RTI Laboratories, Inc.

Date: *13-Apr.-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: 1203732

CASE NARRATIVE

SAMPLE RECEIPT:
Samples were received at the RTI Laboratory, Livonia, MI via commercial delivery on 3/21/2012 in good condition. The sample set consisted of 38 air samples.

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

QUALITY CONTROL:

Volatile Organic Compounds Analyses:

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

Surrogate recoveries were within established control limits.

Air-Phase Petroleum Hydrocarbons Analyses:

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

Surrogate recoveries were within established control limits.

Analytical Sequence ID 47531:

- Sample ID 1203732-027Adup elevated RPD result for C9-C12 Aliphatic Hydrocarbons (200%) due to low sample concentration.

RTI Laboratories, Inc.

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CASE NARRATIVE

Fixed Gases (Noncondensable Gases/Light Hydrocarbons) Analyses:

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

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

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

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

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

Date: 4/13/2012

RTI Laboratories - Definitions and Acronyms

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Definitions:

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

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

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

DUP: Duplicate; aliquots of a sample taken from the same container under laboratory conditions and processed and analyzed independently, used to calculate Precision (%RPD).

LCS: Laboratory Control Sample; prepared by adding a known mass of target analytes to a specified amount of de-ionized water and prepared with the batch of samples, used to calculate Accuracy (%REC).

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

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

MS: Matrix Spike; prepared by adding a known mass of target analytes to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available, used to calculate Accuracy (%REC)

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

PL: Permit limit; only applicable to wastewater reports.

Qual: Qualifier that applies to the analyte reported

Result: Analyte concentration reported

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

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

Qualifiers:

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

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV076

Project Number: 140705
Project Name: Kirtland AFB
Sample Coordinator: Mark Lyon
Turnaround Time: 1203732

Samples Shipment Date: 15 MAR 2012
Lab Destination: RTI Laboratories
Lab Contact: Mike Truchan
Project Contact: Pamela Moss
Carrier/Waybill No: UPS/2323121323

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

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

Special Instructions:

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

1. Relinquished By (Signature/Affiliation): [signature] Date: 3/15/12 Time: 14:30
2. Relinquished By (Signature/Affiliation): Date: Time:
3. Relinquished By (Signature/Affiliation): Date: Time:

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

1. Received By (Signature/Affiliation): [signature] / RTI cab5 Date: 3.21.12 Time: 10:25
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
VA1007	SVMW-02-050-GS-VA1007-REG	14-MAR-2012	14:39	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0843
VA1007	SVMW-02-050-GS-VA1007-REG	14-MAR-2012	14:39	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1008	SVMW-02-100-GS-VA1008-REG	14-MAR-2012	15:15	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0708
VA1008	SVMW-02-100-GS-VA1008-REG	14-MAR-2012	15:15	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1009	SVMW-02-150-GS-VA1009-REG	14-MAR-2012	15:40	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0716
VA1009	SVMW-02-150-GS-VA1009-REG	14-MAR-2012	15:40	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1010	SVMW-05-060-GS-VA1010-REG	14-MAR-2012	12:25	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by			N		523

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Shaw E & I, Inc.

1208732

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV076

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					
VA1019	SVMW-09-450-GS VA1019 REG	14 MAR 2012	12:25	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1020	SVMW-09-100-GS VA1020 REG	14 MAR 2012	12:43	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0586
VA1020	SVMW-09-100-GS VA1020 REG	14 MAR 2012	12:43	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1021	SVMW-09-250-GS VA1021 REG	14 MAR 2012	13:04	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0657
VA1021	SVMW-09-250-GS VA1021 REG	14 MAR 2012	13:04	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1022	SVMW-09-290-GS VA1022 REG	14 MAR 2012	13:27	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0810
VA1022	SVMW-09-290-GS VA1022 REG	14 MAR 2012	13:27	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1031	SVMW-08-050-GS VA1031 REG	14 MAR 2012	10:07	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0421
VA1031	SVMW-08-050-GS VA1031 REG	14 MAR 2012	10:07	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1032	SVMW-08-100-GS VA1032 REG	14 MAR 2012	10:54	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0746
VA1032	SVMW-08-100-GS VA1032 REG	14 MAR 2012	10:54	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1033	SVMW-08-250-GS VA1033 REG	14 MAR 2012	11:25	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0752
VA1033	SVMW-08-250-GS VA1033 REG	14 MAR 2012	11:25	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1040	SVMW-10-050-GS VA1040 REG	14 MAR 2012	13:16	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		515
VA1040	SVMW-10-050-GS VA1040 REG	14 MAR 2012	13:16	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1041	SVMW-10-100-GS VA1041 REG	14 MAR 2012	14:06	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0695
VA1041	SVMW-10-100-GS VA1041 REG	14 MAR 2012	14:06	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1042	SVMW-10-150-GS VA1042 REG	14 MAR 2012	14:50	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		522
VA1042	SVMW-10-150-GS VA1042 REG	14 MAR 2012	14:50	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1043	SVMW-10-250-GS VA1043 REG	14 MAR 2012	15:22	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		530
VA1043	SVMW-10-250-GS VA1043 REG	14 MAR 2012	15:22	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1090	KAFB-106108-450-GS VA1090 REG	14 MAR 2012	10:29	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		529
VA1090	KAFB-106108-450-GS VA1090 REG	14 MAR 2012	10:29	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1091	KAFB-106109-025-GS VA1091 REG	15 MAR 2012	09:08	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0809
VA1091	KAFB-106109-025-GS VA1091 REG	15 MAR 2012	09:08	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1092	KAFB-106109-050-GS VA1092 REG	15 MAR 2012	09:31	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		566
VA1092	KAFB-106109-050-GS VA1092 REG	15 MAR 2012	09:31	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		

Shaw
Shaw E & I, Inc. 1203732

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV076

Sample No	Sample Name	Sample Date	Sample Time	Container	Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1093	KAFB 106109 150 GS VA1093 REG	15 MAR 2012	10 08	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0801
VA1093	KAFB 106109 150 GS VA1093 REG	15 MAR 2012	10 08	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1094	KAFB 106109 250 GS VA1094 REG	15 MAR 2012	10 37	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0587
VA1094	KAFB 106109 250 GS VA1094 REG	15 MAR 2012	10 37	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1095	KAFB 106109 250 GS VA1095 FD	15 MAR 2012	10 37	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0623
VA1095	KAFB 106109 250 GS VA1095 FD	15 MAR 2012	10 37	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1096	KAFB 106109 350 GS VA1096 REG	15 MAR 2012	11 41	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0570
VA1096	KAFB 106109 350 GS VA1096 REG	15 MAR 2012	11 41	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1097	KAFB 106109 450 GS VA1097 REG	15 MAR 2012	12 18	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0841
VA1097	KAFB 106109 450 GS VA1097 REG	15 MAR 2012	12 18	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1104	KAFB 106111 625 GS VA1104 REG	15 MAR 2012	09 09	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0782
VA1104	KAFB 106111 625 GS VA1104 REG	15 MAR 2012	09 09	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1105	KAFB 106111 650 GS VA1105 REG	15 MAR 2012	09 46	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		556
VA1105	KAFB 106111 650 GS VA1105 REG	15 MAR 2012	09 46	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1106	KAFB 106111 650 GS VA1106 FD	15 MAR 2012	09 46	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0770
VA1106	KAFB 106111 650 GS VA1106 FD	15 MAR 2012	09 46	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1107	KAFB 106111 150 GS VA1107 REG	15 MAR 2012	10 33	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1107	KAFB 106111 150 GS VA1107 REG	15 MAR 2012	10 33	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0730
VA1108	KAFB 106111 250 GS VA1108 REG	15 MAR 2012	11 13	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0481
VA1108	KAFB 106111 250 GS VA1108 REG	15 MAR 2012	11 13	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1195-R	KAFB 106124 350 GS VA1195-R REG	15 MAR 2012	12 21	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0745
VA1240	KAFB 106131 245 GS VA1240 REG	13 MAR 2012	13 28	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0644
VA1240	KAFB 106131 245 GS VA1240 REG	13 MAR 2012	13 28	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1241	KAFB 106131 350 GS VA1241 REG	13 MAR 2012	14 08	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0683
VA1241	KAFB 106131 350 GS VA1241 REG	13 MAR 2012	14 08	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1242	KAFB 106131 350 GS VA1242 FD	13 MAR 2012	14 08	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1242	KAFB 106131 350 GS VA1242 FD	13 MAR 2012	14 08	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0698
VA1243	KAFB 106131 450 GS VA1243 REG	13 MAR 2012	15 03	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by			N		0658

Shaw
Shaw E & I, Inc. 1203732

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No. 140705-SV070

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					
VA1247	KAFB 106131 430 GS VA1243 REG	13 MAR 2012	15 03	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1298	KAFB 106140 150 GS VA1298 REG	13 MAR 2012	13 55	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1097
VA1258	KAFB 106140 150 GS VA1298 REG	13 MAR 2012	13 55	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1299	KAFB 106140 250 GS VA1299 REG	13 MAR 2012	14 28	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		548
VA1259	KAFB 106140 250 GS VA1299 REG	13 MAR 2012	14 28	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1300	KAFB 106140 350 GS VA1300 REG	13 MAR 2012	15 04	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0595
VA1306	KAFB 106140 350 GS VA1300 REG	13 MAR 2012	15 04	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1301	KAFB 106140 350 GS VA1301 FD	13 MAR 2012	15 04	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA1307	KAFB 106140 350 GS VA1301 FD	13 MAR 2012	15 04	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0685
VA1302	KAFB 106140 450 GS VA1302 REG	14 MAR 2012	08 50	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0599
VA1303	KAFB 106140 450 GS VA1302 REG	14 MAR 2012	08 50	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA0106 TB	DELDOC AU VA0106 TB TB	14 MAR 2012	08 00	1 L BOTTLEVAC	1 None Required	VOCs / TPH by TO-15			N		0597

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

20 LBS
DWT: 21,15,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4227 8158

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

REF 1 140705
REF 2 BB010030

CUSTODY SEAL
DATE 3-15-12
SIGNATURE Daniel Medina

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

Fold here and place in label pouch

T - 10
UPST 347487

Door: 1249
MI 48150
MI 482 9-02

UPS GROUND

1Z10335E0342278158

6059 N

VA 1009 0716
VA 1241 0683
VA 1007 0843
VA 1302 0599
VA 1292 0698
VA 1240 0664
VA 1051 0621
VA 1015 530
VA 1042 522
VA 1011 0693
VA 1040 515
VA 1022 0810

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

20 LBS 2 OF 6
DWT: 21.15.10

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 4004 0765

T - 10 Door : 1249
MI 48150
IPST 347487 MI 482 9-02

PS GROUND

1Z10335E0340040765

BILLING: P/P
HAZARDOUS MATERIALS - GROUND ONLY

CUSTODY SEAL
DATE 5-15-12
SIGNATURE Daniel Medina

ces in label pouch

VA1019 523
VA1020 0586
VA1021 0657
VA1300 0595
VA1301 0685
VA1090 529
VA1243 0658
VA1298 1097
VA1299 548
VA1008 0708
VA1032 0746
VA1033 0752

FROM:
RONDA BAILEY
(505) 917-0545
KAFB BFF/SHAW E & I INC
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

20 LBS 3 OF 6
DWT: 21.15.13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4065 3979

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

REF 1: 1
REF 2: E
RTI LABORATORIES
31628 GLENDALE ST
LIVONIA MI 48150

P: RED2 S: MPUR t: 3
DAG – 4036

BILLING: P/P

CUSTODY SEAL
DATE 3-15-12
SIGNATURE Daniel Medina

Fold here and place in label pouch

VA 1096	0590
VA 1107	0730
VA 1104	0782
VA 1093	0801
VA 1195-R	0765
VA 1108	0641
VA 1105	556
VA 1094	0587
VA 1097	0841
VA 1092	566
VA 1106	0770
VA 1095	0623

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

20 LBS 4 OF 6
DWT: 21.15.13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4139 3785

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

REF 1: 140705
REF 2: BB010030

RTI LABORATORIES
31628 GLENDALE ST
LIVONIA MI 48150

P: RED2 S: MPUR L: 3
DAG – 4036
1Z 103 35E 03 4139 3785

BILLING: P/P

CUSTODY SEAL
DATE 3-15-12
SIGNATURE Daniel Medina

Fold here and place in label pouch

FROM:
RONDA BAILEY
(505)917-0645
KAFB BFF/SHAW E & I, INC.
5932 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

20 LBS 5 OF 6
DWT: 21.15.13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4049 6194

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

REF 1: 1140705
REF 2 BB010030

BILLING: P/P

CUSTODY SEAL
DATE 3-15-12
SIGNATURE Daniel Medina

Fold here and place in label pouch

RTI LABORATORIES
31628 GLENDALE ST
LIVONIA MI 48150

P: RED2 S: MPUR
DAG – 4036
1Z 103 35E 03 4049 6194

VA1091 0809
VA8076-TB 0597

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: 27,17,15

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4075 7205

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

REF 1:140705
REF 2:BB010030

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

CUSTODY SEAL
DATE 3-16-12
SIGNATURE Daniel Medina

Tedlar Bags

Fold here and place in label pouch

UPS GROUND

1Z10335E0340757205

6059 N

RTI LABORATORIES, INC.

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

Sample Receipt Checklist

Client Name SHA04 Date and Time Receive 3/21/2012 10:25:00 AM

Work Order Numbe 1203732 RcptNo: 1 Received by: **Armando Flores**

Completed by Reviewed by:

Completed Date: 3/23/2012 12:16:33 PM Reviewed Date: 3/25/2012 10:28:14 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:	See Comments		
Sample Tags Present?	Yes ☐	No ☑	
Sample Tags Listed on COC?	Yes ☐	No ☑	
Tag Numbers:			
Sample Condition?	Intact ☑	Broken ☐	Leaking ☐

Case Number: SDG: SAS:

Adjusted? _____ Checked by

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

SampID	ContainerID	Type	Org pH	Adj pH	Req Min pH	Req Max pH
1203732-001A	Container-01 of 01	Bottle				
1203732-001B	Container-01 of 01	Bottle				
1203732-002A	Container-01 of 01	Bottle				
1203732-002B	Container-01 of 01	Bottle				
1203732-003A	Container-01 of 01	Bottle				
1203732-003B	Container-01 of 01	Bottle				
1203732-004A	Container-01 of 01	Bottle				
1203732-004B	Container-01 of 01	Bottle				
1203732-005A	Container-01 of 01	Bottle				
1203732-005B	Container-01 of 01	Bottle				
1203732-006A	Container-01 of 01	Bottle				
1203732-006B	Container-01 of 01	Bottle				
1203732-007A	Container-01 of 01	Bottle				
1203732-007B	Container-01 of 01	Bottle				
1203732-008A	Container-01 of 01	Bottle				
1203732-008B	Container-01 of 01	Bottle				
1203732-009A	Container-01 of 01	Bottle				
1203732-009B	Container-01 of 01	Bottle				
1203732-010A	Container-01 of 01	Bottle				
1203732-010B	Container-01 of 01	Bottle				
1203732-011A	Container-01 of 01	Bottle				
1203732-011B	Container-01 of 01	Bottle				
1203732-012A	Container-01 of 01	Bottle				
1203732-012B	Container-01 of 01	Bottle				
1203732-013A	Container-01 of 01	Bottle				
1203732-013B	Container-01 of 01	Bottle				
1203732-014A	Container-01 of 01	Bottle				
1203732-014B	Container-01 of 01	Bottle				
1203732-015A	Container-01 of 01	Bottle				
1203732-015B	Container-01 of 01	Bottle				
1203732-016A	Container-01 of 01	Bottle				
1203732-016B	Container-01 of 01	Bottle				
1203732-017A	Container-01 of 01	Bottle				
1203732-017B	Container-01 of 01	Bottle				

SampID	ContainerID	Type	Org pH	Adj pH	Req Min pH	Req Max pH
1203732-018A	Container-01 of 01	Bottle				
1203732-018B	Container-01 of 01	Bottle				
1203732-019A	Container-01 of 01	Bottle				
1203732-019B	Container-01 of 01	Bottle				
1203732-020A	Container-01 of 01	Bottle				
1203732-020B	Container-01 of 01	Bottle				
1203732-021A	Container-01 of 01	Bottle				
1203732-021B	Container-01 of 01	Bottle				
1203732-022A	Container-01 of 01	Bottle				
1203732-022B	Container-01 of 01	Bottle				
1203732-023A	Container-01 of 01	Bottle				
1203732-023B	Container-01 of 01	Bottle				
1203732-024A	Container-01 of 01	Bottle				
1203732-024B	Container-01 of 01	Bottle				
1203732-025A	Container-01 of 01	Bottle				
1203732-025B	Container-01 of 01	Bottle				
1203732-026A	Container-01 of 01	Bottle				
1203732-026B	Container-01 of 01	Bottle				
1203732-027A	Container-01 of 01	Bottle				
1203732-027B	Container-01 of 01	Bottle				
1203732-028A	Container-01 of 01	Bottle				
1203732-029A	Container-01 of 01	Bottle				
1203732-029B	Container-01 of 01	Bottle				
1203732-030A	Container-01 of 01	Bottle				
1203732-030B	Container-01 of 01	Bottle				
1203732-031A	Container-01 of 01	Bottle				
1203732-031B	Container-01 of 01	Bottle				
1203732-032A	Container-01 of 01	Bottle				
1203732-032B	Container-01 of 01	Bottle				
1203732-033A	Container-01 of 01	Bottle				
1203732-033B	Container-01 of 01	Bottle				
1203732-034A	Container-01 of 01	Bottle				
1203732-034B	Container-01 of 01	Bottle				
1203732-035A	Container-01 of 01	Bottle				

SampID	ContainerID	Type	Org pH	Adj pH	Req Min pH	Req Max pH
1203732-035B	Container-01 of 01	Bottle				
1203732-036A	Container-01 of 01	Bottle				
1203732-036B	Container-01 of 01	Bottle				
1203732-037A	Container-01 of 01	Bottle				
1203732-037B	Container-01 of 01	Bottle				
1203732-038A	Container-01 of 01	Bottle				

Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
Cardboard b	n/a	Good	Yes		3/15/2012	See COC

Adjusted? _____ Checked by _____

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

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

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

Client Instructions:

Date Contacted: Contacted By:

Regarding:

CorrectiveAction:

Comments:
UPS Nos.:
1Z10335E0342278158,
1Z10335E0340040765,
1Z10335E0340653979,
1Z10335E0341393785,
1Z10335E0340496194,
1Z10335E0340757205

RTI Laboratories - Workorder Sample Summary

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1203732-001	VA1007		3/14/2012 2:39 PM	3/21/2012 10:25 AM	Air
1203732-001	VA1007		3/14/2012 2:39 PM	3/21/2012 10:25 AM	Air
1203732-002	VA1008		3/14/2012 3:15 PM	3/21/2012 10:25 AM	Air
1203732-002	VA1008		3/14/2012 3:15 PM	3/21/2012 10:25 AM	Air
1203732-003	VA1009		3/14/2012 3:40 PM	3/21/2012 10:25 AM	Air
1203732-003	VA1009		3/14/2012 3:40 PM	3/21/2012 10:25 AM	Air
1203732-004	VA1019		3/14/2012 12:25 PM	3/21/2012 10:25 AM	Air
1203732-004	VA1019		3/14/2012 12:25 PM	3/21/2012 10:25 AM	Air
1203732-005	VA1020		3/14/2012 12:43 PM	3/21/2012 10:25 AM	Air
1203732-005	VA1020		3/14/2012 12:43 PM	3/21/2012 10:25 AM	Air
1203732-006	VA1021		3/14/2012 1:04 PM	3/21/2012 10:25 AM	Air
1203732-006	VA1021		3/14/2012 1:04 PM	3/21/2012 10:25 AM	Air
1203732-007	VA1022		3/14/2012 1:27 PM	3/21/2012 10:25 AM	Air
1203732-007	VA1022		3/14/2012 1:27 PM	3/21/2012 10:25 AM	Air
1203732-008	VA1031		3/14/2012 10:07 AM	3/21/2012 10:25 AM	Air
1203732-008	VA1031		3/14/2012 10:07 AM	3/21/2012 10:25 AM	Air
1203732-009	VA1032		3/14/2012 10:54 AM	3/21/2012 10:25 AM	Air
1203732-009	VA1032		3/14/2012 10:54 AM	3/21/2012 10:25 AM	Air
1203732-010	VA1033		3/14/2012 11:25 AM	3/21/2012 10:25 AM	Air
1203732-010	VA1033		3/14/2012 11:25 AM	3/21/2012 10:25 AM	Air
1203732-011	VA1040		3/14/2012 1:16 PM	3/21/2012 10:25 AM	Air
1203732-011	VA1040		3/14/2012 1:16 PM	3/21/2012 10:25 AM	Air
1203732-012	VA1041		3/14/2012 2:06 PM	3/21/2012 10:25 AM	Air
1203732-012	VA1041		3/14/2012 2:06 PM	3/21/2012 10:25 AM	Air
1203732-013	VA1042		3/14/2012 2:50 PM	3/21/2012 10:25 AM	Air
1203732-013	VA1042		3/14/2012 2:50 PM	3/21/2012 10:25 AM	Air
1203732-014	VA1043		3/14/2012 3:22 PM	3/21/2012 10:25 AM	Air
1203732-014	VA1043		3/14/2012 3:22 PM	3/21/2012 10:25 AM	Air
1203732-015	VA1090		3/14/2012 10:29 AM	3/21/2012 10:25 AM	Air
1203732-015	VA1090		3/14/2012 10:29 AM	3/21/2012 10:25 AM	Air
1203732-016	VA1091		3/15/2012 9:08 AM	3/21/2012 10:25 AM	Air
1203732-016	VA1091		3/15/2012 9:08 AM	3/21/2012 10:25 AM	Air
1203732-017	VA1092		3/15/2012 9:31 AM	3/21/2012 10:25 AM	Air
1203732-017	VA1092		3/15/2012 9:31 AM	3/21/2012 10:25 AM	Air
1203732-018	VA1093		3/15/2012 10:08 AM	3/21/2012 10:25 AM	Air
1203732-018	VA1093		3/15/2012 10:08 AM	3/21/2012 10:25 AM	Air
1203732-019	VA1094		3/15/2012 10:37 AM	3/21/2012 10:25 AM	Air
1203732-019	VA1094		3/15/2012 10:37 AM	3/21/2012 10:25 AM	Air
1203732-020	VA1095		3/15/2012 10:37 AM	3/21/2012 10:25 AM	Air
1203732-020	VA1095		3/15/2012 10:37 AM	3/21/2012 10:25 AM	Air
1203732-021	VA1096		3/15/2012 11:41 AM	3/21/2012 10:25 AM	Air
1203732-021	VA1096		3/15/2012 11:41 AM	3/21/2012 10:25 AM	Air
1203732-022	VA1097		3/15/2012 12:18 PM	3/21/2012 10:25 AM	Air
1203732-022	VA1097		3/15/2012 12:18 PM	3/21/2012 10:25 AM	Air
1203732-023	VA1104		3/15/2012 9:09 AM	3/21/2012 10:25 AM	Air

RTI Laboratories - Workorder Sample Summary

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1203732-023	VA1104		3/15/2012 9:09 AM	3/21/2012 10:25 AM	Air
1203732-024	VA1105		3/15/2012 9:46 AM	3/21/2012 10:25 AM	Air
1203732-024	VA1105		3/15/2012 9:46 AM	3/21/2012 10:25 AM	Air
1203732-025	VA1106		3/15/2012 9:46 AM	3/21/2012 10:25 AM	Air
1203732-025	VA1106		3/15/2012 9:46 AM	3/21/2012 10:25 AM	Air
1203732-026	VA1107		3/15/2012 10:33 AM	3/21/2012 10:25 AM	Air
1203732-026	VA1107		3/15/2012 10:33 AM	3/21/2012 10:25 AM	Air
1203732-027	VA1108		3/15/2012 11:13 AM	3/21/2012 10:25 AM	Air
1203732-027	VA1108		3/15/2012 11:13 AM	3/21/2012 10:25 AM	Air
1203732-028	VA1195-R		3/15/2012 12:21 PM	3/21/2012 10:25 AM	Air
1203732-029	VA1240		3/13/2012 1:28 PM	3/21/2012 10:25 AM	Air
1203732-029	VA1240		3/13/2012 1:28 PM	3/21/2012 10:25 AM	Air
1203732-030	VA1241		3/13/2012 2:08 PM	3/21/2012 10:25 AM	Air
1203732-030	VA1241		3/13/2012 2:08 PM	3/21/2012 10:25 AM	Air
1203732-031	VA1242		3/13/2012 2:08 PM	3/21/2012 10:25 AM	Air
1203732-031	VA1242		3/13/2012 2:08 PM	3/21/2012 10:25 AM	Air
1203732-032	VA1243		3/13/2012 3:03 PM	3/21/2012 10:25 AM	Air
1203732-032	VA1243		3/13/2012 3:03 PM	3/21/2012 10:25 AM	Air
1203732-033	VA1298		3/13/2012 1:55 PM	3/21/2012 10:25 AM	Air
1203732-033	VA1298		3/13/2012 1:55 PM	3/21/2012 10:25 AM	Air
1203732-034	VA1299		3/13/2012 2:28 PM	3/21/2012 10:25 AM	Air
1203732-034	VA1299		3/13/2012 2:28 PM	3/21/2012 10:25 AM	Air
1203732-035	VA1300		3/13/2012 3:04 PM	3/21/2012 10:25 AM	Air
1203732-035	VA1300		3/13/2012 3:04 PM	3/21/2012 10:25 AM	Air
1203732-036	VA1301		3/13/2012 3:04 PM	3/21/2012 10:25 AM	Air
1203732-036	VA1301		3/13/2012 3:04 PM	3/21/2012 10:25 AM	Air
1203732-037	VA1302		3/14/2012 8:00 AM	3/21/2012 10:25 AM	Air
1203732-037	VA1302		3/14/2012 8:00 AM	3/21/2012 10:25 AM	Air
1203732-038	VA8076-TB		3/14/2012 8:00 AM	3/21/2012 10:25 AM	Air

RTI Laboratories - DATES REPORT

WO#: 1203732

Date Reported: 4/10/2012
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
1203732-001A	VA1007	3/14/2012 2:39 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/6/2012 1:00 AM
				EPA_TO15-Volatile Organic Compounds			4/5/2012 6:49 PM
1203732-001B	VA1007	3/14/2012 2:39 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/27/2012 2:52 PM
1203732-002A	VA1008	3/14/2012 3:15 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/6/2012 10:19 AM
				EPA_TO15-Volatile Organic Compounds			4/5/2012 8:10 PM
1203732-002B	VA1008	3/14/2012 3:15 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/27/2012 3:09 PM
1203732-003A	VA1009	3/14/2012 3:40 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/6/2012 2:01 PM
				EPA_TO15-Volatile Organic Compounds			4/5/2012 10:20 PM
1203732-003B	VA1009	3/14/2012 3:40 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/27/2012 3:25 PM
1203732-004A	VA1019	3/14/2012 12:25 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/5/2012 7:36 PM
				EPA_TO15-Volatile Organic Compounds			4/6/2012 1:30 AM
1203732-004B	VA1019	3/14/2012 12:25 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/27/2012 3:40 PM
1203732-005A	VA1020	3/14/2012 12:43 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/5/2012 8:25 PM
				EPA_TO15-Volatile Organic Compounds			4/6/2012 2:18 AM
1203732-005B	VA1020	3/14/2012 12:43 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/27/2012 3:55 PM
1203732-006A	VA1021	3/14/2012 1:04 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/5/2012 9:14 PM
				EPA_TO15-Volatile Organic Compounds			4/5/2012 3:49 PM

RTI Laboratories - DATES REPORT

WO#: 1203732

Date Reported: 4/10/2012
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
1203732-006B	VA1021	3/14/2012 1:04 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/27/2012 4:11 PM
1203732-007A	VA1022	3/14/2012 1:27 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/5/2012 11:28 PM
				EPA_TO15-Volatile Organic Compounds			4/5/2012 6:01 PM
1203732-007B	VA1022	3/14/2012 1:27 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/27/2012 4:26 PM
1203732-008A	VA1031	3/14/2012 10:07 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/5/2012 4:21 AM
				EPA_TO15-Volatile Organic Compounds			4/4/2012 5:12 PM
				EPA_TO15-Volatile Organic Compounds			4/7/2012 12:37 AM
1203732-008B	VA1031	3/14/2012 10:07 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/28/2012 12:49 PM
1203732-009A	VA1032	3/14/2012 10:54 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/5/2012 10:25 AM
				EPA_TO15-Volatile Organic Compounds			4/5/2012 3:56 AM
1203732-009B	VA1032	3/14/2012 10:54 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/28/2012 1:50 PM
1203732-010A	VA1033	3/14/2012 11:25 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/5/2012 6:36 AM
				EPA_TO15-Volatile Organic Compounds			4/5/2012 4:39 AM
1203732-010B	VA1033	3/14/2012 11:25 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/28/2012 2:15 PM
1203732-011A	VA1040	3/14/2012 1:16 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/5/2012 9:57 PM
				EPA_TO15-Volatile Organic Compounds			4/5/2012 4:32 PM
				EPA_TO15-Volatile Organic Compounds			4/8/2012 1:34 AM

RTI Laboratories - DATES REPORT

WO#: 1203732

Date Reported: 4/10/2012
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
1203732-011B	VA1040	3/14/2012 1:16 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/28/2012 2:39 PM
1203732-012A	VA1041	3/14/2012 2:06 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			4/6/2012 12:11 AM
				EPA_TO15-Volatile Organic Compounds			4/5/2012 5:13 PM
				EPA_TO15-Volatile Organic Compounds			4/7/2012 4:25 AM
				EPA_TO15-Volatile Organic Compounds			4/8/2012 12:52 AM
1203732-012B	VA1041	3/14/2012 2:06 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/28/2012 2:57 PM
1203732-013A	VA1042	3/14/2012 2:50 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			4/6/2012 1:15 PM
				EPA_TO15-Volatile Organic Compounds			4/5/2012 7:30 PM
1203732-013B	VA1042	3/14/2012 2:50 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/28/2012 3:13 PM
1203732-014A	VA1043	3/14/2012 3:22 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			4/6/2012 3:08 AM
				EPA_TO15-Volatile Organic Compounds			4/5/2012 9:32 PM
1203732-014B	VA1043	3/14/2012 3:22 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/28/2012 3:42 PM
1203732-015A	VA1090	3/14/2012 10:29 AM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			4/5/2012 5:10 AM
				EPA_TO15-Volatile Organic Compounds			4/7/2012 1:25 AM
1203732-015B	VA1090	3/14/2012 10:29 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/28/2012 4:01 PM
1203732-016A	VA1091	3/15/2012 9:08 AM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			4/6/2012 6:42 PM
				EPA_TO15-Volatile Organic Compounds			4/5/2012 11:07 PM

RTI Laboratories - DATES REPORT

WO#: 1203732

Date Reported: 4/10/2012
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
1203732-016B	VA1091	3/15/2012 9:08 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/28/2012 4:47 PM
1203732-017A	VA1092	3/15/2012 9:31 AM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			4/8/2012 12:38 AM
				EPA_TO15-Volatile Organic Compounds			4/6/2012 12:42 AM
1203732-017B	VA1092	3/15/2012 9:31 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/28/2012 5:23 PM
1203732-018A	VA1093	3/15/2012 10:08 AM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			4/9/2012 1:27 PM
				EPA_TO15-Volatile Organic Compounds			4/8/2012 1:20 PM
1203732-018B	VA1093	3/15/2012 10:08 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/29/2012 11:02 AM
1203732-019A	VA1094	3/15/2012 10:37 AM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			4/8/2012 2:17 AM
				EPA_TO15-Volatile Organic Compounds			4/8/2012 3:11 AM
1203732-019B	VA1094	3/15/2012 10:37 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/29/2012 11:19 AM
1203732-020A	VA1095	3/15/2012 10:37 AM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			4/8/2012 3:07 AM
				EPA_TO15-Volatile Organic Compounds			4/8/2012 3:59 AM
1203732-020B	VA1095	3/15/2012 10:37 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/29/2012 11:34 AM
1203732-021A	VA1096	3/15/2012 11:41 AM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			4/9/2012 3:45 PM
				EPA_TO15-Volatile Organic Compounds			4/8/2012 4:47 AM
1203732-021B	VA1096	3/15/2012 11:41 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/29/2012 11:56 AM

RTI Laboratories - DATES REPORT

WO#: 1203732

Date Reported: 4/10/2012
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
1203732-022A	VA1097	3/15/2012 12:18 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/9/2012 4:27 PM
				EPA_TO15-Volatile Organic Compounds			4/8/2012 5:35 AM
1203732-022B	VA1097	3/15/2012 12:18 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/29/2012 12:11 PM
1203732-023A	VA1104	3/15/2012 9:09 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/7/2012 12:23 AM
				EPA_TO15-Volatile Organic Compounds			4/5/2012 11:55 PM
				EPA_TO15-Volatile Organic Compounds			4/7/2012 5:09 AM
1203732-023B	VA1104	3/15/2012 9:09 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/29/2012 12:27 PM
1203732-024A	VA1105	3/15/2012 9:46 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/7/2012 1:06 AM
				EPA_TO15-Volatile Organic Compounds			4/6/2012 12:53 PM
				EPA_TO15-Volatile Organic Compounds			4/6/2012 4:31 PM
1203732-024B	VA1105	3/15/2012 9:46 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/29/2012 12:42 PM
1203732-025A	VA1106	3/15/2012 9:46 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/7/2012 1:48 AM
				EPA_TO15-Volatile Organic Compounds			4/6/2012 2:42 PM
				EPA_TO15-Volatile Organic Compounds			4/6/2012 5:13 PM
1203732-025B	VA1106	3/15/2012 9:46 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/29/2012 12:58 PM
1203732-026A	VA1107	3/15/2012 10:33 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/9/2012 2:16 PM
				EPA_TO15-Volatile Organic Compounds			4/6/2012 6:42 PM
1203732-026B	VA1107	3/15/2012 10:33 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/29/2012 1:13 PM

RTI Laboratories - DATES REPORT

WO#: 1203732

Date Reported: 4/10/2012
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
1203732-027A	VA1108	3/15/2012 11:13 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/9/2012 5:11 PM
				EPA_TO15-Volatile Organic Compounds			4/6/2012 8:56 PM
1203732-027B	VA1108	3/15/2012 11:13 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/29/2012 1:28 PM
1203732-028A	VA1195-R	3/15/2012 12:21 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/7/2012 3:56 AM
				EPA_TO15-Volatile Organic Compounds			4/6/2012 11:55 PM
				EPA_TO15-Volatile Organic Compounds			4/8/2012 2:44 PM
1203732-029A	VA1240	3/13/2012 1:28 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/4/2012 8:45 PM
				EPA_TO15-Volatile Organic Compounds			4/4/2012 7:39 PM
1203732-029B	VA1240	3/13/2012 1:28 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/29/2012 2:14 PM
1203732-030A	VA1241	3/13/2012 2:08 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/4/2012 10:23 PM
				EPA_TO15-Volatile Organic Compounds			4/4/2012 9:23 PM
1203732-030B	VA1241	3/13/2012 2:08 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/29/2012 2:28 PM
1203732-031A	VA1242	3/13/2012 2:08 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/4/2012 11:11 PM
				EPA_TO15-Volatile Organic Compounds			4/4/2012 10:14 PM
1203732-031B	VA1242	3/13/2012 2:08 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/29/2012 2:43 PM
1203732-032A	VA1243	3/13/2012 3:03 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/5/2012 12:43 AM
				EPA_TO15-Volatile Organic Compounds			3/31/2012 12:46 AM
1203732-032B	VA1243	3/13/2012 3:03 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/29/2012 2:58 PM

RTI Laboratories - DATES REPORT

WO#: 1203732

Date Reported: 4/10/2012
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
1203732-033A	VA1298	3/13/2012 1:55 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/4/2012 9:34 PM
				EPA_TO15-Volatile Organic Compounds			4/4/2012 8:31 PM
1203732-033B	VA1298	3/13/2012 1:55 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/29/2012 3:13 PM
1203732-034A	VA1299	3/13/2012 2:28 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/5/2012 12:00 AM
				EPA_TO15-Volatile Organic Compounds			4/4/2012 11:05 PM
1203732-034B	VA1299	3/13/2012 2:28 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/29/2012 3:30 PM
1203732-035A	VA1300	3/13/2012 3:04 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/5/2012 2:07 AM
				EPA_TO15-Volatile Organic Compounds			4/4/2012 11:52 PM
1203732-035B	VA1300	3/13/2012 3:04 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/29/2012 3:45 PM
1203732-036A	VA1301	3/13/2012 3:04 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/5/2012 2:50 AM
				EPA_TO15-Volatile Organic Compounds			4/5/2012 12:39 AM
1203732-036B	VA1301	3/13/2012 3:04 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/29/2012 4:38 PM
1203732-037A	VA1302	3/14/2012 8:00 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/5/2012 1:29 PM
				EPA_TO15-Volatile Organic Compounds			4/6/2012 2:58 AM
1203732-037B	VA1302	3/14/2012 8:00 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			3/29/2012 4:53 PM
1203732-038A	VA8076-TB	3/14/2012 8:00 AM	Air				
				EPA_TO15-Volatile Organic Compounds			4/5/2012 2:19 AM
				EPA_TO15-Volatile Organic Compounds			4/6/2012 3:41 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 2:39:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-001	**Matrix:**	Air
Client Sample ID:	VA1007		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	4.5	0.10		%	1	3/27/2012 2:52 PM
Carbon Monoxide	ND	0.10	U	%	1	3/27/2012 2:52 PM
Methane	ND	0.50	U	%	1	3/27/2012 2:52 PM
Nitrogen	80	0.10		%	1	3/27/2012 2:52 PM
Oxygen	15	0.10		%	1	3/27/2012 2:52 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	4/5/2012 6:49 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	4/5/2012 6:49 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	4/5/2012 6:49 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	4/5/2012 6:49 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	4/5/2012 6:49 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	4/5/2012 6:49 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	4/5/2012 6:49 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	4/5/2012 6:49 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	4/5/2012 6:49 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	4/5/2012 6:49 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	4/5/2012 6:49 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	4/5/2012 6:49 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	4/5/2012 6:49 PM
1,3-Butadiene	ND	400	U	ppbv	400	4/5/2012 6:49 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	4/5/2012 6:49 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	4/5/2012 6:49 PM
2-Butanone	650	400		ppbv	400	4/5/2012 6:49 PM
2-Hexanone	ND	400	U	ppbv	400	4/5/2012 6:49 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	4/5/2012 6:49 PM
Acetone	2,900	400		ppbv	400	4/5/2012 6:49 PM
Benzene	2,900	400		ppbv	400	4/5/2012 6:49 PM
Benzyl chloride	ND	400	U	ppbv	400	4/5/2012 6:49 PM
Bromodichloromethane	ND	400	U	ppbv	400	4/5/2012 6:49 PM
Bromoform	ND	400	U	ppbv	400	4/5/2012 6:49 PM
Bromomethane	ND	400	U	ppbv	400	4/5/2012 6:49 PM
Carbon disulfide	ND	400	U	ppbv	400	4/5/2012 6:49 PM
Carbon tetrachloride	ND	400	U	ppbv	400	4/5/2012 6:49 PM
Chlorobenzene	ND	400	U	ppbv	400	4/5/2012 6:49 PM
Chlorodibromomethane	ND	400	U	ppbv	400	4/5/2012 6:49 PM
Chloroethane	ND	400	U	ppbv	400	4/5/2012 6:49 PM
Chloroform	ND	400	U	ppbv	400	4/5/2012 6:49 PM
Chloromethane	ND	400	U	ppbv	400	4/5/2012 6:49 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	4/5/2012 6:49 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	4/5/2012 6:49 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 2:39:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-001	**Matrix:**	Air
Client Sample ID:	VA1007		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	3,600	800		ppbv	400	4/5/2012 6:49 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	4/5/2012 6:49 PM
Ethyl acetate	ND	400	U	ppbv	400	4/5/2012 6:49 PM
Ethylbenzene	ND	800	U	ppbv	400	4/5/2012 6:49 PM
Heptane	3,700	400		ppbv	400	4/5/2012 6:49 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	4/5/2012 6:49 PM
m,p-Xylene	1,100	800		ppbv	400	4/5/2012 6:49 PM
Methylene chloride	ND	2,000	U	ppbv	400	4/5/2012 6:49 PM
n-Hexane	2,800	800		ppbv	400	4/5/2012 6:49 PM
Naphthalene	ND	400	U	ppbv	400	4/5/2012 6:49 PM
o-Xylene	ND	400	U	ppbv	400	4/5/2012 6:49 PM
Propylene	ND	400	U	ppbv	400	4/5/2012 6:49 PM
Styrene	ND	400	U	ppbv	400	4/5/2012 6:49 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	4/5/2012 6:49 PM
Tetrachloroethene	ND	400	U	ppbv	400	4/5/2012 6:49 PM
Tetrahydrofuran	ND	400	U	ppbv	400	4/5/2012 6:49 PM
Toluene	7,600	400		ppbv	400	4/5/2012 6:49 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	4/5/2012 6:49 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	4/5/2012 6:49 PM
Trichloroethene	ND	400	U	ppbv	400	4/5/2012 6:49 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	4/5/2012 6:49 PM
Vinyl acetate	ND	400	U	ppbv	400	4/5/2012 6:49 PM
Vinyl chloride	ND	400	U	ppbv	400	4/5/2012 6:49 PM
Xylenes, Total	1,100	1,200	J	ppbv	400	4/5/2012 6:49 PM
Surr: 4-Bromofluorobenzene	99.0	70-130		%REC	400	4/5/2012 6:49 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	450,000	47,000		µg/m³	400	4/6/2012 1:00 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	4/6/2012 1:00 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	4/6/2012 1:00 AM
Surr: 4-Bromofluorobenzene	97.1	70-130		%REC	400	4/6/2012 1:00 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 3:15:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-002	**Matrix:**	Air
Client Sample ID:	VA1008		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	8.6	0.10		%	1	3/27/2012 3:09 PM
Carbon Monoxide	ND	0.10	U	%	1	3/27/2012 3:09 PM
Methane	ND	0.50	U	%	1	3/27/2012 3:09 PM
Nitrogen	81	0.10		%	1	3/27/2012 3:09 PM
Oxygen	8.8	0.10		%	1	3/27/2012 3:09 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
2-Butanone	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
2-Hexanone	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
Acetone	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
Benzene	120,000	8,000		ppbv	8000	4/5/2012 8:10 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
Bromoform	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
Bromomethane	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
Chloroethane	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
Chloroform	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
Chloromethane	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 3:15:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-002	**Matrix:**	Air
Client Sample ID:	VA1008		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	380,000	16,000		ppbv	8000	4/5/2012 8:10 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
Ethylbenzene	9,400	16,000	J	ppbv	8000	4/5/2012 8:10 PM
Heptane	170,000	8,000		ppbv	8000	4/5/2012 8:10 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	4/5/2012 8:10 PM
m,p-Xylene	24,000	16,000		ppbv	8000	4/5/2012 8:10 PM
Methylene chloride	ND	40,000	U	ppbv	8000	4/5/2012 8:10 PM
n-Hexane	270,000	16,000		ppbv	8000	4/5/2012 8:10 PM
Naphthalene	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
o-Xylene	8,600	8,000		ppbv	8000	4/5/2012 8:10 PM
Propylene	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
Styrene	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
Toluene	250,000	8,000		ppbv	8000	4/5/2012 8:10 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
Trichloroethene	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	4/5/2012 8:10 PM
Xylenes, Total	33,000	24,000		ppbv	8000	4/5/2012 8:10 PM
Surr: 4-Bromofluorobenzene	98.7	70-130		%REC	8000	4/5/2012 8:10 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	30,000,000	4,700,000		µg/m³	40000	4/6/2012 10:19 AM
C9-C10 Aromatic Hydrocarbons	ND	5,300,000	U	µg/m³	40000	4/6/2012 10:19 AM
C9-C12 Aliphatic Hydrocarbons	ND	7,600,000	U	µg/m³	40000	4/6/2012 10:19 AM
Surr: 4-Bromofluorobenzene	93.7	70-130		%REC	40000	4/6/2012 10:19 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 3:40:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-003	**Matrix:**	Air
Client Sample ID:	VA1009		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.92	0.10		%	1	3/27/2012 3:25 PM
Carbon Monoxide	ND	0.10	U	%	1	3/27/2012 3:25 PM
Methane	ND	0.50	U	%	1	3/27/2012 3:25 PM
Nitrogen	80	0.10		%	1	3/27/2012 3:25 PM
Oxygen	19	0.10		%	1	3/27/2012 3:25 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	4/5/2012 10:20 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	4/5/2012 10:20 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	4/5/2012 10:20 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	4/5/2012 10:20 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	4/5/2012 10:20 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	4/5/2012 10:20 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	4/5/2012 10:20 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	4/5/2012 10:20 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	4/5/2012 10:20 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	4/5/2012 10:20 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	4/5/2012 10:20 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	4/5/2012 10:20 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	4/5/2012 10:20 PM
1,3-Butadiene	ND	400	U	ppbv	400	4/5/2012 10:20 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	4/5/2012 10:20 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	4/5/2012 10:20 PM
2-Butanone	ND	400	U	ppbv	400	4/5/2012 10:20 PM
2-Hexanone	ND	400	U	ppbv	400	4/5/2012 10:20 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	4/5/2012 10:20 PM
Acetone	830	400		ppbv	400	4/5/2012 10:20 PM
Benzene	15,000	400		ppbv	400	4/5/2012 10:20 PM
Benzyl chloride	ND	400	U	ppbv	400	4/5/2012 10:20 PM
Bromodichloromethane	ND	400	U	ppbv	400	4/5/2012 10:20 PM
Bromoform	ND	400	U	ppbv	400	4/5/2012 10:20 PM
Bromomethane	ND	400	U	ppbv	400	4/5/2012 10:20 PM
Carbon disulfide	ND	400	U	ppbv	400	4/5/2012 10:20 PM
Carbon tetrachloride	ND	400	U	ppbv	400	4/5/2012 10:20 PM
Chlorobenzene	ND	400	U	ppbv	400	4/5/2012 10:20 PM
Chlorodibromomethane	ND	400	U	ppbv	400	4/5/2012 10:20 PM
Chloroethane	ND	400	U	ppbv	400	4/5/2012 10:20 PM
Chloroform	ND	400	U	ppbv	400	4/5/2012 10:20 PM
Chloromethane	ND	400	U	ppbv	400	4/5/2012 10:20 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	4/5/2012 10:20 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	4/5/2012 10:20 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 3:40:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-003	**Matrix:**	Air
Client Sample ID:	VA1009		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	17,000	800		ppbv	400	4/5/2012 10:20 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	4/5/2012 10:20 PM
Ethyl acetate	ND	400	U	ppbv	400	4/5/2012 10:20 PM
Ethylbenzene	510	800	J	ppbv	400	4/5/2012 10:20 PM
Heptane	7,400	400		ppbv	400	4/5/2012 10:20 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	4/5/2012 10:20 PM
m,p-Xylene	1,600	800		ppbv	400	4/5/2012 10:20 PM
Methylene chloride	ND	2,000	U	ppbv	400	4/5/2012 10:20 PM
n-Hexane	16,000	800		ppbv	400	4/5/2012 10:20 PM
Naphthalene	ND	400	U	ppbv	400	4/5/2012 10:20 PM
o-Xylene	530	400		ppbv	400	4/5/2012 10:20 PM
Propylene	590	400		ppbv	400	4/5/2012 10:20 PM
Styrene	ND	400	U	ppbv	400	4/5/2012 10:20 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	4/5/2012 10:20 PM
Tetrachloroethene	ND	400	U	ppbv	400	4/5/2012 10:20 PM
Tetrahydrofuran	ND	400	U	ppbv	400	4/5/2012 10:20 PM
Toluene	16,000	400		ppbv	400	4/5/2012 10:20 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	4/5/2012 10:20 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	4/5/2012 10:20 PM
Trichloroethene	ND	400	U	ppbv	400	4/5/2012 10:20 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	4/5/2012 10:20 PM
Vinyl acetate	ND	400	U	ppbv	400	4/5/2012 10:20 PM
Vinyl chloride	ND	400	U	ppbv	400	4/5/2012 10:20 PM
Xylenes, Total	2,100	1,200		ppbv	400	4/5/2012 10:20 PM
Surr: 4-Bromofluorobenzene	99.6	70-130		%REC	400	4/5/2012 10:20 PM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	1,200,000	94,000		µg/m³	800	4/6/2012 2:01 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	4/6/2012 2:01 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	4/6/2012 2:01 PM
Surr: 4-Bromofluorobenzene	97.6	70-130		%REC	800	4/6/2012 2:01 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 12:25:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-004	**Matrix:**	Air
Client Sample ID:	VA1019		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	3.7	0.10		%	1	3/27/2012 3:40 PM
Carbon Monoxide	ND	0.10	U	%	1	3/27/2012 3:40 PM
Methane	ND	0.50	U	%	1	3/27/2012 3:40 PM
Nitrogen	80	0.10		%	1	3/27/2012 3:40 PM
Oxygen	16	0.10		%	1	3/27/2012 3:40 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	4/6/2012 1:30 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	4/6/2012 1:30 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	4/6/2012 1:30 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	4/6/2012 1:30 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	4/6/2012 1:30 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	4/6/2012 1:30 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	4/6/2012 1:30 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	4/6/2012 1:30 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	4/6/2012 1:30 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	4/6/2012 1:30 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	4/6/2012 1:30 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	4/6/2012 1:30 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	4/6/2012 1:30 AM
1,3-Butadiene	ND	400	U	ppbv	400	4/6/2012 1:30 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	4/6/2012 1:30 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	4/6/2012 1:30 AM
2-Butanone	ND	400	U	ppbv	400	4/6/2012 1:30 AM
2-Hexanone	ND	400	U	ppbv	400	4/6/2012 1:30 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	4/6/2012 1:30 AM
Acetone	700	400		ppbv	400	4/6/2012 1:30 AM
Benzene	2,700	400		ppbv	400	4/6/2012 1:30 AM
Benzyl chloride	ND	400	U	ppbv	400	4/6/2012 1:30 AM
Bromodichloromethane	ND	400	U	ppbv	400	4/6/2012 1:30 AM
Bromoform	ND	400	U	ppbv	400	4/6/2012 1:30 AM
Bromomethane	ND	400	U	ppbv	400	4/6/2012 1:30 AM
Carbon disulfide	ND	400	U	ppbv	400	4/6/2012 1:30 AM
Carbon tetrachloride	ND	400	U	ppbv	400	4/6/2012 1:30 AM
Chlorobenzene	ND	400	U	ppbv	400	4/6/2012 1:30 AM
Chlorodibromomethane	ND	400	U	ppbv	400	4/6/2012 1:30 AM
Chloroethane	ND	400	U	ppbv	400	4/6/2012 1:30 AM
Chloroform	ND	400	U	ppbv	400	4/6/2012 1:30 AM
Chloromethane	ND	400	U	ppbv	400	4/6/2012 1:30 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	4/6/2012 1:30 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	4/6/2012 1:30 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 12:25:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-004	**Matrix:**	Air
Client Sample ID:	VA1019		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	5,200	800		ppbv	400	4/6/2012 1:30 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	4/6/2012 1:30 AM
Ethyl acetate	ND	400	U	ppbv	400	4/6/2012 1:30 AM
Ethylbenzene	540	800	J	ppbv	400	4/6/2012 1:30 AM
Heptane	3,800	400		ppbv	400	4/6/2012 1:30 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	4/6/2012 1:30 AM
m,p-Xylene	1,500	800		ppbv	400	4/6/2012 1:30 AM
Methylene chloride	ND	2,000	U	ppbv	400	4/6/2012 1:30 AM
n-Hexane	4,300	800		ppbv	400	4/6/2012 1:30 AM
Naphthalene	ND	400	U	ppbv	400	4/6/2012 1:30 AM
o-Xylene	480	400		ppbv	400	4/6/2012 1:30 AM
Propylene	ND	400	U	ppbv	400	4/6/2012 1:30 AM
Styrene	ND	400	U	ppbv	400	4/6/2012 1:30 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	4/6/2012 1:30 AM
Tetrachloroethene	ND	400	U	ppbv	400	4/6/2012 1:30 AM
Tetrahydrofuran	ND	400	U	ppbv	400	4/6/2012 1:30 AM
Toluene	8,400	400		ppbv	400	4/6/2012 1:30 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	4/6/2012 1:30 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	4/6/2012 1:30 AM
Trichloroethene	ND	400	U	ppbv	400	4/6/2012 1:30 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	4/6/2012 1:30 AM
Vinyl acetate	ND	400	U	ppbv	400	4/6/2012 1:30 AM
Vinyl chloride	ND	400	U	ppbv	400	4/6/2012 1:30 AM
Xylenes, Total	1,900	1,200		ppbv	400	4/6/2012 1:30 AM
Surr: 4-Bromofluorobenzene	97.1	70-130		%REC	400	4/6/2012 1:30 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	140,000	47,000		µg/m³	400	4/5/2012 7:36 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	4/5/2012 7:36 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	4/5/2012 7:36 PM
Surr: 4-Bromofluorobenzene	95.5	70-130		%REC	400	4/5/2012 7:36 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 12:43:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-005	**Matrix:**	Air
Client Sample ID:	VA1020		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	5.5	0.10		%	1	3/27/2012 3:55 PM
Carbon Monoxide	ND	0.10	U	%	1	3/27/2012 3:55 PM
Methane	ND	0.50	U	%	1	3/27/2012 3:55 PM
Nitrogen	80	0.10		%	1	3/27/2012 3:55 PM
Oxygen	13	0.10		%	1	3/27/2012 3:55 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	4/6/2012 2:18 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	4/6/2012 2:18 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	4/6/2012 2:18 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	4/6/2012 2:18 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	4/6/2012 2:18 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	4/6/2012 2:18 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	4/6/2012 2:18 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	4/6/2012 2:18 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	4/6/2012 2:18 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	4/6/2012 2:18 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	4/6/2012 2:18 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	4/6/2012 2:18 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	4/6/2012 2:18 AM
1,3-Butadiene	ND	400	U	ppbv	400	4/6/2012 2:18 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	4/6/2012 2:18 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	4/6/2012 2:18 AM
2-Butanone	ND	400	U	ppbv	400	4/6/2012 2:18 AM
2-Hexanone	ND	400	U	ppbv	400	4/6/2012 2:18 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	4/6/2012 2:18 AM
Acetone	550	400		ppbv	400	4/6/2012 2:18 AM
Benzene	1,900	400		ppbv	400	4/6/2012 2:18 AM
Benzyl chloride	ND	400	U	ppbv	400	4/6/2012 2:18 AM
Bromodichloromethane	ND	400	U	ppbv	400	4/6/2012 2:18 AM
Bromoform	ND	400	U	ppbv	400	4/6/2012 2:18 AM
Bromomethane	ND	400	U	ppbv	400	4/6/2012 2:18 AM
Carbon disulfide	ND	400	U	ppbv	400	4/6/2012 2:18 AM
Carbon tetrachloride	ND	400	U	ppbv	400	4/6/2012 2:18 AM
Chlorobenzene	ND	400	U	ppbv	400	4/6/2012 2:18 AM
Chlorodibromomethane	ND	400	U	ppbv	400	4/6/2012 2:18 AM
Chloroethane	ND	400	U	ppbv	400	4/6/2012 2:18 AM
Chloroform	ND	400	U	ppbv	400	4/6/2012 2:18 AM
Chloromethane	ND	400	U	ppbv	400	4/6/2012 2:18 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	4/6/2012 2:18 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	4/6/2012 2:18 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 12:43:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-005	**Matrix:**	Air
Client Sample ID:	VA1020		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	11,000	800		ppbv	400	4/6/2012 2:18 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	4/6/2012 2:18 AM
Ethyl acetate	ND	400	U	ppbv	400	4/6/2012 2:18 AM
Ethylbenzene	ND	800	U	ppbv	400	4/6/2012 2:18 AM
Heptane	2,900	400		ppbv	400	4/6/2012 2:18 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	4/6/2012 2:18 AM
m,p-Xylene	1,100	800		ppbv	400	4/6/2012 2:18 AM
Methylene chloride	ND	2,000	U	ppbv	400	4/6/2012 2:18 AM
n-Hexane	5,200	800		ppbv	400	4/6/2012 2:18 AM
Naphthalene	ND	400	U	ppbv	400	4/6/2012 2:18 AM
o-Xylene	ND	400	U	ppbv	400	4/6/2012 2:18 AM
Propylene	ND	400	U	ppbv	400	4/6/2012 2:18 AM
Styrene	ND	400	U	ppbv	400	4/6/2012 2:18 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	4/6/2012 2:18 AM
Tetrachloroethene	ND	400	U	ppbv	400	4/6/2012 2:18 AM
Tetrahydrofuran	ND	400	U	ppbv	400	4/6/2012 2:18 AM
Toluene	5,900	400		ppbv	400	4/6/2012 2:18 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	4/6/2012 2:18 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	4/6/2012 2:18 AM
Trichloroethene	ND	400	U	ppbv	400	4/6/2012 2:18 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	4/6/2012 2:18 AM
Vinyl acetate	ND	400	U	ppbv	400	4/6/2012 2:18 AM
Vinyl chloride	ND	400	U	ppbv	400	4/6/2012 2:18 AM
Xylenes, Total	1,100	1,200	J	ppbv	400	4/6/2012 2:18 AM
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	400	4/6/2012 2:18 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	380,000	47,000		µg/m³	400	4/5/2012 8:25 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	4/5/2012 8:25 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	4/5/2012 8:25 PM
Surr: 4-Bromofluorobenzene	97.1	70-130		%REC	400	4/5/2012 8:25 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 1:04:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-006	**Matrix:**	Air
Client Sample ID:	VA1021		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.56	0.10		%	1	3/27/2012 4:11 PM
Carbon Monoxide	ND	0.10	U	%	1	3/27/2012 4:11 PM
Methane	ND	0.50	U	%	1	3/27/2012 4:11 PM
Nitrogen	79	0.10		%	1	3/27/2012 4:11 PM
Oxygen	20	0.10		%	1	3/27/2012 4:11 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	4/5/2012 3:49 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	4/5/2012 3:49 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	4/5/2012 3:49 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	4/5/2012 3:49 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	4/5/2012 3:49 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	4/5/2012 3:49 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	4/5/2012 3:49 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	4/5/2012 3:49 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	4/5/2012 3:49 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	4/5/2012 3:49 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	4/5/2012 3:49 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	4/5/2012 3:49 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	4/5/2012 3:49 PM
1,3-Butadiene	ND	400	U	ppbv	400	4/5/2012 3:49 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	4/5/2012 3:49 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	4/5/2012 3:49 PM
2-Butanone	ND	400	U	ppbv	400	4/5/2012 3:49 PM
2-Hexanone	ND	400	U	ppbv	400	4/5/2012 3:49 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	4/5/2012 3:49 PM
Acetone	1,400	400		ppbv	400	4/5/2012 3:49 PM
Benzene	1,700	400		ppbv	400	4/5/2012 3:49 PM
Benzyl chloride	ND	400	U	ppbv	400	4/5/2012 3:49 PM
Bromodichloromethane	ND	400	U	ppbv	400	4/5/2012 3:49 PM
Bromoform	ND	400	U	ppbv	400	4/5/2012 3:49 PM
Bromomethane	ND	400	U	ppbv	400	4/5/2012 3:49 PM
Carbon disulfide	ND	400	U	ppbv	400	4/5/2012 3:49 PM
Carbon tetrachloride	ND	400	U	ppbv	400	4/5/2012 3:49 PM
Chlorobenzene	ND	400	U	ppbv	400	4/5/2012 3:49 PM
Chlorodibromomethane	ND	400	U	ppbv	400	4/5/2012 3:49 PM
Chloroethane	ND	400	U	ppbv	400	4/5/2012 3:49 PM
Chloroform	ND	400	U	ppbv	400	4/5/2012 3:49 PM
Chloromethane	ND	400	U	ppbv	400	4/5/2012 3:49 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	4/5/2012 3:49 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	4/5/2012 3:49 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 1:04:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-006	**Matrix:**	Air
Client Sample ID:	VA1021		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	3,100	800		ppbv	400	4/5/2012 3:49 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	4/5/2012 3:49 PM
Ethyl acetate	ND	400	U	ppbv	400	4/5/2012 3:49 PM
Ethylbenzene	ND	800	U	ppbv	400	4/5/2012 3:49 PM
Heptane	2,900	400		ppbv	400	4/5/2012 3:49 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	4/5/2012 3:49 PM
m,p-Xylene	1,100	800		ppbv	400	4/5/2012 3:49 PM
Methylene chloride	ND	2,000	U	ppbv	400	4/5/2012 3:49 PM
n-Hexane	2,400	800		ppbv	400	4/5/2012 3:49 PM
Naphthalene	ND	400	U	ppbv	400	4/5/2012 3:49 PM
o-Xylene	ND	400	U	ppbv	400	4/5/2012 3:49 PM
Propylene	ND	400	U	ppbv	400	4/5/2012 3:49 PM
Styrene	ND	400	U	ppbv	400	4/5/2012 3:49 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	4/5/2012 3:49 PM
Tetrachloroethene	ND	400	U	ppbv	400	4/5/2012 3:49 PM
Tetrahydrofuran	ND	400	U	ppbv	400	4/5/2012 3:49 PM
Toluene	6,600	400		ppbv	400	4/5/2012 3:49 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	4/5/2012 3:49 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	4/5/2012 3:49 PM
Trichloroethene	ND	400	U	ppbv	400	4/5/2012 3:49 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	4/5/2012 3:49 PM
Vinyl acetate	ND	400	U	ppbv	400	4/5/2012 3:49 PM
Vinyl chloride	ND	400	U	ppbv	400	4/5/2012 3:49 PM
Xylenes, Total	1,100	1,200	J	ppbv	400	4/5/2012 3:49 PM
Surr: 4-Bromofluorobenzene	97.5	70-130		%REC	400	4/5/2012 3:49 PM
Mass APH Air Air-Phase Petroleum Hydrocarbons	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	190,000	47,000		µg/m³	400	4/5/2012 9:14 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	4/5/2012 9:14 PM
C9-C12 Aliphatic Hydrocarbons	11,000	76,000	J	µg/m³	400	4/5/2012 9:14 PM
Surr: 4-Bromofluorobenzene	97.6	70-130		%REC	400	4/5/2012 9:14 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 1:27:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-007	**Matrix:**	Air
Client Sample ID:	VA1022		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.61	0.10		%	1	3/27/2012 4:26 PM
Carbon Monoxide	ND	0.10	U	%	1	3/27/2012 4:26 PM
Methane	ND	0.50	U	%	1	3/27/2012 4:26 PM
Nitrogen	79	0.10		%	1	3/27/2012 4:26 PM
Oxygen	20	0.10		%	1	3/27/2012 4:26 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	4/5/2012 6:01 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	4/5/2012 6:01 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	4/5/2012 6:01 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	4/5/2012 6:01 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	4/5/2012 6:01 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	4/5/2012 6:01 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	4/5/2012 6:01 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	4/5/2012 6:01 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	4/5/2012 6:01 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	4/5/2012 6:01 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	4/5/2012 6:01 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	4/5/2012 6:01 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	4/5/2012 6:01 PM
1,3-Butadiene	ND	400	U	ppbv	400	4/5/2012 6:01 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	4/5/2012 6:01 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	4/5/2012 6:01 PM
2-Butanone	ND	400	U	ppbv	400	4/5/2012 6:01 PM
2-Hexanone	ND	400	U	ppbv	400	4/5/2012 6:01 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	4/5/2012 6:01 PM
Acetone	2,000	400		ppbv	400	4/5/2012 6:01 PM
Benzene	3,900	400		ppbv	400	4/5/2012 6:01 PM
Benzyl chloride	ND	400	U	ppbv	400	4/5/2012 6:01 PM
Bromodichloromethane	ND	400	U	ppbv	400	4/5/2012 6:01 PM
Bromoform	ND	400	U	ppbv	400	4/5/2012 6:01 PM
Bromomethane	ND	400	U	ppbv	400	4/5/2012 6:01 PM
Carbon disulfide	ND	400	U	ppbv	400	4/5/2012 6:01 PM
Carbon tetrachloride	ND	400	U	ppbv	400	4/5/2012 6:01 PM
Chlorobenzene	ND	400	U	ppbv	400	4/5/2012 6:01 PM
Chlorodibromomethane	ND	400	U	ppbv	400	4/5/2012 6:01 PM
Chloroethane	ND	400	U	ppbv	400	4/5/2012 6:01 PM
Chloroform	ND	400	U	ppbv	400	4/5/2012 6:01 PM
Chloromethane	ND	400	U	ppbv	400	4/5/2012 6:01 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	4/5/2012 6:01 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	4/5/2012 6:01 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 1:27:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-007	**Matrix:**	Air
Client Sample ID:	VA1022		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	5,300	800		ppbv	400	4/5/2012 6:01 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	4/5/2012 6:01 PM
Ethyl acetate	ND	400	U	ppbv	400	4/5/2012 6:01 PM
Ethylbenzene	430	800	J	ppbv	400	4/5/2012 6:01 PM
Heptane	3,800	400		ppbv	400	4/5/2012 6:01 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	4/5/2012 6:01 PM
m,p-Xylene	1,300	800		ppbv	400	4/5/2012 6:01 PM
Methylene chloride	ND	2,000	U	ppbv	400	4/5/2012 6:01 PM
n-Hexane	3,500	800		ppbv	400	4/5/2012 6:01 PM
Naphthalene	ND	400	U	ppbv	400	4/5/2012 6:01 PM
o-Xylene	ND	400	U	ppbv	400	4/5/2012 6:01 PM
Propylene	ND	400	U	ppbv	400	4/5/2012 6:01 PM
Styrene	ND	400	U	ppbv	400	4/5/2012 6:01 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	4/5/2012 6:01 PM
Tetrachloroethene	ND	400	U	ppbv	400	4/5/2012 6:01 PM
Tetrahydrofuran	ND	400	U	ppbv	400	4/5/2012 6:01 PM
Toluene	7,800	400		ppbv	400	4/5/2012 6:01 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	4/5/2012 6:01 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	4/5/2012 6:01 PM
Trichloroethene	ND	400	U	ppbv	400	4/5/2012 6:01 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	4/5/2012 6:01 PM
Vinyl acetate	ND	400	U	ppbv	400	4/5/2012 6:01 PM
Vinyl chloride	ND	400	U	ppbv	400	4/5/2012 6:01 PM
Xylenes, Total	1,300	1,200		ppbv	400	4/5/2012 6:01 PM
Surr: 4-Bromofluorobenzene	98.8	70-130		%REC	400	4/5/2012 6:01 PM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	420,000	47,000		µg/m³	400	4/5/2012 11:28 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	4/5/2012 11:28 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	4/5/2012 11:28 PM
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	400	4/5/2012 11:28 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 10:07:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-008	**Matrix:**	Air
Client Sample ID:	VA1031		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	3.6	0.10		%	1	3/28/2012 12:49 PM
Carbon Monoxide	ND	0.10	U	%	1	3/28/2012 12:49 PM
Methane	ND	0.50	U	%	1	3/28/2012 12:49 PM
Nitrogen	81	0.10		%	1	3/28/2012 12:49 PM
Oxygen	15	0.10		%	1	3/28/2012 12:49 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
2-Butanone	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
2-Hexanone	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
Acetone	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
Benzene	170,000	8,000		ppbv	8000	4/4/2012 5:12 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
Bromoform	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
Bromomethane	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
Chloroethane	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
Chloroform	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
Chloromethane	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 10:07:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-008	**Matrix:**	Air
Client Sample ID:	VA1031		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	760,000	40,000		ppbv	20000	4/7/2012 12:37 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	4/4/2012 5:12 PM
Heptane	170,000	8,000		ppbv	8000	4/4/2012 5:12 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	4/4/2012 5:12 PM
m,p-Xylene	13,000	16,000	J	ppbv	8000	4/4/2012 5:12 PM
Methylene chloride	ND	40,000	U	ppbv	8000	4/4/2012 5:12 PM
n-Hexane	730,000	40,000		ppbv	20000	4/7/2012 12:37 AM
Naphthalene	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
o-Xylene	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
Propylene	18,000	8,000		ppbv	8000	4/4/2012 5:12 PM
Styrene	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
Toluene	130,000	8,000		ppbv	8000	4/4/2012 5:12 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
Trichloroethene	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	4/4/2012 5:12 PM
Xylenes, Total	13,000	24,000	J	ppbv	8000	4/4/2012 5:12 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	8000	4/4/2012 5:12 PM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	30,000,000	2,300,000		µg/m³	20000	4/5/2012 4:21 AM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	4/5/2012 4:21 AM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	4/5/2012 4:21 AM
Surr: 4-Bromofluorobenzene	97.3	70-130		%REC	20000	4/5/2012 4:21 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 10:54:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-009	**Matrix:**	Air
Client Sample ID:	VA1032		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	4.4	0.10		%	1	3/28/2012 1:50 PM
Carbon Monoxide	ND	0.10	U	%	1	3/28/2012 1:50 PM
Methane	ND	0.50	U	%	1	3/28/2012 1:50 PM
Nitrogen	81	0.10		%	1	3/28/2012 1:50 PM
Oxygen	14	0.10		%	1	3/28/2012 1:50 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	4/5/2012 3:56 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	4/5/2012 3:56 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	4/5/2012 3:56 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	4/5/2012 3:56 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	4/5/2012 3:56 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	4/5/2012 3:56 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	4/5/2012 3:56 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	4/5/2012 3:56 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	4/5/2012 3:56 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	4/5/2012 3:56 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	4/5/2012 3:56 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	4/5/2012 3:56 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	4/5/2012 3:56 AM
1,3-Butadiene	ND	800	U	ppbv	800	4/5/2012 3:56 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	4/5/2012 3:56 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	4/5/2012 3:56 AM
2-Butanone	ND	800	U	ppbv	800	4/5/2012 3:56 AM
2-Hexanone	ND	800	U	ppbv	800	4/5/2012 3:56 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	4/5/2012 3:56 AM
Acetone	1,200	800		ppbv	800	4/5/2012 3:56 AM
Benzene	6,000	800		ppbv	800	4/5/2012 3:56 AM
Benzyl chloride	ND	800	U	ppbv	800	4/5/2012 3:56 AM
Bromodichloromethane	ND	800	U	ppbv	800	4/5/2012 3:56 AM
Bromoform	ND	800	U	ppbv	800	4/5/2012 3:56 AM
Bromomethane	ND	800	U	ppbv	800	4/5/2012 3:56 AM
Carbon disulfide	ND	800	U	ppbv	800	4/5/2012 3:56 AM
Carbon tetrachloride	ND	800	U	ppbv	800	4/5/2012 3:56 AM
Chlorobenzene	ND	800	U	ppbv	800	4/5/2012 3:56 AM
Chlorodibromomethane	ND	800	U	ppbv	800	4/5/2012 3:56 AM
Chloroethane	ND	800	U	ppbv	800	4/5/2012 3:56 AM
Chloroform	ND	800	U	ppbv	800	4/5/2012 3:56 AM
Chloromethane	ND	800	U	ppbv	800	4/5/2012 3:56 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	4/5/2012 3:56 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	4/5/2012 3:56 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 10:54:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-009	**Matrix:**	Air
Client Sample ID:	VA1032		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	11,000	1,600		ppbv	800	4/5/2012 3:56 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	4/5/2012 3:56 AM
Ethyl acetate	ND	800	U	ppbv	800	4/5/2012 3:56 AM
Ethylbenzene	1,100	1,600	J	ppbv	800	4/5/2012 3:56 AM
Heptane	7,900	800		ppbv	800	4/5/2012 3:56 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	4/5/2012 3:56 AM
m,p-Xylene	2,500	1,600		ppbv	800	4/5/2012 3:56 AM
Methylene chloride	1,900	4,000	J	ppbv	800	4/5/2012 3:56 AM
n-Hexane	12,000	1,600		ppbv	800	4/5/2012 3:56 AM
Naphthalene	ND	800	U	ppbv	800	4/5/2012 3:56 AM
o-Xylene	830	800		ppbv	800	4/5/2012 3:56 AM
Propylene	ND	800	U	ppbv	800	4/5/2012 3:56 AM
Styrene	ND	800	U	ppbv	800	4/5/2012 3:56 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	4/5/2012 3:56 AM
Tetrachloroethene	ND	800	U	ppbv	800	4/5/2012 3:56 AM
Tetrahydrofuran	ND	800	U	ppbv	800	4/5/2012 3:56 AM
Toluene	11,000	800		ppbv	800	4/5/2012 3:56 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	4/5/2012 3:56 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	4/5/2012 3:56 AM
Trichloroethene	ND	800	U	ppbv	800	4/5/2012 3:56 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	4/5/2012 3:56 AM
Vinyl acetate	ND	800	U	ppbv	800	4/5/2012 3:56 AM
Vinyl chloride	ND	800	U	ppbv	800	4/5/2012 3:56 AM
Xylenes, Total	3,300	2,400		ppbv	800	4/5/2012 3:56 AM
Surr: 4-Bromofluorobenzene	97.7	70-130		%REC	800	4/5/2012 3:56 AM
Mass APH Air Air-Phase Petroleum Hydrocarbons	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	1,200,000	190,000		µg/m³	1600	4/5/2012 10:25 AM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	4/5/2012 10:25 AM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	4/5/2012 10:25 AM
Surr: 4-Bromofluorobenzene	99.5	70-130		%REC	1600	4/5/2012 10:25 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 11:25:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-010	**Matrix:**	Air
Client Sample ID:	VA1033		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.61	0.10		%	1	3/28/2012 2:15 PM
Carbon Monoxide	ND	0.10	U	%	1	3/28/2012 2:15 PM
Methane	ND	0.50	U	%	1	3/28/2012 2:15 PM
Nitrogen	79	0.10		%	1	3/28/2012 2:15 PM
Oxygen	19	0.10		%	1	3/28/2012 2:15 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
2-Butanone	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
2-Hexanone	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Acetone	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Benzene	32,000	8,000		ppbv	8000	4/5/2012 4:39 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Bromoform	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Bromomethane	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Chloroethane	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Chloroform	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Chloromethane	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 11:25:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-010	**Matrix:**	Air
Client Sample ID:	VA1033		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	320,000	16,000		ppbv	8000	4/5/2012 4:39 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	4/5/2012 4:39 AM
Heptane	210,000	8,000		ppbv	8000	4/5/2012 4:39 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	4/5/2012 4:39 AM
m,p-Xylene	ND	16,000	U	ppbv	8000	4/5/2012 4:39 AM
Methylene chloride	ND	40,000	U	ppbv	8000	4/5/2012 4:39 AM
n-Hexane	340,000	16,000		ppbv	8000	4/5/2012 4:39 AM
Naphthalene	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
o-Xylene	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Propylene	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Styrene	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Toluene	26,000	8,000		ppbv	8000	4/5/2012 4:39 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Trichloroethene	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	4/5/2012 4:39 AM
Xylenes, Total	ND	24,000	U	ppbv	8000	4/5/2012 4:39 AM
Surr: 4-Bromofluorobenzene	99.5	70-130		%REC	8000	4/5/2012 4:39 AM
Mass APH Air Air-Phase Petroleum Hydrocarbons	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	12,000,000	940,000		µg/m³	8000	4/5/2012 6:36 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	4/5/2012 6:36 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	4/5/2012 6:36 AM
Surr: 4-Bromofluorobenzene	96.0	70-130		%REC	8000	4/5/2012 6:36 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 1:16:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-011	**Matrix:**	Air
Client Sample ID:	VA1040		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	3.8	0.10		%	1	3/28/2012 2:39 PM
Carbon Monoxide	ND	0.10	U	%	1	3/28/2012 2:39 PM
Methane	ND	0.50	U	%	1	3/28/2012 2:39 PM
Nitrogen	80	0.10		%	1	3/28/2012 2:39 PM
Oxygen	15	0.10		%	1	3/28/2012 2:39 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
1,3-Butadiene	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
2-Butanone	88,000	20,000		ppbv	20000	4/5/2012 4:32 PM
2-Hexanone	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
Acetone	470,000	20,000		ppbv	20000	4/5/2012 4:32 PM
Benzene	320,000	20,000		ppbv	20000	4/5/2012 4:32 PM
Benzyl chloride	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
Bromodichloromethane	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
Bromoform	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
Bromomethane	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
Carbon disulfide	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
Chlorobenzene	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
Chloroethane	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
Chloroform	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
Chloromethane	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 1:16:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-011	**Matrix:**	Air
Client Sample ID:	VA1040		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	3,300,000	160,000		ppbv	80000	4/8/2012 1:34 AM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
Ethyl acetate	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
Ethylbenzene	ND	40,000	U	ppbv	20000	4/5/2012 4:32 PM
Heptane	680,000	20,000		ppbv	20000	4/5/2012 4:32 PM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	4/5/2012 4:32 PM
m,p-Xylene	ND	40,000	U	ppbv	20000	4/5/2012 4:32 PM
Methylene chloride	ND	100,000	U	ppbv	20000	4/5/2012 4:32 PM
n-Hexane	2,600,000	160,000		ppbv	80000	4/8/2012 1:34 AM
Naphthalene	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
o-Xylene	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
Propylene	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
Styrene	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
Tetrachloroethene	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
Toluene	450,000	20,000		ppbv	20000	4/5/2012 4:32 PM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
Trichloroethene	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
Vinyl acetate	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
Vinyl chloride	ND	20,000	U	ppbv	20000	4/5/2012 4:32 PM
Xylenes, Total	ND	60,000	U	ppbv	20000	4/5/2012 4:32 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	20000	4/5/2012 4:32 PM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	73,000,000	4,700,000		µg/m³	40000	4/5/2012 9:57 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300,000	U	µg/m³	40000	4/5/2012 9:57 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600,000	U	µg/m³	40000	4/5/2012 9:57 PM
Surr: 4-Bromofluorobenzene	94.2	70-130		%REC	40000	4/5/2012 9:57 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 2:06:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-012	**Matrix:**	Air
Client Sample ID:	VA1041		

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	3/28/2012 2:57 PM
Carbon Monoxide	ND	0.10	U	%	1	3/28/2012 2:57 PM
Methane	ND	0.50	U	%	1	3/28/2012 2:57 PM
Nitrogen	78	0.10		%	1	3/28/2012 2:57 PM
Oxygen	21	0.10		%	1	3/28/2012 2:57 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
1,3-Butadiene	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
2-Butanone	170,000	20,000		ppbv	20000	4/5/2012 5:13 PM
2-Hexanone	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
Acetone	720,000	20,000		ppbv	20000	4/5/2012 5:13 PM
Benzene	400,000	20,000		ppbv	20000	4/5/2012 5:13 PM
Benzyl chloride	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
Bromodichloromethane	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
Bromoform	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
Bromomethane	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
Carbon disulfide	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
Chlorobenzene	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
Chloroethane	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
Chloroform	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
Chloromethane	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 2:06:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-012	**Matrix:**	Air
Client Sample ID:	VA1041		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,900,000	80,000		ppbv	40000	4/7/2012 4:25 AM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
Ethyl acetate	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
Ethylbenzene	ND	40,000	U	ppbv	20000	4/5/2012 5:13 PM
Heptane	600,000	20,000		ppbv	20000	4/5/2012 5:13 PM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	4/5/2012 5:13 PM
m,p-Xylene	ND	40,000	U	ppbv	20000	4/5/2012 5:13 PM
Methylene chloride	ND	100,000	U	ppbv	20000	4/5/2012 5:13 PM
n-Hexane	2,500,000	160,000		ppbv	80000	4/8/2012 12:52 AM
Naphthalene	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
o-Xylene	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
Propylene	26,000	20,000		ppbv	20000	4/5/2012 5:13 PM
Styrene	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
Tetrachloroethene	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
Toluene	400,000	20,000		ppbv	20000	4/5/2012 5:13 PM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
Trichloroethene	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
Vinyl acetate	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
Vinyl chloride	ND	20,000	U	ppbv	20000	4/5/2012 5:13 PM
Xylenes, Total	ND	60,000	U	ppbv	20000	4/5/2012 5:13 PM
Surr: 4-Bromofluorobenzene	98.7	70-130		%REC	20000	4/5/2012 5:13 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	60,000,000	4,700,000		µg/m³	40000	4/6/2012 12:11 AM
C9-C10 Aromatic Hydrocarbons	ND	5,300,000	U	µg/m³	40000	4/6/2012 12:11 AM
C9-C12 Aliphatic Hydrocarbons	ND	7,600,000	U	µg/m³	40000	4/6/2012 12:11 AM
Surr: 4-Bromofluorobenzene	94.9	70-130		%REC	40000	4/6/2012 12:11 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 2:50:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-013	**Matrix:**	Air
Client Sample ID:	VA1042		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	1.1	0.10		%	1	3/28/2012 3:13 PM
Carbon Monoxide	ND	0.10	U	%	1	3/28/2012 3:13 PM
Methane	ND	0.50	U	%	1	3/28/2012 3:13 PM
Nitrogen	79	0.10		%	1	3/28/2012 3:13 PM
Oxygen	18	0.10		%	1	3/28/2012 3:13 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
1,3-Butadiene	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
2-Butanone	45,000	20,000		ppbv	20000	4/5/2012 7:30 PM
2-Hexanone	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
Acetone	290,000	20,000		ppbv	20000	4/5/2012 7:30 PM
Benzene	190,000	20,000		ppbv	20000	4/5/2012 7:30 PM
Benzyl chloride	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
Bromodichloromethane	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
Bromoform	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
Bromomethane	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
Carbon disulfide	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
Chlorobenzene	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
Chloroethane	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
Chloroform	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
Chloromethane	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 2:50:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-013	**Matrix:**	Air
Client Sample ID:	VA1042		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	650,000	40,000		ppbv	20000	4/5/2012 7:30 PM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
Ethyl acetate	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
Ethylbenzene	ND	40,000	U	ppbv	20000	4/5/2012 7:30 PM
Heptane	400,000	20,000		ppbv	20000	4/5/2012 7:30 PM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	4/5/2012 7:30 PM
m,p-Xylene	ND	40,000	U	ppbv	20000	4/5/2012 7:30 PM
Methylene chloride	ND	100,000	U	ppbv	20000	4/5/2012 7:30 PM
n-Hexane	830,000	40,000		ppbv	20000	4/5/2012 7:30 PM
Naphthalene	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
o-Xylene	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
Propylene	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
Styrene	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
Tetrachloroethene	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
Toluene	240,000	20,000		ppbv	20000	4/5/2012 7:30 PM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
Trichloroethene	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
Vinyl acetate	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
Vinyl chloride	ND	20,000	U	ppbv	20000	4/5/2012 7:30 PM
Xylenes, Total	ND	60,000	U	ppbv	20000	4/5/2012 7:30 PM
Surr: 4-Bromofluorobenzene	98.0	70-130		%REC	20000	4/5/2012 7:30 PM
Mass APH Air Air-Phase Petroleum Hydrocarbons	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	43,000,000	4,700,000		µg/m³	40000	4/6/2012 1:15 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300,000	U	µg/m³	40000	4/6/2012 1:15 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600,000	U	µg/m³	40000	4/6/2012 1:15 PM
Surr: 4-Bromofluorobenzene	98.5	70-130		%REC	40000	4/6/2012 1:15 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 3:22:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-014	**Matrix:**	Air
Client Sample ID:	VA1043		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	1.6	0.10		%	1	3/28/2012 3:42 PM
Carbon Monoxide	ND	0.10	U	%	1	3/28/2012 3:42 PM
Methane	ND	0.50	U	%	1	3/28/2012 3:42 PM
Nitrogen	81	0.10		%	1	3/28/2012 3:42 PM
Oxygen	16	0.10		%	1	3/28/2012 3:42 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
2-Butanone	21,000	8,000		ppbv	8000	4/5/2012 9:32 PM
2-Hexanone	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
Acetone	67,000	8,000		ppbv	8000	4/5/2012 9:32 PM
Benzene	61,000	8,000		ppbv	8000	4/5/2012 9:32 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
Bromoform	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
Bromomethane	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
Chloroethane	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
Chloroform	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
Chloromethane	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 3:22:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-014	**Matrix:**	Air
Client Sample ID:	VA1043		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	170,000	16,000		ppbv	8000	4/5/2012 9:32 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
Ethylbenzene	11,000	16,000	J	ppbv	8000	4/5/2012 9:32 PM
Heptane	240,000	8,000		ppbv	8000	4/5/2012 9:32 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	4/5/2012 9:32 PM
m,p-Xylene	30,000	16,000		ppbv	8000	4/5/2012 9:32 PM
Methylene chloride	ND	40,000	U	ppbv	8000	4/5/2012 9:32 PM
n-Hexane	150,000	16,000		ppbv	8000	4/5/2012 9:32 PM
Naphthalene	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
o-Xylene	8,200	8,000		ppbv	8000	4/5/2012 9:32 PM
Propylene	10,000	8,000		ppbv	8000	4/5/2012 9:32 PM
Styrene	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
Toluene	230,000	8,000		ppbv	8000	4/5/2012 9:32 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
Trichloroethene	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	4/5/2012 9:32 PM
Xylenes, Total	38,000	24,000		ppbv	8000	4/5/2012 9:32 PM
Surr: 4-Bromofluorobenzene	97.6	70-130		%REC	8000	4/5/2012 9:32 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	13,000,000	940,000		µg/m³	8000	4/6/2012 3:08 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	4/6/2012 3:08 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	4/6/2012 3:08 AM
Surr: 4-Bromofluorobenzene	95.3	70-130		%REC	8000	4/6/2012 3:08 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 10:29:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-015	**Matrix:**	Air
Client Sample ID:	VA1090		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.42	0.10		%	1	3/28/2012 4:01 PM
Carbon Monoxide	ND	0.10	U	%	1	3/28/2012 4:01 PM
Methane	ND	0.50	U	%	1	3/28/2012 4:01 PM
Nitrogen	79	0.10		%	1	3/28/2012 4:01 PM
Oxygen	19	0.10		%	1	3/28/2012 4:01 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	200	U	ppbv	200	4/7/2012 1:25 AM
1,1,2,2-Tetrachloroethane	ND	200	U	ppbv	200	4/7/2012 1:25 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	200	U	ppbv	200	4/7/2012 1:25 AM
1,1,2-Trichloroethane	ND	200	U	ppbv	200	4/7/2012 1:25 AM
1,1-Dichloroethane	ND	200	U	ppbv	200	4/7/2012 1:25 AM
1,1-Dichloroethene	ND	200	U	ppbv	200	4/7/2012 1:25 AM
1,2,4-Trichlorobenzene	ND	200	U	ppbv	200	4/7/2012 1:25 AM
1,2,4-Trimethylbenzene	ND	200	U	ppbv	200	4/7/2012 1:25 AM
1,2-Dibromoethane	ND	200	U	ppbv	200	4/7/2012 1:25 AM
1,2-Dichlorobenzene	ND	200	U	ppbv	200	4/7/2012 1:25 AM
1,2-Dichloroethane	ND	200	U	ppbv	200	4/7/2012 1:25 AM
1,2-Dichloropropane	ND	200	U	ppbv	200	4/7/2012 1:25 AM
1,3,5-Trimethylbenzene	ND	200	U	ppbv	200	4/7/2012 1:25 AM
1,3-Butadiene	ND	200	U	ppbv	200	4/7/2012 1:25 AM
1,3-Dichlorobenzene	ND	200	U	ppbv	200	4/7/2012 1:25 AM
1,4-Dichlorobenzene	ND	200	U	ppbv	200	4/7/2012 1:25 AM
2-Butanone	ND	200	U	ppbv	200	4/7/2012 1:25 AM
2-Hexanone	ND	200	U	ppbv	200	4/7/2012 1:25 AM
4-Methyl-2-pentanone	ND	200	U	ppbv	200	4/7/2012 1:25 AM
Acetone	400	200		ppbv	200	4/7/2012 1:25 AM
Benzene	1,300	200		ppbv	200	4/7/2012 1:25 AM
Benzyl chloride	ND	200	U	ppbv	200	4/7/2012 1:25 AM
Bromodichloromethane	ND	200	U	ppbv	200	4/7/2012 1:25 AM
Bromoform	ND	200	U	ppbv	200	4/7/2012 1:25 AM
Bromomethane	ND	200	U	ppbv	200	4/7/2012 1:25 AM
Carbon disulfide	ND	200	U	ppbv	200	4/7/2012 1:25 AM
Carbon tetrachloride	ND	200	U	ppbv	200	4/7/2012 1:25 AM
Chlorobenzene	ND	200	U	ppbv	200	4/7/2012 1:25 AM
Chlorodibromomethane	ND	200	U	ppbv	200	4/7/2012 1:25 AM
Chloroethane	ND	200	U	ppbv	200	4/7/2012 1:25 AM
Chloroform	ND	200	U	ppbv	200	4/7/2012 1:25 AM
Chloromethane	ND	200	U	ppbv	200	4/7/2012 1:25 AM
cis-1,2-Dichloroethene	ND	200	U	ppbv	200	4/7/2012 1:25 AM
cis-1,3-dichloropropene	ND	200	U	ppbv	200	4/7/2012 1:25 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 10:29:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-015	**Matrix:**	Air
Client Sample ID:	VA1090		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,600	400		ppbv	200	4/7/2012 1:25 AM
Dichlorodifluoromethane	ND	200	U	ppbv	200	4/7/2012 1:25 AM
Ethyl acetate	ND	200	U	ppbv	200	4/7/2012 1:25 AM
Ethylbenzene	230	400	J	ppbv	200	4/7/2012 1:25 AM
Heptane	1,500	200		ppbv	200	4/7/2012 1:25 AM
Hexachlorobutadiene	ND	400	U	ppbv	200	4/7/2012 1:25 AM
m,p-Xylene	670	400		ppbv	200	4/7/2012 1:25 AM
Methylene chloride	ND	1,000	U	ppbv	200	4/7/2012 1:25 AM
n-Hexane	1,000	400		ppbv	200	4/7/2012 1:25 AM
Naphthalene	ND	200	U	ppbv	200	4/7/2012 1:25 AM
o-Xylene	200	200		ppbv	200	4/7/2012 1:25 AM
Propylene	ND	200	U	ppbv	200	4/7/2012 1:25 AM
Styrene	ND	200	U	ppbv	200	4/7/2012 1:25 AM
tert-Butyl Methyl Ether	ND	200	U	ppbv	200	4/7/2012 1:25 AM
Tetrachloroethene	ND	200	U	ppbv	200	4/7/2012 1:25 AM
Tetrahydrofuran	ND	200	U	ppbv	200	4/7/2012 1:25 AM
Toluene	4,700	200		ppbv	200	4/7/2012 1:25 AM
trans-1,2-Dichloroethene	ND	200	U	ppbv	200	4/7/2012 1:25 AM
trans-1,3-dichloropropene	ND	200	U	ppbv	200	4/7/2012 1:25 AM
Trichloroethene	ND	200	U	ppbv	200	4/7/2012 1:25 AM
Trichlorofluoromethane	ND	200	U	ppbv	200	4/7/2012 1:25 AM
Vinyl acetate	ND	200	U	ppbv	200	4/7/2012 1:25 AM
Vinyl chloride	ND	200	U	ppbv	200	4/7/2012 1:25 AM
Xylenes, Total	870	600		ppbv	200	4/7/2012 1:25 AM
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	200	4/7/2012 1:25 AM
Mass APH Air Air-Phase Petroleum Hydrocarbons	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	170,000	47,000		µg/m³	400	4/5/2012 5:10 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	4/5/2012 5:10 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	4/5/2012 5:10 AM
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	400	4/5/2012 5:10 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 9:08:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-016	**Matrix:**	Air
Client Sample ID:	VA1091		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.44	0.10		%	1	3/28/2012 4:47 PM
Carbon Monoxide	ND	0.10	U	%	1	3/28/2012 4:47 PM
Methane	ND	0.50	U	%	1	3/28/2012 4:47 PM
Nitrogen	79	0.10		%	1	3/28/2012 4:47 PM
Oxygen	21	0.10		%	1	3/28/2012 4:47 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	4/5/2012 11:07 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	4/5/2012 11:07 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	4/5/2012 11:07 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	4/5/2012 11:07 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	4/5/2012 11:07 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	4/5/2012 11:07 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	4/5/2012 11:07 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	4/5/2012 11:07 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	4/5/2012 11:07 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	4/5/2012 11:07 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	4/5/2012 11:07 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	4/5/2012 11:07 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	4/5/2012 11:07 PM
1,3-Butadiene	ND	400	U	ppbv	400	4/5/2012 11:07 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	4/5/2012 11:07 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	4/5/2012 11:07 PM
2-Butanone	ND	400	U	ppbv	400	4/5/2012 11:07 PM
2-Hexanone	ND	400	U	ppbv	400	4/5/2012 11:07 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	4/5/2012 11:07 PM
Acetone	710	400		ppbv	400	4/5/2012 11:07 PM
Benzene	860	400		ppbv	400	4/5/2012 11:07 PM
Benzyl chloride	ND	400	U	ppbv	400	4/5/2012 11:07 PM
Bromodichloromethane	ND	400	U	ppbv	400	4/5/2012 11:07 PM
Bromoform	ND	400	U	ppbv	400	4/5/2012 11:07 PM
Bromomethane	ND	400	U	ppbv	400	4/5/2012 11:07 PM
Carbon disulfide	ND	400	U	ppbv	400	4/5/2012 11:07 PM
Carbon tetrachloride	ND	400	U	ppbv	400	4/5/2012 11:07 PM
Chlorobenzene	ND	400	U	ppbv	400	4/5/2012 11:07 PM
Chlorodibromomethane	ND	400	U	ppbv	400	4/5/2012 11:07 PM
Chloroethane	ND	400	U	ppbv	400	4/5/2012 11:07 PM
Chloroform	ND	400	U	ppbv	400	4/5/2012 11:07 PM
Chloromethane	ND	400	U	ppbv	400	4/5/2012 11:07 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	4/5/2012 11:07 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	4/5/2012 11:07 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 9:08:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-016	**Matrix:**	Air
Client Sample ID:	VA1091		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,300	800		ppbv	400	4/5/2012 11:07 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	4/5/2012 11:07 PM
Ethyl acetate	ND	400	U	ppbv	400	4/5/2012 11:07 PM
Ethylbenzene	ND	800	U	ppbv	400	4/5/2012 11:07 PM
Heptane	1,300	400		ppbv	400	4/5/2012 11:07 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	4/5/2012 11:07 PM
m,p-Xylene	600	800	J	ppbv	400	4/5/2012 11:07 PM
Methylene chloride	ND	2,000	U	ppbv	400	4/5/2012 11:07 PM
n-Hexane	960	800		ppbv	400	4/5/2012 11:07 PM
Naphthalene	ND	400	U	ppbv	400	4/5/2012 11:07 PM
o-Xylene	ND	400	U	ppbv	400	4/5/2012 11:07 PM
Propylene	ND	400	U	ppbv	400	4/5/2012 11:07 PM
Styrene	ND	400	U	ppbv	400	4/5/2012 11:07 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	4/5/2012 11:07 PM
Tetrachloroethene	ND	400	U	ppbv	400	4/5/2012 11:07 PM
Tetrahydrofuran	ND	400	U	ppbv	400	4/5/2012 11:07 PM
Toluene	3,100	400		ppbv	400	4/5/2012 11:07 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	4/5/2012 11:07 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	4/5/2012 11:07 PM
Trichloroethene	ND	400	U	ppbv	400	4/5/2012 11:07 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	4/5/2012 11:07 PM
Vinyl acetate	ND	400	U	ppbv	400	4/5/2012 11:07 PM
Vinyl chloride	ND	400	U	ppbv	400	4/5/2012 11:07 PM
Xylenes, Total	600	1,200	J	ppbv	400	4/5/2012 11:07 PM
Surr: 4-Bromofluorobenzene	97.4	70-130		%REC	400	4/5/2012 11:07 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	18,000	4,700		µg/m³	40	4/6/2012 6:42 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	4/6/2012 6:42 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	4/6/2012 6:42 PM
Surr: 4-Bromofluorobenzene	98.3	70-130		%REC	40	4/6/2012 6:42 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 9:31:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-017	**Matrix:**	Air
Client Sample ID:	VA1092		

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	3/28/2012 5:23 PM
Carbon Monoxide	ND	0.10	U	%	1	3/28/2012 5:23 PM
Methane	ND	0.50	U	%	1	3/28/2012 5:23 PM
Nitrogen	78	0.10		%	1	3/28/2012 5:23 PM
Oxygen	21	0.10		%	1	3/28/2012 5:23 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	4/6/2012 12:42 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	4/6/2012 12:42 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	4/6/2012 12:42 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	4/6/2012 12:42 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	4/6/2012 12:42 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	4/6/2012 12:42 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	4/6/2012 12:42 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	4/6/2012 12:42 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	4/6/2012 12:42 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	4/6/2012 12:42 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	4/6/2012 12:42 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	4/6/2012 12:42 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	4/6/2012 12:42 AM
1,3-Butadiene	ND	400	U	ppbv	400	4/6/2012 12:42 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	4/6/2012 12:42 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	4/6/2012 12:42 AM
2-Butanone	ND	400	U	ppbv	400	4/6/2012 12:42 AM
2-Hexanone	ND	400	U	ppbv	400	4/6/2012 12:42 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	4/6/2012 12:42 AM
Acetone	400	400		ppbv	400	4/6/2012 12:42 AM
Benzene	1,100	400		ppbv	400	4/6/2012 12:42 AM
Benzyl chloride	ND	400	U	ppbv	400	4/6/2012 12:42 AM
Bromodichloromethane	ND	400	U	ppbv	400	4/6/2012 12:42 AM
Bromoform	ND	400	U	ppbv	400	4/6/2012 12:42 AM
Bromomethane	ND	400	U	ppbv	400	4/6/2012 12:42 AM
Carbon disulfide	ND	400	U	ppbv	400	4/6/2012 12:42 AM
Carbon tetrachloride	ND	400	U	ppbv	400	4/6/2012 12:42 AM
Chlorobenzene	ND	400	U	ppbv	400	4/6/2012 12:42 AM
Chlorodibromomethane	ND	400	U	ppbv	400	4/6/2012 12:42 AM
Chloroethane	ND	400	U	ppbv	400	4/6/2012 12:42 AM
Chloroform	ND	400	U	ppbv	400	4/6/2012 12:42 AM
Chloromethane	ND	400	U	ppbv	400	4/6/2012 12:42 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	4/6/2012 12:42 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	4/6/2012 12:42 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 9:31:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-017	**Matrix:**	Air
Client Sample ID:	VA1092		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,500	800		ppbv	400	4/6/2012 12:42 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	4/6/2012 12:42 AM
Ethyl acetate	ND	400	U	ppbv	400	4/6/2012 12:42 AM
Ethylbenzene	ND	800	U	ppbv	400	4/6/2012 12:42 AM
Heptane	1,500	400		ppbv	400	4/6/2012 12:42 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	4/6/2012 12:42 AM
m,p-Xylene	750	800	J	ppbv	400	4/6/2012 12:42 AM
Methylene chloride	ND	2,000	U	ppbv	400	4/6/2012 12:42 AM
n-Hexane	1,100	800		ppbv	400	4/6/2012 12:42 AM
Naphthalene	ND	400	U	ppbv	400	4/6/2012 12:42 AM
o-Xylene	ND	400	U	ppbv	400	4/6/2012 12:42 AM
Propylene	ND	400	U	ppbv	400	4/6/2012 12:42 AM
Styrene	ND	400	U	ppbv	400	4/6/2012 12:42 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	4/6/2012 12:42 AM
Tetrachloroethene	ND	400	U	ppbv	400	4/6/2012 12:42 AM
Tetrahydrofuran	ND	400	U	ppbv	400	4/6/2012 12:42 AM
Toluene	3,800	400		ppbv	400	4/6/2012 12:42 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	4/6/2012 12:42 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	4/6/2012 12:42 AM
Trichloroethene	ND	400	U	ppbv	400	4/6/2012 12:42 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	4/6/2012 12:42 AM
Vinyl acetate	ND	400	U	ppbv	400	4/6/2012 12:42 AM
Vinyl chloride	ND	400	U	ppbv	400	4/6/2012 12:42 AM
Xylenes, Total	750	1,200	J	ppbv	400	4/6/2012 12:42 AM
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	400	4/6/2012 12:42 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	83,000	47,000		µg/m³	400	4/8/2012 12:38 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	4/8/2012 12:38 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	4/8/2012 12:38 AM
Surr: 4-Bromofluorobenzene	98.3	70-130		%REC	400	4/8/2012 12:38 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 10:08:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-018	**Matrix:**	Air
Client Sample ID:	VA1093		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.17	0.10		%	1	3/29/2012 11:02 AM
Carbon Monoxide	ND	0.10	U	%	1	3/29/2012 11:02 AM
Methane	ND	0.50	U	%	1	3/29/2012 11:02 AM
Nitrogen	79	0.10		%	1	3/29/2012 11:02 AM
Oxygen	20	0.10		%	1	3/29/2012 11:02 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	4/8/2012 1:20 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	4/8/2012 1:20 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	4/8/2012 1:20 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	4/8/2012 1:20 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	4/8/2012 1:20 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	4/8/2012 1:20 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	4/8/2012 1:20 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	4/8/2012 1:20 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	4/8/2012 1:20 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	4/8/2012 1:20 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	4/8/2012 1:20 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	4/8/2012 1:20 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	4/8/2012 1:20 PM
1,3-Butadiene	ND	40	U	ppbv	40	4/8/2012 1:20 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	4/8/2012 1:20 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	4/8/2012 1:20 PM
2-Butanone	ND	40	U	ppbv	40	4/8/2012 1:20 PM
2-Hexanone	ND	40	U	ppbv	40	4/8/2012 1:20 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	4/8/2012 1:20 PM
Acetone	ND	40	U	ppbv	40	4/8/2012 1:20 PM
Benzene	490	40		ppbv	40	4/8/2012 1:20 PM
Benzyl chloride	ND	40	U	ppbv	40	4/8/2012 1:20 PM
Bromodichloromethane	ND	40	U	ppbv	40	4/8/2012 1:20 PM
Bromoform	ND	40	U	ppbv	40	4/8/2012 1:20 PM
Bromomethane	ND	40	U	ppbv	40	4/8/2012 1:20 PM
Carbon disulfide	ND	40	U	ppbv	40	4/8/2012 1:20 PM
Carbon tetrachloride	ND	40	U	ppbv	40	4/8/2012 1:20 PM
Chlorobenzene	ND	40	U	ppbv	40	4/8/2012 1:20 PM
Chlorodibromomethane	ND	40	U	ppbv	40	4/8/2012 1:20 PM
Chloroethane	ND	40	U	ppbv	40	4/8/2012 1:20 PM
Chloroform	ND	40	U	ppbv	40	4/8/2012 1:20 PM
Chloromethane	ND	40	U	ppbv	40	4/8/2012 1:20 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	4/8/2012 1:20 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	4/8/2012 1:20 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 10:08:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-018	**Matrix:**	Air
Client Sample ID:	VA1093		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	710	80		ppbv	40	4/8/2012 1:20 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	4/8/2012 1:20 PM
Ethyl acetate	ND	40	U	ppbv	40	4/8/2012 1:20 PM
Ethylbenzene	98	80		ppbv	40	4/8/2012 1:20 PM
Heptane	720	40		ppbv	40	4/8/2012 1:20 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	4/8/2012 1:20 PM
m,p-Xylene	300	80		ppbv	40	4/8/2012 1:20 PM
Methylene chloride	ND	200	U	ppbv	40	4/8/2012 1:20 PM
n-Hexane	390	80		ppbv	40	4/8/2012 1:20 PM
Naphthalene	ND	40	U	ppbv	40	4/8/2012 1:20 PM
o-Xylene	90	40		ppbv	40	4/8/2012 1:20 PM
Propylene	100	40		ppbv	40	4/8/2012 1:20 PM
Styrene	ND	40	U	ppbv	40	4/8/2012 1:20 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	4/8/2012 1:20 PM
Tetrachloroethene	ND	40	U	ppbv	40	4/8/2012 1:20 PM
Tetrahydrofuran	ND	40	U	ppbv	40	4/8/2012 1:20 PM
Toluene	1,700	40		ppbv	40	4/8/2012 1:20 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	4/8/2012 1:20 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	4/8/2012 1:20 PM
Trichloroethene	ND	40	U	ppbv	40	4/8/2012 1:20 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	4/8/2012 1:20 PM
Vinyl acetate	ND	40	U	ppbv	40	4/8/2012 1:20 PM
Vinyl chloride	ND	40	U	ppbv	40	4/8/2012 1:20 PM
Xylenes, Total	390	120		ppbv	40	4/8/2012 1:20 PM
Surr: 4-Bromofluorobenzene	94.9	70-130		%REC	40	4/8/2012 1:20 PM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	51,000	23,000		µg/m³	200	4/9/2012 1:27 PM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	4/9/2012 1:27 PM
C9-C12 Aliphatic Hydrocarbons	ND	38,000	U	µg/m³	200	4/9/2012 1:27 PM
Surr: 4-Bromofluorobenzene	97.3	70-130		%REC	200	4/9/2012 1:27 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 10:37:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-019	**Matrix:**	Air
Client Sample ID:	VA1094		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.050	0.10	J	%	1	3/29/2012 11:19 AM
Carbon Monoxide	ND	0.10	U	%	1	3/29/2012 11:19 AM
Methane	ND	0.50	U	%	1	3/29/2012 11:19 AM
Nitrogen	77	0.10		%	1	3/29/2012 11:19 AM
Oxygen	21	0.10		%	1	3/29/2012 11:19 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	4/8/2012 3:11 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	4/8/2012 3:11 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	4/8/2012 3:11 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	4/8/2012 3:11 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	4/8/2012 3:11 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	4/8/2012 3:11 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	4/8/2012 3:11 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	4/8/2012 3:11 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	4/8/2012 3:11 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	4/8/2012 3:11 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	4/8/2012 3:11 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	4/8/2012 3:11 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	4/8/2012 3:11 AM
1,3-Butadiene	ND	400	U	ppbv	400	4/8/2012 3:11 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	4/8/2012 3:11 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	4/8/2012 3:11 AM
2-Butanone	ND	400	U	ppbv	400	4/8/2012 3:11 AM
2-Hexanone	ND	400	U	ppbv	400	4/8/2012 3:11 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Acetone	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Benzene	1,300	400		ppbv	400	4/8/2012 3:11 AM
Benzyl chloride	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Bromodichloromethane	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Bromoform	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Bromomethane	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Carbon disulfide	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Carbon tetrachloride	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Chlorobenzene	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Chlorodibromomethane	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Chloroethane	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Chloroform	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Chloromethane	ND	400	U	ppbv	400	4/8/2012 3:11 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	4/8/2012 3:11 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	4/8/2012 3:11 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 10:37:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-019	**Matrix:**	Air
Client Sample ID:	VA1094		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,900	800		ppbv	400	4/8/2012 3:11 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Ethyl acetate	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Ethylbenzene	ND	800	U	ppbv	400	4/8/2012 3:11 AM
Heptane	1,800	400		ppbv	400	4/8/2012 3:11 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	4/8/2012 3:11 AM
m,p-Xylene	800	800		ppbv	400	4/8/2012 3:11 AM
Methylene chloride	ND	2,000	U	ppbv	400	4/8/2012 3:11 AM
n-Hexane	890	800		ppbv	400	4/8/2012 3:11 AM
Naphthalene	ND	400	U	ppbv	400	4/8/2012 3:11 AM
o-Xylene	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Propylene	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Styrene	ND	400	U	ppbv	400	4/8/2012 3:11 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Tetrachloroethene	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Tetrahydrofuran	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Toluene	4,700	400		ppbv	400	4/8/2012 3:11 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	4/8/2012 3:11 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Trichloroethene	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Vinyl acetate	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Vinyl chloride	ND	400	U	ppbv	400	4/8/2012 3:11 AM
Xylenes, Total	800	1,200	J	ppbv	400	4/8/2012 3:11 AM
Surr: 4-Bromofluorobenzene	93.6	70-130		%REC	400	4/8/2012 3:11 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	160,000	47,000		µg/m³	400	4/8/2012 2:17 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	4/8/2012 2:17 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	4/8/2012 2:17 AM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	400	4/8/2012 2:17 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 10:37:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-020	**Matrix:**	Air
Client Sample ID:	VA1095		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.24	0.10		%	1	3/29/2012 11:34 AM
Carbon Monoxide	ND	0.10	U	%	1	3/29/2012 11:34 AM
Methane	ND	0.50	U	%	1	3/29/2012 11:34 AM
Nitrogen	79	0.10		%	1	3/29/2012 11:34 AM
Oxygen	20	0.10		%	1	3/29/2012 11:34 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	4/8/2012 3:59 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	4/8/2012 3:59 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	4/8/2012 3:59 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	4/8/2012 3:59 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	4/8/2012 3:59 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	4/8/2012 3:59 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	4/8/2012 3:59 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	4/8/2012 3:59 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	4/8/2012 3:59 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	4/8/2012 3:59 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	4/8/2012 3:59 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	4/8/2012 3:59 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	4/8/2012 3:59 AM
1,3-Butadiene	ND	400	U	ppbv	400	4/8/2012 3:59 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	4/8/2012 3:59 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	4/8/2012 3:59 AM
2-Butanone	ND	400	U	ppbv	400	4/8/2012 3:59 AM
2-Hexanone	ND	400	U	ppbv	400	4/8/2012 3:59 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Acetone	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Benzene	1,400	400		ppbv	400	4/8/2012 3:59 AM
Benzyl chloride	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Bromodichloromethane	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Bromoform	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Bromomethane	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Carbon disulfide	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Carbon tetrachloride	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Chlorobenzene	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Chlorodibromomethane	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Chloroethane	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Chloroform	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Chloromethane	ND	400	U	ppbv	400	4/8/2012 3:59 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	4/8/2012 3:59 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	4/8/2012 3:59 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 10:37:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-020	**Matrix:**	Air
Client Sample ID:	VA1095		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,300	800		ppbv	400	4/8/2012 3:59 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Ethyl acetate	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Ethylbenzene	ND	800	U	ppbv	400	4/8/2012 3:59 AM
Heptane	2,000	400		ppbv	400	4/8/2012 3:59 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	4/8/2012 3:59 AM
m,p-Xylene	960	800		ppbv	400	4/8/2012 3:59 AM
Methylene chloride	ND	2,000	U	ppbv	400	4/8/2012 3:59 AM
n-Hexane	1,100	800		ppbv	400	4/8/2012 3:59 AM
Naphthalene	ND	400	U	ppbv	400	4/8/2012 3:59 AM
o-Xylene	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Propylene	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Styrene	ND	400	U	ppbv	400	4/8/2012 3:59 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Tetrachloroethene	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Tetrahydrofuran	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Toluene	5,500	400		ppbv	400	4/8/2012 3:59 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	4/8/2012 3:59 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Trichloroethene	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Vinyl acetate	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Vinyl chloride	ND	400	U	ppbv	400	4/8/2012 3:59 AM
Xylenes, Total	960	1,200	J	ppbv	400	4/8/2012 3:59 AM
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	400	4/8/2012 3:59 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	160,000	47,000		µg/m³	400	4/8/2012 3:07 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	4/8/2012 3:07 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	4/8/2012 3:07 AM
Surr: 4-Bromofluorobenzene	96.4	70-130		%REC	400	4/8/2012 3:07 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 11:41:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-021	**Matrix:**	Air
Client Sample ID:	VA1096		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.16	0.10		%	1	3/29/2012 11:56 AM
Carbon Monoxide	ND	0.10	U	%	1	3/29/2012 11:56 AM
Methane	ND	0.50	U	%	1	3/29/2012 11:56 AM
Nitrogen	79	0.10		%	1	3/29/2012 11:56 AM
Oxygen	20	0.10		%	1	3/29/2012 11:56 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	4/8/2012 4:47 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	4/8/2012 4:47 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	4/8/2012 4:47 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	4/8/2012 4:47 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	4/8/2012 4:47 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	4/8/2012 4:47 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	4/8/2012 4:47 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	4/8/2012 4:47 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	4/8/2012 4:47 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	4/8/2012 4:47 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	4/8/2012 4:47 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	4/8/2012 4:47 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	4/8/2012 4:47 AM
1,3-Butadiene	ND	400	U	ppbv	400	4/8/2012 4:47 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	4/8/2012 4:47 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	4/8/2012 4:47 AM
2-Butanone	ND	400	U	ppbv	400	4/8/2012 4:47 AM
2-Hexanone	ND	400	U	ppbv	400	4/8/2012 4:47 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Acetone	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Benzene	1,200	400		ppbv	400	4/8/2012 4:47 AM
Benzyl chloride	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Bromodichloromethane	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Bromoform	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Bromomethane	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Carbon disulfide	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Carbon tetrachloride	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Chlorobenzene	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Chlorodibromomethane	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Chloroethane	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Chloroform	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Chloromethane	ND	400	U	ppbv	400	4/8/2012 4:47 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	4/8/2012 4:47 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	4/8/2012 4:47 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 11:41:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-021	**Matrix:**	Air
Client Sample ID:	VA1096		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,800	800		ppbv	400	4/8/2012 4:47 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Ethyl acetate	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Ethylbenzene	ND	800	U	ppbv	400	4/8/2012 4:47 AM
Heptane	1,900	400		ppbv	400	4/8/2012 4:47 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	4/8/2012 4:47 AM
m,p-Xylene	900	800		ppbv	400	4/8/2012 4:47 AM
Methylene chloride	ND	2,000	U	ppbv	400	4/8/2012 4:47 AM
n-Hexane	860	800		ppbv	400	4/8/2012 4:47 AM
Naphthalene	ND	400	U	ppbv	400	4/8/2012 4:47 AM
o-Xylene	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Propylene	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Styrene	ND	400	U	ppbv	400	4/8/2012 4:47 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Tetrachloroethene	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Tetrahydrofuran	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Toluene	5,100	400		ppbv	400	4/8/2012 4:47 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	4/8/2012 4:47 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Trichloroethene	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Vinyl acetate	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Vinyl chloride	ND	400	U	ppbv	400	4/8/2012 4:47 AM
Xylenes, Total	900	1,200	J	ppbv	400	4/8/2012 4:47 AM
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	400	4/8/2012 4:47 AM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	39,000	4,700		µg/m³	40	4/9/2012 3:45 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	4/9/2012 3:45 PM
C9-C12 Aliphatic Hydrocarbons	5,100	7,600	J	µg/m³	40	4/9/2012 3:45 PM
Surr: 4-Bromofluorobenzene	99.3	70-130		%REC	40	4/9/2012 3:45 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 12:18:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-022	**Matrix:**	Air
Client Sample ID:	VA1097		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.37	0.10		%	1	3/29/2012 12:11 PM
Carbon Monoxide	ND	0.10	U	%	1	3/29/2012 12:11 PM
Methane	ND	0.50	U	%	1	3/29/2012 12:11 PM
Nitrogen	79	0.10		%	1	3/29/2012 12:11 PM
Oxygen	19	0.10		%	1	3/29/2012 12:11 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	4/8/2012 5:35 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	4/8/2012 5:35 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	4/8/2012 5:35 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	4/8/2012 5:35 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	4/8/2012 5:35 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	4/8/2012 5:35 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	4/8/2012 5:35 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	4/8/2012 5:35 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	4/8/2012 5:35 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	4/8/2012 5:35 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	4/8/2012 5:35 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	4/8/2012 5:35 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	4/8/2012 5:35 AM
1,3-Butadiene	ND	400	U	ppbv	400	4/8/2012 5:35 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	4/8/2012 5:35 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	4/8/2012 5:35 AM
2-Butanone	ND	400	U	ppbv	400	4/8/2012 5:35 AM
2-Hexanone	ND	400	U	ppbv	400	4/8/2012 5:35 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Acetone	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Benzene	1,100	400		ppbv	400	4/8/2012 5:35 AM
Benzyl chloride	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Bromodichloromethane	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Bromoform	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Bromomethane	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Carbon disulfide	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Carbon tetrachloride	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Chlorobenzene	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Chlorodibromomethane	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Chloroethane	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Chloroform	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Chloromethane	ND	400	U	ppbv	400	4/8/2012 5:35 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	4/8/2012 5:35 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	4/8/2012 5:35 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 12:18:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-022	**Matrix:**	Air
Client Sample ID:	VA1097		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,100	800		ppbv	400	4/8/2012 5:35 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Ethyl acetate	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Ethylbenzene	ND	800	U	ppbv	400	4/8/2012 5:35 AM
Heptane	1,700	400		ppbv	400	4/8/2012 5:35 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	4/8/2012 5:35 AM
m,p-Xylene	820	800		ppbv	400	4/8/2012 5:35 AM
Methylene chloride	ND	2,000	U	ppbv	400	4/8/2012 5:35 AM
n-Hexane	1,000	800		ppbv	400	4/8/2012 5:35 AM
Naphthalene	ND	400	U	ppbv	400	4/8/2012 5:35 AM
o-Xylene	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Propylene	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Styrene	ND	400	U	ppbv	400	4/8/2012 5:35 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Tetrachloroethene	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Tetrahydrofuran	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Toluene	4,500	400		ppbv	400	4/8/2012 5:35 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	4/8/2012 5:35 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Trichloroethene	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Vinyl acetate	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Vinyl chloride	ND	400	U	ppbv	400	4/8/2012 5:35 AM
Xylenes, Total	820	1,200	J	ppbv	400	4/8/2012 5:35 AM
Surr: 4-Bromofluorobenzene	96.2	70-130		%REC	400	4/8/2012 5:35 AM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	58,000	4,700		µg/m³	40	4/9/2012 4:27 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	4/9/2012 4:27 PM
C9-C12 Aliphatic Hydrocarbons	3,100	7,600	J	µg/m³	40	4/9/2012 4:27 PM
Surr: 4-Bromofluorobenzene	98.9	70-130		%REC	40	4/9/2012 4:27 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 9:09:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-023	**Matrix:**	Air
Client Sample ID:	VA1104		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.22	0.10		%	1	3/29/2012 12:27 PM
Carbon Monoxide	ND	0.10	U	%	1	3/29/2012 12:27 PM
Methane	ND	0.50	U	%	1	3/29/2012 12:27 PM
Nitrogen	78	0.10		%	1	3/29/2012 12:27 PM
Oxygen	21	0.10		%	1	3/29/2012 12:27 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	4/5/2012 11:55 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	4/5/2012 11:55 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	4/5/2012 11:55 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	4/5/2012 11:55 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	4/5/2012 11:55 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	4/5/2012 11:55 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	4/5/2012 11:55 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	4/5/2012 11:55 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	4/5/2012 11:55 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	4/5/2012 11:55 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	4/5/2012 11:55 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	4/5/2012 11:55 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	4/5/2012 11:55 PM
1,3-Butadiene	ND	400	U	ppbv	400	4/5/2012 11:55 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	4/5/2012 11:55 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	4/5/2012 11:55 PM
2-Butanone	2,000	400		ppbv	400	4/5/2012 11:55 PM
2-Hexanone	ND	400	U	ppbv	400	4/5/2012 11:55 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	4/5/2012 11:55 PM
Acetone	4,100	400		ppbv	400	4/5/2012 11:55 PM
Benzene	11,000	400		ppbv	400	4/5/2012 11:55 PM
Benzyl chloride	ND	400	U	ppbv	400	4/5/2012 11:55 PM
Bromodichloromethane	ND	400	U	ppbv	400	4/5/2012 11:55 PM
Bromoform	ND	400	U	ppbv	400	4/5/2012 11:55 PM
Bromomethane	ND	400	U	ppbv	400	4/5/2012 11:55 PM
Carbon disulfide	ND	400	U	ppbv	400	4/5/2012 11:55 PM
Carbon tetrachloride	ND	400	U	ppbv	400	4/5/2012 11:55 PM
Chlorobenzene	ND	400	U	ppbv	400	4/5/2012 11:55 PM
Chlorodibromomethane	ND	400	U	ppbv	400	4/5/2012 11:55 PM
Chloroethane	ND	400	U	ppbv	400	4/5/2012 11:55 PM
Chloroform	ND	400	U	ppbv	400	4/5/2012 11:55 PM
Chloromethane	ND	400	U	ppbv	400	4/5/2012 11:55 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	4/5/2012 11:55 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	4/5/2012 11:55 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 9:09:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-023	**Matrix:**	Air
Client Sample ID:	VA1104		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	33,000	1,600		ppbv	800	4/7/2012 5:09 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	4/5/2012 11:55 PM
Ethyl acetate	ND	400	U	ppbv	400	4/5/2012 11:55 PM
Ethylbenzene	1,500	800		ppbv	400	4/5/2012 11:55 PM
Heptane	17,000	400		ppbv	400	4/5/2012 11:55 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	4/5/2012 11:55 PM
m,p-Xylene	3,700	800		ppbv	400	4/5/2012 11:55 PM
Methylene chloride	ND	2,000	U	ppbv	400	4/5/2012 11:55 PM
n-Hexane	27,000	1,600		ppbv	800	4/7/2012 5:09 AM
Naphthalene	ND	400	U	ppbv	400	4/5/2012 11:55 PM
o-Xylene	1,000	400		ppbv	400	4/5/2012 11:55 PM
Propylene	ND	400	U	ppbv	400	4/5/2012 11:55 PM
Styrene	ND	400	U	ppbv	400	4/5/2012 11:55 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	4/5/2012 11:55 PM
Tetrachloroethene	ND	400	U	ppbv	400	4/5/2012 11:55 PM
Tetrahydrofuran	ND	400	U	ppbv	400	4/5/2012 11:55 PM
Toluene	31,000	800		ppbv	800	4/7/2012 5:09 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	4/5/2012 11:55 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	4/5/2012 11:55 PM
Trichloroethene	ND	400	U	ppbv	400	4/5/2012 11:55 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	4/5/2012 11:55 PM
Vinyl acetate	ND	400	U	ppbv	400	4/5/2012 11:55 PM
Vinyl chloride	ND	400	U	ppbv	400	4/5/2012 11:55 PM
Xylenes, Total	4,800	1,200		ppbv	400	4/5/2012 11:55 PM
Surr: 4-Bromofluorobenzene	98.9	70-130		%REC	400	4/5/2012 11:55 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	170,000	94,000		µg/m³	800	4/7/2012 12:23 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	4/7/2012 12:23 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	4/7/2012 12:23 AM
Surr: 4-Bromofluorobenzene	93.5	70-130		%REC	800	4/7/2012 12:23 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 9:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-024	**Matrix:**	Air
Client Sample ID:	VA1105		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.71	0.10		%	1	3/29/2012 12:42 PM
Carbon Monoxide	ND	0.10	U	%	1	3/29/2012 12:42 PM
Methane	ND	0.50	U	%	1	3/29/2012 12:42 PM
Nitrogen	79	0.10		%	1	3/29/2012 12:42 PM
Oxygen	20	0.10		%	1	3/29/2012 12:42 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	4/6/2012 12:53 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	4/6/2012 12:53 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	4/6/2012 12:53 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	4/6/2012 12:53 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	4/6/2012 12:53 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	4/6/2012 12:53 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	4/6/2012 12:53 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	4/6/2012 12:53 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	4/6/2012 12:53 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	4/6/2012 12:53 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	4/6/2012 12:53 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	4/6/2012 12:53 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	4/6/2012 12:53 PM
1,3-Butadiene	ND	400	U	ppbv	400	4/6/2012 12:53 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	4/6/2012 12:53 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	4/6/2012 12:53 PM
2-Butanone	6,200	400		ppbv	400	4/6/2012 12:53 PM
2-Hexanone	ND	400	U	ppbv	400	4/6/2012 12:53 PM
4-Methyl-2-pentanone	760	400		ppbv	400	4/6/2012 12:53 PM
Acetone	9,300	400		ppbv	400	4/6/2012 12:53 PM
Benzene	17,000	8,000		ppbv	8000	4/6/2012 4:31 PM
Benzyl chloride	ND	400	U	ppbv	400	4/6/2012 12:53 PM
Bromodichloromethane	ND	400	U	ppbv	400	4/6/2012 12:53 PM
Bromoform	ND	400	U	ppbv	400	4/6/2012 12:53 PM
Bromomethane	ND	400	U	ppbv	400	4/6/2012 12:53 PM
Carbon disulfide	ND	400	U	ppbv	400	4/6/2012 12:53 PM
Carbon tetrachloride	ND	400	U	ppbv	400	4/6/2012 12:53 PM
Chlorobenzene	ND	400	U	ppbv	400	4/6/2012 12:53 PM
Chlorodibromomethane	ND	400	U	ppbv	400	4/6/2012 12:53 PM
Chloroethane	ND	400	U	ppbv	400	4/6/2012 12:53 PM
Chloroform	ND	400	U	ppbv	400	4/6/2012 12:53 PM
Chloromethane	ND	400	U	ppbv	400	4/6/2012 12:53 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	4/6/2012 12:53 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	4/6/2012 12:53 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 9:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-024	**Matrix:**	Air
Client Sample ID:	VA1105		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	51,000	16,000		ppbv	8000	4/6/2012 4:31 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	4/6/2012 12:53 PM
Ethyl acetate	ND	400	U	ppbv	400	4/6/2012 12:53 PM
Ethylbenzene	5,200	800		ppbv	400	4/6/2012 12:53 PM
Heptane	52,000	8,000		ppbv	8000	4/6/2012 4:31 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	4/6/2012 12:53 PM
m,p-Xylene	11,000	800		ppbv	400	4/6/2012 12:53 PM
Methylene chloride	ND	2,000	U	ppbv	400	4/6/2012 12:53 PM
n-Hexane	35,000	16,000		ppbv	8000	4/6/2012 4:31 PM
Naphthalene	ND	400	U	ppbv	400	4/6/2012 12:53 PM
o-Xylene	3,400	400		ppbv	400	4/6/2012 12:53 PM
Propylene	ND	400	U	ppbv	400	4/6/2012 12:53 PM
Styrene	ND	400	U	ppbv	400	4/6/2012 12:53 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	4/6/2012 12:53 PM
Tetrachloroethene	ND	400	U	ppbv	400	4/6/2012 12:53 PM
Tetrahydrofuran	ND	400	U	ppbv	400	4/6/2012 12:53 PM
Toluene	51,000	8,000		ppbv	8000	4/6/2012 4:31 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	4/6/2012 12:53 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	4/6/2012 12:53 PM
Trichloroethene	ND	400	U	ppbv	400	4/6/2012 12:53 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	4/6/2012 12:53 PM
Vinyl acetate	ND	400	U	ppbv	400	4/6/2012 12:53 PM
Vinyl chloride	ND	400	U	ppbv	400	4/6/2012 12:53 PM
Xylenes, Total	14,000	1,200		ppbv	400	4/6/2012 12:53 PM
Surr: 4-Bromofluorobenzene	112	70-130		%REC	400	4/6/2012 12:53 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,100,000	940,000		µg/m³	8000	4/7/2012 1:06 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	4/7/2012 1:06 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	4/7/2012 1:06 AM
Surr: 4-Bromofluorobenzene	95.3	70-130		%REC	8000	4/7/2012 1:06 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 9:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-025	**Matrix:**	Air
Client Sample ID:	VA1106		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.51	0.10		%	1	3/29/2012 12:58 PM
Carbon Monoxide	ND	0.10	U	%	1	3/29/2012 12:58 PM
Methane	ND	0.50	U	%	1	3/29/2012 12:58 PM
Nitrogen	79	0.10		%	1	3/29/2012 12:58 PM
Oxygen	20	0.10		%	1	3/29/2012 12:58 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	4/6/2012 2:42 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	4/6/2012 2:42 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	4/6/2012 2:42 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	4/6/2012 2:42 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	4/6/2012 2:42 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	4/6/2012 2:42 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	4/6/2012 2:42 PM
1,2,4-Trimethylbenzene	400	400		ppbv	400	4/6/2012 2:42 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	4/6/2012 2:42 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	4/6/2012 2:42 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	4/6/2012 2:42 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	4/6/2012 2:42 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	4/6/2012 2:42 PM
1,3-Butadiene	ND	400	U	ppbv	400	4/6/2012 2:42 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	4/6/2012 2:42 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	4/6/2012 2:42 PM
2-Butanone	8,000	400		ppbv	400	4/6/2012 2:42 PM
2-Hexanone	ND	400	U	ppbv	400	4/6/2012 2:42 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	4/6/2012 2:42 PM
Acetone	12,000	400		ppbv	400	4/6/2012 2:42 PM
Benzene	65,000	8,000		ppbv	8000	4/6/2012 5:13 PM
Benzyl chloride	ND	400	U	ppbv	400	4/6/2012 2:42 PM
Bromodichloromethane	ND	400	U	ppbv	400	4/6/2012 2:42 PM
Bromoform	ND	400	U	ppbv	400	4/6/2012 2:42 PM
Bromomethane	ND	400	U	ppbv	400	4/6/2012 2:42 PM
Carbon disulfide	ND	400	U	ppbv	400	4/6/2012 2:42 PM
Carbon tetrachloride	ND	400	U	ppbv	400	4/6/2012 2:42 PM
Chlorobenzene	ND	400	U	ppbv	400	4/6/2012 2:42 PM
Chlorodibromomethane	ND	400	U	ppbv	400	4/6/2012 2:42 PM
Chloroethane	ND	400	U	ppbv	400	4/6/2012 2:42 PM
Chloroform	ND	400	U	ppbv	400	4/6/2012 2:42 PM
Chloromethane	ND	400	U	ppbv	400	4/6/2012 2:42 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	4/6/2012 2:42 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	4/6/2012 2:42 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 9:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-025	**Matrix:**	Air
Client Sample ID:	VA1106		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	190,000	16,000		ppbv	8000	4/6/2012 5:13 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	4/6/2012 2:42 PM
Ethyl acetate	ND	400	U	ppbv	400	4/6/2012 2:42 PM
Ethylbenzene	6,300	800		ppbv	400	4/6/2012 2:42 PM
Heptane	190,000	8,000		ppbv	8000	4/6/2012 5:13 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	4/6/2012 2:42 PM
m,p-Xylene	13,000	800		ppbv	400	4/6/2012 2:42 PM
Methylene chloride	ND	2,000	U	ppbv	400	4/6/2012 2:42 PM
n-Hexane	120,000	16,000		ppbv	8000	4/6/2012 5:13 PM
Naphthalene	ND	400	U	ppbv	400	4/6/2012 2:42 PM
o-Xylene	4,200	400		ppbv	400	4/6/2012 2:42 PM
Propylene	ND	400	U	ppbv	400	4/6/2012 2:42 PM
Styrene	ND	400	U	ppbv	400	4/6/2012 2:42 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	4/6/2012 2:42 PM
Tetrachloroethene	ND	400	U	ppbv	400	4/6/2012 2:42 PM
Tetrahydrofuran	ND	400	U	ppbv	400	4/6/2012 2:42 PM
Toluene	220,000	8,000		ppbv	8000	4/6/2012 5:13 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	4/6/2012 2:42 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	4/6/2012 2:42 PM
Trichloroethene	ND	400	U	ppbv	400	4/6/2012 2:42 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	4/6/2012 2:42 PM
Vinyl acetate	ND	400	U	ppbv	400	4/6/2012 2:42 PM
Vinyl chloride	ND	400	U	ppbv	400	4/6/2012 2:42 PM
Xylenes, Total	17,000	1,200		ppbv	400	4/6/2012 2:42 PM
Surr: 4-Bromofluorobenzene	114	70-130		%REC	400	4/6/2012 2:42 PM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	6,200,000	940,000		µg/m³	8000	4/7/2012 1:48 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	4/7/2012 1:48 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	4/7/2012 1:48 AM
Surr: 4-Bromofluorobenzene	93.7	70-130		%REC	8000	4/7/2012 1:48 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 10:33:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-026	**Matrix:**	Air
Client Sample ID:	VA1107		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.51	0.10		%	1	3/29/2012 1:13 PM
Carbon Monoxide	ND	0.10	U	%	1	3/29/2012 1:13 PM
Methane	ND	0.50	U	%	1	3/29/2012 1:13 PM
Nitrogen	79	0.10		%	1	3/29/2012 1:13 PM
Oxygen	20	0.10		%	1	3/29/2012 1:13 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	4/6/2012 6:42 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	4/6/2012 6:42 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	4/6/2012 6:42 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	4/6/2012 6:42 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	4/6/2012 6:42 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	4/6/2012 6:42 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	4/6/2012 6:42 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	4/6/2012 6:42 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	4/6/2012 6:42 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	4/6/2012 6:42 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	4/6/2012 6:42 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	4/6/2012 6:42 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	4/6/2012 6:42 PM
1,3-Butadiene	ND	800	U	ppbv	800	4/6/2012 6:42 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	4/6/2012 6:42 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	4/6/2012 6:42 PM
2-Butanone	ND	800	U	ppbv	800	4/6/2012 6:42 PM
2-Hexanone	ND	800	U	ppbv	800	4/6/2012 6:42 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Acetone	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Benzene	4,200	800		ppbv	800	4/6/2012 6:42 PM
Benzyl chloride	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Bromodichloromethane	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Bromoform	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Bromomethane	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Carbon disulfide	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Carbon tetrachloride	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Chlorobenzene	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Chlorodibromomethane	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Chloroethane	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Chloroform	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Chloromethane	ND	800	U	ppbv	800	4/6/2012 6:42 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	4/6/2012 6:42 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	4/6/2012 6:42 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 10:33:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-026	**Matrix:**	Air
Client Sample ID:	VA1107		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	8,300	1,600		ppbv	800	4/6/2012 6:42 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Ethyl acetate	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Ethylbenzene	ND	1,600	U	ppbv	800	4/6/2012 6:42 PM
Heptane	12,000	800		ppbv	800	4/6/2012 6:42 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	4/6/2012 6:42 PM
m,p-Xylene	1,900	1,600		ppbv	800	4/6/2012 6:42 PM
Methylene chloride	ND	4,000	U	ppbv	800	4/6/2012 6:42 PM
n-Hexane	6,400	1,600		ppbv	800	4/6/2012 6:42 PM
Naphthalene	ND	800	U	ppbv	800	4/6/2012 6:42 PM
o-Xylene	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Propylene	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Styrene	ND	800	U	ppbv	800	4/6/2012 6:42 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Tetrachloroethene	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Tetrahydrofuran	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Toluene	16,000	800		ppbv	800	4/6/2012 6:42 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	4/6/2012 6:42 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Trichloroethene	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Vinyl acetate	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Vinyl chloride	ND	800	U	ppbv	800	4/6/2012 6:42 PM
Xylenes, Total	1,900	2,400	J	ppbv	800	4/6/2012 6:42 PM
Surr: 4-Bromofluorobenzene	98.6	70-130		%REC	800	4/6/2012 6:42 PM
Mass APH Air Air-Phase Petroleum Hydrocarbons	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	460,000	23,000		µg/m³	200	4/9/2012 2:16 PM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	4/9/2012 2:16 PM
C9-C12 Aliphatic Hydrocarbons	31,000	38,000	J	µg/m³	200	4/9/2012 2:16 PM
Surr: 4-Bromofluorobenzene	98.8	70-130		%REC	200	4/9/2012 2:16 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 11:13:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-027	**Matrix:**	Air
Client Sample ID:	VA1108		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.33	0.10		%	1	3/29/2012 1:28 PM
Carbon Monoxide	ND	0.10	U	%	1	3/29/2012 1:28 PM
Methane	ND	0.50	U	%	1	3/29/2012 1:28 PM
Nitrogen	79	0.10		%	1	3/29/2012 1:28 PM
Oxygen	20	0.10		%	1	3/29/2012 1:28 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	4/6/2012 8:56 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	4/6/2012 8:56 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	4/6/2012 8:56 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	4/6/2012 8:56 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	4/6/2012 8:56 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	4/6/2012 8:56 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	4/6/2012 8:56 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	4/6/2012 8:56 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	4/6/2012 8:56 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	4/6/2012 8:56 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	4/6/2012 8:56 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	4/6/2012 8:56 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	4/6/2012 8:56 PM
1,3-Butadiene	ND	800	U	ppbv	800	4/6/2012 8:56 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	4/6/2012 8:56 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	4/6/2012 8:56 PM
2-Butanone	1,600	800		ppbv	800	4/6/2012 8:56 PM
2-Hexanone	ND	800	U	ppbv	800	4/6/2012 8:56 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	4/6/2012 8:56 PM
Acetone	3,000	800		ppbv	800	4/6/2012 8:56 PM
Benzene	12,000	800		ppbv	800	4/6/2012 8:56 PM
Benzyl chloride	ND	800	U	ppbv	800	4/6/2012 8:56 PM
Bromodichloromethane	ND	800	U	ppbv	800	4/6/2012 8:56 PM
Bromoform	ND	800	U	ppbv	800	4/6/2012 8:56 PM
Bromomethane	ND	800	U	ppbv	800	4/6/2012 8:56 PM
Carbon disulfide	ND	800	U	ppbv	800	4/6/2012 8:56 PM
Carbon tetrachloride	ND	800	U	ppbv	800	4/6/2012 8:56 PM
Chlorobenzene	ND	800	U	ppbv	800	4/6/2012 8:56 PM
Chlorodibromomethane	ND	800	U	ppbv	800	4/6/2012 8:56 PM
Chloroethane	ND	800	U	ppbv	800	4/6/2012 8:56 PM
Chloroform	ND	800	U	ppbv	800	4/6/2012 8:56 PM
Chloromethane	ND	800	U	ppbv	800	4/6/2012 8:56 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	4/6/2012 8:56 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	4/6/2012 8:56 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 11:13:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-027	**Matrix:**	Air
Client Sample ID:	VA1108		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	25,000	1,600		ppbv	800	4/6/2012 8:56 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	4/6/2012 8:56 PM
Ethyl acetate	ND	800	U	ppbv	800	4/6/2012 8:56 PM
Ethylbenzene	1,600	1,600	J	ppbv	800	4/6/2012 8:56 PM
Heptane	23,000	800		ppbv	800	4/6/2012 8:56 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	4/6/2012 8:56 PM
m,p-Xylene	3,900	1,600		ppbv	800	4/6/2012 8:56 PM
Methylene chloride	ND	4,000	U	ppbv	800	4/6/2012 8:56 PM
n-Hexane	18,000	1,600		ppbv	800	4/6/2012 8:56 PM
Naphthalene	ND	800	U	ppbv	800	4/6/2012 8:56 PM
o-Xylene	1,000	800		ppbv	800	4/6/2012 8:56 PM
Propylene	ND	800	U	ppbv	800	4/6/2012 8:56 PM
Styrene	ND	800	U	ppbv	800	4/6/2012 8:56 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	4/6/2012 8:56 PM
Tetrachloroethene	ND	800	U	ppbv	800	4/6/2012 8:56 PM
Tetrahydrofuran	ND	800	U	ppbv	800	4/6/2012 8:56 PM
Toluene	31,000	800		ppbv	800	4/6/2012 8:56 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	4/6/2012 8:56 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	4/6/2012 8:56 PM
Trichloroethene	ND	800	U	ppbv	800	4/6/2012 8:56 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	4/6/2012 8:56 PM
Vinyl acetate	ND	800	U	ppbv	800	4/6/2012 8:56 PM
Vinyl chloride	ND	800	U	ppbv	800	4/6/2012 8:56 PM
Xylenes, Total	4,900	2,400		ppbv	800	4/6/2012 8:56 PM
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	800	4/6/2012 8:56 PM
Mass APH Air Air-Phase Petroleum Hydrocarbons	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	1,200,000	190,000		µg/m³	1600	4/9/2012 5:11 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	4/9/2012 5:11 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	4/9/2012 5:11 PM
Surr: 4-Bromofluorobenzene	97.4	70-130		%REC	1600	4/9/2012 5:11 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 12:21:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-028	**Matrix:**	Air
Client Sample ID:	VA1195-R		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	4/6/2012 11:55 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	4/6/2012 11:55 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	4/6/2012 11:55 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	4/6/2012 11:55 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	4/6/2012 11:55 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	4/6/2012 11:55 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	4/6/2012 11:55 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	4/6/2012 11:55 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	4/6/2012 11:55 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	4/6/2012 11:55 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	4/6/2012 11:55 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	4/6/2012 11:55 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	4/6/2012 11:55 PM
1,3-Butadiene	ND	800	U	ppbv	800	4/6/2012 11:55 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	4/6/2012 11:55 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	4/6/2012 11:55 PM
2-Butanone	3,100	800		ppbv	800	4/6/2012 11:55 PM
2-Hexanone	ND	800	U	ppbv	800	4/6/2012 11:55 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	4/6/2012 11:55 PM
Acetone	4,500	800		ppbv	800	4/6/2012 11:55 PM
Benzene	18,000	800		ppbv	800	4/6/2012 11:55 PM
Benzyl chloride	ND	800	U	ppbv	800	4/6/2012 11:55 PM
Bromodichloromethane	ND	800	U	ppbv	800	4/6/2012 11:55 PM
Bromoform	ND	800	U	ppbv	800	4/6/2012 11:55 PM
Bromomethane	ND	800	U	ppbv	800	4/6/2012 11:55 PM
Carbon disulfide	ND	800	U	ppbv	800	4/6/2012 11:55 PM
Carbon tetrachloride	ND	800	U	ppbv	800	4/6/2012 11:55 PM
Chlorobenzene	ND	800	U	ppbv	800	4/6/2012 11:55 PM
Chlorodibromomethane	ND	800	U	ppbv	800	4/6/2012 11:55 PM
Chloroethane	ND	800	U	ppbv	800	4/6/2012 11:55 PM
Chloroform	ND	800	U	ppbv	800	4/6/2012 11:55 PM
Chloromethane	ND	800	U	ppbv	800	4/6/2012 11:55 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	4/6/2012 11:55 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	4/6/2012 11:55 PM
Cyclohexane	82,000	16,000		ppbv	8000	4/8/2012 2:44 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	4/6/2012 11:55 PM
Ethyl acetate	ND	800	U	ppbv	800	4/6/2012 11:55 PM
Ethylbenzene	3,600	1,600		ppbv	800	4/6/2012 11:55 PM
Heptane	37,000	800		ppbv	800	4/6/2012 11:55 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	4/6/2012 11:55 PM
m,p-Xylene	8,900	1,600		ppbv	800	4/6/2012 11:55 PM
Methylene chloride	ND	4,000	U	ppbv	800	4/6/2012 11:55 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/15/2012 12:21:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-028	**Matrix:**	Air
Client Sample ID:	VA1195-R		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
n-Hexane	35,000	1,600		ppbv	800	4/6/2012 11:55 PM
Naphthalene	ND	800	U	ppbv	800	4/6/2012 11:55 PM
o-Xylene	2,400	800		ppbv	800	4/6/2012 11:55 PM
Propylene	2,700	800		ppbv	800	4/6/2012 11:55 PM
Styrene	ND	800	U	ppbv	800	4/6/2012 11:55 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	4/6/2012 11:55 PM
Tetrachloroethene	ND	800	U	ppbv	800	4/6/2012 11:55 PM
Tetrahydrofuran	ND	800	U	ppbv	800	4/6/2012 11:55 PM
Toluene	120,000	8,000		ppbv	8000	4/8/2012 2:44 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	4/6/2012 11:55 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	4/6/2012 11:55 PM
Trichloroethene	ND	800	U	ppbv	800	4/6/2012 11:55 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	4/6/2012 11:55 PM
Vinyl acetate	ND	800	U	ppbv	800	4/6/2012 11:55 PM
Vinyl chloride	ND	800	U	ppbv	800	4/6/2012 11:55 PM
Xylenes, Total	11,000	2,400		ppbv	800	4/6/2012 11:55 PM
Surr: 4-Bromofluorobenzene	97.4	70-130		%REC	800	4/6/2012 11:55 PM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	5,600,000	940,000		µg/m³	8000	4/7/2012 3:56 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	4/7/2012 3:56 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	4/7/2012 3:56 AM
Surr: 4-Bromofluorobenzene	93.6	70-130		%REC	8000	4/7/2012 3:56 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/13/2012 1:28:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-029	**Matrix:**	Air
Client Sample ID:	VA1240		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.46	0.10		%	1	3/29/2012 2:14 PM
Carbon Monoxide	ND	0.10	U	%	1	3/29/2012 2:14 PM
Methane	ND	0.50	U	%	1	3/29/2012 2:14 PM
Nitrogen	79	0.10		%	1	3/29/2012 2:14 PM
Oxygen	20	0.10		%	1	3/29/2012 2:14 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	4/4/2012 7:39 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	4/4/2012 7:39 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	4/4/2012 7:39 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	4/4/2012 7:39 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	4/4/2012 7:39 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	4/4/2012 7:39 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	4/4/2012 7:39 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	4/4/2012 7:39 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	4/4/2012 7:39 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	4/4/2012 7:39 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	4/4/2012 7:39 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	4/4/2012 7:39 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	4/4/2012 7:39 PM
1,3-Butadiene	ND	400	U	ppbv	400	4/4/2012 7:39 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	4/4/2012 7:39 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	4/4/2012 7:39 PM
2-Butanone	ND	400	U	ppbv	400	4/4/2012 7:39 PM
2-Hexanone	ND	400	U	ppbv	400	4/4/2012 7:39 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	4/4/2012 7:39 PM
Acetone	840	400		ppbv	400	4/4/2012 7:39 PM
Benzene	2,800	400		ppbv	400	4/4/2012 7:39 PM
Benzyl chloride	ND	400	U	ppbv	400	4/4/2012 7:39 PM
Bromodichloromethane	ND	400	U	ppbv	400	4/4/2012 7:39 PM
Bromoform	ND	400	U	ppbv	400	4/4/2012 7:39 PM
Bromomethane	ND	400	U	ppbv	400	4/4/2012 7:39 PM
Carbon disulfide	ND	400	U	ppbv	400	4/4/2012 7:39 PM
Carbon tetrachloride	ND	400	U	ppbv	400	4/4/2012 7:39 PM
Chlorobenzene	ND	400	U	ppbv	400	4/4/2012 7:39 PM
Chlorodibromomethane	ND	400	U	ppbv	400	4/4/2012 7:39 PM
Chloroethane	ND	400	U	ppbv	400	4/4/2012 7:39 PM
Chloroform	ND	400	U	ppbv	400	4/4/2012 7:39 PM
Chloromethane	ND	400	U	ppbv	400	4/4/2012 7:39 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	4/4/2012 7:39 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	4/4/2012 7:39 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/13/2012 1:28:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-029	**Matrix:**	Air
Client Sample ID:	VA1240		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	3,900	800		ppbv	400	4/4/2012 7:39 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	4/4/2012 7:39 PM
Ethyl acetate	ND	400	U	ppbv	400	4/4/2012 7:39 PM
Ethylbenzene	ND	800	U	ppbv	400	4/4/2012 7:39 PM
Heptane	3,600	400		ppbv	400	4/4/2012 7:39 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	4/4/2012 7:39 PM
m,p-Xylene	1,100	800		ppbv	400	4/4/2012 7:39 PM
Methylene chloride	940	2,000	J	ppbv	400	4/4/2012 7:39 PM
n-Hexane	2,600	800		ppbv	400	4/4/2012 7:39 PM
Naphthalene	ND	400	U	ppbv	400	4/4/2012 7:39 PM
o-Xylene	ND	400	U	ppbv	400	4/4/2012 7:39 PM
Propylene	ND	400	U	ppbv	400	4/4/2012 7:39 PM
Styrene	ND	400	U	ppbv	400	4/4/2012 7:39 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	4/4/2012 7:39 PM
Tetrachloroethene	ND	400	U	ppbv	400	4/4/2012 7:39 PM
Tetrahydrofuran	ND	400	U	ppbv	400	4/4/2012 7:39 PM
Toluene	9,100	400		ppbv	400	4/4/2012 7:39 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	4/4/2012 7:39 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	4/4/2012 7:39 PM
Trichloroethene	ND	400	U	ppbv	400	4/4/2012 7:39 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	4/4/2012 7:39 PM
Vinyl acetate	ND	400	U	ppbv	400	4/4/2012 7:39 PM
Vinyl chloride	ND	400	U	ppbv	400	4/4/2012 7:39 PM
Xylenes, Total	1,100	1,200	J	ppbv	400	4/4/2012 7:39 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	400	4/4/2012 7:39 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	240,000	47,000		µg/m³	400	4/4/2012 8:45 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	4/4/2012 8:45 PM
C9-C12 Aliphatic Hydrocarbons	10,000	76,000	J	µg/m³	400	4/4/2012 8:45 PM
Surr: 4-Bromofluorobenzene	99.3	70-130		%REC	400	4/4/2012 8:45 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/13/2012 2:08:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-030	**Matrix:**	Air
Client Sample ID:	VA1241		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.16	0.10		%	1	3/29/2012 2:28 PM
Carbon Monoxide	ND	0.10	U	%	1	3/29/2012 2:28 PM
Methane	ND	0.50	U	%	1	3/29/2012 2:28 PM
Nitrogen	79	0.10		%	1	3/29/2012 2:28 PM
Oxygen	20	0.10		%	1	3/29/2012 2:28 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	4/4/2012 9:23 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	4/4/2012 9:23 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	4/4/2012 9:23 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	4/4/2012 9:23 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	4/4/2012 9:23 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	4/4/2012 9:23 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	4/4/2012 9:23 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	4/4/2012 9:23 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	4/4/2012 9:23 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	4/4/2012 9:23 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	4/4/2012 9:23 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	4/4/2012 9:23 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	4/4/2012 9:23 PM
1,3-Butadiene	ND	400	U	ppbv	400	4/4/2012 9:23 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	4/4/2012 9:23 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	4/4/2012 9:23 PM
2-Butanone	ND	400	U	ppbv	400	4/4/2012 9:23 PM
2-Hexanone	ND	400	U	ppbv	400	4/4/2012 9:23 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	4/4/2012 9:23 PM
Acetone	1,100	400		ppbv	400	4/4/2012 9:23 PM
Benzene	4,200	400		ppbv	400	4/4/2012 9:23 PM
Benzyl chloride	ND	400	U	ppbv	400	4/4/2012 9:23 PM
Bromodichloromethane	ND	400	U	ppbv	400	4/4/2012 9:23 PM
Bromoform	ND	400	U	ppbv	400	4/4/2012 9:23 PM
Bromomethane	ND	400	U	ppbv	400	4/4/2012 9:23 PM
Carbon disulfide	ND	400	U	ppbv	400	4/4/2012 9:23 PM
Carbon tetrachloride	ND	400	U	ppbv	400	4/4/2012 9:23 PM
Chlorobenzene	ND	400	U	ppbv	400	4/4/2012 9:23 PM
Chlorodibromomethane	ND	400	U	ppbv	400	4/4/2012 9:23 PM
Chloroethane	ND	400	U	ppbv	400	4/4/2012 9:23 PM
Chloroform	ND	400	U	ppbv	400	4/4/2012 9:23 PM
Chloromethane	ND	400	U	ppbv	400	4/4/2012 9:23 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	4/4/2012 9:23 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	4/4/2012 9:23 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/13/2012 2:08:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-030	**Matrix:**	Air
Client Sample ID:	VA1241		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	6,400	800		ppbv	400	4/4/2012 9:23 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	4/4/2012 9:23 PM
Ethyl acetate	ND	400	U	ppbv	400	4/4/2012 9:23 PM
Ethylbenzene	ND	800	U	ppbv	400	4/4/2012 9:23 PM
Heptane	3,000	400		ppbv	400	4/4/2012 9:23 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	4/4/2012 9:23 PM
m,p-Xylene	1,000	800		ppbv	400	4/4/2012 9:23 PM
Methylene chloride	ND	2,000	U	ppbv	400	4/4/2012 9:23 PM
n-Hexane	4,900	800		ppbv	400	4/4/2012 9:23 PM
Naphthalene	ND	400	U	ppbv	400	4/4/2012 9:23 PM
o-Xylene	ND	400	U	ppbv	400	4/4/2012 9:23 PM
Propylene	450	400		ppbv	400	4/4/2012 9:23 PM
Styrene	ND	400	U	ppbv	400	4/4/2012 9:23 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	4/4/2012 9:23 PM
Tetrachloroethene	ND	400	U	ppbv	400	4/4/2012 9:23 PM
Tetrahydrofuran	ND	400	U	ppbv	400	4/4/2012 9:23 PM
Toluene	9,100	400		ppbv	400	4/4/2012 9:23 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	4/4/2012 9:23 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	4/4/2012 9:23 PM
Trichloroethene	ND	400	U	ppbv	400	4/4/2012 9:23 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	4/4/2012 9:23 PM
Vinyl acetate	ND	400	U	ppbv	400	4/4/2012 9:23 PM
Vinyl chloride	ND	400	U	ppbv	400	4/4/2012 9:23 PM
Xylenes, Total	1,000	1,200	J	ppbv	400	4/4/2012 9:23 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	400	4/4/2012 9:23 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	560,000	47,000		µg/m³	400	4/4/2012 10:23 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	4/4/2012 10:23 PM
C9-C12 Aliphatic Hydrocarbons	13,000	76,000	J	µg/m³	400	4/4/2012 10:23 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	400	4/4/2012 10:23 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/13/2012 2:08:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-031	**Matrix:**	Air
Client Sample ID:	VA1242		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.12	0.10		%	1	3/29/2012 2:43 PM
Carbon Monoxide	ND	0.10	U	%	1	3/29/2012 2:43 PM
Methane	ND	0.50	U	%	1	3/29/2012 2:43 PM
Nitrogen	79	0.10		%	1	3/29/2012 2:43 PM
Oxygen	20	0.10		%	1	3/29/2012 2:43 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	4/4/2012 10:14 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	4/4/2012 10:14 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	4/4/2012 10:14 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	4/4/2012 10:14 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	4/4/2012 10:14 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	4/4/2012 10:14 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	4/4/2012 10:14 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	4/4/2012 10:14 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	4/4/2012 10:14 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	4/4/2012 10:14 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	4/4/2012 10:14 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	4/4/2012 10:14 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	4/4/2012 10:14 PM
1,3-Butadiene	ND	400	U	ppbv	400	4/4/2012 10:14 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	4/4/2012 10:14 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	4/4/2012 10:14 PM
2-Butanone	ND	400	U	ppbv	400	4/4/2012 10:14 PM
2-Hexanone	ND	400	U	ppbv	400	4/4/2012 10:14 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	4/4/2012 10:14 PM
Acetone	2,100	400		ppbv	400	4/4/2012 10:14 PM
Benzene	3,500	400		ppbv	400	4/4/2012 10:14 PM
Benzyl chloride	ND	400	U	ppbv	400	4/4/2012 10:14 PM
Bromodichloromethane	ND	400	U	ppbv	400	4/4/2012 10:14 PM
Bromoform	ND	400	U	ppbv	400	4/4/2012 10:14 PM
Bromomethane	ND	400	U	ppbv	400	4/4/2012 10:14 PM
Carbon disulfide	ND	400	U	ppbv	400	4/4/2012 10:14 PM
Carbon tetrachloride	ND	400	U	ppbv	400	4/4/2012 10:14 PM
Chlorobenzene	ND	400	U	ppbv	400	4/4/2012 10:14 PM
Chlorodibromomethane	ND	400	U	ppbv	400	4/4/2012 10:14 PM
Chloroethane	ND	400	U	ppbv	400	4/4/2012 10:14 PM
Chloroform	ND	400	U	ppbv	400	4/4/2012 10:14 PM
Chloromethane	ND	400	U	ppbv	400	4/4/2012 10:14 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	4/4/2012 10:14 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	4/4/2012 10:14 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/13/2012 2:08:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-031	**Matrix:**	Air
Client Sample ID:	VA1242		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	5,100	800		ppbv	400	4/4/2012 10:14 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	4/4/2012 10:14 PM
Ethyl acetate	ND	400	U	ppbv	400	4/4/2012 10:14 PM
Ethylbenzene	ND	800	U	ppbv	400	4/4/2012 10:14 PM
Heptane	2,600	400		ppbv	400	4/4/2012 10:14 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	4/4/2012 10:14 PM
m,p-Xylene	930	800		ppbv	400	4/4/2012 10:14 PM
Methylene chloride	1,300	2,000	J	ppbv	400	4/4/2012 10:14 PM
n-Hexane	4,500	800		ppbv	400	4/4/2012 10:14 PM
Naphthalene	ND	400	U	ppbv	400	4/4/2012 10:14 PM
o-Xylene	ND	400	U	ppbv	400	4/4/2012 10:14 PM
Propylene	ND	400	U	ppbv	400	4/4/2012 10:14 PM
Styrene	ND	400	U	ppbv	400	4/4/2012 10:14 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	4/4/2012 10:14 PM
Tetrachloroethene	ND	400	U	ppbv	400	4/4/2012 10:14 PM
Tetrahydrofuran	ND	400	U	ppbv	400	4/4/2012 10:14 PM
Toluene	7,700	400		ppbv	400	4/4/2012 10:14 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	4/4/2012 10:14 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	4/4/2012 10:14 PM
Trichloroethene	ND	400	U	ppbv	400	4/4/2012 10:14 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	4/4/2012 10:14 PM
Vinyl acetate	ND	400	U	ppbv	400	4/4/2012 10:14 PM
Vinyl chloride	ND	400	U	ppbv	400	4/4/2012 10:14 PM
Xylenes, Total	930	1,200	J	ppbv	400	4/4/2012 10:14 PM
Surr: 4-Bromofluorobenzene	99.3	70-130		%REC	400	4/4/2012 10:14 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	480,000	47,000		µg/m³	400	4/4/2012 11:11 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	4/4/2012 11:11 PM
C9-C12 Aliphatic Hydrocarbons	17,000	76,000	J	µg/m³	400	4/4/2012 11:11 PM
Surr: 4-Bromofluorobenzene	98.3	70-130		%REC	400	4/4/2012 11:11 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/13/2012 3:03:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-032	**Matrix:**	Air
Client Sample ID:	VA1243		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.39	0.10		%	1	3/29/2012 2:58 PM
Carbon Monoxide	ND	0.10	U	%	1	3/29/2012 2:58 PM
Methane	ND	0.50	U	%	1	3/29/2012 2:58 PM
Nitrogen	80	0.10		%	1	3/29/2012 2:58 PM
Oxygen	18	0.10		%	1	3/29/2012 2:58 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RD2**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
2-Butanone	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
2-Hexanone	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Acetone	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Benzene	77,000	8,000		ppbv	8000	3/31/2012 12:46 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Bromoform	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Bromomethane	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Chloroethane	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Chloroform	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Chloromethane	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/13/2012 3:03:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-032	**Matrix:**	Air
Client Sample ID:	VA1243		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	120,000	16,000		ppbv	8000	3/31/2012 12:46 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	3/31/2012 12:46 AM
Heptane	60,000	8,000		ppbv	8000	3/31/2012 12:46 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	3/31/2012 12:46 AM
m,p-Xylene	ND	16,000	U	ppbv	8000	3/31/2012 12:46 AM
Methylene chloride	ND	40,000	U	ppbv	8000	3/31/2012 12:46 AM
n-Hexane	110,000	16,000		ppbv	8000	3/31/2012 12:46 AM
Naphthalene	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
o-Xylene	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Propylene	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Styrene	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Toluene	110,000	8,000		ppbv	8000	3/31/2012 12:46 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Trichloroethene	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	3/31/2012 12:46 AM
Xylenes, Total	ND	24,000	U	ppbv	8000	3/31/2012 12:46 AM
Surr: 4-Bromofluorobenzene	113	70-130		%REC	8000	3/31/2012 12:46 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	9,400,000	2,300,000		µg/m³	20000	4/5/2012 12:43 AM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	4/5/2012 12:43 AM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	4/5/2012 12:43 AM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	20000	4/5/2012 12:43 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/13/2012 1:55:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-033	**Matrix:**	Air
Client Sample ID:	VA1298		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.059	0.10	J	%	1	3/29/2012 3:13 PM
Carbon Monoxide	ND	0.10	U	%	1	3/29/2012 3:13 PM
Methane	ND	0.50	U	%	1	3/29/2012 3:13 PM
Nitrogen	78	0.10		%	1	3/29/2012 3:13 PM
Oxygen	21	0.10		%	1	3/29/2012 3:13 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	4/4/2012 8:31 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	4/4/2012 8:31 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	4/4/2012 8:31 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	4/4/2012 8:31 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	4/4/2012 8:31 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	4/4/2012 8:31 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	4/4/2012 8:31 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	4/4/2012 8:31 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	4/4/2012 8:31 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	4/4/2012 8:31 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	4/4/2012 8:31 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	4/4/2012 8:31 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	4/4/2012 8:31 PM
1,3-Butadiene	ND	400	U	ppbv	400	4/4/2012 8:31 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	4/4/2012 8:31 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	4/4/2012 8:31 PM
2-Butanone	ND	400	U	ppbv	400	4/4/2012 8:31 PM
2-Hexanone	ND	400	U	ppbv	400	4/4/2012 8:31 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	4/4/2012 8:31 PM
Acetone	740	400		ppbv	400	4/4/2012 8:31 PM
Benzene	4,300	400		ppbv	400	4/4/2012 8:31 PM
Benzyl chloride	ND	400	U	ppbv	400	4/4/2012 8:31 PM
Bromodichloromethane	ND	400	U	ppbv	400	4/4/2012 8:31 PM
Bromoform	ND	400	U	ppbv	400	4/4/2012 8:31 PM
Bromomethane	ND	400	U	ppbv	400	4/4/2012 8:31 PM
Carbon disulfide	ND	400	U	ppbv	400	4/4/2012 8:31 PM
Carbon tetrachloride	ND	400	U	ppbv	400	4/4/2012 8:31 PM
Chlorobenzene	ND	400	U	ppbv	400	4/4/2012 8:31 PM
Chlorodibromomethane	ND	400	U	ppbv	400	4/4/2012 8:31 PM
Chloroethane	ND	400	U	ppbv	400	4/4/2012 8:31 PM
Chloroform	ND	400	U	ppbv	400	4/4/2012 8:31 PM
Chloromethane	ND	400	U	ppbv	400	4/4/2012 8:31 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	4/4/2012 8:31 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	4/4/2012 8:31 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/13/2012 1:55:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-033	**Matrix:**	Air
Client Sample ID:	VA1298		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	9,700	800		ppbv	400	4/4/2012 8:31 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	4/4/2012 8:31 PM
Ethyl acetate	ND	400	U	ppbv	400	4/4/2012 8:31 PM
Ethylbenzene	610	800	J	ppbv	400	4/4/2012 8:31 PM
Heptane	7,600	400		ppbv	400	4/4/2012 8:31 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	4/4/2012 8:31 PM
m,p-Xylene	2,000	800		ppbv	400	4/4/2012 8:31 PM
Methylene chloride	ND	2,000	U	ppbv	400	4/4/2012 8:31 PM
n-Hexane	6,100	800		ppbv	400	4/4/2012 8:31 PM
Naphthalene	ND	400	U	ppbv	400	4/4/2012 8:31 PM
o-Xylene	640	400		ppbv	400	4/4/2012 8:31 PM
Propylene	ND	400	U	ppbv	400	4/4/2012 8:31 PM
Styrene	ND	400	U	ppbv	400	4/4/2012 8:31 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	4/4/2012 8:31 PM
Tetrachloroethene	ND	400	U	ppbv	400	4/4/2012 8:31 PM
Tetrahydrofuran	ND	400	U	ppbv	400	4/4/2012 8:31 PM
Toluene	9,500	400		ppbv	400	4/4/2012 8:31 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	4/4/2012 8:31 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	4/4/2012 8:31 PM
Trichloroethene	ND	400	U	ppbv	400	4/4/2012 8:31 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	4/4/2012 8:31 PM
Vinyl acetate	ND	400	U	ppbv	400	4/4/2012 8:31 PM
Vinyl chloride	ND	400	U	ppbv	400	4/4/2012 8:31 PM
Xylenes, Total	2,600	1,200		ppbv	400	4/4/2012 8:31 PM
Surr: 4-Bromofluorobenzene	98.3	70-130		%REC	400	4/4/2012 8:31 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	600,000	47,000		µg/m³	400	4/4/2012 9:34 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	4/4/2012 9:34 PM
C9-C12 Aliphatic Hydrocarbons	44,000	76,000	J	µg/m³	400	4/4/2012 9:34 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	400	4/4/2012 9:34 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/13/2012 2:28:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-034	**Matrix:**	Air
Client Sample ID:	VA1299		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.16	0.10		%	1	3/29/2012 3:30 PM
Carbon Monoxide	ND	0.10	U	%	1	3/29/2012 3:30 PM
Methane	ND	0.50	U	%	1	3/29/2012 3:30 PM
Nitrogen	79	0.10		%	1	3/29/2012 3:30 PM
Oxygen	20	0.10		%	1	3/29/2012 3:30 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	4/4/2012 11:05 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	4/4/2012 11:05 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	4/4/2012 11:05 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	4/4/2012 11:05 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	4/4/2012 11:05 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	4/4/2012 11:05 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	4/4/2012 11:05 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	4/4/2012 11:05 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	4/4/2012 11:05 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	4/4/2012 11:05 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	4/4/2012 11:05 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	4/4/2012 11:05 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	4/4/2012 11:05 PM
1,3-Butadiene	ND	400	U	ppbv	400	4/4/2012 11:05 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	4/4/2012 11:05 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	4/4/2012 11:05 PM
2-Butanone	ND	400	U	ppbv	400	4/4/2012 11:05 PM
2-Hexanone	ND	400	U	ppbv	400	4/4/2012 11:05 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	4/4/2012 11:05 PM
Acetone	470	400		ppbv	400	4/4/2012 11:05 PM
Benzene	2,600	400		ppbv	400	4/4/2012 11:05 PM
Benzyl chloride	ND	400	U	ppbv	400	4/4/2012 11:05 PM
Bromodichloromethane	ND	400	U	ppbv	400	4/4/2012 11:05 PM
Bromoform	ND	400	U	ppbv	400	4/4/2012 11:05 PM
Bromomethane	ND	400	U	ppbv	400	4/4/2012 11:05 PM
Carbon disulfide	ND	400	U	ppbv	400	4/4/2012 11:05 PM
Carbon tetrachloride	ND	400	U	ppbv	400	4/4/2012 11:05 PM
Chlorobenzene	ND	400	U	ppbv	400	4/4/2012 11:05 PM
Chlorodibromomethane	ND	400	U	ppbv	400	4/4/2012 11:05 PM
Chloroethane	ND	400	U	ppbv	400	4/4/2012 11:05 PM
Chloroform	ND	400	U	ppbv	400	4/4/2012 11:05 PM
Chloromethane	ND	400	U	ppbv	400	4/4/2012 11:05 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	4/4/2012 11:05 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	4/4/2012 11:05 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/13/2012 2:28:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-034	**Matrix:**	Air
Client Sample ID:	VA1299		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	5,300	800		ppbv	400	4/4/2012 11:05 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	4/4/2012 11:05 PM
Ethyl acetate	ND	400	U	ppbv	400	4/4/2012 11:05 PM
Ethylbenzene	410	800	J	ppbv	400	4/4/2012 11:05 PM
Heptane	4,600	400		ppbv	400	4/4/2012 11:05 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	4/4/2012 11:05 PM
m,p-Xylene	1,300	800		ppbv	400	4/4/2012 11:05 PM
Methylene chloride	ND	2,000	U	ppbv	400	4/4/2012 11:05 PM
n-Hexane	3,300	800		ppbv	400	4/4/2012 11:05 PM
Naphthalene	ND	400	U	ppbv	400	4/4/2012 11:05 PM
o-Xylene	430	400		ppbv	400	4/4/2012 11:05 PM
Propylene	ND	400	U	ppbv	400	4/4/2012 11:05 PM
Styrene	ND	400	U	ppbv	400	4/4/2012 11:05 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	4/4/2012 11:05 PM
Tetrachloroethene	ND	400	U	ppbv	400	4/4/2012 11:05 PM
Tetrahydrofuran	ND	400	U	ppbv	400	4/4/2012 11:05 PM
Toluene	6,200	400		ppbv	400	4/4/2012 11:05 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	4/4/2012 11:05 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	4/4/2012 11:05 PM
Trichloroethene	ND	400	U	ppbv	400	4/4/2012 11:05 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	4/4/2012 11:05 PM
Vinyl acetate	ND	400	U	ppbv	400	4/4/2012 11:05 PM
Vinyl chloride	ND	400	U	ppbv	400	4/4/2012 11:05 PM
Xylenes, Total	1,700	1,200		ppbv	400	4/4/2012 11:05 PM
Surr: 4-Bromofluorobenzene	98.5	70-130		%REC	400	4/4/2012 11:05 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	370,000	47,000		µg/m³	400	4/5/2012 12:00 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	4/5/2012 12:00 AM
C9-C12 Aliphatic Hydrocarbons	35,000	76,000	J	µg/m³	400	4/5/2012 12:00 AM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	400	4/5/2012 12:00 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/13/2012 3:04:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-035	**Matrix:**	Air
Client Sample ID:	VA1300		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.21	0.10		%	1	3/29/2012 3:45 PM
Carbon Monoxide	ND	0.10	U	%	1	3/29/2012 3:45 PM
Methane	ND	0.50	U	%	1	3/29/2012 3:45 PM
Nitrogen	79	0.10		%	1	3/29/2012 3:45 PM
Oxygen	20	0.10		%	1	3/29/2012 3:45 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	4/4/2012 11:52 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	4/4/2012 11:52 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	4/4/2012 11:52 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	4/4/2012 11:52 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	4/4/2012 11:52 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	4/4/2012 11:52 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	4/4/2012 11:52 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	4/4/2012 11:52 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	4/4/2012 11:52 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	4/4/2012 11:52 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	4/4/2012 11:52 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	4/4/2012 11:52 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	4/4/2012 11:52 PM
1,3-Butadiene	ND	800	U	ppbv	800	4/4/2012 11:52 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	4/4/2012 11:52 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	4/4/2012 11:52 PM
2-Butanone	ND	800	U	ppbv	800	4/4/2012 11:52 PM
2-Hexanone	ND	800	U	ppbv	800	4/4/2012 11:52 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	4/4/2012 11:52 PM
Acetone	ND	800	U	ppbv	800	4/4/2012 11:52 PM
Benzene	2,400	800		ppbv	800	4/4/2012 11:52 PM
Benzyl chloride	ND	800	U	ppbv	800	4/4/2012 11:52 PM
Bromodichloromethane	ND	800	U	ppbv	800	4/4/2012 11:52 PM
Bromoform	ND	800	U	ppbv	800	4/4/2012 11:52 PM
Bromomethane	ND	800	U	ppbv	800	4/4/2012 11:52 PM
Carbon disulfide	ND	800	U	ppbv	800	4/4/2012 11:52 PM
Carbon tetrachloride	ND	800	U	ppbv	800	4/4/2012 11:52 PM
Chlorobenzene	ND	800	U	ppbv	800	4/4/2012 11:52 PM
Chlorodibromomethane	ND	800	U	ppbv	800	4/4/2012 11:52 PM
Chloroethane	ND	800	U	ppbv	800	4/4/2012 11:52 PM
Chloroform	ND	800	U	ppbv	800	4/4/2012 11:52 PM
Chloromethane	ND	800	U	ppbv	800	4/4/2012 11:52 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	4/4/2012 11:52 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	4/4/2012 11:52 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/13/2012 3:04:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-035	**Matrix:**	Air
Client Sample ID:	VA1300		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	14,000	1,600		ppbv	800	4/4/2012 11:52 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	4/4/2012 11:52 PM
Ethyl acetate	ND	800	U	ppbv	800	4/4/2012 11:52 PM
Ethylbenzene	ND	1,600	U	ppbv	800	4/4/2012 11:52 PM
Heptane	5,400	800		ppbv	800	4/4/2012 11:52 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	4/4/2012 11:52 PM
m,p-Xylene	1,400	1,600	J	ppbv	800	4/4/2012 11:52 PM
Methylene chloride	ND	4,000	U	ppbv	800	4/4/2012 11:52 PM
n-Hexane	11,000	1,600		ppbv	800	4/4/2012 11:52 PM
Naphthalene	ND	800	U	ppbv	800	4/4/2012 11:52 PM
o-Xylene	ND	800	U	ppbv	800	4/4/2012 11:52 PM
Propylene	1,500	800		ppbv	800	4/4/2012 11:52 PM
Styrene	ND	800	U	ppbv	800	4/4/2012 11:52 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	4/4/2012 11:52 PM
Tetrachloroethene	ND	800	U	ppbv	800	4/4/2012 11:52 PM
Tetrahydrofuran	ND	800	U	ppbv	800	4/4/2012 11:52 PM
Toluene	6,700	800		ppbv	800	4/4/2012 11:52 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	4/4/2012 11:52 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	4/4/2012 11:52 PM
Trichloroethene	ND	800	U	ppbv	800	4/4/2012 11:52 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	4/4/2012 11:52 PM
Vinyl acetate	ND	800	U	ppbv	800	4/4/2012 11:52 PM
Vinyl chloride	ND	800	U	ppbv	800	4/4/2012 11:52 PM
Xylenes, Total	1,400	2,400	J	ppbv	800	4/4/2012 11:52 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	800	4/4/2012 11:52 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	3,700,000	940,000		µg/m³	8000	4/5/2012 2:07 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	4/5/2012 2:07 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	4/5/2012 2:07 AM
Surr: 4-Bromofluorobenzene	98.6	70-130		%REC	8000	4/5/2012 2:07 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/13/2012 3:04:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-036	**Matrix:**	Air
Client Sample ID:	VA1301		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.19	0.10		%	1	3/29/2012 4:38 PM
Carbon Monoxide	ND	0.10	U	%	1	3/29/2012 4:38 PM
Methane	ND	0.50	U	%	1	3/29/2012 4:38 PM
Nitrogen	80	0.10		%	1	3/29/2012 4:38 PM
Oxygen	20	0.10		%	1	3/29/2012 4:38 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	4/5/2012 12:39 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	4/5/2012 12:39 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	4/5/2012 12:39 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	4/5/2012 12:39 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	4/5/2012 12:39 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	4/5/2012 12:39 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	4/5/2012 12:39 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	4/5/2012 12:39 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	4/5/2012 12:39 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	4/5/2012 12:39 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	4/5/2012 12:39 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	4/5/2012 12:39 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	4/5/2012 12:39 AM
1,3-Butadiene	ND	800	U	ppbv	800	4/5/2012 12:39 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	4/5/2012 12:39 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	4/5/2012 12:39 AM
2-Butanone	ND	800	U	ppbv	800	4/5/2012 12:39 AM
2-Hexanone	ND	800	U	ppbv	800	4/5/2012 12:39 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	4/5/2012 12:39 AM
Acetone	1,200	800		ppbv	800	4/5/2012 12:39 AM
Benzene	4,800	800		ppbv	800	4/5/2012 12:39 AM
Benzyl chloride	ND	800	U	ppbv	800	4/5/2012 12:39 AM
Bromodichloromethane	ND	800	U	ppbv	800	4/5/2012 12:39 AM
Bromoform	ND	800	U	ppbv	800	4/5/2012 12:39 AM
Bromomethane	ND	800	U	ppbv	800	4/5/2012 12:39 AM
Carbon disulfide	ND	800	U	ppbv	800	4/5/2012 12:39 AM
Carbon tetrachloride	ND	800	U	ppbv	800	4/5/2012 12:39 AM
Chlorobenzene	ND	800	U	ppbv	800	4/5/2012 12:39 AM
Chlorodibromomethane	ND	800	U	ppbv	800	4/5/2012 12:39 AM
Chloroethane	ND	800	U	ppbv	800	4/5/2012 12:39 AM
Chloroform	ND	800	U	ppbv	800	4/5/2012 12:39 AM
Chloromethane	ND	800	U	ppbv	800	4/5/2012 12:39 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	4/5/2012 12:39 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	4/5/2012 12:39 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/13/2012 3:04:00 PM
Project:	Kirtland AFB		
Lab ID:	1203732-036	**Matrix:**	Air
Client Sample ID:	VA1301		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	20,000	1,600		ppbv	800	4/5/2012 12:39 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	4/5/2012 12:39 AM
Ethyl acetate	ND	800	U	ppbv	800	4/5/2012 12:39 AM
Ethylbenzene	800	1,600	J	ppbv	800	4/5/2012 12:39 AM
Heptane	11,000	800		ppbv	800	4/5/2012 12:39 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	4/5/2012 12:39 AM
m,p-Xylene	2,400	1,600		ppbv	800	4/5/2012 12:39 AM
Methylene chloride	ND	4,000	U	ppbv	800	4/5/2012 12:39 AM
n-Hexane	13,000	1,600		ppbv	800	4/5/2012 12:39 AM
Naphthalene	ND	800	U	ppbv	800	4/5/2012 12:39 AM
o-Xylene	840	800		ppbv	800	4/5/2012 12:39 AM
Propylene	1,100	800		ppbv	800	4/5/2012 12:39 AM
Styrene	ND	800	U	ppbv	800	4/5/2012 12:39 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	4/5/2012 12:39 AM
Tetrachloroethene	ND	800	U	ppbv	800	4/5/2012 12:39 AM
Tetrahydrofuran	ND	800	U	ppbv	800	4/5/2012 12:39 AM
Toluene	13,000	800		ppbv	800	4/5/2012 12:39 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	4/5/2012 12:39 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	4/5/2012 12:39 AM
Trichloroethene	ND	800	U	ppbv	800	4/5/2012 12:39 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	4/5/2012 12:39 AM
Vinyl acetate	ND	800	U	ppbv	800	4/5/2012 12:39 AM
Vinyl chloride	ND	800	U	ppbv	800	4/5/2012 12:39 AM
Xylenes, Total	3,200	2,400		ppbv	800	4/5/2012 12:39 AM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	800	4/5/2012 12:39 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,500,000	940,000		µg/m³	8000	4/5/2012 2:50 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	4/5/2012 2:50 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	4/5/2012 2:50 AM
Surr: 4-Bromofluorobenzene	96.5	70-130		%REC	8000	4/5/2012 2:50 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-037	**Matrix:**	Air
Client Sample ID:	VA1302		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.095	0.10	J	%	1	3/29/2012 4:53 PM
Carbon Monoxide	ND	0.10	U	%	1	3/29/2012 4:53 PM
Methane	ND	0.50	U	%	1	3/29/2012 4:53 PM
Nitrogen	78	0.10		%	1	3/29/2012 4:53 PM
Oxygen	21	0.10		%	1	3/29/2012 4:53 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	4/6/2012 2:58 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	4/6/2012 2:58 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	4/6/2012 2:58 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	4/6/2012 2:58 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	4/6/2012 2:58 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	4/6/2012 2:58 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	4/6/2012 2:58 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	4/6/2012 2:58 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	4/6/2012 2:58 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	4/6/2012 2:58 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	4/6/2012 2:58 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	4/6/2012 2:58 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	4/6/2012 2:58 AM
1,3-Butadiene	ND	40	U	ppbv	40	4/6/2012 2:58 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	4/6/2012 2:58 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	4/6/2012 2:58 AM
2-Butanone	ND	40	U	ppbv	40	4/6/2012 2:58 AM
2-Hexanone	ND	40	U	ppbv	40	4/6/2012 2:58 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	4/6/2012 2:58 AM
Acetone	ND	40	U	ppbv	40	4/6/2012 2:58 AM
Benzene	280	40		ppbv	40	4/6/2012 2:58 AM
Benzyl chloride	ND	40	U	ppbv	40	4/6/2012 2:58 AM
Bromodichloromethane	ND	40	U	ppbv	40	4/6/2012 2:58 AM
Bromoform	ND	40	U	ppbv	40	4/6/2012 2:58 AM
Bromomethane	ND	40	U	ppbv	40	4/6/2012 2:58 AM
Carbon disulfide	ND	40	U	ppbv	40	4/6/2012 2:58 AM
Carbon tetrachloride	ND	40	U	ppbv	40	4/6/2012 2:58 AM
Chlorobenzene	ND	40	U	ppbv	40	4/6/2012 2:58 AM
Chlorodibromomethane	ND	40	U	ppbv	40	4/6/2012 2:58 AM
Chloroethane	ND	40	U	ppbv	40	4/6/2012 2:58 AM
Chloroform	ND	40	U	ppbv	40	4/6/2012 2:58 AM
Chloromethane	ND	40	U	ppbv	40	4/6/2012 2:58 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	4/6/2012 2:58 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	4/6/2012 2:58 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-037	**Matrix:**	Air
Client Sample ID:	VA1302		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	580	80		ppbv	40	4/6/2012 2:58 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	4/6/2012 2:58 AM
Ethyl acetate	ND	40	U	ppbv	40	4/6/2012 2:58 AM
Ethylbenzene	68	80	J	ppbv	40	4/6/2012 2:58 AM
Heptane	620	40		ppbv	40	4/6/2012 2:58 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	4/6/2012 2:58 AM
m,p-Xylene	230	80		ppbv	40	4/6/2012 2:58 AM
Methylene chloride	ND	200	U	ppbv	40	4/6/2012 2:58 AM
n-Hexane	440	80		ppbv	40	4/6/2012 2:58 AM
Naphthalene	ND	40	U	ppbv	40	4/6/2012 2:58 AM
o-Xylene	73	40		ppbv	40	4/6/2012 2:58 AM
Propylene	ND	40	U	ppbv	40	4/6/2012 2:58 AM
Styrene	ND	40	U	ppbv	40	4/6/2012 2:58 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	4/6/2012 2:58 AM
Tetrachloroethene	ND	40	U	ppbv	40	4/6/2012 2:58 AM
Tetrahydrofuran	ND	40	U	ppbv	40	4/6/2012 2:58 AM
Toluene	870	40		ppbv	40	4/6/2012 2:58 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	4/6/2012 2:58 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	4/6/2012 2:58 AM
Trichloroethene	ND	40	U	ppbv	40	4/6/2012 2:58 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	4/6/2012 2:58 AM
Vinyl acetate	ND	40	U	ppbv	40	4/6/2012 2:58 AM
Vinyl chloride	ND	40	U	ppbv	40	4/6/2012 2:58 AM
Xylenes, Total	300	120		ppbv	40	4/6/2012 2:58 AM
Surr: 4-Bromofluorobenzene	96.9	70-130		%REC	40	4/6/2012 2:58 AM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	120,000	23,000		µg/m³	200	4/5/2012 1:29 PM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	4/5/2012 1:29 PM
C9-C12 Aliphatic Hydrocarbons	5,200	38,000	J	µg/m³	200	4/5/2012 1:29 PM
Surr: 4-Bromofluorobenzene	99.6	70-130		%REC	200	4/5/2012 1:29 PM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-038	**Matrix:**	Air
Client Sample ID:	VA8076-TB		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
1,1,2,2-Tetrachloroethane	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
1,1,2-Trichloroethane	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
1,1-Dichloroethane	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
1,1-Dichloroethene	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
1,2,4-Trichlorobenzene	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
1,2,4-Trimethylbenzene	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
1,2-Dibromoethane	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
1,2-Dichlorobenzene	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
1,2-Dichloroethane	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
1,2-Dichloropropane	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
1,3,5-Trimethylbenzene	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
1,3-Butadiene	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
1,3-Dichlorobenzene	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
1,4-Dichlorobenzene	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
2-Butanone	4.8	2.0		ppbv	2	4/5/2012 2:19 AM
2-Hexanone	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
4-Methyl-2-pentanone	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
Acetone	28	2.0		ppbv	2	4/5/2012 2:19 AM
Benzene	15	2.0		ppbv	2	4/5/2012 2:19 AM
Benzyl chloride	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
Bromodichloromethane	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
Bromoform	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
Bromomethane	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
Carbon disulfide	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
Carbon tetrachloride	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
Chlorobenzene	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
Chlorodibromomethane	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
Chloroethane	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
Chloroform	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
Chloromethane	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
cis-1,2-Dichloroethene	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
cis-1,3-dichloropropene	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
Cyclohexane	340	32		ppbv	16	4/6/2012 3:41 AM
Dichlorodifluoromethane	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
Ethyl acetate	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
Ethylbenzene	ND	4.0	U	ppbv	2	4/5/2012 2:19 AM
Heptane	78	2.0		ppbv	2	4/5/2012 2:19 AM
Hexachlorobutadiene	ND	4.0	U	ppbv	2	4/5/2012 2:19 AM
m,p-Xylene	4.3	4.0		ppbv	2	4/5/2012 2:19 AM
Methylene chloride	39	10		ppbv	2	4/5/2012 2:19 AM

RTI Laboratories - Analytical Report

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/14/2012 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1203732-038	**Matrix:**	Air
Client Sample ID:	VA8076-TB		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
n-Hexane	30	4.0		ppbv	2	4/5/2012 2:19 AM
Naphthalene	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
o-Xylene	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
Propylene	2.8	2.0		ppbv	2	4/5/2012 2:19 AM
Styrene	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
tert-Butyl Methyl Ether	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
Tetrachloroethene	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
Tetrahydrofuran	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
Toluene	54	2.0		ppbv	2	4/5/2012 2:19 AM
trans-1,2-Dichloroethene	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
trans-1,3-dichloropropene	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
Trichloroethene	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
Trichlorofluoromethane	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
Vinyl acetate	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
Vinyl chloride	ND	2.0	U	ppbv	2	4/5/2012 2:19 AM
Xylenes, Total	4.3	6.0	J	ppbv	2	4/5/2012 2:19 AM
Surr: 4-Bromofluorobenzene	99.5	70-130		%REC	2	4/5/2012 2:19 AM

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47216

Sample ID:	LCS-032712 TCD	Samp Type:	LCS	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	47216	
Client ID:	LCSW	Batch ID:	R47216	TestNo:	ASTM-D2504			Analysis Date:	3/27/2012	SeqNo:	923270	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.7	0.10	2.500	0	107	70	130	0	0	0	
Carbon Monoxide	2.7	0.10	2.500	0	110	70	130	0	0	0	
Methane	2.1	0.50	2.000	0	106	70	130	0	0	0	
Nitrogen	2.7	0.10	2.500	0	107	70	130	0	0	0	
Oxygen	2.5	0.10	2.500	0	99.4	70	130	0	0	0	

Sample ID:	1203608-027BDUP	Samp Type:	DUP	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	47216	
Client ID:	ZZZZZZ	Batch ID:	R47216	TestNo:	ASTM-D2504			Analysis Date:	3/27/2012	SeqNo:	923282	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.38	0.10						0.3820	0	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	79	0.10						79.42	0.507	20	
Oxygen	20	0.10						20.34	0.552	20	

Sample ID:	MBLK-032712 TCD	Samp Type:	MBLK	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	47216	
Client ID:	PBW	Batch ID:	R47216	TestNo:	ASTM-D2504			Analysis Date:	3/27/2012	SeqNo:	924523	

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

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47217

Sample ID: **MBLK-032812 TCD** Samp Type: **MBLK** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **47217**
Client ID: **PBW** Batch ID: **R47217** TestNo: **ASTM-D2504** Analysis Date: **3/28/2012** SeqNo: **923296**

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-032812 TCD** Samp Type: **LCS** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **47217**
Client ID: **LCSW** Batch ID: **R47217** TestNo: **ASTM-D2504** Analysis Date: **3/28/2012** SeqNo: **923298**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.6	0.10	2.500	0	103	70	130	0	0	0	
Carbon Monoxide	2.7	0.10	2.500	0	107	70	130	0	0	0	
Methane	2.1	0.50	2.000	0	103	70	130	0	0	0	
Nitrogen	2.8	0.10	2.500	0	111	70	130	0	0	0	
Oxygen	2.5	0.10	2.500	0	99.1	70	130	0	0	0	

Sample ID: **1203732-017BDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **47217**
Client ID: **VA1092** Batch ID: **R47217** TestNo: **ASTM-D2504** Analysis Date: **3/28/2012** SeqNo: **923310**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.087	0.10						0.09000	3.39	20	J
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	78	0.10						78.45	0.678	20	
Oxygen	21	0.10						20.98	0.631	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47258

Sample ID: **MBLK-032912 TCD** Samp Type: **MBLK** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **47258**
Client ID: **PBW** Batch ID: **R47258** TestNo: **ASTM-D2504** Analysis Date: **3/29/2012** SeqNo: **923866**

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-032912 TCD** Samp Type: **LCS** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **47258**
Client ID: **LCSW** Batch ID: **R47258** TestNo: **ASTM-D2504** Analysis Date: **3/29/2012** SeqNo: **923868**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.7	0.10	2.500	0	107	70	130	2.615	2.16	0	
Carbon Monoxide	2.7	0.10	2.500	0	108	70	130	2.675	0.893	0	
Methane	2.2	0.50	2.000	0	111	70	130	2.243	1.12	0	
Nitrogen	2.6	0.10	2.500	0	106	70	130	2.770	4.54	0	
Oxygen	2.5	0.10	2.500	0	99.0	70	130	2.493	0.765	0	

Sample ID: **1203732-027BDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **47258**
Client ID: **VA1108** Batch ID: **R47258** TestNo: **ASTM-D2504** Analysis Date: **3/29/2012** SeqNo: **923880**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.36	0.10						0.3320	8.92	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	79	0.10						78.82	0.100	20	
Oxygen	20	0.10						19.96	0.105	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47313

Sample ID:	MBLK VOA1 033012	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47313	
Client ID:	PBW	Batch ID:	R47313	TestNo:	TO-15			Analysis Date:	3/30/2012	SeqNo:	924682	

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#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47313

Sample ID:	MBLK VOA1 033012	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47313	
Client ID:	PBW	Batch ID:	R47313	TestNo:	TO-15			Analysis Date:	3/30/2012	SeqNo:	924682	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									U
cis-1,2-Dichloroethene	ND	1.0									U
cis-1,3-dichloropropene	ND	1.0									U
Cyclohexane	ND	2.0									U
Dichlorodifluoromethane	ND	1.0									U
Ethyl acetate	ND	1.0									U
Ethylbenzene	ND	2.0									U
Heptane	ND	1.0									U
Hexachlorobutadiene	ND	2.0									U
m,p-Xylene	ND	2.0									U
Methylene chloride	ND	5.0									U
n-Hexane	ND	2.0									U
Naphthalene	ND	1.0									U
o-Xylene	ND	1.0									U
Propylene	ND	1.0									U
Styrene	ND	1.0									U
tert-Butyl Methyl Ether	ND	1.0									U
Tetrachloroethene	ND	1.0									U
Tetrahydrofuran	ND	1.0									U
Toluene	ND	1.0									U
trans-1,2-Dichloroethene	ND	1.0									U
trans-1,3-dichloropropene	ND	1.0									U
Trichloroethene	ND	1.0									U
Trichlorofluoromethane	ND	1.0									U
Vinyl acetate	ND	1.0									U
Vinyl chloride	ND	1.0									U
Xylenes, Total	ND	3.0									U
Surr: 4-Bromofluorobenzene	15		12.50		116	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47313

Sample ID:	1203608-014ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47313	
Client ID:	ZZZZZZ	Batch ID:	R47313	TestNo:	TO-15			Analysis Date:	3/30/2012	SeqNo:	924689	

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	780	40						808.0	3.07	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#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47313

Sample ID:	1203608-014ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47313	
Client ID:	ZZZZZZ	Batch ID:	R47313	TestNo:	TO-15			Analysis Date:	3/30/2012	SeqNo:	924689	

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	1,300	80						1,335	2.49	25	
Dichlorodifluoromethane	ND	40						0	0	25	U
Ethyl acetate	ND	40						0	0	25	U
Ethylbenzene	110	80						114.4	7.62	25	
Heptane	1,300	40						1,363	2.59	25	
Hexachlorobutadiene	ND	80						0	0	25	U
m,p-Xylene	380	80						411.2	7.26	25	
Methylene chloride	ND	200						0	0	25	U
n-Hexane	760	80						765.6	0.892	25	
Naphthalene	ND	40						0	0	25	U
o-Xylene	96	40						104.0	7.58	25	
Propylene	ND	40						0	0	25	U
Styrene	ND	40						0	0	25	U
tert-Butyl Methyl Ether	ND	40						0	0	25	U
Tetrachloroethene	ND	40						0	0	25	U
Tetrahydrofuran	ND	40						0	0	25	U
Toluene	1,900	40						2,038	5.22	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	480	120						515.2	7.32	25	
Surr: 4-Bromofluorobenzene	560		500.0		112	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47420

Sample ID:	MBLK VOA1 040312	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47420
Client ID:	PBW	Batch ID:	R47420	TestNo:	TO-15			Analysis Date:	4/4/2012	SeqNo:	926469

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#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47420

Sample ID:	MBLK VOA1 040312	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47420	
Client ID:	PBW	Batch ID:	R47420	TestNo:	TO-15			Analysis Date:	4/4/2012	SeqNo:	926469	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									U
cis-1,2-Dichloroethene	ND	1.0									U
cis-1,3-dichloropropene	ND	1.0									U
Cyclohexane	ND	2.0									U
Dichlorodifluoromethane	ND	1.0									U
Ethyl acetate	ND	1.0									U
Ethylbenzene	ND	2.0									U
Heptane	ND	1.0									U
Hexachlorobutadiene	ND	2.0									U
m,p-Xylene	ND	2.0									U
Methylene chloride	ND	5.0									U
n-Hexane	ND	2.0									U
Naphthalene	ND	1.0									U
o-Xylene	ND	1.0									U
Propylene	ND	1.0									U
Styrene	ND	1.0									U
tert-Butyl Methyl Ether	ND	1.0									U
Tetrachloroethene	ND	1.0									U
Tetrahydrofuran	ND	1.0									U
Toluene	ND	1.0									U
trans-1,2-Dichloroethene	ND	1.0									U
trans-1,3-dichloropropene	ND	1.0									U
Trichloroethene	ND	1.0									U
Trichlorofluoromethane	ND	1.0									U
Vinyl acetate	ND	1.0									U
Vinyl chloride	ND	1.0									U
Xylenes, Total	ND	3.0									U
Surr: 4-Bromofluorobenzene	12		12.50		100	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47420

Sample ID:	1203732-008Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47420
Client ID:	VA1031	Batch ID:	R47420	TestNo:	TO-15			Analysis Date:	4/4/2012	SeqNo:	926473

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	150,000	8,000						168,600	11.1	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#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47420

Sample ID:	1203732-008Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47420	
Client ID:	VA1031	Batch ID:	R47420	TestNo:	TO-15			Analysis Date:	4/4/2012	SeqNo:	926473	

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	440,000	16,000						457,500	3.76	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	170,000	8,000						172,300	2.35	25	
Hexachlorobutadiene	ND	16,000						0	0	25	U
m,p-Xylene	13,000	16,000						12,880	1.25	25	J
Methylene chloride	ND	40,000						0	0	25	U
n-Hexane	450,000	16,000						471,000	5.41	25	
Naphthalene	ND	8,000						0	0	25	U
o-Xylene	ND	8,000						0	0	25	U
Propylene	17,000	8,000						18,080	4.06	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	130,000	8,000						134,500	6.57	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	13,000	24,000						12,880	1.25	25	J
Surr: 4-Bromofluorobenzene	100,000		100,000		100	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47436

Sample ID:	MBLK VOA9 040412	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	47436	
Client ID:	PBW	Batch ID:	R47436	TestNo:	MA_APH			Analysis Date:	4/4/2012	SeqNo:	926674	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	ND	120									U
C9-C10 Aromatic Hydrocarbons	ND	130									U
C9-C12 Aliphatic Hydrocarbons	ND	190									U
Surr: 4-Bromofluorobenzene	84		89.50		93.6	70	130				

Sample ID:	1203732-032Adup	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	47436	
Client ID:	VA1243	Batch ID:	R47436	TestNo:	MA_APH			Analysis Date:	4/5/2012	SeqNo:	926681	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	9,600,000	2,300,000						9,360,000	2.95	30	
C9-C10 Aromatic Hydrocarbons	ND	2,700,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000						0	0	30	U
Surr: 4-Bromofluorobenzene	1,800,000		1,790,000		98.7	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47469

Sample ID:	1203732-002Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47469
Client ID:	VA1008	Batch ID:	R47469	TestNo:	TO-15			Analysis Date:	4/5/2012	SeqNo:	927272

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	120,000	8,000						122,100	5.31	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#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47469

Sample ID:	1203732-002Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47469	
Client ID:	VA1008	Batch ID:	R47469	TestNo:	TO-15			Analysis Date:	4/5/2012	SeqNo:	927272	

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	360,000	16,000						380,800	4.62	25	
Dichlorodifluoromethane	ND	8,000						0	0	25	U
Ethyl acetate	ND	8,000						0	0	25	U
Ethylbenzene	9,000	16,000						9,440	5.22	25	J
Heptane	160,000	8,000						166,500	4.72	25	
Hexachlorobutadiene	ND	16,000						0	0	25	U
m,p-Xylene	23,000	16,000						24,480	4.68	25	
Methylene chloride	ND	40,000						0	0	25	U
n-Hexane	250,000	16,000						271,300	6.36	25	
Naphthalene	ND	8,000						0	0	25	U
o-Xylene	8,200	8,000						8,640	4.74	25	
Propylene	ND	8,000						0	0	25	U
Styrene	ND	8,000						0	0	25	U
tert-Butyl Methyl Ether	ND	8,000						0	0	25	U
Tetrachloroethene	ND	8,000						0	0	25	U
Tetrahydrofuran	ND	8,000						0	0	25	U
Toluene	240,000	8,000						253,700	5.18	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	32,000	24,000						33,120	4.70	25	
Surr: 4-Bromofluorobenzene	98,000		100,000		98.5	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47469

Sample ID:	MBLK VOA1 040512	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47469
Client ID:	PBW	Batch ID:	R47469	TestNo:	TO-15			Analysis Date:	4/5/2012	SeqNo:	927296

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#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47469

Sample ID:	MBLK VOA1 040512	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47469
Client ID:	PBW	Batch ID:	R47469	TestNo:	TO-15			Analysis Date:	4/5/2012	SeqNo:	927296

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									U
cis-1,2-Dichloroethene	ND	1.0									U
cis-1,3-dichloropropene	ND	1.0									U
Cyclohexane	ND	2.0									U
Dichlorodifluoromethane	ND	1.0									U
Ethyl acetate	ND	1.0									U
Ethylbenzene	ND	2.0									U
Heptane	ND	1.0									U
Hexachlorobutadiene	ND	2.0									U
m,p-Xylene	ND	2.0									U
Methylene chloride	ND	5.0									U
n-Hexane	ND	2.0									U
Naphthalene	ND	1.0									U
o-Xylene	ND	1.0									U
Propylene	ND	1.0									U
Styrene	ND	1.0									U
tert-Butyl Methyl Ether	ND	1.0									U
Tetrachloroethene	ND	1.0									U
Tetrahydrofuran	ND	1.0									U
Toluene	ND	1.0									U
trans-1,2-Dichloroethene	ND	1.0									U
trans-1,3-dichloropropene	ND	1.0									U
Trichloroethene	ND	1.0									U
Trichlorofluoromethane	ND	1.0									U
Vinyl acetate	ND	1.0									U
Vinyl chloride	ND	1.0									U
Xylenes, Total	ND	3.0									U
Surr: 4-Bromofluorobenzene	12		12.50		99.5	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47474

Sample ID:	MBLK VOA9 040512	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	47474	
Client ID:	PBW	Batch ID:	R47474	TestNo:	MA_APH			Analysis Date:	4/5/2012	SeqNo:	927466	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	ND	120									U
C9-C10 Aromatic Hydrocarbons	ND	130									U
C9-C12 Aliphatic Hydrocarbons	ND	190									U
Surr: 4-Bromofluorobenzene	84		89.50		93.6	70	130				

Sample ID:	1203732-011Adup	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	47474	
Client ID:	VA1040	Batch ID:	R47474	TestNo:	MA_APH			Analysis Date:	4/5/2012	SeqNo:	927471	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	58,000,000	4,700,000						73,090,000	22.5	30	
C9-C10 Aromatic Hydrocarbons	ND	5,300,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	ND	7,600,000						0	0	30	U
Surr: 4-Bromofluorobenzene	3,400,000		3,580,000		95.2	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47487

Sample ID: **MBLK VOA1 040612** Samp Type: **MBLK** Test Code: **EPA_TO15** Units: **ppbv** Prep Date: RunNo: **47487**

Client ID: **PBW** Batch ID: **R47487** TestNo: **TO-15** Analysis Date: **4/6/2012** SeqNo: **927776**

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#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47487

Sample ID:	MBLK VOA1 040612	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47487
Client ID:	PBW	Batch ID:	R47487	TestNo:	TO-15			Analysis Date:	4/6/2012	SeqNo:	927776

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									U
cis-1,2-Dichloroethene	ND	1.0									U
cis-1,3-dichloropropene	ND	1.0									U
Cyclohexane	ND	2.0									U
Dichlorodifluoromethane	ND	1.0									U
Ethyl acetate	ND	1.0									U
Ethylbenzene	ND	2.0									U
Heptane	ND	1.0									U
Hexachlorobutadiene	ND	2.0									U
m,p-Xylene	ND	2.0									U
Methylene chloride	ND	5.0									U
n-Hexane	ND	2.0									U
Naphthalene	ND	1.0									U
o-Xylene	ND	1.0									U
Propylene	ND	1.0									U
Styrene	ND	1.0									U
tert-Butyl Methyl Ether	ND	1.0									U
Tetrachloroethene	ND	1.0									U
Tetrahydrofuran	ND	1.0									U
Toluene	ND	1.0									U
trans-1,2-Dichloroethene	ND	1.0									U
trans-1,3-dichloropropene	ND	1.0									U
Trichloroethene	ND	1.0									U
Trichlorofluoromethane	ND	1.0									U
Vinyl acetate	ND	1.0									U
Vinyl chloride	ND	1.0									U
Xylenes, Total	ND	3.0									U
Surr: 4-Bromofluorobenzene	12		12.50		98.6	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47487

Sample ID:	1203732-027ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47487
Client ID:	VA1108	Batch ID:	R47487	TestNo:	TO-15			Analysis Date:	4/6/2012	SeqNo:	927783

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	800						0	0	25	U
1,1,2,2-Tetrachloroethane	ND	800						0	0	25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800						0	0	25	U
1,1,2-Trichloroethane	ND	800						0	0	25	U
1,1-Dichloroethane	ND	800						0	0	25	U
1,1-Dichloroethene	ND	800						0	0	25	U
1,2,4-Trichlorobenzene	ND	800						0	0	25	U
1,2,4-Trimethylbenzene	ND	800						0	0	25	U
1,2-Dibromoethane	ND	800						0	0	25	U
1,2-Dichlorobenzene	ND	800						0	0	25	U
1,2-Dichloroethane	ND	800						0	0	25	U
1,2-Dichloropropane	ND	800						0	0	25	U
1,3,5-Trimethylbenzene	ND	800						0	0	25	U
1,3-Butadiene	ND	800						0	0	25	U
1,3-Dichlorobenzene	ND	800						0	0	25	U
1,4-Dichlorobenzene	ND	800						0	0	25	U
2-Butanone	1,700	800						1,640	4.76	25	
2-Hexanone	ND	800						0	0	25	U
4-Methyl-2-pentanone	ND	800						0	0	25	U
Acetone	3,200	800						2,968	8.52	25	
Benzene	13,000	800						11,580	7.84	25	
Benzyl chloride	ND	800						0	0	25	U
Bromodichloromethane	ND	800						0	0	25	U
Bromoform	ND	800						0	0	25	U
Bromomethane	ND	800						0	0	25	U
Carbon disulfide	ND	800						0	0	25	U
Carbon tetrachloride	ND	800						0	0	25	U
Chlorobenzene	ND	800						0	0	25	U
Chlorodibromomethane	ND	800						0	0	25	U
Chloroethane	ND	800						0	0	25	U
Chloroform	ND	800						0	0	25	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47487

Sample ID:	1203732-027ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47487
Client ID:	VA1108	Batch ID:	R47487	TestNo:	TO-15			Analysis Date:	4/6/2012	SeqNo:	927783

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	800						0	0	25	U
cis-1,2-Dichloroethene	ND	800						0	0	25	U
cis-1,3-dichloropropene	ND	800						0	0	25	U
Cyclohexane	27,000	1,600						25,240	5.22	25	
Dichlorodifluoromethane	ND	800						0	0	25	U
Ethyl acetate	ND	800						0	0	25	U
Ethylbenzene	1,700	1,600						1,584	8.70	25	
Heptane	24,000	800						23,460	4.14	25	
Hexachlorobutadiene	ND	1,600						0	0	25	U
m,p-Xylene	4,300	1,600						3,888	9.22	25	
Methylene chloride	ND	4,000						0	0	25	U
n-Hexane	19,000	1,600						17,630	6.24	25	
Naphthalene	ND	800						0	0	25	U
o-Xylene	1,200	800						1,040	10.2	25	
Propylene	ND	800						0	0	25	U
Styrene	ND	800						0	0	25	U
tert-Butyl Methyl Ether	ND	800						0	0	25	U
Tetrachloroethene	ND	800						0	0	25	U
Tetrahydrofuran	ND	800						0	0	25	U
Toluene	33,000	800						31,120	6.78	25	
trans-1,2-Dichloroethene	ND	800						0	0	25	U
trans-1,3-dichloropropene	ND	800						0	0	25	U
Trichloroethene	ND	800						0	0	25	U
Trichlorofluoromethane	ND	800						0	0	25	U
Vinyl acetate	ND	800						0	0	25	U
Vinyl chloride	ND	800						0	0	25	U
Xylenes, Total	5,400	2,400						4,928	9.44	25	
Surr: 4-Bromofluorobenzene	9,600		10,000		96.1	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47490

Sample ID:	1203903-012ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47490	
Client ID:	ZZZZZZ	Batch ID:	R47490	TestNo:	TO-15			Analysis Date:	4/7/2012	SeqNo:	927817	

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	150,000	8,000						153,000	4.00	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#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47490

Sample ID:	1203903-012ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47490	
Client ID:	ZZZZZZ	Batch ID:	R47490	TestNo:	TO-15			Analysis Date:	4/7/2012	SeqNo:	927817	

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	280,000	16,000						287,100	2.23	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	87,000	8,000						89,600	3.17	25	
Hexachlorobutadiene	ND	16,000						0	0	25	U
m,p-Xylene	12,000	16,000						12,720	4.50	25	J
Methylene chloride	ND	40,000						0	0	25	U
n-Hexane	210,000	16,000						216,200	1.42	25	
Naphthalene	ND	8,000						0	0	25	U
o-Xylene	ND	8,000						0	0	25	U
Propylene	9,600	8,000						9,600	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	210,000	8,000						221,000	5.81	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	12,000	24,000						12,720	4.50	25	J
Surr: 4-Bromofluorobenzene	98,000		100,000		97.8	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47490

Sample ID:	MBLK VOA1 040712	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47490
Client ID:	PBW	Batch ID:	R47490	TestNo:	TO-15			Analysis Date:	4/7/2012	SeqNo:	927829

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#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47490

Sample ID:	MBLK VOA1 040712	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47490	
Client ID:	PBW	Batch ID:	R47490	TestNo:	TO-15			Analysis Date:	4/7/2012	SeqNo:	927829	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									U
cis-1,2-Dichloroethene	ND	1.0									U
cis-1,3-dichloropropene	ND	1.0									U
Cyclohexane	ND	2.0									U
Dichlorodifluoromethane	ND	1.0									U
Ethyl acetate	ND	1.0									U
Ethylbenzene	ND	2.0									U
Heptane	ND	1.0									U
Hexachlorobutadiene	ND	2.0									U
m,p-Xylene	ND	2.0									U
Methylene chloride	ND	5.0									U
n-Hexane	ND	2.0									U
Naphthalene	ND	1.0									U
o-Xylene	ND	1.0									U
Propylene	ND	1.0									U
Styrene	ND	1.0									U
tert-Butyl Methyl Ether	ND	1.0									U
Tetrachloroethene	ND	1.0									U
Tetrahydrofuran	ND	1.0									U
Toluene	ND	1.0									U
trans-1,2-Dichloroethene	ND	1.0									U
trans-1,3-dichloropropene	ND	1.0									U
Trichloroethene	ND	1.0									U
Trichlorofluoromethane	ND	1.0									U
Vinyl acetate	ND	1.0									U
Vinyl chloride	ND	1.0									U
Xylenes, Total	ND	3.0									U
Surr: 4-Bromofluorobenzene	12		12.50		94.6	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47492

Sample ID:	MBLK VOA9 040612	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	47492	
Client ID:	PBW	Batch ID:	R47492	TestNo:	MA_APH			Analysis Date:	4/6/2012	SeqNo:	927846	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	ND	120									U
C9-C10 Aromatic Hydrocarbons	ND	130									U
C9-C12 Aliphatic Hydrocarbons	ND	190									U
Surr: 4-Bromofluorobenzene	84		89.50		93.6	70	130				

Sample ID:	1203732-016Adup	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	47492	
Client ID:	VA1091	Batch ID:	R47492	TestNo:	MA_APH			Analysis Date:	4/6/2012	SeqNo:	927848	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	21,000	4,700						18,070	13.7	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	3,600		3,580		100	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47493

Sample ID: **MBLK VOA1 040812** Samp Type: **MBLK** Test Code: **EPA_TO15** Units: **ppbv** Prep Date: RunNo: **47493**

Client ID: **PBW** Batch ID: **R47493** TestNo: **TO-15** Analysis Date: **4/8/2012** SeqNo: **927857**

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#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47493

Sample ID:	MBLK VOA1 040812	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47493
Client ID:	PBW	Batch ID:	R47493	TestNo:	TO-15			Analysis Date:	4/8/2012	SeqNo:	927857

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									U
cis-1,2-Dichloroethene	ND	1.0									U
cis-1,3-dichloropropene	ND	1.0									U
Cyclohexane	ND	2.0									U
Dichlorodifluoromethane	ND	1.0									U
Ethyl acetate	ND	1.0									U
Ethylbenzene	ND	2.0									U
Heptane	ND	1.0									U
Hexachlorobutadiene	ND	2.0									U
m,p-Xylene	ND	2.0									U
Methylene chloride	ND	5.0									U
n-Hexane	ND	2.0									U
Naphthalene	ND	1.0									U
o-Xylene	ND	1.0									U
Propylene	ND	1.0									U
Styrene	ND	1.0									U
tert-Butyl Methyl Ether	ND	1.0									U
Tetrachloroethene	ND	1.0									U
Tetrahydrofuran	ND	1.0									U
Toluene	ND	1.0									U
trans-1,2-Dichloroethene	ND	1.0									U
trans-1,3-dichloropropene	ND	1.0									U
Trichloroethene	ND	1.0									U
Trichlorofluoromethane	ND	1.0									U
Vinyl acetate	ND	1.0									U
Vinyl chloride	ND	1.0									U
Xylenes, Total	ND	3.0									U
Surr: 4-Bromofluorobenzene	12		12.50		96.9	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47493

Sample ID:	1203984-012ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47493	
Client ID:	ZZZZZZ	Batch ID:	R47493	TestNo:	TO-15			Analysis Date:	4/8/2012	SeqNo:	927865	

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	19,000	8,000						18,400	2.58	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#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47493

Sample ID:	1203984-012ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47493	
Client ID:	ZZZZZZ	Batch ID:	R47493	TestNo:	TO-15			Analysis Date:	4/8/2012	SeqNo:	927865	

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	44,000	16,000						43,120	2.20	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	32,000	8,000						30,880	2.81	25	
Hexachlorobutadiene	ND	16,000						0	0	25	U
m,p-Xylene	8,500	16,000						8,160	3.85	25	J
Methylene chloride	ND	40,000						0	0	25	U
n-Hexane	22,000	16,000						21,920	2.17	25	
Naphthalene	ND	8,000						0	0	25	U
o-Xylene	ND	8,000						0	0	25	U
Propylene	ND	8,000						0	0	25	U
Styrene	ND	8,000						0	0	25	U
tert-Butyl Methyl Ether	ND	8,000						0	0	25	U
Tetrachloroethene	ND	8,000						0	0	25	U
Tetrahydrofuran	ND	8,000						0	0	25	U
Toluene	43,000	8,000						42,080	1.88	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	8,500	24,000						8,160	3.85	25	J
Surr: 4-Bromofluorobenzene	97,000		100,000		96.6	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47495

Sample ID:	MBLK VOA9 040712	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	47495	
Client ID:	PBW	Batch ID:	R47495	TestNo:	MA_APH			Analysis Date:	4/7/2012	SeqNo:	927935	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons		ND	120									U
C9-C10 Aromatic Hydrocarbons		ND	130									U
C9-C12 Aliphatic Hydrocarbons		ND	190									U
Surr: 4-Bromofluorobenzene		83		89.50		92.5	70	130				

Sample ID:	1203903-014ADUP	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	47495	
Client ID:	ZZZZZZ	Batch ID:	R47495	TestNo:	MA_APH			Analysis Date:	4/7/2012	SeqNo:	927937	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons		ND	940,000						0	0	30	U
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		92.6	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203732

Date Reported: 4/10/2012
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47531

Sample ID:	MBLK VOA9 040912	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	47531	
Client ID:	PBW	Batch ID:	R47531	TestNo:	MA_APH			Analysis Date:	4/9/2012	SeqNo:	928466	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons		ND	120									U
C9-C10 Aromatic Hydrocarbons		ND	130									U
C9-C12 Aliphatic Hydrocarbons		ND	190									U
Surr: 4-Bromofluorobenzene		83		89.50		93.2	70	130				

Sample ID:	1203732-027Adup	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	47531	
Client ID:	VA1108	Batch ID:	R47531	TestNo:	MA_APH			Analysis Date:	4/9/2012	SeqNo:	928473	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons		1,200,000	190,000						1,226,000	0.132	30	
C9-C10 Aromatic Hydrocarbons		ND	210,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons		57,000	300,000						0	200	30	JR
Surr: 4-Bromofluorobenzene		140,000		143,200		100	70	130		0	30	

RTI Laboratories

Run ID: VOA1_120330A **Run No.:** 47313

Analytical Run Date: 3/30/2012 **InstrumentID:** VOA1

Analyst: Rachel Dear **Column:**

Calibration ID: 47220 **Column ID:** 0.25mm, 1.4um

Column Length: 30m

Run Comments: PR, RH3 040412 --- 1,4-Dioxane failed in CCV. Not a project analyte

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB2 VOA1 033012	BFB_TUNE	TUNE	R47313	3/30/2012 8:56:00 AM	Jim Wuokila		
CCV VOA1 033012	EPA_TO15	CCV	R47313	3/30/2012 9:40:00 AM	Jim Wuokila		
RLVS1 VOA1 03301	EPA_TO15	RLVS	R47313	3/30/2012 10:24:00 AM	Jim Wuokila		
MBLK VOA1 033012	EPA_TO15	MBLK	R47313	3/30/2012 11:29:00 AM	Jim Wuokila		
1203608-026A	EPA_TO15	SAMP	R47313	3/30/2012 12:13:00 PM	Celeste Hoitash		
1203608-011A	EPA_TO15	SAMP	R47313	3/30/2012 12:58:00 PM	Jim Wuokila		
1203608-005A	EPA_TO15	SAMP	R47313	3/30/2012 1:45:00 PM	Jim Wuokila		
1203608-028A	EPA_TO15	SAMP	R47313	3/30/2012 2:28:00 PM	Jim Wuokila		
1203608-029A	EPA_TO15	SAMP	R47313	3/30/2012 4:07:00 PM	Jim Wuokila		
1203608-014A	EPA_TO15	SAMP	R47313	3/30/2012 4:50:00 PM	Jim Wuokila		
1203608-014ADUP	EPA_TO15	DUP	R47313	3/30/2012 5:33:00 PM	Jim Wuokila		
1203608-006A	EPA_TO15	SAMP	R47313	3/30/2012 6:17:00 PM	Jim Wuokila		
1203608-007A	EPA_TO15	SAMP	R47313	3/30/2012 7:43:00 PM	Jim Wuokila		
1203608-008A	EPA_TO15	SAMP	R47313	3/30/2012 8:26:00 PM	Jim Wuokila		
1203732-032A	EPA_TO15	SAMP	R47313	3/31/2012 12:46:00 AM	Jim Wuokila		
RLVS1 VOA1 03301	EPA_TO15	RLVS	R47313	3/31/2012 2:15:00 AM	Jim Wuokila		

RTI Laboratories

ANALYTICAL RUN Summary

12-Apr-12

RunNo 47313

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
924679	BFB2 VOA1 033012	BFB_TUNE	TUNE	\1\DATA\033012	3/30/2012 8:56:0	1	R47313		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		92.3	92.3		100	0	0	0	0	0	92%	50	120	0%	
175	M		7.4	7.4		100	0	0	0	0	0	7%	4	9	0%	
176	M		98.3	98.3		100	0	0	0	0	0	98%	93	101	0%	
177	M		6.9	6.9		100	0	0	0	0	0	7%	5	9	0%	
50	M		17.6	17.6		100	0	0	0	0	0	18%	8	40	0%	
75	M		47.5	47.5		100	0	0	0	0	0	48%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.9	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
924680	CCV VOA1 033012	EPA_TO15	CCV	\1\DATA\033012	3/30/2012 9:40:0	1	R47313		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	10.66	10.66		9.6	0	0	0.107	1	0	111%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.24	10.24		10	0	0	0.211	1	0	102%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	11.9	11.9		9.8	0	0	0.108	1	0	121%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.41	9.41		9.8	0	0	0.2	1	0	96%	70	130	0%	
1,1-Dichloroethane	A	ppbv	10.42	10.42		9.7	0	0	0.111	1	0	107%	70	130	0%	
1,1-Dichloroethene	A	ppbv	11.62	11.62		9.9	0	0	0.097	1	0	117%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	7.19	7.19		9.1	0	0	0.271	1	0	79%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	8.99	8.99		9.8	0	0	0.245	1	0	92%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.33	9.33		9.6	0	0	0.186	1	0	97%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	10.24	10.24		9.7	0	0	0.208	1	0	106%	70	130	0%	
1,2-Dichloroethane	A	ppbv	9.55	9.55		9.7	0	0	0.196	1	0	98%	70	130	0%	
1,2-Dichloropropane	A	ppbv	9.05	9.05		9.8	0	0	0.224	1	0	92%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.3	9.3		9.7	0	0	0.24	1	0	96%	70	130	0%	
1,3-Butadiene	A	ppbv	11.95	11.95		9.8	0	0	0.152	1	0	122%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.85	9.85		9.7	0	0	0.202	1	0	102%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
924680	CCV VOA1 033012	EPA_TO15	CCV	.\1\DATA\033012	3/30/2012 9:40:0	1	R47313		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.54	9.54		9.6	0	0	0.194	1	0	99%	70	130	0%	
1,4-Dioxane	A	ppbv	6.57	6.57		9.6	0	0	0.128	1	0	68%	70	130	0%	S
2-Butanone	A	ppbv	8.09	8.09		9.9	0	0	0.287	1	0	82%	70	130	0%	
2-Hexanone	A	ppbv	7.18	7.18		9.8	0	0	0.135	1	0	73%	70	130	0%	
2-Propanol	A	ppbv	8.97	8.97		10.1	0	0	0.329	1	0	89%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	8.83	8.83		10	0	0	0.157	1	0	88%	70	130	0%	
Acetone	A	ppbv	8.75	8.75		10	0	0	0.43	1	0	88%	70	130	0%	
Benzene	A	ppbv	9.37	9.37		9.6	0	0	0.126	1	0	98%	70	130	0%	
Benzyl chloride	A	ppbv	9.67	9.67		9.7	0	0	0.155	1	0	100%	70	130	0%	
Bromodichloromethane	A	ppbv	10.02	10.02		9.6	0	0	0.156	1	0	104%	70	130	0%	
Bromoform	A	ppbv	9.83	9.83		9.6	0	0	0.197	1	0	102%	70	130	0%	
Bromomethane	A	ppbv	10.08	10.08		9.3	0	0	0.075	1	0	108%	70	130	0%	
Carbon disulfide	A	ppbv	11.99	11.99		9.7	0	0	0.093	1	0	124%	70	130	0%	
Carbon tetrachloride	A	ppbv	10.3	10.3		9.5	0	0	0.114	1	0	108%	70	130	0%	
Chlorobenzene	A	ppbv	9.12	9.12		9.9	0	0	0.275	1	0	92%	70	130	0%	
Chlorodibromomethane	A	ppbv	9.99	9.99		9.2	0	0	0.165	1	0	109%	70	130	0%	
Chloroethane	A	ppbv	9.97	9.97		9.8	0	0	0.063	1	0	102%	70	130	0%	
Chloroform	A	ppbv	10.63	10.63		9.4	0	0	0.126	1	0	113%	70	130	0%	
Chloromethane	A	ppbv	10.44	10.44		9.8	0	0	0.104	1	0	107%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	10.39	10.39		9.8	0	0	0.107	1	0	106%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	8.98	8.98		9.5	0	0	0.166	1	0	95%	70	130	0%	
Cyclohexane	A	ppbv	11.5	11.5		9.8	0	0	0.684	2	0	117%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	10.24	10.24		9.2	0	0	0.086	1	0	111%	70	130	0%	
Ethanol	A	ppbv	6.59	6.59		9.2	0	0	1.962	5	0	72%	70	130	0%	
Ethyl acetate	A	ppbv	8.39	8.39		9.8	0	0	0.157	1	0	86%	70	130	0%	
Ethylbenzene	A	ppbv	9.07	9.07		9.8	0	0	0.737	2	0	93%	70	130	0%	
Heptane	A	ppbv	10.82	10.82		9.9	0	0	0.249	1	0	109%	70	130	0%	
Hexachlorobutadiene	A	ppbv	8.87	8.87		9.4	0	0	0.374	2	0	94%	70	130	0%	
m,p-Xylene	A	ppbv	18.63	18.63		19.2	0	0	0.524	2	0	97%	70	130	0%	
Methylene chloride	A	ppbv	10.93	10.93		10	0	0	2.077	5	0	109%	70	130	0%	
n-Hexane	A	ppbv	11.06	11.06		10.1	0	0	0.692	2	0	110%	70	130	0%	
Naphthalene	A	ppbv	8.28	8.28		9.2	0	0	0.247	1	0	90%	70	130	0%	
o-Xylene	A	ppbv	9.29	9.29		10	0	0	0.258	1	0	93%	70	130	0%	
Propylene	A	ppbv	10.91	10.91		10.2	0	0	0.075	1	0	107%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
924680	CCV VOA1 033012	EPA_TO15	CCV	\1\DATA\0330123/30/2012 9:40:0		1	R47313		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	9.17	9.17		9.8	0	0	0.263	1	0	94%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	9.19	9.19		9.9	0	0	0.228	1	0	93%	70	130	0%	
Tetrachloroethene	A	ppbv	9.75	9.75		9.6	0	0	0.148	1	0	102%	70	130	0%	
Tetrahydrofuran	A	ppbv	9.09	9.09		10	0	0	0.201	1	0	91%	70	130	0%	
Toluene	A	ppbv	9.37	9.37		9.8	0	0	0.158	1	0	96%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	11.51	11.51		9.8	0	0	0.117	1	0	117%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	8.31	8.31		9.1	0	0	0.171	1	0	91%	70	130	0%	
Trichloroethene	A	ppbv	9.78	9.78		9.6	0	0	0.119	1	0	102%	70	130	0%	
Trichlorofluoromethane	A	ppbv	10.91	10.91		9.6	0	0	0.148	1	0	114%	70	130	0%	
Vinyl acetate	A	ppbv	8.43	8.43		9.9	0	0	0.266	1	0	85%	70	130	0%	
Vinyl chloride	A	ppbv	11.71	11.71		9.4	0	0	0.072	1	0	125%	70	130	0%	
Xylenes, Total	C	ppbv	27.92	27.92		29.2	0	0	0.782	3	0	96%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		1.25	0	0	0	0	0	1000%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	13.44	13.44		12.5	0	0	0	0	0	108%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
926221	RLVS1 VOA1 03301	EPA_TO15	RLVS	\1\DATA\0330123/30/2012 10:24:		1	R47313		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	1	1		0.996	0	0	0.107	1	0	100%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.43	1.43		1	0	0	0.211	1	0	143%	70	130	0%	S
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	1.04	1.04		0.98	0	0	0.108	1	0	106%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	1	1		0.98	0	0	0.2	1	0	102%	70	130	0%	
1,1-Dichloroethane	A	ppbv	0.96	0.96		0.97	0	0	0.111	1	0	99%	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	1.72	1.72		0.91	0	0	0.271	1	0	189%	70	130	0%	S
1,2,4-Trimethylbenzene	A	ppbv	1.47	1.47		0.98	0	0	0.245	1	0	150%	70	130	0%	S
1,2-Dibromoethane	A	ppbv	1.01	1.01		0.96	0	0	0.186	1	0	105%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.62	1.62		0.97	0	0	0.208	1	0	167%	70	130	0%	S
1,2-Dichloroethane	A	ppbv	1	1		0.97	0	0	0.196	1	0	103%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.97	0.97		0.98	0	0	0.224	1	0	99%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\033012\03301202.D Vial: 2
Acq On : 30 Mar 2012 9:40 am Operator: RACHEL HILL
Sample : CCV VOA1 033012 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\032712V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Mar 29 08:41:28 2012
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	100	0.00
2	T	Propylene	1.052	1.125	-6.9	101	0.01
3	T	Dichlorodifluoromethane	3.636	4.047	-11.3	103	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.517	2.837	-12.7	103	0.00
5	T	Chloromethane	1.095	1.203	-9.9	100	0.00
6	T	Vinyl chloride	1.242	1.547	-24.6	98	0.00
7	T	1,3-Butadiene	0.919	1.120	-21.9	100	0.00
8	T	Bromomethane	1.300	1.409	-8.4	102	0.00
9	T	Chloroethane	0.743	0.805	-8.3	102	0.00
10	T	Trichlorofluoromethane	3.354	3.812	-13.7	100	0.00
11	T	Ethanol	0.425	0.305	28.2	64	0.00
12	T	Freon113	2.225	2.701	-21.4	104	0.00
13	T	1,1-Dichloroethene	1.748	2.051	-17.3	105	0.00
14	T	Acetone	1.784	1.561	12.5	75	0.00
15	T	Carbon disulfide	2.916	3.605	-23.6	118	0.00
16	T	2-Propanol	1.738	1.544	11.2	78	0.00
17	T	Methylene chloride	1.262	1.379	-9.3	99	0.00
18	T	tert-Butyl Methyl Ether	2.952	2.740	7.2	78	0.00
19	T	trans-1,2-Dichloroethene	1.601	1.880	-17.4	103	0.00
20	T	n-Hexane	1.754	1.921	-9.5	96	0.00
21	T	1,1-Dichloroethane	2.060	2.213	-7.4	95	0.00
22	T	Vinyl acetate	2.709	2.307	14.8	69	0.00
23	T	cis-1,2-Dichloroethene	1.164	1.234	-6.0	94	0.00
24	T	2-Butanone	1.751	1.431	18.3	68	0.00
25	T	Ethyl acetate	2.234	1.912	14.4	70	0.00
26	T	Tetrahydrofuran	1.036	0.941	9.2	73	0.00
27	T	Chloroform	2.135	2.317	-8.5	90	0.00
28	T	1,1,1-Trichloroethane	2.186	2.429	-11.1	90	0.00
29	T	Cyclohexane	1.594	1.871	-17.4	96	0.00
30	T	Carbon tetrachloride	2.348	2.546	-8.4	91	0.00
31	T	Benzene	2.949	2.877	2.4	82	0.00
32	T	1,2-Dichloroethane	1.326	1.306	1.5	78	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	106	0.00
34	T	Heptane	0.523	0.572	-9.4	89	0.00
35	T	Trichloroethene	0.411	0.419	-1.9	91	0.00
36	T	1,2-Dichloropropane	0.313	0.290	7.3	79	0.00
37	T	1,4-Dioxane	0.160	0.109	31.9#	63	0.00
38	T	Bromodichloromethane	0.599	0.625	-4.3	90	0.00
39	T	cis-1,3-Dichloropropene	0.497	0.469	5.6	82	0.00
40	T	4-Methyl-2-pentanone	0.215	0.190	11.6	77	0.00
41	T	Toluene	0.862	0.824	4.4	82	0.00
42	T	trans-1,3-Dichloropropene	0.456	0.416	8.8	80	0.00
43	T	1,1,2-Trichloroethane	0.304	0.291	4.3	85	0.00
44	T	Tetrachloroethene	0.509	0.517	-1.6	92	0.00
45	T	2-Hexanone	0.401	0.294	26.7	64	0.00
46	T	Chlorodibromomethane	0.489	0.499	-2.0	89	0.00
47	T	1,2-Dibromoethane	0.457	0.444	2.8	86	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	113	0.00
49	T	Chlorobenzene	0.934	0.860	7.9	86	0.00
50	T	Ethylbenzene	1.465	1.357	7.4	85	0.00
51	T	m,p-Xylene	1.078	1.045	3.1	84	0.00
52	T	o-Xylene	1.097	1.019	7.1	85	0.00
53	T	Styrene	0.821	0.768	6.5	87	0.00
54	T	Bromoform	0.653	0.669	-2.5	98	0.00
55	S	4-Bromofluorobenzene	0.552	0.594	-7.6	124	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\033012\03301202.D Vial: 2
Acq On : 30 Mar 2012 9:40 am Operator: RACHEL HILL
Sample : CCV VOA1 033012 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\032712V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Mar 29 08:41:28 2012
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.737	0.755	-2.4	100	0.00
57	T	4-Ethyltoluene	1.353	1.304	3.6	95	0.00
58	T	1,3,5-Trimethylbenzene	1.196	1.146	4.2	94	0.00
59	T	1,2,4-Trimethylbenzene	1.181	1.083	8.3	96	0.00
60	T	1,3-Dichlorobenzene	0.664	0.675	-1.7	105	0.00
61	T	1,4-Dichlorobenzene	0.627	0.623	0.6	101	0.00
62	T	Benzyl chloride	0.843	0.841	0.2	96	0.00
63	T	1,2-Dichlorobenzene	0.595	0.628	-5.5	106	0.00
64	T	1,2,4-Trichlorobenzene	0.140	0.111	20.7	93	0.00
65	T	Hexachlorobutadiene	0.387	0.365	5.7	107	0.00
66		Naphthalene	0.197	0.177	10.2	103	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\033012\03301202.D Vial: 2
Acq On : 30 Mar 2012 9:40 am Operator: RACHEL HILL
Sample : CCV VOA1 033012 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Mar 30 11:05 2012 Quant Results File: 032712V1.RES

Quant Method : C:\HPCHEM\1\METHODS\032712V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Mar 29 08:41:28 2012
Response via : Initial Calibration
DataAcq Meth : 032712V1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.59	130	810803	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.69	114	2874310	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.54	117	1850279	12.50	ppbv		0.00
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.19	95	1098531	13.44	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 107.52%				
Target Compounds							Qvalue
2) Propylene	5.53	41	744156	10.91	ppbv		99
3) Dichlorodifluoromethane	5.59	85	2415163	10.24	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.85	135	1748284	10.71	ppbv		89
5) Chloromethane	6.01	50	741382	10.44	ppbv		99
6) Vinyl chloride	6.22	62	943182	11.71	ppbv		99
7) 1,3-Butadiene	6.28	39	711762	11.95	ppbv		98
8) Bromomethane	6.86	94	850140	10.08	ppbv	#	99
9) Chloroethane	7.01	64	480470	9.97	ppbv		99
10) Trichlorofluoromethane	7.34	101	2373504	10.91	ppbv		100
11) Ethanol	7.57	45	181894	6.59	ppbv		99
12) Freon113	7.99	101	1716991	11.90	ppbv		97
13) 1,1-Dichloroethene	8.10	61	1316799	11.62	ppbv		94
14) Acetone	8.19	43	1012846	8.75	ppbv		97
15) Carbon disulfide	8.46	76	2268450	11.99	ppbv	#	100
16) 2-Propanol	8.23	45	1011231	8.97	ppbv	#	78
17) Methylene chloride	8.76	49	894726	10.93	ppbv		96
18) tert-Butyl Methyl Ether	8.96	73	1759357	9.19	ppbv		100
19) trans-1,2-Dichloroethene	9.03	61	1195172	11.51	ppbv		92
20) n-Hexane	9.22	57	1258368	11.06	ppbv		100
21) 1,1-Dichloroethane	9.60	63	1392220	10.42	ppbv		100
22) Vinyl acetate	9.53	43	1481398	8.43	ppbv		99
23) cis-1,2-Dichloroethene	10.28	96	784375	10.39	ppbv		93
24) 2-Butanone	10.25	43	918749	8.09	ppbv		99
25) Ethyl acetate	10.20	43	1215564	8.39	ppbv	#	98
26) Tetrahydrofuran	10.58	42	610644	9.09	ppbv		97
27) Chloroform	10.60	83	1472858	10.63	ppbv		99
28) 1,1,1-Trichloroethane	10.85	97	1512428	10.66	ppbv		99
29) Cyclohexane	10.86	56	1189210	11.50	ppbv		97
30) Carbon tetrachloride	11.02	117	1568970	10.30	ppbv		99
31) Benzene	11.30	78	1791690	9.37	ppbv		99
32) 1,2-Dichloroethane	11.37	62	821562	9.55	ppbv		98
34) Heptane	11.35	43	1302111	10.82	ppbv		98
35) Trichloroethene	12.03	130	924906	9.78	ppbv		95
36) 1,2-Dichloropropane	12.38	63	652444	9.05	ppbv		99
37) 1,4-Dioxane	12.46	88	241291	6.57	ppbv		98
38) Bromodichloromethane	12.67	83	1379264	10.02	ppbv		99
39) cis-1,3-Dichloropropene	13.22	75	1025159	8.98	ppbv		98
40) 4-Methyl-2-pentanone	13.33	58	436996	8.83	ppbv		98
41) Toluene	13.63	91	1856835	9.37	ppbv		99
42) trans-1,3-Dichloropropene	13.93	75	870429	8.31	ppbv		98
43) 1,1,2-Trichloroethane	14.20	97	656737	9.41	ppbv		98
44) Tetrachloroethene	14.33	166	1141038	9.75	ppbv		100
45) 2-Hexanone	14.41	43	661668	7.18	ppbv		97
46) Chlorodibromomethane	14.75	129	1124641	9.99	ppbv		99
47) 1,2-Dibromoethane	14.99	107	979766	9.33	ppbv		98
49) Chlorobenzene	15.58	112	1260143	9.12	ppbv		94
50) Ethylbenzene	15.62	91	1967819	9.07	ppbv		97
51) m,p-Xylene	15.78	91	2971116	18.63	ppbv		97
52) o-Xylene	16.37	91	1508924	9.29	ppbv		96

(#) = qualifier out of range (m) = manual integration
03301202.D 032712V1.M Mon Apr 02 11:42:10 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\033012\03301202.D Vial: 2
Acq On : 30 Mar 2012 9:40 am Operator: RACHEL HILL
Sample : CCV VOA1 033012 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Mar 30 11:05 2012 Quant Results File: 032712V1.RES

Quant Method : C:\HPCHEM\1\METHODS\032712V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Mar 29 08:41:28 2012
Response via : Initial Calibration
DataAcq Meth : 032712V1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53)	Styrene	16.39	104	1113975	9.17	ppbv	97
54)	Bromoform	16.78	173	950023	9.83	ppbv	99
56)	1,1,2,2-Tetrachloroethane	17.36	83	1117156	10.24	ppbv	99
57)	4-Ethyltoluene	17.60	105	1892042	9.45	ppbv	97
58)	1,3,5-Trimethylbenzene	17.68	105	1645885	9.30	ppbv	97
59)	1,2,4-Trimethylbenzene	18.26	105	1571616	8.99	ppbv	97
60)	1,3-Dichlorobenzene	18.82	146	968670	9.85	ppbv	99
61)	1,4-Dichlorobenzene	18.96	146	884796	9.54	ppbv	99
62)	Benzyl chloride	19.17	91	1207057	9.67	ppbv	99
63)	1,2-Dichlorobenzene	19.60	146	901875	10.24	ppbv	99
64)	1,2,4-Trichlorobenzene	22.76	180	148987	7.19	ppbv	100
65)	Hexachlorobutadiene	22.96	225	507453	8.87	ppbv	99
66)	Naphthalene	23.45	128	241559	8.28	ppbv	99

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

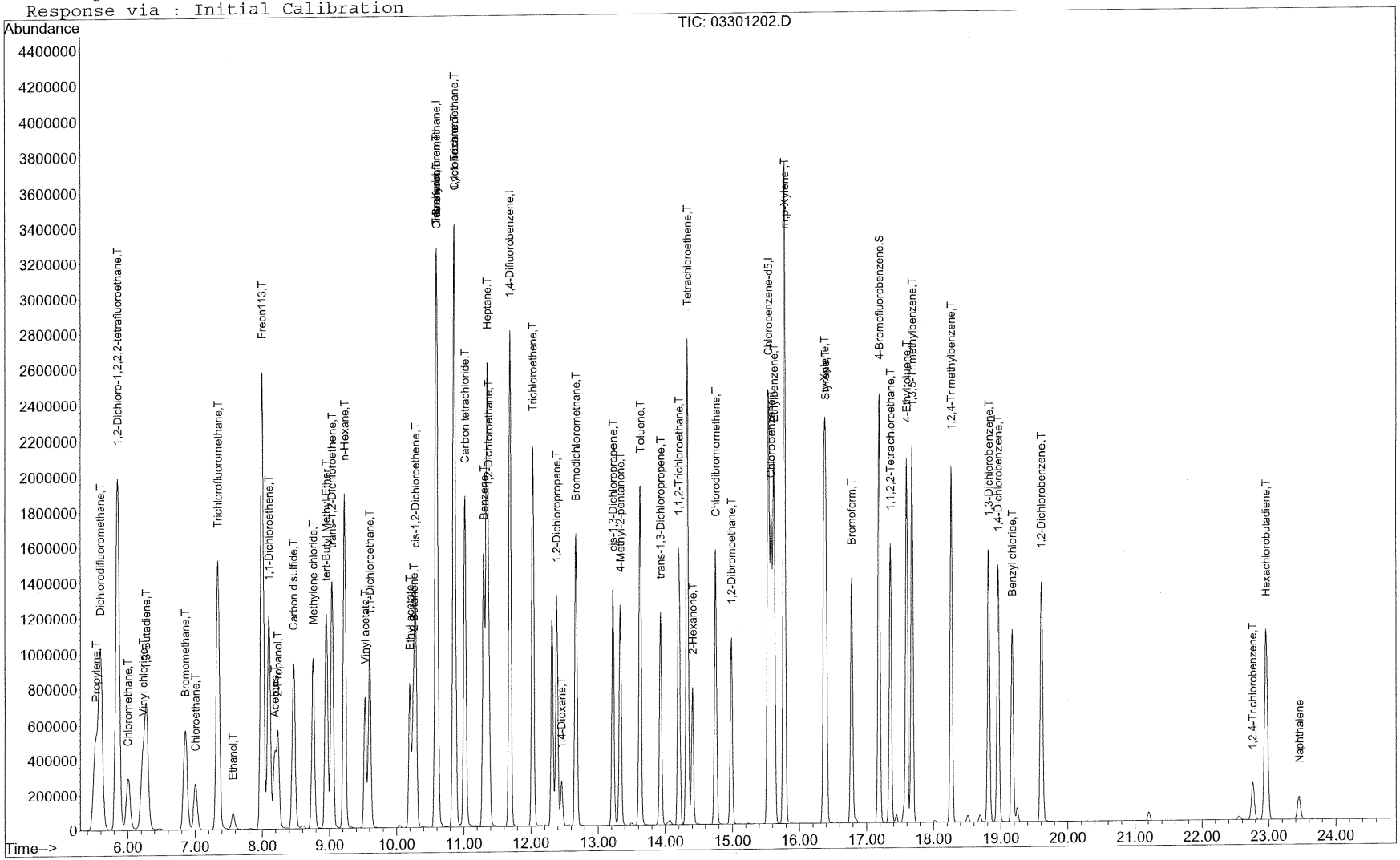
Quantitation Report

Data File : C:\HPCHEM\1\DATA\033012\03301202.D
Acq On : 30 Mar 2012 9:40 am
Sample : CCV VOA1 033012
Misc : CCV EPA TO15
MS Integration Params: CLME.P
Quant Time: Mar 30 11:05 2012

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

Quant Results File: 032712V1.RES

Method : C:\HPCHEM\1\METHODS\032712V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Mar 29 08:41:28 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA1_120403B **Run No.:** 47420

Analytical Run Date: 4/3/2012 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

Calibration ID: 47419 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: PR by RD2 on 05APR12 - 1,4-Dioxane failed in ICV. Not a project analyte.

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB2 VOA1 040312	BFB_TUNE	TUNE	R47420	4/4/2012 4:44:00 AM	Jim Wuokila		
ICV VOA1 040312	EPA_TO15	ICV	R47420	4/4/2012 9:28:00 AM	Jim Wuokila		
RLVS VOA1 040312	EPA_TO15	RLVS	R47420	4/4/2012 10:21:00 AM	Jim Wuokila		
MBLK VOA1 040312	EPA_TO15	MBLK	R47420	4/4/2012 11:56:00 AM	Deborah Griffiths		
1203608-027A	EPA_TO15	SAMP	R47420	4/4/2012 3:29:00 PM	Jim Wuokila		
1203608-014A	EPA_TO15	SAMP	R47420	4/4/2012 4:26:00 PM	Jim Wuokila		
1203732-008A	EPA_TO15	SAMP	R47420	4/4/2012 5:12:00 PM	Jim Wuokila		
1203732-008Adup	EPA_TO15	DUP	R47420	4/4/2012 5:58:00 PM	Deborah Griffiths		
1203608-010A	EPA_TO15	SAMP	R47420	4/4/2012 6:47:00 PM	Jim Wuokila		
1203732-029A	EPA_TO15	SAMP	R47420	4/4/2012 7:39:00 PM	Jim Wuokila		
1203732-033A	EPA_TO15	SAMP	R47420	4/4/2012 8:31:00 PM	Jim Wuokila		
1203732-030A	EPA_TO15	SAMP	R47420	4/4/2012 9:23:00 PM	Jim Wuokila		
1203732-031A	EPA_TO15	SAMP	R47420	4/4/2012 10:14:00 PM	Jim Wuokila		
1203732-034A	EPA_TO15	SAMP	R47420	4/4/2012 11:05:00 PM	Jim Wuokila		
1203732-035A	EPA_TO15	SAMP	R47420	4/4/2012 11:52:00 PM	Jim Wuokila		
1203732-036A	EPA_TO15	SAMP	R47420	4/5/2012 12:39:00 AM	Jim Wuokila		
1203732-038A	EPA_TO15	SAMP	R47420	4/5/2012 2:19:00 AM	Jim Wuokila		
1203732-009A	EPA_TO15	SAMP	R47420	4/5/2012 3:56:00 AM	Jim Wuokila		
1203732-010A	EPA_TO15	SAMP	R47420	4/5/2012 4:39:00 AM	Jim Wuokila		
RLVS2 VOA1 04031	EPA_TO15	RLVS	R47420	4/5/2012 5:23:00 AM	Jim Wuokila		

RTI Laboratories

ANALYTICAL RUN Summary

12-Apr-12

RunNo 47420

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
926466	BFB2 VOA1 040312	BFB_TUNE	TUNE	.1\DATA\040312I	4/4/2012 4:44:00	1	R47420		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		81.8	81.8		100	0	0	0	0	0	82%	50	120	0%	
175	M		7.3	7.3		100	0	0	0	0	0	7%	4	9	0%	
176	M		97.9	97.9		100	0	0	0	0	0	98%	93	101	0%	
177	M		7	7		100	0	0	0	0	0	7%	5	9	0%	
50	M		15.3	15.3		100	0	0	0	0	0	15%	8	40	0%	
75	M		45.1	45.1		100	0	0	0	0	0	45%	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
926467	ICV VOA1 040312	EPA_TO15	ICV	.1\DATA\040312I	4/4/2012 9:28:00	1	R47420		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	9.63	9.63		9.6	0	0	0.107	1	0	100%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	9.46	9.46		10	0	0	0.211	1	0	95%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.68	10.68		9.8	0	0	0.108	1	0	109%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.19	9.19		9.8	0	0	0.2	1	0	94%	70	130	0%	
1,1-Dichloroethane	A	ppbv	9.45	9.45		9.7	0	0	0.111	1	0	97%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.88	10.88		9.9	0	0	0.097	1	0	110%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	6.49	6.49		9.1	0	0	0.271	1	0	71%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	8.93	8.93		9.8	0	0	0.245	1	0	91%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.05	9.05		9.6	0	0	0.186	1	0	94%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	8.55	8.55		9.7	0	0	0.208	1	0	88%	70	130	0%	
1,2-Dichloroethane	A	ppbv	8.52	8.52		9.7	0	0	0.196	1	0	88%	70	130	0%	
1,2-Dichloropropane	A	ppbv	8.7	8.7		9.8	0	0	0.224	1	0	89%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	8.97	8.97		9.7	0	0	0.24	1	0	92%	70	130	0%	
1,3-Butadiene	A	ppbv	10.91	10.91		9.8	0	0	0.152	1	0	111%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	8.47	8.47		9.7	0	0	0.202	1	0	87%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
926467	ICV VOA1 040312	EPA_TO15	ICV	.1\DATA\040312F	4/4/2012 9:28:00	1	R47420		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	8.21	8.21		9.6	0	0	0.194	1	0	86%	70	130	0%	
1,4-Dioxane	A	ppbv	6.38	6.38		9.6	0	0	0.128	1	0	66%	70	130	0%	S
2-Butanone	A	ppbv	8.13	8.13		9.9	0	0	0.287	1	0	82%	70	130	0%	
2-Hexanone	A	ppbv	7.3	7.3		9.8	0	0	0.135	1	0	74%	70	130	0%	
2-Propanol	A	ppbv	9.7	9.7		10.1	0	0	0.329	1	0	96%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	8.92	8.92		10	0	0	0.157	1	0	89%	70	130	0%	
Acetone	A	ppbv	8.26	8.26		10	0	0	0.43	1	0	83%	70	130	0%	
Benzene	A	ppbv	8.42	8.42		9.6	0	0	0.126	1	0	88%	70	130	0%	
Benzyl chloride	A	ppbv	8.81	8.81		9.7	0	0	0.155	1	0	91%	70	130	0%	
Bromodichloromethane	A	ppbv	10.03	10.03		9.6	0	0	0.156	1	0	104%	70	130	0%	
Bromoform	A	ppbv	9.4	9.4		9.6	0	0	0.197	1	0	98%	70	130	0%	
Bromomethane	A	ppbv	10.65	10.65		9.3	0	0	0.075	1	0	115%	70	130	0%	
Carbon disulfide	A	ppbv	12.41	12.41		9.7	0	0	0.093	1	0	128%	70	130	0%	
Carbon tetrachloride	A	ppbv	9.37	9.37		9.5	0	0	0.114	1	0	99%	70	130	0%	
Chlorobenzene	A	ppbv	9.17	9.17		9.9	0	0	0.275	1	0	93%	70	130	0%	
Chlorodibromomethane	A	ppbv	9.8	9.8		9.2	0	0	0.165	1	0	107%	70	130	0%	
Chloroethane	A	ppbv	10.34	10.34		9.8	0	0	0.063	1	0	106%	70	130	0%	
Chloroform	A	ppbv	9.75	9.75		9.4	0	0	0.126	1	0	104%	70	130	0%	
Chloromethane	A	ppbv	10.43	10.43		9.8	0	0	0.104	1	0	106%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.44	9.44		9.8	0	0	0.107	1	0	96%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	8.71	8.71		9.5	0	0	0.166	1	0	92%	70	130	0%	
Cyclohexane	A	ppbv	10.18	10.18		9.8	0	0	0.684	2	0	104%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	10.72	10.72		9.2	0	0	0.086	1	0	117%	70	130	0%	
Ethanol	A	ppbv	7.09	7.09		9.2	0	0	1.962	5	0	77%	70	130	0%	
Ethyl acetate	A	ppbv	8.03	8.03		9.8	0	0	0.157	1	0	82%	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	10.58	10.58		9.9	0	0	0.249	1	0	107%	70	130	0%	
Hexachlorobutadiene	A	ppbv	9.1	9.1		9.4	0	0	0.374	2	0	97%	70	130	0%	
m,p-Xylene	A	ppbv	17.41	17.41		19.2	0	0	0.524	2	0	91%	70	130	0%	
Methylene chloride	A	ppbv	9.77	9.77		10	0	0	2.077	5	0	98%	70	130	0%	
n-Hexane	A	ppbv	10.02	10.02		10.1	0	0	0.692	2	0	99%	70	130	0%	
Naphthalene	A	ppbv	7.09	7.09		9.2	0	0	0.247	1	0	77%	70	130	0%	
o-Xylene	A	ppbv	9.48	9.48		10	0	0	0.258	1	0	95%	70	130	0%	
Propylene	A	ppbv	12.05	12.05		10.2	0	0	0.075	1	0	118%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
926467	ICV VOA1 040312	EPA_TO15	ICV	.1\DATA\040312I	4/4/2012 9:28:00	1	R47420		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	9.11	9.11		9.8	0	0	0.263	1	0	93%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	8.55	8.55		9.9	0	0	0.228	1	0	86%	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	8.64	8.64		10	0	0	0.201	1	0	86%	70	130	0%	
Toluene	A	ppbv	9.07	9.07		9.8	0	0	0.158	1	0	93%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.29	10.29		9.8	0	0	0.117	1	0	105%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	8.01	8.01		9.1	0	0	0.171	1	0	88%	70	130	0%	
Trichloroethene	A	ppbv	9.57	9.57		9.6	0	0	0.119	1	0	100%	70	130	0%	
Trichlorofluoromethane	A	ppbv	10.73	10.73		9.6	0	0	0.148	1	0	112%	70	130	0%	
Vinyl acetate	A	ppbv	7.82	7.82		9.9	0	0	0.266	1	0	79%	70	130	0%	
Vinyl chloride	A	ppbv	10.07	10.07		9.4	0	0	0.072	1	0	107%	70	130	0%	
Xylenes, Total	C	ppbv	26.89	26.89		29.2	0	0	0.782	3	0	92%	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	12.6	12.6		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
926468	RLVS VOA1 040312	EPA_TO15	RLVS	.1\DATA\040312I	4/4/2012 10:21:0	1	R47420		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	1.09	1.09		0.996	0	0	0.107	1	0	109%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.4	1.4		1	0	0	0.211	1	0	140%	70	130	0%	S
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	1.12	1.12		0.98	0	0	0.108	1	0	114%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	1.09	1.09		0.98	0	0	0.2	1	0	111%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1.04	1.04		0.97	0	0	0.111	1	0	107%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1.08	1.08		0.99	0	0	0.097	1	0	109%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.77	1.77		0.91	0	0	0.271	1	0	195%	70	130	0%	S
1,2,4-Trimethylbenzene	A	ppbv	1.45	1.45		0.98	0	0	0.245	1	0	148%	70	130	0%	S
1,2-Dibromoethane	A	ppbv	1.05	1.05		0.96	0	0	0.186	1	0	109%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.55	1.55		0.97	0	0	0.208	1	0	160%	70	130	0%	S
1,2-Dichloroethane	A	ppbv	1.06	1.06		0.97	0	0	0.196	1	0	109%	70	130	0%	
1,2-Dichloropropane	A	ppbv	1.08	1.08		0.98	0	0	0.224	1	0	110%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040312B\04031211.D Vial: 2
Acq On : 4 Apr 2012 9:28 am Operator: RACHEL HILL
Sample : ICV VOA1 040312 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 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	112	0.00
2	T	Propylene	0.933	1.102	-18.1	124	0.02
3	T	Dichlorodifluoromethane	3.299	3.845	-16.6	121	0.01
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.423	2.810	-16.0	117	0.01
5	T	Chloromethane	0.975	1.070	-9.7	107	0.02
6	T	Vinyl chloride	0.908	0.973	-7.2	105	0.00
7	T	1,3-Butadiene	0.604	0.672	-11.3	105	0.00
8	T	Bromomethane	1.211	1.386	-14.5	117	0.00
9	T	Chloroethane	0.672	0.756	-12.5	114	0.01
10	T	Trichlorofluoromethane	3.078	3.441	-11.8	109	0.01
11	T	Ethanol	0.384	0.296	22.9	73	0.00
12	T	Freon113	2.077	2.263	-9.0	102	0.00
13	T	1,1-Dichloroethene	1.532	1.684	-9.9	108	0.00
14	T	Acetone	1.520	1.256	17.4	78	0.00
15	T	Carbon disulfide	2.662	3.404	-27.9	126	0.01
16	T	2-Propanol	1.547	1.485	4.0	92	0.01
17	T	Methylene chloride	1.125	1.099	2.3	97	0.00
18	T	tert-Butyl Methyl Ether	2.677	2.312	13.6	78	0.00
19	T	trans-1,2-Dichloroethene	1.451	1.523	-5.0	101	0.00
20	T	n-Hexane	1.604	1.591	0.8	95	0.00
21	T	1,1-Dichloroethane	1.915	1.866	2.6	94	0.00
22	T	Vinyl acetate	2.421	1.914	20.9	69	0.00
23	T	cis-1,2-Dichloroethene	1.146	1.104	3.7	91	0.00
24	T	2-Butanone	1.588	1.305	17.8	75	0.00
25	T	Ethyl acetate	2.033	1.665	18.1	75	0.00
26	T	Tetrahydrofuran	0.986	0.853	13.5	75	0.00
27	T	Chloroform	2.018	2.007	0.5	90	0.00
28	T	1,1,1-Trichloroethane	2.172	2.178	-0.3	90	0.00
29	T	Cyclohexane	1.517	1.577	-4.0	92	0.01
30	T	Carbon tetrachloride	2.467	2.433	1.4	91	0.00
31	T	Benzene	3.050	2.675	12.3	79	0.00
32	T	1,2-Dichloroethane	1.236	1.086	12.1	77	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	114	0.00
34	T	Heptane	0.502	0.537	-7.0	92	0.00
35	T	Trichloroethene	0.447	0.445	0.4	93	0.00
36	T	1,2-Dichloropropane	0.332	0.294	11.4	80	0.00
37	T	1,4-Dioxane	0.194	0.129	33.5#	63	0.00
38	T	Bromodichloromethane	0.632	0.661	-4.6	95	0.00
39	T	cis-1,3-Dichloropropene	0.535	0.491	8.2	83	0.00
40	T	4-Methyl-2-pentanone	0.233	0.208	10.7	81	0.00
41	T	Toluene	1.053	0.975	7.4	82	0.00
42	T	trans-1,3-Dichloropropene	0.495	0.436	11.9	80	0.00
43	T	1,1,2-Trichloroethane	0.372	0.349	6.2	85	0.00
44	T	Tetrachloroethene	0.563	0.567	-0.7	94	0.00
45	T	2-Hexanone	0.451	0.336	25.5	66	0.00
46	T	Chlorodibromomethane	0.654	0.655	-0.2	89	0.00
47	T	1,2-Dibromoethane	0.571	0.538	5.8	84	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	117	0.00
49	T	Chlorobenzene	0.918	0.850	7.4	86	0.00
50	T	Ethylbenzene	1.443	1.363	5.5	86	0.00
51	T	m,p-Xylene	1.122	1.018	9.3	86	0.00
52	T	o-Xylene	1.148	1.088	5.2	85	0.00
53	T	Styrene	0.882	0.821	6.9	84	0.00
54	T	Bromoform	0.651	0.637	2.2	90	0.00
55	S	4-Bromofluorobenzene	0.627	0.632	-0.8	118	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040312B\04031211.D Vial: 2
Acq On : 4 Apr 2012 9:28 am Operator: RACHEL HILL
Sample : ICV VOA1 040312 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 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	0.758	0.717	5.4	90	0.00
57	T	4-Ethyltoluene	1.526	1.415	7.3	88	0.00
58	T	1,3,5-Trimethylbenzene	1.302	1.204	7.5	88	0.00
59	T	1,2,4-Trimethylbenzene	1.254	1.143	8.9	88	0.00
60	T	1,3-Dichlorobenzene	0.823	0.719	12.6	86	0.00
61	T	1,4-Dichlorobenzene	0.794	0.679	14.5	84	0.00
62	T	Benzyl chloride	0.930	0.845	9.1	86	0.00
63	T	1,2-Dichlorobenzene	0.742	0.654	11.9	89	0.00
64	T	1,2,4-Trichlorobenzene	0.279	0.199	28.7	76	0.00
65	T	Hexachlorobutadiene	0.347	0.336	3.2	90	0.00
66		Naphthalene	0.539	0.415	23.0	80	0.01

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040312B\04031211.D Vial: 2
Acq On : 4 Apr 2012 9:28 am Operator: RACHEL HILL
Sample : ICV VOA1 040312 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 5 10:04 2012 Quant Results File: 040312V1.RES

Quant Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Initial Calibration
DataAcq Meth : 033112V1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.59	130	735115	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.69	114	2519392	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.54	117	2238339	12.50	ppbv		0.00
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.18	95	1413793	12.60	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 100.80%				
Target Compounds							Qvalue
2) Propylene	5.53	41	661190	12.05	ppbv		99
3) Dichlorodifluoromethane	5.60	85	2080337	10.72	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.86	135	1569934	11.02	ppbv		90
5) Chloromethane	6.01	50	597789	10.43	ppbv		99
6) Vinyl chloride	6.22	62	537848	10.07	ppbv		100
7) 1,3-Butadiene	6.27	39	387357	10.91	ppbv		94
8) Bromomethane	6.86	94	758312	10.65	ppbv		99
9) Chloroethane	7.01	64	408878	10.34	ppbv		99
10) Trichlorofluoromethane	7.34	101	1942420	10.73	ppbv		99
11) Ethanol	7.57	45	159970	7.09	ppbv		99
12) Freon113	8.00	101	1304289	10.68	ppbv		94
13) 1,1-Dichloroethene	8.10	61	980326	10.88	ppbv		98
14) Acetone	8.19	43	738406	8.26	ppbv	#	94
15) Carbon disulfide	8.47	76	1941987	12.41	ppbv	#	100
16) 2-Propanol	8.24	45	881996	9.70	ppbv	#	1
17) Methylene chloride	8.76	49	646221	9.77	ppbv		99
18) tert-Butyl Methyl Ether	8.96	73	1346075	8.55	ppbv		98
19) trans-1,2-Dichloroethene	9.04	61	877696	10.29	ppbv		96
20) n-Hexane	9.22	57	945096	10.02	ppbv		96
21) 1,1-Dichloroethane	9.60	63	1064472	9.45	ppbv		100
22) Vinyl acetate	9.53	43	1114211	7.82	ppbv		99
23) cis-1,2-Dichloroethene	10.28	96	636120	9.44	ppbv		96
24) 2-Butanone	10.25	43	759810	8.13	ppbv		98
25) Ethyl acetate	10.20	43	959525	8.03	ppbv	#	100
26) Tetrahydrofuran	10.58	42	501427	8.64	ppbv		95
27) Chloroform	10.61	83	1156905	9.75	ppbv		98
28) 1,1,1-Trichloroethane	10.86	97	1229696	9.63	ppbv		99
29) Cyclohexane	10.87	56	908614	10.18	ppbv		97
30) Carbon tetrachloride	11.02	117	1359321	9.37	ppbv		99
31) Benzene	11.30	78	1510017	8.42	ppbv		100
32) 1,2-Dichloroethane	11.37	62	619399	8.52	ppbv		99
34) Heptane	11.35	43	1070632	10.58	ppbv		97
35) Trichloroethene	12.03	130	860913	9.57	ppbv		97
36) 1,2-Dichloropropane	12.38	63	581346	8.70	ppbv		100
37) 1,4-Dioxane	12.46	88	248811	6.38	ppbv		98
38) Bromodichloromethane	12.67	83	1278402	10.03	ppbv		98
39) cis-1,3-Dichloropropene	13.22	75	939353	8.71	ppbv		99
40) 4-Methyl-2-pentanone	13.33	58	419213	8.92	ppbv		98
41) Toluene	13.63	91	1925252	9.07	ppbv		99
42) trans-1,3-Dichloropropene	13.93	75	799563	8.01	ppbv		99
43) 1,1,2-Trichloroethane	14.20	97	689812	9.19	ppbv		99
44) Tetrachloroethene	14.33	166	1096976	9.68	ppbv		96
45) 2-Hexanone	14.41	43	663387	7.30	ppbv		95
46) Chlorodibromomethane	14.75	129	1293077	9.80	ppbv		99
47) 1,2-Dibromoethane	14.99	107	1041012	9.05	ppbv		99
49) Chlorobenzene	15.58	112	1507597	9.17	ppbv		97
50) Ethylbenzene	15.62	91	2391793	9.26	ppbv		99
51) m,p-Xylene	15.78	91	3498740	17.41	ppbv		99
52) o-Xylene	16.37	91	1948414	9.48	ppbv		99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040312B\04031211.D Vial: 2
Acq On : 4 Apr 2012 9:28 am Operator: RACHEL HILL
Sample : ICV VOA1 040312 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 5 10:04 2012 Quant Results File: 040312V1.RES

Quant Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Initial Calibration
DataAcq Meth : 033112V1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53)	Styrene	16.39	104	1439944	9.11	ppbv	99
54)	Bromoform	16.78	173	1095257	9.40	ppbv	99
56)	1,1,2,2-Tetrachloroethane	17.36	83	1284091	9.46	ppbv	98
57)	4-Ethyltoluene	17.60	105	2483939	9.09	ppbv	100
58)	1,3,5-Trimethylbenzene	17.68	105	2091124	8.97	ppbv	100
59)	1,2,4-Trimethylbenzene	18.26	105	2005247	8.93	ppbv	100
60)	1,3-Dichlorobenzene	18.82	146	1248990	8.47	ppbv	99
61)	1,4-Dichlorobenzene	18.96	146	1167383	8.21	ppbv	99
62)	Benzyl chloride	19.17	91	1466914	8.81	ppbv	99
63)	1,2-Dichlorobenzene	19.61	146	1135503	8.55	ppbv	99
64)	1,2,4-Trichlorobenzene	22.76	180	324019	6.49	ppbv	96
65)	Hexachlorobutadiene	22.96	225	565190	9.10	ppbv	99
66)	Naphthalene	23.45	128	683837	7.09	ppbv	99

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

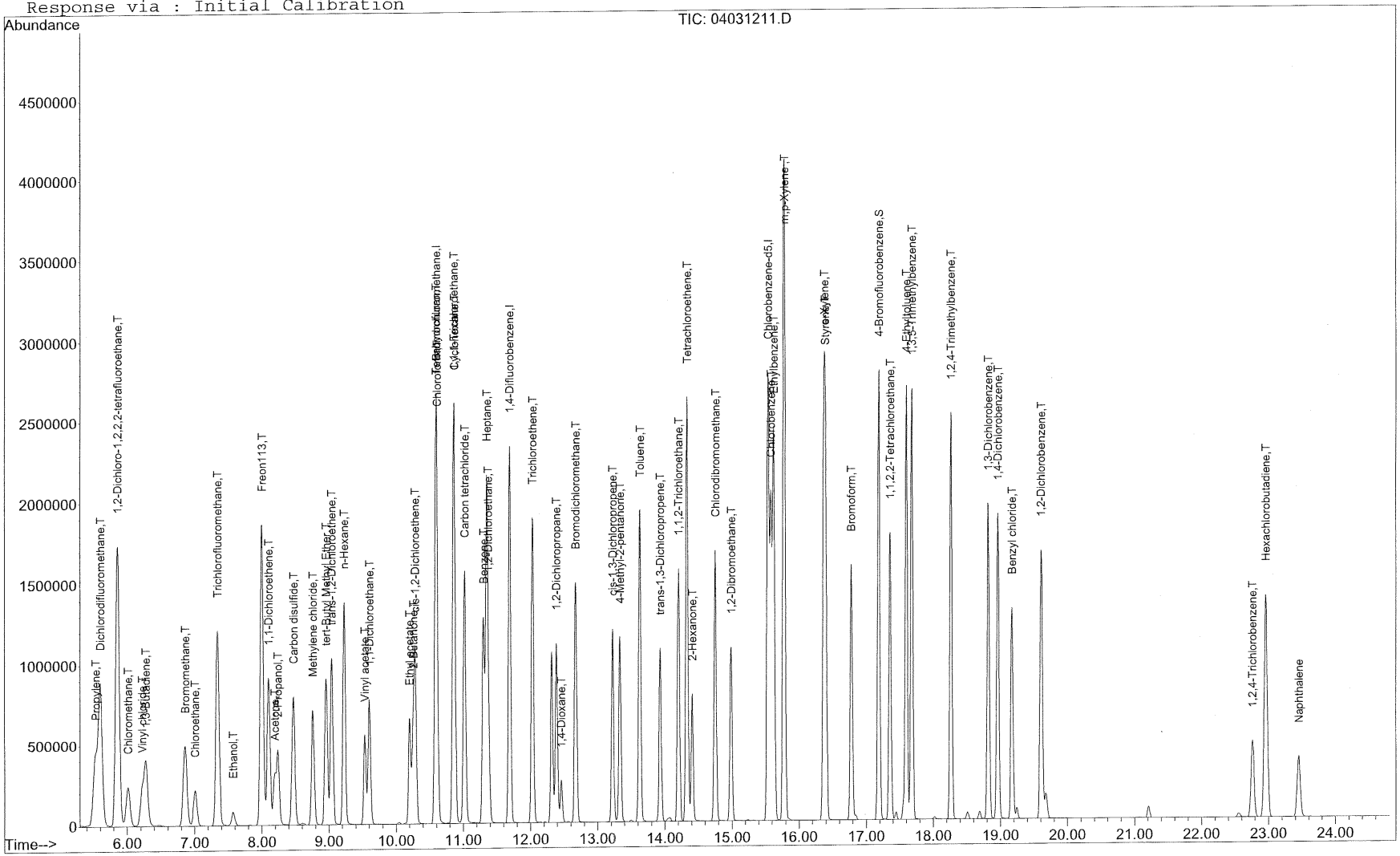
Quantitation Report

Data File : C:\HPCHEM\1\DATA\040312B\04031211.D
Acq On : 4 Apr 2012 9:28 am
Sample : ICV VOA1 040312
Misc : ICV EPA TO15
MS Integration Params: CLME.P
Quant Time: Apr 5 10:04 2012

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

Quant Results File: 040312V1.RES

Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA1_120405A **Run No.:** 47469

Analytical Run Date: 4/5/2012 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

Calibration ID: 47419 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 4/10/12/PR by RD2 on 10APR12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 040512	BFB_TUNE	TUNE	R47469	4/5/2012 8:43:00 AM	Celeste Hoitash		
CCV VOA1 040512	EPA_TO15	CCV	R47469	4/5/2012 11:56:00 AM	Celeste Hoitash		
RLVS VOA1 040512	EPA_TO15	RLVS	R47469	4/5/2012 12:41:00 PM	Celeste Hoitash		
MBLK VOA1 040512	EPA_TO15	MBLK	R47469	4/5/2012 1:31:00 PM	Celeste Hoitash		
1203732-006A	EPA_TO15	SAMP	R47469	4/5/2012 3:49:00 PM	Celeste Hoitash		
1203732-011A	EPA_TO15	SAMP	R47469	4/5/2012 4:32:00 PM	Celeste Hoitash		
1203732-012A	EPA_TO15	SAMP	R47469	4/5/2012 5:13:00 PM	Celeste Hoitash		
1203732-007A	EPA_TO15	SAMP	R47469	4/5/2012 6:01:00 PM	Celeste Hoitash		
1203732-001A	EPA_TO15	SAMP	R47469	4/5/2012 6:49:00 PM	Celeste Hoitash		
1203732-013A	EPA_TO15	SAMP	R47469	4/5/2012 7:30:00 PM	Celeste Hoitash		
1203732-002A	EPA_TO15	SAMP	R47469	4/5/2012 8:10:00 PM	Celeste Hoitash		
1203732-002Adup	EPA_TO15	DUP	R47469	4/5/2012 8:51:00 PM	Deborah Griffiths		
1203732-014A	EPA_TO15	SAMP	R47469	4/5/2012 9:32:00 PM	Celeste Hoitash		
1203732-003A	EPA_TO15	SAMP	R47469	4/5/2012 10:20:00 PM	Celeste Hoitash		
1203732-016A	EPA_TO15	SAMP	R47469	4/5/2012 11:07:00 PM	Celeste Hoitash		
1203732-023A	EPA_TO15	SAMP	R47469	4/5/2012 11:55:00 PM	Celeste Hoitash		
1203732-017A	EPA_TO15	SAMP	R47469	4/6/2012 12:42:00 AM	Celeste Hoitash		
1203732-004A	EPA_TO15	SAMP	R47469	4/6/2012 1:30:00 AM	Celeste Hoitash		
1203732-005A	EPA_TO15	SAMP	R47469	4/6/2012 2:18:00 AM	Celeste Hoitash		
1203732-037A	EPA_TO15	SAMP	R47469	4/6/2012 2:58:00 AM	Celeste Hoitash		
1203732-038A	EPA_TO15	SAMP	R47469	4/6/2012 3:41:00 AM	Celeste Hoitash		
RLVS2 VOA1 04031	EPA_TO15	RLVS	R47469	4/6/2012 4:22:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

12-Apr-12

RunNo 47469

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
927260	BFB VOA1 040512	BFB_TUNE	TUNE	\1\DATA\040512	4/5/2012 8:43:00	1	R47469		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		84.3	84.3		100	0	0	0	0	0	84%	50	120	0%	
175	M		7.4	7.4		100	0	0	0	0	0	7%	4	9	0%	
176	M		98.3	98.3		100	0	0	0	0	0	98%	93	101	0%	
177	M		6.9	6.9		100	0	0	0	0	0	7%	5	9	0%	
50	M		16.2	16.2		100	0	0	0	0	0	16%	8	40	0%	
75	M		46.8	46.8		100	0	0	0	0	0	47%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		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
927262	CCV VOA1 040512	EPA_TO15	CCV	\1\DATA\040512	4/5/2012 11:56:0	1	R47469		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	10.04	10.04		9.6	0	0	0.107	1	0	105%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	8.56	8.56		10	0	0	0.211	1	0	86%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.71	10.71		9.8	0	0	0.108	1	0	109%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	8.6	8.6		9.8	0	0	0.2	1	0	88%	70	130	0%	
1,1-Dichloroethane	A	ppbv	9.95	9.95		9.7	0	0	0.111	1	0	103%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.65	10.65		9.9	0	0	0.097	1	0	108%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	6.5	6.5		9.1	0	0	0.271	1	0	71%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	8.23	8.23		9.8	0	0	0.245	1	0	84%	70	130	0%	
1,2-Dibromoethane	A	ppbv	8.64	8.64		9.6	0	0	0.186	1	0	90%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	8.08	8.08		9.7	0	0	0.208	1	0	83%	70	130	0%	
1,2-Dichloroethane	A	ppbv	9.14	9.14		9.7	0	0	0.196	1	0	94%	70	130	0%	
1,2-Dichloropropane	A	ppbv	8.59	8.59		9.8	0	0	0.224	1	0	88%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	8.17	8.17		9.7	0	0	0.24	1	0	84%	70	130	0%	
1,3-Butadiene	A	ppbv	10.2	10.2		9.8	0	0	0.152	1	0	104%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	8.14	8.14		9.7	0	0	0.202	1	0	84%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
927262	CCV VOA1 040512	EPA_TO15	CCV	\1\DATA\040512	4/5/2012 11:56:0	1	R47469		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	8.05	8.05		9.6	0	0	0.194	1	0	84%	70	130	0%	
1,4-Dioxane	A	ppbv	8.07	8.07		9.6	0	0	0.128	1	0	84%	70	130	0%	
2-Butanone	A	ppbv	8.35	8.35		9.9	0	0	0.287	1	0	84%	70	130	0%	
2-Hexanone	A	ppbv	7.59	7.59		9.8	0	0	0.135	1	0	77%	70	130	0%	
2-Propanol	A	ppbv	8.47	8.47		10.1	0	0	0.329	1	0	84%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	7.95	7.95		10	0	0	0.157	1	0	80%	70	130	0%	
Acetone	A	ppbv	8.7	8.7		10	0	0	0.43	1	0	87%	70	130	0%	
Benzene	A	ppbv	8.85	8.85		9.6	0	0	0.126	1	0	92%	70	130	0%	
Benzyl chloride	A	ppbv	8.1	8.1		9.7	0	0	0.155	1	0	84%	70	130	0%	
Bromodichloromethane	A	ppbv	9.02	9.02		9.6	0	0	0.156	1	0	94%	70	130	0%	
Bromoform	A	ppbv	8.52	8.52		9.6	0	0	0.197	1	0	89%	70	130	0%	
Bromomethane	A	ppbv	9.61	9.61		9.3	0	0	0.075	1	0	103%	70	130	0%	
Carbon disulfide	A	ppbv	10.14	10.14		9.7	0	0	0.093	1	0	105%	70	130	0%	
Carbon tetrachloride	A	ppbv	9.72	9.72		9.5	0	0	0.114	1	0	102%	70	130	0%	
Chlorobenzene	A	ppbv	8.76	8.76		9.9	0	0	0.275	1	0	88%	70	130	0%	
Chlorodibromomethane	A	ppbv	9.03	9.03		9.2	0	0	0.165	1	0	98%	70	130	0%	
Chloroethane	A	ppbv	9.34	9.34		9.8	0	0	0.063	1	0	95%	70	130	0%	
Chloroform	A	ppbv	9.99	9.99		9.4	0	0	0.126	1	0	106%	70	130	0%	
Chloromethane	A	ppbv	9.49	9.49		9.8	0	0	0.104	1	0	97%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.83	9.83		9.8	0	0	0.107	1	0	100%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	8.37	8.37		9.5	0	0	0.166	1	0	88%	70	130	0%	
Cyclohexane	A	ppbv	10.61	10.61		9.8	0	0	0.684	2	0	108%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.26	9.26		9.2	0	0	0.086	1	0	101%	70	130	0%	
Ethanol	A	ppbv	7.92	7.92		9.2	0	0	1.962	5	0	86%	70	130	0%	
Ethyl acetate	A	ppbv	8.1	8.1		9.8	0	0	0.157	1	0	83%	70	130	0%	
Ethylbenzene	A	ppbv	8.62	8.62		9.8	0	0	0.737	2	0	88%	70	130	0%	
Heptane	A	ppbv	10.13	10.13		9.9	0	0	0.249	1	0	102%	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	16.8	16.8		19.2	0	0	0.524	2	0	88%	70	130	0%	
Methylene chloride	A	ppbv	10.26	10.26		10	0	0	2.077	5	0	103%	70	130	0%	
n-Hexane	A	ppbv	10.5	10.5		10.1	0	0	0.692	2	0	104%	70	130	0%	
Naphthalene	A	ppbv	7	7		9.2	0	0	0.247	1	0	76%	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	10	10		10.2	0	0	0.075	1	0	98%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
927262	CCV VOA1 040512	EPA_TO15	CCV	\1\DATA\040512	4/5/2012 11:56:0	1	R47469		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	8.7	8.7		9.8	0	0	0.263	1	0	89%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	8.46	8.46		9.9	0	0	0.228	1	0	85%	70	130	0%	
Tetrachloroethene	A	ppbv	9.24	9.24		9.6	0	0	0.148	1	0	96%	70	130	0%	
Tetrahydrofuran	A	ppbv	8.92	8.92		10	0	0	0.201	1	0	89%	70	130	0%	
Toluene	A	ppbv	8.73	8.73		9.8	0	0	0.158	1	0	89%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.25	10.25		9.8	0	0	0.117	1	0	105%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	7.92	7.92		9.1	0	0	0.171	1	0	87%	70	130	0%	
Trichloroethene	A	ppbv	9.36	9.36		9.6	0	0	0.119	1	0	98%	70	130	0%	
Trichlorofluoromethane	A	ppbv	10.35	10.35		9.6	0	0	0.148	1	0	108%	70	130	0%	
Vinyl acetate	A	ppbv	8.73	8.73		9.9	0	0	0.266	1	0	88%	70	130	0%	
Vinyl chloride	A	ppbv	9.5	9.5		9.4	0	0	0.072	1	0	101%	70	130	0%	
Xylenes, Total	C	ppbv	25.66	25.66		29.2	0	0	0.782	3	0	88%	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	12.41	12.41		12.5	0	0	0	0	0	99%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
927295	RLVS VOA1 040512	EPA_TO15	RLVS	\1\DATA\040512	4/5/2012 12:41:0	1	R47469		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	0.94	0.94		0.996	0	0	0.107	1	0	94%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.19	1.19		1	0	0	0.211	1	0	119%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	0.98	0.98		0.98	0	0	0.108	1	0	100%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.9	0.9		0.98	0	0	0.2	1	0	92%	70	130	0%	
1,1-Dichloroethane	A	ppbv	0.9	0.9		0.97	0	0	0.111	1	0	93%	70	130	0%	
1,1-Dichloroethene	A	ppbv	0.95	0.95		0.99	0	0	0.097	1	0	96%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.44	1.44		0.91	0	0	0.271	1	0	158%	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	0.87	0.87		0.96	0	0	0.186	1	0	91%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.31	1.31		0.97	0	0	0.208	1	0	135%	70	130	0%	S
1,2-Dichloroethane	A	ppbv	0.9	0.9		0.97	0	0	0.196	1	0	93%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.89	0.89		0.98	0	0	0.224	1	0	91%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040512\04051203.D Vial: 3
Acq On : 5 Apr 2012 11:56 am Operator: RACHEL HILL
Sample : CCV VOA1 040512 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	113	0.00
2	T	Propylene	0.933	0.915	1.9	104	0.00
3	T	Dichlorodifluoromethane	3.299	3.319	-0.6	105	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.423	2.455	-1.3	103	0.00
5	T	Chloromethane	0.975	0.974	0.1	98	0.00
6	T	Vinyl chloride	0.908	0.918	-1.1	100	0.00
7	T	1,3-Butadiene	0.604	0.629	-4.1	99	0.00
8	T	Bromomethane	1.211	1.251	-3.3	106	0.00
9	T	Chloroethane	0.672	0.682	-1.5	104	0.00
10	T	Trichlorofluoromethane	3.078	3.319	-7.8	106	0.00
11	T	Ethanol	0.384	0.330	14.1	82	0.00
12	T	Freon113	2.077	2.270	-9.3	103	0.00
13	T	1,1-Dichloroethene	1.532	1.648	-7.6	106	0.00
14	T	Acetone	1.520	1.323	13.0	82	0.00
15	T	Carbon disulfide	2.662	2.782	-4.5	104	0.00
16	T	2-Propanol	1.547	1.297	16.2	81	0.00
17	T	Methylene chloride	1.125	1.154	-2.6	102	0.00
18	T	tert-Butyl Methyl Ether	2.677	2.287	14.6	78	0.00
19	T	trans-1,2-Dichloroethene	1.451	1.517	-4.5	101	0.00
20	T	n-Hexane	1.604	1.667	-3.9	100	0.00
21	T	1,1-Dichloroethane	1.915	1.964	-2.6	100	0.00
22	T	Vinyl acetate	2.421	2.134	11.9	77	0.00
23	T	cis-1,2-Dichloroethene	1.146	1.149	-0.3	96	0.00
24	T	2-Butanone	1.588	1.340	15.6	78	0.00
25	T	Ethyl acetate	2.033	1.679	17.4	76	0.00
26	T	Tetrahydrofuran	0.986	0.879	10.9	78	0.00
27	T	Chloroform	2.018	2.056	-1.9	93	0.00
28	T	1,1,1-Trichloroethane	2.172	2.270	-4.5	94	0.00
29	T	Cyclohexane	1.517	1.643	-8.3	96	0.00
30	T	Carbon tetrachloride	2.467	2.524	-2.3	95	0.00
31	T	Benzene	3.050	2.810	7.9	84	0.00
32	T	1,2-Dichloroethane	1.236	1.164	5.8	83	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	116	0.00
34	T	Heptane	0.502	0.514	-2.4	90	0.00
35	T	Trichloroethene	0.447	0.435	2.7	92	0.00
36	T	1,2-Dichloropropane	0.332	0.291	12.3	80	0.00
37	T	1,4-Dioxane	0.194	0.163	16.0	81	0.00
38	T	Bromodichloromethane	0.632	0.594	6.0	87	0.00
39	T	cis-1,3-Dichloropropene	0.535	0.472	11.8	81	0.00
40	T	4-Methyl-2-pentanone	0.233	0.186	20.2	74	0.00
41	T	Toluene	1.053	0.937	11.0	81	0.00
42	T	trans-1,3-Dichloropropene	0.495	0.431	12.9	80	0.00
43	T	1,1,2-Trichloroethane	0.372	0.327	12.1	81	0.00
44	T	Tetrachloroethene	0.563	0.542	3.7	91	0.00
45	T	2-Hexanone	0.451	0.349	22.6	70	0.00
46	T	Chlorodibromomethane	0.654	0.603	7.8	83	0.00
47	T	1,2-Dibromoethane	0.571	0.514	10.0	82	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	117	0.00
49	T	Chlorobenzene	0.918	0.812	11.5	82	0.00
50	T	Ethylbenzene	1.443	1.270	12.0	80	0.00
51	T	m,p-Xylene	1.122	0.982	12.5	83	0.00
52	T	o-Xylene	1.148	1.017	11.4	80	0.00
53	T	Styrene	0.882	0.783	11.2	80	0.00
54	T	Bromoform	0.651	0.578	11.2	82	0.00
55	S	4-Bromofluorobenzene	0.627	0.622	0.8	117	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040512\04051203.D Vial: 3
Acq On : 5 Apr 2012 11:56 am Operator: RACHEL HILL
Sample : CCV VOA1 040512 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 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	0.758	0.649	14.4	82	0.00
57	T	4-Ethyltoluene	1.526	1.288	15.6	80	0.00
58	T	1,3,5-Trimethylbenzene	1.302	1.096	15.8	81	0.00
59	T	1,2,4-Trimethylbenzene	1.254	1.053	16.0	81	0.00
60	T	1,3-Dichlorobenzene	0.823	0.691	16.0	83	0.00
61	T	1,4-Dichlorobenzene	0.794	0.666	16.1	83	0.00
62	T	Benzyl chloride	0.930	0.777	16.5	80	0.00
63	T	1,2-Dichlorobenzene	0.742	0.618	16.7	85	0.00
64	T	1,2,4-Trichlorobenzene	0.279	0.199	28.7	76	0.00
65	T	Hexachlorobutadiene	0.347	0.271	21.9	73	0.00
66		Naphthalene	0.539	0.410	23.9	80	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040512\04051203.D Vial: 3
Acq On : 5 Apr 2012 11:56 am Operator: RACHEL HILL
Sample : CCV VOA1 040512 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 6 12:24 2012 Quant Results File: 040312V1.RES

Quant Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Initial Calibration
DataAcq Meth : 040312V1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.59	130	739982	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.69	114	2559665	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.54	117	2251213	12.50	ppbv		0.00
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.19	95	1400688	12.41	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 99.28%				
Target Compounds							Qvalue
2) Propylene	5.51	41	552433	10.00	ppbv		99
3) Dichlorodifluoromethane	5.59	85	1807853	9.26	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.84	135	1380700	9.63	ppbv	#	84
5) Chloromethane	6.00	50	547963	9.49	ppbv		100
6) Vinyl chloride	6.21	62	510752	9.50	ppbv		99
7) 1,3-Butadiene	6.26	39	364765	10.20	ppbv		94
8) Bromomethane	6.85	94	688660	9.61	ppbv		99
9) Chloroethane	7.00	64	371601	9.34	ppbv		99
10) Trichlorofluoromethane	7.33	101	1886140	10.35	ppbv		100
11) Ethanol	7.57	45	179724	7.92	ppbv		99
12) Freon113	7.99	101	1317044	10.71	ppbv		95
13) 1,1-Dichloroethene	8.09	61	965853	10.65	ppbv		96
14) Acetone	8.19	43	783042	8.70	ppbv		99
15) Carbon disulfide	8.46	76	1597407	10.14	ppbv	#	100
16) 2-Propanol	8.23	45	775427	8.47	ppbv	#	1
17) Methylene chloride	8.75	49	682876	10.26	ppbv		99
18) tert-Butyl Methyl Ether	8.96	73	1340328	8.46	ppbv		98
19) trans-1,2-Dichloroethene	9.03	61	880115	10.25	ppbv		96
20) n-Hexane	9.22	57	996767	10.50	ppbv		97
21) 1,1-Dichloroethane	9.59	63	1127532	9.95	ppbv		100
22) Vinyl acetate	9.53	43	1250954	8.73	ppbv		99
23) cis-1,2-Dichloroethene	10.28	96	666754	9.83	ppbv		96
24) 2-Butanone	10.25	43	785087	8.35	ppbv		98
25) Ethyl acetate	10.19	43	974343	8.10	ppbv	#	100
26) Tetrahydrofuran	10.58	42	520632	8.92	ppbv		96
27) Chloroform	10.61	83	1193066	9.99	ppbv		98
28) 1,1,1-Trichloroethane	10.85	97	1290011	10.04	ppbv		100
29) Cyclohexane	10.86	56	953050	10.61	ppbv		98
30) Carbon tetrachloride	11.02	117	1419373	9.72	ppbv		99
31) Benzene	11.30	78	1596800	8.85	ppbv		100
32) 1,2-Dichloroethane	11.37	62	668511	9.14	ppbv		99
34) Heptane	11.35	43	1042133	10.13	ppbv		98
35) Trichloroethene	12.03	130	855981	9.36	ppbv		97
36) 1,2-Dichloropropane	12.39	63	583192	8.59	ppbv		100
37) 1,4-Dioxane	12.46	88	319906	8.07	ppbv		98
38) Bromodichloromethane	12.67	83	1167867	9.02	ppbv		98
39) cis-1,3-Dichloropropene	13.22	75	917745	8.37	ppbv		99
40) 4-Methyl-2-pentanone	13.33	58	380000	7.95	ppbv		99
41) Toluene	13.63	91	1880972	8.73	ppbv		100
42) trans-1,3-Dichloropropene	13.93	75	803909	7.92	ppbv		99
43) 1,1,2-Trichloroethane	14.20	97	655294	8.60	ppbv		99
44) Tetrachloroethene	14.33	166	1064912	9.24	ppbv		96
45) 2-Hexanone	14.40	43	700261	7.59	ppbv		95
46) Chlorodibromomethane	14.75	129	1210343	9.03	ppbv		99
47) 1,2-Dibromoethane	14.99	107	1010030	8.64	ppbv		99
49) Chlorobenzene	15.58	112	1448629	8.76	ppbv		98
50) Ethylbenzene	15.62	91	2240834	8.62	ppbv		98
51) m,p-Xylene	15.78	91	3395579	16.80	ppbv		99
52) o-Xylene	16.37	91	1831362	8.86	ppbv		98

(#) = qualifier out of range (m) = manual integration
04051203.D 040312V1.M Fri Apr 06 12:03:23 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040512\04051203.D Vial: 3
Acq On : 5 Apr 2012 11:56 am Operator: RACHEL HILL
Sample : CCV VOA1 040512 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 6 12:24 2012 Quant Results File: 040312V1.RES

Quant Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Initial Calibration
DataAcq Meth : 040312V1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53)	Styrene	16.40	104	1382815	8.70	ppbv	98
54)	Bromoform	16.78	173	998491	8.52	ppbv	99
56)	1,1,2,2-Tetrachloroethane	17.35	83	1168130	8.56	ppbv	98
57)	4-Ethyltoluene	17.60	105	2273066	8.27	ppbv	100
58)	1,3,5-Trimethylbenzene	17.68	105	1914971	8.17	ppbv	99
59)	1,2,4-Trimethylbenzene	18.26	105	1858577	8.23	ppbv	100
60)	1,3-Dichlorobenzene	18.82	146	1206504	8.14	ppbv	99
61)	1,4-Dichlorobenzene	18.96	146	1151417	8.05	ppbv	99
62)	Benzyl chloride	19.17	91	1356595	8.10	ppbv	99
63)	1,2-Dichlorobenzene	19.61	146	1079455	8.08	ppbv	99
64)	1,2,4-Trichlorobenzene	22.76	180	326643	6.50	ppbv	97
65)	Hexachlorobutadiene	22.96	225	458971	7.34	ppbv	99
66)	Naphthalene	23.45	128	678999	7.00	ppbv	99

(#) = qualifier out of range (m) = manual integration
04051203.D 040312V1.M Fri Apr 06 12:03:23 2012 Page 2

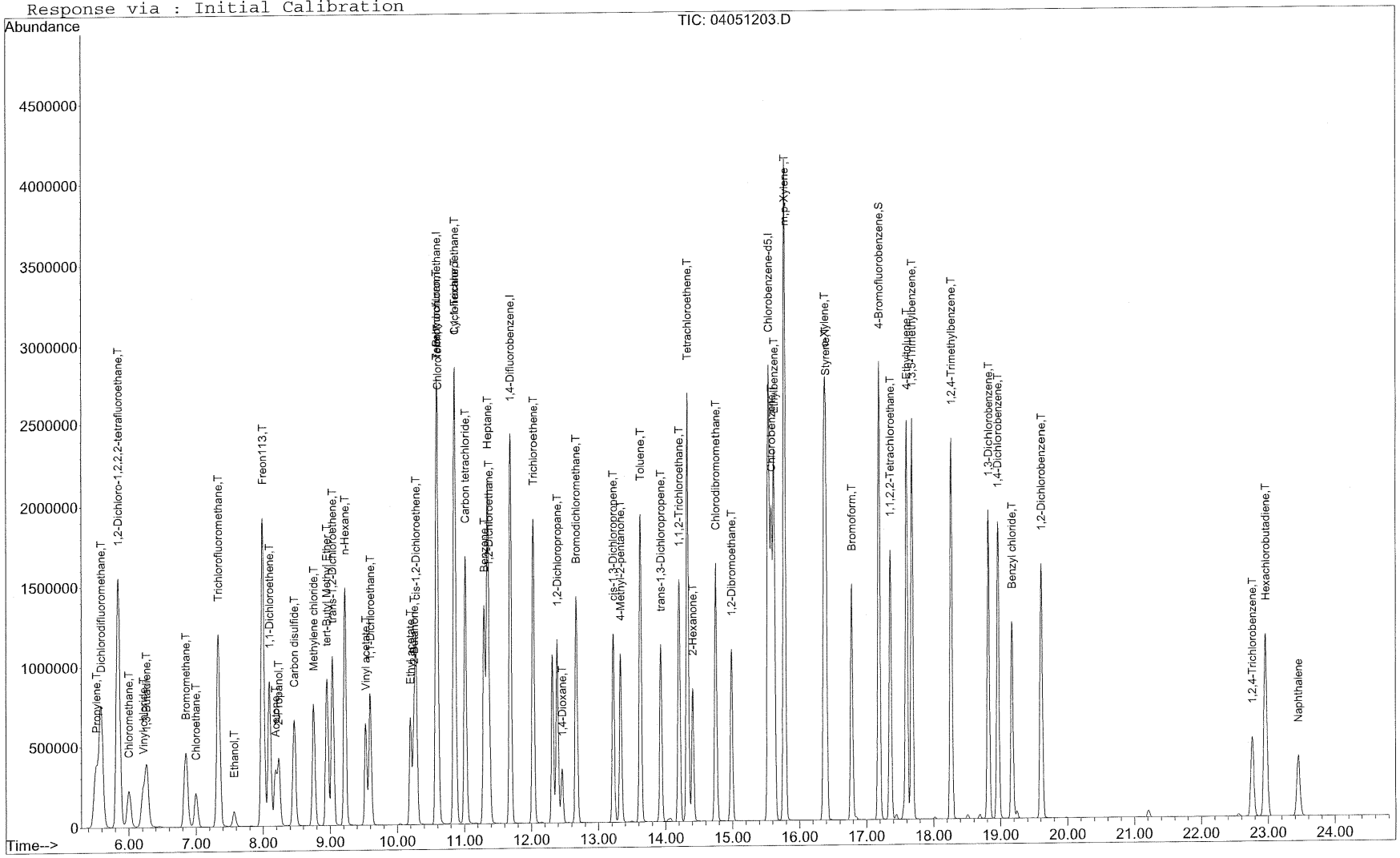
Quantitation Report

Data File : C:\HPCHEM\1\DATA\040512\04051203.D
Acq On : 5 Apr 2012 11:56 am
Sample : CCV VOA1 040512
Misc : CCV EPA TO15
MS Integration Params: CLME.P
Quant Time: Apr 6 12:24 2012

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

Quant Results File: 040312V1.RES

Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA1_120406A **Run No.:** 47487

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

Analyst: Rachel Hill **Column:**

Calibration ID: 47419 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 4/9/12/PR by RD2 on 09APR12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB1 VOA1 040612	BFB_TUNE	TUNE	R47487	4/6/2012 8:22:00 AM	Celeste Hoitash		
CCV VOA1 040612	EPA_TO15	CCV	R47487	4/6/2012 9:46:00 AM	Celeste Hoitash		
RLVS VOA1 040612	EPA_TO15	RLVS	R47487	4/6/2012 11:15:00 AM	Celeste Hoitash		
MBLK VOA1 040612	EPA_TO15	MBLK	R47487	4/6/2012 12:04:00 PM	Celeste Hoitash		
1203732-024A	EPA_TO15	SAMP	R47487	4/6/2012 12:53:00 PM	Celeste Hoitash		
1203732-025A	EPA_TO15	SAMP	R47487	4/6/2012 2:42:00 PM	Celeste Hoitash		
1203732-024A	EPA_TO15	SAMP	R47487	4/6/2012 4:31:00 PM	Celeste Hoitash		
1203732-025A	EPA_TO15	SAMP	R47487	4/6/2012 5:13:00 PM	Celeste Hoitash		
1203732-026A	EPA_TO15	SAMP	R47487	4/6/2012 6:42:00 PM	Celeste Hoitash		
1203732-027A	EPA_TO15	SAMP	R47487	4/6/2012 8:56:00 PM	Celeste Hoitash		
1203732-027ADUP	EPA_TO15	DUP	R47487	4/6/2012 9:41:00 PM	Celeste Hoitash		
1203732-028A	EPA_TO15	SAMP	R47487	4/6/2012 11:55:00 PM	Celeste Hoitash		
1203732-008A	EPA_TO15	SAMP	R47487	4/7/2012 12:37:00 AM	Celeste Hoitash		
1203732-015A	EPA_TO15	SAMP	R47487	4/7/2012 1:25:00 AM	Celeste Hoitash		
1203732-012A	EPA_TO15	SAMP	R47487	4/7/2012 4:25:00 AM	Celeste Hoitash		
1203732-023A	EPA_TO15	SAMP	R47487	4/7/2012 5:09:00 AM	Celeste Hoitash		
RLVS2 VOA1 04061	EPA_TO15	RLVS	R47487	4/7/2012 5:52:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

12-Apr-12

RunNo 47487

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
927773	BFB1 VOA1 040612	BFB_TUNE	TUNE	\1\DATA\040612	4/6/2012 8:22:00	1	R47487		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		84.8	84.8		100	0	0	0	0	0	85%	50	120	0%	
175	M		7.3	7.3		100	0	0	0	0	0	7%	4	9	0%	
176	M		98	98		100	0	0	0	0	0	98%	93	101	0%	
177	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	
50	M		16.2	16.2		100	0	0	0	0	0	16%	8	40	0%	
75	M		46.5	46.5		100	0	0	0	0	0	47%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.8	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
927774	CCV VOA1 040612	EPA_TO15	CCV	\1\DATA\040612	4/6/2012 9:46:00	1	R47487		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	10.79	10.79		9.6	0	0	0.107	1	0	112%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	9.86	9.86		10	0	0	0.211	1	0	99%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	11.03	11.03		9.8	0	0	0.108	1	0	113%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	10.04	10.04		9.8	0	0	0.2	1	0	102%	70	130	0%	
1,1-Dichloroethane	A	ppbv	10.22	10.22		9.7	0	0	0.111	1	0	105%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.62	10.62		9.9	0	0	0.097	1	0	107%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	7.05	7.05		9.1	0	0	0.271	1	0	77%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	9.64	9.64		9.8	0	0	0.245	1	0	98%	70	130	0%	
1,2-Dibromoethane	A	ppbv	10.02	10.02		9.6	0	0	0.186	1	0	104%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	9.08	9.08		9.7	0	0	0.208	1	0	94%	70	130	0%	
1,2-Dichloroethane	A	ppbv	10.12	10.12		9.7	0	0	0.196	1	0	104%	70	130	0%	
1,2-Dichloropropane	A	ppbv	9.99	9.99		9.8	0	0	0.224	1	0	102%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.67	9.67		9.7	0	0	0.24	1	0	100%	70	130	0%	
1,3-Butadiene	A	ppbv	11.99	11.99		9.8	0	0	0.152	1	0	122%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.25	9.25		9.7	0	0	0.202	1	0	95%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
927774	CCV VOA1 040612	EPA_TO15	CCV	\1\DATA\040612	4/6/2012 9:46:00	1	R47487		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.15	9.15		9.6	0	0	0.194	1	0	95%	70	130	0%	
1,4-Dioxane	A	ppbv	9.51	9.51		9.6	0	0	0.128	1	0	99%	70	130	0%	
2-Butanone	A	ppbv	10.01	10.01		9.9	0	0	0.287	1	0	101%	70	130	0%	
2-Hexanone	A	ppbv	9.32	9.32		9.8	0	0	0.135	1	0	95%	70	130	0%	
2-Propanol	A	ppbv	9.54	9.54		10.1	0	0	0.329	1	0	94%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	9.67	9.67		10	0	0	0.157	1	0	97%	70	130	0%	
Acetone	A	ppbv	9.64	9.64		10	0	0	0.43	1	0	96%	70	130	0%	
Benzene	A	ppbv	9.61	9.61		9.6	0	0	0.126	1	0	100%	70	130	0%	
Benzyl chloride	A	ppbv	9.32	9.32		9.7	0	0	0.155	1	0	96%	70	130	0%	
Bromodichloromethane	A	ppbv	10.2	10.2		9.6	0	0	0.156	1	0	106%	70	130	0%	
Bromoform	A	ppbv	9.78	9.78		9.6	0	0	0.197	1	0	102%	70	130	0%	
Bromomethane	A	ppbv	9.88	9.88		9.3	0	0	0.075	1	0	106%	70	130	0%	
Carbon disulfide	A	ppbv	10.3	10.3		9.7	0	0	0.093	1	0	106%	70	130	0%	
Carbon tetrachloride	A	ppbv	10.32	10.32		9.5	0	0	0.114	1	0	109%	70	130	0%	
Chlorobenzene	A	ppbv	10.19	10.19		9.9	0	0	0.275	1	0	103%	70	130	0%	
Chlorodibromomethane	A	ppbv	10.45	10.45		9.2	0	0	0.165	1	0	114%	70	130	0%	
Chloroethane	A	ppbv	9.54	9.54		9.8	0	0	0.063	1	0	97%	70	130	0%	
Chloroform	A	ppbv	10.8	10.8		9.4	0	0	0.126	1	0	115%	70	130	0%	
Chloromethane	A	ppbv	10.2	10.2		9.8	0	0	0.104	1	0	104%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	10.26	10.26		9.8	0	0	0.107	1	0	105%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	9.66	9.66		9.5	0	0	0.166	1	0	102%	70	130	0%	
Cyclohexane	A	ppbv	11.22	11.22		9.8	0	0	0.684	2	0	114%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.61	9.61		9.2	0	0	0.086	1	0	104%	70	130	0%	
Ethanol	A	ppbv	8.59	8.59		9.2	0	0	1.962	5	0	93%	70	130	0%	
Ethyl acetate	A	ppbv	9.56	9.56		9.8	0	0	0.157	1	0	98%	70	130	0%	
Ethylbenzene	A	ppbv	10.2	10.2		9.8	0	0	0.737	2	0	104%	70	130	0%	
Heptane	A	ppbv	11.27	11.27		9.9	0	0	0.249	1	0	114%	70	130	0%	
Hexachlorobutadiene	A	ppbv	8.46	8.46		9.4	0	0	0.374	2	0	90%	70	130	0%	
m,p-Xylene	A	ppbv	19.95	19.95		19.2	0	0	0.524	2	0	104%	70	130	0%	
Methylene chloride	A	ppbv	10.48	10.48		10	0	0	2.077	5	0	105%	70	130	0%	
n-Hexane	A	ppbv	10.68	10.68		10.1	0	0	0.692	2	0	106%	70	130	0%	
Naphthalene	A	ppbv	7.51	7.51		9.2	0	0	0.247	1	0	82%	70	130	0%	
o-Xylene	A	ppbv	10.43	10.43		10	0	0	0.258	1	0	104%	70	130	0%	
Propylene	A	ppbv	10.17	10.17		10.2	0	0	0.075	1	0	100%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
927774	CCV VOA1 040612	EPA_TO15	CCV	\1\DATA\040612	4/6/2012 9:46:00	1	R47487		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	10.16	10.16		9.8	0	0	0.263	1	0	104%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	9.63	9.63		9.9	0	0	0.228	1	0	97%	70	130	0%	
Tetrachloroethene	A	ppbv	10.4	10.4		9.6	0	0	0.148	1	0	108%	70	130	0%	
Tetrahydrofuran	A	ppbv	10.34	10.34		10	0	0	0.201	1	0	103%	70	130	0%	
Toluene	A	ppbv	10.21	10.21		9.8	0	0	0.158	1	0	104%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.45	10.45		9.8	0	0	0.117	1	0	107%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	9.23	9.23		9.1	0	0	0.171	1	0	101%	70	130	0%	
Trichloroethene	A	ppbv	10.39	10.39		9.6	0	0	0.119	1	0	108%	70	130	0%	
Trichlorofluoromethane	A	ppbv	10.57	10.57		9.6	0	0	0.148	1	0	110%	70	130	0%	
Vinyl acetate	A	ppbv	9.89	9.89		9.9	0	0	0.266	1	0	100%	70	130	0%	
Vinyl chloride	A	ppbv	10.48	10.48		9.4	0	0	0.072	1	0	111%	70	130	0%	
Xylenes, Total	C	ppbv	30.38	30.38		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	12.31	12.31		12.5	0	0	0	0	0	98%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
927775	RLVS VOA1 040612	EPA_TO15	RLVS	\1\DATA\040612	4/6/2012 11:15:0	1	R47487		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	1.04	1.04		0.996	0	0	0.107	1	0	104%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.31	1.31		1	0	0	0.211	1	0	131%	70	130	0%	S
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	1.08	1.08		0.98	0	0	0.108	1	0	110%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	1.02	1.02		0.98	0	0	0.2	1	0	104%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1.01	1.01		0.97	0	0	0.111	1	0	104%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1.05	1.05		0.99	0	0	0.097	1	0	106%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.66	1.66		0.91	0	0	0.271	1	0	182%	70	130	0%	S
1,2,4-Trimethylbenzene	A	ppbv	1.34	1.34		0.98	0	0	0.245	1	0	137%	70	130	0%	S
1,2-Dibromoethane	A	ppbv	1	1		0.96	0	0	0.186	1	0	104%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.47	1.47		0.97	0	0	0.208	1	0	152%	70	130	0%	S
1,2-Dichloroethane	A	ppbv	1.04	1.04		0.97	0	0	0.196	1	0	107%	70	130	0%	
1,2-Dichloropropane	A	ppbv	1	1		0.98	0	0	0.224	1	0	102%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040612\04061203.D Vial: 3
Acq On : 6 Apr 2012 9:46 am Operator: RACHEL HILL
Sample : CCV VOA1 040612 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	101	0.00
2	T	Propylene	0.933	0.930	0.3	95	0.02
3	T	Dichlorodifluoromethane	3.299	3.446	-4.5	98	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.423	2.564	-5.8	97	0.00
5	T	Chloromethane	0.975	1.047	-7.4	95	0.02
6	T	Vinyl chloride	0.908	1.012	-11.5	99	0.00
7	T	1,3-Butadiene	0.604	0.739	-22.4	104	0.00
8	T	Bromomethane	1.211	1.287	-6.3	98	0.00
9	T	Chloroethane	0.672	0.697	-3.7	95	0.02
10	T	Trichlorofluoromethane	3.078	3.390	-10.1	97	0.02
11	T	Ethanol	0.384	0.358	6.8	80	0.00
12	T	Freon113	2.077	2.338	-12.6	95	0.00
13	T	1,1-Dichloroethene	1.532	1.644	-7.3	95	0.00
14	T	Acetone	1.520	1.465	3.6	82	0.00
15	T	Carbon disulfide	2.662	2.825	-6.1	95	0.01
16	T	2-Propanol	1.547	1.460	5.6	81	0.00
17	T	Methylene chloride	1.125	1.179	-4.8	94	0.00
18	T	tert-Butyl Methyl Ether	2.677	2.605	2.7	80	0.00
19	T	trans-1,2-Dichloroethene	1.451	1.547	-6.6	93	0.00
20	T	n-Hexane	1.604	1.696	-5.7	91	0.00
21	T	1,1-Dichloroethane	1.915	2.017	-5.3	92	0.00
22	T	Vinyl acetate	2.421	2.420	0.0	79	0.00
23	T	cis-1,2-Dichloroethene	1.146	1.200	-4.7	90	0.00
24	T	2-Butanone	1.588	1.606	-1.1	84	0.00
25	T	Ethyl acetate	2.033	1.984	2.4	81	0.00
26	T	Tetrahydrofuran	0.986	1.020	-3.4	81	0.00
27	T	Chloroform	2.018	2.224	-10.2	90	0.00
28	T	1,1,1-Trichloroethane	2.172	2.440	-12.3	91	0.00
29	T	Cyclohexane	1.517	1.737	-14.5	91	0.00
30	T	Carbon tetrachloride	2.467	2.681	-8.7	90	0.00
31	T	Benzene	3.050	3.051	-0.0	82	0.00
32	T	1,2-Dichloroethane	1.236	1.289	-4.3	82	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	100	0.00
34	T	Heptane	0.502	0.572	-13.9	86	0.00
35	T	Trichloroethene	0.447	0.483	-8.1	89	0.00
36	T	1,2-Dichloropropane	0.332	0.338	-1.8	81	0.00
37	T	1,4-Dioxane	0.194	0.192	1.0	82	0.00
38	T	Bromodichloromethane	0.632	0.672	-6.3	85	0.00
39	T	cis-1,3-Dichloropropene	0.535	0.545	-1.9	81	0.00
40	T	4-Methyl-2-pentanone	0.233	0.226	3.0	78	0.00
41	T	Toluene	1.053	1.097	-4.2	82	0.00
42	T	trans-1,3-Dichloropropene	0.495	0.503	-1.6	81	0.00
43	T	1,1,2-Trichloroethane	0.372	0.381	-2.4	82	0.00
44	T	Tetrachloroethene	0.563	0.609	-8.2	89	0.00
45	T	2-Hexanone	0.451	0.429	4.9	74	0.00
46	T	Chlorodibromomethane	0.654	0.698	-6.7	84	0.00
47	T	1,2-Dibromoethane	0.571	0.596	-4.4	82	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	102	0.00
49	T	Chlorobenzene	0.918	0.945	-2.9	83	0.00
50	T	Ethylbenzene	1.443	1.502	-4.1	82	0.00
51	T	m,p-Xylene	1.122	1.166	-3.9	86	0.00
52	T	o-Xylene	1.148	1.197	-4.3	82	0.00
53	T	Styrene	0.882	0.915	-3.7	81	0.00
54	T	Bromoform	0.651	0.663	-1.8	82	0.00
55	S	4-Bromofluorobenzene	0.627	0.617	1.6	100	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040612\04061203.D Vial: 3
Acq On : 6 Apr 2012 9:46 am Operator: RACHEL HILL
Sample : CCV VOA1 040612 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 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	0.758	0.747	1.5	82	0.00
57	T	4-Ethyltoluene	1.526	1.518	0.5	82	0.00
58	T	1,3,5-Trimethylbenzene	1.302	1.298	0.3	83	0.00
59	T	1,2,4-Trimethylbenzene	1.254	1.234	1.6	83	0.01
60	T	1,3-Dichlorobenzene	0.823	0.785	4.6	82	0.00
61	T	1,4-Dichlorobenzene	0.794	0.757	4.7	82	0.00
62	T	Benzyl chloride	0.930	0.894	3.9	79	0.00
63	T	1,2-Dichlorobenzene	0.742	0.694	6.5	83	0.00
64	T	1,2,4-Trichlorobenzene	0.279	0.216	22.6	72	0.00
65	T	Hexachlorobutadiene	0.347	0.312	10.1	73	0.00
66		Naphthalene	0.539	0.440	18.4	74	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040612\04061203.D Vial: 3
Acq On : 6 Apr 2012 9:46 am Operator: RACHEL HILL
Sample : CCV VOA1 040612 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 6 10:11 2012 Quant Results File: 040312V1.RES

Quant Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Initial Calibration
DataAcq Meth : 040312V1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.59	130	663188	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.69	114	2219315	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.54	117	1951201	12.50	ppbv	0.00
System Monitoring Compounds						
55) 4-Bromofluorobenzene	17.19	95	1204700	12.31	ppbv	0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 98.48%			
Target Compounds						Qvalue
2) Propylene	5.53	41	503363	10.17	ppbv	100
3) Dichlorodifluoromethane	5.60	85	1681871	9.61	ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.86	135	1292409	10.05	ppbv #	85
5) Chloromethane	6.01	50	527753	10.20	ppbv	99
6) Vinyl chloride	6.22	62	504872	10.48	ppbv	100
7) 1,3-Butadiene	6.28	39	384376	11.99	ppbv	94
8) Bromomethane	6.86	94	634887	9.88	ppbv	98
9) Chloroethane	7.01	64	340206	9.54	ppbv	99
10) Trichlorofluoromethane	7.35	101	1726518	10.57	ppbv	99
11) Ethanol	7.58	45	174802	8.59	ppbv	99
12) Freon113	8.00	101	1215562	11.03	ppbv	94
13) 1,1-Dichloroethene	8.10	61	863347	10.62	ppbv	97
14) Acetone	8.19	43	777208	9.64	ppbv	99
15) Carbon disulfide	8.47	76	1453958	10.30	ppbv #	100
16) 2-Propanol	8.24	45	782547	9.54	ppbv #	77
17) Methylene chloride	8.76	49	625547	10.48	ppbv	99
18) tert-Butyl Methyl Ether	8.96	73	1368010	9.63	ppbv	98
19) trans-1,2-Dichloroethene	9.04	61	804389	10.45	ppbv	96
20) n-Hexane	9.23	57	908716	10.68	ppbv	97
21) 1,1-Dichloroethane	9.60	63	1038238	10.22	ppbv	100
22) Vinyl acetate	9.54	43	1270927	9.89	ppbv	99
23) cis-1,2-Dichloroethene	10.29	96	623992	10.26	ppbv	97
24) 2-Butanone	10.25	43	843333	10.01	ppbv	100
25) Ethyl acetate	10.20	43	1031580	9.56	ppbv #	100
26) Tetrahydrofuran	10.59	42	541285	10.34	ppbv	97
27) Chloroform	10.61	83	1156118	10.80	ppbv	97
28) 1,1,1-Trichloroethane	10.86	97	1242615	10.79	ppbv	100
29) Cyclohexane	10.87	56	903102	11.22	ppbv	97
30) Carbon tetrachloride	11.02	117	1351254	10.32	ppbv	99
31) Benzene	11.30	78	1554211	9.61	ppbv	100
32) 1,2-Dichloroethane	11.38	62	663209	10.12	ppbv	99
34) Heptane	11.35	43	1004833	11.27	ppbv	98
35) Trichloroethene	12.03	130	823528	10.39	ppbv	97
36) 1,2-Dichloropropane	12.39	63	588221	9.99	ppbv	100
37) 1,4-Dioxane	12.46	88	326744	9.51	ppbv	97
38) Bromodichloromethane	12.67	83	1144878	10.20	ppbv	97
39) cis-1,3-Dichloropropene	13.22	75	918425	9.66	ppbv	99
40) 4-Methyl-2-pentanone	13.33	58	400497	9.67	ppbv	99
41) Toluene	13.63	91	1908341	10.21	ppbv	99
42) trans-1,3-Dichloropropene	13.93	75	811995	9.23	ppbv	99
43) 1,1,2-Trichloroethane	14.20	97	663619	10.04	ppbv	99
44) Tetrachloroethene	14.33	166	1038497	10.40	ppbv	96
45) 2-Hexanone	14.41	43	745940	9.32	ppbv	95
46) Chlorodibromomethane	14.75	129	1214011	10.45	ppbv	99
47) 1,2-Dibromoethane	14.99	107	1015599	10.02	ppbv	99
49) Chlorobenzene	15.58	112	1460059	10.19	ppbv	98
50) Ethylbenzene	15.63	91	2298151	10.20	ppbv	99
51) m,p-Xylene	15.78	91	3494764	19.95	ppbv	99
52) o-Xylene	16.37	91	1868538	10.43	ppbv	98

(#) = qualifier out of range (m) = manual integration
04061203.D 040312V1.M Mon Apr 09 09:13:08 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040612\04061203.D Vial: 3
Acq On : 6 Apr 2012 9:46 am Operator: RACHEL HILL
Sample : CCV VOA1 040612 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 6 10:11 2012 Quant Results File: 040312V1.RES

Quant Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Initial Calibration
DataAcq Meth : 040312V1

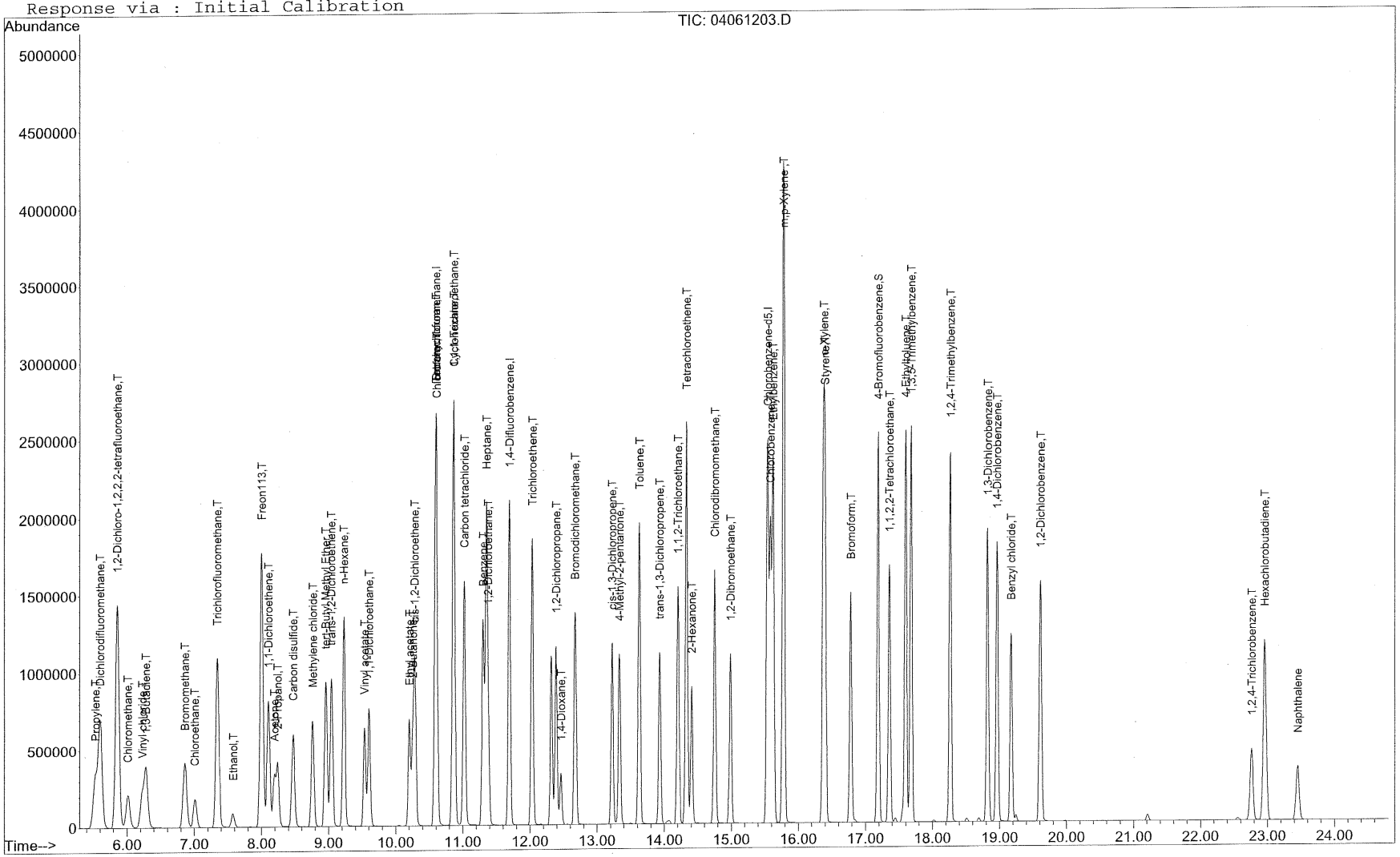
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53) Styrene	16.40	104	1399255	10.16	ppbv	99
54) Bromoform	16.78	173	993214	9.78	ppbv	99
56) 1,1,2,2-Tetrachloroethane	17.36	83	1166733	9.86	ppbv	98
57) 4-Ethyltoluene	17.60	105	2322091	9.75	ppbv	100
58) 1,3,5-Trimethylbenzene	17.68	105	1964750	9.67	ppbv	100
59) 1,2,4-Trimethylbenzene	18.27	105	1887028	9.64	ppbv	100
60) 1,3-Dichlorobenzene	18.82	146	1188839	9.25	ppbv	99
61) 1,4-Dichlorobenzene	18.96	146	1134254	9.15	ppbv	99
62) Benzyl chloride	19.17	91	1352912	9.32	ppbv	99
63) 1,2-Dichlorobenzene	19.61	146	1051052	9.08	ppbv	100
64) 1,2,4-Trichlorobenzene	22.76	180	307039	7.05	ppbv	97
65) Hexachlorobutadiene	22.96	225	458417	8.46	ppbv	99
66) Naphthalene	23.45	128	631652	7.51	ppbv	100

(#) = qualifier out of range (m) = manual integration
04061203.D 040312V1.M Mon Apr 09 09:13:08 2012 Page 2

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040612\04061203.D Vial: 3
Acq On : 6 Apr 2012 9:46 am Operator: RACHEL HILL
Sample : CCV VOA1 040612 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 6 10:11 2012 Quant Results File: 040312V1.RES

Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA1_120407A **Run No.:** 47490

Analytical Run Date: 4/7/2012 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

Calibration ID: 47419 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 4/9/12/PR by RD2 on 09APR12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 040712	BFB_TUNE	TUNE	R47490	4/7/2012 10:55:00 AM	Celeste Hoitash		
CCV VOA1 040712	EPA_TO15	CCV	R47490	4/7/2012 12:56:00 PM	Celeste Hoitash		
RLVS VOA1 040712	EPA_TO15	RLVS	R47490	4/7/2012 1:42:00 PM	Celeste Hoitash		
MBLK VOA1 040712	EPA_TO15	MBLK	R47490	4/7/2012 2:30:00 PM	Celeste Hoitash		
1203903-027A	EPA_TO15	SAMP	R47490	4/7/2012 3:20:00 PM	Celeste Hoitash		
1203903-011A	EPA_TO15	SAMP	R47490	4/7/2012 5:34:00 PM	Celeste Hoitash		
1203903-012A	EPA_TO15	SAMP	R47490	4/7/2012 7:01:00 PM	Celeste Hoitash		
1203903-012ADUP	EPA_TO15	DUP	R47490	4/7/2012 7:42:00 PM	Celeste Hoitash		
1203903-020A	EPA_TO15	SAMP	R47490	4/7/2012 9:56:00 PM	Celeste Hoitash		
1203903-021A	EPA_TO15	SAMP	R47490	4/7/2012 10:41:00 PM	Celeste Hoitash		
1203903-022A	EPA_TO15	SAMP	R47490	4/7/2012 11:25:00 PM	Celeste Hoitash		
1203903-010A	EPA_TO15	SAMP	R47490	4/8/2012 12:10:00 AM	Celeste Hoitash		
1203732-012A	EPA_TO15	SAMP	R47490	4/8/2012 12:52:00 AM	Celeste Hoitash		
1203732-011A	EPA_TO15	SAMP	R47490	4/8/2012 1:34:00 AM	Celeste Hoitash		
1203732-019A	EPA_TO15	SAMP	R47490	4/8/2012 3:11:00 AM	Celeste Hoitash		
1203732-020A	EPA_TO15	SAMP	R47490	4/8/2012 3:59:00 AM	Celeste Hoitash		
1203732-021A	EPA_TO15	SAMP	R47490	4/8/2012 4:47:00 AM	Celeste Hoitash		
1203732-022A	EPA_TO15	SAMP	R47490	4/8/2012 5:35:00 AM	Celeste Hoitash		
RLVS2 VOA1 04071	EPA_TO15	RLVS	R47490	4/8/2012 7:02:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

12-Apr-12

RunNo 47490

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
927811	BFB VOA1 040712	BFB_TUNE	TUNE	\1\DATA\040712	4/7/2012 10:55:0	1	R47490		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		83.7	83.7		100	0	0	0	0	0	84%	50	120	0%	
175	M		7.4	7.4		100	0	0	0	0	0	7%	4	9	0%	
176	M		97.4	97.4		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.8	6.8		100	0	0	0	0	0	7%	5	9	0%	
50	M		16.6	16.6		100	0	0	0	0	0	17%	8	40	0%	
75	M		46.9	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		6.9	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
927812	CCV VOA1 040712	EPA_TO15	CCV	\1\DATA\040712	4/7/2012 12:56:0	1	R47490		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	11.61	11.61		9.6	0	0	0.107	1	0	121%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	11.16	11.16		10	0	0	0.211	1	0	112%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	11.64	11.64		9.8	0	0	0.108	1	0	119%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	11.42	11.42		9.8	0	0	0.2	1	0	117%	70	130	0%	
1,1-Dichloroethane	A	ppbv	10.92	10.92		9.7	0	0	0.111	1	0	113%	70	130	0%	
1,1-Dichloroethene	A	ppbv	11.32	11.32		9.9	0	0	0.097	1	0	114%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	9.53	9.53		9.1	0	0	0.271	1	0	105%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	10.9	10.9		9.8	0	0	0.245	1	0	111%	70	130	0%	
1,2-Dibromoethane	A	ppbv	11.46	11.46		9.6	0	0	0.186	1	0	119%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	10.38	10.38		9.7	0	0	0.208	1	0	107%	70	130	0%	
1,2-Dichloroethane	A	ppbv	11.57	11.57		9.7	0	0	0.196	1	0	119%	70	130	0%	
1,2-Dichloropropane	A	ppbv	11.6	11.6		9.8	0	0	0.224	1	0	118%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	10.95	10.95		9.7	0	0	0.24	1	0	113%	70	130	0%	
1,3-Butadiene	A	ppbv	12.19	12.19		9.8	0	0	0.152	1	0	124%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	10.61	10.61		9.7	0	0	0.202	1	0	109%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
927812	CCV VOA1 040712	EPA_TO15	CCV	.\1\DATA\040712	4/7/2012 12:56:0	1	R47490		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	10.52	10.52		9.6	0	0	0.194	1	0	110%	70	130	0%	
1,4-Dioxane	A	ppbv	10.95	10.95		9.6	0	0	0.128	1	0	114%	70	130	0%	
2-Butanone	A	ppbv	10.63	10.63		9.9	0	0	0.287	1	0	107%	70	130	0%	
2-Hexanone	A	ppbv	11.18	11.18		9.8	0	0	0.135	1	0	114%	70	130	0%	
2-Propanol	A	ppbv	10.57	10.57		10.1	0	0	0.329	1	0	105%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	11.19	11.19		10	0	0	0.157	1	0	112%	70	130	0%	
Acetone	A	ppbv	10.92	10.92		10	0	0	0.43	1	0	109%	70	130	0%	
Benzene	A	ppbv	10.95	10.95		9.6	0	0	0.126	1	0	114%	70	130	0%	
Benzyl chloride	A	ppbv	10.71	10.71		9.7	0	0	0.155	1	0	110%	70	130	0%	
Bromodichloromethane	A	ppbv	11.6	11.6		9.6	0	0	0.156	1	0	121%	70	130	0%	
Bromoform	A	ppbv	11.32	11.32		9.6	0	0	0.197	1	0	118%	70	130	0%	
Bromomethane	A	ppbv	10.45	10.45		9.3	0	0	0.075	1	0	112%	70	130	0%	
Carbon disulfide	A	ppbv	10.78	10.78		9.7	0	0	0.093	1	0	111%	70	130	0%	
Carbon tetrachloride	A	ppbv	11.16	11.16		9.5	0	0	0.114	1	0	117%	70	130	0%	
Chlorobenzene	A	ppbv	11.79	11.79		9.9	0	0	0.275	1	0	119%	70	130	0%	
Chlorodibromomethane	A	ppbv	11.98	11.98		9.8	0	0	0.165	1	0	122%	70	130	0%	
Chloroethane	A	ppbv	10.04	10.04		9.8	0	0	0.063	1	0	102%	70	130	0%	
Chloroform	A	ppbv	11.7	11.7		9.4	0	0	0.126	1	0	124%	70	130	0%	
Chloromethane	A	ppbv	10.65	10.65		9.8	0	0	0.104	1	0	109%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	11.12	11.12		9.8	0	0	0.107	1	0	113%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	11.24	11.24		9.5	0	0	0.166	1	0	118%	70	130	0%	
Cyclohexane	A	ppbv	11.86	11.86		9.8	0	0	0.684	2	0	121%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	10	10		9.2	0	0	0.086	1	0	109%	70	130	0%	
Ethanol	A	ppbv	9.81	9.81		9.2	0	0	1.962	5	0	107%	70	130	0%	
Ethyl acetate	A	ppbv	10.73	10.73		9.8	0	0	0.157	1	0	109%	70	130	0%	
Ethylbenzene	A	ppbv	11.58	11.58		9.8	0	0	0.737	2	0	118%	70	130	0%	
Heptane	A	ppbv	12.54	12.54		9.9	0	0	0.249	1	0	127%	70	130	0%	
Hexachlorobutadiene	A	ppbv	10.98	10.98		9.4	0	0	0.374	2	0	117%	70	130	0%	
m,p-Xylene	A	ppbv	22.44	22.44		19.2	0	0	0.524	2	0	117%	70	130	0%	
Methylene chloride	A	ppbv	11.05	11.05		10	0	0	2.077	5	0	111%	70	130	0%	
n-Hexane	A	ppbv	11.42	11.42		10.1	0	0	0.692	2	0	113%	70	130	0%	
Naphthalene	A	ppbv	9.93	9.93		9.2	0	0	0.247	1	0	108%	70	130	0%	
o-Xylene	A	ppbv	11.79	11.79		10	0	0	0.258	1	0	118%	70	130	0%	
Propylene	A	ppbv	10.74	10.74		10.2	0	0	0.075	1	0	105%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
927812	CCV VOA1 040712	EPA_TO15	CCV	\1\DATA\0407124	7/2/2012 12:56:0	1	R47490		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	11.63	11.63		9.8	0	0	0.263	1	0	119%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	10.99	10.99		9.9	0	0	0.228	1	0	111%	70	130	0%	
Tetrachloroethene	A	ppbv	11.57	11.57		9.6	0	0	0.148	1	0	121%	70	130	0%	
Tetrahydrofuran	A	ppbv	11.61	11.61		10	0	0	0.201	1	0	116%	70	130	0%	
Toluene	A	ppbv	11.66	11.66		9.8	0	0	0.158	1	0	119%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	11.07	11.07		9.8	0	0	0.117	1	0	113%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	10.61	10.61		9.1	0	0	0.171	1	0	117%	70	130	0%	
Trichloroethene	A	ppbv	11.78	11.78		9.6	0	0	0.119	1	0	123%	70	130	0%	
Trichlorofluoromethane	A	ppbv	11.13	11.13		9.6	0	0	0.148	1	0	116%	70	130	0%	
Vinyl acetate	A	ppbv	11.37	11.37		9.9	0	0	0.266	1	0	115%	70	130	0%	
Vinyl chloride	A	ppbv	10.98	10.98		9.4	0	0	0.072	1	0	117%	70	130	0%	
Xylenes, Total	C	ppbv	34.23	34.23		29.2	0	0	0.782	3	0	117%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		1.25	0	0	0	0	0	1000%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	12.41	12.41		12.5	0	0	0	0	0	99%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
927813	RLVS VOA1 040712	EPA_TO15	RLVS	\1\DATA\0407124	7/2/2012 1:42:00	1	R47490		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	1.05	1.05		0.996	0	0	0.107	1	0	105%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.37	1.37		1	0	0	0.211	1	0	137%	70	130	0%	S
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	1.09	1.09		0.98	0	0	0.108	1	0	111%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	1.06	1.06		0.98	0	0	0.2	1	0	108%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1.02	1.02		0.97	0	0	0.111	1	0	105%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1.06	1.06		0.99	0	0	0.097	1	0	107%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.52	1.52		0.91	0	0	0.271	1	0	167%	70	130	0%	S
1,2,4-Trimethylbenzene	A	ppbv	1.41	1.41		0.98	0	0	0.245	1	0	144%	70	130	0%	S
1,2-Dibromoethane	A	ppbv	1.04	1.04		0.96	0	0	0.186	1	0	108%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.48	1.48		0.97	0	0	0.208	1	0	153%	70	130	0%	S
1,2-Dichloroethane	A	ppbv	1	1		0.97	0	0	0.196	1	0	103%	70	130	0%	
1,2-Dichloropropane	A	ppbv	1.06	1.06		0.98	0	0	0.224	1	0	108%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040712\04071203.D Vial: 3
Acq On : 7 Apr 2012 12:56 pm Operator: RACHEL HILL
Sample : CCV VOA1 040712 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 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	99	0.00
2	T	Propylene	0.933	0.982	-5.3	98	0.02
3	T	Dichlorodifluoromethane	3.299	3.588	-8.8	99	0.01
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.423	2.652	-9.5	98	0.01
5	T	Chloromethane	0.975	1.093	-12.1	96	0.02
6	T	Vinyl chloride	0.908	1.061	-16.9	101	0.01
7	T	1,3-Butadiene	0.604	0.751	-24.3	103	0.00
8	T	Bromomethane	1.211	1.361	-12.4	101	0.00
9	T	Chloroethane	0.672	0.733	-9.1	98	0.01
10	T	Trichlorofluoromethane	3.078	3.569	-16.0	100	0.01
11	T	Ethanol	0.384	0.409	-6.5	89	0.00
12	T	Freon113	2.077	2.467	-18.8	98	0.00
13	T	1,1-Dichloroethene	1.532	1.752	-14.4	99	0.00
14	T	Acetone	1.520	1.660	-9.2	90	0.00
15	T	Carbon disulfide	2.662	2.959	-11.2	97	0.01
16	T	2-Propanol	1.547	1.618	-4.6	88	0.00
17	T	Methylene chloride	1.125	1.242	-10.4	97	0.00
18	T	tert-Butyl Methyl Ether	2.677	2.972	-11.0	89	0.00
19	T	trans-1,2-Dichloroethene	1.451	1.639	-13.0	96	0.00
20	T	n-Hexane	1.604	1.813	-13.0	95	0.00
21	T	1,1-Dichloroethane	1.915	2.156	-12.6	96	0.00
22	T	Vinyl acetate	2.421	2.782	-14.9	88	0.00
23	T	cis-1,2-Dichloroethene	1.146	1.300	-13.4	95	0.00
24	T	2-Butanone	1.588	1.706	-7.4	87	0.00
25	T	Ethyl acetate	2.033	2.225	-9.4	88	0.00
26	T	Tetrahydrofuran	0.986	1.145	-16.1	89	0.00
27	T	Chloroform	2.018	2.410	-19.4	96	0.00
28	T	1,1,1-Trichloroethane	2.172	2.626	-20.9	95	0.00
29	T	Cyclohexane	1.517	1.836	-21.0	94	0.00
30	T	Carbon tetrachloride	2.467	2.899	-17.5	96	0.00
31	T	Benzene	3.050	3.478	-14.0	91	0.00
32	T	1,2-Dichloroethane	1.236	1.474	-19.3	92	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	96	0.00
34	T	Heptane	0.502	0.636	-26.7	92	0.00
35	T	Trichloroethene	0.447	0.548	-22.6	96	0.00
36	T	1,2-Dichloropropane	0.332	0.393	-18.4	90	0.00
37	T	1,4-Dioxane	0.194	0.221	-13.9	91	0.00
38	T	Bromodichloromethane	0.632	0.764	-20.9	92	0.00
39	T	cis-1,3-Dichloropropene	0.535	0.633	-18.3	90	0.00
40	T	4-Methyl-2-pentanone	0.233	0.261	-12.0	86	0.00
41	T	Toluene	1.053	1.252	-18.9	89	0.00
42	T	trans-1,3-Dichloropropene	0.495	0.578	-16.8	89	0.00
43	T	1,1,2-Trichloroethane	0.372	0.434	-16.7	89	0.00
44	T	Tetrachloroethene	0.563	0.678	-20.4	95	0.00
45	T	2-Hexanone	0.451	0.514	-14.0	85	0.00
46	T	Chlorodibromomethane	0.654	0.800	-22.3	92	0.00
47	T	1,2-Dibromoethane	0.571	0.681	-19.3	90	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	96	0.00
49	T	Chlorobenzene	0.918	1.093	-19.1	90	0.00
50	T	Ethylbenzene	1.443	1.705	-18.2	88	0.00
51	T	m,p-Xylene	1.122	1.312	-16.9	91	0.00
52	T	o-Xylene	1.148	1.354	-17.9	87	0.00
53	T	Styrene	0.882	1.047	-18.7	88	0.00
54	T	Bromoform	0.651	0.767	-17.8	89	0.00
55	S	4-Bromofluorobenzene	0.627	0.622	0.8	95	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040712\04071203.D Vial: 3
Acq On : 7 Apr 2012 12:56 pm Operator: RACHEL HILL
Sample : CCV VOA1 040712 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 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	0.758	0.846	-11.6	88	0.00
57	T	4-Ethyltoluene	1.526	1.739	-14.0	89	0.00
58	T	1,3,5-Trimethylbenzene	1.302	1.470	-12.9	89	0.00
59	T	1,2,4-Trimethylbenzene	1.254	1.395	-11.2	88	0.00
60	T	1,3-Dichlorobenzene	0.823	0.901	-9.5	89	0.00
61	T	1,4-Dichlorobenzene	0.794	0.870	-9.6	89	0.00
62	T	Benzyl chloride	0.930	1.027	-10.4	86	0.00
63	T	1,2-Dichlorobenzene	0.742	0.794	-7.0	89	0.00
64	T	1,2,4-Trichlorobenzene	0.279	0.292	-4.7	91	0.00
65	T	Hexachlorobutadiene	0.347	0.405	-16.7	89	0.00
66		Naphthalene	0.539	0.582	-8.0	92	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040712\04071203.D Vial: 3
Acq On : 7 Apr 2012 12:56 pm Operator: RACHEL HILL
Sample : CCV VOA1 040712 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 7 13:21 2012 Quant Results File: 040312V1.RES

Quant Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Initial Calibration
DataAcq Meth : 040312V1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.59	130	647876	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.69	114	2124065	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.54	117	1839425	12.50	ppbv		0.00
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.19	95	1144831	12.41	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 99.28%				
Target Compounds							Qvalue
2) Propylene	5.53	41	519155	10.74	ppbv		99
3) Dichlorodifluoromethane	5.60	85	1710924	10.00	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.86	135	1306045	10.40	ppbv	#	85
5) Chloromethane	6.02	50	538144	10.65	ppbv		99
6) Vinyl chloride	6.22	62	516900	10.98	ppbv		99
7) 1,3-Butadiene	6.28	39	381710	12.19	ppbv		95
8) Bromomethane	6.86	94	655885	10.45	ppbv		98
9) Chloroethane	7.01	64	349617	10.04	ppbv		99
10) Trichlorofluoromethane	7.34	101	1775680	11.13	ppbv		100
11) Ethanol	7.57	45	194982	9.81	ppbv		99
12) Freon113	8.00	101	1253111	11.64	ppbv		94
13) 1,1-Dichloroethene	8.10	61	898976	11.32	ppbv		98
14) Acetone	8.19	43	860519	10.92	ppbv		98
15) Carbon disulfide	8.47	76	1487539	10.78	ppbv	#	100
16) 2-Propanol	8.24	45	846884	10.57	ppbv		79
17) Methylene chloride	8.76	49	643942	11.05	ppbv		99
18) tert-Butyl Methyl Ether	8.96	73	1525090	10.99	ppbv		98
19) trans-1,2-Dichloroethene	9.04	61	832536	11.07	ppbv		97
20) n-Hexane	9.23	57	949279	11.42	ppbv		97
21) 1,1-Dichloroethane	9.60	63	1083910	10.92	ppbv		100
22) Vinyl acetate	9.53	43	1427426	11.37	ppbv		99
23) cis-1,2-Dichloroethene	10.28	96	660466	11.12	ppbv		97
24) 2-Butanone	10.25	43	875269	10.63	ppbv		97
25) Ethyl acetate	10.20	43	1130333	10.73	ppbv	#	100
26) Tetrahydrofuran	10.59	42	593671	11.61	ppbv		97
27) Chloroform	10.61	83	1223870	11.70	ppbv		97
28) 1,1,1-Trichloroethane	10.86	97	1306551	11.61	ppbv		100
29) Cyclohexane	10.86	56	932663	11.86	ppbv		98
30) Carbon tetrachloride	11.02	117	1427344	11.16	ppbv		99
31) Benzene	11.30	78	1730728	10.95	ppbv		100
32) 1,2-Dichloroethane	11.38	62	740881	11.57	ppbv		99
34) Heptane	11.35	43	1070176	12.54	ppbv		98
35) Trichloroethene	12.03	130	894091	11.78	ppbv		97
36) 1,2-Dichloropropane	12.39	63	653651	11.60	ppbv		100
37) 1,4-Dioxane	12.46	88	360044	10.95	ppbv		96
38) Bromodichloromethane	12.67	83	1245928	11.60	ppbv		97
39) cis-1,3-Dichloropropene	13.22	75	1022647	11.24	ppbv		99
40) 4-Methyl-2-pentanone	13.33	58	443554	11.19	ppbv		99
41) Toluene	13.62	91	2085698	11.66	ppbv		100
42) trans-1,3-Dichloropropene	13.93	75	893044	10.61	ppbv		99
43) 1,1,2-Trichloroethane	14.20	97	722602	11.42	ppbv		99
44) Tetrachloroethene	14.33	166	1105477	11.57	ppbv		96
45) 2-Hexanone	14.40	43	855858	11.18	ppbv		95
46) Chlorodibromomethane	14.75	129	1332349	11.98	ppbv		99
47) 1,2-Dibromoethane	14.98	107	1111300	11.46	ppbv		99
49) Chlorobenzene	15.58	112	1592476	11.79	ppbv		98
50) Ethylbenzene	15.62	91	2458206	11.58	ppbv		99
51) m,p-Xylene	15.77	91	3706152	22.44	ppbv		99
52) o-Xylene	16.37	91	1992710	11.79	ppbv		99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040712\04071203.D Vial: 3
Acq On : 7 Apr 2012 12:56 pm Operator: RACHEL HILL
Sample : CCV VOA1 040712 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 7 13:21 2012 Quant Results File: 040312V1.RES

Quant Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Initial Calibration
DataAcq Meth : 040312V1

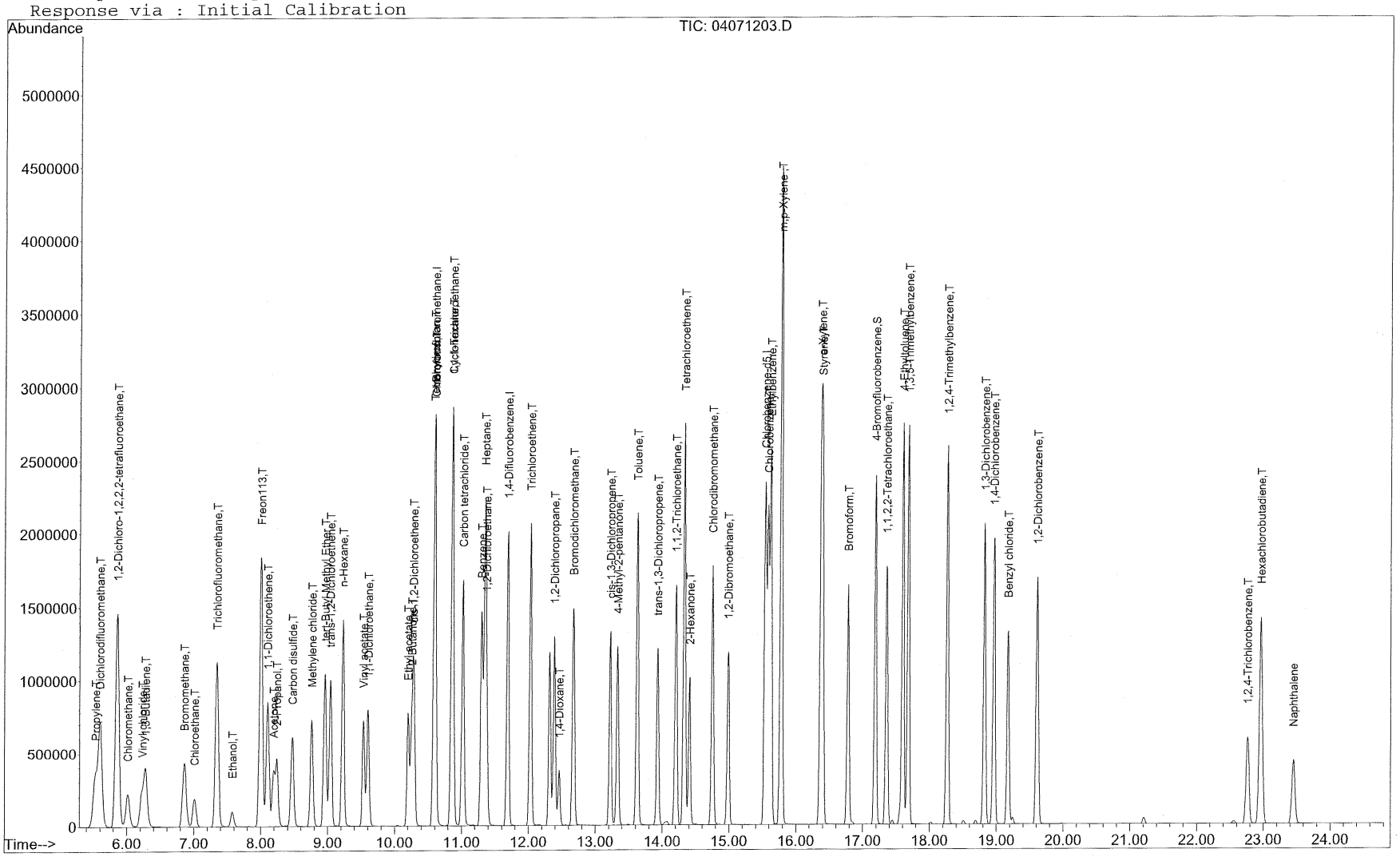
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53)	Styrene	16.40	104	1509701	11.63	ppbv	99
54)	Bromoform	16.78	173	1083832	11.32	ppbv	99
56)	1,1,2,2-Tetrachloroethane	17.35	83	1244241	11.16	ppbv	98
57)	4-Ethyltoluene	17.60	105	2507431	11.16	ppbv	100
58)	1,3,5-Trimethylbenzene	17.68	105	2097787	10.95	ppbv	100
59)	1,2,4-Trimethylbenzene	18.26	105	2011680	10.90	ppbv	100
60)	1,3-Dichlorobenzene	18.82	146	1286167	10.61	ppbv	100
61)	1,4-Dichlorobenzene	18.96	146	1229300	10.52	ppbv	99
62)	Benzyl chloride	19.17	91	1465928	10.71	ppbv	99
63)	1,2-Dichlorobenzene	19.61	146	1133477	10.38	ppbv	99
64)	1,2,4-Trichlorobenzene	22.76	180	390837	9.53	ppbv	97
65)	Hexachlorobutadiene	22.96	225	560610	10.98	ppbv	99
66)	Naphthalene	23.45	128	787351	9.93	ppbv	100

(#) = qualifier out of range (m) = manual integration
04071203.D 040312V1.M Mon Apr 09 09:45:29 2012 Page 2

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040712\04071203.D Vial: 3
Acq On : 7 Apr 2012 12:56 pm Operator: RACHEL HILL
Sample : CCV VOA1 040712 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 7 13:21 2012 Quant Results File: 040312V1.RES

Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA1_120408A **Run No.:** 47493

Analytical Run Date: 4/8/2012 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

Calibration ID: 47419 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 4/9/12/PR by RD2 on 09APR12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 040812	BFB_TUNE	TUNE	R47493	4/8/2012 9:11:00 AM	Celeste Hoitash		
CCV VOA1 040812	EPA_TO15	CCV	R47493	4/8/2012 11:07:00 AM	Celeste Hoitash		
RLVS VOA1 040812	EPA_TO15	RLVS	R47493	4/8/2012 11:49:00 AM	Celeste Hoitash		
MBLK VOA1 040812	EPA_TO15	MBLK	R47493	4/8/2012 12:38:00 PM	Celeste Hoitash		
1203732-018A	EPA_TO15	SAMP	R47493	4/8/2012 1:20:00 PM	Celeste Hoitash		
1203732-028A	EPA_TO15	SAMP	R47493	4/8/2012 2:44:00 PM	Celeste Hoitash		
1203984-014A	EPA_TO15	SAMP	R47493	4/8/2012 3:26:00 PM	Celeste Hoitash		
1203984-015A	EPA_TO15	SAMP	R47493	4/8/2012 4:07:00 PM	Celeste Hoitash		
1203984-010A	EPA_TO15	SAMP	R47493	4/8/2012 4:52:00 PM	Celeste Hoitash		
1203984-011A	EPA_TO15	SAMP	R47493	4/8/2012 5:37:00 PM	Celeste Hoitash		
1203984-012A	EPA_TO15	SAMP	R47493	4/8/2012 6:18:00 PM	Celeste Hoitash		
1203984-012ADUP	EPA_TO15	DUP	R47493	4/8/2012 7:00:00 PM	Celeste Hoitash		
1203984-016A	EPA_TO15	SAMP	R47493	4/8/2012 7:42:00 PM	Celeste Hoitash		
1203984-017A	EPA_TO15	SAMP	R47493	4/8/2012 8:24:00 PM	Celeste Hoitash		
1203984-018A	EPA_TO15	SAMP	R47493	4/8/2012 9:06:00 PM	Celeste Hoitash		
1203984-019A	EPA_TO15	SAMP	R47493	4/8/2012 9:47:00 PM	Celeste Hoitash		
1203984-020A	EPA_TO15	SAMP	R47493	4/8/2012 10:29:00 PM	Celeste Hoitash		
1203984-021A	EPA_TO15	SAMP	R47493	4/8/2012 11:14:00 PM	Celeste Hoitash		
1203984-022A	EPA_TO15	SAMP	R47493	4/8/2012 11:58:00 PM	Celeste Hoitash		
RLVS2 VOA1 04081	EPA_TO15	RLVS	R47493	4/9/2012 12:41:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

12-Apr-12

RunNo 47493

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
927854	BFB VOA1 040812	BFB_TUNE	TUNE	\1\DATA\040812	4/8/2012 9:11:00	1	R47493		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		83.1	83.1		100	0	0	0	0	0	83%	50	120	0%	
175	M		7.5	7.5		100	0	0	0	0	0	8%	4	9	0%	
176	M		97.5	97.5		100	0	0	0	0	0	98%	93	101	0%	
177	M		6.8	6.8		100	0	0	0	0	0	7%	5	9	0%	
50	M		16.6	16.6		100	0	0	0	0	0	17%	8	40	0%	
75	M		47.1	47.1		100	0	0	0	0	0	47%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		7.1	7.1		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
927855	CCV VOA1 040812	EPA_TO15	CCV	\1\DATA\040812	4/8/2012 11:07:0	1	R47493		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	11.07	11.07		9.6	0	0	0.107	1	0	115%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.67	10.67		10	0	0	0.211	1	0	107%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	11.06	11.06		9.8	0	0	0.108	1	0	113%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	11.07	11.07		9.8	0	0	0.2	1	0	113%	70	130	0%	
1,1-Dichloroethane	A	ppbv	10.45	10.45		9.7	0	0	0.111	1	0	108%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.69	10.69		9.9	0	0	0.097	1	0	108%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	9.1	9.1		9.1	0	0	0.271	1	0	100%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	10.45	10.45		9.8	0	0	0.245	1	0	107%	70	130	0%	
1,2-Dibromoethane	A	ppbv	11.14	11.14		9.6	0	0	0.186	1	0	116%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	10.27	10.27		9.7	0	0	0.208	1	0	106%	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	11.11	11.11		9.8	0	0	0.224	1	0	113%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	10.44	10.44		9.7	0	0	0.24	1	0	108%	70	130	0%	
1,3-Butadiene	A	ppbv	12.01	12.01		9.8	0	0	0.152	1	0	123%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	10.31	10.31		9.7	0	0	0.202	1	0	106%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
927855	CCV VOA1 040812	EPA_TO15	CCV	\1\DATA\040812	4/8/2012 11:07:0	1	R47493		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	10.25	10.25		9.6	0	0	0.194	1	0	107%	70	130	0%	
1,4-Dioxane	A	ppbv	10.55	10.55		9.6	0	0	0.128	1	0	110%	70	130	0%	
2-Butanone	A	ppbv	10.02	10.02		9.9	0	0	0.287	1	0	101%	70	130	0%	
2-Hexanone	A	ppbv	10.72	10.72		9.8	0	0	0.135	1	0	109%	70	130	0%	
2-Propanol	A	ppbv	9.99	9.99		10.1	0	0	0.329	1	0	99%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	10.66	10.66		10	0	0	0.157	1	0	107%	70	130	0%	
Acetone	A	ppbv	10.4	10.4		10	0	0	0.43	1	0	104%	70	130	0%	
Benzene	A	ppbv	10.42	10.42		9.6	0	0	0.126	1	0	109%	70	130	0%	
Benzyl chloride	A	ppbv	10.44	10.44		9.7	0	0	0.155	1	0	108%	70	130	0%	
Bromodichloromethane	A	ppbv	11.1	11.1		9.6	0	0	0.156	1	0	116%	70	130	0%	
Bromoform	A	ppbv	10.72	10.72		9.6	0	0	0.197	1	0	112%	70	130	0%	
Bromomethane	A	ppbv	9.97	9.97		9.3	0	0	0.075	1	0	107%	70	130	0%	
Carbon disulfide	A	ppbv	10.27	10.27		9.7	0	0	0.093	1	0	106%	70	130	0%	
Carbon tetrachloride	A	ppbv	10.48	10.48		9.5	0	0	0.114	1	0	110%	70	130	0%	
Chlorobenzene	A	ppbv	11.17	11.17		9.9	0	0	0.275	1	0	113%	70	130	0%	
Chlorodibromomethane	A	ppbv	11.44	11.44		9.2	0	0	0.165	1	0	124%	70	130	0%	
Chloroethane	A	ppbv	9.65	9.65		9.8	0	0	0.063	1	0	98%	70	130	0%	
Chloroform	A	ppbv	11.18	11.18		9.4	0	0	0.126	1	0	119%	70	130	0%	
Chloromethane	A	ppbv	10.22	10.22		9.8	0	0	0.104	1	0	104%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	10.57	10.57		9.8	0	0	0.107	1	0	108%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	10.7	10.7		9.5	0	0	0.166	1	0	113%	70	130	0%	
Cyclohexane	A	ppbv	11.28	11.28		9.8	0	0	0.684	2	0	115%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.61	9.61		9.2	0	0	0.086	1	0	104%	70	130	0%	
Ethanol	A	ppbv	9.16	9.16		9.2	0	0	1.962	5	0	100%	70	130	0%	
Ethyl acetate	A	ppbv	10.13	10.13		9.8	0	0	0.157	1	0	103%	70	130	0%	
Ethylbenzene	A	ppbv	11.03	11.03		9.8	0	0	0.737	2	0	113%	70	130	0%	
Heptane	A	ppbv	11.99	11.99		9.9	0	0	0.249	1	0	121%	70	130	0%	
Hexachlorobutadiene	A	ppbv	10.54	10.54		9.4	0	0	0.374	2	0	112%	70	130	0%	
m,p-Xylene	A	ppbv	21.6	21.6		19.2	0	0	0.524	2	0	113%	70	130	0%	
Methylene chloride	A	ppbv	10.55	10.55		10	0	0	2.077	5	0	106%	70	130	0%	
n-Hexane	A	ppbv	10.86	10.86		10.1	0	0	0.692	2	0	108%	70	130	0%	
Naphthalene	A	ppbv	9.69	9.69		9.2	0	0	0.247	1	0	105%	70	130	0%	
o-Xylene	A	ppbv	11.24	11.24		10	0	0	0.258	1	0	112%	70	130	0%	
Propylene	A	ppbv	10.11	10.11		10.2	0	0	0.075	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
927855	CCV VOA1 040812	EPA_TO15	CCV	\1\DATA\040812	4/8/2012 11:07:0	1	R47493		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	11.09	11.09		9.8	0	0	0.263	1	0	113%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	10.52	10.52		9.9	0	0	0.228	1	0	106%	70	130	0%	
Tetrachloroethene	A	ppbv	11.24	11.24		9.6	0	0	0.148	1	0	117%	70	130	0%	
Tetrahydrofuran	A	ppbv	11.03	11.03		10	0	0	0.201	1	0	110%	70	130	0%	
Toluene	A	ppbv	11.22	11.22		9.8	0	0	0.158	1	0	114%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.5	10.5		9.8	0	0	0.117	1	0	107%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	10.11	10.11		9.1	0	0	0.171	1	0	111%	70	130	0%	
Trichloroethene	A	ppbv	11.28	11.28		9.6	0	0	0.119	1	0	118%	70	130	0%	
Trichlorofluoromethane	A	ppbv	10.5	10.5		9.6	0	0	0.148	1	0	109%	70	130	0%	
Vinyl acetate	A	ppbv	10.82	10.82		9.9	0	0	0.266	1	0	109%	70	130	0%	
Vinyl chloride	A	ppbv	10.54	10.54		9.4	0	0	0.072	1	0	112%	70	130	0%	
Xylenes, Total	C	ppbv	32.84	32.84		29.2	0	0	0.782	3	0	112%	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	12.31	12.31		12.5	0	0	0	0	0	98%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
927856	RLVS VOA1 040812	EPA_TO15	RLVS	\1\DATA\040812	4/8/2012 11:49:0	1	R47493		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	1.04	1.04		0.996	0	0	0.107	1	0	104%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.37	1.37		1	0	0	0.211	1	0	137%	70	130	0%	S
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	1.1	1.1		0.98	0	0	0.108	1	0	112%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	1.06	1.06		0.98	0	0	0.2	1	0	108%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1.02	1.02		0.97	0	0	0.111	1	0	105%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1.05	1.05		0.99	0	0	0.097	1	0	106%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.64	1.64		0.91	0	0	0.271	1	0	180%	70	130	0%	S
1,2,4-Trimethylbenzene	A	ppbv	1.39	1.39		0.98	0	0	0.245	1	0	142%	70	130	0%	S
1,2-Dibromoethane	A	ppbv	1.04	1.04		0.96	0	0	0.186	1	0	108%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.48	1.48		0.97	0	0	0.208	1	0	153%	70	130	0%	S
1,2-Dichloroethane	A	ppbv	1.01	1.01		0.97	0	0	0.196	1	0	104%	70	130	0%	
1,2-Dichloropropane	A	ppbv	1.07	1.07		0.98	0	0	0.224	1	0	109%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040812\04081203.D Vial: 3
Acq On : 8 Apr 2012 11:07 am Operator: RACHEL HILL
Sample : CCV VOA1 040812 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 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	99	0.00
2	T	Propylene	0.933	0.924	1.0	92	0.01
3	T	Dichlorodifluoromethane	3.299	3.447	-4.5	96	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.423	2.549	-5.2	94	0.00
5	T	Chloromethane	0.975	1.049	-7.6	93	0.01
6	T	Vinyl chloride	0.908	1.018	-12.1	97	0.00
7	T	1,3-Butadiene	0.604	0.740	-22.5	102	0.00
8	T	Bromomethane	1.211	1.298	-7.2	97	0.00
9	T	Chloroethane	0.672	0.705	-4.9	94	0.02
10	T	Trichlorofluoromethane	3.078	3.366	-9.4	94	0.01
11	T	Ethanol	0.384	0.382	0.5	83	0.00
12	T	Freon113	2.077	2.344	-12.9	94	0.00
13	T	1,1-Dichloroethene	1.532	1.654	-8.0	93	0.00
14	T	Acetone	1.520	1.580	-3.9	86	0.00
15	T	Carbon disulfide	2.662	2.819	-5.9	92	0.01
16	T	2-Propanol	1.547	1.530	1.1	83	0.01
17	T	Methylene chloride	1.125	1.187	-5.5	92	0.00
18	T	tert-Butyl Methyl Ether	2.677	2.844	-6.2	85	0.00
19	T	trans-1,2-Dichloroethene	1.451	1.555	-7.2	91	0.00
20	T	n-Hexane	1.604	1.725	-7.5	91	0.00
21	T	1,1-Dichloroethane	1.915	2.064	-7.8	92	0.00
22	T	Vinyl acetate	2.421	2.647	-9.3	84	0.00
23	T	cis-1,2-Dichloroethene	1.146	1.236	-7.9	90	0.00
24	T	2-Butanone	1.588	1.607	-1.2	82	0.00
25	T	Ethyl acetate	2.033	2.102	-3.4	84	0.00
26	T	Tetrahydrofuran	0.986	1.088	-10.3	84	0.00
27	T	Chloroform	2.018	2.301	-14.0	91	0.00
28	T	1,1,1-Trichloroethane	2.172	2.503	-15.2	91	0.00
29	T	Cyclohexane	1.517	1.747	-15.2	90	0.00
30	T	Carbon tetrachloride	2.467	2.721	-10.3	90	0.00
31	T	Benzene	3.050	3.310	-8.5	87	0.00
32	T	1,2-Dichloroethane	1.236	1.374	-11.2	86	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	95	0.00
34	T	Heptane	0.502	0.608	-21.1	87	0.00
35	T	Trichloroethene	0.447	0.525	-17.4	91	0.00
36	T	1,2-Dichloropropane	0.332	0.376	-13.3	85	0.00
37	T	1,4-Dioxane	0.194	0.213	-9.8	87	0.00
38	T	Bromodichloromethane	0.632	0.731	-15.7	87	0.00
39	T	cis-1,3-Dichloropropene	0.535	0.603	-12.7	85	0.00
40	T	4-Methyl-2-pentanone	0.233	0.249	-6.9	81	0.00
41	T	Toluene	1.053	1.205	-14.4	85	0.00
42	T	trans-1,3-Dichloropropene	0.495	0.550	-11.1	84	0.00
43	T	1,1,2-Trichloroethane	0.372	0.421	-13.2	86	0.00
44	T	Tetrachloroethene	0.563	0.659	-17.1	91	0.00
45	T	2-Hexanone	0.451	0.493	-9.3	81	0.00
46	T	Chlorodibromomethane	0.654	0.764	-16.8	87	0.00
47	T	1,2-Dibromoethane	0.571	0.662	-15.9	87	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	97	0.00
49	T	Chlorobenzene	0.918	1.035	-12.7	86	0.00
50	T	Ethylbenzene	1.443	1.625	-12.6	84	0.00
51	T	m,p-Xylene	1.122	1.262	-12.5	88	0.00
52	T	o-Xylene	1.148	1.290	-12.4	84	0.00
53	T	Styrene	0.882	0.999	-13.3	84	0.00
54	T	Bromoform	0.651	0.727	-11.7	85	0.00
55	S	4-Bromofluorobenzene	0.627	0.617	1.6	95	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040812\04081203.D Vial: 3
Acq On : 8 Apr 2012 11:07 am Operator: RACHEL HILL
Sample : CCV VOA1 040812 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 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	0.758	0.809	-6.7	84	0.00
57	T	4-Ethyltoluene	1.526	1.662	-8.9	85	0.00
58	T	1,3,5-Trimethylbenzene	1.302	1.402	-7.7	85	0.00
59	T	1,2,4-Trimethylbenzene	1.254	1.338	-6.7	85	0.00
60	T	1,3-Dichlorobenzene	0.823	0.875	-6.3	87	0.00
61	T	1,4-Dichlorobenzene	0.794	0.848	-6.8	87	0.00
62	T	Benzyl chloride	0.930	1.001	-7.6	84	0.00
63	T	1,2-Dichlorobenzene	0.742	0.786	-5.9	89	0.00
64	T	1,2,4-Trichlorobenzene	0.279	0.279	0.0	88	0.00
65	T	Hexachlorobutadiene	0.347	0.389	-12.1	86	0.00
66		Naphthalene	0.539	0.568	-5.4	91	0.01

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040812\04081203.D Vial: 3
Acq On : 8 Apr 2012 11:07 am Operator: RACHEL HILL
Sample : CCV VOA1 040812 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 8 11:32 2012 Quant Results File: 040312V1.RES

Quant Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Initial Calibration
DataAcq Meth : 040312V1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.59	130	649219	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.69	114	2103205	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.54	117	1850210	12.50	ppbv		0.00
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.19	95	1142306	12.31	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 98.48%				
Target Compounds							Qvalue
2) Propylene	5.52	41	489731	10.11	ppbv		100
3) Dichlorodifluoromethane	5.60	85	1647098	9.61	ppbv		100
4) 1,2-Dichloro-1,2,2,2-tetra	5.85	135	1257656	9.99	ppbv	#	85
5) Chloromethane	6.01	50	517593	10.22	ppbv		99
6) Vinyl chloride	6.22	62	496890	10.54	ppbv		100
7) 1,3-Butadiene	6.27	39	376645	12.01	ppbv		95
8) Bromomethane	6.86	94	627185	9.97	ppbv		98
9) Chloroethane	7.01	64	336749	9.65	ppbv		99
10) Trichlorofluoromethane	7.34	101	1678251	10.50	ppbv		100
11) Ethanol	7.57	45	182480	9.16	ppbv		99
12) Freon113	8.00	101	1192970	11.06	ppbv		95
13) 1,1-Dichloroethene	8.10	61	850440	10.69	ppbv		98
14) Acetone	8.19	43	820765	10.40	ppbv	#	94
15) Carbon disulfide	8.47	76	1420373	10.27	ppbv	#	100
16) 2-Propanol	8.24	45	802441	9.99	ppbv	#	1
17) Methylene chloride	8.76	49	616458	10.55	ppbv		98
18) tert-Butyl Methyl Ether	8.95	73	1462421	10.52	ppbv		97
19) trans-1,2-Dichloroethene	9.04	61	791223	10.50	ppbv		98
20) n-Hexane	9.23	57	904802	10.86	ppbv		97
21) 1,1-Dichloroethane	9.60	63	1039682	10.45	ppbv		100
22) Vinyl acetate	9.54	43	1361136	10.82	ppbv		99
23) cis-1,2-Dichloroethene	10.28	96	629058	10.57	ppbv		98
24) 2-Butanone	10.25	43	826542	10.02	ppbv		97
25) Ethyl acetate	10.20	43	1069666	10.13	ppbv	#	100
26) Tetrahydrofuran	10.59	42	565242	11.03	ppbv		96
27) Chloroform	10.61	83	1171424	11.18	ppbv		98
28) 1,1,1-Trichloroethane	10.86	97	1248217	11.07	ppbv		100
29) Cyclohexane	10.86	56	889253	11.28	ppbv		98
30) Carbon tetrachloride	11.02	117	1342455	10.48	ppbv		100
31) Benzene	11.30	78	1650278	10.42	ppbv		100
32) 1,2-Dichloroethane	11.38	62	692130	10.78	ppbv		99
34) Heptane	11.35	43	1012849	11.99	ppbv		98
35) Trichloroethene	12.03	130	847875	11.28	ppbv		97
36) 1,2-Dichloropropane	12.39	63	619735	11.11	ppbv		100
37) 1,4-Dioxane	12.46	88	343437	10.55	ppbv		96
38) Bromodichloromethane	12.67	83	1180840	11.10	ppbv		98
39) cis-1,3-Dichloropropene	13.22	75	963277	10.70	ppbv		99
40) 4-Methyl-2-pentanone	13.33	58	418518	10.66	ppbv		98
41) Toluene	13.63	91	1986659	11.22	ppbv		99
42) trans-1,3-Dichloropropene	13.93	75	842555	10.11	ppbv		99
43) 1,1,2-Trichloroethane	14.21	97	693392	11.07	ppbv		99
44) Tetrachloroethene	14.33	166	1064201	11.24	ppbv		96
45) 2-Hexanone	14.41	43	812736	10.72	ppbv		95
46) Chlorodibromomethane	14.75	129	1259581	11.44	ppbv		99
47) 1,2-Dibromoethane	14.99	107	1069945	11.14	ppbv		100
49) Chlorobenzene	15.58	112	1517232	11.17	ppbv		99
50) Ethylbenzene	15.62	91	2356761	11.03	ppbv		98
51) m,p-Xylene	15.78	91	3586964	21.60	ppbv		99
52) o-Xylene	16.37	91	1909921	11.24	ppbv		98

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040812\04081203.D Vial: 3
Acq On : 8 Apr 2012 11:07 am Operator: RACHEL HILL
Sample : CCV VOA1 040812 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 8 11:32 2012 Quant Results File: 040312V1.RES

Quant Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Initial Calibration
DataAcq Meth : 040312V1

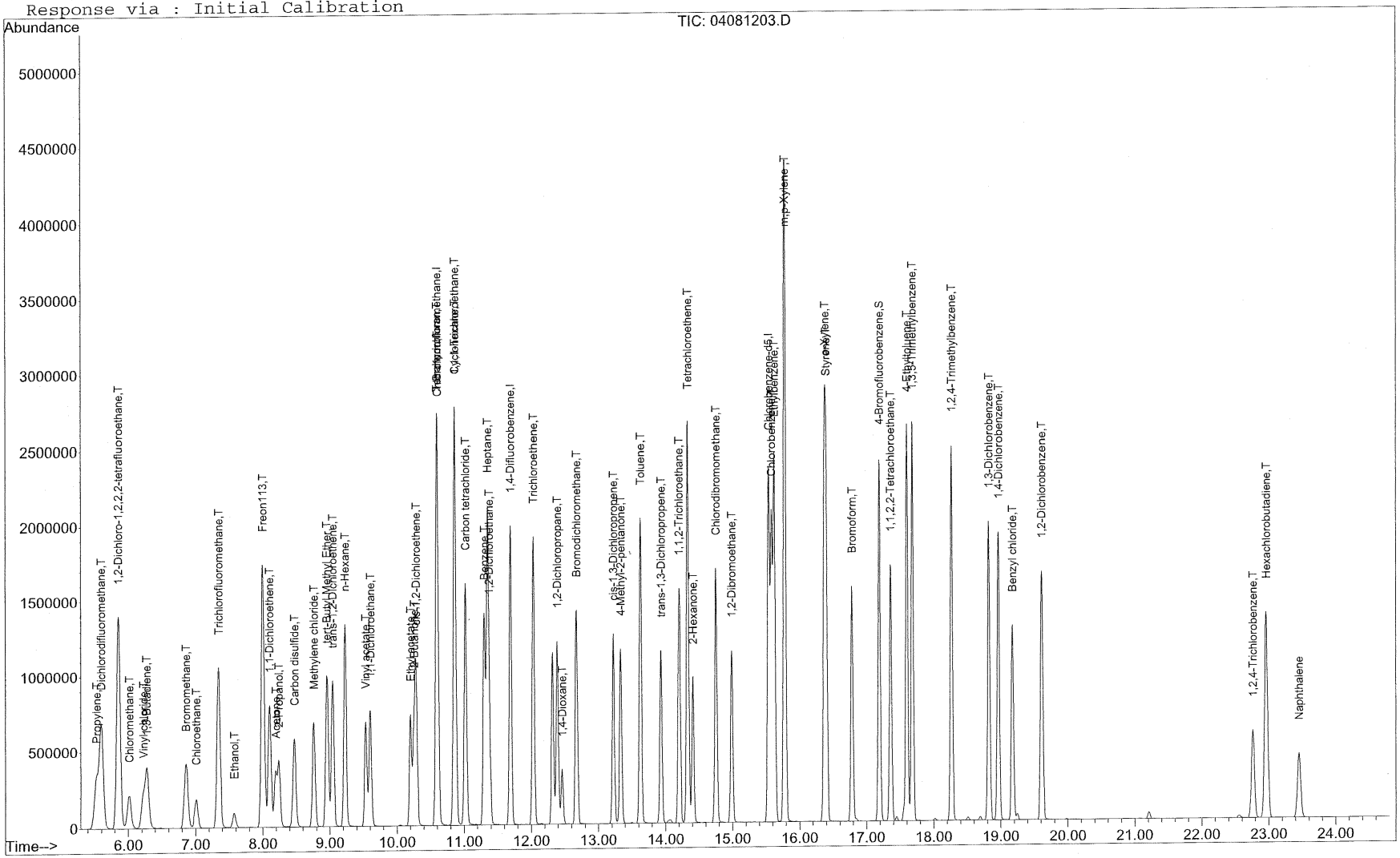
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53)	Styrene	16.40	104	1448739	11.09	ppbv	99
54)	Bromoform	16.78	173	1032346	10.72	ppbv	99
56)	1,1,2,2-Tetrachloroethane	17.35	83	1197413	10.67	ppbv	98
57)	4-Ethyltoluene	17.60	105	2410235	10.67	ppbv	100
58)	1,3,5-Trimethylbenzene	17.68	105	2012234	10.44	ppbv	100
59)	1,2,4-Trimethylbenzene	18.26	105	1940811	10.45	ppbv	100
60)	1,3-Dichlorobenzene	18.82	146	1256546	10.31	ppbv	100
61)	1,4-Dichlorobenzene	18.97	146	1204914	10.25	ppbv	100
62)	Benzyl chloride	19.17	91	1437294	10.44	ppbv	99
63)	1,2-Dichlorobenzene	19.61	146	1128235	10.27	ppbv	99
64)	1,2,4-Trichlorobenzene	22.76	180	375616	9.10	ppbv	97
65)	Hexachlorobutadiene	22.96	225	541160	10.54	ppbv	99
66)	Naphthalene	23.45	128	772961	9.69	ppbv	100

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\040812\04081203.D Vial: 3
Acq On : 8 Apr 2012 11:07 am Operator: RACHEL HILL
Sample : CCV VOA1 040812 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 8 11:32 2012 Quant Results File: 040312V1.RES

Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Initial Calibration



Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\032712V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Mar 29 08:41:28 2012
Response via : Initial Calibration

Calibration Files
2 =03271211.D 4 =03271212.D 5 =03271213.D
6 =03271214.D 7 =03271215.D 8 =03271216.D

		Compound	2	4	5	6	7	8	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------							
2)	T	Propylene	1.021	1.112	1.095	1.115	1.028	0.995	1.052	5.11
3)	T	Dichlorodifluoromet	3.518	3.950	3.893	3.949	3.584	3.381	3.636	8.38
4)	T	1,2-Dichloro-1,2,2,	2.399	2.759	2.716	2.752	2.490	2.327	2.517	9.19
5)	T	Chloromethane	1.111	1.205	1.181	1.163	1.042	0.992	1.095	8.57
6)	T	Vinyl chloride	1.216	1.585	1.512	1.365	1.139	0.961	1.242	20.90
7)	T	1,3-Butadiene	1.037	1.122	1.095	1.071	0.894	0.654	0.919	24.78
8)	T	Bromomethane	1.189	1.393	1.377	1.411	1.275	1.234	1.300	7.04
9)	T	Chloroethane	0.678	0.790	0.795	0.807	0.717	0.701	0.743	7.14
10)	T	Trichlorofluorometh	3.335	3.816	3.765	3.747	3.232	2.940	3.354	13.47
11)	T	Ethanol	0.334	0.481	0.478	0.482	0.408	0.388	0.425	13.42
12)	T	Freon113	2.236	2.611	2.532	2.531	2.096	1.876	2.225	16.00
13)	T	1,1-Dichloroethene	1.733	1.958	1.945	1.955	1.665	1.548	1.748	12.21
14)	T	Acetone	1.807	2.078	2.009	2.016	1.624	1.494	1.784	14.60
15)	T	Carbon disulfide	2.679	3.079	3.059	3.070	2.692		2.916	7.22
16)	T	2-Propanol	1.501	1.996	1.944	1.954	1.669	1.581	1.738	12.58
17)	T	Methylene chloride	1.382	1.403	1.379	1.383	1.162	1.087	1.262	12.68
18)	T	tert-Butyl Methyl E	2.957	3.534	3.395	3.381	2.701	2.421	2.952	17.06
19)	T	trans-1,2-Dichloroe	1.536	1.827	1.803	1.831	1.522	1.402	1.601	13.81
20)	T	n-Hexane	1.715	2.009	1.991	1.997	1.671	1.508	1.754	14.45
21)	T	1,1-Dichloroethane	1.963	2.345	2.328	2.329	1.975	1.809	2.060	13.41
22)	T	Vinyl acetate	2.232	3.369	3.231	3.180	2.534	2.277	2.709	19.63
23)	T	cis-1,2-Dichloroeth	1.079	1.316	1.303	1.322	1.117	1.035	1.164	12.54
24)	T	2-Butanone	1.729	2.117	2.067	1.999	1.658	1.459	1.751	18.99
25)	T	Ethyl acetate	2.022	2.752	2.598	2.620	2.080	1.872	2.234	18.67
26)	T	Tetrahydrofuran	1.047	1.302	1.213	1.167	0.944	0.825	1.036	19.81
27)	T	Chloroform	2.218	2.585	2.449	2.375	1.976	1.751	2.135	17.46
28)	T	1,1,1-Trichloroetha	2.180	2.709	2.575	2.467	2.028	1.766	2.186	19.35
29)	T	Cyclohexane	1.704	1.954	1.859	1.789	1.478	1.262	1.594	19.96
30)	T	Carbon tetrachlorid	2.192	2.809	2.732	2.687	2.261	1.979	2.348	17.16
31)	T	Benzene	2.901	3.518	3.383	3.345	2.735	2.476	2.949	16.25
32)	T	1,2-Dichloroethane	1.304	1.672	1.581	1.519	1.213	1.051	1.326	20.85
33)	I	1,4-Difluorobenzene	----------ISTD----------							
34)	T	Heptane	0.571	0.680	0.632	0.595	0.484	0.393	0.523	25.67
35)	T	Trichloroethene	0.394	0.488	0.474	0.472	0.395	0.351	0.411	16.90
36)	T	1,2-Dichloropropane	0.302	0.389	0.366	0.361	0.292	0.259	0.313	19.27
37)	T	1,4-Dioxane	0.145	0.184	0.182	0.183	0.151	0.140	0.160	14.13
38)	T	Bromodichloromethan	0.544	0.740	0.702	0.697	0.577	0.507	0.599	19.55
39)	T	cis-1,3-Dichloropro	0.450	0.608	0.578	0.577	0.471	0.425	0.497	18.35
40)	T	4-Methyl-2-pentanon	0.189	0.261	0.247	0.247	0.205	0.190	0.215	16.58
41)	T	Toluene	0.883	1.067	0.995	0.987	0.796	0.704	0.862	19.64
42)	T	trans-1,3-Dichlorop	0.384	0.554	0.533	0.533	0.435	0.402	0.456	18.19
43)	T	1,1,2-Trichloroetha	0.286	0.365	0.347	0.347	0.286	0.262	0.304	16.45
44)	T	Tetrachloroethene	0.501	0.597	0.575	0.572	0.482	0.442	0.509	14.98
45)	T	2-Hexanone	0.387	0.486	0.461	0.460	0.371	0.343	0.401	17.46
46)	T	Chlorodibromomethan	0.425	0.596	0.574	0.571	0.472	0.424	0.489	18.61
47)	T	1,2-Dibromoethane	0.437	0.551	0.532	0.527	0.429	0.388	0.457	18.04
48)	I	Chlorobenzene-d5	----------ISTD----------							
49)	T	Chlorobenzene	0.923	1.132	1.066	1.061	0.876	0.794	0.934	17.48
50)	T	Ethylbenzene	1.595	1.817	1.686	1.651	1.357	1.180	1.465	20.84
51)	T	m,p-Xylene	1.259	1.406	1.283	1.200	0.963	0.795	1.078	26.44
52)	T	o-Xylene	1.198	1.354	1.261	1.236	1.016	0.879	1.097	20.60
53)	T	Styrene	0.796	1.007	0.935	0.940	0.769	0.699	0.821	17.81
54)	T	Bromoform	0.543	0.775	0.746	0.769	0.624	0.590	0.653	16.64
55)	S	4-Bromofluorobenzen	0.571	0.542	0.550	0.567	0.539	0.549	0.552	2.25
56)	T	1,1,2,2-Tetrachloro	0.932	0.853	0.817	0.820	0.650	0.591	0.737	21.61
57)	T	4-Ethyltoluene	1.812	1.559	1.470	1.460	1.187	1.068	1.353	22.98

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

Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\032712V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Mar 29 08:41:28 2012
Response via : Initial Calibration

Calibration Files
2 =03271211.D 4 =03271212.D 5 =03271213.D
6 =03271214.D 7 =03271215.D 8 =03271216.D

		Compound	2	4	5	6	7	8	Avg	%RSD
58)	T	1,3,5-Trimethylbenz	1.682	1.380	1.295	1.274	1.032	0.923	1.196	25.45
59)	T	1,2,4-Trimethylbenz	1.592	1.274	1.190	1.202	0.955	0.872	1.181	21.57
60)	T	1,3-Dichlorobenzene	0.841	0.730	0.722	0.749	0.576	0.554	0.664	19.44
61)	T	1,4-Dichlorobenzene	0.733	0.698	0.685	0.724	0.547	0.536	0.627	17.31
62)	T	Benzyl chloride	0.520	0.996	0.978	1.024	0.786	0.756	0.843	23.08
63)	T	1,2-Dichlorobenzene	0.802	0.670	0.635	0.669	0.500	0.484	0.595	23.02
64)	T	1,2,4-Trichlorobenz	0.158	0.136	0.137	0.156	0.120	0.141	0.140	9.51
65)	T	Hexachlorobutadiene	0.617	0.389	0.366	0.399	0.304	0.329	0.387	28.06
66)		Naphthalene	0.208	0.195	0.198	0.226	0.169	0.201	0.197	9.18

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

Compound List Report VOA 1

Method : C:\HPCHEM\1\METHODS\032712V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Mar 29 08:41:28 2012
Response via : Initial Calibration
Total Cpnds : 66

PK#			Compound Name	QIon	Exp RT	Rel RT	Cal	#Qual	A/H	ID
1	I		Bromochloromethane	130	10.59	1.000	A	2	A	B
2		T	Propylene	41	5.51	0.520	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	0.566	A	3	A	B
6		T	Vinyl chloride	62	6.21	0.587	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	7.00	0.661	A	3	A	B
10		T	Trichlorofluoromethane	101	7.33	0.692	A	3	A	B
11		T	Ethanol	45	7.57	0.715	A	2	A	B
12		T	Freon113	101	7.99	0.755	A	2	A	B
13		T	1,1-Dichloroethene	61	8.09	0.764	A	2	A	B
14		T	Acetone	43	8.18	0.773	A	2	A	B
15		T	Carbon disulfide	76	8.46	0.799	A	3	A	B
16		T	2-Propanol	45	8.23	0.777	A	2	A	B
17		T	Methylene chloride	49	8.75	0.827	A	2	A	B
18		T	tert-Butyl Methyl Ether	73	8.95	0.845	A	2	A	B
19		T	trans-1,2-Dichloroethene	61	9.04	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	10.28	0.971	A	3	A	B
24		T	2-Butanone	43	10.24	0.967	A	2	A	B
25		T	Ethyl acetate	43	10.19	0.962	A	3	A	B
26		T	Tetrahydrofuran	42	10.58	0.999	A	2	A	B
27		T	Chloroform	83	10.60	1.001	A	2	A	B
28		T	1,1,1-Trichloroethane	97	10.85	1.025	A	3	A	B
29		T	Cyclohexane	56	10.86	1.025	A	2	A	B
30		T	Carbon tetrachloride	117	11.01	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	11.68	1.000	A	2	A	B
34		T	Heptane	43	11.34	0.971	A	3	A	B
35		T	Trichloroethene	130	12.02	1.029	A	3	A	B
36		T	1,2-Dichloropropane	63	12.38	1.060	A	3	A	B
37		T	1,4-Dioxane	88	12.45	1.066	A	2	A	B
38		T	Bromodichloromethane	83	12.67	1.084	A	2	A	B
39		T	cis-1,3-Dichloropropene	75	13.21	1.131	A	2	A	B
40		T	4-Methyl-2-pentanone	58	13.32	1.141	A	3	A	B
41		T	Toluene	91	13.62	1.166	A	2	A	B
42		T	trans-1,3-Dichloropropene	75	13.93	1.192	A	3	A	B
43		T	1,1,2-Trichloroethane	97	14.20	1.215	A	3	A	B
44		T	Tetrachloroethene	166	14.32	1.226	A	3	A	B
45		T	2-Hexanone	43	14.40	1.233	A	2	A	B
46		T	Chlorodibromomethane	129	14.75	1.262	A	2	A	B
47		T	1,2-Dibromoethane	107	14.98	1.283	A	2	A	B
48	I		Chlorobenzene-d5	117	15.53	1.000	A	2	A	B
49		T	Chlorobenzene	112	15.58	1.003	A	3	A	B
50		T	Ethylbenzene	91	15.62	1.005	A	2	A	B
51		T	m,p-Xylene	91	15.77	1.015	A	2	A	B
52		T	o-Xylene	91	16.36	1.054	A	2	A	B
53		T	Styrene	104	16.39	1.055	A	3	A	B
54		T	Bromoform	173	16.77	1.080	A	3	A	B
55		S	4-Bromofluorobenzene	95	17.18	1.106	A	2	A	B
56		T	1,1,2,2-Tetrachloroethane	83	17.35	1.117	A	2	A	B
57		T	4-Ethyltoluene	105	17.59	1.133	A	1	A	B
58		T	1,3,5-Trimethylbenzene	105	17.68	1.138	A	2	A	B
59		T	1,2,4-Trimethylbenzene	105	18.26	1.175	A	2	A	B
60		T	1,3-Dichlorobenzene	146	18.82	1.211	A	3	A	B
61		T	1,4-Dichlorobenzene	146	18.96	1.221	A	3	A	B
62		T	Benzyl chloride	91	19.17	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	22.76	1.465	A	3	A	B
65		T	Hexachlorobutadiene	225	22.95	1.478	A	2	A	B
66			Naphthalene	128	23.44	1.509	A	2	A	B

```
Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
  A/H = Area or Height
ID  R = R.T.  B = R.T. & Q  Q = Qvalue L = Largest  A = All
--------------------------------------------------------------------------
          032712V1.M     Thu Mar 29 09:23:12 2012
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Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\032712\03271220.D Vial: 2
Acq On : 28 Mar 2012 7:55 am Operator: RACHEL HILL
Sample : ICV VOA1 032712 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\032712V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Mar 29 08:41:28 2012
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	120	0.00
2	T	Propylene	1.052	1.184	-12.5	128	0.01
3	T	Dichlorodifluoromethane	3.636	4.109	-13.0	125	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.517	2.859	-13.6	124	0.00
5	T	Chloromethane	1.095	1.170	-6.8	117	0.01
6	T	Vinyl chloride	1.242	1.156	6.9	87	0.00
7	T	1,3-Butadiene	0.919	0.934	-1.6	100	0.00
8	T	Bromomethane	1.300	1.475	-13.5	127	0.00
9	T	Chloroethane	0.743	0.846	-13.9	129	0.00
10	T	Trichlorofluoromethane	3.354	3.869	-15.4	122	0.00
11	T	Ethanol	0.425	0.393	7.5	98	0.00
12	T	Freon113	2.225	2.710	-21.8	124	0.00
13	T	1,1-Dichloroethene	1.748	2.090	-19.6	128	0.00
14	T	Acetone	1.784	1.913	-7.2	110	0.00
15	T	Carbon disulfide	2.916	3.720	-27.6	145	0.00
16	T	2-Propanol	1.738	1.824	-4.9	110	0.00
17	T	Methylene chloride	1.262	1.459	-15.6	125	0.00
18	T	tert-Butyl Methyl Ether	2.952	3.464	-17.3	118	0.00
19	T	trans-1,2-Dichloroethene	1.601	2.004	-25.2	132	0.00
20	T	n-Hexane	1.754	2.055	-17.2	123	0.00
21	T	1,1-Dichloroethane	2.060	2.397	-16.4	123	0.00
22	T	Vinyl acetate	2.709	2.888	-6.6	103	0.00
23	T	cis-1,2-Dichloroethene	1.164	1.355	-16.4	124	0.00
24	T	2-Butanone	1.751	1.750	0.1	99	0.00
25	T	Ethyl acetate	2.234	2.290	-2.5	100	0.00
26	T	Tetrahydrofuran	1.036	1.049	-1.3	97	0.00
27	T	Chloroform	2.135	2.378	-11.4	110	0.00
28	T	1,1,1-Trichloroethane	2.186	2.525	-15.5	112	0.00
29	T	Cyclohexane	1.594	1.879	-17.9	115	0.00
30	T	Carbon tetrachloride	2.348	2.749	-17.1	117	0.00
31	T	Benzene	2.949	3.440	-16.6	117	0.00
32	T	1,2-Dichloroethane	1.326	1.501	-13.2	108	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	125	0.00
34	T	Heptane	0.523	0.606	-15.9	112	0.00
35	T	Trichloroethene	0.411	0.473	-15.1	122	0.00
36	T	1,2-Dichloropropane	0.313	0.347	-10.9	112	0.00
37	T	1,4-Dioxane	0.160	0.131	18.1	89	0.00
38	T	Bromodichloromethane	0.599	0.706	-17.9	120	0.00
39	T	cis-1,3-Dichloropropene	0.497	0.561	-12.9	116	0.00
40	T	4-Methyl-2-pentanone	0.215	0.223	-3.7	107	0.00
41	T	Toluene	0.862	0.955	-10.8	112	0.00
42	T	trans-1,3-Dichloropropene	0.456	0.491	-7.7	111	0.00
43	T	1,1,2-Trichloroethane	0.304	0.336	-10.5	116	0.00
44	T	Tetrachloroethene	0.509	0.548	-7.7	115	0.00
45	T	2-Hexanone	0.401	0.365	9.0	94	0.00
46	T	Chlorodibromomethane	0.489	0.573	-17.2	121	0.00
47	T	1,2-Dibromoethane	0.457	0.512	-12.0	117	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	130	0.00
49	T	Chlorobenzene	0.934	1.007	-7.8	115	0.00
50	T	Ethylbenzene	1.465	1.564	-6.8	112	0.00
51	T	m,p-Xylene	1.078	1.156	-7.2	107	0.00
52	T	o-Xylene	1.097	1.166	-6.3	112	0.00
53	T	Styrene	0.821	0.874	-6.5	112	0.00
54	T	Bromoform	0.653	0.764	-17.0	128	0.00
55	S	4-Bromofluorobenzene	0.552	0.588	-6.5	141	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\032712\03271220.D Vial: 2
Acq On : 28 Mar 2012 7:55 am Operator: RACHEL HILL
Sample : ICV VOA1 032712 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\032712V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Mar 29 08:41:28 2012
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.737	0.801	-8.7	122	0.00
57	T	4-Ethyltoluene	1.353	1.426	-5.4	118	0.00
58	T	1,3,5-Trimethylbenzene	1.196	1.242	-3.8	117	0.00
59	T	1,2,4-Trimethylbenzene	1.181	1.154	2.3	117	0.00
60	T	1,3-Dichlorobenzene	0.664	0.733	-10.4	130	0.00
61	T	1,4-Dichlorobenzene	0.627	0.686	-9.4	127	0.00
62	T	Benzyl chloride	0.843	0.943	-11.9	123	0.00
63	T	1,2-Dichlorobenzene	0.595	0.663	-11.4	128	0.00
64	T	1,2,4-Trichlorobenzene	0.140	0.145	-3.6	138	0.00
65	T	Hexachlorobutadiene	0.387	0.455	-17.6	152#	0.00
66		Naphthalene	0.197	0.220	-11.7	147	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\032712\03271220.D Vial: 2
Acq On : 28 Mar 2012 7:55 am Operator: RACHEL HILL
Sample : ICV VOA1 032712 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Mar 29 8:42 2012 Quant Results File: 032712V1.RES

Quant Method : C:\HPCHEM\1\METHODS\032712V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Mar 29 08:41:28 2012
Response via : Initial Calibration
DataAcq Meth : 032712V1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.59	130	969318	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.69	114	3394359	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.53	117	2112396	12.50	ppbv		0.00
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.19	95	1242501	13.32	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 106.56%				
Target Compounds							Qvalue
2) Propylene	5.52	41	936116	11.48	ppbv		99
3) Dichlorodifluoromethane	5.59	85	2931348	10.40	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.85	135	2106053	10.79	ppbv		89
5) Chloromethane	6.01	50	862264	10.16	ppbv		100
6) Vinyl chloride	6.21	62	842293	8.75	ppbv		98
7) 1,3-Butadiene	6.28	39	709946	9.97	ppbv		91
8) Bromomethane	6.85	94	1063858	10.55	ppbv		99
9) Chloroethane	7.00	64	603642	10.48	ppbv		99
10) Trichlorofluoromethane	7.34	101	2880180	11.07	ppbv		100
11) Ethanol	7.56	45	280391	8.50	ppbv		98
12) Freon113	7.99	101	2059255	11.94	ppbv		98
13) 1,1-Dichloroethene	8.10	61	1604518	11.84	ppbv		95
14) Acetone	8.19	43	1483264	10.72	ppbv		98
15) Carbon disulfide	8.47	76	2797907	12.37	ppbv	#	99
16) 2-Propanol	8.23	45	1428668	10.60	ppbv	#	1
17) Methylene chloride	8.76	49	1131404	11.56	ppbv		98
18) tert-Butyl Methyl Ether	8.96	73	2659315	11.62	ppbv		99
19) trans-1,2-Dichloroethene	9.03	61	1522599	12.26	ppbv		94
20) n-Hexane	9.22	57	1609464	11.83	ppbv		98
21) 1,1-Dichloroethane	9.60	63	1802632	11.28	ppbv		100
22) Vinyl acetate	9.53	43	2217245	10.55	ppbv		100
23) cis-1,2-Dichloroethene	10.28	96	1029848	11.41	ppbv		94
24) 2-Butanone	10.25	43	1343217	9.89	ppbv		98
25) Ethyl acetate	10.20	43	1740399	10.05	ppbv	#	100
26) Tetrahydrofuran	10.58	42	813371	10.13	ppbv		95
27) Chloroform	10.61	83	1807315	10.92	ppbv		98
28) 1,1,1-Trichloroethane	10.85	97	1879788	11.09	ppbv		99
29) Cyclohexane	10.86	56	1427606	11.55	ppbv		98
30) Carbon tetrachloride	11.02	117	2024789	11.12	ppbv		99
31) Benzene	11.30	78	2560654	11.20	ppbv		99
32) 1,2-Dichloroethane	11.37	62	1128728	10.98	ppbv		98
34) Heptane	11.35	43	1628289	11.46	ppbv		96
35) Trichloroethene	12.03	130	1232238	11.04	ppbv		95
36) 1,2-Dichloropropane	12.39	63	922627	10.84	ppbv		98
37) 1,4-Dioxane	12.45	88	340306	7.84	ppbv		98
38) Bromodichloromethane	12.67	83	1840944	11.32	ppbv		99
39) cis-1,3-Dichloropropene	13.22	75	1447686	10.73	ppbv		98
40) 4-Methyl-2-pentanone	13.33	58	606131	10.37	ppbv		99
41) Toluene	13.63	91	2541527	10.86	ppbv		99
42) trans-1,3-Dichloropropene	13.93	75	1214383	9.81	ppbv		98
43) 1,1,2-Trichloroethane	14.20	97	895422	10.86	ppbv		98
44) Tetrachloroethene	14.33	166	1428653	10.34	ppbv		99
45) 2-Hexanone	14.40	43	971136	8.92	ppbv		97
46) Chlorodibromomethane	14.75	129	1525095	11.48	ppbv		99
47) 1,2-Dibromoethane	14.99	107	1335867	10.77	ppbv		99
49) Chlorobenzene	15.58	112	1684778	10.68	ppbv		95
50) Ethylbenzene	15.62	91	2590728	10.46	ppbv		98
51) m,p-Xylene	15.78	91	3751988	20.60	ppbv		99
52) o-Xylene	16.37	91	1969877	10.62	ppbv		97

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\032712\03271220.D Vial: 2
Acq On : 28 Mar 2012 7:55 am Operator: RACHEL HILL
Sample : ICV VOA1 032712 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Mar 29 8:42 2012 Quant Results File: 032712V1.RES

Quant Method : C:\HPCHEM\1\METHODS\032712V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Mar 29 08:41:28 2012
Response via : Initial Calibration
DataAcq Meth : 032712V1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53)	Styrene	16.39	104	1447538	10.43	ppbv	98
54)	Bromoform	16.77	173	1238755	11.23	ppbv	100
56)	1,1,2,2-Tetrachloroethane	17.35	83	1352837	10.87	ppbv	99
57)	4-Ethyltoluene	17.60	105	2362018	10.33	ppbv	98
58)	1,3,5-Trimethylbenzene	17.68	105	2035313	10.07	ppbv	97
59)	1,2,4-Trimethylbenzene	18.26	105	1910715	9.57	ppbv	98
60)	1,3-Dichlorobenzene	18.82	146	1201384	10.70	ppbv	99
61)	1,4-Dichlorobenzene	18.96	146	1113643	10.52	ppbv	98
62)	Benzyl chloride	19.17	91	1545536	10.84	ppbv	99
63)	1,2-Dichlorobenzene	19.60	146	1086085	10.80	ppbv	99
64)	1,2,4-Trichlorobenzene	22.76	180	222277	9.40	ppbv	100
65)	Hexachlorobutadiene	22.96	225	722636	11.06	ppbv	99
66)	Naphthalene	23.45	128	342439	10.28	ppbv	99

(#) = qualifier out of range (m) = manual integration
03271220.D 032712V1.M Thu Mar 29 09:24:47 2012 Page 2

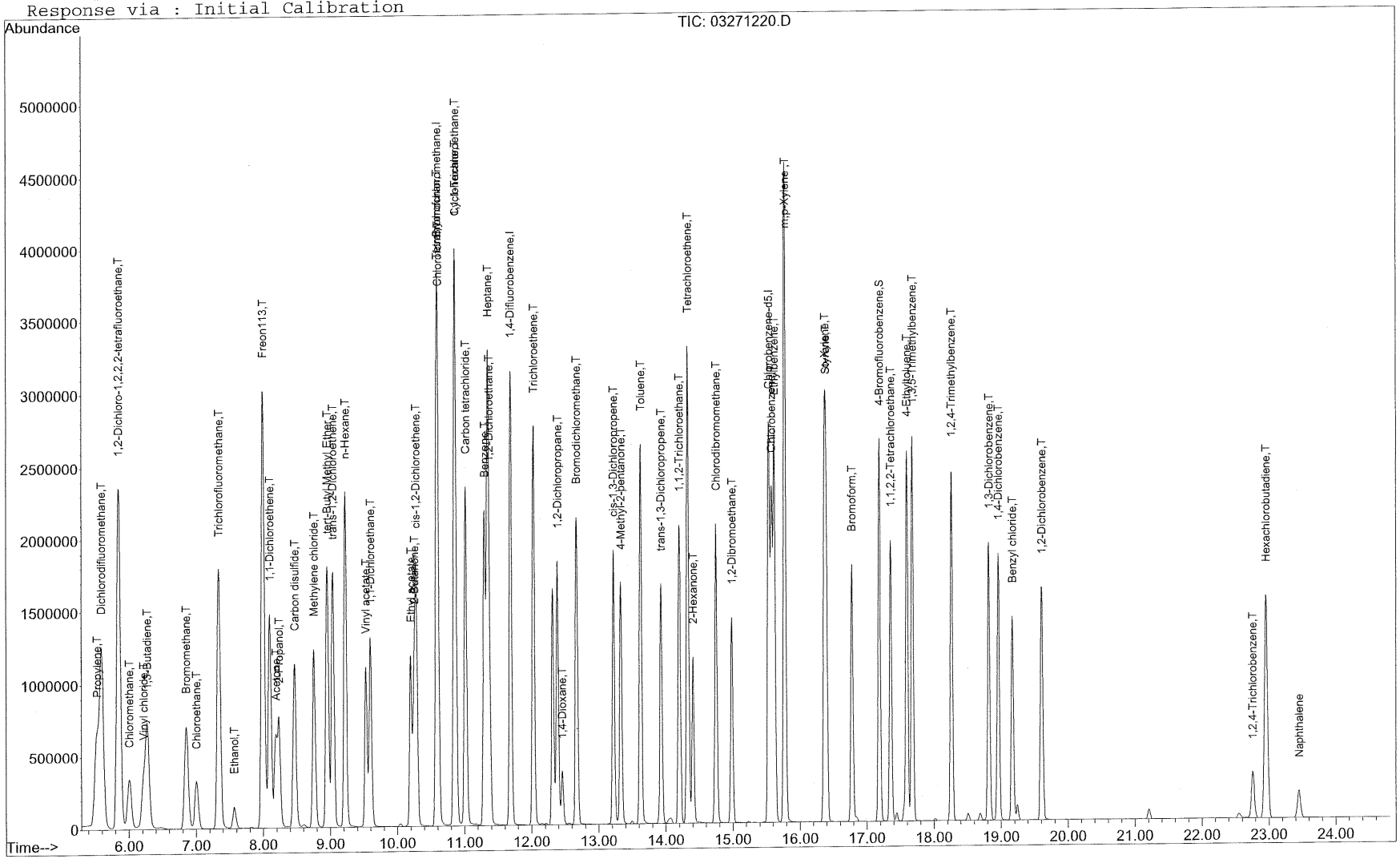
Quantitation Report

Data File : C:\HPCHEM\1\DATA\032712\03271220.D
Acq On : 28 Mar 2012 7:55 am
Sample : ICV VOA1 032712
Misc : ICV EPA TO15
MS Integration Params: CLME.P
Quant Time: Mar 29 8:42 2012

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

Quant Results File: 032712V1.RES

Method : C:\HPCHEM\1\METHODS\032712V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Mar 29 08:41:28 2012
Response via : Initial Calibration



Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Initial Calibration

Calibration Files
2 =04031203.D 4 =04031204.D 5 =04031205.D
6 =04031206.D 7 =04031207.D 8 =04031208.D

		Compound	2	4	5	6	7	8	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------							
2)	T	Propylene	0.908	0.995	0.983	0.926	0.905	0.890	0.933	4.30
3)	T	Dichlorodifluoromet	3.252	3.566	3.556	3.353	3.226	3.106	3.299	6.23
4)	T	1,2-Dichloro-1,2,2,	2.432	2.684	2.636	2.470	2.353	2.228	2.423	8.08
5)	T	Chloromethane	1.034	1.119	1.079	0.982	0.895	0.855	0.975	11.01
6)	T	Vinyl chloride	0.940	1.035	1.009	0.924	0.844	0.799	0.908	10.45
7)	T	1,3-Butadiene	0.676	0.720	0.677	0.610	0.540	0.501	0.604	14.86
8)	T	Bromomethane	1.191	1.328	1.327	1.239	1.146	1.114	1.211	7.42
9)	T	Chloroethane	0.659	0.742	0.738	0.686	0.624	0.610	0.672	7.80
10)	T	Trichlorofluorometh	3.200	3.533	3.499	3.244	2.871	2.683	3.078	12.84
11)	T	Ethanol	0.351	0.455	0.437	0.397	0.337	0.343	0.384	12.33
12)	T	Freon113	2.246	2.480	2.423	2.203	1.857	1.725	2.077	16.70
13)	T	1,1-Dichloroethene	1.582	1.754	1.733	1.606	1.406	1.348	1.532	11.96
14)	T	Acetone	1.754	1.813	1.721	1.574	1.248	1.265	1.520	16.77
15)	T	Carbon disulfide	2.793	3.018	2.970	2.743	2.444	2.340	2.662	10.95
16)	T	2-Propanol	1.486	1.818	1.738	1.598	1.402	1.389	1.547	11.36
17)	T	Methylene chloride	1.305	1.271	1.253	1.156	0.982	0.966	1.125	14.09
18)	T	tert-Butyl Methyl E	3.000	3.312	3.137	2.842	2.175	2.189	2.677	19.24
19)	T	trans-1,2-Dichloroe	1.513	1.689	1.648	1.536	1.302	1.273	1.451	13.42
20)	T	n-Hexane	1.720	1.878	1.856	1.694	1.437	1.382	1.604	15.21
21)	T	1,1-Dichloroethane	1.953	2.220	2.205	2.011	1.724	1.697	1.915	13.04
22)	T	Vinyl acetate	2.085	3.111	2.964	2.668	2.057	2.078	2.421	19.83
23)	T	cis-1,2-Dichloroeth	1.182	1.354	1.314	1.203	1.027	0.996	1.146	13.85
24)	T	2-Butanone	1.711	1.940	1.851	1.809	1.384	1.286	1.588	19.80
25)	T	Ethyl acetate	2.064	2.489	2.373	2.188	1.784	1.696	2.033	16.57
26)	T	Tetrahydrofuran	1.110	1.276	1.184	1.038	0.835	0.769	0.986	22.56
27)	T	Chloroform	2.254	2.492	2.354	2.114	1.773	1.635	2.018	18.91
28)	T	1,1,1-Trichloroetha	2.317	2.718	2.585	2.314	1.921	1.760	2.172	19.60
29)	T	Cyclohexane	1.761	1.930	1.817	1.625	1.326	1.161	1.517	23.48
30)	T	Carbon tetrachlorid	2.497	2.996	2.907	2.650	2.229	2.087	2.467	16.79
31)	T	Benzene	3.397	3.773	3.577	3.236	2.567	2.504	3.050	19.23
32)	T	1,2-Dichloroethane	1.287	1.587	1.494	1.337	1.057	0.997	1.236	21.17
33)	I	1,4-Difluorobenzene	----------ISTD----------							
34)	T	Heptane	0.585	0.665	0.621	0.544	0.445	0.369	0.502	27.74
35)	T	Trichloroethene	0.471	0.546	0.532	0.473	0.404	0.370	0.447	18.21
36)	T	1,2-Dichloropropane	0.362	0.419	0.399	0.355	0.284	0.266	0.332	21.26
37)	T	1,4-Dioxane	0.208	0.234	0.228	0.203	0.166	0.161	0.194	16.87
38)	T	Bromodichloromethan	0.644	0.795	0.768	0.685	0.578	0.514	0.632	20.61
39)	T	cis-1,3-Dichloropro	0.529	0.676	0.648	0.580	0.477	0.446	0.535	19.70
40)	T	4-Methyl-2-pentanon	0.234	0.291	0.277	0.250	0.207	0.197	0.233	18.03
41)	T	Toluene	1.208	1.348	1.263	1.120	0.907	0.819	1.053	23.22
42)	T	trans-1,3-Dichlorop	0.461	0.623	0.601	0.536	0.449	0.425	0.495	18.84
43)	T	1,1,2-Trichloroetha	0.399	0.468	0.442	0.396	0.331	0.304	0.372	19.80
44)	T	Tetrachloroethene	0.621	0.688	0.662	0.593	0.507	0.461	0.563	18.94
45)	T	2-Hexanone	0.459	0.581	0.545	0.480	0.392	0.372	0.451	20.74
46)	T	Chlorodibromomethan	0.651	0.838	0.797	0.709	0.591	0.531	0.654	20.95
47)	T	1,2-Dibromoethane	0.601	0.726	0.692	0.613	0.508	0.457	0.571	21.22
48)	I	Chlorobenzene-d5	----------ISTD----------							
49)	T	Chlorobenzene	1.030	1.160	1.096	0.971	0.817	0.729	0.918	21.74
50)	T	Ethylbenzene	1.799	1.857	1.725	1.513	1.249	1.076	1.443	26.37
51)	T	m,p-Xylene	1.449	1.383	1.252	1.064	0.865	0.720	1.122	25.89
52)	T	o-Xylene	1.467	1.487	1.367	1.191	0.979	0.844	1.148	27.22
53)	T	Styrene	0.946	1.146	1.063	0.937	0.789	0.703	0.882	22.40
54)	T	Bromoform	0.642	0.826	0.784	0.694	0.595	0.541	0.651	19.64
55)	S	4-Bromofluorobenzen	0.627	0.625	0.625	0.628	0.626	0.628	0.627	0.19
56)	T	1,1,2,2-Tetrachloro	1.013	0.927	0.872	0.772	0.658	0.580	0.758	25.46
57)	T	4-Ethyltoluene	2.107	1.881	1.757	1.548	1.298	1.144	1.526	27.37

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

Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Initial Calibration

Calibration Files
2 =04031203.D 4 =04031204.D 5 =04031205.D
6 =04031206.D 7 =04031207.D 8 =04031208.D

		Compound	2	4	5	6	7	8	Avg	%RSD
58)	T	1,3,5-Trimethylbenz	1.859	1.590	1.496	1.308	1.098	0.962	1.302	28.74
59)	T	1,2,4-Trimethylbenz	1.766	1.520	1.426	1.261	1.071	0.944	1.254	27.34
60)	T	1,3-Dichlorobenzene	1.092	0.975	0.926	0.822	0.714	0.657	0.823	22.42
61)	T	1,4-Dichlorobenzene	1.043	0.939	0.892	0.797	0.692	0.635	0.794	21.99
62)	T	Benzyl chloride	0.712	1.146	1.096	0.977	0.857	0.792	0.930	18.52
63)	T	1,2-Dichlorobenzene	1.089	0.854	0.814	0.721	0.630	0.577	0.742	26.52
64)	T	1,2,4-Trichlorobenz	0.405	0.307	0.295	0.259	0.232	0.232	0.279	23.08
65)	T	Hexachlorobutadiene		0.436	0.415	0.359	0.310	0.298	0.347	19.71
66)		Naphthalene	0.795	0.605	0.587	0.502	0.449	0.434	0.539	25.34

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

Compound List Report VOA 1

Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Initial Calibration
Total Cpnds : 66

PK#			Compound Name	QIon	Exp RT	Rel RT	Cal	#Qual	A/H	ID
1	I		Bromochloromethane	130	10.59	1.000	A	2	A	B
2		T	Propylene	41	5.51	0.520	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	0.566	A	3	A	B
6		T	Vinyl chloride	62	6.21	0.587	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	7.00	0.661	A	3	A	B
10		T	Trichlorofluoromethane	101	7.33	0.692	A	3	A	B
11		T	Ethanol	45	7.57	0.715	A	2	A	B
12		T	Freon113	101	7.99	0.755	A	2	A	B
13		T	1,1-Dichloroethene	61	8.09	0.764	A	2	A	B
14		T	Acetone	43	8.18	0.773	A	2	A	B
15		T	Carbon disulfide	76	8.46	0.799	A	3	A	B
16		T	2-Propanol	45	8.23	0.777	A	2	A	B
17		T	Methylene chloride	49	8.75	0.827	A	2	A	B
18		T	tert-Butyl Methyl Ether	73	8.95	0.845	A	2	A	B
19		T	trans-1,2-Dichloroethene	61	9.04	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	10.28	0.971	A	3	A	B
24		T	2-Butanone	43	10.24	0.967	A	2	A	B
25		T	Ethyl acetate	43	10.19	0.962	A	3	A	B
26		T	Tetrahydrofuran	42	10.58	0.999	A	2	A	B
27		T	Chloroform	83	10.60	1.001	A	2	A	B
28		T	1,1,1-Trichloroethane	97	10.85	1.025	A	3	A	B
29		T	Cyclohexane	56	10.86	1.025	A	2	A	B
30		T	Carbon tetrachloride	117	11.01	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	11.68	1.000	A	2	A	B
34		T	Heptane	43	11.34	0.971	A	3	A	B
35		T	Trichloroethene	130	12.02	1.029	A	3	A	B
36		T	1,2-Dichloropropane	63	12.38	1.060	A	3	A	B
37		T	1,4-Dioxane	88	12.45	1.066	A	2	A	B
38		T	Bromodichloromethane	83	12.67	1.084	A	2	A	B
39		T	cis-1,3-Dichloropropene	75	13.21	1.131	A	2	A	B
40		T	4-Methyl-2-pentanone	58	13.32	1.141	A	3	A	B
41		T	Toluene	91	13.62	1.166	A	2	A	B
42		T	trans-1,3-Dichloropropene	75	13.93	1.192	A	3	A	B
43		T	1,1,2-Trichloroethane	97	14.20	1.215	A	3	A	B
44		T	Tetrachloroethene	166	14.32	1.226	A	3	A	B
45		T	2-Hexanone	43	14.40	1.233	A	2	A	B
46		T	Chlorodibromomethane	129	14.75	1.262	A	2	A	B
47		T	1,2-Dibromoethane	107	14.98	1.283	A	2	A	B
48	I		Chlorobenzene-d5	117	15.53	1.000	A	2	A	B
49		T	Chlorobenzene	112	15.58	1.003	A	3	A	B
50		T	Ethylbenzene	91	15.62	1.005	A	2	A	B
51		T	m,p-Xylene	91	15.77	1.015	A	2	A	B
52		T	o-Xylene	91	16.36	1.054	A	2	A	B
53		T	Styrene	104	16.39	1.055	A	3	A	B
54		T	Bromoform	173	16.77	1.080	A	3	A	B
55		S	4-Bromofluorobenzene	95	17.18	1.106	A	2	A	B
56		T	1,1,2,2-Tetrachloroethane	83	17.35	1.117	A	2	A	B
57		T	4-Ethyltoluene	105	17.59	1.133	A	1	A	B
58		T	1,3,5-Trimethylbenzene	105	17.68	1.138	A	2	A	B
59		T	1,2,4-Trimethylbenzene	105	18.26	1.175	A	2	A	B
60		T	1,3-Dichlorobenzene	146	18.82	1.211	A	3	A	B
61		T	1,4-Dichlorobenzene	146	18.96	1.221	A	3	A	B
62		T	Benzyl chloride	91	19.17	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	22.76	1.465	A	3	A	B
65		T	Hexachlorobutadiene	225	22.95	1.478	A	2	A	B
66			Naphthalene	128	23.44	1.509	A	2	A	B

```
Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
  A/H = Area or Height
ID  R = R.T.  B = R.T. & Q  Q = Qvalue L = Largest  A = All
--------------------------------------------------------------------------------
          040312V1.M     Thu Apr 05 09:25:37 2012
```

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040312B\04031211.D Vial: 2
Acq On : 4 Apr 2012 9:28 am Operator: RACHEL HILL
Sample : ICV VOA1 040312 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 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	112	0.00
2	T	Propylene	0.933	1.102	-18.1	124	0.02
3	T	Dichlorodifluoromethane	3.299	3.845	-16.6	121	0.01
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.423	2.810	-16.0	117	0.01
5	T	Chloromethane	0.975	1.070	-9.7	107	0.02
6	T	Vinyl chloride	0.908	0.973	-7.2	105	0.00
7	T	1,3-Butadiene	0.604	0.672	-11.3	105	0.00
8	T	Bromomethane	1.211	1.386	-14.5	117	0.00
9	T	Chloroethane	0.672	0.756	-12.5	114	0.01
10	T	Trichlorofluoromethane	3.078	3.441	-11.8	109	0.01
11	T	Ethanol	0.384	0.296	22.9	73	0.00
12	T	Freon113	2.077	2.263	-9.0	102	0.00
13	T	1,1-Dichloroethene	1.532	1.684	-9.9	108	0.00
14	T	Acetone	1.520	1.256	17.4	78	0.00
15	T	Carbon disulfide	2.662	3.404	-27.9	126	0.01
16	T	2-Propanol	1.547	1.485	4.0	92	0.01
17	T	Methylene chloride	1.125	1.099	2.3	97	0.00
18	T	tert-Butyl Methyl Ether	2.677	2.312	13.6	78	0.00
19	T	trans-1,2-Dichloroethene	1.451	1.523	-5.0	101	0.00
20	T	n-Hexane	1.604	1.591	0.8	95	0.00
21	T	1,1-Dichloroethane	1.915	1.866	2.6	94	0.00
22	T	Vinyl acetate	2.421	1.914	20.9	69	0.00
23	T	cis-1,2-Dichloroethene	1.146	1.104	3.7	91	0.00
24	T	2-Butanone	1.588	1.305	17.8	75	0.00
25	T	Ethyl acetate	2.033	1.665	18.1	75	0.00
26	T	Tetrahydrofuran	0.986	0.853	13.5	75	0.00
27	T	Chloroform	2.018	2.007	0.5	90	0.00
28	T	1,1,1-Trichloroethane	2.172	2.178	-0.3	90	0.00
29	T	Cyclohexane	1.517	1.577	-4.0	92	0.01
30	T	Carbon tetrachloride	2.467	2.433	1.4	91	0.00
31	T	Benzene	3.050	2.675	12.3	79	0.00
32	T	1,2-Dichloroethane	1.236	1.086	12.1	77	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	114	0.00
34	T	Heptane	0.502	0.537	-7.0	92	0.00
35	T	Trichloroethene	0.447	0.445	0.4	93	0.00
36	T	1,2-Dichloropropane	0.332	0.294	11.4	80	0.00
37	T	1,4-Dioxane	0.194	0.129	33.5#	63	0.00
38	T	Bromodichloromethane	0.632	0.661	-4.6	95	0.00
39	T	cis-1,3-Dichloropropene	0.535	0.491	8.2	83	0.00
40	T	4-Methyl-2-pentanone	0.233	0.208	10.7	81	0.00
41	T	Toluene	1.053	0.975	7.4	82	0.00
42	T	trans-1,3-Dichloropropene	0.495	0.436	11.9	80	0.00
43	T	1,1,2-Trichloroethane	0.372	0.349	6.2	85	0.00
44	T	Tetrachloroethene	0.563	0.567	-0.7	94	0.00
45	T	2-Hexanone	0.451	0.336	25.5	66	0.00
46	T	Chlorodibromomethane	0.654	0.655	-0.2	89	0.00
47	T	1,2-Dibromoethane	0.571	0.538	5.8	84	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	117	0.00
49	T	Chlorobenzene	0.918	0.850	7.4	86	0.00
50	T	Ethylbenzene	1.443	1.363	5.5	86	0.00
51	T	m,p-Xylene	1.122	1.018	9.3	86	0.00
52	T	o-Xylene	1.148	1.088	5.2	85	0.00
53	T	Styrene	0.882	0.821	6.9	84	0.00
54	T	Bromoform	0.651	0.637	2.2	90	0.00
55	S	4-Bromofluorobenzene	0.627	0.632	-0.8	118	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040312B\04031211.D Vial: 2
Acq On : 4 Apr 2012 9:28 am Operator: RACHEL HILL
Sample : ICV VOA1 040312 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 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	0.758	0.717	5.4	90	0.00
57	T	4-Ethyltoluene	1.526	1.415	7.3	88	0.00
58	T	1,3,5-Trimethylbenzene	1.302	1.204	7.5	88	0.00
59	T	1,2,4-Trimethylbenzene	1.254	1.143	8.9	88	0.00
60	T	1,3-Dichlorobenzene	0.823	0.719	12.6	86	0.00
61	T	1,4-Dichlorobenzene	0.794	0.679	14.5	84	0.00
62	T	Benzyl chloride	0.930	0.845	9.1	86	0.00
63	T	1,2-Dichlorobenzene	0.742	0.654	11.9	89	0.00
64	T	1,2,4-Trichlorobenzene	0.279	0.199	28.7	76	0.00
65	T	Hexachlorobutadiene	0.347	0.336	3.2	90	0.00
66		Naphthalene	0.539	0.415	23.0	80	0.01

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040312B\04031211.D Vial: 2
Acq On : 4 Apr 2012 9:28 am Operator: RACHEL HILL
Sample : ICV VOA1 040312 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 5 10:04 2012 Quant Results File: 040312V1.RES

Quant Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Initial Calibration
DataAcq Meth : 033112V1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.59	130	735115	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.69	114	2519392	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.54	117	2238339	12.50	ppbv		0.00
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.18	95	1413793	12.60	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 100.80%				
Target Compounds							Qvalue
2) Propylene	5.53	41	661190	12.05	ppbv		99
3) Dichlorodifluoromethane	5.60	85	2080337	10.72	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.86	135	1569934	11.02	ppbv		90
5) Chloromethane	6.01	50	597789	10.43	ppbv		99
6) Vinyl chloride	6.22	62	537848	10.07	ppbv		100
7) 1,3-Butadiene	6.27	39	387357	10.91	ppbv		94
8) Bromomethane	6.86	94	758312	10.65	ppbv		99
9) Chloroethane	7.01	64	408878	10.34	ppbv		99
10) Trichlorofluoromethane	7.34	101	1942420	10.73	ppbv		99
11) Ethanol	7.57	45	159970	7.09	ppbv		99
12) Freon113	8.00	101	1304289	10.68	ppbv		94
13) 1,1-Dichloroethene	8.10	61	980326	10.88	ppbv		98
14) Acetone	8.19	43	738406	8.26	ppbv	#	94
15) Carbon disulfide	8.47	76	1941987	12.41	ppbv	#	100
16) 2-Propanol	8.24	45	881996	9.70	ppbv	#	1
17) Methylene chloride	8.76	49	646221	9.77	ppbv		99
18) tert-Butyl Methyl Ether	8.96	73	1346075	8.55	ppbv		98
19) trans-1,2-Dichloroethene	9.04	61	877696	10.29	ppbv		96
20) n-Hexane	9.22	57	945096	10.02	ppbv		96
21) 1,1-Dichloroethane	9.60	63	1064472	9.45	ppbv		100
22) Vinyl acetate	9.53	43	1114211	7.82	ppbv		99
23) cis-1,2-Dichloroethene	10.28	96	636120	9.44	ppbv		96
24) 2-Butanone	10.25	43	759810	8.13	ppbv		98
25) Ethyl acetate	10.20	43	959525	8.03	ppbv	#	100
26) Tetrahydrofuran	10.58	42	501427	8.64	ppbv		95
27) Chloroform	10.61	83	1156905	9.75	ppbv		98
28) 1,1,1-Trichloroethane	10.86	97	1229696	9.63	ppbv		99
29) Cyclohexane	10.87	56	908614	10.18	ppbv		97
30) Carbon tetrachloride	11.02	117	1359321	9.37	ppbv		99
31) Benzene	11.30	78	1510017	8.42	ppbv		100
32) 1,2-Dichloroethane	11.37	62	619399	8.52	ppbv		99
34) Heptane	11.35	43	1070632	10.58	ppbv		97
35) Trichloroethene	12.03	130	860913	9.57	ppbv		97
36) 1,2-Dichloropropane	12.38	63	581346	8.70	ppbv		100
37) 1,4-Dioxane	12.46	88	248811	6.38	ppbv		98
38) Bromodichloromethane	12.67	83	1278402	10.03	ppbv		98
39) cis-1,3-Dichloropropene	13.22	75	939353	8.71	ppbv		99
40) 4-Methyl-2-pentanone	13.33	58	419213	8.92	ppbv		98
41) Toluene	13.63	91	1925252	9.07	ppbv		99
42) trans-1,3-Dichloropropene	13.93	75	799563	8.01	ppbv		99
43) 1,1,2-Trichloroethane	14.20	97	689812	9.19	ppbv		99
44) Tetrachloroethene	14.33	166	1096976	9.68	ppbv		96
45) 2-Hexanone	14.41	43	663387	7.30	ppbv		95
46) Chlorodibromomethane	14.75	129	1293077	9.80	ppbv		99
47) 1,2-Dibromoethane	14.99	107	1041012	9.05	ppbv		99
49) Chlorobenzene	15.58	112	1507597	9.17	ppbv		97
50) Ethylbenzene	15.62	91	2391793	9.26	ppbv		99
51) m,p-Xylene	15.78	91	3498740	17.41	ppbv		99
52) o-Xylene	16.37	91	1948414	9.48	ppbv		99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040312B\04031211.D Vial: 2
Acq On : 4 Apr 2012 9:28 am Operator: RACHEL HILL
Sample : ICV VOA1 040312 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 5 10:04 2012 Quant Results File: 040312V1.RES

Quant Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Initial Calibration
DataAcq Meth : 033112V1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53)	Styrene	16.39	104	1439944	9.11	ppbv	99
54)	Bromoform	16.78	173	1095257	9.40	ppbv	99
56)	1,1,2,2-Tetrachloroethane	17.36	83	1284091	9.46	ppbv	98
57)	4-Ethyltoluene	17.60	105	2483939	9.09	ppbv	100
58)	1,3,5-Trimethylbenzene	17.68	105	2091124	8.97	ppbv	100
59)	1,2,4-Trimethylbenzene	18.26	105	2005247	8.93	ppbv	100
60)	1,3-Dichlorobenzene	18.82	146	1248990	8.47	ppbv	99
61)	1,4-Dichlorobenzene	18.96	146	1167383	8.21	ppbv	99
62)	Benzyl chloride	19.17	91	1466914	8.81	ppbv	99
63)	1,2-Dichlorobenzene	19.61	146	1135503	8.55	ppbv	99
64)	1,2,4-Trichlorobenzene	22.76	180	324019	6.49	ppbv	96
65)	Hexachlorobutadiene	22.96	225	565190	9.10	ppbv	99
66)	Naphthalene	23.45	128	683837	7.09	ppbv	99

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

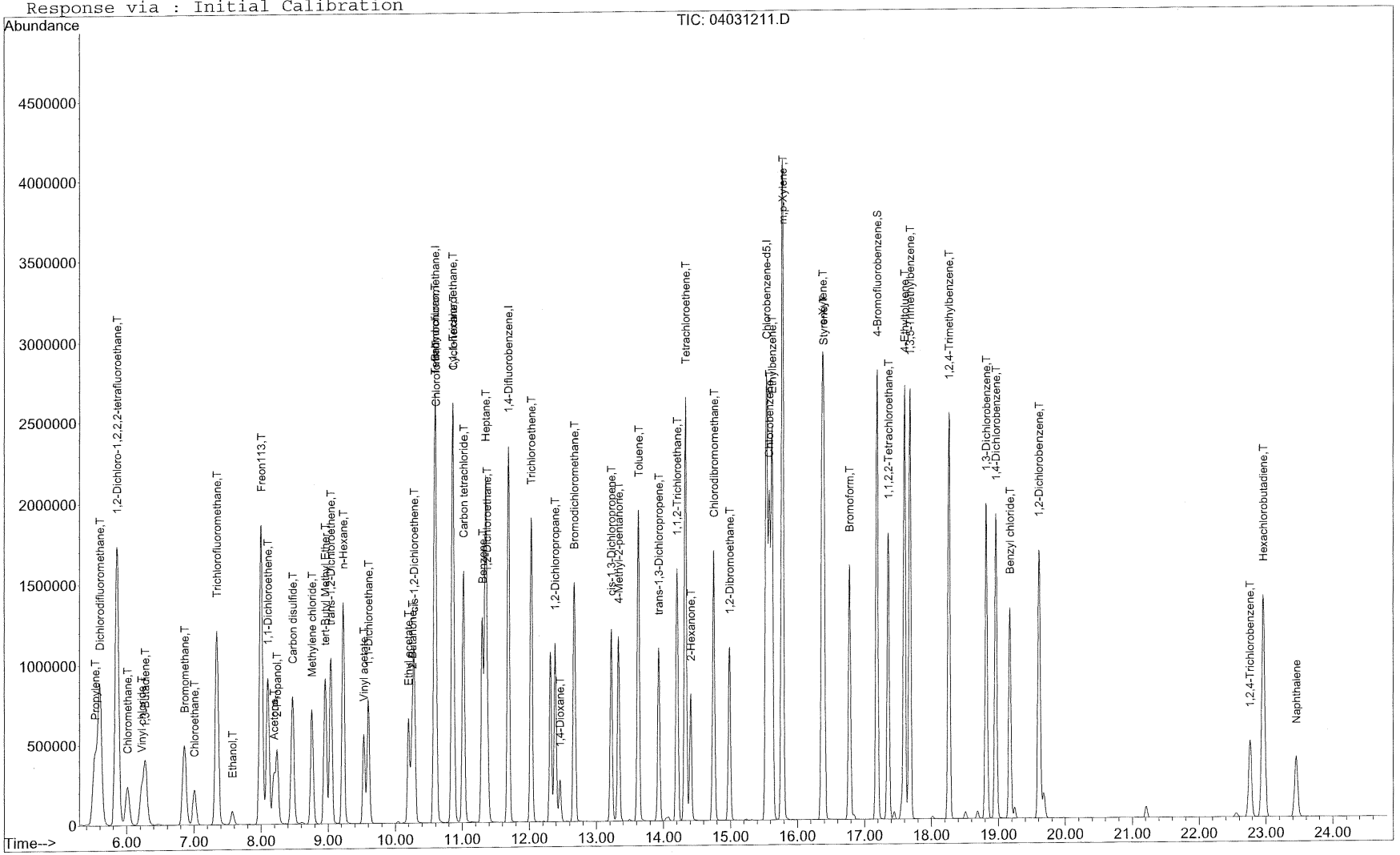
Quantitation Report

Data File : C:\HPCHEM\1\DATA\040312B\04031211.D
Acq On : 4 Apr 2012 9:28 am
Sample : ICV VOA1 040312
Misc : ICV EPA TO15
MS Integration Params: CLME.P
Quant Time: Apr 5 10:04 2012

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

Quant Results File: 040312V1.RES

Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA9_120404A **Run No.:** 47436

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

Analyst: Rachel Dear **Column:**

Calibration ID: 47376 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: PR - rh3, 040512 rsl040512

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 040412	BFB_TUNE	TUNE	R47436	4/4/2012 5:41:00 PM	Robert Lynch		
CCV VOA9 040412	MA_APH	CCV	R47436	4/4/2012 6:24:00 PM	Robert Lynch		
RLVS VOA9 040412	MA_APH	RLVS	R47436	4/4/2012 7:07:00 PM	Robert Lynch		
MBLK VOA9 040412	MA_APH	MBLK	R47436	4/4/2012 7:56:00 PM	Robert Lynch		
1203732-029A	MA_APH	SAMP	R47436	4/4/2012 8:45:00 PM	Robert Lynch		
1203732-033A	MA_APH	SAMP	R47436	4/4/2012 9:34:00 PM	Robert Lynch		
1203732-030A	MA_APH	SAMP	R47436	4/4/2012 10:23:00 PM	Robert Lynch		
1203732-031A	MA_APH	SAMP	R47436	4/4/2012 11:11:00 PM	Robert Lynch		
1203732-034A	MA_APH	SAMP	R47436	4/5/2012	Robert Lynch		
1203732-032A	MA_APH	SAMP	R47436	4/5/2012 12:43:00 AM	Robert Lynch		
1203732-032Adup	MA_APH	DUP	R47436	4/5/2012 1:25:00 AM	Robert Lynch		
1203732-035A	MA_APH	SAMP	R47436	4/5/2012 2:07:00 AM	Robert Lynch		
1203732-036A	MA_APH	SAMP	R47436	4/5/2012 2:50:00 AM	Robert Lynch		
1203732-008A	MA_APH	SAMP	R47436	4/5/2012 4:21:00 AM	Robert Lynch		
1203732-015A	MA_APH	SAMP	R47436	4/5/2012 5:10:00 AM	Robert Lynch		
1203732-010A	MA_APH	SAMP	R47436	4/5/2012 6:36:00 AM	Robert Lynch		
1203608-026A	MA_APH	SAMP	R47436	4/5/2012 9:41:00 AM	Robert Lynch		
1203732-009A	MA_APH	SAMP	R47436	4/5/2012 10:25:00 AM	Robert Lynch		
1203608-027A	MA_APH	SAMP	R47436	4/5/2012 11:08:00 AM	Robert Lynch		
1203608-022A	MA_APH	SAMP	R47436	4/5/2012 12:40:00 PM	Robert Lynch		
1203732-037A	MA_APH	SAMP	R47436	4/5/2012 1:29:00 PM	Robert Lynch		
1203608-002A	MA_APH	SAMP	R47436	4/5/2012 2:11:00 PM	Robert Lynch		
RLVS2 VOA9 04041	MA_APH	RLVS	R47436	4/5/2012 2:53:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

12-Apr-12

RunNo 47436

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
926671	BFB VOA9 040412	BFB_TUNE	TUNE	\1\DATA\040412	4/4/2012 5:41:00	1	R47436		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		57.4	57.4		100	0	0	0	0	0	57%	50	120	0%	
175	M		7.4	7.4		100	0	0	0	0	0	7%	4	9	0%	
176	M		96.3	96.3		100	0	0	0	0	0	96%	93	101	0%	
177	M		6.8	6.8		100	0	0	0	0	0	7%	5	9	0%	
50	M		26.1	26.1		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		6.8	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
926672	CCV VOA9 040412	MA_APH	CCV	\1\DATA\040412	4/4/2012 6:24:00	1	R47436		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
C5-C8 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C5-C8 Aliphatic HC - TOTAL	A	µg/m³	232.82	232.82		234	0	0	0	0	0	99%	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	269.74	269.74		266	0	0	0	0	0	101%	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	377.03	377.03		378	0	0	0	0	0	100%	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	90.57	90.57		89.5	0	0	0	0	0	101%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040412\04041202.D Vial: 2
Acq On : 4 Apr 2012 6:24 pm Operator: RACHEL HILL
Sample : CCV VOA9 040412 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\040312V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Apr 04 08:32:52 2012
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	C5-C8 Aliphatic HC	29.200	29.531	-1.1	100	0.00
2	L1	C5-C8 Aliphatic HC {2}	36.400	36.205	0.5	100	-0.02
3	L1	C5-C8 Aliphatic HC {3}	41.800	41.266	1.3	100	-0.02
4	L1	C5-C8 Aliphatic HC {4}	35.400	35.344	0.2	101	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	41.626	1.4	101	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	48.757	0.5	101	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	232.815	0.5	101	0.21
8	L1	C9-C12 Aliphatic HC	54.600	54.841	-0.4	103	-0.01
9	L1	C9-C12 Aliphatic HC {2}	54.600	55.006	-0.7	102	-0.01
10	L1	C9-C12 Aliphatic HC {3}	61.200	62.071	-1.4	105	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	61.137	-0.6	104	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	67.853	3.1	103	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	74.830	2.8	108	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	377.033	0.3	104	-0.01
15	L1	C9-C10 Aromatic HC	51.700	52.008	-0.6	107	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	51.568	-0.7	108	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	53.088	-1.7	108	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	58.806	-0.2	108	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	53.557	-1.8	109	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	59.364	-1.1	108	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	269.743	-1.4	108	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.00#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.41#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.30#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-11.07#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.84#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.29#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.42#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.41#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.54#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.52#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.63#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.80#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.45#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.35#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.52#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.62#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.62#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	0.00
40	I	Chlorobenzene-d5	12.500	12.500	0.0	103	0.00
41	S	4-Bromofluorobenzene	89.500	90.573	-1.2	104	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
04041202.D 040312V9.M Thu Apr 05 14:40:21 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040412\04041202.D Vial: 2
Acq On : 4 Apr 2012 6:24 pm Operator: RACHEL HILL
Sample : CCV VOA9 040412 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 8:43 2012 Quant Results File: 040312V9.RES

Quant Method : C:\HPCHEM\1\METHODS\040312V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Apr 04 08:32:52 2012
Response via : Initial Calibration
DataAcq Meth : 040312V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	677549	12.50	ug/m3	0.00
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.35	95	483543	90.57	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 101.20%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.21	TIC	2550258	29.53	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2246782	36.20	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2855221	41.27	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	2197842	35.34	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2798800	41.63	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3228414	48.76	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.21	TIC	15877317m	232.82	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	3796600	54.84	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	3783160	55.01	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.69	TIC	3660410	62.07	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.84	TIC	3473070	61.14	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.65	TIC	3268607	67.85	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.48	TIC	2242269	74.83	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	20224116m	377.03	ug/m3	
15) C9-C10 Aromatic HC	17.98	120	233379	52.01	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	242579	51.57	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.92	120	360451	53.09	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.03	120	80687	58.81	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.30	120	266471	53.56	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.03	134	196082	59.36	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.98	TIC	1379649m	269.74	ug/m3	

(#) = qualifier out of range (m) = manual integration
04041202.D 040312V9.M Thu Apr 05 14:27:31 2012 Page 1

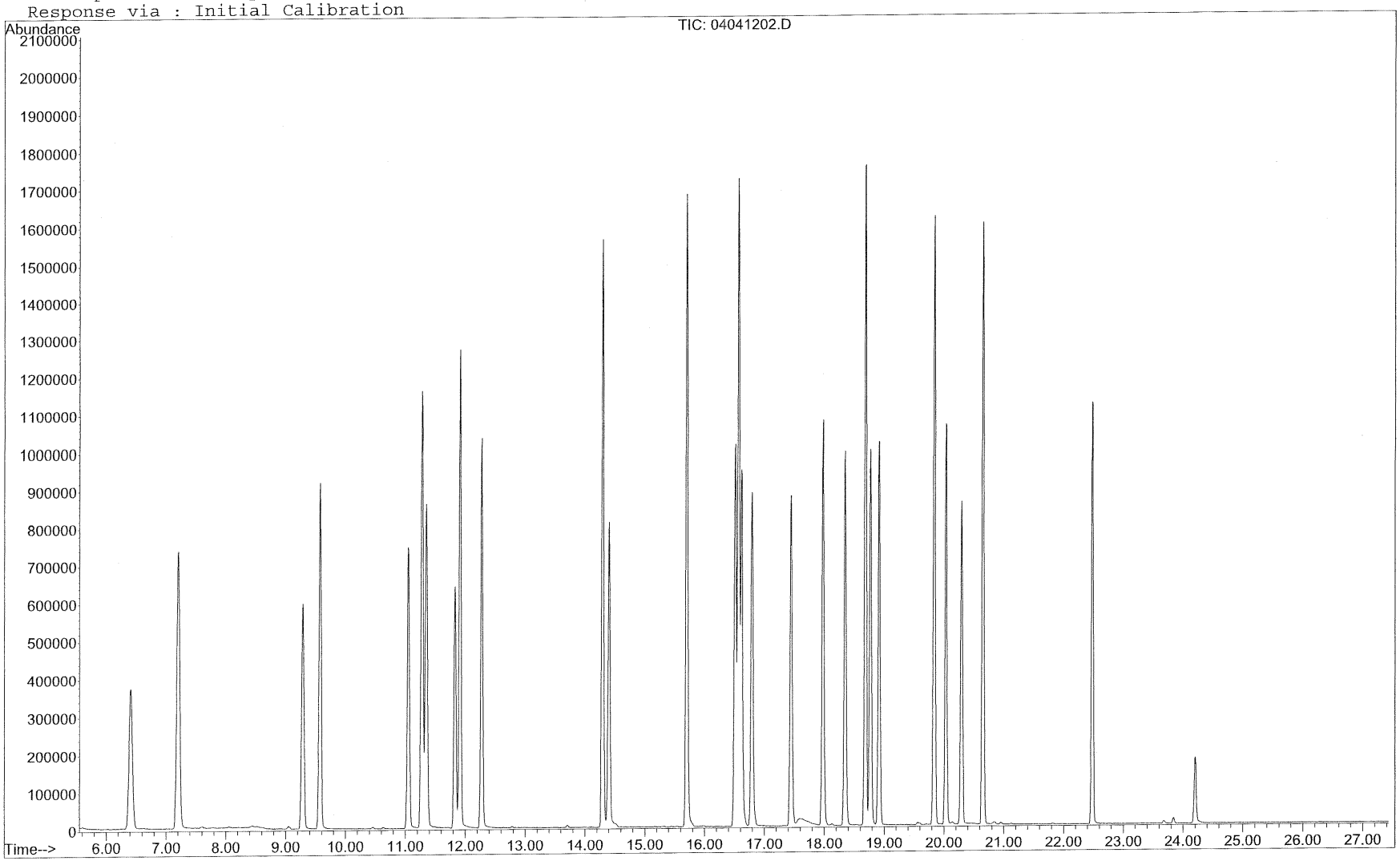
Quantitation Report

Data File : C:\HPCHEM\1\DATA\040412\04041202.D
Acq On : 4 Apr 2012 6:24 pm
Sample : CCV VOA9 040412
Misc : CCV MA APH
MS Integration Params: rteint.p
Quant Time: Apr 5 8:43 2012

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

Quant Results File: 040312V9.RES

Method : C:\HPCHEM\1\METHODS\040312V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Apr 04 08:32:52 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA9_120405A **Run No.:** 47474

Analytical Run Date: 4/5/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

Calibration ID: 47376 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: PR, RH3 - 040912

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 040512	BFB_TUNE	TUNE	R47474	4/5/2012 4:32:00 PM	Charles O`Bryan		
CCV VOA9 040512	MA_APH	CCV	R47474	4/5/2012 5:15:00 PM	Charles O`Bryan		
RLVS VOA9 040512	MA_APH	RLVS	R47474	4/5/2012 5:58:00 PM	Charles O`Bryan		
MBLK VOA9 040512	MA_APH	MBLK	R47474	4/5/2012 6:47:00 PM	Charles O`Bryan		
1203732-004A	MA_APH	SAMP	R47474	4/5/2012 7:36:00 PM	Charles O`Bryan		
1203732-005A	MA_APH	SAMP	R47474	4/5/2012 8:25:00 PM	Charles O`Bryan		
1203732-006A	MA_APH	SAMP	R47474	4/5/2012 9:14:00 PM	Charles O`Bryan		
1203732-011A	MA_APH	SAMP	R47474	4/5/2012 9:57:00 PM	Charles O`Bryan		
1203732-011Adup	MA_APH	DUP	R47474	4/5/2012 10:39:00 PM	Charles O`Bryan		
1203732-007A	MA_APH	SAMP	R47474	4/5/2012 11:28:00 PM	Charles O`Bryan		
1203732-012A	MA_APH	SAMP	R47474	4/6/2012 12:11:00 AM	Charles O`Bryan		
1203732-001A	MA_APH	SAMP	R47474	4/6/2012 1:00:00 AM	Charles O`Bryan		
1203732-014A	MA_APH	SAMP	R47474	4/6/2012 3:08:00 AM	Charles O`Bryan		
1203732-002A	MA_APH	SAMP	R47474	4/6/2012 10:19:00 AM	Charles O`Bryan		
1203732-013A	MA_APH	SAMP	R47474	4/6/2012 1:15:00 PM	Charles O`Bryan		
1203732-003A	MA_APH	SAMP	R47474	4/6/2012 2:01:00 PM	Charles O`Bryan		
RLVS2 VOA9 04051	MA_APH	RLVS	R47474	4/6/2012 2:43:00 PM	Charles O`Bryan		

RTI Laboratories

ANALYTICAL RUN Summary

12-Apr-12

RunNo 47474

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
927463	BFB VOA9 040512	BFB_TUNE	TUNE	\1\DATA\040512	4/5/2012 4:32:00	1	R47474		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		56.6	56.6		100	0	0	0	0	0	57%	50	120	0%	
175	M		7.7	7.7		100	0	0	0	0	0	8%	4	9	0%	
176	M		97	97		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.6	6.6		100	0	0	0	0	0	7%	5	9	0%	
50	M		26.9	26.9		100	0	0	0	0	0	27%	8	40	0%	
75	M		51.4	51.4		100	0	0	0	0	0	51%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.9	6.9		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
927464	CCV VOA9 040512	MA_APH	CCV	\1\DATA\040512	4/5/2012 5:15:00	1	R47474		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
C5-C8 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C5-C8 Aliphatic HC - TOTAL	A	µg/m³	214.65	214.65		234	0	0	0	0	0	92%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	242.93	242.93		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	336.37	336.37		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	88.5	88.5		89.5	0	0	0	0	0	99%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040512\04051202.D Vial: 2
Acq On : 5 Apr 2012 5:15 pm Operator: RACHEL HILL
Sample : CCV VOA9 040512 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\040312V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Apr 04 08:32:52 2012
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	C5-C8 Aliphatic HC	29.200	28.338	3.0	96	-0.01
2	L1	C5-C8 Aliphatic HC {2}	36.400	33.172	8.9	92	-0.02
3	L1	C5-C8 Aliphatic HC {3}	41.800	37.969	9.2	92	-0.02
4	L1	C5-C8 Aliphatic HC {4}	35.400	32.543	8.1	93	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	37.901	10.2	92	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	44.299	9.6	92	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	214.646	8.3	93	0.20
8	L1	C9-C12 Aliphatic HC	54.600	49.138	10.0	92	-0.01
9	L1	C9-C12 Aliphatic HC {2}	54.600	49.445	9.4	92	-0.01
10	L1	C9-C12 Aliphatic HC {3}	61.200	55.423	9.4	93	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	55.029	9.5	94	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	61.118	12.7	93	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	63.475	17.6	92	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	336.373	11.0	93	-0.01
15	L1	C9-C10 Aromatic HC	51.700	46.016	11.0	95	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	46.493	9.2	97	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	47.305	9.4	96	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	53.807	8.3	99	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	49.306	6.3	100	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	53.590	8.7	98	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	242.935	8.7	97	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.00#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.41#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.30#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-11.07#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.84#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.29#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.42#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.41#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.54#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.52#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.63#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.80#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.45#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.35#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.52#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.62#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.62#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	0.00
40	I	Chlorobenzene-d5	12.500	12.500	0.0	99	0.00
41	S	4-Bromofluorobenzene	89.500	88.497	1.1	98	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
04051202.D 040312V9.M Fri Apr 06 14:13:33 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040512\04051202.D Vial: 2
Acq On : 5 Apr 2012 5:15 pm Operator: RACHEL HILL
Sample : CCV VOA9 040512 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 6 15:08 2012 Quant Results File: 040312V9.RES

Quant Method : C:\HPCHEM\1\METHODS\040312V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Apr 04 08:32:52 2012
Response via : Initial Calibration
DataAcq Meth : 040312V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	651625	12.50	ug/m3	0.00
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.35	95	454385	88.50	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 98.88%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.20	TIC	2447174	28.34	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2058578	33.17	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2627138	37.97	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	2023685	32.54	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2548360	37.90	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	2933278	44.30	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.20	TIC	14638213m	214.65	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	3401806	49.14	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	3400647	49.44	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3268362	55.42	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.84	TIC	3126081	55.03	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.65	TIC	2944174	61.12	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.48	TIC	1902028	63.48	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	18043098m	336.37	ug/m3	
15) C9-C10 Aromatic HC	17.98	120	206491	46.02	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	218705	46.49	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.92	120	321183	47.30	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.04	120	73827	53.81	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.29	120	245318	49.31	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.03	134	177010	53.59	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.98	TIC	1242534m	242.93	ug/m3	

(#) = qualifier out of range (m) = manual integration
04051202.D 040312V9.M Fri Apr 06 14:14:06 2012 Page 1

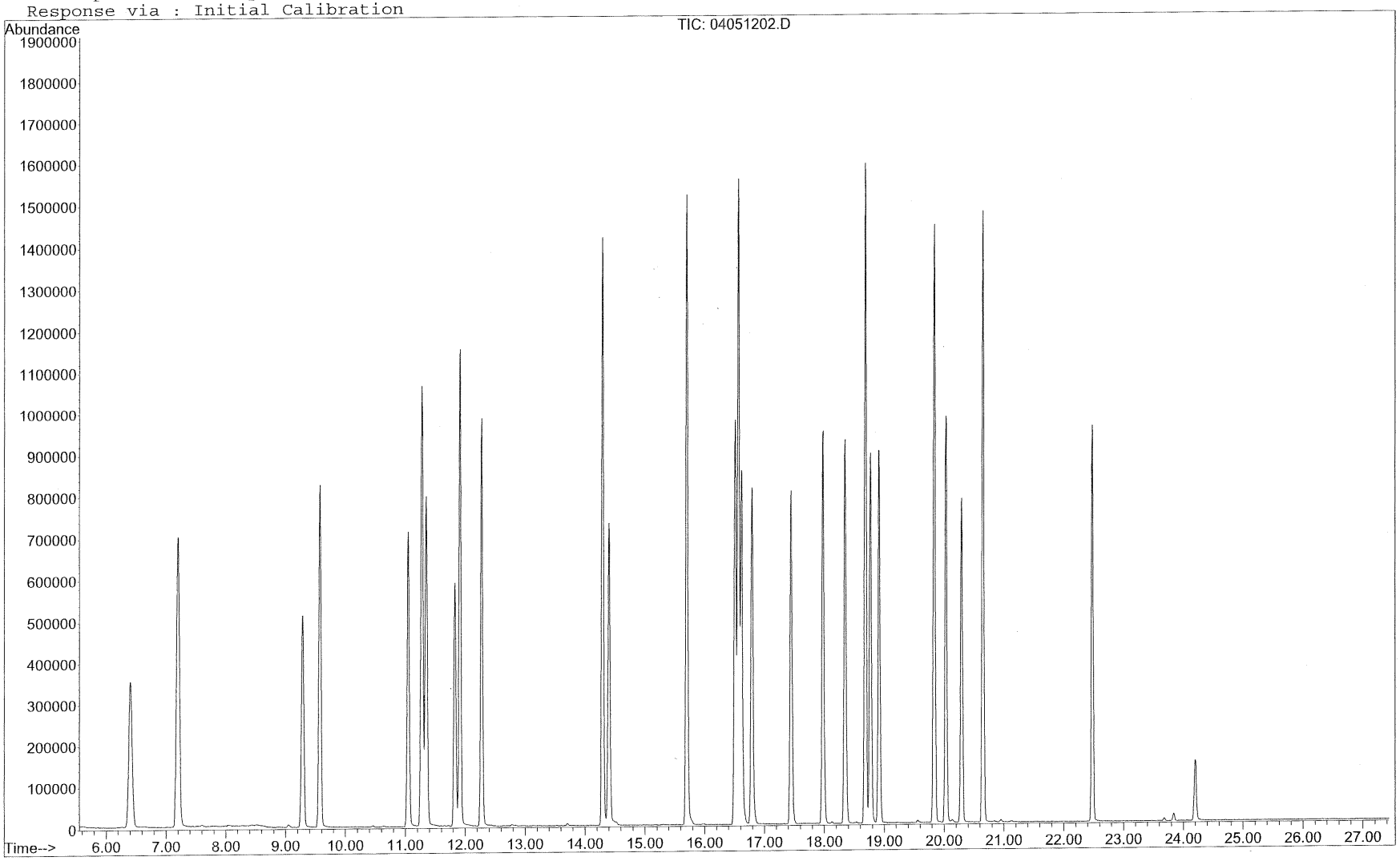
Quantitation Report

Data File : C:\HPCHEM\1\DATA\040512\04051202.D
Acq On : 5 Apr 2012 5:15 pm
Sample : CCV VOA9 040512
Misc : CCV MA APH
MS Integration Params: rteint.p
Quant Time: Apr 6 15:08 2012

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

Quant Results File: 040312V9.RES

Method : C:\HPCHEM\1\METHODS\040312V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Apr 04 08:32:52 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA9_120406A **Run No.:** 47492

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

Analyst: Rachel Dear **Column:**

Calibration ID: 47376 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 4/10/12/PR - RH3 040912

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 040612	BFB_TUNE	TUNE	R47492	4/6/2012 3:45:00 PM	Celeste Hoitash		
CCV VOA9 040612	MA_APH	CCV	R47492	4/6/2012 4:28:00 PM	Celeste Hoitash		
RLVS VOA9 040612	MA_APH	RLVS	R47492	4/6/2012 5:10:00 PM	Celeste Hoitash		
MBLK VOA9 040612	MA_APH	MBLK	R47492	4/6/2012 5:59:00 PM	Celeste Hoitash		
1203732-016A	MA_APH	SAMP	R47492	4/6/2012 6:42:00 PM	Celeste Hoitash		
1203732-016Adup	MA_APH	DUP	R47492	4/6/2012 7:25:00 PM	Celeste Hoitash		
1203732-023A	MA_APH	SAMP	R47492	4/7/2012 12:23:00 AM	Celeste Hoitash		
1203732-024A	MA_APH	SAMP	R47492	4/7/2012 1:06:00 AM	Celeste Hoitash		
1203732-025A	MA_APH	SAMP	R47492	4/7/2012 1:48:00 AM	Celeste Hoitash		
1203732-028A	MA_APH	SAMP	R47492	4/7/2012 3:56:00 AM	Celeste Hoitash		
RLVS2 VOA9 04061	MA_APH	RLVS	R47492	4/7/2012 4:39:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

12-Apr-12

RunNo 47492

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
927843	BFB VOA9 040612	BFB_TUNE	TUNE	\1\DATA\040612	4/6/2012 3:45:00	1	R47492		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		7.5	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		6.4	6.4		100	0	0	0	0	0	6%	5	9	0%	
50	M		26.2	26.2		100	0	0	0	0	0	26%	8	40	0%	
75	M		51.8	51.8		100	0	0	0	0	0	52%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.9	6.9		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
927844	CCV VOA9 040612	MA_APH	CCV	\1\DATA\040612	4/6/2012 4:28:00	1	R47492		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
C5-C8 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C5-C8 Aliphatic HC - TOTAL	A	µg/m³	209.94	209.94		234	0	0	0	0	0	90%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	248.07	248.07		266	0	0	0	0	0	93%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	344.38	344.38		378	0	0	0	0	0	91%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	88.27	88.27		89.5	0	0	0	0	0	99%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040612\04061202.D Vial: 2
Acq On : 6 Apr 2012 4:28 pm Operator: RACHEL HILL
Sample : CCV VOA9 040612 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\040312V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Apr 04 08:32:52 2012
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	C5-C8 Aliphatic HC	29.200	25.541	12.5	86	0.00
2	L1	C5-C8 Aliphatic HC {2}	36.400	32.800	9.9	91	-0.02
3	L1	C5-C8 Aliphatic HC {3}	41.800	37.398	10.5	91	-0.02
4	L1	C5-C8 Aliphatic HC {4}	35.400	32.139	9.2	92	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	38.258	9.3	93	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	44.067	10.1	92	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	209.944	10.3	91	0.20
8	L1	C9-C12 Aliphatic HC	54.600	49.428	9.5	93	-0.01
9	L1	C9-C12 Aliphatic HC {2}	54.600	50.256	8.0	93	-0.01
10	L1	C9-C12 Aliphatic HC {3}	61.200	56.461	7.7	95	-0.01
11	L1	C9-C12 Aliphatic HC {4}	60.800	55.832	8.2	95	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	62.504	10.7	95	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	69.479	9.8	101	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	344.378	8.9	95	-0.01
15	L1	C9-C10 Aromatic HC	51.700	47.231	8.6	97	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	48.118	6.0	101	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	48.508	7.1	99	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	55.277	5.8	101	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	49.594	5.7	101	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	54.060	7.9	99	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	248.071	6.7	99	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.00#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.41#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.30#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-11.07#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.84#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.29#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.42#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.41#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.54#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.52#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.63#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.80#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.45#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.35#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.52#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.62#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.62#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	0.00
40	I	Chlorobenzene-d5	12.500	12.500	0.0	95	0.00
41	S	4-Bromofluorobenzene	89.500	88.271	1.4	94	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
04061202.D 040312V9.M Mon Apr 09 09:49:08 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040612\04061202.D Vial: 2
Acq On : 6 Apr 2012 4:28 pm Operator: RACHEL HILL
Sample : CCV VOA9 040612 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 9 9:35 2012 Quant Results File: 040312V9.RES

Quant Method : C:\HPCHEM\1\METHODS\040312V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Apr 04 08:32:52 2012
Response via : Initial Calibration
DataAcq Meth : 040312V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	628891	12.50	ug/m3	0.00
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.35	95	437411	88.27	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 98.63%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.20	TIC	2205692	25.54	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2035496	32.80	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2587602	37.40	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	1998522	32.14	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2572398	38.26	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	2917887	44.07	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.20	TIC	14317597m	209.94	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	3421857	49.43	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	3456453	50.26	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3329574	56.46	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.84	TIC	3171721	55.83	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.65	TIC	3010935	62.50	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.48	TIC	2081936	69.48	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	18472476m	344.38	ug/m3	
15) C9-C10 Aromatic HC	17.98	120	211944	47.23	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	226349	48.12	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	329353	48.51	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.03	120	75844	55.28	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.29	120	246750	49.59	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.04	134	178563	54.06	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.98	TIC	1268803m	248.07	ug/m3	

(#) = qualifier out of range (m) = manual integration
04061202.D 040312V9.M Mon Apr 09 09:50:50 2012 Page 1

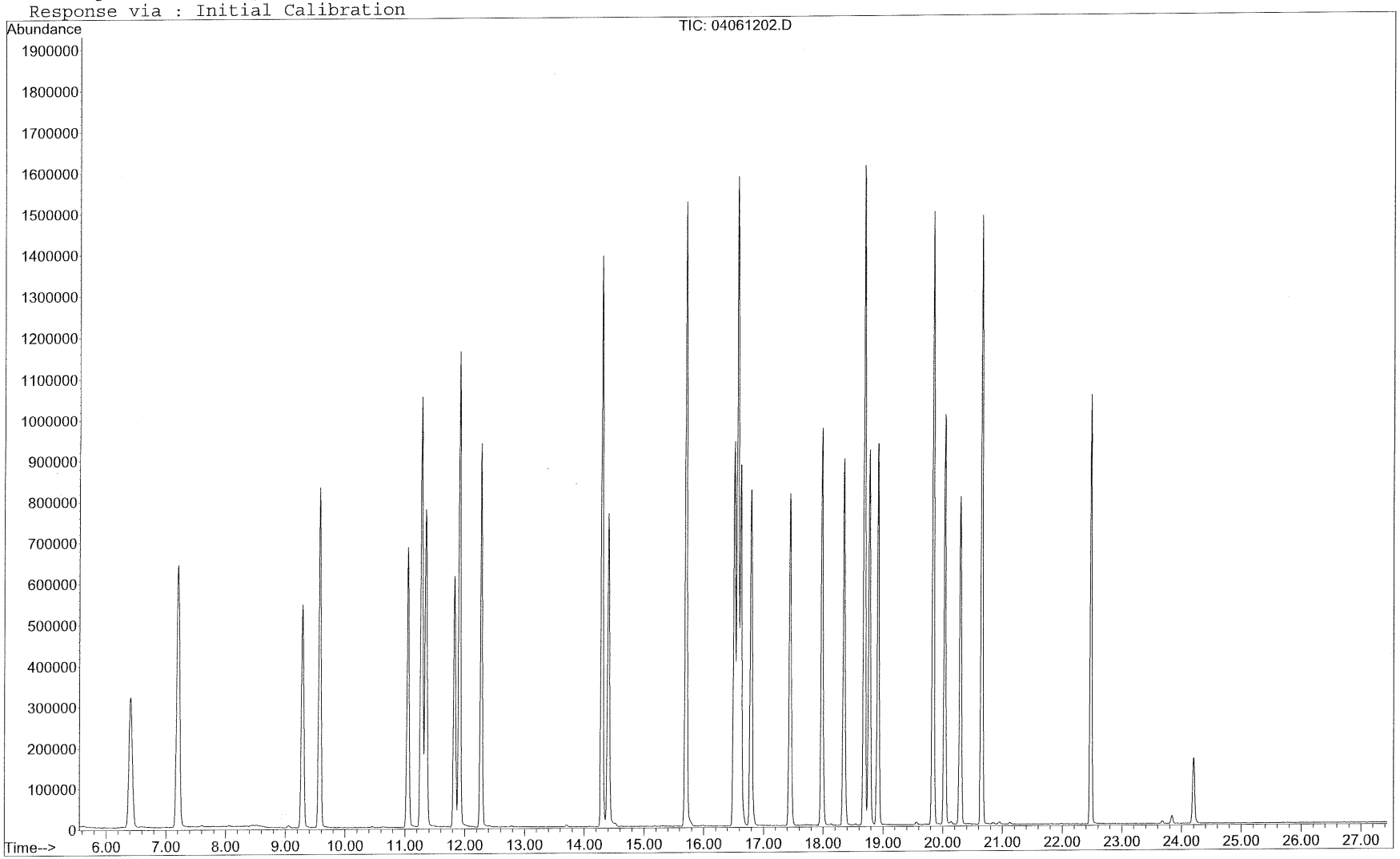
Quantitation Report

Data File : C:\HPCHEM\1\DATA\040612\04061202.D
Acq On : 6 Apr 2012 4:28 pm
Sample : CCV VOA9 040612
Misc : CCV MA APH
MS Integration Params: rteint.p
Quant Time: Apr 9 9:35 2012

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

Quant Results File: 040312V9.RES

Method : C:\HPCHEM\1\METHODS\040312V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Apr 04 08:32:52 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA9_120407A **Run No.:** 47495

Analytical Run Date: 4/7/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

Calibration ID: 47376 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 4/10/12/PR - 040912 RH3 -- Nitrogen tank ran out over the weekend, this is why ending RLVS is not present.

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 040712	BFB_TUNE	TUNE	R47495	4/7/2012 10:56:00 AM	Celeste Hoitash		
CCV VOA9 040712	MA_APH	CCV	R47495	4/7/2012 11:39:00 AM	Celeste Hoitash		
RLVS VOA9 040712	MA_APH	RLVS	R47495	4/7/2012 12:26:00 PM	Celeste Hoitash		
MBLK VOA9 040712	MA_APH	MBLK	R47495	4/7/2012 1:20:00 PM	Celeste Hoitash		
1203903-014A	MA_APH	SAMP	R47495	4/7/2012 4:20:00 PM	Celeste Hoitash		Over-diluted sample. Sample will be re-analyzed at lower dilution.
1203903-014ADUP	MA_APH	DUP	R47495	4/7/2012 5:03:00 PM	Celeste Hoitash		
1203903-016A	MA_APH	SAMP	R47495	4/7/2012 6:35:00 PM	Celeste Hoitash		
1203903-023A	MA_APH	SAMP	R47495	4/7/2012 7:21:00 PM	Celeste Hoitash		
1203903-018A	MA_APH	SAMP	R47495	4/7/2012 8:52:00 PM	Celeste Hoitash		
1203903-024A	MA_APH	SAMP	R47495	4/7/2012 9:35:00 PM	Celeste Hoitash		
1203732-017A	MA_APH	SAMP	R47495	4/8/2012 12:38:00 AM	Celeste Hoitash		
1203732-019A	MA_APH	SAMP	R47495	4/8/2012 2:17:00 AM	Celeste Hoitash		
1203732-020A	MA_APH	SAMP	R47495	4/8/2012 3:07:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

12-Apr-12

RunNo 47495

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
927932	BFB VOA9 040712	BFB_TUNE	TUNE	\1\DATA\040712	4/7/2012 10:56:0	1	R47495		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		60.7	60.7		100	0	0	0	0	0	61%	50	120	0%	
175	M		7.4	7.4		100	0	0	0	0	0	7%	4	9	0%	
176	M		95.3	95.3		100	0	0	0	0	0	95%	93	101	0%	
177	M		6.2	6.2		100	0	0	0	0	0	6%	5	9	0%	
50	M		26.1	26.1		100	0	0	0	0	0	26%	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		6.6	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
927933	CCV VOA9 040712	MA_APH	CCV	\1\DATA\040712	4/7/2012 11:39:0	1	R47495		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
C5-C8 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C5-C8 Aliphatic HC - TOTAL	A	µg/m³	209.75	209.75		234	0	0	0	0	0	90%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	251.27	251.27		266	0	0	0	0	0	94%	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	350.81	350.81		378	0	0	0	0	0	93%	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	88.86	88.86		89.5	0	0	0	0	0	99%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040712\04071202.D Vial: 2
Acq On : 7 Apr 2012 11:39 am Operator: RACHEL HILL
Sample : CCV VOA9 040712 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\040312V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Apr 04 08:32:52 2012
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	C5-C8 Aliphatic HC	29.200	25.555	12.5	86	0.00
2	L1	C5-C8 Aliphatic HC {2}	36.400	32.552	10.6	90	-0.02
3	L1	C5-C8 Aliphatic HC {3}	41.800	37.598	10.1	91	-0.02
4	L1	C5-C8 Aliphatic HC {4}	35.400	31.558	10.9	90	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	38.004	9.9	92	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	44.673	8.8	93	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	209.748	10.4	91	0.21
8	L1	C9-C12 Aliphatic HC	54.600	49.941	8.5	94	-0.02
9	L1	C9-C12 Aliphatic HC {2}	54.600	49.795	8.8	93	-0.02
10	L1	C9-C12 Aliphatic HC {3}	61.200	57.329	6.3	97	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	56.948	6.3	97	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	65.486	6.4	99	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	72.246	6.2	105	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	350.808	7.2	97	-0.02
15	L1	C9-C10 Aromatic HC	51.700	47.358	8.4	98	-0.01
16	L1	C9-C10 Aromatic HC {2}	51.200	47.974	6.3	100	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	49.265	5.6	100	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	55.001	6.3	101	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	50.858	3.3	103	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	55.693	5.1	102	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	251.266	5.5	101	-0.01
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.00#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.41#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.30#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-11.07#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.84#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.29#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.42#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.41#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.54#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.52#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.63#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.80#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.45#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.35#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.52#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.62#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.62#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	0.00
40	I	Chlorobenzene-d5	12.500	12.500	0.0	78	-0.01
41	S	4-Bromofluorobenzene	89.500	88.855	0.7	78	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
04071202.D 040312V9.M Mon Apr 09 11:08:46 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040712\04071202.D Vial: 2
Acq On : 7 Apr 2012 11:39 am Operator: RACHEL HILL
Sample : CCV VOA9 040712 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 9 9:57 2012 Quant Results File: 040312V9.RES

Quant Method : C:\HPCHEM\1\METHODS\040312V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Apr 04 08:32:52 2012
Response via : Initial Calibration
DataAcq Meth : 040312V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	516497	12.50	ug/m3	-0.01
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.34	95	361617	88.86	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 99.28%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.21	TIC	2206913	25.56	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.58	TIC	2020100	32.55	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2601443	37.60	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	1962426	31.56	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2555311	38.00	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.30	TIC	2958012	44.67	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.21	TIC	14304205m	209.75	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	3457390	49.94	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	3424744	49.80	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3380756	57.33	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	3235067	56.95	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.65	TIC	3154581	65.49	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.48	TIC	2164848	72.25	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	18817386m	350.81	ug/m3	
15) C9-C10 Aromatic HC	17.98	120	212512	47.36	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	225673	47.97	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	334494	49.27	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.03	120	75466	55.00	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.29	120	253039	50.86	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.03	134	183958	55.69	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.98	TIC	1285142m	251.27	ug/m3	

(#) = qualifier out of range (m) = manual integration
04071202.D 040312V9.M Mon Apr 09 11:09:56 2012 Page 1

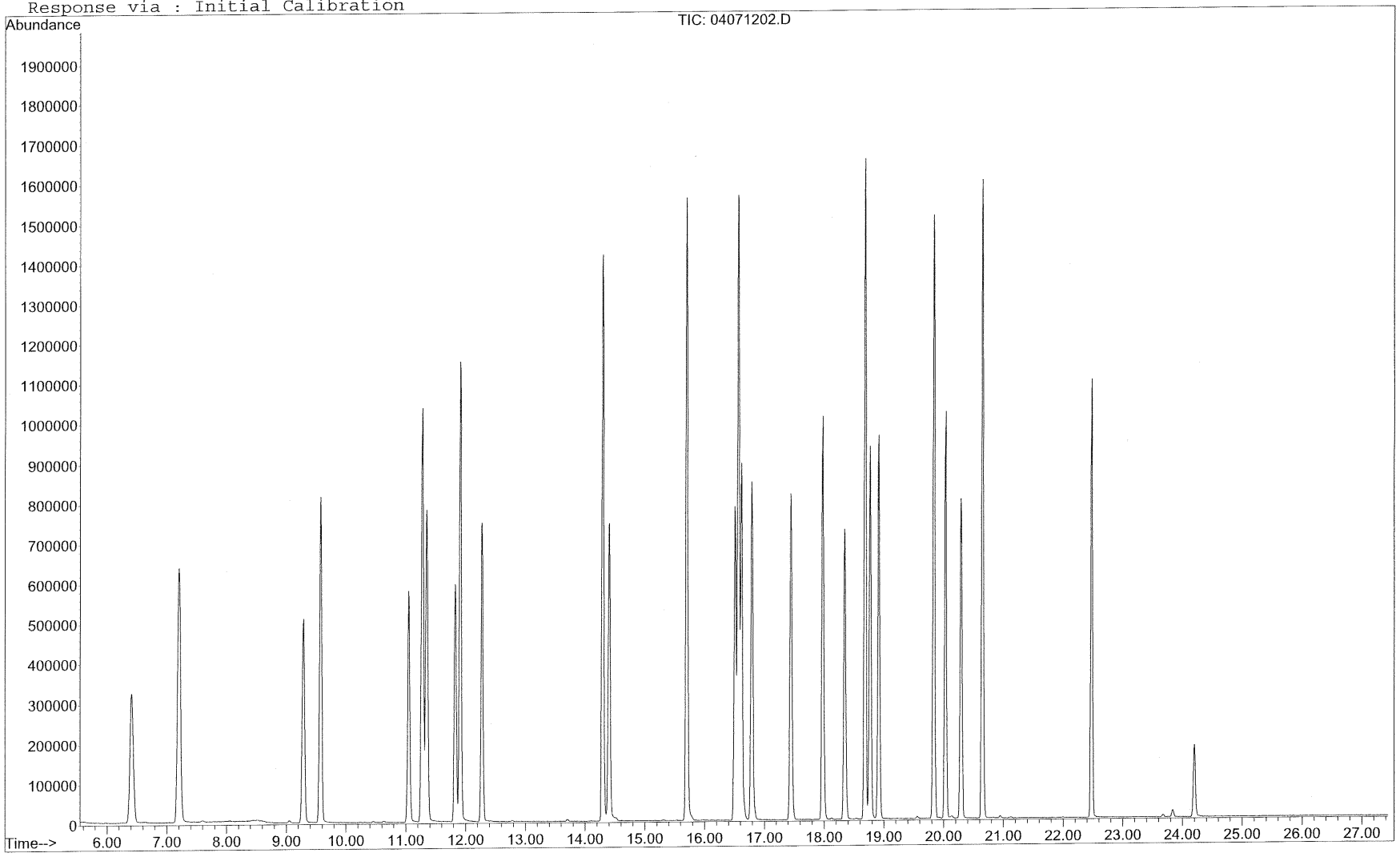
Quantitation Report

Data File : C:\HPCHEM\1\DATA\040712\04071202.D
Acq On : 7 Apr 2012 11:39 am
Sample : CCV VOA9 040712
Misc : CCV MA APH
MS Integration Params: rteint.p
Quant Time: Apr 9 9:57 2012

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

Quant Results File: 040312V9.RES

Method : C:\HPCHEM\1\METHODS\040312V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Apr 04 08:32:52 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA9_120409A **Run No.:** 47531

Analytical Run Date: 4/9/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

Calibration ID: 47376 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 4/10/12/PR, RH3 041012

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 040912	BFB_TUNE	TUNE	R47531	4/9/2012 10:10:00 AM	Celeste Hoitash		
CCV VOA9 040912	MA_APH	CCV	R47531	4/9/2012 10:53:00 AM	Celeste Hoitash		
RLVS VOA9 040912	MA_APH	RLVS	R47531	4/9/2012 11:36:00 AM	Celeste Hoitash		
MBLK VOA9 040912	MA_APH	MBLK	R47531	4/9/2012 12:37:00 PM	Celeste Hoitash		
1203732-018A	MA_APH	SAMP	R47531	4/9/2012 1:27:00 PM	Celeste Hoitash		
1203732-026A	MA_APH	SAMP	R47531	4/9/2012 2:16:00 PM	Celeste Hoitash		
1203732-021A	MA_APH	SAMP	R47531	4/9/2012 3:45:00 PM	Celeste Hoitash		
1203732-022A	MA_APH	SAMP	R47531	4/9/2012 4:27:00 PM	Celeste Hoitash		
1203732-027A	MA_APH	SAMP	R47531	4/9/2012 5:11:00 PM	Celeste Hoitash		
1203732-027Adup	MA_APH	DUP	R47531	4/9/2012 5:55:00 PM	Celeste Hoitash		
1203903-011A	MA_APH	SAMP	R47531	4/9/2012 7:22:00 PM	Celeste Hoitash		
1203903-012A	MA_APH	SAMP	R47531	4/9/2012 8:54:00 PM	Celeste Hoitash		
1203903-009A	MA_APH	SAMP	R47531	4/9/2012 10:26:00 PM	Celeste Hoitash		
1203903-022A	MA_APH	SAMP	R47531	4/9/2012 11:54:00 PM	Celeste Hoitash		
1203903-021A	MA_APH	SAMP	R47531	4/10/2012 1:25:00 AM	Celeste Hoitash		
1203903-010A	MA_APH	SAMP	R47531	4/10/2012 2:08:00 AM	Celeste Hoitash		
1203903-005A	MA_APH	SAMP	R47531	4/10/2012 2:51:00 AM	Celeste Hoitash		
RLVS2 VOA9 04091	MA_APH	RLVS	R47531	4/10/2012 4:16:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

12-Apr-12

RunNo 47531

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
928463	BFB VOA9 040912	BFB_TUNE	TUNE	\1\DATA\040912	4/9/2012 10:10:0	1	R47531		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		58.6	58.6		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		96.3	96.3		100	0	0	0	0	0	96%	93	101	0%	
177	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	
50	M		25.8	25.8		100	0	0	0	0	0	26%	8	40	0%	
75	M		51.8	51.8		100	0	0	0	0	0	52%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.9	6.9		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
928464	CCV VOA9 040912	MA_APH	CCV	\1\DATA\040912	4/9/2012 10:53:0	1	R47531		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	233.19	233.19		234	0	0	0	0	0	100%	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	270.64	270.64		266	0	0	0	0	0	102%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	375.48	375.48		378	0	0	0	0	0	99%	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	88.82	88.82		89.5	0	0	0	0	0	99%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040912\04091202.D Vial: 2
Acq On : 9 Apr 2012 10:53 am Operator: RACHEL HILL
Sample : CCV VOA9 040912 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\040312V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Apr 04 08:32:52 2012
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	C5-C8 Aliphatic HC	29.200	29.775	-2.0	100	-0.01
2	L1	C5-C8 Aliphatic HC {2}	36.400	36.429	-0.1	101	-0.02
3	L1	C5-C8 Aliphatic HC {3}	41.800	41.291	1.2	100	-0.02
4	L1	C5-C8 Aliphatic HC {4}	35.400	35.203	0.6	100	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	41.259	2.2	100	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	49.094	-0.2	102	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	233.190	0.3	101	0.20
8	L1	C9-C12 Aliphatic HC	54.600	55.128	-1.0	103	-0.01
9	L1	C9-C12 Aliphatic HC {2}	54.600	54.548	0.1	101	-0.01
10	L1	C9-C12 Aliphatic HC {3}	61.200	61.043	0.3	103	-0.01
11	L1	C9-C12 Aliphatic HC {4}	60.800	60.063	1.2	102	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	68.059	2.8	103	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	76.157	1.1	110	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	375.476	0.7	103	-0.01
15	L1	C9-C10 Aromatic HC	51.700	51.289	0.8	106	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	52.032	-1.6	109	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	52.517	-0.6	107	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	59.703	-1.7	110	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	54.336	-3.3	110	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	60.704	-3.4	111	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	270.644	-1.7	108	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.00#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.41#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.30#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-11.07#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.84#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.29#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.42#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.41#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.54#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.52#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.63#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.80#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.45#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.35#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.52#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.62#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.62#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	0.00
40	I	Chlorobenzene-d5	12.500	12.500	0.0	105	0.00
41	S	4-Bromofluorobenzene	89.500	88.821	0.8	104	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040912\04091202.D Vial: 2
Acq On : 9 Apr 2012 10:53 am Operator: RACHEL HILL
Sample : CCV VOA9 040912 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 9 16:57 2012 Quant Results File: 040312V9.RES

Quant Method : C:\HPCHEM\1\METHODS\040312V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Apr 04 08:32:52 2012
Response via : Initial Calibration
DataAcq Meth : 040312V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	690526	12.50	ug/m3	0.00
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.35	95	483273	88.82	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 99.24%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.20	TIC	2571265	29.77	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2260675	36.43	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.27	TIC	2856982	41.29	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	2189067	35.20	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2774151	41.26	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3250739	49.09	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.20	TIC	15902879m	233.19	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	3816475	55.13	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	3751641	54.55	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3599811	61.04	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.84	TIC	3412050	60.06	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.65	TIC	3278565	68.06	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.48	TIC	2282025	76.16	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	20140567m	375.48	ug/m3	
15) C9-C10 Aromatic HC	17.98	120	230151	51.29	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	244759	52.03	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.92	120	356576	52.52	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.03	120	81917	59.70	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.29	120	270346	54.34	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.04	134	200510	60.70	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.98	TIC	1384259m	270.64	ug/m3	

(#) = qualifier out of range (m) = manual integration
04091202.D 040312V9.M Tue Apr 10 10:20:43 2012 Page 1

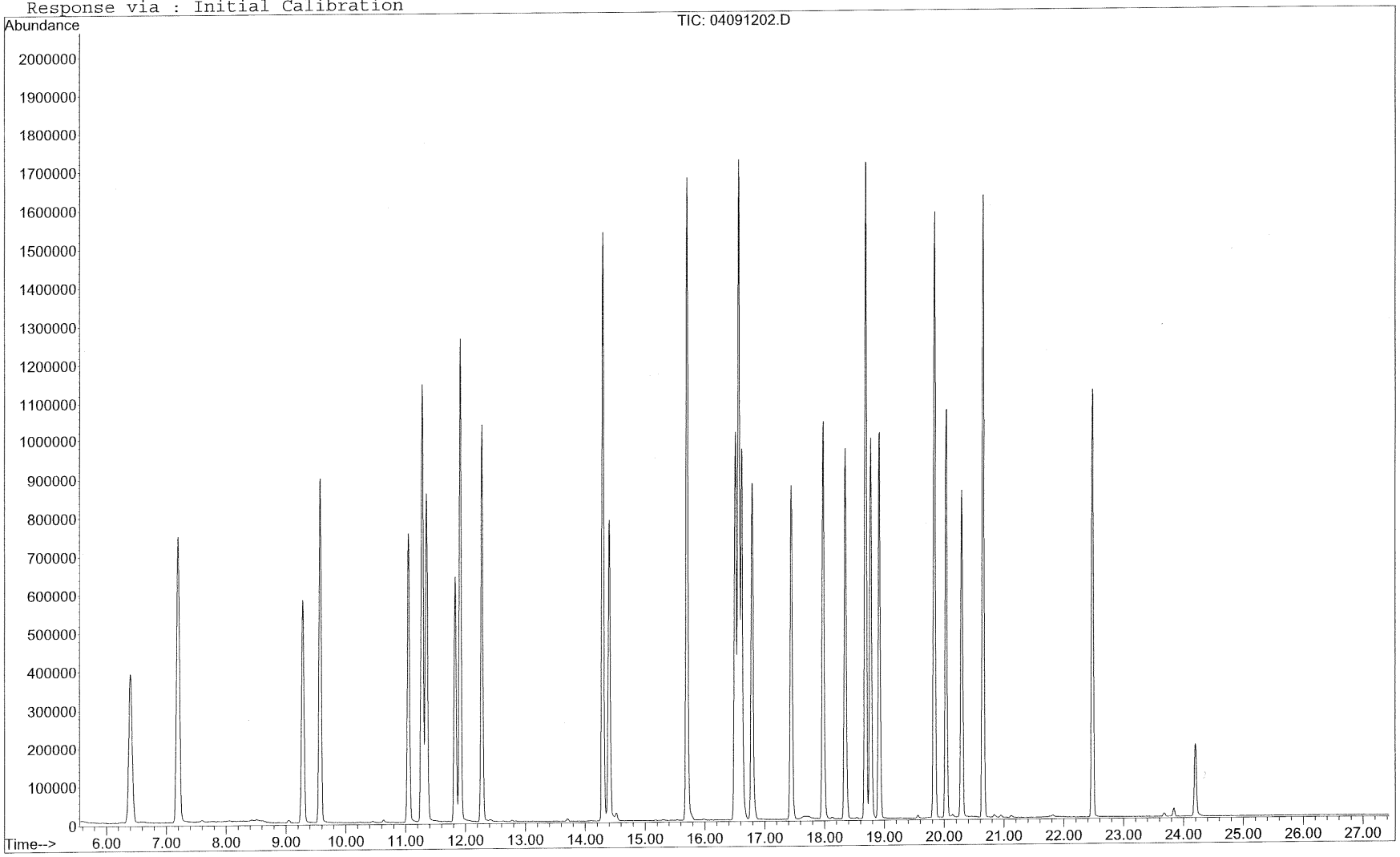
Quantitation Report

Data File : C:\HPCHEM\1\DATA\040912\04091202.D
Acq On : 9 Apr 2012 10:53 am
Sample : CCV VOA9 040912
Misc : CCV MA APH
MS Integration Params: rteint.p
Quant Time: Apr 9 16:57 2012

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

Quant Results File: 040312V9.RES

Method : C:\HPCHEM\1\METHODS\040312V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Apr 04 08:32:52 2012
Response via : Initial Calibration



Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\040312V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Apr 04 08:32:52 2012
Response via : Initial Calibration

Calibration Files
1 =04031203.D 2 =04031204.D 3 =04031205.D
4 =04031206.D 5 =04031207.D 6 =04031208.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)	L1	C5-C8 Aliphatic HC	1.012	0.876	0.860	0.852	0.812	0.828	0.864	E5	8.13
2)	L1	C5-C8 Aliphatic HC	6.532	6.157	6.204	6.162	5.990	6.140	6.206	E4	2.67
3)	L1	C5-C8 Aliphatic HC	7.289	6.817	6.910	6.819	6.637	6.930	6.919	E4	2.95
4)	L1	C5-C8 Aliphatic HC	6.561	6.156	6.201	6.099	6.043	6.186	6.218	E4	2.72
5)	L1	C5-C8 Aliphatic HC	6.952	6.567	6.729	6.688	6.637	6.735	6.724	E4	1.79
6)	L1	C5-C8 Aliphatic HC	6.724	6.497	6.653	6.594	6.602	6.693	6.621	E4	1.15
7)	L1	C5-C8 Aliphatic HC	7.235	6.745	6.812	6.757	6.630	6.773	6.820	E4	2.82
8)	L1	C9-C12 Aliphatic HC	7.047	6.765	6.966	6.959	6.958	6.991	6.923	E4	1.58
9)	L1	C9-C12 Aliphatic HC	7.337	6.781	6.925	6.808	6.822	6.622	6.878	E4	3.23
10)	L1	C9-C12 Aliphatic HC	5.935	5.723	6.075	5.997	5.979	5.901	5.897	E4	2.52
11)	L1	C9-C12 Aliphatic HC	5.698	5.480	5.782	5.762	5.722	5.674	5.681	E4	1.77
12)	L1	C9-C12 Aliphatic HC	4.663	4.544	4.897	4.940	4.834	4.857	4.817	E4	3.29
13)	L1	C9-C12 Aliphatic HC	2.783	2.685	3.002	3.102	3.049	3.059	2.996	E4	6.81
14)	L1	C9-C12 Aliphatic HC	5.385	5.153	5.440	5.433	5.394	5.355	5.364	E4	1.82
15)	L1	C9-C10 Aromatic HC	4.215	4.208	4.462	4.481	4.485	4.649	4.487	E3	5.44
16)	L1	C9-C10 Aromatic HC	4.529	4.390	4.681	4.641	4.684	4.833	4.704	E3	5.28
17)	L1	C9-C10 Aromatic HC	6.661	6.404	6.667	6.762	6.776	6.938	6.790	E3	4.18
18)	L1	C9-C10 Aromatic HC	1.292	1.274	1.358	1.366	1.394	1.425	1.372	E3	5.57
19)	L1	C9-C10 Aromatic HC	4.754	4.653	4.949	4.964	4.945	5.048	4.975	E3	5.51
20)	L1	C9-C10 Aromatic HC	3.082	3.079	3.250	3.283	3.337	3.429	3.303	E3	6.14
21)	L1	C9-C10 Aromatic HC	4.904	4.800	5.058	5.078	5.098	5.259	5.115	E3	5.12
22)		C5-C8 Aliphatic	7.235	6.745	6.812	6.757	6.630	6.773	6.820	E4	2.82
23)	L1	non C5-C8	7.267	6.259	6.328	6.249	6.273	6.388	6.438	E4	5.72
24)	L1	non C5-C8 {2}	4.143	3.945	4.043	4.108	3.841	3.842	3.975	E4	3.12
25)	L1	non C5-C8 {3}	2.923	2.776	2.787	2.922	2.867	3.074	2.898	E4	3.50
26)	L1	non C5-C8 {4}	5.089	4.958	4.976	4.917	4.757	4.853	4.940	E4	2.23
27)	L1	non C5-C8 {5}	4.191	3.872	3.924	4.277	4.047	4.544	4.148	E4	5.51
28)	L1	non C5-C8 {6}	4.668	4.697	4.826	5.011	4.759	5.118	4.915	E4	4.98
29)	L1	non C5-C8 - TOTAL	4.060	4.073	4.205	4.415	4.331	4.646	4.359	E4	6.35
30)		C9-C12 Aliphatic	5.385	5.153	5.440	5.433	5.394	5.355	5.364	E4	1.82
31)	L1	non C9-C12	4.012	3.871	3.926	4.011	4.166	4.399	4.047	E4	4.47
32)	L1	non C9-C12 {2}	4.442	4.350	4.561	4.418	4.589	4.391	4.479	E4	2.30
33)	L1	non C9-C12 {3}	4.648	4.586	4.771	4.754	4.698	4.777	4.753	E4	3.02
34)	L1	non C9-C12 {4}	4.484	4.433	4.590	4.571	4.588	4.632	4.591	E4	2.82
35)	L1	non C9-C12 {5}	2.559	2.459	2.509	2.667	2.638	2.835	2.630	E4	5.04
36)	L1	non C9-C12 - TOTAL	3.179	3.118	3.216	3.247	3.288	3.323	3.256	E4	3.05
37)	L1	C9-C10 Aromatic	4.904	4.800	5.058	5.078	5.098	5.259	5.115	E3	5.12
38)	L1	C9-C10 Aromatic {2}	4.904	4.800	5.058	5.078	5.098	5.259	5.115	E3	5.12
39)	L1	C9-C10 Aromatic - T	4.904	4.800	5.058	5.078	5.098	5.259	5.115	E3	5.12
40)	I	Chlorobenzene-d5	----------ISTD----------								
41)	S	4-Bromofluorobenzen	0.098	0.098	0.099	0.098	0.099	0.098	0.098		0.49

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

Compound List Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\040312V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Apr 04 08:32:52 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

040312V9.M Wed Apr 04 09:28:30 2012

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\040312\04031211.D Vial: 12
Acq On : 3 Apr 2012 6:01 pm Operator: RACHEL HILL
Sample : ICV VOA9 040312 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\040312V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Apr 04 08:32:52 2012
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	C5-C8 Aliphatic HC	29.200	32.390	-10.9	109	-0.01
2	L1	C5-C8 Aliphatic HC {2}	36.400	39.562	-8.7	110	-0.02
3	L1	C5-C8 Aliphatic HC {3}	41.800	45.062	-7.8	109	-0.02
4	L1	C5-C8 Aliphatic HC {4}	35.400	38.574	-9.0	110	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	45.310	-7.4	110	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	53.082	-8.3	110	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	254.119	-8.6	110	0.20
8	L1	C9-C12 Aliphatic HC	54.600	59.063	-8.2	111	-0.01
9	L1	C9-C12 Aliphatic HC {2}	54.600	59.110	-8.3	110	0.00
10	L1	C9-C12 Aliphatic HC {3}	61.200	65.920	-7.7	111	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	64.901	-6.7	111	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	73.833	-5.5	112	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	78.452	-1.9	114	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	403.357	-6.7	111	-0.01
15	L1	C9-C10 Aromatic HC	51.700	54.501	-5.4	112	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	54.809	-7.0	115	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	55.385	-6.1	112	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	63.835	-8.7	117	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	56.801	-8.0	115	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	63.270	-7.8	116	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	284.987	-7.1	114	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.00#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.41#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.30#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-11.07#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.84#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.29#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.42#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.41#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.54#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.52#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.63#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.80#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.45#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.35#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.52#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.62#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.62#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	0.00
40	I	Chlorobenzene-d5	12.500	12.500	0.0	106	0.00
41	S	4-Bromofluorobenzene	89.500	88.789	0.8	106	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
04031211.D 040312V9.M Wed Apr 04 09:28:41 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\040312\04031211.D Vial: 12
Acq On : 3 Apr 2012 6:01 pm Operator: RACHEL HILL
Sample : ICV VOA9 040312 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 4 9:37 2012 Quant Results File: 040312V9.RES

Quant Method : C:\HPCHEM\1\METHODS\040312V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Apr 04 08:32:52 2012
Response via : Initial Calibration
DataAcq Meth : 040312V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	702663	12.50	ug/m3	0.00
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.35	95	491589	88.79	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 99.21%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.20	TIC	2797110	32.39	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.58	TIC	2455133	39.56	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	3117893	45.06	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	2398692	38.57	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	3046517	45.31	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.30	TIC	3514812	53.08	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.20	TIC	17330157m	254.12	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	4088908	59.06	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	4065405	59.11	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3887394	65.92	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.84	TIC	3686899	64.90	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.65	TIC	3556711	73.83	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.48	TIC	2350794	78.45	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	21636111m	403.36	ug/m3	
15) C9-C10 Aromatic HC	17.98	120	244567	54.50	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	257823	54.81	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	376045	55.38	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.03	120	87587	63.84	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.30	120	282610	56.80	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.03	134	208983	63.27	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.98	TIC	1457615m	284.99	ug/m3	

(#) = qualifier out of range (m) = manual integration
04031211.D 040312V9.M Wed Apr 04 09:29:06 2012 Page 1

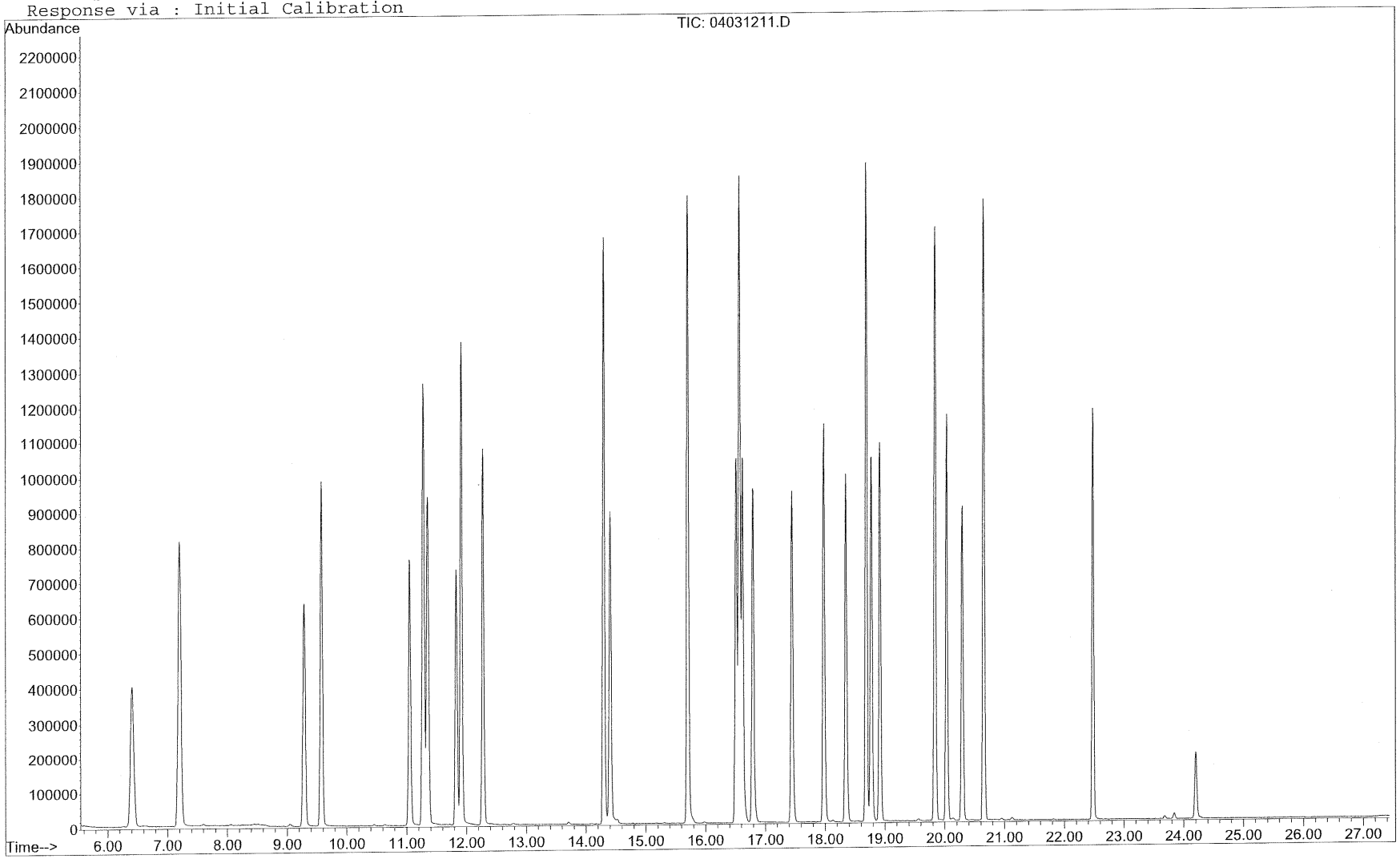
Quantitation Report

Data File : C:\HPCHEM\1\DATA\040312\04031211.D
Acq On : 3 Apr 2012 6:01 pm
Sample : ICV VOA9 040312
Misc : CCV MA APH
MS Integration Params: rteint.p
Quant Time: Apr 4 9:37 2012

Vial: 12
Operator: RACHEL HILL
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 040312V9.RES

Method : C:\HPCHEM\1\METHODS\040312V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Apr 04 08:32:52 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: GC-TCD 1_120327A **Run No.:** 47216

Analytical Run Date: 3/27/2012 **InstrumentID:** GC-TCD 1

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

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

Column Length: 2m

Run Comments: PR 4-2-12 MSB 040212rsl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
MBLK-032712 TCD	ASTM-D2504	MBLK	R47216	3/27/2012 9:32:00 AM	Robert Lynch		
CCV 032712 TCD-A	ASTM-D2504	CCV	R47216	3/27/2012 9:48:00 AM	Robert Lynch		
LCS-032712 TCD	ASTM-D2504	LCS	R47216	3/27/2012 10:05:00 AM	Robert Lynch		
CRQL 032712 TCD-A	ASTM-D2504	CRQL	R47216	3/27/2012 10:39:00 AM	Robert Lynch		
1203608-008B	ASTM-D2504	SAMP	R47216	3/27/2012 10:57:00 AM	Robert Lynch		
1203608-019B	ASTM-D2504	SAMP	R47216	3/27/2012 11:13:00 AM	Robert Lynch		
1203608-020B	ASTM-D2504	SAMP	R47216	3/27/2012 11:29:00 AM	Robert Lynch		
1203608-021B	ASTM-D2504	SAMP	R47216	3/27/2012 11:47:00 AM	Robert Lynch		
1203608-022B	ASTM-D2504	SAMP	R47216	3/27/2012 12:08:00 PM	Robert Lynch		
1203608-023B	ASTM-D2504	SAMP	R47216	3/27/2012 12:26:00 PM	Robert Lynch		
1203608-024B	ASTM-D2504	SAMP	R47216	3/27/2012 12:41:00 PM	Robert Lynch		
1203608-025B	ASTM-D2504	SAMP	R47216	3/27/2012 1:05:00 PM	Robert Lynch		
1203608-026B	ASTM-D2504	SAMP	R47216	3/27/2012 1:20:00 PM	Robert Lynch		
1203608-027B	ASTM-D2504	SAMP	R47216	3/27/2012 1:37:00 PM	Robert Lynch		
1203608-027BDUP	ASTM-D2504	DUP	R47216	3/27/2012 1:52:00 PM	Robert Lynch		
CCV 032712 TCD-B	ASTM-D2504	CCV	R47216	3/27/2012 2:07:00 PM	Robert Lynch		
1203608-028B	ASTM-D2504	SAMP	R47216	3/27/2012 2:22:00 PM	Robert Lynch		
1203608-029B	ASTM-D2504	SAMP	R47216	3/27/2012 2:37:00 PM	Robert Lynch		
1203732-001B	ASTM-D2504	SAMP	R47216	3/27/2012 2:52:00 PM	Robert Lynch		
1203732-002B	ASTM-D2504	SAMP	R47216	3/27/2012 3:09:00 PM	Robert Lynch		
1203732-003B	ASTM-D2504	SAMP	R47216	3/27/2012 3:25:00 PM	Robert Lynch		
1203732-004B	ASTM-D2504	SAMP	R47216	3/27/2012 3:40:00 PM	Robert Lynch		
1203732-005B	ASTM-D2504	SAMP	R47216	3/27/2012 3:55:00 PM	Robert Lynch		
1203732-006B	ASTM-D2504	SAMP	R47216	3/27/2012 4:11:00 PM	Robert Lynch		
1203732-007B	ASTM-D2504	SAMP	R47216	3/27/2012 4:26:00 PM	Robert Lynch		
CCV 032712 TCD-C	ASTM-D2504	CCV	R47216	3/27/2012 4:42:00 PM	Robert Lynch		
CRQL 032712 TCD-C	ASTM-D2504	CRQL	R47216	3/27/2012 5:01:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

11-Apr-12

RunNo 47216

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
924523	MBLK-032712 TCD	ASTM-D2504	MBLK	...TA\032712\0327	3/27/2012 9:32:0	1	R47216		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
923269	CCV 032712 TCD-A	ASTM-D2504	CCV	...TA\032712\0327	3/27/2012 9:48:0	1	R47216		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.657	2.657		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Carbon Monoxide	A	%	2.733	2.733		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	%	2.11	2.11		2	0	0	0.025	0.5	0	106%	85	115	0%	
Nitrogen	A	%	2.776	2.776		2.5	0	0	0.025	0.1	0	111%	85	115	0%	
Oxygen	A	%	2.509	2.509		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
923270	LCS-032712 TCD	ASTM-D2504	LCS	...TA\032712\0327	3/27/2012 10:05:	1	R47216		0	923269	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.667	2.667		2.5	0	0	0.025	0.1	0	107%	70	130	0%	
Carbon Monoxide	A	%	2.74	2.74		2.5	0	0	0.025	0.1	0	110%	70	130	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
923283	CCV 032712 TCD-B	ASTM-D2504	CCV	...TA\032712\0327	3/27/2012 2:07:0	1	R47216		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.651	2.651		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Carbon Monoxide	A	%	2.732	2.732		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	%	2.108	2.108		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.666	2.666		2.5	0	0	0.025	0.1	0	107%	85	115	0%	
Oxygen	A	%	2.48	2.48		2.5	0	0	0.025	0.1	0	99%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
923284	1203608-028B (Container-01 of 01)	ASTM-D2504	SAMP	...TA\032712\0327	3/27/2012 2:22:0	1	R47216		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.054	0.054		0	0	0	0.025	0.1	0	0%	0	0	0%	J
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	78.512	78.512		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	21.016	21.016		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
923285	1203608-029B (Container-01 of 01)	ASTM-D2504	SAMP	...TA\032712\0327	3/27/2012 2:37:0	1	R47216		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.13	0.13		0	0	0	0.025	0.1	0	0%	0	0	0%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	78.483	78.483		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
923293	CCV 032712 TCD-C	ASTM-D2504	CCV	..TA\032712\0327	3/27/2012 4:42:0	1	R47216		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.673	2.673		2.5	0	0	0.025	0.1	0	107%	85	115	0%	
Carbon Monoxide	A	%	2.723	2.723		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	%	2.099	2.099		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.651	2.651		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Oxygen	A	%	2.469	2.469		2.5	0	0	0.025	0.1	0	99%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
923294	CRQL 032712 TCD-C	ASTM-D2504	CRQL	..TA\032712\0327	3/27/2012 5:01:0	1	R47216		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.307	0.307		0.3	0	0	0.025	0.1	0	102%	80	120	0%	
Carbon Monoxide	A	%	0.144	0.144		0.14	0	0	0.025	0.1	0	103%	80	120	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	80	120	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	80	120	0%	
Methane	A	%	0.092	0.092		0.09	0	0	0.025	0.5	0	102%	80	120	0%	
Nitrogen	A	%	1.453	1.453		1.39	0	0	0.025	0.1	0	105%	80	120	0%	
Oxygen	A	%	0.088	0.088		0.08	0	0	0.025	0.1	0	110%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\032712\03271202.D Vial: 1
Acq On : 27 Mar 2012 9:48 am Operator:
Sample : CCV 032712 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title : 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	2.509	-0.4	0	0.06
2	Nitrogen	2.500	2.776	-11.0	0	0.04
3	Carbon Monoxide	2.500	2.733	-9.3	0	0.01
4	Methane	2.000	2.110	-5.5	0	0.03
5	Carbon dioxide	2.500	2.657	-6.3	0	0.02

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\032712\03271202.D Vial: 1
Acq On : 27 Mar 2012 9:48 am Operator:
Sample : CCV 032712 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Mar 29 9:27 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 :

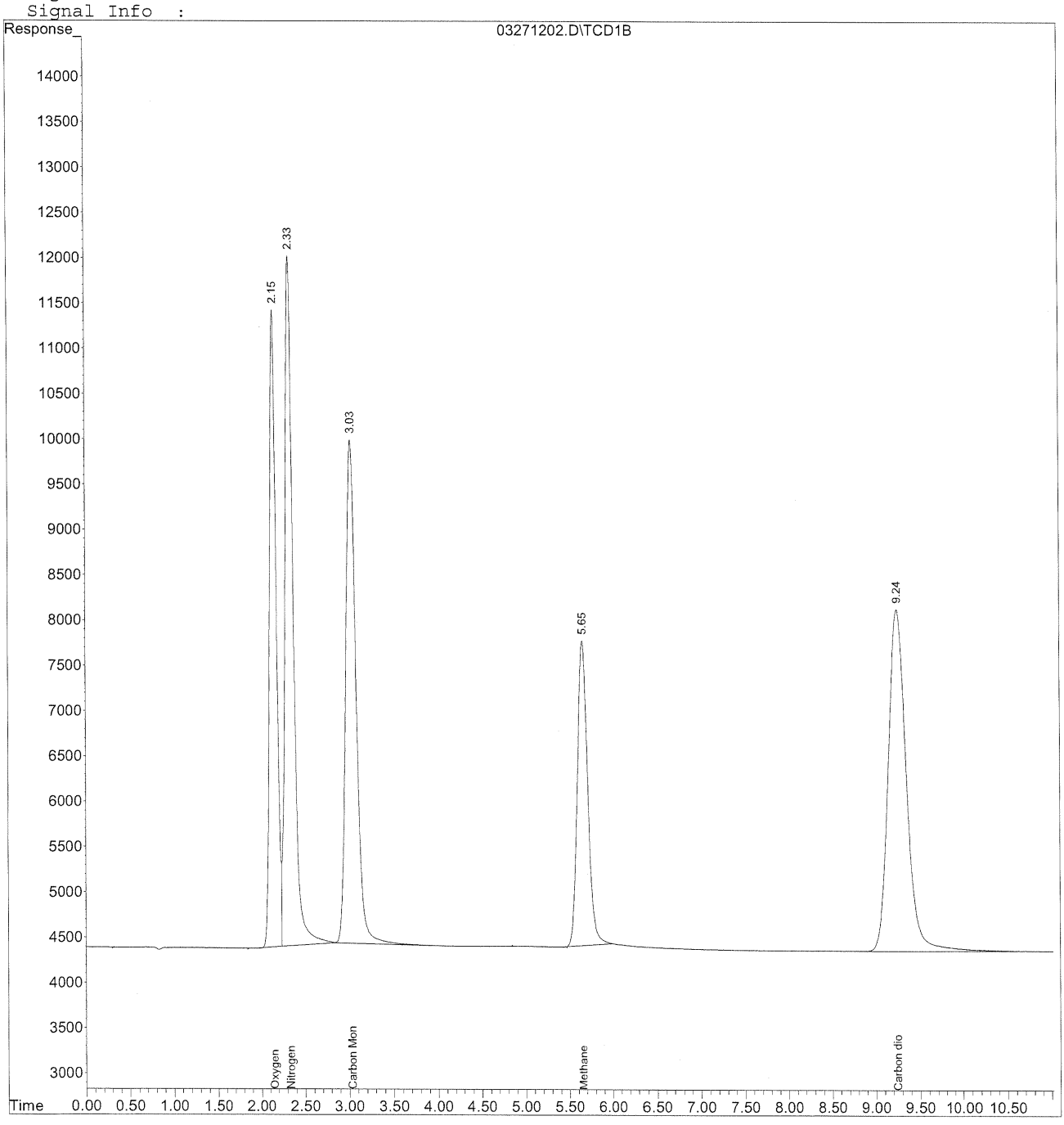
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	388748	2.509 %
2)	Nitrogen	2.34	487230	2.776 %
3)	Carbon Monoxide	3.03	440495	2.733 %
4)	Methane	5.66	284910	2.110 %
5)	Carbon dioxide	9.25	545727	2.657 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\032712\03271202.D Vial: 1
Acq On : 27 Mar 2012 9:48 am Operator:
Sample : CCV 032712 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Mar 29 9:27 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\032712\03271216.D Vial: 1
Acq On : 27 Mar 2012 2:07 pm Operator:
Sample : CCV 032712 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title : D2504 air analysis
Last Update : Wed Jan 04 17:34:10 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.480	0.8	0	0.05
2	Nitrogen	2.500	2.666	-6.6	0	0.03
3	Carbon Monoxide	2.500	2.732	-9.3	0	0.00
4	Methane	2.000	2.108	-5.4	0	0.03
5	Carbon dioxide	2.500	2.651	-6.0	0	0.01

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\032712\03271216.D Vial: 1
Acq On : 27 Mar 2012 2:07 pm Operator:
Sample : CCV 032712 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Mar 29 9:33 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 :

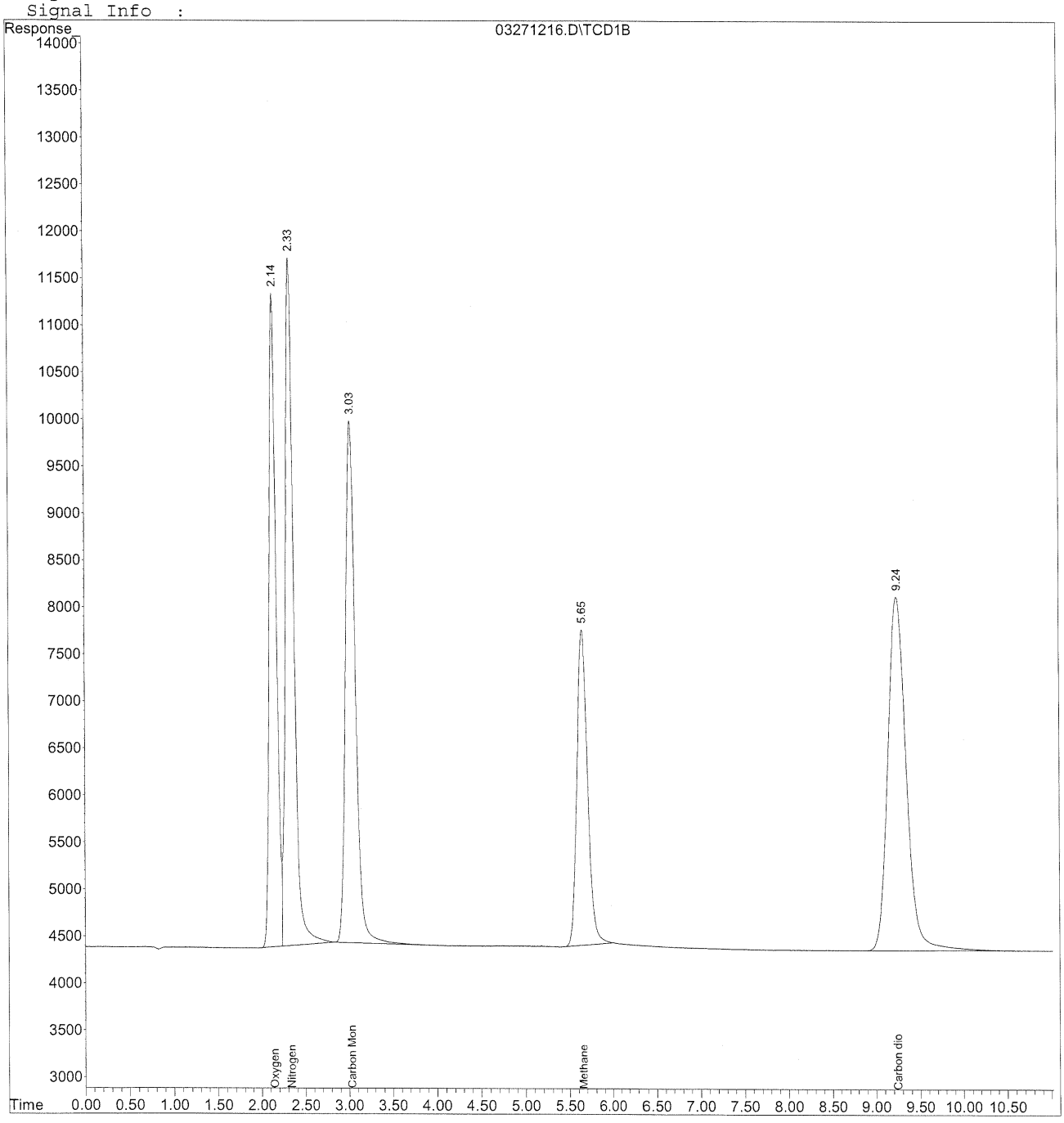
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	384123	2.480 %
2)	Nitrogen	2.33	467982	2.666 %
3)	Carbon Monoxide	3.03	440370	2.732 %
4)	Methane	5.65	284728	2.108 %
5)	Carbon dioxide	9.24	544475	2.651 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\032712\03271216.D Vial: 1
Acq On : 27 Mar 2012 2:07 pm Operator:
Sample : CCV 032712 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Mar 29 9:33 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\032712\03271226.D Vial: 1
Acq On : 27 Mar 2012 4:42 pm Operator:
Sample : CCV 032712 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title : D2504 air analysis
Last Update : Wed Jan 04 17:34:10 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.469	1.2	0	0.05
2	Nitrogen	2.500	2.651	-6.0	0	0.03
3	Carbon Monoxide	2.500	2.723	-8.9	0	0.00
4	Methane	2.000	2.099	-5.0	0	0.03
5	Carbon dioxide	2.500	2.673	-6.9	0	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\032712\03271226.D Vial: 1
Acq On : 27 Mar 2012 4:42 pm Operator:
Sample : CCV 032712 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Mar 29 9:39 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 :

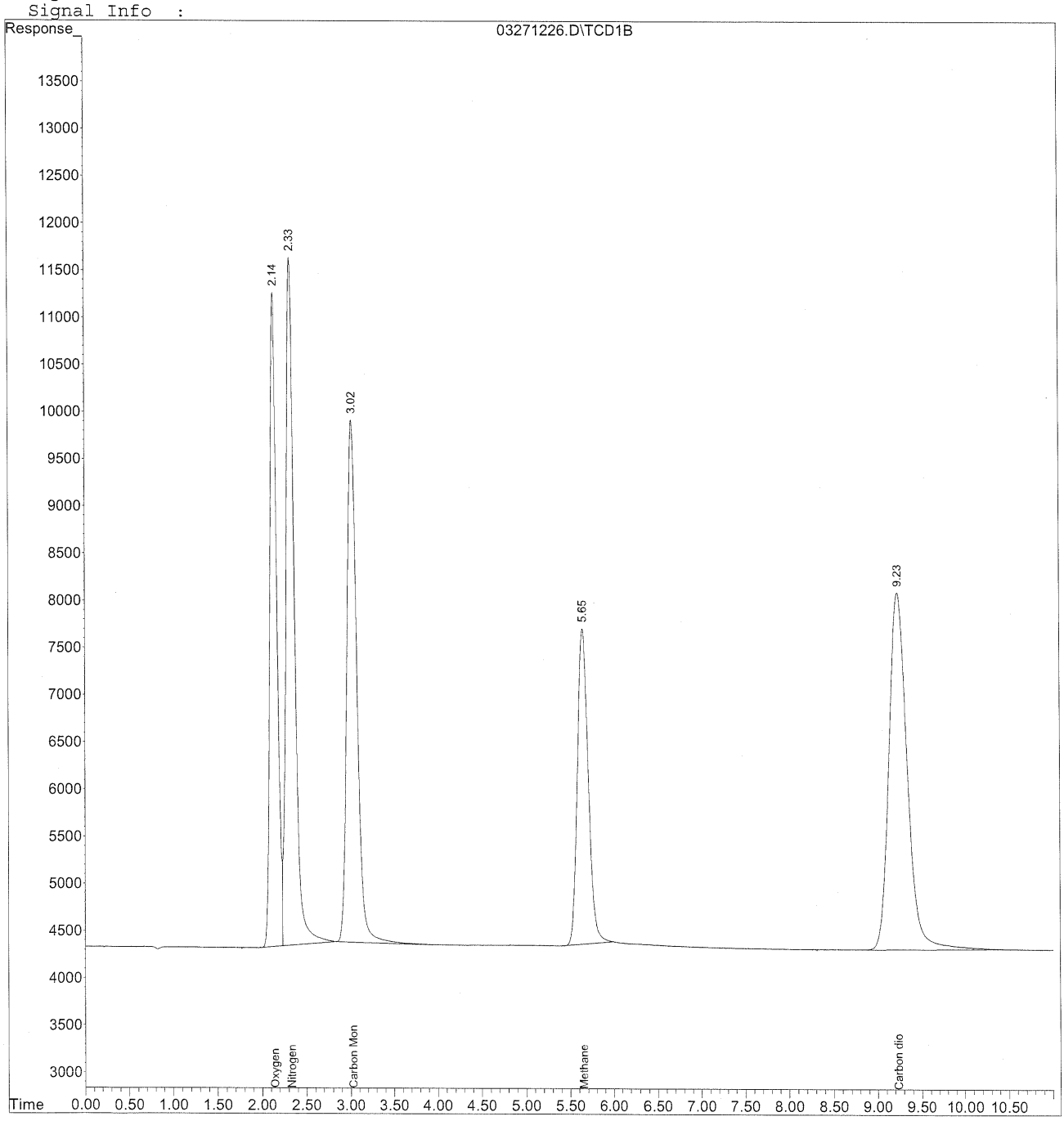
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	382468	2.469 %
2)	Nitrogen	2.33	465283	2.651 %
3)	Carbon Monoxide	3.03	438859	2.723 %
4)	Methane	5.65	283528	2.099 %
5)	Carbon dioxide	9.24	548882	2.673 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\032712\03271226.D Vial: 1
Acq On : 27 Mar 2012 4:42 pm Operator:
Sample : CCV 032712 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Mar 29 9:39 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_120328A **Run No.:** 47217

Analytical Run Date: 3/28/2012 **InstrumentID:** GC-TCD 1

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

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

Column Length: 2m

Run Comments: ch rev 3/30/12/PR 032912JDH

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
MBLK-032812 TCD	ASTM-D2504	MBLK	R47217	3/28/2012 11:22:00 AM	Celeste Hoitash		
CCV 032812 TCD-A	ASTM-D2504	CCV	R47217	3/28/2012 11:45:00 AM	Celeste Hoitash		
LCS-032812 TCD	ASTM-D2504	LCS	R47217	3/28/2012 12:00:00 PM	Celeste Hoitash		
CRQL 032812 TCD-A	ASTM-D2504	CRQL	R47217	3/28/2012 12:18:00 PM	Celeste Hoitash		
1203732-008B	ASTM-D2504	SAMP	R47217	3/28/2012 12:49:00 PM	Celeste Hoitash		
1203732-009B	ASTM-D2504	SAMP	R47217	3/28/2012 1:50:00 PM	Celeste Hoitash		
1203732-010B	ASTM-D2504	SAMP	R47217	3/28/2012 2:15:00 PM	Celeste Hoitash		
1203732-011B	ASTM-D2504	SAMP	R47217	3/28/2012 2:39:00 PM	Celeste Hoitash		
1203732-012B	ASTM-D2504	SAMP	R47217	3/28/2012 2:57:00 PM	Celeste Hoitash		
1203732-013B	ASTM-D2504	SAMP	R47217	3/28/2012 3:13:00 PM	Celeste Hoitash		
1203732-014B	ASTM-D2504	SAMP	R47217	3/28/2012 3:42:00 PM	Celeste Hoitash		
1203732-015B	ASTM-D2504	SAMP	R47217	3/28/2012 4:01:00 PM	Celeste Hoitash		
1203732-016B	ASTM-D2504	SAMP	R47217	3/28/2012 4:47:00 PM	Celeste Hoitash		
1203732-017B	ASTM-D2504	SAMP	R47217	3/28/2012 5:23:00 PM	Celeste Hoitash		
1203732-017BDUP	ASTM-D2504	DUP	R47217	3/28/2012 5:42:00 PM	Celeste Hoitash		
CCV 032712 TCD-B	ASTM-D2504	CCV	R47217	3/28/2012 5:58:00 PM	Celeste Hoitash		
CRQL 032812 TCD-B	ASTM-D2504	CRQL	R47217	3/28/2012 6:13:00 PM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

11-Apr-12

RunNo 47217

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
923296	MBLK-032812 TCD	ASTM-D2504	MBLK	...TA\032812\0328	3/28/2012 11:22:	1	R47217		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
923297	CCV 032812 TCD-A	ASTM-D2504	CCV	...TA\032812\0328	3/28/2012 11:45:	1	R47217		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.638	2.638		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Carbon Monoxide	A	%	2.678	2.678		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	%	2.095	2.095		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.59	2.59		2.5	0	0	0.025	0.1	0	104%	85	115	0%	
Oxygen	A	%	2.452	2.452		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
923298	LCS-032812 TCD	ASTM-D2504	LCS	...TA\032812\0328	3/28/2012 12:00:	1	R47217		0	923297	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.577	2.577		2.5	0	0	0.025	0.1	0	103%	70	130	0%	
Carbon Monoxide	A	%	2.672	2.672		2.5	0	0	0.025	0.1	0	107%	70	130	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
923311	CCV 032712 TCD-B	ASTM-D2504	CCV	..TA\032812\0328	3/28/2012 5:58:0	1	R47217		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.585	2.585		2.5	0	0	0.025	0.1	0	103%	85	115	0%	
Carbon Monoxide	A	%	2.658	2.658		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	%	2.073	2.073		2	0	0	0.025	0.5	0	104%	85	115	0%	
Nitrogen	A	%	2.872	2.872		2.5	0	0	0.025	0.1	0	115%	85	115	0%	
Oxygen	A	%	2.512	2.512		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
923312	CRQL 032812 TCD-B	ASTM-D2504	CRQL	..TA\032812\0328	3/28/2012 6:13:0	1	R47217		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.305	0.305		0.3	0	0	0.025	0.1	0	102%	80	120	0%	
Carbon Monoxide	A	%	0.147	0.147		0.14	0	0	0.025	0.1	0	105%	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	%	0.089	0.089		0.09	0	0	0.025	0.5	0	99%	80	120	0%	
Nitrogen	A	%	1.404	1.404		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\032812\03281202.D Vial: 1
Acq On : 28 Mar 2012 11:45 am Operator:
Sample : CCV 032812 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title : 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	2.452	1.9	0	0.05
2	Nitrogen	2.500	2.590	-3.6	0	0.03
3	Carbon Monoxide	2.500	2.678	-7.1	0	0.00
4	Methane	2.000	2.095	-4.8	0	0.02
5	Carbon dioxide	2.500	2.638	-5.5	0	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\032812\03281202.D Vial: 1
Acq On : 28 Mar 2012 11:45 am Operator:
Sample : CCV 032812 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Mar 28 18:19 2012 Quant Results File: 122211.RES

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

Volume Inj. :
Signal Phase :
Signal Info :

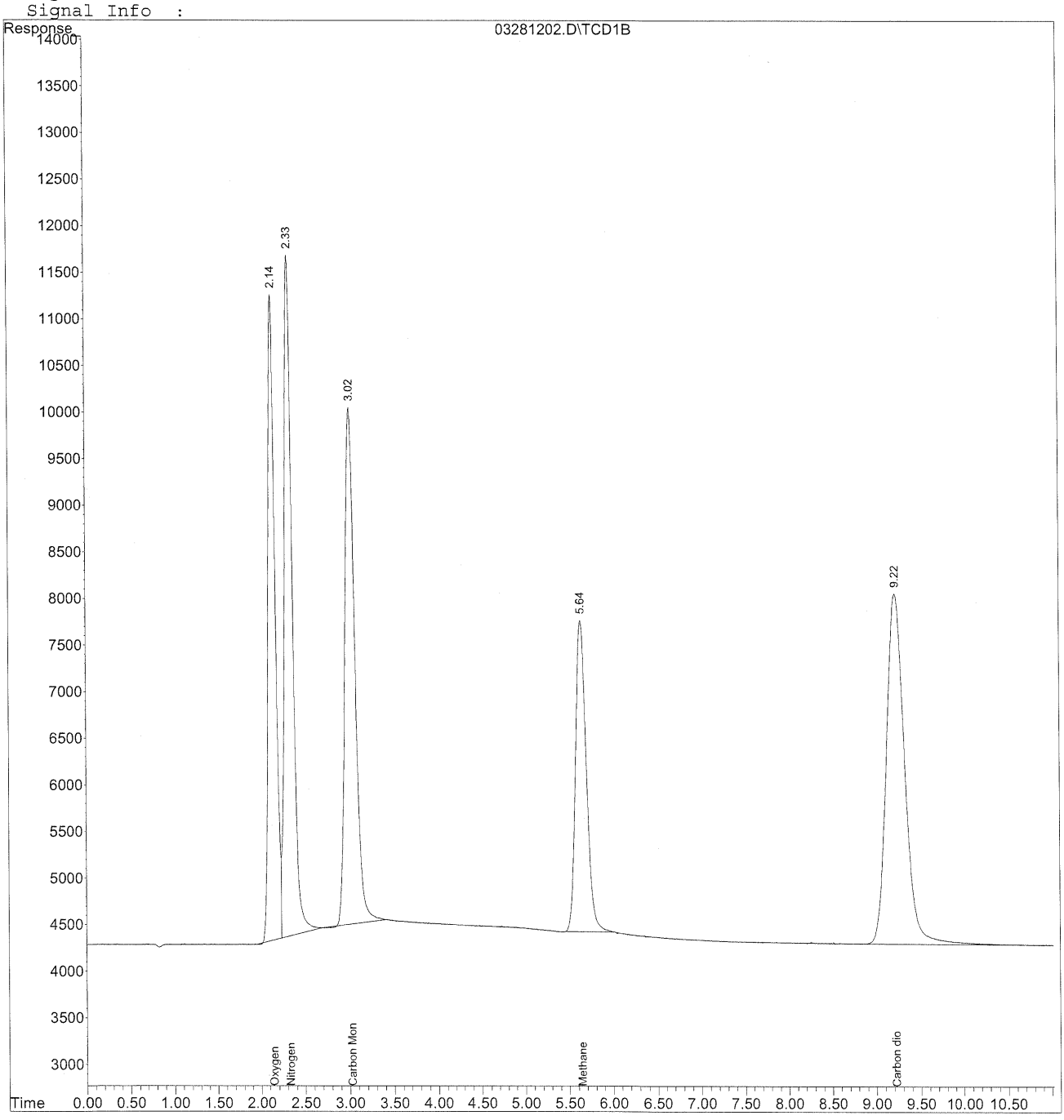
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1)	Oxygen	2.14	379803	2.452	%
2)	Nitrogen	2.33	454603	2.590	%
3)	Carbon Monoxide	3.02	431602	2.678	%
4)	Methane	5.64	282907	2.095	%
5)	Carbon dioxide	9.22	541671	2.638	%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\032812\03281202.D Vial: 1
Acq On : 28 Mar 2012 11:45 am Operator:
Sample : CCV 032812 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Mar 28 18:19 2012 Quant Results File: 122211.RES

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

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\032812\03281216.D Vial: 1
Acq On : 28 Mar 2012 5:58 pm Operator:
Sample : CCV 032712 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title : 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	2.512	-0.5	0	0.05
2	Nitrogen	2.500	2.872	-14.9	0	0.03
3	Carbon Monoxide	2.500	2.658	-6.3	0	0.00
4	Methane	2.000	2.073	-3.6	0	0.02
5	Carbon dioxide	2.500	2.585	-3.4	0	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\032812\03281216.D Vial: 1
Acq On : 28 Mar 2012 5:58 pm Operator:
Sample : CCV 032712 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Mar 28 18:12 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 :

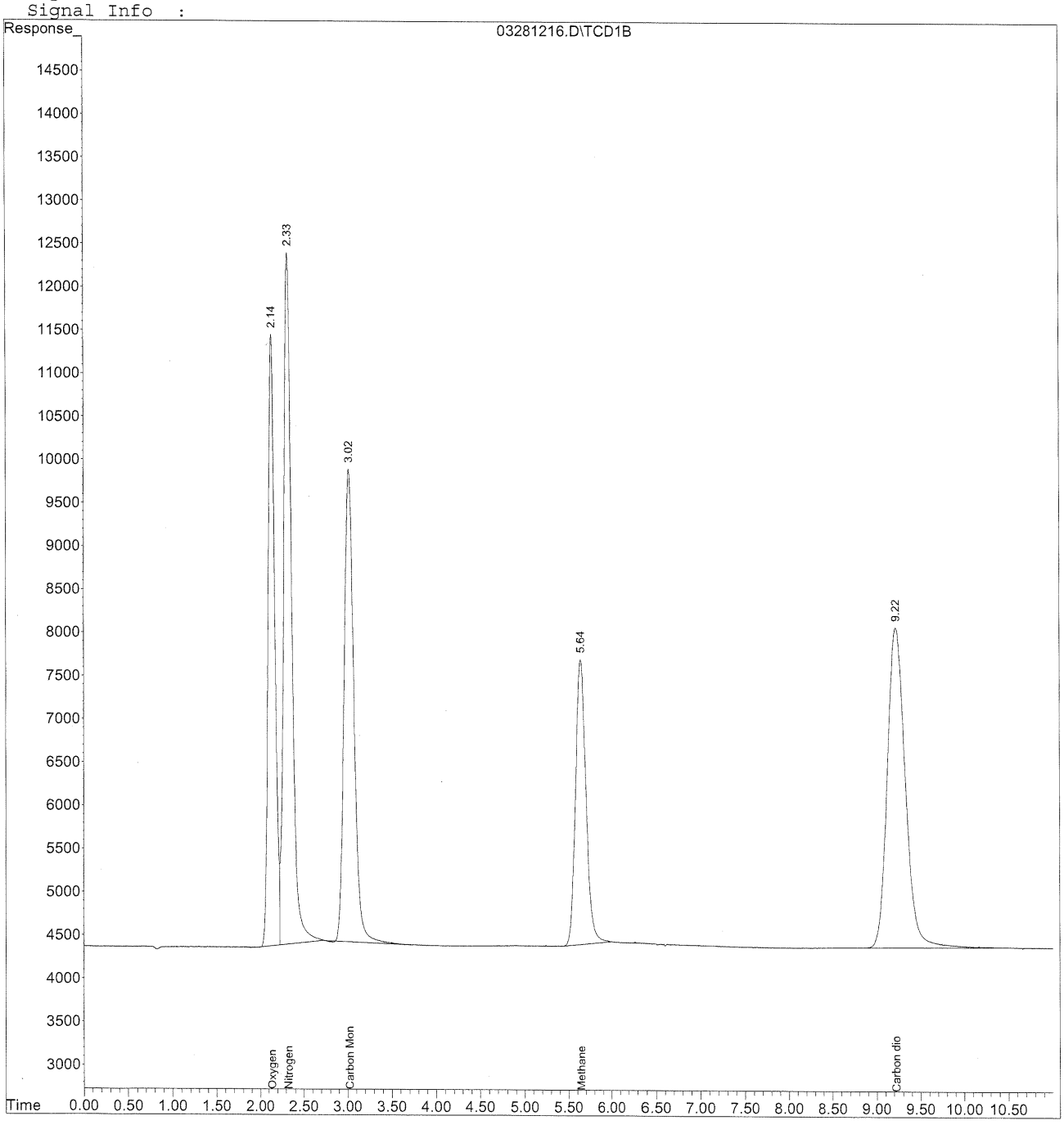
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	389143	2.512 %
2)	Nitrogen	2.33	504139	2.872 %
3)	Carbon Monoxide	3.02	428429	2.658 %
4)	Methane	5.65	280030	2.073 %
5)	Carbon dioxide	9.22	530861	2.585 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\032812\03281216.D Vial: 1
Acq On : 28 Mar 2012 5:58 pm Operator:
Sample : CCV 032712 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Mar 28 18:12 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 :



RTI Laboratories

Run ID: GC-TCD 1_120329A **Run No.:** 47258

Analytical Run Date: 3/29/2012 **InstrumentID:** GC-TCD 1

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

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

Column Length: 2m

Run Comments: PR 4-2-12 MSB 040212rsl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
MBLK-032912 TCD	ASTM-D2504	MBLK	R47258	3/29/2012 9:31:00 AM	Robert Lynch		
CCV 032912 TCD-A	ASTM-D2504	CCV	R47258	3/29/2012 9:47:00 AM	Robert Lynch		
LCS-032912 TCD	ASTM-D2504	LCS	R47258	3/29/2012 10:06:00 AM	Robert Lynch		
CRQL 032912 TCD-A	ASTM-D2504	CRQL	R47258	3/29/2012 10:47:00 AM	Robert Lynch		
1203732-018B	ASTM-D2504	SAMP	R47258	3/29/2012 11:02:00 AM	Robert Lynch		
1203732-019B	ASTM-D2504	SAMP	R47258	3/29/2012 11:19:00 AM	Robert Lynch		
1203732-020B	ASTM-D2504	SAMP	R47258	3/29/2012 11:34:00 AM	Robert Lynch		
1203732-021B	ASTM-D2504	SAMP	R47258	3/29/2012 11:56:00 AM	Robert Lynch		
1203732-022B	ASTM-D2504	SAMP	R47258	3/29/2012 12:11:00 PM	Robert Lynch		
1203732-023B	ASTM-D2504	SAMP	R47258	3/29/2012 12:27:00 PM	Robert Lynch		
1203732-024B	ASTM-D2504	SAMP	R47258	3/29/2012 12:42:00 PM	Robert Lynch		
1203732-025B	ASTM-D2504	SAMP	R47258	3/29/2012 12:58:00 PM	Robert Lynch		
1203732-026B	ASTM-D2504	SAMP	R47258	3/29/2012 1:13:00 PM	Robert Lynch		
1203732-027B	ASTM-D2504	SAMP	R47258	3/29/2012 1:28:00 PM	Robert Lynch		
1203732-027BDUP	ASTM-D2504	DUP	R47258	3/29/2012 1:43:00 PM	Robert Lynch		
CCV 032912 TCD-B	ASTM-D2504	CCV	R47258	3/29/2012 1:59:00 PM	Robert Lynch		
1203732-029B	ASTM-D2504	SAMP	R47258	3/29/2012 2:14:00 PM	Robert Lynch		
1203732-030B	ASTM-D2504	SAMP	R47258	3/29/2012 2:28:00 PM	Robert Lynch		
1203732-031B	ASTM-D2504	SAMP	R47258	3/29/2012 2:43:00 PM	Robert Lynch		
1203732-032B	ASTM-D2504	SAMP	R47258	3/29/2012 2:58:00 PM	Robert Lynch		
1203732-033B	ASTM-D2504	SAMP	R47258	3/29/2012 3:13:00 PM	Robert Lynch		
1203732-034B	ASTM-D2504	SAMP	R47258	3/29/2012 3:30:00 PM	Robert Lynch		
1203732-035B	ASTM-D2504	SAMP	R47258	3/29/2012 3:45:00 PM	Robert Lynch		
1203732-036B	ASTM-D2504	SAMP	R47258	3/29/2012 4:38:00 PM	Robert Lynch		
1203732-037B	ASTM-D2504	SAMP	R47258	3/29/2012 4:53:00 PM	Robert Lynch		
CCV 032912 TCD-C	ASTM-D2504	CCV	R47258	3/29/2012 5:42:00 PM	Robert Lynch		
CRQL 032912 TCD-C	ASTM-D2504	CRQL	R47258	3/29/2012 5:59:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

11-Apr-12

RunNo 47258

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
923866	MBLK-032912 TCD	ASTM-D2504	MBLK	...TA\032912\0329	3/29/2012 9:31:0	1	R47258		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
923867	CCV 032912 TCD-A	ASTM-D2504	CCV	...TA\032912\0329	3/29/2012 9:47:0	1	R47258		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.615	2.615		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Carbon Monoxide	A	%	2.675	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	%	2.243	2.243		2	0	0	0.025	0.5	0	112%	85	115	0%	
Nitrogen	A	%	2.77	2.77		2.5	0	0	0.025	0.1	0	111%	85	115	0%	
Oxygen	A	%	2.493	2.493		2.5	0	0	0.025	0.1	0	100%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
923868	LCS-032912 TCD	ASTM-D2504	LCS	...TA\032912\0329	3/29/2012 10:06:	1	R47258		0	923867	

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	2.615	0.025	0.1	0	107%	70	130	2%	
Carbon Monoxide	A	%	2.699	2.699		2.5	0	2.675	0.025	0.1	0	108%	70	130	1%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
924546	CCV 032912 TCD-B	ASTM-D2504	CCV	...TA\032912\0329	3/29/2012 1:59:0	1	R47258		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.63	2.63		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Carbon Monoxide	A	%	2.719	2.719		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	%	2.073	2.073		2	0	0	0.025	0.5	0	104%	85	115	0%	
Nitrogen	A	%	2.729	2.729		2.5	0	0	0.025	0.1	0	109%	85	115	0%	
Oxygen	A	%	2.491	2.491		2.5	0	0	0.025	0.1	0	100%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
923882	1203732-029B (Container-01 of 01)	ASTM-D2504	SAMP	...TA\032912\0329	3/29/2012 2:14:0	1	R47258		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.457	0.457		0	0	0	0.025	0.1	0	0%	0	0	0%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	78.976	78.976		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	19.605	19.605		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
923883	1203732-030B (Container-01 of 01)	ASTM-D2504	SAMP	...TA\032912\0329	3/29/2012 2:28:0	1	R47258		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.157	0.157		0	0	0	0.025	0.1	0	0%	0	0	0%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	78.878	78.878		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
923891	CCV 032912 TCD-C	ASTM-D2504	CCV	‹TA\032912\0329	3/29/2012 5:42:0	1	R47258		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.634	2.634		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Carbon Monoxide	A	%	2.707	2.707		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.156	2.156		2	0	0	0.025	0.5	0	108%	85	115	0%	
Nitrogen	A	%	2.663	2.663		2.5	0	0	0.025	0.1	0	107%	85	115	0%	
Oxygen	A	%	2.485	2.485		2.5	0	0	0.025	0.1	0	99%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
923892	CRQL 032912 TCD-C	ASTM-D2504	CRQL	‹TA\032912\0329	3/29/2012 5:59:0	1	R47258		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.31	0.31		0.3	0	0	0.025	0.1	0	103%	80	120	0%	
Carbon Monoxide	A	%	0.149	0.149		0.14	0	0	0.025	0.1	0	106%	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	%	0.089	0.089		0.09	0	0	0.025	0.5	0	99%	80	120	0%	
Nitrogen	A	%	1.424	1.424		1.39	0	0	0.025	0.1	0	102%	80	120	0%	
Oxygen	A	%	0.075	0.075		0.08	0	0	0.025	0.1	0	94%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\032912\03291202.D Vial: 1
Acq On : 29 Mar 2012 9:47 am Operator:
Sample : CCV 032912 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title : D2504 air analysis
Last Update : Wed Jan 04 17:34:10 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.493	0.3	0	0.05
2	Nitrogen	2.500	2.770	-10.8	0	0.03
3	Carbon Monoxide	2.500	2.675	-7.0	0	0.00
4	Methane	2.000	2.243	-12.1	0	0.03
5	Carbon dioxide	2.500	2.615	-4.6	0	0.02

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\032912\03291202.D Vial: 1
Acq On : 29 Mar 2012 9:47 am Operator:
Sample : CCV 032912 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Mar 29 10:05 2012 Quant Results File: 122211.RES

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

Volume Inj. :
Signal Phase :
Signal Info :

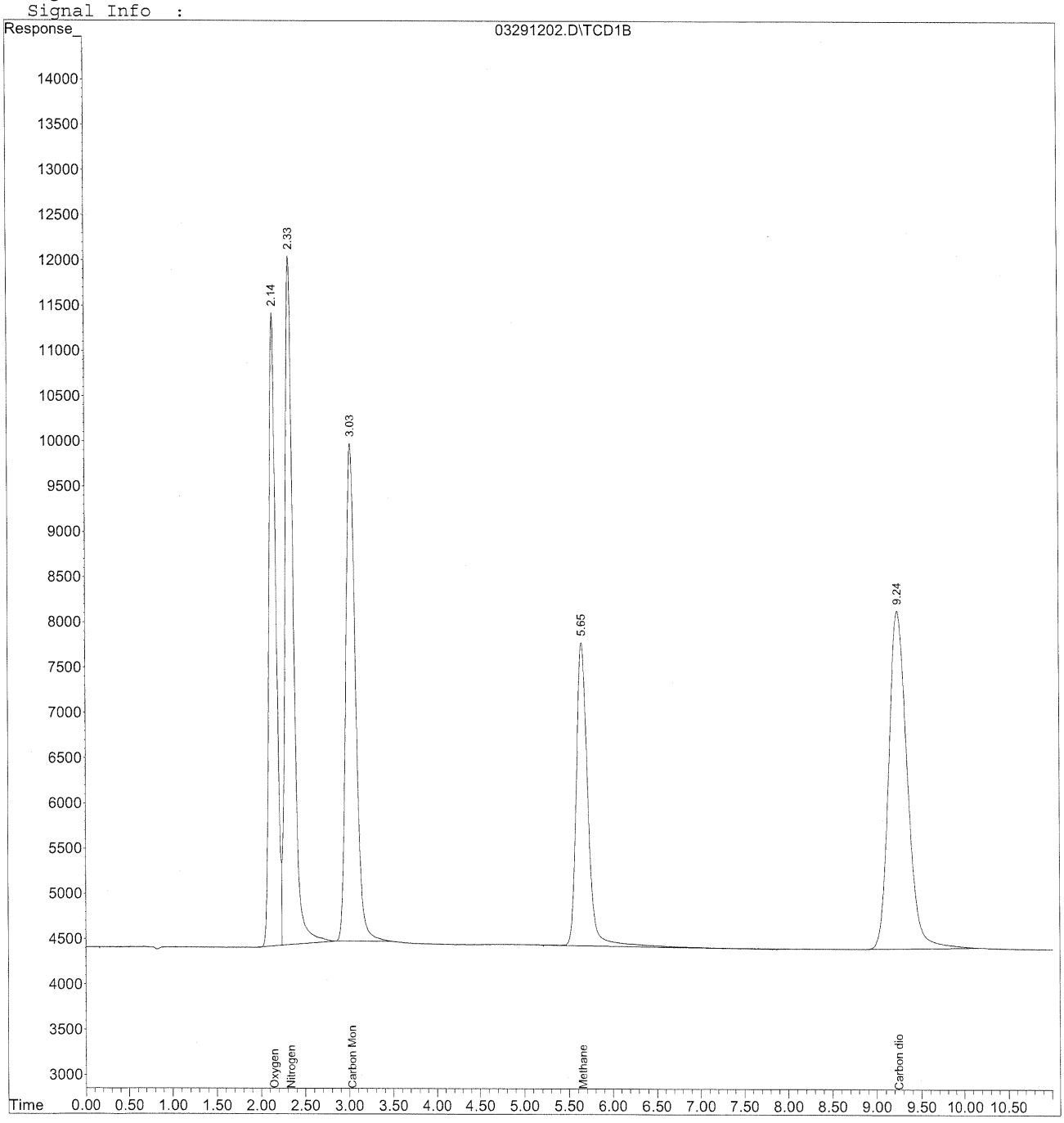
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	386181	2.493 %
2)	Nitrogen	2.33	486113	2.770 %
3)	Carbon Monoxide	3.03	431207	2.675 %
4)	Methane	5.66	302921	2.243 %
5)	Carbon dioxide	9.24	537146	2.615 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\032912\03291202.D Vial: 1
Acq On : 29 Mar 2012 9:47 am Operator:
Sample : CCV 032912 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Mar 29 10:05 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\032912\03291216.D Vial: 1
Acq On : 29 Mar 2012 1:59 pm Operator:
Sample : CCV 032912 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title : D2504 air analysis
Last Update : Mon Apr 02 12:09:49 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.491	0.4	0	0.05
2	Nitrogen	2.500	2.729	-9.2	0	0.04
3	Carbon Monoxide	2.500	2.719	-8.8	0	0.01
4	Methane	2.000	2.073	-3.6	0	0.03
5	Carbon dioxide	2.500	2.630	-5.2	0	0.02

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\032912\03291216.D Vial: 1
Acq On : 29 Mar 2012 1:59 pm Operator:
Sample : CCV 032912 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 2 12:09 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title : D2504 air analysis
Last Update : Mon Apr 02 12:09:49 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

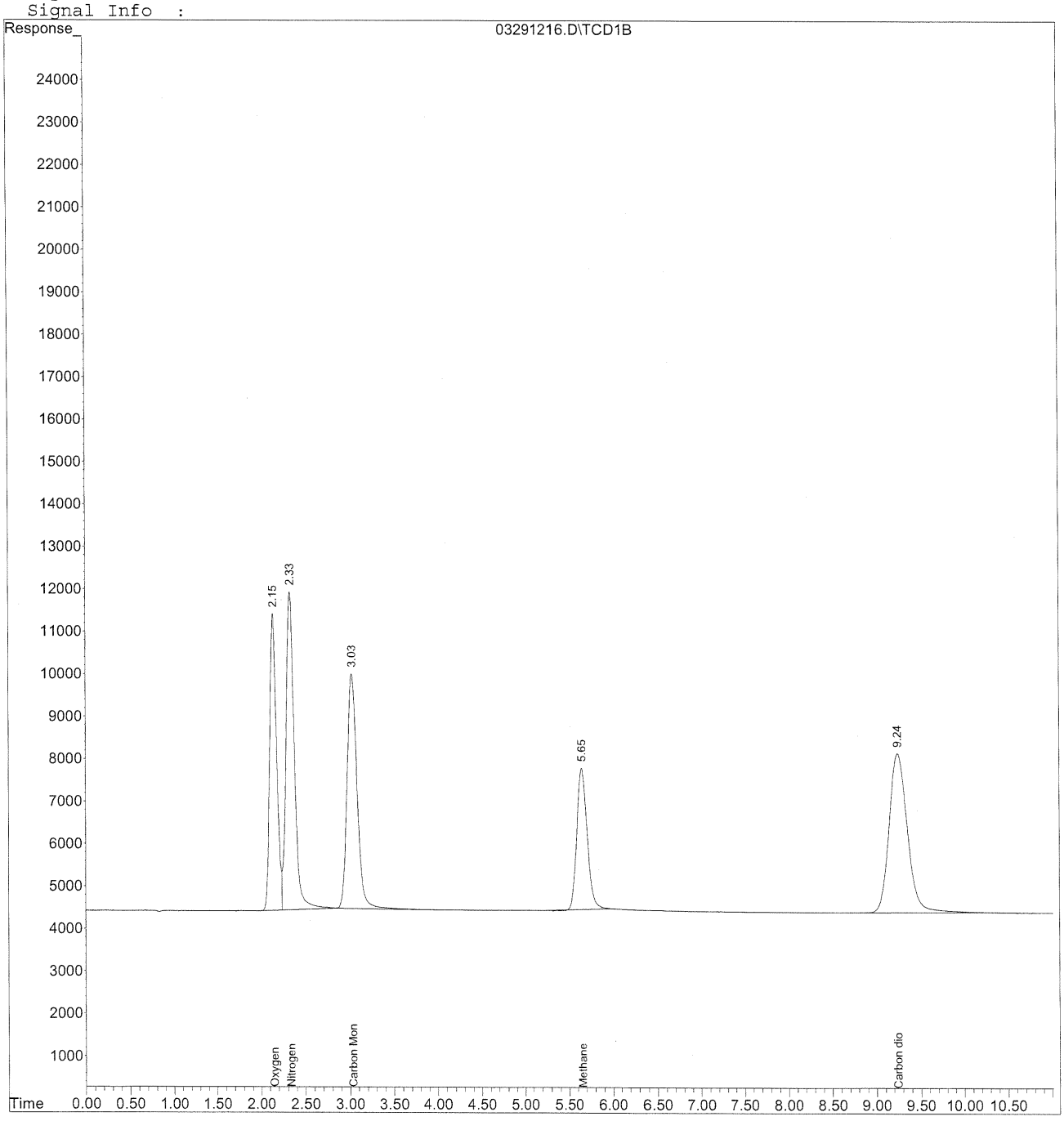
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	385912	2.491 %
2)	Nitrogen	2.34	478890	2.729 %
3)	Carbon Monoxide	3.03	438219	2.719 %
4)	Methane	5.66	279974	2.073 %
5)	Carbon dioxide	9.25	540061	2.630 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\032912\03291216.D Vial: 1
Acq On : 29 Mar 2012 1:59 pm Operator:
Sample : CCV 032912 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 2 12:09 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title : D2504 air analysis
Last Update : Mon Apr 02 12:09:49 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\032912\03291226.D Vial: 1
Acq On : 29 Mar 2012 5:42 pm Operator:
Sample : CCV 032912 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title : D2504 air analysis
Last Update : Wed Jan 04 17:34:10 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.485	0.6	0	0.05
2	Nitrogen	2.500	2.663	-6.5	0	0.03
3	Carbon Monoxide	2.500	2.707	-8.3	0	0.00
4	Methane	2.000	2.156	-7.8	0	0.03
5	Carbon dioxide	2.500	2.634	-5.4	0	0.01

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\032912\03291226.D Vial: 1
Acq On : 29 Mar 2012 5:42 pm Operator:
Sample : CCV 032912 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Mar 29 18:28 2012 Quant Results File: 122211.RES

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

Volume Inj. :
Signal Phase :
Signal Info :

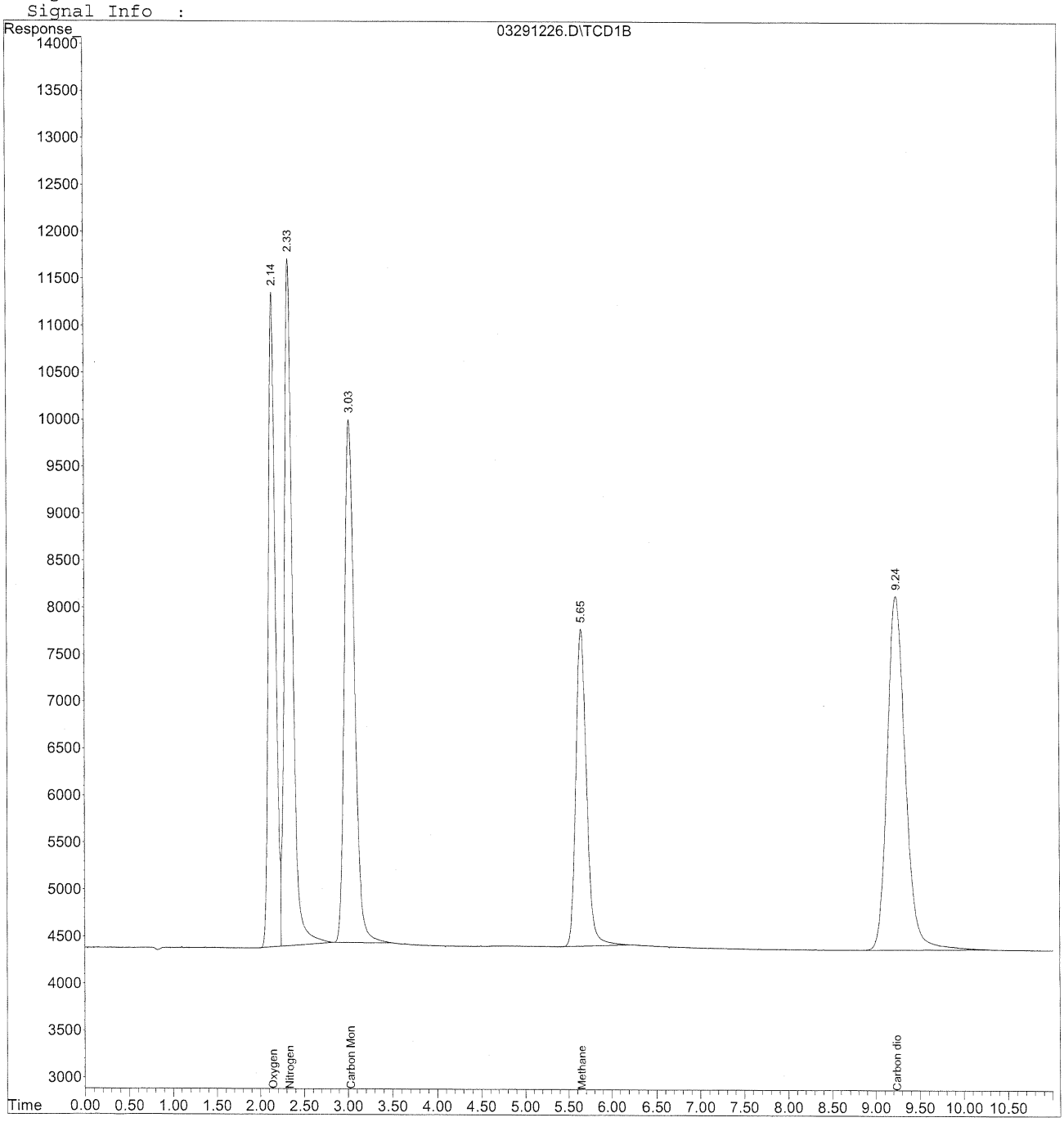
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	385032	2.485 %
2)	Nitrogen	2.33	467441	2.663 %
3)	Carbon Monoxide	3.03	436341	2.707 %
4)	Methane	5.65	291183	2.156 %
5)	Carbon dioxide	9.24	540886	2.634 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\032912\03291226.D Vial: 1
Acq On : 29 Mar 2012 5:42 pm Operator:
Sample : CCV 032912 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Mar 29 18:28 2012 Quant Results File: 122211.RES

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

Volume Inj. :
Signal Phase :
Signal Info :



Response Factor Report GC/TCD

Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title : D2504 air analysis
Last Update : Wed Jan 04 17:34:10 2012

Calibration Files
1 =12221102.D 2 =12221103.D 3 =12221104.D
4 =12221105.D 5 =12221106.D 6 =12221107.D

	Compound	1	2	3	4	5	6	Avg		%RSD
1)	Oxygen	1.462	1.533	1.525	1.518	1.533	1.749	1.549	E5	5.91
2)	Nitrogen	1.766	1.744	1.737	1.709	1.688	1.861	1.755	E5	3.22
3)	Carbon Monoxide	1.659	1.607	1.601	1.572	1.540	1.692	1.612	E5	3.45
4)	Methane	1.383	1.347	1.342	1.317	1.290	1.424	1.351	E5	3.52
5)	Carbon dioxide	2.110	2.039	2.036	1.991	1.966	2.179	2.054	E5	3.83

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

122211.M Tue Mar 06 17:38:36 2012 TESTCAL

Compound List Report GC/TCD

Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title : D2504 air analysis
Last Update : Wed Jan 04 17:34:10 2012
Response via : Initial Calibration
Total Cpnds : 5

PK#	Type	Compound Name	Exp RT	Rel RT	Cal	A/H	ID
1		Oxygen	2.09	1.000	A	A	R
2		Nitrogen	2.30	1.000	A	A	R
3		Carbon Monoxide	3.02	1.000	A	A	R
4		Methane	5.62	1.000	A	A	R
5		Carbon dioxide	9.23	1.000	A	A	R

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

122211.M Tue Mar 06 17:38:20 2012 TESTCAL

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\122211\12221110.D Vial: 1
Acq On : 22 Dec 2011 4:55 pm Operator:
Sample : ICV STD 1-2 Inst : GC/TCD
Misc : ICV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title : D2504 air analysis
Last Update : Wed Jan 04 17:34:10 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	Oxygen	2.500	2.490	0.4	0	0.03
2	Nitrogen	2.500	2.750	-10.0	0	0.00
3	Carbon Monoxide	2.500	2.683	-7.3	0	-0.03
4	Methane	2.000	2.089	-4.4	0	-0.02
5	Carbon dioxide	2.500	2.594	-3.8	0	-0.07

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\122211\12221110.D Vial: 1
Acq On : 22 Dec 2011 4:55 pm Operator:
Sample : ICV STD 1-2 Inst : GC/TCD
Misc : ICV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title : D2504 air analysis
Last Update : Wed Jan 04 17:34:10 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)

(#) = Out of Range SPCC's out = 0 CCC's out = 0
03051113.D 122211.M Tue Mar 06 17:37:31 2012 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\122211\12221110.D Vial: 1
Acq On : 22 Dec 2011 4:55 pm Operator:
Sample : ICV STD 1-2 Inst : GC/TCD
Misc : ICV ASTM-D2504 Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 4 12:42 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 22 18:56:51 2011
Response via : Initial Calibration
DataAcq Meth : TCD-10M.M

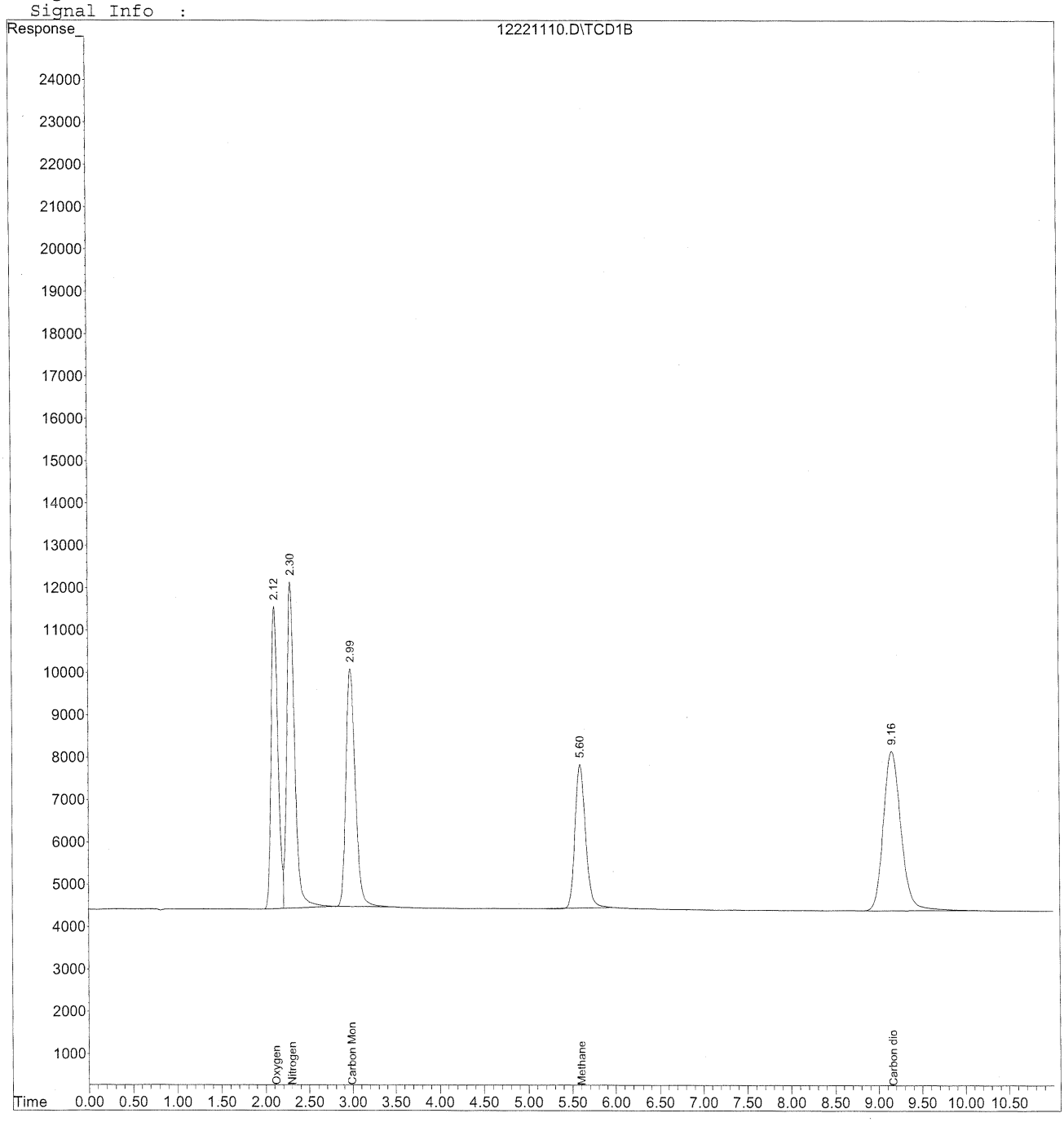
Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.12	385812	2.490 %
2)	Nitrogen	2.30	482618	2.750 %
3)	Carbon Monoxide	2.99	432538	2.683 %
4)	Methane	5.60	282093	2.089 %
5)	Carbon dioxide	9.16f	532664	2.594 %

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\122211\12221110.D Vial: 1
Acq On : 22 Dec 2011 4:55 pm Operator:
Sample : ICV STD 1-2 Inst : GC/TCD
Misc : ICV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 4 12:42 2012 Quant Results File: 122211.RES

Quant Method : C:\HPCHEM\2\METHODS\122211.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 22 18:56:51 2011
Response via : Multiple Level Calibration
DataAcq Meth : TCD-10M.M

Volume Inj. :
Signal Phase :
Signal Info :