RTI Laboratories, Inc.

Date: *09-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: 1201676

CASE NARRATIVE

Revised Report 02/09/2012: On data review, it was noted that the LCS RPD reference in LIMS was entered incorrectly for ASTM-D2504, thus calculating the %RPDs incorrectly. The reference has been corrected and all of the results remain within control limits. The data and EDD have been revised to reflect the change.

SAMPLE RECEIPT:
Samples were received at the RTI Laboratory, Livonia, MI via commercial delivery on 1/23/2012. Samples were received in good condition, for a total sample set of 32 air samples, with the following exceptions:

- Shaw sample ID VA1193 (RTI sample ID 1201676-004A)
- Shaw sample ID VA8072-TB (RTI sample ID 1201676-032A).

Containers for both samples were received with the tip of bottle vac unscrewed. Both bottles were at ambient pressure. TO15 and MA_APH analyses were voided for 1201676–004A. TO15 analysis for sample 1201676-032A (trip blank) was reported at client request.

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

QUALITY CONTROL:

Volatile Organic Compounds Analyses:

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

Surrogate recoveries were within established control limits.

Analytical Sequence ID 45900:

- Sample ID 1201676-031Adup exhibited elevated RPD results for Propylene (200%) due to low sample concentration.

RTI Laboratories, Inc.

Date: *09-Feb.-12*

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Work Order: 1201676

CASE NARRATIVE

Air-Phase Petroleum Hydrocarbons Analyses:

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

Surrogate recoveries were within established control limits.

Analytical Sequence ID 45908:

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

Fixed Gases (Noncondensable Gases/Light Hydrocarbons) Analyses:

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

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

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: 2/9/2012

RTI Laboratories - Definitions and Acronyms

WO#: 1201676

Date Reported: 2/8/2012
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

1201676

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV072

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

Samples Shipment Date: 17 JAN 2012
Lab Destination: RTI Laboratories
Lab Contact: Mike Truchan
Project Contact: Pamela Moss
Carrier/Waybill No.: UPS/2323121286

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

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

Special Instructions:

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

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

1. Relinquished By (Signature/Affiliation) Tim Nager Date: 1/17/12 Time: 1430
2. Relinquished By (Signature/Affiliation) Date: Time:
3. Relinquished By (Signature/Affiliation) Date: Time:

1. Received By (Signature/Affiliation) S. Meier Date: 1-23-12 Time: 10:20
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
VA1190	KAFB-106124-025-GS-VA1190-REG	17 JAN 2012	09:02	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0588
VA1190	KAFB-106124-025-GS-VA1190-REG	17 JAN 2012	09:02	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1191	KAFB-106124-050-GS-VA1191-REG	17 JAN 2012	09:36	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0684
VA1191	KAFB-106124-050-GS-VA1191-REG	17 JAN 2012	09:36	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1192	KAFB-106124-050-GS-VA1192-FD	17 JAN 2012	09:36	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA1192	KAFB-106124-050-GS-VA1192-FD	17 JAN 2012	09:36	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		0683
VA1193	KAFB-106124-150-GS-VA1193-REG	17 JAN 2012	10:23	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by			N		0658

1201676

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV072

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
							MA DEP, VOCs / TPH by TO-15					
VA1193	KAFB-106124-150-GS-VA1193-REG	17 JAN 2012	10:23	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1194	KAFB-106124-250-GS-VA1194-REG	17 JAN 2012	11:01	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0688
VA1194	KAFB-106124-250-GS-VA1194-REG	17 JAN 2012	11:01	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1250	KAFB-106133-025-GS-VA1250-REG	16 JAN 2012	9:20	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0590
VA1250	KAFB-106133-025-GS-VA1250-REG	16 JAN 2012	9:20	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1251	KAFB-106133-050-GS-VA1251-REG	16 JAN 2012	10:02	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0623
VA1251	KAFB-106133-050-GS-VA1251-REG	16 JAN 2012	10:02	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1252	KAFB-106133-050-GS-VA1252-FD	16 JAN 2012	10:02	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0622
VA1252	KAFB-106133-050-GS-VA1252-FD	16 JAN 2012	10:02	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1253	KAFB-106133-170-GS-VA1253-REG	16 JAN 2012	10:53	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0587
VA1253	KAFB-106133-170-GS-VA1253-REG	16 JAN 2012	10:53	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1254	KAFB-106133-250-GS-VA1254-REG	16 JAN 2012	11:31	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0688
VA1254	KAFB-106133-250-GS-VA1254-REG	16 JAN 2012	11:31	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1255	KAFB-106133-350-GS-VA1255-REG	16 JAN 2012	12:11	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0655
VA1255	KAFB-106133-350-GS-VA1255-REG	16 JAN 2012	12:11	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1256	KAFB-106133-450-GS-VA1256-REG	16 JAN 2012	12:51	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0682
VA1256	KAFB-106133-450-GS-VA1256-REG	16 JAN 2012	12:51	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1257	KAFB-106134-025-GS-VA1257-REG	16 JAN 2012	14:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0692
VA1257	KAFB-106134-025-GS-VA1257-REG	16 JAN 2012	14:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1258	KAFB-106134-050-GS-VA1258-REG	16 JAN 2012	14:52	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0691
VA1258	KAFB-106134-050-GS-VA1258-REG	16 JAN 2012	14:52	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1259	KAFB-106134-170-GS-VA1259-REG	16 JAN 2012	15:27	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0695
VA1259	KAFB-106134-170-GS-VA1259-REG	16 JAN 2012	15:27	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1260	KAFB-106134-250-GS-VA1260-REG	16 JAN 2012	16:00	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0616
VA1260	KAFB-106134-250-GS-VA1260-REG	16 JAN 2012	16:00	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1261	KAFB-106134-350-GS-VA1261-REG	17 JAN 2012	08:38	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		564
VA1261	KAFB-106134-350-GS-VA1261-REG	17 JAN 2012	08:38	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		

1201676

Shaw™
Shaw E & I, Inc.

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV072

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1262	KAFB-106134-350-GS-VA1262-FD	17 JAN 2012	08:38	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0589
VA1262	KAFB-106134-350-GS-VA1262-FD	17 JAN 2012	08:38	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1263	KAFB-106134-450-GS-VA1263-REG	17 JAN 2012	09:30	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0673
VA1263	KAFB-106134-450-GS-VA1263-REG	17 JAN 2012	09:30	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1264	KAFB-106135-025-GS-VA1264-REG	16 JAN 2012	13:55	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		554
VA1264	KAFB-106135-025-GS-VA1264-REG	16 JAN 2012	13:55	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1265	KAFB-106135-050-GS-VA1265-REG	16 JAN 2012	14:23	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0708
VA1265	KAFB-106135-050-GS-VA1265-REG	16 JAN 2012	14:23	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1266	KAFB-106135-150-GS-VA1266-REG	16 JAN 2012	15:11	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0656
VA1266	KAFB-106135-150-GS-VA1266-REG	16 JAN 2012	15:11	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1267	KAFB-106135-250-GS-VA1267-REG	16 JAN 2012	15:45	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		566
VA1267	KAFB-106135-250-GS-VA1267-REG	16 JAN 2012	15:45	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1268	KAFB-106135-350-GS-VA1268-REG	16 JAN 2012	16:21	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0596
VA1268	KAFB-106135-350-GS-VA1268-REG	16 JAN 2012	16:21	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1269	KAFB-106135-450-GS-VA1269-REG	17 JAN 2012	10:32	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0601
VA1269	KAFB-106135-450-GS-VA1269-REG	17 JAN 2012	10:32	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1277	KAFB-106137-025-GS-VA1277-REG	16 JAN 2012	8:46	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0719
VA1277	KAFB-106137-025-GS-VA1277-REG	16 JAN 2012	8:46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1278	KAFB-106137-050-GS-VA1278-REG	16 JAN 2012	9:12	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		528
VA1278	KAFB-106137-050-GS-VA1278-REG	16 JAN 2012	9:12	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1279	KAFB-106137-150-GS-VA1279-REG	16 JAN 2012	09:47	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0618
VA1279	KAFB-106137-150-GS-VA1279-REG	16 JAN 2012	09:47	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1280	KAFB-106137-250-GS-VA1280-REG	16 JAN 2012	10:24	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0662
VA1280	KAFB-106137-250-GS-VA1280-REG	16 JAN 2012	10:24	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1281	KAFB-106137-350-GS-VA1281-REG	16 JAN 2012	11:02	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0648
VA1281	KAFB-106137-350-GS-VA1281-REG	16 JAN 2012	11:02	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1282	KAFB-106137-450-GS-VA1282-REG	16 JAN 2012	11:46	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0758
VA1282	KAFB-106137-450-GS-VA1282-REG	16 JAN 2012	11:46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		

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Shaw E & I, Inc.

1201676

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV072

Sample No	Sample Name	Sample Date	Sample Time	Container	Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA8072-TB	FIELDQC-AQ-VA8072-TB-TB	16 JAN 2012	08:00	1 L BOTTLEVAC	1 None Required	VOCs / TPH by TO-15			N		0678

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

20 LBS 1 OF 6
DWT: 21,15,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4119 4893

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

REF 1:140705
REF 2:BB010030

BILLING: P/P

WS 14.0.21 HP LaserJet 4 21.0A 10/2011

Fold here and place in label pouch

CUSTODY SEAL
DATE 1/17/12
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

20 LBS 2 OF 6
DWT: 21,15,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4035 7905

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

REF 1:140705
REF 2:BB010030

BILLING: P/P

WS 14.0.21 HP LaserJet 4 21.0A 10/2011

Fold here and place in label pouch

CUSTODY SEAL
DATE 1/17/12
SIGNATURE Tim Nagel

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

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

11 LBS 3 OF 6
DWT: 14,13,10

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4155 5510

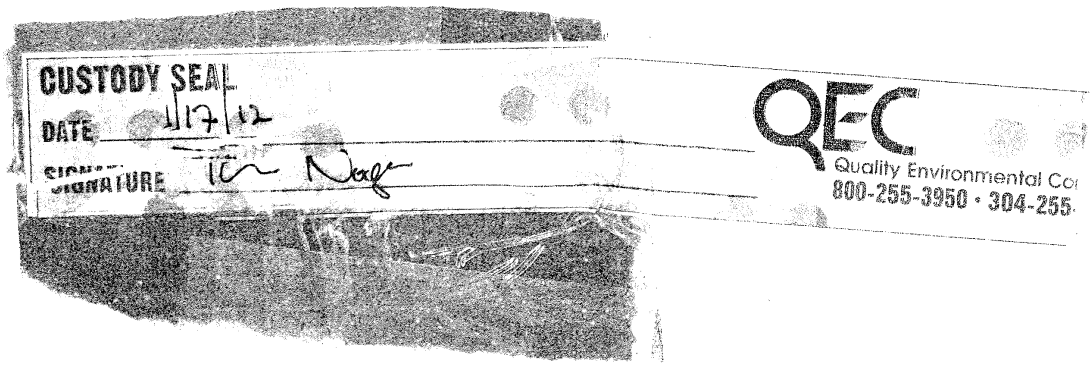
SHIP TO:
MICHAEL TRUCHAN
(734) 422-8000
RTI LABORATORIES
31628 GLENDALE ST.
LIVONIA MI 48150

REF 1:140705
REF 2:BB010030

BILLING: P/P

WS 14.0.21 HP LaserJet 4 21.0A 10/2011

Fold here and place in label pouch



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

7 LBS 4 OF 6
DWT: 12,9,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4170 3725

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

REF 1:140705
REF 2:BB010030

BILLING: P/P

WS 14.0.21 HP LaserJet 4 21.0A 10/2011

Fold here and place in label pouch

CUSTODY SEAL
DATE 1/17/13
SIGNATURE

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

	Bottle Vac
VA1279	0618
VA1280	0462
VA1281	0648
TB/VA8072-TB	0678

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

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

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4107 8536

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

REF 1:140705
REF 2:BB010030

BILLING: P/P

WS 14.0.21 HP LaserJet 4 21.0A 10/2011

Fold here and place in label pouch

CUSTODY SEAL
DATE 1/17/12
SIGNATURE Tim Nogler

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

33 LBS 6 OF 6
DWT: 26,17,14

MI 482 9-02

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

UPS GROUND
TRACKING #;, 1Z 103 35E 03 4091 5945

REF 1:140705
REF 2:BB010030

BILLING: P/P

WS 14.0.21 HP LaserJet 4 21.0A 10/2011

Fold here and place in label pouch

CUSTODY SEAL
DATE 1/17/12
SIGNATURE [illegible]

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

~~Empty Bottle voc's~~ [illegible] AF

~~No samples~~

Empty Bottle voc's

No samples AF 1-23-12

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: **1/23/2012 10:20:00 AM**

Work Order Number **1201676** RcptNo: **1**

Received by: **Stephanie Mercieca**

Completed by:

Reviewed by:

Completed Date: 1/23/2012 12:25:41 PM

Reviewed Date: 1/25/2012 6:04:41 PM

Carrier name: UPS

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

Case Number: SDG: SAS:

Adjusted? _____ Checked by

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

SampID	ContainerID	Type	Org pH	Adj pH	Req Min pH	Req Max pH
1201676-001A	Container-01 of 01	Bottle				
1201676-001B	Container-01 of 01	Bottle				
1201676-002A	Container-01 of 01	Bottle				
1201676-002B	Container-01 of 01	Bottle				
1201676-003A	Container-01 of 01	Bottle				
1201676-003B	Container-01 of 01	Bottle				
1201676-004B	Container-01 of 01	Bottle				
1201676-005A	Container-01 of 01	Bottle				
1201676-005B	Container-01 of 01	Bottle				
1201676-006A	Container-01 of 01	Bottle				
1201676-006B	Container-01 of 01	Bottle				
1201676-007A	Container-01 of 01	Bottle				
1201676-007B	Container-01 of 01	Bottle				
1201676-008A	Container-01 of 01	Bottle				
1201676-008B	Container-01 of 01	Bottle				
1201676-009A	Container-01 of 01	Bottle				
1201676-009B	Container-01 of 01	Bottle				
1201676-010A	Container-01 of 01	Bottle				
1201676-010B	Container-01 of 01	Bottle				
1201676-011A	Container-01 of 01	Bottle				
1201676-011B	Container-01 of 01	Bottle				
1201676-012A	Container-01 of 01	Bottle				
1201676-012B	Container-01 of 01	Bottle				
1201676-013A	Container-01 of 01	Bottle				
1201676-013B	Container-01 of 01	Bottle				
1201676-014A	Container-01 of 01	Bottle				
1201676-014B	Container-01 of 01	Bottle				
1201676-015A	Container-01 of 01	Bottle				
1201676-015B	Container-01 of 01	Bottle				
1201676-016A	Container-01 of 01	Bottle				
1201676-016B	Container-01 of 01	Bottle				
1201676-017A	Container-01 of 01	Bottle				
1201676-017B	Container-01 of 01	Bottle				
1201676-018A	Container-01 of 01	Bottle				

SampID	ContainerID	Type	Org pH	Adj pH	Req Min pH	Req Max pH
1201676-018B	Container-01 of 01	Bottle				
1201676-019A	Container-01 of 01	Bottle				
1201676-019B	Container-01 of 01	Bottle				
1201676-020A	Container-01 of 01	Bottle				
1201676-020B	Container-01 of 01	Bottle				
1201676-021A	Container-01 of 01	Bottle				
1201676-021B	Container-01 of 01	Bottle				
1201676-022A	Container-01 of 01	Bottle				
1201676-022B	Container-01 of 01	Bottle				
1201676-023A	Container-01 of 01	Bottle				
1201676-023B	Container-01 of 01	Bottle				
1201676-024A	Container-01 of 01	Bottle				
1201676-024B	Container-01 of 01	Bottle				
1201676-025A	Container-01 of 01	Bottle				
1201676-025B	Container-01 of 01	Bottle				
1201676-026A	Container-01 of 01	Bottle				
1201676-026B	Container-01 of 01	Bottle				
1201676-027A	Container-01 of 01	Bottle				
1201676-027B	Container-01 of 01	Bottle				
1201676-028A	Container-01 of 01	Bottle				
1201676-028B	Container-01 of 01	Bottle				
1201676-029A	Container-01 of 01	Bottle				
1201676-029B	Container-01 of 01	Bottle				
1201676-030A	Container-01 of 01	Bottle				
1201676-030B	Container-01 of 01	Bottle				
1201676-031A	Container-01 of 01	Bottle				
1201676-031B	Container-01 of 01	Bottle				
1201676-032A	Container-01 of 01	Bottle				

Adjusted? _____ Checked by _____

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

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

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

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

Client Instructions:

Date Contacted: Contacted By:

Regarding:

CorrectiveAction:

Comments:
No regulators were shipped back.

Tracking: UPS 1Z10335E0341194893, UPS 1Z10335E0340357905, UPS 1Z10335E0341555510, UPS 1Z10335E0341703725, UPS1Z10335E0341078536, UPS 1Z10335E0340915945 (contained empty bottle vacs-no samples)

RTI Laboratories - Workorder Sample Summary

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1201676-001	VA1190		1/17/2012 9:02 AM	1/23/2012 10:20 AM	Air
1201676-001	VA1190		1/17/2012 9:02 AM	1/23/2012 10:20 AM	Air
1201676-002	VA1191		1/17/2012 9:36 AM	1/23/2012 10:20 AM	Air
1201676-002	VA1191		1/17/2012 9:36 AM	1/23/2012 10:20 AM	Air
1201676-003	VA1192		1/17/2012 9:36 AM	1/23/2012 10:20 AM	Air
1201676-003	VA1192		1/17/2012 9:36 AM	1/23/2012 10:20 AM	Air
1201676-004	VA1193		1/17/2012 10:23 AM	1/23/2012 10:20 AM	Air
1201676-004	VA1193		1/17/2012 10:23 AM	1/23/2012 10:20 AM	Air
1201676-005	VA1194		1/17/2012 11:01 AM	1/23/2012 10:20 AM	Air
1201676-005	VA1194		1/17/2012 11:01 AM	1/23/2012 10:20 AM	Air
1201676-006	VA1250		1/16/2012 9:20 AM	1/23/2012 10:20 AM	Air
1201676-006	VA1250		1/16/2012 9:20 AM	1/23/2012 10:20 AM	Air
1201676-007	VA1251		1/16/2012 10:02 AM	1/23/2012 10:20 AM	Air
1201676-007	VA1251		1/16/2012 10:02 AM	1/23/2012 10:20 AM	Air
1201676-008	VA1252		1/16/2012 10:02 AM	1/23/2012 10:20 AM	Air
1201676-008	VA1252		1/16/2012 10:02 AM	1/23/2012 10:20 AM	Air
1201676-009	VA1253		1/16/2012 10:53 AM	1/23/2012 10:20 AM	Air
1201676-009	VA1253		1/16/2012 10:53 AM	1/23/2012 10:20 AM	Air
1201676-010	VA1254		1/16/2012 11:31 AM	1/23/2012 10:20 AM	Air
1201676-010	VA1254		1/16/2012 11:31 AM	1/23/2012 10:20 AM	Air
1201676-011	VA1255		1/16/2012 12:11 PM	1/23/2012 10:20 AM	Air
1201676-011	VA1255		1/16/2012 12:11 PM	1/23/2012 10:20 AM	Air
1201676-012	VA1256		1/16/2012 12:51 PM	1/23/2012 10:20 AM	Air
1201676-012	VA1256		1/16/2012 12:51 PM	1/23/2012 10:20 AM	Air
1201676-013	VA1257		1/16/2012 2:22 PM	1/23/2012 10:20 AM	Air
1201676-013	VA1257		1/16/2012 2:22 PM	1/23/2012 10:20 AM	Air
1201676-014	VA1258		1/16/2012 2:52 PM	1/23/2012 10:20 AM	Air
1201676-014	VA1258		1/16/2012 2:52 PM	1/23/2012 10:20 AM	Air
1201676-015	VA1259		1/16/2012 3:27 PM	1/23/2012 10:20 AM	Air
1201676-015	VA1259		1/16/2012 3:27 PM	1/23/2012 10:20 AM	Air
1201676-016	VA1260		1/16/2012 4:00 PM	1/23/2012 10:20 AM	Air
1201676-016	VA1260		1/16/2012 4:00 PM	1/23/2012 10:20 AM	Air
1201676-017	VA1261		1/17/2012 8:38 AM	1/23/2012 10:20 AM	Air
1201676-017	VA1261		1/17/2012 8:38 AM	1/23/2012 10:20 AM	Air
1201676-018	VA1262		1/17/2012 8:38 AM	1/23/2012 10:20 AM	Air
1201676-018	VA1262		1/17/2012 8:38 AM	1/23/2012 10:20 AM	Air
1201676-019	VA1263		1/17/2012 9:30 AM	1/23/2012 10:20 AM	Air
1201676-019	VA1263		1/17/2012 9:30 AM	1/23/2012 10:20 AM	Air
1201676-020	VA1264		1/16/2012 1:55 PM	1/23/2012 10:20 AM	Air
1201676-020	VA1264		1/16/2012 1:55 PM	1/23/2012 10:20 AM	Air
1201676-021	VA1265		1/16/2012 2:23 PM	1/23/2012 10:20 AM	Air
1201676-021	VA1265		1/16/2012 2:23 PM	1/23/2012 10:20 AM	Air
1201676-022	VA1266		1/16/2012 3:11 PM	1/23/2012 10:20 AM	Air
1201676-022	VA1266		1/16/2012 3:11 PM	1/23/2012 10:20 AM	Air
1201676-023	VA1267		1/16/2012 3:45 PM	1/23/2012 10:20 AM	Air

RTI Laboratories - Workorder Sample Summary

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1201676-023	VA1267		1/16/2012 3:45 PM	1/23/2012 10:20 AM	Air
1201676-024	VA1268		1/16/2012 4:21 PM	1/23/2012 10:20 AM	Air
1201676-024	VA1268		1/16/2012 4:21 PM	1/23/2012 10:20 AM	Air
1201676-025	VA1269		1/17/2012 10:32 AM	1/23/2012 10:20 AM	Air
1201676-025	VA1269		1/17/2012 10:32 AM	1/23/2012 10:20 AM	Air
1201676-026	VA1277		1/16/2012 8:46 AM	1/23/2012 10:20 AM	Air
1201676-026	VA1277		1/16/2012 8:46 AM	1/23/2012 10:20 AM	Air
1201676-027	VA1278		1/16/2012 9:12 AM	1/23/2012 10:20 AM	Air
1201676-027	VA1278		1/16/2012 9:12 AM	1/23/2012 10:20 AM	Air
1201676-028	VA1279		1/16/2012 9:47 AM	1/23/2012 10:20 AM	Air
1201676-028	VA1279		1/16/2012 9:47 AM	1/23/2012 10:20 AM	Air
1201676-029	VA1280		1/16/2012 10:24 AM	1/23/2012 10:20 AM	Air
1201676-029	VA1280		1/16/2012 10:24 AM	1/23/2012 10:20 AM	Air
1201676-030	VA1281		1/16/2012 11:02 AM	1/23/2012 10:20 AM	Air
1201676-030	VA1281		1/16/2012 11:02 AM	1/23/2012 10:20 AM	Air
1201676-031	VA1282		1/16/2012 11:46 AM	1/23/2012 10:20 AM	Air
1201676-031	VA1282		1/16/2012 11:46 AM	1/23/2012 10:20 AM	Air
1201676-032	VA8072-TB		1/16/2012 8:00 AM	1/23/2012 10:20 AM	Air

RTI Laboratories - DATES REPORT

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1201676-001A	VA1190	1/17/2012 9:02 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/3/2012 12:53 AM
				EPA_TO15-Volatile Organic Compounds			2/1/2012 5:12 PM
				EPA_TO15-Volatile Organic Compounds			2/2/2012 2:38 PM
				EPA_TO15-Volatile Organic Compounds			2/3/2012 2:37 AM
1201676-001B	VA1190	1/17/2012 9:02 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/26/2012 1:21 PM
1201676-002A	VA1191	1/17/2012 9:36 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/3/2012 2:25 AM
				EPA_TO15-Volatile Organic Compounds			2/2/2012 3:24 PM
				EPA_TO15-Volatile Organic Compounds			2/3/2012 3:29 AM
1201676-002B	VA1191	1/17/2012 9:36 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/26/2012 2:09 PM
1201676-003A	VA1192	1/17/2012 9:36 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/3/2012 1:25 PM
				EPA_TO15-Volatile Organic Compounds			2/2/2012 4:12 PM
				EPA_TO15-Volatile Organic Compounds			2/3/2012 4:21 AM
1201676-003B	VA1192	1/17/2012 9:36 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/26/2012 2:25 PM
1201676-004B	VA1193	1/17/2012 10:23 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/26/2012 2:40 PM
1201676-005A	VA1194	1/17/2012 11:01 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/3/2012 2:51 PM
				EPA_TO15-Volatile Organic Compounds			2/2/2012 7:22 PM
1201676-005B	VA1194	1/17/2012 11:01 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/26/2012 2:56 PM
1201676-006A	VA1250	1/16/2012 9:20 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/30/2012 5:27 PM
				EPA_TO15-Volatile Organic Compounds			1/31/2012 6:26 PM

RTI Laboratories - DATES REPORT

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1201676-006A	VA1250	1/16/2012 9:20 AM	Air				
				EPA_TO15-Volatile Organic Compounds			2/2/2012 1:21 AM
1201676-006B	VA1250	1/16/2012 9:20 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/26/2012 3:11 PM
1201676-007A	VA1251	1/16/2012 10:02 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/30/2012 6:09 PM
				EPA_TO15-Volatile Organic Compounds			1/31/2012 8:07 PM
				EPA_TO15-Volatile Organic Compounds			2/2/2012 2:16 AM
1201676-007B	VA1251	1/16/2012 10:02 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/26/2012 3:27 PM
1201676-008A	VA1252	1/16/2012 10:02 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/31/2012 10:32 PM
				EPA_TO15-Volatile Organic Compounds			1/31/2012 9:05 PM
1201676-008B	VA1252	1/16/2012 10:02 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/28/2012 10:53 AM
1201676-009A	VA1253	1/16/2012 10:53 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/1/2012 7:11 PM
				EPA_TO15-Volatile Organic Compounds			1/31/2012 10:03 PM
1201676-009B	VA1253	1/16/2012 10:53 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/28/2012 11:09 AM
1201676-010A	VA1254	1/16/2012 11:31 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/31/2012 5:17 PM
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/1/2012 8:44 PM
				EPA_TO15-Volatile Organic Compounds			1/31/2012 11:54 PM
1201676-010B	VA1254	1/16/2012 11:31 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/28/2012 11:24 AM
1201676-011A	VA1255	1/16/2012 12:11 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/2/2012 5:31 PM
				EPA_TO15-Volatile Organic Compounds			2/1/2012 12:48 AM

RTI Laboratories - DATES REPORT

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1201676-011B	VA1255	1/16/2012 12:11 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/28/2012 11:40 AM
1201676-012A	VA1256	1/16/2012 12:51 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/2/2012 7:16 PM
				EPA_TO15-Volatile Organic Compounds			1/30/2012 9:37 PM
1201676-012B	VA1256	1/16/2012 12:51 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/28/2012 11:58 AM
1201676-013A	VA1257	1/16/2012 2:22 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/1/2012 11:48 PM
				EPA_TO15-Volatile Organic Compounds			1/30/2012 10:22 PM
				EPA_TO15-Volatile Organic Compounds			2/1/2012 1:44 AM
1201676-013B	VA1257	1/16/2012 2:22 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/28/2012 12:13 PM
1201676-014A	VA1258	1/16/2012 2:52 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/2/2012 12:34 AM
				EPA_TO15-Volatile Organic Compounds			1/31/2012 12:42 AM
1201676-014B	VA1258	1/16/2012 2:52 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/28/2012 12:29 PM
1201676-015A	VA1259	1/16/2012 3:27 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/2/2012 8:48 PM
				EPA_TO15-Volatile Organic Compounds			1/31/2012 2:13 AM
				EPA_TO15-Volatile Organic Compounds			2/1/2012 3:37 AM
1201676-015B	VA1259	1/16/2012 3:27 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/28/2012 12:44 PM
1201676-016A	VA1260	1/16/2012 4:00 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/3/2012 12:42 PM
				EPA_TO15-Volatile Organic Compounds			1/31/2012 3:45 AM
				EPA_TO15-Volatile Organic Compounds			2/1/2012 4:33 AM

RTI Laboratories - DATES REPORT

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1201676-016B	VA1260	1/16/2012 4:00 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/28/2012 12:59 PM
1201676-017A	VA1261	1/17/2012 8:38 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/2/2012 11:15 PM
				EPA_TO15-Volatile Organic Compounds			2/2/2012 3:09 AM
1201676-017B	VA1261	1/17/2012 8:38 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/28/2012 1:13 PM
1201676-018A	VA1262	1/17/2012 8:38 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/3/2012 12:04 AM
				EPA_TO15-Volatile Organic Compounds			2/2/2012 4:03 AM
1201676-018B	VA1262	1/17/2012 8:38 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/30/2012 11:48 AM
1201676-019A	VA1263	1/17/2012 9:30 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/3/2012 1:36 AM
				EPA_TO15-Volatile Organic Compounds			2/1/2012 6:48 PM
1201676-019B	VA1263	1/17/2012 9:30 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/30/2012 12:05 PM
1201676-020A	VA1264	1/16/2012 1:55 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/2/2012 4:04 PM
				EPA_TO15-Volatile Organic Compounds			1/30/2012 2:37 PM
1201676-020B	VA1264	1/16/2012 1:55 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/30/2012 12:24 PM
1201676-021A	VA1265	1/16/2012 2:23 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/2/2012 4:46 PM
				EPA_TO15-Volatile Organic Compounds			1/30/2012 11:52 PM
1201676-021B	VA1265	1/16/2012 2:23 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/30/2012 12:40 PM

RTI Laboratories - DATES REPORT

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1201676-022A	VA1266	1/16/2012 3:11 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/6/2012 4:20 PM
				EPA_TO15-Volatile Organic Compounds			1/31/2012 1:28 AM
				EPA_TO15-Volatile Organic Compounds			2/1/2012 2:41 AM
1201676-022B	VA1266	1/16/2012 3:11 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/30/2012 1:29 PM
1201676-023A	VA1267	1/16/2012 3:45 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/1/2012 5:40 PM
				EPA_TO15-Volatile Organic Compounds			1/31/2012 2:59 AM
1201676-023B	VA1267	1/16/2012 3:45 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/30/2012 2:02 PM
1201676-024A	VA1268	1/16/2012 4:21 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/2/2012 10:26 PM
				EPA_TO15-Volatile Organic Compounds			2/1/2012 5:28 AM
1201676-024B	VA1268	1/16/2012 4:21 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/30/2012 3:04 PM
1201676-025A	VA1269	1/17/2012 10:32 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/3/2012 4:00 AM
				EPA_TO15-Volatile Organic Compounds			2/2/2012 6:35 PM
1201676-025B	VA1269	1/17/2012 10:32 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/30/2012 3:54 PM
1201676-026A	VA1277	1/16/2012 8:46 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/30/2012 3:49 PM
				EPA_TO15-Volatile Organic Compounds			1/31/2012 4:44 PM
1201676-026B	VA1277	1/16/2012 8:46 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/30/2012 4:21 PM
1201676-027A	VA1278	1/16/2012 9:12 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/30/2012 4:32 PM
				EPA_TO15-Volatile Organic Compounds			1/31/2012 5:35 PM

RTI Laboratories - DATES REPORT

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1201676-027B	VA1278	1/16/2012 9:12 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/30/2012 4:40 PM
1201676-028A	VA1279	1/16/2012 9:47 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/30/2012 6:52 PM
				EPA_TO15-Volatile Organic Compounds			1/31/2012 7:17 PM
1201676-028B	VA1279	1/16/2012 9:47 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/30/2012 5:39 PM
1201676-029A	VA1280	1/16/2012 10:24 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/1/2012 1:29 AM
				EPA_TO15-Volatile Organic Compounds			1/31/2012 3:53 PM
1201676-029B	VA1280	1/16/2012 10:24 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/30/2012 5:59 PM
1201676-030A	VA1281	1/16/2012 11:02 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/1/2012 7:55 PM
				EPA_TO15-Volatile Organic Compounds			1/31/2012 10:56 PM
1201676-030B	VA1281	1/16/2012 11:02 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/30/2012 6:15 PM
1201676-031A	VA1282	1/16/2012 11:46 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			2/2/2012 2:39 PM
				EPA_TO15-Volatile Organic Compounds			1/31/2012 1:21 PM
1201676-031B	VA1282	1/16/2012 11:46 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/30/2012 6:31 PM
1201676-032A	VA8072-TB	1/16/2012 8:00 AM	Air				
				EPA_TO15-Volatile Organic Compounds			1/30/2012 1:51 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/17/2012 9:02:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-001	**Matrix:**	Air
Client Sample ID:	VA1190		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.77	0.10		%	1	1/26/2012 1:21 PM
Carbon Monoxide	ND	0.10	U	%	1	1/26/2012 1:21 PM
Methane	ND	0.50	U	%	1	1/26/2012 1:21 PM
Nitrogen	77	0.10		%	1	1/26/2012 1:21 PM
Oxygen	20	0.10		%	1	1/26/2012 1:21 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	2/2/2012 2:38 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	2/2/2012 2:38 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	2/2/2012 2:38 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	2/2/2012 2:38 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	2/2/2012 2:38 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	2/2/2012 2:38 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	2/2/2012 2:38 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	2/2/2012 2:38 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	2/2/2012 2:38 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	2/2/2012 2:38 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	2/2/2012 2:38 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	2/2/2012 2:38 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	2/2/2012 2:38 PM
1,3-Butadiene	ND	40	U	ppbv	40	2/2/2012 2:38 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	2/2/2012 2:38 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	2/2/2012 2:38 PM
2-Butanone	ND	40	U	ppbv	40	2/2/2012 2:38 PM
2-Hexanone	ND	40	U	ppbv	40	2/2/2012 2:38 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	2/2/2012 2:38 PM
Acetone	ND	40	U	ppbv	40	2/2/2012 2:38 PM
Benzene	610	40		ppbv	40	2/2/2012 2:38 PM
Benzyl chloride	ND	40	U	ppbv	40	2/2/2012 2:38 PM
Bromodichloromethane	ND	40	U	ppbv	40	2/2/2012 2:38 PM
Bromoform	ND	40	U	ppbv	40	2/2/2012 2:38 PM
Bromomethane	ND	40	U	ppbv	40	2/2/2012 2:38 PM
Carbon disulfide	ND	40	U	ppbv	40	2/2/2012 2:38 PM
Carbon tetrachloride	ND	40	U	ppbv	40	2/2/2012 2:38 PM
Chlorobenzene	ND	40	U	ppbv	40	2/2/2012 2:38 PM
Chlorodibromomethane	ND	40	U	ppbv	40	2/2/2012 2:38 PM
Chloroethane	ND	40	U	ppbv	40	2/2/2012 2:38 PM
Chloroform	550	40		ppbv	40	2/2/2012 2:38 PM
Chloromethane	ND	40	U	ppbv	40	2/2/2012 2:38 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	2/2/2012 2:38 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	2/2/2012 2:38 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/17/2012 9:02:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-001	**Matrix:**	Air
Client Sample ID:	VA1190		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	800	80		ppbv	40	2/2/2012 2:38 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	2/2/2012 2:38 PM
Ethyl acetate	ND	40	U	ppbv	40	2/2/2012 2:38 PM
Ethylbenzene	64	80	J	ppbv	40	2/2/2012 2:38 PM
Heptane	910	40		ppbv	40	2/2/2012 2:38 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	2/2/2012 2:38 PM
m,p-Xylene	180	80		ppbv	40	2/2/2012 2:38 PM
Methylene chloride	ND	200	U	ppbv	40	2/2/2012 2:38 PM
n-Hexane	440	80		ppbv	40	2/2/2012 2:38 PM
Naphthalene	ND	40	U	ppbv	40	2/2/2012 2:38 PM
o-Xylene	52	40		ppbv	40	2/2/2012 2:38 PM
Propylene	64	40		ppbv	40	2/2/2012 2:38 PM
Styrene	ND	40	U	ppbv	40	2/2/2012 2:38 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	2/2/2012 2:38 PM
Tetrachloroethene	ND	40	U	ppbv	40	2/2/2012 2:38 PM
Tetrahydrofuran	ND	40	U	ppbv	40	2/2/2012 2:38 PM
Toluene	3,900	400		ppbv	400	2/3/2012 2:37 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	2/2/2012 2:38 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	2/2/2012 2:38 PM
Trichloroethene	ND	40	U	ppbv	40	2/2/2012 2:38 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	2/2/2012 2:38 PM
Vinyl acetate	ND	40	U	ppbv	40	2/2/2012 2:38 PM
Vinyl chloride	ND	40	U	ppbv	40	2/2/2012 2:38 PM
Xylenes, Total	230	120		ppbv	40	2/2/2012 2:38 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	40	2/2/2012 2:38 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	130,000	47,000		µg/m³	400	2/3/2012 12:53 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	2/3/2012 12:53 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	2/3/2012 12:53 AM
Surr: 4-Bromofluorobenzene	94.0	70-130		%REC	400	2/3/2012 12:53 AM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/17/2012 9:36:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-002	**Matrix:**	Air
Client Sample ID:	VA1191		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.39	0.10		%	1	1/26/2012 2:09 PM
Carbon Monoxide	ND	0.10	U	%	1	1/26/2012 2:09 PM
Methane	ND	0.50	U	%	1	1/26/2012 2:09 PM
Nitrogen	77	0.10		%	1	1/26/2012 2:09 PM
Oxygen	20	0.10		%	1	1/26/2012 2:09 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	2/2/2012 3:24 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	2/2/2012 3:24 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	2/2/2012 3:24 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	2/2/2012 3:24 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	2/2/2012 3:24 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	2/2/2012 3:24 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	2/2/2012 3:24 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	2/2/2012 3:24 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	2/2/2012 3:24 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	2/2/2012 3:24 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	2/2/2012 3:24 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	2/2/2012 3:24 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	2/2/2012 3:24 PM
1,3-Butadiene	ND	40	U	ppbv	40	2/2/2012 3:24 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	2/2/2012 3:24 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	2/2/2012 3:24 PM
2-Butanone	ND	40	U	ppbv	40	2/2/2012 3:24 PM
2-Hexanone	ND	40	U	ppbv	40	2/2/2012 3:24 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	2/2/2012 3:24 PM
Acetone	ND	40	U	ppbv	40	2/2/2012 3:24 PM
Benzene	1,300	40		ppbv	40	2/2/2012 3:24 PM
Benzyl chloride	ND	40	U	ppbv	40	2/2/2012 3:24 PM
Bromodichloromethane	ND	40	U	ppbv	40	2/2/2012 3:24 PM
Bromoform	ND	40	U	ppbv	40	2/2/2012 3:24 PM
Bromomethane	ND	40	U	ppbv	40	2/2/2012 3:24 PM
Carbon disulfide	ND	40	U	ppbv	40	2/2/2012 3:24 PM
Carbon tetrachloride	ND	40	U	ppbv	40	2/2/2012 3:24 PM
Chlorobenzene	ND	40	U	ppbv	40	2/2/2012 3:24 PM
Chlorodibromomethane	ND	40	U	ppbv	40	2/2/2012 3:24 PM
Chloroethane	ND	40	U	ppbv	40	2/2/2012 3:24 PM
Chloroform	190	40		ppbv	40	2/2/2012 3:24 PM
Chloromethane	ND	40	U	ppbv	40	2/2/2012 3:24 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	2/2/2012 3:24 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	2/2/2012 3:24 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/17/2012 9:36:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-002	**Matrix:**	Air
Client Sample ID:	VA1191		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	7,100	800		ppbv	400	2/3/2012 3:29 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	2/2/2012 3:24 PM
Ethyl acetate	ND	40	U	ppbv	40	2/2/2012 3:24 PM
Ethylbenzene	70	80	J	ppbv	40	2/2/2012 3:24 PM
Heptane	7,100	400		ppbv	400	2/3/2012 3:29 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	2/2/2012 3:24 PM
m,p-Xylene	200	80		ppbv	40	2/2/2012 3:24 PM
Methylene chloride	ND	200	U	ppbv	40	2/2/2012 3:24 PM
n-Hexane	1,400	80		ppbv	40	2/2/2012 3:24 PM
Naphthalene	ND	40	U	ppbv	40	2/2/2012 3:24 PM
o-Xylene	49	40		ppbv	40	2/2/2012 3:24 PM
Propylene	65	40		ppbv	40	2/2/2012 3:24 PM
Styrene	ND	40	U	ppbv	40	2/2/2012 3:24 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	2/2/2012 3:24 PM
Tetrachloroethene	ND	40	U	ppbv	40	2/2/2012 3:24 PM
Tetrahydrofuran	ND	40	U	ppbv	40	2/2/2012 3:24 PM
Toluene	9,700	400		ppbv	400	2/3/2012 3:29 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	2/2/2012 3:24 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	2/2/2012 3:24 PM
Trichloroethene	ND	40	U	ppbv	40	2/2/2012 3:24 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	2/2/2012 3:24 PM
Vinyl acetate	ND	40	U	ppbv	40	2/2/2012 3:24 PM
Vinyl chloride	ND	40	U	ppbv	40	2/2/2012 3:24 PM
Xylenes, Total	250	120		ppbv	40	2/2/2012 3:24 PM
Surr: 4-Bromofluorobenzene	94.4	70-130		%REC	40	2/2/2012 3:24 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	150,000	47,000		µg/m³	400	2/3/2012 2:25 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	2/3/2012 2:25 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	2/3/2012 2:25 AM
Surr: 4-Bromofluorobenzene	95.7	70-130		%REC	400	2/3/2012 2:25 AM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/17/2012 9:36:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-003	**Matrix:**	Air
Client Sample ID:	VA1192		

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 2:25 PM
Carbon Monoxide	ND	0.10	U	%	1	1/26/2012 2:25 PM
Methane	ND	0.50	U	%	1	1/26/2012 2:25 PM
Nitrogen	77	0.10		%	1	1/26/2012 2:25 PM
Oxygen	20	0.10		%	1	1/26/2012 2:25 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	2/2/2012 4:12 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	2/2/2012 4:12 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	2/2/2012 4:12 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	2/2/2012 4:12 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	2/2/2012 4:12 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	2/2/2012 4:12 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	2/2/2012 4:12 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	2/2/2012 4:12 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	2/2/2012 4:12 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	2/2/2012 4:12 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	2/2/2012 4:12 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	2/2/2012 4:12 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	2/2/2012 4:12 PM
1,3-Butadiene	ND	40	U	ppbv	40	2/2/2012 4:12 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	2/2/2012 4:12 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	2/2/2012 4:12 PM
2-Butanone	ND	40	U	ppbv	40	2/2/2012 4:12 PM
2-Hexanone	ND	40	U	ppbv	40	2/2/2012 4:12 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	2/2/2012 4:12 PM
Acetone	ND	40	U	ppbv	40	2/2/2012 4:12 PM
Benzene	650	40		ppbv	40	2/2/2012 4:12 PM
Benzyl chloride	ND	40	U	ppbv	40	2/2/2012 4:12 PM
Bromodichloromethane	ND	40	U	ppbv	40	2/2/2012 4:12 PM
Bromoform	ND	40	U	ppbv	40	2/2/2012 4:12 PM
Bromomethane	ND	40	U	ppbv	40	2/2/2012 4:12 PM
Carbon disulfide	ND	40	U	ppbv	40	2/2/2012 4:12 PM
Carbon tetrachloride	ND	40	U	ppbv	40	2/2/2012 4:12 PM
Chlorobenzene	ND	40	U	ppbv	40	2/2/2012 4:12 PM
Chlorodibromomethane	ND	40	U	ppbv	40	2/2/2012 4:12 PM
Chloroethane	ND	40	U	ppbv	40	2/2/2012 4:12 PM
Chloroform	220	40		ppbv	40	2/2/2012 4:12 PM
Chloromethane	ND	40	U	ppbv	40	2/2/2012 4:12 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	2/2/2012 4:12 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	2/2/2012 4:12 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/17/2012 9:36:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-003	**Matrix:**	Air
Client Sample ID:	VA1192		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,000	80		ppbv	40	2/2/2012 4:12 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	2/2/2012 4:12 PM
Ethyl acetate	ND	40	U	ppbv	40	2/2/2012 4:12 PM
Ethylbenzene	65	80	J	ppbv	40	2/2/2012 4:12 PM
Heptane	1,200	40		ppbv	40	2/2/2012 4:12 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	2/2/2012 4:12 PM
m,p-Xylene	180	80		ppbv	40	2/2/2012 4:12 PM
Methylene chloride	ND	200	U	ppbv	40	2/2/2012 4:12 PM
n-Hexane	590	80		ppbv	40	2/2/2012 4:12 PM
Naphthalene	ND	40	U	ppbv	40	2/2/2012 4:12 PM
o-Xylene	49	40		ppbv	40	2/2/2012 4:12 PM
Propylene	72	40		ppbv	40	2/2/2012 4:12 PM
Styrene	ND	40	U	ppbv	40	2/2/2012 4:12 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	2/2/2012 4:12 PM
Tetrachloroethene	ND	40	U	ppbv	40	2/2/2012 4:12 PM
Tetrahydrofuran	ND	40	U	ppbv	40	2/2/2012 4:12 PM
Toluene	3,300	400		ppbv	400	2/3/2012 4:21 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	2/2/2012 4:12 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	2/2/2012 4:12 PM
Trichloroethene	ND	40	U	ppbv	40	2/2/2012 4:12 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	2/2/2012 4:12 PM
Vinyl acetate	ND	40	U	ppbv	40	2/2/2012 4:12 PM
Vinyl chloride	ND	40	U	ppbv	40	2/2/2012 4:12 PM
Xylenes, Total	230	120		ppbv	40	2/2/2012 4:12 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	40	2/2/2012 4:12 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	23,000	4,700		µg/m³	40	2/3/2012 1:25 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	2/3/2012 1:25 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	2/3/2012 1:25 PM
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	40	2/3/2012 1:25 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/17/2012 10:23:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-004	**Matrix:**	Air
Client Sample ID:	VA1193		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.071	0.10	J	%	1	1/26/2012 2:40 PM
Carbon Monoxide	ND	0.10	U	%	1	1/26/2012 2:40 PM
Methane	ND	0.50	U	%	1	1/26/2012 2:40 PM
Nitrogen	78	0.10		%	1	1/26/2012 2:40 PM
Oxygen	20	0.10		%	1	1/26/2012 2:40 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/17/2012 11:01:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-005	**Matrix:**	Air
Client Sample ID:	VA1194		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.090	0.10	J	%	1	1/26/2012 2:56 PM
Carbon Monoxide	ND	0.10	U	%	1	1/26/2012 2:56 PM
Methane	ND	0.50	U	%	1	1/26/2012 2:56 PM
Nitrogen	78	0.10		%	1	1/26/2012 2:56 PM
Oxygen	20	0.10		%	1	1/26/2012 2:56 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	2/2/2012 7:22 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	2/2/2012 7:22 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	2/2/2012 7:22 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	2/2/2012 7:22 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	2/2/2012 7:22 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	2/2/2012 7:22 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	2/2/2012 7:22 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	2/2/2012 7:22 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	2/2/2012 7:22 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	2/2/2012 7:22 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	2/2/2012 7:22 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	2/2/2012 7:22 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	2/2/2012 7:22 PM
1,3-Butadiene	ND	40	U	ppbv	40	2/2/2012 7:22 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	2/2/2012 7:22 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	2/2/2012 7:22 PM
2-Butanone	ND	40	U	ppbv	40	2/2/2012 7:22 PM
2-Hexanone	ND	40	U	ppbv	40	2/2/2012 7:22 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	2/2/2012 7:22 PM
Acetone	47	40		ppbv	40	2/2/2012 7:22 PM
Benzene	490	40		ppbv	40	2/2/2012 7:22 PM
Benzyl chloride	ND	40	U	ppbv	40	2/2/2012 7:22 PM
Bromodichloromethane	ND	40	U	ppbv	40	2/2/2012 7:22 PM
Bromoform	ND	40	U	ppbv	40	2/2/2012 7:22 PM
Bromomethane	ND	40	U	ppbv	40	2/2/2012 7:22 PM
Carbon disulfide	ND	40	U	ppbv	40	2/2/2012 7:22 PM
Carbon tetrachloride	ND	40	U	ppbv	40	2/2/2012 7:22 PM
Chlorobenzene	ND	40	U	ppbv	40	2/2/2012 7:22 PM
Chlorodibromomethane	ND	40	U	ppbv	40	2/2/2012 7:22 PM
Chloroethane	ND	40	U	ppbv	40	2/2/2012 7:22 PM
Chloroform	ND	40	U	ppbv	40	2/2/2012 7:22 PM
Chloromethane	ND	40	U	ppbv	40	2/2/2012 7:22 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	2/2/2012 7:22 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	2/2/2012 7:22 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/17/2012 11:01:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-005	**Matrix:**	Air
Client Sample ID:	VA1194		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,100	80		ppbv	40	2/2/2012 7:22 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	2/2/2012 7:22 PM
Ethyl acetate	ND	40	U	ppbv	40	2/2/2012 7:22 PM
Ethylbenzene	42	80	J	ppbv	40	2/2/2012 7:22 PM
Heptane	1,200	40		ppbv	40	2/2/2012 7:22 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	2/2/2012 7:22 PM
m,p-Xylene	110	80		ppbv	40	2/2/2012 7:22 PM
Methylene chloride	ND	200	U	ppbv	40	2/2/2012 7:22 PM
n-Hexane	610	80		ppbv	40	2/2/2012 7:22 PM
Naphthalene	ND	40	U	ppbv	40	2/2/2012 7:22 PM
o-Xylene	ND	40	U	ppbv	40	2/2/2012 7:22 PM
Propylene	72	40		ppbv	40	2/2/2012 7:22 PM
Styrene	ND	40	U	ppbv	40	2/2/2012 7:22 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	2/2/2012 7:22 PM
Tetrachloroethene	ND	40	U	ppbv	40	2/2/2012 7:22 PM
Tetrahydrofuran	ND	40	U	ppbv	40	2/2/2012 7:22 PM
Toluene	1,500	40		ppbv	40	2/2/2012 7:22 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	2/2/2012 7:22 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	2/2/2012 7:22 PM
Trichloroethene	ND	40	U	ppbv	40	2/2/2012 7:22 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	2/2/2012 7:22 PM
Vinyl acetate	ND	40	U	ppbv	40	2/2/2012 7:22 PM
Vinyl chloride	ND	40	U	ppbv	40	2/2/2012 7:22 PM
Xylenes, Total	110	120	J	ppbv	40	2/2/2012 7:22 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	40	2/2/2012 7:22 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	24,000	4,700		µg/m³	40	2/3/2012 2:51 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	2/3/2012 2:51 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	2/3/2012 2:51 PM
Surr: 4-Bromofluorobenzene	94.9	70-130		%REC	40	2/3/2012 2:51 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 9:20:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-006	**Matrix:**	Air
Client Sample ID:	VA1250		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.90	0.10		%	1	1/26/2012 3:11 PM
Carbon Monoxide	ND	0.10	U	%	1	1/26/2012 3:11 PM
Methane	ND	0.50	U	%	1	1/26/2012 3:11 PM
Nitrogen	78	0.10		%	1	1/26/2012 3:11 PM
Oxygen	19	0.10		%	1	1/26/2012 3:11 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/31/2012 6:26 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/31/2012 6:26 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/31/2012 6:26 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/31/2012 6:26 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/31/2012 6:26 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 6:26 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/31/2012 6:26 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/31/2012 6:26 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/31/2012 6:26 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 6:26 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/31/2012 6:26 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/31/2012 6:26 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/31/2012 6:26 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/31/2012 6:26 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 6:26 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 6:26 PM
2-Butanone	ND	40	U	ppbv	40	1/31/2012 6:26 PM
2-Hexanone	ND	40	U	ppbv	40	1/31/2012 6:26 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/31/2012 6:26 PM
Acetone	ND	40	U	ppbv	40	1/31/2012 6:26 PM
Benzene	7,800	400		ppbv	400	2/2/2012 1:21 AM
Benzyl chloride	ND	40	U	ppbv	40	1/31/2012 6:26 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/31/2012 6:26 PM
Bromoform	ND	40	U	ppbv	40	1/31/2012 6:26 PM
Bromomethane	ND	40	U	ppbv	40	1/31/2012 6:26 PM
Carbon disulfide	ND	40	U	ppbv	40	1/31/2012 6:26 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/31/2012 6:26 PM
Chlorobenzene	ND	40	U	ppbv	40	1/31/2012 6:26 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/31/2012 6:26 PM
Chloroethane	ND	40	U	ppbv	40	1/31/2012 6:26 PM
Chloroform	ND	40	U	ppbv	40	1/31/2012 6:26 PM
Chloromethane	ND	40	U	ppbv	40	1/31/2012 6:26 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 6:26 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/31/2012 6:26 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 9:20:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-006	**Matrix:**	Air
Client Sample ID:	VA1250		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	10,000	800		ppbv	400	2/2/2012 1:21 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/31/2012 6:26 PM
Ethyl acetate	ND	40	U	ppbv	40	1/31/2012 6:26 PM
Ethylbenzene	80	80		ppbv	40	1/31/2012 6:26 PM
Heptane	2,000	40		ppbv	40	1/31/2012 6:26 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/31/2012 6:26 PM
m,p-Xylene	220	80		ppbv	40	1/31/2012 6:26 PM
Methylene chloride	ND	200	U	ppbv	40	1/31/2012 6:26 PM
n-Hexane	1,900	80		ppbv	40	1/31/2012 6:26 PM
Naphthalene	ND	40	U	ppbv	40	1/31/2012 6:26 PM
o-Xylene	52	40		ppbv	40	1/31/2012 6:26 PM
Propylene	63	40		ppbv	40	1/31/2012 6:26 PM
Styrene	ND	40	U	ppbv	40	1/31/2012 6:26 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/31/2012 6:26 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/31/2012 6:26 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/31/2012 6:26 PM
Toluene	14,000	400		ppbv	400	2/2/2012 1:21 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 6:26 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/31/2012 6:26 PM
Trichloroethene	ND	40	U	ppbv	40	1/31/2012 6:26 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/31/2012 6:26 PM
Vinyl acetate	ND	40	U	ppbv	40	1/31/2012 6:26 PM
Vinyl chloride	ND	40	U	ppbv	40	1/31/2012 6:26 PM
Xylenes, Total	270	120		ppbv	40	1/31/2012 6:26 PM
Surr: 4-Bromofluorobenzene	93.4	70-130		%REC	40	1/31/2012 6:26 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	92,000	4,700		µg/m³	40	1/30/2012 5:27 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	1/30/2012 5:27 PM
C9-C12 Aliphatic Hydrocarbons	2,000	7,600	J	µg/m³	40	1/30/2012 5:27 PM
Surr: 4-Bromofluorobenzene	94.0	70-130		%REC	40	1/30/2012 5:27 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 10:02:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-007	**Matrix:**	Air
Client Sample ID:	VA1251		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.78	0.10		%	1	1/26/2012 3:27 PM
Carbon Monoxide	ND	0.10	U	%	1	1/26/2012 3:27 PM
Methane	ND	0.50	U	%	1	1/26/2012 3:27 PM
Nitrogen	78	0.10		%	1	1/26/2012 3:27 PM
Oxygen	19	0.10		%	1	1/26/2012 3:27 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/31/2012 8:07 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/31/2012 8:07 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/31/2012 8:07 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/31/2012 8:07 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/31/2012 8:07 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 8:07 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/31/2012 8:07 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/31/2012 8:07 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/31/2012 8:07 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 8:07 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/31/2012 8:07 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/31/2012 8:07 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/31/2012 8:07 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/31/2012 8:07 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 8:07 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 8:07 PM
2-Butanone	ND	40	U	ppbv	40	1/31/2012 8:07 PM
2-Hexanone	ND	40	U	ppbv	40	1/31/2012 8:07 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/31/2012 8:07 PM
Acetone	ND	40	U	ppbv	40	1/31/2012 8:07 PM
Benzene	1,600	40		ppbv	40	1/31/2012 8:07 PM
Benzyl chloride	ND	40	U	ppbv	40	1/31/2012 8:07 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/31/2012 8:07 PM
Bromoform	ND	40	U	ppbv	40	1/31/2012 8:07 PM
Bromomethane	ND	40	U	ppbv	40	1/31/2012 8:07 PM
Carbon disulfide	ND	40	U	ppbv	40	1/31/2012 8:07 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/31/2012 8:07 PM
Chlorobenzene	ND	40	U	ppbv	40	1/31/2012 8:07 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/31/2012 8:07 PM
Chloroethane	ND	40	U	ppbv	40	1/31/2012 8:07 PM
Chloroform	ND	40	U	ppbv	40	1/31/2012 8:07 PM
Chloromethane	ND	40	U	ppbv	40	1/31/2012 8:07 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 8:07 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/31/2012 8:07 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 10:02:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-007	**Matrix:**	Air
Client Sample ID:	VA1251		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	4,100	800		ppbv	400	2/2/2012 2:16 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/31/2012 8:07 PM
Ethyl acetate	ND	40	U	ppbv	40	1/31/2012 8:07 PM
Ethylbenzene	95	80		ppbv	40	1/31/2012 8:07 PM
Heptane	1,800	40		ppbv	40	1/31/2012 8:07 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/31/2012 8:07 PM
m,p-Xylene	280	80		ppbv	40	1/31/2012 8:07 PM
Methylene chloride	ND	200	U	ppbv	40	1/31/2012 8:07 PM
n-Hexane	1,500	80		ppbv	40	1/31/2012 8:07 PM
Naphthalene	ND	40	U	ppbv	40	1/31/2012 8:07 PM
o-Xylene	66	40		ppbv	40	1/31/2012 8:07 PM
Propylene	56	40		ppbv	40	1/31/2012 8:07 PM
Styrene	ND	40	U	ppbv	40	1/31/2012 8:07 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/31/2012 8:07 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/31/2012 8:07 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/31/2012 8:07 PM
Toluene	7,900	400		ppbv	400	2/2/2012 2:16 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 8:07 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/31/2012 8:07 PM
Trichloroethene	ND	40	U	ppbv	40	1/31/2012 8:07 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/31/2012 8:07 PM
Vinyl acetate	ND	40	U	ppbv	40	1/31/2012 8:07 PM
Vinyl chloride	ND	40	U	ppbv	40	1/31/2012 8:07 PM
Xylenes, Total	340	120		ppbv	40	1/31/2012 8:07 PM
Surr: 4-Bromofluorobenzene	89.4	70-130		%REC	40	1/31/2012 8:07 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	88,000	4,700		µg/m³	40	1/30/2012 6:09 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	1/30/2012 6:09 PM
C9-C12 Aliphatic Hydrocarbons	2,600	7,600	J	µg/m³	40	1/30/2012 6:09 PM
Surr: 4-Bromofluorobenzene	92.3	70-130		%REC	40	1/30/2012 6:09 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 10:02:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-008	**Matrix:**	Air
Client Sample ID:	VA1252		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.81	0.10		%	1	1/28/2012 10:53 AM
Carbon Monoxide	ND	0.10	U	%	1	1/28/2012 10:53 AM
Methane	ND	0.50	U	%	1	1/28/2012 10:53 AM
Nitrogen	78	0.10		%	1	1/28/2012 10:53 AM
Oxygen	19	0.10		%	1	1/28/2012 10:53 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	1/31/2012 9:05 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	1/31/2012 9:05 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	1/31/2012 9:05 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	1/31/2012 9:05 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	1/31/2012 9:05 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	1/31/2012 9:05 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	1/31/2012 9:05 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	1/31/2012 9:05 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	1/31/2012 9:05 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	1/31/2012 9:05 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	1/31/2012 9:05 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	1/31/2012 9:05 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	1/31/2012 9:05 PM
1,3-Butadiene	ND	400	U	ppbv	400	1/31/2012 9:05 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	1/31/2012 9:05 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	1/31/2012 9:05 PM
2-Butanone	ND	400	U	ppbv	400	1/31/2012 9:05 PM
2-Hexanone	ND	400	U	ppbv	400	1/31/2012 9:05 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	1/31/2012 9:05 PM
Acetone	630	400		ppbv	400	1/31/2012 9:05 PM
Benzene	6,200	400		ppbv	400	1/31/2012 9:05 PM
Benzyl chloride	ND	400	U	ppbv	400	1/31/2012 9:05 PM
Bromodichloromethane	ND	400	U	ppbv	400	1/31/2012 9:05 PM
Bromoform	ND	400	U	ppbv	400	1/31/2012 9:05 PM
Bromomethane	ND	400	U	ppbv	400	1/31/2012 9:05 PM
Carbon disulfide	ND	400	U	ppbv	400	1/31/2012 9:05 PM
Carbon tetrachloride	ND	400	U	ppbv	400	1/31/2012 9:05 PM
Chlorobenzene	ND	400	U	ppbv	400	1/31/2012 9:05 PM
Chlorodibromomethane	ND	400	U	ppbv	400	1/31/2012 9:05 PM
Chloroethane	ND	400	U	ppbv	400	1/31/2012 9:05 PM
Chloroform	ND	400	U	ppbv	400	1/31/2012 9:05 PM
Chloromethane	ND	400	U	ppbv	400	1/31/2012 9:05 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	1/31/2012 9:05 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	1/31/2012 9:05 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 10:02:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-008	**Matrix:**	Air
Client Sample ID:	VA1252		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	9,000	800		ppbv	400	1/31/2012 9:05 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	1/31/2012 9:05 PM
Ethyl acetate	ND	400	U	ppbv	400	1/31/2012 9:05 PM
Ethylbenzene	410	800	J	ppbv	400	1/31/2012 9:05 PM
Heptane	8,000	400		ppbv	400	1/31/2012 9:05 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	1/31/2012 9:05 PM
m,p-Xylene	1,100	800		ppbv	400	1/31/2012 9:05 PM
Methylene chloride	1,200	2,000	J	ppbv	400	1/31/2012 9:05 PM
n-Hexane	5,700	800		ppbv	400	1/31/2012 9:05 PM
Naphthalene	ND	400	U	ppbv	400	1/31/2012 9:05 PM
o-Xylene	ND	400	U	ppbv	400	1/31/2012 9:05 PM
Propylene	530	400		ppbv	400	1/31/2012 9:05 PM
Styrene	ND	400	U	ppbv	400	1/31/2012 9:05 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	1/31/2012 9:05 PM
Tetrachloroethene	ND	400	U	ppbv	400	1/31/2012 9:05 PM
Tetrahydrofuran	ND	400	U	ppbv	400	1/31/2012 9:05 PM
Toluene	15,000	400		ppbv	400	1/31/2012 9:05 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	1/31/2012 9:05 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	1/31/2012 9:05 PM
Trichloroethene	ND	400	U	ppbv	400	1/31/2012 9:05 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	1/31/2012 9:05 PM
Vinyl acetate	ND	400	U	ppbv	400	1/31/2012 9:05 PM
Vinyl chloride	ND	400	U	ppbv	400	1/31/2012 9:05 PM
Xylenes, Total	1,100	1,200	J	ppbv	400	1/31/2012 9:05 PM
Surr: 4-Bromofluorobenzene	109	70-130		%REC	400	1/31/2012 9:05 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	290,000	47,000		µg/m³	400	1/31/2012 10:32 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/31/2012 10:32 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	1/31/2012 10:32 PM
Surr: 4-Bromofluorobenzene	91.1	70-130		%REC	400	1/31/2012 10:32 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 10:53:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-009	**Matrix:**	Air
Client Sample ID:	VA1253		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.34	0.10		%	1	1/28/2012 11:09 AM
Carbon Monoxide	ND	0.10	U	%	1	1/28/2012 11:09 AM
Methane	ND	0.50	U	%	1	1/28/2012 11:09 AM
Nitrogen	79	0.10		%	1	1/28/2012 11:09 AM
Oxygen	19	0.10		%	1	1/28/2012 11:09 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	1/31/2012 10:03 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	1/31/2012 10:03 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	1/31/2012 10:03 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	1/31/2012 10:03 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	1/31/2012 10:03 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	1/31/2012 10:03 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	1/31/2012 10:03 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	1/31/2012 10:03 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	1/31/2012 10:03 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	1/31/2012 10:03 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	1/31/2012 10:03 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	1/31/2012 10:03 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	1/31/2012 10:03 PM
1,3-Butadiene	ND	400	U	ppbv	400	1/31/2012 10:03 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	1/31/2012 10:03 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	1/31/2012 10:03 PM
2-Butanone	ND	400	U	ppbv	400	1/31/2012 10:03 PM
2-Hexanone	ND	400	U	ppbv	400	1/31/2012 10:03 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	1/31/2012 10:03 PM
Acetone	950	400		ppbv	400	1/31/2012 10:03 PM
Benzene	3,300	400		ppbv	400	1/31/2012 10:03 PM
Benzyl chloride	ND	400	U	ppbv	400	1/31/2012 10:03 PM
Bromodichloromethane	ND	400	U	ppbv	400	1/31/2012 10:03 PM
Bromoform	ND	400	U	ppbv	400	1/31/2012 10:03 PM
Bromomethane	ND	400	U	ppbv	400	1/31/2012 10:03 PM
Carbon disulfide	ND	400	U	ppbv	400	1/31/2012 10:03 PM
Carbon tetrachloride	ND	400	U	ppbv	400	1/31/2012 10:03 PM
Chlorobenzene	ND	400	U	ppbv	400	1/31/2012 10:03 PM
Chlorodibromomethane	ND	400	U	ppbv	400	1/31/2012 10:03 PM
Chloroethane	ND	400	U	ppbv	400	1/31/2012 10:03 PM
Chloroform	ND	400	U	ppbv	400	1/31/2012 10:03 PM
Chloromethane	ND	400	U	ppbv	400	1/31/2012 10:03 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	1/31/2012 10:03 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	1/31/2012 10:03 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 10:53:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-009	**Matrix:**	Air
Client Sample ID:	VA1253		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	7,200	800		ppbv	400	1/31/2012 10:03 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	1/31/2012 10:03 PM
Ethyl acetate	ND	400	U	ppbv	400	1/31/2012 10:03 PM
Ethylbenzene	440	800	J	ppbv	400	1/31/2012 10:03 PM
Heptane	7,500	400		ppbv	400	1/31/2012 10:03 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	1/31/2012 10:03 PM
m,p-Xylene	1,200	800		ppbv	400	1/31/2012 10:03 PM
Methylene chloride	1,600	2,000	J	ppbv	400	1/31/2012 10:03 PM
n-Hexane	4,400	800		ppbv	400	1/31/2012 10:03 PM
Naphthalene	ND	400	U	ppbv	400	1/31/2012 10:03 PM
o-Xylene	ND	400	U	ppbv	400	1/31/2012 10:03 PM
Propylene	ND	400	U	ppbv	400	1/31/2012 10:03 PM
Styrene	ND	400	U	ppbv	400	1/31/2012 10:03 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	1/31/2012 10:03 PM
Tetrachloroethene	ND	400	U	ppbv	400	1/31/2012 10:03 PM
Tetrahydrofuran	ND	400	U	ppbv	400	1/31/2012 10:03 PM
Toluene	9,900	400		ppbv	400	1/31/2012 10:03 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	1/31/2012 10:03 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	1/31/2012 10:03 PM
Trichloroethene	ND	400	U	ppbv	400	1/31/2012 10:03 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	1/31/2012 10:03 PM
Vinyl acetate	ND	400	U	ppbv	400	1/31/2012 10:03 PM
Vinyl chloride	ND	400	U	ppbv	400	1/31/2012 10:03 PM
Xylenes, Total	1,200	1,200		ppbv	400	1/31/2012 10:03 PM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	400	1/31/2012 10:03 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	520,000	47,000		µg/m³	400	2/1/2012 7:11 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	2/1/2012 7:11 PM
C9-C12 Aliphatic Hydrocarbons	11,000	76,000	J	µg/m³	400	2/1/2012 7:11 PM
Surr: 4-Bromofluorobenzene	91.1	70-130		%REC	400	2/1/2012 7:11 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 11:31:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-010	**Matrix:**	Air
Client Sample ID:	VA1254		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.59	0.10		%	1	1/28/2012 11:24 AM
Carbon Monoxide	ND	0.10	U	%	1	1/28/2012 11:24 AM
Methane	ND	0.50	U	%	1	1/28/2012 11:24 AM
Nitrogen	79	0.10		%	1	1/28/2012 11:24 AM
Oxygen	18	0.10		%	1	1/28/2012 11:24 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	1/31/2012 11:54 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	1/31/2012 11:54 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	1/31/2012 11:54 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	1/31/2012 11:54 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	1/31/2012 11:54 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	1/31/2012 11:54 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	1/31/2012 11:54 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	1/31/2012 11:54 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	1/31/2012 11:54 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	1/31/2012 11:54 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	1/31/2012 11:54 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	1/31/2012 11:54 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	1/31/2012 11:54 PM
1,3-Butadiene	ND	400	U	ppbv	400	1/31/2012 11:54 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	1/31/2012 11:54 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	1/31/2012 11:54 PM
2-Butanone	ND	400	U	ppbv	400	1/31/2012 11:54 PM
2-Hexanone	ND	400	U	ppbv	400	1/31/2012 11:54 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	1/31/2012 11:54 PM
Acetone	760	400		ppbv	400	1/31/2012 11:54 PM
Benzene	2,500	400		ppbv	400	1/31/2012 11:54 PM
Benzyl chloride	ND	400	U	ppbv	400	1/31/2012 11:54 PM
Bromodichloromethane	ND	400	U	ppbv	400	1/31/2012 11:54 PM
Bromoform	ND	400	U	ppbv	400	1/31/2012 11:54 PM
Bromomethane	ND	400	U	ppbv	400	1/31/2012 11:54 PM
Carbon disulfide	ND	400	U	ppbv	400	1/31/2012 11:54 PM
Carbon tetrachloride	ND	400	U	ppbv	400	1/31/2012 11:54 PM
Chlorobenzene	ND	400	U	ppbv	400	1/31/2012 11:54 PM
Chlorodibromomethane	ND	400	U	ppbv	400	1/31/2012 11:54 PM
Chloroethane	ND	400	U	ppbv	400	1/31/2012 11:54 PM
Chloroform	ND	400	U	ppbv	400	1/31/2012 11:54 PM
Chloromethane	820	400		ppbv	400	1/31/2012 11:54 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	1/31/2012 11:54 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	1/31/2012 11:54 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 11:31:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-010	**Matrix:**	Air
Client Sample ID:	VA1254		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	3,700	800		ppbv	400	1/31/2012 11:54 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	1/31/2012 11:54 PM
Ethyl acetate	ND	400	U	ppbv	400	1/31/2012 11:54 PM
Ethylbenzene	ND	800	U	ppbv	400	1/31/2012 11:54 PM
Heptane	3,200	400		ppbv	400	1/31/2012 11:54 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	1/31/2012 11:54 PM
m,p-Xylene	940	800		ppbv	400	1/31/2012 11:54 PM
Methylene chloride	ND	2,000	U	ppbv	400	1/31/2012 11:54 PM
n-Hexane	2,600	800		ppbv	400	1/31/2012 11:54 PM
Naphthalene	ND	400	U	ppbv	400	1/31/2012 11:54 PM
o-Xylene	ND	400	U	ppbv	400	1/31/2012 11:54 PM
Propylene	440	400		ppbv	400	1/31/2012 11:54 PM
Styrene	ND	400	U	ppbv	400	1/31/2012 11:54 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	1/31/2012 11:54 PM
Tetrachloroethene	ND	400	U	ppbv	400	1/31/2012 11:54 PM
Tetrahydrofuran	ND	400	U	ppbv	400	1/31/2012 11:54 PM
Toluene	7,400	400		ppbv	400	1/31/2012 11:54 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	1/31/2012 11:54 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	1/31/2012 11:54 PM
Trichloroethene	ND	400	U	ppbv	400	1/31/2012 11:54 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	1/31/2012 11:54 PM
Vinyl acetate	ND	400	U	ppbv	400	1/31/2012 11:54 PM
Vinyl chloride	ND	400	U	ppbv	400	1/31/2012 11:54 PM
Xylenes, Total	940	1,200	J	ppbv	400	1/31/2012 11:54 PM
Surr: 4-Bromofluorobenzene	73.9	70-130		%REC	400	1/31/2012 11:54 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	170,000	23,000		µg/m³	200	2/1/2012 8:44 PM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	2/1/2012 8:44 PM
C9-C12 Aliphatic Hydrocarbons	ND	38,000	U	µg/m³	200	2/1/2012 8:44 PM
Surr: 4-Bromofluorobenzene	92.0	70-130		%REC	200	2/1/2012 8:44 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 12:11:00 PM
Project:	Kirtland AFB		
Lab ID:	1201676-011	**Matrix:**	Air
Client Sample ID:	VA1255		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.76	0.10		%	1	1/28/2012 11:40 AM
Carbon Monoxide	ND	0.10	U	%	1	1/28/2012 11:40 AM
Methane	ND	0.50	U	%	1	1/28/2012 11:40 AM
Nitrogen	80	0.10		%	1	1/28/2012 11:40 AM
Oxygen	17	0.10		%	1	1/28/2012 11:40 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	2/1/2012 12:48 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	2/1/2012 12:48 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	2/1/2012 12:48 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	2/1/2012 12:48 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	2/1/2012 12:48 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	2/1/2012 12:48 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	2/1/2012 12:48 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	2/1/2012 12:48 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	2/1/2012 12:48 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	2/1/2012 12:48 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	2/1/2012 12:48 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	2/1/2012 12:48 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	2/1/2012 12:48 AM
1,3-Butadiene	ND	800	U	ppbv	800	2/1/2012 12:48 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	2/1/2012 12:48 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	2/1/2012 12:48 AM
2-Butanone	ND	800	U	ppbv	800	2/1/2012 12:48 AM
2-Hexanone	ND	800	U	ppbv	800	2/1/2012 12:48 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	2/1/2012 12:48 AM
Acetone	ND	800	U	ppbv	800	2/1/2012 12:48 AM
Benzene	4,800	800		ppbv	800	2/1/2012 12:48 AM
Benzyl chloride	ND	800	U	ppbv	800	2/1/2012 12:48 AM
Bromodichloromethane	ND	800	U	ppbv	800	2/1/2012 12:48 AM
Bromoform	ND	800	U	ppbv	800	2/1/2012 12:48 AM
Bromomethane	ND	800	U	ppbv	800	2/1/2012 12:48 AM
Carbon disulfide	ND	800	U	ppbv	800	2/1/2012 12:48 AM
Carbon tetrachloride	ND	800	U	ppbv	800	2/1/2012 12:48 AM
Chlorobenzene	ND	800	U	ppbv	800	2/1/2012 12:48 AM
Chlorodibromomethane	ND	800	U	ppbv	800	2/1/2012 12:48 AM
Chloroethane	ND	800	U	ppbv	800	2/1/2012 12:48 AM
Chloroform	ND	800	U	ppbv	800	2/1/2012 12:48 AM
Chloromethane	ND	800	U	ppbv	800	2/1/2012 12:48 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	2/1/2012 12:48 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	2/1/2012 12:48 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 12:11:00 PM
Project:	Kirtland AFB		
Lab ID:	1201676-011	**Matrix:**	Air
Client Sample ID:	VA1255		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	14,000	1,600		ppbv	800	2/1/2012 12:48 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	2/1/2012 12:48 AM
Ethyl acetate	ND	800	U	ppbv	800	2/1/2012 12:48 AM
Ethylbenzene	ND	1,600	U	ppbv	800	2/1/2012 12:48 AM
Heptane	4,500	800		ppbv	800	2/1/2012 12:48 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	2/1/2012 12:48 AM
m,p-Xylene	1,300	1,600	J	ppbv	800	2/1/2012 12:48 AM
Methylene chloride	ND	4,000	U	ppbv	800	2/1/2012 12:48 AM
n-Hexane	9,300	1,600		ppbv	800	2/1/2012 12:48 AM
Naphthalene	ND	800	U	ppbv	800	2/1/2012 12:48 AM
o-Xylene	ND	800	U	ppbv	800	2/1/2012 12:48 AM
Propylene	5,000	800		ppbv	800	2/1/2012 12:48 AM
Styrene	ND	800	U	ppbv	800	2/1/2012 12:48 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	2/1/2012 12:48 AM
Tetrachloroethene	ND	800	U	ppbv	800	2/1/2012 12:48 AM
Tetrahydrofuran	ND	800	U	ppbv	800	2/1/2012 12:48 AM
Toluene	12,000	800		ppbv	800	2/1/2012 12:48 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	2/1/2012 12:48 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	2/1/2012 12:48 AM
Trichloroethene	ND	800	U	ppbv	800	2/1/2012 12:48 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	2/1/2012 12:48 AM
Vinyl acetate	ND	800	U	ppbv	800	2/1/2012 12:48 AM
Vinyl chloride	ND	800	U	ppbv	800	2/1/2012 12:48 AM
Xylenes, Total	1,300	2,400	J	ppbv	800	2/1/2012 12:48 AM
Surr: 4-Bromofluorobenzene	113	70-130		%REC	800	2/1/2012 12:48 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,700,000	190,000		µg/m³	1600	2/2/2012 5:31 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	2/2/2012 5:31 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	2/2/2012 5:31 PM
Surr: 4-Bromofluorobenzene	93.0	70-130		%REC	1600	2/2/2012 5:31 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 12:51:00 PM
Project:	Kirtland AFB		
Lab ID:	1201676-012	**Matrix:**	Air
Client Sample ID:	VA1256		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.26	0.10		%	1	1/28/2012 11:58 AM
Carbon Monoxide	ND	0.10	U	%	1	1/28/2012 11:58 AM
Methane	ND	0.50	U	%	1	1/28/2012 11:58 AM
Nitrogen	79	0.10		%	1	1/28/2012 11:58 AM
Oxygen	20	0.10		%	1	1/28/2012 11:58 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/30/2012 9:37 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/30/2012 9:37 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/30/2012 9:37 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/30/2012 9:37 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/30/2012 9:37 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/30/2012 9:37 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/30/2012 9:37 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/30/2012 9:37 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/30/2012 9:37 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/30/2012 9:37 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/30/2012 9:37 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/30/2012 9:37 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/30/2012 9:37 PM
1,3-Butadiene	ND	800	U	ppbv	800	1/30/2012 9:37 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/30/2012 9:37 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/30/2012 9:37 PM
2-Butanone	ND	800	U	ppbv	800	1/30/2012 9:37 PM
2-Hexanone	ND	800	U	ppbv	800	1/30/2012 9:37 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/30/2012 9:37 PM
Acetone	810	800		ppbv	800	1/30/2012 9:37 PM
Benzene	2,200	800		ppbv	800	1/30/2012 9:37 PM
Benzyl chloride	ND	800	U	ppbv	800	1/30/2012 9:37 PM
Bromodichloromethane	ND	800	U	ppbv	800	1/30/2012 9:37 PM
Bromoform	ND	800	U	ppbv	800	1/30/2012 9:37 PM
Bromomethane	ND	800	U	ppbv	800	1/30/2012 9:37 PM
Carbon disulfide	ND	800	U	ppbv	800	1/30/2012 9:37 PM
Carbon tetrachloride	ND	800	U	ppbv	800	1/30/2012 9:37 PM
Chlorobenzene	ND	800	U	ppbv	800	1/30/2012 9:37 PM
Chlorodibromomethane	ND	800	U	ppbv	800	1/30/2012 9:37 PM
Chloroethane	ND	800	U	ppbv	800	1/30/2012 9:37 PM
Chloroform	ND	800	U	ppbv	800	1/30/2012 9:37 PM
Chloromethane	ND	800	U	ppbv	800	1/30/2012 9:37 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/30/2012 9:37 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/30/2012 9:37 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 12:51:00 PM
Project:	Kirtland AFB		
Lab ID:	1201676-012	**Matrix:**	Air
Client Sample ID:	VA1256		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	3,700	1,600		ppbv	800	1/30/2012 9:37 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/30/2012 9:37 PM
Ethyl acetate	ND	800	U	ppbv	800	1/30/2012 9:37 PM
Ethylbenzene	ND	1,600	U	ppbv	800	1/30/2012 9:37 PM
Heptane	2,000	800		ppbv	800	1/30/2012 9:37 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/30/2012 9:37 PM
m,p-Xylene	820	1,600	J	ppbv	800	1/30/2012 9:37 PM
Methylene chloride	ND	4,000	U	ppbv	800	1/30/2012 9:37 PM
n-Hexane	3,600	1,600		ppbv	800	1/30/2012 9:37 PM
Naphthalene	ND	800	U	ppbv	800	1/30/2012 9:37 PM
o-Xylene	ND	800	U	ppbv	800	1/30/2012 9:37 PM
Propylene	1,400	800		ppbv	800	1/30/2012 9:37 PM
Styrene	ND	800	U	ppbv	800	1/30/2012 9:37 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/30/2012 9:37 PM
Tetrachloroethene	ND	800	U	ppbv	800	1/30/2012 9:37 PM
Tetrahydrofuran	ND	800	U	ppbv	800	1/30/2012 9:37 PM
Toluene	5,200	800		ppbv	800	1/30/2012 9:37 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/30/2012 9:37 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/30/2012 9:37 PM
Trichloroethene	ND	800	U	ppbv	800	1/30/2012 9:37 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/30/2012 9:37 PM
Vinyl acetate	ND	800	U	ppbv	800	1/30/2012 9:37 PM
Vinyl chloride	ND	800	U	ppbv	800	1/30/2012 9:37 PM
Xylenes, Total	820	2,400	J	ppbv	800	1/30/2012 9:37 PM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	800	1/30/2012 9:37 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	850,000	47,000		µg/m³	400	2/2/2012 7:16 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	2/2/2012 7:16 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	2/2/2012 7:16 PM
Surr: 4-Bromofluorobenzene	95.6	70-130		%REC	400	2/2/2012 7:16 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 2:22:00 PM
Project:	Kirtland AFB		
Lab ID:	1201676-013	**Matrix:**	Air
Client Sample ID:	VA1257		

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	1/28/2012 12:13 PM
Carbon Monoxide	ND	0.10	U	%	1	1/28/2012 12:13 PM
Methane	ND	0.50	U	%	1	1/28/2012 12:13 PM
Nitrogen	77	0.10		%	1	1/28/2012 12:13 PM
Oxygen	21	0.10		%	1	1/28/2012 12:13 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/30/2012 10:22 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/30/2012 10:22 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/30/2012 10:22 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/30/2012 10:22 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/30/2012 10:22 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/30/2012 10:22 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/30/2012 10:22 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/30/2012 10:22 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/30/2012 10:22 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/30/2012 10:22 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/30/2012 10:22 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/30/2012 10:22 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/30/2012 10:22 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/30/2012 10:22 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/30/2012 10:22 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/30/2012 10:22 PM
2-Butanone	ND	40	U	ppbv	40	1/30/2012 10:22 PM
2-Hexanone	ND	40	U	ppbv	40	1/30/2012 10:22 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/30/2012 10:22 PM
Acetone	ND	40	U	ppbv	40	1/30/2012 10:22 PM
Benzene	590	40		ppbv	40	1/30/2012 10:22 PM
Benzyl chloride	ND	40	U	ppbv	40	1/30/2012 10:22 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/30/2012 10:22 PM
Bromoform	ND	40	U	ppbv	40	1/30/2012 10:22 PM
Bromomethane	ND	40	U	ppbv	40	1/30/2012 10:22 PM
Carbon disulfide	ND	40	U	ppbv	40	1/30/2012 10:22 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/30/2012 10:22 PM
Chlorobenzene	ND	40	U	ppbv	40	1/30/2012 10:22 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/30/2012 10:22 PM
Chloroethane	ND	40	U	ppbv	40	1/30/2012 10:22 PM
Chloroform	ND	40	U	ppbv	40	1/30/2012 10:22 PM
Chloromethane	ND	40	U	ppbv	40	1/30/2012 10:22 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/30/2012 10:22 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/30/2012 10:22 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 2:22:00 PM
Project:	Kirtland AFB		
Lab ID:	1201676-013	**Matrix:**	Air
Client Sample ID:	VA1257		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	560	80		ppbv	40	1/30/2012 10:22 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/30/2012 10:22 PM
Ethyl acetate	ND	40	U	ppbv	40	1/30/2012 10:22 PM
Ethylbenzene	140	80		ppbv	40	1/30/2012 10:22 PM
Heptane	650	40		ppbv	40	1/30/2012 10:22 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/30/2012 10:22 PM
m,p-Xylene	460	80		ppbv	40	1/30/2012 10:22 PM
Methylene chloride	ND	200	U	ppbv	40	1/30/2012 10:22 PM
n-Hexane	330	80		ppbv	40	1/30/2012 10:22 PM
Naphthalene	ND	40	U	ppbv	40	1/30/2012 10:22 PM
o-Xylene	120	40		ppbv	40	1/30/2012 10:22 PM
Propylene	80	40		ppbv	40	1/30/2012 10:22 PM
Styrene	ND	40	U	ppbv	40	1/30/2012 10:22 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/30/2012 10:22 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/30/2012 10:22 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/30/2012 10:22 PM
Toluene	5,400	400		ppbv	400	2/1/2012 1:44 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/30/2012 10:22 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/30/2012 10:22 PM
Trichloroethene	ND	40	U	ppbv	40	1/30/2012 10:22 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/30/2012 10:22 PM
Vinyl acetate	ND	40	U	ppbv	40	1/30/2012 10:22 PM
Vinyl chloride	ND	40	U	ppbv	40	1/30/2012 10:22 PM
Xylenes, Total	580	120		ppbv	40	1/30/2012 10:22 PM
Surr: 4-Bromofluorobenzene	98.9	70-130		%REC	40	1/30/2012 10:22 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	770,000	47,000		µg/m³	400	2/1/2012 11:48 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	2/1/2012 11:48 PM
C9-C12 Aliphatic Hydrocarbons	13,000	76,000	J	µg/m³	400	2/1/2012 11:48 PM
Surr: 4-Bromofluorobenzene	93.8	70-130		%REC	400	2/1/2012 11:48 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 2:52:00 PM
Project:	Kirtland AFB		
Lab ID:	1201676-014	**Matrix:**	Air
Client Sample ID:	VA1258		

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	1/28/2012 12:29 PM
Carbon Monoxide	ND	0.10	U	%	1	1/28/2012 12:29 PM
Methane	ND	0.50	U	%	1	1/28/2012 12:29 PM
Nitrogen	78	0.10		%	1	1/28/2012 12:29 PM
Oxygen	20	0.10		%	1	1/28/2012 12:29 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/31/2012 12:42 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/31/2012 12:42 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/31/2012 12:42 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/31/2012 12:42 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/31/2012 12:42 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/31/2012 12:42 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/31/2012 12:42 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/31/2012 12:42 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/31/2012 12:42 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/31/2012 12:42 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/31/2012 12:42 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/31/2012 12:42 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/31/2012 12:42 AM
1,3-Butadiene	ND	800	U	ppbv	800	1/31/2012 12:42 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/31/2012 12:42 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/31/2012 12:42 AM
2-Butanone	ND	800	U	ppbv	800	1/31/2012 12:42 AM
2-Hexanone	ND	800	U	ppbv	800	1/31/2012 12:42 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/31/2012 12:42 AM
Acetone	3,400	800		ppbv	800	1/31/2012 12:42 AM
Benzene	3,200	800		ppbv	800	1/31/2012 12:42 AM
Benzyl chloride	ND	800	U	ppbv	800	1/31/2012 12:42 AM
Bromodichloromethane	ND	800	U	ppbv	800	1/31/2012 12:42 AM
Bromoform	ND	800	U	ppbv	800	1/31/2012 12:42 AM
Bromomethane	ND	800	U	ppbv	800	1/31/2012 12:42 AM
Carbon disulfide	ND	800	U	ppbv	800	1/31/2012 12:42 AM
Carbon tetrachloride	ND	800	U	ppbv	800	1/31/2012 12:42 AM
Chlorobenzene	ND	800	U	ppbv	800	1/31/2012 12:42 AM
Chlorodibromomethane	ND	800	U	ppbv	800	1/31/2012 12:42 AM
Chloroethane	ND	800	U	ppbv	800	1/31/2012 12:42 AM
Chloroform	ND	800	U	ppbv	800	1/31/2012 12:42 AM
Chloromethane	ND	800	U	ppbv	800	1/31/2012 12:42 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/31/2012 12:42 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/31/2012 12:42 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 2:52:00 PM
Project:	Kirtland AFB		
Lab ID:	1201676-014	**Matrix:**	Air
Client Sample ID:	VA1258		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	6,300	1,600		ppbv	800	1/31/2012 12:42 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/31/2012 12:42 AM
Ethyl acetate	ND	800	U	ppbv	800	1/31/2012 12:42 AM
Ethylbenzene	ND	1,600	U	ppbv	800	1/31/2012 12:42 AM
Heptane	6,800	800		ppbv	800	1/31/2012 12:42 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/31/2012 12:42 AM
m,p-Xylene	1,400	1,600	J	ppbv	800	1/31/2012 12:42 AM
Methylene chloride	10,000	4,000		ppbv	800	1/31/2012 12:42 AM
n-Hexane	5,600	1,600		ppbv	800	1/31/2012 12:42 AM
Naphthalene	ND	800	U	ppbv	800	1/31/2012 12:42 AM
o-Xylene	ND	800	U	ppbv	800	1/31/2012 12:42 AM
Propylene	1,400	800		ppbv	800	1/31/2012 12:42 AM
Styrene	ND	800	U	ppbv	800	1/31/2012 12:42 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/31/2012 12:42 AM
Tetrachloroethene	ND	800	U	ppbv	800	1/31/2012 12:42 AM
Tetrahydrofuran	ND	800	U	ppbv	800	1/31/2012 12:42 AM
Toluene	9,900	800		ppbv	800	1/31/2012 12:42 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/31/2012 12:42 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/31/2012 12:42 AM
Trichloroethene	ND	800	U	ppbv	800	1/31/2012 12:42 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/31/2012 12:42 AM
Vinyl acetate	ND	800	U	ppbv	800	1/31/2012 12:42 AM
Vinyl chloride	ND	800	U	ppbv	800	1/31/2012 12:42 AM
Xylenes, Total	1,400	2,400	J	ppbv	800	1/31/2012 12:42 AM
Surr: 4-Bromofluorobenzene	109	70-130		%REC	800	1/31/2012 12:42 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	350,000	94,000		µg/m³	800	2/2/2012 12:34 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	2/2/2012 12:34 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	2/2/2012 12:34 AM
Surr: 4-Bromofluorobenzene	94.9	70-130		%REC	800	2/2/2012 12:34 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 3:27:00 PM
Project:	Kirtland AFB		
Lab ID:	1201676-015	**Matrix:**	Air
Client Sample ID:	VA1259		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.26	0.10		%	1	1/28/2012 12:44 PM
Carbon Monoxide	ND	0.10	U	%	1	1/28/2012 12:44 PM
Methane	ND	0.50	U	%	1	1/28/2012 12:44 PM
Nitrogen	78	0.10		%	1	1/28/2012 12:44 PM
Oxygen	19	0.10		%	1	1/28/2012 12:44 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/31/2012 2:13 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/31/2012 2:13 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/31/2012 2:13 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/31/2012 2:13 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/31/2012 2:13 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 2:13 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/31/2012 2:13 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/31/2012 2:13 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/31/2012 2:13 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 2:13 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/31/2012 2:13 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/31/2012 2:13 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/31/2012 2:13 AM
1,3-Butadiene	ND	40	U	ppbv	40	1/31/2012 2:13 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 2:13 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 2:13 AM
2-Butanone	ND	40	U	ppbv	40	1/31/2012 2:13 AM
2-Hexanone	ND	40	U	ppbv	40	1/31/2012 2:13 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/31/2012 2:13 AM
Acetone	82	40		ppbv	40	1/31/2012 2:13 AM
Benzene	1,000	40		ppbv	40	1/31/2012 2:13 AM
Benzyl chloride	ND	40	U	ppbv	40	1/31/2012 2:13 AM
Bromodichloromethane	ND	40	U	ppbv	40	1/31/2012 2:13 AM
Bromoform	ND	40	U	ppbv	40	1/31/2012 2:13 AM
Bromomethane	ND	40	U	ppbv	40	1/31/2012 2:13 AM
Carbon disulfide	72	40		ppbv	40	1/31/2012 2:13 AM
Carbon tetrachloride	ND	40	U	ppbv	40	1/31/2012 2:13 AM
Chlorobenzene	ND	40	U	ppbv	40	1/31/2012 2:13 AM
Chlorodibromomethane	ND	40	U	ppbv	40	1/31/2012 2:13 AM
Chloroethane	ND	40	U	ppbv	40	1/31/2012 2:13 AM
Chloroform	ND	40	U	ppbv	40	1/31/2012 2:13 AM
Chloromethane	76	40		ppbv	40	1/31/2012 2:13 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 2:13 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/31/2012 2:13 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 3:27:00 PM
Project:	Kirtland AFB		
Lab ID:	1201676-015	**Matrix:**	Air
Client Sample ID:	VA1259		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,600	80		ppbv	40	1/31/2012 2:13 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/31/2012 2:13 AM
Ethyl acetate	ND	40	U	ppbv	40	1/31/2012 2:13 AM
Ethylbenzene	180	80		ppbv	40	1/31/2012 2:13 AM
Heptane	1,600	40		ppbv	40	1/31/2012 2:13 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/31/2012 2:13 AM
m,p-Xylene	650	80		ppbv	40	1/31/2012 2:13 AM
Methylene chloride	ND	200	U	ppbv	40	1/31/2012 2:13 AM
n-Hexane	1,000	80		ppbv	40	1/31/2012 2:13 AM
Naphthalene	ND	40	U	ppbv	40	1/31/2012 2:13 AM
o-Xylene	140	40		ppbv	40	1/31/2012 2:13 AM
Propylene	66	40		ppbv	40	1/31/2012 2:13 AM
Styrene	ND	40	U	ppbv	40	1/31/2012 2:13 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/31/2012 2:13 AM
Tetrachloroethene	ND	40	U	ppbv	40	1/31/2012 2:13 AM
Tetrahydrofuran	ND	40	U	ppbv	40	1/31/2012 2:13 AM
Toluene	11,000	400		ppbv	400	2/1/2012 3:37 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 2:13 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/31/2012 2:13 AM
Trichloroethene	ND	40	U	ppbv	40	1/31/2012 2:13 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/31/2012 2:13 AM
Vinyl acetate	ND	40	U	ppbv	40	1/31/2012 2:13 AM
Vinyl chloride	ND	40	U	ppbv	40	1/31/2012 2:13 AM
Xylenes, Total	790	120		ppbv	40	1/31/2012 2:13 AM
Surr: 4-Bromofluorobenzene	88.0	70-130		%REC	40	1/31/2012 2:13 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	110,000	47,000		µg/m³	400	2/2/2012 8:48 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	2/2/2012 8:48 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	2/2/2012 8:48 PM
Surr: 4-Bromofluorobenzene	95.3	70-130		%REC	400	2/2/2012 8:48 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 4:00:00 PM
Project:	Kirtland AFB		
Lab ID:	1201676-016	**Matrix:**	Air
Client Sample ID:	VA1260		

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	1/28/2012 12:59 PM
Carbon Monoxide	ND	0.10	U	%	1	1/28/2012 12:59 PM
Methane	ND	0.50	U	%	1	1/28/2012 12:59 PM
Nitrogen	79	0.10		%	1	1/28/2012 12:59 PM
Oxygen	19	0.10		%	1	1/28/2012 12:59 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/31/2012 3:45 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/31/2012 3:45 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/31/2012 3:45 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/31/2012 3:45 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/31/2012 3:45 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 3:45 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/31/2012 3:45 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/31/2012 3:45 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/31/2012 3:45 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 3:45 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/31/2012 3:45 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/31/2012 3:45 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/31/2012 3:45 AM
1,3-Butadiene	ND	40	U	ppbv	40	1/31/2012 3:45 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 3:45 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 3:45 AM
2-Butanone	ND	40	U	ppbv	40	1/31/2012 3:45 AM
2-Hexanone	ND	40	U	ppbv	40	1/31/2012 3:45 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/31/2012 3:45 AM
Acetone	ND	40	U	ppbv	40	1/31/2012 3:45 AM
Benzene	360	40		ppbv	40	1/31/2012 3:45 AM
Benzyl chloride	ND	40	U	ppbv	40	1/31/2012 3:45 AM
Bromodichloromethane	ND	40	U	ppbv	40	1/31/2012 3:45 AM
Bromoform	ND	40	U	ppbv	40	1/31/2012 3:45 AM
Bromomethane	ND	40	U	ppbv	40	1/31/2012 3:45 AM
Carbon disulfide	ND	40	U	ppbv	40	1/31/2012 3:45 AM
Carbon tetrachloride	ND	40	U	ppbv	40	1/31/2012 3:45 AM
Chlorobenzene	ND	40	U	ppbv	40	1/31/2012 3:45 AM
Chlorodibromomethane	ND	40	U	ppbv	40	1/31/2012 3:45 AM
Chloroethane	ND	40	U	ppbv	40	1/31/2012 3:45 AM
Chloroform	ND	40	U	ppbv	40	1/31/2012 3:45 AM
Chloromethane	ND	40	U	ppbv	40	1/31/2012 3:45 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 3:45 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/31/2012 3:45 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 4:00:00 PM
Project:	Kirtland AFB		
Lab ID:	1201676-016	**Matrix:**	Air
Client Sample ID:	VA1260		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	340	80		ppbv	40	1/31/2012 3:45 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/31/2012 3:45 AM
Ethyl acetate	ND	40	U	ppbv	40	1/31/2012 3:45 AM
Ethylbenzene	120	80		ppbv	40	1/31/2012 3:45 AM
Heptane	390	40		ppbv	40	1/31/2012 3:45 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/31/2012 3:45 AM
m,p-Xylene	400	80		ppbv	40	1/31/2012 3:45 AM
Methylene chloride	ND	200	U	ppbv	40	1/31/2012 3:45 AM
n-Hexane	190	80		ppbv	40	1/31/2012 3:45 AM
Naphthalene	ND	40	U	ppbv	40	1/31/2012 3:45 AM
o-Xylene	100	40		ppbv	40	1/31/2012 3:45 AM
Propylene	90	40		ppbv	40	1/31/2012 3:45 AM
Styrene	ND	40	U	ppbv	40	1/31/2012 3:45 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/31/2012 3:45 AM
Tetrachloroethene	ND	40	U	ppbv	40	1/31/2012 3:45 AM
Tetrahydrofuran	ND	40	U	ppbv	40	1/31/2012 3:45 AM
Toluene	3,600	400		ppbv	400	2/1/2012 4:33 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 3:45 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/31/2012 3:45 AM
Trichloroethene	ND	40	U	ppbv	40	1/31/2012 3:45 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/31/2012 3:45 AM
Vinyl acetate	ND	40	U	ppbv	40	1/31/2012 3:45 AM
Vinyl chloride	ND	40	U	ppbv	40	1/31/2012 3:45 AM
Xylenes, Total	500	120		ppbv	40	1/31/2012 3:45 AM
Surr: 4-Bromofluorobenzene	98.4	70-130		%REC	40	1/31/2012 3:45 AM
Mass APH Air Air-Phase Petroleum Hydrocarbons	**Method:**					**Analyst: RH3**
C5-C8 Aliphatic Hydrocarbons	24,000	4,700		µg/m³	40	2/3/2012 12:42 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	2/3/2012 12:42 PM
C9-C12 Aliphatic Hydrocarbons	2,900	7,600	J	µg/m³	40	2/3/2012 12:42 PM
Surr: 4-Bromofluorobenzene	96.2	70-130		%REC	40	2/3/2012 12:42 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/17/2012 8:38:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-017	**Matrix:**	Air
Client Sample ID:	VA1261		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.066	0.10	J	%	1	1/28/2012 1:13 PM
Carbon Monoxide	ND	0.10	U	%	1	1/28/2012 1:13 PM
Methane	ND	0.50	U	%	1	1/28/2012 1:13 PM
Nitrogen	77	0.10		%	1	1/28/2012 1:13 PM
Oxygen	21	0.10		%	1	1/28/2012 1:13 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	2/2/2012 3:09 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	2/2/2012 3:09 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	2/2/2012 3:09 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	2/2/2012 3:09 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	2/2/2012 3:09 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	2/2/2012 3:09 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	2/2/2012 3:09 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	2/2/2012 3:09 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	2/2/2012 3:09 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	2/2/2012 3:09 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	2/2/2012 3:09 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	2/2/2012 3:09 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	2/2/2012 3:09 AM
1,3-Butadiene	ND	400	U	ppbv	400	2/2/2012 3:09 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	2/2/2012 3:09 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	2/2/2012 3:09 AM
2-Butanone	ND	400	U	ppbv	400	2/2/2012 3:09 AM
2-Hexanone	ND	400	U	ppbv	400	2/2/2012 3:09 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	2/2/2012 3:09 AM
Acetone	10,000	400		ppbv	400	2/2/2012 3:09 AM
Benzene	820	400		ppbv	400	2/2/2012 3:09 AM
Benzyl chloride	ND	400	U	ppbv	400	2/2/2012 3:09 AM
Bromodichloromethane	ND	400	U	ppbv	400	2/2/2012 3:09 AM
Bromoform	ND	400	U	ppbv	400	2/2/2012 3:09 AM
Bromomethane	ND	400	U	ppbv	400	2/2/2012 3:09 AM
Carbon disulfide	ND	400	U	ppbv	400	2/2/2012 3:09 AM
Carbon tetrachloride	ND	400	U	ppbv	400	2/2/2012 3:09 AM
Chlorobenzene	ND	400	U	ppbv	400	2/2/2012 3:09 AM
Chlorodibromomethane	ND	400	U	ppbv	400	2/2/2012 3:09 AM
Chloroethane	ND	400	U	ppbv	400	2/2/2012 3:09 AM
Chloroform	ND	400	U	ppbv	400	2/2/2012 3:09 AM
Chloromethane	ND	400	U	ppbv	400	2/2/2012 3:09 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	2/2/2012 3:09 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	2/2/2012 3:09 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/17/2012 8:38:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-017	**Matrix:**	Air
Client Sample ID:	VA1261		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,800	800		ppbv	400	2/2/2012 3:09 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	2/2/2012 3:09 AM
Ethyl acetate	ND	400	U	ppbv	400	2/2/2012 3:09 AM
Ethylbenzene	ND	800	U	ppbv	400	2/2/2012 3:09 AM
Heptane	1,500	400		ppbv	400	2/2/2012 3:09 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	2/2/2012 3:09 AM
m,p-Xylene	ND	800	U	ppbv	400	2/2/2012 3:09 AM
Methylene chloride	2,600	2,000		ppbv	400	2/2/2012 3:09 AM
n-Hexane	2,500	800		ppbv	400	2/2/2012 3:09 AM
Naphthalene	ND	400	U	ppbv	400	2/2/2012 3:09 AM
o-Xylene	ND	400	U	ppbv	400	2/2/2012 3:09 AM
Propylene	840	400		ppbv	400	2/2/2012 3:09 AM
Styrene	ND	400	U	ppbv	400	2/2/2012 3:09 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	2/2/2012 3:09 AM
Tetrachloroethene	ND	400	U	ppbv	400	2/2/2012 3:09 AM
Tetrahydrofuran	ND	400	U	ppbv	400	2/2/2012 3:09 AM
Toluene	2,700	400		ppbv	400	2/2/2012 3:09 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	2/2/2012 3:09 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	2/2/2012 3:09 AM
Trichloroethene	ND	400	U	ppbv	400	2/2/2012 3:09 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	2/2/2012 3:09 AM
Vinyl acetate	ND	400	U	ppbv	400	2/2/2012 3:09 AM
Vinyl chloride	ND	400	U	ppbv	400	2/2/2012 3:09 AM
Xylenes, Total	ND	1,200	U	ppbv	400	2/2/2012 3:09 AM
Surr: 4-Bromofluorobenzene	108	70-130		%REC	400	2/2/2012 3:09 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	340,000	47,000		µg/m³	400	2/2/2012 11:15 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	2/2/2012 11:15 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	2/2/2012 11:15 PM
Surr: 4-Bromofluorobenzene	93.3	70-130		%REC	400	2/2/2012 11:15 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/17/2012 8:38:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-018	**Matrix:**	Air
Client Sample ID:	VA1262		

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	1/30/2012 11:48 AM
Carbon Monoxide	ND	0.10	U	%	1	1/30/2012 11:48 AM
Methane	ND	0.50	U	%	1	1/30/2012 11:48 AM
Nitrogen	80	0.10		%	1	1/30/2012 11:48 AM
Oxygen	21	0.10		%	1	1/30/2012 11:48 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	2/2/2012 4:03 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	2/2/2012 4:03 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	2/2/2012 4:03 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	2/2/2012 4:03 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	2/2/2012 4:03 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	2/2/2012 4:03 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	2/2/2012 4:03 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	2/2/2012 4:03 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	2/2/2012 4:03 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	2/2/2012 4:03 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	2/2/2012 4:03 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	2/2/2012 4:03 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	2/2/2012 4:03 AM
1,3-Butadiene	ND	400	U	ppbv	400	2/2/2012 4:03 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	2/2/2012 4:03 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	2/2/2012 4:03 AM
2-Butanone	ND	400	U	ppbv	400	2/2/2012 4:03 AM
2-Hexanone	ND	400	U	ppbv	400	2/2/2012 4:03 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	2/2/2012 4:03 AM
Acetone	ND	400	U	ppbv	400	2/2/2012 4:03 AM
Benzene	530	400		ppbv	400	2/2/2012 4:03 AM
Benzyl chloride	ND	400	U	ppbv	400	2/2/2012 4:03 AM
Bromodichloromethane	ND	400	U	ppbv	400	2/2/2012 4:03 AM
Bromoform	ND	400	U	ppbv	400	2/2/2012 4:03 AM
Bromomethane	ND	400	U	ppbv	400	2/2/2012 4:03 AM
Carbon disulfide	ND	400	U	ppbv	400	2/2/2012 4:03 AM
Carbon tetrachloride	ND	400	U	ppbv	400	2/2/2012 4:03 AM
Chlorobenzene	ND	400	U	ppbv	400	2/2/2012 4:03 AM
Chlorodibromomethane	ND	400	U	ppbv	400	2/2/2012 4:03 AM
Chloroethane	ND	400	U	ppbv	400	2/2/2012 4:03 AM
Chloroform	ND	400	U	ppbv	400	2/2/2012 4:03 AM
Chloromethane	ND	400	U	ppbv	400	2/2/2012 4:03 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	2/2/2012 4:03 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	2/2/2012 4:03 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/17/2012 8:38:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-018	**Matrix:**	Air
Client Sample ID:	VA1262		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,100	800		ppbv	400	2/2/2012 4:03 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	2/2/2012 4:03 AM
Ethyl acetate	ND	400	U	ppbv	400	2/2/2012 4:03 AM
Ethylbenzene	ND	800	U	ppbv	400	2/2/2012 4:03 AM
Heptane	540	400		ppbv	400	2/2/2012 4:03 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	2/2/2012 4:03 AM
m,p-Xylene	ND	800	U	ppbv	400	2/2/2012 4:03 AM
Methylene chloride	ND	2,000	U	ppbv	400	2/2/2012 4:03 AM
n-Hexane	860	800		ppbv	400	2/2/2012 4:03 AM
Naphthalene	ND	400	U	ppbv	400	2/2/2012 4:03 AM
o-Xylene	ND	400	U	ppbv	400	2/2/2012 4:03 AM
Propylene	750	400		ppbv	400	2/2/2012 4:03 AM
Styrene	ND	400	U	ppbv	400	2/2/2012 4:03 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	2/2/2012 4:03 AM
Tetrachloroethene	ND	400	U	ppbv	400	2/2/2012 4:03 AM
Tetrahydrofuran	ND	400	U	ppbv	400	2/2/2012 4:03 AM
Toluene	1,800	400		ppbv	400	2/2/2012 4:03 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	2/2/2012 4:03 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	2/2/2012 4:03 AM
Trichloroethene	ND	400	U	ppbv	400	2/2/2012 4:03 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	2/2/2012 4:03 AM
Vinyl acetate	ND	400	U	ppbv	400	2/2/2012 4:03 AM
Vinyl chloride	ND	400	U	ppbv	400	2/2/2012 4:03 AM
Xylenes, Total	ND	1,200	U	ppbv	400	2/2/2012 4:03 AM
Surr: 4-Bromofluorobenzene	112	70-130		%REC	400	2/2/2012 4:03 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	310,000	47,000		µg/m³	400	2/3/2012 12:04 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	2/3/2012 12:04 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	2/3/2012 12:04 AM
Surr: 4-Bromofluorobenzene	93.7	70-130		%REC	400	2/3/2012 12:04 AM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/17/2012 9:30:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-019	**Matrix:**	Air
Client Sample ID:	VA1263		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.060	0.10	J	%	1	1/30/2012 12:05 PM
Carbon Monoxide	ND	0.10	U	%	1	1/30/2012 12:05 PM
Methane	ND	0.50	U	%	1	1/30/2012 12:05 PM
Nitrogen	79	0.10		%	1	1/30/2012 12:05 PM
Oxygen	21	0.10		%	1	1/30/2012 12:05 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
2-Butanone	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
2-Hexanone	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Acetone	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Benzene	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Bromoform	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Bromomethane	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Chloroethane	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Chloroform	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Chloromethane	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/17/2012 9:30:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-019	**Matrix:**	Air
Client Sample ID:	VA1263		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	26,000	16,000		ppbv	8000	2/1/2012 6:48 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	2/1/2012 6:48 PM
Heptane	14,000	8,000		ppbv	8000	2/1/2012 6:48 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	2/1/2012 6:48 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	2/1/2012 6:48 PM
Methylene chloride	ND	40,000	U	ppbv	8000	2/1/2012 6:48 PM
n-Hexane	21,000	16,000		ppbv	8000	2/1/2012 6:48 PM
Naphthalene	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
o-Xylene	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Propylene	12,000	8,000		ppbv	8000	2/1/2012 6:48 PM
Styrene	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Toluene	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Trichloroethene	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	2/1/2012 6:48 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	2/1/2012 6:48 PM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	8000	2/1/2012 6:48 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,500,000	940,000		µg/m³	8000	2/3/2012 1:36 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	2/3/2012 1:36 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	2/3/2012 1:36 AM
Surr: 4-Bromofluorobenzene	94.2	70-130		%REC	8000	2/3/2012 1:36 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 1:55:00 PM
Project:	Kirtland AFB		
Lab ID:	1201676-020	**Matrix:**	Air
Client Sample ID:	VA1264		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.061	0.10	J	%	1	1/30/2012 12:24 PM
Carbon Monoxide	ND	0.10	U	%	1	1/30/2012 12:24 PM
Methane	ND	0.50	U	%	1	1/30/2012 12:24 PM
Nitrogen	79	0.10		%	1	1/30/2012 12:24 PM
Oxygen	21	0.10		%	1	1/30/2012 12:24 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/30/2012 2:37 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/30/2012 2:37 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/30/2012 2:37 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/30/2012 2:37 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/30/2012 2:37 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/30/2012 2:37 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/30/2012 2:37 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/30/2012 2:37 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/30/2012 2:37 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/30/2012 2:37 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/30/2012 2:37 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/30/2012 2:37 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/30/2012 2:37 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/30/2012 2:37 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/30/2012 2:37 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/30/2012 2:37 PM
2-Butanone	ND	40	U	ppbv	40	1/30/2012 2:37 PM
2-Hexanone	ND	40	U	ppbv	40	1/30/2012 2:37 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/30/2012 2:37 PM
Acetone	ND	40	U	ppbv	40	1/30/2012 2:37 PM
Benzene	680	40		ppbv	40	1/30/2012 2:37 PM
Benzyl chloride	ND	40	U	ppbv	40	1/30/2012 2:37 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/30/2012 2:37 PM
Bromoform	ND	40	U	ppbv	40	1/30/2012 2:37 PM
Bromomethane	ND	40	U	ppbv	40	1/30/2012 2:37 PM
Carbon disulfide	ND	40	U	ppbv	40	1/30/2012 2:37 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/30/2012 2:37 PM
Chlorobenzene	ND	40	U	ppbv	40	1/30/2012 2:37 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/30/2012 2:37 PM
Chloroethane	ND	40	U	ppbv	40	1/30/2012 2:37 PM
Chloroform	ND	40	U	ppbv	40	1/30/2012 2:37 PM
Chloromethane	ND	40	U	ppbv	40	1/30/2012 2:37 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/30/2012 2:37 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/30/2012 2:37 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 1:55:00 PM
Project:	Kirtland AFB		
Lab ID:	1201676-020	**Matrix:**	Air
Client Sample ID:	VA1264		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	910	80		ppbv	40	1/30/2012 2:37 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/30/2012 2:37 PM
Ethyl acetate	ND	40	U	ppbv	40	1/30/2012 2:37 PM
Ethylbenzene	130	80		ppbv	40	1/30/2012 2:37 PM
Heptane	990	40		ppbv	40	1/30/2012 2:37 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/30/2012 2:37 PM
m,p-Xylene	450	80		ppbv	40	1/30/2012 2:37 PM
Methylene chloride	ND	200	U	ppbv	40	1/30/2012 2:37 PM
n-Hexane	600	80		ppbv	40	1/30/2012 2:37 PM
Naphthalene	ND	40	U	ppbv	40	1/30/2012 2:37 PM
o-Xylene	100	40		ppbv	40	1/30/2012 2:37 PM
Propylene	84	40		ppbv	40	1/30/2012 2:37 PM
Styrene	ND	40	U	ppbv	40	1/30/2012 2:37 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/30/2012 2:37 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/30/2012 2:37 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/30/2012 2:37 PM
Toluene	3,300	40		ppbv	40	1/30/2012 2:37 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/30/2012 2:37 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/30/2012 2:37 PM
Trichloroethene	ND	40	U	ppbv	40	1/30/2012 2:37 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/30/2012 2:37 PM
Vinyl acetate	ND	40	U	ppbv	40	1/30/2012 2:37 PM
Vinyl chloride	ND	40	U	ppbv	40	1/30/2012 2:37 PM
Xylenes, Total	550	120		ppbv	40	1/30/2012 2:37 PM
Surr: 4-Bromofluorobenzene	96.9	70-130		%REC	40	1/30/2012 2:37 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	33,000	4,700		µg/m³	40	2/2/2012 4:04 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	2/2/2012 4:04 PM
C9-C12 Aliphatic Hydrocarbons	4,600	7,600	J	µg/m³	40	2/2/2012 4:04 PM
Surr: 4-Bromofluorobenzene	96.5	70-130		%REC	40	2/2/2012 4:04 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 2:23:00 PM
Project:	Kirtland AFB		
Lab ID:	1201676-021	**Matrix:**	Air
Client Sample ID:	VA1265		

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	1/30/2012 12:40 PM
Carbon Monoxide	ND	0.10	U	%	1	1/30/2012 12:40 PM
Methane	ND	0.50	U	%	1	1/30/2012 12:40 PM
Nitrogen	79	0.10		%	1	1/30/2012 12:40 PM
Oxygen	21	0.10		%	1	1/30/2012 12:40 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/30/2012 11:52 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/30/2012 11:52 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/30/2012 11:52 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/30/2012 11:52 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/30/2012 11:52 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/30/2012 11:52 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/30/2012 11:52 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/30/2012 11:52 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/30/2012 11:52 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/30/2012 11:52 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/30/2012 11:52 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/30/2012 11:52 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/30/2012 11:52 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/30/2012 11:52 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/30/2012 11:52 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/30/2012 11:52 PM
2-Butanone	ND	40	U	ppbv	40	1/30/2012 11:52 PM
2-Hexanone	ND	40	U	ppbv	40	1/30/2012 11:52 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/30/2012 11:52 PM
Acetone	73	40		ppbv	40	1/30/2012 11:52 PM
Benzene	480	40		ppbv	40	1/30/2012 11:52 PM
Benzyl chloride	ND	40	U	ppbv	40	1/30/2012 11:52 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/30/2012 11:52 PM
Bromoform	ND	40	U	ppbv	40	1/30/2012 11:52 PM
Bromomethane	ND	40	U	ppbv	40	1/30/2012 11:52 PM
Carbon disulfide	ND	40	U	ppbv	40	1/30/2012 11:52 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/30/2012 11:52 PM
Chlorobenzene	ND	40	U	ppbv	40	1/30/2012 11:52 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/30/2012 11:52 PM
Chloroethane	ND	40	U	ppbv	40	1/30/2012 11:52 PM
Chloroform	ND	40	U	ppbv	40	1/30/2012 11:52 PM
Chloromethane	ND	40	U	ppbv	40	1/30/2012 11:52 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/30/2012 11:52 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/30/2012 11:52 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 2:23:00 PM
Project:	Kirtland AFB		
Lab ID:	1201676-021	**Matrix:**	Air
Client Sample ID:	VA1265		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	580	80		ppbv	40	1/30/2012 11:52 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/30/2012 11:52 PM
Ethyl acetate	ND	40	U	ppbv	40	1/30/2012 11:52 PM
Ethylbenzene	84	80		ppbv	40	1/30/2012 11:52 PM
Heptane	630	40		ppbv	40	1/30/2012 11:52 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/30/2012 11:52 PM
m,p-Xylene	270	80		ppbv	40	1/30/2012 11:52 PM
Methylene chloride	ND	200	U	ppbv	40	1/30/2012 11:52 PM
n-Hexane	420	80		ppbv	40	1/30/2012 11:52 PM
Naphthalene	ND	40	U	ppbv	40	1/30/2012 11:52 PM
o-Xylene	68	40		ppbv	40	1/30/2012 11:52 PM
Propylene	74	40		ppbv	40	1/30/2012 11:52 PM
Styrene	ND	40	U	ppbv	40	1/30/2012 11:52 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/30/2012 11:52 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/30/2012 11:52 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/30/2012 11:52 PM
Toluene	2,000	40		ppbv	40	1/30/2012 11:52 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/30/2012 11:52 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/30/2012 11:52 PM
Trichloroethene	ND	40	U	ppbv	40	1/30/2012 11:52 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/30/2012 11:52 PM
Vinyl acetate	ND	40	U	ppbv	40	1/30/2012 11:52 PM
Vinyl chloride	ND	40	U	ppbv	40	1/30/2012 11:52 PM
Xylenes, Total	340	120		ppbv	40	1/30/2012 11:52 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	40	1/30/2012 11:52 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	25,000	4,700		µg/m³	40	2/2/2012 4:46 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	2/2/2012 4:46 PM
C9-C12 Aliphatic Hydrocarbons	3,800	7,600	J	µg/m³	40	2/2/2012 4:46 PM
Surr: 4-Bromofluorobenzene	99.8	70-130		%REC	40	2/2/2012 4:46 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 3:11:00 PM
Project:	Kirtland AFB		
Lab ID:	1201676-022	**Matrix:**	Air
Client Sample ID:	VA1266		

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	1/30/2012 1:29 PM
Carbon Monoxide	ND	0.10	U	%	1	1/30/2012 1:29 PM
Methane	ND	0.50	U	%	1	1/30/2012 1:29 PM
Nitrogen	80	0.10		%	1	1/30/2012 1:29 PM
Oxygen	21	0.10		%	1	1/30/2012 1:29 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/31/2012 1:28 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/31/2012 1:28 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/31/2012 1:28 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/31/2012 1:28 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/31/2012 1:28 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 1:28 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/31/2012 1:28 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/31/2012 1:28 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/31/2012 1:28 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 1:28 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/31/2012 1:28 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/31/2012 1:28 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/31/2012 1:28 AM
1,3-Butadiene	ND	40	U	ppbv	40	1/31/2012 1:28 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 1:28 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 1:28 AM
2-Butanone	ND	40	U	ppbv	40	1/31/2012 1:28 AM
2-Hexanone	ND	40	U	ppbv	40	1/31/2012 1:28 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/31/2012 1:28 AM
Acetone	ND	40	U	ppbv	40	1/31/2012 1:28 AM
Benzene	460	40		ppbv	40	1/31/2012 1:28 AM
Benzyl chloride	ND	40	U	ppbv	40	1/31/2012 1:28 AM
Bromodichloromethane	ND	40	U	ppbv	40	1/31/2012 1:28 AM
Bromoform	ND	40	U	ppbv	40	1/31/2012 1:28 AM
Bromomethane	ND	40	U	ppbv	40	1/31/2012 1:28 AM
Carbon disulfide	ND	40	U	ppbv	40	1/31/2012 1:28 AM
Carbon tetrachloride	ND	40	U	ppbv	40	1/31/2012 1:28 AM
Chlorobenzene	ND	40	U	ppbv	40	1/31/2012 1:28 AM
Chlorodibromomethane	ND	40	U	ppbv	40	1/31/2012 1:28 AM
Chloroethane	ND	40	U	ppbv	40	1/31/2012 1:28 AM
Chloroform	ND	40	U	ppbv	40	1/31/2012 1:28 AM
Chloromethane	ND	40	U	ppbv	40	1/31/2012 1:28 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 1:28 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/31/2012 1:28 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 3:11:00 PM
Project:	Kirtland AFB		
Lab ID:	1201676-022	**Matrix:**	Air
Client Sample ID:	VA1266		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	530	80		ppbv	40	1/31/2012 1:28 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/31/2012 1:28 AM
Ethyl acetate	ND	40	U	ppbv	40	1/31/2012 1:28 AM
Ethylbenzene	95	80		ppbv	40	1/31/2012 1:28 AM
Heptane	610	40		ppbv	40	1/31/2012 1:28 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/31/2012 1:28 AM
m,p-Xylene	310	80		ppbv	40	1/31/2012 1:28 AM
Methylene chloride	ND	200	U	ppbv	40	1/31/2012 1:28 AM
n-Hexane	390	80		ppbv	40	1/31/2012 1:28 AM
Naphthalene	ND	40	U	ppbv	40	1/31/2012 1:28 AM
o-Xylene	78	40		ppbv	40	1/31/2012 1:28 AM
Propylene	78	40		ppbv	40	1/31/2012 1:28 AM
Styrene	ND	40	U	ppbv	40	1/31/2012 1:28 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/31/2012 1:28 AM
Tetrachloroethene	ND	40	U	ppbv	40	1/31/2012 1:28 AM
Tetrahydrofuran	ND	40	U	ppbv	40	1/31/2012 1:28 AM
Toluene	4,300	400		ppbv	400	2/1/2012 2:41 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 1:28 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/31/2012 1:28 AM
Trichloroethene	ND	40	U	ppbv	40	1/31/2012 1:28 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/31/2012 1:28 AM
Vinyl acetate	ND	40	U	ppbv	40	1/31/2012 1:28 AM
Vinyl chloride	ND	40	U	ppbv	40	1/31/2012 1:28 AM
Xylenes, Total	390	120		ppbv	40	1/31/2012 1:28 AM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	40	1/31/2012 1:28 AM
Mass APH Air	**Method:**					**Analyst: rd2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	16,000	4,700		µg/m³	40	2/6/2012 4:20 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	2/6/2012 4:20 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	2/6/2012 4:20 PM
Surr: 4-Bromofluorobenzene	92.3	70-130		%REC	40	2/6/2012 4:20 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 3:45:00 PM
Project:	Kirtland AFB		
Lab ID:	1201676-023	**Matrix:**	Air
Client Sample ID:	VA1267		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.21	0.10		%	1	1/30/2012 2:02 PM
Carbon Monoxide	ND	0.10	U	%	1	1/30/2012 2:02 PM
Methane	ND	0.50	U	%	1	1/30/2012 2:02 PM
Nitrogen	80	0.10		%	1	1/30/2012 2:02 PM
Oxygen	20	0.10		%	1	1/30/2012 2:02 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/31/2012 2:59 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/31/2012 2:59 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/31/2012 2:59 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/31/2012 2:59 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/31/2012 2:59 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 2:59 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/31/2012 2:59 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/31/2012 2:59 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/31/2012 2:59 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 2:59 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/31/2012 2:59 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/31/2012 2:59 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/31/2012 2:59 AM
1,3-Butadiene	ND	40	U	ppbv	40	1/31/2012 2:59 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 2:59 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 2:59 AM
2-Butanone	ND	40	U	ppbv	40	1/31/2012 2:59 AM
2-Hexanone	ND	40	U	ppbv	40	1/31/2012 2:59 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/31/2012 2:59 AM
Acetone	ND	40	U	ppbv	40	1/31/2012 2:59 AM
Benzene	280	40		ppbv	40	1/31/2012 2:59 AM
Benzyl chloride	ND	40	U	ppbv	40	1/31/2012 2:59 AM
Bromodichloromethane	ND	40	U	ppbv	40	1/31/2012 2:59 AM
Bromoform	ND	40	U	ppbv	40	1/31/2012 2:59 AM
Bromomethane	ND	40	U	ppbv	40	1/31/2012 2:59 AM
Carbon disulfide	ND	40	U	ppbv	40	1/31/2012 2:59 AM
Carbon tetrachloride	ND	40	U	ppbv	40	1/31/2012 2:59 AM
Chlorobenzene	ND	40	U	ppbv	40	1/31/2012 2:59 AM
Chlorodibromomethane	ND	40	U	ppbv	40	1/31/2012 2:59 AM
Chloroethane	ND	40	U	ppbv	40	1/31/2012 2:59 AM
Chloroform	ND	40	U	ppbv	40	1/31/2012 2:59 AM
Chloromethane	ND	40	U	ppbv	40	1/31/2012 2:59 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 2:59 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/31/2012 2:59 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 3:45:00 PM
Project:	Kirtland AFB		
Lab ID:	1201676-023	**Matrix:**	Air
Client Sample ID:	VA1267		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	330	80		ppbv	40	1/31/2012 2:59 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/31/2012 2:59 AM
Ethyl acetate	ND	40	U	ppbv	40	1/31/2012 2:59 AM
Ethylbenzene	48	80	J	ppbv	40	1/31/2012 2:59 AM
Heptane	300	40		ppbv	40	1/31/2012 2:59 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/31/2012 2:59 AM
m,p-Xylene	150	80		ppbv	40	1/31/2012 2:59 AM
Methylene chloride	ND	200	U	ppbv	40	1/31/2012 2:59 AM
n-Hexane	260	80		ppbv	40	1/31/2012 2:59 AM
Naphthalene	ND	40	U	ppbv	40	1/31/2012 2:59 AM
o-Xylene	ND	40	U	ppbv	40	1/31/2012 2:59 AM
Propylene	54	40		ppbv	40	1/31/2012 2:59 AM
Styrene	ND	40	U	ppbv	40	1/31/2012 2:59 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/31/2012 2:59 AM
Tetrachloroethene	ND	40	U	ppbv	40	1/31/2012 2:59 AM
Tetrahydrofuran	ND	40	U	ppbv	40	1/31/2012 2:59 AM
Toluene	930	40		ppbv	40	1/31/2012 2:59 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 2:59 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/31/2012 2:59 AM
Trichloroethene	ND	40	U	ppbv	40	1/31/2012 2:59 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/31/2012 2:59 AM
Vinyl acetate	ND	40	U	ppbv	40	1/31/2012 2:59 AM
Vinyl chloride	ND	40	U	ppbv	40	1/31/2012 2:59 AM
Xylenes, Total	150	120		ppbv	40	1/31/2012 2:59 AM
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	40	1/31/2012 2:59 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	13,000	4,700		µg/m³	40	2/1/2012 5:40 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	2/1/2012 5:40 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	2/1/2012 5:40 PM
Surr: 4-Bromofluorobenzene	93.7	70-130		%REC	40	2/1/2012 5:40 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 4:21:00 PM
Project:	Kirtland AFB		
Lab ID:	1201676-024	**Matrix:**	Air
Client Sample ID:	VA1268		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.072	0.10	J	%	1	1/30/2012 3:04 PM
Carbon Monoxide	ND	0.10	U	%	1	1/30/2012 3:04 PM
Methane	ND	0.50	U	%	1	1/30/2012 3:04 PM
Nitrogen	80	0.10		%	1	1/30/2012 3:04 PM
Oxygen	21	0.10		%	1	1/30/2012 3:04 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	2/1/2012 5:28 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	2/1/2012 5:28 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	2/1/2012 5:28 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	2/1/2012 5:28 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	2/1/2012 5:28 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	2/1/2012 5:28 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	2/1/2012 5:28 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	2/1/2012 5:28 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	2/1/2012 5:28 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	2/1/2012 5:28 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	2/1/2012 5:28 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	2/1/2012 5:28 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	2/1/2012 5:28 AM
1,3-Butadiene	ND	400	U	ppbv	400	2/1/2012 5:28 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	2/1/2012 5:28 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	2/1/2012 5:28 AM
2-Butanone	ND	400	U	ppbv	400	2/1/2012 5:28 AM
2-Hexanone	ND	400	U	ppbv	400	2/1/2012 5:28 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	2/1/2012 5:28 AM
Acetone	1,000	400		ppbv	400	2/1/2012 5:28 AM
Benzene	2,900	400		ppbv	400	2/1/2012 5:28 AM
Benzyl chloride	ND	400	U	ppbv	400	2/1/2012 5:28 AM
Bromodichloromethane	ND	400	U	ppbv	400	2/1/2012 5:28 AM
Bromoform	ND	400	U	ppbv	400	2/1/2012 5:28 AM
Bromomethane	ND	400	U	ppbv	400	2/1/2012 5:28 AM
Carbon disulfide	ND	400	U	ppbv	400	2/1/2012 5:28 AM
Carbon tetrachloride	ND	400	U	ppbv	400	2/1/2012 5:28 AM
Chlorobenzene	ND	400	U	ppbv	400	2/1/2012 5:28 AM
Chlorodibromomethane	ND	400	U	ppbv	400	2/1/2012 5:28 AM
Chloroethane	ND	400	U	ppbv	400	2/1/2012 5:28 AM
Chloroform	ND	400	U	ppbv	400	2/1/2012 5:28 AM
Chloromethane	ND	400	U	ppbv	400	2/1/2012 5:28 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	2/1/2012 5:28 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	2/1/2012 5:28 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 4:21:00 PM
Project:	Kirtland AFB		
Lab ID:	1201676-024	**Matrix:**	Air
Client Sample ID:	VA1268		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	3,100	800		ppbv	400	2/1/2012 5:28 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	2/1/2012 5:28 AM
Ethyl acetate	ND	400	U	ppbv	400	2/1/2012 5:28 AM
Ethylbenzene	ND	800	U	ppbv	400	2/1/2012 5:28 AM
Heptane	1,300	400		ppbv	400	2/1/2012 5:28 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	2/1/2012 5:28 AM
m,p-Xylene	530	800	J	ppbv	400	2/1/2012 5:28 AM
Methylene chloride	ND	2,000	U	ppbv	400	2/1/2012 5:28 AM
n-Hexane	3,100	800		ppbv	400	2/1/2012 5:28 AM
Naphthalene	ND	400	U	ppbv	400	2/1/2012 5:28 AM
o-Xylene	ND	400	U	ppbv	400	2/1/2012 5:28 AM
Propylene	500	400		ppbv	400	2/1/2012 5:28 AM
Styrene	ND	400	U	ppbv	400	2/1/2012 5:28 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	2/1/2012 5:28 AM
Tetrachloroethene	ND	400	U	ppbv	400	2/1/2012 5:28 AM
Tetrahydrofuran	ND	400	U	ppbv	400	2/1/2012 5:28 AM
Toluene	3,100	400		ppbv	400	2/1/2012 5:28 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	2/1/2012 5:28 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	2/1/2012 5:28 AM
Trichloroethene	ND	400	U	ppbv	400	2/1/2012 5:28 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	2/1/2012 5:28 AM
Vinyl acetate	ND	400	U	ppbv	400	2/1/2012 5:28 AM
Vinyl chloride	ND	400	U	ppbv	400	2/1/2012 5:28 AM
Xylenes, Total	530	1,200	J	ppbv	400	2/1/2012 5:28 AM
Surr: 4-Bromofluorobenzene	108	70-130		%REC	400	2/1/2012 5:28 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	360,000	47,000		µg/m³	400	2/2/2012 10:26 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	2/2/2012 10:26 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	2/2/2012 10:26 PM
Surr: 4-Bromofluorobenzene	94.4	70-130		%REC	400	2/2/2012 10:26 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/17/2012 10:32:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-025	**Matrix:**	Air
Client Sample ID:	VA1269		

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	1/30/2012 3:54 PM
Carbon Monoxide	ND	0.10	U	%	1	1/30/2012 3:54 PM
Methane	ND	0.50	U	%	1	1/30/2012 3:54 PM
Nitrogen	79	0.10		%	1	1/30/2012 3:54 PM
Oxygen	21	0.10		%	1	1/30/2012 3:54 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	2/2/2012 6:35 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	2/2/2012 6:35 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	2/2/2012 6:35 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	2/2/2012 6:35 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	2/2/2012 6:35 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	2/2/2012 6:35 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	2/2/2012 6:35 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	2/2/2012 6:35 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	2/2/2012 6:35 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	2/2/2012 6:35 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	2/2/2012 6:35 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	2/2/2012 6:35 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	2/2/2012 6:35 PM
1,3-Butadiene	ND	800	U	ppbv	800	2/2/2012 6:35 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	2/2/2012 6:35 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	2/2/2012 6:35 PM
2-Butanone	ND	800	U	ppbv	800	2/2/2012 6:35 PM
2-Hexanone	ND	800	U	ppbv	800	2/2/2012 6:35 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	2/2/2012 6:35 PM
Acetone	ND	800	U	ppbv	800	2/2/2012 6:35 PM
Benzene	860	800		ppbv	800	2/2/2012 6:35 PM
Benzyl chloride	ND	800	U	ppbv	800	2/2/2012 6:35 PM
Bromodichloromethane	ND	800	U	ppbv	800	2/2/2012 6:35 PM
Bromoform	ND	800	U	ppbv	800	2/2/2012 6:35 PM
Bromomethane	ND	800	U	ppbv	800	2/2/2012 6:35 PM
Carbon disulfide	ND	800	U	ppbv	800	2/2/2012 6:35 PM
Carbon tetrachloride	ND	800	U	ppbv	800	2/2/2012 6:35 PM
Chlorobenzene	ND	800	U	ppbv	800	2/2/2012 6:35 PM
Chlorodibromomethane	ND	800	U	ppbv	800	2/2/2012 6:35 PM
Chloroethane	ND	800	U	ppbv	800	2/2/2012 6:35 PM
Chloroform	ND	800	U	ppbv	800	2/2/2012 6:35 PM
Chloromethane	ND	800	U	ppbv	800	2/2/2012 6:35 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	2/2/2012 6:35 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	2/2/2012 6:35 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/17/2012 10:32:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-025	**Matrix:**	Air
Client Sample ID:	VA1269		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,600	1,600		ppbv	800	2/2/2012 6:35 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	2/2/2012 6:35 PM
Ethyl acetate	ND	800	U	ppbv	800	2/2/2012 6:35 PM
Ethylbenzene	ND	1,600	U	ppbv	800	2/2/2012 6:35 PM
Heptane	1,200	800		ppbv	800	2/2/2012 6:35 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	2/2/2012 6:35 PM
m,p-Xylene	ND	1,600	U	ppbv	800	2/2/2012 6:35 PM
Methylene chloride	ND	4,000	U	ppbv	800	2/2/2012 6:35 PM
n-Hexane	1,600	1,600		ppbv	800	2/2/2012 6:35 PM
Naphthalene	ND	800	U	ppbv	800	2/2/2012 6:35 PM
o-Xylene	ND	800	U	ppbv	800	2/2/2012 6:35 PM
Propylene	1,700	800		ppbv	800	2/2/2012 6:35 PM
Styrene	ND	800	U	ppbv	800	2/2/2012 6:35 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	2/2/2012 6:35 PM
Tetrachloroethene	ND	800	U	ppbv	800	2/2/2012 6:35 PM
Tetrahydrofuran	ND	800	U	ppbv	800	2/2/2012 6:35 PM
Toluene	2,200	800		ppbv	800	2/2/2012 6:35 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	2/2/2012 6:35 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	2/2/2012 6:35 PM
Trichloroethene	ND	800	U	ppbv	800	2/2/2012 6:35 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	2/2/2012 6:35 PM
Vinyl acetate	ND	800	U	ppbv	800	2/2/2012 6:35 PM
Vinyl chloride	ND	800	U	ppbv	800	2/2/2012 6:35 PM
Xylenes, Total	ND	2,400	U	ppbv	800	2/2/2012 6:35 PM
Surr: 4-Bromofluorobenzene	111	70-130		%REC	800	2/2/2012 6:35 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,000,000	94,000		µg/m³	800	2/3/2012 4:00 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	2/3/2012 4:00 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	2/3/2012 4:00 AM
Surr: 4-Bromofluorobenzene	95.2	70-130		%REC	800	2/3/2012 4:00 AM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 8:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-026	**Matrix:**	Air
Client Sample ID:	VA1277		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.098	0.10	J	%	1	1/30/2012 4:21 PM
Carbon Monoxide	ND	0.10	U	%	1	1/30/2012 4:21 PM
Methane	ND	0.50	U	%	1	1/30/2012 4:21 PM
Nitrogen	79	0.10		%	1	1/30/2012 4:21 PM
Oxygen	21	0.10		%	1	1/30/2012 4:21 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/31/2012 4:44 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/31/2012 4:44 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/31/2012 4:44 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/31/2012 4:44 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/31/2012 4:44 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 4:44 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/31/2012 4:44 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/31/2012 4:44 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/31/2012 4:44 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 4:44 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/31/2012 4:44 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/31/2012 4:44 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/31/2012 4:44 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/31/2012 4:44 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 4:44 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 4:44 PM
2-Butanone	ND	40	U	ppbv	40	1/31/2012 4:44 PM
2-Hexanone	ND	40	U	ppbv	40	1/31/2012 4:44 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/31/2012 4:44 PM
Acetone	ND	40	U	ppbv	40	1/31/2012 4:44 PM
Benzene	640	40		ppbv	40	1/31/2012 4:44 PM
Benzyl chloride	ND	40	U	ppbv	40	1/31/2012 4:44 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/31/2012 4:44 PM
Bromoform	ND	40	U	ppbv	40	1/31/2012 4:44 PM
Bromomethane	ND	40	U	ppbv	40	1/31/2012 4:44 PM
Carbon disulfide	ND	40	U	ppbv	40	1/31/2012 4:44 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/31/2012 4:44 PM
Chlorobenzene	ND	40	U	ppbv	40	1/31/2012 4:44 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/31/2012 4:44 PM
Chloroethane	ND	40	U	ppbv	40	1/31/2012 4:44 PM
Chloroform	ND	40	U	ppbv	40	1/31/2012 4:44 PM
Chloromethane	ND	40	U	ppbv	40	1/31/2012 4:44 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 4:44 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/31/2012 4:44 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 8:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-026	**Matrix:**	Air
Client Sample ID:	VA1277		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,500	80		ppbv	40	1/31/2012 4:44 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/31/2012 4:44 PM
Ethyl acetate	ND	40	U	ppbv	40	1/31/2012 4:44 PM
Ethylbenzene	ND	80	U	ppbv	40	1/31/2012 4:44 PM
Heptane	670	40		ppbv	40	1/31/2012 4:44 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/31/2012 4:44 PM
m,p-Xylene	88	80		ppbv	40	1/31/2012 4:44 PM
Methylene chloride	ND	200	U	ppbv	40	1/31/2012 4:44 PM
n-Hexane	1,300	80		ppbv	40	1/31/2012 4:44 PM
Naphthalene	ND	40	U	ppbv	40	1/31/2012 4:44 PM
o-Xylene	ND	40	U	ppbv	40	1/31/2012 4:44 PM
Propylene	88	40		ppbv	40	1/31/2012 4:44 PM
Styrene	ND	40	U	ppbv	40	1/31/2012 4:44 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/31/2012 4:44 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/31/2012 4:44 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/31/2012 4:44 PM
Toluene	1,100	40		ppbv	40	1/31/2012 4:44 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 4:44 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/31/2012 4:44 PM
Trichloroethene	ND	40	U	ppbv	40	1/31/2012 4:44 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/31/2012 4:44 PM
Vinyl acetate	ND	40	U	ppbv	40	1/31/2012 4:44 PM
Vinyl chloride	ND	40	U	ppbv	40	1/31/2012 4:44 PM
Xylenes, Total	88	120	J	ppbv	40	1/31/2012 4:44 PM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	40	1/31/2012 4:44 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	75,000	4,700		µg/m³	40	1/30/2012 3:49 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	1/30/2012 3:49 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	1/30/2012 3:49 PM
Surr: 4-Bromofluorobenzene	88.4	70-130		%REC	40	1/30/2012 3:49 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 9:12:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-027	**Matrix:**	Air
Client Sample ID:	VA1278		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.17	0.10		%	1	1/30/2012 4:40 PM
Carbon Monoxide	ND	0.10	U	%	1	1/30/2012 4:40 PM
Methane	ND	0.50	U	%	1	1/30/2012 4:40 PM
Nitrogen	79	0.10		%	1	1/30/2012 4:40 PM
Oxygen	20	0.10		%	1	1/30/2012 4:40 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/31/2012 5:35 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/31/2012 5:35 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/31/2012 5:35 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/31/2012 5:35 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/31/2012 5:35 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 5:35 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/31/2012 5:35 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/31/2012 5:35 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/31/2012 5:35 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 5:35 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/31/2012 5:35 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/31/2012 5:35 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/31/2012 5:35 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/31/2012 5:35 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 5:35 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 5:35 PM
2-Butanone	ND	40	U	ppbv	40	1/31/2012 5:35 PM
2-Hexanone	ND	40	U	ppbv	40	1/31/2012 5:35 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/31/2012 5:35 PM
Acetone	ND	40	U	ppbv	40	1/31/2012 5:35 PM
Benzene	290	40		ppbv	40	1/31/2012 5:35 PM
Benzyl chloride	ND	40	U	ppbv	40	1/31/2012 5:35 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/31/2012 5:35 PM
Bromoform	ND	40	U	ppbv	40	1/31/2012 5:35 PM
Bromomethane	ND	40	U	ppbv	40	1/31/2012 5:35 PM
Carbon disulfide	ND	40	U	ppbv	40	1/31/2012 5:35 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/31/2012 5:35 PM
Chlorobenzene	ND	40	U	ppbv	40	1/31/2012 5:35 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/31/2012 5:35 PM
Chloroethane	ND	40	U	ppbv	40	1/31/2012 5:35 PM
Chloroform	ND	40	U	ppbv	40	1/31/2012 5:35 PM
Chloromethane	ND	40	U	ppbv	40	1/31/2012 5:35 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 5:35 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/31/2012 5:35 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 9:12:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-027	**Matrix:**	Air
Client Sample ID:	VA1278		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	340	80		ppbv	40	1/31/2012 5:35 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/31/2012 5:35 PM
Ethyl acetate	ND	40	U	ppbv	40	1/31/2012 5:35 PM
Ethylbenzene	ND	80	U	ppbv	40	1/31/2012 5:35 PM
Heptane	260	40		ppbv	40	1/31/2012 5:35 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/31/2012 5:35 PM
m,p-Xylene	82	80		ppbv	40	1/31/2012 5:35 PM
Methylene chloride	ND	200	U	ppbv	40	1/31/2012 5:35 PM
n-Hexane	290	80		ppbv	40	1/31/2012 5:35 PM
Naphthalene	ND	40	U	ppbv	40	1/31/2012 5:35 PM
o-Xylene	ND	40	U	ppbv	40	1/31/2012 5:35 PM
Propylene	56	40		ppbv	40	1/31/2012 5:35 PM
Styrene	ND	40	U	ppbv	40	1/31/2012 5:35 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/31/2012 5:35 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/31/2012 5:35 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/31/2012 5:35 PM
Toluene	700	40		ppbv	40	1/31/2012 5:35 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 5:35 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/31/2012 5:35 PM
Trichloroethene	ND	40	U	ppbv	40	1/31/2012 5:35 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/31/2012 5:35 PM
Vinyl acetate	ND	40	U	ppbv	40	1/31/2012 5:35 PM
Vinyl chloride	ND	40	U	ppbv	40	1/31/2012 5:35 PM
Xylenes, Total	82	120	J	ppbv	40	1/31/2012 5:35 PM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	40	1/31/2012 5:35 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	17,000	4,700		µg/m³	40	1/30/2012 4:32 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	1/30/2012 4:32 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	1/30/2012 4:32 PM
Surr: 4-Bromofluorobenzene	91.8	70-130		%REC	40	1/30/2012 4:32 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 9:47:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-028	**Matrix:**	Air
Client Sample ID:	VA1279		

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	1/30/2012 5:39 PM
Carbon Monoxide	ND	0.10	U	%	1	1/30/2012 5:39 PM
Methane	ND	0.50	U	%	1	1/30/2012 5:39 PM
Nitrogen	79	0.10		%	1	1/30/2012 5:39 PM
Oxygen	21	0.10		%	1	1/30/2012 5:39 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/31/2012 7:17 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/31/2012 7:17 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/31/2012 7:17 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/31/2012 7:17 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/31/2012 7:17 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 7:17 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/31/2012 7:17 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/31/2012 7:17 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/31/2012 7:17 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 7:17 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/31/2012 7:17 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/31/2012 7:17 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/31/2012 7:17 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/31/2012 7:17 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 7:17 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 7:17 PM
2-Butanone	ND	40	U	ppbv	40	1/31/2012 7:17 PM
2-Hexanone	ND	40	U	ppbv	40	1/31/2012 7:17 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/31/2012 7:17 PM
Acetone	ND	40	U	ppbv	40	1/31/2012 7:17 PM
Benzene	240	40		ppbv	40	1/31/2012 7:17 PM
Benzyl chloride	ND	40	U	ppbv	40	1/31/2012 7:17 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/31/2012 7:17 PM
Bromoform	ND	40	U	ppbv	40	1/31/2012 7:17 PM
Bromomethane	ND	40	U	ppbv	40	1/31/2012 7:17 PM
Carbon disulfide	ND	40	U	ppbv	40	1/31/2012 7:17 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/31/2012 7:17 PM
Chlorobenzene	ND	40	U	ppbv	40	1/31/2012 7:17 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/31/2012 7:17 PM
Chloroethane	ND	40	U	ppbv	40	1/31/2012 7:17 PM
Chloroform	ND	40	U	ppbv	40	1/31/2012 7:17 PM
Chloromethane	ND	40	U	ppbv	40	1/31/2012 7:17 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 7:17 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/31/2012 7:17 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 9:47:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-028	**Matrix:**	Air
Client Sample ID:	VA1279		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	290	80		ppbv	40	1/31/2012 7:17 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/31/2012 7:17 PM
Ethyl acetate	ND	40	U	ppbv	40	1/31/2012 7:17 PM
Ethylbenzene	ND	80	U	ppbv	40	1/31/2012 7:17 PM
Heptane	220	40		ppbv	40	1/31/2012 7:17 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/31/2012 7:17 PM
m,p-Xylene	68	80	J	ppbv	40	1/31/2012 7:17 PM
Methylene chloride	ND	200	U	ppbv	40	1/31/2012 7:17 PM
n-Hexane	270	80		ppbv	40	1/31/2012 7:17 PM
Naphthalene	ND	40	U	ppbv	40	1/31/2012 7:17 PM
o-Xylene	ND	40	U	ppbv	40	1/31/2012 7:17 PM
Propylene	55	40		ppbv	40	1/31/2012 7:17 PM
Styrene	ND	40	U	ppbv	40	1/31/2012 7:17 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/31/2012 7:17 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/31/2012 7:17 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/31/2012 7:17 PM
Toluene	550	40		ppbv	40	1/31/2012 7:17 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 7:17 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/31/2012 7:17 PM
Trichloroethene	ND	40	U	ppbv	40	1/31/2012 7:17 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/31/2012 7:17 PM
Vinyl acetate	ND	40	U	ppbv	40	1/31/2012 7:17 PM
Vinyl chloride	ND	40	U	ppbv	40	1/31/2012 7:17 PM
Xylenes, Total	68	120	J	ppbv	40	1/31/2012 7:17 PM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	40	1/31/2012 7:17 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	19,000	4,700		µg/m³	40	1/30/2012 6:52 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	1/30/2012 6:52 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	1/30/2012 6:52 PM
Surr: 4-Bromofluorobenzene	94.3	70-130		%REC	40	1/30/2012 6:52 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 10:24:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-029	**Matrix:**	Air
Client Sample ID:	VA1280		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.12	0.10		%	1	1/30/2012 5:59 PM
Carbon Monoxide	ND	0.10	U	%	1	1/30/2012 5:59 PM
Methane	ND	0.50	U	%	1	1/30/2012 5:59 PM
Nitrogen	79	0.10		%	1	1/30/2012 5:59 PM
Oxygen	21	0.10		%	1	1/30/2012 5:59 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/31/2012 3:53 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/31/2012 3:53 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/31/2012 3:53 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/31/2012 3:53 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/31/2012 3:53 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 3:53 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/31/2012 3:53 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/31/2012 3:53 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/31/2012 3:53 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 3:53 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/31/2012 3:53 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/31/2012 3:53 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/31/2012 3:53 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/31/2012 3:53 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 3:53 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/31/2012 3:53 PM
2-Butanone	ND	40	U	ppbv	40	1/31/2012 3:53 PM
2-Hexanone	ND	40	U	ppbv	40	1/31/2012 3:53 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Acetone	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Benzene	430	40		ppbv	40	1/31/2012 3:53 PM
Benzyl chloride	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Bromoform	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Bromomethane	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Carbon disulfide	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Chlorobenzene	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Chloroethane	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Chloroform	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Chloromethane	ND	40	U	ppbv	40	1/31/2012 3:53 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 3:53 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/31/2012 3:53 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 10:24:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-029	**Matrix:**	Air
Client Sample ID:	VA1280		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	460	80		ppbv	40	1/31/2012 3:53 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Ethyl acetate	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Ethylbenzene	ND	80	U	ppbv	40	1/31/2012 3:53 PM
Heptane	400	40		ppbv	40	1/31/2012 3:53 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/31/2012 3:53 PM
m,p-Xylene	97	80		ppbv	40	1/31/2012 3:53 PM
Methylene chloride	ND	200	U	ppbv	40	1/31/2012 3:53 PM
n-Hexane	450	80		ppbv	40	1/31/2012 3:53 PM
Naphthalene	ND	40	U	ppbv	40	1/31/2012 3:53 PM
o-Xylene	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Propylene	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Styrene	ND	40	U	ppbv	40	1/31/2012 3:53 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Toluene	1,000	40		ppbv	40	1/31/2012 3:53 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/31/2012 3:53 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Trichloroethene	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Vinyl acetate	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Vinyl chloride	ND	40	U	ppbv	40	1/31/2012 3:53 PM
Xylenes, Total	97	120	J	ppbv	40	1/31/2012 3:53 PM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	40	1/31/2012 3:53 PM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RH3**
C5-C8 Aliphatic Hydrocarbons	18,000	4,700		µg/m³	40	2/1/2012 1:29 AM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	2/1/2012 1:29 AM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	2/1/2012 1:29 AM
Surr: 4-Bromofluorobenzene	92.8	70-130		%REC	40	2/1/2012 1:29 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 11:02:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-030	**Matrix:**	Air
Client Sample ID:	VA1281		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.042	0.10	J	%	1	1/30/2012 6:15 PM
Carbon Monoxide	ND	0.10	U	%	1	1/30/2012 6:15 PM
Methane	ND	0.50	U	%	1	1/30/2012 6:15 PM
Nitrogen	78	0.10		%	1	1/30/2012 6:15 PM
Oxygen	21	0.10		%	1	1/30/2012 6:15 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/31/2012 10:56 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/31/2012 10:56 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/31/2012 10:56 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/31/2012 10:56 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/31/2012 10:56 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/31/2012 10:56 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/31/2012 10:56 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/31/2012 10:56 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/31/2012 10:56 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/31/2012 10:56 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/31/2012 10:56 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/31/2012 10:56 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/31/2012 10:56 PM
1,3-Butadiene	ND	800	U	ppbv	800	1/31/2012 10:56 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/31/2012 10:56 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/31/2012 10:56 PM
2-Butanone	ND	800	U	ppbv	800	1/31/2012 10:56 PM
2-Hexanone	ND	800	U	ppbv	800	1/31/2012 10:56 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/31/2012 10:56 PM
Acetone	ND	800	U	ppbv	800	1/31/2012 10:56 PM
Benzene	1,900	800		ppbv	800	1/31/2012 10:56 PM
Benzyl chloride	ND	800	U	ppbv	800	1/31/2012 10:56 PM
Bromodichloromethane	ND	800	U	ppbv	800	1/31/2012 10:56 PM
Bromoform	ND	800	U	ppbv	800	1/31/2012 10:56 PM
Bromomethane	ND	800	U	ppbv	800	1/31/2012 10:56 PM
Carbon disulfide	ND	800	U	ppbv	800	1/31/2012 10:56 PM
Carbon tetrachloride	ND	800	U	ppbv	800	1/31/2012 10:56 PM
Chlorobenzene	ND	800	U	ppbv	800	1/31/2012 10:56 PM
Chlorodibromomethane	ND	800	U	ppbv	800	1/31/2012 10:56 PM
Chloroethane	ND	800	U	ppbv	800	1/31/2012 10:56 PM
Chloroform	ND	800	U	ppbv	800	1/31/2012 10:56 PM
Chloromethane	ND	800	U	ppbv	800	1/31/2012 10:56 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/31/2012 10:56 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/31/2012 10:56 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 11:02:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-030	**Matrix:**	Air
Client Sample ID:	VA1281		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	13,000	1,600		ppbv	800	1/31/2012 10:56 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/31/2012 10:56 PM
Ethyl acetate	ND	800	U	ppbv	800	1/31/2012 10:56 PM
Ethylbenzene	ND	1,600	U	ppbv	800	1/31/2012 10:56 PM
Heptane	2,500	800		ppbv	800	1/31/2012 10:56 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/31/2012 10:56 PM
m,p-Xylene	ND	1,600	U	ppbv	800	1/31/2012 10:56 PM
Methylene chloride	ND	4,000	U	ppbv	800	1/31/2012 10:56 PM
n-Hexane	11,000	1,600		ppbv	800	1/31/2012 10:56 PM
Naphthalene	ND	800	U	ppbv	800	1/31/2012 10:56 PM
o-Xylene	ND	800	U	ppbv	800	1/31/2012 10:56 PM
Propylene	1,900	800		ppbv	800	1/31/2012 10:56 PM
Styrene	ND	800	U	ppbv	800	1/31/2012 10:56 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/31/2012 10:56 PM
Tetrachloroethene	ND	800	U	ppbv	800	1/31/2012 10:56 PM
Tetrahydrofuran	ND	800	U	ppbv	800	1/31/2012 10:56 PM
Toluene	3,000	800		ppbv	800	1/31/2012 10:56 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/31/2012 10:56 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/31/2012 10:56 PM
Trichloroethene	ND	800	U	ppbv	800	1/31/2012 10:56 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/31/2012 10:56 PM
Vinyl acetate	ND	800	U	ppbv	800	1/31/2012 10:56 PM
Vinyl chloride	ND	800	U	ppbv	800	1/31/2012 10:56 PM
Xylenes, Total	ND	2,400	U	ppbv	800	1/31/2012 10:56 PM
Surr: 4-Bromofluorobenzene	110	70-130		%REC	800	1/31/2012 10:56 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	770,000	190,000		µg/m³	1600	2/1/2012 7:55 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	2/1/2012 7:55 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	2/1/2012 7:55 PM
Surr: 4-Bromofluorobenzene	94.9	70-130		%REC	1600	2/1/2012 7:55 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 11:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-031	**Matrix:**	Air
Client Sample ID:	VA1282		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.74	0.10		%	1	1/30/2012 6:31 PM
Carbon Monoxide	ND	0.10	U	%	1	1/30/2012 6:31 PM
Methane	ND	0.50	U	%	1	1/30/2012 6:31 PM
Nitrogen	79	0.10		%	1	1/30/2012 6:31 PM
Oxygen	19	0.10		%	1	1/30/2012 6:31 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
2-Butanone	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
2-Hexanone	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
Acetone	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
Benzene	37,000	8,000		ppbv	8000	1/31/2012 1:21 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
Bromoform	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
Bromomethane	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
Chloroethane	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
Chloroform	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
Chloromethane	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 11:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-031	**Matrix:**	Air
Client Sample ID:	VA1282		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	130,000	16,000		ppbv	8000	1/31/2012 1:21 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	1/31/2012 1:21 PM
Heptane	55,000	8,000		ppbv	8000	1/31/2012 1:21 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	1/31/2012 1:21 PM
m,p-Xylene	9,800	16,000	J	ppbv	8000	1/31/2012 1:21 PM
Methylene chloride	ND	40,000	U	ppbv	8000	1/31/2012 1:21 PM
n-Hexane	62,000	16,000		ppbv	8000	1/31/2012 1:21 PM
Naphthalene	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
o-Xylene	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
Propylene	15,000	8,000		ppbv	8000	1/31/2012 1:21 PM
Styrene	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
Toluene	66,000	8,000		ppbv	8000	1/31/2012 1:21 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
Trichloroethene	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	1/31/2012 1:21 PM
Xylenes, Total	9,800	24,000	J	ppbv	8000	1/31/2012 1:21 PM
Surr: 4-Bromofluorobenzene	111	70-130		%REC	8000	1/31/2012 1:21 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	5,500,000	940,000		µg/m³	8000	2/2/2012 2:39 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	2/2/2012 2:39 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	2/2/2012 2:39 PM
Surr: 4-Bromofluorobenzene	94.1	70-130		%REC	8000	2/2/2012 2:39 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-032	**Matrix:**	Air
Client Sample ID:	VA8072-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	1/30/2012 1:51 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/30/2012 1:51 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/30/2012 1:51 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/30/2012 1:51 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/30/2012 1:51 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/30/2012 1:51 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/30/2012 1:51 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/30/2012 1:51 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/30/2012 1:51 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/30/2012 1:51 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/30/2012 1:51 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/30/2012 1:51 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/30/2012 1:51 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/30/2012 1:51 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/30/2012 1:51 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/30/2012 1:51 PM
2-Butanone	ND	40	U	ppbv	40	1/30/2012 1:51 PM
2-Hexanone	ND	40	U	ppbv	40	1/30/2012 1:51 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Acetone	64	40		ppbv	40	1/30/2012 1:51 PM
Benzene	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Benzyl chloride	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Bromoform	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Bromomethane	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Carbon disulfide	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Chlorobenzene	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Chloroethane	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Chloroform	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Chloromethane	ND	40	U	ppbv	40	1/30/2012 1:51 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/30/2012 1:51 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Cyclohexane	ND	80	U	ppbv	40	1/30/2012 1:51 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Ethyl acetate	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Ethylbenzene	ND	80	U	ppbv	40	1/30/2012 1:51 PM
Heptane	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/30/2012 1:51 PM
m,p-Xylene	ND	80	U	ppbv	40	1/30/2012 1:51 PM
Methylene chloride	100	200	J	ppbv	40	1/30/2012 1:51 PM

RTI Laboratories - Analytical Report

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	1/16/2012 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1201676-032	**Matrix:**	Air
Client Sample ID:	VA8072-TB		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
n-Hexane	48	80	J	ppbv	40	1/30/2012 1:51 PM
Naphthalene	ND	40	U	ppbv	40	1/30/2012 1:51 PM
o-Xylene	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Propylene	76	40		ppbv	40	1/30/2012 1:51 PM
Styrene	ND	40	U	ppbv	40	1/30/2012 1:51 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Toluene	41	40		ppbv	40	1/30/2012 1:51 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/30/2012 1:51 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Trichloroethene	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Vinyl acetate	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Vinyl chloride	ND	40	U	ppbv	40	1/30/2012 1:51 PM
Xylenes, Total	ND	120	U	ppbv	40	1/30/2012 1:51 PM
Surr: 4-Bromofluorobenzene	114	70-130		%REC	40	1/30/2012 1:51 PM

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

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: **VA1190** 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#: 1201676

Date Reported: 2/8/2012
Revision v2

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#: 1201676

Date Reported: 2/8/2012
Revision v2

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#: 1201676

Date Reported: 2/8/2012
Revision v2

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:	VA1264	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#: 1201676

Date Reported: 2/8/2012
Revision v2

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:	VA1264	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#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R45860

Sample ID: **mblk** Samp Type: **MBLK** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **45860**
Client ID: **PBW** Batch ID: **R45860** TestNo: **ASTM-D2504** Analysis Date: **1/28/2012** SeqNo: **899807**

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: **45860**
Client ID: **LCSW** Batch ID: **R45860** TestNo: **ASTM-D2504** Analysis Date: **1/28/2012** SeqNo: **899809**

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	2.608	0.693	0	
Carbon Monoxide	2.7	0.10	2.500	0	106	70	130	2.675	0.826	0	
Methane	2.1	0.50	2.000	0	103	70	130	2.078	0.676	0	
Nitrogen	2.7	0.10	2.500	0	107	70	130	2.763	3.46	0	
Oxygen	2.5	0.10	2.500	0	98.1	70	130	2.494	1.70	0	

Sample ID: **1201676-017bdup** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **45860**
Client ID: **VA1261** Batch ID: **R45860** TestNo: **ASTM-D2504** Analysis Date: **1/28/2012** SeqNo: **899821**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.061	0.10						0.06600	7.87	20	J
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	77	0.10						77.34	0.0297	20	
Oxygen	21	0.10						20.59	0.0680	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R45861

Sample ID: **mblk** Samp Type: **MBLK** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **45861**
Client ID: **PBW** Batch ID: **R45861** TestNo: **ASTM-D2504** Analysis Date: **1/30/2012** SeqNo: **899824**

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: **45861**
Client ID: **LCSW** Batch ID: **R45861** TestNo: **ASTM-D2504** Analysis Date: **1/30/2012** SeqNo: **899826**

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	2.672	2.27	0	
Carbon Monoxide	2.7	0.10	2.500	0	108	70	130	2.730	0.809	0	
Methane	2.1	0.50	2.000	0	105	70	130	2.118	0.711	0	
Nitrogen	2.7	0.10	2.500	0	106	70	130	2.709	1.86	0	
Oxygen	2.5	0.10	2.500	0	99.4	70	130	2.510	1.04	0	

Sample ID: **1201676-027bdup** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **45861**
Client ID: **VA1278** Batch ID: **R45861** TestNo: **ASTM-D2504** Analysis Date: **1/30/2012** SeqNo: **899838**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.18	0.10						0.1740	2.27	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	80	0.10						79.12	0.604	20	
Oxygen	21	0.10						20.39	0.562	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R45900

Sample ID:	1201676-031Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45900
Client ID:	VA1282	Batch ID:	R45900	TestNo:	TO-15			Analysis Date:	1/31/2012	SeqNo:	900627

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	40,000	8,000						37,280	8.23	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#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R45900

Sample ID:	1201676-031Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45900
Client ID:	VA1282	Batch ID:	R45900	TestNo:	TO-15			Analysis Date:	1/31/2012	SeqNo:	900627

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	120,000	16,000						125,200	4.44	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	48,000	8,000						55,360	15.1	25	
Hexachlorobutadiene	ND	16,000						0	0	25	U
m,p-Xylene	9,600	16,000						9,760	1.65	25	J
Methylene chloride	ND	40,000						0	0	25	U
n-Hexane	57,000	16,000						61,920	8.63	25	
Naphthalene	ND	8,000						0	0	25	U
o-Xylene	ND	8,000						0	0	25	U
Propylene	ND	8,000						14,880	200	25	RU
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	65,000	8,000						66,080	1.34	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	9,600	24,000						9,760	1.65	25	J
Surr: 4-Bromofluorobenzene	110,000		100,000		107	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R45900

Sample ID:	MBLK VOA1 013112	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45900
Client ID:	PBW	Batch ID:	R45900	TestNo:	TO-15			Analysis Date:	1/31/2012	SeqNo:	900645

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#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R45900

Sample ID:	MBLK VOA1 013112	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45900
Client ID:	PBW	Batch ID:	R45900	TestNo:	TO-15			Analysis Date:	1/31/2012	SeqNo:	900645

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	1.3	1.0									
Styrene	ND	1.0									U
tert-Butyl Methyl Ether	ND	1.0									U
Tetrachloroethene	ND	1.0									U
Tetrahydrofuran	ND	1.0									U
Toluene	ND	1.0									U
trans-1,2-Dichloroethene	ND	1.0									U
trans-1,3-dichloropropene	ND	1.0									U
Trichloroethene	ND	1.0									U
Trichlorofluoromethane	ND	1.0									U
Vinyl acetate	ND	1.0									U
Vinyl chloride	ND	1.0									U
Xylenes, Total	ND	3.0									U
Surr: 4-Bromofluorobenzene	14		12.50		113	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

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:	ZZZZZZ	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#: 1201676

Date Reported: 2/8/2012
Revision v2

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:	VA1254	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#: 1201676

Date Reported: 2/8/2012
Revision v2

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
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#: 1201676

Date Reported: 2/8/2012
Revision v2

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
Chloromethane	ND	1.0									U
cis-1,2-Dichloroethene	ND	1.0									U
cis-1,3-dichloropropene	ND	1.0									U
Cyclohexane	ND	2.0									U
Dichlorodifluoromethane	ND	1.0									U
Ethyl acetate	ND	1.0									U
Ethylbenzene	ND	2.0									U
Heptane	ND	1.0									U
Hexachlorobutadiene	ND	2.0									U
m,p-Xylene	ND	2.0									U
Methylene chloride	ND	5.0									U
n-Hexane	ND	2.0									U
Naphthalene	ND	1.0									U
o-Xylene	ND	1.0									U
Propylene	1.4	1.0									
Styrene	ND	1.0									U
tert-Butyl Methyl Ether	ND	1.0									U
Tetrachloroethene	ND	1.0									U
Tetrahydrofuran	ND	1.0									U
Toluene	ND	1.0									U
trans-1,2-Dichloroethene	ND	1.0									U
trans-1,3-dichloropropene	ND	1.0									U
Trichloroethene	ND	1.0									U
Trichlorofluoromethane	ND	1.0									U
Vinyl acetate	ND	1.0									U
Vinyl chloride	ND	1.0									U
Xylenes, Total	ND	3.0									U
Surr: 4-Bromofluorobenzene	13		12.50		107	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R45934

Sample ID:	1201676-001Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45934
Client ID:	VA1190	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
1,1,1-Trichloroethane	ND	8,000						0	0	25	U
1,1,2,2-Tetrachloroethane	ND	8,000						0	0	25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000						0	0	25	U
1,1,2-Trichloroethane	ND	8,000						0	0	25	U
1,1-Dichloroethane	ND	8,000						0	0	25	U
1,1-Dichloroethene	ND	8,000						0	0	25	U
1,2,4-Trichlorobenzene	ND	8,000						0	0	25	U
1,2,4-Trimethylbenzene	ND	8,000						0	0	25	U
1,2-Dibromoethane	ND	8,000						0	0	25	U
1,2-Dichlorobenzene	ND	8,000						0	0	25	U
1,2-Dichloroethane	ND	8,000						0	0	25	U
1,2-Dichloropropane	ND	8,000						0	0	25	U
1,3,5-Trimethylbenzene	ND	8,000						0	0	25	U
1,3-Butadiene	ND	8,000						0	0	25	U
1,3-Dichlorobenzene	ND	8,000						0	0	25	U
1,4-Dichlorobenzene	ND	8,000						0	0	25	U
2-Butanone	ND	8,000						0	0	25	U
2-Hexanone	ND	8,000						0	0	25	U
4-Methyl-2-pentanone	ND	8,000						0	0	25	U
Acetone	ND	8,000						0	0	25	U
Benzene	ND	8,000						0	0	25	U
Benzyl chloride	ND	8,000						0	0	25	U
Bromodichloromethane	ND	8,000						0	0	25	U
Bromoform	ND	8,000						0	0	25	U
Bromomethane	ND	8,000						0	0	25	U
Carbon disulfide	ND	8,000						0	0	25	U
Carbon tetrachloride	ND	8,000						0	0	25	U
Chlorobenzene	ND	8,000						0	0	25	U
Chlorodibromomethane	ND	8,000						0	0	25	U
Chloroethane	ND	8,000						0	0	25	U
Chloroform	ND	8,000						0	0	25	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R45934

Sample ID:	1201676-001Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45934
Client ID:	VA1190	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
Chloromethane	ND	8,000						0	0	25	U
cis-1,2-Dichloroethene	ND	8,000						0	0	25	U
cis-1,3-dichloropropene	ND	8,000						0	0	25	U
Cyclohexane	ND	16,000						0	0	25	U
Dichlorodifluoromethane	ND	8,000						0	0	25	U
Ethyl acetate	ND	8,000						0	0	25	U
Ethylbenzene	ND	16,000						0	0	25	U
Heptane	ND	8,000						0	0	25	U
Hexachlorobutadiene	ND	16,000						0	0	25	U
m,p-Xylene	ND	16,000						0	0	25	U
Methylene chloride	ND	40,000						0	0	25	U
n-Hexane	ND	16,000						0	0	25	U
Naphthalene	ND	8,000						0	0	25	U
o-Xylene	ND	8,000						0	0	25	U
Propylene	11,000	8,000						10,720	0	25	
Styrene	ND	8,000						0	0	25	U
tert-Butyl Methyl Ether	ND	8,000						0	0	25	U
Tetrachloroethene	ND	8,000						0	0	25	U
Tetrahydrofuran	ND	8,000						0	0	25	U
Toluene	ND	8,000						0	0	25	U
trans-1,2-Dichloroethene	ND	8,000						0	0	25	U
trans-1,3-dichloropropene	ND	8,000						0	0	25	U
Trichloroethene	ND	8,000						0	0	25	U
Trichlorofluoromethane	ND	8,000						0	0	25	U
Vinyl acetate	ND	8,000						0	0	25	U
Vinyl chloride	ND	8,000						0	0	25	U
Xylenes, Total	ND	24,000						0	0	25	U
Surr: 4-Bromofluorobenzene	110,000		100,000		107	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

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

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

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	1.0									U
1,1,2,2-Tetrachloroethane	ND	1.0									U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0									U
1,1,2-Trichloroethane	ND	1.0									U
1,1-Dichloroethane	ND	1.0									U
1,1-Dichloroethene	ND	1.0									U
1,2,4-Trichlorobenzene	ND	1.0									U
1,2,4-Trimethylbenzene	ND	1.0									U
1,2-Dibromoethane	ND	1.0									U
1,2-Dichlorobenzene	ND	1.0									U
1,2-Dichloroethane	ND	1.0									U
1,2-Dichloropropane	ND	1.0									U
1,3,5-Trimethylbenzene	ND	1.0									U
1,3-Butadiene	ND	1.0									U
1,3-Dichlorobenzene	ND	1.0									U
1,4-Dichlorobenzene	ND	1.0									U
2-Butanone	ND	1.0									U
2-Hexanone	ND	1.0									U
4-Methyl-2-pentanone	ND	1.0									U
Acetone	ND	1.0									U
Benzene	ND	1.0									U
Benzyl chloride	ND	1.0									U
Bromodichloromethane	ND	1.0									U
Bromoform	ND	1.0									U
Bromomethane	ND	1.0									U
Carbon disulfide	ND	1.0									U
Carbon tetrachloride	ND	1.0									U
Chlorobenzene	ND	1.0									U
Chlorodibromomethane	ND	1.0									U
Chloroethane	ND	1.0									U
Chloroform	ND	1.0									U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

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

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

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									U
cis-1,2-Dichloroethene	ND	1.0									U
cis-1,3-dichloropropene	ND	1.0									U
Cyclohexane	ND	2.0									U
Dichlorodifluoromethane	ND	1.0									U
Ethyl acetate	ND	1.0									U
Ethylbenzene	ND	2.0									U
Heptane	ND	1.0									U
Hexachlorobutadiene	ND	2.0									U
m,p-Xylene	ND	2.0									U
Methylene chloride	ND	5.0									U
n-Hexane	ND	2.0									U
Naphthalene	ND	1.0									U
o-Xylene	ND	1.0									U
Propylene	1.4	1.0									
Styrene	ND	1.0									U
tert-Butyl Methyl Ether	ND	1.0									U
Tetrachloroethene	ND	1.0									U
Tetrahydrofuran	ND	1.0									U
Toluene	ND	1.0									U
trans-1,2-Dichloroethene	ND	1.0									U
trans-1,3-dichloropropene	ND	1.0									U
Trichloroethene	ND	1.0									U
Trichlorofluoromethane	ND	1.0									U
Vinyl acetate	ND	1.0									U
Vinyl chloride	ND	1.0									U
Xylenes, Total	ND	3.0									U
Surr: 4-Bromofluorobenzene	14		12.50		113	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

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

Sample ID:	1201676-003Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45970	
Client ID:	VA1192	Batch ID:	R45970	TestNo:	TO-15			Analysis Date:	2/2/2012	SeqNo:	901745	

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

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

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

Sample ID:	1201676-003Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	45970	
Client ID:	VA1192	Batch ID:	R45970	TestNo:	TO-15			Analysis Date:	2/2/2012	SeqNo:	901745	

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

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R45975

Sample ID:	MBLK 020112 VOA9	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	45975	
Client ID:	PBW	Batch ID:	R45975	TestNo:	MA_APH			Analysis Date:	2/1/2012	SeqNo:	901800	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	ND	120									U
C9-C10 Aromatic Hydrocarbons	ND	130									U
C9-C12 Aliphatic Hydrocarbons	ND	190									U
Surr: 4-Bromofluorobenzene	82		89.50		91.7	70	130				

Sample ID:	1201676-023Adup	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	45975	
Client ID:	VA1267	Batch ID:	R45975	TestNo:	MA_APH			Analysis Date:	2/1/2012	SeqNo:	901803	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	14,000	4,700						13,420	5.31	30	
C9-C10 Aromatic Hydrocarbons	ND	5,300						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	ND	7,600						0	0	30	U
Surr: 4-Bromofluorobenzene	3,400		3,580		93.8	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R45976

Sample ID:	MBLK 020212 VOA9	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	45976	
Client ID:	PBW	Batch ID:	R45976	TestNo:	MA_APH			Analysis Date:	2/2/2012	SeqNo:	901816	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	ND	120									U
C9-C10 Aromatic Hydrocarbons	ND	130									U
C9-C12 Aliphatic Hydrocarbons	ND	190									U
Surr: 4-Bromofluorobenzene	82		89.50		92.0	70	130				

Sample ID:	1201676-031Adup	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	45976	
Client ID:	VA1282	Batch ID:	R45976	TestNo:	MA_APH			Analysis Date:	2/2/2012	SeqNo:	901818	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	5,700,000	940,000						5,519,000	3.42	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	680,000		716,000		95.4	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

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

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

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	ND	120									U
C9-C10 Aromatic Hydrocarbons	ND	130									U
C9-C12 Aliphatic Hydrocarbons	ND	190									U
Surr: 4-Bromofluorobenzene	81		89.50		90.3	70	130				

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

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

RTI Laboratories - QC SUMMARY REPORT

WO#: 1201676

Date Reported: 2/8/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

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

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

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	ND	120									U
C9-C10 Aromatic Hydrocarbons	ND	130									U
C9-C12 Aliphatic Hydrocarbons	ND	190									U
Surr: 4-Bromofluorobenzene	79		89.50		88.6	70	130				

Sample ID:	1201676-022Adup	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	46008	
Client ID:	VA1266	Batch ID:	R46008	TestNo:	MA_APH			Analysis Date:	2/6/2012	SeqNo:	902318	

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

RTI Laboratories

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

09-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
01301203.D 012512V1.M Tue Jan 31 12:03:59 2012 Page 1

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
01301203.D 012512V1.M Tue Jan 31 12:03:49 2012 Page 1

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

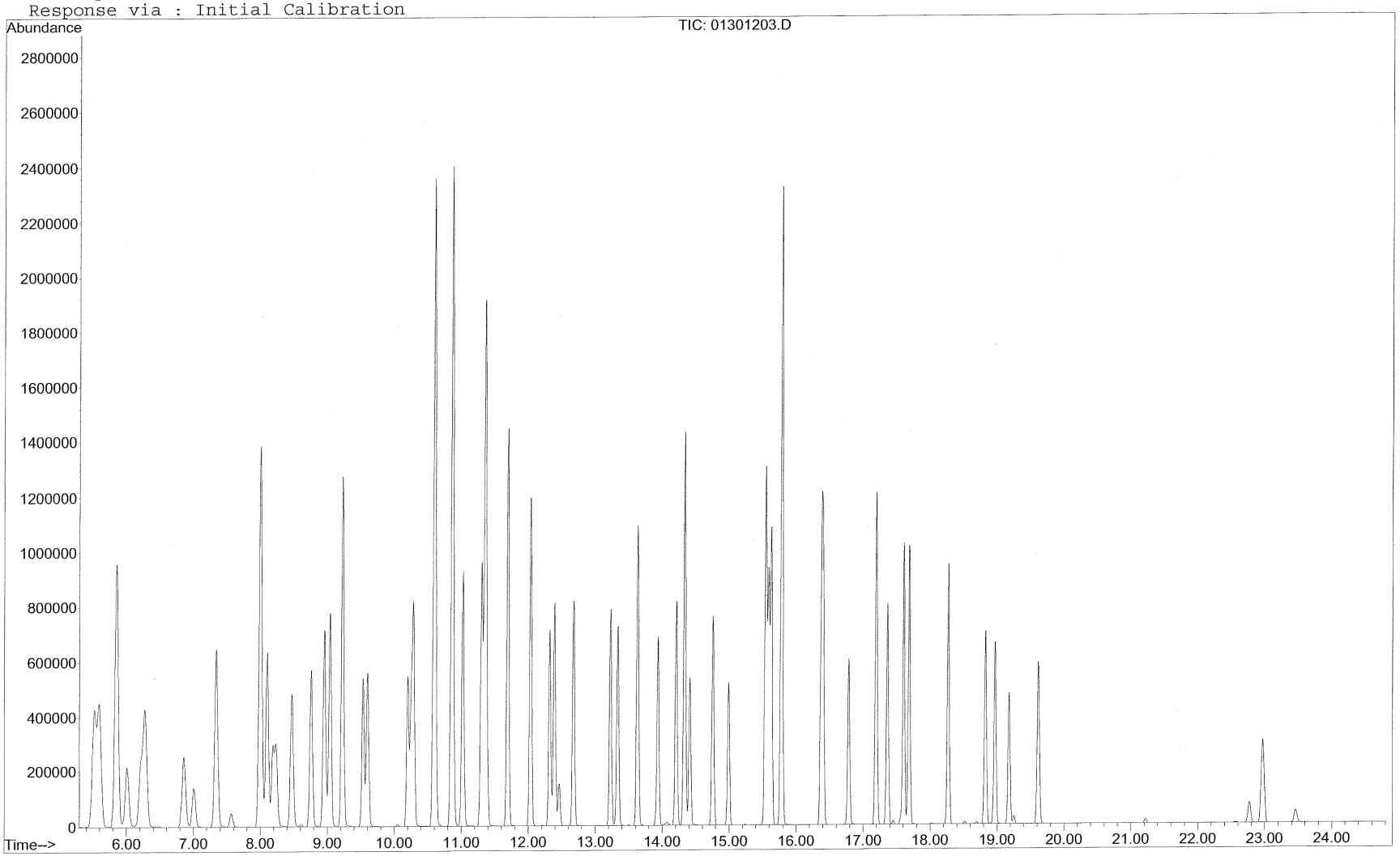
Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53) Styrene	16.40	104	522533	9.72	ppbv		98
54) Bromoform	16.78	173	368651	9.99	ppbv		98
56) 1,1,2,2-Tetrachloroethane	17.36	83	540183	9.94	ppbv	#	99
57) 4-Ethyltoluene	17.60	105	843373	9.43	ppbv		96
58) 1,3,5-Trimethylbenzene	17.69	105	698151	9.20	ppbv		96
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 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

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_120131A **Run No.:** 45900

Analytical Run Date: 1/31/2012 **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 013112	BFB_TUNE	TUNE	R45900	1/31/2012 9:35:00 AM	Robert Lynch		
CCV VOA1 013112	EPA_TO15	CCV	R45900	1/31/2012 10:24:00 AM	Robert Lynch		
RLVS VOA1 013112	EPA_TO15	RLVS	R45900	1/31/2012 11:16:00 AM	Robert Lynch		
MBLK VOA1 013112	EPA_TO15	MBLK	R45900	1/31/2012 12:31:00 PM	Charles O`Bryan		
1201676-031A	EPA_TO15	SAMP	R45900	1/31/2012 1:21:00 PM	Robert Lynch		
1201676-031Adup	EPA_TO15	DUP	R45900	1/31/2012 2:12:00 PM	Charles O`Bryan		
1201676-029A	EPA_TO15	SAMP	R45900	1/31/2012 3:53:00 PM	Robert Lynch		
1201676-026A	EPA_TO15	SAMP	R45900	1/31/2012 4:44:00 PM	Robert Lynch		
1201676-027A	EPA_TO15	SAMP	R45900	1/31/2012 5:35:00 PM	Robert Lynch		
1201676-006A	EPA_TO15	SAMP	R45900	1/31/2012 6:26:00 PM	Robert Lynch		
1201676-028A	EPA_TO15	SAMP	R45900	1/31/2012 7:17:00 PM	Robert Lynch		
1201676-007A	EPA_TO15	SAMP	R45900	1/31/2012 8:07:00 PM	Robert Lynch		
1201676-008A	EPA_TO15	SAMP	R45900	1/31/2012 9:05:00 PM	Robert Lynch		
1201676-009A	EPA_TO15	SAMP	R45900	1/31/2012 10:03:00 PM	Robert Lynch		
1201676-030A	EPA_TO15	SAMP	R45900	1/31/2012 10:56:00 PM	Robert Lynch		
1201676-010A	EPA_TO15	SAMP	R45900	1/31/2012 11:54:00 PM	Robert Lynch		
1201676-011A	EPA_TO15	SAMP	R45900	2/1/2012 12:48:00 AM	Robert Lynch		
1201676-013A	EPA_TO15	SAMP	R45900	2/1/2012 1:44:00 AM	Robert Lynch		
1201676-022A	EPA_TO15	SAMP	R45900	2/1/2012 2:41:00 AM	Robert Lynch		
1201676-015A	EPA_TO15	SAMP	R45900	2/1/2012 3:37:00 AM	Robert Lynch		
1201676-016A	EPA_TO15	SAMP	R45900	2/1/2012 4:33:00 AM	Robert Lynch		
1201676-024A	EPA_TO15	SAMP	R45900	2/1/2012 5:28:00 AM	Robert Lynch		
RLVS2 VOA1 01311	EPA_TO15	RLVS	R45900	2/1/2012 6:19:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

09-Feb-12

RunNo 45900

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
900623	BFB1 VOA1 013112	BFB_TUNE	TUNE	.\1\DATA\013112	1/31/2012 9:35:0	1	R45900		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0.5	0.5		100	0	0	0	0	0	1%	0	2	0%	
174	M		87.7	87.7		100	0	0	0	0	0	88%	50	120	0%	
175	M		6.7	6.7		100	0	0	0	0	0	7%	4	9	0%	
176	M		100.9	100.9		100	0	0	0	0	0	101%	93	101	0%	
177	M		6.3	6.3		100	0	0	0	0	0	6%	5	9	0%	
50	M		23.4	23.4		100	0	0	0	0	0	23%	8	40	0%	
75	M		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		6.2	6.2		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
900624	CCV VOA1 013112	EPA_TO15	CCV	.\1\DATA\013112	1/31/2012 10:24:	1	R45900		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	10.28	10.28		9.6	0	0	0.107	1	0	107%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	9.19	9.19		10	0	0	0.211	1	0	92%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	11.04	11.04		9.8	0	0	0.108	1	0	113%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	8.22	8.22		9.8	0	0	0.2	1	0	84%	70	130	0%	
1,1-Dichloroethane	A	ppbv	9.84	9.84		9.7	0	0	0.111	1	0	101%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.93	10.93		9.9	0	0	0.097	1	0	110%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	7.99	7.99		9.1	0	0	0.271	1	0	88%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	8.57	8.57		9.8	0	0	0.245	1	0	87%	70	130	0%	
1,2-Dibromoethane	A	ppbv	8.18	8.18		9.6	0	0	0.186	1	0	85%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	9.02	9.02		9.7	0	0	0.208	1	0	93%	70	130	0%	
1,2-Dichloroethane	A	ppbv	9.91	9.91		9.7	0	0	0.196	1	0	102%	70	130	0%	
1,2-Dichloropropane	A	ppbv	8.46	8.46		9.8	0	0	0.224	1	0	86%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	8.51	8.51		9.7	0	0	0.24	1	0	88%	70	130	0%	
1,3-Butadiene	A	ppbv	11.97	11.97		9.8	0	0	0.152	1	0	122%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	8.94	8.94		9.7	0	0	0.202	1	0	92%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
900624	CCV VOA1 013112	EPA_TO15	CCV	\1\DATA\013112	1/31/2012 10:24:	1	R45900		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.03	9.03		9.6	0	0	0.194	1	0	94%	70	130	0%	
1,4-Dioxane	A	ppbv	8.41	8.41		9.6	0	0	0.128	1	0	88%	70	130	0%	
2-Butanone	A	ppbv	9.4	9.4		9.9	0	0	0.287	1	0	95%	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	9.51	9.51		10.1	0	0	0.329	1	0	94%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	8.36	8.36		10	0	0	0.157	1	0	84%	70	130	0%	
Acetone	A	ppbv	9.53	9.53		10	0	0	0.43	1	0	95%	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	8.66	8.66		9.7	0	0	0.155	1	0	89%	70	130	0%	
Bromodichloromethane	A	ppbv	8.54	8.54		9.6	0	0	0.156	1	0	89%	70	130	0%	
Bromoform	A	ppbv	8.84	8.84		9.6	0	0	0.197	1	0	92%	70	130	0%	
Bromomethane	A	ppbv	9.53	9.53		9.3	0	0	0.075	1	0	102%	70	130	0%	
Carbon disulfide	A	ppbv	10.29	10.29		9.7	0	0	0.093	1	0	106%	70	130	0%	
Carbon tetrachloride	A	ppbv	9.61	9.61		9.5	0	0	0.114	1	0	101%	70	130	0%	
Chlorobenzene	A	ppbv	8.81	8.81		9.9	0	0	0.275	1	0	89%	70	130	0%	
Chlorodibromomethane	A	ppbv	8.42	8.42		9.2	0	0	0.165	1	0	92%	70	130	0%	
Chloroethane	A	ppbv	9.56	9.56		9.8	0	0	0.063	1	0	98%	70	130	0%	
Chloroform	A	ppbv	10.5	10.5		9.4	0	0	0.126	1	0	112%	70	130	0%	
Chloromethane	A	ppbv	11.2	11.2		9.8	0	0	0.104	1	0	114%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.6	9.6		9.8	0	0	0.107	1	0	98%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	8.18	8.18		9.5	0	0	0.166	1	0	86%	70	130	0%	
Cyclohexane	A	ppbv	11.07	11.07		9.8	0	0	0.684	2	0	113%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.47	9.47		9.2	0	0	0.086	1	0	103%	70	130	0%	
Ethanol	A	ppbv	8.48	8.48		9.2	0	0	1.962	5	0	92%	70	130	0%	
Ethyl acetate	A	ppbv	9.5	9.5		9.8	0	0	0.157	1	0	97%	70	130	0%	
Ethylbenzene	A	ppbv	8.81	8.81		9.8	0	0	0.737	2	0	90%	70	130	0%	
Heptane	A	ppbv	9.78	9.78		9.9	0	0	0.249	1	0	99%	70	130	0%	
Hexachlorobutadiene	A	ppbv	7.65	7.65		9.4	0	0	0.374	2	0	81%	70	130	0%	
m,p-Xylene	A	ppbv	18.51	18.51		19.2	0	0	0.524	2	0	96%	70	130	0%	
Methylene chloride	A	ppbv	10.72	10.72		10	0	0	2.077	5	0	107%	70	130	0%	
n-Hexane	A	ppbv	10.49	10.49		10.1	0	0	0.692	2	0	104%	70	130	0%	
Naphthalene	A	ppbv	8.25	8.25		9.2	0	0	0.247	1	0	90%	70	130	0%	
o-Xylene	A	ppbv	8.86	8.86		10	0	0	0.258	1	0	89%	70	130	0%	
Propylene	A	ppbv	11.04	11.04		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
900624	CCV VOA1 013112	EPA_TO15	CCV	\1\DATA\013112	1/31/2012 10:24:	1	R45900		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	8.93	8.93		9.8	0	0	0.263	1	0	91%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	9.16	9.16		9.9	0	0	0.228	1	0	93%	70	130	0%	
Tetrachloroethene	A	ppbv	8.67	8.67		9.6	0	0	0.148	1	0	90%	70	130	0%	
Tetrahydrofuran	A	ppbv	10.29	10.29		10	0	0	0.201	1	0	103%	70	130	0%	
Toluene	A	ppbv	8.5	8.5		9.8	0	0	0.158	1	0	87%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.28	10.28		9.8	0	0	0.117	1	0	105%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	7.76	7.76		9.1	0	0	0.171	1	0	85%	70	130	0%	
Trichloroethene	A	ppbv	8.53	8.53		9.6	0	0	0.119	1	0	89%	70	130	0%	
Trichlorofluoromethane	A	ppbv	10.14	10.14		9.6	0	0	0.148	1	0	106%	70	130	0%	
Vinyl acetate	A	ppbv	10.15	10.15		9.9	0	0	0.266	1	0	103%	70	130	0%	
Vinyl chloride	A	ppbv	9.66	9.66		9.4	0	0	0.072	1	0	103%	70	130	0%	
Xylenes, Total	C	ppbv	27.37	27.37		29.2	0	0	0.782	3	0	94%	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
900625	RLVS VOA1 013112	EPA_TO15	RLVS	\1\DATA\013112	1/31/2012 11:16:	1	R45900		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	0.91	0.91		0.98	0	0	0.108	1	0	93%	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	1.03	1.03		0.97	0	0	0.111	1	0	106%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1	1		0.99	0	0	0.097	1	0	101%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.29	1.29		0.91	0	0	0.271	1	0	142%	70	130	0%	S
1,2,4-Trimethylbenzene	A	ppbv	1.18	1.18		0.98	0	0	0.245	1	0	120%	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	1.24	1.24		0.97	0	0	0.208	1	0	128%	70	130	0%	
1,2-Dichloroethane	A	ppbv	1.03	1.03		0.97	0	0	0.196	1	0	106%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.82	0.82		0.98	0	0	0.224	1	0	84%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\013112\01311202.D Vial: 2
Acq On : 31 Jan 2012 10:24 am Operator: RACHEL HILL
Sample : CCV VOA1 013112 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	100	0.00
2	T	Propylene	1.441	1.559	-8.2	87	0.00
3	T	Dichlorodifluoromethane	3.080	3.170	-2.9	91	0.01
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.240	2.277	-1.7	91	0.00
5	T	Chloromethane	1.387	1.635	-17.9	97	0.02
6	T	Vinyl chloride	1.732	1.779	-2.7	95	0.02
7	T	1,3-Butadiene	1.265	1.544	-22.1	101	0.01
8	T	Bromomethane	1.154	1.182	-2.4	94	0.00
9	T	Chloroethane	0.748	0.778	-4.0	94	0.00
10	T	Trichlorofluoromethane	2.684	2.834	-5.6	102	0.01
11	T	Ethanol	0.303	0.279	7.9	87	0.00
12	T	Freon113	2.232	2.514	-12.6	110	0.00
13	T	1,1-Dichloroethene	1.891	2.087	-10.4	105	0.00
14	T	Acetone	1.771	1.689	4.6	91	0.00
15	T	Carbon disulfide	3.185	3.377	-6.0	97	0.00
16	T	2-Propanol	1.561	1.470	5.8	85	0.00
17	T	Methylene chloride	1.503	1.611	-7.2	102	0.01
18	T	tert-Butyl Methyl Ether	2.251	2.081	7.6	93	0.00
19	T	trans-1,2-Dichloroethene	1.796	1.884	-4.9	101	0.00
20	T	n-Hexane	1.985	2.061	-3.8	98	0.00
21	T	1,1-Dichloroethane	2.078	2.107	-1.4	97	0.00
22	T	Vinyl acetate	2.668	2.736	-2.5	94	0.00
23	T	cis-1,2-Dichloroethene	1.073	1.051	2.1	96	0.00
24	T	2-Butanone	1.868	1.774	5.0	86	0.00
25	T	Ethyl acetate	2.374	2.301	3.1	88	0.00
26	T	Tetrahydrofuran	1.222	1.258	-2.9	88	0.00
27	T	Chloroform	2.165	2.320	-7.2	97	0.00
28	T	1,1,1-Trichloroethane	1.962	2.101	-7.1	100	0.00
29	T	Cyclohexane	1.984	2.242	-13.0	100	0.00
30	T	Carbon tetrachloride	1.756	1.777	-1.2	101	0.00
31	T	Benzene	2.715	2.665	1.8	97	0.00
32	T	1,2-Dichloroethane	1.214	1.240	-2.1	97	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	109	0.00
34	T	Heptane	0.838	0.827	1.3	94	0.00
35	T	Trichloroethene	0.436	0.387	11.2	94	0.00
36	T	1,2-Dichloropropane	0.370	0.320	13.5	91	0.00
37	T	1,4-Dioxane	0.117	0.103	12.0	87	0.00
38	T	Bromodichloromethane	0.613	0.546	10.9	95	0.00
39	T	cis-1,3-Dichloropropene	0.520	0.448	13.8	91	0.00
40	T	4-Methyl-2-pentanone	0.232	0.194	16.4	86	0.00
41	T	Toluene	0.929	0.806	13.2	91	0.00
42	T	trans-1,3-Dichloropropene	0.437	0.372	14.9	88	0.00
43	T	1,1,2-Trichloroethane	0.322	0.270	16.1	90	0.00
44	T	Tetrachloroethene	0.503	0.454	9.7	92	0.00
45	T	2-Hexanone	0.492	0.410	16.7	81	0.00
46	T	Chlorodibromomethane	0.476	0.409	14.1	93	0.00
47	T	1,2-Dibromoethane	0.474	0.403	15.0	90	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	103	0.00
49	T	Chlorobenzene	0.901	0.801	11.1	90	0.00
50	T	Ethylbenzene	1.472	1.324	10.1	89	0.00
51	T	m,p-Xylene	1.166	1.124	3.6	90	0.00
52	T	o-Xylene	1.079	0.955	11.5	88	0.00
53	T	Styrene	0.795	0.725	8.8	89	0.00
54	T	Bromoform	0.546	0.503	7.9	93	0.00
55	S	4-Bromofluorobenzene	0.597	0.615	-3.0	104	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\013112\01311202.D Vial: 2
Acq On : 31 Jan 2012 10:24 am Operator: RACHEL HILL
Sample : CCV VOA1 013112 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	0.738	8.2	86	0.00
57	T	4-Ethyltoluene	1.324	1.171	11.6	88	0.00
58	T	1,3,5-Trimethylbenzene	1.123	0.985	12.3	89	0.00
59	T	1,2,4-Trimethylbenzene	1.037	0.907	12.5	87	0.00
60	T	1,3-Dichlorobenzene	0.608	0.560	7.9	88	0.00
61	T	1,4-Dichlorobenzene	0.561	0.527	6.1	89	0.00
62	T	Benzyl chloride	0.708	0.632	10.7	86	0.00
63	T	1,2-Dichlorobenzene	0.540	0.502	7.0	85	0.00
64	T	1,2,4-Trichlorobenzene	0.089	0.078	12.4	85	0.00
65	T	Hexachlorobutadiene	0.229	0.187	18.3	81	0.00
66		Naphthalene	0.133	0.119	10.5	86	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\013112\01311202.D Vial: 2
Acq On : 31 Jan 2012 10:24 am Operator: RACHEL HILL
Sample : CCV VOA1 013112 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 31 10:49 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	369970	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.69	114	1227770	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.54	117	785265	12.50	ppbv		0.00
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.20	95	482689	12.88	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 103.04%				
Target Compounds							Qvalue
2) Propylene	5.53	41	470752	11.04	ppbv		93
3) Dichlorodifluoromethane	5.60	85	863202	9.47	ppbv		98
4) 1,2-Dichloro-1,2,2,2-tetra	5.86	135	640258	9.66	ppbv	#	75
5) Chloromethane	6.02	50	459715	11.20	ppbv		99
6) Vinyl chloride	6.23	62	495034	9.66	ppbv	#	99
7) 1,3-Butadiene	6.29	39	447992	11.97	ppbv		91
8) Bromomethane	6.86	94	325314	9.53	ppbv		98
9) Chloroethane	7.01	64	211752	9.56	ppbv	#	95
10) Trichlorofluoromethane	7.35	101	805325	10.14	ppbv	#	98
11) Ethanol	7.57	45	76051	8.48	ppbv		99
12) Freon113	8.00	101	729155	11.04	ppbv		89
13) 1,1-Dichloroethene	8.11	61	611525	10.93	ppbv	#	87
14) Acetone	8.19	43	499859	9.53	ppbv		93
15) Carbon disulfide	8.47	76	969578	10.29	ppbv	#	99
16) 2-Propanol	8.24	45	439577	9.51	ppbv		89
17) Methylene chloride	8.76	49	476759	10.72	ppbv	#	75
18) tert-Butyl Methyl Ether	8.96	73	609854	9.16	ppbv	#	84
19) trans-1,2-Dichloroethene	9.04	61	546455	10.28	ppbv	#	82
20) n-Hexane	9.23	57	616157	10.49	ppbv	#	88
21) 1,1-Dichloroethane	9.61	63	604823	9.84	ppbv	#	96
22) Vinyl acetate	9.54	43	801761	10.15	ppbv	#	94
23) cis-1,2-Dichloroethene	10.29	96	304962	9.60	ppbv	#	80
24) 2-Butanone	10.25	43	519895	9.40	ppbv	#	89
25) Ethyl acetate	10.20	43	667530	9.50	ppbv	#	98
26) Tetrahydrofuran	10.59	42	372470	10.29	ppbv	#	86
27) Chloroform	10.61	83	672904	10.50	ppbv		100
28) 1,1,1-Trichloroethane	10.86	97	596843	10.28	ppbv	#	92
29) Cyclohexane	10.87	56	650329	11.07	ppbv		84
30) Carbon tetrachloride	11.02	117	499512	9.61	ppbv		97
31) Benzene	11.31	78	757108	9.42	ppbv		94
32) 1,2-Dichloroethane	11.38	62	356036	9.91	ppbv	#	97
34) Heptane	11.35	43	804534	9.78	ppbv	#	86
35) Trichloroethene	12.03	130	365072	8.53	ppbv		93
36) 1,2-Dichloropropane	12.39	63	307747	8.46	ppbv	#	95
37) 1,4-Dioxane	12.47	88	96743	8.41	ppbv	#	80
38) Bromodichloromethane	12.68	83	514663	8.54	ppbv		98
39) cis-1,3-Dichloropropene	13.23	75	418091	8.18	ppbv		96
40) 4-Methyl-2-pentanone	13.34	58	190558	8.36	ppbv	#	89
41) Toluene	13.63	91	775719	8.50	ppbv		96
42) trans-1,3-Dichloropropene	13.94	75	332861	7.76	ppbv		96
43) 1,1,2-Trichloroethane	14.21	97	259879	8.22	ppbv		96
44) Tetrachloroethene	14.33	166	428437	8.67	ppbv		98
45) 2-Hexanone	14.41	43	394766	8.17	ppbv		92
46) Chlorodibromomethane	14.76	129	394003	8.42	ppbv		98
47) 1,2-Dibromoethane	14.99	107	380296	8.18	ppbv		100
49) Chlorobenzene	15.59	112	498260	8.81	ppbv	#	87
50) Ethylbenzene	15.63	91	814916	8.81	ppbv		90
51) m,p-Xylene	15.78	91	1356299	18.51	ppbv		91
52) o-Xylene	16.37	91	600241	8.86	ppbv	#	87

(#) = qualifier out of range (m) = manual integration
01311202.D 012512V1.M Wed Feb 01 15:12:41 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\013112\01311202.D Vial: 2
Acq On : 31 Jan 2012 10:24 am Operator: RACHEL HILL
Sample : CCV VOA1 013112 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 31 10:49 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

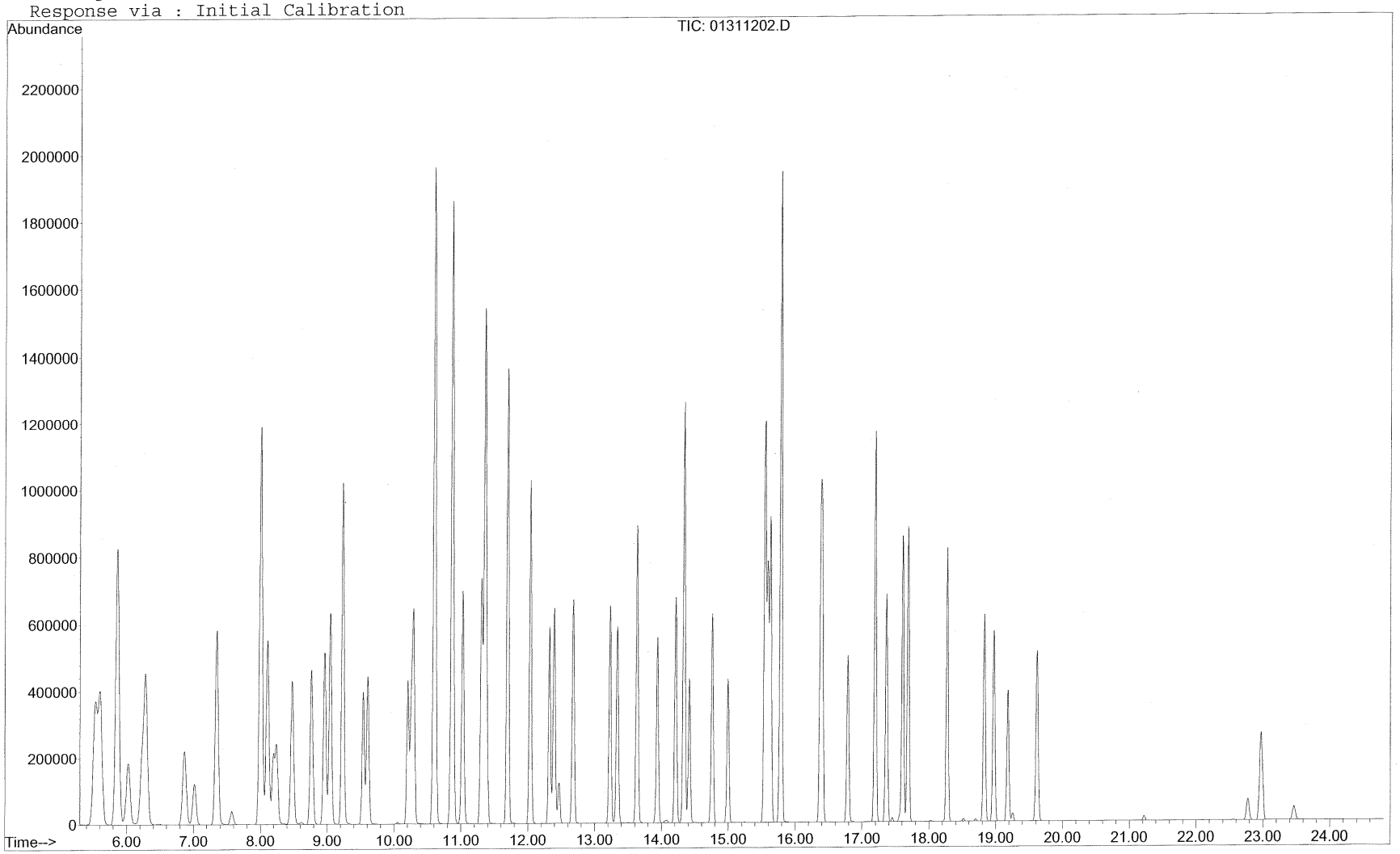
Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53) Styrene	16.40	104	446117	8.93	ppbv		97
54) Bromoform	16.79	173	303148	8.84	ppbv	#	98
56) 1,1,2,2-Tetrachloroethane	17.36	83	463822	9.19	ppbv	#	98
57) 4-Ethyltoluene	17.60	105	721037	8.67	ppbv		95
58) 1,3,5-Trimethylbenzene	17.69	105	600389	8.51	ppbv		96
59) 1,2,4-Trimethylbenzene	18.27	105	558113	8.57	ppbv		97
60) 1,3-Dichlorobenzene	18.83	146	341365	8.94	ppbv		98
61) 1,4-Dichlorobenzene	18.97	146	317982	9.03	ppbv		97
62) Benzyl chloride	19.18	91	385034	8.66	ppbv		97
63) 1,2-Dichlorobenzene	19.62	146	306124	9.02	ppbv		98
64) 1,2,4-Trichlorobenzene	22.77	180	44504	7.99	ppbv		94
65) Hexachlorobutadiene	22.97	225	110138	7.65	ppbv		100
66) Naphthalene	23.46	128	69028	8.25	ppbv		98

(#) = qualifier out of range (m) = manual integration
01311202.D 012512V1.M Wed Feb 01 15:12:41 2012

Quantitation Report

Data File : C:\HPCHEM\1\DATA\013112\01311202.D Vial: 2
Acq On : 31 Jan 2012 10:24 am Operator: RACHEL HILL
Sample : CCV VOA1 013112 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 31 10:49 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_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

09-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
02011205.D 012512V1.M Mon Feb 06 11:09:37 2012 Page 1

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

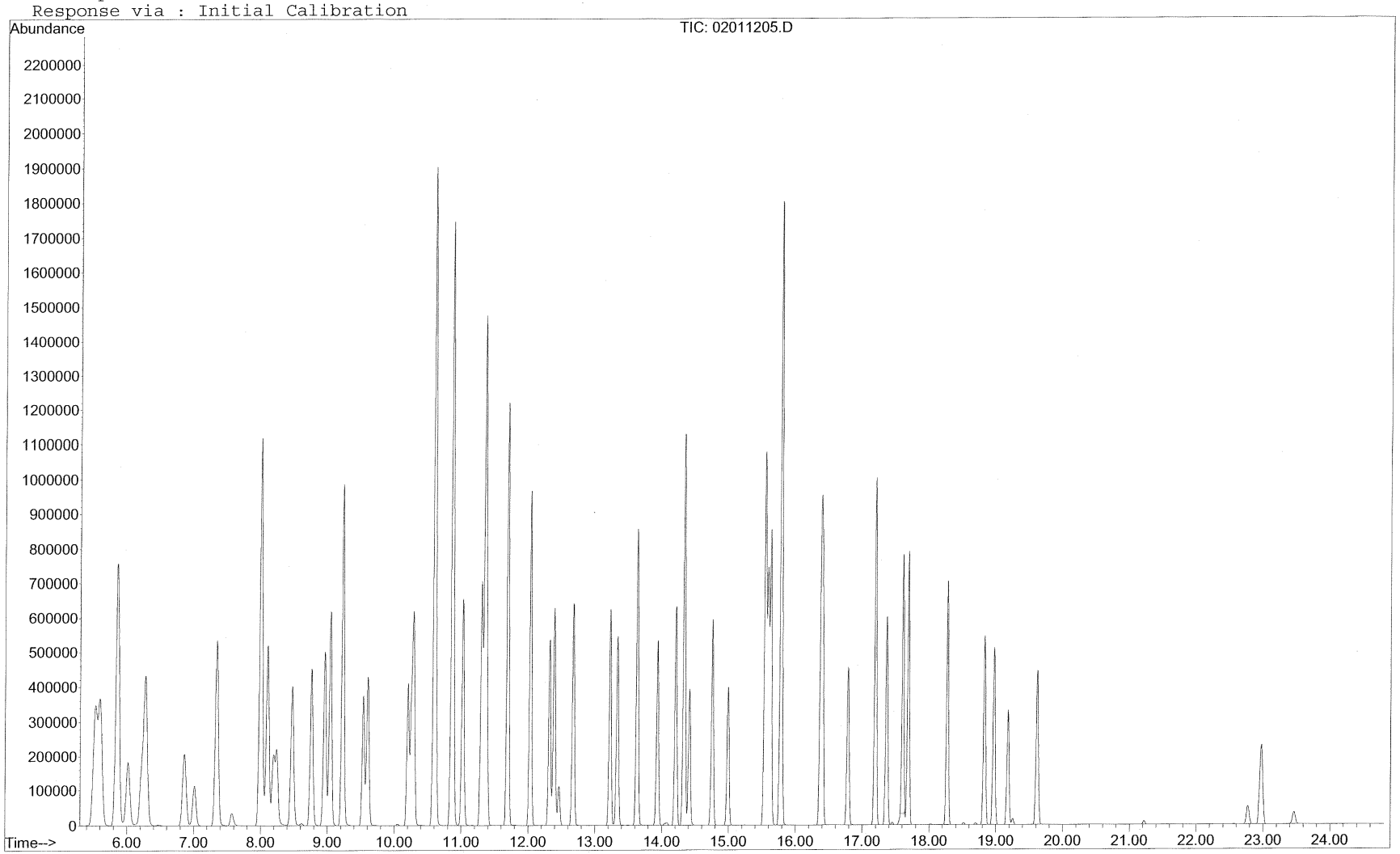
Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53) Styrene	16.40	104	410326	9.20	ppbv		97
54) Bromoform	16.78	173	278139	9.08	ppbv	#	98
56) 1,1,2,2-Tetrachloroethane	17.36	83	412964	9.16	ppbv	#	98
57) 4-Ethyltoluene	17.60	105	649823	8.75	ppbv		95
58) 1,3,5-Trimethylbenzene	17.69	105	536591	8.52	ppbv		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
02011205.D 012512V1.M Mon Feb 06 11:09:37 2012 Page 2

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		
1201692-005A	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

09-Feb-12

RunNo 45970

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
901737	BFB1 VOA1 020212	BFB_TUNE	TUNE	\1\DATA\020212	2/2/2012 9:40:00	1	R45970		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0.6	0.6		100	0	0	0	0	0	1%	0	2	0%	
174	M		72.9	72.9		100	0	0	0	0	0	73%	50	120	0%	
175	M		7.8	7.8		100	0	0	0	0	0	8%	4	9	0%	
176	M		100.1	100.1		100	0	0	0	0	0	100%	93	101	0%	
177	M		7.1	7.1		100	0	0	0	0	0	7%	5	9	0%	
50	M		27	27		100	0	0	0	0	0	27%	8	40	0%	
75	M		50.7	50.7		100	0	0	0	0	0	51%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		7.2	7.2		100	0	0	0	0	0	7%	5	9	0%	

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

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	10.91	10.91		9.6	0	0	0.107	1	0	114%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.35	10.35		10	0	0	0.211	1	0	104%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	11.43	11.43		9.8	0	0	0.108	1	0	117%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.57	9.57		9.8	0	0	0.2	1	0	98%	70	130	0%	
1,1-Dichloroethane	A	ppbv	10.89	10.89		9.7	0	0	0.111	1	0	112%	70	130	0%	
1,1-Dichloroethene	A	ppbv	11.37	11.37		9.9	0	0	0.097	1	0	115%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	9.17	9.17		9.1	0	0	0.271	1	0	101%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	9.54	9.54		9.8	0	0	0.245	1	0	97%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.41	9.41		9.6	0	0	0.186	1	0	98%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	10.1	10.1		9.7	0	0	0.208	1	0	104%	70	130	0%	
1,2-Dichloroethane	A	ppbv	10.78	10.78		9.7	0	0	0.196	1	0	111%	70	130	0%	
1,2-Dichloropropane	A	ppbv	9.96	9.96		9.8	0	0	0.224	1	0	102%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.55	9.55		9.7	0	0	0.24	1	0	98%	70	130	0%	
1,3-Butadiene	A	ppbv	11.69	11.69		9.8	0	0	0.152	1	0	119%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	10.03	10.03		9.7	0	0	0.202	1	0	103%	70	130	0%	

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

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

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

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

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
901739	RLVS VOA1 020212	EPA_TO15	RLVS	.\1\DATA\020212	2/2/2012 11:23:0	1	R45970		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	0.84	0.84		0.996	0	0	0.107	1	0	84%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.2	1.2		1	0	0	0.211	1	0	120%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	0.88	0.88		0.98	0	0	0.108	1	0	90%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.81	0.81		0.98	0	0	0.2	1	0	83%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1	1		0.97	0	0	0.111	1	0	103%	70	130	0%	
1,1-Dichloroethene	A	ppbv	0.98	0.98		0.99	0	0	0.097	1	0	99%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.48	1.48		0.91	0	0	0.271	1	0	163%	70	130	0%	S
1,2,4-Trimethylbenzene	A	ppbv	1.21	1.21		0.98	0	0	0.245	1	0	123%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.78	0.78		0.96	0	0	0.186	1	0	81%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.33	1.33		0.97	0	0	0.208	1	0	137%	70	130	0%	S
1,2-Dichloroethane	A	ppbv	1.08	1.08		0.97	0	0	0.196	1	0	111%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.9	0.9		0.98	0	0	0.224	1	0	92%	70	130	0%	

Evaluate Continuing Calibration Report

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

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

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

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

(#) = Out of Range

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.804	0.832	-3.5	79	0.00
57	T	4-Ethyltoluene	1.324	1.330	-0.5	81	0.00
58	T	1,3,5-Trimethylbenzene	1.123	1.106	1.5	81	0.00
59	T	1,2,4-Trimethylbenzene	1.037	1.009	2.7	78	0.00
60	T	1,3-Dichlorobenzene	0.608	0.629	-3.5	80	0.00
61	T	1,4-Dichlorobenzene	0.561	0.591	-5.3	81	0.00
62	T	Benzyl chloride	0.708	0.694	2.0	77	0.00
63	T	1,2-Dichlorobenzene	0.540	0.563	-4.3	78	0.00
64	T	1,2,4-Trichlorobenzene	0.089	0.089	0.0	79	0.00
65	T	Hexachlorobutadiene	0.229	0.219	4.4	78	0.00
66		Naphthalene	0.133	0.142	-6.8	83	0.00

Quantitation Report (QT Reviewed)

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

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

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

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

Quantitation Report (QT Reviewed)

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

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

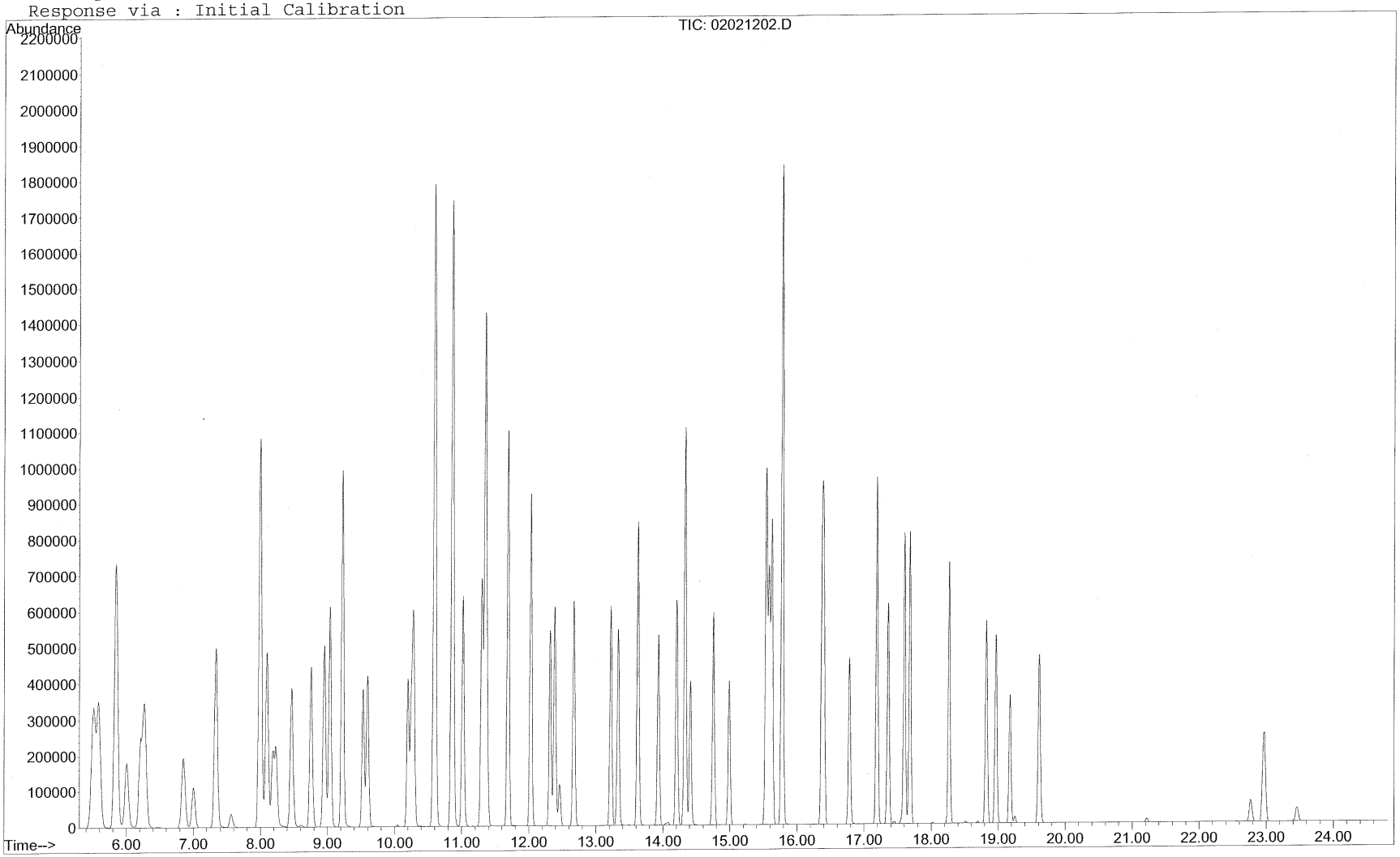
Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53) Styrene	16.40	104	418061	10.31	ppbv		98
54) Bromoform	16.78	173	279110	10.02	ppbv	#	98
56) 1,1,2,2-Tetrachloroethane	17.36	83	424115	10.35	ppbv	#	98
57) 4-Ethyltoluene	17.60	105	664493	9.84	ppbv		95
58) 1,3,5-Trimethylbenzene	17.68	105	546956	9.55	ppbv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

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

Quantitation Report

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

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



Response Factor Report VOA 1

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

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

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

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

Response Factor Report VOA 1

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

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

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

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

Compound List Report VOA 1

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

PK#			Compound Name	QIon	Exp RT	Rel RT	Cal	#Qual	A/H	ID
1	I		Bromochloromethane	130	10.59	1.000	A	2	A	B
2		T	Propylene	41	5.52	0.521	A	2	A	B
3		T	Dichlorodifluoromethane	85	5.59	0.528	A	3	A	B
4		T	1,2-Dichloro-1,2,2,2-tetrafluo	135	5.85	0.552	A	2	A	B
5		T	Chloromethane	50	6.00	0.567	A	3	A	B
6		T	Vinyl chloride	62	6.21	0.586	A	2	A	B
7		T	1,3-Butadiene	39	6.27	0.592	A	2	A	B
8		T	Bromomethane	94	6.85	0.647	A	3	A	B
9		T	Chloroethane	64	7.01	0.661	A	3	A	B
10		T	Trichlorofluoromethane	101	7.34	0.692	A	3	A	B
11		T	Ethanol	45	7.57	0.714	A	2	A	B
12		T	Freon113	101	7.99	0.755	A	2	A	B
13		T	1,1-Dichloroethene	61	8.10	0.765	A	2	A	B
14		T	Acetone	43	8.19	0.773	A	2	A	B
15		T	Carbon disulfide	76	8.47	0.799	A	3	A	B
16		T	2-Propanol	45	8.24	0.777	A	2	A	B
17		T	Methylene chloride	49	8.75	0.826	A	2	A	B
18		T	tert-Butyl Methyl Ether	73	8.96	0.845	A	2	A	B
19		T	trans-1,2-Dichloroethene	61	9.04	0.853	A	2	A	B
20		T	n-Hexane	57	9.22	0.871	A	3	A	B
21		T	1,1-Dichloroethane	63	9.60	0.906	A	3	A	B
22		T	Vinyl acetate	43	9.53	0.900	A	2	A	B
23		T	cis-1,2-Dichloroethene	96	10.29	0.971	A	3	A	B
24		T	2-Butanone	43	10.25	0.967	A	2	A	B
25		T	Ethyl acetate	43	10.20	0.962	A	3	A	B
26		T	Tetrahydrofuran	42	10.59	1.000	A	2	A	B
27		T	Chloroform	83	10.60	1.001	A	2	A	B
28		T	1,1,1-Trichloroethane	97	10.86	1.025	A	3	A	B
29		T	Cyclohexane	56	10.87	1.026	A	2	A	B
30		T	Carbon tetrachloride	117	11.02	1.040	A	3	A	B
31		T	Benzene	78	11.30	1.067	A	3	A	B
32		T	1,2-Dichloroethane	62	11.37	1.074	A	3	A	B
33	I		1,4-Difluorobenzene	114	11.69	1.000	A	2	A	B
34		T	Heptane	43	11.35	0.971	A	3	A	B
35		T	Trichloroethene	130	12.03	1.029	A	3	A	B
36		T	1,2-Dichloropropane	63	12.39	1.059	A	3	A	B
37		T	1,4-Dioxane	88	12.46	1.066	A	2	A	B
38		T	Bromodichloromethane	83	12.67	1.084	A	2	A	B
39		T	cis-1,3-Dichloropropene	75	13.22	1.131	A	2	A	B
40		T	4-Methyl-2-pentanone	58	13.33	1.140	A	3	A	B
41		T	Toluene	91	13.63	1.166	A	2	A	B
42		T	trans-1,3-Dichloropropene	75	13.94	1.192	A	3	A	B
43		T	1,1,2-Trichloroethane	97	14.20	1.215	A	3	A	B
44		T	Tetrachloroethene	166	14.33	1.226	A	3	A	B
45		T	2-Hexanone	43	14.41	1.233	A	2	A	B
46		T	Chlorodibromomethane	129	14.75	1.262	A	2	A	B
47		T	1,2-Dibromoethane	107	14.99	1.282	A	2	A	B
48	I		Chlorobenzene-d5	117	15.54	1.000	A	2	A	B
49		T	Chlorobenzene	112	15.58	1.003	A	3	A	B
50		T	Ethylbenzene	91	15.63	1.005	A	2	A	B
51		T	m,p-Xylene	91	15.78	1.015	A	2	A	B
52		T	o-Xylene	91	16.37	1.054	A	2	A	B
53		T	Styrene	104	16.40	1.055	A	3	A	B
54		T	Bromoform	173	16.78	1.080	A	3	A	B
55	S		4-Bromofluorobenzene	95	17.19	1.106	A	2	A	B
56		T	1,1,2,2-Tetrachloroethane	83	17.36	1.117	A	2	A	B
57		T	4-Ethyltoluene	105	17.60	1.133	A	1	A	B
58		T	1,3,5-Trimethylbenzene	105	17.69	1.138	A	2	A	B
59		T	1,2,4-Trimethylbenzene	105	18.27	1.175	A	2	A	B
60		T	1,3-Dichlorobenzene	146	18.82	1.211	A	3	A	B
61		T	1,4-Dichlorobenzene	146	18.97	1.220	A	3	A	B
62		T	Benzyl chloride	91	19.18	1.234	A	2	A	B
63		T	1,2-Dichlorobenzene	146	19.61	1.262	A	3	A	B
64		T	1,2,4-Trichlorobenzene	180	22.77	1.465	A	3	A	B
65		T	Hexachlorobutadiene	225	22.97	1.478	A	2	A	B
66			Naphthalene	128	23.45	1.509	A	2	A	B

```
Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
  A/H = Area or Height
ID  R = R.T.  B = R.T. & Q  Q = Qvalue L = Largest  A = All
--------------------------------------------------------------------------------
          012512V1.M     Fri Jan 27 11:38:27 2012
```

Evaluate Continuing Calibration Report

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

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

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

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

(#) = Out of Range

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.804	0.857	-6.6	119	0.00
57	T	4-Ethyltoluene	1.324	1.340	-1.2	119	0.00
58	T	1,3,5-Trimethylbenzene	1.123	1.130	-0.6	121	0.00
59	T	1,2,4-Trimethylbenzene	1.037	1.057	-1.9	120	0.00
60	T	1,3-Dichlorobenzene	0.608	0.645	-6.1	119	0.00
61	T	1,4-Dichlorobenzene	0.561	0.599	-6.8	120	0.00
62	T	Benzyl chloride	0.708	0.759	-7.2	122	0.00
63	T	1,2-Dichlorobenzene	0.540	0.584	-8.1	117	0.00
64	T	1,2,4-Trichlorobenzene	0.089	0.087	2.2	113	0.00
65	T	Hexachlorobutadiene	0.229	0.221	3.5	114	0.00
66		Naphthalene	0.133	0.133	0.0	113	0.00

Quantitation Report (QT Reviewed)

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

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

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

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

Quantitation Report (QT Reviewed)

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

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

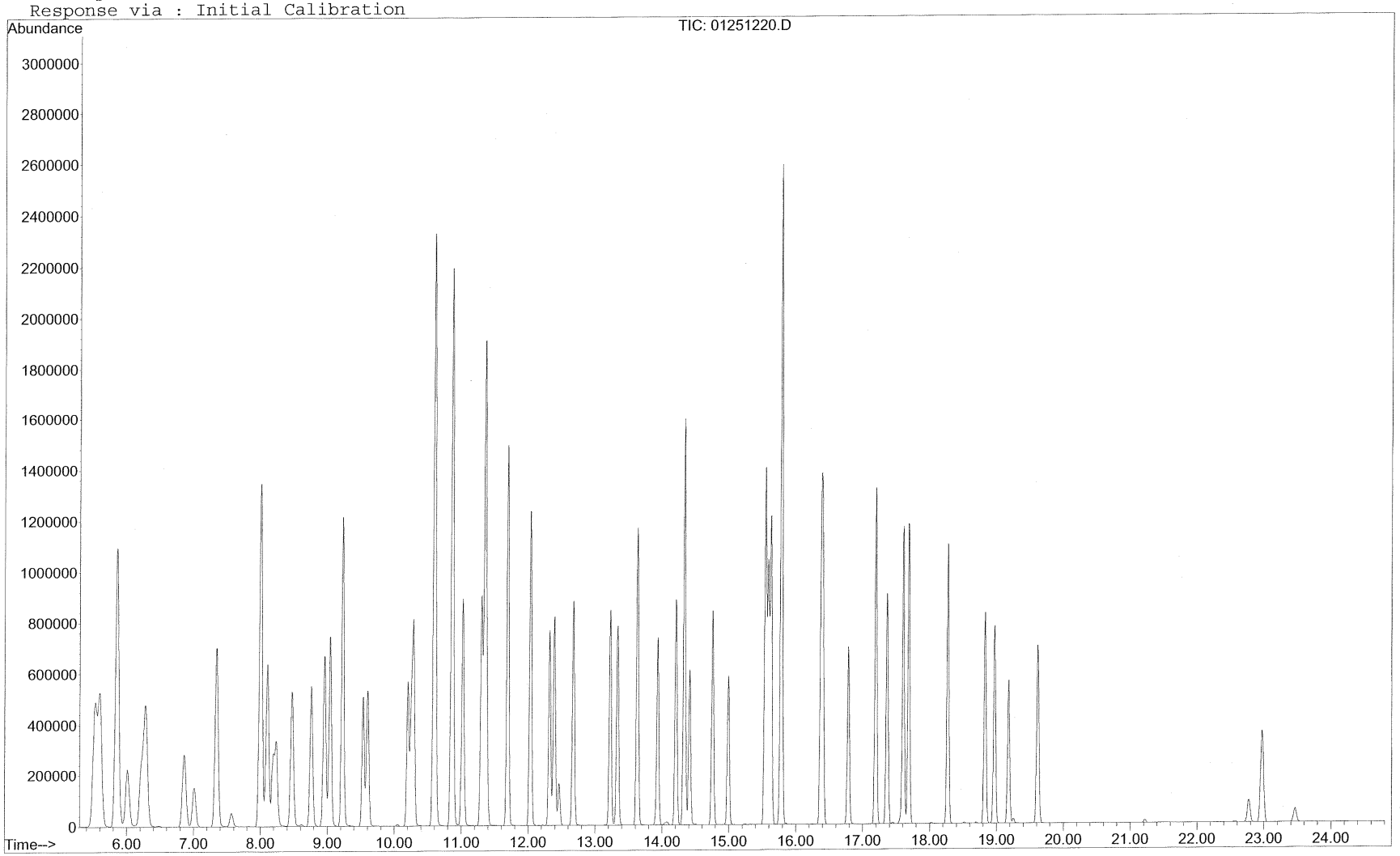
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.40	104	599738	10.16	ppbv		97
54)	Bromoform	16.78	173	425841	10.50	ppbv		98
56)	1,1,2,2-Tetrachloroethane	17.36	83	636113	10.66	ppbv	#	99
57)	4-Ethyltoluene	17.61	105	974772	9.92	ppbv		95
58)	1,3,5-Trimethylbenzene	17.69	105	814123	9.77	ppbv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

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

Quantitation Report

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

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



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

09-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

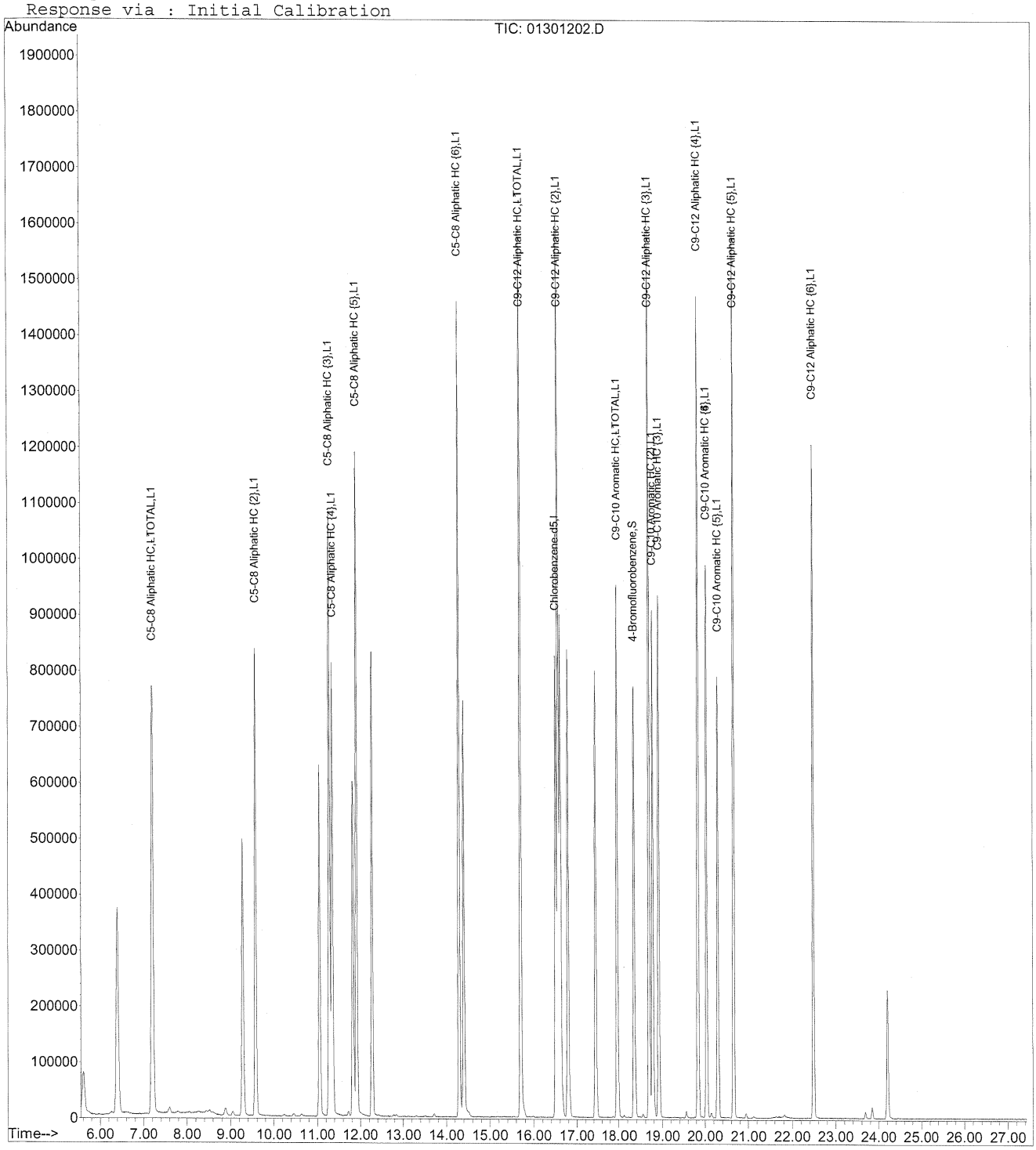
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	565282	12.50	ug/m3	0.00
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.35	95	377480	82.42	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 92.09%			
Target Compounds						Qvalue
1) C5-C8 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 Wed Feb 01 11:09:19 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

09-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

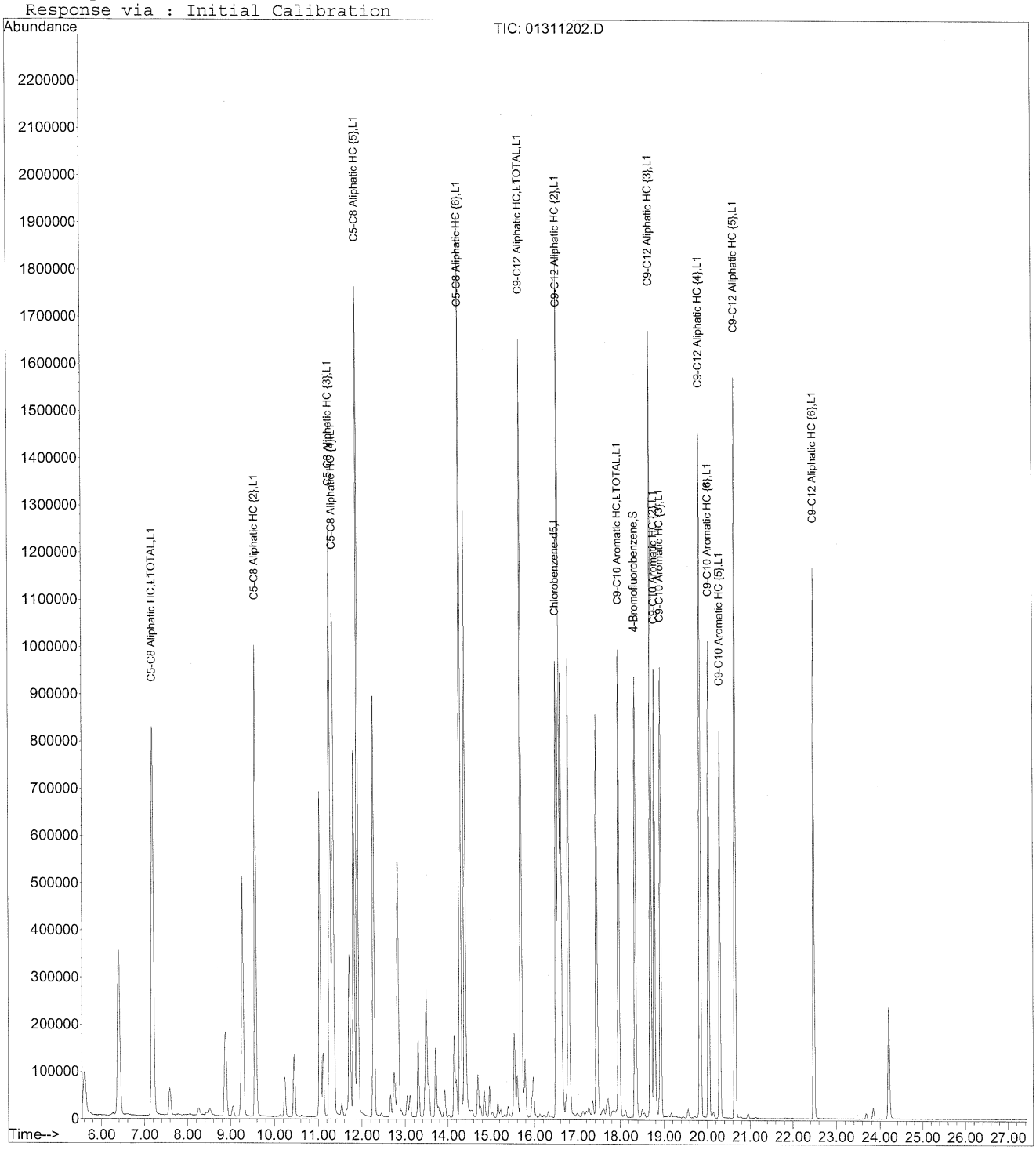
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	661733	12.50	ug/m3	0.00
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.35	95	455773	85.00	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 94.97%			
Target Compounds						Qvalue
1) C5-C8 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



RTI Laboratories

Run ID: VOA9_120201A **Run No.:** 45975

Analytical Run Date: 2/1/2012 **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 020112 VOA9	BFB_TUNE	TUNE	R45975	2/1/2012 1:05:00 PM	Robert Lynch		
CCV 020112 VOA9	MA_APH	CCV	R45975	2/1/2012 2:36:00 PM	Robert Lynch		
RLVS 020112 VOA9	MA_APH	RLVS	R45975	2/1/2012 3:20:00 PM	Robert Lynch		
MBLK 020112 VOA9	MA_APH	MBLK	R45975	2/1/2012 4:15:00 PM	Charles O`Bryan		
1201676-023A	MA_APH	SAMP	R45975	2/1/2012 5:40:00 PM	Robert Lynch		
1201676-023Adup	MA_APH	DUP	R45975	2/1/2012 6:22:00 PM	Charles O`Bryan		
1201676-009A	MA_APH	SAMP	R45975	2/1/2012 7:11:00 PM	Robert Lynch		
1201676-030A	MA_APH	SAMP	R45975	2/1/2012 7:55:00 PM	Robert Lynch		
1201676-010A	MA_APH	SAMP	R45975	2/1/2012 8:44:00 PM	Robert Lynch		
1201676-013A	MA_APH	SAMP	R45975	2/1/2012 11:48:00 PM	Robert Lynch		
1201676-014A	MA_APH	SAMP	R45975	2/2/2012 12:34:00 AM	Robert Lynch		
RLVS2 020112 VOA	MA_APH	RLVS	R45975	2/2/2012 10:47:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

09-Feb-12

RunNo 45975

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
901797	BFB 020112 VOA9	BFB_TUNE	TUNE	\\1\DATA\020112	2/1/2012 1:05:00	1	R45975		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		56.7	56.7		100	0	0	0	0	0	57%	50	120	0%	
175	M		7.5	7.5		100	0	0	0	0	0	8%	4	9	0%	
176	M		96.7	96.7		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	
50	M		26.4	26.4		100	0	0	0	0	0	26%	8	40	0%	
75	M		51.6	51.6		100	0	0	0	0	0	52%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.7	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
901798	CCV 020112 VOA9	MA_APH	CCV	\\1\DATA\020112	2/1/2012 2:36:00	1	R45975		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	226.72	226.72		234	0	0	0	0	0	97%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	240.61	240.61		266	0	0	0	0	0	90%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	346.06	346.06		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	83.3	83.3		89.5	0	0	0	0	0	93%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\020112\02011204.D Vial: 2
Acq On : 1 Feb 2012 2:36 pm Operator: RACHEL HILL
Sample : CCV 020112 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 2 16:42 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

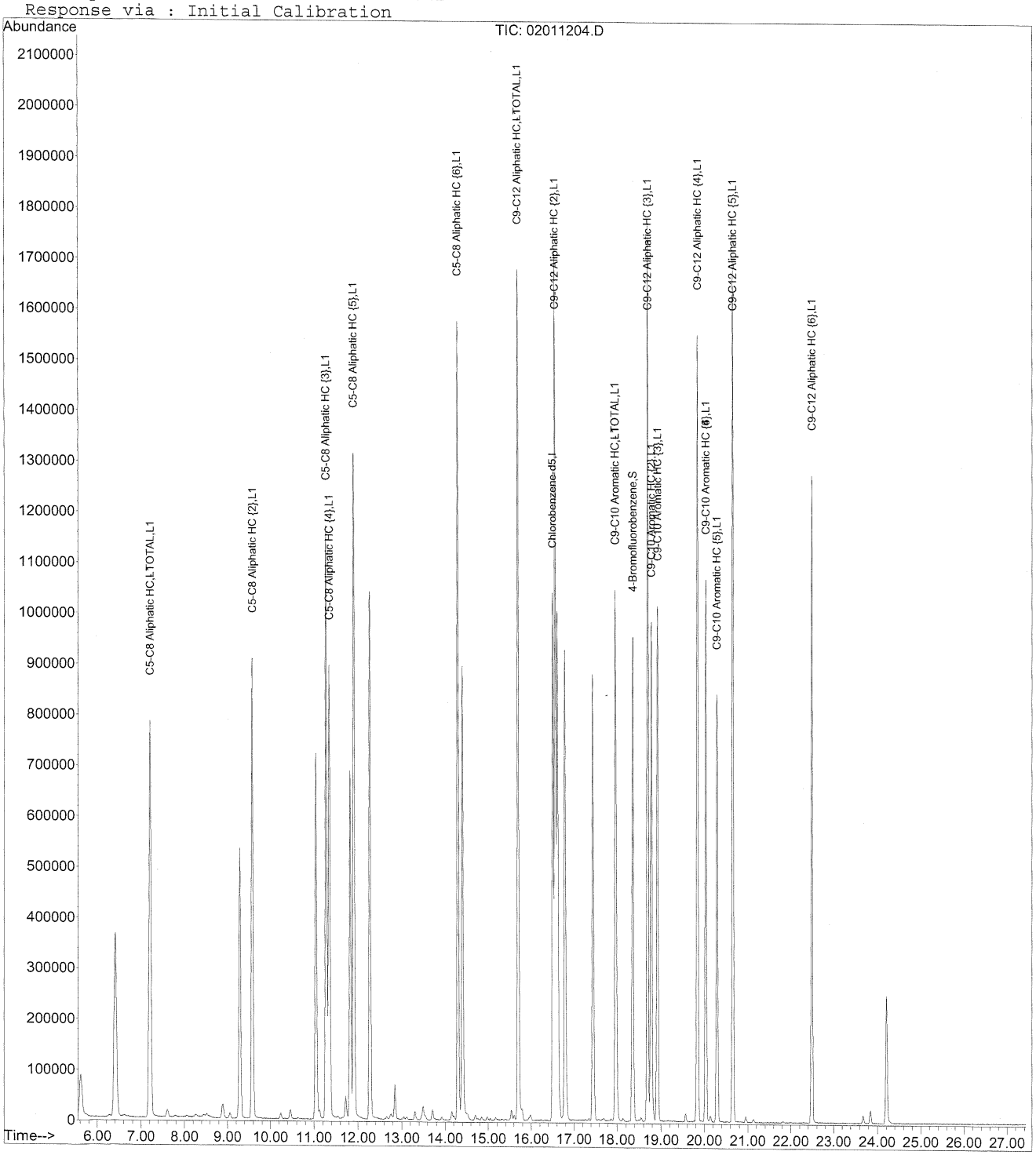
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	703161	12.50	ug/m3	0.00
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.35	95	474606	83.30	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 93.07%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.20	TIC	2669582	27.59	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.58	TIC	2261727	34.78	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2931423	39.91	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	2277184	35.09	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2948829	41.84	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.30	TIC	3359086	47.85	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.20	TIC	16447831m	226.72	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	3803585	51.45	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	3666497	50.86	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.69	TIC	3624712	56.91	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.84	TIC	3430881	55.59	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.65	TIC	3419279	62.76	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.48	TIC	2517349	66.41	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	20462303m	346.06	ug/m3	
15) C9-C10 Aromatic HC	17.98	120	230293	46.65	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	243894	46.53	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.92	120	359344	47.72	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.03	120	79369	51.57	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.30	120	267307	47.16	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.03	134	194713	52.44	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.98	TIC	1374920m	240.61	ug/m3	

(#) = qualifier out of range (m) = manual integration
02011204.D 011912V9.M Fri Feb 03 09:54:57 2012 Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\020112\02011204.D Vial: 2
Acq On : 1 Feb 2012 2:36 pm Operator: RACHEL HILL
Sample : CCV 020112 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 2 16:42 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_120202A **Run No.:** 45976

Analytical Run Date: 2/2/2012 **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 020212 VOA9	BFB_TUNE	TUNE	R45976	2/2/2012 11:34:00 AM	Robert Lynch		
CCV 020212 VOA9	MA_APH	CCV	R45976	2/2/2012 12:17:00 PM	Robert Lynch		
RLVS 020212 VOA9	MA_APH	RLVS	R45976	2/2/2012 1:07:00 PM	Robert Lynch		
MBLK 020212 VOA9	MA_APH	MBLK	R45976	2/2/2012 1:56:00 PM	Charles O`Bryan		
1201676-031A	MA_APH	SAMP	R45976	2/2/2012 2:39:00 PM	Robert Lynch		
1201676-031Adup	MA_APH	DUP	R45976	2/2/2012 3:21:00 PM	Charles O`Bryan		
1201676-020A	MA_APH	SAMP	R45976	2/2/2012 4:04:00 PM	Robert Lynch		
1201676-021A	MA_APH	SAMP	R45976	2/2/2012 4:46:00 PM	Robert Lynch		
1201676-011A	MA_APH	SAMP	R45976	2/2/2012 5:31:00 PM	Robert Lynch		
1201676-012A	MA_APH	SAMP	R45976	2/2/2012 7:16:00 PM	Robert Lynch		
1201676-015A	MA_APH	SAMP	R45976	2/2/2012 8:48:00 PM	Robert Lynch		
1201676-024A	MA_APH	SAMP	R45976	2/2/2012 10:26:00 PM	Robert Lynch		
1201676-017A	MA_APH	SAMP	R45976	2/2/2012 11:15:00 PM	Robert Lynch		
1201676-018A	MA_APH	SAMP	R45976	2/3/2012 12:04:00 AM	Robert Lynch		
1201676-001A	MA_APH	SAMP	R45976	2/3/2012 12:53:00 AM	Robert Lynch		
1201676-019A	MA_APH	SAMP	R45976	2/3/2012 1:36:00 AM	Robert Lynch		
1201676-002A	MA_APH	SAMP	R45976	2/3/2012 2:25:00 AM	Robert Lynch		
1201676-025A	MA_APH	SAMP	R45976	2/3/2012 4:00:00 AM	Robert Lynch		
RLVS2 020212 VOA	MA_APH	RLVS	R45976	2/3/2012 4:44:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

09-Feb-12

RunNo 45976

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
901813	BFB 020212 VOA9	BFB_TUNE	TUNE	\1\DATA\020212	2/2/2012 11:34:0	1	R45976		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		58.8	58.8		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		97.6	97.6		100	0	0	0	0	0	98%	93	101	0%	
177	M		6.5	6.5		100	0	0	0	0	0	7%	5	9	0%	
50	M		26.5	26.5		100	0	0	0	0	0	27%	8	40	0%	
75	M		52.1	52.1		100	0	0	0	0	0	52%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.5	6.5		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
901814	CCV 020212 VOA9	MA_APH	CCV	\1\DATA\020212	2/2/2012 12:17:0	1	R45976		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	217.04	217.04		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	242.91	242.91		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	348.96	348.96		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	88.61	88.61		89.5	0	0	0	0	0	99%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\020212\02021202.D Vial: 2
Acq On : 2 Feb 2012 12:17 pm Operator: RACHEL HILL
Sample : CCV 020212 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 3 9:22 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

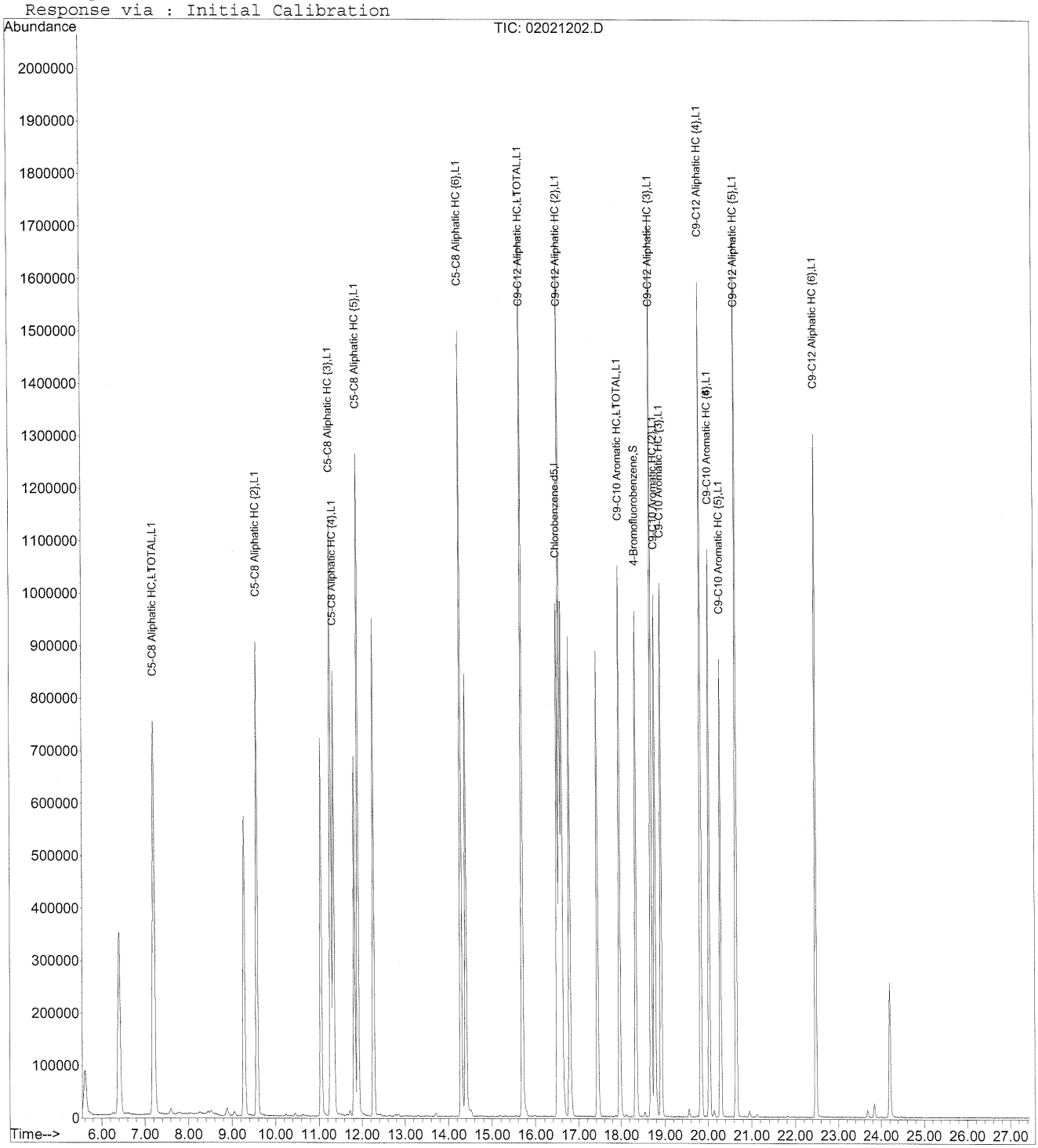
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	661898	12.50	ug/m3	0.00
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.35	95	475207	88.61	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 99.01%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.20	TIC	2577075	26.63	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.58	TIC	2243464	34.50	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2813198	38.30	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	2183170	33.64	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2773917	39.36	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.30	TIC	3154157	44.93	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.20	TIC	15744981m	217.04	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	3753102	50.77	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	3754227	52.08	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.69	TIC	3608713	56.66	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.84	TIC	3443335	55.79	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.66	TIC	3446021	63.26	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.48	TIC	2628263	69.34	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	20633661m	348.96	ug/m3	
15) C9-C10 Aromatic HC	17.98	120	233147	47.22	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	246453	47.02	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.92	120	359684	47.76	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.04	120	81945	53.25	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.30	120	270594	47.74	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.04	134	196248	52.85	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.98	TIC	1388071m	242.91	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\020212\02021202.D Vial: 2
Acq On : 2 Feb 2012 12:17 pm Operator: RACHEL HILL
Sample : CCV 020212 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 3 9:22 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_120203A **Run No.:** 45984

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

Analyst: Rachel Hill **Column:**

Calibration ID: 45704 **Column ID:**

Column Length:

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

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

RTI Laboratories

ANALYTICAL RUN Summary

09-Feb-12

RunNo 45984

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
901922	BFB 020312 VOA9	BFB_TUNE	TUNE	\1\DATA\020312	2/3/2012 9:20:00	1	R45984		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		58.7	58.7		100	0	0	0	0	0	59%	50	120	0%	
175	M		7.3	7.3		100	0	0	0	0	0	7%	4	9	0%	
176	M		97.2	97.2		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.3	6.3		100	0	0	0	0	0	6%	5	9	0%	
50	M		26.3	26.3		100	0	0	0	0	0	26%	8	40	0%	
75	M		52	52		100	0	0	0	0	0	52%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		7	7		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
901923	CCV 020312 VOA9	MA_APH	CCV	\1\DATA\020312	2/3/2012 10:04:0	1	R45984		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
C5-C8 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C5-C8 Aliphatic HC - TOTAL	A	µg/m³	197.71	197.71		234	0	0	0	0	0	84%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	218.1	218.1		266	0	0	0	0	0	82%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	313.42	313.42		378	0	0	0	0	0	83%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	87.3	87.3		89.5	0	0	0	0	0	98%	70	130	0%	

Quantitation Report (QT Reviewed)

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

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

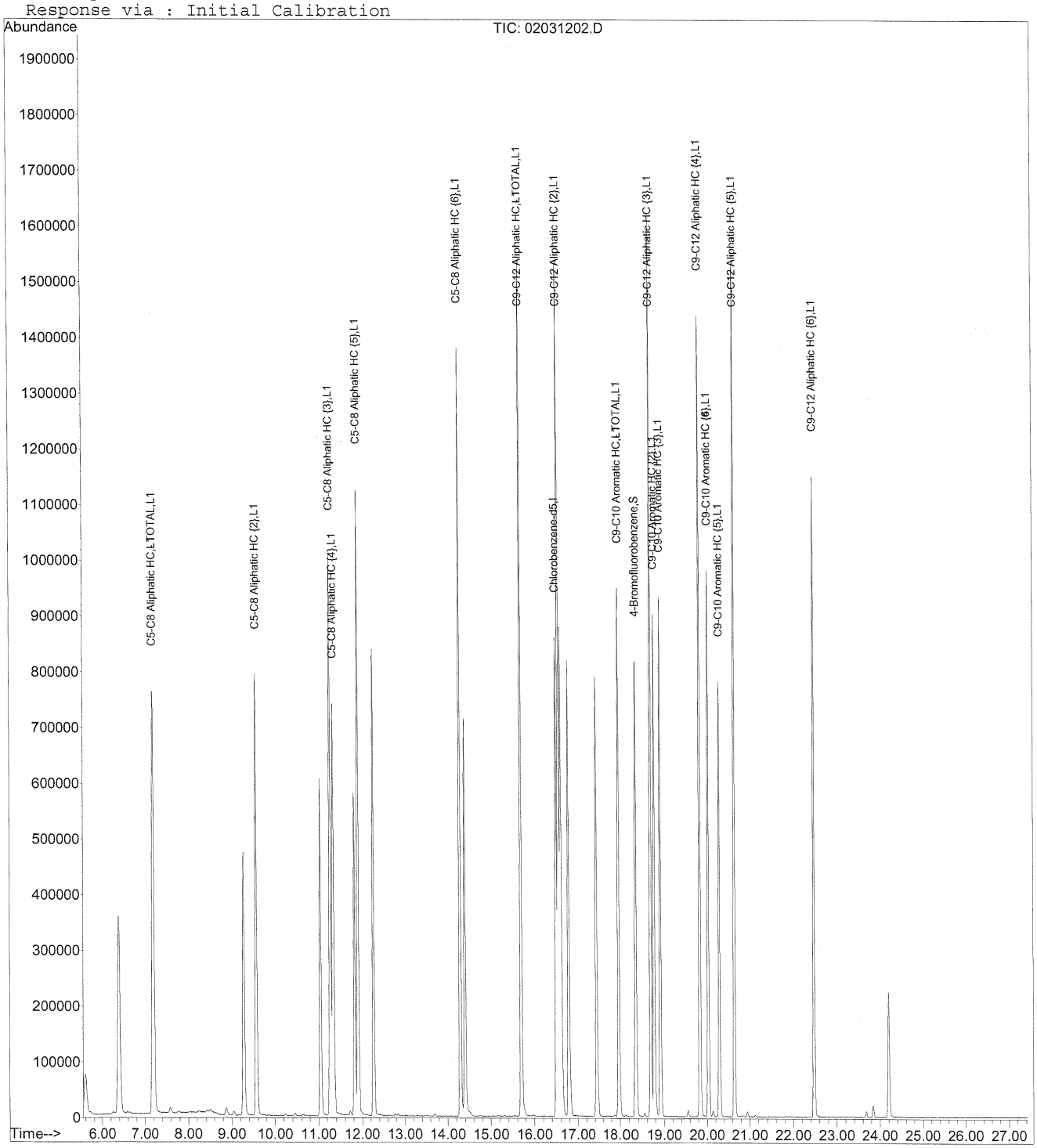
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	568011	12.50	ug/m3	0.00
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.34	95	401768	87.30	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 97.54%			
Target Compounds						Qvalue
1) C5-C8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

(#) = qualifier out of range (m) = manual integration
02031202.D 011912V9.M Mon Feb 06 10:15:47 2012 Page 1

Quantitation Report

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

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



RTI Laboratories

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

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

Analyst: Rachel Dear **Column:**

Calibration ID: 45704 **Column ID:**

Column Length:

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

RTI Laboratories

ANALYTICAL RUN Summary

09-Feb-12

RunNo 46008

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

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		60.4	60.4		100	0	0	0	0	0	60%	50	120	0%	
175	M		7.3	7.3		100	0	0	0	0	0	7%	4	9	0%	
176	M		97.1	97.1		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.5	6.5		100	0	0	0	0	0	7%	5	9	0%	
50	M		26.1	26.1		100	0	0	0	0	0	26%	8	40	0%	
75	M		50.5	50.5		100	0	0	0	0	0	51%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.9	6.9		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
902314	CCV 020612 VOA9	MA_APH	CCV	\1\DATA\020612	2/6/2012 11:51:0	1	R46008		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
C5-C8 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C5-C8 Aliphatic HC - TOTAL	A	µg/m³	206.7	206.7		234	0	0	0	0	0	88%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	229.71	229.71		266	0	0	0	0	0	86%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	323.38	323.38		378	0	0	0	0	0	86%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	86.6	86.6		89.5	0	0	0	0	0	97%	70	130	0%	

Quantitation Report (QT Reviewed)

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

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

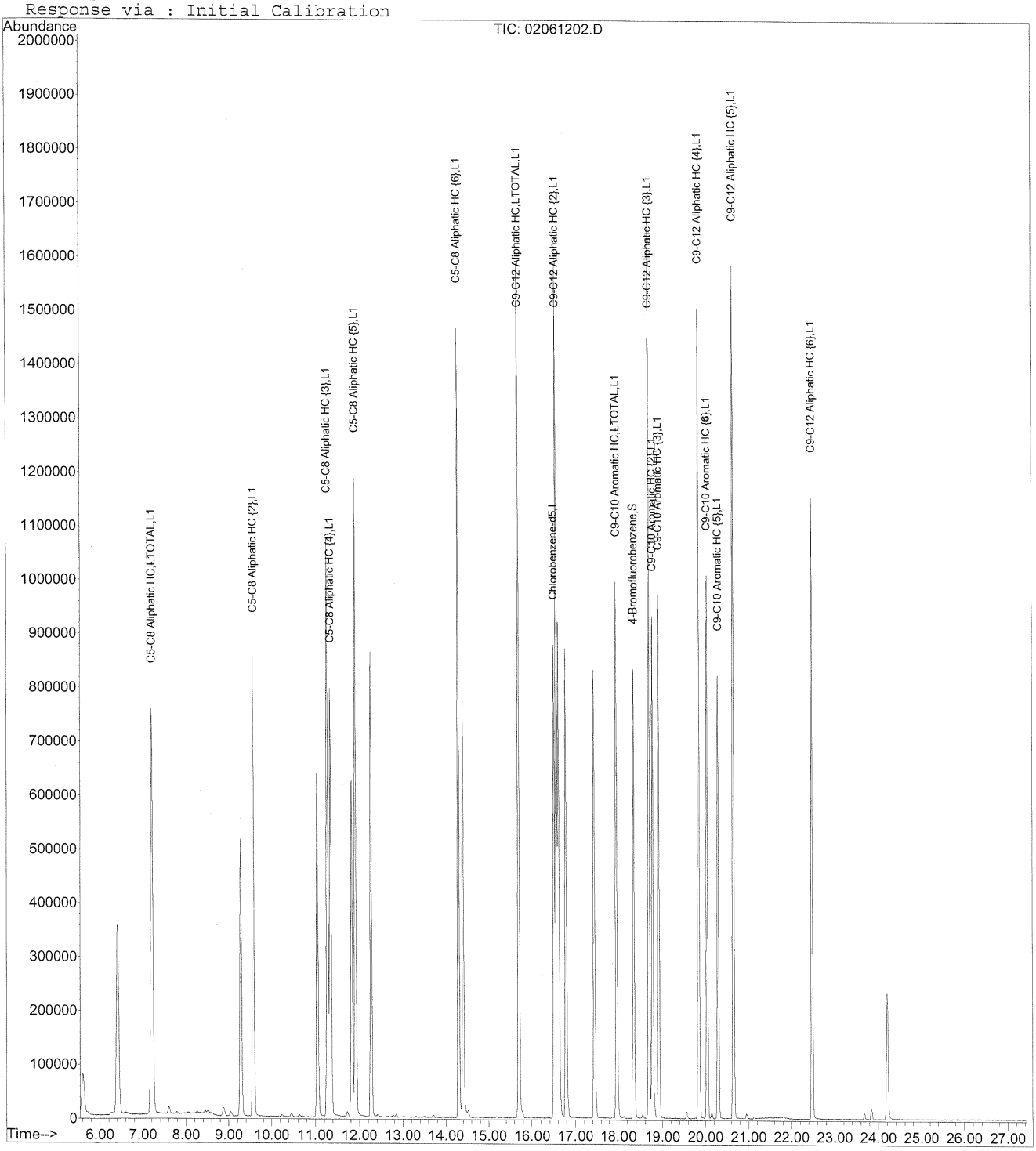
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	586144	12.50	ug/m3	-0.01
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.35	95	411274	86.60	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 96.76%			
Target Compounds						Qvalue
1) C5-C8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

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

Quantitation Report

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

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



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_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

SampID	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

09-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	\TA\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	\TA\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	\TA\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%	

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	\TA\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	\TA\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	\TA\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	\TA\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 :

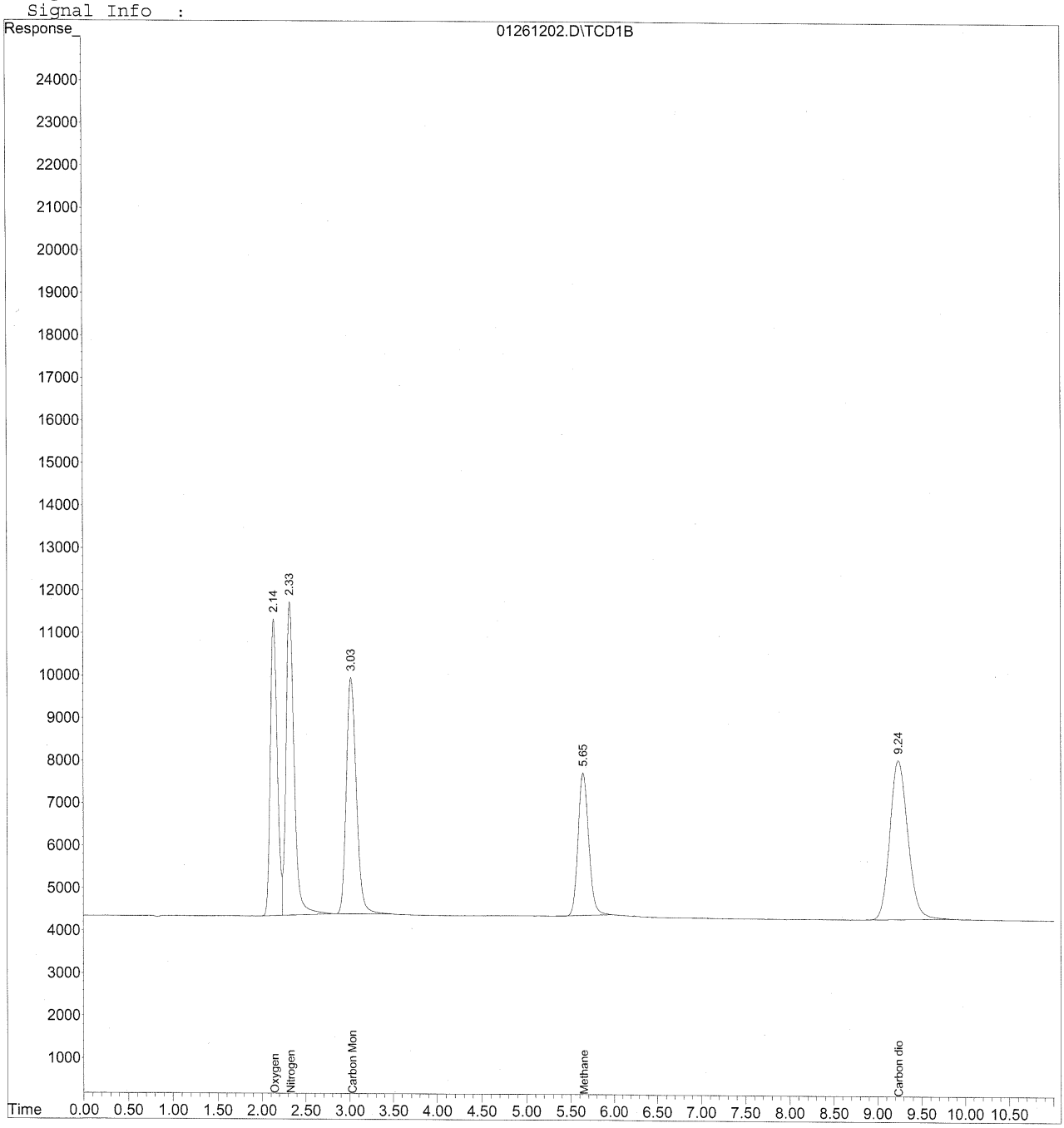
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1)	Oxygen	2.14	386362	2.494	%
2)	Nitrogen	2.33	472467	2.692	%
3)	Carbon Monoxide	3.03	436373	2.707	%
4)	Methane	5.65	283994	2.103	%
5)	Carbon dioxide	9.24	529548	2.578	%

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 :

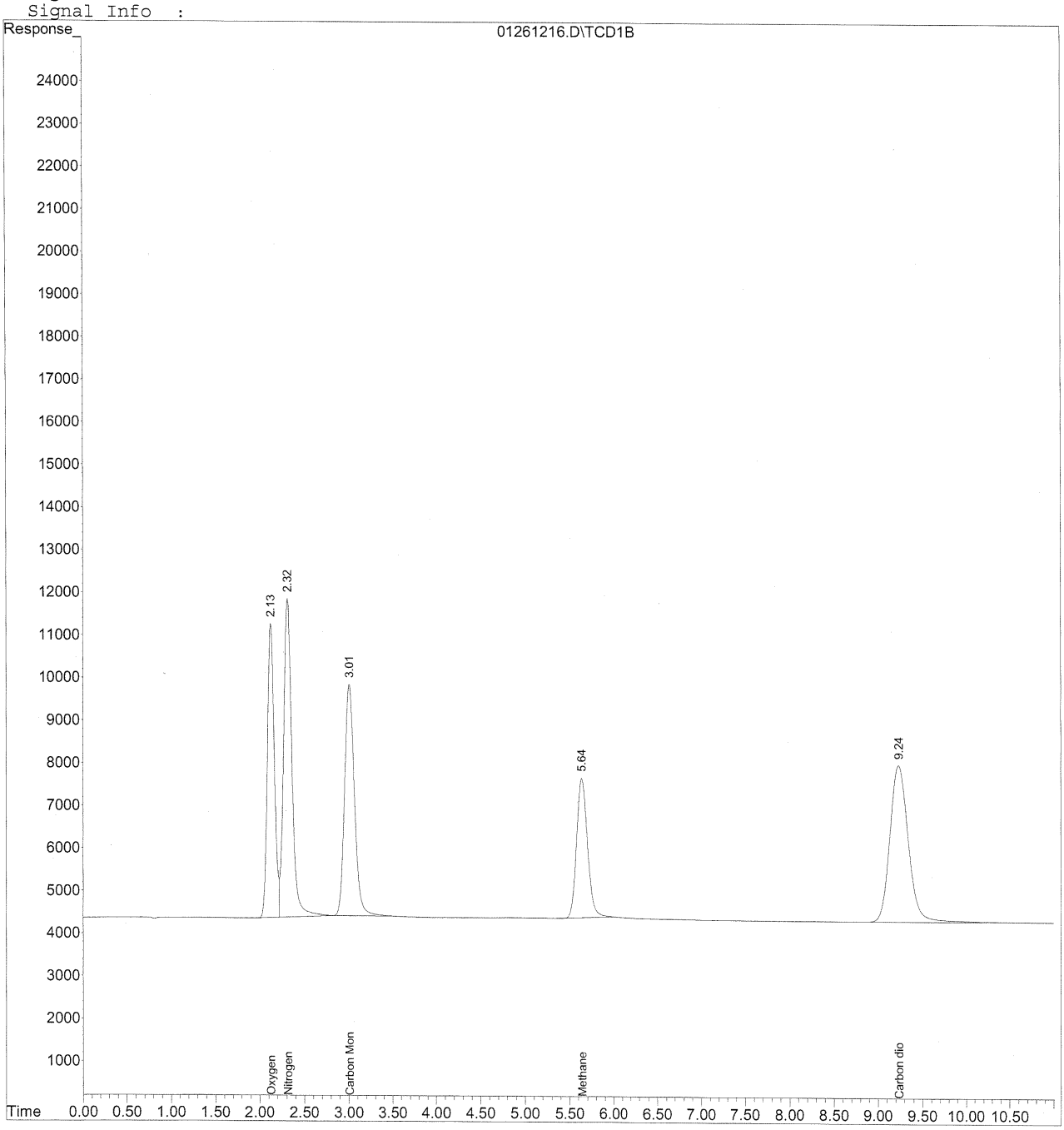
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1)	Oxygen	2.13	381663	2.464	%
2)	Nitrogen	2.32	478299	2.725	%
3)	Carbon Monoxide	3.01	426843	2.648	%
4)	Methane	5.65	278126	2.059	%
5)	Carbon dioxide	9.24	532227	2.592	%

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 :

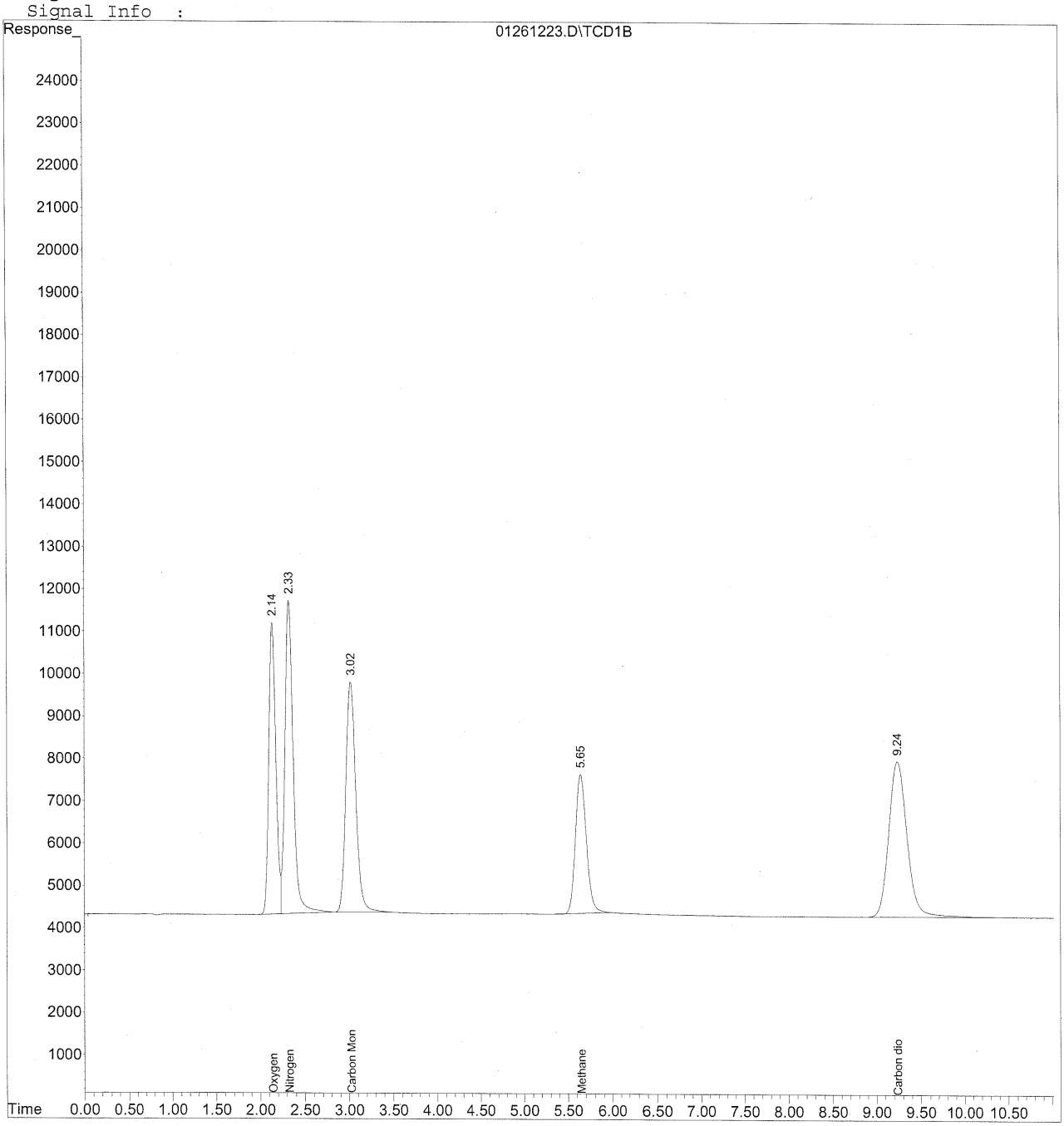
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	380785	2.458 %
2)	Nitrogen	2.33	473366	2.697 %
3)	Carbon Monoxide	3.02	426783	2.648 %
4)	Methane	5.65	277738	2.056 %
5)	Carbon dioxide	9.24	531987	2.590 %

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 :



RTI Laboratories

Run ID: GC-TCD 1_120128A **Run No.:** 45860

Analytical Run Date: 1/28/2012 **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	R45860	1/28/2012 9:23:00 AM	Charles O`Bryan		
ccv std 1-2 a	ASTM-D2504	CCV	R45860	1/28/2012 9:48:00 AM	Robert Lynch		
lcs	ASTM-D2504	LCS	R45860	1/28/2012 10:03:00 AM	Celeste Hoitash		
crql std 2% a	ASTM-D2504	CRQL	R45860	1/28/2012 10:37:00 AM	Robert Lynch		
1201676-008b	ASTM-D2504	SAMP	R45860	1/28/2012 10:53:00 AM	Robert Lynch		
1201676-009b	ASTM-D2504	SAMP	R45860	1/28/2012 11:09:00 AM	Robert Lynch		
1201676-010b	ASTM-D2504	SAMP	R45860	1/28/2012 11:24:00 AM	Robert Lynch		
1201676-011b	ASTM-D2504	SAMP	R45860	1/28/2012 11:40:00 AM	Robert Lynch		
1201676-012b	ASTM-D2504	SAMP	R45860	1/28/2012 11:58:00 AM	Robert Lynch		
1201676-013b	ASTM-D2504	SAMP	R45860	1/28/2012 12:13:00 PM	Robert Lynch		
1201676-014b	ASTM-D2504	SAMP	R45860	1/28/2012 12:29:00 PM	Robert Lynch		
1201676-015b	ASTM-D2504	SAMP	R45860	1/28/2012 12:44:00 PM	Robert Lynch		
1201676-016b	ASTM-D2504	SAMP	R45860	1/28/2012 12:59:00 PM	Robert Lynch		
1201676-017b	ASTM-D2504	SAMP	R45860	1/28/2012 1:13:00 PM	Robert Lynch		
1201676-017bdup	ASTM-D2504	DUP	R45860	1/28/2012 1:28:00 PM	Charles O`Bryan		
ccv std 1-2 b	ASTM-D2504	CCV	R45860	1/28/2012 1:43:00 PM	Robert Lynch		
crql std 2% b	ASTM-D2504	CRQL	R45860	1/28/2012 2:14:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

09-Feb-12

RunNo 45860

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
899807	mblk	ASTM-D2504	MBLK	.TA\012812\0128	1/28/2012 9:23:0	1	R45860		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
899808	ccv std 1-2 a	ASTM-D2504	CCV	.TA\012812\0128	1/28/2012 9:48:0	1	R45860		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.608	2.608		2.5	0	0	0.025	0.1	0	104%	85	115	0%	
Carbon Monoxide	A	%	2.675	2.675		2.5	0	0	0.025	0.1	0	107%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.078	2.078		2	0	0	0.025	0.5	0	104%	85	115	0%	
Nitrogen	A	%	2.763	2.763		2.5	0	0	0.025	0.1	0	111%	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
899809	lcs	ASTM-D2504	LCS	.TA\012812\0128	1/28/2012 10:03:	1	R45860		0	899808	

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	2.608	0.025	0.1	0	104%	70	130	1%	
Carbon Monoxide	A	%	2.653	2.653		2.5	0	2.675	0.025	0.1	0	106%	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	%	2.064	2.064		2	0	2.078	0.025	0.5	0	103%	70	130	1%	
Nitrogen	A	%	2.669	2.669		2.5	0	2.763	0.025	0.1	0	107%	70	130	3%	
Oxygen	A	%	2.452	2.452		2.5	0	2.494	0.025	0.1	0	98%	70	130	2%	

1

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
899820	1201676-017b (Container-01 of 01)	ASTM-D2504	SAMP	.TA\012812\0128	1/28/2012 1:13:0	1	R45860		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Nitrogen	A	%	77.341	77.341		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	20.594	20.594		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
899821	1201676-017bdup	ASTM-D2504	DUP	.TA\012812\0128	1/28/2012 1:28:0	1	R45860		0	899820	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.061	0.061		0	0	0.066	0.025	0.1	0	0%	0	0	8%	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	%	77.364	77.364		0	0	77.341	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	20.608	20.608		0	0	20.594	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
899822	ccv std 1-2 b	ASTM-D2504	CCV	.TA\012812\0128	1/28/2012 1:43:0	1	R45860		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.597	2.597		2.5	0	0	0.025	0.1	0	104%	85	115	0%	
Carbon Monoxide	A	%	2.651	2.651		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.06	2.06		2	0	0	0.025	0.5	0	103%	85	115	0%	
Nitrogen	A	%	2.677	2.677		2.5	0	0	0.025	0.1	0	107%	85	115	0%	
Oxygen	A	%	2.453	2.453		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
899823	crql std 2% b	ASTM-D2504	CRQL	.TA\012812\0128	1/28/2012 2:14:0	1	R45860		0	0	

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

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\012812\01281202.D Vial: 1
Acq On : 28 Jan 2012 9:48 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	2.763	-10.5	0	0.03
3	Carbon Monoxide	2.500	2.675	-7.0	0	0.00
4	Methane	2.000	2.078	-3.9	0	0.03
5	Carbon dioxide	2.500	2.608	-4.3	0	0.00

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\012812\01281202.D Vial: 1
Acq On : 28 Jan 2012 9:48 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 Tue Jan 31 13:33:52 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012812\01281202.D Vial: 1
Acq On : 28 Jan 2012 9:48 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 28 10:02 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 :

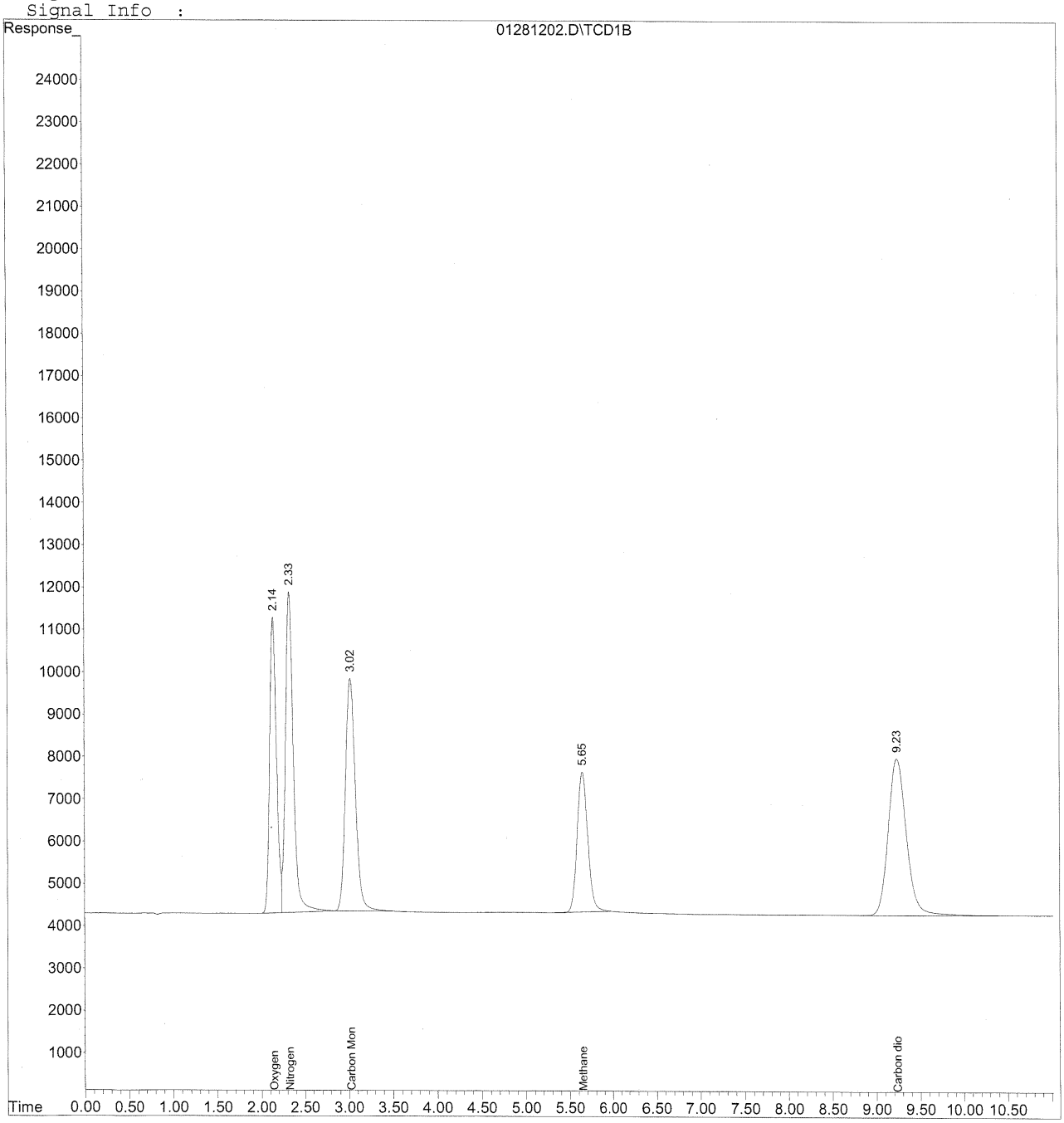
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	386351	2.494 %
2)	Nitrogen	2.33	484913	2.763 %
3)	Carbon Monoxide	3.02	431194	2.675 %
4)	Methane	5.65	280644	2.078 %
5)	Carbon dioxide	9.24	535572	2.608 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012812\01281202.D Vial: 1
Acq On : 28 Jan 2012 9:48 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 28 10:02 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\012812\01281216.D Vial: 1
Acq On : 28 Jan 2012 1:43 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	2.453	1.9	0	0.05
2	Nitrogen	2.500	2.677	-7.1	0	0.03
3	Carbon Monoxide	2.500	2.651	-6.0	0	0.00
4	Methane	2.000	2.060	-3.0	0	0.03
5	Carbon dioxide	2.500	2.597	-3.9	0	0.01

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\012812\01281216.D Vial: 1
Acq On : 28 Jan 2012 1:43 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 Tue Jan 31 13:34:02 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012812\01281216.D Vial: 1
Acq On : 28 Jan 2012 1:43 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 28 13:56 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 :

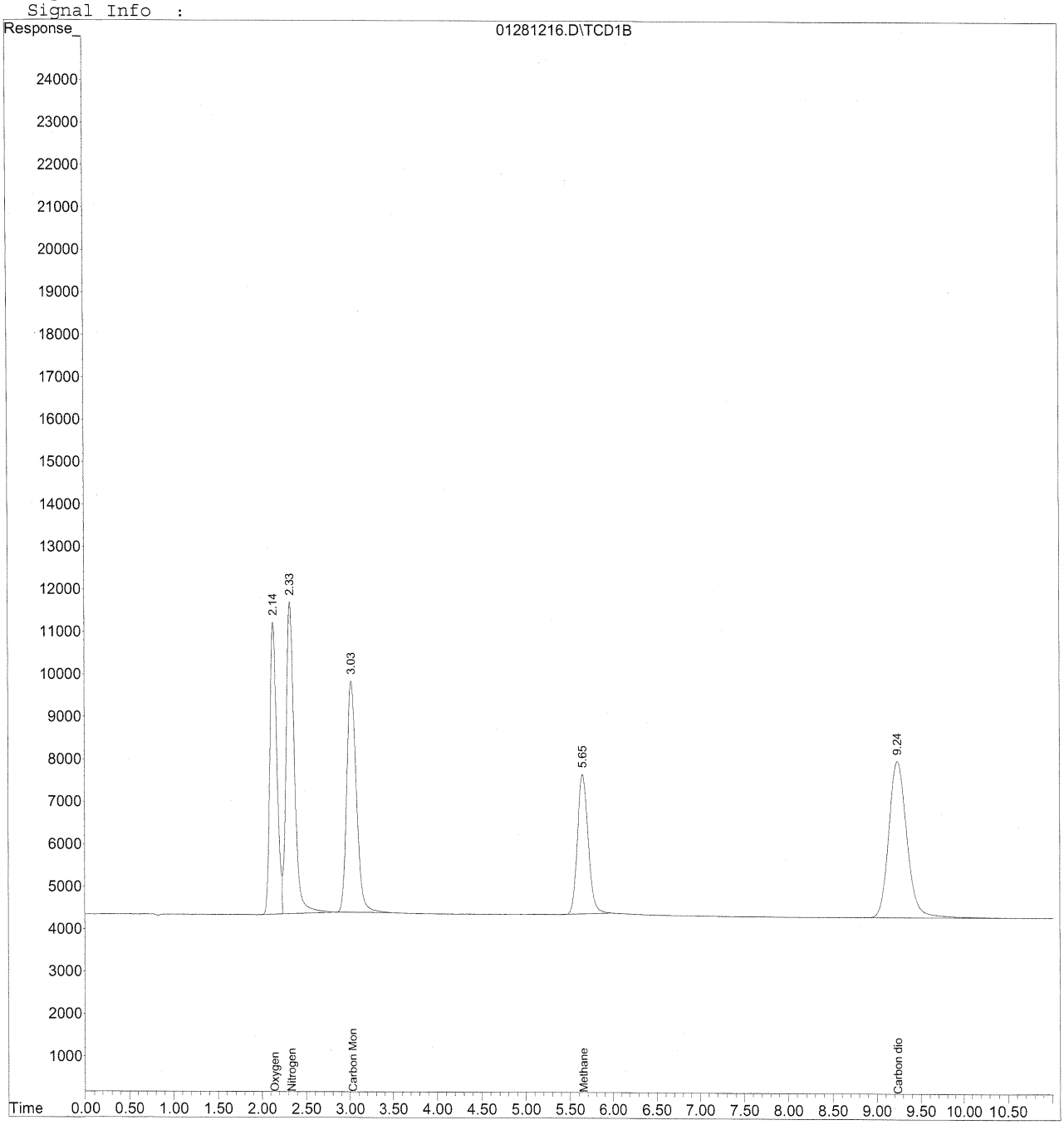
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	380022	2.453 %
2)	Nitrogen	2.33	469888	2.677 %
3)	Carbon Monoxide	3.03	427258	2.651 %
4)	Methane	5.65	278194	2.060 %
5)	Carbon dioxide	9.24	533290	2.597 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012812\01281216.D Vial: 1
Acq On : 28 Jan 2012 1:43 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 28 13:56 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_120130A Run No.: 45861

Analytical Run Date: 1/30/2012 **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	R45861	1/30/2012 10:26:00 AM	Charles O`Bryan		
ccv std 1-2 a	ASTM-D2504	CCV	R45861	1/30/2012 10:50:00 AM	Robert Lynch		
lcs	ASTM-D2504	LCS	R45861	1/30/2012 11:06:00 AM	Robert Lynch		
crql std 2% a	ASTM-D2504	CRQL	R45861	1/30/2012 11:23:00 AM	Robert Lynch		
1201676-018b	ASTM-D2504	SAMP	R45861	1/30/2012 11:48:00 AM	Robert Lynch		
1201676-019b	ASTM-D2504	SAMP	R45861	1/30/2012 12:05:00 PM	Robert Lynch		
1201676-020b	ASTM-D2504	SAMP	R45861	1/30/2012 12:24:00 PM	Robert Lynch		
1201676-021b	ASTM-D2504	SAMP	R45861	1/30/2012 12:40:00 PM	Robert Lynch		
1201676-022b	ASTM-D2504	SAMP	R45861	1/30/2012 1:29:00 PM	Robert Lynch		
1201676-023b	ASTM-D2504	SAMP	R45861	1/30/2012 2:02:00 PM	Robert Lynch		
1201676-024b	ASTM-D2504	SAMP	R45861	1/30/2012 3:04:00 PM	Robert Lynch		
1201676-025b	ASTM-D2504	SAMP	R45861	1/30/2012 3:54:00 PM	Robert Lynch		
1201676-026b	ASTM-D2504	SAMP	R45861	1/30/2012 4:21:00 PM	Robert Lynch		
1201676-027b	ASTM-D2504	SAMP	R45861	1/30/2012 4:40:00 PM	Robert Lynch		
1201676-027bdup	ASTM-D2504	DUP	R45861	1/30/2012 5:06:00 PM	Charles O`Bryan		
ccv std 1-2 b	ASTM-D2504	CCV	R45861	1/30/2012 5:23:00 PM	Robert Lynch		
1201676-028b	ASTM-D2504	SAMP	R45861	1/30/2012 5:39:00 PM	Robert Lynch		
1201676-029b	ASTM-D2504	SAMP	R45861	1/30/2012 5:59:00 PM	Robert Lynch		
1201676-030b	ASTM-D2504	SAMP	R45861	1/30/2012 6:15:00 PM	Robert Lynch		
1201676-031b	ASTM-D2504	SAMP	R45861	1/30/2012 6:31:00 PM	Robert Lynch		
ccv std 1-2 c	ASTM-D2504	CCV	R45861	1/30/2012 7:00:00 PM	Robert Lynch		
crql std 2% c	ASTM-D2504	CRQL	R45861	1/30/2012 7:15:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

09-Feb-12

RunNo 45861

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
899824	mblk	ASTM-D2504	MBLK	\TA\013012\0130	1/30/2012 10:26:	1	R45861		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
899825	ccv std 1-2 a	ASTM-D2504	CCV	\TA\013012\0130	1/30/2012 10:50:	1	R45861		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.672	2.672		2.5	0	0	0.025	0.1	0	107%	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	%	2.118	2.118		2	0	0	0.025	0.5	0	106%	85	115	0%	
Nitrogen	A	%	2.709	2.709		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Oxygen	A	%	2.51	2.51		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
899826	lcs	ASTM-D2504	LCS	\TA\013012\0130	1/30/2012 11:06:	1	R45861		0	899825	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.612	2.612		2.5	0	2.672	0.025	0.1	0	104%	70	130	2%	
Carbon Monoxide	A	%	2.708	2.708		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	%	2.103	2.103		2	0	2.118	0.025	0.5	0	105%	70	130	1%	
Nitrogen	A	%	2.659	2.659		2.5	0	2.709	0.025	0.1	0	106%	70	130	2%	
Oxygen	A	%	2.484	2.484		2.5	0	2.51	0.025	0.1	0	99%	70	130	1%	

1

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
899837	1201676-027b (Container-01 of 01)	ASTM-D2504	SAMP	\TA\013012\0130	1/30/2012 4:40:0	1	R45861		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	%	20.391	20.391		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
899838	1201676-027bdup	ASTM-D2504	DUP	\TA\013012\0130	1/30/2012 5:06:0	1	R45861		0	899837	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.178	0.178		0	0	0.174	0.025	0.1	0	0%	0	0	2%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	79.595	79.595		0	0	79.116	0.025	0.1	0	0%	0	0	1%	
Oxygen	A	%	20.506	20.506		0	0	20.391	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
899839	ccv std 1-2 b	ASTM-D2504	CCV	\TA\013012\0130	1/30/2012 5:23:0	1	R45861		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	%	2.692	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	%	2.093	2.093		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.65	2.65		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Oxygen	A	%	2.473	2.473		2.5	0	0	0.025	0.1	0	99%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
899840	1201676-028b (Container-01 of 01)	ASTM-D2504	SAMP	\TA\013012\0130	1/30/2012 5:39:0	1	R45861		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
899842	1201676-030b (Container-01 of 01)	ASTM-D2504	SAMP	\TA\013012\0130	1/30/2012 6:15:0	1	R45861		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	%	20.976	20.976		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
899843	1201676-031b (Container-01 of 01)	ASTM-D2504	SAMP	\TA\013012\0130	1/30/2012 6:31:0	1	R45861		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.743	0.743		0	0	0	0.025	0.1	0	0%	0	0	0%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	79.209	79.209		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	18.933	18.933		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
899844	ccv std 1-2 c	ASTM-D2504	CCV	\TA\013012\0130	1/30/2012 7:00:0	1	R45861		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.66	2.66		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Carbon Monoxide	A	%	2.721	2.721		2.5	0	0	0.025	0.1	0	109%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.113	2.113		2	0	0	0.025	0.5	0	106%	85	115	0%	
Nitrogen	A	%	2.789	2.789		2.5	0	0	0.025	0.1	0	112%	85	115	0%	
Oxygen	A	%	2.529	2.529		2.5	0	0	0.025	0.1	0	101%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
899845	crql std 2% c	ASTM-D2504	CRQL	\TA\013012\0130	1/30/2012 7:15:0	1	R45861		0	0	

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

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\013012\01301202.D Vial: 1
Acq On : 30 Jan 2012 10:50 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	2.510	-0.4	0	0.04
2	Nitrogen	2.500	2.709	-8.4	0	0.02
3	Carbon Monoxide	2.500	2.730	-9.2	0	0.00
4	Methane	2.000	2.118	-5.9	0	0.03
5	Carbon dioxide	2.500	2.672	-6.9	0	0.02

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\013012\01301202.D Vial: 1
Acq On : 30 Jan 2012 10:50 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 Tue Jan 31 13:37:05 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\013012\01301202.D Vial: 1
Acq On : 30 Jan 2012 10:50 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 30 11:05 2012 Quant Results File: 122211.RES

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

Volume Inj. :
Signal Phase :
Signal Info :

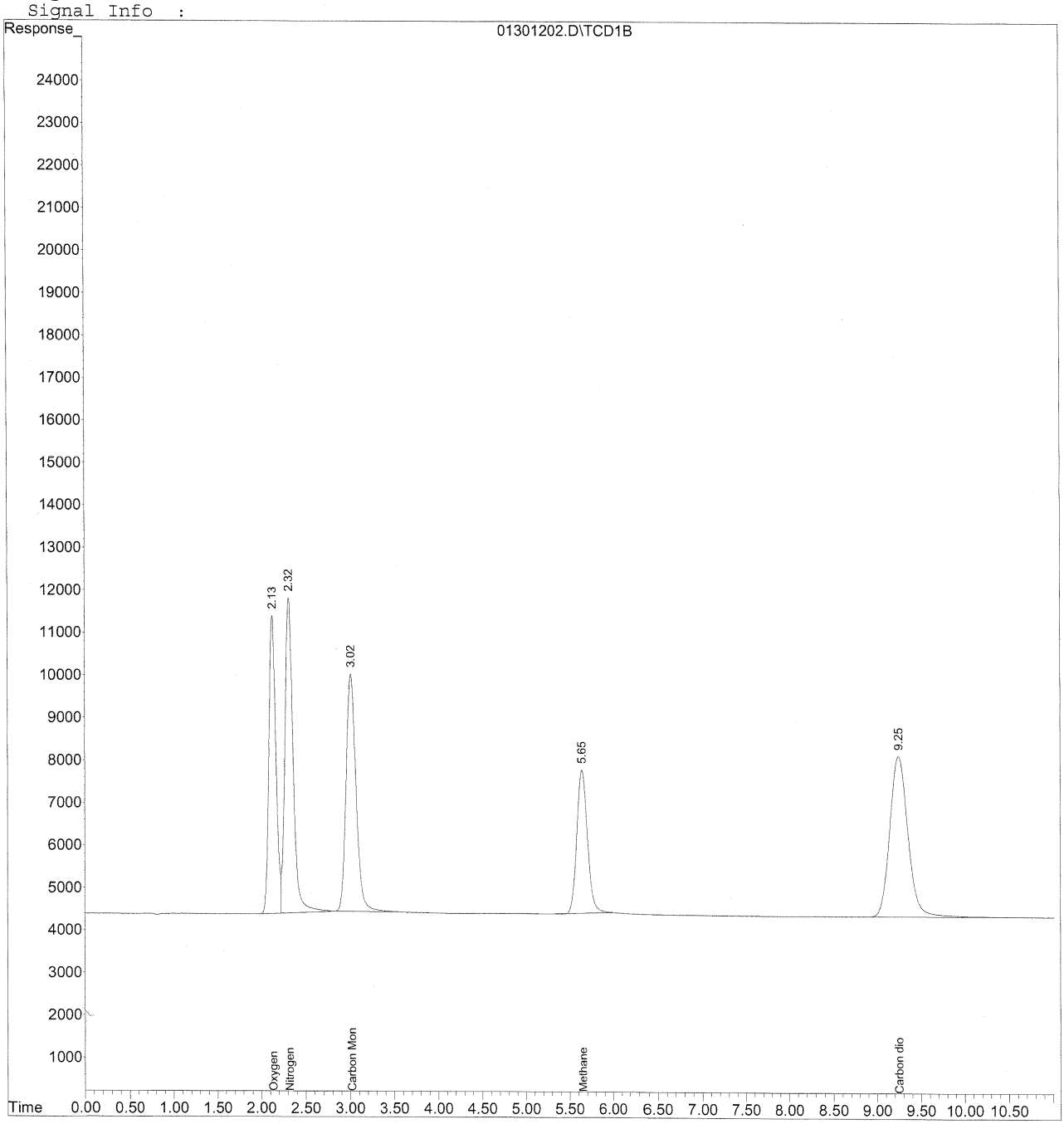
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.13	388832	2.510 %
2)	Nitrogen	2.32	475397	2.709 %
3)	Carbon Monoxide	3.02	440127	2.730 %
4)	Methane	5.65	285989	2.118 %
5)	Carbon dioxide	9.25	548827	2.672 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\013012\01301202.D Vial: 1
Acq On : 30 Jan 2012 10:50 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 30 11:05 2012 Quant Results File: 122211.RES

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

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\013012\01301216.D Vial: 1
Acq On : 30 Jan 2012 5:23 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	2.473	1.1	0	0.06
2	Nitrogen	2.500	2.650	-6.0	0	0.04
3	Carbon Monoxide	2.500	2.692	-7.7	0	0.02
4	Methane	2.000	2.093	-4.6	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\013012\01301216.D Vial: 1
Acq On : 30 Jan 2012 5:23 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 Tue Jan 31 13:37:16 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\013012\01301216.D Vial: 1
Acq On : 30 Jan 2012 5:23 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 30 17:37 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 :

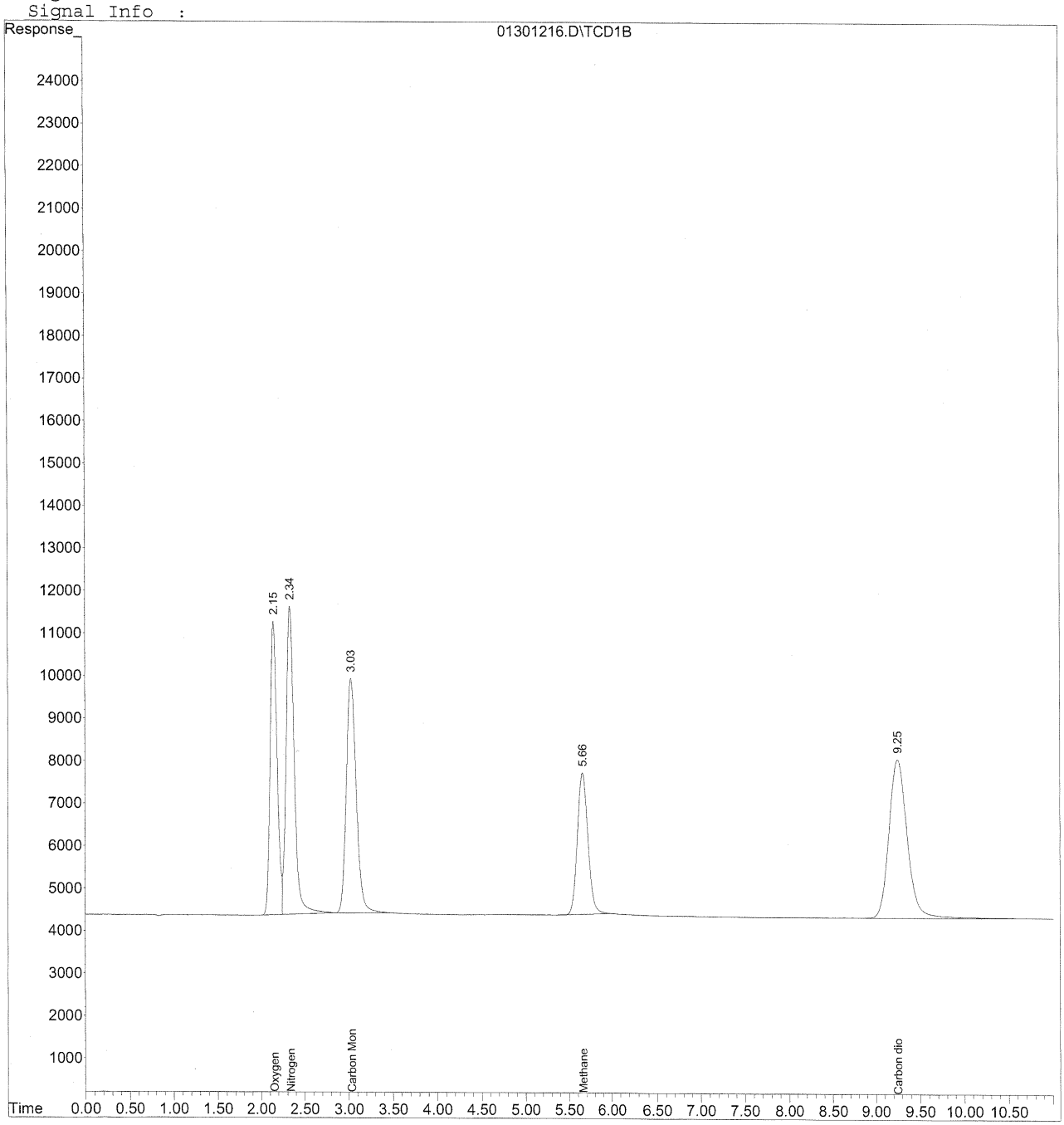
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	383109	2.473 %
2)	Nitrogen	2.34	465094	2.650 %
3)	Carbon Monoxide	3.04	433960	2.692 %
4)	Methane	5.66	282709	2.093 %
5)	Carbon dioxide	9.25	542010	2.639 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\013012\01301216.D Vial: 1
Acq On : 30 Jan 2012 5:23 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 30 17:37 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\013012\01301221.D Vial: 1
Acq On : 30 Jan 2012 7:00 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	2.529	-1.2	0	0.06
2	Nitrogen	2.500	2.789	-11.6	0	0.04
3	Carbon Monoxide	2.500	2.721	-8.8	0	0.01
4	Methane	2.000	2.113	-5.6	0	0.03
5	Carbon dioxide	2.500	2.660	-6.4	0	0.02

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\013012\01301221.D Vial: 1
Acq On : 30 Jan 2012 7:00 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 Tue Jan 31 13:37:24 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\013012\01301221.D Vial: 1
Acq On : 30 Jan 2012 7:00 pm Operator:
Sample : ccv std 1-2 c Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 30 19:12 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 :

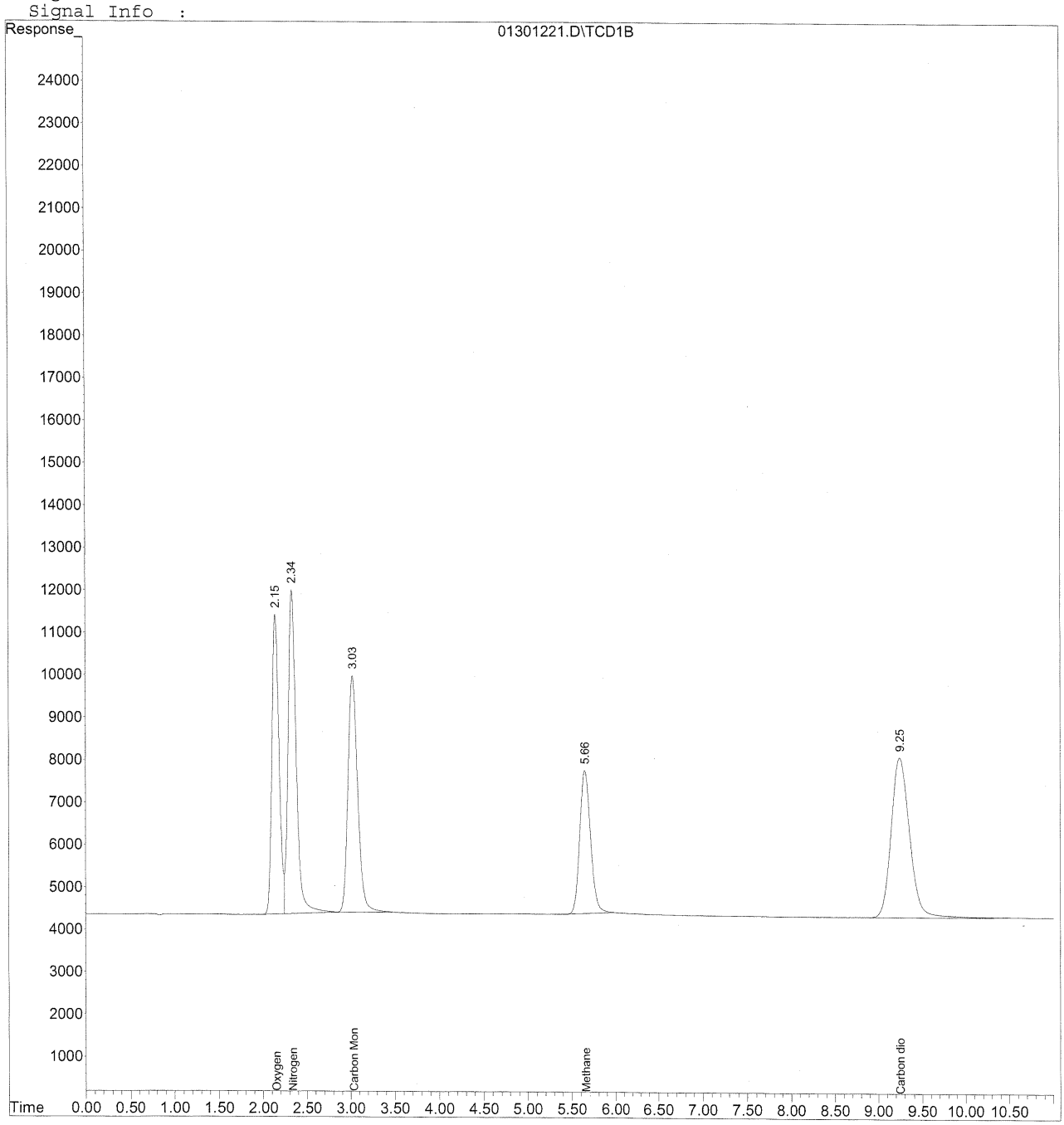
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1)	Oxygen	2.15	391810	2.529	%
2)	Nitrogen	2.34	489561	2.789	%
3)	Carbon Monoxide	3.03	438544	2.721	%
4)	Methane	5.66	285351	2.113	%
5)	Carbon dioxide	9.25	546213	2.660	%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\013012\01301221.D Vial: 1
Acq On : 30 Jan 2012 7:00 pm Operator:
Sample : ccv std 1-2 c Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 30 19:12 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

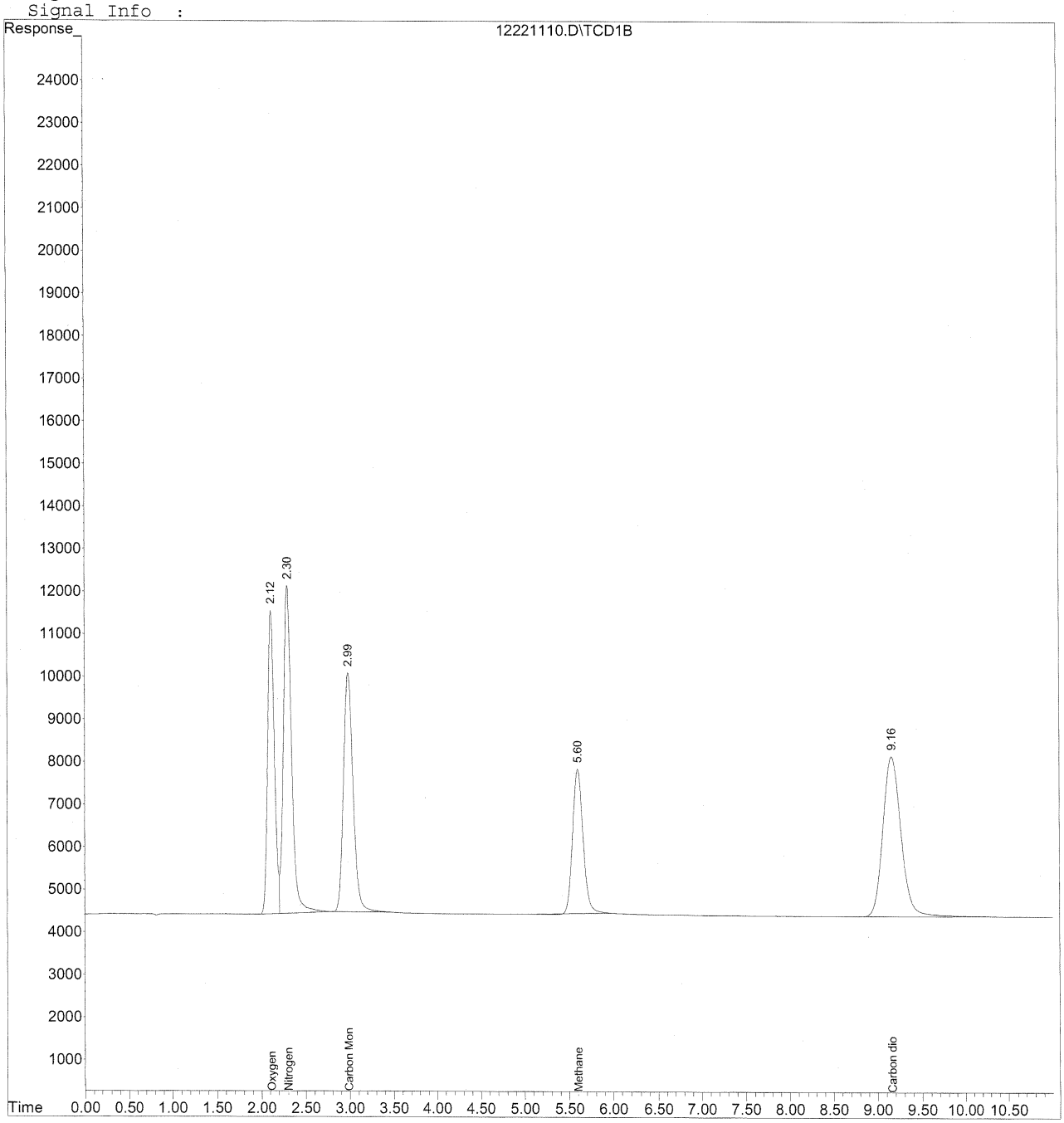
Volume Inj. :
Signal Phase :
Signal Info :

	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 :