RTI Laboratories, Inc.

Date: *29-Feb.-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: 1201804

CASE NARRATIVE

SAMPLE RECEIPT:
Samples were received at the RTI Laboratory, Livonia, MI via commercial delivery on 1/26/2012. Samples were received in good condition, for a total sample set of 49 air samples, with the following exceptions:

- Shaw sample ID VA1195 (RTI sample ID 1201804-027A)
- Shaw sample ID VA8073-TB (RTI sample ID 1201804-049A).

Containers for both samples were received with the tip of bottle vac unscrewed slightly. Both bottles were at ambient pressure. TO15 and MA_APH analyses were voided for 1201804-027A. TO15 analysis for sample 1201804-019A (trip blank) was reported.

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

Analytical Comments for METHOD EPA_TO15, SAMPLE 1201804-040A, Batch ID R46147: Elevated concentrations of non-target analytes. Unable to analyze at lower dilution due to high probability of instrument contamination. Reporting limits elevated.

Analytical Comments for METHOD EPA_TO15, SAMPLE 1201804-042A, Batch ID R46147: Elevated concentrations of non-target analytes. Unable to analyze at lower dilution due to high probability of instrument contamination. Reporting limits elevated.

Analytical Comments for METHOD EPA_TO15, SAMPLE 1201804-048A, Batch ID R46150: Elevated concentrations of non-target analytes. Unable to analyze at lower dilution due to high probability of instrument contamination. Reporting limits elevated.

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.

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Surrogate recoveries were within established control limits.

Analytical Sequence ID 46018:

- Sample ID 1201804-033Adup exhibited elevated RPD results for Cyclohexane (200%) and n-Hexane (200%) due to low sample concentrations in the dilution analyzed.

Air-Phase Petroleum Hydrocarbons Analyses:

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

Surrogate recoveries were within established control limits.

Analytical Sequence ID 46104:

- Sample ID 1201804-038Adup exhibited elevated RPD results for C9-C12 Aliphatic Hydrocarbons (200%) due to low sample concentrations.

Analytical Sequence ID 46108:

- Sample ID 1201804-045Adup exhibited slightly elevated RPD results for C9-C12 Aliphatic Hydrocarbons (32.5%).

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

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CASE NARRATIVE

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: Charles O'Bryan
Charles O'Bryan, Director, Quality Management

Date: 2/29/2012

RTI Laboratories - Definitions and Acronyms

WO#: 1201804

Date Reported: 2/24/2012
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
RL	Reporting Limit
S	Spike Recovery outside accepted recovery limits

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

1201804

Reference Document No: 140705-SV073

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

Samples Shipment Date: 20 JAN 2012
Lab Destination: RTI Laboratories
Lab Contact: Mike Truchan
Project Contact: Pamela Moss
Carrier/Waybill No.: UPS/2323121290

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

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

Special Instructions:

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

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

1. Relinquished By (Signature/Affiliation): TC Nogen — Date: 1/20/12 Time: 1400
1. Received By (Signature/Affiliation): Andy Flores / RTI C465 — Date: 1-26-12 Time: 09:15
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
VA1005R	SVMW-01-250-GS-VA1005R-REG	20 JAN 2012	9:18	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0598
VA1026R	SVMW-06-302-GS-VA1026R-REG	20 JAN 2012	8:34	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0705
VA1117	KAFB-106113-020-GS-VA1117-REG	19 JAN 2012	9:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		541
VA1117	KAFB-106113-020-GS-VA1117-REG	19 JAN 2012	9:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1118	KAFB-106113-050-GS-VA1118-REG	19 JAN 2012	09:55	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0740
VA1118	KAFB-106113-050-GS-VA1118-REG	19 JAN 2012	09:55	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		

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Reference Document No: 140705-SV073

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1119	KAFB-106113-050-GS-VA1119-FD	19 JAN 2012	09:55	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0788
VA1119	KAFB-106113-050-GS-VA1119-FD	19 JAN 2012	09:55	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1120	KAFB-106113-150-GS-VA1120-REG	19 JAN 2012	10:52	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0796
VA1120	KAFB-106113-150-GS-VA1120-REG	19 JAN 2012	10:52	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1121	KAFB-106113-250-GS-VA1121-REG	19 JAN 2012	11:27	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0753
VA1121	KAFB-106113-250-GS-VA1121-REG	19 JAN 2012	11:27	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1122	KAFB-106113-350-GS-VA1122-REG	19 JAN 2012	12:14	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0735
VA1122	KAFB-106113-350-GS-VA1122-REG	19 JAN 2012	12:14	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1123	KAFB-106113-450-GS-VA1123-REG	19 JAN 2012	13:00	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0680
VA1123	KAFB-106113-450-GS-VA1123-REG	19 JAN 2012	13:00	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1131	KAFB-106115-025-GS-VA1131-REG	19 JAN 2012	13:59	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0663
VA1131	KAFB-106115-025-GS-VA1131-REG	19 JAN 2012	13:59	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1132	KAFB-106115-050-GS-VA1132-REG	19 JAN 2012	14:27	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0757
VA1132	KAFB-106115-050-GS-VA1132-REG	19 JAN 2012	14:27	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1133	KAFB-106115-150-GS-VA1133-REG	19 JAN 2012	15:00	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0726
VA1133	KAFB-106115-150-GS-VA1133-REG	19 JAN 2012	15:00	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1134	KAFB-106115-250-GS-VA1134-REG	19 JAN 2012	15:34	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0687
VA1134	KAFB-106115-250-GS-VA1134-REG	19 JAN 2012	15:34	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1135	KAFB-106115-350-GS-VA1135-REG	19 JAN 2012	16:10	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0811
VA1135	KAFB-106115-350-GS-VA1135-REG	19 JAN 2012	16:10	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1136	KAFB-106115-450-GS-VA1136-REG	20 JAN 2012	09:50	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0702
VA1136	KAFB-106115-450-GS-VA1136-REG	20 JAN 2012	09:50	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1146	KAFB-106117-150-GS-VA1146-REG	18 JAN 2012	12:21	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0774
VA1146	KAFB-106117-150-GS-VA1146-REG	18 JAN 2012	12:21	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1147	KAFB-106117-250-GS-VA1147-REG	18 JAN 2012	12:56	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0844
VA1147	KAFB-106117-250-GS-VA1147-REG	18 JAN 2012	12:56	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1148	KAFB-106117-350-GS-VA1148-REG	18 JAN 2012	13:30	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0833
VA1148	KAFB-106117-350-GS-VA1148-REG	18 JAN 2012	13:30	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		

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Reference Document No: 140705-SV073

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1149	KAFB-106117-350-GS-VA1149-FD	18 JAN 2012	13:30	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0778
VA1149	KAFB-106117-350-GS-VA1149-FD	18 JAN 2012	13:30	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1150	KAFB-106117-450-GS-VA1150-REG	18 JAN 2012	15:08	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0812
VA1150	KAFB-106117-450-GS-VA1150-REG	18 JAN 2012	15:08	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1164	KAFB-106120-025-GS-VA1164-REG	20 JAN 2012	10:14	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		562
VA1164	KAFB-106120-025-GS-VA1164-REG	20 JAN 2012	10:14	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1165	KAFB-106120-050-GS-VA1165-REG	20 JAN 2012	10:45	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0823
VA1165	KAFB-106120-050-GS-VA1165-REG	20 JAN 2012	10:45	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1166	KAFB-106120-150-GS-VA1166-REG	20 JAN 2012	11:16	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0614
VA1166	KAFB-106120-150-GS-VA1166-REG	20 JAN 2012	11:16	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1167	KAFB-106120-250-GS-VA1167-REG	20 JAN 2012	11:48	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0767
VA1167	KAFB-106120-250-GS-VA1167-REG	20 JAN 2012	11:48	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1168	KAFB-106120-350-GS-VA1168-REG	20 JAN 2012	11:31	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0577
VA1168	KAFB-106120-350-GS-VA1168-REG	20 JAN 2012	11:31	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1169	KAFB-106120-450-GS-VA1169-REG	20 JAN 2012	12:20	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0717
VA1169	KAFB-106120-450-GS-VA1169-REG	20 JAN 2012	12:20	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1195	KAFB-106124-350-GS-VA1195-REG	17 JAN 2012	11:45	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0637
VA1195	KAFB-106124-350-GS-VA1195-REG	17 JAN 2012	11:45	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1196	KAFB-106124-450-GS-VA1196-REG	17 JAN 2012	12:35	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0676
VA1196	KAFB-106124-450-GS-VA1196-REG	17 JAN 2012	12:35	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1197	KAFB-106125-025-GS-VA1197-REG	18 JAN 2012	12:17	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0777
VA1197	KAFB-106125-025-GS-VA1197-REG	18 JAN 2012	12:17	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1198	KAFB-106125-050-GS-VA1198-REG	18 JAN 2012	12:42	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		517
VA1198	KAFB-106125-050-GS-VA1198-REG	18 JAN 2012	12:42	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1199	KAFB-106125-150-GS-VA1199-REG	18 JAN 2012	13:16	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0594
VA1199	KAFB-106125-150-GS-VA1199-REG	18 JAN 2012	13:16	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1200	KAFB-106125-250-GS-VA1200-REG	18 JAN 2012	13:54	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1200	KAFB-106125-250-GS-VA1200-REG	18 JAN 2012	13:54	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0578

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV073

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1201	KAFB-106125-350-GS-VA1201-REG	18 JAN 2012	14:31	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0835
VA1201	KAFB-106125-350-GS-VA1201-REG	18 JAN 2012	14:31	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1202	KAFB-106125-350-GS-VA1202-FD	18 JAN 2012	14:31	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0608
VA1202	KAFB-106125-350-GS-VA1202-FD	18 JAN 2012	14:31	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1203	KAFB-106125-450-GS-VA1203-REG	18 JAN 2012	15:48	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0815
VA1203	KAFB-106125-450-GS-VA1203-REG	18 JAN 2012	15:48	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1204	KAFB-106126-025-GS-VA1204-REG	19 JAN 2012	09:30	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0606
VA1204	KAFB-106126-025-GS-VA1204-REG	19 JAN 2012	09:30	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1205	KAFB-106126-050-GS-VA1205-REG	19 JAN 2012	09:57	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1205	KAFB-106126-050-GS-VA1205-REG	19 JAN 2012	09:57	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0659
VA1206	KAFB-106126-150-GS-VA1206-REG	19 JAN 2012	10:29	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0707
VA1206	KAFB-106126-150-GS-VA1206-REG	19 JAN 2012	10:29	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1207	KAFB-106126-250-GS-VA1207-REG	19 JAN 2012	10:58	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0613
VA1207	KAFB-106126-250-GS-VA1207-REG	19 JAN 2012	10:58	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1208	KAFB-106126-350-GS-VA1208-REG	19 JAN 2012	11:34	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0794
VA1208	KAFB-106126-350-GS-VA1208-REG	19 JAN 2012	11:34	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1209	KAFB-106126-450-GS-VA1209-REG	19 JAN 2012	12:12	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		546
VA1209	KAFB-106126-450-GS-VA1209-REG	19 JAN 2012	12:12	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		0710
VA1210	KAFB-106127-025-GS-VA1210-REG	19 JAN 2012	13:21	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1210	KAFB-106127-025-GS-VA1210-REG	19 JAN 2012	13:21	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1211	KAFB-106127-050-GS-VA1211-REG	19 JAN 2012	13:54	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0791
VA1211	KAFB-106127-050-GS-VA1211-REG	19 JAN 2012	13:54	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1212	KAFB-106127-050-GS-VA1212-FD	19 JAN 2012	13:54	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		533
VA1212	KAFB-106127-050-GS-VA1212-FD	19 JAN 2012	13:54	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1213	KAFB-106127-150-GS-VA1213-REG	19 JAN 2012	14:38	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0674
VA1213	KAFB-106127-150-GS-VA1213-REG	19 JAN 2012	14:38	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1214	KAFB-106127-250-GS-VA1214-REG	19 JAN 2012	15:14	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0762
VA1214	KAFB-106127-250-GS-VA1214-REG	19 JAN 2012	15:14	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		

1201804

Shaw™
Shaw E & I, Inc.

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV073

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1215	KAFB-106127-350-GS-VA1215-REG	19 JAN 2012	15:48	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1215	KAFB-106127-350-GS-VA1215-REG	19 JAN 2012	15:48	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0755
VA1216	KAFB-106127-450-GS-VA1216-REG	20 JAN 2012	08:56	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0748
VA1216	KAFB-106127-450-GS-VA1216-REG	20 JAN 2012	08:56	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA8073-TB	FIELDQC-AQ-VA8073-TB-TB	18 JAN 2012	08:00	1 L BOTTLEVAC	1	None Required	VOCs / TPH by TO-15			N		0842

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

34 LBS 1 OF 6
DWT: 23,18,13

1201804

MI 482 9-02

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

UPS GROUND
TRACKING #: 1Z 103 35E 03 4032 2568

REF 1:140705
REF 2:BB010030

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

T - 10 Door: 1249
UPST 308182 MI 48150
MI 482 9-02

UPS GROUND

1Z10335E0340322568

P05D166 0073511 Jan 24 23:57:49 2012 US

SS2006 HIP 11.1.3 BTLP2844L

6059 N

lace in label pouch

RTI LABORATORIES
31628 GLENDALE ST

LIVONIA MI 48150

P: RED2 S: MNITE I: 3

19F – FL2

1Z10335E034032 **2568**

HBT7WST MILIV113 JAN 26 04:16:16 2012
US 4821 HIP 11.1.3 ZEBRAZ4MP

CUSTODY SEAL
DATE 1-20-12
SIGNATURE Daniel L Medina

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

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: 21,15,13

1201804

MI 482 9-02

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

UPS GROUND
TRACKING #: 1Z 103 35E 03 4056 3772

REF 1:140705
REF 2:BB010030

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

WS 14.0.21 HP LaserJet 4 21.0A 10/2011

Fold here and place in label pouch

T - 10 Door: 1249
MI 48150
UPST 308182 MI 482 9-02

UPS GROUND

1Z10335E0340563772

P05D166 0073511 Jan

SS2006 HIP 11.1

RTI LABORATORIES
31628 GLENDALE ST

LIVONIA MI 48150

P: RED2 S: MNITE I: 3
19F – FL2
1Z10335E034056 **3772**
HBT7WST MILIV113 JAN 26 04:16:19 2012
US 4821 HIP 11.1.3 ZEBRAZ4MP

CUSTODY SEAL
DATE 1-20-12
SIGNATURE Daniel Medina

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

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: 21,15,13

1201804

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4081 1584

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

REF 1:140705
REF 2:BB010030

BILLING: P/P

WS 14.0.21 HP LaserJet 4 21.0A 10/2011

Fold here and place in label pouch

CUSTODY SEAL
DATE 1-20-12
SIGNATURE Daniel Medina

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

RTI LABORATORIES
31628 GLENDALE ST

LIVONIA MI 48150

P: RED2 S: MNITE I: 3
19F – FL2
1Z10335E034081 1584
HBT7WST MILIV113 JAN 26 04:37:20 2012
US 4821 HIP 11.1.3 ZEBRAZ4MP

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

14 LBS 4 OF 6
DWT: 16,11,12

1201804

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4110 1992

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

REF 1:140705
REF 2:BB010030

BILLING: P/P

WS 14.0.21 HP LaserJet 4 21.0A 10/2011

Fold here and place in label pouch

0977477 ADCPrinter US 6059 Jan 24 23:51:16 2012 HIP 11.1.3 LP2844L

MI 482 9-02

(420) 48150-0000

UPS GROUND
TRACKING #:1Z 103 35E 03 4110 1992

RTI LABORATORIES
31628 GLENDALE ST

LIVONIA MI 48150

P: RED2 S: MNITE I: 3

19F – FL2

1Z10335E034110 1992

HBT7WST MILIV113 JAN 26 04:40:04 2012
US 4821 HIP 11.1.3 ZEBRAZ4MP

CUSTODY SEAL
DATE 1-20-12
SIGNATURE Daniel Medina

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

+ Regulators

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

7 LBS 6 OF 6
DWT: 11.4.5

1201804

MI 482 9-02

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

UPS GROUND
TRACKING #: 1Z 103 35E 03 4135 4611

REF 1:140705
REF 2:BB010030

BILLING: P/P

WS 14.0.21 HP LaserJet 4 21.0A 10/2011

Fold here and place in label pouch

CUSTODY SEAL
DATE 1-20-12
SIGNATURE Daniel Medina

Regulators

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

3 LBS 5 OF 6
DWT: 21,15,13

1201804

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

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4003 1006

REF 1:140705
REF 2:BB010030

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

T - 10 Door : 1249
MI 48150
UPST 308182 MI 482 9-02

UPS GROUND

1Z10335E0340031006

P05D166 0073511 Jan 24 23:48:53 2012 US
SS2006 HIP 11.1.3 BTLP2844L

6059 N

in label pouch

RTI LABORATORIES
31628 GLENDALE ST

LIVONIA MI 48150

P: RED2 S: MNITE I: 3
19F – FL2
1Z10335E034003 **1006**
HBT7WST MILIV113 JAN 26 04:06:21 2012
US 4821 HIP 11.1.3 ZEBRAZ4MP

Tedlar Bags

CUSTODY SEAL
DATE 1-20-12
SIGNATURE Daniel Medina

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

RTI LABORATORIES, INC.

RTI
31628 Glendale St.
Livonia, MI 48150
TEL: 7344228000 FAX: 7344225342
Website: www.rtilabs.com

Sample Receipt Checklist

Client Name: **SHA04**

Date and Time Received: **1/26/2012 9:15:00 AM**

Work Order Number **1201804** RcptNo: **1**

Received by: **Armando Flores**

Completed by:

Reviewed by:

Completed Date: 1/26/2012 11:56:54 AM

Reviewed Date: 1/27/2012 9:49:45 AM

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	°C
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:				
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 below.

SampID	ContainerID	Type	Org pH	Adj pH	Req Min pH	Req Max pH
1201804-001A	Container-01 of 01	Bottle				
1201804-002A	Container-01 of 01	Bottle				
1201804-003A	Container-01 of 01	Bottle				
1201804-003B	Container-01 of 01	Bottle				
1201804-004A	Container-01 of 01	Bottle				
1201804-004B	Container-01 of 01	Bottle				
1201804-005A	Container-01 of 01	Bottle				
1201804-005B	Container-01 of 01	Bottle				
1201804-006A	Container-01 of 01	Bottle				
1201804-006B	Container-01 of 01	Bottle				
1201804-007A	Container-01 of 01	Bottle				
1201804-007B	Container-01 of 01	Bottle				
1201804-008A	Container-01 of 01	Bottle				
1201804-008B	Container-01 of 01	Bottle				
1201804-009A	Container-01 of 01	Bottle				
1201804-009B	Container-01 of 01	Bottle				
1201804-010A	Container-01 of 01	Bottle				
1201804-010B	Container-01 of 01	Bottle				
1201804-011A	Container-01 of 01	Bottle				
1201804-011B	Container-01 of 01	Bottle				
1201804-012A	Container-01 of 01	Bottle				
1201804-012B	Container-01 of 01	Bottle				
1201804-013A	Container-01 of 01	Bottle				
1201804-013B	Container-01 of 01	Bottle				
1201804-014A	Container-01 of 01	Bottle				
1201804-014B	Container-01 of 01	Bottle				
1201804-015A	Container-01 of 01	Bottle				
1201804-015B	Container-01 of 01	Bottle				
1201804-016A	Container-01 of 01	Bottle				
1201804-016B	Container-01 of 01	Bottle				
1201804-017A	Container-01 of 01	Bottle				
1201804-017B	Container-01 of 01	Bottle				
1201804-018A	Container-01 of 01	Bottle				
1201804-018B	Container-01 of 01	Bottle				

SampID	ContainerID	Type	Org pH	Adj pH	Req Min pH	Req Max pH
1201804-019A	Container-01 of 01	Bottle				
1201804-019B	Container-01 of 01	Bottle				
1201804-020A	Container-01 of 01	Bottle				
1201804-020B	Container-01 of 01	Bottle				
1201804-021A	Container-01 of 01	Bottle				
1201804-021B	Container-01 of 01	Bottle				
1201804-022A	Container-01 of 01	Bottle				
1201804-022B	Container-01 of 01	Bottle				
1201804-023A	Container-01 of 01	Bottle				
1201804-023B	Container-01 of 01	Bottle				
1201804-024A	Container-01 of 01	Bottle				
1201804-024B	Container-01 of 01	Bottle				
1201804-025A	Container-01 of 01	Bottle				
1201804-025B	Container-01 of 01	Bottle				
1201804-026A	Container-01 of 01	Bottle				
1201804-026B	Container-01 of 01	Bottle				
1201804-027B	Container-01 of 01	Bottle				
1201804-028A	Container-01 of 01	Bottle				
1201804-028B	Container-01 of 01	Bottle				
1201804-029A	Container-01 of 01	Bottle				
1201804-029B	Container-01 of 01	Bottle				
1201804-030A	Container-01 of 01	Bottle				
1201804-030B	Container-01 of 01	Bottle				
1201804-031A	Container-01 of 01	Bottle				
1201804-031B	Container-01 of 01	Bottle				
1201804-032A	Container-01 of 01	Bottle				
1201804-032B	Container-01 of 01	Bottle				
1201804-033A	Container-01 of 01	Bottle				
1201804-033B	Container-01 of 01	Bottle				
1201804-034A	Container-01 of 01	Bottle				
1201804-034B	Container-01 of 01	Bottle				
1201804-035A	Container-01 of 01	Bottle				
1201804-035B	Container-01 of 01	Bottle				
1201804-036A	Container-01 of 01	Bottle				

SampID	ContainerID	Type	Org pH	Adj pH	Req Min pH	Req Max pH
1201804-036B	Container-01 of 01	Bottle				
1201804-037A	Container-01 of 01	Bottle				
1201804-037B	Container-01 of 01	Bottle				
1201804-038A	Container-01 of 01	Bottle				
1201804-038B	Container-01 of 01	Bottle				
1201804-039A	Container-01 of 01	Bottle				
1201804-039B	Container-01 of 01	Bottle				
1201804-040A	Container-01 of 01	Bottle				
1201804-040B	Container-01 of 01	Bottle				
1201804-041A	Container-01 of 01	Bottle				
1201804-041B	Container-01 of 01	Bottle				
1201804-042A	Container-01 of 01	Bottle				
1201804-042B	Container-01 of 01	Bottle				
1201804-043A	Container-01 of 01	Bottle				
1201804-043B	Container-01 of 01	Bottle				
1201804-044A	Container-01 of 01	Bottle				
1201804-044B	Container-01 of 01	Bottle				
1201804-045A	Container-01 of 01	Bottle				
1201804-045B	Container-01 of 01	Bottle				
1201804-046A	Container-01 of 01	Bottle				
1201804-046B	Container-01 of 01	Bottle				
1201804-047A	Container-01 of 01	Bottle				
1201804-047B	Container-01 of 01	Bottle				
1201804-048A	Container-01 of 01	Bottle				
1201804-048B	Container-01 of 01	Bottle				
1201804-049A	Container-01 of 01	Bottle				

Adjusted? _____ Checked by _____

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

SampID	ContainerID	Type	Org pH	Adj pH	Req Min pH	Req Max pH

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

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

Client Instructions:

Date Contacted: Contacted By:

Regarding:

CorrectiveAction:

Comments:
Tracking #'s: UPS 1Z10335E0340322568, UPS1Z10335E0340563772, UPS 1Z10335E0340811584, UPS 1Z10335E0341101992, UPS1Z10335E0341354611, UPS 1Z10335E0340031006

RTI Laboratories - Workorder Sample Summary

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1201804-001	VA1005R		1/20/2012 9:18 AM	1/26/2012 9:15 AM	Air
1201804-002	VA1026R		1/20/2012 8:34 AM	1/26/2012 9:15 AM	Air
1201804-003	VA1117		1/19/2012 9:22 AM	1/26/2012 9:15 AM	Air
1201804-003	VA1117		1/19/2012 9:22 AM	1/26/2012 9:15 AM	Air
1201804-004	VA1118		1/19/2012 9:55 AM	1/26/2012 9:15 AM	Air
1201804-004	VA1118		1/19/2012 9:55 AM	1/26/2012 9:15 AM	Air
1201804-005	VA1119		1/19/2012 9:55 AM	1/26/2012 9:15 AM	Air
1201804-005	VA1119		1/19/2012 9:55 AM	1/26/2012 9:15 AM	Air
1201804-006	VA1120		1/19/2012 10:52 AM	1/26/2012 9:15 AM	Air
1201804-006	VA1120		1/19/2012 10:52 AM	1/26/2012 9:15 AM	Air
1201804-007	VA1121		1/19/2012 11:27 AM	1/26/2012 9:15 AM	Air
1201804-007	VA1121		1/19/2012 11:27 AM	1/26/2012 9:15 AM	Air
1201804-008	VA1122		1/19/2012 12:14 PM	1/26/2012 9:15 AM	Air
1201804-008	VA1122		1/19/2012 12:14 PM	1/26/2012 9:15 AM	Air
1201804-009	VA1123		1/19/2012 1:00 PM	1/26/2012 9:15 AM	Air
1201804-009	VA1123		1/19/2012 1:00 PM	1/26/2012 9:15 AM	Air
1201804-010	VA1131		1/19/2012 1:59 PM	1/26/2012 9:15 AM	Air
1201804-010	VA1131		1/19/2012 1:59 PM	1/26/2012 9:15 AM	Air
1201804-011	VA1132		1/19/2012 2:27 PM	1/26/2012 9:15 AM	Air
1201804-011	VA1132		1/19/2012 2:27 PM	1/26/2012 9:15 AM	Air
1201804-012	VA1133		1/19/2012 3:00 PM	1/26/2012 9:15 AM	Air
1201804-012	VA1133		1/19/2012 3:00 PM	1/26/2012 9:15 AM	Air
1201804-013	VA1134		1/19/2012 3:34 PM	1/26/2012 9:15 AM	Air
1201804-013	VA1134		1/19/2012 3:34 PM	1/26/2012 9:15 AM	Air
1201804-014	VA1135		1/19/2012 4:10 PM	1/26/2012 9:15 AM	Air
1201804-014	VA1135		1/19/2012 4:10 PM	1/26/2012 9:15 AM	Air
1201804-015	VA1136		1/20/2012 9:50 AM	1/26/2012 9:15 AM	Air
1201804-015	VA1136		1/20/2012 9:50 AM	1/26/2012 9:15 AM	Air
1201804-016	VA1146		1/18/2012 12:21 PM	1/26/2012 9:15 AM	Air
1201804-016	VA1146		1/18/2012 12:21 PM	1/26/2012 9:15 AM	Air
1201804-017	VA1147		1/18/2012 12:56 PM	1/26/2012 9:15 AM	Air
1201804-017	VA1147		1/18/2012 12:56 PM	1/26/2012 9:15 AM	Air
1201804-018	VA1148		1/18/2012 1:30 PM	1/26/2012 9:15 AM	Air
1201804-018	VA1148		1/18/2012 1:30 PM	1/26/2012 9:15 AM	Air
1201804-019	VA1149		1/18/2012 1:30 PM	1/26/2012 9:15 AM	Air
1201804-019	VA1149		1/18/2012 1:30 PM	1/26/2012 9:15 AM	Air
1201804-020	VA1150		1/18/2012 3:08 PM	1/26/2012 9:15 AM	Air
1201804-020	VA1150		1/18/2012 3:08 PM	1/26/2012 9:15 AM	Air
1201804-021	VA1164		1/20/2012 10:14 AM	1/26/2012 9:15 AM	Air
1201804-021	VA1164		1/20/2012 10:14 AM	1/26/2012 9:15 AM	Air
1201804-022	VA1165		1/20/2012 10:45 AM	1/26/2012 9:15 AM	Air
1201804-022	VA1165		1/20/2012 10:45 AM	1/26/2012 9:15 AM	Air
1201804-023	VA1166		1/20/2012 11:16 AM	1/26/2012 9:15 AM	Air
1201804-023	VA1166		1/20/2012 11:16 AM	1/26/2012 9:15 AM	Air
1201804-024	VA1167		1/20/2012 11:48 AM	1/26/2012 9:15 AM	Air

RTI Laboratories - Workorder Sample Summary

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1201804-024	VA1167		1/20/2012 11:48 AM	1/26/2012 9:15 AM	Air
1201804-025	VA1168		1/20/2012 11:31 AM	1/26/2012 9:15 AM	Air
1201804-025	VA1168		1/20/2012 11:31 AM	1/26/2012 9:15 AM	Air
1201804-026	VA1169		1/20/2012 12:20 PM	1/26/2012 9:15 AM	Air
1201804-026	VA1169		1/20/2012 12:20 PM	1/26/2012 9:15 AM	Air
1201804-027	VA1195		1/17/2012 11:45 AM	1/26/2012 9:15 AM	Air
1201804-027	VA1195		1/17/2012 11:45 AM	1/26/2012 9:15 AM	Air
1201804-028	VA1196		1/17/2012 12:35 PM	1/26/2012 9:15 AM	Air
1201804-028	VA1196		1/17/2012 12:35 PM	1/26/2012 9:15 AM	Air
1201804-029	VA1197		1/18/2012 12:17 PM	1/26/2012 9:15 AM	Air
1201804-029	VA1197		1/18/2012 12:17 PM	1/26/2012 9:15 AM	Air
1201804-030	VA1198		1/18/2012 12:42 PM	1/26/2012 9:15 AM	Air
1201804-030	VA1198		1/18/2012 12:42 PM	1/26/2012 9:15 AM	Air
1201804-031	VA1199		1/18/2012 1:16 PM	1/26/2012 9:15 AM	Air
1201804-031	VA1199		1/18/2012 1:16 PM	1/26/2012 9:15 AM	Air
1201804-032	VA1200		1/18/2012 1:54 PM	1/26/2012 9:15 AM	Air
1201804-032	VA1200		1/18/2012 1:54 PM	1/26/2012 9:15 AM	Air
1201804-033	VA1201		1/18/2012 2:31 PM	1/26/2012 9:15 AM	Air
1201804-033	VA1201		1/18/2012 2:31 PM	1/26/2012 9:15 AM	Air
1201804-034	VA1202		1/18/2012 2:31 PM	1/26/2012 9:15 AM	Air
1201804-034	VA1202		1/18/2012 2:31 PM	1/26/2012 9:15 AM	Air
1201804-035	VA1203		1/18/2012 3:48 PM	1/26/2012 9:15 AM	Air
1201804-035	VA1203		1/18/2012 3:48 PM	1/26/2012 9:15 AM	Air
1201804-036	VA1204		1/19/2012 9:30 AM	1/26/2012 9:15 AM	Air
1201804-036	VA1204		1/19/2012 9:30 AM	1/26/2012 9:15 AM	Air
1201804-037	VA1205		1/19/2012 9:57 AM	1/26/2012 9:15 AM	Air
1201804-037	VA1205		1/19/2012 9:57 AM	1/26/2012 9:15 AM	Air
1201804-038	VA1206		1/19/2012 10:29 AM	1/26/2012 9:15 AM	Air
1201804-038	VA1206		1/19/2012 10:29 AM	1/26/2012 9:15 AM	Air
1201804-039	VA1207		1/19/2012 10:58 AM	1/26/2012 9:15 AM	Air
1201804-039	VA1207		1/19/2012 10:58 AM	1/26/2012 9:15 AM	Air
1201804-040	VA1208		1/19/2012 11:34 AM	1/26/2012 9:15 AM	Air
1201804-040	VA1208		1/19/2012 11:34 AM	1/26/2012 9:15 AM	Air
1201804-041	VA1209		1/19/2012 12:12 PM	1/26/2012 9:15 AM	Air
1201804-041	VA1209		1/19/2012 12:12 PM	1/26/2012 9:15 AM	Air
1201804-042	VA1210		1/19/2012 1:21 PM	1/26/2012 9:15 AM	Air
1201804-042	VA1210		1/19/2012 1:21 PM	1/26/2012 9:15 AM	Air
1201804-043	VA1211		1/19/2012 1:54 PM	1/26/2012 9:15 AM	Air
1201804-043	VA1211		1/19/2012 1:54 PM	1/26/2012 9:15 AM	Air
1201804-044	VA1212		1/19/2012 1:54 PM	1/26/2012 9:15 AM	Air
1201804-044	VA1212		1/19/2012 1:54 PM	1/26/2012 9:15 AM	Air
1201804-045	VA1213		1/19/2012 2:38 PM	1/26/2012 9:15 AM	Air
1201804-045	VA1213		1/19/2012 2:38 PM	1/26/2012 9:15 AM	Air
1201804-046	VA1214		1/19/2012 3:14 PM	1/26/2012 9:15 AM	Air
1201804-046	VA1214		1/19/2012 3:14 PM	1/26/2012 9:15 AM	Air

RTI Laboratories - Workorder Sample Summary

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1201804-047	VA1215		1/19/2012 3:48 PM	1/26/2012 9:15 AM	Air
1201804-047	VA1215		1/19/2012 3:48 PM	1/26/2012 9:15 AM	Air
1201804-048	VA1216		1/20/2012 8:56 AM	1/26/2012 9:15 AM	Air
1201804-048	VA1216		1/20/2012 8:56 AM	1/26/2012 9:15 AM	Air
1201804-049	VA8073-TB		1/18/2012 8:00 AM	1/26/2012 9:15 AM	Air

RTI Laboratories - DATES REPORT

WO#: 1201804

Date Reported: 2/24/2012
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
1201804-001A	VA1005R	1/20/2012 9:18 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/14/2012 1:28 PM
				EPA_TO15-Volatile Organic Compounds			2/15/2012 4:23 AM
1201804-002A	VA1026R	1/20/2012 8:34 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/9/2012 1:45 AM
				EPA_TO15-Volatile Organic Compounds			2/11/2012 7:54 PM
1201804-003A	VA1117	1/19/2012 9:22 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/7/2012 6:15 PM
				EPA_TO15-Volatile Organic Compounds			2/7/2012 4:10 AM
1201804-003B	VA1117	1/19/2012 9:22 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/2/2012 11:30 AM
1201804-004A	VA1118	1/19/2012 9:55 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/6/2012 11:03 PM
				EPA_TO15-Volatile Organic Compounds			2/10/2012 6:16 AM
1201804-004B	VA1118	1/19/2012 9:55 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/2/2012 11:47 AM
1201804-005A	VA1119	1/19/2012 9:55 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/6/2012 11:49 PM
				EPA_TO15-Volatile Organic Compounds			2/10/2012 7:05 AM
1201804-005B	VA1119	1/19/2012 9:55 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/2/2012 12:03 PM
1201804-006A	VA1120	1/19/2012 10:52 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/7/2012 12:34 AM
				EPA_TO15-Volatile Organic Compounds			2/10/2012 8:51 PM
1201804-006B	VA1120	1/19/2012 10:52 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/2/2012 12:24 PM
1201804-007A	VA1121	1/19/2012 11:27 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/7/2012 1:20 AM
				EPA_TO15-Volatile Organic Compounds			2/10/2012 10:31 PM

RTI Laboratories - DATES REPORT

WO#: 1201804

Date Reported: 2/24/2012
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
1201804-007B	VA1121	1/19/2012 11:27 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/2/2012 12:40 PM
1201804-008A	VA1122	1/19/2012 12:14 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/7/2012 8:26 PM
				EPA_TO15-Volatile Organic Compounds			2/11/2012 12:50 AM
1201804-008B	VA1122	1/19/2012 12:14 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/2/2012 12:59 PM
1201804-009A	VA1123	1/19/2012 1:00 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/7/2012 9:08 PM
				EPA_TO15-Volatile Organic Compounds			2/9/2012 10:15 PM
1201804-009B	VA1123	1/19/2012 1:00 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/2/2012 1:14 PM
1201804-010A	VA1131	1/19/2012 1:59 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/8/2012 9:27 PM
				EPA_TO15-Volatile Organic Compounds			2/11/2012 4:50 AM
1201804-010B	VA1131	1/19/2012 1:59 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/2/2012 1:28 PM
1201804-011A	VA1132	1/19/2012 2:27 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/8/2012 10:13 PM
				EPA_TO15-Volatile Organic Compounds			2/11/2012 5:39 AM
1201804-011B	VA1132	1/19/2012 2:27 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/2/2012 1:44 PM
1201804-012A	VA1133	1/19/2012 3:00 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/9/2012 3:53 PM
				EPA_TO15-Volatile Organic Compounds			2/10/2012 12:11 PM
				EPA_TO15-Volatile Organic Compounds			2/11/2012 6:31 AM
1201804-012B	VA1133	1/19/2012 3:00 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/2/2012 3:23 PM

RTI Laboratories - DATES REPORT

WO#: 1201804

Date Reported: 2/24/2012
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
1201804-013A	VA1134	1/19/2012 3:34 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/9/2012 5:24 PM
				EPA_TO15-Volatile Organic Compounds			2/11/2012 4:53 PM
1201804-013B	VA1134	1/19/2012 3:34 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/6/2012 10:24 AM
1201804-014A	VA1135	1/19/2012 4:10 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/9/2012 1:02 AM
				EPA_TO15-Volatile Organic Compounds			2/15/2012 3:31 AM
1201804-014B	VA1135	1/19/2012 4:10 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/6/2012 10:45 AM
1201804-015A	VA1136	1/20/2012 9:50 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/9/2012 11:47 PM
				EPA_TO15-Volatile Organic Compounds			2/11/2012 10:09 PM
1201804-015B	VA1136	1/20/2012 9:50 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/6/2012 11:00 AM
1201804-016A	VA1146	1/18/2012 12:21 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/6/2012 5:47 PM
				EPA_TO15-Volatile Organic Compounds			2/7/2012 1:02 AM
1201804-016B	VA1146	1/18/2012 12:21 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/6/2012 11:20 AM
1201804-017A	VA1147	1/18/2012 12:56 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/3/2012 6:30 PM
				EPA_TO15-Volatile Organic Compounds			2/3/2012 12:57 AM
				EPA_TO15-Volatile Organic Compounds			2/7/2012 2:32 AM
1201804-017B	VA1147	1/18/2012 12:56 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/6/2012 11:35 AM
1201804-018A	VA1148	1/18/2012 1:30 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/6/2012 6:30 PM
				EPA_TO15-Volatile Organic Compounds			2/6/2012 6:41 PM

RTI Laboratories - DATES REPORT

WO#: 1201804

Date Reported: 2/24/2012
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
1201804-018A	VA1148	1/18/2012 1:30 PM	Air				
				EPA_TO15-Volatile Organic Compounds			2/10/2012 12:40 AM
1201804-018B	VA1148	1/18/2012 1:30 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/6/2012 11:55 AM
1201804-019A	VA1149	1/18/2012 1:30 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/6/2012 7:12 PM
				EPA_TO15-Volatile Organic Compounds			2/6/2012 7:28 PM
				EPA_TO15-Volatile Organic Compounds			2/10/2012 1:26 AM
1201804-019B	VA1149	1/18/2012 1:30 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/6/2012 12:32 PM
1201804-020A	VA1150	1/18/2012 3:08 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/7/2012 5:26 PM
				EPA_TO15-Volatile Organic Compounds			2/6/2012 9:03 PM
				EPA_TO15-Volatile Organic Compounds			2/10/2012 3:01 AM
				EPA_TO15-Volatile Organic Compounds			2/10/2012 3:46 AM
1201804-020B	VA1150	1/18/2012 3:08 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/6/2012 12:49 PM
1201804-021A	VA1164	1/20/2012 10:14 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/14/2012 2:17 PM
				EPA_TO15-Volatile Organic Compounds			2/15/2012 5:14 AM
1201804-021B	VA1164	1/20/2012 10:14 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/6/2012 1:46 PM
1201804-022A	VA1165	1/20/2012 10:45 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/10/2012 2:50 PM
				EPA_TO15-Volatile Organic Compounds			2/15/2012 6:07 AM
1201804-022B	VA1165	1/20/2012 10:45 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/6/2012 2:19 PM
1201804-023A	VA1166	1/20/2012 11:16 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/10/2012 8:28 PM

RTI Laboratories - DATES REPORT

WO#: 1201804

Date Reported: 2/24/2012
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
1201804-023A	VA1166	1/20/2012 11:16 AM	Air				
				EPA_TO15-Volatile Organic Compounds			2/15/2012 6:59 AM
1201804-023B	VA1166	1/20/2012 11:16 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/6/2012 3:57 PM
1201804-024A	VA1167	1/20/2012 11:48 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/14/2012 11:56 AM
				EPA_TO15-Volatile Organic Compounds			2/14/2012 11:24 PM
				EPA_TO15-Volatile Organic Compounds			2/15/2012 11:34 AM
1201804-024B	VA1167	1/20/2012 11:48 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/6/2012 4:28 PM
1201804-025A	VA1168	1/20/2012 11:31 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/10/2012 7:39 PM
				EPA_TO15-Volatile Organic Compounds			2/15/2012 1:18 PM
1201804-025B	VA1168	1/20/2012 11:31 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/6/2012 4:55 PM
1201804-026A	VA1169	1/20/2012 12:20 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/10/2012 12:55 PM
				EPA_TO15-Volatile Organic Compounds			2/12/2012 2:47 AM
1201804-026B	VA1169	1/20/2012 12:20 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/6/2012 6:00 PM
1201804-027B	VA1195	1/17/2012 11:45 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/6/2012 6:28 PM
1201804-028A	VA1196	1/17/2012 12:35 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/3/2012 3:35 PM
				EPA_TO15-Volatile Organic Compounds			2/6/2012 11:27 PM
1201804-028B	VA1196	1/17/2012 12:35 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/7/2012 10:27 AM

RTI Laboratories - DATES REPORT

WO#: 1201804

Date Reported: 2/24/2012
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
1201804-029A	VA1197	1/18/2012 12:17 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/7/2012 12:55 PM
				EPA_TO15-Volatile Organic Compounds			2/7/2012 12:13 AM
				EPA_TO15-Volatile Organic Compounds			2/10/2012 8:02 PM
1201804-029B	VA1197	1/18/2012 12:17 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/7/2012 10:42 AM
1201804-030A	VA1198	1/18/2012 12:42 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/7/2012 3:04 PM
				EPA_TO15-Volatile Organic Compounds			2/6/2012 3:31 PM
				EPA_TO15-Volatile Organic Compounds			2/7/2012 1:47 AM
1201804-030B	VA1198	1/18/2012 12:42 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/7/2012 11:12 AM
1201804-031A	VA1199	1/18/2012 1:16 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/7/2012 3:46 PM
				EPA_TO15-Volatile Organic Compounds			2/6/2012 4:24 PM
				EPA_TO15-Volatile Organic Compounds			2/7/2012 3:18 AM
1201804-031B	VA1199	1/18/2012 1:16 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/7/2012 11:43 AM
1201804-032A	VA1200	1/18/2012 1:54 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/7/2012 4:28 PM
				EPA_TO15-Volatile Organic Compounds			2/6/2012 1:52 PM
1201804-032B	VA1200	1/18/2012 1:54 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/7/2012 11:58 AM
1201804-033A	VA1201	1/18/2012 2:31 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/3/2012 9:23 PM
				EPA_TO15-Volatile Organic Compounds			2/6/2012 5:09 PM
				EPA_TO15-Volatile Organic Compounds			2/10/2012 2:15 AM
1201804-033B	VA1201	1/18/2012 2:31 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/7/2012 12:17 PM

RTI Laboratories - DATES REPORT

WO#: 1201804

Date Reported: 2/24/2012
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
1201804-034A	VA1202	1/18/2012 2:31 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/6/2012 7:58 PM
				EPA_TO15-Volatile Organic Compounds			2/6/2012 8:17 PM
1201804-034B	VA1202	1/18/2012 2:31 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/7/2012 12:40 PM
1201804-035A	VA1203	1/18/2012 3:48 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/3/2012 11:31 PM
				EPA_TO15-Volatile Organic Compounds			2/10/2012 4:35 AM
1201804-035B	VA1203	1/18/2012 3:48 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/7/2012 12:55 PM
1201804-036A	VA1204	1/19/2012 9:30 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/6/2012 10:18 PM
				EPA_TO15-Volatile Organic Compounds			2/10/2012 5:27 AM
1201804-036B	VA1204	1/19/2012 9:30 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/7/2012 1:10 PM
1201804-037A	VA1205	1/19/2012 9:57 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/8/2012 4:47 PM
				EPA_TO15-Volatile Organic Compounds			2/10/2012 7:57 AM
1201804-037B	VA1205	1/19/2012 9:57 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/7/2012 1:29 PM
1201804-038A	VA1206	1/19/2012 10:29 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/8/2012 12:50 PM
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/8/2012 5:36 PM
				EPA_TO15-Volatile Organic Compounds			2/10/2012 8:49 AM
1201804-038B	VA1206	1/19/2012 10:29 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/7/2012 2:26 PM
1201804-039A	VA1207	1/19/2012 10:58 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/8/2012 6:25 PM
				EPA_TO15-Volatile Organic Compounds			2/10/2012 9:43 PM

RTI Laboratories - DATES REPORT

WO#: 1201804

Date Reported: 2/24/2012
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
1201804-039B	VA1207	1/19/2012 10:58 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/7/2012 2:48 PM
1201804-040A	VA1208	1/19/2012 11:34 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/7/2012 6:59 PM
				EPA_TO15-Volatile Organic Compounds			2/10/2012 11:18 PM
1201804-040B	VA1208	1/19/2012 11:34 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/7/2012 3:09 PM
1201804-041A	VA1209	1/19/2012 12:12 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/7/2012 7:43 PM
				EPA_TO15-Volatile Organic Compounds			2/15/2012 3:34 PM
				EPA_TO15-Volatile Organic Compounds			2/15/2012 4:19 PM
1201804-041B	VA1209	1/19/2012 12:12 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/7/2012 3:27 PM
1201804-042A	VA1210	1/19/2012 1:21 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/8/2012 7:10 PM
				EPA_TO15-Volatile Organic Compounds			2/11/2012 2:23 AM
1201804-042B	VA1210	1/19/2012 1:21 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/7/2012 4:29 PM
1201804-043A	VA1211	1/19/2012 1:54 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/8/2012 7:56 PM
				EPA_TO15-Volatile Organic Compounds			2/15/2012 1:51 AM
1201804-043B	VA1211	1/19/2012 1:54 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/7/2012 4:08 PM
1201804-044A	VA1212	1/19/2012 1:54 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/8/2012 8:42 PM
				EPA_TO15-Volatile Organic Compounds			2/11/2012 4:01 AM
1201804-044B	VA1212	1/19/2012 1:54 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/9/2012 10:26 AM

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WO#: 1201804

Date Reported: 2/24/2012
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
1201804-045A	VA1213	1/19/2012 2:38 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/9/2012 12:24 PM
				EPA_TO15-Volatile Organic Compounds			2/10/2012 10:43 AM
1201804-045B	VA1213	1/19/2012 2:38 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/9/2012 11:07 AM
1201804-046A	VA1214	1/19/2012 3:14 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/9/2012 4:39 PM
				EPA_TO15-Volatile Organic Compounds			2/11/2012 7:20 AM
1201804-046B	VA1214	1/19/2012 3:14 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/9/2012 12:18 PM
1201804-047A	VA1215	1/19/2012 3:48 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/9/2012 12:20 AM
				EPA_TO15-Volatile Organic Compounds			2/11/2012 5:38 PM
				EPA_TO15-Volatile Organic Compounds			2/15/2012 2:43 AM
1201804-047B	VA1215	1/19/2012 3:48 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/9/2012 12:59 PM
1201804-048A	VA1216	1/20/2012 8:56 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/9/2012 11:04 PM
				EPA_TO15-Volatile Organic Compounds			2/11/2012 8:39 PM
1201804-048B	VA1216	1/20/2012 8:56 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			2/9/2012 3:57 PM
1201804-049A	VA8073-TB	1/18/2012 8:00 AM	Air				
				EPA_TO15-Volatile Organic Compounds			2/2/2012 9:51 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/20/2012 9:18:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-001	**Matrix:**	Air
Client Sample ID:	VA1005R		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds	**Method: TO-15**					**Analyst: rd2**
1,1,1-Trichloroethane	ND	200	U	ppbv	200	2/15/2012 4:23 AM
1,1,2,2-Tetrachloroethane	ND	200	U	ppbv	200	2/15/2012 4:23 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	200	U	ppbv	200	2/15/2012 4:23 AM
1,1,2-Trichloroethane	ND	200	U	ppbv	200	2/15/2012 4:23 AM
1,1-Dichloroethane	ND	200	U	ppbv	200	2/15/2012 4:23 AM
1,1-Dichloroethene	ND	200	U	ppbv	200	2/15/2012 4:23 AM
1,2,4-Trichlorobenzene	ND	200	U	ppbv	200	2/15/2012 4:23 AM
1,2,4-Trimethylbenzene	ND	200	U	ppbv	200	2/15/2012 4:23 AM
1,2-Dibromoethane	ND	200	U	ppbv	200	2/15/2012 4:23 AM
1,2-Dichlorobenzene	ND	200	U	ppbv	200	2/15/2012 4:23 AM
1,2-Dichloroethane	ND	200	U	ppbv	200	2/15/2012 4:23 AM
1,2-Dichloropropane	ND	200	U	ppbv	200	2/15/2012 4:23 AM
1,3,5-Trimethylbenzene	ND	200	U	ppbv	200	2/15/2012 4:23 AM
1,3-Butadiene	ND	200	U	ppbv	200	2/15/2012 4:23 AM
1,3-Dichlorobenzene	ND	200	U	ppbv	200	2/15/2012 4:23 AM
1,4-Dichlorobenzene	ND	200	U	ppbv	200	2/15/2012 4:23 AM
2-Butanone	ND	200	U	ppbv	200	2/15/2012 4:23 AM
2-Hexanone	ND	200	U	ppbv	200	2/15/2012 4:23 AM
4-Methyl-2-pentanone	ND	200	U	ppbv	200	2/15/2012 4:23 AM
Acetone	300	200		ppbv	200	2/15/2012 4:23 AM
Benzene	2,500	200		ppbv	200	2/15/2012 4:23 AM
Benzyl chloride	ND	200	U	ppbv	200	2/15/2012 4:23 AM
Bromodichloromethane	ND	200	U	ppbv	200	2/15/2012 4:23 AM
Bromoform	ND	200	U	ppbv	200	2/15/2012 4:23 AM
Bromomethane	ND	200	U	ppbv	200	2/15/2012 4:23 AM
Carbon disulfide	ND	200	U	ppbv	200	2/15/2012 4:23 AM
Carbon tetrachloride	ND	200	U	ppbv	200	2/15/2012 4:23 AM
Chlorobenzene	ND	200	U	ppbv	200	2/15/2012 4:23 AM
Chlorodibromomethane	ND	200	U	ppbv	200	2/15/2012 4:23 AM
Chloroethane	ND	200	U	ppbv	200	2/15/2012 4:23 AM
Chloroform	ND	200	U	ppbv	200	2/15/2012 4:23 AM
Chloromethane	ND	200	U	ppbv	200	2/15/2012 4:23 AM
cis-1,2-Dichloroethene	ND	200	U	ppbv	200	2/15/2012 4:23 AM
cis-1,3-dichloropropene	ND	200	U	ppbv	200	2/15/2012 4:23 AM
Cyclohexane	1,100	400		ppbv	200	2/15/2012 4:23 AM
Dichlorodifluoromethane	ND	200	U	ppbv	200	2/15/2012 4:23 AM
Ethyl acetate	ND	200	U	ppbv	200	2/15/2012 4:23 AM
Ethylbenzene	210	400	J	ppbv	200	2/15/2012 4:23 AM
Heptane	590	200		ppbv	200	2/15/2012 4:23 AM
Hexachlorobutadiene	ND	400	U	ppbv	200	2/15/2012 4:23 AM
m,p-Xylene	390	400	J	ppbv	200	2/15/2012 4:23 AM
Methylene chloride	ND	1,000	U	ppbv	200	2/15/2012 4:23 AM

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WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/20/2012 9:18:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-001	**Matrix:**	Air
Client Sample ID:	VA1005R		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
n-Hexane	760	400		ppbv	200	2/15/2012 4:23 AM
Naphthalene	ND	200	U	ppbv	200	2/15/2012 4:23 AM
o-Xylene	ND	200	U	ppbv	200	2/15/2012 4:23 AM
Propylene	380	200		ppbv	200	2/15/2012 4:23 AM
Styrene	ND	200	U	ppbv	200	2/15/2012 4:23 AM
tert-Butyl Methyl Ether	ND	200	U	ppbv	200	2/15/2012 4:23 AM
Tetrachloroethene	ND	200	U	ppbv	200	2/15/2012 4:23 AM
Tetrahydrofuran	ND	200	U	ppbv	200	2/15/2012 4:23 AM
Toluene	6,300	200		ppbv	200	2/15/2012 4:23 AM
trans-1,2-Dichloroethene	ND	200	U	ppbv	200	2/15/2012 4:23 AM
trans-1,3-dichloropropene	ND	200	U	ppbv	200	2/15/2012 4:23 AM
Trichloroethene	ND	200	U	ppbv	200	2/15/2012 4:23 AM
Trichlorofluoromethane	ND	200	U	ppbv	200	2/15/2012 4:23 AM
Vinyl acetate	ND	200	U	ppbv	200	2/15/2012 4:23 AM
Vinyl chloride	ND	200	U	ppbv	200	2/15/2012 4:23 AM
Xylenes, Total	390	600	J	ppbv	200	2/15/2012 4:23 AM
Surr: 4-Bromofluorobenzene	113	70-130		%REC	200	2/15/2012 4:23 AM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	96,000	23,000		µg/m³	200	2/14/2012 1:28 PM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	2/14/2012 1:28 PM
C9-C12 Aliphatic Hydrocarbons	ND	38,000	U	µg/m³	200	2/14/2012 1:28 PM
Surr: 4-Bromofluorobenzene	93.9	70-130		%REC	200	2/14/2012 1:28 PM

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WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/20/2012 8:34:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-002	**Matrix:**	Air
Client Sample ID:	VA1026R		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
2-Butanone	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
2-Hexanone	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Acetone	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Benzene	42,000	8,000		ppbv	8000	2/11/2012 7:54 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Bromoform	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Bromomethane	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Chloroethane	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Chloroform	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Chloromethane	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Cyclohexane	44,000	16,000		ppbv	8000	2/11/2012 7:54 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	2/11/2012 7:54 PM
Heptane	13,000	8,000		ppbv	8000	2/11/2012 7:54 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	2/11/2012 7:54 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	2/11/2012 7:54 PM
Methylene chloride	ND	40,000	U	ppbv	8000	2/11/2012 7:54 PM

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WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/20/2012 8:34:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-002	**Matrix:**	Air
Client Sample ID:	VA1026R		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
n-Hexane	40,000	16,000		ppbv	8000	2/11/2012 7:54 PM
Naphthalene	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
o-Xylene	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Propylene	22,000	8,000		ppbv	8000	2/11/2012 7:54 PM
Styrene	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Toluene	37,000	8,000		ppbv	8000	2/11/2012 7:54 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Trichloroethene	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	2/11/2012 7:54 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	2/11/2012 7:54 PM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	8000	2/11/2012 7:54 PM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RH3**
C5-C8 Aliphatic Hydrocarbons	5,400,000	940,000		µg/m³	8000	2/9/2012 1:45 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	2/9/2012 1:45 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	2/9/2012 1:45 AM
Surr: 4-Bromofluorobenzene	89.9	70-130		%REC	8000	2/9/2012 1:45 AM

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WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 9:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-003	**Matrix:**	Air
Client Sample ID:	VA1117		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.044	0.10	J	%	1	2/2/2012 11:30 AM
Carbon Monoxide	ND	0.10	U	%	1	2/2/2012 11:30 AM
Methane	ND	0.50	U	%	1	2/2/2012 11:30 AM
Nitrogen	79	0.10		%	1	2/2/2012 11:30 AM
Oxygen	21	0.10		%	1	2/2/2012 11:30 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	2/7/2012 4:10 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	2/7/2012 4:10 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	2/7/2012 4:10 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	2/7/2012 4:10 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	2/7/2012 4:10 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	2/7/2012 4:10 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	2/7/2012 4:10 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	2/7/2012 4:10 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	2/7/2012 4:10 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	2/7/2012 4:10 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	2/7/2012 4:10 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	2/7/2012 4:10 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	2/7/2012 4:10 AM
1,3-Butadiene	ND	400	U	ppbv	400	2/7/2012 4:10 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	2/7/2012 4:10 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	2/7/2012 4:10 AM
2-Butanone	ND	400	U	ppbv	400	2/7/2012 4:10 AM
2-Hexanone	ND	400	U	ppbv	400	2/7/2012 4:10 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	2/7/2012 4:10 AM
Acetone	1,400	400		ppbv	400	2/7/2012 4:10 AM
Benzene	8,900	400		ppbv	400	2/7/2012 4:10 AM
Benzyl chloride	ND	400	U	ppbv	400	2/7/2012 4:10 AM
Bromodichloromethane	ND	400	U	ppbv	400	2/7/2012 4:10 AM
Bromoform	ND	400	U	ppbv	400	2/7/2012 4:10 AM
Bromomethane	ND	400	U	ppbv	400	2/7/2012 4:10 AM
Carbon disulfide	ND	400	U	ppbv	400	2/7/2012 4:10 AM
Carbon tetrachloride	ND	400	U	ppbv	400	2/7/2012 4:10 AM
Chlorobenzene	ND	400	U	ppbv	400	2/7/2012 4:10 AM
Chlorodibromomethane	ND	400	U	ppbv	400	2/7/2012 4:10 AM
Chloroethane	ND	400	U	ppbv	400	2/7/2012 4:10 AM
Chloroform	ND	400	U	ppbv	400	2/7/2012 4:10 AM
Chloromethane	ND	400	U	ppbv	400	2/7/2012 4:10 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	2/7/2012 4:10 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	2/7/2012 4:10 AM

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WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 9:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-003	**Matrix:**	Air
Client Sample ID:	VA1117		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	14,000	800		ppbv	400	2/7/2012 4:10 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	2/7/2012 4:10 AM
Ethyl acetate	ND	400	U	ppbv	400	2/7/2012 4:10 AM
Ethylbenzene	680	800	J	ppbv	400	2/7/2012 4:10 AM
Heptane	12,000	400		ppbv	400	2/7/2012 4:10 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	2/7/2012 4:10 AM
m,p-Xylene	1,900	800		ppbv	400	2/7/2012 4:10 AM
Methylene chloride	1,100	2,000	J	ppbv	400	2/7/2012 4:10 AM
n-Hexane	16,000	800		ppbv	400	2/7/2012 4:10 AM
Naphthalene	ND	400	U	ppbv	400	2/7/2012 4:10 AM
o-Xylene	480	400		ppbv	400	2/7/2012 4:10 AM
Propylene	600	400		ppbv	400	2/7/2012 4:10 AM
Styrene	ND	400	U	ppbv	400	2/7/2012 4:10 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	2/7/2012 4:10 AM
Tetrachloroethene	ND	400	U	ppbv	400	2/7/2012 4:10 AM
Tetrahydrofuran	ND	400	U	ppbv	400	2/7/2012 4:10 AM
Toluene	17,000	400		ppbv	400	2/7/2012 4:10 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	2/7/2012 4:10 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	2/7/2012 4:10 AM
Trichloroethene	ND	400	U	ppbv	400	2/7/2012 4:10 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	2/7/2012 4:10 AM
Vinyl acetate	ND	400	U	ppbv	400	2/7/2012 4:10 AM
Vinyl chloride	ND	400	U	ppbv	400	2/7/2012 4:10 AM
Xylenes, Total	2,400	1,200		ppbv	400	2/7/2012 4:10 AM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	400	2/7/2012 4:10 AM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	500,000	47,000		µg/m³	400	2/7/2012 6:15 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	2/7/2012 6:15 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	2/7/2012 6:15 PM
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	400	2/7/2012 6:15 PM

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WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 9:55:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-004	**Matrix:**	Air
Client Sample ID:	VA1118		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.045	0.10	J	%	1	2/2/2012 11:47 AM
Carbon Monoxide	ND	0.10	U	%	1	2/2/2012 11:47 AM
Methane	ND	0.50	U	%	1	2/2/2012 11:47 AM
Nitrogen	79	0.10		%	1	2/2/2012 11:47 AM
Oxygen	21	0.10		%	1	2/2/2012 11:47 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	2/10/2012 6:16 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	2/10/2012 6:16 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	2/10/2012 6:16 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	2/10/2012 6:16 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	2/10/2012 6:16 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	2/10/2012 6:16 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	2/10/2012 6:16 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	2/10/2012 6:16 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	2/10/2012 6:16 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	2/10/2012 6:16 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	2/10/2012 6:16 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	2/10/2012 6:16 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	2/10/2012 6:16 AM
1,3-Butadiene	ND	800	U	ppbv	800	2/10/2012 6:16 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	2/10/2012 6:16 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	2/10/2012 6:16 AM
2-Butanone	ND	800	U	ppbv	800	2/10/2012 6:16 AM
2-Hexanone	ND	800	U	ppbv	800	2/10/2012 6:16 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	2/10/2012 6:16 AM
Acetone	1,600	800		ppbv	800	2/10/2012 6:16 AM
Benzene	9,200	800		ppbv	800	2/10/2012 6:16 AM
Benzyl chloride	ND	800	U	ppbv	800	2/10/2012 6:16 AM
Bromodichloromethane	ND	800	U	ppbv	800	2/10/2012 6:16 AM
Bromoform	ND	800	U	ppbv	800	2/10/2012 6:16 AM
Bromomethane	ND	800	U	ppbv	800	2/10/2012 6:16 AM
Carbon disulfide	ND	800	U	ppbv	800	2/10/2012 6:16 AM
Carbon tetrachloride	ND	800	U	ppbv	800	2/10/2012 6:16 AM
Chlorobenzene	ND	800	U	ppbv	800	2/10/2012 6:16 AM
Chlorodibromomethane	ND	800	U	ppbv	800	2/10/2012 6:16 AM
Chloroethane	ND	800	U	ppbv	800	2/10/2012 6:16 AM
Chloroform	ND	800	U	ppbv	800	2/10/2012 6:16 AM
Chloromethane	ND	800	U	ppbv	800	2/10/2012 6:16 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	2/10/2012 6:16 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	2/10/2012 6:16 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 9:55:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-004	**Matrix:**	Air
Client Sample ID:	VA1118		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	16,000	1,600		ppbv	800	2/10/2012 6:16 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	2/10/2012 6:16 AM
Ethyl acetate	ND	800	U	ppbv	800	2/10/2012 6:16 AM
Ethylbenzene	1,100	1,600	J	ppbv	800	2/10/2012 6:16 AM
Heptane	16,000	800		ppbv	800	2/10/2012 6:16 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	2/10/2012 6:16 AM
m,p-Xylene	3,000	1,600		ppbv	800	2/10/2012 6:16 AM
Methylene chloride	ND	4,000	U	ppbv	800	2/10/2012 6:16 AM
n-Hexane	15,000	1,600		ppbv	800	2/10/2012 6:16 AM
Naphthalene	ND	800	U	ppbv	800	2/10/2012 6:16 AM
o-Xylene	820	800		ppbv	800	2/10/2012 6:16 AM
Propylene	1,300	800		ppbv	800	2/10/2012 6:16 AM
Styrene	ND	800	U	ppbv	800	2/10/2012 6:16 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	2/10/2012 6:16 AM
Tetrachloroethene	ND	800	U	ppbv	800	2/10/2012 6:16 AM
Tetrahydrofuran	ND	800	U	ppbv	800	2/10/2012 6:16 AM
Toluene	24,000	800		ppbv	800	2/10/2012 6:16 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	2/10/2012 6:16 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	2/10/2012 6:16 AM
Trichloroethene	ND	800	U	ppbv	800	2/10/2012 6:16 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	2/10/2012 6:16 AM
Vinyl acetate	ND	800	U	ppbv	800	2/10/2012 6:16 AM
Vinyl chloride	ND	800	U	ppbv	800	2/10/2012 6:16 AM
Xylenes, Total	3,800	2,400		ppbv	800	2/10/2012 6:16 AM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	800	2/10/2012 6:16 AM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	470,000	94,000		µg/m³	800	2/6/2012 11:03 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	2/6/2012 11:03 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	2/6/2012 11:03 PM
Surr: 4-Bromofluorobenzene	96.8	70-130		%REC	800	2/6/2012 11:03 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 9:55:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-005	**Matrix:**	Air
Client Sample ID:	VA1119		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.056	0.10	J	%	1	2/2/2012 12:03 PM
Carbon Monoxide	ND	0.10	U	%	1	2/2/2012 12:03 PM
Methane	ND	0.50	U	%	1	2/2/2012 12:03 PM
Nitrogen	79	0.10		%	1	2/2/2012 12:03 PM
Oxygen	21	0.10		%	1	2/2/2012 12:03 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	2/10/2012 7:05 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	2/10/2012 7:05 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	2/10/2012 7:05 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	2/10/2012 7:05 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	2/10/2012 7:05 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	2/10/2012 7:05 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	2/10/2012 7:05 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	2/10/2012 7:05 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	2/10/2012 7:05 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	2/10/2012 7:05 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	2/10/2012 7:05 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	2/10/2012 7:05 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	2/10/2012 7:05 AM
1,3-Butadiene	ND	800	U	ppbv	800	2/10/2012 7:05 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	2/10/2012 7:05 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	2/10/2012 7:05 AM
2-Butanone	ND	800	U	ppbv	800	2/10/2012 7:05 AM
2-Hexanone	ND	800	U	ppbv	800	2/10/2012 7:05 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	2/10/2012 7:05 AM
Acetone	1,000	800		ppbv	800	2/10/2012 7:05 AM
Benzene	12,000	800		ppbv	800	2/10/2012 7:05 AM
Benzyl chloride	ND	800	U	ppbv	800	2/10/2012 7:05 AM
Bromodichloromethane	ND	800	U	ppbv	800	2/10/2012 7:05 AM
Bromoform	ND	800	U	ppbv	800	2/10/2012 7:05 AM
Bromomethane	ND	800	U	ppbv	800	2/10/2012 7:05 AM
Carbon disulfide	ND	800	U	ppbv	800	2/10/2012 7:05 AM
Carbon tetrachloride	ND	800	U	ppbv	800	2/10/2012 7:05 AM
Chlorobenzene	ND	800	U	ppbv	800	2/10/2012 7:05 AM
Chlorodibromomethane	ND	800	U	ppbv	800	2/10/2012 7:05 AM
Chloroethane	ND	800	U	ppbv	800	2/10/2012 7:05 AM
Chloroform	ND	800	U	ppbv	800	2/10/2012 7:05 AM
Chloromethane	ND	800	U	ppbv	800	2/10/2012 7:05 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	2/10/2012 7:05 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	2/10/2012 7:05 AM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 9:55:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-005	**Matrix:**	Air
Client Sample ID:	VA1119		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	27,000	1,600		ppbv	800	2/10/2012 7:05 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	2/10/2012 7:05 AM
Ethyl acetate	ND	800	U	ppbv	800	2/10/2012 7:05 AM
Ethylbenzene	900	1,600	J	ppbv	800	2/10/2012 7:05 AM
Heptane	18,000	800		ppbv	800	2/10/2012 7:05 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	2/10/2012 7:05 AM
m,p-Xylene	2,400	1,600		ppbv	800	2/10/2012 7:05 AM
Methylene chloride	ND	4,000	U	ppbv	800	2/10/2012 7:05 AM
n-Hexane	26,000	1,600		ppbv	800	2/10/2012 7:05 AM
Naphthalene	ND	800	U	ppbv	800	2/10/2012 7:05 AM
o-Xylene	ND	800	U	ppbv	800	2/10/2012 7:05 AM
Propylene	1,200	800		ppbv	800	2/10/2012 7:05 AM
Styrene	ND	800	U	ppbv	800	2/10/2012 7:05 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	2/10/2012 7:05 AM
Tetrachloroethene	ND	800	U	ppbv	800	2/10/2012 7:05 AM
Tetrahydrofuran	7,800	800		ppbv	800	2/10/2012 7:05 AM
Toluene	21,000	800		ppbv	800	2/10/2012 7:05 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	2/10/2012 7:05 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	2/10/2012 7:05 AM
Trichloroethene	ND	800	U	ppbv	800	2/10/2012 7:05 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	2/10/2012 7:05 AM
Vinyl acetate	ND	800	U	ppbv	800	2/10/2012 7:05 AM
Vinyl chloride	ND	800	U	ppbv	800	2/10/2012 7:05 AM
Xylenes, Total	2,400	2,400		ppbv	800	2/10/2012 7:05 AM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	800	2/10/2012 7:05 AM
Mass APH Air Air-Phase Petroleum Hydrocarbons	**Method:**					**Analyst: rd2**
C5-C8 Aliphatic Hydrocarbons	840,000	94,000		µg/m³	800	2/6/2012 11:49 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	2/6/2012 11:49 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	2/6/2012 11:49 PM
Surr: 4-Bromofluorobenzene	96.4	70-130		%REC	800	2/6/2012 11:49 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 10:52:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-006	**Matrix:**	Air
Client Sample ID:	VA1120		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.050	0.10	J	%	1	2/2/2012 12:24 PM
Carbon Monoxide	ND	0.10	U	%	1	2/2/2012 12:24 PM
Methane	ND	0.50	U	%	1	2/2/2012 12:24 PM
Nitrogen	79	0.10		%	1	2/2/2012 12:24 PM
Oxygen	21	0.10		%	1	2/2/2012 12:24 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	2/10/2012 8:51 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	2/10/2012 8:51 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	2/10/2012 8:51 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	2/10/2012 8:51 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	2/10/2012 8:51 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	2/10/2012 8:51 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	2/10/2012 8:51 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	2/10/2012 8:51 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	2/10/2012 8:51 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	2/10/2012 8:51 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	2/10/2012 8:51 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	2/10/2012 8:51 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	2/10/2012 8:51 PM
1,3-Butadiene	ND	800	U	ppbv	800	2/10/2012 8:51 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	2/10/2012 8:51 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	2/10/2012 8:51 PM
2-Butanone	ND	800	U	ppbv	800	2/10/2012 8:51 PM
2-Hexanone	ND	800	U	ppbv	800	2/10/2012 8:51 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	2/10/2012 8:51 PM
Acetone	ND	800	U	ppbv	800	2/10/2012 8:51 PM
Benzene	12,000	800		ppbv	800	2/10/2012 8:51 PM
Benzyl chloride	ND	800	U	ppbv	800	2/10/2012 8:51 PM
Bromodichloromethane	ND	800	U	ppbv	800	2/10/2012 8:51 PM
Bromoform	ND	800	U	ppbv	800	2/10/2012 8:51 PM
Bromomethane	ND	800	U	ppbv	800	2/10/2012 8:51 PM
Carbon disulfide	ND	800	U	ppbv	800	2/10/2012 8:51 PM
Carbon tetrachloride	ND	800	U	ppbv	800	2/10/2012 8:51 PM
Chlorobenzene	ND	800	U	ppbv	800	2/10/2012 8:51 PM
Chlorodibromomethane	ND	800	U	ppbv	800	2/10/2012 8:51 PM
Chloroethane	ND	800	U	ppbv	800	2/10/2012 8:51 PM
Chloroform	ND	800	U	ppbv	800	2/10/2012 8:51 PM
Chloromethane	ND	800	U	ppbv	800	2/10/2012 8:51 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	2/10/2012 8:51 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	2/10/2012 8:51 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 10:52:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-006	**Matrix:**	Air
Client Sample ID:	VA1120		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	21,000	1,600		ppbv	800	2/10/2012 8:51 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	2/10/2012 8:51 PM
Ethyl acetate	ND	800	U	ppbv	800	2/10/2012 8:51 PM
Ethylbenzene	1,100	1,600	J	ppbv	800	2/10/2012 8:51 PM
Heptane	19,000	800		ppbv	800	2/10/2012 8:51 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	2/10/2012 8:51 PM
m,p-Xylene	3,200	1,600		ppbv	800	2/10/2012 8:51 PM
Methylene chloride	ND	4,000	U	ppbv	800	2/10/2012 8:51 PM
n-Hexane	17,000	1,600		ppbv	800	2/10/2012 8:51 PM
Naphthalene	ND	800	U	ppbv	800	2/10/2012 8:51 PM
o-Xylene	810	800		ppbv	800	2/10/2012 8:51 PM
Propylene	1,900	800		ppbv	800	2/10/2012 8:51 PM
Styrene	ND	800	U	ppbv	800	2/10/2012 8:51 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	2/10/2012 8:51 PM
Tetrachloroethene	ND	800	U	ppbv	800	2/10/2012 8:51 PM
Tetrahydrofuran	ND	800	U	ppbv	800	2/10/2012 8:51 PM
Toluene	30,000	800		ppbv	800	2/10/2012 8:51 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	2/10/2012 8:51 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	2/10/2012 8:51 PM
Trichloroethene	ND	800	U	ppbv	800	2/10/2012 8:51 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	2/10/2012 8:51 PM
Vinyl acetate	ND	800	U	ppbv	800	2/10/2012 8:51 PM
Vinyl chloride	ND	800	U	ppbv	800	2/10/2012 8:51 PM
Xylenes, Total	4,000	2,400		ppbv	800	2/10/2012 8:51 PM
Surr: 4-Bromofluorobenzene	96.4	70-130		%REC	800	2/10/2012 8:51 PM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	710,000	94,000		µg/m³	800	2/7/2012 12:34 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	2/7/2012 12:34 AM
C9-C12 Aliphatic Hydrocarbons	25,000	150,000	J	µg/m³	800	2/7/2012 12:34 AM
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	800	2/7/2012 12:34 AM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 11:27:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-007	**Matrix:**	Air
Client Sample ID:	VA1121		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.049	0.10	J	%	1	2/2/2012 12:40 PM
Carbon Monoxide	ND	0.10	U	%	1	2/2/2012 12:40 PM
Methane	ND	0.50	U	%	1	2/2/2012 12:40 PM
Nitrogen	78	0.10		%	1	2/2/2012 12:40 PM
Oxygen	21	0.10		%	1	2/2/2012 12:40 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	2/10/2012 10:31 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	2/10/2012 10:31 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	2/10/2012 10:31 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	2/10/2012 10:31 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	2/10/2012 10:31 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	2/10/2012 10:31 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	2/10/2012 10:31 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	2/10/2012 10:31 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	2/10/2012 10:31 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	2/10/2012 10:31 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	2/10/2012 10:31 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	2/10/2012 10:31 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	2/10/2012 10:31 PM
1,3-Butadiene	ND	800	U	ppbv	800	2/10/2012 10:31 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	2/10/2012 10:31 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	2/10/2012 10:31 PM
2-Butanone	ND	800	U	ppbv	800	2/10/2012 10:31 PM
2-Hexanone	ND	800	U	ppbv	800	2/10/2012 10:31 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	2/10/2012 10:31 PM
Acetone	1,300	800		ppbv	800	2/10/2012 10:31 PM
Benzene	13,000	800		ppbv	800	2/10/2012 10:31 PM
Benzyl chloride	ND	800	U	ppbv	800	2/10/2012 10:31 PM
Bromodichloromethane	ND	800	U	ppbv	800	2/10/2012 10:31 PM
Bromoform	ND	800	U	ppbv	800	2/10/2012 10:31 PM
Bromomethane	ND	800	U	ppbv	800	2/10/2012 10:31 PM
Carbon disulfide	ND	800	U	ppbv	800	2/10/2012 10:31 PM
Carbon tetrachloride	ND	800	U	ppbv	800	2/10/2012 10:31 PM
Chlorobenzene	ND	800	U	ppbv	800	2/10/2012 10:31 PM
Chlorodibromomethane	ND	800	U	ppbv	800	2/10/2012 10:31 PM
Chloroethane	ND	800	U	ppbv	800	2/10/2012 10:31 PM
Chloroform	ND	800	U	ppbv	800	2/10/2012 10:31 PM
Chloromethane	ND	800	U	ppbv	800	2/10/2012 10:31 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	2/10/2012 10:31 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	2/10/2012 10:31 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 11:27:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-007	**Matrix:**	Air
Client Sample ID:	VA1121		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	25,000	1,600		ppbv	800	2/10/2012 10:31 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	2/10/2012 10:31 PM
Ethyl acetate	ND	800	U	ppbv	800	2/10/2012 10:31 PM
Ethylbenzene	1,100	1,600	J	ppbv	800	2/10/2012 10:31 PM
Heptane	20,000	800		ppbv	800	2/10/2012 10:31 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	2/10/2012 10:31 PM
m,p-Xylene	3,100	1,600		ppbv	800	2/10/2012 10:31 PM
Methylene chloride	ND	4,000	U	ppbv	800	2/10/2012 10:31 PM
n-Hexane	22,000	1,600		ppbv	800	2/10/2012 10:31 PM
Naphthalene	ND	800	U	ppbv	800	2/10/2012 10:31 PM
o-Xylene	800	800		ppbv	800	2/10/2012 10:31 PM
Propylene	2,100	800		ppbv	800	2/10/2012 10:31 PM
Styrene	ND	800	U	ppbv	800	2/10/2012 10:31 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	2/10/2012 10:31 PM
Tetrachloroethene	ND	800	U	ppbv	800	2/10/2012 10:31 PM
Tetrahydrofuran	ND	800	U	ppbv	800	2/10/2012 10:31 PM
Toluene	30,000	800		ppbv	800	2/10/2012 10:31 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	2/10/2012 10:31 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	2/10/2012 10:31 PM
Trichloroethene	ND	800	U	ppbv	800	2/10/2012 10:31 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	2/10/2012 10:31 PM
Vinyl acetate	ND	800	U	ppbv	800	2/10/2012 10:31 PM
Vinyl chloride	ND	800	U	ppbv	800	2/10/2012 10:31 PM
Xylenes, Total	3,900	2,400		ppbv	800	2/10/2012 10:31 PM
Surr: 4-Bromofluorobenzene	99.0	70-130		%REC	800	2/10/2012 10:31 PM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	900,000	94,000		µg/m³	800	2/7/2012 1:20 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	2/7/2012 1:20 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	2/7/2012 1:20 AM
Surr: 4-Bromofluorobenzene	93.9	70-130		%REC	800	2/7/2012 1:20 AM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 12:14:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-008	**Matrix:**	Air
Client Sample ID:	VA1122		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	0.40	0.10		%	1	2/2/2012 12:59 PM
Carbon Monoxide	ND	0.10	U	%	1	2/2/2012 12:59 PM
Methane	ND	0.50	U	%	1	2/2/2012 12:59 PM
Nitrogen	81	0.10		%	1	2/2/2012 12:59 PM
Oxygen	19	0.10		%	1	2/2/2012 12:59 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
2-Butanone	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
2-Hexanone	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
Acetone	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
Benzene	29,000	8,000		ppbv	8000	2/11/2012 12:50 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
Bromoform	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
Bromomethane	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
Chloroethane	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
Chloroform	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
Chloromethane	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 12:14:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-008	**Matrix:**	Air
Client Sample ID:	VA1122		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	43,000	16,000		ppbv	8000	2/11/2012 12:50 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	2/11/2012 12:50 AM
Heptane	18,000	8,000		ppbv	8000	2/11/2012 12:50 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	2/11/2012 12:50 AM
m,p-Xylene	ND	16,000	U	ppbv	8000	2/11/2012 12:50 AM
Methylene chloride	ND	40,000	U	ppbv	8000	2/11/2012 12:50 AM
n-Hexane	36,000	16,000		ppbv	8000	2/11/2012 12:50 AM
Naphthalene	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
o-Xylene	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
Propylene	26,000	8,000		ppbv	8000	2/11/2012 12:50 AM
Styrene	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
Toluene	37,000	8,000		ppbv	8000	2/11/2012 12:50 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
Trichloroethene	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	2/11/2012 12:50 AM
Xylenes, Total	ND	24,000	U	ppbv	8000	2/11/2012 12:50 AM
Surr: 4-Bromofluorobenzene	109	70-130		%REC	8000	2/11/2012 12:50 AM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	5,300,000	940,000		µg/m³	8000	2/7/2012 8:26 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	2/7/2012 8:26 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	2/7/2012 8:26 PM
Surr: 4-Bromofluorobenzene	94.2	70-130		%REC	8000	2/7/2012 8:26 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 1:00:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-009	**Matrix:**	Air
Client Sample ID:	VA1123		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.044	0.10	J	%	1	2/2/2012 1:14 PM
Carbon Monoxide	ND	0.10	U	%	1	2/2/2012 1:14 PM
Methane	ND	0.50	U	%	1	2/2/2012 1:14 PM
Nitrogen	78	0.10		%	1	2/2/2012 1:14 PM
Oxygen	21	0.10		%	1	2/2/2012 1:14 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
2-Butanone	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
2-Hexanone	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
Acetone	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
Benzene	83,000	8,000		ppbv	8000	2/9/2012 10:15 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
Bromoform	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
Bromomethane	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
Chloroethane	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
Chloroform	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
Chloromethane	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 1:00:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-009	**Matrix:**	Air
Client Sample ID:	VA1123		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	130,000	16,000		ppbv	8000	2/9/2012 10:15 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	2/9/2012 10:15 PM
Heptane	56,000	8,000		ppbv	8000	2/9/2012 10:15 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	2/9/2012 10:15 PM
m,p-Xylene	11,000	16,000	J	ppbv	8000	2/9/2012 10:15 PM
Methylene chloride	ND	40,000	U	ppbv	8000	2/9/2012 10:15 PM
n-Hexane	130,000	16,000		ppbv	8000	2/9/2012 10:15 PM
Naphthalene	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
o-Xylene	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
Propylene	24,000	8,000		ppbv	8000	2/9/2012 10:15 PM
Styrene	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
Toluene	140,000	8,000		ppbv	8000	2/9/2012 10:15 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
Trichloroethene	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	2/9/2012 10:15 PM
Xylenes, Total	11,000	24,000	J	ppbv	8000	2/9/2012 10:15 PM
Surr: 4-Bromofluorobenzene	112	70-130		%REC	8000	2/9/2012 10:15 PM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	13,000,000	940,000		µg/m³	8000	2/7/2012 9:08 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	2/7/2012 9:08 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	2/7/2012 9:08 PM
Surr: 4-Bromofluorobenzene	92.5	70-130		%REC	8000	2/7/2012 9:08 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 1:59:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-010	**Matrix:**	Air
Client Sample ID:	VA1131		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.049	0.10	J	%	1	2/2/2012 1:28 PM
Carbon Monoxide	ND	0.10	U	%	1	2/2/2012 1:28 PM
Methane	ND	0.50	U	%	1	2/2/2012 1:28 PM
Nitrogen	78	0.10		%	1	2/2/2012 1:28 PM
Oxygen	21	0.10		%	1	2/2/2012 1:28 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	2/11/2012 4:50 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	2/11/2012 4:50 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	2/11/2012 4:50 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	2/11/2012 4:50 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	2/11/2012 4:50 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	2/11/2012 4:50 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	2/11/2012 4:50 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	2/11/2012 4:50 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	2/11/2012 4:50 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	2/11/2012 4:50 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	2/11/2012 4:50 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	2/11/2012 4:50 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	2/11/2012 4:50 AM
1,3-Butadiene	ND	800	U	ppbv	800	2/11/2012 4:50 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	2/11/2012 4:50 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	2/11/2012 4:50 AM
2-Butanone	ND	800	U	ppbv	800	2/11/2012 4:50 AM
2-Hexanone	ND	800	U	ppbv	800	2/11/2012 4:50 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	2/11/2012 4:50 AM
Acetone	1,000	800		ppbv	800	2/11/2012 4:50 AM
Benzene	6,900	800		ppbv	800	2/11/2012 4:50 AM
Benzyl chloride	ND	800	U	ppbv	800	2/11/2012 4:50 AM
Bromodichloromethane	ND	800	U	ppbv	800	2/11/2012 4:50 AM
Bromoform	ND	800	U	ppbv	800	2/11/2012 4:50 AM
Bromomethane	ND	800	U	ppbv	800	2/11/2012 4:50 AM
Carbon disulfide	ND	800	U	ppbv	800	2/11/2012 4:50 AM
Carbon tetrachloride	ND	800	U	ppbv	800	2/11/2012 4:50 AM
Chlorobenzene	ND	800	U	ppbv	800	2/11/2012 4:50 AM
Chlorodibromomethane	ND	800	U	ppbv	800	2/11/2012 4:50 AM
Chloroethane	ND	800	U	ppbv	800	2/11/2012 4:50 AM
Chloroform	ND	800	U	ppbv	800	2/11/2012 4:50 AM
Chloromethane	ND	800	U	ppbv	800	2/11/2012 4:50 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	2/11/2012 4:50 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	2/11/2012 4:50 AM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 1:59:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-010	**Matrix:**	Air
Client Sample ID:	VA1131		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	10,000	1,600		ppbv	800	2/11/2012 4:50 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	2/11/2012 4:50 AM
Ethyl acetate	ND	800	U	ppbv	800	2/11/2012 4:50 AM
Ethylbenzene	850	1,600	J	ppbv	800	2/11/2012 4:50 AM
Heptane	8,900	800		ppbv	800	2/11/2012 4:50 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	2/11/2012 4:50 AM
m,p-Xylene	2,200	1,600		ppbv	800	2/11/2012 4:50 AM
Methylene chloride	ND	4,000	U	ppbv	800	2/11/2012 4:50 AM
n-Hexane	8,000	1,600		ppbv	800	2/11/2012 4:50 AM
Naphthalene	ND	800	U	ppbv	800	2/11/2012 4:50 AM
o-Xylene	ND	800	U	ppbv	800	2/11/2012 4:50 AM
Propylene	2,100	800		ppbv	800	2/11/2012 4:50 AM
Styrene	ND	800	U	ppbv	800	2/11/2012 4:50 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	2/11/2012 4:50 AM
Tetrachloroethene	ND	800	U	ppbv	800	2/11/2012 4:50 AM
Tetrahydrofuran	ND	800	U	ppbv	800	2/11/2012 4:50 AM
Toluene	19,000	800		ppbv	800	2/11/2012 4:50 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	2/11/2012 4:50 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	2/11/2012 4:50 AM
Trichloroethene	ND	800	U	ppbv	800	2/11/2012 4:50 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	2/11/2012 4:50 AM
Vinyl acetate	ND	800	U	ppbv	800	2/11/2012 4:50 AM
Vinyl chloride	ND	800	U	ppbv	800	2/11/2012 4:50 AM
Xylenes, Total	2,200	2,400	J	ppbv	800	2/11/2012 4:50 AM
Surr: 4-Bromofluorobenzene	99.3	70-130		%REC	800	2/11/2012 4:50 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	880,000	94,000		µg/m³	800	2/8/2012 9:27 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	2/8/2012 9:27 PM
C9-C12 Aliphatic Hydrocarbons	30,000	150,000	J	µg/m³	800	2/8/2012 9:27 PM
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	800	2/8/2012 9:27 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 2:27:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-011	**Matrix:**	Air
Client Sample ID:	VA1132		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.45	0.10		%	1	2/2/2012 1:44 PM
Carbon Monoxide	ND	0.10	U	%	1	2/2/2012 1:44 PM
Methane	ND	0.50	U	%	1	2/2/2012 1:44 PM
Nitrogen	79	0.10		%	1	2/2/2012 1:44 PM
Oxygen	20	0.10		%	1	2/2/2012 1:44 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	2/11/2012 5:39 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	2/11/2012 5:39 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	2/11/2012 5:39 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	2/11/2012 5:39 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	2/11/2012 5:39 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	2/11/2012 5:39 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	2/11/2012 5:39 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	2/11/2012 5:39 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	2/11/2012 5:39 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	2/11/2012 5:39 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	2/11/2012 5:39 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	2/11/2012 5:39 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	2/11/2012 5:39 AM
1,3-Butadiene	ND	800	U	ppbv	800	2/11/2012 5:39 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	2/11/2012 5:39 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	2/11/2012 5:39 AM
2-Butanone	ND	800	U	ppbv	800	2/11/2012 5:39 AM
2-Hexanone	ND	800	U	ppbv	800	2/11/2012 5:39 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	2/11/2012 5:39 AM
Acetone	ND	800	U	ppbv	800	2/11/2012 5:39 AM
Benzene	2,400	800		ppbv	800	2/11/2012 5:39 AM
Benzyl chloride	ND	800	U	ppbv	800	2/11/2012 5:39 AM
Bromodichloromethane	ND	800	U	ppbv	800	2/11/2012 5:39 AM
Bromoform	ND	800	U	ppbv	800	2/11/2012 5:39 AM
Bromomethane	ND	800	U	ppbv	800	2/11/2012 5:39 AM
Carbon disulfide	ND	800	U	ppbv	800	2/11/2012 5:39 AM
Carbon tetrachloride	ND	800	U	ppbv	800	2/11/2012 5:39 AM
Chlorobenzene	ND	800	U	ppbv	800	2/11/2012 5:39 AM
Chlorodibromomethane	ND	800	U	ppbv	800	2/11/2012 5:39 AM
Chloroethane	ND	800	U	ppbv	800	2/11/2012 5:39 AM
Chloroform	ND	800	U	ppbv	800	2/11/2012 5:39 AM
Chloromethane	ND	800	U	ppbv	800	2/11/2012 5:39 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	2/11/2012 5:39 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	2/11/2012 5:39 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 2:27:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-011	**Matrix:**	Air
Client Sample ID:	VA1132		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	3,700	1,600		ppbv	800	2/11/2012 5:39 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	2/11/2012 5:39 AM
Ethyl acetate	ND	800	U	ppbv	800	2/11/2012 5:39 AM
Ethylbenzene	ND	1,600	U	ppbv	800	2/11/2012 5:39 AM
Heptane	3,600	800		ppbv	800	2/11/2012 5:39 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	2/11/2012 5:39 AM
m,p-Xylene	940	1,600	J	ppbv	800	2/11/2012 5:39 AM
Methylene chloride	ND	4,000	U	ppbv	800	2/11/2012 5:39 AM
n-Hexane	2,800	1,600		ppbv	800	2/11/2012 5:39 AM
Naphthalene	ND	800	U	ppbv	800	2/11/2012 5:39 AM
o-Xylene	ND	800	U	ppbv	800	2/11/2012 5:39 AM
Propylene	2,000	800		ppbv	800	2/11/2012 5:39 AM
Styrene	ND	800	U	ppbv	800	2/11/2012 5:39 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	2/11/2012 5:39 AM
Tetrachloroethene	ND	800	U	ppbv	800	2/11/2012 5:39 AM
Tetrahydrofuran	ND	800	U	ppbv	800	2/11/2012 5:39 AM
Toluene	6,300	800		ppbv	800	2/11/2012 5:39 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	2/11/2012 5:39 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	2/11/2012 5:39 AM
Trichloroethene	ND	800	U	ppbv	800	2/11/2012 5:39 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	2/11/2012 5:39 AM
Vinyl acetate	ND	800	U	ppbv	800	2/11/2012 5:39 AM
Vinyl chloride	ND	800	U	ppbv	800	2/11/2012 5:39 AM
Xylenes, Total	940	2,400	J	ppbv	800	2/11/2012 5:39 AM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	800	2/11/2012 5:39 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	630,000	94,000		µg/m³	800	2/8/2012 10:13 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	2/8/2012 10:13 PM
C9-C12 Aliphatic Hydrocarbons	30,000	150,000	J	µg/m³	800	2/8/2012 10:13 PM
Surr: 4-Bromofluorobenzene	99.2	70-130		%REC	800	2/8/2012 10:13 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 3:00:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-012	**Matrix:**	Air
Client Sample ID:	VA1133		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.062	0.10	J	%	1	2/2/2012 3:23 PM
Carbon Monoxide	ND	0.10	U	%	1	2/2/2012 3:23 PM
Methane	ND	0.50	U	%	1	2/2/2012 3:23 PM
Nitrogen	80	0.10		%	1	2/2/2012 3:23 PM
Oxygen	21	0.10		%	1	2/2/2012 3:23 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	2/10/2012 12:11 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	2/10/2012 12:11 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	2/10/2012 12:11 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	2/10/2012 12:11 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	2/10/2012 12:11 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	2/10/2012 12:11 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	2/10/2012 12:11 PM
1,2,4-Trimethylbenzene	100	40		ppbv	40	2/10/2012 12:11 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	2/10/2012 12:11 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	2/10/2012 12:11 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	2/10/2012 12:11 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	2/10/2012 12:11 PM
1,3,5-Trimethylbenzene	50	40		ppbv	40	2/10/2012 12:11 PM
1,3-Butadiene	ND	40	U	ppbv	40	2/10/2012 12:11 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	2/10/2012 12:11 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	2/10/2012 12:11 PM
2-Butanone	ND	40	U	ppbv	40	2/10/2012 12:11 PM
2-Hexanone	ND	40	U	ppbv	40	2/10/2012 12:11 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	2/10/2012 12:11 PM
Acetone	ND	40	U	ppbv	40	2/10/2012 12:11 PM
Benzene	3,700	400		ppbv	400	2/11/2012 6:31 AM
Benzyl chloride	ND	40	U	ppbv	40	2/10/2012 12:11 PM
Bromodichloromethane	ND	40	U	ppbv	40	2/10/2012 12:11 PM
Bromoform	ND	40	U	ppbv	40	2/10/2012 12:11 PM
Bromomethane	ND	40	U	ppbv	40	2/10/2012 12:11 PM
Carbon disulfide	ND	40	U	ppbv	40	2/10/2012 12:11 PM
Carbon tetrachloride	ND	40	U	ppbv	40	2/10/2012 12:11 PM
Chlorobenzene	ND	40	U	ppbv	40	2/10/2012 12:11 PM
Chlorodibromomethane	ND	40	U	ppbv	40	2/10/2012 12:11 PM
Chloroethane	ND	40	U	ppbv	40	2/10/2012 12:11 PM
Chloroform	ND	40	U	ppbv	40	2/10/2012 12:11 PM
Chloromethane	ND	40	U	ppbv	40	2/10/2012 12:11 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	2/10/2012 12:11 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	2/10/2012 12:11 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 3:00:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-012	**Matrix:**	Air
Client Sample ID:	VA1133		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	5,800	800		ppbv	400	2/11/2012 6:31 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	2/10/2012 12:11 PM
Ethyl acetate	ND	40	U	ppbv	40	2/10/2012 12:11 PM
Ethylbenzene	770	80		ppbv	40	2/10/2012 12:11 PM
Heptane	5,300	400		ppbv	400	2/11/2012 6:31 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	2/10/2012 12:11 PM
m,p-Xylene	1,900	80		ppbv	40	2/10/2012 12:11 PM
Methylene chloride	ND	200	U	ppbv	40	2/10/2012 12:11 PM
n-Hexane	4,600	800		ppbv	400	2/11/2012 6:31 AM
Naphthalene	ND	40	U	ppbv	40	2/10/2012 12:11 PM
o-Xylene	520	40		ppbv	40	2/10/2012 12:11 PM
Propylene	120	40		ppbv	40	2/10/2012 12:11 PM
Styrene	ND	40	U	ppbv	40	2/10/2012 12:11 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	2/10/2012 12:11 PM
Tetrachloroethene	ND	40	U	ppbv	40	2/10/2012 12:11 PM
Tetrahydrofuran	ND	40	U	ppbv	40	2/10/2012 12:11 PM
Toluene	11,000	400		ppbv	400	2/11/2012 6:31 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	2/10/2012 12:11 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	2/10/2012 12:11 PM
Trichloroethene	ND	40	U	ppbv	40	2/10/2012 12:11 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	2/10/2012 12:11 PM
Vinyl acetate	ND	40	U	ppbv	40	2/10/2012 12:11 PM
Vinyl chloride	ND	40	U	ppbv	40	2/10/2012 12:11 PM
Xylenes, Total	2,400	120		ppbv	40	2/10/2012 12:11 PM
Surr: 4-Bromofluorobenzene	120	70-130		%REC	40	2/10/2012 12:11 PM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	180,000	47,000		µg/m³	400	2/9/2012 3:53 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	2/9/2012 3:53 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	2/9/2012 3:53 PM
Surr: 4-Bromofluorobenzene	93.8	70-130		%REC	400	2/9/2012 3:53 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 3:34:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-013	**Matrix:**	Air
Client Sample ID:	VA1134		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.058	0.10	J	%	1	2/6/2012 10:24 AM
Carbon Monoxide	ND	0.10	U	%	1	2/6/2012 10:24 AM
Methane	ND	0.50	U	%	1	2/6/2012 10:24 AM
Nitrogen	79	0.10		%	1	2/6/2012 10:24 AM
Oxygen	21	0.10		%	1	2/6/2012 10:24 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	2/11/2012 4:53 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	2/11/2012 4:53 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	2/11/2012 4:53 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	2/11/2012 4:53 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	2/11/2012 4:53 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	2/11/2012 4:53 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	2/11/2012 4:53 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	2/11/2012 4:53 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	2/11/2012 4:53 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	2/11/2012 4:53 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	2/11/2012 4:53 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	2/11/2012 4:53 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	2/11/2012 4:53 PM
1,3-Butadiene	ND	800	U	ppbv	800	2/11/2012 4:53 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	2/11/2012 4:53 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	2/11/2012 4:53 PM
2-Butanone	ND	800	U	ppbv	800	2/11/2012 4:53 PM
2-Hexanone	ND	800	U	ppbv	800	2/11/2012 4:53 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	2/11/2012 4:53 PM
Acetone	1,200	800		ppbv	800	2/11/2012 4:53 PM
Benzene	2,700	800		ppbv	800	2/11/2012 4:53 PM
Benzyl chloride	ND	800	U	ppbv	800	2/11/2012 4:53 PM
Bromodichloromethane	ND	800	U	ppbv	800	2/11/2012 4:53 PM
Bromoform	ND	800	U	ppbv	800	2/11/2012 4:53 PM
Bromomethane	ND	800	U	ppbv	800	2/11/2012 4:53 PM
Carbon disulfide	ND	800	U	ppbv	800	2/11/2012 4:53 PM
Carbon tetrachloride	ND	800	U	ppbv	800	2/11/2012 4:53 PM
Chlorobenzene	ND	800	U	ppbv	800	2/11/2012 4:53 PM
Chlorodibromomethane	ND	800	U	ppbv	800	2/11/2012 4:53 PM
Chloroethane	ND	800	U	ppbv	800	2/11/2012 4:53 PM
Chloroform	ND	800	U	ppbv	800	2/11/2012 4:53 PM
Chloromethane	ND	800	U	ppbv	800	2/11/2012 4:53 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	2/11/2012 4:53 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	2/11/2012 4:53 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 3:34:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-013	**Matrix:**	Air
Client Sample ID:	VA1134		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	4,700	1,600		ppbv	800	2/11/2012 4:53 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	2/11/2012 4:53 PM
Ethyl acetate	ND	800	U	ppbv	800	2/11/2012 4:53 PM
Ethylbenzene	ND	1,600	U	ppbv	800	2/11/2012 4:53 PM
Heptane	3,700	800		ppbv	800	2/11/2012 4:53 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	2/11/2012 4:53 PM
m,p-Xylene	1,100	1,600	J	ppbv	800	2/11/2012 4:53 PM
Methylene chloride	ND	4,000	U	ppbv	800	2/11/2012 4:53 PM
n-Hexane	4,000	1,600		ppbv	800	2/11/2012 4:53 PM
Naphthalene	ND	800	U	ppbv	800	2/11/2012 4:53 PM
o-Xylene	ND	800	U	ppbv	800	2/11/2012 4:53 PM
Propylene	2,100	800		ppbv	800	2/11/2012 4:53 PM
Styrene	ND	800	U	ppbv	800	2/11/2012 4:53 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	2/11/2012 4:53 PM
Tetrachloroethene	ND	800	U	ppbv	800	2/11/2012 4:53 PM
Tetrahydrofuran	ND	800	U	ppbv	800	2/11/2012 4:53 PM
Toluene	5,800	800		ppbv	800	2/11/2012 4:53 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	2/11/2012 4:53 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	2/11/2012 4:53 PM
Trichloroethene	ND	800	U	ppbv	800	2/11/2012 4:53 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	2/11/2012 4:53 PM
Vinyl acetate	ND	800	U	ppbv	800	2/11/2012 4:53 PM
Vinyl chloride	ND	800	U	ppbv	800	2/11/2012 4:53 PM
Xylenes, Total	1,100	2,400	J	ppbv	800	2/11/2012 4:53 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	800	2/11/2012 4:53 PM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	480,000	94,000		µg/m³	800	2/9/2012 5:24 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	2/9/2012 5:24 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	2/9/2012 5:24 PM
Surr: 4-Bromofluorobenzene	97.9	70-130		%REC	800	2/9/2012 5:24 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 4:10:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-014	**Matrix:**	Air
Client Sample ID:	VA1135		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.047	0.10	J	%	1	2/6/2012 10:45 AM
Carbon Monoxide	ND	0.10	U	%	1	2/6/2012 10:45 AM
Methane	ND	0.50	U	%	1	2/6/2012 10:45 AM
Nitrogen	79	0.10		%	1	2/6/2012 10:45 AM
Oxygen	21	0.10		%	1	2/6/2012 10:45 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: rd2**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	2/15/2012 3:31 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	2/15/2012 3:31 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	2/15/2012 3:31 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	2/15/2012 3:31 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	2/15/2012 3:31 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	2/15/2012 3:31 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	2/15/2012 3:31 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	2/15/2012 3:31 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	2/15/2012 3:31 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	2/15/2012 3:31 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	2/15/2012 3:31 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	2/15/2012 3:31 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	2/15/2012 3:31 AM
1,3-Butadiene	ND	800	U	ppbv	800	2/15/2012 3:31 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	2/15/2012 3:31 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	2/15/2012 3:31 AM
2-Butanone	ND	800	U	ppbv	800	2/15/2012 3:31 AM
2-Hexanone	ND	800	U	ppbv	800	2/15/2012 3:31 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	2/15/2012 3:31 AM
Acetone	ND	800	U	ppbv	800	2/15/2012 3:31 AM
Benzene	2,800	800		ppbv	800	2/15/2012 3:31 AM
Benzyl chloride	ND	800	U	ppbv	800	2/15/2012 3:31 AM
Bromodichloromethane	ND	800	U	ppbv	800	2/15/2012 3:31 AM
Bromoform	ND	800	U	ppbv	800	2/15/2012 3:31 AM
Bromomethane	ND	800	U	ppbv	800	2/15/2012 3:31 AM
Carbon disulfide	ND	800	U	ppbv	800	2/15/2012 3:31 AM
Carbon tetrachloride	ND	800	U	ppbv	800	2/15/2012 3:31 AM
Chlorobenzene	ND	800	U	ppbv	800	2/15/2012 3:31 AM
Chlorodibromomethane	ND	800	U	ppbv	800	2/15/2012 3:31 AM
Chloroethane	ND	800	U	ppbv	800	2/15/2012 3:31 AM
Chloroform	ND	800	U	ppbv	800	2/15/2012 3:31 AM
Chloromethane	ND	800	U	ppbv	800	2/15/2012 3:31 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	2/15/2012 3:31 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	2/15/2012 3:31 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 4:10:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-014	**Matrix:**	Air
Client Sample ID:	VA1135		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	11,000	1,600		ppbv	800	2/15/2012 3:31 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	2/15/2012 3:31 AM
Ethyl acetate	ND	800	U	ppbv	800	2/15/2012 3:31 AM
Ethylbenzene	ND	1,600	U	ppbv	800	2/15/2012 3:31 AM
Heptane	4,600	800		ppbv	800	2/15/2012 3:31 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	2/15/2012 3:31 AM
m,p-Xylene	1,100	1,600	J	ppbv	800	2/15/2012 3:31 AM
Methylene chloride	ND	4,000	U	ppbv	800	2/15/2012 3:31 AM
n-Hexane	7,900	1,600		ppbv	800	2/15/2012 3:31 AM
Naphthalene	ND	800	U	ppbv	800	2/15/2012 3:31 AM
o-Xylene	ND	800	U	ppbv	800	2/15/2012 3:31 AM
Propylene	4,500	800		ppbv	800	2/15/2012 3:31 AM
Styrene	ND	800	U	ppbv	800	2/15/2012 3:31 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	2/15/2012 3:31 AM
Tetrachloroethene	ND	800	U	ppbv	800	2/15/2012 3:31 AM
Tetrahydrofuran	ND	800	U	ppbv	800	2/15/2012 3:31 AM
Toluene	7,200	800		ppbv	800	2/15/2012 3:31 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	2/15/2012 3:31 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	2/15/2012 3:31 AM
Trichloroethene	ND	800	U	ppbv	800	2/15/2012 3:31 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	2/15/2012 3:31 AM
Vinyl acetate	ND	800	U	ppbv	800	2/15/2012 3:31 AM
Vinyl chloride	ND	800	U	ppbv	800	2/15/2012 3:31 AM
Xylenes, Total	1,100	2,400	J	ppbv	800	2/15/2012 3:31 AM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	800	2/15/2012 3:31 AM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RH3**
C5-C8 Aliphatic Hydrocarbons	6,600,000	940,000		µg/m³	8000	2/9/2012 1:02 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	2/9/2012 1:02 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	2/9/2012 1:02 AM
Surr: 4-Bromofluorobenzene	93.7	70-130		%REC	8000	2/9/2012 1:02 AM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/20/2012 9:50:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-015	**Matrix:**	Air
Client Sample ID:	VA1136		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.046	0.10	J	%	1	2/6/2012 11:00 AM
Carbon Monoxide	ND	0.10	U	%	1	2/6/2012 11:00 AM
Methane	ND	0.50	U	%	1	2/6/2012 11:00 AM
Nitrogen	78	0.10		%	1	2/6/2012 11:00 AM
Oxygen	21	0.10		%	1	2/6/2012 11:00 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
2-Butanone	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
2-Hexanone	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Acetone	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Benzene	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Bromoform	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Bromomethane	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Chloroethane	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Chloroform	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Chloromethane	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/20/2012 9:50:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-015	**Matrix:**	Air
Client Sample ID:	VA1136		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	23,000	16,000		ppbv	8000	2/11/2012 10:09 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	2/11/2012 10:09 PM
Heptane	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	2/11/2012 10:09 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	2/11/2012 10:09 PM
Methylene chloride	ND	40,000	U	ppbv	8000	2/11/2012 10:09 PM
n-Hexane	25,000	16,000		ppbv	8000	2/11/2012 10:09 PM
Naphthalene	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
o-Xylene	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Propylene	25,000	8,000		ppbv	8000	2/11/2012 10:09 PM
Styrene	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Toluene	13,000	8,000		ppbv	8000	2/11/2012 10:09 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Trichloroethene	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	2/11/2012 10:09 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	2/11/2012 10:09 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	8000	2/11/2012 10:09 PM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	11,000,000	940,000		µg/m³	8000	2/9/2012 11:47 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	2/9/2012 11:47 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	2/9/2012 11:47 PM
Surr: 4-Bromofluorobenzene	91.8	70-130		%REC	8000	2/9/2012 11:47 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 12:21:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-016	**Matrix:**	Air
Client Sample ID:	VA1146		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.046	0.10	J	%	1	2/6/2012 11:20 AM
Carbon Monoxide	ND	0.10	U	%	1	2/6/2012 11:20 AM
Methane	ND	0.50	U	%	1	2/6/2012 11:20 AM
Nitrogen	79	0.10		%	1	2/6/2012 11:20 AM
Oxygen	21	0.10		%	1	2/6/2012 11:20 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	2/7/2012 1:02 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	2/7/2012 1:02 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	2/7/2012 1:02 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	2/7/2012 1:02 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	2/7/2012 1:02 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	2/7/2012 1:02 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	2/7/2012 1:02 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	2/7/2012 1:02 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	2/7/2012 1:02 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	2/7/2012 1:02 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	2/7/2012 1:02 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	2/7/2012 1:02 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	2/7/2012 1:02 AM
1,3-Butadiene	ND	800	U	ppbv	800	2/7/2012 1:02 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	2/7/2012 1:02 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	2/7/2012 1:02 AM
2-Butanone	ND	800	U	ppbv	800	2/7/2012 1:02 AM
2-Hexanone	ND	800	U	ppbv	800	2/7/2012 1:02 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	2/7/2012 1:02 AM
Acetone	1,200	800		ppbv	800	2/7/2012 1:02 AM
Benzene	7,700	800		ppbv	800	2/7/2012 1:02 AM
Benzyl chloride	ND	800	U	ppbv	800	2/7/2012 1:02 AM
Bromodichloromethane	ND	800	U	ppbv	800	2/7/2012 1:02 AM
Bromoform	ND	800	U	ppbv	800	2/7/2012 1:02 AM
Bromomethane	ND	800	U	ppbv	800	2/7/2012 1:02 AM
Carbon disulfide	ND	800	U	ppbv	800	2/7/2012 1:02 AM
Carbon tetrachloride	ND	800	U	ppbv	800	2/7/2012 1:02 AM
Chlorobenzene	ND	800	U	ppbv	800	2/7/2012 1:02 AM
Chlorodibromomethane	ND	800	U	ppbv	800	2/7/2012 1:02 AM
Chloroethane	ND	800	U	ppbv	800	2/7/2012 1:02 AM
Chloroform	ND	800	U	ppbv	800	2/7/2012 1:02 AM
Chloromethane	ND	800	U	ppbv	800	2/7/2012 1:02 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	2/7/2012 1:02 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	2/7/2012 1:02 AM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 12:21:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-016	**Matrix:**	Air
Client Sample ID:	VA1146		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	23,000	1,600		ppbv	800	2/7/2012 1:02 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	2/7/2012 1:02 AM
Ethyl acetate	ND	800	U	ppbv	800	2/7/2012 1:02 AM
Ethylbenzene	ND	1,600	U	ppbv	800	2/7/2012 1:02 AM
Heptane	6,200	800		ppbv	800	2/7/2012 1:02 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	2/7/2012 1:02 AM
m,p-Xylene	1,100	1,600	J	ppbv	800	2/7/2012 1:02 AM
Methylene chloride	ND	4,000	U	ppbv	800	2/7/2012 1:02 AM
n-Hexane	12,000	1,600		ppbv	800	2/7/2012 1:02 AM
Naphthalene	ND	800	U	ppbv	800	2/7/2012 1:02 AM
o-Xylene	ND	800	U	ppbv	800	2/7/2012 1:02 AM
Propylene	1,200	800		ppbv	800	2/7/2012 1:02 AM
Styrene	ND	800	U	ppbv	800	2/7/2012 1:02 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	2/7/2012 1:02 AM
Tetrachloroethene	ND	800	U	ppbv	800	2/7/2012 1:02 AM
Tetrahydrofuran	ND	800	U	ppbv	800	2/7/2012 1:02 AM
Toluene	11,000	800		ppbv	800	2/7/2012 1:02 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	2/7/2012 1:02 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	2/7/2012 1:02 AM
Trichloroethene	ND	800	U	ppbv	800	2/7/2012 1:02 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	2/7/2012 1:02 AM
Vinyl acetate	ND	800	U	ppbv	800	2/7/2012 1:02 AM
Vinyl chloride	ND	800	U	ppbv	800	2/7/2012 1:02 AM
Xylenes, Total	1,100	2,400	J	ppbv	800	2/7/2012 1:02 AM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	800	2/7/2012 1:02 AM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	550,000	94,000		µg/m³	800	2/6/2012 5:47 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	2/6/2012 5:47 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	2/6/2012 5:47 PM
Surr: 4-Bromofluorobenzene	94.0	70-130		%REC	800	2/6/2012 5:47 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 12:56:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-017	**Matrix:**	Air
Client Sample ID:	VA1147		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.045	0.10	J	%	1	2/6/2012 11:35 AM
Carbon Monoxide	ND	0.10	U	%	1	2/6/2012 11:35 AM
Methane	ND	0.50	U	%	1	2/6/2012 11:35 AM
Nitrogen	78	0.10		%	1	2/6/2012 11:35 AM
Oxygen	21	0.10		%	1	2/6/2012 11:35 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
2-Butanone	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
2-Hexanone	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
Acetone	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
Benzene	290,000	8,000		ppbv	8000	2/3/2012 12:57 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
Bromoform	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
Bromomethane	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
Chloroethane	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
Chloroform	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
Chloromethane	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 12:56:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-017	**Matrix:**	Air
Client Sample ID:	VA1147		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	350,000	40,000		ppbv	20000	2/7/2012 2:32 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
Ethylbenzene	11,000	16,000	J	ppbv	8000	2/3/2012 12:57 AM
Heptane	380,000	8,000		ppbv	8000	2/3/2012 12:57 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	2/3/2012 12:57 AM
m,p-Xylene	24,000	16,000		ppbv	8000	2/3/2012 12:57 AM
Methylene chloride	ND	40,000	U	ppbv	8000	2/3/2012 12:57 AM
n-Hexane	300,000	40,000		ppbv	20000	2/7/2012 2:32 AM
Naphthalene	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
o-Xylene	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
Propylene	17,000	8,000		ppbv	8000	2/3/2012 12:57 AM
Styrene	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
Toluene	390,000	8,000		ppbv	8000	2/3/2012 12:57 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
Trichloroethene	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	2/3/2012 12:57 AM
Xylenes, Total	24,000	24,000		ppbv	8000	2/3/2012 12:57 AM
Surr: 4-Bromofluorobenzene	110	70-130		%REC	8000	2/3/2012 12:57 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	8,200,000	2,300,000		µg/m³	20000	2/3/2012 6:30 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	2/3/2012 6:30 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	2/3/2012 6:30 PM
Surr: 4-Bromofluorobenzene	91.3	70-130		%REC	20000	2/3/2012 6:30 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 1:30:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-018	**Matrix:**	Air
Client Sample ID:	VA1148		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.078	0.10	J	%	1	2/6/2012 11:55 AM
Carbon Monoxide	ND	0.10	U	%	1	2/6/2012 11:55 AM
Methane	ND	0.50	U	%	1	2/6/2012 11:55 AM
Nitrogen	79	0.10		%	1	2/6/2012 11:55 AM
Oxygen	21	0.10		%	1	2/6/2012 11:55 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
1,3-Butadiene	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
2-Butanone	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
2-Hexanone	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
Acetone	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
Benzene	710,000	20,000		ppbv	20000	2/6/2012 6:41 PM
Benzyl chloride	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
Bromodichloromethane	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
Bromoform	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
Bromomethane	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
Carbon disulfide	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
Chlorobenzene	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
Chloroethane	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
Chloroform	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
Chloromethane	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 1:30:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-018	**Matrix:**	Air
Client Sample ID:	VA1148		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,800,000	80,000		ppbv	40000	2/10/2012 12:40 AM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
Ethyl acetate	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
Ethylbenzene	ND	40,000	U	ppbv	20000	2/6/2012 6:41 PM
Heptane	1,000,000	40,000		ppbv	40000	2/10/2012 12:40 AM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	2/6/2012 6:41 PM
m,p-Xylene	32,000	40,000	J	ppbv	20000	2/6/2012 6:41 PM
Methylene chloride	ND	100,000	U	ppbv	20000	2/6/2012 6:41 PM
n-Hexane	1,700,000	80,000		ppbv	40000	2/10/2012 12:40 AM
Naphthalene	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
o-Xylene	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
Propylene	42,000	20,000		ppbv	20000	2/6/2012 6:41 PM
Styrene	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
Tetrachloroethene	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
Toluene	860,000	20,000		ppbv	20000	2/6/2012 6:41 PM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
Trichloroethene	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
Vinyl acetate	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
Vinyl chloride	ND	20,000	U	ppbv	20000	2/6/2012 6:41 PM
Xylenes, Total	32,000	60,000	J	ppbv	20000	2/6/2012 6:41 PM
Surr: 4-Bromofluorobenzene	111	70-130		%REC	20000	2/6/2012 6:41 PM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	39,000,000	2,300,000		µg/m³	20000	2/6/2012 6:30 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	2/6/2012 6:30 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	2/6/2012 6:30 PM
Surr: 4-Bromofluorobenzene	93.8	70-130		%REC	20000	2/6/2012 6:30 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 1:30:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-019	**Matrix:**	Air
Client Sample ID:	VA1149		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.047	0.10	J	%	1	2/6/2012 12:32 PM
Carbon Monoxide	ND	0.10	U	%	1	2/6/2012 12:32 PM
Methane	ND	0.50	U	%	1	2/6/2012 12:32 PM
Nitrogen	79	0.10		%	1	2/6/2012 12:32 PM
Oxygen	21	0.10		%	1	2/6/2012 12:32 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
1,3-Butadiene	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
2-Butanone	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
2-Hexanone	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
Acetone	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
Benzene	690,000	20,000		ppbv	20000	2/6/2012 7:28 PM
Benzyl chloride	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
Bromodichloromethane	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
Bromoform	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
Bromomethane	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
Carbon disulfide	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
Chlorobenzene	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
Chloroethane	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
Chloroform	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
Chloromethane	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 1:30:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-019	**Matrix:**	Air
Client Sample ID:	VA1149		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,600,000	80,000		ppbv	40000	2/10/2012 1:26 AM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
Ethyl acetate	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
Ethylbenzene	ND	40,000	U	ppbv	20000	2/6/2012 7:28 PM
Heptane	930,000	40,000		ppbv	40000	2/10/2012 1:26 AM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	2/6/2012 7:28 PM
m,p-Xylene	39,000	40,000	J	ppbv	20000	2/6/2012 7:28 PM
Methylene chloride	ND	100,000	U	ppbv	20000	2/6/2012 7:28 PM
n-Hexane	1,500,000	80,000		ppbv	40000	2/10/2012 1:26 AM
Naphthalene	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
o-Xylene	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
Propylene	40,000	20,000		ppbv	20000	2/6/2012 7:28 PM
Styrene	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
Tetrachloroethene	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
Toluene	930,000	20,000		ppbv	20000	2/6/2012 7:28 PM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
Trichloroethene	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
Vinyl acetate	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
Vinyl chloride	ND	20,000	U	ppbv	20000	2/6/2012 7:28 PM
Xylenes, Total	39,000	60,000	J	ppbv	20000	2/6/2012 7:28 PM
Surr: 4-Bromofluorobenzene	111	70-130		%REC	20000	2/6/2012 7:28 PM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	31,000,000	2,300,000		µg/m³	20000	2/6/2012 7:12 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	2/6/2012 7:12 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	2/6/2012 7:12 PM
Surr: 4-Bromofluorobenzene	92.7	70-130		%REC	20000	2/6/2012 7:12 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 3:08:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-020	**Matrix:**	Air
Client Sample ID:	VA1150		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	1.6	0.10		%	1	2/6/2012 12:49 PM
Carbon Monoxide	ND	0.10	U	%	1	2/6/2012 12:49 PM
Methane	ND	0.50	U	%	1	2/6/2012 12:49 PM
Nitrogen	82	0.10		%	1	2/6/2012 12:49 PM
Oxygen	15	0.10		%	1	2/6/2012 12:49 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
1,3-Butadiene	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
2-Butanone	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
2-Hexanone	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
Acetone	36,000	20,000		ppbv	20000	2/6/2012 9:03 PM
Benzene	960,000	40,000		ppbv	40000	2/10/2012 3:01 AM
Benzyl chloride	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
Bromodichloromethane	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
Bromoform	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
Bromomethane	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
Carbon disulfide	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
Chlorobenzene	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
Chloroethane	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
Chloroform	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
Chloromethane	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 3:08:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-020	**Matrix:**	Air
Client Sample ID:	VA1150		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,200,000	160,000		ppbv	80000	2/10/2012 3:46 AM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
Ethyl acetate	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
Ethylbenzene	ND	40,000	U	ppbv	20000	2/6/2012 9:03 PM
Heptane	1,300,000	40,000		ppbv	40000	2/10/2012 3:01 AM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	2/6/2012 9:03 PM
m,p-Xylene	32,000	40,000	J	ppbv	20000	2/6/2012 9:03 PM
Methylene chloride	ND	100,000	U	ppbv	20000	2/6/2012 9:03 PM
n-Hexane	3,100,000	160,000		ppbv	80000	2/10/2012 3:46 AM
Naphthalene	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
o-Xylene	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
Propylene	63,000	20,000		ppbv	20000	2/6/2012 9:03 PM
Styrene	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
Tetrachloroethene	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
Toluene	740,000	40,000		ppbv	40000	2/10/2012 3:01 AM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
Trichloroethene	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
Vinyl acetate	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
Vinyl chloride	ND	20,000	U	ppbv	20000	2/6/2012 9:03 PM
Xylenes, Total	32,000	60,000	J	ppbv	20000	2/6/2012 9:03 PM
Surr: 4-Bromofluorobenzene	111	70-130		%REC	20000	2/6/2012 9:03 PM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	79,000,000	4,700,000		µg/m³	40000	2/7/2012 5:26 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300,000	U	µg/m³	40000	2/7/2012 5:26 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600,000	U	µg/m³	40000	2/7/2012 5:26 PM
Surr: 4-Bromofluorobenzene	93.4	70-130		%REC	40000	2/7/2012 5:26 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/20/2012 10:14:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-021	**Matrix:**	Air
Client Sample ID:	VA1164		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.53	0.10		%	1	2/6/2012 1:46 PM
Carbon Monoxide	ND	0.10	U	%	1	2/6/2012 1:46 PM
Methane	ND	0.50	U	%	1	2/6/2012 1:46 PM
Nitrogen	80	0.10		%	1	2/6/2012 1:46 PM
Oxygen	20	0.10		%	1	2/6/2012 1:46 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: rd2**
1,1,1-Trichloroethane	ND	200	U	ppbv	200	2/15/2012 5:14 AM
1,1,2,2-Tetrachloroethane	ND	200	U	ppbv	200	2/15/2012 5:14 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	200	U	ppbv	200	2/15/2012 5:14 AM
1,1,2-Trichloroethane	ND	200	U	ppbv	200	2/15/2012 5:14 AM
1,1-Dichloroethane	ND	200	U	ppbv	200	2/15/2012 5:14 AM
1,1-Dichloroethene	ND	200	U	ppbv	200	2/15/2012 5:14 AM
1,2,4-Trichlorobenzene	ND	200	U	ppbv	200	2/15/2012 5:14 AM
1,2,4-Trimethylbenzene	ND	200	U	ppbv	200	2/15/2012 5:14 AM
1,2-Dibromoethane	ND	200	U	ppbv	200	2/15/2012 5:14 AM
1,2-Dichlorobenzene	ND	200	U	ppbv	200	2/15/2012 5:14 AM
1,2-Dichloroethane	ND	200	U	ppbv	200	2/15/2012 5:14 AM
1,2-Dichloropropane	ND	200	U	ppbv	200	2/15/2012 5:14 AM
1,3,5-Trimethylbenzene	ND	200	U	ppbv	200	2/15/2012 5:14 AM
1,3-Butadiene	ND	200	U	ppbv	200	2/15/2012 5:14 AM
1,3-Dichlorobenzene	ND	200	U	ppbv	200	2/15/2012 5:14 AM
1,4-Dichlorobenzene	ND	200	U	ppbv	200	2/15/2012 5:14 AM
2-Butanone	ND	200	U	ppbv	200	2/15/2012 5:14 AM
2-Hexanone	ND	200	U	ppbv	200	2/15/2012 5:14 AM
4-Methyl-2-pentanone	ND	200	U	ppbv	200	2/15/2012 5:14 AM
Acetone	520	200		ppbv	200	2/15/2012 5:14 AM
Benzene	2,300	200		ppbv	200	2/15/2012 5:14 AM
Benzyl chloride	ND	200	U	ppbv	200	2/15/2012 5:14 AM
Bromodichloromethane	ND	200	U	ppbv	200	2/15/2012 5:14 AM
Bromoform	ND	200	U	ppbv	200	2/15/2012 5:14 AM
Bromomethane	ND	200	U	ppbv	200	2/15/2012 5:14 AM
Carbon disulfide	ND	200	U	ppbv	200	2/15/2012 5:14 AM
Carbon tetrachloride	ND	200	U	ppbv	200	2/15/2012 5:14 AM
Chlorobenzene	ND	200	U	ppbv	200	2/15/2012 5:14 AM
Chlorodibromomethane	ND	200	U	ppbv	200	2/15/2012 5:14 AM
Chloroethane	ND	200	U	ppbv	200	2/15/2012 5:14 AM
Chloroform	ND	200	U	ppbv	200	2/15/2012 5:14 AM
Chloromethane	ND	200	U	ppbv	200	2/15/2012 5:14 AM
cis-1,2-Dichloroethene	ND	200	U	ppbv	200	2/15/2012 5:14 AM
cis-1,3-dichloropropene	ND	200	U	ppbv	200	2/15/2012 5:14 AM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/20/2012 10:14:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-021	**Matrix:**	Air
Client Sample ID:	VA1164		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,500	400		ppbv	200	2/15/2012 5:14 AM
Dichlorodifluoromethane	ND	200	U	ppbv	200	2/15/2012 5:14 AM
Ethyl acetate	ND	200	U	ppbv	200	2/15/2012 5:14 AM
Ethylbenzene	ND	400	U	ppbv	200	2/15/2012 5:14 AM
Heptane	1,600	200		ppbv	200	2/15/2012 5:14 AM
Hexachlorobutadiene	ND	400	U	ppbv	200	2/15/2012 5:14 AM
m,p-Xylene	310	400	J	ppbv	200	2/15/2012 5:14 AM
Methylene chloride	990	1,000	J	ppbv	200	2/15/2012 5:14 AM
n-Hexane	2,000	400		ppbv	200	2/15/2012 5:14 AM
Naphthalene	ND	200	U	ppbv	200	2/15/2012 5:14 AM
o-Xylene	ND	200	U	ppbv	200	2/15/2012 5:14 AM
Propylene	630	200		ppbv	200	2/15/2012 5:14 AM
Styrene	ND	200	U	ppbv	200	2/15/2012 5:14 AM
tert-Butyl Methyl Ether	ND	200	U	ppbv	200	2/15/2012 5:14 AM
Tetrachloroethene	ND	200	U	ppbv	200	2/15/2012 5:14 AM
Tetrahydrofuran	ND	200	U	ppbv	200	2/15/2012 5:14 AM
Toluene	4,900	200		ppbv	200	2/15/2012 5:14 AM
trans-1,2-Dichloroethene	ND	200	U	ppbv	200	2/15/2012 5:14 AM
trans-1,3-dichloropropene	ND	200	U	ppbv	200	2/15/2012 5:14 AM
Trichloroethene	ND	200	U	ppbv	200	2/15/2012 5:14 AM
Trichlorofluoromethane	ND	200	U	ppbv	200	2/15/2012 5:14 AM
Vinyl acetate	ND	200	U	ppbv	200	2/15/2012 5:14 AM
Vinyl chloride	ND	200	U	ppbv	200	2/15/2012 5:14 AM
Xylenes, Total	310	600	J	ppbv	200	2/15/2012 5:14 AM
Surr: 4-Bromofluorobenzene	110	70-130		%REC	200	2/15/2012 5:14 AM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	220,000	23,000		µg/m³	200	2/14/2012 2:17 PM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	2/14/2012 2:17 PM
C9-C12 Aliphatic Hydrocarbons	ND	38,000	U	µg/m³	200	2/14/2012 2:17 PM
Surr: 4-Bromofluorobenzene	92.9	70-130		%REC	200	2/14/2012 2:17 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/20/2012 10:45:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-022	**Matrix:**	Air
Client Sample ID:	VA1165		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.64	0.10		%	1	2/6/2012 2:19 PM
Carbon Monoxide	ND	0.10	U	%	1	2/6/2012 2:19 PM
Methane	ND	0.50	U	%	1	2/6/2012 2:19 PM
Nitrogen	80	0.10		%	1	2/6/2012 2:19 PM
Oxygen	20	0.10		%	1	2/6/2012 2:19 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: rd2**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	2/15/2012 6:07 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	2/15/2012 6:07 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	2/15/2012 6:07 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	2/15/2012 6:07 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	2/15/2012 6:07 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	2/15/2012 6:07 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	2/15/2012 6:07 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	2/15/2012 6:07 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	2/15/2012 6:07 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	2/15/2012 6:07 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	2/15/2012 6:07 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	2/15/2012 6:07 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	2/15/2012 6:07 AM
1,3-Butadiene	ND	400	U	ppbv	400	2/15/2012 6:07 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	2/15/2012 6:07 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	2/15/2012 6:07 AM
2-Butanone	ND	400	U	ppbv	400	2/15/2012 6:07 AM
2-Hexanone	ND	400	U	ppbv	400	2/15/2012 6:07 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	2/15/2012 6:07 AM
Acetone	900	400		ppbv	400	2/15/2012 6:07 AM
Benzene	3,300	400		ppbv	400	2/15/2012 6:07 AM
Benzyl chloride	ND	400	U	ppbv	400	2/15/2012 6:07 AM
Bromodichloromethane	ND	400	U	ppbv	400	2/15/2012 6:07 AM
Bromoform	ND	400	U	ppbv	400	2/15/2012 6:07 AM
Bromomethane	ND	400	U	ppbv	400	2/15/2012 6:07 AM
Carbon disulfide	ND	400	U	ppbv	400	2/15/2012 6:07 AM
Carbon tetrachloride	ND	400	U	ppbv	400	2/15/2012 6:07 AM
Chlorobenzene	ND	400	U	ppbv	400	2/15/2012 6:07 AM
Chlorodibromomethane	ND	400	U	ppbv	400	2/15/2012 6:07 AM
Chloroethane	ND	400	U	ppbv	400	2/15/2012 6:07 AM
Chloroform	ND	400	U	ppbv	400	2/15/2012 6:07 AM
Chloromethane	ND	400	U	ppbv	400	2/15/2012 6:07 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	2/15/2012 6:07 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	2/15/2012 6:07 AM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/20/2012 10:45:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-022	**Matrix:**	Air
Client Sample ID:	VA1165		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	10,000	800		ppbv	400	2/15/2012 6:07 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	2/15/2012 6:07 AM
Ethyl acetate	ND	400	U	ppbv	400	2/15/2012 6:07 AM
Ethylbenzene	430	800	J	ppbv	400	2/15/2012 6:07 AM
Heptane	5,400	400		ppbv	400	2/15/2012 6:07 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	2/15/2012 6:07 AM
m,p-Xylene	1,100	800		ppbv	400	2/15/2012 6:07 AM
Methylene chloride	1,200	2,000	J	ppbv	400	2/15/2012 6:07 AM
n-Hexane	7,300	800		ppbv	400	2/15/2012 6:07 AM
Naphthalene	ND	400	U	ppbv	400	2/15/2012 6:07 AM
o-Xylene	ND	400	U	ppbv	400	2/15/2012 6:07 AM
Propylene	2,900	400		ppbv	400	2/15/2012 6:07 AM
Styrene	ND	400	U	ppbv	400	2/15/2012 6:07 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	2/15/2012 6:07 AM
Tetrachloroethene	ND	400	U	ppbv	400	2/15/2012 6:07 AM
Tetrahydrofuran	ND	400	U	ppbv	400	2/15/2012 6:07 AM
Toluene	10,000	400		ppbv	400	2/15/2012 6:07 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	2/15/2012 6:07 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	2/15/2012 6:07 AM
Trichloroethene	ND	400	U	ppbv	400	2/15/2012 6:07 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	2/15/2012 6:07 AM
Vinyl acetate	ND	400	U	ppbv	400	2/15/2012 6:07 AM
Vinyl chloride	ND	400	U	ppbv	400	2/15/2012 6:07 AM
Xylenes, Total	1,100	1,200	J	ppbv	400	2/15/2012 6:07 AM
Surr: 4-Bromofluorobenzene	108	70-130		%REC	400	2/15/2012 6:07 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	99,000	47,000		µg/m³	400	2/10/2012 2:50 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	2/10/2012 2:50 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	2/10/2012 2:50 PM
Surr: 4-Bromofluorobenzene	93.7	70-130		%REC	400	2/10/2012 2:50 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/20/2012 11:16:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-023	**Matrix:**	Air
Client Sample ID:	VA1166		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.049	0.10	J	%	1	2/6/2012 3:57 PM
Carbon Monoxide	ND	0.10	U	%	1	2/6/2012 3:57 PM
Methane	ND	0.50	U	%	1	2/6/2012 3:57 PM
Nitrogen	78	0.10		%	1	2/6/2012 3:57 PM
Oxygen	21	0.10		%	1	2/6/2012 3:57 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: rd2**
1,1,1-Trichloroethane	ND	200	U	ppbv	200	2/15/2012 6:59 AM
1,1,2,2-Tetrachloroethane	ND	200	U	ppbv	200	2/15/2012 6:59 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	200	U	ppbv	200	2/15/2012 6:59 AM
1,1,2-Trichloroethane	ND	200	U	ppbv	200	2/15/2012 6:59 AM
1,1-Dichloroethane	ND	200	U	ppbv	200	2/15/2012 6:59 AM
1,1-Dichloroethene	ND	200	U	ppbv	200	2/15/2012 6:59 AM
1,2,4-Trichlorobenzene	ND	200	U	ppbv	200	2/15/2012 6:59 AM
1,2,4-Trimethylbenzene	ND	200	U	ppbv	200	2/15/2012 6:59 AM
1,2-Dibromoethane	ND	200	U	ppbv	200	2/15/2012 6:59 AM
1,2-Dichlorobenzene	ND	200	U	ppbv	200	2/15/2012 6:59 AM
1,2-Dichloroethane	ND	200	U	ppbv	200	2/15/2012 6:59 AM
1,2-Dichloropropane	ND	200	U	ppbv	200	2/15/2012 6:59 AM
1,3,5-Trimethylbenzene	ND	200	U	ppbv	200	2/15/2012 6:59 AM
1,3-Butadiene	ND	200	U	ppbv	200	2/15/2012 6:59 AM
1,3-Dichlorobenzene	ND	200	U	ppbv	200	2/15/2012 6:59 AM
1,4-Dichlorobenzene	ND	200	U	ppbv	200	2/15/2012 6:59 AM
2-Butanone	ND	200	U	ppbv	200	2/15/2012 6:59 AM
2-Hexanone	ND	200	U	ppbv	200	2/15/2012 6:59 AM
4-Methyl-2-pentanone	ND	200	U	ppbv	200	2/15/2012 6:59 AM
Acetone	ND	200	U	ppbv	200	2/15/2012 6:59 AM
Benzene	1,700	200		ppbv	200	2/15/2012 6:59 AM
Benzyl chloride	ND	200	U	ppbv	200	2/15/2012 6:59 AM
Bromodichloromethane	ND	200	U	ppbv	200	2/15/2012 6:59 AM
Bromoform	ND	200	U	ppbv	200	2/15/2012 6:59 AM
Bromomethane	ND	200	U	ppbv	200	2/15/2012 6:59 AM
Carbon disulfide	ND	200	U	ppbv	200	2/15/2012 6:59 AM
Carbon tetrachloride	ND	200	U	ppbv	200	2/15/2012 6:59 AM
Chlorobenzene	ND	200	U	ppbv	200	2/15/2012 6:59 AM
Chlorodibromomethane	ND	200	U	ppbv	200	2/15/2012 6:59 AM
Chloroethane	ND	200	U	ppbv	200	2/15/2012 6:59 AM
Chloroform	ND	200	U	ppbv	200	2/15/2012 6:59 AM
Chloromethane	ND	200	U	ppbv	200	2/15/2012 6:59 AM
cis-1,2-Dichloroethene	ND	200	U	ppbv	200	2/15/2012 6:59 AM
cis-1,3-dichloropropene	ND	200	U	ppbv	200	2/15/2012 6:59 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/20/2012 11:16:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-023	**Matrix:**	Air
Client Sample ID:	VA1166		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,500	400		ppbv	200	2/15/2012 6:59 AM
Dichlorodifluoromethane	ND	200	U	ppbv	200	2/15/2012 6:59 AM
Ethyl acetate	ND	200	U	ppbv	200	2/15/2012 6:59 AM
Ethylbenzene	ND	400	U	ppbv	200	2/15/2012 6:59 AM
Heptane	2,200	200		ppbv	200	2/15/2012 6:59 AM
Hexachlorobutadiene	ND	400	U	ppbv	200	2/15/2012 6:59 AM
m,p-Xylene	300	400	J	ppbv	200	2/15/2012 6:59 AM
Methylene chloride	600	1,000	J	ppbv	200	2/15/2012 6:59 AM
n-Hexane	1,500	400		ppbv	200	2/15/2012 6:59 AM
Naphthalene	ND	200	U	ppbv	200	2/15/2012 6:59 AM
o-Xylene	ND	200	U	ppbv	200	2/15/2012 6:59 AM
Propylene	400	200		ppbv	200	2/15/2012 6:59 AM
Styrene	ND	200	U	ppbv	200	2/15/2012 6:59 AM
tert-Butyl Methyl Ether	ND	200	U	ppbv	200	2/15/2012 6:59 AM
Tetrachloroethene	ND	200	U	ppbv	200	2/15/2012 6:59 AM
Tetrahydrofuran	ND	200	U	ppbv	200	2/15/2012 6:59 AM
Toluene	4,400	200		ppbv	200	2/15/2012 6:59 AM
trans-1,2-Dichloroethene	ND	200	U	ppbv	200	2/15/2012 6:59 AM
trans-1,3-dichloropropene	ND	200	U	ppbv	200	2/15/2012 6:59 AM
Trichloroethene	ND	200	U	ppbv	200	2/15/2012 6:59 AM
Trichlorofluoromethane	ND	200	U	ppbv	200	2/15/2012 6:59 AM
Vinyl acetate	ND	200	U	ppbv	200	2/15/2012 6:59 AM
Vinyl chloride	ND	200	U	ppbv	200	2/15/2012 6:59 AM
Xylenes, Total	300	600	J	ppbv	200	2/15/2012 6:59 AM
Surr: 4-Bromofluorobenzene	109	70-130		%REC	200	2/15/2012 6:59 AM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RH3**
C5-C8 Aliphatic Hydrocarbons	140,000	23,000		µg/m³	200	2/10/2012 8:28 PM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	2/10/2012 8:28 PM
C9-C12 Aliphatic Hydrocarbons	ND	38,000	U	µg/m³	200	2/10/2012 8:28 PM
Surr: 4-Bromofluorobenzene	93.3	70-130		%REC	200	2/10/2012 8:28 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/20/2012 11:48:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-024	**Matrix:**	Air
Client Sample ID:	VA1167		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.35	0.10		%	1	2/6/2012 4:28 PM
Carbon Monoxide	ND	0.10	U	%	1	2/6/2012 4:28 PM
Methane	ND	0.50	U	%	1	2/6/2012 4:28 PM
Nitrogen	80	0.10		%	1	2/6/2012 4:28 PM
Oxygen	20	0.10		%	1	2/6/2012 4:28 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: rd2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	2/14/2012 11:24 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	2/14/2012 11:24 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	2/14/2012 11:24 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	2/14/2012 11:24 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	2/14/2012 11:24 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	2/14/2012 11:24 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	2/14/2012 11:24 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	2/14/2012 11:24 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	2/14/2012 11:24 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	2/14/2012 11:24 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	2/14/2012 11:24 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	2/14/2012 11:24 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	2/14/2012 11:24 PM
1,3-Butadiene	ND	40	U	ppbv	40	2/14/2012 11:24 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	2/14/2012 11:24 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	2/14/2012 11:24 PM
2-Butanone	ND	40	U	ppbv	40	2/14/2012 11:24 PM
2-Hexanone	ND	40	U	ppbv	40	2/14/2012 11:24 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	2/14/2012 11:24 PM
Acetone	ND	40	U	ppbv	40	2/14/2012 11:24 PM
Benzene	750	40		ppbv	40	2/14/2012 11:24 PM
Benzyl chloride	ND	40	U	ppbv	40	2/14/2012 11:24 PM
Bromodichloromethane	ND	40	U	ppbv	40	2/14/2012 11:24 PM
Bromoform	ND	40	U	ppbv	40	2/14/2012 11:24 PM
Bromomethane	ND	40	U	ppbv	40	2/14/2012 11:24 PM
Carbon disulfide	ND	40	U	ppbv	40	2/14/2012 11:24 PM
Carbon tetrachloride	ND	40	U	ppbv	40	2/14/2012 11:24 PM
Chlorobenzene	ND	40	U	ppbv	40	2/14/2012 11:24 PM
Chlorodibromomethane	ND	40	U	ppbv	40	2/14/2012 11:24 PM
Chloroethane	ND	40	U	ppbv	40	2/14/2012 11:24 PM
Chloroform	ND	40	U	ppbv	40	2/14/2012 11:24 PM
Chloromethane	ND	40	U	ppbv	40	2/14/2012 11:24 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	2/14/2012 11:24 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	2/14/2012 11:24 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/20/2012 11:48:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-024	**Matrix:**	Air
Client Sample ID:	VA1167		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,300	80		ppbv	40	2/14/2012 11:24 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	2/14/2012 11:24 PM
Ethyl acetate	ND	40	U	ppbv	40	2/14/2012 11:24 PM
Ethylbenzene	63	80	J	ppbv	40	2/14/2012 11:24 PM
Heptane	1,300	40		ppbv	40	2/14/2012 11:24 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	2/14/2012 11:24 PM
m,p-Xylene	150	80		ppbv	40	2/14/2012 11:24 PM
Methylene chloride	ND	200	U	ppbv	40	2/14/2012 11:24 PM
n-Hexane	680	80		ppbv	40	2/14/2012 11:24 PM
Naphthalene	ND	40	U	ppbv	40	2/14/2012 11:24 PM
o-Xylene	ND	40	U	ppbv	40	2/14/2012 11:24 PM
Propylene	140	40		ppbv	40	2/14/2012 11:24 PM
Styrene	ND	40	U	ppbv	40	2/14/2012 11:24 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	2/14/2012 11:24 PM
Tetrachloroethene	ND	40	U	ppbv	40	2/14/2012 11:24 PM
Tetrahydrofuran	ND	40	U	ppbv	40	2/14/2012 11:24 PM
Toluene	1,600	400		ppbv	400	2/15/2012 11:34 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	2/14/2012 11:24 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	2/14/2012 11:24 PM
Trichloroethene	ND	40	U	ppbv	40	2/14/2012 11:24 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	2/14/2012 11:24 PM
Vinyl acetate	ND	40	U	ppbv	40	2/14/2012 11:24 PM
Vinyl chloride	ND	40	U	ppbv	40	2/14/2012 11:24 PM
Xylenes, Total	150	120		ppbv	40	2/14/2012 11:24 PM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	40	2/14/2012 11:24 PM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	62,000	4,700		µg/m³	40	2/14/2012 11:56 AM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	2/14/2012 11:56 AM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	2/14/2012 11:56 AM
Surr: 4-Bromofluorobenzene	92.0	70-130		%REC	40	2/14/2012 11:56 AM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/20/2012 11:31:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-025	**Matrix:**	Air
Client Sample ID:	VA1168		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.092	0.10	J	%	1	2/6/2012 4:55 PM
Carbon Monoxide	ND	0.10	U	%	1	2/6/2012 4:55 PM
Methane	ND	0.50	U	%	1	2/6/2012 4:55 PM
Nitrogen	79	0.10		%	1	2/6/2012 4:55 PM
Oxygen	21	0.10		%	1	2/6/2012 4:55 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: rd2**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	2/15/2012 1:18 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	2/15/2012 1:18 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	2/15/2012 1:18 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	2/15/2012 1:18 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	2/15/2012 1:18 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	2/15/2012 1:18 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	2/15/2012 1:18 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	2/15/2012 1:18 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	2/15/2012 1:18 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	2/15/2012 1:18 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	2/15/2012 1:18 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	2/15/2012 1:18 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	2/15/2012 1:18 PM
1,3-Butadiene	ND	400	U	ppbv	400	2/15/2012 1:18 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	2/15/2012 1:18 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	2/15/2012 1:18 PM
2-Butanone	ND	400	U	ppbv	400	2/15/2012 1:18 PM
2-Hexanone	ND	400	U	ppbv	400	2/15/2012 1:18 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	2/15/2012 1:18 PM
Acetone	ND	400	U	ppbv	400	2/15/2012 1:18 PM
Benzene	1,900	400		ppbv	400	2/15/2012 1:18 PM
Benzyl chloride	ND	400	U	ppbv	400	2/15/2012 1:18 PM
Bromodichloromethane	ND	400	U	ppbv	400	2/15/2012 1:18 PM
Bromoform	ND	400	U	ppbv	400	2/15/2012 1:18 PM
Bromomethane	ND	400	U	ppbv	400	2/15/2012 1:18 PM
Carbon disulfide	ND	400	U	ppbv	400	2/15/2012 1:18 PM
Carbon tetrachloride	ND	400	U	ppbv	400	2/15/2012 1:18 PM
Chlorobenzene	ND	400	U	ppbv	400	2/15/2012 1:18 PM
Chlorodibromomethane	ND	400	U	ppbv	400	2/15/2012 1:18 PM
Chloroethane	ND	400	U	ppbv	400	2/15/2012 1:18 PM
Chloroform	ND	400	U	ppbv	400	2/15/2012 1:18 PM
Chloromethane	ND	400	U	ppbv	400	2/15/2012 1:18 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	2/15/2012 1:18 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	2/15/2012 1:18 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/20/2012 11:31:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-025	**Matrix:**	Air
Client Sample ID:	VA1168		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	3,200	800		ppbv	400	2/15/2012 1:18 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	2/15/2012 1:18 PM
Ethyl acetate	ND	400	U	ppbv	400	2/15/2012 1:18 PM
Ethylbenzene	ND	800	U	ppbv	400	2/15/2012 1:18 PM
Heptane	1,800	400		ppbv	400	2/15/2012 1:18 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	2/15/2012 1:18 PM
m,p-Xylene	560	800	J	ppbv	400	2/15/2012 1:18 PM
Methylene chloride	ND	2,000	U	ppbv	400	2/15/2012 1:18 PM
n-Hexane	2,900	800		ppbv	400	2/15/2012 1:18 PM
Naphthalene	ND	400	U	ppbv	400	2/15/2012 1:18 PM
o-Xylene	ND	400	U	ppbv	400	2/15/2012 1:18 PM
Propylene	1,100	400		ppbv	400	2/15/2012 1:18 PM
Styrene	ND	400	U	ppbv	400	2/15/2012 1:18 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	2/15/2012 1:18 PM
Tetrachloroethene	ND	400	U	ppbv	400	2/15/2012 1:18 PM
Tetrahydrofuran	ND	400	U	ppbv	400	2/15/2012 1:18 PM
Toluene	4,300	400		ppbv	400	2/15/2012 1:18 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	2/15/2012 1:18 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	2/15/2012 1:18 PM
Trichloroethene	ND	400	U	ppbv	400	2/15/2012 1:18 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	2/15/2012 1:18 PM
Vinyl acetate	ND	400	U	ppbv	400	2/15/2012 1:18 PM
Vinyl chloride	ND	400	U	ppbv	400	2/15/2012 1:18 PM
Xylenes, Total	560	1,200	J	ppbv	400	2/15/2012 1:18 PM
Surr: 4-Bromofluorobenzene	108	70-130		%REC	400	2/15/2012 1:18 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	530,000	94,000		µg/m³	800	2/10/2012 7:39 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	2/10/2012 7:39 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	2/10/2012 7:39 PM
Surr: 4-Bromofluorobenzene	93.2	70-130		%REC	800	2/10/2012 7:39 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/20/2012 12:20:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-026	**Matrix:**	Air
Client Sample ID:	VA1169		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.042	0.10	J	%	1	2/6/2012 6:00 PM
Carbon Monoxide	ND	0.10	U	%	1	2/6/2012 6:00 PM
Methane	ND	0.50	U	%	1	2/6/2012 6:00 PM
Nitrogen	79	0.10		%	1	2/6/2012 6:00 PM
Oxygen	21	0.10		%	1	2/6/2012 6:00 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
1,1,2,2-Tetrachloroethane	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
1,1,2-Trichloroethane	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
1,1-Dichloroethane	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
1,1-Dichloroethene	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
1,2,4-Trichlorobenzene	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
1,2,4-Trimethylbenzene	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
1,2-Dibromoethane	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
1,2-Dichlorobenzene	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
1,2-Dichloroethane	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
1,2-Dichloropropane	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
1,3,5-Trimethylbenzene	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
1,3-Butadiene	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
1,3-Dichlorobenzene	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
1,4-Dichlorobenzene	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
2-Butanone	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
2-Hexanone	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
4-Methyl-2-pentanone	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
Acetone	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
Benzene	5,100	1,600		ppbv	1600	2/12/2012 2:47 AM
Benzyl chloride	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
Bromodichloromethane	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
Bromoform	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
Bromomethane	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
Carbon disulfide	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
Carbon tetrachloride	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
Chlorobenzene	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
Chlorodibromomethane	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
Chloroethane	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
Chloroform	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
Chloromethane	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
cis-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
cis-1,3-dichloropropene	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/20/2012 12:20:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-026	**Matrix:**	Air
Client Sample ID:	VA1169		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	8,800	3,200		ppbv	1600	2/12/2012 2:47 AM
Dichlorodifluoromethane	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
Ethyl acetate	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
Ethylbenzene	ND	3,200	U	ppbv	1600	2/12/2012 2:47 AM
Heptane	2,800	1,600		ppbv	1600	2/12/2012 2:47 AM
Hexachlorobutadiene	ND	3,200	U	ppbv	1600	2/12/2012 2:47 AM
m,p-Xylene	ND	3,200	U	ppbv	1600	2/12/2012 2:47 AM
Methylene chloride	ND	8,000	U	ppbv	1600	2/12/2012 2:47 AM
n-Hexane	9,400	3,200		ppbv	1600	2/12/2012 2:47 AM
Naphthalene	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
o-Xylene	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
Propylene	5,100	1,600		ppbv	1600	2/12/2012 2:47 AM
Styrene	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
tert-Butyl Methyl Ether	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
Tetrachloroethene	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
Tetrahydrofuran	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
Toluene	6,200	1,600		ppbv	1600	2/12/2012 2:47 AM
trans-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
trans-1,3-dichloropropene	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
Trichloroethene	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
Trichlorofluoromethane	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
Vinyl acetate	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
Vinyl chloride	ND	1,600	U	ppbv	1600	2/12/2012 2:47 AM
Xylenes, Total	ND	4,800	U	ppbv	1600	2/12/2012 2:47 AM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1600	2/12/2012 2:47 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,200,000	190,000		µg/m³	1600	2/10/2012 12:55 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	2/10/2012 12:55 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	2/10/2012 12:55 PM
Surr: 4-Bromofluorobenzene	92.8	70-130		%REC	1600	2/10/2012 12:55 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/17/2012 11:45:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-027	**Matrix:**	Air
Client Sample ID:	VA1195		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.090	0.10	J	%	1	2/6/2012 6:28 PM
Carbon Monoxide	ND	0.10	U	%	1	2/6/2012 6:28 PM
Methane	ND	0.50	U	%	1	2/6/2012 6:28 PM
Nitrogen	79	0.10		%	1	2/6/2012 6:28 PM
Oxygen	21	0.10		%	1	2/6/2012 6:28 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/17/2012 12:35:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-028	**Matrix:**	Air
Client Sample ID:	VA1196		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.13	0.10		%	1	2/7/2012 10:27 AM
Carbon Monoxide	ND	0.10	U	%	1	2/7/2012 10:27 AM
Methane	ND	0.50	U	%	1	2/7/2012 10:27 AM
Nitrogen	79	0.10		%	1	2/7/2012 10:27 AM
Oxygen	20	0.10		%	1	2/7/2012 10:27 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	2/6/2012 11:27 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	2/6/2012 11:27 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	2/6/2012 11:27 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	2/6/2012 11:27 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	2/6/2012 11:27 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	2/6/2012 11:27 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	2/6/2012 11:27 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	2/6/2012 11:27 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	2/6/2012 11:27 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	2/6/2012 11:27 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	2/6/2012 11:27 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	2/6/2012 11:27 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	2/6/2012 11:27 PM
1,3-Butadiene	ND	400	U	ppbv	400	2/6/2012 11:27 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	2/6/2012 11:27 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	2/6/2012 11:27 PM
2-Butanone	ND	400	U	ppbv	400	2/6/2012 11:27 PM
2-Hexanone	ND	400	U	ppbv	400	2/6/2012 11:27 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	2/6/2012 11:27 PM
Acetone	680	400		ppbv	400	2/6/2012 11:27 PM
Benzene	1,200	400		ppbv	400	2/6/2012 11:27 PM
Benzyl chloride	ND	400	U	ppbv	400	2/6/2012 11:27 PM
Bromodichloromethane	ND	400	U	ppbv	400	2/6/2012 11:27 PM
Bromoform	ND	400	U	ppbv	400	2/6/2012 11:27 PM
Bromomethane	ND	400	U	ppbv	400	2/6/2012 11:27 PM
Carbon disulfide	ND	400	U	ppbv	400	2/6/2012 11:27 PM
Carbon tetrachloride	ND	400	U	ppbv	400	2/6/2012 11:27 PM
Chlorobenzene	ND	400	U	ppbv	400	2/6/2012 11:27 PM
Chlorodibromomethane	ND	400	U	ppbv	400	2/6/2012 11:27 PM
Chloroethane	ND	400	U	ppbv	400	2/6/2012 11:27 PM
Chloroform	ND	400	U	ppbv	400	2/6/2012 11:27 PM
Chloromethane	ND	400	U	ppbv	400	2/6/2012 11:27 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	2/6/2012 11:27 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	2/6/2012 11:27 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/17/2012 12:35:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-028	**Matrix:**	Air
Client Sample ID:	VA1196		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	6,000	800		ppbv	400	2/6/2012 11:27 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	2/6/2012 11:27 PM
Ethyl acetate	ND	400	U	ppbv	400	2/6/2012 11:27 PM
Ethylbenzene	ND	800	U	ppbv	400	2/6/2012 11:27 PM
Heptane	1,800	400		ppbv	400	2/6/2012 11:27 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	2/6/2012 11:27 PM
m,p-Xylene	ND	800	U	ppbv	400	2/6/2012 11:27 PM
Methylene chloride	ND	2,000	U	ppbv	400	2/6/2012 11:27 PM
n-Hexane	5,300	800		ppbv	400	2/6/2012 11:27 PM
Naphthalene	ND	400	U	ppbv	400	2/6/2012 11:27 PM
o-Xylene	ND	400	U	ppbv	400	2/6/2012 11:27 PM
Propylene	980	400		ppbv	400	2/6/2012 11:27 PM
Styrene	ND	400	U	ppbv	400	2/6/2012 11:27 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	2/6/2012 11:27 PM
Tetrachloroethene	ND	400	U	ppbv	400	2/6/2012 11:27 PM
Tetrahydrofuran	ND	400	U	ppbv	400	2/6/2012 11:27 PM
Toluene	2,700	400		ppbv	400	2/6/2012 11:27 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	2/6/2012 11:27 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	2/6/2012 11:27 PM
Trichloroethene	ND	400	U	ppbv	400	2/6/2012 11:27 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	2/6/2012 11:27 PM
Vinyl acetate	ND	400	U	ppbv	400	2/6/2012 11:27 PM
Vinyl chloride	ND	400	U	ppbv	400	2/6/2012 11:27 PM
Xylenes, Total	ND	1,200	U	ppbv	400	2/6/2012 11:27 PM
Surr: 4-Bromofluorobenzene	108	70-130		%REC	400	2/6/2012 11:27 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,600,000	940,000		µg/m³	8000	2/3/2012 3:35 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	2/3/2012 3:35 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	2/3/2012 3:35 PM
Surr: 4-Bromofluorobenzene	92.8	70-130		%REC	8000	2/3/2012 3:35 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 12:17:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-029	**Matrix:**	Air
Client Sample ID:	VA1197		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.16	0.10		%	1	2/7/2012 10:42 AM
Carbon Monoxide	ND	0.10	U	%	1	2/7/2012 10:42 AM
Methane	ND	0.50	U	%	1	2/7/2012 10:42 AM
Nitrogen	78	0.10		%	1	2/7/2012 10:42 AM
Oxygen	21	0.10		%	1	2/7/2012 10:42 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	2/7/2012 12:13 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	2/7/2012 12:13 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	2/7/2012 12:13 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	2/7/2012 12:13 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	2/7/2012 12:13 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	2/7/2012 12:13 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	2/7/2012 12:13 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	2/7/2012 12:13 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	2/7/2012 12:13 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	2/7/2012 12:13 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	2/7/2012 12:13 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	2/7/2012 12:13 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	2/7/2012 12:13 AM
1,3-Butadiene	ND	40	U	ppbv	40	2/7/2012 12:13 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	2/7/2012 12:13 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	2/7/2012 12:13 AM
2-Butanone	ND	40	U	ppbv	40	2/7/2012 12:13 AM
2-Hexanone	ND	40	U	ppbv	40	2/7/2012 12:13 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	2/7/2012 12:13 AM
Acetone	ND	40	U	ppbv	40	2/7/2012 12:13 AM
Benzene	1,600	40		ppbv	40	2/7/2012 12:13 AM
Benzyl chloride	ND	40	U	ppbv	40	2/7/2012 12:13 AM
Bromodichloromethane	ND	40	U	ppbv	40	2/7/2012 12:13 AM
Bromoform	ND	40	U	ppbv	40	2/7/2012 12:13 AM
Bromomethane	ND	40	U	ppbv	40	2/7/2012 12:13 AM
Carbon disulfide	ND	40	U	ppbv	40	2/7/2012 12:13 AM
Carbon tetrachloride	ND	40	U	ppbv	40	2/7/2012 12:13 AM
Chlorobenzene	ND	40	U	ppbv	40	2/7/2012 12:13 AM
Chlorodibromomethane	ND	40	U	ppbv	40	2/7/2012 12:13 AM
Chloroethane	ND	40	U	ppbv	40	2/7/2012 12:13 AM
Chloroform	130	40		ppbv	40	2/7/2012 12:13 AM
Chloromethane	ND	40	U	ppbv	40	2/7/2012 12:13 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	2/7/2012 12:13 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	2/7/2012 12:13 AM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 12:17:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-029	**Matrix:**	Air
Client Sample ID:	VA1197		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,900	1,600		ppbv	800	2/10/2012 8:02 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	2/7/2012 12:13 AM
Ethyl acetate	ND	40	U	ppbv	40	2/7/2012 12:13 AM
Ethylbenzene	99	80		ppbv	40	2/7/2012 12:13 AM
Heptane	1,600	800		ppbv	800	2/10/2012 8:02 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	2/7/2012 12:13 AM
m,p-Xylene	270	80		ppbv	40	2/7/2012 12:13 AM
Methylene chloride	ND	200	U	ppbv	40	2/7/2012 12:13 AM
n-Hexane	1,600	80		ppbv	40	2/7/2012 12:13 AM
Naphthalene	ND	40	U	ppbv	40	2/7/2012 12:13 AM
o-Xylene	63	40		ppbv	40	2/7/2012 12:13 AM
Propylene	67	40		ppbv	40	2/7/2012 12:13 AM
Styrene	ND	40	U	ppbv	40	2/7/2012 12:13 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	2/7/2012 12:13 AM
Tetrachloroethene	ND	40	U	ppbv	40	2/7/2012 12:13 AM
Tetrahydrofuran	ND	40	U	ppbv	40	2/7/2012 12:13 AM
Toluene	1,800	800		ppbv	800	2/10/2012 8:02 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	2/7/2012 12:13 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	2/7/2012 12:13 AM
Trichloroethene	ND	40	U	ppbv	40	2/7/2012 12:13 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	2/7/2012 12:13 AM
Vinyl acetate	ND	40	U	ppbv	40	2/7/2012 12:13 AM
Vinyl chloride	ND	40	U	ppbv	40	2/7/2012 12:13 AM
Xylenes, Total	330	120		ppbv	40	2/7/2012 12:13 AM
Surr: 4-Bromofluorobenzene	97.6	70-130		%REC	40	2/7/2012 12:13 AM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	62,000	4,700		µg/m³	40	2/7/2012 12:55 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	2/7/2012 12:55 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	2/7/2012 12:55 PM
Surr: 4-Bromofluorobenzene	93.3	70-130		%REC	40	2/7/2012 12:55 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 12:42:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-030	**Matrix:**	Air
Client Sample ID:	VA1198		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	1.1	0.10		%	1	2/7/2012 11:12 AM
Carbon Monoxide	ND	0.10	U	%	1	2/7/2012 11:12 AM
Methane	ND	0.50	U	%	1	2/7/2012 11:12 AM
Nitrogen	80	0.10		%	1	2/7/2012 11:12 AM
Oxygen	20	0.10		%	1	2/7/2012 11:12 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	2/7/2012 1:47 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	2/7/2012 1:47 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	2/7/2012 1:47 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	2/7/2012 1:47 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	2/7/2012 1:47 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	2/7/2012 1:47 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	2/7/2012 1:47 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	2/7/2012 1:47 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	2/7/2012 1:47 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	2/7/2012 1:47 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	2/7/2012 1:47 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	2/7/2012 1:47 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	2/7/2012 1:47 AM
1,3-Butadiene	ND	40	U	ppbv	40	2/7/2012 1:47 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	2/7/2012 1:47 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	2/7/2012 1:47 AM
2-Butanone	ND	40	U	ppbv	40	2/7/2012 1:47 AM
2-Hexanone	ND	40	U	ppbv	40	2/7/2012 1:47 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	2/7/2012 1:47 AM
Acetone	ND	40	U	ppbv	40	2/7/2012 1:47 AM
Benzene	1,200	40		ppbv	40	2/7/2012 1:47 AM
Benzyl chloride	ND	40	U	ppbv	40	2/7/2012 1:47 AM
Bromodichloromethane	ND	40	U	ppbv	40	2/7/2012 1:47 AM
Bromoform	ND	40	U	ppbv	40	2/7/2012 1:47 AM
Bromomethane	ND	40	U	ppbv	40	2/7/2012 1:47 AM
Carbon disulfide	ND	40	U	ppbv	40	2/7/2012 1:47 AM
Carbon tetrachloride	ND	40	U	ppbv	40	2/7/2012 1:47 AM
Chlorobenzene	ND	40	U	ppbv	40	2/7/2012 1:47 AM
Chlorodibromomethane	ND	40	U	ppbv	40	2/7/2012 1:47 AM
Chloroethane	ND	40	U	ppbv	40	2/7/2012 1:47 AM
Chloroform	120	40		ppbv	40	2/7/2012 1:47 AM
Chloromethane	ND	40	U	ppbv	40	2/7/2012 1:47 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	2/7/2012 1:47 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	2/7/2012 1:47 AM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 12:42:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-030	**Matrix:**	Air
Client Sample ID:	VA1198		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,900	800		ppbv	400	2/6/2012 3:31 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	2/7/2012 1:47 AM
Ethyl acetate	ND	40	U	ppbv	40	2/7/2012 1:47 AM
Ethylbenzene	94	80		ppbv	40	2/7/2012 1:47 AM
Heptane	2,500	400		ppbv	400	2/6/2012 3:31 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	2/7/2012 1:47 AM
m,p-Xylene	250	80		ppbv	40	2/7/2012 1:47 AM
Methylene chloride	ND	200	U	ppbv	40	2/7/2012 1:47 AM
n-Hexane	1,300	80		ppbv	40	2/7/2012 1:47 AM
Naphthalene	ND	40	U	ppbv	40	2/7/2012 1:47 AM
o-Xylene	59	40		ppbv	40	2/7/2012 1:47 AM
Propylene	220	40		ppbv	40	2/7/2012 1:47 AM
Styrene	ND	40	U	ppbv	40	2/7/2012 1:47 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	2/7/2012 1:47 AM
Tetrachloroethene	ND	40	U	ppbv	40	2/7/2012 1:47 AM
Tetrahydrofuran	ND	40	U	ppbv	40	2/7/2012 1:47 AM
Toluene	2,800	400		ppbv	400	2/6/2012 3:31 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	2/7/2012 1:47 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	2/7/2012 1:47 AM
Trichloroethene	ND	40	U	ppbv	40	2/7/2012 1:47 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	2/7/2012 1:47 AM
Vinyl acetate	ND	40	U	ppbv	40	2/7/2012 1:47 AM
Vinyl chloride	ND	40	U	ppbv	40	2/7/2012 1:47 AM
Xylenes, Total	310	120		ppbv	40	2/7/2012 1:47 AM
Surr: 4-Bromofluorobenzene	97.9	70-130		%REC	40	2/7/2012 1:47 AM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	89,000	4,700		µg/m³	40	2/7/2012 3:04 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	2/7/2012 3:04 PM
C9-C12 Aliphatic Hydrocarbons	2,100	7,600	J	µg/m³	40	2/7/2012 3:04 PM
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	40	2/7/2012 3:04 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 1:16:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-031	**Matrix:**	Air
Client Sample ID:	VA1199		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.16	0.10		%	1	2/7/2012 11:43 AM
Carbon Monoxide	ND	0.10	U	%	1	2/7/2012 11:43 AM
Methane	ND	0.50	U	%	1	2/7/2012 11:43 AM
Nitrogen	80	0.10		%	1	2/7/2012 11:43 AM
Oxygen	20	0.10		%	1	2/7/2012 11:43 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	2/7/2012 3:18 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	2/7/2012 3:18 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	2/7/2012 3:18 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	2/7/2012 3:18 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	2/7/2012 3:18 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	2/7/2012 3:18 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	2/7/2012 3:18 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	2/7/2012 3:18 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	2/7/2012 3:18 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	2/7/2012 3:18 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	2/7/2012 3:18 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	2/7/2012 3:18 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	2/7/2012 3:18 AM
1,3-Butadiene	ND	40	U	ppbv	40	2/7/2012 3:18 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	2/7/2012 3:18 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	2/7/2012 3:18 AM
2-Butanone	ND	40	U	ppbv	40	2/7/2012 3:18 AM
2-Hexanone	ND	40	U	ppbv	40	2/7/2012 3:18 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	2/7/2012 3:18 AM
Acetone	ND	40	U	ppbv	40	2/7/2012 3:18 AM
Benzene	910	40		ppbv	40	2/7/2012 3:18 AM
Benzyl chloride	ND	40	U	ppbv	40	2/7/2012 3:18 AM
Bromodichloromethane	ND	40	U	ppbv	40	2/7/2012 3:18 AM
Bromoform	ND	40	U	ppbv	40	2/7/2012 3:18 AM
Bromomethane	ND	40	U	ppbv	40	2/7/2012 3:18 AM
Carbon disulfide	ND	40	U	ppbv	40	2/7/2012 3:18 AM
Carbon tetrachloride	ND	40	U	ppbv	40	2/7/2012 3:18 AM
Chlorobenzene	ND	40	U	ppbv	40	2/7/2012 3:18 AM
Chlorodibromomethane	ND	40	U	ppbv	40	2/7/2012 3:18 AM
Chloroethane	ND	40	U	ppbv	40	2/7/2012 3:18 AM
Chloroform	ND	40	U	ppbv	40	2/7/2012 3:18 AM
Chloromethane	ND	40	U	ppbv	40	2/7/2012 3:18 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	2/7/2012 3:18 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	2/7/2012 3:18 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 1:16:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-031	**Matrix:**	Air
Client Sample ID:	VA1199		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,700	80		ppbv	40	2/7/2012 3:18 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	2/7/2012 3:18 AM
Ethyl acetate	ND	40	U	ppbv	40	2/7/2012 3:18 AM
Ethylbenzene	81	80		ppbv	40	2/7/2012 3:18 AM
Heptane	2,000	40		ppbv	40	2/7/2012 3:18 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	2/7/2012 3:18 AM
m,p-Xylene	210	80		ppbv	40	2/7/2012 3:18 AM
Methylene chloride	ND	200	U	ppbv	40	2/7/2012 3:18 AM
n-Hexane	910	80		ppbv	40	2/7/2012 3:18 AM
Naphthalene	ND	40	U	ppbv	40	2/7/2012 3:18 AM
o-Xylene	54	40		ppbv	40	2/7/2012 3:18 AM
Propylene	140	40		ppbv	40	2/7/2012 3:18 AM
Styrene	ND	40	U	ppbv	40	2/7/2012 3:18 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	2/7/2012 3:18 AM
Tetrachloroethene	ND	40	U	ppbv	40	2/7/2012 3:18 AM
Tetrahydrofuran	ND	40	U	ppbv	40	2/7/2012 3:18 AM
Toluene	1,600	400		ppbv	400	2/6/2012 4:24 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	2/7/2012 3:18 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	2/7/2012 3:18 AM
Trichloroethene	ND	40	U	ppbv	40	2/7/2012 3:18 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	2/7/2012 3:18 AM
Vinyl acetate	ND	40	U	ppbv	40	2/7/2012 3:18 AM
Vinyl chloride	ND	40	U	ppbv	40	2/7/2012 3:18 AM
Xylenes, Total	260	120		ppbv	40	2/7/2012 3:18 AM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	40	2/7/2012 3:18 AM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: rd2**
C5-C8 Aliphatic Hydrocarbons	35,000	4,700		µg/m³	40	2/7/2012 3:46 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	2/7/2012 3:46 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	2/7/2012 3:46 PM
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	40	2/7/2012 3:46 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 1:54:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-032	**Matrix:**	Air
Client Sample ID:	VA1200		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.11	0.10		%	1	2/7/2012 11:58 AM
Carbon Monoxide	ND	0.10	U	%	1	2/7/2012 11:58 AM
Methane	ND	0.50	U	%	1	2/7/2012 11:58 AM
Nitrogen	79	0.10		%	1	2/7/2012 11:58 AM
Oxygen	20	0.10		%	1	2/7/2012 11:58 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	2/6/2012 1:52 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	2/6/2012 1:52 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	2/6/2012 1:52 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	2/6/2012 1:52 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	2/6/2012 1:52 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	2/6/2012 1:52 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	2/6/2012 1:52 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	2/6/2012 1:52 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	2/6/2012 1:52 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	2/6/2012 1:52 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	2/6/2012 1:52 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	2/6/2012 1:52 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	2/6/2012 1:52 PM
1,3-Butadiene	ND	40	U	ppbv	40	2/6/2012 1:52 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	2/6/2012 1:52 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	2/6/2012 1:52 PM
2-Butanone	ND	40	U	ppbv	40	2/6/2012 1:52 PM
2-Hexanone	ND	40	U	ppbv	40	2/6/2012 1:52 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	2/6/2012 1:52 PM
Acetone	ND	40	U	ppbv	40	2/6/2012 1:52 PM
Benzene	450	40		ppbv	40	2/6/2012 1:52 PM
Benzyl chloride	ND	40	U	ppbv	40	2/6/2012 1:52 PM
Bromodichloromethane	ND	40	U	ppbv	40	2/6/2012 1:52 PM
Bromoform	ND	40	U	ppbv	40	2/6/2012 1:52 PM
Bromomethane	ND	40	U	ppbv	40	2/6/2012 1:52 PM
Carbon disulfide	ND	40	U	ppbv	40	2/6/2012 1:52 PM
Carbon tetrachloride	ND	40	U	ppbv	40	2/6/2012 1:52 PM
Chlorobenzene	ND	40	U	ppbv	40	2/6/2012 1:52 PM
Chlorodibromomethane	ND	40	U	ppbv	40	2/6/2012 1:52 PM
Chloroethane	ND	40	U	ppbv	40	2/6/2012 1:52 PM
Chloroform	ND	40	U	ppbv	40	2/6/2012 1:52 PM
Chloromethane	ND	40	U	ppbv	40	2/6/2012 1:52 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	2/6/2012 1:52 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	2/6/2012 1:52 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 1:54:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-032	**Matrix:**	Air
Client Sample ID:	VA1200		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,000	80		ppbv	40	2/6/2012 1:52 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	2/6/2012 1:52 PM
Ethyl acetate	ND	40	U	ppbv	40	2/6/2012 1:52 PM
Ethylbenzene	44	80	J	ppbv	40	2/6/2012 1:52 PM
Heptane	1,200	40		ppbv	40	2/6/2012 1:52 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	2/6/2012 1:52 PM
m,p-Xylene	110	80		ppbv	40	2/6/2012 1:52 PM
Methylene chloride	ND	200	U	ppbv	40	2/6/2012 1:52 PM
n-Hexane	530	80		ppbv	40	2/6/2012 1:52 PM
Naphthalene	ND	40	U	ppbv	40	2/6/2012 1:52 PM
o-Xylene	ND	40	U	ppbv	40	2/6/2012 1:52 PM
Propylene	86	40		ppbv	40	2/6/2012 1:52 PM
Styrene	ND	40	U	ppbv	40	2/6/2012 1:52 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	2/6/2012 1:52 PM
Tetrachloroethene	ND	40	U	ppbv	40	2/6/2012 1:52 PM
Tetrahydrofuran	ND	40	U	ppbv	40	2/6/2012 1:52 PM
Toluene	1,600	40		ppbv	40	2/6/2012 1:52 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	2/6/2012 1:52 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	2/6/2012 1:52 PM
Trichloroethene	ND	40	U	ppbv	40	2/6/2012 1:52 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	2/6/2012 1:52 PM
Vinyl acetate	ND	40	U	ppbv	40	2/6/2012 1:52 PM
Vinyl chloride	ND	40	U	ppbv	40	2/6/2012 1:52 PM
Xylenes, Total	110	120	J	ppbv	40	2/6/2012 1:52 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	40	2/6/2012 1:52 PM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	30,000	4,700		µg/m³	40	2/7/2012 4:28 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	2/7/2012 4:28 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	2/7/2012 4:28 PM
Surr: 4-Bromofluorobenzene	94.7	70-130		%REC	40	2/7/2012 4:28 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 2:31:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-033	**Matrix:**	Air
Client Sample ID:	VA1201		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.12	0.10		%	1	2/7/2012 12:17 PM
Carbon Monoxide	ND	0.10	U	%	1	2/7/2012 12:17 PM
Methane	ND	0.50	U	%	1	2/7/2012 12:17 PM
Nitrogen	79	0.10		%	1	2/7/2012 12:17 PM
Oxygen	21	0.10		%	1	2/7/2012 12:17 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	2/10/2012 2:15 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	2/10/2012 2:15 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	2/10/2012 2:15 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	2/10/2012 2:15 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	2/10/2012 2:15 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	2/10/2012 2:15 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	2/10/2012 2:15 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	2/10/2012 2:15 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	2/10/2012 2:15 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	2/10/2012 2:15 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	2/10/2012 2:15 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	2/10/2012 2:15 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	2/10/2012 2:15 AM
1,3-Butadiene	ND	800	U	ppbv	800	2/10/2012 2:15 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	2/10/2012 2:15 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	2/10/2012 2:15 AM
2-Butanone	ND	800	U	ppbv	800	2/10/2012 2:15 AM
2-Hexanone	ND	800	U	ppbv	800	2/10/2012 2:15 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	2/10/2012 2:15 AM
Acetone	1,200	800		ppbv	800	2/10/2012 2:15 AM
Benzene	1,200	800		ppbv	800	2/10/2012 2:15 AM
Benzyl chloride	ND	800	U	ppbv	800	2/10/2012 2:15 AM
Bromodichloromethane	ND	800	U	ppbv	800	2/10/2012 2:15 AM
Bromoform	ND	800	U	ppbv	800	2/10/2012 2:15 AM
Bromomethane	ND	800	U	ppbv	800	2/10/2012 2:15 AM
Carbon disulfide	ND	800	U	ppbv	800	2/10/2012 2:15 AM
Carbon tetrachloride	ND	800	U	ppbv	800	2/10/2012 2:15 AM
Chlorobenzene	ND	800	U	ppbv	800	2/10/2012 2:15 AM
Chlorodibromomethane	ND	800	U	ppbv	800	2/10/2012 2:15 AM
Chloroethane	ND	800	U	ppbv	800	2/10/2012 2:15 AM
Chloroform	ND	800	U	ppbv	800	2/10/2012 2:15 AM
Chloromethane	ND	800	U	ppbv	800	2/10/2012 2:15 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	2/10/2012 2:15 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	2/10/2012 2:15 AM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 2:31:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-033	**Matrix:**	Air
Client Sample ID:	VA1201		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	4,500	1,600		ppbv	800	2/10/2012 2:15 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	2/10/2012 2:15 AM
Ethyl acetate	ND	800	U	ppbv	800	2/10/2012 2:15 AM
Ethylbenzene	ND	1,600	U	ppbv	800	2/10/2012 2:15 AM
Heptane	1,700	800		ppbv	800	2/10/2012 2:15 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	2/10/2012 2:15 AM
m,p-Xylene	ND	1,600	U	ppbv	800	2/10/2012 2:15 AM
Methylene chloride	2,300	4,000	J	ppbv	800	2/10/2012 2:15 AM
n-Hexane	4,600	1,600		ppbv	800	2/10/2012 2:15 AM
Naphthalene	ND	800	U	ppbv	800	2/10/2012 2:15 AM
o-Xylene	ND	800	U	ppbv	800	2/10/2012 2:15 AM
Propylene	2,400	800		ppbv	800	2/10/2012 2:15 AM
Styrene	ND	800	U	ppbv	800	2/10/2012 2:15 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	2/10/2012 2:15 AM
Tetrachloroethene	ND	800	U	ppbv	800	2/10/2012 2:15 AM
Tetrahydrofuran	ND	800	U	ppbv	800	2/10/2012 2:15 AM
Toluene	2,000	800		ppbv	800	2/10/2012 2:15 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	2/10/2012 2:15 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	2/10/2012 2:15 AM
Trichloroethene	ND	800	U	ppbv	800	2/10/2012 2:15 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	2/10/2012 2:15 AM
Vinyl acetate	ND	800	U	ppbv	800	2/10/2012 2:15 AM
Vinyl chloride	ND	800	U	ppbv	800	2/10/2012 2:15 AM
Xylenes, Total	ND	2,400	U	ppbv	800	2/10/2012 2:15 AM
Surr: 4-Bromofluorobenzene	111	70-130		%REC	800	2/10/2012 2:15 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,800,000	940,000		µg/m³	8000	2/3/2012 9:23 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	2/3/2012 9:23 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	2/3/2012 9:23 PM
Surr: 4-Bromofluorobenzene	91.7	70-130		%REC	8000	2/3/2012 9:23 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 2:31:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-034	**Matrix:**	Air
Client Sample ID:	VA1202		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.088	0.10	J	%	1	2/7/2012 12:40 PM
Carbon Monoxide	ND	0.10	U	%	1	2/7/2012 12:40 PM
Methane	ND	0.50	U	%	1	2/7/2012 12:40 PM
Nitrogen	79	0.10		%	1	2/7/2012 12:40 PM
Oxygen	21	0.10		%	1	2/7/2012 12:40 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	2/6/2012 8:17 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	2/6/2012 8:17 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	2/6/2012 8:17 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	2/6/2012 8:17 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	2/6/2012 8:17 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	2/6/2012 8:17 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	2/6/2012 8:17 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	2/6/2012 8:17 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	2/6/2012 8:17 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	2/6/2012 8:17 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	2/6/2012 8:17 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	2/6/2012 8:17 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	2/6/2012 8:17 PM
1,3-Butadiene	ND	800	U	ppbv	800	2/6/2012 8:17 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	2/6/2012 8:17 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	2/6/2012 8:17 PM
2-Butanone	ND	800	U	ppbv	800	2/6/2012 8:17 PM
2-Hexanone	ND	800	U	ppbv	800	2/6/2012 8:17 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	2/6/2012 8:17 PM
Acetone	1,100	800		ppbv	800	2/6/2012 8:17 PM
Benzene	2,200	800		ppbv	800	2/6/2012 8:17 PM
Benzyl chloride	ND	800	U	ppbv	800	2/6/2012 8:17 PM
Bromodichloromethane	ND	800	U	ppbv	800	2/6/2012 8:17 PM
Bromoform	ND	800	U	ppbv	800	2/6/2012 8:17 PM
Bromomethane	ND	800	U	ppbv	800	2/6/2012 8:17 PM
Carbon disulfide	ND	800	U	ppbv	800	2/6/2012 8:17 PM
Carbon tetrachloride	ND	800	U	ppbv	800	2/6/2012 8:17 PM
Chlorobenzene	ND	800	U	ppbv	800	2/6/2012 8:17 PM
Chlorodibromomethane	ND	800	U	ppbv	800	2/6/2012 8:17 PM
Chloroethane	ND	800	U	ppbv	800	2/6/2012 8:17 PM
Chloroform	ND	800	U	ppbv	800	2/6/2012 8:17 PM
Chloromethane	ND	800	U	ppbv	800	2/6/2012 8:17 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	2/6/2012 8:17 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	2/6/2012 8:17 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 2:31:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-034	**Matrix:**	Air
Client Sample ID:	VA1202		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	7,400	1,600		ppbv	800	2/6/2012 8:17 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	2/6/2012 8:17 PM
Ethyl acetate	ND	800	U	ppbv	800	2/6/2012 8:17 PM
Ethylbenzene	ND	1,600	U	ppbv	800	2/6/2012 8:17 PM
Heptane	4,500	800		ppbv	800	2/6/2012 8:17 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	2/6/2012 8:17 PM
m,p-Xylene	ND	1,600	U	ppbv	800	2/6/2012 8:17 PM
Methylene chloride	ND	4,000	U	ppbv	800	2/6/2012 8:17 PM
n-Hexane	5,800	1,600		ppbv	800	2/6/2012 8:17 PM
Naphthalene	ND	800	U	ppbv	800	2/6/2012 8:17 PM
o-Xylene	ND	800	U	ppbv	800	2/6/2012 8:17 PM
Propylene	2,500	800		ppbv	800	2/6/2012 8:17 PM
Styrene	ND	800	U	ppbv	800	2/6/2012 8:17 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	2/6/2012 8:17 PM
Tetrachloroethene	ND	800	U	ppbv	800	2/6/2012 8:17 PM
Tetrahydrofuran	ND	800	U	ppbv	800	2/6/2012 8:17 PM
Toluene	6,100	800		ppbv	800	2/6/2012 8:17 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	2/6/2012 8:17 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	2/6/2012 8:17 PM
Trichloroethene	ND	800	U	ppbv	800	2/6/2012 8:17 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	2/6/2012 8:17 PM
Vinyl acetate	ND	800	U	ppbv	800	2/6/2012 8:17 PM
Vinyl chloride	ND	800	U	ppbv	800	2/6/2012 8:17 PM
Xylenes, Total	ND	2,400	U	ppbv	800	2/6/2012 8:17 PM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	800	2/6/2012 8:17 PM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: rd2**
C5-C8 Aliphatic Hydrocarbons	1,300,000	94,000		µg/m³	800	2/6/2012 7:58 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	2/6/2012 7:58 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	2/6/2012 7:58 PM
Surr: 4-Bromofluorobenzene	92.6	70-130		%REC	800	2/6/2012 7:58 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 3:48:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-035	**Matrix:**	Air
Client Sample ID:	VA1203		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.16	0.10		%	1	2/7/2012 12:55 PM
Carbon Monoxide	ND	0.10	U	%	1	2/7/2012 12:55 PM
Methane	ND	0.50	U	%	1	2/7/2012 12:55 PM
Nitrogen	79	0.10		%	1	2/7/2012 12:55 PM
Oxygen	20	0.10		%	1	2/7/2012 12:55 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	2/10/2012 4:35 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	2/10/2012 4:35 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	2/10/2012 4:35 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	2/10/2012 4:35 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	2/10/2012 4:35 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	2/10/2012 4:35 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	2/10/2012 4:35 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	2/10/2012 4:35 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	2/10/2012 4:35 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	2/10/2012 4:35 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	2/10/2012 4:35 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	2/10/2012 4:35 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	2/10/2012 4:35 AM
1,3-Butadiene	ND	800	U	ppbv	800	2/10/2012 4:35 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	2/10/2012 4:35 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	2/10/2012 4:35 AM
2-Butanone	ND	800	U	ppbv	800	2/10/2012 4:35 AM
2-Hexanone	ND	800	U	ppbv	800	2/10/2012 4:35 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	2/10/2012 4:35 AM
Acetone	960	800		ppbv	800	2/10/2012 4:35 AM
Benzene	3,000	800		ppbv	800	2/10/2012 4:35 AM
Benzyl chloride	ND	800	U	ppbv	800	2/10/2012 4:35 AM
Bromodichloromethane	ND	800	U	ppbv	800	2/10/2012 4:35 AM
Bromoform	ND	800	U	ppbv	800	2/10/2012 4:35 AM
Bromomethane	ND	800	U	ppbv	800	2/10/2012 4:35 AM
Carbon disulfide	ND	800	U	ppbv	800	2/10/2012 4:35 AM
Carbon tetrachloride	ND	800	U	ppbv	800	2/10/2012 4:35 AM
Chlorobenzene	ND	800	U	ppbv	800	2/10/2012 4:35 AM
Chlorodibromomethane	ND	800	U	ppbv	800	2/10/2012 4:35 AM
Chloroethane	ND	800	U	ppbv	800	2/10/2012 4:35 AM
Chloroform	ND	800	U	ppbv	800	2/10/2012 4:35 AM
Chloromethane	ND	800	U	ppbv	800	2/10/2012 4:35 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	2/10/2012 4:35 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	2/10/2012 4:35 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 3:48:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-035	**Matrix:**	Air
Client Sample ID:	VA1203		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	17,000	1,600		ppbv	800	2/10/2012 4:35 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	2/10/2012 4:35 AM
Ethyl acetate	ND	800	U	ppbv	800	2/10/2012 4:35 AM
Ethylbenzene	ND	1,600	U	ppbv	800	2/10/2012 4:35 AM
Heptane	4,300	800		ppbv	800	2/10/2012 4:35 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	2/10/2012 4:35 AM
m,p-Xylene	ND	1,600	U	ppbv	800	2/10/2012 4:35 AM
Methylene chloride	ND	4,000	U	ppbv	800	2/10/2012 4:35 AM
n-Hexane	17,000	1,600		ppbv	800	2/10/2012 4:35 AM
Naphthalene	ND	800	U	ppbv	800	2/10/2012 4:35 AM
o-Xylene	ND	800	U	ppbv	800	2/10/2012 4:35 AM
Propylene	2,800	800		ppbv	800	2/10/2012 4:35 AM
Styrene	ND	800	U	ppbv	800	2/10/2012 4:35 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	2/10/2012 4:35 AM
Tetrachloroethene	ND	800	U	ppbv	800	2/10/2012 4:35 AM
Tetrahydrofuran	ND	800	U	ppbv	800	2/10/2012 4:35 AM
Toluene	7,400	800		ppbv	800	2/10/2012 4:35 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	2/10/2012 4:35 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	2/10/2012 4:35 AM
Trichloroethene	ND	800	U	ppbv	800	2/10/2012 4:35 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	2/10/2012 4:35 AM
Vinyl acetate	ND	800	U	ppbv	800	2/10/2012 4:35 AM
Vinyl chloride	ND	800	U	ppbv	800	2/10/2012 4:35 AM
Xylenes, Total	ND	2,400	U	ppbv	800	2/10/2012 4:35 AM
Surr: 4-Bromofluorobenzene	110	70-130		%REC	800	2/10/2012 4:35 AM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RH3**
C5-C8 Aliphatic Hydrocarbons	6,600,000	940,000		µg/m³	8000	2/3/2012 11:31 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	2/3/2012 11:31 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	2/3/2012 11:31 PM
Surr: 4-Bromofluorobenzene	91.6	70-130		%REC	8000	2/3/2012 11:31 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 9:30:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-036	**Matrix:**	Air
Client Sample ID:	VA1204		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.56	0.10		%	1	2/7/2012 1:10 PM
Carbon Monoxide	ND	0.10	U	%	1	2/7/2012 1:10 PM
Methane	ND	0.50	U	%	1	2/7/2012 1:10 PM
Nitrogen	79	0.10		%	1	2/7/2012 1:10 PM
Oxygen	20	0.10		%	1	2/7/2012 1:10 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	2/10/2012 5:27 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	2/10/2012 5:27 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	2/10/2012 5:27 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	2/10/2012 5:27 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	2/10/2012 5:27 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	2/10/2012 5:27 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	2/10/2012 5:27 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	2/10/2012 5:27 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	2/10/2012 5:27 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	2/10/2012 5:27 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	2/10/2012 5:27 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	2/10/2012 5:27 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	2/10/2012 5:27 AM
1,3-Butadiene	ND	400	U	ppbv	400	2/10/2012 5:27 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	2/10/2012 5:27 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	2/10/2012 5:27 AM
2-Butanone	ND	400	U	ppbv	400	2/10/2012 5:27 AM
2-Hexanone	ND	400	U	ppbv	400	2/10/2012 5:27 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	2/10/2012 5:27 AM
Acetone	850	400		ppbv	400	2/10/2012 5:27 AM
Benzene	980	400		ppbv	400	2/10/2012 5:27 AM
Benzyl chloride	ND	400	U	ppbv	400	2/10/2012 5:27 AM
Bromodichloromethane	ND	400	U	ppbv	400	2/10/2012 5:27 AM
Bromoform	ND	400	U	ppbv	400	2/10/2012 5:27 AM
Bromomethane	ND	400	U	ppbv	400	2/10/2012 5:27 AM
Carbon disulfide	ND	400	U	ppbv	400	2/10/2012 5:27 AM
Carbon tetrachloride	ND	400	U	ppbv	400	2/10/2012 5:27 AM
Chlorobenzene	ND	400	U	ppbv	400	2/10/2012 5:27 AM
Chlorodibromomethane	ND	400	U	ppbv	400	2/10/2012 5:27 AM
Chloroethane	ND	400	U	ppbv	400	2/10/2012 5:27 AM
Chloroform	ND	400	U	ppbv	400	2/10/2012 5:27 AM
Chloromethane	ND	400	U	ppbv	400	2/10/2012 5:27 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	2/10/2012 5:27 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	2/10/2012 5:27 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 9:30:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-036	**Matrix:**	Air
Client Sample ID:	VA1204		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,200	800		ppbv	400	2/10/2012 5:27 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	2/10/2012 5:27 AM
Ethyl acetate	ND	400	U	ppbv	400	2/10/2012 5:27 AM
Ethylbenzene	ND	800	U	ppbv	400	2/10/2012 5:27 AM
Heptane	910	400		ppbv	400	2/10/2012 5:27 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	2/10/2012 5:27 AM
m,p-Xylene	ND	800	U	ppbv	400	2/10/2012 5:27 AM
Methylene chloride	ND	2,000	U	ppbv	400	2/10/2012 5:27 AM
n-Hexane	1,300	800		ppbv	400	2/10/2012 5:27 AM
Naphthalene	ND	400	U	ppbv	400	2/10/2012 5:27 AM
o-Xylene	ND	400	U	ppbv	400	2/10/2012 5:27 AM
Propylene	550	400		ppbv	400	2/10/2012 5:27 AM
Styrene	ND	400	U	ppbv	400	2/10/2012 5:27 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	2/10/2012 5:27 AM
Tetrachloroethene	ND	400	U	ppbv	400	2/10/2012 5:27 AM
Tetrahydrofuran	480	400		ppbv	400	2/10/2012 5:27 AM
Toluene	1,900	400		ppbv	400	2/10/2012 5:27 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	2/10/2012 5:27 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	2/10/2012 5:27 AM
Trichloroethene	ND	400	U	ppbv	400	2/10/2012 5:27 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	2/10/2012 5:27 AM
Vinyl acetate	ND	400	U	ppbv	400	2/10/2012 5:27 AM
Vinyl chloride	ND	400	U	ppbv	400	2/10/2012 5:27 AM
Xylenes, Total	ND	1,200	U	ppbv	400	2/10/2012 5:27 AM
Surr: 4-Bromofluorobenzene	108	70-130		%REC	400	2/10/2012 5:27 AM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	450,000	47,000		µg/m³	400	2/6/2012 10:18 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	2/6/2012 10:18 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	2/6/2012 10:18 PM
Surr: 4-Bromofluorobenzene	93.3	70-130		%REC	400	2/6/2012 10:18 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 9:57:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-037	**Matrix:**	Air
Client Sample ID:	VA1205		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.53	0.10		%	1	2/7/2012 1:29 PM
Carbon Monoxide	ND	0.10	U	%	1	2/7/2012 1:29 PM
Methane	ND	0.50	U	%	1	2/7/2012 1:29 PM
Nitrogen	79	0.10		%	1	2/7/2012 1:29 PM
Oxygen	20	0.10		%	1	2/7/2012 1:29 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	200	U	ppbv	200	2/10/2012 7:57 AM
1,1,2,2-Tetrachloroethane	ND	200	U	ppbv	200	2/10/2012 7:57 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	200	U	ppbv	200	2/10/2012 7:57 AM
1,1,2-Trichloroethane	ND	200	U	ppbv	200	2/10/2012 7:57 AM
1,1-Dichloroethane	ND	200	U	ppbv	200	2/10/2012 7:57 AM
1,1-Dichloroethene	ND	200	U	ppbv	200	2/10/2012 7:57 AM
1,2,4-Trichlorobenzene	ND	200	U	ppbv	200	2/10/2012 7:57 AM
1,2,4-Trimethylbenzene	ND	200	U	ppbv	200	2/10/2012 7:57 AM
1,2-Dibromoethane	ND	200	U	ppbv	200	2/10/2012 7:57 AM
1,2-Dichlorobenzene	ND	200	U	ppbv	200	2/10/2012 7:57 AM
1,2-Dichloroethane	ND	200	U	ppbv	200	2/10/2012 7:57 AM
1,2-Dichloropropane	ND	200	U	ppbv	200	2/10/2012 7:57 AM
1,3,5-Trimethylbenzene	ND	200	U	ppbv	200	2/10/2012 7:57 AM
1,3-Butadiene	ND	200	U	ppbv	200	2/10/2012 7:57 AM
1,3-Dichlorobenzene	ND	200	U	ppbv	200	2/10/2012 7:57 AM
1,4-Dichlorobenzene	ND	200	U	ppbv	200	2/10/2012 7:57 AM
2-Butanone	ND	200	U	ppbv	200	2/10/2012 7:57 AM
2-Hexanone	ND	200	U	ppbv	200	2/10/2012 7:57 AM
4-Methyl-2-pentanone	ND	200	U	ppbv	200	2/10/2012 7:57 AM
Acetone	720	200		ppbv	200	2/10/2012 7:57 AM
Benzene	850	200		ppbv	200	2/10/2012 7:57 AM
Benzyl chloride	ND	200	U	ppbv	200	2/10/2012 7:57 AM
Bromodichloromethane	ND	200	U	ppbv	200	2/10/2012 7:57 AM
Bromoform	ND	200	U	ppbv	200	2/10/2012 7:57 AM
Bromomethane	ND	200	U	ppbv	200	2/10/2012 7:57 AM
Carbon disulfide	ND	200	U	ppbv	200	2/10/2012 7:57 AM
Carbon tetrachloride	ND	200	U	ppbv	200	2/10/2012 7:57 AM
Chlorobenzene	ND	200	U	ppbv	200	2/10/2012 7:57 AM
Chlorodibromomethane	ND	200	U	ppbv	200	2/10/2012 7:57 AM
Chloroethane	ND	200	U	ppbv	200	2/10/2012 7:57 AM
Chloroform	ND	200	U	ppbv	200	2/10/2012 7:57 AM
Chloromethane	ND	200	U	ppbv	200	2/10/2012 7:57 AM
cis-1,2-Dichloroethene	ND	200	U	ppbv	200	2/10/2012 7:57 AM
cis-1,3-dichloropropene	ND	200	U	ppbv	200	2/10/2012 7:57 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 9:57:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-037	**Matrix:**	Air
Client Sample ID:	VA1205		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,200	400		ppbv	200	2/10/2012 7:57 AM
Dichlorodifluoromethane	ND	200	U	ppbv	200	2/10/2012 7:57 AM
Ethyl acetate	ND	200	U	ppbv	200	2/10/2012 7:57 AM
Ethylbenzene	ND	400	U	ppbv	200	2/10/2012 7:57 AM
Heptane	1,700	200		ppbv	200	2/10/2012 7:57 AM
Hexachlorobutadiene	ND	400	U	ppbv	200	2/10/2012 7:57 AM
m,p-Xylene	200	400	J	ppbv	200	2/10/2012 7:57 AM
Methylene chloride	430	1,000	J	ppbv	200	2/10/2012 7:57 AM
n-Hexane	1,200	400		ppbv	200	2/10/2012 7:57 AM
Naphthalene	ND	200	U	ppbv	200	2/10/2012 7:57 AM
o-Xylene	ND	200	U	ppbv	200	2/10/2012 7:57 AM
Propylene	ND	200	U	ppbv	200	2/10/2012 7:57 AM
Styrene	ND	200	U	ppbv	200	2/10/2012 7:57 AM
tert-Butyl Methyl Ether	ND	200	U	ppbv	200	2/10/2012 7:57 AM
Tetrachloroethene	ND	200	U	ppbv	200	2/10/2012 7:57 AM
Tetrahydrofuran	ND	200	U	ppbv	200	2/10/2012 7:57 AM
Toluene	1,800	200		ppbv	200	2/10/2012 7:57 AM
trans-1,2-Dichloroethene	ND	200	U	ppbv	200	2/10/2012 7:57 AM
trans-1,3-dichloropropene	ND	200	U	ppbv	200	2/10/2012 7:57 AM
Trichloroethene	ND	200	U	ppbv	200	2/10/2012 7:57 AM
Trichlorofluoromethane	ND	200	U	ppbv	200	2/10/2012 7:57 AM
Vinyl acetate	ND	200	U	ppbv	200	2/10/2012 7:57 AM
Vinyl chloride	ND	200	U	ppbv	200	2/10/2012 7:57 AM
Xylenes, Total	200	600	J	ppbv	200	2/10/2012 7:57 AM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	200	2/10/2012 7:57 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	230,000	47,000		µg/m³	400	2/8/2012 4:47 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	2/8/2012 4:47 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	2/8/2012 4:47 PM
Surr: 4-Bromofluorobenzene	91.7	70-130		%REC	400	2/8/2012 4:47 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 10:29:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-038	**Matrix:**	Air
Client Sample ID:	VA1206		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.12	0.10		%	1	2/7/2012 2:26 PM
Carbon Monoxide	ND	0.10	U	%	1	2/7/2012 2:26 PM
Methane	ND	0.50	U	%	1	2/7/2012 2:26 PM
Nitrogen	80	0.10		%	1	2/7/2012 2:26 PM
Oxygen	21	0.10		%	1	2/7/2012 2:26 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	200	U	ppbv	200	2/10/2012 8:49 AM
1,1,2,2-Tetrachloroethane	ND	200	U	ppbv	200	2/10/2012 8:49 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	200	U	ppbv	200	2/10/2012 8:49 AM
1,1,2-Trichloroethane	ND	200	U	ppbv	200	2/10/2012 8:49 AM
1,1-Dichloroethane	ND	200	U	ppbv	200	2/10/2012 8:49 AM
1,1-Dichloroethene	ND	200	U	ppbv	200	2/10/2012 8:49 AM
1,2,4-Trichlorobenzene	ND	200	U	ppbv	200	2/10/2012 8:49 AM
1,2,4-Trimethylbenzene	ND	200	U	ppbv	200	2/10/2012 8:49 AM
1,2-Dibromoethane	ND	200	U	ppbv	200	2/10/2012 8:49 AM
1,2-Dichlorobenzene	ND	200	U	ppbv	200	2/10/2012 8:49 AM
1,2-Dichloroethane	ND	200	U	ppbv	200	2/10/2012 8:49 AM
1,2-Dichloropropane	ND	200	U	ppbv	200	2/10/2012 8:49 AM
1,3,5-Trimethylbenzene	ND	200	U	ppbv	200	2/10/2012 8:49 AM
1,3-Butadiene	ND	200	U	ppbv	200	2/10/2012 8:49 AM
1,3-Dichlorobenzene	ND	200	U	ppbv	200	2/10/2012 8:49 AM
1,4-Dichlorobenzene	ND	200	U	ppbv	200	2/10/2012 8:49 AM
2-Butanone	ND	200	U	ppbv	200	2/10/2012 8:49 AM
2-Hexanone	ND	200	U	ppbv	200	2/10/2012 8:49 AM
4-Methyl-2-pentanone	ND	200	U	ppbv	200	2/10/2012 8:49 AM
Acetone	580	200		ppbv	200	2/10/2012 8:49 AM
Benzene	1,700	200		ppbv	200	2/10/2012 8:49 AM
Benzyl chloride	ND	200	U	ppbv	200	2/10/2012 8:49 AM
Bromodichloromethane	ND	200	U	ppbv	200	2/10/2012 8:49 AM
Bromoform	ND	200	U	ppbv	200	2/10/2012 8:49 AM
Bromomethane	ND	200	U	ppbv	200	2/10/2012 8:49 AM
Carbon disulfide	ND	200	U	ppbv	200	2/10/2012 8:49 AM
Carbon tetrachloride	ND	200	U	ppbv	200	2/10/2012 8:49 AM
Chlorobenzene	ND	200	U	ppbv	200	2/10/2012 8:49 AM
Chlorodibromomethane	ND	200	U	ppbv	200	2/10/2012 8:49 AM
Chloroethane	ND	200	U	ppbv	200	2/10/2012 8:49 AM
Chloroform	ND	200	U	ppbv	200	2/10/2012 8:49 AM
Chloromethane	ND	200	U	ppbv	200	2/10/2012 8:49 AM
cis-1,2-Dichloroethene	ND	200	U	ppbv	200	2/10/2012 8:49 AM
cis-1,3-dichloropropene	ND	200	U	ppbv	200	2/10/2012 8:49 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 10:29:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-038	**Matrix:**	Air
Client Sample ID:	VA1206		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	4,500	400		ppbv	200	2/10/2012 8:49 AM
Dichlorodifluoromethane	ND	200	U	ppbv	200	2/10/2012 8:49 AM
Ethyl acetate	ND	200	U	ppbv	200	2/10/2012 8:49 AM
Ethylbenzene	ND	400	U	ppbv	200	2/10/2012 8:49 AM
Heptane	3,600	200		ppbv	200	2/10/2012 8:49 AM
Hexachlorobutadiene	ND	400	U	ppbv	200	2/10/2012 8:49 AM
m,p-Xylene	320	400	J	ppbv	200	2/10/2012 8:49 AM
Methylene chloride	ND	1,000	U	ppbv	200	2/10/2012 8:49 AM
n-Hexane	2,300	400		ppbv	200	2/10/2012 8:49 AM
Naphthalene	ND	200	U	ppbv	200	2/10/2012 8:49 AM
o-Xylene	ND	200	U	ppbv	200	2/10/2012 8:49 AM
Propylene	340	200		ppbv	200	2/10/2012 8:49 AM
Styrene	ND	200	U	ppbv	200	2/10/2012 8:49 AM
tert-Butyl Methyl Ether	ND	200	U	ppbv	200	2/10/2012 8:49 AM
Tetrachloroethene	ND	200	U	ppbv	200	2/10/2012 8:49 AM
Tetrahydrofuran	ND	200	U	ppbv	200	2/10/2012 8:49 AM
Toluene	3,900	200		ppbv	200	2/10/2012 8:49 AM
trans-1,2-Dichloroethene	ND	200	U	ppbv	200	2/10/2012 8:49 AM
trans-1,3-dichloropropene	ND	200	U	ppbv	200	2/10/2012 8:49 AM
Trichloroethene	ND	200	U	ppbv	200	2/10/2012 8:49 AM
Trichlorofluoromethane	ND	200	U	ppbv	200	2/10/2012 8:49 AM
Vinyl acetate	ND	200	U	ppbv	200	2/10/2012 8:49 AM
Vinyl chloride	ND	200	U	ppbv	200	2/10/2012 8:49 AM
Xylenes, Total	320	600	J	ppbv	200	2/10/2012 8:49 AM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	200	2/10/2012 8:49 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	240,000	47,000		µg/m³	400	2/8/2012 5:36 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	2/8/2012 5:36 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	2/8/2012 5:36 PM
Surr: 4-Bromofluorobenzene	92.6	70-130		%REC	400	2/8/2012 5:36 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 10:58:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-039	**Matrix:**	Air
Client Sample ID:	VA1207		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.092	0.10	J	%	1	2/7/2012 2:48 PM
Carbon Monoxide	ND	0.10	U	%	1	2/7/2012 2:48 PM
Methane	ND	0.50	U	%	1	2/7/2012 2:48 PM
Nitrogen	80	0.10		%	1	2/7/2012 2:48 PM
Oxygen	21	0.10		%	1	2/7/2012 2:48 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	200	U	ppbv	200	2/10/2012 9:43 PM
1,1,2,2-Tetrachloroethane	ND	200	U	ppbv	200	2/10/2012 9:43 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	200	U	ppbv	200	2/10/2012 9:43 PM
1,1,2-Trichloroethane	ND	200	U	ppbv	200	2/10/2012 9:43 PM
1,1-Dichloroethane	ND	200	U	ppbv	200	2/10/2012 9:43 PM
1,1-Dichloroethene	ND	200	U	ppbv	200	2/10/2012 9:43 PM
1,2,4-Trichlorobenzene	ND	200	U	ppbv	200	2/10/2012 9:43 PM
1,2,4-Trimethylbenzene	ND	200	U	ppbv	200	2/10/2012 9:43 PM
1,2-Dibromoethane	ND	200	U	ppbv	200	2/10/2012 9:43 PM
1,2-Dichlorobenzene	ND	200	U	ppbv	200	2/10/2012 9:43 PM
1,2-Dichloroethane	ND	200	U	ppbv	200	2/10/2012 9:43 PM
1,2-Dichloropropane	ND	200	U	ppbv	200	2/10/2012 9:43 PM
1,3,5-Trimethylbenzene	ND	200	U	ppbv	200	2/10/2012 9:43 PM
1,3-Butadiene	ND	200	U	ppbv	200	2/10/2012 9:43 PM
1,3-Dichlorobenzene	ND	200	U	ppbv	200	2/10/2012 9:43 PM
1,4-Dichlorobenzene	ND	200	U	ppbv	200	2/10/2012 9:43 PM
2-Butanone	ND	200	U	ppbv	200	2/10/2012 9:43 PM
2-Hexanone	ND	200	U	ppbv	200	2/10/2012 9:43 PM
4-Methyl-2-pentanone	ND	200	U	ppbv	200	2/10/2012 9:43 PM
Acetone	290	200		ppbv	200	2/10/2012 9:43 PM
Benzene	1,300	200		ppbv	200	2/10/2012 9:43 PM
Benzyl chloride	ND	200	U	ppbv	200	2/10/2012 9:43 PM
Bromodichloromethane	ND	200	U	ppbv	200	2/10/2012 9:43 PM
Bromoform	ND	200	U	ppbv	200	2/10/2012 9:43 PM
Bromomethane	ND	200	U	ppbv	200	2/10/2012 9:43 PM
Carbon disulfide	ND	200	U	ppbv	200	2/10/2012 9:43 PM
Carbon tetrachloride	ND	200	U	ppbv	200	2/10/2012 9:43 PM
Chlorobenzene	ND	200	U	ppbv	200	2/10/2012 9:43 PM
Chlorodibromomethane	ND	200	U	ppbv	200	2/10/2012 9:43 PM
Chloroethane	ND	200	U	ppbv	200	2/10/2012 9:43 PM
Chloroform	ND	200	U	ppbv	200	2/10/2012 9:43 PM
Chloromethane	ND	200	U	ppbv	200	2/10/2012 9:43 PM
cis-1,2-Dichloroethene	ND	200	U	ppbv	200	2/10/2012 9:43 PM
cis-1,3-dichloropropene	ND	200	U	ppbv	200	2/10/2012 9:43 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 10:58:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-039	**Matrix:**	Air
Client Sample ID:	VA1207		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	3,700	400		ppbv	200	2/10/2012 9:43 PM
Dichlorodifluoromethane	ND	200	U	ppbv	200	2/10/2012 9:43 PM
Ethyl acetate	ND	200	U	ppbv	200	2/10/2012 9:43 PM
Ethylbenzene	ND	400	U	ppbv	200	2/10/2012 9:43 PM
Heptane	2,800	200		ppbv	200	2/10/2012 9:43 PM
Hexachlorobutadiene	ND	400	U	ppbv	200	2/10/2012 9:43 PM
m,p-Xylene	ND	400	U	ppbv	200	2/10/2012 9:43 PM
Methylene chloride	ND	1,000	U	ppbv	200	2/10/2012 9:43 PM
n-Hexane	1,900	400		ppbv	200	2/10/2012 9:43 PM
Naphthalene	ND	200	U	ppbv	200	2/10/2012 9:43 PM
o-Xylene	ND	200	U	ppbv	200	2/10/2012 9:43 PM
Propylene	510	200		ppbv	200	2/10/2012 9:43 PM
Styrene	ND	200	U	ppbv	200	2/10/2012 9:43 PM
tert-Butyl Methyl Ether	ND	200	U	ppbv	200	2/10/2012 9:43 PM
Tetrachloroethene	ND	200	U	ppbv	200	2/10/2012 9:43 PM
Tetrahydrofuran	ND	200	U	ppbv	200	2/10/2012 9:43 PM
Toluene	2,800	200		ppbv	200	2/10/2012 9:43 PM
trans-1,2-Dichloroethene	ND	200	U	ppbv	200	2/10/2012 9:43 PM
trans-1,3-dichloropropene	ND	200	U	ppbv	200	2/10/2012 9:43 PM
Trichloroethene	ND	200	U	ppbv	200	2/10/2012 9:43 PM
Trichlorofluoromethane	ND	200	U	ppbv	200	2/10/2012 9:43 PM
Vinyl acetate	ND	200	U	ppbv	200	2/10/2012 9:43 PM
Vinyl chloride	ND	200	U	ppbv	200	2/10/2012 9:43 PM
Xylenes, Total	ND	600	U	ppbv	200	2/10/2012 9:43 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	200	2/10/2012 9:43 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	300,000	47,000		µg/m³	400	2/8/2012 6:25 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	2/8/2012 6:25 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	2/8/2012 6:25 PM
Surr: 4-Bromofluorobenzene	93.3	70-130		%REC	400	2/8/2012 6:25 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 11:34:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-040	**Matrix:**	Air
Client Sample ID:	VA1208		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	0.10	0.10		%	1	2/7/2012 3:09 PM
Carbon Monoxide	ND	0.10	U	%	1	2/7/2012 3:09 PM
Methane	ND	0.50	U	%	1	2/7/2012 3:09 PM
Nitrogen	80	0.10		%	1	2/7/2012 3:09 PM
Oxygen	21	0.10		%	1	2/7/2012 3:09 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
1,1,2,2-Tetrachloroethane	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
1,1,2-Trichloroethane	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
1,1-Dichloroethane	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
1,1-Dichloroethene	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
1,2,4-Trichlorobenzene	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
1,2,4-Trimethylbenzene	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
1,2-Dibromoethane	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
1,2-Dichlorobenzene	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
1,2-Dichloroethane	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
1,2-Dichloropropane	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
1,3,5-Trimethylbenzene	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
1,3-Butadiene	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
1,3-Dichlorobenzene	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
1,4-Dichlorobenzene	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
2-Butanone	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
2-Hexanone	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
4-Methyl-2-pentanone	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Acetone	1,700	1,600		ppbv	1600	2/10/2012 11:18 PM
Benzene	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Benzyl chloride	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Bromodichloromethane	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Bromoform	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Bromomethane	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Carbon disulfide	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Carbon tetrachloride	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Chlorobenzene	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Chlorodibromomethane	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Chloroethane	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Chloroform	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Chloromethane	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
cis-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
cis-1,3-dichloropropene	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 11:34:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-040	**Matrix:**	Air
Client Sample ID:	VA1208		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	3,400	3,200		ppbv	1600	2/10/2012 11:18 PM
Dichlorodifluoromethane	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Ethyl acetate	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Ethylbenzene	ND	3,200	U	ppbv	1600	2/10/2012 11:18 PM
Heptane	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Hexachlorobutadiene	ND	3,200	U	ppbv	1600	2/10/2012 11:18 PM
m,p-Xylene	ND	3,200	U	ppbv	1600	2/10/2012 11:18 PM
Methylene chloride	ND	8,000	U	ppbv	1600	2/10/2012 11:18 PM
n-Hexane	3,200	3,200		ppbv	1600	2/10/2012 11:18 PM
Naphthalene	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
o-Xylene	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Propylene	5,000	1,600		ppbv	1600	2/10/2012 11:18 PM
Styrene	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
tert-Butyl Methyl Ether	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Tetrachloroethene	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Tetrahydrofuran	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Toluene	1,700	1,600		ppbv	1600	2/10/2012 11:18 PM
trans-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
trans-1,3-dichloropropene	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Trichloroethene	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Trichlorofluoromethane	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Vinyl acetate	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Vinyl chloride	ND	1,600	U	ppbv	1600	2/10/2012 11:18 PM
Xylenes, Total	ND	4,800	U	ppbv	1600	2/10/2012 11:18 PM
Surr: 4-Bromofluorobenzene	108	70-130		%REC	1600	2/10/2012 11:18 PM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,100,000	190,000		µg/m³	1600	2/7/2012 6:59 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	2/7/2012 6:59 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	2/7/2012 6:59 PM
Surr: 4-Bromofluorobenzene	95.6	70-130		%REC	1600	2/7/2012 6:59 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 12:12:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-041	**Matrix:**	Air
Client Sample ID:	VA1209		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.078	0.10	J	%	1	2/7/2012 3:27 PM
Carbon Monoxide	ND	0.10	U	%	1	2/7/2012 3:27 PM
Methane	ND	0.50	U	%	1	2/7/2012 3:27 PM
Nitrogen	79	0.10		%	1	2/7/2012 3:27 PM
Oxygen	21	0.10		%	1	2/7/2012 3:27 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: rd2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	2/15/2012 4:19 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	2/15/2012 4:19 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	2/15/2012 4:19 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	2/15/2012 4:19 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	2/15/2012 4:19 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	2/15/2012 4:19 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	2/15/2012 4:19 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	2/15/2012 4:19 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	2/15/2012 4:19 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	2/15/2012 4:19 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	2/15/2012 4:19 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	2/15/2012 4:19 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	2/15/2012 4:19 PM
1,3-Butadiene	ND	40	U	ppbv	40	2/15/2012 4:19 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	2/15/2012 4:19 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	2/15/2012 4:19 PM
2-Butanone	ND	40	U	ppbv	40	2/15/2012 4:19 PM
2-Hexanone	ND	40	U	ppbv	40	2/15/2012 4:19 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	2/15/2012 4:19 PM
Acetone	540	400		ppbv	400	2/15/2012 3:34 PM
Benzene	180	40		ppbv	40	2/15/2012 4:19 PM
Benzyl chloride	ND	40	U	ppbv	40	2/15/2012 4:19 PM
Bromodichloromethane	ND	40	U	ppbv	40	2/15/2012 4:19 PM
Bromoform	ND	40	U	ppbv	40	2/15/2012 4:19 PM
Bromomethane	ND	40	U	ppbv	40	2/15/2012 4:19 PM
Carbon disulfide	ND	40	U	ppbv	40	2/15/2012 4:19 PM
Carbon tetrachloride	ND	40	U	ppbv	40	2/15/2012 4:19 PM
Chlorobenzene	ND	40	U	ppbv	40	2/15/2012 4:19 PM
Chlorodibromomethane	ND	40	U	ppbv	40	2/15/2012 4:19 PM
Chloroethane	ND	40	U	ppbv	40	2/15/2012 4:19 PM
Chloroform	ND	40	U	ppbv	40	2/15/2012 4:19 PM
Chloromethane	ND	40	U	ppbv	40	2/15/2012 4:19 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	2/15/2012 4:19 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	2/15/2012 4:19 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 12:12:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-041	**Matrix:**	Air
Client Sample ID:	VA1209		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,500	80		ppbv	40	2/15/2012 4:19 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	2/15/2012 4:19 PM
Ethyl acetate	ND	40	U	ppbv	40	2/15/2012 4:19 PM
Ethylbenzene	ND	80	U	ppbv	40	2/15/2012 4:19 PM
Heptane	460	40		ppbv	40	2/15/2012 4:19 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	2/15/2012 4:19 PM
m,p-Xylene	46	80	J	ppbv	40	2/15/2012 4:19 PM
Methylene chloride	ND	200	U	ppbv	40	2/15/2012 4:19 PM
n-Hexane	1,500	80		ppbv	40	2/15/2012 4:19 PM
Naphthalene	ND	40	U	ppbv	40	2/15/2012 4:19 PM
o-Xylene	ND	40	U	ppbv	40	2/15/2012 4:19 PM
Propylene	520	40		ppbv	40	2/15/2012 4:19 PM
Styrene	ND	40	U	ppbv	40	2/15/2012 4:19 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	2/15/2012 4:19 PM
Tetrachloroethene	ND	40	U	ppbv	40	2/15/2012 4:19 PM
Tetrahydrofuran	ND	40	U	ppbv	40	2/15/2012 4:19 PM
Toluene	700	40		ppbv	40	2/15/2012 4:19 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	2/15/2012 4:19 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	2/15/2012 4:19 PM
Trichloroethene	ND	40	U	ppbv	40	2/15/2012 4:19 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	2/15/2012 4:19 PM
Vinyl acetate	ND	40	U	ppbv	40	2/15/2012 4:19 PM
Vinyl chloride	ND	40	U	ppbv	40	2/15/2012 4:19 PM
Xylenes, Total	46	120	J	ppbv	40	2/15/2012 4:19 PM
Surr: 4-Bromofluorobenzene	110	70-130		%REC	40	2/15/2012 4:19 PM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: rd2**
C5-C8 Aliphatic Hydrocarbons	1,500,000	190,000		µg/m³	1600	2/7/2012 7:43 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	2/7/2012 7:43 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	2/7/2012 7:43 PM
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	1600	2/7/2012 7:43 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 1:21:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-042	**Matrix:**	Air
Client Sample ID:	VA1210		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.17	0.10		%	1	2/7/2012 4:29 PM
Carbon Monoxide	ND	0.10	U	%	1	2/7/2012 4:29 PM
Methane	ND	0.50	U	%	1	2/7/2012 4:29 PM
Nitrogen	79	0.10		%	1	2/7/2012 4:29 PM
Oxygen	21	0.10		%	1	2/7/2012 4:29 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	2/11/2012 2:23 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	2/11/2012 2:23 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	2/11/2012 2:23 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	2/11/2012 2:23 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	2/11/2012 2:23 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	2/11/2012 2:23 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	2/11/2012 2:23 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	2/11/2012 2:23 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	2/11/2012 2:23 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	2/11/2012 2:23 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	2/11/2012 2:23 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	2/11/2012 2:23 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	2/11/2012 2:23 AM
1,3-Butadiene	ND	800	U	ppbv	800	2/11/2012 2:23 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	2/11/2012 2:23 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	2/11/2012 2:23 AM
2-Butanone	ND	800	U	ppbv	800	2/11/2012 2:23 AM
2-Hexanone	ND	800	U	ppbv	800	2/11/2012 2:23 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	2/11/2012 2:23 AM
Acetone	1,400	800		ppbv	800	2/11/2012 2:23 AM
Benzene	ND	800	U	ppbv	800	2/11/2012 2:23 AM
Benzyl chloride	ND	800	U	ppbv	800	2/11/2012 2:23 AM
Bromodichloromethane	ND	800	U	ppbv	800	2/11/2012 2:23 AM
Bromoform	ND	800	U	ppbv	800	2/11/2012 2:23 AM
Bromomethane	ND	800	U	ppbv	800	2/11/2012 2:23 AM
Carbon disulfide	ND	800	U	ppbv	800	2/11/2012 2:23 AM
Carbon tetrachloride	ND	800	U	ppbv	800	2/11/2012 2:23 AM
Chlorobenzene	ND	800	U	ppbv	800	2/11/2012 2:23 AM
Chlorodibromomethane	ND	800	U	ppbv	800	2/11/2012 2:23 AM
Chloroethane	ND	800	U	ppbv	800	2/11/2012 2:23 AM
Chloroform	ND	800	U	ppbv	800	2/11/2012 2:23 AM
Chloromethane	ND	800	U	ppbv	800	2/11/2012 2:23 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	2/11/2012 2:23 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	2/11/2012 2:23 AM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 1:21:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-042	**Matrix:**	Air
Client Sample ID:	VA1210		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,000	1,600		ppbv	800	2/11/2012 2:23 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	2/11/2012 2:23 AM
Ethyl acetate	ND	800	U	ppbv	800	2/11/2012 2:23 AM
Ethylbenzene	ND	1,600	U	ppbv	800	2/11/2012 2:23 AM
Heptane	1,100	800		ppbv	800	2/11/2012 2:23 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	2/11/2012 2:23 AM
m,p-Xylene	ND	1,600	U	ppbv	800	2/11/2012 2:23 AM
Methylene chloride	ND	4,000	U	ppbv	800	2/11/2012 2:23 AM
n-Hexane	1,500	1,600	J	ppbv	800	2/11/2012 2:23 AM
Naphthalene	ND	800	U	ppbv	800	2/11/2012 2:23 AM
o-Xylene	ND	800	U	ppbv	800	2/11/2012 2:23 AM
Propylene	2,000	800		ppbv	800	2/11/2012 2:23 AM
Styrene	ND	800	U	ppbv	800	2/11/2012 2:23 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	2/11/2012 2:23 AM
Tetrachloroethene	ND	800	U	ppbv	800	2/11/2012 2:23 AM
Tetrahydrofuran	ND	800	U	ppbv	800	2/11/2012 2:23 AM
Toluene	990	800		ppbv	800	2/11/2012 2:23 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	2/11/2012 2:23 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	2/11/2012 2:23 AM
Trichloroethene	ND	800	U	ppbv	800	2/11/2012 2:23 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	2/11/2012 2:23 AM
Vinyl acetate	ND	800	U	ppbv	800	2/11/2012 2:23 AM
Vinyl chloride	ND	800	U	ppbv	800	2/11/2012 2:23 AM
Xylenes, Total	ND	2,400	U	ppbv	800	2/11/2012 2:23 AM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	800	2/11/2012 2:23 AM
Mass APH Air Air-Phase Petroleum Hydrocarbons	**Method:**					**Analyst: RH3**
C5-C8 Aliphatic Hydrocarbons	510,000	94,000		µg/m³	800	2/8/2012 7:10 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	2/8/2012 7:10 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	2/8/2012 7:10 PM
Surr: 4-Bromofluorobenzene	94.4	70-130		%REC	800	2/8/2012 7:10 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 1:54:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-043	**Matrix:**	Air
Client Sample ID:	VA1211		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.052	0.10	J	%	1	2/7/2012 4:08 PM
Carbon Monoxide	ND	0.10	U	%	1	2/7/2012 4:08 PM
Methane	ND	0.50	U	%	1	2/7/2012 4:08 PM
Nitrogen	78	0.10		%	1	2/7/2012 4:08 PM
Oxygen	21	0.10		%	1	2/7/2012 4:08 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: rd2**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	2/15/2012 1:51 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	2/15/2012 1:51 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	2/15/2012 1:51 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	2/15/2012 1:51 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	2/15/2012 1:51 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	2/15/2012 1:51 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	2/15/2012 1:51 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	2/15/2012 1:51 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	2/15/2012 1:51 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	2/15/2012 1:51 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	2/15/2012 1:51 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	2/15/2012 1:51 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	2/15/2012 1:51 AM
1,3-Butadiene	ND	400	U	ppbv	400	2/15/2012 1:51 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	2/15/2012 1:51 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	2/15/2012 1:51 AM
2-Butanone	ND	400	U	ppbv	400	2/15/2012 1:51 AM
2-Hexanone	ND	400	U	ppbv	400	2/15/2012 1:51 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	2/15/2012 1:51 AM
Acetone	1,000	400		ppbv	400	2/15/2012 1:51 AM
Benzene	530	400		ppbv	400	2/15/2012 1:51 AM
Benzyl chloride	ND	400	U	ppbv	400	2/15/2012 1:51 AM
Bromodichloromethane	ND	400	U	ppbv	400	2/15/2012 1:51 AM
Bromoform	ND	400	U	ppbv	400	2/15/2012 1:51 AM
Bromomethane	ND	400	U	ppbv	400	2/15/2012 1:51 AM
Carbon disulfide	ND	400	U	ppbv	400	2/15/2012 1:51 AM
Carbon tetrachloride	ND	400	U	ppbv	400	2/15/2012 1:51 AM
Chlorobenzene	ND	400	U	ppbv	400	2/15/2012 1:51 AM
Chlorodibromomethane	ND	400	U	ppbv	400	2/15/2012 1:51 AM
Chloroethane	ND	400	U	ppbv	400	2/15/2012 1:51 AM
Chloroform	ND	400	U	ppbv	400	2/15/2012 1:51 AM
Chloromethane	ND	400	U	ppbv	400	2/15/2012 1:51 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	2/15/2012 1:51 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	2/15/2012 1:51 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 1:54:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-043	**Matrix:**	Air
Client Sample ID:	VA1211		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,400	800		ppbv	400	2/15/2012 1:51 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	2/15/2012 1:51 AM
Ethyl acetate	ND	400	U	ppbv	400	2/15/2012 1:51 AM
Ethylbenzene	ND	800	U	ppbv	400	2/15/2012 1:51 AM
Heptane	1,100	400		ppbv	400	2/15/2012 1:51 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	2/15/2012 1:51 AM
m,p-Xylene	ND	800	U	ppbv	400	2/15/2012 1:51 AM
Methylene chloride	1,500	2,000	J	ppbv	400	2/15/2012 1:51 AM
n-Hexane	880	800		ppbv	400	2/15/2012 1:51 AM
Naphthalene	ND	400	U	ppbv	400	2/15/2012 1:51 AM
o-Xylene	ND	400	U	ppbv	400	2/15/2012 1:51 AM
Propylene	1,000	400		ppbv	400	2/15/2012 1:51 AM
Styrene	ND	400	U	ppbv	400	2/15/2012 1:51 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	2/15/2012 1:51 AM
Tetrachloroethene	ND	400	U	ppbv	400	2/15/2012 1:51 AM
Tetrahydrofuran	ND	400	U	ppbv	400	2/15/2012 1:51 AM
Toluene	1,200	400		ppbv	400	2/15/2012 1:51 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	2/15/2012 1:51 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	2/15/2012 1:51 AM
Trichloroethene	ND	400	U	ppbv	400	2/15/2012 1:51 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	2/15/2012 1:51 AM
Vinyl acetate	ND	400	U	ppbv	400	2/15/2012 1:51 AM
Vinyl chloride	ND	400	U	ppbv	400	2/15/2012 1:51 AM
Xylenes, Total	ND	1,200	U	ppbv	400	2/15/2012 1:51 AM
Surr: 4-Bromofluorobenzene	112	70-130		%REC	400	2/15/2012 1:51 AM
Mass APH Air Air-Phase Petroleum Hydrocarbons	**Method:**					**Analyst: RH3**
C5-C8 Aliphatic Hydrocarbons	300,000	94,000		µg/m³	800	2/8/2012 7:56 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	2/8/2012 7:56 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	2/8/2012 7:56 PM
Surr: 4-Bromofluorobenzene	95.9	70-130		%REC	800	2/8/2012 7:56 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 1:54:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-044	**Matrix:**	Air
Client Sample ID:	VA1212		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.20	0.10		%	1	2/9/2012 10:26 AM
Carbon Monoxide	ND	0.10	U	%	1	2/9/2012 10:26 AM
Methane	ND	0.50	U	%	1	2/9/2012 10:26 AM
Nitrogen	78	0.10		%	1	2/9/2012 10:26 AM
Oxygen	21	0.10		%	1	2/9/2012 10:26 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	2/11/2012 4:01 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	2/11/2012 4:01 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	2/11/2012 4:01 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	2/11/2012 4:01 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	2/11/2012 4:01 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	2/11/2012 4:01 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	2/11/2012 4:01 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	2/11/2012 4:01 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	2/11/2012 4:01 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	2/11/2012 4:01 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	2/11/2012 4:01 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	2/11/2012 4:01 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	2/11/2012 4:01 AM
1,3-Butadiene	ND	800	U	ppbv	800	2/11/2012 4:01 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	2/11/2012 4:01 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	2/11/2012 4:01 AM
2-Butanone	ND	800	U	ppbv	800	2/11/2012 4:01 AM
2-Hexanone	ND	800	U	ppbv	800	2/11/2012 4:01 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	2/11/2012 4:01 AM
Acetone	1,000	800		ppbv	800	2/11/2012 4:01 AM
Benzene	1,600	800		ppbv	800	2/11/2012 4:01 AM
Benzyl chloride	ND	800	U	ppbv	800	2/11/2012 4:01 AM
Bromodichloromethane	ND	800	U	ppbv	800	2/11/2012 4:01 AM
Bromoform	ND	800	U	ppbv	800	2/11/2012 4:01 AM
Bromomethane	ND	800	U	ppbv	800	2/11/2012 4:01 AM
Carbon disulfide	ND	800	U	ppbv	800	2/11/2012 4:01 AM
Carbon tetrachloride	ND	800	U	ppbv	800	2/11/2012 4:01 AM
Chlorobenzene	ND	800	U	ppbv	800	2/11/2012 4:01 AM
Chlorodibromomethane	ND	800	U	ppbv	800	2/11/2012 4:01 AM
Chloroethane	ND	800	U	ppbv	800	2/11/2012 4:01 AM
Chloroform	ND	800	U	ppbv	800	2/11/2012 4:01 AM
Chloromethane	ND	800	U	ppbv	800	2/11/2012 4:01 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	2/11/2012 4:01 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	2/11/2012 4:01 AM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 1:54:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-044	**Matrix:**	Air
Client Sample ID:	VA1212		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	4,900	1,600		ppbv	800	2/11/2012 4:01 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	2/11/2012 4:01 AM
Ethyl acetate	ND	800	U	ppbv	800	2/11/2012 4:01 AM
Ethylbenzene	ND	1,600	U	ppbv	800	2/11/2012 4:01 AM
Heptane	3,500	800		ppbv	800	2/11/2012 4:01 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	2/11/2012 4:01 AM
m,p-Xylene	ND	1,600	U	ppbv	800	2/11/2012 4:01 AM
Methylene chloride	ND	4,000	U	ppbv	800	2/11/2012 4:01 AM
n-Hexane	2,500	1,600		ppbv	800	2/11/2012 4:01 AM
Naphthalene	ND	800	U	ppbv	800	2/11/2012 4:01 AM
o-Xylene	ND	800	U	ppbv	800	2/11/2012 4:01 AM
Propylene	2,300	800		ppbv	800	2/11/2012 4:01 AM
Styrene	ND	800	U	ppbv	800	2/11/2012 4:01 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	2/11/2012 4:01 AM
Tetrachloroethene	ND	800	U	ppbv	800	2/11/2012 4:01 AM
Tetrahydrofuran	ND	800	U	ppbv	800	2/11/2012 4:01 AM
Toluene	3,000	800		ppbv	800	2/11/2012 4:01 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	2/11/2012 4:01 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	2/11/2012 4:01 AM
Trichloroethene	ND	800	U	ppbv	800	2/11/2012 4:01 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	2/11/2012 4:01 AM
Vinyl acetate	ND	800	U	ppbv	800	2/11/2012 4:01 AM
Vinyl chloride	ND	800	U	ppbv	800	2/11/2012 4:01 AM
Xylenes, Total	ND	2,400	U	ppbv	800	2/11/2012 4:01 AM
Surr: 4-Bromofluorobenzene	108	70-130		%REC	800	2/11/2012 4:01 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	710,000	94,000		µg/m³	800	2/8/2012 8:42 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	2/8/2012 8:42 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	2/8/2012 8:42 PM
Surr: 4-Bromofluorobenzene	95.7	70-130		%REC	800	2/8/2012 8:42 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 2:38:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-045	**Matrix:**	Air
Client Sample ID:	VA1213		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.14	0.10		%	1	2/9/2012 11:07 AM
Carbon Monoxide	ND	0.10	U	%	1	2/9/2012 11:07 AM
Methane	ND	0.50	U	%	1	2/9/2012 11:07 AM
Nitrogen	80	0.10		%	1	2/9/2012 11:07 AM
Oxygen	20	0.10		%	1	2/9/2012 11:07 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	2/10/2012 10:43 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	2/10/2012 10:43 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	2/10/2012 10:43 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	2/10/2012 10:43 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	2/10/2012 10:43 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	2/10/2012 10:43 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	2/10/2012 10:43 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	2/10/2012 10:43 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	2/10/2012 10:43 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	2/10/2012 10:43 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	2/10/2012 10:43 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	2/10/2012 10:43 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	2/10/2012 10:43 AM
1,3-Butadiene	ND	40	U	ppbv	40	2/10/2012 10:43 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	2/10/2012 10:43 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	2/10/2012 10:43 AM
2-Butanone	ND	40	U	ppbv	40	2/10/2012 10:43 AM
2-Hexanone	ND	40	U	ppbv	40	2/10/2012 10:43 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Acetone	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Benzene	360	40		ppbv	40	2/10/2012 10:43 AM
Benzyl chloride	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Bromodichloromethane	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Bromoform	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Bromomethane	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Carbon disulfide	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Carbon tetrachloride	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Chlorobenzene	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Chlorodibromomethane	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Chloroethane	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Chloroform	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Chloromethane	ND	40	U	ppbv	40	2/10/2012 10:43 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	2/10/2012 10:43 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	2/10/2012 10:43 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 2:38:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-045	**Matrix:**	Air
Client Sample ID:	VA1213		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,100	80		ppbv	40	2/10/2012 10:43 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Ethyl acetate	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Ethylbenzene	ND	80	U	ppbv	40	2/10/2012 10:43 AM
Heptane	940	40		ppbv	40	2/10/2012 10:43 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	2/10/2012 10:43 AM
m,p-Xylene	97	80		ppbv	40	2/10/2012 10:43 AM
Methylene chloride	ND	200	U	ppbv	40	2/10/2012 10:43 AM
n-Hexane	500	80		ppbv	40	2/10/2012 10:43 AM
Naphthalene	ND	40	U	ppbv	40	2/10/2012 10:43 AM
o-Xylene	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Propylene	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Styrene	ND	40	U	ppbv	40	2/10/2012 10:43 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Tetrachloroethene	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Tetrahydrofuran	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Toluene	1,300	40		ppbv	40	2/10/2012 10:43 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	2/10/2012 10:43 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Trichloroethene	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Vinyl acetate	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Vinyl chloride	ND	40	U	ppbv	40	2/10/2012 10:43 AM
Xylenes, Total	97	120	J	ppbv	40	2/10/2012 10:43 AM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	40	2/10/2012 10:43 AM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	84,000	4,700		µg/m³	40	2/9/2012 12:24 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	2/9/2012 12:24 PM
C9-C12 Aliphatic Hydrocarbons	1,700	7,600	J	µg/m³	40	2/9/2012 12:24 PM
Surr: 4-Bromofluorobenzene	94.5	70-130		%REC	40	2/9/2012 12:24 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 3:14:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-046	**Matrix:**	Air
Client Sample ID:	VA1214		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.13	0.10		%	1	2/9/2012 12:18 PM
Carbon Monoxide	ND	0.10	U	%	1	2/9/2012 12:18 PM
Methane	ND	0.50	U	%	1	2/9/2012 12:18 PM
Nitrogen	80	0.10		%	1	2/9/2012 12:18 PM
Oxygen	21	0.10		%	1	2/9/2012 12:18 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	2/11/2012 7:20 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	2/11/2012 7:20 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	2/11/2012 7:20 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	2/11/2012 7:20 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	2/11/2012 7:20 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	2/11/2012 7:20 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	2/11/2012 7:20 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	2/11/2012 7:20 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	2/11/2012 7:20 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	2/11/2012 7:20 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	2/11/2012 7:20 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	2/11/2012 7:20 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	2/11/2012 7:20 AM
1,3-Butadiene	ND	800	U	ppbv	800	2/11/2012 7:20 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	2/11/2012 7:20 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	2/11/2012 7:20 AM
2-Butanone	ND	800	U	ppbv	800	2/11/2012 7:20 AM
2-Hexanone	ND	800	U	ppbv	800	2/11/2012 7:20 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	2/11/2012 7:20 AM
Acetone	ND	800	U	ppbv	800	2/11/2012 7:20 AM
Benzene	1,200	800		ppbv	800	2/11/2012 7:20 AM
Benzyl chloride	ND	800	U	ppbv	800	2/11/2012 7:20 AM
Bromodichloromethane	ND	800	U	ppbv	800	2/11/2012 7:20 AM
Bromoform	ND	800	U	ppbv	800	2/11/2012 7:20 AM
Bromomethane	ND	800	U	ppbv	800	2/11/2012 7:20 AM
Carbon disulfide	ND	800	U	ppbv	800	2/11/2012 7:20 AM
Carbon tetrachloride	ND	800	U	ppbv	800	2/11/2012 7:20 AM
Chlorobenzene	ND	800	U	ppbv	800	2/11/2012 7:20 AM
Chlorodibromomethane	ND	800	U	ppbv	800	2/11/2012 7:20 AM
Chloroethane	ND	800	U	ppbv	800	2/11/2012 7:20 AM
Chloroform	ND	800	U	ppbv	800	2/11/2012 7:20 AM
Chloromethane	ND	800	U	ppbv	800	2/11/2012 7:20 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	2/11/2012 7:20 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	2/11/2012 7:20 AM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 3:14:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-046	**Matrix:**	Air
Client Sample ID:	VA1214		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,600	1,600		ppbv	800	2/11/2012 7:20 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	2/11/2012 7:20 AM
Ethyl acetate	ND	800	U	ppbv	800	2/11/2012 7:20 AM
Ethylbenzene	ND	1,600	U	ppbv	800	2/11/2012 7:20 AM
Heptane	1,900	800		ppbv	800	2/11/2012 7:20 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	2/11/2012 7:20 AM
m,p-Xylene	ND	1,600	U	ppbv	800	2/11/2012 7:20 AM
Methylene chloride	ND	4,000	U	ppbv	800	2/11/2012 7:20 AM
n-Hexane	1,700	1,600		ppbv	800	2/11/2012 7:20 AM
Naphthalene	ND	800	U	ppbv	800	2/11/2012 7:20 AM
o-Xylene	ND	800	U	ppbv	800	2/11/2012 7:20 AM
Propylene	2,200	800		ppbv	800	2/11/2012 7:20 AM
Styrene	ND	800	U	ppbv	800	2/11/2012 7:20 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	2/11/2012 7:20 AM
Tetrachloroethene	ND	800	U	ppbv	800	2/11/2012 7:20 AM
Tetrahydrofuran	ND	800	U	ppbv	800	2/11/2012 7:20 AM
Toluene	2,600	800		ppbv	800	2/11/2012 7:20 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	2/11/2012 7:20 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	2/11/2012 7:20 AM
Trichloroethene	ND	800	U	ppbv	800	2/11/2012 7:20 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	2/11/2012 7:20 AM
Vinyl acetate	ND	800	U	ppbv	800	2/11/2012 7:20 AM
Vinyl chloride	ND	800	U	ppbv	800	2/11/2012 7:20 AM
Xylenes, Total	ND	2,400	U	ppbv	800	2/11/2012 7:20 AM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	800	2/11/2012 7:20 AM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	230,000	94,000		µg/m³	800	2/9/2012 4:39 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	2/9/2012 4:39 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	2/9/2012 4:39 PM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	800	2/9/2012 4:39 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 3:48:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-047	**Matrix:**	Air
Client Sample ID:	VA1215		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.11	0.10		%	1	2/9/2012 12:59 PM
Carbon Monoxide	ND	0.10	U	%	1	2/9/2012 12:59 PM
Methane	ND	0.50	U	%	1	2/9/2012 12:59 PM
Nitrogen	80	0.10		%	1	2/9/2012 12:59 PM
Oxygen	21	0.10		%	1	2/9/2012 12:59 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: rd2**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	2/15/2012 2:43 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	2/15/2012 2:43 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	2/15/2012 2:43 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	2/15/2012 2:43 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	2/15/2012 2:43 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	2/15/2012 2:43 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	2/15/2012 2:43 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	2/15/2012 2:43 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	2/15/2012 2:43 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	2/15/2012 2:43 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	2/15/2012 2:43 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	2/15/2012 2:43 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	2/15/2012 2:43 AM
1,3-Butadiene	ND	400	U	ppbv	400	2/15/2012 2:43 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	2/15/2012 2:43 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	2/15/2012 2:43 AM
2-Butanone	ND	400	U	ppbv	400	2/15/2012 2:43 AM
2-Hexanone	ND	400	U	ppbv	400	2/15/2012 2:43 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	2/15/2012 2:43 AM
Acetone	420	400		ppbv	400	2/15/2012 2:43 AM
Benzene	1,100	400		ppbv	400	2/15/2012 2:43 AM
Benzyl chloride	ND	400	U	ppbv	400	2/15/2012 2:43 AM
Bromodichloromethane	ND	400	U	ppbv	400	2/15/2012 2:43 AM
Bromoform	ND	400	U	ppbv	400	2/15/2012 2:43 AM
Bromomethane	ND	400	U	ppbv	400	2/15/2012 2:43 AM
Carbon disulfide	ND	400	U	ppbv	400	2/15/2012 2:43 AM
Carbon tetrachloride	ND	400	U	ppbv	400	2/15/2012 2:43 AM
Chlorobenzene	ND	400	U	ppbv	400	2/15/2012 2:43 AM
Chlorodibromomethane	ND	400	U	ppbv	400	2/15/2012 2:43 AM
Chloroethane	ND	400	U	ppbv	400	2/15/2012 2:43 AM
Chloroform	ND	400	U	ppbv	400	2/15/2012 2:43 AM
Chloromethane	ND	400	U	ppbv	400	2/15/2012 2:43 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	2/15/2012 2:43 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	2/15/2012 2:43 AM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/19/2012 3:48:00 PM
Project:	Kirtland AFB		
Lab ID:	1201804-047	**Matrix:**	Air
Client Sample ID:	VA1215		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	5,300	800		ppbv	400	2/15/2012 2:43 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	2/15/2012 2:43 AM
Ethyl acetate	ND	400	U	ppbv	400	2/15/2012 2:43 AM
Ethylbenzene	ND	800	U	ppbv	400	2/15/2012 2:43 AM
Heptane	2,300	400		ppbv	400	2/15/2012 2:43 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	2/15/2012 2:43 AM
m,p-Xylene	ND	800	U	ppbv	400	2/15/2012 2:43 AM
Methylene chloride	940	2,000	J	ppbv	400	2/15/2012 2:43 AM
n-Hexane	3,800	800		ppbv	400	2/15/2012 2:43 AM
Naphthalene	ND	400	U	ppbv	400	2/15/2012 2:43 AM
o-Xylene	ND	400	U	ppbv	400	2/15/2012 2:43 AM
Propylene	1,400	400		ppbv	400	2/15/2012 2:43 AM
Styrene	ND	400	U	ppbv	400	2/15/2012 2:43 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	2/15/2012 2:43 AM
Tetrachloroethene	ND	400	U	ppbv	400	2/15/2012 2:43 AM
Tetrahydrofuran	ND	400	U	ppbv	400	2/15/2012 2:43 AM
Toluene	2,600	400		ppbv	400	2/15/2012 2:43 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	2/15/2012 2:43 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	2/15/2012 2:43 AM
Trichloroethene	ND	400	U	ppbv	400	2/15/2012 2:43 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	2/15/2012 2:43 AM
Vinyl acetate	ND	400	U	ppbv	400	2/15/2012 2:43 AM
Vinyl chloride	ND	400	U	ppbv	400	2/15/2012 2:43 AM
Xylenes, Total	ND	1,200	U	ppbv	400	2/15/2012 2:43 AM
Surr: 4-Bromofluorobenzene	109	70-130		%REC	400	2/15/2012 2:43 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,900,000	940,000		µg/m³	8000	2/9/2012 12:20 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	2/9/2012 12:20 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	2/9/2012 12:20 AM
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	8000	2/9/2012 12:20 AM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/20/2012 8:56:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-048	**Matrix:**	Air
Client Sample ID:	VA1216		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.057	0.10	J	%	1	2/9/2012 3:57 PM
Carbon Monoxide	ND	0.10	U	%	1	2/9/2012 3:57 PM
Methane	ND	0.50	U	%	1	2/9/2012 3:57 PM
Nitrogen	80	0.10		%	1	2/9/2012 3:57 PM
Oxygen	21	0.10		%	1	2/9/2012 3:57 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
2-Butanone	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
2-Hexanone	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Acetone	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Benzene	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Bromoform	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Bromomethane	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Chloroethane	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Chloroform	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Chloromethane	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/20/2012 8:56:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-048	**Matrix:**	Air
Client Sample ID:	VA1216		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	14,000	16,000	J	ppbv	8000	2/11/2012 8:39 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	2/11/2012 8:39 PM
Heptane	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	2/11/2012 8:39 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	2/11/2012 8:39 PM
Methylene chloride	ND	40,000	U	ppbv	8000	2/11/2012 8:39 PM
n-Hexane	14,000	16,000	J	ppbv	8000	2/11/2012 8:39 PM
Naphthalene	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
o-Xylene	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Propylene	22,000	8,000		ppbv	8000	2/11/2012 8:39 PM
Styrene	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Toluene	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Trichloroethene	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	2/11/2012 8:39 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	2/11/2012 8:39 PM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	8000	2/11/2012 8:39 PM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	7,700,000	940,000		µg/m³	8000	2/9/2012 11:04 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	2/9/2012 11:04 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	2/9/2012 11:04 PM
Surr: 4-Bromofluorobenzene	91.8	70-130		%REC	8000	2/9/2012 11:04 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-049	**Matrix:**	Air
Client Sample ID:	VA8073-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	2/2/2012 9:51 PM
1,1,2,2-Tetrachloroethane	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
1,1,2-Trichloroethane	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
1,1-Dichloroethane	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
1,1-Dichloroethene	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
1,2,4-Trichlorobenzene	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
1,2,4-Trimethylbenzene	1.9	1.0		ppbv	1	2/2/2012 9:51 PM
1,2-Dibromoethane	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
1,2-Dichlorobenzene	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
1,2-Dichloroethane	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
1,2-Dichloropropane	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
1,3,5-Trimethylbenzene	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
1,3-Butadiene	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
1,3-Dichlorobenzene	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
1,4-Dichlorobenzene	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
2-Butanone	17	1.0		ppbv	1	2/2/2012 9:51 PM
2-Hexanone	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
4-Methyl-2-pentanone	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
Acetone	31	1.0		ppbv	1	2/2/2012 9:51 PM
Benzene	5.6	1.0		ppbv	1	2/2/2012 9:51 PM
Benzyl chloride	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
Bromodichloromethane	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
Bromoform	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
Bromomethane	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
Carbon disulfide	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
Carbon tetrachloride	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
Chlorobenzene	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
Chlorodibromomethane	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
Chloroethane	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
Chloroform	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
Chloromethane	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
cis-1,2-Dichloroethene	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
cis-1,3-dichloropropene	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
Cyclohexane	26	2.0		ppbv	1	2/2/2012 9:51 PM
Dichlorodifluoromethane	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
Ethyl acetate	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
Ethylbenzene	5.4	2.0		ppbv	1	2/2/2012 9:51 PM
Heptane	30	1.0		ppbv	1	2/2/2012 9:51 PM
Hexachlorobutadiene	ND	2.0	U	ppbv	1	2/2/2012 9:51 PM
m,p-Xylene	14	2.0		ppbv	1	2/2/2012 9:51 PM
Methylene chloride	2.5	5.0	J	ppbv	1	2/2/2012 9:51 PM

RTI Laboratories - Analytical Report

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/18/2012 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1201804-049	**Matrix:**	Air
Client Sample ID:	VA8073-TB		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
n-Hexane	10	2.0		ppbv	1	2/2/2012 9:51 PM
Naphthalene	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
o-Xylene	3.8	1.0		ppbv	1	2/2/2012 9:51 PM
Propylene	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
Styrene	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
tert-Butyl Methyl Ether	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
Tetrachloroethene	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
Tetrahydrofuran	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
Toluene	44	1.0		ppbv	1	2/2/2012 9:51 PM
trans-1,2-Dichloroethene	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
trans-1,3-dichloropropene	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
Trichloroethene	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
Trichlorofluoromethane	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
Vinyl acetate	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
Vinyl chloride	ND	1.0	U	ppbv	1	2/2/2012 9:51 PM
Xylenes, Total	17	3.0		ppbv	1	2/2/2012 9:51 PM
Surr: 4-Bromofluorobenzene	89.2	70-130		%REC	1	2/2/2012 9:51 PM

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R45970

Sample ID:	MBLK VOA1 020212	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45970
Client ID:	PBW	Batch ID:	R45970	TestNo:	TO-15			Analysis Date:	2/2/2012	SeqNo:	901740

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#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R45970

Sample ID:	MBLK VOA1 020212	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45970
Client ID:	PBW	Batch ID:	R45970	TestNo:	TO-15			Analysis Date:	2/2/2012	SeqNo:	901740

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	1.4	1.0									
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	14		12.50		113	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R45970

Sample ID:	1201676-003Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45970
Client ID:	ZZZZZZ	Batch ID:	R45970	TestNo:	TO-15			Analysis Date:	2/2/2012	SeqNo:	901745

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	40						0	0	25	U
1,1,2,2-Tetrachloroethane	ND	40						0	0	25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40						0	0	25	U
1,1,2-Trichloroethane	ND	40						0	0	25	U
1,1-Dichloroethane	ND	40						0	0	25	U
1,1-Dichloroethene	ND	40						0	0	25	U
1,2,4-Trichlorobenzene	ND	40						0	0	25	U
1,2,4-Trimethylbenzene	ND	40						0	0	25	U
1,2-Dibromoethane	ND	40						0	0	25	U
1,2-Dichlorobenzene	ND	40						0	0	25	U
1,2-Dichloroethane	ND	40						0	0	25	U
1,2-Dichloropropane	ND	40						0	0	25	U
1,3,5-Trimethylbenzene	ND	40						0	0	25	U
1,3-Butadiene	ND	40						0	0	25	U
1,3-Dichlorobenzene	ND	40						0	0	25	U
1,4-Dichlorobenzene	ND	40						0	0	25	U
2-Butanone	ND	40						0	0	25	U
2-Hexanone	ND	40						0	0	25	U
4-Methyl-2-pentanone	ND	40						0	0	25	U
Acetone	ND	40						0	0	25	U
Benzene	660	40						653.2	1.10	25	
Benzyl chloride	ND	40						0	0	25	U
Bromodichloromethane	ND	40						0	0	25	U
Bromoform	ND	40						0	0	25	U
Bromomethane	ND	40						0	0	25	U
Carbon disulfide	ND	40						0	0	25	U
Carbon tetrachloride	ND	40						0	0	25	U
Chlorobenzene	ND	40						0	0	25	U
Chlorodibromomethane	ND	40						0	0	25	U
Chloroethane	ND	40						0	0	25	U
Chloroform	230	40						217.6	5.19	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R45970

Sample ID:	1201676-003Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45970
Client ID:	ZZZZZZ	Batch ID:	R45970	TestNo:	TO-15			Analysis Date:	2/2/2012	SeqNo:	901745

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	40						0	0	25	U
cis-1,2-Dichloroethene	ND	40						0	0	25	U
cis-1,3-dichloropropene	ND	40						0	0	25	U
Cyclohexane	1,000	80						1,016	1.83	25	
Dichlorodifluoromethane	ND	40						0	0	25	U
Ethyl acetate	ND	40						0	0	25	U
Ethylbenzene	67	80						64.80	3.04	25	J
Heptane	1,200	40						1,164	1.97	25	
Hexachlorobutadiene	ND	80						0	0	25	U
m,p-Xylene	190	80						182.0	4.93	25	
Methylene chloride	ND	200						0	0	25	U
n-Hexane	580	80						587.2	1.58	25	
Naphthalene	ND	40						0	0	25	U
o-Xylene	51	40						48.80	4.80	25	
Propylene	71	40						72.00	1.68	25	
Styrene	ND	40						0	0	25	U
tert-Butyl Methyl Ether	ND	40						0	0	25	U
Tetrachloroethene	ND	40						0	0	25	U
Tetrahydrofuran	ND	40						0	0	25	U
Toluene	2,300	40						2,150	4.94	25	
trans-1,2-Dichloroethene	ND	40						0	0	25	U
trans-1,3-dichloropropene	ND	40						0	0	25	U
Trichloroethene	ND	40						0	0	25	U
Trichlorofluoromethane	ND	40						0	0	25	U
Vinyl acetate	ND	40						0	0	25	U
Vinyl chloride	ND	40						0	0	25	U
Xylenes, Total	240	120						230.8	4.90	25	
Surr: 4-Bromofluorobenzene	520		500.0		104	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R45984

Sample ID:	MBLK 020312 VOA9	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	45984	
Client ID:	PBW	Batch ID:	R45984	TestNo:	MA_APH			Analysis Date:	2/3/2012	SeqNo:	901925	

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		90.3	70	130				

Sample ID:	1201804-028Adup	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	45984	
Client ID:	VA1196	Batch ID:	R45984	TestNo:	MA_APH			Analysis Date:	2/3/2012	SeqNo:	901931	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	1,600,000	940,000						1,616,000	1.12	30	
C9-C10 Aromatic Hydrocarbons	ND	1,100,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000						0	0	30	U
Surr: 4-Bromofluorobenzene	660,000		716,000		92.5	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46008

Sample ID:	MBLK 020612 VOA9	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	46008	
Client ID:	PBW	Batch ID:	R46008	TestNo:	MA_APH			Analysis Date:	2/6/2012	SeqNo:	902316	

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	79		89.50		88.6	70	130				

Sample ID:	1201676-022Adup	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	46008	
Client ID:	ZZZZZZ	Batch ID:	R46008	TestNo:	MA_APH			Analysis Date:	2/6/2012	SeqNo:	902318	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	16,000	4,700						15,580	4.45	30	
C9-C10 Aromatic Hydrocarbons	ND	5,300						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	ND	7,600						0	0	30	U
Surr: 4-Bromofluorobenzene	3,400		3,580		94.8	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46018

Sample ID:	MBLK VOA1 020612	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	46018
Client ID:	PBW	Batch ID:	R46018	TestNo:	TO-15			Analysis Date:	2/6/2012	SeqNo:	902537

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#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46018

Sample ID:	MBLK VOA1 020612	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	46018
Client ID:	PBW	Batch ID:	R46018	TestNo:	TO-15			Analysis Date:	2/6/2012	SeqNo:	902537

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	1.4	1.0									
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	13		12.50		108	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46018

Sample ID:	1201804-033Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	46018
Client ID:	VA1201	Batch ID:	R46018	TestNo:	TO-15			Analysis Date:	2/6/2012	SeqNo:	902542

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	ND	8,000						0	0	25	U
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#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46018

Sample ID:	1201804-033Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	46018	
Client ID:	VA1201	Batch ID:	R46018	TestNo:	TO-15			Analysis Date:	2/6/2012	SeqNo:	902542	

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	ND	16,000						9,200	200	25	RU
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	ND	8,000						0	0	25	U
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	ND	16,000						8,480	200	25	RU
Naphthalene	ND	8,000						0	0	25	U
o-Xylene	ND	8,000						0	0	25	U
Propylene	12,000	8,000						14,800	20.9	25	
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	ND	8,000						0	0	25	U
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	100,000		100,000		103	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46036

Sample ID:	MBLK VOA9 020712	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	46036	
Client ID:	PBW	Batch ID:	R46036	TestNo:	MA_APH			Analysis Date:	2/7/2012	SeqNo:	902710	

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:	1201804-029ADUP	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	46036	
Client ID:	VA1197	Batch ID:	R46036	TestNo:	MA_APH			Analysis Date:	2/7/2012	SeqNo:	902712	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	64,000	4,700						62,370	2.85	30	
C9-C10 Aromatic Hydrocarbons	ND	5,300						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	ND	7,600						0	0	30	U
Surr: 4-Bromofluorobenzene	3,400		3,580		94.0	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46053

Sample ID: **MBLK** Samp Type: **MBLK** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **46053**
Client ID: **PBW** Batch ID: **R46053** TestNo: **ASTM-D2504** Analysis Date: **2/2/2012** SeqNo: **903127**

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** Samp Type: **LCS** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **46053**
Client ID: **LCSW** Batch ID: **R46053** TestNo: **ASTM-D2504** Analysis Date: **2/2/2012** SeqNo: **903129**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.7	0.10	2.500	0	106	70	130	2.630	0.946	0	
Carbon Monoxide	2.7	0.10	2.500	0	108	70	130	2.689	0.0372	0	
Methane	2.1	0.50	2.000	0	105	70	130	2.093	0.0956	0	
Nitrogen	2.7	0.10	2.500	0	107	70	130	2.650	0.564	0	
Oxygen	2.5	0.10	2.500	0	98.9	70	130	2.473	0.0404	0	

Sample ID: **1201804-012bdup** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **46053**
Client ID: **VA1133** Batch ID: **R46053** TestNo: **ASTM-D2504** Analysis Date: **2/2/2012** SeqNo: **903141**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.061	0.10						0.06200	1.63	20	J
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	78	0.10						79.67	1.49	20	
Oxygen	21	0.10						21.34	1.48	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46054

Sample ID:	mblk	Samp Type:	MBLK	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	46054	
Client ID:	PBW	Batch ID:	R46054	TestNo:	ASTM-D2504			Analysis Date:	2/6/2012	SeqNo:	903144	

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	Samp Type:	LCS	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	46054	
Client ID:	LCSW	Batch ID:	R46054	TestNo:	ASTM-D2504			Analysis Date:	2/6/2012	SeqNo:	903146	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.6	0.10	2.500	0	105	70	130	2.615	0.610	0	
Carbon Monoxide	2.7	0.10	2.500	0	107	70	130	2.704	0.705	0	
Methane	2.1	0.50	2.000	0	103	70	130	2.106	1.97	0	
Nitrogen	2.6	0.10	2.500	0	105	70	130	2.694	2.14	0	
Oxygen	2.5	0.10	2.500	0	98.5	70	130	2.493	1.21	0	

Sample ID:	1201804-022bdup	Samp Type:	DUP	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	46054	
Client ID:	VA1165	Batch ID:	R46054	TestNo:	ASTM-D2504			Analysis Date:	2/6/2012	SeqNo:	903158	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.63	0.10						0.6410	1.10	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	80	0.10						79.57	0.0465	20	
Oxygen	20	0.10						20.24	0.0593	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46055

Sample ID:	mblk	Samp Type:	MBLK	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	46055	
Client ID:	PBW	Batch ID:	R46055	TestNo:	ASTM-D2504			Analysis Date:	2/7/2012	SeqNo:	903167	

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	Samp Type:	LCS	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	46055	
Client ID:	LCSW	Batch ID:	R46055	TestNo:	ASTM-D2504			Analysis Date:	2/7/2012	SeqNo:	903169	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.6	0.10	2.500	0	106	70	130	2.638	0	0	
Carbon Monoxide	2.7	0.10	2.500	0	108	70	130	2.698	0	0	
Methane	2.1	0.50	2.000	0	105	70	130	2.101	0.191	0	
Nitrogen	2.6	0.10	2.500	0	106	70	130	2.653	0.264	0	
Oxygen	2.5	0.10	2.500	0	98.9	70	130	2.476	0.162	0	

Sample ID:	1201804-037bdup	Samp Type:	DUP	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	46055	
Client ID:	VA1205	Batch ID:	R46055	TestNo:	ASTM-D2504			Analysis Date:	2/7/2012	SeqNo:	903181	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.53	0.10						0.5290	0.569	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	79	0.10						79.23	0.700	20	
Oxygen	20	0.10						20.29	0.707	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46093

Sample ID:	mblk	Samp Type:	MBLK	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	46093	
Client ID:	PBW	Batch ID:	R46093	TestNo:	ASTM-D2504			Analysis Date:	2/9/2012	SeqNo:	903917	

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	Samp Type:	LCS	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	46093	
Client ID:	LCSW	Batch ID:	R46093	TestNo:	ASTM-D2504			Analysis Date:	2/9/2012	SeqNo:	903919	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.7	0.10	2.500	0	106	70	130	2.633	0.794	0	
Carbon Monoxide	2.7	0.10	2.500	0	108	70	130	2.685	0.446	0	
Methane	2.1	0.50	2.000	0	105	70	130	2.090	0.382	0	
Nitrogen	2.6	0.10	2.500	0	106	70	130	2.639	0.378	0	
Oxygen	2.5	0.10	2.500	0	99.0	70	130	2.465	0.445	0	

Sample ID:	1201804-048bdup	Samp Type:	DUP	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	46093	
Client ID:	VA1216	Batch ID:	R46093	TestNo:	ASTM-D2504			Analysis Date:	2/9/2012	SeqNo:	903926	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.056	0.10						0.05700	1.77	20	J
Carbon Monoxide	ND	0.10						0	0	20	
Methane	ND	0.50						0	0	20	
Nitrogen	79	0.10						79.60	0.480	20	
Oxygen	21	0.10						21.25	0.476	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46104

Sample ID:	MBLK VOA9 020812	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	46104	
Client ID:	PBW	Batch ID:	R46104	TestNo:	MA_APH			Analysis Date:	2/8/2012	SeqNo:	903992	

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		89.8	70	130				

Sample ID:	1201804-038Adup	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	46104	
Client ID:	VA1206	Batch ID:	R46104	TestNo:	MA_APH			Analysis Date:	2/8/2012	SeqNo:	903994	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	110,000	4,700						109,200	4.63	30	
C9-C10 Aromatic Hydrocarbons	ND	5,300						0	0	30	
C9-C12 Aliphatic Hydrocarbons	ND	7,600						1,429	200	30	R
Surr: 4-Bromofluorobenzene	3,300		3,580		92.9	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46108

Sample ID:	MBLK VOA9 020912	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	46108	
Client ID:	PBW	Batch ID:	R46108	TestNo:	MA_APH			Analysis Date:	2/9/2012	SeqNo:	904049	

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		91.2	70	130				

Sample ID:	1201804-045Adup	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	46108	
Client ID:	VA1213	Batch ID:	R46108	TestNo:	MA_APH			Analysis Date:	2/9/2012	SeqNo:	904051	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	99,000	4,700						84,390	15.5	30	
C9-C10 Aromatic Hydrocarbons	ND	5,300						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	2,400	7,600						1,737	32.5	30	JR
Surr: 4-Bromofluorobenzene	3,400		3,580		95.0	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46119

Sample ID:	MBLK VOA1 020912	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	46119
Client ID:	PBW	Batch ID:	R46119	TestNo:	TO-15			Analysis Date:	2/10/2012	SeqNo:	904299

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#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46119

Sample ID:	MBLK VOA1 020912	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	46119	
Client ID:	PBW	Batch ID:	R46119	TestNo:	TO-15			Analysis Date:	2/10/2012	SeqNo:	904299	

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	2.3	1.0									
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	14		12.50		108	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46119

Sample ID:	1201804-012ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	46119	
Client ID:	VA1133	Batch ID:	R46119	TestNo:	TO-15			Analysis Date:	2/10/2012	SeqNo:	904302	

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	110	40						103.2	1.92	25	
1,2-Dibromoethane	ND	40						0	0	25	U
1,2-Dichlorobenzene	ND	40						0	0	25	U
1,2-Dichloroethane	ND	40						0	0	25	U
1,2-Dichloropropane	ND	40						0	0	25	U
1,3,5-Trimethylbenzene	51	40						49.60	2.39	25	
1,3-Butadiene	ND	40						0	0	25	U
1,3-Dichlorobenzene	ND	40						0	0	25	U
1,4-Dichlorobenzene	ND	40						0	0	25	U
2-Butanone	ND	40						0	0	25	U
2-Hexanone	ND	40						0	0	25	U
4-Methyl-2-pentanone	ND	40						0	0	25	U
Acetone	ND	40						0	0	25	U
Benzene	3,100	40						3,206	4.20	25	
Benzyl chloride	ND	40						0	0	25	U
Bromodichloromethane	ND	40						0	0	25	U
Bromoform	ND	40						0	0	25	U
Bromomethane	ND	40						0	0	25	U
Carbon disulfide	ND	40						0	0	25	U
Carbon tetrachloride	ND	40						0	0	25	U
Chlorobenzene	ND	40						0	0	25	U
Chlorodibromomethane	ND	40						0	0	25	U
Chloroethane	ND	40						0	0	25	U
Chloroform	ND	40						0	0	25	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46119

Sample ID:	1201804-012ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	46119	
Client ID:	VA1133	Batch ID:	R46119	TestNo:	TO-15			Analysis Date:	2/10/2012	SeqNo:	904302	

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	4,500	80						4,729	4.12	25	
Dichlorodifluoromethane	ND	40						0	0	25	U
Ethyl acetate	ND	40						0	0	25	U
Ethylbenzene	760	80						772.0	1.04	25	
Heptane	4,100	40						4,341	4.54	25	
Hexachlorobutadiene	ND	80						0	0	25	U
m,p-Xylene	1,900	80						1,905	1.14	25	
Methylene chloride	ND	200						0	0	25	U
n-Hexane	4,200	80						4,348	3.37	25	
Naphthalene	ND	40						0	0	25	U
o-Xylene	510	40						517.2	1.09	25	
Propylene	120	40						124.4	1.62	25	
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	6,300	40						6,631	5.56	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	2,400	120						2,422	1.13	25	
Surr: 4-Bromofluorobenzene	590		500.0		118	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46143

Sample ID:	MBLK VOA9 021012	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	46143	
Client ID:	PBW	Batch ID:	R46143	TestNo:	MA_APH			Analysis Date:	2/10/2012	SeqNo:	904678	

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		89.4	70	130				

Sample ID:	1201804-026Adup	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	46143	
Client ID:	VA1169	Batch ID:	R46143	TestNo:	MA_APH			Analysis Date:	2/10/2012	SeqNo:	904680	

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						1,155,000	4.72	30	
C9-C10 Aromatic Hydrocarbons	ND	210,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	ND	300,000						0	0	30	U
Surr: 4-Bromofluorobenzene	130,000		143,200		93.8	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46147

Sample ID:	MBLK VOA1 021012	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	46147
Client ID:	PBW	Batch ID:	R46147	TestNo:	TO-15			Analysis Date:	2/10/2012	SeqNo:	904746

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#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46147

Sample ID:	MBLK VOA1 021012	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	46147
Client ID:	PBW	Batch ID:	R46147	TestNo:	TO-15			Analysis Date:	2/10/2012	SeqNo:	904746

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	2.2	1.0									
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	13		12.50		107	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46147

Sample ID:	1201804-008ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	46147
Client ID:	VA1122	Batch ID:	R46147	TestNo:	TO-15			Analysis Date:	2/11/2012	SeqNo:	904754

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	27,000	8,000						28,960	6.56	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#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46147

Sample ID:	1201804-008ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	46147
Client ID:	VA1122	Batch ID:	R46147	TestNo:	TO-15			Analysis Date:	2/11/2012	SeqNo:	904754

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	41,000	16,000						42,720	4.79	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						17,920	5.98	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	34,000	16,000						35,600	4.83	25	
Naphthalene	ND	8,000						0	0	25	U
o-Xylene	ND	8,000						0	0	25	U
Propylene	26,000	8,000						26,480	2.45	25	
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	33,000	8,000						37,200	10.9	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	110,000		100,000		109	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46150

Sample ID:	MBLK VOA1 021112	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	46150
Client ID:	PBW	Batch ID:	R46150	TestNo:	TO-15			Analysis Date:	2/11/2012	SeqNo:	904802

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#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46150

Sample ID:	MBLK VOA1 021112	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	46150
Client ID:	PBW	Batch ID:	R46150	TestNo:	TO-15			Analysis Date:	2/11/2012	SeqNo:	904802

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	2.4	1.0									
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	13		12.50		107	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46150

Sample ID:	1201804-047ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	46150
Client ID:	VA1215	Batch ID:	R46150	TestNo:	TO-15			Analysis Date:	2/11/2012	SeqNo:	904811

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	ND	8,000						0	0	25	U
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#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46150

Sample ID:	1201804-047ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	46150
Client ID:	VA1215	Batch ID:	R46150	TestNo:	TO-15			Analysis Date:	2/11/2012	SeqNo:	904811

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	ND	16,000						0	0	25	U
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	ND	8,000						0	0	25	U
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	ND	16,000						0	0	25	U
Naphthalene	ND	8,000						0	0	25	U
o-Xylene	ND	8,000						0	0	25	U
Propylene	20,000	8,000						20,080	1.61	25	
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	ND	8,000						0	0	25	U
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	110,000		100,000		105	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46235

Sample ID:	MBLK VOA9 021412	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	46235	
Client ID:	PBW	Batch ID:	R46235	TestNo:	MA_APH			Analysis Date:	2/14/2012	SeqNo:	906160	

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		91.7	70	130				

Sample ID:	1201804-024Adup	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	46235	
Client ID:	VA1167	Batch ID:	R46235	TestNo:	MA_APH			Analysis Date:	2/14/2012	SeqNo:	906162	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	64,000	4,700						61,990	3.77	30	
C9-C10 Aromatic Hydrocarbons	ND	5,300						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	ND	7,600						0	0	30	U
Surr: 4-Bromofluorobenzene	3,400		3,580		94.7	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46267

Sample ID:	1201804-024Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	46267
Client ID:	VA1167	Batch ID:	R46267	TestNo:	TO-15			Analysis Date:	2/15/2012	SeqNo:	906739

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	40						0	0	25	U
1,1,2,2-Tetrachloroethane	ND	40						0	0	25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40						0	0	25	U
1,1,2-Trichloroethane	ND	40						0	0	25	U
1,1-Dichloroethane	ND	40						0	0	25	U
1,1-Dichloroethene	ND	40						0	0	25	U
1,2,4-Trichlorobenzene	ND	40						0	0	25	U
1,2,4-Trimethylbenzene	ND	40						0	0	25	U
1,2-Dibromoethane	ND	40						0	0	25	U
1,2-Dichlorobenzene	ND	40						0	0	25	U
1,2-Dichloroethane	ND	40						0	0	25	U
1,2-Dichloropropane	ND	40						0	0	25	U
1,3,5-Trimethylbenzene	ND	40						0	0	25	U
1,3-Butadiene	ND	40						0	0	25	U
1,3-Dichlorobenzene	ND	40						0	0	25	U
1,4-Dichlorobenzene	ND	40						0	0	25	U
2-Butanone	ND	40						0	0	25	U
2-Hexanone	ND	40						0	0	25	U
4-Methyl-2-pentanone	ND	40						0	0	25	U
Acetone	ND	40						0	0	25	U
Benzene	660	40						754.8	13.5	25	
Benzyl chloride	ND	40						0	0	25	U
Bromodichloromethane	ND	40						0	0	25	U
Bromoform	ND	40						0	0	25	U
Bromomethane	ND	40						0	0	25	U
Carbon disulfide	ND	40						0	0	25	U
Carbon tetrachloride	ND	40						0	0	25	U
Chlorobenzene	ND	40						0	0	25	U
Chlorodibromomethane	ND	40						0	0	25	U
Chloroethane	ND	40						0	0	25	U
Chloroform	ND	40						0	0	25	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46267

Sample ID:	1201804-024Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	46267
Client ID:	VA1167	Batch ID:	R46267	TestNo:	TO-15			Analysis Date:	2/15/2012	SeqNo:	906739

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	40						0	0	25	U
cis-1,2-Dichloroethene	ND	40						0	0	25	U
cis-1,3-dichloropropene	ND	40						0	0	25	U
Cyclohexane	1,200	80						1,308	8.62	25	
Dichlorodifluoromethane	ND	40						0	0	25	U
Ethyl acetate	ND	40						0	0	25	U
Ethylbenzene	60	80						62.80	3.90	25	J
Heptane	1,200	40						1,260	2.64	25	
Hexachlorobutadiene	ND	80						0	0	25	U
m,p-Xylene	140	80						146.0	5.06	25	
Methylene chloride	ND	200						0	0	25	U
n-Hexane	610	80						676.4	9.61	25	
Naphthalene	ND	40						0	0	25	U
o-Xylene	ND	40						0	0	25	U
Propylene	140	40						137.2	0	25	
Styrene	ND	40						0	0	25	U
tert-Butyl Methyl Ether	ND	40						0	0	25	U
Tetrachloroethene	ND	40						0	0	25	U
Tetrahydrofuran	ND	40						0	0	25	U
Toluene	2,500	40						2,655	5.00	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	140	120						146.0	5.06	25	
Surr: 4-Bromofluorobenzene	540		500.0		109	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46267

Sample ID:	MBLK VOA1 021412	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	46267
Client ID:	PBW	Batch ID:	R46267	TestNo:	TO-15			Analysis Date:	2/14/2012	SeqNo:	906753

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#: 1201804

Date Reported: 2/24/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R46267

Sample ID:	MBLK VOA1 021412	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	46267
Client ID:	PBW	Batch ID:	R46267	TestNo:	TO-15			Analysis Date:	2/14/2012	SeqNo:	906753

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	2.4	1.0									
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	14		12.50		115	70	130				

RTI Laboratories

Run ID: VOA1_120202A **Run No.:** 45970

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

Analyst: Rachel Hill **Column:**

Calibration ID: 45767 **Column ID:** 0.25mm, 1.4umFT

Column Length: 30m

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB1 VOA1 020212	BFB_TUNE	TUNE	R45970	2/2/2012 9:40:00 AM	Charles O`Bryan		
CCV VOA1 020212	EPA_TO15	CCV	R45970	2/2/2012 10:27:00 AM	Charles O`Bryan		
RLVS VOA1 020212	EPA_TO15	RLVS	R45970	2/2/2012 11:23:00 AM	Charles O`Bryan		
MBLK VOA1 020212	EPA_TO15	MBLK	R45970	2/2/2012 12:16:00 PM	Charles O`Bryan		
1201592-005A	EPA_TO15	SAMP	R45970	2/2/2012 1:03:00 PM	Charles O`Bryan		
1201676-001A	EPA_TO15	SAMP	R45970	2/2/2012 2:38:00 PM	Charles O`Bryan		
1201676-002A	EPA_TO15	SAMP	R45970	2/2/2012 3:24:00 PM	Charles O`Bryan		
1201676-003A	EPA_TO15	SAMP	R45970	2/2/2012 4:12:00 PM	Charles O`Bryan		
1201676-003Adup	EPA_TO15	DUP	R45970	2/2/2012 4:59:00 PM	Charles O`Bryan		
1201676-004A	EPA_TO15	SAMP	R45970	2/2/2012 5:46:00 PM	Charles O`Bryan		Received sample with bottle tip unscrewed slightly. Bottle was at ambient pressure.
1201676-025A	EPA_TO15	SAMP	R45970	2/2/2012 6:35:00 PM	Charles O`Bryan		
1201676-005A	EPA_TO15	SAMP	R45970	2/2/2012 7:22:00 PM	Charles O`Bryan		
1201804-049A	EPA_TO15	SAMP	R45970	2/2/2012 9:51:00 PM	Charles O`Bryan		Trip Blank - Received sample with bottle tip unscrewed slightly. Bottle was at ambient pressure. Instructed to report by DG.
1201804-017A	EPA_TO15	SAMP	R45970	2/3/2012 12:57:00 AM	Charles O`Bryan		
1201676-001A	EPA_TO15	SAMP	R45970	2/3/2012 2:37:00 AM	Charles O`Bryan		
1201676-002A	EPA_TO15	SAMP	R45970	2/3/2012 3:29:00 AM	Charles O`Bryan		
1201676-003A	EPA_TO15	SAMP	R45970	2/3/2012 4:21:00 AM	Charles O`Bryan		
RLVS2 VOA1 02021	EPA_TO15	RLVS	R45970	2/3/2012 5:08:00 AM	Charles O`Bryan		

RTI Laboratories

ANALYTICAL RUN Summary

27-Feb-12

RunNo 45970

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
901737	BFB1 VOA1 020212	BFB_TUNE	TUNE	.\1\DATA\020212	2/2/2012 9:40:00	1	R45970		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		72.9	72.9		100	0	0	0	0	0	73%	50	120	0%	
175	M		7.8	7.8		100	0	0	0	0	0	8%	4	9	0%	
176	M		100.1	100.1		100	0	0	0	0	0	100%	93	101	0%	
177	M		7.1	7.1		100	0	0	0	0	0	7%	5	9	0%	
50	M		27	27		100	0	0	0	0	0	27%	8	40	0%	
75	M		50.7	50.7		100	0	0	0	0	0	51%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		7.2	7.2		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
901738	CCV VOA1 020212	EPA_TO15	CCV	.\1\DATA\020212	2/2/2012 10:27:0	1	R45970		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	10.91	10.91		9.6	0	0	0.107	1	0	114%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.35	10.35		10	0	0	0.211	1	0	104%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	11.43	11.43		9.8	0	0	0.108	1	0	117%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.57	9.57		9.8	0	0	0.2	1	0	98%	70	130	0%	
1,1-Dichloroethane	A	ppbv	10.89	10.89		9.7	0	0	0.111	1	0	112%	70	130	0%	
1,1-Dichloroethene	A	ppbv	11.37	11.37		9.9	0	0	0.097	1	0	115%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	9.17	9.17		9.1	0	0	0.271	1	0	101%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	9.54	9.54		9.8	0	0	0.245	1	0	97%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.41	9.41		9.6	0	0	0.186	1	0	98%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	10.1	10.1		9.7	0	0	0.208	1	0	104%	70	130	0%	
1,2-Dichloroethane	A	ppbv	10.78	10.78		9.7	0	0	0.196	1	0	111%	70	130	0%	
1,2-Dichloropropane	A	ppbv	9.96	9.96		9.8	0	0	0.224	1	0	102%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.55	9.55		9.7	0	0	0.24	1	0	98%	70	130	0%	
1,3-Butadiene	A	ppbv	11.69	11.69		9.8	0	0	0.152	1	0	119%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	10.03	10.03		9.7	0	0	0.202	1	0	103%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
901738	CCV VOA1 020212	EPA_TO15	CCV	\1\DATA\020212	2/2/2012 10:27:0	1	R45970		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	10.11	10.11		9.6	0	0	0.194	1	0	105%	70	130	0%	
1,4-Dioxane	A	ppbv	10	10		9.6	0	0	0.128	1	0	104%	70	130	0%	
2-Butanone	A	ppbv	10.53	10.53		9.9	0	0	0.287	1	0	106%	70	130	0%	
2-Hexanone	A	ppbv	9.82	9.82		9.8	0	0	0.135	1	0	100%	70	130	0%	
2-Propanol	A	ppbv	10.32	10.32		10.1	0	0	0.329	1	0	102%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	9.79	9.79		10	0	0	0.157	1	0	98%	70	130	0%	
Acetone	A	ppbv	11.03	11.03		10	0	0	0.43	1	0	110%	70	130	0%	
Benzene	A	ppbv	10.31	10.31		9.6	0	0	0.126	1	0	107%	70	130	0%	
Benzyl chloride	A	ppbv	9.51	9.51		9.7	0	0	0.155	1	0	98%	70	130	0%	
Bromodichloromethane	A	ppbv	9.72	9.72		9.6	0	0	0.156	1	0	101%	70	130	0%	
Bromoform	A	ppbv	10.02	10.02		9.6	0	0	0.197	1	0	104%	70	130	0%	
Bromomethane	A	ppbv	9.65	9.65		9.3	0	0	0.075	1	0	104%	70	130	0%	
Carbon disulfide	A	ppbv	10.49	10.49		9.7	0	0	0.093	1	0	108%	70	130	0%	
Carbon tetrachloride	A	ppbv	10.03	10.03		9.5	0	0	0.114	1	0	106%	70	130	0%	M
Chlorobenzene	A	ppbv	10.04	10.04		9.9	0	0	0.275	1	0	101%	70	130	0%	
Chlorodibromomethane	A	ppbv	9.68	9.68		9.2	0	0	0.165	1	0	105%	70	130	0%	
Chloroethane	A	ppbv	9.79	9.79		9.8	0	0	0.063	1	0	100%	70	130	0%	
Chloroform	A	ppbv	11.19	11.19		9.4	0	0	0.126	1	0	119%	70	130	0%	
Chloromethane	A	ppbv	11.89	11.89		9.8	0	0	0.104	1	0	121%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	10.42	10.42		9.8	0	0	0.107	1	0	106%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	9.48	9.48		9.5	0	0	0.166	1	0	100%	70	130	0%	
Cyclohexane	A	ppbv	12.24	12.24		9.8	0	0	0.684	2	0	125%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.52	9.52		9.2	0	0	0.086	1	0	103%	70	130	0%	
Ethanol	A	ppbv	9.5	9.5		9.2	0	0	1.962	5	0	103%	70	130	0%	
Ethyl acetate	A	ppbv	10.63	10.63		9.8	0	0	0.157	1	0	108%	70	130	0%	
Ethylbenzene	A	ppbv	10.09	10.09		9.8	0	0	0.737	2	0	103%	70	130	0%	
Heptane	A	ppbv	11.37	11.37		9.9	0	0	0.249	1	0	115%	70	130	0%	
Hexachlorobutadiene	A	ppbv	8.99	8.99		9.4	0	0	0.374	2	0	96%	70	130	0%	
m,p-Xylene	A	ppbv	21.54	21.54		19.2	0	0	0.524	2	0	112%	70	130	0%	
Methylene chloride	A	ppbv	11.71	11.71		10	0	0	2.077	5	0	117%	70	130	0%	
n-Hexane	A	ppbv	11.68	11.68		10.1	0	0	0.692	2	0	116%	70	130	0%	
Naphthalene	A	ppbv	9.79	9.79		9.2	0	0	0.247	1	0	106%	70	130	0%	
o-Xylene	A	ppbv	10.14	10.14		10	0	0	0.258	1	0	101%	70	130	0%	
Propylene	A	ppbv	11.55	11.55		10.2	0	0	0.075	1	0	113%	70	130	0%	B

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
901738	CCV VOA1 020212	EPA_TO15	CCV	.\1\DATA\020212	2/2/2012 10:27:0	1	R45970		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	10.31	10.31		9.8	0	0	0.263	1	0	105%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	10.14	10.14		9.9	0	0	0.228	1	0	102%	70	130	0%	
Tetrachloroethene	A	ppbv	9.89	9.89		9.6	0	0	0.148	1	0	103%	70	130	0%	
Tetrahydrofuran	A	ppbv	11.6	11.6		10	0	0	0.201	1	0	116%	70	130	0%	
Toluene	A	ppbv	9.92	9.92		9.8	0	0	0.158	1	0	101%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	11.21	11.21		9.8	0	0	0.117	1	0	114%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	8.93	8.93		9.1	0	0	0.171	1	0	98%	70	130	0%	
Trichloroethene	A	ppbv	9.69	9.69		9.6	0	0	0.119	1	0	101%	70	130	0%	
Trichlorofluoromethane	A	ppbv	10.08	10.08		9.6	0	0	0.148	1	0	105%	70	130	0%	
Vinyl acetate	A	ppbv	11.36	11.36		9.9	0	0	0.266	1	0	115%	70	130	0%	
Vinyl chloride	A	ppbv	11.04	11.04		9.4	0	0	0.072	1	0	117%	70	130	0%	
Xylenes, Total	C	ppbv	31.68	31.68		29.2	0	0	0.782	3	0	108%	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		1.25	0	0	0	0	0	1000%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	12.96	12.96		12.5	0	0	0	0	0	104%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
901739	RLVS VOA1 020212	EPA_TO15	RLVS	.\1\DATA\020212	2/2/2012 11:23:0	1	R45970		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	0.84	0.84		0.996	0	0	0.107	1	0	84%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.2	1.2		1	0	0	0.211	1	0	120%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	0.88	0.88		0.98	0	0	0.108	1	0	90%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.81	0.81		0.98	0	0	0.2	1	0	83%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1	1		0.97	0	0	0.111	1	0	103%	70	130	0%	
1,1-Dichloroethene	A	ppbv	0.98	0.98		0.99	0	0	0.097	1	0	99%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.48	1.48		0.91	0	0	0.271	1	0	163%	70	130	0%	S
1,2,4-Trimethylbenzene	A	ppbv	1.21	1.21		0.98	0	0	0.245	1	0	123%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.78	0.78		0.96	0	0	0.186	1	0	81%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.33	1.33		0.97	0	0	0.208	1	0	137%	70	130	0%	S
1,2-Dichloroethane	A	ppbv	1.08	1.08		0.97	0	0	0.196	1	0	111%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.9	0.9		0.98	0	0	0.224	1	0	92%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\020212\02021202.D Vial: 3
Acq On : 2 Feb 2012 10:27 am Operator: RACHEL HILL
Sample : CCV VOA1 020212 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\012512V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Jan 26 09:30:01 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	86	0.00
2	T	Propylene	1.441	1.632	-13.3	78	0.00
3	T	Dichlorodifluoromethane	3.080	3.187	-3.5	78	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.240	2.300	-2.7	79	0.00
5	T	Chloromethane	1.387	1.735	-25.1	88	0.00
6	T	Vinyl chloride	1.732	2.035	-17.5	93	0.00
7	T	1,3-Butadiene	1.265	1.508	-19.2	85	0.00
8	T	Bromomethane	1.154	1.197	-3.7	82	0.00
9	T	Chloroethane	0.748	0.796	-6.4	82	0.00
10	T	Trichlorofluoromethane	2.684	2.818	-5.0	87	0.00
11	T	Ethanol	0.303	0.313	-3.3	84	0.00
12	T	Freon113	2.232	2.603	-16.6	98	0.00
13	T	1,1-Dichloroethene	1.891	2.171	-14.8	93	0.00
14	T	Acetone	1.771	1.954	-10.3	90	0.00
15	T	Carbon disulfide	3.185	3.446	-8.2	85	0.00
16	T	2-Propanol	1.561	1.596	-2.2	79	0.00
17	T	Methylene chloride	1.503	1.760	-17.1	96	0.00
18	T	tert-Butyl Methyl Ether	2.251	2.306	-2.4	88	0.00
19	T	trans-1,2-Dichloroethene	1.796	2.053	-14.3	94	0.00
20	T	n-Hexane	1.985	2.295	-15.6	94	0.00
21	T	1,1-Dichloroethane	2.078	2.333	-12.3	92	0.00
22	T	Vinyl acetate	2.668	3.061	-14.7	90	0.00
23	T	cis-1,2-Dichloroethene	1.073	1.141	-6.3	89	0.00
24	T	2-Butanone	1.868	1.987	-6.4	83	0.00
25	T	Ethyl acetate	2.374	2.576	-8.5	85	0.00
26	T	Tetrahydrofuran	1.222	1.418	-16.0	85	0.00
27	T	Chloroform	2.165	2.472	-14.2	89	0.00
28	T	1,1,1-Trichloroethane	1.962	2.229	-13.6	91	0.00
29	T	Cyclohexane	1.984	2.478	-24.9	95	0.00
30	T	Carbon tetrachloride	1.756	1.854	-5.6	90	0.00
31	T	Benzene	2.715	2.917	-7.4	91	0.00
32	T	1,2-Dichloroethane	1.214	1.349	-11.1	91	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	87	0.00
34	T	Heptane	0.838	0.962	-14.8	87	0.00
35	T	Trichloroethene	0.436	0.440	-0.9	86	0.00
36	T	1,2-Dichloropropane	0.370	0.377	-1.9	86	0.00
37	T	1,4-Dioxane	0.117	0.122	-4.3	83	0.00
38	T	Bromodichloromethane	0.613	0.621	-1.3	87	0.00
39	T	cis-1,3-Dichloropropene	0.520	0.519	0.2	84	0.00
40	T	4-Methyl-2-pentanone	0.232	0.227	2.2	80	0.00
41	T	Toluene	0.929	0.940	-1.2	85	0.00
42	T	trans-1,3-Dichloropropene	0.437	0.428	2.1	81	0.00
43	T	1,1,2-Trichloroethane	0.322	0.314	2.5	83	0.00
44	T	Tetrachloroethene	0.503	0.518	-3.0	84	0.00
45	T	2-Hexanone	0.492	0.493	-0.2	78	0.00
46	T	Chlorodibromomethane	0.476	0.470	1.3	86	0.00
47	T	1,2-Dibromoethane	0.474	0.464	2.1	83	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	83	0.00
49	T	Chlorobenzene	0.901	0.913	-1.3	83	0.00
50	T	Ethylbenzene	1.472	1.515	-2.9	83	0.00
51	T	m,p-Xylene	1.166	1.308	-12.2	85	0.00
52	T	o-Xylene	1.079	1.094	-1.4	82	0.00
53	T	Styrene	0.795	0.836	-5.2	83	0.00
54	T	Bromoform	0.546	0.570	-4.4	85	0.00
55	S	4-Bromofluorobenzene	0.597	0.619	-3.7	85	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\020212\02021202.D Vial: 3
Acq On : 2 Feb 2012 10:27 am Operator: RACHEL HILL
Sample : CCV VOA1 020212 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\012512V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Jan 26 09:30:01 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	0.804	0.832	-3.5	79	0.00
57	T	4-Ethyltoluene	1.324	1.330	-0.5	81	0.00
58	T	1,3,5-Trimethylbenzene	1.123	1.106	1.5	81	0.00
59	T	1,2,4-Trimethylbenzene	1.037	1.009	2.7	78	0.00
60	T	1,3-Dichlorobenzene	0.608	0.629	-3.5	80	0.00
61	T	1,4-Dichlorobenzene	0.561	0.591	-5.3	81	0.00
62	T	Benzyl chloride	0.708	0.694	2.0	77	0.00
63	T	1,2-Dichlorobenzene	0.540	0.563	-4.3	78	0.00
64	T	1,2,4-Trichlorobenzene	0.089	0.089	0.0	79	0.00
65	T	Hexachlorobutadiene	0.229	0.219	4.4	78	0.00
66		Naphthalene	0.133	0.142	-6.8	83	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\020212\02021202.D Vial: 3
Acq On : 2 Feb 2012 10:27 am Operator: RACHEL HILL
Sample : CCV VOA1 020212 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 3 14:37 2012 Quant Results File: 012512V1.RES

Quant Method : C:\HPCHEM\1\METHODS\012512V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Jan 26 09:30:01 2012
Response via : Initial Calibration
DataAcq Meth : 012512V1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.59	130	317222	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.69	114	982423	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.54	117	637492	12.50	ppbv		0.00
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.19	95	394397	12.96	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 103.68%				
Target Compounds							Qvalue
2) Propylene	5.51	41	422408	11.55	ppbv		92
3) Dichlorodifluoromethane	5.58	85	744174	9.52	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.85	135	554481	9.75	ppbv	#	74
5) Chloromethane	6.01	50	418287	11.89	ppbv		99
6) Vinyl chloride	6.21	62	485337	11.04	ppbv	#	99
7) 1,3-Butadiene	6.27	39	375111	11.69	ppbv		89
8) Bromomethane	6.86	94	282500	9.65	ppbv	#	98
9) Chloroethane	7.00	64	185896	9.79	ppbv	#	94
10) Trichlorofluoromethane	7.34	101	686607	10.08	ppbv	#	97
11) Ethanol	7.56	45	73020	9.50	ppbv		99
12) Freon113	8.00	101	647341	11.43	ppbv		89
13) 1,1-Dichloroethene	8.09	61	545439	11.37	ppbv	#	86
14) Acetone	8.19	43	495791	11.03	ppbv		94
15) Carbon disulfide	8.47	76	848254	10.49	ppbv	#	99
16) 2-Propanol	8.24	45	409057	10.32	ppbv		96
17) Methylene chloride	8.75	49	446637	11.71	ppbv	#	75
18) tert-Butyl Methyl Ether	8.95	73	579425	10.14	ppbv	#	81
19) trans-1,2-Dichloroethene	9.04	61	510644	11.21	ppbv	#	82
20) n-Hexane	9.22	57	588143	11.68	ppbv	#	88
21) 1,1-Dichloroethane	9.60	63	574378	10.89	ppbv	#	96
22) Vinyl acetate	9.53	43	769075	11.36	ppbv	#	94
23) cis-1,2-Dichloroethene	10.28	96	283794	10.42	ppbv	#	79
24) 2-Butanone	10.25	43	499121	10.53	ppbv	#	88
25) Ethyl acetate	10.20	43	640730	10.63	ppbv	#	98
26) Tetrahydrofuran	10.58	42	359896	11.60	ppbv	#	85
27) Chloroform	10.61	83	614763	11.19	ppbv		100
28) 1,1,1-Trichloroethane	10.86	97	543128	10.91	ppbv	#	91
29) Cyclohexane	10.86	56	616262	12.24	ppbv	#	83
30) Carbon tetrachloride	11.02	117	447053m	10.03	ppbv		
31) Benzene	11.30	78	710634	10.31	ppbv		94
32) 1,2-Dichloroethane	11.37	62	332035	10.78	ppbv	#	97
34) Heptane	11.35	43	748523	11.37	ppbv	#	86
35) Trichloroethene	12.03	130	331757	9.69	ppbv		94
36) 1,2-Dichloropropane	12.39	63	290068	9.96	ppbv	#	95
37) 1,4-Dioxane	12.46	88	92031	10.00	ppbv	#	80
38) Bromodichloromethane	12.67	83	468525	9.72	ppbv		98
39) cis-1,3-Dichloropropene	13.23	75	387690	9.48	ppbv		96
40) 4-Methyl-2-pentanone	13.34	58	178587	9.79	ppbv	#	88
41) Toluene	13.63	91	724342	9.92	ppbv		97
42) trans-1,3-Dichloropropene	13.93	75	306452	8.93	ppbv		97
43) 1,1,2-Trichloroethane	14.20	97	242016	9.57	ppbv		95
44) Tetrachloroethene	14.33	166	390964	9.89	ppbv		98
45) 2-Hexanone	14.41	43	379687	9.82	ppbv		91
46) Chlorodibromomethane	14.75	129	362312	9.68	ppbv		99
47) 1,2-Dibromoethane	14.99	107	350238	9.41	ppbv		100
49) Chlorobenzene	15.58	112	461006	10.04	ppbv	#	86
50) Ethylbenzene	15.63	91	757396	10.09	ppbv		91
51) m,p-Xylene	15.78	91	1281225	21.54	ppbv		91
52) o-Xylene	16.37	91	557976	10.14	ppbv	#	86

(#) = qualifier out of range (m) = manual integration
02021202.D 012512V1.M Fri Feb 03 16:34:16 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\020212\02021202.D Vial: 3
Acq On : 2 Feb 2012 10:27 am Operator: RACHEL HILL
Sample : CCV VOA1 020212 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 3 14:37 2012 Quant Results File: 012512V1.RES

Quant Method : C:\HPCHEM\1\METHODS\012512V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Jan 26 09:30:01 2012
Response via : Initial Calibration
DataAcq Meth : 012512V1

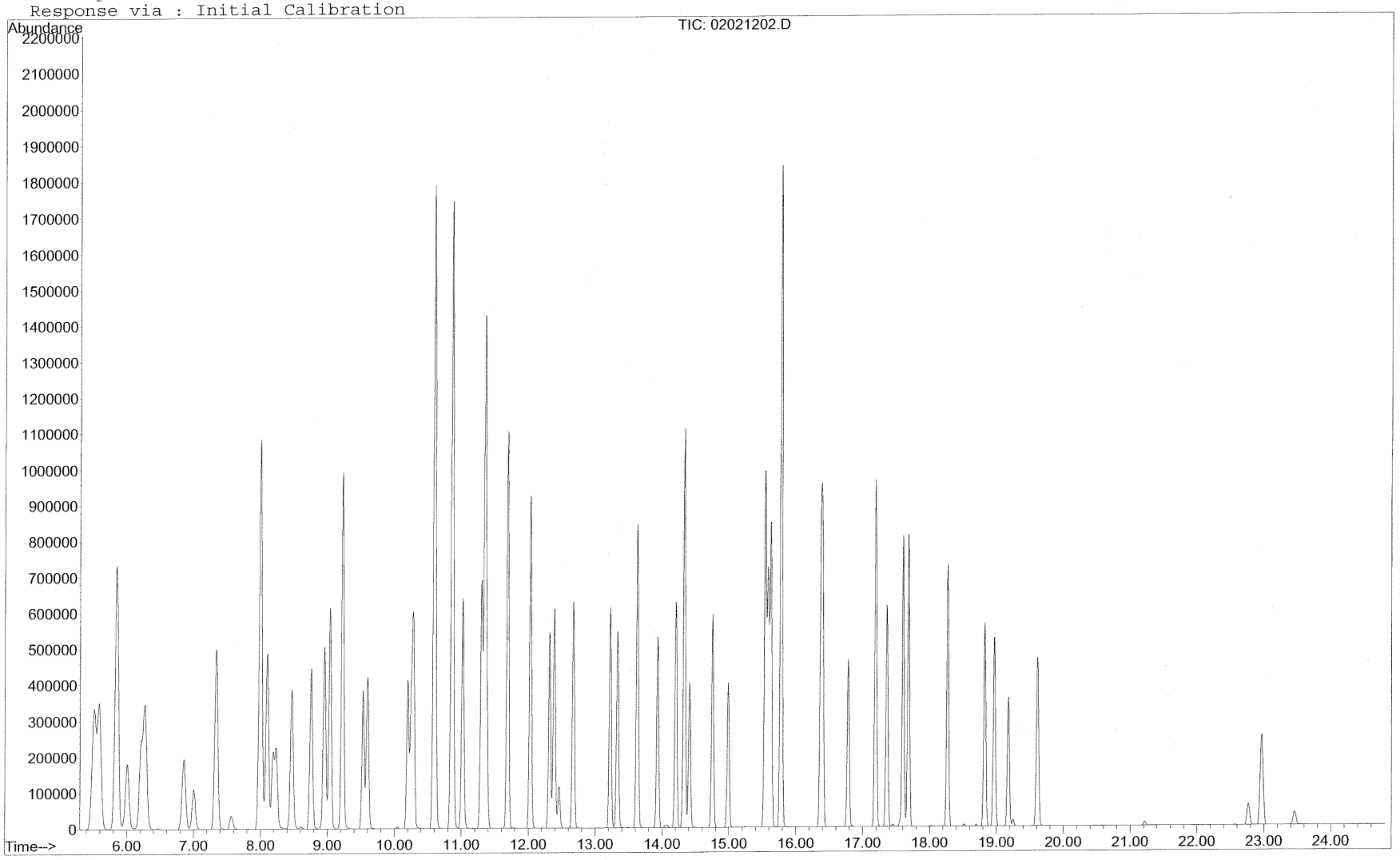
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.40	104	418061	10.31	ppbv		98
54)	Bromoform	16.78	173	279110	10.02	ppbv	#	98
56)	1,1,2,2-Tetrachloroethane	17.36	83	424115	10.35	ppbv	#	98
57)	4-Ethyltoluene	17.60	105	664493	9.84	ppbv		95
58)	1,3,5-Trimethylbenzene	17.68	105	546956	9.55	ppbv		96
59)	1,2,4-Trimethylbenzene	18.27	105	504424	9.54	ppbv		97
60)	1,3-Dichlorobenzene	18.82	146	310924	10.03	ppbv		97
61)	1,4-Dichlorobenzene	18.97	146	289143	10.11	ppbv		97
62)	Benzyl chloride	19.18	91	343256	9.51	ppbv		97
63)	1,2-Dichlorobenzene	19.61	146	278392	10.10	ppbv		98
64)	1,2,4-Trichlorobenzene	22.77	180	41478	9.17	ppbv		96
65)	Hexachlorobutadiene	22.97	225	105065	8.99	ppbv		99
66)	Naphthalene	23.46	128	66492	9.79	ppbv		97

(#) = qualifier out of range (m) = manual integration
02021202.D 012512V1.M Fri Feb 03 16:34:16 2012 Page 2

Quantitation Report

Data File : C:\HPCHEM\1\DATA\020212\02021202.D Vial: 3
Acq On : 2 Feb 2012 10:27 am Operator: RACHEL HILL
Sample : CCV VOA1 020212 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 3 14:37 2012 Quant Results File: 012512V1.RES

Method : C:\HPCHEM\1\METHODS\012512V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Jan 26 09:30:01 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA1_120206A **Run No.:** 46018

Analytical Run Date: 2/6/2012 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

Calibration ID: 45767 **Column ID:** 0.25mm, 1.4umFT

Column Length: 30m

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB1 VOA1 020612	BFB_TUNE	TUNE	R46018	2/6/2012 10:39:00 AM	Robert Lynch		
CCV VOA1 020612	EPA_TO15	CCV	R46018	2/6/2012 11:26:00 AM	Robert Lynch		
RLVS VOA1 020612	EPA_TO15	RLVS	R46018	2/6/2012 12:13:00 PM	Robert Lynch		
MBLK VOA1 020612	EPA_TO15	MBLK	R46018	2/6/2012 1:06:00 PM	Charles O`Bryan		
1201804-032A	EPA_TO15	SAMP	R46018	2/6/2012 1:52:00 PM	Robert Lynch		
1201804-030A	EPA_TO15	SAMP	R46018	2/6/2012 3:31:00 PM	Robert Lynch		
1201804-031A	EPA_TO15	SAMP	R46018	2/6/2012 4:24:00 PM	Robert Lynch		
1201804-033A	EPA_TO15	SAMP	R46018	2/6/2012 5:09:00 PM	Robert Lynch		
1201804-033Adup	EPA_TO15	DUP	R46018	2/6/2012 5:55:00 PM	Charles O`Bryan		Sample over-diluted. Will re-run at lower dilution. Reported here to show that sample and duplicate were analyzed.
1201804-018A	EPA_TO15	SAMP	R46018	2/6/2012 6:41:00 PM	Robert Lynch		
1201804-019A	EPA_TO15	SAMP	R46018	2/6/2012 7:28:00 PM	Robert Lynch		
1201804-034A	EPA_TO15	SAMP	R46018	2/6/2012 8:17:00 PM	Robert Lynch		
1201804-020A	EPA_TO15	SAMP	R46018	2/6/2012 9:03:00 PM	Robert Lynch		
1201804-027A	EPA_TO15	SAMP	R46018	2/6/2012 10:35:00 PM	Robert Lynch		Received sample with bottle tip unscrewed slightly. Bottle was at ambient pressure.
1201804-028A	EPA_TO15	SAMP	R46018	2/6/2012 11:27:00 PM	Robert Lynch		
1201804-029A	EPA_TO15	SAMP	R46018	2/7/2012 12:13:00 AM	Robert Lynch		
1201804-016A	EPA_TO15	SAMP	R46018	2/7/2012 1:02:00 AM	Robert Lynch		
1201804-030A	EPA_TO15	SAMP	R46018	2/7/2012 1:47:00 AM	Robert Lynch		
1201804-017A	EPA_TO15	SAMP	R46018	2/7/2012 2:32:00 AM	Robert Lynch		
1201804-031A	EPA_TO15	SAMP	R46018	2/7/2012 3:18:00 AM	Robert Lynch		
1201804-003A	EPA_TO15	SAMP	R46018	2/7/2012 4:10:00 AM	Robert Lynch		
RLVS2 VOA1 02061	EPA_TO15	RLVS	R46018	2/7/2012 4:56:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

27-Feb-12

RunNo 46018

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
902530	BFB1 VOA1 020612	BFB_TUNE	TUNE	\1\DATA\020612	2/6/2012 10:39:0	1	R46018		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		80.8	80.8		100	0	0	0	0	0	81%	50	120	0%	
175	M		7	7		100	0	0	0	0	0	7%	4	9	0%	
176	M		100.4	100.4		100	0	0	0	0	0	100%	93	101	0%	
177	M		6.5	6.5		100	0	0	0	0	0	7%	5	9	0%	
50	M		23.9	23.9		100	0	0	0	0	0	24%	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
902535	CCV VOA1 020612	EPA_TO15	CCV	\1\DATA\020612	2/6/2012 11:26:0	1	R46018		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	9.77	9.77		9.6	0	0	0.107	1	0	102%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	9.8	9.8		10	0	0	0.211	1	0	98%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.08	10.08		9.8	0	0	0.108	1	0	103%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.1	9.1		9.8	0	0	0.2	1	0	93%	70	130	0%	
1,1-Dichloroethane	A	ppbv	9.51	9.51		9.7	0	0	0.111	1	0	98%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.41	10.41		9.9	0	0	0.097	1	0	105%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	9.85	9.85		9.1	0	0	0.271	1	0	108%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	9.1	9.1		9.8	0	0	0.245	1	0	93%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.15	9.15		9.6	0	0	0.186	1	0	95%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	9.95	9.95		9.7	0	0	0.208	1	0	103%	70	130	0%	
1,2-Dichloroethane	A	ppbv	9.36	9.36		9.7	0	0	0.196	1	0	96%	70	130	0%	
1,2-Dichloropropane	A	ppbv	8.98	8.98		9.8	0	0	0.224	1	0	92%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.02	9.02		9.7	0	0	0.24	1	0	93%	70	130	0%	
1,3-Butadiene	A	ppbv	11.19	11.19		9.8	0	0	0.152	1	0	114%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.77	9.77		9.7	0	0	0.202	1	0	101%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
902535	CCV VOA1 020612	EPA_TO15	CCV	\1\DATA\020612	2/6/2012 11:26:0	1	R46018		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.91	9.91		9.6	0	0	0.194	1	0	103%	70	130	0%	
1,4-Dioxane	A	ppbv	9.53	9.53		9.6	0	0	0.128	1	0	99%	70	130	0%	
2-Butanone	A	ppbv	9.09	9.09		9.9	0	0	0.287	1	0	92%	70	130	0%	
2-Hexanone	A	ppbv	9.59	9.59		9.8	0	0	0.135	1	0	98%	70	130	0%	
2-Propanol	A	ppbv	10	10		10.1	0	0	0.329	1	0	99%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	9.47	9.47		10	0	0	0.157	1	0	95%	70	130	0%	
Acetone	A	ppbv	9.19	9.19		10	0	0	0.43	1	0	92%	70	130	0%	
Benzene	A	ppbv	9.05	9.05		9.6	0	0	0.126	1	0	94%	70	130	0%	
Benzyl chloride	A	ppbv	9.71	9.71		9.7	0	0	0.155	1	0	100%	70	130	0%	
Bromodichloromethane	A	ppbv	9.4	9.4		9.6	0	0	0.156	1	0	98%	70	130	0%	
Bromoform	A	ppbv	9.61	9.61		9.6	0	0	0.197	1	0	100%	70	130	0%	
Bromomethane	A	ppbv	9.73	9.73		9.3	0	0	0.075	1	0	105%	70	130	0%	
Carbon disulfide	A	ppbv	10.36	10.36		9.7	0	0	0.093	1	0	107%	70	130	0%	
Carbon tetrachloride	A	ppbv	9.32	9.32		9.5	0	0	0.114	1	0	98%	70	130	0%	
Chlorobenzene	A	ppbv	9.33	9.33		9.9	0	0	0.275	1	0	94%	70	130	0%	
Chlorodibromomethane	A	ppbv	9.49	9.49		9.2	0	0	0.165	1	0	103%	70	130	0%	
Chloroethane	A	ppbv	9.54	9.54		9.8	0	0	0.063	1	0	97%	70	130	0%	
Chloroform	A	ppbv	10.12	10.12		9.4	0	0	0.126	1	0	108%	70	130	0%	
Chloromethane	A	ppbv	11.18	11.18		9.8	0	0	0.104	1	0	114%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.34	9.34		9.8	0	0	0.107	1	0	95%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	8.85	8.85		9.5	0	0	0.166	1	0	93%	70	130	0%	
Cyclohexane	A	ppbv	10.46	10.46		9.8	0	0	0.684	2	0	107%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.61	9.61		9.2	0	0	0.086	1	0	104%	70	130	0%	
Ethanol	A	ppbv	8.82	8.82		9.2	0	0	1.962	5	0	96%	70	130	0%	
Ethyl acetate	A	ppbv	9.29	9.29		9.8	0	0	0.157	1	0	95%	70	130	0%	
Ethylbenzene	A	ppbv	9.27	9.27		9.8	0	0	0.737	2	0	95%	70	130	0%	
Heptane	A	ppbv	10.47	10.47		9.9	0	0	0.249	1	0	106%	70	130	0%	
Hexachlorobutadiene	A	ppbv	9.74	9.74		9.4	0	0	0.374	2	0	104%	70	130	0%	
m,p-Xylene	A	ppbv	19.7	19.7		19.2	0	0	0.524	2	0	103%	70	130	0%	
Methylene chloride	A	ppbv	9.89	9.89		10	0	0	2.077	5	0	99%	70	130	0%	
n-Hexane	A	ppbv	9.86	9.86		10.1	0	0	0.692	2	0	98%	70	130	0%	
Naphthalene	A	ppbv	10.6	10.6		9.2	0	0	0.247	1	0	115%	70	130	0%	
o-Xylene	A	ppbv	9.39	9.39		10	0	0	0.258	1	0	94%	70	130	0%	
Propylene	A	ppbv	11.49	11.49		10.2	0	0	0.075	1	0	113%	70	130	0%	B

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
902535	CCV VOA1 020612	EPA_TO15	CCV	\1\DATA\020612	2/6/2012 11:26:0	1	R46018		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	9.49	9.49		9.8	0	0	0.263	1	0	97%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	8.7	8.7		9.9	0	0	0.228	1	0	88%	70	130	0%	
Tetrachloroethene	A	ppbv	9.77	9.77		9.6	0	0	0.148	1	0	102%	70	130	0%	
Tetrahydrofuran	A	ppbv	10.28	10.28		10	0	0	0.201	1	0	103%	70	130	0%	
Toluene	A	ppbv	9.34	9.34		9.8	0	0	0.158	1	0	95%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	9.51	9.51		9.8	0	0	0.117	1	0	97%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	8.6	8.6		9.1	0	0	0.171	1	0	95%	70	130	0%	
Trichloroethene	A	ppbv	9.25	9.25		9.6	0	0	0.119	1	0	96%	70	130	0%	
Trichlorofluoromethane	A	ppbv	9.8	9.8		9.6	0	0	0.148	1	0	102%	70	130	0%	
Vinyl acetate	A	ppbv	9.44	9.44		9.9	0	0	0.266	1	0	95%	70	130	0%	
Vinyl chloride	A	ppbv	10.34	10.34		9.4	0	0	0.072	1	0	110%	70	130	0%	
Xylenes, Total	C	ppbv	29.09	29.09		29.2	0	0	0.782	3	0	100%	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		1.25	0	0	0	0	0	1000%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	12.63	12.63		12.5	0	0	0	0	0	101%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
902536	RLVS VOA1 020612	EPA_TO15	RLVS	\1\DATA\020612	2/6/2012 12:13:0	1	R46018		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	0.8	0.8		0.996	0	0	0.107	1	0	80%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.24	1.24		1	0	0	0.211	1	0	124%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	0.86	0.86		0.98	0	0	0.108	1	0	88%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.86	0.86		0.98	0	0	0.2	1	0	88%	70	130	0%	
1,1-Dichloroethane	A	ppbv	0.95	0.95		0.97	0	0	0.111	1	0	98%	70	130	0%	
1,1-Dichloroethene	A	ppbv	0.94	0.94		0.99	0	0	0.097	1	0	95%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.47	1.47		0.91	0	0	0.271	1	0	162%	70	130	0%	S
1,2,4-Trimethylbenzene	A	ppbv	1.29	1.29		0.98	0	0	0.245	1	0	132%	70	130	0%	S
1,2-Dibromoethane	A	ppbv	0.85	0.85		0.96	0	0	0.186	1	0	89%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.32	1.32		0.97	0	0	0.208	1	0	136%	70	130	0%	S
1,2-Dichloroethane	A	ppbv	1.07	1.07		0.97	0	0	0.196	1	0	110%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.92	0.92		0.98	0	0	0.224	1	0	94%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\020612\02061202.D Vial: 2
Acq On : 6 Feb 2012 11:26 am Operator: RACHEL HILL
Sample : CCV VOA1 020612 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\012512V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Jan 26 09:30:01 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	1.441	1.624	-12.7	80	-0.02
3	T	Dichlorodifluoromethane	3.080	3.218	-4.5	81	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.240	2.358	-5.3	83	-0.01
5	T	Chloromethane	1.387	1.631	-17.6	85	0.00
6	T	Vinyl chloride	1.732	1.904	-9.9	90	0.00
7	T	1,3-Butadiene	1.265	1.444	-14.2	83	0.00
8	T	Bromomethane	1.154	1.207	-4.6	84	0.00
9	T	Chloroethane	0.748	0.776	-3.7	82	-0.01
10	T	Trichlorofluoromethane	2.684	2.741	-2.1	86	0.00
11	T	Ethanol	0.303	0.290	4.3	80	0.00
12	T	Freon113	2.232	2.296	-2.9	88	0.00
13	T	1,1-Dichloroethene	1.891	1.989	-5.2	88	0.00
14	T	Acetone	1.771	1.627	8.1	77	0.00
15	T	Carbon disulfide	3.185	3.401	-6.8	86	0.00
16	T	2-Propanol	1.561	1.545	1.0	79	0.00
17	T	Methylene chloride	1.503	1.487	1.1	83	0.00
18	T	tert-Butyl Methyl Ether	2.251	1.978	12.1	78	0.00
19	T	trans-1,2-Dichloroethene	1.796	1.742	3.0	82	0.00
20	T	n-Hexane	1.985	1.937	2.4	81	0.00
21	T	1,1-Dichloroethane	2.078	2.037	2.0	83	0.00
22	T	Vinyl acetate	2.668	2.544	4.6	77	0.00
23	T	cis-1,2-Dichloroethene	1.073	1.023	4.7	82	0.00
24	T	2-Butanone	1.868	1.714	8.2	73	0.00
25	T	Ethyl acetate	2.374	2.251	5.2	76	0.00
26	T	Tetrahydrofuran	1.222	1.257	-2.9	77	0.00
27	T	Chloroform	2.165	2.236	-3.3	82	0.00
28	T	1,1,1-Trichloroethane	1.962	1.996	-1.7	84	0.00
29	T	Cyclohexane	1.984	2.118	-6.8	83	0.00
30	T	Carbon tetrachloride	1.756	1.723	1.9	86	0.00
31	T	Benzene	2.715	2.560	5.7	82	0.00
32	T	1,2-Dichloroethane	1.214	1.171	3.5	81	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	88	0.00
34	T	Heptane	0.838	0.885	-5.6	82	0.00
35	T	Trichloroethene	0.436	0.420	3.7	83	0.00
36	T	1,2-Dichloropropane	0.370	0.339	8.4	79	0.00
37	T	1,4-Dioxane	0.117	0.116	0.9	80	0.00
38	T	Bromodichloromethane	0.613	0.601	2.0	85	0.00
39	T	cis-1,3-Dichloropropene	0.520	0.485	6.7	80	0.00
40	T	4-Methyl-2-pentanone	0.232	0.220	5.2	79	0.00
41	T	Toluene	0.929	0.885	4.7	81	0.00
42	T	trans-1,3-Dichloropropene	0.437	0.413	5.5	79	0.00
43	T	1,1,2-Trichloroethane	0.322	0.299	7.1	81	0.00
44	T	Tetrachloroethene	0.503	0.512	-1.8	84	0.00
45	T	2-Hexanone	0.492	0.482	2.0	77	0.00
46	T	Chlorodibromomethane	0.476	0.461	3.2	85	0.00
47	T	1,2-Dibromoethane	0.474	0.451	4.9	82	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	89	0.00
49	T	Chlorobenzene	0.901	0.849	5.8	82	0.00
50	T	Ethylbenzene	1.472	1.393	5.4	81	0.00
51	T	m,p-Xylene	1.166	1.197	-2.7	83	0.00
52	T	o-Xylene	1.079	1.013	6.1	81	0.00
53	T	Styrene	0.795	0.770	3.1	82	0.00
54	T	Bromoform	0.546	0.546	0.0	87	0.00
55	S	4-Bromofluorobenzene	0.597	0.603	-1.0	88	0.00

(#) = Out of Range
02061202.D 012512V1.M Tue Feb 07 14:20:44 2012 Page 1

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\020612\02061202.D Vial: 2
Acq On : 6 Feb 2012 11:26 am Operator: RACHEL HILL
Sample : CCV VOA1 020612 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\012512V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Jan 26 09:30:01 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	0.804	0.788	2.0	80	0.00
57	T	4-Ethyltoluene	1.324	1.252	5.4	82	0.00
58	T	1,3,5-Trimethylbenzene	1.123	1.044	7.0	82	0.00
59	T	1,2,4-Trimethylbenzene	1.037	0.963	7.1	80	0.00
60	T	1,3-Dichlorobenzene	0.608	0.612	-0.7	83	0.00
61	T	1,4-Dichlorobenzene	0.561	0.578	-3.0	85	0.00
62	T	Benzyl chloride	0.708	0.709	-0.1	83	0.00
63	T	1,2-Dichlorobenzene	0.540	0.555	-2.8	82	0.00
64	T	1,2,4-Trichlorobenzene	0.089	0.096	-7.9	91	0.00
65	T	Hexachlorobutadiene	0.229	0.237	-3.5	90	0.00
66		Naphthalene	0.133	0.153	-15.0	96	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\020612\02061202.D Vial: 2
Acq On : 6 Feb 2012 11:26 am Operator: RACHEL HILL
Sample : CCV VOA1 020612 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 6 11:50 2012 Quant Results File: 012512V1.RES

Quant Method : C:\HPCHEM\1\METHODS\012512V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Jan 26 09:30:01 2012
Response via : Initial Calibration
DataAcq Meth : 012512V1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.59	130	325330	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.69	114	997501	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.54	117	680632	12.50	ppbv		0.00
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.19	95	410314	12.63	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 101.04%				
Target Compounds							Qvalue
2) Propylene	5.50	41	431039	11.49	ppbv		93
3) Dichlorodifluoromethane	5.58	85	770547	9.61	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.84	135	583131	10.00	ppbv	#	75
5) Chloromethane	6.00	50	403337	11.18	ppbv		99
6) Vinyl chloride	6.20	62	465915	10.34	ppbv	#	99
7) 1,3-Butadiene	6.27	39	368245	11.19	ppbv		90
8) Bromomethane	6.85	94	292209	9.73	ppbv		99
9) Chloroethane	7.00	64	185788	9.54	ppbv		95
10) Trichlorofluoromethane	7.33	101	684893	9.80	ppbv	#	97
11) Ethanol	7.56	45	69531	8.82	ppbv		98
12) Freon113	7.99	101	585519	10.08	ppbv		89
13) 1,1-Dichloroethene	8.09	61	512454	10.41	ppbv	#	87
14) Acetone	8.18	43	423426	9.19	ppbv		93
15) Carbon disulfide	8.46	76	858618	10.36	ppbv	#	100
16) 2-Propanol	8.23	45	406126	10.00	ppbv	#	1
17) Methylene chloride	8.75	49	386939	9.89	ppbv	#	76
18) tert-Butyl Methyl Ether	8.95	73	509703	8.70	ppbv	#	83
19) trans-1,2-Dichloroethene	9.04	61	444274	9.51	ppbv	#	83
20) n-Hexane	9.22	57	509148	9.86	ppbv	#	88
21) 1,1-Dichloroethane	9.59	63	514286	9.51	ppbv	#	96
22) Vinyl acetate	9.53	43	655566	9.44	ppbv	#	94
23) cis-1,2-Dichloroethene	10.28	96	260829	9.34	ppbv	#	81
24) 2-Butanone	10.25	43	441684	9.09	ppbv	#	89
25) Ethyl acetate	10.20	43	574231	9.29	ppbv	#	98
26) Tetrahydrofuran	10.59	42	327030	10.28	ppbv	#	86
27) Chloroform	10.60	83	570247	10.12	ppbv		100
28) 1,1,1-Trichloroethane	10.86	97	498736	9.77	ppbv	#	92
29) Cyclohexane	10.86	56	540231	10.46	ppbv		84
30) Carbon tetrachloride	11.02	117	426100	9.32	ppbv		97
31) Benzene	11.30	78	639527	9.05	ppbv		94
32) 1,2-Dichloroethane	11.38	62	295746	9.36	ppbv	#	97
34) Heptane	11.35	43	699503	10.47	ppbv	#	87
35) Trichloroethene	12.03	130	321547	9.25	ppbv		93
36) 1,2-Dichloropropane	12.39	63	265358	8.98	ppbv	#	95
37) 1,4-Dioxane	12.46	88	89020	9.53	ppbv	#	81
38) Bromodichloromethane	12.67	83	460218	9.40	ppbv		98
39) cis-1,3-Dichloropropene	13.22	75	367487	8.85	ppbv		96
40) 4-Methyl-2-pentanone	13.33	58	175491	9.47	ppbv	#	90
41) Toluene	13.63	91	691906	9.34	ppbv		96
42) trans-1,3-Dichloropropene	13.93	75	299655	8.60	ppbv		97
43) 1,1,2-Trichloroethane	14.21	97	233730	9.10	ppbv		95
44) Tetrachloroethene	14.33	166	391960	9.77	ppbv		99
45) 2-Hexanone	14.41	43	376807	9.59	ppbv		91
46) Chlorodibromomethane	14.75	129	360492	9.49	ppbv		99
47) 1,2-Dibromoethane	14.99	107	345769	9.15	ppbv		99
49) Chlorobenzene	15.58	112	457693	9.33	ppbv	#	88
50) Ethylbenzene	15.62	91	743098	9.27	ppbv		94
51) m,p-Xylene	15.78	91	1251062	19.70	ppbv		91
52) o-Xylene	16.37	91	551649	9.39	ppbv	#	87

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\020612\02061202.D Vial: 2
Acq On : 6 Feb 2012 11:26 am Operator: RACHEL HILL
Sample : CCV VOA1 020612 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 6 11:50 2012 Quant Results File: 012512V1.RES

Quant Method : C:\HPCHEM\1\METHODS\012512V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Jan 26 09:30:01 2012
Response via : Initial Calibration
DataAcq Meth : 012512V1

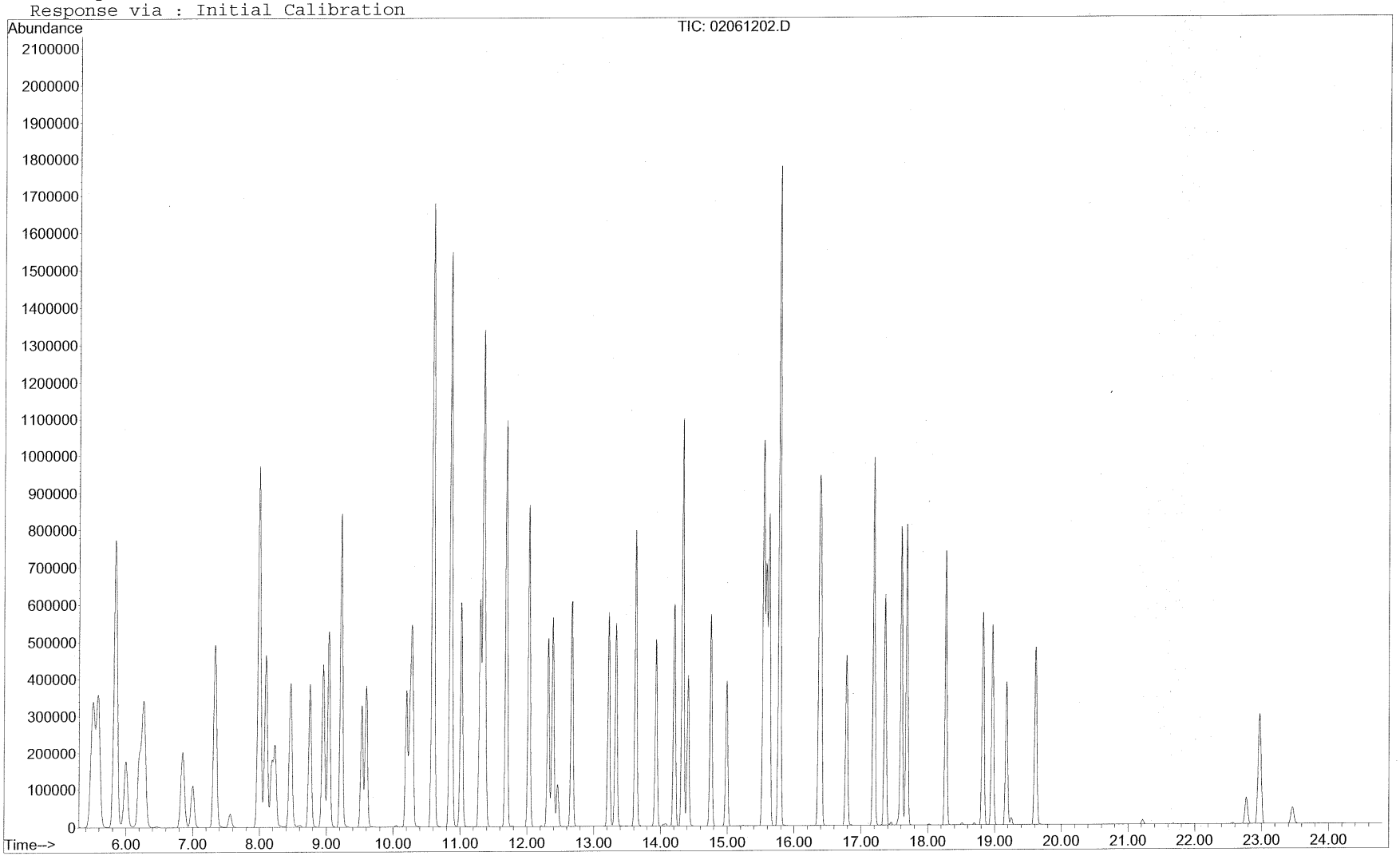
Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53) Styrene	16.40	104	410782	9.49	ppbv		98
54) Bromoform	16.79	173	285627	9.61	ppbv		98
56) 1,1,2,2-Tetrachloroethane	17.36	83	428897	9.80	ppbv	#	98
57) 4-Ethyltoluene	17.60	105	668089	9.27	ppbv		95
58) 1,3,5-Trimethylbenzene	17.69	105	551588	9.02	ppbv		96
59) 1,2,4-Trimethylbenzene	18.27	105	513726	9.10	ppbv		97
60) 1,3-Dichlorobenzene	18.83	146	323332	9.77	ppbv		98
61) 1,4-Dichlorobenzene	18.97	146	302359	9.91	ppbv		97
62) Benzyl chloride	19.18	91	374406	9.71	ppbv		97
63) 1,2-Dichlorobenzene	19.62	146	292934	9.95	ppbv		97
64) 1,2,4-Trichlorobenzene	22.77	180	47578	9.85	ppbv		96
65) Hexachlorobutadiene	22.97	225	121524	9.74	ppbv		98
66) Naphthalene	23.46	128	76875	10.60	ppbv		98

(#) = qualifier out of range (m) = manual integration
02061202.D 012512V1.M Tue Feb 07 14:20:35 2012

Quantitation Report

Data File : C:\HPCHEM\1\DATA\020612\02061202.D Vial: 2
Acq On : 6 Feb 2012 11:26 am Operator: RACHEL HILL
Sample : CCV VOA1 020612 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 6 11:50 2012 Quant Results File: 012512V1.RES

Method : C:\HPCHEM\1\METHODS\012512V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Jan 26 09:30:01 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA1_120209B **Run No.:** 46119

Analytical Run Date: 2/9/2012 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

Calibration ID: 46118 **Column ID:** 0.25mm, 1.4umFT

Column Length: 30m

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB2 VOA1 020912	BFB_TUNE	TUNE	R46119	2/9/2012 6:12:00 PM	Robert Lynch		
ICV VOA1 020912	EPA_TO15	ICV	R46119	2/9/2012 7:48:00 PM	Robert Lynch		
RLVS1 VOA1 02091	EPA_TO15	RLVS	R46119	2/9/2012 8:36:00 PM	Robert Lynch		
1201804-009A	EPA_TO15	SAMP	R46119	2/9/2012 10:15:00 PM	Robert Lynch		
1201804-018A	EPA_TO15	SAMP	R46119	2/10/2012 12:40:00 AM	Robert Lynch		
1201804-019A	EPA_TO15	SAMP	R46119	2/10/2012 1:26:00 AM	Robert Lynch		
1201804-033A	EPA_TO15	SAMP	R46119	2/10/2012 2:15:00 AM	Robert Lynch		
1201804-020A	EPA_TO15	SAMP	R46119	2/10/2012 3:01:00 AM	Robert Lynch		
1201804-020A	EPA_TO15	SAMP	R46119	2/10/2012 3:46:00 AM	Robert Lynch		
1201804-035A	EPA_TO15	SAMP	R46119	2/10/2012 4:35:00 AM	Robert Lynch		
1201804-036A	EPA_TO15	SAMP	R46119	2/10/2012 5:27:00 AM	Robert Lynch		
1201804-004A	EPA_TO15	SAMP	R46119	2/10/2012 6:16:00 AM	Robert Lynch		
1201804-005A	EPA_TO15	SAMP	R46119	2/10/2012 7:05:00 AM	Robert Lynch		
1201804-037A	EPA_TO15	SAMP	R46119	2/10/2012 7:57:00 AM	Robert Lynch		
1201804-038A	EPA_TO15	SAMP	R46119	2/10/2012 8:49:00 AM	Robert Lynch		
MBLK VOA1 020912	EPA_TO15	MBLK	R46119	2/10/2012 9:56:00 AM	Robert Lynch		Accidentally ran first blank in sequence w/out bottle attached. Re-analyzed asap here.
1201804-045A	EPA_TO15	SAMP	R46119	2/10/2012 10:43:00 AM	Robert Lynch		
1201804-012A	EPA_TO15	SAMP	R46119	2/10/2012 12:11:00 PM	Robert Lynch		
1201804-012ADUP	EPA_TO15	DUP	R46119	2/10/2012 12:57:00 PM	Charles O`Bryan		
RLVS2 VOA1 02091	EPA_TO15	RLVS	R46119	2/10/2012 1:51:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

27-Feb-12

RunNo 46119

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
904284	BFB2 VOA1 020912	BFB_TUNE	TUNE	\1\DATA\020912	2/9/2012 6:12:00	1	R46119		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		78.2	78.2		100	0	0	0	0	0	78%	50	120	0%	
175	M		7.4	7.4		100	0	0	0	0	0	7%	4	9	0%	
176	M		100.7	100.7		100	0	0	0	0	0	101%	93	101	0%	
177	M		6.8	6.8		100	0	0	0	0	0	7%	5	9	0%	
50	M		23.6	23.6		100	0	0	0	0	0	24%	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		6.9	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
904285	ICV VOA1 020912	EPA_TO15	ICV	\1\DATA\020912	2/9/2012 7:48:00	1	R46119		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	9.76	9.76		9.6	0	0	0.107	1	0	102%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	9.18	9.18		10	0	0	0.211	1	0	92%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.07	10.07		9.8	0	0	0.108	1	0	103%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	8.37	8.37		9.8	0	0	0.2	1	0	85%	70	130	0%	
1,1-Dichloroethane	A	ppbv	9.16	9.16		9.7	0	0	0.111	1	0	94%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.34	10.34		9.9	0	0	0.097	1	0	104%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	7.49	7.49		9.1	0	0	0.271	1	0	82%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	8.72	8.72		9.8	0	0	0.245	1	0	89%	70	130	0%	
1,2-Dibromoethane	A	ppbv	8.39	8.39		9.6	0	0	0.186	1	0	87%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	9.21	9.21		9.7	0	0	0.208	1	0	95%	70	130	0%	
1,2-Dichloroethane	A	ppbv	9.13	9.13		9.7	0	0	0.196	1	0	94%	70	130	0%	
1,2-Dichloropropane	A	ppbv	8.38	8.38		9.8	0	0	0.224	1	0	86%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	8.51	8.51		9.7	0	0	0.24	1	0	88%	70	130	0%	
1,3-Butadiene	A	ppbv	10.81	10.81		9.8	0	0	0.152	1	0	110%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	8.92	8.92		9.7	0	0	0.202	1	0	92%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
904285	ICV VOA1 020912	EPA_TO15	ICV	\1\DATA\020912	2/9/2012 7:48:00	1	R46119		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	8.91	8.91		9.6	0	0	0.194	1	0	93%	70	130	0%	
1,4-Dioxane	A	ppbv	8.73	8.73		9.6	0	0	0.128	1	0	91%	70	130	0%	
2-Butanone	A	ppbv	8.5	8.5		9.9	0	0	0.287	1	0	86%	70	130	0%	
2-Hexanone	A	ppbv	8.65	8.65		9.8	0	0	0.135	1	0	88%	70	130	0%	
2-Propanol	A	ppbv	9.64	9.64		10.1	0	0	0.329	1	0	95%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	8.73	8.73		10	0	0	0.157	1	0	87%	70	130	0%	
Acetone	A	ppbv	8.89	8.89		10	0	0	0.43	1	0	89%	70	130	0%	
Benzene	A	ppbv	8.53	8.53		9.6	0	0	0.126	1	0	89%	70	130	0%	
Benzyl chloride	A	ppbv	9.78	9.78		9.7	0	0	0.155	1	0	101%	70	130	0%	
Bromodichloromethane	A	ppbv	8.51	8.51		9.6	0	0	0.156	1	0	89%	70	130	0%	
Bromoform	A	ppbv	8.82	8.82		9.6	0	0	0.197	1	0	92%	70	130	0%	
Bromomethane	A	ppbv	9.73	9.73		9.3	0	0	0.075	1	0	105%	70	130	0%	
Carbon disulfide	A	ppbv	10.16	10.16		9.7	0	0	0.093	1	0	105%	70	130	0%	
Carbon tetrachloride	A	ppbv	9.13	9.13		9.5	0	0	0.114	1	0	96%	70	130	0%	
Chlorobenzene	A	ppbv	8.67	8.67		9.9	0	0	0.275	1	0	88%	70	130	0%	
Chlorodibromomethane	A	ppbv	8.52	8.52		9.2	0	0	0.165	1	0	93%	70	130	0%	
Chloroethane	A	ppbv	9.64	9.64		9.8	0	0	0.063	1	0	98%	70	130	0%	
Chloroform	A	ppbv	9.84	9.84		9.4	0	0	0.126	1	0	105%	70	130	0%	
Chloromethane	A	ppbv	9.88	9.88		9.8	0	0	0.104	1	0	101%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.09	9.09		9.8	0	0	0.107	1	0	93%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	8.26	8.26		9.5	0	0	0.166	1	0	87%	70	130	0%	
Cyclohexane	A	ppbv	10.21	10.21		9.8	0	0	0.684	2	0	104%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.55	9.55		9.2	0	0	0.086	1	0	104%	70	130	0%	
Ethanol	A	ppbv	9.66	9.66		9.2	0	0	1.962	5	0	105%	70	130	0%	
Ethyl acetate	A	ppbv	8.6	8.6		9.8	0	0	0.157	1	0	88%	70	130	0%	
Ethylbenzene	A	ppbv	8.66	8.66		9.8	0	0	0.737	2	0	88%	70	130	0%	
Heptane	A	ppbv	9.61	9.61		9.9	0	0	0.249	1	0	97%	70	130	0%	
Hexachlorobutadiene	A	ppbv	8.92	8.92		9.4	0	0	0.374	2	0	95%	70	130	0%	
m,p-Xylene	A	ppbv	18.48	18.48		19.2	0	0	0.524	2	0	96%	70	130	0%	
Methylene chloride	A	ppbv	9.59	9.59		10	0	0	2.077	5	0	96%	70	130	0%	
n-Hexane	A	ppbv	9.8	9.8		10.1	0	0	0.692	2	0	97%	70	130	0%	
Naphthalene	A	ppbv	7.7	7.7		9.2	0	0	0.247	1	0	84%	70	130	0%	
o-Xylene	A	ppbv	8.75	8.75		10	0	0	0.258	1	0	88%	70	130	0%	
Propylene	A	ppbv	11.15	11.15		10.2	0	0	0.075	1	0	109%	70	130	0%	B

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
904285	ICV VOA1 020912	EPA_TO15	ICV	\1\DATA\020912	2/9/2012 7:48:00	1	R46119		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	8.79	8.79		9.8	0	0	0.263	1	0	90%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	8.62	8.62		9.9	0	0	0.228	1	0	87%	70	130	0%	
Tetrachloroethene	A	ppbv	8.99	8.99		9.6	0	0	0.148	1	0	94%	70	130	0%	
Tetrahydrofuran	A	ppbv	9.38	9.38		10	0	0	0.201	1	0	94%	70	130	0%	
Toluene	A	ppbv	8.43	8.43		9.8	0	0	0.158	1	0	86%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	9.46	9.46		9.8	0	0	0.117	1	0	97%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	8	8		9.1	0	0	0.171	1	0	88%	70	130	0%	
Trichloroethene	A	ppbv	8.64	8.64		9.6	0	0	0.119	1	0	90%	70	130	0%	
Trichlorofluoromethane	A	ppbv	9.94	9.94		9.6	0	0	0.148	1	0	104%	70	130	0%	
Vinyl acetate	A	ppbv	9.19	9.19		9.9	0	0	0.266	1	0	93%	70	130	0%	
Vinyl chloride	A	ppbv	9.85	9.85		9.4	0	0	0.072	1	0	105%	70	130	0%	
Xylenes, Total	C	ppbv	27.23	27.23		29.2	0	0	0.782	3	0	93%	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		1.25	0	0	0	0	0	1000%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	13.06	13.06		12.5	0	0	0	0	0	104%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
904286	RLVS1 VOA1 02091	EPA_TO15	RLVS	\1\DATA\020912	2/9/2012 8:36:00	1	R46119		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	0.82	0.82		0.996	0	0	0.107	1	0	82%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.19	1.19		1	0	0	0.211	1	0	119%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	0.92	0.92		0.98	0	0	0.108	1	0	94%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.68	0.68		0.98	0	0	0.2	1	0	69%	70	130	0%	S
1,1-Dichloroethane	A	ppbv	0.97	0.97		0.97	0	0	0.111	1	0	100%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1	1		0.99	0	0	0.097	1	0	101%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.75	1.75		0.91	0	0	0.271	1	0	192%	70	130	0%	S
1,2,4-Trimethylbenzene	A	ppbv	1.24	1.24		0.98	0	0	0.245	1	0	127%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.65	0.65		0.96	0	0	0.186	1	0	68%	70	130	0%	S
1,2-Dichlorobenzene	A	ppbv	1.39	1.39		0.97	0	0	0.208	1	0	143%	70	130	0%	S
1,2-Dichloroethane	A	ppbv	0.96	0.96		0.97	0	0	0.196	1	0	99%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.7	0.7		0.98	0	0	0.224	1	0	71%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\020912\02091214.D Vial: 3
Acq On : 9 Feb 2012 7:48 pm Operator: RACHEL HILL
Sample : ICV VOA1 020912 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\020912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Feb 10 09:48:09 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	120	0.00
2	T	Propylene	1.382	1.511	-9.3	111	0.00
3	T	Dichlorodifluoromethane	3.131	3.252	-3.9	114	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.293	2.356	-2.7	115	0.00
5	T	Chloromethane	1.427	1.484	-4.0	106	0.00
6	T	Vinyl chloride	1.730	1.813	-4.8	112	0.00
7	T	1,3-Butadiene	1.252	1.381	-10.3	112	0.00
8	T	Bromomethane	1.156	1.209	-4.6	115	0.00
9	T	Chloroethane	0.723	0.757	-4.7	112	0.00
10	T	Trichlorofluoromethane	2.832	2.933	-3.6	117	0.00
11	T	Ethanol	0.325	0.341	-4.9	107	0.00
12	T	Freon113	2.361	2.427	-2.8	111	0.00
13	T	1,1-Dichloroethene	1.904	1.990	-4.5	112	0.00
14	T	Acetone	2.032	1.806	11.1	100	0.00
15	T	Carbon disulfide	3.145	3.296	-4.8	112	0.00
16	T	2-Propanol	1.732	1.653	4.6	105	0.00
17	T	Methylene chloride	1.522	1.459	4.1	104	0.00
18	T	tert-Butyl Methyl Ether	2.602	2.265	13.0	99	0.00
19	T	trans-1,2-Dichloroethene	1.837	1.774	3.4	105	0.00
20	T	n-Hexane	2.013	1.954	2.9	104	0.00
21	T	1,1-Dichloroethane	2.159	2.038	5.6	103	0.00
22	T	Vinyl acetate	2.966	2.754	7.1	96	0.00
23	T	cis-1,2-Dichloroethene	1.144	1.060	7.3	106	0.00
24	T	2-Butanone	2.151	1.848	14.1	92	0.00
25	T	Ethyl acetate	2.755	2.418	12.2	96	0.00
26	T	Tetrahydrofuran	1.422	1.334	6.2	98	0.00
27	T	Chloroform	2.371	2.382	-0.5	105	0.00
28	T	1,1,1-Trichloroethane	2.190	2.226	-1.6	106	0.00
29	T	Cyclohexane	2.051	2.136	-4.1	104	0.00
30	T	Carbon tetrachloride	2.027	1.948	3.9	108	0.00
31	T	Benzene	2.997	2.663	11.1	98	0.00
32	T	1,2-Dichloroethane	1.384	1.302	5.9	101	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	126	0.00
34	T	Heptane	1.013	0.983	3.0	103	0.00
35	T	Trichloroethene	0.545	0.490	10.1	105	0.00
36	T	1,2-Dichloropropane	0.455	0.390	14.3	98	0.00
37	T	1,4-Dioxane	0.155	0.141	9.0	104	0.00
38	T	Bromodichloromethane	0.796	0.706	11.3	103	0.00
39	T	cis-1,3-Dichloropropene	0.653	0.568	13.0	100	0.00
40	T	4-Methyl-2-pentanone	0.287	0.251	12.5	101	0.00
41	T	Toluene	1.185	1.019	14.0	99	0.00
42	T	trans-1,3-Dichloropropene	0.552	0.485	12.1	100	0.00
43	T	1,1,2-Trichloroethane	0.409	0.349	14.7	100	0.00
44	T	Tetrachloroethene	0.632	0.592	6.3	106	0.00
45	T	2-Hexanone	0.624	0.551	11.7	96	0.00
46	T	Chlorodibromomethane	0.639	0.555	13.1	102	0.00
47	T	1,2-Dibromoethane	0.607	0.530	12.7	100	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	121	0.00
49	T	Chlorobenzene	1.142	1.000	12.4	98	0.00
50	T	Ethylbenzene	1.865	1.648	11.6	97	0.00
51	T	m,p-Xylene	1.497	1.441	3.7	98	0.00
52	T	o-Xylene	1.374	1.202	12.5	98	0.00
53	T	Styrene	1.008	0.905	10.2	97	0.00
54	T	Bromoform	0.732	0.672	8.2	100	0.00
55	S	4-Bromofluorobenzene	0.601	0.628	-4.5	121	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\020912\02091214.D Vial: 3
Acq On : 9 Feb 2012 7:48 pm Operator: RACHEL HILL
Sample : ICV VOA1 020912 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\020912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Feb 10 09:48:09 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	0.995	0.914	8.1	100	0.00
57	T	4-Ethyltoluene	1.676	1.470	12.3	100	0.00
58	T	1,3,5-Trimethylbenzene	1.425	1.250	12.3	100	0.00
59	T	1,2,4-Trimethylbenzene	1.299	1.155	11.1	101	0.00
60	T	1,3-Dichlorobenzene	0.774	0.711	8.1	100	0.00
61	T	1,4-Dichlorobenzene	0.715	0.663	7.3	100	0.00
62	T	Benzyl chloride	0.803	0.810	-0.9	98	0.00
63	T	1,2-Dichlorobenzene	0.681	0.647	5.0	101	0.00
64	T	1,2,4-Trichlorobenzene	0.147	0.121	17.7	96	0.00
65	T	Hexachlorobutadiene	0.327	0.311	4.9	100	0.00
66		Naphthalene	0.213	0.178	16.4	95	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\020912\02091214.D Vial: 3
Acq On : 9 Feb 2012 7:48 pm Operator: RACHEL HILL
Sample : ICV VOA1 020912 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 10 9:51 2012 Quant Results File: 020912V1.RES

Quant Method : C:\HPCHEM\1\METHODS\020912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Feb 10 09:48:09 2012
Response via : Initial Calibration
DataAcq Meth : 020912V1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.60	130	406338	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.69	114	1113294	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.54	117	733968	12.50	ppbv		0.00
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.19	95	460884	13.06	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 104.48%				
Target Compounds							Qvalue
2) Propylene	5.52	41	500879	11.15	ppbv		92
3) Dichlorodifluoromethane	5.59	85	972473	9.55	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.85	135	727547	9.76	ppbv	#	77
5) Chloromethane	6.01	50	458379	9.88	ppbv		99
6) Vinyl chloride	6.21	62	553909	9.85	ppbv	#	99
7) 1,3-Butadiene	6.28	39	439973	10.81	ppbv		89
8) Bromomethane	6.86	94	365466	9.73	ppbv		99
9) Chloroethane	7.01	64	226423	9.64	ppbv		95
10) Trichlorofluoromethane	7.34	101	915332	9.94	ppbv	#	98
11) Ethanol	7.56	45	101972	9.66	ppbv		99
12) Freon113	8.00	101	773022	10.07	ppbv		91
13) 1,1-Dichloroethene	8.10	61	640335	10.34	ppbv	#	87
14) Acetone	8.19	43	587168	8.89	ppbv		93
15) Carbon disulfide	8.47	76	1039205	10.16	ppbv	#	100
16) 2-Propanol	8.24	45	542577	9.64	ppbv	#	1
17) Methylene chloride	8.76	49	474412	9.59	ppbv	#	78
18) tert-Butyl Methyl Ether	8.95	73	728884	8.62	ppbv	#	85
19) trans-1,2-Dichloroethene	9.04	61	565014	9.46	ppbv	#	83
20) n-Hexane	9.23	57	641460	9.80	ppbv	#	88
21) 1,1-Dichloroethane	9.60	63	642740	9.16	ppbv	#	96
22) Vinyl acetate	9.53	43	886166	9.19	ppbv	#	95
23) cis-1,2-Dichloroethene	10.28	96	337796	9.09	ppbv	#	82
24) 2-Butanone	10.25	43	594571	8.50	ppbv	#	90
25) Ethyl acetate	10.20	43	770246	8.60	ppbv	#	98
26) Tetrahydrofuran	10.59	42	433722	9.38	ppbv		88
27) Chloroform	10.61	83	758792	9.84	ppbv		99
28) 1,1,1-Trichloroethane	10.86	97	694614	9.76	ppbv	#	93
29) Cyclohexane	10.86	56	680605	10.21	ppbv		86
30) Carbon tetrachloride	11.02	117	601557	9.13	ppbv		97
31) Benzene	11.30	78	830883	8.53	ppbv		94
32) 1,2-Dichloroethane	11.38	62	410566	9.13	ppbv	#	97
34) Heptane	11.35	43	866934	9.61	ppbv	#	88
35) Trichloroethene	12.03	130	419218	8.64	ppbv		94
36) 1,2-Dichloropropane	12.39	63	340028	8.38	ppbv		96
37) 1,4-Dioxane	12.46	88	120779	8.73	ppbv	#	82
38) Bromodichloromethane	12.67	83	603280	8.51	ppbv		99
39) cis-1,3-Dichloropropene	13.23	75	480647	8.26	ppbv		97
40) 4-Methyl-2-pentanone	13.33	58	223239	8.73	ppbv	#	91
41) Toluene	13.63	91	889532	8.43	ppbv		97
42) trans-1,3-Dichloropropene	13.94	75	393481	8.00	ppbv		97
43) 1,1,2-Trichloroethane	14.21	97	305015	8.37	ppbv		96
44) Tetrachloroethene	14.33	166	506225	8.99	ppbv		98
45) 2-Hexanone	14.41	43	480798	8.65	ppbv		92
46) Chlorodibromomethane	14.75	129	484626	8.52	ppbv		99
47) 1,2-Dibromoethane	14.99	107	453320	8.39	ppbv		100
49) Chlorobenzene	15.59	112	581531	8.67	ppbv	#	88
50) Ethylbenzene	15.63	91	948128	8.66	ppbv		92
51) m,p-Xylene	15.78	91	1624292	18.48	ppbv		92
52) o-Xylene	16.38	91	705970	8.75	ppbv	#	88

(#) = qualifier out of range (m) = manual integration
02091214.D 020912V1.M Mon Feb 13 17:15:36 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\020912\02091214.D Vial: 3
Acq On : 9 Feb 2012 7:48 pm Operator: RACHEL HILL
Sample : ICV VOA1 020912 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 10 9:51 2012 Quant Results File: 020912V1.RES

Quant Method : C:\HPCHEM\1\METHODS\020912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Feb 10 09:48:09 2012
Response via : Initial Calibration
DataAcq Meth : 020912V1

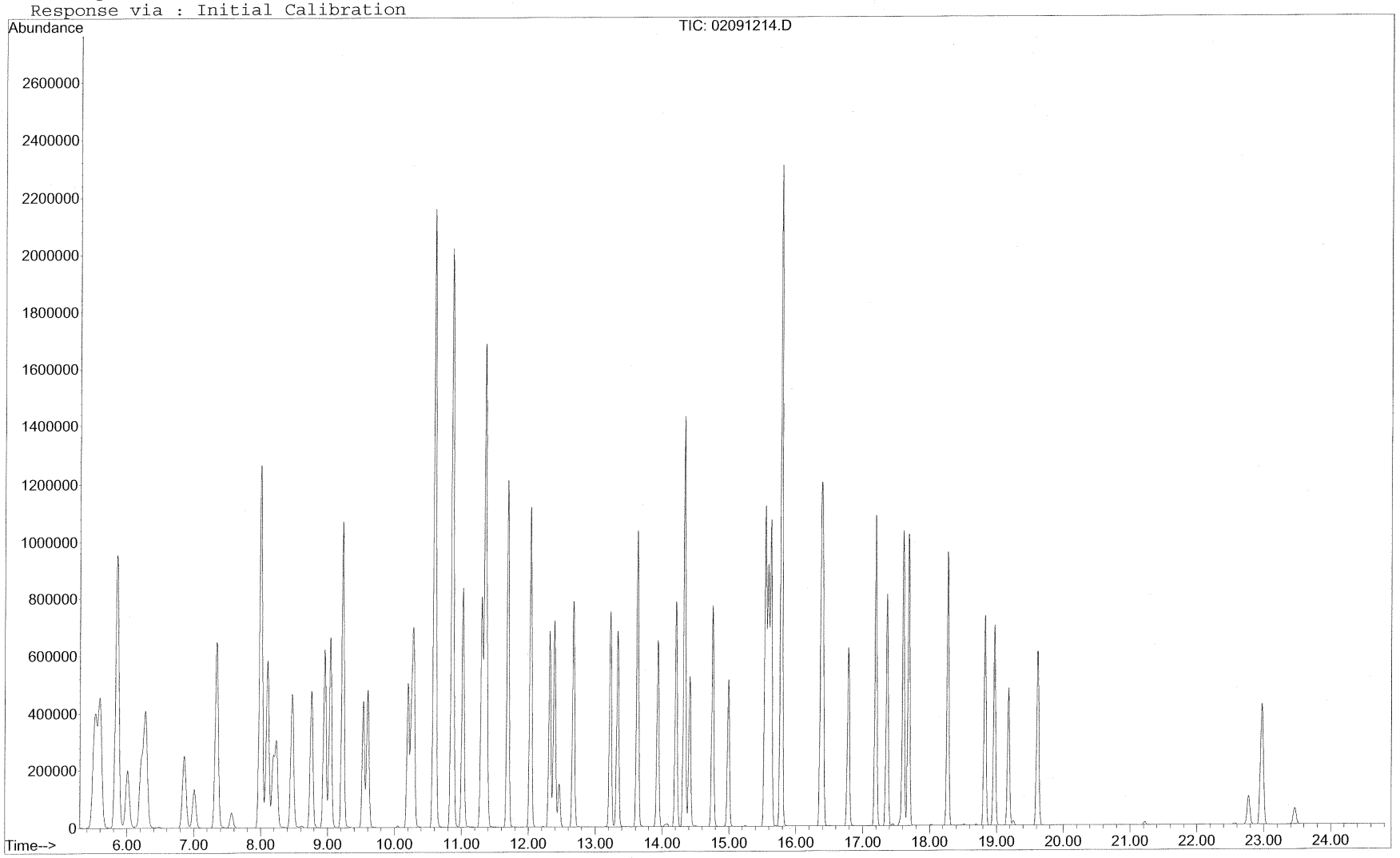
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53)	Styrene	16.40	104	520626	8.79	ppbv	97
54)	Bromoform	16.78	173	378870	8.82	ppbv	98
56)	1,1,2,2-Tetrachloroethane	17.36	83	536399	9.18	ppbv	99
57)	4-Ethyltoluene	17.60	105	845624	8.59	ppbv	96
58)	1,3,5-Trimethylbenzene	17.68	105	711973	8.51	ppbv	96
59)	1,2,4-Trimethylbenzene	18.27	105	664800	8.72	ppbv	97
60)	1,3-Dichlorobenzene	18.83	146	405160	8.92	ppbv	98
61)	1,4-Dichlorobenzene	18.97	146	373725	8.91	ppbv	98
62)	Benzyl chloride	19.18	91	461295	9.78	ppbv	97
63)	1,2-Dichlorobenzene	19.61	146	368312	9.21	ppbv	98
64)	1,2,4-Trichlorobenzene	22.77	180	64755	7.49	ppbv	97
65)	Hexachlorobutadiene	22.97	225	171429	8.92	ppbv	99
66)	Naphthalene	23.46	128	96338	7.70	ppbv	98

(#) = qualifier out of range (m) = manual integration
02091214.D 020912V1.M Mon Feb 13 17:15:37 2012 Page 2

Quantitation Report

Data File : C:\HPCHEM\1\DATA\020912\02091214.D Vial: 3
Acq On : 9 Feb 2012 7:48 pm Operator: RACHEL HILL
Sample : ICV VOA1 020912 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 10 9:51 2012 Quant Results File: 020912V1.RES

Method : C:\HPCHEM\1\METHODS\020912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Feb 10 09:48:09 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA1_120210A **Run No.:** 46147

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

Analyst: Rachel Hill **Column:**

Calibration ID: 46118 **Column ID:** 0.25mm, 1.4umFT

Column Length: 30m

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 021012	BFB_TUNE	TUNE	R46147	2/10/2012 3:48:00 PM	Robert Lynch		
CCV VOA1 021012	EPA_TO15	CCV	R46147	2/10/2012 5:27:00 PM	Robert Lynch		
RLVS1 VOA1 02101	EPA_TO15	RLVS	R46147	2/10/2012 6:23:00 PM	Robert Lynch		
MBLK VOA1 021012	EPA_TO15	MBLK	R46147	2/10/2012 7:14:00 PM	Charles O`Bryan		
1201804-029A	EPA_TO15	SAMP	R46147	2/10/2012 8:02:00 PM	Robert Lynch		
1201804-006A	EPA_TO15	SAMP	R46147	2/10/2012 8:51:00 PM	Robert Lynch		
1201804-039A	EPA_TO15	SAMP	R46147	2/10/2012 9:43:00 PM	Robert Lynch		
1201804-007A	EPA_TO15	SAMP	R46147	2/10/2012 10:31:00 PM	Robert Lynch		
1201804-040A	EPA_TO15	SAMP	R46147	2/10/2012 11:18:00 PM	Robert Lynch		High in non-target analytes. Lower dilution will likely cause contamination of instruments.
1201804-008A	EPA_TO15	SAMP	R46147	2/11/2012 12:50:00 AM	Robert Lynch		
1201804-008ADUP	EPA_TO15	DUP	R46147	2/11/2012 1:35:00 AM	Charles O`Bryan		
1201804-042A	EPA_TO15	SAMP	R46147	2/11/2012 2:23:00 AM	Robert Lynch		High in non-target analytes. Lower dilution will likely cause contamination of instruments.
1201804-044A	EPA_TO15	SAMP	R46147	2/11/2012 4:01:00 AM	Robert Lynch		
1201804-010A	EPA_TO15	SAMP	R46147	2/11/2012 4:50:00 AM	Robert Lynch		
1201804-011A	EPA_TO15	SAMP	R46147	2/11/2012 5:39:00 AM	Robert Lynch		
1201804-012A	EPA_TO15	SAMP	R46147	2/11/2012 6:31:00 AM	Robert Lynch		
1201804-046A	EPA_TO15	SAMP	R46147	2/11/2012 7:20:00 AM	Robert Lynch		
RLVS1 VOA1 02101	EPA_TO15	RLVS	R46147	2/11/2012 9:33:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

27-Feb-12

RunNo 46147

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
904743	BFB VOA1 021012	BFB_TUNE	TUNE	\1\DATA\021012	2/10/2012 3:48:0	1	R46147		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0.5	0.5		100	0	0	0	0	0	1%	0	2	0%	
174	M		76.3	76.3		100	0	0	0	0	0	76%	50	120	0%	
175	M		7.3	7.3		100	0	0	0	0	0	7%	4	9	0%	
176	M		100.3	100.3		100	0	0	0	0	0	100%	93	101	0%	
177	M		6.9	6.9		100	0	0	0	0	0	7%	5	9	0%	
50	M		23.7	23.7		100	0	0	0	0	0	24%	8	40	0%	
75	M		49.3	49.3		100	0	0	0	0	0	49%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.9	6.9		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
904744	CCV VOA1 021012	EPA_TO15	CCV	\1\DATA\021012	2/10/2012 5:27:0	1	R46147		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	10.08	10.08		9.6	0	0	0.107	1	0	105%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	9.19	9.19		10	0	0	0.211	1	0	92%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	9.87	9.87		9.8	0	0	0.108	1	0	101%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	8.69	8.69		9.8	0	0	0.2	1	0	89%	70	130	0%	
1,1-Dichloroethane	A	ppbv	9.4	9.4		9.7	0	0	0.111	1	0	97%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.07	10.07		9.9	0	0	0.097	1	0	102%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	8.08	8.08		9.1	0	0	0.271	1	0	89%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	8.67	8.67		9.8	0	0	0.245	1	0	88%	70	130	0%	
1,2-Dibromoethane	A	ppbv	8.65	8.65		9.6	0	0	0.186	1	0	90%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	9.15	9.15		9.7	0	0	0.208	1	0	94%	70	130	0%	
1,2-Dichloroethane	A	ppbv	9.88	9.88		9.7	0	0	0.196	1	0	102%	70	130	0%	
1,2-Dichloropropane	A	ppbv	8.77	8.77		9.8	0	0	0.224	1	0	89%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	8.47	8.47		9.7	0	0	0.24	1	0	87%	70	130	0%	
1,3-Butadiene	A	ppbv	10.16	10.16		9.8	0	0	0.152	1	0	104%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.07	9.07		9.7	0	0	0.202	1	0	94%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
904744	CCV VOA1 021012	EPA_TO15	CCV	:\1\DATA\021012	2/10/2012 5:27:0	1	R46147		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.16	9.16		9.6	0	0	0.194	1	0	95%	70	130	0%	
1,4-Dioxane	A	ppbv	8.46	8.46		9.6	0	0	0.128	1	0	88%	70	130	0%	
2-Butanone	A	ppbv	8.96	8.96		9.9	0	0	0.287	1	0	91%	70	130	0%	
2-Hexanone	A	ppbv	9.33	9.33		9.8	0	0	0.135	1	0	95%	70	130	0%	
2-Propanol	A	ppbv	9.37	9.37		10.1	0	0	0.329	1	0	93%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	8.93	8.93		10	0	0	0.157	1	0	89%	70	130	0%	
Acetone	A	ppbv	9.14	9.14		10	0	0	0.43	1	0	91%	70	130	0%	
Benzene	A	ppbv	9.25	9.25		9.6	0	0	0.126	1	0	96%	70	130	0%	
Benzyl chloride	A	ppbv	10.49	10.49		9.7	0	0	0.155	1	0	108%	70	130	0%	
Bromodichloromethane	A	ppbv	8.66	8.66		9.6	0	0	0.156	1	0	90%	70	130	0%	
Bromoform	A	ppbv	9.03	9.03		9.6	0	0	0.197	1	0	94%	70	130	0%	
Bromomethane	A	ppbv	9.1	9.1		9.3	0	0	0.075	1	0	98%	70	130	0%	
Carbon disulfide	A	ppbv	9.79	9.79		9.7	0	0	0.093	1	0	101%	70	130	0%	
Carbon tetrachloride	A	ppbv	9.24	9.24		9.5	0	0	0.114	1	0	97%	70	130	0%	
Chlorobenzene	A	ppbv	8.92	8.92		9.9	0	0	0.275	1	0	90%	70	130	0%	
Chlorodibromomethane	A	ppbv	8.86	8.86		9.2	0	0	0.165	1	0	96%	70	130	0%	
Chloroethane	A	ppbv	9.08	9.08		9.8	0	0	0.063	1	0	93%	70	130	0%	
Chloroform	A	ppbv	10.21	10.21		9.4	0	0	0.126	1	0	109%	70	130	0%	
Chloromethane	A	ppbv	9.66	9.66		9.8	0	0	0.104	1	0	99%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.3	9.3		9.8	0	0	0.107	1	0	95%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	8.6	8.6		9.5	0	0	0.166	1	0	91%	70	130	0%	
Cyclohexane	A	ppbv	10.39	10.39		9.8	0	0	0.684	2	0	106%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	8.96	8.96		9.2	0	0	0.086	1	0	97%	70	130	0%	
Ethanol	A	ppbv	8.73	8.73		9.2	0	0	1.962	5	0	95%	70	130	0%	
Ethyl acetate	A	ppbv	9.44	9.44		9.8	0	0	0.157	1	0	96%	70	130	0%	
Ethylbenzene	A	ppbv	8.84	8.84		9.8	0	0	0.737	2	0	90%	70	130	0%	
Heptane	A	ppbv	9.58	9.58		9.9	0	0	0.249	1	0	97%	70	130	0%	
Hexachlorobutadiene	A	ppbv	8.88	8.88		9.4	0	0	0.374	2	0	94%	70	130	0%	
m,p-Xylene	A	ppbv	19.06	19.06		19.2	0	0	0.524	2	0	99%	70	130	0%	
Methylene chloride	A	ppbv	9.71	9.71		10	0	0	2.077	5	0	97%	70	130	0%	
n-Hexane	A	ppbv	10	10		10.1	0	0	0.692	2	0	99%	70	130	0%	
Naphthalene	A	ppbv	8.59	8.59		9.2	0	0	0.247	1	0	93%	70	130	0%	
o-Xylene	A	ppbv	8.97	8.97		10	0	0	0.258	1	0	90%	70	130	0%	
Propylene	A	ppbv	11.29	11.29		10.2	0	0	0.075	1	0	111%	70	130	0%	B

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
904744	CCV VOA1 021012	EPA_TO15	CCV	.\1\DATA\021012	2/10/2012 5:27:0	1	R46147		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	9.1	9.1		9.8	0	0	0.263	1	0	93%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	9.14	9.14		9.9	0	0	0.228	1	0	92%	70	130	0%	
Tetrachloroethene	A	ppbv	8.87	8.87		9.6	0	0	0.148	1	0	92%	70	130	0%	
Tetrahydrofuran	A	ppbv	9.78	9.78		10	0	0	0.201	1	0	98%	70	130	0%	
Toluene	A	ppbv	8.83	8.83		9.8	0	0	0.158	1	0	90%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	9.72	9.72		9.8	0	0	0.117	1	0	99%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	8.33	8.33		9.1	0	0	0.171	1	0	92%	70	130	0%	
Trichloroethene	A	ppbv	8.6	8.6		9.6	0	0	0.119	1	0	90%	70	130	0%	
Trichlorofluoromethane	A	ppbv	9.38	9.38		9.6	0	0	0.148	1	0	98%	70	130	0%	
Vinyl acetate	A	ppbv	9.95	9.95		9.9	0	0	0.266	1	0	101%	70	130	0%	
Vinyl chloride	A	ppbv	8.82	8.82		9.4	0	0	0.072	1	0	94%	70	130	0%	
Xylenes, Total	C	ppbv	28.03	28.03		29.2	0	0	0.782	3	0	96%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		1.25	0	0	0	0	0	1000%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	12.68	12.68		12.5	0	0	0	0	0	101%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
904745	RLVS1 VOA1 02101	EPA_TO15	RLVS	.\1\DATA\021012	2/10/2012 6:23:0	1	R46147		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	0.71	0.71		0.996	0	0	0.107	1	0	71%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	0.95	0.95		1	0	0	0.211	1	0	95%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	0.78	0.78		0.98	0	0	0.108	1	0	80%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.59	0.59		0.98	0	0	0.2	1	0	60%	70	130	0%	S
1,1-Dichloroethane	A	ppbv	0.87	0.87		0.97	0	0	0.111	1	0	90%	70	130	0%	
1,1-Dichloroethene	A	ppbv	0.86	0.86		0.99	0	0	0.097	1	0	87%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.07	1.07		0.91	0	0	0.271	1	0	118%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	0.95	0.95		0.98	0	0	0.245	1	0	97%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.58	0.58		0.96	0	0	0.186	1	0	60%	70	130	0%	S
1,2-Dichlorobenzene	A	ppbv	1.03	1.03		0.97	0	0	0.208	1	0	106%	70	130	0%	
1,2-Dichloroethane	A	ppbv	0.86	0.86		0.97	0	0	0.196	1	0	89%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.65	0.65		0.98	0	0	0.224	1	0	66%	70	130	0%	S

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\021012\02101203.D Vial: 4
Acq On : 10 Feb 2012 5:27 pm Operator: RACHEL HILL
Sample : CCV VOA1 021012 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\020912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Feb 10 09:48:09 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	117	0.00
2	T	Propylene	1.382	1.529	-10.6	110	0.00
3	T	Dichlorodifluoromethane	3.131	3.050	2.6	105	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.293	2.189	4.5	104	0.00
5	T	Chloromethane	1.427	1.451	-1.7	101	0.00
6	T	Vinyl chloride	1.730	1.623	6.2	98	0.00
7	T	1,3-Butadiene	1.252	1.299	-3.8	102	0.00
8	T	Bromomethane	1.156	1.131	2.2	105	0.00
9	T	Chloroethane	0.723	0.713	1.4	103	0.00
10	T	Trichlorofluoromethane	2.832	2.769	2.2	107	0.00
11	T	Ethanol	0.325	0.308	5.2	94	0.00
12	T	Freon113	2.361	2.378	-0.7	106	0.00
13	T	1,1-Dichloroethene	1.904	1.936	-1.7	106	0.00
14	T	Acetone	2.032	1.857	8.6	100	0.00
15	T	Carbon disulfide	3.145	3.175	-1.0	106	0.00
16	T	2-Propanol	1.732	1.607	7.2	100	0.00
17	T	Methylene chloride	1.522	1.477	3.0	103	0.00
18	T	tert-Butyl Methyl Ether	2.602	2.401	7.7	102	0.00
19	T	trans-1,2-Dichloroethene	1.837	1.822	0.8	105	0.00
20	T	n-Hexane	2.013	1.993	1.0	103	0.00
21	T	1,1-Dichloroethane	2.159	2.092	3.1	103	0.00
22	T	Vinyl acetate	2.966	2.981	-0.5	101	0.00
23	T	cis-1,2-Dichloroethene	1.144	1.086	5.1	105	0.00
24	T	2-Butanone	2.151	1.947	9.5	95	0.00
25	T	Ethyl acetate	2.755	2.655	3.6	103	0.00
26	T	Tetrahydrofuran	1.422	1.391	2.2	100	0.00
27	T	Chloroform	2.371	2.470	-4.2	107	0.00
28	T	1,1,1-Trichloroethane	2.190	2.301	-5.1	107	0.00
29	T	Cyclohexane	2.051	2.176	-6.1	103	0.00
30	T	Carbon tetrachloride	2.027	1.972	2.7	107	0.00
31	T	Benzene	2.997	2.889	3.6	104	0.00
32	T	1,2-Dichloroethane	1.384	1.409	-1.8	106	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	127	0.00
34	T	Heptane	1.013	0.980	3.3	103	0.00
35	T	Trichloroethene	0.545	0.488	10.5	106	0.00
36	T	1,2-Dichloropropane	0.455	0.408	10.3	103	0.00
37	T	1,4-Dioxane	0.155	0.137	11.6	101	0.00
38	T	Bromodichloromethane	0.796	0.718	9.8	105	0.00
39	T	cis-1,3-Dichloropropene	0.653	0.591	9.5	105	0.00
40	T	4-Methyl-2-pentanone	0.287	0.256	10.8	104	0.00
41	T	Toluene	1.185	1.068	9.9	104	0.00
42	T	trans-1,3-Dichloropropene	0.552	0.506	8.3	105	0.00
43	T	1,1,2-Trichloroethane	0.409	0.363	11.2	105	0.00
44	T	Tetrachloroethene	0.632	0.584	7.6	106	0.00
45	T	2-Hexanone	0.624	0.594	4.8	104	0.00
46	T	Chlorodibromomethane	0.639	0.578	9.5	107	0.00
47	T	1,2-Dibromoethane	0.607	0.547	9.9	104	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	124	0.00
49	T	Chlorobenzene	1.142	1.028	10.0	104	0.00
50	T	Ethylbenzene	1.865	1.683	9.8	102	0.00
51	T	m,p-Xylene	1.497	1.485	0.8	104	0.00
52	T	o-Xylene	1.374	1.232	10.3	104	0.00
53	T	Styrene	1.008	0.936	7.1	104	0.00
54	T	Bromoform	0.732	0.688	6.0	105	0.00
55	S	4-Bromofluorobenzene	0.601	0.610	-1.5	121	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\021012\02101203.D Vial: 4
Acq On : 10 Feb 2012 5:27 pm Operator: RACHEL HILL
Sample : CCV VOA1 021012 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\020912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Feb 10 09:48:09 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	0.995	0.915	8.0	103	0.00
57	T	4-Ethyltoluene	1.676	1.470	12.3	103	0.00
58	T	1,3,5-Trimethylbenzene	1.425	1.244	12.7	103	0.00
59	T	1,2,4-Trimethylbenzene	1.299	1.149	11.5	103	0.00
60	T	1,3-Dichlorobenzene	0.774	0.724	6.5	105	0.00
61	T	1,4-Dichlorobenzene	0.715	0.682	4.6	106	0.00
62	T	Benzyl chloride	0.803	0.869	-8.2	108	0.00
63	T	1,2-Dichlorobenzene	0.681	0.642	5.7	104	0.00
64	T	1,2,4-Trichlorobenzene	0.147	0.131	10.9	107	0.00
65	T	Hexachlorobutadiene	0.327	0.309	5.5	102	0.00
66		Naphthalene	0.213	0.199	6.6	109	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\021012\02101203.D Vial: 4
Acq On : 10 Feb 2012 5:27 pm Operator: RACHEL HILL
Sample : CCV VOA1 021012 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 10 17:52 2012 Quant Results File: 020912V1.RES

Quant Method : C:\HPCHEM\1\METHODS\020912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Feb 10 09:48:09 2012
Response via : Initial Calibration
DataAcq Meth : 020912V1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.60	130	396353	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.69	114	1120972	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.54	117	755475	12.50	ppbv		0.00
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.19	95	460613	12.68	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 101.44%				
Target Compounds							Qvalue
2) Propylene	5.52	41	494548	11.29	ppbv		88
3) Dichlorodifluoromethane	5.60	85	889698	8.96	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.85	135	659441	9.07	ppbv	#	76
5) Chloromethane	6.01	50	437089	9.66	ppbv		99
6) Vinyl chloride	6.21	62	483674	8.82	ppbv	#	99
7) 1,3-Butadiene	6.28	39	403506	10.16	ppbv		89
8) Bromomethane	6.86	94	333582	9.10	ppbv	#	98
9) Chloroethane	7.01	64	207921	9.08	ppbv		95
10) Trichlorofluoromethane	7.34	101	842786	9.38	ppbv	#	98
11) Ethanol	7.56	45	89925	8.73	ppbv		99
12) Freon113	8.00	101	738947	9.87	ppbv		90
13) 1,1-Dichloroethene	8.10	61	607877	10.07	ppbv	#	87
14) Acetone	8.19	43	588858	9.14	ppbv		93
15) Carbon disulfide	8.47	76	976472	9.79	ppbv	#	99
16) 2-Propanol	8.23	45	514685	9.37	ppbv		90
17) Methylene chloride	8.76	49	468483	9.71	ppbv	#	78
18) tert-Butyl Methyl Ether	8.96	73	753856	9.14	ppbv	#	86
19) trans-1,2-Dichloroethene	9.04	61	566069	9.72	ppbv	#	82
20) n-Hexane	9.23	57	638307	10.00	ppbv	#	87
21) 1,1-Dichloroethane	9.60	63	643332	9.40	ppbv	#	97
22) Vinyl acetate	9.53	43	935917	9.95	ppbv	#	95
23) cis-1,2-Dichloroethene	10.28	96	337347	9.30	ppbv	#	82
24) 2-Butanone	10.25	43	611175	8.96	ppbv	#	89
25) Ethyl acetate	10.20	43	824943	9.44	ppbv	#	100
26) Tetrahydrofuran	10.59	42	440946	9.78	ppbv		88
27) Chloroform	10.61	83	767557	10.21	ppbv		100
28) 1,1,1-Trichloroethane	10.86	97	700394	10.08	ppbv	#	93
29) Cyclohexane	10.87	56	676063	10.39	ppbv		86
30) Carbon tetrachloride	11.02	117	593879	9.24	ppbv		97
31) Benzene	11.30	78	879292	9.25	ppbv		94
32) 1,2-Dichloroethane	11.38	62	433277	9.88	ppbv	#	98
34) Heptane	11.35	43	870023	9.58	ppbv	#	88
35) Trichloroethene	12.03	130	420202	8.60	ppbv		93
36) 1,2-Dichloropropane	12.39	63	358236	8.77	ppbv		96
37) 1,4-Dioxane	12.46	88	117809	8.46	ppbv	#	83
38) Bromodichloromethane	12.67	83	617935	8.66	ppbv		99
39) cis-1,3-Dichloropropene	13.23	75	503909	8.60	ppbv		96
40) 4-Methyl-2-pentanone	13.34	58	229910	8.93	ppbv	#	91
41) Toluene	13.63	91	938957	8.83	ppbv		97
42) trans-1,3-Dichloropropene	13.94	75	412555	8.33	ppbv		96
43) 1,1,2-Trichloroethane	14.21	97	319169	8.69	ppbv		96
44) Tetrachloroethene	14.34	166	502761	8.87	ppbv		98
45) 2-Hexanone	14.41	43	522304	9.33	ppbv		92
46) Chlorodibromomethane	14.76	129	507759	8.86	ppbv		99
47) 1,2-Dibromoethane	14.99	107	470680	8.65	ppbv		100
49) Chlorobenzene	15.59	112	615359	8.92	ppbv	#	88
50) Ethylbenzene	15.63	91	996889	8.84	ppbv		92
51) m,p-Xylene	15.78	91	1723699	19.06	ppbv		92
52) o-Xylene	16.38	91	744479	8.97	ppbv	#	88

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\021012\02101203.D Vial: 4
Acq On : 10 Feb 2012 5:27 pm Operator: RACHEL HILL
Sample : CCV VOA1 021012 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 10 17:52 2012 Quant Results File: 020912V1.RES

Quant Method : C:\HPCHEM\1\METHODS\020912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Feb 10 09:48:09 2012
Response via : Initial Calibration
DataAcq Meth : 020912V1

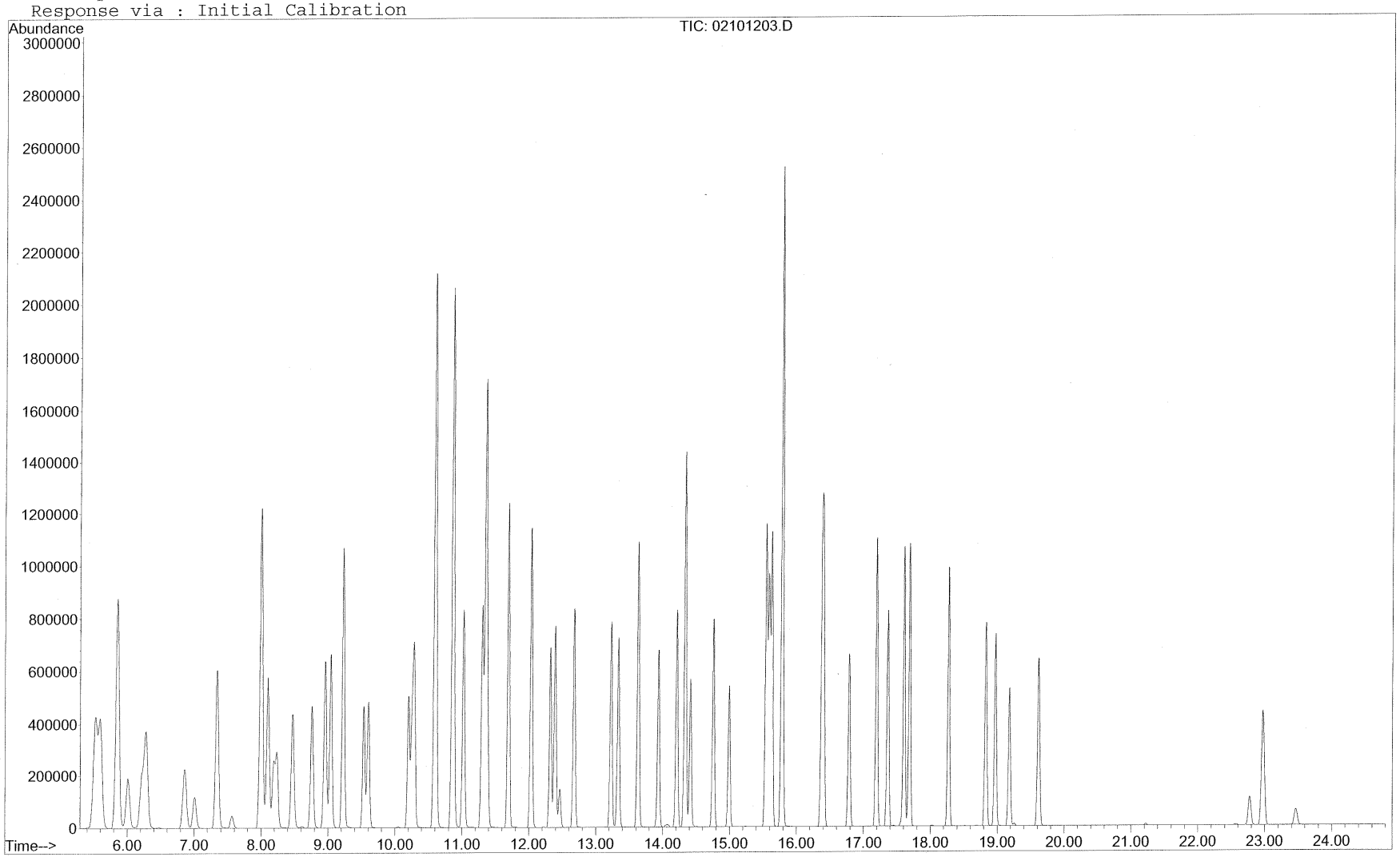
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.40	104	554666	9.10	ppbv		97
54)	Bromoform	16.79	173	399042	9.03	ppbv	#	98
56)	1,1,2,2-Tetrachloroethane	17.36	83	552878	9.19	ppbv	#	99
57)	4-Ethyltoluene	17.60	105	870826	8.60	ppbv		95
58)	1,3,5-Trimethylbenzene	17.69	105	729320	8.47	ppbv		96
59)	1,2,4-Trimethylbenzene	18.27	105	680452	8.67	ppbv		97
60)	1,3-Dichlorobenzene	18.83	146	424218	9.07	ppbv		98
61)	1,4-Dichlorobenzene	18.97	146	395770	9.16	ppbv		98
62)	Benzyl chloride	19.18	91	509249	10.49	ppbv		97
63)	1,2-Dichlorobenzene	19.62	146	376457	9.15	ppbv		98
64)	1,2,4-Trichlorobenzene	22.77	180	71926	8.08	ppbv		97
65)	Hexachlorobutadiene	22.97	225	175506	8.88	ppbv		99
66)	Naphthalene	23.46	128	110733	8.59	ppbv		99

(#) = qualifier out of range (m) = manual integration
02101203.D 020912V1.M Mon Feb 13 17:24:55 2012 Page 2

Quantitation Report

Data File : C:\HPCHEM\1\DATA\021012\02101203.D Vial: 4
Acq On : 10 Feb 2012 5:27 pm Operator: RACHEL HILL
Sample : CCV VOA1 021012 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 10 17:52 2012 Quant Results File: 020912V1.RES

Method : C:\HPCHEM\1\METHODS\020912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Feb 10 09:48:09 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA1_120211A **Run No.:** 46150

Analytical Run Date: 2/11/2012 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

Calibration ID: 46118 **Column ID:** 0.25mm, 1.4umFT

Column Length: 30m

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 021112	BFB_TUNE	TUNE	R46150	2/11/2012 10:18:00 AM	Robert Lynch		
CCV VOA1 021112	EPA_TO15	CCV	R46150	2/11/2012 1:32:00 PM	Robert Lynch		
RLVS1 VOA1 02111	EPA_TO15	RLVS	R46150	2/11/2012 3:09:00 PM	Robert Lynch		
MBLK VOA1 021112	EPA_TO15	MBLK	R46150	2/11/2012 4:05:00 PM	Robert Lynch		
1201804-013A	EPA_TO15	SAMP	R46150	2/11/2012 4:53:00 PM	Robert Lynch		
1201804-047A	EPA_TO15	SAMP	R46150	2/11/2012 5:38:00 PM	Robert Lynch		Over-diluted sample. Will re-analyze sample at lower dilution. Reported here to show sample and duplicate were indeed analyzed.
1201804-047ADUP	EPA_TO15	DUP	R46150	2/11/2012 6:23:00 PM	Charles O`Bryan		
1201804-002A	EPA_TO15	SAMP	R46150	2/11/2012 7:54:00 PM	Robert Lynch		
1201804-048A	EPA_TO15	SAMP	R46150	2/11/2012 8:39:00 PM	Robert Lynch		Non-target analytes high in sample. Instrumentation contamination likely if ran at lower dilution.
1201804-015A	EPA_TO15	SAMP	R46150	2/11/2012 10:09:00 PM	Robert Lynch		
1201804-026A	EPA_TO15	SAMP	R46150	2/12/2012 2:47:00 AM	Robert Lynch		
RLVS2 VOA1 02111	EPA_TO15	RLVS	R46150	2/12/2012 4:24:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

27-Feb-12

RunNo 46150

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
904799	BFB VOA1 021112	BFB_TUNE	TUNE	\1\DATA\021112	2/11/2012 10:18:	1	R46150		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		77.3	77.3		100	0	0	0	0	0	77%	50	120	0%	
175	M		7.1	7.1		100	0	0	0	0	0	7%	4	9	0%	
176	M		99.2	99.2		100	0	0	0	0	0	99%	93	101	0%	
177	M		6.9	6.9		100	0	0	0	0	0	7%	5	9	0%	
50	M		25.1	25.1		100	0	0	0	0	0	25%	8	40	0%	
75	M		50	50		100	0	0	0	0	0	50%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		7.1	7.1		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
904800	CCV VOA1 021112	EPA_TO15	CCV	\1\DATA\021112	2/11/2012 1:32:0	1	R46150		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	9.95	9.95		9.6	0	0	0.107	1	0	104%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	8.17	8.17		10	0	0	0.211	1	0	82%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.81	10.81		9.8	0	0	0.108	1	0	110%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	7.46	7.46		9.8	0	0	0.2	1	0	76%	70	130	0%	
1,1-Dichloroethane	A	ppbv	9.65	9.65		9.7	0	0	0.111	1	0	99%	70	130	0%	
1,1-Dichloroethene	A	ppbv	11.27	11.27		9.9	0	0	0.097	1	0	114%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	6.55	6.55		9.1	0	0	0.271	1	0	72%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	7.61	7.61		9.8	0	0	0.245	1	0	78%	70	130	0%	
1,2-Dibromoethane	A	ppbv	7.36	7.36		9.6	0	0	0.186	1	0	77%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	7.95	7.95		9.7	0	0	0.208	1	0	82%	70	130	0%	
1,2-Dichloroethane	A	ppbv	9.25	9.25		9.7	0	0	0.196	1	0	95%	70	130	0%	
1,2-Dichloropropane	A	ppbv	7.48	7.48		9.8	0	0	0.224	1	0	76%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	7.43	7.43		9.7	0	0	0.24	1	0	77%	70	130	0%	
1,3-Butadiene	A	ppbv	11.21	11.21		9.8	0	0	0.152	1	0	114%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	7.77	7.77		9.7	0	0	0.202	1	0	80%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
904800	CCV VOA1 021112	EPA_TO15	CCV	:\1\DATA\021112	2/11/2012 1:32:0	1	R46150		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	7.71	7.71		9.6	0	0	0.194	1	0	80%	70	130	0%	
1,4-Dioxane	A	ppbv	7.17	7.17		9.6	0	0	0.128	1	0	75%	70	130	0%	
2-Butanone	A	ppbv	8	8		9.9	0	0	0.287	1	0	81%	70	130	0%	
2-Hexanone	A	ppbv	7.54	7.54		9.8	0	0	0.135	1	0	77%	70	130	0%	
2-Propanol	A	ppbv	9.18	9.18		10.1	0	0	0.329	1	0	91%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	7.51	7.51		10	0	0	0.157	1	0	75%	70	130	0%	
Acetone	A	ppbv	8.51	8.51		10	0	0	0.43	1	0	85%	70	130	0%	
Benzene	A	ppbv	8.9	8.9		9.6	0	0	0.126	1	0	93%	70	130	0%	
Benzyl chloride	A	ppbv	8.87	8.87		9.7	0	0	0.155	1	0	91%	70	130	0%	
Bromodichloromethane	A	ppbv	7.71	7.71		9.6	0	0	0.156	1	0	80%	70	130	0%	
Bromoform	A	ppbv	7.88	7.88		9.6	0	0	0.197	1	0	82%	70	130	0%	
Bromomethane	A	ppbv	10.08	10.08		9.3	0	0	0.075	1	0	108%	70	130	0%	
Carbon disulfide	A	ppbv	10.8	10.8		9.7	0	0	0.093	1	0	111%	70	130	0%	
Carbon tetrachloride	A	ppbv	9.07	9.07		9.5	0	0	0.114	1	0	95%	70	130	0%	
Chlorobenzene	A	ppbv	7.89	7.89		9.9	0	0	0.275	1	0	80%	70	130	0%	
Chlorodibromomethane	A	ppbv	7.67	7.67		9.2	0	0	0.165	1	0	83%	70	130	0%	
Chloroethane	A	ppbv	10.12	10.12		9.8	0	0	0.063	1	0	103%	70	130	0%	
Chloroform	A	ppbv	10.16	10.16		9.4	0	0	0.126	1	0	108%	70	130	0%	
Chloromethane	A	ppbv	11.23	11.23		9.8	0	0	0.104	1	0	115%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.39	9.39		9.8	0	0	0.107	1	0	96%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	7.42	7.42		9.5	0	0	0.166	1	0	78%	70	130	0%	
Cyclohexane	A	ppbv	10.66	10.66		9.8	0	0	0.684	2	0	109%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.89	9.89		9.2	0	0	0.086	1	0	108%	70	130	0%	
Ethanol	A	ppbv	8.6	8.6		9.2	0	0	1.962	5	0	93%	70	130	0%	
Ethyl acetate	A	ppbv	8.37	8.37		9.8	0	0	0.157	1	0	85%	70	130	0%	
Ethylbenzene	A	ppbv	7.85	7.85		9.8	0	0	0.737	2	0	80%	70	130	0%	
Heptane	A	ppbv	8.75	8.75		9.9	0	0	0.249	1	0	88%	70	130	0%	
Hexachlorobutadiene	A	ppbv	7.33	7.33		9.4	0	0	0.374	2	0	78%	70	130	0%	
m,p-Xylene	A	ppbv	16.63	16.63		19.2	0	0	0.524	2	0	87%	70	130	0%	
Methylene chloride	A	ppbv	10.38	10.38		10	0	0	2.077	5	0	104%	70	130	0%	
n-Hexane	A	ppbv	10.44	10.44		10.1	0	0	0.692	2	0	103%	70	130	0%	
Naphthalene	A	ppbv	6.88	6.88		9.2	0	0	0.247	1	0	75%	70	130	0%	
o-Xylene	A	ppbv	7.93	7.93		10	0	0	0.258	1	0	79%	70	130	0%	
Propylene	A	ppbv	12.63	12.63		10.2	0	0	0.075	1	0	124%	70	130	0%	B

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
904800	CCV VOA1 021112	EPA_TO15	CCV	\1\DATA\021112	2/11/2012 1:32:0	1	R46150		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	7.96	7.96		9.8	0	0	0.263	1	0	81%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	8.35	8.35		9.9	0	0	0.228	1	0	84%	70	130	0%	
Tetrachloroethene	A	ppbv	7.98	7.98		9.6	0	0	0.148	1	0	83%	70	130	0%	
Tetrahydrofuran	A	ppbv	9.34	9.34		10	0	0	0.201	1	0	93%	70	130	0%	
Toluene	A	ppbv	7.57	7.57		9.8	0	0	0.158	1	0	77%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.01	10.01		9.8	0	0	0.117	1	0	102%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	7.09	7.09		9.1	0	0	0.171	1	0	78%	70	130	0%	
Trichloroethene	A	ppbv	7.84	7.84		9.6	0	0	0.119	1	0	82%	70	130	0%	
Trichlorofluoromethane	A	ppbv	10.33	10.33		9.6	0	0	0.148	1	0	108%	70	130	0%	
Vinyl acetate	A	ppbv	9.15	9.15		9.9	0	0	0.266	1	0	92%	70	130	0%	
Vinyl chloride	A	ppbv	9.49	9.49		9.4	0	0	0.072	1	0	101%	70	130	0%	
Xylenes, Total	C	ppbv	24.56	24.56		29.2	0	0	0.782	3	0	84%	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		1.25	0	0	0	0	0	1000%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	12.15	12.15		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
904801	RLVS1 VOA1 02111	EPA_TO15	RLVS	\1\DATA\021112	2/11/2012 3:09:0	1	R46150		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	0.8	0.8		0.996	0	0	0.107	1	0	80%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.01	1.01		1	0	0	0.211	1	0	101%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	0.89	0.89		0.98	0	0	0.108	1	0	91%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.63	0.63		0.98	0	0	0.2	1	0	64%	70	130	0%	S
1,1-Dichloroethane	A	ppbv	0.97	0.97		0.97	0	0	0.111	1	0	100%	70	130	0%	
1,1-Dichloroethene	A	ppbv	0.99	0.99		0.99	0	0	0.097	1	0	100%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1	1		0.91	0	0	0.271	1	0	110%	70	130	0%	M
1,2,4-Trimethylbenzene	A	ppbv	1.02	1.02		0.98	0	0	0.245	1	0	104%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.61	0.61		0.96	0	0	0.186	1	0	64%	70	130	0%	S
1,2-Dichlorobenzene	A	ppbv	1.08	1.08		0.97	0	0	0.208	1	0	111%	70	130	0%	
1,2-Dichloroethane	A	ppbv	0.97	0.97		0.97	0	0	0.196	1	0	100%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.68	0.68		0.98	0	0	0.224	1	0	69%	70	130	0%	S

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\021112\02111203.D Vial: 4
Acq On : 11 Feb 2012 1:32 pm Operator: RACHEL HILL
Sample : CCV VOA1 021112 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\020912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Feb 10 09:48:09 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	102	0.00
2	T	Propylene	1.382	1.711	-23.8	107	0.00
3	T	Dichlorodifluoromethane	3.131	3.365	-7.5	100	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.293	2.410	-5.1	100	0.00
5	T	Chloromethane	1.427	1.687	-18.2	102	0.00
6	T	Vinyl chloride	1.730	1.747	-1.0	91	0.00
7	T	1,3-Butadiene	1.252	1.432	-14.4	98	0.00
8	T	Bromomethane	1.156	1.253	-8.4	101	0.00
9	T	Chloroethane	0.723	0.795	-10.0	100	0.00
10	T	Trichlorofluoromethane	2.832	3.048	-7.6	103	0.00
11	T	Ethanol	0.325	0.304	6.5	80	0.00
12	T	Freon113	2.361	2.604	-10.3	101	0.00
13	T	1,1-Dichloroethene	1.904	2.167	-13.8	103	0.00
14	T	Acetone	2.032	1.729	14.9	81	0.00
15	T	Carbon disulfide	3.145	3.501	-11.3	101	0.00
16	T	2-Propanol	1.732	1.575	9.1	85	0.00
17	T	Methylene chloride	1.522	1.580	-3.8	96	0.00
18	T	tert-Butyl Methyl Ether	2.602	2.194	15.7	81	0.00
19	T	trans-1,2-Dichloroethene	1.837	1.876	-2.1	94	0.00
20	T	n-Hexane	2.013	2.080	-3.3	94	0.00
21	T	1,1-Dichloroethane	2.159	2.148	0.5	92	0.00
22	T	Vinyl acetate	2.966	2.741	7.6	81	0.00
23	T	cis-1,2-Dichloroethene	1.144	1.095	4.3	92	0.00
24	T	2-Butanone	2.151	1.739	19.2	74	0.00
25	T	Ethyl acetate	2.755	2.354	14.6	79	0.00
26	T	Tetrahydrofuran	1.422	1.328	6.6	83	0.00
27	T	Chloroform	2.371	2.458	-3.7	92	0.00
28	T	1,1,1-Trichloroethane	2.190	2.269	-3.6	92	0.00
29	T	Cyclohexane	2.051	2.231	-8.8	92	0.00
30	T	Carbon tetrachloride	2.027	1.936	4.5	91	0.00
31	T	Benzene	2.997	2.778	7.3	87	0.00
32	T	1,2-Dichloroethane	1.384	1.320	4.6	87	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	122	0.00
34	T	Heptane	1.013	0.895	11.6	91	0.00
35	T	Trichloroethene	0.545	0.445	18.3	93	0.00
36	T	1,2-Dichloropropane	0.455	0.348	23.5	85	0.00
37	T	1,4-Dioxane	0.155	0.116	25.2	83	0.00
38	T	Bromodichloromethane	0.796	0.639	19.7	91	0.00
39	T	cis-1,3-Dichloropropene	0.653	0.510	21.9	87	0.00
40	T	4-Methyl-2-pentanone	0.287	0.216	24.7	84	0.00
41	T	Toluene	1.185	0.915	22.8	86	0.00
42	T	trans-1,3-Dichloropropene	0.552	0.430	22.1	86	0.00
43	T	1,1,2-Trichloroethane	0.409	0.312	23.7	87	0.00
44	T	Tetrachloroethene	0.632	0.526	16.8	92	0.00
45	T	2-Hexanone	0.624	0.481	22.9	81	0.00
46	T	Chlorodibromomethane	0.639	0.500	21.8	89	0.00
47	T	1,2-Dibromoethane	0.607	0.465	23.4	85	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	117	0.00
49	T	Chlorobenzene	1.142	0.910	20.3	86	0.00
50	T	Ethylbenzene	1.865	1.494	19.9	85	0.00
51	T	m,p-Xylene	1.497	1.297	13.4	85	0.00
52	T	o-Xylene	1.374	1.089	20.7	86	0.00
53	T	Styrene	1.008	0.819	18.8	85	0.00
54	T	Bromoform	0.732	0.600	18.0	86	0.00
55	S	4-Bromofluorobenzene	0.601	0.584	2.8	109	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\021112\02111203.D Vial: 4
Acq On : 11 Feb 2012 1:32 pm Operator: RACHEL HILL
Sample : CCV VOA1 021112 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\020912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Feb 10 09:48:09 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	0.995	0.813	18.3	86	0.00
57	T	4-Ethyltoluene	1.676	1.284	23.4	84	0.00
58	T	1,3,5-Trimethylbenzene	1.425	1.091	23.4	85	0.00
59	T	1,2,4-Trimethylbenzene	1.299	1.008	22.4	85	0.00
60	T	1,3-Dichlorobenzene	0.774	0.620	19.9	84	0.00
61	T	1,4-Dichlorobenzene	0.715	0.574	19.7	84	0.00
62	T	Benzyl chloride	0.803	0.735	8.5	86	0.00
63	T	1,2-Dichlorobenzene	0.681	0.558	18.1	84	0.00
64	T	1,2,4-Trichlorobenzene	0.147	0.106	27.9	81	0.00
65	T	Hexachlorobutadiene	0.327	0.255	22.0	79	0.00
66		Naphthalene	0.213	0.160	24.9	82	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\021112\02111203.D Vial: 4
Acq On : 11 Feb 2012 1:32 pm Operator: RACHEL HILL
Sample : CCV VOA1 021112 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 11 13:57 2012 Quant Results File: 020912V1.RES

Quant Method : C:\HPCHEM\1\METHODS\020912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Feb 10 09:48:09 2012
Response via : Initial Calibration
DataAcq Meth : 020912V1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.60	130	344541	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.69	114	1081943	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.54	117	708119	12.50	ppbv		0.00
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.19	95	413472	12.15	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 97.20%				
Target Compounds							Qvalue
2) Propylene	5.51	41	481162	12.63	ppbv		88
3) Dichlorodifluoromethane	5.59	85	853373	9.89	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.85	135	631043	9.98	ppbv	#	75
5) Chloromethane	6.00	50	441786	11.23	ppbv		98
6) Vinyl chloride	6.21	62	452640	9.49	ppbv	#	98
7) 1,3-Butadiene	6.27	39	386748	11.21	ppbv		89
8) Bromomethane	6.86	94	321151	10.08	ppbv	#	98
9) Chloroethane	7.01	64	201485	10.12	ppbv	#	95
10) Trichlorofluoromethane	7.34	101	806587	10.33	ppbv	#	97
11) Ethanol	7.56	45	76995	8.60	ppbv		99
12) Freon113	8.00	101	703279	10.81	ppbv		89
13) 1,1-Dichloroethene	8.10	61	591371	11.27	ppbv	#	87
14) Acetone	8.19	43	476624	8.51	ppbv		93
15) Carbon disulfide	8.47	76	936049	10.80	ppbv	#	100
16) 2-Propanol	8.23	45	438556	9.18	ppbv	#	1
17) Methylene chloride	8.76	49	435453	10.38	ppbv	#	77
18) tert-Butyl Methyl Ether	8.95	73	598741	8.35	ppbv	#	85
19) trans-1,2-Dichloroethene	9.04	61	506689	10.01	ppbv	#	83
20) n-Hexane	9.23	57	579053	10.44	ppbv	#	88
21) 1,1-Dichloroethane	9.60	63	574383	9.65	ppbv	#	96
22) Vinyl acetate	9.53	43	747928	9.15	ppbv	#	94
23) cis-1,2-Dichloroethene	10.28	96	295913	9.39	ppbv	#	82
24) 2-Butanone	10.25	43	474596	8.00	ppbv	#	90
25) Ethyl acetate	10.20	43	635815	8.37	ppbv	#	98
26) Tetrahydrofuran	10.59	42	366165	9.34	ppbv		87
27) Chloroform	10.60	83	663973	10.16	ppbv		100
28) 1,1,1-Trichloroethane	10.86	97	600455	9.95	ppbv	#	92
29) Cyclohexane	10.86	56	602684	10.66	ppbv		85
30) Carbon tetrachloride	11.02	117	506925	9.07	ppbv		97
31) Benzene	11.30	78	735032	8.90	ppbv		94
32) 1,2-Dichloroethane	11.38	62	352872	9.25	ppbv	#	97
34) Heptane	11.35	43	767020	8.75	ppbv	#	88
35) Trichloroethene	12.03	130	369823	7.84	ppbv		94
36) 1,2-Dichloropropane	12.39	63	294898	7.48	ppbv		96
37) 1,4-Dioxane	12.46	88	96428	7.17	ppbv	#	81
38) Bromodichloromethane	12.67	83	530828	7.71	ppbv		99
39) cis-1,3-Dichloropropene	13.23	75	419721	7.42	ppbv		97
40) 4-Methyl-2-pentanone	13.34	58	186622	7.51	ppbv	#	90
41) Toluene	13.63	91	776443	7.57	ppbv		96
42) trans-1,3-Dichloropropene	13.93	75	338596	7.09	ppbv		97
43) 1,1,2-Trichloroethane	14.21	97	264322	7.46	ppbv		96
44) Tetrachloroethene	14.33	166	436889	7.98	ppbv		98
45) 2-Hexanone	14.41	43	407718	7.54	ppbv		92
46) Chlorodibromomethane	14.75	129	424322	7.67	ppbv		99
47) 1,2-Dibromoethane	14.99	107	386736	7.36	ppbv		100
49) Chlorobenzene	15.59	112	510564	7.89	ppbv	#	88
50) Ethylbenzene	15.63	91	829503	7.85	ppbv		92
51) m,p-Xylene	15.78	91	1410170	16.63	ppbv		91
52) o-Xylene	16.38	91	617003	7.93	ppbv	#	88

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\021112\02111203.D Vial: 4
Acq On : 11 Feb 2012 1:32 pm Operator: RACHEL HILL
Sample : CCV VOA1 021112 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 11 13:57 2012 Quant Results File: 020912V1.RES

Quant Method : C:\HPCHEM\1\METHODS\020912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Feb 10 09:48:09 2012
Response via : Initial Calibration
DataAcq Meth : 020912V1

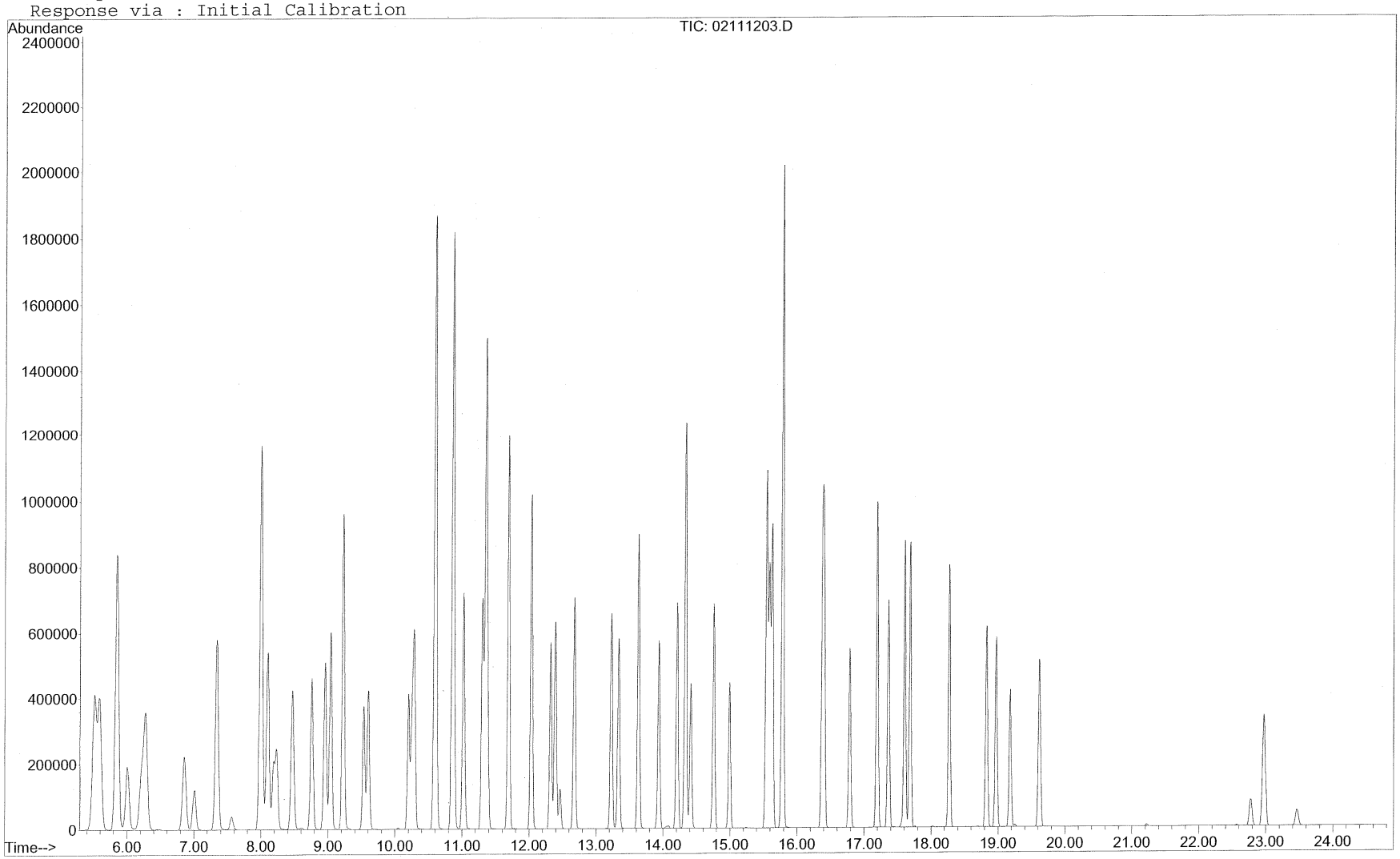
Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53) Styrene	16.40	104	454858	7.96	ppbv		97
54) Bromoform	16.78	173	326405	7.88	ppbv	#	98
56) 1,1,2,2-Tetrachloroethane	17.36	83	460570	8.17	ppbv	#	99
57) 4-Ethyltoluene	17.60	105	712700	7.51	ppbv		95
58) 1,3,5-Trimethylbenzene	17.69	105	599258	7.43	ppbv		96
59) 1,2,4-Trimethylbenzene	18.27	105	559833	7.61	ppbv		97
60) 1,3-Dichlorobenzene	18.83	146	340578	7.77	ppbv		98
61) 1,4-Dichlorobenzene	18.97	146	312152	7.71	ppbv		97
62) Benzyl chloride	19.18	91	403712	8.87	ppbv		97
63) 1,2-Dichlorobenzene	19.62	146	306483	7.95	ppbv		97
64) 1,2,4-Trichlorobenzene	22.77	180	54660	6.55	ppbv		97
65) Hexachlorobutadiene	22.97	225	135928	7.33	ppbv		99
66) Naphthalene	23.46	128	83139	6.88	ppbv		98

(#) = qualifier out of range (m) = manual integration
02111203.D 020912V1.M Mon Feb 13 17:36:52 2012

Quantitation Report

Data File : C:\HPCHEM\1\DATA\021112\02111203.D Vial: 4
Acq On : 11 Feb 2012 1:32 pm Operator: RACHEL HILL
Sample : CCV VOA1 021112 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 11 13:57 2012 Quant Results File: 020912V1.RES

Method : C:\HPCHEM\1\METHODS\020912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Feb 10 09:48:09 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA1_120214B **Run No.:** 46267

Analytical Run Date: 2/14/2012 **InstrumentID:** VOA1

Analyst: Rachel Dear **Column:**

Calibration ID: 46266 **Column ID:** 0.25mm, 1.4umFT

Column Length: 30m

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB2 VOA1 021412	BFB_TUNE	TUNE	R46267	2/14/2012 8:17:00 PM	Charles O`Bryan		
ICV VOA1 021412	EPA_TO15	ICV	R46267	2/14/2012 9:02:00 PM	Charles O`Bryan		
RLVS VOA1 021412	EPA_TO15	RLVS	R46267	2/14/2012 9:48:00 PM	Charles O`Bryan		
MBLK VOA1 021412	EPA_TO15	MBLK	R46267	2/14/2012 10:38:00 PM	Charles O`Bryan		
1201804-024A	EPA_TO15	SAMP	R46267	2/14/2012 11:24:00 PM	Charles O`Bryan		
1201804-024Adup	EPA_TO15	DUP	R46267	2/15/2012 12:10:00 AM	Charles O`Bryan		
1201804-043A	EPA_TO15	SAMP	R46267	2/15/2012 1:51:00 AM	Charles O`Bryan		
1201804-047A	EPA_TO15	SAMP	R46267	2/15/2012 2:43:00 AM	Charles O`Bryan		
1201804-014A	EPA_TO15	SAMP	R46267	2/15/2012 3:31:00 AM	Charles O`Bryan		
1201804-001A	EPA_TO15	SAMP	R46267	2/15/2012 4:23:00 AM	Charles O`Bryan		
1201804-021A	EPA_TO15	SAMP	R46267	2/15/2012 5:14:00 AM	Charles O`Bryan		
1201804-022A	EPA_TO15	SAMP	R46267	2/15/2012 6:07:00 AM	Charles O`Bryan		
1201804-023A	EPA_TO15	SAMP	R46267	2/15/2012 6:59:00 AM	Charles O`Bryan		
1201804-024A	EPA_TO15	SAMP	R46267	2/15/2012 11:34:00 AM	Charles O`Bryan		
1201804-025A	EPA_TO15	SAMP	R46267	2/15/2012 1:18:00 PM	Charles O`Bryan		
1201804-041A	EPA_TO15	SAMP	R46267	2/15/2012 3:34:00 PM	Charles O`Bryan		
1201804-041A	EPA_TO15	SAMP	R46267	2/15/2012 4:19:00 PM	Charles O`Bryan		
RLVS2 VOA1 02141	EPA_TO15	RLVS	R46267	2/15/2012 5:06:00 PM	Charles O`Bryan		

RTI Laboratories

ANALYTICAL RUN Summary

27-Feb-12

RunNo 46267

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
906735	BFB2 VOA1 021412	BFB_TUNE	TUNE	\1\DATA\021412	2/14/2012 8:17:0	1	R46267		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		80.2	80.2		100	0	0	0	0	0	80%	50	120	0%	
175	M		7.2	7.2		100	0	0	0	0	0	7%	4	9	0%	
176	M		99.6	99.6		100	0	0	0	0	0	100%	93	101	0%	
177	M		6.8	6.8		100	0	0	0	0	0	7%	5	9	0%	
50	M		23.1	23.1		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		6.9	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
906736	ICV VOA1 021412	EPA_TO15	ICV	\1\DATA\021412	2/14/2012 9:02:0	1	R46267		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	11.62	11.62		9.6	0	0	0.107	1	0	121%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.63	10.63		10	0	0	0.211	1	0	106%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	11.53	11.53		9.8	0	0	0.108	1	0	118%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	10.03	10.03		9.8	0	0	0.2	1	0	102%	70	130	0%	
1,1-Dichloroethane	A	ppbv	11.01	11.01		9.7	0	0	0.111	1	0	114%	70	130	0%	
1,1-Dichloroethene	A	ppbv	11.23	11.23		9.9	0	0	0.097	1	0	113%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	8.17	8.17		9.1	0	0	0.271	1	0	90%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	10.16	10.16		9.8	0	0	0.245	1	0	104%	70	130	0%	
1,2-Dibromoethane	A	ppbv	10.01	10.01		9.6	0	0	0.186	1	0	104%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	10.47	10.47		9.7	0	0	0.208	1	0	108%	70	130	0%	
1,2-Dichloroethane	A	ppbv	11.38	11.38		9.7	0	0	0.196	1	0	117%	70	130	0%	
1,2-Dichloropropane	A	ppbv	10.56	10.56		9.8	0	0	0.224	1	0	108%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.76	9.76		9.7	0	0	0.24	1	0	101%	70	130	0%	
1,3-Butadiene	A	ppbv	11.04	11.04		9.8	0	0	0.152	1	0	113%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	10.42	10.42		9.7	0	0	0.202	1	0	107%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
906736	ICV VOA1 021412	EPA_TO15	ICV	\1\DATA\021412	2/14/2012 9:02:0	1	R46267		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	0	108%	70	130	0%	
1,4-Dioxane	A	ppbv	10.35	10.35		9.6	0	0	0.128	1	0	108%	70	130	0%	
2-Butanone	A	ppbv	11.23	11.23		9.9	0	0	0.287	1	0	113%	70	130	0%	
2-Hexanone	A	ppbv	10.29	10.29		9.8	0	0	0.135	1	0	105%	70	130	0%	
2-Propanol	A	ppbv	10.45	10.45		10.1	0	0	0.329	1	0	103%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	10.23	10.23		10	0	0	0.157	1	0	102%	70	130	0%	
Acetone	A	ppbv	11.17	11.17		10	0	0	0.43	1	0	112%	70	130	0%	
Benzene	A	ppbv	10.99	10.99		9.6	0	0	0.126	1	0	114%	70	130	0%	
Benzyl chloride	A	ppbv	11.34	11.34		9.7	0	0	0.155	1	0	117%	70	130	0%	
Bromodichloromethane	A	ppbv	10.22	10.22		9.6	0	0	0.156	1	0	106%	70	130	0%	
Bromoform	A	ppbv	10.2	10.2		9.6	0	0	0.197	1	0	106%	70	130	0%	
Bromomethane	A	ppbv	10.07	10.07		9.3	0	0	0.075	1	0	108%	70	130	0%	
Carbon disulfide	A	ppbv	10.78	10.78		9.7	0	0	0.093	1	0	111%	70	130	0%	
Carbon tetrachloride	A	ppbv	10.87	10.87		9.5	0	0	0.114	1	0	114%	70	130	0%	
Chlorobenzene	A	ppbv	10.33	10.33		9.9	0	0	0.275	1	0	104%	70	130	0%	
Chlorodibromomethane	A	ppbv	10.12	10.12		9.2	0	0	0.165	1	0	110%	70	130	0%	
Chloroethane	A	ppbv	10.13	10.13		9.8	0	0	0.063	1	0	103%	70	130	0%	
Chloroform	A	ppbv	11.52	11.52		9.4	0	0	0.126	1	0	123%	70	130	0%	
Chloromethane	A	ppbv	10.07	10.07		9.8	0	0	0.104	1	0	103%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	10.85	10.85		9.8	0	0	0.107	1	0	111%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	10.05	10.05		9.5	0	0	0.166	1	0	106%	70	130	0%	
Cyclohexane	A	ppbv	11.89	11.89		9.8	0	0	0.684	2	0	121%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.5	9.5		9.2	0	0	0.086	1	0	103%	70	130	0%	
Ethanol	A	ppbv	9.33	9.33		9.2	0	0	1.962	5	0	101%	70	130	0%	
Ethyl acetate	A	ppbv	11.18	11.18		9.8	0	0	0.157	1	0	114%	70	130	0%	
Ethylbenzene	A	ppbv	10.2	10.2		9.8	0	0	0.737	2	0	104%	70	130	0%	
Heptane	A	ppbv	11.29	11.29		9.9	0	0	0.249	1	0	114%	70	130	0%	
Hexachlorobutadiene	A	ppbv	9.22	9.22		9.4	0	0	0.374	2	0	98%	70	130	0%	
m,p-Xylene	A	ppbv	21.45	21.45		19.2	0	0	0.524	2	0	112%	70	130	0%	
Methylene chloride	A	ppbv	11.1	11.1		10	0	0	2.077	5	0	111%	70	130	0%	
n-Hexane	A	ppbv	11.53	11.53		10.1	0	0	0.692	2	0	114%	70	130	0%	
Naphthalene	A	ppbv	8.39	8.39		9.2	0	0	0.247	1	0	91%	70	130	0%	
o-Xylene	A	ppbv	10.29	10.29		10	0	0	0.258	1	0	103%	70	130	0%	
Propylene	A	ppbv	11.16	11.16		10.2	0	0	0.075	1	0	109%	70	130	0%	B

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
906736	ICV VOA1 021412	EPA_TO15	ICV	\1\DATA\021412	2/14/2012 9:02:0	1	R46267		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	10.28	10.28		9.8	0	0	0.263	1	0	105%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	11.27	11.27		9.9	0	0	0.228	1	0	114%	70	130	0%	
Tetrachloroethene	A	ppbv	10.31	10.31		9.6	0	0	0.148	1	0	107%	70	130	0%	
Tetrahydrofuran	A	ppbv	11.23	11.23		10	0	0	0.201	1	0	112%	70	130	0%	
Toluene	A	ppbv	10.23	10.23		9.8	0	0	0.158	1	0	104%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	11.16	11.16		9.8	0	0	0.117	1	0	114%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	9.54	9.54		9.1	0	0	0.171	1	0	105%	70	130	0%	
Trichloroethene	A	ppbv	10.33	10.33		9.6	0	0	0.119	1	0	108%	70	130	0%	
Trichlorofluoromethane	A	ppbv	10.61	10.61		9.6	0	0	0.148	1	0	111%	70	130	0%	
Vinyl acetate	A	ppbv	12.01	12.01		9.9	0	0	0.266	1	0	121%	70	130	0%	
Vinyl chloride	A	ppbv	9.9	9.9		9.4	0	0	0.072	1	0	105%	70	130	0%	
Xylenes, Total	C	ppbv	31.74	31.74		29.2	0	0	0.782	3	0	109%	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		1.25	0	0	0	0	0	1000%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	12.84	12.84		12.5	0	0	0	0	0	103%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
906737	RLVS VOA1 021412	EPA_TO15	RLVS	\1\DATA\021412	2/14/2012 9:48:0	1	R46267		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	0.81	0.81		0.996	0	0	0.107	1	0	81%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.25	1.25		1	0	0	0.211	1	0	125%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	0.9	0.9		0.98	0	0	0.108	1	0	92%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.81	0.81		0.98	0	0	0.2	1	0	83%	70	130	0%	
1,1-Dichloroethane	A	ppbv	0.97	0.97		0.97	0	0	0.111	1	0	100%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1	1		0.99	0	0	0.097	1	0	101%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.54	1.54		0.91	0	0	0.271	1	0	169%	70	130	0%	S
1,2,4-Trimethylbenzene	A	ppbv	1.27	1.27		0.98	0	0	0.245	1	0	130%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.77	0.77		0.96	0	0	0.186	1	0	80%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.29	1.29		0.97	0	0	0.208	1	0	133%	70	130	0%	S
1,2-Dichloroethane	A	ppbv	1	1		0.97	0	0	0.196	1	0	103%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.85	0.85		0.98	0	0	0.224	1	0	87%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\021412\02141215.D Vial: 4
Acq On : 14 Feb 2012 9:02 pm Operator: RACHEL HILL
Sample : ICV VOA1 021412 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\021412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Feb 15 10:42:28 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	118	0.00
2	T	Propylene	1.332	1.457	-9.4	111	0.00
3	T	Dichlorodifluoromethane	2.866	2.960	-3.3	116	0.01
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.107	2.173	-3.1	117	0.00
5	T	Chloromethane	1.291	1.368	-6.0	109	0.01
6	T	Vinyl chloride	1.511	1.591	-5.3	119	0.01
7	T	1,3-Butadiene	1.099	1.238	-12.6	114	0.01
8	T	Bromomethane	1.013	1.097	-8.3	119	0.00
9	T	Chloroethane	0.615	0.677	-10.1	115	0.00
10	T	Trichlorofluoromethane	2.415	2.670	-10.6	120	0.00
11	T	Ethanol	0.273	0.277	-1.5	116	0.00
12	T	Freon113	2.005	2.359	-17.7	119	0.00
13	T	1,1-Dichloroethene	1.606	1.822	-13.4	115	0.00
14	T	Acetone	1.536	1.716	-11.7	114	0.00
15	T	Carbon disulfide	2.674	2.970	-11.1	115	0.00
16	T	2-Propanol	1.372	1.420	-3.5	114	0.00
17	T	Methylene chloride	1.293	1.435	-11.0	113	0.00
18	T	tert-Butyl Methyl Ether	1.966	2.239	-13.9	116	0.00
19	T	trans-1,2-Dichloroethene	1.559	1.775	-13.9	114	0.00
20	T	n-Hexane	1.704	1.946	-14.2	113	0.00
21	T	1,1-Dichloroethane	1.810	2.053	-13.4	114	0.00
22	T	Vinyl acetate	2.280	2.766	-21.3	114	0.00
23	T	cis-1,2-Dichloroethene	0.963	1.067	-10.8	116	0.00
24	T	2-Butanone	1.562	1.771	-13.4	119	0.00
25	T	Ethyl acetate	2.019	2.303	-14.1	115	0.00
26	T	Tetrahydrofuran	1.099	1.234	-12.3	110	0.00
27	T	Chloroform	2.032	2.389	-17.6	115	0.00
28	T	1,1,1-Trichloroethane	1.879	2.274	-21.0	118	0.00
29	T	Cyclohexane	1.754	2.128	-21.3	112	0.00
30	T	Carbon tetrachloride	1.723	1.972	-14.5	119	0.00
31	T	Benzene	2.357	2.698	-14.5	114	0.00
32	T	1,2-Dichloroethane	1.100	1.291	-17.4	115	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	115	0.00
34	T	Heptane	0.735	0.838	-14.0	111	0.00
35	T	Trichloroethene	0.398	0.428	-7.5	116	0.00
36	T	1,2-Dichloropropane	0.305	0.329	-7.9	112	0.00
37	T	1,4-Dioxane	0.104	0.113	-8.7	114	0.00
38	T	Bromodichloromethane	0.551	0.587	-6.5	115	0.00
39	T	cis-1,3-Dichloropropene	0.445	0.471	-5.8	113	0.00
40	T	4-Methyl-2-pentanone	0.197	0.201	-2.0	111	0.00
41	T	Toluene	0.801	0.836	-4.4	112	0.00
42	T	trans-1,3-Dichloropropene	0.377	0.395	-4.8	113	0.00
43	T	1,1,2-Trichloroethane	0.277	0.284	-2.5	113	0.00
44	T	Tetrachloroethene	0.459	0.493	-7.4	116	0.00
45	T	2-Hexanone	0.419	0.440	-5.0	110	0.00
46	T	Chlorodibromomethane	0.440	0.455	-3.4	115	0.00
47	T	1,2-Dibromoethane	0.414	0.432	-4.3	114	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	114	0.00
49	T	Chlorobenzene	0.833	0.869	-4.3	112	0.00
50	T	Ethylbenzene	1.346	1.401	-4.1	111	0.00
51	T	m,p-Xylene	1.092	1.219	-11.6	111	0.00
52	T	o-Xylene	0.990	1.019	-2.9	111	0.00
53	T	Styrene	0.739	0.775	-4.9	111	0.00
54	T	Bromoform	0.552	0.587	-6.3	114	0.00
55	S	4-Bromofluorobenzene	0.572	0.587	-2.6	115	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\021412\02141215.D Vial: 4
Acq On : 14 Feb 2012 9:02 pm Operator: RACHEL HILL
Sample : ICV VOA1 021412 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\021412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Feb 15 10:42:28 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	0.740	0.786	-6.2	112	0.00
57	T	4-Ethyltoluene	1.217	1.239	-1.8	110	0.00
58	T	1,3,5-Trimethylbenzene	1.039	1.045	-0.6	111	0.00
59	T	1,2,4-Trimethylbenzene	0.955	0.990	-3.7	114	0.00
60	T	1,3-Dichlorobenzene	0.566	0.608	-7.4	114	0.00
61	T	1,4-Dichlorobenzene	0.522	0.563	-7.9	114	0.00
62	T	Benzyl chloride	0.598	0.699	-16.9	113	0.00
63	T	1,2-Dichlorobenzene	0.502	0.542	-8.0	115	0.00
64	T	1,2,4-Trichlorobenzene	0.089	0.080	10.1	108	0.00
65	T	Hexachlorobutadiene	0.208	0.204	1.9	108	0.00
66		Naphthalene	0.131	0.119	9.2	105	0.01

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\021412\02141215.D Vial: 4
Acq On : 14 Feb 2012 9:02 pm Operator: RACHEL HILL
Sample : ICV VOA1 021412 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 15 10:44 2012 Quant Results File: 021412V1.RES

Quant Method : C:\HPCHEM\1\METHODS\021412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Feb 15 10:42:28 2012
Response via : Initial Calibration
DataAcq Meth : 021412V1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.60	130	456948	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.70	114	1401037	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.54	117	863768	12.50	ppbv		0.00
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.19	95	507372	12.84	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 102.72%				
Target Compounds							Qvalue
2) Propylene	5.53	41	543332	11.16	ppbv		89
3) Dichlorodifluoromethane	5.60	85	995457	9.50	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.86	135	754758	9.80	ppbv	#	79
5) Chloromethane	6.02	50	475029	10.07	ppbv		99
6) Vinyl chloride	6.22	62	546742	9.90	ppbv	#	98
7) 1,3-Butadiene	6.29	39	443459	11.04	ppbv		89
8) Bromomethane	6.86	94	372995	10.07	ppbv		99
9) Chloroethane	7.01	64	227668	10.13	ppbv		96
10) Trichlorofluoromethane	7.34	101	936855	10.61	ppbv	#	98
11) Ethanol	7.57	45	93052	9.33	ppbv		98
12) Freon113	8.00	101	845139	11.53	ppbv		91
13) 1,1-Dichloroethene	8.10	61	659481	11.23	ppbv	#	87
14) Acetone	8.19	43	627262	11.17	ppbv		94
15) Carbon disulfide	8.47	76	1053187	10.78	ppbv	#	100
16) 2-Propanol	8.24	45	524320	10.45	ppbv		94
17) Methylene chloride	8.76	49	524678	11.10	ppbv	#	78
18) tert-Butyl Methyl Ether	8.96	73	810188	11.27	ppbv	#	86
19) trans-1,2-Dichloroethene	9.04	61	635907	11.16	ppbv	#	84
20) n-Hexane	9.23	57	718377	11.53	ppbv	#	88
21) 1,1-Dichloroethane	9.60	63	728001	11.01	ppbv	#	96
22) Vinyl acetate	9.54	43	1001175	12.01	ppbv	#	95
23) cis-1,2-Dichloroethene	10.29	96	382103	10.85	ppbv	#	83
24) 2-Butanone	10.25	43	641034	11.23	ppbv	#	88
25) Ethyl acetate	10.20	43	825047	11.18	ppbv	#	100
26) Tetrahydrofuran	10.59	42	450968	11.23	ppbv		89
27) Chloroform	10.61	83	855984	11.52	ppbv		100
28) 1,1,1-Trichloroethane	10.86	97	797965	11.62	ppbv	#	94
29) Cyclohexane	10.87	56	762195	11.89	ppbv		87
30) Carbon tetrachloride	11.03	117	684827	10.87	ppbv		98
31) Benzene	11.30	78	946903	10.99	ppbv		94
32) 1,2-Dichloroethane	11.38	62	457650	11.38	ppbv	#	98
34) Heptane	11.36	43	929969	11.29	ppbv	#	89
35) Trichloroethene	12.04	130	460604	10.33	ppbv		94
36) 1,2-Dichloropropane	12.39	63	361383	10.56	ppbv		96
37) 1,4-Dioxane	12.46	88	121216	10.35	ppbv	#	82
38) Bromodichloromethane	12.68	83	631150	10.22	ppbv		99
39) cis-1,3-Dichloropropene	13.23	75	501826	10.05	ppbv		97
40) 4-Methyl-2-pentanone	13.34	58	225413	10.23	ppbv	#	91
41) Toluene	13.63	91	917990	10.23	ppbv		97
42) trans-1,3-Dichloropropene	13.94	75	402999	9.54	ppbv		97
43) 1,1,2-Trichloroethane	14.21	97	311711	10.03	ppbv		96
44) Tetrachloroethene	14.34	166	530262	10.31	ppbv		98
45) 2-Hexanone	14.41	43	483385	10.29	ppbv		92
46) Chlorodibromomethane	14.76	129	499389	10.12	ppbv		99
47) 1,2-Dibromoethane	15.00	107	464328	10.01	ppbv		100
49) Chlorobenzene	15.59	112	594426	10.33	ppbv	#	89
50) Ethylbenzene	15.63	91	948809	10.20	ppbv		91
51) m,p-Xylene	15.79	91	1617683	21.45	ppbv		92
52) o-Xylene	16.38	91	704159	10.29	ppbv	#	88

(#) = qualifier out of range (m) = manual integration
02141215.D 021412V1.M Thu Feb 16 14:00:17 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\021412\02141215.D Vial: 4
Acq On : 14 Feb 2012 9:02 pm Operator: RACHEL HILL
Sample : ICV VOA1 021412 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 15 10:44 2012 Quant Results File: 021412V1.RES

Quant Method : C:\HPCHEM\1\METHODS\021412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Feb 15 10:42:28 2012
Response via : Initial Calibration
DataAcq Meth : 021412V1

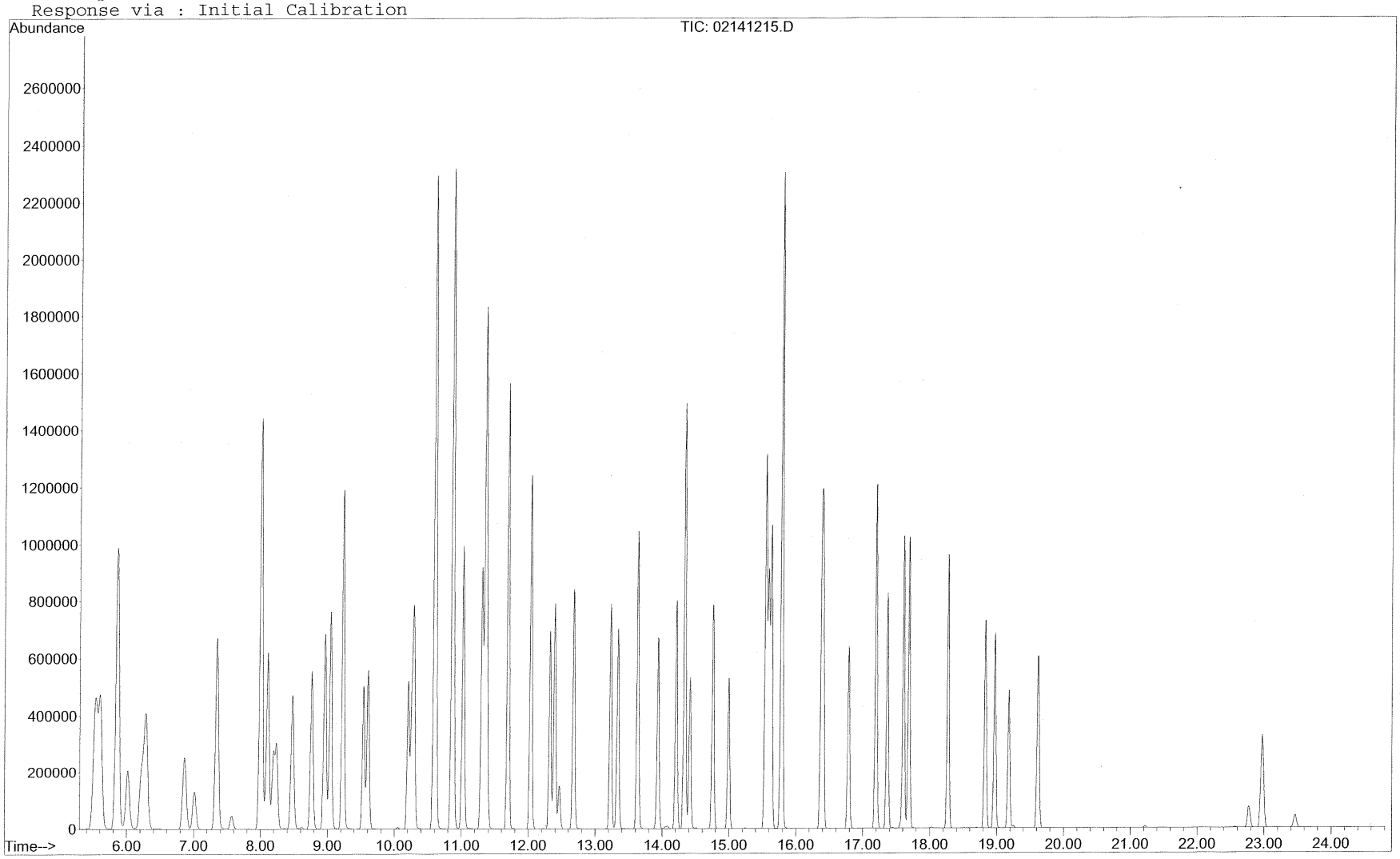
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53) Styrene	16.40	104	525048	10.28	ppbv	98
54) Bromoform	16.78	173	389155	10.20	ppbv	98
56) 1,1,2,2-Tetrachloroethane	17.36	83	543319	10.63	ppbv	99
57) 4-Ethyltoluene	17.61	105	839090	9.97	ppbv	95
58) 1,3,5-Trimethylbenzene	17.69	105	700182	9.76	ppbv	97
59) 1,2,4-Trimethylbenzene	18.27	105	670646	10.16	ppbv	97
60) 1,3-Dichlorobenzene	18.83	146	407813	10.42	ppbv	98
61) 1,4-Dichlorobenzene	18.97	146	373344	10.35	ppbv	98
62) Benzyl chloride	19.18	91	468453	11.34	ppbv	97
63) 1,2-Dichlorobenzene	19.62	146	363519	10.47	ppbv	98
64) 1,2,4-Trichlorobenzene	22.77	180	50220	8.17	ppbv	97
65) Hexachlorobutadiene	22.97	225	132493	9.22	ppbv	98
66) Naphthalene	23.47	128	75832	8.39	ppbv	98

(#) = qualifier out of range (m) = manual integration
02141215.D 021412V1.M Thu Feb 16 14:00:17 2012

Quantitation Report

Data File : C:\HPCHEM\1\DATA\021412\02141215.D Vial: 4
Acq On : 14 Feb 2012 9:02 pm Operator: RACHEL HILL
Sample : ICV VOA1 021412 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 15 10:44 2012 Quant Results File: 021412V1.RES

Method : C:\HPCHEM\1\METHODS\021412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Feb 15 10:42:28 2012
Response via : Initial Calibration



Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\012512V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Jan 26 09:30:01 2012
Response via : Initial Calibration

Calibration Files
2 =01251212.D 4 =01251213.D 5 =01251214.D
6 =01251215.D 7 =01251216.D 8 =01251217.D

		Compound	2	4	5	6	7	8	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------							
2)	T	Propylene		1.785	1.578	1.447	1.282	1.211	1.441	14.69
3)	T	Dichlorodifluoromet	3.099	3.489	3.155	2.995	2.767	2.782	3.080	8.44
4)	T	1,2-Dichloro-1,2,2,	2.073	2.490	2.286	2.203	2.121	2.176	2.240	6.32
5)	T	Chloromethane	1.643	1.681	1.498	1.372	1.220	1.111	1.387	16.42
6)	T	Vinyl chloride	1.855	1.867	1.752	1.715	1.470		1.732	9.25
7)	T	1,3-Butadiene	1.478	1.522	1.402	1.303	1.224	1.130	1.265	19.69
8)	T	Bromomethane	1.147	1.255	1.197	1.101	1.057	1.049	1.154	7.78
9)	T	Chloroethane	0.781	0.828	0.801	0.717	0.685	0.661	0.748	8.28
10)	T	Trichlorofluorometh	2.582	2.786	2.839	2.555	2.593	2.599	2.684	4.82
11)	T	Ethanol	0.383	0.320	0.313	0.300	0.262	0.256	0.303	14.13
12)	T	Freon113	2.193	2.278	2.533	2.199	2.316	2.146	2.232	7.90
13)	T	1,1-Dichloroethene	2.079	1.993	2.092	1.760	1.777	1.697	1.891	8.55
14)	T	Acetone	2.450	1.856	1.816	1.705	1.509	1.463	1.771	18.83
15)	T	Carbon disulfide	3.309	3.464	3.443	3.017	2.951	2.858	3.185	7.63
16)	T	2-Propanol	1.939	1.727	1.593	1.549	1.343	1.308	1.561	14.10
17)	T	Methylene chloride	1.997	1.570	1.614	1.383	1.334	1.269	1.503	16.77
18)	T	tert-Butyl Methyl E	2.652	2.235	2.277	2.154	2.002	2.095	2.251	9.35
19)	T	trans-1,2-Dichloroe	1.984	1.860	1.942	1.698	1.688	1.667	1.796	7.31
20)	T	n-Hexane	2.248	2.093	2.183	1.911	1.876	1.800	1.985	9.48
21)	T	1,1-Dichloroethane	2.337	2.165	2.200	1.968	1.894	1.906	2.078	7.98
22)	T	Vinyl acetate	2.558	2.895	2.942	2.738	2.456	2.468	2.668	7.36
23)	T	cis-1,2-Dichloroeth	1.079	1.093	1.092	1.023	0.997	1.060	1.073	5.10
24)	T	2-Butanone	2.392	2.051	1.869	1.802	1.659	1.597	1.868	14.76
25)	T	Ethyl acetate	2.738	2.597	2.497	2.322	2.116	2.046	2.374	10.58
26)	T	Tetrahydrofuran	1.393	1.434	1.322	1.290	1.085	1.024	1.222	14.66
27)	T	Chloroform	2.321	2.390	2.340	2.235	2.060	1.957	2.165	9.69
28)	T	1,1,1-Trichloroetha	1.811	2.098	2.177	2.095	2.012	1.851	1.962	9.15
29)	T	Cyclohexane	2.284	2.241	2.305	2.072	1.905	1.635	1.984	17.00
30)	T	Carbon tetrachlorid	1.486	1.757	1.829	1.768	1.776	1.836	1.756	7.07
31)	T	Benzene	3.182	2.756	2.799	2.594	2.405	2.519	2.715	9.23
32)	T	1,2-Dichloroethane	1.387	1.270	1.287	1.223	1.133	1.113	1.214	9.05
33)	I	1,4-Difluorobenzene	----------ISTD----------							
34)	T	Heptane	0.831	0.956	0.926	0.939	0.826	0.790	0.838	14.93
35)	T	Trichloroethene	0.363	0.445	0.446	0.463	0.443	0.493	0.436	9.91
36)	T	1,2-Dichloropropane	0.366	0.381	0.376	0.388	0.350	0.386	0.370	4.63
37)	T	1,4-Dioxane	0.107	0.128	0.123	0.125	0.107	0.119	0.117	7.47
38)	T	Bromodichloromethan	0.485	0.623	0.627	0.657	0.612	0.688	0.613	10.42
39)	T	cis-1,3-Dichloropro	0.434	0.535	0.527	0.549	0.497	0.565	0.520	8.32
40)	T	4-Methyl-2-pentanon	0.213	0.246	0.237	0.245	0.218	0.240	0.232	5.71
41)	T	Toluene	0.864	0.962	0.937	0.972	0.880	0.995	0.929	5.46
42)	T	trans-1,3-Dichlorop	0.335	0.458	0.442	0.466	0.416	0.477	0.437	11.24
43)	T	1,1,2-Trichloroetha	0.281	0.327	0.318	0.336	0.304	0.355	0.322	7.39
44)	T	Tetrachloroethene	0.428	0.538	0.528	0.556	0.529	0.538	0.503	12.04
45)	T	2-Hexanone	0.462	0.550	0.506	0.533	0.450	0.493	0.492	8.16
46)	T	Chlorodibromomethan	0.321	0.477	0.479	0.517	0.484	0.574	0.476	16.16
47)	T	1,2-Dibromoethane	0.407	0.487	0.470	0.501	0.449	0.528	0.474	8.14
48)	I	Chlorobenzene-d5	----------ISTD----------							
49)	T	Chlorobenzene	0.849	0.917	0.898	0.935	0.851	0.967	0.901	4.79
50)	T	Ethylbenzene	1.460	1.522	1.481	1.544	1.418	1.549	1.472	5.31
51)	T	m,p-Xylene	1.148	1.282	1.268	1.337	1.210	1.118	1.166	15.33
52)	T	o-Xylene	1.061	1.110	1.074	1.130	1.072	1.157	1.079	6.21
53)	T	Styrene	0.694	0.836	0.805	0.843	0.782	0.875	0.795	8.15
54)	T	Bromoform	0.372	0.557	0.568	0.594	0.555	0.644	0.546	15.52
55)	S	4-Bromofluorobenzen	0.656	0.607	0.613	0.589	0.577	0.576	0.597	5.39
56)	T	1,1,2,2-Tetrachloro	0.963	0.877	0.813	0.809	0.725	0.765	0.804	11.96
57)	T	4-Ethyltoluene	1.665	1.363	1.288	1.299	1.215	1.295	1.324	12.56

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

Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\012512V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Jan 26 09:30:01 2012
Response via : Initial Calibration

Calibration Files
2 =01251212.D 4 =01251213.D 5 =01251214.D
6 =01251215.D 7 =01251216.D 8 =01251217.D

		Compound	2	4	5	6	7	8	Avg	%RSD
58)	T	1,3,5-Trimethylbenz	1.415	1.135	1.087	1.093	1.066	1.101	1.123	12.42
59)	T	1,2,4-Trimethylbenz	1.309	1.072	0.990	1.009	0.987	0.988	1.037	12.57
60)	T	1,3-Dichlorobenzene	0.720	0.656	0.613	0.607	0.531	0.581	0.608	10.72
61)	T	1,4-Dichlorobenzene	0.629	0.607	0.558	0.572	0.493	0.545	0.561	8.43
62)	T	Benzyl chloride		0.756	0.710	0.736	0.646	0.691	0.708	6.00
63)	T	1,2-Dichlorobenzene	0.677	0.604	0.539	0.535	0.491	0.482	0.540	14.27
64)	T	1,2,4-Trichlorobenz	0.107	0.094	0.080	0.092	0.069	0.090	0.089	14.47
65)	T	Hexachlorobutadiene	0.318	0.235	0.204	0.228	0.177	0.222	0.229	18.99
66)		Naphthalene	0.154	0.143	0.122	0.141	0.103	0.136	0.133	13.42

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

Compound List Report VOA 1

Method : C:\HPCHEM\1\METHODS\012512V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Jan 26 09:30:01 2012
Response via : Initial Calibration
Total Cpnds : 66

PK#			Compound Name	QIon	Exp RT	Rel RT	Cal	#Qual	A/H	ID
1	I		Bromochloromethane	130	10.59	1.000	A	2	A	B
2		T	Propylene	41	5.52	0.521	A	2	A	B
3		T	Dichlorodifluoromethane	85	5.59	0.528	A	3	A	B
4		T	1,2-Dichloro-1,2,2,2-tetrafluo	135	5.85	0.552	A	2	A	B
5		T	Chloromethane	50	6.00	0.567	A	3	A	B
6		T	Vinyl chloride	62	6.21	0.586	A	2	A	B
7		T	1,3-Butadiene	39	6.27	0.592	A	2	A	B
8		T	Bromomethane	94	6.85	0.647	A	3	A	B
9		T	Chloroethane	64	7.01	0.661	A	3	A	B
10		T	Trichlorofluoromethane	101	7.34	0.692	A	3	A	B
11		T	Ethanol	45	7.57	0.714	A	2	A	B
12		T	Freon113	101	7.99	0.755	A	2	A	B
13		T	1,1-Dichloroethene	61	8.10	0.765	A	2	A	B
14		T	Acetone	43	8.19	0.773	A	2	A	B
15		T	Carbon disulfide	76	8.47	0.799	A	3	A	B
16		T	2-Propanol	45	8.24	0.777	A	2	A	B
17		T	Methylene chloride	49	8.75	0.826	A	2	A	B
18		T	tert-Butyl Methyl Ether	73	8.96	0.845	A	2	A	B
19		T	trans-1,2-Dichloroethene	61	9.04	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	9.60	0.906	A	3	A	B
22		T	Vinyl acetate	43	9.53	0.900	A	2	A	B
23		T	cis-1,2-Dichloroethene	96	10.29	0.971	A	3	A	B
24		T	2-Butanone	43	10.25	0.967	A	2	A	B
25		T	Ethyl acetate	43	10.20	0.962	A	3	A	B
26		T	Tetrahydrofuran	42	10.59	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	10.86	1.025	A	3	A	B
29		T	Cyclohexane	56	10.87	1.026	A	2	A	B
30		T	Carbon tetrachloride	117	11.02	1.040	A	3	A	B
31		T	Benzene	78	11.30	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	11.69	1.000	A	2	A	B
34		T	Heptane	43	11.35	0.971	A	3	A	B
35		T	Trichloroethene	130	12.03	1.029	A	3	A	B
36		T	1,2-Dichloropropane	63	12.39	1.059	A	3	A	B
37		T	1,4-Dioxane	88	12.46	1.066	A	2	A	B
38		T	Bromodichloromethane	83	12.67	1.084	A	2	A	B
39		T	cis-1,3-Dichloropropene	75	13.22	1.131	A	2	A	B
40		T	4-Methyl-2-pentanone	58	13.33	1.140	A	3	A	B
41		T	Toluene	91	13.63	1.166	A	2	A	B
42		T	trans-1,3-Dichloropropene	75	13.94	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	14.33	1.226	A	3	A	B
45		T	2-Hexanone	43	14.41	1.233	A	2	A	B
46		T	Chlorodibromomethane	129	14.75	1.262	A	2	A	B
47		T	1,2-Dibromoethane	107	14.99	1.282	A	2	A	B
48	I		Chlorobenzene-d5	117	15.54	1.000	A	2	A	B
49		T	Chlorobenzene	112	15.58	1.003	A	3	A	B
50		T	Ethylbenzene	91	15.63	1.005	A	2	A	B
51		T	m,p-Xylene	91	15.78	1.015	A	2	A	B
52		T	o-Xylene	91	16.37	1.054	A	2	A	B
53		T	Styrene	104	16.40	1.055	A	3	A	B
54		T	Bromoform	173	16.78	1.080	A	3	A	B
55		S	4-Bromofluorobenzene	95	17.19	1.106	A	2	A	B
56		T	1,1,2,2-Tetrachloroethane	83	17.36	1.117	A	2	A	B
57		T	4-Ethyltoluene	105	17.60	1.133	A	1	A	B
58		T	1,3,5-Trimethylbenzene	105	17.69	1.138	A	2	A	B
59		T	1,2,4-Trimethylbenzene	105	18.27	1.175	A	2	A	B
60		T	1,3-Dichlorobenzene	146	18.82	1.211	A	3	A	B
61		T	1,4-Dichlorobenzene	146	18.97	1.220	A	3	A	B
62		T	Benzyl chloride	91	19.18	1.234	A	2	A	B
63		T	1,2-Dichlorobenzene	146	19.61	1.262	A	3	A	B
64		T	1,2,4-Trichlorobenzene	180	22.77	1.465	A	3	A	B
65		T	Hexachlorobutadiene	225	22.97	1.478	A	2	A	B
66			Naphthalene	128	23.45	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
--------------------------------------------------------------------------------
          012512V1.M     Fri Jan 27 11:38:27 2012
```

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\012512\01251220.D Vial: 2
Acq On : 26 Jan 2012 1:09 am Operator: RACHEL HILL
Sample : ICV VOA1 012512 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\012512V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Jan 26 09:30:01 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	125	0.00
2	T	Propylene	1.441	1.617	-12.2	113	0.00
3	T	Dichlorodifluoromethane	3.080	3.295	-7.0	118	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.240	2.385	-6.5	120	0.00
5	T	Chloromethane	1.387	1.478	-6.6	110	0.00
6	T	Vinyl chloride	1.732	1.788	-3.2	120	0.00
7	T	1,3-Butadiene	1.265	1.423	-12.5	117	0.00
8	T	Bromomethane	1.154	1.210	-4.9	120	0.00
9	T	Chloroethane	0.748	0.781	-4.4	118	0.00
10	T	Trichlorofluoromethane	2.684	2.842	-5.9	127	0.00
11	T	Ethanol	0.303	0.310	-2.3	121	0.00
12	T	Freon113	2.232	2.290	-2.6	125	0.00
13	T	1,1-Dichloroethene	1.891	1.949	-3.1	122	0.00
14	T	Acetone	1.771	1.772	-0.1	119	0.00
15	T	Carbon disulfide	3.185	3.321	-4.3	120	0.00
16	T	2-Propanol	1.561	1.637	-4.9	118	0.00
17	T	Methylene chloride	1.503	1.462	2.7	116	0.00
18	T	tert-Butyl Methyl Ether	2.251	2.207	2.0	123	0.00
19	T	trans-1,2-Dichloroethene	1.796	1.791	0.3	120	0.00
20	T	n-Hexane	1.985	1.990	-0.3	119	0.00
21	T	1,1-Dichloroethane	2.078	2.064	0.7	119	0.00
22	T	Vinyl acetate	2.668	2.804	-5.1	121	0.00
23	T	cis-1,2-Dichloroethene	1.073	1.049	2.2	120	0.00
24	T	2-Butanone	1.868	1.829	2.1	111	0.00
25	T	Ethyl acetate	2.374	2.414	-1.7	116	0.00
26	T	Tetrahydrofuran	1.222	1.307	-7.0	114	0.00
27	T	Chloroform	2.165	2.328	-7.5	122	0.00
28	T	1,1,1-Trichloroethane	1.962	2.133	-8.7	127	0.00
29	T	Cyclohexane	1.984	2.141	-7.9	119	0.00
30	T	Carbon tetrachloride	1.756	1.871	-6.5	133	0.00
31	T	Benzene	2.715	2.665	1.8	121	0.00
32	T	1,2-Dichloroethane	1.214	1.257	-3.5	124	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	121	0.00
34	T	Heptane	0.838	0.922	-10.0	117	0.00
35	T	Trichloroethene	0.436	0.444	-1.8	121	0.00
36	T	1,2-Dichloropropane	0.370	0.370	0.0	118	0.00
37	T	1,4-Dioxane	0.117	0.123	-5.1	116	0.00
38	T	Bromodichloromethane	0.613	0.648	-5.7	126	0.00
39	T	cis-1,3-Dichloropropene	0.520	0.537	-3.3	121	0.00
40	T	4-Methyl-2-pentanone	0.232	0.239	-3.0	118	0.00
41	T	Toluene	0.929	0.942	-1.4	119	0.00
42	T	trans-1,3-Dichloropropene	0.437	0.457	-4.6	121	0.00
43	T	1,1,2-Trichloroethane	0.322	0.328	-1.9	121	0.00
44	T	Tetrachloroethene	0.503	0.551	-9.5	124	0.00
45	T	2-Hexanone	0.492	0.527	-7.1	116	0.00
46	T	Chlorodibromomethane	0.476	0.507	-6.5	129	0.00
47	T	1,2-Dibromoethane	0.474	0.492	-3.8	122	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	121	0.00
49	T	Chlorobenzene	0.901	0.913	-1.3	121	0.00
50	T	Ethylbenzene	1.472	1.506	-2.3	120	0.00
51	T	m,p-Xylene	1.166	1.294	-11.0	122	0.00
52	T	o-Xylene	1.079	1.104	-2.3	121	0.00
53	T	Styrene	0.795	0.824	-3.6	120	0.00
54	T	Bromoform	0.546	0.597	-9.3	130	0.00
55	S	4-Bromofluorobenzene	0.597	0.616	-3.2	123	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\012512\01251220.D Vial: 2
Acq On : 26 Jan 2012 1:09 am Operator: RACHEL HILL
Sample : ICV VOA1 012512 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\012512V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Jan 26 09:30:01 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	0.804	0.857	-6.6	119	0.00
57	T	4-Ethyltoluene	1.324	1.340	-1.2	119	0.00
58	T	1,3,5-Trimethylbenzene	1.123	1.130	-0.6	121	0.00
59	T	1,2,4-Trimethylbenzene	1.037	1.057	-1.9	120	0.00
60	T	1,3-Dichlorobenzene	0.608	0.645	-6.1	119	0.00
61	T	1,4-Dichlorobenzene	0.561	0.599	-6.8	120	0.00
62	T	Benzyl chloride	0.708	0.759	-7.2	122	0.00
63	T	1,2-Dichlorobenzene	0.540	0.584	-8.1	117	0.00
64	T	1,2,4-Trichlorobenzene	0.089	0.087	2.2	113	0.00
65	T	Hexachlorobutadiene	0.229	0.221	3.5	114	0.00
66		Naphthalene	0.133	0.133	0.0	113	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\012512\01251220.D Vial: 2
Acq On : 26 Jan 2012 1:09 am Operator: RACHEL HILL
Sample : ICV VOA1 012512 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 27 9:27 2012 Quant Results File: 012512V1.RES

Quant Method : C:\HPCHEM\1\METHODS\012512V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Jan 26 09:30:01 2012
Response via : Initial Calibration
DataAcq Meth : 012512V1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.60	130	462566	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.69	114	1368875	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.54	117	928054	12.50	ppbv		0.00
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.19	95	571346	12.90	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 103.20%				
Target Compounds							Qvalue
2) Propylene	5.53	41	610287	11.44	ppbv		93
3) Dichlorodifluoromethane	5.60	85	1121932	9.84	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.85	135	838615	10.12	ppbv	#	77
5) Chloromethane	6.01	50	519529	10.12	ppbv		99
6) Vinyl chloride	6.22	62	621977	9.70	ppbv		98
7) 1,3-Butadiene	6.28	39	516178	11.03	ppbv		90
8) Bromomethane	6.86	94	416429	9.76	ppbv		99
9) Chloroethane	7.01	64	265751	9.60	ppbv		96
10) Trichlorofluoromethane	7.34	101	1009597	10.16	ppbv		98
11) Ethanol	7.56	45	105552	9.41	ppbv		100
12) Freon113	8.00	101	830568	10.06	ppbv		91
13) 1,1-Dichloroethene	8.10	61	714107	10.21	ppbv	#	87
14) Acetone	8.19	43	655565	10.00	ppbv		93
15) Carbon disulfide	8.47	76	1192171	10.11	ppbv	#	100
16) 2-Propanol	8.24	45	611659	10.59	ppbv		84
17) Methylene chloride	8.76	49	540906	9.73	ppbv	#	78
18) tert-Butyl Methyl Ether	8.96	73	808376	9.71	ppbv	#	85
19) trans-1,2-Dichloroethene	9.04	61	649472	9.77	ppbv	#	81
20) n-Hexane	9.23	57	743943	10.13	ppbv	#	89
21) 1,1-Dichloroethane	9.60	63	740953	9.64	ppbv	#	96
22) Vinyl acetate	9.54	43	1027355	10.41	ppbv	#	95
23) cis-1,2-Dichloroethene	10.28	96	380493	9.58	ppbv	#	80
24) 2-Butanone	10.25	43	670117	9.69	ppbv	#	89
25) Ethyl acetate	10.20	43	875615	9.97	ppbv	#	98
26) Tetrahydrofuran	10.59	42	483756	10.69	ppbv		89
27) Chloroform	10.61	83	844118	10.54	ppbv		100
28) 1,1,1-Trichloroethane	10.86	97	757718	10.44	ppbv	#	94
29) Cyclohexane	10.86	56	776557	10.58	ppbv		86
30) Carbon tetrachloride	11.02	117	657685	10.12	ppbv		98
31) Benzene	11.30	78	946711	9.42	ppbv		94
32) 1,2-Dichloroethane	11.38	62	451335	10.05	ppbv	#	97
34) Heptane	11.35	43	999815	10.90	ppbv	#	88
35) Trichloroethene	12.04	130	466924	9.79	ppbv		92
36) 1,2-Dichloropropane	12.39	63	397391	9.80	ppbv	#	95
37) 1,4-Dioxane	12.46	88	129379	10.09	ppbv	#	79
38) Bromodichloromethane	12.67	83	681530	10.15	ppbv		98
39) cis-1,3-Dichloropropene	13.23	75	558581	9.80	ppbv		96
40) 4-Methyl-2-pentanone	13.34	58	262110	10.31	ppbv	#	90
41) Toluene	13.63	91	1011396	9.94	ppbv		97
42) trans-1,3-Dichloropropene	13.93	75	455483	9.52	ppbv		96
43) 1,1,2-Trichloroethane	14.21	97	351949	9.99	ppbv		96
44) Tetrachloroethene	14.33	166	579612	10.52	ppbv		98
45) 2-Hexanone	14.41	43	565611	10.49	ppbv		93
46) Chlorodibromomethane	14.76	129	544205	10.44	ppbv		99
47) 1,2-Dibromoethane	14.99	107	516998	9.97	ppbv		100
49) Chlorobenzene	15.59	112	671322	10.04	ppbv	#	88
50) Ethylbenzene	15.63	91	1095800	10.03	ppbv		92
51) m,p-Xylene	15.78	91	1844898	21.31	ppbv		92
52) o-Xylene	16.38	91	819974	10.24	ppbv	#	88

(#) = qualifier out of range (m) = manual integration
01251220.D 012512V1.M Fri Jan 27 11:38:36 2012

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\012512\01251220.D Vial: 2
Acq On : 26 Jan 2012 1:09 am Operator: RACHEL HILL
Sample : ICV VOA1 012512 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 27 9:27 2012 Quant Results File: 012512V1.RES

Quant Method : C:\HPCHEM\1\METHODS\012512V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Jan 26 09:30:01 2012
Response via : Initial Calibration
DataAcq Meth : 012512V1

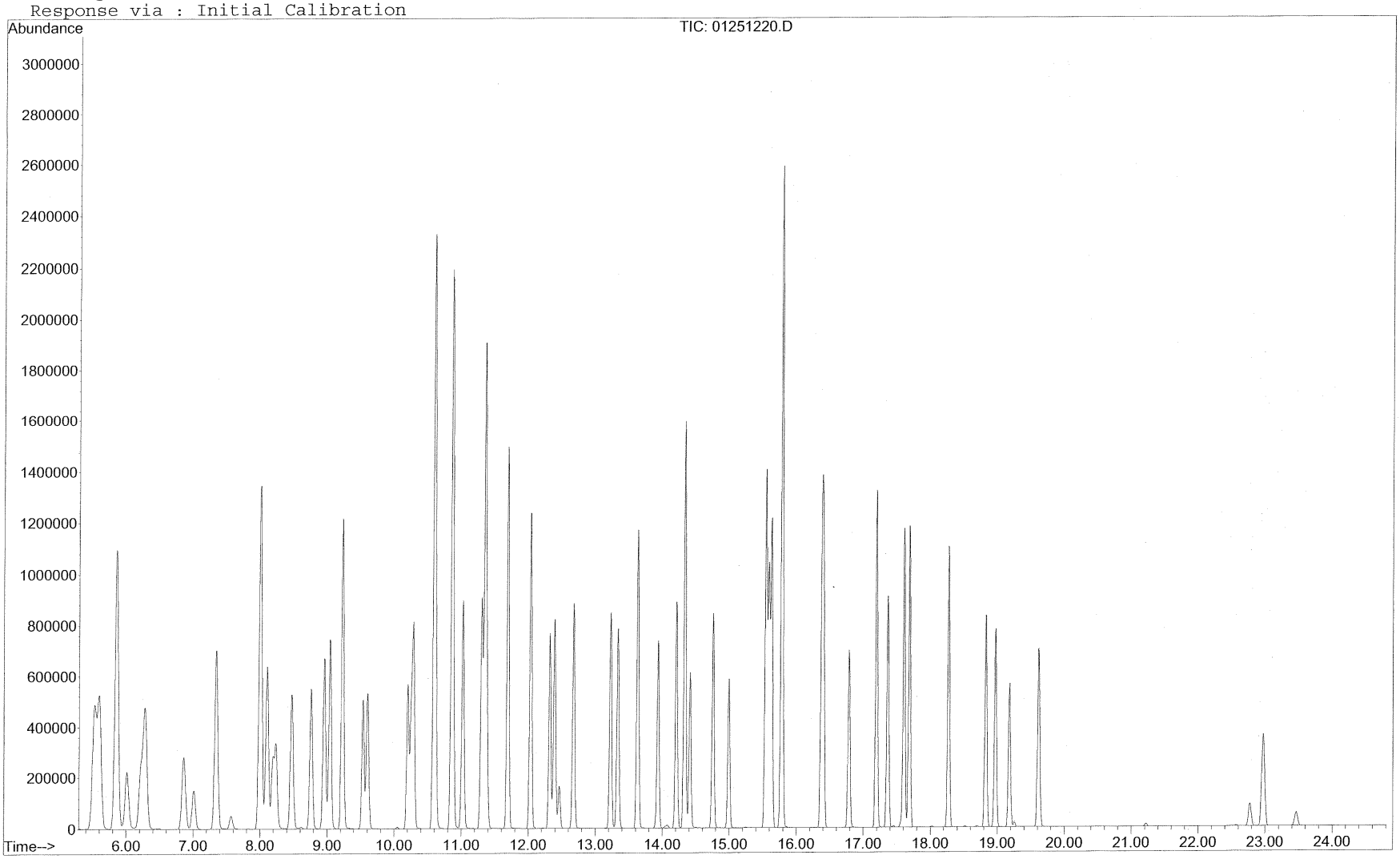
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.40	104	599738	10.16	ppbv		97
54)	Bromoform	16.78	173	425841	10.50	ppbv		98
56)	1,1,2,2-Tetrachloroethane	17.36	83	636113	10.66	ppbv	#	99
57)	4-Ethyltoluene	17.61	105	974772	9.92	ppbv		95
58)	1,3,5-Trimethylbenzene	17.69	105	814123	9.77	ppbv		96
59)	1,2,4-Trimethylbenzene	18.27	105	768893	9.99	ppbv		97
60)	1,3-Dichlorobenzene	18.83	146	464686	10.30	ppbv		98
61)	1,4-Dichlorobenzene	18.97	146	426827	10.25	ppbv		97
62)	Benzyl chloride	19.18	91	546692	10.40	ppbv		96
63)	1,2-Dichlorobenzene	19.61	146	420666	10.48	ppbv		98
64)	1,2,4-Trichlorobenzene	22.77	180	58960	8.95	ppbv		96
65)	Hexachlorobutadiene	22.97	225	154414	9.08	ppbv		98
66)	Naphthalene	23.46	128	90590	9.16	ppbv		98

(#) = qualifier out of range (m) = manual integration
01251220.D 012512V1.M Fri Jan 27 11:38:36 2012

Quantitation Report

Data File : C:\HPCHEM\1\DATA\012512\01251220.D Vial: 2
Acq On : 26 Jan 2012 1:09 am Operator: RACHEL HILL
Sample : ICV VOA1 012512 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 27 9:27 2012 Quant Results File: 012512V1.RES

Method : C:\HPCHEM\1\METHODS\012512V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Jan 26 09:30:01 2012
Response via : Initial Calibration



Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\020912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Feb 10 09:48:09 2012
Response via : Initial Calibration

Calibration Files
2 =02091203.D 4 =02091205.D 5 =02091206.D
6 =02091207.D 7 =02091208.D 8 =02091211.D

		Compound	2	4	5	6	7	8	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------							
2)	T	Propylene		1.628	1.497	1.383	1.235	1.207	1.382	11.56
3)	T	Dichlorodifluoromet	2.860	3.409	3.222	3.048	2.842	2.996	3.131	8.62
4)	T	1,2-Dichloro-1,2,2,	1.989	2.456	2.327	2.247	2.170	2.360	2.293	7.69
5)	T	Chloromethane	1.630	1.678	1.544	1.419	1.262	1.182	1.427	13.68
6)	T	Vinyl chloride	1.817	1.947	1.845	1.688	1.353		1.730	13.31
7)	T	1,3-Butadiene	1.354	1.485	1.388	1.309	1.228	1.116	1.252	16.00
8)	T	Bromomethane	1.078	1.266	1.178	1.118	1.059	1.107	1.156	7.79
9)	T	Chloroethane	0.712	0.809	0.757	0.699	0.662	0.672	0.723	7.17
10)	T	Trichlorofluorometh	2.523	3.020	2.838	2.717	2.710	2.911	2.832	7.07
11)	T	Ethanol		0.384	0.350	0.321	0.303	0.294	0.325	11.04
12)	T	Freon113	2.168	2.622	2.408	2.369	2.478	2.360	2.361	7.29
13)	T	1,1-Dichloroethene	1.897	2.133	1.944	1.808	1.791	1.833	1.904	6.13
14)	T	Acetone	3.149	2.166	1.906	1.789	1.782	1.723	2.032	25.45
15)	T	Carbon disulfide	3.010	3.519	3.264	3.029	2.903	3.007	3.145	6.90
16)	T	2-Propanol	2.479	1.888	1.715	1.582	1.482	1.462	1.732	20.90
17)	T	Methylene chloride	1.910	1.676	1.495	1.403	1.377	1.370	1.522	13.22
18)	T	tert-Butyl Methyl E	3.092	2.745	2.400	2.323	2.490	2.573	2.602	9.84
19)	T	trans-1,2-Dichloroe	1.827	2.033	1.821	1.740	1.773	1.821	1.837	5.09
20)	T	n-Hexane	2.045	2.263	2.035	1.931	1.959	1.948	2.013	6.02
21)	T	1,1-Dichloroethane	2.211	2.371	2.129	2.024	2.049	2.110	2.159	5.50
22)	T	Vinyl acetate	2.806	3.439	2.999	2.844	2.935	2.883	2.966	7.36
23)	T	cis-1,2-Dichloroeth	1.091	1.205	1.097	1.062	1.101	1.198	1.144	6.41
24)	T	2-Butanone	3.060	2.405	1.972	1.958	1.880	1.866	2.151	20.51
25)	T	Ethyl acetate	3.769	3.021	2.618	2.561	2.456	2.371	2.755	17.93
26)	T	Tetrahydrofuran	1.948	1.626	1.442	1.353	1.289	1.180	1.422	20.16
27)	T	Chloroform	2.405	2.714	2.471	2.395	2.356	2.196	2.371	8.71
28)	T	1,1,1-Trichloroetha	1.838	2.511	2.333	2.317	2.312	2.100	2.190	11.15
29)	T	Cyclohexane	2.135	2.473	2.235	2.129	2.015	1.781	2.051	14.20
30)	T	Carbon tetrachlorid	1.686	2.161	1.992	1.977	2.101	2.183	2.027	8.35
31)	T	Benzene	3.160	3.247	2.876	2.769	2.888	3.000	2.997	5.60
32)	T	1,2-Dichloroethane	1.438	1.552	1.401	1.350	1.379	1.311	1.384	6.89
33)	I	1,4-Difluorobenzene	----------ISTD----------							
34)	T	Heptane	0.875	1.200	1.106	1.091	1.096	0.936	1.013	14.66
35)	T	Trichloroethene	0.402	0.585	0.545	0.555	0.618	0.596	0.545	13.16
36)	T	1,2-Dichloropropane	0.397	0.499	0.449	0.450	0.486	0.466	0.455	7.31
37)	T	1,4-Dioxane	0.166	0.171	0.157	0.151	0.155	0.146	0.155	6.87
38)	T	Bromodichloromethan	0.571	0.862	0.794	0.808	0.882	0.853	0.796	13.17
39)	T	cis-1,3-Dichloropro	0.491	0.714	0.652	0.655	0.695	0.687	0.653	11.46
40)	T	4-Methyl-2-pentanon	0.266	0.312	0.288	0.285	0.294	0.282	0.287	4.87
41)	T	Toluene	1.007	1.294	1.165	1.178	1.261	1.230	1.185	7.88
42)	T	trans-1,3-Dichlorop	0.396	0.608	0.555	0.547	0.581	0.581	0.552	13.04
43)	T	1,1,2-Trichloroetha	0.340	0.439	0.399	0.403	0.431	0.432	0.409	8.39
44)	T	Tetrachloroethene	0.501	0.700	0.661	0.679	0.723	0.628	0.632	13.39
45)	T	2-Hexanone	0.607	0.724	0.644	0.618	0.634	0.577	0.624	8.32
46)	T	Chlorodibromomethan	0.441	0.686	0.628	0.645	0.729	0.707	0.639	14.90
47)	T	1,2-Dibromoethane	0.481	0.667	0.603	0.593	0.648	0.642	0.607	10.12
48)	I	Chlorobenzene-d5	----------ISTD----------							
49)	T	Chlorobenzene	1.040	1.233	1.116	1.114	1.181	1.177	1.142	5.42
50)	T	Ethylbenzene	1.773	2.047	1.836	1.863	1.953	1.875	1.865	5.98
51)	T	m,p-Xylene	1.412	1.780	1.621	1.659	1.634	1.323	1.497	16.83
52)	T	o-Xylene	1.341	1.478	1.333	1.393	1.455	1.392	1.374	6.17
53)	T	Styrene	0.873	1.124	1.006	1.016	1.078	1.037	1.008	8.52
54)	T	Bromoform	0.585	0.811	0.731	0.731	0.803	0.771	0.732	10.61
55)	S	4-Bromofluorobenzen	0.669	0.625	0.611	0.583	0.592	0.571	0.601	6.35
56)	T	1,1,2,2-Tetrachloro	1.315	1.105	0.979	0.927	0.932	0.868	0.995	16.61
57)	T	4-Ethyltoluene	2.206	1.780	1.597	1.563	1.609	1.524	1.676	15.19

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

Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\020912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Feb 10 09:48:09 2012
Response via : Initial Calibration

Calibration Files
2 =02091203.D 4 =02091205.D 5 =02091206.D
6 =02091207.D 7 =02091208.D 8 =02091211.D

		Compound	2	4	5	6	7	8	Avg	%RSD
58)	T	1,3,5-Trimethylbenz	1.901	1.502	1.356	1.337	1.355	1.297	1.425	15.88
59)	T	1,2,4-Trimethylbenz	1.799	1.382	1.246	1.185	1.204	1.143	1.299	18.18
60)	T	1,3-Dichlorobenzene	1.064	0.855	0.768	0.675	0.714	0.664	0.774	18.72
61)	T	1,4-Dichlorobenzene	0.920	0.800	0.715	0.633	0.671	0.624	0.715	15.30
62)	T	Benzyl chloride	0.515	0.997	0.887	0.810	0.840	0.770	0.803	20.07
63)	T	1,2-Dichlorobenzene	1.036	0.770	0.684	0.582	0.603	0.540	0.681	25.88
64)	T	1,2,4-Trichlorobenz	0.257	0.152	0.131	0.113	0.125	0.120	0.147	33.81
65)	T	Hexachlorobutadiene		0.376	0.322	0.291	0.319	0.310	0.327	9.16
66)		Naphthalene	0.341	0.227	0.197	0.164	0.185	0.178	0.213	28.03

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

Compound List Report VOA 1

Method : C:\HPCHEM\1\METHODS\020912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Feb 10 09:48:09 2012
Response via : Initial Calibration
Total Cpnds : 66

PK#			Compound Name	QIon	Exp RT	Rel RT	Cal	#Qual	A/H	ID
1	I		Bromochloromethane	130	10.59	1.000	A	2	A	B
2		T	Propylene	41	5.52	0.521	A	2	A	B
3		T	Dichlorodifluoromethane	85	5.59	0.528	A	3	A	B
4		T	1,2-Dichloro-1,2,2,2-tetrafluo	135	5.85	0.552	A	2	A	B
5		T	Chloromethane	50	6.00	0.567	A	3	A	B
6		T	Vinyl chloride	62	6.21	0.586	A	2	A	B
7		T	1,3-Butadiene	39	6.27	0.592	A	2	A	B
8		T	Bromomethane	94	6.85	0.647	A	3	A	B
9		T	Chloroethane	64	7.01	0.661	A	3	A	B
10		T	Trichlorofluoromethane	101	7.34	0.692	A	3	A	B
11		T	Ethanol	45	7.57	0.714	A	2	A	B
12		T	Freon113	101	7.99	0.755	A	2	A	B
13		T	1,1-Dichloroethene	61	8.10	0.765	A	2	A	B
14		T	Acetone	43	8.19	0.773	A	2	A	B
15		T	Carbon disulfide	76	8.47	0.799	A	3	A	B
16		T	2-Propanol	45	8.24	0.777	A	2	A	B
17		T	Methylene chloride	49	8.75	0.826	A	2	A	B
18		T	tert-Butyl Methyl Ether	73	8.96	0.845	A	2	A	B
19		T	trans-1,2-Dichloroethene	61	9.04	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	9.60	0.906	A	3	A	B
22		T	Vinyl acetate	43	9.53	0.900	A	2	A	B
23		T	cis-1,2-Dichloroethene	96	10.29	0.971	A	3	A	B
24		T	2-Butanone	43	10.25	0.967	A	2	A	B
25		T	Ethyl acetate	43	10.20	0.962	A	3	A	B
26		T	Tetrahydrofuran	42	10.59	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	10.86	1.025	A	3	A	B
29		T	Cyclohexane	56	10.87	1.026	A	2	A	B
30		T	Carbon tetrachloride	117	11.02	1.040	A	3	A	B
31		T	Benzene	78	11.30	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	11.69	1.000	A	2	A	B
34		T	Heptane	43	11.35	0.971	A	3	A	B
35		T	Trichloroethene	130	12.03	1.029	A	3	A	B
36		T	1,2-Dichloropropane	63	12.39	1.059	A	3	A	B
37		T	1,4-Dioxane	88	12.46	1.066	A	2	A	B
38		T	Bromodichloromethane	83	12.67	1.084	A	2	A	B
39		T	cis-1,3-Dichloropropene	75	13.22	1.131	A	2	A	B
40		T	4-Methyl-2-pentanone	58	13.33	1.140	A	3	A	B
41		T	Toluene	91	13.63	1.166	A	2	A	B
42		T	trans-1,3-Dichloropropene	75	13.94	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	14.33	1.226	A	3	A	B
45		T	2-Hexanone	43	14.41	1.233	A	2	A	B
46		T	Chlorodibromomethane	129	14.75	1.262	A	2	A	B
47		T	1,2-Dibromoethane	107	14.99	1.282	A	2	A	B
48	I		Chlorobenzene-d5	117	15.54	1.000	A	2	A	B
49		T	Chlorobenzene	112	15.58	1.003	A	3	A	B
50		T	Ethylbenzene	91	15.63	1.005	A	2	A	B
51		T	m,p-Xylene	91	15.78	1.015	A	2	A	B
52		T	o-Xylene	91	16.37	1.054	A	2	A	B
53		T	Styrene	104	16.40	1.055	A	3	A	B
54		T	Bromoform	173	16.78	1.080	A	3	A	B
55		S	4-Bromofluorobenzene	95	17.19	1.106	A	2	A	B
56		T	1,1,2,2-Tetrachloroethane	83	17.36	1.117	A	2	A	B
57		T	4-Ethyltoluene	105	17.60	1.133	A	1	A	B
58		T	1,3,5-Trimethylbenzene	105	17.69	1.138	A	2	A	B
59		T	1,2,4-Trimethylbenzene	105	18.27	1.175	A	2	A	B
60		T	1,3-Dichlorobenzene	146	18.82	1.211	A	3	A	B
61		T	1,4-Dichlorobenzene	146	18.97	1.220	A	3	A	B
62		T	Benzyl chloride	91	19.18	1.234	A	2	A	B
63		T	1,2-Dichlorobenzene	146	19.61	1.262	A	3	A	B
64		T	1,2,4-Trichlorobenzene	180	22.77	1.465	A	3	A	B
65		T	Hexachlorobutadiene	225	22.97	1.478	A	2	A	B
66			Naphthalene	128	23.45	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
--------------------------------------------------------------------------------
          020912V1.M     Mon Feb 20 13:39:05 2012
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Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\020912\02091214.D Vial: 3
Acq On : 9 Feb 2012 7:48 pm Operator: RACHEL HILL
Sample : ICV VOA1 020912 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\020912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Feb 10 09:48:09 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	120	0.00
2	T	Propylene	1.382	1.511	-9.3	111	0.00
3	T	Dichlorodifluoromethane	3.131	3.252	-3.9	114	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.293	2.356	-2.7	115	0.00
5	T	Chloromethane	1.427	1.484	-4.0	106	0.00
6	T	Vinyl chloride	1.730	1.813	-4.8	112	0.00
7	T	1,3-Butadiene	1.252	1.381	-10.3	112	0.00
8	T	Bromomethane	1.156	1.209	-4.6	115	0.00
9	T	Chloroethane	0.723	0.757	-4.7	112	0.00
10	T	Trichlorofluoromethane	2.832	2.933	-3.6	117	0.00
11	T	Ethanol	0.325	0.341	-4.9	107	0.00
12	T	Freon113	2.361	2.427	-2.8	111	0.00
13	T	1,1-Dichloroethene	1.904	1.990	-4.5	112	0.00
14	T	Acetone	2.032	1.806	11.1	100	0.00
15	T	Carbon disulfide	3.145	3.296	-4.8	112	0.00
16	T	2-Propanol	1.732	1.653	4.6	105	0.00
17	T	Methylene chloride	1.522	1.459	4.1	104	0.00
18	T	tert-Butyl Methyl Ether	2.602	2.265	13.0	99	0.00
19	T	trans-1,2-Dichloroethene	1.837	1.774	3.4	105	0.00
20	T	n-Hexane	2.013	1.954	2.9	104	0.00
21	T	1,1-Dichloroethane	2.159	2.038	5.6	103	0.00
22	T	Vinyl acetate	2.966	2.754	7.1	96	0.00
23	T	cis-1,2-Dichloroethene	1.144	1.060	7.3	106	0.00
24	T	2-Butanone	2.151	1.848	14.1	92	0.00
25	T	Ethyl acetate	2.755	2.418	12.2	96	0.00
26	T	Tetrahydrofuran	1.422	1.334	6.2	98	0.00
27	T	Chloroform	2.371	2.382	-0.5	105	0.00
28	T	1,1,1-Trichloroethane	2.190	2.226	-1.6	106	0.00
29	T	Cyclohexane	2.051	2.136	-4.1	104	0.00
30	T	Carbon tetrachloride	2.027	1.948	3.9	108	0.00
31	T	Benzene	2.997	2.663	11.1	98	0.00
32	T	1,2-Dichloroethane	1.384	1.302	5.9	101	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	126	0.00
34	T	Heptane	1.013	0.983	3.0	103	0.00
35	T	Trichloroethene	0.545	0.490	10.1	105	0.00
36	T	1,2-Dichloropropane	0.455	0.390	14.3	98	0.00
37	T	1,4-Dioxane	0.155	0.141	9.0	104	0.00
38	T	Bromodichloromethane	0.796	0.706	11.3	103	0.00
39	T	cis-1,3-Dichloropropene	0.653	0.568	13.0	100	0.00
40	T	4-Methyl-2-pentanone	0.287	0.251	12.5	101	0.00
41	T	Toluene	1.185	1.019	14.0	99	0.00
42	T	trans-1,3-Dichloropropene	0.552	0.485	12.1	100	0.00
43	T	1,1,2-Trichloroethane	0.409	0.349	14.7	100	0.00
44	T	Tetrachloroethene	0.632	0.592	6.3	106	0.00
45	T	2-Hexanone	0.624	0.551	11.7	96	0.00
46	T	Chlorodibromomethane	0.639	0.555	13.1	102	0.00
47	T	1,2-Dibromoethane	0.607	0.530	12.7	100	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	121	0.00
49	T	Chlorobenzene	1.142	1.000	12.4	98	0.00
50	T	Ethylbenzene	1.865	1.648	11.6	97	0.00
51	T	m,p-Xylene	1.497	1.441	3.7	98	0.00
52	T	o-Xylene	1.374	1.202	12.5	98	0.00
53	T	Styrene	1.008	0.905	10.2	97	0.00
54	T	Bromoform	0.732	0.672	8.2	100	0.00
55	S	4-Bromofluorobenzene	0.601	0.628	-4.5	121	0.00

(#) = Out of Range
02091214.D 020912V1.M Mon Feb 13 17:12:43 2012 Page 1

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\020912\02091214.D Vial: 3
Acq On : 9 Feb 2012 7:48 pm Operator: RACHEL HILL
Sample : ICV VOA1 020912 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\020912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Feb 10 09:48:09 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	0.995	0.914	8.1	100	0.00
57	T	4-Ethyltoluene	1.676	1.470	12.3	100	0.00
58	T	1,3,5-Trimethylbenzene	1.425	1.250	12.3	100	0.00
59	T	1,2,4-Trimethylbenzene	1.299	1.155	11.1	101	0.00
60	T	1,3-Dichlorobenzene	0.774	0.711	8.1	100	0.00
61	T	1,4-Dichlorobenzene	0.715	0.663	7.3	100	0.00
62	T	Benzyl chloride	0.803	0.810	-0.9	98	0.00
63	T	1,2-Dichlorobenzene	0.681	0.647	5.0	101	0.00
64	T	1,2,4-Trichlorobenzene	0.147	0.121	17.7	96	0.00
65	T	Hexachlorobutadiene	0.327	0.311	4.9	100	0.00
66		Naphthalene	0.213	0.178	16.4	95	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\020912\02091214.D Vial: 3
Acq On : 9 Feb 2012 7:48 pm Operator: RACHEL HILL
Sample : ICV VOA1 020912 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 10 9:51 2012 Quant Results File: 020912V1.RES

Quant Method : C:\HPCHEM\1\METHODS\020912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Feb 10 09:48:09 2012
Response via : Initial Calibration
DataAcq Meth : 020912V1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.60	130	406338	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.69	114	1113294	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.54	117	733968	12.50	ppbv		0.00
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.19	95	460884	13.06	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 104.48%				
Target Compounds							Qvalue
2) Propylene	5.52	41	500879	11.15	ppbv		92
3) Dichlorodifluoromethane	5.59	85	972473	9.55	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.85	135	727547	9.76	ppbv	#	77
5) Chloromethane	6.01	50	458379	9.88	ppbv		99
6) Vinyl chloride	6.21	62	553909	9.85	ppbv	#	99
7) 1,3-Butadiene	6.28	39	439973	10.81	ppbv		89
8) Bromomethane	6.86	94	365466	9.73	ppbv		99
9) Chloroethane	7.01	64	226423	9.64	ppbv		95
10) Trichlorofluoromethane	7.34	101	915332	9.94	ppbv	#	98
11) Ethanol	7.56	45	101972	9.66	ppbv		99
12) Freon113	8.00	101	773022	10.07	ppbv		91
13) 1,1-Dichloroethene	8.10	61	640335	10.34	ppbv	#	87
14) Acetone	8.19	43	587168	8.89	ppbv		93
15) Carbon disulfide	8.47	76	1039205	10.16	ppbv	#	100
16) 2-Propanol	8.24	45	542577	9.64	ppbv	#	1
17) Methylene chloride	8.76	49	474412	9.59	ppbv	#	78
18) tert-Butyl Methyl Ether	8.95	73	728884	8.62	ppbv	#	85
19) trans-1,2-Dichloroethene	9.04	61	565014	9.46	ppbv	#	83
20) n-Hexane	9.23	57	641460	9.80	ppbv	#	88
21) 1,1-Dichloroethane	9.60	63	642740	9.16	ppbv	#	96
22) Vinyl acetate	9.53	43	886166	9.19	ppbv	#	95
23) cis-1,2-Dichloroethene	10.28	96	337796	9.09	ppbv	#	82
24) 2-Butanone	10.25	43	594571	8.50	ppbv	#	90
25) Ethyl acetate	10.20	43	770246	8.60	ppbv	#	98
26) Tetrahydrofuran	10.59	42	433722	9.38	ppbv		88
27) Chloroform	10.61	83	758792	9.84	ppbv		99
28) 1,1,1-Trichloroethane	10.86	97	694614	9.76	ppbv	#	93
29) Cyclohexane	10.86	56	680605	10.21	ppbv		86
30) Carbon tetrachloride	11.02	117	601557	9.13	ppbv		97
31) Benzene	11.30	78	830883	8.53	ppbv		94
32) 1,2-Dichloroethane	11.38	62	410566	9.13	ppbv	#	97
34) Heptane	11.35	43	866934	9.61	ppbv	#	88
35) Trichloroethene	12.03	130	419218	8.64	ppbv		94
36) 1,2-Dichloropropane	12.39	63	340028	8.38	ppbv		96
37) 1,4-Dioxane	12.46	88	120779	8.73	ppbv	#	82
38) Bromodichloromethane	12.67	83	603280	8.51	ppbv		99
39) cis-1,3-Dichloropropene	13.23	75	480647	8.26	ppbv		97
40) 4-Methyl-2-pentanone	13.33	58	223239	8.73	ppbv	#	91
41) Toluene	13.63	91	889532	8.43	ppbv		97
42) trans-1,3-Dichloropropene	13.94	75	393481	8.00	ppbv		97
43) 1,1,2-Trichloroethane	14.21	97	305015	8.37	ppbv		96
44) Tetrachloroethene	14.33	166	506225	8.99	ppbv		98
45) 2-Hexanone	14.41	43	480798	8.65	ppbv		92
46) Chlorodibromomethane	14.75	129	484626	8.52	ppbv		99
47) 1,2-Dibromoethane	14.99	107	453320	8.39	ppbv		100
49) Chlorobenzene	15.59	112	581531	8.67	ppbv	#	88
50) Ethylbenzene	15.63	91	948128	8.66	ppbv		92
51) m,p-Xylene	15.78	91	1624292	18.48	ppbv		92
52) o-Xylene	16.38	91	705970	8.75	ppbv	#	88

(#) = qualifier out of range (m) = manual integration
02091214.D 020912V1.M Mon Feb 13 17:12:43 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\020912\02091214.D Vial: 3
Acq On : 9 Feb 2012 7:48 pm Operator: RACHEL HILL
Sample : ICV VOA1 020912 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 10 9:51 2012 Quant Results File: 020912V1.RES

Quant Method : C:\HPCHEM\1\METHODS\020912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Feb 10 09:48:09 2012
Response via : Initial Calibration
DataAcq Meth : 020912V1

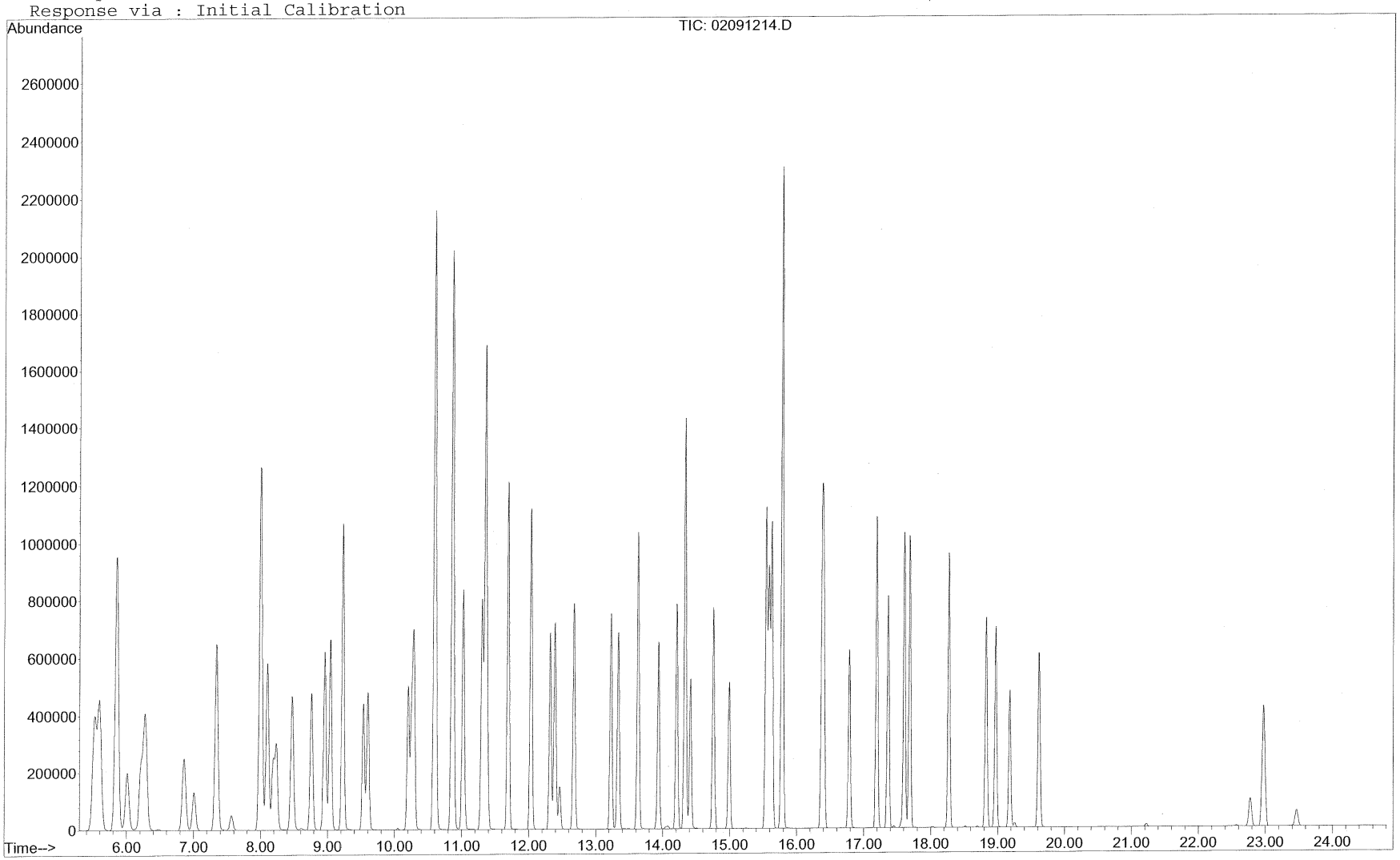
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53) Styrene	16.40	104	520626	8.79	ppbv	97
54) Bromoform	16.78	173	378870	8.82	ppbv	98
56) 1,1,2,2-Tetrachloroethane	17.36	83	536399	9.18	ppbv	99
57) 4-Ethyltoluene	17.60	105	845624	8.59	ppbv	96
58) 1,3,5-Trimethylbenzene	17.68	105	711973	8.51	ppbv	96
59) 1,2,4-Trimethylbenzene	18.27	105	664800	8.72	ppbv	97
60) 1,3-Dichlorobenzene	18.83	146	405160	8.92	ppbv	98
61) 1,4-Dichlorobenzene	18.97	146	373725	8.91	ppbv	98
62) Benzyl chloride	19.18	91	461295	9.78	ppbv	97
63) 1,2-Dichlorobenzene	19.61	146	368312	9.21	ppbv	98
64) 1,2,4-Trichlorobenzene	22.77	180	64755	7.49	ppbv	97
65) Hexachlorobutadiene	22.97	225	171429	8.92	ppbv	99
66) Naphthalene	23.46	128	96338	7.70	ppbv	98

(#) = qualifier out of range (m) = manual integration
02091214.D 020912V1.M Mon Feb 13 17:12:43 2012 Page 2

Quantitation Report

Data File : C:\HPCHEM\1\DATA\020912\02091214.D Vial: 3
Acq On : 9 Feb 2012 7:48 pm Operator: RACHEL HILL
Sample : ICV VOA1 020912 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 10 9:51 2012 Quant Results File: 020912V1.RES

Method : C:\HPCHEM\1\METHODS\020912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Feb 10 09:48:09 2012
Response via : Initial Calibration



Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\021412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Feb 15 10:42:28 2012
Response via : Initial Calibration

Calibration Files
2 =02141207.D 4 =02141208.D 5 =02141209.D
6 =02141210.D 7 =02141211.D 8 =02141212.D

		Compound	2	4	5	6	7	8	Avg	%RSD
1)	I	Bromochloromethane	ISTD							
2)	T	Propylene		1.542	1.617	1.283	1.164	1.120	1.332	15.22
3)	T	Dichlorodifluoromet	2.594	2.998	3.248	2.707	2.574	2.671	2.866	10.57
4)	T	1,2-Dichloro-1,2,2,	1.797	2.187	2.375	2.010	1.981	2.109	2.107	9.37
5)	T	Chloromethane	1.465	1.475	1.529	1.246	1.128	1.065	1.291	15.05
6)	T	Vinyl chloride	1.465	1.575	1.690	1.505	1.318		1.511	9.09
7)	T	1,3-Butadiene	1.144	1.276	1.297	1.131	1.077	0.990	1.099	16.09
8)	T	Bromomethane	0.945	1.088	1.100	0.967	0.916	0.944	1.013	8.87
9)	T	Chloroethane	0.613	0.692	0.670	0.587	0.548	0.554	0.615	9.08
10)	T	Trichlorofluorometh	2.193	2.622	2.498	2.270	2.215	2.400	2.415	8.37
11)	T	Ethanol	0.438	0.281	0.276	0.225	0.219	0.221	0.273	28.27
12)	T	Freon113	1.843	2.336	2.042	1.965	1.995	1.980	2.005	8.07
13)	T	1,1-Dichloroethene	1.651	1.867	1.670	1.493	1.425	1.473	1.606	9.54
14)	T	Acetone	2.089	1.778	1.525	1.320	1.312	1.285	1.536	19.42
15)	T	Carbon disulfide	2.652	3.039	2.856	2.518	2.359	2.429	2.674	9.49
16)	T	2-Propanol	1.789	1.463	1.488	1.188	1.158	1.173	1.372	16.71
17)	T	Methylene chloride	1.612	1.501	1.289	1.171	1.118	1.112	1.293	14.99
18)	T	tert-Butyl Methyl E	2.239	2.269	1.869	1.703	1.776	1.782	1.966	12.11
19)	T	trans-1,2-Dichloroe	1.564	1.830	1.555	1.451	1.441	1.460	1.559	8.75
20)	T	n-Hexane	1.709	2.024	1.744	1.613	1.584	1.586	1.704	9.03
21)	T	1,1-Dichloroethane	1.802	2.128	1.832	1.682	1.645	1.661	1.810	9.54
22)	T	Vinyl acetate	2.095	2.869	2.319	2.121	2.155	2.052	2.280	12.41
23)	T	cis-1,2-Dichloroeth	0.887	1.085	0.954	0.888	0.889	0.938	0.963	9.65
24)	T	2-Butanone	1.899	1.761	1.622	1.365	1.393	1.377	1.562	13.33
25)	T	Ethyl acetate	2.331	2.358	2.120	1.772	1.771	1.741	2.019	13.16
26)	T	Tetrahydrofuran	1.289	1.318	1.195	1.030	0.982	0.920	1.099	15.02
27)	T	Chloroform	2.001	2.455	2.190	2.022	1.934	1.819	2.032	11.20
28)	T	1,1,1-Trichloroetha	1.535	2.278	2.013	1.961	1.910	1.756	1.879	12.84
29)	T	Cyclohexane	1.759	2.244	1.920	1.794	1.661	1.498	1.754	15.91
30)	T	Carbon tetrachlorid	1.387	1.951	1.739	1.658	1.705	1.764	1.723	10.33
31)	T	Benzene	2.473	2.778	2.280	2.145	2.155	2.131	2.357	10.48
32)	T	1,2-Dichloroethane	1.116	1.318	1.119	1.031	1.054	1.006	1.100	9.53
33)	I	1,4-Difluorobenzene	ISTD							
34)	T	Heptane	0.618	0.872	0.887	0.746	0.746	0.680	0.735	15.52
35)	T	Trichloroethene	0.295	0.425	0.447	0.381	0.416	0.427	0.398	12.67
36)	T	1,2-Dichloropropane	0.270	0.340	0.330	0.280	0.298	0.299	0.305	8.50
37)	T	1,4-Dioxane	0.103	0.114	0.118	0.094	0.097	0.098	0.104	8.62
38)	T	Bromodichloromethan	0.402	0.590	0.614	0.515	0.558	0.581	0.551	13.24
39)	T	cis-1,3-Dichloropro	0.341	0.482	0.491	0.406	0.437	0.453	0.445	12.91
40)	T	4-Methyl-2-pentanon	0.178	0.210	0.221	0.180	0.186	0.190	0.197	8.81
41)	T	Toluene	0.671	0.865	0.884	0.736	0.777	0.807	0.801	9.75
42)	T	trans-1,3-Dichlorop	0.269	0.403	0.421	0.344	0.373	0.384	0.377	15.25
43)	T	1,1,2-Trichloroetha	0.222	0.289	0.304	0.253	0.271	0.286	0.277	11.61
44)	T	Tetrachloroethene	0.351	0.491	0.538	0.463	0.488	0.468	0.459	13.21
45)	T	2-Hexanone	0.401	0.461	0.471	0.383	0.398	0.393	0.419	8.32
46)	T	Chlorodibromomethan	0.305	0.458	0.482	0.412	0.456	0.489	0.440	14.79
47)	T	1,2-Dibromoethane	0.323	0.436	0.456	0.378	0.412	0.432	0.414	11.80
48)	I	Chlorobenzene-d5	ISTD							
49)	T	Chlorobenzene	0.713	0.882	0.882	0.774	0.826	0.851	0.833	8.18
50)	T	Ethylbenzene	1.195	1.445	1.460	1.272	1.339	1.363	1.346	6.87
51)	T	m,p-Xylene	0.924	1.254	1.278	1.126	1.174	1.049	1.092	15.12
52)	T	o-Xylene	0.866	1.050	1.074	0.935	1.002	1.031	0.990	7.28
53)	T	Styrene	0.616	0.797	0.797	0.703	0.751	0.771	0.739	8.65
54)	T	Bromoform	0.421	0.590	0.587	0.529	0.578	0.594	0.552	11.22
55)	S	4-Bromofluorobenzen	0.646	0.585	0.571	0.570	0.557	0.541	0.572	6.51
56)	T	1,1,2,2-Tetrachloro	0.871	0.801	0.787	0.679	0.703	0.662	0.740	10.82
57)	T	4-Ethyltoluene	1.432	1.284	1.255	1.109	1.152	1.125	1.217	9.45

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

Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\021412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Feb 15 10:42:28 2012
Response via : Initial Calibration

Calibration Files
2 =02141207.D 4 =02141208.D 5 =02141209.D
6 =02141210.D 7 =02141211.D 8 =02141212.D

		Compound	2	4	5	6	7	8	Avg	%RSD
58)	T	1,3,5-Trimethylbenz	1.239	1.072	1.080	0.939	0.979	0.976	1.039	9.88
59)	T	1,2,4-Trimethylbenz	1.156	0.994	0.980	0.863	0.896	0.872	0.955	10.67
60)	T	1,3-Dichlorobenzene	0.659	0.611	0.589	0.516	0.544	0.502	0.566	9.86
61)	T	1,4-Dichlorobenzene	0.574	0.562	0.545	0.480	0.507	0.470	0.522	7.67
62)	T	Benzyl chloride	0.317	0.707	0.710	0.600	0.655	0.599	0.598	24.39
63)	T	1,2-Dichlorobenzene	0.633	0.541	0.532	0.449	0.472	0.423	0.502	14.23
64)	T	1,2,4-Trichlorobenz	0.128	0.084	0.085	0.072	0.082	0.078	0.089	20.67
65)	T	Hexachlorobutadiene		0.216	0.217	0.180	0.201	0.188	0.208	11.18
66)		Naphthalene	0.173	0.130	0.128	0.110	0.124	0.114	0.131	15.84

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

Compound List Report VOA 1

Method : C:\HPCHEM\1\METHODS\021412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Feb 15 10:42:28 2012
Response via : Initial Calibration
Total Cpnds : 66

PK#			Compound Name	QIon	Exp RT	Rel RT	Cal	#Qual	A/H	ID
1	I		Bromochloromethane	130	10.59	1.000	A	2	A	B
2		T	Propylene	41	5.52	0.521	A	2	A	B
3		T	Dichlorodifluoromethane	85	5.59	0.528	A	3	A	B
4		T	1,2-Dichloro-1,2,2,2-tetrafluo	135	5.85	0.552	A	2	A	B
5		T	Chloromethane	50	6.00	0.567	A	3	A	B
6		T	Vinyl chloride	62	6.21	0.586	A	2	A	B
7		T	1,3-Butadiene	39	6.27	0.592	A	2	A	B
8		T	Bromomethane	94	6.85	0.647	A	3	A	B
9		T	Chloroethane	64	7.01	0.661	A	3	A	B
10		T	Trichlorofluoromethane	101	7.34	0.692	A	3	A	B
11		T	Ethanol	45	7.57	0.714	A	2	A	B
12		T	Freon113	101	7.99	0.755	A	2	A	B
13		T	1,1-Dichloroethene	61	8.10	0.765	A	2	A	B
14		T	Acetone	43	8.19	0.773	A	2	A	B
15		T	Carbon disulfide	76	8.47	0.799	A	3	A	B
16		T	2-Propanol	45	8.24	0.777	A	2	A	B
17		T	Methylene chloride	49	8.75	0.826	A	2	A	B
18		T	tert-Butyl Methyl Ether	73	8.96	0.845	A	2	A	B
19		T	trans-1,2-Dichloroethene	61	9.04	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	9.60	0.906	A	3	A	B
22		T	Vinyl acetate	43	9.53	0.900	A	2	A	B
23		T	cis-1,2-Dichloroethene	96	10.29	0.971	A	3	A	B
24		T	2-Butanone	43	10.25	0.967	A	2	A	B
25		T	Ethyl acetate	43	10.20	0.962	A	3	A	B
26		T	Tetrahydrofuran	42	10.59	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	10.86	1.025	A	3	A	B
29		T	Cyclohexane	56	10.87	1.026	A	2	A	B
30		T	Carbon tetrachloride	117	11.02	1.040	A	3	A	B
31		T	Benzene	78	11.30	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	11.69	1.000	A	2	A	B
34		T	Heptane	43	11.35	0.971	A	3	A	B
35		T	Trichloroethene	130	12.03	1.029	A	3	A	B
36		T	1,2-Dichloropropane	63	12.39	1.059	A	3	A	B
37		T	1,4-Dioxane	88	12.46	1.066	A	2	A	B
38		T	Bromodichloromethane	83	12.67	1.084	A	2	A	B
39		T	cis-1,3-Dichloropropene	75	13.22	1.131	A	2	A	B
40		T	4-Methyl-2-pentanone	58	13.33	1.140	A	3	A	B
41		T	Toluene	91	13.63	1.166	A	2	A	B
42		T	trans-1,3-Dichloropropene	75	13.94	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	14.33	1.226	A	3	A	B
45		T	2-Hexanone	43	14.41	1.233	A	2	A	B
46		T	Chlorodibromomethane	129	14.75	1.262	A	2	A	B
47		T	1,2-Dibromoethane	107	14.99	1.282	A	2	A	B
48	I		Chlorobenzene-d5	117	15.54	1.000	A	2	A	B
49		T	Chlorobenzene	112	15.58	1.003	A	3	A	B
50		T	Ethylbenzene	91	15.63	1.005	A	2	A	B
51		T	m,p-Xylene	91	15.78	1.015	A	2	A	B
52		T	o-Xylene	91	16.37	1.054	A	2	A	B
53		T	Styrene	104	16.40	1.055	A	3	A	B
54		T	Bromoform	173	16.78	1.080	A	3	A	B
55		S	4-Bromofluorobenzene	95	17.19	1.106	A	2	A	B
56		T	1,1,2,2-Tetrachloroethane	83	17.36	1.117	A	2	A	B
57		T	4-Ethyltoluene	105	17.60	1.133	A	1	A	B
58		T	1,3,5-Trimethylbenzene	105	17.69	1.138	A	2	A	B
59		T	1,2,4-Trimethylbenzene	105	18.27	1.175	A	2	A	B
60		T	1,3-Dichlorobenzene	146	18.82	1.211	A	3	A	B
61		T	1,4-Dichlorobenzene	146	18.97	1.220	A	3	A	B
62		T	Benzyl chloride	91	19.18	1.234	A	2	A	B
63		T	1,2-Dichlorobenzene	146	19.61	1.262	A	3	A	B
64		T	1,2,4-Trichlorobenzene	180	22.77	1.465	A	3	A	B
65		T	Hexachlorobutadiene	225	22.97	1.478	A	2	A	B
66			Naphthalene	128	23.45	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
--------------------------------------------------------------------------
          021412V1.M     Thu Feb 16 13:55:52 2012
```

RTI Laboratories

Run ID: VOA9_120203A **Run No.:** 45984

Analytical Run Date: 2/3/2012 **InstrumentID:** VOA9

Analyst: Rachel Hill **Column:**

Calibration ID: 45704 **Column ID:**

Column Length:

Run Comments: 1201676-004 - Received sample with bottle tip unscrewed slightly. Bottle was at ambient pressure.

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB 020312 VOA9	BFB_TUNE	TUNE	R45984	2/3/2012 9:20:00 AM	Robert Lynch		
CCV 020312 VOA9	MA_APH	CCV	R45984	2/3/2012 10:04:00 AM	Robert Lynch		
RLVS 020312 VOA9	MA_APH	RLVS	R45984	2/3/2012 10:51:00 AM	Robert Lynch		
MBLK 020312 VOA9	MA_APH	MBLK	R45984	2/3/2012 11:58:00 AM	Charles O`Bryan		
1201676-016A	MA_APH	SAMP	R45984	2/3/2012 12:42:00 PM	Robert Lynch		
1201676-003A	MA_APH	SAMP	R45984	2/3/2012 1:25:00 PM	Robert Lynch		
1201676-004A	MA_APH	SAMP	R45984	2/3/2012 2:08:00 PM	Robert Lynch		
1201676-005A	MA_APH	SAMP	R45984	2/3/2012 2:51:00 PM	Robert Lynch		
1201804-028A	MA_APH	SAMP	R45984	2/3/2012 3:35:00 PM	Robert Lynch		
1201804-028Adup	MA_APH	DUP	R45984	2/3/2012 4:18:00 PM	Charles O`Bryan		
1201804-017A	MA_APH	SAMP	R45984	2/3/2012 6:30:00 PM	Robert Lynch		
1201804-033A	MA_APH	SAMP	R45984	2/3/2012 9:23:00 PM	Robert Lynch		
1201804-035A	MA_APH	SAMP	R45984	2/3/2012 11:31:00 PM	Robert Lynch		
RLVS2 020312 VOA	MA_APH	RLVS	R45984	2/4/2012 1:40:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

27-Feb-12

RunNo 45984

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
901922	BFB 020312 VOA9	BFB_TUNE	TUNE	.\1\DATA\020312	2/3/2012 9:20:00	1	R45984		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		58.7	58.7		100	0	0	0	0	0	59%	50	120	0%	
175	M		7.3	7.3		100	0	0	0	0	0	7%	4	9	0%	
176	M		97.2	97.2		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.3	6.3		100	0	0	0	0	0	6%	5	9	0%	
50	M		26.3	26.3		100	0	0	0	0	0	26%	8	40	0%	
75	M		52	52		100	0	0	0	0	0	52%	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
901923	CCV 020312 VOA9	MA_APH	CCV	.\1\DATA\020312	2/3/2012 10:04:0	1	R45984		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	197.71	197.71		234	0	0	0	0	0	84%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	218.1	218.1		266	0	0	0	0	0	82%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	313.42	313.42		378	0	0	0	0	0	83%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	87.3	87.3		89.5	0	0	0	0	0	98%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\020312\02031202.D Vial: 2
Acq On : 3 Feb 2012 10:04 am Operator: RACHEL HILL
Sample : CCV 020312 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 3 13:55 2012 Quant Results File: 011912V9.RES

Quant Method : C:\HPCHEM\1\METHODS\011912V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 20 11:29:10 2012
Response via : Initial Calibration
DataAcq Meth : 011912V9

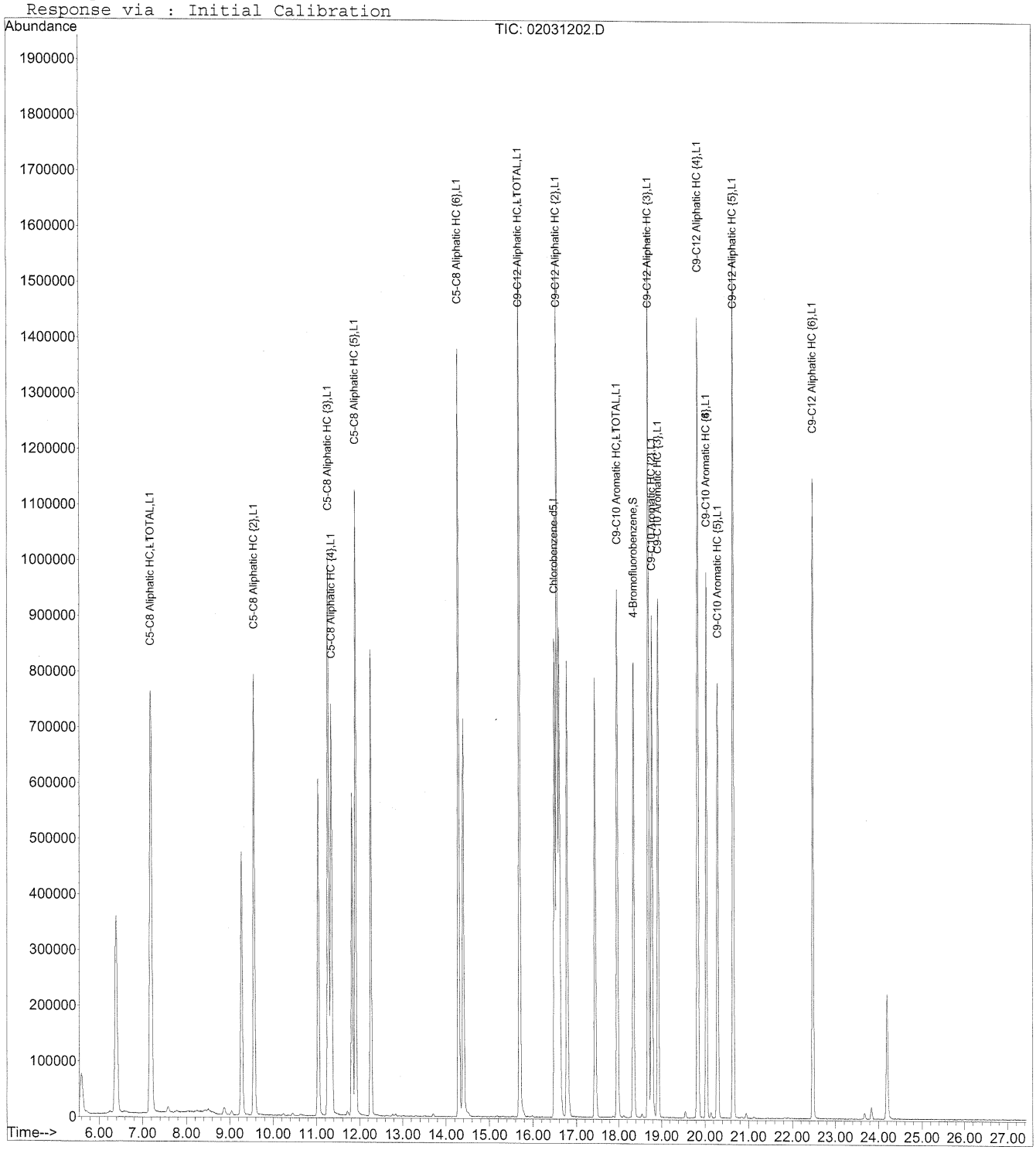
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	568011	12.50	ug/m3	0.00
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.34	95	401768	87.30	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 97.54%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2622251	27.10	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	1949078	29.97	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2561222	34.87	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	1867198	28.77	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2472544	35.09	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	2870510	40.89	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	14342803m	197.71	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	3454692	46.73	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	3229410	44.80	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3269314	51.33	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.84	TIC	3123011	50.60	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.65	TIC	3165870	58.11	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.48	TIC	2290393	60.42	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	18532690m	313.42	ug/m3	
15) C9-C10 Aromatic HC	17.98	120	204848	41.49	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	220783	42.12	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	324502	43.09	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.03	120	73268	47.61	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.30	120	244392	43.11	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.03	134	178508	48.08	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.98	TIC	1246301m	218.10	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\020312\02031202.D Vial: 2
Acq On : 3 Feb 2012 10:04 am Operator: RACHEL HILL
Sample : CCV 020312 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 3 13:55 2012 Quant Results File: 011912V9.RES

Method : C:\HPCHEM\1\METHODS\011912V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 20 11:29:10 2012
Response via : Initial Calibration



02031202.D 011912V9.M Mon Feb 06 10:15:47 2012 Page 2

RTI Laboratories

Run ID: VOA9_120206A **Run No.:** 46008

Analytical Run Date: 2/6/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

Calibration ID: 45704 **Column ID:**

Column Length:

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB 020612 VOA9	BFB_TUNE	TUNE	R46008	2/6/2012 11:09:00 AM	Robert Lynch		
CCV 020612 VOA9	MA_APH	CCV	R46008	2/6/2012 11:51:00 AM	Robert Lynch		
RLVS 020612 VOA9	MA_APH	RLVS	R46008	2/6/2012 12:34:00 PM	Robert Lynch		
MBLK 020612 VOA9	MA_APH	MBLK	R46008	2/6/2012 1:23:00 PM	Charles O`Bryan		
1201676-022A	MA_APH	SAMP	R46008	2/6/2012 4:20:00 PM	Robert Lynch		
1201676-022Adup	MA_APH	DUP	R46008	2/6/2012 5:02:00 PM	Charles O`Bryan		
1201804-016A	MA_APH	SAMP	R46008	2/6/2012 5:47:00 PM	Robert Lynch		
1201804-018A	MA_APH	SAMP	R46008	2/6/2012 6:30:00 PM	Robert Lynch		
1201804-019A	MA_APH	SAMP	R46008	2/6/2012 7:12:00 PM	Robert Lynch		
1201804-034A	MA_APH	SAMP	R46008	2/6/2012 7:58:00 PM	Robert Lynch		
1201804-036A	MA_APH	SAMP	R46008	2/6/2012 10:18:00 PM	Robert Lynch		
1201804-004A	MA_APH	SAMP	R46008	2/6/2012 11:03:00 PM	Robert Lynch		
1201804-005A	MA_APH	SAMP	R46008	2/6/2012 11:49:00 PM	Robert Lynch		
1201804-006A	MA_APH	SAMP	R46008	2/7/2012 12:34:00 AM	Robert Lynch		
1201804-007A	MA_APH	SAMP	R46008	2/7/2012 1:20:00 AM	Robert Lynch		
RLVS2 020612 VOA	MA_APH	RLVS	R46008	2/7/2012 3:27:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

27-Feb-12

RunNo 46008

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
902313	BFB 020612 VOA9	BFB_TUNE	TUNE	.\1\DATA\020612	2/6/2012 11:09:0	1	R46008		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		60.4	60.4		100	0	0	0	0	0	60%	50	120	0%	
175	M		7.3	7.3		100	0	0	0	0	0	7%	4	9	0%	
176	M		97.1	97.1		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		26.1	26.1		100	0	0	0	0	0	26%	8	40	0%	
75	M		50.5	50.5		100	0	0	0	0	0	51%	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
902314	CCV 020612 VOA9	MA_APH	CCV	.\1\DATA\020612	2/6/2012 11:51:0	1	R46008		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	206.7	206.7		234	0	0	0	0	0	88%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	229.71	229.71		266	0	0	0	0	0	86%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	323.38	323.38		378	0	0	0	0	0	86%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	86.6	86.6		89.5	0	0	0	0	0	97%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\020612\02061202.D Vial: 2
Acq On : 6 Feb 2012 11:51 am Operator: RACHEL HILL
Sample : CCV 020612 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 9:54 2012 Quant Results File: 011912V9.RES

Quant Method : C:\HPCHEM\1\METHODS\011912V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 20 11:29:10 2012
Response via : Initial Calibration
DataAcq Meth : 011912V9

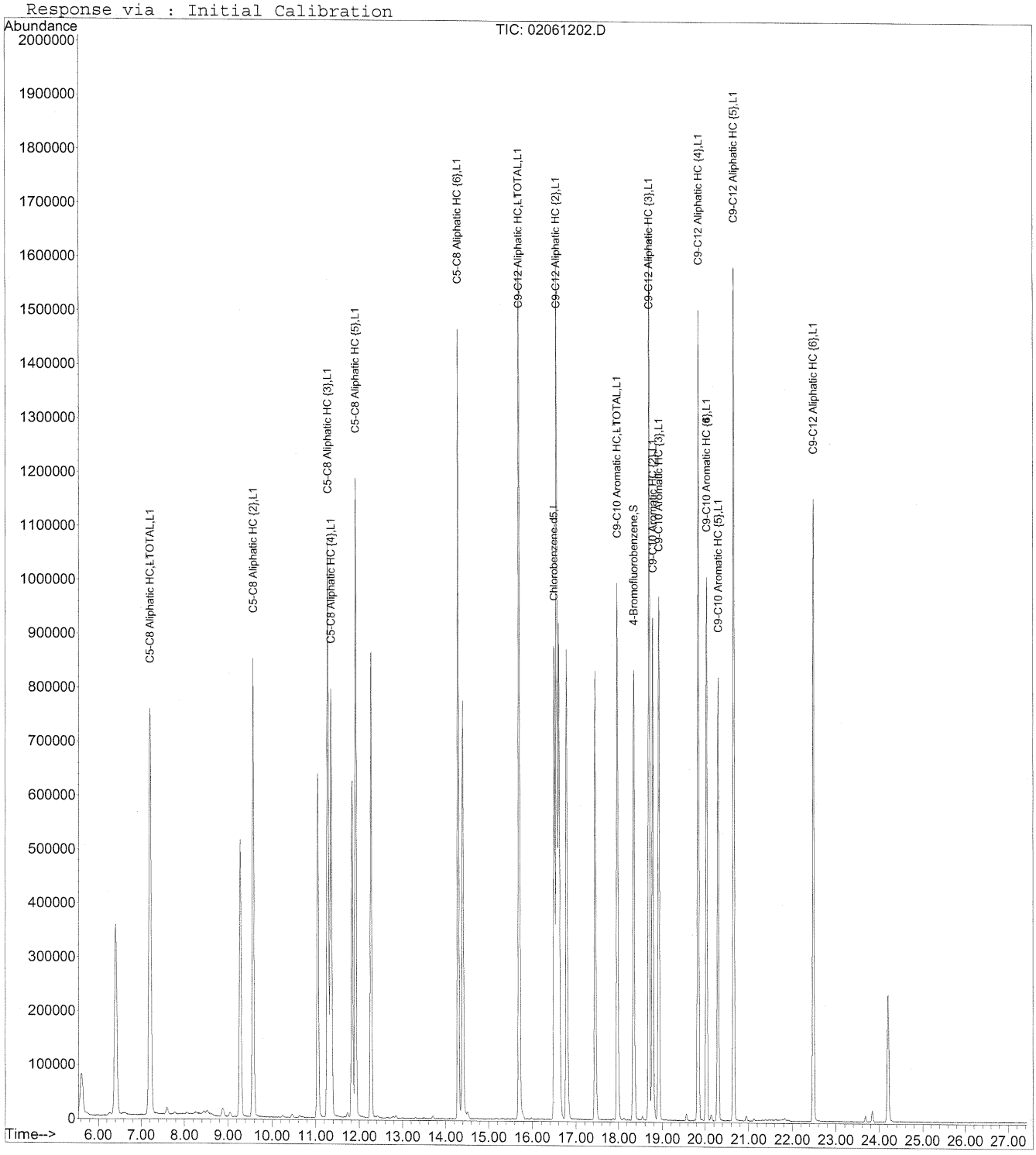
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	586144	12.50	ug/m3	-0.01
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.35	95	411274	86.60	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 96.76%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.20	TIC	2603848	26.91	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.58	TIC	2093560	32.20	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2635368	35.88	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	2037679	31.40	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2613542	37.09	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.30	TIC	3011478	42.90	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.20	TIC	14995475m	206.70	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	3560644	48.17	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	3343836	46.39	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3405999	53.48	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.84	TIC	3237136	52.45	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.65	TIC	3237301	59.42	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.48	TIC	2336424	61.64	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	19121340m	323.38	ug/m3	
15) C9-C10 Aromatic HC	17.98	120	219488	44.46	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	233254	44.50	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.92	120	341625	45.37	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.03	120	77333	50.25	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.30	120	254499	44.90	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.04	134	186431	50.21	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.98	TIC	1312630m	229.71	ug/m3	

(#) = qualifier out of range (m) = manual integration
02061202.D 011912V9.M Tue Feb 07 10:16:48 2012 Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\020612\02061202.D Vial: 2
Acq On : 6 Feb 2012 11:51 am Operator: RACHEL HILL
Sample : CCV 020612 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 9:54 2012 Quant Results File: 011912V9.RES

Method : C:\HPCHEM\1\METHODS\011912V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 20 11:29:10 2012
Response via : Initial Calibration



02061202.D 011912V9.M Tue Feb 07 10:16:48 2012 Page 2

RTI Laboratories

Run ID: VOA9_120207A **Run No.:** 46036

Analytical Run Date: 2/7/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

Calibration ID: 45704 **Column ID:**

Column Length:

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 020712	BFB_TUNE	TUNE	R46036	2/7/2012 9:49:00 AM	Robert Lynch		
CCV VOA9 020712	MA_APH	CCV	R46036	2/7/2012 10:32:00 AM	Robert Lynch		
RLVS VOA9 020712	MA_APH	RLVS	R46036	2/7/2012 11:17:00 AM	Robert Lynch		
MBLK VOA9 020712	MA_APH	MBLK	R46036	2/7/2012 12:13:00 PM	Charles O`Bryan		
1201804-029A	MA_APH	SAMP	R46036	2/7/2012 12:55:00 PM	Robert Lynch		
1201804-029ADUP	MA_APH	DUP	R46036	2/7/2012 1:38:00 PM	Charles O`Bryan		
1201804-027A	MA_APH	SAMP	R46036	2/7/2012 2:21:00 PM	Robert Lynch		Received sample with bottle tip unscrewed slightly. Bottle was at ambient pressure.
1201804-030A	MA_APH	SAMP	R46036	2/7/2012 3:04:00 PM	Robert Lynch		
1201804-031A	MA_APH	SAMP	R46036	2/7/2012 3:46:00 PM	Robert Lynch		
1201804-032A	MA_APH	SAMP	R46036	2/7/2012 4:28:00 PM	Robert Lynch		
1201804-020A	MA_APH	SAMP	R46036	2/7/2012 5:26:00 PM	Robert Lynch		
1201804-003A	MA_APH	SAMP	R46036	2/7/2012 6:15:00 PM	Robert Lynch		
1201804-040A	MA_APH	SAMP	R46036	2/7/2012 6:59:00 PM	Robert Lynch		
1201804-041A	MA_APH	SAMP	R46036	2/7/2012 7:43:00 PM	Robert Lynch		
1201804-008A	MA_APH	SAMP	R46036	2/7/2012 8:26:00 PM	Robert Lynch		
1201804-009A	MA_APH	SAMP	R46036	2/7/2012 9:08:00 PM	Robert Lynch		
RLVS2 VOA9 02071	MA_APH	RLVS	R46036	2/8/2012 2:47:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

27-Feb-12

RunNo 46036

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
902707	BFB VOA9 020712	BFB_TUNE	TUNE	.\1\DATA\020712	2/7/2012 9:49:00	1	R46036		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		58.3	58.3		100	0	0	0	0	0	58%	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		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	
50	M		27.2	27.2		100	0	0	0	0	0	27%	8	40	0%	
75	M		51.9	51.9		100	0	0	0	0	0	52%	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
902708	CCV VOA9 020712	MA_APH	CCV	.\1\DATA\020712	2/7/2012 10:32:0	1	R46036		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	207.96	207.96		234	0	0	0	0	0	89%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	222.84	222.84		266	0	0	0	0	0	84%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	327.4	327.4		378	0	0	0	0	0	87%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	85.44	85.44		89.5	0	0	0	0	0	95%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\020712\02071202.D Vial: 2
Acq On : 7 Feb 2012 10:32 am Operator: RACHEL HILL
Sample : CCV VOA9 020712 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 14:11 2012 Quant Results File: 011912V9.RES

Quant Method : C:\HPCHEM\1\METHODS\011912V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 20 11:29:10 2012
Response via : Initial Calibration
DataAcq Meth : 011912V9

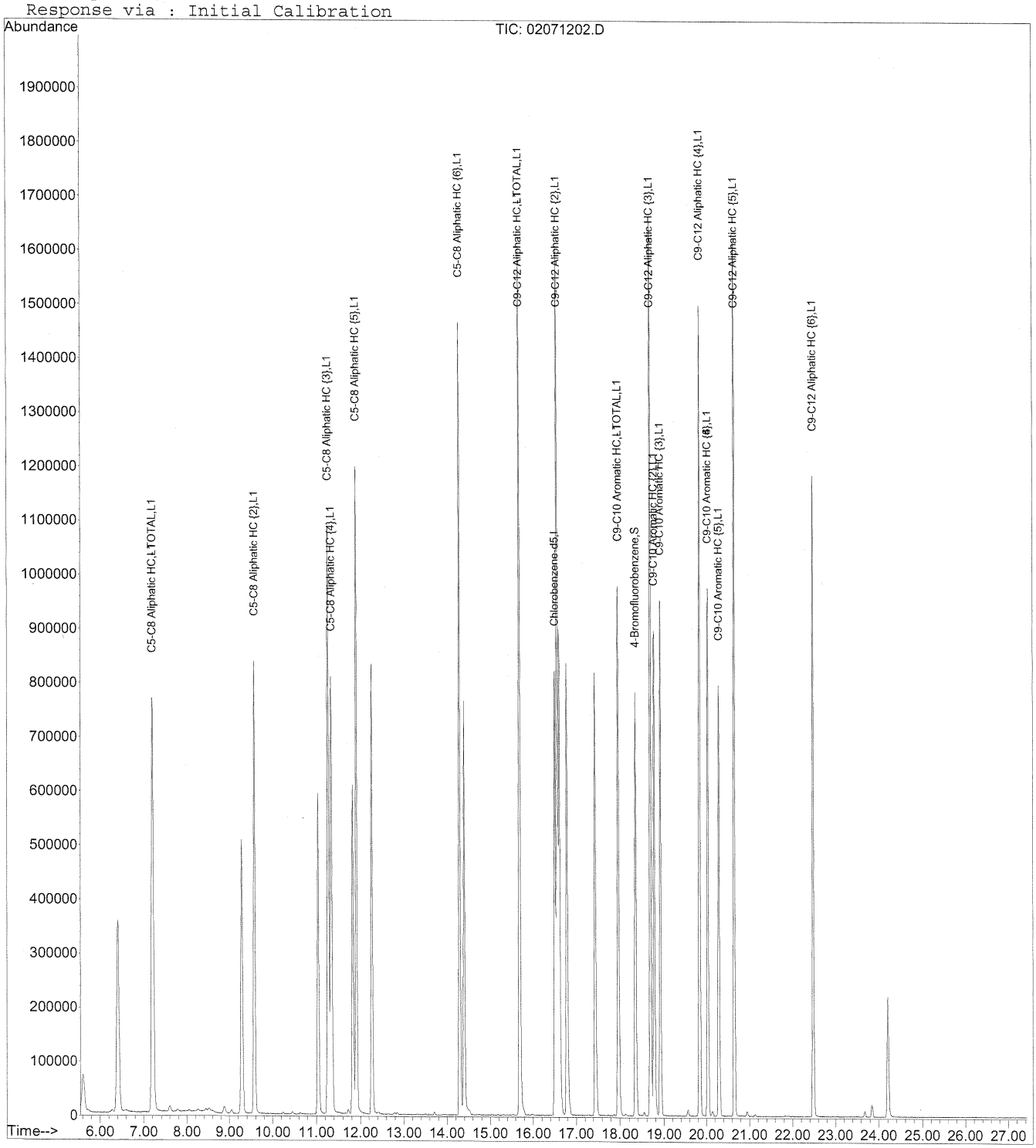
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	548073	12.50	ug/m3	0.00
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.35	95	379412	85.44	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 95.46%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.20	TIC	2638157	27.26	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2068237	31.81	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2672666	36.39	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	2050751	31.60	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2633459	37.37	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3023080	43.07	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.20	TIC	15086350m	207.96	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	3603611	48.75	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	3511091	48.71	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3392745	53.27	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.84	TIC	3228268	52.31	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.66	TIC	3248060	59.62	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.48	TIC	2375096	62.66	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	19358871m	327.40	ug/m3	
15) C9-C10 Aromatic HC	17.98	120	213029	43.15	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	224010	42.74	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	332874	44.20	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.04	120	73512	47.77	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.29	120	250093	44.12	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.04	134	179838	48.43	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.98	TIC	1273356m	222.84	ug/m3	

(#) = qualifier out of range (m) = manual integration
02071202.D 011912V9.M Wed Feb 08 10:11:21 2012 Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\020712\02071202.D Vial: 2
Acq On : 7 Feb 2012 10:32 am Operator: RACHEL HILL
Sample : CCV VOA9 020712 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 14:11 2012 Quant Results File: 011912V9.RES

Method : C:\HPCHEM\1\METHODS\011912V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 20 11:29:10 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA9_120208A **Run No.:** 46104

Analytical Run Date: 2/8/2012 **InstrumentID:** VOA9

Analyst: Rachel Hill **Column:**

Calibration ID: 45704 **Column ID:**

Column Length:

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 020812	BFB_TUNE	TUNE	R46104	2/8/2012 9:52:00 AM	Robert Lynch		
CCV VOA9 020812	MA_APH	CCV	R46104	2/8/2012 10:35:00 AM	Robert Lynch		
RLVS VOA9 020812	MA_APH	RLVS	R46104	2/8/2012 11:18:00 AM	Robert Lynch		
MBLK VOA9 020812	MA_APH	MBLK	R46104	2/8/2012 12:07:00 PM	Robert Lynch		
1201804-038A	MA_APH	SAMP	R46104	2/8/2012 12:50:00 PM	Robert Lynch		Sample needed lower dilution. Analyzed later in sequence. 40x reported here to show that sample and duplicate were analyzed.
1201804-038Adup	MA_APH	DUP	R46104	2/8/2012 1:32:00 PM	Celeste Hoitash		
1201804-037A	MA_APH	SAMP	R46104	2/8/2012 4:47:00 PM	Robert Lynch		
1201804-038A	MA_APH	SAMP	R46104	2/8/2012 5:36:00 PM	Robert Lynch		
1201804-039A	MA_APH	SAMP	R46104	2/8/2012 6:25:00 PM	Robert Lynch		
1201804-042A	MA_APH	SAMP	R46104	2/8/2012 7:10:00 PM	Robert Lynch		
1201804-043A	MA_APH	SAMP	R46104	2/8/2012 7:56:00 PM	Robert Lynch		
1201804-044A	MA_APH	SAMP	R46104	2/8/2012 8:42:00 PM	Robert Lynch		
1201804-010A	MA_APH	SAMP	R46104	2/8/2012 9:27:00 PM	Robert Lynch		
1201804-011A	MA_APH	SAMP	R46104	2/8/2012 10:13:00 PM	Robert Lynch		
1201804-047A	MA_APH	SAMP	R46104	2/9/2012 12:20:00 AM	Robert Lynch		
1201804-014A	MA_APH	SAMP	R46104	2/9/2012 1:02:00 AM	Robert Lynch		
1201804-002A	MA_APH	SAMP	R46104	2/9/2012 1:45:00 AM	Robert Lynch		
RLVS2 VOA9 02081	MA_APH	RLVS	R46104	2/9/2012 2:27:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

27-Feb-12

RunNo 46104

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
903989	BFB VOA9 020812	BFB_TUNE	TUNE	.\1\DATA\020812	2/8/2012 9:52:00	1	R46104		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		57	57		100	0	0	0	0	0	57%	50	120	0%	
175	M		7.7	7.7		100	0	0	0	0	0	8%	4	9	0%	
176	M		97.4	97.4		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.6	6.6		100	0	0	0	0	0	7%	5	9	0%	
50	M		27	27		100	0	0	0	0	0	27%	8	40	0%	
75	M		51	51		100	0	0	0	0	0	51%	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
903990	CCV VOA9 020812	MA_APH	CCV	.\1\DATA\020812	2/8/2012 10:35:0	1	R46104		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	183.17	183.17		234	0	0	0	0	0	78%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	203.99	203.99		266	0	0	0	0	0	77%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	299.74	299.74		378	0	0	0	0	0	79%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	88.75	88.75		89.5	0	0	0	0	0	99%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\020812\02081202.D Vial: 2
Acq On : 8 Feb 2012 10:35 am Operator: RACHEL HILL
Sample : CCV VOA9 020812 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 8 12:01 2012 Quant Results File: 011912V9.RES

Quant Method : C:\HPCHEM\1\METHODS\011912V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 20 11:29:10 2012
Response via : Initial Calibration
DataAcq Meth : 011912V9

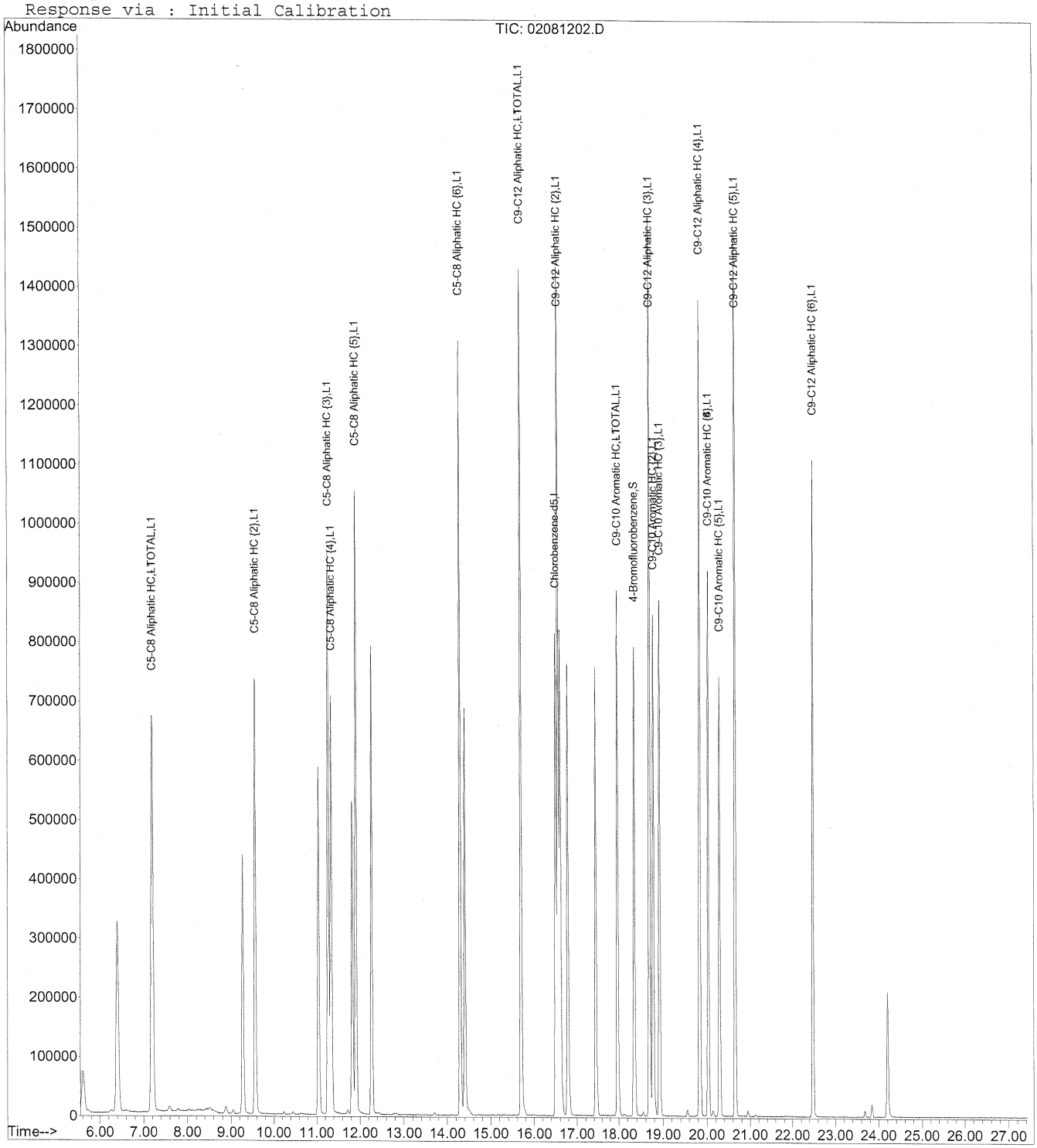
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	536646	12.50	ug/m3	0.00
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.35	95	385895	88.75	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 99.16%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2300169	23.77	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	1838339	28.27	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2356041	32.08	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	1761185	27.14	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2339138	33.19	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	2693299	38.37	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	13288171m	183.17	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	3217347	43.52	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	3196928	44.35	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3125306	49.07	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.84	TIC	2962089	48.00	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.66	TIC	3020332	55.44	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.48	TIC	2201584	58.08	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	17723586m	299.74	ug/m3	
15) C9-C10 Aromatic HC	17.98	120	192638	39.02	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	206259	39.35	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.92	120	303113	40.25	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.03	120	69127	44.92	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.29	120	230107	40.59	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.04	134	164423	44.28	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.98	TIC	1165667m	203.99	ug/m3	

(#) = qualifier out of range (m) = manual integration
02081202.D 011912V9.M Thu Feb 09 09:21:49 2012 Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\020812\02081202.D Vial: 2
Acq On : 8 Feb 2012 10:35 am Operator: RACHEL HILL
Sample : CCV VOA9 020812 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 8 12:01 2012 Quant Results File: 011912V9.RES

Method : C:\HPCHEM\1\METHODS\011912V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 20 11:29:10 2012
Response via : Initial Calibration



02081202.D 011912V9.M Thu Feb 09 09:21:49 2012 Page 2

RTI Laboratories

Run ID: VOA9_120209A **Run No.:** 46108

Analytical Run Date: 2/9/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

Calibration ID: 45704 **Column ID:**

Column Length:

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 020912	BFB_TUNE	TUNE	R46108	2/9/2012 9:22:00 AM	Robert Lynch		
CCV VOA9 020912	MA_APH	CCV	R46108	2/9/2012 10:05:00 AM	Robert Lynch		
RLVS VOA9 020912	MA_APH	RLVS	R46108	2/9/2012 10:48:00 AM	Robert Lynch		
MBLK VOA9 020912	MA_APH	MBLK	R46108	2/9/2012 11:37:00 AM	Robert Lynch		
1201804-045A	MA_APH	SAMP	R46108	2/9/2012 12:24:00 PM	Robert Lynch		
1201804-045Adup	MA_APH	DUP	R46108	2/9/2012 1:06:00 PM	Robert Lynch		
1201804-012A	MA_APH	SAMP	R46108	2/9/2012 3:53:00 PM	Robert Lynch		
1201804-046A	MA_APH	SAMP	R46108	2/9/2012 4:39:00 PM	Robert Lynch		
1201804-013A	MA_APH	SAMP	R46108	2/9/2012 5:24:00 PM	Robert Lynch		
1201804-048A	MA_APH	SAMP	R46108	2/9/2012 11:04:00 PM	Robert Lynch		
1201804-015A	MA_APH	SAMP	R46108	2/9/2012 11:47:00 PM	Robert Lynch		
RLVS2 VOA9 02091	MA_APH	RLVS	R46108	2/10/2012 12:29:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

27-Feb-12

RunNo 46108

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
904046	BFB VOA9 020912	BFB_TUNE	TUNE	\1\DATA\020912	2/9/2012 9:22:00	1	R46108		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		59.6	59.6		100	0	0	0	0	0	60%	50	120	0%	
175	M		7.3	7.3		100	0	0	0	0	0	7%	4	9	0%	
176	M		95.6	95.6		100	0	0	0	0	0	96%	93	101	0%	
177	M		6.2	6.2		100	0	0	0	0	0	6%	5	9	0%	
50	M		26.5	26.5		100	0	0	0	0	0	27%	8	40	0%	
75	M		51.9	51.9		100	0	0	0	0	0	52%	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
904047	CCV VOA9 020912	MA_APH	CCV	\1\DATA\020912	2/9/2012 10:05:0	1	R46108		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	209.86	209.86		234	0	0	0	0	0	90%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	234.46	234.46		266	0	0	0	0	0	88%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	343.04	343.04		378	0	0	0	0	0	91%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	88.9	88.9		89.5	0	0	0	0	0	99%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\020912\02091202.D Vial: 2
Acq On : 9 Feb 2012 10:05 am Operator: RACHEL HILL
Sample : CCV VOA9 020912 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 12:53 2012 Quant Results File: 011912V9.RES

Quant Method : C:\HPCHEM\1\METHODS\011912V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 20 11:29:10 2012
Response via : Initial Calibration
DataAcq Meth : 011912V9

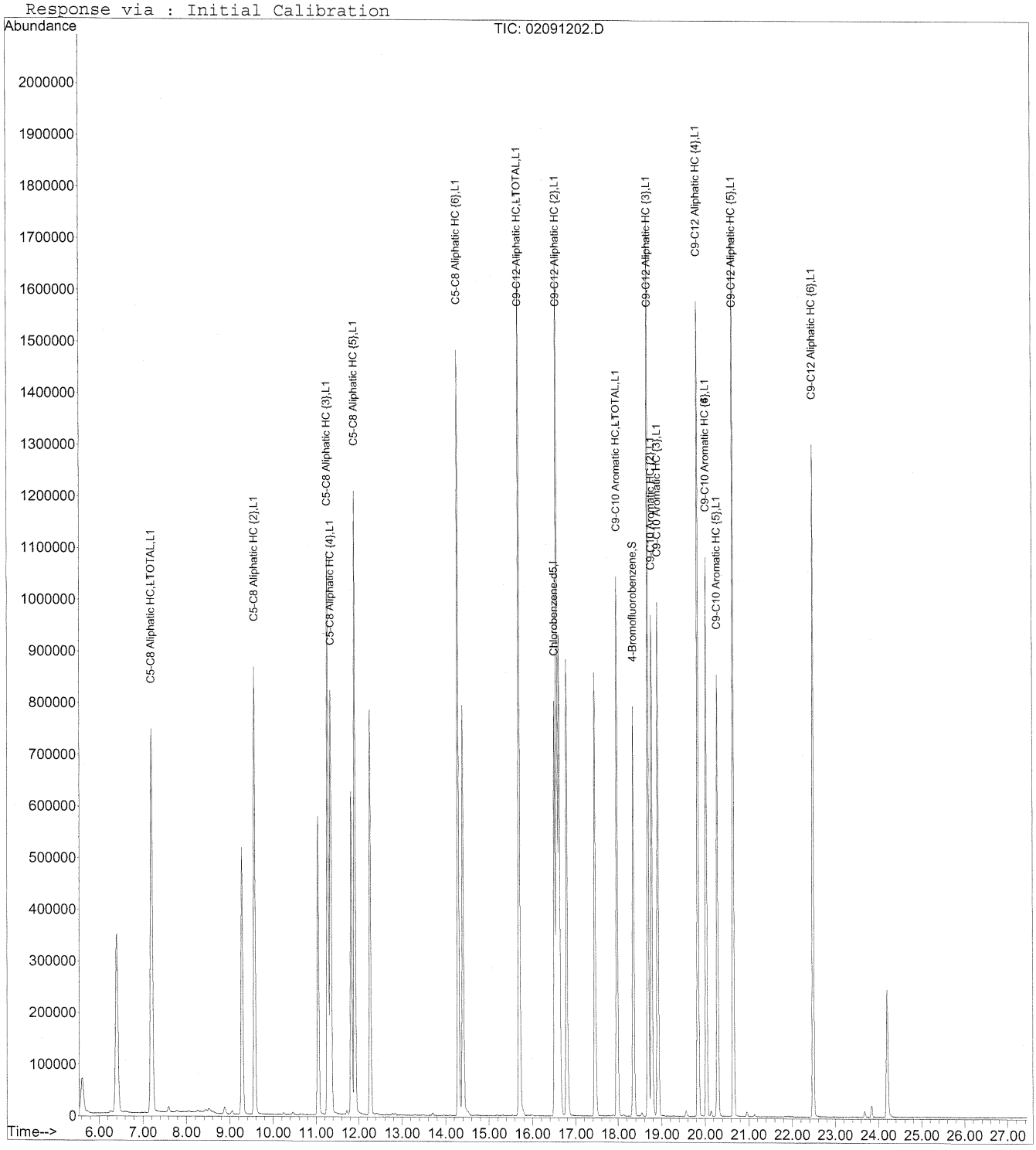
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	527686	12.50	ug/m3	0.00
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.35	95	380120	88.90	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 99.33%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.20	TIC	2565147	26.51	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2131845	32.78	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2707209	36.86	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	2092579	32.24	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2653332	37.65	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3074160	43.79	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.20	TIC	15224272m	209.86	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	3699051	50.04	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	3627249	50.32	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.69	TIC	3564920	55.98	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.84	TIC	3388194	54.90	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.66	TIC	3443111	63.20	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.48	TIC	2561261	67.57	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	20283786m	343.04	ug/m3	
15) C9-C10 Aromatic HC	17.98	120	224687	45.51	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	238165	45.44	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.92	120	345519	45.88	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.04	120	78963	51.31	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.29	120	262903	46.38	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.04	134	189539	51.05	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.98	TIC	1339776m	234.46	ug/m3	

(#) = qualifier out of range (m) = manual integration
02091202.D 011912V9.M Fri Feb 10 09:47:57 2012 Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\020912\02091202.D Vial: 2
Acq On : 9 Feb 2012 10:05 am Operator: RACHEL HILL
Sample : CCV VOA9 020912 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 12:53 2012 Quant Results File: 011912V9.RES

Method : C:\HPCHEM\1\METHODS\011912V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 20 11:29:10 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA9_120210A **Run No.:** 46143

Analytical Run Date: 2/10/2012 **InstrumentID:** VOA9

Analyst: Rachel Hill **Column:**

Calibration ID: 45704 **Column ID:**

Column Length:

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 021012	BFB_TUNE	TUNE	R46143	2/10/2012 9:54:00 AM	Robert Lynch		
CCV VOA9 021012	MA_APH	CCV	R46143	2/10/2012 10:37:00 AM	Robert Lynch		
RLVS VOA9 021012	MA_APH	RLVS	R46143	2/10/2012 11:22:00 AM	Robert Lynch		
MBLK VOA9 021012	MA_APH	MBLK	R46143	2/10/2012 12:11:00 PM	Robert Lynch		
1201804-026A	MA_APH	SAMP	R46143	2/10/2012 12:55:00 PM	Robert Lynch		
1201804-026Adup	MA_APH	DUP	R46143	2/10/2012 2:01:00 PM	Robert Lynch		
1201804-022A	MA_APH	SAMP	R46143	2/10/2012 2:50:00 PM	Robert Lynch		
1201804-025A	MA_APH	SAMP	R46143	2/10/2012 7:39:00 PM	Robert Lynch		
1201804-023A	MA_APH	SAMP	R46143	2/10/2012 8:28:00 PM	Robert Lynch		
RLVS VOA9 021012	MA_APH	RLVS	R46143	2/10/2012 9:10:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

27-Feb-12

RunNo 46143

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
904666	BFB VOA9 021012	BFB_TUNE	TUNE	.\1\DATA\021012	2/10/2012 9:54:0	1	R46143		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		58.2	58.2		100	0	0	0	0	0	58%	50	120	0%	
175	M		7.2	7.2		100	0	0	0	0	0	7%	4	9	0%	
176	M		96.6	96.6		100	0	0	0	0	0	97%	93	101	0%	
177	M		7.1	7.1		100	0	0	0	0	0	7%	5	9	0%	
50	M		26.9	26.9		100	0	0	0	0	0	27%	8	40	0%	
75	M		52.3	52.3		100	0	0	0	0	0	52%	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
904676	CCV VOA9 021012	MA_APH	CCV	.\1\DATA\021012	2/10/2012 10:37:	1	R46143		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	207.69	207.69		234	0	0	0	0	0	89%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	232.2	232.2		266	0	0	0	0	0	87%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	341.72	341.72		378	0	0	0	0	0	90%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	87.33	87.33		89.5	0	0	0	0	0	98%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\021012\02101202.D Vial: 2
Acq On : 10 Feb 2012 10:37 am Operator: RACHEL HILL
Sample : CCV VOA9 021012 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 10 12:47 2012 Quant Results File: 011912V9.RES

Quant Method : C:\HPCHEM\1\METHODS\011912V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 20 11:29:10 2012
Response via : Initial Calibration
DataAcq Meth : 011912V9

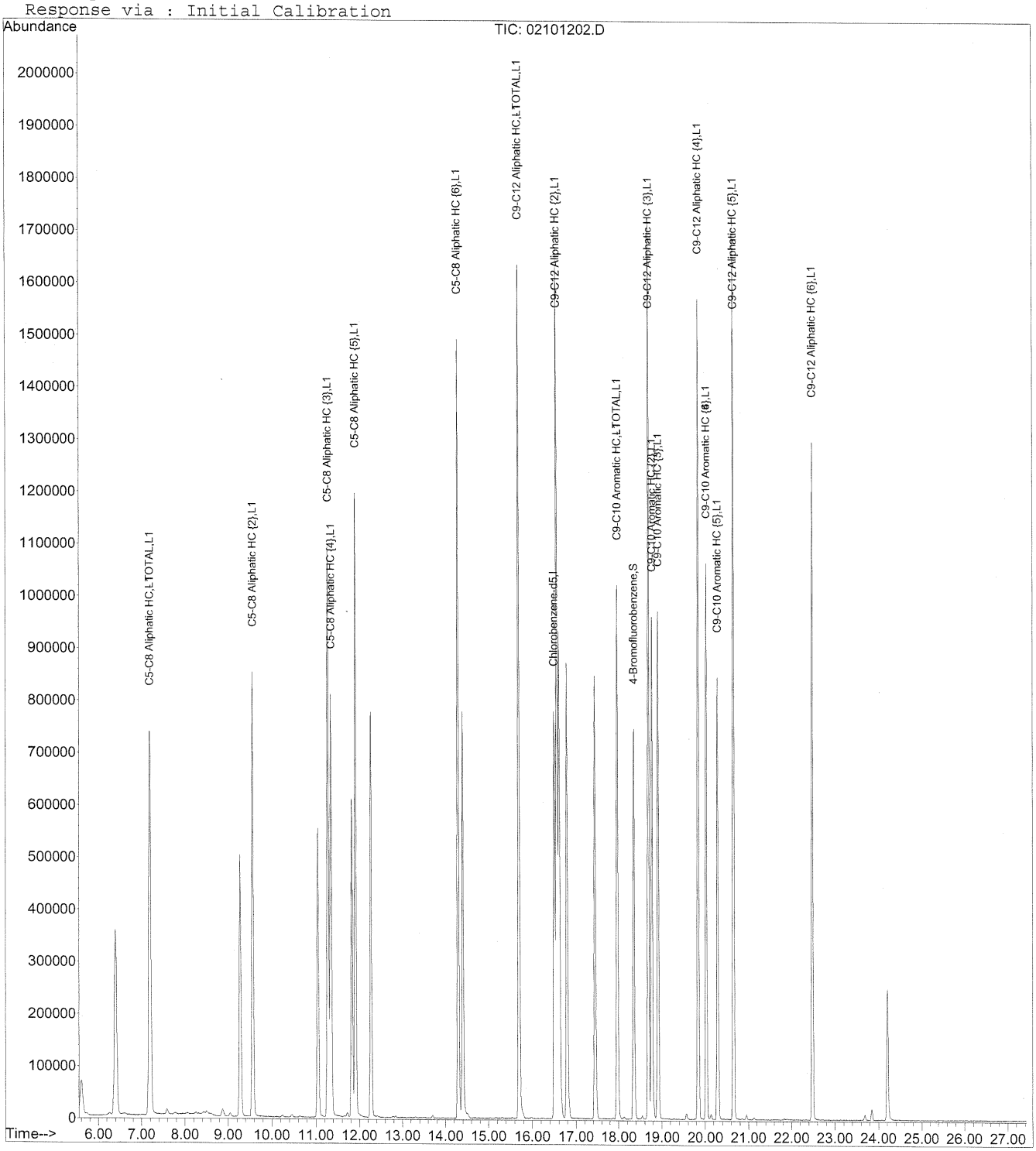
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	518439	12.50	ug/m3	-0.01
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.35	95	366840	87.33	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 97.58%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2508321	25.92	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2095613	32.23	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2713415	36.95	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	2030169	31.28	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2642185	37.49	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3077592	43.84	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	15067295m	207.69	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	3660028	49.51	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	3608398	50.06	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.69	TIC	3552849	55.79	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.84	TIC	3395897	55.03	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.66	TIC	3440643	63.16	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.48	TIC	2547879	67.22	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	20205694m	341.72	ug/m3	
15) C9-C10 Aromatic HC	17.98	120	220835	44.73	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	235943	45.02	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.92	120	343583	45.63	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.04	120	78564	51.05	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.30	120	258434	45.59	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.04	134	189470	51.03	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.98	TIC	1326829m	232.20	ug/m3	

(#) = qualifier out of range (m) = manual integration
02101202.D 011912V9.M Tue Feb 14 09:51:49 2012 Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\021012\02101202.D Vial: 2
Acq On : 10 Feb 2012 10:37 am Operator: RACHEL HILL
Sample : CCV VOA9 021012 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 10 12:47 2012 Quant Results File: 011912V9.RES

Method : C:\HPCHEM\1\METHODS\011912V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 20 11:29:10 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA9_120214A **Run No.:** 46235

Analytical Run Date: 2/14/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

Calibration ID: 45704 **Column ID:**

Column Length:

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 021412	BFB_TUNE	TUNE	R46235	2/14/2012 8:59:00 AM	Robert Lynch		
CCV VOA9 021412	MA_APH	CCV	R46235	2/14/2012 9:42:00 AM	Robert Lynch		
RLVS VOA9 021412	MA_APH	RLVS	R46235	2/14/2012 10:24:00 AM	Robert Lynch		
MBLK VOA9 021412	MA_APH	MBLK	R46235	2/14/2012 11:14:00 AM	Robert Lynch		
1201804-024A	MA_APH	SAMP	R46235	2/14/2012 11:56:00 AM	Robert Lynch		
1201804-024Adup	MA_APH	DUP	R46235	2/14/2012 12:39:00 PM	Robert Lynch		
1201804-001A	MA_APH	SAMP	R46235	2/14/2012 1:28:00 PM	Robert Lynch		
1201804-021A	MA_APH	SAMP	R46235	2/14/2012 2:17:00 PM	Robert Lynch		
RLVS2 VOA9 02141	MA_APH	RLVS	R46235	2/14/2012 3:00:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

27-Feb-12

RunNo 46235

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
906157	BFB VOA9 021412	BFB_TUNE	TUNE	.\1\DATA\021412	2/14/2012 8:59:0	1	R46235		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		60.6	60.6		100	0	0	0	0	0	61%	50	120	0%	
175	M		7.2	7.2		100	0	0	0	0	0	7%	4	9	0%	
176	M		96	96		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		25.5	25.5		100	0	0	0	0	0	26%	8	40	0%	
75	M		51.1	51.1		100	0	0	0	0	0	51%	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
906158	CCV VOA9 021412	MA_APH	CCV	.\1\DATA\021412	2/14/2012 9:42:0	1	R46235		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	239.83	239.83		234	0	0	0	0	0	102%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	262.59	262.59		266	0	0	0	0	0	99%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	381.97	381.97		378	0	0	0	0	0	101%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	86.96	86.96		89.5	0	0	0	0	0	97%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\021412\02141202.D Vial: 2
Acq On : 14 Feb 2012 9:42 am Operator: RACHEL HILL
Sample : CCV VOA9 021412 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 12:44 2012 Quant Results File: 011912V9.RES

Quant Method : C:\HPCHEM\1\METHODS\011912V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 20 11:29:10 2012
Response via : Initial Calibration
DataAcq Meth : 011912V9

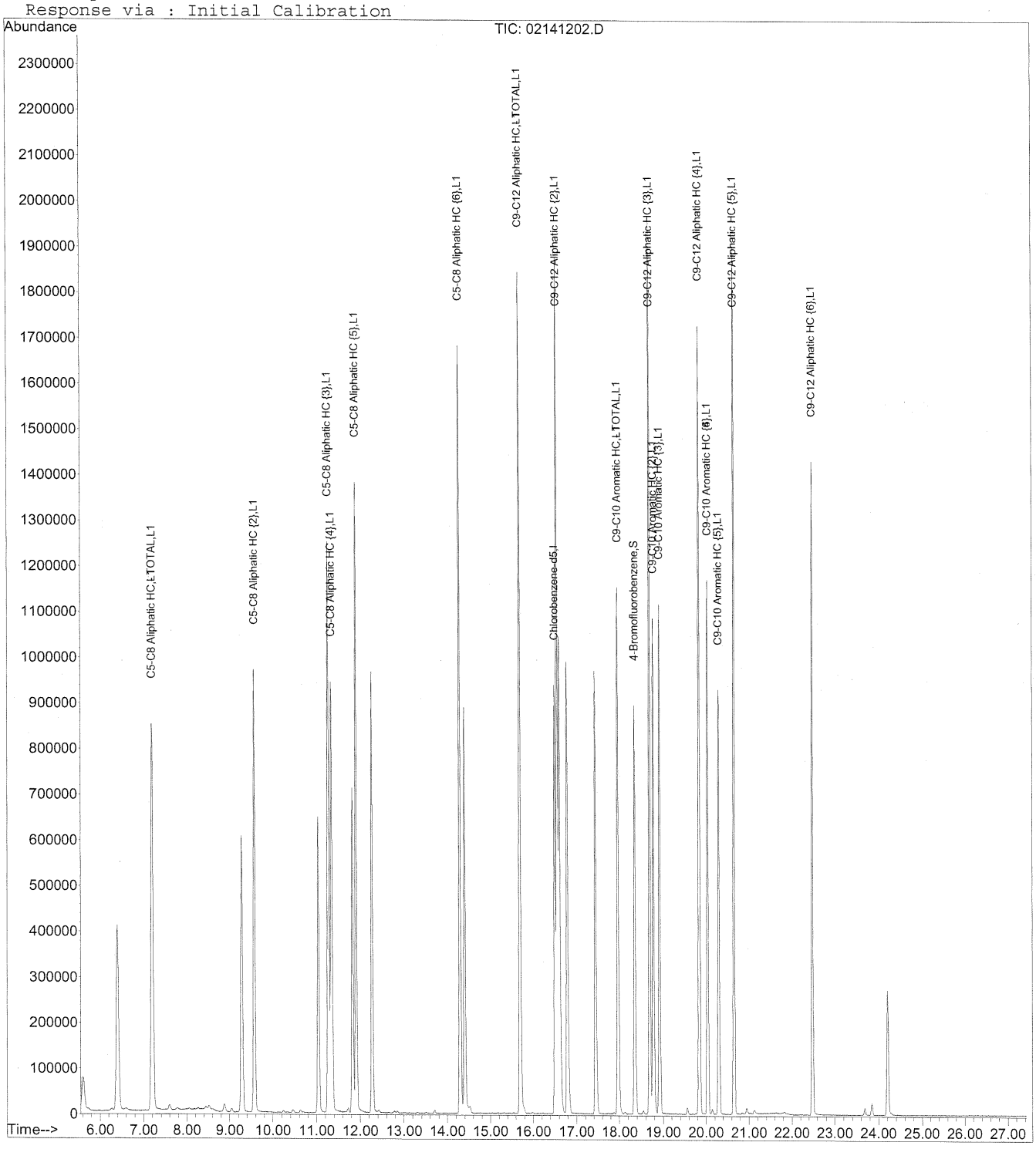
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	621467	12.50	ug/m3	0.00
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.35	95	437901	86.96	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 97.16%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2930254	30.28	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2436645	37.47	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	3098581	42.19	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	2390569	36.83	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	3044192	43.20	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3498208	49.84	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	17398449m	239.83	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	4148036	56.11	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	4064827	56.39	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.69	TIC	3968039	62.31	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.84	TIC	3757781	60.89	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.65	TIC	3797196	69.70	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.48	TIC	2849831	75.18	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	22585710m	381.97	ug/m3	
15) C9-C10 Aromatic HC	17.98	120	250452	50.73	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	264804	50.52	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.92	120	388856	51.64	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.04	120	88534	57.53	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.29	120	292248	51.56	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.04	134	215599	58.07	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.98	TIC	1500493m	262.59	ug/m3	

(#) = qualifier out of range (m) = manual integration
02141202.D 011912V9.M Tue Feb 14 15:51:19 2012 Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\021412\02141202.D Vial: 2
Acq On : 14 Feb 2012 9:42 am Operator: RACHEL HILL
Sample : CCV VOA9 021412 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 12:44 2012 Quant Results File: 011912V9.RES

Method : C:\HPCHEM\1\METHODS\011912V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 20 11:29:10 2012
Response via : Initial Calibration



02141202.D 011912V9.M Tue Feb 14 15:51:19 2012 Page 2

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\011912V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 20 11:29:10 2012
Response via : Initial Calibration

Calibration Files
1 =01191207.D 2 =01191208.D 3 =01191209.D
4 =01191210.D 5 =01191211.D 6 =01191212.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)	L1	C5-C8 Aliphatic HC	1.173	1.007	0.976	0.956	0.918	0.874	0.968	E5	10.72
2)	L1	C5-C8 Aliphatic HC	7.175	6.715	6.411	6.331	6.053	6.249	6.503	E4	5.64
3)	L1	C5-C8 Aliphatic HC	8.240	7.610	7.329	7.103	6.900	7.003	7.344	E4	6.24
4)	L1	C5-C8 Aliphatic HC	7.229	6.630	6.374	6.262	5.958	6.276	6.490	E4	6.31
5)	L1	C5-C8 Aliphatic HC	7.793	7.179	6.999	6.921	6.705	6.810	7.047	E4	5.12
6)	L1	C5-C8 Aliphatic HC	7.651	7.126	7.063	6.913	6.765	6.861	7.020	E4	4.44
7)	L1	C5-C8 Aliphatic HC	8.153	7.451	7.224	7.098	6.852	6.923	7.255	E4	6.09
8)	L1	C9-C12 Aliphatic HC	8.134	7.505	7.432	7.306	7.157	7.204	7.392	E4	4.97
9)	L1	C9-C12 Aliphatic HC	7.909	7.035	7.189	7.244	7.116	6.915	7.209	E4	4.54
10)	L1	C9-C12 Aliphatic HC	6.944	6.392	6.522	6.382	6.070	6.262	6.369	E4	4.91
11)	L1	C9-C12 Aliphatic HC	6.757	6.119	6.265	6.134	5.795	6.160	6.172	E4	4.85
12)	L1	C9-C12 Aliphatic HC	5.781	5.372	5.505	5.426	5.207	5.497	5.448	E4	3.28
13)	L1	C9-C12 Aliphatic HC	3.918	3.633	3.768	3.752	3.600	3.910	3.791	E4	3.74
14)	L1	C9-C12 Aliphatic HC	6.396	5.854	5.964	5.890	5.673	5.856	5.913	E4	3.94
15)	L1	C9-C10 Aromatic HC	5.142	4.865	4.880	4.845	4.610	4.977	4.937	E3	4.22
16)	L1	C9-C10 Aromatic HC	5.537	5.142	5.168	5.080	4.869	5.310	5.241	E3	4.85
17)	L1	C9-C10 Aromatic HC	8.014	7.362	7.390	7.419	7.042	7.633	7.530	E3	4.36
18)	L1	C9-C10 Aromatic HC	1.613	1.456	1.528	1.506	1.438	1.599	1.539	E3	5.02
19)	L1	C9-C10 Aromatic HC	6.015	5.481	5.613	5.515	5.232	5.746	5.669	E3	5.32
20)	L1	C9-C10 Aromatic HC	3.857	3.568	3.701	3.607	3.480	3.833	3.713	E3	4.61
21)	L1	C9-C10 Aromatic HC	6.035	5.573	5.641	5.572	5.307	5.816	5.714	E3	4.75
22)		C5-C8 Aliphatic	8.153	7.451	7.224	7.098	6.852	6.923	7.255	E4	6.09
23)	L1	non C5-C8	8.342	6.994	7.091	6.943	6.859	6.689	7.072	E4	8.29
24)	L1	non C5-C8 {2}	4.811	4.514	4.289	4.343	4.017	4.120	4.345	E4	6.00
25)	L1	non C5-C8 {3}	2.783	2.707	2.631	2.573	2.725	2.676	2.697	E4	2.87
26)	L1	non C5-C8 {4}	5.676	5.475	5.106	4.983	4.712	4.826	5.147	E4	6.73
27)	L1	non C5-C8 {5}	4.323	4.104	3.759	3.615	4.007	3.853	3.928	E4	6.01
28)	L1	non C5-C8 {6}	5.520	5.582	5.114	5.215	5.085	5.181	5.318	E4	4.05
29)	L1	non C5-C8 - TOTAL	4.320	4.457	4.312	4.385	4.461	4.630	4.507	E4	5.23
30)		C9-C12 Aliphatic	6.396	5.854	5.964	5.890	5.673	5.856	5.913	E4	3.94
31)	L1	non C9-C12	4.126	4.107	3.645	3.885	3.797	4.010	3.941	E4	4.44
32)	L1	non C9-C12 {2}	5.267	4.857	4.802	4.865	4.668	4.598	4.856	E4	4.46
33)	L1	non C9-C12 {3}	5.518	5.189	5.137	5.085	4.840	5.110	5.178	E4	4.18
34)	L1	non C9-C12 {4}	5.345	4.984	4.966	4.864	4.680	4.944	4.997	E4	4.35
35)	L1	non C9-C12 {5}	2.738	2.673	2.571	2.561	2.696	2.736	2.675	E4	2.96
36)	L1	non C9-C12 - TOTAL	3.509	3.438	3.328	3.376	3.310	3.442	3.434	E4	3.29
37)	L1	C9-C10 Aromatic	6.035	5.573	5.641	5.572	5.307	5.816	5.714	E3	4.75
38)	L1	C9-C10 Aromatic {2}	6.035	5.573	5.641	5.572	5.307	5.816	5.714	E3	4.75
39)	L1	C9-C10 Aromatic - T	6.035	5.573	5.641	5.572	5.307	5.816	5.714	E3	4.75
40)	I	Chlorobenzene-d5	----------ISTD----------								
41)	S	4-Bromofluorobenzen	0.099	0.100	0.102	0.101	0.100	0.103	0.101		1.69

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

Compound List Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\011912V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 20 11:29:10 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

011912V9.M Tue Jan 24 17:04:13 2012

RTI Laboratories

Run ID: GC-TCD 1_120202A **Run No.:** 46053

Analytical Run Date: 2/2/2012 **InstrumentID:** GC-TCD 1

Analyst: Mike Budziak **Column:** GC-TCD 1

Calibration ID: 45325 **Column ID:** 100/120mesh x 1mm ID

Column Length: 2m

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
MBLK	ASTM-D2504	MBLK	R46053	2/2/2012 9:39:00 AM	Robert Lynch		
CCV STD 1-2 A	ASTM-D2504	CCV	R46053	2/2/2012 10:11:00 AM	Robert Lynch		
LCS	ASTM-D2504	LCS	R46053	2/2/2012 10:26:00 AM	Robert Lynch		
CRQL STD 2% A	ASTM-D2504	CRQL	R46053	2/2/2012 11:01:00 AM	Robert Lynch		
1201804-003b	ASTM-D2504	SAMP	R46053	2/2/2012 11:30:00 AM	Robert Lynch		
1201804-004b	ASTM-D2504	SAMP	R46053	2/2/2012 11:47:00 AM	Robert Lynch		
1201804-005b	ASTM-D2504	SAMP	R46053	2/2/2012 12:03:00 PM	Robert Lynch		
1201804-006b	ASTM-D2504	SAMP	R46053	2/2/2012 12:24:00 PM	Robert Lynch		
1201804-007b	ASTM-D2504	SAMP	R46053	2/2/2012 12:40:00 PM	Robert Lynch		
1201804-008b	ASTM-D2504	SAMP	R46053	2/2/2012 12:59:00 PM	Robert Lynch		
1201804-009b	ASTM-D2504	SAMP	R46053	2/2/2012 1:14:00 PM	Robert Lynch		
1201804-010b	ASTM-D2504	SAMP	R46053	2/2/2012 1:28:00 PM	Robert Lynch		
1201804-011b	ASTM-D2504	SAMP	R46053	2/2/2012 1:44:00 PM	Robert Lynch		
1201804-012b	ASTM-D2504	SAMP	R46053	2/2/2012 3:23:00 PM	Robert Lynch		
1201804-012bdup	ASTM-D2504	DUP	R46053	2/2/2012 3:38:00 PM	Robert Lynch		
CCV STD 1-2 B	ASTM-D2504	CCV	R46053	2/2/2012 3:53:00 PM	Robert Lynch		
CRQL STD 2% B	ASTM-D2504	CRQL	R46053	2/2/2012 4:08:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

27-Feb-12

RunNo 46053

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
903127	MBLK	ASTM-D2504	MBLK	\TA\020212\0202	2/2/2012 9:39:00	1	R46053		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
903128	CCV STD 1-2 A	ASTM-D2504	CCV	\TA\020212\0202	2/2/2012 10:11:0	1	R46053		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.63	2.63		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Carbon Monoxide	A	%	2.689	2.689		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	%	2.093	2.093		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.65	2.65		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Oxygen	A	%	2.473	2.473		2.5	0	0	0.025	0.1	0	99%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
903129	LCS	ASTM-D2504	LCS	\TA\020212\0202	2/2/2012 10:26:0	1	R46053		0	903128	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.655	2.655		2.5	0	2.63	0.025	0.1	0	106%	70	130	1%	
Carbon Monoxide	A	%	2.688	2.688		2.5	0	2.689	0.025	0.1	0	108%	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%	
Methane	A	%	2.091	2.091		2	0	2.093	0.025	0.5	0	105%	70	130	0%	
Nitrogen	A	%	2.665	2.665		2.5	0	2.65	0.025	0.1	0	107%	70	130	1%	
Oxygen	A	%	2.472	2.472		2.5	0	2.473	0.025	0.1	0	99%	70	130	0%	

1

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
903140	1201804-012b (Container-01 of 01)	ASTM-D2504	SAMP	\TA\020212\0202	2/2/2012 3:23:00	1	R46053		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	%	21.336	21.336		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
903141	1201804-012bdup	ASTM-D2504	DUP	\TA\020212\0202	2/2/2012 3:38:00	1	R46053		0	903140	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.061	0.061		0	0	0.062	0.025	0.1	0	0%	0	0	2%	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	%	78.491	78.491		0	0	79.67	0.025	0.1	0	0%	0	0	1%	
Oxygen	A	%	21.022	21.022		0	0	21.336	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
903193	CCV STD 1-2 B	ASTM-D2504	CCV	\TA\020212\0202	2/2/2012 3:53:00	1	R46053		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.666	2.666		2.5	0	0	0.025	0.1	0	107%	85	115	0%	
Carbon Monoxide	A	%	2.704	2.704		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.09	2.09		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.72	2.72		2.5	0	0	0.025	0.1	0	109%	85	115	0%	
Oxygen	A	%	2.499	2.499		2.5	0	0	0.025	0.1	0	100%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
903194	CRQL STD 2% B	ASTM-D2504	CRQL	\TA\020212\0202	2/2/2012 4:08:00	1	R46053		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\2\DATA\020212\02021202.D Vial: 1
Acq On : 2 Feb 2012 10:11 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV 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	2.473	1.1	0	0.06
2	Nitrogen	2.500	2.650	-6.0	0	0.04
3	Carbon Monoxide	2.500	2.689	-7.6	0	0.01
4	Methane	2.000	2.093	-4.6	0	0.03
5	Carbon dioxide	2.500	2.630	-5.2	0	0.02

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\020212\02021202.D Vial: 1
Acq On : 2 Feb 2012 10:11 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV 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 Wed Feb 08 18:14:35 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020212\02021202.D Vial: 1
Acq On : 2 Feb 2012 10:11 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Feb 2 11:28 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 23 19:11:07 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

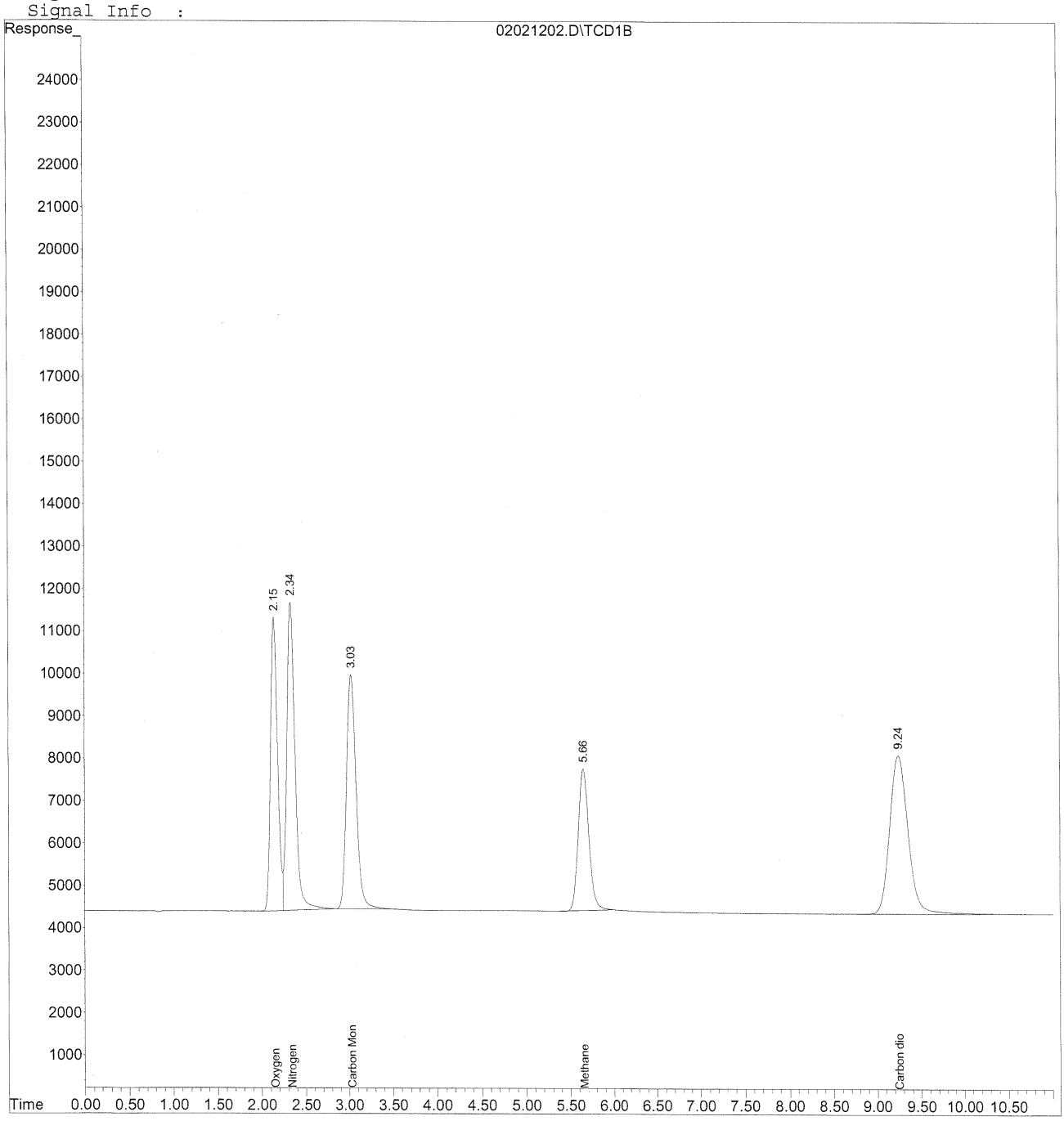
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	383041	2.473 %
2)	Nitrogen	2.34	465075	2.650 %
3)	Carbon Monoxide	3.03	433530	2.689 %
4)	Methane	5.66	282660	2.093 %
5)	Carbon dioxide	9.24	540043	2.630 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020212\02021202.D Vial: 1
Acq On : 2 Feb 2012 10:11 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 2 11:28 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 23 19:11:07 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\020212\02021216.D Vial: 1
Acq On : 2 Feb 2012 3:53 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV 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	2.499	0.0	0	0.06
2	Nitrogen	2.500	2.720	-8.8	0	0.04
3	Carbon Monoxide	2.500	2.704	-8.2	0	0.01
4	Methane	2.000	2.090	-4.5	0	0.03
5	Carbon dioxide	2.500	2.666	-6.6	0	0.02

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\020212\02021216.D Vial: 1
Acq On : 2 Feb 2012 3:53 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV 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 Wed Feb 08 18:14:46 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020212\02021216.D Vial: 1
Acq On : 2 Feb 2012 3:53 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Feb 8 18:05 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 23 19:11:07 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

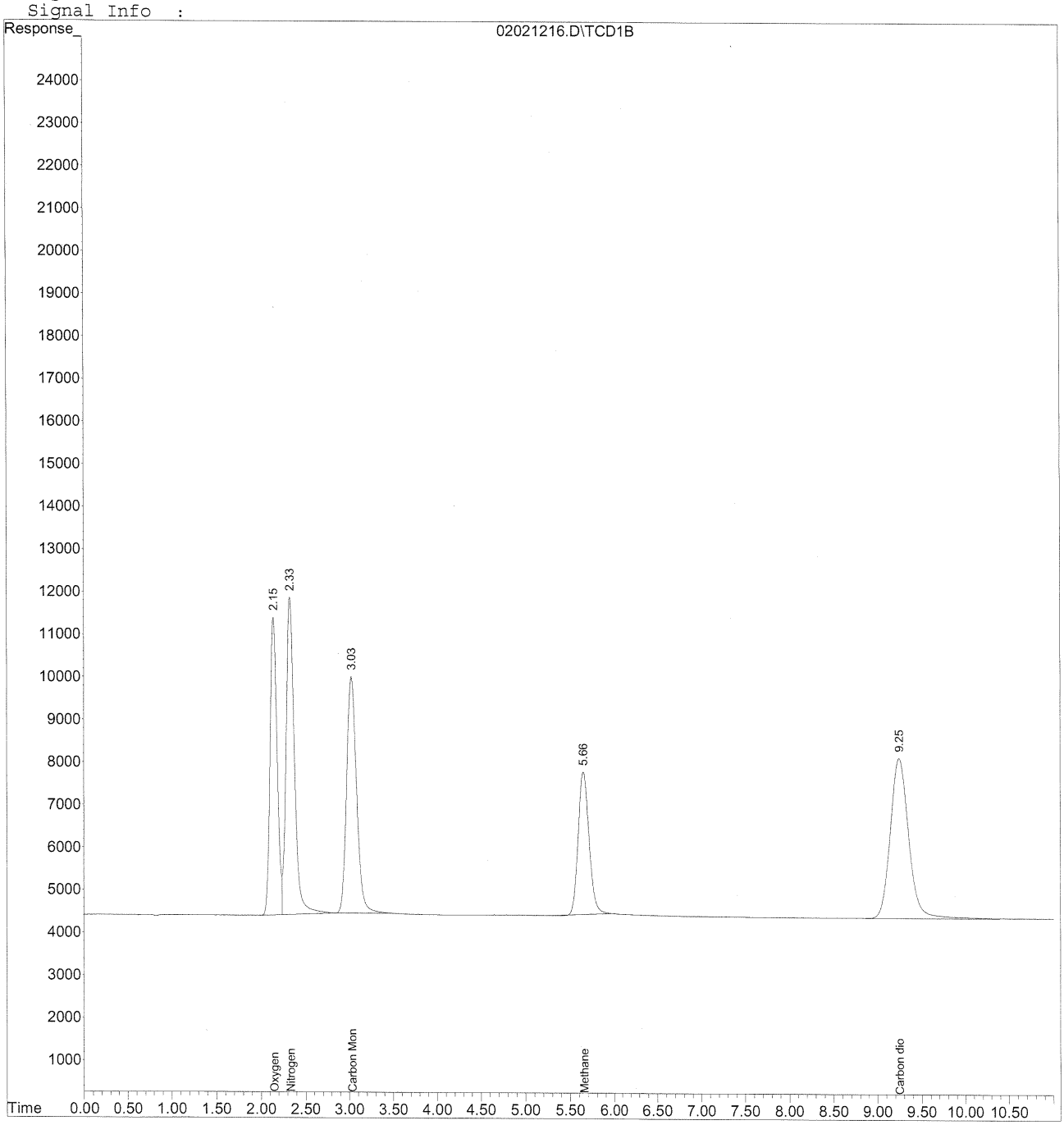
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	387164	2.499 %
2)	Nitrogen	2.34	477335	2.720 %
3)	Carbon Monoxide	3.03	435911	2.704 %
4)	Methane	5.66	282321	2.090 %
5)	Carbon dioxide	9.25	547612	2.666 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020212\02021216.D Vial: 1
Acq On : 2 Feb 2012 3:53 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 8 18:05 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 23 19:11:07 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



RTI Laboratories

Run ID: GC-TCD 1_120206A **Run No.:** 46054

Analytical Run Date: 2/6/2012 **InstrumentID:** GC-TCD 1

Analyst: Mike Budziak **Column:** GC-TCD 1

Calibration ID: 45325 **Column ID:** 100/120mesh x 1mm ID

Column Length: 2m

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
mblk	ASTM-D2504	MBLK	R46054	2/6/2012 9:13:00 AM	Robert Lynch		
ccv std 1-2 a	ASTM-D2504	CCV	R46054	2/6/2012 9:33:00 AM	Robert Lynch		
lcs	ASTM-D2504	LCS	R46054	2/6/2012 9:49:00 AM	Robert Lynch		
crql std 2% a	ASTM-D2504	CRQL	R46054	2/6/2012 10:04:00 AM	Robert Lynch		
1201804-013b	ASTM-D2504	SAMP	R46054	2/6/2012 10:24:00 AM	Robert Lynch		
1201804-014b	ASTM-D2504	SAMP	R46054	2/6/2012 10:45:00 AM	Robert Lynch		
1201804-015b	ASTM-D2504	SAMP	R46054	2/6/2012 11:00:00 AM	Robert Lynch		
1201804-016b	ASTM-D2504	SAMP	R46054	2/6/2012 11:20:00 AM	Robert Lynch		
1201804-017b	ASTM-D2504	SAMP	R46054	2/6/2012 11:35:00 AM	Robert Lynch		
1201804-018b	ASTM-D2504	SAMP	R46054	2/6/2012 11:55:00 AM	Robert Lynch		
1201804-019b	ASTM-D2504	SAMP	R46054	2/6/2012 12:32:00 PM	Robert Lynch		
1201804-020b	ASTM-D2504	SAMP	R46054	2/6/2012 12:49:00 PM	Robert Lynch		
1201804-021b	ASTM-D2504	SAMP	R46054	2/6/2012 1:46:00 PM	Robert Lynch		
1201804-022b	ASTM-D2504	SAMP	R46054	2/6/2012 2:19:00 PM	Robert Lynch		
1201804-022bdup	ASTM-D2504	DUP	R46054	2/6/2012 3:23:00 PM	Robert Lynch		
ccv std 1-2 b	ASTM-D2504	CCV	R46054	2/6/2012 3:41:00 PM	Robert Lynch		
1201804-023b	ASTM-D2504	SAMP	R46054	2/6/2012 3:57:00 PM	Robert Lynch		
1201804-024b	ASTM-D2504	SAMP	R46054	2/6/2012 4:28:00 PM	Robert Lynch		
1201804-025b	ASTM-D2504	SAMP	R46054	2/6/2012 4:55:00 PM	Robert Lynch		
1201804-026b	ASTM-D2504	SAMP	R46054	2/6/2012 6:00:00 PM	Robert Lynch		
1201804-027b	ASTM-D2504	SAMP	R46054	2/6/2012 6:28:00 PM	Robert Lynch		
ccv std 1-2 c	ASTM-D2504	CCV	R46054	2/6/2012 6:48:00 PM	Robert Lynch		
crql std 2% c	ASTM-D2504	CRQL	R46054	2/6/2012 7:18:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

27-Feb-12

RunNo 46054

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
903144	mblk	ASTM-D2504	MBLK	\TA\020612\0206	2/6/2012 9:13:00	1	R46054		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
903145	ccv std 1-2 a	ASTM-D2504	CCV	\TA\020612\0206	2/6/2012 9:33:00	1	R46054		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.615	2.615		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Carbon Monoxide	A	%	2.704	2.704		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.106	2.106		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.694	2.694		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Oxygen	A	%	2.493	2.493		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
903146	lcs	ASTM-D2504	LCS	\TA\020612\0206	2/6/2012 9:49:00	1	R46054		0	903145	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.631	2.631		2.5	0	2.615	0.025	0.1	0	105%	70	130	1%	
Carbon Monoxide	A	%	2.685	2.685		2.5	0	2.704	0.025	0.1	0	107%	70	130	1%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Methane	A	%	2.065	2.065		2	0	2.106	0.025	0.5	0	103%	70	130	2%	
Nitrogen	A	%	2.637	2.637		2.5	0	2.694	0.025	0.1	0	105%	70	130	2%	
Oxygen	A	%	2.463	2.463		2.5	0	2.493	0.025	0.1	0	99%	70	130	1%	

1

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
903157	1201804-022b (Container-01 of 01)	ASTM-D2504	SAMP	\TA\020612\0206	2/6/2012 2:19:00	1	R46054		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	%	20.239	20.239		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
903158	1201804-022bdup	ASTM-D2504	DUP	\TA\020612\0206	2/6/2012 3:23:00	1	R46054		0	903157	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.634	0.634		0	0	0.641	0.025	0.1	0	0%	0	0	1%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	79.531	79.531		0	0	79.568	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	20.227	20.227		0	0	20.239	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
903159	ccv std 1-2 b	ASTM-D2504	CCV	\TA\020612\0206	2/6/2012 3:41:00	1	R46054		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.603	2.603		2.5	0	0	0.025	0.1	0	104%	85	115	0%	
Carbon Monoxide	A	%	2.703	2.703		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.099	2.099		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.661	2.661		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Oxygen	A	%	2.48	2.48		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
903160	1201804-023b (Container-01 of 01)	ASTM-D2504	SAMP	\TA\020612\0206	2/6/2012 3:57:00	1	R46054		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
903165	ccv std 1-2 c	ASTM-D2504	CCV	\TA\020612\0206	2/6/2012 6:48:00	1	R46054		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.637	2.637		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Carbon Monoxide	A	%	2.706	2.706		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	%	2.093	2.093		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.662	2.662		2.5	0	0	0.025	0.1	0	106%	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
903166	crql std 2% c	ASTM-D2504	CRQL	\TA\020612\0206	2/6/2012 7:18:00	1	R46054		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.312	0.312		0.3	0	0	0.025	0.1	0	104%	80	120	0%	
Carbon Monoxide	A	%	0.152	0.152		0.14	0	0	0.025	0.1	0	109%	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	%	0.091	0.091		0.09	0	0	0.025	0.5	0	101%	80	120	0%	
Nitrogen	A	%	1.429	1.429		1.39	0	0	0.025	0.1	0	103%	80	120	0%	
Oxygen	A	%	0.077	0.077		0.08	0	0	0.025	0.1	0	96%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\020612\02061202.D Vial: 1
Acq On : 6 Feb 2012 9:33 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV 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	2.493	0.3	0	0.06
2	Nitrogen	2.500	2.694	-7.8	0	0.04
3	Carbon Monoxide	2.500	2.704	-8.2	0	0.01
4	Methane	2.000	2.106	-5.3	0	0.03
5	Carbon dioxide	2.500	2.615	-4.6	0	0.02

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\020612\02061202.D Vial: 1
Acq On : 6 Feb 2012 9:33 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV 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 Wed Feb 08 17:40:05 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020612\02061202.D Vial: 1
Acq On : 6 Feb 2012 9:33 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Feb 6 19:19 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 23 19:11:07 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

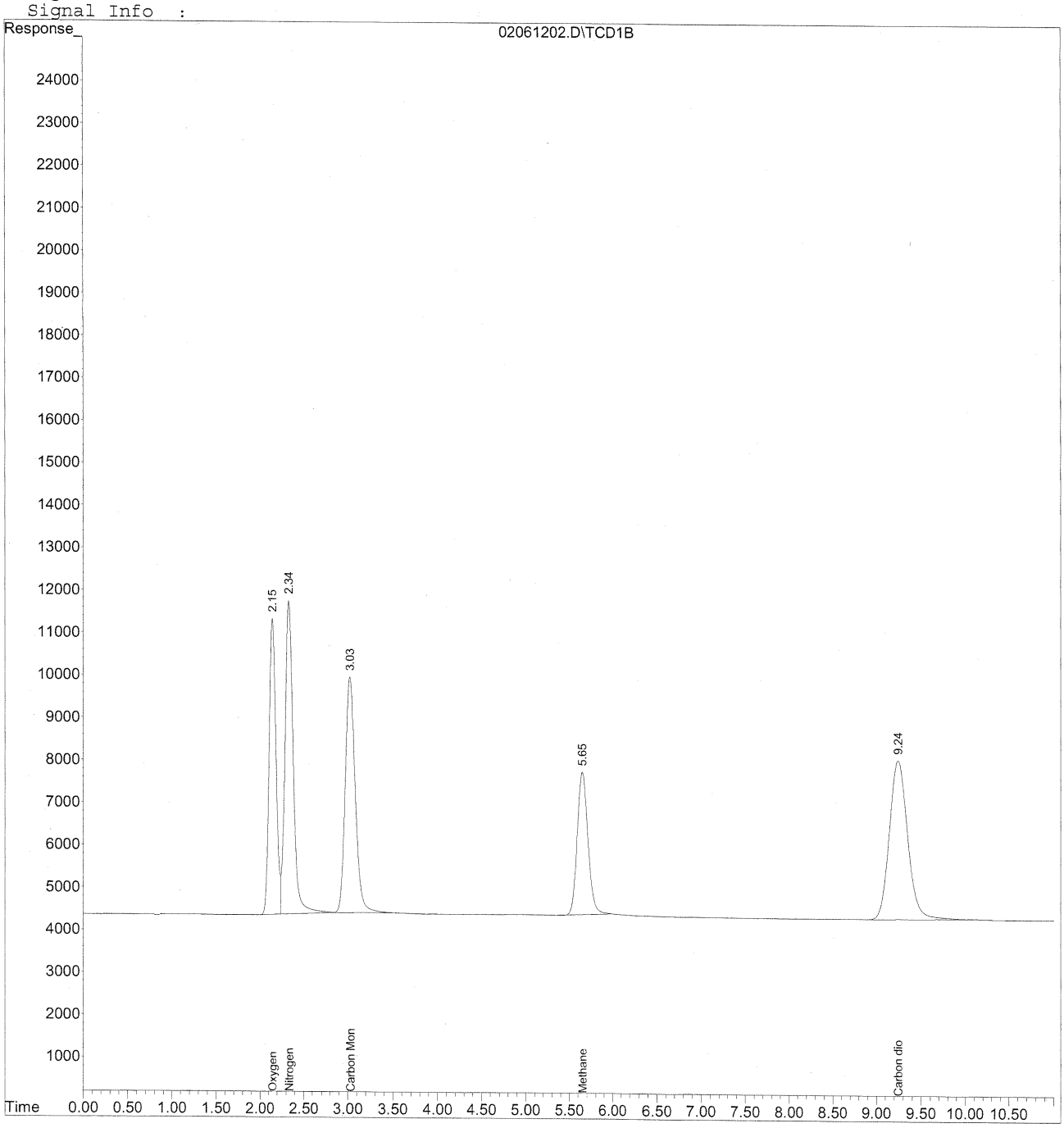
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	386138	2.493 %
2)	Nitrogen	2.34	472918	2.694 %
3)	Carbon Monoxide	3.03	435904	2.704 %
4)	Methane	5.66	284420	2.106 %
5)	Carbon dioxide	9.25	537075	2.615 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020612\02061202.D Vial: 1
Acq On : 6 Feb 2012 9:33 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 6 19:19 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 23 19:11:07 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\020612\02061216.D Vial: 1
Acq On : 6 Feb 2012 3:41 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV 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	2.480	0.8	0	0.06
2	Nitrogen	2.500	2.661	-6.4	0	0.04
3	Carbon Monoxide	2.500	2.703	-8.1	0	0.01
4	Methane	2.000	2.099	-5.0	0	0.03
5	Carbon dioxide	2.500	2.603	-4.1	0	0.02

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\020612\02061216.D Vial: 1
Acq On : 6 Feb 2012 3:41 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV 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 Wed Feb 08 17:40:17 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020612\02061216.D Vial: 1
Acq On : 6 Feb 2012 3:41 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Feb 6 19:18 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 23 19:11:07 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

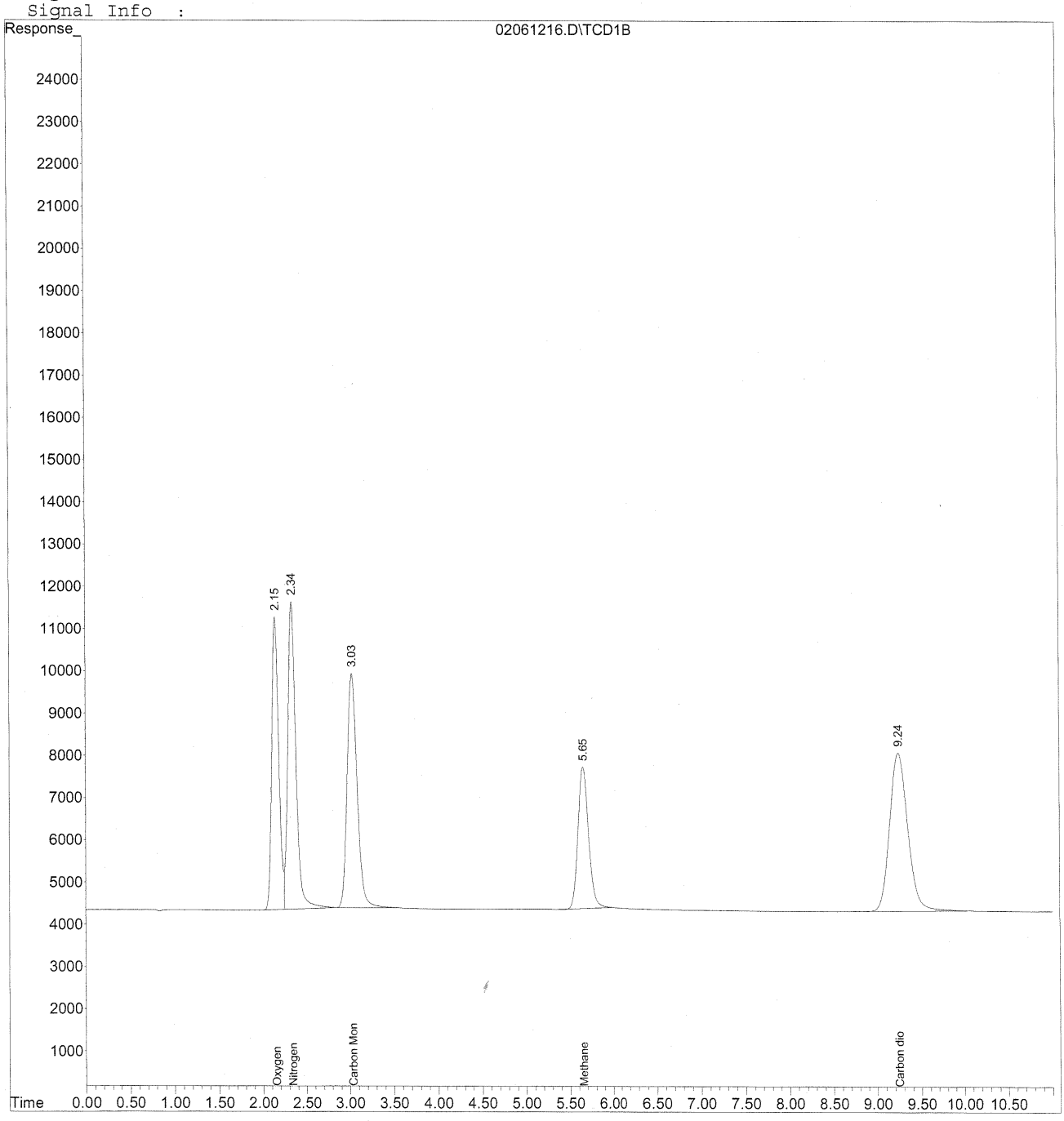
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	384262	2.480 %
2)	Nitrogen	2.34	467035	2.661 %
3)	Carbon Monoxide	3.03	435772	2.703 %
4)	Methane	5.66	283504	2.099 %
5)	Carbon dioxide	9.24	534638	2.603 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020612\02061216.D Vial: 1
Acq On : 6 Feb 2012 3:41 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 6 19:18 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 23 19:11:07 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\020612\02061222.D Vial: 1
Acq On : 6 Feb 2012 6:48 pm Operator:
Sample : ccv std 1-2 c Inst : GC/TCD
Misc : CCV 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	2.486	0.6	0	0.06
2	Nitrogen	2.500	2.662	-6.5	0	0.04
3	Carbon Monoxide	2.500	2.706	-8.2	0	0.01
4	Methane	2.000	2.093	-4.6	0	0.03
5	Carbon dioxide	2.500	2.637	-5.5	0	0.01

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\020612\02061222.D Vial: 1
Acq On : 6 Feb 2012 6:48 pm Operator:
Sample : ccv std 1-2 c Inst : GC/TCD
Misc : CCV 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 Wed Feb 08 17:40:25 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020612\02061222.D Vial: 1
Acq On : 6 Feb 2012 6:48 pm Operator:
Sample : ccv std 1-2 c Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Feb 6 19:20 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 23 19:11:07 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

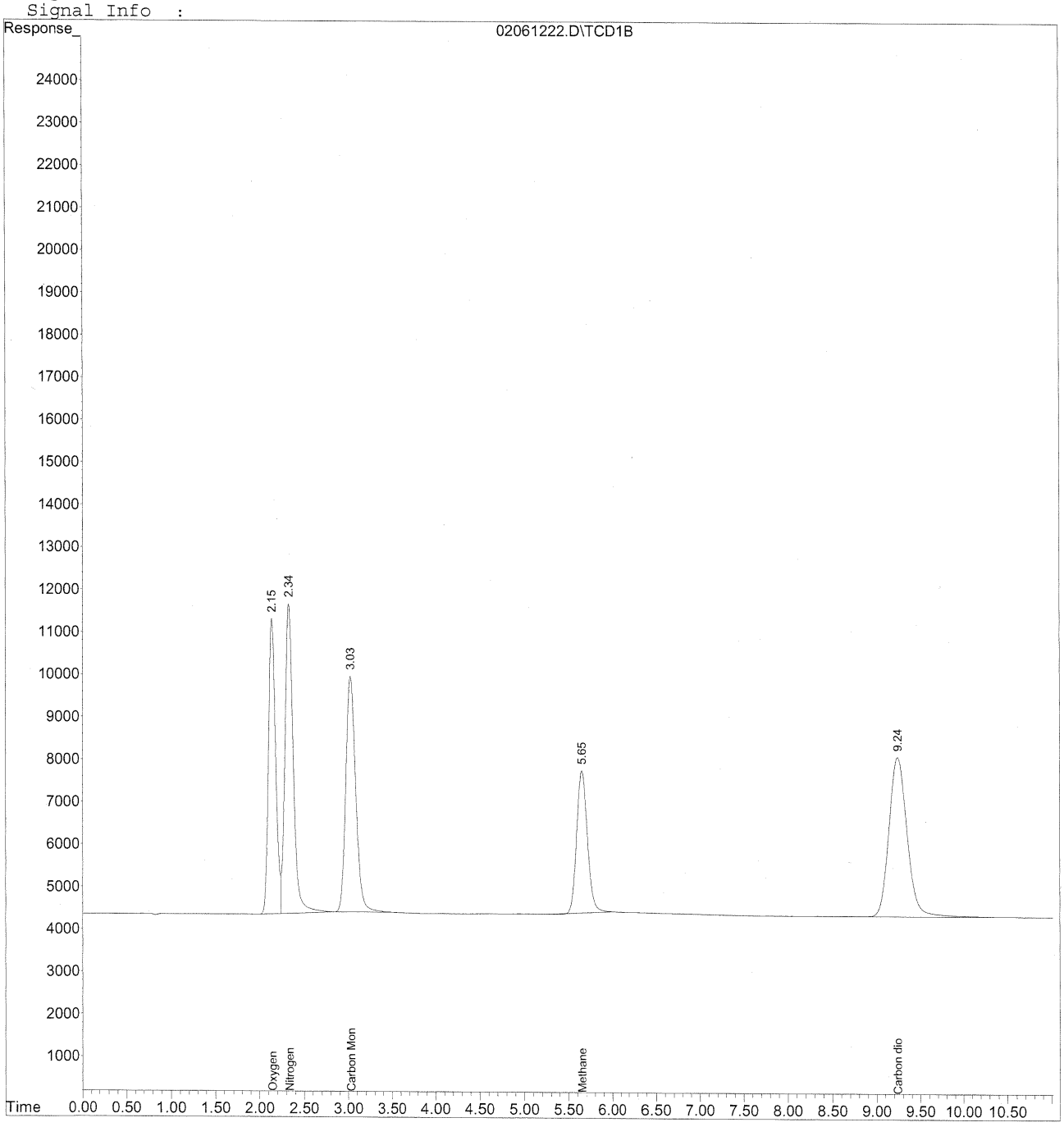
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	385060	2.486 %
2)	Nitrogen	2.34	467229	2.662 %
3)	Carbon Monoxide	3.03	436238	2.706 %
4)	Methane	5.66	282721	2.093 %
5)	Carbon dioxide	9.24	541504	2.637 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020612\02061222.D Vial: 1
Acq On : 6 Feb 2012 6:48 pm Operator:
Sample : ccv std 1-2 c Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 6 19:20 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 23 19:11:07 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



RTI Laboratories

Run ID: GC-TCD 1_120207A **Run No.:** 46055

Analytical Run Date: 2/7/2012 **InstrumentID:** GC-TCD 1

Analyst: Mike Budziak **Column:** GC-TCD 1

Calibration ID: 45325 **Column ID:** 100/120mesh x 1mm ID

Column Length: 2m

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
mblk	ASTM-D2504	MBLK	R46055	2/7/2012 9:19:00 AM	Robert Lynch		
ccv std 1-2 a	ASTM-D2504	CCV	R46055	2/7/2012 9:34:00 AM	Robert Lynch		
lcs	ASTM-D2504	LCS	R46055	2/7/2012 9:50:00 AM	Robert Lynch		
crql std 2% a	ASTM-D2504	CRQL	R46055	2/7/2012 10:07:00 AM	Robert Lynch		
1201804-028b	ASTM-D2504	SAMP	R46055	2/7/2012 10:27:00 AM	Robert Lynch		
1201804-029b	ASTM-D2504	SAMP	R46055	2/7/2012 10:42:00 AM	Robert Lynch		
1201804-030b	ASTM-D2504	SAMP	R46055	2/7/2012 11:12:00 AM	Robert Lynch		
1201804-031b	ASTM-D2504	SAMP	R46055	2/7/2012 11:43:00 AM	Robert Lynch		
1201804-032b	ASTM-D2504	SAMP	R46055	2/7/2012 11:58:00 AM	Robert Lynch		
1201804-033b	ASTM-D2504	SAMP	R46055	2/7/2012 12:17:00 PM	Robert Lynch		
1201804-034b	ASTM-D2504	SAMP	R46055	2/7/2012 12:40:00 PM	Robert Lynch		
1201804-035b	ASTM-D2504	SAMP	R46055	2/7/2012 12:55:00 PM	Robert Lynch		
1201804-036b	ASTM-D2504	SAMP	R46055	2/7/2012 1:10:00 PM	Robert Lynch		
1201804-037b	ASTM-D2504	SAMP	R46055	2/7/2012 1:29:00 PM	Robert Lynch		
1201804-037bdup	ASTM-D2504	DUP	R46055	2/7/2012 1:44:00 PM	Robert Lynch		
ccv std 1-2 b	ASTM-D2504	CCV	R46055	2/7/2012 2:03:00 PM	Robert Lynch		
1201804-038b	ASTM-D2504	SAMP	R46055	2/7/2012 2:26:00 PM	Robert Lynch		
1201804-039b	ASTM-D2504	SAMP	R46055	2/7/2012 2:48:00 PM	Robert Lynch		
1201804-040b	ASTM-D2504	SAMP	R46055	2/7/2012 3:09:00 PM	Robert Lynch		
1201804-041b	ASTM-D2504	SAMP	R46055	2/7/2012 3:27:00 PM	Robert Lynch		
1201804-043b	ASTM-D2504	SAMP	R46055	2/7/2012 4:08:00 PM	Robert Lynch		
1201804-042b	ASTM-D2504	SAMP	R46055	2/7/2012 4:29:00 PM	Robert Lynch		
ccv std 1-2 c	ASTM-D2504	CCV	R46055	2/7/2012 5:01:00 PM	Robert Lynch		
crql std 2% c	ASTM-D2504	CRQL	R46055	2/7/2012 5:23:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

27-Feb-12

RunNo 46055

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
903167	mblk	ASTM-D2504	MBLK	\TA\020712\0207	2/7/2012 9:19:00	1	R46055		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
903168	ccv std 1-2 a	ASTM-D2504	CCV	\TA\020712\0207	2/7/2012 9:34:00	1	R46055		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.638	2.638		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Carbon Monoxide	A	%	2.698	2.698		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.101	2.101		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.653	2.653		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Oxygen	A	%	2.476	2.476		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
903169	lcs	ASTM-D2504	LCS	\TA\020712\0207	2/7/2012 9:50:00	1	R46055		0	903168	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.638	2.638		2.5	0	2.638	0.025	0.1	0	106%	70	130	0%	
Carbon Monoxide	A	%	2.698	2.698		2.5	0	2.698	0.025	0.1	0	108%	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%	
Methane	A	%	2.097	2.097		2	0	2.101	0.025	0.5	0	105%	70	130	0%	
Nitrogen	A	%	2.646	2.646		2.5	0	2.653	0.025	0.1	0	106%	70	130	0%	
Oxygen	A	%	2.472	2.472		2.5	0	2.476	0.025	0.1	0	99%	70	130	0%	

1

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
903180	1201804-037b (Container-01 of 01)	ASTM-D2504	SAMP	ıTA\020712\0207	2/7/2012 1:29:00	1	R46055		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	%	20.287	20.287		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
903181	1201804-037bdup	ASTM-D2504	DUP	ıTA\020712\0207	2/7/2012 1:44:00	1	R46055		0	903180	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.526	0.526		0	0	0.529	0.025	0.1	0	0%	0	0	1%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	78.678	78.678		0	0	79.231	0.025	0.1	0	0%	0	0	1%	
Oxygen	A	%	20.144	20.144		0	0	20.287	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
903182	ccv std 1-2 b	ASTM-D2504	CCV	ıTA\020712\0207	2/7/2012 2:03:00	1	R46055		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.666	2.666		2.5	0	0	0.025	0.1	0	107%	85	115	0%	
Carbon Monoxide	A	%	2.72	2.72		2.5	0	0	0.025	0.1	0	109%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.113	2.113		2	0	0	0.025	0.5	0	106%	85	115	0%	
Nitrogen	A	%	2.751	2.751		2.5	0	0	0.025	0.1	0	110%	85	115	0%	
Oxygen	A	%	2.518	2.518		2.5	0	0	0.025	0.1	0	101%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
903183	1201804-038b (Container-01 of 01)	ASTM-D2504	SAMP	ıTA\020712\0207	2/7/2012 2:26:00	1	R46055		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
903188	1201804-042b (Container-01 of 01)	ASTM-D2504	SAMP	\TA\020712\0207	2/7/2012 4:29:00	1	R46055		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.174	0.174		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	%	79.447	79.447		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	20.959	20.959		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
903189	ccv std 1-2 c	ASTM-D2504	CCV	\TA\020712\0207	2/7/2012 5:01:00	1	R46055		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.673	2.673		2.5	0	0	0.025	0.1	0	107%	85	115	0%	
Carbon Monoxide	A	%	2.737	2.737		2.5	0	0	0.025	0.1	0	109%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.132	2.132		2	0	0	0.025	0.5	0	107%	85	115	0%	
Nitrogen	A	%	2.8	2.8		2.5	0	0	0.025	0.1	0	112%	85	115	0%	
Oxygen	A	%	2.539	2.539		2.5	0	0	0.025	0.1	0	102%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
903190	crql std 2% c	ASTM-D2504	CRQL	\TA\020712\0207	2/7/2012 5:23:00	1	R46055		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.317	0.317		0.3	0	0	0.025	0.1	0	106%	80	120	0%	
Carbon Monoxide	A	%	0.15	0.15		0.14	0	0	0.025	0.1	0	107%	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	%	0.097	0.097		0.09	0	0	0.025	0.5	0	108%	80	120	0%	
Nitrogen	A	%	1.432	1.432		1.39	0	0	0.025	0.1	0	103%	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\2\DATA\020712\02071202.D Vial: 1
Acq On : 7 Feb 2012 9:34 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV 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	2.476	1.0	0	0.06
2	Nitrogen	2.500	2.653	-6.1	0	0.04
3	Carbon Monoxide	2.500	2.698	-7.9	0	0.01
4	Methane	2.000	2.101	-5.0	0	0.03
5	Carbon dioxide	2.500	2.638	-5.5	0	0.02

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\020712\02071202.D Vial: 1
Acq On : 7 Feb 2012 9:34 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV 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 Wed Feb 08 17:44:23 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020712\02071202.D Vial: 1
Acq On : 7 Feb 2012 9:34 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Feb 7 14:16 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 23 19:11:07 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

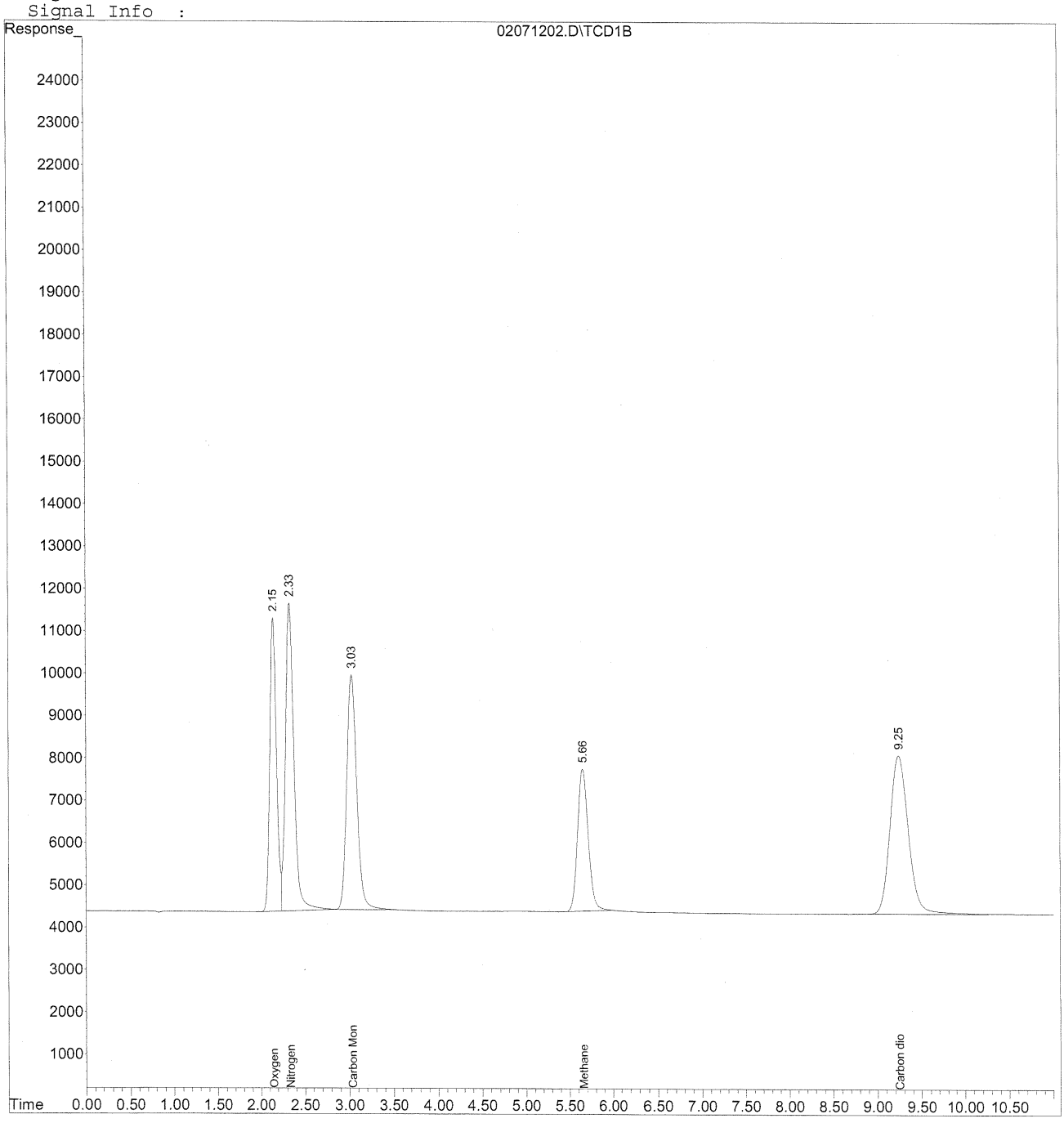
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	383617	2.476 %
2)	Nitrogen	2.34	465559	2.653 %
3)	Carbon Monoxide	3.03	434881	2.698 %
4)	Methane	5.66	283698	2.101 %
5)	Carbon dioxide	9.25	541783	2.638 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020712\02071202.D Vial: 1
Acq On : 7 Feb 2012 9:34 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 7 14:16 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 23 19:11:07 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\020712\02071216.D Vial: 1
Acq On : 7 Feb 2012 2:03 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV 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	2.518	-0.7	0	0.06
2	Nitrogen	2.500	2.751	-10.0	0	0.04
3	Carbon Monoxide	2.500	2.720	-8.8	0	0.01
4	Methane	2.000	2.113	-5.6	0	0.03
5	Carbon dioxide	2.500	2.666	-6.6	0	0.02

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\020712\02071216.D Vial: 1
Acq On : 7 Feb 2012 2:03 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV 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 Wed Feb 08 17:44:38 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020712\02071216.D Vial: 1
Acq On : 7 Feb 2012 2:03 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Feb 7 14:15 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 23 19:11:07 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

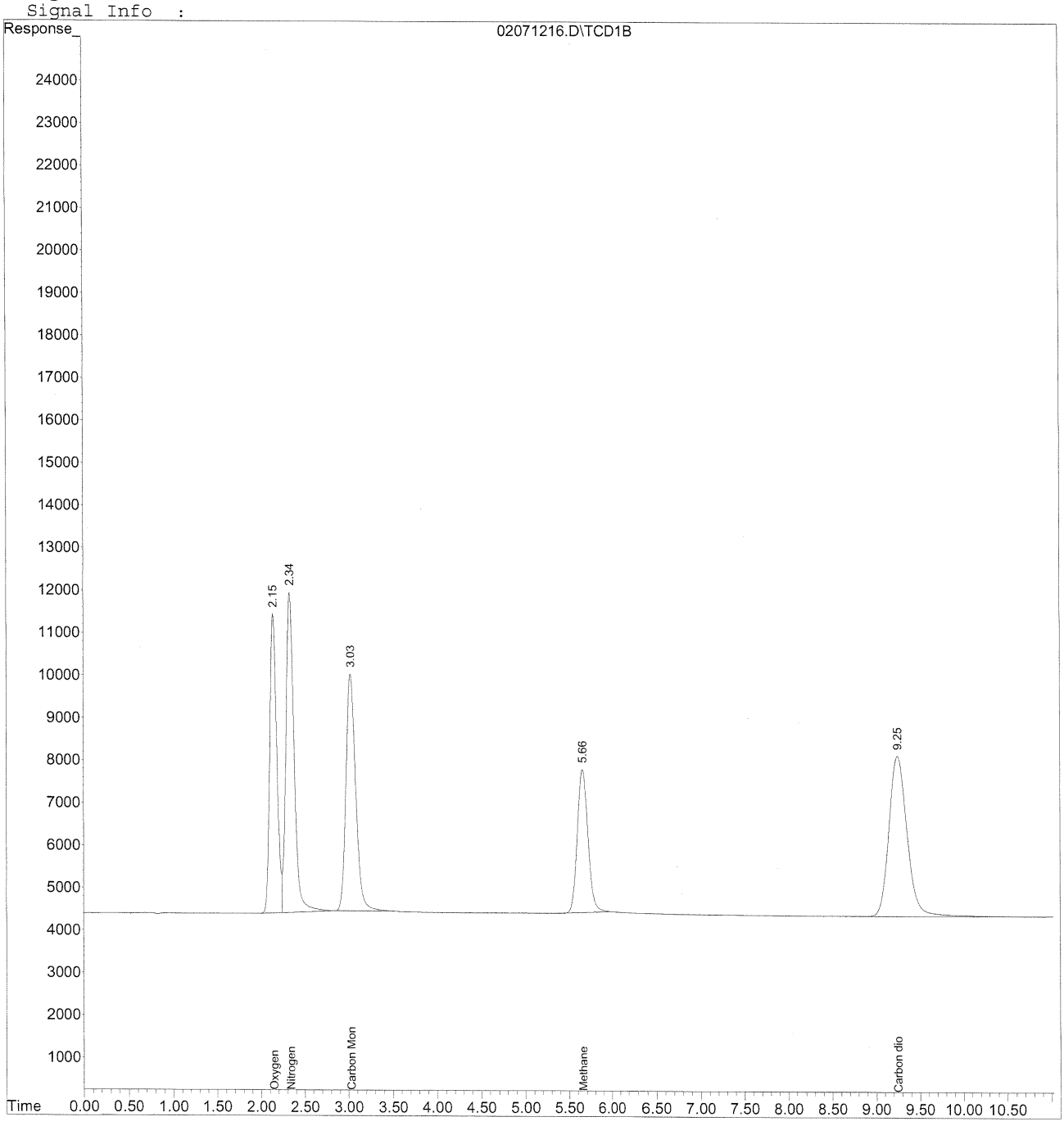
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	390019	2.518 %
2)	Nitrogen	2.34	482862	2.751 %
3)	Carbon Monoxide	3.03	438483	2.720 %
4)	Methane	5.66	285426	2.113 %
5)	Carbon dioxide	9.25	547617	2.666 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020712\02071216.D Vial: 1
Acq On : 7 Feb 2012 2:03 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 7 14:15 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 23 19:11:07 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\020712\02071223.D Vial: 1
Acq On : 7 Feb 2012 5:01 pm Operator:
Sample : ccv std 1-2 c Inst : GC/TCD
Misc : CCV 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	2.539	-1.6	0	0.05
2	Nitrogen	2.500	2.800	-12.0	0	0.02
3	Carbon Monoxide	2.500	2.737	-9.5	0	0.00
4	Methane	2.000	2.132	-6.6	0	0.01
5	Carbon dioxide	2.500	2.673	-6.9	0	-0.01

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\020712\02071223.D Vial: 1
Acq On : 7 Feb 2012 5:01 pm Operator:
Sample : ccv std 1-2 c Inst : GC/TCD
Misc : CCV 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 Wed Feb 08 17:44:48 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020712\02071223.D Vial: 1
Acq On : 7 Feb 2012 5:01 pm Operator:
Sample : ccv std 1-2 c Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Feb 7 17:21 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 23 19:11:07 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

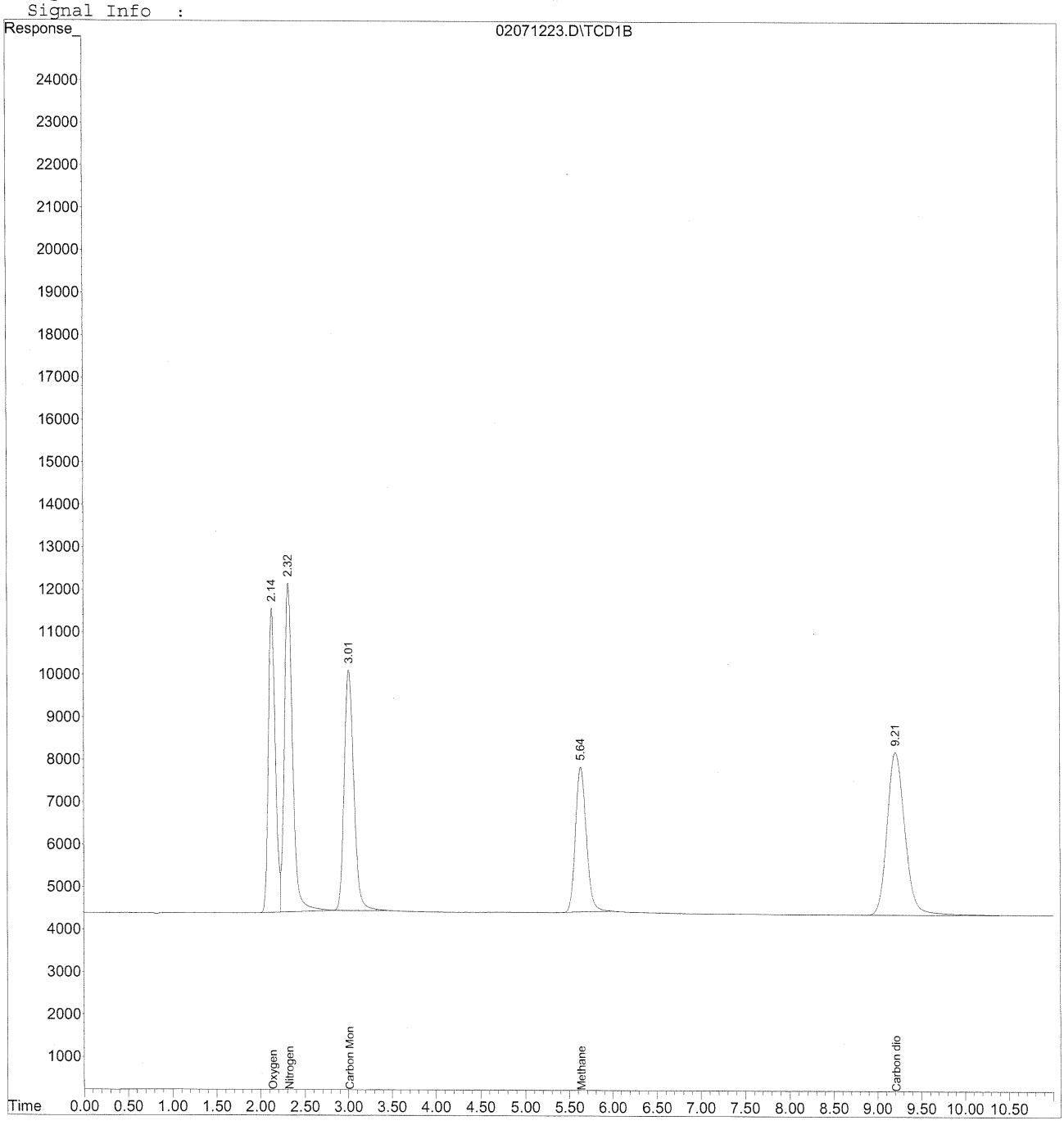
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	393394	2.539 %
2)	Nitrogen	2.32	491482	2.800 %
3)	Carbon Monoxide	3.02	441214	2.737 %
4)	Methane	5.64	287974	2.132 %
5)	Carbon dioxide	9.21	548944	2.673 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020712\02071223.D Vial: 1
Acq On : 7 Feb 2012 5:01 pm Operator:
Sample : ccv std 1-2 c Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 7 17:21 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 23 19:11:07 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



RTI Laboratories

Run ID: GC-TCD 1_120209A **Run No.:** 46093

Analytical Run Date: 2/9/2012 **InstrumentID:** GC-TCD 1

Analyst: Mike Budziak **Column:** GC-TCD 1

Calibration ID: 45325 **Column ID:** 100/120mesh x 1mm ID

Column Length: 2m

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
mblk	ASTM-D2504	MBLK	R46093	2/9/2012 9:19:00 AM	Robert Lynch		
ccv std 1-2 a	ASTM-D2504	CCV	R46093	2/9/2012 9:34:00 AM	Robert Lynch		
lcs	ASTM-D2504	LCS	R46093	2/9/2012 9:52:00 AM	Robert Lynch		
crql std 2% a	ASTM-D2504	CRQL	R46093	2/9/2012 10:11:00 AM	Robert Lynch		
1201804-044b	ASTM-D2504	SAMP	R46093	2/9/2012 10:26:00 AM	Robert Lynch		
1201804-045b	ASTM-D2504	SAMP	R46093	2/9/2012 11:07:00 AM	Robert Lynch		
1201804-046b	ASTM-D2504	SAMP	R46093	2/9/2012 12:18:00 PM	Robert Lynch		
1201804-047b	ASTM-D2504	SAMP	R46093	2/9/2012 12:59:00 PM	Robert Lynch		
1201804-048b	ASTM-D2504	SAMP	R46093	2/9/2012 3:57:00 PM	Robert Lynch		
1201804-048bdup	ASTM-D2504	DUP	R46093	2/9/2012 4:21:00 PM	Robert Lynch		
ccv std 1-2 b	ASTM-D2504	CCV	R46093	2/9/2012 4:36:00 PM	Robert Lynch		
crql std 2% b	ASTM-D2504	CRQL	R46093	2/9/2012 5:08:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

27-Feb-12

RunNo 46093

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
903917	mblk	ASTM-D2504	MBLK	\TA\020912\0209	2/9/2012 9:19:00	1	R46093		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
903918	ccv std 1-2 a	ASTM-D2504	CCV	\TA\020912\0209	2/9/2012 9:34:00	1	R46093		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.633	2.633		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Carbon Monoxide	A	%	2.685	2.685		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	%	2.09	2.09		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.639	2.639		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Oxygen	A	%	2.465	2.465		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
903919	lcs	ASTM-D2504	LCS	\TA\020912\0209	2/9/2012 9:52:00	1	R46093		0	903918	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.654	2.654		2.5	0	2.633	0.025	0.1	0	106%	70	130	1%	
Carbon Monoxide	A	%	2.697	2.697		2.5	0	2.685	0.025	0.1	0	108%	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%	
Methane	A	%	2.098	2.098		2	0	2.09	0.025	0.5	0	105%	70	130	0%	
Nitrogen	A	%	2.649	2.649		2.5	0	2.639	0.025	0.1	0	106%	70	130	0%	
Oxygen	A	%	2.476	2.476		2.5	0	2.465	0.025	0.1	0	99%	70	130	0%	

1

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
903925	1201804-048b (Container-01 of 01)	ASTM-D2504	SAMP	\TA\020912\0209	2/9/2012 3:57:00	1	R46093		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	%	21.249	21.249		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
903926	1201804-048bdup	ASTM-D2504	DUP	\TA\020912\0209	2/9/2012 4:21:00	1	R46093		0	903925	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.056	0.056		0	0	0.057	0.025	0.1	0	0%	0	0	2%	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	%	79.222	79.222		0	0	79.603	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	21.148	21.148		0	0	21.249	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
903927	ccv std 1-2 b	ASTM-D2504	CCV	\TA\020912\0209	2/9/2012 4:36:00	1	R46093		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.621	2.621		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Carbon Monoxide	A	%	2.686	2.686		2.5	0	0	0.025	0.1	0	107%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.089	2.089		2	0	0	0.025	0.5	0	104%	85	115	0%	
Nitrogen	A	%	2.846	2.846		2.5	0	0	0.025	0.1	0	114%	85	115	0%	
Oxygen	A	%	2.522	2.522		2.5	0	0	0.025	0.1	0	101%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
903928	crql std 2% b	ASTM-D2504	CRQL	\TA\020912\0209	2/9/2012 5:08:00	1	R46093		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.313	0.313		0.3	0	0	0.025	0.1	0	104%	80	120	0%	
Carbon Monoxide	A	%	0.149	0.149		0.14	0	0	0.025	0.1	0	106%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\020912\02091202.D Vial: 1
Acq On : 9 Feb 2012 9:34 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV 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	2.465	1.4	0	0.05
2	Nitrogen	2.500	2.639	-5.6	0	0.03
3	Carbon Monoxide	2.500	2.685	-7.4	0	0.00
4	Methane	2.000	2.090	-4.5	0	0.03
5	Carbon dioxide	2.500	2.633	-5.3	0	0.01

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\020912\02091202.D Vial: 1
Acq On : 9 Feb 2012 9:34 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV 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 Thu Feb 09 18:39:45 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020912\02091202.D Vial: 1
Acq On : 9 Feb 2012 9:34 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Feb 9 9:51 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 23 19:11:07 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

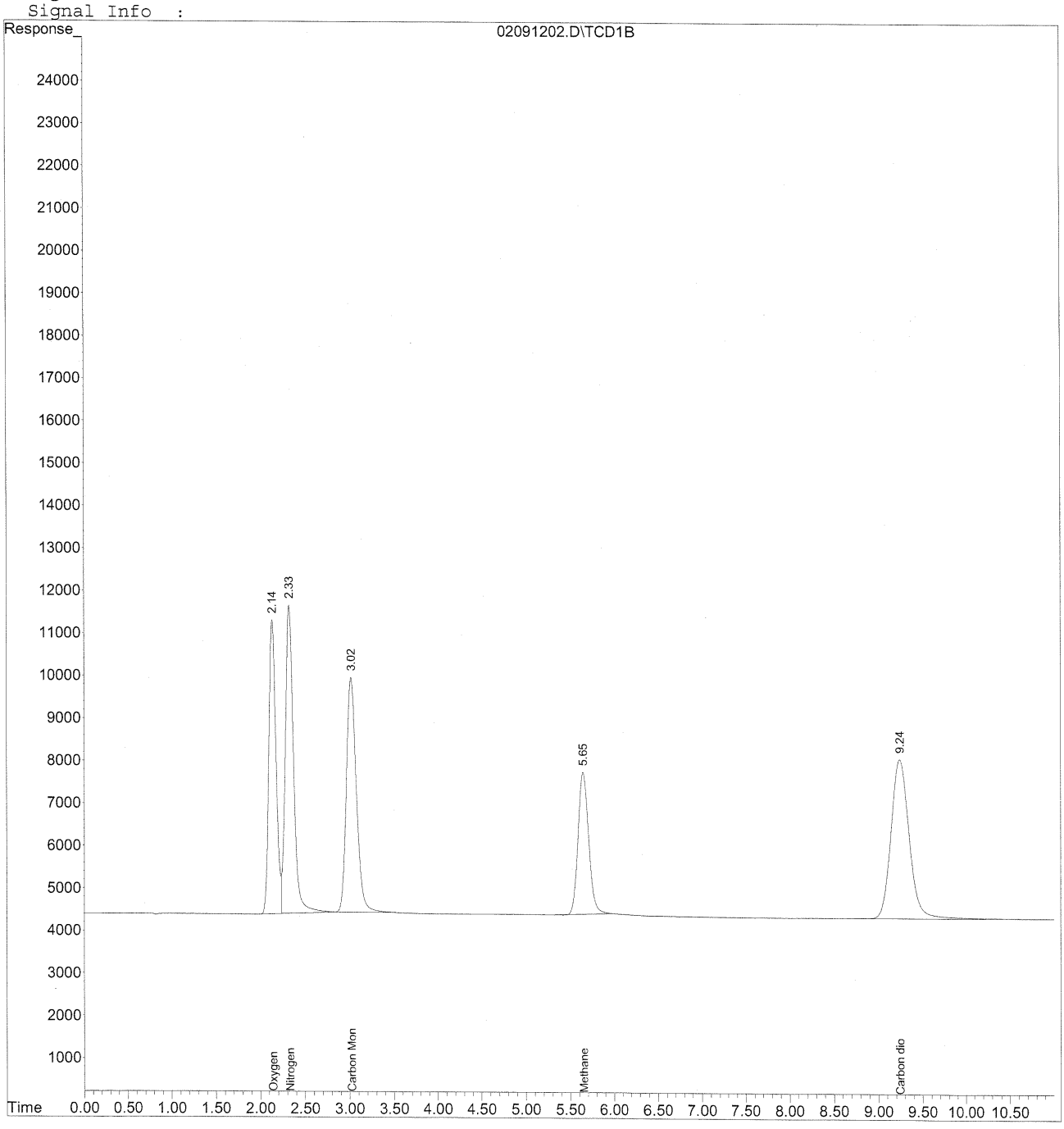
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	381925	2.465 %
2)	Nitrogen	2.33	463195	2.639 %
3)	Carbon Monoxide	3.03	432769	2.685 %
4)	Methane	5.65	282267	2.090 %
5)	Carbon dioxide	9.24	540811	2.633 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020912\02091202.D Vial: 1
Acq On : 9 Feb 2012 9:34 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 9 9:51 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 23 19:11:07 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\020912\02091211.D Vial: 1
Acq On : 9 Feb 2012 4:36 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV 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	2.522	-0.9	0	0.05
2	Nitrogen	2.500	2.846	-13.8	0	0.03
3	Carbon Monoxide	2.500	2.686	-7.4	0	0.00
4	Methane	2.000	2.089	-4.4	0	0.03
5	Carbon dioxide	2.500	2.621	-4.8	0	0.01

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\020912\02091211.D Vial: 1
Acq On : 9 Feb 2012 4:36 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV 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 Thu Feb 09 18:39:55 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020912\02091211.D Vial: 1
Acq On : 9 Feb 2012 4:36 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Feb 9 16:47 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 23 19:11:07 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	390652	2.522 %
2)	Nitrogen	2.33	499558	2.846 %
3)	Carbon Monoxide	3.03	432980	2.686 %
4)	Methane	5.65	282153	2.089 %
5)	Carbon dioxide	9.24	538238	2.621 %

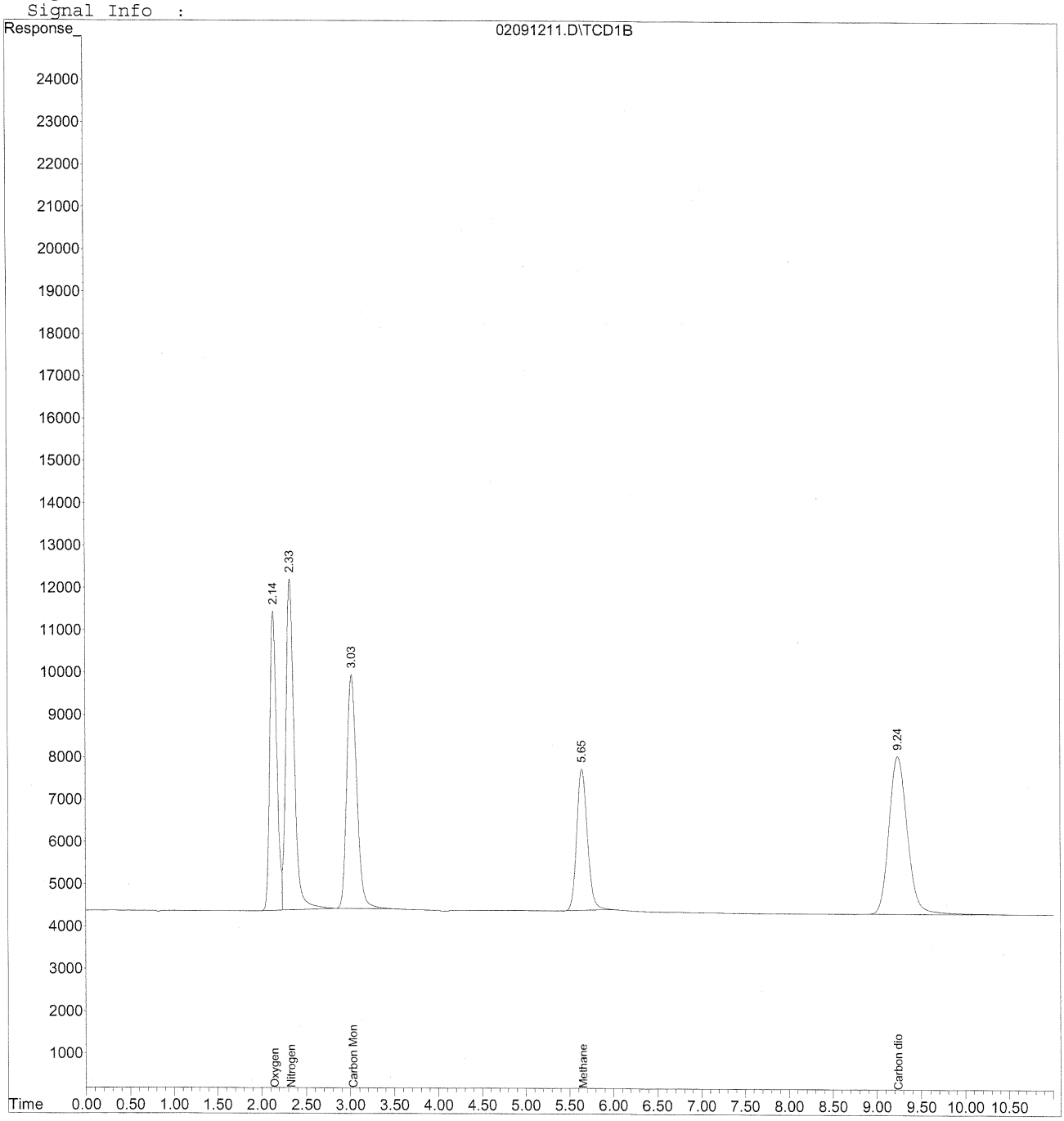
(f)=RT Delta > 1/2 Window (m)=manual int.
02091211.D 122211.M Thu Feb 09 18:39:11 2012 TESTCAL Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020912\02091211.D Vial: 1
Acq On : 9 Feb 2012 4:36 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 9 16:47 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 23 19:11:07 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 Mon Jan 09 11:49:54 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 Mon Jan 09 11:49:40 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 Mon Jan 09 11:49:02 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

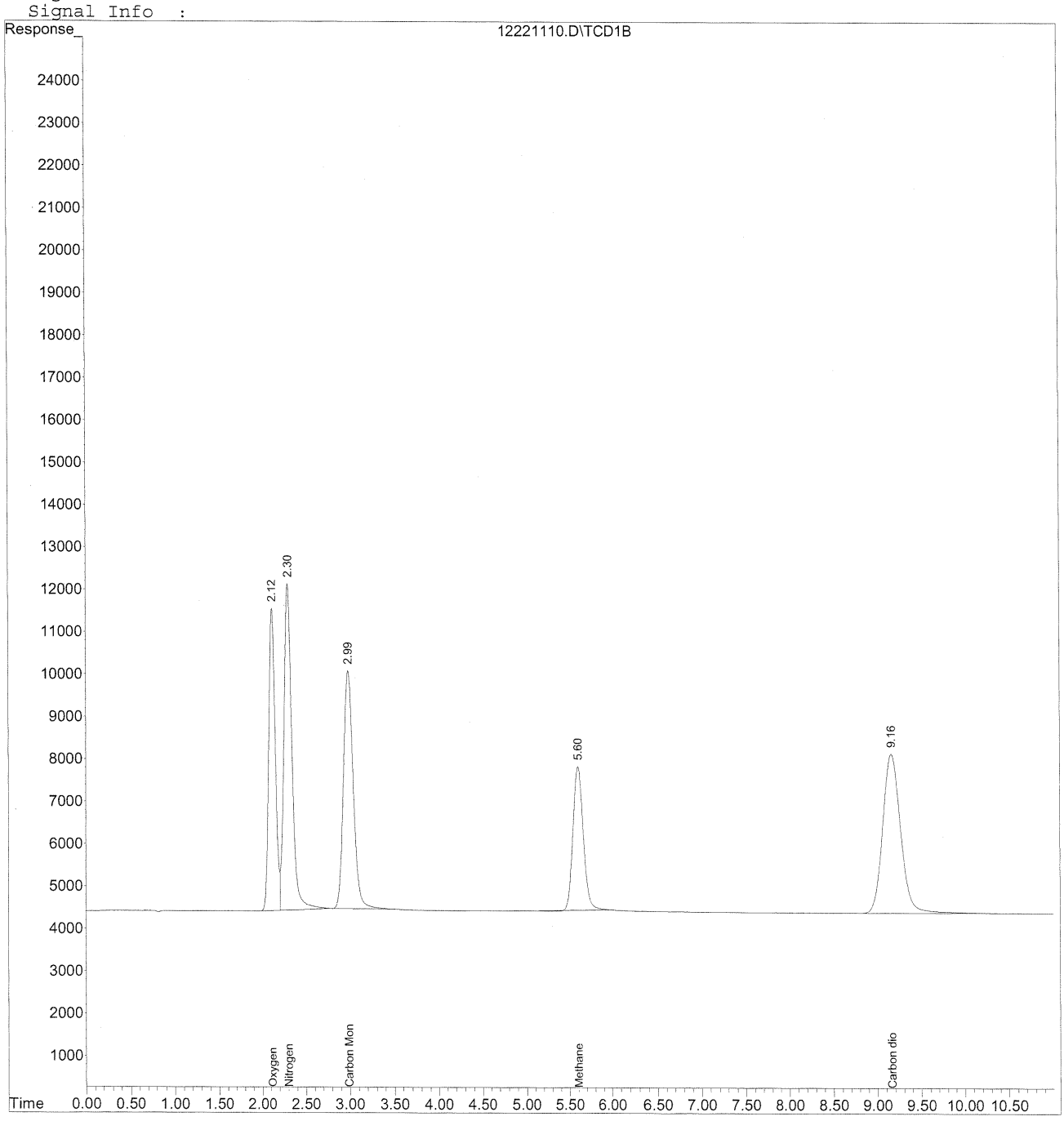
Volume Inj. :
Signal Phase :
Signal Info :

	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 :