RTI Laboratories, Inc.

Date: *15-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: 1201592

CASE NARRATIVE

Revised Report 02/15/2012: On data review, it was noted that the reference number in the LIMS was incorrectly applied to the sample duplicate. RPD values for the duplicate (1201592-026ADUP) were incorrectly calculated as 0%. This reference number has been corrected and the revised calculated RPD values are within control limits. The EDD has been revised to reflect this change.

SAMPLE RECEIPT:
Samples were received at the RTI Laboratory, Livonia, MI via commercial delivery on 1/19/2012. Samples were received in good condition, except for client sample IDs VA1026 and VA1005. The nozzles on the bottle vacs were slightly open (TO-15); TO-15 was not analyzed on these samples. The sample set consisted of 50 air samples.

SAMPLE ANALYSIS:
Samples were analyzed at the RTI Livonia Laboratory for:
Volatile Organic Compounds – EPA Method TO15
Air-Phase Petroleum Hydrocarbons – MA_APH (Massachusetts DEP APH Method)
Fixed Gases (Noncondensable Gases/Light Hydrocarbons) – ASTM D2504

QUALITY CONTROL:

Volatile Organic Compounds Analyses:

All sample analyses included a Method Blank, CCV, RLVS (CRQL) and Duplicate. All QC parameters were within established control limits except where noted on the QC forms or below. Initial and continuing calibration results were within method specifications. MS tuning parameters were within the acceptable ranges for the method.

Surrogate recoveries were within established control limits.

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 45908:

- Sample ID 1201676-010Adup exhibited elevated RPD results for C9-C12 Aliphatic Hydrocarbons (38.5%).

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CASE NARRATIVE

Fixed Gases (Noncondensable Gases/Light Hydrocarbons) Analyses:

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

Samples collected in Tedlar bags have a limited holding time as specified by the manufacturer for the collection of volatile organic compounds. There is no known stability data for the analytes of interest for this project collected in Tedlar bags. The standard holding time is 48 hours for Tedlar bags. Due to the nature of the project sample analysis within 48 hours was not feasible

No other problems were noted during the analytical events associated with this project.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Laboratory Director or his designee, as verified by the following signature.

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

Date: 2/15/2012

RTI Laboratories - Definitions and Acronyms

WO#: 1201592

Date Reported: 2/10/2012
Revision v2

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

Reference Document No: 140705-SV071

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

Samples Shipment Date: 13 JAN 2012
Lab Destination: RTI Laboratories
Lab Contact: Mike Truchan
Project Contact: Pamela Moss
Carrier/Waybill No.: UPS/2323121275

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: 1201592

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

Sample Disposal:
Return to Client | Disposal by Lab X | Archive (mos.)

1. Relinquished By (Signature/Affiliation) Antonio Shaw — Date: 1/13/12 Time: 1253
2. Relinquished By (Signature/Affiliation) — Date: Time:
3. Relinquished By (Signature/Affiliation) — Date: Time:

1. Received By (Signature/Affiliation) — Date: Time:
2. Received By (Signature/Affiliation) — Date: Time:
3. Received By (Signature/Affiliation) — Date: Time:

Comments:

Bottles

Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	~~Condition On Receipt~~
VA1002	SVMW-01-050-GS-VA1002-REG	10 JAN 2012	13:56	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0808
VA1002	SVMW-01-050-GS-VA1002-REG	10 JAN 2012	13:56	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1003	SVMW-01-050-GS-VA1003-FD	10 JAN 2012	13:56	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0813
VA1003	SVMW-01-050-GS-VA1003-FD	10 JAN 2012	13:56	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1004	SVMW-01-100-GS-VA1004-REG	10 JAN 2012	14:44	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0804
VA1004	SVMW-01-100-GS-VA1004-REG	10 JAN 2012	14:44	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1005	SVMW-01-250-GS-VA1005-REG	10 JAN 2012	15:09	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by			N		0763

sample was compromised upon receipt. Nalia 1:15 pm

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV071

1201592

Bottles

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	~~Condition On Receipt~~
VA1005	SVMW-01-250-GS-VA1005-REG	10 JAN 2012	15:09	1 L Tedlar Bag	1	None Required	MA DEP, VOCs / TPH by TO-15 Fixed Gases by ASTM D2504			N		
VA1006	SVMW-01-300-GS-VA1006-REG	10 JAN 2012	15:35	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		10
VA1006	SVMW-01-300-GS-VA1006-REG	10 JAN 2012	15:35	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1023	SVMW-06-050-GS-VA1023-REG	10 JAN 2012	10:30	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0698
VA1023	SVMW-06-050-GS-VA1023-REG	10 JAN 2012	10:30	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1024	SVMW-06-100-GS-VA1024-REG	10 JAN 2012	11:09	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0664
VA1024	SVMW-06-100-GS-VA1024-REG	10 JAN 2012	11:09	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1025	SVMW-06-252-GS-VA1025-REG	10 JAN 2012	11:40	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0756
VA1025	SVMW-06-252-GS-VA1025-REG	10 JAN 2012	11:40	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1026	SVMW-06-302-GS-VA1026-REG	10 JAN 2012	12:10	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0793
VA1026	SVMW-06-302-GS-VA1026-REG	10 JAN 2012	12:10	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1062	SVMW-15-150-GS-VA1062-REG	12 JAN 2012	08:55	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		532
VA1062	SVMW-15-150-GS-VA1062-REG	12 JAN 2012	08:55	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1063	SVMW-15-250-GS-VA1063-REG	12 JAN 2012	09:34	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		~~532~~ 797
VA1063	SVMW-15-250-GS-VA1063-REG	12 JAN 2012	09:34	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1064	SVMW-15-350-GS-VA1064-REG	12 JAN 2012	10:19	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		70
VA1064	SVMW-15-350-GS-VA1064-REG	12 JAN 2012	10:19	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1065	SVMW-15-450-GS-VA1065-REG	12 JAN 2012	11:13	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0679
VA1065	SVMW-15-450-GS-VA1065-REG	12 JAN 2012	11:13	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1083	SVEW-13-410-GS-VA1083-REG	12 JAN 2012	11:57	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		551
VA1083	SVEW-13-410-GS-VA1083-REG	12 JAN 2012	11:57	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1111	KAFB-106112-025-GS-VA1111-REG	12 JAN 2012	11:34	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		535
VA1111	KAFB-106112-025-GS-VA1111-REG	12 JAN 2012	11:34	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1112	KAFB-106112-050-GS-VA1112-REG	12 JAN 2012	12:12	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		526
VA1112	KAFB-106112-050-GS-VA1112-REG	12 JAN 2012	12:12	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1113	KAFB-106112-150-GS-VA1113-REG	12 JAN 2012	12:42	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		559
VA1113	KAFB-106112-150-GS-VA1113-REG	12 JAN 2012	12:42	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		

Sample was compromised upon receipt 1/19/12 11:15 am

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV071

120592

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1114	KAFB-106112-250-GS-VA1114-REG	12 JAN 2012	13:15	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1114	KAFB-106112-250-GS-VA1114-REG	12 JAN 2012	13:15	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1115	KAFB-106112-350-GS-VA1115-REG	12 JAN 2012	13:48	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1115	KAFB-106112-350-GS-VA1115-REG	12 JAN 2012	13:48	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1116	KAFB-106112-450-GS-VA1116-REG	12 JAN 2012	14:30	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1116	KAFB-106112-450-GS-VA1116-REG	12 JAN 2012	14:30	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1144	KAFB-106117-025-GS-VA1144-REG	12 JAN 2012	15:21	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1144	KAFB-106117-025-GS-VA1144-REG	12 JAN 2012	15:21	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1145	KAFB-106117-050-GS-VA1145-REG	12 JAN 2012	15:50	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1145	KAFB-106117-050-GS-VA1145-REG	12 JAN 2012	15:50	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
* VA1170	KAFB-106121-025-GS-VA1170-REG	10 JAN 2012	11:25	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
* VA1170	KAFB-106121-025-GS-VA1170-REG	10 JAN 2012	11:25	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
* VA1171	KAFB-106121-025-GS-VA1171-FD	10 JAN 2012	11:25	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
* VA1171	KAFB-106121-025-GS-VA1171-FD	10 JAN 2012	11:25	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
* VA1172	KAFB-106121-050-GS-VA1172-REG	10 JAN 2012	12:12	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
* VA1172	KAFB-106121-050-GS-VA1172-REG	10 JAN 2012	12:12	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
* VA1173	KAFB-106121-145-GS-VA1173-REG	10 JAN 2012	12:45	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
* VA1173	KAFB-106121-145-GS-VA1173-REG	10 JAN 2012	12:45	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1174	KAFB-106121-250-GS-VA1174-REG	10 JAN 2012	13:24	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1174	KAFB-106121-250-GS-VA1174-REG	10 JAN 2012	13:24	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1175	KAFB-106121-350-GS-VA1175-REG	10 JAN 2012	14:00	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1175	KAFB-106121-350-GS-VA1175-REG	10 JAN 2012	14:00	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1176	KAFB-106121-450-GS-VA1176-REG	10 JAN 2012	14:50	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1176	KAFB-106121-450-GS-VA1176-REG	10 JAN 2012	14:50	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1177	KAFB-106122-025-GS-VA1177-REG	10 JAN 2012	15:47	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1177	KAFB-106122-025-GS-VA1177-REG	10 JAN 2012	15:47	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1178	KAFB-106122-050-GS-VA1178-REG	10 JAN 2012	16:13	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1178	KAFB-106122-050-GS-VA1178-REG	10 JAN 2012	16:13	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		

VA1170 KAFB-106121-050-GS-VA1170-REG
VA1171 KAFB-106121-050-GS-VA1171-FD
VA1172 KAFB-106121-025-GS-VA1172-REG
VA1173 KAFB-106121-145-GS-VA1173-REG

SH 5/14/2012

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV071

1201592

Bottles

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID
VA1179	KAFB-106122-150-GS-VA1179-REG	11 JAN 2012	9:42	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	
VA1179	KAFB-106122-150-GS-VA1179-REG	11 JAN 2012	9:42	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1180	KAFB-106122-250-GS-VA1180-REG	11 JAN 2012	10:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	0675
VA1180	KAFB-106122-250-GS-VA1180-REG	11 JAN 2012	10:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1181	KAFB-106122-250-GS-VA1181-FD	11 JAN 2012	10:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	0694
VA1181	KAFB-106122-250-GS-VA1181-FD	11 JAN 2012	10:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1182	KAFB-106122-350-GS-VA1182-REG	11 JAN 2012	11:20	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	
VA1182	KAFB-106122-350-GS-VA1182-REG	11 JAN 2012	11:20	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1183	KAFB-106122-450-GS-VA1183-REG	11 JAN 2012	12:04	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1183	KAFB-106122-450-GS-VA1183-REG	11 JAN 2012	12:04	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	
VA1184	KAFB-106123-025-GS-VA1184-REG	11 JAN 2012	13:30	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	
VA1184	KAFB-106123-025-GS-VA1184-REG	11 JAN 2012	13:30	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1185	KAFB-106123-050-GS-VA1185-REG	11 JAN 2012	14:01	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	
VA1185	KAFB-106123-050-GS-VA1185-REG	11 JAN 2012	14:01	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1186	KAFB-106123-150-GS-VA1186-REG	11 JAN 2012	14:40	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	0581
VA1186	KAFB-106123-150-GS-VA1186-REG	11 JAN 2012	14:40	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1187	KAFB-106123-250-GS-VA1187-REG	11 JAN 2012	15:14	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	
VA1187	KAFB-106123-250-GS-VA1187-REG	11 JAN 2012	15:14	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1188	KAFB-106123-350-GS-VA1188-REG	11 JAN 2012	15:48	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1188	KAFB-106123-350-GS-VA1188-REG	11 JAN 2012	15:48	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	
VA1189	KAFB-106123-450-GS-VA1189-REG	11 JAN 2012	16:24	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	
VA1189	KAFB-106123-450-GS-VA1189-REG	11 JAN 2012	16:24	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1230	KAFB-106130-025-GS-VA1230-REG	12 JAN 2012	13:39	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	0843
VA1230	KAFB-106130-025-GS-VA1230-REG	12 JAN 2012	13:39	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1231	KAFB-106130-050-GS-VA1231-REG	12 JAN 2012	14:11	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	0728
VA1231	KAFB-106130-050-GS-VA1231-REG	12 JAN 2012	14:11	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1232	KAFB-106130-050-GS-VA1232-FD	12 JAN 2012	14:11	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	0826
VA1232	KAFB-106130-050-GS-VA1232-FD	12 JAN 2012	14:11	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	

C

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV071

1201592

Bottles

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID
VA1179	KAFB-106122-150-GS-VA1179-REG	11 JAN 2012	9:42	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	521
VA1179	KAFB-106122-150-GS-VA1179-REG	11 JAN 2012	9:42	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1180	KAFB-106122-250-GS-VA1180-REG	11 JAN 2012	10:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	
VA1180	KAFB-106122-250-GS-VA1180-REG	11 JAN 2012	10:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1181	KAFB-106122-250-GS-VA1181-FD	11 JAN 2012	10:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	
VA1181	KAFB-106122-250-GS-VA1181-FD	11 JAN 2012	10:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1182	KAFB-106122-350-GS-VA1182-REG	11 JAN 2012	11:20	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	555
VA1182	KAFB-106122-350-GS-VA1182-REG	11 JAN 2012	11:20	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1183	KAFB-106122-450-GS-VA1183-REG	11 JAN 2012	12:04	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1183	KAFB-106122-450-GS-VA1183-REG	11 JAN 2012	12:04	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	615
VA1184	KAFB-106123-025-GS-VA1184-REG	11 JAN 2012	13:30	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	537
VA1184	KAFB-106123-025-GS-VA1184-REG	11 JAN 2012	13:30	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1185	KAFB-106123-050-GS-VA1185-REG	11 JAN 2012	14:01	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	583
VA1185	KAFB-106123-050-GS-VA1185-REG	11 JAN 2012	14:01	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1186	KAFB-106123-150-GS-VA1186-REG	11 JAN 2012	14:40	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	
VA1186	KAFB-106123-150-GS-VA1186-REG	11 JAN 2012	14:40	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1187	KAFB-106123-250-GS-VA1187-REG	11 JAN 2012	15:14	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	630
VA1187	KAFB-106123-250-GS-VA1187-REG	11 JAN 2012	15:14	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1188	KAFB-106123-350-GS-VA1188-REG	11 JAN 2012	15:48	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1188	KAFB-106123-350-GS-VA1188-REG	11 JAN 2012	15:48	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	585
VA1189	KAFB-106123-450-GS-VA1189-REG	11 JAN 2012	16:24	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	785
VA1189	KAFB-106123-450-GS-VA1189-REG	11 JAN 2012	16:24	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1230	KAFB-106130-025-GS-VA1230-REG	12 JAN 2012	13:39	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	
VA1230	KAFB-106130-025-GS-VA1230-REG	12 JAN 2012	13:39	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1231	KAFB-106130-050-GS-VA1231-REG	12 JAN 2012	14:11	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	
VA1231	KAFB-106130-050-GS-VA1231-REG	12 JAN 2012	14:11	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	
VA1232	KAFB-106130-050-GS-VA1232-FD	12 JAN 2012	14:11	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N	
VA1232	KAFB-106130-050-GS-VA1232-FD	12 JAN 2012	14:11	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	

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C

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV071

1201592

Bottles

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	~~Addition Info~~
VA1233	KAFB-106130-150-GS-VA1233-REG	12 JAN 2012	15:05	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1233	KAFB-106130-150-GS-VA1233-REG	12 JAN 2012	15:05	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		713
VA1234	KAFB-106130-250-GS-VA1234-REG	12 JAN 2012	15:49	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		624
VA1234	KAFB-106130-250-GS-VA1234-REG	12 JAN 2012	15:49	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1235	KAFB-106130-350-GS-VA1235-REG	13 JAN 2012	09:15	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		651
VA1235	KAFB-106130-350-GS-VA1235-REG	13 JAN 2012	09:15	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1236	KAFB-106130-450-GS-VA1236-REG	13 JAN 2012	10:18	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		745
VA1236	KAFB-106130-450-GS-VA1236-REG	13 JAN 2012	10:18	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA8071-TB	FIELDQC-AQ-VA8071-TB-TB	10 JAN 2012	8:00	1 L BOTTLEVAC	1	None Required	VOCs / TPH by TO-15			N		750

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV071

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

Samples Shipment Date: 13 JAN 2012
Lab Destination: RTI Laboratories
Lab Contact: Mike Truchan
Project Contact: Pamela Moss
Carrier/Waybill No.: UPS/2323121275

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: 1201592

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

Sample Disposal:
Return to Client | Disposal by Lab X | Archive | (mos.)

1. Relinquished By (Signature/Affiliation): Antonio Flores Shaw — Date: 1/13/12 Time: 1253
2. Relinquished By (Signature/Affiliation): Date: Time:
3. Relinquished By (Signature/Affiliation): Date: Time:

1. Received By (Signature/Affiliation): Cedo Flores / RTI Labs — Date: 1-19-12 Time: 10:02
2. Received By (Signature/Affiliation): Date: Time:
3. Received By (Signature/Affiliation): Date: Time:

Comments:

Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1002	SVMW-01-050-GS-VA1002-REG	10 JAN 2012	13:56	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1002	SVMW-01-050-GS-VA1002-REG	10 JAN 2012	13:56	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1003	SVMW-01-050-GS-VA1003-FD	10 JAN 2012	13:56	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1003	SVMW-01-050-GS-VA1003-FD	10 JAN 2012	13:56	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1004	SVMW-01-100-GS-VA1004-REG	10 JAN 2012	14:44	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1004	SVMW-01-100-GS-VA1004-REG	10 JAN 2012	14:44	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1005	SVMW-01-250-GS-VA1005-REG	10 JAN 2012	15:09	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by			N		

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

1201592

Reference Document No: 140705-SV071

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1005	SVMW-01-250-GS-VA1005-REG	10 JAN 2012	15:09	1 L Tedlar Bag	1	None Required	MA DEP, VOCs / TPH by TO-15 Fixed Gases by ASTM D2504			N		
VA1006	SVMW-01-300-GS-VA1006-REG	10 JAN 2012	15:35	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1006	SVMW-01-300-GS-VA1006-REG	10 JAN 2012	15:35	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1023	SVMW-06-050-GS-VA1023-REG	10 JAN 2012	10:30	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1023	SVMW-06-050-GS-VA1023-REG	10 JAN 2012	10:30	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1024	SVMW-06-100-GS-VA1024-REG	10 JAN 2012	11:09	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1024	SVMW-06-100-GS-VA1024-REG	10 JAN 2012	11:09	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1025	SVMW-06-252-GS-VA1025-REG	10 JAN 2012	11:40	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1025	SVMW-06-252-GS-VA1025-REG	10 JAN 2012	11:40	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1026	SVMW-06-302-GS-VA1026-REG	10 JAN 2012	12:10	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1026	SVMW-06-302-GS-VA1026-REG	10 JAN 2012	12:10	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1062	SVMW-15-150-GS-VA1062-REG	12 JAN 2012	08:55	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1062	SVMW-15-150-GS-VA1062-REG	12 JAN 2012	08:55	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1063	SVMW-15-250-GS-VA1063-REG	12 JAN 2012	09:34	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1063	SVMW-15-250-GS-VA1063-REG	12 JAN 2012	09:34	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1064	SVMW-15-350-GS-VA1064-REG	12 JAN 2012	10:19	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1064	SVMW-15-350-GS-VA1064-REG	12 JAN 2012	10:19	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1065	SVMW-15-450-GS-VA1065-REG	12 JAN 2012	11:13	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1065	SVMW-15-450-GS-VA1065-REG	12 JAN 2012	11:13	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1083	SVEW-13-410-GS-VA1083-REG	12 JAN 2012	11:57	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1083	SVEW-13-410-GS-VA1083-REG	12 JAN 2012	11:57	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1111	KAFB-106112-025-GS-VA1111-REG	12 JAN 2012	11:34	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1111	KAFB-106112-025-GS-VA1111-REG	12 JAN 2012	11:34	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1112	KAFB-106112-050-GS-VA1112-REG	12 JAN 2012	12:12	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1112	KAFB-106112-050-GS-VA1112-REG	12 JAN 2012	12:12	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1113	KAFB-106112-150-GS-VA1113-REG	12 JAN 2012	12:42	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1113	KAFB-106112-150-GS-VA1113-REG	12 JAN 2012	12:42	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

1201592

Reference Document No: 140705-SV071

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1114	KAFB-106112-250-GS-VA1114-REG	12 JAN 2012	13:15	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1114	KAFB-106112-250-GS-VA1114-REG	12 JAN 2012	13:15	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1115	KAFB-106112-350-GS-VA1115-REG	12 JAN 2012	13:48	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1115	KAFB-106112-350-GS-VA1115-REG	12 JAN 2012	13:48	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1116	KAFB-106112-450-GS-VA1116-REG	12 JAN 2012	14:30	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1116	KAFB-106112-450-GS-VA1116-REG	12 JAN 2012	14:30	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1144	KAFB-106117-025-GS-VA1144-REG	12 JAN 2012	15:21	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1144	KAFB-106117-025-GS-VA1144-REG	12 JAN 2012	15:21	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1145	KAFB-106117-050-GS-VA1145-REG	12 JAN 2012	15:50	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1145	KAFB-106117-050-GS-VA1145-REG	12 JAN 2012	15:50	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1170	KAFB-106121-025-GS-VA1170-REG	10 JAN 2012	11:25	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1170	KAFB-106121-025-GS-VA1170-REG	10 JAN 2012	11:25	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1171	KAFB-106121-025-GS-VA1171-FD	10 JAN 2012	11:25	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1171	KAFB-106121-025-GS-VA1171-FD	10 JAN 2012	11:25	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1172	KAFB-106121-050-GS-VA1172-REG	10 JAN 2012	12:12	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1172	KAFB-106121-050-GS-VA1172-REG	10 JAN 2012	12:12	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1173	KAFB-106121-150-GS-VA1173-REG	10 JAN 2012	12:45	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1173	KAFB-106121-150-GS-VA1173-REG	10 JAN 2012	12:45	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1174	KAFB-106121-250-GS-VA1174-REG	10 JAN 2012	13:24	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1174	KAFB-106121-250-GS-VA1174-REG	10 JAN 2012	13:24	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1175	KAFB-106121-350-GS-VA1175-REG	10 JAN 2012	14:00	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1175	KAFB-106121-350-GS-VA1175-REG	10 JAN 2012	14:00	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1176	KAFB-106121-450-GS-VA1176-REG	10 JAN 2012	14:50	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1176	KAFB-106121-450-GS-VA1176-REG	10 JAN 2012	14:50	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1177	KAFB-106122-025-GS-VA1177-REG	10 JAN 2012	15:47	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1177	KAFB-106122-025-GS-VA1177-REG	10 JAN 2012	15:47	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1178	KAFB-106122-050-GS-VA1178-REG	10 JAN 2012	16:13	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1178	KAFB-106122-050-GS-VA1178-REG	10 JAN 2012	16:13	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

1201592

Reference Document No: 140705-SV071

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1179	KAFB-106122-150-GS-VA1179-REG	11 JAN 2012	9:42	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1179	KAFB-106122-150-GS-VA1179-REG	11 JAN 2012	9:42	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1180	KAFB-106122-250-GS-VA1180-REG	11 JAN 2012	10:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1180	KAFB-106122-250-GS-VA1180-REG	11 JAN 2012	10:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1181	KAFB-106122-250-GS-VA1181-FD	11 JAN 2012	10:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1181	KAFB-106122-250-GS-VA1181-FD	11 JAN 2012	10:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1182	KAFB-106122-350-GS-VA1182-REG	11 JAN 2012	11:20	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1182	KAFB-106122-350-GS-VA1182-REG	11 JAN 2012	11:20	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1183	KAFB-106122-450-GS-VA1183-REG	11 JAN 2012	12:04	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1183	KAFB-106122-450-GS-VA1183-REG	11 JAN 2012	12:04	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1184	KAFB-106123-025-GS-VA1184-REG	11 JAN 2012	13:30	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1184	KAFB-106123-025-GS-VA1184-REG	11 JAN 2012	13:30	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1185	KAFB-106123-050-GS-VA1185-REG	11 JAN 2012	14:01	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1185	KAFB-106123-050-GS-VA1185-REG	11 JAN 2012	14:01	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1186	KAFB-106123-150-GS-VA1186-REG	11 JAN 2012	14:40	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1186	KAFB-106123-150-GS-VA1186-REG	11 JAN 2012	14:40	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1187	KAFB-106123-250-GS-VA1187-REG	11 JAN 2012	15:14	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1187	KAFB-106123-250-GS-VA1187-REG	11 JAN 2012	15:14	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1188	KAFB-106123-350-GS-VA1188-REG	11 JAN 2012	15:48	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1188	KAFB-106123-350-GS-VA1188-REG	11 JAN 2012	15:48	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1189	KAFB-106123-450-GS-VA1189-REG	11 JAN 2012	16:24	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1189	KAFB-106123-450-GS-VA1189-REG	11 JAN 2012	16:24	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1230	KAFB-106130-025-GS-VA1230-REG	12 JAN 2012	13:39	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1230	KAFB-106130-025-GS-VA1230-REG	12 JAN 2012	13:39	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1231	KAFB-106130-050-GS-VA1231-REG	12 JAN 2012	14:11	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1231	KAFB-106130-050-GS-VA1231-REG	12 JAN 2012	14:11	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1232	KAFB-106130-050-GS-VA1232-FD	12 JAN 2012	14:11	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1232	KAFB-106130-050-GS-VA1232-FD	12 JAN 2012	14:11	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		

Shaw™
Shaw E & I, Inc.

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV071

1201592

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1233	KAFB-106130-150-GS-VA1233-REG	12 JAN 2012	15:05	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1233	KAFB-106130-150-GS-VA1233-REG	12 JAN 2012	15:05	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1234	KAFB-106130-250-GS-VA1234-REG	12 JAN 2012	15:49	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1234	KAFB-106130-250-GS-VA1234-REG	12 JAN 2012	15:49	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1235	KAFB-106130-350-GS-VA1235-REG	13 JAN 2012	09:15	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1235	KAFB-106130-350-GS-VA1235-REG	13 JAN 2012	09:15	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1236	KAFB-106130-450-GS-VA1236-REG	13 JAN 2012	10:18	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1236	KAFB-106130-450-GS-VA1236-REG	13 JAN 2012	10:18	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA8071-TB	FIELDQC-AQ-VA8071-TB-TB	10 JAN 2012	8:00	1 L BOTTLEVAC	1	None Required	VOCs / TPH by TO-15			N		

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

50 LBS **1 OF 5**
DWT: 25,25,25

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4043 8845

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

REF 1:140705
REF 2:BB010030

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

CUSTODY SEAL
DATE 1/15/12
SIGNATURE

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

.0A 10/2011

Fold here and place in label pouch

ITI LABORATORIES
31628 GLENDALE ST

IVONIA MI 48150

P: RED2 S: MNITE I: 3
19F – FL2
Z10335E034043 8845
YU9WDN MILIV113 JAN 19 05:20:28 2012
S 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

40 LBS **2 OF 5**
DWT: 24,11,15

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4256 8853

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

REF 1:140705
REF 2:BB010030

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

WS 14.0.21 HP LaserJet 4 21.0A 10/2011

Fold here and place in label pouch

CUSTODY SEAL
DATE 1/13/12
SIGNATURE

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

T - 10 Door: 1249
MI 48150
UPST 340634 MI 482 9-02

UPS GROUND

1Z10335E0342568853

P39D116 2014861 Jan 17 23:24:59 2012 US

SS1040 HIP 11.1.3 BTLP2844L 6059 N

RTI LABORATORIES
31628 GLENDALE ST

LIVONIA MI 48150

P: RED2 S: MNITE I: 3
19F – FL2
Z10335E034256 **8853**
YU9WDN MILIV113 JAN 19 05:21:46 2012
S 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

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

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4055 3461

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

REF 1:140705
REF 2:BB010030

RTI LABORATORIES
31628 GLENDALE ST

LIVONIA MI 48150

P: RED2 S: MNITE I: 3
19F – FL2
1Z10335E034055 3461
GCCBMEL MILIV205 JAN 19 05:11:53 2012
US 482 HIP 11.1.3 ZEBRAZ4MP

BILLING: P/P

WS 14.0.21 HP LaserJet 4 21.0A 10/2011

CUSTODY SEAL
DATE 1/13/12
SIGNATURE

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

7 LBS 4 OF 5
DWT: 24,14,14

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4150 8679

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

REF 1:140705
REF 2:BB010030

ITI LABORATORIES
31628 GLENDALE ST
LIVONIA MI 48150

P: RED2 S: MNITE I: 3
19F – FL2
Z10335E034150 8679
YV9WDN MILIV113 JAN 19 05:20:14 2012
S 4821 HIP 11.1.3 ZEBRAZ4MP

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

CUSTODY SEAL
DATE 11/13/12
SIGNATURE

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

Proof of Delivery

Close Window

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number:	1Z10335E0340910486
Service:	UPS Ground
Weight:	9.00 lbs
Shipped/Billed On:	01/13/2012
Delivered On:	01/19/2012 10:02 A.M.
Delivered To:	LIVONIA, MI, US
Signed By:	FLORES
Left At:	Mail Room

Thank you for giving us this opportunity to serve you.

Sincerely,

UPS

Tracking results provided by UPS: 01/19/2012 12:08 P.M. ET

Print This Page

Close Window

Regulators

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: **1/19/2012 10:02:00 AM**

Work Order Number **1201592** RcptNo: **1**

Received by: **Armando Flores**

Completed by:

Reviewed by:

Completed Date: 1/19/2012 5:28:40 PM

Reviewed Date: 1/25/2012 5:58:21 PM

Carrier name: FedEx

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:	See Comments			
Sample Tags Present?	Yes ☐	No ☑		
Sample Tags Listed on COC?	Yes ☐	No ☑		
Tag Numbers:				
Sample Condition?	Intact ☑	Broken ☐	Leaking	☐

Case Number: SDG: SAS:

Adjusted? _____ Checked by

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

SampID	ContainerID	Type	Org pH	Adj pH	Req Min pH	Req Max pH
1201592-001A	Container-1 of 1	Bottle				
1201592-001B	Container-1 of 1	Bottle				
1201592-002A	Container-1 of 1	Bottle				
1201592-002B	Container-1 of 1	Bottle				
1201592-003A	Container-1 of 1	Bottle				
1201592-003B	Container-1 of 1	Bottle				
1201592-004B	Container-1 of 1	Bottle				
1201592-005A	Container-1 of 1	Bottle				
1201592-005B	Container-1 of 1	Bottle				
1201592-006A	Container-1 of 1	Bottle				
1201592-006B	Container-1 of 1	Bottle				
1201592-007A	Container-1 of 1	Bottle				
1201592-007B	Container-1 of 1	Bottle				
1201592-008A	Container-1 of 1	Bottle				
1201592-008B	Container-1 of 1	Bottle				
1201592-009B	Container-1 of 1	Bottle				
1201592-010A	Container-1 of 1	Bottle				
1201592-010B	Container-1 of 1	Bottle				
1201592-011A	Container-1 of 1	Bottle				
1201592-011B	Container-1 of 1	Bottle				
1201592-012A	Container-1 of 1	Bottle				
1201592-012B	Container-1 of 1	Bottle				
1201592-013A	Container-1 of 1	Bottle				
1201592-013B	Container-1 of 1	Bottle				
1201592-014A	Container-1 of 1	Bottle				
1201592-014B	Container-1 of 1	Bottle				
1201592-015A	Container-1 of 1	Bottle				
1201592-015B	Container-1 of 1	Bottle				
1201592-016A	Container-1 of 1	Bottle				
1201592-016B	Container-1 of 1	Bottle				
1201592-017A	Container-1 of 1	Bottle				
1201592-017B	Container-1 of 1	Bottle				
1201592-018A	Container-1 of 1	Bottle				
1201592-018B	Container-1 of 1	Bottle				

SampID	ContainerID	Type	Org pH	Adj pH	Req Min pH	Req Max pH
1201592-019A	Container-1 of 1	Bottle				
1201592-019B	Container-1 of 1	Bottle				
1201592-020A	Container-1 of 1	Bottle				
1201592-020B	Container-1 of 1	Bottle				
1201592-021A	Container-1 of 1	Bottle				
1201592-021B	Container-1 of 1	Bottle				
1201592-022A	Container-1 of 1	Bottle				
1201592-022B	Container-1 of 1	Bottle				
1201592-023A	Container-1 of 1	Bottle				
1201592-023B	Container-1 of 1	Bottle				
1201592-024A	Container-1 of 1	Bottle				
1201592-024B	Container-1 of 1	Bottle				
1201592-025A	Container-1 of 1	Bottle				
1201592-025B	Container-1 of 1	Bottle				
1201592-026A	Container-1 of 1	Bottle				
1201592-026B	Container-1 of 1	Bottle				
1201592-027A	Container-1 of 1	Bottle				
1201592-027B	Container-1 of 1	Bottle				
1201592-028A	Container-1 of 1	Bottle				
1201592-028B	Container-1 of 1	Bottle				
1201592-029A	Container-1 of 1	Bottle				
1201592-029B	Container-1 of 1	Bottle				
1201592-030A	Container-1 of 1	Bottle				
1201592-030B	Container-1 of 1	Bottle				
1201592-031A	Container-1 of 1	Bottle				
1201592-031B	Container-1 of 1	Bottle				
1201592-032A	Container-1 of 1	Bottle				
1201592-032B	Container-1 of 1	Bottle				
1201592-033A	Container-1 of 1	Bottle				
1201592-033B	Container-1 of 1	Bottle				
1201592-034A	Container-1 of 1	Bottle				
1201592-034B	Container-1 of 1	Bottle				
1201592-035A	Container-1 of 1	Bottle				
1201592-035B	Container-1 of 1	Bottle				

SampID	ContainerID	Type	Org pH	Adj pH	Req Min pH	Req Max pH
1201592-036A	Container-1 of 1	Bottle				
1201592-036B	Container-1 of 1	Bottle				
1201592-037A	Container-1 of 1	Bottle				
1201592-037B	Container-1 of 1	Bottle				
1201592-038A	Container-1 of 1	Bottle				
1201592-038B	Container-1 of 1	Bottle				
1201592-039A	Container-1 of 1	Bottle				
1201592-039B	Container-1 of 1	Bottle				
1201592-040A	Container-1 of 1	Bottle				
1201592-040B	Container-1 of 1	Bottle				
1201592-041A	Container-1 of 1	Bottle				
1201592-041B	Container-1 of 1	Bottle				
1201592-042A	Container-1 of 1	Bottle				
1201592-042B	Container-1 of 1	Bottle				
1201592-043A	Container-1 of 1	Bottle				
1201592-043B	Container-1 of 1	Bottle				
1201592-044A	Container-1 of 1	Bottle				
1201592-044B	Container-1 of 1	Bottle				
1201592-045A	Container-1 of 1	Bottle				
1201592-045B	Container-1 of 1	Bottle				
1201592-046A	Container-01 of 01	Bottle				
1201592-046B	Container-01 of 01	Bottle				
1201592-047A	Container-01 of 01	Bottle				
1201592-047B	Container-01 of 01	Bottle				
1201592-048A	Container-01 of 01	Bottle				
1201592-048B	Container-01 of 01	Bottle				
1201592-049A	Container-01 of 01	Bottle				
1201592-049B	Container-01 of 01	Bottle				
1201592-050A	Container-01 of 01	Bottle				

Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
Blue cooler	n/a	Good	Yes		1/13/2012	See COC's

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: Pam and Diane

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

Client Instructions: They will resample those sites

Date Contacted: 1/19/2012 Contacted By: Deborah Griffiths

Regarding: 2 Amber Vacs rec'd Compromised

Comments:
Bottles VOCs received in cardboard boxes; tedlar bags received in a cooler.

FedEx Nos.
1Z10335E0340438845
1Z10335E0342568853
1Z10335E0340553461
1Z10335E0341508679
1Z10335E0340910486
Two samples (Amber Vacs for MA-APH and VOCs TO15), VA1005 and VA1026 were received comporimised. Unable to analyze.

CorrectiveAction:
Client will resample, email attached

RTI Laboratories - Workorder Sample Summary

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1201592-001	VA1002		1/10/2012 1:56 PM	1/19/2012 10:02 AM	Air
1201592-001	VA1002		1/10/2012 1:56 PM	1/19/2012 10:02 AM	Air
1201592-002	VA1003		1/10/2012 1:56 PM	1/19/2012 10:02 AM	Air
1201592-002	VA1003		1/10/2012 1:56 PM	1/19/2012 10:02 AM	Air
1201592-003	VA1004		1/10/2012 2:44 PM	1/19/2012 10:02 AM	Air
1201592-003	VA1004		1/10/2012 2:44 PM	1/19/2012 10:02 AM	Air
1201592-004	VA1005		1/10/2012 3:09 PM	1/19/2012 10:02 AM	Air
1201592-004	VA1005		1/10/2012 3:09 PM	1/19/2012 10:02 AM	Air
1201592-005	VA1006		1/10/2012 3:35 PM	1/19/2012 10:02 AM	Air
1201592-005	VA1006		1/10/2012 3:35 PM	1/19/2012 10:02 AM	Air
1201592-006	VA1023		1/10/2012 10:30 AM	1/19/2012 10:02 AM	Air
1201592-006	VA1023		1/10/2012 10:30 AM	1/19/2012 10:02 AM	Air
1201592-007	VA1024		1/10/2012 11:09 AM	1/19/2012 10:02 AM	Air
1201592-007	VA1024		1/10/2012 11:09 AM	1/19/2012 10:02 AM	Air
1201592-008	VA1025		1/10/2012 11:40 AM	1/19/2012 10:02 AM	Air
1201592-008	VA1025		1/10/2012 11:40 AM	1/19/2012 10:02 AM	Air
1201592-009	VA1026		1/10/2012 12:10 PM	1/19/2012 10:02 AM	Air
1201592-009	VA1026		1/10/2012 12:10 PM	1/19/2012 10:02 AM	Air
1201592-010	VA1062		1/12/2012 8:55 AM	1/19/2012 10:02 AM	Air
1201592-010	VA1062		1/12/2012 8:55 AM	1/19/2012 10:02 AM	Air
1201592-011	VA1063		1/12/2012 9:34 AM	1/19/2012 10:02 AM	Air
1201592-011	VA1063		1/12/2012 9:34 AM	1/19/2012 10:02 AM	Air
1201592-012	VA1064		1/12/2012 10:19 AM	1/19/2012 10:02 AM	Air
1201592-012	VA1064		1/12/2012 10:19 AM	1/19/2012 10:02 AM	Air
1201592-013	VA1065		1/12/2012 11:13 AM	1/19/2012 10:02 AM	Air
1201592-013	VA1065		1/12/2012 11:13 AM	1/19/2012 10:02 AM	Air
1201592-014	VA1083		1/12/2012 11:57 AM	1/19/2012 10:02 AM	Air
1201592-014	VA1083		1/12/2012 11:57 AM	1/19/2012 10:02 AM	Air
1201592-015	VA1111		1/12/2012 11:34 AM	1/19/2012 10:02 AM	Air
1201592-015	VA1111		1/12/2012 11:34 AM	1/19/2012 10:02 AM	Air
1201592-016	VA1112		1/12/2012 12:12 PM	1/19/2012 10:02 AM	Air
1201592-016	VA1112		1/12/2012 12:12 PM	1/19/2012 10:02 AM	Air
1201592-017	VA1113		1/12/2012 12:42 PM	1/19/2012 10:02 AM	Air
1201592-017	VA1113		1/12/2012 12:42 PM	1/19/2012 10:02 AM	Air
1201592-018	VA1114		1/12/2012 1:15 PM	1/19/2012 10:02 AM	Air
1201592-018	VA1114		1/12/2012 1:15 PM	1/19/2012 10:02 AM	Air
1201592-019	VA1115		1/12/2012 1:48 PM	1/19/2012 10:02 AM	Air
1201592-019	VA1115		1/12/2012 1:48 PM	1/19/2012 10:02 AM	Air
1201592-020	VA1116		1/12/2012 2:30 PM	1/19/2012 10:02 AM	Air
1201592-020	VA1116		1/12/2012 2:30 PM	1/19/2012 10:02 AM	Air
1201592-021	VA1144		1/12/2012 3:21 PM	1/19/2012 10:02 AM	Air
1201592-021	VA1144		1/12/2012 3:21 PM	1/19/2012 10:02 AM	Air
1201592-022	VA1145		1/12/2012 3:50 PM	1/19/2012 10:02 AM	Air
1201592-022	VA1145		1/12/2012 3:50 PM	1/19/2012 10:02 AM	Air
1201592-023	VA1170		1/10/2012 11:25 AM	1/19/2012 10:02 AM	Air

RTI Laboratories - Workorder Sample Summary

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1201592-023	VA1170		1/10/2012 11:25 AM	1/19/2012 10:02 AM	Air
1201592-024	VA1171		1/10/2012 11:25 AM	1/19/2012 10:02 AM	Air
1201592-024	VA1171		1/10/2012 11:25 AM	1/19/2012 10:02 AM	Air
1201592-025	VA1172		1/10/2012 12:12 PM	1/19/2012 10:02 AM	Air
1201592-025	VA1172		1/10/2012 12:12 PM	1/19/2012 10:02 AM	Air
1201592-026	VA1173		1/10/2012 12:45 PM	1/19/2012 10:02 AM	Air
1201592-026	VA1173		1/10/2012 12:45 PM	1/19/2012 10:02 AM	Air
1201592-027	VA1174		1/10/2012 1:24 PM	1/19/2012 10:02 AM	Air
1201592-027	VA1174		1/10/2012 1:24 PM	1/19/2012 10:02 AM	Air
1201592-028	VA1175		1/10/2012 2:00 PM	1/19/2012 10:02 AM	Air
1201592-028	VA1175		1/10/2012 2:00 PM	1/19/2012 10:02 AM	Air
1201592-029	VA1176		1/10/2012 2:50 PM	1/19/2012 10:02 AM	Air
1201592-029	VA1176		1/10/2012 2:50 PM	1/19/2012 10:02 AM	Air
1201592-030	VA1177		1/10/2012 3:47 PM	1/19/2012 10:02 AM	Air
1201592-030	VA1177		1/10/2012 3:47 PM	1/19/2012 10:02 AM	Air
1201592-031	VA1178		1/10/2012 4:13 PM	1/19/2012 10:02 AM	Air
1201592-031	VA1178		1/10/2012 4:13 PM	1/19/2012 10:02 AM	Air
1201592-032	VA1179		1/11/2012 9:42 AM	1/19/2012 10:02 AM	Air
1201592-032	VA1179		1/11/2012 9:42 AM	1/19/2012 10:02 AM	Air
1201592-033	VA1180		1/11/2012 10:22 AM	1/19/2012 10:02 AM	Air
1201592-033	VA1180		1/11/2012 10:22 AM	1/19/2012 10:02 AM	Air
1201592-034	VA1181		1/11/2012 10:22 AM	1/19/2012 10:02 AM	Air
1201592-034	VA1181		1/11/2012 10:22 AM	1/19/2012 10:02 AM	Air
1201592-035	VA1182		1/11/2012 11:20 AM	1/19/2012 10:02 AM	Air
1201592-035	VA1182		1/11/2012 11:20 AM	1/19/2012 10:02 AM	Air
1201592-036	VA1183		1/11/2012 12:04 PM	1/19/2012 10:02 AM	Air
1201592-036	VA1183		1/11/2012 12:04 PM	1/19/2012 10:02 AM	Air
1201592-037	VA1184		1/11/2012 1:30 PM	1/19/2012 10:02 AM	Air
1201592-037	VA1184		1/11/2012 1:30 PM	1/19/2012 10:02 AM	Air
1201592-038	VA1185		1/11/2012 2:01 PM	1/19/2012 10:02 AM	Air
1201592-038	VA1185		1/11/2012 2:01 PM	1/19/2012 10:02 AM	Air
1201592-039	VA1186		1/11/2012 2:40 PM	1/19/2012 10:02 AM	Air
1201592-039	VA1186		1/11/2012 2:40 PM	1/19/2012 10:02 AM	Air
1201592-040	VA1187		1/11/2012 3:14 PM	1/19/2012 10:02 AM	Air
1201592-040	VA1187		1/11/2012 3:14 PM	1/19/2012 10:02 AM	Air
1201592-041	VA1188		1/11/2012 3:48 PM	1/19/2012 10:02 AM	Air
1201592-041	VA1188		1/11/2012 3:48 PM	1/19/2012 10:02 AM	Air
1201592-042	VA1189		1/11/2012 4:24 PM	1/19/2012 10:02 AM	Air
1201592-042	VA1189		1/11/2012 4:24 PM	1/19/2012 10:02 AM	Air
1201592-043	VA1230		1/12/2012 1:39 PM	1/19/2012 10:02 AM	Air
1201592-043	VA1230		1/12/2012 1:39 PM	1/19/2012 10:02 AM	Air
1201592-044	VA1231		1/12/2012 2:11 PM	1/19/2012 10:02 AM	Air
1201592-044	VA1231		1/12/2012 2:11 PM	1/19/2012 10:02 AM	Air
1201592-045	VA1232		1/12/2012 2:11 PM	1/19/2012 10:02 AM	Air
1201592-045	VA1232		1/12/2012 2:11 PM	1/19/2012 10:02 AM	Air

RTI Laboratories - Workorder Sample Summary

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1201592-046	VA1233		1/12/2012 3:05 PM	1/19/2012 10:02 AM	Air
1201592-046	VA1233		1/12/2012 3:05 PM	1/19/2012 10:02 AM	Air
1201592-047	VA1234		1/12/2012 3:49 PM	1/19/2012 10:02 AM	Air
1201592-047	VA1234		1/12/2012 3:49 PM	1/19/2012 10:02 AM	Air
1201592-048	VA1235		1/13/2012 9:15 AM	1/19/2012 10:02 AM	Air
1201592-048	VA1235		1/13/2012 9:15 AM	1/19/2012 10:02 AM	Air
1201592-049	VA1236		1/13/2012 10:18 AM	1/19/2012 10:02 AM	Air
1201592-049	VA1236		1/13/2012 10:18 AM	1/19/2012 10:02 AM	Air
1201592-050	VA8071-TB		1/10/2012 8:00 AM	1/19/2012 10:02 AM	Air

RTI Laboratories - DATES REPORT

WO#: 1201592

Date Reported: 2/10/2012
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
1201592-001A	VA1002	1/10/2012 1:56 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/23/2012 10:22 PM
				EPA_TO15-Volatile Organic Compounds			1/23/2012 2:43 AM
1201592-001B	VA1002	1/10/2012 1:56 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/20/2012 2:33 PM
1201592-002A	VA1003	1/10/2012 1:56 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/23/2012 11:12 PM
				EPA_TO15-Volatile Organic Compounds			1/20/2012 10:12 AM
				EPA_TO15-Volatile Organic Compounds			1/23/2012 3:36 AM
1201592-002B	VA1003	1/10/2012 1:56 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/20/2012 2:49 PM
1201592-003A	VA1004	1/10/2012 2:44 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/25/2012 1:33 AM
				EPA_TO15-Volatile Organic Compounds			1/26/2012 4:19 AM
				EPA_TO15-Volatile Organic Compounds			1/27/2012 4:03 PM
				EPA_TO15-Volatile Organic Compounds			1/28/2012 3:44 AM
				EPA_TO15-Volatile Organic Compounds			1/30/2012 4:08 PM
1201592-003B	VA1004	1/10/2012 2:44 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/20/2012 3:06 PM
1201592-004B	VA1005	1/10/2012 3:09 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/20/2012 3:21 PM
1201592-005A	VA1006	1/10/2012 3:35 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/26/2012 6:34 PM
				EPA_TO15-Volatile Organic Compounds			1/27/2012 5:39 PM
				EPA_TO15-Volatile Organic Compounds			1/28/2012 5:17 AM
				EPA_TO15-Volatile Organic Compounds			2/2/2012 1:03 PM
1201592-005B	VA1006	1/10/2012 3:35 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/20/2012 3:36 PM

RTI Laboratories - DATES REPORT

WO#: 1201592

Date Reported: 2/10/2012
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
1201592-006A	VA1023	1/10/2012 10:30 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/23/2012 5:14 PM
				EPA_TO15-Volatile Organic Compounds			1/22/2012 8:17 PM
1201592-006B	VA1023	1/10/2012 10:30 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/20/2012 3:53 PM
1201592-007A	VA1024	1/10/2012 11:09 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/24/2012 4:40 PM
				EPA_TO15-Volatile Organic Compounds			1/22/2012 9:04 PM
1201592-007B	VA1024	1/10/2012 11:09 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/20/2012 4:12 PM
1201592-008A	VA1025	1/10/2012 11:40 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/23/2012 3:48 PM
				EPA_TO15-Volatile Organic Compounds			1/20/2012 3:56 AM
1201592-008B	VA1025	1/10/2012 11:40 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/20/2012 4:28 PM
1201592-009B	VA1026	1/10/2012 12:10 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/20/2012 4:43 PM
1201592-010A	VA1062	1/12/2012 8:55 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/24/2012 2:05 AM
				EPA_TO15-Volatile Organic Compounds			1/27/2012 7:12 PM
1201592-010B	VA1062	1/12/2012 8:55 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/20/2012 4:57 PM
1201592-011A	VA1063	1/12/2012 9:34 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/24/2012 8:31 PM
				EPA_TO15-Volatile Organic Compounds			1/25/2012 4:11 AM
1201592-011B	VA1063	1/12/2012 9:34 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/23/2012 2:27 PM

RTI Laboratories - DATES REPORT

WO#: 1201592

Date Reported: 2/10/2012
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
1201592-012A	VA1064	1/12/2012 10:19 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/27/2012 12:38 PM
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/28/2012 3:04 AM
				EPA_TO15-Volatile Organic Compounds			1/24/2012 4:49 PM
				EPA_TO15-Volatile Organic Compounds			1/26/2012 6:40 PM
1201592-012B	VA1064	1/12/2012 10:19 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/23/2012 2:44 PM
1201592-013A	VA1065	1/12/2012 11:13 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/28/2012 3:46 AM
				EPA_TO15-Volatile Organic Compounds			1/24/2012 7:04 PM
1201592-013B	VA1065	1/12/2012 11:13 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/23/2012 3:00 PM
1201592-014A	VA1083	1/12/2012 11:57 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/27/2012 6:26 PM
				EPA_TO15-Volatile Organic Compounds			1/24/2012 8:34 PM
1201592-014B	VA1083	1/12/2012 11:57 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/23/2012 3:27 PM
1201592-015A	VA1111	1/12/2012 11:34 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/30/2012 1:33 PM
				EPA_TO15-Volatile Organic Compounds			1/26/2012 7:27 PM
1201592-015B	VA1111	1/12/2012 11:34 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/23/2012 4:02 PM
1201592-016A	VA1112	1/12/2012 12:12 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/27/2012 7:09 PM
				EPA_TO15-Volatile Organic Compounds			1/26/2012 8:12 PM
1201592-016B	VA1112	1/12/2012 12:12 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/23/2012 4:21 PM
1201592-017A	VA1113	1/12/2012 12:42 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/30/2012 3:00 PM

RTI Laboratories - DATES REPORT

WO#: 1201592

Date Reported: 2/10/2012
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
1201592-017A	VA1113	1/12/2012 12:42 PM	Air				
				EPA_TO15-Volatile Organic Compounds			1/27/2012 12:43 PM
1201592-017B	VA1113	1/12/2012 12:42 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/23/2012 4:44 PM
1201592-018A	VA1114	1/12/2012 1:15 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/27/2012 9:16 PM
				EPA_TO15-Volatile Organic Compounds			1/27/2012 7:58 PM
1201592-018B	VA1114	1/12/2012 1:15 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/23/2012 5:05 PM
1201592-019A	VA1115	1/12/2012 1:48 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/31/2012 6:42 PM
				EPA_TO15-Volatile Organic Compounds			1/25/2012 12:19 AM
1201592-019B	VA1115	1/12/2012 1:48 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/23/2012 5:31 PM
1201592-020A	VA1116	1/12/2012 2:30 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/31/2012 8:08 PM
				EPA_TO15-Volatile Organic Compounds			1/27/2012 9:29 PM
				EPA_TO15-Volatile Organic Compounds			1/30/2012 6:26 PM
1201592-020B	VA1116	1/12/2012 2:30 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/23/2012 5:46 PM
1201592-021A	VA1144	1/12/2012 3:21 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/31/2012 9:43 PM
				EPA_TO15-Volatile Organic Compounds			1/27/2012 11:07 PM
				EPA_TO15-Volatile Organic Compounds			1/30/2012 8:48 PM
1201592-021B	VA1144	1/12/2012 3:21 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/24/2012 12:06 PM
1201592-022A	VA1145	1/12/2012 3:50 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/24/2012 9:56 PM
				EPA_TO15-Volatile Organic Compounds			1/28/2012 1:26 AM

RTI Laboratories - DATES REPORT

WO#: 1201592

Date Reported: 2/10/2012
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
1201592-022B	VA1145	1/12/2012 3:50 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/24/2012 12:21 PM
1201592-023A	VA1170	1/10/2012 11:25 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/23/2012 6:42 PM
				EPA_TO15-Volatile Organic Compounds			1/22/2012 9:51 PM
1201592-023B	VA1170	1/10/2012 11:25 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/24/2012 12:51 PM
1201592-024A	VA1171	1/10/2012 11:25 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/24/2012 5:24 PM
				EPA_TO15-Volatile Organic Compounds			1/22/2012 10:38 PM
1201592-024B	VA1171	1/10/2012 11:25 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/24/2012 1:08 PM
1201592-025A	VA1172	1/10/2012 12:12 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/24/2012 6:08 PM
				EPA_TO15-Volatile Organic Compounds			1/23/2012 12:16 AM
				EPA_TO15-Volatile Organic Compounds			1/26/2012 3:33 AM
1201592-025B	VA1172	1/10/2012 12:12 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/24/2012 2:08 PM
1201592-026A	VA1173	1/10/2012 12:45 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/23/2012 8:50 PM
				EPA_TO15-Volatile Organic Compounds			1/23/2012 1:04 AM
1201592-026B	VA1173	1/10/2012 12:45 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/24/2012 2:26 PM
1201592-027A	VA1174	1/10/2012 1:24 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/24/2012 6:52 PM
				EPA_TO15-Volatile Organic Compounds			1/23/2012 1:51 AM
1201592-027B	VA1174	1/10/2012 1:24 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/24/2012 2:49 PM

RTI Laboratories - DATES REPORT

WO#: 1201592

Date Reported: 2/10/2012
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
1201592-028A	VA1175	1/10/2012 2:00 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/26/2012 4:21 PM
				EPA_TO15-Volatile Organic Compounds			1/25/2012 4:59 AM
1201592-028B	VA1175	1/10/2012 2:00 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/24/2012 3:06 PM
1201592-029A	VA1176	1/10/2012 2:50 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/26/2012 5:48 PM
				EPA_TO15-Volatile Organic Compounds			1/28/2012 4:31 AM
1201592-029B	VA1176	1/10/2012 2:50 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/24/2012 3:30 PM
1201592-030A	VA1177	1/10/2012 3:47 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/26/2012 7:18 PM
				EPA_TO15-Volatile Organic Compounds			1/26/2012 7:26 AM
1201592-030B	VA1177	1/10/2012 3:47 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/24/2012 4:04 PM
1201592-031A	VA1178	1/10/2012 4:13 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/26/2012 8:02 PM
				EPA_TO15-Volatile Organic Compounds			1/26/2012 8:12 AM
1201592-031B	VA1178	1/10/2012 4:13 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/25/2012 12:12 PM
1201592-032A	VA1179	1/11/2012 9:42 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/26/2012 8:46 PM
				EPA_TO15-Volatile Organic Compounds			1/26/2012 8:59 AM
1201592-032B	VA1179	1/11/2012 9:42 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/25/2012 12:29 PM
1201592-033A	VA1180	1/11/2012 10:22 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/28/2012 12:50 AM
				EPA_TO15-Volatile Organic Compounds			1/26/2012 9:51 AM

RTI Laboratories - DATES REPORT

WO#: 1201592

Date Reported: 2/10/2012
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
1201592-033B	VA1180	1/11/2012 10:22 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/25/2012 12:43 PM
1201592-034A	VA1181	1/11/2012 10:22 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/26/2012 10:20 PM
				EPA_TO15-Volatile Organic Compounds			1/26/2012 10:37 AM
1201592-034B	VA1181	1/11/2012 10:22 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/25/2012 1:03 PM
1201592-035A	VA1182	1/11/2012 11:20 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/27/2012 2:47 PM
				EPA_TO15-Volatile Organic Compounds			1/26/2012 12:13 PM
1201592-035B	VA1182	1/11/2012 11:20 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/25/2012 2:27 PM
1201592-036A	VA1183	1/11/2012 12:04 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/27/2012 3:32 PM
				EPA_TO15-Volatile Organic Compounds			1/26/2012 1:02 PM
1201592-036B	VA1183	1/11/2012 12:04 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/25/2012 2:42 PM
1201592-037A	VA1184	1/11/2012 1:30 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/27/2012 12:41 AM
				EPA_TO15-Volatile Organic Compounds			1/26/2012 1:55 PM
1201592-037B	VA1184	1/11/2012 1:30 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/25/2012 2:58 PM
1201592-038A	VA1185	1/11/2012 2:01 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/27/2012 1:27 AM
				EPA_TO15-Volatile Organic Compounds			1/26/2012 2:43 PM
1201592-038B	VA1185	1/11/2012 2:01 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/25/2012 3:19 PM

RTI Laboratories - DATES REPORT

WO#: 1201592

Date Reported: 2/10/2012
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
1201592-039A	VA1186	1/11/2012 2:40 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/27/2012 2:11 AM
				EPA_TO15-Volatile Organic Compounds			1/26/2012 3:29 PM
1201592-039B	VA1186	1/11/2012 2:40 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/25/2012 3:34 PM
1201592-040A	VA1187	1/11/2012 3:14 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/23/2012 11:55 PM
				EPA_TO15-Volatile Organic Compounds			1/26/2012 4:17 PM
1201592-040B	VA1187	1/11/2012 3:14 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/25/2012 3:57 PM
1201592-041A	VA1188	1/11/2012 3:48 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/24/2012 7:41 PM
				EPA_TO15-Volatile Organic Compounds			1/30/2012 5:40 PM
				EPA_TO15-Volatile Organic Compounds			1/30/2012 7:11 PM
1201592-041B	VA1188	1/11/2012 3:48 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/26/2012 11:04 AM
1201592-042A	VA1189	1/11/2012 4:24 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/24/2012 1:21 AM
				EPA_TO15-Volatile Organic Compounds			1/22/2012 5:57 PM
1201592-042B	VA1189	1/11/2012 4:24 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/26/2012 11:19 AM
1201592-043A	VA1230	1/12/2012 1:39 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/27/2012 9:59 PM
				EPA_TO15-Volatile Organic Compounds			1/27/2012 8:43 PM
1201592-043B	VA1230	1/12/2012 1:39 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/26/2012 11:34 AM
1201592-044A	VA1231	1/12/2012 2:11 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/31/2012 7:25 PM
				EPA_TO15-Volatile Organic Compounds			1/25/2012 1:04 AM

RTI Laboratories - DATES REPORT

WO#: 1201592

Date Reported: 2/10/2012
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
1201592-044B	VA1231	1/12/2012 2:11 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/26/2012 11:49 AM
1201592-045A	VA1232	1/12/2012 2:11 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/28/2012 12:06 AM
				EPA_TO15-Volatile Organic Compounds			1/25/2012 1:49 AM
1201592-045B	VA1232	1/12/2012 2:11 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/26/2012 12:04 PM
1201592-046A	VA1233	1/12/2012 3:05 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/31/2012 8:57 PM
				EPA_TO15-Volatile Organic Compounds			1/30/2012 8:03 PM
1201592-046B	VA1233	1/12/2012 3:05 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/26/2012 12:19 PM
1201592-047A	VA1234	1/12/2012 3:49 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/24/2012 2:10 PM
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/25/2012 12:05 AM
				EPA_TO15-Volatile Organic Compounds			1/27/2012 11:54 PM
				EPA_TO15-Volatile Organic Compounds			2/2/2012 12:28 AM
1201592-047B	VA1234	1/12/2012 3:49 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/26/2012 12:34 PM
1201592-048A	VA1235	1/13/2012 9:15 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/24/2012 10:39 PM
				EPA_TO15-Volatile Organic Compounds			1/28/2012 2:12 AM
1201592-048B	VA1235	1/13/2012 9:15 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/26/2012 12:51 PM
1201592-049A	VA1236	1/13/2012 10:18 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/24/2012 11:22 PM
				EPA_TO15-Volatile Organic Compounds			1/28/2012 2:58 AM

RTI Laboratories - DATES REPORT

WO#: 1201592

Date Reported: 2/10/2012
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
1201592-049B	VA1236	1/13/2012 10:18 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/26/2012 1:06 PM
1201592-050A	VA8071-TB	1/10/2012 8:00 AM	Air	EPA_TO15-Volatile Organic Compounds			1/19/2012 11:27 PM

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WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 1:56:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-001	**Matrix:**	Air
Client Sample ID:	VA1002		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	5.9	0.10		%	1	1/20/2012 2:33 PM
Carbon Monoxide	ND	0.10	U	%	1	1/20/2012 2:33 PM
Methane	ND	0.50	U	%	1	1/20/2012 2:33 PM
Nitrogen	80	0.10		%	1	1/20/2012 2:33 PM
Oxygen	13	0.10		%	1	1/20/2012 2:33 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	1/23/2012 2:43 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	1/23/2012 2:43 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	1/23/2012 2:43 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	1/23/2012 2:43 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	1/23/2012 2:43 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	1/23/2012 2:43 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	1/23/2012 2:43 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	1/23/2012 2:43 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	1/23/2012 2:43 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	1/23/2012 2:43 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	1/23/2012 2:43 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	1/23/2012 2:43 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	1/23/2012 2:43 AM
1,3-Butadiene	ND	400	U	ppbv	400	1/23/2012 2:43 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	1/23/2012 2:43 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	1/23/2012 2:43 AM
2-Butanone	ND	400	U	ppbv	400	1/23/2012 2:43 AM
2-Hexanone	ND	400	U	ppbv	400	1/23/2012 2:43 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	1/23/2012 2:43 AM
Acetone	600	400		ppbv	400	1/23/2012 2:43 AM
Benzene	5,800	400		ppbv	400	1/23/2012 2:43 AM
Benzyl chloride	ND	400	U	ppbv	400	1/23/2012 2:43 AM
Bromodichloromethane	ND	400	U	ppbv	400	1/23/2012 2:43 AM
Bromoform	ND	400	U	ppbv	400	1/23/2012 2:43 AM
Bromomethane	ND	400	U	ppbv	400	1/23/2012 2:43 AM
Carbon disulfide	ND	400	U	ppbv	400	1/23/2012 2:43 AM
Carbon tetrachloride	ND	400	U	ppbv	400	1/23/2012 2:43 AM
Chlorobenzene	ND	400	U	ppbv	400	1/23/2012 2:43 AM
Chlorodibromomethane	ND	400	U	ppbv	400	1/23/2012 2:43 AM
Chloroethane	ND	400	U	ppbv	400	1/23/2012 2:43 AM
Chloroform	ND	400	U	ppbv	400	1/23/2012 2:43 AM
Chloromethane	ND	400	U	ppbv	400	1/23/2012 2:43 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	1/23/2012 2:43 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	1/23/2012 2:43 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 1:56:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-001	**Matrix:**	Air
Client Sample ID:	VA1002		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,500	800		ppbv	400	1/23/2012 2:43 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	1/23/2012 2:43 AM
Ethyl acetate	ND	400	U	ppbv	400	1/23/2012 2:43 AM
Ethylbenzene	530	800	J	ppbv	400	1/23/2012 2:43 AM
Heptane	1,400	400		ppbv	400	1/23/2012 2:43 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	1/23/2012 2:43 AM
m,p-Xylene	1,200	800		ppbv	400	1/23/2012 2:43 AM
Methylene chloride	1,000	2,000	J	ppbv	400	1/23/2012 2:43 AM
n-Hexane	2,100	800		ppbv	400	1/23/2012 2:43 AM
Naphthalene	ND	400	U	ppbv	400	1/23/2012 2:43 AM
o-Xylene	460	400		ppbv	400	1/23/2012 2:43 AM
Propylene	ND	400	U	ppbv	400	1/23/2012 2:43 AM
Styrene	ND	400	U	ppbv	400	1/23/2012 2:43 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	1/23/2012 2:43 AM
Tetrachloroethene	ND	400	U	ppbv	400	1/23/2012 2:43 AM
Tetrahydrofuran	ND	400	U	ppbv	400	1/23/2012 2:43 AM
Toluene	13,000	400		ppbv	400	1/23/2012 2:43 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	1/23/2012 2:43 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	1/23/2012 2:43 AM
Trichloroethene	ND	400	U	ppbv	400	1/23/2012 2:43 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	1/23/2012 2:43 AM
Vinyl acetate	ND	400	U	ppbv	400	1/23/2012 2:43 AM
Vinyl chloride	ND	400	U	ppbv	400	1/23/2012 2:43 AM
Xylenes, Total	1,700	1,200		ppbv	400	1/23/2012 2:43 AM
Surr: 4-Bromofluorobenzene	115	70-130		%REC	400	1/23/2012 2:43 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	95,000	47,000		µg/m³	400	1/23/2012 10:22 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/23/2012 10:22 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	1/23/2012 10:22 PM
Surr: 4-Bromofluorobenzene	97.9	70-130		%REC	400	1/23/2012 10:22 PM

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WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 1:56:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-002	**Matrix:**	Air
Client Sample ID:	VA1003		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	6.5	0.10		%	1	1/20/2012 2:49 PM
Carbon Monoxide	ND	0.10	U	%	1	1/20/2012 2:49 PM
Methane	ND	0.50	U	%	1	1/20/2012 2:49 PM
Nitrogen	80	0.10		%	1	1/20/2012 2:49 PM
Oxygen	12	0.10		%	1	1/20/2012 2:49 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/20/2012 10:12 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/20/2012 10:12 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/20/2012 10:12 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/20/2012 10:12 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/20/2012 10:12 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/20/2012 10:12 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/20/2012 10:12 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/20/2012 10:12 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/20/2012 10:12 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/20/2012 10:12 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/20/2012 10:12 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/20/2012 10:12 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/20/2012 10:12 AM
1,3-Butadiene	ND	40	U	ppbv	40	1/20/2012 10:12 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/20/2012 10:12 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/20/2012 10:12 AM
2-Butanone	ND	40	U	ppbv	40	1/20/2012 10:12 AM
2-Hexanone	ND	40	U	ppbv	40	1/20/2012 10:12 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/20/2012 10:12 AM
Acetone	ND	40	U	ppbv	40	1/20/2012 10:12 AM
Benzene	7,100	400		ppbv	400	1/23/2012 3:36 AM
Benzyl chloride	ND	40	U	ppbv	40	1/20/2012 10:12 AM
Bromodichloromethane	ND	40	U	ppbv	40	1/20/2012 10:12 AM
Bromoform	ND	40	U	ppbv	40	1/20/2012 10:12 AM
Bromomethane	ND	40	U	ppbv	40	1/20/2012 10:12 AM
Carbon disulfide	ND	40	U	ppbv	40	1/20/2012 10:12 AM
Carbon tetrachloride	ND	40	U	ppbv	40	1/20/2012 10:12 AM
Chlorobenzene	ND	40	U	ppbv	40	1/20/2012 10:12 AM
Chlorodibromomethane	ND	40	U	ppbv	40	1/20/2012 10:12 AM
Chloroethane	ND	40	U	ppbv	40	1/20/2012 10:12 AM
Chloroform	ND	40	U	ppbv	40	1/20/2012 10:12 AM
Chloromethane	ND	40	U	ppbv	40	1/20/2012 10:12 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/20/2012 10:12 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/20/2012 10:12 AM

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WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 1:56:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-002	**Matrix:**	Air
Client Sample ID:	VA1003		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,600	80		ppbv	40	1/20/2012 10:12 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/20/2012 10:12 AM
Ethyl acetate	ND	40	U	ppbv	40	1/20/2012 10:12 AM
Ethylbenzene	390	80		ppbv	40	1/20/2012 10:12 AM
Heptane	1,100	40		ppbv	40	1/20/2012 10:12 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/20/2012 10:12 AM
m,p-Xylene	950	80		ppbv	40	1/20/2012 10:12 AM
Methylene chloride	ND	200	U	ppbv	40	1/20/2012 10:12 AM
n-Hexane	1,000	80		ppbv	40	1/20/2012 10:12 AM
Naphthalene	ND	40	U	ppbv	40	1/20/2012 10:12 AM
o-Xylene	330	40		ppbv	40	1/20/2012 10:12 AM
Propylene	ND	40	U	ppbv	40	1/20/2012 10:12 AM
Styrene	ND	40	U	ppbv	40	1/20/2012 10:12 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/20/2012 10:12 AM
Tetrachloroethene	ND	40	U	ppbv	40	1/20/2012 10:12 AM
Tetrahydrofuran	ND	40	U	ppbv	40	1/20/2012 10:12 AM
Toluene	18,000	400		ppbv	400	1/23/2012 3:36 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/20/2012 10:12 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/20/2012 10:12 AM
Trichloroethene	ND	40	U	ppbv	40	1/20/2012 10:12 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/20/2012 10:12 AM
Vinyl acetate	ND	40	U	ppbv	40	1/20/2012 10:12 AM
Vinyl chloride	ND	40	U	ppbv	40	1/20/2012 10:12 AM
Xylenes, Total	1,300	120		ppbv	40	1/20/2012 10:12 AM
Surr: 4-Bromofluorobenzene	116	70-130		%REC	40	1/20/2012 10:12 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	120,000	47,000		µg/m³	400	1/23/2012 11:12 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/23/2012 11:12 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	1/23/2012 11:12 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	400	1/23/2012 11:12 PM

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WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 2:44:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-003	**Matrix:**	Air
Client Sample ID:	VA1004		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	8.3	0.10		%	1	1/20/2012 3:06 PM
Carbon Monoxide	ND	0.10	U	%	1	1/20/2012 3:06 PM
Methane	ND	0.50	U	%	1	1/20/2012 3:06 PM
Nitrogen	81	0.10		%	1	1/20/2012 3:06 PM
Oxygen	10	0.10		%	1	1/20/2012 3:06 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/27/2012 4:03 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/27/2012 4:03 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/27/2012 4:03 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/27/2012 4:03 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/27/2012 4:03 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/27/2012 4:03 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/27/2012 4:03 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/27/2012 4:03 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/27/2012 4:03 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/27/2012 4:03 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/27/2012 4:03 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/27/2012 4:03 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/27/2012 4:03 PM
1,3-Butadiene	ND	800	U	ppbv	800	1/27/2012 4:03 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/27/2012 4:03 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/27/2012 4:03 PM
2-Butanone	ND	800	U	ppbv	800	1/27/2012 4:03 PM
2-Hexanone	ND	800	U	ppbv	800	1/27/2012 4:03 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/27/2012 4:03 PM
Acetone	ND	800	U	ppbv	800	1/27/2012 4:03 PM
Benzene	32,000	8,000		ppbv	8000	1/28/2012 3:44 AM
Benzyl chloride	ND	800	U	ppbv	800	1/27/2012 4:03 PM
Bromodichloromethane	ND	800	U	ppbv	800	1/27/2012 4:03 PM
Bromoform	ND	800	U	ppbv	800	1/27/2012 4:03 PM
Bromomethane	ND	800	U	ppbv	800	1/27/2012 4:03 PM
Carbon disulfide	ND	800	U	ppbv	800	1/27/2012 4:03 PM
Carbon tetrachloride	ND	800	U	ppbv	800	1/27/2012 4:03 PM
Chlorobenzene	ND	800	U	ppbv	800	1/27/2012 4:03 PM
Chlorodibromomethane	ND	800	U	ppbv	800	1/27/2012 4:03 PM
Chloroethane	ND	800	U	ppbv	800	1/27/2012 4:03 PM
Chloroform	ND	800	U	ppbv	800	1/27/2012 4:03 PM
Chloromethane	ND	800	U	ppbv	800	1/27/2012 4:03 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/27/2012 4:03 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/27/2012 4:03 PM

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WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 2:44:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-003	**Matrix:**	Air
Client Sample ID:	VA1004		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	370,000	16,000		ppbv	8000	1/28/2012 3:44 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/27/2012 4:03 PM
Ethyl acetate	ND	800	U	ppbv	800	1/27/2012 4:03 PM
Ethylbenzene	2,500	1,600		ppbv	800	1/27/2012 4:03 PM
Heptane	150,000	8,000		ppbv	8000	1/28/2012 3:44 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/27/2012 4:03 PM
m,p-Xylene	7,300	1,600		ppbv	800	1/27/2012 4:03 PM
Methylene chloride	ND	4,000	U	ppbv	800	1/27/2012 4:03 PM
n-Hexane	970,000	40,000		ppbv	20000	1/30/2012 4:08 PM
Naphthalene	ND	800	U	ppbv	800	1/27/2012 4:03 PM
o-Xylene	1,700	800		ppbv	800	1/27/2012 4:03 PM
Propylene	8,100	800		ppbv	800	1/27/2012 4:03 PM
Styrene	ND	800	U	ppbv	800	1/27/2012 4:03 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/27/2012 4:03 PM
Tetrachloroethene	ND	800	U	ppbv	800	1/27/2012 4:03 PM
Tetrahydrofuran	ND	800	U	ppbv	800	1/27/2012 4:03 PM
Toluene	23,000	8,000		ppbv	8000	1/28/2012 3:44 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/27/2012 4:03 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/27/2012 4:03 PM
Trichloroethene	ND	800	U	ppbv	800	1/27/2012 4:03 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/27/2012 4:03 PM
Vinyl acetate	ND	800	U	ppbv	800	1/27/2012 4:03 PM
Vinyl chloride	ND	800	U	ppbv	800	1/27/2012 4:03 PM
Xylenes, Total	9,100	2,400		ppbv	800	1/27/2012 4:03 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	800	1/27/2012 4:03 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	11,000,000	940,000		µg/m³	8000	1/25/2012 1:33 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	1/25/2012 1:33 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	1/25/2012 1:33 AM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	8000	1/25/2012 1:33 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 3:09:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-004	**Matrix:**	Air
Client Sample ID:	VA1005		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.69	0.10		%	1	1/20/2012 3:21 PM
Carbon Monoxide	ND	0.10	U	%	1	1/20/2012 3:21 PM
Methane	ND	0.50	U	%	1	1/20/2012 3:21 PM
Nitrogen	79	0.10		%	1	1/20/2012 3:21 PM
Oxygen	20	0.10		%	1	1/20/2012 3:21 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 3:35:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-005	**Matrix:**	Air
Client Sample ID:	VA1006		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.63	0.10		%	1	1/20/2012 3:36 PM
Carbon Monoxide	ND	0.10	U	%	1	1/20/2012 3:36 PM
Methane	ND	0.50	U	%	1	1/20/2012 3:36 PM
Nitrogen	79	0.10		%	1	1/20/2012 3:36 PM
Oxygen	20	0.10		%	1	1/20/2012 3:36 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/27/2012 5:39 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/27/2012 5:39 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/27/2012 5:39 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/27/2012 5:39 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/27/2012 5:39 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/27/2012 5:39 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/27/2012 5:39 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/27/2012 5:39 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/27/2012 5:39 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/27/2012 5:39 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/27/2012 5:39 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/27/2012 5:39 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/27/2012 5:39 PM
1,3-Butadiene	ND	800	U	ppbv	800	1/27/2012 5:39 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/27/2012 5:39 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/27/2012 5:39 PM
2-Butanone	ND	800	U	ppbv	800	1/27/2012 5:39 PM
2-Hexanone	ND	800	U	ppbv	800	1/27/2012 5:39 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/27/2012 5:39 PM
Acetone	ND	800	U	ppbv	800	1/27/2012 5:39 PM
Benzene	35,000	800		ppbv	800	1/27/2012 5:39 PM
Benzyl chloride	ND	800	U	ppbv	800	1/27/2012 5:39 PM
Bromodichloromethane	ND	800	U	ppbv	800	1/27/2012 5:39 PM
Bromoform	ND	800	U	ppbv	800	1/27/2012 5:39 PM
Bromomethane	ND	800	U	ppbv	800	1/27/2012 5:39 PM
Carbon disulfide	ND	800	U	ppbv	800	1/27/2012 5:39 PM
Carbon tetrachloride	ND	800	U	ppbv	800	1/27/2012 5:39 PM
Chlorobenzene	ND	800	U	ppbv	800	1/27/2012 5:39 PM
Chlorodibromomethane	ND	800	U	ppbv	800	1/27/2012 5:39 PM
Chloroethane	ND	800	U	ppbv	800	1/27/2012 5:39 PM
Chloroform	ND	800	U	ppbv	800	1/27/2012 5:39 PM
Chloromethane	ND	800	U	ppbv	800	1/27/2012 5:39 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/27/2012 5:39 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/27/2012 5:39 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 3:35:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-005	**Matrix:**	Air
Client Sample ID:	VA1006		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	320,000	16,000		ppbv	8000	1/28/2012 5:17 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/27/2012 5:39 PM
Ethyl acetate	ND	800	U	ppbv	800	1/27/2012 5:39 PM
Ethylbenzene	1,300	1,600	J	ppbv	800	1/27/2012 5:39 PM
Heptane	120,000	8,000		ppbv	8000	1/28/2012 5:17 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/27/2012 5:39 PM
m,p-Xylene	3,800	1,600		ppbv	800	1/27/2012 5:39 PM
Methylene chloride	ND	4,000	U	ppbv	800	1/27/2012 5:39 PM
n-Hexane	16,000	20,000	J	ppbv	10000	2/2/2012 1:03 PM
Naphthalene	ND	800	U	ppbv	800	1/27/2012 5:39 PM
o-Xylene	1,200	800		ppbv	800	1/27/2012 5:39 PM
Propylene	3,400	800		ppbv	800	1/27/2012 5:39 PM
Styrene	ND	800	U	ppbv	800	1/27/2012 5:39 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/27/2012 5:39 PM
Tetrachloroethene	ND	800	U	ppbv	800	1/27/2012 5:39 PM
Tetrahydrofuran	ND	800	U	ppbv	800	1/27/2012 5:39 PM
Toluene	26,000	8,000		ppbv	8000	1/28/2012 5:17 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/27/2012 5:39 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/27/2012 5:39 PM
Trichloroethene	ND	800	U	ppbv	800	1/27/2012 5:39 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/27/2012 5:39 PM
Vinyl acetate	ND	800	U	ppbv	800	1/27/2012 5:39 PM
Vinyl chloride	ND	800	U	ppbv	800	1/27/2012 5:39 PM
Xylenes, Total	4,900	2,400		ppbv	800	1/27/2012 5:39 PM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	800	1/27/2012 5:39 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,000,000	94,000		µg/m³	800	1/26/2012 6:34 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/26/2012 6:34 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	1/26/2012 6:34 PM
Surr: 4-Bromofluorobenzene	93.2	70-130		%REC	800	1/26/2012 6:34 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 10:30:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-006	**Matrix:**	Air
Client Sample ID:	VA1023		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	1.9	0.10		%	1	1/20/2012 3:53 PM
Carbon Monoxide	ND	0.10	U	%	1	1/20/2012 3:53 PM
Methane	ND	0.50	U	%	1	1/20/2012 3:53 PM
Nitrogen	79	0.10		%	1	1/20/2012 3:53 PM
Oxygen	19	0.10		%	1	1/20/2012 3:53 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
1,1,2,2-Tetrachloroethane	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
1,1,2-Trichloroethane	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
1,1-Dichloroethane	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
1,1-Dichloroethene	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
1,2,4-Trichlorobenzene	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
1,2,4-Trimethylbenzene	13	8.0		ppbv	8	1/22/2012 8:17 PM
1,2-Dibromoethane	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
1,2-Dichlorobenzene	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
1,2-Dichloroethane	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
1,2-Dichloropropane	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
1,3,5-Trimethylbenzene	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
1,3-Butadiene	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
1,3-Dichlorobenzene	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
1,4-Dichlorobenzene	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
2-Butanone	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
2-Hexanone	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
4-Methyl-2-pentanone	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Acetone	14	8.0		ppbv	8	1/22/2012 8:17 PM
Benzene	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Benzyl chloride	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Bromodichloromethane	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Bromoform	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Bromomethane	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Carbon disulfide	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Carbon tetrachloride	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Chlorobenzene	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Chlorodibromomethane	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Chloroethane	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Chloroform	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Chloromethane	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
cis-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
cis-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 10:30:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-006	**Matrix:**	Air
Client Sample ID:	VA1023		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	ND	16	U	ppbv	8	1/22/2012 8:17 PM
Dichlorodifluoromethane	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Ethyl acetate	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Ethylbenzene	11	16	J	ppbv	8	1/22/2012 8:17 PM
Heptane	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Hexachlorobutadiene	ND	16	U	ppbv	8	1/22/2012 8:17 PM
m,p-Xylene	46	16		ppbv	8	1/22/2012 8:17 PM
Methylene chloride	ND	40	U	ppbv	8	1/22/2012 8:17 PM
n-Hexane	ND	16	U	ppbv	8	1/22/2012 8:17 PM
Naphthalene	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
o-Xylene	22	8.0		ppbv	8	1/22/2012 8:17 PM
Propylene	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Styrene	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
tert-Butyl Methyl Ether	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Tetrachloroethene	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Tetrahydrofuran	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Toluene	33	8.0		ppbv	8	1/22/2012 8:17 PM
trans-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
trans-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Trichloroethene	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Trichlorofluoromethane	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Vinyl acetate	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Vinyl chloride	ND	8.0	U	ppbv	8	1/22/2012 8:17 PM
Xylenes, Total	68	24		ppbv	8	1/22/2012 8:17 PM
Surr: 4-Bromofluorobenzene	119	70-130		%REC	8	1/22/2012 8:17 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,700	940		µg/m³	8	1/23/2012 5:14 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100	U	µg/m³	8	1/23/2012 5:14 PM
C9-C12 Aliphatic Hydrocarbons	1,100	1,500	J	µg/m³	8	1/23/2012 5:14 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	8	1/23/2012 5:14 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 11:09:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-007	**Matrix:**	Air
Client Sample ID:	VA1024		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	2.5	0.10		%	1	1/20/2012 4:12 PM
Carbon Monoxide	ND	0.10	U	%	1	1/20/2012 4:12 PM
Methane	ND	0.50	U	%	1	1/20/2012 4:12 PM
Nitrogen	80	0.10		%	1	1/20/2012 4:12 PM
Oxygen	18	0.10		%	1	1/20/2012 4:12 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
1,1,2,2-Tetrachloroethane	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
1,1,2-Trichloroethane	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
1,1-Dichloroethane	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
1,1-Dichloroethene	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
1,2,4-Trichlorobenzene	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
1,2,4-Trimethylbenzene	12	8.0		ppbv	8	1/22/2012 9:04 PM
1,2-Dibromoethane	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
1,2-Dichlorobenzene	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
1,2-Dichloroethane	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
1,2-Dichloropropane	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
1,3,5-Trimethylbenzene	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
1,3-Butadiene	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
1,3-Dichlorobenzene	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
1,4-Dichlorobenzene	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
2-Butanone	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
2-Hexanone	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
4-Methyl-2-pentanone	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Acetone	9.7	8.0		ppbv	8	1/22/2012 9:04 PM
Benzene	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Benzyl chloride	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Bromodichloromethane	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Bromoform	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Bromomethane	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Carbon disulfide	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Carbon tetrachloride	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Chlorobenzene	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Chlorodibromomethane	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Chloroethane	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Chloroform	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Chloromethane	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
cis-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
cis-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 11:09:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-007	**Matrix:**	Air
Client Sample ID:	VA1024		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	ND	16	U	ppbv	8	1/22/2012 9:04 PM
Dichlorodifluoromethane	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Ethyl acetate	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Ethylbenzene	ND	16	U	ppbv	8	1/22/2012 9:04 PM
Heptane	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Hexachlorobutadiene	ND	16	U	ppbv	8	1/22/2012 9:04 PM
m,p-Xylene	33	16		ppbv	8	1/22/2012 9:04 PM
Methylene chloride	ND	40	U	ppbv	8	1/22/2012 9:04 PM
n-Hexane	ND	16	U	ppbv	8	1/22/2012 9:04 PM
Naphthalene	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
o-Xylene	18	8.0		ppbv	8	1/22/2012 9:04 PM
Propylene	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Styrene	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
tert-Butyl Methyl Ether	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Tetrachloroethene	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Tetrahydrofuran	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Toluene	15	8.0		ppbv	8	1/22/2012 9:04 PM
trans-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
trans-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Trichloroethene	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Trichlorofluoromethane	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Vinyl acetate	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Vinyl chloride	ND	8.0	U	ppbv	8	1/22/2012 9:04 PM
Xylenes, Total	51	24		ppbv	8	1/22/2012 9:04 PM
Surr: 4-Bromofluorobenzene	118	70-130		%REC	8	1/22/2012 9:04 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	940	940		µg/m³	8	1/24/2012 4:40 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100	U	µg/m³	8	1/24/2012 4:40 PM
C9-C12 Aliphatic Hydrocarbons	1,200	1,500	J	µg/m³	8	1/24/2012 4:40 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	8	1/24/2012 4:40 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 11:40:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-008	**Matrix:**	Air
Client Sample ID:	VA1025		

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	1/20/2012 4:28 PM
Carbon Monoxide	ND	0.10	U	%	1	1/20/2012 4:28 PM
Methane	ND	0.50	U	%	1	1/20/2012 4:28 PM
Nitrogen	82	0.10		%	1	1/20/2012 4:28 PM
Oxygen	16	0.10		%	1	1/20/2012 4:28 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
2-Butanone	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
2-Hexanone	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
Acetone	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
Benzene	160,000	8,000		ppbv	8000	1/20/2012 3:56 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
Bromoform	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
Bromomethane	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
Chloroethane	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
Chloroform	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
Chloromethane	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 11:40:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-008	**Matrix:**	Air
Client Sample ID:	VA1025		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	260,000	16,000		ppbv	8000	1/20/2012 3:56 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	1/20/2012 3:56 AM
Heptane	63,000	8,000		ppbv	8000	1/20/2012 3:56 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	1/20/2012 3:56 AM
m,p-Xylene	ND	16,000	U	ppbv	8000	1/20/2012 3:56 AM
Methylene chloride	ND	40,000	U	ppbv	8000	1/20/2012 3:56 AM
n-Hexane	240,000	16,000		ppbv	8000	1/20/2012 3:56 AM
Naphthalene	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
o-Xylene	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
Propylene	8,100	8,000		ppbv	8000	1/20/2012 3:56 AM
Styrene	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
Toluene	20,000	8,000		ppbv	8000	1/20/2012 3:56 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
Trichloroethene	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	1/20/2012 3:56 AM
Xylenes, Total	ND	24,000	U	ppbv	8000	1/20/2012 3:56 AM
Surr: 4-Bromofluorobenzene	122	70-130		%REC	8000	1/20/2012 3:56 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	10,000,000	940,000		µg/m³	8000	1/23/2012 3:48 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	1/23/2012 3:48 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	1/23/2012 3:48 PM
Surr: 4-Bromofluorobenzene	95.7	70-130		%REC	8000	1/23/2012 3:48 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 12:10:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-009	**Matrix:**	Air
Client Sample ID:	VA1026		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.88	0.10		%	1	1/20/2012 4:43 PM
Carbon Monoxide	ND	0.10	U	%	1	1/20/2012 4:43 PM
Methane	ND	0.50	U	%	1	1/20/2012 4:43 PM
Nitrogen	81	0.10		%	1	1/20/2012 4:43 PM
Oxygen	18	0.10		%	1	1/20/2012 4:43 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 8:55:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-010	**Matrix:**	Air
Client Sample ID:	VA1062		

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	1/20/2012 4:57 PM
Carbon Monoxide	ND	0.10	U	%	1	1/20/2012 4:57 PM
Methane	ND	0.50	U	%	1	1/20/2012 4:57 PM
Nitrogen	79	0.10		%	1	1/20/2012 4:57 PM
Oxygen	21	0.10		%	1	1/20/2012 4:57 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
1,1,2,2-Tetrachloroethane	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
1,1,2-Trichloroethane	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
1,1-Dichloroethane	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
1,1-Dichloroethene	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
1,2,4-Trichlorobenzene	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
1,2,4-Trimethylbenzene	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
1,2-Dibromoethane	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
1,2-Dichlorobenzene	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
1,2-Dichloroethane	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
1,2-Dichloropropane	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
1,3,5-Trimethylbenzene	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
1,3-Butadiene	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
1,3-Dichlorobenzene	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
1,4-Dichlorobenzene	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
2-Butanone	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
2-Hexanone	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
4-Methyl-2-pentanone	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
Acetone	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
Benzene	78	8.0		ppbv	8	1/27/2012 7:12 PM
Benzyl chloride	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
Bromodichloromethane	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
Bromoform	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
Bromomethane	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
Carbon disulfide	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
Carbon tetrachloride	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
Chlorobenzene	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
Chlorodibromomethane	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
Chloroethane	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
Chloroform	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
Chloromethane	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
cis-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
cis-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 8:55:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-010	**Matrix:**	Air
Client Sample ID:	VA1062		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	87	16		ppbv	8	1/27/2012 7:12 PM
Dichlorodifluoromethane	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
Ethyl acetate	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
Ethylbenzene	ND	16	U	ppbv	8	1/27/2012 7:12 PM
Heptane	44	8.0		ppbv	8	1/27/2012 7:12 PM
Hexachlorobutadiene	ND	16	U	ppbv	8	1/27/2012 7:12 PM
m,p-Xylene	16	16	J	ppbv	8	1/27/2012 7:12 PM
Methylene chloride	ND	40	U	ppbv	8	1/27/2012 7:12 PM
n-Hexane	83	16		ppbv	8	1/27/2012 7:12 PM
Naphthalene	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
o-Xylene	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
Propylene	15	8.0		ppbv	8	1/27/2012 7:12 PM
Styrene	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
tert-Butyl Methyl Ether	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
Tetrachloroethene	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
Tetrahydrofuran	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
Toluene	120	8.0		ppbv	8	1/27/2012 7:12 PM
trans-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
trans-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
Trichloroethene	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
Trichlorofluoromethane	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
Vinyl acetate	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
Vinyl chloride	ND	8.0	U	ppbv	8	1/27/2012 7:12 PM
Xylenes, Total	16	24	J	ppbv	8	1/27/2012 7:12 PM
Surr: 4-Bromofluorobenzene	110	70-130		%REC	8	1/27/2012 7:12 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,800	940		µg/m³	8	1/24/2012 2:05 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100	U	µg/m³	8	1/24/2012 2:05 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500	U	µg/m³	8	1/24/2012 2:05 AM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	8	1/24/2012 2:05 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 9:34:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-011	**Matrix:**	Air
Client Sample ID:	VA1063		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.49	0.10		%	1	1/23/2012 2:27 PM
Carbon Monoxide	ND	0.10	U	%	1	1/23/2012 2:27 PM
Methane	ND	0.50	U	%	1	1/23/2012 2:27 PM
Nitrogen	80	0.10		%	1	1/23/2012 2:27 PM
Oxygen	18	0.10		%	1	1/23/2012 2:27 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	1/25/2012 4:11 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	1/25/2012 4:11 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	1/25/2012 4:11 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	1/25/2012 4:11 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	1/25/2012 4:11 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	1/25/2012 4:11 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	1/25/2012 4:11 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	1/25/2012 4:11 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	1/25/2012 4:11 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	1/25/2012 4:11 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	1/25/2012 4:11 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	1/25/2012 4:11 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	1/25/2012 4:11 AM
1,3-Butadiene	ND	400	U	ppbv	400	1/25/2012 4:11 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	1/25/2012 4:11 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	1/25/2012 4:11 AM
2-Butanone	ND	400	U	ppbv	400	1/25/2012 4:11 AM
2-Hexanone	ND	400	U	ppbv	400	1/25/2012 4:11 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Acetone	910	400		ppbv	400	1/25/2012 4:11 AM
Benzene	1,800	400		ppbv	400	1/25/2012 4:11 AM
Benzyl chloride	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Bromodichloromethane	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Bromoform	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Bromomethane	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Carbon disulfide	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Carbon tetrachloride	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Chlorobenzene	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Chlorodibromomethane	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Chloroethane	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Chloroform	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Chloromethane	ND	400	U	ppbv	400	1/25/2012 4:11 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	1/25/2012 4:11 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	1/25/2012 4:11 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 9:34:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-011	**Matrix:**	Air
Client Sample ID:	VA1063		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,400	800		ppbv	400	1/25/2012 4:11 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Ethyl acetate	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Ethylbenzene	ND	800	U	ppbv	400	1/25/2012 4:11 AM
Heptane	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	1/25/2012 4:11 AM
m,p-Xylene	ND	800	U	ppbv	400	1/25/2012 4:11 AM
Methylene chloride	ND	2,000	U	ppbv	400	1/25/2012 4:11 AM
n-Hexane	1,400	800		ppbv	400	1/25/2012 4:11 AM
Naphthalene	ND	400	U	ppbv	400	1/25/2012 4:11 AM
o-Xylene	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Propylene	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Styrene	ND	400	U	ppbv	400	1/25/2012 4:11 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Tetrachloroethene	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Tetrahydrofuran	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Toluene	2,000	400		ppbv	400	1/25/2012 4:11 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	1/25/2012 4:11 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Trichloroethene	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Vinyl acetate	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Vinyl chloride	ND	400	U	ppbv	400	1/25/2012 4:11 AM
Xylenes, Total	ND	1,200	U	ppbv	400	1/25/2012 4:11 AM
Surr: 4-Bromofluorobenzene	118	70-130		%REC	400	1/25/2012 4:11 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	200,000	47,000		µg/m³	400	1/24/2012 8:31 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/24/2012 8:31 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	1/24/2012 8:31 PM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	400	1/24/2012 8:31 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 10:19:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-012	**Matrix:**	Air
Client Sample ID:	VA1064		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.79	0.10		%	1	1/23/2012 2:44 PM
Carbon Monoxide	ND	0.10	U	%	1	1/23/2012 2:44 PM
Methane	ND	0.50	U	%	1	1/23/2012 2:44 PM
Nitrogen	80	0.10		%	1	1/23/2012 2:44 PM
Oxygen	16	0.10		%	1	1/23/2012 2:44 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
2-Butanone	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
2-Hexanone	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
Acetone	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
Benzene	200,000	8,000		ppbv	8000	1/24/2012 4:49 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
Bromoform	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
Bromomethane	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
Chloroethane	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
Chloroform	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
Chloromethane	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 10:19:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-012	**Matrix:**	Air
Client Sample ID:	VA1064		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	610,000	40,000		ppbv	20000	1/26/2012 6:40 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	1/24/2012 4:49 PM
Heptane	290,000	8,000		ppbv	8000	1/24/2012 4:49 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	1/24/2012 4:49 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	1/24/2012 4:49 PM
Methylene chloride	ND	40,000	U	ppbv	8000	1/24/2012 4:49 PM
n-Hexane	580,000	40,000		ppbv	20000	1/26/2012 6:40 PM
Naphthalene	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
o-Xylene	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
Propylene	21,000	8,000		ppbv	8000	1/24/2012 4:49 PM
Styrene	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
Toluene	120,000	8,000		ppbv	8000	1/24/2012 4:49 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
Trichloroethene	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	1/24/2012 4:49 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	1/24/2012 4:49 PM
Surr: 4-Bromofluorobenzene	120	70-130		%REC	8000	1/24/2012 4:49 PM
Mass APH Air		**Method:**				**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	24,000,000	2,300,000		µg/m³	20000	1/28/2012 3:04 AM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	1/28/2012 3:04 AM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	1/28/2012 3:04 AM
Surr: 4-Bromofluorobenzene	87.5	70-130		%REC	20000	1/28/2012 3:04 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 11:13:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-013	**Matrix:**	Air
Client Sample ID:	VA1065		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.87	0.10		%	1	1/23/2012 3:00 PM
Carbon Monoxide	ND	0.10	U	%	1	1/23/2012 3:00 PM
Methane	ND	0.50	U	%	1	1/23/2012 3:00 PM
Nitrogen	77	0.10		%	1	1/23/2012 3:00 PM
Oxygen	18	0.10		%	1	1/23/2012 3:00 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
2-Butanone	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
2-Hexanone	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Acetone	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Benzene	11,000	8,000		ppbv	8000	1/24/2012 7:04 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Bromoform	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Bromomethane	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Chloroethane	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Chloroform	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Chloromethane	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 11:13:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-013	**Matrix:**	Air
Client Sample ID:	VA1065		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	37,000	16,000		ppbv	8000	1/24/2012 7:04 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	1/24/2012 7:04 PM
Heptane	24,000	8,000		ppbv	8000	1/24/2012 7:04 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	1/24/2012 7:04 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	1/24/2012 7:04 PM
Methylene chloride	48,000	40,000		ppbv	8000	1/24/2012 7:04 PM
n-Hexane	41,000	16,000		ppbv	8000	1/24/2012 7:04 PM
Naphthalene	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
o-Xylene	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Propylene	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Styrene	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Toluene	9,500	8,000		ppbv	8000	1/24/2012 7:04 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Trichloroethene	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	1/24/2012 7:04 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	1/24/2012 7:04 PM
Surr: 4-Bromofluorobenzene	121	70-130		%REC	8000	1/24/2012 7:04 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	20,000,000	2,300,000		µg/m³	20000	1/28/2012 3:46 AM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	1/28/2012 3:46 AM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	1/28/2012 3:46 AM
Surr: 4-Bromofluorobenzene	88.1	70-130		%REC	20000	1/28/2012 3:46 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 11:57:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-014	**Matrix:**	Air
Client Sample ID:	VA1083		

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	1/23/2012 3:27 PM
Carbon Monoxide	ND	0.10	U	%	1	1/23/2012 3:27 PM
Methane	ND	0.50	U	%	1	1/23/2012 3:27 PM
Nitrogen	78	0.10		%	1	1/23/2012 3:27 PM
Oxygen	21	0.10		%	1	1/23/2012 3:27 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
2-Butanone	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
2-Hexanone	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Acetone	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Benzene	15,000	8,000		ppbv	8000	1/24/2012 8:34 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Bromoform	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Bromomethane	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Chloroethane	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Chloroform	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Chloromethane	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 11:57:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-014	**Matrix:**	Air
Client Sample ID:	VA1083		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	19,000	16,000		ppbv	8000	1/24/2012 8:34 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	1/24/2012 8:34 PM
Heptane	20,000	8,000		ppbv	8000	1/24/2012 8:34 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	1/24/2012 8:34 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	1/24/2012 8:34 PM
Methylene chloride	ND	40,000	U	ppbv	8000	1/24/2012 8:34 PM
n-Hexane	14,000	16,000	J	ppbv	8000	1/24/2012 8:34 PM
Naphthalene	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
o-Xylene	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Propylene	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Styrene	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Toluene	38,000	8,000		ppbv	8000	1/24/2012 8:34 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Trichloroethene	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	1/24/2012 8:34 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	1/24/2012 8:34 PM
Surr: 4-Bromofluorobenzene	112	70-130		%REC	8000	1/24/2012 8:34 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	640,000	94,000		µg/m³	800	1/27/2012 6:26 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/27/2012 6:26 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	1/27/2012 6:26 PM
Surr: 4-Bromofluorobenzene	90.7	70-130		%REC	800	1/27/2012 6:26 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 11:34:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-015	**Matrix:**	Air
Client Sample ID:	VA1111		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.043	0.10	J	%	1	1/23/2012 4:02 PM
Carbon Monoxide	ND	0.10	U	%	1	1/23/2012 4:02 PM
Methane	ND	0.50	U	%	1	1/23/2012 4:02 PM
Nitrogen	78	0.10		%	1	1/23/2012 4:02 PM
Oxygen	21	0.10		%	1	1/23/2012 4:02 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/26/2012 7:27 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/26/2012 7:27 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/26/2012 7:27 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/26/2012 7:27 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/26/2012 7:27 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/26/2012 7:27 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/26/2012 7:27 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/26/2012 7:27 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/26/2012 7:27 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/26/2012 7:27 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/26/2012 7:27 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/26/2012 7:27 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/26/2012 7:27 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/26/2012 7:27 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/26/2012 7:27 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/26/2012 7:27 PM
2-Butanone	ND	40	U	ppbv	40	1/26/2012 7:27 PM
2-Hexanone	ND	40	U	ppbv	40	1/26/2012 7:27 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/26/2012 7:27 PM
Acetone	ND	40	U	ppbv	40	1/26/2012 7:27 PM
Benzene	470	40		ppbv	40	1/26/2012 7:27 PM
Benzyl chloride	ND	40	U	ppbv	40	1/26/2012 7:27 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/26/2012 7:27 PM
Bromoform	ND	40	U	ppbv	40	1/26/2012 7:27 PM
Bromomethane	ND	40	U	ppbv	40	1/26/2012 7:27 PM
Carbon disulfide	ND	40	U	ppbv	40	1/26/2012 7:27 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/26/2012 7:27 PM
Chlorobenzene	ND	40	U	ppbv	40	1/26/2012 7:27 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/26/2012 7:27 PM
Chloroethane	ND	40	U	ppbv	40	1/26/2012 7:27 PM
Chloroform	ND	40	U	ppbv	40	1/26/2012 7:27 PM
Chloromethane	ND	40	U	ppbv	40	1/26/2012 7:27 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/26/2012 7:27 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/26/2012 7:27 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 11:34:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-015	**Matrix:**	Air
Client Sample ID:	VA1111		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,500	80		ppbv	40	1/26/2012 7:27 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/26/2012 7:27 PM
Ethyl acetate	ND	40	U	ppbv	40	1/26/2012 7:27 PM
Ethylbenzene	72	80	J	ppbv	40	1/26/2012 7:27 PM
Heptane	770	40		ppbv	40	1/26/2012 7:27 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/26/2012 7:27 PM
m,p-Xylene	120	80		ppbv	40	1/26/2012 7:27 PM
Methylene chloride	ND	200	U	ppbv	40	1/26/2012 7:27 PM
n-Hexane	1,500	80		ppbv	40	1/26/2012 7:27 PM
Naphthalene	ND	40	U	ppbv	40	1/26/2012 7:27 PM
o-Xylene	ND	40	U	ppbv	40	1/26/2012 7:27 PM
Propylene	85	40		ppbv	40	1/26/2012 7:27 PM
Styrene	ND	40	U	ppbv	40	1/26/2012 7:27 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/26/2012 7:27 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/26/2012 7:27 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/26/2012 7:27 PM
Toluene	1,800	40		ppbv	40	1/26/2012 7:27 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/26/2012 7:27 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/26/2012 7:27 PM
Trichloroethene	ND	40	U	ppbv	40	1/26/2012 7:27 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/26/2012 7:27 PM
Vinyl acetate	ND	40	U	ppbv	40	1/26/2012 7:27 PM
Vinyl chloride	ND	40	U	ppbv	40	1/26/2012 7:27 PM
Xylenes, Total	120	120	J	ppbv	40	1/26/2012 7:27 PM
Surr: 4-Bromofluorobenzene	110	70-130		%REC	40	1/26/2012 7:27 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	44,000	4,700		µg/m³	40	1/30/2012 1:33 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	1/30/2012 1:33 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	1/30/2012 1:33 PM
Surr: 4-Bromofluorobenzene	88.0	70-130		%REC	40	1/30/2012 1:33 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 12:12:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-016	**Matrix:**	Air
Client Sample ID:	VA1112		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.70	0.10		%	1	1/23/2012 4:21 PM
Carbon Monoxide	ND	0.10	U	%	1	1/23/2012 4:21 PM
Methane	ND	0.50	U	%	1	1/23/2012 4:21 PM
Nitrogen	79	0.10		%	1	1/23/2012 4:21 PM
Oxygen	18	0.10		%	1	1/23/2012 4:21 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/26/2012 8:12 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/26/2012 8:12 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/26/2012 8:12 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/26/2012 8:12 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/26/2012 8:12 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/26/2012 8:12 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/26/2012 8:12 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/26/2012 8:12 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/26/2012 8:12 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/26/2012 8:12 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/26/2012 8:12 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/26/2012 8:12 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/26/2012 8:12 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/26/2012 8:12 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/26/2012 8:12 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/26/2012 8:12 PM
2-Butanone	ND	40	U	ppbv	40	1/26/2012 8:12 PM
2-Hexanone	ND	40	U	ppbv	40	1/26/2012 8:12 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/26/2012 8:12 PM
Acetone	ND	40	U	ppbv	40	1/26/2012 8:12 PM
Benzene	350	40		ppbv	40	1/26/2012 8:12 PM
Benzyl chloride	ND	40	U	ppbv	40	1/26/2012 8:12 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/26/2012 8:12 PM
Bromoform	ND	40	U	ppbv	40	1/26/2012 8:12 PM
Bromomethane	ND	40	U	ppbv	40	1/26/2012 8:12 PM
Carbon disulfide	ND	40	U	ppbv	40	1/26/2012 8:12 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/26/2012 8:12 PM
Chlorobenzene	ND	40	U	ppbv	40	1/26/2012 8:12 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/26/2012 8:12 PM
Chloroethane	ND	40	U	ppbv	40	1/26/2012 8:12 PM
Chloroform	ND	40	U	ppbv	40	1/26/2012 8:12 PM
Chloromethane	ND	40	U	ppbv	40	1/26/2012 8:12 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/26/2012 8:12 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/26/2012 8:12 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 12:12:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-016	**Matrix:**	Air
Client Sample ID:	VA1112		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,000	80		ppbv	40	1/26/2012 8:12 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/26/2012 8:12 PM
Ethyl acetate	ND	40	U	ppbv	40	1/26/2012 8:12 PM
Ethylbenzene	66	80	J	ppbv	40	1/26/2012 8:12 PM
Heptane	170	40		ppbv	40	1/26/2012 8:12 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/26/2012 8:12 PM
m,p-Xylene	110	80		ppbv	40	1/26/2012 8:12 PM
Methylene chloride	ND	200	U	ppbv	40	1/26/2012 8:12 PM
n-Hexane	430	80		ppbv	40	1/26/2012 8:12 PM
Naphthalene	ND	40	U	ppbv	40	1/26/2012 8:12 PM
o-Xylene	ND	40	U	ppbv	40	1/26/2012 8:12 PM
Propylene	94	40		ppbv	40	1/26/2012 8:12 PM
Styrene	ND	40	U	ppbv	40	1/26/2012 8:12 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/26/2012 8:12 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/26/2012 8:12 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/26/2012 8:12 PM
Toluene	1,400	40		ppbv	40	1/26/2012 8:12 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/26/2012 8:12 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/26/2012 8:12 PM
Trichloroethene	ND	40	U	ppbv	40	1/26/2012 8:12 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/26/2012 8:12 PM
Vinyl acetate	ND	40	U	ppbv	40	1/26/2012 8:12 PM
Vinyl chloride	ND	40	U	ppbv	40	1/26/2012 8:12 PM
Xylenes, Total	110	120	J	ppbv	40	1/26/2012 8:12 PM
Surr: 4-Bromofluorobenzene	114	70-130		%REC	40	1/26/2012 8:12 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	41,000	4,700		µg/m³	40	1/27/2012 7:09 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	1/27/2012 7:09 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	1/27/2012 7:09 PM
Surr: 4-Bromofluorobenzene	89.5	70-130		%REC	40	1/27/2012 7:09 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 12:42:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-017	**Matrix:**	Air
Client Sample ID:	VA1113		

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	1/23/2012 4:44 PM
Carbon Monoxide	ND	0.10	U	%	1	1/23/2012 4:44 PM
Methane	ND	0.50	U	%	1	1/23/2012 4:44 PM
Nitrogen	78	0.10		%	1	1/23/2012 4:44 PM
Oxygen	21	0.10		%	1	1/23/2012 4:44 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/27/2012 12:43 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/27/2012 12:43 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/27/2012 12:43 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/27/2012 12:43 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/27/2012 12:43 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/27/2012 12:43 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/27/2012 12:43 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/27/2012 12:43 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/27/2012 12:43 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/27/2012 12:43 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/27/2012 12:43 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/27/2012 12:43 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/27/2012 12:43 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/27/2012 12:43 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/27/2012 12:43 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/27/2012 12:43 PM
2-Butanone	ND	40	U	ppbv	40	1/27/2012 12:43 PM
2-Hexanone	ND	40	U	ppbv	40	1/27/2012 12:43 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/27/2012 12:43 PM
Acetone	ND	40	U	ppbv	40	1/27/2012 12:43 PM
Benzene	200	40		ppbv	40	1/27/2012 12:43 PM
Benzyl chloride	ND	40	U	ppbv	40	1/27/2012 12:43 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/27/2012 12:43 PM
Bromoform	ND	40	U	ppbv	40	1/27/2012 12:43 PM
Bromomethane	ND	40	U	ppbv	40	1/27/2012 12:43 PM
Carbon disulfide	ND	40	U	ppbv	40	1/27/2012 12:43 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/27/2012 12:43 PM
Chlorobenzene	ND	40	U	ppbv	40	1/27/2012 12:43 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/27/2012 12:43 PM
Chloroethane	ND	40	U	ppbv	40	1/27/2012 12:43 PM
Chloroform	ND	40	U	ppbv	40	1/27/2012 12:43 PM
Chloromethane	ND	40	U	ppbv	40	1/27/2012 12:43 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/27/2012 12:43 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/27/2012 12:43 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 12:42:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-017	**Matrix:**	Air
Client Sample ID:	VA1113		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,200	80		ppbv	40	1/27/2012 12:43 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/27/2012 12:43 PM
Ethyl acetate	ND	40	U	ppbv	40	1/27/2012 12:43 PM
Ethylbenzene	44	80	J	ppbv	40	1/27/2012 12:43 PM
Heptane	140	40		ppbv	40	1/27/2012 12:43 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/27/2012 12:43 PM
m,p-Xylene	75	80	J	ppbv	40	1/27/2012 12:43 PM
Methylene chloride	ND	200	U	ppbv	40	1/27/2012 12:43 PM
n-Hexane	880	80		ppbv	40	1/27/2012 12:43 PM
Naphthalene	ND	40	U	ppbv	40	1/27/2012 12:43 PM
o-Xylene	ND	40	U	ppbv	40	1/27/2012 12:43 PM
Propylene	120	40		ppbv	40	1/27/2012 12:43 PM
Styrene	ND	40	U	ppbv	40	1/27/2012 12:43 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/27/2012 12:43 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/27/2012 12:43 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/27/2012 12:43 PM
Toluene	790	40		ppbv	40	1/27/2012 12:43 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/27/2012 12:43 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/27/2012 12:43 PM
Trichloroethene	ND	40	U	ppbv	40	1/27/2012 12:43 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/27/2012 12:43 PM
Vinyl acetate	ND	40	U	ppbv	40	1/27/2012 12:43 PM
Vinyl chloride	ND	40	U	ppbv	40	1/27/2012 12:43 PM
Xylenes, Total	75	120	J	ppbv	40	1/27/2012 12:43 PM
Surr: 4-Bromofluorobenzene	110	70-130		%REC	40	1/27/2012 12:43 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	67,000	4,700		µg/m³	40	1/30/2012 3:00 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	1/30/2012 3:00 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	1/30/2012 3:00 PM
Surr: 4-Bromofluorobenzene	87.1	70-130		%REC	40	1/30/2012 3:00 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 1:15:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-018	**Matrix:**	Air
Client Sample ID:	VA1114		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.086	0.10	J	%	1	1/23/2012 5:05 PM
Carbon Monoxide	ND	0.10	U	%	1	1/23/2012 5:05 PM
Methane	ND	0.50	U	%	1	1/23/2012 5:05 PM
Nitrogen	78	0.10		%	1	1/23/2012 5:05 PM
Oxygen	21	0.10		%	1	1/23/2012 5:05 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
2-Butanone	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
2-Hexanone	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
Acetone	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
Benzene	71,000	8,000		ppbv	8000	1/27/2012 7:58 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
Bromoform	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
Bromomethane	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
Chloroethane	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
Chloroform	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
Chloromethane	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 1:15:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-018	**Matrix:**	Air
Client Sample ID:	VA1114		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	210,000	16,000		ppbv	8000	1/27/2012 7:58 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	1/27/2012 7:58 PM
Heptane	80,000	8,000		ppbv	8000	1/27/2012 7:58 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	1/27/2012 7:58 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	1/27/2012 7:58 PM
Methylene chloride	ND	40,000	U	ppbv	8000	1/27/2012 7:58 PM
n-Hexane	240,000	16,000		ppbv	8000	1/27/2012 7:58 PM
Naphthalene	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
o-Xylene	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
Propylene	18,000	8,000		ppbv	8000	1/27/2012 7:58 PM
Styrene	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
Toluene	95,000	8,000		ppbv	8000	1/27/2012 7:58 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
Trichloroethene	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	1/27/2012 7:58 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	1/27/2012 7:58 PM
Surr: 4-Bromofluorobenzene	112	70-130		%REC	8000	1/27/2012 7:58 PM
Mass APH Air		**Method:**				**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	12,000,000	940,000		µg/m³	8000	1/27/2012 9:16 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	1/27/2012 9:16 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	1/27/2012 9:16 PM
Surr: 4-Bromofluorobenzene	88.9	70-130		%REC	8000	1/27/2012 9:16 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 1:48:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-019	**Matrix:**	Air
Client Sample ID:	VA1115		

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	1/23/2012 5:31 PM
Carbon Monoxide	ND	0.10	U	%	1	1/23/2012 5:31 PM
Methane	ND	0.50	U	%	1	1/23/2012 5:31 PM
Nitrogen	78	0.10		%	1	1/23/2012 5:31 PM
Oxygen	21	0.10		%	1	1/23/2012 5:31 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
2-Butanone	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
2-Hexanone	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
Acetone	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
Benzene	290,000	8,000		ppbv	8000	1/25/2012 12:19 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
Bromoform	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
Bromomethane	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
Chloroethane	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
Chloroform	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
Chloromethane	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 1:48:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-019	**Matrix:**	Air
Client Sample ID:	VA1115		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	380,000	16,000		ppbv	8000	1/25/2012 12:19 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
Ethylbenzene	8,200	16,000	J	ppbv	8000	1/25/2012 12:19 AM
Heptane	190,000	8,000		ppbv	8000	1/25/2012 12:19 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	1/25/2012 12:19 AM
m,p-Xylene	16,000	16,000	J	ppbv	8000	1/25/2012 12:19 AM
Methylene chloride	ND	40,000	U	ppbv	8000	1/25/2012 12:19 AM
n-Hexane	390,000	16,000		ppbv	8000	1/25/2012 12:19 AM
Naphthalene	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
o-Xylene	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
Propylene	23,000	8,000		ppbv	8000	1/25/2012 12:19 AM
Styrene	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
Toluene	380,000	8,000		ppbv	8000	1/25/2012 12:19 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
Trichloroethene	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	1/25/2012 12:19 AM
Xylenes, Total	16,000	24,000	J	ppbv	8000	1/25/2012 12:19 AM
Surr: 4-Bromofluorobenzene	116	70-130		%REC	8000	1/25/2012 12:19 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	20,000,000	2,300,000		µg/m³	20000	1/31/2012 6:42 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	1/31/2012 6:42 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	1/31/2012 6:42 PM
Surr: 4-Bromofluorobenzene	92.3	70-130		%REC	20000	1/31/2012 6:42 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 2:30:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-020	**Matrix:**	Air
Client Sample ID:	VA1116		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	1.3	0.10		%	1	1/23/2012 5:46 PM
Carbon Monoxide	ND	0.10	U	%	1	1/23/2012 5:46 PM
Methane	ND	0.50	U	%	1	1/23/2012 5:46 PM
Nitrogen	79	0.10		%	1	1/23/2012 5:46 PM
Oxygen	17	0.10		%	1	1/23/2012 5:46 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
1,3-Butadiene	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
2-Butanone	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
2-Hexanone	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
Acetone	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
Benzene	930,000	20,000		ppbv	20000	1/27/2012 9:29 PM
Benzyl chloride	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
Bromodichloromethane	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
Bromoform	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
Bromomethane	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
Carbon disulfide	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
Chlorobenzene	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
Chloroethane	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
Chloroform	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
Chloromethane	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 2:30:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-020	**Matrix:**	Air
Client Sample ID:	VA1116		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,400,000	80,000		ppbv	40000	1/30/2012 6:26 PM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
Ethyl acetate	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
Ethylbenzene	ND	40,000	U	ppbv	20000	1/27/2012 9:29 PM
Heptane	850,000	20,000		ppbv	20000	1/27/2012 9:29 PM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	1/27/2012 9:29 PM
m,p-Xylene	45,000	40,000		ppbv	20000	1/27/2012 9:29 PM
Methylene chloride	ND	100,000	U	ppbv	20000	1/27/2012 9:29 PM
n-Hexane	1,400,000	80,000		ppbv	40000	1/30/2012 6:26 PM
Naphthalene	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
o-Xylene	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
Propylene	65,000	20,000		ppbv	20000	1/27/2012 9:29 PM
Styrene	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
Tetrachloroethene	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
Toluene	980,000	40,000		ppbv	40000	1/30/2012 6:26 PM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
Trichloroethene	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
Vinyl acetate	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
Vinyl chloride	ND	20,000	U	ppbv	20000	1/27/2012 9:29 PM
Xylenes, Total	45,000	60,000	J	ppbv	20000	1/27/2012 9:29 PM
Surr: 4-Bromofluorobenzene	119	70-130		%REC	20000	1/27/2012 9:29 PM
Mass APH Air		**Method:**				**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	32,000,000	2,300,000		µg/m³	20000	1/31/2012 8:08 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	1/31/2012 8:08 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	1/31/2012 8:08 PM
Surr: 4-Bromofluorobenzene	92.1	70-130		%REC	20000	1/31/2012 8:08 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 3:21:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-021	**Matrix:**	Air
Client Sample ID:	VA1144		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.67	0.10		%	1	1/24/2012 12:06 PM
Carbon Monoxide	ND	0.10	U	%	1	1/24/2012 12:06 PM
Methane	ND	0.50	U	%	1	1/24/2012 12:06 PM
Nitrogen	78	0.10		%	1	1/24/2012 12:06 PM
Oxygen	20	0.10		%	1	1/24/2012 12:06 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/27/2012 11:07 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/27/2012 11:07 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/27/2012 11:07 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/27/2012 11:07 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/27/2012 11:07 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/27/2012 11:07 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/27/2012 11:07 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/27/2012 11:07 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/27/2012 11:07 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/27/2012 11:07 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/27/2012 11:07 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/27/2012 11:07 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/27/2012 11:07 PM
1,3-Butadiene	ND	800	U	ppbv	800	1/27/2012 11:07 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/27/2012 11:07 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/27/2012 11:07 PM
2-Butanone	ND	800	U	ppbv	800	1/27/2012 11:07 PM
2-Hexanone	ND	800	U	ppbv	800	1/27/2012 11:07 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/27/2012 11:07 PM
Acetone	ND	800	U	ppbv	800	1/27/2012 11:07 PM
Benzene	13,000	800		ppbv	800	1/27/2012 11:07 PM
Benzyl chloride	ND	800	U	ppbv	800	1/27/2012 11:07 PM
Bromodichloromethane	ND	800	U	ppbv	800	1/27/2012 11:07 PM
Bromoform	ND	800	U	ppbv	800	1/27/2012 11:07 PM
Bromomethane	ND	800	U	ppbv	800	1/27/2012 11:07 PM
Carbon disulfide	ND	800	U	ppbv	800	1/27/2012 11:07 PM
Carbon tetrachloride	ND	800	U	ppbv	800	1/27/2012 11:07 PM
Chlorobenzene	ND	800	U	ppbv	800	1/27/2012 11:07 PM
Chlorodibromomethane	ND	800	U	ppbv	800	1/27/2012 11:07 PM
Chloroethane	ND	800	U	ppbv	800	1/27/2012 11:07 PM
Chloroform	ND	800	U	ppbv	800	1/27/2012 11:07 PM
Chloromethane	ND	800	U	ppbv	800	1/27/2012 11:07 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/27/2012 11:07 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/27/2012 11:07 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 3:21:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-021	**Matrix:**	Air
Client Sample ID:	VA1144		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	19,000	1,600		ppbv	800	1/27/2012 11:07 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/27/2012 11:07 PM
Ethyl acetate	ND	800	U	ppbv	800	1/27/2012 11:07 PM
Ethylbenzene	1,300	1,600	J	ppbv	800	1/27/2012 11:07 PM
Heptane	15,000	800		ppbv	800	1/27/2012 11:07 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/27/2012 11:07 PM
m,p-Xylene	3,900	1,600		ppbv	800	1/27/2012 11:07 PM
Methylene chloride	ND	4,000	U	ppbv	800	1/27/2012 11:07 PM
n-Hexane	14,000	1,600		ppbv	800	1/27/2012 11:07 PM
Naphthalene	ND	800	U	ppbv	800	1/27/2012 11:07 PM
o-Xylene	1,000	800		ppbv	800	1/27/2012 11:07 PM
Propylene	1,400	800		ppbv	800	1/27/2012 11:07 PM
Styrene	ND	800	U	ppbv	800	1/27/2012 11:07 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/27/2012 11:07 PM
Tetrachloroethene	ND	800	U	ppbv	800	1/27/2012 11:07 PM
Tetrahydrofuran	ND	800	U	ppbv	800	1/27/2012 11:07 PM
Toluene	24,000	8,000		ppbv	8000	1/30/2012 8:48 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/27/2012 11:07 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/27/2012 11:07 PM
Trichloroethene	ND	800	U	ppbv	800	1/27/2012 11:07 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/27/2012 11:07 PM
Vinyl acetate	ND	800	U	ppbv	800	1/27/2012 11:07 PM
Vinyl chloride	ND	800	U	ppbv	800	1/27/2012 11:07 PM
Xylenes, Total	4,900	2,400		ppbv	800	1/27/2012 11:07 PM
Surr: 4-Bromofluorobenzene	112	70-130		%REC	800	1/27/2012 11:07 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	560,000	94,000		µg/m³	800	1/31/2012 9:43 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/31/2012 9:43 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	1/31/2012 9:43 PM
Surr: 4-Bromofluorobenzene	92.2	70-130		%REC	800	1/31/2012 9:43 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 3:50:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-022	**Matrix:**	Air
Client Sample ID:	VA1145		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	2.7	0.10		%	1	1/24/2012 12:21 PM
Carbon Monoxide	ND	0.10	U	%	1	1/24/2012 12:21 PM
Methane	ND	0.50	U	%	1	1/24/2012 12:21 PM
Nitrogen	80	0.10		%	1	1/24/2012 12:21 PM
Oxygen	16	0.10		%	1	1/24/2012 12:21 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
2-Butanone	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
2-Hexanone	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
Acetone	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
Benzene	35,000	8,000		ppbv	8000	1/28/2012 1:26 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
Bromoform	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
Bromomethane	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
Chloroethane	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
Chloroform	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
Chloromethane	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 3:50:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-022	**Matrix:**	Air
Client Sample ID:	VA1145		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	110,000	16,000		ppbv	8000	1/28/2012 1:26 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	1/28/2012 1:26 AM
Heptane	34,000	8,000		ppbv	8000	1/28/2012 1:26 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	1/28/2012 1:26 AM
m,p-Xylene	ND	16,000	U	ppbv	8000	1/28/2012 1:26 AM
Methylene chloride	ND	40,000	U	ppbv	8000	1/28/2012 1:26 AM
n-Hexane	82,000	16,000		ppbv	8000	1/28/2012 1:26 AM
Naphthalene	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
o-Xylene	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
Propylene	16,000	8,000		ppbv	8000	1/28/2012 1:26 AM
Styrene	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
Toluene	55,000	8,000		ppbv	8000	1/28/2012 1:26 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
Trichloroethene	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	1/28/2012 1:26 AM
Xylenes, Total	ND	24,000	U	ppbv	8000	1/28/2012 1:26 AM
Surr: 4-Bromofluorobenzene	120	70-130		%REC	8000	1/28/2012 1:26 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	3,100,000	940,000		µg/m³	8000	1/24/2012 9:56 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	1/24/2012 9:56 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	1/24/2012 9:56 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	8000	1/24/2012 9:56 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 11:25:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-023	**Matrix:**	Air
Client Sample ID:	VA1170		

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	1/24/2012 12:51 PM
Carbon Monoxide	ND	0.10	U	%	1	1/24/2012 12:51 PM
Methane	ND	0.50	U	%	1	1/24/2012 12:51 PM
Nitrogen	79	0.10		%	1	1/24/2012 12:51 PM
Oxygen	21	0.10		%	1	1/24/2012 12:51 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
1,1,2,2-Tetrachloroethane	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
1,1,2-Trichloroethane	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
1,1-Dichloroethane	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
1,1-Dichloroethene	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
1,2,4-Trichlorobenzene	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
1,2,4-Trimethylbenzene	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
1,2-Dibromoethane	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
1,2-Dichlorobenzene	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
1,2-Dichloroethane	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
1,2-Dichloropropane	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
1,3,5-Trimethylbenzene	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
1,3-Butadiene	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
1,3-Dichlorobenzene	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
1,4-Dichlorobenzene	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
2-Butanone	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
2-Hexanone	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
4-Methyl-2-pentanone	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Acetone	28	8.0		ppbv	8	1/22/2012 9:51 PM
Benzene	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Benzyl chloride	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Bromodichloromethane	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Bromoform	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Bromomethane	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Carbon disulfide	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Carbon tetrachloride	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Chlorobenzene	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Chlorodibromomethane	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Chloroethane	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Chloroform	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Chloromethane	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
cis-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
cis-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 11:25:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-023	**Matrix:**	Air
Client Sample ID:	VA1170		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	ND	16	U	ppbv	8	1/22/2012 9:51 PM
Dichlorodifluoromethane	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Ethyl acetate	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Ethylbenzene	ND	16	U	ppbv	8	1/22/2012 9:51 PM
Heptane	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Hexachlorobutadiene	ND	16	U	ppbv	8	1/22/2012 9:51 PM
m,p-Xylene	ND	16	U	ppbv	8	1/22/2012 9:51 PM
Methylene chloride	32	40	J	ppbv	8	1/22/2012 9:51 PM
n-Hexane	20	16		ppbv	8	1/22/2012 9:51 PM
Naphthalene	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
o-Xylene	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Propylene	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Styrene	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
tert-Butyl Methyl Ether	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Tetrachloroethene	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Tetrahydrofuran	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Toluene	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
trans-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
trans-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Trichloroethene	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Trichlorofluoromethane	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Vinyl acetate	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Vinyl chloride	ND	8.0	U	ppbv	8	1/22/2012 9:51 PM
Xylenes, Total	ND	24	U	ppbv	8	1/22/2012 9:51 PM
Surr: 4-Bromofluorobenzene	118	70-130		%REC	8	1/22/2012 9:51 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,800	940		µg/m³	8	1/23/2012 6:42 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100	U	µg/m³	8	1/23/2012 6:42 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500	U	µg/m³	8	1/23/2012 6:42 PM
Surr: 4-Bromofluorobenzene	98.9	70-130		%REC	8	1/23/2012 6:42 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 11:25:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-024	**Matrix:**	Air
Client Sample ID:	VA1171		

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	1/24/2012 1:08 PM
Carbon Monoxide	ND	0.10	U	%	1	1/24/2012 1:08 PM
Methane	ND	0.50	U	%	1	1/24/2012 1:08 PM
Nitrogen	79	0.10		%	1	1/24/2012 1:08 PM
Oxygen	21	0.10		%	1	1/24/2012 1:08 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
1,1,2,2-Tetrachloroethane	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
1,1,2-Trichloroethane	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
1,1-Dichloroethane	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
1,1-Dichloroethene	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
1,2,4-Trichlorobenzene	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
1,2,4-Trimethylbenzene	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
1,2-Dibromoethane	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
1,2-Dichlorobenzene	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
1,2-Dichloroethane	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
1,2-Dichloropropane	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
1,3,5-Trimethylbenzene	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
1,3-Butadiene	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
1,3-Dichlorobenzene	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
1,4-Dichlorobenzene	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
2-Butanone	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
2-Hexanone	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
4-Methyl-2-pentanone	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
Acetone	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
Benzene	17	8.0		ppbv	8	1/22/2012 10:38 PM
Benzyl chloride	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
Bromodichloromethane	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
Bromoform	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
Bromomethane	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
Carbon disulfide	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
Carbon tetrachloride	20	8.0		ppbv	8	1/22/2012 10:38 PM
Chlorobenzene	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
Chlorodibromomethane	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
Chloroethane	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
Chloroform	120	8.0		ppbv	8	1/22/2012 10:38 PM
Chloromethane	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
cis-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
cis-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 11:25:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-024	**Matrix:**	Air
Client Sample ID:	VA1171		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	24	16		ppbv	8	1/22/2012 10:38 PM
Dichlorodifluoromethane	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
Ethyl acetate	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
Ethylbenzene	9.1	16	J	ppbv	8	1/22/2012 10:38 PM
Heptane	25	8.0		ppbv	8	1/22/2012 10:38 PM
Hexachlorobutadiene	ND	16	U	ppbv	8	1/22/2012 10:38 PM
m,p-Xylene	33	16		ppbv	8	1/22/2012 10:38 PM
Methylene chloride	ND	40	U	ppbv	8	1/22/2012 10:38 PM
n-Hexane	12	16	J	ppbv	8	1/22/2012 10:38 PM
Naphthalene	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
o-Xylene	12	8.0		ppbv	8	1/22/2012 10:38 PM
Propylene	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
Styrene	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
tert-Butyl Methyl Ether	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
Tetrachloroethene	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
Tetrahydrofuran	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
Toluene	84	8.0		ppbv	8	1/22/2012 10:38 PM
trans-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
trans-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
Trichloroethene	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
Trichlorofluoromethane	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
Vinyl acetate	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
Vinyl chloride	ND	8.0	U	ppbv	8	1/22/2012 10:38 PM
Xylenes, Total	45	24		ppbv	8	1/22/2012 10:38 PM
Surr: 4-Bromofluorobenzene	116	70-130		%REC	8	1/22/2012 10:38 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,600	1,900		µg/m³	16	1/24/2012 5:24 PM
C9-C10 Aromatic Hydrocarbons	ND	2,100	U	µg/m³	16	1/24/2012 5:24 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,000	U	µg/m³	16	1/24/2012 5:24 PM
Surr: 4-Bromofluorobenzene	99.3	70-130		%REC	16	1/24/2012 5:24 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 12:12:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-025	**Matrix:**	Air
Client Sample ID:	VA1172		

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	1/24/2012 2:08 PM
Carbon Monoxide	ND	0.10	U	%	1	1/24/2012 2:08 PM
Methane	ND	0.50	U	%	1	1/24/2012 2:08 PM
Nitrogen	79	0.10		%	1	1/24/2012 2:08 PM
Oxygen	21	0.10		%	1	1/24/2012 2:08 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
1,1,2,2-Tetrachloroethane	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
1,1,2-Trichloroethane	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
1,1-Dichloroethane	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
1,1-Dichloroethene	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
1,2,4-Trichlorobenzene	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
1,2,4-Trimethylbenzene	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
1,2-Dibromoethane	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
1,2-Dichlorobenzene	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
1,2-Dichloroethane	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
1,2-Dichloropropane	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
1,3,5-Trimethylbenzene	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
1,3-Butadiene	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
1,3-Dichlorobenzene	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
1,4-Dichlorobenzene	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
2-Butanone	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
2-Hexanone	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
4-Methyl-2-pentanone	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
Acetone	16	8.0		ppbv	8	1/23/2012 12:16 AM
Benzene	50	8.0		ppbv	8	1/23/2012 12:16 AM
Benzyl chloride	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
Bromodichloromethane	23	8.0		ppbv	8	1/23/2012 12:16 AM
Bromoform	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
Bromomethane	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
Carbon disulfide	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
Carbon tetrachloride	83	8.0		ppbv	8	1/23/2012 12:16 AM
Chlorobenzene	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
Chlorodibromomethane	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
Chloroethane	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
Chloroform	210	40		ppbv	40	1/26/2012 3:33 AM
Chloromethane	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
cis-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
cis-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 12:12:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-025	**Matrix:**	Air
Client Sample ID:	VA1172		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	28	16		ppbv	8	1/23/2012 12:16 AM
Dichlorodifluoromethane	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
Ethyl acetate	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
Ethylbenzene	12	16	J	ppbv	8	1/23/2012 12:16 AM
Heptane	21	8.0		ppbv	8	1/23/2012 12:16 AM
Hexachlorobutadiene	ND	16	U	ppbv	8	1/23/2012 12:16 AM
m,p-Xylene	49	16		ppbv	8	1/23/2012 12:16 AM
Methylene chloride	ND	40	U	ppbv	8	1/23/2012 12:16 AM
n-Hexane	17	16		ppbv	8	1/23/2012 12:16 AM
Naphthalene	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
o-Xylene	17	8.0		ppbv	8	1/23/2012 12:16 AM
Propylene	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
Styrene	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
tert-Butyl Methyl Ether	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
Tetrachloroethene	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
Tetrahydrofuran	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
Toluene	160	8.0		ppbv	8	1/23/2012 12:16 AM
trans-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
trans-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
Trichloroethene	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
Trichlorofluoromethane	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
Vinyl acetate	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
Vinyl chloride	ND	8.0	U	ppbv	8	1/23/2012 12:16 AM
Xylenes, Total	66	24		ppbv	8	1/23/2012 12:16 AM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	8	1/23/2012 12:16 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,200	940		µg/m³	8	1/24/2012 6:08 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100	U	µg/m³	8	1/24/2012 6:08 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500	U	µg/m³	8	1/24/2012 6:08 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	8	1/24/2012 6:08 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 12:45:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-026	**Matrix:**	Air
Client Sample ID:	VA1173		

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	1/24/2012 2:26 PM
Carbon Monoxide	ND	0.10	U	%	1	1/24/2012 2:26 PM
Methane	ND	0.50	U	%	1	1/24/2012 2:26 PM
Nitrogen	79	0.10		%	1	1/24/2012 2:26 PM
Oxygen	21	0.10		%	1	1/24/2012 2:26 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
1,1,2,2-Tetrachloroethane	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
1,1,2-Trichloroethane	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
1,1-Dichloroethane	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
1,1-Dichloroethene	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
1,2,4-Trichlorobenzene	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
1,2,4-Trimethylbenzene	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
1,2-Dibromoethane	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
1,2-Dichlorobenzene	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
1,2-Dichloroethane	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
1,2-Dichloropropane	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
1,3,5-Trimethylbenzene	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
1,3-Butadiene	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
1,3-Dichlorobenzene	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
1,4-Dichlorobenzene	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
2-Butanone	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
2-Hexanone	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
4-Methyl-2-pentanone	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
Acetone	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
Benzene	11	8.0		ppbv	8	1/23/2012 1:04 AM
Benzyl chloride	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
Bromodichloromethane	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
Bromoform	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
Bromomethane	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
Carbon disulfide	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
Carbon tetrachloride	12	8.0		ppbv	8	1/23/2012 1:04 AM
Chlorobenzene	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
Chlorodibromomethane	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
Chloroethane	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
Chloroform	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
Chloromethane	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
cis-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
cis-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 12:45:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-026	**Matrix:**	Air
Client Sample ID:	VA1173		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	27	16		ppbv	8	1/23/2012 1:04 AM
Dichlorodifluoromethane	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
Ethyl acetate	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
Ethylbenzene	ND	16	U	ppbv	8	1/23/2012 1:04 AM
Heptane	12	8.0		ppbv	8	1/23/2012 1:04 AM
Hexachlorobutadiene	ND	16	U	ppbv	8	1/23/2012 1:04 AM
m,p-Xylene	ND	16	U	ppbv	8	1/23/2012 1:04 AM
Methylene chloride	ND	40	U	ppbv	8	1/23/2012 1:04 AM
n-Hexane	24	16		ppbv	8	1/23/2012 1:04 AM
Naphthalene	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
o-Xylene	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
Propylene	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
Styrene	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
tert-Butyl Methyl Ether	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
Tetrachloroethene	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
Tetrahydrofuran	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
Toluene	30	8.0		ppbv	8	1/23/2012 1:04 AM
trans-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
trans-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
Trichloroethene	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
Trichlorofluoromethane	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
Vinyl acetate	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
Vinyl chloride	ND	8.0	U	ppbv	8	1/23/2012 1:04 AM
Xylenes, Total	ND	24	U	ppbv	8	1/23/2012 1:04 AM
Surr: 4-Bromofluorobenzene	118	70-130		%REC	8	1/23/2012 1:04 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	4,900	940		µg/m³	8	1/23/2012 8:50 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100	U	µg/m³	8	1/23/2012 8:50 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500	U	µg/m³	8	1/23/2012 8:50 PM
Surr: 4-Bromofluorobenzene	98.0	70-130		%REC	8	1/23/2012 8:50 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 1:24:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-027	**Matrix:**	Air
Client Sample ID:	VA1174		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.048	0.10	J	%	1	1/24/2012 2:49 PM
Carbon Monoxide	ND	0.10	U	%	1	1/24/2012 2:49 PM
Methane	ND	0.50	U	%	1	1/24/2012 2:49 PM
Nitrogen	79	0.10		%	1	1/24/2012 2:49 PM
Oxygen	21	0.10		%	1	1/24/2012 2:49 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
1,1,2,2-Tetrachloroethane	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
1,1,2-Trichloroethane	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
1,1-Dichloroethane	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
1,1-Dichloroethene	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
1,2,4-Trichlorobenzene	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
1,2,4-Trimethylbenzene	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
1,2-Dibromoethane	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
1,2-Dichlorobenzene	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
1,2-Dichloroethane	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
1,2-Dichloropropane	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
1,3,5-Trimethylbenzene	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
1,3-Butadiene	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
1,3-Dichlorobenzene	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
1,4-Dichlorobenzene	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
2-Butanone	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
2-Hexanone	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
4-Methyl-2-pentanone	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
Acetone	11	8.0		ppbv	8	1/23/2012 1:51 AM
Benzene	13	8.0		ppbv	8	1/23/2012 1:51 AM
Benzyl chloride	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
Bromodichloromethane	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
Bromoform	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
Bromomethane	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
Carbon disulfide	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
Carbon tetrachloride	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
Chlorobenzene	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
Chlorodibromomethane	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
Chloroethane	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
Chloroform	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
Chloromethane	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
cis-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
cis-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 1:24:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-027	**Matrix:**	Air
Client Sample ID:	VA1174		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	26	16		ppbv	8	1/23/2012 1:51 AM
Dichlorodifluoromethane	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
Ethyl acetate	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
Ethylbenzene	ND	16	U	ppbv	8	1/23/2012 1:51 AM
Heptane	24	8.0		ppbv	8	1/23/2012 1:51 AM
Hexachlorobutadiene	ND	16	U	ppbv	8	1/23/2012 1:51 AM
m,p-Xylene	10	16	J	ppbv	8	1/23/2012 1:51 AM
Methylene chloride	ND	40	U	ppbv	8	1/23/2012 1:51 AM
n-Hexane	16	16		ppbv	8	1/23/2012 1:51 AM
Naphthalene	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
o-Xylene	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
Propylene	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
Styrene	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
tert-Butyl Methyl Ether	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
Tetrachloroethene	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
Tetrahydrofuran	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
Toluene	33	8.0		ppbv	8	1/23/2012 1:51 AM
trans-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
trans-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
Trichloroethene	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
Trichlorofluoromethane	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
Vinyl acetate	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
Vinyl chloride	ND	8.0	U	ppbv	8	1/23/2012 1:51 AM
Xylenes, Total	10	24	J	ppbv	8	1/23/2012 1:51 AM
Surr: 4-Bromofluorobenzene	113	70-130		%REC	8	1/23/2012 1:51 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	3,400	940		µg/m³	8	1/24/2012 6:52 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100	U	µg/m³	8	1/24/2012 6:52 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500	U	µg/m³	8	1/24/2012 6:52 PM
Surr: 4-Bromofluorobenzene	99.8	70-130		%REC	8	1/24/2012 6:52 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 2:00:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-028	**Matrix:**	Air
Client Sample ID:	VA1175		

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	1/24/2012 3:06 PM
Carbon Monoxide	ND	0.10	U	%	1	1/24/2012 3:06 PM
Methane	ND	0.50	U	%	1	1/24/2012 3:06 PM
Nitrogen	79	0.10		%	1	1/24/2012 3:06 PM
Oxygen	21	0.10		%	1	1/24/2012 3:06 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/25/2012 4:59 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/25/2012 4:59 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/25/2012 4:59 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/25/2012 4:59 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/25/2012 4:59 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/25/2012 4:59 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/25/2012 4:59 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/25/2012 4:59 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/25/2012 4:59 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/25/2012 4:59 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/25/2012 4:59 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/25/2012 4:59 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/25/2012 4:59 AM
1,3-Butadiene	ND	800	U	ppbv	800	1/25/2012 4:59 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/25/2012 4:59 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/25/2012 4:59 AM
2-Butanone	ND	800	U	ppbv	800	1/25/2012 4:59 AM
2-Hexanone	ND	800	U	ppbv	800	1/25/2012 4:59 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/25/2012 4:59 AM
Acetone	ND	800	U	ppbv	800	1/25/2012 4:59 AM
Benzene	4,300	800		ppbv	800	1/25/2012 4:59 AM
Benzyl chloride	ND	800	U	ppbv	800	1/25/2012 4:59 AM
Bromodichloromethane	ND	800	U	ppbv	800	1/25/2012 4:59 AM
Bromoform	ND	800	U	ppbv	800	1/25/2012 4:59 AM
Bromomethane	ND	800	U	ppbv	800	1/25/2012 4:59 AM
Carbon disulfide	ND	800	U	ppbv	800	1/25/2012 4:59 AM
Carbon tetrachloride	ND	800	U	ppbv	800	1/25/2012 4:59 AM
Chlorobenzene	ND	800	U	ppbv	800	1/25/2012 4:59 AM
Chlorodibromomethane	ND	800	U	ppbv	800	1/25/2012 4:59 AM
Chloroethane	ND	800	U	ppbv	800	1/25/2012 4:59 AM
Chloroform	ND	800	U	ppbv	800	1/25/2012 4:59 AM
Chloromethane	ND	800	U	ppbv	800	1/25/2012 4:59 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/25/2012 4:59 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/25/2012 4:59 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 2:00:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-028	**Matrix:**	Air
Client Sample ID:	VA1175		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	20,000	1,600		ppbv	800	1/25/2012 4:59 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/25/2012 4:59 AM
Ethyl acetate	ND	800	U	ppbv	800	1/25/2012 4:59 AM
Ethylbenzene	ND	1,600	U	ppbv	800	1/25/2012 4:59 AM
Heptane	3,800	800		ppbv	800	1/25/2012 4:59 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/25/2012 4:59 AM
m,p-Xylene	ND	1,600	U	ppbv	800	1/25/2012 4:59 AM
Methylene chloride	ND	4,000	U	ppbv	800	1/25/2012 4:59 AM
n-Hexane	18,000	1,600		ppbv	800	1/25/2012 4:59 AM
Naphthalene	ND	800	U	ppbv	800	1/25/2012 4:59 AM
o-Xylene	ND	800	U	ppbv	800	1/25/2012 4:59 AM
Propylene	1,800	800		ppbv	800	1/25/2012 4:59 AM
Styrene	ND	800	U	ppbv	800	1/25/2012 4:59 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/25/2012 4:59 AM
Tetrachloroethene	ND	800	U	ppbv	800	1/25/2012 4:59 AM
Tetrahydrofuran	ND	800	U	ppbv	800	1/25/2012 4:59 AM
Toluene	6,600	800		ppbv	800	1/25/2012 4:59 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/25/2012 4:59 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/25/2012 4:59 AM
Trichloroethene	ND	800	U	ppbv	800	1/25/2012 4:59 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/25/2012 4:59 AM
Vinyl acetate	ND	800	U	ppbv	800	1/25/2012 4:59 AM
Vinyl chloride	ND	800	U	ppbv	800	1/25/2012 4:59 AM
Xylenes, Total	ND	2,400	U	ppbv	800	1/25/2012 4:59 AM
Surr: 4-Bromofluorobenzene	119	70-130		%REC	800	1/25/2012 4:59 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,600,000	940,000		µg/m³	8000	1/26/2012 4:21 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	1/26/2012 4:21 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	1/26/2012 4:21 PM
Surr: 4-Bromofluorobenzene	92.6	70-130		%REC	8000	1/26/2012 4:21 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 2:50:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-029	**Matrix:**	Air
Client Sample ID:	VA1176		

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	1/24/2012 3:30 PM
Carbon Monoxide	ND	0.10	U	%	1	1/24/2012 3:30 PM
Methane	ND	0.50	U	%	1	1/24/2012 3:30 PM
Nitrogen	79	0.10		%	1	1/24/2012 3:30 PM
Oxygen	21	0.10		%	1	1/24/2012 3:30 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	16	U	ppbv	16	1/28/2012 4:31 AM
1,1,2,2-Tetrachloroethane	ND	16	U	ppbv	16	1/28/2012 4:31 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	16	U	ppbv	16	1/28/2012 4:31 AM
1,1,2-Trichloroethane	ND	16	U	ppbv	16	1/28/2012 4:31 AM
1,1-Dichloroethane	ND	16	U	ppbv	16	1/28/2012 4:31 AM
1,1-Dichloroethene	ND	16	U	ppbv	16	1/28/2012 4:31 AM
1,2,4-Trichlorobenzene	ND	16	U	ppbv	16	1/28/2012 4:31 AM
1,2,4-Trimethylbenzene	ND	16	U	ppbv	16	1/28/2012 4:31 AM
1,2-Dibromoethane	ND	16	U	ppbv	16	1/28/2012 4:31 AM
1,2-Dichlorobenzene	ND	16	U	ppbv	16	1/28/2012 4:31 AM
1,2-Dichloroethane	ND	16	U	ppbv	16	1/28/2012 4:31 AM
1,2-Dichloropropane	ND	16	U	ppbv	16	1/28/2012 4:31 AM
1,3,5-Trimethylbenzene	ND	16	U	ppbv	16	1/28/2012 4:31 AM
1,3-Butadiene	ND	16	U	ppbv	16	1/28/2012 4:31 AM
1,3-Dichlorobenzene	ND	16	U	ppbv	16	1/28/2012 4:31 AM
1,4-Dichlorobenzene	ND	16	U	ppbv	16	1/28/2012 4:31 AM
2-Butanone	ND	16	U	ppbv	16	1/28/2012 4:31 AM
2-Hexanone	ND	16	U	ppbv	16	1/28/2012 4:31 AM
4-Methyl-2-pentanone	ND	16	U	ppbv	16	1/28/2012 4:31 AM
Acetone	44	16		ppbv	16	1/28/2012 4:31 AM
Benzene	25	16		ppbv	16	1/28/2012 4:31 AM
Benzyl chloride	ND	16	U	ppbv	16	1/28/2012 4:31 AM
Bromodichloromethane	ND	16	U	ppbv	16	1/28/2012 4:31 AM
Bromoform	ND	16	U	ppbv	16	1/28/2012 4:31 AM
Bromomethane	ND	16	U	ppbv	16	1/28/2012 4:31 AM
Carbon disulfide	ND	16	U	ppbv	16	1/28/2012 4:31 AM
Carbon tetrachloride	ND	16	U	ppbv	16	1/28/2012 4:31 AM
Chlorobenzene	ND	16	U	ppbv	16	1/28/2012 4:31 AM
Chlorodibromomethane	ND	16	U	ppbv	16	1/28/2012 4:31 AM
Chloroethane	ND	16	U	ppbv	16	1/28/2012 4:31 AM
Chloroform	ND	16	U	ppbv	16	1/28/2012 4:31 AM
Chloromethane	ND	16	U	ppbv	16	1/28/2012 4:31 AM
cis-1,2-Dichloroethene	ND	16	U	ppbv	16	1/28/2012 4:31 AM
cis-1,3-dichloropropene	ND	16	U	ppbv	16	1/28/2012 4:31 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 2:50:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-029	**Matrix:**	Air
Client Sample ID:	VA1176		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	32	32	J	ppbv	16	1/28/2012 4:31 AM
Dichlorodifluoromethane	ND	16	U	ppbv	16	1/28/2012 4:31 AM
Ethyl acetate	ND	16	U	ppbv	16	1/28/2012 4:31 AM
Ethylbenzene	ND	32	U	ppbv	16	1/28/2012 4:31 AM
Heptane	ND	16	U	ppbv	16	1/28/2012 4:31 AM
Hexachlorobutadiene	ND	32	U	ppbv	16	1/28/2012 4:31 AM
m,p-Xylene	ND	32	U	ppbv	16	1/28/2012 4:31 AM
Methylene chloride	270	80		ppbv	16	1/28/2012 4:31 AM
n-Hexane	62	32		ppbv	16	1/28/2012 4:31 AM
Naphthalene	ND	16	U	ppbv	16	1/28/2012 4:31 AM
o-Xylene	ND	16	U	ppbv	16	1/28/2012 4:31 AM
Propylene	26	16		ppbv	16	1/28/2012 4:31 AM
Styrene	ND	16	U	ppbv	16	1/28/2012 4:31 AM
tert-Butyl Methyl Ether	ND	16	U	ppbv	16	1/28/2012 4:31 AM
Tetrachloroethene	ND	16	U	ppbv	16	1/28/2012 4:31 AM
Tetrahydrofuran	ND	16	U	ppbv	16	1/28/2012 4:31 AM
Toluene	41	16		ppbv	16	1/28/2012 4:31 AM
trans-1,2-Dichloroethene	ND	16	U	ppbv	16	1/28/2012 4:31 AM
trans-1,3-dichloropropene	ND	16	U	ppbv	16	1/28/2012 4:31 AM
Trichloroethene	ND	16	U	ppbv	16	1/28/2012 4:31 AM
Trichlorofluoromethane	ND	16	U	ppbv	16	1/28/2012 4:31 AM
Vinyl acetate	ND	16	U	ppbv	16	1/28/2012 4:31 AM
Vinyl chloride	ND	16	U	ppbv	16	1/28/2012 4:31 AM
Xylenes, Total	ND	48	U	ppbv	16	1/28/2012 4:31 AM
Surr: 4-Bromofluorobenzene	109	70-130		%REC	16	1/28/2012 4:31 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,200	940		µg/m³	8	1/26/2012 5:48 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100	U	µg/m³	8	1/26/2012 5:48 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500	U	µg/m³	8	1/26/2012 5:48 PM
Surr: 4-Bromofluorobenzene	90.8	70-130		%REC	8	1/26/2012 5:48 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 3:47:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-030	**Matrix:**	Air
Client Sample ID:	VA1177		

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	1/24/2012 4:04 PM
Carbon Monoxide	ND	0.10	U	%	1	1/24/2012 4:04 PM
Methane	ND	0.50	U	%	1	1/24/2012 4:04 PM
Nitrogen	80	0.10		%	1	1/24/2012 4:04 PM
Oxygen	21	0.10		%	1	1/24/2012 4:04 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
1,1,2,2-Tetrachloroethane	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
1,1,2-Trichloroethane	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
1,1-Dichloroethane	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
1,1-Dichloroethene	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
1,2,4-Trichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
1,2,4-Trimethylbenzene	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
1,2-Dibromoethane	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
1,2-Dichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
1,2-Dichloroethane	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
1,2-Dichloropropane	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
1,3,5-Trimethylbenzene	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
1,3-Butadiene	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
1,3-Dichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
1,4-Dichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
2-Butanone	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
2-Hexanone	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
4-Methyl-2-pentanone	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
Acetone	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
Benzene	75	8.0		ppbv	8	1/26/2012 7:26 AM
Benzyl chloride	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
Bromodichloromethane	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
Bromoform	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
Bromomethane	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
Carbon disulfide	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
Carbon tetrachloride	15	8.0		ppbv	8	1/26/2012 7:26 AM
Chlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
Chlorodibromomethane	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
Chloroethane	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
Chloroform	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
Chloromethane	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
cis-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
cis-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 3:47:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-030	**Matrix:**	Air
Client Sample ID:	VA1177		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	79	16		ppbv	8	1/26/2012 7:26 AM
Dichlorodifluoromethane	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
Ethyl acetate	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
Ethylbenzene	9.9	16	J	ppbv	8	1/26/2012 7:26 AM
Heptane	32	8.0		ppbv	8	1/26/2012 7:26 AM
Hexachlorobutadiene	ND	16	U	ppbv	8	1/26/2012 7:26 AM
m,p-Xylene	17	16		ppbv	8	1/26/2012 7:26 AM
Methylene chloride	ND	40	U	ppbv	8	1/26/2012 7:26 AM
n-Hexane	87	16		ppbv	8	1/26/2012 7:26 AM
Naphthalene	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
o-Xylene	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
Propylene	12	8.0		ppbv	8	1/26/2012 7:26 AM
Styrene	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
tert-Butyl Methyl Ether	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
Tetrachloroethene	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
Tetrahydrofuran	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
Toluene	210	8.0		ppbv	8	1/26/2012 7:26 AM
trans-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
trans-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
Trichloroethene	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
Trichlorofluoromethane	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
Vinyl acetate	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
Vinyl chloride	ND	8.0	U	ppbv	8	1/26/2012 7:26 AM
Xylenes, Total	17	24	J	ppbv	8	1/26/2012 7:26 AM
Surr: 4-Bromofluorobenzene	114	70-130		%REC	8	1/26/2012 7:26 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	6,500	940		µg/m³	8	1/26/2012 7:18 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100	U	µg/m³	8	1/26/2012 7:18 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500	U	µg/m³	8	1/26/2012 7:18 PM
Surr: 4-Bromofluorobenzene	91.0	70-130		%REC	8	1/26/2012 7:18 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 4:13:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-031	**Matrix:**	Air
Client Sample ID:	VA1178		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.055	0.10	J	%	1	1/25/2012 12:12 PM
Carbon Monoxide	ND	0.10	U	%	1	1/25/2012 12:12 PM
Methane	ND	0.50	U	%	1	1/25/2012 12:12 PM
Nitrogen	79	0.10		%	1	1/25/2012 12:12 PM
Oxygen	21	0.10		%	1	1/25/2012 12:12 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
1,1,2,2-Tetrachloroethane	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
1,1,2-Trichloroethane	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
1,1-Dichloroethane	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
1,1-Dichloroethene	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
1,2,4-Trichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
1,2,4-Trimethylbenzene	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
1,2-Dibromoethane	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
1,2-Dichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
1,2-Dichloroethane	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
1,2-Dichloropropane	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
1,3,5-Trimethylbenzene	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
1,3-Butadiene	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
1,3-Dichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
1,4-Dichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
2-Butanone	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
2-Hexanone	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
4-Methyl-2-pentanone	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
Acetone	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
Benzene	36	8.0		ppbv	8	1/26/2012 8:12 AM
Benzyl chloride	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
Bromodichloromethane	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
Bromoform	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
Bromomethane	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
Carbon disulfide	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
Carbon tetrachloride	48	8.0		ppbv	8	1/26/2012 8:12 AM
Chlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
Chlorodibromomethane	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
Chloroethane	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
Chloroform	64	8.0		ppbv	8	1/26/2012 8:12 AM
Chloromethane	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
cis-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
cis-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 4:13:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-031	**Matrix:**	Air
Client Sample ID:	VA1178		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	34	16		ppbv	8	1/26/2012 8:12 AM
Dichlorodifluoromethane	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
Ethyl acetate	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
Ethylbenzene	ND	16	U	ppbv	8	1/26/2012 8:12 AM
Heptane	18	8.0		ppbv	8	1/26/2012 8:12 AM
Hexachlorobutadiene	ND	16	U	ppbv	8	1/26/2012 8:12 AM
m,p-Xylene	12	16	J	ppbv	8	1/26/2012 8:12 AM
Methylene chloride	ND	40	U	ppbv	8	1/26/2012 8:12 AM
n-Hexane	37	16		ppbv	8	1/26/2012 8:12 AM
Naphthalene	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
o-Xylene	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
Propylene	11	8.0		ppbv	8	1/26/2012 8:12 AM
Styrene	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
tert-Butyl Methyl Ether	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
Tetrachloroethene	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
Tetrahydrofuran	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
Toluene	120	8.0		ppbv	8	1/26/2012 8:12 AM
trans-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
trans-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
Trichloroethene	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
Trichlorofluoromethane	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
Vinyl acetate	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
Vinyl chloride	ND	8.0	U	ppbv	8	1/26/2012 8:12 AM
Xylenes, Total	12	24	J	ppbv	8	1/26/2012 8:12 AM
Surr: 4-Bromofluorobenzene	113	70-130		%REC	8	1/26/2012 8:12 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,700	940		µg/m³	8	1/26/2012 8:02 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100	U	µg/m³	8	1/26/2012 8:02 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500	U	µg/m³	8	1/26/2012 8:02 PM
Surr: 4-Bromofluorobenzene	91.9	70-130		%REC	8	1/26/2012 8:02 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/11/2012 9:42:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-032	**Matrix:**	Air
Client Sample ID:	VA1179		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.081	0.10	J	%	1	1/25/2012 12:29 PM
Carbon Monoxide	ND	0.10	U	%	1	1/25/2012 12:29 PM
Methane	ND	0.50	U	%	1	1/25/2012 12:29 PM
Nitrogen	79	0.10		%	1	1/25/2012 12:29 PM
Oxygen	21	0.10		%	1	1/25/2012 12:29 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
1,1,2,2-Tetrachloroethane	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
1,1,2-Trichloroethane	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
1,1-Dichloroethane	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
1,1-Dichloroethene	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
1,2,4-Trichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
1,2,4-Trimethylbenzene	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
1,2-Dibromoethane	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
1,2-Dichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
1,2-Dichloroethane	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
1,2-Dichloropropane	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
1,3,5-Trimethylbenzene	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
1,3-Butadiene	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
1,3-Dichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
1,4-Dichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
2-Butanone	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
2-Hexanone	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
4-Methyl-2-pentanone	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
Acetone	21	8.0		ppbv	8	1/26/2012 8:59 AM
Benzene	15	8.0		ppbv	8	1/26/2012 8:59 AM
Benzyl chloride	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
Bromodichloromethane	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
Bromoform	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
Bromomethane	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
Carbon disulfide	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
Carbon tetrachloride	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
Chlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
Chlorodibromomethane	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
Chloroethane	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
Chloroform	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
Chloromethane	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
cis-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
cis-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/11/2012 9:42:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-032	**Matrix:**	Air
Client Sample ID:	VA1179		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	17	16		ppbv	8	1/26/2012 8:59 AM
Dichlorodifluoromethane	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
Ethyl acetate	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
Ethylbenzene	ND	16	U	ppbv	8	1/26/2012 8:59 AM
Heptane	11	8.0		ppbv	8	1/26/2012 8:59 AM
Hexachlorobutadiene	ND	16	U	ppbv	8	1/26/2012 8:59 AM
m,p-Xylene	11	16	J	ppbv	8	1/26/2012 8:59 AM
Methylene chloride	ND	40	U	ppbv	8	1/26/2012 8:59 AM
n-Hexane	14	16	J	ppbv	8	1/26/2012 8:59 AM
Naphthalene	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
o-Xylene	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
Propylene	8.6	8.0		ppbv	8	1/26/2012 8:59 AM
Styrene	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
tert-Butyl Methyl Ether	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
Tetrachloroethene	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
Tetrahydrofuran	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
Toluene	56	8.0		ppbv	8	1/26/2012 8:59 AM
trans-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
trans-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
Trichloroethene	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
Trichlorofluoromethane	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
Vinyl acetate	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
Vinyl chloride	ND	8.0	U	ppbv	8	1/26/2012 8:59 AM
Xylenes, Total	11	24	J	ppbv	8	1/26/2012 8:59 AM
Surr: 4-Bromofluorobenzene	112	70-130		%REC	8	1/26/2012 8:59 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,600	940		µg/m³	8	1/26/2012 8:46 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100	U	µg/m³	8	1/26/2012 8:46 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500	U	µg/m³	8	1/26/2012 8:46 PM
Surr: 4-Bromofluorobenzene	91.0	70-130		%REC	8	1/26/2012 8:46 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/11/2012 10:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-033	**Matrix:**	Air
Client Sample ID:	VA1180		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.43	0.10		%	1	1/25/2012 12:43 PM
Carbon Monoxide	ND	0.10	U	%	1	1/25/2012 12:43 PM
Methane	ND	0.50	U	%	1	1/25/2012 12:43 PM
Nitrogen	80	0.10		%	1	1/25/2012 12:43 PM
Oxygen	19	0.10		%	1	1/25/2012 12:43 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/26/2012 9:51 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/26/2012 9:51 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/26/2012 9:51 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/26/2012 9:51 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/26/2012 9:51 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/26/2012 9:51 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/26/2012 9:51 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/26/2012 9:51 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/26/2012 9:51 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/26/2012 9:51 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/26/2012 9:51 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/26/2012 9:51 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/26/2012 9:51 AM
1,3-Butadiene	ND	40	U	ppbv	40	1/26/2012 9:51 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/26/2012 9:51 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/26/2012 9:51 AM
2-Butanone	ND	40	U	ppbv	40	1/26/2012 9:51 AM
2-Hexanone	ND	40	U	ppbv	40	1/26/2012 9:51 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/26/2012 9:51 AM
Acetone	66	40		ppbv	40	1/26/2012 9:51 AM
Benzene	68	40		ppbv	40	1/26/2012 9:51 AM
Benzyl chloride	ND	40	U	ppbv	40	1/26/2012 9:51 AM
Bromodichloromethane	ND	40	U	ppbv	40	1/26/2012 9:51 AM
Bromoform	ND	40	U	ppbv	40	1/26/2012 9:51 AM
Bromomethane	ND	40	U	ppbv	40	1/26/2012 9:51 AM
Carbon disulfide	ND	40	U	ppbv	40	1/26/2012 9:51 AM
Carbon tetrachloride	ND	40	U	ppbv	40	1/26/2012 9:51 AM
Chlorobenzene	ND	40	U	ppbv	40	1/26/2012 9:51 AM
Chlorodibromomethane	ND	40	U	ppbv	40	1/26/2012 9:51 AM
Chloroethane	ND	40	U	ppbv	40	1/26/2012 9:51 AM
Chloroform	ND	40	U	ppbv	40	1/26/2012 9:51 AM
Chloromethane	ND	40	U	ppbv	40	1/26/2012 9:51 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/26/2012 9:51 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/26/2012 9:51 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/11/2012 10:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-033	**Matrix:**	Air
Client Sample ID:	VA1180		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	110	80		ppbv	40	1/26/2012 9:51 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/26/2012 9:51 AM
Ethyl acetate	ND	40	U	ppbv	40	1/26/2012 9:51 AM
Ethylbenzene	ND	80	U	ppbv	40	1/26/2012 9:51 AM
Heptane	52	40		ppbv	40	1/26/2012 9:51 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/26/2012 9:51 AM
m,p-Xylene	ND	80	U	ppbv	40	1/26/2012 9:51 AM
Methylene chloride	84	200	J	ppbv	40	1/26/2012 9:51 AM
n-Hexane	140	80		ppbv	40	1/26/2012 9:51 AM
Naphthalene	ND	40	U	ppbv	40	1/26/2012 9:51 AM
o-Xylene	ND	40	U	ppbv	40	1/26/2012 9:51 AM
Propylene	55	40		ppbv	40	1/26/2012 9:51 AM
Styrene	ND	40	U	ppbv	40	1/26/2012 9:51 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/26/2012 9:51 AM
Tetrachloroethene	ND	40	U	ppbv	40	1/26/2012 9:51 AM
Tetrahydrofuran	ND	40	U	ppbv	40	1/26/2012 9:51 AM
Toluene	100	40		ppbv	40	1/26/2012 9:51 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/26/2012 9:51 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/26/2012 9:51 AM
Trichloroethene	ND	40	U	ppbv	40	1/26/2012 9:51 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/26/2012 9:51 AM
Vinyl acetate	ND	40	U	ppbv	40	1/26/2012 9:51 AM
Vinyl chloride	ND	40	U	ppbv	40	1/26/2012 9:51 AM
Xylenes, Total	ND	120	U	ppbv	40	1/26/2012 9:51 AM
Surr: 4-Bromofluorobenzene	115	70-130		%REC	40	1/26/2012 9:51 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,300	940		µg/m³	8	1/28/2012 12:50 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100	U	µg/m³	8	1/28/2012 12:50 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500	U	µg/m³	8	1/28/2012 12:50 AM
Surr: 4-Bromofluorobenzene	86.4	70-130		%REC	8	1/28/2012 12:50 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/11/2012 10:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-034	**Matrix:**	Air
Client Sample ID:	VA1181		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.44	0.10		%	1	1/25/2012 1:03 PM
Carbon Monoxide	ND	0.10	U	%	1	1/25/2012 1:03 PM
Methane	ND	0.50	U	%	1	1/25/2012 1:03 PM
Nitrogen	80	0.10		%	1	1/25/2012 1:03 PM
Oxygen	20	0.10		%	1	1/25/2012 1:03 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
1,1,2,2-Tetrachloroethane	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
1,1,2-Trichloroethane	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
1,1-Dichloroethane	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
1,1-Dichloroethene	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
1,2,4-Trichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
1,2,4-Trimethylbenzene	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
1,2-Dibromoethane	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
1,2-Dichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
1,2-Dichloroethane	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
1,2-Dichloropropane	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
1,3,5-Trimethylbenzene	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
1,3-Butadiene	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
1,3-Dichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
1,4-Dichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
2-Butanone	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
2-Hexanone	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
4-Methyl-2-pentanone	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
Acetone	13	8.0		ppbv	8	1/26/2012 10:37 AM
Benzene	20	8.0		ppbv	8	1/26/2012 10:37 AM
Benzyl chloride	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
Bromodichloromethane	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
Bromoform	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
Bromomethane	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
Carbon disulfide	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
Carbon tetrachloride	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
Chlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
Chlorodibromomethane	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
Chloroethane	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
Chloroform	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
Chloromethane	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
cis-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
cis-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/11/2012 10:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-034	**Matrix:**	Air
Client Sample ID:	VA1181		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	26	16		ppbv	8	1/26/2012 10:37 AM
Dichlorodifluoromethane	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
Ethyl acetate	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
Ethylbenzene	ND	16	U	ppbv	8	1/26/2012 10:37 AM
Heptane	13	8.0		ppbv	8	1/26/2012 10:37 AM
Hexachlorobutadiene	ND	16	U	ppbv	8	1/26/2012 10:37 AM
m,p-Xylene	14	16	J	ppbv	8	1/26/2012 10:37 AM
Methylene chloride	ND	40	U	ppbv	8	1/26/2012 10:37 AM
n-Hexane	16	16	J	ppbv	8	1/26/2012 10:37 AM
Naphthalene	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
o-Xylene	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
Propylene	11	8.0		ppbv	8	1/26/2012 10:37 AM
Styrene	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
tert-Butyl Methyl Ether	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
Tetrachloroethene	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
Tetrahydrofuran	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
Toluene	55	8.0		ppbv	8	1/26/2012 10:37 AM
trans-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
trans-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
Trichloroethene	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
Trichlorofluoromethane	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
Vinyl acetate	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
Vinyl chloride	ND	8.0	U	ppbv	8	1/26/2012 10:37 AM
Xylenes, Total	14	24	J	ppbv	8	1/26/2012 10:37 AM
Surr: 4-Bromofluorobenzene	112	70-130		%REC	8	1/26/2012 10:37 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,100	940		µg/m³	8	1/26/2012 10:20 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100	U	µg/m³	8	1/26/2012 10:20 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500	U	µg/m³	8	1/26/2012 10:20 PM
Surr: 4-Bromofluorobenzene	92.7	70-130		%REC	8	1/26/2012 10:20 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/11/2012 11:20:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-035	**Matrix:**	Air
Client Sample ID:	VA1182		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.30	0.10		%	1	1/25/2012 2:27 PM
Carbon Monoxide	ND	0.10	U	%	1	1/25/2012 2:27 PM
Methane	ND	0.50	U	%	1	1/25/2012 2:27 PM
Nitrogen	82	0.10		%	1	1/25/2012 2:27 PM
Oxygen	19	0.10		%	1	1/25/2012 2:27 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/26/2012 12:13 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/26/2012 12:13 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/26/2012 12:13 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/26/2012 12:13 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/26/2012 12:13 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/26/2012 12:13 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/26/2012 12:13 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/26/2012 12:13 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/26/2012 12:13 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/26/2012 12:13 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/26/2012 12:13 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/26/2012 12:13 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/26/2012 12:13 PM
1,3-Butadiene	ND	800	U	ppbv	800	1/26/2012 12:13 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/26/2012 12:13 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/26/2012 12:13 PM
2-Butanone	ND	800	U	ppbv	800	1/26/2012 12:13 PM
2-Hexanone	ND	800	U	ppbv	800	1/26/2012 12:13 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/26/2012 12:13 PM
Acetone	ND	800	U	ppbv	800	1/26/2012 12:13 PM
Benzene	6,600	800		ppbv	800	1/26/2012 12:13 PM
Benzyl chloride	ND	800	U	ppbv	800	1/26/2012 12:13 PM
Bromodichloromethane	ND	800	U	ppbv	800	1/26/2012 12:13 PM
Bromoform	ND	800	U	ppbv	800	1/26/2012 12:13 PM
Bromomethane	ND	800	U	ppbv	800	1/26/2012 12:13 PM
Carbon disulfide	ND	800	U	ppbv	800	1/26/2012 12:13 PM
Carbon tetrachloride	ND	800	U	ppbv	800	1/26/2012 12:13 PM
Chlorobenzene	ND	800	U	ppbv	800	1/26/2012 12:13 PM
Chlorodibromomethane	ND	800	U	ppbv	800	1/26/2012 12:13 PM
Chloroethane	ND	800	U	ppbv	800	1/26/2012 12:13 PM
Chloroform	ND	800	U	ppbv	800	1/26/2012 12:13 PM
Chloromethane	ND	800	U	ppbv	800	1/26/2012 12:13 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/26/2012 12:13 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/26/2012 12:13 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/11/2012 11:20:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-035	**Matrix:**	Air
Client Sample ID:	VA1182		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	22,000	1,600		ppbv	800	1/26/2012 12:13 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/26/2012 12:13 PM
Ethyl acetate	ND	800	U	ppbv	800	1/26/2012 12:13 PM
Ethylbenzene	ND	1,600	U	ppbv	800	1/26/2012 12:13 PM
Heptane	2,500	800		ppbv	800	1/26/2012 12:13 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/26/2012 12:13 PM
m,p-Xylene	ND	1,600	U	ppbv	800	1/26/2012 12:13 PM
Methylene chloride	ND	4,000	U	ppbv	800	1/26/2012 12:13 PM
n-Hexane	19,000	1,600		ppbv	800	1/26/2012 12:13 PM
Naphthalene	ND	800	U	ppbv	800	1/26/2012 12:13 PM
o-Xylene	ND	800	U	ppbv	800	1/26/2012 12:13 PM
Propylene	4,300	800		ppbv	800	1/26/2012 12:13 PM
Styrene	ND	800	U	ppbv	800	1/26/2012 12:13 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/26/2012 12:13 PM
Tetrachloroethene	ND	800	U	ppbv	800	1/26/2012 12:13 PM
Tetrahydrofuran	ND	800	U	ppbv	800	1/26/2012 12:13 PM
Toluene	7,000	800		ppbv	800	1/26/2012 12:13 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/26/2012 12:13 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/26/2012 12:13 PM
Trichloroethene	ND	800	U	ppbv	800	1/26/2012 12:13 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/26/2012 12:13 PM
Vinyl acetate	ND	800	U	ppbv	800	1/26/2012 12:13 PM
Vinyl chloride	ND	800	U	ppbv	800	1/26/2012 12:13 PM
Xylenes, Total	ND	2,400	U	ppbv	800	1/26/2012 12:13 PM
Surr: 4-Bromofluorobenzene	118	70-130		%REC	800	1/26/2012 12:13 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	580,000	190,000		µg/m³	1600	1/27/2012 2:47 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	1/27/2012 2:47 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	1/27/2012 2:47 PM
Surr: 4-Bromofluorobenzene	89.9	70-130		%REC	1600	1/27/2012 2:47 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/11/2012 12:04:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-036	**Matrix:**	Air
Client Sample ID:	VA1183		

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	1/25/2012 2:42 PM
Carbon Monoxide	ND	0.10	U	%	1	1/25/2012 2:42 PM
Methane	ND	0.50	U	%	1	1/25/2012 2:42 PM
Nitrogen	79	0.10		%	1	1/25/2012 2:42 PM
Oxygen	21	0.10		%	1	1/25/2012 2:42 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/26/2012 1:02 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/26/2012 1:02 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/26/2012 1:02 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/26/2012 1:02 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/26/2012 1:02 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/26/2012 1:02 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/26/2012 1:02 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/26/2012 1:02 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/26/2012 1:02 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/26/2012 1:02 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/26/2012 1:02 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/26/2012 1:02 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/26/2012 1:02 PM
1,3-Butadiene	ND	800	U	ppbv	800	1/26/2012 1:02 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/26/2012 1:02 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/26/2012 1:02 PM
2-Butanone	ND	800	U	ppbv	800	1/26/2012 1:02 PM
2-Hexanone	ND	800	U	ppbv	800	1/26/2012 1:02 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/26/2012 1:02 PM
Acetone	1,800	800		ppbv	800	1/26/2012 1:02 PM
Benzene	9,400	800		ppbv	800	1/26/2012 1:02 PM
Benzyl chloride	ND	800	U	ppbv	800	1/26/2012 1:02 PM
Bromodichloromethane	ND	800	U	ppbv	800	1/26/2012 1:02 PM
Bromoform	ND	800	U	ppbv	800	1/26/2012 1:02 PM
Bromomethane	ND	800	U	ppbv	800	1/26/2012 1:02 PM
Carbon disulfide	ND	800	U	ppbv	800	1/26/2012 1:02 PM
Carbon tetrachloride	ND	800	U	ppbv	800	1/26/2012 1:02 PM
Chlorobenzene	ND	800	U	ppbv	800	1/26/2012 1:02 PM
Chlorodibromomethane	ND	800	U	ppbv	800	1/26/2012 1:02 PM
Chloroethane	ND	800	U	ppbv	800	1/26/2012 1:02 PM
Chloroform	ND	800	U	ppbv	800	1/26/2012 1:02 PM
Chloromethane	ND	800	U	ppbv	800	1/26/2012 1:02 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/26/2012 1:02 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/26/2012 1:02 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/11/2012 12:04:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-036	**Matrix:**	Air
Client Sample ID:	VA1183		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	21,000	1,600		ppbv	800	1/26/2012 1:02 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/26/2012 1:02 PM
Ethyl acetate	ND	800	U	ppbv	800	1/26/2012 1:02 PM
Ethylbenzene	ND	1,600	U	ppbv	800	1/26/2012 1:02 PM
Heptane	5,100	800		ppbv	800	1/26/2012 1:02 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/26/2012 1:02 PM
m,p-Xylene	ND	1,600	U	ppbv	800	1/26/2012 1:02 PM
Methylene chloride	ND	4,000	U	ppbv	800	1/26/2012 1:02 PM
n-Hexane	24,000	1,600		ppbv	800	1/26/2012 1:02 PM
Naphthalene	ND	800	U	ppbv	800	1/26/2012 1:02 PM
o-Xylene	ND	800	U	ppbv	800	1/26/2012 1:02 PM
Propylene	3,800	800		ppbv	800	1/26/2012 1:02 PM
Styrene	ND	800	U	ppbv	800	1/26/2012 1:02 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/26/2012 1:02 PM
Tetrachloroethene	ND	800	U	ppbv	800	1/26/2012 1:02 PM
Tetrahydrofuran	ND	800	U	ppbv	800	1/26/2012 1:02 PM
Toluene	16,000	800		ppbv	800	1/26/2012 1:02 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/26/2012 1:02 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/26/2012 1:02 PM
Trichloroethene	ND	800	U	ppbv	800	1/26/2012 1:02 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/26/2012 1:02 PM
Vinyl acetate	ND	800	U	ppbv	800	1/26/2012 1:02 PM
Vinyl chloride	ND	800	U	ppbv	800	1/26/2012 1:02 PM
Xylenes, Total	ND	2,400	U	ppbv	800	1/26/2012 1:02 PM
Surr: 4-Bromofluorobenzene	116	70-130		%REC	800	1/26/2012 1:02 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,000,000	190,000		µg/m³	1600	1/27/2012 3:32 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	1/27/2012 3:32 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	1/27/2012 3:32 PM
Surr: 4-Bromofluorobenzene	90.2	70-130		%REC	1600	1/27/2012 3:32 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/11/2012 1:30:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-037	**Matrix:**	Air
Client Sample ID:	VA1184		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.84	0.10		%	1	1/25/2012 2:58 PM
Carbon Monoxide	ND	0.10	U	%	1	1/25/2012 2:58 PM
Methane	ND	0.50	U	%	1	1/25/2012 2:58 PM
Nitrogen	79	0.10		%	1	1/25/2012 2:58 PM
Oxygen	20	0.10		%	1	1/25/2012 2:58 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	1/26/2012 1:55 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	1/26/2012 1:55 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	1/26/2012 1:55 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	1/26/2012 1:55 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	1/26/2012 1:55 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	1/26/2012 1:55 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	1/26/2012 1:55 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	1/26/2012 1:55 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	1/26/2012 1:55 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	1/26/2012 1:55 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	1/26/2012 1:55 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	1/26/2012 1:55 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	1/26/2012 1:55 PM
1,3-Butadiene	ND	400	U	ppbv	400	1/26/2012 1:55 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	1/26/2012 1:55 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	1/26/2012 1:55 PM
2-Butanone	ND	400	U	ppbv	400	1/26/2012 1:55 PM
2-Hexanone	ND	400	U	ppbv	400	1/26/2012 1:55 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	1/26/2012 1:55 PM
Acetone	650	400		ppbv	400	1/26/2012 1:55 PM
Benzene	3,500	400		ppbv	400	1/26/2012 1:55 PM
Benzyl chloride	ND	400	U	ppbv	400	1/26/2012 1:55 PM
Bromodichloromethane	ND	400	U	ppbv	400	1/26/2012 1:55 PM
Bromoform	ND	400	U	ppbv	400	1/26/2012 1:55 PM
Bromomethane	ND	400	U	ppbv	400	1/26/2012 1:55 PM
Carbon disulfide	ND	400	U	ppbv	400	1/26/2012 1:55 PM
Carbon tetrachloride	ND	400	U	ppbv	400	1/26/2012 1:55 PM
Chlorobenzene	ND	400	U	ppbv	400	1/26/2012 1:55 PM
Chlorodibromomethane	ND	400	U	ppbv	400	1/26/2012 1:55 PM
Chloroethane	ND	400	U	ppbv	400	1/26/2012 1:55 PM
Chloroform	ND	400	U	ppbv	400	1/26/2012 1:55 PM
Chloromethane	ND	400	U	ppbv	400	1/26/2012 1:55 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	1/26/2012 1:55 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	1/26/2012 1:55 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/11/2012 1:30:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-037	**Matrix:**	Air
Client Sample ID:	VA1184		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	5,000	800		ppbv	400	1/26/2012 1:55 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	1/26/2012 1:55 PM
Ethyl acetate	ND	400	U	ppbv	400	1/26/2012 1:55 PM
Ethylbenzene	ND	800	U	ppbv	400	1/26/2012 1:55 PM
Heptane	2,100	400		ppbv	400	1/26/2012 1:55 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	1/26/2012 1:55 PM
m,p-Xylene	820	800		ppbv	400	1/26/2012 1:55 PM
Methylene chloride	1,600	2,000	J	ppbv	400	1/26/2012 1:55 PM
n-Hexane	6,200	800		ppbv	400	1/26/2012 1:55 PM
Naphthalene	ND	400	U	ppbv	400	1/26/2012 1:55 PM
o-Xylene	ND	400	U	ppbv	400	1/26/2012 1:55 PM
Propylene	560	400		ppbv	400	1/26/2012 1:55 PM
Styrene	ND	400	U	ppbv	400	1/26/2012 1:55 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	1/26/2012 1:55 PM
Tetrachloroethene	ND	400	U	ppbv	400	1/26/2012 1:55 PM
Tetrahydrofuran	ND	400	U	ppbv	400	1/26/2012 1:55 PM
Toluene	3,700	400		ppbv	400	1/26/2012 1:55 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	1/26/2012 1:55 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	1/26/2012 1:55 PM
Trichloroethene	ND	400	U	ppbv	400	1/26/2012 1:55 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	1/26/2012 1:55 PM
Vinyl acetate	ND	400	U	ppbv	400	1/26/2012 1:55 PM
Vinyl chloride	ND	400	U	ppbv	400	1/26/2012 1:55 PM
Xylenes, Total	820	1,200	J	ppbv	400	1/26/2012 1:55 PM
Surr: 4-Bromofluorobenzene	113	70-130		%REC	400	1/26/2012 1:55 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	180,000	47,000		µg/m³	400	1/27/2012 12:41 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/27/2012 12:41 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	1/27/2012 12:41 AM
Surr: 4-Bromofluorobenzene	91.1	70-130		%REC	400	1/27/2012 12:41 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/11/2012 2:01:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-038	**Matrix:**	Air
Client Sample ID:	VA1185		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	1.3	0.10		%	1	1/25/2012 3:19 PM
Carbon Monoxide	ND	0.10	U	%	1	1/25/2012 3:19 PM
Methane	ND	0.50	U	%	1	1/25/2012 3:19 PM
Nitrogen	80	0.10		%	1	1/25/2012 3:19 PM
Oxygen	19	0.10		%	1	1/25/2012 3:19 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/26/2012 2:43 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/26/2012 2:43 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/26/2012 2:43 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/26/2012 2:43 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/26/2012 2:43 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/26/2012 2:43 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/26/2012 2:43 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/26/2012 2:43 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/26/2012 2:43 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/26/2012 2:43 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/26/2012 2:43 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/26/2012 2:43 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/26/2012 2:43 PM
1,3-Butadiene	ND	800	U	ppbv	800	1/26/2012 2:43 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/26/2012 2:43 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/26/2012 2:43 PM
2-Butanone	ND	800	U	ppbv	800	1/26/2012 2:43 PM
2-Hexanone	ND	800	U	ppbv	800	1/26/2012 2:43 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Acetone	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Benzene	2,500	800		ppbv	800	1/26/2012 2:43 PM
Benzyl chloride	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Bromodichloromethane	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Bromoform	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Bromomethane	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Carbon disulfide	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Carbon tetrachloride	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Chlorobenzene	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Chlorodibromomethane	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Chloroethane	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Chloroform	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Chloromethane	ND	800	U	ppbv	800	1/26/2012 2:43 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/26/2012 2:43 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/26/2012 2:43 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/11/2012 2:01:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-038	**Matrix:**	Air
Client Sample ID:	VA1185		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	4,600	1,600		ppbv	800	1/26/2012 2:43 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Ethyl acetate	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Ethylbenzene	ND	1,600	U	ppbv	800	1/26/2012 2:43 PM
Heptane	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/26/2012 2:43 PM
m,p-Xylene	ND	1,600	U	ppbv	800	1/26/2012 2:43 PM
Methylene chloride	ND	4,000	U	ppbv	800	1/26/2012 2:43 PM
n-Hexane	5,300	1,600		ppbv	800	1/26/2012 2:43 PM
Naphthalene	ND	800	U	ppbv	800	1/26/2012 2:43 PM
o-Xylene	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Propylene	1,600	800		ppbv	800	1/26/2012 2:43 PM
Styrene	ND	800	U	ppbv	800	1/26/2012 2:43 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Tetrachloroethene	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Tetrahydrofuran	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Toluene	2,100	800		ppbv	800	1/26/2012 2:43 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/26/2012 2:43 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Trichloroethene	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Vinyl acetate	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Vinyl chloride	ND	800	U	ppbv	800	1/26/2012 2:43 PM
Xylenes, Total	ND	2,400	U	ppbv	800	1/26/2012 2:43 PM
Surr: 4-Bromofluorobenzene	115	70-130		%REC	800	1/26/2012 2:43 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	520,000	94,000		µg/m³	800	1/27/2012 1:27 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/27/2012 1:27 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	1/27/2012 1:27 AM
Surr: 4-Bromofluorobenzene	91.2	70-130		%REC	800	1/27/2012 1:27 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/11/2012 2:40:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-039	**Matrix:**	Air
Client Sample ID:	VA1186		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.33	0.10		%	1	1/25/2012 3:34 PM
Carbon Monoxide	ND	0.10	U	%	1	1/25/2012 3:34 PM
Methane	ND	0.50	U	%	1	1/25/2012 3:34 PM
Nitrogen	80	0.10		%	1	1/25/2012 3:34 PM
Oxygen	20	0.10		%	1	1/25/2012 3:34 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
1,1,2,2-Tetrachloroethane	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
1,1,2-Trichloroethane	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
1,1-Dichloroethane	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
1,1-Dichloroethene	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
1,2,4-Trichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
1,2,4-Trimethylbenzene	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
1,2-Dibromoethane	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
1,2-Dichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
1,2-Dichloroethane	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
1,2-Dichloropropane	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
1,3,5-Trimethylbenzene	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
1,3-Butadiene	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
1,3-Dichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
1,4-Dichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
2-Butanone	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
2-Hexanone	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
4-Methyl-2-pentanone	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
Acetone	9.6	8.0		ppbv	8	1/26/2012 3:29 PM
Benzene	82	8.0		ppbv	8	1/26/2012 3:29 PM
Benzyl chloride	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
Bromodichloromethane	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
Bromoform	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
Bromomethane	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
Carbon disulfide	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
Carbon tetrachloride	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
Chlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
Chlorodibromomethane	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
Chloroethane	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
Chloroform	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
Chloromethane	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
cis-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
cis-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/11/2012 2:40:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-039	**Matrix:**	Air
Client Sample ID:	VA1186		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	79	16		ppbv	8	1/26/2012 3:29 PM
Dichlorodifluoromethane	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
Ethyl acetate	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
Ethylbenzene	10	16	J	ppbv	8	1/26/2012 3:29 PM
Heptane	28	8.0		ppbv	8	1/26/2012 3:29 PM
Hexachlorobutadiene	ND	16	U	ppbv	8	1/26/2012 3:29 PM
m,p-Xylene	20	16		ppbv	8	1/26/2012 3:29 PM
Methylene chloride	ND	40	U	ppbv	8	1/26/2012 3:29 PM
n-Hexane	72	16		ppbv	8	1/26/2012 3:29 PM
Naphthalene	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
o-Xylene	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
Propylene	12	8.0		ppbv	8	1/26/2012 3:29 PM
Styrene	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
tert-Butyl Methyl Ether	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
Tetrachloroethene	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
Tetrahydrofuran	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
Toluene	230	8.0		ppbv	8	1/26/2012 3:29 PM
trans-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
trans-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
Trichloroethene	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
Trichlorofluoromethane	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
Vinyl acetate	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
Vinyl chloride	ND	8.0	U	ppbv	8	1/26/2012 3:29 PM
Xylenes, Total	20	24	J	ppbv	8	1/26/2012 3:29 PM
Surr: 4-Bromofluorobenzene	112	70-130		%REC	8	1/26/2012 3:29 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	5,100	940		µg/m³	8	1/27/2012 2:11 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100	U	µg/m³	8	1/27/2012 2:11 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500	U	µg/m³	8	1/27/2012 2:11 AM
Surr: 4-Bromofluorobenzene	90.4	70-130		%REC	8	1/27/2012 2:11 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/11/2012 3:14:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-040	**Matrix:**	Air
Client Sample ID:	VA1187		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.32	0.10		%	1	1/25/2012 3:57 PM
Carbon Monoxide	ND	0.10	U	%	1	1/25/2012 3:57 PM
Methane	ND	0.50	U	%	1	1/25/2012 3:57 PM
Nitrogen	80	0.10		%	1	1/25/2012 3:57 PM
Oxygen	20	0.10		%	1	1/25/2012 3:57 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
1,1,2,2-Tetrachloroethane	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
1,1,2-Trichloroethane	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
1,1-Dichloroethane	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
1,1-Dichloroethene	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
1,2,4-Trichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
1,2,4-Trimethylbenzene	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
1,2-Dibromoethane	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
1,2-Dichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
1,2-Dichloroethane	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
1,2-Dichloropropane	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
1,3,5-Trimethylbenzene	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
1,3-Butadiene	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
1,3-Dichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
1,4-Dichlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
2-Butanone	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
2-Hexanone	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
4-Methyl-2-pentanone	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
Acetone	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
Benzene	44	8.0		ppbv	8	1/26/2012 4:17 PM
Benzyl chloride	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
Bromodichloromethane	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
Bromoform	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
Bromomethane	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
Carbon disulfide	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
Carbon tetrachloride	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
Chlorobenzene	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
Chlorodibromomethane	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
Chloroethane	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
Chloroform	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
Chloromethane	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
cis-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
cis-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/11/2012 3:14:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-040	**Matrix:**	Air
Client Sample ID:	VA1187		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	45	16		ppbv	8	1/26/2012 4:17 PM
Dichlorodifluoromethane	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
Ethyl acetate	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
Ethylbenzene	ND	16	U	ppbv	8	1/26/2012 4:17 PM
Heptane	15	8.0		ppbv	8	1/26/2012 4:17 PM
Hexachlorobutadiene	ND	16	U	ppbv	8	1/26/2012 4:17 PM
m,p-Xylene	11	16	J	ppbv	8	1/26/2012 4:17 PM
Methylene chloride	ND	40	U	ppbv	8	1/26/2012 4:17 PM
n-Hexane	34	16		ppbv	8	1/26/2012 4:17 PM
Naphthalene	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
o-Xylene	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
Propylene	14	8.0		ppbv	8	1/26/2012 4:17 PM
Styrene	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
tert-Butyl Methyl Ether	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
Tetrachloroethene	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
Tetrahydrofuran	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
Toluene	87	8.0		ppbv	8	1/26/2012 4:17 PM
trans-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
trans-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
Trichloroethene	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
Trichlorofluoromethane	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
Vinyl acetate	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
Vinyl chloride	ND	8.0	U	ppbv	8	1/26/2012 4:17 PM
Xylenes, Total	11	24	J	ppbv	8	1/26/2012 4:17 PM
Surr: 4-Bromofluorobenzene	109	70-130		%REC	8	1/26/2012 4:17 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	5,300	940		µg/m³	8	1/23/2012 11:55 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100	U	µg/m³	8	1/23/2012 11:55 PM
C9-C12 Aliphatic Hydrocarbons	240	1,500	J	µg/m³	8	1/23/2012 11:55 PM
Surr: 4-Bromofluorobenzene	99.4	70-130		%REC	8	1/23/2012 11:55 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/11/2012 3:48:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-041	**Matrix:**	Air
Client Sample ID:	VA1188		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.46	0.10		%	1	1/26/2012 11:04 AM
Carbon Monoxide	ND	0.10	U	%	1	1/26/2012 11:04 AM
Methane	ND	0.50	U	%	1	1/26/2012 11:04 AM
Nitrogen	81	0.10		%	1	1/26/2012 11:04 AM
Oxygen	18	0.10		%	1	1/26/2012 11:04 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
1,1,2,2-Tetrachloroethane	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
1,1,2-Trichloroethane	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
1,1-Dichloroethane	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
1,1-Dichloroethene	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
1,2,4-Trichlorobenzene	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
1,2,4-Trimethylbenzene	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
1,2-Dibromoethane	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
1,2-Dichlorobenzene	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
1,2-Dichloroethane	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
1,2-Dichloropropane	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
1,3,5-Trimethylbenzene	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
1,3-Butadiene	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
1,3-Dichlorobenzene	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
1,4-Dichlorobenzene	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
2-Butanone	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
2-Hexanone	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
4-Methyl-2-pentanone	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
Acetone	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
Benzene	180	8.0		ppbv	8	1/30/2012 5:40 PM
Benzyl chloride	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
Bromodichloromethane	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
Bromoform	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
Bromomethane	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
Carbon disulfide	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
Carbon tetrachloride	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
Chlorobenzene	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
Chlorodibromomethane	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
Chloroethane	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
Chloroform	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
Chloromethane	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
cis-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
cis-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/11/2012 3:48:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-041	**Matrix:**	Air
Client Sample ID:	VA1188		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	410	80		ppbv	40	1/30/2012 7:11 PM
Dichlorodifluoromethane	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
Ethyl acetate	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
Ethylbenzene	ND	16	U	ppbv	8	1/30/2012 5:40 PM
Heptane	180	8.0		ppbv	8	1/30/2012 5:40 PM
Hexachlorobutadiene	ND	16	U	ppbv	8	1/30/2012 5:40 PM
m,p-Xylene	18	16		ppbv	8	1/30/2012 5:40 PM
Methylene chloride	ND	40	U	ppbv	8	1/30/2012 5:40 PM
n-Hexane	390	16		ppbv	8	1/30/2012 5:40 PM
Naphthalene	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
o-Xylene	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
Propylene	33	8.0		ppbv	8	1/30/2012 5:40 PM
Styrene	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
tert-Butyl Methyl Ether	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
Tetrachloroethene	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
Tetrahydrofuran	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
Toluene	340	8.0		ppbv	8	1/30/2012 5:40 PM
trans-1,2-Dichloroethene	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
trans-1,3-dichloropropene	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
Trichloroethene	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
Trichlorofluoromethane	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
Vinyl acetate	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
Vinyl chloride	ND	8.0	U	ppbv	8	1/30/2012 5:40 PM
Xylenes, Total	18	24	J	ppbv	8	1/30/2012 5:40 PM
Surr: 4-Bromofluorobenzene	118	70-130		%REC	8	1/30/2012 5:40 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	170,000	47,000		µg/m³	400	1/24/2012 7:41 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/24/2012 7:41 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	1/24/2012 7:41 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	400	1/24/2012 7:41 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/11/2012 4:24:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-042	**Matrix:**	Air
Client Sample ID:	VA1189		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.37	0.10		%	1	1/26/2012 11:19 AM
Carbon Monoxide	ND	0.10	U	%	1	1/26/2012 11:19 AM
Methane	ND	0.50	U	%	1	1/26/2012 11:19 AM
Nitrogen	80	0.10		%	1	1/26/2012 11:19 AM
Oxygen	18	0.10		%	1	1/26/2012 11:19 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
2-Butanone	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
2-Hexanone	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Acetone	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Benzene	44,000	8,000		ppbv	8000	1/22/2012 5:57 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Bromoform	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Bromomethane	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Chloroethane	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Chloroform	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Chloromethane	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/11/2012 4:24:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-042	**Matrix:**	Air
Client Sample ID:	VA1189		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	87,000	16,000		ppbv	8000	1/22/2012 5:57 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	1/22/2012 5:57 PM
Heptane	22,000	8,000		ppbv	8000	1/22/2012 5:57 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	1/22/2012 5:57 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	1/22/2012 5:57 PM
Methylene chloride	ND	40,000	U	ppbv	8000	1/22/2012 5:57 PM
n-Hexane	85,000	16,000		ppbv	8000	1/22/2012 5:57 PM
Naphthalene	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
o-Xylene	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Propylene	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Styrene	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Toluene	69,000	8,000		ppbv	8000	1/22/2012 5:57 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Trichloroethene	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	1/22/2012 5:57 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	1/22/2012 5:57 PM
Surr: 4-Bromofluorobenzene	112	70-130		%REC	8000	1/22/2012 5:57 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	12,000,000	940,000		µg/m³	8000	1/24/2012 1:21 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	1/24/2012 1:21 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	1/24/2012 1:21 AM
Surr: 4-Bromofluorobenzene	98.1	70-130		%REC	8000	1/24/2012 1:21 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 1:39:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-043	**Matrix:**	Air
Client Sample ID:	VA1230		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.15	0.10		%	1	1/26/2012 11:34 AM
Carbon Monoxide	ND	0.10	U	%	1	1/26/2012 11:34 AM
Methane	ND	0.50	U	%	1	1/26/2012 11:34 AM
Nitrogen	78	0.10		%	1	1/26/2012 11:34 AM
Oxygen	20	0.10		%	1	1/26/2012 11:34 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
2-Butanone	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
2-Hexanone	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
Acetone	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
Benzene	62,000	8,000		ppbv	8000	1/27/2012 8:43 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
Bromoform	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
Bromomethane	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
Chloroethane	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
Chloroform	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
Chloromethane	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 1:39:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-043	**Matrix:**	Air
Client Sample ID:	VA1230		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	170,000	16,000		ppbv	8000	1/27/2012 8:43 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	1/27/2012 8:43 PM
Heptane	83,000	8,000		ppbv	8000	1/27/2012 8:43 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	1/27/2012 8:43 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	1/27/2012 8:43 PM
Methylene chloride	ND	40,000	U	ppbv	8000	1/27/2012 8:43 PM
n-Hexane	190,000	16,000		ppbv	8000	1/27/2012 8:43 PM
Naphthalene	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
o-Xylene	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
Propylene	17,000	8,000		ppbv	8000	1/27/2012 8:43 PM
Styrene	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
Toluene	98,000	8,000		ppbv	8000	1/27/2012 8:43 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
Trichloroethene	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	1/27/2012 8:43 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	1/27/2012 8:43 PM
Surr: 4-Bromofluorobenzene	111	70-130		%REC	8000	1/27/2012 8:43 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,300,000	940,000		µg/m³	8000	1/27/2012 9:59 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	1/27/2012 9:59 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	1/27/2012 9:59 PM
Surr: 4-Bromofluorobenzene	90.2	70-130		%REC	8000	1/27/2012 9:59 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 2:11:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-044	**Matrix:**	Air
Client Sample ID:	VA1231		

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	1/26/2012 11:49 AM
Carbon Monoxide	ND	0.10	U	%	1	1/26/2012 11:49 AM
Methane	ND	0.50	U	%	1	1/26/2012 11:49 AM
Nitrogen	78	0.10		%	1	1/26/2012 11:49 AM
Oxygen	20	0.10		%	1	1/26/2012 11:49 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
2-Butanone	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
2-Hexanone	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Acetone	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Benzene	17,000	8,000		ppbv	8000	1/25/2012 1:04 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Bromoform	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Bromomethane	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Chloroethane	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Chloroform	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Chloromethane	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 2:11:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-044	**Matrix:**	Air
Client Sample ID:	VA1231		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	27,000	16,000		ppbv	8000	1/25/2012 1:04 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	1/25/2012 1:04 AM
Heptane	36,000	8,000		ppbv	8000	1/25/2012 1:04 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	1/25/2012 1:04 AM
m,p-Xylene	ND	16,000	U	ppbv	8000	1/25/2012 1:04 AM
Methylene chloride	ND	40,000	U	ppbv	8000	1/25/2012 1:04 AM
n-Hexane	22,000	16,000		ppbv	8000	1/25/2012 1:04 AM
Naphthalene	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
o-Xylene	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Propylene	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Styrene	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Toluene	37,000	8,000		ppbv	8000	1/25/2012 1:04 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Trichloroethene	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	1/25/2012 1:04 AM
Xylenes, Total	ND	24,000	U	ppbv	8000	1/25/2012 1:04 AM
Surr: 4-Bromofluorobenzene	114	70-130		%REC	8000	1/25/2012 1:04 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	780,000	190,000		µg/m³	1600	1/31/2012 7:25 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	1/31/2012 7:25 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	1/31/2012 7:25 PM
Surr: 4-Bromofluorobenzene	91.9	70-130		%REC	1600	1/31/2012 7:25 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 2:11:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-045	**Matrix:**	Air
Client Sample ID:	VA1232		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.15	0.10		%	1	1/26/2012 12:04 PM
Carbon Monoxide	ND	0.10	U	%	1	1/26/2012 12:04 PM
Methane	ND	0.50	U	%	1	1/26/2012 12:04 PM
Nitrogen	78	0.10		%	1	1/26/2012 12:04 PM
Oxygen	20	0.10		%	1	1/26/2012 12:04 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
2-Butanone	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
2-Hexanone	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Acetone	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Benzene	49,000	8,000		ppbv	8000	1/25/2012 1:49 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Bromoform	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Bromomethane	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Chloroethane	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Chloroform	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Chloromethane	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 2:11:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-045	**Matrix:**	Air
Client Sample ID:	VA1232		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	83,000	16,000		ppbv	8000	1/25/2012 1:49 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	1/25/2012 1:49 AM
Heptane	110,000	8,000		ppbv	8000	1/25/2012 1:49 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	1/25/2012 1:49 AM
m,p-Xylene	10,000	16,000	J	ppbv	8000	1/25/2012 1:49 AM
Methylene chloride	ND	40,000	U	ppbv	8000	1/25/2012 1:49 AM
n-Hexane	70,000	16,000		ppbv	8000	1/25/2012 1:49 AM
Naphthalene	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
o-Xylene	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Propylene	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Styrene	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Toluene	120,000	8,000		ppbv	8000	1/25/2012 1:49 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Trichloroethene	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	1/25/2012 1:49 AM
Xylenes, Total	10,000	24,000	J	ppbv	8000	1/25/2012 1:49 AM
Surr: 4-Bromofluorobenzene	116	70-130		%REC	8000	1/25/2012 1:49 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,700,000	940,000		µg/m³	8000	1/28/2012 12:06 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	1/28/2012 12:06 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	1/28/2012 12:06 AM
Surr: 4-Bromofluorobenzene	90.9	70-130		%REC	8000	1/28/2012 12:06 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 3:05:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-046	**Matrix:**	Air
Client Sample ID:	VA1233		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.31	0.10		%	1	1/26/2012 12:19 PM
Carbon Monoxide	ND	0.10	U	%	1	1/26/2012 12:19 PM
Methane	ND	0.50	U	%	1	1/26/2012 12:19 PM
Nitrogen	79	0.10		%	1	1/26/2012 12:19 PM
Oxygen	19	0.10		%	1	1/26/2012 12:19 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	1/30/2012 8:03 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	1/30/2012 8:03 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	1/30/2012 8:03 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	1/30/2012 8:03 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	1/30/2012 8:03 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	1/30/2012 8:03 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	1/30/2012 8:03 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	1/30/2012 8:03 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	1/30/2012 8:03 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	1/30/2012 8:03 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	1/30/2012 8:03 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	1/30/2012 8:03 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	1/30/2012 8:03 PM
1,3-Butadiene	ND	400	U	ppbv	400	1/30/2012 8:03 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	1/30/2012 8:03 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	1/30/2012 8:03 PM
2-Butanone	ND	400	U	ppbv	400	1/30/2012 8:03 PM
2-Hexanone	ND	400	U	ppbv	400	1/30/2012 8:03 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	1/30/2012 8:03 PM
Acetone	460	400		ppbv	400	1/30/2012 8:03 PM
Benzene	2,300	400		ppbv	400	1/30/2012 8:03 PM
Benzyl chloride	ND	400	U	ppbv	400	1/30/2012 8:03 PM
Bromodichloromethane	ND	400	U	ppbv	400	1/30/2012 8:03 PM
Bromoform	ND	400	U	ppbv	400	1/30/2012 8:03 PM
Bromomethane	ND	400	U	ppbv	400	1/30/2012 8:03 PM
Carbon disulfide	ND	400	U	ppbv	400	1/30/2012 8:03 PM
Carbon tetrachloride	ND	400	U	ppbv	400	1/30/2012 8:03 PM
Chlorobenzene	ND	400	U	ppbv	400	1/30/2012 8:03 PM
Chlorodibromomethane	ND	400	U	ppbv	400	1/30/2012 8:03 PM
Chloroethane	ND	400	U	ppbv	400	1/30/2012 8:03 PM
Chloroform	ND	400	U	ppbv	400	1/30/2012 8:03 PM
Chloromethane	ND	400	U	ppbv	400	1/30/2012 8:03 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	1/30/2012 8:03 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	1/30/2012 8:03 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 3:05:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-046	**Matrix:**	Air
Client Sample ID:	VA1233		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,300	800		ppbv	400	1/30/2012 8:03 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	1/30/2012 8:03 PM
Ethyl acetate	ND	400	U	ppbv	400	1/30/2012 8:03 PM
Ethylbenzene	540	800	J	ppbv	400	1/30/2012 8:03 PM
Heptane	3,100	400		ppbv	400	1/30/2012 8:03 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	1/30/2012 8:03 PM
m,p-Xylene	1,600	800		ppbv	400	1/30/2012 8:03 PM
Methylene chloride	ND	2,000	U	ppbv	400	1/30/2012 8:03 PM
n-Hexane	2,000	800		ppbv	400	1/30/2012 8:03 PM
Naphthalene	ND	400	U	ppbv	400	1/30/2012 8:03 PM
o-Xylene	460	400		ppbv	400	1/30/2012 8:03 PM
Propylene	650	400		ppbv	400	1/30/2012 8:03 PM
Styrene	ND	400	U	ppbv	400	1/30/2012 8:03 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	1/30/2012 8:03 PM
Tetrachloroethene	ND	400	U	ppbv	400	1/30/2012 8:03 PM
Tetrahydrofuran	ND	400	U	ppbv	400	1/30/2012 8:03 PM
Toluene	10,000	400		ppbv	400	1/30/2012 8:03 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	1/30/2012 8:03 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	1/30/2012 8:03 PM
Trichloroethene	ND	400	U	ppbv	400	1/30/2012 8:03 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	1/30/2012 8:03 PM
Vinyl acetate	ND	400	U	ppbv	400	1/30/2012 8:03 PM
Vinyl chloride	ND	400	U	ppbv	400	1/30/2012 8:03 PM
Xylenes, Total	2,100	1,200		ppbv	400	1/30/2012 8:03 PM
Surr: 4-Bromofluorobenzene	110	70-130		%REC	400	1/30/2012 8:03 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	170,000	47,000		µg/m³	400	1/31/2012 8:57 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/31/2012 8:57 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	1/31/2012 8:57 PM
Surr: 4-Bromofluorobenzene	92.1	70-130		%REC	400	1/31/2012 8:57 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 3:49:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-047	**Matrix:**	Air
Client Sample ID:	VA1234		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.94	0.10		%	1	1/26/2012 12:34 PM
Carbon Monoxide	ND	0.10	U	%	1	1/26/2012 12:34 PM
Methane	ND	0.50	U	%	1	1/26/2012 12:34 PM
Nitrogen	79	0.10		%	1	1/26/2012 12:34 PM
Oxygen	18	0.10		%	1	1/26/2012 12:34 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/27/2012 11:54 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/27/2012 11:54 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/27/2012 11:54 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/27/2012 11:54 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/27/2012 11:54 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/27/2012 11:54 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/27/2012 11:54 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/27/2012 11:54 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/27/2012 11:54 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/27/2012 11:54 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/27/2012 11:54 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/27/2012 11:54 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/27/2012 11:54 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/27/2012 11:54 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/27/2012 11:54 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/27/2012 11:54 PM
2-Butanone	ND	40	U	ppbv	40	1/27/2012 11:54 PM
2-Hexanone	ND	40	U	ppbv	40	1/27/2012 11:54 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/27/2012 11:54 PM
Acetone	ND	40	U	ppbv	40	1/27/2012 11:54 PM
Benzene	1,300	40		ppbv	40	1/27/2012 11:54 PM
Benzyl chloride	ND	40	U	ppbv	40	1/27/2012 11:54 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/27/2012 11:54 PM
Bromoform	ND	40	U	ppbv	40	1/27/2012 11:54 PM
Bromomethane	ND	40	U	ppbv	40	1/27/2012 11:54 PM
Carbon disulfide	ND	40	U	ppbv	40	1/27/2012 11:54 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/27/2012 11:54 PM
Chlorobenzene	ND	40	U	ppbv	40	1/27/2012 11:54 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/27/2012 11:54 PM
Chloroethane	ND	40	U	ppbv	40	1/27/2012 11:54 PM
Chloroform	ND	40	U	ppbv	40	1/27/2012 11:54 PM
Chloromethane	ND	40	U	ppbv	40	1/27/2012 11:54 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/27/2012 11:54 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/27/2012 11:54 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/12/2012 3:49:00 PM
Project:	Kirtland AFB		
Lab ID:	1201592-047	**Matrix:**	Air
Client Sample ID:	VA1234		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,800	80		ppbv	40	1/27/2012 11:54 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/27/2012 11:54 PM
Ethyl acetate	ND	40	U	ppbv	40	1/27/2012 11:54 PM
Ethylbenzene	170	80		ppbv	40	1/27/2012 11:54 PM
Heptane	2,300	400		ppbv	400	2/2/2012 12:28 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/27/2012 11:54 PM
m,p-Xylene	550	80		ppbv	40	1/27/2012 11:54 PM
Methylene chloride	ND	200	U	ppbv	40	1/27/2012 11:54 PM
n-Hexane	1,400	80		ppbv	40	1/27/2012 11:54 PM
Naphthalene	ND	40	U	ppbv	40	1/27/2012 11:54 PM
o-Xylene	130	40		ppbv	40	1/27/2012 11:54 PM
Propylene	140	40		ppbv	40	1/27/2012 11:54 PM
Styrene	ND	40	U	ppbv	40	1/27/2012 11:54 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/27/2012 11:54 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/27/2012 11:54 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/27/2012 11:54 PM
Toluene	4,600	400		ppbv	400	2/2/2012 12:28 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/27/2012 11:54 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/27/2012 11:54 PM
Trichloroethene	ND	40	U	ppbv	40	1/27/2012 11:54 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/27/2012 11:54 PM
Vinyl acetate	ND	40	U	ppbv	40	1/27/2012 11:54 PM
Vinyl chloride	ND	40	U	ppbv	40	1/27/2012 11:54 PM
Xylenes, Total	680	120		ppbv	40	1/27/2012 11:54 PM
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	40	1/27/2012 11:54 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	82,000	4,700		µg/m³	40	1/25/2012 12:05 AM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	1/25/2012 12:05 AM
C9-C12 Aliphatic Hydrocarbons	7,700	7,600		µg/m³	40	1/25/2012 12:05 AM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	40	1/25/2012 12:05 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/13/2012 9:15:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-048	**Matrix:**	Air
Client Sample ID:	VA1235		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.83	0.10		%	1	1/26/2012 12:51 PM
Carbon Monoxide	ND	0.10	U	%	1	1/26/2012 12:51 PM
Methane	ND	0.50	U	%	1	1/26/2012 12:51 PM
Nitrogen	80	0.10		%	1	1/26/2012 12:51 PM
Oxygen	17	0.10		%	1	1/26/2012 12:51 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
2-Butanone	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
2-Hexanone	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
Acetone	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
Benzene	14,000	8,000		ppbv	8000	1/28/2012 2:12 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
Bromoform	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
Bromomethane	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
Chloroethane	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
Chloroform	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
Chloromethane	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/13/2012 9:15:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-048	**Matrix:**	Air
Client Sample ID:	VA1235		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	57,000	16,000		ppbv	8000	1/28/2012 2:12 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	1/28/2012 2:12 AM
Heptane	18,000	8,000		ppbv	8000	1/28/2012 2:12 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	1/28/2012 2:12 AM
m,p-Xylene	ND	16,000	U	ppbv	8000	1/28/2012 2:12 AM
Methylene chloride	ND	40,000	U	ppbv	8000	1/28/2012 2:12 AM
n-Hexane	46,000	16,000		ppbv	8000	1/28/2012 2:12 AM
Naphthalene	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
o-Xylene	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
Propylene	16,000	8,000		ppbv	8000	1/28/2012 2:12 AM
Styrene	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
Toluene	23,000	8,000		ppbv	8000	1/28/2012 2:12 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
Trichloroethene	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	1/28/2012 2:12 AM
Xylenes, Total	ND	24,000	U	ppbv	8000	1/28/2012 2:12 AM
Surr: 4-Bromofluorobenzene	116	70-130		%REC	8000	1/28/2012 2:12 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	3,700,000	940,000		µg/m³	8000	1/24/2012 10:39 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	1/24/2012 10:39 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	1/24/2012 10:39 PM
Surr: 4-Bromofluorobenzene	99.9	70-130		%REC	8000	1/24/2012 10:39 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/13/2012 10:18:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-049	**Matrix:**	Air
Client Sample ID:	VA1236		

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	1/26/2012 1:06 PM
Carbon Monoxide	ND	0.10	U	%	1	1/26/2012 1:06 PM
Methane	ND	0.50	U	%	1	1/26/2012 1:06 PM
Nitrogen	78	0.10		%	1	1/26/2012 1:06 PM
Oxygen	20	0.10		%	1	1/26/2012 1:06 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
2-Butanone	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
2-Hexanone	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
Acetone	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
Benzene	84,000	8,000		ppbv	8000	1/28/2012 2:58 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
Bromoform	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
Bromomethane	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
Chloroethane	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
Chloroform	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
Chloromethane	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/13/2012 10:18:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-049	**Matrix:**	Air
Client Sample ID:	VA1236		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	240,000	16,000		ppbv	8000	1/28/2012 2:58 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	1/28/2012 2:58 AM
Heptane	110,000	8,000		ppbv	8000	1/28/2012 2:58 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	1/28/2012 2:58 AM
m,p-Xylene	ND	16,000	U	ppbv	8000	1/28/2012 2:58 AM
Methylene chloride	ND	40,000	U	ppbv	8000	1/28/2012 2:58 AM
n-Hexane	240,000	16,000		ppbv	8000	1/28/2012 2:58 AM
Naphthalene	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
o-Xylene	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
Propylene	20,000	8,000		ppbv	8000	1/28/2012 2:58 AM
Styrene	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
Toluene	74,000	8,000		ppbv	8000	1/28/2012 2:58 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
Trichloroethene	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	1/28/2012 2:58 AM
Xylenes, Total	ND	24,000	U	ppbv	8000	1/28/2012 2:58 AM
Surr: 4-Bromofluorobenzene	114	70-130		%REC	8000	1/28/2012 2:58 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	8,200,000	940,000		µg/m³	8000	1/24/2012 11:22 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	1/24/2012 11:22 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	1/24/2012 11:22 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	8000	1/24/2012 11:22 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-050	**Matrix:**	Air
Client Sample ID:	VA8071-TB		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/19/2012 11:27 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/19/2012 11:27 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/19/2012 11:27 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/19/2012 11:27 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/19/2012 11:27 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/19/2012 11:27 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/19/2012 11:27 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/19/2012 11:27 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/19/2012 11:27 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/19/2012 11:27 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/19/2012 11:27 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/19/2012 11:27 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/19/2012 11:27 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/19/2012 11:27 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/19/2012 11:27 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/19/2012 11:27 PM
2-Butanone	ND	40	U	ppbv	40	1/19/2012 11:27 PM
2-Hexanone	ND	40	U	ppbv	40	1/19/2012 11:27 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Acetone	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Benzene	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Benzyl chloride	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Bromoform	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Bromomethane	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Carbon disulfide	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Chlorobenzene	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Chloroethane	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Chloroform	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Chloromethane	ND	40	U	ppbv	40	1/19/2012 11:27 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/19/2012 11:27 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Cyclohexane	ND	80	U	ppbv	40	1/19/2012 11:27 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Ethyl acetate	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Ethylbenzene	ND	80	U	ppbv	40	1/19/2012 11:27 PM
Heptane	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/19/2012 11:27 PM
m,p-Xylene	ND	80	U	ppbv	40	1/19/2012 11:27 PM
Methylene chloride	ND	200	U	ppbv	40	1/19/2012 11:27 PM

RTI Laboratories - Analytical Report

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/10/2012 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1201592-050	**Matrix:**	Air
Client Sample ID:	VA8071-TB		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
n-Hexane	ND	80	U	ppbv	40	1/19/2012 11:27 PM
Naphthalene	ND	40	U	ppbv	40	1/19/2012 11:27 PM
o-Xylene	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Propylene	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Styrene	ND	40	U	ppbv	40	1/19/2012 11:27 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Toluene	ND	40	U	ppbv	40	1/19/2012 11:27 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/19/2012 11:27 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Trichloroethene	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Vinyl acetate	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Vinyl chloride	ND	40	U	ppbv	40	1/19/2012 11:27 PM
Xylenes, Total	ND	120	U	ppbv	40	1/19/2012 11:27 PM
Surr: 4-Bromofluorobenzene	110	70-130		%REC	40	1/19/2012 11:27 PM

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45620

Sample ID:	**MBLK VOA1 011912**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**45620**
Client ID:	**PBW**	Batch ID:	**R45620**	TestNo:	**TO-15**			Analysis Date:	**1/19/2012**	SeqNo:	**896060**

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#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45620

Sample ID:	**MBLK VOA1 011912**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**45620**
Client ID:	**PBW**	Batch ID:	**R45620**	TestNo:	**TO-15**			Analysis Date:	**1/19/2012**	SeqNo:	**896060**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									U
cis-1,2-Dichloroethene	ND	1.0									U
cis-1,3-dichloropropene	ND	1.0									U
Cyclohexane	ND	2.0									U
Dichlorodifluoromethane	ND	1.0									U
Ethyl acetate	ND	1.0									U
Ethylbenzene	ND	2.0									U
Heptane	ND	1.0									U
Hexachlorobutadiene	ND	2.0									U
m,p-Xylene	ND	2.0									U
Methylene chloride	ND	5.0									U
n-Hexane	ND	2.0									U
Naphthalene	ND	1.0									U
o-Xylene	ND	1.0									U
Propylene	ND	1.0									U
Styrene	ND	1.0									U
tert-Butyl Methyl Ether	ND	1.0									U
Tetrachloroethene	ND	1.0									U
Tetrahydrofuran	ND	1.0									U
Toluene	ND	1.0									U
trans-1,2-Dichloroethene	ND	1.0									U
trans-1,3-dichloropropene	ND	1.0									U
Trichloroethene	ND	1.0									U
Trichlorofluoromethane	ND	1.0									U
Vinyl acetate	ND	1.0									U
Vinyl chloride	ND	1.0									U
Xylenes, Total	ND	3.0									U
Surr: 4-Bromofluorobenzene	14		12.50		114	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45620

Sample ID:	SUMMA BLK VOA10	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45620
Client ID:	PBW	Batch ID:	R45620	TestNo:	TO-15			Analysis Date:	1/19/2012	SeqNo:	896061

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#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45620

Sample ID:	SUMMA BLK VOA10	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45620		
Client ID:	PBW	Batch ID:	R45620	TestNo:	TO-15			Analysis Date:	1/19/2012	SeqNo:	896061		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									U
cis-1,2-Dichloroethene	ND	1.0									U
cis-1,3-dichloropropene	ND	1.0									U
Cyclohexane	ND	2.0									U
Dichlorodifluoromethane	ND	1.0									U
Ethyl acetate	ND	1.0									U
Ethylbenzene	ND	2.0									U
Heptane	ND	1.0									U
Hexachlorobutadiene	ND	2.0									U
m,p-Xylene	ND	2.0									U
Methylene chloride	ND	5.0									U
n-Hexane	ND	2.0									U
Naphthalene	ND	1.0									U
o-Xylene	ND	1.0									U
Propylene	ND	1.0									U
Styrene	ND	1.0									U
tert-Butyl Methyl Ether	ND	1.0									U
Tetrachloroethene	ND	1.0									U
Tetrahydrofuran	ND	1.0									U
Toluene	ND	1.0									U
trans-1,2-Dichloroethene	ND	1.0									U
trans-1,3-dichloropropene	ND	1.0									U
Trichloroethene	ND	1.0									U
Trichlorofluoromethane	ND	1.0									U
Vinyl acetate	ND	1.0									U
Vinyl chloride	ND	1.0									U
Xylenes, Total	ND	3.0									U
Surr: 4-Bromofluorobenzene	14		12.50		111	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45620

Sample ID:	**1201592-002Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**45620**
Client ID:	**VA1003**	Batch ID:	**R45620**	TestNo:	**TO-15**			Analysis Date:	**1/20/2012**	SeqNo:	**896068**

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	3,100	40						3,061	2.57	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#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45620

Sample ID:	**1201592-002Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**45620**
Client ID:	**VA1003**	Batch ID:	**R45620**	TestNo:	**TO-15**			Analysis Date:	**1/20/2012**	SeqNo:	**896068**

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	1,700	80						1,606	5.97	25	
Dichlorodifluoromethane	ND	40						0	0	25	U
Ethyl acetate	ND	40						0	0	25	U
Ethylbenzene	420	80						386.8	7.47	25	
Heptane	1,100	40						1,116	2.03	25	
Hexachlorobutadiene	ND	80						0	0	25	U
m,p-Xylene	1,000	80						951.2	7.37	25	
Methylene chloride	ND	200						0	0	25	U
n-Hexane	1,200	80						1,040	13.9	25	
Naphthalene	ND	40						0	0	25	U
o-Xylene	350	40						326.8	6.97	25	
Propylene	ND	40						0	0	25	U
Styrene	ND	40						0	0	25	U
tert-Butyl Methyl Ether	ND	40						0	0	25	U
Tetrachloroethene	ND	40						0	0	25	U
Tetrahydrofuran	ND	40						0	0	25	U
Toluene	4,700	40						4,815	3.21	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	1,400	120						1,278	7.27	25	
Surr: 4-Bromofluorobenzene	570		500.0		114	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45700

Sample ID:	MBLK VOA1 012212	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45700
Client ID:	PBW	Batch ID:	R45700	TestNo:	TO-15			Analysis Date:	1/22/2012	SeqNo:	897215

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#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R45700**

Sample ID:	**MBLK VOA1 012212**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**45700**
Client ID:	**PBW**	Batch ID:	**R45700**	TestNo:	**TO-15**			Analysis Date:	**1/22/2012**	SeqNo:	**897215**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									U
cis-1,2-Dichloroethene	ND	1.0									U
cis-1,3-dichloropropene	ND	1.0									U
Cyclohexane	ND	2.0									U
Dichlorodifluoromethane	ND	1.0									U
Ethyl acetate	ND	1.0									U
Ethylbenzene	ND	2.0									U
Heptane	ND	1.0									U
Hexachlorobutadiene	ND	2.0									U
m,p-Xylene	ND	2.0									U
Methylene chloride	ND	5.0									U
n-Hexane	ND	2.0									U
Naphthalene	ND	1.0									U
o-Xylene	ND	1.0									U
Propylene	ND	1.0									U
Styrene	ND	1.0									U
tert-Butyl Methyl Ether	ND	1.0									U
Tetrachloroethene	ND	1.0									U
Tetrahydrofuran	ND	1.0									U
Toluene	ND	1.0									U
trans-1,2-Dichloroethene	ND	1.0									U
trans-1,3-dichloropropene	ND	1.0									U
Trichloroethene	ND	1.0									U
Trichlorofluoromethane	ND	1.0									U
Vinyl acetate	ND	1.0									U
Vinyl chloride	ND	1.0									U
Xylenes, Total	ND	3.0									U
Surr: 4-Bromofluorobenzene	14		12.50		114	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R45700**

Sample ID:	**1201592-024ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**45700**
Client ID:	**VA1171**	Batch ID:	**R45700**	TestNo:	**TO-15**			Analysis Date:	**1/22/2012**	SeqNo:	**897221**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	8.0						0	0	25	U
1,1,2,2-Tetrachloroethane	ND	8.0						0	0	25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8.0						0	0	25	U
1,1,2-Trichloroethane	ND	8.0						0	0	25	U
1,1-Dichloroethane	ND	8.0						0	0	25	U
1,1-Dichloroethene	ND	8.0						0	0	25	U
1,2,4-Trichlorobenzene	ND	8.0						0	0	25	U
1,2,4-Trimethylbenzene	ND	8.0						0	0	25	U
1,2-Dibromoethane	ND	8.0						0	0	25	U
1,2-Dichlorobenzene	ND	8.0						0	0	25	U
1,2-Dichloroethane	ND	8.0						0	0	25	U
1,2-Dichloropropane	ND	8.0						0	0	25	U
1,3,5-Trimethylbenzene	ND	8.0						0	0	25	U
1,3-Butadiene	ND	8.0						0	0	25	U
1,3-Dichlorobenzene	ND	8.0						0	0	25	U
1,4-Dichlorobenzene	ND	8.0						0	0	25	U
2-Butanone	ND	8.0						0	0	25	U
2-Hexanone	ND	8.0						0	0	25	U
4-Methyl-2-pentanone	ND	8.0						0	0	25	U
Acetone	ND	8.0						0	0	25	U
Benzene	16	8.0						16.96	4.34	25	
Benzyl chloride	ND	8.0						0	0	25	U
Bromodichloromethane	ND	8.0						0	0	25	U
Bromoform	ND	8.0						0	0	25	U
Bromomethane	ND	8.0						0	0	25	U
Carbon disulfide	ND	8.0						0	0	25	U
Carbon tetrachloride	20	8.0						20.32	3.61	25	
Chlorobenzene	ND	8.0						0	0	25	U
Chlorodibromomethane	ND	8.0						0	0	25	U
Chloroethane	ND	8.0						0	0	25	U
Chloroform	110	8.0						119.3	5.09	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45700

Sample ID:	1201592-024ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45700		
Client ID:	VA1171	Batch ID:	R45700	TestNo:	TO-15			Analysis Date:	1/22/2012	SeqNo:	897221		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	8.0						0	0	25	U
cis-1,2-Dichloroethene	ND	8.0						0	0	25	U
cis-1,3-dichloropropene	ND	8.0						0	0	25	U
Cyclohexane	24	16						24.00	1.68	25	
Dichlorodifluoromethane	ND	8.0						0	0	25	U
Ethyl acetate	ND	8.0						0	0	25	U
Ethylbenzene	8.2	16						9.120	11.1	25	J
Heptane	22	8.0						24.88	12.3	25	
Hexachlorobutadiene	ND	16						0	0	25	U
m,p-Xylene	30	16						33.28	10.9	25	
Methylene chloride	ND	40						0	0	25	U
n-Hexane	11	16						11.68	2.78	25	J
Naphthalene	ND	8.0						0	0	25	U
o-Xylene	11	8.0						11.84	9.93	25	
Propylene	ND	8.0						0	0	25	U
Styrene	ND	8.0						0	0	25	U
tert-Butyl Methyl Ether	ND	8.0						0	0	25	U
Tetrachloroethene	ND	8.0						0	0	25	U
Tetrahydrofuran	ND	8.0						0	0	25	U
Toluene	70	8.0						84.32	18.9	25	
trans-1,2-Dichloroethene	ND	8.0						0	0	25	U
trans-1,3-dichloropropene	ND	8.0						0	0	25	U
Trichloroethene	ND	8.0						0	0	25	U
Trichlorofluoromethane	ND	8.0						0	0	25	U
Vinyl acetate	ND	8.0						0	0	25	U
Vinyl chloride	ND	8.0						0	0	25	U
Xylenes, Total	41	24						45.12	10.6	25	
Surr: 4-Bromofluorobenzene	110		100.0		111	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45702

Sample ID:	MBLK 012312 VOA9	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	45702
Client ID:	PBW	Batch ID:	R45702	TestNo:	MA_APH			Analysis Date:	1/23/2012	SeqNo:	897244

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	ND	120									U
C9-C10 Aromatic Hydrocarbons	ND	130									U
C9-C12 Aliphatic Hydrocarbons	ND	190									U
Surr: 4-Bromofluorobenzene	86		89.50		95.7	70	130				

Sample ID:	1201592-008Adup	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	45702
Client ID:	VA1025	Batch ID:	R45702	TestNo:	MA_APH			Analysis Date:	1/23/2012	SeqNo:	897246

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	11,000,000	940,000						10,420,000	7.80	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	690,000		716,000		95.9	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45710

Sample ID:	MBLK VOA1 012412	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45710
Client ID:	PBW	Batch ID:	R45710	TestNo:	TO-15			Analysis Date:	1/24/2012	SeqNo:	897368

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#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45710

Sample ID:	**MBLK VOA1 012412**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**45710**
Client ID:	**PBW**	Batch ID:	**R45710**	TestNo:	**TO-15**			Analysis Date:	**1/24/2012**	SeqNo:	**897368**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									U
cis-1,2-Dichloroethene	ND	1.0									U
cis-1,3-dichloropropene	ND	1.0									U
Cyclohexane	ND	2.0									U
Dichlorodifluoromethane	ND	1.0									U
Ethyl acetate	ND	1.0									U
Ethylbenzene	ND	2.0									U
Heptane	ND	1.0									U
Hexachlorobutadiene	ND	2.0									U
m,p-Xylene	ND	2.0									U
Methylene chloride	ND	5.0									U
n-Hexane	ND	2.0									U
Naphthalene	ND	1.0									U
o-Xylene	ND	1.0									U
Propylene	ND	1.0									U
Styrene	ND	1.0									U
tert-Butyl Methyl Ether	ND	1.0									U
Tetrachloroethene	ND	1.0									U
Tetrahydrofuran	ND	1.0									U
Toluene	ND	1.0									U
trans-1,2-Dichloroethene	ND	1.0									U
trans-1,3-dichloropropene	ND	1.0									U
Trichloroethene	ND	1.0									U
Trichlorofluoromethane	ND	1.0									U
Vinyl acetate	ND	1.0									U
Vinyl chloride	ND	1.0									U
Xylenes, Total	ND	3.0									U
Surr: 4-Bromofluorobenzene	14		12.50		111	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45710

Sample ID:	1201592-012Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45710
Client ID:	VA1064	Batch ID:	R45710	TestNo:	TO-15			Analysis Date:	1/24/2012	SeqNo:	897370

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	180,000	8,000						203,100	11.7	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#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45710

Sample ID:	**1201592-012Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**45710**		
Client ID:	**VA1064**	Batch ID:	**R45710**	TestNo:	**TO-15**			Analysis Date:	**1/24/2012**	SeqNo:	**897370**		

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	460,000	16,000						510,100	9.65	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	250,000	8,000						293,600	18.0	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	460,000	16,000						517,400	10.7	25	
Naphthalene	ND	8,000						0	0	25	U
o-Xylene	ND	8,000						0	0	25	U
Propylene	19,000	8,000						21,360	9.41	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	100,000	8,000						121,700	19.8	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	120,000		100,000		119	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45758

Sample ID:	MBLK 012412 VOA9	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	45758
Client ID:	PBW	Batch ID:	R45758	TestNo:	MA_APH			Analysis Date:	1/24/2012	SeqNo:	898070

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	53	120									J
C9-C10 Aromatic Hydrocarbons	ND	130									U
C9-C12 Aliphatic Hydrocarbons	ND	190									U
Surr: 4-Bromofluorobenzene	86		89.50		95.8	70	130				

Sample ID:	1201592-047Adup	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	45758
Client ID:	VA1234	Batch ID:	R45758	TestNo:	MA_APH			Analysis Date:	1/24/2012	SeqNo:	898072

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	430,000	940,000						435,400	1.18	30	J
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	710,000		716,000		98.8	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R45769

Sample ID:	MBLK VOA1 012512	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45769
Client ID:	PBW	Batch ID:	R45769	TestNo:	TO-15			Analysis Date:	1/26/2012	SeqNo:	898230

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#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45769

Sample ID:	**MBLK VOA1 012512**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**45769**		
Client ID:	**PBW**	Batch ID:	**R45769**	TestNo:	**TO-15**			Analysis Date:	**1/26/2012**	SeqNo:	**898230**		

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#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R45774**

Sample ID:	**MBLK 012612 VOA9**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**45774**
Client ID:	**PBW**	Batch ID:	**R45774**	TestNo:	**MA_APH**			Analysis Date:	**1/26/2012**	SeqNo:	**898281**

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:	**1201592-028Adup**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**45774**
Client ID:	**VA1175**	Batch ID:	**R45774**	TestNo:	**MA_APH**			Analysis Date:	**1/26/2012**	SeqNo:	**898283**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	2,400,000	940,000						2,640,000	7.98	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	670,000		716,000		93.4	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45784

Sample ID: **mblk** Samp Type: **MBLK** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **45784**

Client ID: **PBW** Batch ID: **R45784** TestNo: **ASTM-D2504** Analysis Date: **1/20/2012** SeqNo: **898730**

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: **45784**

Client ID: **LCSW** Batch ID: **R45784** TestNo: **ASTM-D2504** Analysis Date: **1/20/2012** SeqNo: **898732**

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	2.628	0.304	0	
Carbon Monoxide	2.7	0.10	2.500	0	108	70	130	2.707	0.0369	0	
Methane	2.1	0.50	2.000	0	104	70	130	2.097	0.382	0	
Nitrogen	2.8	0.10	2.500	0	112	70	130	2.744	1.73	0	
Oxygen	2.5	0.10	2.500	0	100	70	130	2.499	0.399	0	

Sample ID: **1201592-010bDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **45784**

Client ID: **VA1062** Batch ID: **R45784** TestNo: **ASTM-D2504** Analysis Date: **1/20/2012** SeqNo: **898744**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.091	0.10						0.09200	1.09	20	J
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	79	0.10						78.55	0.0331	20	
Oxygen	21	0.10						20.77	0.0289	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R45785

Sample ID:	mblk	Samp Type:	MBLK	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	45785
Client ID:	PBW	Batch ID:	R45785	TestNo:	ASTM-D2504			Analysis Date:	1/23/2012	SeqNo:	898747

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:	45785
Client ID:	LCSW	Batch ID:	R45785	TestNo:	ASTM-D2504			Analysis Date:	1/23/2012	SeqNo:	898749

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.6	0.10	2.500	0	103	70	130	2.606	1.08	0	
Carbon Monoxide	2.6	0.10	2.500	0	105	70	130	2.698	2.40	0	
Methane	2.0	0.50	2.000	0	102	70	130	2.069	1.07	0	
Nitrogen	2.6	0.10	2.500	0	103	70	130	2.728	5.46	0	
Oxygen	2.4	0.10	2.500	0	96.6	70	130	2.485	2.90	0	

Sample ID:	1201592-020bdup	Samp Type:	DUP	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	45785
Client ID:	VA1116	Batch ID:	R45785	TestNo:	ASTM-D2504			Analysis Date:	1/23/2012	SeqNo:	898761

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	1.3	0.10						1.282	0.777	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	79	0.10						78.52	0.650	20	
Oxygen	17	0.10						17.28	0.600	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R45786

Sample ID:	mblk	Samp Type:	MBLK	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	45786
Client ID:	PBW	Batch ID:	R45786	TestNo:	ASTM-D2504			Analysis Date:	1/24/2012	SeqNo:	898764

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:	45786
Client ID:	LCSW	Batch ID:	R45786	TestNo:	ASTM-D2504			Analysis Date:	1/24/2012	SeqNo:	898766

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	2.651	0	0	
Carbon Monoxide	2.7	0.10	2.500	0	108	70	130	2.715	0.147	0	
Methane	2.1	0.50	2.000	0	105	70	130	2.088	1.00	0	
Nitrogen	2.7	0.10	2.500	0	107	70	130	2.652	0.451	0	
Oxygen	2.5	0.10	2.500	0	99.6	70	130	2.469	0.807	0	

Sample ID:	1201592-030bdup	Samp Type:	DUP	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	45786
Client ID:	VA1177	Batch ID:	R45786	TestNo:	ASTM-D2504			Analysis Date:	1/24/2012	SeqNo:	898778

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.046	0.10						0.04700	2.15	20	J
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	80	0.10						79.59	1.03	20	
Oxygen	21	0.10						21.28	0.499	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R45787

Sample ID:	mblk	Samp Type:	MBLK	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	45787
Client ID:	PBW	Batch ID:	R45787	TestNo:	ASTM-D2504			Analysis Date:	1/25/2012	SeqNo:	898781

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:	45787
Client ID:	LCSW	Batch ID:	R45787	TestNo:	ASTM-D2504			Analysis Date:	1/25/2012	SeqNo:	898783

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.6	0.10	2.500	0	104	70	130	2.613	0.614	0	
Carbon Monoxide	2.7	0.10	2.500	0	108	70	130	2.730	1.07	0	
Methane	2.1	0.50	2.000	0	105	70	130	2.106	0.428	0	
Nitrogen	2.7	0.10	2.500	0	106	70	130	2.624	1.02	0	
Oxygen	2.5	0.10	2.500	0	99.0	70	130	2.478	0.162	0	

Sample ID:	1201592-040bdup	Samp Type:	DUP	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	45787
Client ID:	VA1187	Batch ID:	R45787	TestNo:	ASTM-D2504			Analysis Date:	1/25/2012	SeqNo:	898795

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.32	0.10						0.3250	0.308	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	79	0.10						80.42	1.27	20	
Oxygen	20	0.10						19.96	0.412	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45788

Sample ID:	mblk	Samp Type:	MBLK	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	45788
Client ID:	PBW	Batch ID:	R45788	TestNo:	ASTM-D2504			Analysis Date:	1/26/2012	SeqNo:	898798

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:	45788
Client ID:	LCSW	Batch ID:	R45788	TestNo:	ASTM-D2504			Analysis Date:	1/26/2012	SeqNo:	898800

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	2.578	2.22	0	
Carbon Monoxide	2.7	0.10	2.500	0	108	70	130	2.707	0.481	0	
Methane	2.1	0.50	2.000	0	105	70	130	2.103	0.572	0	
Nitrogen	2.7	0.10	2.500	0	106	70	130	2.692	1.46	0	
Oxygen	2.5	0.10	2.500	0	98.9	70	130	2.494	0.886	0	

Sample ID:	1201676-001bdup	Samp Type:	DUP	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	45788
Client ID:	ZZZZZZ	Batch ID:	R45788	TestNo:	ASTM-D2504			Analysis Date:	1/26/2012	SeqNo:	898812

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.78	0.10						0.7720	0.774	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	78	0.10						77.48	0.453	20	
Oxygen	20	0.10						19.84	0.453	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45807

Sample ID:	1201592-017ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45807
Client ID:	VA1113	Batch ID:	R45807	TestNo:	TO-15			Analysis Date:	1/27/2012	SeqNo:	898896

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	40						0	0	25	U
1,1,2,2-Tetrachloroethane	ND	40						0	0	25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40						0	0	25	U
1,1,2-Trichloroethane	ND	40						0	0	25	U
1,1-Dichloroethane	ND	40						0	0	25	U
1,1-Dichloroethene	ND	40						0	0	25	U
1,2,4-Trichlorobenzene	ND	40						0	0	25	U
1,2,4-Trimethylbenzene	ND	40						0	0	25	U
1,2-Dibromoethane	ND	40						0	0	25	U
1,2-Dichlorobenzene	ND	40						0	0	25	U
1,2-Dichloroethane	ND	40						0	0	25	U
1,2-Dichloropropane	ND	40						0	0	25	U
1,3,5-Trimethylbenzene	ND	40						0	0	25	U
1,3-Butadiene	ND	40						0	0	25	U
1,3-Dichlorobenzene	ND	40						0	0	25	U
1,4-Dichlorobenzene	ND	40						0	0	25	U
2-Butanone	ND	40						0	0	25	U
2-Hexanone	ND	40						0	0	25	U
4-Methyl-2-pentanone	ND	40						0	0	25	U
Acetone	ND	40						0	0	25	U
Benzene	210	40						198.4	7.00	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#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45807

Sample ID:	1201592-017ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45807
Client ID:	VA1113	Batch ID:	R45807	TestNo:	TO-15			Analysis Date:	1/27/2012	SeqNo:	898896

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						1,188	3.18	25	
Dichlorodifluoromethane	ND	40						0	0	25	U
Ethyl acetate	ND	40						0	0	25	U
Ethylbenzene	49	80						44.00	10.3	25	J
Heptane	150	40						144.0	3.01	25	
Hexachlorobutadiene	ND	80						0	0	25	U
m,p-Xylene	86	80						74.80	13.5	25	
Methylene chloride	ND	200						0	0	25	U
n-Hexane	900	80						876.4	2.70	25	
Naphthalene	ND	40						0	0	25	U
o-Xylene	ND	40						0	0	25	U
Propylene	130	40						123.2	4.13	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	890	40						794.4	11.7	25	
trans-1,2-Dichloroethene	ND	40						0	0	25	U
trans-1,3-dichloropropene	ND	40						0	0	25	U
Trichloroethene	ND	40						0	0	25	U
Trichlorofluoromethane	ND	40						0	0	25	U
Vinyl acetate	ND	40						0	0	25	U
Vinyl chloride	ND	40						0	0	25	U
Xylenes, Total	86	120						74.80	13.5	25	J
Surr: 4-Bromofluorobenzene	570		500.0		113	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45807

Sample ID:	**MBLK VOA1 012712**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**45807**
Client ID:	**PBW**	Batch ID:	**R45807**	TestNo:	**TO-15**			Analysis Date:	**1/27/2012**	SeqNo:	**898897**

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#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R45807**

Sample ID:	**MBLK VOA1 012712**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**45807**
Client ID:	**PBW**	Batch ID:	**R45807**	TestNo:	**TO-15**			Analysis Date:	**1/27/2012**	SeqNo:	**898897**

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		110	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45808

Sample ID:	MBLK 012712 VOA9	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	45808
Client ID:	PBW	Batch ID:	R45808	TestNo:	MA_APH			Analysis Date:	1/27/2012	SeqNo:	898978

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		88.8	70	130				

Sample ID:	1201592-012Adup	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	45808
Client ID:	VA1064	Batch ID:	R45808	TestNo:	MA_APH			Analysis Date:	1/27/2012	SeqNo:	898980

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	21,000,000	940,000						23,680,000	11.3	30	
C9-C10 Aromatic Hydrocarbons	ND	1,100,000						0	0	30	
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000						0	0	30	
Surr: 4-Bromofluorobenzene	650,000		716,000		90.1	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45849

Sample ID:	MBLK VOA1 013012	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45849
Client ID:	PBW	Batch ID:	R45849	TestNo:	TO-15			Analysis Date:	1/30/2012	SeqNo:	899544

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#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45849

Sample ID:	**MBLK VOA1 013012**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**45849**
Client ID:	**PBW**	Batch ID:	**R45849**	TestNo:	**TO-15**			Analysis Date:	**1/30/2012**	SeqNo:	**899544**

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		110	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45849

Sample ID:	1201676-020ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45849
Client ID:	ZZZZZZ	Batch ID:	R45849	TestNo:	TO-15			Analysis Date:	1/30/2012	SeqNo:	899547

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	710	40						675.2	5.36	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#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45849

Sample ID:	1201676-020ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45849
Client ID:	ZZZZZZ	Batch ID:	R45849	TestNo:	TO-15			Analysis Date:	1/30/2012	SeqNo:	899547

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	920	80						911.6	0.569	25	
Dichlorodifluoromethane	ND	40						0	0	25	U
Ethyl acetate	ND	40						0	0	25	U
Ethylbenzene	130	80						128.8	4.55	25	
Heptane	980	40						990.4	0.892	25	
Hexachlorobutadiene	ND	80						0	0	25	U
m,p-Xylene	470	80						445.6	5.75	25	
Methylene chloride	ND	200						0	0	25	U
n-Hexane	620	80						598.0	3.61	25	
Naphthalene	ND	40						0	0	25	U
o-Xylene	110	40						104.8	5.57	25	
Propylene	83	40						84.40	1.43	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	3,300	40						3,292	1.05	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	580	120						550.4	5.72	25	
Surr: 4-Bromofluorobenzene	490		500.0		97.0	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45907

Sample ID:	MBLK 013012 VOA9	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	45907
Client ID:	PBW	Batch ID:	R45907	TestNo:	MA_APH			Analysis Date:	1/30/2012	SeqNo:	900758

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	42	120									J
C9-C10 Aromatic Hydrocarbons	ND	130									U
C9-C12 Aliphatic Hydrocarbons	ND	190									U
Surr: 4-Bromofluorobenzene	78		89.50		87.4	70	130				

Sample ID:	1201592-015Adup	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	45907
Client ID:	VA1111	Batch ID:	R45907	TestNo:	MA_APH			Analysis Date:	1/30/2012	SeqNo:	900760

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	42,000	4,700						43,830	4.87	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	3,200		3,580		88.4	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R45908**

Sample ID:	**MBLK 013112 VOA9**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**45908**
Client ID:	**PBW**	Batch ID:	**R45908**	TestNo:	**MA_APH**			Analysis Date:	**1/31/2012**	SeqNo:	**900775**

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		89.2	70	130				

Sample ID:	**1201676-010Adup**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**45908**
Client ID:	**ZZZZZZ**	Batch ID:	**R45908**	TestNo:	**MA_APH**			Analysis Date:	**1/31/2012**	SeqNo:	**900777**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	100,000	4,700						92,660	10.2	30	
C9-C10 Aromatic Hydrocarbons	ND	5,300						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	11,000	7,600						7,462	38.5	30	R
Surr: 4-Bromofluorobenzene	3,500		3,580		97.3	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R45934

Sample ID:	MBLK VOA1 020112	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45934
Client ID:	PBW	Batch ID:	R45934	TestNo:	TO-15			Analysis Date:	2/1/2012	SeqNo:	901202

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Heptane	ND	1.0									U
Toluene	ND	1.0									U
Surr: 4-Bromofluorobenzene	13		12.50		107	70	130				

Sample ID:	1201676-001Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45934
Client ID:	ZZZZZZ	Batch ID:	R45934	TestNo:	TO-15			Analysis Date:	2/1/2012	SeqNo:	901204

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Heptane	ND	8,000						0	0	25	U
Toluene	ND	8,000						0	0	25	U
Surr: 4-Bromofluorobenzene	110,000		100,000		107	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201592

Date Reported: 2/10/2012
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
n-Hexane	ND	2.0									U
Surr: 4-Bromofluorobenzene	14		12.50		113	70	130				

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
n-Hexane	580	80						587.2	1.58	25	
Surr: 4-Bromofluorobenzene	520		500.0		104	70	130		0	25	

RTI Laboratories

Run ID: **VOA1_120119B** **Run No.:** 45620

Analytical Run Date: 1/19/2012 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

Calibration ID: 45619 **Column ID:** 0.25mm, 1.4umFT

Column Length: 30m

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB2 VOA1 011912	BFB_TUNE	TUNE	R45620	1/19/2012 5:54:00 PM	Robert Lynch		
ICV VOA1 011912	EPA_TO15	ICV	R45620	1/19/2012 6:40:00 PM	Robert Lynch		
RLVS VOA1 011912	EPA_TO15	RLVS	R45620	1/19/2012 7:26:00 PM	Robert Lynch		
MBLK VOA1 011912	EPA_TO15	MBLK	R45620	1/19/2012 8:18:00 PM	Charles O`Bryan		
SUMMA BLK VOA1 0	EPA_TO15	MBLK	R45620	1/19/2012 9:10:00 PM	Charles O`Bryan		
1112881-001B	EPA_TO15	SAMP	R45620	1/19/2012 9:57:00 PM	Robert Lynch		
1201023-002A	EPA_TO15	SAMP	R45620	1/19/2012 10:42:00 PM	Robert Lynch		
1201592-050A	EPA_TO15	SAMP	R45620	1/19/2012 11:27:00 PM	Robert Lynch		
1201592-008A	EPA_TO15	SAMP	R45620	1/20/2012 3:56:00 AM	Robert Lynch		
1201592-002A	EPA_TO15	SAMP	R45620	1/20/2012 10:12:00 AM	Robert Lynch		
1201592-002Adup	EPA_TO15	DUP	R45620	1/20/2012 10:57:00 AM	Charles O`Bryan		
RLVS2 VOA1 01191	EPA_TO15	RLVS	R45620	1/20/2012 2:29:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

15-Feb-12

RunNo 45620

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
896057	BFB2 VOA1 011912	BFB_TUNE	TUNE	:\1\DATA\011912	1/19/2012 5:54:0	1	R45620		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		86.6	86.6		100	0	0	0	0	0	87%	50	120	0%	
175	M		6.9	6.9		100	0	0	0	0	0	7%	4	9	0%	
176	M		100.5	100.5		100	0	0	0	0	0	101%	93	101	0%	
177	M		6.5	6.5		100	0	0	0	0	0	7%	5	9	0%	
50	M		19.2	19.2		100	0	0	0	0	0	19%	8	40	0%	
75	M		42.3	42.3		100	0	0	0	0	0	42%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.8	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
896058	ICV VOA1 011912	EPA_TO15	ICV	:\1\DATA\011912	1/19/2012 6:40:0	1	R45620		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	10.78	10.78		9.6	0	0	0.107	1	0	112%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.89	10.89		10	0	0	0.211	1	0	109%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.48	10.48		9.8	0	0	0.108	1	0	107%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	10.6	10.6		9.8	0	0	0.2	1	0	108%	70	130	0%	
1,1-Dichloroethane	A	ppbv	10.1	10.1		9.7	0	0	0.111	1	0	104%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.51	10.51		9.9	0	0	0.097	1	0	106%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	8.43	8.43		9.1	0	0	0.271	1	0	93%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	10.5	10.5		9.8	0	0	0.245	1	0	107%	70	130	0%	
1,2-Dibromoethane	A	ppbv	10.52	10.52		9.6	0	0	0.186	1	0	110%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	10.42	10.42		9.7	0	0	0.208	1	0	107%	70	130	0%	
1,2-Dichloroethane	A	ppbv	10.66	10.66		9.7	0	0	0.196	1	0	110%	70	130	0%	
1,2-Dichloropropane	A	ppbv	10.67	10.67		9.8	0	0	0.224	1	0	109%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	10.28	10.28		9.7	0	0	0.24	1	0	106%	70	130	0%	
1,3-Butadiene	A	ppbv	11.98	11.98		9.8	0	0	0.152	1	0	122%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	10.28	10.28		9.7	0	0	0.202	1	0	106%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
896058	ICV VOA1 011912	EPA_TO15	ICV	:\1\DATA\011912	1/19/2012 6:40:0	1	R45620		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	10.14	10.14		9.6	0	0	0.194	1	0	106%	70	130	0%	
1,4-Dioxane	A	ppbv	10.58	10.58		9.6	0	0	0.128	1	0	110%	70	130	0%	
2-Butanone	A	ppbv	11.47	11.47		9.9	0	0	0.287	1	0	116%	70	130	0%	
2-Hexanone	A	ppbv	10.91	10.91		9.8	0	0	0.135	1	0	111%	70	130	0%	
2-Propanol	A	ppbv	11.3	11.3		10.1	0	0	0.329	1	0	112%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	10.91	10.91		10	0	0	0.157	1	0	109%	70	130	0%	
Acetone	A	ppbv	10.62	10.62		10	0	0	0.43	1	0	106%	70	130	0%	
Benzene	A	ppbv	10.03	10.03		9.6	0	0	0.126	1	0	104%	70	130	0%	
Benzyl chloride	A	ppbv	10.56	10.56		9.7	0	0	0.155	1	0	109%	70	130	0%	
Bromodichloromethane	A	ppbv	10.64	10.64		9.6	0	0	0.156	1	0	111%	70	130	0%	
Bromoform	A	ppbv	10.78	10.78		9.6	0	0	0.197	1	0	112%	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	10.42	10.42		9.7	0	0	0.093	1	0	107%	70	130	0%	
Carbon tetrachloride	A	ppbv	10.48	10.48		9.5	0	0	0.114	1	0	110%	70	130	0%	
Chlorobenzene	A	ppbv	10.88	10.88		9.9	0	0	0.275	1	0	110%	70	130	0%	
Chlorodibromomethane	A	ppbv	10.89	10.89		9.2	0	0	0.165	1	0	118%	70	130	0%	
Chloroethane	A	ppbv	9.87	9.87		9.8	0	0	0.063	1	0	101%	70	130	0%	
Chloroform	A	ppbv	10.74	10.74		9.4	0	0	0.126	1	0	114%	70	130	0%	
Chloromethane	A	ppbv	10.15	10.15		9.8	0	0	0.104	1	0	104%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	10.07	10.07		9.8	0	0	0.107	1	0	103%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	10.37	10.37		9.5	0	0	0.166	1	0	109%	70	130	0%	
Cyclohexane	A	ppbv	10.87	10.87		9.8	0	0	0.684	2	0	111%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	10.08	10.08		9.2	0	0	0.086	1	0	110%	70	130	0%	
Ethanol	A	ppbv	10.12	10.12		9.2	0	0	1.962	5	0	110%	70	130	0%	
Ethyl acetate	A	ppbv	10.69	10.69		9.8	0	0	0.157	1	0	109%	70	130	0%	
Ethylbenzene	A	ppbv	10.89	10.89		9.8	0	0	0.737	2	0	111%	70	130	0%	
Heptane	A	ppbv	11.35	11.35		9.9	0	0	0.249	1	0	115%	70	130	0%	
Hexachlorobutadiene	A	ppbv	8.87	8.87		9.4	0	0	0.374	2	0	94%	70	130	0%	
m,p-Xylene	A	ppbv	22.88	22.88		19.2	0	0	0.524	2	0	119%	70	130	0%	
Methylene chloride	A	ppbv	10.11	10.11		10	0	0	2.077	5	0	101%	70	130	0%	
n-Hexane	A	ppbv	10.63	10.63		10.1	0	0	0.692	2	0	105%	70	130	0%	
Naphthalene	A	ppbv	8.27	8.27		9.2	0	0	0.247	1	0	90%	70	130	0%	
o-Xylene	A	ppbv	11.19	11.19		10	0	0	0.258	1	0	112%	70	130	0%	
Propylene	A	ppbv	11.05	11.05		10.2	0	0	0.075	1	0	108%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
896058	ICV VOA1 011912	EPA_TO15	ICV	:\1\DATA\011912	1/19/2012 6:40:0	1	R45620		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	10.77	10.77		9.8	0	0	0.263	1	0	110%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	10.41	10.41		9.9	0	0	0.228	1	0	105%	70	130	0%	
Tetrachloroethene	A	ppbv	10.98	10.98		9.6	0	0	0.148	1	0	114%	70	130	0%	
Tetrahydrofuran	A	ppbv	11.06	11.06		10	0	0	0.201	1	0	111%	70	130	0%	
Toluene	A	ppbv	10.64	10.64		9.8	0	0	0.158	1	0	109%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.18	10.18		9.8	0	0	0.117	1	0	104%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	10.11	10.11		9.1	0	0	0.171	1	0	111%	70	130	0%	
Trichloroethene	A	ppbv	10.49	10.49		9.6	0	0	0.119	1	0	109%	70	130	0%	
Trichlorofluoromethane	A	ppbv	10.43	10.43		9.6	0	0	0.148	1	0	109%	70	130	0%	
Vinyl acetate	A	ppbv	11	11		9.9	0	0	0.266	1	0	111%	70	130	0%	
Vinyl chloride	A	ppbv	11.17	11.17		9.4	0	0	0.072	1	0	119%	70	130	0%	
Xylenes, Total	C	ppbv	34.07	34.07		29.2	0	0	0.782	3	0	117%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		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	12.25	12.25		12.5	0	0	0	0	0	98%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
896059	RLVS VOA1 011912	EPA_TO15	RLVS	:\1\DATA\011912	1/19/2012 7:26:0	1	R45620		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	0.87	0.87		0.996	0	0	0.107	1	0	87%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.14	1.14		1	0	0	0.211	1	0	114%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	0.87	0.87		0.98	0	0	0.108	1	0	89%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.78	0.78		0.98	0	0	0.2	1	0	80%	70	130	0%	
1,1-Dichloroethane	A	ppbv	0.94	0.94		0.97	0	0	0.111	1	0	97%	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	1.11	1.11		0.91	0	0	0.271	1	0	122%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	1.26	1.26		0.98	0	0	0.245	1	0	129%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.79	0.79		0.96	0	0	0.186	1	0	82%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.21	1.21		0.97	0	0	0.208	1	0	125%	70	130	0%	
1,2-Dichloroethane	A	ppbv	0.99	0.99		0.97	0	0	0.196	1	0	102%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.84	0.84		0.98	0	0	0.224	1	0	86%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\011912\01191212.D Vial: 2
Acq On : 19 Jan 2012 6:40 pm Operator: RACHEL HILL
Sample : ICV VOA1 011912 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\011912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 20 11:02:05 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	116	0.00
2	T	Propylene	1.412	1.530	-8.4	110	0.00
3	T	Dichlorodifluoromethane	3.136	3.438	-9.6	113	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.376	2.611	-9.9	113	0.00
5	T	Chloromethane	1.272	1.359	-6.8	104	0.00
6	T	Vinyl chloride	1.565	1.859	-18.8	111	0.00
7	T	1,3-Butadiene	1.228	1.500	-22.1	108	0.00
8	T	Bromomethane	1.252	1.356	-8.3	114	0.00
9	T	Chloroethane	0.812	0.871	-7.3	110	0.00
10	T	Trichlorofluoromethane	2.802	3.043	-8.6	111	0.00
11	T	Ethanol	0.334	0.367	-9.9	110	0.00
12	T	Freon113	2.358	2.521	-6.9	103	0.00
13	T	1,1-Dichloroethene	1.995	2.119	-6.2	104	0.00
14	T	Acetone	1.862	1.977	-6.2	108	0.00
15	T	Carbon disulfide	3.427	3.683	-7.5	109	0.00
16	T	2-Propanol	1.673	1.871	-11.8	112	0.00
17	T	Methylene chloride	1.571	1.589	-1.1	103	0.00
18	T	tert-Butyl Methyl Ether	2.470	2.598	-5.2	109	0.00
19	T	trans-1,2-Dichloroethene	1.902	1.976	-3.9	105	0.00
20	T	n-Hexane	2.109	2.220	-5.3	102	0.00
21	T	1,1-Dichloroethane	2.225	2.317	-4.1	107	0.00
22	T	Vinyl acetate	2.872	3.193	-11.2	109	0.00
23	T	cis-1,2-Dichloroethene	1.164	1.197	-2.8	108	0.00
24	T	2-Butanone	1.879	2.176	-15.8	109	0.00
25	T	Ethyl acetate	2.535	2.765	-9.1	108	0.00
26	T	Tetrahydrofuran	1.200	1.327	-10.6	104	0.00
27	T	Chloroform	2.142	2.347	-9.6	106	0.00
28	T	1,1,1-Trichloroethane	1.985	2.228	-12.2	109	0.00
29	T	Cyclohexane	2.017	2.237	-10.9	100	0.00
30	T	Carbon tetrachloride	1.914	2.111	-10.3	113	0.00
31	T	Benzene	2.920	3.051	-4.5	110	0.00
32	T	1,2-Dichloroethane	1.194	1.313	-10.0	110	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	119	0.00
34	T	Heptane	0.844	0.968	-14.7	105	0.00
35	T	Trichloroethene	0.473	0.517	-9.3	112	0.00
36	T	1,2-Dichloropropane	0.399	0.434	-8.8	111	0.00
37	T	1,4-Dioxane	0.135	0.149	-10.4	111	0.00
38	T	Bromodichloromethane	0.657	0.728	-10.8	114	0.00
39	T	cis-1,3-Dichloropropene	0.561	0.612	-9.1	113	0.00
40	T	4-Methyl-2-pentanone	0.259	0.283	-9.3	110	0.00
41	T	Toluene	1.004	1.090	-8.6	112	0.00
42	T	trans-1,3-Dichloropropene	0.473	0.525	-11.0	115	0.00
43	T	1,1,2-Trichloroethane	0.349	0.378	-8.3	113	0.00
44	T	Tetrachloroethene	0.546	0.625	-14.5	111	0.00
45	T	2-Hexanone	0.532	0.592	-11.3	109	0.00
46	T	Chlorodibromomethane	0.532	0.591	-11.1	115	0.00
47	T	1,2-Dibromoethane	0.507	0.555	-9.5	113	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	117	0.00
49	T	Chlorobenzene	0.970	1.066	-9.9	112	0.00
50	T	Ethylbenzene	1.559	1.732	-11.1	112	0.00
51	T	m,p-Xylene	1.189	1.417	-19.2	111	0.00
52	T	o-Xylene	1.139	1.275	-11.9	113	0.00
53	T	Styrene	0.847	0.931	-9.9	110	0.00
54	T	Bromoform	0.620	0.697	-12.4	112	0.00
55	S	4-Bromofluorobenzene	0.604	0.593	1.8	110	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\011912\01191212.D Vial: 2
Acq On : 19 Jan 2012 6:40 pm Operator: RACHEL HILL
Sample : ICV VOA1 011912 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\011912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 20 11:02:05 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	0.825	0.899	-9.0	110	0.00
57	T	4-Ethyltoluene	1.351	1.423	-5.3	109	0.00
58	T	1,3,5-Trimethylbenzene	1.128	1.196	-6.0	111	0.00
59	T	1,2,4-Trimethylbenzene	1.019	1.092	-7.2	111	0.00
60	T	1,3-Dichlorobenzene	0.656	0.695	-5.9	107	0.00
61	T	1,4-Dichlorobenzene	0.614	0.648	-5.5	105	0.00
62	T	Benzyl chloride	0.840	0.915	-8.9	111	0.00
63	T	1,2-Dichlorobenzene	0.583	0.627	-7.5	108	0.00
64	T	1,2,4-Trichlorobenzene	0.121	0.112	7.4	101	0.00
65	T	Hexachlorobutadiene	0.305	0.288	5.6	106	0.00
66		Naphthalene	0.190	0.171	10.0	97	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011912\01191212.D Vial: 2
Acq On : 19 Jan 2012 6:40 pm Operator: RACHEL HILL
Sample : ICV VOA1 011912 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 20 11:02 2012 Quant Results File: 011912V1.RES

Quant Method : C:\HPCHEM\1\METHODS\011912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 20 11:02:05 2012
Response via : Initial Calibration
DataAcq Meth : 011312V1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.59	130	574807	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.69	114	1682913	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.55	117	1119007	12.50	ppbv	0.00
System Monitoring Compounds						
55) 4-Bromofluorobenzene	17.19	95	663019	12.25	ppbv	0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 98.00%			
Target Compounds						Qvalue
2) Propylene	5.51	41	717694	11.05	ppbv	99
3) Dichlorodifluoromethane	5.59	85	1454395	10.08	ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.85	135	1140426	10.44	ppbv	82
5) Chloromethane	6.01	50	593531	10.15	ppbv	99
6) Vinyl chloride	6.21	62	803539	11.17	ppbv	99
7) 1,3-Butadiene	6.27	39	676186	11.98	ppbv	92
8) Bromomethane	6.85	94	580085	10.08	ppbv	99
9) Chloroethane	7.00	64	368499	9.87	ppbv	97
10) Trichlorofluoromethane	7.34	101	1343225	10.43	ppbv	99
11) Ethanol	7.56	45	155167	10.12	ppbv	100
12) Freon113	8.00	101	1136032	10.48	ppbv	94
13) 1,1-Dichloroethene	8.10	61	964578	10.51	ppbv	89
14) Acetone	8.19	43	909067	10.62	ppbv	96
15) Carbon disulfide	8.47	76	1642644	10.42	ppbv #	100
16) 2-Propanol	8.23	45	869126	11.30	ppbv	82
17) Methylene chloride	8.76	49	730761	10.11	ppbv #	80
18) tert-Butyl Methyl Ether	8.96	73	1182922	10.41	ppbv #	86
19) trans-1,2-Dichloroethene	9.04	61	890674	10.18	ppbv #	83
20) n-Hexane	9.23	57	1031051	10.63	ppbv #	94
21) 1,1-Dichloroethane	9.60	63	1033330	10.10	ppbv #	97
22) Vinyl acetate	9.53	43	1453526	11.00	ppbv #	96
23) cis-1,2-Dichloroethene	10.28	96	539222	10.07	ppbv #	84
24) 2-Butanone	10.25	43	990680	11.47	ppbv #	89
25) Ethyl acetate	10.20	43	1245995	10.69	ppbv #	100
26) Tetrahydrofuran	10.59	42	610324	11.06	ppbv	90
27) Chloroform	10.61	83	1057888	10.74	ppbv	100
28) 1,1,1-Trichloroethane	10.86	97	983649	10.78	ppbv	96
29) Cyclohexane	10.86	56	1008200	10.87	ppbv	90
30) Carbon tetrachloride	11.02	117	921981	10.48	ppbv	99
31) Benzene	11.30	78	1347083	10.03	ppbv	95
32) 1,2-Dichloroethane	11.38	62	585444	10.66	ppbv	98
34) Heptane	11.35	43	1290511	11.35	ppbv #	91
35) Trichloroethene	12.04	130	668046	10.49	ppbv	94
36) 1,2-Dichloropropane	12.39	63	573072	10.67	ppbv #	95
37) 1,4-Dioxane	12.46	88	192330	10.58	ppbv #	80
38) Bromodichloromethane	12.67	83	941009	10.64	ppbv	99
39) cis-1,3-Dichloropropene	13.23	75	783328	10.37	ppbv	97
40) 4-Methyl-2-pentanone	13.33	58	380381	10.91	ppbv #	91
41) Toluene	13.63	91	1437632	10.64	ppbv	98
42) trans-1,3-Dichloropropene	13.93	75	643242	10.11	ppbv	97
43) 1,1,2-Trichloroethane	14.21	97	498405	10.60	ppbv	96
44) Tetrachloroethene	14.33	166	807265	10.98	ppbv	99
45) 2-Hexanone	14.41	43	781331	10.91	ppbv	95
46) Chlorodibromomethane	14.76	129	779639	10.89	ppbv	99
47) 1,2-Dibromoethane	14.99	107	717621	10.52	ppbv	99
49) Chlorobenzene	15.59	112	944445	10.88	ppbv #	92
50) Ethylbenzene	15.63	91	1519662	10.89	ppbv	94
51) m,p-Xylene	15.78	91	2434796	22.88	ppbv	96
52) o-Xylene	16.38	91	1141099	11.19	ppbv #	91

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011912\01191212.D
Acq On : 19 Jan 2012 6:40 pm
Sample : ICV VOA1 011912
Misc : ICV EPA TO15
MS Integration Params: CLME.P
Quant Time: Jan 20 11:02 2012

Vial: 2
Operator: RACHEL HILL
Inst : VOA 1
Multiplr: 1.00

Quant Results File: 011912V1.RES

Quant Method : C:\HPCHEM\1\METHODS\011912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 20 11:02:05 2012
Response via : Initial Calibration
DataAcq Meth : 011312V1

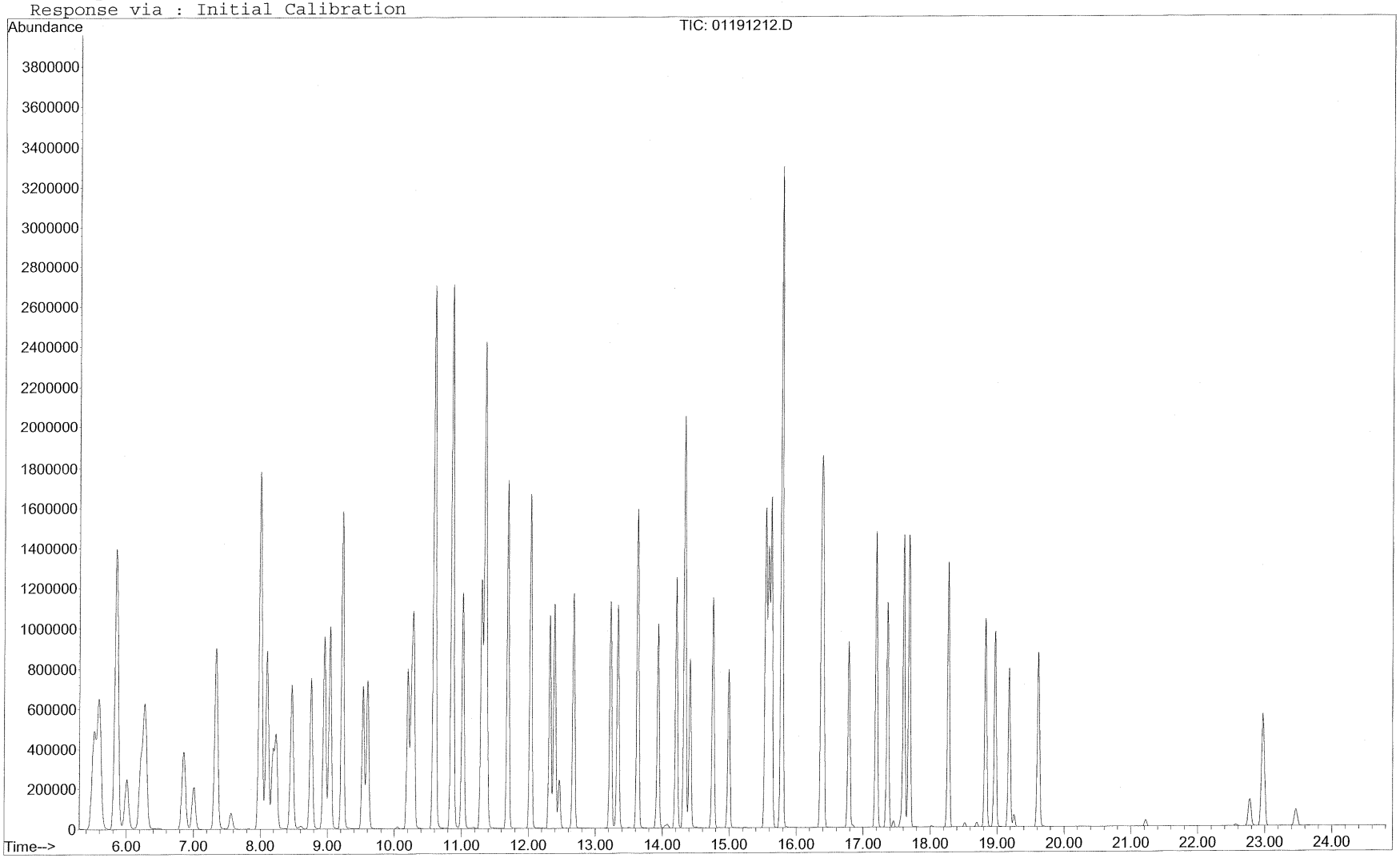
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
53) Styrene	16.40	104	816589	10.77 ppbv	98
54) Bromoform	16.78	173	598781	10.78 ppbv	99
56) 1,1,2,2-Tetrachloroethane	17.36	83	804714	10.89 ppbv	99
57) 4-Ethyltoluene	17.61	105	1247977	10.32 ppbv	97
58) 1,3,5-Trimethylbenzene	17.68	105	1038514	10.28 ppbv	97
59) 1,2,4-Trimethylbenzene	18.27	105	958269	10.50 ppbv	98
60) 1,3-Dichlorobenzene	18.82	146	603880	10.28 ppbv	98
61) 1,4-Dichlorobenzene	18.97	146	557078	10.14 ppbv	99
62) Benzyl chloride	19.18	91	794401	10.56 ppbv	97
63) 1,2-Dichlorobenzene	19.61	146	544023	10.42 ppbv	98
64) 1,2,4-Trichlorobenzene	22.78	180	91453	8.43 ppbv	98
65) Hexachlorobutadiene	22.97	225	242077	8.87 ppbv	99
66) Naphthalene	23.46	128	140669	8.27 ppbv	99

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011912\01191212.D Vial: 2
Acq On : 19 Jan 2012 6:40 pm Operator: RACHEL HILL
Sample : ICV VOA1 011912 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 20 11:02 2012 Quant Results File: 011912V1.RES

Method : C:\HPCHEM\1\METHODS\011912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 20 11:02:05 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA1_120122A **Run No.:** 45700

Analytical Run Date: 1/22/2012 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

Calibration ID: 45619 **Column ID:** 0.25mm, 1.4umFT

Column Length: 30m

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB1 VOA1 012212	BFB_TUNE	TUNE	R45700	1/22/2012 10:48:00 AM	Robert Lynch		
CCV VOA1 012212	EPA_TO15	CCV	R45700	1/22/2012 12:21:00 PM	Robert Lynch		
RLVS VOA1 012212	EPA_TO15	RLVS	R45700	1/22/2012 2:01:00 PM	Robert Lynch		
MBLK VOA1 012212	EPA_TO15	MBLK	R45700	1/22/2012 2:53:00 PM	Charles O`Bryan		
1201592-042A	EPA_TO15	SAMP	R45700	1/22/2012 5:57:00 PM	Robert Lynch		
1201592-006A	EPA_TO15	SAMP	R45700	1/22/2012 8:17:00 PM	Robert Lynch		
1201592-007A	EPA_TO15	SAMP	R45700	1/22/2012 9:04:00 PM	Robert Lynch		
1201592-023A	EPA_TO15	SAMP	R45700	1/22/2012 9:51:00 PM	Robert Lynch		
1201592-024A	EPA_TO15	SAMP	R45700	1/22/2012 10:38:00 PM	Robert Lynch		
1201592-024ADUP	EPA_TO15	DUP	R45700	1/22/2012 11:25:00 PM	Charles O`Bryan		
1201592-025A	EPA_TO15	SAMP	R45700	1/23/2012 12:16:00 AM	Robert Lynch		
1201592-026A	EPA_TO15	SAMP	R45700	1/23/2012 1:04:00 AM	Robert Lynch		
1201592-027A	EPA_TO15	SAMP	R45700	1/23/2012 1:51:00 AM	Robert Lynch		
1201592-001A	EPA_TO15	SAMP	R45700	1/23/2012 2:43:00 AM	Robert Lynch		
1201592-002A	EPA_TO15	SAMP	R45700	1/23/2012 3:36:00 AM	Robert Lynch		
RLVS2 VOA1 01221	EPA_TO15	RLVS	R45700	1/23/2012 4:23:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

15-Feb-12

RunNo 45700

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
897212	BFB1 VOA1 012212	BFB_TUNE	TUNE	:\1\DATA\012212	1/22/2012 10:48:	1	R45700		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0.6	0.6		100	0	0	0	0	0	1%	0	2	0%	
174	M		87.7	87.7		100	0	0	0	0	0	88%	50	120	0%	
175	M		7.2	7.2		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		6.5	6.5		100	0	0	0	0	0	7%	5	9	0%	
50	M		19.3	19.3		100	0	0	0	0	0	19%	8	40	0%	
75	M		43.3	43.3		100	0	0	0	0	0	43%	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
897213	CCV VOA1 012212	EPA_TO15	CCV	:\1\DATA\012212	1/22/2012 12:21:	1	R45700		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	9.57	9.57		9.6	0	0	0.107	1	0	100%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	9.28	9.28		10	0	0	0.211	1	0	93%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.02	10.02		9.8	0	0	0.108	1	0	102%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	8.2	8.2		9.8	0	0	0.2	1	0	84%	70	130	0%	
1,1-Dichloroethane	A	ppbv	8.87	8.87		9.7	0	0	0.111	1	0	91%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.37	10.37		9.9	0	0	0.097	1	0	105%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	6.72	6.72		9.1	0	0	0.271	1	0	74%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	8.94	8.94		9.8	0	0	0.245	1	0	91%	70	130	0%	
1,2-Dibromoethane	A	ppbv	8.37	8.37		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	8.81	8.81		9.7	0	0	0.196	1	0	91%	70	130	0%	
1,2-Dichloropropane	A	ppbv	8.17	8.17		9.8	0	0	0.224	1	0	83%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	8.38	8.38		9.7	0	0	0.24	1	0	86%	70	130	0%	
1,3-Butadiene	A	ppbv	11.78	11.78		9.8	0	0	0.152	1	0	120%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	8.98	8.98		9.7	0	0	0.202	1	0	93%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
897213	CCV VOA1 012212	EPA_TO15	CCV	:\1\DATA\012212	1/22/2012 12:21:	1	R45700		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	8.84	8.84		9.6	0	0	0.194	1	0	92%	70	130	0%	
1,4-Dioxane	A	ppbv	8.16	8.16		9.6	0	0	0.128	1	0	85%	70	130	0%	
2-Butanone	A	ppbv	8.47	8.47		9.9	0	0	0.287	1	0	86%	70	130	0%	
2-Hexanone	A	ppbv	8.17	8.17		9.8	0	0	0.135	1	0	83%	70	130	0%	
2-Propanol	A	ppbv	9.42	9.42		10.1	0	0	0.329	1	0	93%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	8.22	8.22		10	0	0	0.157	1	0	82%	70	130	0%	
Acetone	A	ppbv	8.33	8.33		10	0	0	0.43	1	0	83%	70	130	0%	
Benzene	A	ppbv	8.15	8.15		9.6	0	0	0.126	1	0	85%	70	130	0%	
Benzyl chloride	A	ppbv	8.86	8.86		9.7	0	0	0.155	1	0	91%	70	130	0%	
Bromodichloromethane	A	ppbv	8.4	8.4		9.6	0	0	0.156	1	0	88%	70	130	0%	
Bromoform	A	ppbv	8.58	8.58		9.6	0	0	0.197	1	0	89%	70	130	0%	
Bromomethane	A	ppbv	9.8	9.8		9.3	0	0	0.075	1	0	105%	70	130	0%	
Carbon disulfide	A	ppbv	10.18	10.18		9.7	0	0	0.093	1	0	105%	70	130	0%	
Carbon tetrachloride	A	ppbv	9.03	9.03		9.5	0	0	0.114	1	0	95%	70	130	0%	
Chlorobenzene	A	ppbv	8.51	8.51		9.9	0	0	0.275	1	0	86%	70	130	0%	
Chlorodibromomethane	A	ppbv	8.4	8.4		9.2	0	0	0.165	1	0	91%	70	130	0%	
Chloroethane	A	ppbv	9.69	9.69		9.8	0	0	0.063	1	0	99%	70	130	0%	
Chloroform	A	ppbv	9.62	9.62		9.4	0	0	0.126	1	0	102%	70	130	0%	
Chloromethane	A	ppbv	10.6	10.6		9.8	0	0	0.104	1	0	108%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	8.86	8.86		9.8	0	0	0.107	1	0	90%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	8.11	8.11		9.5	0	0	0.166	1	0	85%	70	130	0%	
Cyclohexane	A	ppbv	10.1	10.1		9.8	0	0	0.684	2	0	103%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.92	9.92		9.2	0	0	0.086	1	0	108%	70	130	0%	
Ethanol	A	ppbv	8.21	8.21		9.2	0	0	1.962	5	0	89%	70	130	0%	
Ethyl acetate	A	ppbv	8.54	8.54		9.8	0	0	0.157	1	0	87%	70	130	0%	
Ethylbenzene	A	ppbv	8.5	8.5		9.8	0	0	0.737	2	0	87%	70	130	0%	
Heptane	A	ppbv	9.72	9.72		9.9	0	0	0.249	1	0	98%	70	130	0%	
Hexachlorobutadiene	A	ppbv	6.86	6.86		9.4	0	0	0.374	2	0	73%	70	130	0%	
m,p-Xylene	A	ppbv	17.82	17.82		19.2	0	0	0.524	2	0	93%	70	130	0%	
Methylene chloride	A	ppbv	9.47	9.47		10	0	0	2.077	5	0	95%	70	130	0%	
n-Hexane	A	ppbv	9.71	9.71		10.1	0	0	0.692	2	0	96%	70	130	0%	
Naphthalene	A	ppbv	6.79	6.79		9.2	0	0	0.247	1	0	74%	70	130	0%	
o-Xylene	A	ppbv	8.65	8.65		10	0	0	0.258	1	0	87%	70	130	0%	
Propylene	A	ppbv	11	11		10.2	0	0	0.075	1	0	108%	70	130	0%	M

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
897213	CCV VOA1 012212	EPA_TO15	CCV	\1\DATA\012212	1/22/2012 12:21:	1	R45700		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	8.58	8.58		9.8	0	0	0.263	1	0	88%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	8.07	8.07		9.9	0	0	0.228	1	0	82%	70	130	0%	
Tetrachloroethene	A	ppbv	9.1	9.1		9.6	0	0	0.148	1	0	95%	70	130	0%	
Tetrahydrofuran	A	ppbv	9.23	9.23		10	0	0	0.201	1	0	92%	70	130	0%	
Toluene	A	ppbv	8.31	8.31		9.8	0	0	0.158	1	0	85%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	9.41	9.41		9.8	0	0	0.117	1	0	96%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	7.94	7.94		9.1	0	0	0.171	1	0	87%	70	130	0%	
Trichloroethene	A	ppbv	8.78	8.78		9.6	0	0	0.119	1	0	91%	70	130	0%	
Trichlorofluoromethane	A	ppbv	10.25	10.25		9.6	0	0	0.148	1	0	107%	70	130	0%	
Vinyl acetate	A	ppbv	8.66	8.66		9.9	0	0	0.266	1	0	87%	70	130	0%	
Vinyl chloride	A	ppbv	10.58	10.58		9.4	0	0	0.072	1	0	113%	70	130	0%	
Xylenes, Total	C	ppbv	26.47	26.47		29.2	0	0	0.782	3	0	91%	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	12.71	12.71		12.5	0	0	0	0	0	102%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
897214	RLVS VOA1 012212	EPA_TO15	RLVS	\1\DATA\012212	1/22/2012 2:01:0	1	R45700		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	1.01	1.01		1	0	0	0.211	1	0	101%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	0.83	0.83		0.98	0	0	0.108	1	0	85%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.66	0.66		0.98	0	0	0.2	1	0	67%	70	130	0%	S
1,1-Dichloroethane	A	ppbv	0.88	0.88		0.97	0	0	0.111	1	0	91%	70	130	0%	
1,1-Dichloroethene	A	ppbv	0.88	0.88		0.99	0	0	0.097	1	0	89%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	0.77	0.77		0.91	0	0	0.271	1	0	85%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	1.07	1.07		0.98	0	0	0.245	1	0	109%	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	1.01	1.01		0.97	0	0	0.208	1	0	104%	70	130	0%	
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	0.73	0.73		0.98	0	0	0.224	1	0	74%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\012212\01221203.D
Acq On : 22 Jan 2012 12:21 pm
Sample : CCV VOA1 012212
Misc : CCV EPA TO15
MS Integration Params: CLME.P

Vial: 3
Operator: RACHEL HILL
Inst : VOA 1
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\011912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 20 11:02:05 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	119	0.00
2	T	Propylene	1.412	1.522	-7.8	112	-0.12
3	T	Dichlorodifluoromethane	3.136	3.383	-7.9	114	-0.04
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.376	2.559	-7.7	113	-0.02
5	T	Chloromethane	1.272	1.419	-11.6	111	-0.02
6	T	Vinyl chloride	1.565	1.762	-12.6	108	-0.02
7	T	1,3-Butadiene	1.228	1.477	-20.3	109	-0.02
8	T	Bromomethane	1.252	1.319	-5.4	113	-0.01
9	T	Chloroethane	0.812	0.855	-5.3	111	-0.01
10	T	Trichlorofluoromethane	2.802	2.992	-6.8	112	0.00
11	T	Ethanol	0.334	0.298	10.8	91	0.00
12	T	Freon113	2.358	2.411	-2.2	101	0.00
13	T	1,1-Dichloroethene	1.995	2.089	-4.7	105	0.00
14	T	Acetone	1.862	1.550	16.8	87	0.00
15	T	Carbon disulfide	3.427	3.595	-4.9	109	0.00
16	T	2-Propanol	1.673	1.560	6.8	96	0.00
17	T	Methylene chloride	1.571	1.487	5.3	98	0.00
18	T	tert-Butyl Methyl Ether	2.470	2.012	18.5	87	0.00
19	T	trans-1,2-Dichloroethene	1.902	1.826	4.0	99	0.00
20	T	n-Hexane	2.109	2.027	3.9	96	0.00
21	T	1,1-Dichloroethane	2.225	2.035	8.5	96	0.00
22	T	Vinyl acetate	2.872	2.514	12.5	87	0.00
23	T	cis-1,2-Dichloroethene	1.164	1.053	9.5	97	0.00
24	T	2-Butanone	1.879	1.608	14.4	83	0.00
25	T	Ethyl acetate	2.535	2.208	12.9	88	0.00
26	T	Tetrahydrofuran	1.200	1.107	7.7	89	0.00
27	T	Chloroform	2.142	2.102	1.9	97	0.00
28	T	1,1,1-Trichloroethane	1.985	1.978	0.4	99	0.00
29	T	Cyclohexane	2.017	2.078	-3.0	95	0.00
30	T	Carbon tetrachloride	1.914	1.819	5.0	100	0.00
31	T	Benzene	2.920	2.477	15.2	91	0.00
32	T	1,2-Dichloroethane	1.194	1.084	9.2	93	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	128	0.00
34	T	Heptane	0.844	0.829	1.8	96	0.00
35	T	Trichloroethene	0.473	0.432	8.7	100	0.00
36	T	1,2-Dichloropropane	0.399	0.332	16.8	91	0.00
37	T	1,4-Dioxane	0.135	0.115	14.8	91	0.00
38	T	Bromodichloromethane	0.657	0.574	12.6	96	0.00
39	T	cis-1,3-Dichloropropene	0.561	0.479	14.6	95	0.00
40	T	4-Methyl-2-pentanone	0.259	0.213	17.8	89	0.00
41	T	Toluene	1.004	0.851	15.2	94	0.00
42	T	trans-1,3-Dichloropropene	0.473	0.412	12.9	97	0.00
43	T	1,1,2-Trichloroethane	0.349	0.292	16.3	94	0.00
44	T	Tetrachloroethene	0.546	0.518	5.1	99	0.00
45	T	2-Hexanone	0.532	0.444	16.5	88	0.00
46	T	Chlorodibromomethane	0.532	0.456	14.3	95	0.00
47	T	1,2-Dibromoethane	0.507	0.442	12.8	96	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	126	0.00
49	T	Chlorobenzene	0.970	0.833	14.1	94	0.00
50	T	Ethylbenzene	1.559	1.352	13.3	94	0.00
51	T	m,p-Xylene	1.189	1.103	7.2	92	0.00
52	T	o-Xylene	1.139	0.986	13.4	94	0.00
53	T	Styrene	0.847	0.742	12.4	94	0.00
54	T	Bromoform	0.620	0.554	10.6	96	0.00
55	S	4-Bromofluorobenzene	0.604	0.615	-1.8	123	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\012212\01221203.D Vial: 3
Acq On : 22 Jan 2012 12:21 pm Operator: RACHEL HILL
Sample : CCV VOA1 012212 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\011912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 20 11:02:05 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	0.825	0.766	7.2	100	0.00
57	T	4-Ethyltoluene	1.351	1.166	13.7	96	0.00
58	T	1,3,5-Trimethylbenzene	1.128	0.975	13.6	97	0.00
59	T	1,2,4-Trimethylbenzene	1.019	0.930	8.7	101	0.00
60	T	1,3-Dichlorobenzene	0.656	0.607	7.5	101	0.00
61	T	1,4-Dichlorobenzene	0.614	0.565	8.0	98	0.00
62	T	Benzyl chloride	0.840	0.768	8.6	100	0.00
63	T	1,2-Dichlorobenzene	0.583	0.554	5.0	103	0.00
64	T	1,2,4-Trichlorobenzene	0.121	0.090	25.6	87	0.00
65	T	Hexachlorobutadiene	0.305	0.222	27.2	88	0.00
66		Naphthalene	0.190	0.140	26.3	86	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\012212\01221203.D Vial: 3
Acq On : 22 Jan 2012 12:21 pm Operator: RACHEL HILL
Sample : CCV VOA1 012212 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 24 15:24 2012 Quant Results File: 011912V1.RES

Quant Method : C:\HPCHEM\1\METHODS\011912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 20 11:02:05 2012
Response via : Initial Calibration
DataAcq Meth : 011912V1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.59	130	588471	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.69	114	1806332	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.54	117	1200112	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.20	95	737491	12.71	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 101.68%

Target Compounds							Qvalue
2) Propylene	5.40	41	731053m	11.00	ppbv		
3) Dichlorodifluoromethane	5.54	85	1465247	9.92	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.83	135	1144371	10.23	ppbv		82
5) Chloromethane	5.98	50	634755	10.60	ppbv		99
6) Vinyl chloride	6.19	62	779865	10.58	ppbv		99
7) 1,3-Butadiene	6.26	39	681218	11.78	ppbv		92
8) Bromomethane	6.84	94	577385	9.80	ppbv		99
9) Chloroethane	6.99	64	370180	9.69	ppbv		96
10) Trichlorofluoromethane	7.33	101	1352362	10.25	ppbv		99
11) Ethanol	7.56	45	128909	8.21	ppbv		99
12) Freon113	7.99	101	1112567	10.02	ppbv		93
13) 1,1-Dichloroethene	8.09	61	973645	10.37	ppbv		88
14) Acetone	8.18	43	729736	8.33	ppbv	#	90
15) Carbon disulfide	8.46	76	1641888	10.18	ppbv	#	100
16) 2-Propanol	8.23	45	741729	9.42	ppbv	#	1
17) Methylene chloride	8.75	49	700202	9.47	ppbv	#	79
18) tert-Butyl Methyl Ether	8.95	73	937959	8.07	ppbv	#	85
19) trans-1,2-Dichloroethene	9.03	61	842282	9.41	ppbv	#	83
20) n-Hexane	9.22	57	963963	9.71	ppbv	#	93
21) 1,1-Dichloroethane	9.60	63	929479	8.87	ppbv	#	96
22) Vinyl acetate	9.53	43	1171602	8.66	ppbv	#	96
23) cis-1,2-Dichloroethene	10.28	96	485670	8.86	ppbv	#	82
24) 2-Butanone	10.25	43	749567	8.47	ppbv	#	91
25) Ethyl acetate	10.20	43	1018793	8.54	ppbv	#	99
26) Tetrahydrofuran	10.59	42	521374	9.23	ppbv		89
27) Chloroform	10.61	83	969576	9.62	ppbv		99
28) 1,1,1-Trichloroethane	10.86	97	893886	9.57	ppbv	#	95
29) Cyclohexane	10.86	56	958579	10.10	ppbv		88
30) Carbon tetrachloride	11.02	117	813472	9.03	ppbv		99
31) Benzene	11.30	78	1119579	8.15	ppbv		94
32) 1,2-Dichloroethane	11.38	62	495112	8.81	ppbv		98
34) Heptane	11.35	43	1186068	9.72	ppbv	#	89
35) Trichloroethene	12.03	130	599943	8.78	ppbv		94
36) 1,2-Dichloropropane	12.39	63	470708	8.17	ppbv	#	95
37) 1,4-Dioxane	12.46	88	159165	8.16	ppbv	#	80
38) Bromodichloromethane	12.67	83	796942	8.40	ppbv		98
39) cis-1,3-Dichloropropene	13.23	75	657767	8.11	ppbv		97
40) 4-Methyl-2-pentanone	13.34	58	307354	8.22	ppbv	#	90
41) Toluene	13.63	91	1205842	8.31	ppbv		98
42) trans-1,3-Dichloropropene	13.94	75	542387	7.94	ppbv		97
43) 1,1,2-Trichloroethane	14.21	97	414128	8.20	ppbv		96
44) Tetrachloroethene	14.34	166	718172	9.10	ppbv		99
45) 2-Hexanone	14.41	43	628347	8.17	ppbv		94
46) Chlorodibromomethane	14.76	129	645581	8.40	ppbv		99
47) 1,2-Dibromoethane	14.99	107	613047	8.37	ppbv		100
49) Chlorobenzene	15.59	112	792227	8.51	ppbv	#	90
50) Ethylbenzene	15.63	91	1271904	8.50	ppbv		93
51) m,p-Xylene	15.78	91	2033995	17.82	ppbv		94
52) o-Xylene	16.38	91	946498	8.65	ppbv	#	89

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\012212\01221203.D Vial: 3
Acq On : 22 Jan 2012 12:21 pm Operator: RACHEL HILL
Sample : CCV VOA1 012212 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 24 15:24 2012 Quant Results File: 011912V1.RES

Quant Method : C:\HPCHEM\1\METHODS\011912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 20 11:02:05 2012
Response via : Initial Calibration
DataAcq Meth : 011912V1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
53) Styrene	16.40	104	697957	8.58 ppbv	98
54) Bromoform	16.79	173	510817	8.58 ppbv	99
56) 1,1,2,2-Tetrachloroethane	17.36	83	735272	9.28 ppbv	99
57) 4-Ethyltoluene	17.60	105	1096818	8.45 ppbv	96
58) 1,3,5-Trimethylbenzene	17.69	105	908119	8.38 ppbv	96
59) 1,2,4-Trimethylbenzene	18.27	105	875002	8.94 ppbv	97
60) 1,3-Dichlorobenzene	18.83	146	565503	8.98 ppbv	98
61) 1,4-Dichlorobenzene	18.97	146	521073	8.84 ppbv	98
62) Benzyl chloride	19.18	91	714815	8.86 ppbv	97
63) 1,2-Dichlorobenzene	19.62	146	515684	9.21 ppbv	98
64) 1,2,4-Trichlorobenzene	22.78	180	78215	6.72 ppbv	97
65) Hexachlorobutadiene	22.97	225	200768	6.86 ppbv	99
66) Naphthalene	23.46	128	123977	6.79 ppbv	98

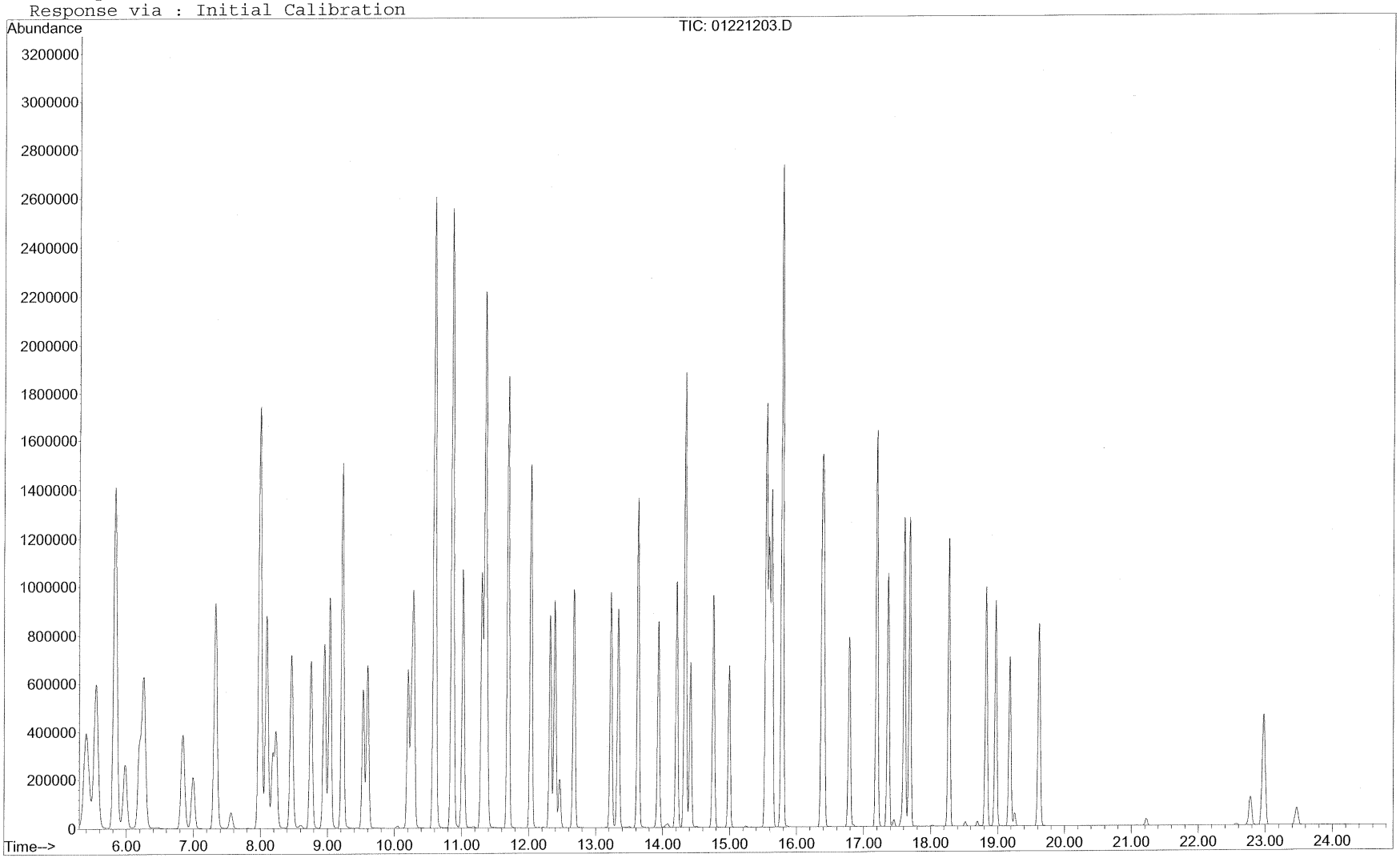
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\012212\01221203.D
Acq On : 22 Jan 2012 12:21 pm
Sample : CCV VOA1 012212
Misc : CCV EPA TO15
MS Integration Params: CLME.P
Quant Time: Jan 24 15:24 2012

Vial: 3
Operator: RACHEL HILL
Inst : VOA 1
Multiplr: 1.00
Quant Results File: 011912V1.RES

Method : C:\HPCHEM\1\METHODS\011912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 20 11:02:05 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: **VOA1_120124A** **Run No.:** 45710

Analytical Run Date: 1/24/2012 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

Calibration ID: 45619 **Column ID:** 0.25mm, 1.4umFT

Column Length: 30m

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB1 VOA1 012412	BFB_TUNE	TUNE	R45710	1/24/2012 10:06:00 AM	Robert Lynch		
CCV VOA1 012412	EPA_TO15	CCV	R45710	1/24/2012 1:42:00 PM	Robert Lynch		
RLVS VOA1 012412	EPA_TO15	RLVS	R45710	1/24/2012 3:13:00 PM	Robert Lynch		
MBLK VOA1 012412	EPA_TO15	MBLK	R45710	1/24/2012 4:05:00 PM	Charles O`Bryan		
1201592-012A	EPA_TO15	SAMP	R45710	1/24/2012 4:49:00 PM	Robert Lynch		
1201592-012Adup	EPA_TO15	DUP	R45710	1/24/2012 5:34:00 PM	Charles O`Bryan		
1201592-013A	EPA_TO15	SAMP	R45710	1/24/2012 7:04:00 PM	Robert Lynch		
1201592-014A	EPA_TO15	SAMP	R45710	1/24/2012 8:34:00 PM	Robert Lynch		
1201592-019A	EPA_TO15	SAMP	R45710	1/25/2012 12:19:00 AM	Robert Lynch		
1201592-044A	EPA_TO15	SAMP	R45710	1/25/2012 1:04:00 AM	Robert Lynch		
1201592-045A	EPA_TO15	SAMP	R45710	1/25/2012 1:49:00 AM	Robert Lynch		
1201592-011A	EPA_TO15	SAMP	R45710	1/25/2012 4:11:00 AM	Robert Lynch		
1201592-028A	EPA_TO15	SAMP	R45710	1/25/2012 4:59:00 AM	Robert Lynch		
RLVS2 VOA1 01241	EPA_TO15	RLVS	R45710	1/25/2012 5:45:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

15-Feb-12

RunNo 45710

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
897365	BFB1 VOA1 012412	BFB_TUNE	TUNE	\1\DATA\012412	1/24/2012 10:06:	1	R45710		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		78.7	78.7		100	0	0	0	0	0	79%	50	120	0%	
175	M		7.2	7.2		100	0	0	0	0	0	7%	4	9	0%	
176	M		100	100		100	0	0	0	0	0	100%	93	101	0%	
177	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	
50	M		23.3	23.3		100	0	0	0	0	0	23%	8	40	0%	
75	M		46.9	46.9		100	0	0	0	0	0	47%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.8	6.8		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
897366	CCV VOA1 012412	EPA_TO15	CCV	\1\DATA\012412	1/24/2012 1:42:0	1	R45710		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	9.84	9.84		9.6	0	0	0.107	1	0	103%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.22	10.22		10	0	0	0.211	1	0	102%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	9.37	9.37		9.8	0	0	0.108	1	0	96%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.3	9.3		9.8	0	0	0.2	1	0	95%	70	130	0%	
1,1-Dichloroethane	A	ppbv	9.01	9.01		9.7	0	0	0.111	1	0	93%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.06	10.06		9.9	0	0	0.097	1	0	102%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	7.67	7.67		9.1	0	0	0.271	1	0	84%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	9.69	9.69		9.8	0	0	0.245	1	0	99%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.39	9.39		9.6	0	0	0.186	1	0	98%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	9.81	9.81		9.7	0	0	0.208	1	0	101%	70	130	0%	
1,2-Dichloroethane	A	ppbv	9.75	9.75		9.7	0	0	0.196	1	0	101%	70	130	0%	
1,2-Dichloropropane	A	ppbv	9.39	9.39		9.8	0	0	0.224	1	0	96%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.21	9.21		9.7	0	0	0.24	1	0	95%	70	130	0%	
1,3-Butadiene	A	ppbv	12.21	12.21		9.8	0	0	0.152	1	0	125%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.56	9.56		9.7	0	0	0.202	1	0	99%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
897366	CCV VOA1 012412	EPA_TO15	CCV	:\1\DATA\012412	1/24/2012 1:42:0	1	R45710		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.42	9.42		9.6	0	0	0.194	1	0	98%	70	130	0%	
1,4-Dioxane	A	ppbv	8.92	8.92		9.6	0	0	0.128	1	0	93%	70	130	0%	
2-Butanone	A	ppbv	9.64	9.64		9.9	0	0	0.287	1	0	97%	70	130	0%	
2-Hexanone	A	ppbv	9.81	9.81		9.8	0	0	0.135	1	0	100%	70	130	0%	
2-Propanol	A	ppbv	9.8	9.8		10.1	0	0	0.329	1	0	97%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	9.48	9.48		10	0	0	0.157	1	0	95%	70	130	0%	
Acetone	A	ppbv	9.08	9.08		10	0	0	0.43	1	0	91%	70	130	0%	
Benzene	A	ppbv	8.62	8.62		9.6	0	0	0.126	1	0	90%	70	130	0%	
Benzyl chloride	A	ppbv	9.34	9.34		9.7	0	0	0.155	1	0	96%	70	130	0%	
Bromodichloromethane	A	ppbv	9.68	9.68		9.6	0	0	0.156	1	0	101%	70	130	0%	
Bromoform	A	ppbv	9.36	9.36		9.6	0	0	0.197	1	0	98%	70	130	0%	
Bromomethane	A	ppbv	9.36	9.36		9.3	0	0	0.075	1	0	101%	70	130	0%	
Carbon disulfide	A	ppbv	9.72	9.72		9.7	0	0	0.093	1	0	100%	70	130	0%	
Carbon tetrachloride	A	ppbv	8.96	8.96		9.5	0	0	0.114	1	0	94%	70	130	0%	
Chlorobenzene	A	ppbv	9.54	9.54		9.9	0	0	0.275	1	0	96%	70	130	0%	
Chlorodibromomethane	A	ppbv	9.57	9.57		9.2	0	0	0.165	1	0	104%	70	130	0%	
Chloroethane	A	ppbv	9.29	9.29		9.8	0	0	0.063	1	0	95%	70	130	0%	
Chloroform	A	ppbv	10.36	10.36		9.4	0	0	0.126	1	0	110%	70	130	0%	
Chloromethane	A	ppbv	11.04	11.04		9.8	0	0	0.104	1	0	113%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	8.77	8.77		9.8	0	0	0.107	1	0	89%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	9.35	9.35		9.5	0	0	0.166	1	0	98%	70	130	0%	
Cyclohexane	A	ppbv	10.29	10.29		9.8	0	0	0.684	2	0	105%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.56	9.56		9.2	0	0	0.086	1	0	104%	70	130	0%	
Ethanol	A	ppbv	8.62	8.62		9.2	0	0	1.962	5	0	94%	70	130	0%	
Ethyl acetate	A	ppbv	9.13	9.13		9.8	0	0	0.157	1	0	93%	70	130	0%	
Ethylbenzene	A	ppbv	9.41	9.41		9.8	0	0	0.737	2	0	96%	70	130	0%	
Heptane	A	ppbv	11.32	11.32		9.9	0	0	0.249	1	0	114%	70	130	0%	
Hexachlorobutadiene	A	ppbv	7.51	7.51		9.4	0	0	0.374	2	0	80%	70	130	0%	
m,p-Xylene	A	ppbv	20.2	20.2		19.2	0	0	0.524	2	0	105%	70	130	0%	
Methylene chloride	A	ppbv	9.4	9.4		10	0	0	2.077	5	0	94%	70	130	0%	
n-Hexane	A	ppbv	9.63	9.63		10.1	0	0	0.692	2	0	95%	70	130	0%	
Naphthalene	A	ppbv	7.77	7.77		9.2	0	0	0.247	1	0	84%	70	130	0%	
o-Xylene	A	ppbv	9.53	9.53		10	0	0	0.258	1	0	95%	70	130	0%	
Propylene	A	ppbv	10.52	10.52		10.2	0	0	0.075	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
897366	CCV VOA1 012412	EPA_TO15	CCV	:\1\DATA\012412	1/24/2012 1:42:0	1	R45710		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	9.34	9.34		9.8	0	0	0.263	1	0	95%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	8.47	8.47		9.9	0	0	0.228	1	0	86%	70	130	0%	
Tetrachloroethene	A	ppbv	9.84	9.84		9.6	0	0	0.148	1	0	103%	70	130	0%	
Tetrahydrofuran	A	ppbv	10.55	10.55		10	0	0	0.201	1	0	106%	70	130	0%	
Toluene	A	ppbv	9.39	9.39		9.8	0	0	0.158	1	0	96%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	9.2	9.2		9.8	0	0	0.117	1	0	94%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	9.05	9.05		9.1	0	0	0.171	1	0	99%	70	130	0%	
Trichloroethene	A	ppbv	9.68	9.68		9.6	0	0	0.119	1	0	101%	70	130	0%	
Trichlorofluoromethane	A	ppbv	9.69	9.69		9.6	0	0	0.148	1	0	101%	70	130	0%	
Vinyl acetate	A	ppbv	9.12	9.12		9.9	0	0	0.266	1	0	92%	70	130	0%	
Vinyl chloride	A	ppbv	10.85	10.85		9.4	0	0	0.072	1	0	115%	70	130	0%	
Xylenes, Total	C	ppbv	29.73	29.73		29.2	0	0	0.782	3	0	102%	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	12.88	12.88		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
897367	RLVS VOA1 012412	EPA_TO15	RLVS	:\1\DATA\012412	1/24/2012 3:13:0	1	R45710		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	0.77	0.77		0.996	0	0	0.107	1	0	77%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.09	1.09		1	0	0	0.211	1	0	109%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	0.79	0.79		0.98	0	0	0.108	1	0	81%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.7	0.7		0.98	0	0	0.2	1	0	71%	70	130	0%	
1,1-Dichloroethane	A	ppbv	0.86	0.86		0.97	0	0	0.111	1	0	89%	70	130	0%	
1,1-Dichloroethene	A	ppbv	0.87	0.87		0.99	0	0	0.097	1	0	88%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.16	1.16		0.91	0	0	0.271	1	0	127%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	1.15	1.15		0.98	0	0	0.245	1	0	117%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.7	0.7		0.96	0	0	0.186	1	0	73%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.16	1.16		0.97	0	0	0.208	1	0	120%	70	130	0%	
1,2-Dichloroethane	A	ppbv	0.93	0.93		0.97	0	0	0.196	1	0	96%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.77	0.77		0.98	0	0	0.224	1	0	79%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\012412\01241205.D Vial: 3
Acq On : 24 Jan 2012 1:42 pm Operator: RACHEL HILL
Sample : CCV VOA1 012412 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\011912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 20 11:02:05 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	101	0.00
2	T	Propylene	1.412	1.456	-3.1	92	0.00
3	T	Dichlorodifluoromethane	3.136	3.260	-4.0	93	0.01
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.376	2.367	0.4	89	0.00
5	T	Chloromethane	1.272	1.478	-16.2	98	0.01
6	T	Vinyl chloride	1.565	1.806	-15.4	94	0.01
7	T	1,3-Butadiene	1.228	1.530	-24.6	96	0.00
8	T	Bromomethane	1.252	1.259	-0.6	92	0.00
9	T	Chloroethane	0.812	0.820	-1.0	90	0.00
10	T	Trichlorofluoromethane	2.802	2.829	-1.0	90	0.00
11	T	Ethanol	0.334	0.312	6.6	82	0.00
12	T	Freon113	2.358	2.254	4.4	80	0.00
13	T	1,1-Dichloroethene	1.995	2.027	-1.6	87	0.00
14	T	Acetone	1.862	1.690	9.2	81	0.00
15	T	Carbon disulfide	3.427	3.433	-0.2	89	0.00
16	T	2-Propanol	1.673	1.624	2.9	85	0.00
17	T	Methylene chloride	1.571	1.477	6.0	83	0.00
18	T	tert-Butyl Methyl Ether	2.470	2.113	14.5	78	0.00
19	T	trans-1,2-Dichloroethene	1.902	1.785	6.2	82	0.00
20	T	n-Hexane	2.109	2.011	4.6	81	0.00
21	T	1,1-Dichloroethane	2.225	2.066	7.1	83	0.00
22	T	Vinyl acetate	2.872	2.645	7.9	79	0.00
23	T	cis-1,2-Dichloroethene	1.164	1.042	10.5	82	0.00
24	T	2-Butanone	1.879	1.829	2.7	80	0.00
25	T	Ethyl acetate	2.535	2.361	6.9	81	0.00
26	T	Tetrahydrofuran	1.200	1.266	-5.5	86	0.00
27	T	Chloroform	2.142	2.265	-5.7	89	0.00
28	T	1,1,1-Trichloroethane	1.985	2.034	-2.5	87	0.00
29	T	Cyclohexane	2.017	2.118	-5.0	82	0.00
30	T	Carbon tetrachloride	1.914	1.804	5.7	84	0.00
31	T	Benzene	2.920	2.621	10.2	82	0.00
32	T	1,2-Dichloroethane	1.194	1.201	-0.6	88	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	100	0.00
34	T	Heptane	0.844	0.966	-14.5	88	0.00
35	T	Trichloroethene	0.473	0.477	-0.8	86	0.00
36	T	1,2-Dichloropropane	0.399	0.382	4.3	82	0.00
37	T	1,4-Dioxane	0.135	0.125	7.4	78	0.00
38	T	Bromodichloromethane	0.657	0.662	-0.8	87	0.00
39	T	cis-1,3-Dichloropropene	0.561	0.552	1.6	85	0.00
40	T	4-Methyl-2-pentanone	0.259	0.245	5.4	80	0.00
41	T	Toluene	1.004	0.962	4.2	83	0.00
42	T	trans-1,3-Dichloropropene	0.473	0.470	0.6	86	0.00
43	T	1,1,2-Trichloroethane	0.349	0.331	5.2	83	0.00
44	T	Tetrachloroethene	0.546	0.560	-2.6	83	0.00
45	T	2-Hexanone	0.532	0.532	0.0	82	0.00
46	T	Chlorodibromomethane	0.532	0.519	2.4	85	0.00
47	T	1,2-Dibromoethane	0.507	0.495	2.4	84	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	100	0.00
49	T	Chlorobenzene	0.970	0.934	3.7	84	0.00
50	T	Ethylbenzene	1.559	1.496	4.0	82	0.00
51	T	m,p-Xylene	1.189	1.251	-5.2	83	0.00
52	T	o-Xylene	1.139	1.086	4.7	82	0.00
53	T	Styrene	0.847	0.807	4.7	81	0.00
54	T	Bromoform	0.620	0.605	2.4	83	0.00
55	S	4-Bromofluorobenzene	0.604	0.623	-3.1	99	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\012412\01241205.D Vial: 3
Acq On : 24 Jan 2012 1:42 pm Operator: RACHEL HILL
Sample : CCV VOA1 012412 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\011912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 20 11:02:05 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	0.825	0.844	-2.3	88	0.00
57	T	4-Ethyltoluene	1.351	1.283	5.0	84	0.00
58	T	1,3,5-Trimethylbenzene	1.128	1.072	5.0	85	0.00
59	T	1,2,4-Trimethylbenzene	1.019	1.008	1.1	87	0.00
60	T	1,3-Dichlorobenzene	0.656	0.647	1.4	85	0.00
61	T	1,4-Dichlorobenzene	0.614	0.602	2.0	83	0.00
62	T	Benzyl chloride	0.840	0.809	3.7	84	0.00
63	T	1,2-Dichlorobenzene	0.583	0.590	-1.2	87	0.00
64	T	1,2,4-Trichlorobenzene	0.121	0.102	15.7	79	0.00
65	T	Hexachlorobutadiene	0.305	0.244	20.0	77	0.00
66		Naphthalene	0.190	0.161	15.3	78	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\012412\01241205.D Vial: 3
Acq On : 24 Jan 2012 1:42 pm Operator: RACHEL HILL
Sample : CCV VOA1 012412 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 24 14:07 2012 Quant Results File: 011912V1.RES

Quant Method : C:\HPCHEM\1\METHODS\011912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 20 11:02:05 2012
Response via : Initial Calibration
DataAcq Meth : 011912V1

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	10.60	130	502011	12.50 ppbv	0.00
33) 1,4-Difluorobenzene	11.70	114	1411498	12.50 ppbv	0.00
48) Chlorobenzene-d5	15.54	117	953240	12.50 ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.19	95	593810	12.88 ppbv	0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 103.04%		

Target Compounds					Qvalue
2) Propylene	5.53	41	596438	10.52 ppbv	99
3) Dichlorodifluoromethane	5.60	85	1204409	9.56 ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.86	135	903166	9.46 ppbv #	77
5) Chloromethane	6.02	50	563730	11.04 ppbv	99
6) Vinyl chloride	6.22	62	681721	10.85 ppbv	99
7) 1,3-Butadiene	6.28	39	602254	12.21 ppbv	91
8) Bromomethane	6.86	94	470345	9.36 ppbv	99
9) Chloroethane	7.01	64	303023	9.29 ppbv	96
10) Trichlorofluoromethane	7.34	101	1090794	9.69 ppbv #	99
11) Ethanol	7.57	45	115431	8.62 ppbv	99
12) Freon113	8.00	101	887299	9.37 ppbv	91
13) 1,1-Dichloroethene	8.10	61	806008	10.06 ppbv #	87
14) Acetone	8.19	43	678735	9.08 ppbv	94
15) Carbon disulfide	8.47	76	1337481	9.72 ppbv #	99
16) 2-Propanol	8.24	45	658831	9.80 ppbv	81
17) Methylene chloride	8.76	49	593206	9.40 ppbv #	78
18) tert-Butyl Methyl Ether	8.96	73	840013	8.47 ppbv #	85
19) trans-1,2-Dichloroethene	9.04	61	702383	9.20 ppbv #	82
20) n-Hexane	9.23	57	815593	9.63 ppbv #	90
21) 1,1-Dichloroethane	9.60	63	804690	9.01 ppbv #	96
22) Vinyl acetate	9.54	43	1051681	9.12 ppbv #	95
23) cis-1,2-Dichloroethene	10.29	96	410002	8.77 ppbv #	80
24) 2-Butanone	10.25	43	727110	9.64 ppbv #	87
25) Ethyl acetate	10.20	43	929323	9.13 ppbv #	100
26) Tetrahydrofuran	10.59	42	508256	10.55 ppbv	88
27) Chloroform	10.61	83	891412	10.36 ppbv	100
28) 1,1,1-Trichloroethane	10.86	97	784385	9.84 ppbv #	94
29) Cyclohexane	10.87	56	833427	10.29 ppbv	86
30) Carbon tetrachloride	11.02	117	688373	8.96 ppbv	98
31) Benzene	11.30	78	1010465	8.62 ppbv	94
32) 1,2-Dichloroethane	11.38	62	467735	9.75 ppbv	97
34) Heptane	11.36	43	1079439	11.32 ppbv #	88
35) Trichloroethene	12.04	130	516744	9.68 ppbv	93
36) 1,2-Dichloropropane	12.39	63	422965	9.39 ppbv #	95
37) 1,4-Dioxane	12.46	88	135906	8.92 ppbv #	78
38) Bromodichloromethane	12.67	83	717978	9.68 ppbv	99
39) cis-1,3-Dichloropropene	13.23	75	591996	9.35 ppbv	96
40) 4-Methyl-2-pentanone	13.34	58	277214	9.48 ppbv #	89
41) Toluene	13.63	91	1064829	9.39 ppbv	97
42) trans-1,3-Dichloropropene	13.93	75	482863	9.05 ppbv	96
43) 1,1,2-Trichloroethane	14.21	97	366734	9.30 ppbv	95
44) Tetrachloroethene	14.34	166	606835	9.84 ppbv	98
45) 2-Hexanone	14.41	43	589258	9.81 ppbv	94
46) Chlorodibromomethane	14.75	129	574493	9.57 ppbv	99
47) 1,2-Dibromoethane	14.99	107	536860	9.39 ppbv	99
49) Chlorobenzene	15.59	112	705222	9.54 ppbv #	89
50) Ethylbenzene	15.63	91	1118296	9.41 ppbv	91
51) m,p-Xylene	15.78	91	1831808	20.20 ppbv	93
52) o-Xylene	16.38	91	828245	9.53 ppbv #	88

(#) = qualifier out of range (m) = manual integration
01241205.D 011912V1.M Wed Jan 25 09:55:33 2012

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\012412\01241205.D Vial: 3
Acq On : 24 Jan 2012 1:42 pm Operator: RACHEL HILL
Sample : CCV VOA1 012412 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 24 14:07 2012 Quant Results File: 011912V1.RES

Quant Method : C:\HPCHEM\1\METHODS\011912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 20 11:02:05 2012
Response via : Initial Calibration
DataAcq Meth : 011912V1

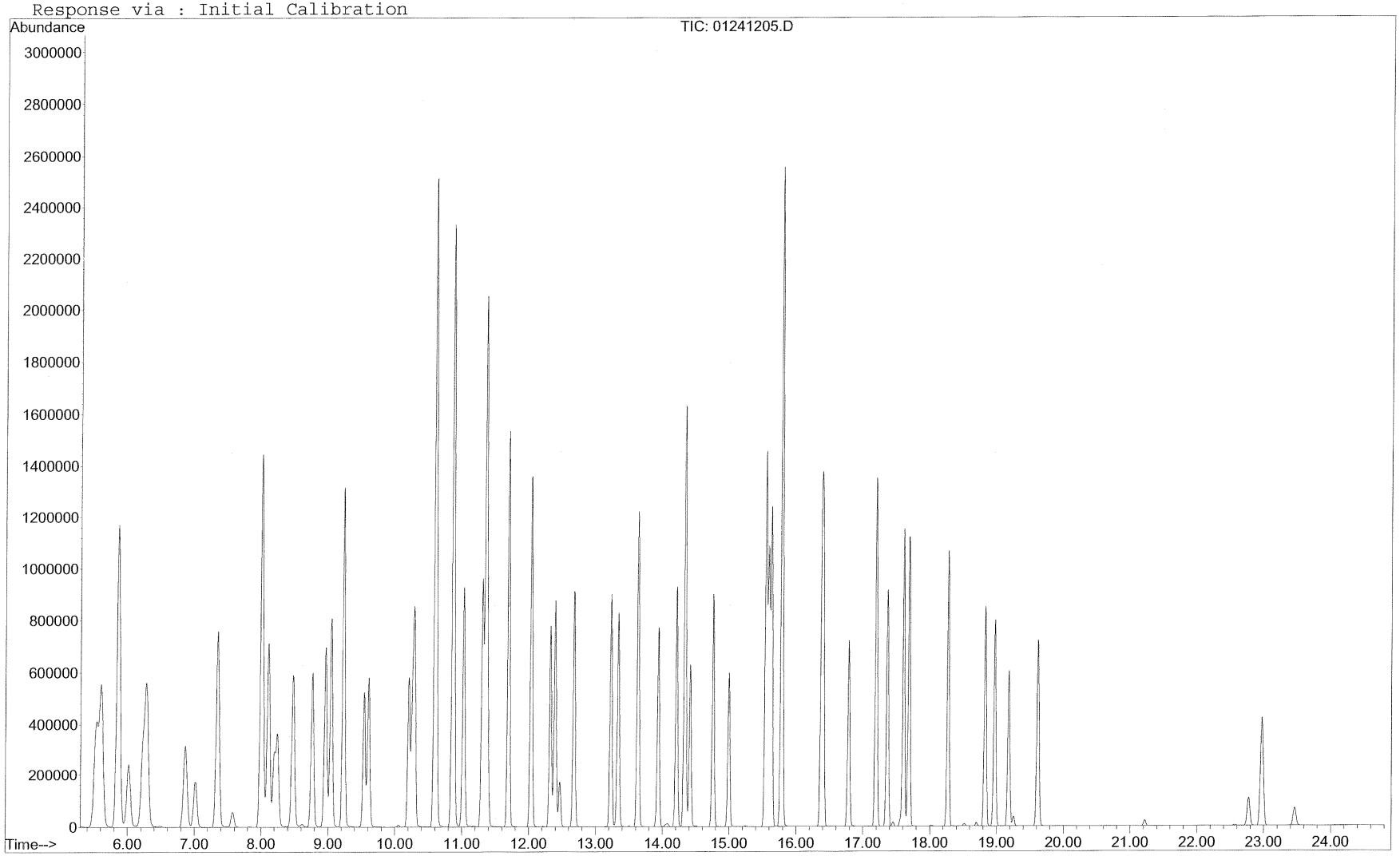
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
53) Styrene	16.40	104	603037	9.34 ppbv	98
54) Bromoform	16.78	173	443013	9.36 ppbv	98
56) 1,1,2,2-Tetrachloroethane	17.36	83	643579	10.22 ppbv	99
57) 4-Ethyltoluene	17.61	105	958548	9.30 ppbv	96
58) 1,3,5-Trimethylbenzene	17.69	105	792611	9.21 ppbv	97
59) 1,2,4-Trimethylbenzene	18.27	105	753184	9.69 ppbv	97
60) 1,3-Dichlorobenzene	18.82	146	478546	9.56 ppbv	98
61) 1,4-Dichlorobenzene	18.97	146	441009	9.42 ppbv	98
62) Benzyl chloride	19.18	91	598445	9.34 ppbv	96
63) 1,2-Dichlorobenzene	19.62	146	436458	9.81 ppbv	98
64) 1,2,4-Trichlorobenzene	22.77	180	70844	7.67 ppbv	97
65) Hexachlorobutadiene	22.97	225	174644	7.51 ppbv	98
66) Naphthalene	23.46	128	112645	7.77 ppbv	98

(#) = qualifier out of range (m) = manual integration
01241205.D 011912V1.M Wed Jan 25 09:55:33 2012

Quantitation Report

Data File : C:\HPCHEM\1\DATA\012412\01241205.D Vial: 3
Acq On : 24 Jan 2012 1:42 pm Operator: RACHEL HILL
Sample : CCV VOA1 012412 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 24 14:07 2012 Quant Results File: 011912V1.RES

Method : C:\HPCHEM\1\METHODS\011912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 20 11:02:05 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: **VOA1_120125A** **Run No.:** 45769

Analytical Run Date: 1/25/2012 **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
BFB2 VOA1 012512	BFB_TUNE	TUNE	R45769	1/26/2012 12:24:00 AM	Robert Lynch		
ICV VOA1 012512	EPA_TO15	ICV	R45769	1/26/2012 1:09:00 AM	Robert Lynch		
RLVS VOA1 012512	EPA_TO15	RLVS	R45769	1/26/2012 1:55:00 AM	Robert Lynch		
MBLK VOA1 012512	EPA_TO15	MBLK	R45769	1/26/2012 2:47:00 AM	Charles O`Bryan		
1201592-025A	EPA_TO15	SAMP	R45769	1/26/2012 3:33:00 AM	Robert Lynch		
1201592-003A	EPA_TO15	SAMP	R45769	1/26/2012 4:19:00 AM	Robert Lynch		Over diluted sample. Will re-analyze at a lower dilution. Reported here to show sample and duplicate were analyzed.
1201592-003ADUP	EPA_TO15	DUP	R45769	1/26/2012 5:04:00 AM	Charles O`Bryan		
1201592-030A	EPA_TO15	SAMP	R45769	1/26/2012 7:26:00 AM	Robert Lynch		
1201592-031A	EPA_TO15	SAMP	R45769	1/26/2012 8:12:00 AM	Robert Lynch		
1201592-032A	EPA_TO15	SAMP	R45769	1/26/2012 8:59:00 AM	Robert Lynch		
1201592-033A	EPA_TO15	SAMP	R45769	1/26/2012 9:51:00 AM	Robert Lynch		
1201592-034A	EPA_TO15	SAMP	R45769	1/26/2012 10:37:00 AM	Robert Lynch		
1201592-035A	EPA_TO15	SAMP	R45769	1/26/2012 12:13:00 PM	Robert Lynch		
1201592-036A	EPA_TO15	SAMP	R45769	1/26/2012 1:02:00 PM	Robert Lynch		
1201592-037A	EPA_TO15	SAMP	R45769	1/26/2012 1:55:00 PM	Robert Lynch		
1201592-038A	EPA_TO15	SAMP	R45769	1/26/2012 2:43:00 PM	Robert Lynch		
1201592-039A	EPA_TO15	SAMP	R45769	1/26/2012 3:29:00 PM	Robert Lynch		
1201592-040A	EPA_TO15	SAMP	R45769	1/26/2012 4:17:00 PM	Robert Lynch		
1201592-012A	EPA_TO15	SAMP	R45769	1/26/2012 6:40:00 PM	Robert Lynch		
1201592-015A	EPA_TO15	SAMP	R45769	1/26/2012 7:27:00 PM	Robert Lynch		
1201592-016A	EPA_TO15	SAMP	R45769	1/26/2012 8:12:00 PM	Robert Lynch		
RLVS2 VOA1 01251	EPA_TO15	RLVS	R45769	1/26/2012 8:58:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

15-Feb-12

RunNo 45769

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
898224	BFB2 VOA1 012512	BFB_TUNE	TUNE	:\1\DATA\012512	1/26/2012 12:24:	1	R45769		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0.6	0.6		100	0	0	0	0	0	1%	0	2	0%	
174	M		75.1	75.1		100	0	0	0	0	0	75%	50	120	0%	
175	M		7.2	7.2		100	0	0	0	0	0	7%	4	9	0%	
176	M		99.9	99.9		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		21.9	21.9		100	0	0	0	0	0	22%	8	40	0%	
75	M		46	46		100	0	0	0	0	0	46%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		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
898227	ICV VOA1 012512	EPA_TO15	ICV	:\1\DATA\012512	1/26/2012 1:09:0	1	R45769		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	10.44	10.44		9.6	0	0	0.107	1	0	109%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.66	10.66		10	0	0	0.211	1	0	107%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.06	10.06		9.8	0	0	0.108	1	0	103%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.99	9.99		9.8	0	0	0.2	1	0	102%	70	130	0%	
1,1-Dichloroethane	A	ppbv	9.64	9.64		9.7	0	0	0.111	1	0	99%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.21	10.21		9.9	0	0	0.097	1	0	103%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	8.95	8.95		9.1	0	0	0.271	1	0	98%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	9.99	9.99		9.8	0	0	0.245	1	0	102%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.97	9.97		9.6	0	0	0.186	1	0	104%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	10.48	10.48		9.7	0	0	0.208	1	0	108%	70	130	0%	
1,2-Dichloroethane	A	ppbv	10.05	10.05		9.7	0	0	0.196	1	0	104%	70	130	0%	
1,2-Dichloropropane	A	ppbv	9.8	9.8		9.8	0	0	0.224	1	0	100%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.77	9.77		9.7	0	0	0.24	1	0	101%	70	130	0%	
1,3-Butadiene	A	ppbv	11.03	11.03		9.8	0	0	0.152	1	0	113%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	10.3	10.3		9.7	0	0	0.202	1	0	106%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
898227	ICV VOA1 012512	EPA_TO15	ICV	:\1\DATA\012512	1/26/2012 1:09:0	1	R45769		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	10.25	10.25		9.6	0	0	0.194	1	0	107%	70	130	0%	
1,4-Dioxane	A	ppbv	10.09	10.09		9.6	0	0	0.128	1	0	105%	70	130	0%	
2-Butanone	A	ppbv	9.69	9.69		9.9	0	0	0.287	1	0	98%	70	130	0%	
2-Hexanone	A	ppbv	10.49	10.49		9.8	0	0	0.135	1	0	107%	70	130	0%	
2-Propanol	A	ppbv	10.59	10.59		10.1	0	0	0.329	1	0	105%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	10.31	10.31		10	0	0	0.157	1	0	103%	70	130	0%	
Acetone	A	ppbv	10	10		10	0	0	0.43	1	0	100%	70	130	0%	
Benzene	A	ppbv	9.42	9.42		9.6	0	0	0.126	1	0	98%	70	130	0%	
Benzyl chloride	A	ppbv	10.4	10.4		9.7	0	0	0.155	1	0	107%	70	130	0%	
Bromodichloromethane	A	ppbv	10.15	10.15		9.6	0	0	0.156	1	0	106%	70	130	0%	
Bromoform	A	ppbv	10.5	10.5		9.6	0	0	0.197	1	0	109%	70	130	0%	
Bromomethane	A	ppbv	9.76	9.76		9.3	0	0	0.075	1	0	105%	70	130	0%	
Carbon disulfide	A	ppbv	10.11	10.11		9.7	0	0	0.093	1	0	104%	70	130	0%	
Carbon tetrachloride	A	ppbv	10.12	10.12		9.5	0	0	0.114	1	0	107%	70	130	0%	
Chlorobenzene	A	ppbv	10.04	10.04		9.9	0	0	0.275	1	0	101%	70	130	0%	
Chlorodibromomethane	A	ppbv	10.44	10.44		9.2	0	0	0.165	1	0	113%	70	130	0%	
Chloroethane	A	ppbv	9.6	9.6		9.8	0	0	0.063	1	0	98%	70	130	0%	
Chloroform	A	ppbv	10.54	10.54		9.4	0	0	0.126	1	0	112%	70	130	0%	
Chloromethane	A	ppbv	10.12	10.12		9.8	0	0	0.104	1	0	103%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.58	9.58		9.8	0	0	0.107	1	0	98%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	9.8	9.8		9.5	0	0	0.166	1	0	103%	70	130	0%	
Cyclohexane	A	ppbv	10.58	10.58		9.8	0	0	0.684	2	0	108%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.84	9.84		9.2	0	0	0.086	1	0	107%	70	130	0%	
Ethanol	A	ppbv	9.41	9.41		9.2	0	0	1.962	5	0	102%	70	130	0%	
Ethyl acetate	A	ppbv	9.97	9.97		9.8	0	0	0.157	1	0	102%	70	130	0%	
Ethylbenzene	A	ppbv	10.03	10.03		9.8	0	0	0.737	2	0	102%	70	130	0%	
Heptane	A	ppbv	10.9	10.9		9.9	0	0	0.249	1	0	110%	70	130	0%	
Hexachlorobutadiene	A	ppbv	9.08	9.08		9.4	0	0	0.374	2	0	97%	70	130	0%	
m,p-Xylene	A	ppbv	21.31	21.31		19.2	0	0	0.524	2	0	111%	70	130	0%	
Methylene chloride	A	ppbv	9.73	9.73		10	0	0	2.077	5	0	97%	70	130	0%	
n-Hexane	A	ppbv	10.13	10.13		10.1	0	0	0.692	2	0	100%	70	130	0%	
Naphthalene	A	ppbv	9.16	9.16		9.2	0	0	0.247	1	0	100%	70	130	0%	
o-Xylene	A	ppbv	10.24	10.24		10	0	0	0.258	1	0	102%	70	130	0%	
Propylene	A	ppbv	11.44	11.44		10.2	0	0	0.075	1	0	112%	70	130	0%	B

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
898227	ICV VOA1 012512	EPA_TO15	ICV	\1\DATA\012512	1/26/2012 1:09:0	1	R45769		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	10.16	10.16		9.8	0	0	0.263	1	0	104%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	9.71	9.71		9.9	0	0	0.228	1	0	98%	70	130	0%	
Tetrachloroethene	A	ppbv	10.52	10.52		9.6	0	0	0.148	1	0	110%	70	130	0%	
Tetrahydrofuran	A	ppbv	10.69	10.69		10	0	0	0.201	1	0	107%	70	130	0%	
Toluene	A	ppbv	9.94	9.94		9.8	0	0	0.158	1	0	101%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	9.77	9.77		9.8	0	0	0.117	1	0	100%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	9.52	9.52		9.1	0	0	0.171	1	0	105%	70	130	0%	
Trichloroethene	A	ppbv	9.79	9.79		9.6	0	0	0.119	1	0	102%	70	130	0%	
Trichlorofluoromethane	A	ppbv	10.16	10.16		9.6	0	0	0.148	1	0	106%	70	130	0%	
Vinyl acetate	A	ppbv	10.41	10.41		9.9	0	0	0.266	1	0	105%	70	130	0%	
Vinyl chloride	A	ppbv	9.7	9.7		9.4	0	0	0.072	1	0	103%	70	130	0%	
Xylenes, Total	C	ppbv	31.55	31.55		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	12.9	12.9		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
898229	RLVS VOA1 012512	EPA_TO15	RLVS	\1\DATA\012512	1/26/2012 1:55:0	1	R45769		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	1.1	1.1		1	0	0	0.211	1	0	110%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	0.83	0.83		0.98	0	0	0.108	1	0	85%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.73	0.73		0.98	0	0	0.2	1	0	74%	70	130	0%	
1,1-Dichloroethane	A	ppbv	0.9	0.9		0.97	0	0	0.111	1	0	93%	70	130	0%	
1,1-Dichloroethene	A	ppbv	0.91	0.91		0.99	0	0	0.097	1	0	92%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.24	1.24		0.91	0	0	0.271	1	0	136%	70	130	0%	S
1,2,4-Trimethylbenzene	A	ppbv	1.15	1.15		0.98	0	0	0.245	1	0	117%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.7	0.7		0.96	0	0	0.186	1	0	73%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.15	1.15		0.97	0	0	0.208	1	0	119%	70	130	0%	
1,2-Dichloroethane	A	ppbv	0.91	0.91		0.97	0	0	0.196	1	0	94%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.77	0.77		0.98	0	0	0.224	1	0	79%	70	130	0%	

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\012512\01251220.D
Acq On : 26 Jan 2012 1:09 am
Sample : ICV VOA1 012512
Misc : ICV EPA TO15
MS Integration Params: CLME.P
Quant Time: Jan 27 9:27 2012

Vial: 2
Operator: RACHEL HILL
Inst : VOA 1
Multiplr: 1.00

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

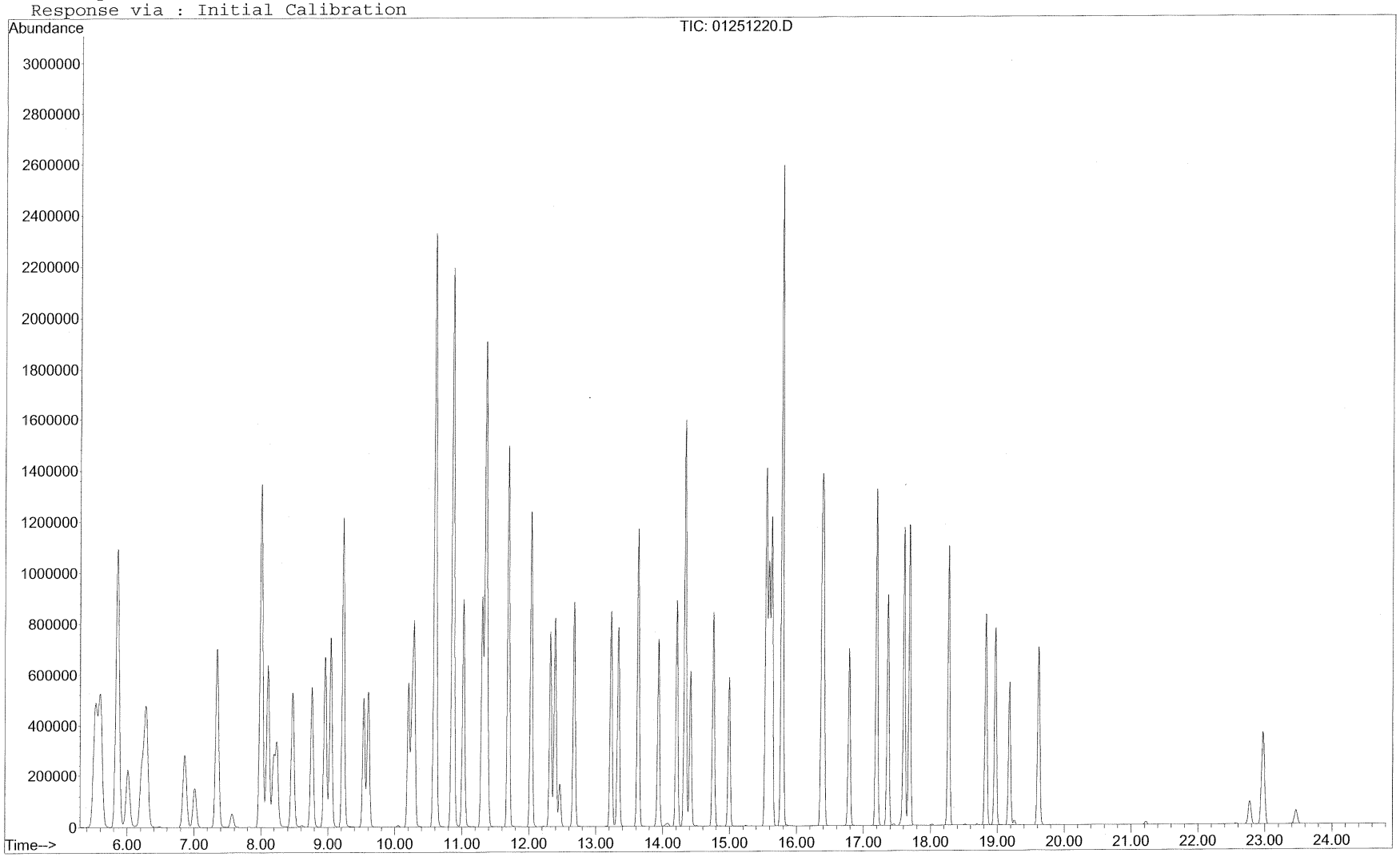
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
53) Styrene	16.40	104	599738	10.16 ppbv	97
54) Bromoform	16.78	173	425841	10.50 ppbv	98
56) 1,1,2,2-Tetrachloroethane	17.36	83	636113	10.66 ppbv #	99
57) 4-Ethyltoluene	17.61	105	974772	9.92 ppbv	95
58) 1,3,5-Trimethylbenzene	17.69	105	814123	9.77 ppbv	96
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

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



RTI Laboratories

Run ID: **VOA1_120127B** **Run No.:** 45807

Analytical Run Date: 1/27/2012 **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 012712	BFB_TUNE	TUNE	R45807	1/27/2012 9:33:00 AM	Robert Lynch		
CCV VOA1 012712	EPA_TO15	CCV	R45807	1/27/2012 10:18:00 AM	Robert Lynch		
RLVS VOA1 012712	EPA_TO15	RLVS	R45807	1/27/2012 11:06:00 AM	Robert Lynch		
1201592-017A	EPA_TO15	SAMP	R45807	1/27/2012 12:43:00 PM	Robert Lynch		
1201592-017ADUP	EPA_TO15	DUP	R45807	1/27/2012 1:28:00 PM	Charles O`Bryan		
MBLK VOA1 012712	EPA_TO15	MBLK	R45807	1/27/2012 3:14:00 PM	Charles O`Bryan		Accidentally ran original blank in wrong autosampler position. Re-analyzed here.
1201592-003A	EPA_TO15	SAMP	R45807	1/27/2012 4:03:00 PM	Robert Lynch		
1201592-005A	EPA_TO15	SAMP	R45807	1/27/2012 5:39:00 PM	Robert Lynch		
1201592-010A	EPA_TO15	SAMP	R45807	1/27/2012 7:12:00 PM	Robert Lynch		
1201592-018A	EPA_TO15	SAMP	R45807	1/27/2012 7:58:00 PM	Robert Lynch		
1201592-043A	EPA_TO15	SAMP	R45807	1/27/2012 8:43:00 PM	Robert Lynch		
1201592-020A	EPA_TO15	SAMP	R45807	1/27/2012 9:29:00 PM	Robert Lynch		
1201592-021A	EPA_TO15	SAMP	R45807	1/27/2012 11:07:00 PM	Robert Lynch		
1201592-047A	EPA_TO15	SAMP	R45807	1/27/2012 11:54:00 PM	Robert Lynch		
1201592-022A	EPA_TO15	SAMP	R45807	1/28/2012 1:26:00 AM	Robert Lynch		
1201592-048A	EPA_TO15	SAMP	R45807	1/28/2012 2:12:00 AM	Robert Lynch		
1201592-049A	EPA_TO15	SAMP	R45807	1/28/2012 2:58:00 AM	Robert Lynch		
1201592-003A	EPA_TO15	SAMP	R45807	1/28/2012 3:44:00 AM	Robert Lynch		
1201592-029A	EPA_TO15	SAMP	R45807	1/28/2012 4:31:00 AM	Robert Lynch		
1201592-005A	EPA_TO15	SAMP	R45807	1/28/2012 5:17:00 AM	Charles O`Bryan		
RLVS VOA1 012712	EPA_TO15	RLVS	R45807	1/28/2012 6:05:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

15-Feb-12

RunNo 45807

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
898892	BFB1 VOA1 012712	BFB_TUNE	TUNE	.\1\DATA\012712	1/27/2012 9:33:0	1	R45807		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		77.2	77.2		100	0	0	0	0	0	77%	50	120	0%	
175	M		7.2	7.2		100	0	0	0	0	0	7%	4	9	0%	
176	M		99.8	99.8		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		22.8	22.8		100	0	0	0	0	0	23%	8	40	0%	
75	M		47.1	47.1		100	0	0	0	0	0	47%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.8	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
898893	CCV VOA1 012712	EPA_TO15	CCV	.\1\DATA\012712	1/27/2012 10:18:	1	R45807		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	10.9	10.9		9.6	0	0	0.107	1	0	114%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.24	10.24		10	0	0	0.211	1	0	102%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	11.32	11.32		9.8	0	0	0.108	1	0	116%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.92	9.92		9.8	0	0	0.2	1	0	101%	70	130	0%	
1,1-Dichloroethane	A	ppbv	10.44	10.44		9.7	0	0	0.111	1	0	108%	70	130	0%	
1,1-Dichloroethene	A	ppbv	11.19	11.19		9.9	0	0	0.097	1	0	113%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	8.93	8.93		9.1	0	0	0.271	1	0	98%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	9.45	9.45		9.8	0	0	0.245	1	0	96%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.72	9.72		9.6	0	0	0.186	1	0	101%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	9.8	9.8		9.7	0	0	0.208	1	0	101%	70	130	0%	
1,2-Dichloroethane	A	ppbv	10.54	10.54		9.7	0	0	0.196	1	0	109%	70	130	0%	
1,2-Dichloropropane	A	ppbv	9.94	9.94		9.8	0	0	0.224	1	0	101%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.48	9.48		9.7	0	0	0.24	1	0	98%	70	130	0%	
1,3-Butadiene	A	ppbv	10.95	10.95		9.8	0	0	0.152	1	0	112%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.88	9.88		9.7	0	0	0.202	1	0	102%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
898893	CCV VOA1 012712	EPA_TO15	CCV	\1\DATA\012712	1/27/2012 10:18:	1	R45807		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.86	9.86		9.6	0	0	0.194	1	0	103%	70	130	0%	
1,4-Dioxane	A	ppbv	10.21	10.21		9.6	0	0	0.128	1	0	106%	70	130	0%	
2-Butanone	A	ppbv	10.28	10.28		9.9	0	0	0.287	1	0	104%	70	130	0%	
2-Hexanone	A	ppbv	10.16	10.16		9.8	0	0	0.135	1	0	104%	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	10.24	10.24		10	0	0	0.157	1	0	102%	70	130	0%	
Acetone	A	ppbv	10.62	10.62		10	0	0	0.43	1	0	106%	70	130	0%	
Benzene	A	ppbv	10.12	10.12		9.6	0	0	0.126	1	0	105%	70	130	0%	
Benzyl chloride	A	ppbv	9.84	9.84		9.7	0	0	0.155	1	0	101%	70	130	0%	
Bromodichloromethane	A	ppbv	9.96	9.96		9.6	0	0	0.156	1	0	104%	70	130	0%	
Bromoform	A	ppbv	9.82	9.82		9.6	0	0	0.197	1	0	102%	70	130	0%	
Bromomethane	A	ppbv	9.8	9.8		9.3	0	0	0.075	1	0	105%	70	130	0%	
Carbon disulfide	A	ppbv	10.52	10.52		9.7	0	0	0.093	1	0	108%	70	130	0%	
Carbon tetrachloride	A	ppbv	10.05	10.05		9.5	0	0	0.114	1	0	106%	70	130	0%	
Chlorobenzene	A	ppbv	10.04	10.04		9.9	0	0	0.275	1	0	101%	70	130	0%	
Chlorodibromomethane	A	ppbv	9.96	9.96		9.2	0	0	0.165	1	0	108%	70	130	0%	
Chloroethane	A	ppbv	9.78	9.78		9.8	0	0	0.063	1	0	100%	70	130	0%	
Chloroform	A	ppbv	11	11		9.4	0	0	0.126	1	0	117%	70	130	0%	
Chloromethane	A	ppbv	10.26	10.26		9.8	0	0	0.104	1	0	105%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	10.41	10.41		9.8	0	0	0.107	1	0	106%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	9.73	9.73		9.5	0	0	0.166	1	0	102%	70	130	0%	
Cyclohexane	A	ppbv	11.57	11.57		9.8	0	0	0.684	2	0	118%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.6	9.6		9.2	0	0	0.086	1	0	104%	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	10.42	10.42		9.8	0	0	0.157	1	0	106%	70	130	0%	
Ethylbenzene	A	ppbv	10.12	10.12		9.8	0	0	0.737	2	0	103%	70	130	0%	
Heptane	A	ppbv	10.98	10.98		9.9	0	0	0.249	1	0	111%	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	21.15	21.15		19.2	0	0	0.524	2	0	110%	70	130	0%	
Methylene chloride	A	ppbv	10.88	10.88		10	0	0	2.077	5	0	109%	70	130	0%	
n-Hexane	A	ppbv	11.19	11.19		10.1	0	0	0.692	2	0	111%	70	130	0%	
Naphthalene	A	ppbv	9.59	9.59		9.2	0	0	0.247	1	0	104%	70	130	0%	
o-Xylene	A	ppbv	10.18	10.18		10	0	0	0.258	1	0	102%	70	130	0%	
Propylene	A	ppbv	11.24	11.24		10.2	0	0	0.075	1	0	110%	70	130	0%	B

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
898893	CCV VOA1 012712	EPA_TO15	CCV	\1\DATA\012712	1/27/2012 10:18:	1	R45807		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	10.09	10.09		9.8	0	0	0.263	1	0	103%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	10.53	10.53		9.9	0	0	0.228	1	0	106%	70	130	0%	
Tetrachloroethene	A	ppbv	10.08	10.08		9.6	0	0	0.148	1	0	105%	70	130	0%	
Tetrahydrofuran	A	ppbv	11.03	11.03		10	0	0	0.201	1	0	110%	70	130	0%	
Toluene	A	ppbv	10.12	10.12		9.8	0	0	0.158	1	0	103%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.8	10.8		9.8	0	0	0.117	1	0	110%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	9.3	9.3		9.1	0	0	0.171	1	0	102%	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	10.34	10.34		9.6	0	0	0.148	1	0	108%	70	130	0%	
Vinyl acetate	A	ppbv	11.02	11.02		9.9	0	0	0.266	1	0	111%	70	130	0%	
Vinyl chloride	A	ppbv	9.76	9.76		9.4	0	0	0.072	1	0	104%	70	130	0%	
Xylenes, Total	C	ppbv	31.33	31.33		29.2	0	0	0.782	3	0	107%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		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	13.02	13.02		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
898894	RLVS VOA1 012712	EPA_TO15	RLVS	\1\DATA\012712	1/27/2012 11:06:	1	R45807		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	0.83	0.83		0.996	0	0	0.107	1	0	83%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.13	1.13		1	0	0	0.211	1	0	113%	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	0.77	0.77		0.98	0	0	0.2	1	0	79%	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	0.96	0.96		0.99	0	0	0.097	1	0	97%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.3	1.3		0.91	0	0	0.271	1	0	143%	70	130	0%	S
1,2,4-Trimethylbenzene	A	ppbv	1.16	1.16		0.98	0	0	0.245	1	0	118%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.76	0.76		0.96	0	0	0.186	1	0	79%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.23	1.23		0.97	0	0	0.208	1	0	127%	70	130	0%	
1,2-Dichloroethane	A	ppbv	0.98	0.98		0.97	0	0	0.196	1	0	101%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.83	0.83		0.98	0	0	0.224	1	0	85%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\012712\01271202.D
Acq On : 27 Jan 2012 10:18 am
Sample : CCV VOA1 012712
Misc : CCV EPA TO15
MS Integration Params: CLME.P

Vial: 2
Operator: RACHEL HILL
Inst : VOA 1
Multiplr: 1.00

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	113	0.00
2	T	Propylene	1.441	1.589	-10.3	101	0.01
3	T	Dichlorodifluoromethane	3.080	3.215	-4.4	105	0.01
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.240	2.316	-3.4	106	0.00
5	T	Chloromethane	1.387	1.498	-8.0	101	0.02
6	T	Vinyl chloride	1.732	1.797	-3.8	109	0.00
7	T	1,3-Butadiene	1.265	1.413	-11.7	105	0.00
8	T	Bromomethane	1.154	1.215	-5.3	110	0.01
9	T	Chloroethane	0.748	0.796	-6.4	109	0.00
10	T	Trichlorofluoromethane	2.684	2.891	-7.7	118	0.01
11	T	Ethanol	0.303	0.313	-3.3	111	0.00
12	T	Freon113	2.232	2.578	-15.5	128	0.00
13	T	1,1-Dichloroethene	1.891	2.136	-13.0	122	0.00
14	T	Acetone	1.771	1.881	-6.2	115	0.00
15	T	Carbon disulfide	3.185	3.456	-8.5	113	0.01
16	T	2-Propanol	1.561	1.615	-3.5	106	0.00
17	T	Methylene chloride	1.503	1.635	-8.8	118	0.01
18	T	tert-Butyl Methyl Ether	2.251	2.394	-6.4	122	0.00
19	T	trans-1,2-Dichloroethene	1.796	1.978	-10.1	121	0.00
20	T	n-Hexane	1.985	2.199	-10.8	119	0.00
21	T	1,1-Dichloroethane	2.078	2.235	-7.6	117	0.00
22	T	Vinyl acetate	2.668	2.970	-11.3	116	0.00
23	T	cis-1,2-Dichloroethene	1.073	1.140	-6.2	118	0.00
24	T	2-Butanone	1.868	1.940	-3.9	107	0.00
25	T	Ethyl acetate	2.374	2.525	-6.4	110	0.00
26	T	Tetrahydrofuran	1.222	1.348	-10.3	107	0.00
27	T	Chloroform	2.165	2.429	-12.2	115	0.00
28	T	1,1,1-Trichloroethane	1.962	2.227	-13.5	120	0.00
29	T	Cyclohexane	1.984	2.342	-18.0	119	0.00
30	T	Carbon tetrachloride	1.756	1.857	-5.8	120	0.00
31	T	Benzene	2.715	2.863	-5.5	118	0.00
32	T	1,2-Dichloroethane	1.214	1.318	-8.6	118	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	114	0.00
34	T	Heptane	0.838	0.929	-10.9	111	0.00
35	T	Trichloroethene	0.436	0.440	-0.9	112	0.00
36	T	1,2-Dichloropropane	0.370	0.376	-1.6	112	0.00
37	T	1,4-Dioxane	0.117	0.125	-6.8	111	0.00
38	T	Bromodichloromethane	0.613	0.636	-3.8	116	0.00
39	T	cis-1,3-Dichloropropene	0.520	0.533	-2.5	113	0.00
40	T	4-Methyl-2-pentanone	0.232	0.238	-2.6	110	0.00
41	T	Toluene	0.929	0.959	-3.2	113	0.00
42	T	trans-1,3-Dichloropropene	0.437	0.446	-2.1	111	0.00
43	T	1,1,2-Trichloroethane	0.322	0.326	-1.2	113	0.00
44	T	Tetrachloroethene	0.503	0.528	-5.0	112	0.00
45	T	2-Hexanone	0.492	0.510	-3.7	106	0.00
46	T	Chlorodibromomethane	0.476	0.484	-1.7	115	0.00
47	T	1,2-Dibromoethane	0.474	0.479	-1.1	112	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	112	0.00
49	T	Chlorobenzene	0.901	0.913	-1.3	112	0.00
50	T	Ethylbenzene	1.472	1.521	-3.3	112	0.00
51	T	m,p-Xylene	1.166	1.285	-10.2	112	0.00
52	T	o-Xylene	1.079	1.098	-1.8	111	0.00
53	T	Styrene	0.795	0.819	-3.0	110	0.00
54	T	Bromoform	0.546	0.559	-2.4	112	0.00
55	S	4-Bromofluorobenzene	0.597	0.622	-4.2	115	0.00
56	T	1,1,2,2-Tetrachloroethane	0.804	0.823	-2.4	105	0.00
57	T	4-Ethyltoluene	1.324	1.307	1.3	107	0.00
58	T	1,3,5-Trimethylbenzene	1.123	1.097	2.3	108	0.00
59	T	1,2,4-Trimethylbenzene	1.037	1.000	3.6	105	0.00

60	T	1,3-Dichlorobenzene	0.608	0.619	-1.8	106	0.00
61	T	1,4-Dichlorobenzene	0.561	0.576	-2.7	106	0.00
62	T	Benzyl chloride	0.708	0.718	-1.4	106	0.00
63	T	1,2-Dichlorobenzene	0.540	0.546	-1.1	101	0.00
64	T	1,2,4-Trichlorobenzene	0.089	0.087	2.2	104	0.00
65	T	Hexachlorobutadiene	0.229	0.219	4.4	105	0.00
66		Naphthalene	0.133	0.139	-4.5	109	0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0
01251213.D 012512V1.M Tue Jan 31 11:30:19 2012

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\012712\01271202.D Vial: 2
Acq On : 27 Jan 2012 10:18 am Operator: RACHEL HILL
Sample : CCV VOA1 012712 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 27 11:33 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 : 011912V1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.60	130	420506	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.70	114	1287230	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.55	117	857322	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.19	95	533017	13.02	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 104.16%

Target Compounds						Qvalue
2) Propylene	5.53	41	545159	11.24	ppbv	92
3) Dichlorodifluoromethane	5.60	85	995012	9.60	ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.86	135	740031	9.82	ppbv #	75
5) Chloromethane	6.02	50	478587	10.26	ppbv	99
6) Vinyl chloride	6.22	62	568363	9.76	ppbv #	98
7) 1,3-Butadiene	6.28	39	465920	10.95	ppbv	89
8) Bromomethane	6.86	94	380275	9.80	ppbv	99
9) Chloroethane	7.01	64	246288	9.78	ppbv	96
10) Trichlorofluoromethane	7.35	101	933643	10.34	ppbv #	98
11) Ethanol	7.57	45	96845	9.50	ppbv	100
12) Freon113	8.00	101	849893	11.32	ppbv	90
13) 1,1-Dichloroethene	8.10	61	711512	11.19	ppbv #	87
14) Acetone	8.19	43	632726	10.62	ppbv	94
15) Carbon disulfide	8.48	76	1127661	10.52	ppbv #	100
16) 2-Propanol	8.24	45	548566	10.45	ppbv	91
17) Methylene chloride	8.76	49	550112	10.88	ppbv #	78
18) tert-Butyl Methyl Ether	8.96	73	797391	10.53	ppbv #	85
19) trans-1,2-Dichloroethene	9.05	61	652095	10.80	ppbv #	82
20) n-Hexane	9.23	57	747151	11.19	ppbv #	90
21) 1,1-Dichloroethane	9.61	63	729463	10.44	ppbv #	96
22) Vinyl acetate	9.54	43	989188	11.02	ppbv #	95
23) cis-1,2-Dichloroethene	10.28	96	375690	10.41	ppbv #	81
24) 2-Butanone	10.25	43	646224	10.28	ppbv #	89
25) Ethyl acetate	10.20	43	832546	10.42	ppbv #	98
26) Tetrahydrofuran	10.59	42	453468	11.03	ppbv	88
27) Chloroform	10.61	83	800842	11.00	ppbv	100
28) 1,1,1-Trichloroethane	10.86	97	719270	10.90	ppbv #	93
29) Cyclohexane	10.87	56	771991	11.57	ppbv	85
30) Carbon tetrachloride	11.02	117	593617	10.05	ppbv	97
31) Benzene	11.30	78	924556	10.12	ppbv	94
32) 1,2-Dichloroethane	11.38	62	430227	10.54	ppbv #	97
34) Heptane	11.35	43	946881	10.98	ppbv #	87
35) Trichloroethene	12.04	130	434891	9.69	ppbv	92
36) 1,2-Dichloropropane	12.39	63	379271	9.94	ppbv #	95
37) 1,4-Dioxane	12.46	88	123178	10.21	ppbv #	79
38) Bromodichloromethane	12.68	83	629112	9.96	ppbv	98
39) cis-1,3-Dichloropropene	13.23	75	521406	9.73	ppbv	96
40) 4-Methyl-2-pentanone	13.33	58	244757	10.24	ppbv #	89
41) Toluene	13.63	91	967533	10.12	ppbv	98
42) trans-1,3-Dichloropropene	13.94	75	418160	9.30	ppbv	97
43) 1,1,2-Trichloroethane	14.21	97	328661	9.92	ppbv	95
44) Tetrachloroethene	14.33	166	522314	10.08	ppbv	98
45) 2-Hexanone	14.41	43	514964	10.16	ppbv	93
46) Chlorodibromomethane	14.76	129	488392	9.96	ppbv	99
47) 1,2-Dibromoethane	14.99	107	473781	9.72	ppbv	100
49) Chlorobenzene	15.59	112	620237	10.04	ppbv #	88
50) Ethylbenzene	15.63	91	1022025	10.12	ppbv	91
51) m,p-Xylene	15.78	91	1691552	21.15	ppbv	91
52) o-Xylene	16.38	91	753255	10.18	ppbv #	88

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\012712\01271202.D
Acq On : 27 Jan 2012 10:18 am
Sample : CCV VOA1 012712
Misc : CCV EPA TO15
MS Integration Params: CLME.P
Quant Time: Jan 27 11:33 2012

Vial: 2
Operator: RACHEL HILL
Inst : VOA 1
Multiplr: 1.00
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 : 011912V1

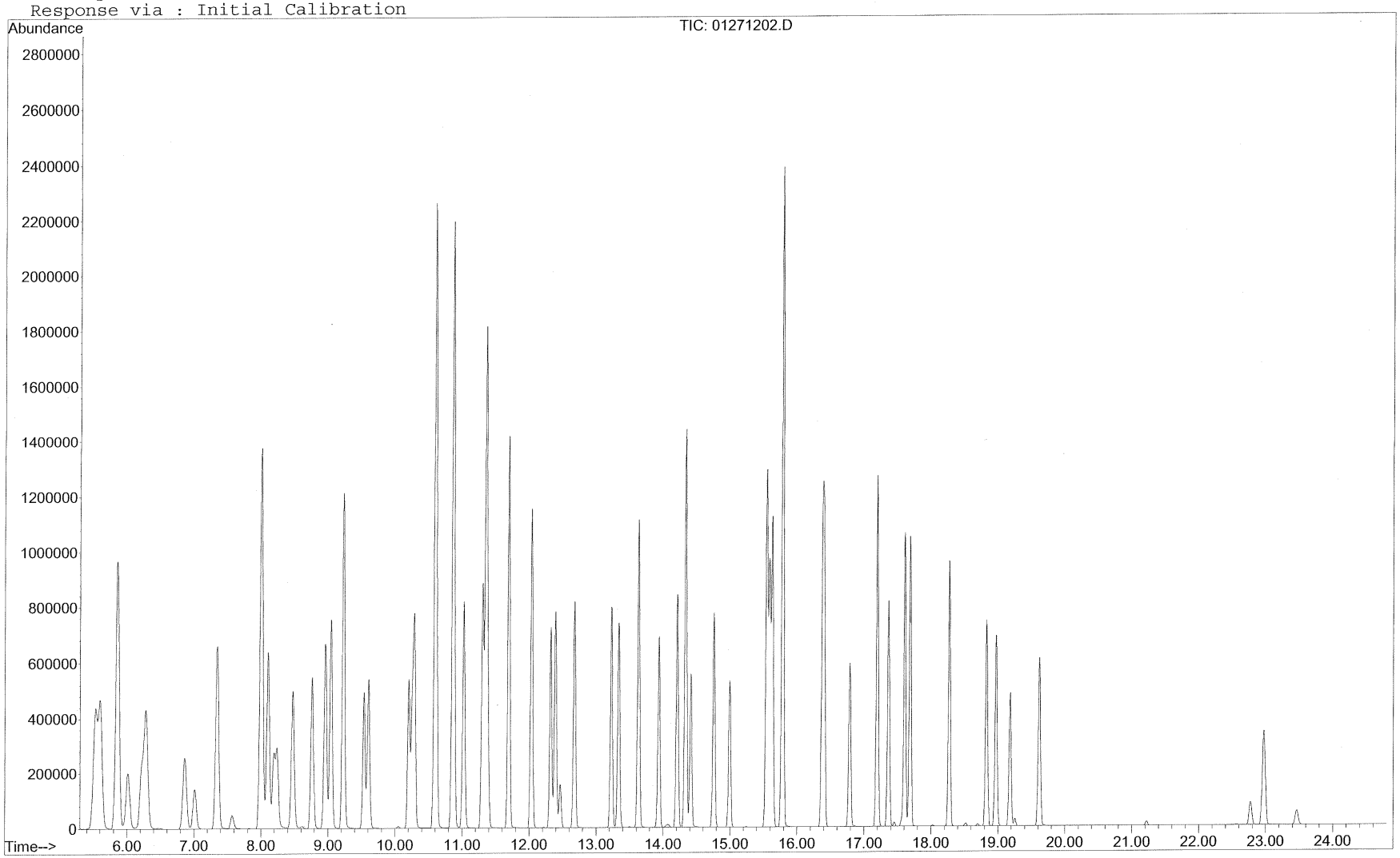
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
53) Styrene	16.40	104	550321	10.09 ppbv	98
54) Bromoform	16.79	173	367852	9.82 ppbv	98
56) 1,1,2,2-Tetrachloroethane	17.36	83	564353	10.24 ppbv #	99
57) 4-Ethyltoluene	17.61	105	878558	9.68 ppbv	95
58) 1,3,5-Trimethylbenzene	17.69	105	730039	9.48 ppbv	96
59) 1,2,4-Trimethylbenzene	18.27	105	671824	9.45 ppbv	96
60) 1,3-Dichlorobenzene	18.83	146	411579	9.88 ppbv	98
61) 1,4-Dichlorobenzene	18.97	146	379029	9.86 ppbv	98
62) Benzyl chloride	19.18	91	477731	9.84 ppbv	96
63) 1,2-Dichlorobenzene	19.62	146	363359	9.80 ppbv	98
64) 1,2,4-Trichlorobenzene	22.77	180	54338	8.93 ppbv	99
65) Hexachlorobutadiene	22.97	225	141318	8.99 ppbv	100
66) Naphthalene	23.46	128	87650	9.59 ppbv	98

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\012712\01271202.D Vial: 2
Acq On : 27 Jan 2012 10:18 am Operator: RACHEL HILL
Sample : CCV VOA1 012712 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 27 11:33 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_120130A** **Run No.:** 45849

Analytical Run Date: 1/30/2012 **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 013012	BFB_TUNE	TUNE	R45849	1/30/2012 9:54:00 AM	Robert Lynch		
CCV VOA1 013012	EPA_TO15	CCV	R45849	1/30/2012 11:25:00 AM	Robert Lynch		
RLVS VOA1 013012	EPA_TO15	RLVS	R45849	1/30/2012 12:11:00 PM	Robert Lynch		
MBLK VOA1 013012	EPA_TO15	MBLK	R45849	1/30/2012 1:04:00 PM	Charles O`Bryan		
1201676-032A	EPA_TO15	SAMP	R45849	1/30/2012 1:51:00 PM	Robert Lynch		Trip Blank. Received with tip of bottle vac unscrewed. Sample was at ambient pressure. We secured tip and ran per usual.
1201676-020A	EPA_TO15	SAMP	R45849	1/30/2012 2:37:00 PM	Robert Lynch		
1201676-020ADUP	EPA_TO15	DUP	R45849	1/30/2012 3:23:00 PM	Charles O`Bryan		
1201592-003A	EPA_TO15	SAMP	R45849	1/30/2012 4:08:00 PM	Robert Lynch		
1201592-041A	EPA_TO15	SAMP	R45849	1/30/2012 5:40:00 PM	Robert Lynch		
1201592-020A	EPA_TO15	SAMP	R45849	1/30/2012 6:26:00 PM	Robert Lynch		
1201592-041A	EPA_TO15	SAMP	R45849	1/30/2012 7:11:00 PM	Robert Lynch		
1201592-046A	EPA_TO15	SAMP	R45849	1/30/2012 8:03:00 PM	Robert Lynch		
1201592-021A	EPA_TO15	SAMP	R45849	1/30/2012 8:48:00 PM	Robert Lynch		
1201676-012A	EPA_TO15	SAMP	R45849	1/30/2012 9:37:00 PM	Robert Lynch		
1201676-013A	EPA_TO15	SAMP	R45849	1/30/2012 10:22:00 PM	Robert Lynch		
1201676-021A	EPA_TO15	SAMP	R45849	1/30/2012 11:52:00 PM	Robert Lynch		
1201676-014A	EPA_TO15	SAMP	R45849	1/31/2012 12:42:00 AM	Robert Lynch		
1201676-022A	EPA_TO15	SAMP	R45849	1/31/2012 1:28:00 AM	Robert Lynch		
1201676-015A	EPA_TO15	SAMP	R45849	1/31/2012 2:13:00 AM	Robert Lynch		
1201676-023A	EPA_TO15	SAMP	R45849	1/31/2012 2:59:00 AM	Robert Lynch		
1201676-016A	EPA_TO15	SAMP	R45849	1/31/2012 3:45:00 AM	Robert Lynch		
RLVS VOA1 013012	EPA_TO15	RLVS	R45849	1/31/2012 6:59:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

15-Feb-12

RunNo 45849

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
899541	BFB1 VOA1 013012	BFB_TUNE	TUNE	:\1\DATA\013012	1/30/2012 9:54:0	1	R45849		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		80	80		100	0	0	0	0	0	80%	50	120	0%	
175	M		7.3	7.3		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		6.5	6.5		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		46.6	46.6		100	0	0	0	0	0	47%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.6	6.6		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
899542	CCV VOA1 013012	EPA_TO15	CCV	:\1\DATA\013012	1/30/2012 11:25:	1	R45849		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	11.63	11.63		9.6	0	0	0.107	1	0	121%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	9.94	9.94		10	0	0	0.211	1	0	99%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	11.07	11.07		9.8	0	0	0.108	1	0	113%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.23	9.23		9.8	0	0	0.2	1	0	94%	70	130	0%	
1,1-Dichloroethane	A	ppbv	10.9	10.9		9.7	0	0	0.111	1	0	112%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.76	10.76		9.9	0	0	0.097	1	0	109%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	8.03	8.03		9.1	0	0	0.271	1	0	88%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	9.25	9.25		9.8	0	0	0.245	1	0	94%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.12	9.12		9.6	0	0	0.186	1	0	95%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	9.51	9.51		9.7	0	0	0.208	1	0	98%	70	130	0%	
1,2-Dichloroethane	A	ppbv	11.22	11.22		9.7	0	0	0.196	1	0	116%	70	130	0%	
1,2-Dichloropropane	A	ppbv	9.9	9.9		9.8	0	0	0.224	1	0	101%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.2	9.2		9.7	0	0	0.24	1	0	95%	70	130	0%	
1,3-Butadiene	A	ppbv	10.88	10.88		9.8	0	0	0.152	1	0	111%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.59	9.59		9.7	0	0	0.202	1	0	99%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
899542	CCV VOA1 013012	EPA_TO15	CCV	:\1\DATA\013012	1/30/2012 11:25:	1	R45849		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.46	9.46		9.6	0	0	0.194	1	0	99%	70	130	0%	
1,4-Dioxane	A	ppbv	9.56	9.56		9.6	0	0	0.128	1	0	100%	70	130	0%	
2-Butanone	A	ppbv	10.37	10.37		9.9	0	0	0.287	1	0	105%	70	130	0%	
2-Hexanone	A	ppbv	9.67	9.67		9.8	0	0	0.135	1	0	99%	70	130	0%	
2-Propanol	A	ppbv	10.29	10.29		10.1	0	0	0.329	1	0	102%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	9.62	9.62		10	0	0	0.157	1	0	96%	70	130	0%	
Acetone	A	ppbv	11.17	11.17		10	0	0	0.43	1	0	112%	70	130	0%	
Benzene	A	ppbv	10.82	10.82		9.6	0	0	0.126	1	0	113%	70	130	0%	
Benzyl chloride	A	ppbv	9.6	9.6		9.7	0	0	0.155	1	0	99%	70	130	0%	
Bromodichloromethane	A	ppbv	9.64	9.64		9.6	0	0	0.156	1	0	100%	70	130	0%	
Bromoform	A	ppbv	9.99	9.99		9.6	0	0	0.197	1	0	104%	70	130	0%	
Bromomethane	A	ppbv	9.41	9.41		9.3	0	0	0.075	1	0	101%	70	130	0%	
Carbon disulfide	A	ppbv	10.04	10.04		9.7	0	0	0.093	1	0	104%	70	130	0%	
Carbon tetrachloride	A	ppbv	10.92	10.92		9.5	0	0	0.114	1	0	115%	70	130	0%	
Chlorobenzene	A	ppbv	9.74	9.74		9.9	0	0	0.275	1	0	98%	70	130	0%	
Chlorodibromomethane	A	ppbv	9.55	9.55		9.2	0	0	0.165	1	0	104%	70	130	0%	
Chloroethane	A	ppbv	9.47	9.47		9.8	0	0	0.063	1	0	97%	70	130	0%	
Chloroform	A	ppbv	11.58	11.58		9.4	0	0	0.126	1	0	123%	70	130	0%	
Chloromethane	A	ppbv	10.48	10.48		9.8	0	0	0.104	1	0	107%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	10.63	10.63		9.8	0	0	0.107	1	0	108%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	9.34	9.34		9.5	0	0	0.166	1	0	98%	70	130	0%	
Cyclohexane	A	ppbv	12.27	12.27		9.8	0	0	0.684	2	0	125%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.22	9.22		9.2	0	0	0.086	1	0	100%	70	130	0%	
Ethanol	A	ppbv	9.54	9.54		9.2	0	0	1.962	5	0	104%	70	130	0%	
Ethyl acetate	A	ppbv	10.59	10.59		9.8	0	0	0.157	1	0	108%	70	130	0%	
Ethylbenzene	A	ppbv	9.76	9.76		9.8	0	0	0.737	2	0	100%	70	130	0%	
Heptane	A	ppbv	11.24	11.24		9.9	0	0	0.249	1	0	114%	70	130	0%	
Hexachlorobutadiene	A	ppbv	8.2	8.2		9.4	0	0	0.374	2	0	87%	70	130	0%	
m,p-Xylene	A	ppbv	20.67	20.67		19.2	0	0	0.524	2	0	108%	70	130	0%	
Methylene chloride	A	ppbv	11	11		10	0	0	2.077	5	0	110%	70	130	0%	
n-Hexane	A	ppbv	11.48	11.48		10.1	0	0	0.692	2	0	114%	70	130	0%	
Naphthalene	A	ppbv	8.19	8.19		9.2	0	0	0.247	1	0	89%	70	130	0%	
o-Xylene	A	ppbv	9.81	9.81		10	0	0	0.258	1	0	98%	70	130	0%	
Propylene	A	ppbv	11.03	11.03		10.2	0	0	0.075	1	0	108%	70	130	0%	B

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
899542	CCV VOA1 013012	EPA_TO15	CCV	\1\DATA\013012	1/30/2012 11:25:	1	R45849		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	9.72	9.72		9.8	0	0	0.263	1	0	99%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	11.1	11.1		9.9	0	0	0.228	1	0	112%	70	130	0%	
Tetrachloroethene	A	ppbv	9.68	9.68		9.6	0	0	0.148	1	0	101%	70	130	0%	
Tetrahydrofuran	A	ppbv	11.67	11.67		10	0	0	0.201	1	0	117%	70	130	0%	
Toluene	A	ppbv	9.57	9.57		9.8	0	0	0.158	1	0	98%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	11	11		9.8	0	0	0.117	1	0	112%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	8.79	8.79		9.1	0	0	0.171	1	0	97%	70	130	0%	
Trichloroethene	A	ppbv	9.71	9.71		9.6	0	0	0.119	1	0	101%	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	12.08	12.08		9.9	0	0	0.266	1	0	122%	70	130	0%	
Vinyl chloride	A	ppbv	9.69	9.69		9.4	0	0	0.072	1	0	103%	70	130	0%	
Xylenes, Total	C	ppbv	30.48	30.48		29.2	0	0	0.782	3	0	104%	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	12.59	12.59		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
899543	RLVS VOA1 013012	EPA_TO15	RLVS	\1\DATA\013012	1/30/2012 12:11:	1	R45849		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	1.12	1.12		1	0	0	0.211	1	0	112%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	0.84	0.84		0.98	0	0	0.108	1	0	86%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.74	0.74		0.98	0	0	0.2	1	0	76%	70	130	0%	
1,1-Dichloroethane	A	ppbv	0.92	0.92		0.97	0	0	0.111	1	0	95%	70	130	0%	
1,1-Dichloroethene	A	ppbv	0.96	0.96		0.99	0	0	0.097	1	0	97%	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	1.13	1.13		0.98	0	0	0.245	1	0	115%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.72	0.72		0.96	0	0	0.186	1	0	75%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.2	1.2		0.97	0	0	0.208	1	0	124%	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	0.8	0.8		0.98	0	0	0.224	1	0	82%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\013012\01301203.D Vial: 3
Acq On : 30 Jan 2012 11:25 am Operator: RACHEL HILL
Sample : CCV VOA1 013012 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	114	0.00
2	T	Propylene	1.441	1.558	-8.1	99	0.00
3	T	Dichlorodifluoromethane	3.080	3.086	-0.2	100	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.240	2.262	-1.0	103	0.00
5	T	Chloromethane	1.387	1.530	-10.3	103	0.00
6	T	Vinyl chloride	1.732	1.785	-3.1	109	0.00
7	T	1,3-Butadiene	1.265	1.405	-11.1	105	0.00
8	T	Bromomethane	1.154	1.168	-1.2	106	0.00
9	T	Chloroethane	0.748	0.770	-2.9	106	0.00
10	T	Trichlorofluoromethane	2.684	2.778	-3.5	113	0.00
11	T	Ethanol	0.303	0.314	-3.6	112	0.00
12	T	Freon113	2.232	2.522	-13.0	126	0.00
13	T	1,1-Dichloroethene	1.891	2.055	-8.7	117	0.00
14	T	Acetone	1.771	1.979	-11.7	121	0.00
15	T	Carbon disulfide	3.185	3.296	-3.5	108	0.00
16	T	2-Propanol	1.561	1.590	-1.9	105	0.00
17	T	Methylene chloride	1.503	1.654	-10.0	120	0.00
18	T	tert-Butyl Methyl Ether	2.251	2.524	-12.1	128	0.00
19	T	trans-1,2-Dichloroethene	1.796	2.016	-12.2	123	0.00
20	T	n-Hexane	1.985	2.256	-13.7	122	0.00
21	T	1,1-Dichloroethane	2.078	2.334	-12.3	123	0.00
22	T	Vinyl acetate	2.668	3.256	-22.0	128	0.00
23	T	cis-1,2-Dichloroethene	1.073	1.164	-8.5	121	0.00
24	T	2-Butanone	1.868	1.957	-4.8	108	0.00
25	T	Ethyl acetate	2.374	2.566	-8.1	112	0.00
26	T	Tetrahydrofuran	1.222	1.426	-16.7	113	0.00
27	T	Chloroform	2.165	2.558	-18.2	122	0.00
28	T	1,1,1-Trichloroethane	1.962	2.377	-21.2	129	0.00
29	T	Cyclohexane	1.984	2.485	-25.3	126	0.00
30	T	Carbon tetrachloride	1.756	2.019	-15.0	131	0.00
31	T	Benzene	2.715	3.059	-12.7	126	0.00
32	T	1,2-Dichloroethane	1.214	1.403	-15.6	126	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	117	0.00
34	T	Heptane	0.838	0.951	-13.5	116	0.00
35	T	Trichloroethene	0.436	0.441	-1.1	116	0.00
36	T	1,2-Dichloropropane	0.370	0.374	-1.1	115	0.00
37	T	1,4-Dioxane	0.117	0.117	0.0	106	0.00
38	T	Bromodichloromethane	0.613	0.616	-0.5	115	0.00
39	T	cis-1,3-Dichloropropene	0.520	0.512	1.5	112	0.00
40	T	4-Methyl-2-pentanone	0.232	0.223	3.9	106	0.00
41	T	Toluene	0.929	0.907	2.4	110	0.00
42	T	trans-1,3-Dichloropropene	0.437	0.422	3.4	108	0.00
43	T	1,1,2-Trichloroethane	0.322	0.303	5.9	108	0.00
44	T	Tetrachloroethene	0.503	0.507	-0.8	110	0.00
45	T	2-Hexanone	0.492	0.486	1.2	103	0.00
46	T	Chlorodibromomethane	0.476	0.464	2.5	114	0.00
47	T	1,2-Dibromoethane	0.474	0.450	5.1	108	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	110	0.00
49	T	Chlorobenzene	0.901	0.886	1.7	107	0.00
50	T	Ethylbenzene	1.472	1.466	0.4	106	0.00
51	T	m,p-Xylene	1.166	1.255	-7.6	108	0.00
52	T	o-Xylene	1.079	1.058	1.9	105	0.00
53	T	Styrene	0.795	0.789	0.8	104	0.00
54	T	Bromoform	0.546	0.568	-4.0	113	0.00
55	S	4-Bromofluorobenzene	0.597	0.601	-0.7	109	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\013012\01301203.D Vial: 3
Acq On : 30 Jan 2012 11:25 am Operator: RACHEL HILL
Sample : CCV VOA1 013012 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	0.799	0.6	101	0.00
57	T	4-Ethyltoluene	1.324	1.273	3.9	103	0.00
58	T	1,3,5-Trimethylbenzene	1.123	1.065	5.2	104	0.00
59	T	1,2,4-Trimethylbenzene	1.037	0.979	5.6	101	0.00
60	T	1,3-Dichlorobenzene	0.608	0.601	1.2	101	0.00
61	T	1,4-Dichlorobenzene	0.561	0.553	1.4	101	0.00
62	T	Benzyl chloride	0.708	0.700	1.1	102	0.00
63	T	1,2-Dichlorobenzene	0.540	0.530	1.9	97	0.00
64	T	1,2,4-Trichlorobenzene	0.089	0.078	12.4	92	0.00
65	T	Hexachlorobutadiene	0.229	0.200	12.7	94	0.00
66		Naphthalene	0.133	0.119	10.5	92	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\013012\01301203.D Vial: 3
Acq On : 30 Jan 2012 11:25 am Operator: RACHEL HILL
Sample : CCV VOA1 013012 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 30 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	10.60	130	421081	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.69	114	1320919	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.54	117	844845	12.50	ppbv	0.00
System Monitoring Compounds						
55) 4-Bromofluorobenzene	17.19	95	507656	12.59	ppbv	0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 100.72%			
Target Compounds						Qvalue
2) Propylene	5.52	41	535384	11.03	ppbv	93
3) Dichlorodifluoromethane	5.60	85	956287	9.22	ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.85	135	723912	9.59	ppbv #	76
5) Chloromethane	6.01	50	489600	10.48	ppbv	99
6) Vinyl chloride	6.21	62	565145	9.69	ppbv #	99
7) 1,3-Butadiene	6.27	39	463692	10.88	ppbv	89
8) Bromomethane	6.86	94	365847	9.41	ppbv	98
9) Chloroethane	7.01	64	238786	9.47	ppbv	95
10) Trichlorofluoromethane	7.34	101	898420	9.94	ppbv #	98
11) Ethanol	7.56	45	97355	9.54	ppbv	100
12) Freon113	8.00	101	832417	11.07	ppbv	90
13) 1,1-Dichloroethene	8.10	61	685235	10.76	ppbv #	86
14) Acetone	8.19	43	666600	11.17	ppbv #	92
15) Carbon disulfide	8.47	76	1076991	10.04	ppbv #	100
16) 2-Propanol	8.23	45	541124	10.29	ppbv #	1
17) Methylene chloride	8.76	49	557049	11.00	ppbv #	76
18) tert-Butyl Methyl Ether	8.95	73	841894	11.10	ppbv #	84
19) trans-1,2-Dichloroethene	9.04	61	665577	11.00	ppbv #	81
20) n-Hexane	9.23	57	767623	11.48	ppbv #	89
21) 1,1-Dichloroethane	9.60	63	762791	10.90	ppbv #	96
22) Vinyl acetate	9.53	43	1086006	12.08	ppbv #	95
23) cis-1,2-Dichloroethene	10.28	96	384106	10.63	ppbv #	80
24) 2-Butanone	10.25	43	652724	10.37	ppbv #	89
25) Ethyl acetate	10.20	43	847258	10.59	ppbv #	100
26) Tetrahydrofuran	10.59	42	480402	11.67	ppbv #	87
27) Chloroform	10.61	83	844331	11.58	ppbv	100
28) 1,1,1-Trichloroethane	10.86	97	768678	11.63	ppbv #	93
29) Cyclohexane	10.86	56	820265	12.27	ppbv	85
30) Carbon tetrachloride	11.02	117	646236	10.92	ppbv	98
31) Benzene	11.30	78	989284	10.82	ppbv	94
32) 1,2-Dichloroethane	11.38	62	458590	11.22	ppbv #	98
34) Heptane	11.35	43	994631	11.24	ppbv #	87
35) Trichloroethene	12.03	130	447008	9.71	ppbv	93
36) 1,2-Dichloropropane	12.39	63	387491	9.90	ppbv #	95
37) 1,4-Dioxane	12.46	88	118308	9.56	ppbv #	78
38) Bromodichloromethane	12.67	83	624767	9.64	ppbv	98
39) cis-1,3-Dichloropropene	13.23	75	513843	9.34	ppbv	96
40) 4-Methyl-2-pentanone	13.34	58	236023	9.62	ppbv #	89
41) Toluene	13.63	91	939058	9.57	ppbv	97
42) trans-1,3-Dichloropropene	13.93	75	405683	8.79	ppbv	97
43) 1,1,2-Trichloroethane	14.21	97	313823	9.23	ppbv	95
44) Tetrachloroethene	14.34	166	514367	9.68	ppbv	99
45) 2-Hexanone	14.41	43	503139	9.67	ppbv	92
46) Chlorodibromomethane	14.75	129	480729	9.55	ppbv	99
47) 1,2-Dibromoethane	14.99	107	456399	9.12	ppbv	100
49) Chlorobenzene	15.59	112	592854	9.74	ppbv #	87
50) Ethylbenzene	15.63	91	970778	9.76	ppbv	92
51) m,p-Xylene	15.78	91	1629086	20.67	ppbv	92
52) o-Xylene	16.38	91	714980	9.81	ppbv #	87

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\013012\01301203.D Vial: 3
Acq On : 30 Jan 2012 11:25 am Operator: RACHEL HILL
Sample : CCV VOA1 013012 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 30 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	522533	9.72 ppbv	98
54)	Bromoform	16.78	173	368651	9.99 ppbv	98
56)	1,1,2,2-Tetrachloroethane	17.36	83	540183	9.94 ppbv #	99
57)	4-Ethyltoluene	17.60	105	843373	9.43 ppbv	96
58)	1,3,5-Trimethylbenzene	17.69	105	698151	9.20 ppbv	96
59)	1,2,4-Trimethylbenzene	18.27	105	648225	9.25 ppbv	97
60)	1,3-Dichlorobenzene	18.82	146	393859	9.59 ppbv	98
61)	1,4-Dichlorobenzene	18.97	146	358585	9.46 ppbv	98
62)	Benzyl chloride	19.18	91	459109	9.60 ppbv	97
63)	1,2-Dichlorobenzene	19.61	146	347377	9.51 ppbv	98
64)	1,2,4-Trichlorobenzene	22.77	180	48145	8.03 ppbv	98
65)	Hexachlorobutadiene	22.97	225	127014	8.20 ppbv	100
66)	Naphthalene	23.46	128	73722	8.19 ppbv	97

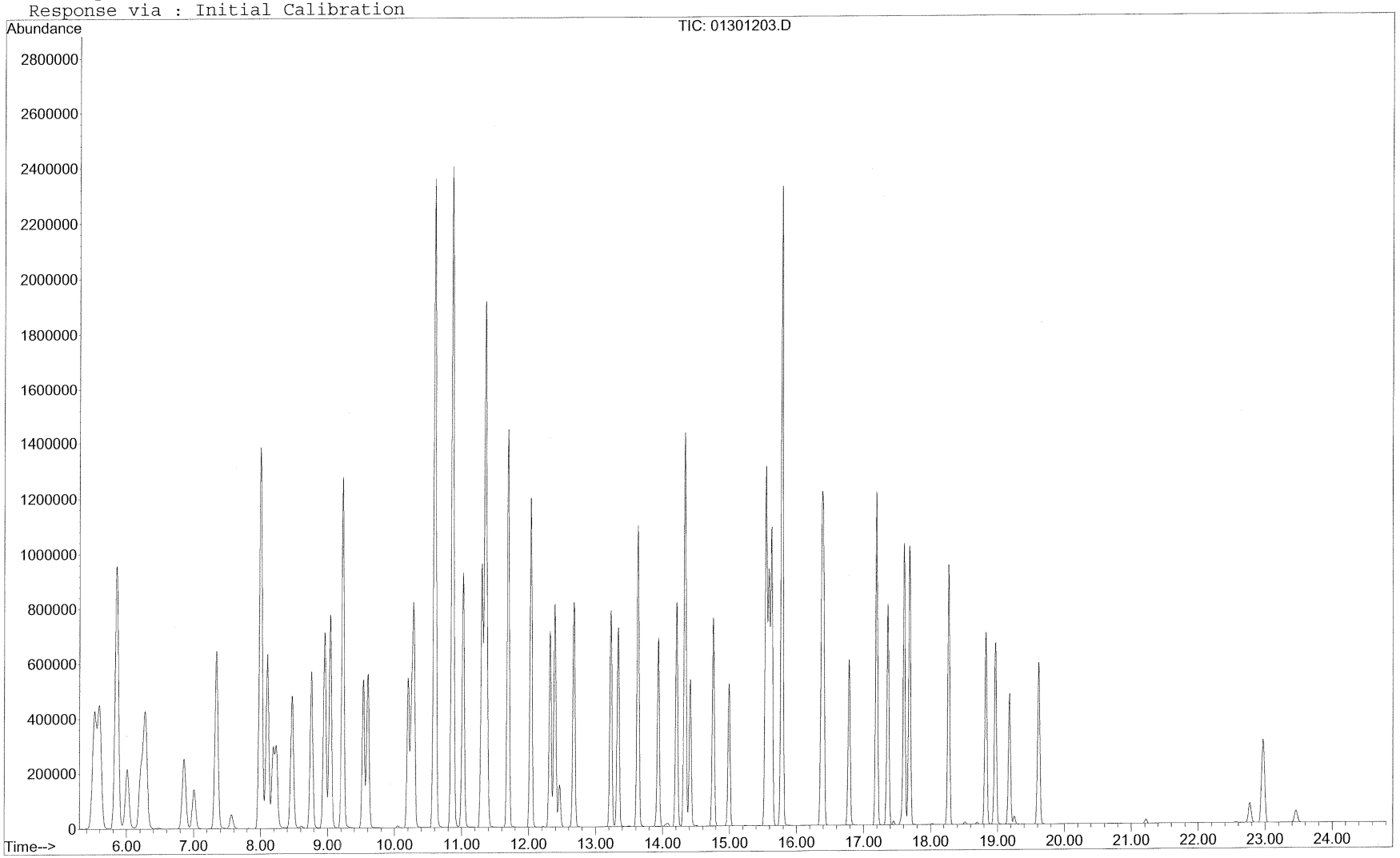
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\013012\01301203.D
Acq On : 30 Jan 2012 11:25 am
Sample : CCV VOA1 013012
Misc : CCV EPA TO15
MS Integration Params: CLME.P
Quant Time: Jan 30 11:50 2012

Vial: 3
Operator: RACHEL HILL
Inst : VOA 1
Multiplr: 1.00
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_120201A** **Run No.:** 45934

Analytical Run Date: 2/1/2012 **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 020112	BFB_TUNE	TUNE	R45934	2/1/2012 12:22:00 PM	Robert Lynch		
CCV VOA1 020112	EPA_TO15	CCV	R45934	2/1/2012 2:12:00 PM	Robert Lynch		
RLVS VOA1 020112	EPA_TO15	RLVS	R45934	2/1/2012 3:04:00 PM	Robert Lynch		
MBLK VOA1 020112	EPA_TO15	MBLK	R45934	2/1/2012 4:23:00 PM	Charles O`Bryan		
1201676-001A	EPA_TO15	SAMP	R45934	2/1/2012 5:12:00 PM	Robert Lynch		Sample was over-diluted. Will re-run at lower dilution.
1201676-001Adup	EPA_TO15	DUP	R45934	2/1/2012 6:00:00 PM	Charles O`Bryan		
1201676-019A	EPA_TO15	SAMP	R45934	2/1/2012 6:48:00 PM	Robert Lynch		
1201592-047A	EPA_TO15	SAMP	R45934	2/2/2012 12:28:00 AM	Robert Lynch		
1201676-006A	EPA_TO15	SAMP	R45934	2/2/2012 1:21:00 AM	Robert Lynch		
1201676-007A	EPA_TO15	SAMP	R45934	2/2/2012 2:16:00 AM	Robert Lynch		
1201676-017A	EPA_TO15	SAMP	R45934	2/2/2012 3:09:00 AM	Robert Lynch		
1201676-018A	EPA_TO15	SAMP	R45934	2/2/2012 4:03:00 AM	Robert Lynch		
RLVS2 VOA1 02011	EPA_TO15	RLVS	R45934	2/2/2012 4:52:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

15-Feb-12

RunNo 45934

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
901199	BFB1 VOA1 020112	BFB_TUNE	TUNE	:\1\DATA\020112	2/1/2012 12:22:0	1	R45934		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		78.8	78.8		100	0	0	0	0	0	79%	50	120	0%	
175	M		7.2	7.2		100	0	0	0	0	0	7%	4	9	0%	
176	M		100	100		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		24.9	24.9		100	0	0	0	0	0	25%	8	40	0%	
75	M		49.7	49.7		100	0	0	0	0	0	50%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.8	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
901200	CCV VOA1 020112	EPA_TO15	CCV	:\1\DATA\020112	2/1/2012 2:12:00	1	R45934		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	9.8	9.8		9.6	0	0	0.107	1	0	102%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	9.16	9.16		10	0	0	0.211	1	0	92%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.43	10.43		9.8	0	0	0.108	1	0	106%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	8.62	8.62		9.8	0	0	0.2	1	0	88%	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	10.49	10.49		9.9	0	0	0.097	1	0	106%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	7.4	7.4		9.1	0	0	0.271	1	0	81%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	8.48	8.48		9.8	0	0	0.245	1	0	87%	70	130	0%	
1,2-Dibromoethane	A	ppbv	8.47	8.47		9.6	0	0	0.186	1	0	88%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	8.71	8.71		9.7	0	0	0.208	1	0	90%	70	130	0%	
1,2-Dichloroethane	A	ppbv	9.61	9.61		9.7	0	0	0.196	1	0	99%	70	130	0%	
1,2-Dichloropropane	A	ppbv	9.07	9.07		9.8	0	0	0.224	1	0	93%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	8.52	8.52		9.7	0	0	0.24	1	0	88%	70	130	0%	
1,3-Butadiene	A	ppbv	11.32	11.32		9.8	0	0	0.152	1	0	116%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	8.85	8.85		9.7	0	0	0.202	1	0	91%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
901200	CCV VOA1 020112	EPA_TO15	CCV	:\1\DATA\020112	2/1/2012 2:12:00	1	R45934		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	8.86	8.86		9.6	0	0	0.194	1	0	92%	70	130	0%	
1,4-Dioxane	A	ppbv	8.45	8.45		9.6	0	0	0.128	1	0	88%	70	130	0%	
2-Butanone	A	ppbv	9.49	9.49		9.9	0	0	0.287	1	0	96%	70	130	0%	
2-Hexanone	A	ppbv	8.42	8.42		9.8	0	0	0.135	1	0	86%	70	130	0%	
2-Propanol	A	ppbv	9	9		10.1	0	0	0.329	1	0	89%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	8.56	8.56		10	0	0	0.157	1	0	86%	70	130	0%	
Acetone	A	ppbv	9.35	9.35		10	0	0	0.43	1	0	94%	70	130	0%	
Benzene	A	ppbv	9.24	9.24		9.6	0	0	0.126	1	0	96%	70	130	0%	
Benzyl chloride	A	ppbv	8.18	8.18		9.7	0	0	0.155	1	0	84%	70	130	0%	
Bromodichloromethane	A	ppbv	9.13	9.13		9.6	0	0	0.156	1	0	95%	70	130	0%	
Bromoform	A	ppbv	9.08	9.08		9.6	0	0	0.197	1	0	95%	70	130	0%	
Bromomethane	A	ppbv	9.07	9.07		9.3	0	0	0.075	1	0	98%	70	130	0%	
Carbon disulfide	A	ppbv	9.63	9.63		9.7	0	0	0.093	1	0	99%	70	130	0%	
Carbon tetrachloride	A	ppbv	9.1	9.1		9.5	0	0	0.114	1	0	96%	70	130	0%	M
Chlorobenzene	A	ppbv	9.3	9.3		9.9	0	0	0.275	1	0	94%	70	130	0%	
Chlorodibromomethane	A	ppbv	8.87	8.87		9.2	0	0	0.165	1	0	96%	70	130	0%	
Chloroethane	A	ppbv	9.02	9.02		9.8	0	0	0.063	1	0	92%	70	130	0%	
Chloroform	A	ppbv	10.14	10.14		9.4	0	0	0.126	1	0	108%	70	130	0%	
Chloromethane	A	ppbv	10.61	10.61		9.8	0	0	0.104	1	0	108%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.33	9.33		9.8	0	0	0.107	1	0	95%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	8.66	8.66		9.5	0	0	0.166	1	0	91%	70	130	0%	
Cyclohexane	A	ppbv	10.57	10.57		9.8	0	0	0.684	2	0	108%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	8.72	8.72		9.2	0	0	0.086	1	0	95%	70	130	0%	
Ethanol	A	ppbv	8.45	8.45		9.2	0	0	1.962	5	0	92%	70	130	0%	
Ethyl acetate	A	ppbv	9.33	9.33		9.8	0	0	0.157	1	0	95%	70	130	0%	
Ethylbenzene	A	ppbv	9.26	9.26		9.8	0	0	0.737	2	0	94%	70	130	0%	
Heptane	A	ppbv	10.34	10.34		9.9	0	0	0.249	1	0	104%	70	130	0%	
Hexachlorobutadiene	A	ppbv	7.34	7.34		9.4	0	0	0.374	2	0	78%	70	130	0%	
m,p-Xylene	A	ppbv	19.48	19.48		19.2	0	0	0.524	2	0	101%	70	130	0%	
Methylene chloride	A	ppbv	10.41	10.41		10	0	0	2.077	5	0	104%	70	130	0%	
n-Hexane	A	ppbv	10.31	10.31		10.1	0	0	0.692	2	0	102%	70	130	0%	
Naphthalene	A	ppbv	7.97	7.97		9.2	0	0	0.247	1	0	87%	70	130	0%	
o-Xylene	A	ppbv	9.21	9.21		10	0	0	0.258	1	0	92%	70	130	0%	
Propylene	A	ppbv	10.36	10.36		10.2	0	0	0.075	1	0	102%	70	130	0%	B

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
901200	CCV VOA1 020112	EPA_TO15	CCV	.\1\DATA\020112	2/1/2012 2:12:00	1	R45934		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	9.2	9.2		9.8	0	0	0.263	1	0	94%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	8.89	8.89		9.9	0	0	0.228	1	0	90%	70	130	0%	
Tetrachloroethene	A	ppbv	9.16	9.16		9.6	0	0	0.148	1	0	95%	70	130	0%	
Tetrahydrofuran	A	ppbv	9.94	9.94		10	0	0	0.201	1	0	99%	70	130	0%	
Toluene	A	ppbv	9.06	9.06		9.8	0	0	0.158	1	0	92%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	9.98	9.98		9.8	0	0	0.117	1	0	102%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	8.19	8.19		9.1	0	0	0.171	1	0	90%	70	130	0%	
Trichloroethene	A	ppbv	9.22	9.22		9.6	0	0	0.119	1	0	96%	70	130	0%	
Trichlorofluoromethane	A	ppbv	9.41	9.41		9.6	0	0	0.148	1	0	98%	70	130	0%	
Vinyl acetate	A	ppbv	9.63	9.63		9.9	0	0	0.266	1	0	97%	70	130	0%	
Vinyl chloride	A	ppbv	8.38	8.38		9.4	0	0	0.072	1	0	89%	70	130	0%	
Xylenes, Total	C	ppbv	28.69	28.69		29.2	0	0	0.782	3	0	98%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		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	12.46	12.46		12.5	0	0	0	0	0	100%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
901201	RLVS VOA1 020112	EPA_TO15	RLVS	.\1\DATA\020112	2/1/2012 3:04:00	1	R45934		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	1.11	1.11		1	0	0	0.211	1	0	111%	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	0.8	0.8		0.98	0	0	0.2	1	0	82%	70	130	0%	
1,1-Dichloroethane	A	ppbv	0.98	0.98		0.97	0	0	0.111	1	0	101%	70	130	0%	
1,1-Dichloroethene	A	ppbv	0.96	0.96		0.99	0	0	0.097	1	0	97%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.24	1.24		0.91	0	0	0.271	1	0	136%	70	130	0%	S
1,2,4-Trimethylbenzene	A	ppbv	1.13	1.13		0.98	0	0	0.245	1	0	115%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.75	0.75		0.96	0	0	0.186	1	0	78%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.17	1.17		0.97	0	0	0.208	1	0	121%	70	130	0%	
1,2-Dichloroethane	A	ppbv	0.98	0.98		0.97	0	0	0.196	1	0	101%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.84	0.84		0.98	0	0	0.224	1	0	86%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\020112\02011205.D Vial: 3
Acq On : 1 Feb 2012 2:12 pm Operator: RACHEL HILL
Sample : CCV VOA1 020112 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	98	0.00
2	T	Propylene	1.441	1.464	-1.6	81	0.00
3	T	Dichlorodifluoromethane	3.080	2.921	5.2	82	0.01
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.240	2.091	6.7	83	0.00
5	T	Chloromethane	1.387	1.548	-11.6	91	0.02
6	T	Vinyl chloride	1.732	1.543	10.9	81	0.02
7	T	1,3-Butadiene	1.265	1.462	-15.6	95	0.00
8	T	Bromomethane	1.154	1.125	2.5	88	0.00
9	T	Chloroethane	0.748	0.733	2.0	87	0.00
10	T	Trichlorofluoromethane	2.684	2.631	2.0	93	0.00
11	T	Ethanol	0.303	0.278	8.3	86	0.00
12	T	Freon113	2.232	2.375	-6.4	103	0.00
13	T	1,1-Dichloroethene	1.891	2.003	-5.9	99	0.00
14	T	Acetone	1.771	1.657	6.4	88	0.00
15	T	Carbon disulfide	3.185	3.163	0.7	90	0.00
16	T	2-Propanol	1.561	1.392	10.8	79	0.00
17	T	Methylene chloride	1.503	1.565	-4.1	98	0.00
18	T	tert-Butyl Methyl Ether	2.251	2.022	10.2	89	0.00
19	T	trans-1,2-Dichloroethene	1.796	1.828	-1.8	97	0.00
20	T	n-Hexane	1.985	2.026	-2.1	95	0.00
21	T	1,1-Dichloroethane	2.078	2.067	0.5	94	0.00
22	T	Vinyl acetate	2.668	2.596	2.7	88	0.00
23	T	cis-1,2-Dichloroethene	1.073	1.022	4.8	92	0.00
24	T	2-Butanone	1.868	1.790	4.2	86	0.00
25	T	Ethyl acetate	2.374	2.260	4.8	86	0.00
26	T	Tetrahydrofuran	1.222	1.215	0.6	83	0.00
27	T	Chloroform	2.165	2.239	-3.4	92	0.00
28	T	1,1,1-Trichloroethane	1.962	2.002	-2.0	94	0.00
29	T	Cyclohexane	1.984	2.140	-7.9	94	0.00
30	T	Carbon tetrachloride	1.756	1.681	4.3	94	0.00
31	T	Benzene	2.715	2.613	3.8	93	0.00
32	T	1,2-Dichloroethane	1.214	1.203	0.9	93	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	97	0.00
34	T	Heptane	0.838	0.875	-4.4	89	0.00
35	T	Trichloroethene	0.436	0.418	4.1	91	0.00
36	T	1,2-Dichloropropane	0.370	0.343	7.3	88	0.00
37	T	1,4-Dioxane	0.117	0.103	12.0	78	0.00
38	T	Bromodichloromethane	0.613	0.583	4.9	91	0.00
39	T	cis-1,3-Dichloropropene	0.520	0.474	8.8	86	0.00
40	T	4-Methyl-2-pentanone	0.232	0.199	14.2	79	0.00
41	T	Toluene	0.929	0.858	7.6	87	0.00
42	T	trans-1,3-Dichloropropene	0.437	0.393	10.1	83	0.00
43	T	1,1,2-Trichloroethane	0.322	0.283	12.1	84	0.00
44	T	Tetrachloroethene	0.503	0.480	4.6	87	0.00
45	T	2-Hexanone	0.492	0.423	14.0	75	0.00
46	T	Chlorodibromomethane	0.476	0.431	9.5	88	0.00
47	T	1,2-Dibromoethane	0.474	0.418	11.8	83	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	92	0.00
49	T	Chlorobenzene	0.901	0.846	6.1	85	0.00
50	T	Ethylbenzene	1.472	1.391	5.5	84	0.00
51	T	m,p-Xylene	1.166	1.183	-1.5	85	0.00
52	T	o-Xylene	1.079	0.993	8.0	82	0.00
53	T	Styrene	0.795	0.746	6.2	82	0.00
54	T	Bromoform	0.546	0.516	5.5	85	0.00
55	S	4-Bromofluorobenzene	0.597	0.595	0.3	90	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\020112\02011205.D Vial: 3
Acq On : 1 Feb 2012 2:12 pm Operator: RACHEL HILL
Sample : CCV VOA1 020112 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	0.736	8.5	77	0.00
57	T	4-Ethyltoluene	1.324	1.182	10.7	79	0.00
58	T	1,3,5-Trimethylbenzene	1.123	0.986	12.2	80	0.00
59	T	1,2,4-Trimethylbenzene	1.037	0.897	13.5	77	0.00
60	T	1,3-Dichlorobenzene	0.608	0.554	8.9	77	0.00
61	T	1,4-Dichlorobenzene	0.561	0.517	7.8	78	0.00
62	T	Benzyl chloride	0.708	0.597	15.7	72	0.00
63	T	1,2-Dichlorobenzene	0.540	0.485	10.2	74	0.00
64	T	1,2,4-Trichlorobenzene	0.089	0.072	19.1	70	0.00
65	T	Hexachlorobutadiene	0.229	0.179	21.8	70	0.00
66		Naphthalene	0.133	0.115	13.5	74	0.01

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\020112\02011205.D Vial: 3
Acq On : 1 Feb 2012 2:12 pm Operator: RACHEL HILL
Sample : CCV VOA1 020112 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 2 11:22 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	364862	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.69	114	1099899	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.54	117	701506	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.19	95	417209	12.46	ppbv	0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 99.68%			

Target Compounds						Qvalue
2) Propylene	5.53	41	435876	10.36	ppbv	92
3) Dichlorodifluoromethane	5.60	85	784425	8.72	ppbv	98
4) 1,2-Dichloro-1,2,2,2-tetra	5.86	135	579819	8.87	ppbv #	74
5) Chloromethane	6.02	50	429277	10.61	ppbv	99
6) Vinyl chloride	6.23	62	423494	8.38	ppbv #	99
7) 1,3-Butadiene	6.28	39	418133	11.32	ppbv	92
8) Bromomethane	6.86	94	305331	9.07	ppbv	97
9) Chloroethane	7.01	64	196953	9.02	ppbv #	95
10) Trichlorofluoromethane	7.34	101	737112	9.41	ppbv #	98
11) Ethanol	7.57	45	74724	8.45	ppbv	99
12) Freon113	8.00	101	679352	10.43	ppbv	89
13) 1,1-Dichloroethene	8.10	61	578885	10.49	ppbv #	86
14) Acetone	8.19	43	483633	9.35	ppbv #	90
15) Carbon disulfide	8.47	76	895561	9.63	ppbv #	99
16) 2-Propanol	8.24	45	410338	9.00	ppbv #	1
17) Methylene chloride	8.76	49	456811	10.41	ppbv #	76
18) tert-Butyl Methyl Ether	8.96	73	584279	8.89	ppbv #	83
19) trans-1,2-Dichloroethene	9.04	61	523010	9.98	ppbv #	82
20) n-Hexane	9.23	57	597399	10.31	ppbv #	88
21) 1,1-Dichloroethane	9.60	63	585116	9.65	ppbv #	96
22) Vinyl acetate	9.53	43	750221	9.63	ppbv #	94
23) cis-1,2-Dichloroethene	10.29	96	292235	9.33	ppbv #	81
24) 2-Butanone	10.25	43	517301	9.49	ppbv #	87
25) Ethyl acetate	10.20	43	646476	9.33	ppbv #	99
26) Tetrahydrofuran	10.59	42	354786	9.94	ppbv #	86
27) Chloroform	10.61	83	640488	10.14	ppbv	100
28) 1,1,1-Trichloroethane	10.86	97	560969	9.80	ppbv #	91
29) Cyclohexane	10.87	56	612039	10.57	ppbv	84
30) Carbon tetrachloride	11.02	117	466251m	9.10	ppbv	
31) Benzene	11.30	78	732289	9.24	ppbv	94
32) 1,2-Dichloroethane	11.38	62	340499	9.61	ppbv #	97
34) Heptane	11.35	43	761815	10.34	ppbv #	87
35) Trichloroethene	12.03	130	353395	9.22	ppbv	93
36) 1,2-Dichloropropane	12.39	63	295489	9.07	ppbv #	95
37) 1,4-Dioxane	12.46	88	87071	8.45	ppbv #	80
38) Bromodichloromethane	12.67	83	492755	9.13	ppbv	98
39) cis-1,3-Dichloropropene	13.23	75	396418	8.66	ppbv	96
40) 4-Methyl-2-pentanone	13.34	58	174868	8.56	ppbv #	89
41) Toluene	13.63	91	740047	9.06	ppbv	97
42) trans-1,3-Dichloropropene	13.94	75	314718	8.19	ppbv	96
43) 1,1,2-Trichloroethane	14.21	97	243951	8.62	ppbv	95
44) Tetrachloroethene	14.33	166	405365	9.16	ppbv	98
45) 2-Hexanone	14.41	43	364500	8.42	ppbv	91
46) Chlorodibromomethane	14.75	129	371775	8.87	ppbv	99
47) 1,2-Dibromoethane	14.99	107	352826	8.47	ppbv	100
49) Chlorobenzene	15.58	112	469819	9.30	ppbv #	86
50) Ethylbenzene	15.63	91	764844	9.26	ppbv	90
51) m,p-Xylene	15.78	91	1274801	19.48	ppbv	91
52) o-Xylene	16.37	91	557510	9.21	ppbv #	87

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\020112\02011205.D Vial: 3
Acq On : 1 Feb 2012 2:12 pm Operator: RACHEL HILL
Sample : CCV VOA1 020112 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 2 11:22 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

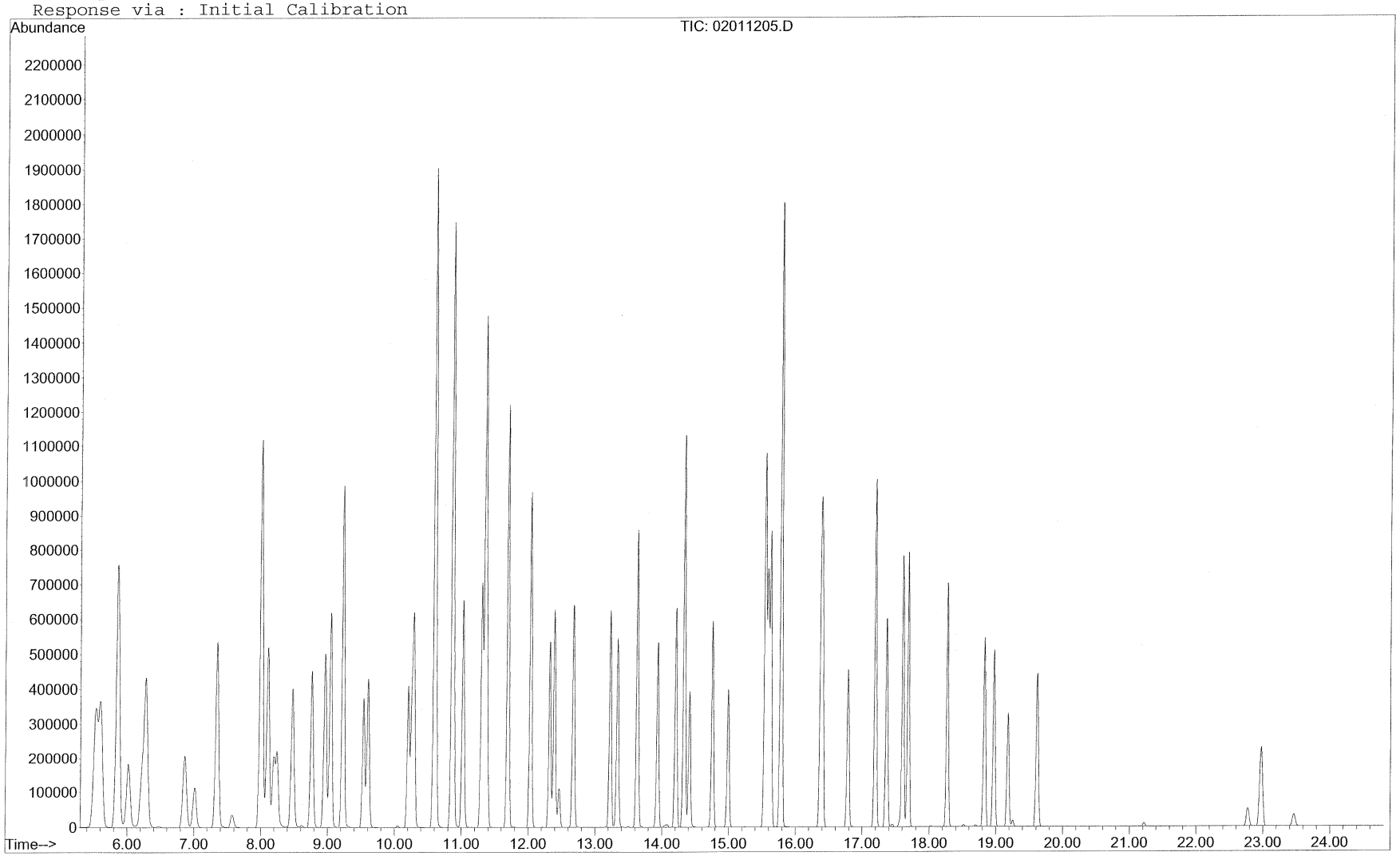
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
53) Styrene	16.40	104	410326	9.20 ppbv	97
54) Bromoform	16.78	173	278139	9.08 ppbv #	98
56) 1,1,2,2-Tetrachloroethane	17.36	83	412964	9.16 ppbv #	98
57) 4-Ethyltoluene	17.60	105	649823	8.75 ppbv	95
58) 1,3,5-Trimethylbenzene	17.69	105	536591	8.52 ppbv	96
59) 1,2,4-Trimethylbenzene	18.27	105	493145	8.48 ppbv	97
60) 1,3-Dichlorobenzene	18.83	146	301742	8.85 ppbv	98
61) 1,4-Dichlorobenzene	18.97	146	278654	8.86 ppbv	97
62) Benzyl chloride	19.18	91	324980	8.18 ppbv	97
63) 1,2-Dichlorobenzene	19.62	146	264130	8.71 ppbv	98
64) 1,2,4-Trichlorobenzene	22.78	180	36833	7.40 ppbv	96
65) Hexachlorobutadiene	22.97	225	94434	7.34 ppbv	99
66) Naphthalene	23.47	128	59579	7.97 ppbv #	97

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\020112\02011205.D Vial: 3
Acq On : 1 Feb 2012 2:12 pm Operator: RACHEL HILL
Sample : CCV VOA1 020112 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Feb 2 11:22 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_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		
1201804-017A	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

15-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
Acq On : 2 Feb 2012 10:27 am
Sample : CCV VOA1 020212
Misc : CCV EPA TO15
MS Integration Params: CLME.P

Vial: 3
Operator: RACHEL HILL
Inst : VOA 1
Multiplr: 1.00

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

(#) = Out of Range SPCC's out = 0 CCC's out = 0
02021202.D 012512V1.M Fri Feb 03 16:34:24 2012

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\020212\02021202.D
Acq On : 2 Feb 2012 10:27 am
Sample : CCV VOA1 020212
Misc : CCV EPA TO15
MS Integration Params: CLME.P
Quant Time: Feb 3 14:37 2012

Vial: 3
Operator: RACHEL HILL
Inst : VOA 1
Multiplr: 1.00

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

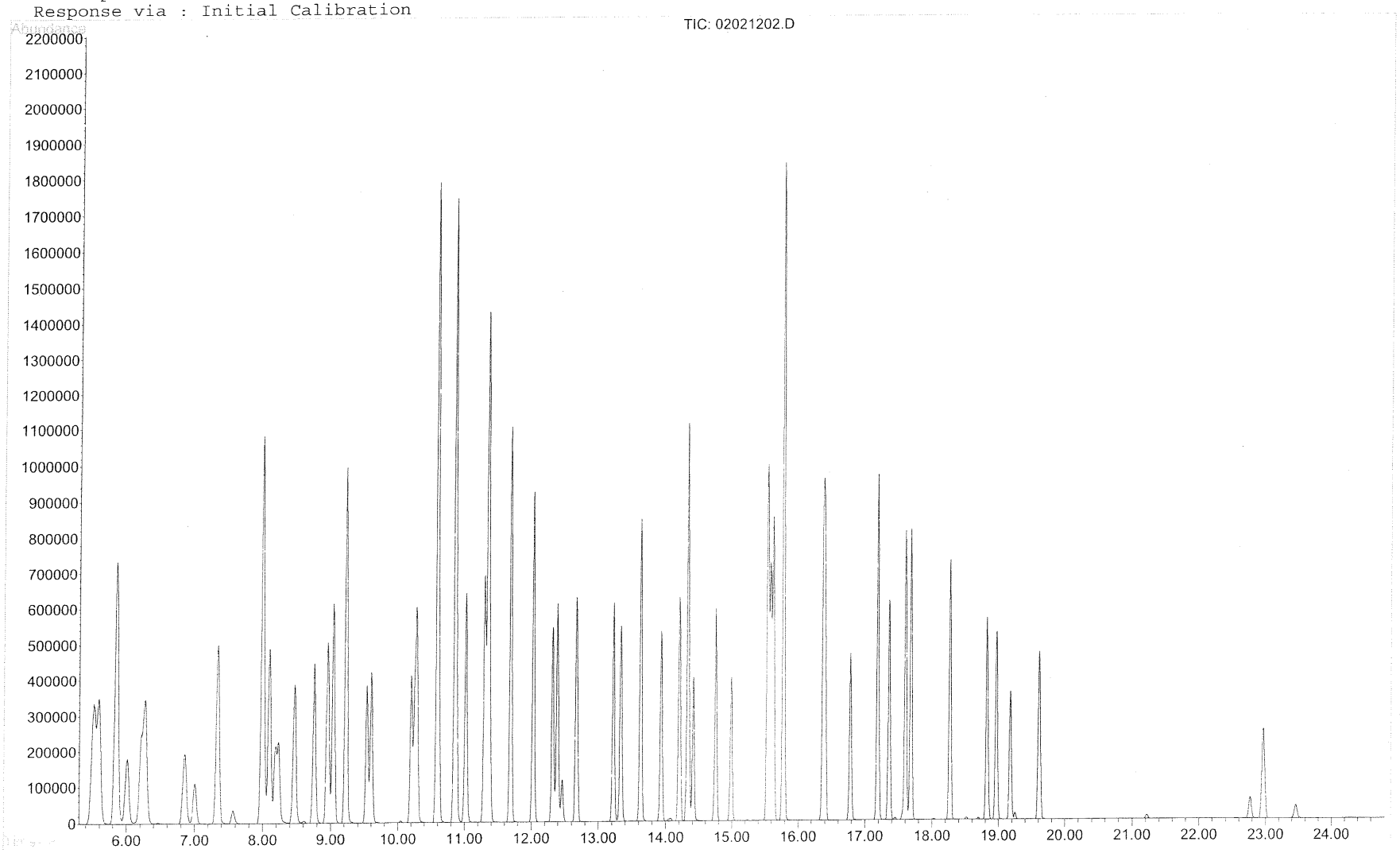
Quantitation Report

Data File : C:\HPCHEM\1\DATA\020212\02021202.D
Acq On : 2 Feb 2012 10:27 am
Sample : CCV VOA1 020212
Misc : CCV EPA TO15
MS Integration Params: CLME.P
Quant Time: Feb 3 14:37 2012

Vial: 3
Operator: RACHEL HILL
Inst : VOA 1
Multiplr: 1.00

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\011912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 20 11:02:05 2012
Response via : Initial Calibration

Calibration Files
2 =01191204.D 4 =01191205.D 5 =01191206.D
6 =01191207.D 7 =01191208.D 8 =01191209.D

		Compound	2	4	5	6	7	8	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------							
2)	T	Propylene	1.409	1.613	1.455	1.329	1.303	1.290	1.412	8.27
3)	T	Dichlorodifluoromet	2.754	3.543	3.208	2.978	2.953	2.995	3.136	9.61
4)	T	1,2-Dichloro-1,2,2,	1.970	2.687	2.456	2.298	2.338	2.374	2.376	9.31
5)	T	Chloromethane	1.290	1.524	1.368	1.207	1.171	1.117	1.272	10.83
6)	T	Vinyl chloride	1.544	1.950	1.682	1.505	1.145		1.565	18.68
7)	T	1,3-Butadiene	1.318	1.613	1.415	1.314	1.208	0.932	1.228	22.92
8)	T	Bromomethane	1.049	1.388	1.264	1.177	1.182	1.229	1.252	11.30
9)	T	Chloroethane	0.711	0.920	0.836	0.766	0.758	0.783	0.812	9.74
10)	T	Trichlorofluorometh	2.332	3.185	2.923	2.739	2.722	2.771	2.802	9.36
11)	T	Ethanol	0.354	0.387	0.351	0.303	0.289	0.289	0.334	11.73
12)	T	Freon113	2.017	2.852	2.625	2.483	2.333	2.184	2.358	13.35
13)	T	1,1-Dichloroethene	1.816	2.358	2.116	1.958	1.891	1.875	1.995	9.32
14)	T	Acetone	2.253	2.122	2.003	1.729	1.556	1.496	1.862	15.28
15)	T	Carbon disulfide	3.049	3.911	3.555	3.268	3.235	3.294	3.427	8.72
16)	T	2-Propanol	1.861	1.937	1.782	1.506	1.451	1.448	1.673	12.14
17)	T	Methylene chloride	1.779	1.801	1.651	1.519	1.399	1.352	1.571	11.28
18)	T	tert-Butyl Methyl E	2.678	2.760	2.683	2.319	2.120	2.049	2.470	12.15
19)	T	trans-1,2-Dichloroe	1.813	2.196	2.047	1.915	1.789	1.708	1.902	8.83
20)	T	n-Hexane	2.067	2.524	2.323	2.119	1.959	1.847	2.109	11.39
21)	T	1,1-Dichloroethane	2.174	2.523	2.382	2.191	2.046	1.991	2.225	8.33
22)	T	Vinyl acetate	2.685	3.418	3.244	2.808	2.562	2.402	2.872	12.76
23)	T	cis-1,2-Dichloroeth	1.042	1.291	1.217	1.139	1.090	1.097	1.164	8.30
24)	T	2-Butanone	2.127	2.314	2.016	1.746	1.645	1.574	1.879	14.68
25)	T	Ethyl acetate	2.851	2.972	2.695	2.353	2.175	2.189	2.535	12.47
26)	T	Tetrahydrofuran	1.297	1.487	1.358	1.150	1.040	0.979	1.200	15.47
27)	T	Chloroform	2.130	2.569	2.392	2.146	1.995	1.841	2.142	12.15
28)	T	1,1,1-Trichloroetha	1.749	2.384	2.307	2.074	1.920	1.723	1.985	14.00
29)	T	Cyclohexane	2.070	2.606	2.387	2.106	1.851	1.583	2.017	19.86
30)	T	Carbon tetrachlorid	1.603	2.170	2.103	1.930	1.858	1.793	1.914	9.93
31)	T	Benzene	3.094	3.235	3.124	2.771	2.603	2.532	2.920	9.58
32)	T	1,2-Dichloroethane	1.296	1.386	1.335	1.163	1.076	0.990	1.194	12.35
33)	I	1,4-Difluorobenzene	----------ISTD----------							
34)	T	Heptane	0.827	1.104	1.040	0.892	0.804	0.677	0.844	22.47
35)	T	Trichloroethene	0.377	0.552	0.545	0.497	0.490	0.456	0.473	14.48
36)	T	1,2-Dichloropropane	0.379	0.466	0.453	0.400	0.382	0.357	0.399	11.20
37)	T	1,4-Dioxane	0.113	0.161	0.152	0.132	0.128	0.122	0.135	12.34
38)	T	Bromodichloromethan	0.537	0.765	0.747	0.673	0.659	0.624	0.657	12.37
39)	T	cis-1,3-Dichloropro	0.477	0.648	0.628	0.556	0.548	0.525	0.561	10.52
40)	T	4-Methyl-2-pentanon	0.227	0.306	0.293	0.252	0.249	0.238	0.259	11.39
41)	T	Toluene	0.916	1.166	1.131	0.997	0.977	0.926	1.004	10.39
42)	T	trans-1,3-Dichlorop	0.379	0.546	0.531	0.465	0.464	0.446	0.473	11.74
43)	T	1,1,2-Trichloroetha	0.293	0.399	0.389	0.345	0.345	0.334	0.349	10.17
44)	T	Tetrachloroethene	0.434	0.673	0.651	0.589	0.577	0.494	0.546	19.06
45)	T	2-Hexanone	0.492	0.647	0.608	0.516	0.504	0.473	0.532	12.73
46)	T	Chlorodibromomethan	0.388	0.615	0.607	0.545	0.554	0.531	0.532	14.65
47)	T	1,2-Dibromoethane	0.422	0.587	0.571	0.499	0.504	0.484	0.507	11.16
48)	I	Chlorobenzene-d5	----------ISTD----------							
49)	T	Chlorobenzene	0.867	1.114	1.090	0.964	0.942	0.926	0.970	9.91
50)	T	Ethylbenzene	1.526	1.813	1.773	1.571	1.505	1.436	1.559	11.83
51)	T	m,p-Xylene	1.164	1.502	1.474	1.284	1.165	0.979	1.189	22.28
52)	T	o-Xylene	1.088	1.321	1.308	1.162	1.113	1.060	1.139	12.27
53)	T	Styrene	0.746	0.988	0.966	0.857	0.845	0.809	0.847	12.05
54)	T	Bromoform	0.488	0.727	0.720	0.638	0.634	0.606	0.620	14.37
55)	S	4-Bromofluorobenzen	0.673	0.629	0.614	0.585	0.593	0.574	0.604	6.26
56)	T	1,1,2,2-Tetrachloro	0.971	0.958	0.921	0.784	0.757	0.704	0.825	14.77
57)	T	4-Ethyltoluene	1.698	1.524	1.463	1.259	1.222	1.158	1.351	15.73

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

Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\011912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 20 11:02:05 2012
Response via : Initial Calibration

Calibration Files
2 =01191204.D 4 =01191205.D 5 =01191206.D
6 =01191207.D 7 =01191208.D 8 =01191209.D

		Compound	2	4	5	6	7	8	Avg	%RSD
58)	T	1,3,5-Trimethylbenz	1.454	1.262	1.222	1.047	1.012	0.969	1.128	16.83
59)	T	1,2,4-Trimethylbenz	1.261	1.156	1.102	0.951	0.918	0.864	1.019	15.08
60)	T	1,3-Dichlorobenzene	0.768	0.759	0.725	0.606	0.602	0.558	0.656	13.85
61)	T	1,4-Dichlorobenzene	0.687	0.724	0.674	0.565	0.571	0.529	0.614	12.79
62)	T	Benzyl chloride		0.964	0.946	0.806	0.774	0.711	0.840	13.15
63)	T	1,2-Dichlorobenzene	0.746	0.678	0.641	0.535	0.521	0.464	0.583	18.00
64)	T	1,2,4-Trichlorobenz	0.155	0.130	0.127	0.102	0.111	0.103	0.121	16.86
65)	T	Hexachlorobutadiene	0.426	0.317	0.310	0.263	0.264	0.250	0.305	19.48
66)		Naphthalene	0.252	0.206	0.198	0.159	0.170	0.155	0.190	19.32

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

Compound List Report VOA 1

Method : C:\HPCHEM\1\METHODS\011912V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 20 11:02:05 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

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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
-----------------------------------------------------------------------
          011912V1.M     Tue Jan 24 15:15:30 2012
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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
```

RTI Laboratories

Run ID: **VOA9_120123A** **Run No.:** 45702

Analytical Run Date: 1/23/2012 **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 012312 VOA9	BFB_TUNE	TUNE	R45702	1/23/2012 12:32:00 PM	Robert Lynch		
CCV 012312 VOA9	MA_APH	CCV	R45702	1/23/2012 1:14:00 PM	Robert Lynch		
RLVS 012312 VOA9	MA_APH	RLVS	R45702	1/23/2012 2:16:00 PM	Robert Lynch		
MBLK 012312 VOA9	MA_APH	MBLK	R45702	1/23/2012 3:06:00 PM	Charles O`Bryan		
1201592-008A	MA_APH	SAMP	R45702	1/23/2012 3:48:00 PM	Robert Lynch		
1201592-008Adup	MA_APH	DUP	R45702	1/23/2012 4:30:00 PM	Charles O`Bryan		
1201592-006A	MA_APH	SAMP	R45702	1/23/2012 5:14:00 PM	Robert Lynch		
1201592-023A	MA_APH	SAMP	R45702	1/23/2012 6:42:00 PM	Robert Lynch		
1201592-026A	MA_APH	SAMP	R45702	1/23/2012 8:50:00 PM	Robert Lynch		
1201592-001A	MA_APH	SAMP	R45702	1/23/2012 10:22:00 PM	Robert Lynch		
1201592-002A	MA_APH	SAMP	R45702	1/23/2012 11:12:00 PM	Robert Lynch		
1201592-040A	MA_APH	SAMP	R45702	1/23/2012 11:55:00 PM	Robert Lynch		
1201592-042A	MA_APH	SAMP	R45702	1/24/2012 1:21:00 AM	Robert Lynch		
1201592-010A	MA_APH	SAMP	R45702	1/24/2012 2:05:00 AM	Robert Lynch		
RLVS2 012312 VOA	MA_APH	RLVS	R45702	1/24/2012 3:30:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

15-Feb-12

RunNo 45702

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
897241	BFB 012312 VOA9	BFB_TUNE	TUNE	:\1\DATA\012312	1/23/2012 12:32:	1	R45702		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		59.3	59.3		100	0	0	0	0	0	59%	50	120	0%	
175	M		7.4	7.4		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		6.6	6.6		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		50.2	50.2		100	0	0	0	0	0	50%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.9	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
897242	CCV 012312 VOA9	MA_APH	CCV	:\1\DATA\012312	1/23/2012 1:14:0	1	R45702		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
C5-C8 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C5-C8 Aliphatic HC - TOTAL	A	µg/m³	216.93	216.93		234	0	0	0	0	0	93%	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	241	241		266	0	0	0	0	0	91%	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	347.29	347.29		378	0	0	0	0	0	92%	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	87.48	87.48		89.5	0	0	0	0	0	98%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\012312\01231202.D Vial: 2
Acq On : 23 Jan 2012 1:14 pm Operator: RACHEL HILL
Sample : CCV 012312 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 24 9:49 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	725382	12.50 ug/m3	0.00

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.35	95	514152	87.48 ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 97.74%

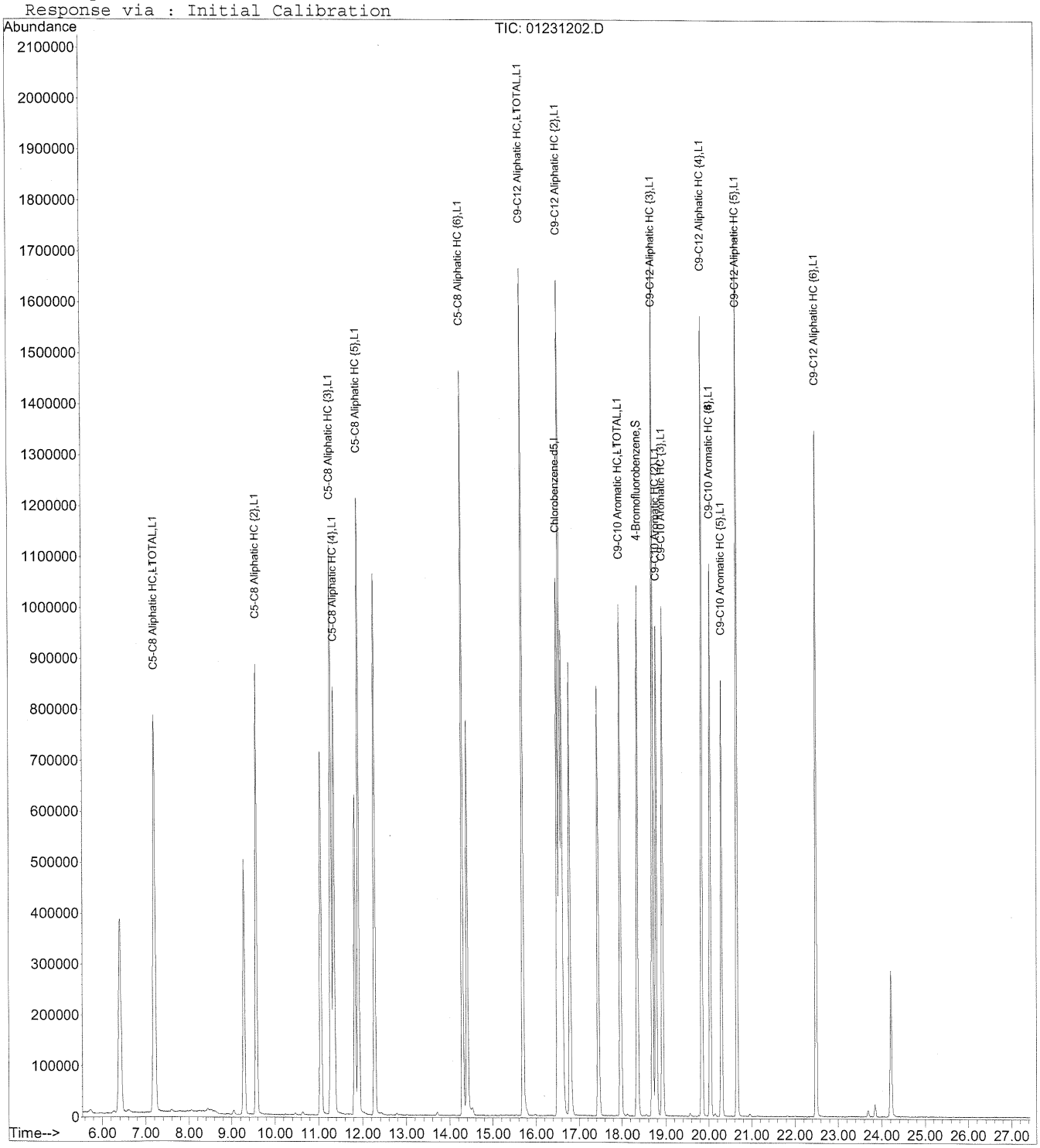
Target Compounds					Qvalue
1) C5-C8 Aliphatic HC	7.20	TIC	2699259	27.90 ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2197005	33.79 ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2838115	38.64 ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	2122032	32.70 ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2718861	38.58 ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3162216	45.05 ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.20	TIC	15737488m	216.93 ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	3750918	50.74 ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	3501348	48.57 ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.69	TIC	3558487	55.87 ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.84	TIC	3421457	55.44 ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.66	TIC	3566674	65.47 ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.49	TIC	2736148	72.18 ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	20535032m	347.29 ug/m3	
15) C9-C10 Aromatic HC	17.99	120	228322	46.25 ug/m3	100
16) C9-C10 Aromatic HC {2}	18.78	120	242214	46.21 ug/m3	100
17) C9-C10 Aromatic HC {3}	18.92	120	354658	47.10 ug/m3	100
18) C9-C10 Aromatic HC {4}	20.04	120	80230	52.13 ug/m3	100
19) C9-C10 Aromatic HC {5}	20.30	120	273533	48.25 ug/m3	100
20) C9-C10 Aromatic HC {6}	20.04	134	198199	53.38 ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.98	TIC	1377156m	241.00 ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\012312\01231202.D Vial: 2
Acq On : 23 Jan 2012 1:14 pm Operator: RACHEL HILL
Sample : CCV 012312 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 24 9:49 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_120124A **Run No.:** 45758

Analytical Run Date: 1/24/2012 **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 012412 VOA9	BFB_TUNE	TUNE	R45758	1/24/2012 10:03:00 AM	Robert Lynch		
CCV 012412 VOA9	MA_APH	CCV	R45758	1/24/2012 10:46:00 AM	Robert Lynch		
RLVS 012412 VOA9	MA_APH	RLVS	R45758	1/24/2012 11:51:00 AM	Robert Lynch		
MBLK 012412 VOA9	MA_APH	MBLK	R45758	1/24/2012 1:27:00 PM	Charles O`Bryan		
1201592-047A	MA_APH	SAMP	R45758	1/24/2012 2:10:00 PM	Robert Lynch		Over-diluted sample. Will re-run at a lower dilution. Reported here to show sample and duplicate were indeed analyzed.
1201592-047Adup	MA_APH	DUP	R45758	1/24/2012 2:53:00 PM	Charles O`Bryan		
1201592-007A	MA_APH	SAMP	R45758	1/24/2012 4:40:00 PM	Robert Lynch		
1201592-024A	MA_APH	SAMP	R45758	1/24/2012 5:24:00 PM	Robert Lynch		
1201592-025A	MA_APH	SAMP	R45758	1/24/2012 6:08:00 PM	Robert Lynch		
1201592-027A	MA_APH	SAMP	R45758	1/24/2012 6:52:00 PM	Robert Lynch		
1201592-041A	MA_APH	SAMP	R45758	1/24/2012 7:41:00 PM	Robert Lynch		
1201592-011A	MA_APH	SAMP	R45758	1/24/2012 8:31:00 PM	Robert Lynch		
1201592-022A	MA_APH	SAMP	R45758	1/24/2012 9:56:00 PM	Robert Lynch		
1201592-048A	MA_APH	SAMP	R45758	1/24/2012 10:39:00 PM	Robert Lynch		
1201592-049A	MA_APH	SAMP	R45758	1/24/2012 11:22:00 PM	Robert Lynch		
1201592-047A	MA_APH	SAMP	R45758	1/25/2012 12:05:00 AM	Robert Lynch		
1201592-003A	MA_APH	SAMP	R45758	1/25/2012 1:33:00 AM	Robert Lynch		
RLVS2 012412 VOA	MA_APH	RLVS	R45758	1/25/2012 3:44:00 AM	Robert Lynch		RLVS failing high due to carryover from extremely contaminated sample ran directly beforehand. Procedures to clean out system afterward were performed.

RTI Laboratories

ANALYTICAL RUN Summary

15-Feb-12

RunNo 45758

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
898067	BFB 012412 VOA9	BFB_TUNE	TUNE	.\1\DATA\012412	1/24/2012 10:03:	1	R45758		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		60.9	60.9		100	0	0	0	0	0	61%	50	120	0%	
175	M		7	7		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		6.3	6.3		100	0	0	0	0	0	6%	5	9	0%	
50	M		25.8	25.8		100	0	0	0	0	0	26%	8	40	0%	
75	M		51.2	51.2		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
898068	CCV 012412 VOA9	MA_APH	CCV	.\1\DATA\012412	1/24/2012 10:46:	1	R45758		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	230.34	230.34		234	0	0	0	0	0	98%	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	256.6	256.6		266	0	0	0	0	0	96%	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	370.04	370.04		378	0	0	0	0	0	98%	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	91.44	91.44		89.5	0	0	0	0	0	102%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\012412\01241202.D Vial: 2
Acq On : 24 Jan 2012 10:46 am Operator: RACHEL HILL
Sample : CCV 012412 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 25 10:02 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	587442	12.50 ug/m3	0.00
System Monitoring Compounds					
41) 4-Bromofluorobenzene	18.35	95	435234	91.44 ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 102.17%		
Target Compounds					Qvalue
1) C5-C8 Aliphatic HC	7.20	TIC	2837488	29.32 ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2326911	35.78 ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	3037554	41.36 ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	2226326	34.30 ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2939948	41.72 ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3342217	47.61 ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.20	TIC	16710444m	230.34 ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	3972668	53.74 ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	3865420	53.62 ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.69	TIC	3824499	60.05 ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.84	TIC	3627030	58.77 ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.66	TIC	3698192	67.88 ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.48	TIC	2892841	76.32 ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	21880650m	370.04 ug/m3	
15) C9-C10 Aromatic HC	17.98	120	244021	49.43 ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	259776	49.56 ug/m3	100
17) C9-C10 Aromatic HC {3}	18.92	120	381640	50.68 ug/m3	100
18) C9-C10 Aromatic HC {4}	20.04	120	86396	56.14 ug/m3	100
19) C9-C10 Aromatic HC {5}	20.30	120	283947	50.09 ug/m3	100
20) C9-C10 Aromatic HC {6}	20.04	134	210507	56.69 ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.98	TIC	1466287m	256.60 ug/m3	

(#) = qualifier out of range (m) = manual integration
01241202.D 011912V9.M Fri Jan 27 11:54:11 2012

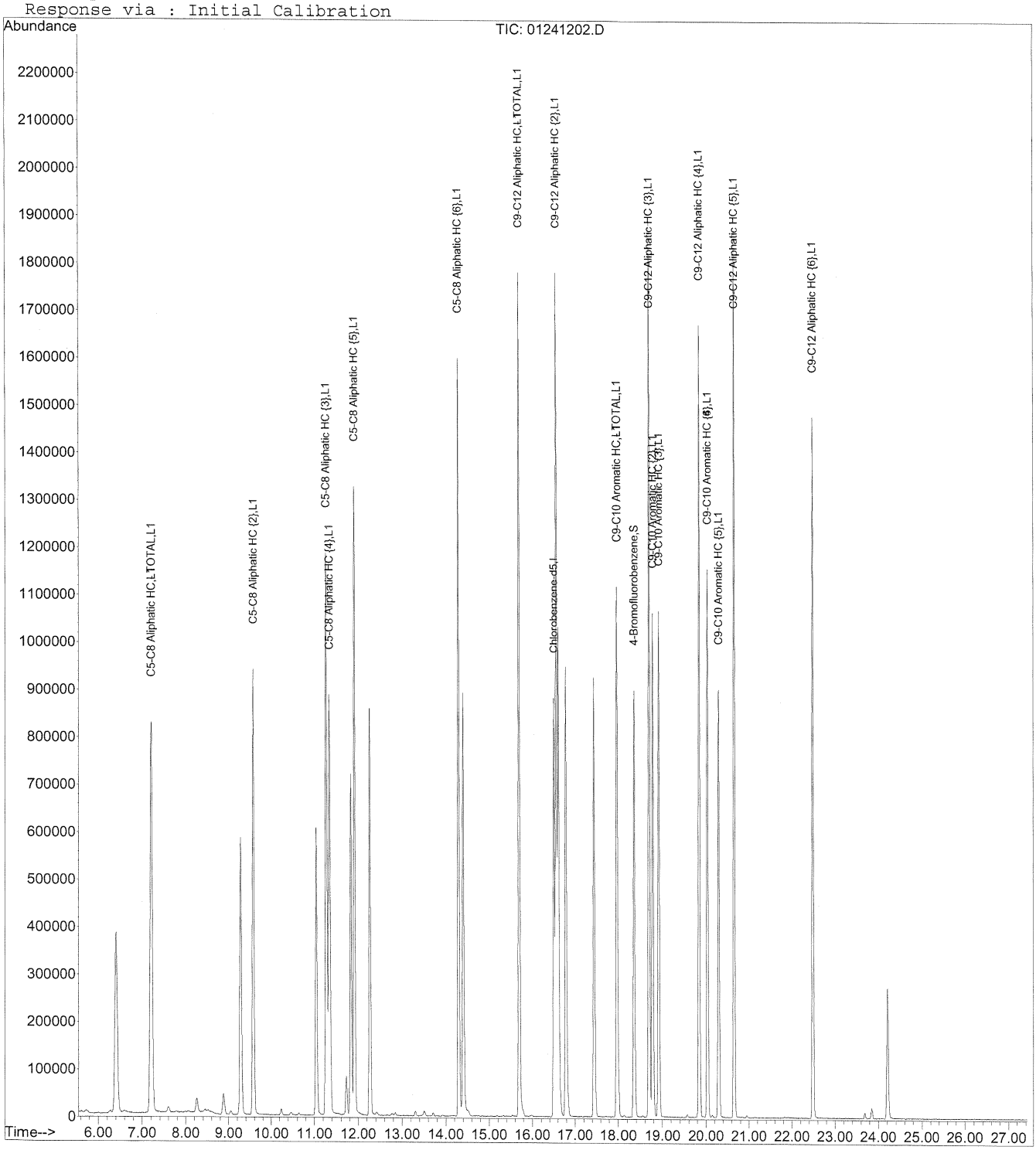
Quantitation Report

Data File : C:\HPCHEM\1\DATA\012412\01241202.D
Acq On : 24 Jan 2012 10:46 am
Sample : CCV 012412 VOA9
Misc : CCV MA APH
MS Integration Params: rteint.p
Quant Time: Jan 25 10:02 2012

Vial: 2
Operator: RACHEL HILL
Inst : GC/MS Ins
Multiplr: 1.00

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_120126A **Run No.:** 45774

Analytical Run Date: 1/26/2012 **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 012612 VOA9	BFB_TUNE	TUNE	R45774	1/26/2012 11:35:00 AM	Robert Lynch		
CCV 012612 VOA9	MA_APH	CCV	R45774	1/26/2012 1:12:00 PM	Robert Lynch		
RLVS 012612 VOA9	MA_APH	RLVS	R45774	1/26/2012 2:46:00 PM	Robert Lynch		
MBLK 012612 VOA9	MA_APH	MBLK	R45774	1/26/2012 3:38:00 PM	Charles O`Bryan		
1201592-028A	MA_APH	SAMP	R45774	1/26/2012 4:21:00 PM	Robert Lynch		
1201592-028Adup	MA_APH	DUP	R45774	1/26/2012 5:03:00 PM	Charles O`Bryan		
1201592-029A	MA_APH	SAMP	R45774	1/26/2012 5:48:00 PM	Robert Lynch		
1201592-005A	MA_APH	SAMP	R45774	1/26/2012 6:34:00 PM	Robert Lynch		
1201592-030A	MA_APH	SAMP	R45774	1/26/2012 7:18:00 PM	Robert Lynch		
1201592-031A	MA_APH	SAMP	R45774	1/26/2012 8:02:00 PM	Robert Lynch		
1201592-032A	MA_APH	SAMP	R45774	1/26/2012 8:46:00 PM	Robert Lynch		
1201592-034A	MA_APH	SAMP	R45774	1/26/2012 10:20:00 PM	Robert Lynch		
1201592-037A	MA_APH	SAMP	R45774	1/27/2012 12:41:00 AM	Robert Lynch		
1201592-038A	MA_APH	SAMP	R45774	1/27/2012 1:27:00 AM	Robert Lynch		
1201592-039A	MA_APH	SAMP	R45774	1/27/2012 2:11:00 AM	Robert Lynch		
RLVS2 012612 VOA	MA_APH	RLVS	R45774	1/27/2012 3:43:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

15-Feb-12

RunNo 45774

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
898278	BFB 012612 VOA9	BFB_TUNE	TUNE	\1\DATA\012612	1/26/2012 11:35:	1	R45774		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		56.1	56.1		100	0	0	0	0	0	56%	50	120	0%	
175	M		7.4	7.4		100	0	0	0	0	0	7%	4	9	0%	
176	M		97	97		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.8	6.8		100	0	0	0	0	0	7%	5	9	0%	
50	M		25.8	25.8		100	0	0	0	0	0	26%	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	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
898279	CCV 012612 VOA9	MA_APH	CCV	\1\DATA\012612	1/26/2012 1:12:0	1	R45774		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	214.96	214.96		234	0	0	0	0	0	92%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	231.53	231.53		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	329.05	329.05		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	83.92	83.92		89.5	0	0	0	0	0	94%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\012612\01261205.D Vial: 2
Acq On : 26 Jan 2012 1:12 pm Operator: RACHEL HILL
Sample : CCV 012612 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 27 9:29 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	16.52	117	754264	12.50 ug/m3	0.00

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.35	95	512865	83.92 ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 93.77%

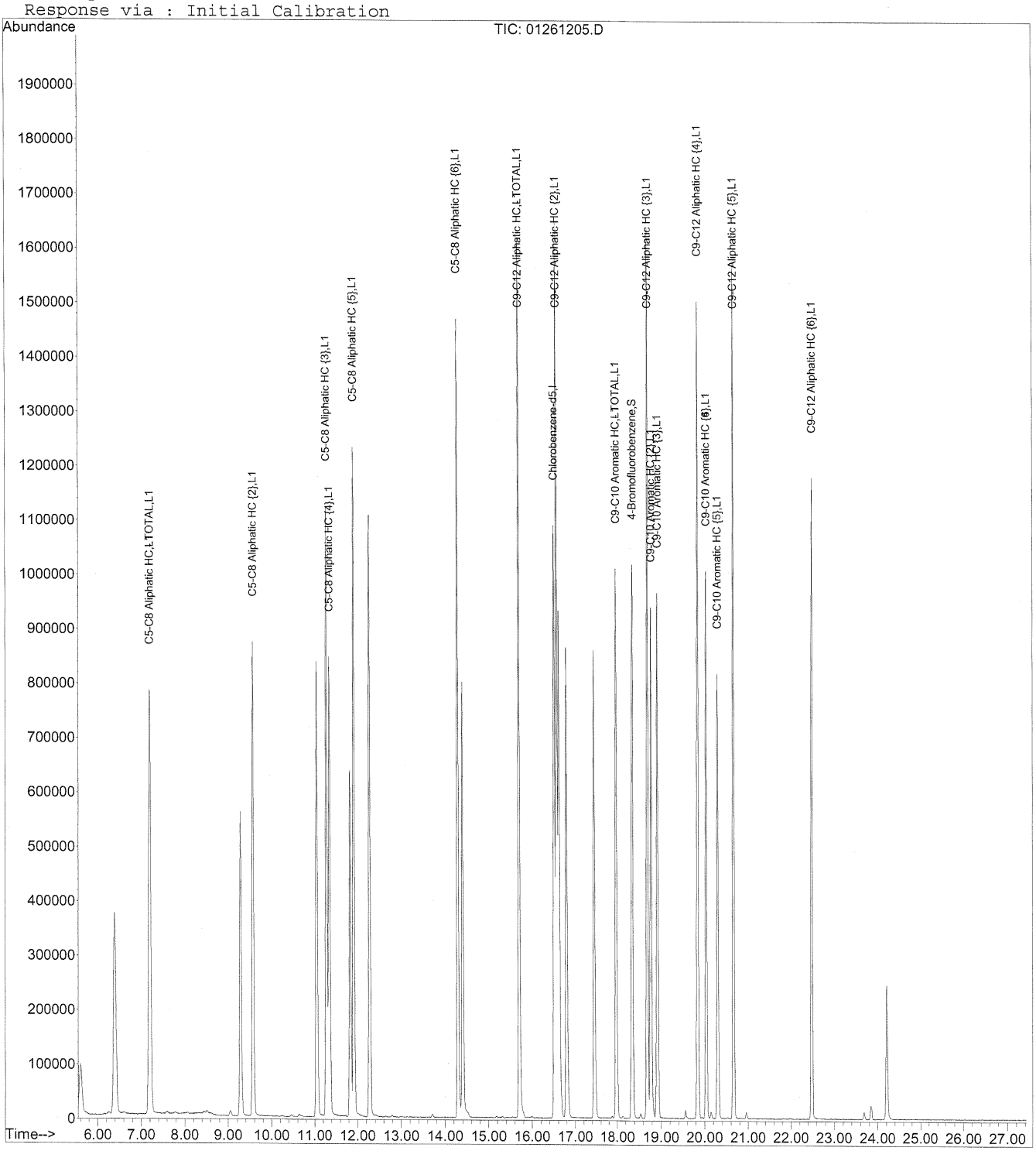
Target Compounds					Qvalue
1) C5-C8 Aliphatic HC	7.20	TIC	2669393	27.59 ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2193405	33.73 ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2787541	37.95 ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	2146519	33.07 ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.92	TIC	2688788	38.15 ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.30	TIC	3108694	44.29 ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.20	TIC	15594340m	214.96 ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	3671495	49.67 ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	3634542	50.42 ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.69	TIC	3382772	53.12 ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.84	TIC	3232755	52.38 ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.66	TIC	3196660	58.68 ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.49	TIC	2338396	61.69 ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	19456620m	329.05 ug/m3	
15) C9-C10 Aromatic HC	17.98	120	221824	44.93 ug/m3	100
16) C9-C10 Aromatic HC {2}	18.78	120	235291	44.89 ug/m3	100
17) C9-C10 Aromatic HC {3}	18.92	120	346047	45.95 ug/m3	100
18) C9-C10 Aromatic HC {4}	20.04	120	76455	49.68 ug/m3	100
19) C9-C10 Aromatic HC {5}	20.30	120	256202	45.20 ug/m3	100
20) C9-C10 Aromatic HC {6}	20.04	134	187202	50.42 ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.98	TIC	1323021m	231.53 ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\012612\01261205.D Vial: 2
Acq On : 26 Jan 2012 1:12 pm Operator: RACHEL HILL
Sample : CCV 012612 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 27 9:29 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_120127A **Run No.:** 45808

Analytical Run Date: 1/27/2012 **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 012712 VOA9	BFB_TUNE	TUNE	R45808	1/27/2012 9:29:00 AM	Robert Lynch		
CCV 012712 VOA9	MA_APH	CCV	R45808	1/27/2012 10:12:00 AM	Robert Lynch		
RLVS 012712 VOA9	MA_APH	RLVS	R45808	1/27/2012 11:03:00 AM	Robert Lynch		
MBLK 012712 VOA9	MA_APH	MBLK	R45808	1/27/2012 11:55:00 AM	Charles O`Bryan		
1201592-012A	MA_APH	SAMP	R45808	1/27/2012 12:38:00 PM	Robert Lynch		Needs higher dilution. Performed later in run.
1201592-012Adup	MA_APH	DUP	R45808	1/27/2012 1:21:00 PM	Celeste Hoitash		
1201592-035A	MA_APH	SAMP	R45808	1/27/2012 2:47:00 PM	Robert Lynch		
1201592-036A	MA_APH	SAMP	R45808	1/27/2012 3:32:00 PM	Robert Lynch		
1201592-014A	MA_APH	SAMP	R45808	1/27/2012 6:26:00 PM	Robert Lynch		
1201592-016A	MA_APH	SAMP	R45808	1/27/2012 7:09:00 PM	Robert Lynch		
1201592-018A	MA_APH	SAMP	R45808	1/27/2012 9:16:00 PM	Robert Lynch		
1201592-043A	MA_APH	SAMP	R45808	1/27/2012 9:59:00 PM	Robert Lynch		
1201592-045A	MA_APH	SAMP	R45808	1/28/2012 12:06:00 AM	Robert Lynch		
1201592-033A	MA_APH	SAMP	R45808	1/28/2012 12:50:00 AM	Robert Lynch		
1201592-012A	MA_APH	SAMP	R45808	1/28/2012 3:04:00 AM	Robert Lynch		
1201592-013A	MA_APH	SAMP	R45808	1/28/2012 3:46:00 AM	Robert Lynch		
RLVS2 012712 VOA	MA_APH	RLVS	R45808	1/28/2012 4:28:00 AM	Robert Lynch		Carryover from contaminated sample ran before RLVS occurred. This is why c5-c8 section is high.

RTI Laboratories

ANALYTICAL RUN Summary

15-Feb-12

RunNo 45808

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
898975	BFB 012712 VOA9	BFB_TUNE	TUNE	\1\DATA\012712	1/27/2012 9:29:0	1	R45808		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		59.8	59.8		100	0	0	0	0	0	60%	50	120	0%	
175	M		7.5	7.5		100	0	0	0	0	0	8%	4	9	0%	
176	M		96.9	96.9		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.4	6.4		100	0	0	0	0	0	6%	5	9	0%	
50	M		25.7	25.7		100	0	0	0	0	0	26%	8	40	0%	
75	M		51.4	51.4		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
898976	CCV 012712 VOA9	MA_APH	CCV	\1\DATA\012712	1/27/2012 10:12:	1	R45808		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	190.52	190.52		234	0	0	0	0	0	81%	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	207.56	207.56		266	0	0	0	0	0	78%	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	292.45	292.45		378	0	0	0	0	0	77%	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	82.18	82.18		89.5	0	0	0	0	0	92%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\012712\01271202.D Vial: 2
Acq On : 27 Jan 2012 10:12 am Operator: RACHEL HILL
Sample : CCV 012712 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 27 14:09 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	16.52	117	626335	12.50	ug/m3	0.00

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.35	95	417078	82.18	ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 91.82%

Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.20	TIC	2392396	24.72	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	1920479	29.53	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2487606	33.87	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	1870388	28.82	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.92	TIC	2419768	34.34	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.30	TIC	2730910	38.90	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.20	TIC	13821547m	190.52	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	3251026	43.98	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	3042430	42.21	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.69	TIC	3033698	47.63	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.84	TIC	2889204	46.82	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.66	TIC	2897141	53.18	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.49	TIC	2179114	57.49	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	17292613m	292.45	ug/m3	
15) C9-C10 Aromatic HC	17.98	120	198685	40.24	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.78	120	209271	39.93	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	307566	40.84	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.04	120	69624	45.24	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.30	120	232333	40.99	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.04	134	168582	45.40	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.98	TIC	1186061m	207.56	ug/m3	

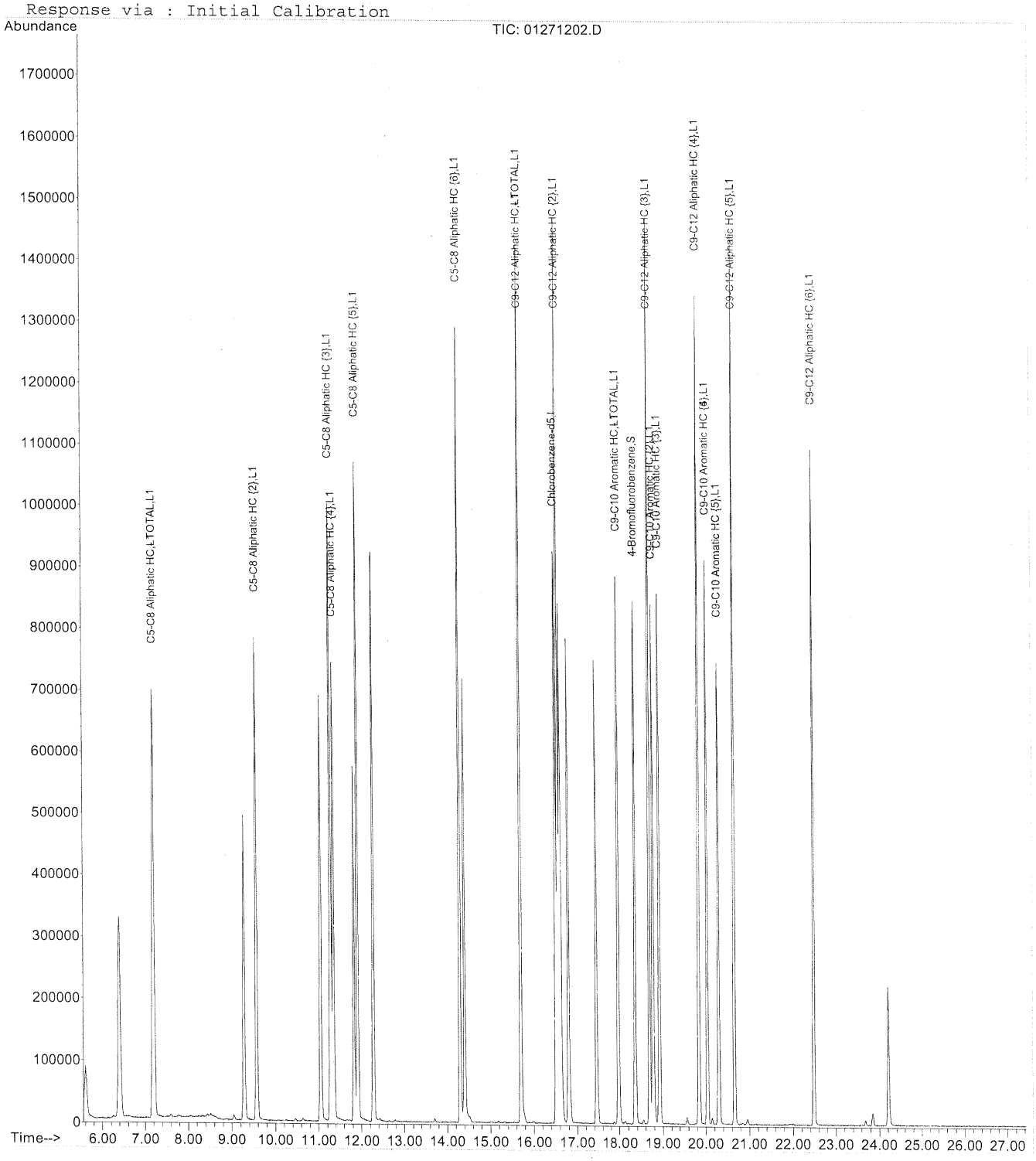
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\012712\01271202.D
Acq On : 27 Jan 2012 10:12 am
Sample : CCV 012712 VOA9
Misc : CCV MA APH
MS Integration Params: rteint.p
Quant Time: Jan 27 14:09 2012

Vial: 2
Operator: RACHEL HILL
Inst : GC/MS Ins
Multiplr: 1.00
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_120130A **Run No.:** 45907

Analytical Run Date: 1/30/2012 **InstrumentID:** VOA9

Analyst: Rachel Hill **Column:**

Calibration ID: 45704 **Column ID:**

Column Length:

Run Comments: LN ran out in the middle of the run/night - reason for time gap between last sample and RLVS analysis.

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB 013012 VOA9	BFB_TUNE	TUNE	R45907	1/30/2012 10:20:00 AM	Robert Lynch		
CCV 013012 VOA9	MA_APH	CCV	R45907	1/30/2012 11:03:00 AM	Robert Lynch		
RLVS 013012 VOA9	MA_APH	RLVS	R45907	1/30/2012 11:54:00 AM	Robert Lynch		
MBLK 013012 VOA9	MA_APH	MBLK	R45907	1/30/2012 12:51:00 PM	Charles O`Bryan		
1201592-015A	MA_APH	SAMP	R45907	1/30/2012 1:33:00 PM	Robert Lynch		
1201592-015Adup	MA_APH	DUP	R45907	1/30/2012 2:15:00 PM	Charles O`Bryan		
1201592-017A	MA_APH	SAMP	R45907	1/30/2012 3:00:00 PM	Robert Lynch		
1201676-026A	MA_APH	SAMP	R45907	1/30/2012 3:49:00 PM	Robert Lynch		
1201676-027A	MA_APH	SAMP	R45907	1/30/2012 4:32:00 PM	Robert Lynch		
1201676-006A	MA_APH	SAMP	R45907	1/30/2012 5:27:00 PM	Robert Lynch		
1201676-007A	MA_APH	SAMP	R45907	1/30/2012 6:09:00 PM	Robert Lynch		
1201676-028A	MA_APH	SAMP	R45907	1/30/2012 6:52:00 PM	Robert Lynch		
RLVS2 VOA9 01301	MA_APH	RLVS	R45907	1/31/2012 9:35:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

15-Feb-12

RunNo 45907

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
900755	BFB 013012 VOA9	BFB_TUNE	TUNE	.\1\DATA\013012	1/30/2012 10:20:	1	R45907		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		65.7	65.7		100	0	0	0	0	0	66%	50	120	0%	
175	M		7.5	7.5		100	0	0	0	0	0	8%	4	9	0%	
176	M		96.8	96.8		100	0	0	0	0	0	97%	93	101	0%	
177	M		5.8	5.8		100	0	0	0	0	0	6%	5	9	0%	
50	M		25.2	25.2		100	0	0	0	0	0	25%	8	40	0%	
75	M		48.7	48.7		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		6.1	6.1		100	0	0	0	0	0	6%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
900756	CCV 013012 VOA9	MA_APH	CCV	.\1\DATA\013012	1/30/2012 11:03:	1	R45907		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	208.36	208.36		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	223.3	223.3		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	326.74	326.74		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	82.42	82.42		89.5	0	0	0	0	0	92%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\013012\01301202.D Vial: 2
Acq On : 30 Jan 2012 11:03 am Operator: RACHEL HILL
Sample : CCV 013012 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 31 10:19 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

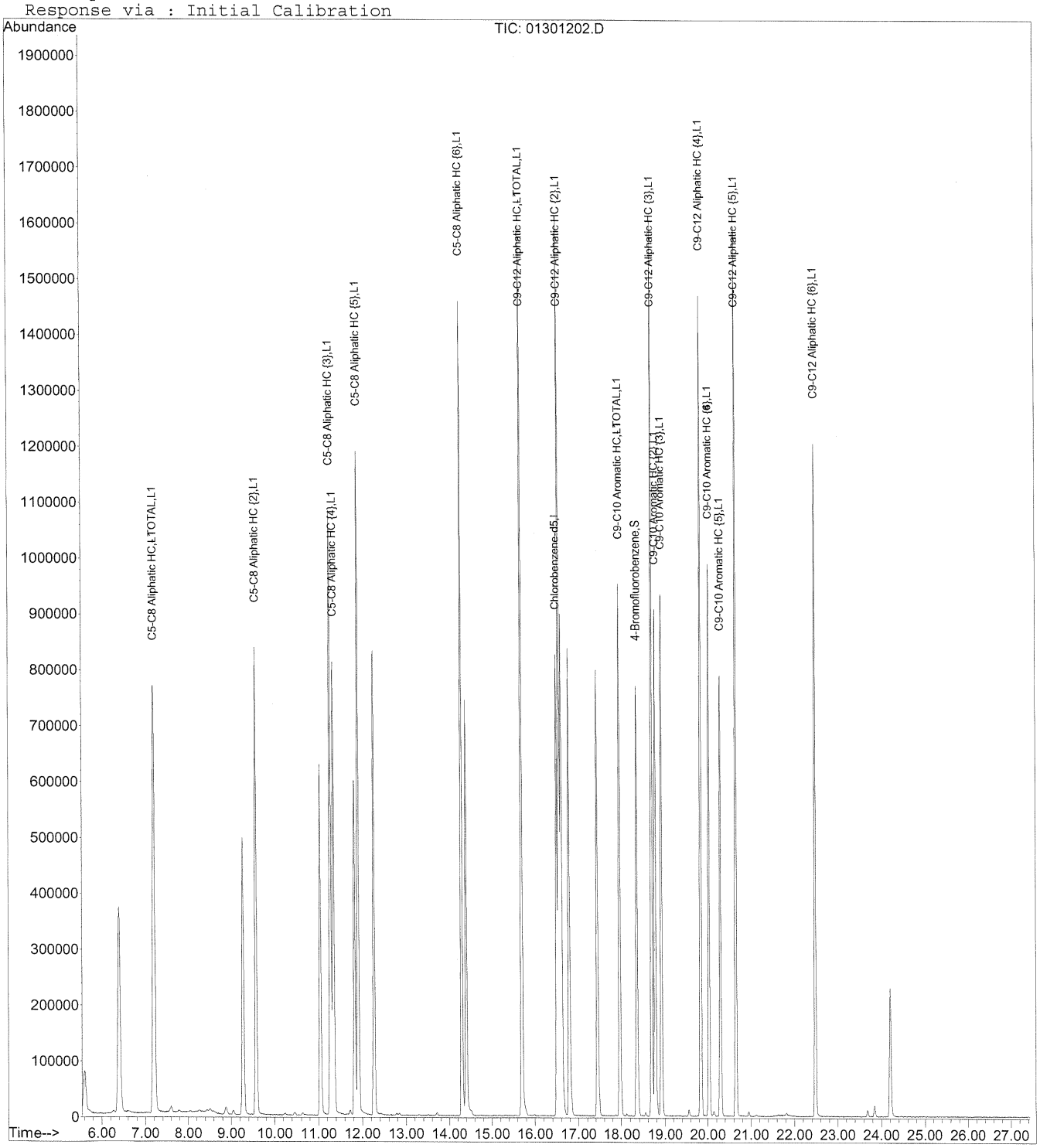
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	565282	12.50 ug/m3	0.00
System Monitoring Compounds					
41) 4-Bromofluorobenzene	18.35	95	377480	82.42 ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 92.09%		
Target Compounds					Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2640773	27.29 ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2091427	32.16 ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2695201	36.70 ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	2037263	31.39 ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2638399	37.44 ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.30	TIC	3012509	42.92 ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	15115572m	208.36 ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	3604409	48.76 ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	3514479	48.75 ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3335333	52.37 ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.84	TIC	3195531	51.78 ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.65	TIC	3238107	59.44 ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.48	TIC	2432117	64.16 ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	19319976m	326.74 ug/m3	
15) C9-C10 Aromatic HC	17.98	120	212208	42.98 ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	225015	42.93 ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	332986	44.22 ug/m3	100
18) C9-C10 Aromatic HC {4}	20.04	120	74578	48.46 ug/m3	100
19) C9-C10 Aromatic HC {5}	20.30	120	249873	44.08 ug/m3	100
20) C9-C10 Aromatic HC {6}	20.04	134	181319	48.83 ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.98	TIC	1275979m	223.30 ug/m3	

(#) = qualifier out of range (m) = manual integration
01301202.D 011912V9.M Thu Feb 09 11:55:46 2012

Quantitation Report

Data File : C:\HPCHEM\1\DATA\013012\01301202.D Vial: 2
Acq On : 30 Jan 2012 11:03 am Operator: RACHEL HILL
Sample : CCV 013012 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 31 10:19 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_120131A** **Run No.:** 45908

Analytical Run Date: 1/31/2012 **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 013112 VOA9	BFB_TUNE	TUNE	R45908	1/31/2012 11:23:00 AM	Robert Lynch		
CCV 013112 VOA9	MA_APH	CCV	R45908	1/31/2012 12:07:00 PM	Robert Lynch		
RLVS 013112 VOA9	MA_APH	RLVS	R45908	1/31/2012 2:05:00 PM	Robert Lynch		
MBLK 013112 VOA9	MA_APH	MBLK	R45908	1/31/2012 3:52:00 PM	Charles O`Bryan		
1201676-010A	MA_APH	SAMP	R45908	1/31/2012 5:17:00 PM	Robert Lynch		Sample needs higher dilution. Will re-analyze.
1201676-010Adup	MA_APH	DUP	R45908	1/31/2012 5:59:00 PM	Charles O`Bryan		
1201592-019A	MA_APH	SAMP	R45908	1/31/2012 6:42:00 PM	Robert Lynch		
1201592-044A	MA_APH	SAMP	R45908	1/31/2012 7:25:00 PM	Robert Lynch		
1201592-020A	MA_APH	SAMP	R45908	1/31/2012 8:08:00 PM	Robert Lynch		
1201592-046A	MA_APH	SAMP	R45908	1/31/2012 8:57:00 PM	Robert Lynch		
1201592-021A	MA_APH	SAMP	R45908	1/31/2012 9:43:00 PM	Robert Lynch		
1201676-008A	MA_APH	SAMP	R45908	1/31/2012 10:32:00 PM	Robert Lynch		
1201676-029A	MA_APH	SAMP	R45908	2/1/2012 1:29:00 AM	Robert Lynch		
RLVS2 013112 VOA	MA_APH	RLVS	R45908	2/1/2012 3:39:00 AM	Robert Lynch		Contamination from sample ran before RLVS carried over into it, causing c5-c8 group to be high.

RTI Laboratories

ANALYTICAL RUN Summary

15-Feb-12

RunNo 45908

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
900772	BFB 013112 VOA9	BFB_TUNE	TUNE	:\1\DATA\013112	1/31/2012 11:23:	1	R45908		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		59.2	59.2		100	0	0	0	0	0	59%	50	120	0%	
175	M		7.5	7.5		100	0	0	0	0	0	8%	4	9	0%	
176	M		96.9	96.9		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.4	6.4		100	0	0	0	0	0	6%	5	9	0%	
50	M		26.4	26.4		100	0	0	0	0	0	26%	8	40	0%	
75	M		51.3	51.3		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
900773	CCV 013112 VOA9	MA_APH	CCV	:\1\DATA\013112	1/31/2012 12:07:	1	R45908		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	268.36	268.36		234	0	0	0	0	0	115%	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	226.44	226.44		266	0	0	0	0	0	85%	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	336.92	336.92		378	0	0	0	0	0	89%	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	85		89.5	0	0	0	0	0	95%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\013112\01311202.D Vial: 2
Acq On : 31 Jan 2012 12:07 pm Operator: RACHEL HILL
Sample : CCV 013112 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 1 9:44 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

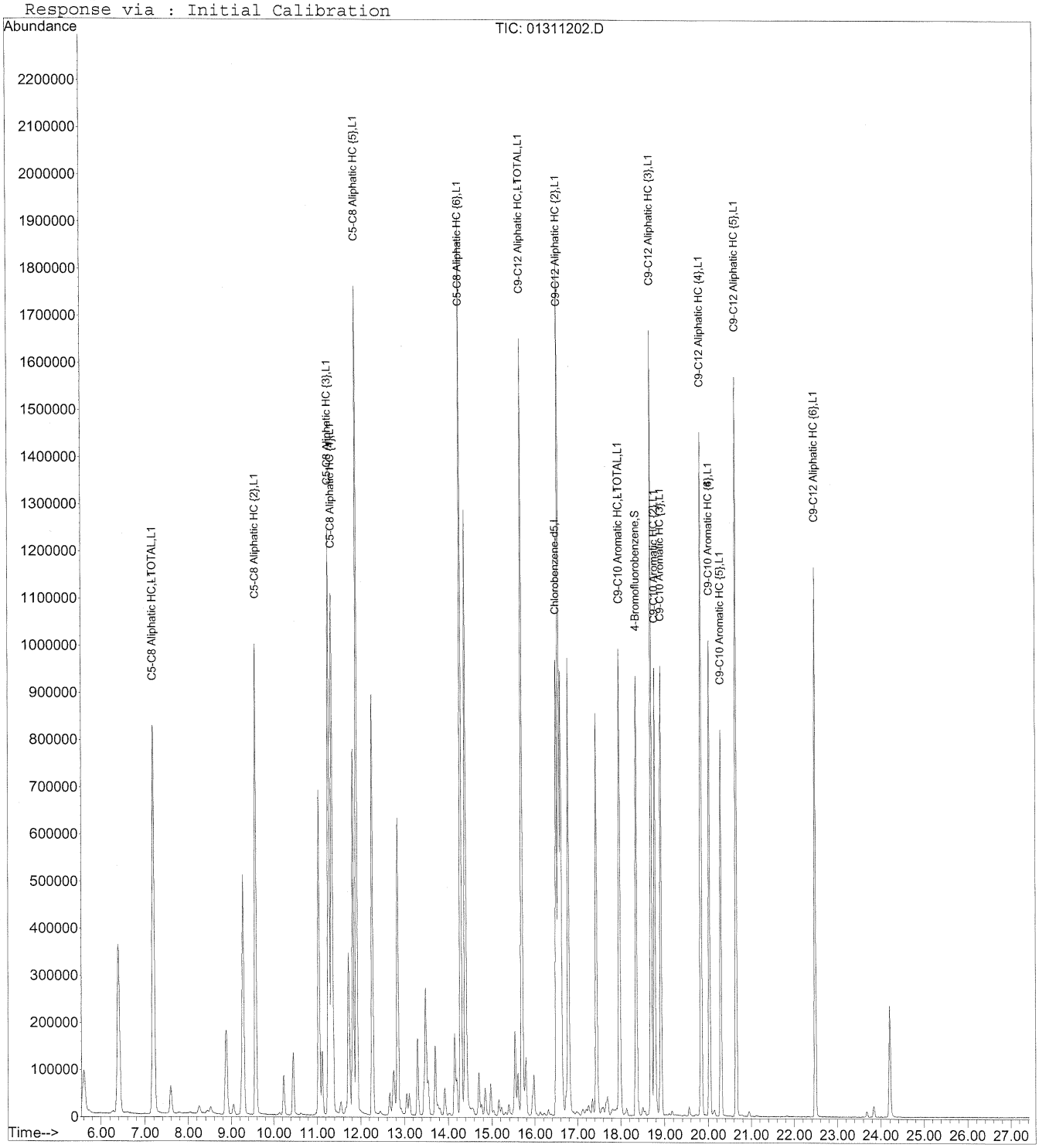
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	661733	12.50 ug/m3	0.00
System Monitoring Compounds					
41) 4-Bromofluorobenzene	18.35	95	455773	85.00 ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 94.97%		
Target Compounds					Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2851604	29.47 ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2533134	38.95 ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	3108378	42.32 ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	3017045	46.48 ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	3938474	55.89 ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	4019887	57.27 ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	19468522m	268.36 ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	3730776	50.47 ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	4033065	55.95 ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.69	TIC	3449925	54.17 ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.84	TIC	3214285	52.08 ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.66	TIC	3176846	58.31 ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.48	TIC	2316903	61.12 ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	19921800m	336.92 ug/m3	
15) C9-C10 Aromatic HC	17.98	120	217545	44.06 ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	228208	43.54 ug/m3	100
17) C9-C10 Aromatic HC {3}	18.92	120	338722	44.98 ug/m3	100
18) C9-C10 Aromatic HC {4}	20.04	120	75326	48.95 ug/m3	100
19) C9-C10 Aromatic HC {5}	20.29	120	252543	44.55 ug/m3	100
20) C9-C10 Aromatic HC {6}	20.04	134	181603	48.91 ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.98	TIC	1293947m	226.44 ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\013112\01311202.D Vial: 2
Acq On : 31 Jan 2012 12:07 pm Operator: RACHEL HILL
Sample : CCV 013112 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 1 9:44 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



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_120120A **Run No.:** 45784

Analytical Run Date: 1/20/2012 **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	R45784	1/20/2012 12:52:00 PM	Charles O`Bryan		
ccv std 1-2 a	ASTM-D2504	CCV	R45784	1/20/2012 1:10:00 PM	Robert Lynch		
lcs	ASTM-D2504	LCS	R45784	1/20/2012 1:43:00 PM	Robert Lynch		
crql std 2% a	ASTM-D2504	CRQL	R45784	1/20/2012 2:17:00 PM	Robert Lynch		
1201592-001b	ASTM-D2504	SAMP	R45784	1/20/2012 2:33:00 PM	Robert Lynch		
1201592-002b	ASTM-D2504	SAMP	R45784	1/20/2012 2:49:00 PM	Robert Lynch		
1201592-003b	ASTM-D2504	SAMP	R45784	1/20/2012 3:06:00 PM	Robert Lynch		
1201592-004b	ASTM-D2504	SAMP	R45784	1/20/2012 3:21:00 PM	Robert Lynch		
1201592-005b	ASTM-D2504	SAMP	R45784	1/20/2012 3:36:00 PM	Robert Lynch		
1201592-006b	ASTM-D2504	SAMP	R45784	1/20/2012 3:53:00 PM	Robert Lynch		
1201592-007b	ASTM-D2504	SAMP	R45784	1/20/2012 4:12:00 PM	Robert Lynch		
1201592-008b	ASTM-D2504	SAMP	R45784	1/20/2012 4:28:00 PM	Robert Lynch		
1201592-009b	ASTM-D2504	SAMP	R45784	1/20/2012 4:43:00 PM	Robert Lynch		
1201592-010b	ASTM-D2504	SAMP	R45784	1/20/2012 4:57:00 PM	Robert Lynch		
1201592-010bDUP	ASTM-D2504	DUP	R45784	1/20/2012 5:12:00 PM	Charles O`Bryan		
ccv std 1-2 b	ASTM-D2504	CCV	R45784	1/20/2012 5:43:00 PM	Robert Lynch		
crql std 2% b	ASTM-D2504	CRQL	R45784	1/20/2012 6:05:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

15-Feb-12

RunNo 45784

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
898730	mblk	ASTM-D2504	MBLK	ıTA\012012\0120	1/20/2012 12:52:	1	R45784		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
898731	ccv std 1-2 a	ASTM-D2504	CCV	ıTA\012012\0120	1/20/2012 1:10:0	1	R45784		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.628	2.628		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Carbon Monoxide	A	%	2.707	2.707		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.097	2.097		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.744	2.744		2.5	0	0	0.025	0.1	0	110%	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
898732	lcs	ASTM-D2504	LCS	ıTA\012012\0120	1/20/2012 1:43:0	1	R45784		0	898731	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.636	2.636		2.5	0	2.628	0.025	0.1	0	105%	70	130	0%	
Carbon Monoxide	A	%	2.706	2.706		2.5	0	2.707	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	%	2.089	2.089		2	0	2.097	0.025	0.5	0	104%	70	130	0%	
Nitrogen	A	%	2.792	2.792		2.5	0	2.744	0.025	0.1	0	112%	70	130	2%	
Oxygen	A	%	2.509	2.509		2.5	0	2.499	0.025	0.1	0	100%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
898743	1201592-010b (Container-1 of 1)	ASTM-D2504	SAMP	ıTA\012012\0120	1/20/2012 4:57:0	1	R45784		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	%	20.77	20.77		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
898744	1201592-010bDUP	ASTM-D2504	DUP	ıTA\012012\0120	1/20/2012 5:12:0	1	R45784		0	898743	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.091	0.091		0	0	0.092	0.025	0.1	0	0%	0	0	1%	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	%	78.58	78.58		0	0	78.554	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	20.776	20.776		0	0	20.77	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
898745	ccv std 1-2 b	ASTM-D2504	CCV	ıTA\012012\0120	1/20/2012 5:43:0	1	R45784		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.628	2.628		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Carbon Monoxide	A	%	2.686	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	%	2.093	2.093		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.705	2.705		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Oxygen	A	%	2.483	2.483		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
898746	crql std 2% b	ASTM-D2504	CRQL	ıTA\012012\0120	1/20/2012 6:05:0	1	R45784		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	%	0.149	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\012012\01201202.D Vial: 1
Acq On : 20 Jan 2012 1:10 pm 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	2.499	0.0	0	0.06
2	Nitrogen	2.500	2.744	-9.8	0	0.04
3	Carbon Monoxide	2.500	2.707	-8.3	0	0.01
4	Methane	2.000	2.097	-4.8	0	0.03
5	Carbon dioxide	2.500	2.628	-5.1	0	0.03

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\012012\01201202.D Vial: 1
Acq On : 20 Jan 2012 1:10 pm 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 Fri Jan 27 15:54:42 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012012\01201202.D Vial: 1
Acq On : 20 Jan 2012 1:10 pm Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 20 13:21 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 09 13:16:42 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

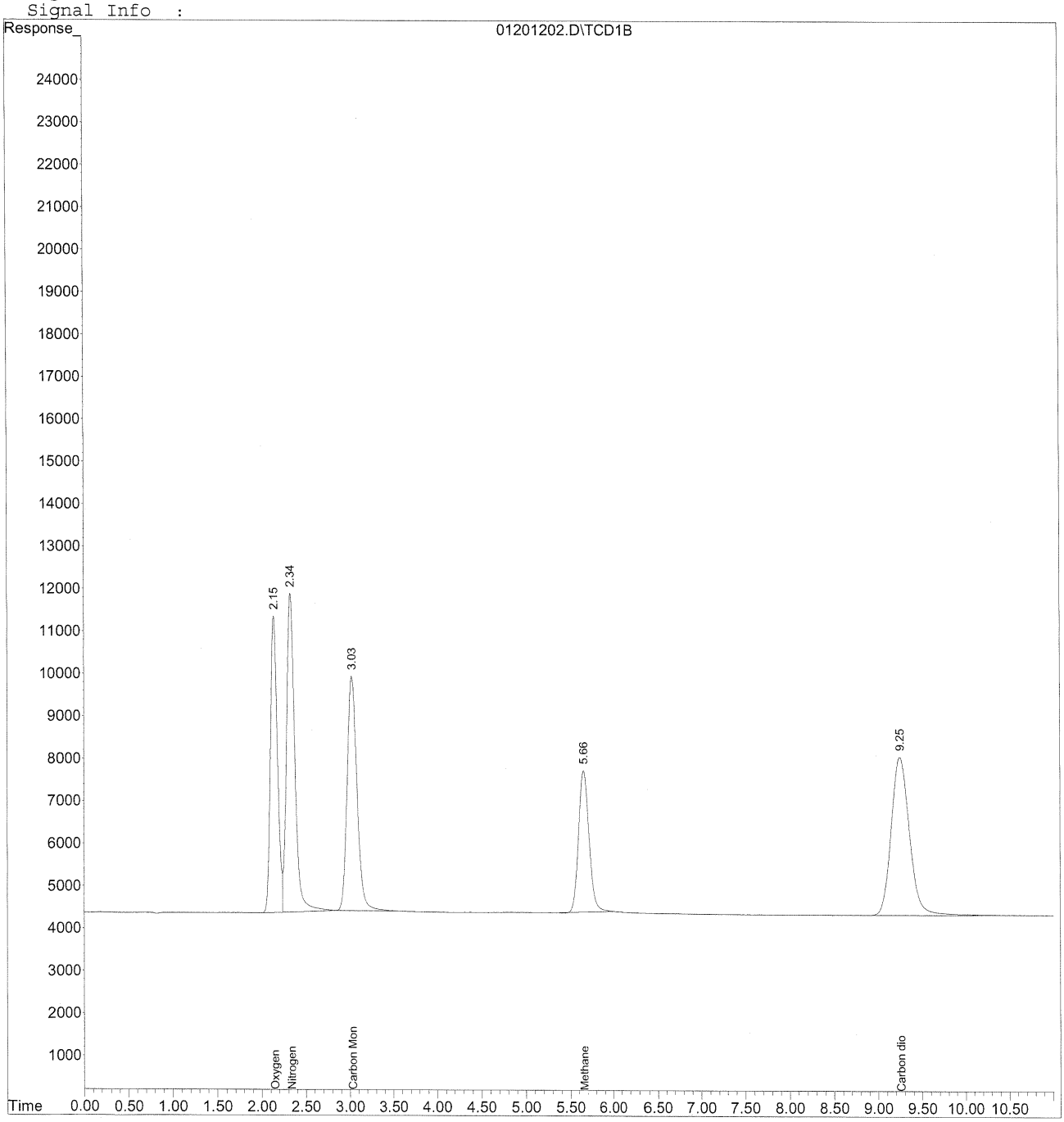
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	387198	2.499 %
2)	Nitrogen	2.34	481679	2.744 %
3)	Carbon Monoxide	3.03	436421	2.707 %
4)	Methane	5.66	283162	2.097 %
5)	Carbon dioxide	9.25	539669	2.628 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012012\01201202.D Vial: 1
Acq On : 20 Jan 2012 1:10 pm Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 20 13:21 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 09 13:16:42 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\012012\01201216.D Vial: 1
Acq On : 20 Jan 2012 5:43 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	2.483	0.7	0	0.05
2	Nitrogen	2.500	2.705	-8.2	0	0.04
3	Carbon Monoxide	2.500	2.686	-7.4	0	0.01
4	Methane	2.000	2.093	-4.6	0	0.03
5	Carbon dioxide	2.500	2.628	-5.1	0	0.02

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\012012\01201216.D Vial: 1
Acq On : 20 Jan 2012 5:43 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 Fri Jan 27 15:54:50 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012012\01201216.D Vial: 1
Acq On : 20 Jan 2012 5:43 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 25 11:59 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 :

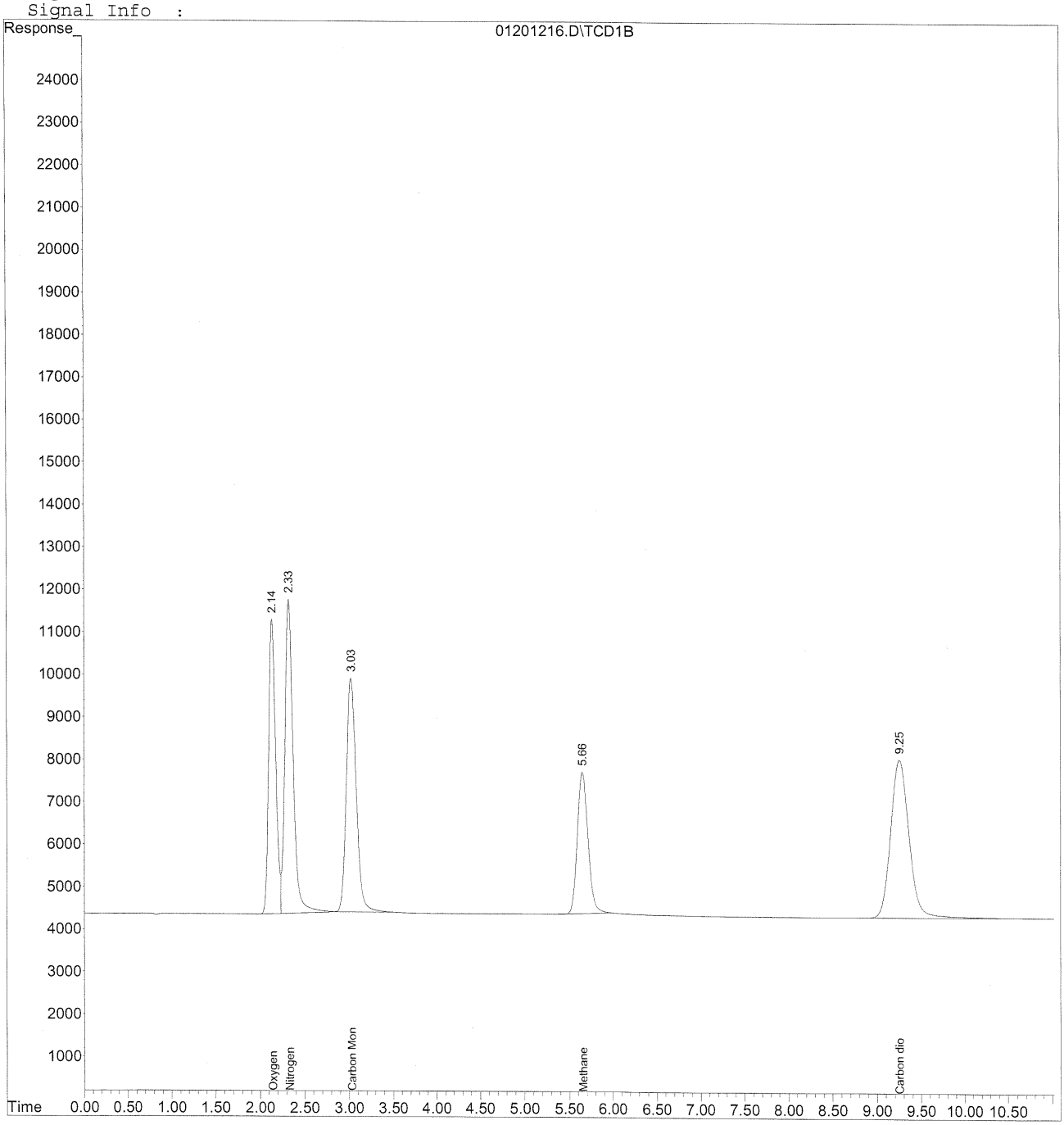
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	384670	2.483 %
2)	Nitrogen	2.34	474755	2.705 %
3)	Carbon Monoxide	3.03	432909	2.686 %
4)	Methane	5.66	282681	2.093 %
5)	Carbon dioxide	9.25	539685	2.628 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012012\01201216.D Vial: 1
Acq On : 20 Jan 2012 5:43 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 25 11:59 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_120123A **Run No.:** 45785

Analytical Run Date: 1/23/2012 **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	R45785	1/23/2012 11:40:00 AM	Charles O`Bryan		
ccv std 1-2 a	ASTM-D2504	CCV	R45785	1/23/2012 12:01:00 PM	Robert Lynch		
lcs	ASTM-D2504	LCS	R45785	1/23/2012 12:16:00 PM	Robert Lynch		
crql std 2% a	ASTM-D2504	CRQL	R45785	1/23/2012 12:45:00 PM	Robert Lynch		
1201592-011b	ASTM-D2504	SAMP	R45785	1/23/2012 2:27:00 PM	Robert Lynch		
1201592-012b	ASTM-D2504	SAMP	R45785	1/23/2012 2:44:00 PM	Robert Lynch		
1201592-013b	ASTM-D2504	SAMP	R45785	1/23/2012 3:00:00 PM	Robert Lynch		
1201592-014b	ASTM-D2504	SAMP	R45785	1/23/2012 3:27:00 PM	Robert Lynch		
1201592-015b	ASTM-D2504	SAMP	R45785	1/23/2012 4:02:00 PM	Robert Lynch		
1201592-016b	ASTM-D2504	SAMP	R45785	1/23/2012 4:21:00 PM	Robert Lynch		
1201592-017b	ASTM-D2504	SAMP	R45785	1/23/2012 4:44:00 PM	Robert Lynch		
1201592-018b	ASTM-D2504	SAMP	R45785	1/23/2012 5:05:00 PM	Robert Lynch		
1201592-019b	ASTM-D2504	SAMP	R45785	1/23/2012 5:31:00 PM	Robert Lynch		
1201592-020b	ASTM-D2504	SAMP	R45785	1/23/2012 5:46:00 PM	Robert Lynch		
1201592-020bdup	ASTM-D2504	DUP	R45785	1/23/2012 6:06:00 PM	Charles O`Bryan		
ccv std 1-2 b	ASTM-D2504	CCV	R45785	1/23/2012 6:24:00 PM	Robert Lynch		
crql std 2% b	ASTM-D2504	CRQL	R45785	1/23/2012 6:55:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

15-Feb-12

RunNo 45785

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
898747	mblk	ASTM-D2504	MBLK	ıTA\012312\0123	1/23/2012 11:40:	1	R45785		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
898748	ccv std 1-2 a	ASTM-D2504	CCV	ıTA\012312\0123	1/23/2012 12:01:	1	R45785		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.606	2.606		2.5	0	0	0.025	0.1	0	104%	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	%	2.069	2.069		2	0	0	0.025	0.5	0	103%	85	115	0%	
Nitrogen	A	%	2.728	2.728		2.5	0	0	0.025	0.1	0	109%	85	115	0%	
Oxygen	A	%	2.485	2.485		2.5	0	0	0.025	0.1	0	99%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
898749	lcs	ASTM-D2504	LCS	ıTA\012312\0123	1/23/2012 12:16:	1	R45785		0	898748	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.578	2.578		2.5	0	2.606	0.025	0.1	0	103%	70	130	1%	
Carbon Monoxide	A	%	2.634	2.634		2.5	0	2.698	0.025	0.1	0	105%	70	130	2%	
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	%	2.047	2.047		2	0	2.069	0.025	0.5	0	102%	70	130	1%	
Nitrogen	A	%	2.583	2.583		2.5	0	2.728	0.025	0.1	0	103%	70	130	5%	
Oxygen	A	%	2.414	2.414		2.5	0	2.485	0.025	0.1	0	97%	70	130	3%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
898760	1201592-020b (Container-1 of 1)	ASTM-D2504	SAMP	ıTA\012312\0123	1/23/2012 5:46:0	1	R45785		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	%	17.281	17.281		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
898761	1201592-020bdup	ASTM-D2504	DUP	ıTA\012312\0123	1/23/2012 6:06:0	1	R45785		0	898760	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	1.292	1.292		0	0	1.282	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	%	79.036	79.036		0	0	78.524	0.025	0.1	0	0%	0	0	1%	
Oxygen	A	%	17.385	17.385		0	0	17.281	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
898762	ccv std 1-2 b	ASTM-D2504	CCV	ıTA\012312\0123	1/23/2012 6:24:0	1	R45785		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.571	2.571		2.5	0	0	0.025	0.1	0	103%	85	115	0%	
Carbon Monoxide	A	%	2.677	2.677		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	%	2.071	2.071		2	0	0	0.025	0.5	0	104%	85	115	0%	
Nitrogen	A	%	2.63	2.63		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Oxygen	A	%	2.459	2.459		2.5	0	0	0.025	0.1	0	98%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
898763	crql std 2% b	ASTM-D2504	CRQL	ıTA\012312\0123	1/23/2012 6:55:0	1	R45785		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.308	0.308		0.3	0	0	0.025	0.1	0	103%	80	120	0%	
Carbon Monoxide	A	%	0.145	0.145		0.14	0	0	0.025	0.1	0	104%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\012312\01231202.D Vial: 1
Acq On : 23 Jan 2012 12:01 pm 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	2.485	0.6	0	0.05
2	Nitrogen	2.500	2.728	-9.1	0	0.03
3	Carbon Monoxide	2.500	2.698	-7.9	0	0.00
4	Methane	2.000	2.069	-3.4	0	0.02
5	Carbon dioxide	2.500	2.606	-4.2	0	0.00

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\012312\01231202.D Vial: 1
Acq On : 23 Jan 2012 12:01 pm 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 Fri Jan 27 15:58:28 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012312\01231202.D Vial: 1
Acq On : 23 Jan 2012 12:01 pm Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 23 12:15 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 23 12:15:24 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

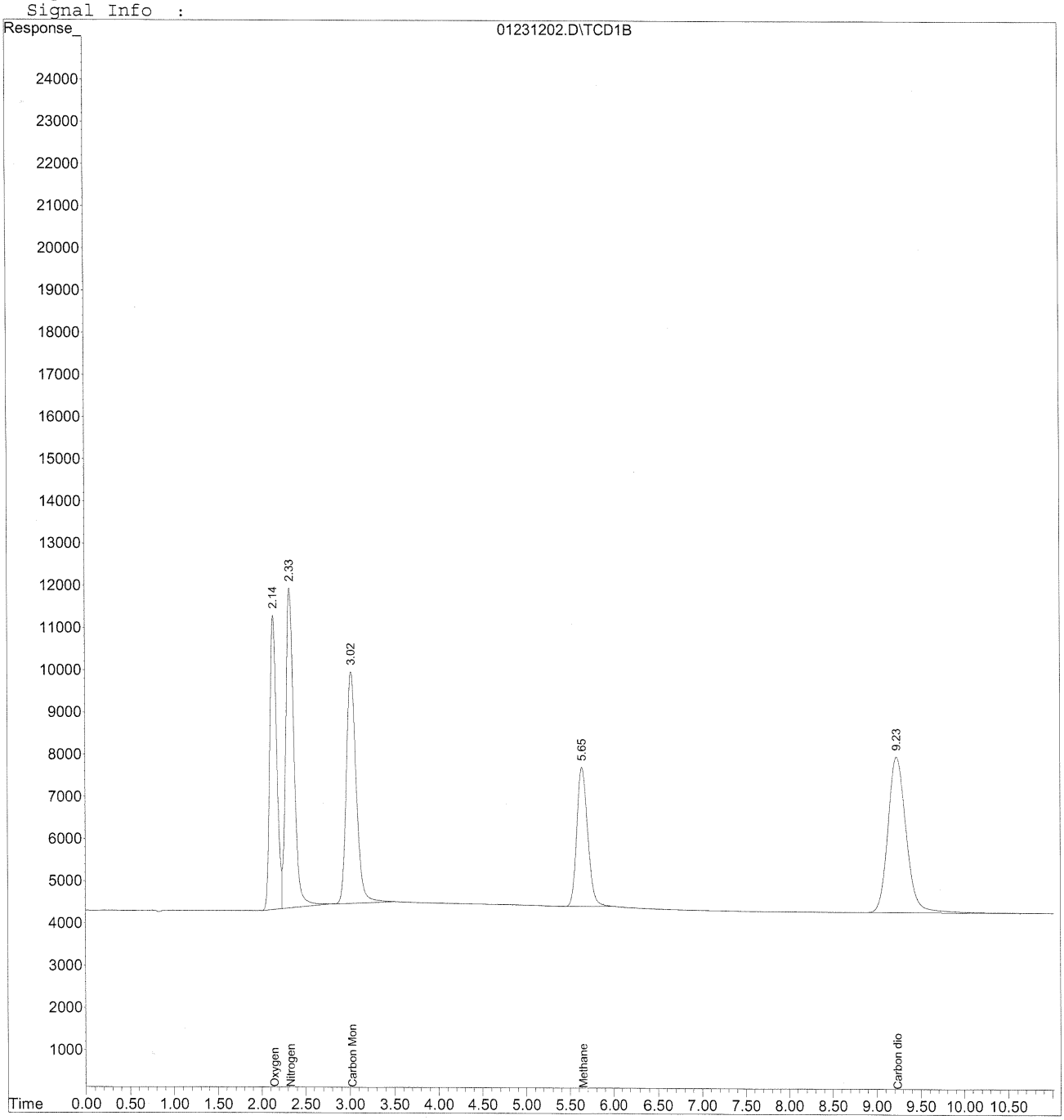
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	385046	2.485 %
2)	Nitrogen	2.33	478872	2.728 %
3)	Carbon Monoxide	3.03	434884	2.698 %
4)	Methane	5.65	279420	2.069 %
5)	Carbon dioxide	9.23	535222	2.606 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012312\01231202.D Vial: 1
Acq On : 23 Jan 2012 12:01 pm Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 23 12:15 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Mon Jan 23 12:15:24 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\012312\01231216.D          Vial: 1
Acq On    : 23 Jan 2012   6:24 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	2.459	1.6	0	0.06
2	Nitrogen	2.500	2.630	-5.2	0	0.04
3	Carbon Monoxide	2.500	2.677	-7.1	0	0.00
4	Methane	2.000	2.071	-3.6	0	0.03
5	Carbon dioxide	2.500	2.571	-2.8	0	0.00

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\2\DATA\012312\01231216.D          Vial: 1
Acq On    : 23 Jan 2012   6:24 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 Fri Jan 27 15:58:39 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012312\01231216.D Vial: 1
Acq On : 23 Jan 2012 6:24 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 26 8:48 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	380970	2.459 %
2)	Nitrogen	2.34	461516	2.630 %
3)	Carbon Monoxide	3.03	431545	2.677 %
4)	Methane	5.65	279700	2.071 %
5)	Carbon dioxide	9.24	527988	2.571 %

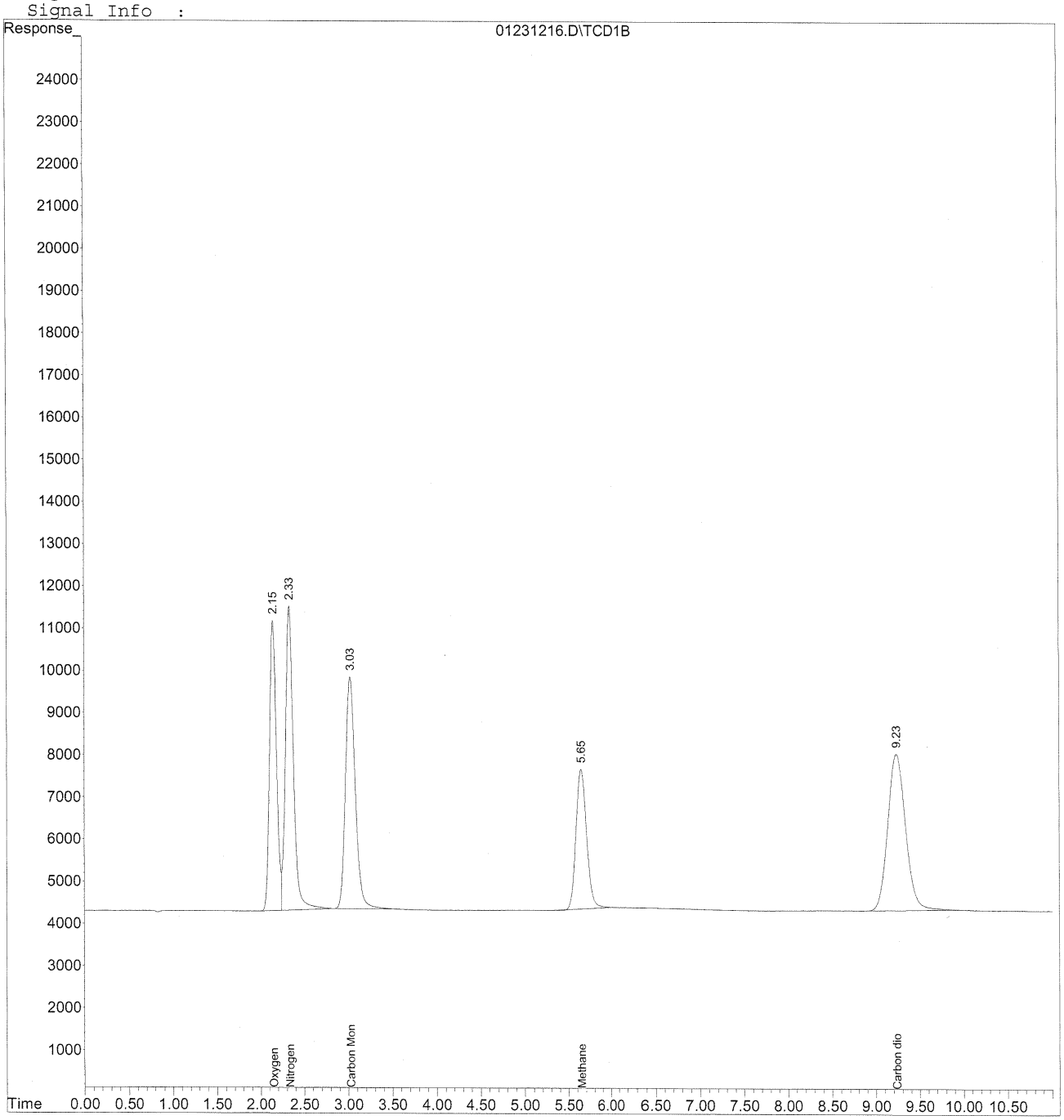
(f)=RT Delta > 1/2 Window (m)=manual int.
01231216.D 122211.M Fri Jan 27 15:57:23 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012312\01231216.D Vial: 1
Acq On : 23 Jan 2012 6:24 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 26 8:48 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_120124A **Run No.:** 45786

Analytical Run Date: 1/24/2012 **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	R45786	1/24/2012 10:48:00 AM	Charles O`Bryan		
ccv std 1-2 a	ASTM-D2504	CCV	R45786	1/24/2012 11:08:00 AM	Robert Lynch		
lcs	ASTM-D2504	LCS	R45786	1/24/2012 11:35:00 AM	Robert Lynch		
crql std 2% a	ASTM-D2504	CRQL	R45786	1/24/2012 11:51:00 AM	Robert Lynch		
1201592-021b	ASTM-D2504	SAMP	R45786	1/24/2012 12:06:00 PM	Robert Lynch		
1201592-022b	ASTM-D2504	SAMP	R45786	1/24/2012 12:21:00 PM	Robert Lynch		
1201592-023b	ASTM-D2504	SAMP	R45786	1/24/2012 12:51:00 PM	Robert Lynch		
1201592-024b	ASTM-D2504	SAMP	R45786	1/24/2012 1:08:00 PM	Robert Lynch		
1201592-025b	ASTM-D2504	SAMP	R45786	1/24/2012 2:08:00 PM	Robert Lynch		
1201592-026b	ASTM-D2504	SAMP	R45786	1/24/2012 2:26:00 PM	Robert Lynch		
1201592-027b	ASTM-D2504	SAMP	R45786	1/24/2012 2:49:00 PM	Robert Lynch		
1201592-028b	ASTM-D2504	SAMP	R45786	1/24/2012 3:06:00 PM	Robert Lynch		
1201592-029b	ASTM-D2504	SAMP	R45786	1/24/2012 3:30:00 PM	Robert Lynch		
1201592-030b	ASTM-D2504	SAMP	R45786	1/24/2012 4:04:00 PM	Robert Lynch		
1201592-030bdup	ASTM-D2504	DUP	R45786	1/24/2012 5:44:00 PM	Charles O`Bryan		
ccv std 1-2 b	ASTM-D2504	CCV	R45786	1/24/2012 5:59:00 PM	Robert Lynch		
crql std 2% b	ASTM-D2504	CRQL	R45786	1/24/2012 6:18:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

15-Feb-12

RunNo 45786

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
898764	mblk	ASTM-D2504	MBLK	ıTA\012412\0124	1/24/2012 10:48:	1	R45786		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
898765	ccv std 1-2 a	ASTM-D2504	CCV	ıTA\012412\0124	1/24/2012 11:08:	1	R45786		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.651	2.651		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Carbon Monoxide	A	%	2.715	2.715		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	%	2.088	2.088		2	0	0	0.025	0.5	0	104%	85	115	0%	
Nitrogen	A	%	2.652	2.652		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Oxygen	A	%	2.469	2.469		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
898766	lcs	ASTM-D2504	LCS	ıTA\012412\0124	1/24/2012 11:35:	1	R45786		0	898765	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.651	2.651		2.5	0	2.651	0.025	0.1	0	106%	70	130	0%	
Carbon Monoxide	A	%	2.711	2.711		2.5	0	2.715	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	%	2.109	2.109		2	0	2.088	0.025	0.5	0	105%	70	130	1%	
Nitrogen	A	%	2.664	2.664		2.5	0	2.652	0.025	0.1	0	107%	70	130	0%	
Oxygen	A	%	2.489	2.489		2.5	0	2.469	0.025	0.1	0	100%	70	130	1%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
898777	1201592-030b (Container-1 of 1)	ASTM-D2504	SAMP	ıTA\012412\0124	1/24/2012 4:04:0	1	R45786		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	%	21.275	21.275		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
898778	1201592-030bdup	ASTM-D2504	DUP	ıTA\012412\0124	1/24/2012 5:44:0	1	R45786		0	898777	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.046	0.046		0	0	0.047	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	%	80.412	80.412		0	0	79.587	0.025	0.1	0	0%	0	0	1%	
Oxygen	A	%	21.169	21.169		0	0	21.275	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
898779	ccv std 1-2 b	ASTM-D2504	CCV	ıTA\012412\0124	1/24/2012 5:59:0	1	R45786		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.635	2.635		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Carbon Monoxide	A	%	2.692	2.692		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.085	2.085		2	0	0	0.025	0.5	0	104%	85	115	0%	
Nitrogen	A	%	2.736	2.736		2.5	0	0	0.025	0.1	0	109%	85	115	0%	
Oxygen	A	%	2.495	2.495		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
898780	crql std 2% b	ASTM-D2504	CRQL	ıTA\012412\0124	1/24/2012 6:18:0	1	R45786		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	%	0.153	0.153		0.14	0	0	0.025	0.1	0	109%	80	120	0%	

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\2\DATA\012412\01241202.D          Vial: 1
Acq On    : 24 Jan 2012  11:08 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	2.469	1.2	0	0.06
2	Nitrogen	2.500	2.652	-6.1	0	0.04
3	Carbon Monoxide	2.500	2.715	-8.6	0	0.01
4	Methane	2.000	2.088	-4.4	0	0.03
5	Carbon dioxide	2.500	2.651	-6.0	0	0.02

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\2\DATA\012412\01241202.D          Vial: 1
Acq On    : 24 Jan 2012  11:08 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 Fri Jan 27 16:03:02 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012412\01241202.D Vial: 1
Acq On : 24 Jan 2012 11:08 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 24 12:03 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 :

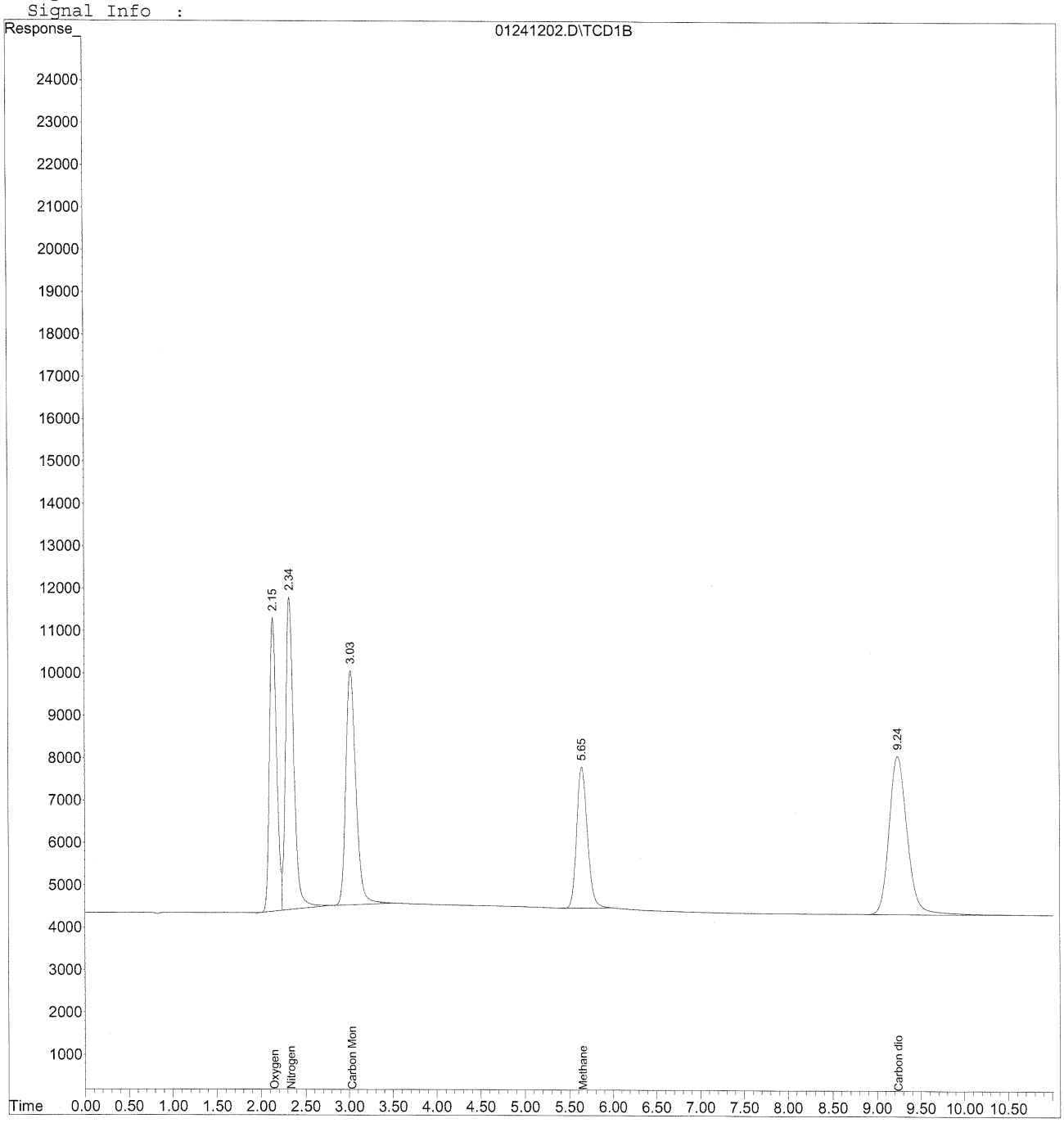
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1)	Oxygen	2.15	382450	2.469	%
2)	Nitrogen	2.34	465547	2.652	%
3)	Carbon Monoxide	3.03	437694	2.715	%
4)	Methane	5.65	281993	2.088	%
5)	Carbon dioxide	9.24	544457	2.651	%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012412\01241202.D Vial: 1
Acq On : 24 Jan 2012 11:08 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 24 12:03 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\012412\01241216.D Vial: 1
Acq On : 24 Jan 2012 5:59 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	2.495	0.2	0	0.06
2	Nitrogen	2.500	2.736	-9.4	0	0.04
3	Carbon Monoxide	2.500	2.692	-7.7	0	0.02
4	Methane	2.000	2.085	-4.2	0	0.04
5	Carbon dioxide	2.500	2.635	-5.4	0	0.02

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\012412\01241216.D Vial: 1
Acq On : 24 Jan 2012 5:59 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 Fri Jan 27 16:03:12 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012412\01241216.D Vial: 1
Acq On : 24 Jan 2012 5:59 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 24 18:17 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 :

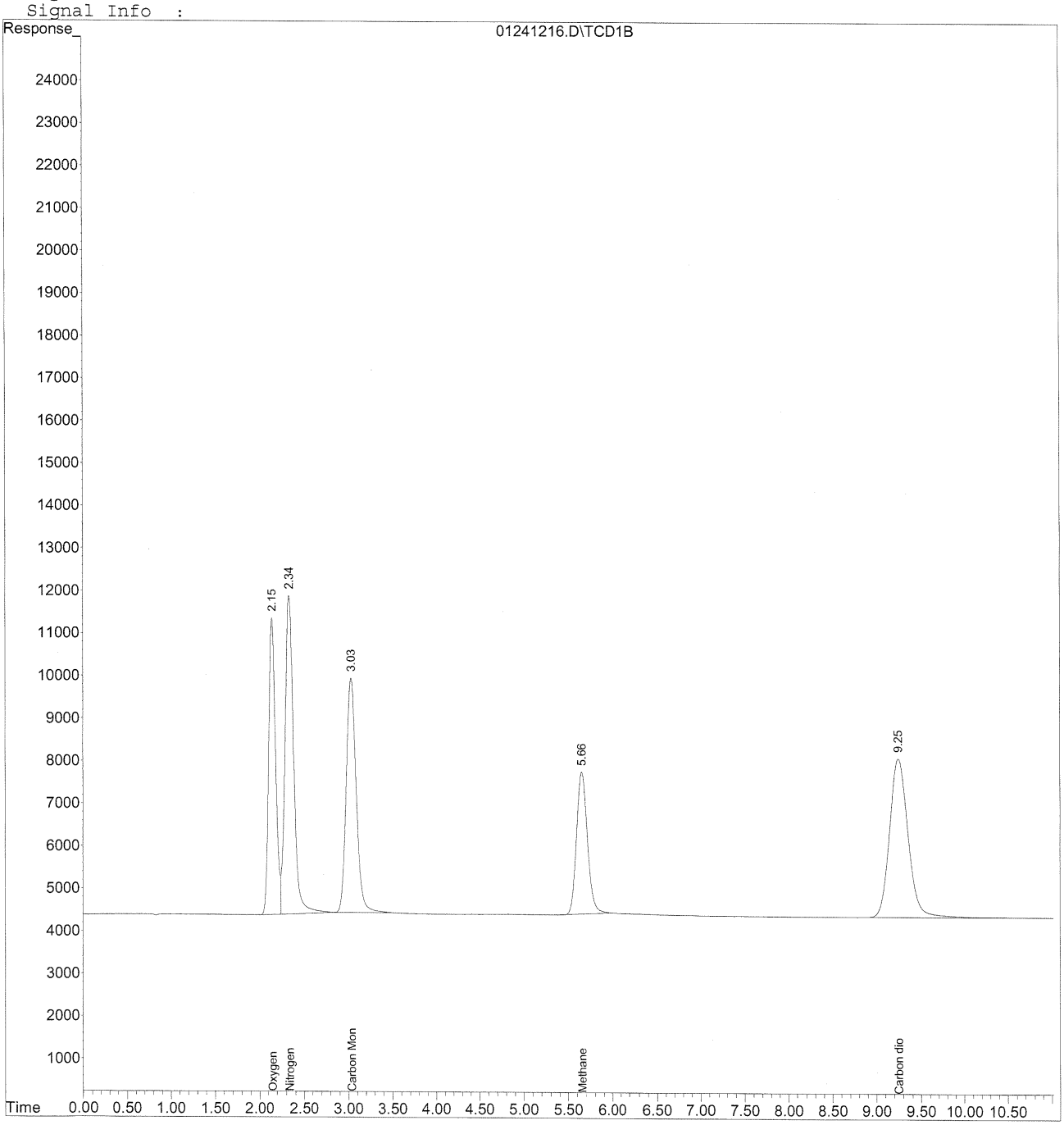
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	386542	2.495 %
2)	Nitrogen	2.34	480264	2.736 %
3)	Carbon Monoxide	3.04	433864	2.692 %
4)	Methane	5.66	281528	2.085 %
5)	Carbon dioxide	9.25	541181	2.635 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012412\01241216.D Vial: 1
Acq On : 24 Jan 2012 5:59 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 24 18:17 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_120125A **Run No.:** 45787

Analytical Run Date: 1/25/2012 **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	R45787	1/25/2012 11:08:00 AM	Charles O`Bryan		
ccv std 1-2 a	ASTM-D2504	CCV	R45787	1/25/2012 11:24:00 AM	Robert Lynch		
lcs	ASTM-D2504	LCS	R45787	1/25/2012 11:39:00 AM	Robert Lynch		
crql std 2% a	ASTM-D2504	CRQL	R45787	1/25/2012 11:54:00 AM	Robert Lynch		
1201592-031b	ASTM-D2504	SAMP	R45787	1/25/2012 12:12:00 PM	Robert Lynch		
1201592-032b	ASTM-D2504	SAMP	R45787	1/25/2012 12:29:00 PM	Robert Lynch		
1201592-033b	ASTM-D2504	SAMP	R45787	1/25/2012 12:43:00 PM	Robert Lynch		
1201592-034b	ASTM-D2504	SAMP	R45787	1/25/2012 1:03:00 PM	Robert Lynch		
1201592-035b	ASTM-D2504	SAMP	R45787	1/25/2012 2:27:00 PM	Robert Lynch		
1201592-036b	ASTM-D2504	SAMP	R45787	1/25/2012 2:42:00 PM	Robert Lynch		
1201592-037b	ASTM-D2504	SAMP	R45787	1/25/2012 2:58:00 PM	Robert Lynch		
1201592-038b	ASTM-D2504	SAMP	R45787	1/25/2012 3:19:00 PM	Robert Lynch		
1201592-039b	ASTM-D2504	SAMP	R45787	1/25/2012 3:34:00 PM	Robert Lynch		
1201592-040b	ASTM-D2504	SAMP	R45787	1/25/2012 3:57:00 PM	Robert Lynch		
1201592-040bdup	ASTM-D2504	DUP	R45787	1/25/2012 4:12:00 PM	Charles O`Bryan		
ccv std 1-2 b	ASTM-D2504	CCV	R45787	1/25/2012 4:29:00 PM	Robert Lynch		
crql std 2% b	ASTM-D2504	CRQL	R45787	1/25/2012 4:45:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

15-Feb-12

RunNo 45787

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
898781	mblk	ASTM-D2504	MBLK	ıTA\012512\0125	1/25/2012 11:08:	1	R45787		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
898782	ccv std 1-2 a	ASTM-D2504	CCV	ıTA\012512\0125	1/25/2012 11:24:	1	R45787		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.613	2.613		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Carbon Monoxide	A	%	2.73	2.73		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	%	2.106	2.106		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.624	2.624		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Oxygen	A	%	2.478	2.478		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
898783	lcs	ASTM-D2504	LCS	ıTA\012512\0125	1/25/2012 11:39:	1	R45787		0	898782	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.597	2.597		2.5	0	2.613	0.025	0.1	0	104%	70	130	1%	
Carbon Monoxide	A	%	2.701	2.701		2.5	0	2.73	0.025	0.1	0	108%	70	130	1%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Methane	A	%	2.097	2.097		2	0	2.106	0.025	0.5	0	105%	70	130	0%	
Nitrogen	A	%	2.651	2.651		2.5	0	2.624	0.025	0.1	0	106%	70	130	1%	
Oxygen	A	%	2.474	2.474		2.5	0	2.478	0.025	0.1	0	99%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
898794	1201592-040b (Container-1 of 1)	ASTM-D2504	SAMP	ıTA\012512\0125	1/25/2012 3:57:0	1	R45787		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	%	19.961	19.961		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
898795	1201592-040bdup	ASTM-D2504	DUP	ıTA\012512\0125	1/25/2012 4:12:0	1	R45787		0	898794	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.324	0.324		0	0	0.325	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	%	79.407	79.407		0	0	80.42	0.025	0.1	0	0%	0	0	1%	
Oxygen	A	%	19.879	19.879		0	0	19.961	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
898796	ccv std 1-2 b	ASTM-D2504	CCV	ıTA\012512\0125	1/25/2012 4:29:0	1	R45787		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.639	2.639		2.5	0	0	0.025	0.1	0	106%	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	%	2.099	2.099		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.66	2.66		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Oxygen	A	%	2.481	2.481		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
898797	crql std 2% b	ASTM-D2504	CRQL	ıTA\012512\0125	1/25/2012 4:45:0	1	R45787		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	%	0.152	0.152		0.14	0	0	0.025	0.1	0	109%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\012512\01251202.D Vial: 1
Acq On : 25 Jan 2012 11:24 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	2.478	0.9	0	0.06
2	Nitrogen	2.500	2.624	-5.0	0	0.04
3	Carbon Monoxide	2.500	2.730	-9.2	0	0.02
4	Methane	2.000	2.106	-5.3	0	0.04
5	Carbon dioxide	2.500	2.613	-4.5	0	0.02

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\012512\01251202.D Vial: 1
Acq On : 25 Jan 2012 11:24 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 Fri Jan 27 16:05:58 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012512\01251202.D Vial: 1
Acq On : 25 Jan 2012 11:24 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 25 12:08 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 :

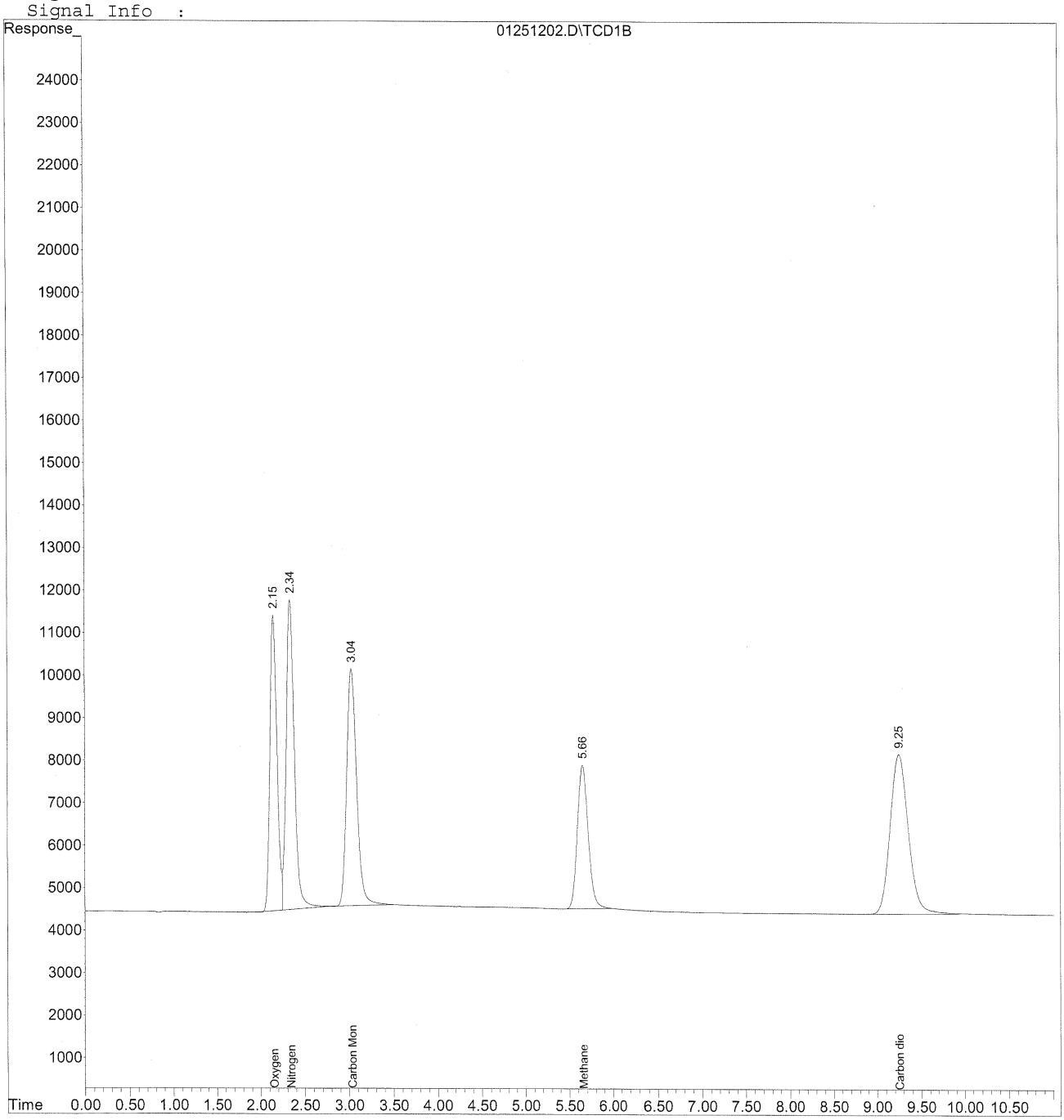
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	383915	2.478 %
2)	Nitrogen	2.34	460587	2.624 %
3)	Carbon Monoxide	3.04	440014	2.730 %
4)	Methane	5.66	284470	2.106 %
5)	Carbon dioxide	9.25	536555	2.613 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012512\01251202.D Vial: 1
Acq On : 25 Jan 2012 11:24 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 25 12:08 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\012512\01251216.D Vial: 1
Acq On : 25 Jan 2012 4:29 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	2.481	0.8	0	0.06
2	Nitrogen	2.500	2.660	-6.4	0	0.04
3	Carbon Monoxide	2.500	2.704	-8.2	0	0.02
4	Methane	2.000	2.099	-5.0	0	0.04
5	Carbon dioxide	2.500	2.639	-5.6	0	0.02

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\012512\01251216.D Vial: 1
Acq On : 25 Jan 2012 4:29 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 Fri Jan 27 16:06:08 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012512\01251216.D Vial: 1
Acq On : 25 Jan 2012 4:29 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 27 12:13 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 :

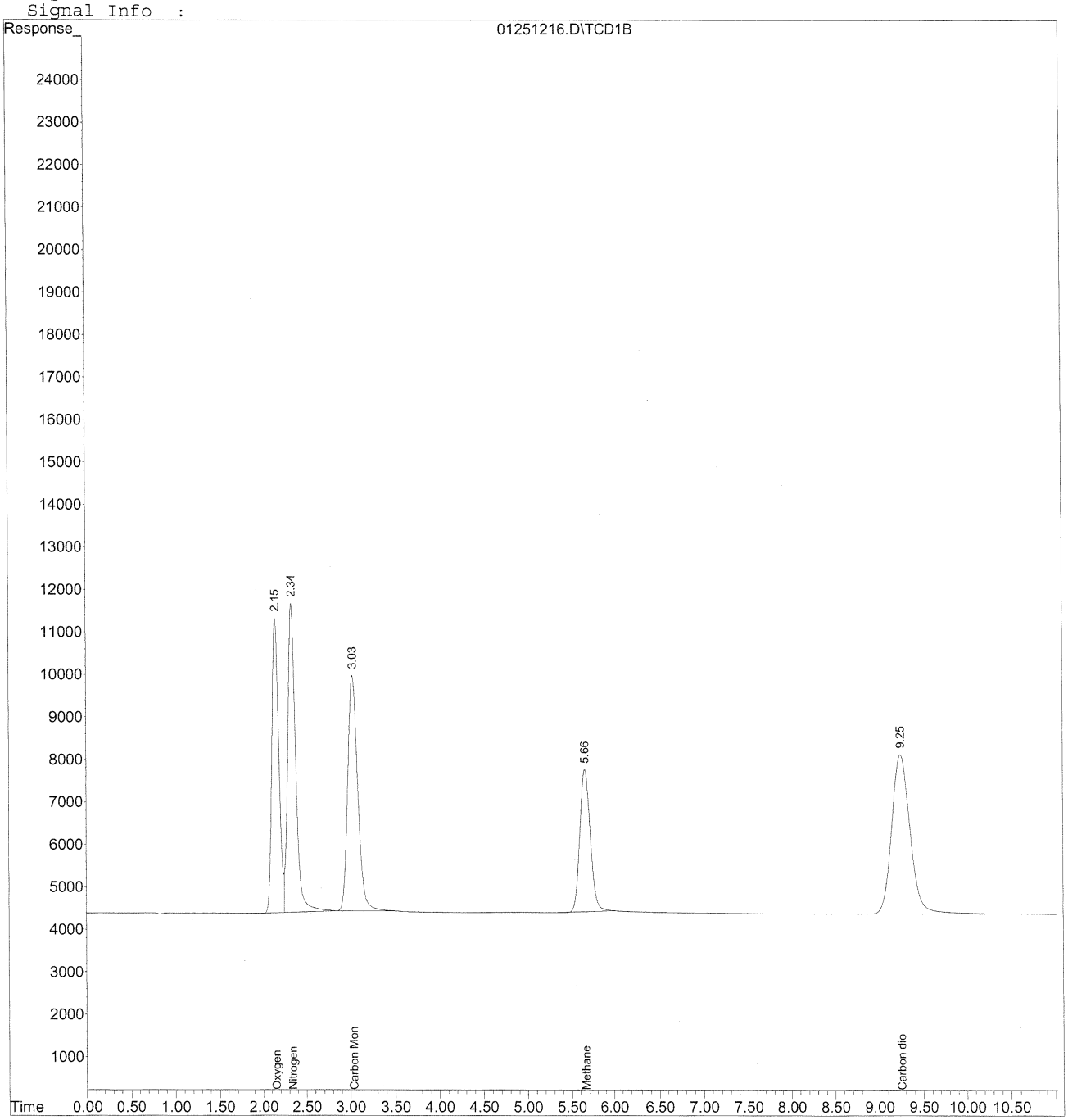
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	384421	2.481 %
2)	Nitrogen	2.34	466798	2.660 %
3)	Carbon Monoxide	3.04	435942	2.704 %
4)	Methane	5.66	283480	2.099 %
5)	Carbon dioxide	9.25	542034	2.639 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012512\01251216.D Vial: 1
Acq On : 25 Jan 2012 4:29 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 12:13 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_120126A **Run No.:** 45788

Analytical Run Date: 1/26/2012 **InstrumentID:** GC-TCD 1

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

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

Column Length: 2m

SamplID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
mblk	ASTM-D2504	MBLK	R45788	1/26/2012 9:32:00 AM	Charles O`Bryan		
ccv std 1-2 a	ASTM-D2504	CCV	R45788	1/26/2012 10:00:00 AM	Robert Lynch		
lcs	ASTM-D2504	LCS	R45788	1/26/2012 10:20:00 AM	Robert Lynch		
crql std 2% a	ASTM-D2504	CRQL	R45788	1/26/2012 10:44:00 AM	Robert Lynch		
1201592-041b	ASTM-D2504	SAMP	R45788	1/26/2012 11:04:00 AM	Robert Lynch		
1201592-042b	ASTM-D2504	SAMP	R45788	1/26/2012 11:19:00 AM	Robert Lynch		
1201592-043b	ASTM-D2504	SAMP	R45788	1/26/2012 11:34:00 AM	Robert Lynch		
1201592-044b	ASTM-D2504	SAMP	R45788	1/26/2012 11:49:00 AM	Robert Lynch		
1201592-045b	ASTM-D2504	SAMP	R45788	1/26/2012 12:04:00 PM	Robert Lynch		
1201592-046b	ASTM-D2504	SAMP	R45788	1/26/2012 12:19:00 PM	Robert Lynch		
1201592-047b	ASTM-D2504	SAMP	R45788	1/26/2012 12:34:00 PM	Robert Lynch		
1201592-048b	ASTM-D2504	SAMP	R45788	1/26/2012 12:51:00 PM	Robert Lynch		
1201592-049b	ASTM-D2504	SAMP	R45788	1/26/2012 1:06:00 PM	Robert Lynch		
1201676-001b	ASTM-D2504	SAMP	R45788	1/26/2012 1:21:00 PM	Robert Lynch		
1201676-001bdup	ASTM-D2504	DUP	R45788	1/26/2012 1:39:00 PM	Charles O`Bryan		
ccv std 1-2 b	ASTM-D2504	CCV	R45788	1/26/2012 1:54:00 PM	Robert Lynch		
1201676-002b	ASTM-D2504	SAMP	R45788	1/26/2012 2:09:00 PM	Robert Lynch		
1201676-003b	ASTM-D2504	SAMP	R45788	1/26/2012 2:25:00 PM	Robert Lynch		
1201676-004b	ASTM-D2504	SAMP	R45788	1/26/2012 2:40:00 PM	Robert Lynch		
1201676-005b	ASTM-D2504	SAMP	R45788	1/26/2012 2:56:00 PM	Robert Lynch		
1201676-006b	ASTM-D2504	SAMP	R45788	1/26/2012 3:11:00 PM	Robert Lynch		
1201676-007b	ASTM-D2504	SAMP	R45788	1/26/2012 3:27:00 PM	Robert Lynch		
ccv std 1-2 c	ASTM-D2504	CCV	R45788	1/26/2012 3:43:00 PM	Robert Lynch		
crql std 2% c	ASTM-D2504	CRQL	R45788	1/26/2012 4:20:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

15-Feb-12

RunNo 45788

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
898798	mblk	ASTM-D2504	MBLK	ATA\012612\0126	1/26/2012 9:32:0	1	R45788		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
898799	ccv std 1-2 a	ASTM-D2504	CCV	ATA\012612\0126	1/26/2012 10:00:	1	R45788		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.578	2.578		2.5	0	0	0.025	0.1	0	103%	85	115	0%	
Carbon Monoxide	A	%	2.707	2.707		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	%	2.103	2.103		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.692	2.692		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Oxygen	A	%	2.494	2.494		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
898800	lcs	ASTM-D2504	LCS	ATA\012612\0126	1/26/2012 10:20:	1	R45788		0	898799	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.636	2.636		2.5	0	2.578	0.025	0.1	0	105%	70	130	2%	
Carbon Monoxide	A	%	2.694	2.694		2.5	0	2.707	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	2.103	0.025	0.5	0	105%	70	130	1%	
Nitrogen	A	%	2.653	2.653		2.5	0	2.692	0.025	0.1	0	106%	70	130	1%	
Oxygen	A	%	2.472	2.472		2.5	0	2.494	0.025	0.1	0	99%	70	130	1%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
898811	1201676-001b (Container-01 of 01)	ASTM-D2504	SAMP	ATA\012612\0126	1/26/2012 1:21:0	1	R45788		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	%	19.842	19.842		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
898812	1201676-001bdup	ASTM-D2504	DUP	ATA\012612\0126	1/26/2012 1:39:0	1	R45788		0	898811	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.778	0.778		0	0	0.772	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	%	77.837	77.837		0	0	77.485	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	19.932	19.932		0	0	19.842	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
898813	ccv std 1-2 b	ASTM-D2504	CCV	ATA\012612\0126	1/26/2012 1:54:0	1	R45788		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.592	2.592		2.5	0	0	0.025	0.1	0	104%	85	115	0%	
Carbon Monoxide	A	%	2.648	2.648		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.059	2.059		2	0	0	0.025	0.5	0	103%	85	115	0%	
Nitrogen	A	%	2.725	2.725		2.5	0	0	0.025	0.1	0	109%	85	115	0%	
Oxygen	A	%	2.464	2.464		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
898814	1201676-002b (Container-01 of 01)	ASTM-D2504	SAMP	ATA\012612\0126	1/26/2012 2:09:0	1	R45788		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
898819	1201676-007b (Container-01 of 01)	ASTM-D2504	SAMP	ıTA\012612\0126	1/26/2012 3:27:0	1	R45788		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.778	0.778		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	%	77.952	77.952		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	19.418	19.418		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
898820	ccv std 1-2 c	ASTM-D2504	CCV	ıTA\012612\0126	1/26/2012 3:43:0	1	R45788		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.59	2.59		2.5	0	0	0.025	0.1	0	104%	85	115	0%	
Carbon Monoxide	A	%	2.648	2.648		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.056	2.056		2	0	0	0.025	0.5	0	103%	85	115	0%	
Nitrogen	A	%	2.697	2.697		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Oxygen	A	%	2.458	2.458		2.5	0	0	0.025	0.1	0	98%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
898821	crql std 2% c	ASTM-D2504	CRQL	ıTA\012612\0126	1/26/2012 4:20:0	1	R45788		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.308	0.308		0.3	0	0	0.025	0.1	0	103%	80	120	0%	
Carbon Monoxide	A	%	0.153	0.153		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	%	1.399	1.399		1.39	0	0	0.025	0.1	0	101%	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\012612\01261202.D Vial: 1
Acq On : 26 Jan 2012 10:00 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	2.494	0.2	0	0.05
2	Nitrogen	2.500	2.692	-7.7	0	0.03
3	Carbon Monoxide	2.500	2.707	-8.3	0	0.00
4	Methane	2.000	2.103	-5.2	0	0.03
5	Carbon dioxide	2.500	2.578	-3.1	0	0.01

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\012612\01261202.D Vial: 1
Acq On : 26 Jan 2012 10:00 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 Fri Jan 27 16:09:10 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012612\01261202.D Vial: 1
Acq On : 26 Jan 2012 10:00 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 26 10:17 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 :

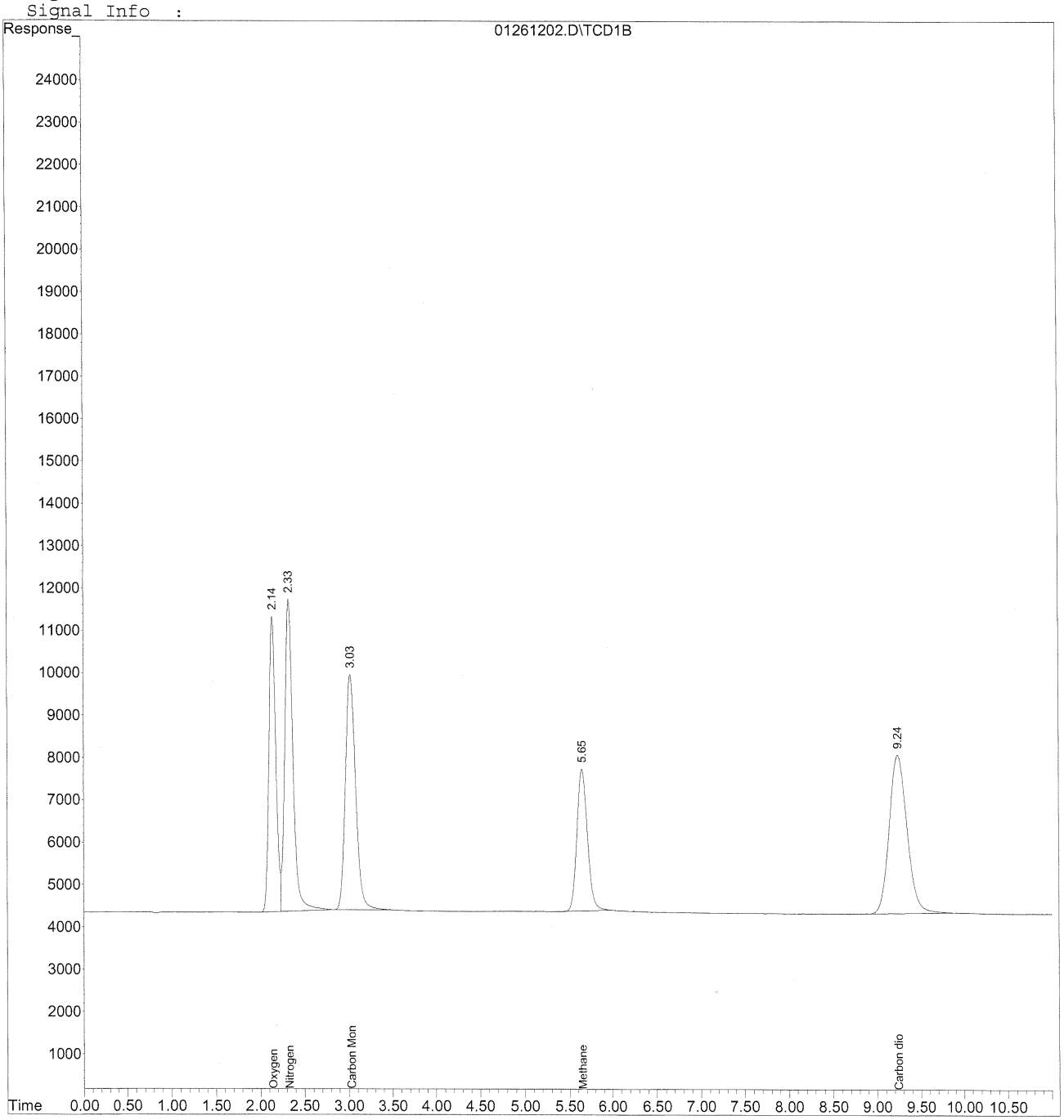
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	386362	2.494 %
2)	Nitrogen	2.33	472467	2.692 %
3)	Carbon Monoxide	3.03	436373	2.707 %
4)	Methane	5.65	283994	2.103 %
5)	Carbon dioxide	9.24	529548	2.578 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012612\01261202.D Vial: 1
Acq On : 26 Jan 2012 10:00 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 26 10:17 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\012612\01261216.D Vial: 1
Acq On : 26 Jan 2012 1:54 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	2.464	1.4	0	0.04
2	Nitrogen	2.500	2.725	-9.0	0	0.02
3	Carbon Monoxide	2.500	2.648	-5.9	0	0.00
4	Methane	2.000	2.059	-3.0	0	0.02
5	Carbon dioxide	2.500	2.592	-3.7	0	0.00

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\012612\01261216.D Vial: 1
Acq On : 26 Jan 2012 1:54 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 Fri Jan 27 16:09:19 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012612\01261216.D Vial: 1
Acq On : 26 Jan 2012 1:54 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 26 15:18 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 :

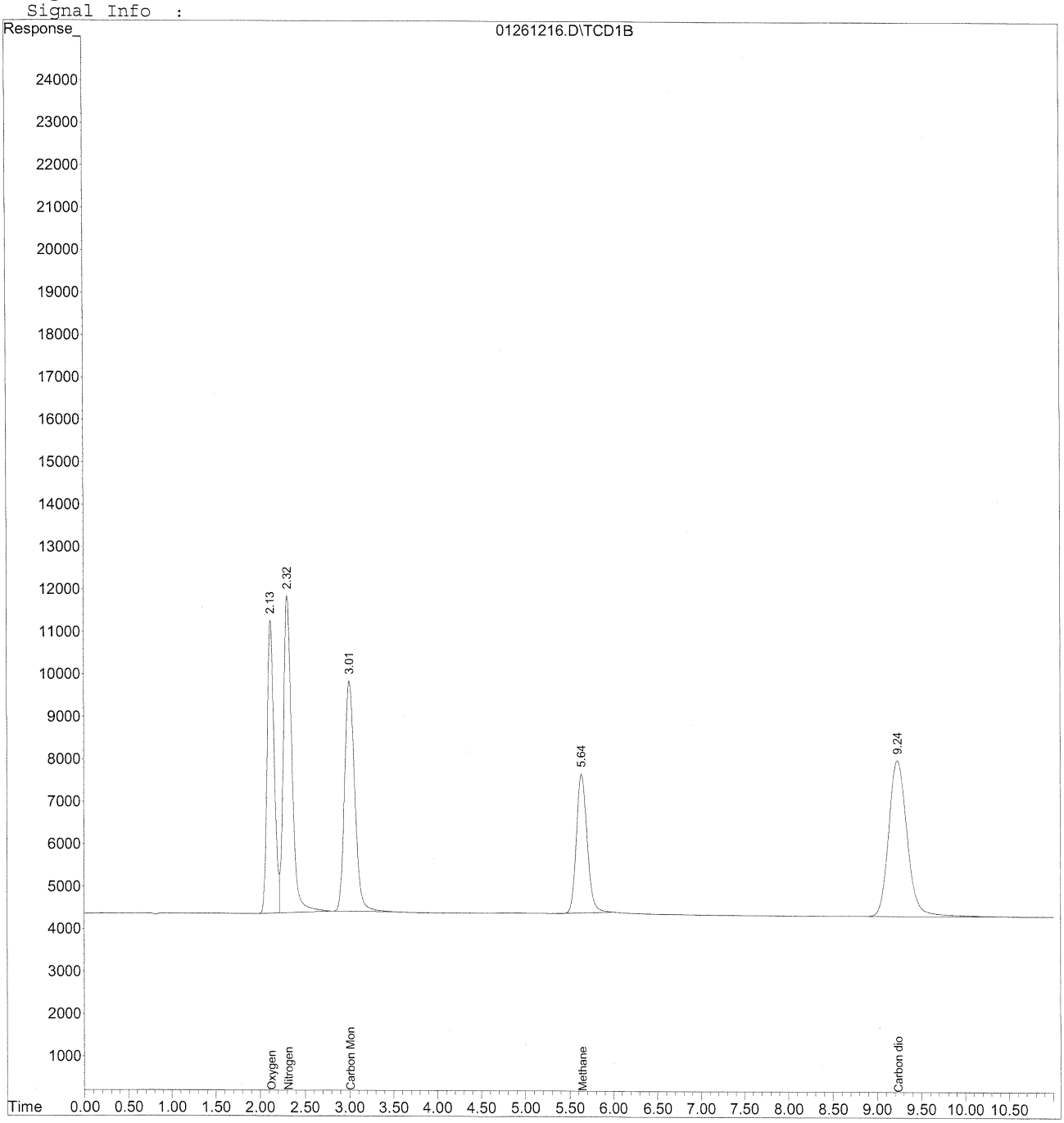
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.13	381663	2.464 %
2)	Nitrogen	2.32	478299	2.725 %
3)	Carbon Monoxide	3.01	426843	2.648 %
4)	Methane	5.65	278126	2.059 %
5)	Carbon dioxide	9.24	532227	2.592 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012612\01261216.D Vial: 1
Acq On : 26 Jan 2012 1:54 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 26 15:18 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\012612\01261223.D Vial: 1
Acq On : 26 Jan 2012 3:43 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	2.458	1.7	0	0.05
2	Nitrogen	2.500	2.697	-7.9	0	0.03
3	Carbon Monoxide	2.500	2.648	-5.9	0	0.00
4	Methane	2.000	2.056	-2.8	0	0.03
5	Carbon dioxide	2.500	2.590	-3.6	0	0.01

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\012612\01261223.D Vial: 1
Acq On : 26 Jan 2012 3:43 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 Fri Jan 27 16:09:26 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012612\01261223.D Vial: 1
Acq On : 26 Jan 2012 3:43 pm Operator:
Sample : ccv std 1-2 c Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 26 15:55 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 :

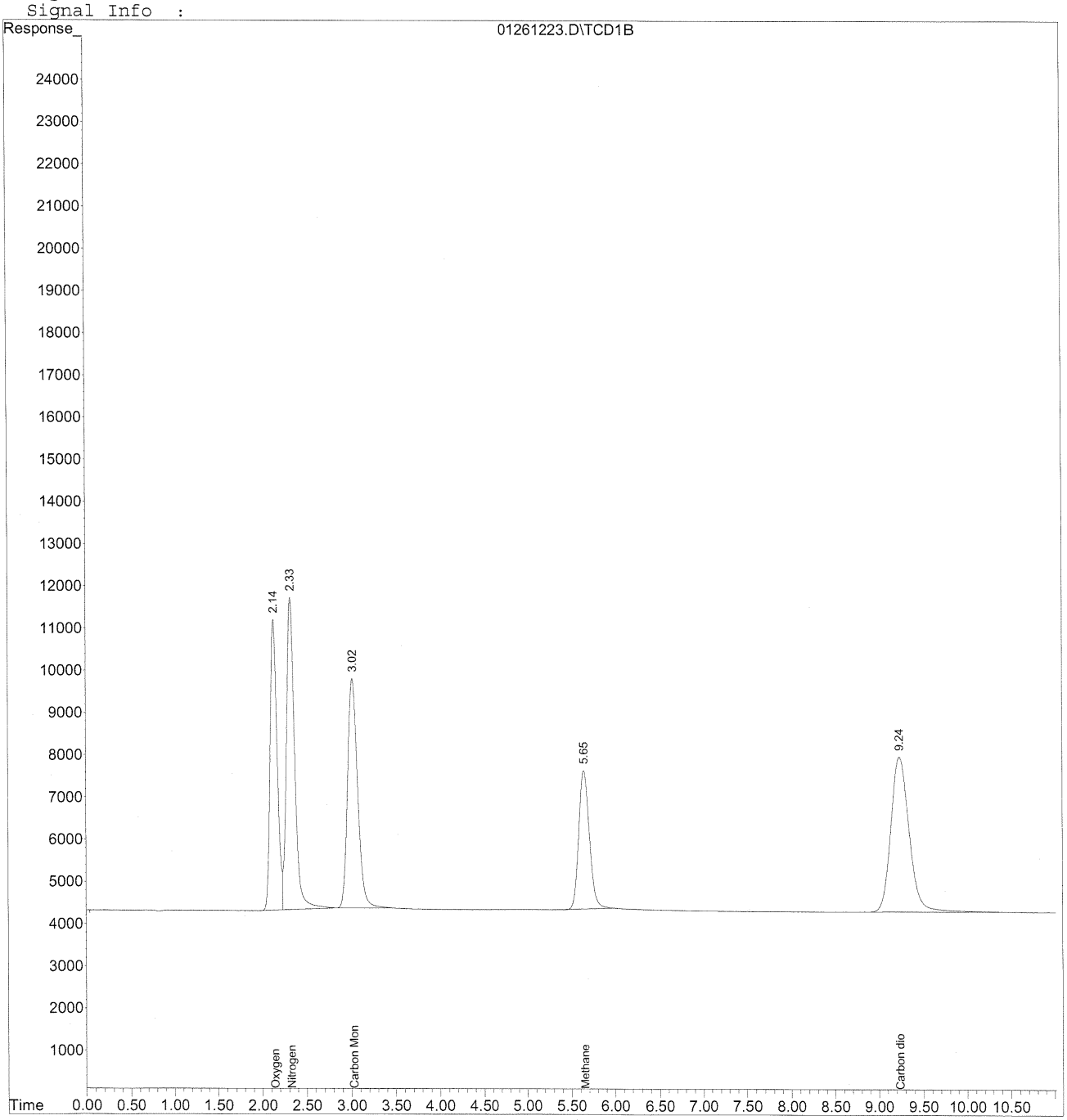
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	380785	2.458 %
2)	Nitrogen	2.33	473366	2.697 %
3)	Carbon Monoxide	3.02	426783	2.648 %
4)	Methane	5.65	277738	2.056 %
5)	Carbon dioxide	9.24	531987	2.590 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012612\01261223.D Vial: 1
Acq On : 26 Jan 2012 3:43 pm Operator:
Sample : ccv std 1-2 c Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 26 15:55 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

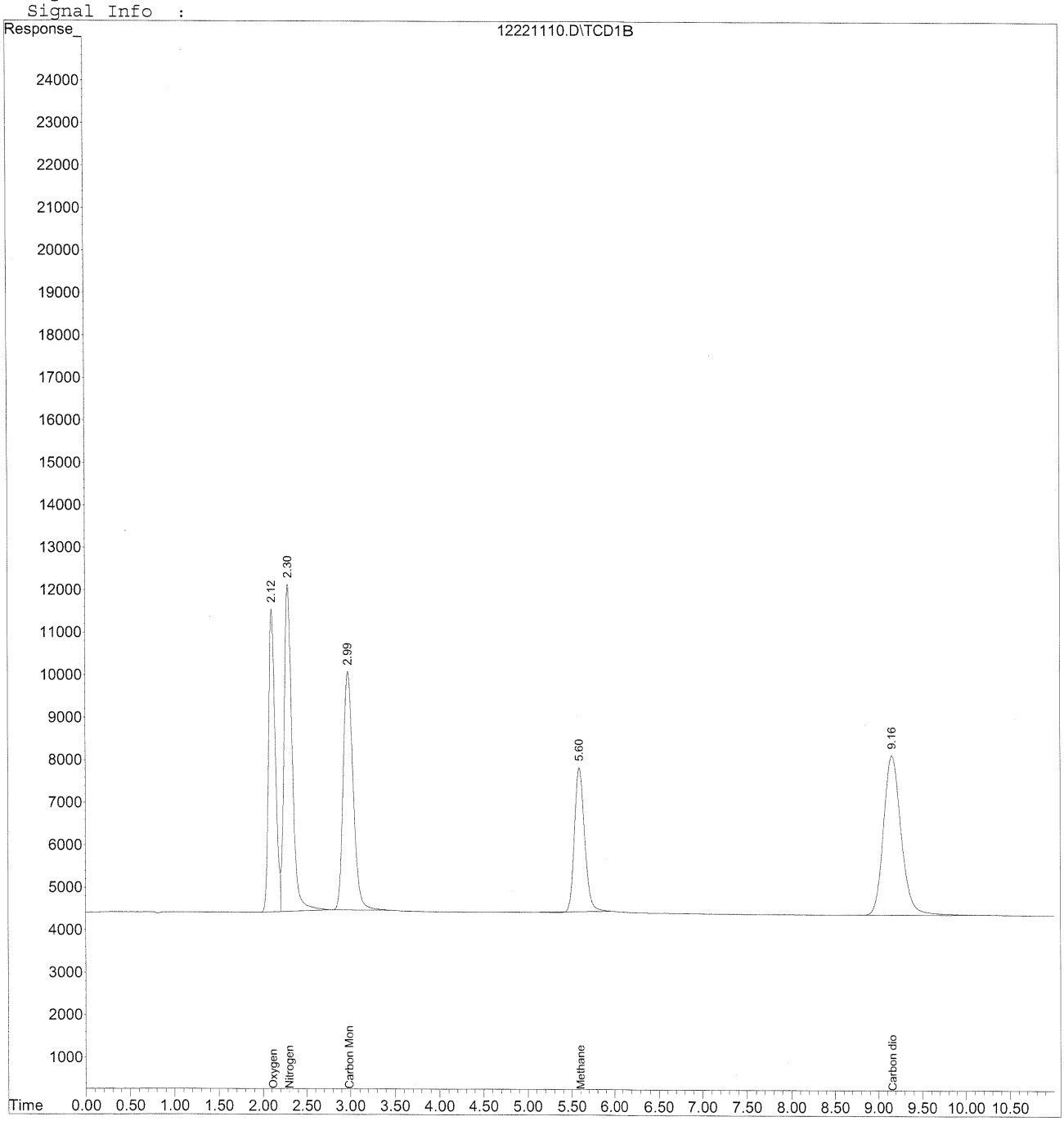
Volume Inj. :
Signal Phase :
Signal Info :

	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.
12221110.D 122211.M Mon Jan 09 11:49:34 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 : 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 :