RTI Laboratories, Inc.

Date: *03-Jul.-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: 1206178

CASE NARRATIVE

SAMPLE RECEIPT:
Samples were received at the RTI Laboratory, Livonia, MI via commercial delivery on 6/6/2012 in good condition. The sample set consisted of 55 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 49242:
- Sample ID 1206178-007ADUP exhibited RPD results outside acceptance limits for Methylene chloride (67.4%).

Analytical Sequence ID 49288:
- Sample ID 1206178-015ADUP exhibited RPD results outside acceptance limits for Acetone (30.3%).

Analytical Sequence ID 49363:
- Sample ID 1206178-038ADUP exhibited RPD results outside acceptance limits for 2-Butanone (200%) and Ethylbenzene (200%).

Analytical Sequence ID 49456:
- Sample ID 1206396-018ADUP exhibited RPD results outside acceptance limits for Acetone (200).

RTI Laboratories, Inc.

Date: *02-Jul.-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: 1205A85

CASE NARRATIVE

Air-Phase Petroleum Hydrocarbons Analyses:

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

Surrogate recoveries were within established control limits.

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: July 3, 2012_____
Charles O'Bryan, Director, Quality Management

RTI Laboratories - Definitions and Acronyms

WO#: 1206178

Date Reported: 6/29/2012
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-SV089

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

Samples Shipment Date: 31 MAY 2012
Lab Destination: RTI Laboratories
Lab Contact: Mike Truchan
Project Contact: Pamela Moss
Carrier/Waybill No.: UPS/2323121382

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) T Nagy — Date: 5/31/12 Time: 1442
1. Received By (Signature/Affiliation) [illegible] / RTI Labs — Date: 6-6-12 Time: 10:08
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
VA1328	SVMW-04-050-GS-VA1328-REG	29 MAY 2012	8:43	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0712
VA1328	SVMW-04-050-GS-VA1328-REG	29 MAY 2012	8:43	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1329	SVMW-04-100-GS-VA1329-REG	29 MAY 2012	9:10	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0847
VA1329	SVMW-04-100-GS-VA1329-REG	29 MAY 2012	9:10	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1330	SVMW-04-250-GS-VA1330-REG	29 MAY 2012	9:45	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		559
VA1330	SVMW-04-250-GS-VA1330-REG	29 MAY 2012	9:45	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1331	SVMW-04-300-GS-VA1331-REG	29 MAY 2012	10:35	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by			N		0600

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV089

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1331	SVMW-04-300-GS-VA1331-REG	29 MAY 2012	10:35	1 L Tedlar Bag	1	None Required	MA DEP, VOCs / TPH by TO-15 Fixed Gases by ASTM D2504			N N		0669
VA1332	SVMW-05-050-GS-VA1332-REG	30 MAY 2012	13:51	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15					
VA1332	SVMW-05-050-GS-VA1332-REG	30 MAY 2012	13:51	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N N		0736
VA1333	SVMW-05-100-GS-VA1333-REG	30 MAY 2012	14:25	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15					
VA1333	SVMW-05-100-GS-VA1333-REG	30 MAY 2012	14:25	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N N		0687
VA1334	SVMW-05-100-GS-VA1334-FD	30 MAY 2012	14:25	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15					
VA1334	SVMW-05-100-GS-VA1334-FD	30 MAY 2012	14:25	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N N		0651
VA1335	SVMW-05-200-GS-VA1335-REG	30 MAY 2012	15:12	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15					
VA1335	SVMW-05-200-GS-VA1335-REG	30 MAY 2012	15:12	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N N		0824
VA1336	SVMW-05-290-GS-VA1336-REG	30 MAY 2012	15:48	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15					
VA1336	SVMW-05-290-GS-VA1336-REG	30 MAY 2012	15:48	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N N		0783
VA1358	SVMW-11-050-GS-VA1358-REG	30 MAY 2012	9:41	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15					
VA1358	SVMW-11-050-GS-VA1358-REG	30 MAY 2012	9:41	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N N		0693
VA1359	SVMW-11-100-GS-VA1359-REG	30 MAY 2012	10:16	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15					
VA1359	SVMW-11-100-GS-VA1359-REG	30 MAY 2012	10:16	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N N		0716
VA1360	SVMW-11-250-GS-VA1360-REG	30 MAY 2012	10:48	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15					
VA1360	SVMW-11-250-GS-VA1360-REG	30 MAY 2012	10:48	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N N		0720
VA1361	SVMW-11-260-GS-VA1361-REG	30 MAY 2012	11:18	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15					
VA1361	SVMW-11-260-GS-VA1361-REG	30 MAY 2012	11:18	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N N		0737
VA1438	KAFB-106114-025-GS-VA1438-REG	30 MAY 2012	11:38	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15					
VA1438	KAFB-106114-025-GS-VA1438-REG	30 MAY 2012	11:38	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N N		0613
VA1439	KAFB-106114-050-GS-VA1439-REG	30 MAY 2012	12:11	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15					
VA1439	KAFB-106114-050-GS-VA1439-REG	30 MAY 2012	12:11	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N N		0771
VA1440	KAFB-106114-150-GS-VA1440-REG	30 MAY 2012	13:04	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15					
VA1440	KAFB-106114-150-GS-VA1440-REG	30 MAY 2012	13:04	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N N		0761
VA1441	KAFB-106114-250-GS-VA1441-REG	30 MAY 2012	13:47	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15					
VA1441	KAFB-106114-250-GS-VA1441-REG	30 MAY 2012	13:47	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-SV089

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1442	KAFB-106114-350-GS-VA1442-REG	30 MAY 2012	14:37	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0604
VA1442	KAFB-106114-350-GS-VA1442-REG	30 MAY 2012	14:37	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1443	KAFB-106114-450-GS-VA1443-REG	30 MAY 2012	15:26	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		546
VA1443	KAFB-106114-450-GS-VA1443-REG	30 MAY 2012	15:26	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1451	KAFB-106116-025-GS-VA1451-REG	29 MAY 2012	12:15	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0635
VA1451	KAFB-106116-025-GS-VA1451-REG	29 MAY 2012	12:15	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1452	KAFB-106116-050-GS-VA1452-REG	29 MAY 2012	12:59	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0610
VA1452	KAFB-106116-050-GS-VA1452-REG	29 MAY 2012	12:59	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1453	KAFB-106116-150-GS-VA1453-REG	29 MAY 2012	13:45	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		551
VA1453	KAFB-106116-150-GS-VA1453-REG	29 MAY 2012	13:45	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1454	KAFB-106116-250-GS-VA1454-REG	29 MAY 2012	14:40	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1224
VA1454	KAFB-106116-250-GS-VA1454-REG	29 MAY 2012	14:40	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1455	KAFB-106116-350-GS-VA1455-REG	29 MAY 2012	15:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0836
VA1455	KAFB-106116-350-GS-VA1455-REG	29 MAY 2012	15:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1456	KAFB-106116-350-GS-VA1456-FD	29 MAY 2012	15:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		526
VA1456	KAFB-106116-350-GS-VA1456-FD	29 MAY 2012	15:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1457	KAFB-106116-450-GS-VA1457-REG	30 MAY 2012	8:35	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0654
VA1457	KAFB-106116-450-GS-VA1457-REG	30 MAY 2012	8:35	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1458	KAFB-106117-025-GS-VA1458-REG	29 MAY 2012	13:51	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0842
VA1458	KAFB-106117-025-GS-VA1458-REG	29 MAY 2012	13:51	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1459	KAFB-106117-050-GS-VA1459-REG	29 MAY 2012	14:26	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0612
VA1459	KAFB-106117-050-GS-VA1459-REG	29 MAY 2012	14:26	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1460	KAFB-106117-150-GS-VA1460-REG	29 MAY 2012	15:14	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0676
VA1460	KAFB-106117-150-GS-VA1460-REG	29 MAY 2012	15:14	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1461	KAFB-106117-250-GS-VA1461-REG	30 MAY 2012	8:27	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0724
VA1461	KAFB-106117-250-GS-VA1461-REG	30 MAY 2012	8:27	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1462	KAFB-106117-350-GS-VA1462-REG	30 MAY 2012	9:14	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0605
VA1462	KAFB-106117-350-GS-VA1462-REG	30 MAY 2012	9:14	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-SV089

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1463	KAFB-106117-350-GS-VA1463-FD	30 MAY 2012	9:14	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0786
VA1463	KAFB-106117-350-GS-VA1463-FD	30 MAY 2012	9:14	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1464	KAFB-106117-450-GS-VA1464-REG	30 MAY 2012	10:25	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0820
VA1464	KAFB-106117-450-GS-VA1464-REG	30 MAY 2012	10:25	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1484	KAFB-106121-025-GS-VA1484-REG	31 MAY 2012	8:31	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0782
VA1484	KAFB-106121-025-GS-VA1484-REG	31 MAY 2012	8:31	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1485	KAFB-106121-050-GS-VA1485-REG	31 MAY 2012	9:04	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0590
VA1485	KAFB-106121-050-GS-VA1485-REG	31 MAY 2012	9:04	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1486	KAFB-106121-150-GS-VA1486-REG	31 MAY 2012	9:41	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0658
VA1486	KAFB-106121-150-GS-VA1486-REG	31 MAY 2012	9:41	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1487	KAFB-106121-150-GS-VA1487-FD	31 MAY 2012	9:41	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0765
VA1487	KAFB-106121-150-GS-VA1487-FD	31 MAY 2012	9:41	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1488	KAFB-106121-250-GS-VA1488-REG	31 MAY 2012	10:36	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0841
VA1488	KAFB-106121-250-GS-VA1488-REG	31 MAY 2012	10:36	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1489	KAFB-106121-350-GS-VA1489-REG	31 MAY 2012	11:46	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0683
VA1489	KAFB-106121-350-GS-VA1489-REG	31 MAY 2012	11:46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1490	KAFB-106121-450-GS-VA1490-REG	31 MAY 2012	12:31	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1097
VA1490	KAFB-106121-450-GS-VA1490-REG	31 MAY 2012	12:31	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1504	KAFB-106124-025-GS-VA1504-REG	31 MAY 2012	8:58	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		~~0760~~ cm
VA1504	KAFB-106124-025-GS-VA1504-REG	31 MAY 2012	8:58	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0760
VA1505	KAFB-106124-050-GS-VA1505-REG	31 MAY 2012	9:30	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0764
VA1505	KAFB-106124-050-GS-VA1505-REG	31 MAY 2012	9:30	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1506	KAFB-106124-150-GS-VA1506-REG	31 MAY 2012	10:13	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0774
VA1506	KAFB-106124-150-GS-VA1506-REG	31 MAY 2012	10:13	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1507	KAFB-106124-250-GS-VA1507-REG	31 MAY 2012	10:54	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		565
VA1507	KAFB-106124-250-GS-VA1507-REG	31 MAY 2012	10:54	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1508	KAFB-106124-250-GS-VA1508-FD	31 MAY 2012	10:54	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		517
VA1508	KAFB-106124-250-GS-VA1508-FD	31 MAY 2012	10:54	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-SV089

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1509	KAFB-106124-350-GS-VA1509-REG	31 MAY 2012	11:50	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		517
VA1509	KAFB-106124-350-GS-VA1509-REG	31 MAY 2012	11:50	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1510	KAFB-106124-450-GS-VA1510-REG	31 MAY 2012	12:32	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0578
VA1510	KAFB-106124-450-GS-VA1510-REG	31 MAY 2012	12:32	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1616	KAFB-106141-025-GS-VA1616-REG	29 MAY 2012	8:23	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0796
VA1616	KAFB-106141-025-GS-VA1616-REG	29 MAY 2012	8:23	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		~~0796~~ cm
VA1617	KAFB-106141-025-GS-VA1617-FD	29 MAY 2012	8:23	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0791
VA1617	KAFB-106141-025-GS-VA1617-FD	29 MAY 2012	8:23	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		~~0794~~ cm
VA1618	KAFB-106141-050-GS-VA1618-REG	29 MAY 2012	9:41	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0799
VA1618	KAFB-106141-050-GS-VA1618-REG	29 MAY 2012	9:41	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		~~0798~~ cm
VA1619	KAFB-106141-170-GS-VA1619-REG	29 MAY 2012	10:27	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0594
VA1619	KAFB-106141-170-GS-VA1619-REG	29 MAY 2012	10:27	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		~~0594~~ cm
VA1620	KAFB-106141-250-GS-VA1620-REG	29 MAY 2012	11:08	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0753
VA1620	KAFB-106141-250-GS-VA1620-REG	29 MAY 2012	11:08	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		~~0753~~ cm
VA1621	KAFB-106141-350-GS-VA1621-REG	29 MAY 2012	11:49	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0755
VA1621	KAFB-106141-350-GS-VA1621-REG	29 MAY 2012	11:49	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1622	KAFB-106141-450-GS-VA1622-REG	29 MAY 2012	12:32	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0811
VA1622	KAFB-106141-450-GS-VA1622-REG	29 MAY 2012	12:32	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA6089-TB	FIELDQC-AQ-VA6089-TB-TB	29 MAY 2012	08:00	1 L BOTTLEVAC	1	None Required	VOCs / TPH by TO-15			N		0589

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

20 LBS 1 OF 6
DWT: 21,14,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4121 7082

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 5/31/12
SIGNATURE T Nagy

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

Fold here and place in label pouch

VA 1332	0669
VA 1333	0736
VA 1334	0687
VA 1335	0651
VA 1358	0783
VA 1359	0693
VA 1360	0716
VA 1361	0720
VA 1457	0654
VA 1462	0605
VA 1463	0786
VA 5089-TB	0589

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

20 LBS 2 OF 6
DWT: 21,14,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4153 7496

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 5/31/12
SIGNATURE T Nash

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

VA 1328 0712
VA 1329 0847
VA 1330 559
VA 1331 0600
VA 1451 0635
VA 1452 0610
VA 1453 551
VA 1454 1224
VA 1455 0836
VA 1456 526
VA 1464 0820

VA 1510 0578

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

20 LBS 3 OF 6
DWT: 21,14,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4229 6503

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 5/31/12
SIGNATURE T Vogel

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

WS 15.0.16 HP LaserJet 4 27 DA 04/2012

Fold here and place in label pouch

VA 1458	0842
VA 1459	0612
VA 1460	0676
VA 1461	0724
VA 1484	0782
VA 1616	0796
VA 1617	0791
VA 1618	0799
VA 1619	0594
VA 1620	0753
VA 1621	0755
VA 1622	0811

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

20 LBS 4 OF 6
DWT: 21,14,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4125 0116

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 5/31/12
SIGNATURE T Daily

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

VA 1485 0590
VA 1486 0658
VA 1487 0765
VA 1488 0841
VA 1489 0683
VA 1490 1097
VA 1504 0760
VA 1505 0764
VA 1506 0674
VA 1507 0774
VA 1508 565
VA 1509 517

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

27 LBS 5 OF 6
DWT: 21,14,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4191 4328

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 5/31/12

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

VA 1443 546
VA 1442 0604
VA 1441 0761
VA 1440 0771
VA 1439 0613
VA 1438 0737
VA 1336 0824

TB 0815
TB 0768

Regulators

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

5 LBS 6 OF 6
DWT: 26,19,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4216 5136

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 5/31/12
SIGNATURE T Nash

QEC
Quality Environmental Containers
800-255-1950 · 304-255-3900

Fold here and p...

Tedlar Bags

Armando Flores

From: Deb Griffiths [dgriffiths@rtilab.com]
Sent: Tuesday, June 05, 2012 5:07 PM
To: 'Armando Flores'; cmein@rtilab.com
Cc: 'Rachel Hill'; 'Rachel Dear'; 'Mike Truchan'; 'Jim Wuokila'
Subject: FW: RTI COC

Incoming from Shaw. Please note that there was one tedlar bag missing and was shipped with this shipment.

Deborah Griffiths
Director, Project Management
RTI Laboratories
31628 Glendale St.
Livonia, MI 48150
PH: (734) 422-8000 x214
Cell: (317) 379-7994

From: Oshlo, Diane L [mailto:diane.oshlo@shawgrp.com]
Sent: Tuesday, June 05, 2012 4:57 PM
To: Deb Griffiths
Cc: Moss, Pamela J; Noger, Timotheus D; Huang, Susan
Subject: RTI COC

Deb,

Please see attached file and note we missed sending a tedlar bag in the May 31, 2012 shipment and have included it with this shipment. The sample id va1485 from well KAFB 106121-050 collected 5/31/2012 at 0904 analysis required fixed gases by ASTMD 2504. This sample is hand written on the coc with today's shipment.

Thank you for your time,
Diane

Diane Oshlo
Field Manager
Shaw Field Office
Kirtland AFB
5202 Randolph Ave SE
Kirtland AFB, NM
87117
505-259-5669 (Cell)
diane.oshlo@ shawgrp.com

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

10 LBS 4 OF 4
DWT: 24,13,15

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4275 4375

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

BILLING: P/P

REF 1:140705
REF 2:BB010030

CUSTODY SEAL
DATE 8/5/12
SIGNATURE

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

4 27.2A 04/2012

Tedlar Bags

VA 1485

1206178-035B

Shaw
Shaw E & I, Inc.

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV090

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1447	KAFB-106115-150-GS-VA1447-FD	04 JUN 2012	9:50	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1447	KAFB-106115-150-GS-VA1447-FD	04 JUN 2012	9:50	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1448	KAFB-106115-250-GS-VA1448-REG	04 JUN 2012	10:52	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1448	KAFB-106115-250-GS-VA1448-REG	04 JUN 2012	10:52	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1449	KAFB-106115-350-GS-VA1449-REG	04 JUN 2012	11:37	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1449	KAFB-106115-350-GS-VA1449-REG	04 JUN 2012	11:37	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1450	KAFB-106115-450-GS-VA1450-REG	04 JUN 2012	12:20	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1450	KAFB-106115-450-GS-VA1450-REG	04 JUN 2012	12:20	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1465	KAFB-106118-025-GS-VA1465-REG	04 JUN 2012	15:53	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1465	KAFB-106118-025-GS-VA1465-REG	04 JUN 2012	15:53	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1466	KAFB-106118-050-GS-VA1466-REG	05 JUN 2012	11:10	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1466	KAFB-106118-050-GS-VA1466-REG	05 JUN 2012	11:10	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1467	KAFB-106118-160-GS-VA1467-REG	05 JUN 2012	11:47	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1467	KAFB-106118-160-GS-VA1467-REG	05 JUN 2012	11:47	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA8090-TB	FIELDQC-AO-VA8090-TB-TB	04 JUN 2012	08:00	1 L BOTTLEVAC	1	None Required	VOCs / TPH by TO-15			N		
* VA1485	KAFB106121-050	31 May 2012	0904	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N)		

* mixed in last shipment on 5/31/12

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 **6/6/2012 10:08:00 AM**

Work Order Number **1206178** RcptNo: **1** Received by: **Armando Flores**

Completed by Reviewed by:

Completed Date: 6/7/2012 4:38:12 PM Reviewed Date: 6/8/2012 2:57:25 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:

Adjusted? _____ Checked by

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

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 Contacted? ☐ Yes ☑ No ☐ NA Person Contacted:

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

Client Instructions:

Date Contacted: Contacted By:

Regarding:

CorrectiveAction:

Comments:
UPS tracking numbers
1Z10335E0341217082
1Z10335E0341537496
1Z10335E0342296503
1Z10335E0341250116
1Z10335E0341914328
1Z10335E0342165136

RTI Laboratories - Workorder Sample Summary

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1206178-001A	VA1328		5/29/2012 8:43 AM	6/6/2012 10:08 AM	Air
1206178-001B	VA1328		5/29/2012 8:43 AM	6/6/2012 10:08 AM	Air
1206178-002A	VA1329		5/29/2012 9:10 AM	6/6/2012 10:08 AM	Air
1206178-002B	VA1329		5/29/2012 9:10 AM	6/6/2012 10:08 AM	Air
1206178-003A	VA1330		5/29/2012 9:45 AM	6/6/2012 10:08 AM	Air
1206178-003B	VA1330		5/29/2012 9:45 AM	6/6/2012 10:08 AM	Air
1206178-004A	VA1331		5/29/2012 10:35 AM	6/6/2012 10:08 AM	Air
1206178-004B	VA1331		5/29/2012 10:35 AM	6/6/2012 10:08 AM	Air
1206178-005A	VA1332		5/30/2012 1:51 PM	6/6/2012 10:08 AM	Air
1206178-005B	VA1332		5/30/2012 1:51 PM	6/6/2012 10:08 AM	Air
1206178-006A	VA1333		5/30/2012 2:25 PM	6/6/2012 10:08 AM	Air
1206178-006B	VA1333		5/30/2012 2:25 PM	6/6/2012 10:08 AM	Air
1206178-007A	VA1334		5/30/2012 2:25 PM	6/6/2012 10:08 AM	Air
1206178-007B	VA1334		5/30/2012 2:25 PM	6/6/2012 10:08 AM	Air
1206178-008A	VA1335		5/30/2012 3:12 PM	6/6/2012 10:08 AM	Air
1206178-008B	VA1335		5/30/2012 3:12 PM	6/6/2012 10:08 AM	Air
1206178-009A	VA1336		5/30/2012 3:48 PM	6/6/2012 10:08 AM	Air
1206178-009B	VA1336		5/30/2012 3:48 PM	6/6/2012 10:08 AM	Air
1206178-010A	VA1358		5/30/2012 9:41 AM	6/6/2012 10:08 AM	Air
1206178-010B	VA1358		5/30/2012 9:41 AM	6/6/2012 10:08 AM	Air
1206178-011A	VA1359		5/30/2012 10:16 AM	6/6/2012 10:08 AM	Air
1206178-011B	VA1359		5/30/2012 10:16 AM	6/6/2012 10:08 AM	Air
1206178-012A	VA1360		5/30/2012 10:48 AM	6/6/2012 10:08 AM	Air
1206178-012B	VA1360		5/30/2012 10:48 AM	6/6/2012 10:08 AM	Air
1206178-013A	VA1361		5/30/2012 11:18 AM	6/6/2012 10:08 AM	Air
1206178-013B	VA1361		5/30/2012 11:18 AM	6/6/2012 10:08 AM	Air
1206178-014A	VA1438		5/30/2012 11:38 AM	6/6/2012 10:08 AM	Air
1206178-014B	VA1438		5/30/2012 11:38 AM	6/6/2012 10:08 AM	Air
1206178-015A	VA1439		5/30/2012 12:11 PM	6/6/2012 10:08 AM	Air
1206178-015B	VA1439		5/30/2012 12:11 PM	6/6/2012 10:08 AM	Air
1206178-016A	VA1440		5/30/2012 1:04 PM	6/6/2012 10:08 AM	Air
1206178-016B	VA1440		5/30/2012 1:04 PM	6/6/2012 10:08 AM	Air
1206178-017A	VA1441		5/30/2012 1:47 PM	6/6/2012 10:08 AM	Air
1206178-017B	VA1441		5/30/2012 1:47 PM	6/6/2012 10:08 AM	Air
1206178-018A	VA1442		5/30/2012 2:37 PM	6/6/2012 10:08 AM	Air
1206178-018B	VA1442		5/30/2012 2:37 PM	6/6/2012 10:08 AM	Air
1206178-019A	VA1443		5/30/2012 3:26 PM	6/6/2012 10:08 AM	Air
1206178-019B	VA1443		5/30/2012 3:26 PM	6/6/2012 10:08 AM	Air
1206178-020A	VA1451		5/29/2012 12:15 PM	6/6/2012 10:08 AM	Air
1206178-020B	VA1451		5/29/2012 12:15 PM	6/6/2012 10:08 AM	Air
1206178-021A	VA1452		5/29/2012 12:59 PM	6/6/2012 10:08 AM	Air
1206178-021B	VA1452		5/29/2012 12:59 PM	6/6/2012 10:08 AM	Air
1206178-022A	VA1453		5/29/2012 1:45 PM	6/6/2012 10:08 AM	Air
1206178-022B	VA1453		5/29/2012 1:45 PM	6/6/2012 10:08 AM	Air
1206178-023A	VA1454		5/29/2012 2:40 PM	6/6/2012 10:08 AM	Air

RTI Laboratories - Workorder Sample Summary

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1206178-023B	VA1454		5/29/2012 2:40 PM	6/6/2012 10:08 AM	Air
1206178-024A	VA1455		5/29/2012 3:22 PM	6/6/2012 10:08 AM	Air
1206178-024B	VA1455		5/29/2012 3:22 PM	6/6/2012 10:08 AM	Air
1206178-025A	VA1456		5/29/2012 3:22 PM	6/6/2012 10:08 AM	Air
1206178-025B	VA1456		5/29/2012 3:22 PM	6/6/2012 10:08 AM	Air
1206178-026A	VA1457		5/30/2012 8:35 AM	6/6/2012 10:08 AM	Air
1206178-026B	VA1457		5/30/2012 8:35 AM	6/6/2012 10:08 AM	Air
1206178-027A	VA1458		5/29/2012 1:51 PM	6/6/2012 10:08 AM	Air
1206178-027B	VA1458		5/29/2012 1:51 PM	6/6/2012 10:08 AM	Air
1206178-028A	VA1459		5/29/2012 2:26 PM	6/6/2012 10:08 AM	Air
1206178-028B	VA1459		5/29/2012 2:26 PM	6/6/2012 10:08 AM	Air
1206178-029A	VA1460		5/29/2012 3:14 PM	6/6/2012 10:08 AM	Air
1206178-029B	VA1460		5/29/2012 3:14 PM	6/6/2012 10:08 AM	Air
1206178-030A	VA1461		5/30/2012 8:27 AM	6/6/2012 10:08 AM	Air
1206178-030B	VA1461		5/30/2012 8:27 AM	6/6/2012 10:08 AM	Air
1206178-031A	VA1462		5/30/2012 9:14 AM	6/6/2012 10:08 AM	Air
1206178-031B	VA1462		5/30/2012 9:14 AM	6/6/2012 10:08 AM	Air
1206178-032A	VA1463		5/30/2012 9:14 AM	6/6/2012 10:08 AM	Air
1206178-032B	VA1463		5/30/2012 9:14 AM	6/6/2012 10:08 AM	Air
1206178-033A	VA1464		5/30/2012 10:25 AM	6/6/2012 10:08 AM	Air
1206178-033B	VA1464		5/30/2012 10:25 AM	6/6/2012 10:08 AM	Air
1206178-034A	VA1484		5/31/2012 8:31 AM	6/6/2012 10:08 AM	Air
1206178-034B	VA1484		5/31/2012 8:31 AM	6/6/2012 10:08 AM	Air
1206178-035A	VA1485		5/31/2012 9:04 AM	6/6/2012 10:08 AM	Air
1206178-035B	VA1485		5/31/2012 9:04 AM	6/6/2012 10:08 AM	Air
1206178-036A	VA1486		5/31/2012 9:41 AM	6/6/2012 10:08 AM	Air
1206178-036B	VA1486		5/31/2012 9:41 AM	6/6/2012 10:08 AM	Air
1206178-037A	VA1487		5/31/2012 9:41 AM	6/6/2012 10:08 AM	Air
1206178-037B	VA1487		5/31/2012 9:41 AM	6/6/2012 10:08 AM	Air
1206178-038A	VA1488		5/31/2012 10:36 AM	6/6/2012 10:08 AM	Air
1206178-038B	VA1488		5/31/2012 10:36 AM	6/6/2012 10:08 AM	Air
1206178-039A	VA1489		5/31/2012 11:46 AM	6/6/2012 10:08 AM	Air
1206178-039B	VA1489		5/31/2012 11:46 AM	6/6/2012 10:08 AM	Air
1206178-040A	VA1490		5/31/2012 12:31 PM	6/6/2012 10:08 AM	Air
1206178-040B	VA1490		5/31/2012 12:31 PM	6/6/2012 10:08 AM	Air
1206178-041A	VA1504		5/31/2012 8:58 AM	6/6/2012 10:08 AM	Air
1206178-041B	VA1504		5/31/2012 8:58 AM	6/6/2012 10:08 AM	Air
1206178-042A	VA1505		5/31/2012 9:30 AM	6/6/2012 10:08 AM	Air
1206178-042B	VA1505		5/31/2012 9:30 AM	6/6/2012 10:08 AM	Air
1206178-043A	VA1506		5/31/2012 10:13 AM	6/6/2012 10:08 AM	Air
1206178-043B	VA1506		5/31/2012 10:13 AM	6/6/2012 10:08 AM	Air
1206178-044A	VA1507		5/31/2012 10:54 AM	6/6/2012 10:08 AM	Air
1206178-044B	VA1507		5/31/2012 10:54 AM	6/6/2012 10:08 AM	Air
1206178-045A	VA1508		5/31/2012 10:54 AM	6/6/2012 10:08 AM	Air
1206178-045B	VA1508		5/31/2012 10:54 AM	6/6/2012 10:08 AM	Air

RTI Laboratories - Workorder Sample Summary

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1206178-046A	VA1509		5/31/2012 11:50 AM	6/6/2012 10:08 AM	Air
1206178-046B	VA1509		5/31/2012 11:50 AM	6/6/2012 10:08 AM	Air
1206178-047A	VA1510		5/31/2012 12:32 PM	6/6/2012 10:08 AM	Air
1206178-047B	VA1510		5/31/2012 12:32 PM	6/6/2012 10:08 AM	Air
1206178-048A	VA1616		5/29/2012 8:23 AM	6/6/2012 10:08 AM	Air
1206178-048B	VA1616		5/29/2012 8:23 AM	6/6/2012 10:08 AM	Air
1206178-049A	VA1617		5/29/2012 8:23 AM	6/6/2012 10:08 AM	Air
1206178-049B	VA1617		5/29/2012 8:23 AM	6/6/2012 10:08 AM	Air
1206178-050A	VA1618		5/29/2012 9:41 AM	6/6/2012 10:08 AM	Air
1206178-050B	VA1618		5/29/2012 9:41 AM	6/6/2012 10:08 AM	Air
1206178-051A	VA1619		5/29/2012 10:27 AM	6/6/2012 10:08 AM	Air
1206178-051B	VA1619		5/29/2012 10:27 AM	6/6/2012 10:08 AM	Air
1206178-052A	VA1620		5/29/2012 11:08 AM	6/6/2012 10:08 AM	Air
1206178-052B	VA1620		5/29/2012 11:08 AM	6/6/2012 10:08 AM	Air
1206178-053A	VA1621		5/29/2012 11:49 AM	6/6/2012 10:08 AM	Air
1206178-053B	VA1621		5/29/2012 11:49 AM	6/6/2012 10:08 AM	Air
1206178-054A	VA1622		5/29/2012 12:32 PM	6/6/2012 10:08 AM	Air
1206178-054B	VA1622		5/29/2012 12:32 PM	6/6/2012 10:08 AM	Air
1206178-055A	VA8089-TB		5/29/2012 8:00 AM	6/6/2012 10:08 AM	Air

RTI Laboratories - DATES REPORT

WO#: 1206178

Date Reported: 6/29/2012
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
1206178-001A	VA1328	5/29/2012 8:43 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/9/2012 1:37 AM
				EPA_TO15-Volatile Organic Compounds			6/11/2012 5:07 PM
1206178-001B	VA1328	5/29/2012 8:43 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/13/2012 10:56 AM
1206178-002A	VA1329	5/29/2012 9:10 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/9/2012 2:20 AM
				EPA_TO15-Volatile Organic Compounds			6/11/2012 6:33 PM
1206178-002B	VA1329	5/29/2012 9:10 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/13/2012 11:13 AM
1206178-003A	VA1330	5/29/2012 9:45 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/12/2012 8:15 PM
				EPA_TO15-Volatile Organic Compounds			6/11/2012 7:14 PM
				EPA_TO15-Volatile Organic Compounds			6/13/2012 12:21 AM
1206178-003B	VA1330	5/29/2012 9:45 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/13/2012 11:28 AM
1206178-004A	VA1331	5/29/2012 10:35 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/12/2012 9:41 PM
				EPA_TO15-Volatile Organic Compounds			6/11/2012 7:58 PM
				EPA_TO15-Volatile Organic Compounds			6/11/2012 10:47 PM
1206178-004B	VA1331	5/29/2012 10:35 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/13/2012 11:43 AM
1206178-005A	VA1332	5/30/2012 1:51 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/12/2012 10:23 PM
				EPA_TO15-Volatile Organic Compounds			6/11/2012 8:40 PM
				EPA_TO15-Volatile Organic Compounds			6/13/2012 1:03 AM
1206178-005B	VA1332	5/30/2012 1:51 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/13/2012 11:59 AM

RTI Laboratories - DATES REPORT

WO#: 1206178

Date Reported: 6/29/2012
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
1206178-006A	VA1333	5/30/2012 2:25 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/12/2012 11:06 PM
				EPA_TO15-Volatile Organic Compounds			6/11/2012 9:24 PM
				EPA_TO15-Volatile Organic Compounds			6/11/2012 10:05 PM
1206178-006B	VA1333	5/30/2012 2:25 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/13/2012 12:13 PM
1206178-007A	VA1334	5/30/2012 2:25 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/12/2012 11:49 PM
				EPA_TO15-Volatile Organic Compounds			6/11/2012 11:31 PM
				EPA_TO15-Volatile Organic Compounds			6/13/2012 1:44 AM
1206178-007B	VA1334	5/30/2012 2:25 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/13/2012 12:30 PM
1206178-008A	VA1335	5/30/2012 3:12 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/13/2012 12:32 AM
				EPA_TO15-Volatile Organic Compounds			6/12/2012 12:57 AM
				EPA_TO15-Volatile Organic Compounds			6/12/2012 1:41 AM
1206178-008B	VA1335	5/30/2012 3:12 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/13/2012 12:45 PM
1206178-009A	VA1336	5/30/2012 3:48 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/13/2012 1:14 AM
				EPA_TO15-Volatile Organic Compounds			6/12/2012 2:23 AM
				EPA_TO15-Volatile Organic Compounds			6/12/2012 3:07 AM
1206178-009B	VA1336	5/30/2012 3:48 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/13/2012 1:04 PM
1206178-010A	VA1358	5/30/2012 9:41 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/13/2012 1:57 AM
				EPA_TO15-Volatile Organic Compounds			6/12/2012 3:48 AM
				EPA_TO15-Volatile Organic Compounds			6/13/2012 2:25 AM

RTI Laboratories - DATES REPORT

WO#: 1206178

Date Reported: 6/29/2012
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
1206178-010B	VA1358	5/30/2012 9:41 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/13/2012 1:19 PM
1206178-011A	VA1359	5/30/2012 10:16 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/13/2012 2:41 AM
				EPA_TO15-Volatile Organic Compounds			6/12/2012 4:30 AM
				EPA_TO15-Volatile Organic Compounds			6/13/2012 2:11 PM
1206178-011B	VA1359	5/30/2012 10:16 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/13/2012 2:19 PM
1206178-012A	VA1360	5/30/2012 10:48 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/13/2012 3:25 AM
				EPA_TO15-Volatile Organic Compounds			6/12/2012 5:11 AM
				EPA_TO15-Volatile Organic Compounds			6/13/2012 3:48 AM
1206178-012B	VA1360	5/30/2012 10:48 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/13/2012 2:34 PM
1206178-013A	VA1361	5/30/2012 11:18 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/13/2012 5:13 PM
				EPA_TO15-Volatile Organic Compounds			6/12/2012 5:52 AM
				EPA_TO15-Volatile Organic Compounds			6/13/2012 4:29 AM
1206178-013B	VA1361	5/30/2012 11:18 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/13/2012 2:49 PM
1206178-014A	VA1438	5/30/2012 11:38 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/14/2012 6:15 PM
				EPA_TO15-Volatile Organic Compounds			6/12/2012 6:34 AM
				EPA_TO15-Volatile Organic Compounds			6/12/2012 7:18 AM
1206178-014B	VA1438	5/30/2012 11:38 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/13/2012 3:03 PM
1206178-015A	VA1439	5/30/2012 12:11 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/13/2012 6:40 PM
				EPA_TO15-Volatile Organic Compounds			6/12/2012 5:46 PM

RTI Laboratories - DATES REPORT

WO#: 1206178

Date Reported: 6/29/2012
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
1206178-015B	VA1439	5/30/2012 12:11 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/13/2012 3:18 PM
1206178-016A	VA1440	5/30/2012 1:04 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/14/2012 7:43 PM
				EPA_TO15-Volatile Organic Compounds			6/12/2012 2:13 PM
				EPA_TO15-Volatile Organic Compounds			6/12/2012 7:11 PM
1206178-016B	VA1440	5/30/2012 1:04 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/13/2012 3:35 PM
1206178-017A	VA1441	5/30/2012 1:47 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/12/2012 6:48 PM
				EPA_TO15-Volatile Organic Compounds			6/12/2012 2:57 PM
1206178-017B	VA1441	5/30/2012 1:47 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/13/2012 3:50 PM
1206178-018A	VA1442	5/30/2012 2:37 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/13/2012 8:51 PM
				EPA_TO15-Volatile Organic Compounds			6/12/2012 9:24 PM
1206178-018B	VA1442	5/30/2012 2:37 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/13/2012 4:05 PM
1206178-019A	VA1443	5/30/2012 3:26 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/13/2012 10:18 PM
				EPA_TO15-Volatile Organic Compounds			6/12/2012 4:20 PM
1206178-019B	VA1443	5/30/2012 3:26 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/13/2012 4:20 PM
1206178-020A	VA1451	5/29/2012 12:15 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/14/2012 8:27 PM
				EPA_TO15-Volatile Organic Compounds			6/12/2012 10:56 PM
1206178-020B	VA1451	5/29/2012 12:15 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/13/2012 4:35 PM

RTI Laboratories - DATES REPORT

WO#: 1206178

Date Reported: 6/29/2012
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
1206178-021A	VA1452	5/29/2012 12:59 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/13/2012 11:50 PM
				EPA_TO15-Volatile Organic Compounds			6/12/2012 11:40 PM
1206178-021B	VA1452	5/29/2012 12:59 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/18/2012 9:52 AM
1206178-022A	VA1453	5/29/2012 1:45 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/12/2012 1:37 PM
				EPA_TO15-Volatile Organic Compounds			6/12/2012 7:56 PM
1206178-022B	VA1453	5/29/2012 1:45 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/18/2012 10:07 AM
1206178-023A	VA1454	5/29/2012 2:40 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/14/2012 12:39 AM
				EPA_TO15-Volatile Organic Compounds			6/12/2012 10:12 PM
1206178-023B	VA1454	5/29/2012 2:40 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/18/2012 10:21 AM
1206178-024A	VA1455	5/29/2012 3:22 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/14/2012 7:40 AM
				EPA_TO15-Volatile Organic Compounds			6/13/2012 9:16 PM
1206178-024B	VA1455	5/29/2012 3:22 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/18/2012 10:36 AM
1206178-025A	VA1456	5/29/2012 3:22 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/14/2012 8:25 AM
				EPA_TO15-Volatile Organic Compounds			6/15/2012 3:29 AM
1206178-025B	VA1456	5/29/2012 3:22 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/18/2012 10:51 AM
1206178-026A	VA1457	5/30/2012 8:35 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/12/2012 5:20 PM
				EPA_TO15-Volatile Organic Compounds			6/14/2012 12:02 AM

RTI Laboratories - DATES REPORT

WO#: 1206178

Date Reported: 6/29/2012
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
1206178-026B	VA1457	5/30/2012 8:35 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/18/2012 11:13 AM
1206178-027A	VA1458	5/29/2012 1:51 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/14/2012 9:10 PM
				EPA_TO15-Volatile Organic Compounds			6/14/2012 12:43 AM
1206178-027B	VA1458	5/29/2012 1:51 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/18/2012 11:27 AM
1206178-028A	VA1459	5/29/2012 2:26 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/14/2012 9:53 PM
				EPA_TO15-Volatile Organic Compounds			6/14/2012 1:24 AM
1206178-028B	VA1459	5/29/2012 2:26 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/18/2012 11:44 AM
1206178-029A	VA1460	5/29/2012 3:14 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/14/2012 10:36 PM
				EPA_TO15-Volatile Organic Compounds			6/14/2012 2:05 AM
1206178-029B	VA1460	5/29/2012 3:14 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/18/2012 11:59 AM
1206178-030A	VA1461	5/30/2012 8:27 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/14/2012 11:20 PM
				EPA_TO15-Volatile Organic Compounds			6/14/2012 2:48 AM
1206178-030B	VA1461	5/30/2012 8:27 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/18/2012 12:18 PM
1206178-031A	VA1462	5/30/2012 9:14 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/15/2012 12:03 AM
				EPA_TO15-Volatile Organic Compounds			6/13/2012 5:00 PM
1206178-031B	VA1462	5/30/2012 9:14 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/18/2012 1:05 PM

RTI Laboratories - DATES REPORT

WO#: 1206178

Date Reported: 6/29/2012
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
1206178-032A	VA1463	5/30/2012 9:14 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/15/2012 10:44 AM
				EPA_TO15-Volatile Organic Compounds			6/13/2012 5:41 PM
1206178-032B	VA1463	5/30/2012 9:14 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/18/2012 1:20 PM
1206178-033A	VA1464	5/30/2012 10:25 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/15/2012 1:29 AM
				EPA_TO15-Volatile Organic Compounds			6/13/2012 6:22 PM
				EPA_TO15-Volatile Organic Compounds			6/15/2012 4:55 AM
1206178-033B	VA1464	5/30/2012 10:25 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/18/2012 1:47 PM
1206178-034A	VA1484	5/31/2012 8:31 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/15/2012 2:14 AM
				EPA_TO15-Volatile Organic Compounds			6/13/2012 7:06 PM
1206178-034B	VA1484	5/31/2012 8:31 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/18/2012 2:02 PM
1206178-035A	VA1485	5/31/2012 9:04 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/15/2012 3:00 AM
				EPA_TO15-Volatile Organic Compounds			6/13/2012 7:51 PM
1206178-035B	VA1485	5/31/2012 9:04 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/18/2012 2:17 PM
1206178-036A	VA1486	5/31/2012 9:41 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/15/2012 10:01 AM
				EPA_TO15-Volatile Organic Compounds			6/13/2012 8:35 PM
1206178-036B	VA1486	5/31/2012 9:41 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/18/2012 2:31 PM
1206178-037A	VA1487	5/31/2012 9:41 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/13/2012 4:16 PM
				EPA_TO15-Volatile Organic Compounds			6/14/2012 3:32 AM

RTI Laboratories - DATES REPORT

WO#: 1206178

Date Reported: 6/29/2012
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
1206178-037B	VA1487	5/31/2012 9:41 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/18/2012 2:50 PM
1206178-038A	VA1488	5/31/2012 10:36 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/14/2012 2:57 AM
				EPA_TO15-Volatile Organic Compounds			6/14/2012 7:30 PM
1206178-038B	VA1488	5/31/2012 10:36 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/18/2012 3:04 PM
1206178-039A	VA1489	5/31/2012 11:46 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/15/2012 11:28 AM
				EPA_TO15-Volatile Organic Compounds			6/14/2012 8:56 PM
1206178-039B	VA1489	5/31/2012 11:46 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/18/2012 3:21 PM
1206178-040A	VA1490	5/31/2012 12:31 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/15/2012 3:57 PM
				EPA_TO15-Volatile Organic Compounds			6/14/2012 9:40 PM
1206178-040B	VA1490	5/31/2012 12:31 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/18/2012 3:37 PM
1206178-041A	VA1504	5/31/2012 8:58 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/15/2012 4:43 PM
				EPA_TO15-Volatile Organic Compounds			6/14/2012 10:24 PM
1206178-041B	VA1504	5/31/2012 8:58 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/19/2012 10:46 AM
1206178-042A	VA1505	5/31/2012 9:30 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/15/2012 5:28 PM
				EPA_TO15-Volatile Organic Compounds			6/14/2012 11:09 PM
1206178-042B	VA1505	5/31/2012 9:30 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/19/2012 11:09 AM

RTI Laboratories - DATES REPORT

WO#: 1206178

Date Reported: 6/29/2012
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
1206178-043A	VA1506	5/31/2012 10:13 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/15/2012 6:58 PM
				EPA_TO15-Volatile Organic Compounds			6/14/2012 11:53 PM
				EPA_TO15-Volatile Organic Compounds			6/15/2012 6:38 PM
1206178-043B	VA1506	5/31/2012 10:13 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/19/2012 11:23 AM
1206178-044A	VA1507	5/31/2012 10:54 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/15/2012 7:43 PM
				EPA_TO15-Volatile Organic Compounds			6/15/2012 12:38 AM
1206178-044B	VA1507	5/31/2012 10:54 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/19/2012 11:38 AM
1206178-045A	VA1508	5/31/2012 10:54 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/15/2012 8:29 PM
				EPA_TO15-Volatile Organic Compounds			6/15/2012 1:22 AM
1206178-045B	VA1508	5/31/2012 10:54 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/19/2012 11:55 AM
1206178-046A	VA1509	5/31/2012 11:50 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/15/2012 9:14 PM
				EPA_TO15-Volatile Organic Compounds			6/15/2012 7:22 PM
1206178-046B	VA1509	5/31/2012 11:50 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/19/2012 12:10 PM
1206178-047A	VA1510	5/31/2012 12:32 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/15/2012 9:57 PM
				EPA_TO15-Volatile Organic Compounds			6/15/2012 2:45 AM
1206178-047B	VA1510	5/31/2012 12:32 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/19/2012 12:24 PM
1206178-048A	VA1616	5/29/2012 8:23 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/21/2012 2:34 PM
				EPA_TO15-Volatile Organic Compounds			6/15/2012 8:45 PM

RTI Laboratories - DATES REPORT

WO#: 1206178

Date Reported: 6/29/2012
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
1206178-048A	VA1616	5/29/2012 8:23 AM	Air				
				EPA_TO15-Volatile Organic Compounds			6/18/2012 6:06 PM
1206178-048B	VA1616	5/29/2012 8:23 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/19/2012 12:47 PM
1206178-049A	VA1617	5/29/2012 8:23 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/15/2012 11:37 PM
				EPA_TO15-Volatile Organic Compounds			6/15/2012 10:08 PM
1206178-049B	VA1617	5/29/2012 8:23 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/19/2012 1:05 PM
1206178-050A	VA1618	5/29/2012 9:41 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/16/2012 12:27 AM
				EPA_TO15-Volatile Organic Compounds			6/15/2012 10:50 PM
1206178-050B	VA1618	5/29/2012 9:41 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/19/2012 1:29 PM
1206178-051A	VA1619	5/29/2012 10:27 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/21/2012 3:18 PM
				EPA_TO15-Volatile Organic Compounds			6/15/2012 11:31 PM
1206178-051B	VA1619	5/29/2012 10:27 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/19/2012 2:35 PM
1206178-052A	VA1620	5/29/2012 11:08 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/21/2012 4:01 PM
				EPA_TO15-Volatile Organic Compounds			6/16/2012 12:12 AM
1206178-052B	VA1620	5/29/2012 11:08 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/19/2012 2:50 PM
1206178-053A	VA1621	5/29/2012 11:49 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/21/2012 4:45 PM
				EPA_TO15-Volatile Organic Compounds			6/16/2012 12:54 AM

RTI Laboratories - DATES REPORT

WO#: 1206178

Date Reported: 6/29/2012
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
1206178-053B	VA1621	5/29/2012 11:49 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/19/2012 3:06 PM
1206178-054A	VA1622	5/29/2012 12:32 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			6/21/2012 5:29 PM
				EPA_TO15-Volatile Organic Compounds			6/16/2012 1:35 AM
1206178-054B	VA1622	5/29/2012 12:32 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			6/19/2012 3:26 PM
1206178-055A	VA8089-TB	5/29/2012 8:00 AM	Air				
				EPA_TO15-Volatile Organic Compounds			6/15/2012 12:44 PM
				EPA_TO15-Volatile Organic Compounds			6/15/2012 8:04 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 8:43:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-001	**Matrix:**	Air
Client Sample ID:	VA1328		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	6.2	0.10		%	1	6/13/2012 10:56 AM
Carbon Monoxide	ND	0.10	U	%	1	6/13/2012 10:56 AM
Methane	ND	0.50	U	%	1	6/13/2012 10:56 AM
Nitrogen	82	0.10		%	1	6/13/2012 10:56 AM
Oxygen	11	0.10		%	1	6/13/2012 10:56 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/11/2012 5:07 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/11/2012 5:07 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/11/2012 5:07 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/11/2012 5:07 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/11/2012 5:07 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/11/2012 5:07 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/11/2012 5:07 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/11/2012 5:07 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/11/2012 5:07 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/11/2012 5:07 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/11/2012 5:07 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/11/2012 5:07 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/11/2012 5:07 PM
1,3-Butadiene	ND	800	U	ppbv	800	6/11/2012 5:07 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/11/2012 5:07 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/11/2012 5:07 PM
2-Butanone	ND	800	U	ppbv	800	6/11/2012 5:07 PM
2-Hexanone	ND	800	U	ppbv	800	6/11/2012 5:07 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Acetone	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Benzene	20,000	800		ppbv	800	6/11/2012 5:07 PM
Benzyl chloride	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Bromodichloromethane	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Bromoform	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Bromomethane	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Carbon disulfide	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Carbon tetrachloride	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Chlorobenzene	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Chlorodibromomethane	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Chloroethane	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Chloroform	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Chloromethane	ND	800	U	ppbv	800	6/11/2012 5:07 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/11/2012 5:07 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/11/2012 5:07 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 8:43:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-001	**Matrix:**	Air
Client Sample ID:	VA1328		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	9,800	1,600		ppbv	800	6/11/2012 5:07 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Ethyl acetate	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Ethylbenzene	ND	1,600	U	ppbv	800	6/11/2012 5:07 PM
Heptane	2,700	800		ppbv	800	6/11/2012 5:07 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/11/2012 5:07 PM
m,p-Xylene	ND	1,600	U	ppbv	800	6/11/2012 5:07 PM
Methylene chloride	ND	4,000	U	ppbv	800	6/11/2012 5:07 PM
n-Hexane	5,600	1,600		ppbv	800	6/11/2012 5:07 PM
Naphthalene	ND	800	U	ppbv	800	6/11/2012 5:07 PM
o-Xylene	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Propylene	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Styrene	ND	800	U	ppbv	800	6/11/2012 5:07 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Tetrachloroethene	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Tetrahydrofuran	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Toluene	ND	800	U	ppbv	800	6/11/2012 5:07 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/11/2012 5:07 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Trichloroethene	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Vinyl acetate	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Vinyl chloride	ND	800	U	ppbv	800	6/11/2012 5:07 PM
Xylenes, Total	ND	2,400	U	ppbv	800	6/11/2012 5:07 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	800	6/11/2012 5:07 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,900,000	940,000		µg/m³	8000	6/9/2012 1:37 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	6/9/2012 1:37 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	6/9/2012 1:37 AM
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	8000	6/9/2012 1:37 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 9:10:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-002	**Matrix:**	Air
Client Sample ID:	VA1329		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	5.5	0.10		%	1	6/13/2012 11:13 AM
Carbon Monoxide	ND	0.10	U	%	1	6/13/2012 11:13 AM
Methane	ND	0.50	U	%	1	6/13/2012 11:13 AM
Nitrogen	82	0.10		%	1	6/13/2012 11:13 AM
Oxygen	12	0.10		%	1	6/13/2012 11:13 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
1,3-Butadiene	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
2-Butanone	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
2-Hexanone	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
Acetone	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
Benzene	240,000	20,000		ppbv	20000	6/11/2012 6:33 PM
Benzyl chloride	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
Bromodichloromethane	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
Bromoform	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
Bromomethane	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
Carbon disulfide	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
Chlorobenzene	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
Chloroethane	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
Chloroform	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
Chloromethane	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 9:10:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-002	**Matrix:**	Air
Client Sample ID:	VA1329		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	810,000	40,000		ppbv	20000	6/11/2012 6:33 PM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
Ethyl acetate	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
Ethylbenzene	ND	40,000	U	ppbv	20000	6/11/2012 6:33 PM
Heptane	350,000	20,000		ppbv	20000	6/11/2012 6:33 PM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	6/11/2012 6:33 PM
m,p-Xylene	ND	40,000	U	ppbv	20000	6/11/2012 6:33 PM
Methylene chloride	ND	100,000	U	ppbv	20000	6/11/2012 6:33 PM
n-Hexane	800,000	40,000		ppbv	20000	6/11/2012 6:33 PM
Naphthalene	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
o-Xylene	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
Propylene	27,000	20,000		ppbv	20000	6/11/2012 6:33 PM
Styrene	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
Tetrachloroethene	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
Toluene	230,000	20,000		ppbv	20000	6/11/2012 6:33 PM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
Trichloroethene	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
Vinyl acetate	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
Vinyl chloride	ND	20,000	U	ppbv	20000	6/11/2012 6:33 PM
Xylenes, Total	ND	60,000	U	ppbv	20000	6/11/2012 6:33 PM
Surr: 4-Bromofluorobenzene	97.9	70-130		%REC	20000	6/11/2012 6:33 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	37,000,000	4,700,000		µg/m³	40000	6/9/2012 2:20 AM
C9-C10 Aromatic Hydrocarbons	ND	5,300,000	U	µg/m³	40000	6/9/2012 2:20 AM
C9-C12 Aliphatic Hydrocarbons	ND	7,600,000	U	µg/m³	40000	6/9/2012 2:20 AM
Surr: 4-Bromofluorobenzene	97.1	70-130		%REC	40000	6/9/2012 2:20 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 9:45:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-003	**Matrix:**	Air
Client Sample ID:	VA1330		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.67	0.10		%	1	6/13/2012 11:28 AM
Carbon Monoxide	ND	0.10	U	%	1	6/13/2012 11:28 AM
Methane	ND	0.50	U	%	1	6/13/2012 11:28 AM
Nitrogen	80	0.10		%	1	6/13/2012 11:28 AM
Oxygen	19	0.10		%	1	6/13/2012 11:28 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
2-Butanone	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
2-Hexanone	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
Acetone	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
Benzene	83,000	8,000		ppbv	8000	6/11/2012 7:14 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
Bromoform	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
Bromomethane	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
Chloroethane	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
Chloroform	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
Chloromethane	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 9:45:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-003	**Matrix:**	Air
Client Sample ID:	VA1330		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	540,000	40,000		ppbv	20000	6/13/2012 12:21 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	6/11/2012 7:14 PM
Heptane	590,000	20,000		ppbv	20000	6/13/2012 12:21 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	6/11/2012 7:14 PM
m,p-Xylene	13,000	16,000	J	ppbv	8000	6/11/2012 7:14 PM
Methylene chloride	ND	40,000	U	ppbv	8000	6/11/2012 7:14 PM
n-Hexane	450,000	40,000		ppbv	20000	6/13/2012 12:21 AM
Naphthalene	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
o-Xylene	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
Propylene	12,000	8,000		ppbv	8000	6/11/2012 7:14 PM
Styrene	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
Toluene	110,000	8,000		ppbv	8000	6/11/2012 7:14 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
Trichloroethene	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	6/11/2012 7:14 PM
Xylenes, Total	13,000	24,000	J	ppbv	8000	6/11/2012 7:14 PM
Surr: 4-Bromofluorobenzene	96.0	70-130		%REC	8000	6/11/2012 7:14 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	9,300,000	2,300,000		µg/m³	20000	6/12/2012 8:15 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000		µg/m³	20000	6/12/2012 8:15 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000		µg/m³	20000	6/12/2012 8:15 PM
Surr: 4-Bromofluorobenzene	93.8	70-130		%REC	20000	6/12/2012 8:15 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 10:35:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-004	**Matrix:**	Air
Client Sample ID:	VA1331		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.54	0.10		%	1	6/13/2012 11:43 AM
Carbon Monoxide	ND	0.10	U	%	1	6/13/2012 11:43 AM
Methane	ND	0.50	U	%	1	6/13/2012 11:43 AM
Nitrogen	80	0.10		%	1	6/13/2012 11:43 AM
Oxygen	19	0.10		%	1	6/13/2012 11:43 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/11/2012 7:58 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/11/2012 7:58 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/11/2012 7:58 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/11/2012 7:58 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/11/2012 7:58 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/11/2012 7:58 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/11/2012 7:58 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/11/2012 7:58 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/11/2012 7:58 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/11/2012 7:58 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/11/2012 7:58 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/11/2012 7:58 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/11/2012 7:58 PM
1,3-Butadiene	ND	800	U	ppbv	800	6/11/2012 7:58 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/11/2012 7:58 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/11/2012 7:58 PM
2-Butanone	ND	800	U	ppbv	800	6/11/2012 7:58 PM
2-Hexanone	ND	800	U	ppbv	800	6/11/2012 7:58 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/11/2012 7:58 PM
Acetone	ND	800	U	ppbv	800	6/11/2012 7:58 PM
Benzene	21,000	800		ppbv	800	6/11/2012 7:58 PM
Benzyl chloride	ND	800	U	ppbv	800	6/11/2012 7:58 PM
Bromodichloromethane	ND	800	U	ppbv	800	6/11/2012 7:58 PM
Bromoform	ND	800	U	ppbv	800	6/11/2012 7:58 PM
Bromomethane	ND	800	U	ppbv	800	6/11/2012 7:58 PM
Carbon disulfide	ND	800	U	ppbv	800	6/11/2012 7:58 PM
Carbon tetrachloride	ND	800	U	ppbv	800	6/11/2012 7:58 PM
Chlorobenzene	ND	800	U	ppbv	800	6/11/2012 7:58 PM
Chlorodibromomethane	ND	800	U	ppbv	800	6/11/2012 7:58 PM
Chloroethane	ND	800	U	ppbv	800	6/11/2012 7:58 PM
Chloroform	ND	800	U	ppbv	800	6/11/2012 7:58 PM
Chloromethane	ND	800	U	ppbv	800	6/11/2012 7:58 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/11/2012 7:58 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/11/2012 7:58 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 10:35:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-004	**Matrix:**	Air
Client Sample ID:	VA1331		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	37,000	1,600		ppbv	800	6/11/2012 7:58 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/11/2012 7:58 PM
Ethyl acetate	ND	800	U	ppbv	800	6/11/2012 7:58 PM
Ethylbenzene	1,500	1,600	J	ppbv	800	6/11/2012 7:58 PM
Heptane	61,000	8,000		ppbv	8000	6/11/2012 10:47 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/11/2012 7:58 PM
m,p-Xylene	5,600	1,600		ppbv	800	6/11/2012 7:58 PM
Methylene chloride	ND	4,000	U	ppbv	800	6/11/2012 7:58 PM
n-Hexane	26,000	1,600		ppbv	800	6/11/2012 7:58 PM
Naphthalene	ND	800	U	ppbv	800	6/11/2012 7:58 PM
o-Xylene	1,700	800		ppbv	800	6/11/2012 7:58 PM
Propylene	1,200	800		ppbv	800	6/11/2012 7:58 PM
Styrene	ND	800	U	ppbv	800	6/11/2012 7:58 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/11/2012 7:58 PM
Tetrachloroethene	ND	800	U	ppbv	800	6/11/2012 7:58 PM
Tetrahydrofuran	ND	800	U	ppbv	800	6/11/2012 7:58 PM
Toluene	32,000	800		ppbv	800	6/11/2012 7:58 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/11/2012 7:58 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/11/2012 7:58 PM
Trichloroethene	ND	800	U	ppbv	800	6/11/2012 7:58 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/11/2012 7:58 PM
Vinyl acetate	ND	800	U	ppbv	800	6/11/2012 7:58 PM
Vinyl chloride	ND	800	U	ppbv	800	6/11/2012 7:58 PM
Xylenes, Total	7,300	2,400		ppbv	800	6/11/2012 7:58 PM
Surr: 4-Bromofluorobenzene	94.5	70-130		%REC	800	6/11/2012 7:58 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,700,000	940,000		µg/m³	8000	6/12/2012 9:41 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000		µg/m³	8000	6/12/2012 9:41 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000		µg/m³	8000	6/12/2012 9:41 PM
Surr: 4-Bromofluorobenzene	93.9	70-130		%REC	8000	6/12/2012 9:41 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 1:51:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-005	**Matrix:**	Air
Client Sample ID:	VA1332		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	3.6	0.10		%	1	6/13/2012 11:59 AM
Carbon Monoxide	ND	0.10	U	%	1	6/13/2012 11:59 AM
Methane	ND	0.50	U	%	1	6/13/2012 11:59 AM
Nitrogen	81	0.10		%	1	6/13/2012 11:59 AM
Oxygen	16	0.10		%	1	6/13/2012 11:59 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
2-Butanone	14,000	8,000		ppbv	8000	6/11/2012 8:40 PM
2-Hexanone	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
Acetone	29,000	8,000		ppbv	8000	6/11/2012 8:40 PM
Benzene	71,000	8,000		ppbv	8000	6/11/2012 8:40 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
Bromoform	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
Bromomethane	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
Chloroethane	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
Chloroform	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
Chloromethane	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 1:51:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-005	**Matrix:**	Air
Client Sample ID:	VA1332		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	190,000	16,000		ppbv	8000	6/11/2012 8:40 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
Ethylbenzene	26,000	16,000		ppbv	8000	6/11/2012 8:40 PM
Heptane	290,000	8,000		ppbv	8000	6/11/2012 8:40 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	6/11/2012 8:40 PM
m,p-Xylene	65,000	16,000		ppbv	8000	6/11/2012 8:40 PM
Methylene chloride	ND	40,000	U	ppbv	8000	6/11/2012 8:40 PM
n-Hexane	69,000	16,000		ppbv	8000	6/11/2012 8:40 PM
Naphthalene	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
o-Xylene	17,000	8,000		ppbv	8000	6/11/2012 8:40 PM
Propylene	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
Styrene	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
Toluene	370,000	20,000		ppbv	20000	6/13/2012 1:03 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
Trichloroethene	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	6/11/2012 8:40 PM
Xylenes, Total	81,000	24,000		ppbv	8000	6/11/2012 8:40 PM
Surr: 4-Bromofluorobenzene	97.5	70-130		%REC	8000	6/11/2012 8:40 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	5,100,000	2,300,000		µg/m³	20000	6/12/2012 10:23 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000		µg/m³	20000	6/12/2012 10:23 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000		µg/m³	20000	6/12/2012 10:23 PM
Surr: 4-Bromofluorobenzene	93.9	70-130		%REC	20000	6/12/2012 10:23 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 2:25:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-006	**Matrix:**	Air
Client Sample ID:	VA1333		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	3.7	0.10		%	1	6/13/2012 12:13 PM
Carbon Monoxide	ND	0.10	U	%	1	6/13/2012 12:13 PM
Methane	ND	0.50	U	%	1	6/13/2012 12:13 PM
Nitrogen	80	0.10		%	1	6/13/2012 12:13 PM
Oxygen	16	0.10		%	1	6/13/2012 12:13 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/11/2012 9:24 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/11/2012 9:24 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/11/2012 9:24 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/11/2012 9:24 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/11/2012 9:24 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/11/2012 9:24 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/11/2012 9:24 PM
1,2,4-Trimethylbenzene	1,200	800		ppbv	800	6/11/2012 9:24 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/11/2012 9:24 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/11/2012 9:24 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/11/2012 9:24 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/11/2012 9:24 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/11/2012 9:24 PM
1,3-Butadiene	ND	800	U	ppbv	800	6/11/2012 9:24 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/11/2012 9:24 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/11/2012 9:24 PM
2-Butanone	4,500	800		ppbv	800	6/11/2012 9:24 PM
2-Hexanone	ND	800	U	ppbv	800	6/11/2012 9:24 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/11/2012 9:24 PM
Acetone	6,000	800		ppbv	800	6/11/2012 9:24 PM
Benzene	28,000	800		ppbv	800	6/11/2012 9:24 PM
Benzyl chloride	ND	800	U	ppbv	800	6/11/2012 9:24 PM
Bromodichloromethane	ND	800	U	ppbv	800	6/11/2012 9:24 PM
Bromoform	ND	800	U	ppbv	800	6/11/2012 9:24 PM
Bromomethane	ND	800	U	ppbv	800	6/11/2012 9:24 PM
Carbon disulfide	ND	800	U	ppbv	800	6/11/2012 9:24 PM
Carbon tetrachloride	ND	800	U	ppbv	800	6/11/2012 9:24 PM
Chlorobenzene	ND	800	U	ppbv	800	6/11/2012 9:24 PM
Chlorodibromomethane	ND	800	U	ppbv	800	6/11/2012 9:24 PM
Chloroethane	ND	800	U	ppbv	800	6/11/2012 9:24 PM
Chloroform	ND	800	U	ppbv	800	6/11/2012 9:24 PM
Chloromethane	ND	800	U	ppbv	800	6/11/2012 9:24 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/11/2012 9:24 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/11/2012 9:24 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 2:25:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-006	**Matrix:**	Air
Client Sample ID:	VA1333		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	130,000	16,000		ppbv	8000	6/11/2012 10:05 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/11/2012 9:24 PM
Ethyl acetate	ND	800	U	ppbv	800	6/11/2012 9:24 PM
Ethylbenzene	13,000	1,600		ppbv	800	6/11/2012 9:24 PM
Heptane	170,000	8,000		ppbv	8000	6/11/2012 10:05 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/11/2012 9:24 PM
m,p-Xylene	32,000	1,600		ppbv	800	6/11/2012 9:24 PM
Methylene chloride	ND	4,000	U	ppbv	800	6/11/2012 9:24 PM
n-Hexane	35,000	1,600		ppbv	800	6/11/2012 9:24 PM
Naphthalene	ND	800	U	ppbv	800	6/11/2012 9:24 PM
o-Xylene	8,900	800		ppbv	800	6/11/2012 9:24 PM
Propylene	810	800		ppbv	800	6/11/2012 9:24 PM
Styrene	ND	800	U	ppbv	800	6/11/2012 9:24 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/11/2012 9:24 PM
Tetrachloroethene	ND	800	U	ppbv	800	6/11/2012 9:24 PM
Tetrahydrofuran	ND	800	U	ppbv	800	6/11/2012 9:24 PM
Toluene	290,000	8,000		ppbv	8000	6/11/2012 10:05 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/11/2012 9:24 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/11/2012 9:24 PM
Trichloroethene	ND	800	U	ppbv	800	6/11/2012 9:24 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/11/2012 9:24 PM
Vinyl acetate	ND	800	U	ppbv	800	6/11/2012 9:24 PM
Vinyl chloride	ND	800	U	ppbv	800	6/11/2012 9:24 PM
Xylenes, Total	41,000	2,400		ppbv	800	6/11/2012 9:24 PM
Surr: 4-Bromofluorobenzene	97.2	70-130		%REC	800	6/11/2012 9:24 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	3,300,000	940,000		µg/m³	8000	6/12/2012 11:06 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000		µg/m³	8000	6/12/2012 11:06 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000		µg/m³	8000	6/12/2012 11:06 PM
Surr: 4-Bromofluorobenzene	95.3	70-130		%REC	8000	6/12/2012 11:06 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 2:25:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-007	**Matrix:**	Air
Client Sample ID:	VA1334		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	4.8	0.10		%	1	6/13/2012 12:30 PM
Carbon Monoxide	ND	0.10	U	%	1	6/13/2012 12:30 PM
Methane	ND	0.50	U	%	1	6/13/2012 12:30 PM
Nitrogen	81	0.10		%	1	6/13/2012 12:30 PM
Oxygen	14	0.10		%	1	6/13/2012 12:30 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/11/2012 11:31 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/11/2012 11:31 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/11/2012 11:31 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/11/2012 11:31 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/11/2012 11:31 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/11/2012 11:31 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/11/2012 11:31 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/11/2012 11:31 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/11/2012 11:31 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/11/2012 11:31 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/11/2012 11:31 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/11/2012 11:31 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/11/2012 11:31 PM
1,3-Butadiene	ND	800	U	ppbv	800	6/11/2012 11:31 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/11/2012 11:31 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/11/2012 11:31 PM
2-Butanone	6,800	800		ppbv	800	6/11/2012 11:31 PM
2-Hexanone	ND	800	U	ppbv	800	6/11/2012 11:31 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/11/2012 11:31 PM
Acetone	10,000	800		ppbv	800	6/11/2012 11:31 PM
Benzene	34,000	800		ppbv	800	6/11/2012 11:31 PM
Benzyl chloride	ND	800	U	ppbv	800	6/11/2012 11:31 PM
Bromodichloromethane	ND	800	U	ppbv	800	6/11/2012 11:31 PM
Bromoform	ND	800	U	ppbv	800	6/11/2012 11:31 PM
Bromomethane	ND	800	U	ppbv	800	6/11/2012 11:31 PM
Carbon disulfide	ND	800	U	ppbv	800	6/11/2012 11:31 PM
Carbon tetrachloride	ND	800	U	ppbv	800	6/11/2012 11:31 PM
Chlorobenzene	ND	800	U	ppbv	800	6/11/2012 11:31 PM
Chlorodibromomethane	ND	800	U	ppbv	800	6/11/2012 11:31 PM
Chloroethane	ND	800	U	ppbv	800	6/11/2012 11:31 PM
Chloroform	ND	800	U	ppbv	800	6/11/2012 11:31 PM
Chloromethane	ND	800	U	ppbv	800	6/11/2012 11:31 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/11/2012 11:31 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/11/2012 11:31 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 2:25:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-007	**Matrix:**	Air
Client Sample ID:	VA1334		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	130,000	16,000		ppbv	8000	6/13/2012 1:44 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/11/2012 11:31 PM
Ethyl acetate	ND	800	U	ppbv	800	6/11/2012 11:31 PM
Ethylbenzene	11,000	1,600		ppbv	800	6/11/2012 11:31 PM
Heptane	160,000	8,000		ppbv	8000	6/13/2012 1:44 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/11/2012 11:31 PM
m,p-Xylene	28,000	1,600		ppbv	800	6/11/2012 11:31 PM
Methylene chloride	3,300	4,000	J	ppbv	800	6/11/2012 11:31 PM
n-Hexane	50,000	16,000		ppbv	8000	6/13/2012 1:44 AM
Naphthalene	ND	800	U	ppbv	800	6/11/2012 11:31 PM
o-Xylene	7,300	800		ppbv	800	6/11/2012 11:31 PM
Propylene	840	800		ppbv	800	6/11/2012 11:31 PM
Styrene	ND	800	U	ppbv	800	6/11/2012 11:31 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/11/2012 11:31 PM
Tetrachloroethene	ND	800	U	ppbv	800	6/11/2012 11:31 PM
Tetrahydrofuran	ND	800	U	ppbv	800	6/11/2012 11:31 PM
Toluene	240,000	8,000		ppbv	8000	6/13/2012 1:44 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/11/2012 11:31 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/11/2012 11:31 PM
Trichloroethene	ND	800	U	ppbv	800	6/11/2012 11:31 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/11/2012 11:31 PM
Vinyl acetate	ND	800	U	ppbv	800	6/11/2012 11:31 PM
Vinyl chloride	ND	800	U	ppbv	800	6/11/2012 11:31 PM
Xylenes, Total	35,000	2,400		ppbv	800	6/11/2012 11:31 PM
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	800	6/11/2012 11:31 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	3,700,000	940,000		µg/m³	8000	6/12/2012 11:49 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000		µg/m³	8000	6/12/2012 11:49 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000		µg/m³	8000	6/12/2012 11:49 PM
Surr: 4-Bromofluorobenzene	94.2	70-130		%REC	8000	6/12/2012 11:49 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 3:12:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-008	**Matrix:**	Air
Client Sample ID:	VA1335		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.42	0.10		%	1	6/13/2012 12:45 PM
Carbon Monoxide	ND	0.10	U	%	1	6/13/2012 12:45 PM
Methane	ND	0.50	U	%	1	6/13/2012 12:45 PM
Nitrogen	79	0.10		%	1	6/13/2012 12:45 PM
Oxygen	20	0.10		%	1	6/13/2012 12:45 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/12/2012 1:41 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/12/2012 1:41 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/12/2012 1:41 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/12/2012 1:41 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/12/2012 1:41 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 1:41 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/12/2012 1:41 AM
1,2,4-Trimethylbenzene	1,000	800		ppbv	800	6/12/2012 1:41 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/12/2012 1:41 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 1:41 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/12/2012 1:41 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/12/2012 1:41 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/12/2012 1:41 AM
1,3-Butadiene	ND	800	U	ppbv	800	6/12/2012 1:41 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 1:41 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 1:41 AM
2-Butanone	4,100	800		ppbv	800	6/12/2012 1:41 AM
2-Hexanone	ND	800	U	ppbv	800	6/12/2012 1:41 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/12/2012 1:41 AM
Acetone	7,300	800		ppbv	800	6/12/2012 1:41 AM
Benzene	23,000	800		ppbv	800	6/12/2012 1:41 AM
Benzyl chloride	ND	800	U	ppbv	800	6/12/2012 1:41 AM
Bromodichloromethane	ND	800	U	ppbv	800	6/12/2012 1:41 AM
Bromoform	ND	800	U	ppbv	800	6/12/2012 1:41 AM
Bromomethane	ND	800	U	ppbv	800	6/12/2012 1:41 AM
Carbon disulfide	ND	800	U	ppbv	800	6/12/2012 1:41 AM
Carbon tetrachloride	ND	800	U	ppbv	800	6/12/2012 1:41 AM
Chlorobenzene	ND	800	U	ppbv	800	6/12/2012 1:41 AM
Chlorodibromomethane	ND	800	U	ppbv	800	6/12/2012 1:41 AM
Chloroethane	ND	800	U	ppbv	800	6/12/2012 1:41 AM
Chloroform	ND	800	U	ppbv	800	6/12/2012 1:41 AM
Chloromethane	ND	800	U	ppbv	800	6/12/2012 1:41 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 1:41 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/12/2012 1:41 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 3:12:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-008	**Matrix:**	Air
Client Sample ID:	VA1335		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	85,000	16,000		ppbv	8000	6/12/2012 12:57 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/12/2012 1:41 AM
Ethyl acetate	ND	800	U	ppbv	800	6/12/2012 1:41 AM
Ethylbenzene	12,000	1,600		ppbv	800	6/12/2012 1:41 AM
Heptane	140,000	8,000		ppbv	8000	6/12/2012 12:57 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/12/2012 1:41 AM
m,p-Xylene	32,000	1,600		ppbv	800	6/12/2012 1:41 AM
Methylene chloride	ND	4,000	U	ppbv	800	6/12/2012 1:41 AM
n-Hexane	23,000	1,600		ppbv	800	6/12/2012 1:41 AM
Naphthalene	ND	800	U	ppbv	800	6/12/2012 1:41 AM
o-Xylene	8,800	800		ppbv	800	6/12/2012 1:41 AM
Propylene	850	800		ppbv	800	6/12/2012 1:41 AM
Styrene	ND	800	U	ppbv	800	6/12/2012 1:41 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/12/2012 1:41 AM
Tetrachloroethene	ND	800	U	ppbv	800	6/12/2012 1:41 AM
Tetrahydrofuran	ND	800	U	ppbv	800	6/12/2012 1:41 AM
Toluene	250,000	8,000		ppbv	8000	6/12/2012 12:57 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 1:41 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/12/2012 1:41 AM
Trichloroethene	ND	800	U	ppbv	800	6/12/2012 1:41 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/12/2012 1:41 AM
Vinyl acetate	ND	800	U	ppbv	800	6/12/2012 1:41 AM
Vinyl chloride	ND	800	U	ppbv	800	6/12/2012 1:41 AM
Xylenes, Total	40,000	2,400		ppbv	800	6/12/2012 1:41 AM
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	800	6/12/2012 1:41 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	3,400,000	940,000		µg/m³	8000	6/13/2012 12:32 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000		µg/m³	8000	6/13/2012 12:32 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000		µg/m³	8000	6/13/2012 12:32 AM
Surr: 4-Bromofluorobenzene	95.6	70-130		%REC	8000	6/13/2012 12:32 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 3:48:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-009	**Matrix:**	Air
Client Sample ID:	VA1336		

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	6/13/2012 1:04 PM
Carbon Monoxide	ND	0.10	U	%	1	6/13/2012 1:04 PM
Methane	ND	0.50	U	%	1	6/13/2012 1:04 PM
Nitrogen	80	0.10		%	1	6/13/2012 1:04 PM
Oxygen	20	0.10		%	1	6/13/2012 1:04 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/12/2012 3:07 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/12/2012 3:07 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/12/2012 3:07 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/12/2012 3:07 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/12/2012 3:07 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 3:07 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/12/2012 3:07 AM
1,2,4-Trimethylbenzene	890	800		ppbv	800	6/12/2012 3:07 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/12/2012 3:07 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 3:07 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/12/2012 3:07 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/12/2012 3:07 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/12/2012 3:07 AM
1,3-Butadiene	ND	800	U	ppbv	800	6/12/2012 3:07 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 3:07 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 3:07 AM
2-Butanone	3,100	800		ppbv	800	6/12/2012 3:07 AM
2-Hexanone	ND	800	U	ppbv	800	6/12/2012 3:07 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/12/2012 3:07 AM
Acetone	4,800	800		ppbv	800	6/12/2012 3:07 AM
Benzene	20,000	800		ppbv	800	6/12/2012 3:07 AM
Benzyl chloride	ND	800	U	ppbv	800	6/12/2012 3:07 AM
Bromodichloromethane	ND	800	U	ppbv	800	6/12/2012 3:07 AM
Bromoform	ND	800	U	ppbv	800	6/12/2012 3:07 AM
Bromomethane	ND	800	U	ppbv	800	6/12/2012 3:07 AM
Carbon disulfide	ND	800	U	ppbv	800	6/12/2012 3:07 AM
Carbon tetrachloride	ND	800	U	ppbv	800	6/12/2012 3:07 AM
Chlorobenzene	ND	800	U	ppbv	800	6/12/2012 3:07 AM
Chlorodibromomethane	ND	800	U	ppbv	800	6/12/2012 3:07 AM
Chloroethane	ND	800	U	ppbv	800	6/12/2012 3:07 AM
Chloroform	ND	800	U	ppbv	800	6/12/2012 3:07 AM
Chloromethane	ND	800	U	ppbv	800	6/12/2012 3:07 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 3:07 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/12/2012 3:07 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 3:48:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-009	**Matrix:**	Air
Client Sample ID:	VA1336		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	65,000	16,000		ppbv	8000	6/12/2012 2:23 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/12/2012 3:07 AM
Ethyl acetate	ND	800	U	ppbv	800	6/12/2012 3:07 AM
Ethylbenzene	9,100	1,600		ppbv	800	6/12/2012 3:07 AM
Heptane	100,000	8,000		ppbv	8000	6/12/2012 2:23 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/12/2012 3:07 AM
m,p-Xylene	24,000	1,600		ppbv	800	6/12/2012 3:07 AM
Methylene chloride	ND	4,000	U	ppbv	800	6/12/2012 3:07 AM
n-Hexane	19,000	1,600		ppbv	800	6/12/2012 3:07 AM
Naphthalene	ND	800	U	ppbv	800	6/12/2012 3:07 AM
o-Xylene	6,700	800		ppbv	800	6/12/2012 3:07 AM
Propylene	1,100	800		ppbv	800	6/12/2012 3:07 AM
Styrene	ND	800	U	ppbv	800	6/12/2012 3:07 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/12/2012 3:07 AM
Tetrachloroethene	ND	800	U	ppbv	800	6/12/2012 3:07 AM
Tetrahydrofuran	ND	800	U	ppbv	800	6/12/2012 3:07 AM
Toluene	190,000	8,000		ppbv	8000	6/12/2012 2:23 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 3:07 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/12/2012 3:07 AM
Trichloroethene	ND	800	U	ppbv	800	6/12/2012 3:07 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/12/2012 3:07 AM
Vinyl acetate	ND	800	U	ppbv	800	6/12/2012 3:07 AM
Vinyl chloride	ND	800	U	ppbv	800	6/12/2012 3:07 AM
Xylenes, Total	31,000	2,400		ppbv	800	6/12/2012 3:07 AM
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	800	6/12/2012 3:07 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,700,000	940,000		µg/m³	8000	6/13/2012 1:14 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000		µg/m³	8000	6/13/2012 1:14 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000		µg/m³	8000	6/13/2012 1:14 AM
Surr: 4-Bromofluorobenzene	95.2	70-130		%REC	8000	6/13/2012 1:14 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 9:41:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-010	**Matrix:**	Air
Client Sample ID:	VA1358		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	8.7	0.10		%	1	6/13/2012 1:19 PM
Carbon Monoxide	ND	0.10	U	%	1	6/13/2012 1:19 PM
Methane	ND	0.50	U	%	1	6/13/2012 1:19 PM
Nitrogen	83	0.10		%	1	6/13/2012 1:19 PM
Oxygen	6.9	0.10		%	1	6/13/2012 1:19 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
2-Butanone	43,000	8,000		ppbv	8000	6/12/2012 3:48 AM
2-Hexanone	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
Acetone	220,000	8,000		ppbv	8000	6/12/2012 3:48 AM
Benzene	120,000	8,000		ppbv	8000	6/12/2012 3:48 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
Bromoform	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
Bromomethane	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
Chloroethane	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
Chloroform	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
Chloromethane	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 9:41:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-010	**Matrix:**	Air
Client Sample ID:	VA1358		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	700,000	40,000		ppbv	20000	6/13/2012 2:25 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
Ethylbenzene	13,000	16,000	J	ppbv	8000	6/12/2012 3:48 AM
Heptane	310,000	8,000		ppbv	8000	6/12/2012 3:48 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	6/12/2012 3:48 AM
m,p-Xylene	30,000	16,000		ppbv	8000	6/12/2012 3:48 AM
Methylene chloride	ND	40,000	U	ppbv	8000	6/12/2012 3:48 AM
n-Hexane	250,000	16,000		ppbv	8000	6/12/2012 3:48 AM
Naphthalene	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
o-Xylene	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
Propylene	10,000	8,000		ppbv	8000	6/12/2012 3:48 AM
Styrene	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
Toluene	380,000	8,000		ppbv	8000	6/12/2012 3:48 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
Trichloroethene	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	6/12/2012 3:48 AM
Xylenes, Total	30,000	24,000		ppbv	8000	6/12/2012 3:48 AM
Surr: 4-Bromofluorobenzene	98.5	70-130		%REC	8000	6/12/2012 3:48 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	16,000,000	2,300,000		µg/m³	20000	6/13/2012 1:57 AM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000		µg/m³	20000	6/13/2012 1:57 AM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000		µg/m³	20000	6/13/2012 1:57 AM
Surr: 4-Bromofluorobenzene	93.7	70-130		%REC	20000	6/13/2012 1:57 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 10:16:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-011	**Matrix:**	Air
Client Sample ID:	VA1359		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	8.1	0.10		%	1	6/13/2012 2:19 PM
Carbon Monoxide	ND	0.10	U	%	1	6/13/2012 2:19 PM
Methane	ND	0.50	U	%	1	6/13/2012 2:19 PM
Nitrogen	82	0.10		%	1	6/13/2012 2:19 PM
Oxygen	7.6	0.10		%	1	6/13/2012 2:19 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
1,1,2,2-Tetrachloroethane	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
1,1,2-Trichloroethane	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
1,1-Dichloroethane	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
1,1-Dichloroethene	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
1,2,4-Trichlorobenzene	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
1,2,4-Trimethylbenzene	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
1,2-Dibromoethane	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
1,2-Dichlorobenzene	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
1,2-Dichloroethane	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
1,2-Dichloropropane	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
1,3,5-Trimethylbenzene	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
1,3-Butadiene	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
1,3-Dichlorobenzene	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
1,4-Dichlorobenzene	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
2-Butanone	460,000	40,000		ppbv	40000	6/12/2012 4:30 AM
2-Hexanone	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
4-Methyl-2-pentanone	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
Acetone	2,300,000	160,000		ppbv	160000	6/13/2012 2:11 PM
Benzene	1,400,000	40,000		ppbv	40000	6/12/2012 4:30 AM
Benzyl chloride	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
Bromodichloromethane	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
Bromoform	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
Bromomethane	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
Carbon disulfide	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
Carbon tetrachloride	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
Chlorobenzene	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
Chlorodibromomethane	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
Chloroethane	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
Chloroform	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
Chloromethane	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
cis-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
cis-1,3-dichloropropene	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 10:16:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-011	**Matrix:**	Air
Client Sample ID:	VA1359		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	4,800,000	320,000		ppbv	160000	6/13/2012 2:11 PM
Dichlorodifluoromethane	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
Ethyl acetate	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
Ethylbenzene	42,000	80,000	J	ppbv	40000	6/12/2012 4:30 AM
Heptane	2,000,000	40,000		ppbv	40000	6/12/2012 4:30 AM
Hexachlorobutadiene	ND	80,000	U	ppbv	40000	6/12/2012 4:30 AM
m,p-Xylene	82,000	80,000		ppbv	40000	6/12/2012 4:30 AM
Methylene chloride	ND	200,000	U	ppbv	40000	6/12/2012 4:30 AM
n-Hexane	5,300,000	320,000		ppbv	160000	6/13/2012 2:11 PM
Naphthalene	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
o-Xylene	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
Propylene	65,000	40,000		ppbv	40000	6/12/2012 4:30 AM
Styrene	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
tert-Butyl Methyl Ether	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
Tetrachloroethene	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
Tetrahydrofuran	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
Toluene	1,700,000	40,000		ppbv	40000	6/12/2012 4:30 AM
trans-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
trans-1,3-dichloropropene	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
Trichloroethene	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
Trichlorofluoromethane	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
Vinyl acetate	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
Vinyl chloride	ND	40,000	U	ppbv	40000	6/12/2012 4:30 AM
Xylenes, Total	82,000	120,000	J	ppbv	40000	6/12/2012 4:30 AM
Surr: 4-Bromofluorobenzene	98.6	70-130		%REC	40000	6/12/2012 4:30 AM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	91,000,000	9,400,000		µg/m³	80000	6/13/2012 2:41 AM
C9-C10 Aromatic Hydrocarbons	ND	11,000,000		µg/m³	80000	6/13/2012 2:41 AM
C9-C12 Aliphatic Hydrocarbons	ND	15,000,000		µg/m³	80000	6/13/2012 2:41 AM
Surr: 4-Bromofluorobenzene	91.7	70-130		%REC	80000	6/13/2012 2:41 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 10:48:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-012	**Matrix:**	Air
Client Sample ID:	VA1360		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	3.3	0.10		%	1	6/13/2012 2:34 PM
Carbon Monoxide	ND	0.10	U	%	1	6/13/2012 2:34 PM
Methane	ND	0.50	U	%	1	6/13/2012 2:34 PM
Nitrogen	81	0.10		%	1	6/13/2012 2:34 PM
Oxygen	14	0.10		%	1	6/13/2012 2:34 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
1,1,2,2-Tetrachloroethane	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
1,1,2-Trichloroethane	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
1,1-Dichloroethane	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
1,1-Dichloroethene	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
1,2,4-Trichlorobenzene	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
1,2,4-Trimethylbenzene	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
1,2-Dibromoethane	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
1,2-Dichlorobenzene	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
1,2-Dichloroethane	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
1,2-Dichloropropane	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
1,3,5-Trimethylbenzene	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
1,3-Butadiene	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
1,3-Dichlorobenzene	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
1,4-Dichlorobenzene	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
2-Butanone	570,000	40,000		ppbv	40000	6/12/2012 5:11 AM
2-Hexanone	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
4-Methyl-2-pentanone	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
Acetone	2,800,000	80,000		ppbv	80000	6/13/2012 3:48 AM
Benzene	600,000	40,000		ppbv	40000	6/12/2012 5:11 AM
Benzyl chloride	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
Bromodichloromethane	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
Bromoform	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
Bromomethane	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
Carbon disulfide	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
Carbon tetrachloride	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
Chlorobenzene	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
Chlorodibromomethane	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
Chloroethane	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
Chloroform	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
Chloromethane	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
cis-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
cis-1,3-dichloropropene	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 10:48:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-012	**Matrix:**	Air
Client Sample ID:	VA1360		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,200,000	160,000		ppbv	80000	6/13/2012 3:48 AM
Dichlorodifluoromethane	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
Ethyl acetate	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
Ethylbenzene	49,000	80,000	J	ppbv	40000	6/12/2012 5:11 AM
Heptane	2,900,000	80,000		ppbv	80000	6/13/2012 3:48 AM
Hexachlorobutadiene	ND	80,000	U	ppbv	40000	6/12/2012 5:11 AM
m,p-Xylene	110,000	80,000		ppbv	40000	6/12/2012 5:11 AM
Methylene chloride	ND	200,000	U	ppbv	40000	6/12/2012 5:11 AM
n-Hexane	1,100,000	80,000		ppbv	40000	6/12/2012 5:11 AM
Naphthalene	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
o-Xylene	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
Propylene	57,000	40,000		ppbv	40000	6/12/2012 5:11 AM
Styrene	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
tert-Butyl Methyl Ether	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
Tetrachloroethene	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
Tetrahydrofuran	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
Toluene	1,900,000	40,000		ppbv	40000	6/12/2012 5:11 AM
trans-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
trans-1,3-dichloropropene	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
Trichloroethene	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
Trichlorofluoromethane	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
Vinyl acetate	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
Vinyl chloride	ND	40,000	U	ppbv	40000	6/12/2012 5:11 AM
Xylenes, Total	110,000	120,000	J	ppbv	40000	6/12/2012 5:11 AM
Surr: 4-Bromofluorobenzene	99.2	70-130		%REC	40000	6/12/2012 5:11 AM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	48,000,000	9,400,000		µg/m³	80000	6/13/2012 3:25 AM
C9-C10 Aromatic Hydrocarbons	ND	11,000,000		µg/m³	80000	6/13/2012 3:25 AM
C9-C12 Aliphatic Hydrocarbons	ND	15,000,000		µg/m³	80000	6/13/2012 3:25 AM
Surr: 4-Bromofluorobenzene	91.8	70-130		%REC	80000	6/13/2012 3:25 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 11:18:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-013	**Matrix:**	Air
Client Sample ID:	VA1361		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	1.7	0.10		%	1	6/13/2012 2:49 PM
Carbon Monoxide	ND	0.10	U	%	1	6/13/2012 2:49 PM
Methane	ND	0.50	U	%	1	6/13/2012 2:49 PM
Nitrogen	80	0.10		%	1	6/13/2012 2:49 PM
Oxygen	17	0.10		%	1	6/13/2012 2:49 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
1,1,2,2-Tetrachloroethane	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
1,1,2-Trichloroethane	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
1,1-Dichloroethane	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
1,1-Dichloroethene	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
1,2,4-Trichlorobenzene	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
1,2,4-Trimethylbenzene	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
1,2-Dibromoethane	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
1,2-Dichlorobenzene	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
1,2-Dichloroethane	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
1,2-Dichloropropane	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
1,3,5-Trimethylbenzene	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
1,3-Butadiene	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
1,3-Dichlorobenzene	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
1,4-Dichlorobenzene	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
2-Butanone	230,000	40,000		ppbv	40000	6/12/2012 5:52 AM
2-Hexanone	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
4-Methyl-2-pentanone	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
Acetone	870,000	40,000		ppbv	40000	6/12/2012 5:52 AM
Benzene	650,000	40,000		ppbv	40000	6/12/2012 5:52 AM
Benzyl chloride	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
Bromodichloromethane	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
Bromoform	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
Bromomethane	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
Carbon disulfide	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
Carbon tetrachloride	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
Chlorobenzene	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
Chlorodibromomethane	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
Chloroethane	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
Chloroform	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
Chloromethane	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
cis-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
cis-1,3-dichloropropene	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 11:18:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-013	**Matrix:**	Air
Client Sample ID:	VA1361		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,000,000	160,000		ppbv	80000	6/13/2012 4:29 AM
Dichlorodifluoromethane	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
Ethyl acetate	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
Ethylbenzene	60,000	80,000	J	ppbv	40000	6/12/2012 5:52 AM
Heptane	1,900,000	40,000		ppbv	40000	6/12/2012 5:52 AM
Hexachlorobutadiene	ND	80,000	U	ppbv	40000	6/12/2012 5:52 AM
m,p-Xylene	140,000	80,000		ppbv	40000	6/12/2012 5:52 AM
Methylene chloride	ND	200,000	U	ppbv	40000	6/12/2012 5:52 AM
n-Hexane	830,000	80,000		ppbv	40000	6/12/2012 5:52 AM
Naphthalene	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
o-Xylene	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
Propylene	48,000	40,000		ppbv	40000	6/12/2012 5:52 AM
Styrene	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
tert-Butyl Methyl Ether	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
Tetrachloroethene	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
Tetrahydrofuran	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
Toluene	1,700,000	40,000		ppbv	40000	6/12/2012 5:52 AM
trans-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
trans-1,3-dichloropropene	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
Trichloroethene	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
Trichlorofluoromethane	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
Vinyl acetate	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
Vinyl chloride	ND	40,000	U	ppbv	40000	6/12/2012 5:52 AM
Xylenes, Total	140,000	120,000		ppbv	40000	6/12/2012 5:52 AM
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	40000	6/12/2012 5:52 AM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	34,000,000	9,400,000		µg/m³	80000	6/13/2012 5:13 PM
C9-C10 Aromatic Hydrocarbons	ND	11,000,000	U	µg/m³	80000	6/13/2012 5:13 PM
C9-C12 Aliphatic Hydrocarbons	ND	15,000,000	U	µg/m³	80000	6/13/2012 5:13 PM
Surr: 4-Bromofluorobenzene	92.6	70-130		%REC	80000	6/13/2012 5:13 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 11:38:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-014	**Matrix:**	Air
Client Sample ID:	VA1438		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.50	0.10		%	1	6/13/2012 3:03 PM
Carbon Monoxide	ND	0.10	U	%	1	6/13/2012 3:03 PM
Methane	ND	0.50	U	%	1	6/13/2012 3:03 PM
Nitrogen	80	0.10		%	1	6/13/2012 3:03 PM
Oxygen	20	0.10		%	1	6/13/2012 3:03 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/12/2012 7:18 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/12/2012 7:18 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/12/2012 7:18 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/12/2012 7:18 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/12/2012 7:18 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 7:18 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/12/2012 7:18 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/12/2012 7:18 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/12/2012 7:18 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 7:18 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/12/2012 7:18 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/12/2012 7:18 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/12/2012 7:18 AM
1,3-Butadiene	ND	800	U	ppbv	800	6/12/2012 7:18 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 7:18 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 7:18 AM
2-Butanone	1,800	800		ppbv	800	6/12/2012 7:18 AM
2-Hexanone	ND	800	U	ppbv	800	6/12/2012 7:18 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/12/2012 7:18 AM
Acetone	4,300	800		ppbv	800	6/12/2012 7:18 AM
Benzene	28,000	800		ppbv	800	6/12/2012 7:18 AM
Benzyl chloride	ND	800	U	ppbv	800	6/12/2012 7:18 AM
Bromodichloromethane	ND	800	U	ppbv	800	6/12/2012 7:18 AM
Bromoform	ND	800	U	ppbv	800	6/12/2012 7:18 AM
Bromomethane	ND	800	U	ppbv	800	6/12/2012 7:18 AM
Carbon disulfide	ND	800	U	ppbv	800	6/12/2012 7:18 AM
Carbon tetrachloride	ND	800	U	ppbv	800	6/12/2012 7:18 AM
Chlorobenzene	ND	800	U	ppbv	800	6/12/2012 7:18 AM
Chlorodibromomethane	ND	800	U	ppbv	800	6/12/2012 7:18 AM
Chloroethane	ND	800	U	ppbv	800	6/12/2012 7:18 AM
Chloroform	ND	800	U	ppbv	800	6/12/2012 7:18 AM
Chloromethane	ND	800	U	ppbv	800	6/12/2012 7:18 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 7:18 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/12/2012 7:18 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 11:38:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-014	**Matrix:**	Air
Client Sample ID:	VA1438		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	83,000	16,000		ppbv	8000	6/12/2012 6:34 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/12/2012 7:18 AM
Ethyl acetate	ND	800	U	ppbv	800	6/12/2012 7:18 AM
Ethylbenzene	3,200	1,600		ppbv	800	6/12/2012 7:18 AM
Heptane	74,000	8,000		ppbv	8000	6/12/2012 6:34 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/12/2012 7:18 AM
m,p-Xylene	8,200	1,600		ppbv	800	6/12/2012 7:18 AM
Methylene chloride	ND	4,000	U	ppbv	800	6/12/2012 7:18 AM
n-Hexane	73,000	16,000		ppbv	8000	6/12/2012 6:34 AM
Naphthalene	ND	800	U	ppbv	800	6/12/2012 7:18 AM
o-Xylene	2,200	800		ppbv	800	6/12/2012 7:18 AM
Propylene	910	800		ppbv	800	6/12/2012 7:18 AM
Styrene	ND	800	U	ppbv	800	6/12/2012 7:18 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/12/2012 7:18 AM
Tetrachloroethene	ND	800	U	ppbv	800	6/12/2012 7:18 AM
Tetrahydrofuran	ND	800	U	ppbv	800	6/12/2012 7:18 AM
Toluene	91,000	8,000		ppbv	8000	6/12/2012 6:34 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 7:18 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/12/2012 7:18 AM
Trichloroethene	ND	800	U	ppbv	800	6/12/2012 7:18 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/12/2012 7:18 AM
Vinyl acetate	ND	800	U	ppbv	800	6/12/2012 7:18 AM
Vinyl chloride	ND	800	U	ppbv	800	6/12/2012 7:18 AM
Xylenes, Total	10,000	2,400		ppbv	800	6/12/2012 7:18 AM
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	800	6/12/2012 7:18 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,100,000	190,000		µg/m³	1600	6/14/2012 6:15 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	6/14/2012 6:15 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	6/14/2012 6:15 PM
Surr: 4-Bromofluorobenzene	98.4	70-130		%REC	1600	6/14/2012 6:15 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 12:11:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-015	**Matrix:**	Air
Client Sample ID:	VA1439		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.32	0.10		%	1	6/13/2012 3:18 PM
Carbon Monoxide	ND	0.10	U	%	1	6/13/2012 3:18 PM
Methane	ND	0.50	U	%	1	6/13/2012 3:18 PM
Nitrogen	80	0.10		%	1	6/13/2012 3:18 PM
Oxygen	20	0.10		%	1	6/13/2012 3:18 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/12/2012 5:46 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/12/2012 5:46 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/12/2012 5:46 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/12/2012 5:46 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/12/2012 5:46 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 5:46 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/12/2012 5:46 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/12/2012 5:46 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/12/2012 5:46 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 5:46 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/12/2012 5:46 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/12/2012 5:46 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/12/2012 5:46 PM
1,3-Butadiene	ND	800	U	ppbv	800	6/12/2012 5:46 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 5:46 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 5:46 PM
2-Butanone	ND	800	U	ppbv	800	6/12/2012 5:46 PM
2-Hexanone	ND	800	U	ppbv	800	6/12/2012 5:46 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/12/2012 5:46 PM
Acetone	2,600	800		ppbv	800	6/12/2012 5:46 PM
Benzene	15,000	800		ppbv	800	6/12/2012 5:46 PM
Benzyl chloride	ND	800	U	ppbv	800	6/12/2012 5:46 PM
Bromodichloromethane	ND	800	U	ppbv	800	6/12/2012 5:46 PM
Bromoform	ND	800	U	ppbv	800	6/12/2012 5:46 PM
Bromomethane	ND	800	U	ppbv	800	6/12/2012 5:46 PM
Carbon disulfide	ND	800	U	ppbv	800	6/12/2012 5:46 PM
Carbon tetrachloride	ND	800	U	ppbv	800	6/12/2012 5:46 PM
Chlorobenzene	ND	800	U	ppbv	800	6/12/2012 5:46 PM
Chlorodibromomethane	ND	800	U	ppbv	800	6/12/2012 5:46 PM
Chloroethane	ND	800	U	ppbv	800	6/12/2012 5:46 PM
Chloroform	ND	800	U	ppbv	800	6/12/2012 5:46 PM
Chloromethane	ND	800	U	ppbv	800	6/12/2012 5:46 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 5:46 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/12/2012 5:46 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 12:11:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-015	**Matrix:**	Air
Client Sample ID:	VA1439		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	35,000	1,600		ppbv	800	6/12/2012 5:46 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/12/2012 5:46 PM
Ethyl acetate	ND	800	U	ppbv	800	6/12/2012 5:46 PM
Ethylbenzene	1,800	1,600		ppbv	800	6/12/2012 5:46 PM
Heptane	31,000	800		ppbv	800	6/12/2012 5:46 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/12/2012 5:46 PM
m,p-Xylene	4,500	1,600		ppbv	800	6/12/2012 5:46 PM
Methylene chloride	ND	4,000	U	ppbv	800	6/12/2012 5:46 PM
n-Hexane	28,000	1,600		ppbv	800	6/12/2012 5:46 PM
Naphthalene	ND	800	U	ppbv	800	6/12/2012 5:46 PM
o-Xylene	1,200	800		ppbv	800	6/12/2012 5:46 PM
Propylene	ND	800	U	ppbv	800	6/12/2012 5:46 PM
Styrene	ND	800	U	ppbv	800	6/12/2012 5:46 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/12/2012 5:46 PM
Tetrachloroethene	ND	800	U	ppbv	800	6/12/2012 5:46 PM
Tetrahydrofuran	ND	800	U	ppbv	800	6/12/2012 5:46 PM
Toluene	36,000	800		ppbv	800	6/12/2012 5:46 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 5:46 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/12/2012 5:46 PM
Trichloroethene	ND	800	U	ppbv	800	6/12/2012 5:46 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/12/2012 5:46 PM
Vinyl acetate	ND	800	U	ppbv	800	6/12/2012 5:46 PM
Vinyl chloride	ND	800	U	ppbv	800	6/12/2012 5:46 PM
Xylenes, Total	5,700	2,400		ppbv	800	6/12/2012 5:46 PM
Surr: 4-Bromofluorobenzene	94.3	70-130		%REC	800	6/12/2012 5:46 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	910,000	190,000		µg/m³	1600	6/13/2012 6:40 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	6/13/2012 6:40 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	6/13/2012 6:40 PM
Surr: 4-Bromofluorobenzene	95.1	70-130		%REC	1600	6/13/2012 6:40 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 1:04:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-016	**Matrix:**	Air
Client Sample ID:	VA1440		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.44	0.10		%	1	6/13/2012 3:35 PM
Carbon Monoxide	ND	0.10	U	%	1	6/13/2012 3:35 PM
Methane	ND	0.50	U	%	1	6/13/2012 3:35 PM
Nitrogen	81	0.10		%	1	6/13/2012 3:35 PM
Oxygen	19	0.10		%	1	6/13/2012 3:35 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/12/2012 2:13 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/12/2012 2:13 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/12/2012 2:13 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/12/2012 2:13 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/12/2012 2:13 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 2:13 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/12/2012 2:13 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/12/2012 2:13 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/12/2012 2:13 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 2:13 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/12/2012 2:13 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/12/2012 2:13 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/12/2012 2:13 PM
1,3-Butadiene	ND	800	U	ppbv	800	6/12/2012 2:13 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 2:13 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 2:13 PM
2-Butanone	ND	800	U	ppbv	800	6/12/2012 2:13 PM
2-Hexanone	ND	800	U	ppbv	800	6/12/2012 2:13 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/12/2012 2:13 PM
Acetone	1,400	800		ppbv	800	6/12/2012 2:13 PM
Benzene	16,000	800		ppbv	800	6/12/2012 2:13 PM
Benzyl chloride	ND	800	U	ppbv	800	6/12/2012 2:13 PM
Bromodichloromethane	ND	800	U	ppbv	800	6/12/2012 2:13 PM
Bromoform	ND	800	U	ppbv	800	6/12/2012 2:13 PM
Bromomethane	ND	800	U	ppbv	800	6/12/2012 2:13 PM
Carbon disulfide	ND	800	U	ppbv	800	6/12/2012 2:13 PM
Carbon tetrachloride	ND	800	U	ppbv	800	6/12/2012 2:13 PM
Chlorobenzene	ND	800	U	ppbv	800	6/12/2012 2:13 PM
Chlorodibromomethane	ND	800	U	ppbv	800	6/12/2012 2:13 PM
Chloroethane	ND	800	U	ppbv	800	6/12/2012 2:13 PM
Chloroform	ND	800	U	ppbv	800	6/12/2012 2:13 PM
Chloromethane	ND	800	U	ppbv	800	6/12/2012 2:13 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 2:13 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/12/2012 2:13 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 1:04:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-016	**Matrix:**	Air
Client Sample ID:	VA1440		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	37,000	1,600		ppbv	800	6/12/2012 2:13 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/12/2012 2:13 PM
Ethyl acetate	ND	800	U	ppbv	800	6/12/2012 2:13 PM
Ethylbenzene	2,600	1,600		ppbv	800	6/12/2012 2:13 PM
Heptane	32,000	800		ppbv	800	6/12/2012 2:13 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/12/2012 2:13 PM
m,p-Xylene	6,900	1,600		ppbv	800	6/12/2012 2:13 PM
Methylene chloride	ND	4,000	U	ppbv	800	6/12/2012 2:13 PM
n-Hexane	29,000	1,600		ppbv	800	6/12/2012 2:13 PM
Naphthalene	ND	800	U	ppbv	800	6/12/2012 2:13 PM
o-Xylene	1,900	800		ppbv	800	6/12/2012 2:13 PM
Propylene	ND	800	U	ppbv	800	6/12/2012 2:13 PM
Styrene	ND	800	U	ppbv	800	6/12/2012 2:13 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/12/2012 2:13 PM
Tetrachloroethene	ND	800	U	ppbv	800	6/12/2012 2:13 PM
Tetrahydrofuran	ND	800	U	ppbv	800	6/12/2012 2:13 PM
Toluene	62,000	8,000		ppbv	8000	6/12/2012 7:11 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 2:13 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/12/2012 2:13 PM
Trichloroethene	ND	800	U	ppbv	800	6/12/2012 2:13 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/12/2012 2:13 PM
Vinyl acetate	ND	800	U	ppbv	800	6/12/2012 2:13 PM
Vinyl chloride	ND	800	U	ppbv	800	6/12/2012 2:13 PM
Xylenes, Total	8,800	2,400		ppbv	800	6/12/2012 2:13 PM
Surr: 4-Bromofluorobenzene	94.2	70-130		%REC	800	6/12/2012 2:13 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,000,000	190,000		µg/m³	1600	6/14/2012 7:43 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	6/14/2012 7:43 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	6/14/2012 7:43 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1600	6/14/2012 7:43 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 1:47:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-017	**Matrix:**	Air
Client Sample ID:	VA1441		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.67	0.10		%	1	6/13/2012 3:50 PM
Carbon Monoxide	ND	0.10	U	%	1	6/13/2012 3:50 PM
Methane	ND	0.50	U	%	1	6/13/2012 3:50 PM
Nitrogen	80	0.10		%	1	6/13/2012 3:50 PM
Oxygen	19	0.10		%	1	6/13/2012 3:50 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/12/2012 2:57 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/12/2012 2:57 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/12/2012 2:57 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/12/2012 2:57 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/12/2012 2:57 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 2:57 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/12/2012 2:57 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/12/2012 2:57 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/12/2012 2:57 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 2:57 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/12/2012 2:57 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/12/2012 2:57 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/12/2012 2:57 PM
1,3-Butadiene	ND	800	U	ppbv	800	6/12/2012 2:57 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 2:57 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 2:57 PM
2-Butanone	ND	800	U	ppbv	800	6/12/2012 2:57 PM
2-Hexanone	ND	800	U	ppbv	800	6/12/2012 2:57 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/12/2012 2:57 PM
Acetone	1,300	800		ppbv	800	6/12/2012 2:57 PM
Benzene	14,000	800		ppbv	800	6/12/2012 2:57 PM
Benzyl chloride	ND	800	U	ppbv	800	6/12/2012 2:57 PM
Bromodichloromethane	ND	800	U	ppbv	800	6/12/2012 2:57 PM
Bromoform	ND	800	U	ppbv	800	6/12/2012 2:57 PM
Bromomethane	ND	800	U	ppbv	800	6/12/2012 2:57 PM
Carbon disulfide	ND	800	U	ppbv	800	6/12/2012 2:57 PM
Carbon tetrachloride	ND	800	U	ppbv	800	6/12/2012 2:57 PM
Chlorobenzene	ND	800	U	ppbv	800	6/12/2012 2:57 PM
Chlorodibromomethane	ND	800	U	ppbv	800	6/12/2012 2:57 PM
Chloroethane	ND	800	U	ppbv	800	6/12/2012 2:57 PM
Chloroform	ND	800	U	ppbv	800	6/12/2012 2:57 PM
Chloromethane	ND	800	U	ppbv	800	6/12/2012 2:57 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 2:57 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/12/2012 2:57 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 1:47:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-017	**Matrix:**	Air
Client Sample ID:	VA1441		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	33,000	1,600		ppbv	800	6/12/2012 2:57 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/12/2012 2:57 PM
Ethyl acetate	ND	800	U	ppbv	800	6/12/2012 2:57 PM
Ethylbenzene	2,700	1,600		ppbv	800	6/12/2012 2:57 PM
Heptane	28,000	800		ppbv	800	6/12/2012 2:57 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/12/2012 2:57 PM
m,p-Xylene	7,100	1,600		ppbv	800	6/12/2012 2:57 PM
Methylene chloride	ND	4,000	U	ppbv	800	6/12/2012 2:57 PM
n-Hexane	27,000	1,600		ppbv	800	6/12/2012 2:57 PM
Naphthalene	ND	800	U	ppbv	800	6/12/2012 2:57 PM
o-Xylene	2,100	800		ppbv	800	6/12/2012 2:57 PM
Propylene	ND	800	U	ppbv	800	6/12/2012 2:57 PM
Styrene	ND	800	U	ppbv	800	6/12/2012 2:57 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/12/2012 2:57 PM
Tetrachloroethene	ND	800	U	ppbv	800	6/12/2012 2:57 PM
Tetrahydrofuran	ND	800	U	ppbv	800	6/12/2012 2:57 PM
Toluene	38,000	800		ppbv	800	6/12/2012 2:57 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 2:57 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/12/2012 2:57 PM
Trichloroethene	ND	800	U	ppbv	800	6/12/2012 2:57 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/12/2012 2:57 PM
Vinyl acetate	ND	800	U	ppbv	800	6/12/2012 2:57 PM
Vinyl chloride	ND	800	U	ppbv	800	6/12/2012 2:57 PM
Xylenes, Total	9,200	2,400		ppbv	800	6/12/2012 2:57 PM
Surr: 4-Bromofluorobenzene	93.4	70-130		%REC	800	6/12/2012 2:57 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,100,000	190,000		µg/m³	1600	6/12/2012 6:48 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	6/12/2012 6:48 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	6/12/2012 6:48 PM
Surr: 4-Bromofluorobenzene	98.1	70-130		%REC	1600	6/12/2012 6:48 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 2:37:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-018	**Matrix:**	Air
Client Sample ID:	VA1442		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.31	0.10		%	1	6/13/2012 4:05 PM
Carbon Monoxide	ND	0.10	U	%	1	6/13/2012 4:05 PM
Methane	ND	0.50	U	%	1	6/13/2012 4:05 PM
Nitrogen	80	0.10		%	1	6/13/2012 4:05 PM
Oxygen	19	0.10		%	1	6/13/2012 4:05 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/12/2012 9:24 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/12/2012 9:24 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/12/2012 9:24 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/12/2012 9:24 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/12/2012 9:24 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 9:24 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/12/2012 9:24 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/12/2012 9:24 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/12/2012 9:24 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 9:24 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/12/2012 9:24 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/12/2012 9:24 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/12/2012 9:24 PM
1,3-Butadiene	ND	800	U	ppbv	800	6/12/2012 9:24 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 9:24 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 9:24 PM
2-Butanone	ND	800	U	ppbv	800	6/12/2012 9:24 PM
2-Hexanone	ND	800	U	ppbv	800	6/12/2012 9:24 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/12/2012 9:24 PM
Acetone	2,600	800		ppbv	800	6/12/2012 9:24 PM
Benzene	25,000	800		ppbv	800	6/12/2012 9:24 PM
Benzyl chloride	ND	800	U	ppbv	800	6/12/2012 9:24 PM
Bromodichloromethane	ND	800	U	ppbv	800	6/12/2012 9:24 PM
Bromoform	ND	800	U	ppbv	800	6/12/2012 9:24 PM
Bromomethane	ND	800	U	ppbv	800	6/12/2012 9:24 PM
Carbon disulfide	ND	800	U	ppbv	800	6/12/2012 9:24 PM
Carbon tetrachloride	ND	800	U	ppbv	800	6/12/2012 9:24 PM
Chlorobenzene	ND	800	U	ppbv	800	6/12/2012 9:24 PM
Chlorodibromomethane	ND	800	U	ppbv	800	6/12/2012 9:24 PM
Chloroethane	ND	800	U	ppbv	800	6/12/2012 9:24 PM
Chloroform	ND	800	U	ppbv	800	6/12/2012 9:24 PM
Chloromethane	ND	800	U	ppbv	800	6/12/2012 9:24 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 9:24 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/12/2012 9:24 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 2:37:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-018	**Matrix:**	Air
Client Sample ID:	VA1442		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	25,000	1,600		ppbv	800	6/12/2012 9:24 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/12/2012 9:24 PM
Ethyl acetate	ND	800	U	ppbv	800	6/12/2012 9:24 PM
Ethylbenzene	1,900	1,600		ppbv	800	6/12/2012 9:24 PM
Heptane	20,000	800		ppbv	800	6/12/2012 9:24 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/12/2012 9:24 PM
m,p-Xylene	5,200	1,600		ppbv	800	6/12/2012 9:24 PM
Methylene chloride	1,700	4,000	J	ppbv	800	6/12/2012 9:24 PM
n-Hexane	20,000	1,600		ppbv	800	6/12/2012 9:24 PM
Naphthalene	ND	800	U	ppbv	800	6/12/2012 9:24 PM
o-Xylene	1,600	800		ppbv	800	6/12/2012 9:24 PM
Propylene	ND	800	U	ppbv	800	6/12/2012 9:24 PM
Styrene	ND	800	U	ppbv	800	6/12/2012 9:24 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/12/2012 9:24 PM
Tetrachloroethene	ND	800	U	ppbv	800	6/12/2012 9:24 PM
Tetrahydrofuran	ND	800	U	ppbv	800	6/12/2012 9:24 PM
Toluene	30,000	800		ppbv	800	6/12/2012 9:24 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 9:24 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/12/2012 9:24 PM
Trichloroethene	ND	800	U	ppbv	800	6/12/2012 9:24 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/12/2012 9:24 PM
Vinyl acetate	ND	800	U	ppbv	800	6/12/2012 9:24 PM
Vinyl chloride	ND	800	U	ppbv	800	6/12/2012 9:24 PM
Xylenes, Total	6,700	2,400		ppbv	800	6/12/2012 9:24 PM
Surr: 4-Bromofluorobenzene	94.1	70-130		%REC	800	6/12/2012 9:24 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,300,000	190,000		µg/m³	1600	6/13/2012 8:51 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	6/13/2012 8:51 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	6/13/2012 8:51 PM
Surr: 4-Bromofluorobenzene	96.4	70-130		%REC	1600	6/13/2012 8:51 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 3:26:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-019	**Matrix:**	Air
Client Sample ID:	VA1443		

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	6/13/2012 4:20 PM
Carbon Monoxide	ND	0.10	U	%	1	6/13/2012 4:20 PM
Methane	ND	0.50	U	%	1	6/13/2012 4:20 PM
Nitrogen	81	0.10		%	1	6/13/2012 4:20 PM
Oxygen	19	0.10		%	1	6/13/2012 4:20 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
1,3-Butadiene	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
2-Butanone	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
2-Hexanone	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Acetone	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Benzene	220,000	20,000		ppbv	20000	6/12/2012 4:20 PM
Benzyl chloride	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Bromodichloromethane	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Bromoform	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Bromomethane	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Carbon disulfide	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Chlorobenzene	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Chloroethane	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Chloroform	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Chloromethane	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 3:26:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-019	**Matrix:**	Air
Client Sample ID:	VA1443		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	410,000	40,000		ppbv	20000	6/12/2012 4:20 PM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Ethyl acetate	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Ethylbenzene	ND	40,000	U	ppbv	20000	6/12/2012 4:20 PM
Heptane	240,000	20,000		ppbv	20000	6/12/2012 4:20 PM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	6/12/2012 4:20 PM
m,p-Xylene	ND	40,000	U	ppbv	20000	6/12/2012 4:20 PM
Methylene chloride	ND	100,000	U	ppbv	20000	6/12/2012 4:20 PM
n-Hexane	430,000	40,000		ppbv	20000	6/12/2012 4:20 PM
Naphthalene	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
o-Xylene	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Propylene	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Styrene	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Tetrachloroethene	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Toluene	210,000	20,000		ppbv	20000	6/12/2012 4:20 PM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Trichloroethene	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Vinyl acetate	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Vinyl chloride	ND	20,000	U	ppbv	20000	6/12/2012 4:20 PM
Xylenes, Total	ND	60,000	U	ppbv	20000	6/12/2012 4:20 PM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	20000	6/12/2012 4:20 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	10,000,000	2,300,000		µg/m³	20000	6/13/2012 10:18 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	6/13/2012 10:18 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	6/13/2012 10:18 PM
Surr: 4-Bromofluorobenzene	93.6	70-130		%REC	20000	6/13/2012 10:18 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 12:15:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-020	**Matrix:**	Air
Client Sample ID:	VA1451		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.26	0.10		%	1	6/13/2012 4:35 PM
Carbon Monoxide	ND	0.10	U	%	1	6/13/2012 4:35 PM
Methane	ND	0.50	U	%	1	6/13/2012 4:35 PM
Nitrogen	77	0.10		%	1	6/13/2012 4:35 PM
Oxygen	20	0.10		%	1	6/13/2012 4:35 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/12/2012 10:56 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/12/2012 10:56 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/12/2012 10:56 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/12/2012 10:56 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/12/2012 10:56 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 10:56 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/12/2012 10:56 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/12/2012 10:56 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/12/2012 10:56 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 10:56 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/12/2012 10:56 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/12/2012 10:56 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/12/2012 10:56 PM
1,3-Butadiene	ND	800	U	ppbv	800	6/12/2012 10:56 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 10:56 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 10:56 PM
2-Butanone	ND	800	U	ppbv	800	6/12/2012 10:56 PM
2-Hexanone	ND	800	U	ppbv	800	6/12/2012 10:56 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/12/2012 10:56 PM
Acetone	2,100	800		ppbv	800	6/12/2012 10:56 PM
Benzene	8,700	800		ppbv	800	6/12/2012 10:56 PM
Benzyl chloride	ND	800	U	ppbv	800	6/12/2012 10:56 PM
Bromodichloromethane	ND	800	U	ppbv	800	6/12/2012 10:56 PM
Bromoform	ND	800	U	ppbv	800	6/12/2012 10:56 PM
Bromomethane	ND	800	U	ppbv	800	6/12/2012 10:56 PM
Carbon disulfide	ND	800	U	ppbv	800	6/12/2012 10:56 PM
Carbon tetrachloride	ND	800	U	ppbv	800	6/12/2012 10:56 PM
Chlorobenzene	ND	800	U	ppbv	800	6/12/2012 10:56 PM
Chlorodibromomethane	ND	800	U	ppbv	800	6/12/2012 10:56 PM
Chloroethane	ND	800	U	ppbv	800	6/12/2012 10:56 PM
Chloroform	ND	800	U	ppbv	800	6/12/2012 10:56 PM
Chloromethane	ND	800	U	ppbv	800	6/12/2012 10:56 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 10:56 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/12/2012 10:56 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 12:15:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-020	**Matrix:**	Air
Client Sample ID:	VA1451		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	21,000	1,600		ppbv	800	6/12/2012 10:56 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/12/2012 10:56 PM
Ethyl acetate	ND	800	U	ppbv	800	6/12/2012 10:56 PM
Ethylbenzene	1,300	1,600	J	ppbv	800	6/12/2012 10:56 PM
Heptane	27,000	800		ppbv	800	6/12/2012 10:56 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/12/2012 10:56 PM
m,p-Xylene	4,700	1,600		ppbv	800	6/12/2012 10:56 PM
Methylene chloride	3,000	4,000	J	ppbv	800	6/12/2012 10:56 PM
n-Hexane	13,000	1,600		ppbv	800	6/12/2012 10:56 PM
Naphthalene	ND	800	U	ppbv	800	6/12/2012 10:56 PM
o-Xylene	1,500	800		ppbv	800	6/12/2012 10:56 PM
Propylene	ND	800	U	ppbv	800	6/12/2012 10:56 PM
Styrene	ND	800	U	ppbv	800	6/12/2012 10:56 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/12/2012 10:56 PM
Tetrachloroethene	ND	800	U	ppbv	800	6/12/2012 10:56 PM
Tetrahydrofuran	ND	800	U	ppbv	800	6/12/2012 10:56 PM
Toluene	24,000	800		ppbv	800	6/12/2012 10:56 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 10:56 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/12/2012 10:56 PM
Trichloroethene	ND	800	U	ppbv	800	6/12/2012 10:56 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/12/2012 10:56 PM
Vinyl acetate	ND	800	U	ppbv	800	6/12/2012 10:56 PM
Vinyl chloride	ND	800	U	ppbv	800	6/12/2012 10:56 PM
Xylenes, Total	6,200	2,400		ppbv	800	6/12/2012 10:56 PM
Surr: 4-Bromofluorobenzene	97.4	70-130		%REC	800	6/12/2012 10:56 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,300,000	190,000		µg/m³	1600	6/14/2012 8:27 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	6/14/2012 8:27 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	6/14/2012 8:27 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1600	6/14/2012 8:27 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 12:59:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-021	**Matrix:**	Air
Client Sample ID:	VA1452		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.38	0.10		%	1	6/18/2012 9:52 AM
Carbon Monoxide	ND	0.10	U	%	1	6/18/2012 9:52 AM
Methane	ND	0.50	U	%	1	6/18/2012 9:52 AM
Nitrogen	79	0.10		%	1	6/18/2012 9:52 AM
Oxygen	19	0.10		%	1	6/18/2012 9:52 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/12/2012 11:40 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/12/2012 11:40 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/12/2012 11:40 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/12/2012 11:40 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/12/2012 11:40 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 11:40 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/12/2012 11:40 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/12/2012 11:40 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/12/2012 11:40 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 11:40 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/12/2012 11:40 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/12/2012 11:40 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/12/2012 11:40 PM
1,3-Butadiene	ND	800	U	ppbv	800	6/12/2012 11:40 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 11:40 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 11:40 PM
2-Butanone	ND	800	U	ppbv	800	6/12/2012 11:40 PM
2-Hexanone	ND	800	U	ppbv	800	6/12/2012 11:40 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/12/2012 11:40 PM
Acetone	ND	800	U	ppbv	800	6/12/2012 11:40 PM
Benzene	3,800	800		ppbv	800	6/12/2012 11:40 PM
Benzyl chloride	ND	800	U	ppbv	800	6/12/2012 11:40 PM
Bromodichloromethane	ND	800	U	ppbv	800	6/12/2012 11:40 PM
Bromoform	ND	800	U	ppbv	800	6/12/2012 11:40 PM
Bromomethane	ND	800	U	ppbv	800	6/12/2012 11:40 PM
Carbon disulfide	ND	800	U	ppbv	800	6/12/2012 11:40 PM
Carbon tetrachloride	ND	800	U	ppbv	800	6/12/2012 11:40 PM
Chlorobenzene	ND	800	U	ppbv	800	6/12/2012 11:40 PM
Chlorodibromomethane	ND	800	U	ppbv	800	6/12/2012 11:40 PM
Chloroethane	ND	800	U	ppbv	800	6/12/2012 11:40 PM
Chloroform	ND	800	U	ppbv	800	6/12/2012 11:40 PM
Chloromethane	ND	800	U	ppbv	800	6/12/2012 11:40 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 11:40 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/12/2012 11:40 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 12:59:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-021	**Matrix:**	Air
Client Sample ID:	VA1452		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	9,500	1,600		ppbv	800	6/12/2012 11:40 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/12/2012 11:40 PM
Ethyl acetate	ND	800	U	ppbv	800	6/12/2012 11:40 PM
Ethylbenzene	ND	1,600	U	ppbv	800	6/12/2012 11:40 PM
Heptane	13,000	800		ppbv	800	6/12/2012 11:40 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/12/2012 11:40 PM
m,p-Xylene	2,700	1,600		ppbv	800	6/12/2012 11:40 PM
Methylene chloride	ND	4,000	U	ppbv	800	6/12/2012 11:40 PM
n-Hexane	5,000	1,600		ppbv	800	6/12/2012 11:40 PM
Naphthalene	ND	800	U	ppbv	800	6/12/2012 11:40 PM
o-Xylene	850	800		ppbv	800	6/12/2012 11:40 PM
Propylene	ND	800	U	ppbv	800	6/12/2012 11:40 PM
Styrene	ND	800	U	ppbv	800	6/12/2012 11:40 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/12/2012 11:40 PM
Tetrachloroethene	ND	800	U	ppbv	800	6/12/2012 11:40 PM
Tetrahydrofuran	ND	800	U	ppbv	800	6/12/2012 11:40 PM
Toluene	12,000	800		ppbv	800	6/12/2012 11:40 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 11:40 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/12/2012 11:40 PM
Trichloroethene	ND	800	U	ppbv	800	6/12/2012 11:40 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/12/2012 11:40 PM
Vinyl acetate	ND	800	U	ppbv	800	6/12/2012 11:40 PM
Vinyl chloride	ND	800	U	ppbv	800	6/12/2012 11:40 PM
Xylenes, Total	3,600	2,400		ppbv	800	6/12/2012 11:40 PM
Surr: 4-Bromofluorobenzene	93.5	70-130		%REC	800	6/12/2012 11:40 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	590,000	94,000		µg/m³	800	6/13/2012 11:50 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	6/13/2012 11:50 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	6/13/2012 11:50 PM
Surr: 4-Bromofluorobenzene	99.7	70-130		%REC	800	6/13/2012 11:50 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 1:45:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-022	**Matrix:**	Air
Client Sample ID:	VA1453		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.21	0.10		%	1	6/18/2012 10:07 AM
Carbon Monoxide	ND	0.10	U	%	1	6/18/2012 10:07 AM
Methane	ND	0.50	U	%	1	6/18/2012 10:07 AM
Nitrogen	79	0.10		%	1	6/18/2012 10:07 AM
Oxygen	19	0.10		%	1	6/18/2012 10:07 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/12/2012 7:56 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/12/2012 7:56 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/12/2012 7:56 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/12/2012 7:56 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/12/2012 7:56 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 7:56 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/12/2012 7:56 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/12/2012 7:56 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/12/2012 7:56 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 7:56 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/12/2012 7:56 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/12/2012 7:56 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/12/2012 7:56 PM
1,3-Butadiene	ND	800	U	ppbv	800	6/12/2012 7:56 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 7:56 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/12/2012 7:56 PM
2-Butanone	ND	800	U	ppbv	800	6/12/2012 7:56 PM
2-Hexanone	ND	800	U	ppbv	800	6/12/2012 7:56 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/12/2012 7:56 PM
Acetone	2,300	800		ppbv	800	6/12/2012 7:56 PM
Benzene	3,300	800		ppbv	800	6/12/2012 7:56 PM
Benzyl chloride	ND	800	U	ppbv	800	6/12/2012 7:56 PM
Bromodichloromethane	ND	800	U	ppbv	800	6/12/2012 7:56 PM
Bromoform	ND	800	U	ppbv	800	6/12/2012 7:56 PM
Bromomethane	ND	800	U	ppbv	800	6/12/2012 7:56 PM
Carbon disulfide	ND	800	U	ppbv	800	6/12/2012 7:56 PM
Carbon tetrachloride	ND	800	U	ppbv	800	6/12/2012 7:56 PM
Chlorobenzene	ND	800	U	ppbv	800	6/12/2012 7:56 PM
Chlorodibromomethane	ND	800	U	ppbv	800	6/12/2012 7:56 PM
Chloroethane	ND	800	U	ppbv	800	6/12/2012 7:56 PM
Chloroform	ND	800	U	ppbv	800	6/12/2012 7:56 PM
Chloromethane	ND	800	U	ppbv	800	6/12/2012 7:56 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 7:56 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/12/2012 7:56 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 1:45:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-022	**Matrix:**	Air
Client Sample ID:	VA1453		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	9,400	1,600		ppbv	800	6/12/2012 7:56 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/12/2012 7:56 PM
Ethyl acetate	ND	800	U	ppbv	800	6/12/2012 7:56 PM
Ethylbenzene	ND	1,600	U	ppbv	800	6/12/2012 7:56 PM
Heptane	10,000	800		ppbv	800	6/12/2012 7:56 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/12/2012 7:56 PM
m,p-Xylene	1,900	1,600		ppbv	800	6/12/2012 7:56 PM
Methylene chloride	ND	4,000	U	ppbv	800	6/12/2012 7:56 PM
n-Hexane	6,400	1,600		ppbv	800	6/12/2012 7:56 PM
Naphthalene	ND	800	U	ppbv	800	6/12/2012 7:56 PM
o-Xylene	ND	800	U	ppbv	800	6/12/2012 7:56 PM
Propylene	ND	800	U	ppbv	800	6/12/2012 7:56 PM
Styrene	ND	800	U	ppbv	800	6/12/2012 7:56 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/12/2012 7:56 PM
Tetrachloroethene	ND	800	U	ppbv	800	6/12/2012 7:56 PM
Tetrahydrofuran	ND	800	U	ppbv	800	6/12/2012 7:56 PM
Toluene	9,300	800		ppbv	800	6/12/2012 7:56 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/12/2012 7:56 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/12/2012 7:56 PM
Trichloroethene	ND	800	U	ppbv	800	6/12/2012 7:56 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/12/2012 7:56 PM
Vinyl acetate	ND	800	U	ppbv	800	6/12/2012 7:56 PM
Vinyl chloride	ND	800	U	ppbv	800	6/12/2012 7:56 PM
Xylenes, Total	1,900	2,400	J	ppbv	800	6/12/2012 7:56 PM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	800	6/12/2012 7:56 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	380,000	94,000		µg/m³	800	6/12/2012 1:37 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	6/12/2012 1:37 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	6/12/2012 1:37 PM
Surr: 4-Bromofluorobenzene	94.5	70-130		%REC	800	6/12/2012 1:37 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 2:40:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-023	**Matrix:**	Air
Client Sample ID:	VA1454		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.085	0.10	J	%	1	6/18/2012 10:21 AM
Carbon Monoxide	ND	0.10	U	%	1	6/18/2012 10:21 AM
Methane	ND	0.50	U	%	1	6/18/2012 10:21 AM
Nitrogen	78	0.10		%	1	6/18/2012 10:21 AM
Oxygen	20	0.10		%	1	6/18/2012 10:21 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	6/12/2012 10:12 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	6/12/2012 10:12 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	6/12/2012 10:12 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	6/12/2012 10:12 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	6/12/2012 10:12 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	6/12/2012 10:12 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	6/12/2012 10:12 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	6/12/2012 10:12 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	6/12/2012 10:12 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	6/12/2012 10:12 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	6/12/2012 10:12 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	6/12/2012 10:12 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	6/12/2012 10:12 PM
1,3-Butadiene	ND	400	U	ppbv	400	6/12/2012 10:12 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	6/12/2012 10:12 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	6/12/2012 10:12 PM
2-Butanone	ND	400	U	ppbv	400	6/12/2012 10:12 PM
2-Hexanone	ND	400	U	ppbv	400	6/12/2012 10:12 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	6/12/2012 10:12 PM
Acetone	1,100	400		ppbv	400	6/12/2012 10:12 PM
Benzene	3,100	400		ppbv	400	6/12/2012 10:12 PM
Benzyl chloride	ND	400	U	ppbv	400	6/12/2012 10:12 PM
Bromodichloromethane	ND	400	U	ppbv	400	6/12/2012 10:12 PM
Bromoform	ND	400	U	ppbv	400	6/12/2012 10:12 PM
Bromomethane	ND	400	U	ppbv	400	6/12/2012 10:12 PM
Carbon disulfide	ND	400	U	ppbv	400	6/12/2012 10:12 PM
Carbon tetrachloride	ND	400	U	ppbv	400	6/12/2012 10:12 PM
Chlorobenzene	ND	400	U	ppbv	400	6/12/2012 10:12 PM
Chlorodibromomethane	ND	400	U	ppbv	400	6/12/2012 10:12 PM
Chloroethane	ND	400	U	ppbv	400	6/12/2012 10:12 PM
Chloroform	ND	400	U	ppbv	400	6/12/2012 10:12 PM
Chloromethane	ND	400	U	ppbv	400	6/12/2012 10:12 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	6/12/2012 10:12 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	6/12/2012 10:12 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 2:40:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-023	**Matrix:**	Air
Client Sample ID:	VA1454		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	7,400	800		ppbv	400	6/12/2012 10:12 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	6/12/2012 10:12 PM
Ethyl acetate	ND	400	U	ppbv	400	6/12/2012 10:12 PM
Ethylbenzene	570	800	J	ppbv	400	6/12/2012 10:12 PM
Heptane	7,500	400		ppbv	400	6/12/2012 10:12 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	6/12/2012 10:12 PM
m,p-Xylene	2,000	800		ppbv	400	6/12/2012 10:12 PM
Methylene chloride	ND	2,000	U	ppbv	400	6/12/2012 10:12 PM
n-Hexane	4,600	800		ppbv	400	6/12/2012 10:12 PM
Naphthalene	ND	400	U	ppbv	400	6/12/2012 10:12 PM
o-Xylene	660	400		ppbv	400	6/12/2012 10:12 PM
Propylene	ND	400	U	ppbv	400	6/12/2012 10:12 PM
Styrene	ND	400	U	ppbv	400	6/12/2012 10:12 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	6/12/2012 10:12 PM
Tetrachloroethene	ND	400	U	ppbv	400	6/12/2012 10:12 PM
Tetrahydrofuran	ND	400	U	ppbv	400	6/12/2012 10:12 PM
Toluene	8,200	400		ppbv	400	6/12/2012 10:12 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	6/12/2012 10:12 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	6/12/2012 10:12 PM
Trichloroethene	ND	400	U	ppbv	400	6/12/2012 10:12 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	6/12/2012 10:12 PM
Vinyl acetate	ND	400	U	ppbv	400	6/12/2012 10:12 PM
Vinyl chloride	ND	400	U	ppbv	400	6/12/2012 10:12 PM
Xylenes, Total	2,700	1,200		ppbv	400	6/12/2012 10:12 PM
Surr: 4-Bromofluorobenzene	92.0	70-130		%REC	400	6/12/2012 10:12 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	430,000	47,000		µg/m³	400	6/14/2012 12:39 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	6/14/2012 12:39 AM
C9-C12 Aliphatic Hydrocarbons	31,000	76,000	J	µg/m³	400	6/14/2012 12:39 AM
Surr: 4-Bromofluorobenzene	99.3	70-130		%REC	400	6/14/2012 12:39 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 3:22:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-024	**Matrix:**	Air
Client Sample ID:	VA1455		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.094	0.10	J	%	1	6/18/2012 10:36 AM
Carbon Monoxide	ND	0.10	U	%	1	6/18/2012 10:36 AM
Methane	ND	0.50	U	%	1	6/18/2012 10:36 AM
Nitrogen	78	0.10		%	1	6/18/2012 10:36 AM
Oxygen	20	0.10		%	1	6/18/2012 10:36 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
2-Butanone	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
2-Hexanone	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Acetone	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Benzene	16,000	8,000		ppbv	8000	6/13/2012 9:16 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Bromoform	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Bromomethane	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Chloroethane	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Chloroform	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Chloromethane	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 3:22:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-024	**Matrix:**	Air
Client Sample ID:	VA1455		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	32,000	16,000		ppbv	8000	6/13/2012 9:16 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	6/13/2012 9:16 PM
Heptane	18,000	8,000		ppbv	8000	6/13/2012 9:16 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	6/13/2012 9:16 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	6/13/2012 9:16 PM
Methylene chloride	ND	40,000	U	ppbv	8000	6/13/2012 9:16 PM
n-Hexane	27,000	16,000		ppbv	8000	6/13/2012 9:16 PM
Naphthalene	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
o-Xylene	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Propylene	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Styrene	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Toluene	24,000	8,000		ppbv	8000	6/13/2012 9:16 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Trichloroethene	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	6/13/2012 9:16 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	6/13/2012 9:16 PM
Surr: 4-Bromofluorobenzene	94.0	70-130		%REC	8000	6/13/2012 9:16 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,300,000	190,000		µg/m³	1600	6/14/2012 7:40 AM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	6/14/2012 7:40 AM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	6/14/2012 7:40 AM
Surr: 4-Bromofluorobenzene	94.5	70-130		%REC	1600	6/14/2012 7:40 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 3:22:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-025	**Matrix:**	Air
Client Sample ID:	VA1456		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.056	0.10	J	%	1	6/18/2012 10:51 AM
Carbon Monoxide	ND	0.10	U	%	1	6/18/2012 10:51 AM
Methane	ND	0.50	U	%	1	6/18/2012 10:51 AM
Nitrogen	78	0.10		%	1	6/18/2012 10:51 AM
Oxygen	21	0.10		%	1	6/18/2012 10:51 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/15/2012 3:29 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/15/2012 3:29 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/15/2012 3:29 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/15/2012 3:29 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/15/2012 3:29 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/15/2012 3:29 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/15/2012 3:29 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/15/2012 3:29 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/15/2012 3:29 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/15/2012 3:29 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/15/2012 3:29 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/15/2012 3:29 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/15/2012 3:29 AM
1,3-Butadiene	ND	800	U	ppbv	800	6/15/2012 3:29 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/15/2012 3:29 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/15/2012 3:29 AM
2-Butanone	ND	800	U	ppbv	800	6/15/2012 3:29 AM
2-Hexanone	ND	800	U	ppbv	800	6/15/2012 3:29 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Acetone	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Benzene	8,800	800		ppbv	800	6/15/2012 3:29 AM
Benzyl chloride	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Bromodichloromethane	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Bromoform	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Bromomethane	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Carbon disulfide	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Carbon tetrachloride	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Chlorobenzene	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Chlorodibromomethane	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Chloroethane	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Chloroform	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Chloromethane	ND	800	U	ppbv	800	6/15/2012 3:29 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/15/2012 3:29 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/15/2012 3:29 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 3:22:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-025	**Matrix:**	Air
Client Sample ID:	VA1456		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	19,000	1,600		ppbv	800	6/15/2012 3:29 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Ethyl acetate	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Ethylbenzene	820	1,600	J	ppbv	800	6/15/2012 3:29 AM
Heptane	12,000	800		ppbv	800	6/15/2012 3:29 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/15/2012 3:29 AM
m,p-Xylene	2,500	1,600		ppbv	800	6/15/2012 3:29 AM
Methylene chloride	ND	4,000	U	ppbv	800	6/15/2012 3:29 AM
n-Hexane	15,000	1,600		ppbv	800	6/15/2012 3:29 AM
Naphthalene	ND	800	U	ppbv	800	6/15/2012 3:29 AM
o-Xylene	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Propylene	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Styrene	ND	800	U	ppbv	800	6/15/2012 3:29 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Tetrachloroethene	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Tetrahydrofuran	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Toluene	15,000	800		ppbv	800	6/15/2012 3:29 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/15/2012 3:29 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Trichloroethene	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Vinyl acetate	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Vinyl chloride	ND	800	U	ppbv	800	6/15/2012 3:29 AM
Xylenes, Total	2,500	2,400		ppbv	800	6/15/2012 3:29 AM
Surr: 4-Bromofluorobenzene	93.8	70-130		%REC	800	6/15/2012 3:29 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,100,000	190,000		µg/m³	1600	6/14/2012 8:25 AM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	6/14/2012 8:25 AM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	6/14/2012 8:25 AM
Surr: 4-Bromofluorobenzene	99.7	70-130		%REC	1600	6/14/2012 8:25 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 8:35:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-026	**Matrix:**	Air
Client Sample ID:	VA1457		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.54	0.10		%	1	6/18/2012 11:13 AM
Carbon Monoxide	ND	0.10	U	%	1	6/18/2012 11:13 AM
Methane	ND	0.50	U	%	1	6/18/2012 11:13 AM
Nitrogen	81	0.10		%	1	6/18/2012 11:13 AM
Oxygen	18	0.10		%	1	6/18/2012 11:13 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
1,1,2,2-Tetrachloroethane	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
1,1,2-Trichloroethane	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
1,1-Dichloroethane	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
1,1-Dichloroethene	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
1,2,4-Trichlorobenzene	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
1,2,4-Trimethylbenzene	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
1,2-Dibromoethane	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
1,2-Dichlorobenzene	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
1,2-Dichloroethane	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
1,2-Dichloropropane	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
1,3,5-Trimethylbenzene	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
1,3-Butadiene	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
1,3-Dichlorobenzene	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
1,4-Dichlorobenzene	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
2-Butanone	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
2-Hexanone	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
4-Methyl-2-pentanone	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Acetone	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Benzene	650,000	40,000		ppbv	40000	6/14/2012 12:02 AM
Benzyl chloride	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Bromodichloromethane	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Bromoform	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Bromomethane	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Carbon disulfide	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Carbon tetrachloride	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Chlorobenzene	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Chlorodibromomethane	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Chloroethane	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Chloroform	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Chloromethane	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
cis-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
cis-1,3-dichloropropene	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 8:35:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-026	**Matrix:**	Air
Client Sample ID:	VA1457		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,100,000	80,000		ppbv	40000	6/14/2012 12:02 AM
Dichlorodifluoromethane	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Ethyl acetate	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Ethylbenzene	ND	80,000	U	ppbv	40000	6/14/2012 12:02 AM
Heptane	710,000	40,000		ppbv	40000	6/14/2012 12:02 AM
Hexachlorobutadiene	ND	80,000	U	ppbv	40000	6/14/2012 12:02 AM
m,p-Xylene	ND	80,000	U	ppbv	40000	6/14/2012 12:02 AM
Methylene chloride	ND	200,000	U	ppbv	40000	6/14/2012 12:02 AM
n-Hexane	980,000	80,000		ppbv	40000	6/14/2012 12:02 AM
Naphthalene	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
o-Xylene	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Propylene	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Styrene	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
tert-Butyl Methyl Ether	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Tetrachloroethene	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Tetrahydrofuran	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Toluene	680,000	40,000		ppbv	40000	6/14/2012 12:02 AM
trans-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
trans-1,3-dichloropropene	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Trichloroethene	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Trichlorofluoromethane	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Vinyl acetate	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Vinyl chloride	ND	40,000	U	ppbv	40000	6/14/2012 12:02 AM
Xylenes, Total	ND	120,000	U	ppbv	40000	6/14/2012 12:02 AM
Surr: 4-Bromofluorobenzene	93.3	70-130		%REC	40000	6/14/2012 12:02 AM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	21,000,000	9,400,000		µg/m³	80000	6/12/2012 5:20 PM
C9-C10 Aromatic Hydrocarbons	ND	11,000,000	U	µg/m³	80000	6/12/2012 5:20 PM
C9-C12 Aliphatic Hydrocarbons	ND	15,000,000	U	µg/m³	80000	6/12/2012 5:20 PM
Surr: 4-Bromofluorobenzene	95.5	70-130		%REC	80000	6/12/2012 5:20 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 1:51:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-027	**Matrix:**	Air
Client Sample ID:	VA1458		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	1.2	0.10		%	1	6/18/2012 11:27 AM
Carbon Monoxide	ND	0.10	U	%	1	6/18/2012 11:27 AM
Methane	ND	0.50	U	%	1	6/18/2012 11:27 AM
Nitrogen	79	0.10		%	1	6/18/2012 11:27 AM
Oxygen	19	0.10		%	1	6/18/2012 11:27 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/14/2012 12:43 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/14/2012 12:43 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/14/2012 12:43 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/14/2012 12:43 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/14/2012 12:43 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/14/2012 12:43 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/14/2012 12:43 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	6/14/2012 12:43 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/14/2012 12:43 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/14/2012 12:43 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/14/2012 12:43 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/14/2012 12:43 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/14/2012 12:43 AM
1,3-Butadiene	ND	40	U	ppbv	40	6/14/2012 12:43 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/14/2012 12:43 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/14/2012 12:43 AM
2-Butanone	ND	40	U	ppbv	40	6/14/2012 12:43 AM
2-Hexanone	ND	40	U	ppbv	40	6/14/2012 12:43 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/14/2012 12:43 AM
Acetone	53	40		ppbv	40	6/14/2012 12:43 AM
Benzene	110	40		ppbv	40	6/14/2012 12:43 AM
Benzyl chloride	ND	40	U	ppbv	40	6/14/2012 12:43 AM
Bromodichloromethane	ND	40	U	ppbv	40	6/14/2012 12:43 AM
Bromoform	ND	40	U	ppbv	40	6/14/2012 12:43 AM
Bromomethane	ND	40	U	ppbv	40	6/14/2012 12:43 AM
Carbon disulfide	ND	40	U	ppbv	40	6/14/2012 12:43 AM
Carbon tetrachloride	ND	40	U	ppbv	40	6/14/2012 12:43 AM
Chlorobenzene	ND	40	U	ppbv	40	6/14/2012 12:43 AM
Chlorodibromomethane	ND	40	U	ppbv	40	6/14/2012 12:43 AM
Chloroethane	ND	40	U	ppbv	40	6/14/2012 12:43 AM
Chloroform	ND	40	U	ppbv	40	6/14/2012 12:43 AM
Chloromethane	ND	40	U	ppbv	40	6/14/2012 12:43 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/14/2012 12:43 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/14/2012 12:43 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 1:51:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-027	**Matrix:**	Air
Client Sample ID:	VA1458		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	420	80		ppbv	40	6/14/2012 12:43 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/14/2012 12:43 AM
Ethyl acetate	ND	40	U	ppbv	40	6/14/2012 12:43 AM
Ethylbenzene	ND	80	U	ppbv	40	6/14/2012 12:43 AM
Heptane	170	40		ppbv	40	6/14/2012 12:43 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/14/2012 12:43 AM
m,p-Xylene	ND	80	U	ppbv	40	6/14/2012 12:43 AM
Methylene chloride	ND	200	U	ppbv	40	6/14/2012 12:43 AM
n-Hexane	170	80		ppbv	40	6/14/2012 12:43 AM
Naphthalene	ND	40	U	ppbv	40	6/14/2012 12:43 AM
o-Xylene	ND	40	U	ppbv	40	6/14/2012 12:43 AM
Propylene	54	40		ppbv	40	6/14/2012 12:43 AM
Styrene	ND	40	U	ppbv	40	6/14/2012 12:43 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/14/2012 12:43 AM
Tetrachloroethene	ND	40	U	ppbv	40	6/14/2012 12:43 AM
Tetrahydrofuran	ND	40	U	ppbv	40	6/14/2012 12:43 AM
Toluene	180	40		ppbv	40	6/14/2012 12:43 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/14/2012 12:43 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/14/2012 12:43 AM
Trichloroethene	ND	40	U	ppbv	40	6/14/2012 12:43 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/14/2012 12:43 AM
Vinyl acetate	ND	40	U	ppbv	40	6/14/2012 12:43 AM
Vinyl chloride	ND	40	U	ppbv	40	6/14/2012 12:43 AM
Xylenes, Total	ND	120	U	ppbv	40	6/14/2012 12:43 AM
Surr: 4-Bromofluorobenzene	94.4	70-130		%REC	40	6/14/2012 12:43 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	15,000	4,700		µg/m³	40	6/14/2012 9:10 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	6/14/2012 9:10 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	6/14/2012 9:10 PM
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	40	6/14/2012 9:10 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 2:26:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-028	**Matrix:**	Air
Client Sample ID:	VA1459		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	1.4	0.10		%	1	6/18/2012 11:44 AM
Carbon Monoxide	ND	0.10	U	%	1	6/18/2012 11:44 AM
Methane	ND	0.50	U	%	1	6/18/2012 11:44 AM
Nitrogen	80	0.10		%	1	6/18/2012 11:44 AM
Oxygen	18	0.10		%	1	6/18/2012 11:44 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/14/2012 1:24 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/14/2012 1:24 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/14/2012 1:24 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/14/2012 1:24 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/14/2012 1:24 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/14/2012 1:24 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/14/2012 1:24 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	6/14/2012 1:24 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/14/2012 1:24 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/14/2012 1:24 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/14/2012 1:24 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/14/2012 1:24 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/14/2012 1:24 AM
1,3-Butadiene	ND	40	U	ppbv	40	6/14/2012 1:24 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/14/2012 1:24 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/14/2012 1:24 AM
2-Butanone	ND	40	U	ppbv	40	6/14/2012 1:24 AM
2-Hexanone	ND	40	U	ppbv	40	6/14/2012 1:24 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/14/2012 1:24 AM
Acetone	54	40		ppbv	40	6/14/2012 1:24 AM
Benzene	48	40		ppbv	40	6/14/2012 1:24 AM
Benzyl chloride	ND	40	U	ppbv	40	6/14/2012 1:24 AM
Bromodichloromethane	ND	40	U	ppbv	40	6/14/2012 1:24 AM
Bromoform	ND	40	U	ppbv	40	6/14/2012 1:24 AM
Bromomethane	ND	40	U	ppbv	40	6/14/2012 1:24 AM
Carbon disulfide	ND	40	U	ppbv	40	6/14/2012 1:24 AM
Carbon tetrachloride	ND	40	U	ppbv	40	6/14/2012 1:24 AM
Chlorobenzene	ND	40	U	ppbv	40	6/14/2012 1:24 AM
Chlorodibromomethane	ND	40	U	ppbv	40	6/14/2012 1:24 AM
Chloroethane	ND	40	U	ppbv	40	6/14/2012 1:24 AM
Chloroform	ND	40	U	ppbv	40	6/14/2012 1:24 AM
Chloromethane	ND	40	U	ppbv	40	6/14/2012 1:24 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/14/2012 1:24 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/14/2012 1:24 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 2:26:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-028	**Matrix:**	Air
Client Sample ID:	VA1459		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	300	80		ppbv	40	6/14/2012 1:24 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/14/2012 1:24 AM
Ethyl acetate	ND	40	U	ppbv	40	6/14/2012 1:24 AM
Ethylbenzene	ND	80	U	ppbv	40	6/14/2012 1:24 AM
Heptane	97	40		ppbv	40	6/14/2012 1:24 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/14/2012 1:24 AM
m,p-Xylene	ND	80	U	ppbv	40	6/14/2012 1:24 AM
Methylene chloride	ND	200	U	ppbv	40	6/14/2012 1:24 AM
n-Hexane	59	80	J	ppbv	40	6/14/2012 1:24 AM
Naphthalene	ND	40	U	ppbv	40	6/14/2012 1:24 AM
o-Xylene	ND	40	U	ppbv	40	6/14/2012 1:24 AM
Propylene	ND	40	U	ppbv	40	6/14/2012 1:24 AM
Styrene	ND	40	U	ppbv	40	6/14/2012 1:24 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/14/2012 1:24 AM
Tetrachloroethene	ND	40	U	ppbv	40	6/14/2012 1:24 AM
Tetrahydrofuran	ND	40	U	ppbv	40	6/14/2012 1:24 AM
Toluene	150	40		ppbv	40	6/14/2012 1:24 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/14/2012 1:24 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/14/2012 1:24 AM
Trichloroethene	ND	40	U	ppbv	40	6/14/2012 1:24 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/14/2012 1:24 AM
Vinyl acetate	ND	40	U	ppbv	40	6/14/2012 1:24 AM
Vinyl chloride	ND	40	U	ppbv	40	6/14/2012 1:24 AM
Xylenes, Total	ND	120	U	ppbv	40	6/14/2012 1:24 AM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	40	6/14/2012 1:24 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	18,000	4,700		µg/m³	40	6/14/2012 9:53 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	6/14/2012 9:53 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	6/14/2012 9:53 PM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	40	6/14/2012 9:53 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 3:14:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-029	**Matrix:**	Air
Client Sample ID:	VA1460		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	1.4	0.10		%	1	6/18/2012 11:59 AM
Carbon Monoxide	ND	0.10	U	%	1	6/18/2012 11:59 AM
Methane	ND	0.50	U	%	1	6/18/2012 11:59 AM
Nitrogen	80	0.10		%	1	6/18/2012 11:59 AM
Oxygen	18	0.10		%	1	6/18/2012 11:59 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/14/2012 2:05 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/14/2012 2:05 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/14/2012 2:05 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/14/2012 2:05 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/14/2012 2:05 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/14/2012 2:05 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/14/2012 2:05 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	6/14/2012 2:05 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/14/2012 2:05 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/14/2012 2:05 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/14/2012 2:05 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/14/2012 2:05 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/14/2012 2:05 AM
1,3-Butadiene	ND	40	U	ppbv	40	6/14/2012 2:05 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/14/2012 2:05 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/14/2012 2:05 AM
2-Butanone	ND	40	U	ppbv	40	6/14/2012 2:05 AM
2-Hexanone	ND	40	U	ppbv	40	6/14/2012 2:05 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Acetone	48	40		ppbv	40	6/14/2012 2:05 AM
Benzene	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Benzyl chloride	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Bromodichloromethane	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Bromoform	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Bromomethane	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Carbon disulfide	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Carbon tetrachloride	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Chlorobenzene	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Chlorodibromomethane	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Chloroethane	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Chloroform	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Chloromethane	ND	40	U	ppbv	40	6/14/2012 2:05 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/14/2012 2:05 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/14/2012 2:05 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 3:14:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-029	**Matrix:**	Air
Client Sample ID:	VA1460		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	250	80		ppbv	40	6/14/2012 2:05 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Ethyl acetate	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Ethylbenzene	ND	80	U	ppbv	40	6/14/2012 2:05 AM
Heptane	64	40		ppbv	40	6/14/2012 2:05 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/14/2012 2:05 AM
m,p-Xylene	ND	80	U	ppbv	40	6/14/2012 2:05 AM
Methylene chloride	ND	200	U	ppbv	40	6/14/2012 2:05 AM
n-Hexane	56	80	J	ppbv	40	6/14/2012 2:05 AM
Naphthalene	ND	40	U	ppbv	40	6/14/2012 2:05 AM
o-Xylene	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Propylene	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Styrene	ND	40	U	ppbv	40	6/14/2012 2:05 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Tetrachloroethene	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Tetrahydrofuran	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Toluene	78	40		ppbv	40	6/14/2012 2:05 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/14/2012 2:05 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Trichloroethene	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Vinyl acetate	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Vinyl chloride	ND	40	U	ppbv	40	6/14/2012 2:05 AM
Xylenes, Total	ND	120	U	ppbv	40	6/14/2012 2:05 AM
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	40	6/14/2012 2:05 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	11,000	4,700		µg/m³	40	6/14/2012 10:36 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	6/14/2012 10:36 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	6/14/2012 10:36 PM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	40	6/14/2012 10:36 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 8:27:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-030	**Matrix:**	Air
Client Sample ID:	VA1461		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.38	0.10		%	1	6/18/2012 12:18 PM
Carbon Monoxide	ND	0.10	U	%	1	6/18/2012 12:18 PM
Methane	ND	0.50	U	%	1	6/18/2012 12:18 PM
Nitrogen	79	0.10		%	1	6/18/2012 12:18 PM
Oxygen	20	0.10		%	1	6/18/2012 12:18 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
1,1,2,2-Tetrachloroethane	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
1,1,2-Trichloroethane	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
1,1-Dichloroethane	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
1,1-Dichloroethene	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
1,2,4-Trichlorobenzene	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
1,2,4-Trimethylbenzene	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
1,2-Dibromoethane	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
1,2-Dichlorobenzene	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
1,2-Dichloroethane	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
1,2-Dichloropropane	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
1,3,5-Trimethylbenzene	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
1,3-Butadiene	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
1,3-Dichlorobenzene	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
1,4-Dichlorobenzene	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
2-Butanone	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
2-Hexanone	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
4-Methyl-2-pentanone	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Acetone	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Benzene	27,000	1,600		ppbv	1600	6/14/2012 2:48 AM
Benzyl chloride	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Bromodichloromethane	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Bromoform	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Bromomethane	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Carbon disulfide	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Carbon tetrachloride	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Chlorobenzene	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Chlorodibromomethane	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Chloroethane	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Chloroform	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Chloromethane	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
cis-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
cis-1,3-dichloropropene	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 8:27:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-030	**Matrix:**	Air
Client Sample ID:	VA1461		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	54,000	3,200		ppbv	1600	6/14/2012 2:48 AM
Dichlorodifluoromethane	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Ethyl acetate	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Ethylbenzene	ND	3,200	U	ppbv	1600	6/14/2012 2:48 AM
Heptane	21,000	1,600		ppbv	1600	6/14/2012 2:48 AM
Hexachlorobutadiene	ND	3,200	U	ppbv	1600	6/14/2012 2:48 AM
m,p-Xylene	2,000	3,200	J	ppbv	1600	6/14/2012 2:48 AM
Methylene chloride	ND	8,000	U	ppbv	1600	6/14/2012 2:48 AM
n-Hexane	43,000	3,200		ppbv	1600	6/14/2012 2:48 AM
Naphthalene	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
o-Xylene	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Propylene	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Styrene	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
tert-Butyl Methyl Ether	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Tetrachloroethene	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Tetrahydrofuran	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Toluene	27,000	1,600		ppbv	1600	6/14/2012 2:48 AM
trans-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
trans-1,3-dichloropropene	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Trichloroethene	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Trichlorofluoromethane	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Vinyl acetate	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Vinyl chloride	ND	1,600	U	ppbv	1600	6/14/2012 2:48 AM
Xylenes, Total	2,000	4,800	J	ppbv	1600	6/14/2012 2:48 AM
Surr: 4-Bromofluorobenzene	92.9	70-130		%REC	1600	6/14/2012 2:48 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,600,000	190,000		µg/m³	1600	6/14/2012 11:20 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	6/14/2012 11:20 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	6/14/2012 11:20 PM
Surr: 4-Bromofluorobenzene	98.3	70-130		%REC	1600	6/14/2012 11:20 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 9:14:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-031	**Matrix:**	Air
Client Sample ID:	VA1462		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	1.2	0.10		%	1	6/18/2012 1:05 PM
Carbon Monoxide	ND	0.10	U	%	1	6/18/2012 1:05 PM
Methane	ND	0.50	U	%	1	6/18/2012 1:05 PM
Nitrogen	80	0.10		%	1	6/18/2012 1:05 PM
Oxygen	18	0.10		%	1	6/18/2012 1:05 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
1,1,2,2-Tetrachloroethane	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
1,1,2-Trichloroethane	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
1,1-Dichloroethane	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
1,1-Dichloroethene	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
1,2,4-Trichlorobenzene	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
1,2,4-Trimethylbenzene	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
1,2-Dibromoethane	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
1,2-Dichlorobenzene	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
1,2-Dichloroethane	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
1,2-Dichloropropane	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
1,3,5-Trimethylbenzene	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
1,3-Butadiene	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
1,3-Dichlorobenzene	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
1,4-Dichlorobenzene	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
2-Butanone	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
2-Hexanone	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
4-Methyl-2-pentanone	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Acetone	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Benzene	130,000	40,000		ppbv	40000	6/13/2012 5:00 PM
Benzyl chloride	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Bromodichloromethane	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Bromoform	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Bromomethane	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Carbon disulfide	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Carbon tetrachloride	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Chlorobenzene	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Chlorodibromomethane	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Chloroethane	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Chloroform	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Chloromethane	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
cis-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
cis-1,3-dichloropropene	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 9:14:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-031	**Matrix:**	Air
Client Sample ID:	VA1462		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	710,000	80,000		ppbv	40000	6/13/2012 5:00 PM
Dichlorodifluoromethane	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Ethyl acetate	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Ethylbenzene	ND	80,000	U	ppbv	40000	6/13/2012 5:00 PM
Heptane	590,000	40,000		ppbv	40000	6/13/2012 5:00 PM
Hexachlorobutadiene	ND	80,000	U	ppbv	40000	6/13/2012 5:00 PM
m,p-Xylene	50,000	80,000	J	ppbv	40000	6/13/2012 5:00 PM
Methylene chloride	ND	200,000	U	ppbv	40000	6/13/2012 5:00 PM
n-Hexane	390,000	80,000		ppbv	40000	6/13/2012 5:00 PM
Naphthalene	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
o-Xylene	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Propylene	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Styrene	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
tert-Butyl Methyl Ether	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Tetrachloroethene	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Tetrahydrofuran	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Toluene	390,000	40,000		ppbv	40000	6/13/2012 5:00 PM
trans-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
trans-1,3-dichloropropene	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Trichloroethene	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Trichlorofluoromethane	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Vinyl acetate	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Vinyl chloride	ND	40,000	U	ppbv	40000	6/13/2012 5:00 PM
Xylenes, Total	50,000	120,000	J	ppbv	40000	6/13/2012 5:00 PM
Surr: 4-Bromofluorobenzene	95.1	70-130		%REC	40000	6/13/2012 5:00 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	8,700,000	4,700,000		µg/m³	40000	6/15/2012 12:03 AM
C9-C10 Aromatic Hydrocarbons	ND	5,300,000	U	µg/m³	40000	6/15/2012 12:03 AM
C9-C12 Aliphatic Hydrocarbons	ND	7,600,000	U	µg/m³	40000	6/15/2012 12:03 AM
Surr: 4-Bromofluorobenzene	94.4	70-130		%REC	40000	6/15/2012 12:03 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 9:14:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-032	**Matrix:**	Air
Client Sample ID:	VA1463		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	1.0	0.10		%	1	6/18/2012 1:20 PM
Carbon Monoxide	ND	0.10	U	%	1	6/18/2012 1:20 PM
Methane	ND	0.50	U	%	1	6/18/2012 1:20 PM
Nitrogen	79	0.10		%	1	6/18/2012 1:20 PM
Oxygen	18	0.10		%	1	6/18/2012 1:20 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
1,1,2,2-Tetrachloroethane	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
1,1,2-Trichloroethane	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
1,1-Dichloroethane	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
1,1-Dichloroethene	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
1,2,4-Trichlorobenzene	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
1,2,4-Trimethylbenzene	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
1,2-Dibromoethane	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
1,2-Dichlorobenzene	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
1,2-Dichloroethane	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
1,2-Dichloropropane	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
1,3,5-Trimethylbenzene	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
1,3-Butadiene	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
1,3-Dichlorobenzene	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
1,4-Dichlorobenzene	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
2-Butanone	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
2-Hexanone	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
4-Methyl-2-pentanone	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Acetone	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Benzene	74,000	40,000		ppbv	40000	6/13/2012 5:41 PM
Benzyl chloride	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Bromodichloromethane	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Bromoform	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Bromomethane	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Carbon disulfide	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Carbon tetrachloride	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Chlorobenzene	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Chlorodibromomethane	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Chloroethane	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Chloroform	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Chloromethane	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
cis-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
cis-1,3-dichloropropene	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 9:14:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-032	**Matrix:**	Air
Client Sample ID:	VA1463		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	360,000	80,000		ppbv	40000	6/13/2012 5:41 PM
Dichlorodifluoromethane	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Ethyl acetate	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Ethylbenzene	ND	80,000	U	ppbv	40000	6/13/2012 5:41 PM
Heptane	300,000	40,000		ppbv	40000	6/13/2012 5:41 PM
Hexachlorobutadiene	ND	80,000	U	ppbv	40000	6/13/2012 5:41 PM
m,p-Xylene	ND	80,000	U	ppbv	40000	6/13/2012 5:41 PM
Methylene chloride	ND	200,000	U	ppbv	40000	6/13/2012 5:41 PM
n-Hexane	190,000	80,000		ppbv	40000	6/13/2012 5:41 PM
Naphthalene	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
o-Xylene	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Propylene	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Styrene	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
tert-Butyl Methyl Ether	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Tetrachloroethene	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Tetrahydrofuran	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Toluene	210,000	40,000		ppbv	40000	6/13/2012 5:41 PM
trans-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
trans-1,3-dichloropropene	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Trichloroethene	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Trichlorofluoromethane	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Vinyl acetate	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Vinyl chloride	ND	40,000	U	ppbv	40000	6/13/2012 5:41 PM
Xylenes, Total	ND	120,000	U	ppbv	40000	6/13/2012 5:41 PM
Surr: 4-Bromofluorobenzene	96.2	70-130		%REC	40000	6/13/2012 5:41 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	6,700,000	2,300,000		µg/m³	20000	6/15/2012 10:44 AM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	6/15/2012 10:44 AM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	6/15/2012 10:44 AM
Surr: 4-Bromofluorobenzene	95.9	70-130		%REC	20000	6/15/2012 10:44 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 10:25:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-033	**Matrix:**	Air
Client Sample ID:	VA1464		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	2.9	0.10		%	1	6/18/2012 1:47 PM
Carbon Monoxide	ND	0.10	U	%	1	6/18/2012 1:47 PM
Methane	ND	0.50	U	%	1	6/18/2012 1:47 PM
Nitrogen	82	0.10		%	1	6/18/2012 1:47 PM
Oxygen	13	0.10		%	1	6/18/2012 1:47 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
1,1,2,2-Tetrachloroethane	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
1,1,2-Trichloroethane	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
1,1-Dichloroethane	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
1,1-Dichloroethene	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
1,2,4-Trichlorobenzene	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
1,2,4-Trimethylbenzene	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
1,2-Dibromoethane	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
1,2-Dichlorobenzene	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
1,2-Dichloroethane	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
1,2-Dichloropropane	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
1,3,5-Trimethylbenzene	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
1,3-Butadiene	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
1,3-Dichlorobenzene	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
1,4-Dichlorobenzene	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
2-Butanone	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
2-Hexanone	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
4-Methyl-2-pentanone	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
Acetone	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
Benzene	790,000	40,000		ppbv	40000	6/13/2012 6:22 PM
Benzyl chloride	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
Bromodichloromethane	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
Bromoform	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
Bromomethane	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
Carbon disulfide	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
Carbon tetrachloride	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
Chlorobenzene	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
Chlorodibromomethane	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
Chloroethane	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
Chloroform	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
Chloromethane	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
cis-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
cis-1,3-dichloropropene	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/30/2012 10:25:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-033	**Matrix:**	Air
Client Sample ID:	VA1464		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,500,000	160,000		ppbv	80000	6/15/2012 4:55 AM
Dichlorodifluoromethane	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
Ethyl acetate	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
Ethylbenzene	ND	80,000	U	ppbv	40000	6/13/2012 6:22 PM
Heptane	1,200,000	40,000		ppbv	40000	6/13/2012 6:22 PM
Hexachlorobutadiene	ND	80,000	U	ppbv	40000	6/13/2012 6:22 PM
m,p-Xylene	43,000	80,000	J	ppbv	40000	6/13/2012 6:22 PM
Methylene chloride	ND	200,000	U	ppbv	40000	6/13/2012 6:22 PM
n-Hexane	2,000,000	160,000		ppbv	80000	6/15/2012 4:55 AM
Naphthalene	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
o-Xylene	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
Propylene	42,000	40,000		ppbv	40000	6/13/2012 6:22 PM
Styrene	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
tert-Butyl Methyl Ether	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
Tetrachloroethene	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
Tetrahydrofuran	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
Toluene	670,000	40,000		ppbv	40000	6/13/2012 6:22 PM
trans-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
trans-1,3-dichloropropene	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
Trichloroethene	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
Trichlorofluoromethane	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
Vinyl acetate	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
Vinyl chloride	ND	40,000	U	ppbv	40000	6/13/2012 6:22 PM
Xylenes, Total	43,000	120,000	J	ppbv	40000	6/13/2012 6:22 PM
Surr: 4-Bromofluorobenzene	96.5	70-130		%REC	40000	6/13/2012 6:22 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	43,000,000	9,400,000		µg/m³	80000	6/15/2012 1:29 AM
C9-C10 Aromatic Hydrocarbons	ND	11,000,000	U	µg/m³	80000	6/15/2012 1:29 AM
C9-C12 Aliphatic Hydrocarbons	ND	15,000,000	U	µg/m³	80000	6/15/2012 1:29 AM
Surr: 4-Bromofluorobenzene	94.4	70-130		%REC	80000	6/15/2012 1:29 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 8:31:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-034	**Matrix:**	Air
Client Sample ID:	VA1484		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.40	0.10		%	1	6/18/2012 2:02 PM
Carbon Monoxide	ND	0.10	U	%	1	6/18/2012 2:02 PM
Methane	ND	0.50	U	%	1	6/18/2012 2:02 PM
Nitrogen	79	0.10		%	1	6/18/2012 2:02 PM
Oxygen	20	0.10		%	1	6/18/2012 2:02 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/13/2012 7:06 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/13/2012 7:06 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/13/2012 7:06 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/13/2012 7:06 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/13/2012 7:06 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/13/2012 7:06 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/13/2012 7:06 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/13/2012 7:06 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/13/2012 7:06 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/13/2012 7:06 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/13/2012 7:06 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/13/2012 7:06 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/13/2012 7:06 PM
1,3-Butadiene	ND	800	U	ppbv	800	6/13/2012 7:06 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/13/2012 7:06 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/13/2012 7:06 PM
2-Butanone	ND	800	U	ppbv	800	6/13/2012 7:06 PM
2-Hexanone	ND	800	U	ppbv	800	6/13/2012 7:06 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Acetone	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Benzene	5,800	800		ppbv	800	6/13/2012 7:06 PM
Benzyl chloride	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Bromodichloromethane	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Bromoform	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Bromomethane	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Carbon disulfide	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Carbon tetrachloride	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Chlorobenzene	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Chlorodibromomethane	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Chloroethane	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Chloroform	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Chloromethane	ND	800	U	ppbv	800	6/13/2012 7:06 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/13/2012 7:06 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/13/2012 7:06 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 8:31:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-034	**Matrix:**	Air
Client Sample ID:	VA1484		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	8,700	1,600		ppbv	800	6/13/2012 7:06 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Ethyl acetate	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Ethylbenzene	ND	1,600	U	ppbv	800	6/13/2012 7:06 PM
Heptane	7,800	800		ppbv	800	6/13/2012 7:06 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/13/2012 7:06 PM
m,p-Xylene	1,200	1,600	J	ppbv	800	6/13/2012 7:06 PM
Methylene chloride	ND	4,000	U	ppbv	800	6/13/2012 7:06 PM
n-Hexane	8,300	1,600		ppbv	800	6/13/2012 7:06 PM
Naphthalene	ND	800	U	ppbv	800	6/13/2012 7:06 PM
o-Xylene	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Propylene	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Styrene	ND	800	U	ppbv	800	6/13/2012 7:06 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Tetrachloroethene	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Tetrahydrofuran	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Toluene	11,000	800		ppbv	800	6/13/2012 7:06 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/13/2012 7:06 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Trichloroethene	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Vinyl acetate	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Vinyl chloride	ND	800	U	ppbv	800	6/13/2012 7:06 PM
Xylenes, Total	1,200	2,400	J	ppbv	800	6/13/2012 7:06 PM
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	800	6/13/2012 7:06 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	370,000	94,000		µg/m³	800	6/15/2012 2:14 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	6/15/2012 2:14 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	6/15/2012 2:14 AM
Surr: 4-Bromofluorobenzene	97.6	70-130		%REC	800	6/15/2012 2:14 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 9:04:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-035	**Matrix:**	Air
Client Sample ID:	VA1485		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.56	0.10		%	1	6/18/2012 2:17 PM
Carbon Monoxide	ND	0.10	U	%	1	6/18/2012 2:17 PM
Methane	ND	0.50	U	%	1	6/18/2012 2:17 PM
Nitrogen	78	0.10		%	1	6/18/2012 2:17 PM
Oxygen	20	0.10		%	1	6/18/2012 2:17 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/13/2012 7:51 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/13/2012 7:51 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/13/2012 7:51 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/13/2012 7:51 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/13/2012 7:51 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/13/2012 7:51 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/13/2012 7:51 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/13/2012 7:51 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/13/2012 7:51 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/13/2012 7:51 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/13/2012 7:51 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/13/2012 7:51 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/13/2012 7:51 PM
1,3-Butadiene	ND	800	U	ppbv	800	6/13/2012 7:51 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/13/2012 7:51 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/13/2012 7:51 PM
2-Butanone	ND	800	U	ppbv	800	6/13/2012 7:51 PM
2-Hexanone	ND	800	U	ppbv	800	6/13/2012 7:51 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Acetone	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Benzene	4,000	800		ppbv	800	6/13/2012 7:51 PM
Benzyl chloride	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Bromodichloromethane	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Bromoform	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Bromomethane	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Carbon disulfide	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Carbon tetrachloride	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Chlorobenzene	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Chlorodibromomethane	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Chloroethane	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Chloroform	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Chloromethane	ND	800	U	ppbv	800	6/13/2012 7:51 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/13/2012 7:51 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/13/2012 7:51 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 9:04:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-035	**Matrix:**	Air
Client Sample ID:	VA1485		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	5,300	1,600		ppbv	800	6/13/2012 7:51 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Ethyl acetate	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Ethylbenzene	ND	1,600	U	ppbv	800	6/13/2012 7:51 PM
Heptane	5,500	800		ppbv	800	6/13/2012 7:51 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/13/2012 7:51 PM
m,p-Xylene	1,100	1,600	J	ppbv	800	6/13/2012 7:51 PM
Methylene chloride	ND	4,000	U	ppbv	800	6/13/2012 7:51 PM
n-Hexane	4,600	1,600		ppbv	800	6/13/2012 7:51 PM
Naphthalene	ND	800	U	ppbv	800	6/13/2012 7:51 PM
o-Xylene	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Propylene	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Styrene	ND	800	U	ppbv	800	6/13/2012 7:51 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Tetrachloroethene	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Tetrahydrofuran	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Toluene	9,000	800		ppbv	800	6/13/2012 7:51 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/13/2012 7:51 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Trichloroethene	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Vinyl acetate	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Vinyl chloride	ND	800	U	ppbv	800	6/13/2012 7:51 PM
Xylenes, Total	1,100	2,400	J	ppbv	800	6/13/2012 7:51 PM
Surr: 4-Bromofluorobenzene	93.7	70-130		%REC	800	6/13/2012 7:51 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	220,000	94,000		µg/m³	800	6/15/2012 3:00 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	6/15/2012 3:00 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	6/15/2012 3:00 AM
Surr: 4-Bromofluorobenzene	97.2	70-130		%REC	800	6/15/2012 3:00 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 9:41:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-036	**Matrix:**	Air
Client Sample ID:	VA1486		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.12	0.10		%	1	6/18/2012 2:31 PM
Carbon Monoxide	ND	0.10	U	%	1	6/18/2012 2:31 PM
Methane	ND	0.50	U	%	1	6/18/2012 2:31 PM
Nitrogen	78	0.10		%	1	6/18/2012 2:31 PM
Oxygen	20	0.10		%	1	6/18/2012 2:31 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/13/2012 8:35 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/13/2012 8:35 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/13/2012 8:35 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/13/2012 8:35 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/13/2012 8:35 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/13/2012 8:35 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/13/2012 8:35 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/13/2012 8:35 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/13/2012 8:35 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/13/2012 8:35 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/13/2012 8:35 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/13/2012 8:35 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/13/2012 8:35 PM
1,3-Butadiene	ND	800	U	ppbv	800	6/13/2012 8:35 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/13/2012 8:35 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/13/2012 8:35 PM
2-Butanone	ND	800	U	ppbv	800	6/13/2012 8:35 PM
2-Hexanone	ND	800	U	ppbv	800	6/13/2012 8:35 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Acetone	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Benzene	6,000	800		ppbv	800	6/13/2012 8:35 PM
Benzyl chloride	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Bromodichloromethane	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Bromoform	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Bromomethane	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Carbon disulfide	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Carbon tetrachloride	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Chlorobenzene	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Chlorodibromomethane	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Chloroethane	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Chloroform	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Chloromethane	ND	800	U	ppbv	800	6/13/2012 8:35 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/13/2012 8:35 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/13/2012 8:35 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 9:41:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-036	**Matrix:**	Air
Client Sample ID:	VA1486		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	9,500	1,600		ppbv	800	6/13/2012 8:35 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Ethyl acetate	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Ethylbenzene	ND	1,600	U	ppbv	800	6/13/2012 8:35 PM
Heptane	8,800	800		ppbv	800	6/13/2012 8:35 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/13/2012 8:35 PM
m,p-Xylene	1,700	1,600		ppbv	800	6/13/2012 8:35 PM
Methylene chloride	ND	4,000	U	ppbv	800	6/13/2012 8:35 PM
n-Hexane	7,500	1,600		ppbv	800	6/13/2012 8:35 PM
Naphthalene	ND	800	U	ppbv	800	6/13/2012 8:35 PM
o-Xylene	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Propylene	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Styrene	ND	800	U	ppbv	800	6/13/2012 8:35 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Tetrachloroethene	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Tetrahydrofuran	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Toluene	13,000	800		ppbv	800	6/13/2012 8:35 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/13/2012 8:35 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Trichloroethene	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Vinyl acetate	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Vinyl chloride	ND	800	U	ppbv	800	6/13/2012 8:35 PM
Xylenes, Total	1,700	2,400	J	ppbv	800	6/13/2012 8:35 PM
Surr: 4-Bromofluorobenzene	94.2	70-130		%REC	800	6/13/2012 8:35 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	360,000	94,000		µg/m³	800	6/15/2012 10:01 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	6/15/2012 10:01 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	6/15/2012 10:01 AM
Surr: 4-Bromofluorobenzene	93.2	70-130		%REC	800	6/15/2012 10:01 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 9:41:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-037	**Matrix:**	Air
Client Sample ID:	VA1487		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.10	0.10		%	1	6/18/2012 2:50 PM
Carbon Monoxide	ND	0.10	U	%	1	6/18/2012 2:50 PM
Methane	ND	0.50	U	%	1	6/18/2012 2:50 PM
Nitrogen	79	0.10		%	1	6/18/2012 2:50 PM
Oxygen	20	0.10		%	1	6/18/2012 2:50 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/14/2012 3:32 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/14/2012 3:32 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/14/2012 3:32 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/14/2012 3:32 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/14/2012 3:32 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/14/2012 3:32 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/14/2012 3:32 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/14/2012 3:32 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/14/2012 3:32 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/14/2012 3:32 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/14/2012 3:32 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/14/2012 3:32 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/14/2012 3:32 AM
1,3-Butadiene	ND	800	U	ppbv	800	6/14/2012 3:32 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/14/2012 3:32 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/14/2012 3:32 AM
2-Butanone	ND	800	U	ppbv	800	6/14/2012 3:32 AM
2-Hexanone	ND	800	U	ppbv	800	6/14/2012 3:32 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Acetone	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Benzene	7,100	800		ppbv	800	6/14/2012 3:32 AM
Benzyl chloride	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Bromodichloromethane	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Bromoform	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Bromomethane	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Carbon disulfide	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Carbon tetrachloride	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Chlorobenzene	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Chlorodibromomethane	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Chloroethane	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Chloroform	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Chloromethane	ND	800	U	ppbv	800	6/14/2012 3:32 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/14/2012 3:32 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/14/2012 3:32 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 9:41:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-037	**Matrix:**	Air
Client Sample ID:	VA1487		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	13,000	1,600		ppbv	800	6/14/2012 3:32 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Ethyl acetate	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Ethylbenzene	ND	1,600	U	ppbv	800	6/14/2012 3:32 AM
Heptane	10,000	800		ppbv	800	6/14/2012 3:32 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/14/2012 3:32 AM
m,p-Xylene	1,600	1,600	J	ppbv	800	6/14/2012 3:32 AM
Methylene chloride	ND	4,000	U	ppbv	800	6/14/2012 3:32 AM
n-Hexane	9,900	1,600		ppbv	800	6/14/2012 3:32 AM
Naphthalene	ND	800	U	ppbv	800	6/14/2012 3:32 AM
o-Xylene	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Propylene	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Styrene	ND	800	U	ppbv	800	6/14/2012 3:32 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Tetrachloroethene	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Tetrahydrofuran	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Toluene	14,000	800		ppbv	800	6/14/2012 3:32 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/14/2012 3:32 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Trichloroethene	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Vinyl acetate	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Vinyl chloride	ND	800	U	ppbv	800	6/14/2012 3:32 AM
Xylenes, Total	1,600	2,400	J	ppbv	800	6/14/2012 3:32 AM
Surr: 4-Bromofluorobenzene	93.4	70-130		%REC	800	6/14/2012 3:32 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	400,000	94,000		µg/m³	800	6/13/2012 4:16 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	6/13/2012 4:16 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	6/13/2012 4:16 PM
Surr: 4-Bromofluorobenzene	94.5	70-130		%REC	800	6/13/2012 4:16 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 10:36:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-038	**Matrix:**	Air
Client Sample ID:	VA1488		

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	6/18/2012 3:04 PM
Carbon Monoxide	ND	0.10	U	%	1	6/18/2012 3:04 PM
Methane	ND	0.50	U	%	1	6/18/2012 3:04 PM
Nitrogen	79	0.10		%	1	6/18/2012 3:04 PM
Oxygen	20	0.10		%	1	6/18/2012 3:04 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/14/2012 7:30 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/14/2012 7:30 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/14/2012 7:30 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/14/2012 7:30 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/14/2012 7:30 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/14/2012 7:30 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/14/2012 7:30 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/14/2012 7:30 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/14/2012 7:30 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/14/2012 7:30 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/14/2012 7:30 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/14/2012 7:30 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/14/2012 7:30 PM
1,3-Butadiene	ND	800	U	ppbv	800	6/14/2012 7:30 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/14/2012 7:30 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/14/2012 7:30 PM
2-Butanone	ND	800	U	ppbv	800	6/14/2012 7:30 PM
2-Hexanone	ND	800	U	ppbv	800	6/14/2012 7:30 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/14/2012 7:30 PM
Acetone	3,200	800		ppbv	800	6/14/2012 7:30 PM
Benzene	7,400	800		ppbv	800	6/14/2012 7:30 PM
Benzyl chloride	ND	800	U	ppbv	800	6/14/2012 7:30 PM
Bromodichloromethane	ND	800	U	ppbv	800	6/14/2012 7:30 PM
Bromoform	ND	800	U	ppbv	800	6/14/2012 7:30 PM
Bromomethane	ND	800	U	ppbv	800	6/14/2012 7:30 PM
Carbon disulfide	ND	800	U	ppbv	800	6/14/2012 7:30 PM
Carbon tetrachloride	ND	800	U	ppbv	800	6/14/2012 7:30 PM
Chlorobenzene	ND	800	U	ppbv	800	6/14/2012 7:30 PM
Chlorodibromomethane	ND	800	U	ppbv	800	6/14/2012 7:30 PM
Chloroethane	ND	800	U	ppbv	800	6/14/2012 7:30 PM
Chloroform	ND	800	U	ppbv	800	6/14/2012 7:30 PM
Chloromethane	ND	800	U	ppbv	800	6/14/2012 7:30 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/14/2012 7:30 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/14/2012 7:30 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 10:36:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-038	**Matrix:**	Air
Client Sample ID:	VA1488		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	19,000	1,600		ppbv	800	6/14/2012 7:30 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/14/2012 7:30 PM
Ethyl acetate	ND	800	U	ppbv	800	6/14/2012 7:30 PM
Ethylbenzene	ND	1,600	U	ppbv	800	6/14/2012 7:30 PM
Heptane	17,000	800		ppbv	800	6/14/2012 7:30 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/14/2012 7:30 PM
m,p-Xylene	2,000	1,600		ppbv	800	6/14/2012 7:30 PM
Methylene chloride	ND	4,000	U	ppbv	800	6/14/2012 7:30 PM
n-Hexane	11,000	1,600		ppbv	800	6/14/2012 7:30 PM
Naphthalene	ND	800	U	ppbv	800	6/14/2012 7:30 PM
o-Xylene	ND	800	U	ppbv	800	6/14/2012 7:30 PM
Propylene	ND	800	U	ppbv	800	6/14/2012 7:30 PM
Styrene	ND	800	U	ppbv	800	6/14/2012 7:30 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/14/2012 7:30 PM
Tetrachloroethene	ND	800	U	ppbv	800	6/14/2012 7:30 PM
Tetrahydrofuran	ND	800	U	ppbv	800	6/14/2012 7:30 PM
Toluene	17,000	800		ppbv	800	6/14/2012 7:30 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/14/2012 7:30 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/14/2012 7:30 PM
Trichloroethene	ND	800	U	ppbv	800	6/14/2012 7:30 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/14/2012 7:30 PM
Vinyl acetate	ND	800	U	ppbv	800	6/14/2012 7:30 PM
Vinyl chloride	ND	800	U	ppbv	800	6/14/2012 7:30 PM
Xylenes, Total	2,000	2,400	J	ppbv	800	6/14/2012 7:30 PM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	800	6/14/2012 7:30 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	330,000	94,000		µg/m³	800	6/14/2012 2:57 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	6/14/2012 2:57 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	6/14/2012 2:57 AM
Surr: 4-Bromofluorobenzene	98.6	70-130		%REC	800	6/14/2012 2:57 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 11:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-039	**Matrix:**	Air
Client Sample ID:	VA1489		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.15	0.10		%	1	6/18/2012 3:21 PM
Carbon Monoxide	ND	0.10	U	%	1	6/18/2012 3:21 PM
Methane	ND	0.50	U	%	1	6/18/2012 3:21 PM
Nitrogen	79	0.10		%	1	6/18/2012 3:21 PM
Oxygen	20	0.10		%	1	6/18/2012 3:21 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
2-Butanone	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
2-Hexanone	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Acetone	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Benzene	18,000	8,000		ppbv	8000	6/14/2012 8:56 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Bromoform	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Bromomethane	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Chloroethane	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Chloroform	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Chloromethane	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 11:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-039	**Matrix:**	Air
Client Sample ID:	VA1489		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	42,000	16,000		ppbv	8000	6/14/2012 8:56 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	6/14/2012 8:56 PM
Heptane	20,000	8,000		ppbv	8000	6/14/2012 8:56 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	6/14/2012 8:56 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	6/14/2012 8:56 PM
Methylene chloride	ND	40,000	U	ppbv	8000	6/14/2012 8:56 PM
n-Hexane	34,000	16,000		ppbv	8000	6/14/2012 8:56 PM
Naphthalene	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
o-Xylene	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Propylene	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Styrene	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Toluene	36,000	8,000		ppbv	8000	6/14/2012 8:56 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Trichloroethene	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	6/14/2012 8:56 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	6/14/2012 8:56 PM
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	8000	6/14/2012 8:56 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	3,400,000	940,000		µg/m³	8000	6/15/2012 11:28 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	6/15/2012 11:28 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	6/15/2012 11:28 AM
Surr: 4-Bromofluorobenzene	95.6	70-130		%REC	8000	6/15/2012 11:28 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 12:31:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-040	**Matrix:**	Air
Client Sample ID:	VA1490		

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	6/18/2012 3:37 PM
Carbon Monoxide	ND	0.10	U	%	1	6/18/2012 3:37 PM
Methane	ND	0.50	U	%	1	6/18/2012 3:37 PM
Nitrogen	79	0.10		%	1	6/18/2012 3:37 PM
Oxygen	19	0.10		%	1	6/18/2012 3:37 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/14/2012 9:40 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/14/2012 9:40 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/14/2012 9:40 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/14/2012 9:40 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/14/2012 9:40 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/14/2012 9:40 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/14/2012 9:40 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/14/2012 9:40 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/14/2012 9:40 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/14/2012 9:40 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/14/2012 9:40 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/14/2012 9:40 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/14/2012 9:40 PM
1,3-Butadiene	ND	800	U	ppbv	800	6/14/2012 9:40 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/14/2012 9:40 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/14/2012 9:40 PM
2-Butanone	ND	800	U	ppbv	800	6/14/2012 9:40 PM
2-Hexanone	ND	800	U	ppbv	800	6/14/2012 9:40 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Acetone	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Benzene	4,800	800		ppbv	800	6/14/2012 9:40 PM
Benzyl chloride	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Bromodichloromethane	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Bromoform	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Bromomethane	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Carbon disulfide	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Carbon tetrachloride	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Chlorobenzene	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Chlorodibromomethane	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Chloroethane	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Chloroform	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Chloromethane	ND	800	U	ppbv	800	6/14/2012 9:40 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/14/2012 9:40 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/14/2012 9:40 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 12:31:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-040	**Matrix:**	Air
Client Sample ID:	VA1490		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	15,000	1,600		ppbv	800	6/14/2012 9:40 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Ethyl acetate	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Ethylbenzene	ND	1,600	U	ppbv	800	6/14/2012 9:40 PM
Heptane	6,200	800		ppbv	800	6/14/2012 9:40 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/14/2012 9:40 PM
m,p-Xylene	900	1,600	J	ppbv	800	6/14/2012 9:40 PM
Methylene chloride	ND	4,000	U	ppbv	800	6/14/2012 9:40 PM
n-Hexane	15,000	1,600		ppbv	800	6/14/2012 9:40 PM
Naphthalene	ND	800	U	ppbv	800	6/14/2012 9:40 PM
o-Xylene	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Propylene	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Styrene	ND	800	U	ppbv	800	6/14/2012 9:40 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Tetrachloroethene	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Tetrahydrofuran	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Toluene	8,100	800		ppbv	800	6/14/2012 9:40 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/14/2012 9:40 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Trichloroethene	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Vinyl acetate	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Vinyl chloride	ND	800	U	ppbv	800	6/14/2012 9:40 PM
Xylenes, Total	900	2,400	J	ppbv	800	6/14/2012 9:40 PM
Surr: 4-Bromofluorobenzene	97.9	70-130		%REC	800	6/14/2012 9:40 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,700,000	190,000		µg/m³	1600	6/15/2012 3:57 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	6/15/2012 3:57 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	6/15/2012 3:57 PM
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	1600	6/15/2012 3:57 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 8:58:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-041	**Matrix:**	Air
Client Sample ID:	VA1504		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.75	0.10		%	1	6/19/2012 10:46 AM
Carbon Monoxide	ND	0.10	U	%	1	6/19/2012 10:46 AM
Methane	ND	0.50	U	%	1	6/19/2012 10:46 AM
Nitrogen	79	0.10		%	1	6/19/2012 10:46 AM
Oxygen	20	0.10		%	1	6/19/2012 10:46 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/14/2012 10:24 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/14/2012 10:24 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/14/2012 10:24 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/14/2012 10:24 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/14/2012 10:24 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/14/2012 10:24 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/14/2012 10:24 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/14/2012 10:24 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/14/2012 10:24 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/14/2012 10:24 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/14/2012 10:24 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/14/2012 10:24 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/14/2012 10:24 PM
1,3-Butadiene	ND	800	U	ppbv	800	6/14/2012 10:24 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/14/2012 10:24 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/14/2012 10:24 PM
2-Butanone	ND	800	U	ppbv	800	6/14/2012 10:24 PM
2-Hexanone	ND	800	U	ppbv	800	6/14/2012 10:24 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Acetone	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Benzene	1,700	800		ppbv	800	6/14/2012 10:24 PM
Benzyl chloride	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Bromodichloromethane	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Bromoform	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Bromomethane	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Carbon disulfide	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Carbon tetrachloride	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Chlorobenzene	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Chlorodibromomethane	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Chloroethane	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Chloroform	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Chloromethane	ND	800	U	ppbv	800	6/14/2012 10:24 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/14/2012 10:24 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/14/2012 10:24 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 8:58:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-041	**Matrix:**	Air
Client Sample ID:	VA1504		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	4,000	1,600		ppbv	800	6/14/2012 10:24 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Ethyl acetate	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Ethylbenzene	900	1,600	J	ppbv	800	6/14/2012 10:24 PM
Heptane	6,900	800		ppbv	800	6/14/2012 10:24 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/14/2012 10:24 PM
m,p-Xylene	2,500	1,600		ppbv	800	6/14/2012 10:24 PM
Methylene chloride	ND	4,000	U	ppbv	800	6/14/2012 10:24 PM
n-Hexane	1,700	1,600		ppbv	800	6/14/2012 10:24 PM
Naphthalene	ND	800	U	ppbv	800	6/14/2012 10:24 PM
o-Xylene	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Propylene	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Styrene	ND	800	U	ppbv	800	6/14/2012 10:24 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Tetrachloroethene	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Tetrahydrofuran	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Toluene	12,000	800		ppbv	800	6/14/2012 10:24 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/14/2012 10:24 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Trichloroethene	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Vinyl acetate	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Vinyl chloride	ND	800	U	ppbv	800	6/14/2012 10:24 PM
Xylenes, Total	2,500	2,400		ppbv	800	6/14/2012 10:24 PM
Surr: 4-Bromofluorobenzene	93.8	70-130		%REC	800	6/14/2012 10:24 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	240,000	94,000		µg/m³	800	6/15/2012 4:43 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	6/15/2012 4:43 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	6/15/2012 4:43 PM
Surr: 4-Bromofluorobenzene	97.6	70-130		%REC	800	6/15/2012 4:43 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 9:30:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-042	**Matrix:**	Air
Client Sample ID:	VA1505		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.59	0.10		%	1	6/19/2012 11:09 AM
Carbon Monoxide	ND	0.10	U	%	1	6/19/2012 11:09 AM
Methane	ND	0.50	U	%	1	6/19/2012 11:09 AM
Nitrogen	79	0.10		%	1	6/19/2012 11:09 AM
Oxygen	20	0.10		%	1	6/19/2012 11:09 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/14/2012 11:09 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/14/2012 11:09 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/14/2012 11:09 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/14/2012 11:09 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/14/2012 11:09 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/14/2012 11:09 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/14/2012 11:09 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/14/2012 11:09 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/14/2012 11:09 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/14/2012 11:09 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/14/2012 11:09 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/14/2012 11:09 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/14/2012 11:09 PM
1,3-Butadiene	ND	800	U	ppbv	800	6/14/2012 11:09 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/14/2012 11:09 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/14/2012 11:09 PM
2-Butanone	ND	800	U	ppbv	800	6/14/2012 11:09 PM
2-Hexanone	ND	800	U	ppbv	800	6/14/2012 11:09 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/14/2012 11:09 PM
Acetone	910	800		ppbv	800	6/14/2012 11:09 PM
Benzene	3,400	800		ppbv	800	6/14/2012 11:09 PM
Benzyl chloride	ND	800	U	ppbv	800	6/14/2012 11:09 PM
Bromodichloromethane	ND	800	U	ppbv	800	6/14/2012 11:09 PM
Bromoform	ND	800	U	ppbv	800	6/14/2012 11:09 PM
Bromomethane	ND	800	U	ppbv	800	6/14/2012 11:09 PM
Carbon disulfide	ND	800	U	ppbv	800	6/14/2012 11:09 PM
Carbon tetrachloride	ND	800	U	ppbv	800	6/14/2012 11:09 PM
Chlorobenzene	ND	800	U	ppbv	800	6/14/2012 11:09 PM
Chlorodibromomethane	ND	800	U	ppbv	800	6/14/2012 11:09 PM
Chloroethane	ND	800	U	ppbv	800	6/14/2012 11:09 PM
Chloroform	ND	800	U	ppbv	800	6/14/2012 11:09 PM
Chloromethane	ND	800	U	ppbv	800	6/14/2012 11:09 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/14/2012 11:09 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/14/2012 11:09 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 9:30:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-042	**Matrix:**	Air
Client Sample ID:	VA1505		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	8,200	1,600		ppbv	800	6/14/2012 11:09 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/14/2012 11:09 PM
Ethyl acetate	ND	800	U	ppbv	800	6/14/2012 11:09 PM
Ethylbenzene	1,800	1,600		ppbv	800	6/14/2012 11:09 PM
Heptane	15,000	800		ppbv	800	6/14/2012 11:09 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/14/2012 11:09 PM
m,p-Xylene	4,800	1,600		ppbv	800	6/14/2012 11:09 PM
Methylene chloride	ND	4,000	U	ppbv	800	6/14/2012 11:09 PM
n-Hexane	3,000	1,600		ppbv	800	6/14/2012 11:09 PM
Naphthalene	ND	800	U	ppbv	800	6/14/2012 11:09 PM
o-Xylene	1,300	800		ppbv	800	6/14/2012 11:09 PM
Propylene	ND	800	U	ppbv	800	6/14/2012 11:09 PM
Styrene	ND	800	U	ppbv	800	6/14/2012 11:09 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/14/2012 11:09 PM
Tetrachloroethene	ND	800	U	ppbv	800	6/14/2012 11:09 PM
Tetrahydrofuran	ND	800	U	ppbv	800	6/14/2012 11:09 PM
Toluene	26,000	800		ppbv	800	6/14/2012 11:09 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/14/2012 11:09 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/14/2012 11:09 PM
Trichloroethene	ND	800	U	ppbv	800	6/14/2012 11:09 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/14/2012 11:09 PM
Vinyl acetate	ND	800	U	ppbv	800	6/14/2012 11:09 PM
Vinyl chloride	ND	800	U	ppbv	800	6/14/2012 11:09 PM
Xylenes, Total	6,200	2,400		ppbv	800	6/14/2012 11:09 PM
Surr: 4-Bromofluorobenzene	95.5	70-130		%REC	800	6/14/2012 11:09 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	440,000	190,000		µg/m³	1600	6/15/2012 5:28 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	6/15/2012 5:28 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	6/15/2012 5:28 PM
Surr: 4-Bromofluorobenzene	95.7	70-130		%REC	1600	6/15/2012 5:28 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 10:13:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-043	**Matrix:**	Air
Client Sample ID:	VA1506		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.089	0.10	J	%	1	6/19/2012 11:23 AM
Carbon Monoxide	ND	0.10	U	%	1	6/19/2012 11:23 AM
Methane	ND	0.50	U	%	1	6/19/2012 11:23 AM
Nitrogen	78	0.10		%	1	6/19/2012 11:23 AM
Oxygen	20	0.10		%	1	6/19/2012 11:23 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/14/2012 11:53 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/14/2012 11:53 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/14/2012 11:53 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/14/2012 11:53 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/14/2012 11:53 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/14/2012 11:53 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/14/2012 11:53 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/14/2012 11:53 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/14/2012 11:53 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/14/2012 11:53 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/14/2012 11:53 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/14/2012 11:53 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/14/2012 11:53 PM
1,3-Butadiene	ND	800	U	ppbv	800	6/14/2012 11:53 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/14/2012 11:53 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/14/2012 11:53 PM
2-Butanone	820	800		ppbv	800	6/14/2012 11:53 PM
2-Hexanone	ND	800	U	ppbv	800	6/14/2012 11:53 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/14/2012 11:53 PM
Acetone	1,600	800		ppbv	800	6/14/2012 11:53 PM
Benzene	6,400	800		ppbv	800	6/14/2012 11:53 PM
Benzyl chloride	ND	800	U	ppbv	800	6/14/2012 11:53 PM
Bromodichloromethane	ND	800	U	ppbv	800	6/14/2012 11:53 PM
Bromoform	ND	800	U	ppbv	800	6/14/2012 11:53 PM
Bromomethane	ND	800	U	ppbv	800	6/14/2012 11:53 PM
Carbon disulfide	ND	800	U	ppbv	800	6/14/2012 11:53 PM
Carbon tetrachloride	ND	800	U	ppbv	800	6/14/2012 11:53 PM
Chlorobenzene	ND	800	U	ppbv	800	6/14/2012 11:53 PM
Chlorodibromomethane	ND	800	U	ppbv	800	6/14/2012 11:53 PM
Chloroethane	ND	800	U	ppbv	800	6/14/2012 11:53 PM
Chloroform	ND	800	U	ppbv	800	6/14/2012 11:53 PM
Chloromethane	ND	800	U	ppbv	800	6/14/2012 11:53 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/14/2012 11:53 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/14/2012 11:53 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 10:13:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-043	**Matrix:**	Air
Client Sample ID:	VA1506		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	20,000	1,600		ppbv	800	6/14/2012 11:53 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/14/2012 11:53 PM
Ethyl acetate	ND	800	U	ppbv	800	6/14/2012 11:53 PM
Ethylbenzene	3,000	1,600		ppbv	800	6/14/2012 11:53 PM
Heptane	29,000	800		ppbv	800	6/14/2012 11:53 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/14/2012 11:53 PM
m,p-Xylene	8,000	1,600		ppbv	800	6/14/2012 11:53 PM
Methylene chloride	ND	4,000	U	ppbv	800	6/14/2012 11:53 PM
n-Hexane	6,500	1,600		ppbv	800	6/14/2012 11:53 PM
Naphthalene	ND	800	U	ppbv	800	6/14/2012 11:53 PM
o-Xylene	2,200	800		ppbv	800	6/14/2012 11:53 PM
Propylene	ND	800	U	ppbv	800	6/14/2012 11:53 PM
Styrene	ND	800	U	ppbv	800	6/14/2012 11:53 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/14/2012 11:53 PM
Tetrachloroethene	ND	800	U	ppbv	800	6/14/2012 11:53 PM
Tetrahydrofuran	ND	800	U	ppbv	800	6/14/2012 11:53 PM
Toluene	70,000	8,000		ppbv	8000	6/15/2012 6:38 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/14/2012 11:53 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/14/2012 11:53 PM
Trichloroethene	ND	800	U	ppbv	800	6/14/2012 11:53 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/14/2012 11:53 PM
Vinyl acetate	ND	800	U	ppbv	800	6/14/2012 11:53 PM
Vinyl chloride	ND	800	U	ppbv	800	6/14/2012 11:53 PM
Xylenes, Total	10,000	2,400		ppbv	800	6/14/2012 11:53 PM
Surr: 4-Bromofluorobenzene	93.5	70-130		%REC	800	6/14/2012 11:53 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,100,000	190,000		µg/m³	1600	6/15/2012 6:58 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	6/15/2012 6:58 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	6/15/2012 6:58 PM
Surr: 4-Bromofluorobenzene	96.4	70-130		%REC	1600	6/15/2012 6:58 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 10:54:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-044	**Matrix:**	Air
Client Sample ID:	VA1507		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.12	0.10		%	1	6/19/2012 11:38 AM
Carbon Monoxide	ND	0.10	U	%	1	6/19/2012 11:38 AM
Methane	ND	0.50	U	%	1	6/19/2012 11:38 AM
Nitrogen	79	0.10		%	1	6/19/2012 11:38 AM
Oxygen	20	0.10		%	1	6/19/2012 11:38 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/15/2012 12:38 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/15/2012 12:38 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/15/2012 12:38 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/15/2012 12:38 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/15/2012 12:38 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/15/2012 12:38 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/15/2012 12:38 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/15/2012 12:38 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/15/2012 12:38 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/15/2012 12:38 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/15/2012 12:38 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/15/2012 12:38 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/15/2012 12:38 AM
1,3-Butadiene	ND	800	U	ppbv	800	6/15/2012 12:38 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/15/2012 12:38 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/15/2012 12:38 AM
2-Butanone	ND	800	U	ppbv	800	6/15/2012 12:38 AM
2-Hexanone	ND	800	U	ppbv	800	6/15/2012 12:38 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/15/2012 12:38 AM
Acetone	860	800		ppbv	800	6/15/2012 12:38 AM
Benzene	3,800	800		ppbv	800	6/15/2012 12:38 AM
Benzyl chloride	ND	800	U	ppbv	800	6/15/2012 12:38 AM
Bromodichloromethane	ND	800	U	ppbv	800	6/15/2012 12:38 AM
Bromoform	ND	800	U	ppbv	800	6/15/2012 12:38 AM
Bromomethane	ND	800	U	ppbv	800	6/15/2012 12:38 AM
Carbon disulfide	ND	800	U	ppbv	800	6/15/2012 12:38 AM
Carbon tetrachloride	ND	800	U	ppbv	800	6/15/2012 12:38 AM
Chlorobenzene	ND	800	U	ppbv	800	6/15/2012 12:38 AM
Chlorodibromomethane	ND	800	U	ppbv	800	6/15/2012 12:38 AM
Chloroethane	ND	800	U	ppbv	800	6/15/2012 12:38 AM
Chloroform	ND	800	U	ppbv	800	6/15/2012 12:38 AM
Chloromethane	ND	800	U	ppbv	800	6/15/2012 12:38 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/15/2012 12:38 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/15/2012 12:38 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 10:54:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-044	**Matrix:**	Air
Client Sample ID:	VA1507		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	10,000	1,600		ppbv	800	6/15/2012 12:38 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/15/2012 12:38 AM
Ethyl acetate	ND	800	U	ppbv	800	6/15/2012 12:38 AM
Ethylbenzene	2,100	1,600		ppbv	800	6/15/2012 12:38 AM
Heptane	16,000	800		ppbv	800	6/15/2012 12:38 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/15/2012 12:38 AM
m,p-Xylene	5,600	1,600		ppbv	800	6/15/2012 12:38 AM
Methylene chloride	ND	4,000	U	ppbv	800	6/15/2012 12:38 AM
n-Hexane	3,200	1,600		ppbv	800	6/15/2012 12:38 AM
Naphthalene	ND	800	U	ppbv	800	6/15/2012 12:38 AM
o-Xylene	1,600	800		ppbv	800	6/15/2012 12:38 AM
Propylene	ND	800	U	ppbv	800	6/15/2012 12:38 AM
Styrene	ND	800	U	ppbv	800	6/15/2012 12:38 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/15/2012 12:38 AM
Tetrachloroethene	ND	800	U	ppbv	800	6/15/2012 12:38 AM
Tetrahydrofuran	ND	800	U	ppbv	800	6/15/2012 12:38 AM
Toluene	29,000	800		ppbv	800	6/15/2012 12:38 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/15/2012 12:38 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/15/2012 12:38 AM
Trichloroethene	ND	800	U	ppbv	800	6/15/2012 12:38 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/15/2012 12:38 AM
Vinyl acetate	ND	800	U	ppbv	800	6/15/2012 12:38 AM
Vinyl chloride	ND	800	U	ppbv	800	6/15/2012 12:38 AM
Xylenes, Total	7,200	2,400		ppbv	800	6/15/2012 12:38 AM
Surr: 4-Bromofluorobenzene	93.8	70-130		%REC	800	6/15/2012 12:38 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	590,000	190,000		µg/m³	1600	6/15/2012 7:43 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	6/15/2012 7:43 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	6/15/2012 7:43 PM
Surr: 4-Bromofluorobenzene	96.7	70-130		%REC	1600	6/15/2012 7:43 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 10:54:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-045	**Matrix:**	Air
Client Sample ID:	VA1508		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.091	0.10	J	%	1	6/19/2012 11:55 AM
Carbon Monoxide	ND	0.10	U	%	1	6/19/2012 11:55 AM
Methane	ND	0.50	U	%	1	6/19/2012 11:55 AM
Nitrogen	79	0.10		%	1	6/19/2012 11:55 AM
Oxygen	20	0.10		%	1	6/19/2012 11:55 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/15/2012 1:22 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/15/2012 1:22 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/15/2012 1:22 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/15/2012 1:22 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/15/2012 1:22 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/15/2012 1:22 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/15/2012 1:22 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/15/2012 1:22 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/15/2012 1:22 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/15/2012 1:22 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/15/2012 1:22 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/15/2012 1:22 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/15/2012 1:22 AM
1,3-Butadiene	ND	800	U	ppbv	800	6/15/2012 1:22 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/15/2012 1:22 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/15/2012 1:22 AM
2-Butanone	ND	800	U	ppbv	800	6/15/2012 1:22 AM
2-Hexanone	ND	800	U	ppbv	800	6/15/2012 1:22 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/15/2012 1:22 AM
Acetone	1,100	800		ppbv	800	6/15/2012 1:22 AM
Benzene	4,200	800		ppbv	800	6/15/2012 1:22 AM
Benzyl chloride	ND	800	U	ppbv	800	6/15/2012 1:22 AM
Bromodichloromethane	ND	800	U	ppbv	800	6/15/2012 1:22 AM
Bromoform	ND	800	U	ppbv	800	6/15/2012 1:22 AM
Bromomethane	ND	800	U	ppbv	800	6/15/2012 1:22 AM
Carbon disulfide	ND	800	U	ppbv	800	6/15/2012 1:22 AM
Carbon tetrachloride	ND	800	U	ppbv	800	6/15/2012 1:22 AM
Chlorobenzene	ND	800	U	ppbv	800	6/15/2012 1:22 AM
Chlorodibromomethane	ND	800	U	ppbv	800	6/15/2012 1:22 AM
Chloroethane	ND	800	U	ppbv	800	6/15/2012 1:22 AM
Chloroform	ND	800	U	ppbv	800	6/15/2012 1:22 AM
Chloromethane	ND	800	U	ppbv	800	6/15/2012 1:22 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/15/2012 1:22 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/15/2012 1:22 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 10:54:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-045	**Matrix:**	Air
Client Sample ID:	VA1508		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	12,000	1,600		ppbv	800	6/15/2012 1:22 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/15/2012 1:22 AM
Ethyl acetate	ND	800	U	ppbv	800	6/15/2012 1:22 AM
Ethylbenzene	2,500	1,600		ppbv	800	6/15/2012 1:22 AM
Heptane	18,000	800		ppbv	800	6/15/2012 1:22 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/15/2012 1:22 AM
m,p-Xylene	6,700	1,600		ppbv	800	6/15/2012 1:22 AM
Methylene chloride	ND	4,000	U	ppbv	800	6/15/2012 1:22 AM
n-Hexane	3,700	1,600		ppbv	800	6/15/2012 1:22 AM
Naphthalene	ND	800	U	ppbv	800	6/15/2012 1:22 AM
o-Xylene	1,800	800		ppbv	800	6/15/2012 1:22 AM
Propylene	ND	800	U	ppbv	800	6/15/2012 1:22 AM
Styrene	ND	800	U	ppbv	800	6/15/2012 1:22 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/15/2012 1:22 AM
Tetrachloroethene	ND	800	U	ppbv	800	6/15/2012 1:22 AM
Tetrahydrofuran	ND	800	U	ppbv	800	6/15/2012 1:22 AM
Toluene	33,000	800		ppbv	800	6/15/2012 1:22 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/15/2012 1:22 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/15/2012 1:22 AM
Trichloroethene	ND	800	U	ppbv	800	6/15/2012 1:22 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/15/2012 1:22 AM
Vinyl acetate	ND	800	U	ppbv	800	6/15/2012 1:22 AM
Vinyl chloride	ND	800	U	ppbv	800	6/15/2012 1:22 AM
Xylenes, Total	8,600	2,400		ppbv	800	6/15/2012 1:22 AM
Surr: 4-Bromofluorobenzene	92.7	70-130		%REC	800	6/15/2012 1:22 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	640,000	190,000		µg/m³	1600	6/15/2012 8:29 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	6/15/2012 8:29 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	6/15/2012 8:29 PM
Surr: 4-Bromofluorobenzene	97.1	70-130		%REC	1600	6/15/2012 8:29 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 11:50:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-046	**Matrix:**	Air
Client Sample ID:	VA1509		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.13	0.10		%	1	6/19/2012 12:10 PM
Carbon Monoxide	ND	0.10	U	%	1	6/19/2012 12:10 PM
Methane	ND	0.50	U	%	1	6/19/2012 12:10 PM
Nitrogen	79	0.10		%	1	6/19/2012 12:10 PM
Oxygen	20	0.10		%	1	6/19/2012 12:10 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	6/15/2012 7:22 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	6/15/2012 7:22 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	6/15/2012 7:22 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	6/15/2012 7:22 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	6/15/2012 7:22 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	6/15/2012 7:22 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	6/15/2012 7:22 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	6/15/2012 7:22 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	6/15/2012 7:22 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	6/15/2012 7:22 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	6/15/2012 7:22 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	6/15/2012 7:22 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	6/15/2012 7:22 PM
1,3-Butadiene	ND	800	U	ppbv	800	6/15/2012 7:22 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	6/15/2012 7:22 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	6/15/2012 7:22 PM
2-Butanone	ND	800	U	ppbv	800	6/15/2012 7:22 PM
2-Hexanone	ND	800	U	ppbv	800	6/15/2012 7:22 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	6/15/2012 7:22 PM
Acetone	820	800		ppbv	800	6/15/2012 7:22 PM
Benzene	2,500	800		ppbv	800	6/15/2012 7:22 PM
Benzyl chloride	ND	800	U	ppbv	800	6/15/2012 7:22 PM
Bromodichloromethane	ND	800	U	ppbv	800	6/15/2012 7:22 PM
Bromoform	ND	800	U	ppbv	800	6/15/2012 7:22 PM
Bromomethane	ND	800	U	ppbv	800	6/15/2012 7:22 PM
Carbon disulfide	ND	800	U	ppbv	800	6/15/2012 7:22 PM
Carbon tetrachloride	ND	800	U	ppbv	800	6/15/2012 7:22 PM
Chlorobenzene	ND	800	U	ppbv	800	6/15/2012 7:22 PM
Chlorodibromomethane	ND	800	U	ppbv	800	6/15/2012 7:22 PM
Chloroethane	ND	800	U	ppbv	800	6/15/2012 7:22 PM
Chloroform	ND	800	U	ppbv	800	6/15/2012 7:22 PM
Chloromethane	ND	800	U	ppbv	800	6/15/2012 7:22 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	6/15/2012 7:22 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	6/15/2012 7:22 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 11:50:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-046	**Matrix:**	Air
Client Sample ID:	VA1509		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	7,400	1,600		ppbv	800	6/15/2012 7:22 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	6/15/2012 7:22 PM
Ethyl acetate	ND	800	U	ppbv	800	6/15/2012 7:22 PM
Ethylbenzene	1,600	1,600	J	ppbv	800	6/15/2012 7:22 PM
Heptane	10,000	800		ppbv	800	6/15/2012 7:22 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	6/15/2012 7:22 PM
m,p-Xylene	4,200	1,600		ppbv	800	6/15/2012 7:22 PM
Methylene chloride	ND	4,000	U	ppbv	800	6/15/2012 7:22 PM
n-Hexane	3,400	1,600		ppbv	800	6/15/2012 7:22 PM
Naphthalene	ND	800	U	ppbv	800	6/15/2012 7:22 PM
o-Xylene	1,200	800		ppbv	800	6/15/2012 7:22 PM
Propylene	ND	800	U	ppbv	800	6/15/2012 7:22 PM
Styrene	ND	800	U	ppbv	800	6/15/2012 7:22 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	6/15/2012 7:22 PM
Tetrachloroethene	ND	800	U	ppbv	800	6/15/2012 7:22 PM
Tetrahydrofuran	ND	800	U	ppbv	800	6/15/2012 7:22 PM
Toluene	20,000	800		ppbv	800	6/15/2012 7:22 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	6/15/2012 7:22 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	6/15/2012 7:22 PM
Trichloroethene	ND	800	U	ppbv	800	6/15/2012 7:22 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	6/15/2012 7:22 PM
Vinyl acetate	ND	800	U	ppbv	800	6/15/2012 7:22 PM
Vinyl chloride	ND	800	U	ppbv	800	6/15/2012 7:22 PM
Xylenes, Total	5,400	2,400		ppbv	800	6/15/2012 7:22 PM
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	800	6/15/2012 7:22 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	830,000	190,000		µg/m³	1600	6/15/2012 9:14 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	6/15/2012 9:14 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	6/15/2012 9:14 PM
Surr: 4-Bromofluorobenzene	96.4	70-130		%REC	1600	6/15/2012 9:14 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 12:32:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-047	**Matrix:**	Air
Client Sample ID:	VA1510		

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	6/19/2012 12:24 PM
Carbon Monoxide	ND	0.10	U	%	1	6/19/2012 12:24 PM
Methane	ND	0.50	U	%	1	6/19/2012 12:24 PM
Nitrogen	79	0.10		%	1	6/19/2012 12:24 PM
Oxygen	20	0.10		%	1	6/19/2012 12:24 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
2-Butanone	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
2-Hexanone	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Acetone	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Benzene	10,000	8,000		ppbv	8000	6/15/2012 2:45 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Bromoform	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Bromomethane	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Chloroethane	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Chloroform	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Chloromethane	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/31/2012 12:32:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-047	**Matrix:**	Air
Client Sample ID:	VA1510		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	40,000	16,000		ppbv	8000	6/15/2012 2:45 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	6/15/2012 2:45 AM
Heptane	33,000	8,000		ppbv	8000	6/15/2012 2:45 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	6/15/2012 2:45 AM
m,p-Xylene	14,000	16,000	J	ppbv	8000	6/15/2012 2:45 AM
Methylene chloride	ND	40,000	U	ppbv	8000	6/15/2012 2:45 AM
n-Hexane	28,000	16,000		ppbv	8000	6/15/2012 2:45 AM
Naphthalene	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
o-Xylene	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Propylene	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Styrene	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Toluene	67,000	8,000		ppbv	8000	6/15/2012 2:45 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Trichloroethene	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	6/15/2012 2:45 AM
Xylenes, Total	14,000	24,000	J	ppbv	8000	6/15/2012 2:45 AM
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	8000	6/15/2012 2:45 AM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	6,500,000	2,300,000		µg/m³	20000	6/15/2012 9:57 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	6/15/2012 9:57 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	6/15/2012 9:57 PM
Surr: 4-Bromofluorobenzene	92.9	70-130		%REC	20000	6/15/2012 9:57 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 8:23:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-048	**Matrix:**	Air
Client Sample ID:	VA1616		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.072	0.10	J	%	1	6/19/2012 12:47 PM
Carbon Monoxide	ND	0.10	U	%	1	6/19/2012 12:47 PM
Methane	ND	0.50	U	%	1	6/19/2012 12:47 PM
Nitrogen	79	0.10		%	1	6/19/2012 12:47 PM
Oxygen	21	0.10		%	1	6/19/2012 12:47 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
1,1,2,2-Tetrachloroethane	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
1,1,2-Trichloroethane	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
1,1-Dichloroethane	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
1,1-Dichloroethene	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
1,2,4-Trichlorobenzene	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
1,2,4-Trimethylbenzene	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
1,2-Dibromoethane	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
1,2-Dichlorobenzene	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
1,2-Dichloroethane	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
1,2-Dichloropropane	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
1,3,5-Trimethylbenzene	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
1,3-Butadiene	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
1,3-Dichlorobenzene	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
1,4-Dichlorobenzene	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
2-Butanone	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
2-Hexanone	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
4-Methyl-2-pentanone	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
Acetone	16	8.0		ppbv	8	6/18/2012 6:06 PM
Benzene	9.6	8.0		ppbv	8	6/18/2012 6:06 PM
Benzyl chloride	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
Bromodichloromethane	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
Bromoform	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
Bromomethane	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
Carbon disulfide	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
Carbon tetrachloride	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
Chlorobenzene	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
Chlorodibromomethane	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
Chloroethane	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
Chloroform	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
Chloromethane	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
cis-1,2-Dichloroethene	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
cis-1,3-dichloropropene	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 8:23:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-048	**Matrix:**	Air
Client Sample ID:	VA1616		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	50	16		ppbv	8	6/18/2012 6:06 PM
Dichlorodifluoromethane	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
Ethyl acetate	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
Ethylbenzene	ND	16	U	ppbv	8	6/18/2012 6:06 PM
Heptane	21	8.0		ppbv	8	6/18/2012 6:06 PM
Hexachlorobutadiene	ND	16	U	ppbv	8	6/18/2012 6:06 PM
m,p-Xylene	10	16	J	ppbv	8	6/18/2012 6:06 PM
Methylene chloride	ND	40	U	ppbv	8	6/18/2012 6:06 PM
n-Hexane	15	16	J	ppbv	8	6/18/2012 6:06 PM
Naphthalene	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
o-Xylene	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
Propylene	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
Styrene	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
tert-Butyl Methyl Ether	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
Tetrachloroethene	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
Tetrahydrofuran	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
Toluene	30	8.0		ppbv	8	6/18/2012 6:06 PM
trans-1,2-Dichloroethene	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
trans-1,3-dichloropropene	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
Trichloroethene	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
Trichlorofluoromethane	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
Vinyl acetate	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
Vinyl chloride	ND	8.0	U	ppbv	8	6/18/2012 6:06 PM
Xylenes, Total	10	24	J	ppbv	8	6/18/2012 6:06 PM
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	8	6/18/2012 6:06 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	4,300	940		µg/m³	8	6/21/2012 2:34 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100	U	µg/m³	8	6/21/2012 2:34 PM
C9-C12 Aliphatic Hydrocarbons	320	1,500	J	µg/m³	8	6/21/2012 2:34 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	8	6/21/2012 2:34 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 8:23:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-049	**Matrix:**	Air
Client Sample ID:	VA1617		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.063	0.10	J	%	1	6/19/2012 1:05 PM
Carbon Monoxide	ND	0.10	U	%	1	6/19/2012 1:05 PM
Methane	ND	0.50	U	%	1	6/19/2012 1:05 PM
Nitrogen	79	0.10		%	1	6/19/2012 1:05 PM
Oxygen	21	0.10		%	1	6/19/2012 1:05 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/15/2012 10:08 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/15/2012 10:08 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/15/2012 10:08 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/15/2012 10:08 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/15/2012 10:08 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/15/2012 10:08 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/15/2012 10:08 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	6/15/2012 10:08 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/15/2012 10:08 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/15/2012 10:08 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/15/2012 10:08 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/15/2012 10:08 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/15/2012 10:08 PM
1,3-Butadiene	ND	40	U	ppbv	40	6/15/2012 10:08 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/15/2012 10:08 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/15/2012 10:08 PM
2-Butanone	ND	40	U	ppbv	40	6/15/2012 10:08 PM
2-Hexanone	ND	40	U	ppbv	40	6/15/2012 10:08 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/15/2012 10:08 PM
Acetone	150	40		ppbv	40	6/15/2012 10:08 PM
Benzene	120	40		ppbv	40	6/15/2012 10:08 PM
Benzyl chloride	ND	40	U	ppbv	40	6/15/2012 10:08 PM
Bromodichloromethane	ND	40	U	ppbv	40	6/15/2012 10:08 PM
Bromoform	ND	40	U	ppbv	40	6/15/2012 10:08 PM
Bromomethane	ND	40	U	ppbv	40	6/15/2012 10:08 PM
Carbon disulfide	ND	40	U	ppbv	40	6/15/2012 10:08 PM
Carbon tetrachloride	ND	40	U	ppbv	40	6/15/2012 10:08 PM
Chlorobenzene	ND	40	U	ppbv	40	6/15/2012 10:08 PM
Chlorodibromomethane	ND	40	U	ppbv	40	6/15/2012 10:08 PM
Chloroethane	ND	40	U	ppbv	40	6/15/2012 10:08 PM
Chloroform	ND	40	U	ppbv	40	6/15/2012 10:08 PM
Chloromethane	ND	40	U	ppbv	40	6/15/2012 10:08 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/15/2012 10:08 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/15/2012 10:08 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 8:23:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-049	**Matrix:**	Air
Client Sample ID:	VA1617		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	460	80		ppbv	40	6/15/2012 10:08 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/15/2012 10:08 PM
Ethyl acetate	ND	40	U	ppbv	40	6/15/2012 10:08 PM
Ethylbenzene	ND	80	U	ppbv	40	6/15/2012 10:08 PM
Heptane	260	40		ppbv	40	6/15/2012 10:08 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/15/2012 10:08 PM
m,p-Xylene	96	80		ppbv	40	6/15/2012 10:08 PM
Methylene chloride	ND	200	U	ppbv	40	6/15/2012 10:08 PM
n-Hexane	120	80		ppbv	40	6/15/2012 10:08 PM
Naphthalene	ND	40	U	ppbv	40	6/15/2012 10:08 PM
o-Xylene	ND	40	U	ppbv	40	6/15/2012 10:08 PM
Propylene	ND	40	U	ppbv	40	6/15/2012 10:08 PM
Styrene	ND	40	U	ppbv	40	6/15/2012 10:08 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/15/2012 10:08 PM
Tetrachloroethene	ND	40	U	ppbv	40	6/15/2012 10:08 PM
Tetrahydrofuran	ND	40	U	ppbv	40	6/15/2012 10:08 PM
Toluene	510	40		ppbv	40	6/15/2012 10:08 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/15/2012 10:08 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/15/2012 10:08 PM
Trichloroethene	ND	40	U	ppbv	40	6/15/2012 10:08 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/15/2012 10:08 PM
Vinyl acetate	ND	40	U	ppbv	40	6/15/2012 10:08 PM
Vinyl chloride	ND	40	U	ppbv	40	6/15/2012 10:08 PM
Xylenes, Total	96	120	J	ppbv	40	6/15/2012 10:08 PM
Surr: 4-Bromofluorobenzene	96.9	70-130		%REC	40	6/15/2012 10:08 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	49,000	23,000		µg/m³	200	6/15/2012 11:37 PM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	6/15/2012 11:37 PM
C9-C12 Aliphatic Hydrocarbons	ND	38,000	U	µg/m³	200	6/15/2012 11:37 PM
Surr: 4-Bromofluorobenzene	99.2	70-130		%REC	200	6/15/2012 11:37 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 9:41:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-050	**Matrix:**	Air
Client Sample ID:	VA1618		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.10	0.10		%	1	6/19/2012 1:29 PM
Carbon Monoxide	ND	0.10	U	%	1	6/19/2012 1:29 PM
Methane	ND	0.50	U	%	1	6/19/2012 1:29 PM
Nitrogen	80	0.10		%	1	6/19/2012 1:29 PM
Oxygen	21	0.10		%	1	6/19/2012 1:29 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/15/2012 10:50 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/15/2012 10:50 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/15/2012 10:50 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/15/2012 10:50 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/15/2012 10:50 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/15/2012 10:50 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/15/2012 10:50 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	6/15/2012 10:50 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/15/2012 10:50 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/15/2012 10:50 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/15/2012 10:50 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/15/2012 10:50 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/15/2012 10:50 PM
1,3-Butadiene	ND	40	U	ppbv	40	6/15/2012 10:50 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/15/2012 10:50 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/15/2012 10:50 PM
2-Butanone	ND	40	U	ppbv	40	6/15/2012 10:50 PM
2-Hexanone	ND	40	U	ppbv	40	6/15/2012 10:50 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Acetone	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Benzene	64	40		ppbv	40	6/15/2012 10:50 PM
Benzyl chloride	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Bromodichloromethane	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Bromoform	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Bromomethane	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Carbon disulfide	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Carbon tetrachloride	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Chlorobenzene	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Chlorodibromomethane	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Chloroethane	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Chloroform	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Chloromethane	ND	40	U	ppbv	40	6/15/2012 10:50 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/15/2012 10:50 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/15/2012 10:50 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 9:41:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-050	**Matrix:**	Air
Client Sample ID:	VA1618		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	110	80		ppbv	40	6/15/2012 10:50 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Ethyl acetate	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Ethylbenzene	ND	80	U	ppbv	40	6/15/2012 10:50 PM
Heptane	40	40		ppbv	40	6/15/2012 10:50 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/15/2012 10:50 PM
m,p-Xylene	ND	80	U	ppbv	40	6/15/2012 10:50 PM
Methylene chloride	ND	200	U	ppbv	40	6/15/2012 10:50 PM
n-Hexane	ND	80	U	ppbv	40	6/15/2012 10:50 PM
Naphthalene	ND	40	U	ppbv	40	6/15/2012 10:50 PM
o-Xylene	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Propylene	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Styrene	ND	40	U	ppbv	40	6/15/2012 10:50 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Tetrachloroethene	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Tetrahydrofuran	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Toluene	200	40		ppbv	40	6/15/2012 10:50 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/15/2012 10:50 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Trichloroethene	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Vinyl acetate	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Vinyl chloride	ND	40	U	ppbv	40	6/15/2012 10:50 PM
Xylenes, Total	ND	120	U	ppbv	40	6/15/2012 10:50 PM
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	40	6/15/2012 10:50 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	99,000	23,000		µg/m³	200	6/16/2012 12:27 AM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	6/16/2012 12:27 AM
C9-C12 Aliphatic Hydrocarbons	ND	38,000	U	µg/m³	200	6/16/2012 12:27 AM
Surr: 4-Bromofluorobenzene	94.7	70-130		%REC	200	6/16/2012 12:27 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 10:27:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-051	**Matrix:**	Air
Client Sample ID:	VA1619		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.084	0.10	J	%	1	6/19/2012 2:35 PM
Carbon Monoxide	ND	0.10	U	%	1	6/19/2012 2:35 PM
Methane	ND	0.50	U	%	1	6/19/2012 2:35 PM
Nitrogen	79	0.10		%	1	6/19/2012 2:35 PM
Oxygen	20	0.10		%	1	6/19/2012 2:35 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/15/2012 11:31 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/15/2012 11:31 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/15/2012 11:31 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/15/2012 11:31 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/15/2012 11:31 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/15/2012 11:31 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/15/2012 11:31 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	6/15/2012 11:31 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/15/2012 11:31 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/15/2012 11:31 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/15/2012 11:31 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/15/2012 11:31 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/15/2012 11:31 PM
1,3-Butadiene	ND	40	U	ppbv	40	6/15/2012 11:31 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/15/2012 11:31 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/15/2012 11:31 PM
2-Butanone	ND	40	U	ppbv	40	6/15/2012 11:31 PM
2-Hexanone	ND	40	U	ppbv	40	6/15/2012 11:31 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/15/2012 11:31 PM
Acetone	85	40		ppbv	40	6/15/2012 11:31 PM
Benzene	82	40		ppbv	40	6/15/2012 11:31 PM
Benzyl chloride	ND	40	U	ppbv	40	6/15/2012 11:31 PM
Bromodichloromethane	ND	40	U	ppbv	40	6/15/2012 11:31 PM
Bromoform	ND	40	U	ppbv	40	6/15/2012 11:31 PM
Bromomethane	ND	40	U	ppbv	40	6/15/2012 11:31 PM
Carbon disulfide	ND	40	U	ppbv	40	6/15/2012 11:31 PM
Carbon tetrachloride	ND	40	U	ppbv	40	6/15/2012 11:31 PM
Chlorobenzene	ND	40	U	ppbv	40	6/15/2012 11:31 PM
Chlorodibromomethane	ND	40	U	ppbv	40	6/15/2012 11:31 PM
Chloroethane	ND	40	U	ppbv	40	6/15/2012 11:31 PM
Chloroform	ND	40	U	ppbv	40	6/15/2012 11:31 PM
Chloromethane	ND	40	U	ppbv	40	6/15/2012 11:31 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/15/2012 11:31 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/15/2012 11:31 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 10:27:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-051	**Matrix:**	Air
Client Sample ID:	VA1619		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	550	80		ppbv	40	6/15/2012 11:31 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/15/2012 11:31 PM
Ethyl acetate	ND	40	U	ppbv	40	6/15/2012 11:31 PM
Ethylbenzene	ND	80	U	ppbv	40	6/15/2012 11:31 PM
Heptane	190	40		ppbv	40	6/15/2012 11:31 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/15/2012 11:31 PM
m,p-Xylene	62	80	J	ppbv	40	6/15/2012 11:31 PM
Methylene chloride	ND	200	U	ppbv	40	6/15/2012 11:31 PM
n-Hexane	100	80		ppbv	40	6/15/2012 11:31 PM
Naphthalene	ND	40	U	ppbv	40	6/15/2012 11:31 PM
o-Xylene	ND	40	U	ppbv	40	6/15/2012 11:31 PM
Propylene	ND	40	U	ppbv	40	6/15/2012 11:31 PM
Styrene	ND	40	U	ppbv	40	6/15/2012 11:31 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/15/2012 11:31 PM
Tetrachloroethene	ND	40	U	ppbv	40	6/15/2012 11:31 PM
Tetrahydrofuran	ND	40	U	ppbv	40	6/15/2012 11:31 PM
Toluene	280	40		ppbv	40	6/15/2012 11:31 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/15/2012 11:31 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/15/2012 11:31 PM
Trichloroethene	ND	40	U	ppbv	40	6/15/2012 11:31 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/15/2012 11:31 PM
Vinyl acetate	ND	40	U	ppbv	40	6/15/2012 11:31 PM
Vinyl chloride	ND	40	U	ppbv	40	6/15/2012 11:31 PM
Xylenes, Total	62	120	J	ppbv	40	6/15/2012 11:31 PM
Surr: 4-Bromofluorobenzene	97.0	70-130		%REC	40	6/15/2012 11:31 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	26,000	4,700		µg/m³	40	6/21/2012 3:18 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	6/21/2012 3:18 PM
C9-C12 Aliphatic Hydrocarbons	1,400	7,600	J	µg/m³	40	6/21/2012 3:18 PM
Surr: 4-Bromofluorobenzene	96.2	70-130		%REC	40	6/21/2012 3:18 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 11:08:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-052	**Matrix:**	Air
Client Sample ID:	VA1620		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.071	0.10	J	%	1	6/19/2012 2:50 PM
Carbon Monoxide	ND	0.10	U	%	1	6/19/2012 2:50 PM
Methane	ND	0.50	U	%	1	6/19/2012 2:50 PM
Nitrogen	78	0.10		%	1	6/19/2012 2:50 PM
Oxygen	21	0.10		%	1	6/19/2012 2:50 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/16/2012 12:12 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/16/2012 12:12 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/16/2012 12:12 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/16/2012 12:12 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/16/2012 12:12 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/16/2012 12:12 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/16/2012 12:12 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	6/16/2012 12:12 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/16/2012 12:12 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/16/2012 12:12 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/16/2012 12:12 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/16/2012 12:12 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/16/2012 12:12 AM
1,3-Butadiene	ND	40	U	ppbv	40	6/16/2012 12:12 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/16/2012 12:12 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/16/2012 12:12 AM
2-Butanone	ND	40	U	ppbv	40	6/16/2012 12:12 AM
2-Hexanone	ND	40	U	ppbv	40	6/16/2012 12:12 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/16/2012 12:12 AM
Acetone	57	40		ppbv	40	6/16/2012 12:12 AM
Benzene	60	40		ppbv	40	6/16/2012 12:12 AM
Benzyl chloride	ND	40	U	ppbv	40	6/16/2012 12:12 AM
Bromodichloromethane	ND	40	U	ppbv	40	6/16/2012 12:12 AM
Bromoform	ND	40	U	ppbv	40	6/16/2012 12:12 AM
Bromomethane	ND	40	U	ppbv	40	6/16/2012 12:12 AM
Carbon disulfide	ND	40	U	ppbv	40	6/16/2012 12:12 AM
Carbon tetrachloride	ND	40	U	ppbv	40	6/16/2012 12:12 AM
Chlorobenzene	ND	40	U	ppbv	40	6/16/2012 12:12 AM
Chlorodibromomethane	ND	40	U	ppbv	40	6/16/2012 12:12 AM
Chloroethane	ND	40	U	ppbv	40	6/16/2012 12:12 AM
Chloroform	ND	40	U	ppbv	40	6/16/2012 12:12 AM
Chloromethane	ND	40	U	ppbv	40	6/16/2012 12:12 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/16/2012 12:12 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/16/2012 12:12 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 11:08:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-052	**Matrix:**	Air
Client Sample ID:	VA1620		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	390	80		ppbv	40	6/16/2012 12:12 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/16/2012 12:12 AM
Ethyl acetate	ND	40	U	ppbv	40	6/16/2012 12:12 AM
Ethylbenzene	ND	80	U	ppbv	40	6/16/2012 12:12 AM
Heptane	130	40		ppbv	40	6/16/2012 12:12 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/16/2012 12:12 AM
m,p-Xylene	ND	80	U	ppbv	40	6/16/2012 12:12 AM
Methylene chloride	ND	200	U	ppbv	40	6/16/2012 12:12 AM
n-Hexane	72	80	J	ppbv	40	6/16/2012 12:12 AM
Naphthalene	ND	40	U	ppbv	40	6/16/2012 12:12 AM
o-Xylene	ND	40	U	ppbv	40	6/16/2012 12:12 AM
Propylene	ND	40	U	ppbv	40	6/16/2012 12:12 AM
Styrene	ND	40	U	ppbv	40	6/16/2012 12:12 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/16/2012 12:12 AM
Tetrachloroethene	ND	40	U	ppbv	40	6/16/2012 12:12 AM
Tetrahydrofuran	ND	40	U	ppbv	40	6/16/2012 12:12 AM
Toluene	170	40		ppbv	40	6/16/2012 12:12 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/16/2012 12:12 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/16/2012 12:12 AM
Trichloroethene	ND	40	U	ppbv	40	6/16/2012 12:12 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/16/2012 12:12 AM
Vinyl acetate	ND	40	U	ppbv	40	6/16/2012 12:12 AM
Vinyl chloride	ND	40	U	ppbv	40	6/16/2012 12:12 AM
Xylenes, Total	ND	120	U	ppbv	40	6/16/2012 12:12 AM
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	40	6/16/2012 12:12 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	27,000	4,700		µg/m³	40	6/21/2012 4:01 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	6/21/2012 4:01 PM
C9-C12 Aliphatic Hydrocarbons	1,800	7,600	J	µg/m³	40	6/21/2012 4:01 PM
Surr: 4-Bromofluorobenzene	97.5	70-130		%REC	40	6/21/2012 4:01 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 11:49:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-053	**Matrix:**	Air
Client Sample ID:	VA1621		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.10	0.10		%	1	6/19/2012 3:06 PM
Carbon Monoxide	ND	0.10	U	%	1	6/19/2012 3:06 PM
Methane	ND	0.50	U	%	1	6/19/2012 3:06 PM
Nitrogen	79	0.10		%	1	6/19/2012 3:06 PM
Oxygen	20	0.10		%	1	6/19/2012 3:06 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/16/2012 12:54 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/16/2012 12:54 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/16/2012 12:54 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/16/2012 12:54 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/16/2012 12:54 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/16/2012 12:54 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/16/2012 12:54 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	6/16/2012 12:54 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/16/2012 12:54 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/16/2012 12:54 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/16/2012 12:54 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/16/2012 12:54 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/16/2012 12:54 AM
1,3-Butadiene	ND	40	U	ppbv	40	6/16/2012 12:54 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/16/2012 12:54 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/16/2012 12:54 AM
2-Butanone	ND	40	U	ppbv	40	6/16/2012 12:54 AM
2-Hexanone	ND	40	U	ppbv	40	6/16/2012 12:54 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Acetone	60	40		ppbv	40	6/16/2012 12:54 AM
Benzene	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Benzyl chloride	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Bromodichloromethane	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Bromoform	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Bromomethane	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Carbon disulfide	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Carbon tetrachloride	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Chlorobenzene	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Chlorodibromomethane	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Chloroethane	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Chloroform	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Chloromethane	ND	40	U	ppbv	40	6/16/2012 12:54 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/16/2012 12:54 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/16/2012 12:54 AM

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Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 11:49:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-053	**Matrix:**	Air
Client Sample ID:	VA1621		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	300	80		ppbv	40	6/16/2012 12:54 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Ethyl acetate	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Ethylbenzene	ND	80	U	ppbv	40	6/16/2012 12:54 AM
Heptane	89	40		ppbv	40	6/16/2012 12:54 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/16/2012 12:54 AM
m,p-Xylene	ND	80	U	ppbv	40	6/16/2012 12:54 AM
Methylene chloride	ND	200	U	ppbv	40	6/16/2012 12:54 AM
n-Hexane	61	80	J	ppbv	40	6/16/2012 12:54 AM
Naphthalene	ND	40	U	ppbv	40	6/16/2012 12:54 AM
o-Xylene	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Propylene	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Styrene	ND	40	U	ppbv	40	6/16/2012 12:54 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Tetrachloroethene	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Tetrahydrofuran	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Toluene	110	40		ppbv	40	6/16/2012 12:54 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/16/2012 12:54 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Trichloroethene	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Vinyl acetate	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Vinyl chloride	ND	40	U	ppbv	40	6/16/2012 12:54 AM
Xylenes, Total	ND	120	U	ppbv	40	6/16/2012 12:54 AM
Surr: 4-Bromofluorobenzene	97.7	70-130		%REC	40	6/16/2012 12:54 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	18,000	4,700		µg/m³	40	6/21/2012 4:45 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	6/21/2012 4:45 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	6/21/2012 4:45 PM
Surr: 4-Bromofluorobenzene	99.7	70-130		%REC	40	6/21/2012 4:45 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 12:32:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-054	**Matrix:**	Air
Client Sample ID:	VA1622		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.064	0.10	J	%	1	6/19/2012 3:26 PM
Carbon Monoxide	ND	0.10	U	%	1	6/19/2012 3:26 PM
Methane	ND	0.50	U	%	1	6/19/2012 3:26 PM
Nitrogen	79	0.10		%	1	6/19/2012 3:26 PM
Oxygen	21	0.10		%	1	6/19/2012 3:26 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	6/16/2012 1:35 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	6/16/2012 1:35 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	6/16/2012 1:35 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	6/16/2012 1:35 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	6/16/2012 1:35 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	6/16/2012 1:35 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	6/16/2012 1:35 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	6/16/2012 1:35 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	6/16/2012 1:35 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	6/16/2012 1:35 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	6/16/2012 1:35 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	6/16/2012 1:35 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	6/16/2012 1:35 AM
1,3-Butadiene	ND	40	U	ppbv	40	6/16/2012 1:35 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	6/16/2012 1:35 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	6/16/2012 1:35 AM
2-Butanone	ND	40	U	ppbv	40	6/16/2012 1:35 AM
2-Hexanone	ND	40	U	ppbv	40	6/16/2012 1:35 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Acetone	66	40		ppbv	40	6/16/2012 1:35 AM
Benzene	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Benzyl chloride	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Bromodichloromethane	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Bromoform	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Bromomethane	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Carbon disulfide	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Carbon tetrachloride	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Chlorobenzene	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Chlorodibromomethane	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Chloroethane	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Chloroform	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Chloromethane	ND	40	U	ppbv	40	6/16/2012 1:35 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	6/16/2012 1:35 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	6/16/2012 1:35 AM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 12:32:00 PM
Project:	Kirtland AFB		
Lab ID:	1206178-054	**Matrix:**	Air
Client Sample ID:	VA1622		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	280	80		ppbv	40	6/16/2012 1:35 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Ethyl acetate	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Ethylbenzene	ND	80	U	ppbv	40	6/16/2012 1:35 AM
Heptane	77	40		ppbv	40	6/16/2012 1:35 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	6/16/2012 1:35 AM
m,p-Xylene	ND	80	U	ppbv	40	6/16/2012 1:35 AM
Methylene chloride	ND	200	U	ppbv	40	6/16/2012 1:35 AM
n-Hexane	62	80	J	ppbv	40	6/16/2012 1:35 AM
Naphthalene	ND	40	U	ppbv	40	6/16/2012 1:35 AM
o-Xylene	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Propylene	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Styrene	ND	40	U	ppbv	40	6/16/2012 1:35 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Tetrachloroethene	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Tetrahydrofuran	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Toluene	99	40		ppbv	40	6/16/2012 1:35 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	6/16/2012 1:35 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Trichloroethene	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Vinyl acetate	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Vinyl chloride	ND	40	U	ppbv	40	6/16/2012 1:35 AM
Xylenes, Total	ND	120	U	ppbv	40	6/16/2012 1:35 AM
Surr: 4-Bromofluorobenzene	96.8	70-130		%REC	40	6/16/2012 1:35 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	16,000	4,700		µg/m³	40	6/21/2012 5:29 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	6/21/2012 5:29 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	6/21/2012 5:29 PM
Surr: 4-Bromofluorobenzene	94.7	70-130		%REC	40	6/21/2012 5:29 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-055	**Matrix:**	Air
Client Sample ID:	VA8089-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	6/15/2012 12:44 PM
1,1,2,2-Tetrachloroethane	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
1,1,2-Trichloroethane	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
1,1-Dichloroethane	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
1,1-Dichloroethene	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
1,2,4-Trichlorobenzene	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
1,2,4-Trimethylbenzene	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
1,2-Dibromoethane	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
1,2-Dichlorobenzene	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
1,2-Dichloroethane	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
1,2-Dichloropropane	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
1,3,5-Trimethylbenzene	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
1,3-Butadiene	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
1,3-Dichlorobenzene	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
1,4-Dichlorobenzene	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
2-Butanone	45	1.0		ppbv	1	6/15/2012 12:44 PM
2-Hexanone	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
4-Methyl-2-pentanone	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
Acetone	15	1.0		ppbv	1	6/15/2012 12:44 PM
Benzene	4.0	1.0		ppbv	1	6/15/2012 12:44 PM
Benzyl chloride	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
Bromodichloromethane	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
Bromoform	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
Bromomethane	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
Carbon disulfide	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
Carbon tetrachloride	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
Chlorobenzene	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
Chlorodibromomethane	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
Chloroethane	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
Chloroform	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
Chloromethane	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
cis-1,2-Dichloroethene	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
cis-1,3-dichloropropene	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
Cyclohexane	11	2.0		ppbv	1	6/15/2012 12:44 PM
Dichlorodifluoromethane	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
Ethyl acetate	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
Ethylbenzene	1.4	2.0	J	ppbv	1	6/15/2012 12:44 PM
Heptane	7.1	1.0		ppbv	1	6/15/2012 12:44 PM
Hexachlorobutadiene	ND	2.0	U	ppbv	1	6/15/2012 12:44 PM
m,p-Xylene	3.6	2.0		ppbv	1	6/15/2012 12:44 PM
Methylene chloride	7.1	5.0		ppbv	1	6/15/2012 12:44 PM

RTI Laboratories - Analytical Report

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	5/29/2012 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1206178-055	**Matrix:**	Air
Client Sample ID:	VA8089-TB		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
n-Hexane	12	2.0		ppbv	1	6/15/2012 12:44 PM
Naphthalene	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
o-Xylene	1.2	1.0		ppbv	1	6/15/2012 12:44 PM
Propylene	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
Styrene	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
tert-Butyl Methyl Ether	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
Tetrachloroethene	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
Tetrahydrofuran	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
Toluene	58	16		ppbv	16	6/15/2012 8:04 PM
trans-1,2-Dichloroethene	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
trans-1,3-dichloropropene	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
Trichloroethene	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
Trichlorofluoromethane	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
Vinyl acetate	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
Vinyl chloride	ND	1.0	U	ppbv	1	6/15/2012 12:44 PM
Xylenes, Total	4.9	3.0		ppbv	1	6/15/2012 12:44 PM
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	1	6/15/2012 12:44 PM

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49209**

Sample ID:	**MBLK VOA9 060812**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**49209**
Client ID:	**PBW**	Batch ID:	**R49209**	TestNo:	**MA_APH**			Analysis Date:	**6/8/2012**	SeqNo:	**961954**

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		90.5	70	130				

Sample ID:	**1205A85-020Adup**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**49209**
Client ID:	**ZZZZZZ**	Batch ID:	**R49209**	TestNo:	**MA_APH**			Analysis Date:	**6/8/2012**	SeqNo:	**961958**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	290,000	94,000						275,600	6.25	30	
C9-C10 Aromatic Hydrocarbons	ND	110,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	ND	150,000						0	0	30	U
Surr: 4-Bromofluorobenzene	72,000		71,600		101	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49242**

Sample ID:	**MBLK VOA1 061112**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49242**
Client ID:	**PBW**	Batch ID:	**R49242**	TestNo:	**TO-15**			Analysis Date:	**6/11/2012**	SeqNo:	**962636**

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#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49242**

Sample ID:	**MBLK VOA1 061112**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49242**
Client ID:	**PBW**	Batch ID:	**R49242**	TestNo:	**TO-15**			Analysis Date:	**6/11/2012**	SeqNo:	**962636**

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		98.1	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49242**

Sample ID:	**1206178-007ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49242**
Client ID:	**VA1334**	Batch ID:	**R49242**	TestNo:	**TO-15**			Analysis Date:	**6/12/2012**	SeqNo:	**962646**

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	6,800	800						6,816	0.589	25	
2-Hexanone	ND	800						0	0	25	U
4-Methyl-2-pentanone	ND	800						0	0	25	U
Acetone	10,000	800						10,140	3.26	25	
Benzene	33,000	800						33,670	1.77	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#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49242**

Sample ID:	**1206178-007ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49242**
Client ID:	**VA1334**	Batch ID:	**R49242**	TestNo:	**TO-15**			Analysis Date:	**6/12/2012**	SeqNo:	**962646**

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	82,000	1,600						83,960	2.29	25	E
Dichlorodifluoromethane	ND	800						0	0	25	U
Ethyl acetate	ND	800						0	0	25	U
Ethylbenzene	11,000	1,600						11,180	2.12	25	
Heptane	68,000	800						70,620	3.39	25	E
Hexachlorobutadiene	ND	1,600						0	0	25	U
m,p-Xylene	29,000	1,600						28,160	1.75	25	
Methylene chloride	6,600	4,000						3,280	67.4	25	R
n-Hexane	50,000	1,600						47,610	4.55	25	E
Naphthalene	ND	800						0	0	25	U
o-Xylene	7,600	800						7,336	2.90	25	
Propylene	860	800						840.0	2.82	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	99,000	800						101,700	2.70	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	36,000	2,400						35,500	1.99	25	
Surr: 4-Bromofluorobenzene	9,800		10,000		97.7	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49288**

Sample ID:	**1206178-015ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49288**
Client ID:	**VA1439**	Batch ID:	**R49288**	TestNo:	**TO-15**			Analysis Date:	**6/12/2012**	SeqNo:	**963413**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	800						0	0	25	U
1,1,2,2-Tetrachloroethane	ND	800						0	0	25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800						0	0	25	U
1,1,2-Trichloroethane	ND	800						0	0	25	U
1,1-Dichloroethane	ND	800						0	0	25	U
1,1-Dichloroethene	ND	800						0	0	25	U
1,2,4-Trichlorobenzene	ND	800						0	0	25	U
1,2,4-Trimethylbenzene	ND	800						0	0	25	U
1,2-Dibromoethane	ND	800						0	0	25	U
1,2-Dichlorobenzene	ND	800						0	0	25	U
1,2-Dichloroethane	ND	800						0	0	25	U
1,2-Dichloropropane	ND	800						0	0	25	U
1,3,5-Trimethylbenzene	ND	800						0	0	25	U
1,3-Butadiene	ND	800						0	0	25	U
1,3-Dichlorobenzene	ND	800						0	0	25	U
1,4-Dichlorobenzene	ND	800						0	0	25	U
2-Butanone	ND	800						0	0	25	U
2-Hexanone	ND	800						0	0	25	U
4-Methyl-2-pentanone	ND	800						0	0	25	U
Acetone	1,900	800						2,552	30.3	25	R
Benzene	16,000	800						14,870	8.55	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#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49288**

Sample ID:	**1206178-015ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49288**
Client ID:	**VA1439**	Batch ID:	**R49288**	TestNo:	**TO-15**			Analysis Date:	**6/12/2012**	SeqNo:	**963413**

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	37,000	1,600						35,200	5.09	25	
Dichlorodifluoromethane	ND	800						0	0	25	U
Ethyl acetate	ND	800						0	0	25	U
Ethylbenzene	1,900	1,600						1,768	8.24	25	
Heptane	32,000	800						31,140	3.33	25	
Hexachlorobutadiene	ND	1,600						0	0	25	U
m,p-Xylene	4,800	1,600						4,456	7.77	25	
Methylene chloride	ND	4,000						0	0	25	U
n-Hexane	29,000	1,600						27,780	5.16	25	
Naphthalene	ND	800						0	0	25	U
o-Xylene	1,300	800						1,208	7.03	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	38,000	800						35,870	6.14	25	
trans-1,2-Dichloroethene	ND	800						0	0	25	U
trans-1,3-dichloropropene	ND	800						0	0	25	U
Trichloroethene	ND	800						0	0	25	U
Trichlorofluoromethane	ND	800						0	0	25	U
Vinyl acetate	ND	800						0	0	25	U
Vinyl chloride	ND	800						0	0	25	U
Xylenes, Total	6,100	2,400						5,664	7.61	25	
Surr: 4-Bromofluorobenzene	9,300		10,000		93.4	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49288**

Sample ID:	**MBLK VOA1 061212**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49288**
Client ID:	**PBW**	Batch ID:	**R49288**	TestNo:	**TO-15**			Analysis Date:	**6/12/2012**	SeqNo:	**963427**

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#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49288**

Sample ID:	**MBLK VOA1 061212**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49288**
Client ID:	**PBW**	Batch ID:	**R49288**	TestNo:	**TO-15**			Analysis Date:	**6/12/2012**	SeqNo:	**963427**

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		95.7	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49293**

Sample ID:	**MBLK VOA9 061212**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**49293**
Client ID:	**PBW**	Batch ID:	**R49293**	TestNo:	**MA_APH**			Analysis Date:	**6/12/2012**	SeqNo:	**963530**

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		91.0	70	130				

Sample ID:	**1206178-017Adup**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**49293**
Client ID:	**VA1441**	Batch ID:	**R49293**	TestNo:	**MA_APH**			Analysis Date:	**6/12/2012**	SeqNo:	**963535**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	1,000,000	190,000						1,076,000	3.84	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		95.4	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49314**

Sample ID:	**MBLK-061312 TCD**	Samp Type:	**MBLK**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49314**
Client ID:	**PBW**	Batch ID:	**R49314**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/13/2012**	SeqNo:	**964005**

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-061312 TCD-A**	Samp Type:	**LCS**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49314**
Client ID:	**LCSW**	Batch ID:	**R49314**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/13/2012**	SeqNo:	**964007**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.4	0.10	2.500	0	97.6	70	130	2.445	0.246	20	
Carbon Monoxide	2.7	0.10	2.500	0	107	70	130	2.676	0.337	20	
Methane	2.1	0.50	2.000	0	104	70	130	2.082	0.433	20	
Nitrogen	2.7	0.10	2.500	0	106	70	130	2.748	3.44	20	
Oxygen	2.5	0.10	2.500	0	98.4	70	130	2.496	1.49	20	

Sample ID:	**1206178-010BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49314**
Client ID:	**VA1358**	Batch ID:	**R49314**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/13/2012**	SeqNo:	**964019**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	8.7	0.10						8.673	0.162	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	84	0.10						83.16	0.535	20	
Oxygen	7.0	0.10						6.880	2.17	20	

Sample ID:	**1206178-020BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49314**
Client ID:	**VA1451**	Batch ID:	**R49314**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/13/2012**	SeqNo:	**964031**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.27	0.10						0.2610	1.90	20	
Carbon Monoxide	ND	0.10						0	0	20	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49314**

Sample ID:	**1206178-020BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49314**
Client ID:	**VA1451**	Batch ID:	**R49314**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/13/2012**	SeqNo:	**964031**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Methane	ND	0.50						0	0	20	U
Nitrogen	79	0.10						77.09	2.97	20	
Oxygen	20	0.10						20.02	0.642	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49321**

Sample ID:	**MBLK VOA1 061312**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49321**
Client ID:	**PBW**	Batch ID:	**R49321**	TestNo:	**TO-15**			Analysis Date:	**6/13/2012**	SeqNo:	**964248**

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#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49321**

Sample ID:	**MBLK VOA1 061312**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49321**
Client ID:	**PBW**	Batch ID:	**R49321**	TestNo:	**TO-15**			Analysis Date:	**6/13/2012**	SeqNo:	**964248**

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		95.4	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49321**

Sample ID:	**1206178-024Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49321**
Client ID:	**VA1455**	Batch ID:	**R49321**	TestNo:	**TO-15**			Analysis Date:	**6/13/2012**	SeqNo:	**964257**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	8,000						0	0	25	U
1,1,2,2-Tetrachloroethane	ND	8,000						0	0	25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000						0	0	25	U
1,1,2-Trichloroethane	ND	8,000						0	0	25	U
1,1-Dichloroethane	ND	8,000						0	0	25	U
1,1-Dichloroethene	ND	8,000						0	0	25	U
1,2,4-Trichlorobenzene	ND	8,000						0	0	25	U
1,2,4-Trimethylbenzene	ND	8,000						0	0	25	U
1,2-Dibromoethane	ND	8,000						0	0	25	U
1,2-Dichlorobenzene	ND	8,000						0	0	25	U
1,2-Dichloroethane	ND	8,000						0	0	25	U
1,2-Dichloropropane	ND	8,000						0	0	25	U
1,3,5-Trimethylbenzene	ND	8,000						0	0	25	U
1,3-Butadiene	ND	8,000						0	0	25	U
1,3-Dichlorobenzene	ND	8,000						0	0	25	U
1,4-Dichlorobenzene	ND	8,000						0	0	25	U
2-Butanone	ND	8,000						0	0	25	U
2-Hexanone	ND	8,000						0	0	25	U
4-Methyl-2-pentanone	ND	8,000						0	0	25	U
Acetone	ND	8,000						0	0	25	U
Benzene	16,000	8,000						15,840	0	25	
Benzyl chloride	ND	8,000						0	0	25	U
Bromodichloromethane	ND	8,000						0	0	25	U
Bromoform	ND	8,000						0	0	25	U
Bromomethane	ND	8,000						0	0	25	U
Carbon disulfide	ND	8,000						0	0	25	U
Carbon tetrachloride	ND	8,000						0	0	25	U
Chlorobenzene	ND	8,000						0	0	25	U
Chlorodibromomethane	ND	8,000						0	0	25	U
Chloroethane	ND	8,000						0	0	25	U
Chloroform	ND	8,000						0	0	25	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49321**

Sample ID:	**1206178-024Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49321**
Client ID:	**VA1455**	Batch ID:	**R49321**	TestNo:	**TO-15**			Analysis Date:	**6/13/2012**	SeqNo:	**964257**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	8,000						0	0	25	U
cis-1,2-Dichloroethene	ND	8,000						0	0	25	U
cis-1,3-dichloropropene	ND	8,000						0	0	25	U
Cyclohexane	33,000	16,000						31,760	3.22	25	
Dichlorodifluoromethane	ND	8,000						0	0	25	U
Ethyl acetate	ND	8,000						0	0	25	U
Ethylbenzene	ND	16,000						0	0	25	U
Heptane	17,000	8,000						17,520	0.458	25	
Hexachlorobutadiene	ND	16,000						0	0	25	U
m,p-Xylene	ND	16,000						0	0	25	U
Methylene chloride	ND	40,000						0	0	25	U
n-Hexane	27,000	16,000						26,720	1.78	25	
Naphthalene	ND	8,000						0	0	25	U
o-Xylene	ND	8,000						0	0	25	U
Propylene	ND	8,000						0	0	25	U
Styrene	ND	8,000						0	0	25	U
tert-Butyl Methyl Ether	ND	8,000						0	0	25	U
Tetrachloroethene	ND	8,000						0	0	25	U
Tetrahydrofuran	ND	8,000						0	0	25	U
Toluene	24,000	8,000						24,480	1.32	25	
trans-1,2-Dichloroethene	ND	8,000						0	0	25	U
trans-1,3-dichloropropene	ND	8,000						0	0	25	U
Trichloroethene	ND	8,000						0	0	25	U
Trichlorofluoromethane	ND	8,000						0	0	25	U
Vinyl acetate	ND	8,000						0	0	25	U
Vinyl chloride	ND	8,000						0	0	25	U
Xylenes, Total	ND	24,000						0	0	25	U
Surr: 4-Bromofluorobenzene	95,000		100,000		94.6	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49363**

Sample ID:	**MBLK/BV0592 CC V**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49363**
Client ID:	**PBW**	Batch ID:	**R49363**	TestNo:	**TO-15**			Analysis Date:	**6/14/2012**	SeqNo:	**964864**

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#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49363**

Sample ID:	**MBLK/BV0592 CC V**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49363**
Client ID:	**PBW**	Batch ID:	**R49363**	TestNo:	**TO-15**			Analysis Date:	**6/14/2012**	SeqNo:	**964864**

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		92.7	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49363**

Sample ID:	**MBLK SUMMA VOA1**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49363**
Client ID:	**PBW**	Batch ID:	**R49363**	TestNo:	**TO-15**			Analysis Date:	**6/14/2012**	SeqNo:	**964865**

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	0.72	1.0									J
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#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49363**

Sample ID:	**MBLK SUMMA VOA1**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49363**
Client ID:	**PBW**	Batch ID:	**R49363**	TestNo:	**TO-15**			Analysis Date:	**6/14/2012**	SeqNo:	**964865**

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	1.2	2.0									J
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		94.2	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49363**

Sample ID:	**1206178-038ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49363**
Client ID:	**VA1488**	Batch ID:	**R49363**	TestNo:	**TO-15**			Analysis Date:	**6/14/2012**	SeqNo:	**964873**

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	940	800						0	200	25	R
2-Hexanone	ND	800						0	0	25	U
4-Methyl-2-pentanone	ND	800						0	0	25	U
Acetone	3,700	800						3,208	14.8	25	
Benzene	8,500	800						7,416	13.5	25	
Benzyl chloride	ND	800						0	0	25	U
Bromodichloromethane	ND	800						0	0	25	U
Bromoform	ND	800						0	0	25	U
Bromomethane	ND	800						0	0	25	U
Carbon disulfide	ND	800						0	0	25	U
Carbon tetrachloride	ND	800						0	0	25	U
Chlorobenzene	ND	800						0	0	25	U
Chlorodibromomethane	ND	800						0	0	25	U
Chloroethane	ND	800						0	0	25	U
Chloroform	ND	800						0	0	25	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49363**

Sample ID:	**1206178-038ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49363**
Client ID:	**VA1488**	Batch ID:	**R49363**	TestNo:	**TO-15**			Analysis Date:	**6/14/2012**	SeqNo:	**964873**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	800						0	0	25	U
cis-1,2-Dichloroethene	ND	800						0	0	25	U
cis-1,3-dichloropropene	ND	800						0	0	25	U
Cyclohexane	20,000	1,600						18,680	9.23	25	
Dichlorodifluoromethane	ND	800						0	0	25	U
Ethyl acetate	ND	800						0	0	25	U
Ethylbenzene	880	1,600						0	200	25	JR
Heptane	18,000	800						16,720	8.78	25	
Hexachlorobutadiene	ND	1,600						0	0	25	U
m,p-Xylene	2,300	1,600						1,952	14.8	25	
Methylene chloride	ND	4,000						0	0	25	U
n-Hexane	12,000	1,600						10,620	10.2	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	19,000	800						16,530	15.3	25	
trans-1,2-Dichloroethene	ND	800						0	0	25	U
trans-1,3-dichloropropene	ND	800						0	0	25	U
Trichloroethene	ND	800						0	0	25	U
Trichlorofluoromethane	ND	800						0	0	25	U
Vinyl acetate	ND	800						0	0	25	U
Vinyl chloride	ND	800						0	0	25	U
Xylenes, Total	2,300	2,400						1,952	14.8	25	J
Surr: 4-Bromofluorobenzene	9,400		10,000		93.8	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49382**

Sample ID:	**MBLK VOA9 061312**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**49382**
Client ID:	**PBW**	Batch ID:	**R49382**	TestNo:	**MA_APH**			Analysis Date:	**6/13/2012**	SeqNo:	**965367**

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	80		89.50		89.9	70	130				

Sample ID:	**1206178-015Adup**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**49382**
Client ID:	**VA1439**	Batch ID:	**R49382**	TestNo:	**MA_APH**			Analysis Date:	**6/13/2012**	SeqNo:	**965371**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	930,000	190,000						913,900	2.06	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		95.3	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49383**

Sample ID:	**MBLK VOA9 061412**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**49383**
Client ID:	**PBW**	Batch ID:	**R49383**	TestNo:	**MA_APH**			Analysis Date:	**6/14/2012**	SeqNo:	**965453**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	ND	120									U
C9-C10 Aromatic Hydrocarbons	ND	130									U
C9-C12 Aliphatic Hydrocarbons	ND	190									U
Surr: 4-Bromofluorobenzene	82		89.50		91.8	70	130				

Sample ID:	**1206178-014Adup**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**49383**
Client ID:	**VA1438**	Batch ID:	**R49383**	TestNo:	**MA_APH**			Analysis Date:	**6/14/2012**	SeqNo:	**965455**

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						1,144,000	3.39	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		99.5	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49398**

Sample ID:	**MBLK VOA9 061512**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**49398**
Client ID:	**PBW**	Batch ID:	**R49398**	TestNo:	**MA_APH**			Analysis Date:	**6/15/2012**	SeqNo:	**965720**

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		92.2	70	130				

Sample ID:	**1206178-042Adup**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**49398**
Client ID:	**VA1505**	Batch ID:	**R49398**	TestNo:	**MA_APH**			Analysis Date:	**6/15/2012**	SeqNo:	**965725**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	440,000	190,000						436,400	0.923	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		96.4	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49425**

Sample ID:	**MBLK VOA1 061512**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49425**
Client ID:	**PBW**	Batch ID:	**R49425**	TestNo:	**TO-15**			Analysis Date:	**6/15/2012**	SeqNo:	**966128**

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#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49425**

Sample ID:	**MBLK VOA1 061512**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49425**
Client ID:	**PBW**	Batch ID:	**R49425**	TestNo:	**TO-15**			Analysis Date:	**6/15/2012**	SeqNo:	**966128**

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		95.2	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49425**

Sample ID:	**1206178-048ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49425**
Client ID:	**VA1616**	Batch ID:	**R49425**	TestNo:	**TO-15**			Analysis Date:	**6/15/2012**	SeqNo:	**966133**

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	43	40						40.00	7.69	25	
Benzene	ND	40						0	0	25	U
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#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49425**

Sample ID:	**1206178-048ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49425**
Client ID:	**VA1616**	Batch ID:	**R49425**	TestNo:	**TO-15**			Analysis Date:	**6/15/2012**	SeqNo:	**966133**

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	100	80						102.4	2.37	25	
Dichlorodifluoromethane	ND	40						0	0	25	U
Ethyl acetate	ND	40						0	0	25	U
Ethylbenzene	ND	80						0	0	25	U
Heptane	ND	40						0	0	25	U
Hexachlorobutadiene	ND	80						0	0	25	U
m,p-Xylene	ND	80						0	0	25	U
Methylene chloride	ND	200						0	0	25	U
n-Hexane	ND	80						0	0	25	U
Naphthalene	ND	40						0	0	25	U
o-Xylene	ND	40						0	0	25	U
Propylene	ND	40						0	0	25	U
Styrene	ND	40						0	0	25	U
tert-Butyl Methyl Ether	ND	40						0	0	25	U
Tetrachloroethene	ND	40						0	0	25	U
Tetrahydrofuran	ND	40						0	0	25	U
Toluene	56	40						56.00	0.712	25	
trans-1,2-Dichloroethene	ND	40						0	0	25	U
trans-1,3-dichloropropene	ND	40						0	0	25	U
Trichloroethene	ND	40						0	0	25	U
Trichlorofluoromethane	ND	40						0	0	25	U
Vinyl acetate	ND	40						0	0	25	U
Vinyl chloride	ND	40						0	0	25	U
Xylenes, Total	ND	120						0	0	25	U
Surr: 4-Bromofluorobenzene	480		500.0		96.5	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49456**

Sample ID:	**MBLK VOA1 061812**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49456**
Client ID:	**PBW**	Batch ID:	**R49456**	TestNo:	**TO-15**			Analysis Date:	**6/18/2012**	SeqNo:	**966582**

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#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49456**

Sample ID:	**MBLK VOA1 061812**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49456**
Client ID:	**PBW**	Batch ID:	**R49456**	TestNo:	**TO-15**			Analysis Date:	**6/18/2012**	SeqNo:	**966582**

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		96.0	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49456**

Sample ID:	**1206396-018ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49456**
Client ID:	**ZZZZZZ**	Batch ID:	**R49456**	TestNo:	**TO-15**			Analysis Date:	**6/18/2012**	SeqNo:	**966586**

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	860	800						0	200	25	R
Benzene	1,700	800						1,512	11.9	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#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49456**

Sample ID:	**1206396-018ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**49456**
Client ID:	**ZZZZZZ**	Batch ID:	**R49456**	TestNo:	**TO-15**			Analysis Date:	**6/18/2012**	SeqNo:	**966586**

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	5,400	1,600						5,120	5.32	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	3,100	800						2,960	5.52	25	
Hexachlorobutadiene	ND	1,600						0	0	25	U
m,p-Xylene	ND	1,600						0	0	25	U
Methylene chloride	ND	4,000						0	0	25	U
n-Hexane	2,800	1,600						2,632	6.19	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	4,500	800						4,104	10.0	25	
trans-1,2-Dichloroethene	ND	800						0	0	25	U
trans-1,3-dichloropropene	ND	800						0	0	25	U
Trichloroethene	ND	800						0	0	25	U
Trichlorofluoromethane	ND	800						0	0	25	U
Vinyl acetate	ND	800						0	0	25	U
Vinyl chloride	ND	800						0	0	25	U
Xylenes, Total	ND	2,400						0	0	25	U
Surr: 4-Bromofluorobenzene	9,800		10,000		98.0	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49470**

Sample ID:	**MBLK-061812 TCD**	Samp Type:	**MBLK**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49470**
Client ID:	**PBW**	Batch ID:	**R49470**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/18/2012**	SeqNo:	**966801**

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-061812 TCD-A**	Samp Type:	**LCS**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49470**
Client ID:	**LCSW**	Batch ID:	**R49470**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/18/2012**	SeqNo:	**966803**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.5	0.10	2.500	0	101	70	130	2.555	1.46	20	
Carbon Monoxide	2.6	0.10	2.500	0	106	70	130	2.646	0.0378	20	
Methane	2.1	0.50	2.000	0	103	70	130	2.055	0.0974	20	
Nitrogen	2.6	0.10	2.500	0	104	70	130	2.673	2.46	20	
Oxygen	2.4	0.10	2.500	0	97.3	70	130	2.454	0.901	20	

Sample ID:	**1206178-030BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49470**
Client ID:	**VA1461**	Batch ID:	**R49470**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/18/2012**	SeqNo:	**966815**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.35	0.10						0.3830	9.29	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	79	0.10						79.29	0.631	20	
Oxygen	20	0.10						19.91	0.267	20	

Sample ID:	**1206178-040BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49470**
Client ID:	**VA1490**	Batch ID:	**R49470**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/18/2012**	SeqNo:	**966827**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.18	0.10						0.1850	0	20	
Carbon Monoxide	ND	0.10						0	0	20	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49470**

Sample ID:	**1206178-040BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49470**
Client ID:	**VA1490**	Batch ID:	**R49470**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/18/2012**	SeqNo:	**966827**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Methane	ND	0.50						0	0	20	U
Nitrogen	79	0.10						79.07	0.152	20	
Oxygen	20	0.10						19.49	0.164	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49471**

Sample ID: **MBLK-061912 TCD** Samp Type: **MBLK** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **49471**

Client ID: **PBW** Batch ID: **R49471** TestNo: **ASTM-D2504** Analysis Date: **6/19/2012** SeqNo: **966830**

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-061912 TCD-A** Samp Type: **LCS** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **49471**

Client ID: **LCSW** Batch ID: **R49471** TestNo: **ASTM-D2504** Analysis Date: **6/19/2012** SeqNo: **966832**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.4	0.10	2.500	0	97.6	70	130	2.578	5.46	20	
Carbon Monoxide	2.7	0.10	2.500	0	108	70	130	2.675	0.634	20	
Methane	2.1	0.50	2.000	0	103	70	130	2.080	0.530	20	
Nitrogen	2.7	0.10	2.500	0	106	70	130	2.748	3.40	20	
Oxygen	2.4	0.10	2.500	0	98.0	70	130	2.491	1.66	20	

Sample ID: **1206178-050BDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **49471**

Client ID: **VA1618** Batch ID: **R49471** TestNo: **ASTM-D2504** Analysis Date: **6/19/2012** SeqNo: **966844**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.10	0.10						0.1020	0.985	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	79	0.10						79.63	0.834	20	
Oxygen	21	0.10						20.68	0.786	20	

Sample ID: **1206178-054BDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **49471**

Client ID: **VA1622** Batch ID: **R49471** TestNo: **ASTM-D2504** Analysis Date: **6/19/2012** SeqNo: **966850**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.062	0.10						0.06400	3.17	20	J
Carbon Monoxide	ND	0.10						0	0	20	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49471**

Sample ID:	**1206178-054BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**%**	Prep Date:		RunNo:	**49471**
Client ID:	**VA1622**	Batch ID:	**R49471**	TestNo:	**ASTM-D2504**			Analysis Date:	**6/19/2012**	SeqNo:	**966850**

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	78	0.10						79.17	0.920	20	
Oxygen	21	0.10						20.80	0.874	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1206178

Date Reported: 6/29/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R49548**

Sample ID:	**MBLK VOA9 062112**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**49548**
Client ID:	**PBW**	Batch ID:	**R49548**	TestNo:	**MA_APH**			Analysis Date:	**6/21/2012**	SeqNo:	**968528**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	ND	120									U
C9-C10 Aromatic Hydrocarbons	ND	130									U
C9-C12 Aliphatic Hydrocarbons	ND	190									U
Surr: 4-Bromofluorobenzene	86		89.50		96.0	70	130				

Sample ID:	**1206396-018Adup**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**49548**
Client ID:	**ZZZZZZ**	Batch ID:	**R49548**	TestNo:	**MA_APH**			Analysis Date:	**6/22/2012**	SeqNo:	**968552**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	320,000	94,000						298,300	7.66	30	
C9-C10 Aromatic Hydrocarbons	ND	110,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	ND	150,000						0	0	30	U
Surr: 4-Bromofluorobenzene	69,000		71,600		96.6	70	130		0	30	

RTI Laboratories

Run ID: **VOA1_120611A** **Run No.:** 49242

Analytical Run Date: 6/11/2012 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

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

Column Length: 60m

Run Comments: PR by RD2 on 12june12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 061112	BFB_TUNE	TUNE	R49242	6/11/2012 9:58:00 AM	Robert Lynch		
CCV VOA1 061112	EPA_TO15	CCV	R49242	6/11/2012 2:13:00 PM	Robert Lynch		
RLVS VOA1 061112	EPA_TO15	RLVS	R49242	6/11/2012 3:13:00 PM	Robert Lynch		
MBLK VOA1 061112	EPA_TO15	MBLK	R49242	6/11/2012 4:01:00 PM	Deborah Griffiths		
1206178-001A	EPA_TO15	SAMP	R49242	6/11/2012 5:07:00 PM	Robert Lynch		
1206178-002A	EPA_TO15	SAMP	R49242	6/11/2012 6:33:00 PM	Robert Lynch		
1206178-003A	EPA_TO15	SAMP	R49242	6/11/2012 7:14:00 PM	Robert Lynch		
1206178-004A	EPA_TO15	SAMP	R49242	6/11/2012 7:58:00 PM	Robert Lynch		
1206178-005A	EPA_TO15	SAMP	R49242	6/11/2012 8:40:00 PM	Robert Lynch		
1206178-006A	EPA_TO15	SAMP	R49242	6/11/2012 9:24:00 PM	Robert Lynch		
1206178-006A	EPA_TO15	SAMP	R49242	6/11/2012 10:05:00 PM	Robert Lynch		
1206178-004A	EPA_TO15	SAMP	R49242	6/11/2012 10:47:00 PM	Robert Lynch		
1206178-007A	EPA_TO15	SAMP	R49242	6/11/2012 11:31:00 PM	Robert Lynch		
1206178-007ADUP	EPA_TO15	DUP	R49242	6/12/2012 12:15:00 AM	Deborah Griffiths		
1206178-008A	EPA_TO15	SAMP	R49242	6/12/2012 12:57:00 AM	Robert Lynch		
1206178-008A	EPA_TO15	SAMP	R49242	6/12/2012 1:41:00 AM	Robert Lynch		
1206178-009A	EPA_TO15	SAMP	R49242	6/12/2012 2:23:00 AM	Robert Lynch		
1206178-009A	EPA_TO15	SAMP	R49242	6/12/2012 3:07:00 AM	Robert Lynch		
1206178-010A	EPA_TO15	SAMP	R49242	6/12/2012 3:48:00 AM	Robert Lynch		
1206178-011A	EPA_TO15	SAMP	R49242	6/12/2012 4:30:00 AM	Robert Lynch		
1206178-012A	EPA_TO15	SAMP	R49242	6/12/2012 5:11:00 AM	Robert Lynch		
1206178-013A	EPA_TO15	SAMP	R49242	6/12/2012 5:52:00 AM	Robert Lynch		
1206178-014A	EPA_TO15	SAMP	R49242	6/12/2012 6:34:00 AM	Robert Lynch		
1206178-014A	EPA_TO15	SAMP	R49242	6/12/2012 7:18:00 AM	Robert Lynch		
RLVS2 VOA1 06111	EPA_TO15	RLVS	R49242	6/12/2012 8:38:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

02-Jul-12

RunNo 49242

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
962631	BFB VOA1 061112	BFB_TUNE	TUNE	.\1\DATA\061112	6/11/2012 9:58:0	1	R49242		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0.5	0.5		100	0	0	0	0	0	1%	0	2	0%	
174	M		87.3	87.3		100	0	0	0	0	0	87%	50	120	0%	
175	M		7.2	7.2		100	0	0	0	0	0	7%	4	9	0%	
176	M		97.4	97.4		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.9	6.9		100	0	0	0	0	0	7%	5	9	0%	
50	M		16.7	16.7		100	0	0	0	0	0	17%	8	40	0%	
75	M		46.5	46.5		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		6.6	6.6		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
962634	CCV VOA1 061112	EPA_TO15	CCV	.\1\DATA\061112	6/11/2012 2:13:0	1	R49242		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	9.67	9.67		9.6	0	0	0.107	1	50	101%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.11	10.11		10	0	0	0.211	1	50	101%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	9.6	9.6		9.8	0	0	0.108	1	50	98%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.93	9.93		9.8	0	0	0.2	1	50	101%	70	130	0%	
1,1-Dichloroethane	A	ppbv	9.48	9.48		9.7	0	0	0.111	1	50	98%	70	130	0%	
1,1-Dichloroethene	A	ppbv	9.51	9.51		9.9	0	0	0.097	1	50	96%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	8.67	8.67		9.1	0	0	0.271	1	50	95%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	10.06	10.06		9.8	0	0	0.245	1	50	103%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.85	9.85		9.6	0	0	0.186	1	50	103%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	9.8	9.8		9.7	0	0	0.208	1	50	101%	70	130	0%	
1,2-Dichloroethane	A	ppbv	10.17	10.17		9.7	0	0	0.196	1	50	105%	70	130	0%	
1,2-Dichloropropane	A	ppbv	10.05	10.05		9.8	0	0	0.224	1	50	103%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.86	9.86		9.7	0	0	0.24	1	50	102%	70	130	0%	
1,3-Butadiene	A	ppbv	8.37	8.37		9.8	0	0	0.152	1	50	85%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.86	9.86		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
962634	CCV VOA1 061112	EPA_TO15	CCV	.\1\DATA\061112	6/11/2012 2:13:0	1	R49242		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.78	9.78		9.6	0	0	0.194	1	50	102%	70	130	0%	
1,4-Dioxane	A	ppbv	9.95	9.95		9.6	0	0	0.128	1	50	104%	70	130	0%	
2-Butanone	A	ppbv	10.99	10.99		9.9	0	0	0.287	1	50	111%	70	130	0%	
2-Hexanone	A	ppbv	10.5	10.5		9.8	0	0	0.135	1	50	107%	70	130	0%	
2-Propanol	A	ppbv	10.63	10.63		10.1	0	0	0.329	1	50	105%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	10.27	10.27		10	0	0	0.157	1	50	103%	70	130	0%	
Acetone	A	ppbv	10.53	10.53		10	0	0	0.43	1	50	105%	70	130	0%	
Benzene	A	ppbv	10.22	10.22		9.6	0	0	0.126	1	50	106%	70	130	0%	
Benzyl chloride	A	ppbv	10.26	10.26		9.7	0	0	0.155	1	50	106%	70	130	0%	
Bromodichloromethane	A	ppbv	9.23	9.23		9.6	0	0	0.156	1	50	96%	70	130	0%	
Bromoform	A	ppbv	10.04	10.04		9.6	0	0	0.197	1	50	105%	70	130	0%	
Bromomethane	A	ppbv	8.83	8.83		9.3	0	0	0.075	1	50	95%	70	130	0%	
Carbon disulfide	A	ppbv	9.28	9.28		9.7	0	0	0.093	1	50	96%	70	130	0%	
Carbon tetrachloride	A	ppbv	9.6	9.6		9.5	0	0	0.114	1	50	101%	70	130	0%	
Chlorobenzene	A	ppbv	10.33	10.33		9.9	0	0	0.275	1	50	104%	70	130	0%	
Chlorodibromomethane	A	ppbv	9.81	9.81		9.2	0	0	0.165	1	50	107%	70	130	0%	
Chloroethane	A	ppbv	8.42	8.42		9.8	0	0	0.063	1	50	86%	70	130	0%	
Chloroform	A	ppbv	9.78	9.78		9.4	0	0	0.126	1	50	104%	70	130	0%	
Chloromethane	A	ppbv	8.79	8.79		9.8	0	0	0.104	1	50	90%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.86	9.86		9.8	0	0	0.107	1	50	101%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	9.81	9.81		9.5	0	0	0.166	1	50	103%	70	130	0%	
Cyclohexane	A	ppbv	9.78	9.78		9.8	0	0	0.684	2	50	100%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	8.38	8.38		9.2	0	0	0.086	1	50	91%	70	130	0%	
Ethanol	A	ppbv	9.69	9.69		9.2	0	0	1.962	5	50	105%	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	10.27	10.27		9.8	0	0	0.737	2	50	105%	70	130	0%	
Heptane	A	ppbv	9.62	9.62		9.9	0	0	0.249	1	50	97%	70	130	0%	
Hexachlorobutadiene	A	ppbv	9.66	9.66		9.4	0	0	0.374	2	50	103%	70	130	0%	
m,p-Xylene	A	ppbv	20.61	20.61		19.2	0	0	0.524	2	100	107%	70	130	0%	
Methylene chloride	A	ppbv	9.44	9.44		10	0	0	2.077	5	50	94%	70	130	0%	
n-Hexane	A	ppbv	9.88	9.88		10.1	0	0	0.692	2	50	98%	70	130	0%	
Naphthalene	A	ppbv	8.93	8.93		9.2	0	0	0.247	1	50	97%	70	130	0%	
o-Xylene	A	ppbv	10.33	10.33		10	0	0	0.258	1	50	103%	70	130	0%	
Propylene	A	ppbv	10.09	10.09		10.2	0	0	0.075	1	50	99%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
962634	CCV VOA1 061112	EPA_TO15	CCV	.\1\DATA\061112	6/11/2012 2:13:0	1	R49242		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	50	105%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	11.14	11.14		9.9	0	0	0.228	1	50	113%	70	130	0%	
Tetrachloroethene	A	ppbv	9.17	9.17		9.6	0	0	0.148	1	50	96%	70	130	0%	
Tetrahydrofuran	A	ppbv	10.62	10.62		10	0	0	0.201	1	50	106%	70	130	0%	
Toluene	A	ppbv	10.1	10.1		9.8	0	0	0.158	1	50	103%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	9.66	9.66		9.8	0	0	0.117	1	50	99%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	9.45	9.45		9.1	0	0	0.171	1	50	104%	70	130	0%	
Trichloroethene	A	ppbv	9.2	9.2		9.6	0	0	0.119	1	50	96%	70	130	0%	
Trichlorofluoromethane	A	ppbv	9.09	9.09		9.6	0	0	0.148	1	50	95%	70	130	0%	
Vinyl acetate	A	ppbv	11.53	11.53		9.9	0	0	0.266	1	50	116%	70	130	0%	
Vinyl chloride	A	ppbv	8.11	8.11		9.4	0	0	0.072	1	50	86%	70	130	0%	
Xylenes, Total	C	ppbv	30.94	30.94		29.2	0	0	0.782	3	150	106%	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
962635	RLVS VOA1 061112	EPA_TO15	RLVS	.\1\DATA\061112	6/11/2012 3:13:0	1	R49242		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	1.04	1.04		0.996	0	0	0.107	1	50	104%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.16	1.16		1	0	0	0.211	1	50	116%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	1.12	1.12		0.98	0	0	0.108	1	50	114%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	1	1		0.98	0	0	0.2	1	50	102%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1.06	1.06		0.97	0	0	0.111	1	50	109%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1.11	1.11		0.99	0	0	0.097	1	50	112%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.14	1.14		0.91	0	0	0.271	1	50	125%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	1.19	1.19		0.98	0	0	0.245	1	50	121%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.94	0.94		0.96	0	0	0.186	1	50	98%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.26	1.26		0.97	0	0	0.208	1	50	130%	70	130	0%	
1,2-Dichloroethane	A	ppbv	1.07	1.07		0.97	0	0	0.196	1	50	110%	70	130	0%	
1,2-Dichloropropane	A	ppbv	1	1		0.98	0	0	0.224	1	50	102%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\061112\06111203.D Vial: 5
Acq On : 11 Jun 2012 2:13 pm Operator: RACHEL HILL
Sample : CCV VOA1 061112 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	122	0.00
2	T	Propylene	0.813	0.805	1.0	111	0.00
3	T	Dichlorodifluoromethane	3.079	2.803	9.0	101	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.303	2.155	6.4	105	0.00
5	T	Chloromethane	0.928	0.859	7.4	99	0.00
6	T	Vinyl chloride	1.049	0.905	13.7	91	0.00
7	T	1,3-Butadiene	0.727	0.621	14.6	87	0.00
8	T	Bromomethane	1.112	1.055	5.1	104	0.00
9	T	Chloroethane	0.591	0.541	8.5	98	0.00
10	T	Trichlorofluoromethane	2.936	2.780	5.3	101	0.00
11	T	Ethanol	0.315	0.332	-5.4	109	0.00
12	T	Freon113	1.993	1.952	2.1	101	0.00
13	T	1,1-Dichloroethene	1.379	1.325	3.9	99	0.00
14	T	Acetone	1.332	1.403	-5.3	101	0.00
15	T	Carbon disulfide	2.400	2.297	4.3	100	0.00
16	T	2-Propanol	1.279	1.346	-5.2	108	0.00
17	T	Methylene chloride	1.022	0.965	5.6	99	0.00
18	T	tert-Butyl Methyl Ether	2.198	2.474	-12.6	105	0.00
19	T	trans-1,2-Dichloroethene	1.262	1.243	1.5	100	0.00
20	T	n-Hexane	1.399	1.368	2.2	99	0.00
21	T	1,1-Dichloroethane	1.713	1.674	2.3	99	0.00
22	T	Vinyl acetate	2.035	2.371	-16.5	104	0.00
23	T	cis-1,2-Dichloroethene	1.036	1.043	-0.7	101	0.00
24	T	2-Butanone	1.404	1.559	-11.0	102	0.00
25	T	Ethyl acetate	1.735	1.952	-12.5	105	0.00
26	T	Tetrahydrofuran	0.898	0.954	-6.2	100	0.00
27	T	Chloroform	1.950	1.947	0.2	100	0.00
28	T	1,1,1-Trichloroethane	2.105	2.120	-0.7	101	0.00
29	T	Cyclohexane	1.419	1.416	0.2	99	0.00
30	T	Carbon tetrachloride	2.325	2.349	-1.0	100	0.00
31	T	Benzene	2.740	2.917	-6.5	102	0.00
32	T	1,2-Dichloroethane	1.133	1.188	-4.9	100	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	128	0.00
34	T	Heptane	0.486	0.472	2.9	99	0.00
35	T	Trichloroethene	0.444	0.425	4.3	103	0.00
36	T	1,2-Dichloropropane	0.304	0.312	-2.6	102	0.00
37	T	1,4-Dioxane	0.175	0.182	-4.0	108	0.00
38	T	Bromodichloromethane	0.631	0.607	3.8	101	0.00
39	T	cis-1,3-Dichloropropene	0.487	0.503	-3.3	103	0.00
40	T	4-Methyl-2-pentanone	0.208	0.214	-2.9	104	0.00
41	T	Toluene	1.030	1.061	-3.0	103	0.00
42	T	trans-1,3-Dichloropropene	0.451	0.468	-3.8	104	0.00
43	T	1,1,2-Trichloroethane	0.358	0.362	-1.1	104	0.00
44	T	Tetrachloroethene	0.582	0.555	4.6	103	0.00
45	T	2-Hexanone	0.404	0.433	-7.2	105	0.00
46	T	Chlorodibromomethane	0.660	0.660	0.0	103	0.00
47	T	1,2-Dibromoethane	0.559	0.574	-2.7	104	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	124	0.00
49	T	Chlorobenzene	0.880	0.918	-4.3	105	0.00
50	T	Ethylbenzene	1.411	1.479	-4.8	103	0.00
51	T	m,p-Xylene	1.097	1.177	-7.3	103	0.00
52	T	o-Xylene	1.117	1.154	-3.3	102	0.00
53	T	Styrene	0.860	0.905	-5.2	104	0.00
54	T	Bromoform	0.634	0.663	-4.6	106	0.00
55	S	4-Bromofluorobenzene	0.581	0.568	2.2	121	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\061112\06111203.D Vial: 5
Acq On : 11 Jun 2012 2:13 pm Operator: RACHEL HILL
Sample : CCV VOA1 061112 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	0.705	-1.1	102	0.00
57	T	4-Ethyltoluene	1.452	1.495	-3.0	104	0.00
58	T	1,3,5-Trimethylbenzene	1.242	1.262	-1.6	103	0.00
59	T	1,2,4-Trimethylbenzene	1.162	1.193	-2.7	104	0.00
60	T	1,3-Dichlorobenzene	0.763	0.775	-1.6	106	0.00
61	T	1,4-Dichlorobenzene	0.736	0.750	-1.9	106	0.00
62	T	Benzyl chloride	0.809	0.856	-5.8	109	0.00
63	T	1,2-Dichlorobenzene	0.669	0.676	-1.0	106	0.00
64	T	1,2,4-Trichlorobenzene	0.243	0.232	4.5	103	0.00
65	T	Hexachlorobutadiene	0.327	0.336	-2.8	104	0.00
66		Naphthalene	0.481	0.467	2.9	105	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\061112\06111203.D Vial: 5
Acq On : 11 Jun 2012 2:13 pm Operator: RACHEL HILL
Sample : CCV VOA1 061112 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 11 14:37 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	441871	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.68	114	1510126	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.53	117	1311844	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.18	95	745149	12.22	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 97.76%

Target Compounds						Qvalue
2) Propylene	5.52	41	290217	10.09	ppbv	95
3) Dichlorodifluoromethane	5.58	85	911713	8.38	ppbv	100
4) 1,2-Dichloro-1,2,2,2-tetra	5.84	135	723789	8.89	ppbv #	87
5) Chloromethane	6.00	50	288615	8.79	ppbv	98
6) Vinyl chloride	6.20	62	300673	8.11	ppbv	100
7) 1,3-Butadiene	6.26	39	215244	8.37	ppbv	96
8) Bromomethane	6.84	94	346974	8.83	ppbv	98
9) Chloroethane	6.99	64	175860	8.42	ppbv	99
10) Trichlorofluoromethane	7.32	101	943267	9.09	ppbv	99
11) Ethanol	7.56	45	107812	9.69	ppbv	100
12) Freon113	7.98	101	676208	9.60	ppbv	96
13) 1,1-Dichloroethene	8.09	61	463558	9.51	ppbv	99
14) Acetone	8.18	43	495958	10.53	ppbv #	94
15) Carbon disulfide	8.45	76	787644	9.28	ppbv #	99
16) 2-Propanol	8.23	45	480676	10.63	ppbv #	1
17) Methylene chloride	8.75	49	341208	9.44	ppbv	97
18) tert-Butyl Methyl Ether	8.95	73	865944	11.14	ppbv	97
19) trans-1,2-Dichloroethene	9.03	61	430717	9.66	ppbv	99
20) n-Hexane	9.21	57	488385	9.88	ppbv	97
21) 1,1-Dichloroethane	9.59	63	574115	9.48	ppbv	100
22) Vinyl acetate	9.52	43	829667	11.53	ppbv	99
23) cis-1,2-Dichloroethene	10.27	96	361162	9.86	ppbv	99
24) 2-Butanone	10.24	43	545450	10.99	ppbv	99
25) Ethyl acetate	10.19	43	676185	11.02	ppbv #	100
26) Tetrahydrofuran	10.58	42	337159	10.62	ppbv	94
27) Chloroform	10.60	83	674401	9.78	ppbv	98
28) 1,1,1-Trichloroethane	10.84	97	719286	9.67	ppbv	99
29) Cyclohexane	10.86	56	490487	9.78	ppbv	99
30) Carbon tetrachloride	11.01	117	788817	9.60	ppbv	98
31) Benzene	11.29	78	989949	10.22	ppbv	99
32) 1,2-Dichloroethane	11.37	62	407347	10.17	ppbv	99
34) Heptane	11.34	43	564983	9.62	ppbv	98
35) Trichloroethene	12.02	130	492832	9.20	ppbv	97
36) 1,2-Dichloropropane	12.38	63	369129	10.05	ppbv	100
37) 1,4-Dioxane	12.45	88	210704	9.95	ppbv	94
38) Bromodichloromethane	12.66	83	704069	9.23	ppbv	98
39) cis-1,3-Dichloropropene	13.21	75	577165	9.81	ppbv	100
40) 4-Methyl-2-pentanone	13.32	58	258041	10.27	ppbv	98
41) Toluene	13.62	91	1256745	10.10	ppbv	98
42) trans-1,3-Dichloropropene	13.93	75	514407	9.45	ppbv	99
43) 1,1,2-Trichloroethane	14.20	97	429111	9.93	ppbv	99
44) Tetrachloroethene	14.32	166	643966	9.17	ppbv	96
45) 2-Hexanone	14.40	43	512662	10.50	ppbv	97
46) Chlorodibromomethane	14.75	129	781673	9.81	ppbv	99
47) 1,2-Dibromoethane	14.98	107	665823	9.85	ppbv	100
49) Chlorobenzene	15.58	112	954092	10.33	ppbv	99
50) Ethylbenzene	15.61	91	1521570	10.27	ppbv	97
51) m,p-Xylene	15.77	91	2372129	20.61	ppbv	97
52) o-Xylene	16.36	91	1211391	10.33	ppbv	98

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\061112\06111203.D Vial: 5
Acq On : 11 Jun 2012 2:13 pm Operator: RACHEL HILL
Sample : CCV VOA1 061112 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 11 14:37 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

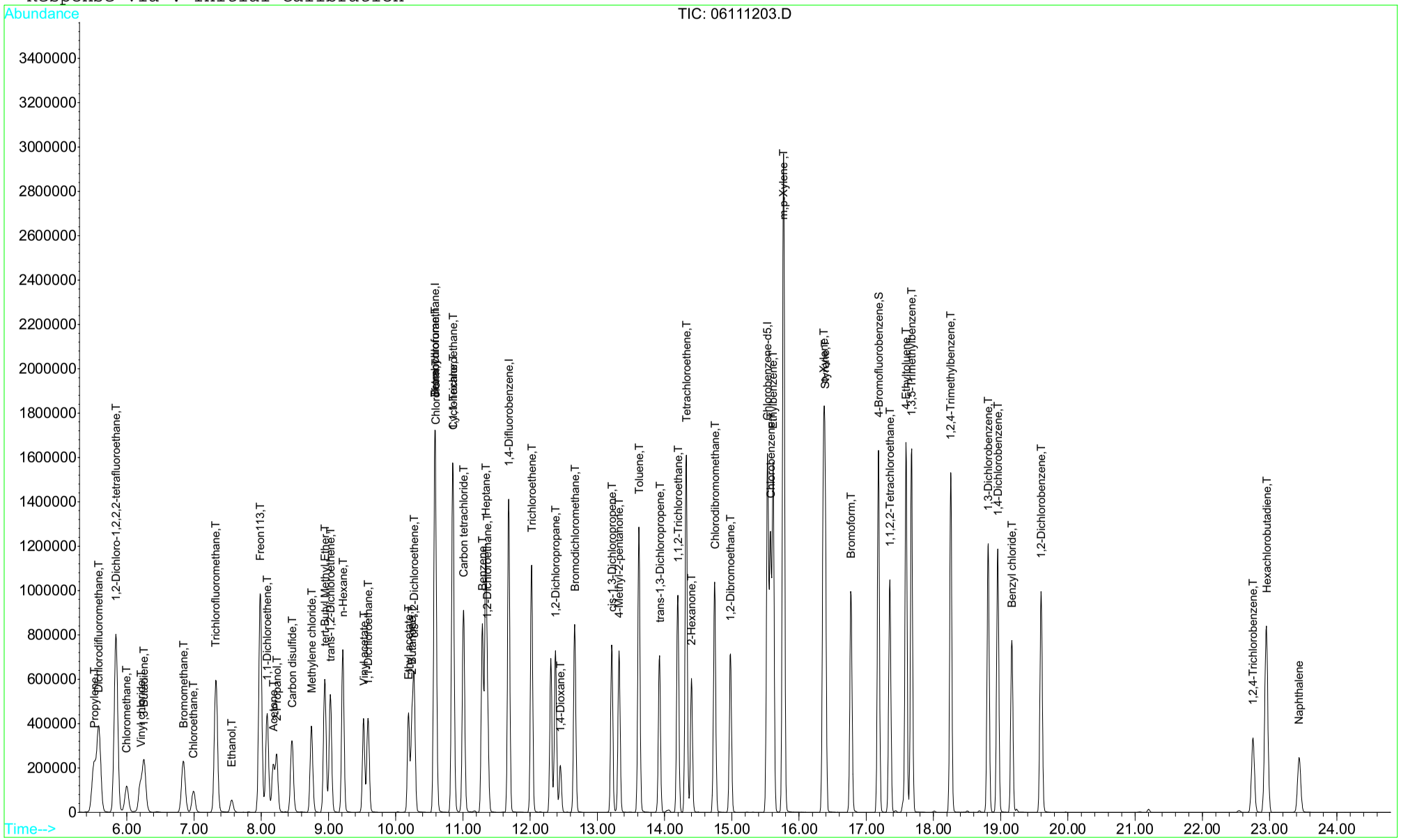
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53)	Styrene	16.39	104	930612	10.32	ppbv	99
54)	Bromoform	16.77	173	667647	10.04	ppbv	99
56)	1,1,2,2-Tetrachloroethane	17.35	83	739721	10.11	ppbv	98
57)	4-Ethyltoluene	17.59	105	1537653	10.09	ppbv	99
58)	1,3,5-Trimethylbenzene	17.68	105	1284989	9.86	ppbv	99
59)	1,2,4-Trimethylbenzene	18.26	105	1227201	10.06	ppbv	99
60)	1,3-Dichlorobenzene	18.82	146	789440	9.86	ppbv	98
61)	1,4-Dichlorobenzene	18.96	146	755334	9.78	ppbv	98
62)	Benzyl chloride	19.17	91	871906	10.26	ppbv	99
63)	1,2-Dichlorobenzene	19.60	146	687879	9.80	ppbv	98
64)	1,2,4-Trichlorobenzene	22.75	180	221214	8.67	ppbv	97
65)	Hexachlorobutadiene	22.95	225	331551	9.66	ppbv	99
66)	Naphthalene	23.44	128	450993	8.93	ppbv	100

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\061112\06111203.D Vial: 5
Acq On : 11 Jun 2012 2:13 pm Operator: RACHEL HILL
Sample : CCV VOA1 061112 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 11 14:37 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_120612A **Run No.:** 49288

Analytical Run Date: 6/12/2012 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

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

Column Length: 60m

Run Comments: PR AW 6.13.12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 061212	BFB_TUNE	TUNE	R49288	6/12/2012 11:05:00 AM	Robert Lynch		
CCV VOA1 061212	EPA_TO15	CCV	R49288	6/12/2012 11:45:00 AM	Robert Lynch		
RLVS VOA1 061212	EPA_TO15	RLVS	R49288	6/12/2012 12:35:00 PM	Robert Lynch		
MBLK VOA1 061212	EPA_TO15	MBLK	R49288	6/12/2012 1:29:00 PM	Robert Lynch		
1206178-016A	EPA_TO15	SAMP	R49288	6/12/2012 2:13:00 PM	Deborah Griffiths		
1206178-017A	EPA_TO15	SAMP	R49288	6/12/2012 2:57:00 PM	Deborah Griffiths		
1206178-019A	EPA_TO15	SAMP	R49288	6/12/2012 4:20:00 PM	Deborah Griffiths		
1206178-015A	EPA_TO15	SAMP	R49288	6/12/2012 5:46:00 PM	Deborah Griffiths		
1206178-015ADUP	EPA_TO15	DUP	R49288	6/12/2012 6:30:00 PM	Deborah Griffiths		
1206178-016A	EPA_TO15	SAMP	R49288	6/12/2012 7:11:00 PM	Deborah Griffiths		
1206178-022A	EPA_TO15	SAMP	R49288	6/12/2012 7:56:00 PM	Deborah Griffiths		
1206178-018A	EPA_TO15	SAMP	R49288	6/12/2012 9:24:00 PM	Deborah Griffiths		
1206178-023A	EPA_TO15	SAMP	R49288	6/12/2012 10:12:00 PM	Deborah Griffiths		
1206178-020A	EPA_TO15	SAMP	R49288	6/12/2012 10:56:00 PM	Deborah Griffiths		
1206178-021A	EPA_TO15	SAMP	R49288	6/12/2012 11:40:00 PM	Deborah Griffiths		
1206178-003A	EPA_TO15	SAMP	R49288	6/13/2012 12:21:00 AM	Robert Lynch		
1206178-005A	EPA_TO15	SAMP	R49288	6/13/2012 1:03:00 AM	Robert Lynch		
1206178-007A	EPA_TO15	SAMP	R49288	6/13/2012 1:44:00 AM	Robert Lynch		
1206178-010A	EPA_TO15	SAMP	R49288	6/13/2012 2:25:00 AM	Robert Lynch		
1206178-012A	EPA_TO15	SAMP	R49288	6/13/2012 3:48:00 AM	Robert Lynch		
1206178-013A	EPA_TO15	SAMP	R49288	6/13/2012 4:29:00 AM	Robert Lynch		
RLVS2 VOA1 06121	EPA_TO15	RLVS	R49288	6/13/2012 5:11:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

02-Jul-12

RunNo 49288

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
963406	BFB VOA1 061212	BFB_TUNE	TUNE	.\1\DATA\0612126/12/2012 11:05:		1	R49288		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		87	87		100	0	0	0	0	0	87%	50	120	0%	
175	M		7.2	7.2		100	0	0	0	0	0	7%	4	9	0%	
176	M		97.6	97.6		100	0	0	0	0	0	98%	93	101	0%	
177	M		6.6	6.6		100	0	0	0	0	0	7%	5	9	0%	
50	M		17.3	17.3		100	0	0	0	0	0	17%	8	40	0%	
75	M		47.5	47.5		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
963407	CCV VOA1 061212	EPA_TO15	CCV	.\1\DATA\0612126/12/2012 11:45:		1	R49288		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	11.35	11.35		9.6	0	0	0.107	1	50	118%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	11.24	11.24		10	0	0	0.211	1	50	112%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	11.37	11.37		9.8	0	0	0.108	1	50	116%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	11.2	11.2		9.8	0	0	0.2	1	50	114%	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	11.27	11.27		9.9	0	0	0.097	1	50	114%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	8.15	8.15		9.1	0	0	0.271	1	50	90%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	11.06	11.06		9.8	0	0	0.245	1	50	113%	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	10.37	10.37		9.7	0	0	0.208	1	50	107%	70	130	0%	
1,2-Dichloroethane	A	ppbv	11.58	11.58		9.7	0	0	0.196	1	50	119%	70	130	0%	
1,2-Dichloropropane	A	ppbv	11.38	11.38		9.8	0	0	0.224	1	50	116%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	10.96	10.96		9.7	0	0	0.24	1	50	113%	70	130	0%	
1,3-Butadiene	A	ppbv	10.94	10.94		9.8	0	0	0.152	1	50	112%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	10.58	10.58		9.7	0	0	0.202	1	50	109%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
963407	CCV VOA1 061212	EPA_TO15	CCV	\1\DATA\0612	126/12/2012 11:45:	1	R49288		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	10.5	10.5		9.6	0	0	0.194	1	50	109%	70	130	0%	
1,4-Dioxane	A	ppbv	11.01	11.01		9.6	0	0	0.128	1	50	115%	70	130	0%	
2-Butanone	A	ppbv	12.22	12.22		9.9	0	0	0.287	1	50	123%	70	130	0%	
2-Hexanone	A	ppbv	11.3	11.3		9.8	0	0	0.135	1	50	115%	70	130	0%	
2-Propanol	A	ppbv	11.41	11.41		10.1	0	0	0.329	1	50	113%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	11.23	11.23		10	0	0	0.157	1	50	112%	70	130	0%	
Acetone	A	ppbv	11.88	11.88		10	0	0	0.43	1	50	119%	70	130	0%	
Benzene	A	ppbv	11.57	11.57		9.6	0	0	0.126	1	50	121%	70	130	0%	
Benzyl chloride	A	ppbv	10.39	10.39		9.7	0	0	0.155	1	50	107%	70	130	0%	
Bromodichloromethane	A	ppbv	10.73	10.73		9.6	0	0	0.156	1	50	112%	70	130	0%	
Bromoform	A	ppbv	10.69	10.69		9.6	0	0	0.197	1	50	111%	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	10.83	10.83		9.7	0	0	0.093	1	50	112%	70	130	0%	
Carbon tetrachloride	A	ppbv	11.23	11.23		9.5	0	0	0.114	1	50	118%	70	130	0%	
Chlorobenzene	A	ppbv	11.51	11.51		9.9	0	0	0.275	1	50	116%	70	130	0%	
Chlorodibromomethane	A	ppbv	10.97	10.97		9.2	0	0	0.165	1	50	119%	70	130	0%	
Chloroethane	A	ppbv	10.07	10.07		9.8	0	0	0.063	1	50	103%	70	130	0%	
Chloroform	A	ppbv	11.62	11.62		9.4	0	0	0.126	1	50	124%	70	130	0%	
Chloromethane	A	ppbv	10.58	10.58		9.8	0	0	0.104	1	50	108%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	11.54	11.54		9.8	0	0	0.107	1	50	118%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	10.95	10.95		9.5	0	0	0.166	1	50	115%	70	130	0%	
Cyclohexane	A	ppbv	11.66	11.66		9.8	0	0	0.684	2	50	119%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	10.08	10.08		9.2	0	0	0.086	1	50	110%	70	130	0%	
Ethanol	A	ppbv	10.28	10.28		9.2	0	0	1.962	5	50	112%	70	130	0%	
Ethyl acetate	A	ppbv	12.24	12.24		9.8	0	0	0.157	1	50	125%	70	130	0%	
Ethylbenzene	A	ppbv	11.58	11.58		9.8	0	0	0.737	2	50	118%	70	130	0%	
Heptane	A	ppbv	11.39	11.39		9.9	0	0	0.249	1	50	115%	70	130	0%	
Hexachlorobutadiene	A	ppbv	9.33	9.33		9.4	0	0	0.374	2	50	99%	70	130	0%	
m,p-Xylene	A	ppbv	23.47	23.47		19.2	0	0	0.524	2	100	122%	70	130	0%	
Methylene chloride	A	ppbv	11.26	11.26		10	0	0	2.077	5	50	113%	70	130	0%	
n-Hexane	A	ppbv	11.76	11.76		10.1	0	0	0.692	2	50	116%	70	130	0%	
Naphthalene	A	ppbv	8.12	8.12		9.2	0	0	0.247	1	50	88%	70	130	0%	
o-Xylene	A	ppbv	11.65	11.65		10	0	0	0.258	1	50	117%	70	130	0%	
Propylene	A	ppbv	11.91	11.91		10.2	0	0	0.075	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
963407	CCV VOA1 061212	EPA_TO15	CCV	\1\DATA\0612	126/12/2012 11:45:	1	R49288		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	11.57	11.57		9.8	0	0	0.263	1	50	118%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	11.88	11.88		9.9	0	0	0.228	1	50	120%	70	130	0%	
Tetrachloroethene	A	ppbv	10.69	10.69		9.6	0	0	0.148	1	50	111%	70	130	0%	
Tetrahydrofuran	A	ppbv	12.05	12.05		10	0	0	0.201	1	50	121%	70	130	0%	
Toluene	A	ppbv	11.46	11.46		9.8	0	0	0.158	1	50	117%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	11.42	11.42		9.8	0	0	0.117	1	50	117%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	10.4	10.4		9.1	0	0	0.171	1	50	114%	70	130	0%	
Trichloroethene	A	ppbv	10.78	10.78		9.6	0	0	0.119	1	50	112%	70	130	0%	
Trichlorofluoromethane	A	ppbv	10.85	10.85		9.6	0	0	0.148	1	50	113%	70	130	0%	
Vinyl acetate	A	ppbv	12.64	12.64		9.9	0	0	0.266	1	50	128%	70	130	0%	
Vinyl chloride	A	ppbv	10.32	10.32		9.4	0	0	0.072	1	50	110%	70	130	0%	
Xylenes, Total	C	ppbv	35.12	35.12		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	12.07	12.07		12.5	0	0	0	0	0	97%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
963408	RLVS VOA1 061212	EPA_TO15	RLVS	\1\DATA\0612	126/12/2012 12:35:	1	R49288		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	0.98	0.98		0.996	0	0	0.107	1	50	98%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.18	1.18		1	0	0	0.211	1	50	118%	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	0.97	0.97		0.98	0	0	0.2	1	50	99%	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	1.02	1.02		0.99	0	0	0.097	1	50	103%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.04	1.04		0.91	0	0	0.271	1	50	114%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	1.17	1.17		0.98	0	0	0.245	1	50	119%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.91	0.91		0.96	0	0	0.186	1	50	95%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.23	1.23		0.97	0	0	0.208	1	50	127%	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	0.99	0.99		0.98	0	0	0.224	1	50	101%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\061212\06121202.D Vial: 4
Acq On : 12 Jun 2012 11:45 am Operator: RACHEL HILL
Sample : CCV VOA1 061212 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	88	0.00
2	T	Propylene	0.813	0.949	-16.7	94	0.00
3	T	Dichlorodifluoromethane	3.079	3.372	-9.5	87	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.303	2.510	-9.0	88	0.00
5	T	Chloromethane	0.928	1.034	-11.4	86	0.00
6	T	Vinyl chloride	1.049	1.152	-9.8	83	0.00
7	T	1,3-Butadiene	0.727	0.812	-11.7	82	0.00
8	T	Bromomethane	1.112	1.228	-10.4	87	0.00
9	T	Chloroethane	0.591	0.647	-9.5	84	0.00
10	T	Trichlorofluoromethane	2.936	3.317	-13.0	87	0.00
11	T	Ethanol	0.315	0.352	-11.7	83	0.00
12	T	Freon113	1.993	2.313	-16.1	86	0.00
13	T	1,1-Dichloroethene	1.379	1.570	-13.9	84	0.00
14	T	Acetone	1.332	1.582	-18.8	82	0.00
15	T	Carbon disulfide	2.400	2.680	-11.7	84	0.00
16	T	2-Propanol	1.279	1.445	-13.0	84	0.00
17	T	Methylene chloride	1.022	1.151	-12.6	85	0.00
18	T	tert-Butyl Methyl Ether	2.198	2.639	-20.1	81	0.00
19	T	trans-1,2-Dichloroethene	1.262	1.470	-16.5	85	0.00
20	T	n-Hexane	1.399	1.629	-16.4	85	0.00
21	T	1,1-Dichloroethane	1.713	1.984	-15.8	84	0.00
22	T	Vinyl acetate	2.035	2.599	-27.7	82	0.00
23	T	cis-1,2-Dichloroethene	1.036	1.221	-17.9	85	0.00
24	T	2-Butanone	1.404	1.734	-23.5	82	0.00
25	T	Ethyl acetate	1.735	2.168	-25.0	83	0.00
26	T	Tetrahydrofuran	0.898	1.082	-20.5	81	0.00
27	T	Chloroform	1.950	2.311	-18.5	85	0.00
28	T	1,1,1-Trichloroethane	2.105	2.488	-18.2	85	0.00
29	T	Cyclohexane	1.419	1.689	-19.0	85	0.00
30	T	Carbon tetrachloride	2.325	2.748	-18.2	85	0.00
31	T	Benzene	2.740	3.304	-20.6	83	0.00
32	T	1,2-Dichloroethane	1.133	1.353	-19.4	82	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	91	0.00
34	T	Heptane	0.486	0.559	-15.0	84	0.00
35	T	Trichloroethene	0.444	0.498	-12.2	86	0.00
36	T	1,2-Dichloropropane	0.304	0.353	-16.1	82	0.00
37	T	1,4-Dioxane	0.175	0.201	-14.9	85	0.00
38	T	Bromodichloromethane	0.631	0.706	-11.9	83	0.00
39	T	cis-1,3-Dichloropropene	0.487	0.561	-15.2	82	0.00
40	T	4-Methyl-2-pentanone	0.208	0.233	-12.0	81	0.00
41	T	Toluene	1.030	1.205	-17.0	83	0.00
42	T	trans-1,3-Dichloropropene	0.451	0.515	-14.2	81	0.00
43	T	1,1,2-Trichloroethane	0.358	0.409	-14.2	83	0.00
44	T	Tetrachloroethene	0.582	0.648	-11.3	85	0.00
45	T	2-Hexanone	0.404	0.466	-15.3	80	0.00
46	T	Chlorodibromomethane	0.660	0.738	-11.8	82	0.00
47	T	1,2-Dibromoethane	0.559	0.645	-15.4	83	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	90	0.00
49	T	Chlorobenzene	0.880	1.024	-16.4	84	0.00
50	T	Ethylbenzene	1.411	1.667	-18.1	84	0.00
51	T	m,p-Xylene	1.097	1.340	-22.2	84	0.00
52	T	o-Xylene	1.117	1.301	-16.5	83	0.00
53	T	Styrene	0.860	1.015	-18.0	85	0.00
54	T	Bromoform	0.634	0.706	-11.4	82	0.00
55	S	4-Bromofluorobenzene	0.581	0.561	3.4	86	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\061212\06121202.D Vial: 4
Acq On : 12 Jun 2012 11:45 am Operator: RACHEL HILL
Sample : CCV VOA1 061212 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	0.784	-12.5	82	0.00
57	T	4-Ethyltoluene	1.452	1.670	-15.0	84	0.00
58	T	1,3,5-Trimethylbenzene	1.242	1.403	-13.0	83	0.00
59	T	1,2,4-Trimethylbenzene	1.162	1.312	-12.9	82	0.00
60	T	1,3-Dichlorobenzene	0.763	0.832	-9.0	82	0.00
61	T	1,4-Dichlorobenzene	0.736	0.805	-9.4	82	0.00
62	T	Benzyl chloride	0.809	0.867	-7.2	80	0.00
63	T	1,2-Dichlorobenzene	0.669	0.715	-6.9	81	0.00
64	T	1,2,4-Trichlorobenzene	0.243	0.218	10.3	70	0.00
65	T	Hexachlorobutadiene	0.327	0.325	0.6	73	0.00
66		Naphthalene	0.481	0.425	11.6	69	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\061212\06121202.D Vial: 4
Acq On : 12 Jun 2012 11:45 am Operator: RACHEL HILL
Sample : CCV VOA1 061212 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 12 12:17 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	317647	12.50 ppbv	0.00
33) 1,4-Difluorobenzene	11.68	114	1075632	12.50 ppbv	0.00
48) Chlorobenzene-d5	15.53	117	948348	12.50 ppbv	0.00
System Monitoring Compounds					
55) 4-Bromofluorobenzene	17.18	95	531819	12.07 ppbv	0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 96.56%		
Target Compounds					Qvalue
2) Propylene	5.51	41	246064	11.91 ppbv	95
3) Dichlorodifluoromethane	5.58	85	788244	10.08 ppbv	100
4) 1,2-Dichloro-1,2,2,2-tetra	5.84	135	605913	10.35 ppbv #	85
5) Chloromethane	6.00	50	249671	10.58 ppbv	98
6) Vinyl chloride	6.20	62	275201	10.32 ppbv	99
7) 1,3-Butadiene	6.26	39	202115	10.94 ppbv	98
8) Bromomethane	6.84	94	290126	10.27 ppbv #	98
9) Chloroethane	6.99	64	151224	10.07 ppbv	99
10) Trichlorofluoromethane	7.32	101	809187	10.85 ppbv	98
11) Ethanol	7.57	45	82217	10.28 ppbv	99
12) Freon113	7.99	101	575906	11.37 ppbv	94
13) 1,1-Dichloroethene	8.09	61	394877	11.27 ppbv	99
14) Acetone	8.18	43	402068	11.88 ppbv #	96
15) Carbon disulfide	8.46	76	660518	10.83 ppbv #	100
16) 2-Propanol	8.24	45	370911	11.41 ppbv #	1
17) Methylene chloride	8.75	49	292464	11.26 ppbv	98
18) tert-Butyl Methyl Ether	8.95	73	663907	11.88 ppbv	98
19) trans-1,2-Dichloroethene	9.03	61	366030	11.42 ppbv	99
20) n-Hexane	9.21	57	417984	11.76 ppbv	98
21) 1,1-Dichloroethane	9.59	63	488966	11.23 ppbv	99
22) Vinyl acetate	9.52	43	653948	12.64 ppbv	99
23) cis-1,2-Dichloroethene	10.28	96	303974	11.54 ppbv	99
24) 2-Butanone	10.24	43	436120	12.22 ppbv	99
25) Ethyl acetate	10.19	43	539888	12.24 ppbv #	99
26) Tetrahydrofuran	10.58	42	274948	12.05 ppbv	96
27) Chloroform	10.60	83	575584	11.62 ppbv	97
28) 1,1,1-Trichloroethane	10.85	97	606993	11.35 ppbv	99
29) Cyclohexane	10.85	56	420501	11.66 ppbv	99
30) Carbon tetrachloride	11.01	117	663384	11.23 ppbv	98
31) Benzene	11.29	78	806013	11.57 ppbv	99
32) 1,2-Dichloroethane	11.37	62	333486	11.58 ppbv	99
34) Heptane	11.34	43	476448	11.39 ppbv	98
35) Trichloroethene	12.02	130	411535	10.78 ppbv	97
36) 1,2-Dichloropropane	12.38	63	297573	11.38 ppbv	99
37) 1,4-Dioxane	12.45	88	166102	11.01 ppbv	94
38) Bromodichloromethane	12.66	83	582999	10.73 ppbv	98
39) cis-1,3-Dichloropropene	13.22	75	458722	10.95 ppbv	99
40) 4-Methyl-2-pentanone	13.33	58	200904	11.23 ppbv	98
41) Toluene	13.62	91	1016256	11.46 ppbv	98
42) trans-1,3-Dichloropropene	13.93	75	403312	10.40 ppbv	99
43) 1,1,2-Trichloroethane	14.20	97	344595	11.20 ppbv	99
44) Tetrachloroethene	14.32	166	534970	10.69 ppbv	96
45) 2-Hexanone	14.40	43	392928	11.30 ppbv	97
46) Chlorodibromomethane	14.74	129	622734	10.97 ppbv	98
47) 1,2-Dibromoethane	14.98	107	532489	11.06 ppbv	100
49) Chlorobenzene	15.57	112	768921	11.51 ppbv	99
50) Ethylbenzene	15.62	91	1239697	11.58 ppbv	97
51) m,p-Xylene	15.77	91	1952557	23.47 ppbv	96
52) o-Xylene	16.36	91	987343	11.65 ppbv	98

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\061212\06121202.D Vial: 4
Acq On : 12 Jun 2012 11:45 am Operator: RACHEL HILL
Sample : CCV VOA1 061212 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 12 12:17 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

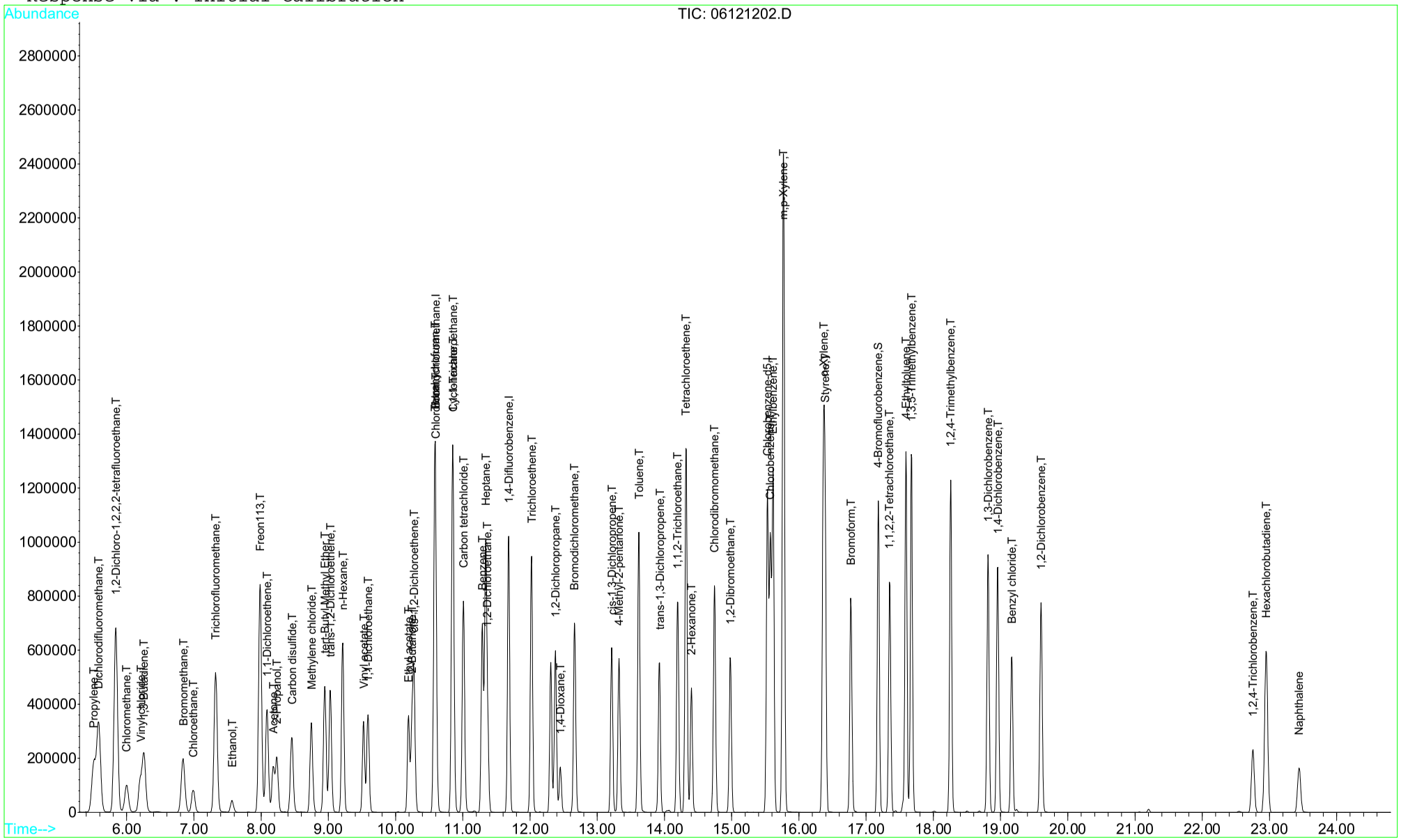
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53)	Styrene	16.39	104	754472	11.57	ppbv	98
54)	Bromoform	16.77	173	513950	10.69	ppbv	98
56)	1,1,2,2-Tetrachloroethane	17.35	83	594634	11.24	ppbv	98
57)	4-Ethyltoluene	17.59	105	1241881	11.27	ppbv	98
58)	1,3,5-Trimethylbenzene	17.67	105	1032712	10.96	ppbv	98
59)	1,2,4-Trimethylbenzene	18.26	105	975151	11.06	ppbv	98
60)	1,3-Dichlorobenzene	18.81	146	612346	10.58	ppbv	98
61)	1,4-Dichlorobenzene	18.96	146	586405	10.50	ppbv	98
62)	Benzyl chloride	19.17	91	637933	10.39	ppbv	99
63)	1,2-Dichlorobenzene	19.60	146	526435	10.37	ppbv	98
64)	1,2,4-Trichlorobenzene	22.75	180	150345	8.15	ppbv	97
65)	Hexachlorobutadiene	22.95	225	231537	9.33	ppbv	99
66)	Naphthalene	23.44	128	296451	8.12	ppbv	100

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\061212\06121202.D Vial: 4
Acq On : 12 Jun 2012 11:45 am Operator: RACHEL HILL
Sample : CCV VOA1 061212 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 12 12:17 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_120613A** **Run No.:** 49321

Analytical Run Date: 6/13/2012 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

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

Column Length: 60m

Run Comments: PR by RD2 on 14june12 061512rsl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 061312	BFB_TUNE	TUNE	R49321	6/13/2012 8:37:00 AM	Robert Lynch		
CCV VOA1 061312	EPA_TO15	CCV	R49321	6/13/2012 10:31:00 AM	Robert Lynch		
RLVS VOA1 061312	EPA_TO15	RLVS	R49321	6/13/2012 11:14:00 AM	Robert Lynch		
MBLK VOA1 061312	EPA_TO15	MBLK	R49321	6/13/2012 12:00:00 PM	Deborah Griffiths		
1206178-011A	EPA_TO15	SAMP	R49321	6/13/2012 2:11:00 PM	Robert Lynch		
1206178-031A	EPA_TO15	SAMP	R49321	6/13/2012 5:00:00 PM	Robert Lynch		
1206178-032A	EPA_TO15	SAMP	R49321	6/13/2012 5:41:00 PM	Robert Lynch		
1206178-033A	EPA_TO15	SAMP	R49321	6/13/2012 6:22:00 PM	Robert Lynch		
1206178-034A	EPA_TO15	SAMP	R49321	6/13/2012 7:06:00 PM	Robert Lynch		
1206178-035A	EPA_TO15	SAMP	R49321	6/13/2012 7:51:00 PM	Robert Lynch		
1206178-036A	EPA_TO15	SAMP	R49321	6/13/2012 8:35:00 PM	Robert Lynch		
1206178-024A	EPA_TO15	SAMP	R49321	6/13/2012 9:16:00 PM	Robert Lynch		
1206178-024Adup	EPA_TO15	DUP	R49321	6/13/2012 9:57:00 PM	Deborah Griffiths		
1206178-026A	EPA_TO15	SAMP	R49321	6/14/2012 12:02:00 AM	Robert Lynch		
1206178-027A	EPA_TO15	SAMP	R49321	6/14/2012 12:43:00 AM	Robert Lynch		
1206178-028A	EPA_TO15	SAMP	R49321	6/14/2012 1:24:00 AM	Robert Lynch		
1206178-029A	EPA_TO15	SAMP	R49321	6/14/2012 2:05:00 AM	Robert Lynch		
1206178-030A	EPA_TO15	SAMP	R49321	6/14/2012 2:48:00 AM	Robert Lynch		
1206178-037A	EPA_TO15	SAMP	R49321	6/14/2012 3:32:00 AM	Robert Lynch		
RLVS2 VOA1 06131	EPA_TO15	RLVS	R49321	6/14/2012 4:14:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

02-Jul-12

RunNo 49321

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
964245	BFB VOA1 061312	BFB_TUNE	TUNE	.\1\DATA\061312	6/13/2012 8:37:0	1	R49321		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		88.3	88.3		100	0	0	0	0	0	88%	50	120	0%	
175	M		7.3	7.3		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		6.8	6.8		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		47.3	47.3		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
964246	CCV VOA1 061312	EPA_TO15	CCV	.\1\DATA\061312	6/13/2012 10:31:	1	R49321		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	10.1	10.1		9.6	0	0	0.107	1	50	105%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.6	10.6		10	0	0	0.211	1	50	106%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	9.98	9.98		9.8	0	0	0.108	1	50	102%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	10.82	10.82		9.8	0	0	0.2	1	50	110%	70	130	0%	
1,1-Dichloroethane	A	ppbv	10.15	10.15		9.7	0	0	0.111	1	50	105%	70	130	0%	
1,1-Dichloroethene	A	ppbv	9.98	9.98		9.9	0	0	0.097	1	50	101%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	8.49	8.49		9.1	0	0	0.271	1	50	93%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	10.34	10.34		9.8	0	0	0.245	1	50	106%	70	130	0%	
1,2-Dibromoethane	A	ppbv	10.66	10.66		9.6	0	0	0.186	1	50	111%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	9.69	9.69		9.7	0	0	0.208	1	50	100%	70	130	0%	
1,2-Dichloroethane	A	ppbv	10.67	10.67		9.7	0	0	0.196	1	50	110%	70	130	0%	
1,2-Dichloropropane	A	ppbv	11.1	11.1		9.8	0	0	0.224	1	50	113%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	10.22	10.22		9.7	0	0	0.24	1	50	105%	70	130	0%	
1,3-Butadiene	A	ppbv	9.41	9.41		9.8	0	0	0.152	1	50	96%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	10	10		9.7	0	0	0.202	1	50	103%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
964246	CCV VOA1 061312	EPA_TO15	CCV	.\1\DATA\061312	6/13/2012 10:31:	1	R49321		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.81	9.81		9.6	0	0	0.194	1	50	102%	70	130	0%	
1,4-Dioxane	A	ppbv	10.67	10.67		9.6	0	0	0.128	1	50	111%	70	130	0%	
2-Butanone	A	ppbv	11.64	11.64		9.9	0	0	0.287	1	50	118%	70	130	0%	
2-Hexanone	A	ppbv	11.16	11.16		9.8	0	0	0.135	1	50	114%	70	130	0%	
2-Propanol	A	ppbv	10.6	10.6		10.1	0	0	0.329	1	50	105%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	10.87	10.87		10	0	0	0.157	1	50	109%	70	130	0%	
Acetone	A	ppbv	11.03	11.03		10	0	0	0.43	1	50	110%	70	130	0%	
Benzene	A	ppbv	10.71	10.71		9.6	0	0	0.126	1	50	112%	70	130	0%	
Benzyl chloride	A	ppbv	10.01	10.01		9.7	0	0	0.155	1	50	103%	70	130	0%	
Bromodichloromethane	A	ppbv	10.19	10.19		9.6	0	0	0.156	1	50	106%	70	130	0%	
Bromoform	A	ppbv	10.18	10.18		9.6	0	0	0.197	1	50	106%	70	130	0%	
Bromomethane	A	ppbv	8.86	8.86		9.3	0	0	0.075	1	50	95%	70	130	0%	
Carbon disulfide	A	ppbv	9.64	9.64		9.7	0	0	0.093	1	50	99%	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	10.87	10.87		9.9	0	0	0.275	1	50	110%	70	130	0%	
Chlorodibromomethane	A	ppbv	10.59	10.59		9.2	0	0	0.165	1	50	115%	70	130	0%	
Chloroethane	A	ppbv	8.7	8.7		9.8	0	0	0.063	1	50	89%	70	130	0%	
Chloroform	A	ppbv	10.39	10.39		9.4	0	0	0.126	1	50	111%	70	130	0%	
Chloromethane	A	ppbv	9.15	9.15		9.8	0	0	0.104	1	50	93%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	10.34	10.34		9.8	0	0	0.107	1	50	106%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	10.66	10.66		9.5	0	0	0.166	1	50	112%	70	130	0%	
Cyclohexane	A	ppbv	10.26	10.26		9.8	0	0	0.684	2	50	105%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	8.72	8.72		9.2	0	0	0.086	1	50	95%	70	130	0%	
Ethanol	A	ppbv	9.87	9.87		9.2	0	0	1.962	5	50	107%	70	130	0%	
Ethyl acetate	A	ppbv	11.18	11.18		9.8	0	0	0.157	1	50	114%	70	130	0%	
Ethylbenzene	A	ppbv	10.98	10.98		9.8	0	0	0.737	2	50	112%	70	130	0%	
Heptane	A	ppbv	10.63	10.63		9.9	0	0	0.249	1	50	107%	70	130	0%	
Hexachlorobutadiene	A	ppbv	9.39	9.39		9.4	0	0	0.374	2	50	100%	70	130	0%	
m,p-Xylene	A	ppbv	22.1	22.1		19.2	0	0	0.524	2	100	115%	70	130	0%	
Methylene chloride	A	ppbv	10.06	10.06		10	0	0	2.077	5	50	101%	70	130	0%	
n-Hexane	A	ppbv	10.4	10.4		10.1	0	0	0.692	2	50	103%	70	130	0%	
Naphthalene	A	ppbv	8.57	8.57		9.2	0	0	0.247	1	50	93%	70	130	0%	
o-Xylene	A	ppbv	11.05	11.05		10	0	0	0.258	1	50	111%	70	130	0%	
Propylene	A	ppbv	9.83	9.83		10.2	0	0	0.075	1	50	96%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
964246	CCV VOA1 061312	EPA_TO15	CCV	.\1\DATA\061312	6/13/2012 10:31:	1	R49321		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	10.87	10.87		9.8	0	0	0.263	1	50	111%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	11.18	11.18		9.9	0	0	0.228	1	50	113%	70	130	0%	
Tetrachloroethene	A	ppbv	9.98	9.98		9.6	0	0	0.148	1	50	104%	70	130	0%	
Tetrahydrofuran	A	ppbv	11.28	11.28		10	0	0	0.201	1	50	113%	70	130	0%	
Toluene	A	ppbv	11.09	11.09		9.8	0	0	0.158	1	50	113%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.12	10.12		9.8	0	0	0.117	1	50	103%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	10.18	10.18		9.1	0	0	0.171	1	50	112%	70	130	0%	
Trichloroethene	A	ppbv	10.16	10.16		9.6	0	0	0.119	1	50	106%	70	130	0%	
Trichlorofluoromethane	A	ppbv	9.39	9.39		9.6	0	0	0.148	1	50	98%	70	130	0%	
Vinyl acetate	A	ppbv	11.79	11.79		9.9	0	0	0.266	1	50	119%	70	130	0%	
Vinyl chloride	A	ppbv	8.94	8.94		9.4	0	0	0.072	1	50	95%	70	130	0%	
Xylenes, Total	C	ppbv	33.15	33.15		29.2	0	0	0.782	3	150	114%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	12.11	12.11		12.5	0	0	0	0	0	97%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
964247	RLVS VOA1 061312	EPA_TO15	RLVS	.\1\DATA\061312	6/13/2012 11:14:	1	R49321		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	1.04	1.04		0.996	0	0	0.107	1	50	104%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.25	1.25		1	0	0	0.211	1	50	125%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	1.11	1.11		0.98	0	0	0.108	1	50	113%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	1.06	1.06		0.98	0	0	0.2	1	50	108%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1.09	1.09		0.97	0	0	0.111	1	50	112%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1.08	1.08		0.99	0	0	0.097	1	50	109%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.07	1.07		0.91	0	0	0.271	1	50	118%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	1.2	1.2		0.98	0	0	0.245	1	50	122%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.98	0.98		0.96	0	0	0.186	1	50	102%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.27	1.27		0.97	0	0	0.208	1	50	131%	70	130	0%	S
1,2-Dichloroethane	A	ppbv	1.12	1.12		0.97	0	0	0.196	1	50	115%	70	130	0%	
1,2-Dichloropropane	A	ppbv	1.09	1.09		0.98	0	0	0.224	1	50	111%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\061312\06131203.D Vial: 5
Acq On : 13 Jun 2012 10:31 am Operator: RACHEL HILL
Sample : CCV VOA1 061312 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	95	0.00
2	T	Propylene	0.813	0.784	3.6	84	0.00
3	T	Dichlorodifluoromethane	3.079	2.918	5.2	81	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.303	2.201	4.4	83	0.00
5	T	Chloromethane	0.928	0.895	3.6	80	0.00
6	T	Vinyl chloride	1.049	0.997	5.0	77	0.00
7	T	1,3-Butadiene	0.727	0.699	3.9	76	0.00
8	T	Bromomethane	1.112	1.059	4.8	81	0.00
9	T	Chloroethane	0.591	0.559	5.4	78	0.00
10	T	Trichlorofluoromethane	2.936	2.872	2.2	81	0.00
11	T	Ethanol	0.315	0.338	-7.3	86	0.00
12	T	Freon113	1.993	2.029	-1.8	81	0.00
13	T	1,1-Dichloroethene	1.379	1.390	-0.8	80	0.00
14	T	Acetone	1.332	1.469	-10.3	82	0.00
15	T	Carbon disulfide	2.400	2.385	0.6	81	0.00
16	T	2-Propanol	1.279	1.343	-5.0	84	0.00
17	T	Methylene chloride	1.022	1.028	-0.6	82	0.00
18	T	tert-Butyl Methyl Ether	2.198	2.483	-13.0	82	0.00
19	T	trans-1,2-Dichloroethene	1.262	1.303	-3.2	81	0.00
20	T	n-Hexane	1.399	1.440	-2.9	81	0.00
21	T	1,1-Dichloroethane	1.713	1.792	-4.6	82	0.00
22	T	Vinyl acetate	2.035	2.424	-19.1	83	0.00
23	T	cis-1,2-Dichloroethene	1.036	1.093	-5.5	82	0.00
24	T	2-Butanone	1.404	1.651	-17.6	84	0.00
25	T	Ethyl acetate	1.735	1.979	-14.1	82	0.00
26	T	Tetrahydrofuran	0.898	1.012	-12.7	82	0.00
27	T	Chloroform	1.950	2.067	-6.0	82	0.00
28	T	1,1,1-Trichloroethane	2.105	2.214	-5.2	82	0.00
29	T	Cyclohexane	1.419	1.486	-4.7	81	0.00
30	T	Carbon tetrachloride	2.325	2.432	-4.6	81	0.00
31	T	Benzene	2.740	3.057	-11.6	83	0.00
32	T	1,2-Dichloroethane	1.133	1.246	-10.0	81	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	94	0.00
34	T	Heptane	0.486	0.522	-7.4	81	0.00
35	T	Trichloroethene	0.444	0.469	-5.6	84	0.00
36	T	1,2-Dichloropropane	0.304	0.344	-13.2	83	0.00
37	T	1,4-Dioxane	0.175	0.195	-11.4	86	0.00
38	T	Bromodichloromethane	0.631	0.670	-6.2	82	0.00
39	T	cis-1,3-Dichloropropene	0.487	0.546	-12.1	82	0.00
40	T	4-Methyl-2-pentanone	0.208	0.226	-8.7	81	0.00
41	T	Toluene	1.030	1.166	-13.2	84	0.00
42	T	trans-1,3-Dichloropropene	0.451	0.504	-11.8	83	0.00
43	T	1,1,2-Trichloroethane	0.358	0.395	-10.3	84	0.00
44	T	Tetrachloroethene	0.582	0.605	-4.0	83	0.00
45	T	2-Hexanone	0.404	0.460	-13.9	82	0.00
46	T	Chlorodibromomethane	0.660	0.713	-8.0	82	0.00
47	T	1,2-Dibromoethane	0.559	0.621	-11.1	83	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	94	0.00
49	T	Chlorobenzene	0.880	0.967	-9.9	83	0.00
50	T	Ethylbenzene	1.411	1.581	-12.0	83	0.00
51	T	m,p-Xylene	1.097	1.263	-15.1	83	0.00
52	T	o-Xylene	1.117	1.234	-10.5	82	0.00
53	T	Styrene	0.860	0.954	-10.9	83	0.00
54	T	Bromoform	0.634	0.672	-6.0	81	0.00
55	S	4-Bromofluorobenzene	0.581	0.563	3.1	90	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\061312\06131203.D Vial: 5
Acq On : 13 Jun 2012 10:31 am Operator: RACHEL HILL
Sample : CCV VOA1 061312 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	0.739	-6.0	81	0.00
57	T	4-Ethyltoluene	1.452	1.565	-7.8	82	0.00
58	T	1,3,5-Trimethylbenzene	1.242	1.309	-5.4	81	0.00
59	T	1,2,4-Trimethylbenzene	1.162	1.226	-5.5	80	0.00
60	T	1,3-Dichlorobenzene	0.763	0.787	-3.1	81	0.00
61	T	1,4-Dichlorobenzene	0.736	0.753	-2.3	80	0.00
62	T	Benzyl chloride	0.809	0.836	-3.3	80	0.00
63	T	1,2-Dichlorobenzene	0.669	0.668	0.1	79	0.00
64	T	1,2,4-Trichlorobenzene	0.243	0.227	6.6	76	0.00
65	T	Hexachlorobutadiene	0.327	0.327	0.0	76	0.00
66		Naphthalene	0.481	0.448	6.9	76	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\061312\06131203.D Vial: 5
Acq On : 13 Jun 2012 10:31 am Operator: RACHEL HILL
Sample : CCV VOA1 061312 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 13 10:56 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	342787	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.68	114	1116823	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.53	117	988363	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.18	95	556448	12.11	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 96.88%

Target Compounds							Qvalue
2) Propylene	5.52	41	219223	9.83	ppbv		96
3) Dichlorodifluoromethane	5.58	85	736154	8.72	ppbv		100
4) 1,2-Dichloro-1,2,2,2-tetra	5.84	135	573420	9.08	ppbv	#	85
5) Chloromethane	6.00	50	233054	9.15	ppbv		98
6) Vinyl chloride	6.21	62	257110	8.94	ppbv	#	99
7) 1,3-Butadiene	6.26	39	187734	9.41	ppbv		98
8) Bromomethane	6.85	94	270163	8.86	ppbv		99
9) Chloroethane	7.00	64	141024	8.70	ppbv		99
10) Trichlorofluoromethane	7.33	101	756130	9.39	ppbv		98
11) Ethanol	7.57	45	85185	9.87	ppbv		100
12) Freon113	7.99	101	545406	9.98	ppbv		94
13) 1,1-Dichloroethene	8.09	61	377366	9.98	ppbv		98
14) Acetone	8.18	43	402797	11.03	ppbv	#	95
15) Carbon disulfide	8.46	76	634524	9.64	ppbv	#	100
16) 2-Propanol	8.23	45	371911	10.60	ppbv	#	1
17) Methylene chloride	8.75	49	282012	10.06	ppbv		98
18) tert-Butyl Methyl Ether	8.95	73	674171	11.18	ppbv		98
19) trans-1,2-Dichloroethene	9.03	61	350214	10.12	ppbv		99
20) n-Hexane	9.22	57	398944	10.40	ppbv		98
21) 1,1-Dichloroethane	9.59	63	476552	10.15	ppbv		99
22) Vinyl acetate	9.52	43	658175	11.79	ppbv		99
23) cis-1,2-Dichloroethene	10.27	96	293717	10.34	ppbv		99
24) 2-Butanone	10.24	43	448122	11.64	ppbv		97
25) Ethyl acetate	10.19	43	531964	11.18	ppbv	#	100
26) Tetrahydrofuran	10.58	42	277629	11.28	ppbv		95
27) Chloroform	10.60	83	555586	10.39	ppbv		97
28) 1,1,1-Trichloroethane	10.85	97	582751	10.10	ppbv		99
29) Cyclohexane	10.86	56	399403	10.26	ppbv		99
30) Carbon tetrachloride	11.01	117	633483	9.94	ppbv		99
31) Benzene	11.29	78	804900	10.71	ppbv		99
32) 1,2-Dichloroethane	11.37	62	331532	10.67	ppbv		99
34) Heptane	11.34	43	461610	10.63	ppbv		97
35) Trichloroethene	12.02	130	402626	10.16	ppbv		97
36) 1,2-Dichloropropane	12.38	63	301468	11.10	ppbv		99
37) 1,4-Dioxane	12.45	88	167120	10.67	ppbv		94
38) Bromodichloromethane	12.66	83	574684	10.19	ppbv		98
39) cis-1,3-Dichloropropene	13.21	75	463780	10.66	ppbv		100
40) 4-Methyl-2-pentanone	13.32	58	201946	10.87	ppbv		98
41) Toluene	13.62	91	1020748	11.09	ppbv		98
42) trans-1,3-Dichloropropene	13.93	75	409718	10.18	ppbv		100
43) 1,1,2-Trichloroethane	14.20	97	345670	10.82	ppbv		99
44) Tetrachloroethene	14.32	166	518662	9.98	ppbv		96
45) 2-Hexanone	14.40	43	402641	11.16	ppbv		96
46) Chlorodibromomethane	14.75	129	624274	10.59	ppbv		99
47) 1,2-Dibromoethane	14.98	107	532673	10.66	ppbv		100
49) Chlorobenzene	15.57	112	756941	10.87	ppbv		99
50) Ethylbenzene	15.61	91	1224988	10.98	ppbv		97
51) m,p-Xylene	15.77	91	1916640	22.10	ppbv		97
52) o-Xylene	16.36	91	976067	11.05	ppbv		98

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\061312\06131203.D Vial: 5
Acq On : 13 Jun 2012 10:31 am Operator: RACHEL HILL
Sample : CCV VOA1 061312 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 13 10:56 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

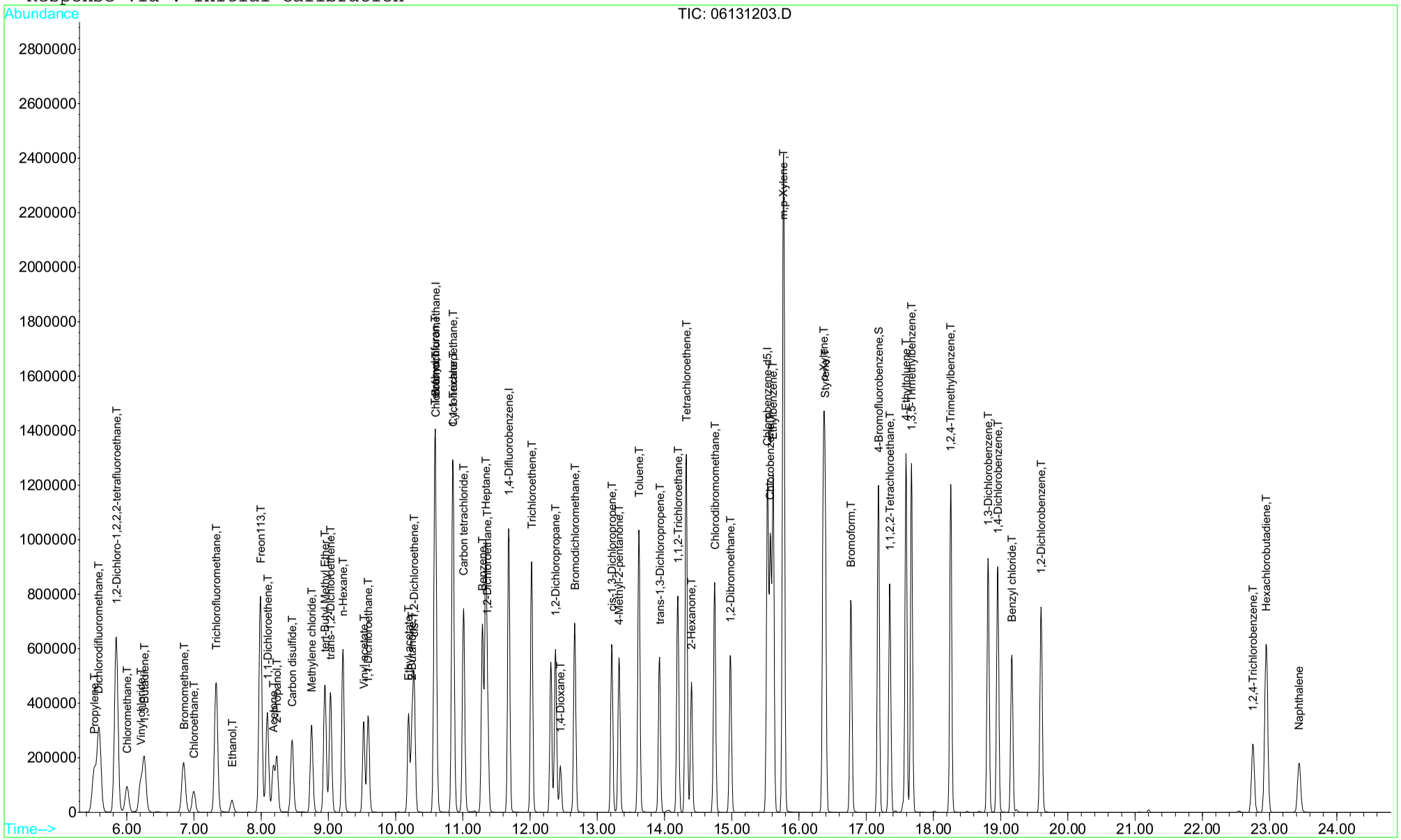
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53)	Styrene	16.39	104	738849	10.87	ppbv	98
54)	Bromoform	16.77	173	509937	10.18	ppbv	99
56)	1,1,2,2-Tetrachloroethane	17.35	83	584435	10.60	ppbv	98
57)	4-Ethyltoluene	17.59	105	1212539	10.56	ppbv	98
58)	1,3,5-Trimethylbenzene	17.68	105	1003813	10.22	ppbv	98
59)	1,2,4-Trimethylbenzene	18.26	105	949985	10.34	ppbv	98
60)	1,3-Dichlorobenzene	18.81	146	603665	10.00	ppbv	98
61)	1,4-Dichlorobenzene	18.96	146	571265	9.81	ppbv	99
62)	Benzyl chloride	19.17	91	640827	10.01	ppbv	99
63)	1,2-Dichlorobenzene	19.60	146	512644	9.69	ppbv	98
64)	1,2,4-Trichlorobenzene	22.75	180	163164	8.49	ppbv	97
65)	Hexachlorobutadiene	22.95	225	242803	9.39	ppbv	99
66)	Naphthalene	23.44	128	326054	8.57	ppbv	100

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\061312\06131203.D Vial: 5
Acq On : 13 Jun 2012 10:31 am Operator: RACHEL HILL
Sample : CCV VOA1 061312 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 13 10:56 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_120614A **Run No.:** 49363

Analytical Run Date: 6/14/2012 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

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

Column Length: 60m

Run Comments: PR AW 6.16.12 061812rsl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 061412	BFB_TUNE	TUNE	R49363	6/14/2012 9:45:00 AM	Robert Lynch		
CCV VOA1 061412	EPA_TO15	CCV	R49363	6/14/2012 10:28:00 AM	Robert Lynch		
RLVS VOA1 061412	EPA_TO15	RLVS	R49363	6/14/2012 11:18:00 AM	Robert Lynch		
MBLK/BV0592 CC V	EPA_TO15	MBLK	R49363	6/14/2012 12:16:00 PM	Deborah Griffiths		
MBLK SUMMA VOA1	EPA_TO15	MBLK	R49363	6/14/2012 2:06:00 PM	Deborah Griffiths		
1206558-001A	EPA_TO15	SAMP	R49363	6/14/2012 3:48:00 PM	Robert Lynch		
1206558-002A	EPA_TO15	SAMP	R49363	6/14/2012 5:16:00 PM	Robert Lynch		
1206558-003A	EPA_TO15	SAMP	R49363	6/14/2012 5:57:00 PM	Robert Lynch		
1206558-003A	EPA_TO15	SAMP	R49363	6/14/2012 6:45:00 PM	Robert Lynch		
1206178-038A	EPA_TO15	SAMP	R49363	6/14/2012 7:30:00 PM	Robert Lynch		
1206178-038ADUP	EPA_TO15	DUP	R49363	6/14/2012 8:14:00 PM	Deborah Griffiths		
1206178-039A	EPA_TO15	SAMP	R49363	6/14/2012 8:56:00 PM	Robert Lynch		
1206178-040A	EPA_TO15	SAMP	R49363	6/14/2012 9:40:00 PM	Robert Lynch		
1206178-041A	EPA_TO15	SAMP	R49363	6/14/2012 10:24:00 PM	Robert Lynch		
1206178-042A	EPA_TO15	SAMP	R49363	6/14/2012 11:09:00 PM	Robert Lynch		
1206178-043A	EPA_TO15	SAMP	R49363	6/14/2012 11:53:00 PM	Robert Lynch		
1206178-044A	EPA_TO15	SAMP	R49363	6/15/2012 12:38:00 AM	Robert Lynch		
1206178-045A	EPA_TO15	SAMP	R49363	6/15/2012 1:22:00 AM	Robert Lynch		
1206178-047A	EPA_TO15	SAMP	R49363	6/15/2012 2:45:00 AM	Robert Lynch		
1206178-025A	EPA_TO15	SAMP	R49363	6/15/2012 3:29:00 AM	Robert Lynch		
1206178-033A	EPA_TO15	SAMP	R49363	6/15/2012 4:55:00 AM	Robert Lynch		
RLVS VOA1 061412	EPA_TO15	RLVS	R49363	6/15/2012 5:37:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

02-Jul-12

RunNo 49363

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
964861	BFB VOA1 061412	BFB_TUNE	TUNE	.\1\DATA\061412	6/14/2012 9:45:0	1	R49363		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		86.6	86.6		100	0	0	0	0	0	87%	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		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	
50	M		17.3	17.3		100	0	0	0	0	0	17%	8	40	0%	
75	M		47.7	47.7		100	0	0	0	0	0	48%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		7	7		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
964862	CCV VOA1 061412	EPA_TO15	CCV	.\1\DATA\061412	6/14/2012 10:28:	1	R49363		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	11.14	11.14		9.6	0	0	0.107	1	50	116%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	11.2	11.2		10	0	0	0.211	1	50	112%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	11.21	11.21		9.8	0	0	0.108	1	50	114%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	11	11		9.8	0	0	0.2	1	50	112%	70	130	0%	
1,1-Dichloroethane	A	ppbv	11.12	11.12		9.7	0	0	0.111	1	50	115%	70	130	0%	
1,1-Dichloroethene	A	ppbv	11.14	11.14		9.9	0	0	0.097	1	50	113%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	8.68	8.68		9.1	0	0	0.271	1	50	95%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	10.97	10.97		9.8	0	0	0.245	1	50	112%	70	130	0%	
1,2-Dibromoethane	A	ppbv	10.8	10.8		9.6	0	0	0.186	1	50	113%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	10.42	10.42		9.7	0	0	0.208	1	50	107%	70	130	0%	
1,2-Dichloroethane	A	ppbv	11.56	11.56		9.7	0	0	0.196	1	50	119%	70	130	0%	
1,2-Dichloropropane	A	ppbv	11.31	11.31		9.8	0	0	0.224	1	50	115%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	10.77	10.77		9.7	0	0	0.24	1	50	111%	70	130	0%	
1,3-Butadiene	A	ppbv	11.22	11.22		9.8	0	0	0.152	1	50	114%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	10.43	10.43		9.7	0	0	0.202	1	50	108%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
964862	CCV VOA1 061412	EPA_TO15	CCV	\1\DATA\061412	6/14/2012 10:28:	1	R49363		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	10.35	10.35		9.6	0	0	0.194	1	50	108%	70	130	0%	
1,4-Dioxane	A	ppbv	10.82	10.82		9.6	0	0	0.128	1	50	113%	70	130	0%	
2-Butanone	A	ppbv	12.03	12.03		9.9	0	0	0.287	1	50	122%	70	130	0%	
2-Hexanone	A	ppbv	11.21	11.21		9.8	0	0	0.135	1	50	114%	70	130	0%	
2-Propanol	A	ppbv	11.42	11.42		10.1	0	0	0.329	1	50	113%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	11.24	11.24		10	0	0	0.157	1	50	112%	70	130	0%	
Acetone	A	ppbv	11.87	11.87		10	0	0	0.43	1	50	119%	70	130	0%	
Benzene	A	ppbv	11.58	11.58		9.6	0	0	0.126	1	50	121%	70	130	0%	
Benzyl chloride	A	ppbv	10.47	10.47		9.7	0	0	0.155	1	50	108%	70	130	0%	
Bromodichloromethane	A	ppbv	10.52	10.52		9.6	0	0	0.156	1	50	110%	70	130	0%	
Bromoform	A	ppbv	10.5	10.5		9.6	0	0	0.197	1	50	109%	70	130	0%	
Bromomethane	A	ppbv	9.99	9.99		9.3	0	0	0.075	1	50	107%	70	130	0%	
Carbon disulfide	A	ppbv	10.69	10.69		9.7	0	0	0.093	1	50	110%	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	11.29	11.29		9.9	0	0	0.275	1	50	114%	70	130	0%	
Chlorodibromomethane	A	ppbv	10.76	10.76		9.2	0	0	0.165	1	50	117%	70	130	0%	
Chloroethane	A	ppbv	9.91	9.91		9.8	0	0	0.063	1	50	101%	70	130	0%	
Chloroform	A	ppbv	11.47	11.47		9.4	0	0	0.126	1	50	122%	70	130	0%	
Chloromethane	A	ppbv	10.37	10.37		9.8	0	0	0.104	1	50	106%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	11.33	11.33		9.8	0	0	0.107	1	50	116%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	10.75	10.75		9.5	0	0	0.166	1	50	113%	70	130	0%	
Cyclohexane	A	ppbv	11.44	11.44		9.8	0	0	0.684	2	50	117%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	10	10		9.2	0	0	0.086	1	50	109%	70	130	0%	
Ethanol	A	ppbv	10.17	10.17		9.2	0	0	1.962	5	50	111%	70	130	0%	
Ethyl acetate	A	ppbv	11.65	11.65		9.8	0	0	0.157	1	50	119%	70	130	0%	
Ethylbenzene	A	ppbv	11.45	11.45		9.8	0	0	0.737	2	50	117%	70	130	0%	
Heptane	A	ppbv	11.12	11.12		9.9	0	0	0.249	1	50	112%	70	130	0%	
Hexachlorobutadiene	A	ppbv	10.02	10.02		9.4	0	0	0.374	2	50	107%	70	130	0%	
m,p-Xylene	A	ppbv	23.03	23.03		19.2	0	0	0.524	2	100	120%	70	130	0%	
Methylene chloride	A	ppbv	10.99	10.99		10	0	0	2.077	5	50	110%	70	130	0%	
n-Hexane	A	ppbv	11.53	11.53		10.1	0	0	0.692	2	50	114%	70	130	0%	
Naphthalene	A	ppbv	8.7	8.7		9.2	0	0	0.247	1	50	95%	70	130	0%	
o-Xylene	A	ppbv	11.54	11.54		10	0	0	0.258	1	50	115%	70	130	0%	
Propylene	A	ppbv	11.27	11.27		10.2	0	0	0.075	1	50	110%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
964862	CCV VOA1 061412	EPA_TO15	CCV	.\1\DATA\061412	6/14/2012 10:28:	1	R49363		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	11.32	11.32		9.8	0	0	0.263	1	50	116%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	11.96	11.96		9.9	0	0	0.228	1	50	121%	70	130	0%	
Tetrachloroethene	A	ppbv	10.24	10.24		9.6	0	0	0.148	1	50	107%	70	130	0%	
Tetrahydrofuran	A	ppbv	12.1	12.1		10	0	0	0.201	1	50	121%	70	130	0%	
Toluene	A	ppbv	11.28	11.28		9.8	0	0	0.158	1	50	115%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	11.21	11.21		9.8	0	0	0.117	1	50	114%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	10.27	10.27		9.1	0	0	0.171	1	50	113%	70	130	0%	
Trichloroethene	A	ppbv	10.43	10.43		9.6	0	0	0.119	1	50	109%	70	130	0%	
Trichlorofluoromethane	A	ppbv	10.51	10.51		9.6	0	0	0.148	1	50	109%	70	130	0%	
Vinyl acetate	A	ppbv	12.61	12.61		9.9	0	0	0.266	1	50	127%	70	130	0%	
Vinyl chloride	A	ppbv	10.56	10.56		9.4	0	0	0.072	1	50	112%	70	130	0%	
Xylenes, Total	C	ppbv	34.57	34.57		29.2	0	0	0.782	3	150	118%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	12.09	12.09		12.5	0	0	0	0	0	97%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
964863	RLVS VOA1 061412	EPA_TO15	RLVS	.\1\DATA\061412	6/14/2012 11:18:	1	R49363		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	1.01	1.01		0.996	0	0	0.107	1	50	101%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.1	1.1		1	0	0	0.211	1	50	110%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	1.08	1.08		0.98	0	0	0.108	1	50	110%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.92	0.92		0.98	0	0	0.2	1	50	94%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1.04	1.04		0.97	0	0	0.111	1	50	107%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1.03	1.03		0.99	0	0	0.097	1	50	104%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	0.9	0.9		0.91	0	0	0.271	1	50	99%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	1.06	1.06		0.98	0	0	0.245	1	50	108%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.84	0.84		0.96	0	0	0.186	1	50	88%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.13	1.13		0.97	0	0	0.208	1	50	116%	70	130	0%	
1,2-Dichloroethane	A	ppbv	1.12	1.12		0.97	0	0	0.196	1	50	115%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.97	0.97		0.98	0	0	0.224	1	50	99%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\061412\06141202.D Vial: 4
Acq On : 14 Jun 2012 10:28 am Operator: RACHEL HILL
Sample : CCV VOA1 061412 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	82	0.00
2	T	Propylene	0.813	0.899	-10.6	83	0.00
3	T	Dichlorodifluoromethane	3.079	3.345	-8.6	80	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.303	2.464	-7.0	81	0.00
5	T	Chloromethane	0.928	1.014	-9.3	79	0.00
6	T	Vinyl chloride	1.049	1.179	-12.4	79	0.00
7	T	1,3-Butadiene	0.727	0.833	-14.6	79	0.00
8	T	Bromomethane	1.112	1.194	-7.4	79	0.00
9	T	Chloroethane	0.591	0.636	-7.6	77	0.00
10	T	Trichlorofluoromethane	2.936	3.213	-9.4	79	0.00
11	T	Ethanol	0.315	0.348	-10.5	76	0.00
12	T	Freon113	1.993	2.278	-14.3	79	0.00
13	T	1,1-Dichloroethene	1.379	1.551	-12.5	77	0.00
14	T	Acetone	1.332	1.581	-18.7	77	0.00
15	T	Carbon disulfide	2.400	2.646	-10.3	78	0.00
16	T	2-Propanol	1.279	1.447	-13.1	78	0.00
17	T	Methylene chloride	1.022	1.123	-9.9	77	0.00
18	T	tert-Butyl Methyl Ether	2.198	2.655	-20.8	76	0.00
19	T	trans-1,2-Dichloroethene	1.262	1.444	-14.4	78	0.00
20	T	n-Hexane	1.399	1.597	-14.2	77	0.00
21	T	1,1-Dichloroethane	1.713	1.963	-14.6	77	0.00
22	T	Vinyl acetate	2.035	2.592	-27.4	76	0.00
23	T	cis-1,2-Dichloroethene	1.036	1.198	-15.6	78	0.00
24	T	2-Butanone	1.404	1.706	-21.5	75	0.00
25	T	Ethyl acetate	1.735	2.064	-19.0	74	0.00
26	T	Tetrahydrofuran	0.898	1.086	-20.9	76	0.00
27	T	Chloroform	1.950	2.283	-17.1	78	0.00
28	T	1,1,1-Trichloroethane	2.105	2.442	-16.0	78	0.00
29	T	Cyclohexane	1.419	1.657	-16.8	78	0.00
30	T	Carbon tetrachloride	2.325	2.706	-16.4	78	0.00
31	T	Benzene	2.740	3.306	-20.7	77	0.00
32	T	1,2-Dichloroethane	1.133	1.350	-19.2	76	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	86	0.00
34	T	Heptane	0.486	0.546	-12.3	77	0.00
35	T	Trichloroethene	0.444	0.482	-8.6	79	0.00
36	T	1,2-Dichloropropane	0.304	0.351	-15.5	77	0.00
37	T	1,4-Dioxane	0.175	0.198	-13.1	79	0.00
38	T	Bromodichloromethane	0.631	0.692	-9.7	77	0.00
39	T	cis-1,3-Dichloropropene	0.487	0.551	-13.1	76	0.00
40	T	4-Methyl-2-pentanone	0.208	0.234	-12.5	76	0.00
41	T	Toluene	1.030	1.185	-15.0	77	0.00
42	T	trans-1,3-Dichloropropene	0.451	0.509	-12.9	76	0.00
43	T	1,1,2-Trichloroethane	0.358	0.402	-12.3	77	0.00
44	T	Tetrachloroethene	0.582	0.620	-6.5	77	0.00
45	T	2-Hexanone	0.404	0.462	-14.4	75	0.00
46	T	Chlorodibromomethane	0.660	0.724	-9.7	76	0.00
47	T	1,2-Dibromoethane	0.559	0.629	-12.5	76	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	84	0.00
49	T	Chlorobenzene	0.880	1.004	-14.1	77	0.00
50	T	Ethylbenzene	1.411	1.649	-16.9	77	0.00
51	T	m,p-Xylene	1.097	1.315	-19.9	77	0.00
52	T	o-Xylene	1.117	1.289	-15.4	77	0.00
53	T	Styrene	0.860	0.993	-15.5	77	0.00
54	T	Bromoform	0.634	0.693	-9.3	75	0.00
55	S	4-Bromofluorobenzene	0.581	0.562	3.3	80	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\061412\06141202.D Vial: 4
Acq On : 14 Jun 2012 10:28 am Operator: RACHEL HILL
Sample : CCV VOA1 061412 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	0.781	-12.1	76	0.00
57	T	4-Ethyltoluene	1.452	1.639	-12.9	77	0.00
58	T	1,3,5-Trimethylbenzene	1.242	1.379	-11.0	76	0.00
59	T	1,2,4-Trimethylbenzene	1.162	1.301	-12.0	76	0.00
60	T	1,3-Dichlorobenzene	0.763	0.821	-7.6	75	0.00
61	T	1,4-Dichlorobenzene	0.736	0.793	-7.7	76	0.00
62	T	Benzyl chloride	0.809	0.874	-8.0	75	0.00
63	T	1,2-Dichlorobenzene	0.669	0.719	-7.5	76	0.00
64	T	1,2,4-Trichlorobenzene	0.243	0.232	4.5	69	0.00
65	T	Hexachlorobutadiene	0.327	0.349	-6.7	73	0.00
66		Naphthalene	0.481	0.455	5.4	69	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\061412\06141202.D Vial: 4
Acq On : 14 Jun 2012 10:28 am Operator: RACHEL HILL
Sample : CCV VOA1 061412 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 14 10:52 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	296150	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.68	114	1014994	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.53	117	883523	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.18	95	496598	12.09	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 96.72%

Target Compounds						Qvalue
2) Propylene	5.52	41	217218	11.27	ppbv	97
3) Dichlorodifluoromethane	5.59	85	729133	10.00	ppbv	100
4) 1,2-Dichloro-1,2,2,2-tetra	5.84	135	554557	10.16	ppbv #	84
5) Chloromethane	6.00	50	228204	10.37	ppbv	98
6) Vinyl chloride	6.20	62	262480	10.56	ppbv #	99
7) 1,3-Butadiene	6.26	39	193396	11.22	ppbv	97
8) Bromomethane	6.85	94	263140	9.99	ppbv #	99
9) Chloroethane	7.00	64	138714	9.91	ppbv	99
10) Trichlorofluoromethane	7.33	101	730807	10.51	ppbv	99
11) Ethanol	7.57	45	75827	10.17	ppbv	99
12) Freon113	7.99	101	529020	11.21	ppbv	93
13) 1,1-Dichloroethene	8.09	61	363878	11.14	ppbv	97
14) Acetone	8.18	43	374627	11.87	ppbv #	96
15) Carbon disulfide	8.46	76	608034	10.69	ppbv #	99
16) 2-Propanol	8.23	45	346188	11.42	ppbv #	1
17) Methylene chloride	8.75	49	266082	10.99	ppbv	99
18) tert-Butyl Methyl Ether	8.95	73	622829	11.96	ppbv	99
19) trans-1,2-Dichloroethene	9.03	61	335163	11.21	ppbv	99
20) n-Hexane	9.22	57	382225	11.53	ppbv	97
21) 1,1-Dichloroethane	9.59	63	451090	11.12	ppbv	100
22) Vinyl acetate	9.52	43	607990	12.61	ppbv	99
23) cis-1,2-Dichloroethene	10.28	96	278134	11.33	ppbv	99
24) 2-Butanone	10.24	43	400136	12.03	ppbv	100
25) Ethyl acetate	10.19	43	479135	11.65	ppbv #	98
26) Tetrahydrofuran	10.58	42	257353	12.10	ppbv	95
27) Chloroform	10.60	83	529996	11.47	ppbv	98
28) 1,1,1-Trichloroethane	10.85	97	555401	11.14	ppbv	99
29) Cyclohexane	10.86	56	384634	11.44	ppbv	99
30) Carbon tetrachloride	11.01	117	609133	11.06	ppbv	98
31) Benzene	11.29	78	751951	11.58	ppbv	99
32) 1,2-Dichloroethane	11.37	62	310165	11.56	ppbv	99
34) Heptane	11.34	43	438810	11.12	ppbv	97
35) Trichloroethene	12.02	130	375628	10.43	ppbv	97
36) 1,2-Dichloropropane	12.38	63	279262	11.31	ppbv	99
37) 1,4-Dioxane	12.45	88	153975	10.82	ppbv	94
38) Bromodichloromethane	12.66	83	539437	10.52	ppbv	98
39) cis-1,3-Dichloropropene	13.22	75	425056	10.75	ppbv	99
40) 4-Methyl-2-pentanone	13.32	58	189650	11.24	ppbv	98
41) Toluene	13.62	91	943141	11.28	ppbv	98
42) trans-1,3-Dichloropropene	13.92	75	375801	10.27	ppbv	99
43) 1,1,2-Trichloroethane	14.20	97	319523	11.00	ppbv	99
44) Tetrachloroethene	14.32	166	483688	10.24	ppbv	96
45) 2-Hexanone	14.40	43	367752	11.21	ppbv	97
46) Chlorodibromomethane	14.74	129	576271	10.76	ppbv	98
47) 1,2-Dibromoethane	14.98	107	490260	10.80	ppbv	100
49) Chlorobenzene	15.58	112	702730	11.29	ppbv	99
50) Ethylbenzene	15.62	91	1142114	11.45	ppbv	96
51) m,p-Xylene	15.77	91	1785251	23.03	ppbv	97
52) o-Xylene	16.36	91	911083	11.54	ppbv	98

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\061412\06141202.D Vial: 4
Acq On : 14 Jun 2012 10:28 am Operator: RACHEL HILL
Sample : CCV VOA1 061412 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 14 10:52 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

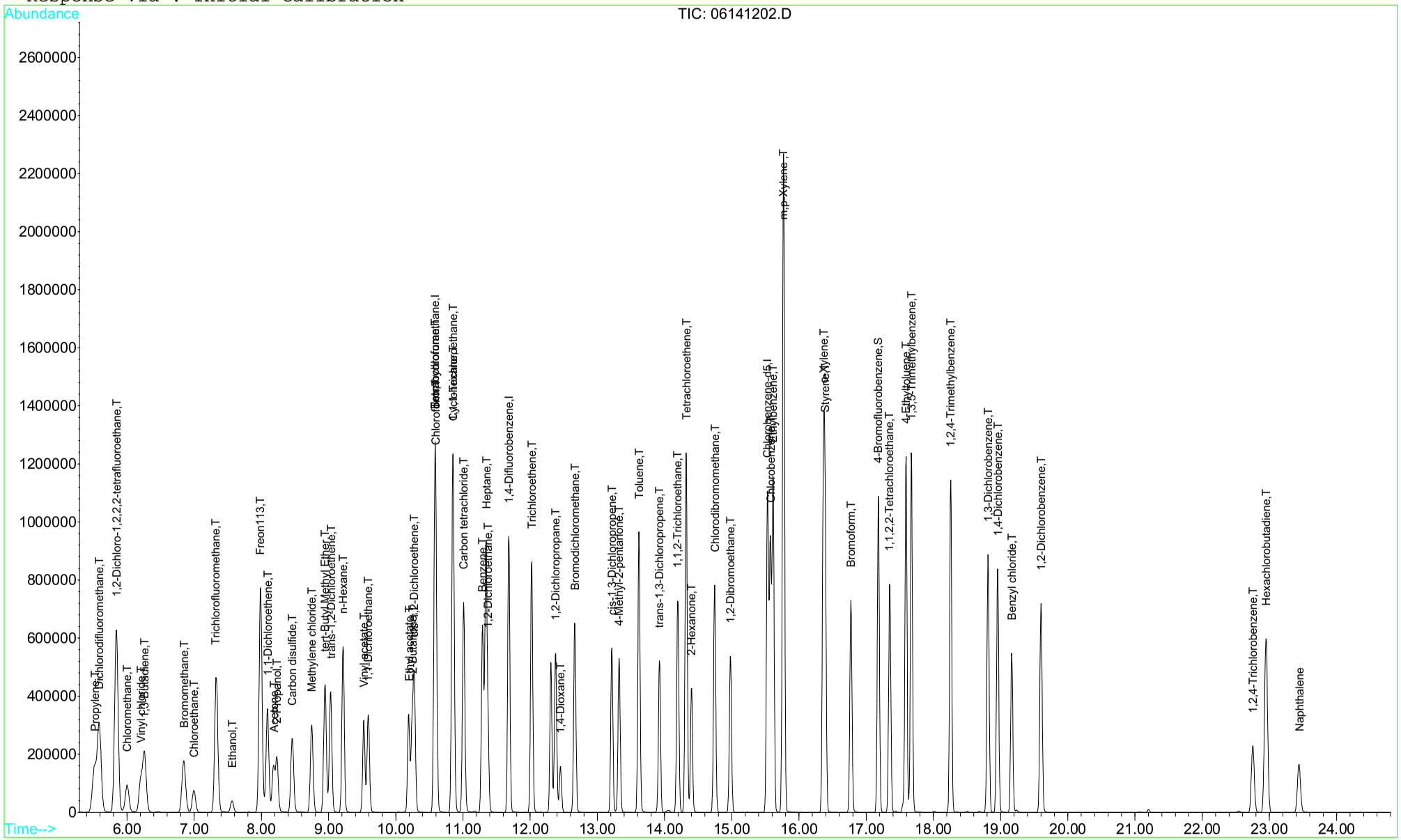
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53)	Styrene	16.39	104	688045	11.32	ppbv	98
54)	Bromoform	16.77	173	470451	10.50	ppbv	99
56)	1,1,2,2-Tetrachloroethane	17.35	83	551817	11.20	ppbv	98
57)	4-Ethyltoluene	17.59	105	1135166	11.06	ppbv	97
58)	1,3,5-Trimethylbenzene	17.67	105	945691	10.77	ppbv	98
59)	1,2,4-Trimethylbenzene	18.26	105	901230	10.97	ppbv	98
60)	1,3-Dichlorobenzene	18.81	146	562867	10.43	ppbv	98
61)	1,4-Dichlorobenzene	18.95	146	538319	10.35	ppbv	98
62)	Benzyl chloride	19.17	91	599060	10.47	ppbv	99
63)	1,2-Dichlorobenzene	19.60	146	492726	10.42	ppbv	98
64)	1,2,4-Trichlorobenzene	22.76	180	149025	8.68	ppbv	96
65)	Hexachlorobutadiene	22.95	225	231584	10.02	ppbv	99
66)	Naphthalene	23.44	128	296032	8.70	ppbv	100

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\061412\06141202.D Vial: 4
Acq On : 14 Jun 2012 10:28 am Operator: RACHEL HILL
Sample : CCV VOA1 061412 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 14 10:52 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_120615A** **Run No.:** 49425

Analytical Run Date: 6/15/2012 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

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

Column Length: 60m

Run Comments: PR by RD2 on 19june12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 061512	BFB_TUNE	TUNE	R49425	6/15/2012 9:35:00 AM	Robert Lynch		
CCV VOA1 061512	EPA_TO15	CCV	R49425	6/15/2012 10:18:00 AM	Robert Lynch		
RLVS VOA1 061512	EPA_TO15	RLVS	R49425	6/15/2012 10:59:00 AM	Robert Lynch		
MBLK VOA1 061512	EPA_TO15	MBLK	R49425	6/15/2012 11:56:00 AM	Robert Lynch		
1206178-055A	EPA_TO15	SAMP	R49425	6/15/2012 12:44:00 PM	Robert Lynch		
1206178-043A	EPA_TO15	SAMP	R49425	6/15/2012 6:38:00 PM	Robert Lynch		
1206178-046A	EPA_TO15	SAMP	R49425	6/15/2012 7:22:00 PM	Robert Lynch		
1206178-055A	EPA_TO15	SAMP	R49425	6/15/2012 8:04:00 PM	Robert Lynch		
1206178-048A	EPA_TO15	SAMP	R49425	6/15/2012 8:45:00 PM	Robert Lynch		Sample over-dluted. Will re-analyze at lower dilution. Reporting here at 40x to be associated with DUP. Will report analytes at lower dilution.
1206178-048ADUP	EPA_TO15	DUP	R49425	6/15/2012 9:27:00 PM	Robert Lynch		
1206178-049A	EPA_TO15	SAMP	R49425	6/15/2012 10:08:00 PM	Robert Lynch		
1206178-050A	EPA_TO15	SAMP	R49425	6/15/2012 10:50:00 PM	Robert Lynch		
1206178-051A	EPA_TO15	SAMP	R49425	6/15/2012 11:31:00 PM	Robert Lynch		
1206178-052A	EPA_TO15	SAMP	R49425	6/16/2012 12:12:00 AM	Robert Lynch		
1206178-053A	EPA_TO15	SAMP	R49425	6/16/2012 12:54:00 AM	Robert Lynch		
1206178-054A	EPA_TO15	SAMP	R49425	6/16/2012 1:35:00 AM	Robert Lynch		
1206396-006A	EPA_TO15	SAMP	R49425	6/16/2012 3:46:00 AM	Robert Lynch		
RLVS2 VOA1 06151	EPA_TO15	RLVS	R49425	6/16/2012 4:29:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

02-Jul-12

RunNo 49425

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
966125	BFB VOA1 061512	BFB_TUNE	TUNE	.\1\DATA\061512	6/15/2012 9:35:0	1	R49425		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	88		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		17.2	17.2		100	0	0	0	0	0	17%	8	40	0%	
75	M		47.7	47.7		100	0	0	0	0	0	48%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.8	6.8		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
966126	CCV VOA1 061512	EPA_TO15	CCV	.\1\DATA\061512	6/15/2012 10:18:	1	R49425		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	11.28	11.28		9.6	0	0	0.107	1	50	118%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.9	10.9		10	0	0	0.211	1	50	109%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	11.52	11.52		9.8	0	0	0.108	1	50	118%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	10.56	10.56		9.8	0	0	0.2	1	50	108%	70	130	0%	
1,1-Dichloroethane	A	ppbv	11.38	11.38		9.7	0	0	0.111	1	50	117%	70	130	0%	
1,1-Dichloroethene	A	ppbv	11.66	11.66		9.9	0	0	0.097	1	50	118%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	9.05	9.05		9.1	0	0	0.271	1	50	99%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	10.56	10.56		9.8	0	0	0.245	1	50	108%	70	130	0%	
1,2-Dibromoethane	A	ppbv	10.34	10.34		9.6	0	0	0.186	1	50	108%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	10.15	10.15		9.7	0	0	0.208	1	50	105%	70	130	0%	
1,2-Dichloroethane	A	ppbv	11.36	11.36		9.7	0	0	0.196	1	50	117%	70	130	0%	
1,2-Dichloropropane	A	ppbv	10.77	10.77		9.8	0	0	0.224	1	50	110%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	10.39	10.39		9.7	0	0	0.24	1	50	107%	70	130	0%	
1,3-Butadiene	A	ppbv	11.79	11.79		9.8	0	0	0.152	1	50	120%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	10.21	10.21		9.7	0	0	0.202	1	50	105%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
966126	CCV VOA1 061512	EPA_TO15	CCV	.\1\DATA\061512	6/15/2012 10:18:	1	R49425		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	10.18	10.18		9.6	0	0	0.194	1	50	106%	70	130	0%	
1,4-Dioxane	A	ppbv	10.32	10.32		9.6	0	0	0.128	1	50	108%	70	130	0%	
2-Butanone	A	ppbv	11.68	11.68		9.9	0	0	0.287	1	50	118%	70	130	0%	
2-Hexanone	A	ppbv	10.42	10.42		9.8	0	0	0.135	1	50	106%	70	130	0%	
2-Propanol	A	ppbv	11.32	11.32		10.1	0	0	0.329	1	50	112%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	10.57	10.57		10	0	0	0.157	1	50	106%	70	130	0%	
Acetone	A	ppbv	11.65	11.65		10	0	0	0.43	1	50	117%	70	130	0%	
Benzene	A	ppbv	11.46	11.46		9.6	0	0	0.126	1	50	119%	70	130	0%	
Benzyl chloride	A	ppbv	10.16	10.16		9.7	0	0	0.155	1	50	105%	70	130	0%	
Bromodichloromethane	A	ppbv	10.42	10.42		9.6	0	0	0.156	1	50	109%	70	130	0%	
Bromoform	A	ppbv	10.18	10.18		9.6	0	0	0.197	1	50	106%	70	130	0%	
Bromomethane	A	ppbv	10.48	10.48		9.3	0	0	0.075	1	50	113%	70	130	0%	
Carbon disulfide	A	ppbv	11.22	11.22		9.7	0	0	0.093	1	50	116%	70	130	0%	
Carbon tetrachloride	A	ppbv	11.09	11.09		9.5	0	0	0.114	1	50	117%	70	130	0%	
Chlorobenzene	A	ppbv	10.76	10.76		9.9	0	0	0.275	1	50	109%	70	130	0%	
Chlorodibromomethane	A	ppbv	10.36	10.36		9.2	0	0	0.165	1	50	113%	70	130	0%	
Chloroethane	A	ppbv	10.43	10.43		9.8	0	0	0.063	1	50	106%	70	130	0%	
Chloroform	A	ppbv	11.57	11.57		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	11.56	11.56		9.8	0	0	0.107	1	50	118%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	10.33	10.33		9.5	0	0	0.166	1	50	109%	70	130	0%	
Cyclohexane	A	ppbv	11.62	11.62		9.8	0	0	0.684	2	50	119%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	10.54	10.54		9.2	0	0	0.086	1	50	115%	70	130	0%	
Ethanol	A	ppbv	9.89	9.89		9.2	0	0	1.962	5	50	108%	70	130	0%	
Ethyl acetate	A	ppbv	12.08	12.08		9.8	0	0	0.157	1	50	123%	70	130	0%	
Ethylbenzene	A	ppbv	10.84	10.84		9.8	0	0	0.737	2	50	111%	70	130	0%	
Heptane	A	ppbv	10.92	10.92		9.9	0	0	0.249	1	50	110%	70	130	0%	
Hexachlorobutadiene	A	ppbv	9.7	9.7		9.4	0	0	0.374	2	50	103%	70	130	0%	
m,p-Xylene	A	ppbv	22.15	22.15		19.2	0	0	0.524	2	100	115%	70	130	0%	
Methylene chloride	A	ppbv	11.63	11.63		10	0	0	2.077	5	50	116%	70	130	0%	
n-Hexane	A	ppbv	11.79	11.79		10.1	0	0	0.692	2	50	117%	70	130	0%	
Naphthalene	A	ppbv	9.34	9.34		9.2	0	0	0.247	1	50	102%	70	130	0%	
o-Xylene	A	ppbv	10.98	10.98		10	0	0	0.258	1	50	110%	70	130	0%	
Propylene	A	ppbv	11.86	11.86		10.2	0	0	0.075	1	50	116%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
966126	CCV VOA1 061512	EPA_TO15	CCV	.\1\DATA\061512	6/15/2012 10:18:	1	R49425		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	10.81	10.81		9.8	0	0	0.263	1	50	110%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	11.51	11.51		9.9	0	0	0.228	1	50	116%	70	130	0%	
Tetrachloroethene	A	ppbv	10.18	10.18		9.6	0	0	0.148	1	50	106%	70	130	0%	
Tetrahydrofuran	A	ppbv	11.78	11.78		10	0	0	0.201	1	50	118%	70	130	0%	
Toluene	A	ppbv	10.76	10.76		9.8	0	0	0.158	1	50	110%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	11.5	11.5		9.8	0	0	0.117	1	50	117%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	9.8	9.8		9.1	0	0	0.171	1	50	108%	70	130	0%	
Trichloroethene	A	ppbv	10.17	10.17		9.6	0	0	0.119	1	50	106%	70	130	0%	
Trichlorofluoromethane	A	ppbv	11.03	11.03		9.6	0	0	0.148	1	50	115%	70	130	0%	
Vinyl acetate	A	ppbv	12.19	12.19		9.9	0	0	0.266	1	50	123%	70	130	0%	
Vinyl chloride	A	ppbv	11.1	11.1		9.4	0	0	0.072	1	50	118%	70	130	0%	
Xylenes, Total	C	ppbv	33.13	33.13		29.2	0	0	0.782	3	150	113%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	12.21	12.21		12.5	0	0	0	0	0	98%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
966127	RLVS VOA1 061512	EPA_TO15	RLVS	.\1\DATA\061512	6/15/2012 10:59:	1	R49425		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	1.13	1.13		0.996	0	0	0.107	1	50	113%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.31	1.31		1	0	0	0.211	1	50	131%	70	130	0%	S
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	1.21	1.21		0.98	0	0	0.108	1	50	123%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	1.08	1.08		0.98	0	0	0.2	1	50	110%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1.21	1.21		0.97	0	0	0.111	1	50	125%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1.2	1.2		0.99	0	0	0.097	1	50	121%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.18	1.18		0.91	0	0	0.271	1	50	130%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	1.25	1.25		0.98	0	0	0.245	1	50	128%	70	130	0%	
1,2-Dibromoethane	A	ppbv	1.01	1.01		0.96	0	0	0.186	1	50	105%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.32	1.32		0.97	0	0	0.208	1	50	136%	70	130	0%	S
1,2-Dichloroethane	A	ppbv	1.23	1.23		0.97	0	0	0.196	1	50	127%	70	130	0%	
1,2-Dichloropropane	A	ppbv	1.14	1.14		0.98	0	0	0.224	1	50	116%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\061512\06151202.D Vial: 4
Acq On : 15 Jun 2012 10:18 am Operator: RACHEL HILL
Sample : CCV VOA1 061512 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	80	0.00
2	T	Propylene	0.813	0.945	-16.2	86	0.00
3	T	Dichlorodifluoromethane	3.079	3.528	-14.6	83	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.303	2.597	-12.8	84	0.00
5	T	Chloromethane	0.928	1.069	-15.2	81	0.00
6	T	Vinyl chloride	1.049	1.238	-18.0	82	0.00
7	T	1,3-Butadiene	0.727	0.875	-20.4	81	0.00
8	T	Bromomethane	1.112	1.253	-12.7	82	0.00
9	T	Chloroethane	0.591	0.670	-13.4	80	0.00
10	T	Trichlorofluoromethane	2.936	3.374	-14.9	81	0.00
11	T	Ethanol	0.315	0.338	-7.3	73	0.00
12	T	Freon113	1.993	2.342	-17.5	80	0.00
13	T	1,1-Dichloroethene	1.379	1.624	-17.8	80	0.00
14	T	Acetone	1.332	1.551	-16.4	74	0.00
15	T	Carbon disulfide	2.400	2.775	-15.6	80	0.00
16	T	2-Propanol	1.279	1.434	-12.1	76	0.00
17	T	Methylene chloride	1.022	1.189	-16.3	80	0.00
18	T	tert-Butyl Methyl Ether	2.198	2.557	-16.3	72	0.00
19	T	trans-1,2-Dichloroethene	1.262	1.481	-17.4	78	0.00
20	T	n-Hexane	1.399	1.633	-16.7	78	0.00
21	T	1,1-Dichloroethane	1.713	2.009	-17.3	78	0.00
22	T	Vinyl acetate	2.035	2.506	-23.1	72	0.00
23	T	cis-1,2-Dichloroethene	1.036	1.222	-18.0	78	0.00
24	T	2-Butanone	1.404	1.656	-17.9	72	0.00
25	T	Ethyl acetate	1.735	2.139	-23.3	75	0.00
26	T	Tetrahydrofuran	0.898	1.057	-17.7	73	0.00
27	T	Chloroform	1.950	2.302	-18.1	78	0.00
28	T	1,1,1-Trichloroethane	2.105	2.473	-17.5	78	0.00
29	T	Cyclohexane	1.419	1.683	-18.6	78	0.00
30	T	Carbon tetrachloride	2.325	2.714	-16.7	76	0.00
31	T	Benzene	2.740	3.270	-19.3	75	0.00
32	T	1,2-Dichloroethane	1.133	1.327	-17.1	74	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	87	0.00
34	T	Heptane	0.486	0.536	-10.3	77	0.00
35	T	Trichloroethene	0.444	0.470	-5.9	77	0.00
36	T	1,2-Dichloropropane	0.304	0.334	-9.9	74	0.00
37	T	1,4-Dioxane	0.175	0.188	-7.4	76	0.00
38	T	Bromodichloromethane	0.631	0.685	-8.6	77	0.00
39	T	cis-1,3-Dichloropropene	0.487	0.529	-8.6	73	0.00
40	T	4-Methyl-2-pentanone	0.208	0.220	-5.8	73	0.00
41	T	Toluene	1.030	1.131	-9.8	74	0.00
42	T	trans-1,3-Dichloropropene	0.451	0.485	-7.5	73	0.00
43	T	1,1,2-Trichloroethane	0.358	0.385	-7.5	75	0.00
44	T	Tetrachloroethene	0.582	0.617	-6.0	78	0.00
45	T	2-Hexanone	0.404	0.429	-6.2	71	0.00
46	T	Chlorodibromomethane	0.660	0.697	-5.6	74	0.00
47	T	1,2-Dibromoethane	0.559	0.602	-7.7	74	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	85	0.00
49	T	Chlorobenzene	0.880	0.957	-8.7	75	0.00
50	T	Ethylbenzene	1.411	1.561	-10.6	74	0.00
51	T	m,p-Xylene	1.097	1.265	-15.3	75	0.00
52	T	o-Xylene	1.117	1.227	-9.8	74	0.00
53	T	Styrene	0.860	0.948	-10.2	75	0.00
54	T	Bromoform	0.634	0.672	-6.0	74	0.00
55	S	4-Bromofluorobenzene	0.581	0.568	2.2	83	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\061512\06151202.D Vial: 4
Acq On : 15 Jun 2012 10:18 am Operator: RACHEL HILL
Sample : CCV VOA1 061512 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	0.760	-9.0	75	0.00
57	T	4-Ethyltoluene	1.452	1.586	-9.2	76	0.00
58	T	1,3,5-Trimethylbenzene	1.242	1.331	-7.2	75	0.00
59	T	1,2,4-Trimethylbenzene	1.162	1.252	-7.7	75	0.00
60	T	1,3-Dichlorobenzene	0.763	0.803	-5.2	75	0.00
61	T	1,4-Dichlorobenzene	0.736	0.780	-6.0	76	0.00
62	T	Benzyl chloride	0.809	0.848	-4.8	74	0.00
63	T	1,2-Dichlorobenzene	0.669	0.700	-4.6	75	0.00
64	T	1,2,4-Trichlorobenzene	0.243	0.242	0.4	74	0.00
65	T	Hexachlorobutadiene	0.327	0.337	-3.1	71	0.00
66		Naphthalene	0.481	0.489	-1.7	75	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\061512\06151202.D Vial: 4
Acq On : 15 Jun 2012 10:18 am Operator: RACHEL HILL
Sample : CCV VOA1 061512 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 15 10:43 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	291056	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.68	114	1026077	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.53	117	898506	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.18	95	509971	12.21	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 97.68%

Target Compounds						Qvalue
2) Propylene	5.51	41	224537	11.86	ppbv	97
3) Dichlorodifluoromethane	5.59	85	755759	10.54	ppbv	100
4) 1,2-Dichloro-1,2,2,2-tetra	5.84	135	574505	10.71	ppbv #	83
5) Chloromethane	6.00	50	236549	10.94	ppbv	98
6) Vinyl chloride	6.20	62	271054	11.10	ppbv #	100
7) 1,3-Butadiene	6.26	39	199672	11.79	ppbv	98
8) Bromomethane	6.84	94	271414	10.48	ppbv #	98
9) Chloroethane	7.00	64	143487	10.43	ppbv	99
10) Trichlorofluoromethane	7.33	101	754289	11.03	ppbv	98
11) Ethanol	7.57	45	72463	9.89	ppbv	99
12) Freon113	7.99	101	534432	11.52	ppbv	93
13) 1,1-Dichloroethene	8.09	61	374460	11.66	ppbv	97
14) Acetone	8.19	43	361219	11.65	ppbv #	96
15) Carbon disulfide	8.46	76	626766	11.22	ppbv #	100
16) 2-Propanol	8.23	45	337310	11.32	ppbv #	1
17) Methylene chloride	8.75	49	276807	11.63	ppbv	99
18) tert-Butyl Methyl Ether	8.95	73	589409	11.51	ppbv	99
19) trans-1,2-Dichloroethene	9.03	61	337966	11.50	ppbv	99
20) n-Hexane	9.22	57	383959	11.79	ppbv	97
21) 1,1-Dichloroethane	9.59	63	453695	11.38	ppbv	99
22) Vinyl acetate	9.52	43	577746	12.19	ppbv	99
23) cis-1,2-Dichloroethene	10.28	96	278808	11.56	ppbv	99
24) 2-Butanone	10.24	43	381685	11.68	ppbv	100
25) Ethyl acetate	10.19	43	488099	12.08	ppbv #	100
26) Tetrahydrofuran	10.58	42	246134	11.78	ppbv	95
27) Chloroform	10.60	83	525175	11.57	ppbv	98
28) 1,1,1-Trichloroethane	10.85	97	552798	11.28	ppbv	99
29) Cyclohexane	10.86	56	384146	11.62	ppbv	99
30) Carbon tetrachloride	11.01	117	600281	11.09	ppbv	98
31) Benzene	11.29	78	731015	11.46	ppbv	100
32) 1,2-Dichloroethane	11.37	62	299630	11.36	ppbv	99
34) Heptane	11.34	43	435750	10.92	ppbv	97
35) Trichloroethene	12.02	130	370131	10.17	ppbv	96
36) 1,2-Dichloropropane	12.38	63	268840	10.77	ppbv	100
37) 1,4-Dioxane	12.45	88	148473	10.32	ppbv	94
38) Bromodichloromethane	12.66	83	539956	10.42	ppbv	98
39) cis-1,3-Dichloropropene	13.22	75	412726	10.33	ppbv	99
40) 4-Methyl-2-pentanone	13.33	58	180326	10.57	ppbv	98
41) Toluene	13.62	91	909676	10.76	ppbv	98
42) trans-1,3-Dichloropropene	13.92	75	362330	9.80	ppbv	99
43) 1,1,2-Trichloroethane	14.20	97	309849	10.56	ppbv	99
44) Tetrachloroethene	14.32	166	486141	10.18	ppbv	96
45) 2-Hexanone	14.40	43	345482	10.42	ppbv	97
46) Chlorodibromomethane	14.74	129	561026	10.36	ppbv	98
47) 1,2-Dibromoethane	14.98	107	474648	10.34	ppbv	100
49) Chlorobenzene	15.58	112	680777	10.76	ppbv	99
50) Ethylbenzene	15.62	91	1099699	10.84	ppbv	97
51) m,p-Xylene	15.77	91	1745940	22.15	ppbv	96
52) o-Xylene	16.37	91	882008	10.98	ppbv	97

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\061512\06151202.D Vial: 4
Acq On : 15 Jun 2012 10:18 am Operator: RACHEL HILL
Sample : CCV VOA1 061512 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 15 10:43 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

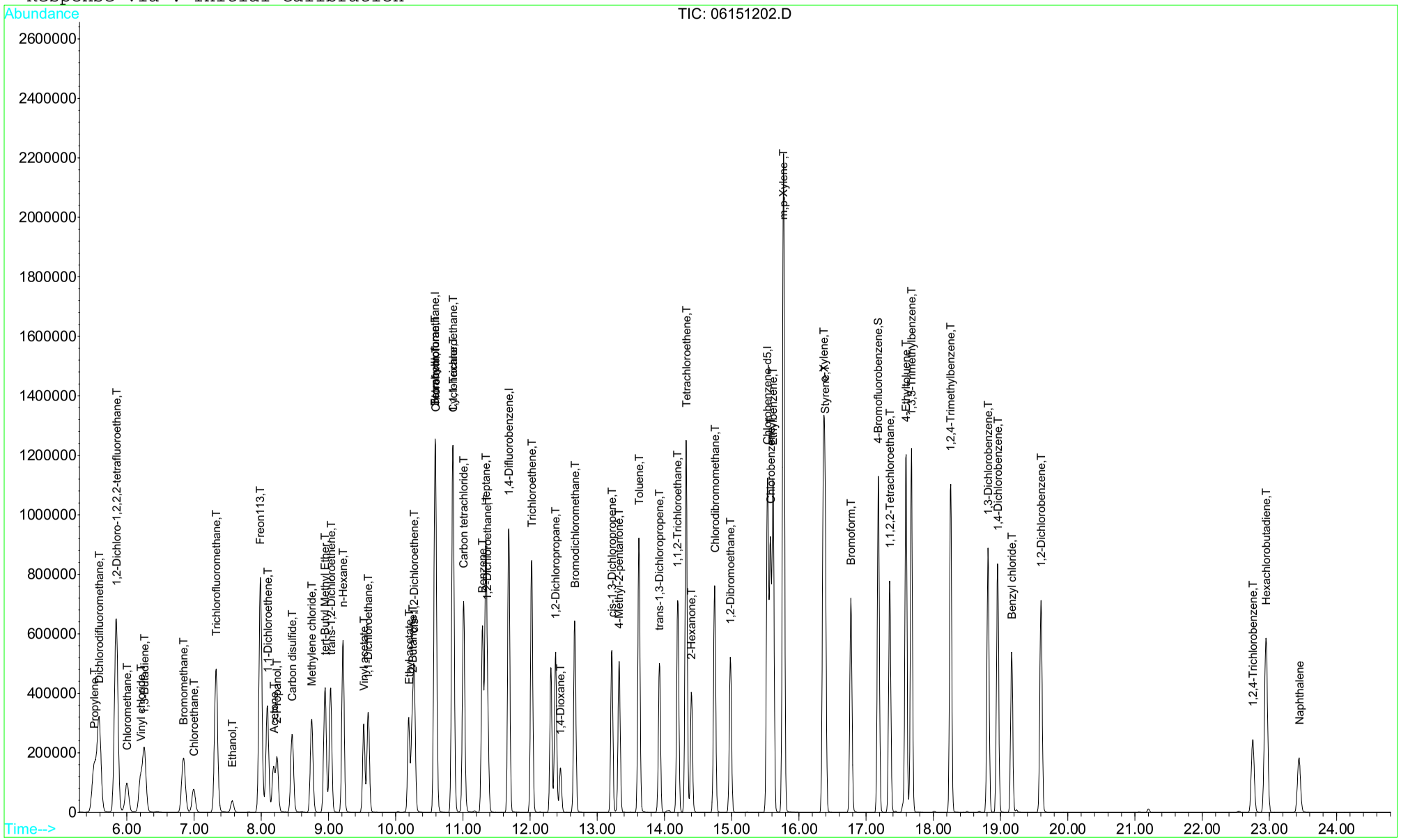
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
53)	Styrene	16.39	104	667639	10.81 ppbv	99
54)	Bromoform	16.77	173	463812	10.18 ppbv	98
56)	1,1,2,2-Tetrachloroethane	17.35	83	546313	10.90 ppbv	98
57)	4-Ethyltoluene	17.59	105	1117556	10.70 ppbv	97
58)	1,3,5-Trimethylbenzene	17.67	105	927717	10.39 ppbv	98
59)	1,2,4-Trimethylbenzene	18.26	105	881854	10.56 ppbv	98
60)	1,3-Dichlorobenzene	18.81	146	559892	10.21 ppbv	97
61)	1,4-Dichlorobenzene	18.95	146	538536	10.18 ppbv	97
62)	Benzyl chloride	19.16	91	591090	10.16 ppbv	99
63)	1,2-Dichlorobenzene	19.60	146	488010	10.15 ppbv	98
64)	1,2,4-Trichlorobenzene	22.75	180	158060	9.05 ppbv	97
65)	Hexachlorobutadiene	22.95	225	227885	9.70 ppbv	99
66)	Naphthalene	23.44	128	323061	9.34 ppbv	100

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\061512\06151202.D Vial: 4
Acq On : 15 Jun 2012 10:18 am Operator: RACHEL HILL
Sample : CCV VOA1 061512 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 15 10:43 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_120618A** **Run No.:** 49456

Analytical Run Date: 6/18/2012 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

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

Column Length: 60m

Run Comments: PR by RD2 on 19june12. Nitrogen tank ran out overnight. Ran RLVS as soon as possible in the morning but was out of 24 hour time clock.

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 061812	BFB_TUNE	TUNE	R49456	6/18/2012 9:23:00 AM	Robert Lynch		
CCV VOA1 061812	EPA_TO15	CCV	R49456	6/18/2012 12:19:00 PM	Robert Lynch		
RLVS VOA1 061812	EPA_TO15	RLVS	R49456	6/18/2012 1:02:00 PM	Robert Lynch		
MBLK VOA1 061812	EPA_TO15	MBLK	R49456	6/18/2012 2:41:00 PM	Robert Lynch		
1206396-007A	EPA_TO15	SAMP	R49456	6/18/2012 3:26:00 PM	Robert Lynch		
1206178-048A	EPA_TO15	SAMP	R49456	6/18/2012 6:06:00 PM	Robert Lynch		
1206396-018A	EPA_TO15	SAMP	R49456	6/18/2012 7:35:00 PM	Robert Lynch		
1206396-018ADUP	EPA_TO15	DUP	R49456	6/18/2012 8:19:00 PM	Robert Lynch		
1206396-020A	EPA_TO15	SAMP	R49456	6/18/2012 9:49:00 PM	Robert Lynch		
RLVS2 VOA1 06181	EPA_TO15	RLVS	R49456	6/19/2012 9:49:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

02-Jul-12

RunNo 49456

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
966579	BFB VOA1 061812	BFB_TUNE	TUNE	.\1\DATA\061812	6/18/2012 9:23:0	1	R49456		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	89		100	0	0	0	0	0	89%	50	120	0%	
175	M		7.1	7.1		100	0	0	0	0	0	7%	4	9	0%	
176	M		95.7	95.7		100	0	0	0	0	0	96%	93	101	0%	
177	M		6.6	6.6		100	0	0	0	0	0	7%	5	9	0%	
50	M		16.7	16.7		100	0	0	0	0	0	17%	8	40	0%	
75	M		47.3	47.3		100	0	0	0	0	0	47%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.9	6.9		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
966580	CCV VOA1 061812	EPA_TO15	CCV	.\1\DATA\061812	6/18/2012 12:19:	1	R49456		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	9.67	9.67		9.6	0	0	0.107	1	50	101%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	9.41	9.41		10	0	0	0.211	1	50	94%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.04	10.04		9.8	0	0	0.108	1	50	102%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.21	9.21		9.8	0	0	0.2	1	50	94%	70	130	0%	
1,1-Dichloroethane	A	ppbv	9.82	9.82		9.7	0	0	0.111	1	50	101%	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	7.2	7.2		9.1	0	0	0.271	1	50	79%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	9.05	9.05		9.8	0	0	0.245	1	50	92%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.07	9.07		9.6	0	0	0.186	1	50	94%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	9.02	9.02		9.7	0	0	0.208	1	50	93%	70	130	0%	
1,2-Dichloroethane	A	ppbv	9.93	9.93		9.7	0	0	0.196	1	50	102%	70	130	0%	
1,2-Dichloropropane	A	ppbv	9.48	9.48		9.8	0	0	0.224	1	50	97%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	8.89	8.89		9.7	0	0	0.24	1	50	92%	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	9.04	9.04		9.7	0	0	0.202	1	50	93%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
966580	CCV VOA1 061812	EPA_TO15	CCV	.\1\DATA\061812	6/18/2012 12:19:	1	R49456		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	8.99	8.99		9.6	0	0	0.194	1	50	94%	70	130	0%	
1,4-Dioxane	A	ppbv	8.78	8.78		9.6	0	0	0.128	1	50	91%	70	130	0%	
2-Butanone	A	ppbv	9.83	9.83		9.9	0	0	0.287	1	50	99%	70	130	0%	
2-Hexanone	A	ppbv	8.59	8.59		9.8	0	0	0.135	1	50	88%	70	130	0%	
2-Propanol	A	ppbv	9.69	9.69		10.1	0	0	0.329	1	50	96%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	8.92	8.92		10	0	0	0.157	1	50	89%	70	130	0%	
Acetone	A	ppbv	9.57	9.57		10	0	0	0.43	1	50	96%	70	130	0%	
Benzene	A	ppbv	10.14	10.14		9.6	0	0	0.126	1	50	106%	70	130	0%	
Benzyl chloride	A	ppbv	9.06	9.06		9.7	0	0	0.155	1	50	93%	70	130	0%	
Bromodichloromethane	A	ppbv	9.42	9.42		9.6	0	0	0.156	1	50	98%	70	130	0%	
Bromoform	A	ppbv	9.08	9.08		9.6	0	0	0.197	1	50	95%	70	130	0%	
Bromomethane	A	ppbv	9.72	9.72		9.3	0	0	0.075	1	50	105%	70	130	0%	
Carbon disulfide	A	ppbv	10.17	10.17		9.7	0	0	0.093	1	50	105%	70	130	0%	
Carbon tetrachloride	A	ppbv	9.57	9.57		9.5	0	0	0.114	1	50	101%	70	130	0%	
Chlorobenzene	A	ppbv	9.47	9.47		9.9	0	0	0.275	1	50	96%	70	130	0%	
Chlorodibromomethane	A	ppbv	9.39	9.39		9.2	0	0	0.165	1	50	102%	70	130	0%	
Chloroethane	A	ppbv	9.46	9.46		9.8	0	0	0.063	1	50	97%	70	130	0%	
Chloroform	A	ppbv	9.97	9.97		9.4	0	0	0.126	1	50	106%	70	130	0%	
Chloromethane	A	ppbv	10.05	10.05		9.8	0	0	0.104	1	50	103%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.96	9.96		9.8	0	0	0.107	1	50	102%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	9.13	9.13		9.5	0	0	0.166	1	50	96%	70	130	0%	
Cyclohexane	A	ppbv	9.92	9.92		9.8	0	0	0.684	2	50	101%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.57	9.57		9.2	0	0	0.086	1	50	104%	70	130	0%	
Ethanol	A	ppbv	8.87	8.87		9.2	0	0	1.962	5	50	96%	70	130	0%	
Ethyl acetate	A	ppbv	9.55	9.55		9.8	0	0	0.157	1	50	97%	70	130	0%	
Ethylbenzene	A	ppbv	9.43	9.43		9.8	0	0	0.737	2	50	96%	70	130	0%	
Heptane	A	ppbv	9.63	9.63		9.9	0	0	0.249	1	50	97%	70	130	0%	
Hexachlorobutadiene	A	ppbv	8.08	8.08		9.4	0	0	0.374	2	50	86%	70	130	0%	
m,p-Xylene	A	ppbv	19.02	19.02		19.2	0	0	0.524	2	100	99%	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	10.16	10.16		10.1	0	0	0.692	2	50	101%	70	130	0%	
Naphthalene	A	ppbv	7.38	7.38		9.2	0	0	0.247	1	50	80%	70	130	0%	
o-Xylene	A	ppbv	9.48	9.48		10	0	0	0.258	1	50	95%	70	130	0%	
Propylene	A	ppbv	12.25	12.25		10.2	0	0	0.075	1	50	120%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
966580	CCV VOA1 061812	EPA_TO15	CCV	.\1\DATA\061812	6/18/2012 12:19:	1	R49456		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	9.43	9.43		9.8	0	0	0.263	1	50	96%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	9.59	9.59		9.9	0	0	0.228	1	50	97%	70	130	0%	
Tetrachloroethene	A	ppbv	9.01	9.01		9.6	0	0	0.148	1	50	94%	70	130	0%	
Tetrahydrofuran	A	ppbv	9.5	9.5		10	0	0	0.201	1	50	95%	70	130	0%	
Toluene	A	ppbv	9.43	9.43		9.8	0	0	0.158	1	50	96%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	9.9	9.9		9.8	0	0	0.117	1	50	101%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	8.61	8.61		9.1	0	0	0.171	1	50	95%	70	130	0%	
Trichloroethene	A	ppbv	9.12	9.12		9.6	0	0	0.119	1	50	95%	70	130	0%	
Trichlorofluoromethane	A	ppbv	10.02	10.02		9.6	0	0	0.148	1	50	104%	70	130	0%	
Vinyl acetate	A	ppbv	9.87	9.87		9.9	0	0	0.266	1	50	100%	70	130	0%	
Vinyl chloride	A	ppbv	10.38	10.38		9.4	0	0	0.072	1	50	110%	70	130	0%	
Xylenes, Total	C	ppbv	28.5	28.5		29.2	0	0	0.782	3	150	98%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	12.45	12.45		12.5	0	0	0	0	0	100%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
966581	RLVS VOA1 061812	EPA_TO15	RLVS	.\1\DATA\061812	6/18/2012 1:02:0	1	R49456		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	1.03	1.03		0.996	0	0	0.107	1	50	103%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.28	1.28		1	0	0	0.211	1	50	128%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	1.09	1.09		0.98	0	0	0.108	1	50	111%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	1.06	1.06		0.98	0	0	0.2	1	50	108%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1.08	1.08		0.97	0	0	0.111	1	50	111%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1.1	1.1		0.99	0	0	0.097	1	50	111%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.03	1.03		0.91	0	0	0.271	1	50	113%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	1.18	1.18		0.98	0	0	0.245	1	50	120%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.97	0.97		0.96	0	0	0.186	1	50	101%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.27	1.27		0.97	0	0	0.208	1	50	131%	70	130	0%	S
1,2-Dichloroethane	A	ppbv	1.09	1.09		0.97	0	0	0.196	1	50	112%	70	130	0%	
1,2-Dichloropropane	A	ppbv	1.07	1.07		0.98	0	0	0.224	1	50	109%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\061812\06181203.D Vial: 5
Acq On : 18 Jun 2012 12:19 pm Operator: RACHEL HILL
Sample : CCV VOA1 061812 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	87	0.00
2	T	Propylene	0.813	0.977	-20.2	96	0.00
3	T	Dichlorodifluoromethane	3.079	3.204	-4.1	82	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.303	2.362	-2.6	82	0.00
5	T	Chloromethane	0.928	0.982	-5.8	81	0.00
6	T	Vinyl chloride	1.049	1.158	-10.4	83	0.00
7	T	1,3-Butadiene	0.727	0.819	-12.7	82	0.00
8	T	Bromomethane	1.112	1.162	-4.5	82	0.00
9	T	Chloroethane	0.591	0.608	-2.9	78	0.00
10	T	Trichlorofluoromethane	2.936	3.063	-4.3	80	0.00
11	T	Ethanol	0.315	0.303	3.8	71	0.00
12	T	Freon113	1.993	2.042	-2.5	75	0.00
13	T	1,1-Dichloroethene	1.379	1.447	-4.9	77	0.00
14	T	Acetone	1.332	1.275	4.3	66	0.00
15	T	Carbon disulfide	2.400	2.517	-4.9	78	0.00
16	T	2-Propanol	1.279	1.227	4.1	70	0.00
17	T	Methylene chloride	1.022	1.016	0.6	74	0.00
18	T	tert-Butyl Methyl Ether	2.198	2.130	3.1	65	0.00
19	T	trans-1,2-Dichloroethene	1.262	1.275	-1.0	73	0.00
20	T	n-Hexane	1.399	1.408	-0.6	73	0.00
21	T	1,1-Dichloroethane	1.713	1.734	-1.2	73	0.00
22	T	Vinyl acetate	2.035	2.028	0.3	63	0.00
23	T	cis-1,2-Dichloroethene	1.036	1.053	-1.6	73	0.00
24	T	2-Butanone	1.404	1.393	0.8	65	0.00
25	T	Ethyl acetate	1.735	1.692	2.5	65	0.00
26	T	Tetrahydrofuran	0.898	0.853	5.0	64	0.00
27	T	Chloroform	1.950	1.983	-1.7	72	0.00
28	T	1,1,1-Trichloroethane	2.105	2.119	-0.7	72	0.00
29	T	Cyclohexane	1.419	1.437	-1.3	72	0.00
30	T	Carbon tetrachloride	2.325	2.343	-0.8	71	0.00
31	T	Benzene	2.740	2.893	-5.6	72	0.00
32	T	1,2-Dichloroethane	1.133	1.160	-2.4	70	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	90	0.00
34	T	Heptane	0.486	0.473	2.7	70	0.00
35	T	Trichloroethene	0.444	0.421	5.2	72	0.00
36	T	1,2-Dichloropropane	0.304	0.294	3.3	68	0.00
37	T	1,4-Dioxane	0.175	0.160	8.6	67	0.00
38	T	Bromodichloromethane	0.631	0.620	1.7	73	0.00
39	T	cis-1,3-Dichloropropene	0.487	0.468	3.9	68	0.00
40	T	4-Methyl-2-pentanone	0.208	0.185	11.1	64	0.00
41	T	Toluene	1.030	0.991	3.8	68	0.00
42	T	trans-1,3-Dichloropropene	0.451	0.426	5.5	67	0.00
43	T	1,1,2-Trichloroethane	0.358	0.336	6.1	68	0.00
44	T	Tetrachloroethene	0.582	0.546	6.2	71	0.00
45	T	2-Hexanone	0.404	0.354	12.4	61	0.00
46	T	Chlorodibromomethane	0.660	0.632	4.2	70	0.00
47	T	1,2-Dibromoethane	0.559	0.528	5.5	68	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	88	0.00
49	T	Chlorobenzene	0.880	0.842	4.3	68	0.00
50	T	Ethylbenzene	1.411	1.358	3.8	67	0.00
51	T	m,p-Xylene	1.097	1.086	1.0	67	0.00
52	T	o-Xylene	1.117	1.060	5.1	66	0.00
53	T	Styrene	0.860	0.827	3.8	67	0.00
54	T	Bromoform	0.634	0.599	5.5	68	0.00
55	S	4-Bromofluorobenzene	0.581	0.579	0.3	87	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\061812\06181203.D Vial: 5
Acq On : 18 Jun 2012 12:19 pm Operator: RACHEL HILL
Sample : CCV VOA1 061812 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	0.656	5.9	67	0.00
57	T	4-Ethyltoluene	1.452	1.347	7.2	66	0.00
58	T	1,3,5-Trimethylbenzene	1.242	1.139	8.3	66	0.00
59	T	1,2,4-Trimethylbenzene	1.162	1.074	7.6	66	0.00
60	T	1,3-Dichlorobenzene	0.763	0.711	6.8	68	0.00
61	T	1,4-Dichlorobenzene	0.736	0.689	6.4	69	0.00
62	T	Benzyl chloride	0.809	0.756	6.6	68	0.00
63	T	1,2-Dichlorobenzene	0.669	0.622	7.0	69	0.00
64	T	1,2,4-Trichlorobenzene	0.243	0.192	21.0	61	0.00
65	T	Hexachlorobutadiene	0.327	0.281	14.1	61	0.00
66		Naphthalene	0.481	0.386	19.8	62	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\061812\06181203.D Vial: 5
Acq On : 18 Jun 2012 12:19 pm Operator: RACHEL HILL
Sample : CCV VOA1 061812 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 18 12:43 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	315069	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.68	114	1068348	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.53	117	927976	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.18	95	536961	12.45	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 99.60%

Target Compounds							Qvalue
2) Propylene	5.52	41	251095	12.25	ppbv		92
3) Dichlorodifluoromethane	5.59	85	743002	9.57	ppbv		100
4) 1,2-Dichloro-1,2,2,2-tetra	5.84	135	565595	9.74	ppbv	#	84
5) Chloromethane	6.01	50	235096	10.05	ppbv		98
6) Vinyl chloride	6.20	62	274408	10.38	ppbv		99
7) 1,3-Butadiene	6.26	39	202305	11.03	ppbv		98
8) Bromomethane	6.84	94	272436	9.72	ppbv	#	98
9) Chloroethane	6.99	64	140932	9.46	ppbv		100
10) Trichlorofluoromethane	7.32	101	741201	10.02	ppbv		98
11) Ethanol	7.57	45	70328	8.87	ppbv		99
12) Freon113	7.99	101	504419	10.04	ppbv		93
13) 1,1-Dichloroethene	8.09	61	361005	10.39	ppbv		97
14) Acetone	8.18	43	321364	9.57	ppbv	#	96
15) Carbon disulfide	8.46	76	615284	10.17	ppbv	#	99
16) 2-Propanol	8.23	45	312399	9.69	ppbv	#	1
17) Methylene chloride	8.75	49	256085	9.94	ppbv		99
18) tert-Butyl Methyl Ether	8.95	73	531475	9.59	ppbv		98
19) trans-1,2-Dichloroethene	9.03	61	314950	9.90	ppbv		99
20) n-Hexane	9.21	57	358323	10.16	ppbv		98
21) 1,1-Dichloroethane	9.59	63	423906	9.82	ppbv		99
22) Vinyl acetate	9.52	43	506094	9.87	ppbv		99
23) cis-1,2-Dichloroethene	10.27	96	260063	9.96	ppbv		99
24) 2-Butanone	10.24	43	347686	9.83	ppbv		98
25) Ethyl acetate	10.19	43	417906	9.55	ppbv	#	99
26) Tetrahydrofuran	10.58	42	215039	9.50	ppbv		95
27) Chloroform	10.60	83	489906	9.97	ppbv		98
28) 1,1,1-Trichloroethane	10.84	97	512845	9.67	ppbv		99
29) Cyclohexane	10.85	56	355015	9.92	ppbv		99
30) Carbon tetrachloride	11.01	117	560923	9.57	ppbv		98
31) Benzene	11.29	78	700102	10.14	ppbv		99
32) 1,2-Dichloroethane	11.37	62	283625	9.93	ppbv		99
34) Heptane	11.34	43	400176	9.63	ppbv		98
35) Trichloroethene	12.02	130	345583	9.12	ppbv		96
36) 1,2-Dichloropropane	12.38	63	246346	9.48	ppbv		100
37) 1,4-Dioxane	12.45	88	131592	8.78	ppbv		95
38) Bromodichloromethane	12.66	83	508552	9.42	ppbv		98
39) cis-1,3-Dichloropropene	13.21	75	379874	9.13	ppbv		100
40) 4-Methyl-2-pentanone	13.32	58	158509	8.92	ppbv		97
41) Toluene	13.62	91	830387	9.43	ppbv		98
42) trans-1,3-Dichloropropene	13.92	75	331500	8.61	ppbv		100
43) 1,1,2-Trichloroethane	14.20	97	281522	9.21	ppbv		99
44) Tetrachloroethene	14.32	166	448027	9.01	ppbv		96
45) 2-Hexanone	14.39	43	296728	8.59	ppbv		97
46) Chlorodibromomethane	14.74	129	529380	9.39	ppbv		99
47) 1,2-Dibromoethane	14.98	107	433380	9.07	ppbv		100
49) Chlorobenzene	15.57	112	619022	9.47	ppbv		99
50) Ethylbenzene	15.61	91	987889	9.43	ppbv		96
51) m,p-Xylene	15.77	91	1548162	19.02	ppbv		96
52) o-Xylene	16.36	91	786614	9.48	ppbv		97

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\061812\06181203.D Vial: 5
Acq On : 18 Jun 2012 12:19 pm Operator: RACHEL HILL
Sample : CCV VOA1 061812 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 18 12:43 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

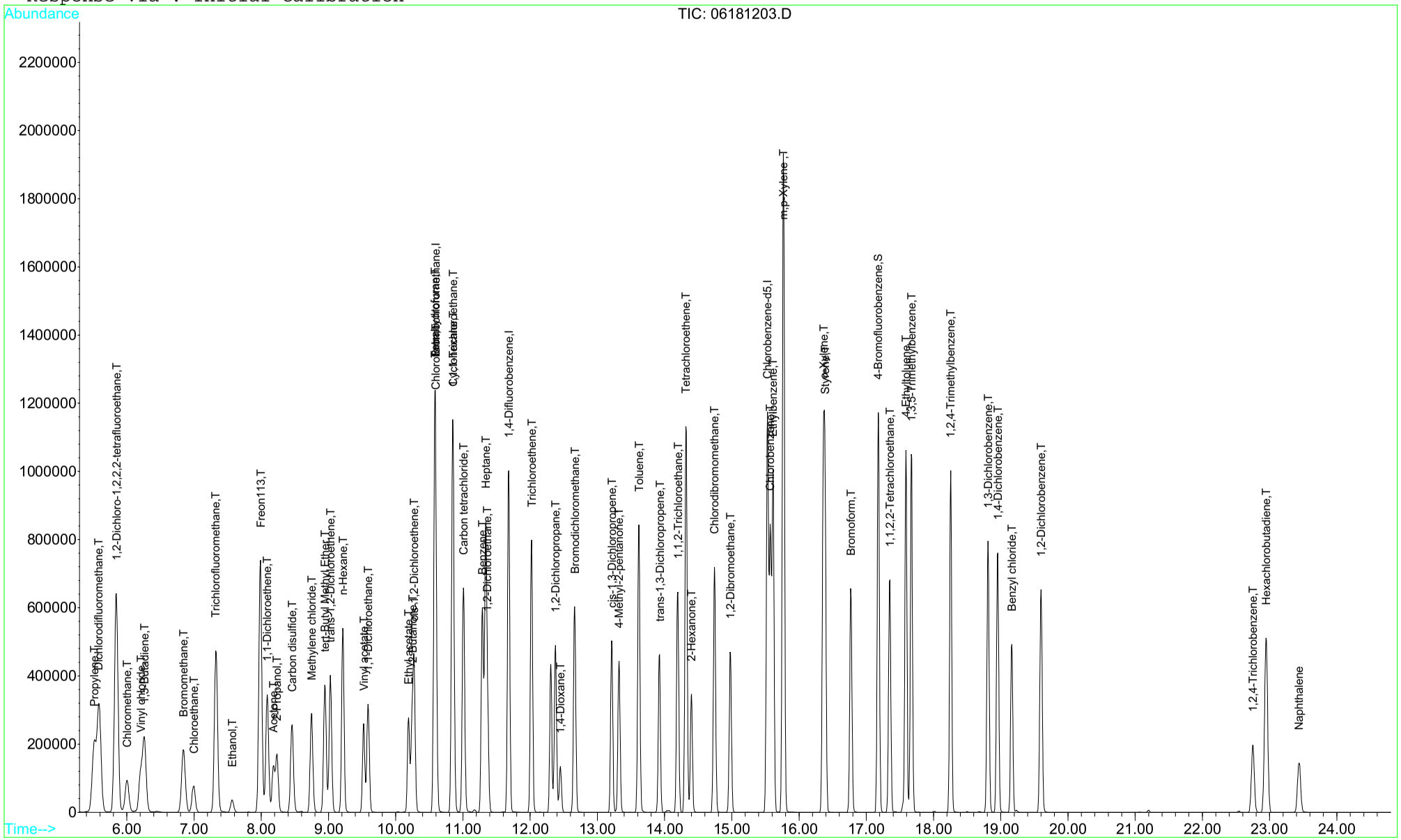
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53)	Styrene	16.39	104	601485	9.43	ppbv	98
54)	Bromoform	16.77	173	427037	9.08	ppbv	98
56)	1,1,2,2-Tetrachloroethane	17.34	83	487313	9.41	ppbv	98
57)	4-Ethyltoluene	17.59	105	979766	9.09	ppbv	97
58)	1,3,5-Trimethylbenzene	17.67	105	820087	8.89	ppbv	98
59)	1,2,4-Trimethylbenzene	18.25	105	781074	9.05	ppbv	98
60)	1,3-Dichlorobenzene	18.81	146	512194	9.04	ppbv	97
61)	1,4-Dichlorobenzene	18.96	146	491393	8.99	ppbv	98
62)	Benzyl chloride	19.16	91	544100	9.06	ppbv	99
63)	1,2-Dichlorobenzene	19.60	146	447952	9.02	ppbv	98
64)	1,2,4-Trichlorobenzene	22.75	180	129902	7.20	ppbv	96
65)	Hexachlorobutadiene	22.95	225	196017	8.08	ppbv	99
66)	Naphthalene	23.44	128	263785	7.38	ppbv	100

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\061812\06181203.D Vial: 5
Acq On : 18 Jun 2012 12:19 pm Operator: RACHEL HILL
Sample : CCV VOA1 061812 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jun 18 12:43 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\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

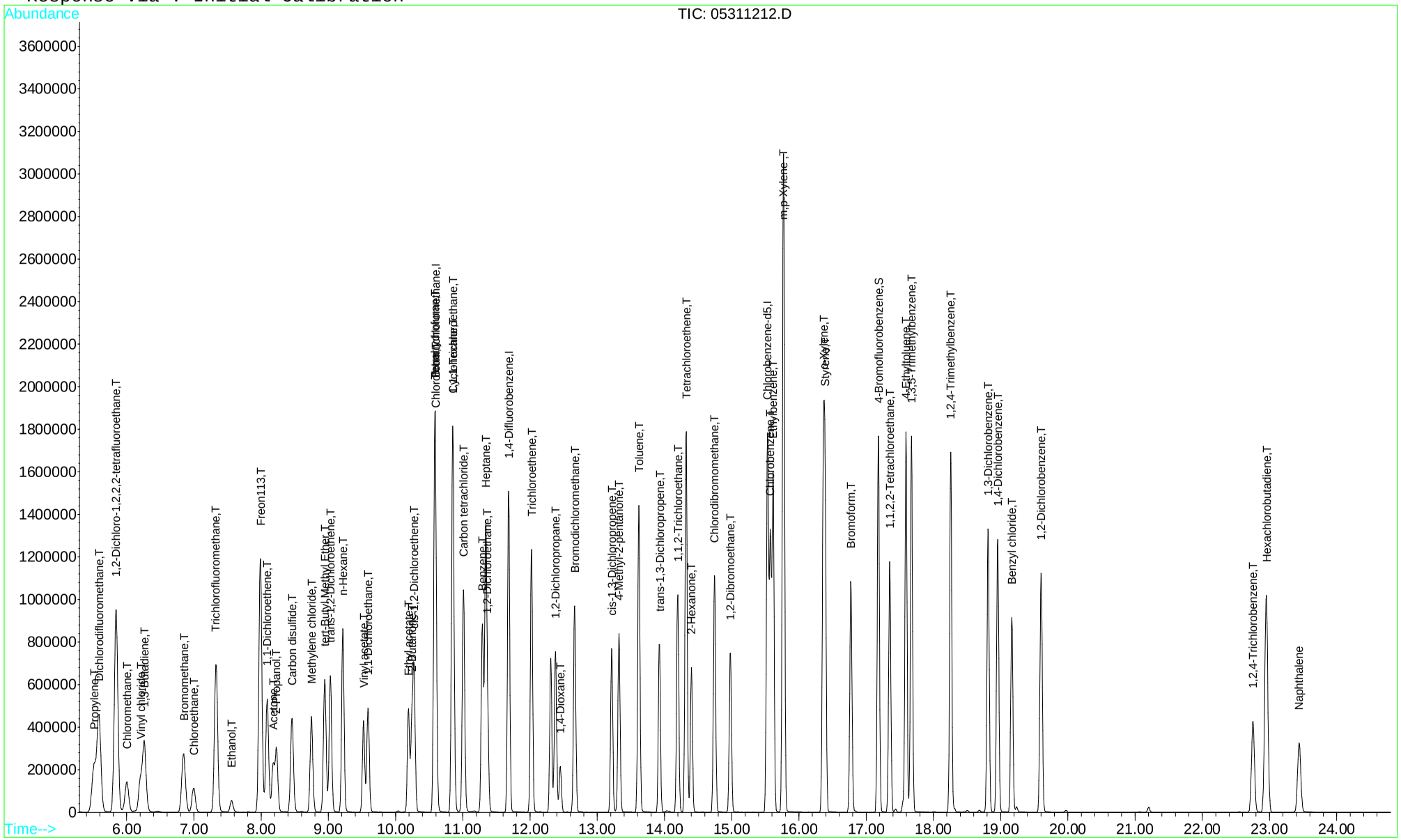
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53) Styrene	16.39	104	981022	10.06	ppbv	99
54) Bromoform	16.77	173	715854	9.95	ppbv	99
56) 1,1,2,2-Tetrachloroethane	17.35	83	824498	10.42	ppbv	98
57) 4-Ethyltoluene	17.59	105	1637849	9.94	ppbv	99
58) 1,3,5-Trimethylbenzene	17.68	105	1373368	9.74	ppbv	99
59) 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_120608A** **Run No.:** 49209

Analytical Run Date: 6/8/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

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

Column Length: 60m

Run Comments: PR AW 6.12.12 061212rsl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 060812	BFB_TUNE	TUNE	R49209	6/8/2012 11:07:00 AM	Robert Lynch		
CCV VOA9 060812	MA_APH	CCV	R49209	6/8/2012 11:50:00 AM	Robert Lynch		
RLVS VOA9 060812	MA_APH	RLVS	R49209	6/8/2012 12:33:00 PM	Robert Lynch		
MBLK VOA9 060812	MA_APH	MBLK	R49209	6/8/2012 1:23:00 PM	Deborah Griffiths		
1205A85-014A	MA_APH	SAMP	R49209	6/8/2012 3:00:00 PM	Robert Lynch		
1205A85-019A	MA_APH	SAMP	R49209	6/8/2012 5:18:00 PM	Robert Lynch		
1205A85-020A	MA_APH	SAMP	R49209	6/8/2012 6:04:00 PM	Robert Lynch		
1205A85-020Adup	MA_APH	DUP	R49209	6/8/2012 6:50:00 PM	Deborah Griffiths		
1205A85-021A	MA_APH	SAMP	R49209	6/8/2012 7:35:00 PM	Robert Lynch		
1205A85-024A	MA_APH	SAMP	R49209	6/8/2012 8:25:00 PM	Robert Lynch		
1205A85-025A	MA_APH	SAMP	R49209	6/8/2012 9:15:00 PM	Robert Lynch		
1205A85-010A	MA_APH	SAMP	R49209	6/9/2012 12:55:00 AM	Robert Lynch		
1206178-001A	MA_APH	SAMP	R49209	6/9/2012 1:37:00 AM	Robert Lynch		
1206178-002A	MA_APH	SAMP	R49209	6/9/2012 2:20:00 AM	Robert Lynch		
RLVS2 VOA9 06081	MA_APH	RLVS	R49209	6/9/2012 3:46:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

02-Jul-12

RunNo 49209

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
961951	BFB VOA9 060812	BFB_TUNE	TUNE	.\1\DATA\060812	6/8/2012 11:07:0	1	R49209		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		96.4	96.4		100	0	0	0	0	0	96%	93	101	0%	
177	M		6.5	6.5		100	0	0	0	0	0	7%	5	9	0%	
50	M		23.3	23.3		100	0	0	0	0	0	23%	8	40	0%	
75	M		47.4	47.4		100	0	0	0	0	0	47%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.9	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
961952	CCV VOA9 060812	MA_APH	CCV	.\1\DATA\060812	6/8/2012 11:50:0	1	R49209		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	223.57	223.57		234	0	0	0	0	0	96%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	1170	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	273.43	273.43		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	378.52	378.52		378	0	0	0	0	0	100%	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	87.55	87.55		89.5	0	0	0	0	0	98%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\060812\06081202.D Vial: 2
Acq On : 8 Jun 2012 11:50 am Operator: RACHEL HILL
Sample : CCV VOA9 060812 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	26.554	9.1	88	-0.02
2	L1	C5-C8 Aliphatic HC {2}	36.400	34.790	4.4	95	-0.02
3	L1	C5-C8 Aliphatic HC {3}	41.800	40.125	4.0	94	-0.03
4	L1	C5-C8 Aliphatic HC {4}	35.400	33.774	4.6	96	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	40.927	3.0	95	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	47.788	2.5	96	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	223.566	4.5	94	0.19
8	L1	C9-C12 Aliphatic HC	54.600	53.675	1.7	96	-0.02
9	L1	C9-C12 Aliphatic HC {2}	54.600	52.599	3.7	93	-0.02
10	L1	C9-C12 Aliphatic HC {3}	61.200	61.739	-0.9	98	-0.02
11	L1	C9-C12 Aliphatic HC {4}	60.800	61.958	-1.9	100	-0.02
12	L1	C9-C12 Aliphatic HC {5}	70.000	70.126	-0.2	99	-0.01
13	L1	C9-C12 Aliphatic HC {6}	77.000	81.057	-5.3	105	-0.02
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	378.520	-0.1	98	-0.02
15	L1	C9-C10 Aromatic HC	51.700	51.461	0.5	102	-0.02
16	L1	C9-C10 Aromatic HC {2}	51.200	52.017	-1.6	103	-0.02
17	L1	C9-C10 Aromatic HC {3}	52.200	54.198	-3.8	104	-0.01
18	L1	C9-C10 Aromatic HC {4}	58.700	60.318	-2.8	104	-0.01
19	L1	C9-C10 Aromatic HC {5}	52.600	54.389	-3.4	104	-0.01
20	L1	C9-C10 Aromatic HC {6}	58.700	60.995	-3.9	105	-0.01
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	273.428	-2.8	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	105	-0.02
41	S	4-Bromofluorobenzene	89.500	87.547	2.2	103	-0.01

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060812\06081202.D Vial: 2
Acq On : 8 Jun 2012 11:50 am Operator: RACHEL HILL
Sample : CCV VOA9 060812 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 11 9:20 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	725926	12.50 ug/m3	-0.02

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.33	95	478926	87.55 ug/m3	-0.01

Spiked Amount 89.500 Range 70 - 130 Recovery = 97.82%

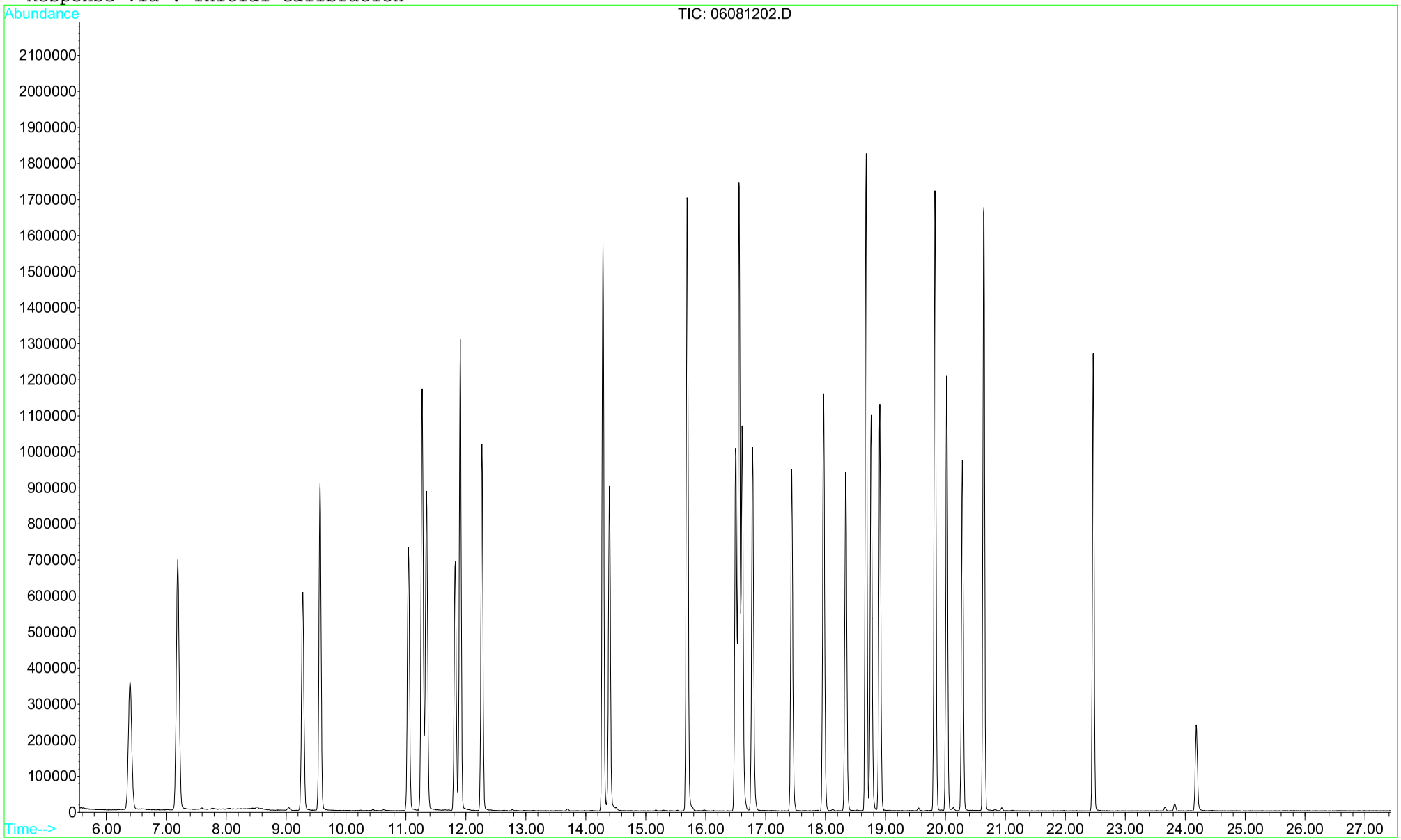
Target Compounds					Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2386055	26.55 ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2304761	34.79 ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.27	TIC	2952034	40.12 ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2278714	33.77 ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2896403	40.93 ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3354267	47.79 ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	16172234m	223.57 ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	3928438	53.68 ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.55	TIC	3720855	52.60 ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3786273	61.74 ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.82	TIC	3705951	61.96 ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	3472202	70.13 ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.46	TIC	2560921	81.06 ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	21174640m	378.52 ug/m3	
15) C9-C10 Aromatic HC	17.97	120	266889	51.46 ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	287674	52.02 ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	428013	54.20 ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	94719	60.32 ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	323495	54.39 ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	241793	61.00 ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1642583m	273.43 ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060812\06081202.D Vial: 2
Acq On : 8 Jun 2012 11:50 am Operator: RACHEL HILL
Sample : CCV VOA9 060812 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 11 9:20 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_120612A **Run No.:** 49293

Analytical Run Date: 6/12/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

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

Column Length: 60m

Run Comments: PR AW 6.13.12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 061212	BFB_TUNE	TUNE	R49293	6/12/2012 9:48:00 AM	Robert Lynch		
CCV VOA9 061212	MA_APH	CCV	R49293	6/12/2012 10:32:00 AM	Robert Lynch		
RLVS VOA9 061212	MA_APH	RLVS	R49293	6/12/2012 11:16:00 AM	Robert Lynch		
MBLK VOA9 061212	MA_APH	MBLK	R49293	6/12/2012 12:06:00 PM	Deborah Griffiths		
1205A85-032A	MA_APH	SAMP	R49293	6/12/2012 12:49:00 PM	Deborah Griffiths		
1206178-022A	MA_APH	SAMP	R49293	6/12/2012 1:37:00 PM	Deborah Griffiths		
1206178-026A	MA_APH	SAMP	R49293	6/12/2012 5:20:00 PM	Deborah Griffiths		
1206178-017A	MA_APH	SAMP	R49293	6/12/2012 6:48:00 PM	Deborah Griffiths		
1206178-017Adup	MA_APH	DUP	R49293	6/12/2012 7:32:00 PM	Deborah Griffiths		
1206178-003A	MA_APH	SAMP	R49293	6/12/2012 8:15:00 PM	Robert Lynch		
1206178-004A	MA_APH	SAMP	R49293	6/12/2012 9:41:00 PM	Robert Lynch		
1206178-005A	MA_APH	SAMP	R49293	6/12/2012 10:23:00 PM	Robert Lynch		
1206178-006A	MA_APH	SAMP	R49293	6/12/2012 11:06:00 PM	Robert Lynch		
1206178-007A	MA_APH	SAMP	R49293	6/12/2012 11:49:00 PM	Robert Lynch		
1206178-008A	MA_APH	SAMP	R49293	6/13/2012 12:32:00 AM	Robert Lynch		
1206178-009A	MA_APH	SAMP	R49293	6/13/2012 1:14:00 AM	Robert Lynch		
1206178-010A	MA_APH	SAMP	R49293	6/13/2012 1:57:00 AM	Robert Lynch		
1206178-011A	MA_APH	SAMP	R49293	6/13/2012 2:41:00 AM	Robert Lynch		
1206178-012A	MA_APH	SAMP	R49293	6/13/2012 3:25:00 AM	Robert Lynch		
RLVS2 VOA9 06121	MA_APH	RLVS	R49293	6/13/2012 9:00:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

02-Jul-12

RunNo 49293

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
963527	BFB VOA9 061212	BFB_TUNE	TUNE	.\1\DATA\061212	6/12/2012 9:48:0	1	R49293		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		63.7	63.7		100	0	0	0	0	0	64%	50	120	0%	
175	M		7.5	7.5		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		6.4	6.4		100	0	0	0	0	0	6%	5	9	0%	
50	M		22.9	22.9		100	0	0	0	0	0	23%	8	40	0%	
75	M		48.4	48.4		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
963528	CCV VOA9 061212	MA_APH	CCV	.\1\DATA\061212	6/12/2012 10:32:	1	R49293		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	225.86	225.86		234	0	0	0	0	0	97%	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	261.98	261.98		266	0	0	0	0	0	98%	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	369.05	369.05		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	86.84	86.84		89.5	0	0	0	0	0	97%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\061212\06121202.D Vial: 2
Acq On : 12 Jun 2012 10:32 am Operator: RACHEL HILL
Sample : CCV VOA9 061212 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	29.144	0.2	97	-0.02
2	L1	C5-C8 Aliphatic HC {2}	36.400	34.961	4.0	95	-0.03
3	L1	C5-C8 Aliphatic HC {3}	41.800	40.276	3.6	94	-0.03
4	L1	C5-C8 Aliphatic HC {4}	35.400	33.454	5.5	95	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	40.388	4.3	94	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	47.369	3.3	95	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	225.862	3.5	95	0.19
8	L1	C9-C12 Aliphatic HC	54.600	53.678	1.7	96	-0.02
9	L1	C9-C12 Aliphatic HC {2}	54.600	53.473	2.1	94	-0.02
10	L1	C9-C12 Aliphatic HC {3}	61.200	59.646	2.5	95	-0.02
11	L1	C9-C12 Aliphatic HC {4}	60.800	59.568	2.0	96	-0.01
12	L1	C9-C12 Aliphatic HC {5}	70.000	66.342	5.2	94	-0.02
13	L1	C9-C12 Aliphatic HC {6}	77.000	76.842	0.2	100	-0.02
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	369.049	2.4	96	-0.02
15	L1	C9-C10 Aromatic HC	51.700	50.031	3.2	99	-0.02
16	L1	C9-C10 Aromatic HC {2}	51.200	49.528	3.3	98	-0.02
17	L1	C9-C10 Aromatic HC {3}	52.200	51.722	0.9	99	-0.01
18	L1	C9-C10 Aromatic HC {4}	58.700	56.636	3.5	97	-0.01
19	L1	C9-C10 Aromatic HC {5}	52.600	52.694	-0.2	101	-0.01
20	L1	C9-C10 Aromatic HC {6}	58.700	57.922	1.3	100	-0.01
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	261.978	1.5	99	-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	89	-0.02
41	S	4-Bromofluorobenzene	89.500	86.843	3.0	87	-0.01

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\061212\06121202.D Vial: 2
Acq On : 12 Jun 2012 10:32 am Operator: RACHEL HILL
Sample : CCV VOA9 061212 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 12 12:42 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	618422	12.50	ug/m3	-0.02

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.33	95	404721	86.84	ug/m3	-0.01

Spiked Amount 89.500 Range 70 - 130 Recovery = 97.03%

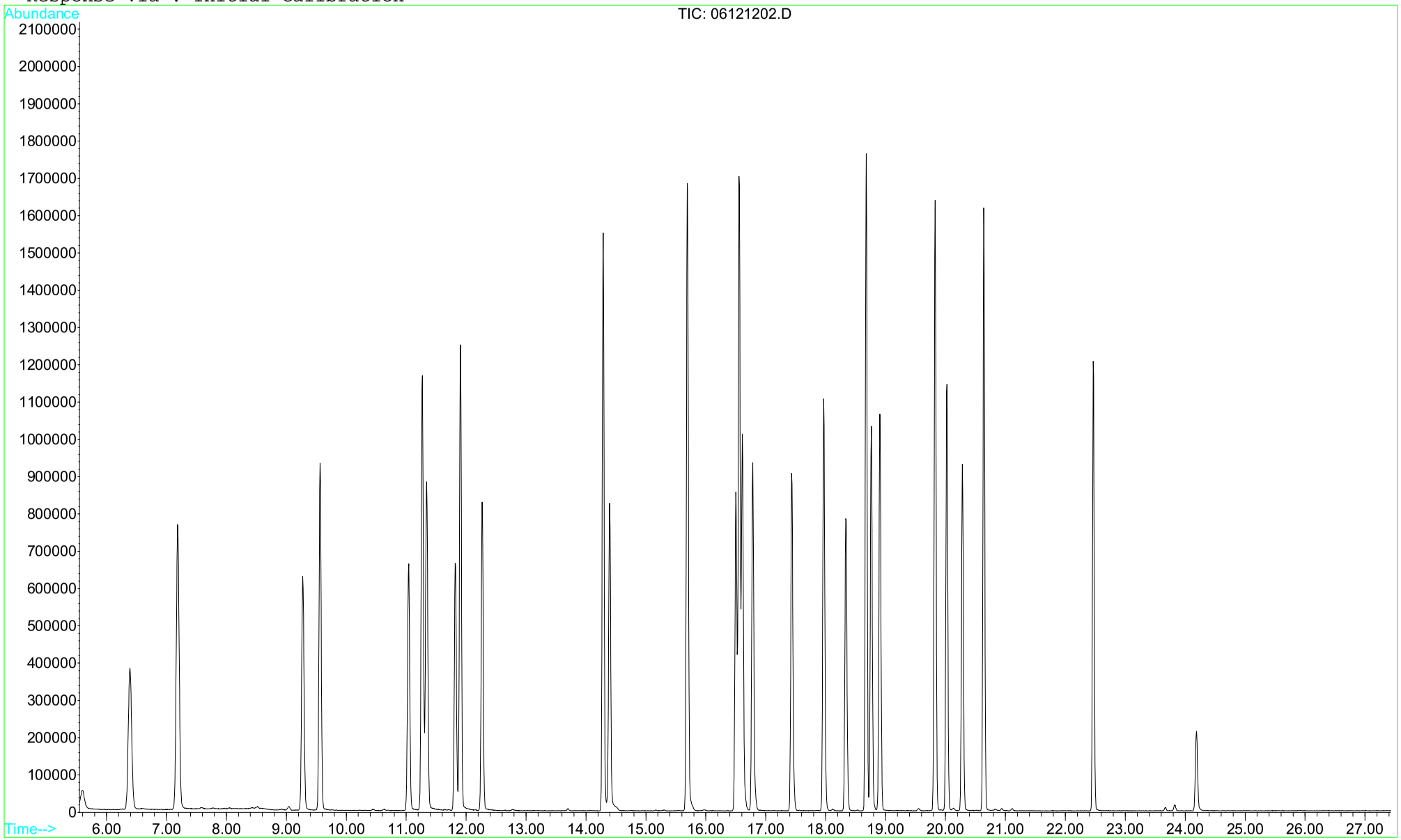
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2618781	29.14	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.56	TIC	2316063	34.96	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.27	TIC	2963136	40.28	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2257117	33.45	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2858272	40.39	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3324903	47.37	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	16338272m	225.86	ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	3928645	53.68	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.55	TIC	3782655	53.47	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3657909	59.65	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	3563003	59.57	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	3284883	66.34	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.47	TIC	2427738	76.84	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	20644833m	369.05	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	259469	50.03	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	273909	49.53	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	408459	51.72	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	88937	56.64	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	313412	52.69	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	229612	57.92	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1573798m	261.98	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\061212\06121202.D Vial: 2
Acq On : 12 Jun 2012 10:32 am Operator: RACHEL HILL
Sample : CCV VOA9 061212 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 12 12:42 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_120613A** **Run No.:** 49382

Analytical Run Date: 6/13/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

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

Column Length: 60m

Run Comments: PR AW 6.16.12 Ending RLVS out of time clock, JW approved. 061812rsl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 061312	BFB_TUNE	TUNE	R49382	6/13/2012 12:15:00 PM	Robert Lynch		
CCV VOA9 061312	MA_APH	CCV	R49382	6/13/2012 12:58:00 PM	Robert Lynch		
RLVS VOA9 061312	MA_APH	RLVS	R49382	6/13/2012 1:42:00 PM	Robert Lynch		
MBLK VOA9 061312	MA_APH	MBLK	R49382	6/13/2012 2:32:00 PM	Deborah Griffiths		
1206178-037A	MA_APH	SAMP	R49382	6/13/2012 4:16:00 PM	Robert Lynch		
1206178-013A	MA_APH	SAMP	R49382	6/13/2012 5:13:00 PM	Robert Lynch		
1206178-015A	MA_APH	SAMP	R49382	6/13/2012 6:40:00 PM	Robert Lynch		
1206178-015Adup	MA_APH	DUP	R49382	6/13/2012 7:24:00 PM	Deborah Griffiths		
1206178-018A	MA_APH	SAMP	R49382	6/13/2012 8:51:00 PM	Robert Lynch		
1206178-019A	MA_APH	SAMP	R49382	6/13/2012 10:18:00 PM	Robert Lynch		
1206178-021A	MA_APH	SAMP	R49382	6/13/2012 11:50:00 PM	Robert Lynch		
1206178-023A	MA_APH	SAMP	R49382	6/14/2012 12:39:00 AM	Robert Lynch		
1206178-038A	MA_APH	SAMP	R49382	6/14/2012 2:57:00 AM	Robert Lynch		
1206178-024A	MA_APH	SAMP	R49382	6/14/2012 7:40:00 AM	Robert Lynch		
1206178-025A	MA_APH	SAMP	R49382	6/14/2012 8:25:00 AM	Robert Lynch		
RLVS2 VOA9 06131	MA_APH	RLVS	R49382	6/14/2012 12:38:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

02-Jul-12

RunNo 49382

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
965364	BFB VOA9 061312	BFB_TUNE	TUNE	.\1\DATA\061312	6/13/2012 12:15:	1	R49382		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		66.8	66.8		100	0	0	0	0	0	67%	50	120	0%	
175	M		7.3	7.3		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		6.4	6.4		100	0	0	0	0	0	6%	5	9	0%	
50	M		23.5	23.5		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		6.7	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
965365	CCV VOA9 061312	MA_APH	CCV	.\1\DATA\061312	6/13/2012 12:58:	1	R49382		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	209.22	209.22		234	0	0	0	0	0	89%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	1170	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	248.93	248.93		266	0	0	0	0	0	94%	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	342.58	342.58		378	0	0	0	0	0	91%	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	86.37	86.37		89.5	0	0	0	0	0	97%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\061312\06131203.D Vial: 2
Acq On : 13 Jun 2012 12:58 pm Operator: RACHEL HILL
Sample : CCV VOA9 061312 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	26.246	10.1	87	-0.02
2	L1	C5-C8 Aliphatic HC {2}	36.400	32.505	10.7	88	-0.03
3	L1	C5-C8 Aliphatic HC {3}	41.800	37.844	9.5	88	-0.03
4	L1	C5-C8 Aliphatic HC {4}	35.400	31.110	12.1	89	-0.03
5	L1	C5-C8 Aliphatic HC {5}	42.200	37.834	10.3	88	-0.03
6	L1	C5-C8 Aliphatic HC {6}	49.000	43.619	11.0	87	-0.03
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	209.216	10.6	88	0.19
8	L1	C9-C12 Aliphatic HC	54.600	48.926	10.4	88	-0.02
9	L1	C9-C12 Aliphatic HC {2}	54.600	49.842	8.7	88	-0.02
10	L1	C9-C12 Aliphatic HC {3}	61.200	55.701	9.0	89	-0.02
11	L1	C9-C12 Aliphatic HC {4}	60.800	56.216	7.5	91	-0.01
12	L1	C9-C12 Aliphatic HC {5}	70.000	62.002	11.4	87	-0.02
13	L1	C9-C12 Aliphatic HC {6}	77.000	69.912	9.2	91	-0.02
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	342.575	9.4	89	-0.02
15	L1	C9-C10 Aromatic HC	51.700	47.251	8.6	94	-0.02
16	L1	C9-C10 Aromatic HC {2}	51.200	46.905	8.4	93	-0.01
17	L1	C9-C10 Aromatic HC {3}	52.200	48.992	6.1	94	-0.01
18	L1	C9-C10 Aromatic HC {4}	58.700	54.997	6.3	94	-0.02
19	L1	C9-C10 Aromatic HC {5}	52.600	49.916	5.1	96	-0.01
20	L1	C9-C10 Aromatic HC {6}	58.700	55.698	5.1	96	-0.02
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	248.929	6.4	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	83	-0.02
41	S	4-Bromofluorobenzene	89.500	86.370	3.5	80	-0.01

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\061312\06131203.D Vial: 2
Acq On : 13 Jun 2012 12:58 pm Operator: RACHEL HILL
Sample : CCV VOA9 061312 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 15 16:15 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	572552	12.50	ug/m3	-0.02

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.34	95	372658	86.37	ug/m3	-0.01

Spiked Amount 89.500 Range 70 - 130 Recovery = 96.50%

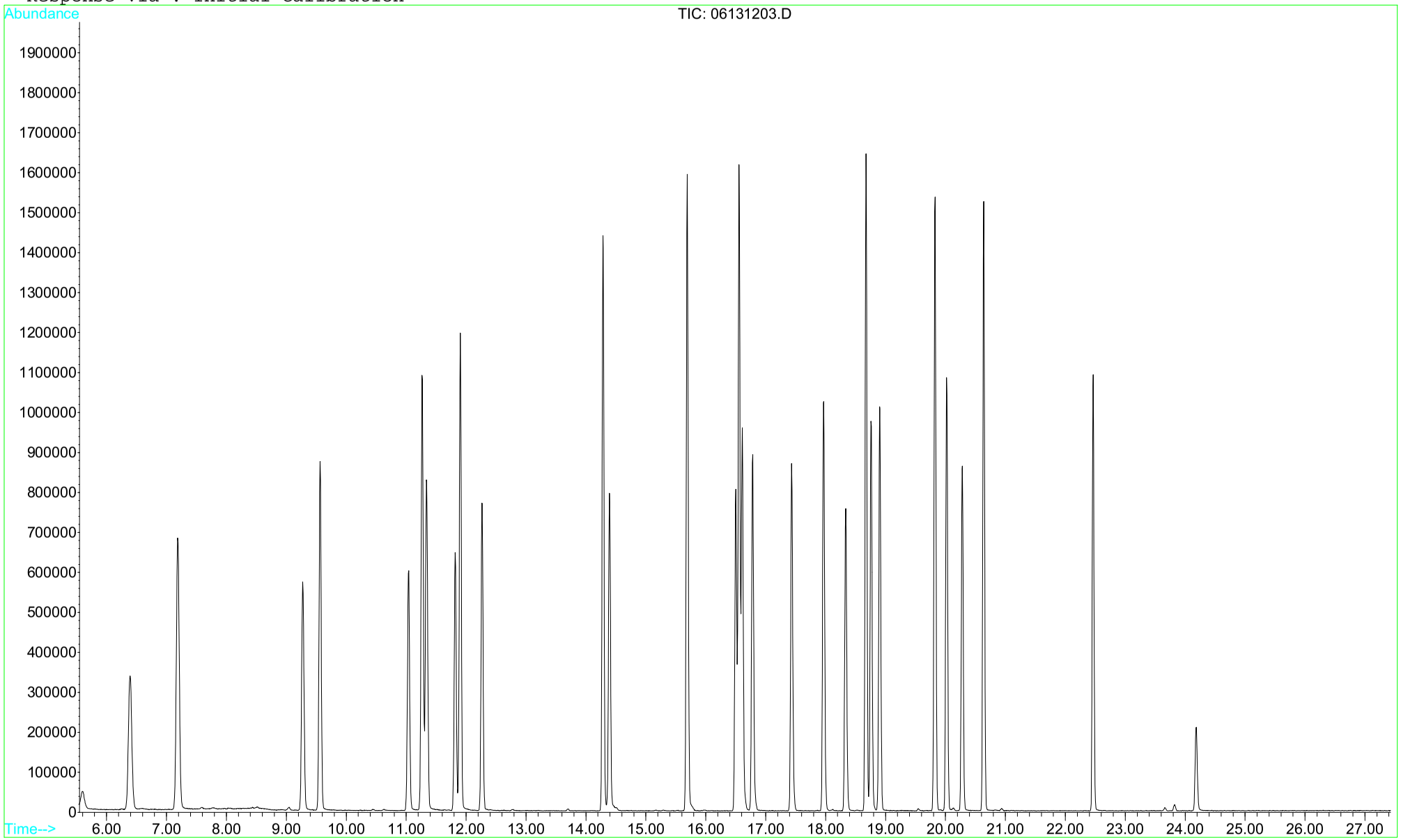
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2358445	26.25	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.56	TIC	2153373	32.50	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.26	TIC	2784243	37.84	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2098935	31.11	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.90	TIC	2677500	37.83	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.28	TIC	3061645	43.62	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	15134141m	209.22	ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	3580820	48.93	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	3525823	49.84	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.67	TIC	3415971	55.70	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	3362509	56.22	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	3069949	62.00	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.47	TIC	2208795	69.91	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	19163867m	342.58	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	245055	47.25	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	259401	46.90	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	386904	48.99	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	86363	55.00	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	296890	49.92	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	220793	55.70	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1495406m	248.93	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\061312\06131203.D Vial: 2
Acq On : 13 Jun 2012 12:58 pm Operator: RACHEL HILL
Sample : CCV VOA9 061312 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 15 16:15 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_120614A** **Run No.:** 49383

Analytical Run Date: 6/14/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

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

Column Length: 60m

Run Comments: PR AW 6.16.12 061812rsl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 061412	BFB_TUNE	TUNE	R49383	6/14/2012 1:28:00 PM	Robert Lynch		
CCV VOA9 061412	MA_APH	CCV	R49383	6/14/2012 2:54:00 PM	Robert Lynch		
RLVS VOA9 061412	MA_APH	RLVS	R49383	6/14/2012 3:37:00 PM	Robert Lynch		
MBLK VOA9 061412	MA_APH	MBLK	R49383	6/14/2012 5:31:00 PM	Deborah Griffiths		
1206178-014A	MA_APH	SAMP	R49383	6/14/2012 6:15:00 PM	Robert Lynch		
1206178-014Adup	MA_APH	DUP	R49383	6/14/2012 6:59:00 PM	Deborah Griffiths		
1206178-016A	MA_APH	SAMP	R49383	6/14/2012 7:43:00 PM	Robert Lynch		
1206178-020A	MA_APH	SAMP	R49383	6/14/2012 8:27:00 PM	Robert Lynch		
1206178-027A	MA_APH	SAMP	R49383	6/14/2012 9:10:00 PM	Robert Lynch		
1206178-028A	MA_APH	SAMP	R49383	6/14/2012 9:53:00 PM	Robert Lynch		
1206178-029A	MA_APH	SAMP	R49383	6/14/2012 10:36:00 PM	Robert Lynch		
1206178-030A	MA_APH	SAMP	R49383	6/14/2012 11:20:00 PM	Robert Lynch		
1206178-031A	MA_APH	SAMP	R49383	6/15/2012 12:03:00 AM	Robert Lynch		
1206178-033A	MA_APH	SAMP	R49383	6/15/2012 1:29:00 AM	Robert Lynch		
1206178-034A	MA_APH	SAMP	R49383	6/15/2012 2:14:00 AM	Robert Lynch		
1206178-035A	MA_APH	SAMP	R49383	6/15/2012 3:00:00 AM	Robert Lynch		
1206178-036A	MA_APH	SAMP	R49383	6/15/2012 10:01:00 AM	Robert Lynch		
1206178-032A	MA_APH	SAMP	R49383	6/15/2012 10:44:00 AM	Robert Lynch		
1206178-039A	MA_APH	SAMP	R49383	6/15/2012 11:28:00 AM	Robert Lynch		
RLVS2 VOA9 06141	MA_APH	RLVS	R49383	6/15/2012 12:11:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

02-Jul-12

RunNo 49383

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
965450	BFB VOA9 061412	BFB_TUNE	TUNE	.\1\DATA\061412	6/14/2012 1:28:0	1	R49383		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		62.6	62.6		100	0	0	0	0	0	63%	50	120	0%	
175	M		7.7	7.7		100	0	0	0	0	0	8%	4	9	0%	
176	M		97.2	97.2		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.5	6.5		100	0	0	0	0	0	7%	5	9	0%	
50	M		22.3	22.3		100	0	0	0	0	0	22%	8	40	0%	
75	M		47.1	47.1		100	0	0	0	0	0	47%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.6	6.6		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
965451	CCV VOA9 061412	MA_APH	CCV	.\1\DATA\061412	6/14/2012 2:54:0	1	R49383		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	216.66	216.66		234	0	0	0	0	0	93%	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	258.55	258.55		266	0	0	0	0	0	97%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	1330	0%	0	0	0%	
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	356.63	356.63		378	0	0	0	0	0	94%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	1890	0%	0	0	0%	
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	86.76	86.76		89.5	0	0	0	0	0	97%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\061412\06141202.D Vial: 2
Acq On : 14 Jun 2012 2:54 pm Operator: RACHEL HILL
Sample : CCV VOA9 061412 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	26.031	10.9	86	-0.02
2	L1	C5-C8 Aliphatic HC {2}	36.400	33.815	7.1	92	-0.03
3	L1	C5-C8 Aliphatic HC {3}	41.800	39.734	4.9	93	-0.03
4	L1	C5-C8 Aliphatic HC {4}	35.400	32.468	8.3	93	-0.03
5	L1	C5-C8 Aliphatic HC {5}	42.200	39.269	6.9	91	-0.03
6	L1	C5-C8 Aliphatic HC {6}	49.000	45.597	6.9	91	-0.03
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	216.661	7.4	91	0.19
8	L1	C9-C12 Aliphatic HC	54.600	51.165	6.3	92	-0.02
9	L1	C9-C12 Aliphatic HC {2}	54.600	52.540	3.8	93	-0.02
10	L1	C9-C12 Aliphatic HC {3}	61.200	57.091	6.7	91	-0.02
11	L1	C9-C12 Aliphatic HC {4}	60.800	57.580	5.3	93	-0.01
12	L1	C9-C12 Aliphatic HC {5}	70.000	64.331	8.1	91	-0.02
13	L1	C9-C12 Aliphatic HC {6}	77.000	74.645	3.1	97	-0.01
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	356.635	5.7	92	-0.02
15	L1	C9-C10 Aromatic HC	51.700	49.798	3.7	99	-0.02
16	L1	C9-C10 Aromatic HC {2}	51.200	48.728	4.8	97	-0.01
17	L1	C9-C10 Aromatic HC {3}	52.200	50.606	3.1	97	-0.02
18	L1	C9-C10 Aromatic HC {4}	58.700	57.583	1.9	99	-0.02
19	L1	C9-C10 Aromatic HC {5}	52.600	51.415	2.3	99	-0.01
20	L1	C9-C10 Aromatic HC {6}	58.700	57.909	1.3	100	-0.02
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	258.547	2.8	98	-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	86.760	3.1	102	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\061412\06141202.D Vial: 2
Acq On : 14 Jun 2012 2:54 pm Operator: RACHEL HILL
Sample : CCV VOA9 061412 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 15 11:05 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	723991	12.50	ug/m3	-0.02

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.34	95	473358	86.76	ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 96.94%

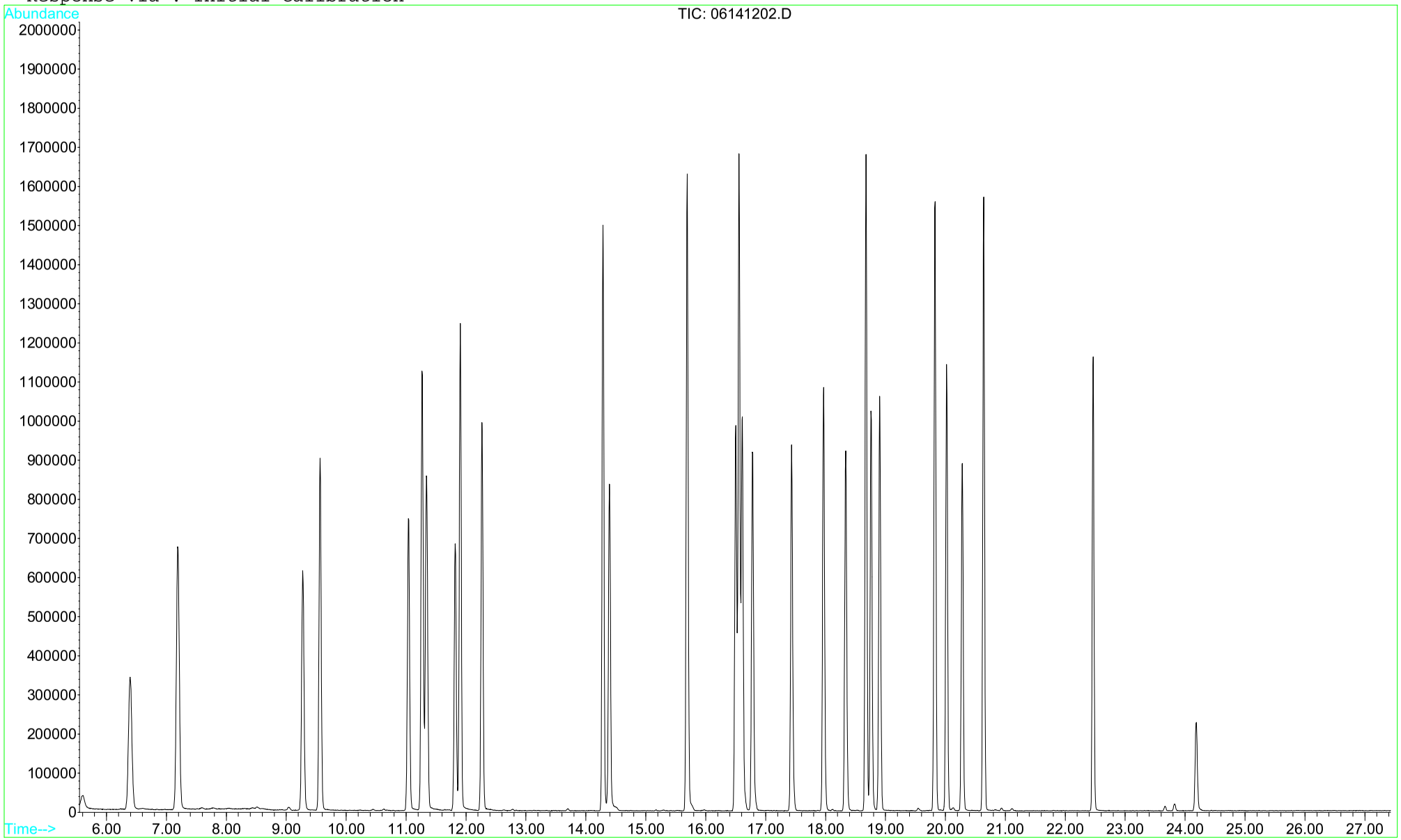
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2339064	26.03	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.56	TIC	2240172	33.82	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.27	TIC	2923299	39.73	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2190568	32.47	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.90	TIC	2779072	39.27	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.28	TIC	3200530	45.60	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	15672705m	216.66	ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	3744690	51.16	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	3716715	52.54	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.67	TIC	3501218	57.09	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	3444112	57.58	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	3185297	64.33	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.47	TIC	2358339	74.65	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	19950371m	356.63	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	258261	49.80	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	269482	48.73	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.90	120	399650	50.61	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	90424	57.58	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	305807	51.42	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	229561	57.91	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1553185m	258.55	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\061412\06141202.D Vial: 2
Acq On : 14 Jun 2012 2:54 pm Operator: RACHEL HILL
Sample : CCV VOA9 061412 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 15 11:05 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



RTI Laboratories

Run ID: **VOA9_120615A** **Run No.:** 49398

Analytical Run Date: 6/15/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

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

Column Length: 60m

Run Comments: PR AW 6.20.12.

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 061512	BFB_TUNE	TUNE	R49398	6/15/2012 12:56:00 PM	Robert Lynch		
CCV VOA9 061512	MA_APH	CCV	R49398	6/15/2012 1:39:00 PM	Robert Lynch		
RLVS VOA9 061512	MA_APH	RLVS	R49398	6/15/2012 2:22:00 PM	Robert Lynch		
MBLK VOA9 061512	MA_APH	MBLK	R49398	6/15/2012 3:12:00 PM	Deborah Griffiths		
1206178-040A	MA_APH	SAMP	R49398	6/15/2012 3:57:00 PM	Robert Lynch		
1206178-041A	MA_APH	SAMP	R49398	6/15/2012 4:43:00 PM	Robert Lynch		
1206178-042A	MA_APH	SAMP	R49398	6/15/2012 5:28:00 PM	Robert Lynch		
1206178-042Adup	MA_APH	DUP	R49398	6/15/2012 6:13:00 PM	Deborah Griffiths		
1206178-043A	MA_APH	SAMP	R49398	6/15/2012 6:58:00 PM	Robert Lynch		
1206178-044A	MA_APH	SAMP	R49398	6/15/2012 7:43:00 PM	Robert Lynch		
1206178-045A	MA_APH	SAMP	R49398	6/15/2012 8:29:00 PM	Robert Lynch		
1206178-046A	MA_APH	SAMP	R49398	6/15/2012 9:14:00 PM	Robert Lynch		
1206178-047A	MA_APH	SAMP	R49398	6/15/2012 9:57:00 PM	Robert Lynch		
1206178-049A	MA_APH	SAMP	R49398	6/15/2012 11:37:00 PM	Robert Lynch		
1206178-050A	MA_APH	SAMP	R49398	6/16/2012 12:27:00 AM	Robert Lynch		
RLVS2 VOA9 06151	MA_APH	RLVS	R49398	6/16/2012 1:10:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

02-Jul-12

RunNo 49398

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
965717	BFB VOA9 061512	BFB_TUNE	TUNE	.\1\DATA\061512	6/15/2012 12:56:	1	R49398		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		64.5	64.5		100	0	0	0	0	0	65%	50	120	0%	
175	M		7.4	7.4		100	0	0	0	0	0	7%	4	9	0%	
176	M		96.7	96.7		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	
50	M		22.4	22.4		100	0	0	0	0	0	22%	8	40	0%	
75	M		48.5	48.5		100	0	0	0	0	0	49%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.6	6.6		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
965718	CCV VOA9 061512	MA_APH	CCV	.\1\DATA\061512	6/15/2012 1:39:0	1	R49398		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	231.01	231.01		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	268.93	268.93		266	0	0	0	0	0	101%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	1330	0%	0	0	0%	
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	371.76	371.76		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	88.02	88.02		89.5	0	0	0	0	0	98%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\061512\06151202.D Vial: 2
Acq On : 15 Jun 2012 1:39 pm Operator: RACHEL HILL
Sample : CCV VOA9 061512 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	27.973	4.2	93	-0.02
2	L1	C5-C8 Aliphatic HC {2}	36.400	36.423	-0.1	99	-0.02
3	L1	C5-C8 Aliphatic HC {3}	41.800	42.240	-1.1	99	-0.03
4	L1	C5-C8 Aliphatic HC {4}	35.400	34.467	2.6	98	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	41.852	0.8	97	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	48.290	1.4	97	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	231.015	1.3	97	0.19
8	L1	C9-C12 Aliphatic HC	54.600	54.072	1.0	97	-0.02
9	L1	C9-C12 Aliphatic HC {2}	54.600	54.663	-0.1	97	-0.02
10	L1	C9-C12 Aliphatic HC {3}	61.200	59.566	2.7	95	-0.02
11	L1	C9-C12 Aliphatic HC {4}	60.800	60.422	0.6	97	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	66.751	4.6	94	-0.01
13	L1	C9-C12 Aliphatic HC {6}	77.000	75.968	1.3	99	-0.02
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	371.763	1.7	96	-0.02
15	L1	C9-C10 Aromatic HC	51.700	51.677	0.0	102	-0.02
16	L1	C9-C10 Aromatic HC {2}	51.200	50.843	0.7	101	-0.02
17	L1	C9-C10 Aromatic HC {3}	52.200	53.088	-1.7	102	-0.01
18	L1	C9-C10 Aromatic HC {4}	58.700	58.084	1.0	100	-0.01
19	L1	C9-C10 Aromatic HC {5}	52.600	53.522	-1.8	103	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	59.924	-2.1	104	-0.01
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	268.926	-1.1	102	-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	89	-0.01
41	S	4-Bromofluorobenzene	89.500	88.019	1.7	88	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\061512\06151202.D Vial: 2
Acq On : 15 Jun 2012 1:39 pm Operator: RACHEL HILL
Sample : CCV VOA9 061512 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 18 9:24 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	616562	12.50	ug/m3	-0.01

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.34	95	408969	88.02	ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 98.35%

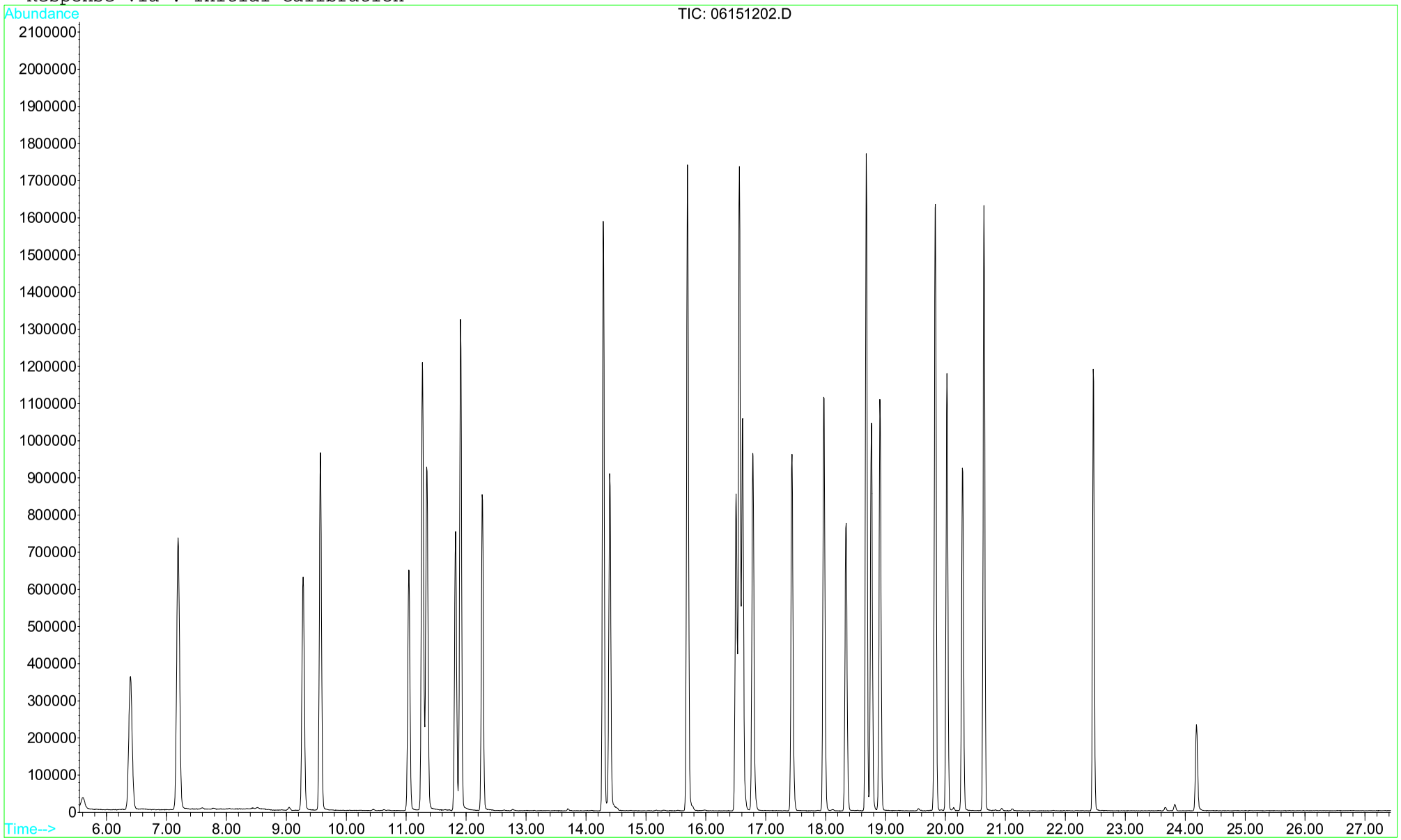
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2513606	27.97	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2412924	36.42	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.27	TIC	3107663	42.24	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2325422	34.47	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2961877	41.85	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3389556	48.29	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	16711048m	231.01	ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	3957490	54.07	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	3866840	54.66	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3653014	59.57	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	3614107	60.42	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	3305092	66.75	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.47	TIC	2400121	75.97	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	20796664m	371.76	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	268010	51.68	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	281181	50.84	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	419251	53.09	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	91211	58.08	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.29	120	318336	53.52	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	237547	59.92	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1615536m	268.93	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\061512\06151202.D Vial: 2
Acq On : 15 Jun 2012 1:39 pm Operator: RACHEL HILL
Sample : CCV VOA9 061512 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 18 9:24 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_120621A** **Run No.:** 49548

Analytical Run Date: 6/21/2012 **InstrumentID:** VOA9

Analyst: Rachel Hill **Column:**

Calibration ID: 49528 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: Peer reviewed AW 6.22.12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 062112	BFB_TUNE	TUNE	R49548	6/21/2012 10:03:00 AM	Robert Lynch		
CCV VOA9 062112	MA_APH	CCV	R49548	6/21/2012 10:46:00 AM	Robert Lynch		
RLVS VOA9 062112	MA_APH	RLVS	R49548	6/21/2012 12:17:00 PM	Robert Lynch		
MBLK VOA9 062112	MA_APH	MBLK	R49548	6/21/2012 1:07:00 PM	Robert Lynch		
1206178-048A	MA_APH	SAMP	R49548	6/21/2012 2:34:00 PM	Robert Lynch		
1206178-051A	MA_APH	SAMP	R49548	6/21/2012 3:18:00 PM	Robert Lynch		
1206178-052A	MA_APH	SAMP	R49548	6/21/2012 4:01:00 PM	Robert Lynch		
1206178-053A	MA_APH	SAMP	R49548	6/21/2012 4:45:00 PM	Robert Lynch		
1206178-054A	MA_APH	SAMP	R49548	6/21/2012 5:29:00 PM	Robert Lynch		
1206396-004A	MA_APH	SAMP	R49548	6/21/2012 6:19:00 PM	Robert Lynch		
1206396-006A	MA_APH	SAMP	R49548	6/21/2012 8:35:00 PM	Robert Lynch		
1206396-007A	MA_APH	SAMP	R49548	6/21/2012 9:21:00 PM	Robert Lynch		
1206396-015A	MA_APH	SAMP	R49548	6/21/2012 10:11:00 PM	Robert Lynch		
1206396-017A	MA_APH	SAMP	R49548	6/21/2012 11:50:00 PM	Robert Lynch		
1206396-018A	MA_APH	SAMP	R49548	6/22/2012 12:36:00 AM	Robert Lynch		
1206396-018Adup	MA_APH	DUP	R49548	6/22/2012 1:22:00 AM	Robert Lynch		
1206396-019A	MA_APH	SAMP	R49548	6/22/2012 2:12:00 AM	Robert Lynch		
1206396-020A	MA_APH	SAMP	R49548	6/22/2012 2:55:00 AM	Robert Lynch		
1206396-021A	MA_APH	SAMP	R49548	6/22/2012 3:41:00 AM	Robert Lynch		
RLVS2 VOA9 06211	MA_APH	RLVS	R49548	6/22/2012 9:59:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

02-Jul-12

RunNo 49548

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
968525	BFB VOA9 062112	BFB_TUNE	TUNE	.\1\DATA\062112	6/21/2012 10:03:	1	R49548		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		64.4	64.4		100	0	0	0	0	0	64%	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		6.7	6.7		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		47.6	47.6		100	0	0	0	0	0	48%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
968526	CCV VOA9 062112	MA_APH	CCV	.\1\DATA\062112	6/21/2012 10:46:	1	R49548		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	244.44	244.44		234	0	0	0	0	0	104%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	1170	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	287.71	287.71		266	0	0	0	0	0	108%	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	404.39	404.39		378	0	0	0	0	0	107%	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	89.28	89.28		89.5	0	0	0	0	0	100%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\062112\06211202.D Vial: 2
Acq On : 21 Jun 2012 10:46 am Operator: RACHEL HILL
Sample : CCV VOA9 062112 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\062012V9.M (RTE Integrator)
Title : MASS APH
Last Update : Thu Jun 21 08:39:41 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	30.068	-3.0	102	-0.02
2	L1	C5-C8 Aliphatic HC {2}	36.400	38.221	-5.0	105	-0.02
3	L1	C5-C8 Aliphatic HC {3}	41.800	44.121	-5.6	105	-0.03
4	L1	C5-C8 Aliphatic HC {4}	35.400	36.431	-2.9	103	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	44.369	-5.1	105	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	51.341	-4.8	104	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	244.442	-4.5	104	0.19
8	L1	C9-C12 Aliphatic HC	54.600	57.918	-6.1	105	-0.02
9	L1	C9-C12 Aliphatic HC {2}	54.600	55.308	-1.3	100	-0.02
10	L1	C9-C12 Aliphatic HC {3}	61.200	65.844	-7.6	107	-0.02
11	L1	C9-C12 Aliphatic HC {4}	60.800	65.527	-7.8	108	-0.02
12	L1	C9-C12 Aliphatic HC {5}	70.000	76.576	-9.4	112	-0.01
13	L1	C9-C12 Aliphatic HC {6}	77.000	86.574	-12.4	117	-0.02
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	404.386	-7.0	107	-0.02
15	L1	C9-C10 Aromatic HC	51.700	54.464	-5.3	109	-0.02
16	L1	C9-C10 Aromatic HC {2}	51.200	54.860	-7.1	112	-0.02
17	L1	C9-C10 Aromatic HC {3}	52.200	55.887	-7.1	110	-0.01
18	L1	C9-C10 Aromatic HC {4}	58.700	65.039	-10.8	117	-0.01
19	L1	C9-C10 Aromatic HC {5}	52.600	57.637	-9.6	116	-0.01
20	L1	C9-C10 Aromatic HC {6}	58.700	64.677	-10.2	116	-0.01
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	287.715	-8.2	112	-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	89.282	0.2	93	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\062112\06211202.D Vial: 2
Acq On : 21 Jun 2012 10:46 am Operator: RACHEL HILL
Sample : CCV VOA9 062112 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 21 16:34 2012 Quant Results File: 062012V9.RES

Quant Method : C:\HPCHEM\1\METHODS\062012V9.M (RTE Integrator)
Title : MASS APH
Last Update : Thu Jun 21 08:39:41 2012
Response via : Initial Calibration
DataAcq Meth : 062012V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.50	117	737503	12.50	ug/m3	-0.02

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.34	95	483256	89.28	ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 99.75%

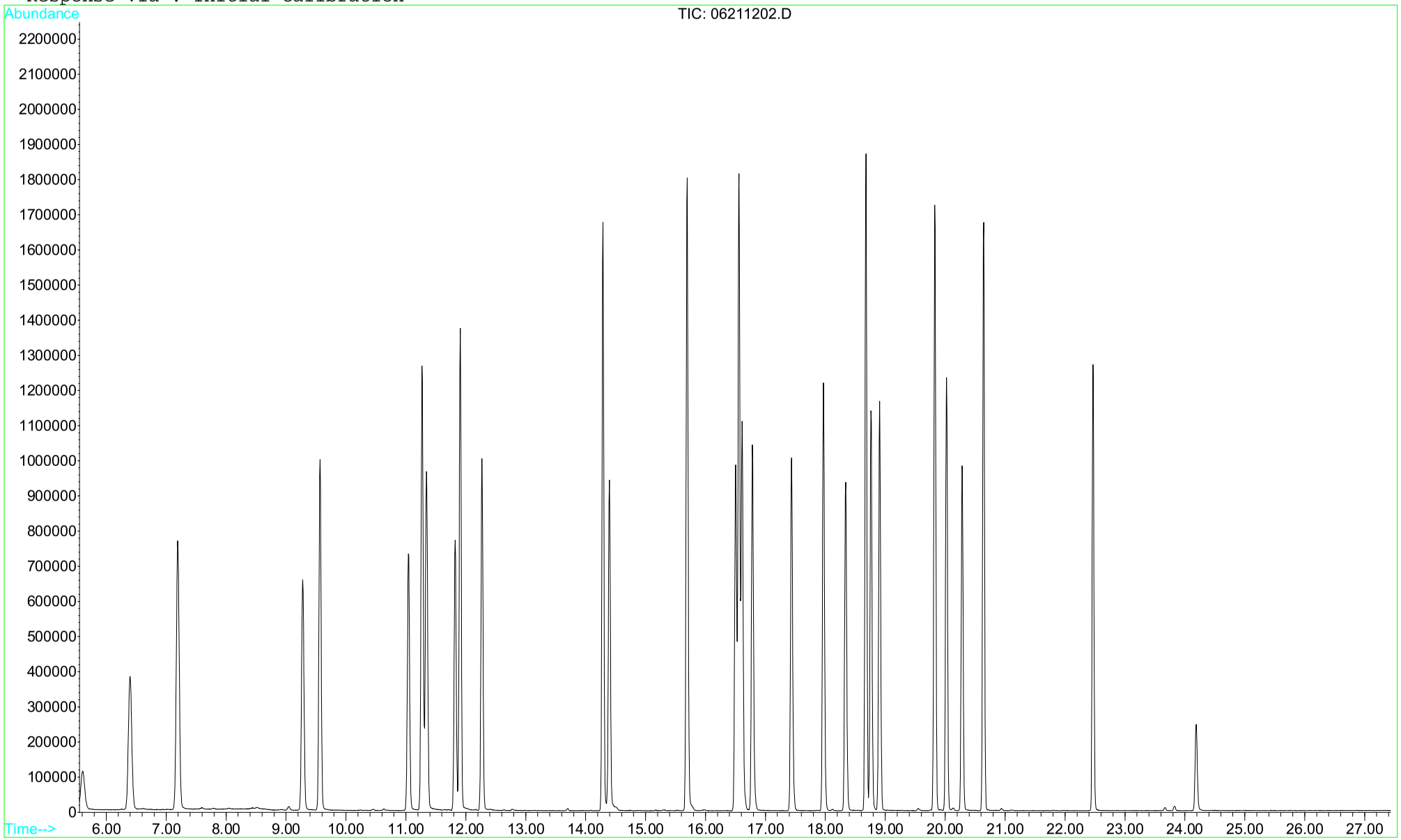
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2633627	30.07	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2512108	38.22	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.27	TIC	3253827	44.12	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2432331	36.43	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	3103820	44.37	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3565248	51.34	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	17500961m	244.44	ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	4160056	57.92	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	3883904	55.31	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3876097	65.84	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	3814915	65.53	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	3456298	76.58	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.46	TIC	2587736	86.57	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	21779006m	404.39	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	288798	54.46	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	305241	54.86	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	445222	55.89	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	100440	65.04	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	341102	57.64	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	254955	64.68	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1735758m	287.71	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\062112\06211202.D Vial: 2
Acq On : 21 Jun 2012 10:46 am Operator: RACHEL HILL
Sample : CCV VOA9 062112 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 21 16:34 2012 Quant Results File: 062012V9.RES

Method : C:\HPCHEM\1\METHODS\062012V9.M (RTE Integrator)
Title : MASS APH
Last Update : Thu Jun 21 08:39:41 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

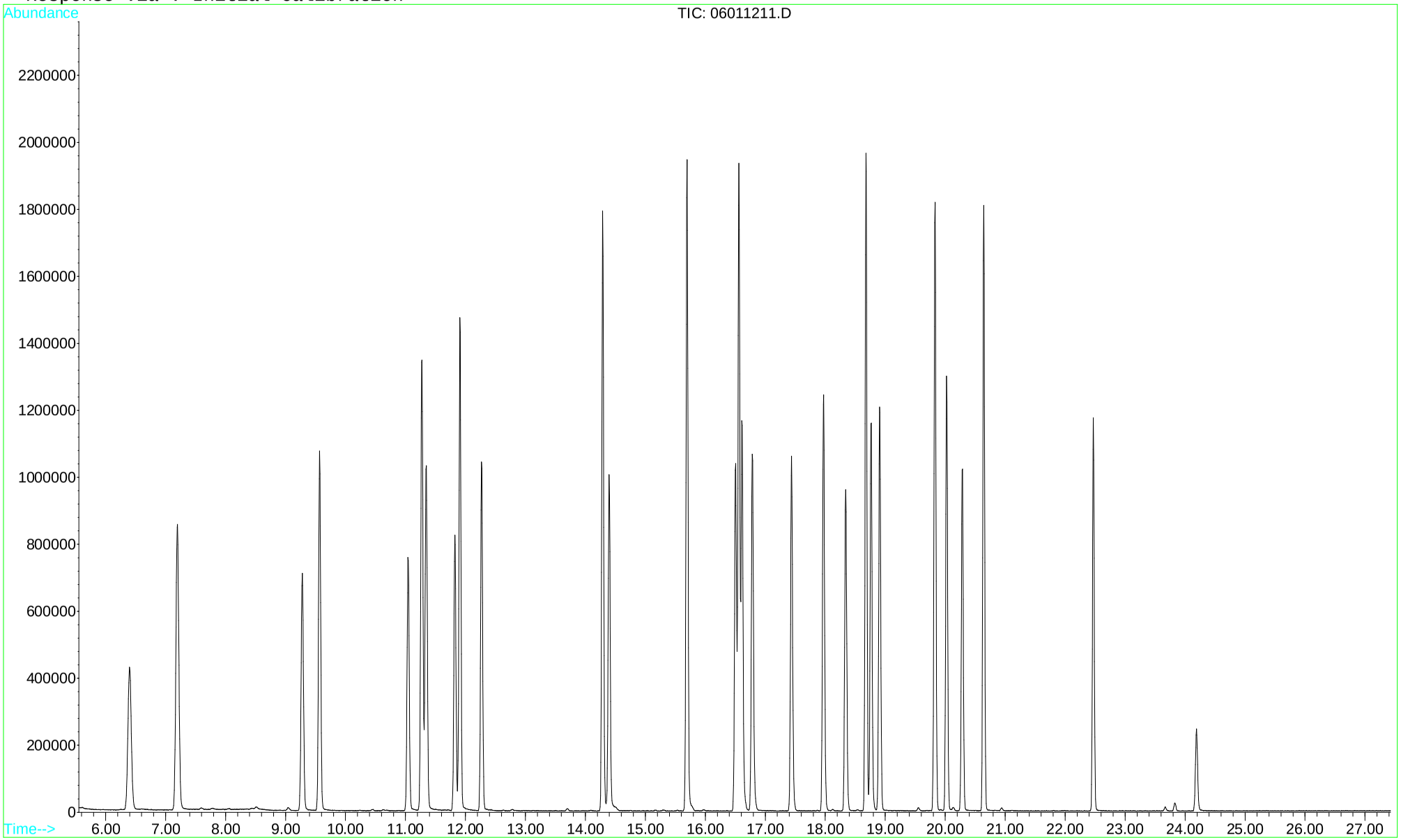
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	744532	12.50	ug/m3	-0.01
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.34	95	496179	88.43	ug/m3	0.00
Spiked Amount 89.500 Range 70 - 130 Recovery = 98.80%						
Target Compounds						Qvalue
1) C5-C8 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



Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\062012V9.M (RTE Integrator)
Title : MASS APH
Last Update : Thu Jun 21 08:39:41 2012
Response via : Initial Calibration

Calibration Files
1 =06201206.D 2 =06201207.D 3 =06201208.D
4 =06201209.D 5 =06201210.D 6 =06201211.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)	L1	C5-C8 Aliphatic HC	1.043	0.885	0.892	0.874	0.867	0.808	0.876	E5	10.03
2)	L1	C5-C8 Aliphatic HC	6.896	6.570	6.832	6.722	6.646	6.306	6.573	E4	4.64
3)	L1	C5-C8 Aliphatic HC	7.732	7.425	7.696	7.540	7.446	7.168	7.375	E4	5.20
4)	L1	C5-C8 Aliphatic HC	7.060	6.667	6.841	6.742	6.661	6.483	6.677	E4	3.73
5)	L1	C5-C8 Aliphatic HC	7.273	6.981	7.236	7.212	7.181	6.774	6.996	E4	5.00
6)	L1	C5-C8 Aliphatic HC	7.374	7.024	7.203	7.141	7.091	6.670	6.944	E4	6.16
7)	L1	C5-C8 Aliphatic HC	7.680	7.192	7.394	7.307	7.240	6.864	7.160	E4	5.58
8)	L1	C9-C12 Aliphatic HC	7.707	7.273	7.408	7.416	7.404	6.853	7.183	E4	6.91
9)	L1	C9-C12 Aliphatic HC	7.403	7.123	7.251	7.236	7.131	6.753	7.022	E4	5.58
10)	L1	C9-C12 Aliphatic HC	6.324	5.923	6.152	6.067	6.071	5.594	5.887	E4	7.18
11)	L1	C9-C12 Aliphatic HC	6.277	5.810	6.016	6.005	5.918	5.584	5.822	E4	6.30
12)	L1	C9-C12 Aliphatic HC	4.667	4.407	4.556	4.660	4.668	4.428	4.514	E4	3.86
13)	L1	C9-C12 Aliphatic HC	3.021	2.870	2.952	3.093	3.067	2.914	2.989	E4	2.71
14)	L1	C9-C12 Aliphatic HC	5.695	5.374	5.529	5.558	5.522	5.181	5.386	E4	5.37
15)	L1	C9-C10 Aromatic HC	5.310	5.147	5.453	5.415	5.479	5.312	5.303	E3	3.26
16)	L1	C9-C10 Aromatic HC	5.589	5.306	5.606	5.673	5.788	5.611	5.564	E3	3.02
17)	L1	C9-C10 Aromatic HC	8.136	7.743	8.036	8.100	8.233	7.946	7.966	E3	2.94
18)	L1	C9-C10 Aromatic HC	1.535	1.464	1.556	1.581	1.621	1.556	1.544	E3	3.37
19)	L1	C9-C10 Aromatic HC	5.932	5.611	5.983	5.984	6.129	5.971	5.918	E3	2.77
20)	L1	C9-C10 Aromatic HC	3.867	3.759	4.018	4.044	4.120	3.979	3.942	E3	3.38
21)	L1	C9-C10 Aromatic HC	6.069	5.803	6.112	6.133	6.240	6.068	6.033	E3	2.76
22)		C5-C8 Aliphatic	7.680	7.192	7.394	7.307	7.240	6.864	7.160	E4	5.58
23)	L1	non C5-C8	7.780	6.820	6.754	6.604	6.600	6.192	6.651	E4	9.19
24)	L1	non C5-C8 {2}	4.656	4.290	4.606	4.560	4.468	4.194	4.381	E4	6.26
25)	L1	non C5-C8 {3}	3.123	3.154	3.111	3.128	3.127	3.227	3.130	E4	1.78
26)	L1	non C5-C8 {4}	5.206	5.346	5.735	5.686	5.557	5.291	5.412	E4	4.68
27)	L1	non C5-C8 {5}	4.243	4.401	4.263	4.302	4.292	4.525	4.265	E4	5.05
28)	L1	non C5-C8 {6}	5.097	5.430	5.837	5.730	5.759	5.512	5.511	E4	5.14
29)	L1	non C5-C8 - TOTAL	4.281	4.553	4.754	4.827	4.906	4.886	4.697	E4	4.72
30)		C9-C12 Aliphatic	5.695	5.374	5.529	5.558	5.522	5.181	5.386	E4	5.37
31)	L1	non C9-C12	4.212	4.212	4.250	4.385	4.426	4.329	4.222	E4	5.41
32)	L1	non C9-C12 {2}	5.259	5.034	5.137	5.136	5.180	4.979	5.020	E4	5.61
33)	L1	non C9-C12 {3}	5.267	5.112	5.341	5.334	5.373	5.166	5.218	E4	3.05
34)	L1	non C9-C12 {4}	5.069	4.888	5.148	5.098	5.158	4.966	5.005	E4	3.24
35)	L1	non C9-C12 {5}	2.607	2.665	2.642	2.708	2.728	2.925	2.708	E4	3.84
36)	L1	non C9-C12 - TOTAL	3.433	3.455	3.544	3.592	3.647	3.577	3.509	E4	3.23
37)	L1	C9-C10 Aromatic	6.069	5.803	6.112	6.133	6.240	6.068	6.033	E3	2.76
38)	L1	C9-C10 Aromatic {2}	6.069	5.803	6.112	6.133	6.240	6.068	6.033	E3	2.76
39)	L1	C9-C10 Aromatic - T	6.069	5.803	6.112	6.133	6.240	6.068	6.033	E3	2.76
40)	I	Chlorobenzene-d5	----------ISTD----------								
41)	S	4-Bromofluorobenzen	0.092	0.089	0.091	0.091	0.091	0.093	0.092		2.42

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

Compound List Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\062012V9.M (RTE Integrator)
Title : MASS APH
Last Update : Thu Jun 21 08:39:41 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\062012\06201215.D Vial: 13
Acq On : 21 Jun 2012 2:31 am Operator: RACHEL HILL
Sample : ICV VOA9 062012 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\062012V9.M (RTE Integrator)
Title : MASS APH
Last Update : Thu Jun 21 08:39:41 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	32.581	-11.6	110	-0.02
2	L1	C5-C8 Aliphatic HC {2}	36.400	41.552	-14.2	114	-0.02
3	L1	C5-C8 Aliphatic HC {3}	41.800	47.110	-12.7	112	-0.03
4	L1	C5-C8 Aliphatic HC {4}	35.400	40.593	-14.7	115	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	48.049	-13.9	114	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	56.098	-14.5	113	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	265.744	-13.6	113	0.19
8	L1	C9-C12 Aliphatic HC	54.600	63.290	-15.9	114	-0.02
9	L1	C9-C12 Aliphatic HC {2}	54.600	63.893	-17.0	115	-0.02
10	L1	C9-C12 Aliphatic HC {3}	61.200	72.330	-18.2	117	-0.01
11	L1	C9-C12 Aliphatic HC {4}	60.800	71.666	-17.9	118	-0.01
12	L1	C9-C12 Aliphatic HC {5}	70.000	82.505	-17.9	121	-0.02
13	L1	C9-C12 Aliphatic HC {6}	77.000	95.478	-24.0	129	-0.01
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	446.383	-18.1	118	-0.02
15	L1	C9-C10 Aromatic HC	51.700	59.978	-16.0	120	-0.02
16	L1	C9-C10 Aromatic HC {2}	51.200	60.049	-17.3	123	-0.01
17	L1	C9-C10 Aromatic HC {3}	52.200	61.915	-18.6	122	-0.01
18	L1	C9-C10 Aromatic HC {4}	58.700	71.079	-21.1	128	-0.02
19	L1	C9-C10 Aromatic HC {5}	52.600	63.542	-20.8	127	-0.01
20	L1	C9-C10 Aromatic HC {6}	58.700	71.161	-21.2	127	-0.01
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	316.882	-19.1	124	-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	103	-0.02
41	S	4-Bromofluorobenzene	89.500	87.278	2.5	104	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\062012\06201215.D Vial: 13
Acq On : 21 Jun 2012 2:31 am Operator: RACHEL HILL
Sample : ICV VOA9 062012 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 21 9:50 2012 Quant Results File: 062012V9.RES

Quant Method : C:\HPCHEM\1\METHODS\062012V9.M (RTE Integrator)
Title : MASS APH
Last Update : Thu Jun 21 08:39:41 2012
Response via : Initial Calibration
DataAcq Meth : 062012V9

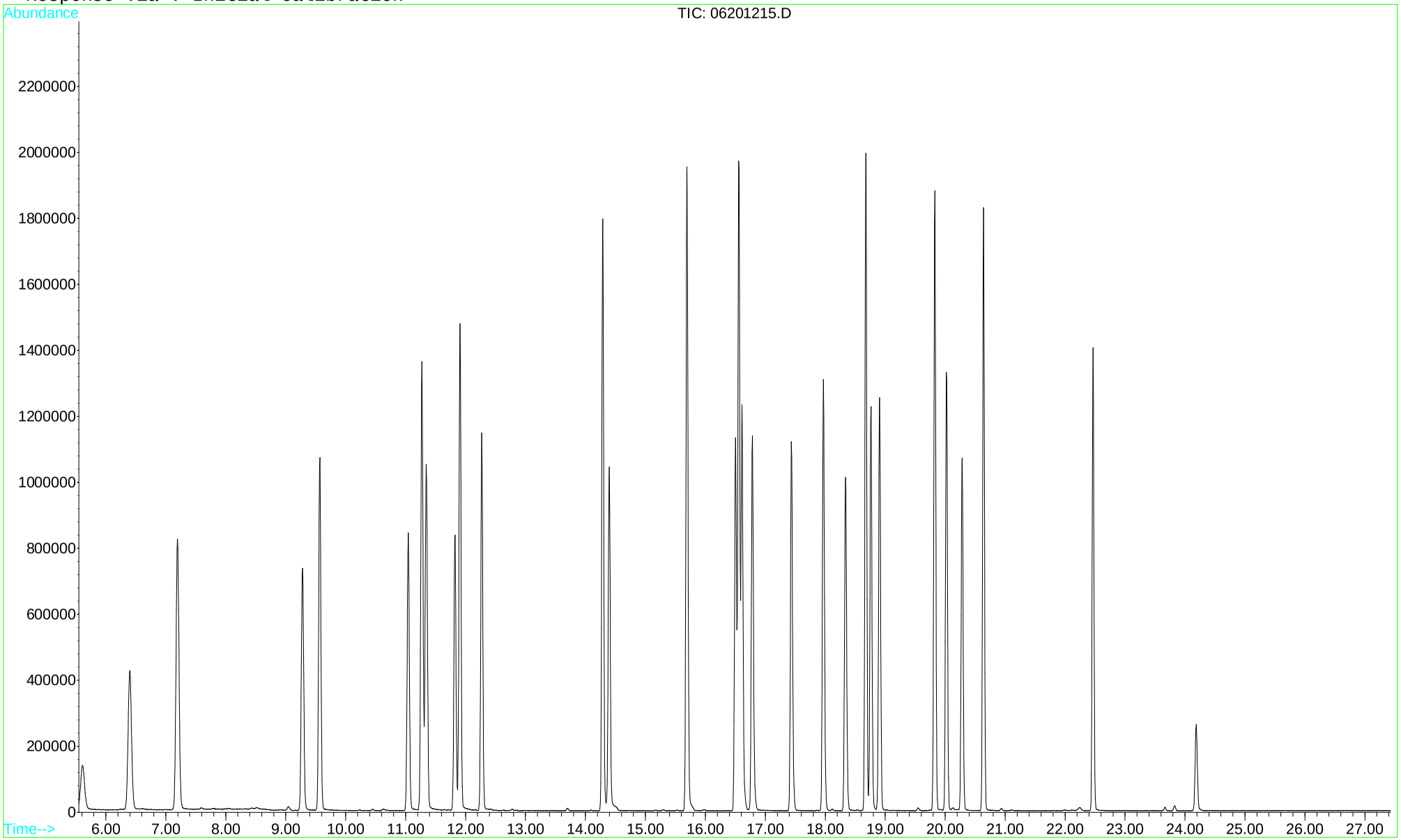
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.50	117	840869	12.50	ug/m3	-0.02
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.34	95	538619	87.28	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 97.52%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2853724	32.58	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2731006	41.55	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.27	TIC	3474329	47.11	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2710200	40.59	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	3361298	48.05	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3895563	56.10	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	19026120m	265.74	ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	4545900	63.29	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	4486833	63.89	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	4257925	72.33	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	4172317	71.67	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	3723951	82.51	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.47	TIC	2853887	95.48	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	24040813m	446.38	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	318037	59.98	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	334114	60.05	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	493240	61.91	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	109768	71.08	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	376044	63.54	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.03	134	280516	71.16	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1911719m	316.88	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\062012\06201215.D Vial: 13
Acq On : 21 Jun 2012 2:31 am Operator: RACHEL HILL
Sample : ICV VOA9 062012 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 21 9:50 2012 Quant Results File: 062012V9.RES

Method : C:\HPCHEM\1\METHODS\062012V9.M (RTE Integrator)
Title : MASS APH
Last Update : Thu Jun 21 08:39:41 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: GC-TCD 1_120613A **Run No.:** 49314

Analytical Run Date: 6/13/2012 **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 06-20-12 MSB 062012rsl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
MBLK-061312 TCD	ASTM-D2504	MBLK	R49314	6/13/2012 9:56:00 AM	Robert Lynch		
CCV-061312 TCD-A	ASTM-D2504	CCV	R49314	6/13/2012 10:12:00 AM	Robert Lynch		
LCS-061312 TCD-A	ASTM-D2504	LCS	R49314	6/13/2012 10:27:00 AM	Robert Lynch		
CRQL-061312 TCD-A	ASTM-D2504	CRQL	R49314	6/13/2012 10:42:00 AM	Robert Lynch		
1206178-001B	ASTM-D2504	SAMP	R49314	6/13/2012 10:56:00 AM	Robert Lynch		
1206178-002B	ASTM-D2504	SAMP	R49314	6/13/2012 11:13:00 AM	Robert Lynch		
1206178-003B	ASTM-D2504	SAMP	R49314	6/13/2012 11:28:00 AM	Robert Lynch		
1206178-004B	ASTM-D2504	SAMP	R49314	6/13/2012 11:43:00 AM	Robert Lynch		
1206178-005B	ASTM-D2504	SAMP	R49314	6/13/2012 11:59:00 AM	Robert Lynch		
1206178-006B	ASTM-D2504	SAMP	R49314	6/13/2012 12:13:00 PM	Robert Lynch		
1206178-007B	ASTM-D2504	SAMP	R49314	6/13/2012 12:30:00 PM	Robert Lynch		
1206178-008B	ASTM-D2504	SAMP	R49314	6/13/2012 12:45:00 PM	Robert Lynch		
1206178-009B	ASTM-D2504	SAMP	R49314	6/13/2012 1:04:00 PM	Robert Lynch		
1206178-010B	ASTM-D2504	SAMP	R49314	6/13/2012 1:19:00 PM	Robert Lynch		
1206178-010BDUP	ASTM-D2504	DUP	R49314	6/13/2012 1:36:00 PM	Robert Lynch		
CCV-061312 TCD-B	ASTM-D2504	CCV	R49314	6/13/2012 2:05:00 PM	Robert Lynch		
1206178-011B	ASTM-D2504	SAMP	R49314	6/13/2012 2:19:00 PM	Robert Lynch		
1206178-012B	ASTM-D2504	SAMP	R49314	6/13/2012 2:34:00 PM	Robert Lynch		
1206178-013B	ASTM-D2504	SAMP	R49314	6/13/2012 2:49:00 PM	Robert Lynch		
1206178-014B	ASTM-D2504	SAMP	R49314	6/13/2012 3:03:00 PM	Robert Lynch		
1206178-015B	ASTM-D2504	SAMP	R49314	6/13/2012 3:18:00 PM	Robert Lynch		
1206178-016B	ASTM-D2504	SAMP	R49314	6/13/2012 3:35:00 PM	Robert Lynch		
1206178-017B	ASTM-D2504	SAMP	R49314	6/13/2012 3:50:00 PM	Robert Lynch		
1206178-018B	ASTM-D2504	SAMP	R49314	6/13/2012 4:05:00 PM	Robert Lynch		
1206178-019B	ASTM-D2504	SAMP	R49314	6/13/2012 4:20:00 PM	Robert Lynch		
1206178-020B	ASTM-D2504	SAMP	R49314	6/13/2012 4:35:00 PM	Robert Lynch		
1206178-020BDUP	ASTM-D2504	DUP	R49314	6/13/2012 4:49:00 PM	Robert Lynch		
CCV-061312 TCD-C	ASTM-D2504	CCV	R49314	6/13/2012 5:04:00 PM	Robert Lynch		
CRQL-061312 TCD-C	ASTM-D2504	CRQL	R49314	6/13/2012 5:38:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

02-Jul-12

RunNo 49314

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
964005	MBLK-061312 TCD	ASTM-D2504	MBLK	)\061312\061312(	6/13/2012 9:56:0	1	R49314		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
964006	CCV-061312 TCD-A	ASTM-D2504	CCV	)\061312\061312(	6/13/2012 10:12:	1	R49314		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.445	2.445		2.5	0	0	0.025	0.1	0	98%	85	115	0%	
Carbon Monoxide	A	%	2.676	2.676		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	%	2.082	2.082		2	0	0	0.025	0.5	0	104%	85	115	0%	
Nitrogen	A	%	2.748	2.748		2.5	0	0	0.025	0.1	0	110%	85	115	0%	
Oxygen	A	%	2.496	2.496		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
964007	LCS-061312 TCD-A	ASTM-D2504	LCS	)\061312\061312(	6/13/2012 10:27:	1	R49314		0	964006	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.439	2.439		2.5	0	2.445	0.025	0.1	0	98%	70	130	0%	
Carbon Monoxide	A	%	2.667	2.667		2.5	0	2.676	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
964020	CCV-061312 TCD-B	ASTM-D2504	CCV	D\061312\061312	6/13/2012 2:05:0	1	R49314		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.503	2.503		2.5	0	0	0.025	0.1	0	100%	85	115	0%	
Carbon Monoxide	A	%	2.656	2.656		2.5	0	0	0.025	0.1	0	106%	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	%	2.06	2.06		2	0	0	0.025	0.5	0	103%	85	115	0%	
Nitrogen	A	%	2.626	2.626		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Oxygen	A	%	2.443	2.443		2.5	0	0	0.025	0.1	0	98%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
964021	1206178-011B (Container-01 of 01)	ASTM-D2504	SAMP	D\061312\061312	6/13/2012 2:19:0	1	R49314		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	8.072	8.072		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	%	81.513	81.513		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	7.559	7.559		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
964022	1206178-012B (Container-01 of 01)	ASTM-D2504	SAMP	D\061312\061312	6/13/2012 2:34:0	1	R49314		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	3.339	3.339		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	%	80.919	80.919		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	14.311	14.311		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
964030	1206178-020B (Container-01 of 01)	ASTM-D2504	SAMP	)\061312\061312	6/13/2012 4:35:0	1	R49314		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	%	20.022	20.022		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
964031	1206178-020BDUP	ASTM-D2504	DUP	)\061312\061312	6/13/2012 4:49:0	1	R49314		0	964030	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.266	0.266		0	0	0.261	0.025	0.1	0	0%	0	0	2%	
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	%	79.418	79.418		0	0	77.091	0.025	0.1	0	0%	0	0	3%	
Oxygen	A	%	20.151	20.151		0	0	20.022	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
964032	CCV-061312 TCD-C	ASTM-D2504	CCV	)\061312\061312	6/13/2012 5:04:0	1	R49314		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.554	2.554		2.5	0	0	0.025	0.1	0	102%	85	115	0%	
Carbon Monoxide	A	%	2.654	2.654		2.5	0	0	0.025	0.1	0	106%	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	%	2.054	2.054		2	0	0	0.025	0.5	0	103%	85	115	0%	
Nitrogen	A	%	2.772	2.772		2.5	0	0	0.025	0.1	0	111%	85	115	0%	
Oxygen	A	%	2.486	2.486		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
964033	CRQL-061312 TCD-C	ASTM-D2504	CRQL	)\061312\061312	6/13/2012 5:38:0	1	R49314		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\061312\06131202.D Vial: 1
Acq On : 13 Jun 2012 10:12 am Operator:
Sample : CCV-061312 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 : Thu Jun 07 19:03:43 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	2.496	0.2	0	-0.02
2	Nitrogen	2.500	2.748	-9.9	0	-0.01
3	Carbon Monoxide	2.500	2.676	-7.0	0	0.03
4	Methane	2.000	2.082	-4.1	0	0.00
5	Carbon dioxide	2.500	2.445	2.2	0	-0.06

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\061312\06131202.D Vial: 1
Acq On : 13 Jun 2012 10:12 am Operator:
Sample : CCV-061312 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 13 11:06 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 :

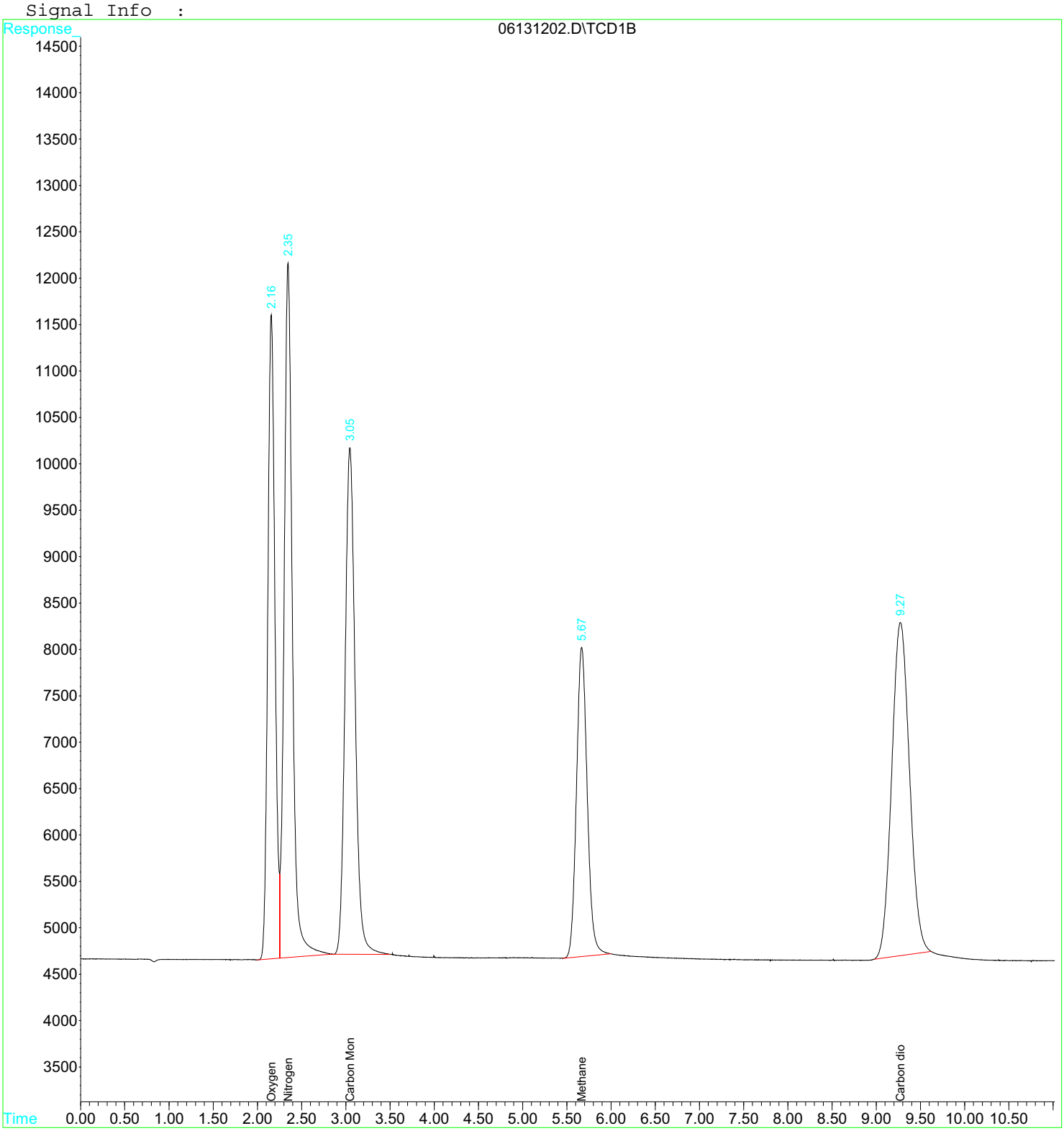
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1)	Oxygen	2.16	386735	2.496	%
2)	Nitrogen	2.35	482370	2.748	%
3)	Carbon Monoxide	3.05	431327	2.676	%
4)	Methane	5.67	281228	2.082	%
5)	Carbon dioxide	9.27	502220	2.445	%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\061312\06131202.D Vial: 1
Acq On : 13 Jun 2012 10:12 am Operator:
Sample : CCV-061312 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 13 11:06 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\061312\06131216.D Vial: 1
Acq On : 13 Jun 2012 2:05 pm Operator:
Sample : CCV-061312 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 : Thu Jun 07 19:03:43 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	2.443	2.3	0	-0.02
2	Nitrogen	2.500	2.626	-5.0	0	0.00
3	Carbon Monoxide	2.500	2.656	-6.2	0	0.04
4	Methane	2.000	2.060	-3.0	0	0.00
5	Carbon dioxide	2.500	2.503	-0.1	0	-0.04

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\061312\06131216.D Vial: 1
Acq On : 13 Jun 2012 2:05 pm Operator:
Sample : CCV-061312 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 13 13:24 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	2.16	378424	2.443	%
2)	Nitrogen	2.35	460935	2.626	%
3)	Carbon Monoxide	3.06	428123	2.656	%
4)	Methane	5.68	278221	2.060	%
5)	Carbon dioxide	9.29	513953	2.503	%

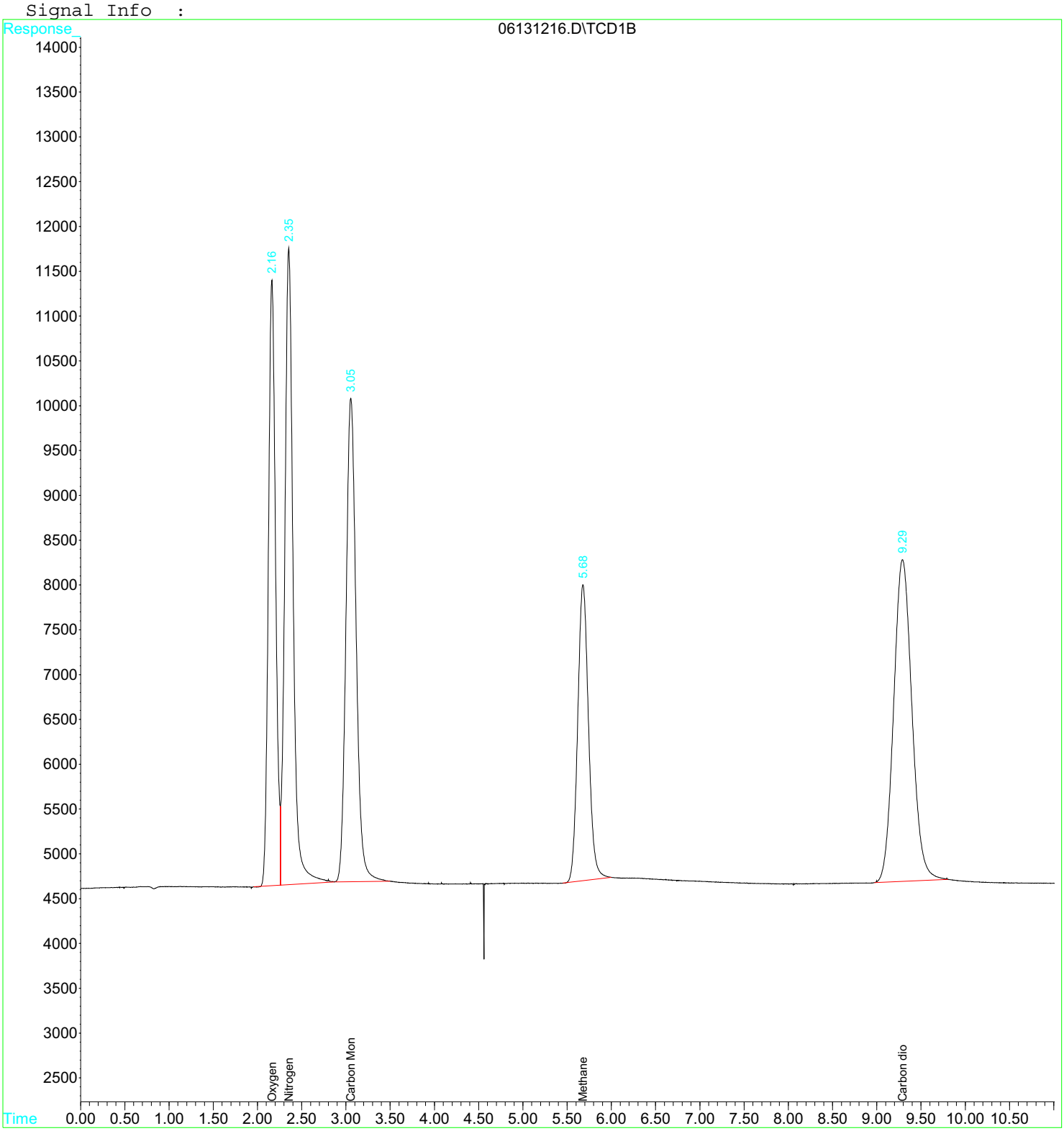
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\061312\06131216.D Vial: 1
Acq On : 13 Jun 2012 2:05 pm Operator:
Sample : CCV-061312 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 13 13:24 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\061312\06131228.D Vial: 1
Acq On : 13 Jun 2012 5:04 pm Operator:
Sample : CCV-061312 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 : Thu Jun 07 19:03:43 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	2.486	0.6	0	-0.01
2	Nitrogen	2.500	2.772	-10.9	0	0.00
3	Carbon Monoxide	2.500	2.654	-6.2	0	0.04
4	Methane	2.000	2.054	-2.7	0	0.01
5	Carbon dioxide	2.500	2.554	-2.2	0	-0.04

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\061312\06131228.D Vial: 1
Acq On : 13 Jun 2012 5:04 pm Operator:
Sample : CCV-061312 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 14 7:44 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 :

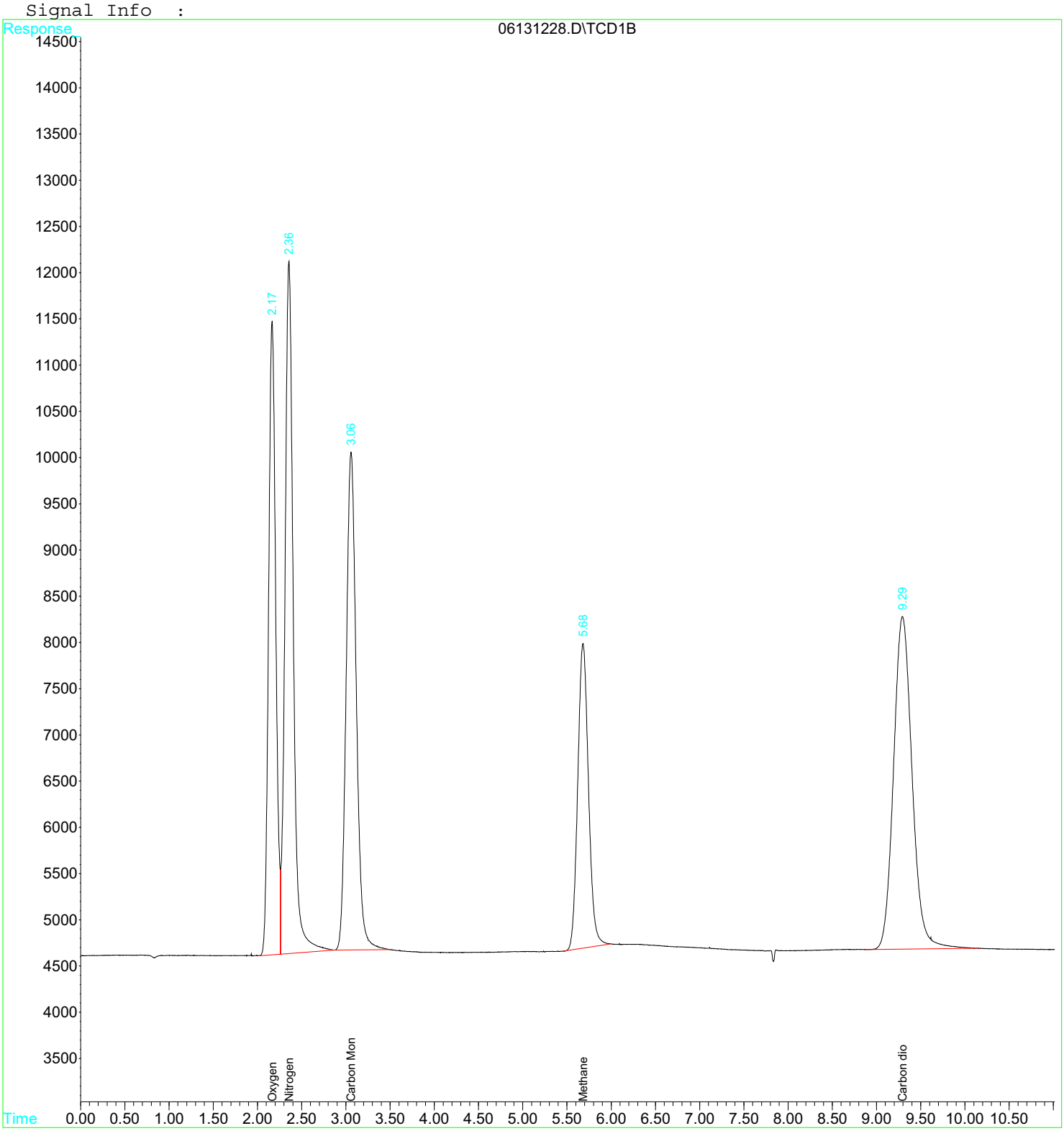
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1)	Oxygen	2.17	385062	2.486	%
2)	Nitrogen	2.36	486527	2.772	%
3)	Carbon Monoxide	3.06	427780	2.654	%
4)	Methane	5.68	277444	2.054	%
5)	Carbon dioxide	9.29	524553	2.554	%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\061312\06131228.D Vial: 1
Acq On : 13 Jun 2012 5:04 pm Operator:
Sample : CCV-061312 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 14 7:44 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 :



RTI Laboratories

Run ID: GC-TCD 1_120618A **Run No.:** 49470

Analytical Run Date: 6/18/2012 **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 06-20-12 MSB 062012rsl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
MBLK-061812 TCD	ASTM-D2504	MBLK	R49470	6/18/2012 8:38:00 AM	Robert Lynch		
CCV-061812 TCD-A	ASTM-D2504	CCV	R49470	6/18/2012 8:52:00 AM	Robert Lynch		
LCS-061812 TCD-A	ASTM-D2504	LCS	R49470	6/18/2012 9:07:00 AM	Robert Lynch		
CRQL-061812 TCD-A	ASTM-D2504	CRQL	R49470	6/18/2012 9:37:00 AM	Robert Lynch		
1206178-021B	ASTM-D2504	SAMP	R49470	6/18/2012 9:52:00 AM	Robert Lynch		
1206178-022B	ASTM-D2504	SAMP	R49470	6/18/2012 10:07:00 AM	Robert Lynch		
1206178-023B	ASTM-D2504	SAMP	R49470	6/18/2012 10:21:00 AM	Robert Lynch		
1206178-024B	ASTM-D2504	SAMP	R49470	6/18/2012 10:36:00 AM	Robert Lynch		
1206178-025B	ASTM-D2504	SAMP	R49470	6/18/2012 10:51:00 AM	Robert Lynch		
1206178-026B	ASTM-D2504	SAMP	R49470	6/18/2012 11:13:00 AM	Robert Lynch		
1206178-027B	ASTM-D2504	SAMP	R49470	6/18/2012 11:27:00 AM	Robert Lynch		
1206178-028B	ASTM-D2504	SAMP	R49470	6/18/2012 11:44:00 AM	Robert Lynch		
1206178-029B	ASTM-D2504	SAMP	R49470	6/18/2012 11:59:00 AM	Robert Lynch		
1206178-030B	ASTM-D2504	SAMP	R49470	6/18/2012 12:18:00 PM	Robert Lynch		
1206178-030BDUP	ASTM-D2504	DUP	R49470	6/18/2012 12:34:00 PM	Robert Lynch		
CCV-061812 TCD-B	ASTM-D2504	CCV	R49470	6/18/2012 12:48:00 PM	Robert Lynch		
1206178-031B	ASTM-D2504	SAMP	R49470	6/18/2012 1:05:00 PM	Robert Lynch		
1206178-032B	ASTM-D2504	SAMP	R49470	6/18/2012 1:20:00 PM	Robert Lynch		
1206178-033B	ASTM-D2504	SAMP	R49470	6/18/2012 1:47:00 PM	Robert Lynch		
1206178-034B	ASTM-D2504	SAMP	R49470	6/18/2012 2:02:00 PM	Robert Lynch		
1206178-035B	ASTM-D2504	SAMP	R49470	6/18/2012 2:17:00 PM	Robert Lynch		
1206178-036B	ASTM-D2504	SAMP	R49470	6/18/2012 2:31:00 PM	Robert Lynch		
1206178-037B	ASTM-D2504	SAMP	R49470	6/18/2012 2:50:00 PM	Robert Lynch		
1206178-038B	ASTM-D2504	SAMP	R49470	6/18/2012 3:04:00 PM	Robert Lynch		
1206178-039B	ASTM-D2504	SAMP	R49470	6/18/2012 3:21:00 PM	Robert Lynch		
1206178-040B	ASTM-D2504	SAMP	R49470	6/18/2012 3:37:00 PM	Robert Lynch		
1206178-040BDUP	ASTM-D2504	DUP	R49470	6/18/2012 3:53:00 PM	Robert Lynch		
CCV-061812 TCD-C	ASTM-D2504	CCV	R49470	6/18/2012 4:08:00 PM	Robert Lynch		
CRQL-061812 TCD-C	ASTM-D2504	CRQL	R49470	6/18/2012 4:23:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

02-Jul-12

RunNo 49470

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
966801	MBLK-061812 TCD	ASTM-D2504	MBLK	)\061812\061812(	6/18/2012 8:38:0	1	R49470		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
966802	CCV-061812 TCD-A	ASTM-D2504	CCV	)\061812\061812(	6/18/2012 8:52:0	1	R49470		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.555	2.555		2.5	0	0	0.025	0.1	0	102%	85	115	0%	
Carbon Monoxide	A	%	2.646	2.646		2.5	0	0	0.025	0.1	0	106%	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	%	2.055	2.055		2	0	0	0.025	0.5	0	103%	85	115	0%	
Nitrogen	A	%	2.673	2.673		2.5	0	0	0.025	0.1	0	107%	85	115	0%	
Oxygen	A	%	2.454	2.454		2.5	0	0	0.025	0.1	0	98%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
966803	LCS-061812 TCD-A	ASTM-D2504	LCS	)\061812\061812(	6/18/2012 9:07:0	1	R49470		0	966802	

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	2.555	0.025	0.1	0	101%	70	130	1%	
Carbon Monoxide	A	%	2.645	2.645		2.5	0	2.646	0.025	0.1	0	106%	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
966816	CCV-061812 TCD-B	ASTM-D2504	CCV	D\061812\061812	6/18/2012 12:48:	1	R49470		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.428	2.428		2.5	0	0	0.025	0.1	0	97%	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	%	2.049	2.049		2	0	0	0.025	0.5	0	102%	85	115	0%	
Nitrogen	A	%	2.658	2.658		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Oxygen	A	%	2.446	2.446		2.5	0	0	0.025	0.1	0	98%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
966817	1206178-031B (Container-01 of 01)	ASTM-D2504	SAMP	D\061812\061812	6/18/2012 1:05:0	1	R49470		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	1.211	1.211		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	%	80.073	80.073		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	17.588	17.588		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
966818	1206178-032B (Container-01 of 01)	ASTM-D2504	SAMP	D\061812\061812	6/18/2012 1:20:0	1	R49470		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	1.005	1.005		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	%	79.168	79.168		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	18.15	18.15		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
966826	1206178-040B (Container-01 of 01)	ASTM-D2504	SAMP	)\061812\061812	6/18/2012 3:37:0	1	R49470		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	%	19.486	19.486		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
966827	1206178-040BDUP	ASTM-D2504	DUP	)\061812\061812	6/18/2012 3:53:0	1	R49470		0	966826	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.185	0.185		0	0	0.185	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	%	79.192	79.192		0	0	79.072	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	19.518	19.518		0	0	19.486	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
966828	CCV-061812 TCD-C	ASTM-D2504	CCV	)\061812\061812	6/18/2012 4:08:0	1	R49470		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.422	2.422		2.5	0	0	0.025	0.1	0	97%	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	%	2.045	2.045		2	0	0	0.025	0.5	0	102%	85	115	0%	
Nitrogen	A	%	2.728	2.728		2.5	0	0	0.025	0.1	0	109%	85	115	0%	
Oxygen	A	%	2.461	2.461		2.5	0	0	0.025	0.1	0	98%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
966829	CRQL-061812 TCD-C	ASTM-D2504	CRQL	)\061812\061812	6/18/2012 4:23:0	1	R49470		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\061812\06181202.D Vial: 1
Acq On : 18 Jun 2012 8:52 am Operator:
Sample : CCV-061812 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 : Thu Jun 07 19:03:43 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	2.454	1.8	0	-0.02
2	Nitrogen	2.500	2.673	-6.9	0	0.00
3	Carbon Monoxide	2.500	2.646	-5.8	0	0.04
4	Methane	2.000	2.055	-2.8	0	0.01
5	Carbon dioxide	2.500	2.555	-2.2	0	-0.03

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\061812\06181202.D Vial: 1
Acq On : 18 Jun 2012 8:52 am Operator:
Sample : CCV-061812 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 18 8:04 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	2.16	380140	2.454	%
2)	Nitrogen	2.35	469068	2.673	%
3)	Carbon Monoxide	3.06	426518	2.646	%
4)	Methane	5.68	277591	2.055	%
5)	Carbon dioxide	9.30	524644	2.555	%

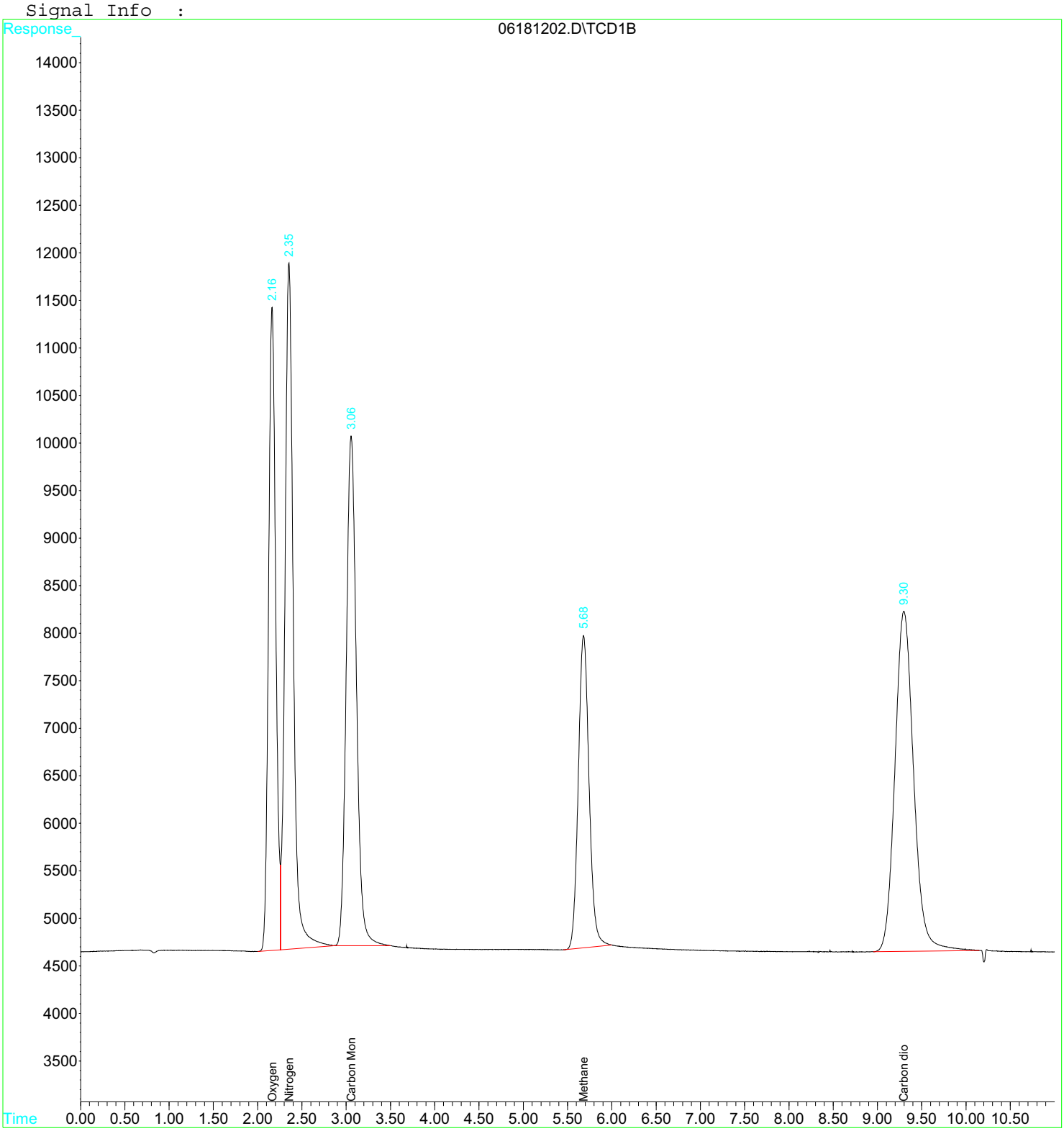
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\061812\06181202.D Vial: 1
Acq On : 18 Jun 2012 8:52 am Operator:
Sample : CCV-061812 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 18 8:04 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\061812\06181216.D Vial: 1
Acq On : 18 Jun 2012 12:48 pm Operator:
Sample : CCV-061812 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 : Thu Jun 07 19:03:43 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	2.446	2.2	0	-0.01
2	Nitrogen	2.500	2.658	-6.3	0	0.00
3	Carbon Monoxide	2.500	2.671	-6.8	0	0.04
4	Methane	2.000	2.049	-2.4	0	0.01
5	Carbon dioxide	2.500	2.428	2.9	0	-0.03

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\061812\06181216.D Vial: 1
Acq On : 18 Jun 2012 12:48 pm Operator:
Sample : CCV-061812 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 20 7:50 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	378872	2.446	%
2)	Nitrogen	2.36	466594	2.658	%
3)	Carbon Monoxide	3.06	430559	2.671	%
4)	Methane	5.68	276673	2.049	%
5)	Carbon dioxide	9.30	498592	2.428	%

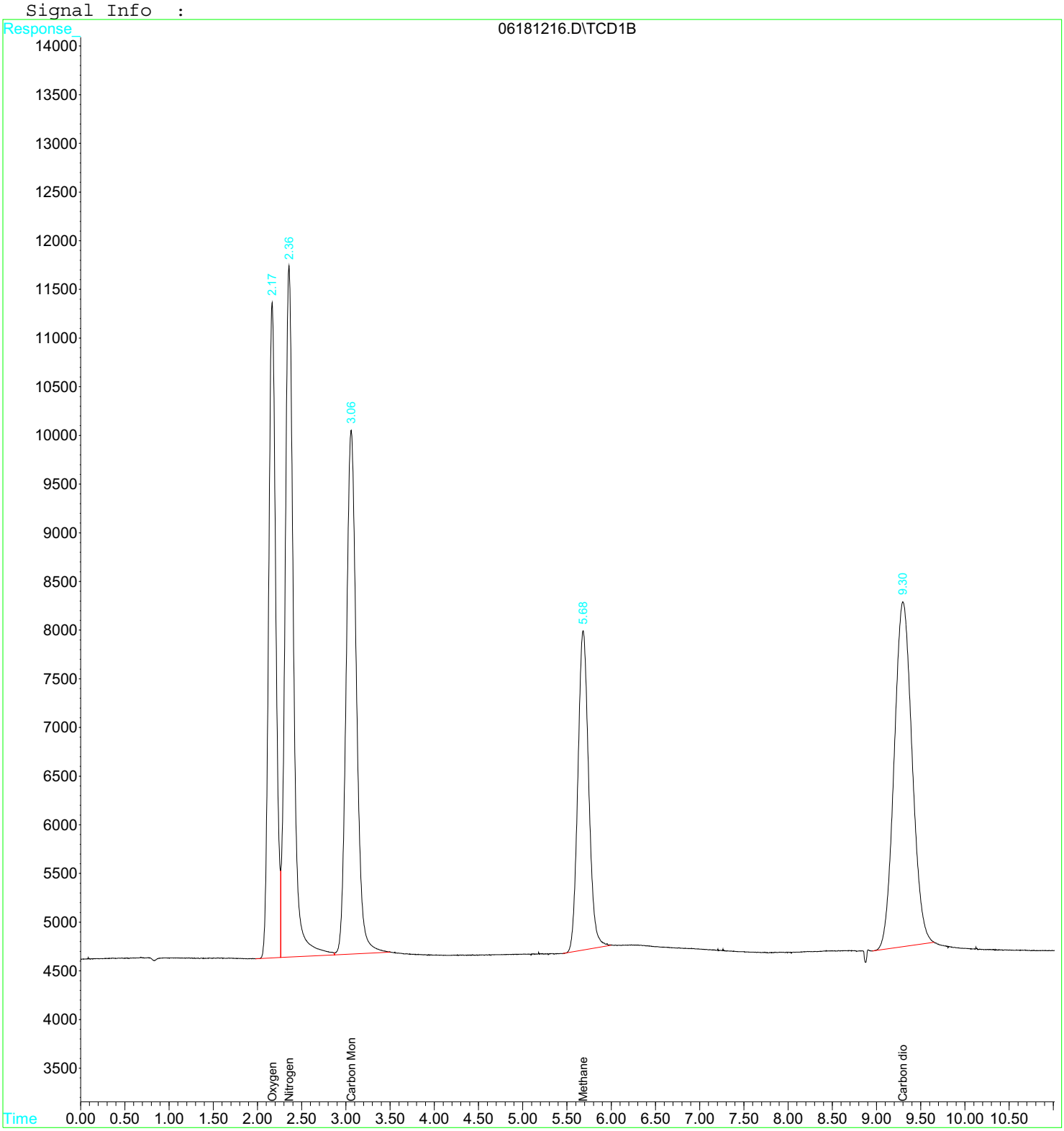
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\061812\06181216.D Vial: 1
Acq On : 18 Jun 2012 12:48 pm Operator:
Sample : CCV-061812 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 20 7:50 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\061812\06181228.D Vial: 1
Acq On : 18 Jun 2012 4:08 pm Operator:
Sample : CCV-061812 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 : Thu Jun 07 19:03:43 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	2.461	1.6	0	-0.01
2	Nitrogen	2.500	2.728	-9.1	0	0.00
3	Carbon Monoxide	2.500	2.671	-6.8	0	0.04
4	Methane	2.000	2.045	-2.2	0	0.01
5	Carbon dioxide	2.500	2.422	3.1	0	-0.03

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\061812\06181228.D Vial: 1
Acq On : 18 Jun 2012 4:08 pm Operator:
Sample : CCV-061812 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 20 7:54 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 :

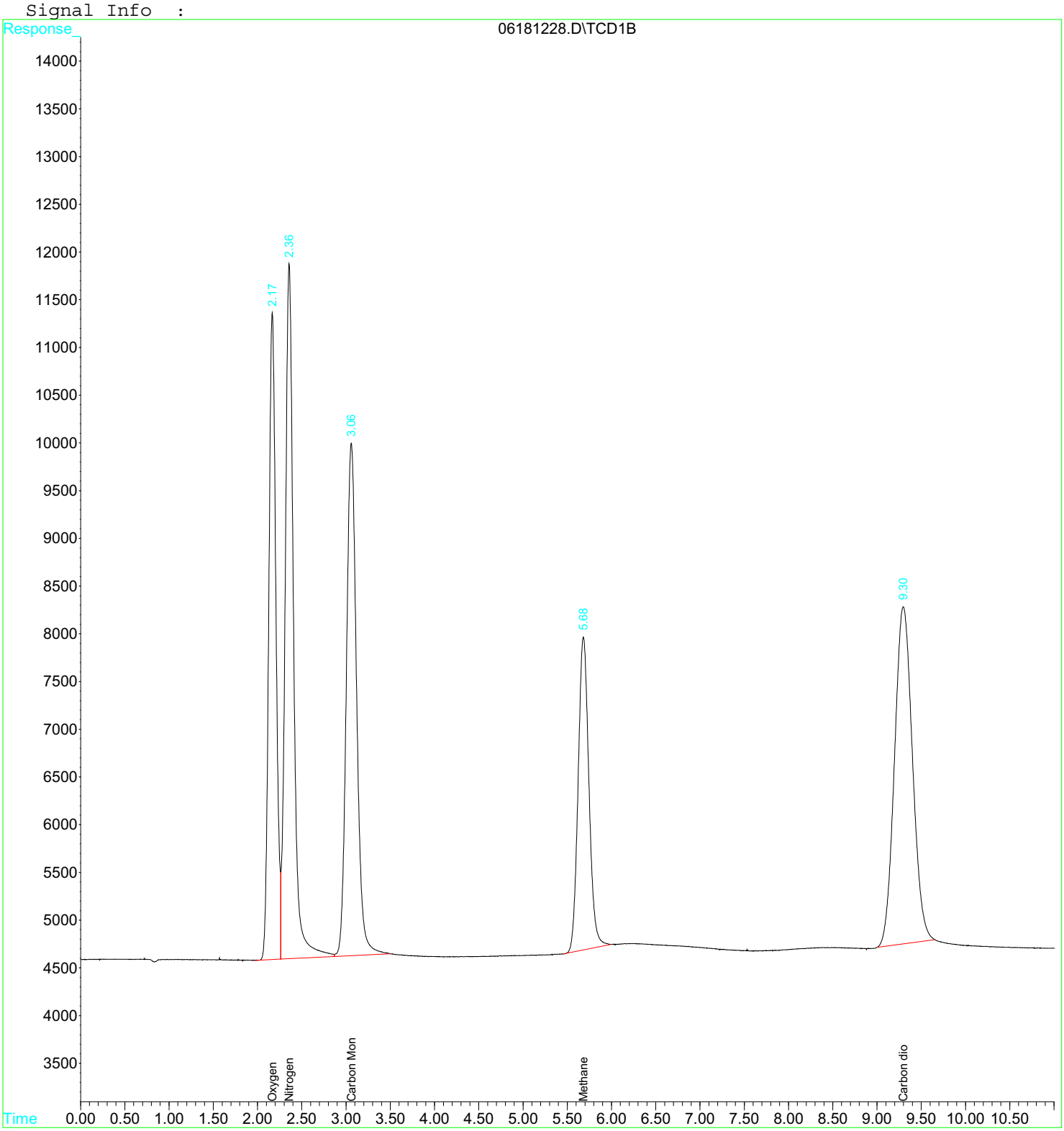
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1)	Oxygen	2.17	381287	2.461	%
2)	Nitrogen	2.36	478757	2.728	%
3)	Carbon Monoxide	3.06	430551	2.671	%
4)	Methane	5.68	276159	2.045	%
5)	Carbon dioxide	9.30	497342	2.422	%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\061812\06181228.D Vial: 1
Acq On : 18 Jun 2012 4:08 pm Operator:
Sample : CCV-061812 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 20 7:54 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 :



RTI Laboratories

Run ID: GC-TCD 1_120619A **Run No.:** 49471

Analytical Run Date: 6/19/2012 **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 06-20-12 MSB 062012rsl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
MBLK-061912 TCD	ASTM-D2504	MBLK	R49471	6/19/2012 9:25:00 AM	Robert Lynch		
CCV-061912 TCD-A	ASTM-D2504	CCV	R49471	6/19/2012 9:45:00 AM	Robert Lynch		
LCS-061912 TCD-A	ASTM-D2504	LCS	R49471	6/19/2012 10:01:00 AM	Robert Lynch		
CRQL-061912 TCD-A	ASTM-D2504	CRQL	R49471	6/19/2012 10:31:00 AM	Robert Lynch		
1206178-041B	ASTM-D2504	SAMP	R49471	6/19/2012 10:46:00 AM	Robert Lynch		
1206178-042B	ASTM-D2504	SAMP	R49471	6/19/2012 11:09:00 AM	Robert Lynch		
1206178-043B	ASTM-D2504	SAMP	R49471	6/19/2012 11:23:00 AM	Robert Lynch		
1206178-044B	ASTM-D2504	SAMP	R49471	6/19/2012 11:38:00 AM	Robert Lynch		
1206178-045B	ASTM-D2504	SAMP	R49471	6/19/2012 11:55:00 AM	Robert Lynch		
1206178-046B	ASTM-D2504	SAMP	R49471	6/19/2012 12:10:00 PM	Robert Lynch		
1206178-047B	ASTM-D2504	SAMP	R49471	6/19/2012 12:24:00 PM	Robert Lynch		
1206178-048B	ASTM-D2504	SAMP	R49471	6/19/2012 12:47:00 PM	Robert Lynch		
1206178-049B	ASTM-D2504	SAMP	R49471	6/19/2012 1:05:00 PM	Robert Lynch		
1206178-050B	ASTM-D2504	SAMP	R49471	6/19/2012 1:29:00 PM	Robert Lynch		
1206178-050BDUP	ASTM-D2504	DUP	R49471	6/19/2012 1:46:00 PM	Robert Lynch		
CCV-061912 TCD-B	ASTM-D2504	CCV	R49471	6/19/2012 2:01:00 PM	Robert Lynch		
1206178-051B	ASTM-D2504	SAMP	R49471	6/19/2012 2:35:00 PM	Robert Lynch		
1206178-052B	ASTM-D2504	SAMP	R49471	6/19/2012 2:50:00 PM	Robert Lynch		
1206178-053B	ASTM-D2504	SAMP	R49471	6/19/2012 3:06:00 PM	Robert Lynch		
1206178-054B	ASTM-D2504	SAMP	R49471	6/19/2012 3:26:00 PM	Robert Lynch		
1206178-054BDUP	ASTM-D2504	DUP	R49471	6/19/2012 3:41:00 PM	Robert Lynch		
CCV-061912 TCD-C	ASTM-D2504	CCV	R49471	6/19/2012 3:57:00 PM	Robert Lynch		
CRQL-061912 TCD-B	ASTM-D2504	CRQL	R49471	6/19/2012 4:57:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

02-Jul-12

RunNo 49471

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
966830	MBLK-061912 TCD	ASTM-D2504	MBLK	)\061912\061912(	6/19/2012 9:25:0	1	R49471		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
966831	CCV-061912 TCD-A	ASTM-D2504	CCV	)\061912\061912(	6/19/2012 9:45:0	1	R49471		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.578	2.578		2.5	0	0	0.025	0.1	0	103%	85	115	0%	
Carbon Monoxide	A	%	2.675	2.675		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	%	2.08	2.08		2	0	0	0.025	0.5	0	104%	85	115	0%	
Nitrogen	A	%	2.748	2.748		2.5	0	0	0.025	0.1	0	110%	85	115	0%	
Oxygen	A	%	2.491	2.491		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
966832	LCS-061912 TCD-A	ASTM-D2504	LCS	)\061912\061912(	6/19/2012 10:01:	1	R49471		0	966831	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.441	2.441		2.5	0	2.578	0.025	0.1	0	98%	70	130	5%	
Carbon Monoxide	A	%	2.692	2.692		2.5	0	2.675	0.025	0.1	0	108%	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
966845	CCV-061912 TCD-B	ASTM-D2504	CCV	D\061912\061912	6/19/2012 2:01:0	1	R49471		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.451	2.451		2.5	0	0	0.025	0.1	0	98%	85	115	0%	
Carbon Monoxide	A	%	2.697	2.697		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	%	2.063	2.063		2	0	0	0.025	0.5	0	103%	85	115	0%	
Nitrogen	A	%	2.771	2.771		2.5	0	0	0.025	0.1	0	111%	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
966846	1206178-051B (Container-01 of 01)	ASTM-D2504	SAMP	D\061912\061912	6/19/2012 2:35:0	1	R49471		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.084	0.084		0	0	0	0.025	0.1	0	0%	0	0	0%	J
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	%	78.667	78.667		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	20.463	20.463		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
966847	1206178-052B (Container-01 of 01)	ASTM-D2504	SAMP	D\061912\061912	6/19/2012 2:50:0	1	R49471		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.071	0.071		0	0	0	0.025	0.1	0	0%	0	0	0%	J
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	%	78.39	78.39		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	20.514	20.514		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
966851	CCV-061912 TCD-C	ASTM-D2504	CCV	)\061912\061912	6/19/2012 3:57:0	1	R49471		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.428	2.428		2.5	0	0	0.025	0.1	0	97%	85	115	0%	
Carbon Monoxide	A	%	2.7	2.7		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	%	2.053	2.053		2	0	0	0.025	0.5	0	103%	85	115	0%	
Nitrogen	A	%	2.712	2.712		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Oxygen	A	%	2.49	2.49		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
966852	CRQL-061912 TCD-B	ASTM-D2504	CRQL	)\061912\061912	6/19/2012 4:57:0	1	R49471		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.288	0.288		0.3	0	0	0.025	0.1	0	96%	80	120	0%	
Carbon Monoxide	A	%	0.146	0.146		0.14	0	0	0.025	0.1	0	104%	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	%	0.079	0.079		0.09	0	0	0.025	0.5	0	88%	80	120	0%	
Nitrogen	A	%	1.392	1.392		1.39	0	0	0.025	0.1	0	100%	80	120	0%	
Oxygen	A	%	0.081	0.081		0.08	0	0	0.025	0.1	0	101%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\061912\06191202.D Vial: 1
Acq On : 19 Jun 2012 9:45 am Operator:
Sample : CCV-061912 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 : Thu Jun 07 19:03:43 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	2.491	0.4	0	-0.01
2	Nitrogen	2.500	2.748	-9.9	0	0.00
3	Carbon Monoxide	2.500	2.675	-7.0	0	0.04
4	Methane	2.000	2.080	-4.0	0	0.01
5	Carbon dioxide	2.500	2.578	-3.1	0	-0.04

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\061912\06191202.D Vial: 1
Acq On : 19 Jun 2012 9:45 am Operator:
Sample : CCV-061912 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 19 9:14 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 :

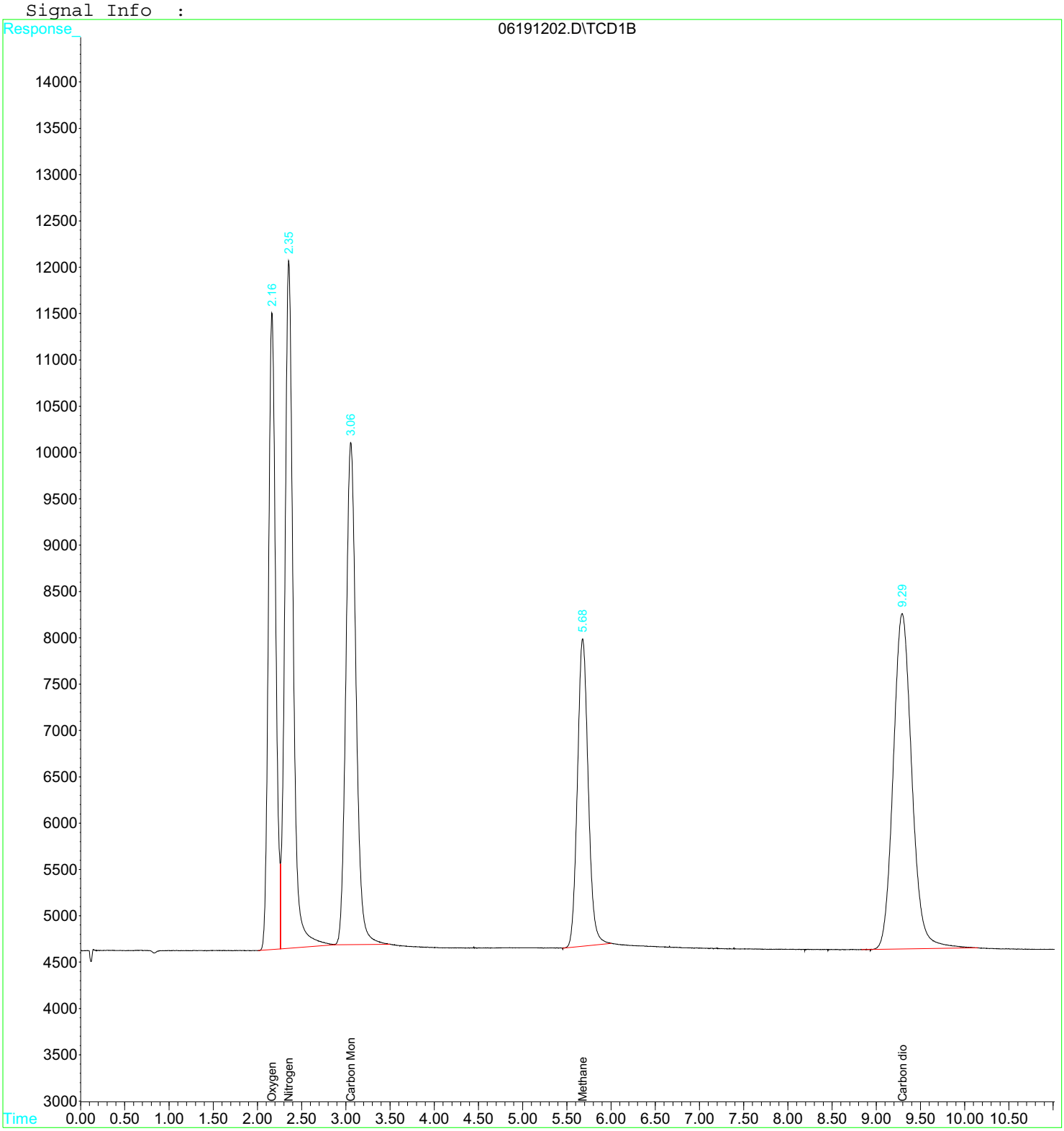
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1)	Oxygen	2.17	385826	2.491	%
2)	Nitrogen	2.36	482341	2.748	%
3)	Carbon Monoxide	3.06	431145	2.675	%
4)	Methane	5.68	280906	2.080	%
5)	Carbon dioxide	9.29	529358	2.578	%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\061912\06191202.D Vial: 1
Acq On : 19 Jun 2012 9:45 am Operator:
Sample : CCV-061912 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 19 9:14 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\061912\06191216.D Vial: 1
Acq On : 19 Jun 2012 2:01 pm Operator:
Sample : CCV-061912 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 : Thu Jun 07 19:03:43 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	-0.02
2	Nitrogen	2.500	2.771	-10.8	0	-0.01
3	Carbon Monoxide	2.500	2.697	-7.9	0	0.03
4	Methane	2.000	2.063	-3.2	0	0.00
5	Carbon dioxide	2.500	2.451	2.0	0	-0.04

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\061912\06191216.D Vial: 1
Acq On : 19 Jun 2012 2:01 pm Operator:
Sample : CCV-061912 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 20 7:58 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 :

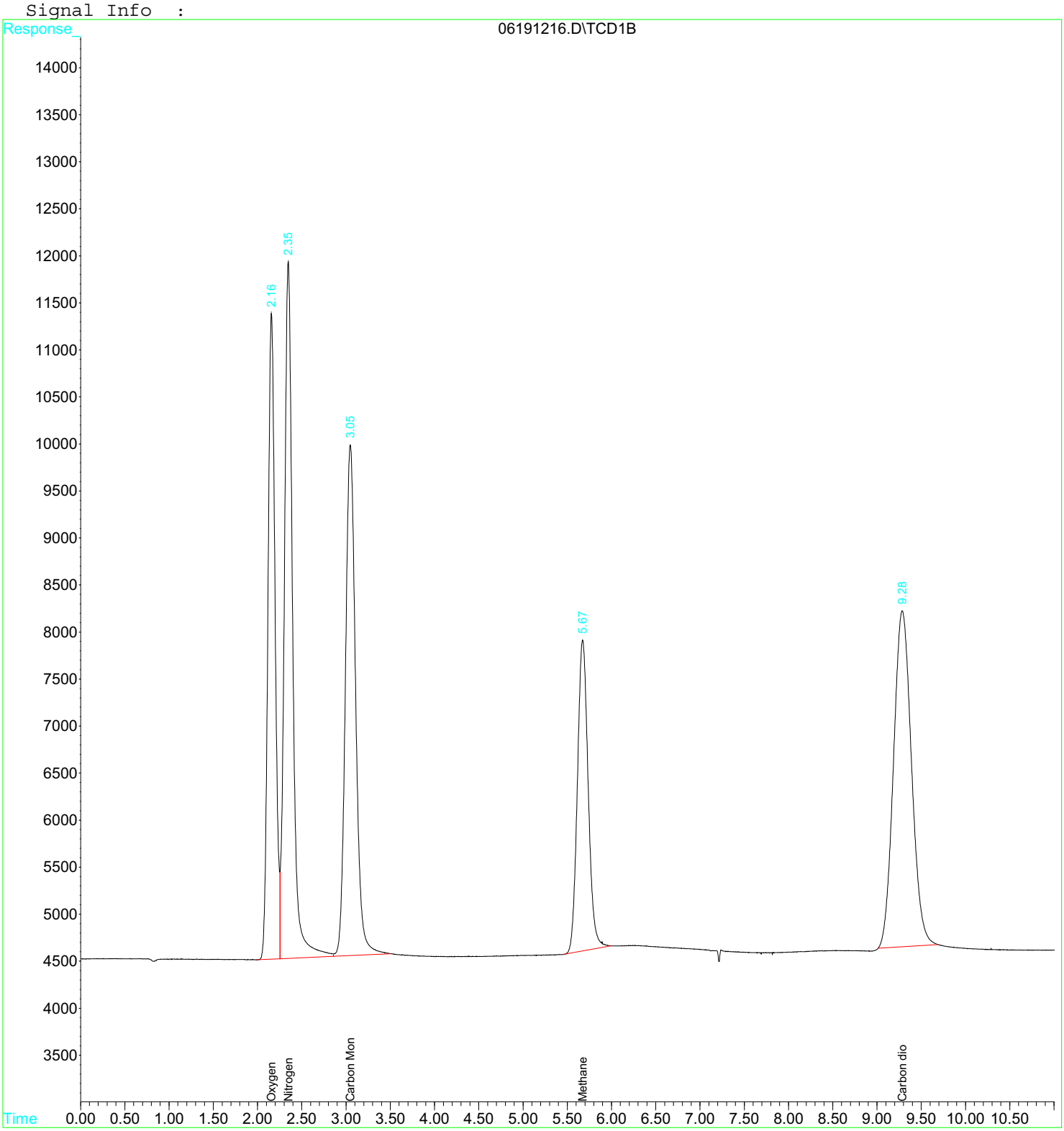
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1)	Oxygen	2.16	385267	2.487	%
2)	Nitrogen	2.35	486343	2.771	%
3)	Carbon Monoxide	3.05	434807	2.697	%
4)	Methane	5.67	278641	2.063	%
5)	Carbon dioxide	9.29	503269	2.451	%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\061912\06191216.D Vial: 1
Acq On : 19 Jun 2012 2:01 pm Operator:
Sample : CCV-061912 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 20 7:58 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\061912\06191222.D Vial: 1
Acq On : 19 Jun 2012 3:57 pm Operator:
Sample : CCV-061912 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 : Thu Jun 07 19:03:43 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	-0.02
2	Nitrogen	2.500	2.712	-8.5	0	-0.01
3	Carbon Monoxide	2.500	2.700	-8.0	0	0.03
4	Methane	2.000	2.053	-2.6	0	0.00
5	Carbon dioxide	2.500	2.428	2.9	0	-0.05

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\061912\06191222.D Vial: 1
Acq On : 19 Jun 2012 3:57 pm Operator:
Sample : CCV-061912 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 20 7:59 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 :

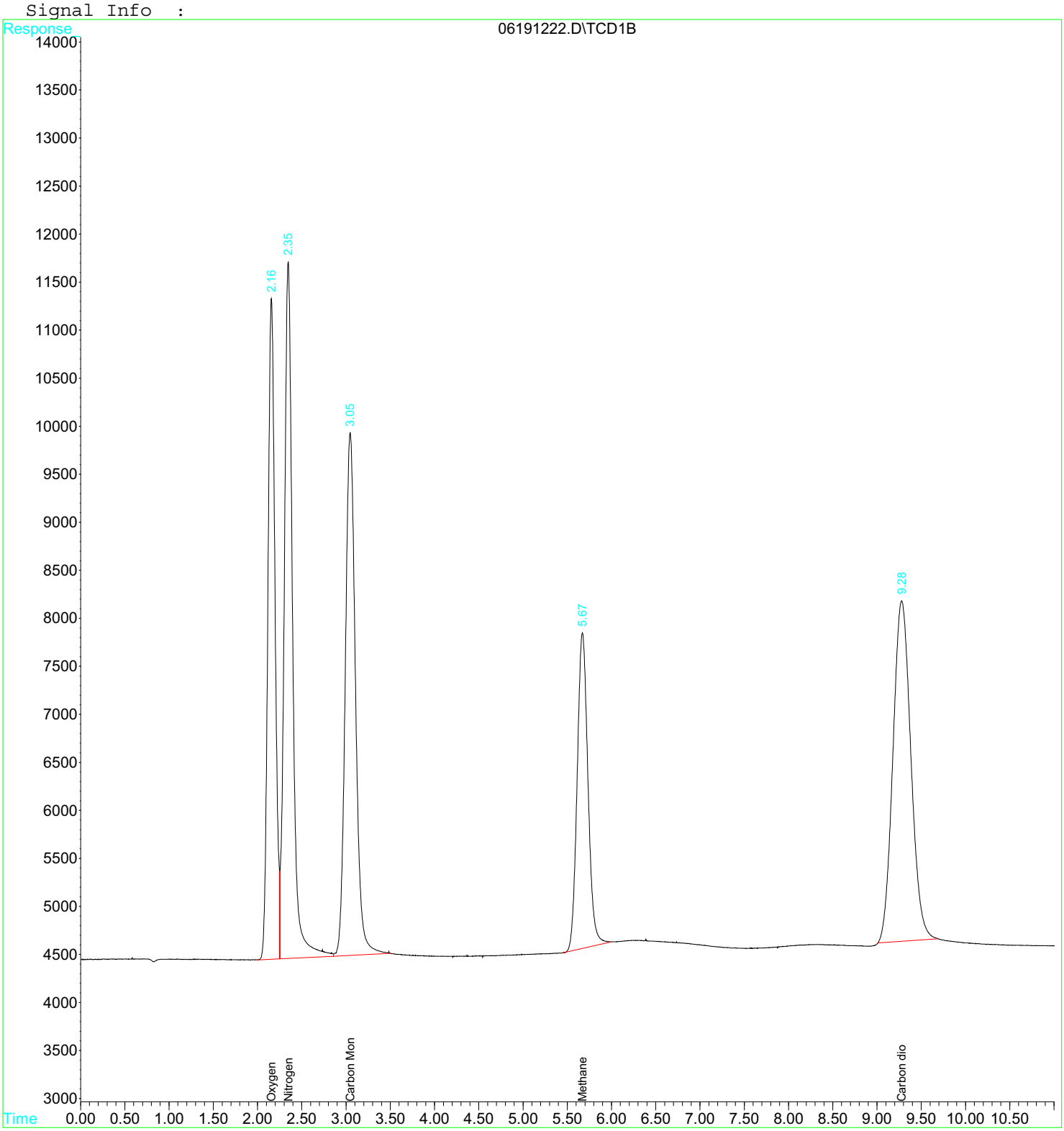
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1)	Oxygen	2.16	385799	2.490	%
2)	Nitrogen	2.35	476012	2.712	%
3)	Carbon Monoxide	3.05	435230	2.700	%
4)	Methane	5.67	277215	2.053	%
5)	Carbon dioxide	9.28	498675	2.428	%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\061912\06191222.D Vial: 1
Acq On : 19 Jun 2012 3:57 pm Operator:
Sample : CCV-061912 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 20 7:59 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

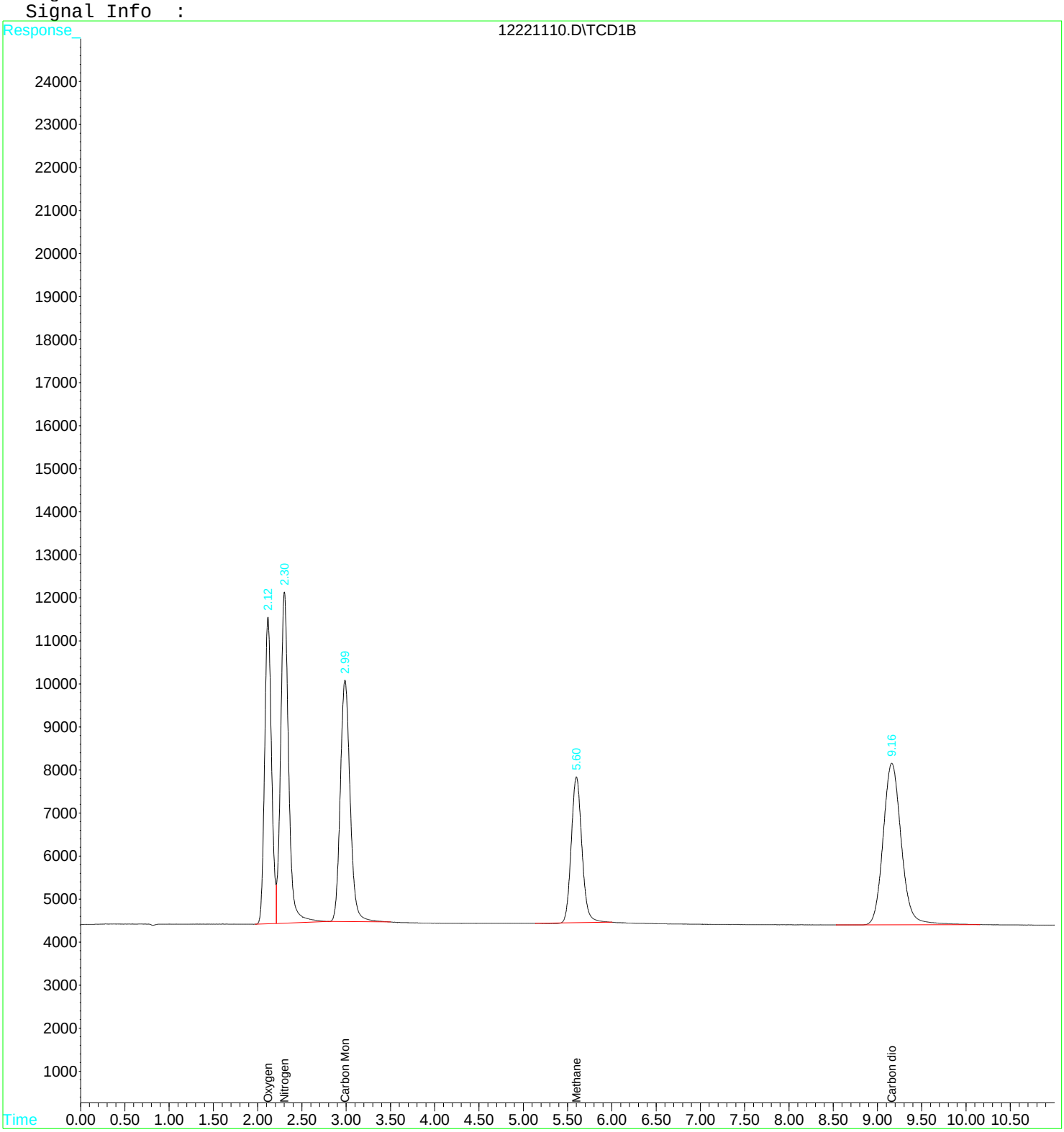
Volume Inj. :
Signal Phase :
Signal Info :

	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	%

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

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 :