600	1,900						8,252	8.60	30	
C9-C10 Aromatic Hydrocarbons	ND	2,100						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	ND	3,000						493.1	200	30	RU
Surr: 4-Bromofluorobenzene	1,400		1,432		94.5	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R48955**

Sample ID:	**MBLK VOA1 052912**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**48955**
Client ID:	**PBW**	Batch ID:	**R48955**	TestNo:	**TO-15**			Analysis Date:	**5/29/2012**	SeqNo:	**956846**

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#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R48955**

Sample ID:	**MBLK VOA1 052912**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**48955**
Client ID:	**PBW**	Batch ID:	**R48955**	TestNo:	**TO-15**			Analysis Date:	**5/29/2012**	SeqNo:	**956846**

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		95.9	70	130				

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WO#: 1205939

Date Reported: 6/11/2012
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Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R48955**

Sample ID:	**1205939-001Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**48955**
Client ID:	**VA1316**	Batch ID:	**R48955**	TestNo:	**TO-15**			Analysis Date:	**5/29/2012**	SeqNo:	**956855**

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	3,500	800						3,152	11.3	25	
Benzene	1,200	800						1,072	10.6	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

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Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R48955**

Sample ID:	**1205939-001Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**48955**
Client ID:	**VA1316**	Batch ID:	**R48955**	TestNo:	**TO-15**			Analysis Date:	**5/29/2012**	SeqNo:	**956855**

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	3,300	1,600						2,904	11.4	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	1,600	800						1,456	10.4	25	
Hexachlorobutadiene	ND	1,600						0	0	25	U
m,p-Xylene	810	1,600						0	200	25	JR
Methylene chloride	9,500	4,000						8,888	6.61	25	
n-Hexane	3,700	1,600						3,360	8.87	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	2,800	800						2,408	13.3	25	
trans-1,2-Dichloroethene	ND	800						0	0	25	U
trans-1,3-dichloropropene	ND	800						0	0	25	U
Trichloroethene	ND	800						0	0	25	U
Trichlorofluoromethane	ND	800						0	0	25	U
Vinyl acetate	ND	800						0	0	25	U
Vinyl chloride	ND	800						0	0	25	U
Xylenes, Total	810	2,400						0	200	25	JR
Surr: 4-Bromofluorobenzene	9,500		10,000		95.4	70	130		0	25	

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WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R48985**

Sample ID:	**MBLK VOA9 053012**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**48985**
Client ID:	**PBW**	Batch ID:	**R48985**	TestNo:	**MA_APH**			Analysis Date:	**5/30/2012**	SeqNo:	**957489**

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		93.7	70	130				

Sample ID:	**1205939-012Adup**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**48985**
Client ID:	**VA1347**	Batch ID:	**R48985**	TestNo:	**MA_APH**			Analysis Date:	**5/30/2012**	SeqNo:	**957492**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	1,300,000	94,000						1,196,000	5.43	30	
C9-C10 Aromatic Hydrocarbons	ND	110,000						0	0	30	
C9-C12 Aliphatic Hydrocarbons	27,000	150,000						0	200	30	JR
Surr: 4-Bromofluorobenzene	71,000		71,600		99.7	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R48989**

Sample ID:	**1205939-004Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**48989**
Client ID:	**VA1319**	Batch ID:	**R48989**	TestNo:	**TO-15**			Analysis Date:	**5/30/2012**	SeqNo:	**957579**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	800						0	0	25	U
1,1,2,2-Tetrachloroethane	ND	800						0	0	25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800						0	0	25	U
1,1,2-Trichloroethane	ND	800						0	0	25	U
1,1-Dichloroethane	ND	800						0	0	25	U
1,1-Dichloroethene	ND	800						0	0	25	U
1,2,4-Trichlorobenzene	ND	800						0	0	25	U
1,2,4-Trimethylbenzene	ND	800						0	0	25	U
1,2-Dibromoethane	ND	800						0	0	25	U
1,2-Dichlorobenzene	ND	800						0	0	25	U
1,2-Dichloroethane	ND	800						0	0	25	U
1,2-Dichloropropane	ND	800						0	0	25	U
1,3,5-Trimethylbenzene	ND	800						0	0	25	U
1,3-Butadiene	ND	800						0	0	25	U
1,3-Dichlorobenzene	ND	800						0	0	25	U
1,4-Dichlorobenzene	ND	800						0	0	25	U
2-Butanone	ND	800						0	0	25	U
2-Hexanone	ND	800						0	0	25	U
4-Methyl-2-pentanone	ND	800						0	0	25	U
Acetone	ND	800						0	0	25	U
Benzene	12,000	800						10,220	12.6	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#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R48989**

Sample ID:	**1205939-004Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**48989**
Client ID:	**VA1319**	Batch ID:	**R48989**	TestNo:	**TO-15**			Analysis Date:	**5/30/2012**	SeqNo:	**957579**

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	23,000	1,600						20,420	11.3	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	9,600	800						8,408	12.9	25	
Hexachlorobutadiene	ND	1,600						0	0	25	U
m,p-Xylene	1,700	1,600						1,512	11.5	25	
Methylene chloride	ND	4,000						0	0	25	U
n-Hexane	21,000	1,600						19,200	8.96	25	
Naphthalene	ND	800						0	0	25	U
o-Xylene	ND	800						0	0	25	U
Propylene	900	800						864.0	3.64	25	
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	5,100	800						4,432	13.6	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	1,700	2,400						1,512	11.5	25	J
Surr: 4-Bromofluorobenzene	9,600		10,000		96.2	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R48989**

Sample ID:	**MBLK VOA1 053012**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**48989**
Client ID:	**PBW**	Batch ID:	**R48989**	TestNo:	**TO-15**			Analysis Date:	**5/30/2012**	SeqNo:	**957586**

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#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R48989**

Sample ID:	**MBLK VOA1 053012**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**48989**
Client ID:	**PBW**	Batch ID:	**R48989**	TestNo:	**TO-15**			Analysis Date:	**5/30/2012**	SeqNo:	**957586**

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		96.2	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49026**

Sample ID:	**MBLK VOA1 053112**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49026**
Client ID:	**PBW**	Batch ID:	**R49026**	TestNo:	**TO-15**			Analysis Date:	**5/31/2012**	SeqNo:	**958337**

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#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49026**

Sample ID:	**MBLK VOA1 053112**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49026**
Client ID:	**PBW**	Batch ID:	**R49026**	TestNo:	**TO-15**			Analysis Date:	**5/31/2012**	SeqNo:	**958337**

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		97.7	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49026**

Sample ID:	**1205939-017Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49026**
Client ID:	**VA1402**	Batch ID:	**R49026**	TestNo:	**TO-15**			Analysis Date:	**5/31/2012**	SeqNo:	**958341**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	800						0	0	25	U
1,1,2,2-Tetrachloroethane	ND	800						0	0	25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800						0	0	25	U
1,1,2-Trichloroethane	ND	800						0	0	25	U
1,1-Dichloroethane	ND	800						0	0	25	U
1,1-Dichloroethene	ND	800						0	0	25	U
1,2,4-Trichlorobenzene	ND	800						0	0	25	U
1,2,4-Trimethylbenzene	ND	800						0	0	25	U
1,2-Dibromoethane	ND	800						0	0	25	U
1,2-Dichlorobenzene	ND	800						0	0	25	U
1,2-Dichloroethane	ND	800						0	0	25	U
1,2-Dichloropropane	ND	800						0	0	25	U
1,3,5-Trimethylbenzene	ND	800						0	0	25	U
1,3-Butadiene	ND	800						0	0	25	U
1,3-Dichlorobenzene	ND	800						0	0	25	U
1,4-Dichlorobenzene	ND	800						0	0	25	U
2-Butanone	ND	800						0	0	25	U
2-Hexanone	ND	800						0	0	25	U
4-Methyl-2-pentanone	ND	800						0	0	25	U
Acetone	ND	800						0	0	25	U
Benzene	36,000	800						33,090	7.47	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#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49026**

Sample ID:	**1205939-017Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49026**
Client ID:	**VA1402**	Batch ID:	**R49026**	TestNo:	**TO-15**			Analysis Date:	**5/31/2012**	SeqNo:	**958341**

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	5,100	1,600						4,832	4.85	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	ND	800						0	0	25	U
Hexachlorobutadiene	ND	1,600						0	0	25	U
m,p-Xylene	2,300	1,600						2,128	6.90	25	
Methylene chloride	ND	4,000						0	0	25	U
n-Hexane	4,700	1,600						4,536	3.30	25	
Naphthalene	ND	800						0	0	25	U
o-Xylene	1,400	800						1,328	2.38	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	50,000	800						46,390	8.09	25	E
trans-1,2-Dichloroethene	ND	800						0	0	25	U
trans-1,3-dichloropropene	ND	800						0	0	25	U
Trichloroethene	ND	800						0	0	25	U
Trichlorofluoromethane	ND	800						0	0	25	U
Vinyl acetate	ND	800						0	0	25	U
Vinyl chloride	ND	800						0	0	25	U
Xylenes, Total	3,600	2,400						3,456	5.19	25	
Surr: 4-Bromofluorobenzene	9,900		10,000		99.2	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49028**

Sample ID:	**MBLK VOA9 053112**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**49028**
Client ID:	**PBW**	Batch ID:	**R49028**	TestNo:	**MA_APH**			Analysis Date:	**5/31/2012**	SeqNo:	**958371**

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	81		89.50		90.9	70	130				

Sample ID:	**1205939-030Adup**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**49028**
Client ID:	**VA1502**	Batch ID:	**R49028**	TestNo:	**MA_APH**			Analysis Date:	**5/31/2012**	SeqNo:	**958377**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	17,000	4,700						16,910	0.980	30	
C9-C10 Aromatic Hydrocarbons	ND	5,300						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	2,500	7,600						2,591	4.29	30	J
Surr: 4-Bromofluorobenzene	3,500		3,580		96.6	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49090**

Sample ID:	**MBLK VOA1 060112**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49090**
Client ID:	**PBW**	Batch ID:	**R49090**	TestNo:	**TO-15**			Analysis Date:	**6/1/2012**	SeqNo:	**959561**

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#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49090**

Sample ID:	**MBLK VOA1 060112**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49090**
Client ID:	**PBW**	Batch ID:	**R49090**	TestNo:	**TO-15**			Analysis Date:	**6/1/2012**	SeqNo:	**959561**

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#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49090**

Sample ID:	**1205939-032ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49090**
Client ID:	**VA1563**	Batch ID:	**R49090**	TestNo:	**TO-15**			Analysis Date:	**6/2/2012**	SeqNo:	**959566**

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	450	40						466.4	2.87	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#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49090**

Sample ID:	**1205939-032ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49090**
Client ID:	**VA1563**	Batch ID:	**R49090**	TestNo:	**TO-15**			Analysis Date:	**6/2/2012**	SeqNo:	**959566**

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	1,200	80						1,260	2.31	25	
Dichlorodifluoromethane	ND	40						0	0	25	U
Ethyl acetate	ND	40						0	0	25	U
Ethylbenzene	61	80						74.40	20.1	25	J
Heptane	610	40						677.6	9.85	25	
Hexachlorobutadiene	ND	80						0	0	25	U
m,p-Xylene	150	80						178.4	19.4	25	
Methylene chloride	ND	200						0	0	25	U
n-Hexane	890	80						892.0	0.135	25	
Naphthalene	ND	40						0	0	25	U
o-Xylene	52	40						63.20	18.7	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	770	40						889.6	14.7	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	200	120						241.6	19.2	25	
Surr: 4-Bromofluorobenzene	480		500.0		96.9	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49092**

Sample ID:	**MBLK VOA9 060412**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**49092**
Client ID:	**PBW**	Batch ID:	**R49092**	TestNo:	**MA_APH**			Analysis Date:	**6/4/2012**	SeqNo:	**959580**

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		93.3	70	130				

Sample ID:	**1205939-018Adup**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**49092**
Client ID:	**VA1403**	Batch ID:	**R49092**	TestNo:	**MA_APH**			Analysis Date:	**6/5/2012**	SeqNo:	**959588**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	1,200,000	190,000						1,160,000	4.89	30	
C9-C10 Aromatic Hydrocarbons	ND	210,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	ND	300,000						0	0	30	U
Surr: 4-Bromofluorobenzene	140,000		143,200		98.4	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49099**

Sample ID:	**MBLK-060512 TCD**	Samp Type:	**MBLK**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49099**
Client ID:	**PBW**	Batch ID:	**R49099**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/5/2012**	SeqNo:	**959663**

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

Sample ID:	**LCS-060512 TCD-A**	Samp Type:	**LCS**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49099**
Client ID:	**LCSW**	Batch ID:	**R49099**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/5/2012**	SeqNo:	**959665**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.6	0.10	2.500	0	103	70	130	2.518	2.47	0	
Carbon Monoxide	2.7	0.10	2.500	0	107	70	130	2.671	0.374	0	
Methane	2.1	0.50	2.000	0	105	70	130	2.085	0.431	0	
Nitrogen	2.6	0.10	2.500	0	106	70	130	2.691	1.57	0	
Oxygen	2.5	0.10	2.500	0	98.6	70	130	2.473	0.283	0	

Sample ID:	**1205939-003BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49099**
Client ID:	**VA1318**	Batch ID:	**R49099**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/5/2012**	SeqNo:	**959677**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.74	0.10						0.7300	1.77	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	81	0.10						80.48	1.06	20	
Oxygen	20	0.10						19.33	0.907	20	

Sample ID:	**1205939-013BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49099**
Client ID:	**VA1398**	Batch ID:	**R49099**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/5/2012**	SeqNo:	**959807**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.50	0.10						0.4930	1.01	20	
Carbon Monoxide	ND	0.10						0	0	20	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49099**

Sample ID:	**1205939-013BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49099**
Client ID:	**VA1398**	Batch ID:	**R49099**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/5/2012**	SeqNo:	**959807**

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	80	0.10						79.77	0.0539	20	
Oxygen	20	0.10						20.23	0.0642	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49102**

Sample ID:	**1205939-035ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49102**
Client ID:	**VA1566**	Batch ID:	**R49102**	TestNo:	**TO-15**			Analysis Date:	**6/5/2012**	SeqNo:	**959704**

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	410	40						464.8	11.8	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#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49102**

Sample ID:	**1205939-035ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49102**
Client ID:	**VA1566**	Batch ID:	**R49102**	TestNo:	**TO-15**			Analysis Date:	**6/5/2012**	SeqNo:	**959704**

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	1,200	80						1,337	9.69	25	
Dichlorodifluoromethane	ND	40						0	0	25	U
Ethyl acetate	ND	40						0	0	25	U
Ethylbenzene	90	80						105.2	15.6	25	
Heptane	660	40						762.4	13.7	25	
Hexachlorobutadiene	ND	80						0	0	25	U
m,p-Xylene	220	80						260.8	17.7	25	
Methylene chloride	ND	200						0	0	25	U
n-Hexane	610	80						652.8	7.44	25	
Naphthalene	ND	40						0	0	25	U
o-Xylene	79	40						93.60	17.2	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	980	40						1,143	15.5	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	300	120						354.4	17.6	25	
Surr: 4-Bromofluorobenzene	480		500.0		96.2	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49102**

Sample ID:	**MBLK VOA1 060412**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49102**
Client ID:	**PBW**	Batch ID:	**R49102**	TestNo:	**TO-15**			Analysis Date:	**6/4/2012**	SeqNo:	**959712**

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#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49102**

Sample ID:	**MBLK VOA1 060412**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49102**
Client ID:	**PBW**	Batch ID:	**R49102**	TestNo:	**TO-15**			Analysis Date:	**6/4/2012**	SeqNo:	**959712**

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		97.9	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49118**

Sample ID:	**MBLK VOA9 060512**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**49118**
Client ID:	**PBW**	Batch ID:	**R49118**	TestNo:	**MA_APH**			Analysis Date:	**6/5/2012**	SeqNo:	**959960**

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									
C9-C10 Aromatic Hydrocarbons	ND	130									
C9-C12 Aliphatic Hydrocarbons	ND	190									
Surr: 4-Bromofluorobenzene	81		89.50		90.6	70	130				

Sample ID:	**1205939-040Adup**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**49118**
Client ID:	**VA1591**	Batch ID:	**R49118**	TestNo:	**MA_APH**			Analysis Date:	**6/6/2012**	SeqNo:	**959965**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	70,000	23,000						67,210	3.96	30	
C9-C10 Aromatic Hydrocarbons	ND	27,000						0	0	30	
C9-C12 Aliphatic Hydrocarbons	17,000	38,000						22,410	29.7	30	J
Surr: 4-Bromofluorobenzene	17,000		17,900		96.5	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49131**

Sample ID:	**MBLK-060612 TCD**	Samp Type:	**MBLK**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49131**
Client ID:	**PBW**	Batch ID:	**R49131**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/6/2012**	SeqNo:	**960285**

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

Sample ID:	**LCS-060612 TCD-A**	Samp Type:	**LCS**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49131**
Client ID:	**LCSW**	Batch ID:	**R49131**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/6/2012**	SeqNo:	**960288**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.6	0.10	2.500	0	104	70	130	2.597	0.193	20	
Carbon Monoxide	2.7	0.10	2.500	0	107	70	130	2.692	0.521	20	
Methane	2.1	0.50	2.000	0	105	70	130	2.101	0.477	20	
Nitrogen	2.7	0.10	2.500	0	106	70	130	2.686	1.27	20	
Oxygen	2.5	0.10	2.500	0	98.6	70	130	2.485	0.768	20	

Sample ID:	**1205939-023BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49131**
Client ID:	**VA1411**	Batch ID:	**R49131**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/6/2012**	SeqNo:	**960304**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.67	0.10						0.6630	0.602	20	
Carbon Monoxide	ND	0.10						0	0	20	
Methane	ND	0.50						0	0	20	
Nitrogen	83	0.10						82.56	0.246	20	
Oxygen	17	0.10						17.27	0.237	20	

Sample ID:	**1205939-033BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49131**
Client ID:	**VA1564**	Batch ID:	**R49131**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/6/2012**	SeqNo:	**960316**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.47	0.10						0.4770	0.631	20	
Carbon Monoxide	ND	0.10						0	0	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49131**

Sample ID:	**1205939-033BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49131**
Client ID:	**VA1564**	Batch ID:	**R49131**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/6/2012**	SeqNo:	**960316**

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	
Nitrogen	80	0.10						79.94	0.0538	20	
Oxygen	20	0.10						20.24	0.0840	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49149**

Sample ID:	**MBLK VOA9 060612**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**49149**
Client ID:	**PBW**	Batch ID:	**R49149**	TestNo:	**MA_APH**			Analysis Date:	**6/6/2012**	SeqNo:	**960608**

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

Sample ID:	**1205A85-006Adup**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**49149**
Client ID:	**ZZZZZZ**	Batch ID:	**R49149**	TestNo:	**MA_APH**			Analysis Date:	**6/6/2012**	SeqNo:	**960613**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	25,000	4,700						23,580	5.25	30	
C9-C10 Aromatic Hydrocarbons	ND	5,300						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	1,100	7,600						1,157	3.77	30	J
Surr: 4-Bromofluorobenzene	3,600		3,580		100	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49169**

Sample ID:	**MBLK-060712 TCD**	Samp Type:	**MBLK**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49169**
Client ID:	**PBW**	Batch ID:	**R49169**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/7/2012**	SeqNo:	**961020**

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

Sample ID:	**LCS-060712 TCD-A**	Samp Type:	**LCS**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49169**
Client ID:	**LCSW**	Batch ID:	**R49169**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/7/2012**	SeqNo:	**961022**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.6	0.10	2.500	0	105	70	130	2.611	0.839	20	
Carbon Monoxide	2.7	0.10	2.500	0	110	70	130	2.721	0.623	20	
Methane	2.1	0.50	2.000	0	107	70	130	2.120	0.564	20	
Nitrogen	2.7	0.10	2.500	0	109	70	130	2.733	0.734	20	
Oxygen	2.5	0.10	2.500	0	101	70	130	2.514	0.397	20	

Sample ID:	**1205939-034BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49169**
Client ID:	**VA1565**	Batch ID:	**R49169**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/7/2012**	SeqNo:	**961034**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.68	0.10						0.7060	3.46	20	
Carbon Monoxide	ND	0.10						0	0	20	
Methane	ND	0.50						0	0	20	
Nitrogen	78	0.10						78.45	0.425	20	
Oxygen	20	0.10						19.96	0.366	20	

Sample ID:	**1205939-045BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49169**
Client ID:	**VA1596**	Batch ID:	**R49169**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/7/2012**	SeqNo:	**961044**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.36	0.10						0.3670	3.04	20	
Carbon Monoxide	ND	0.10						0	0	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1205939

Date Reported: 6/11/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R49169**

Sample ID:	**1205939-045BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49169**
Client ID:	**VA1596**	Batch ID:	**R49169**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/7/2012**	SeqNo:	**961044**

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	
Nitrogen	78	0.10						78.81	0.750	20	
Oxygen	19	0.10						19.77	1.43	20	

RTI Laboratories

Run ID: VOA1_120529A **Run No.:** 48955

Analytical Run Date: 5/29/2012 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

Calibration ID: 48752 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 6/5/12/PR AW 5.30.12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 052912	BFB_TUNE	TUNE	R48955	5/29/2012 10:45:00 AM	Celeste Hoitash		
CCV VOA1 052912	EPA_TO15	CCV	R48955	5/29/2012 11:28:00 AM	Celeste Hoitash		
RLVS VOA1 052912	EPA_TO15	RLVS	R48955	5/29/2012 12:11:00 PM	Celeste Hoitash		
MBLK VOA1 052912	EPA_TO15	MBLK	R48955	5/29/2012 1:48:00 PM	Celeste Hoitash		
1205846-002A	EPA_TO15	SAMP	R48955	5/29/2012 2:37:00 PM	Celeste Hoitash		
1205846-022A	EPA_TO15	SAMP	R48955	5/29/2012 3:19:00 PM	Celeste Hoitash		
1205846-023A	EPA_TO15	SAMP	R48955	5/29/2012 4:45:00 PM	Celeste Hoitash		
1205846-024A	EPA_TO15	SAMP	R48955	5/29/2012 5:27:00 PM	Celeste Hoitash		
1205846-025A	EPA_TO15	SAMP	R48955	5/29/2012 6:08:00 PM	Celeste Hoitash		
1205846-028A	EPA_TO15	SAMP	R48955	5/29/2012 6:51:00 PM	Celeste Hoitash		
1205939-001A	EPA_TO15	SAMP	R48955	5/29/2012 7:36:00 PM	Celeste Hoitash		Sample was analyzed at 800x with duplicate. Sample required re-analysis at lower dilution.
1205939-001Adup	EPA_TO15	DUP	R48955	5/29/2012 8:20:00 PM	Celeste Hoitash		
1205939-002A	EPA_TO15	SAMP	R48955	5/29/2012 9:02:00 PM	Celeste Hoitash		
1205939-003A	EPA_TO15	SAMP	R48955	5/29/2012 9:43:00 PM	Celeste Hoitash		
1205939-005A	EPA_TO15	SAMP	R48955	5/29/2012 11:09:00 PM	Celeste Hoitash		
1205939-006A	EPA_TO15	SAMP	R48955	5/29/2012 11:51:00 PM	Celeste Hoitash		
1205939-007A	EPA_TO15	SAMP	R48955	5/30/2012 12:32:00 AM	Celeste Hoitash		
1205939-008A	EPA_TO15	SAMP	R48955	5/30/2012 1:14:00 AM	Celeste Hoitash		
1205939-009A	EPA_TO15	SAMP	R48955	5/30/2012 1:56:00 AM	Celeste Hoitash		
1205939-010A	EPA_TO15	SAMP	R48955	5/30/2012 2:37:00 AM	Celeste Hoitash		
RLVS2 VOA1 05291	EPA_TO15	RLVS	R48955	5/30/2012 3:19:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

13-Jun-12

RunNo 48955

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
956843	BFB VOA1 052912	BFB_TUNE	TUNE	.\1\DATA\052912	5/29/2012 10:45:	1	R48955		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		89.1	89.1		100	0	0	0	0	0	89%	50	120	0%	
175	M		7.2	7.2		100	0	0	0	0	0	7%	4	9	0%	
176	M		96.4	96.4		100	0	0	0	0	0	96%	93	101	0%	
177	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	
50	M		16.8	16.8		100	0	0	0	0	0	17%	8	40	0%	
75	M		46.7	46.7		100	0	0	0	0	0	47%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.8	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
956844	CCV VOA1 052912	EPA_TO15	CCV	.\1\DATA\052912	5/29/2012 11:28:	1	R48955		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	11.78	11.78		9.6	0	0	0.107	1	0	123%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	11.47	11.47		10	0	0	0.211	1	0	115%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	11.7	11.7		9.8	0	0	0.108	1	0	119%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	11.62	11.62		9.8	0	0	0.2	1	0	119%	70	130	0%	
1,1-Dichloroethane	A	ppbv	11.18	11.18		9.7	0	0	0.111	1	0	115%	70	130	0%	
1,1-Dichloroethene	A	ppbv	11.53	11.53		9.9	0	0	0.097	1	0	116%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	9.74	9.74		9.1	0	0	0.271	1	0	107%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	11.45	11.45		9.8	0	0	0.245	1	0	117%	70	130	0%	
1,2-Dibromoethane	A	ppbv	11.39	11.39		9.6	0	0	0.186	1	0	119%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	10.94	10.94		9.7	0	0	0.208	1	0	113%	70	130	0%	
1,2-Dichloroethane	A	ppbv	11.95	11.95		9.7	0	0	0.196	1	0	123%	70	130	0%	
1,2-Dichloropropane	A	ppbv	11.38	11.38		9.8	0	0	0.224	1	0	116%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	11.39	11.39		9.7	0	0	0.24	1	0	117%	70	130	0%	
1,3-Butadiene	A	ppbv	12.41	12.41		9.8	0	0	0.152	1	0	127%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	11.07	11.07		9.7	0	0	0.202	1	0	114%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
956844	CCV VOA1 052912	EPA_TO15	CCV	\1\DATA\0529125/29/2012 11:28:		1	R48955		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	11.06	11.06		9.6	0	0	0.194	1	0	115%	70	130	0%	
1,4-Dioxane	A	ppbv	10.94	10.94		9.6	0	0	0.128	1	0	114%	70	130	0%	
2-Butanone	A	ppbv	11.75	11.75		9.9	0	0	0.287	1	0	119%	70	130	0%	
2-Hexanone	A	ppbv	11.61	11.61		9.8	0	0	0.135	1	0	118%	70	130	0%	
2-Propanol	A	ppbv	11.67	11.67		10.1	0	0	0.329	1	0	116%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	11.39	11.39		10	0	0	0.157	1	0	114%	70	130	0%	
Acetone	A	ppbv	11.94	11.94		10	0	0	0.43	1	0	119%	70	130	0%	
Benzene	A	ppbv	11.58	11.58		9.6	0	0	0.126	1	0	121%	70	130	0%	
Benzyl chloride	A	ppbv	11.7	11.7		9.7	0	0	0.155	1	0	121%	70	130	0%	
Bromodichloromethane	A	ppbv	11.21	11.21		9.6	0	0	0.156	1	0	117%	70	130	0%	
Bromoform	A	ppbv	11.28	11.28		9.6	0	0	0.197	1	0	118%	70	130	0%	
Bromomethane	A	ppbv	10.3	10.3		9.3	0	0	0.075	1	0	111%	70	130	0%	
Carbon disulfide	A	ppbv	10.87	10.87		9.7	0	0	0.093	1	0	112%	70	130	0%	
Carbon tetrachloride	A	ppbv	11.55	11.55		9.5	0	0	0.114	1	0	122%	70	130	0%	
Chlorobenzene	A	ppbv	11.73	11.73		9.9	0	0	0.275	1	0	118%	70	130	0%	
Chlorodibromomethane	A	ppbv	11.6	11.6		9.2	0	0	0.165	1	0	126%	70	130	0%	
Chloroethane	A	ppbv	10.05	10.05		9.8	0	0	0.063	1	0	103%	70	130	0%	
Chloroform	A	ppbv	11.96	11.96		9.4	0	0	0.126	1	0	127%	70	130	0%	
Chloromethane	A	ppbv	10.69	10.69		9.8	0	0	0.104	1	0	109%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	11.48	11.48		9.8	0	0	0.107	1	0	117%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	11.09	11.09		9.5	0	0	0.166	1	0	117%	70	130	0%	
Cyclohexane	A	ppbv	11.84	11.84		9.8	0	0	0.684	2	0	121%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	10.33	10.33		9.2	0	0	0.086	1	0	112%	70	130	0%	
Ethanol	A	ppbv	10.29	10.29		9.2	0	0	1.962	5	0	112%	70	130	0%	
Ethyl acetate	A	ppbv	11.73	11.73		9.8	0	0	0.157	1	0	120%	70	130	0%	
Ethylbenzene	A	ppbv	11.82	11.82		9.8	0	0	0.737	2	0	121%	70	130	0%	
Heptane	A	ppbv	11.74	11.74		9.9	0	0	0.249	1	0	119%	70	130	0%	
Hexachlorobutadiene	A	ppbv	10.87	10.87		9.4	0	0	0.374	2	0	116%	70	130	0%	
m,p-Xylene	A	ppbv	24.42	24.42		19.2	0	0	0.524	2	0	127%	70	130	0%	
Methylene chloride	A	ppbv	11.31	11.31		10	0	0	2.077	5	0	113%	70	130	0%	
n-Hexane	A	ppbv	11.59	11.59		10.1	0	0	0.692	2	0	115%	70	130	0%	
Naphthalene	A	ppbv	10.21	10.21		9.2	0	0	0.247	1	0	111%	70	130	0%	
o-Xylene	A	ppbv	12.07	12.07		10	0	0	0.258	1	0	121%	70	130	0%	
Propylene	A	ppbv	11.02	11.02		10.2	0	0	0.075	1	0	108%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
956844	CCV VOA1 052912	EPA_TO15	CCV	.\1\DATA\052912	5/29/2012 11:28:	1	R48955		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	11.86	11.86		9.8	0	0	0.263	1	0	121%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	11.83	11.83		9.9	0	0	0.228	1	0	119%	70	130	0%	
Tetrachloroethene	A	ppbv	11.19	11.19		9.6	0	0	0.148	1	0	117%	70	130	0%	
Tetrahydrofuran	A	ppbv	12.57	12.57		10	0	0	0.201	1	0	126%	70	130	0%	
Toluene	A	ppbv	11.71	11.71		9.8	0	0	0.158	1	0	119%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	11.26	11.26		9.8	0	0	0.117	1	0	115%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	10.75	10.75		9.1	0	0	0.171	1	0	118%	70	130	0%	
Trichloroethene	A	ppbv	10.99	10.99		9.6	0	0	0.119	1	0	114%	70	130	0%	
Trichlorofluoromethane	A	ppbv	11.1	11.1		9.6	0	0	0.148	1	0	116%	70	130	0%	
Vinyl acetate	A	ppbv	12.3	12.3		9.9	0	0	0.266	1	0	124%	70	130	0%	
Vinyl chloride	A	ppbv	11.08	11.08		9.4	0	0	0.072	1	0	118%	70	130	0%	
Xylenes, Total	C	ppbv	36.49	36.49		29.2	0	0	0.782	3	0	125%	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	12.22	12.22		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
956845	RLVS VOA1 052912	EPA_TO15	RLVS	.\1\DATA\052912	5/29/2012 12:11:	1	R48955		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	0	96%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.14	1.14		1	0	0	0.211	1	0	114%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	1.04	1.04		0.98	0	0	0.108	1	0	106%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.92	0.92		0.98	0	0	0.2	1	0	94%	70	130	0%	
1,1-Dichloroethane	A	ppbv	0.97	0.97		0.97	0	0	0.111	1	0	100%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1.01	1.01		0.99	0	0	0.097	1	0	102%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.13	1.13		0.91	0	0	0.271	1	0	124%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	1.13	1.13		0.98	0	0	0.245	1	0	115%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.87	0.87		0.96	0	0	0.186	1	0	91%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.21	1.21		0.97	0	0	0.208	1	0	125%	70	130	0%	
1,2-Dichloroethane	A	ppbv	0.98	0.98		0.97	0	0	0.196	1	0	101%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.9	0.9		0.98	0	0	0.224	1	0	92%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\052912\05291202.D Vial: 2
Acq On : 29 May 2012 11:28 am Operator: RACHEL HILL
Sample : CCV VOA1 052912 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\052112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue May 22 11:27:50 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	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	82	0.00
2	T	Propylene	0.868	0.938	-8.1	79	0.00
3	T	Dichlorodifluoromethane	3.197	3.590	-12.3	81	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.424	2.711	-11.8	81	0.00
5	T	Chloromethane	0.950	1.068	-12.4	80	0.00
6	T	Vinyl chloride	0.994	1.172	-17.9	81	0.00
7	T	1,3-Butadiene	0.676	0.856	-26.6	86	0.00
8	T	Bromomethane	1.178	1.305	-10.8	79	0.00
9	T	Chloroethane	0.628	0.686	-9.2	78	0.00
10	T	Trichlorofluoromethane	3.080	3.561	-15.6	81	0.00
11	T	Ethanol	0.362	0.405	-11.9	77	0.00
12	T	Freon113	2.072	2.473	-19.4	81	0.00
13	T	1,1-Dichloroethene	1.461	1.701	-16.4	80	0.00
14	T	Acetone	1.475	1.761	-19.4	81	0.00
15	T	Carbon disulfide	2.573	2.883	-12.0	78	0.00
16	T	2-Propanol	1.430	1.653	-15.6	79	0.00
17	T	Methylene chloride	1.070	1.209	-13.0	79	0.00
18	T	tert-Butyl Methyl Ether	2.527	3.019	-19.5	78	0.00
19	T	trans-1,2-Dichloroethene	1.365	1.568	-14.9	79	0.00
20	T	n-Hexane	1.507	1.730	-14.8	79	0.00
21	T	1,1-Dichloroethane	1.828	2.106	-15.2	79	0.00
22	T	Vinyl acetate	2.347	2.915	-24.2	80	0.00
23	T	cis-1,2-Dichloroethene	1.111	1.302	-17.2	80	0.00
24	T	2-Butanone	1.512	1.795	-18.7	77	0.00
25	T	Ethyl acetate	1.973	2.361	-19.7	77	0.00
26	T	Tetrahydrofuran	0.964	1.212	-25.7	81	0.00
27	T	Chloroform	2.025	2.470	-22.0	81	0.00
28	T	1,1,1-Trichloroethane	2.214	2.715	-22.6	81	0.00
29	T	Cyclohexane	1.490	1.800	-20.8	80	0.00
30	T	Carbon tetrachloride	2.472	3.005	-21.6	81	0.00
31	T	Benzene	2.940	3.548	-20.7	79	0.00
32	T	1,2-Dichloroethane	1.229	1.515	-23.3	80	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	85	0.00
34	T	Heptane	0.528	0.627	-18.7	80	0.00
35	T	Trichloroethene	0.485	0.555	-14.4	81	0.00
36	T	1,2-Dichloropropane	0.338	0.393	-16.3	78	0.00
37	T	1,4-Dioxane	0.200	0.228	-14.0	80	0.00
38	T	Bromodichloromethane	0.683	0.797	-16.7	81	0.00
39	T	cis-1,3-Dichloropropene	0.545	0.637	-16.9	78	0.00
40	T	4-Methyl-2-pentanone	0.234	0.267	-14.1	78	0.00
41	T	Toluene	1.114	1.331	-19.5	81	0.00
42	T	trans-1,3-Dichloropropene	0.504	0.596	-18.3	79	0.00
43	T	1,1,2-Trichloroethane	0.389	0.461	-18.5	81	0.00
44	T	Tetrachloroethene	0.620	0.723	-16.6	82	0.00
45	T	2-Hexanone	0.458	0.543	-18.6	80	0.00
46	T	Chlorodibromomethane	0.718	0.850	-18.4	80	0.00
47	T	1,2-Dibromoethane	0.609	0.723	-18.7	80	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	86	0.00
49	T	Chlorobenzene	0.964	1.142	-18.5	82	0.00
50	T	Ethylbenzene	1.513	1.825	-20.6	82	0.00
51	T	m,p-Xylene	1.137	1.447	-27.3	83	0.00
52	T	o-Xylene	1.204	1.453	-20.7	82	0.00
53	T	Styrene	0.932	1.128	-21.0	82	0.00
54	T	Bromoform	0.705	0.829	-17.6	80	0.00
55	S	4-Bromofluorobenzene	0.604	0.590	2.3	84	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\052912\05291202.D Vial: 2
Acq On : 29 May 2012 11:28 am Operator: RACHEL HILL
Sample : CCV VOA1 052912 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\052112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue May 22 11:27:50 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	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.762	0.875	-14.8	80	0.00
57	T	4-Ethyltoluene	1.571	1.856	-18.1	82	0.00
58	T	1,3,5-Trimethylbenzene	1.343	1.577	-17.4	83	0.00
59	T	1,2,4-Trimethylbenzene	1.268	1.481	-16.8	82	0.00
60	T	1,3-Dichlorobenzene	0.838	0.957	-14.2	82	0.00
61	T	1,4-Dichlorobenzene	0.811	0.934	-15.2	82	0.00
62	T	Benzyl chloride	0.881	1.062	-20.5	80	0.00
63	T	1,2-Dichlorobenzene	0.743	0.838	-12.8	80	0.00
64	T	1,2,4-Trichlorobenzene	0.278	0.297	-6.8	81	0.00
65	T	Hexachlorobutadiene	0.368	0.425	-15.5	81	0.00
66		Naphthalene	0.537	0.596	-11.0	83	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052912\05291202.D Vial: 2
Acq On : 29 May 2012 11:28 am Operator: RACHEL HILL
Sample : CCV VOA1 052912 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: May 29 15:43 2012 Quant Results File: 052112V1.RES

Quant Method : C:\HPCHEM\1\METHODS\052112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue May 22 11:27:50 2012
Response via : Initial Calibration
DataAcq Meth : 052112V1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.58	130	465348	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.68	114	1537136	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.53	117	1366006	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.18	95	805901	12.22	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 97.76%

Target Compounds						Qvalue
2) Propylene	5.51	41	356189	11.02	ppbv	99
3) Dichlorodifluoromethane	5.58	85	1229560	10.33	ppbv	100
4) 1,2-Dichloro-1,2,2,2-tetra	5.84	135	958923	10.63	ppbv #	87
5) Chloromethane	6.00	50	377790	10.69	ppbv	100
6) Vinyl chloride	6.20	62	409968	11.08	ppbv #	99
7) 1,3-Butadiene	6.26	39	312308	12.41	ppbv	98
8) Bromomethane	6.84	94	451733	10.30	ppbv #	98
9) Chloroethane	6.99	64	234917	10.05	ppbv	99
10) Trichlorofluoromethane	7.33	101	1272774	11.10	ppbv	99
11) Ethanol	7.56	45	138667	10.29	ppbv	100
12) Freon113	7.99	101	902218	11.70	ppbv	96
13) 1,1-Dichloroethene	8.09	61	626932	11.53	ppbv	97
14) Acetone	8.18	43	655756	11.94	ppbv #	94
15) Carbon disulfide	8.46	76	1040963	10.87	ppbv #	100
16) 2-Propanol	8.23	45	621429	11.67	ppbv #	1
17) Methylene chloride	8.75	49	450237	11.31	ppbv	99
18) tert-Butyl Methyl Ether	8.94	73	1112751	11.83	ppbv	98
19) trans-1,2-Dichloroethene	9.03	61	572036	11.26	ppbv	99
20) n-Hexane	9.22	57	650315	11.59	ppbv	99
21) 1,1-Dichloroethane	9.59	63	760498	11.18	ppbv	100
22) Vinyl acetate	9.52	43	1074275	12.30	ppbv	99
23) cis-1,2-Dichloroethene	10.27	96	474926	11.48	ppbv	99
24) 2-Butanone	10.24	43	661496	11.75	ppbv	98
25) Ethyl acetate	10.19	43	861435	11.73	ppbv #	99
26) Tetrahydrofuran	10.58	42	451342	12.57	ppbv	97
27) Chloroform	10.60	83	901221	11.96	ppbv	97
28) 1,1,1-Trichloroethane	10.85	97	970463	11.78	ppbv	99
29) Cyclohexane	10.85	56	656633	11.84	ppbv	99
30) Carbon tetrachloride	11.01	117	1062700	11.55	ppbv	98
31) Benzene	11.29	78	1268024	11.58	ppbv	99
32) 1,2-Dichloroethane	11.37	62	546992	11.95	ppbv	99
34) Heptane	11.34	43	762871	11.74	ppbv	98
35) Trichloroethene	12.02	130	654935	10.99	ppbv	97
36) 1,2-Dichloropropane	12.38	63	473512	11.38	ppbv	99
37) 1,4-Dioxane	12.45	88	268651	10.94	ppbv	95
38) Bromodichloromethane	12.66	83	940429	11.21	ppbv	98
39) cis-1,3-Dichloropropene	13.22	75	743663	11.09	ppbv	100
40) 4-Methyl-2-pentanone	13.32	58	328064	11.39	ppbv	99
41) Toluene	13.62	91	1603733	11.71	ppbv	99
42) trans-1,3-Dichloropropene	13.92	75	666648	10.75	ppbv	100
43) 1,1,2-Trichloroethane	14.20	97	555713	11.62	ppbv	99
44) Tetrachloroethene	14.32	166	853370	11.19	ppbv	96
45) 2-Hexanone	14.40	43	653887	11.61	ppbv	97
46) Chlorodibromomethane	14.74	129	1024516	11.60	ppbv	99
47) 1,2-Dibromoethane	14.98	107	853622	11.39	ppbv	99
49) Chlorobenzene	15.58	112	1235858	11.73	ppbv	99
50) Ethylbenzene	15.62	91	1954694	11.82	ppbv	98
51) m,p-Xylene	15.77	91	3035505	24.42	ppbv	99
52) o-Xylene	16.37	91	1587740	12.07	ppbv	98

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052912\05291202.D Vial: 2
Acq On : 29 May 2012 11:28 am Operator: RACHEL HILL
Sample : CCV VOA1 052912 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: May 29 15:43 2012 Quant Results File: 052112V1.RES

Quant Method : C:\HPCHEM\1\METHODS\052112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue May 22 11:27:50 2012
Response via : Initial Calibration
DataAcq Meth : 052112V1

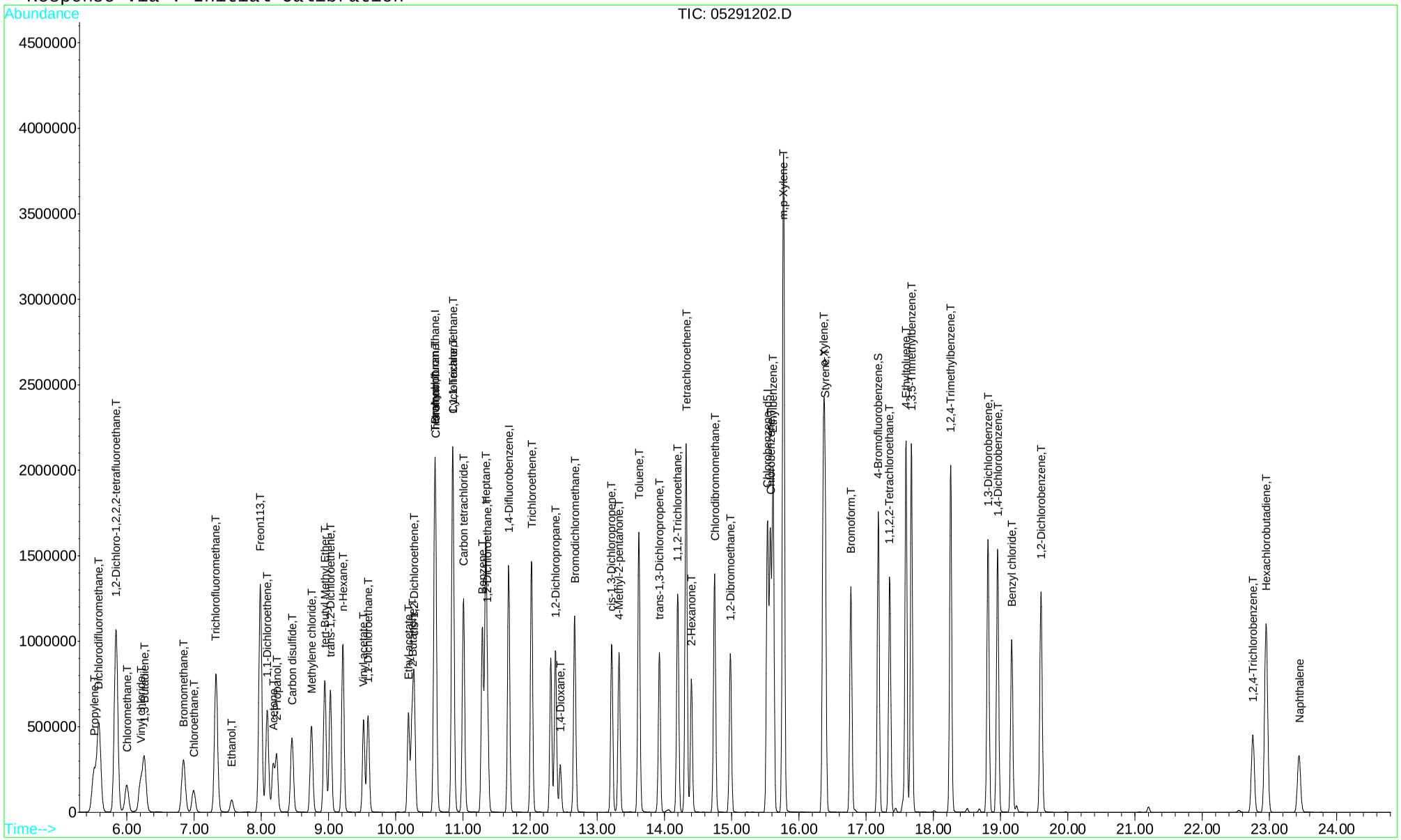
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53)	Styrene	16.39	104	1207555	11.86	ppbv	99
54)	Bromoform	16.77	173	869458	11.28	ppbv	98
56)	1,1,2,2-Tetrachloroethane	17.35	83	955806	11.47	ppbv	98
57)	4-Ethyltoluene	17.59	105	1987731	11.58	ppbv	100
58)	1,3,5-Trimethylbenzene	17.67	105	1672150	11.39	ppbv	100
59)	1,2,4-Trimethylbenzene	18.26	105	1586509	11.45	ppbv	100
60)	1,3-Dichlorobenzene	18.81	146	1014547	11.07	ppbv	98
61)	1,4-Dichlorobenzene	18.95	146	979616	11.06	ppbv	99
62)	Benzyl chloride	19.16	91	1125972	11.70	ppbv	99
63)	1,2-Dichlorobenzene	19.60	146	888165	10.94	ppbv	98
64)	1,2,4-Trichlorobenzene	22.76	180	295434	9.74	ppbv	97
65)	Hexachlorobutadiene	22.95	225	436963	10.87	ppbv	98
66)	Naphthalene	23.44	128	598921	10.21	ppbv	100

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052912\05291202.D Vial: 2
Acq On : 29 May 2012 11:28 am Operator: RACHEL HILL
Sample : CCV VOA1 052912 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: May 29 15:43 2012 Quant Results File: 052112V1.RES

Method : C:\HPCHEM\1\METHODS\052112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue May 22 11:27:50 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: **VOA1_120530A** **Run No.:** 48989

Analytical Run Date: 5/30/2012 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

Calibration ID: 48752 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 6/5/12/PR AW 5.31.12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 053012	BFB_TUNE	TUNE	R48989	5/30/2012 9:16:00 AM	Celeste Hoitash		
CCV VOA1 053012	EPA_TO15	CCV	R48989	5/30/2012 10:42:00 AM	Celeste Hoitash		
RLVS VOA1 053012	EPA_TO15	RLVS	R48989	5/30/2012 11:24:00 AM	Celeste Hoitash		
MBLK VOA1 053012	EPA_TO15	MBLK	R48989	5/30/2012 12:13:00 PM	Celeste Hoitash		
1205939-001A	EPA_TO15	SAMP	R48989	5/30/2012 5:30:00 PM	Celeste Hoitash		
1205939-004A	EPA_TO15	SAMP	R48989	5/30/2012 6:15:00 PM	Celeste Hoitash		
1205939-004Adup	EPA_TO15	DUP	R48989	5/30/2012 7:00:00 PM	Celeste Hoitash		
1205939-011A	EPA_TO15	SAMP	R48989	5/30/2012 7:48:00 PM	Celeste Hoitash		
1205939-012A	EPA_TO15	SAMP	R48989	5/30/2012 8:32:00 PM	Celeste Hoitash		
1205939-016A	EPA_TO15	SAMP	R48989	5/30/2012 11:44:00 PM	Celeste Hoitash		
1205939-017A	EPA_TO15	SAMP	R48989	5/31/2012 12:26:00 AM	Celeste Hoitash		
1205939-018A	EPA_TO15	SAMP	R48989	5/31/2012 1:10:00 AM	Celeste Hoitash		
1205939-019A	EPA_TO15	SAMP	R48989	5/31/2012 1:59:00 AM	Celeste Hoitash		
RLVS2 VOA1 05301	EPA_TO15	RLVS	R48989	5/31/2012 4:52:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

13-Jun-12

RunNo 48989

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
957574	BFB VOA1 053012	BFB_TUNE	TUNE	.\1\DATA\053012	5/30/2012 9:16:0	1	R48989		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		89.2	89.2		100	0	0	0	0	0	89%	50	120	0%	
175	M		7.3	7.3		100	0	0	0	0	0	7%	4	9	0%	
176	M		97.4	97.4		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.6	6.6		100	0	0	0	0	0	7%	5	9	0%	
50	M		16.9	16.9		100	0	0	0	0	0	17%	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		6.8	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
957575	CCV VOA1 053012	EPA_TO15	CCV	.\1\DATA\053012	5/30/2012 10:42:	1	R48989		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	10.34	10.34		9.6	0	0	0.107	1	0	108%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10	10		10	0	0	0.211	1	0	100%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.54	10.54		9.8	0	0	0.108	1	0	108%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	10.43	10.43		9.8	0	0	0.2	1	0	106%	70	130	0%	
1,1-Dichloroethane	A	ppbv	10.21	10.21		9.7	0	0	0.111	1	0	105%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.38	10.38		9.9	0	0	0.097	1	0	105%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	8.01	8.01		9.1	0	0	0.271	1	0	88%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	9.93	9.93		9.8	0	0	0.245	1	0	101%	70	130	0%	
1,2-Dibromoethane	A	ppbv	10.27	10.27		9.6	0	0	0.186	1	0	107%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	9.43	9.43		9.7	0	0	0.208	1	0	97%	70	130	0%	
1,2-Dichloroethane	A	ppbv	10.47	10.47		9.7	0	0	0.196	1	0	108%	70	130	0%	
1,2-Dichloropropane	A	ppbv	10.4	10.4		9.8	0	0	0.224	1	0	106%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.83	9.83		9.7	0	0	0.24	1	0	101%	70	130	0%	
1,3-Butadiene	A	ppbv	10.98	10.98		9.8	0	0	0.152	1	0	112%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.58	9.58		9.7	0	0	0.202	1	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
957575	CCV VOA1 053012	EPA_TO15	CCV	.\1\DATA\053012	5/30/2012 10:42:	1	R48989		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.53	9.53		9.6	0	0	0.194	1	0	99%	70	130	0%	
1,4-Dioxane	A	ppbv	9.44	9.44		9.6	0	0	0.128	1	0	98%	70	130	0%	
2-Butanone	A	ppbv	11.09	11.09		9.9	0	0	0.287	1	0	112%	70	130	0%	
2-Hexanone	A	ppbv	10.03	10.03		9.8	0	0	0.135	1	0	102%	70	130	0%	
2-Propanol	A	ppbv	10.03	10.03		10.1	0	0	0.329	1	0	99%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	9.95	9.95		10	0	0	0.157	1	0	100%	70	130	0%	
Acetone	A	ppbv	10.41	10.41		10	0	0	0.43	1	0	104%	70	130	0%	
Benzene	A	ppbv	10.53	10.53		9.6	0	0	0.126	1	0	110%	70	130	0%	
Benzyl chloride	A	ppbv	9.72	9.72		9.7	0	0	0.155	1	0	100%	70	130	0%	
Bromodichloromethane	A	ppbv	10.2	10.2		9.6	0	0	0.156	1	0	106%	70	130	0%	
Bromoform	A	ppbv	9.63	9.63		9.6	0	0	0.197	1	0	100%	70	130	0%	
Bromomethane	A	ppbv	9.42	9.42		9.3	0	0	0.075	1	0	101%	70	130	0%	
Carbon disulfide	A	ppbv	9.85	9.85		9.7	0	0	0.093	1	0	102%	70	130	0%	
Carbon tetrachloride	A	ppbv	10.14	10.14		9.5	0	0	0.114	1	0	107%	70	130	0%	
Chlorobenzene	A	ppbv	10.32	10.32		9.9	0	0	0.275	1	0	104%	70	130	0%	
Chlorodibromomethane	A	ppbv	10.36	10.36		9.2	0	0	0.165	1	0	113%	70	130	0%	
Chloroethane	A	ppbv	9.15	9.15		9.8	0	0	0.063	1	0	93%	70	130	0%	
Chloroform	A	ppbv	10.73	10.73		9.4	0	0	0.126	1	0	114%	70	130	0%	
Chloromethane	A	ppbv	9.96	9.96		9.8	0	0	0.104	1	0	102%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	10.34	10.34		9.8	0	0	0.107	1	0	106%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	10.08	10.08		9.5	0	0	0.166	1	0	106%	70	130	0%	
Cyclohexane	A	ppbv	11.27	11.27		9.8	0	0	0.684	2	0	115%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.37	9.37		9.2	0	0	0.086	1	0	102%	70	130	0%	
Ethanol	A	ppbv	8.86	8.86		9.2	0	0	1.962	5	0	96%	70	130	0%	
Ethyl acetate	A	ppbv	10.14	10.14		9.8	0	0	0.157	1	0	103%	70	130	0%	
Ethylbenzene	A	ppbv	10.44	10.44		9.8	0	0	0.737	2	0	107%	70	130	0%	
Heptane	A	ppbv	11.37	11.37		9.9	0	0	0.249	1	0	115%	70	130	0%	
Hexachlorobutadiene	A	ppbv	8.9	8.9		9.4	0	0	0.374	2	0	95%	70	130	0%	
m,p-Xylene	A	ppbv	21.7	21.7		19.2	0	0	0.524	2	0	113%	70	130	0%	
Methylene chloride	A	ppbv	10.32	10.32		10	0	0	2.077	5	0	103%	70	130	0%	
n-Hexane	A	ppbv	10.98	10.98		10.1	0	0	0.692	2	0	109%	70	130	0%	
Naphthalene	A	ppbv	8.23	8.23		9.2	0	0	0.247	1	0	89%	70	130	0%	
o-Xylene	A	ppbv	10.54	10.54		10	0	0	0.258	1	0	105%	70	130	0%	
Propylene	A	ppbv	9.93	9.93		10.2	0	0	0.075	1	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
957575	CCV VOA1 053012	EPA_TO15	CCV	.\1\DATA\053012	5/30/2012 10:42:	1	R48989		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	10.32	10.32		9.8	0	0	0.263	1	0	105%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	10.33	10.33		9.9	0	0	0.228	1	0	104%	70	130	0%	
Tetrachloroethene	A	ppbv	10.17	10.17		9.6	0	0	0.148	1	0	106%	70	130	0%	
Tetrahydrofuran	A	ppbv	11.17	11.17		10	0	0	0.201	1	0	112%	70	130	0%	
Toluene	A	ppbv	11.04	11.04		9.8	0	0	0.158	1	0	113%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.25	10.25		9.8	0	0	0.117	1	0	105%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	9.69	9.69		9.1	0	0	0.171	1	0	106%	70	130	0%	
Trichloroethene	A	ppbv	10.24	10.24		9.6	0	0	0.119	1	0	107%	70	130	0%	
Trichlorofluoromethane	A	ppbv	9.97	9.97		9.6	0	0	0.148	1	0	104%	70	130	0%	
Vinyl acetate	A	ppbv	10.62	10.62		9.9	0	0	0.266	1	0	107%	70	130	0%	
Vinyl chloride	A	ppbv	10.2	10.2		9.4	0	0	0.072	1	0	109%	70	130	0%	
Xylenes, Total	C	ppbv	32.24	32.24		29.2	0	0	0.782	3	0	110%	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	12.25	12.25		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
957576	RLVS VOA1 053012	EPA_TO15	RLVS	.\1\DATA\053012	5/30/2012 11:24:	1	R48989		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	0	96%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.14	1.14		1	0	0	0.211	1	0	114%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	1.04	1.04		0.98	0	0	0.108	1	0	106%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.93	0.93		0.98	0	0	0.2	1	0	95%	70	130	0%	
1,1-Dichloroethane	A	ppbv	0.99	0.99		0.97	0	0	0.111	1	0	102%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1.02	1.02		0.99	0	0	0.097	1	0	103%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.09	1.09		0.91	0	0	0.271	1	0	120%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	1.12	1.12		0.98	0	0	0.245	1	0	114%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.88	0.88		0.96	0	0	0.186	1	0	92%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.16	1.16		0.97	0	0	0.208	1	0	120%	70	130	0%	
1,2-Dichloroethane	A	ppbv	0.99	0.99		0.97	0	0	0.196	1	0	102%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.92	0.92		0.98	0	0	0.224	1	0	94%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\053012\05301203.D Vial: 3
Acq On : 30 May 2012 10:42 am Operator: RACHEL HILL
Sample : CCV VOA1 053012 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\052112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue May 22 11:27:50 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	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	81	0.00
2	T	Propylene	0.868	0.845	2.6	71	0.00
3	T	Dichlorodifluoromethane	3.197	3.256	-1.8	72	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.424	2.443	-0.8	72	0.00
5	T	Chloromethane	0.950	0.996	-4.8	73	0.00
6	T	Vinyl chloride	0.994	1.079	-8.6	74	0.00
7	T	1,3-Butadiene	0.676	0.757	-12.0	75	0.00
8	T	Bromomethane	1.178	1.193	-1.3	71	0.00
9	T	Chloroethane	0.628	0.625	0.5	70	0.00
10	T	Trichlorofluoromethane	3.080	3.199	-3.9	72	0.00
11	T	Ethanol	0.362	0.348	3.9	66	0.00
12	T	Freon113	2.072	2.228	-7.5	72	0.00
13	T	1,1-Dichloroethene	1.461	1.532	-4.9	71	0.00
14	T	Acetone	1.475	1.536	-4.1	70	0.00
15	T	Carbon disulfide	2.573	2.611	-1.5	70	0.00
16	T	2-Propanol	1.430	1.420	0.7	67	0.00
17	T	Methylene chloride	1.070	1.104	-3.2	72	0.00
18	T	tert-Butyl Methyl Ether	2.527	2.638	-4.4	67	0.00
19	T	trans-1,2-Dichloroethene	1.365	1.428	-4.6	71	0.00
20	T	n-Hexane	1.507	1.638	-8.7	74	0.00
21	T	1,1-Dichloroethane	1.828	1.924	-5.3	71	0.00
22	T	Vinyl acetate	2.347	2.518	-7.3	68	0.00
23	T	cis-1,2-Dichloroethene	1.111	1.172	-5.5	71	0.00
24	T	2-Butanone	1.512	1.694	-12.0	72	0.00
25	T	Ethyl acetate	1.973	2.042	-3.5	66	0.00
26	T	Tetrahydrofuran	0.964	1.077	-11.7	71	0.00
27	T	Chloroform	2.025	2.217	-9.5	72	0.00
28	T	1,1,1-Trichloroethane	2.214	2.386	-7.8	71	0.00
29	T	Cyclohexane	1.490	1.714	-15.0	75	0.00
30	T	Carbon tetrachloride	2.472	2.640	-6.8	70	0.00
31	T	Benzene	2.940	3.225	-9.7	71	0.00
32	T	1,2-Dichloroethane	1.229	1.327	-8.0	69	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	81	0.00
34	T	Heptane	0.528	0.607	-15.0	74	0.00
35	T	Trichloroethene	0.485	0.517	-6.6	72	0.00
36	T	1,2-Dichloropropane	0.338	0.359	-6.2	68	0.00
37	T	1,4-Dioxane	0.200	0.196	2.0	66	0.00
38	T	Bromodichloromethane	0.683	0.726	-6.3	70	0.00
39	T	cis-1,3-Dichloropropene	0.545	0.578	-6.1	68	0.00
40	T	4-Methyl-2-pentanone	0.234	0.233	0.4	66	0.00
41	T	Toluene	1.114	1.255	-12.7	73	0.00
42	T	trans-1,3-Dichloropropene	0.504	0.537	-6.5	68	0.00
43	T	1,1,2-Trichloroethane	0.389	0.414	-6.4	70	0.00
44	T	Tetrachloroethene	0.620	0.657	-6.0	71	0.00
45	T	2-Hexanone	0.458	0.469	-2.4	66	0.00
46	T	Chlorodibromomethane	0.718	0.759	-5.7	68	0.00
47	T	1,2-Dibromoethane	0.609	0.652	-7.1	69	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	84	0.00
49	T	Chlorobenzene	0.964	1.005	-4.3	70	0.00
50	T	Ethylbenzene	1.513	1.612	-6.5	70	0.00
51	T	m,p-Xylene	1.137	1.285	-13.0	72	0.00
52	T	o-Xylene	1.204	1.269	-5.4	70	0.00
53	T	Styrene	0.932	0.982	-5.4	70	0.00
54	T	Bromoform	0.705	0.707	-0.3	67	0.00
55	S	4-Bromofluorobenzene	0.604	0.591	2.2	82	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\053012\05301203.D Vial: 3
Acq On : 30 May 2012 10:42 am Operator: RACHEL HILL
Sample : CCV VOA1 053012 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\052112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue May 22 11:27:50 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	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.762	0.762	0.0	68	0.00
57	T	4-Ethyltoluene	1.571	1.609	-2.4	70	0.00
58	T	1,3,5-Trimethylbenzene	1.343	1.362	-1.4	70	0.00
59	T	1,2,4-Trimethylbenzene	1.268	1.286	-1.4	70	0.00
60	T	1,3-Dichlorobenzene	0.838	0.828	1.2	69	0.00
61	T	1,4-Dichlorobenzene	0.811	0.805	0.7	69	0.00
62	T	Benzyl chloride	0.881	0.883	-0.2	65	0.00
63	T	1,2-Dichlorobenzene	0.743	0.722	2.8	67	0.00
64	T	1,2,4-Trichlorobenzene	0.278	0.244	12.2	65	0.00
65	T	Hexachlorobutadiene	0.368	0.348	5.4	65	0.00
66		Naphthalene	0.537	0.480	10.6	65	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\053012\05301203.D Vial: 3
Acq On : 30 May 2012 10:42 am Operator: RACHEL HILL
Sample : CCV VOA1 053012 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: May 30 11:07 2012 Quant Results File: 052112V1.RES

Quant Method : C:\HPCHEM\1\METHODS\052112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue May 22 11:27:50 2012
Response via : Initial Calibration
DataAcq Meth : 052112V1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.58	130	459371	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.68	114	1473980	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.53	117	1332831	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.18	95	788175	12.25	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 98.00%

Target Compounds						Qvalue
2) Propylene	5.51	41	316641	9.93	ppbv	98
3) Dichlorodifluoromethane	5.58	85	1100845	9.37	ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.84	135	853025	9.58	ppbv #	87
5) Chloromethane	6.00	50	347658	9.96	ppbv	99
6) Vinyl chloride	6.20	62	372758	10.20	ppbv #	99
7) 1,3-Butadiene	6.26	39	272669	10.98	ppbv	98
8) Bromomethane	6.84	94	407691	9.42	ppbv #	98
9) Chloroethane	6.99	64	211201	9.15	ppbv	99
10) Trichlorofluoromethane	7.33	101	1128714	9.97	ppbv	99
11) Ethanol	7.56	45	117822	8.86	ppbv	99
12) Freon113	7.99	101	802231	10.54	ppbv	95
13) 1,1-Dichloroethene	8.09	61	557227	10.38	ppbv	97
14) Acetone	8.18	43	564490	10.41	ppbv #	96
15) Carbon disulfide	8.46	76	930787	9.85	ppbv #	100
16) 2-Propanol	8.23	45	527119	10.03	ppbv #	1
17) Methylene chloride	8.75	49	405884	10.32	ppbv	99
18) tert-Butyl Methyl Ether	8.94	73	959722	10.33	ppbv	99
19) trans-1,2-Dichloroethene	9.03	61	514224	10.25	ppbv	99
20) n-Hexane	9.21	57	608111	10.98	ppbv	98
21) 1,1-Dichloroethane	9.59	63	685991	10.21	ppbv	99
22) Vinyl acetate	9.52	43	916263	10.62	ppbv	99
23) cis-1,2-Dichloroethene	10.27	96	421959	10.34	ppbv	99
24) 2-Butanone	10.24	43	616318	11.09	ppbv	98
25) Ethyl acetate	10.19	43	735409	10.14	ppbv #	99
26) Tetrahydrofuran	10.58	42	395944	11.17	ppbv	97
27) Chloroform	10.60	83	798283	10.73	ppbv	96
28) 1,1,1-Trichloroethane	10.85	97	841626	10.34	ppbv	100
29) Cyclohexane	10.85	56	617122	11.27	ppbv	98
30) Carbon tetrachloride	11.01	117	921674	10.14	ppbv	98
31) Benzene	11.29	78	1137876	10.53	ppbv	100
32) 1,2-Dichloroethane	11.37	62	473207	10.47	ppbv	99
34) Heptane	11.34	43	708576	11.37	ppbv	98
35) Trichloroethene	12.02	130	585036	10.24	ppbv	97
36) 1,2-Dichloropropane	12.38	63	415172	10.40	ppbv	100
37) 1,4-Dioxane	12.45	88	222394	9.44	ppbv	95
38) Bromodichloromethane	12.66	83	821283	10.20	ppbv	98
39) cis-1,3-Dichloropropene	13.21	75	647824	10.08	ppbv	100
40) 4-Methyl-2-pentanone	13.32	58	274905	9.95	ppbv	99
41) Toluene	13.62	91	1449903	11.04	ppbv	98
42) trans-1,3-Dichloropropene	13.92	75	576014	9.69	ppbv	100
43) 1,1,2-Trichloroethane	14.20	97	478458	10.43	ppbv	99
44) Tetrachloroethene	14.32	166	743796	10.17	ppbv	96
45) 2-Hexanone	14.40	43	541886	10.03	ppbv	97
46) Chlorodibromomethane	14.75	129	877019	10.36	ppbv	99
47) 1,2-Dibromoethane	14.98	107	738006	10.27	ppbv	99
49) Chlorobenzene	15.58	112	1060581	10.32	ppbv	99
50) Ethylbenzene	15.61	91	1684672	10.44	ppbv	98
51) m,p-Xylene	15.77	91	2631283	21.70	ppbv	98
52) o-Xylene	16.36	91	1353001	10.54	ppbv	98

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\053012\05301203.D Vial: 3
Acq On : 30 May 2012 10:42 am Operator: RACHEL HILL
Sample : CCV VOA1 053012 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: May 30 11:07 2012 Quant Results File: 052112V1.RES

Quant Method : C:\HPCHEM\1\METHODS\052112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue May 22 11:27:50 2012
Response via : Initial Calibration
DataAcq Meth : 052112V1

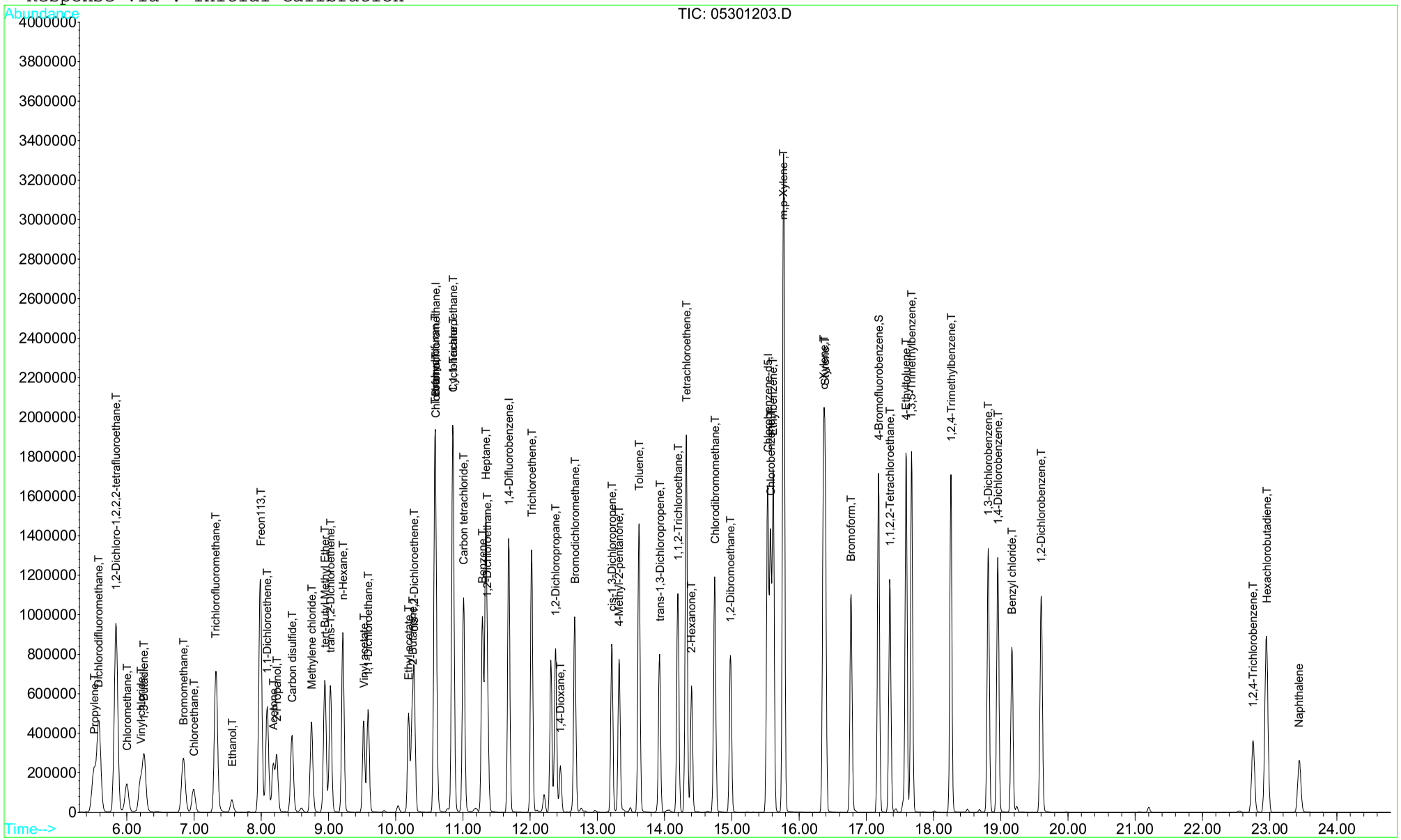
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53)	Styrene	16.39	104	1025738	10.32	ppbv	99
54)	Bromoform	16.77	173	724078	9.63	ppbv	99
56)	1,1,2,2-Tetrachloroethane	17.35	83	812728	10.00	ppbv	98
57)	4-Ethyltoluene	17.59	105	1680955	10.03	ppbv	99
58)	1,3,5-Trimethylbenzene	17.67	105	1408189	9.83	ppbv	99
59)	1,2,4-Trimethylbenzene	18.26	105	1343603	9.93	ppbv	99
60)	1,3-Dichlorobenzene	18.81	146	856033	9.58	ppbv	98
61)	1,4-Dichlorobenzene	18.96	146	823640	9.53	ppbv	98
62)	Benzyl chloride	19.16	91	912999	9.72	ppbv	100
63)	1,2-Dichlorobenzene	19.60	146	746609	9.43	ppbv	98
64)	1,2,4-Trichlorobenzene	22.76	180	236982	8.01	ppbv	96
65)	Hexachlorobutadiene	22.95	225	349165	8.90	ppbv	99
66)	Naphthalene	23.44	128	471043	8.23	ppbv	100

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\053012\05301203.D Vial: 3
Acq On : 30 May 2012 10:42 am Operator: RACHEL HILL
Sample : CCV VOA1 053012 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: May 30 11:07 2012 Quant Results File: 052112V1.RES

Method : C:\HPCHEM\1\METHODS\052112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue May 22 11:27:50 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: **VOA1_120531B** **Run No.:** 49026

Analytical Run Date: 5/31/2012 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

Calibration ID: 49025 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 6/5/12/PR by RD2 on 04JUN12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB2 VOA1 053112	BFB_TUNE	TUNE	R49026	5/31/2012 3:03:00 PM	Celeste Hoitash		
ICV VOA1 053112	EPA_TO15	ICV	R49026	5/31/2012 5:06:00 PM	Celeste Hoitash		
RLVS VOA1 053112	EPA_TO15	RLVS	R49026	5/31/2012 6:50:00 PM	Celeste Hoitash		
MBLK VOA1 053112	EPA_TO15	MBLK	R49026	5/31/2012 7:39:00 PM	Celeste Hoitash		
1205939-012A	EPA_TO15	SAMP	R49026	5/31/2012 8:20:00 PM	Celeste Hoitash		
1205939-013A	EPA_TO15	SAMP	R49026	5/31/2012 9:01:00 PM	Celeste Hoitash		
1205939-017A	EPA_TO15	SAMP	R49026	5/31/2012 11:09:00 PM	Celeste Hoitash		
1205939-017Adup	EPA_TO15	DUP	R49026	5/31/2012 11:53:00 PM	Celeste Hoitash		
1205939-020A	EPA_TO15	SAMP	R49026	6/1/2012 12:34:00 AM	Celeste Hoitash		
1205939-021A	EPA_TO15	SAMP	R49026	6/1/2012 1:16:00 AM	Celeste Hoitash		
1205939-023A	EPA_TO15	SAMP	R49026	6/1/2012 2:51:00 AM	Celeste Hoitash		
1205939-024A	EPA_TO15	SAMP	R49026	6/1/2012 3:36:00 AM	Celeste Hoitash		
1205939-025A	EPA_TO15	SAMP	R49026	6/1/2012 4:23:00 AM	Celeste Hoitash		
1205939-014A	EPA_TO15	SAMP	R49026	6/1/2012 8:39:00 AM	Celeste Hoitash		
1205939-024A	EPA_TO15	SAMP	R49026	6/1/2012 9:21:00 AM	Celeste Hoitash		
1205939-028A	EPA_TO15	SAMP	R49026	6/1/2012 10:02:00 AM	Celeste Hoitash		
1205939-015A	EPA_TO15	SAMP	R49026	6/1/2012 10:46:00 AM	Celeste Hoitash		
1205939-022A	EPA_TO15	SAMP	R49026	6/1/2012 11:28:00 AM	Celeste Hoitash		
1205939-027A	EPA_TO15	SAMP	R49026	6/1/2012 12:08:00 PM	Celeste Hoitash		
1205939-029A	EPA_TO15	SAMP	R49026	6/1/2012 12:49:00 PM	Celeste Hoitash		
RLVS2 VOA1 05311	EPA_TO15	RLVS	R49026	6/1/2012 1:32:00 PM	Celeste Hoitash		

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ANALYTICAL RUN Summary

13-Jun-12

RunNo 49026

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
958334	BFB2 VOA1 053112	BFB_TUNE	TUNE	.\1\DATA\053112	5/31/2012 3:03:0	1	R49026		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		88.4	88.4		100	0	0	0	0	0	88%	50	120	0%	
175	M		7.4	7.4		100	0	0	0	0	0	7%	4	9	0%	
176	M		97.4	97.4		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	
50	M		16.6	16.6		100	0	0	0	0	0	17%	8	40	0%	
75	M		46.7	46.7		100	0	0	0	0	0	47%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.8	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
958335	ICV VOA1 053112	EPA_TO15	ICV	.\1\DATA\053112	5/31/2012 5:06:0	1	R49026		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	9.94	9.94		9.6	0	0	0.107	1	50	104%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.42	10.42		10	0	0	0.211	1	50	104%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.28	10.28		9.8	0	0	0.108	1	50	105%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.74	9.74		9.8	0	0	0.2	1	50	99%	70	130	0%	
1,1-Dichloroethane	A	ppbv	9.95	9.95		9.7	0	0	0.111	1	50	103%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.39	10.39		9.9	0	0	0.097	1	50	105%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	10.13	10.13		9.1	0	0	0.271	1	50	111%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	10.23	10.23		9.8	0	0	0.245	1	50	104%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.68	9.68		9.6	0	0	0.186	1	50	101%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	10.17	10.17		9.7	0	0	0.208	1	50	105%	70	130	0%	
1,2-Dichloroethane	A	ppbv	9.81	9.81		9.7	0	0	0.196	1	50	101%	70	130	0%	
1,2-Dichloropropane	A	ppbv	9.81	9.81		9.8	0	0	0.224	1	50	100%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.74	9.74		9.7	0	0	0.24	1	50	100%	70	130	0%	
1,3-Butadiene	A	ppbv	11.03	11.03		9.8	0	0	0.152	1	50	113%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.93	9.93		9.7	0	0	0.202	1	50	102%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
958335	ICV VOA1 053112	EPA_TO15	ICV	.\1\DATA\053112	5/31/2012 5:06:0	1	R49026		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.87	9.87		9.6	0	0	0.194	1	50	103%	70	130	0%	
1,4-Dioxane	A	ppbv	9.34	9.34		9.6	0	0	0.128	1	50	97%	70	130	0%	
2-Butanone	A	ppbv	10.54	10.54		9.9	0	0	0.287	1	50	106%	70	130	0%	
2-Hexanone	A	ppbv	11.04	11.04		9.8	0	0	0.135	1	50	113%	70	130	0%	
2-Propanol	A	ppbv	11.25	11.25		10.1	0	0	0.329	1	50	111%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	11.13	11.13		10	0	0	0.157	1	50	111%	70	130	0%	
Acetone	A	ppbv	10.44	10.44		10	0	0	0.43	1	50	104%	70	130	0%	
Benzene	A	ppbv	9.81	9.81		9.6	0	0	0.126	1	50	102%	70	130	0%	
Benzyl chloride	A	ppbv	11.04	11.04		9.7	0	0	0.155	1	50	114%	70	130	0%	
Bromodichloromethane	A	ppbv	10	10		9.6	0	0	0.156	1	50	104%	70	130	0%	
Bromoform	A	ppbv	9.95	9.95		9.6	0	0	0.197	1	50	104%	70	130	0%	
Bromomethane	A	ppbv	9.56	9.56		9.3	0	0	0.075	1	50	103%	70	130	0%	
Carbon disulfide	A	ppbv	11.56	11.56		9.7	0	0	0.093	1	50	119%	70	130	0%	
Carbon tetrachloride	A	ppbv	9.94	9.94		9.5	0	0	0.114	1	50	105%	70	130	0%	
Chlorobenzene	A	ppbv	9.85	9.85		9.9	0	0	0.275	1	50	99%	70	130	0%	
Chlorodibromomethane	A	ppbv	9.84	9.84		9.2	0	0	0.165	1	50	107%	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	10.07	10.07		9.4	0	0	0.126	1	50	107%	70	130	0%	
Chloromethane	A	ppbv	9.71	9.71		9.8	0	0	0.104	1	50	99%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	10.27	10.27		9.8	0	0	0.107	1	50	105%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	9.3	9.3		9.5	0	0	0.166	1	50	98%	70	130	0%	
Cyclohexane	A	ppbv	10.56	10.56		9.8	0	0	0.684	2	50	108%	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	8.52	8.52		9.2	0	0	1.962	5	50	93%	70	130	0%	
Ethyl acetate	A	ppbv	11.02	11.02		9.8	0	0	0.157	1	50	112%	70	130	0%	
Ethylbenzene	A	ppbv	9.75	9.75		9.8	0	0	0.737	2	50	99%	70	130	0%	
Heptane	A	ppbv	10.41	10.41		9.9	0	0	0.249	1	50	105%	70	130	0%	
Hexachlorobutadiene	A	ppbv	10.84	10.84		9.4	0	0	0.374	2	50	115%	70	130	0%	
m,p-Xylene	A	ppbv	19.76	19.76		19.2	0	0	0.524	2	100	103%	70	130	0%	
Methylene chloride	A	ppbv	9.94	9.94		10	0	0	2.077	5	50	99%	70	130	0%	
n-Hexane	A	ppbv	10.73	10.73		10.1	0	0	0.692	2	50	106%	70	130	0%	
Naphthalene	A	ppbv	10.84	10.84		9.2	0	0	0.247	1	50	118%	70	130	0%	
o-Xylene	A	ppbv	10.18	10.18		10	0	0	0.258	1	50	102%	70	130	0%	
Propylene	A	ppbv	10.37	10.37		10.2	0	0	0.075	1	50	102%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
958335	ICV VOA1 053112	EPA_TO15	ICV	.\1\DATA\053112	5/31/2012 5:06:0	1	R49026		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	10.06	10.06		9.8	0	0	0.263	1	50	103%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	10.7	10.7		9.9	0	0	0.228	1	50	108%	70	130	0%	
Tetrachloroethene	A	ppbv	9.54	9.54		9.6	0	0	0.148	1	50	99%	70	130	0%	
Tetrahydrofuran	A	ppbv	10.5	10.5		10	0	0	0.201	1	50	105%	70	130	0%	
Toluene	A	ppbv	10.7	10.7		9.8	0	0	0.158	1	50	109%	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	10.02	10.02		9.1	0	0	0.171	1	50	110%	70	130	0%	
Trichloroethene	A	ppbv	9.58	9.58		9.6	0	0	0.119	1	50	100%	70	130	0%	
Trichlorofluoromethane	A	ppbv	9.74	9.74		9.6	0	0	0.148	1	50	101%	70	130	0%	
Vinyl acetate	A	ppbv	10.68	10.68		9.9	0	0	0.266	1	50	108%	70	130	0%	
Vinyl chloride	A	ppbv	9.25	9.25		9.4	0	0	0.072	1	50	98%	70	130	0%	
Xylenes, Total	C	ppbv	29.94	29.94		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	12.5	12.5		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
958336	RLVS VOA1 053112	EPA_TO15	RLVS	.\1\DATA\053112	5/31/2012 6:50:0	1	R49026		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	0.97	0.97		0.996	0	0	0.107	1	50	97%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.13	1.13		1	0	0	0.211	1	50	113%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	1.02	1.02		0.98	0	0	0.108	1	50	104%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.96	0.96		0.98	0	0	0.2	1	50	98%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1.01	1.01		0.97	0	0	0.111	1	50	104%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1.06	1.06		0.99	0	0	0.097	1	50	107%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.06	1.06		0.91	0	0	0.271	1	50	116%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	1.15	1.15		0.98	0	0	0.245	1	50	117%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.9	0.9		0.96	0	0	0.186	1	50	94%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.18	1.18		0.97	0	0	0.208	1	50	122%	70	130	0%	
1,2-Dichloroethane	A	ppbv	0.99	0.99		0.97	0	0	0.196	1	50	102%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.95	0.95		0.98	0	0	0.224	1	50	97%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\053112\05311212.D Vial: 12
Acq On : 31 May 2012 5:06 pm Operator: RACHEL HILL
Sample : ICV VOA1 053112 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\053112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jun 01 09:18:38 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	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	133	0.00
2	T	Propylene	0.813	0.827	-1.7	124	0.00
3	T	Dichlorodifluoromethane	3.079	3.095	-0.5	121	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.303	2.330	-1.2	124	0.00
5	T	Chloromethane	0.928	0.949	-2.3	120	0.00
6	T	Vinyl chloride	1.049	1.032	1.6	113	0.00
7	T	1,3-Butadiene	0.727	0.818	-12.5	125	0.00
8	T	Bromomethane	1.112	1.143	-2.8	123	0.00
9	T	Chloroethane	0.591	0.595	-0.7	117	0.00
10	T	Trichlorofluoromethane	2.936	2.977	-1.4	118	0.00
11	T	Ethanol	0.315	0.291	7.6	104	0.00
12	T	Freon113	1.993	2.089	-4.8	118	0.00
13	T	1,1-Dichloroethene	1.379	1.446	-4.9	117	0.00
14	T	Acetone	1.332	1.390	-4.4	109	0.00
15	T	Carbon disulfide	2.400	2.859	-19.1	136	0.00
16	T	2-Propanol	1.279	1.425	-11.4	125	0.00
17	T	Methylene chloride	1.022	1.016	0.6	114	0.00
18	T	tert-Butyl Methyl Ether	2.198	2.375	-8.1	110	0.00
19	T	trans-1,2-Dichloroethene	1.262	1.371	-8.6	120	0.00
20	T	n-Hexane	1.399	1.486	-6.2	117	0.00
21	T	1,1-Dichloroethane	1.713	1.757	-2.6	113	0.00
22	T	Vinyl acetate	2.035	2.196	-7.9	105	0.00
23	T	cis-1,2-Dichloroethene	1.036	1.086	-4.8	115	0.00
24	T	2-Butanone	1.404	1.494	-6.4	107	0.00
25	T	Ethyl acetate	1.735	1.951	-12.4	114	0.00
26	T	Tetrahydrofuran	0.898	0.942	-4.9	108	0.00
27	T	Chloroform	1.950	2.004	-2.8	112	0.00
28	T	1,1,1-Trichloroethane	2.105	2.179	-3.5	113	0.00
29	T	Cyclohexane	1.419	1.530	-7.8	117	0.00
30	T	Carbon tetrachloride	2.325	2.431	-4.6	113	0.00
31	T	Benzene	2.740	2.799	-2.2	107	0.00
32	T	1,2-Dichloroethane	1.133	1.146	-1.1	105	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	136	0.00
34	T	Heptane	0.486	0.511	-5.1	115	0.00
35	T	Trichloroethene	0.444	0.442	0.5	115	0.00
36	T	1,2-Dichloropropane	0.304	0.304	0.0	106	0.00
37	T	1,4-Dioxane	0.175	0.170	2.9	108	0.00
38	T	Bromodichloromethane	0.631	0.658	-4.3	116	0.00
39	T	cis-1,3-Dichloropropene	0.487	0.476	2.3	104	0.00
40	T	4-Methyl-2-pentanone	0.208	0.231	-11.1	120	0.00
41	T	Toluene	1.030	1.125	-9.2	116	0.00
42	T	trans-1,3-Dichloropropene	0.451	0.496	-10.0	117	0.00
43	T	1,1,2-Trichloroethane	0.358	0.355	0.8	109	0.00
44	T	Tetrachloroethene	0.582	0.578	0.7	114	0.00
45	T	2-Hexanone	0.404	0.455	-12.6	117	0.00
46	T	Chlorodibromomethane	0.660	0.662	-0.3	110	0.00
47	T	1,2-Dibromoethane	0.559	0.564	-0.9	109	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	134	0.00
49	T	Chlorobenzene	0.880	0.876	0.5	108	0.00
50	T	Ethylbenzene	1.411	1.403	0.6	105	0.00
51	T	m,p-Xylene	1.097	1.129	-2.9	106	0.00
52	T	o-Xylene	1.117	1.137	-1.8	109	0.00
53	T	Styrene	0.860	0.882	-2.6	110	0.00
54	T	Bromoform	0.634	0.657	-3.6	114	0.00
55	S	4-Bromofluorobenzene	0.581	0.581	0.0	134	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\053112\05311212.D Vial: 12
Acq On : 31 May 2012 5:06 pm Operator: RACHEL HILL
Sample : ICV VOA1 053112 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\053112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jun 01 09:18:38 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	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.697	0.726	-4.2	114	0.00
57	T	4-Ethyltoluene	1.452	1.473	-1.4	111	0.00
58	T	1,3,5-Trimethylbenzene	1.242	1.247	-0.4	111	0.00
59	T	1,2,4-Trimethylbenzene	1.162	1.213	-4.4	114	0.00
60	T	1,3-Dichlorobenzene	0.763	0.781	-2.4	115	0.00
61	T	1,4-Dichlorobenzene	0.736	0.757	-2.9	116	0.00
62	T	Benzyl chloride	0.809	0.921	-13.8	126	0.00
63	T	1,2-Dichlorobenzene	0.669	0.701	-4.8	119	0.00
64	T	1,2,4-Trichlorobenzene	0.243	0.270	-11.1	130	0.00
65	T	Hexachlorobutadiene	0.327	0.377	-15.3	126	0.00
66		Naphthalene	0.481	0.567	-17.9	138	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\053112\05311212.D Vial: 12
Acq On : 31 May 2012 5:06 pm Operator: RACHEL HILL
Sample : ICV VOA1 053112 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 1 9:19 2012 Quant Results File: 053112V1.RES

Quant Method : C:\HPCHEM\1\METHODS\053112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jun 01 09:18:38 2012
Response via : Initial Calibration
DataAcq Meth : 053112V1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.58	130	481456	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.68	114	1612192	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.53	117	1418692	12.50	ppbv	0.00

System Monitoring Compounds						
55) 4-Bromofluorobenzene	17.18	95	824147	12.50	ppbv	0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 100.00%			

Target Compounds						Qvalue
2) Propylene	5.52	41	324728	10.37	ppbv	99
3) Dichlorodifluoromethane	5.59	85	1096677	9.25	ppbv	100
4) 1,2-Dichloro-1,2,2,2-tetra	5.85	135	852398	9.61	ppbv #	86
5) Chloromethane	6.00	50	347318	9.71	ppbv	98
6) Vinyl chloride	6.21	62	373657	9.25	ppbv	99
7) 1,3-Butadiene	6.26	39	308884	11.03	ppbv	96
8) Bromomethane	6.85	94	409579	9.56	ppbv	99
9) Chloroethane	7.00	64	210732	9.26	ppbv	99
10) Trichlorofluoromethane	7.33	101	1100913	9.74	ppbv	99
11) Ethanol	7.56	45	103216	8.52	ppbv	99
12) Freon113	7.99	101	788697	10.28	ppbv	95
13) 1,1-Dichloroethene	8.09	61	551564	10.39	ppbv	99
14) Acetone	8.18	43	535459	10.44	ppbv	99
15) Carbon disulfide	8.46	76	1068272	11.56	ppbv #	100
16) 2-Propanol	8.23	45	554191	11.25	ppbv #	75
17) Methylene chloride	8.75	49	391415	9.94	ppbv	98
18) tert-Butyl Methyl Ether	8.95	73	905796	10.70	ppbv	98
19) trans-1,2-Dichloroethene	9.03	61	517367	10.65	ppbv	99
20) n-Hexane	9.22	57	578015	10.73	ppbv	97
21) 1,1-Dichloroethane	9.59	63	656601	9.95	ppbv	100
22) Vinyl acetate	9.52	43	837373	10.68	ppbv	99
23) cis-1,2-Dichloroethene	10.28	96	409835	10.27	ppbv	99
24) 2-Butanone	10.24	43	569860	10.54	ppbv	100
25) Ethyl acetate	10.19	43	736475	11.02	ppbv #	100
26) Tetrahydrofuran	10.58	42	363003	10.50	ppbv	96
27) Chloroform	10.60	83	756368	10.07	ppbv	97
28) 1,1,1-Trichloroethane	10.85	97	805667	9.94	ppbv	99
29) Cyclohexane	10.86	56	577408	10.56	ppbv	99
30) Carbon tetrachloride	11.01	117	889700	9.94	ppbv	99
31) Benzene	11.29	78	1035086	9.81	ppbv	100
32) 1,2-Dichloroethane	11.37	62	428112	9.81	ppbv	99
34) Heptane	11.34	43	652953	10.41	ppbv	98
35) Trichloroethene	12.02	130	547778	9.58	ppbv	97
36) 1,2-Dichloropropane	12.38	63	384611	9.81	ppbv	100
37) 1,4-Dioxane	12.45	88	211101	9.34	ppbv	95
38) Bromodichloromethane	12.67	83	814332	10.00	ppbv	98
39) cis-1,3-Dichloropropene	13.21	75	583735	9.30	ppbv	100
40) 4-Methyl-2-pentanone	13.32	58	298491	11.13	ppbv	98
41) Toluene	13.62	91	1422215	10.70	ppbv	98
42) trans-1,3-Dichloropropene	13.93	75	582336	10.02	ppbv	100
43) 1,1,2-Trichloroethane	14.20	97	449010	9.74	ppbv	99
44) Tetrachloroethene	14.32	166	715360	9.54	ppbv	96
45) 2-Hexanone	14.40	43	575397	11.04	ppbv	96
46) Chlorodibromomethane	14.75	129	837258	9.84	ppbv	99
47) 1,2-Dibromoethane	14.98	107	698125	9.68	ppbv	100
49) Chlorobenzene	15.57	112	983994	9.85	ppbv	99
50) Ethylbenzene	15.62	91	1560666	9.75	ppbv	97
51) m,p-Xylene	15.77	91	2459547	19.76	ppbv	98
52) o-Xylene	16.36	91	1290286	10.18	ppbv	98

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\053112\05311212.D Vial: 12
Acq On : 31 May 2012 5:06 pm Operator: RACHEL HILL
Sample : ICV VOA1 053112 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 1 9:19 2012 Quant Results File: 053112V1.RES

Quant Method : C:\HPCHEM\1\METHODS\053112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jun 01 09:18:38 2012
Response via : Initial Calibration
DataAcq Meth : 053112V1

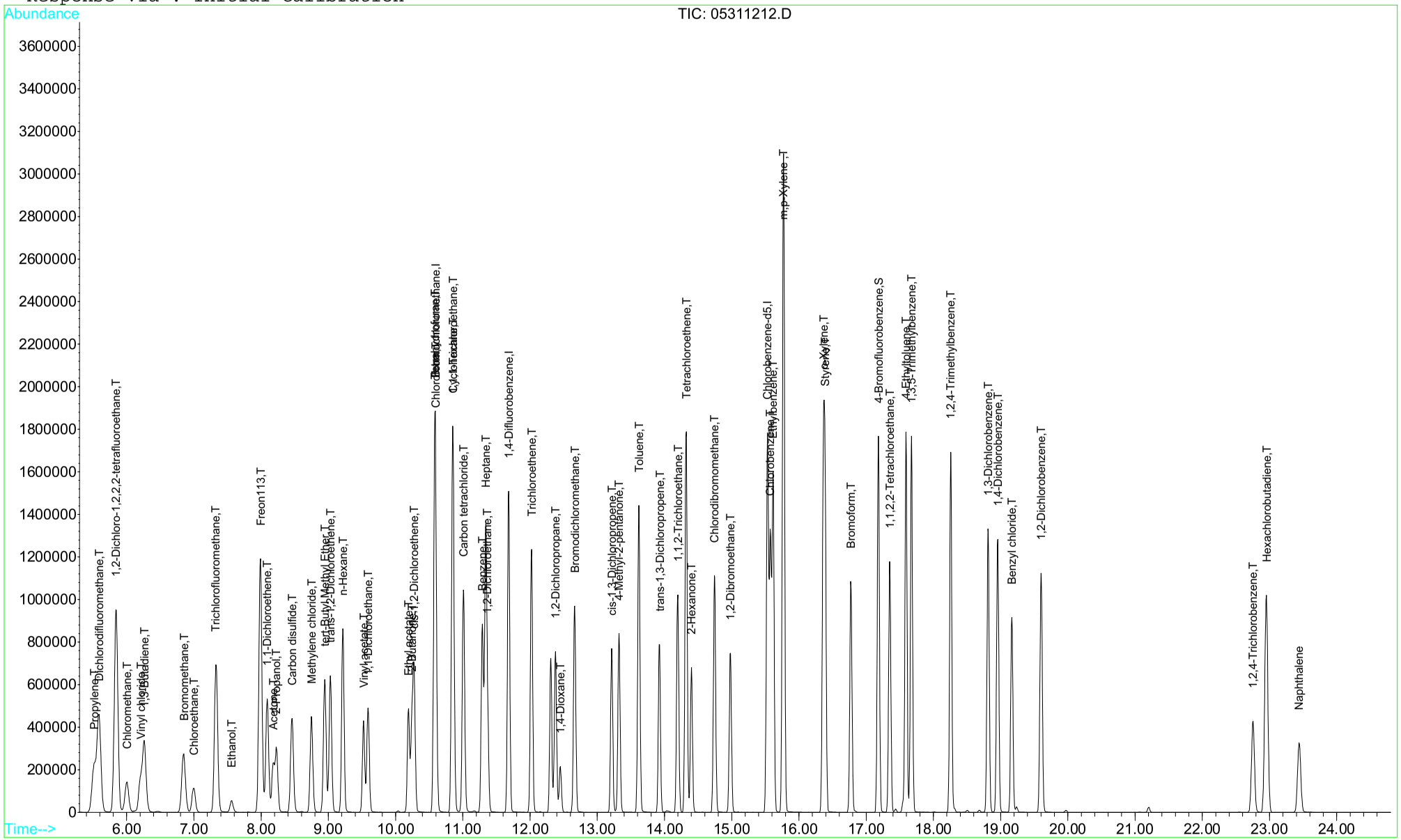
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
53) Styrene	16.39	104	981022	10.06 ppbv	99
54) Bromoform	16.77	173	715854	9.95 ppbv	99
56) 1,1,2,2-Tetrachloroethane	17.35	83	824498	10.42 ppbv	98
57) 4-Ethyltoluene	17.59	105	1637849	9.94 ppbv	99
58) 1,3,5-Trimethylbenzene	17.68	105	1373368	9.74 ppbv	99
59) 1,2,4-Trimethylbenzene	18.26	105	1348761	10.23 ppbv	99
60) 1,3-Dichlorobenzene	18.82	146	859808	9.93 ppbv	99
61) 1,4-Dichlorobenzene	18.96	146	824927	9.87 ppbv	99
62) Benzyl chloride	19.17	91	1014035	11.04 ppbv	99
63) 1,2-Dichlorobenzene	19.60	146	772077	10.17 ppbv	98
64) 1,2,4-Trichlorobenzene	22.75	180	279313	10.13 ppbv	96
65) Hexachlorobutadiene	22.95	225	402349	10.84 ppbv	99
66) Naphthalene	23.44	128	592469	10.84 ppbv	100

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\053112\05311212.D Vial: 12
Acq On : 31 May 2012 5:06 pm Operator: RACHEL HILL
Sample : ICV VOA1 053112 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 1 9:19 2012 Quant Results File: 053112V1.RES

Method : C:\HPCHEM\1\METHODS\053112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jun 01 09:18:38 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: **VOA1_120601A** **Run No.:** 49090

Analytical Run Date: 6/1/2012 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

Calibration ID: 49025 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: PR by RD2 on 05june12 060812rsl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 060112	BFB_TUNE	TUNE	R49090	6/1/2012 2:13:00 PM	Robert Lynch		
CCV VOA1 060112	EPA_TO15	CCV	R49090	6/1/2012 7:07:00 PM	Robert Lynch		
RLVS VOA1 060112	EPA_TO15	RLVS	R49090	6/1/2012 7:50:00 PM	Robert Lynch		
MBLK VOA1 060112	EPA_TO15	MBLK	R49090	6/1/2012 8:39:00 PM	Robert Lynch		
1205939-026A	EPA_TO15	SAMP	R49090	6/1/2012 9:21:00 PM	Robert Lynch		
1205939-030A	EPA_TO15	SAMP	R49090	6/1/2012 10:02:00 PM	Robert Lynch		
1205939-031A	EPA_TO15	SAMP	R49090	6/1/2012 11:25:00 PM	Robert Lynch		
1205939-032A	EPA_TO15	SAMP	R49090	6/2/2012 6:56:00 AM	Robert Lynch		
1205939-032ADUP	EPA_TO15	DUP	R49090	6/2/2012 7:37:00 AM	Robert Lynch		
1205939-033A	EPA_TO15	SAMP	R49090	6/2/2012 8:19:00 AM	Robert Lynch		
1205939-034A	EPA_TO15	SAMP	R49090	6/2/2012 9:00:00 AM	Robert Lynch		
1205939-046A	EPA_TO15	SAMP	R49090	6/2/2012 9:48:00 AM	Robert Lynch		
1205A85-001A	EPA_TO15	SAMP	R49090	6/2/2012 10:33:00 AM	Robert Lynch		
1205A85-002A	EPA_TO15	SAMP	R49090	6/2/2012 11:17:00 AM	Robert Lynch		
1205A85-003A	EPA_TO15	SAMP	R49090	6/2/2012 12:02:00 PM	Robert Lynch		
RLVS2 VOA1 06011	EPA_TO15	RLVS	R49090	6/2/2012 12:44:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

13-Jun-12

RunNo 49090

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
959558	BFB VOA1 060112	BFB_TUNE	TUNE	.\1\DATA\060112	6/1/2012 2:13:00	1	R49090		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0.4	0.4		100	0	0	0	0	0	0%	0	2	0%	
174	M		89.9	89.9		100	0	0	0	0	0	90%	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		6.6	6.6		100	0	0	0	0	0	7%	5	9	0%	
50	M		17	17		100	0	0	0	0	0	17%	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
959559	CCV VOA1 060112	EPA_TO15	CCV	.\1\DATA\060112	6/1/2012 7:07:00	1	R49090		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	11.44	11.44		9.6	0	0	0.107	1	50	119%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	11.48	11.48		10	0	0	0.211	1	50	115%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	11.6	11.6		9.8	0	0	0.108	1	50	118%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	11.26	11.26		9.8	0	0	0.2	1	50	115%	70	130	0%	
1,1-Dichloroethane	A	ppbv	11.23	11.23		9.7	0	0	0.111	1	50	116%	70	130	0%	
1,1-Dichloroethene	A	ppbv	11.63	11.63		9.9	0	0	0.097	1	50	117%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	8.9	8.9		9.1	0	0	0.271	1	50	98%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	11.32	11.32		9.8	0	0	0.245	1	50	116%	70	130	0%	
1,2-Dibromoethane	A	ppbv	11.06	11.06		9.6	0	0	0.186	1	50	115%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	10.95	10.95		9.7	0	0	0.208	1	50	113%	70	130	0%	
1,2-Dichloroethane	A	ppbv	11.4	11.4		9.7	0	0	0.196	1	50	118%	70	130	0%	
1,2-Dichloropropane	A	ppbv	11.34	11.34		9.8	0	0	0.224	1	50	116%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	11.03	11.03		9.7	0	0	0.24	1	50	114%	70	130	0%	
1,3-Butadiene	A	ppbv	11.06	11.06		9.8	0	0	0.152	1	50	113%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	10.92	10.92		9.7	0	0	0.202	1	50	113%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
959559	CCV VOA1 060112	EPA_TO15	CCV	\1\DATA\060112	6/1/2012 7:07:00	1	R49090		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	10.75	10.75		9.6	0	0	0.194	1	50	112%	70	130	0%	
1,4-Dioxane	A	ppbv	11.06	11.06		9.6	0	0	0.128	1	50	115%	70	130	0%	
2-Butanone	A	ppbv	12.02	12.02		9.9	0	0	0.287	1	50	121%	70	130	0%	
2-Hexanone	A	ppbv	11.26	11.26		9.8	0	0	0.135	1	50	115%	70	130	0%	
2-Propanol	A	ppbv	11.97	11.97		10.1	0	0	0.329	1	50	119%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	11.41	11.41		10	0	0	0.157	1	50	114%	70	130	0%	
Acetone	A	ppbv	11.47	11.47		10	0	0	0.43	1	50	115%	70	130	0%	
Benzene	A	ppbv	11.24	11.24		9.6	0	0	0.126	1	50	117%	70	130	0%	
Benzyl chloride	A	ppbv	11.11	11.11		9.7	0	0	0.155	1	50	115%	70	130	0%	
Bromodichloromethane	A	ppbv	10.99	10.99		9.6	0	0	0.156	1	50	114%	70	130	0%	
Bromoform	A	ppbv	11.16	11.16		9.6	0	0	0.197	1	50	116%	70	130	0%	
Bromomethane	A	ppbv	10.81	10.81		9.3	0	0	0.075	1	50	116%	70	130	0%	
Carbon disulfide	A	ppbv	11.5	11.5		9.7	0	0	0.093	1	50	119%	70	130	0%	
Carbon tetrachloride	A	ppbv	11.31	11.31		9.5	0	0	0.114	1	50	119%	70	130	0%	
Chlorobenzene	A	ppbv	11.55	11.55		9.9	0	0	0.275	1	50	117%	70	130	0%	
Chlorodibromomethane	A	ppbv	11.17	11.17		9.2	0	0	0.165	1	50	121%	70	130	0%	
Chloroethane	A	ppbv	10.56	10.56		9.8	0	0	0.063	1	50	108%	70	130	0%	
Chloroform	A	ppbv	11.56	11.56		9.4	0	0	0.126	1	50	123%	70	130	0%	
Chloromethane	A	ppbv	10.94	10.94		9.8	0	0	0.104	1	50	112%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	11.59	11.59		9.8	0	0	0.107	1	50	118%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	11.08	11.08		9.5	0	0	0.166	1	50	117%	70	130	0%	
Cyclohexane	A	ppbv	11.74	11.74		9.8	0	0	0.684	2	50	120%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	10.66	10.66		9.2	0	0	0.086	1	50	116%	70	130	0%	
Ethanol	A	ppbv	10.6	10.6		9.2	0	0	1.962	5	50	115%	70	130	0%	
Ethyl acetate	A	ppbv	11.9	11.9		9.8	0	0	0.157	1	50	121%	70	130	0%	
Ethylbenzene	A	ppbv	11.49	11.49		9.8	0	0	0.737	2	50	117%	70	130	0%	
Heptane	A	ppbv	11.72	11.72		9.9	0	0	0.249	1	50	118%	70	130	0%	
Hexachlorobutadiene	A	ppbv	9.98	9.98		9.4	0	0	0.374	2	50	106%	70	130	0%	
m,p-Xylene	A	ppbv	23.05	23.05		19.2	0	0	0.524	2	100	120%	70	130	0%	
Methylene chloride	A	ppbv	11.32	11.32		10	0	0	2.077	5	50	113%	70	130	0%	
n-Hexane	A	ppbv	11.8	11.8		10.1	0	0	0.692	2	50	117%	70	130	0%	
Naphthalene	A	ppbv	9.09	9.09		9.2	0	0	0.247	1	50	99%	70	130	0%	
o-Xylene	A	ppbv	11.75	11.75		10	0	0	0.258	1	50	118%	70	130	0%	
Propylene	A	ppbv	11.68	11.68		10.2	0	0	0.075	1	50	115%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
959559	CCV VOA1 060112	EPA_TO15	CCV	.\1\DATA\060112	6/1/2012 7:07:00	1	R49090		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	11.54	11.54		9.8	0	0	0.263	1	50	118%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	12.01	12.01		9.9	0	0	0.228	1	50	121%	70	130	0%	
Tetrachloroethene	A	ppbv	11.1	11.1		9.6	0	0	0.148	1	50	116%	70	130	0%	
Tetrahydrofuran	A	ppbv	11.75	11.75		10	0	0	0.201	1	50	118%	70	130	0%	
Toluene	A	ppbv	11.33	11.33		9.8	0	0	0.158	1	50	116%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	11.61	11.61		9.8	0	0	0.117	1	50	118%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	10.61	10.61		9.1	0	0	0.171	1	50	117%	70	130	0%	
Trichloroethene	A	ppbv	11.19	11.19		9.6	0	0	0.119	1	50	117%	70	130	0%	
Trichlorofluoromethane	A	ppbv	11.23	11.23		9.6	0	0	0.148	1	50	117%	70	130	0%	
Vinyl acetate	A	ppbv	12.32	12.32		9.9	0	0	0.266	1	50	124%	70	130	0%	
Vinyl chloride	A	ppbv	10.43	10.43		9.4	0	0	0.072	1	50	111%	70	130	0%	
Xylenes, Total	C	ppbv	34.8	34.8		29.2	0	0	0.782	3	150	119%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	12.32	12.32		12.5	0	0	0	0	0	99%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
959560	RLVS VOA1 060112	EPA_TO15	RLVS	.\1\DATA\060112	6/1/2012 7:50:00	1	R49090		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	1.15	1.15		1	0	0	0.211	1	50	115%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	1.04	1.04		0.98	0	0	0.108	1	50	106%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.94	0.94		0.98	0	0	0.2	1	50	96%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1.02	1.02		0.97	0	0	0.111	1	50	105%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1.06	1.06		0.99	0	0	0.097	1	50	107%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.08	1.08		0.91	0	0	0.271	1	50	119%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	1.16	1.16		0.98	0	0	0.245	1	50	118%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.9	0.9		0.96	0	0	0.186	1	50	94%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.18	1.18		0.97	0	0	0.208	1	50	122%	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	0.98	0.98		0.98	0	0	0.224	1	50	100%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\060112\06011204.D Vial: 3
Acq On : 1 Jun 2012 7:07 pm Operator: RACHEL HILL
Sample : CCV VOA1 060112 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\053112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jun 01 09:18:38 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	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	114	0.00
2	T	Propylene	0.813	0.931	-14.5	120	0.00
3	T	Dichlorodifluoromethane	3.079	3.569	-15.9	120	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.303	2.709	-17.6	124	0.00
5	T	Chloromethane	0.928	1.069	-15.2	116	0.00
6	T	Vinyl chloride	1.049	1.164	-11.0	109	0.00
7	T	1,3-Butadiene	0.727	0.821	-12.9	108	0.00
8	T	Bromomethane	1.112	1.293	-16.3	120	0.00
9	T	Chloroethane	0.591	0.679	-14.9	115	0.00
10	T	Trichlorofluoromethane	2.936	3.434	-17.0	117	0.00
11	T	Ethanol	0.315	0.362	-14.9	111	0.00
12	T	Freon113	1.993	2.359	-18.4	114	0.00
13	T	1,1-Dichloroethene	1.379	1.620	-17.5	113	0.00
14	T	Acetone	1.332	1.528	-14.7	103	0.00
15	T	Carbon disulfide	2.400	2.844	-18.5	116	0.00
16	T	2-Propanol	1.279	1.516	-18.5	114	0.00
17	T	Methylene chloride	1.022	1.157	-13.2	111	0.00
18	T	tert-Butyl Methyl Ether	2.198	2.667	-21.3	106	0.00
19	T	trans-1,2-Dichloroethene	1.262	1.495	-18.5	112	0.00
20	T	n-Hexane	1.399	1.634	-16.8	111	0.00
21	T	1,1-Dichloroethane	1.713	1.983	-15.8	109	0.00
22	T	Vinyl acetate	2.035	2.534	-24.5	104	0.00
23	T	cis-1,2-Dichloroethene	1.036	1.226	-18.3	111	0.00
24	T	2-Butanone	1.404	1.704	-21.4	105	0.00
25	T	Ethyl acetate	1.735	2.107	-21.4	106	0.00
26	T	Tetrahydrofuran	0.898	1.055	-17.5	103	0.00
27	T	Chloroform	1.950	2.300	-17.9	110	0.00
28	T	1,1,1-Trichloroethane	2.105	2.508	-19.1	112	0.00
29	T	Cyclohexane	1.419	1.701	-19.9	111	0.00
30	T	Carbon tetrachloride	2.325	2.768	-19.1	111	0.00
31	T	Benzene	2.740	3.208	-17.1	105	0.00
32	T	1,2-Dichloroethane	1.133	1.331	-17.5	105	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	116	0.00
34	T	Heptane	0.486	0.576	-18.5	110	0.00
35	T	Trichloroethene	0.444	0.517	-16.4	114	0.00
36	T	1,2-Dichloropropane	0.304	0.352	-15.8	104	0.00
37	T	1,4-Dioxane	0.175	0.202	-15.4	109	0.00
38	T	Bromodichloromethane	0.631	0.723	-14.6	108	0.00
39	T	cis-1,3-Dichloropropene	0.487	0.568	-16.6	105	0.00
40	T	4-Methyl-2-pentanone	0.208	0.237	-13.9	104	0.00
41	T	Toluene	1.030	1.191	-15.6	105	0.00
42	T	trans-1,3-Dichloropropene	0.451	0.525	-16.4	106	0.00
43	T	1,1,2-Trichloroethane	0.358	0.411	-14.8	107	0.00
44	T	Tetrachloroethene	0.582	0.672	-15.5	113	0.00
45	T	2-Hexanone	0.404	0.464	-14.9	102	0.00
46	T	Chlorodibromomethane	0.660	0.752	-13.9	106	0.00
47	T	1,2-Dibromoethane	0.559	0.644	-15.2	106	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	113	0.00
49	T	Chlorobenzene	0.880	1.027	-16.7	107	0.00
50	T	Ethylbenzene	1.411	1.654	-17.2	105	0.00
51	T	m,p-Xylene	1.097	1.317	-20.1	104	0.00
52	T	o-Xylene	1.117	1.313	-17.5	106	0.00
53	T	Styrene	0.860	1.012	-17.7	106	0.00
54	T	Bromoform	0.634	0.737	-16.2	108	0.00
55	S	4-Bromofluorobenzene	0.581	0.573	1.4	111	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\060112\06011204.D Vial: 3
Acq On : 1 Jun 2012 7:07 pm Operator: RACHEL HILL
Sample : CCV VOA1 060112 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\053112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jun 01 09:18:38 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	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.697	0.801	-14.9	106	0.00
57	T	4-Ethyltoluene	1.452	1.676	-15.4	106	0.00
58	T	1,3,5-Trimethylbenzene	1.242	1.412	-13.7	105	0.00
59	T	1,2,4-Trimethylbenzene	1.162	1.342	-15.5	106	0.00
60	T	1,3-Dichlorobenzene	0.763	0.859	-12.6	107	0.00
61	T	1,4-Dichlorobenzene	0.736	0.825	-12.1	106	0.00
62	T	Benzyl chloride	0.809	0.927	-14.6	107	0.00
63	T	1,2-Dichlorobenzene	0.669	0.755	-12.9	108	0.00
64	T	1,2,4-Trichlorobenzene	0.243	0.238	2.1	96	0.00
65	T	Hexachlorobutadiene	0.327	0.347	-6.1	98	0.00
66		Naphthalene	0.481	0.476	1.0	98	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060112\06011204.D Vial: 3
Acq On : 1 Jun 2012 7:07 pm Operator: RACHEL HILL
Sample : CCV VOA1 060112 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 1 19:31 2012 Quant Results File: 053112V1.RES

Quant Method : C:\HPCHEM\1\METHODS\053112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jun 01 09:18:38 2012
Response via : Initial Calibration
DataAcq Meth : 053112V1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.59	130	413306	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.68	114	1368987	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.53	117	1195050	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.18	95	684589	12.32	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 98.56%

Target Compounds						Qvalue
2) Propylene	5.52	41	314125	11.68	ppbv	98
3) Dichlorodifluoromethane	5.59	85	1085555	10.66	ppbv	100
4) 1,2-Dichloro-1,2,2,2-tetra	5.84	135	850851	11.17	ppbv #	86
5) Chloromethane	6.00	50	335843	10.94	ppbv	99
6) Vinyl chloride	6.21	62	361695	10.43	ppbv #	99
7) 1,3-Butadiene	6.26	39	266077	11.06	ppbv	97
8) Bromomethane	6.85	94	397494	10.81	ppbv #	98
9) Chloroethane	7.00	64	206416	10.56	ppbv	99
10) Trichlorofluoromethane	7.33	101	1089960	11.23	ppbv	98
11) Ethanol	7.56	45	110231	10.60	ppbv	99
12) Freon113	7.99	101	764453	11.60	ppbv	95
13) 1,1-Dichloroethene	8.10	61	530169	11.63	ppbv	98
14) Acetone	8.18	43	505189	11.47	ppbv #	96
15) Carbon disulfide	8.46	76	912194	11.50	ppbv #	99
16) 2-Propanol	8.23	45	506141	11.97	ppbv #	1
17) Methylene chloride	8.75	49	382686	11.32	ppbv	99
18) tert-Butyl Methyl Ether	8.95	73	872940	12.01	ppbv	97
19) trans-1,2-Dichloroethene	9.03	61	484482	11.61	ppbv	99
20) n-Hexane	9.22	57	545762	11.80	ppbv	97
21) 1,1-Dichloroethane	9.59	63	636129	11.23	ppbv	99
22) Vinyl acetate	9.52	43	829385	12.32	ppbv	99
23) cis-1,2-Dichloroethene	10.28	96	397217	11.59	ppbv	99
24) 2-Butanone	10.25	43	557884	12.02	ppbv	99
25) Ethyl acetate	10.19	43	682592	11.90	ppbv #	98
26) Tetrahydrofuran	10.58	42	348847	11.75	ppbv	95
27) Chloroform	10.60	83	745113	11.56	ppbv	98
28) 1,1,1-Trichloroethane	10.85	97	796221	11.44	ppbv	99
29) Cyclohexane	10.86	56	551107	11.74	ppbv	99
30) Carbon tetrachloride	11.01	117	869538	11.31	ppbv	98
31) Benzene	11.29	78	1018186	11.24	ppbv	100
32) 1,2-Dichloroethane	11.37	62	426985	11.40	ppbv	98
34) Heptane	11.34	43	624156	11.72	ppbv	97
35) Trichloroethene	12.02	130	543758	11.19	ppbv	97
36) 1,2-Dichloropropane	12.38	63	377502	11.34	ppbv	99
37) 1,4-Dioxane	12.45	88	212246	11.06	ppbv	95
38) Bromodichloromethane	12.67	83	759897	10.99	ppbv	98
39) cis-1,3-Dichloropropene	13.22	75	590951	11.08	ppbv	100
40) 4-Methyl-2-pentanone	13.33	58	259726	11.41	ppbv	98
41) Toluene	13.62	91	1278495	11.33	ppbv	98
42) trans-1,3-Dichloropropene	13.93	75	523285	10.61	ppbv	99
43) 1,1,2-Trichloroethane	14.20	97	441016	11.26	ppbv	99
44) Tetrachloroethene	14.33	166	707000	11.10	ppbv	96
45) 2-Hexanone	14.40	43	498328	11.26	ppbv	97
46) Chlorodibromomethane	14.74	129	806743	11.17	ppbv	99
47) 1,2-Dibromoethane	14.98	107	677530	11.06	ppbv	99
49) Chlorobenzene	15.58	112	972043	11.55	ppbv	99
50) Ethylbenzene	15.62	91	1549851	11.49	ppbv	98
51) m,p-Xylene	15.77	91	2416664	23.05	ppbv	97
52) o-Xylene	16.36	91	1255279	11.75	ppbv	98

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060112\06011204.D Vial: 3
Acq On : 1 Jun 2012 7:07 pm Operator: RACHEL HILL
Sample : CCV VOA1 060112 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 1 19:31 2012 Quant Results File: 053112V1.RES

Quant Method : C:\HPCHEM\1\METHODS\053112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jun 01 09:18:38 2012
Response via : Initial Calibration
DataAcq Meth : 053112V1

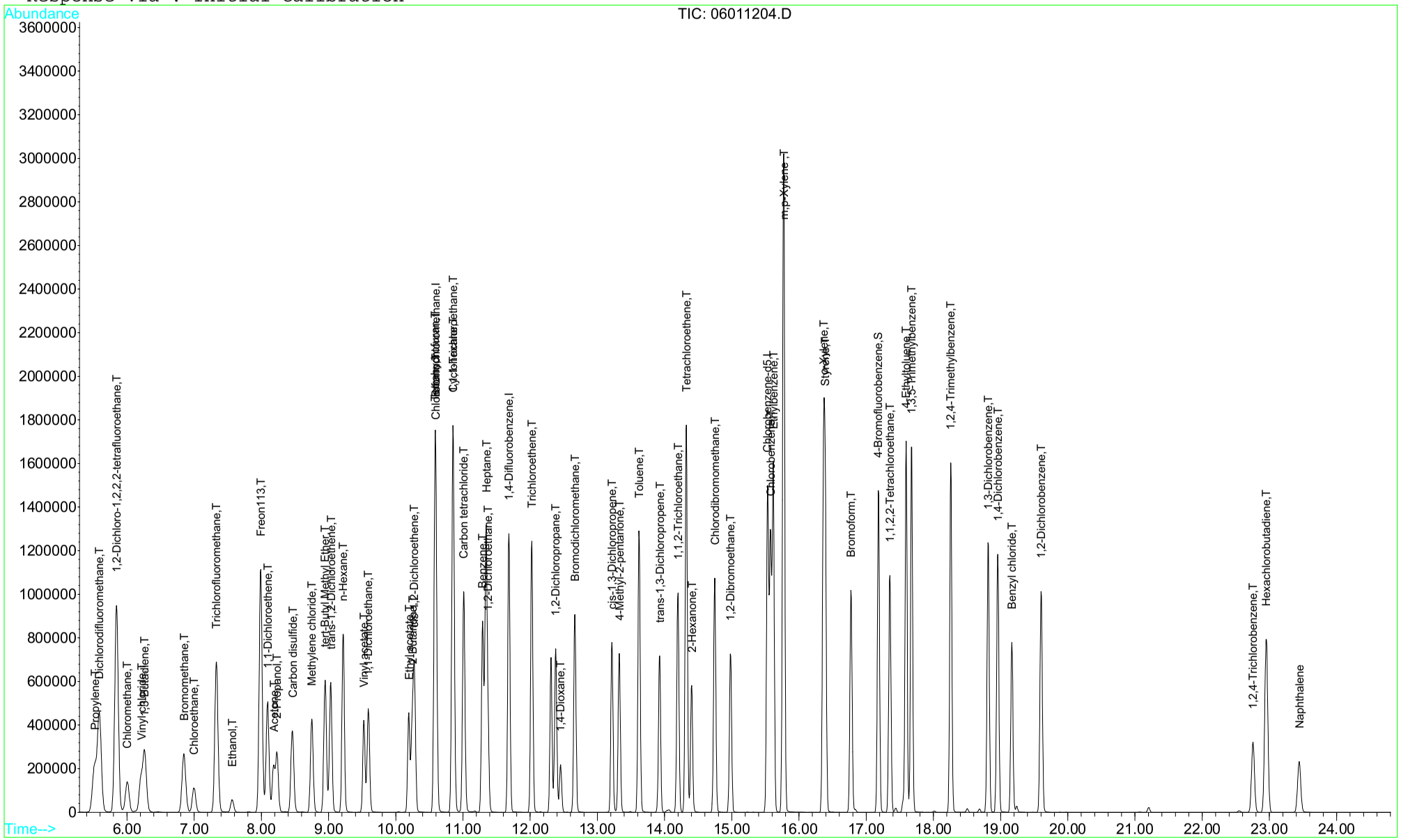
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53)	Styrene	16.39	104	948324	11.54	ppbv	99
54)	Bromoform	16.77	173	676155	11.16	ppbv	99
56)	1,1,2,2-Tetrachloroethane	17.35	83	765312	11.48	ppbv	98
57)	4-Ethyltoluene	17.59	105	1570338	11.31	ppbv	98
58)	1,3,5-Trimethylbenzene	17.68	105	1309721	11.03	ppbv	99
59)	1,2,4-Trimethylbenzene	18.26	105	1257593	11.32	ppbv	99
60)	1,3-Dichlorobenzene	18.82	146	796951	10.92	ppbv	98
61)	1,4-Dichlorobenzene	18.96	146	756898	10.75	ppbv	99
62)	Benzyl chloride	19.17	91	859429	11.11	ppbv	99
63)	1,2-Dichlorobenzene	19.60	146	700377	10.95	ppbv	98
64)	1,2,4-Trichlorobenzene	22.76	180	206901	8.90	ppbv	97
65)	Hexachlorobutadiene	22.95	225	311908	9.98	ppbv	99
66)	Naphthalene	23.44	128	418266	9.09	ppbv	99

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060112\06011204.D Vial: 3
Acq On : 1 Jun 2012 7:07 pm Operator: RACHEL HILL
Sample : CCV VOA1 060112 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 1 19:31 2012 Quant Results File: 053112V1.RES

Method : C:\HPCHEM\1\METHODS\053112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jun 01 09:18:38 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: **VOA1_120604A** **Run No.:** 49102

Analytical Run Date: 6/4/2012 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

Calibration ID: 49025 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: PR by RD2 on 05june12 060812rsl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 060412	BFB_TUNE	TUNE	R49102	6/4/2012 7:57:00 AM	Robert Lynch		
CCV VOA1 060412	EPA_TO15	CCV	R49102	6/4/2012 9:30:00 AM	Robert Lynch		
RLVS VOA1 060412	EPA_TO15	RLVS	R49102	6/4/2012 10:13:00 AM	Robert Lynch		
MBLK VOA1 060412	EPA_TO15	MBLK	R49102	6/4/2012 11:02:00 AM	Robert Lynch		
1205939-034A	EPA_TO15	SAMP	R49102	6/4/2012 11:53:00 AM	Robert Lynch		
1205939-037A	EPA_TO15	SAMP	R49102	6/4/2012 1:19:00 PM	Robert Lynch		
1205939-036A	EPA_TO15	SAMP	R49102	6/4/2012 3:30:00 PM	Robert Lynch		
1205939-039A	EPA_TO15	SAMP	R49102	6/4/2012 4:56:00 PM	Robert Lynch		
1205939-038A	EPA_TO15	SAMP	R49102	6/4/2012 5:44:00 PM	Robert Lynch		
1205939-044A	EPA_TO15	SAMP	R49102	6/4/2012 10:57:00 PM	Robert Lynch		
1205939-045A	EPA_TO15	SAMP	R49102	6/4/2012 11:42:00 PM	Robert Lynch		
1205939-035A	EPA_TO15	SAMP	R49102	6/5/2012 12:23:00 AM	Robert Lynch		
1205939-035ADUP	EPA_TO15	DUP	R49102	6/5/2012 1:05:00 AM	Robert Lynch		
1205939-040A	EPA_TO15	SAMP	R49102	6/5/2012 1:46:00 AM	Robert Lynch		
1205939-041A	EPA_TO15	SAMP	R49102	6/5/2012 2:28:00 AM	Robert Lynch		
1205939-042A	EPA_TO15	SAMP	R49102	6/5/2012 3:52:00 AM	Robert Lynch		
1205939-043A	EPA_TO15	SAMP	R49102	6/5/2012 4:34:00 AM	Robert Lynch		
1205939-044A	EPA_TO15	SAMP	R49102	6/5/2012 5:15:00 AM	Robert Lynch		
1205939-045A	EPA_TO15	SAMP	R49102	6/5/2012 5:57:00 AM	Robert Lynch		
RLVS2 VOA1 06041	EPA_TO15	RLVS	R49102	6/5/2012 6:39:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

13-Jun-12

RunNo 49102

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
959693	BFB VOA1 060412	BFB_TUNE	TUNE	.\1\DATA\060412	6/4/2012 7:57:00	1	R49102		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		89.7	89.7		100	0	0	0	0	0	90%	50	120	0%	
175	M		7.3	7.3		100	0	0	0	0	0	7%	4	9	0%	
176	M		97.3	97.3		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.8	6.8		100	0	0	0	0	0	7%	5	9	0%	
50	M		16.3	16.3		100	0	0	0	0	0	16%	8	40	0%	
75	M		46.8	46.8		100	0	0	0	0	0	47%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
959713	CCV VOA1 060412	EPA_TO15	CCV	.\1\DATA\060412	6/4/2012 9:30:00	1	R49102		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	11.17	11.17		9.6	0	0	0.107	1	50	116%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	11.55	11.55		10	0	0	0.211	1	50	116%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	11.09	11.09		9.8	0	0	0.108	1	50	113%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	11.73	11.73		9.8	0	0	0.2	1	50	120%	70	130	0%	
1,1-Dichloroethane	A	ppbv	11.05	11.05		9.7	0	0	0.111	1	50	114%	70	130	0%	
1,1-Dichloroethene	A	ppbv	11.17	11.17		9.9	0	0	0.097	1	50	113%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	11.12	11.12		9.1	0	0	0.271	1	50	122%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	11.3	11.3		9.8	0	0	0.245	1	50	115%	70	130	0%	
1,2-Dibromoethane	A	ppbv	11.59	11.59		9.6	0	0	0.186	1	50	121%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	11.37	11.37		9.7	0	0	0.208	1	50	117%	70	130	0%	
1,2-Dichloroethane	A	ppbv	11.55	11.55		9.7	0	0	0.196	1	50	119%	70	130	0%	
1,2-Dichloropropane	A	ppbv	11.95	11.95		9.8	0	0	0.224	1	50	122%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	11.07	11.07		9.7	0	0	0.24	1	50	114%	70	130	0%	
1,3-Butadiene	A	ppbv	10.04	10.04		9.8	0	0	0.152	1	50	102%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	11.33	11.33		9.7	0	0	0.202	1	50	117%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
959713	CCV VOA1 060412	EPA_TO15	CCV	.\1\DATA\060412	6/4/2012 9:30:00	1	R49102		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	11.35	11.35		9.6	0	0	0.194	1	50	118%	70	130	0%	
1,4-Dioxane	A	ppbv	11.76	11.76		9.6	0	0	0.128	1	50	123%	70	130	0%	
2-Butanone	A	ppbv	12.25	12.25		9.9	0	0	0.287	1	50	124%	70	130	0%	
2-Hexanone	A	ppbv	12.18	12.18		9.8	0	0	0.135	1	50	124%	70	130	0%	
2-Propanol	A	ppbv	11.96	11.96		10.1	0	0	0.329	1	50	118%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	11.94	11.94		10	0	0	0.157	1	50	119%	70	130	0%	
Acetone	A	ppbv	11.87	11.87		10	0	0	0.43	1	50	119%	70	130	0%	
Benzene	A	ppbv	11.45	11.45		9.6	0	0	0.126	1	50	119%	70	130	0%	
Benzyl chloride	A	ppbv	11.79	11.79		9.7	0	0	0.155	1	50	122%	70	130	0%	
Bromodichloromethane	A	ppbv	11.18	11.18		9.6	0	0	0.156	1	50	116%	70	130	0%	
Bromoform	A	ppbv	11.55	11.55		9.6	0	0	0.197	1	50	120%	70	130	0%	
Bromomethane	A	ppbv	10.27	10.27		9.3	0	0	0.075	1	50	110%	70	130	0%	
Carbon disulfide	A	ppbv	10.91	10.91		9.7	0	0	0.093	1	50	112%	70	130	0%	
Carbon tetrachloride	A	ppbv	11.06	11.06		9.5	0	0	0.114	1	50	116%	70	130	0%	
Chlorobenzene	A	ppbv	11.78	11.78		9.9	0	0	0.275	1	50	119%	70	130	0%	
Chlorodibromomethane	A	ppbv	11.72	11.72		9.2	0	0	0.165	1	50	127%	70	130	0%	
Chloroethane	A	ppbv	9.95	9.95		9.8	0	0	0.063	1	50	102%	70	130	0%	
Chloroform	A	ppbv	11.32	11.32		9.4	0	0	0.126	1	50	120%	70	130	0%	
Chloromethane	A	ppbv	10.25	10.25		9.8	0	0	0.104	1	50	105%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	11.34	11.34		9.8	0	0	0.107	1	50	116%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	11.69	11.69		9.5	0	0	0.166	1	50	123%	70	130	0%	
Cyclohexane	A	ppbv	11.3	11.3		9.8	0	0	0.684	2	50	115%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.86	9.86		9.2	0	0	0.086	1	50	107%	70	130	0%	
Ethanol	A	ppbv	11	11		9.2	0	0	1.962	5	50	120%	70	130	0%	
Ethyl acetate	A	ppbv	12.18	12.18		9.8	0	0	0.157	1	50	124%	70	130	0%	
Ethylbenzene	A	ppbv	11.6	11.6		9.8	0	0	0.737	2	50	118%	70	130	0%	
Heptane	A	ppbv	11.77	11.77		9.9	0	0	0.249	1	50	119%	70	130	0%	
Hexachlorobutadiene	A	ppbv	11.73	11.73		9.4	0	0	0.374	2	50	125%	70	130	0%	
m,p-Xylene	A	ppbv	23.14	23.14		19.2	0	0	0.524	2	100	121%	70	130	0%	
Methylene chloride	A	ppbv	11	11		10	0	0	2.077	5	50	110%	70	130	0%	
n-Hexane	A	ppbv	11.62	11.62		10.1	0	0	0.692	2	50	115%	70	130	0%	
Naphthalene	A	ppbv	11.74	11.74		9.2	0	0	0.247	1	50	128%	70	130	0%	
o-Xylene	A	ppbv	11.81	11.81		10	0	0	0.258	1	50	118%	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
959713	CCV VOA1 060412	EPA_TO15	CCV	.\1\DATA\060412	6/4/2012 9:30:00	1	R49102		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	11.66	11.66		9.8	0	0	0.263	1	50	119%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	12.5	12.5		9.9	0	0	0.228	1	50	126%	70	130	0%	
Tetrachloroethene	A	ppbv	11.1	11.1		9.6	0	0	0.148	1	50	116%	70	130	0%	
Tetrahydrofuran	A	ppbv	12.02	12.02		10	0	0	0.201	1	50	120%	70	130	0%	
Toluene	A	ppbv	11.89	11.89		9.8	0	0	0.158	1	50	121%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	11.31	11.31		9.8	0	0	0.117	1	50	115%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	11.25	11.25		9.1	0	0	0.171	1	50	124%	70	130	0%	
Trichloroethene	A	ppbv	11.29	11.29		9.6	0	0	0.119	1	50	118%	70	130	0%	
Trichlorofluoromethane	A	ppbv	10.63	10.63		9.6	0	0	0.148	1	50	111%	70	130	0%	
Vinyl acetate	A	ppbv	12.82	12.82		9.9	0	0	0.266	1	50	129%	70	130	0%	
Vinyl chloride	A	ppbv	9.54	9.54		9.4	0	0	0.072	1	50	101%	70	130	0%	
Xylenes, Total	C	ppbv	34.95	34.95		29.2	0	0	0.782	3	150	120%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	12.47	12.47		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
959695	RLVS VOA1 060412	EPA_TO15	RLVS	.\1\DATA\060412	6/4/2012 10:13:0	1	R49102		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	1.14	1.14		1	0	0	0.211	1	50	114%	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	0.95	0.95		0.98	0	0	0.2	1	50	97%	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	1.04	1.04		0.99	0	0	0.097	1	50	105%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.24	1.24		0.91	0	0	0.271	1	50	136%	70	130	0%	S
1,2,4-Trimethylbenzene	A	ppbv	1.16	1.16		0.98	0	0	0.245	1	50	118%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.9	0.9		0.96	0	0	0.186	1	50	94%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.22	1.22		0.97	0	0	0.208	1	50	126%	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\060412\06041203.D Vial: 4
Acq On : 4 Jun 2012 9:30 am Operator: RACHEL HILL
Sample : CCV VOA1 060412 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\053112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jun 01 09:18:38 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	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	128	0.00
2	T	Propylene	0.813	0.866	-6.5	126	0.00
3	T	Dichlorodifluoromethane	3.079	3.300	-7.2	125	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.303	2.516	-9.2	129	0.00
5	T	Chloromethane	0.928	1.002	-8.0	122	0.00
6	T	Vinyl chloride	1.049	1.064	-1.4	112	0.00
7	T	1,3-Butadiene	0.727	0.745	-2.5	110	0.00
8	T	Bromomethane	1.112	1.228	-10.4	128	0.00
9	T	Chloroethane	0.591	0.639	-8.1	121	0.00
10	T	Trichlorofluoromethane	2.936	3.250	-10.7	125	0.00
11	T	Ethanol	0.315	0.376	-19.4	130	0.00
12	T	Freon113	1.993	2.255	-13.1	122	0.00
13	T	1,1-Dichloroethene	1.379	1.556	-12.8	122	0.00
14	T	Acetone	1.332	1.581	-18.7	120	0.00
15	T	Carbon disulfide	2.400	2.699	-12.5	124	0.00
16	T	2-Propanol	1.279	1.515	-18.5	128	0.00
17	T	Methylene chloride	1.022	1.124	-10.0	121	0.00
18	T	tert-Butyl Methyl Ether	2.198	2.776	-26.3	124	0.00
19	T	trans-1,2-Dichloroethene	1.262	1.456	-15.4	123	0.00
20	T	n-Hexane	1.399	1.609	-15.0	122	0.00
21	T	1,1-Dichloroethane	1.713	1.952	-14.0	121	0.00
22	T	Vinyl acetate	2.035	2.636	-29.5	122	0.00
23	T	cis-1,2-Dichloroethene	1.036	1.200	-15.8	122	0.00
24	T	2-Butanone	1.404	1.737	-23.7	120	0.00
25	T	Ethyl acetate	1.735	2.156	-24.3	121	0.00
26	T	Tetrahydrofuran	0.898	1.079	-20.2	119	0.00
27	T	Chloroform	1.950	2.252	-15.5	121	0.00
28	T	1,1,1-Trichloroethane	2.105	2.449	-16.3	123	0.00
29	T	Cyclohexane	1.419	1.636	-15.3	120	0.00
30	T	Carbon tetrachloride	2.325	2.706	-16.4	122	0.00
31	T	Benzene	2.740	3.269	-19.3	120	0.00
32	T	1,2-Dichloroethane	1.133	1.348	-19.0	119	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	126	0.00
34	T	Heptane	0.486	0.578	-18.9	120	0.00
35	T	Trichloroethene	0.444	0.521	-17.3	125	0.00
36	T	1,2-Dichloropropane	0.304	0.371	-22.0	120	0.00
37	T	1,4-Dioxane	0.175	0.215	-22.9	126	0.00
38	T	Bromodichloromethane	0.631	0.735	-16.5	121	0.00
39	T	cis-1,3-Dichloropropene	0.487	0.599	-23.0	121	0.00
40	T	4-Methyl-2-pentanone	0.208	0.248	-19.2	119	0.00
41	T	Toluene	1.030	1.250	-21.4	120	0.00
42	T	trans-1,3-Dichloropropene	0.451	0.557	-23.5	122	0.00
43	T	1,1,2-Trichloroethane	0.358	0.428	-19.6	121	0.00
44	T	Tetrachloroethene	0.582	0.673	-15.6	123	0.00
45	T	2-Hexanone	0.404	0.502	-24.3	120	0.00
46	T	Chlorodibromomethane	0.660	0.789	-19.5	122	0.00
47	T	1,2-Dibromoethane	0.559	0.675	-20.8	121	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	126	0.00
49	T	Chlorobenzene	0.880	1.048	-19.1	121	0.00
50	T	Ethylbenzene	1.411	1.670	-18.4	118	0.00
51	T	m,p-Xylene	1.097	1.322	-20.5	117	0.00
52	T	o-Xylene	1.117	1.319	-18.1	119	0.00
53	T	Styrene	0.860	1.023	-19.0	120	0.00
54	T	Bromoform	0.634	0.763	-20.3	124	0.00
55	S	4-Bromofluorobenzene	0.581	0.579	0.3	125	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\060412\06041203.D Vial: 4
Acq On : 4 Jun 2012 9:30 am Operator: RACHEL HILL
Sample : CCV VOA1 060412 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\053112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jun 01 09:18:38 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	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.697	0.805	-15.5	119	0.00
57	T	4-Ethyltoluene	1.452	1.679	-15.6	119	0.00
58	T	1,3,5-Trimethylbenzene	1.242	1.417	-14.1	118	0.00
59	T	1,2,4-Trimethylbenzene	1.162	1.340	-15.3	119	0.00
60	T	1,3-Dichlorobenzene	0.763	0.891	-16.8	123	0.00
61	T	1,4-Dichlorobenzene	0.736	0.870	-18.2	125	0.00
62	T	Benzyl chloride	0.809	0.984	-21.6	127	0.00
63	T	1,2-Dichlorobenzene	0.669	0.785	-17.3	125	0.00
64	T	1,2,4-Trichlorobenzene	0.243	0.297	-22.2	134	0.00
65	T	Hexachlorobutadiene	0.327	0.408	-24.8	128	0.00
66		Naphthalene	0.481	0.614	-27.7	141	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060412\06041203.D Vial: 4
Acq On : 4 Jun 2012 9:30 am Operator: RACHEL HILL
Sample : CCV VOA1 060412 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 4 9:55 2012 Quant Results File: 053112V1.RES

Quant Method : C:\HPCHEM\1\METHODS\053112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jun 01 09:18:38 2012
Response via : Initial Calibration
DataAcq Meth : 053112V1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.58	130	464466	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.68	114	1495615	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.53	117	1334724	12.50	ppbv	0.00

System Monitoring Compounds						
55) 4-Bromofluorobenzene	17.18	95	773301	12.47	ppbv	0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 99.76%			

Target Compounds						Qvalue
2) Propylene	5.51	41	328125	10.86	ppbv	98
3) Dichlorodifluoromethane	5.58	85	1128054	9.86	ppbv	100
4) 1,2-Dichloro-1,2,2,2-tetra	5.84	135	888155	10.38	ppbv #	87
5) Chloromethane	6.00	50	353551	10.25	ppbv	98
6) Vinyl chloride	6.21	62	371705	9.54	ppbv	99
7) 1,3-Butadiene	6.26	39	271273	10.04	ppbv	97
8) Bromomethane	6.84	94	424462	10.27	ppbv	98
9) Chloroethane	7.00	64	218511	9.95	ppbv	99
10) Trichlorofluoromethane	7.32	101	1159272	10.63	ppbv	99
11) Ethanol	7.56	45	128619	11.00	ppbv	100
12) Freon113	7.98	101	821216	11.09	ppbv	95
13) 1,1-Dichloroethene	8.09	61	572338	11.17	ppbv	99
14) Acetone	8.18	43	587462	11.87	ppbv	99
15) Carbon disulfide	8.46	76	972639	10.91	ppbv #	99
16) 2-Propanol	8.23	45	568419	11.96	ppbv #	1
17) Methylene chloride	8.75	49	417608	11.00	ppbv	98
18) tert-Butyl Methyl Ether	8.95	73	1021315	12.50	ppbv	98
19) trans-1,2-Dichloroethene	9.03	61	530148	11.31	ppbv	100
20) n-Hexane	9.21	57	603933	11.62	ppbv	97
21) 1,1-Dichloroethane	9.59	63	703436	11.05	ppbv	100
22) Vinyl acetate	9.52	43	969788	12.82	ppbv	99
23) cis-1,2-Dichloroethene	10.27	96	436797	11.34	ppbv	99
24) 2-Butanone	10.24	43	639115	12.25	ppbv	99
25) Ethyl acetate	10.19	43	785160	12.18	ppbv #	100
26) Tetrahydrofuran	10.58	42	400978	12.02	ppbv	95
27) Chloroform	10.60	83	819886	11.32	ppbv	97
28) 1,1,1-Trichloroethane	10.84	97	873639	11.17	ppbv	100
29) Cyclohexane	10.86	56	595906	11.30	ppbv	99
30) Carbon tetrachloride	11.01	117	955361	11.06	ppbv	98
31) Benzene	11.29	78	1166132	11.45	ppbv	100
32) 1,2-Dichloroethane	11.37	62	486011	11.55	ppbv	99
34) Heptane	11.34	43	684706	11.77	ppbv	97
35) Trichloroethene	12.02	130	598932	11.29	ppbv	97
36) 1,2-Dichloropropane	12.38	63	434646	11.95	ppbv	99
37) 1,4-Dioxane	12.45	88	246676	11.76	ppbv	94
38) Bromodichloromethane	12.66	83	844560	11.18	ppbv	98
39) cis-1,3-Dichloropropene	13.21	75	681155	11.69	ppbv	100
40) 4-Methyl-2-pentanone	13.32	58	297106	11.94	ppbv	98
41) Toluene	13.62	91	1465646	11.89	ppbv	99
42) trans-1,3-Dichloropropene	13.93	75	606194	11.25	ppbv	100
43) 1,1,2-Trichloroethane	14.20	97	501705	11.73	ppbv	99
44) Tetrachloroethene	14.32	166	772503	11.10	ppbv	96
45) 2-Hexanone	14.40	43	588731	12.18	ppbv	97
46) Chlorodibromomethane	14.75	129	925091	11.72	ppbv	99
47) 1,2-Dibromoethane	14.98	107	775552	11.59	ppbv	99
49) Chlorobenzene	15.57	112	1107811	11.78	ppbv	99
50) Ethylbenzene	15.61	91	1747601	11.60	ppbv	97
51) m,p-Xylene	15.77	91	2709600	23.14	ppbv	98
52) o-Xylene	16.36	91	1408266	11.81	ppbv	98

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060412\06041203.D Vial: 4
Acq On : 4 Jun 2012 9:30 am Operator: RACHEL HILL
Sample : CCV VOA1 060412 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 4 9:55 2012 Quant Results File: 053112V1.RES

Quant Method : C:\HPCHEM\1\METHODS\053112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jun 01 09:18:38 2012
Response via : Initial Calibration
DataAcq Meth : 053112V1

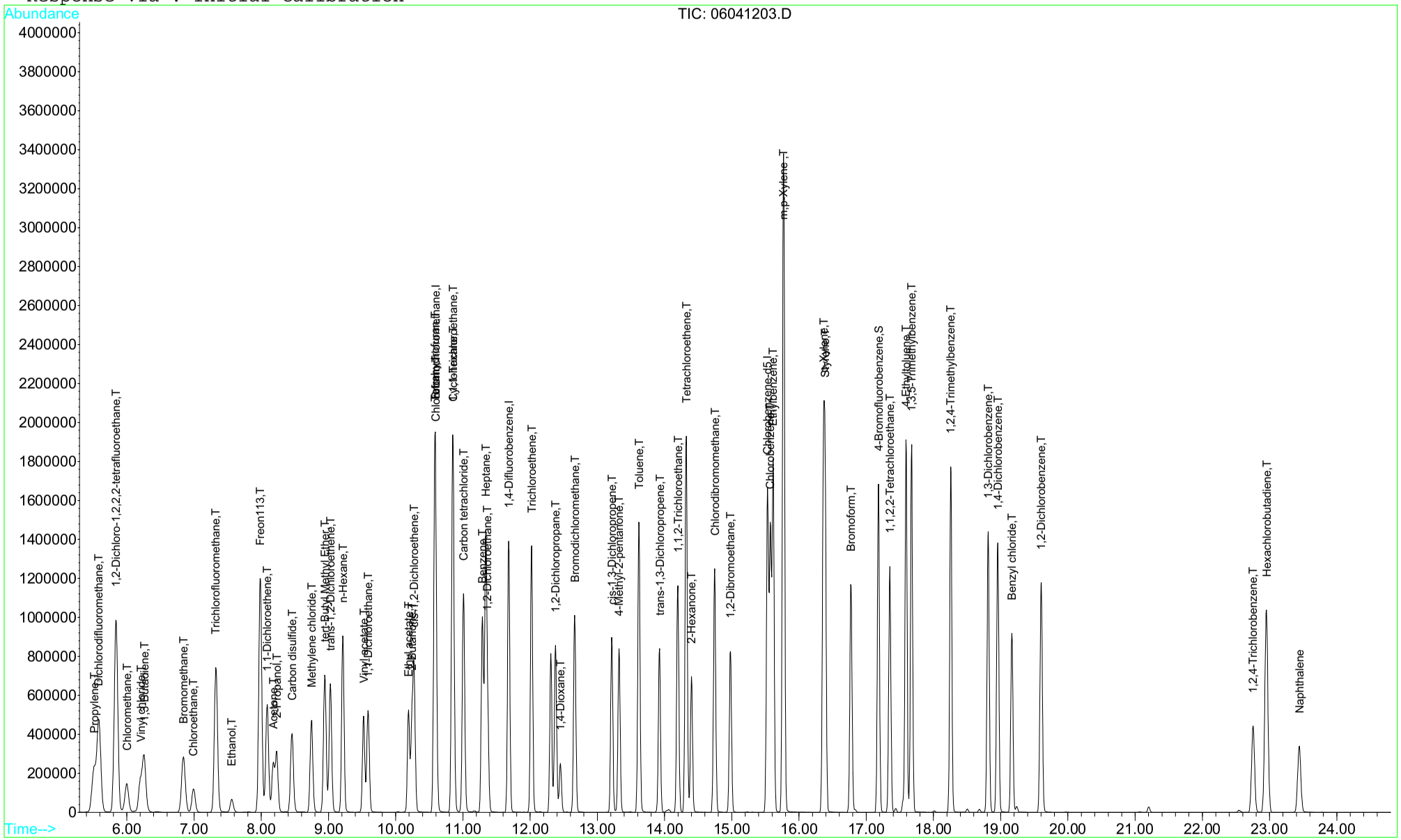
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53)	Styrene	16.39	104	1070043	11.66	ppbv	99
54)	Bromoform	16.78	173	781684	11.55	ppbv	99
56)	1,1,2,2-Tetrachloroethane	17.35	83	860038	11.55	ppbv	98
57)	4-Ethyltoluene	17.59	105	1757397	11.33	ppbv	99
58)	1,3,5-Trimethylbenzene	17.68	105	1467858	11.07	ppbv	100
59)	1,2,4-Trimethylbenzene	18.26	105	1402605	11.30	ppbv	99
60)	1,3-Dichlorobenzene	18.82	146	923159	11.33	ppbv	98
61)	1,4-Dichlorobenzene	18.96	146	892184	11.35	ppbv	98
62)	Benzyl chloride	19.17	91	1019152	11.79	ppbv	99
63)	1,2-Dichlorobenzene	19.61	146	812606	11.37	ppbv	98
64)	1,2,4-Trichlorobenzene	22.75	180	288568	11.12	ppbv	97
65)	Hexachlorobutadiene	22.95	225	409532	11.73	ppbv	99
66)	Naphthalene	23.44	128	603308	11.74	ppbv	100

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060412\06041203.D Vial: 4
Acq On : 4 Jun 2012 9:30 am Operator: RACHEL HILL
Sample : CCV VOA1 060412 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 4 9:55 2012 Quant Results File: 053112V1.RES

Method : C:\HPCHEM\1\METHODS\053112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jun 01 09:18:38 2012
Response via : Initial Calibration



Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\052112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue May 22 11:27:50 2012
Response via : Initial Calibration

Calibration Files
2 =05211203.D 4 =05211204.D 5 =05211205.D
6 =05211206.D 7 =05211207.D 8 =05211208.D

		Compound	2	4	5	6	7	8	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------							
2)	T	Propylene	0.900	0.964	0.910	0.873	0.837	0.800	0.868	7.20
3)	T	Dichlorodifluoromet	3.267	3.621	3.411	3.254	3.094	2.919	3.197	8.71
4)	T	1,2-Dichloro-1,2,2,	2.478	2.724	2.586	2.465	2.366	2.213	2.424	8.46
5)	T	Chloromethane	0.980	1.093	1.031	0.969	0.915	0.848	0.950	10.42
6)	T	Vinyl chloride	1.037	1.179	1.083	1.012	0.944	0.872	0.994	12.12
7)	T	1,3-Butadiene	0.741	0.814	0.742	0.677	0.634	0.575	0.676	14.35
8)	T	Bromomethane	1.174	1.347	1.264	1.211	1.133	1.069	1.178	9.02
9)	T	Chloroethane	0.619	0.715	0.681	0.656	0.598	0.564	0.628	9.31
10)	T	Trichlorofluorometh	3.228	3.577	3.384	3.230	2.908	2.715	3.080	12.29
11)	T	Ethanol	0.373	0.428	0.410	0.380	0.329	0.307	0.362	13.39
12)	T	Freon113	2.157	2.477	2.318	2.221	1.921	1.770	2.072	14.66
13)	T	1,1-Dichloroethene	1.531	1.730	1.611	1.525	1.346	1.269	1.461	12.98
14)	T	Acetone	1.786	1.779	1.677	1.532	1.261	1.160	1.475	19.54
15)	T	Carbon disulfide	2.734	3.021	2.841	2.658	2.389	2.237	2.573	12.81
16)	T	2-Propanol	1.403	1.710	1.617	1.488	1.332	1.247	1.430	13.04
17)	T	Methylene chloride	1.254	1.243	1.168	1.103	0.959	0.896	1.070	15.25
18)	T	tert-Butyl Methyl E	2.648	3.165	2.978	2.705	2.210	2.030	2.527	18.62
19)	T	trans-1,2-Dichloroe	1.400	1.620	1.523	1.448	1.261	1.177	1.365	13.45
20)	T	n-Hexane	1.586	1.782	1.692	1.591	1.392	1.296	1.507	14.05
21)	T	1,1-Dichloroethane	1.853	2.183	2.061	1.934	1.679	1.576	1.828	13.76
22)	T	Vinyl acetate	1.720	2.986	2.814	2.578	2.081	1.902	2.347	22.07
23)	T	cis-1,2-Dichloroeth	1.118	1.327	1.248	1.182	1.025	0.957	1.111	13.66
24)	T	2-Butanone	1.507	1.905	1.810	1.633	1.409	1.226	1.512	19.52
25)	T	Ethyl acetate	1.868	2.509	2.356	2.195	1.737	1.649	1.973	19.39
26)	T	Tetrahydrofuran	0.956	1.224	1.150	1.049	0.875	0.780	0.964	19.53
27)	T	Chloroform	2.072	2.487	2.326	2.165	1.878	1.691	2.025	16.64
28)	T	1,1,1-Trichloroetha	2.240	2.724	2.560	2.388	2.058	1.848	2.214	17.08
29)	T	Cyclohexane	1.613	1.830	1.705	1.606	1.381	1.222	1.490	18.37
30)	T	Carbon tetrachlorid	2.319	3.020	2.857	2.670	2.346	2.128	2.472	15.69
31)	T	Benzene	3.123	3.677	3.410	3.146	2.598	2.382	2.940	18.36
32)	T	1,2-Dichloroethane	1.207	1.545	1.461	1.331	1.112	1.011	1.229	18.50
33)	I	1,4-Difluorobenzene	----------ISTD----------							
34)	T	Heptane	0.546	0.666	0.622	0.574	0.495	0.434	0.528	20.10
35)	T	Trichloroethene	0.463	0.582	0.555	0.519	0.459	0.422	0.485	14.40
36)	T	1,2-Dichloropropane	0.325	0.426	0.400	0.367	0.308	0.282	0.338	18.14
37)	T	1,4-Dioxane	0.196	0.240	0.235	0.214	0.183	0.168	0.200	15.68
38)	T	Bromodichloromethan	0.636	0.837	0.796	0.736	0.654	0.590	0.683	16.40
39)	T	cis-1,3-Dichloropro	0.469	0.688	0.649	0.597	0.507	0.472	0.545	18.20
40)	T	4-Methyl-2-pentanon	0.210	0.289	0.276	0.252	0.218	0.204	0.234	16.21
41)	T	Toluene	1.171	1.397	1.307	1.197	1.007	0.909	1.114	19.11
42)	T	trans-1,3-Dichlorop	0.397	0.636	0.603	0.554	0.481	0.447	0.504	18.72
43)	T	1,1,2-Trichloroetha	0.364	0.484	0.451	0.421	0.362	0.334	0.389	16.50
44)	T	Tetrachloroethene	0.577	0.749	0.712	0.660	0.594	0.552	0.620	14.59
45)	T	2-Hexanone	0.416	0.576	0.549	0.496	0.421	0.392	0.458	18.15
46)	T	Chlorodibromomethan	0.616	0.903	0.849	0.785	0.683	0.628	0.718	17.96
47)	T	1,2-Dibromoethane	0.565	0.763	0.720	0.659	0.567	0.524	0.609	17.64
48)	I	Chlorobenzene-d5	----------ISTD----------							
49)	T	Chlorobenzene	0.939	1.201	1.132	1.033	0.900	0.821	0.964	17.66
50)	T	Ethylbenzene	1.650	1.913	1.781	1.612	1.384	1.222	1.513	20.82
51)	T	m,p-Xylene	1.311	1.491	1.374	1.214	1.027	0.867	1.137	25.74
52)	T	o-Xylene	1.326	1.521	1.413	1.273	1.102	0.969	1.204	20.75
53)	T	Styrene	0.841	1.181	1.108	1.012	0.888	0.801	0.932	18.79
54)	T	Bromoform	0.585	0.884	0.837	0.769	0.678	0.626	0.705	18.03
55)	S	4-Bromofluorobenzen	0.604	0.602	0.602	0.599	0.605	0.606	0.604	0.53
56)	T	1,1,2,2-Tetrachloro	0.881	0.937	0.873	0.789	0.694	0.622	0.762	19.35
57)	T	4-Ethyltoluene	1.865	1.932	1.798	1.633	1.427	1.270	1.571	20.62

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

Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\052112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue May 22 11:27:50 2012
Response via : Initial Calibration

Calibration Files
2 =05211203.D 4 =05211204.D 5 =05211205.D
6 =05211206.D 7 =05211207.D 8 =05211208.D

		Compound	2	4	5	6	7	8	Avg	%RSD
58)	T	1,3,5-Trimethylbenz	1.664	1.638	1.525	1.370	1.210	1.076	1.343	21.28
59)	T	1,2,4-Trimethylbenz	1.502	1.540	1.436	1.308	1.162	1.038	1.268	19.44
60)	T	1,3-Dichlorobenzene	0.935	1.003	0.941	0.860	0.771	0.715	0.838	15.77
61)	T	1,4-Dichlorobenzene	0.883	0.978	0.910	0.836	0.747	0.695	0.811	15.55
62)	T	Benzyl chloride	0.465	1.140	1.063	0.966	0.860	0.792	0.881	27.32
63)	T	1,2-Dichlorobenzene	0.894	0.895	0.819	0.746	0.671	0.618	0.743	18.04
64)	T	1,2,4-Trichlorobenz	0.304	0.316	0.307	0.284	0.246	0.245	0.278	11.74
65)	T	Hexachlorobutadiene		0.450	0.419	0.387	0.334	0.317	0.368	16.28
66)		Naphthalene	0.620	0.619	0.603	0.552	0.467	0.463	0.537	15.13

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

Compound List Report VOA 1

Method : C:\HPCHEM\1\METHODS\052112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue May 22 11:27:50 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	10.59	1.000	A	2	A	B
2	T	Propylene	41	5.51	0.521	A	2	A	B
3	T	Dichlorodifluoromethane	85	5.59	0.528	A	3	A	B
4	T	1,2-Dichloro-1,2,2,2-tetrafluo	135	5.84	0.551	A	2	A	B
5	T	Chloromethane	50	6.00	0.567	A	3	A	B
6	T	Vinyl chloride	62	6.20	0.586	A	2	A	B
7	T	1,3-Butadiene	39	6.26	0.591	A	2	A	B
8	T	Bromomethane	94	6.84	0.646	A	3	A	B
9	T	Chloroethane	64	6.99	0.661	A	3	A	B
10	T	Trichlorofluoromethane	101	7.33	0.692	A	3	A	B
11	T	Ethanol	45	7.56	0.714	A	2	A	B
12	T	Freon113	101	7.99	0.754	A	2	A	B
13	T	1,1-Dichloroethene	61	8.09	0.764	A	2	A	B
14	T	Acetone	43	8.18	0.773	A	2	A	B
15	T	Carbon disulfide	76	8.46	0.799	A	3	A	B
16	T	2-Propanol	45	8.23	0.778	A	2	A	B
17	T	Methylene chloride	49	8.75	0.827	A	2	A	B
18	T	tert-Butyl Methyl Ether	73	8.95	0.845	A	2	A	B
19	T	trans-1,2-Dichloroethene	61	9.03	0.853	A	2	A	B
20	T	n-Hexane	57	9.22	0.871	A	3	A	B
21	T	1,1-Dichloroethane	63	9.59	0.906	A	3	A	B
22	T	Vinyl acetate	43	9.52	0.900	A	2	A	B
23	T	cis-1,2-Dichloroethene	96	10.28	0.971	A	3	A	B
24	T	2-Butanone	43	10.24	0.967	A	2	A	B
25	T	Ethyl acetate	43	10.19	0.963	A	3	A	B
26	T	Tetrahydrofuran	42	10.58	0.999	A	2	A	B
27	T	Chloroform	83	10.60	1.001	A	2	A	B
28	T	1,1,1-Trichloroethane	97	10.85	1.025	A	3	A	B
29	T	Cyclohexane	56	10.86	1.026	A	2	A	B
30	T	Carbon tetrachloride	117	11.01	1.040	A	3	A	B
31	T	Benzene	78	11.29	1.067	A	3	A	B
32	T	1,2-Dichloroethane	62	11.37	1.074	A	3	A	B
33	I	1,4-Difluorobenzene	114	11.68	1.000	A	2	A	B
34	T	Heptane	43	11.34	0.970	A	3	A	B
35	T	Trichloroethene	130	12.02	1.029	A	3	A	B
36	T	1,2-Dichloropropane	63	12.38	1.060	A	3	A	B
37	T	1,4-Dioxane	88	12.45	1.066	A	2	A	B
38	T	Bromodichloromethane	83	12.66	1.084	A	2	A	B
39	T	cis-1,3-Dichloropropene	75	13.22	1.131	A	2	A	B
40	T	4-Methyl-2-pentanone	58	13.33	1.141	A	3	A	B
41	T	Toluene	91	13.62	1.166	A	2	A	B
42	T	trans-1,3-Dichloropropene	75	13.92	1.192	A	3	A	B
43	T	1,1,2-Trichloroethane	97	14.19	1.215	A	3	A	B
44	T	Tetrachloroethene	166	14.33	1.226	A	3	A	B
45	T	2-Hexanone	43	14.40	1.233	A	2	A	B
46	T	Chlorodibromomethane	129	14.74	1.262	A	2	A	B
47	T	1,2-Dibromoethane	107	14.98	1.282	A	2	A	B
48	I	Chlorobenzene-d5	117	15.53	1.000	A	2	A	B
49	T	Chlorobenzene	112	15.58	1.003	A	3	A	B
50	T	Ethylbenzene	91	15.62	1.005	A	2	A	B
51	T	m,p-Xylene	91	15.77	1.015	A	2	A	B
52	T	o-Xylene	91	16.37	1.054	A	2	A	B
53	T	Styrene	104	16.39	1.055	A	3	A	B
54	T	Bromoform	173	16.77	1.080	A	3	A	B
55	S	4-Bromofluorobenzene	95	17.18	1.106	A	2	A	B
56	T	1,1,2,2-Tetrachloroethane	83	17.35	1.117	A	2	A	B
57	T	4-Ethyltoluene	105	17.59	1.133	A	1	A	B
58	T	1,3,5-Trimethylbenzene	105	17.67	1.138	A	2	A	B
59	T	1,2,4-Trimethylbenzene	105	18.26	1.175	A	2	A	B
60	T	1,3-Dichlorobenzene	146	18.81	1.211	A	3	A	B
61	T	1,4-Dichlorobenzene	146	18.96	1.221	A	3	A	B
62	T	Benzyl chloride	91	19.17	1.234	A	2	A	B
63	T	1,2-Dichlorobenzene	146	19.60	1.262	A	3	A	B
64	T	1,2,4-Trichlorobenzene	180	22.76	1.465	A	3	A	B
65	T	Hexachlorobutadiene	225	22.96	1.478	A	2	A	B
66		Naphthalene	128	23.44	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

052112V1.M Thu May 24 10:22:48 2012

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\052112\05211211.D Vial: 11
Acq On : 21 May 2012 5:08 pm Operator: RACHEL HILL
Sample : ICV VOA1 052112 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\052112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue May 22 11:27:50 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	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	108	0.00
2	T	Propylene	0.868	0.963	-10.9	108	0.00
3	T	Dichlorodifluoromethane	3.197	3.611	-12.9	108	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.424	2.735	-12.8	109	0.00
5	T	Chloromethane	0.950	1.056	-11.2	104	0.00
6	T	Vinyl chloride	0.994	1.091	-9.8	100	0.00
7	T	1,3-Butadiene	0.676	0.763	-12.9	101	0.00
8	T	Bromomethane	1.178	1.363	-15.7	109	0.00
9	T	Chloroethane	0.628	0.725	-15.4	110	0.00
10	T	Trichlorofluoromethane	3.080	3.606	-17.1	109	0.00
11	T	Ethanol	0.362	0.441	-21.8	111	0.00
12	T	Freon113	2.072	2.494	-20.4	109	0.00
13	T	1,1-Dichloroethene	1.461	1.744	-19.4	109	0.00
14	T	Acetone	1.475	1.804	-22.3	110	0.00
15	T	Carbon disulfide	2.573	3.004	-16.8	107	0.00
16	T	2-Propanol	1.430	1.731	-21.0	109	0.00
17	T	Methylene chloride	1.070	1.250	-16.8	109	0.00
18	T	tert-Butyl Methyl Ether	2.527	3.206	-26.9	109	0.00
19	T	trans-1,2-Dichloroethene	1.365	1.640	-20.1	109	0.00
20	T	n-Hexane	1.507	1.796	-19.2	109	0.00
21	T	1,1-Dichloroethane	1.828	2.193	-20.0	109	0.00
22	T	Vinyl acetate	2.347	3.037	-29.4	110	0.00
23	T	cis-1,2-Dichloroethene	1.111	1.331	-19.8	108	0.00
24	T	2-Butanone	1.512	1.933	-27.8	110	0.00
25	T	Ethyl acetate	1.973	2.559	-29.7	110	0.00
26	T	Tetrahydrofuran	0.964	1.212	-25.7	107	0.00
27	T	Chloroform	2.025	2.456	-21.3	107	0.00
28	T	1,1,1-Trichloroethane	2.214	2.703	-22.1	107	0.00
29	T	Cyclohexane	1.490	1.828	-22.7	108	0.00
30	T	Carbon tetrachloride	2.472	2.994	-21.1	107	0.00
31	T	Benzene	2.940	3.654	-24.3	107	0.00
32	T	1,2-Dichloroethane	1.229	1.548	-26.0	108	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	110	0.00
34	T	Heptane	0.528	0.646	-22.3	107	0.00
35	T	Trichloroethene	0.485	0.569	-17.3	108	0.00
36	T	1,2-Dichloropropane	0.338	0.421	-24.6	109	0.00
37	T	1,4-Dioxane	0.200	0.243	-21.5	112	0.00
38	T	Bromodichloromethane	0.683	0.821	-20.2	108	0.00
39	T	cis-1,3-Dichloropropene	0.545	0.675	-23.9	108	0.00
40	T	4-Methyl-2-pentanone	0.234	0.285	-21.8	109	0.00
41	T	Toluene	1.114	1.355	-21.6	107	0.00
42	T	trans-1,3-Dichloropropene	0.504	0.625	-24.0	108	0.00
43	T	1,1,2-Trichloroethane	0.389	0.475	-22.1	108	0.00
44	T	Tetrachloroethene	0.620	0.723	-16.6	106	0.00
45	T	2-Hexanone	0.458	0.569	-24.2	109	0.00
46	T	Chlorodibromomethane	0.718	0.872	-21.4	107	0.00
47	T	1,2-Dibromoethane	0.609	0.747	-22.7	108	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	109	0.00
49	T	Chlorobenzene	0.964	1.179	-22.3	107	0.00
50	T	Ethylbenzene	1.513	1.865	-23.3	106	0.00
51	T	m,p-Xylene	1.137	1.429	-25.7	105	0.00
52	T	o-Xylene	1.204	1.487	-23.5	107	0.00
53	T	Styrene	0.932	1.153	-23.7	107	0.00
54	T	Bromoform	0.705	0.861	-22.1	106	0.00
55	S	4-Bromofluorobenzene	0.604	0.606	-0.3	110	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\052112\05211211.D Vial: 11
Acq On : 21 May 2012 5:08 pm Operator: RACHEL HILL
Sample : ICV VOA1 052112 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\052112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue May 22 11:27:50 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	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.762	0.912	-19.7	106	0.00
57	T	4-Ethyltoluene	1.571	1.891	-20.4	107	0.00
58	T	1,3,5-Trimethylbenzene	1.343	1.594	-18.7	106	0.00
59	T	1,2,4-Trimethylbenzene	1.268	1.508	-18.9	107	0.00
60	T	1,3-Dichlorobenzene	0.838	0.977	-16.6	106	0.00
61	T	1,4-Dichlorobenzene	0.811	0.949	-17.0	106	0.00
62	T	Benzyl chloride	0.881	1.095	-24.3	105	0.00
63	T	1,2-Dichlorobenzene	0.743	0.867	-16.7	106	0.00
64	T	1,2,4-Trichlorobenzene	0.278	0.306	-10.1	106	0.00
65	T	Hexachlorobutadiene	0.368	0.435	-18.2	106	0.00
66		Naphthalene	0.537	0.598	-11.4	106	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052112\05211211.D Vial: 11
Acq On : 21 May 2012 5:08 pm Operator: RACHEL HILL
Sample : ICV VOA1 052112 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: May 22 11:31 2012 Quant Results File: 052112V1.RES

Quant Method : C:\HPCHEM\1\METHODS\052112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue May 22 11:27:50 2012
Response via : Initial Calibration
DataAcq Meth : 052112V1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.59	130	616192	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.68	114	2003654	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.53	117	1740131	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.18	95	1054574	12.55	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 100.40%

Target Compounds						Qvalue
2) Propylene	5.51	41	484407	11.32	ppbv	99
3) Dichlorodifluoromethane	5.59	85	1637720	10.39	ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.84	135	1281034	10.72	ppbv #	87
5) Chloromethane	6.00	50	494538	10.56	ppbv	100
6) Vinyl chloride	6.20	62	505563	10.31	ppbv #	100
7) 1,3-Butadiene	6.26	39	368818	11.07	ppbv	96
8) Bromomethane	6.85	94	624761	10.76	ppbv	98
9) Chloroethane	6.99	64	328981	10.63	ppbv	99
10) Trichlorofluoromethane	7.33	101	1706710	11.24	ppbv	99
11) Ethanol	7.56	45	199843	11.20	ppbv	100
12) Freon113	7.99	101	1204775	11.80	ppbv	96
13) 1,1-Dichloroethene	8.09	61	851059	11.82	ppbv	98
14) Acetone	8.18	43	889176	12.23	ppbv #	95
15) Carbon disulfide	8.46	76	1436266	11.33	ppbv #	100
16) 2-Propanol	8.23	45	861941	12.23	ppbv #	1
17) Methylene chloride	8.74	49	616036	11.68	ppbv	99
18) tert-Butyl Methyl Ether	8.95	73	1564485	12.56	ppbv	98
19) trans-1,2-Dichloroethene	9.03	61	792310	11.78	ppbv	98
20) n-Hexane	9.22	57	894183	12.04	ppbv	97
21) 1,1-Dichloroethane	9.59	63	1048648	11.64	ppbv	100
22) Vinyl acetate	9.52	43	1482200	12.81	ppbv	99
23) cis-1,2-Dichloroethene	10.28	96	643168	11.75	ppbv	98
24) 2-Butanone	10.24	43	943192	12.65	ppbv	99
25) Ethyl acetate	10.19	43	1236405	12.71	ppbv #	99
26) Tetrahydrofuran	10.58	42	597252	12.56	ppbv	95
27) Chloroform	10.60	83	1186358	11.89	ppbv	97
28) 1,1,1-Trichloroethane	10.85	97	1279282	11.72	ppbv	100
29) Cyclohexane	10.86	56	883313	12.03	ppbv	98
30) Carbon tetrachloride	11.01	117	1401998	11.50	ppbv	99
31) Benzene	11.29	78	1729213	11.93	ppbv	100
32) 1,2-Dichloroethane	11.37	62	740428	12.22	ppbv	99
34) Heptane	11.34	43	1025124	12.10	ppbv	97
35) Trichloroethene	12.02	130	876088	11.28	ppbv	98
36) 1,2-Dichloropropane	12.38	63	661526	12.19	ppbv	99
37) 1,4-Dioxane	12.45	88	374165	11.69	ppbv	96
38) Bromodichloromethane	12.66	83	1263563	11.55	ppbv	97
39) cis-1,3-Dichloropropene	13.22	75	1027740	11.76	ppbv	100
40) 4-Methyl-2-pentanone	13.32	58	457002	12.17	ppbv	99
41) Toluene	13.62	91	2128194	11.92	ppbv	100
42) trans-1,3-Dichloropropene	13.93	75	911029	11.27	ppbv	100
43) 1,1,2-Trichloroethane	14.19	97	746181	11.97	ppbv	99
44) Tetrachloroethene	14.33	166	1112495	11.19	ppbv	96
45) 2-Hexanone	14.40	43	894088	12.18	ppbv	96
46) Chlorodibromomethane	14.74	129	1369685	11.90	ppbv	99
47) 1,2-Dibromoethane	14.98	107	1149228	11.76	ppbv	99
49) Chlorobenzene	15.58	112	1624697	12.11	ppbv	99
50) Ethylbenzene	15.62	91	2544841	12.08	ppbv	99
51) m,p-Xylene	15.77	91	3819882	24.13	ppbv	100
52) o-Xylene	16.37	91	2070748	12.35	ppbv	99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052112\05211211.D Vial: 11
Acq On : 21 May 2012 5:08 pm Operator: RACHEL HILL
Sample : ICV VOA1 052112 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: May 22 11:31 2012 Quant Results File: 052112V1.RES

Quant Method : C:\HPCHEM\1\METHODS\052112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue May 22 11:27:50 2012
Response via : Initial Calibration
DataAcq Meth : 052112V1

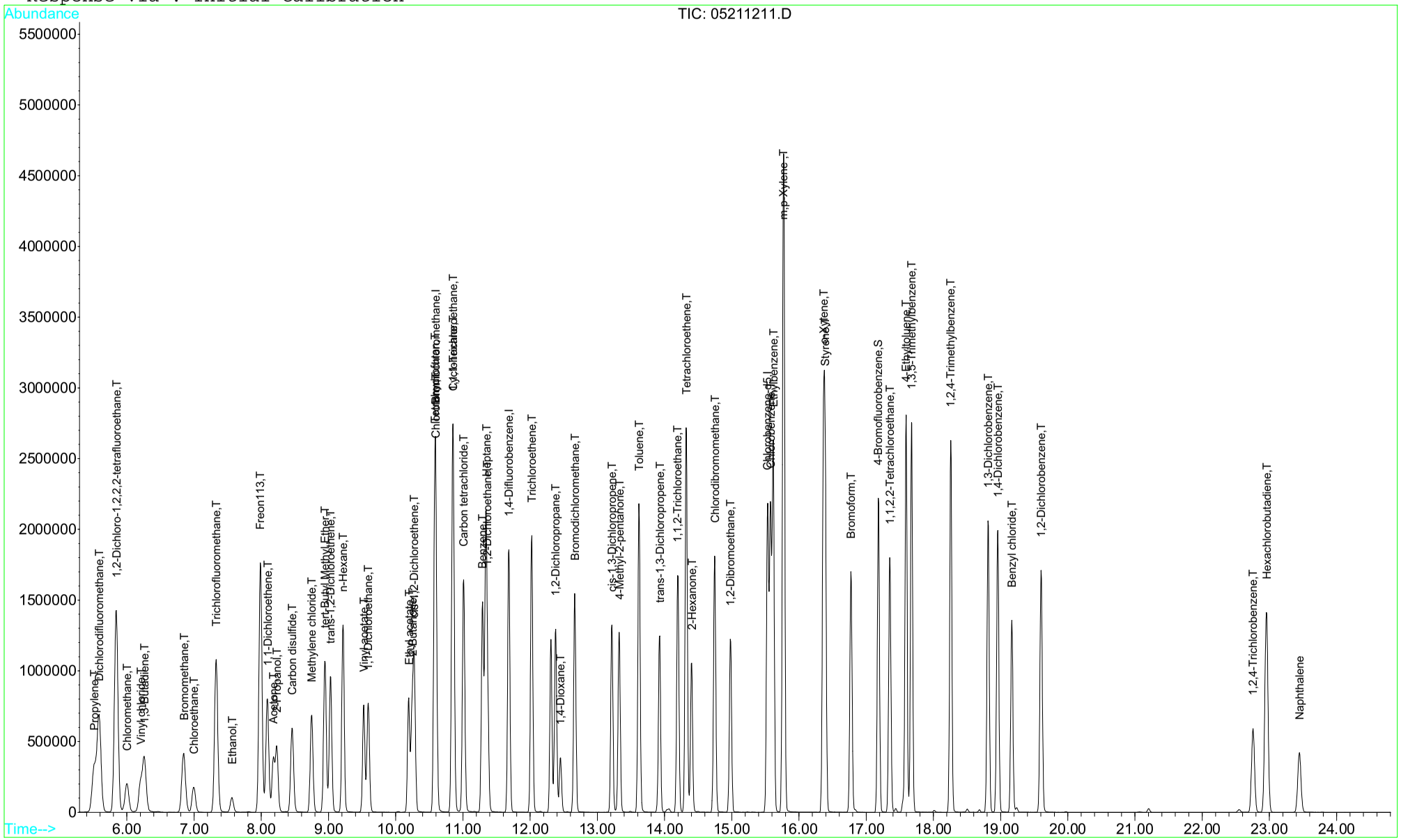
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
53)	Styrene	16.39	104	1573645	12.13 ppbv	99
54)	Bromoform	16.77	173	1150805	11.72 ppbv	99
56)	1,1,2,2-Tetrachloroethane	17.35	83	1269367	11.96 ppbv	97
57)	4-Ethyltoluene	17.59	105	2579430	11.79 ppbv	100
58)	1,3,5-Trimethylbenzene	17.68	105	2151977	11.51 ppbv	99
59)	1,2,4-Trimethylbenzene	18.26	105	2056914	11.65 ppbv	99
60)	1,3-Dichlorobenzene	18.82	146	1319402	11.30 ppbv	100
61)	1,4-Dichlorobenzene	18.96	146	1268903	11.24 ppbv	99
62)	Benzyl chloride	19.17	91	1479055	12.06 ppbv	99
63)	1,2-Dichlorobenzene	19.60	146	1171162	11.33 ppbv	99
64)	1,2,4-Trichlorobenzene	22.76	180	387230	10.02 ppbv	97
65)	Hexachlorobutadiene	22.96	225	569874	11.13 ppbv	99
66)	Naphthalene	23.45	128	766204	10.26 ppbv	99

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052112\05211211.D Vial: 11
Acq On : 21 May 2012 5:08 pm Operator: RACHEL HILL
Sample : ICV VOA1 052112 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: May 22 11:31 2012 Quant Results File: 052112V1.RES

Method : C:\HPCHEM\1\METHODS\052112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue May 22 11:27:50 2012
Response via : Initial Calibration



Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\053112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jun 01 09:18:38 2012
Response via : Initial Calibration

Calibration Files
2 =05311203.D 4 =05311204.D 5 =05311205.D
6 =05311206.D 7 =05311207.D 8 =05311208.D

		Compound	2	4	5	6	7	8	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------							
2)	T	Propylene	0.848	0.884	0.871	0.834	0.783	0.742	0.813	7.59
3)	T	Dichlorodifluoromet	3.256	3.403	3.344	3.166	2.961	2.754	3.079	9.41
4)	T	1,2-Dichloro-1,2,2,	2.289	2.503	2.497	2.363	2.253	2.133	2.303	7.12
5)	T	Chloromethane	1.004	1.057	1.001	0.946	0.887	0.820	0.928	10.99
6)	T	Vinyl chloride	1.129	1.220	1.163	1.078	1.002	0.905	1.049	13.14
7)	T	1,3-Butadiene	0.814	0.868	0.814	0.741	0.683	0.610	0.727	15.66
8)	T	Bromomethane	1.139	1.235	1.221	1.126	1.075	1.001	1.112	8.79
9)	T	Chloroethane	0.602	0.677	0.655	0.586	0.565	0.531	0.591	9.95
10)	T	Trichlorofluorometh	3.101	3.349	3.286	2.882	2.802	2.594	2.936	10.93
11)	T	Ethanol	0.344	0.373	0.357	0.280	0.297	0.278	0.315	13.41
12)	T	Freon113	2.116	2.365	2.294	1.862	1.895	1.751	1.993	13.54
13)	T	1,1-Dichloroethene	1.468	1.640	1.579	1.311	1.297	1.197	1.379	13.56
14)	T	Acetone	1.656	1.690	1.567	1.077	1.216	1.088	1.332	22.07
15)	T	Carbon disulfide	2.441	2.793	2.710	2.388	2.300	2.127	2.400	11.61
16)	T	2-Propanol	1.335	1.520	1.451	1.204	1.219	1.132	1.279	12.57
17)	T	Methylene chloride	1.343	1.192	1.138	0.903	0.920	0.847	1.022	19.74
18)	T	tert-Butyl Methyl E	2.333	2.865	2.678	1.759	2.085	1.874	2.198	20.06
19)	T	trans-1,2-Dichloroe	1.322	1.522	1.467	1.149	1.202	1.103	1.262	14.19
20)	T	n-Hexane	1.444	1.688	1.628	1.275	1.335	1.240	1.399	13.99
21)	T	1,1-Dichloroethane	1.814	2.074	1.998	1.564	1.618	1.490	1.713	14.72
22)	T	Vinyl acetate	1.595	2.784	2.592	1.704	2.027	1.823	2.035	23.03
23)	T	cis-1,2-Dichloroeth	1.036	1.259	1.203	0.950	0.995	0.919	1.036	13.69
24)	T	2-Butanone	1.454	1.863	1.706	1.116	1.363	1.172	1.404	20.70
25)	T	Ethyl acetate	1.617	2.280	2.162	1.452	1.693	1.490	1.735	19.90
26)	T	Tetrahydrofuran	0.884	1.167	1.086	0.793	0.868	0.784	0.898	18.79
27)	T	Chloroform	2.029	2.387	2.258	1.810	1.878	1.710	1.950	15.02
28)	T	1,1,1-Trichloroetha	2.087	2.565	2.468	1.953	2.059	1.877	2.105	14.60
29)	T	Cyclohexane	1.489	1.747	1.670	1.324	1.375	1.236	1.419	16.42
30)	T	Carbon tetrachlorid	2.199	2.855	2.712	2.146	2.263	2.102	2.325	14.07
31)	T	Benzene	2.922	3.496	3.252	2.399	2.567	2.341	2.740	18.00
32)	T	1,2-Dichloroethane	1.177	1.450	1.350	0.969	1.062	0.993	1.133	17.77
33)	I	1,4-Difluorobenzene	----------ISTD----------							
34)	T	Heptane	0.478	0.608	0.564	0.454	0.481	0.436	0.486	15.81
35)	T	Trichloroethene	0.407	0.526	0.503	0.411	0.442	0.417	0.444	11.47
36)	T	1,2-Dichloropropane	0.296	0.392	0.358	0.260	0.293	0.271	0.304	16.98
37)	T	1,4-Dioxane	0.175	0.215	0.205	0.154	0.170	0.157	0.175	14.43
38)	T	Bromodichloromethan	0.581	0.771	0.722	0.597	0.623	0.581	0.631	13.20
39)	T	cis-1,3-Dichloropro	0.405	0.626	0.579	0.434	0.481	0.451	0.487	17.13
40)	T	4-Methyl-2-pentanon	0.192	0.263	0.240	0.184	0.202	0.191	0.208	14.91
41)	T	Toluene	1.024	1.318	1.205	0.909	0.997	0.909	1.030	16.68
42)	T	trans-1,3-Dichlorop	0.343	0.576	0.535	0.411	0.452	0.425	0.451	17.67
43)	T	1,1,2-Trichloroetha	0.338	0.445	0.410	0.320	0.348	0.328	0.358	14.06
44)	T	Tetrachloroethene	0.513	0.690	0.655	0.553	0.582	0.553	0.582	11.47
45)	T	2-Hexanone	0.375	0.528	0.473	0.350	0.389	0.367	0.404	17.21
46)	T	Chlorodibromomethan	0.540	0.821	0.764	0.611	0.661	0.628	0.660	15.03
47)	T	1,2-Dibromoethane	0.496	0.707	0.653	0.506	0.551	0.516	0.559	15.45
48)	I	Chlorobenzene-d5	----------ISTD----------							
49)	T	Chlorobenzene	0.838	1.091	1.017	0.788	0.867	0.812	0.880	14.30
50)	T	Ethylbenzene	1.485	1.788	1.640	1.264	1.360	1.243	1.411	17.13
51)	T	m,p-Xylene	1.179	1.427	1.304	1.010	1.063	0.937	1.097	20.67
52)	T	o-Xylene	1.162	1.402	1.285	1.017	1.083	0.994	1.117	16.12
53)	T	Styrene	0.747	1.078	1.002	0.796	0.861	0.802	0.860	15.36
54)	T	Bromoform	0.485	0.775	0.729	0.594	0.646	0.623	0.634	15.16
55)	S	4-Bromofluorobenzen	0.590	0.585	0.574	0.577	0.579	0.578	0.581	0.92
56)	T	1,1,2,2-Tetrachloro	0.759	0.857	0.786	0.641	0.663	0.614	0.697	15.18
57)	T	4-Ethyltoluene	1.619	1.787	1.629	1.320	1.379	1.287	1.452	15.78

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

Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\053112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jun 01 09:18:38 2012
Response via : Initial Calibration

Calibration Files
2 =05311203.D 4 =05311204.D 5 =05311205.D
6 =05311206.D 7 =05311207.D 8 =05311208.D

		Compound	2	4	5	6	7	8	Avg	%RSD
58)	T	1,3,5-Trimethylbenz	1.436	1.516	1.400	1.111	1.167	1.080	1.242	16.54
59)	T	1,2,4-Trimethylbenz	1.252	1.430	1.301	1.058	1.116	1.034	1.162	14.70
60)	T	1,3-Dichlorobenzene	0.804	0.913	0.841	0.691	0.733	0.695	0.763	11.99
61)	T	1,4-Dichlorobenzene	0.775	0.879	0.816	0.669	0.708	0.665	0.736	12.11
62)	T	Benzyl chloride		0.979	0.913	0.748	0.790	0.732	0.809	13.83
63)	T	1,2-Dichlorobenzene	0.778	0.794	0.732	0.604	0.627	0.587	0.669	14.37
64)	T	1,2,4-Trichlorobenz	0.273	0.279	0.258	0.201	0.226	0.233	0.243	11.48
65)	T	Hexachlorobutadiene		0.401	0.361	0.278	0.314	0.310	0.327	13.95
66)		Naphthalene	0.594	0.551	0.518	0.400	0.440	0.446	0.481	15.19

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

Compound List Report VOA 1

Method : C:\HPCHEM\1\METHODS\053112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jun 01 09:18:38 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	10.58	1.000	A	2	A	B
2	T	Propylene	41	5.51	0.521	A	2	A	B
3	T	Dichlorodifluoromethane	85	5.58	0.528	A	3	A	B
4	T	1,2-Dichloro-1,2,2,2-tetrafluo	135	5.84	0.552	A	2	A	B
5	T	Chloromethane	50	6.00	0.567	A	3	A	B
6	T	Vinyl chloride	62	6.20	0.586	A	2	A	B
7	T	1,3-Butadiene	39	6.26	0.591	A	2	A	B
8	T	Bromomethane	94	6.84	0.647	A	3	A	B
9	T	Chloroethane	64	6.99	0.660	A	3	A	B
10	T	Trichlorofluoromethane	101	7.33	0.693	A	3	A	B
11	T	Ethanol	45	7.56	0.714	A	2	A	B
12	T	Freon113	101	7.98	0.754	A	2	A	B
13	T	1,1-Dichloroethene	61	8.09	0.764	A	2	A	B
14	T	Acetone	43	8.18	0.773	A	2	A	B
15	T	Carbon disulfide	76	8.46	0.799	A	3	A	B
16	T	2-Propanol	45	8.23	0.778	A	2	A	B
17	T	Methylene chloride	49	8.75	0.827	A	2	A	B
18	T	tert-Butyl Methyl Ether	73	8.95	0.845	A	2	A	B
19	T	trans-1,2-Dichloroethene	61	9.03	0.853	A	2	A	B
20	T	n-Hexane	57	9.22	0.871	A	3	A	B
21	T	1,1-Dichloroethane	63	9.59	0.906	A	3	A	B
22	T	Vinyl acetate	43	9.52	0.900	A	2	A	B
23	T	cis-1,2-Dichloroethene	96	10.27	0.971	A	3	A	B
24	T	2-Butanone	43	10.24	0.967	A	2	A	B
25	T	Ethyl acetate	43	10.19	0.963	A	3	A	B
26	T	Tetrahydrofuran	42	10.58	1.000	A	2	A	B
27	T	Chloroform	83	10.60	1.001	A	2	A	B
28	T	1,1,1-Trichloroethane	97	10.84	1.025	A	3	A	B
29	T	Cyclohexane	56	10.86	1.026	A	2	A	B
30	T	Carbon tetrachloride	117	11.01	1.041	A	3	A	B
31	T	Benzene	78	11.29	1.067	A	3	A	B
32	T	1,2-Dichloroethane	62	11.37	1.074	A	3	A	B
33	I	1,4-Difluorobenzene	114	11.68	1.000	A	2	A	B
34	T	Heptane	43	11.34	0.971	A	3	A	B
35	T	Trichloroethene	130	12.02	1.029	A	3	A	B
36	T	1,2-Dichloropropane	63	12.38	1.060	A	3	A	B
37	T	1,4-Dioxane	88	12.45	1.066	A	2	A	B
38	T	Bromodichloromethane	83	12.66	1.084	A	2	A	B
39	T	cis-1,3-Dichloropropene	75	13.21	1.131	A	2	A	B
40	T	4-Methyl-2-pentanone	58	13.32	1.141	A	3	A	B
41	T	Toluene	91	13.62	1.166	A	2	A	B
42	T	trans-1,3-Dichloropropene	75	13.93	1.192	A	3	A	B
43	T	1,1,2-Trichloroethane	97	14.20	1.215	A	3	A	B
44	T	Tetrachloroethene	166	14.32	1.226	A	3	A	B
45	T	2-Hexanone	43	14.40	1.233	A	2	A	B
46	T	Chlorodibromomethane	129	14.75	1.262	A	2	A	B
47	T	1,2-Dibromoethane	107	14.98	1.283	A	2	A	B
48	I	Chlorobenzene-d5	117	15.53	1.000	A	2	A	B
49	T	Chlorobenzene	112	15.57	1.003	A	3	A	B
50	T	Ethylbenzene	91	15.61	1.005	A	2	A	B
51	T	m,p-Xylene	91	15.77	1.015	A	2	A	B
52	T	o-Xylene	91	16.36	1.054	A	2	A	B
53	T	Styrene	104	16.39	1.055	A	3	A	B
54	T	Bromoform	173	16.78	1.080	A	3	A	B
55	S	4-Bromofluorobenzene	95	17.18	1.106	A	2	A	B
56	T	1,1,2,2-Tetrachloroethane	83	17.35	1.117	A	2	A	B
57	T	4-Ethyltoluene	105	17.59	1.133	A	1	A	B
58	T	1,3,5-Trimethylbenzene	105	17.68	1.138	A	2	A	B
59	T	1,2,4-Trimethylbenzene	105	18.26	1.176	A	2	A	B
60	T	1,3-Dichlorobenzene	146	18.82	1.211	A	3	A	B
61	T	1,4-Dichlorobenzene	146	18.96	1.221	A	3	A	B
62	T	Benzyl chloride	91	19.16	1.234	A	2	A	B
63	T	1,2-Dichlorobenzene	146	19.60	1.262	A	3	A	B
64	T	1,2,4-Trichlorobenzene	180	22.75	1.465	A	3	A	B
65	T	Hexachlorobutadiene	225	22.95	1.478	A	2	A	B
66		Naphthalene	128	23.44	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

053112V1.M Fri Jun 01 14:15:20 2012

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\053112\05311212.D Vial: 12
Acq On : 31 May 2012 5:06 pm Operator: RACHEL HILL
Sample : ICV VOA1 053112 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\053112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jun 01 09:18:38 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	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	133	0.00
2	T	Propylene	0.813	0.827	-1.7	124	0.00
3	T	Dichlorodifluoromethane	3.079	3.095	-0.5	121	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.303	2.330	-1.2	124	0.00
5	T	Chloromethane	0.928	0.949	-2.3	120	0.00
6	T	Vinyl chloride	1.049	1.032	1.6	113	0.00
7	T	1,3-Butadiene	0.727	0.818	-12.5	125	0.00
8	T	Bromomethane	1.112	1.143	-2.8	123	0.00
9	T	Chloroethane	0.591	0.595	-0.7	117	0.00
10	T	Trichlorofluoromethane	2.936	2.977	-1.4	118	0.00
11	T	Ethanol	0.315	0.291	7.6	104	0.00
12	T	Freon113	1.993	2.089	-4.8	118	0.00
13	T	1,1-Dichloroethene	1.379	1.446	-4.9	117	0.00
14	T	Acetone	1.332	1.390	-4.4	109	0.00
15	T	Carbon disulfide	2.400	2.859	-19.1	136	0.00
16	T	2-Propanol	1.279	1.425	-11.4	125	0.00
17	T	Methylene chloride	1.022	1.016	0.6	114	0.00
18	T	tert-Butyl Methyl Ether	2.198	2.375	-8.1	110	0.00
19	T	trans-1,2-Dichloroethene	1.262	1.371	-8.6	120	0.00
20	T	n-Hexane	1.399	1.486	-6.2	117	0.00
21	T	1,1-Dichloroethane	1.713	1.757	-2.6	113	0.00
22	T	Vinyl acetate	2.035	2.196	-7.9	105	0.00
23	T	cis-1,2-Dichloroethene	1.036	1.086	-4.8	115	0.00
24	T	2-Butanone	1.404	1.494	-6.4	107	0.00
25	T	Ethyl acetate	1.735	1.951	-12.4	114	0.00
26	T	Tetrahydrofuran	0.898	0.942	-4.9	108	0.00
27	T	Chloroform	1.950	2.004	-2.8	112	0.00
28	T	1,1,1-Trichloroethane	2.105	2.179	-3.5	113	0.00
29	T	Cyclohexane	1.419	1.530	-7.8	117	0.00
30	T	Carbon tetrachloride	2.325	2.431	-4.6	113	0.00
31	T	Benzene	2.740	2.799	-2.2	107	0.00
32	T	1,2-Dichloroethane	1.133	1.146	-1.1	105	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	136	0.00
34	T	Heptane	0.486	0.511	-5.1	115	0.00
35	T	Trichloroethene	0.444	0.442	0.5	115	0.00
36	T	1,2-Dichloropropane	0.304	0.304	0.0	106	0.00
37	T	1,4-Dioxane	0.175	0.170	2.9	108	0.00
38	T	Bromodichloromethane	0.631	0.658	-4.3	116	0.00
39	T	cis-1,3-Dichloropropene	0.487	0.476	2.3	104	0.00
40	T	4-Methyl-2-pentanone	0.208	0.231	-11.1	120	0.00
41	T	Toluene	1.030	1.125	-9.2	116	0.00
42	T	trans-1,3-Dichloropropene	0.451	0.496	-10.0	117	0.00
43	T	1,1,2-Trichloroethane	0.358	0.355	0.8	109	0.00
44	T	Tetrachloroethene	0.582	0.578	0.7	114	0.00
45	T	2-Hexanone	0.404	0.455	-12.6	117	0.00
46	T	Chlorodibromomethane	0.660	0.662	-0.3	110	0.00
47	T	1,2-Dibromoethane	0.559	0.564	-0.9	109	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	134	0.00
49	T	Chlorobenzene	0.880	0.876	0.5	108	0.00
50	T	Ethylbenzene	1.411	1.403	0.6	105	0.00
51	T	m,p-Xylene	1.097	1.129	-2.9	106	0.00
52	T	o-Xylene	1.117	1.137	-1.8	109	0.00
53	T	Styrene	0.860	0.882	-2.6	110	0.00
54	T	Bromoform	0.634	0.657	-3.6	114	0.00
55	S	4-Bromofluorobenzene	0.581	0.581	0.0	134	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\053112\05311212.D Vial: 12
Acq On : 31 May 2012 5:06 pm Operator: RACHEL HILL
Sample : ICV VOA1 053112 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\053112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jun 01 09:18:38 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	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.697	0.726	-4.2	114	0.00
57	T	4-Ethyltoluene	1.452	1.473	-1.4	111	0.00
58	T	1,3,5-Trimethylbenzene	1.242	1.247	-0.4	111	0.00
59	T	1,2,4-Trimethylbenzene	1.162	1.213	-4.4	114	0.00
60	T	1,3-Dichlorobenzene	0.763	0.781	-2.4	115	0.00
61	T	1,4-Dichlorobenzene	0.736	0.757	-2.9	116	0.00
62	T	Benzyl chloride	0.809	0.921	-13.8	126	0.00
63	T	1,2-Dichlorobenzene	0.669	0.701	-4.8	119	0.00
64	T	1,2,4-Trichlorobenzene	0.243	0.270	-11.1	130	0.00
65	T	Hexachlorobutadiene	0.327	0.377	-15.3	126	0.00
66		Naphthalene	0.481	0.567	-17.9	138	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\053112\05311212.D Vial: 12
Acq On : 31 May 2012 5:06 pm Operator: RACHEL HILL
Sample : ICV VOA1 053112 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 1 9:19 2012 Quant Results File: 053112V1.RES

Quant Method : C:\HPCHEM\1\METHODS\053112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jun 01 09:18:38 2012
Response via : Initial Calibration
DataAcq Meth : 053112V1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.58	130	481456	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.68	114	1612192	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.53	117	1418692	12.50	ppbv	0.00

System Monitoring Compounds						
55) 4-Bromofluorobenzene	17.18	95	824147	12.50	ppbv	0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 100.00%			

Target Compounds						Qvalue
2) Propylene	5.52	41	324728	10.37	ppbv	99
3) Dichlorodifluoromethane	5.59	85	1096677	9.25	ppbv	100
4) 1,2-Dichloro-1,2,2,2-tetra	5.85	135	852398	9.61	ppbv #	86
5) Chloromethane	6.00	50	347318	9.71	ppbv	98
6) Vinyl chloride	6.21	62	373657	9.25	ppbv	99
7) 1,3-Butadiene	6.26	39	308884	11.03	ppbv	96
8) Bromomethane	6.85	94	409579	9.56	ppbv	99
9) Chloroethane	7.00	64	210732	9.26	ppbv	99
10) Trichlorofluoromethane	7.33	101	1100913	9.74	ppbv	99
11) Ethanol	7.56	45	103216	8.52	ppbv	99
12) Freon113	7.99	101	788697	10.28	ppbv	95
13) 1,1-Dichloroethene	8.09	61	551564	10.39	ppbv	99
14) Acetone	8.18	43	535459	10.44	ppbv	99
15) Carbon disulfide	8.46	76	1068272	11.56	ppbv #	100
16) 2-Propanol	8.23	45	554191	11.25	ppbv #	75
17) Methylene chloride	8.75	49	391415	9.94	ppbv	98
18) tert-Butyl Methyl Ether	8.95	73	905796	10.70	ppbv	98
19) trans-1,2-Dichloroethene	9.03	61	517367	10.65	ppbv	99
20) n-Hexane	9.22	57	578015	10.73	ppbv	97
21) 1,1-Dichloroethane	9.59	63	656601	9.95	ppbv	100
22) Vinyl acetate	9.52	43	837373	10.68	ppbv	99
23) cis-1,2-Dichloroethene	10.28	96	409835	10.27	ppbv	99
24) 2-Butanone	10.24	43	569860	10.54	ppbv	100
25) Ethyl acetate	10.19	43	736475	11.02	ppbv #	100
26) Tetrahydrofuran	10.58	42	363003	10.50	ppbv	96
27) Chloroform	10.60	83	756368	10.07	ppbv	97
28) 1,1,1-Trichloroethane	10.85	97	805667	9.94	ppbv	99
29) Cyclohexane	10.86	56	577408	10.56	ppbv	99
30) Carbon tetrachloride	11.01	117	889700	9.94	ppbv	99
31) Benzene	11.29	78	1035086	9.81	ppbv	100
32) 1,2-Dichloroethane	11.37	62	428112	9.81	ppbv	99
34) Heptane	11.34	43	652953	10.41	ppbv	98
35) Trichloroethene	12.02	130	547778	9.58	ppbv	97
36) 1,2-Dichloropropane	12.38	63	384611	9.81	ppbv	100
37) 1,4-Dioxane	12.45	88	211101	9.34	ppbv	95
38) Bromodichloromethane	12.67	83	814332	10.00	ppbv	98
39) cis-1,3-Dichloropropene	13.21	75	583735	9.30	ppbv	100
40) 4-Methyl-2-pentanone	13.32	58	298491	11.13	ppbv	98
41) Toluene	13.62	91	1422215	10.70	ppbv	98
42) trans-1,3-Dichloropropene	13.93	75	582336	10.02	ppbv	100
43) 1,1,2-Trichloroethane	14.20	97	449010	9.74	ppbv	99
44) Tetrachloroethene	14.32	166	715360	9.54	ppbv	96
45) 2-Hexanone	14.40	43	575397	11.04	ppbv	96
46) Chlorodibromomethane	14.75	129	837258	9.84	ppbv	99
47) 1,2-Dibromoethane	14.98	107	698125	9.68	ppbv	100
49) Chlorobenzene	15.57	112	983994	9.85	ppbv	99
50) Ethylbenzene	15.62	91	1560666	9.75	ppbv	97
51) m,p-Xylene	15.77	91	2459547	19.76	ppbv	98
52) o-Xylene	16.36	91	1290286	10.18	ppbv	98

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\053112\05311212.D Vial: 12
Acq On : 31 May 2012 5:06 pm Operator: RACHEL HILL
Sample : ICV VOA1 053112 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 1 9:19 2012 Quant Results File: 053112V1.RES

Quant Method : C:\HPCHEM\1\METHODS\053112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jun 01 09:18:38 2012
Response via : Initial Calibration
DataAcq Meth : 053112V1

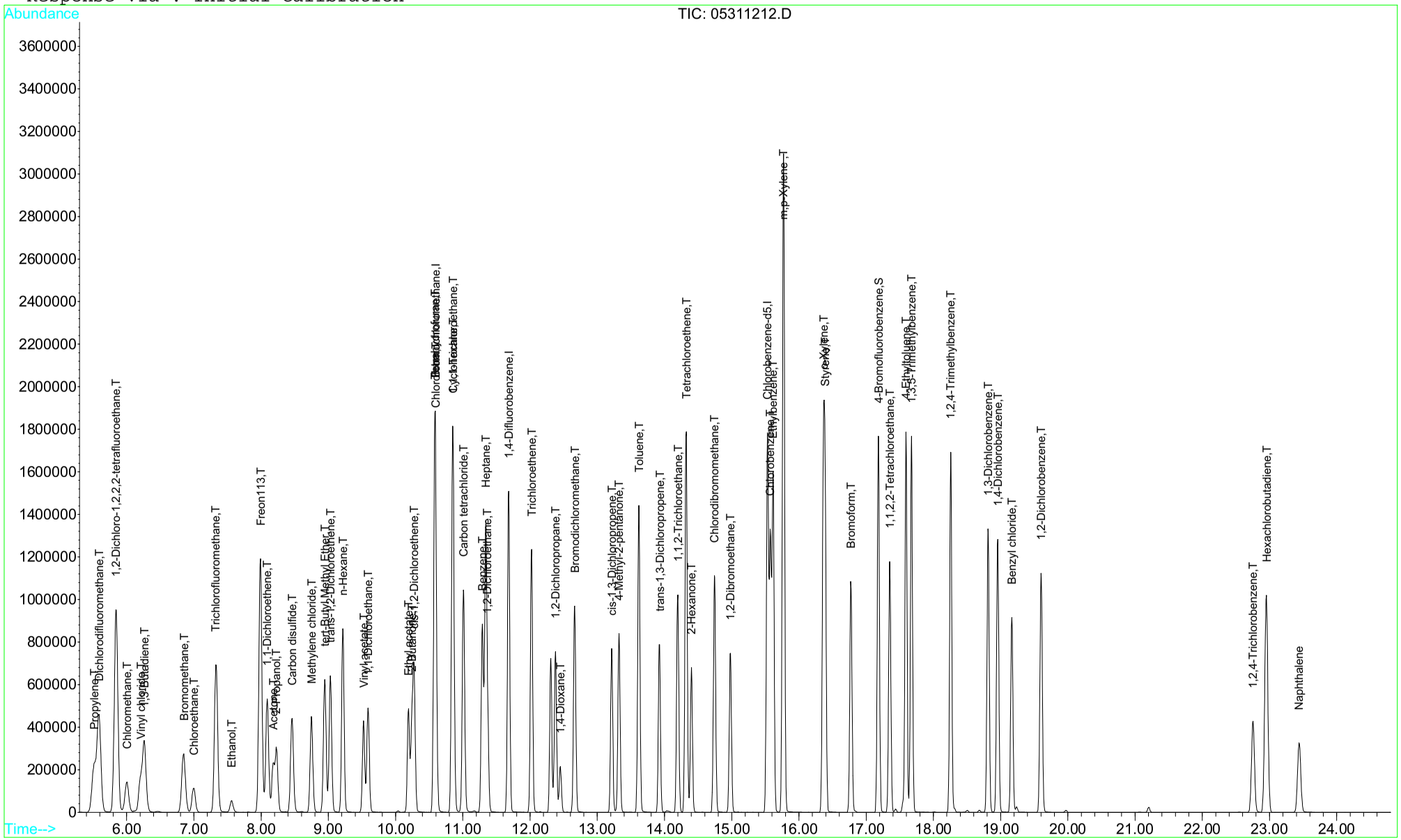
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
53) Styrene	16.39	104	981022	10.06 ppbv	99
54) Bromoform	16.77	173	715854	9.95 ppbv	99
56) 1,1,2,2-Tetrachloroethane	17.35	83	824498	10.42 ppbv	98
57) 4-Ethyltoluene	17.59	105	1637849	9.94 ppbv	99
58) 1,3,5-Trimethylbenzene	17.68	105	1373368	9.74 ppbv	99
59) 1,2,4-Trimethylbenzene	18.26	105	1348761	10.23 ppbv	99
60) 1,3-Dichlorobenzene	18.82	146	859808	9.93 ppbv	99
61) 1,4-Dichlorobenzene	18.96	146	824927	9.87 ppbv	99
62) Benzyl chloride	19.17	91	1014035	11.04 ppbv	99
63) 1,2-Dichlorobenzene	19.60	146	772077	10.17 ppbv	98
64) 1,2,4-Trichlorobenzene	22.75	180	279313	10.13 ppbv	96
65) Hexachlorobutadiene	22.95	225	402349	10.84 ppbv	99
66) Naphthalene	23.44	128	592469	10.84 ppbv	100

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\053112\05311212.D Vial: 12
Acq On : 31 May 2012 5:06 pm Operator: RACHEL HILL
Sample : ICV VOA1 053112 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 1 9:19 2012 Quant Results File: 053112V1.RES

Method : C:\HPCHEM\1\METHODS\053112V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jun 01 09:18:38 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: **VOA9_120525A** **Run No.:** 48916

Analytical Run Date: 5/25/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

Calibration ID: 48735 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 6/5/12/PR AW 5.29.12 Ending RLVS high due to carry over; 147.6/117 within +/- 30. Compound 1 & 2 of C5-C8 high.

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 052512	BFB_TUNE	TUNE	R48916	5/25/2012 1:07:00 PM	Celeste Hoitash		
CCV VOA9 052512	MA_APH	CCV	R48916	5/25/2012 1:50:00 PM	Celeste Hoitash		
RLVS VOA9 052512	MA_APH	RLVS	R48916	5/25/2012 2:32:00 PM	Celeste Hoitash		
MBLK VOA9 052512	MA_APH	MBLK	R48916	5/25/2012 3:28:00 PM	Celeste Hoitash		
1205846-023A	MA_APH	SAMP	R48916	5/25/2012 6:25:00 PM	Celeste Hoitash		
1205846-024A	MA_APH	SAMP	R48916	5/25/2012 7:14:00 PM	Celeste Hoitash		
1205846-025A	MA_APH	SAMP	R48916	5/25/2012 8:03:00 PM	Celeste Hoitash		
1205846-027A	MA_APH	SAMP	R48916	5/25/2012 8:47:00 PM	Celeste Hoitash		
1205846-027Adup	MA_APH	DUP	R48916	5/25/2012 9:31:00 PM	Celeste Hoitash		
1205939-001A	MA_APH	SAMP	R48916	5/25/2012 10:17:00 PM	Celeste Hoitash		
1205939-006A	MA_APH	SAMP	R48916	5/26/2012 2:44:00 AM	Celeste Hoitash		
1205939-007A	MA_APH	SAMP	R48916	5/26/2012 3:27:00 AM	Celeste Hoitash		
RLVS2 VOA9 05251	MA_APH	RLVS	R48916	5/26/2012 4:09:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

13-Jun-12

RunNo 48916

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
956272	BFB VOA9 052512	BFB_TUNE	TUNE	.\1\DATA\052512	5/25/2012 1:07:0	1	R48916		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		61.4	61.4		100	0	0	0	0	0	61%	50	120	0%	
175	M		7.5	7.5		100	0	0	0	0	0	8%	4	9	0%	
176	M		97	97		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.4	6.4		100	0	0	0	0	0	6%	5	9	0%	
50	M		24.4	24.4		100	0	0	0	0	0	24%	8	40	0%	
75	M		49.2	49.2		100	0	0	0	0	0	49%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.9	6.9		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
956273	CCV VOA9 052512	MA_APH	CCV	.\1\DATA\052512	5/25/2012 1:50:0	1	R48916		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	220.6	220.6		234	0	0	0	0	0	94%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	246.54	246.54		266	0	0	0	0	0	93%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
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	356.64	356.64		378	0	0	0	0	0	94%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	88.06	88.06		89.5	0	0	0	0	0	98%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\052512\05251202.D Vial: 2
Acq On : 25 May 2012 1:50 pm Operator: RACHEL HILL
Sample : CCV VOA9 052512 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\052112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue May 22 10:13:50 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	28.784	1.4	96	-0.02
2	L1	C5-C8 Aliphatic HC {2}	36.400	34.631	4.9	92	-0.02
3	L1	C5-C8 Aliphatic HC {3}	41.800	38.963	6.8	89	-0.03
4	L1	C5-C8 Aliphatic HC {4}	35.400	33.185	6.3	94	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	39.616	6.1	91	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	45.233	7.7	89	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	220.598	5.7	91	0.19
8	L1	C9-C12 Aliphatic HC	54.600	51.219	6.2	90	-0.02
9	L1	C9-C12 Aliphatic HC {2}	54.600	51.736	5.2	89	-0.02
10	L1	C9-C12 Aliphatic HC {3}	61.200	57.463	6.1	89	-0.01
11	L1	C9-C12 Aliphatic HC {4}	60.800	57.506	5.4	91	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	66.059	5.6	92	-0.01
13	L1	C9-C12 Aliphatic HC {6}	77.000	72.995	5.2	95	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	356.641	5.7	91	-0.02
15	L1	C9-C10 Aromatic HC	51.700	47.068	9.0	90	-0.02
16	L1	C9-C10 Aromatic HC {2}	51.200	46.628	8.9	90	-0.02
17	L1	C9-C10 Aromatic HC {3}	52.200	48.866	6.4	92	-0.01
18	L1	C9-C10 Aromatic HC {4}	58.700	54.681	6.8	93	-0.01
19	L1	C9-C10 Aromatic HC {5}	52.600	49.040	6.8	93	-0.01
20	L1	C9-C10 Aromatic HC {6}	58.700	54.375	7.4	92	-0.01
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	246.540	7.3	92	-0.02
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.00#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.41#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.30#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-11.07#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.84#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.29#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.42#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.41#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.54#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.52#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.63#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.80#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.45#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.35#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.52#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.62#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.62#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	0.00
40	I	Chlorobenzene-d5	12.500	12.500	0.0	83	-0.01
41	S	4-Bromofluorobenzene	89.500	88.058	1.6	84	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052512\05251202.D Vial: 2
Acq On : 25 May 2012 1:50 pm Operator: RACHEL HILL
Sample : CCV VOA9 052512 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 29 12:02 2012 Quant Results File: 052112V9.RES

Quant Method : C:\HPCHEM\1\METHODS\052112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue May 22 10:13:50 2012
Response via : Initial Calibration
DataAcq Meth : 052112V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	697487	12.50	ug/m3	-0.01

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.34	95	468275	88.06	ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 98.39%

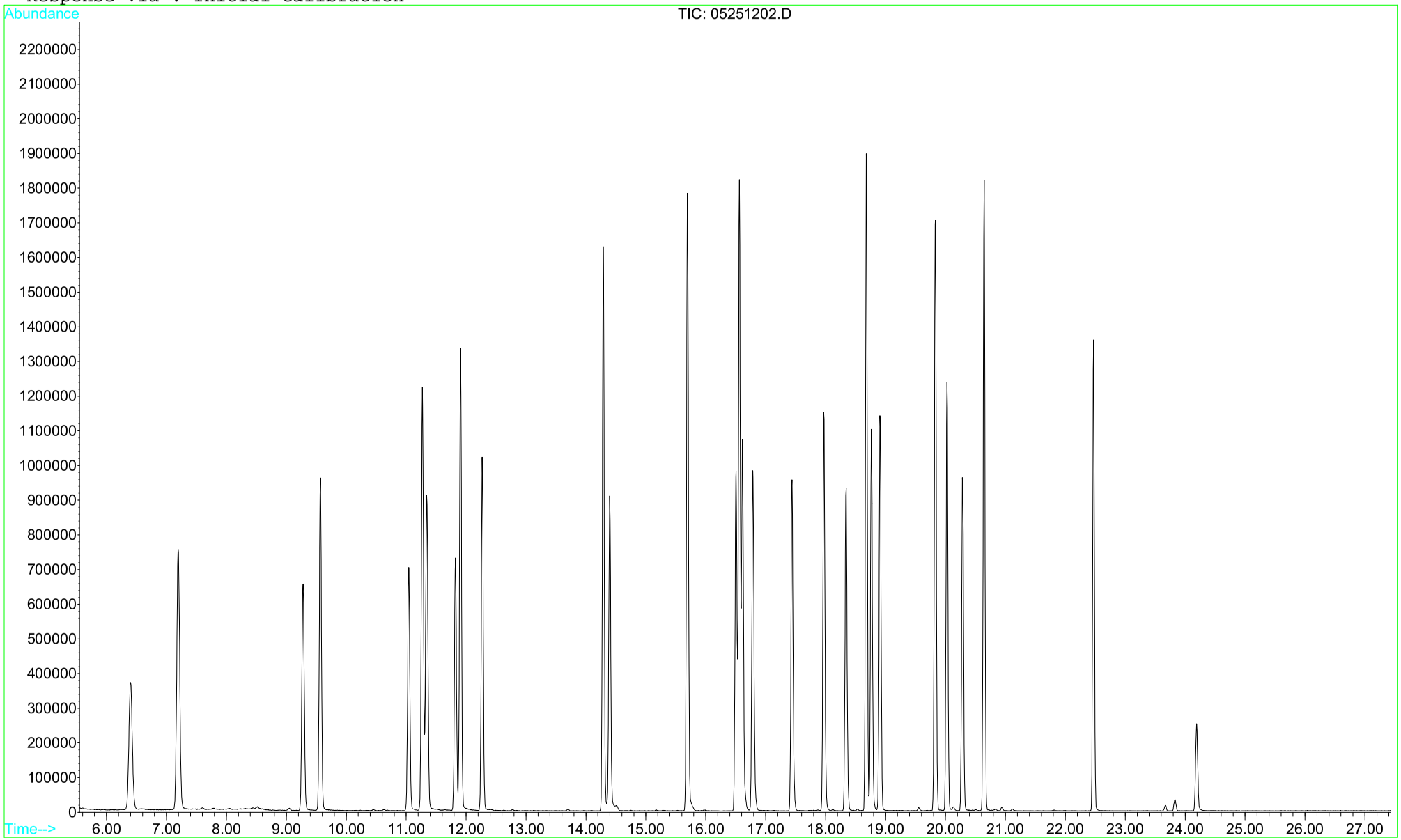
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2592142	28.78	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2404848	34.63	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.27	TIC	3033427	38.96	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2343585	33.19	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2987355	39.62	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3406719	45.23	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	16768076m	220.60	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	4048969	51.22	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	4021233	51.74	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3917216	57.46	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	3766106	57.51	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	3660422	66.06	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.47	TIC	2702288	73.00	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	22116234m	356.64	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	266094	47.07	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	281541	46.63	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	421387	48.87	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	94815	54.68	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	319958	49.04	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	237776	54.38	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1621571m	246.54	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052512\05251202.D Vial: 2
Acq On : 25 May 2012 1:50 pm Operator: RACHEL HILL
Sample : CCV VOA9 052512 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 29 12:02 2012 Quant Results File: 052112V9.RES

Method : C:\HPCHEM\1\METHODS\052112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue May 22 10:13:50 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA9_120529A **Run No.:** 48954

Analytical Run Date: 5/29/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

Calibration ID: 48735 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 6/5/12/PR AW 5.30.12 Liquid nitrogen ran out overnight. An ending RLVS ran within 24 hour clock, but was high due to analytes on the trap overnight. A 2nd ending RLVS was ran immediately, but was out of the 24 hour clock.

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 052912	BFB_TUNE	TUNE	R48954	5/29/2012 10:08:00 AM	Celeste Hoitash		
CCV VOA9 052912	MA_APH	CCV	R48954	5/29/2012 10:52:00 AM	Celeste Hoitash		
RLVS VOA9 052912	MA_APH	RLVS	R48954	5/29/2012 12:17:00 PM	Celeste Hoitash		
MBLK VOA9 052912	MA_APH	MBLK	R48954	5/29/2012 2:06:00 PM	Celeste Hoitash		
1205846-005A	MA_APH	SAMP	R48954	5/29/2012 3:50:00 PM	Celeste Hoitash		
1205846-005Adup	MA_APH	DUP	R48954	5/29/2012 4:34:00 PM	Celeste Hoitash		
1205846-009A	MA_APH	SAMP	R48954	5/29/2012 5:18:00 PM	Celeste Hoitash		
1205846-010A	MA_APH	SAMP	R48954	5/29/2012 6:03:00 PM	Celeste Hoitash		
1205846-011A	MA_APH	SAMP	R48954	5/29/2012 6:47:00 PM	Celeste Hoitash		
1205846-012A	MA_APH	SAMP	R48954	5/29/2012 7:31:00 PM	Celeste Hoitash		
1205939-002A	MA_APH	SAMP	R48954	5/29/2012 8:14:00 PM	Celeste Hoitash		
1205939-003A	MA_APH	SAMP	R48954	5/29/2012 9:39:00 PM	Celeste Hoitash		
1205939-004A	MA_APH	SAMP	R48954	5/29/2012 10:21:00 PM	Celeste Hoitash		
1205939-008A	MA_APH	SAMP	R48954	5/29/2012 11:53:00 PM	Celeste Hoitash		
1205939-009A	MA_APH	SAMP	R48954	5/30/2012 12:36:00 AM	Celeste Hoitash		
1205939-010A	MA_APH	SAMP	R48954	5/30/2012 1:18:00 AM	Celeste Hoitash		
RLVS2 VOA9 05291	MA_APH	RLVS	R48954	5/30/2012 10:34:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

13-Jun-12

RunNo 48954

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
956825	BFB VOA9 052912	BFB_TUNE	TUNE	.\1\DATA\052912	5/29/2012 10:08:	1	R48954		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		61.2	61.2		100	0	0	0	0	0	61%	50	120	0%	
175	M		7.5	7.5		100	0	0	0	0	0	8%	4	9	0%	
176	M		96.9	96.9		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.6	6.6		100	0	0	0	0	0	7%	5	9	0%	
50	M		23.7	23.7		100	0	0	0	0	0	24%	8	40	0%	
75	M		48.2	48.2		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
956826	CCV VOA9 052912	MA_APH	CCV	.\1\DATA\052912	5/29/2012 10:52:	1	R48954		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	249.43	249.43		234	0	0	0	0	0	107%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	272.01	272.01		266	0	0	0	0	0	102%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
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	393.99	393.99		378	0	0	0	0	0	104%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	86.94	86.94		89.5	0	0	0	0	0	97%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\052912\05291202.D Vial: 2
Acq On : 29 May 2012 10:52 am Operator: RACHEL HILL
Sample : CCV VOA9 052912 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\052112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue May 22 10:13:50 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	32.999	-13.0	110	-0.02
2	L1	C5-C8 Aliphatic HC {2}	36.400	38.866	-6.8	103	-0.02
3	L1	C5-C8 Aliphatic HC {3}	41.800	44.093	-5.5	101	-0.03
4	L1	C5-C8 Aliphatic HC {4}	35.400	37.364	-5.5	105	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	44.234	-4.8	102	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	51.544	-5.2	101	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	249.433	-6.6	103	0.19
8	L1	C9-C12 Aliphatic HC	54.600	59.839	-9.6	105	-0.02
9	L1	C9-C12 Aliphatic HC {2}	54.600	55.146	-1.0	95	-0.02
10	L1	C9-C12 Aliphatic HC {3}	61.200	63.223	-3.3	98	-0.02
11	L1	C9-C12 Aliphatic HC {4}	60.800	63.384	-4.3	100	-0.02
12	L1	C9-C12 Aliphatic HC {5}	70.000	73.061	-4.4	102	-0.01
13	L1	C9-C12 Aliphatic HC {6}	77.000	78.503	-2.0	102	-0.01
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	393.988	-4.2	100	-0.02
15	L1	C9-C10 Aromatic HC	51.700	52.152	-0.9	99	-0.02
16	L1	C9-C10 Aromatic HC {2}	51.200	51.792	-1.2	100	-0.02
17	L1	C9-C10 Aromatic HC {3}	52.200	53.458	-2.4	101	-0.01
18	L1	C9-C10 Aromatic HC {4}	58.700	59.853	-2.0	101	-0.01
19	L1	C9-C10 Aromatic HC {5}	52.600	54.106	-2.9	102	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	60.312	-2.7	102	-0.01
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	272.006	-2.3	101	-0.02
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.00#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.41#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.30#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-11.07#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.84#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.29#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.42#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.41#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.54#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.52#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.63#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.80#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.45#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.35#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.52#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.62#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.62#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	0.00
40	I	Chlorobenzene-d5	12.500	12.500	0.0	92	-0.02
41	S	4-Bromofluorobenzene	89.500	86.936	2.9	91	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052912\05291202.D Vial: 2
Acq On : 29 May 2012 10:52 am Operator: RACHEL HILL
Sample : CCV VOA9 052912 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 29 16:26 2012 Quant Results File: 052112V9.RES

Quant Method : C:\HPCHEM\1\METHODS\052112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue May 22 10:13:50 2012
Response via : Initial Calibration
DataAcq Meth : 052112V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.50	117	764912	12.50	ug/m3	-0.02

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.34	95	506998	86.94	ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 97.14%

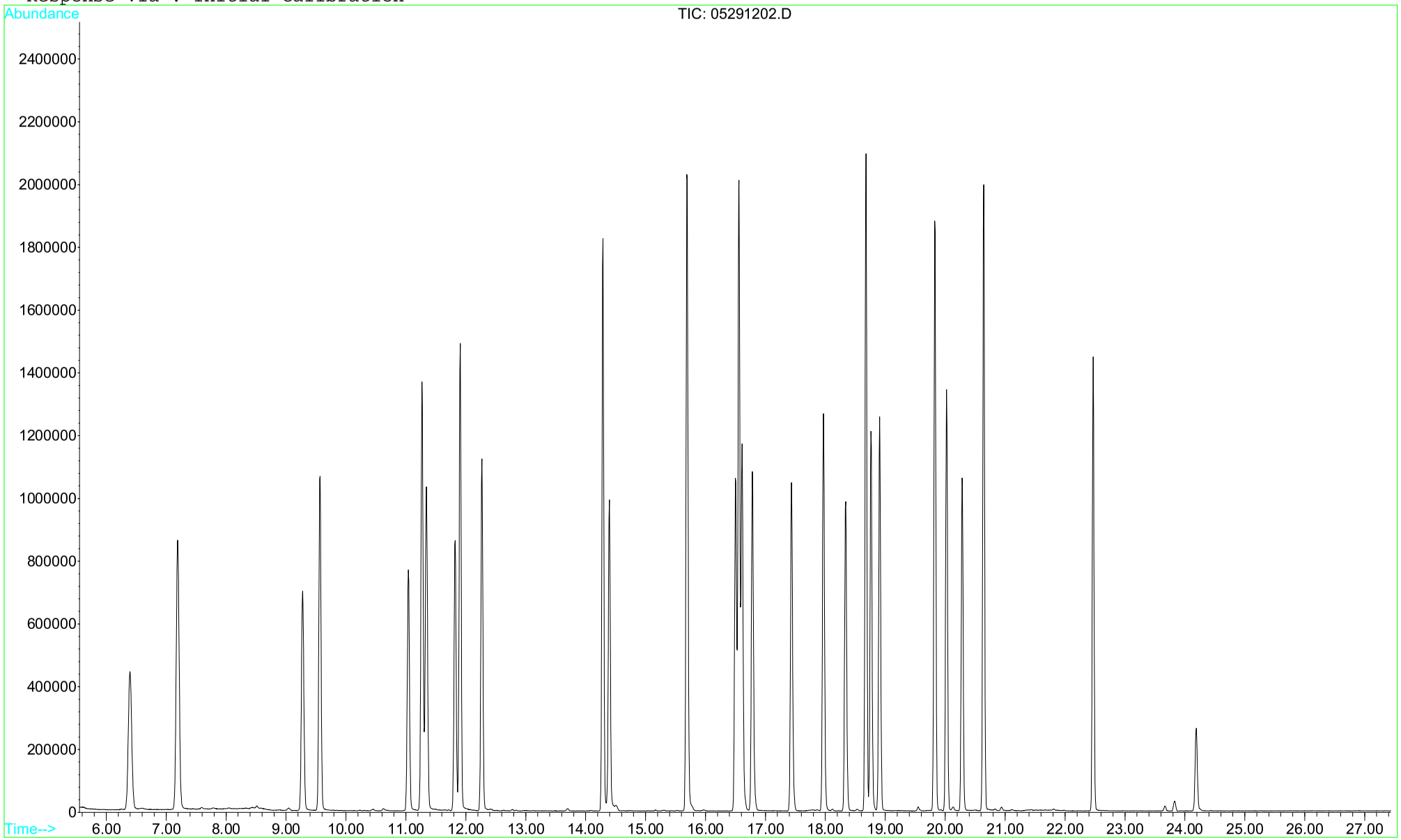
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2971771	33.00	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2698927	38.87	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.27	TIC	3432811	44.09	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2638696	37.36	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	3335611	44.23	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3882023	51.54	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	18959839m	249.43	ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	4730401	59.84	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	4286313	55.15	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	4309851	63.22	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	4151037	63.38	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	4048435	73.06	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.47	TIC	2906180	78.50	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	24432217m	393.99	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	294838	52.15	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	312719	51.79	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	460982	53.46	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	103783	59.85	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.29	120	353006	54.11	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	263735	60.31	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1789063m	272.01	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052912\05291202.D Vial: 2
Acq On : 29 May 2012 10:52 am Operator: RACHEL HILL
Sample : CCV VOA9 052912 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 29 16:26 2012 Quant Results File: 052112V9.RES

Method : C:\HPCHEM\1\METHODS\052112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue May 22 10:13:50 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: **VOA9_120530A** **Run No.:** 48985

Analytical Run Date: 5/30/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

Calibration ID: 48735 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 6/5/12/PR AW 5.31.12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 053012	BFB_TUNE	TUNE	R48985	5/30/2012 11:27:00 AM	Celeste Hoitash		
CCV VOA9 053012	MA_APH	CCV	R48985	5/30/2012 12:10:00 PM	Celeste Hoitash		
RLVS VOA9 053012	MA_APH	RLVS	R48985	5/30/2012 12:53:00 PM	Celeste Hoitash		
MBLK VOA9 053012	MA_APH	MBLK	R48985	5/30/2012 1:42:00 PM	Celeste Hoitash		
1205939-011A	MA_APH	SAMP	R48985	5/30/2012 3:59:00 PM	Celeste Hoitash		
1205939-012A	MA_APH	SAMP	R48985	5/30/2012 4:45:00 PM	Celeste Hoitash		
1205939-012Adup	MA_APH	DUP	R48985	5/30/2012 5:33:00 PM	Celeste Hoitash		
1205939-005A	MA_APH	SAMP	R48985	5/30/2012 6:17:00 PM	Celeste Hoitash		
1205939-024A	MA_APH	SAMP	R48985	5/30/2012 7:45:00 PM	Celeste Hoitash		
RLVS2 VOA9 05301	MA_APH	RLVS	R48985	5/31/2012 4:13:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

13-Jun-12

RunNo 48985

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
957486	BFB VOA9 053012	BFB_TUNE	TUNE	.\1\DATA\053012	5/30/2012 11:27:	1	R48985		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		61.7	61.7		100	0	0	0	0	0	62%	50	120	0%	
175	M		7.4	7.4		100	0	0	0	0	0	7%	4	9	0%	
176	M		98.4	98.4		100	0	0	0	0	0	98%	93	101	0%	
177	M		6.4	6.4		100	0	0	0	0	0	6%	5	9	0%	
50	M		23.9	23.9		100	0	0	0	0	0	24%	8	40	0%	
75	M		49.4	49.4		100	0	0	0	0	0	49%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.8	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
957487	CCV VOA9 053012	MA_APH	CCV	.\1\DATA\053012	5/30/2012 12:10:	1	R48985		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	216.12	216.12		234	0	0	0	0	0	92%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	240.31	240.31		266	0	0	0	0	0	90%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
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	344.47	344.47		378	0	0	0	0	0	91%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	86.8	86.8		89.5	0	0	0	0	0	97%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\053012\05301202.D Vial: 2
Acq On : 30 May 2012 12:10 pm Operator: RACHEL HILL
Sample : CCV VOA9 053012 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\052112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue May 22 10:13:50 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	28.064	3.9	94	-0.02
2	L1	C5-C8 Aliphatic HC {2}	36.400	33.730	7.3	90	-0.02
3	L1	C5-C8 Aliphatic HC {3}	41.800	38.372	8.2	87	-0.03
4	L1	C5-C8 Aliphatic HC {4}	35.400	32.636	7.8	92	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	38.289	9.3	88	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	44.857	8.5	88	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	216.118	7.6	90	0.19
8	L1	C9-C12 Aliphatic HC	54.600	50.703	7.1	89	-0.02
9	L1	C9-C12 Aliphatic HC {2}	54.600	48.159	11.8	83	-0.01
10	L1	C9-C12 Aliphatic HC {3}	61.200	55.442	9.4	86	-0.01
11	L1	C9-C12 Aliphatic HC {4}	60.800	56.061	7.8	88	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	64.257	8.2	89	-0.01
13	L1	C9-C12 Aliphatic HC {6}	77.000	70.190	8.8	91	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	344.469	8.9	88	-0.02
15	L1	C9-C10 Aromatic HC	51.700	45.960	11.1	88	-0.02
16	L1	C9-C10 Aromatic HC {2}	51.200	45.569	11.0	88	-0.01
17	L1	C9-C10 Aromatic HC {3}	52.200	47.427	9.1	90	-0.01
18	L1	C9-C10 Aromatic HC {4}	58.700	53.787	8.4	91	-0.01
19	L1	C9-C10 Aromatic HC {5}	52.600	47.400	9.9	90	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	53.541	8.8	91	-0.01
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	240.311	9.7	89	-0.02
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.00#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.41#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.30#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-11.07#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.84#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.29#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.42#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.41#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.54#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.52#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.63#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.80#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.45#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.35#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.52#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.62#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.62#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	0.00
40	I	Chlorobenzene-d5	12.500	12.500	0.0	83	-0.02
41	S	4-Bromofluorobenzene	89.500	86.797	3.0	83	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\053012\05301202.D Vial: 2
Acq On : 30 May 2012 12:10 pm Operator: RACHEL HILL
Sample : CCV VOA9 053012 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 14:43 2012 Quant Results File: 052112V9.RES

Quant Method : C:\HPCHEM\1\METHODS\052112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue May 22 10:13:50 2012
Response via : Initial Calibration
DataAcq Meth : 052112V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.50	117	697401	12.50	ug/m3	-0.02

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.34	95	461514	86.80	ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 96.98%

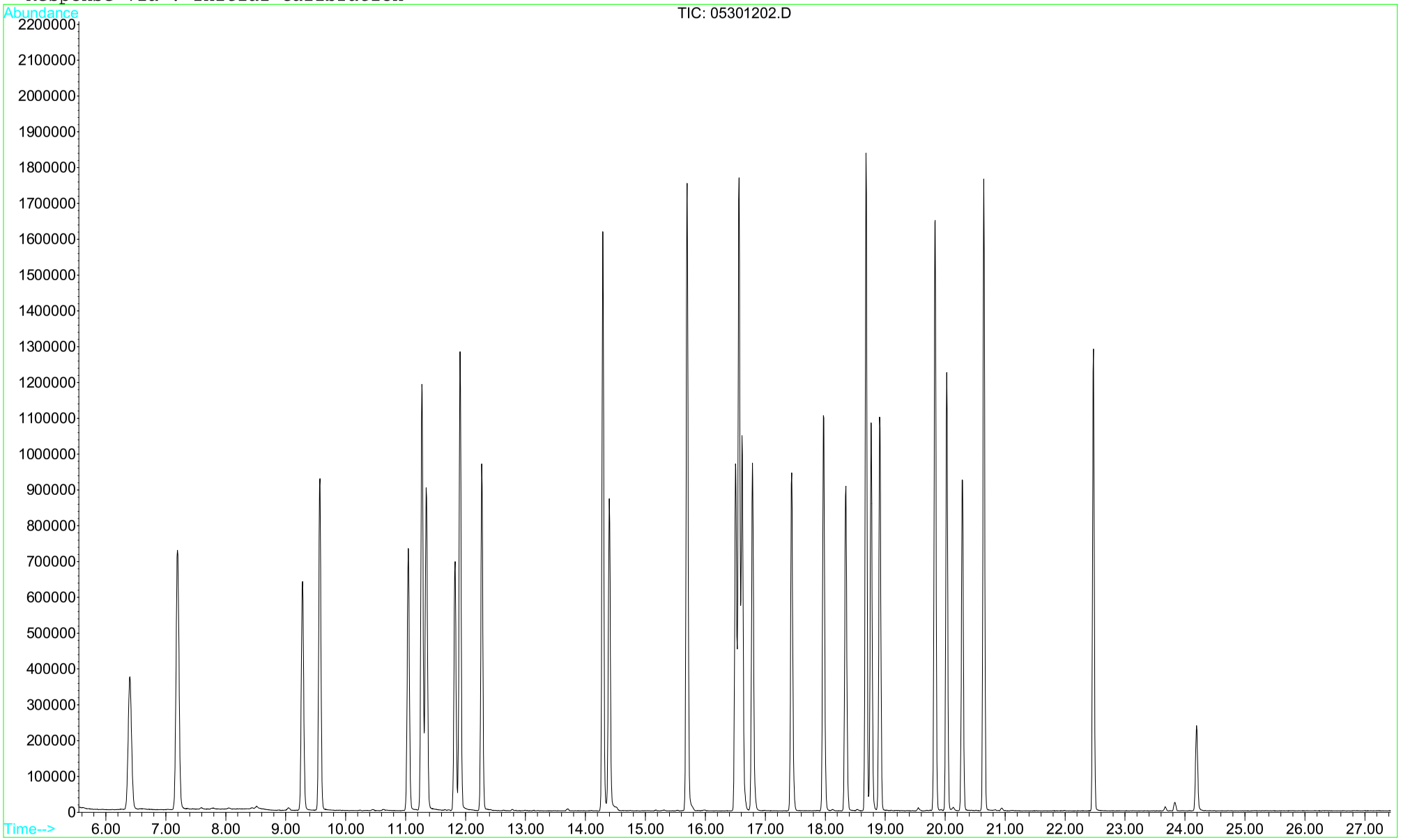
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2527322	28.06	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2342319	33.73	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.27	TIC	2987414	38.37	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2304762	32.64	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2887292	38.29	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3378414	44.86	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	16427523m	216.12	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	4008203	50.70	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	3743242	48.16	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3779456	55.44	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	3671503	56.06	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.65	TIC	3560609	64.26	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.47	TIC	2598422	70.19	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	21361435m	344.47	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	259831	45.96	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	275145	45.57	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	408974	47.43	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.03	120	93265	53.79	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.29	120	309256	47.40	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.03	134	234125	53.54	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1580596m	240.31	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\053012\05301202.D Vial: 2
Acq On : 30 May 2012 12:10 pm Operator: RACHEL HILL
Sample : CCV VOA9 053012 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 14:43 2012 Quant Results File: 052112V9.RES

Method : C:\HPCHEM\1\METHODS\052112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue May 22 10:13:50 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: **VOA9_120531A** **Run No.:** 49028

Analytical Run Date: 5/31/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

Calibration ID: 48735 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: PR AW 6.4.12 RLVS can was closed overnight, reopening of can caused high pressure in standard resulting in an elevated response. Re-ran RLVS as soon as possible, but fell out of 24 hour time clock.

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 053112	BFB_TUNE	TUNE	R49028	5/31/2012 9:45:00 AM	Robert Lynch		
CCV VOA9 053112	MA_APH	CCV	R49028	5/31/2012 10:30:00 AM	Robert Lynch		
RLVS VOA9 053112	MA_APH	RLVS	R49028	5/31/2012 11:13:00 AM	Robert Lynch		
MBLK VOA9 053112	MA_APH	MBLK	R49028	5/31/2012 1:09:00 PM	Robert Lynch		
1205939-013A	MA_APH	SAMP	R49028	5/31/2012 2:09:00 PM	Robert Lynch		
1205939-014A	MA_APH	SAMP	R49028	5/31/2012 2:52:00 PM	Robert Lynch		
1205939-015A	MA_APH	SAMP	R49028	5/31/2012 3:37:00 PM	Robert Lynch		
1205939-029A	MA_APH	SAMP	R49028	5/31/2012 4:20:00 PM	Robert Lynch		
1205939-030A	MA_APH	SAMP	R49028	5/31/2012 5:04:00 PM	Robert Lynch		
1205939-030Adup	MA_APH	DUP	R49028	5/31/2012 5:47:00 PM	Robert Lynch		
1205939-016A	MA_APH	SAMP	R49028	5/31/2012 6:38:00 PM	Robert Lynch		
1205939-017A	MA_APH	SAMP	R49028	5/31/2012 7:27:00 PM	Robert Lynch		
1205939-019A	MA_APH	SAMP	R49028	5/31/2012 9:46:00 PM	Robert Lynch		
1205939-020A	MA_APH	SAMP	R49028	5/31/2012 10:35:00 PM	Robert Lynch		
1205939-021A	MA_APH	SAMP	R49028	5/31/2012 11:24:00 PM	Robert Lynch		
1205939-022A	MA_APH	SAMP	R49028	6/1/2012 12:14:00 AM	Robert Lynch		
1205939-023A	MA_APH	SAMP	R49028	6/1/2012 1:00:00 AM	Robert Lynch		
1205939-025A	MA_APH	SAMP	R49028	6/1/2012 1:50:00 AM	Robert Lynch		
1205939-026A	MA_APH	SAMP	R49028	6/1/2012 2:33:00 AM	Robert Lynch		
1205939-027A	MA_APH	SAMP	R49028	6/1/2012 3:17:00 AM	Robert Lynch		
1205939-028A	MA_APH	SAMP	R49028	6/1/2012 4:00:00 AM	Robert Lynch		
1205939-031A	MA_APH	SAMP	R49028	6/1/2012 4:43:00 AM	Robert Lynch		
RLVS2 VOA9 05311	MA_APH	RLVS	R49028	6/1/2012 10:09:00 AM			

RTI Laboratories

ANALYTICAL RUN Summary

13-Jun-12

RunNo 49028

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
958368	BFB VOA9 053112	BFB_TUNE	TUNE	.\1\DATA\053112	5/31/2012 9:45:0	1	R49028		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		62.4	62.4		100	0	0	0	0	0	62%	50	120	0%	
175	M		7.5	7.5		100	0	0	0	0	0	8%	4	9	0%	
176	M		97.3	97.3		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.2	6.2		100	0	0	0	0	0	6%	5	9	0%	
50	M		23.8	23.8		100	0	0	0	0	0	24%	8	40	0%	
75	M		48.6	48.6		100	0	0	0	0	0	49%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.5	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
958369	CCV VOA9 053112	MA_APH	CCV	.\1\DATA\053112	5/31/2012 10:30:	1	R49028		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	232.19	232.19		234	0	0	0	0	0	99%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	1170	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	254.07	254.07		266	0	0	0	0	0	96%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	1330	0%	0	0	0%	
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	370.82	370.82		378	0	0	0	0	0	98%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	1890	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	87.26	87.26		89.5	0	0	0	0	0	97%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\053112\05311202.D Vial: 2
Acq On : 31 May 2012 10:30 am Operator: RACHEL HILL
Sample : CCV VOA9 053112 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\052112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue May 22 10:13:50 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	30.798	-5.5	103	-0.02
2	L1	C5-C8 Aliphatic HC {2}	36.400	35.943	1.3	96	-0.03
3	L1	C5-C8 Aliphatic HC {3}	41.800	41.404	0.9	94	-0.03
4	L1	C5-C8 Aliphatic HC {4}	35.400	34.360	2.9	97	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	41.286	2.2	95	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	48.023	2.0	94	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	232.195	0.8	96	0.19
8	L1	C9-C12 Aliphatic HC	54.600	55.660	-1.9	97	-0.02
9	L1	C9-C12 Aliphatic HC {2}	54.600	53.641	1.8	92	-0.02
10	L1	C9-C12 Aliphatic HC {3}	61.200	59.025	3.6	92	-0.01
11	L1	C9-C12 Aliphatic HC {4}	60.800	59.524	2.1	94	-0.01
12	L1	C9-C12 Aliphatic HC {5}	70.000	68.491	2.2	95	-0.02
13	L1	C9-C12 Aliphatic HC {6}	77.000	73.176	5.0	95	-0.02
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	370.818	1.9	94	-0.02
15	L1	C9-C10 Aromatic HC	51.700	48.757	5.7	93	-0.02
16	L1	C9-C10 Aromatic HC {2}	51.200	48.136	6.0	93	-0.02
17	L1	C9-C10 Aromatic HC {3}	52.200	50.155	3.9	95	-0.01
18	L1	C9-C10 Aromatic HC {4}	58.700	56.141	4.4	95	-0.02
19	L1	C9-C10 Aromatic HC {5}	52.600	50.656	3.7	96	-0.01
20	L1	C9-C10 Aromatic HC {6}	58.700	55.898	4.8	95	-0.01
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	254.066	4.5	94	-0.02
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.00#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.41#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.30#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-11.07#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.84#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.29#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.42#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.41#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.54#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.52#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.63#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.80#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.45#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.35#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.52#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.62#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.62#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	0.00
40	I	Chlorobenzene-d5	12.500	12.500	0.0	74	-0.02
41	S	4-Bromofluorobenzene	89.500	87.256	2.5	73	-0.01

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\053112\05311202.D Vial: 2
Acq On : 31 May 2012 10:30 am Operator: RACHEL HILL
Sample : CCV VOA9 053112 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 31 15:23 2012 Quant Results File: 052112V9.RES

Quant Method : C:\HPCHEM\1\METHODS\052112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue May 22 10:13:50 2012
Response via : Initial Calibration
DataAcq Meth : 052112V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.50	117	615672	12.50	ug/m3	-0.02
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.34	95	409583	87.26	ug/m3	-0.01
Spiked Amount 89.500 Range 70 - 130 Recovery = 97.50%						

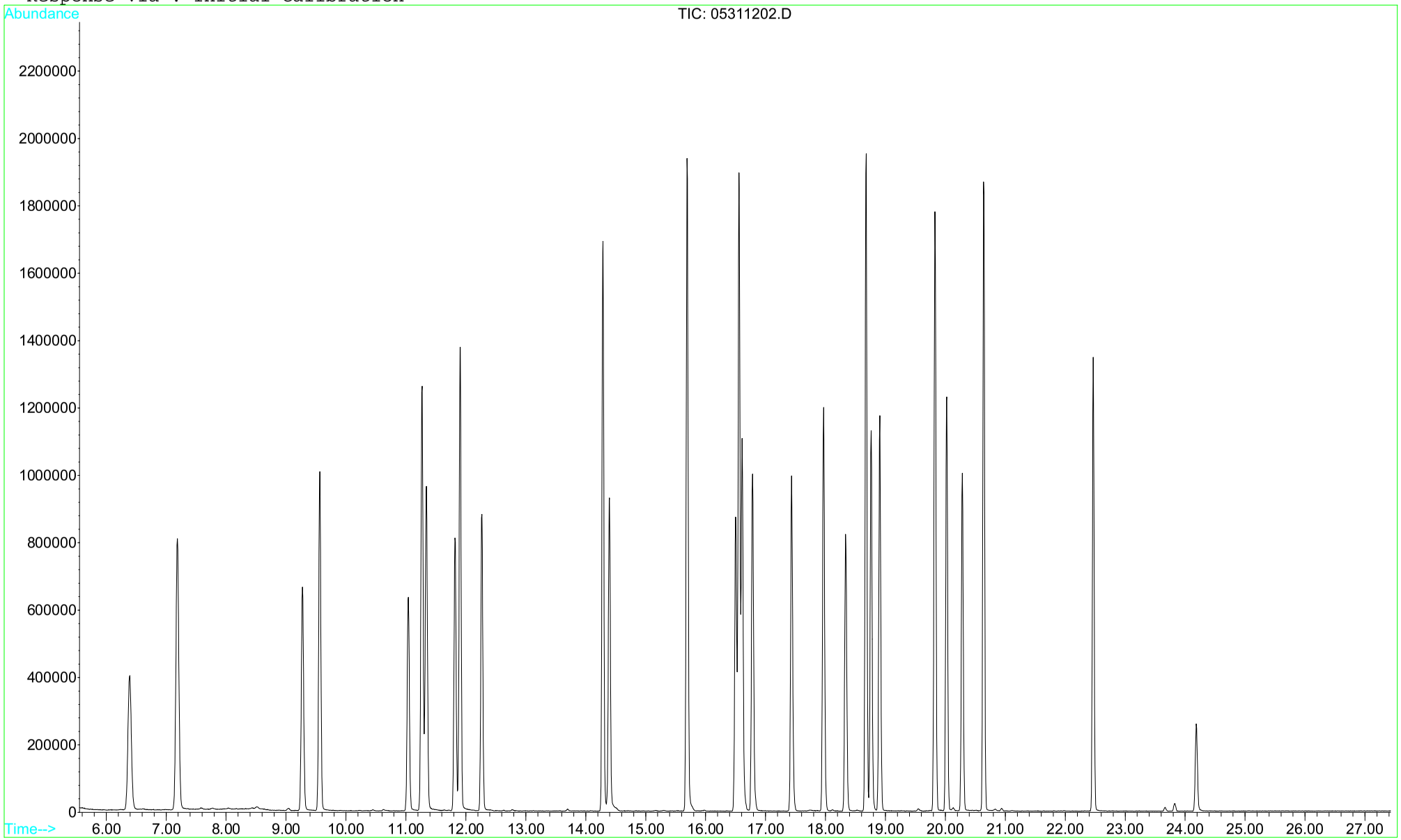
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2773477	30.80	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.56	TIC	2495929	35.94	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.27	TIC	3223416	41.40	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2426505	34.36	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	3113352	41.29	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3616868	48.02	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	17649547m	232.19	ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	4400041	55.66	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	4169289	53.64	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	4023667	59.02	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	3898253	59.52	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	3795199	68.49	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.47	TIC	2708961	73.18	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	22995410m	370.82	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	275644	48.76	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	290647	48.14	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	432498	50.15	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	97347	56.14	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	330497	50.66	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	244436	55.90	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1671069m	254.07	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\053112\05311202.D Vial: 2
Acq On : 31 May 2012 10:30 am Operator: RACHEL HILL
Sample : CCV VOA9 053112 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 31 15:23 2012 Quant Results File: 052112V9.RES

Method : C:\HPCHEM\1\METHODS\052112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue May 22 10:13:50 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: **VOA9_120604A** **Run No.:** 49092

Analytical Run Date: 6/4/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

Calibration ID: 49059 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: PR AW 6.4.12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 060412	BFB_TUNE	TUNE	R49092	6/4/2012 11:14:00 AM	Robert Lynch		
CCV VOA9 060412	MA_APH	CCV	R49092	6/4/2012 11:57:00 AM	Robert Lynch		
RLVS VOA9 060412	MA_APH	RLVS	R49092	6/4/2012 3:55:00 PM	Robert Lynch		
MBLK VOA9 060412	MA_APH	MBLK	R49092	6/4/2012 4:49:00 PM	Robert Lynch		
1205939-032A	MA_APH	SAMP	R49092	6/4/2012 5:32:00 PM	Robert Lynch		
1205939-033A	MA_APH	SAMP	R49092	6/4/2012 6:15:00 PM	Robert Lynch		
1205939-036A	MA_APH	SAMP	R49092	6/4/2012 8:35:00 PM	Robert Lynch		
1205939-037A	MA_APH	SAMP	R49092	6/4/2012 9:24:00 PM	Robert Lynch		
1205939-038A	MA_APH	SAMP	R49092	6/4/2012 10:13:00 PM	Robert Lynch		
1205939-044A	MA_APH	SAMP	R49092	6/5/2012 2:42:00 AM	Robert Lynch		
1205939-018A	MA_APH	SAMP	R49092	6/5/2012 4:09:00 AM	Robert Lynch		
1205939-018Adup	MA_APH	DUP	R49092	6/5/2012 4:54:00 AM	Robert Lynch		
1205939-034A	MA_APH	SAMP	R49092	6/5/2012 5:43:00 AM	Robert Lynch		
RLVS2 VOA9 06041	MA_APH	RLVS	R49092	6/5/2012 10:52:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

13-Jun-12

RunNo 49092

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
959577	BFB VOA9 060412	BFB_TUNE	TUNE	.\1\DATA\060412	6/4/2012 11:14:0	1	R49092		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		62.5	62.5		100	0	0	0	0	0	63%	50	120	0%	
175	M		7.4	7.4		100	0	0	0	0	0	7%	4	9	0%	
176	M		96.3	96.3		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		22.9	22.9		100	0	0	0	0	0	23%	8	40	0%	
75	M		47.8	47.8		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
959578	CCV VOA9 060412	MA_APH	CCV	.\1\DATA\060412	6/4/2012 11:57:0	1	R49092		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	258.72	258.72		234	0	0	0	0	0	111%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	1170	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	303.96	303.96		266	0	0	0	0	0	114%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	1330	0%	0	0	0%	
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	431.66	431.66		378	0	0	0	0	0	114%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	1890	0%	0	0	0%	
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	89.85	89.85		89.5	0	0	0	0	0	100%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\060412\06041202.D Vial: 2
Acq On : 4 Jun 2012 11:57 am Operator: RACHEL HILL
Sample : CCV VOA9 060412 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\060112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jun 04 10:17:25 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	32.170	-10.2	107	-0.02
2	L1	C5-C8 Aliphatic HC {2}	36.400	40.285	-10.7	110	-0.02
3	L1	C5-C8 Aliphatic HC {3}	41.800	47.103	-12.7	110	-0.03
4	L1	C5-C8 Aliphatic HC {4}	35.400	38.165	-7.8	109	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	46.506	-10.2	108	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	54.479	-11.2	109	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	258.718	-10.6	109	0.19
8	L1	C9-C12 Aliphatic HC	54.600	60.820	-11.4	109	-0.02
9	L1	C9-C12 Aliphatic HC {2}	54.600	61.958	-13.5	109	-0.02
10	L1	C9-C12 Aliphatic HC {3}	61.200	69.406	-13.4	111	-0.02
11	L1	C9-C12 Aliphatic HC {4}	60.800	69.031	-13.5	111	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	81.487	-16.4	115	-0.01
13	L1	C9-C12 Aliphatic HC {6}	77.000	91.558	-18.9	119	-0.01
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	431.658	-14.2	112	-0.02
15	L1	C9-C10 Aromatic HC	51.700	57.620	-11.5	114	-0.01
16	L1	C9-C10 Aromatic HC {2}	51.200	56.995	-11.3	113	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	60.022	-15.0	115	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	67.526	-15.0	116	-0.01
19	L1	C9-C10 Aromatic HC {5}	52.600	60.616	-15.2	116	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	68.465	-16.6	118	-0.01
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	303.963	-14.3	115	-0.02
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.00#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.41#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.30#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-11.07#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.84#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.29#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.42#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.41#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.54#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.52#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.63#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.80#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.45#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.35#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.52#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.62#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.62#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	0.00
40	I	Chlorobenzene-d5	12.500	12.500	0.0	102	-0.01
41	S	4-Bromofluorobenzene	89.500	89.854	-0.4	103	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060412\06041202.D Vial: 2
Acq On : 4 Jun 2012 11:57 am Operator: RACHEL HILL
Sample : CCV VOA9 060412 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 4 17:55 2012 Quant Results File: 060112V9.RES

Quant Method : C:\HPCHEM\1\METHODS\060112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jun 04 10:17:25 2012
Response via : Initial Calibration
DataAcq Meth : 060112V9

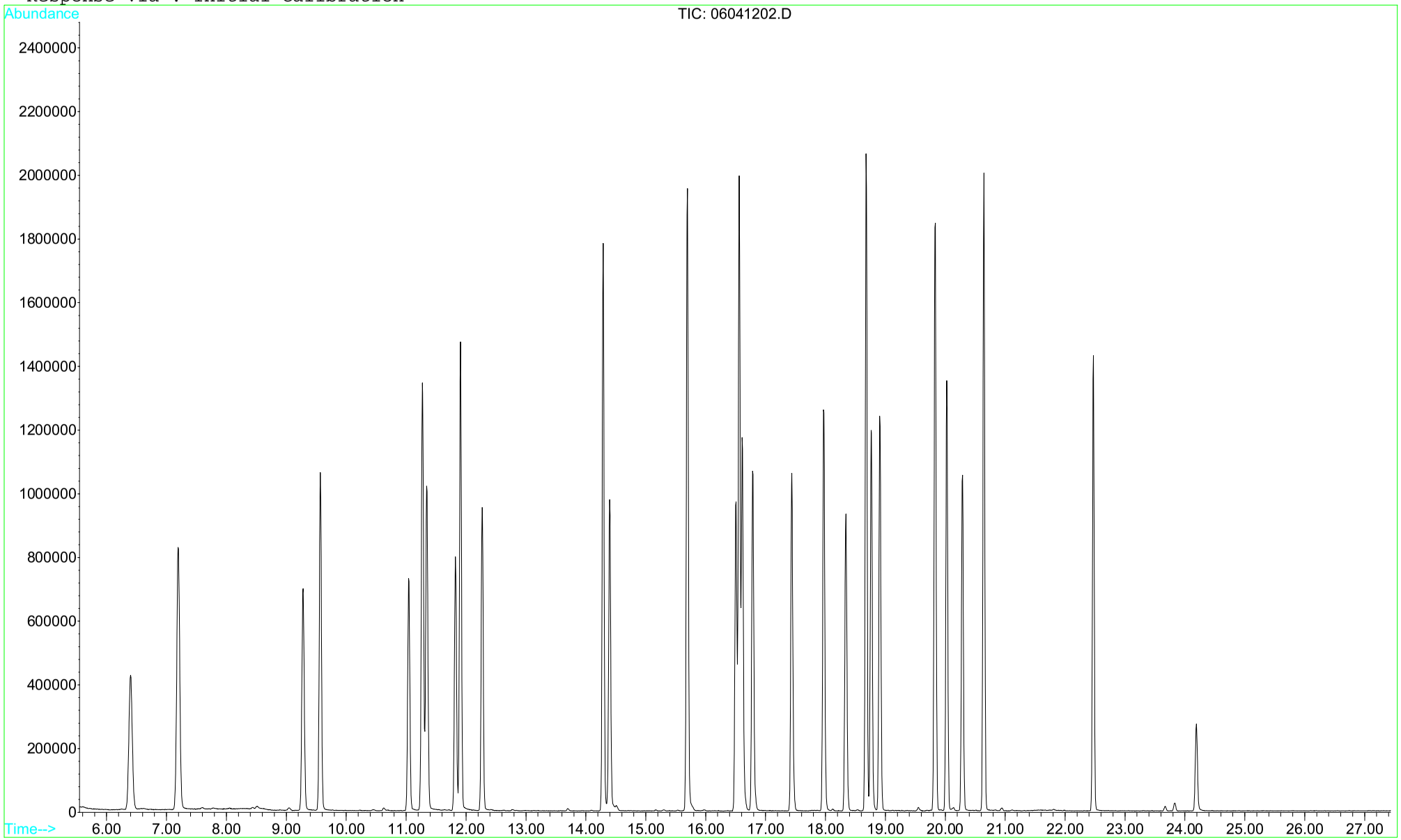
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	706331	12.50	ug/m3	-0.01
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.34	95	478279	89.85	ug/m3	0.00
Spiked Amount 89.500 Range 70 - 130 Recovery = 100.39%						
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2890750	32.17	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2668787	40.29	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.27	TIC	3465468	47.10	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2574908	38.16	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	3291214	46.51	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3823930	54.48	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	18715057m	258.72	ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	4451357	60.82	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	4382922	61.96	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	4256417	69.41	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	4129032	69.03	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	4034772	81.49	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.47	TIC	2892698	91.56	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	24147198m	431.66	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	298830	57.62	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	315205	57.00	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	474007	60.02	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	106037	67.53	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.29	120	360532	60.62	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	271405	68.47	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1826016m	303.96	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060412\06041202.D Vial: 2
Acq On : 4 Jun 2012 11:57 am Operator: RACHEL HILL
Sample : CCV VOA9 060412 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 4 17:55 2012 Quant Results File: 060112V9.RES

Method : C:\HPCHEM\1\METHODS\060112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jun 04 10:17:25 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: **VOA9_120605A** **Run No.:** 49118

Analytical Run Date: 6/5/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

Calibration ID: 49059 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: PR AW 6.5.12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 060512	BFB_TUNE	TUNE	R49118	6/5/2012 11:47:00 AM	Robert Lynch		
CCV VOA9 060512	MA_APH	CCV	R49118	6/5/2012 12:30:00 PM	Robert Lynch		
RLVS VOA9 060512	MA_APH	RLVS	R49118	6/5/2012 1:13:00 PM	Robert Lynch		
MBLK VOA9 060512	MA_APH	MBLK	R49118	6/5/2012 3:04:00 PM	Robert Lynch		
1205939-042A	MA_APH	SAMP	R49118	6/5/2012 3:47:00 PM	Robert Lynch		
1205939-039A	MA_APH	SAMP	R49118	6/5/2012 4:36:00 PM	Robert Lynch		
1205939-035A	MA_APH	SAMP	R49118	6/5/2012 5:25:00 PM	Robert Lynch		
1205939-040A	MA_APH	SAMP	R49118	6/5/2012 6:15:00 PM	Robert Lynch		
1205939-040Adup	MA_APH	DUP	R49118	6/6/2012 9:05:00 AM	Robert Lynch		
1205939-041A	MA_APH	SAMP	R49118	6/6/2012 9:55:00 AM	Robert Lynch		
RLVS2 VOA9 06051	MA_APH	RLVS	R49118	6/6/2012 10:40:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

13-Jun-12

RunNo 49118

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
959957	BFB VOA9 060512	BFB_TUNE	TUNE	.\1\DATA\060512	6/5/2012 11:47:0	1	R49118		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		61.8	61.8		100	0	0	0	0	0	62%	50	120	0%	
175	M		7.4	7.4		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		6.6	6.6		100	0	0	0	0	0	7%	5	9	0%	
50	M		24.1	24.1		100	0	0	0	0	0	24%	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
959958	CCV VOA9 060512	MA_APH	CCV	.\1\DATA\060512	6/5/2012 12:30:0	1	R49118		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	245	245		234	0	0	0	0	0	105%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	1170	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	280.34	280.34		266	0	0	0	0	0	105%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	1330	0%	0	0	0%	
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	397.18	397.18		378	0	0	0	0	0	105%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	1890	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	87.36	87.36		89.5	0	0	0	0	0	98%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\060512\06051202.D Vial: 2
Acq On : 5 Jun 2012 12:30 pm Operator: RACHEL HILL
Sample : CCV VOA9 060512 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\060112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jun 04 10:17:25 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	30.407	-4.1	101	-0.02
2	L1	C5-C8 Aliphatic HC {2}	36.400	38.379	-5.4	104	-0.02
3	L1	C5-C8 Aliphatic HC {3}	41.800	44.778	-7.1	105	-0.03
4	L1	C5-C8 Aliphatic HC {4}	35.400	36.098	-2.0	103	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	44.069	-4.4	103	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	51.282	-4.7	103	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	245.004	-4.7	103	0.19
8	L1	C9-C12 Aliphatic HC	54.600	56.898	-4.2	102	-0.02
9	L1	C9-C12 Aliphatic HC {2}	54.600	57.360	-5.1	101	-0.02
10	L1	C9-C12 Aliphatic HC {3}	61.200	64.563	-5.5	103	-0.01
11	L1	C9-C12 Aliphatic HC {4}	60.800	64.149	-5.5	103	-0.01
12	L1	C9-C12 Aliphatic HC {5}	70.000	73.239	-4.6	103	-0.01
13	L1	C9-C12 Aliphatic HC {6}	77.000	81.460	-5.8	106	-0.02
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	397.180	-5.1	103	-0.02
15	L1	C9-C10 Aromatic HC	51.700	53.208	-2.9	105	-0.02
16	L1	C9-C10 Aromatic HC {2}	51.200	53.099	-3.7	105	-0.01
17	L1	C9-C10 Aromatic HC {3}	52.200	55.592	-6.5	107	-0.01
18	L1	C9-C10 Aromatic HC {4}	58.700	62.809	-7.0	108	-0.01
19	L1	C9-C10 Aromatic HC {5}	52.600	55.746	-6.0	107	-0.01
20	L1	C9-C10 Aromatic HC {6}	58.700	61.869	-5.4	107	-0.01
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	280.335	-5.4	106	-0.02
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.00#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.41#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.30#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-11.07#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.84#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.29#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.42#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.41#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.54#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.52#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.63#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.80#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.45#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.35#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.52#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.62#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.62#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	0.00
40	I	Chlorobenzene-d5	12.500	12.500	0.0	91	-0.02
41	S	4-Bromofluorobenzene	89.500	87.358	2.4	90	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060512\06051202.D Vial: 2
Acq On : 5 Jun 2012 12:30 pm Operator: RACHEL HILL
Sample : CCV VOA9 060512 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 5 13:31 2012 Quant Results File: 060112V9.RES

Quant Method : C:\HPCHEM\1\METHODS\060112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jun 04 10:17:25 2012
Response via : Initial Calibration
DataAcq Meth : 060112V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.50	117	631467	12.50	ug/m3	-0.02

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.34	95	415708	87.36	ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 97.61%

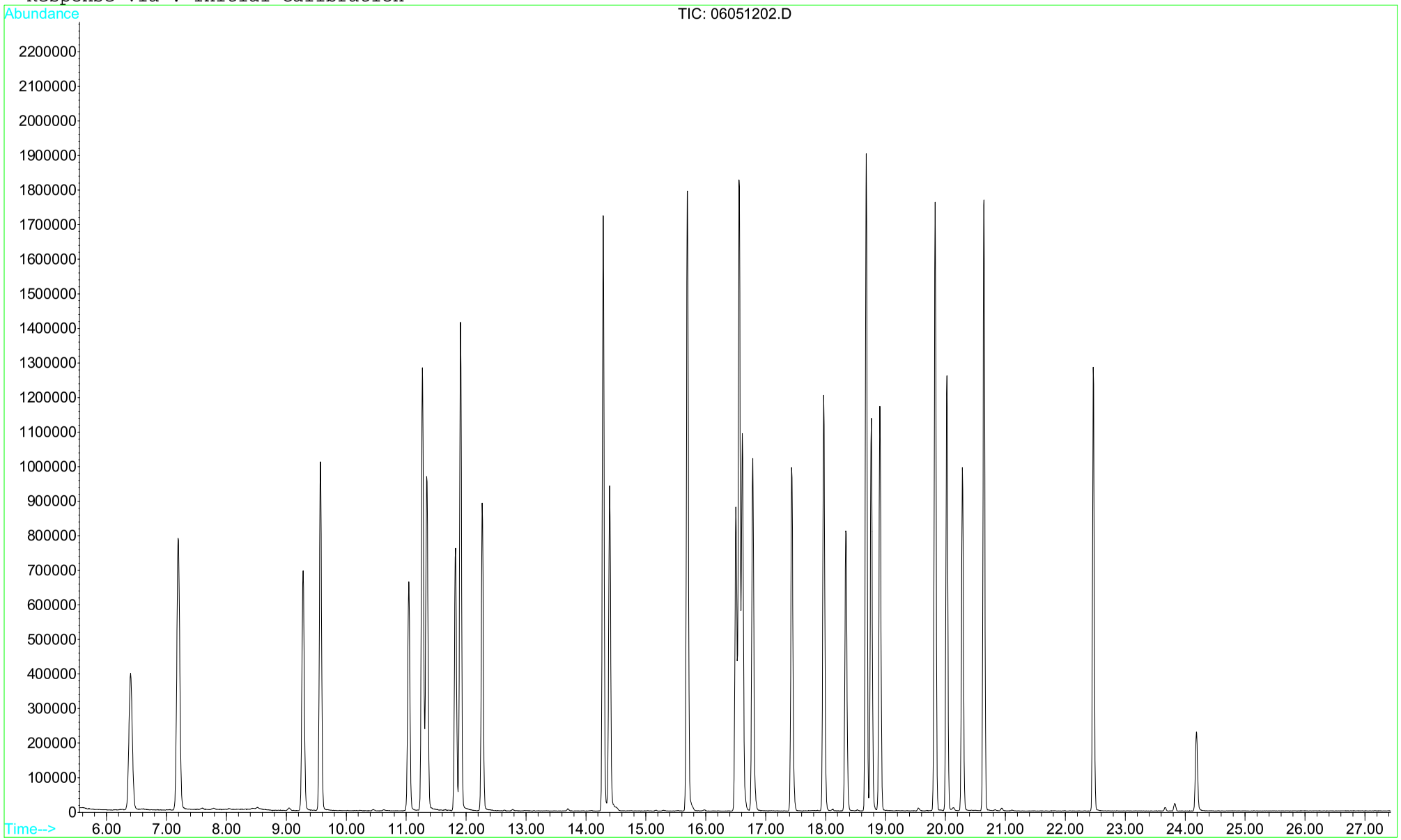
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2732302	30.41	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2542530	38.38	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.27	TIC	3294355	44.78	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2435507	36.10	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	3118723	44.07	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3599547	51.28	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	17722964m	245.00	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	4164335	56.90	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	4057680	57.36	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3959438	64.56	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	3837022	64.15	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	3626350	73.24	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.47	TIC	2573657	81.46	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	22218482m	397.18	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	275947	53.21	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	293658	53.10	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	439022	55.59	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	98630	62.81	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	331562	55.75	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	245257	61.87	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1684076m	280.34	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060512\06051202.D Vial: 2
Acq On : 5 Jun 2012 12:30 pm Operator: RACHEL HILL
Sample : CCV VOA9 060512 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 5 13:31 2012 Quant Results File: 060112V9.RES

Method : C:\HPCHEM\1\METHODS\060112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jun 04 10:17:25 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: **VOA9_120606A** **Run No.:** 49149

Analytical Run Date: 6/6/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

Calibration ID: 49059 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: PR AW 6.8.12 061112rsl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 060612	BFB_TUNE	TUNE	R49149	6/6/2012 11:39:00 AM	Robert Lynch		
CCV VOA9 060612	MA_APH	CCV	R49149	6/6/2012 12:23:00 PM	Robert Lynch		
RLVS VOA9 060612	MA_APH	RLVS	R49149	6/6/2012 1:07:00 PM	Robert Lynch		
MBLK VOA9 060612	MA_APH	MBLK	R49149	6/6/2012 2:04:00 PM	Robert Lynch		
1205939-043A	MA_APH	SAMP	R49149	6/6/2012 2:55:00 PM	Robert Lynch		
1205939-045A	MA_APH	SAMP	R49149	6/6/2012 3:45:00 PM	Robert Lynch		
1205A85-005A	MA_APH	SAMP	R49149	6/6/2012 4:28:00 PM	Robert Lynch		
1205A85-006A	MA_APH	SAMP	R49149	6/6/2012 5:11:00 PM	Robert Lynch		
1205A85-006Adup	MA_APH	DUP	R49149	6/6/2012 5:53:00 PM	Robert Lynch		
1205A85-007A	MA_APH	SAMP	R49149	6/6/2012 6:36:00 PM	Robert Lynch		
1205A85-001A	MA_APH	SAMP	R49149	6/6/2012 7:26:00 PM	Robert Lynch		
1205A85-002A	MA_APH	SAMP	R49149	6/6/2012 8:16:00 PM	Robert Lynch		
1205A85-003A	MA_APH	SAMP	R49149	6/6/2012 9:02:00 PM	Robert Lynch		
1205A85-011A	MA_APH	SAMP	R49149	6/7/2012 12:05:00 AM	Robert Lynch		
1205A85-022A	MA_APH	SAMP	R49149	6/7/2012 12:51:00 AM	Robert Lynch		
1205A85-023A	MA_APH	SAMP	R49149	6/7/2012 1:38:00 AM	Robert Lynch		
RLVS2 VOA9 06061	MA_APH	RLVS	R49149	6/7/2012 10:02:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

13-Jun-12

RunNo 49149

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
960605	BFB VOA9 060612	BFB_TUNE	TUNE	.\1\DATA\060612	6/6/2012 11:39:0	1	R49149		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		62	62		100	0	0	0	0	0	62%	50	120	0%	
175	M		7.6	7.6		100	0	0	0	0	0	8%	4	9	0%	
176	M		96.2	96.2		100	0	0	0	0	0	96%	93	101	0%	
177	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	
50	M		24.1	24.1		100	0	0	0	0	0	24%	8	40	0%	
75	M		49.6	49.6		100	0	0	0	0	0	50%	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
960606	CCV VOA9 060612	MA_APH	CCV	.\1\DATA\060612	6/6/2012 12:23:0	1	R49149		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	238.42	238.42		234	0	0	0	0	0	102%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	1170	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	273.86	273.86		266	0	0	0	0	0	103%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	1330	0%	0	0	0%	
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	381.9	381.9		378	0	0	0	0	0	101%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	1890	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	88.49	88.49		89.5	0	0	0	0	0	99%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\060612\06061202.D Vial: 2
Acq On : 6 Jun 2012 12:23 pm Operator: RACHEL HILL
Sample : CCV VOA9 060612 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\060112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jun 04 10:17:25 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	30.913	-5.9	103	-0.02
2	L1	C5-C8 Aliphatic HC {2}	36.400	37.028	-1.7	101	-0.03
3	L1	C5-C8 Aliphatic HC {3}	41.800	42.416	-1.5	99	-0.03
4	L1	C5-C8 Aliphatic HC {4}	35.400	35.482	-0.2	101	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	42.453	-0.6	99	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	49.817	-1.7	100	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	238.416	-1.9	100	0.19
8	L1	C9-C12 Aliphatic HC	54.600	55.078	-0.9	99	-0.02
9	L1	C9-C12 Aliphatic HC {2}	54.600	53.583	1.9	95	-0.02
10	L1	C9-C12 Aliphatic HC {3}	61.200	62.689	-2.4	100	-0.02
11	L1	C9-C12 Aliphatic HC {4}	60.800	62.428	-2.7	101	-0.01
12	L1	C9-C12 Aliphatic HC {5}	70.000	69.586	0.6	98	-0.01
13	L1	C9-C12 Aliphatic HC {6}	77.000	79.702	-3.5	104	-0.02
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	381.902	-1.0	99	-0.02
15	L1	C9-C10 Aromatic HC	51.700	52.116	-0.8	103	-0.02
16	L1	C9-C10 Aromatic HC {2}	51.200	52.798	-3.1	105	-0.02
17	L1	C9-C10 Aromatic HC {3}	52.200	53.680	-2.8	103	-0.01
18	L1	C9-C10 Aromatic HC {4}	58.700	60.438	-3.0	104	-0.01
19	L1	C9-C10 Aromatic HC {5}	52.600	54.266	-3.2	104	-0.01
20	L1	C9-C10 Aromatic HC {6}	58.700	60.874	-3.7	105	-0.01
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	273.862	-3.0	104	-0.02
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.00#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.41#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.30#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-11.07#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.84#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.29#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.42#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.41#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.54#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.52#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.63#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.80#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.45#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.35#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.52#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.62#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.62#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	0.00
40	I	Chlorobenzene-d5	12.500	12.500	0.0	96	-0.02
41	S	4-Bromofluorobenzene	89.500	88.489	1.1	96	-0.01

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060612\06061202.D Vial: 2
Acq On : 6 Jun 2012 12:23 pm Operator: RACHEL HILL
Sample : CCV VOA9 060612 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 6 15:05 2012 Quant Results File: 060112V9.RES

Quant Method : C:\HPCHEM\1\METHODS\060112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jun 04 10:17:25 2012
Response via : Initial Calibration
DataAcq Meth : 060112V9

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
40) Chlorobenzene-d5	16.50	117	666060	12.50 ug/m3	-0.02

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.33	95	444156	88.49 ug/m3	-0.01

Spiked Amount 89.500 Range 70 - 130 Recovery = 98.87%

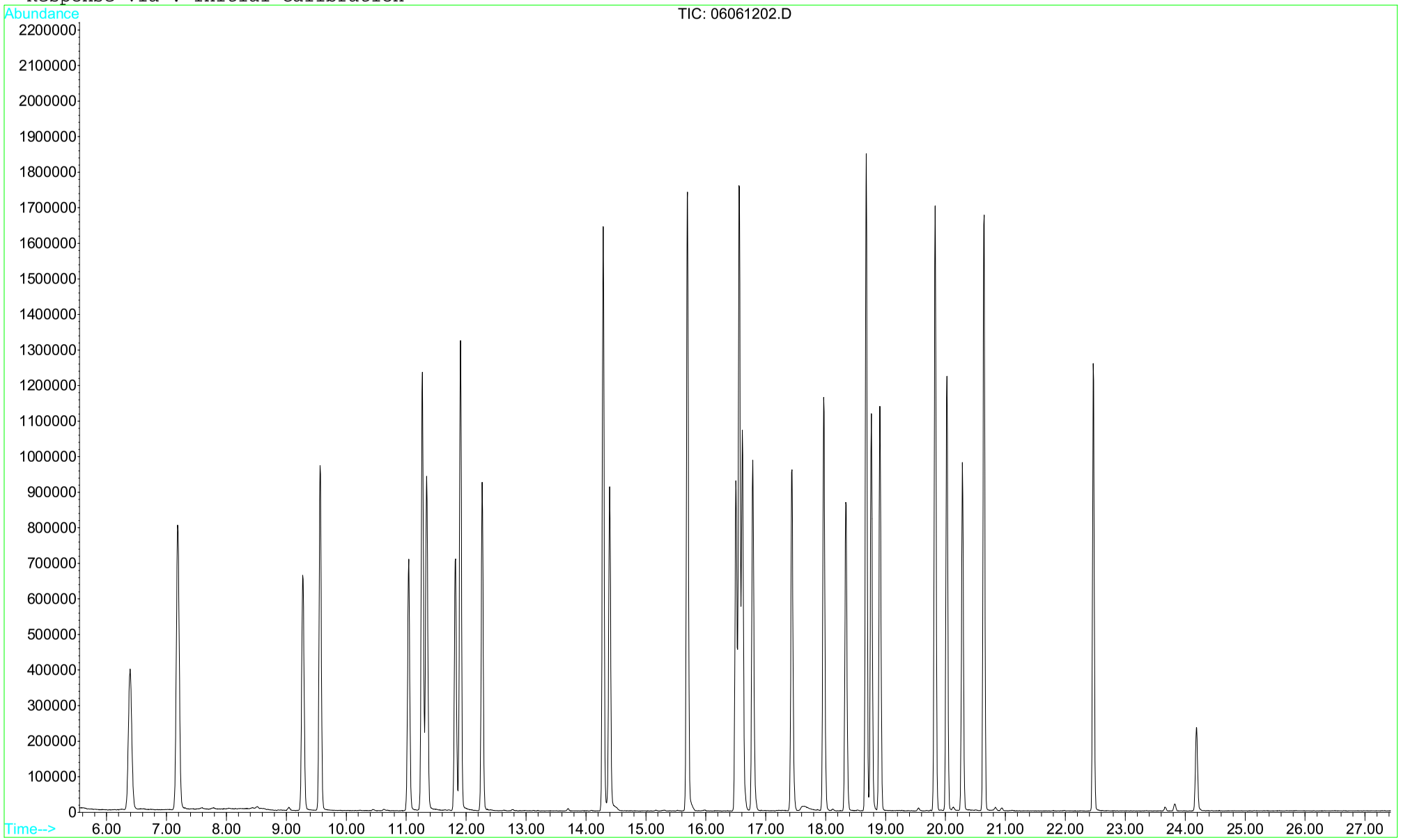
Target Compounds					Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2777799	30.91 ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.56	TIC	2453002	37.03 ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.27	TIC	3120611	42.42 ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2393890	35.48 ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	3004396	42.45 ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3496703	49.82 ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	17246401m	238.42 ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	4031117	55.08 ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.55	TIC	3790480	53.58 ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3844538	62.69 ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	3734091	62.43 ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	3445503	69.59 ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.47	TIC	2518097	79.70 ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	21363826m	381.90 ug/m3	
15) C9-C10 Aromatic HC	17.97	120	270286	52.12 ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	291995	52.80 ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	423929	53.68 ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	94907	60.44 ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	322760	54.27 ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	241312	60.87 ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1645189m	273.86 ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060612\06061202.D Vial: 2
Acq On : 6 Jun 2012 12:23 pm Operator: RACHEL HILL
Sample : CCV VOA9 060612 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 6 15:05 2012 Quant Results File: 060112V9.RES

Method : C:\HPCHEM\1\METHODS\060112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jun 04 10:17:25 2012
Response via : Initial Calibration



Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\052112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue May 22 10:13:50 2012
Response via : Initial Calibration

Calibration Files
1 =05211206.D 2 =05211207.D 3 =05211208.D
4 =05211209.D 5 =05211210.D 6 =05211211.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)	L1	C5-C8 Aliphatic HC	1.048	0.923	0.896	0.869	0.899	0.849	0.901	E5	8.16
2)	L1	C5-C8 Aliphatic HC	7.804	7.176	6.822	6.689	6.863	6.683	6.944	E4	6.13
3)	L1	C5-C8 Aliphatic HC	8.737	8.172	7.653	7.393	7.757	7.405	7.785	E4	6.50
4)	L1	C5-C8 Aliphatic HC	7.891	7.079	7.016	6.806	6.958	6.922	7.062	E4	5.41
5)	L1	C5-C8 Aliphatic HC	8.406	7.738	7.465	7.326	7.581	7.252	7.541	E4	5.92
6)	L1	C5-C8 Aliphatic HC	8.380	7.842	7.562	7.377	7.504	7.268	7.532	E4	6.57
7)	L1	C5-C8 Aliphatic HC	8.547	7.836	7.532	7.350	7.573	7.294	7.601	E4	6.33
8)	L1	C9-C12 Aliphatic HC	8.753	8.272	7.954	7.860	7.893	7.593	7.905	E4	6.84
9)	L1	C9-C12 Aliphatic HC	8.569	8.294	7.872	7.765	7.663	7.579	7.773	E4	7.77
10)	L1	C9-C12 Aliphatic HC	7.463	7.152	6.923	6.865	6.847	6.533	6.817	E4	7.09
11)	L1	C9-C12 Aliphatic HC	7.152	6.837	6.561	6.542	6.508	6.370	6.549	E4	6.04
12)	L1	C9-C12 Aliphatic HC	5.746	5.693	5.601	5.549	5.570	5.470	5.541	E4	3.46
13)	L1	C9-C12 Aliphatic HC	3.706	3.689	3.703	3.694	3.743	3.762	3.702	E4	1.25
14)	L1	C9-C12 Aliphatic HC	6.679	6.456	6.256	6.200	6.195	6.051	6.201	E4	5.56
15)	L1	C9-C10 Aromatic HC	5.941	5.743	5.471	5.508	5.680	5.686	5.653	E3	2.87
16)	L1	C9-C10 Aromatic HC	6.309	6.123	5.858	5.873	6.062	6.044	6.038	E3	2.55
17)	L1	C9-C10 Aromatic HC	9.073	8.729	8.423	8.449	8.682	8.600	8.623	E3	2.74
18)	L1	C9-C10 Aromatic HC	1.760	1.742	1.705	1.707	1.769	1.757	1.734	E3	1.73
19)	L1	C9-C10 Aromatic HC	6.755	6.559	6.396	6.288	6.560	6.549	6.524	E3	2.26
20)	L1	C9-C10 Aromatic HC	4.515	4.390	4.299	4.264	4.434	4.406	4.373	E3	2.03
21)	L1	C9-C10 Aromatic HC	6.870	6.658	6.415	6.394	6.606	6.604	6.577	E3	2.49
22)		C5-C8 Aliphatic	8.547	7.836	7.532	7.350	7.573	7.294	7.601	E4	6.33
23)	L1	non C5-C8	8.029	7.137	6.969	6.762	6.766	6.590	6.945	E4	7.76
24)	L1	non C5-C8 {2}	5.661	5.036	4.830	4.638	4.837	4.580	4.875	E4	7.94
25)	L1	non C5-C8 {3}	3.343	3.276	3.203	3.140	3.138	3.145	3.211	E4	2.44
26)	L1	non C5-C8 {4}	6.487	5.922	5.599	5.415	5.717	5.539	5.751	E4	6.28
27)	L1	non C5-C8 {5}	4.728	4.614	4.420	4.361	4.327	4.388	4.460	E4	3.37
28)	L1	non C5-C8 {6}	6.331	5.955	5.587	5.830	6.030	5.881	5.928	E4	3.79
29)	L1	non C5-C8 - TOTAL	4.856	4.922	4.803	4.847	5.085	5.128	4.983	E4	3.35
30)		C9-C12 Aliphatic	6.679	6.456	6.256	6.200	6.195	6.051	6.201	E4	5.56
31)	L1	non C9-C12	4.570	4.596	4.467	4.523	4.377	4.344	4.451	E4	2.70
32)	L1	non C9-C12 {2}	5.876	5.698	5.386	5.384	5.696	5.352	5.482	E4	5.42
33)	L1	non C9-C12 {3}	6.222	5.930	5.693	5.604	5.698	5.666	5.770	E4	3.98
34)	L1	non C9-C12 {4}	6.014	5.713	5.438	5.390	5.536	5.423	5.554	E4	4.23
35)	L1	non C9-C12 {5}	2.836	2.876	2.760	2.815	2.814	2.890	2.857	E4	2.81
36)	L1	non C9-C12 - TOTAL	3.838	3.887	3.735	3.760	3.864	3.828	3.810	E4	1.54
37)	L1	C9-C10 Aromatic	6.870	6.658	6.415	6.394	6.606	6.604	6.577	E3	2.49
38)	L1	C9-C10 Aromatic {2}	6.870	6.658	6.415	6.394	6.606	6.604	6.577	E3	2.49
39)	L1	C9-C10 Aromatic - T	6.870	6.658	6.415	6.394	6.606	6.604	6.577	E3	2.49
40)	I	Chlorobenzene-d5	----------ISTD----------								
41)	S	4-Bromofluorobenzen	0.093	0.093	0.095	0.096	0.095	0.097	0.095		2.01

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

Compound List Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\052112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue May 22 10:13:50 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	7.21	1.000	A	0	A	B
2	L1	C5-C8 Aliphatic HC {2}	TIC	9.59	1.000	A	0	A	B
3	L1	C5-C8 Aliphatic HC {3}	TIC	11.30	1.000	A	0	A	B
4	L1	C5-C8 Aliphatic HC {4}	TIC	11.37	1.000	A	0	A	B
5	L1	C5-C8 Aliphatic HC {5}	TIC	11.93	1.000	A	0	A	B
6	L1	C5-C8 Aliphatic HC {6}	TIC	14.31	1.000	A	0	A	B
7	L1	C5-C8 Aliphatic HC - TOTAL	TIC	7.00	1.000	A	0	A	B
8	L1	C9-C12 Aliphatic HC	TIC	15.71	1.000	A	0	A	B
9	L1	C9-C12 Aliphatic HC {2}	TIC	16.58	1.000	A	0	A	B
10	L1	C9-C12 Aliphatic HC {3}	TIC	18.69	1.000	A	0	A	B
11	L1	C9-C12 Aliphatic HC {4}	TIC	19.84	1.000	A	0	A	B
12	L1	C9-C12 Aliphatic HC {5}	TIC	20.66	1.000	A	0	A	B
13	L1	C9-C12 Aliphatic HC {6}	TIC	22.48	1.000	A	0	A	B
14	L1	C9-C12 Aliphatic HC - TOTAL	TIC	15.71	1.000	A	0	A	B
15	L1	C9-C10 Aromatic HC	120	17.99	1.000	A	0	A	B
16	L1	C9-C10 Aromatic HC {2}	120	18.78	1.000	A	0	A	B
17	L1	C9-C10 Aromatic HC {3}	120	18.92	1.000	A	0	A	B
18	L1	C9-C10 Aromatic HC {4}	120	20.04	1.000	A	0	A	B
19	L1	C9-C10 Aromatic HC {5}	120	20.30	1.000	A	0	A	B
20	L1	C9-C10 Aromatic HC {6}	134	20.04	1.000	A	0	A	B
21	L1	C9-C10 Aromatic HC - TOTAL	TIC	17.99	1.000	A	0	A	B
22		C5-C8 Aliphatic	TIC	7.00	1.000	A	0	A	B
23	L1	non C5-C8	TIC	6.41	1.000	A	0	A	B
24	L1	non C5-C8 {2}	TIC	9.30	1.000	A	0	A	B
25	L1	non C5-C8 {3}	TIC	11.07	1.000	A	0	A	B
26	L1	non C5-C8 {4}	TIC	11.84	1.000	A	0	A	B
27	L1	non C5-C8 {5}	TIC	12.29	1.000	A	0	A	B
28	L1	non C5-C8 {6}	TIC	14.42	1.000	A	0	A	B
29	L1	non C5-C8 - TOTAL	TIC	6.41	1.000	A	0	A	B
30		C9-C12 Aliphatic	TIC	16.54	1.000	A	0	A	B
31	L1	non C9-C12	TIC	16.52	1.000	A	0	A	B
32	L1	non C9-C12 {2}	TIC	16.63	1.000	A	0	A	B
33	L1	non C9-C12 {3}	TIC	16.80	1.000	A	0	A	B
34	L1	non C9-C12 {4}	TIC	17.45	1.000	A	0	A	B
35	L1	non C9-C12 {5}	TIC	18.35	1.000	A	0	A	B
36	L1	non C9-C12 - TOTAL	TIC	16.52	1.000	A	0	A	B
37	L1	C9-C10 Aromatic	120	17.62	1.000	A	0	A	B
38	L1	C9-C10 Aromatic {2}	134	17.62	1.000	A	0	A	B
39	L1	C9-C10 Aromatic - TOTAL	134	0.00	1.000	A	1	A	B
40	I	Chlorobenzene-d5	117	16.52	1.000	A	2	A	B
41	S	4-Bromofluorobenzene	95	18.35	1.111	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

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\052112\05211214.D Vial: 12
Acq On : 21 May 2012 10:40 pm Operator: RACHEL HILL
Sample : ICV VOA9 052112 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\052112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue May 22 10:13:50 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	32.520	-11.4	109	-0.03
2	L1	C5-C8 Aliphatic HC {2}	36.400	39.831	-9.4	106	-0.03
3	L1	C5-C8 Aliphatic HC {3}	41.800	45.012	-7.7	103	-0.03
4	L1	C5-C8 Aliphatic HC {4}	35.400	37.467	-5.8	106	-0.03
5	L1	C5-C8 Aliphatic HC {5}	42.200	45.494	-7.8	105	-0.03
6	L1	C5-C8 Aliphatic HC {6}	49.000	52.045	-6.2	102	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	252.529	-7.9	105	0.19
8	L1	C9-C12 Aliphatic HC	54.600	58.255	-6.7	102	-0.03
9	L1	C9-C12 Aliphatic HC {2}	54.600	58.735	-7.6	101	-0.02
10	L1	C9-C12 Aliphatic HC {3}	61.200	64.161	-4.8	100	-0.02
11	L1	C9-C12 Aliphatic HC {4}	60.800	63.828	-5.0	101	-0.02
12	L1	C9-C12 Aliphatic HC {5}	70.000	71.491	-2.1	99	-0.02
13	L1	C9-C12 Aliphatic HC {6}	77.000	73.958	4.0	96	-0.02
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	393.849	-4.2	100	-0.03
15	L1	C9-C10 Aromatic HC	51.700	53.417	-3.3	102	-0.02
16	L1	C9-C10 Aromatic HC {2}	51.200	53.449	-4.4	103	-0.02
17	L1	C9-C10 Aromatic HC {3}	52.200	54.247	-3.9	103	-0.02
18	L1	C9-C10 Aromatic HC {4}	58.700	61.953	-5.5	105	-0.02
19	L1	C9-C10 Aromatic HC {5}	52.600	54.651	-3.9	103	-0.01
20	L1	C9-C10 Aromatic HC {6}	58.700	60.944	-3.8	103	-0.01
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	277.164	-4.2	103	-0.02
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.00#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.41#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.30#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-11.07#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.84#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.29#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.42#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.41#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.54#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.52#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.63#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.80#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.45#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.35#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.52#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.62#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.62#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	0.00
40	I	Chlorobenzene-d5	12.500	12.500	0.0	104	-0.02
41	S	4-Bromofluorobenzene	89.500	88.087	1.6	104	-0.01

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\052112\05211214.D Vial: 12
Acq On : 21 May 2012 10:40 pm Operator: RACHEL HILL
Sample : ICV VOA9 052112 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 22 11:53 2012 Quant Results File: 052112V9.RES

Quant Method : C:\HPCHEM\1\METHODS\052112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue May 22 10:13:50 2012
Response via : Initial Calibration
DataAcq Meth : 052112V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.50	117	867381	12.50	ug/m3	-0.02

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.33	95	582528	88.09	ug/m3	-0.01

Spiked Amount 89.500 Range 70 - 130 Recovery = 98.42%

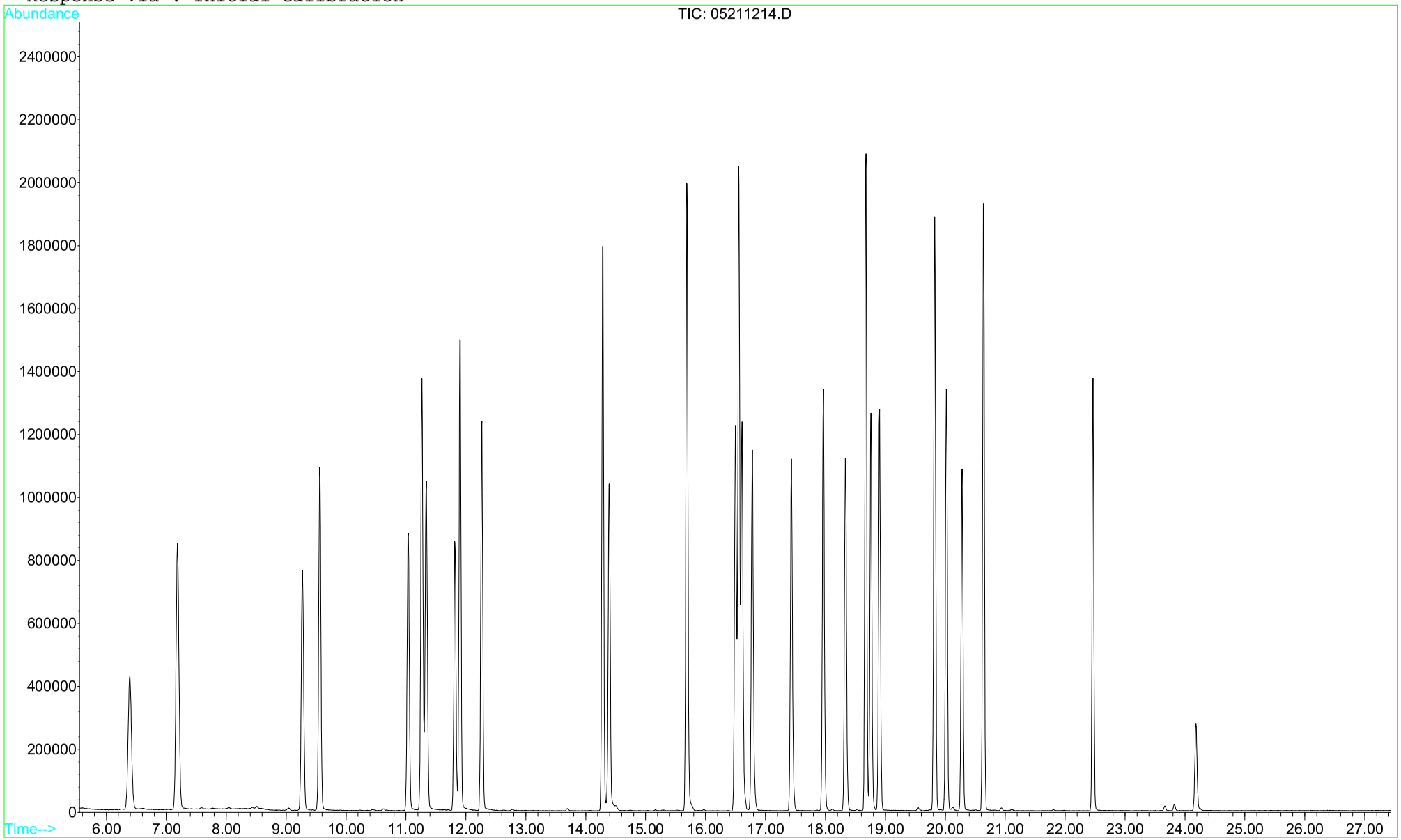
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2928557	32.52	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.56	TIC	2765958	39.83	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.27	TIC	3504347	45.01	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2645932	37.47	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.90	TIC	3430634	45.49	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3919760	52.04	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	19195188m	252.53	ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	4605160	58.25	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.55	TIC	4565220	58.73	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	4373795	64.16	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.82	TIC	4180121	63.83	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	3961447	71.49	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.46	TIC	2737913	73.96	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	24423656m	393.85	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	301990	53.42	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	322726	53.45	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.90	120	467785	54.25	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	107424	61.95	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	356565	54.65	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	266501	60.94	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1822991m	277.16	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\052112\05211214.D Vial: 12
Acq On : 21 May 2012 10:40 pm Operator: RACHEL HILL
Sample : ICV VOA9 052112 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 22 11:53 2012 Quant Results File: 052112V9.RES

Method : C:\HPCHEM\1\METHODS\052112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue May 22 10:13:50 2012
Response via : Initial Calibration



Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\060112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jun 04 10:17:25 2012
Response via : Initial Calibration

Calibration Files
1 =06011203.D 2 =06011204.D 3 =06011205.D
4 =06011206.D 5 =06011207.D 6 =06011208.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)	L1	C5-C8 Aliphatic HC	1.080	0.927	0.925	0.896	0.854	0.823	0.899	E5	10.69
2)	L1	C5-C8 Aliphatic HC	7.774	6.695	6.728	6.417	6.241	6.353	6.625	E4	8.29
3)	L1	C5-C8 Aliphatic HC	8.559	7.541	7.456	7.121	7.051	7.015	7.357	E4	8.07
4)	L1	C5-C8 Aliphatic HC	7.901	6.679	6.747	6.529	6.294	6.590	6.747	E4	7.85
5)	L1	C5-C8 Aliphatic HC	8.097	7.201	7.113	6.902	6.803	6.857	7.077	E4	7.00
6)	L1	C5-C8 Aliphatic HC	8.080	7.155	7.124	6.853	6.790	6.767	7.019	E4	7.64
7)	L1	C5-C8 Aliphatic HC	8.434	7.353	7.323	7.064	6.902	6.914	7.234	E4	8.08
8)	L1	C9-C12 Aliphatic HC	8.567	7.460	7.399	7.178	7.053	7.061	7.319	E4	8.62
9)	L1	C9-C12 Aliphatic HC	8.261	7.332	7.173	6.914	6.761	6.836	7.074	E4	8.86
10)	L1	C9-C12 Aliphatic HC	7.203	6.292	6.242	6.051	5.913	5.835	6.133	E4	9.11
11)	L1	C9-C12 Aliphatic HC	6.977	6.106	6.025	5.928	5.707	5.751	5.981	E4	8.38
12)	L1	C9-C12 Aliphatic HC	5.625	5.014	5.036	4.895	4.676	4.825	4.951	E4	6.85
13)	L1	C9-C12 Aliphatic HC	3.514	3.153	3.246	3.120	2.938	3.084	3.159	E4	5.76
14)	L1	C9-C12 Aliphatic HC	6.476	5.708	5.680	5.511	5.334	5.397	5.594	E4	8.01
15)	L1	C9-C10 Aromatic HC	5.760	5.067	5.040	5.041	5.008	5.233	5.186	E3	5.11
16)	L1	C9-C10 Aromatic HC	6.185	5.444	5.408	5.361	5.292	5.514	5.530	E3	5.41
17)	L1	C9-C10 Aromatic HC	8.878	7.881	7.726	7.755	7.574	7.821	7.897	E3	5.63
18)	L1	C9-C10 Aromatic HC	1.689	1.557	1.549	1.553	1.525	1.566	1.570	E3	3.43
19)	L1	C9-C10 Aromatic HC	6.605	5.896	5.873	5.767	5.665	5.887	5.948	E3	5.12
20)	L1	C9-C10 Aromatic HC	4.312	3.907	3.936	3.911	3.845	3.929	3.964	E3	3.94
21)	L1	C9-C10 Aromatic HC	6.683	5.951	5.891	5.856	5.753	5.984	6.007	E3	5.11
22)		C5-C8 Aliphatic	8.434	7.353	7.323	7.064	6.902	6.914	7.234	E4	8.08
23)	L1	non C5-C8	7.862	6.712	6.732	6.604	6.420	6.319	6.669	E4	8.71
24)	L1	non C5-C8 {2}	5.598	4.811	4.757	4.513	4.343	4.364	4.637	E4	10.66
25)	L1	non C5-C8 {3}	2.873	2.782	2.761	2.810	2.860	2.866	2.833	E4	1.68
26)	L1	non C5-C8 {4}	6.232	5.442	5.378	5.141	5.075	5.244	5.375	E4	7.47
27)	L1	non C5-C8 {5}	4.000	3.841	3.780	3.899	3.977	3.934	3.906	E4	1.95
28)	L1	non C5-C8 {6}	6.296	5.547	5.516	5.318	5.284	5.452	5.551	E4	6.17
29)	L1	non C5-C8 - TOTAL	4.427	4.424	4.490	4.521	4.591	4.807	4.581	E4	3.58
30)		C9-C12 Aliphatic	6.476	5.708	5.680	5.511	5.334	5.397	5.594	E4	8.01
31)	L1	non C9-C12	3.856	3.765	3.659	3.721	3.988	3.757	3.802	E4	2.88
32)	L1	non C9-C12 {2}	6.088	5.060	5.189	5.172	4.876	5.020	5.111	E4	10.03
33)	L1	non C9-C12 {3}	5.931	5.219	5.205	5.051	4.982	5.196	5.247	E4	5.99
34)	L1	non C9-C12 {4}	5.717	5.032	4.965	4.820	4.828	4.991	5.043	E4	6.10
35)	L1	non C9-C12 {5}	2.420	2.389	2.352	2.439	2.516	2.562	2.479	E4	4.56
36)	L1	non C9-C12 - TOTAL	3.476	3.341	3.344	3.364	3.386	3.506	3.403	E4	1.91
37)	L1	C9-C10 Aromatic	6.683	5.951	5.891	5.856	5.753	5.984	6.007	E3	5.11
38)	L1	C9-C10 Aromatic {2}	6.683	5.951	5.891	5.856	5.753	5.984	6.007	E3	5.11
39)	L1	C9-C10 Aromatic - T	6.683	5.951	5.891	5.856	5.753	5.984	6.007	E3	5.11
40)	I	Chlorobenzene-d5	----------ISTD----------								
41)	S	4-Bromofluorobenzen	0.092	0.093	0.093	0.095	0.094	0.095	0.094		2.17

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

Compound List Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\060112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jun 04 10:17:25 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	7.21	1.000	A	0	A	B
2	L1	C5-C8 Aliphatic HC {2}	TIC	9.59	1.000	A	0	A	B
3	L1	C5-C8 Aliphatic HC {3}	TIC	11.30	1.000	A	0	A	B
4	L1	C5-C8 Aliphatic HC {4}	TIC	11.37	1.000	A	0	A	B
5	L1	C5-C8 Aliphatic HC {5}	TIC	11.93	1.000	A	0	A	B
6	L1	C5-C8 Aliphatic HC {6}	TIC	14.31	1.000	A	0	A	B
7	L1	C5-C8 Aliphatic HC - TOTAL	TIC	7.00	1.000	A	0	A	B
8	L1	C9-C12 Aliphatic HC	TIC	15.71	1.000	A	0	A	B
9	L1	C9-C12 Aliphatic HC {2}	TIC	16.58	1.000	A	0	A	B
10	L1	C9-C12 Aliphatic HC {3}	TIC	18.69	1.000	A	0	A	B
11	L1	C9-C12 Aliphatic HC {4}	TIC	19.84	1.000	A	0	A	B
12	L1	C9-C12 Aliphatic HC {5}	TIC	20.66	1.000	A	0	A	B
13	L1	C9-C12 Aliphatic HC {6}	TIC	22.48	1.000	A	0	A	B
14	L1	C9-C12 Aliphatic HC - TOTAL	TIC	15.71	1.000	A	0	A	B
15	L1	C9-C10 Aromatic HC	120	17.99	1.000	A	0	A	B
16	L1	C9-C10 Aromatic HC {2}	120	18.78	1.000	A	0	A	B
17	L1	C9-C10 Aromatic HC {3}	120	18.92	1.000	A	0	A	B
18	L1	C9-C10 Aromatic HC {4}	120	20.04	1.000	A	0	A	B
19	L1	C9-C10 Aromatic HC {5}	120	20.30	1.000	A	0	A	B
20	L1	C9-C10 Aromatic HC {6}	134	20.04	1.000	A	0	A	B
21	L1	C9-C10 Aromatic HC - TOTAL	TIC	17.99	1.000	A	0	A	B
22		C5-C8 Aliphatic	TIC	7.00	1.000	A	0	A	B
23	L1	non C5-C8	TIC	6.41	1.000	A	0	A	B
24	L1	non C5-C8 {2}	TIC	9.30	1.000	A	0	A	B
25	L1	non C5-C8 {3}	TIC	11.07	1.000	A	0	A	B
26	L1	non C5-C8 {4}	TIC	11.84	1.000	A	0	A	B
27	L1	non C5-C8 {5}	TIC	12.29	1.000	A	0	A	B
28	L1	non C5-C8 {6}	TIC	14.42	1.000	A	0	A	B
29	L1	non C5-C8 - TOTAL	TIC	6.41	1.000	A	0	A	B
30		C9-C12 Aliphatic	TIC	16.54	1.000	A	0	A	B
31	L1	non C9-C12	TIC	16.52	1.000	A	0	A	B
32	L1	non C9-C12 {2}	TIC	16.63	1.000	A	0	A	B
33	L1	non C9-C12 {3}	TIC	16.80	1.000	A	0	A	B
34	L1	non C9-C12 {4}	TIC	17.45	1.000	A	0	A	B
35	L1	non C9-C12 {5}	TIC	18.35	1.000	A	0	A	B
36	L1	non C9-C12 - TOTAL	TIC	16.52	1.000	A	0	A	B
37	L1	C9-C10 Aromatic	120	17.62	1.000	A	0	A	B
38	L1	C9-C10 Aromatic {2}	134	17.62	1.000	A	0	A	B
39	L1	C9-C10 Aromatic - TOTAL	134	0.00	1.000	A	1	A	B
40	I	Chlorobenzene-d5	117	16.52	1.000	A	2	A	B
41	S	4-Bromofluorobenzene	95	18.35	1.111	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

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\060112\06011211.D Vial: 12
Acq On : 1 Jun 2012 8:53 pm Operator: RACHEL HILL
Sample : ICV VOA9 060112 Inst : GC/MS Ins
Misc : ICV MA APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\060112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jun 04 10:17:25 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	32.962	-12.9	109	-0.01
2	L1	C5-C8 Aliphatic HC {2}	36.400	40.994	-12.6	111	-0.02
3	L1	C5-C8 Aliphatic HC {3}	41.800	47.362	-13.3	111	-0.02
4	L1	C5-C8 Aliphatic HC {4}	35.400	39.131	-10.5	112	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	46.884	-11.1	109	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	54.142	-10.5	108	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	261.558	-11.8	110	0.20
8	L1	C9-C12 Aliphatic HC	54.600	60.168	-10.2	108	-0.02
9	L1	C9-C12 Aliphatic HC {2}	54.600	60.705	-11.2	107	-0.02
10	L1	C9-C12 Aliphatic HC {3}	61.200	66.970	-9.4	107	-0.02
11	L1	C9-C12 Aliphatic HC {4}	60.800	66.641	-9.6	107	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	74.186	-6.0	105	-0.01
13	L1	C9-C12 Aliphatic HC {6}	77.000	74.375	3.4	97	-0.01
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	407.827	-7.9	106	-0.02
15	L1	C9-C10 Aromatic HC	51.700	55.920	-8.2	111	-0.01
16	L1	C9-C10 Aromatic HC {2}	51.200	55.972	-9.3	111	-0.02
17	L1	C9-C10 Aromatic HC {3}	52.200	57.575	-10.3	111	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	65.742	-12.0	113	-0.01
19	L1	C9-C10 Aromatic HC {5}	52.600	58.231	-10.7	112	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	65.178	-11.0	113	-0.01
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	293.340	-10.3	111	-0.01
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.00#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.41#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.30#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-11.07#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.84#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.29#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.42#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.41#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.54#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.52#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.63#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.80#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.45#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.35#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.52#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.62#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.62#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	0.00
40	I	Chlorobenzene-d5	12.500	12.500	0.0	107	-0.01
41	S	4-Bromofluorobenzene	89.500	88.434	1.2	107	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060112\06011211.D Vial: 12
Acq On : 1 Jun 2012 8:53 pm Operator: RACHEL HILL
Sample : ICV VOA9 060112 Inst : GC/MS Ins
Misc : ICV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 4 10:23 2012 Quant Results File: 060112V9.RES

Quant Method : C:\HPCHEM\1\METHODS\060112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jun 04 10:17:25 2012
Response via : Initial Calibration
DataAcq Meth : 060112V9

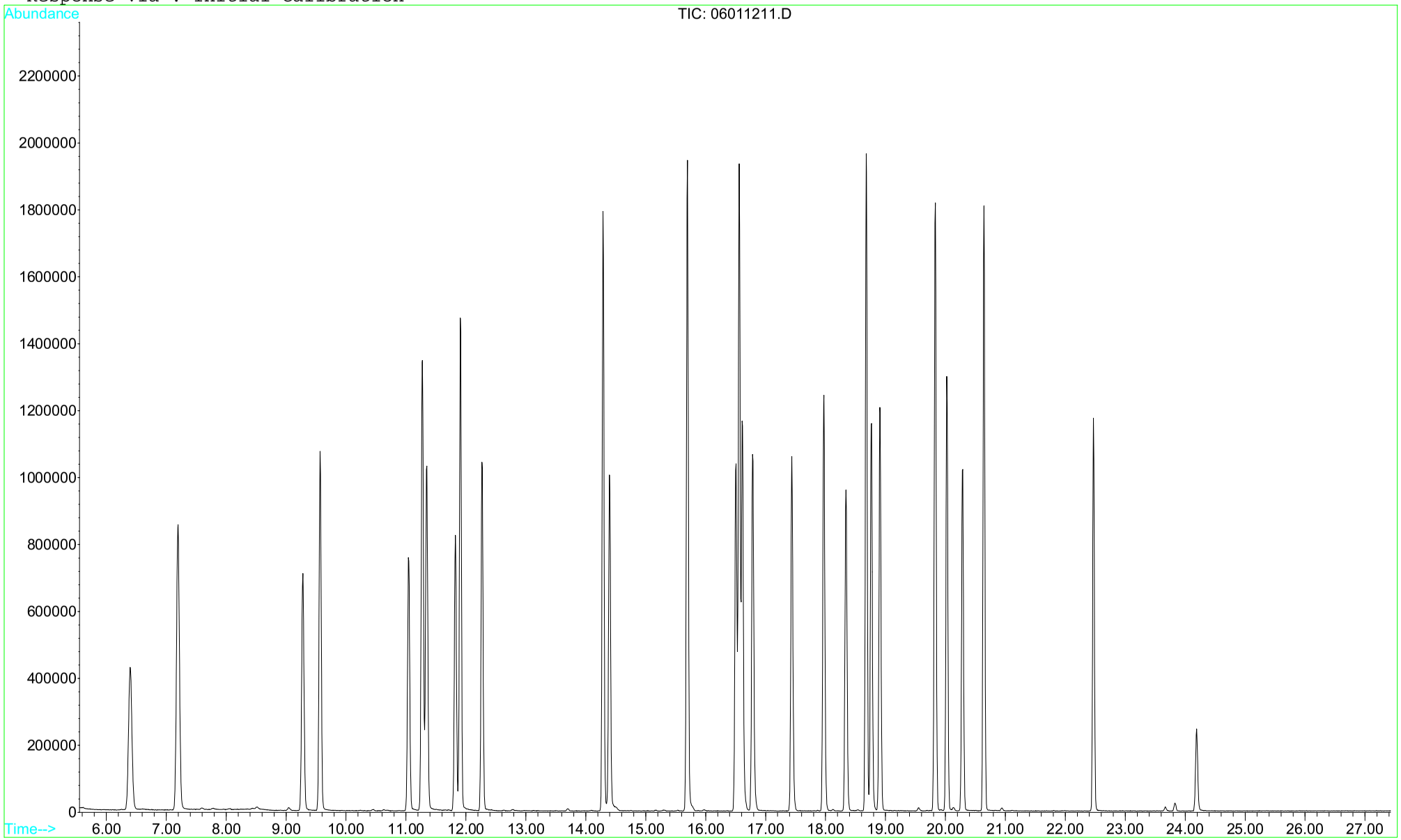
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	744532	12.50	ug/m3	-0.01
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.34	95	496179	88.43	ug/m3	0.00
Spiked Amount 89.500 Range 70 - 130 Recovery = 98.80%						
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.20	TIC	2961895	32.96	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2715771	40.99	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	3484491	47.36	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	2640106	39.13	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	3317926	46.88	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3800264	54.14	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.20	TIC	18920453m	261.56	ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	4403655	60.17	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	4294276	60.70	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	4107038	66.97	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	3986071	66.64	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	3673241	74.19	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.47	TIC	2349811	74.38	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	22814092m	407.83	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	290011	55.92	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	309548	55.97	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	454687	57.58	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	103236	65.74	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.29	120	346345	58.23	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	258375	65.18	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1762202m	293.34	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060112\06011211.D Vial: 12
Acq On : 1 Jun 2012 8:53 pm Operator: RACHEL HILL
Sample : ICV VOA9 060112 Inst : GC/MS Ins
Misc : ICV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 4 10:23 2012 Quant Results File: 060112V9.RES

Method : C:\HPCHEM\1\METHODS\060112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jun 04 10:17:25 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: **GC-TCD 1_120605A** **Run No.:** 49099

Analytical Run Date: 6/5/2012 **InstrumentID:** GC-TCD 1

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

Calibration ID: 45325 **Column ID:** Permanent Gases

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

Run Comments: PR 6-5-12 MSB

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
MBLK-060512 TCD	ASTM-D2504	MBLK	R49099	6/5/2012 8:54:00 AM	Charles O`Bryan		
CCV-060512 TCD-A	ASTM-D2504	CCV	R49099	6/5/2012 9:24:00 AM	Charles O`Bryan		
LCS-060512 TCD-A	ASTM-D2504	LCS	R49099	6/5/2012 9:39:00 AM	Charles O`Bryan		
CRQL-060512 TCD-A	ASTM-D2504	CRQL	R49099	6/5/2012 9:54:00 AM	Charles O`Bryan		
1205846-021B	ASTM-D2504	SAMP	R49099	6/5/2012 10:09:00 AM	Charles O`Bryan		
1205846-022B	ASTM-D2504	SAMP	R49099	6/5/2012 10:23:00 AM	Charles O`Bryan		
1205846-023B	ASTM-D2504	SAMP	R49099	6/5/2012 10:38:00 AM	Charles O`Bryan		
1205846-024B	ASTM-D2504	SAMP	R49099	6/5/2012 10:53:00 AM	Charles O`Bryan		
1205846-025B	ASTM-D2504	SAMP	R49099	6/5/2012 11:07:00 AM	Charles O`Bryan		
1205846-026B	ASTM-D2504	SAMP	R49099	6/5/2012 11:24:00 AM	Charles O`Bryan		
1205846-027B	ASTM-D2504	SAMP	R49099	6/5/2012 11:38:00 AM	Charles O`Bryan		
1205939-001B	ASTM-D2504	SAMP	R49099	6/5/2012 11:53:00 AM	Charles O`Bryan		
1205939-002B	ASTM-D2504	SAMP	R49099	6/5/2012 12:08:00 PM	Charles O`Bryan		
1205939-003B	ASTM-D2504	SAMP	R49099	6/5/2012 12:23:00 PM	Charles O`Bryan		
1205939-003BDUP	ASTM-D2504	DUP	R49099	6/5/2012 12:43:00 PM	Charles O`Bryan		
CCV-060512 TCD-B	ASTM-D2504	CCV	R49099	6/5/2012 1:13:00 PM	Charles O`Bryan		
1205939-004B	ASTM-D2504	SAMP	R49099	6/5/2012 1:27:00 PM	Charles O`Bryan		
1205939-005B	ASTM-D2504	SAMP	R49099	6/5/2012 1:49:00 PM	Charles O`Bryan		
1205939-006B	ASTM-D2504	SAMP	R49099	6/5/2012 2:04:00 PM	Charles O`Bryan		
1205939-007B	ASTM-D2504	SAMP	R49099	6/5/2012 2:20:00 PM	Charles O`Bryan		
1205939-008B	ASTM-D2504	SAMP	R49099	6/5/2012 2:35:00 PM	Charles O`Bryan		
1205939-009B	ASTM-D2504	SAMP	R49099	6/5/2012 2:49:00 PM	Charles O`Bryan		
1205939-010B	ASTM-D2504	SAMP	R49099	6/5/2012 3:05:00 PM	Charles O`Bryan		
1205939-011B	ASTM-D2504	SAMP	R49099	6/5/2012 3:20:00 PM	Charles O`Bryan		
1205939-012B	ASTM-D2504	SAMP	R49099	6/5/2012 3:35:00 PM	Charles O`Bryan		
1205939-013B	ASTM-D2504	SAMP	R49099	6/5/2012 3:50:00 PM	Charles O`Bryan		
1205939-013BDUP	ASTM-D2504	DUP	R49099	6/5/2012 4:05:00 PM	Charles O`Bryan		
CCV-060512 TCD-C	ASTM-D2504	CCV	R49099	6/5/2012 4:35:00 PM	Charles O`Bryan		
CRQL-060512 TCD-B	ASTM-D2504	CRQL	R49099	6/5/2012 4:50:00 PM	Charles O`Bryan		

RTI Laboratories

ANALYTICAL RUN Summary

13-Jun-12

RunNo 49099

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
959663	MBLK-060512 TCD	ASTM-D2504	MBLK	060512-TCD\060	6/5/2012 8:54:00	1	R49099		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	0	0		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
959664	CCV-060512 TCD-A	ASTM-D2504	CCV	060512-TCD\060	6/5/2012 9:24:00	1	R49099		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.518	2.518		2.5	0	0	0.025	0.1	0	101%	85	115	0%	
Carbon Monoxide	A	%	2.671	2.671		2.5	0	0	0.025	0.1	0	107%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.085	2.085		2	0	0	0.025	0.5	0	104%	85	115	0%	
Nitrogen	A	%	2.691	2.691		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Oxygen	A	%	2.473	2.473		2.5	0	0	0.025	0.1	0	99%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
959665	LCS-060512 TCD-A	ASTM-D2504	LCS	060512-TCD\060	6/5/2012 9:39:00	1	R49099		0	959664	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.581	2.581		2.5	0	2.518	0.025	0.1	0	103%	70	130	2%	
Carbon Monoxide	A	%	2.681	2.681		2.5	0	2.671	0.025	0.1	0	107%	70	130	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
959678	CCV-060512 TCD-B	ASTM-D2504	CCV	060512-TCD\060	6/5/2012 1:13:00	1	R49099		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.592	2.592		2.5	0	0	0.025	0.1	0	104%	85	115	0%	
Carbon Monoxide	A	%	2.686	2.686		2.5	0	0	0.025	0.1	0	107%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.092	2.092		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.709	2.709		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Oxygen	A	%	2.487	2.487		2.5	0	0	0.025	0.1	0	99%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
959679	1205939-004B (Container-01 of 01)	ASTM-D2504	SAMP	060512-TCD\060	6/5/2012 1:27:00	1	R49099		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.374	0.374		0	0	0	0.025	0.1	0	0%	0	0	0%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	79.775	79.775		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	20.105	20.105		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
959680	1205939-005B (Container-01 of 01)	ASTM-D2504	SAMP	060512-TCD\060	6/5/2012 1:49:00	1	R49099		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	7.515	7.515		0	0	0	0.025	0.1	0	0%	0	0	0%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	85.981	85.981		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	7.681	7.681		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
959784	1205939-013B (Container-01 of 01)	ASTM-D2504	SAMP	060512-TCD\060	6/5/2012 3:50:00	1	R49099		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	%	20.234	20.234		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
959807	1205939-013BDUP	ASTM-D2504	DUP	060512-TCD\060	6/5/2012 4:05:00	1	R49099		0	959784	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.498	0.498		0	0	0.493	0.025	0.1	0	0%	0	0	1%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	79.812	79.812		0	0	79.769	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	20.247	20.247		0	0	20.234	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
959808	CCV-060512 TCD-C	ASTM-D2504	CCV	060512-TCD\060	6/5/2012 4:35:00	1	R49099		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.586	2.586		2.5	0	0	0.025	0.1	0	103%	85	115	0%	
Carbon Monoxide	A	%	2.69	2.69		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.097	2.097		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.667	2.667		2.5	0	0	0.025	0.1	0	107%	85	115	0%	
Oxygen	A	%	2.479	2.479		2.5	0	0	0.025	0.1	0	99%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
959809	CRQL-060512 TCD-B	ASTM-D2504	CRQL	060512-TCD\060	6/5/2012 4:50:00	1	R49099		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\060512-TCD\06051202.D Vial: 1
Acq On : 5 Jun 2012 9:24 am Operator:
Sample : CCV-060512 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\TCD\052912\122211.M (Chemstation Integrator)
Title :
Last Update : Tue May 29 13:11:55 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	2.473	1.1	0	-0.01
2	Nitrogen	2.500	2.691	-7.6	0	0.00
3	Carbon Monoxide	2.500	2.671	-6.8	0	0.04
4	Methane	2.000	2.085	-4.2	0	0.06
5	Carbon dioxide	2.500	2.518	-0.7	0	-0.03

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\060512-TCD\06051202.D Vial: 1
Acq On : 5 Jun 2012 9:24 am Operator:
Sample : CCV-060512 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 5 9:11 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Tue May 29 13:11:55 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	2.17	383129	2.473	%
2)	Nitrogen	2.36	472300	2.691	%
3)	Carbon Monoxide	3.06	430528	2.671	%
4)	Methane	5.69f	281535	2.085	%
5)	Carbon dioxide	9.30	517027	2.518	%

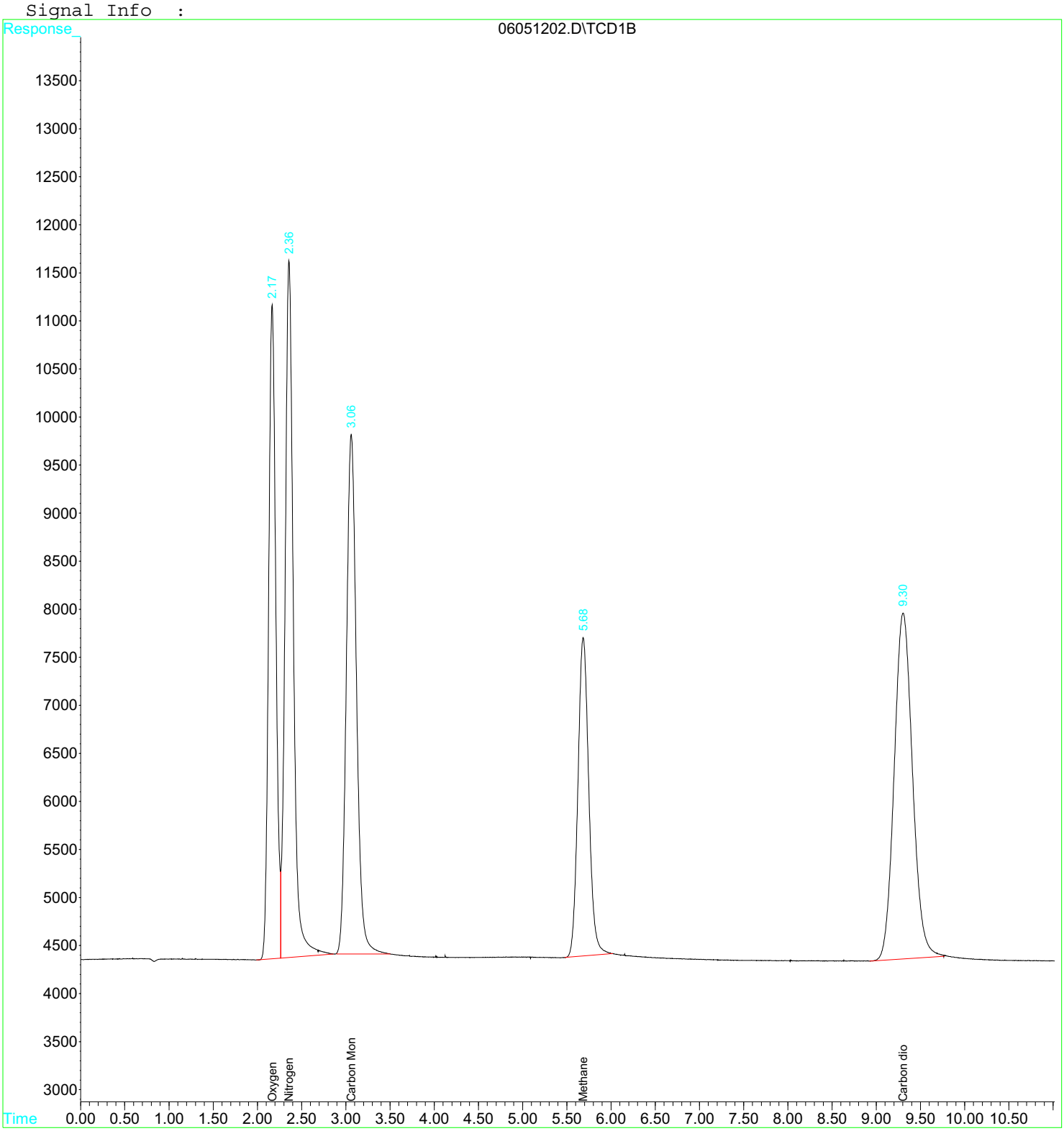
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\060512-TCD\06051202.D Vial: 1
Acq On : 5 Jun 2012 9:24 am Operator:
Sample : CCV-060512 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 5 9:11 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Tue May 29 13:11:55 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\060512-TCD\06051216.D Vial: 1
Acq On : 5 Jun 2012 1:13 pm Operator:
Sample : CCV-060512 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\TCD\052912\122211.M (Chemstation Integrator)
Title :
Last Update : Tue May 29 13:11:55 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	2.487	0.5	0	-0.01
2	Nitrogen	2.500	2.709	-8.4	0	0.00
3	Carbon Monoxide	2.500	2.686	-7.4	0	0.04
4	Methane	2.000	2.092	-4.6	0	0.06
5	Carbon dioxide	2.500	2.592	-3.7	0	-0.03

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\060512-TCD\06051216.D Vial: 1
Acq On : 5 Jun 2012 1:13 pm Operator:
Sample : CCV-060512 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 5 12:25 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Tue May 29 13:11:55 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	2.17	385240	2.487	%
2)	Nitrogen	2.36	475538	2.709	%
3)	Carbon Monoxide	3.06	432936	2.686	%
4)	Methane	5.68f	282523	2.092	%
5)	Carbon dioxide	9.30	532250	2.592	%

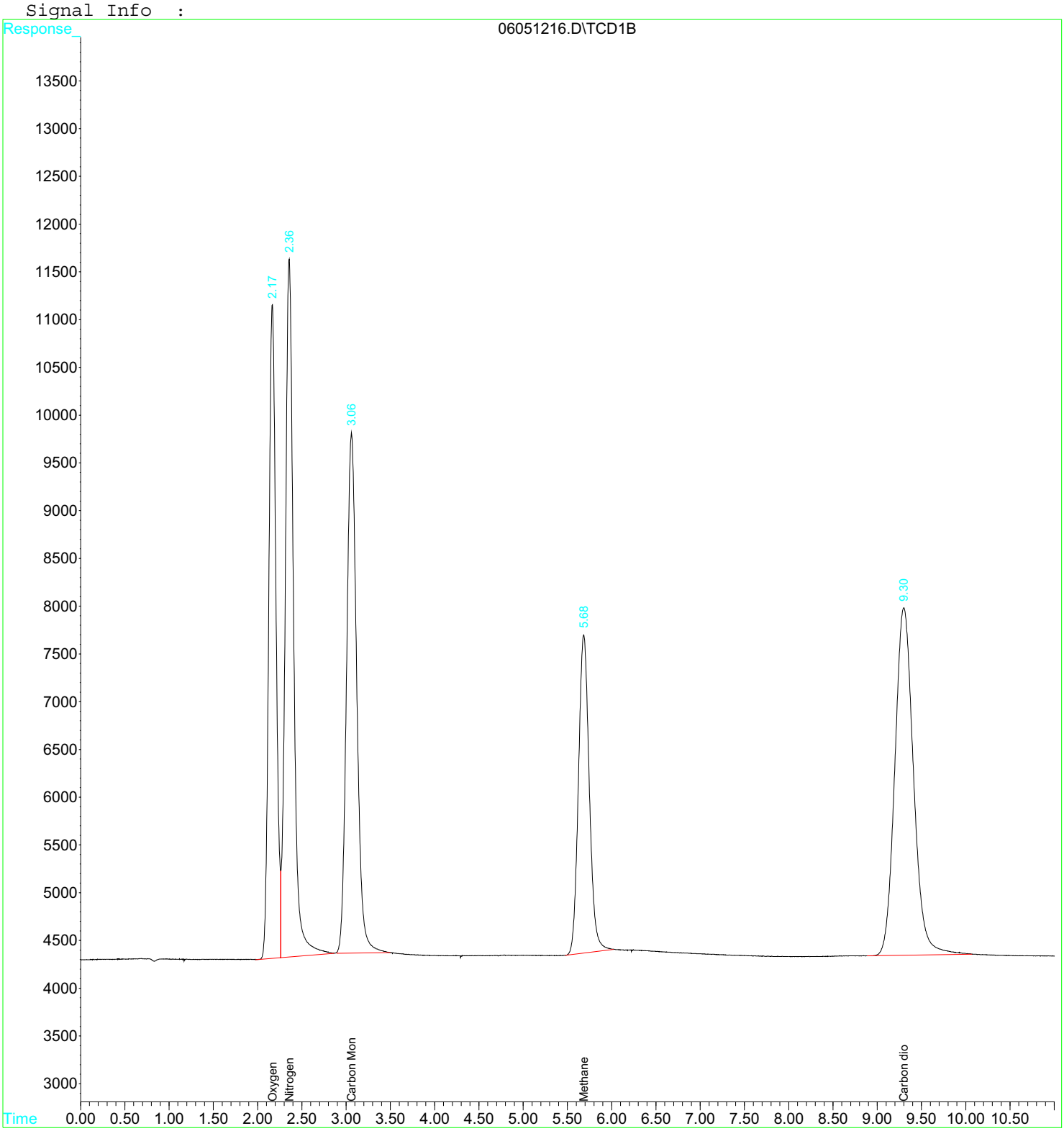
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\060512-TCD\06051216.D Vial: 1
Acq On : 5 Jun 2012 1:13 pm Operator:
Sample : CCV-060512 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 5 12:25 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Tue May 29 13:11:55 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\060512-TCD\06051228.D Vial: 1
Acq On : 5 Jun 2012 4:35 pm Operator:
Sample : CCV-060512 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\TCD\052912\122211.M (Chemstation Integrator)
Title :
Last Update : Tue May 29 13:11:55 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	2.479	0.8	0	0.00
2	Nitrogen	2.500	2.667	-6.7	0	0.00
3	Carbon Monoxide	2.500	2.690	-7.6	0	0.04
4	Methane	2.000	2.097	-4.8	0	0.06
5	Carbon dioxide	2.500	2.586	-3.4	0	-0.03

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\060512-TCD\06051228.D Vial: 1
Acq On : 5 Jun 2012 4:35 pm Operator:
Sample : CCV-060512 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 5 15:46 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Tue May 29 13:11:55 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	2.17	384039	2.479	%
2)	Nitrogen	2.36	468020	2.667	%
3)	Carbon Monoxide	3.06	433578	2.690	%
4)	Methane	5.69f	283177	2.097	%
5)	Carbon dioxide	9.30	531163	2.586	%

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

RTI Laboratories

Run ID: GC-TCD 1_120606A **Run No.:** 49131

Analytical Run Date: 6/6/2012 **InstrumentID:** GC-TCD 1

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

Calibration ID: 45325 **Column ID:** Permanent Gases

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

Run Comments: PR 06-06-12 MSB 060712rsl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
MBLK-060612 TCD	ASTM-D2504	MBLK	R49131	6/6/2012 9:09:00 AM	Robert Lynch		
CCV-060612 TCD-A	ASTM-D2504	CCV	R49131	6/6/2012 9:24:00 AM	Robert Lynch		
LCS-060612 TCD-A	ASTM-D2504	LCS	R49131	6/6/2012 9:39:00 AM	Robert Lynch		
CRQL-060612 TCD-A	ASTM-D2504	CRQL	R49131	6/6/2012 9:55:00 AM	Robert Lynch		
1205939-014B	ASTM-D2504	SAMP	R49131	6/6/2012 10:09:00 AM	Robert Lynch		
1205939-015B	ASTM-D2504	SAMP	R49131	6/6/2012 10:24:00 AM	Robert Lynch		
1205939-016B	ASTM-D2504	SAMP	R49131	6/6/2012 10:40:00 AM	Robert Lynch		
1205939-017B	ASTM-D2504	SAMP	R49131	6/6/2012 10:56:00 AM	Robert Lynch		
1205939-018B	ASTM-D2504	SAMP	R49131	6/6/2012 11:11:00 AM	Robert Lynch		
1205939-019B	ASTM-D2504	SAMP	R49131	6/6/2012 11:26:00 AM	Robert Lynch		
1205939-020B	ASTM-D2504	SAMP	R49131	6/6/2012 11:41:00 AM	Robert Lynch		
1205939-021B	ASTM-D2504	SAMP	R49131	6/6/2012 11:56:00 AM	Robert Lynch		
1205939-022B	ASTM-D2504	SAMP	R49131	6/6/2012 12:10:00 PM	Robert Lynch		
1205939-023B	ASTM-D2504	SAMP	R49131	6/6/2012 12:25:00 PM	Robert Lynch		
1205939-023BDUP	ASTM-D2504	DUP	R49131	6/6/2012 12:41:00 PM	Robert Lynch		
CCV-060612 TCD-B	ASTM-D2504	CCV	R49131	6/6/2012 12:56:00 PM	Robert Lynch		
1205939-024B	ASTM-D2504	SAMP	R49131	6/6/2012 1:12:00 PM	Robert Lynch		
1205939-025B	ASTM-D2504	SAMP	R49131	6/6/2012 1:27:00 PM	Robert Lynch		
1205939-026B	ASTM-D2504	SAMP	R49131	6/6/2012 1:42:00 PM	Robert Lynch		
1205939-027B	ASTM-D2504	SAMP	R49131	6/6/2012 1:57:00 PM	Robert Lynch		
1205939-028B	ASTM-D2504	SAMP	R49131	6/6/2012 2:18:00 PM	Robert Lynch		
1205939-029B	ASTM-D2504	SAMP	R49131	6/6/2012 2:33:00 PM	Robert Lynch		
1205939-030B	ASTM-D2504	SAMP	R49131	6/6/2012 2:49:00 PM	Robert Lynch		
1205939-031B	ASTM-D2504	SAMP	R49131	6/6/2012 3:05:00 PM	Robert Lynch		
1205939-032B	ASTM-D2504	SAMP	R49131	6/6/2012 3:20:00 PM	Robert Lynch		
1205939-033B	ASTM-D2504	SAMP	R49131	6/6/2012 3:35:00 PM	Robert Lynch		
1205939-033BDUP	ASTM-D2504	DUP	R49131	6/6/2012 3:50:00 PM	Robert Lynch		
CCV-060612 TCD-C	ASTM-D2504	CCV	R49131	6/6/2012 4:05:00 PM	Robert Lynch		
CRQL-060612 TCD-B	ASTM-D2504	CRQL	R49131	6/6/2012 4:21:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

13-Jun-12

RunNo 49131

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
960285	MBLK-060612 TCD	ASTM-D2504	MBLK	)\060612\060612(	6/6/2012 9:09:00	1	R49131		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	0	0		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
960287	CCV-060612 TCD-A	ASTM-D2504	CCV	)\060612\060612(	6/6/2012 9:24:00	1	R49131		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.597	2.597		2.5	0	0	0.025	0.1	0	104%	85	115	0%	
Carbon Monoxide	A	%	2.692	2.692		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.101	2.101		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.686	2.686		2.5	0	0	0.025	0.1	0	107%	85	115	0%	
Oxygen	A	%	2.485	2.485		2.5	0	0	0.025	0.1	0	99%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
960288	LCS-060612 TCD-A	ASTM-D2504	LCS	)\060612\060612(	6/6/2012 9:39:00	1	R49131		0	960287	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.592	2.592		2.5	0	2.597	0.025	0.1	0	104%	70	130	0%	
Carbon Monoxide	A	%	2.678	2.678		2.5	0	2.692	0.025	0.1	0	107%	70	130	1%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
960305	CCV-060612 TCD-B	ASTM-D2504	CCV	D\060612\060612	6/6/2012 12:56:0	1	R49131		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.595	2.595		2.5	0	0	0.025	0.1	0	104%	85	115	0%	
Carbon Monoxide	A	%	2.688	2.688		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.099	2.099		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.794	2.794		2.5	0	0	0.025	0.1	0	112%	85	115	0%	
Oxygen	A	%	2.513	2.513		2.5	0	0	0.025	0.1	0	101%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
960306	1205939-024B (Container-01 of 01)	ASTM-D2504	SAMP	D\060612\060612	6/6/2012 1:12:00	1	R49131		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.228	0.228		0	0	0	0.025	0.1	0	0%	0	0	0%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	81.042	81.042		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	19.388	19.388		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
960307	1205939-025B (Container-01 of 01)	ASTM-D2504	SAMP	D\060612\060612	6/6/2012 1:27:00	1	R49131		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.897	0.897		0	0	0	0.025	0.1	0	0%	0	0	0%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	79.911	79.911		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	19.802	19.802		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
960315	1205939-033B (Container-01 of 01)	ASTM-D2504	SAMP	D\060612\060612	6/6/2012 3:35:00	1	R49131		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	%	20.24	20.24		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
960316	1205939-033BDUP	ASTM-D2504	DUP	D\060612\060612	6/6/2012 3:50:00	1	R49131		0	960315	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.474	0.474		0	0	0.477	0.025	0.1	0	0%	0	0	1%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	79.979	79.979		0	0	79.936	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	20.257	20.257		0	0	20.24	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
960317	CCV-060612 TCD-C	ASTM-D2504	CCV	D\060612\060612	6/6/2012 4:05:00	1	R49131		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.598	2.598		2.5	0	0	0.025	0.1	0	104%	85	115	0%	
Carbon Monoxide	A	%	2.704	2.704		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.1	2.1		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.869	2.869		2.5	0	0	0.025	0.1	0	115%	85	115	0%	
Oxygen	A	%	2.538	2.538		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
960318	CRQL-060612 TCD-B	ASTM-D2504	CRQL	D\060612\060612	6/6/2012 4:21:00	1	R49131		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\060612\06061202.D Vial: 1
Acq On : 6 Jun 2012 9:24 am Operator:
Sample : CCV-060612 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\TCD\052912\122211.M (Chemstation Integrator)
Title :
Last Update : Tue May 29 13:11:55 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	2.485	0.6	0	0.00
2	Nitrogen	2.500	2.686	-7.4	0	0.00
3	Carbon Monoxide	2.500	2.692	-7.7	0	0.05
4	Methane	2.000	2.101	-5.0	0	0.06
5	Carbon dioxide	2.500	2.597	-3.9	0	-0.02

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\060612\06061202.D Vial: 1
Acq On : 6 Jun 2012 9:24 am Operator:
Sample : CCV-060612 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 6 8:36 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Wed Jun 06 09:28:31 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	2.17	385015	2.485	%
2)	Nitrogen	2.36	471511	2.686	%
3)	Carbon Monoxide	3.07	434004	2.692	%
4)	Methane	5.69	283734	2.101	%
5)	Carbon dioxide	9.31	533395	2.597	%

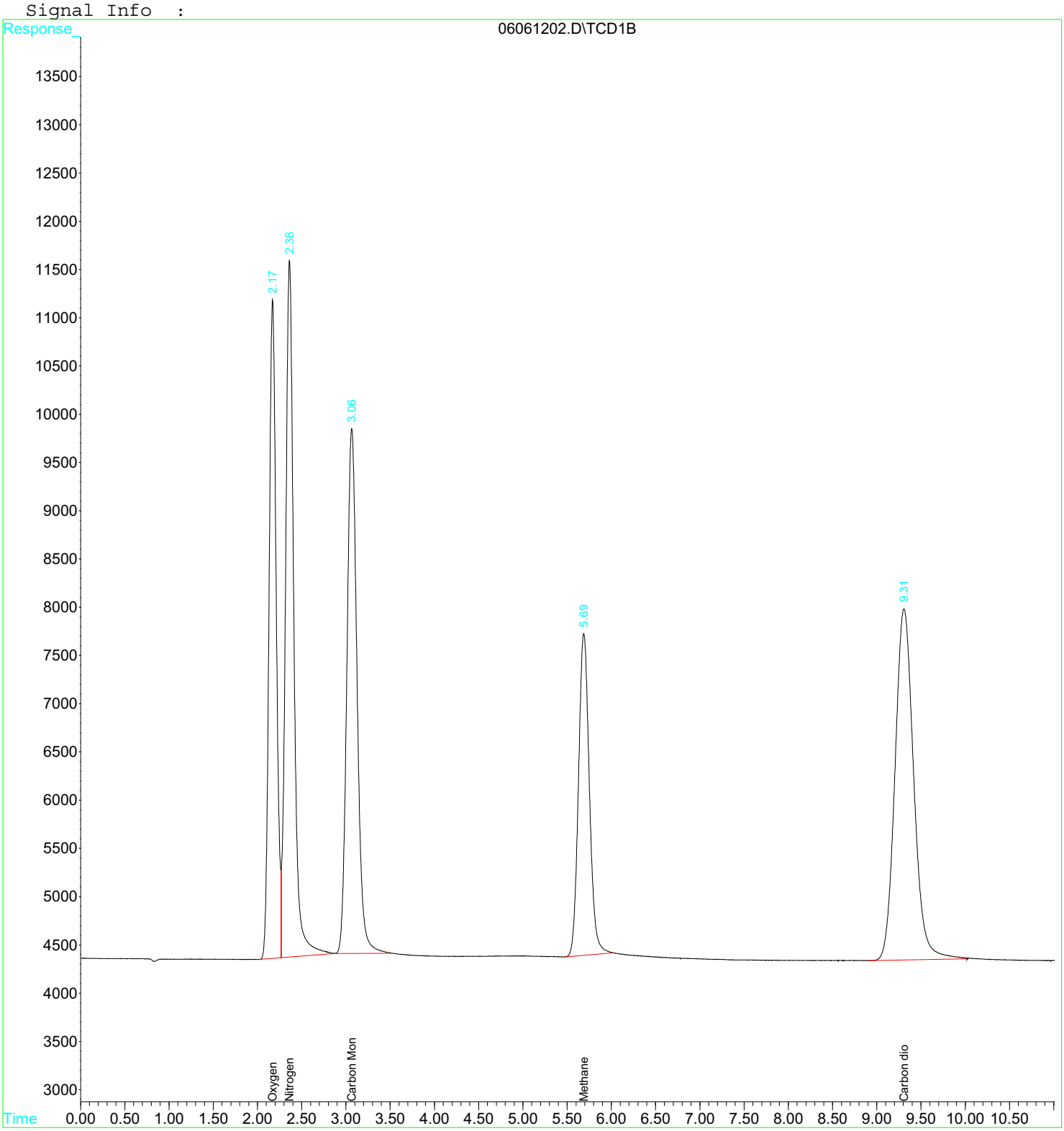
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\060612\06061202.D Vial: 1
Acq On : 6 Jun 2012 9:24 am Operator:
Sample : CCV-060612 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 6 8:36 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Wed Jun 06 09:28:31 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\060612\06061216.D Vial: 1
Acq On : 6 Jun 2012 12:56 pm Operator:
Sample : CCV-060612 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\TCD\052912\122211.M (Chemstation Integrator)
Title :
Last Update : Tue May 29 13:11:55 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	2.513	-0.5	0	0.00
2	Nitrogen	2.500	2.794	-11.8	0	0.00
3	Carbon Monoxide	2.500	2.688	-7.5	0	0.05
4	Methane	2.000	2.099	-5.0	0	0.06
5	Carbon dioxide	2.500	2.595	-3.8	0	-0.03

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\060612\06061216.D Vial: 1
Acq On : 6 Jun 2012 12:56 pm Operator:
Sample : CCV-060612 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 6 12:08 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Wed Jun 06 09:28:31 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

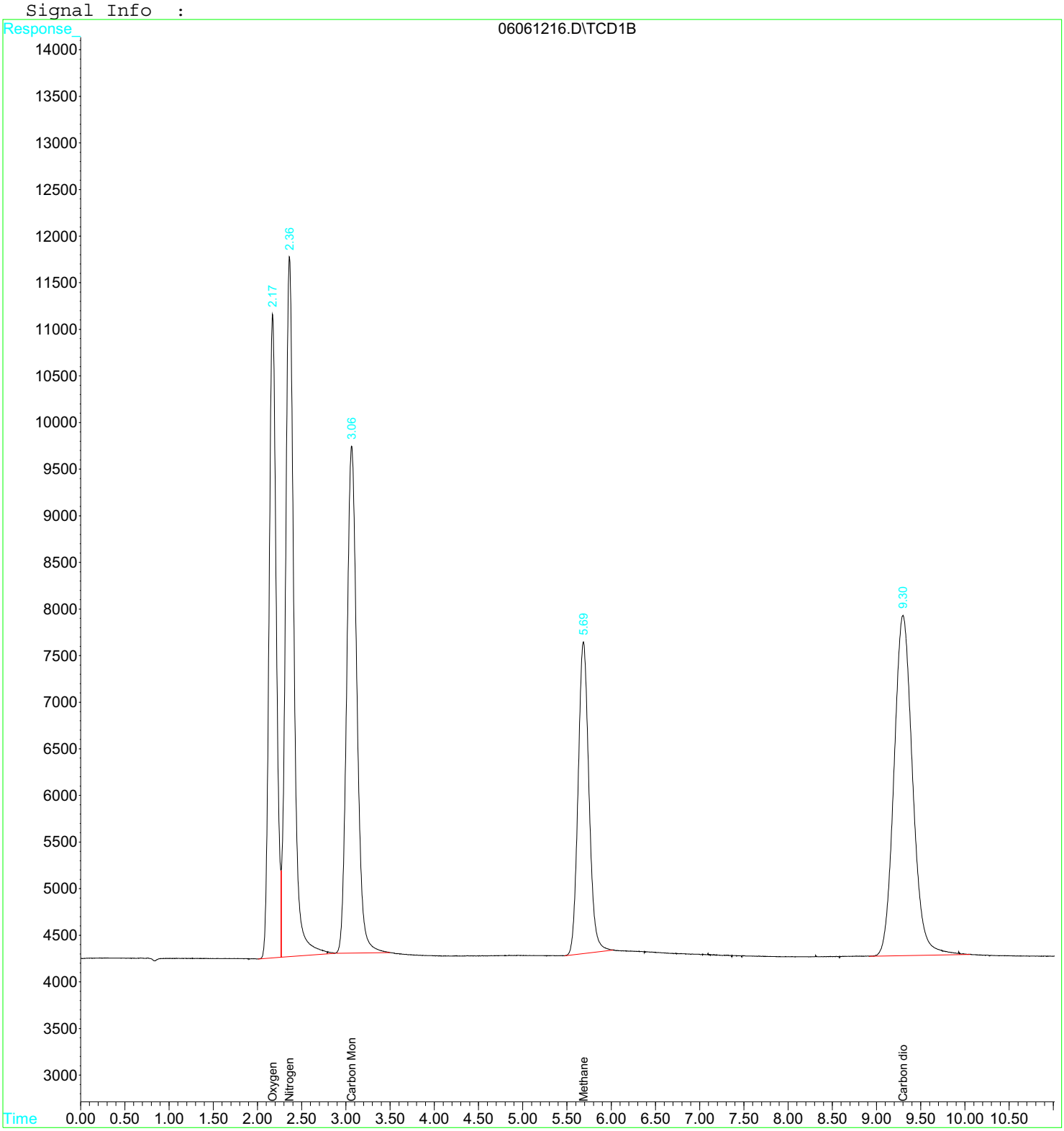
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1)	Oxygen	2.17	389295	2.513	%
2)	Nitrogen	2.36	490447	2.794	%
3)	Carbon Monoxide	3.07	433297	2.688	%
4)	Methane	5.69	283540	2.099	%
5)	Carbon dioxide	9.30	532991	2.595	%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\060612\06061216.D Vial: 1
Acq On : 6 Jun 2012 12:56 pm Operator:
Sample : CCV-060612 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 6 12:08 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Wed Jun 06 09:28:31 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\060612\06061228.D Vial: 1
Acq On : 6 Jun 2012 4:05 pm Operator:
Sample : CCV-060612 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\TCD\052912\122211.M (Chemstation Integrator)
Title :
Last Update : Tue May 29 13:11:55 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	2.538	-1.5	0	0.00
2	Nitrogen	2.500	2.869	-14.8	0	0.00
3	Carbon Monoxide	2.500	2.704	-8.2	0	0.04
4	Methane	2.000	2.100	-5.0	0	0.06
5	Carbon dioxide	2.500	2.598	-3.9	0	-0.04

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\060612\06061228.D Vial: 1
Acq On : 6 Jun 2012 4:05 pm Operator:
Sample : CCV-060612 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 6 15:17 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Wed Jun 06 09:28:31 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

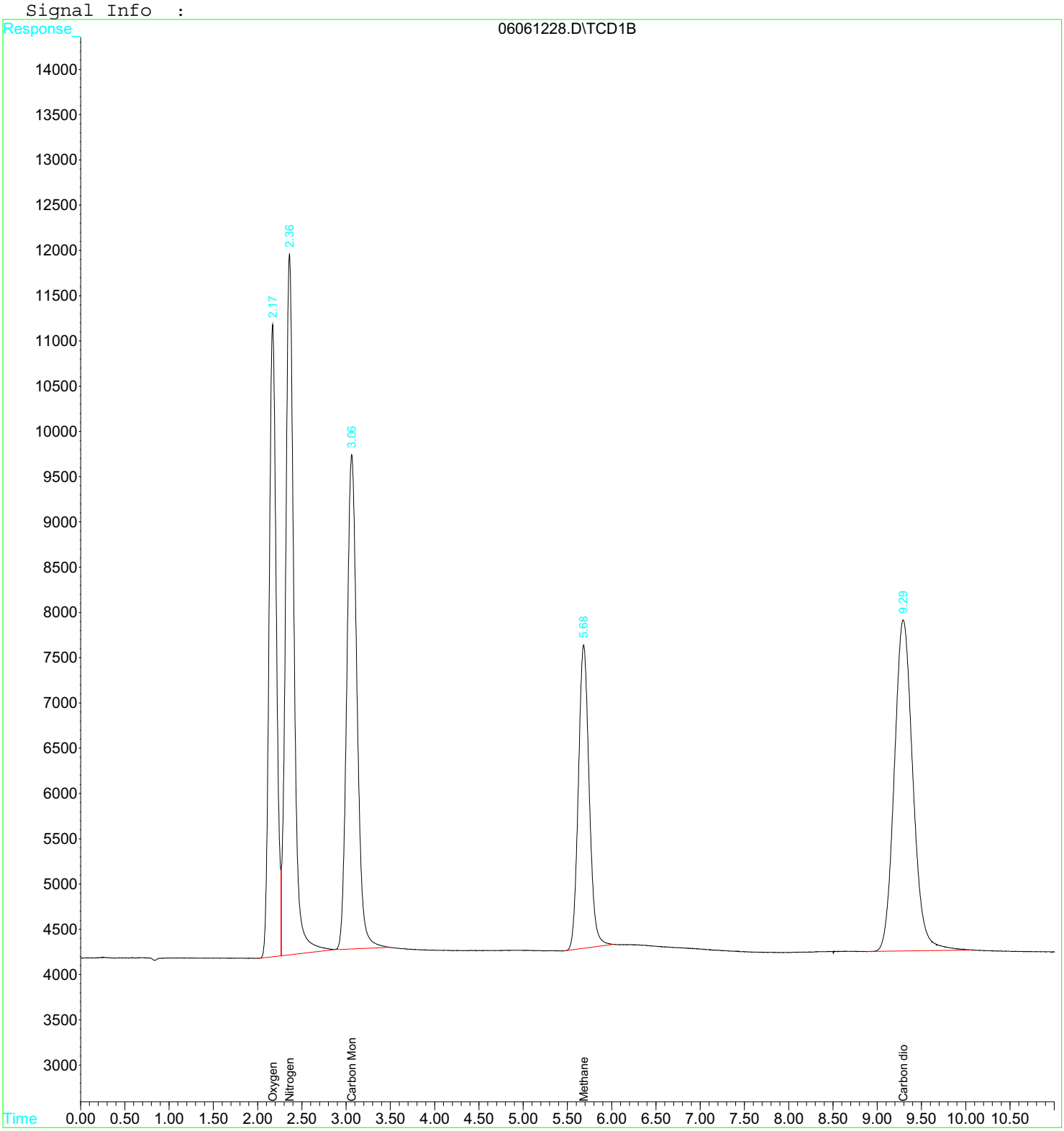
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1)	Oxygen	2.17	393224	2.538	%
2)	Nitrogen	2.36	503496	2.869	%
3)	Carbon Monoxide	3.06	435872	2.704	%
4)	Methane	5.68	283577	2.100	%
5)	Carbon dioxide	9.29	533564	2.598	%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\060612\06061228.D Vial: 1
Acq On : 6 Jun 2012 4:05 pm Operator:
Sample : CCV-060612 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 6 15:17 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Wed Jun 06 09:28:31 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



RTI Laboratories

Run ID: **GC-TCD 1_120607A** **Run No.:** 49169

Analytical Run Date: 6/7/2012 **InstrumentID:** GC-TCD 1

Analyst: Mike Budziak **Column:** GC-TCD 1

Calibration ID: 45325 **Column ID:** Permanent Gases

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

Run Comments: PR 060812JDH 060812rsl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
MBLK-060712 TCD	ASTM-D2504	MBLK	R49169	6/7/2012 8:58:00 AM	Robert Lynch		
CCV-060712 TCD-A	ASTM-D2504	CCV	R49169	6/7/2012 9:22:00 AM	Robert Lynch		
LCS-060712 TCD-A	ASTM-D2504	LCS	R49169	6/7/2012 10:46:00 AM	Robert Lynch		
CRQL-060712 TCD-A	ASTM-D2504	CRQL	R49169	6/7/2012 11:01:00 AM	Robert Lynch		
1205939-034B	ASTM-D2504	SAMP	R49169	6/7/2012 11:19:00 AM	Robert Lynch		
1205939-035B	ASTM-D2504	SAMP	R49169	6/7/2012 11:46:00 AM	Robert Lynch		
1205939-036B	ASTM-D2504	SAMP	R49169	6/7/2012 12:11:00 PM	Robert Lynch		
1205939-037B	ASTM-D2504	SAMP	R49169	6/7/2012 1:31:00 PM	Robert Lynch		
1205939-038B	ASTM-D2504	SAMP	R49169	6/7/2012 1:47:00 PM	Robert Lynch		
1205939-039B	ASTM-D2504	SAMP	R49169	6/7/2012 2:13:00 PM	Robert Lynch		
1205939-040B	ASTM-D2504	SAMP	R49169	6/7/2012 2:33:00 PM	Robert Lynch		
1205939-041B	ASTM-D2504	SAMP	R49169	6/7/2012 2:50:00 PM	Robert Lynch		
1205939-042B	ASTM-D2504	SAMP	R49169	6/7/2012 3:14:00 PM	Robert Lynch		
1205939-043B	ASTM-D2504	SAMP	R49169	6/7/2012 3:31:00 PM	Robert Lynch		
1205939-034BDUP	ASTM-D2504	DUP	R49169	6/7/2012 3:51:00 PM	Robert Lynch		
CCV-060712 TCD-B	ASTM-D2504	CCV	R49169	6/7/2012 4:29:00 PM	Robert Lynch		
1205939-044B	ASTM-D2504	SAMP	R49169	6/7/2012 4:45:00 PM	Robert Lynch		
1205939-045B	ASTM-D2504	SAMP	R49169	6/7/2012 5:07:00 PM	Robert Lynch		
1205939-045BDUP	ASTM-D2504	DUP	R49169	6/7/2012 5:23:00 PM	Robert Lynch		
CCV-060712 TCD-C	ASTM-D2504	CCV	R49169	6/7/2012 6:06:00 PM	Robert Lynch		
CRQL-060712 TCD-C	ASTM-D2504	CRQL	R49169	6/7/2012 6:28:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

13-Jun-12

RunNo 49169

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
961020	MBLK-060712 TCD	ASTM-D2504	MBLK	ıTA\060712\0607	6/7/2012 8:58:00	1	R49169		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	0	0		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
961021	CCV-060712 TCD-A	ASTM-D2504	CCV	ıTA\060712\0607	6/7/2012 9:22:00	1	R49169		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.611	2.611		2.5	0	0	0.025	0.1	0	104%	85	115	0%	
Carbon Monoxide	A	%	2.721	2.721		2.5	0	0	0.025	0.1	0	109%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.12	2.12		2	0	0	0.025	0.5	0	106%	85	115	0%	
Nitrogen	A	%	2.733	2.733		2.5	0	0	0.025	0.1	0	109%	85	115	0%	
Oxygen	A	%	2.514	2.514		2.5	0	0	0.025	0.1	0	101%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
961022	LCS-060712 TCD-A	ASTM-D2504	LCS	ıTA\060712\0607	6/7/2012 10:46:0	1	R49169		0	961021	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.633	2.633		2.5	0	2.611	0.025	0.1	0	105%	70	130	1%	
Carbon Monoxide	A	%	2.738	2.738		2.5	0	2.721	0.025	0.1	0	110%	70	130	1%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
961041	CCV-060712 TCD-B	ASTM-D2504	CCV	ıTA\060712\0607	6/7/2012 4:29:00	1	R49169		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.628	2.628		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Carbon Monoxide	A	%	2.724	2.724		2.5	0	0	0.025	0.1	0	109%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.104	2.104		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.696	2.696		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Oxygen	A	%	2.511	2.511		2.5	0	0	0.025	0.1	0	100%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
961042	1205939-044B (Container-01 of 01)	ASTM-D2504	SAMP	ıTA\060712\0607	6/7/2012 4:45:00	1	R49169		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.287	0.287		0	0	0	0.025	0.1	0	0%	0	0	0%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	78.225	78.225		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	19.814	19.814		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
961043	1205939-045B (Container-01 of 01)	ASTM-D2504	SAMP	ıTA\060712\0607	6/7/2012 5:07:00	1	R49169		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.367	0.367		0	0	0	0.025	0.1	0	0%	0	0	0%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	78.814	78.814		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	19.773	19.773		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
961044	1205939-045BDUP	ASTM-D2504	DUP	ıTA\060712\0607	6/7/2012 5:23:00	1	R49169		0	961043	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.356	0.356		0	0	0.367	0.025	0.1	0	0%	0	0	3%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	78.225	78.225		0	0	78.814	0.025	0.1	0	0%	0	0	1%	
Oxygen	A	%	19.492	19.492		0	0	19.773	0.025	0.1	0	0%	0	0	1%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
961045	CCV-060712 TCD-C	ASTM-D2504	CCV	ıTA\060712\0607	6/7/2012 6:06:00	1	R49169		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.646	2.646		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Carbon Monoxide	A	%	2.711	2.711		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.095	2.095		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.703	2.703		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Oxygen	A	%	2.505	2.505		2.5	0	0	0.025	0.1	0	100%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
961046	CRQL-060712 TCD-C	ASTM-D2504	CRQL	ıTA\060712\0607	6/7/2012 6:28:00	1	R49169		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.348	0.348		0.3	0	0	0.025	0.1	0	116%	80	120	0%	
Carbon Monoxide	A	%	0.144	0.144		0.14	0	0	0.025	0.1	0	103%	80	120	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	80	120	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	80	120	0%	
Methane	A	%	0.08	0.08		0.09	0	0	0.025	0.5	0	89%	80	120	0%	
Nitrogen	A	%	1.37	1.37		1.39	0	0	0.025	0.1	0	99%	80	120	0%	
Oxygen	A	%	0.073	0.073		0.08	0	0	0.025	0.1	0	91%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\060712\06071202.D Vial: 1
Acq On : 7 Jun 2012 9:22 am Operator:
Sample : CCV-060712 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Tue May 29 13:11:55 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	2.514	-0.6	0	-0.03
2	Nitrogen	2.500	2.733	-9.3	0	-0.02
3	Carbon Monoxide	2.500	2.721	-8.8	0	0.02
4	Methane	2.000	2.120	-6.0	0	0.04
5	Carbon dioxide	2.500	2.611	-4.4	0	-0.06

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\060712\06071202.D Vial: 1
Acq On : 7 Jun 2012 9:22 am Operator:
Sample : CCV-060712 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Tue May 29 13:11:55 2012
Response via : Multiple Level Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)

(#) = Out of Range SPCC's out = 0 CCC's out = 0
03051113.D 122211.M Thu Jun 07 18:50:01 2012

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\060712\06071202.D Vial: 1
Acq On : 7 Jun 2012 9:22 am Operator:
Sample : CCV-060712 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 7 11:13 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Wed Jun 06 09:28:31 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	2.15	389422	2.514	%
2)	Nitrogen	2.34	479672	2.733	%
3)	Carbon Monoxide	3.04	438635	2.721	%
4)	Methane	5.66	286327	2.120	%
5)	Carbon dioxide	9.27f	536211	2.611	%

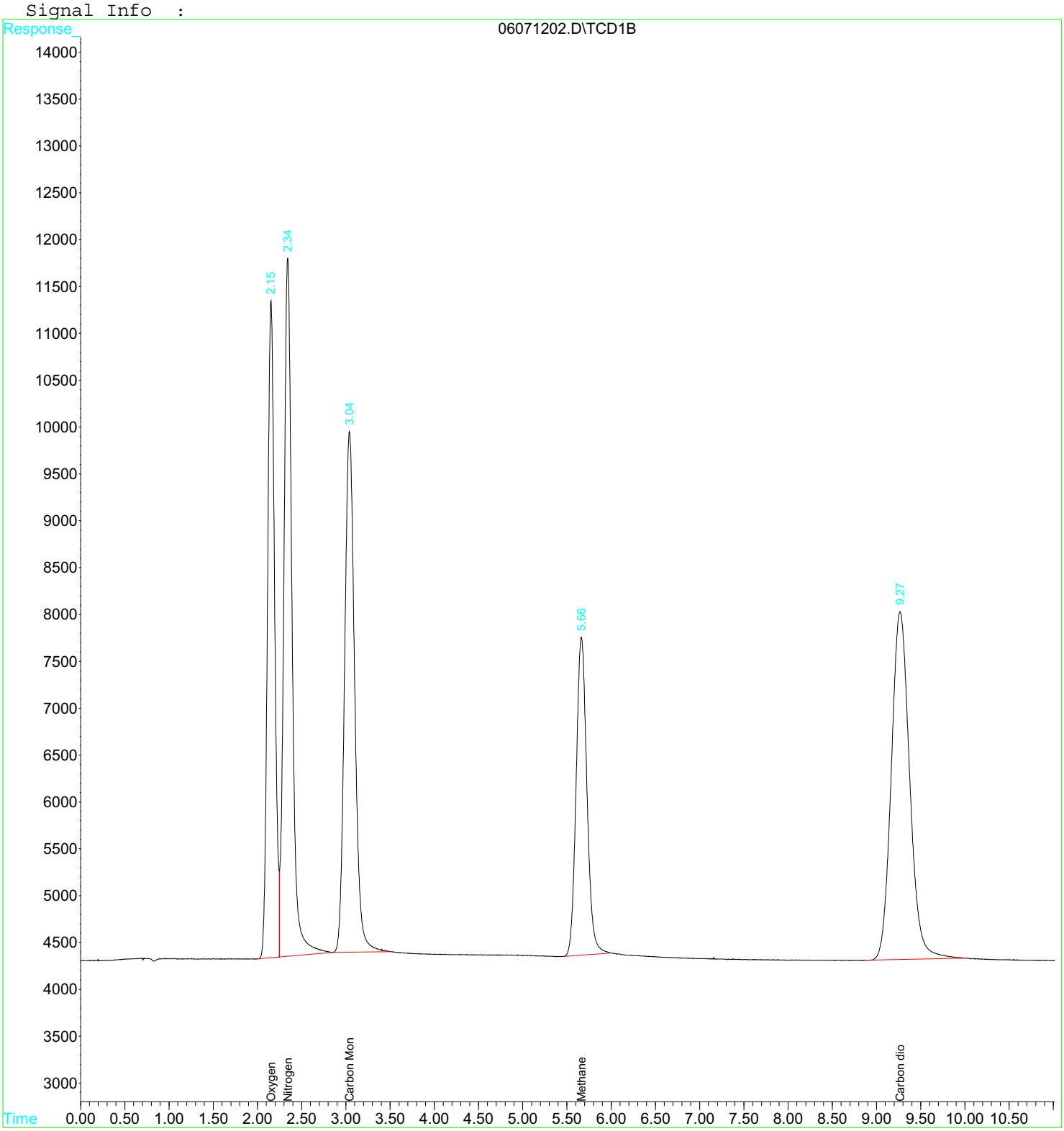
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\060712\06071202.D Vial: 1
Acq On : 7 Jun 2012 9:22 am Operator:
Sample : CCV-060712 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 7 11:13 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Wed Jun 06 09:28:31 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\060712\06071216.D Vial: 1
Acq On : 7 Jun 2012 4:29 pm Operator:
Sample : CCV-060712 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Tue May 29 13:11:55 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	2.511	-0.4	0	0.00
2	Nitrogen	2.500	2.696	-7.8	0	0.00
3	Carbon Monoxide	2.500	2.724	-9.0	0	0.05
4	Methane	2.000	2.104	-5.2	0	0.06
5	Carbon dioxide	2.500	2.628	-5.1	0	-0.04

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\060712\06071216.D Vial: 1
Acq On : 7 Jun 2012 4:29 pm Operator:
Sample : CCV-060712 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Tue May 29 13:11:55 2012
Response via : Multiple Level Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)

(#) = Out of Range SPCC's out = 0 CCC's out = 0
03051113.D 122211.M Thu Jun 07 19:01:25 2012

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\2\DATA\060712\06071216.D Vial: 1
Acq On : 7 Jun 2012 4:29 pm Operator:
Sample : CCV-060712 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 7 15:40 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Tue May 29 13:11:55 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	2.18	389000	2.511	%
2)	Nitrogen	2.37	473153	2.696	%
3)	Carbon Monoxide	3.07	439054	2.724	%
4)	Methane	5.69f	284105	2.104	%
5)	Carbon dioxide	9.29	539701	2.628	%

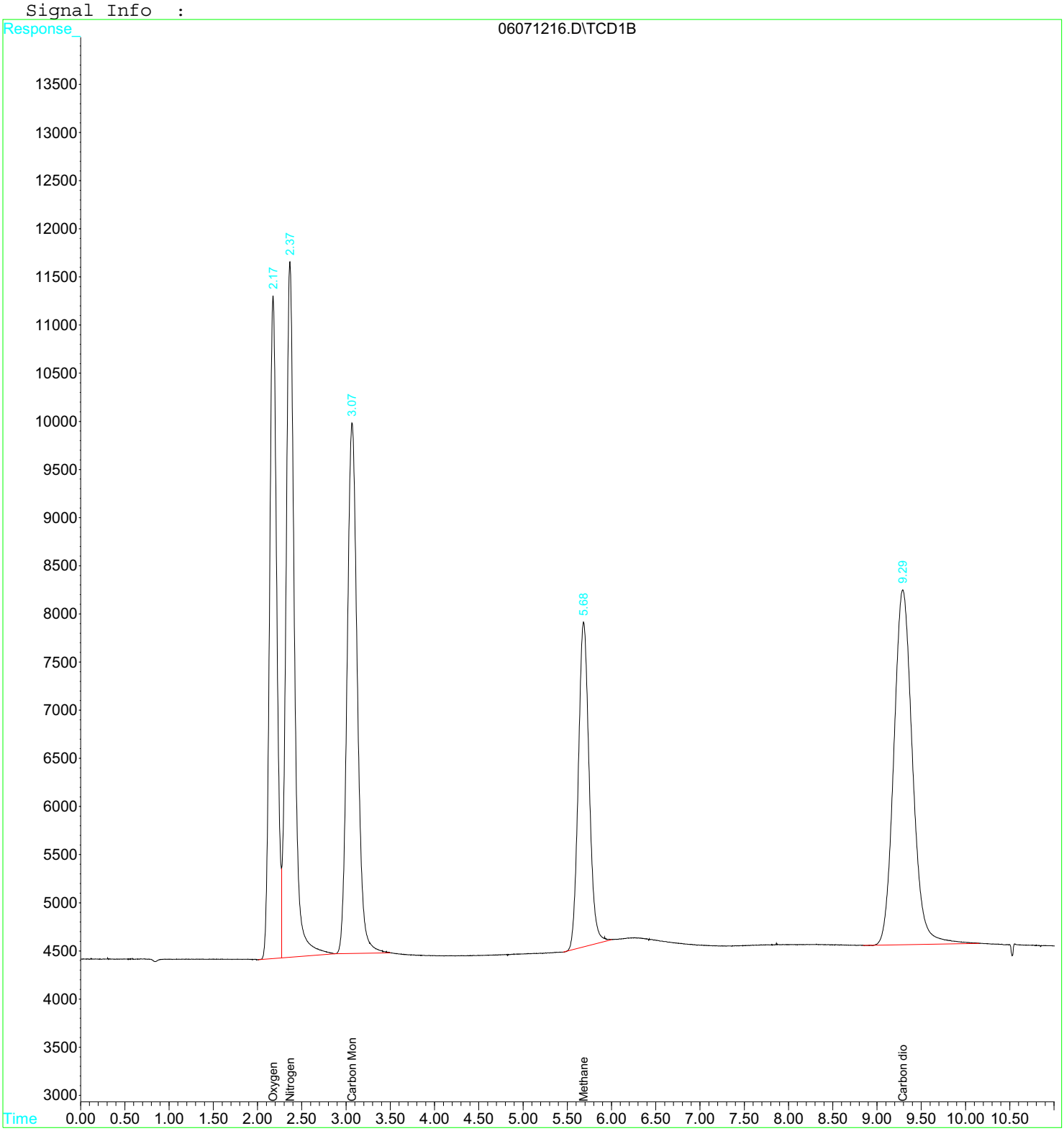
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\2\DATA\060712\06071216.D Vial: 1
Acq On : 7 Jun 2012 4:29 pm Operator:
Sample : CCV-060712 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 7 15:40 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Tue May 29 13:11:55 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\060712\06071220.D Vial: 1
Acq On : 7 Jun 2012 6:06 pm Operator:
Sample : CCV-060712 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Tue May 29 13:11:55 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	2.505	-0.2	0	0.00
2	Nitrogen	2.500	2.703	-8.1	0	0.00
3	Carbon Monoxide	2.500	2.711	-8.4	0	0.05
4	Methane	2.000	2.095	-4.8	0	0.06
5	Carbon dioxide	2.500	2.646	-5.8	0	-0.04

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\060712\06071220.D Vial: 1
Acq On : 7 Jun 2012 6:06 pm Operator:
Sample : CCV-060712 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Tue May 29 13:11:55 2012
Response via : Multiple Level Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)

(#) = Out of Range SPCC's out = 0 CCC's out = 0
03051113.D 122211.M Thu Jun 07 19:02:49 2012

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\060712\06071220.D Vial: 1
Acq On : 7 Jun 2012 6:06 pm Operator:
Sample : CCV-060712 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 7 17:26 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Tue May 29 13:11:55 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	2.18	388094	2.505	%
2)	Nitrogen	2.37	474477	2.703	%
3)	Carbon Monoxide	3.07	437004	2.711	%
4)	Methane	5.69f	282995	2.095	%
5)	Carbon dioxide	9.29	543386	2.646	%

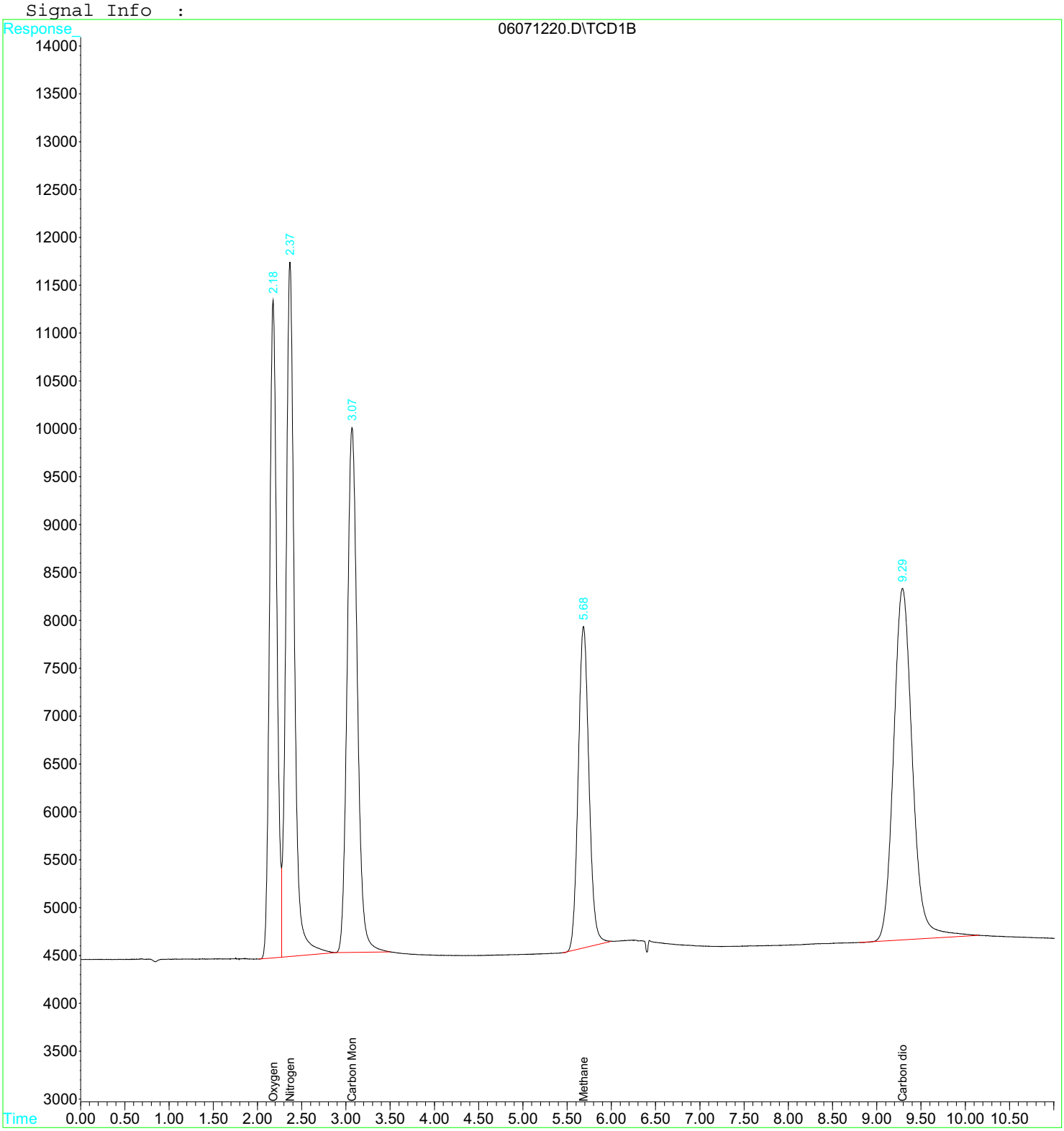
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\060712\06071220.D Vial: 1
Acq On : 7 Jun 2012 6:06 pm Operator:
Sample : CCV-060712 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 7 17:26 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Tue May 29 13:11:55 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\122211.M (Chemstation Integrator)
Title : D2504 air analysis
Last Update : Wed Jan 04 17:34:10 2012

Calibration Files
1 =12221102.D 2 =12221103.D 3 =12221104.D
4 =12221105.D 5 =12221106.D 6 =12221107.D

	Compound	1	2	3	4	5	6	Avg	%RSD
1)	Oxygen	1.462	1.533	1.525	1.518	1.533	1.749	1.549 E5	5.91
2)	Nitrogen	1.766	1.744	1.737	1.709	1.688	1.861	1.755 E5	3.22
3)	Carbon Monoxide	1.659	1.607	1.601	1.572	1.540	1.692	1.612 E5	3.45
4)	Methane	1.383	1.347	1.342	1.317	1.290	1.424	1.351 E5	3.52
5)	Carbon dioxide	2.110	2.039	2.036	1.991	1.966	2.179	2.054 E5	3.83

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

122211.M Tue Mar 06 17:38:36 2012 TESTCAL

Compound List Report GC/TCD

Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title : D2504 air analysis
Last Update : Wed Jan 04 17:34:10 2012
Response via : Initial Calibration
Total Cpnds : 5

PK#	Type	Compound Name	Exp RT	Rel RT	Cal	A/H	ID
1		Oxygen	2.09	1.000	A	A	R
2		Nitrogen	2.30	1.000	A	A	R
3		Carbon Monoxide	3.02	1.000	A	A	R
4		Methane	5.62	1.000	A	A	R
5		Carbon dioxide	9.23	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

122211.M Tue Mar 06 17:38:20 2012 TESTCAL

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\122211\12221110.D Vial: 1
Acq On : 22 Dec 2011 4:55 pm Operator:
Sample : ICV STD 1-2 Inst : GC/TCD
Misc : ICV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title : D2504 air analysis
Last Update : Wed Jan 04 17:34:10 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	2.490	0.4	0	0.03
2	Nitrogen	2.500	2.750	-10.0	0	0.00
3	Carbon Monoxide	2.500	2.683	-7.3	0	-0.03
4	Methane	2.000	2.089	-4.4	0	-0.02
5	Carbon dioxide	2.500	2.594	-3.8	0	-0.07

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\122211\12221110.D Vial: 1
Acq On : 22 Dec 2011 4:55 pm Operator:
Sample : ICV STD 1-2 Inst : GC/TCD
Misc : ICV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title : D2504 air analysis
Last Update : Wed Jan 04 17:34:10 2012
Response via : Multiple Level Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)

(#) = Out of Range SPCC's out = 0 CCC's out = 0
03051113.D 122211.M Tue Mar 06 17:37:31 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\122211\12221110.D Vial: 1
Acq On : 22 Dec 2011 4:55 pm Operator:
Sample : ICV STD 1-2 Inst : GC/TCD
Misc : ICV ASTM-D2504 Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 4 12:42 2012 Quant Results File: 122211.RES

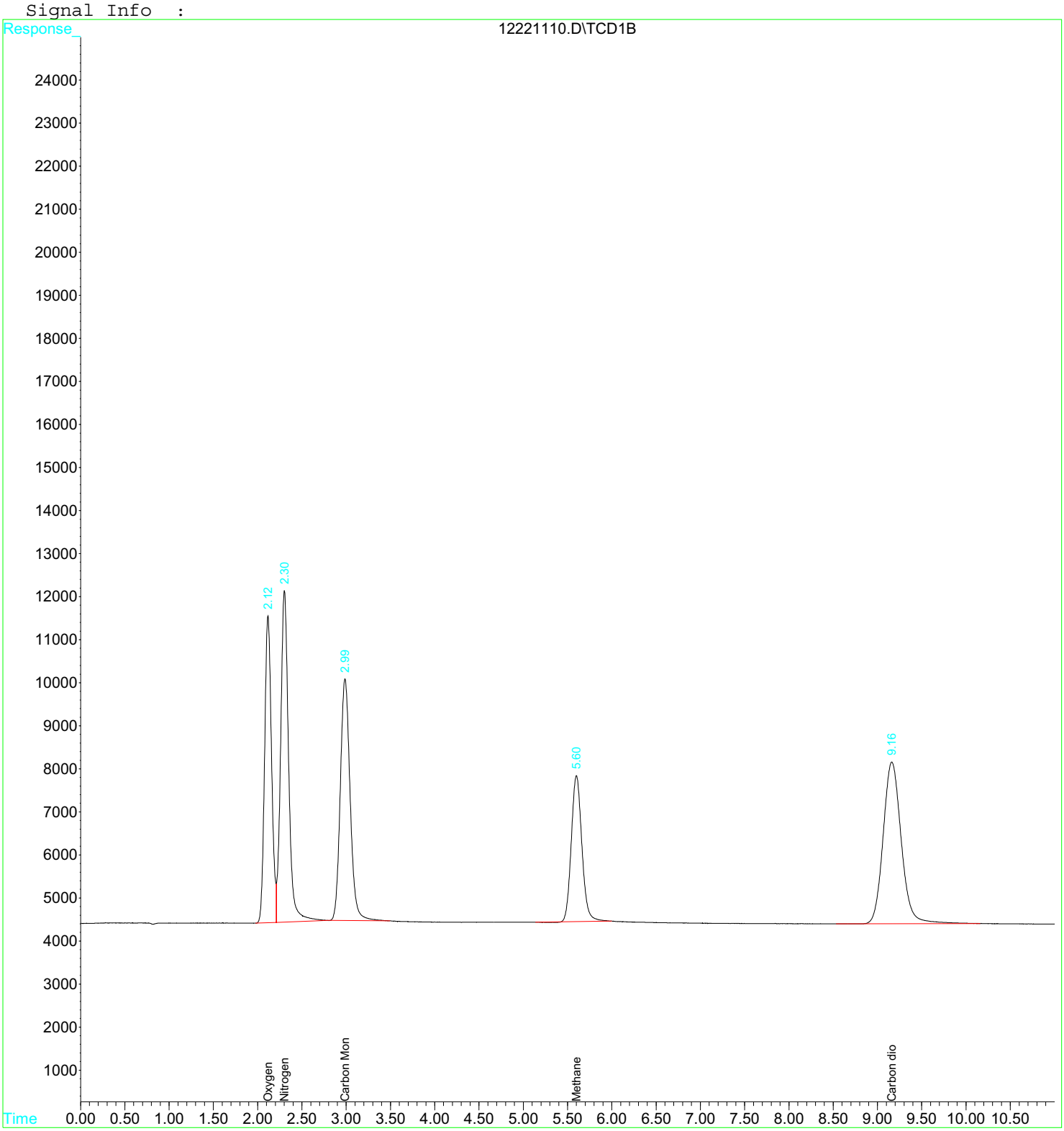
Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 22 18:56:51 2011
Response via : Initial Calibration
DataAcq Meth : TCD-10M.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1)	Oxygen	2.12	385812	2.490	%
2)	Nitrogen	2.30	482618	2.750	%
3)	Carbon Monoxide	2.99	432538	2.683	%
4)	Methane	5.60	282093	2.089	%
5)	Carbon dioxide	9.16f	532664	2.594	%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\122211\12221110.D Vial: 1
Acq On : 22 Dec 2011 4:55 pm Operator:
Sample : ICV STD 1-2 Inst : GC/TCD
Misc : ICV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 4 12:42 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 22 18:56:51 2011
Response via : Multiple Level Calibration
DataAcq Meth : TCD-10M.M

Volume Inj. :
Signal Phase :
Signal Info :