RTI Laboratories, Inc.

Date: *23-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: 1203984 revised

CASE NARRATIVE

Revision 04/23/2012: Revised to report LOQs in place of MDLs.

SAMPLE RECEIPT:
Samples were received at the RTI Laboratory, Livonia, MI via commercial delivery on 3/28/2012 in good condition. The sample set consisted of 37 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.

The Trip Blank sample associated with this work order (1203984-037A) contained several compounds at levels greater than the reporting limit.

Analytical Sequence ID 47626:
- Sample ID 1203984-030Adup exhibited results outside acceptance limits for Acetone (200%) due to low sample concentration.

Analytical Sequence ID 47673:
- Sample ID 1203984-024Adup exhibited results outside acceptance limits for Toluene (200%).

Analytical Sequence ID 47712:
- Sample ID 1203984-009Adup exhibited results outside acceptance limits for Acetone (200%) due to low sample concentration.

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CO#: 501
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CASE NARRATIVE

Air-Phase Petroleum Hydrocarbons Analyses:

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

Surrogate recoveries were within established control limits.

Analytical Sequence ID 47706:

- Sample ID 1203984-006Adup exhibited elevated RPD result for C9-C12 Aliphatic Hydrocarbons (39.8%).

Analytical Sequence ID 47707:

- Sample ID 1203984-018Adup Sample ID 1203984-006Adup exhibited elevated RPD result for C9-C12 Aliphatic Hydrocarbons (200%) due to low sample concentration.

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 Date: 4/23/2012
Charles O'Bryan, Director, Quality Management

RTI Laboratories - Definitions and Acronyms

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Definitions:

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

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

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

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

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

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

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

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

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

PL: Permit limit; only applicable to wastewater reports.

Qual: Qualifier that applies to the analyte reported

Result: Analyte concentration reported

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

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

Qualifiers:

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

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV078

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

Samples Shipment Date: 22 MAR 2012
Lab Destination: RTI Laboratories
Lab Contact: Mike Truchan
Project Contact: Pamela Moss
Carrier/Waybill No.: UPS/2323121345

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

1203984

Special Instructions:

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

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

1. Relinquished By (Signature/Affiliation) T Wagner — Date: 3/22/12 Time: 1420
2. Relinquished By (Signature/Affiliation) — Date: Time:
3. Relinquished By (Signature/Affiliation) — Date: Time:

1. Received By (Signature/Affiliation) Andy Flores / RTI Labs — Date: 3-28-12 Time: 10:58
2. Received By (Signature/Affiliation) — Date: Time:
3. Received By (Signature/Affiliation) — Date: Time:

Comments:

0

Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1044	SVMW-11-050-GS-VA1044-REG	22 MAR 2012	9:46	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1150
VA1044	SVMW-11-050-GS-VA1044-REG	22 MAR 2012	9:46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1045	SVMW-11-100-GS-VA1045-REG	22 MAR 2012	10:10	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0834
VA1045	SVMW-11-100-GS-VA1045-REG	22 MAR 2012	10:10	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		"
VA1046	SVMW-11-250-GS-VA1046-REG	22 MAR 2012	10:46	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1149
VA1046	SVMW-11-250-GS-VA1046-REG	22 MAR 2012	10:46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1047	SVMW-11-260-GS-VA1047-REG	22 MAR 2012	11:17	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by			N		1229

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV078

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					
VA1047	SVMW-11-260-GS-VA1047-REG	22 MAR 2012	11:17	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1053	SVMW-13-150-GS-VA1053-REG	22 MAR 2012	9:47	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1215
VA1053	SVMW-13-150-GS-VA1053-REG	22 MAR 2012	9:47	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1054	SVMW-13-250-GS-VA1054-REG	22 MAR 2012	10:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1216
VA1054	SVMW-13-250-GS-VA1054-REG	22 MAR 2012	10:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1055	SVMW-13-350-GS-VA1055-REG	22 MAR 2012	10:51	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1212
VA1055	SVMW-13-350-GS-VA1055-REG	22 MAR 2012	10:51	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1056	SVMW-13-450-GS-VA1056-REG	22 MAR 2012	11:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1214
VA1056	SVMW-13-450-GS-VA1056-REG	22 MAR 2012	11:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1066	KAFB-106028-150-GS-VA1066-REG	21 MAR 2012	9:06	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1205
VA1066	KAFB-106028-150-GS-VA1066-REG	21 MAR 2012	9:06	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1067	KAFB-106028-250-GS-VA1067-REG	21 MAR 2012	9:45	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1206
VA1067	KAFB-106028-250-GS-VA1067-REG	21 MAR 2012	9:45	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1068	KAFB-106028-350-GS-VA1068-REG	21 MAR 2012	10:26	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1207
VA1068	KAFB-106028-350-GS-VA1068-REG	21 MAR 2012	10:26	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1069	KAFB-106028-450-GS-VA1069-REG	21 MAR 2012	11:01	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1210
VA1069	KAFB-106028-450-GS-VA1069-REG	21 MAR 2012	11:01	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1070	SVEW-01-260-GS-VA1070-REG	21 MAR 2012	08:50	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0649
VA1070	SVEW-01-260-GS-VA1070-REG	21 MAR 2012	08:50	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1071	SVEW-02-060-GS-VA1071-REG	21 MAR 2012	9:36	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1144
VA1071	SVEW-02-060-GS-VA1071-REG	21 MAR 2012	9:36	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1072	SVEW-02-060-GS-VA1072-FD	21 MAR 2012	09:36	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1147
VA1072	SVEW-02-060-GS-VA1072-FD	21 MAR 2012	09:36	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1073	SVEW-03-160-GS-VA1073-REG	21 MAR 2012	12:57	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0828
VA1073	SVEW-03-160-GS-VA1073-REG	21 MAR 2012	12:57	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1074	SVEW-04-313-GS-VA1074-REG	21 MAR 2012	13:27	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0798
VA1074	SVEW-04-313-GS-VA1074-REG	21 MAR 2012	13:27	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV078

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1075	SVEW-05-460-GS-VA1075-REG	21 MAR 2012	13:52	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0780
VA1075	SVEW-05-460-GS-VA1075-REG	21 MAR 2012	13:52	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1076	SVEW-06-060-GS-VA1076-REG	21 MAR 2012	14:15	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1145
VA1076	SVEW-06-060-GS-VA1076-REG	21 MAR 2012	14:15	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1077	SVEW-07-160-GS-VA1077-REG	21 MAR 2012	14:42	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		0700
VA1077	SVEW-07-160-GS-VA1077-REG	21 MAR 2012	14:42	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1078	SVEW-08-260-GS-VA1078-REG	21 MAR 2012	15:21	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1143
VA1078	SVEW-08-260-GS-VA1078-REG	21 MAR 2012	15:21	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1079	SVEW-09-460-GS-VA1079-REG	21 MAR 2012	15:39	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1148
VA1079	SVEW-09-460-GS-VA1079-REG	21 MAR 2012	15:39	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1081	SVEW-11-410-GS-VA1081-REG	22 MAR 2012	11:53	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1208
VA1081	SVEW-11-410-GS-VA1081-REG	22 MAR 2012	11:53	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1151	KAFB-106118-025-GS-VA1151-REG	20 MAR 2012	13:42	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1151
VA1151	KAFB-106118-025-GS-VA1151-REG	20 MAR 2012	13:42	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1152	KAFB-106118-050-GS-VA1152-REG	20 MAR 2012	14:30	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1152
VA1152	KAFB-106118-050-GS-VA1152-REG	20 MAR 2012	14:30	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1153	KAFB-106118-160-GS-VA1153-REG	20 MAR 2012	15:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1155
VA1153	KAFB-106118-160-GS-VA1153-REG	20 MAR 2012	15:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1154	KAFB-106118-265-GS-VA1154-REG	20 MAR 2012	16:04	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1153
VA1154	KAFB-106118-265-GS-VA1154-REG	20 MAR 2012	16:04	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1155	KAFB-106118-350-GS-VA1155-REG	22 MAR 2012	8:23	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1211
VA1155	KAFB-106118-350-GS-VA1155-REG	22 MAR 2012	8:23	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1156	KAFB-106118-450-GS-VA1156-REG	22 MAR 2012	9:00	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1213
VA1156	KAFB-106118-450-GS-VA1156-REG	22 MAR 2012	9:00	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1157	KAFB-106119-025-GS-VA1157-REG	20 MAR 2012	12:10	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1179
VA1157	KAFB-106119-025-GS-VA1157-REG	20 MAR 2012	12:10	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1158	KAFB-106119-050-GS-VA1158-REG	20 MAR 2012	12:45	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1158	KAFB-106119-050-GS-VA1158-REG	20 MAR 2012	12:45	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1175

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Shaw E & I, Inc.

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV078

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
VA1159	KAFB-106119-150-GS-VA1159-REG	20 MAR 2012	13:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1173
VA1159	KAFB-106119-150-GS-VA1159-REG	20 MAR 2012	13:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1160	KAFB-106119-150-GS-VA1160-FD	20 MAR 2012	13:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1174
VA1160	KAFB-106119-150-GS-VA1160-FD	20 MAR 2012	13:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1161	KAFB-106119-250-GS-VA1161-REG	20 MAR 2012	14:19	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1176
VA1161	KAFB-106119-250-GS-VA1161-REG	20 MAR 2012	14:19	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1162	KAFB-106119-350-GS-VA1162-REG	20 MAR 2012	14:58	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1177
VA1162	KAFB-106119-350-GS-VA1162-REG	20 MAR 2012	14:58	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1163	KAFB-106119-450-GS-VA1163-REG	20 MAR 2012	15:33	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1163	KAFB-106119-450-GS-VA1163-REG	20 MAR 2012	15:33	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		1178
VA8078-TB	FIELDQC-AQ-VA8078-TB-TB	21 MAR 2012	08:00	1 L BOTTLEVAC	1	None Required	VOCs / TPH by TO-15			N		1180

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

20 LBS 1 OF 7
DWT: 21,15,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4298 9863

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 3/22/12
SIGNATURE

WS 15.0.15 HP LaserJet 4 24.0A 01/2012

Bottle No.	Sample ID
0834	VA1045
0700	VA1077
1151	VA1151
1155	VA1153
1179	VA1157
1175	VA1158
1173	VA1159
1174	VA1160
1176	VA1161
1177	VA1162
1178	VA1163
1180	VA8078-TB

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

20 LBS 2 OF 7
DWT: 21,15,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4168 9073

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 3/22/12
SIGNATURE T Nolan

WS 15.0.15 HP LaserJet 4 24.0A 01/2012

Fold here and place in label pouch

Sample ID.	Bottle No.
VA1044	1150
VA1046	1149
VA1047	1229
VA1053	1215
VA1054	1216
VA1055	1212
VA1056	1214
VA1069	1210
VA1073	0828
VA1081	1208
VA1155	1211
VA1156	1213

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

20 LBS 3 OF 7
DWT: 21,15,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4207 4887

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 3/22/12
SIGNATURE

WS 15.0.15 HP LaserJet 4 24.0A 01/2012

Sample ID	Bottle No.
VA 1066	1205
VA 1067	1206
VA 1068	1207
VA 1070	0649
VA 1071	1144
VA 1072	1147
VA 1074	0798
VA 1075	0780
VA 1076	1145
VA 1078	1143
VA 1079	1148
VA 1154	1153

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

2 LBS 4 OF 7
DWT: 21,15,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4298 3298

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 3/22/12
SIGNATURE

WS 15.0.15 HP LaserJet 4 24.0A 01/2012

Fold here and place in label pouch

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

2 LBS 5 OF 7
DWT: 21,15,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4181 0305

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 3/22/12
SIGNATURE TNal

WS 15.0.15 HP LaserJet 4 24.0A 01/2012

Fold here and place in label pouch

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

3 LBS 6 OF 7
DWT: 21,15,13

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4111 1918

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 3/22/12
SIGNATURE TNuff

WS 15.0.15 HP LaserJet 4 24.0A 01/2012

Fold here and place in label pouch

Sample ID
VA 1152

Bottle
1152

Tedlar Bags

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

7 LBS 7 OF 7
DWT: 19,8,4

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4020 4123

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

REF 1:140705
REF 2:BB010030

BILLING: P/P

CUSTODY SEAL
DATE 3/22/12
SIGNATURE

WS 15.0.15 HP LaserJet 4 24.0A 01/2012

Fold here and place in label pouch

Regulators

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 **3/28/2012 10:58:00 AM**

Work Order Numbe **1203984** RcptNo: **1** Received by: **Armando Flores**

Completed by Reviewed by:

Completed Date: 3/29/2012 5:39:27 PM Reviewed Date: 3/30/2012 8:24:02 AM

Carrier name: UPS

Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	Not Present ☐
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐	
Is it clear what analyses were requested?	Yes ☑	No ☐	
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Samples in proper container/bottle?	Yes ☑	No ☐	
Were correct preservatives used and noted?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
Were container lables complete (ID, Pres, Date)?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Was an attempt made to cool the samples?	Yes ☐	No ☑	
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☐	No ☑	
Response when temperature is outside of range:	Not required		
Preservative added to bottles:			
Sample Temp. taken and recorded upon receipt?	Yes ☐	No ☑	To °C
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials ☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	No Water ☑
Are Samples considered acceptable?	Yes ☑	No ☐	
Custody Seals present?	Yes ☑	No ☐	
Traffic Report or Packing Lists present?	Yes ☐	No ☑	
Airbill or Sticker?	Air Bill ☑	Sticker ☐	Not Present ☐
Airbill No:	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
1203984-001A	Container-01 of 01	Bottle				
1203984-001B	Container-01 of 01	Bottle				
1203984-002A	Container-01 of 01	Bottle				
1203984-002B	Container-01 of 01	Bottle				
1203984-003A	Container-01 of 01	Bottle				
1203984-003B	Container-01 of 01	Bottle				
1203984-004A	Container-01 of 01	Bottle				
1203984-004B	Container-01 of 01	Bottle				
1203984-005A	Container-01 of 01	Bottle				
1203984-005B	Container-01 of 01	Bottle				
1203984-006A	Container-01 of 01	Bottle				
1203984-006B	Container-01 of 01	Bottle				
1203984-007A	Container-01 of 01	Bottle				
1203984-007B	Container-01 of 01	Bottle				
1203984-008A	Container-01 of 01	Bottle				
1203984-008B	Container-01 of 01	Bottle				
1203984-009A	Container-01 of 01	Bottle				
1203984-009B	Container-01 of 01	Bottle				
1203984-010A	Container-01 of 01	Bottle				
1203984-010B	Container-01 of 01	Bottle				
1203984-011A	Container-01 of 01	Bottle				
1203984-011B	Container-01 of 01	Bottle				
1203984-012A	Container-01 of 01	Bottle				
1203984-012B	Container-01 of 01	Bottle				
1203984-013A	Container-01 of 01	Bottle				
1203984-013B	Container-01 of 01	Bottle				
1203984-014A	Container-01 of 01	Bottle				
1203984-014B	Container-01 of 01	Bottle				
1203984-015A	Container-01 of 01	Bottle				
1203984-015B	Container-01 of 01	Bottle				
1203984-016A	Container-01 of 01	Bottle				
1203984-016B	Container-01 of 01	Bottle				
1203984-017A	Container-01 of 01	Bottle				
1203984-017B	Container-01 of 01	Bottle				

SampID	ContainerID	Type	Org pH	Adj pH	Req Min pH	Req Max pH
1203984-018A	Container-01 of 01	Bottle				
1203984-018B	Container-01 of 01	Bottle				
1203984-019A	Container-01 of 01	Bottle				
1203984-019B	Container-01 of 01	Bottle				
1203984-020A	Container-01 of 01	Bottle				
1203984-020B	Container-01 of 01	Bottle				
1203984-021A	Container-01 of 01	Bottle				
1203984-021B	Container-01 of 01	Bottle				
1203984-022A	Container-01 of 01	Bottle				
1203984-022B	Container-01 of 01	Bottle				
1203984-023A	Container-01 of 01	Bottle				
1203984-023B	Container-01 of 01	Bottle				
1203984-024A	Container-01 of 01	Bottle				
1203984-024B	Container-01 of 01	Bottle				
1203984-025A	Container-01 of 01	Bottle				
1203984-025B	Container-01 of 01	Bottle				
1203984-026A	Container-01 of 01	Bottle				
1203984-026B	Container-01 of 01	Bottle				
1203984-027A	Container-01 of 01	Bottle				
1203984-027B	Container-01 of 01	Bottle				
1203984-028A	Container-01 of 01	Bottle				
1203984-028B	Container-01 of 01	Bottle				
1203984-029A	Container-01 of 01	Bottle				
1203984-029B	Container-01 of 01	Bottle				
1203984-030A	Container-01 of 01	Bottle				
1203984-030B	Container-01 of 01	Bottle				
1203984-031A	Container-01 of 01	Bottle				
1203984-031B	Container-01 of 01	Bottle				
1203984-032A	Container-01 of 01	Bottle				
1203984-032B	Container-01 of 01	Bottle				
1203984-033A	Container-01 of 01	Bottle				
1203984-033B	Container-01 of 01	Bottle				
1203984-034A	Container-01 of 01	Bottle				
1203984-034B	Container-01 of 01	Bottle				

SampID	ContainerID	Type	Org pH	Adj pH	Req Min pH	Req Max pH
1203984-035A	Container-01 of 01	Bottle				
1203984-035B	Container-01 of 01	Bottle				
1203984-036A	Container-01 of 01	Bottle				
1203984-036B	Container-01 of 01	Bottle				
1203984-037A	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		3/22/2012	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.:
1Z10335E0342989863,
1Z10335E0341689073,
1Z10335E0342074887,
1Z10335E0342983298,
1Z10335E0341810305,
1Z10335E0341111918,
1Z10335E0340204123

RTI Laboratories - Workorder Sample Summary

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1203984-001A	VA1044		3/22/2012 9:46 AM	3/28/2012 10:58 AM	Air
1203984-001B	VA1044		3/22/2012 9:46 AM	3/28/2012 10:58 AM	Air
1203984-002A	VA1045		3/22/2012 10:10 AM	3/28/2012 10:58 AM	Air
1203984-002B	VA1045		3/22/2012 10:10 AM	3/28/2012 10:58 AM	Air
1203984-003A	VA1046		3/22/2012 10:46 AM	3/28/2012 10:58 AM	Air
1203984-003B	VA1046		3/22/2012 10:46 AM	3/28/2012 10:58 AM	Air
1203984-004A	VA1047		3/22/2012 11:17 AM	3/28/2012 10:58 AM	Air
1203984-004B	VA1047		3/22/2012 11:17 AM	3/28/2012 10:58 AM	Air
1203984-005A	VA1053		3/22/2012 9:47 AM	3/28/2012 10:58 AM	Air
1203984-005B	VA1053		3/22/2012 9:47 AM	3/28/2012 10:58 AM	Air
1203984-006A	VA1054		3/22/2012 10:22 AM	3/28/2012 10:58 AM	Air
1203984-006B	VA1054		3/22/2012 10:22 AM	3/28/2012 10:58 AM	Air
1203984-007A	VA1055		3/22/2012 10:51 AM	3/28/2012 10:58 AM	Air
1203984-007B	VA1055		3/22/2012 10:51 AM	3/28/2012 10:58 AM	Air
1203984-008A	VA1056		3/22/2012 11:22 AM	3/28/2012 10:58 AM	Air
1203984-008B	VA1056		3/22/2012 11:22 AM	3/28/2012 10:58 AM	Air
1203984-009A	VA1066		3/21/2012 9:06 AM	3/28/2012 10:58 AM	Air
1203984-009B	VA1066		3/21/2012 9:06 AM	3/28/2012 10:58 AM	Air
1203984-010A	VA1067		3/21/2012 9:45 AM	3/28/2012 10:58 AM	Air
1203984-010B	VA1067		3/21/2012 9:45 AM	3/28/2012 10:58 AM	Air
1203984-011A	VA1068		3/21/2012 10:26 AM	3/28/2012 10:58 AM	Air
1203984-011B	VA1068		3/21/2012 10:26 AM	3/28/2012 10:58 AM	Air
1203984-012A	VA1069		3/21/2012 11:01 AM	3/28/2012 10:58 AM	Air
1203984-012B	VA1069		3/21/2012 11:01 AM	3/28/2012 10:58 AM	Air
1203984-013A	VA1070		3/21/2012 8:50 AM	3/28/2012 10:58 AM	Air
1203984-013B	VA1070		3/21/2012 8:50 AM	3/28/2012 10:58 AM	Air
1203984-014A	VA1071		3/21/2012 9:36 AM	3/28/2012 10:58 AM	Air
1203984-014B	VA1071		3/21/2012 9:36 AM	3/28/2012 10:58 AM	Air
1203984-015A	VA1072		3/21/2012 9:36 AM	3/28/2012 10:58 AM	Air
1203984-015B	VA1072		3/21/2012 9:36 AM	3/28/2012 10:58 AM	Air
1203984-016A	VA1073		3/21/2012 12:57 PM	3/28/2012 10:58 AM	Air
1203984-016B	VA1073		3/21/2012 12:57 PM	3/28/2012 10:58 AM	Air
1203984-017A	VA1074		3/21/2012 1:27 PM	3/28/2012 10:58 AM	Air
1203984-017B	VA1074		3/21/2012 1:27 PM	3/28/2012 10:58 AM	Air
1203984-018A	VA1075		3/21/2012 1:52 PM	3/28/2012 10:58 AM	Air
1203984-018B	VA1075		3/21/2012 1:52 PM	3/28/2012 10:58 AM	Air
1203984-019A	VA1076		3/21/2012 2:15 PM	3/28/2012 10:58 AM	Air
1203984-019B	VA1076		3/21/2012 2:15 PM	3/28/2012 10:58 AM	Air
1203984-020A	VA1077		3/21/2012 2:42 PM	3/28/2012 10:58 AM	Air
1203984-020B	VA1077		3/21/2012 2:42 PM	3/28/2012 10:58 AM	Air
1203984-021A	VA1078		3/21/2012 3:21 PM	3/28/2012 10:58 AM	Air
1203984-021B	VA1078		3/21/2012 3:21 PM	3/28/2012 10:58 AM	Air
1203984-022A	VA1079		3/21/2012 3:39 PM	3/28/2012 10:58 AM	Air
1203984-022B	VA1079		3/21/2012 3:39 PM	3/28/2012 10:58 AM	Air
1203984-023A	VA1081		3/22/2012 11:53 AM	3/28/2012 10:58 AM	Air

RTI Laboratories - Workorder Sample Summary

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1203984-023B	VA1081		3/22/2012 11:53 AM	3/28/2012 10:58 AM	Air
1203984-024A	VA1151		3/20/2012 1:42 PM	3/28/2012 10:58 AM	Air
1203984-024B	VA1151		3/20/2012 1:42 PM	3/28/2012 10:58 AM	Air
1203984-025A	VA1152		3/20/2012 2:30 PM	3/28/2012 10:58 AM	Air
1203984-025B	VA1152		3/20/2012 2:30 PM	3/28/2012 10:58 AM	Air
1203984-026A	VA1153		3/20/2012 3:22 PM	3/28/2012 10:58 AM	Air
1203984-026B	VA1153		3/20/2012 3:22 PM	3/28/2012 10:58 AM	Air
1203984-027A	VA1154		3/20/2012 4:04 PM	3/28/2012 10:58 AM	Air
1203984-027B	VA1154		3/20/2012 4:04 PM	3/28/2012 10:58 AM	Air
1203984-028A	VA1155		3/22/2012 8:23 AM	3/28/2012 10:58 AM	Air
1203984-028B	VA1155		3/22/2012 8:23 AM	3/28/2012 10:58 AM	Air
1203984-029A	VA1156		3/22/2012 9:00 AM	3/28/2012 10:58 AM	Air
1203984-029B	VA1156		3/22/2012 9:00 AM	3/28/2012 10:58 AM	Air
1203984-030A	VA1157		3/20/2012 12:10 PM	3/28/2012 10:58 AM	Air
1203984-030B	VA1157		3/20/2012 12:10 PM	3/28/2012 10:58 AM	Air
1203984-031A	VA1158		3/20/2012 12:45 PM	3/28/2012 10:58 AM	Air
1203984-031B	VA1158		3/20/2012 12:45 PM	3/28/2012 10:58 AM	Air
1203984-032A	VA1159		3/20/2012 1:22 PM	3/28/2012 10:58 AM	Air
1203984-032B	VA1159		3/20/2012 1:22 PM	3/28/2012 10:58 AM	Air
1203984-033A	VA1160		3/20/2012 1:22 PM	3/28/2012 10:58 AM	Air
1203984-033B	VA1160		3/20/2012 1:22 PM	3/28/2012 10:58 AM	Air
1203984-034A	VA1161		3/20/2012 2:19 PM	3/28/2012 10:58 AM	Air
1203984-034B	VA1161		3/20/2012 2:19 PM	3/28/2012 10:58 AM	Air
1203984-035A	VA1162		3/20/2012 2:58 PM	3/28/2012 10:58 AM	Air
1203984-035B	VA1162		3/20/2012 2:58 PM	3/28/2012 10:58 AM	Air
1203984-036A	VA1163		3/20/2012 3:33 PM	3/28/2012 10:58 AM	Air
1203984-036B	VA1163		3/20/2012 3:33 PM	3/28/2012 10:58 AM	Air
1203984-037A	VA8078-TB		3/21/2012 8:00 AM	3/28/2012 10:58 AM	Air

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/22/2012 9:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-001	**Matrix:**	Air
Client Sample ID:	VA1044		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	3.2	0.10		%	1	4/2/2012 4:36 PM
Carbon Monoxide	ND	0.10	U	%	1	4/2/2012 4:36 PM
Methane	ND	0.50	U	%	1	4/2/2012 4:36 PM
Nitrogen	79	0.10		%	1	4/2/2012 4:36 PM
Oxygen	17	0.10		%	1	4/2/2012 4:36 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
2-Butanone	22,000	8,000		ppbv	8000	4/12/2012 12:01 AM
2-Hexanone	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
Acetone	110,000	8,000		ppbv	8000	4/12/2012 12:01 AM
Benzene	60,000	8,000		ppbv	8000	4/12/2012 12:01 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
Bromoform	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
Bromomethane	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
Chloroethane	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
Chloroform	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
Chloromethane	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/22/2012 9:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-001	**Matrix:**	Air
Client Sample ID:	VA1044		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	390,000	16,000		ppbv	8000	4/12/2012 12:01 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
Ethylbenzene	12,000	16,000	J	ppbv	8000	4/12/2012 12:01 AM
Heptane	260,000	8,000		ppbv	8000	4/12/2012 12:01 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	4/12/2012 12:01 AM
m,p-Xylene	25,000	16,000		ppbv	8000	4/12/2012 12:01 AM
Methylene chloride	ND	40,000	U	ppbv	8000	4/12/2012 12:01 AM
n-Hexane	210,000	16,000		ppbv	8000	4/12/2012 12:01 AM
Naphthalene	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
o-Xylene	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
Propylene	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
Styrene	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
Toluene	230,000	8,000		ppbv	8000	4/12/2012 12:01 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
Trichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	4/12/2012 12:01 AM
Xylenes, Total	25,000	24,000		ppbv	8000	4/12/2012 12:01 AM
Surr: 4-Bromofluorobenzene	94.2	70-130		%REC	8000	4/12/2012 12:01 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	11,000,000	940,000		µg/m³	8000	4/13/2012 2:11 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	4/13/2012 2:11 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	4/13/2012 2:11 PM
Surr: 4-Bromofluorobenzene	92.9	70-130		%REC	8000	4/13/2012 2:11 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/22/2012 10:10:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-002	**Matrix:**	Air
Client Sample ID:	VA1045		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.81	0.10		%	1	4/2/2012 4:59 PM
Carbon Monoxide	ND	0.10	U	%	1	4/2/2012 4:59 PM
Methane	ND	0.50	U	%	1	4/2/2012 4:59 PM
Nitrogen	78	0.10		%	1	4/2/2012 4:59 PM
Oxygen	20	0.10		%	1	4/2/2012 4:59 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
1,3-Butadiene	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
2-Butanone	150,000	20,000		ppbv	20000	4/12/2012 1:24 AM
2-Hexanone	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
Acetone	770,000	20,000		ppbv	20000	4/12/2012 1:24 AM
Benzene	490,000	20,000		ppbv	20000	4/12/2012 1:24 AM
Benzyl chloride	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
Bromodichloromethane	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
Bromoform	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
Bromomethane	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
Carbon disulfide	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
Chlorobenzene	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
Chloroethane	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
Chloroform	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
Chloromethane	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/22/2012 10:10:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-002	**Matrix:**	Air
Client Sample ID:	VA1045		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,300,000	80,000		ppbv	40000	4/13/2012 9:39 PM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
Ethyl acetate	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
Ethylbenzene	22,000	40,000	J	ppbv	20000	4/12/2012 1:24 AM
Heptane	790,000	20,000		ppbv	20000	4/12/2012 1:24 AM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	4/12/2012 1:24 AM
m,p-Xylene	44,000	40,000		ppbv	20000	4/12/2012 1:24 AM
Methylene chloride	ND	100,000	U	ppbv	20000	4/12/2012 1:24 AM
n-Hexane	1,200,000	80,000		ppbv	40000	4/13/2012 9:39 PM
Naphthalene	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
o-Xylene	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
Propylene	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
Styrene	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
Tetrachloroethene	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
Toluene	720,000	20,000		ppbv	20000	4/12/2012 1:24 AM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
Trichloroethene	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
Vinyl acetate	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
Vinyl chloride	ND	20,000	U	ppbv	20000	4/12/2012 1:24 AM
Xylenes, Total	44,000	60,000	J	ppbv	20000	4/12/2012 1:24 AM
Surr: 4-Bromofluorobenzene	96.0	70-130		%REC	20000	4/12/2012 1:24 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	47,000,000	4,700,000		µg/m³	40000	4/13/2012 3:37 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300,000	U	µg/m³	40000	4/13/2012 3:37 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600,000	U	µg/m³	40000	4/13/2012 3:37 PM
Surr: 4-Bromofluorobenzene	93.8	70-130		%REC	40000	4/13/2012 3:37 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/22/2012 10:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-003	**Matrix:**	Air
Client Sample ID:	VA1046		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	7.6	0.10		%	1	4/2/2012 5:27 PM
Carbon Monoxide	ND	0.10	U	%	1	4/2/2012 5:27 PM
Methane	ND	0.50	U	%	1	4/2/2012 5:27 PM
Nitrogen	84	0.10		%	1	4/2/2012 5:27 PM
Oxygen	6.6	0.10		%	1	4/2/2012 5:27 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
2-Butanone	200,000	8,000		ppbv	8000	4/12/2012 2:50 AM
2-Hexanone	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
Acetone	1,100,000	40,000		ppbv	40000	4/12/2012 4:02 PM
Benzene	170,000	8,000		ppbv	8000	4/12/2012 2:50 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
Bromoform	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
Bromomethane	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
Chloroethane	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
Chloroform	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
Chloromethane	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/22/2012 10:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-003	**Matrix:**	Air
Client Sample ID:	VA1046		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,100,000	80,000		ppbv	40000	4/12/2012 4:02 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
Ethylbenzene	23,000	16,000		ppbv	8000	4/12/2012 2:50 AM
Heptane	1,400,000	40,000		ppbv	40000	4/12/2012 4:02 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	4/12/2012 2:50 AM
m,p-Xylene	54,000	16,000		ppbv	8000	4/12/2012 2:50 AM
Methylene chloride	ND	40,000	U	ppbv	8000	4/12/2012 2:50 AM
n-Hexane	330,000	16,000		ppbv	8000	4/12/2012 2:50 AM
Naphthalene	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
o-Xylene	14,000	8,000		ppbv	8000	4/12/2012 2:50 AM
Propylene	12,000	8,000		ppbv	8000	4/12/2012 2:50 AM
Styrene	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
Toluene	710,000	40,000		ppbv	40000	4/12/2012 4:02 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
Trichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	4/12/2012 2:50 AM
Xylenes, Total	68,000	24,000		ppbv	8000	4/12/2012 2:50 AM
Surr: 4-Bromofluorobenzene	98.3	70-130		%REC	8000	4/12/2012 2:50 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	34,000,000	4,700,000		µg/m³	40000	4/14/2012 6:44 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300,000	U	µg/m³	40000	4/14/2012 6:44 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600,000	U	µg/m³	40000	4/14/2012 6:44 PM
Surr: 4-Bromofluorobenzene	95.1	70-130		%REC	40000	4/14/2012 6:44 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/22/2012 11:17:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-004	**Matrix:**	Air
Client Sample ID:	VA1047		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	2.5	0.10		%	1	4/3/2012 10:51 AM
Carbon Monoxide	ND	0.10	U	%	1	4/3/2012 10:51 AM
Methane	ND	0.50	U	%	1	4/3/2012 10:51 AM
Nitrogen	79	0.10		%	1	4/3/2012 10:51 AM
Oxygen	17	0.10		%	1	4/3/2012 10:51 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
2-Butanone	230,000	8,000		ppbv	8000	4/12/2012 4:16 AM
2-Hexanone	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
Acetone	890,000	40,000		ppbv	40000	4/12/2012 4:43 PM
Benzene	320,000	8,000		ppbv	8000	4/12/2012 4:16 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
Bromoform	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
Bromomethane	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
Chloroethane	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
Chloroform	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
Chloromethane	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/22/2012 11:17:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-004	**Matrix:**	Air
Client Sample ID:	VA1047		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,700,000	80,000		ppbv	40000	4/12/2012 4:43 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
Ethylbenzene	27,000	16,000		ppbv	8000	4/12/2012 4:16 AM
Heptane	1,300,000	40,000		ppbv	40000	4/12/2012 4:43 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	4/12/2012 4:16 AM
m,p-Xylene	73,000	16,000		ppbv	8000	4/12/2012 4:16 AM
Methylene chloride	ND	40,000	U	ppbv	8000	4/12/2012 4:16 AM
n-Hexane	720,000	80,000		ppbv	40000	4/12/2012 4:43 PM
Naphthalene	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
o-Xylene	19,000	8,000		ppbv	8000	4/12/2012 4:16 AM
Propylene	18,000	8,000		ppbv	8000	4/12/2012 4:16 AM
Styrene	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
Toluene	630,000	40,000		ppbv	40000	4/12/2012 4:43 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
Trichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	4/12/2012 4:16 AM
Xylenes, Total	92,000	24,000		ppbv	8000	4/12/2012 4:16 AM
Surr: 4-Bromofluorobenzene	96.7	70-130		%REC	8000	4/12/2012 4:16 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	42,000,000	4,700,000		µg/m³	40000	4/14/2012 7:27 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300,000	U	µg/m³	40000	4/14/2012 7:27 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600,000	U	µg/m³	40000	4/14/2012 7:27 PM
Surr: 4-Bromofluorobenzene	98.1	70-130		%REC	40000	4/14/2012 7:27 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/22/2012 9:47:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-005	**Matrix:**	Air
Client Sample ID:	VA1053		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.049	0.10	J	%	1	4/3/2012 11:07 AM
Carbon Monoxide	ND	0.10	U	%	1	4/3/2012 11:07 AM
Methane	ND	0.50	U	%	1	4/3/2012 11:07 AM
Nitrogen	78	0.10		%	1	4/3/2012 11:07 AM
Oxygen	21	0.10		%	1	4/3/2012 11:07 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
2-Butanone	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
2-Hexanone	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Acetone	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Benzene	38,000	8,000		ppbv	8000	4/12/2012 12:42 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Bromoform	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Bromomethane	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Chloroethane	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Chloroform	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Chloromethane	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/22/2012 9:47:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-005	**Matrix:**	Air
Client Sample ID:	VA1053		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	190,000	16,000		ppbv	8000	4/12/2012 12:42 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	4/12/2012 12:42 AM
Heptane	41,000	8,000		ppbv	8000	4/12/2012 12:42 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	4/12/2012 12:42 AM
m,p-Xylene	ND	16,000	U	ppbv	8000	4/12/2012 12:42 AM
Methylene chloride	ND	40,000	U	ppbv	8000	4/12/2012 12:42 AM
n-Hexane	110,000	16,000		ppbv	8000	4/12/2012 12:42 AM
Naphthalene	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
o-Xylene	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Propylene	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Styrene	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Toluene	39,000	8,000		ppbv	8000	4/12/2012 12:42 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Trichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	4/12/2012 12:42 AM
Xylenes, Total	ND	24,000	U	ppbv	8000	4/12/2012 12:42 AM
Surr: 4-Bromofluorobenzene	93.8	70-130		%REC	8000	4/12/2012 12:42 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	5,000,000	940,000		µg/m³	8000	4/13/2012 2:54 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	4/13/2012 2:54 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	4/13/2012 2:54 PM
Surr: 4-Bromofluorobenzene	93.7	70-130		%REC	8000	4/13/2012 2:54 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/22/2012 10:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-006	**Matrix:**	Air
Client Sample ID:	VA1054		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.35	0.10		%	1	4/3/2012 11:26 AM
Carbon Monoxide	ND	0.10	U	%	1	4/3/2012 11:26 AM
Methane	ND	0.50	U	%	1	4/3/2012 11:26 AM
Nitrogen	80	0.10		%	1	4/3/2012 11:26 AM
Oxygen	19	0.10		%	1	4/3/2012 11:26 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	4/12/2012 2:09 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	4/12/2012 2:09 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	4/12/2012 2:09 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	4/12/2012 2:09 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	4/12/2012 2:09 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	4/12/2012 2:09 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	4/12/2012 2:09 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	4/12/2012 2:09 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	4/12/2012 2:09 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	4/12/2012 2:09 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	4/12/2012 2:09 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	4/12/2012 2:09 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	4/12/2012 2:09 AM
1,3-Butadiene	ND	800	U	ppbv	800	4/12/2012 2:09 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	4/12/2012 2:09 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	4/12/2012 2:09 AM
2-Butanone	ND	800	U	ppbv	800	4/12/2012 2:09 AM
2-Hexanone	ND	800	U	ppbv	800	4/12/2012 2:09 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	4/12/2012 2:09 AM
Acetone	1,500	800		ppbv	800	4/12/2012 2:09 AM
Benzene	8,200	800		ppbv	800	4/12/2012 2:09 AM
Benzyl chloride	ND	800	U	ppbv	800	4/12/2012 2:09 AM
Bromodichloromethane	ND	800	U	ppbv	800	4/12/2012 2:09 AM
Bromoform	ND	800	U	ppbv	800	4/12/2012 2:09 AM
Bromomethane	ND	800	U	ppbv	800	4/12/2012 2:09 AM
Carbon disulfide	ND	800	U	ppbv	800	4/12/2012 2:09 AM
Carbon tetrachloride	ND	800	U	ppbv	800	4/12/2012 2:09 AM
Chlorobenzene	ND	800	U	ppbv	800	4/12/2012 2:09 AM
Chlorodibromomethane	ND	800	U	ppbv	800	4/12/2012 2:09 AM
Chloroethane	ND	800	U	ppbv	800	4/12/2012 2:09 AM
Chloroform	ND	800	U	ppbv	800	4/12/2012 2:09 AM
Chloromethane	ND	800	U	ppbv	800	4/12/2012 2:09 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	4/12/2012 2:09 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	4/12/2012 2:09 AM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/22/2012 10:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-006	**Matrix:**	Air
Client Sample ID:	VA1054		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	20,000	1,600		ppbv	800	4/12/2012 2:09 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	4/12/2012 2:09 AM
Ethyl acetate	ND	800	U	ppbv	800	4/12/2012 2:09 AM
Ethylbenzene	2,400	1,600		ppbv	800	4/12/2012 2:09 AM
Heptane	16,000	800		ppbv	800	4/12/2012 2:09 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	4/12/2012 2:09 AM
m,p-Xylene	6,400	1,600		ppbv	800	4/12/2012 2:09 AM
Methylene chloride	ND	4,000	U	ppbv	800	4/12/2012 2:09 AM
n-Hexane	12,000	1,600		ppbv	800	4/12/2012 2:09 AM
Naphthalene	ND	800	U	ppbv	800	4/12/2012 2:09 AM
o-Xylene	1,900	800		ppbv	800	4/12/2012 2:09 AM
Propylene	ND	800	U	ppbv	800	4/12/2012 2:09 AM
Styrene	ND	800	U	ppbv	800	4/12/2012 2:09 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	4/12/2012 2:09 AM
Tetrachloroethene	ND	800	U	ppbv	800	4/12/2012 2:09 AM
Tetrahydrofuran	ND	800	U	ppbv	800	4/12/2012 2:09 AM
Toluene	26,000	800		ppbv	800	4/12/2012 2:09 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	4/12/2012 2:09 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	4/12/2012 2:09 AM
Trichloroethene	ND	800	U	ppbv	800	4/12/2012 2:09 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	4/12/2012 2:09 AM
Vinyl acetate	ND	800	U	ppbv	800	4/12/2012 2:09 AM
Vinyl chloride	ND	800	U	ppbv	800	4/12/2012 2:09 AM
Xylenes, Total	8,200	2,400		ppbv	800	4/12/2012 2:09 AM
Surr: 4-Bromofluorobenzene	93.6	70-130		%REC	800	4/12/2012 2:09 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	780,000	94,000		µg/m³	800	4/13/2012 4:24 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	4/13/2012 4:24 PM
C9-C12 Aliphatic Hydrocarbons	62,000	150,000	J	µg/m³	800	4/13/2012 4:24 PM
Surr: 4-Bromofluorobenzene	98.5	70-130		%REC	800	4/13/2012 4:24 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/22/2012 10:51:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-007	**Matrix:**	Air
Client Sample ID:	VA1055		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.16	0.10		%	1	4/3/2012 11:41 AM
Carbon Monoxide	ND	0.10	U	%	1	4/3/2012 11:41 AM
Methane	ND	0.50	U	%	1	4/3/2012 11:41 AM
Nitrogen	78	0.10		%	1	4/3/2012 11:41 AM
Oxygen	21	0.10		%	1	4/3/2012 11:41 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	4/12/2012 3:35 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	4/12/2012 3:35 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	4/12/2012 3:35 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	4/12/2012 3:35 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	4/12/2012 3:35 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	4/12/2012 3:35 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	4/12/2012 3:35 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	4/12/2012 3:35 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	4/12/2012 3:35 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	4/12/2012 3:35 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	4/12/2012 3:35 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	4/12/2012 3:35 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	4/12/2012 3:35 AM
1,3-Butadiene	ND	800	U	ppbv	800	4/12/2012 3:35 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	4/12/2012 3:35 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	4/12/2012 3:35 AM
2-Butanone	ND	800	U	ppbv	800	4/12/2012 3:35 AM
2-Hexanone	ND	800	U	ppbv	800	4/12/2012 3:35 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	4/12/2012 3:35 AM
Acetone	1,600	800		ppbv	800	4/12/2012 3:35 AM
Benzene	7,700	800		ppbv	800	4/12/2012 3:35 AM
Benzyl chloride	ND	800	U	ppbv	800	4/12/2012 3:35 AM
Bromodichloromethane	ND	800	U	ppbv	800	4/12/2012 3:35 AM
Bromoform	ND	800	U	ppbv	800	4/12/2012 3:35 AM
Bromomethane	ND	800	U	ppbv	800	4/12/2012 3:35 AM
Carbon disulfide	ND	800	U	ppbv	800	4/12/2012 3:35 AM
Carbon tetrachloride	ND	800	U	ppbv	800	4/12/2012 3:35 AM
Chlorobenzene	ND	800	U	ppbv	800	4/12/2012 3:35 AM
Chlorodibromomethane	ND	800	U	ppbv	800	4/12/2012 3:35 AM
Chloroethane	ND	800	U	ppbv	800	4/12/2012 3:35 AM
Chloroform	ND	800	U	ppbv	800	4/12/2012 3:35 AM
Chloromethane	ND	800	U	ppbv	800	4/12/2012 3:35 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	4/12/2012 3:35 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	4/12/2012 3:35 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/22/2012 10:51:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-007	**Matrix:**	Air
Client Sample ID:	VA1055		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	23,000	1,600		ppbv	800	4/12/2012 3:35 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	4/12/2012 3:35 AM
Ethyl acetate	ND	800	U	ppbv	800	4/12/2012 3:35 AM
Ethylbenzene	2,200	1,600		ppbv	800	4/12/2012 3:35 AM
Heptane	16,000	800		ppbv	800	4/12/2012 3:35 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	4/12/2012 3:35 AM
m,p-Xylene	5,600	1,600		ppbv	800	4/12/2012 3:35 AM
Methylene chloride	ND	4,000	U	ppbv	800	4/12/2012 3:35 AM
n-Hexane	13,000	1,600		ppbv	800	4/12/2012 3:35 AM
Naphthalene	ND	800	U	ppbv	800	4/12/2012 3:35 AM
o-Xylene	1,600	800		ppbv	800	4/12/2012 3:35 AM
Propylene	ND	800	U	ppbv	800	4/12/2012 3:35 AM
Styrene	ND	800	U	ppbv	800	4/12/2012 3:35 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	4/12/2012 3:35 AM
Tetrachloroethene	ND	800	U	ppbv	800	4/12/2012 3:35 AM
Tetrahydrofuran	ND	800	U	ppbv	800	4/12/2012 3:35 AM
Toluene	23,000	800		ppbv	800	4/12/2012 3:35 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	4/12/2012 3:35 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	4/12/2012 3:35 AM
Trichloroethene	ND	800	U	ppbv	800	4/12/2012 3:35 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	4/12/2012 3:35 AM
Vinyl acetate	ND	800	U	ppbv	800	4/12/2012 3:35 AM
Vinyl chloride	ND	800	U	ppbv	800	4/12/2012 3:35 AM
Xylenes, Total	7,200	2,400		ppbv	800	4/12/2012 3:35 AM
Surr: 4-Bromofluorobenzene	94.1	70-130		%REC	800	4/12/2012 3:35 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,100,000	94,000		µg/m³	800	4/13/2012 6:40 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	4/13/2012 6:40 PM
C9-C12 Aliphatic Hydrocarbons	46,000	150,000	J	µg/m³	800	4/13/2012 6:40 PM
Surr: 4-Bromofluorobenzene	99.8	70-130		%REC	800	4/13/2012 6:40 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/22/2012 11:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-008	**Matrix:**	Air
Client Sample ID:	VA1056		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.28	0.10		%	1	4/3/2012 11:57 AM
Carbon Monoxide	ND	0.10	U	%	1	4/3/2012 11:57 AM
Methane	ND	0.50	U	%	1	4/3/2012 11:57 AM
Nitrogen	79	0.10		%	1	4/3/2012 11:57 AM
Oxygen	20	0.10		%	1	4/3/2012 11:57 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	4/12/2012 5:01 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	4/12/2012 5:01 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	4/12/2012 5:01 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	4/12/2012 5:01 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	4/12/2012 5:01 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	4/12/2012 5:01 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	4/12/2012 5:01 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	4/12/2012 5:01 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	4/12/2012 5:01 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	4/12/2012 5:01 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	4/12/2012 5:01 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	4/12/2012 5:01 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	4/12/2012 5:01 AM
1,3-Butadiene	ND	800	U	ppbv	800	4/12/2012 5:01 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	4/12/2012 5:01 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	4/12/2012 5:01 AM
2-Butanone	ND	800	U	ppbv	800	4/12/2012 5:01 AM
2-Hexanone	ND	800	U	ppbv	800	4/12/2012 5:01 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	4/12/2012 5:01 AM
Acetone	1,700	800		ppbv	800	4/12/2012 5:01 AM
Benzene	27,000	800		ppbv	800	4/12/2012 5:01 AM
Benzyl chloride	ND	800	U	ppbv	800	4/12/2012 5:01 AM
Bromodichloromethane	ND	800	U	ppbv	800	4/12/2012 5:01 AM
Bromoform	ND	800	U	ppbv	800	4/12/2012 5:01 AM
Bromomethane	ND	800	U	ppbv	800	4/12/2012 5:01 AM
Carbon disulfide	ND	800	U	ppbv	800	4/12/2012 5:01 AM
Carbon tetrachloride	ND	800	U	ppbv	800	4/12/2012 5:01 AM
Chlorobenzene	ND	800	U	ppbv	800	4/12/2012 5:01 AM
Chlorodibromomethane	ND	800	U	ppbv	800	4/12/2012 5:01 AM
Chloroethane	ND	800	U	ppbv	800	4/12/2012 5:01 AM
Chloroform	ND	800	U	ppbv	800	4/12/2012 5:01 AM
Chloromethane	ND	800	U	ppbv	800	4/12/2012 5:01 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	4/12/2012 5:01 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	4/12/2012 5:01 AM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/22/2012 11:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-008	**Matrix:**	Air
Client Sample ID:	VA1056		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	32,000	1,600		ppbv	800	4/12/2012 5:01 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	4/12/2012 5:01 AM
Ethyl acetate	ND	800	U	ppbv	800	4/12/2012 5:01 AM
Ethylbenzene	2,400	1,600		ppbv	800	4/12/2012 5:01 AM
Heptane	17,000	800		ppbv	800	4/12/2012 5:01 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	4/12/2012 5:01 AM
m,p-Xylene	6,500	1,600		ppbv	800	4/12/2012 5:01 AM
Methylene chloride	ND	4,000	U	ppbv	800	4/12/2012 5:01 AM
n-Hexane	21,000	1,600		ppbv	800	4/12/2012 5:01 AM
Naphthalene	ND	800	U	ppbv	800	4/12/2012 5:01 AM
o-Xylene	1,900	800		ppbv	800	4/12/2012 5:01 AM
Propylene	1,200	800		ppbv	800	4/12/2012 5:01 AM
Styrene	ND	800	U	ppbv	800	4/12/2012 5:01 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	4/12/2012 5:01 AM
Tetrachloroethene	ND	800	U	ppbv	800	4/12/2012 5:01 AM
Tetrahydrofuran	ND	800	U	ppbv	800	4/12/2012 5:01 AM
Toluene	27,000	800		ppbv	800	4/12/2012 5:01 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	4/12/2012 5:01 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	4/12/2012 5:01 AM
Trichloroethene	ND	800	U	ppbv	800	4/12/2012 5:01 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	4/12/2012 5:01 AM
Vinyl acetate	ND	800	U	ppbv	800	4/12/2012 5:01 AM
Vinyl chloride	ND	800	U	ppbv	800	4/12/2012 5:01 AM
Xylenes, Total	8,400	2,400		ppbv	800	4/12/2012 5:01 AM
Surr: 4-Bromofluorobenzene	94.8	70-130		%REC	800	4/12/2012 5:01 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,400,000	940,000		µg/m³	8000	4/13/2012 8:06 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	4/13/2012 8:06 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	4/13/2012 8:06 PM
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	8000	4/13/2012 8:06 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 9:06:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-009	**Matrix:**	Air
Client Sample ID:	VA1066		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.077	0.10	J	%	1	4/3/2012 12:12 PM
Carbon Monoxide	ND	0.10	U	%	1	4/3/2012 12:12 PM
Methane	ND	0.50	U	%	1	4/3/2012 12:12 PM
Nitrogen	78	0.10		%	1	4/3/2012 12:12 PM
Oxygen	20	0.10		%	1	4/3/2012 12:12 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RD2**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	4/13/2012 4:46 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	4/13/2012 4:46 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	4/13/2012 4:46 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	4/13/2012 4:46 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	4/13/2012 4:46 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	4/13/2012 4:46 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	4/13/2012 4:46 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	4/13/2012 4:46 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	4/13/2012 4:46 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	4/13/2012 4:46 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	4/13/2012 4:46 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	4/13/2012 4:46 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	4/13/2012 4:46 PM
1,3-Butadiene	ND	800	U	ppbv	800	4/13/2012 4:46 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	4/13/2012 4:46 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	4/13/2012 4:46 PM
2-Butanone	ND	800	U	ppbv	800	4/13/2012 4:46 PM
2-Hexanone	ND	800	U	ppbv	800	4/13/2012 4:46 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Acetone	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Benzene	1,900	800		ppbv	800	4/13/2012 4:46 PM
Benzyl chloride	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Bromodichloromethane	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Bromoform	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Bromomethane	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Carbon disulfide	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Carbon tetrachloride	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Chlorobenzene	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Chlorodibromomethane	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Chloroethane	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Chloroform	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Chloromethane	ND	800	U	ppbv	800	4/13/2012 4:46 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	4/13/2012 4:46 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	4/13/2012 4:46 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 9:06:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-009	**Matrix:**	Air
Client Sample ID:	VA1066		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	3,200	1,600		ppbv	800	4/13/2012 4:46 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Ethyl acetate	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Ethylbenzene	ND	1,600	U	ppbv	800	4/13/2012 4:46 PM
Heptane	2,900	800		ppbv	800	4/13/2012 4:46 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	4/13/2012 4:46 PM
m,p-Xylene	1,200	1,600	J	ppbv	800	4/13/2012 4:46 PM
Methylene chloride	ND	4,000	U	ppbv	800	4/13/2012 4:46 PM
n-Hexane	1,600	1,600		ppbv	800	4/13/2012 4:46 PM
Naphthalene	ND	800	U	ppbv	800	4/13/2012 4:46 PM
o-Xylene	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Propylene	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Styrene	ND	800	U	ppbv	800	4/13/2012 4:46 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Tetrachloroethene	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Tetrahydrofuran	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Toluene	6,400	800		ppbv	800	4/13/2012 4:46 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	4/13/2012 4:46 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Trichloroethene	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Vinyl acetate	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Vinyl chloride	ND	800	U	ppbv	800	4/13/2012 4:46 PM
Xylenes, Total	1,200	2,400	J	ppbv	800	4/13/2012 4:46 PM
Surr: 4-Bromofluorobenzene	94.8	70-130		%REC	800	4/13/2012 4:46 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	240,000	94,000		µg/m³	800	4/12/2012 1:59 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	4/12/2012 1:59 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	4/12/2012 1:59 AM
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	800	4/12/2012 1:59 AM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 9:45:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-010	**Matrix:**	Air
Client Sample ID:	VA1067		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.088	0.10	J	%	1	4/3/2012 12:28 PM
Carbon Monoxide	ND	0.10	U	%	1	4/3/2012 12:28 PM
Methane	ND	0.50	U	%	1	4/3/2012 12:28 PM
Nitrogen	78	0.10		%	1	4/3/2012 12:28 PM
Oxygen	21	0.10		%	1	4/3/2012 12:28 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	4/8/2012 4:52 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	4/8/2012 4:52 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	4/8/2012 4:52 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	4/8/2012 4:52 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	4/8/2012 4:52 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	4/8/2012 4:52 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	4/8/2012 4:52 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	4/8/2012 4:52 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	4/8/2012 4:52 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	4/8/2012 4:52 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	4/8/2012 4:52 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	4/8/2012 4:52 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	4/8/2012 4:52 PM
1,3-Butadiene	ND	800	U	ppbv	800	4/8/2012 4:52 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	4/8/2012 4:52 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	4/8/2012 4:52 PM
2-Butanone	ND	800	U	ppbv	800	4/8/2012 4:52 PM
2-Hexanone	ND	800	U	ppbv	800	4/8/2012 4:52 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	4/8/2012 4:52 PM
Acetone	1,100	800		ppbv	800	4/8/2012 4:52 PM
Benzene	2,100	800		ppbv	800	4/8/2012 4:52 PM
Benzyl chloride	ND	800	U	ppbv	800	4/8/2012 4:52 PM
Bromodichloromethane	ND	800	U	ppbv	800	4/8/2012 4:52 PM
Bromoform	ND	800	U	ppbv	800	4/8/2012 4:52 PM
Bromomethane	ND	800	U	ppbv	800	4/8/2012 4:52 PM
Carbon disulfide	ND	800	U	ppbv	800	4/8/2012 4:52 PM
Carbon tetrachloride	ND	800	U	ppbv	800	4/8/2012 4:52 PM
Chlorobenzene	ND	800	U	ppbv	800	4/8/2012 4:52 PM
Chlorodibromomethane	ND	800	U	ppbv	800	4/8/2012 4:52 PM
Chloroethane	ND	800	U	ppbv	800	4/8/2012 4:52 PM
Chloroform	ND	800	U	ppbv	800	4/8/2012 4:52 PM
Chloromethane	ND	800	U	ppbv	800	4/8/2012 4:52 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	4/8/2012 4:52 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	4/8/2012 4:52 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 9:45:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-010	**Matrix:**	Air
Client Sample ID:	VA1067		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	4,100	1,600		ppbv	800	4/8/2012 4:52 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	4/8/2012 4:52 PM
Ethyl acetate	ND	800	U	ppbv	800	4/8/2012 4:52 PM
Ethylbenzene	ND	1,600	U	ppbv	800	4/8/2012 4:52 PM
Heptane	4,400	800		ppbv	800	4/8/2012 4:52 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	4/8/2012 4:52 PM
m,p-Xylene	1,400	1,600	J	ppbv	800	4/8/2012 4:52 PM
Methylene chloride	ND	4,000	U	ppbv	800	4/8/2012 4:52 PM
n-Hexane	2,600	1,600		ppbv	800	4/8/2012 4:52 PM
Naphthalene	ND	800	U	ppbv	800	4/8/2012 4:52 PM
o-Xylene	ND	800	U	ppbv	800	4/8/2012 4:52 PM
Propylene	ND	800	U	ppbv	800	4/8/2012 4:52 PM
Styrene	ND	800	U	ppbv	800	4/8/2012 4:52 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	4/8/2012 4:52 PM
Tetrachloroethene	ND	800	U	ppbv	800	4/8/2012 4:52 PM
Tetrahydrofuran	ND	800	U	ppbv	800	4/8/2012 4:52 PM
Toluene	7,400	800		ppbv	800	4/8/2012 4:52 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	4/8/2012 4:52 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	4/8/2012 4:52 PM
Trichloroethene	ND	800	U	ppbv	800	4/8/2012 4:52 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	4/8/2012 4:52 PM
Vinyl acetate	ND	800	U	ppbv	800	4/8/2012 4:52 PM
Vinyl chloride	ND	800	U	ppbv	800	4/8/2012 4:52 PM
Xylenes, Total	1,400	2,400	J	ppbv	800	4/8/2012 4:52 PM
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	800	4/8/2012 4:52 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	200,000	47,000		µg/m³	400	4/11/2012 5:39 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	4/11/2012 5:39 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	4/11/2012 5:39 PM
Surr: 4-Bromofluorobenzene	99.7	70-130		%REC	400	4/11/2012 5:39 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 10:26:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-011	**Matrix:**	Air
Client Sample ID:	VA1068		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.16	0.10		%	1	4/3/2012 12:43 PM
Carbon Monoxide	ND	0.10	U	%	1	4/3/2012 12:43 PM
Methane	ND	0.50	U	%	1	4/3/2012 12:43 PM
Nitrogen	78	0.10		%	1	4/3/2012 12:43 PM
Oxygen	21	0.10		%	1	4/3/2012 12:43 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	4/8/2012 5:37 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	4/8/2012 5:37 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	4/8/2012 5:37 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	4/8/2012 5:37 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	4/8/2012 5:37 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	4/8/2012 5:37 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	4/8/2012 5:37 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	4/8/2012 5:37 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	4/8/2012 5:37 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	4/8/2012 5:37 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	4/8/2012 5:37 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	4/8/2012 5:37 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	4/8/2012 5:37 PM
1,3-Butadiene	ND	800	U	ppbv	800	4/8/2012 5:37 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	4/8/2012 5:37 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	4/8/2012 5:37 PM
2-Butanone	ND	800	U	ppbv	800	4/8/2012 5:37 PM
2-Hexanone	ND	800	U	ppbv	800	4/8/2012 5:37 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Acetone	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Benzene	3,000	800		ppbv	800	4/8/2012 5:37 PM
Benzyl chloride	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Bromodichloromethane	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Bromoform	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Bromomethane	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Carbon disulfide	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Carbon tetrachloride	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Chlorobenzene	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Chlorodibromomethane	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Chloroethane	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Chloroform	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Chloromethane	ND	800	U	ppbv	800	4/8/2012 5:37 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	4/8/2012 5:37 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	4/8/2012 5:37 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 10:26:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-011	**Matrix:**	Air
Client Sample ID:	VA1068		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	6,300	1,600		ppbv	800	4/8/2012 5:37 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Ethyl acetate	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Ethylbenzene	ND	1,600	U	ppbv	800	4/8/2012 5:37 PM
Heptane	3,600	800		ppbv	800	4/8/2012 5:37 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	4/8/2012 5:37 PM
m,p-Xylene	1,200	1,600	J	ppbv	800	4/8/2012 5:37 PM
Methylene chloride	ND	4,000	U	ppbv	800	4/8/2012 5:37 PM
n-Hexane	4,200	1,600		ppbv	800	4/8/2012 5:37 PM
Naphthalene	ND	800	U	ppbv	800	4/8/2012 5:37 PM
o-Xylene	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Propylene	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Styrene	ND	800	U	ppbv	800	4/8/2012 5:37 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Tetrachloroethene	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Tetrahydrofuran	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Toluene	6,500	800		ppbv	800	4/8/2012 5:37 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	4/8/2012 5:37 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Trichloroethene	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Vinyl acetate	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Vinyl chloride	ND	800	U	ppbv	800	4/8/2012 5:37 PM
Xylenes, Total	1,200	2,400	J	ppbv	800	4/8/2012 5:37 PM
Surr: 4-Bromofluorobenzene	94.9	70-130		%REC	800	4/8/2012 5:37 PM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	370,000	47,000		µg/m³	400	4/12/2012 2:50 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	4/12/2012 2:50 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	4/12/2012 2:50 AM
Surr: 4-Bromofluorobenzene	99.5	70-130		%REC	400	4/12/2012 2:50 AM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 11:01:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-012	**Matrix:**	Air
Client Sample ID:	VA1069		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.46	0.10		%	1	4/3/2012 12:58 PM
Carbon Monoxide	ND	0.10	U	%	1	4/3/2012 12:58 PM
Methane	ND	0.50	U	%	1	4/3/2012 12:58 PM
Nitrogen	78	0.10		%	1	4/3/2012 12:58 PM
Oxygen	20	0.10		%	1	4/3/2012 12:58 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
2-Butanone	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
2-Hexanone	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Acetone	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Benzene	18,000	8,000		ppbv	8000	4/8/2012 6:18 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Bromoform	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Bromomethane	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Chloroethane	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Chloroform	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Chloromethane	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 11:01:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-012	**Matrix:**	Air
Client Sample ID:	VA1069		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	43,000	16,000		ppbv	8000	4/8/2012 6:18 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	4/8/2012 6:18 PM
Heptane	31,000	8,000		ppbv	8000	4/8/2012 6:18 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	4/8/2012 6:18 PM
m,p-Xylene	8,200	16,000	J	ppbv	8000	4/8/2012 6:18 PM
Methylene chloride	ND	40,000	U	ppbv	8000	4/8/2012 6:18 PM
n-Hexane	22,000	16,000		ppbv	8000	4/8/2012 6:18 PM
Naphthalene	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
o-Xylene	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Propylene	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Styrene	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Toluene	42,000	8,000		ppbv	8000	4/8/2012 6:18 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Trichloroethene	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	4/8/2012 6:18 PM
Xylenes, Total	8,200	24,000	J	ppbv	8000	4/8/2012 6:18 PM
Surr: 4-Bromofluorobenzene	96.9	70-130		%REC	8000	4/8/2012 6:18 PM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	1,800,000	940,000		µg/m³	8000	4/13/2012 9:33 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	4/13/2012 9:33 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	4/13/2012 9:33 PM
Surr: 4-Bromofluorobenzene	95.7	70-130		%REC	8000	4/13/2012 9:33 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 8:50:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-013	**Matrix:**	Air
Client Sample ID:	VA1070		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.41	0.10		%	1	4/3/2012 1:18 PM
Carbon Monoxide	ND	0.10	U	%	1	4/3/2012 1:18 PM
Methane	ND	0.50	U	%	1	4/3/2012 1:18 PM
Nitrogen	78	0.10		%	1	4/3/2012 1:18 PM
Oxygen	20	0.10		%	1	4/3/2012 1:18 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RD2**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
1,3-Butadiene	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
2-Butanone	46,000	20,000		ppbv	20000	4/13/2012 6:12 PM
2-Hexanone	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
Acetone	410,000	20,000		ppbv	20000	4/13/2012 6:12 PM
Benzene	220,000	20,000		ppbv	20000	4/13/2012 6:12 PM
Benzyl chloride	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
Bromodichloromethane	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
Bromoform	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
Bromomethane	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
Carbon disulfide	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
Chlorobenzene	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
Chloroethane	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
Chloroform	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
Chloromethane	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 8:50:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-013	**Matrix:**	Air
Client Sample ID:	VA1070		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	860,000	40,000		ppbv	20000	4/13/2012 6:12 PM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
Ethyl acetate	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
Ethylbenzene	25,000	40,000	J	ppbv	20000	4/13/2012 6:12 PM
Heptane	780,000	20,000		ppbv	20000	4/13/2012 6:12 PM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	4/13/2012 6:12 PM
m,p-Xylene	58,000	40,000		ppbv	20000	4/13/2012 6:12 PM
Methylene chloride	ND	100,000	U	ppbv	20000	4/13/2012 6:12 PM
n-Hexane	540,000	40,000		ppbv	20000	4/13/2012 6:12 PM
Naphthalene	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
o-Xylene	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
Propylene	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
Styrene	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
Tetrachloroethene	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
Toluene	600,000	20,000		ppbv	20000	4/13/2012 6:12 PM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
Trichloroethene	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
Vinyl acetate	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
Vinyl chloride	ND	20,000	U	ppbv	20000	4/13/2012 6:12 PM
Xylenes, Total	58,000	60,000	J	ppbv	20000	4/13/2012 6:12 PM
Surr: 4-Bromofluorobenzene	96.8	70-130		%REC	20000	4/13/2012 6:12 PM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	29,000,000	2,300,000		µg/m³	20000	4/12/2012 1:13 AM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	4/12/2012 1:13 AM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	4/12/2012 1:13 AM
Surr: 4-Bromofluorobenzene	97.1	70-130		%REC	20000	4/12/2012 1:13 AM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 9:36:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-014	**Matrix:**	Air
Client Sample ID:	VA1071		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	2.4	0.10		%	1	4/5/2012 10:03 AM
Carbon Monoxide	ND	0.10	U	%	1	4/5/2012 10:03 AM
Methane	ND	0.50	U	%	1	4/5/2012 10:03 AM
Nitrogen	79	0.10		%	1	4/5/2012 10:03 AM
Oxygen	18	0.10		%	1	4/5/2012 10:03 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
1,3-Butadiene	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
2-Butanone	29,000	20,000		ppbv	20000	4/8/2012 3:26 PM
2-Hexanone	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
Acetone	310,000	20,000		ppbv	20000	4/8/2012 3:26 PM
Benzene	170,000	20,000		ppbv	20000	4/8/2012 3:26 PM
Benzyl chloride	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
Bromodichloromethane	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
Bromoform	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
Bromomethane	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
Carbon disulfide	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
Chlorobenzene	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
Chloroethane	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
Chloroform	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
Chloromethane	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 9:36:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-014	**Matrix:**	Air
Client Sample ID:	VA1071		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	820,000	40,000		ppbv	20000	4/8/2012 3:26 PM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
Ethyl acetate	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
Ethylbenzene	26,000	40,000	J	ppbv	20000	4/8/2012 3:26 PM
Heptane	680,000	20,000		ppbv	20000	4/8/2012 3:26 PM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	4/8/2012 3:26 PM
m,p-Xylene	51,000	40,000		ppbv	20000	4/8/2012 3:26 PM
Methylene chloride	ND	100,000	U	ppbv	20000	4/8/2012 3:26 PM
n-Hexane	680,000	40,000		ppbv	20000	4/8/2012 3:26 PM
Naphthalene	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
o-Xylene	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
Propylene	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
Styrene	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
Tetrachloroethene	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
Toluene	400,000	20,000		ppbv	20000	4/8/2012 3:26 PM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
Trichloroethene	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
Vinyl acetate	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
Vinyl chloride	ND	20,000	U	ppbv	20000	4/8/2012 3:26 PM
Xylenes, Total	51,000	60,000	J	ppbv	20000	4/8/2012 3:26 PM
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	20000	4/8/2012 3:26 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	30,000,000	2,300,000		µg/m³	20000	4/11/2012 4:06 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	4/11/2012 4:06 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	4/11/2012 4:06 PM
Surr: 4-Bromofluorobenzene	96.9	70-130		%REC	20000	4/11/2012 4:06 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 9:36:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-015	**Matrix:**	Air
Client Sample ID:	VA1072		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.045	0.10	J	%	1	4/5/2012 10:19 AM
Carbon Monoxide	ND	0.10	U	%	1	4/5/2012 10:19 AM
Methane	ND	0.50	U	%	1	4/5/2012 10:19 AM
Nitrogen	78	0.10		%	1	4/5/2012 10:19 AM
Oxygen	21	0.10		%	1	4/5/2012 10:19 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
1,3-Butadiene	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
2-Butanone	52,000	20,000		ppbv	20000	4/8/2012 4:07 PM
2-Hexanone	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
Acetone	520,000	20,000		ppbv	20000	4/8/2012 4:07 PM
Benzene	270,000	20,000		ppbv	20000	4/8/2012 4:07 PM
Benzyl chloride	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
Bromodichloromethane	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
Bromoform	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
Bromomethane	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
Carbon disulfide	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
Chlorobenzene	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
Chloroethane	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
Chloroform	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
Chloromethane	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 9:36:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-015	**Matrix:**	Air
Client Sample ID:	VA1072		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,300,000	80,000		ppbv	40000	4/13/2012 6:53 PM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
Ethyl acetate	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
Ethylbenzene	41,000	40,000		ppbv	20000	4/8/2012 4:07 PM
Heptane	820,000	20,000		ppbv	20000	4/8/2012 4:07 PM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	4/8/2012 4:07 PM
m,p-Xylene	79,000	40,000		ppbv	20000	4/8/2012 4:07 PM
Methylene chloride	ND	100,000	U	ppbv	20000	4/8/2012 4:07 PM
n-Hexane	950,000	40,000		ppbv	20000	4/8/2012 4:07 PM
Naphthalene	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
o-Xylene	23,000	20,000		ppbv	20000	4/8/2012 4:07 PM
Propylene	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
Styrene	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
Tetrachloroethene	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
Toluene	600,000	20,000		ppbv	20000	4/8/2012 4:07 PM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
Trichloroethene	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
Vinyl acetate	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
Vinyl chloride	ND	20,000	U	ppbv	20000	4/8/2012 4:07 PM
Xylenes, Total	100,000	60,000		ppbv	20000	4/8/2012 4:07 PM
Surr: 4-Bromofluorobenzene	96.7	70-130		%REC	20000	4/8/2012 4:07 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	37,000,000	2,300,000		µg/m³	20000	4/11/2012 4:49 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	4/11/2012 4:49 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	4/11/2012 4:49 PM
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	20000	4/11/2012 4:49 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 12:57:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-016	**Matrix:**	Air
Client Sample ID:	VA1073		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	5.1	0.10		%	1	4/5/2012 10:35 AM
Carbon Monoxide	ND	0.10	U	%	1	4/5/2012 10:35 AM
Methane	ND	0.50	U	%	1	4/5/2012 10:35 AM
Nitrogen	81	0.10		%	1	4/5/2012 10:35 AM
Oxygen	12	0.10		%	1	4/5/2012 10:35 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
1,3-Butadiene	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
2-Butanone	35,000	20,000		ppbv	20000	4/8/2012 7:42 PM
2-Hexanone	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
Acetone	300,000	20,000		ppbv	20000	4/8/2012 7:42 PM
Benzene	160,000	20,000		ppbv	20000	4/8/2012 7:42 PM
Benzyl chloride	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
Bromodichloromethane	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
Bromoform	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
Bromomethane	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
Carbon disulfide	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
Chlorobenzene	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
Chloroethane	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
Chloroform	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
Chloromethane	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 12:57:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-016	**Matrix:**	Air
Client Sample ID:	VA1073		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	500,000	40,000		ppbv	20000	4/8/2012 7:42 PM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
Ethyl acetate	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
Ethylbenzene	21,000	40,000	J	ppbv	20000	4/8/2012 7:42 PM
Heptane	310,000	20,000		ppbv	20000	4/8/2012 7:42 PM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	4/8/2012 7:42 PM
m,p-Xylene	48,000	40,000		ppbv	20000	4/8/2012 7:42 PM
Methylene chloride	ND	100,000	U	ppbv	20000	4/8/2012 7:42 PM
n-Hexane	690,000	40,000		ppbv	20000	4/8/2012 7:42 PM
Naphthalene	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
o-Xylene	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
Propylene	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
Styrene	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
Tetrachloroethene	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
Toluene	230,000	20,000		ppbv	20000	4/8/2012 7:42 PM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
Trichloroethene	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
Vinyl acetate	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
Vinyl chloride	ND	20,000	U	ppbv	20000	4/8/2012 7:42 PM
Xylenes, Total	48,000	60,000	J	ppbv	20000	4/8/2012 7:42 PM
Surr: 4-Bromofluorobenzene	95.2	70-130		%REC	20000	4/8/2012 7:42 PM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	16,000,000	4,700,000		µg/m³	40000	4/12/2012 9:08 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300,000	U	µg/m³	40000	4/12/2012 9:08 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600,000	U	µg/m³	40000	4/12/2012 9:08 PM
Surr: 4-Bromofluorobenzene	94.9	70-130		%REC	40000	4/12/2012 9:08 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 1:27:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-017	**Matrix:**	Air
Client Sample ID:	VA1074		

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	4/5/2012 10:50 AM
Carbon Monoxide	ND	0.10	U	%	1	4/5/2012 10:50 AM
Methane	ND	0.50	U	%	1	4/5/2012 10:50 AM
Nitrogen	79	0.10		%	1	4/5/2012 10:50 AM
Oxygen	19	0.10		%	1	4/5/2012 10:50 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
2-Butanone	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
2-Hexanone	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
Acetone	12,000	8,000		ppbv	8000	4/8/2012 8:24 PM
Benzene	28,000	8,000		ppbv	8000	4/8/2012 8:24 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
Bromoform	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
Bromomethane	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
Chloroethane	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
Chloroform	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
Chloromethane	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 1:27:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-017	**Matrix:**	Air
Client Sample ID:	VA1074		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	68,000	16,000		ppbv	8000	4/8/2012 8:24 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	4/8/2012 8:24 PM
Heptane	80,000	8,000		ppbv	8000	4/8/2012 8:24 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	4/8/2012 8:24 PM
m,p-Xylene	17,000	16,000		ppbv	8000	4/8/2012 8:24 PM
Methylene chloride	ND	40,000	U	ppbv	8000	4/8/2012 8:24 PM
n-Hexane	51,000	16,000		ppbv	8000	4/8/2012 8:24 PM
Naphthalene	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
o-Xylene	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
Propylene	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
Styrene	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
Toluene	90,000	8,000		ppbv	8000	4/8/2012 8:24 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
Trichloroethene	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	4/8/2012 8:24 PM
Xylenes, Total	17,000	24,000	J	ppbv	8000	4/8/2012 8:24 PM
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	8000	4/8/2012 8:24 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,200,000	940,000		µg/m³	8000	4/12/2012 9:52 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	4/12/2012 9:52 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	4/12/2012 9:52 PM
Surr: 4-Bromofluorobenzene	94.8	70-130		%REC	8000	4/12/2012 9:52 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 1:52:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-018	**Matrix:**	Air
Client Sample ID:	VA1075		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.056	0.10	J	%	1	4/5/2012 11:06 AM
Carbon Monoxide	ND	0.10	U	%	1	4/5/2012 11:06 AM
Methane	ND	0.50	U	%	1	4/5/2012 11:06 AM
Nitrogen	78	0.10		%	1	4/5/2012 11:06 AM
Oxygen	21	0.10		%	1	4/5/2012 11:06 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
2-Butanone	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
2-Hexanone	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
Acetone	13,000	8,000		ppbv	8000	4/8/2012 9:06 PM
Benzene	20,000	8,000		ppbv	8000	4/8/2012 9:06 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
Bromoform	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
Bromomethane	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
Chloroethane	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
Chloroform	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
Chloromethane	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 1:52:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-018	**Matrix:**	Air
Client Sample ID:	VA1075		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	34,000	16,000		ppbv	8000	4/8/2012 9:06 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
Ethylbenzene	8,400	16,000	J	ppbv	8000	4/8/2012 9:06 PM
Heptane	50,000	8,000		ppbv	8000	4/8/2012 9:06 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	4/8/2012 9:06 PM
m,p-Xylene	20,000	16,000		ppbv	8000	4/8/2012 9:06 PM
Methylene chloride	ND	40,000	U	ppbv	8000	4/8/2012 9:06 PM
n-Hexane	24,000	16,000		ppbv	8000	4/8/2012 9:06 PM
Naphthalene	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
o-Xylene	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
Propylene	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
Styrene	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
Toluene	84,000	8,000		ppbv	8000	4/8/2012 9:06 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
Trichloroethene	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	4/8/2012 9:06 PM
Xylenes, Total	20,000	24,000	J	ppbv	8000	4/8/2012 9:06 PM
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	8000	4/8/2012 9:06 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,200,000	190,000		µg/m³	1600	4/14/2012 8:11 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	4/14/2012 8:11 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	4/14/2012 8:11 PM
Surr: 4-Bromofluorobenzene	99.3	70-130		%REC	1600	4/14/2012 8:11 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 2:15:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-019	**Matrix:**	Air
Client Sample ID:	VA1076		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.11	0.10		%	1	4/5/2012 11:30 AM
Carbon Monoxide	ND	0.10	U	%	1	4/5/2012 11:30 AM
Methane	ND	0.50	U	%	1	4/5/2012 11:30 AM
Nitrogen	79	0.10		%	1	4/5/2012 11:30 AM
Oxygen	21	0.10		%	1	4/5/2012 11:30 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
2-Butanone	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
2-Hexanone	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
Acetone	15,000	8,000		ppbv	8000	4/8/2012 9:47 PM
Benzene	19,000	8,000		ppbv	8000	4/8/2012 9:47 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
Bromoform	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
Bromomethane	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
Chloroethane	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
Chloroform	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
Chloromethane	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 2:15:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-019	**Matrix:**	Air
Client Sample ID:	VA1076		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	64,000	16,000		ppbv	8000	4/8/2012 9:47 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	4/8/2012 9:47 PM
Heptane	54,000	8,000		ppbv	8000	4/8/2012 9:47 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	4/8/2012 9:47 PM
m,p-Xylene	12,000	16,000	J	ppbv	8000	4/8/2012 9:47 PM
Methylene chloride	ND	40,000	U	ppbv	8000	4/8/2012 9:47 PM
n-Hexane	53,000	16,000		ppbv	8000	4/8/2012 9:47 PM
Naphthalene	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
o-Xylene	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
Propylene	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
Styrene	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
Toluene	58,000	8,000		ppbv	8000	4/8/2012 9:47 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
Trichloroethene	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	4/8/2012 9:47 PM
Xylenes, Total	12,000	24,000	J	ppbv	8000	4/8/2012 9:47 PM
Surr: 4-Bromofluorobenzene	97.0	70-130		%REC	8000	4/8/2012 9:47 PM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	1,400,000	190,000		µg/m³	1600	4/14/2012 9:39 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	4/14/2012 9:39 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	4/14/2012 9:39 PM
Surr: 4-Bromofluorobenzene	99.6	70-130		%REC	1600	4/14/2012 9:39 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 2:42:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-020	**Matrix:**	Air
Client Sample ID:	VA1077		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.95	0.10		%	1	4/5/2012 11:45 AM
Carbon Monoxide	ND	0.10	U	%	1	4/5/2012 11:45 AM
Methane	ND	0.50	U	%	1	4/5/2012 11:45 AM
Nitrogen	79	0.10		%	1	4/5/2012 11:45 AM
Oxygen	19	0.10		%	1	4/5/2012 11:45 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
2-Butanone	21,000	8,000		ppbv	8000	4/8/2012 10:29 PM
2-Hexanone	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
Acetone	71,000	8,000		ppbv	8000	4/8/2012 10:29 PM
Benzene	81,000	8,000		ppbv	8000	4/8/2012 10:29 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
Bromoform	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
Bromomethane	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
Chloroethane	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
Chloroform	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
Chloromethane	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 2:42:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-020	**Matrix:**	Air
Client Sample ID:	VA1077		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	300,000	16,000		ppbv	8000	4/8/2012 10:29 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
Ethylbenzene	14,000	16,000	J	ppbv	8000	4/8/2012 10:29 PM
Heptane	170,000	8,000		ppbv	8000	4/8/2012 10:29 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	4/8/2012 10:29 PM
m,p-Xylene	32,000	16,000		ppbv	8000	4/8/2012 10:29 PM
Methylene chloride	ND	40,000	U	ppbv	8000	4/8/2012 10:29 PM
n-Hexane	330,000	40,000		ppbv	20000	4/13/2012 7:35 PM
Naphthalene	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
o-Xylene	10,000	8,000		ppbv	8000	4/8/2012 10:29 PM
Propylene	8,900	8,000		ppbv	8000	4/8/2012 10:29 PM
Styrene	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
Toluene	120,000	8,000		ppbv	8000	4/8/2012 10:29 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
Trichloroethene	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	4/8/2012 10:29 PM
Xylenes, Total	42,000	24,000		ppbv	8000	4/8/2012 10:29 PM
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	8000	4/8/2012 10:29 PM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	9,100,000	2,300,000		µg/m³	20000	4/13/2012 12:02 AM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	4/13/2012 12:02 AM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	4/13/2012 12:02 AM
Surr: 4-Bromofluorobenzene	94.5	70-130		%REC	20000	4/13/2012 12:02 AM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 3:21:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-021	**Matrix:**	Air
Client Sample ID:	VA1078		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.62	0.10		%	1	4/5/2012 12:16 PM
Carbon Monoxide	ND	0.10	U	%	1	4/5/2012 12:16 PM
Methane	ND	0.50	U	%	1	4/5/2012 12:16 PM
Nitrogen	81	0.10		%	1	4/5/2012 12:16 PM
Oxygen	19	0.10		%	1	4/5/2012 12:16 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	4/8/2012 11:14 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	4/8/2012 11:14 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	4/8/2012 11:14 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	4/8/2012 11:14 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	4/8/2012 11:14 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	4/8/2012 11:14 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	4/8/2012 11:14 PM
1,2,4-Trimethylbenzene	1,200	800		ppbv	800	4/8/2012 11:14 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	4/8/2012 11:14 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	4/8/2012 11:14 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	4/8/2012 11:14 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	4/8/2012 11:14 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	4/8/2012 11:14 PM
1,3-Butadiene	ND	800	U	ppbv	800	4/8/2012 11:14 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	4/8/2012 11:14 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	4/8/2012 11:14 PM
2-Butanone	3,800	800		ppbv	800	4/8/2012 11:14 PM
2-Hexanone	ND	800	U	ppbv	800	4/8/2012 11:14 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	4/8/2012 11:14 PM
Acetone	21,000	800		ppbv	800	4/8/2012 11:14 PM
Benzene	9,200	800		ppbv	800	4/8/2012 11:14 PM
Benzyl chloride	ND	800	U	ppbv	800	4/8/2012 11:14 PM
Bromodichloromethane	ND	800	U	ppbv	800	4/8/2012 11:14 PM
Bromoform	ND	800	U	ppbv	800	4/8/2012 11:14 PM
Bromomethane	ND	800	U	ppbv	800	4/8/2012 11:14 PM
Carbon disulfide	ND	800	U	ppbv	800	4/8/2012 11:14 PM
Carbon tetrachloride	ND	800	U	ppbv	800	4/8/2012 11:14 PM
Chlorobenzene	ND	800	U	ppbv	800	4/8/2012 11:14 PM
Chlorodibromomethane	ND	800	U	ppbv	800	4/8/2012 11:14 PM
Chloroethane	ND	800	U	ppbv	800	4/8/2012 11:14 PM
Chloroform	ND	800	U	ppbv	800	4/8/2012 11:14 PM
Chloromethane	ND	800	U	ppbv	800	4/8/2012 11:14 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	4/8/2012 11:14 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	4/8/2012 11:14 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 3:21:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-021	**Matrix:**	Air
Client Sample ID:	VA1078		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	30,000	1,600		ppbv	800	4/8/2012 11:14 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	4/8/2012 11:14 PM
Ethyl acetate	ND	800	U	ppbv	800	4/8/2012 11:14 PM
Ethylbenzene	4,800	1,600		ppbv	800	4/8/2012 11:14 PM
Heptane	26,000	800		ppbv	800	4/8/2012 11:14 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	4/8/2012 11:14 PM
m,p-Xylene	12,000	1,600		ppbv	800	4/8/2012 11:14 PM
Methylene chloride	ND	4,000	U	ppbv	800	4/8/2012 11:14 PM
n-Hexane	25,000	1,600		ppbv	800	4/8/2012 11:14 PM
Naphthalene	ND	800	U	ppbv	800	4/8/2012 11:14 PM
o-Xylene	3,600	800		ppbv	800	4/8/2012 11:14 PM
Propylene	ND	800	U	ppbv	800	4/8/2012 11:14 PM
Styrene	ND	800	U	ppbv	800	4/8/2012 11:14 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	4/8/2012 11:14 PM
Tetrachloroethene	ND	800	U	ppbv	800	4/8/2012 11:14 PM
Tetrahydrofuran	ND	800	U	ppbv	800	4/8/2012 11:14 PM
Toluene	34,000	800		ppbv	800	4/8/2012 11:14 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	4/8/2012 11:14 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	4/8/2012 11:14 PM
Trichloroethene	ND	800	U	ppbv	800	4/8/2012 11:14 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	4/8/2012 11:14 PM
Vinyl acetate	ND	800	U	ppbv	800	4/8/2012 11:14 PM
Vinyl chloride	ND	800	U	ppbv	800	4/8/2012 11:14 PM
Xylenes, Total	16,000	2,400		ppbv	800	4/8/2012 11:14 PM
Surr: 4-Bromofluorobenzene	92.8	70-130		%REC	800	4/8/2012 11:14 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,600,000	940,000		µg/m³	8000	4/13/2012 12:45 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	4/13/2012 12:45 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	4/13/2012 12:45 AM
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	8000	4/13/2012 12:45 AM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 3:39:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-022	**Matrix:**	Air
Client Sample ID:	VA1079		

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	4/5/2012 12:34 PM
Carbon Monoxide	ND	0.10	U	%	1	4/5/2012 12:34 PM
Methane	ND	0.50	U	%	1	4/5/2012 12:34 PM
Nitrogen	79	0.10		%	1	4/5/2012 12:34 PM
Oxygen	21	0.10		%	1	4/5/2012 12:34 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	4/8/2012 11:58 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	4/8/2012 11:58 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	4/8/2012 11:58 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	4/8/2012 11:58 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	4/8/2012 11:58 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	4/8/2012 11:58 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	4/8/2012 11:58 PM
1,2,4-Trimethylbenzene	1,000	800		ppbv	800	4/8/2012 11:58 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	4/8/2012 11:58 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	4/8/2012 11:58 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	4/8/2012 11:58 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	4/8/2012 11:58 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	4/8/2012 11:58 PM
1,3-Butadiene	ND	800	U	ppbv	800	4/8/2012 11:58 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	4/8/2012 11:58 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	4/8/2012 11:58 PM
2-Butanone	2,200	800		ppbv	800	4/8/2012 11:58 PM
2-Hexanone	ND	800	U	ppbv	800	4/8/2012 11:58 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	4/8/2012 11:58 PM
Acetone	13,000	800		ppbv	800	4/8/2012 11:58 PM
Benzene	7,700	800		ppbv	800	4/8/2012 11:58 PM
Benzyl chloride	ND	800	U	ppbv	800	4/8/2012 11:58 PM
Bromodichloromethane	ND	800	U	ppbv	800	4/8/2012 11:58 PM
Bromoform	ND	800	U	ppbv	800	4/8/2012 11:58 PM
Bromomethane	ND	800	U	ppbv	800	4/8/2012 11:58 PM
Carbon disulfide	ND	800	U	ppbv	800	4/8/2012 11:58 PM
Carbon tetrachloride	ND	800	U	ppbv	800	4/8/2012 11:58 PM
Chlorobenzene	ND	800	U	ppbv	800	4/8/2012 11:58 PM
Chlorodibromomethane	ND	800	U	ppbv	800	4/8/2012 11:58 PM
Chloroethane	ND	800	U	ppbv	800	4/8/2012 11:58 PM
Chloroform	ND	800	U	ppbv	800	4/8/2012 11:58 PM
Chloromethane	ND	800	U	ppbv	800	4/8/2012 11:58 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	4/8/2012 11:58 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	4/8/2012 11:58 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 3:39:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-022	**Matrix:**	Air
Client Sample ID:	VA1079		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	23,000	1,600		ppbv	800	4/8/2012 11:58 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	4/8/2012 11:58 PM
Ethyl acetate	ND	800	U	ppbv	800	4/8/2012 11:58 PM
Ethylbenzene	4,100	1,600		ppbv	800	4/8/2012 11:58 PM
Heptane	22,000	800		ppbv	800	4/8/2012 11:58 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	4/8/2012 11:58 PM
m,p-Xylene	10,000	1,600		ppbv	800	4/8/2012 11:58 PM
Methylene chloride	ND	4,000	U	ppbv	800	4/8/2012 11:58 PM
n-Hexane	17,000	1,600		ppbv	800	4/8/2012 11:58 PM
Naphthalene	ND	800	U	ppbv	800	4/8/2012 11:58 PM
o-Xylene	3,000	800		ppbv	800	4/8/2012 11:58 PM
Propylene	ND	800	U	ppbv	800	4/8/2012 11:58 PM
Styrene	ND	800	U	ppbv	800	4/8/2012 11:58 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	4/8/2012 11:58 PM
Tetrachloroethene	ND	800	U	ppbv	800	4/8/2012 11:58 PM
Tetrahydrofuran	ND	800	U	ppbv	800	4/8/2012 11:58 PM
Toluene	32,000	800		ppbv	800	4/8/2012 11:58 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	4/8/2012 11:58 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	4/8/2012 11:58 PM
Trichloroethene	ND	800	U	ppbv	800	4/8/2012 11:58 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	4/8/2012 11:58 PM
Vinyl acetate	ND	800	U	ppbv	800	4/8/2012 11:58 PM
Vinyl chloride	ND	800	U	ppbv	800	4/8/2012 11:58 PM
Xylenes, Total	13,000	2,400		ppbv	800	4/8/2012 11:58 PM
Surr: 4-Bromofluorobenzene	93.4	70-130		%REC	800	4/8/2012 11:58 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,400,000	190,000		µg/m³	1600	4/14/2012 11:07 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	4/14/2012 11:07 PM
C9-C12 Aliphatic Hydrocarbons	82,000	300,000	J	µg/m³	1600	4/14/2012 11:07 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1600	4/14/2012 11:07 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/22/2012 11:53:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-023	**Matrix:**	Air
Client Sample ID:	VA1081		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.087	0.10	J	%	1	4/5/2012 12:55 PM
Carbon Monoxide	ND	0.10	U	%	1	4/5/2012 12:55 PM
Methane	ND	0.50	U	%	1	4/5/2012 12:55 PM
Nitrogen	79	0.10		%	1	4/5/2012 12:55 PM
Oxygen	21	0.10		%	1	4/5/2012 12:55 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
2-Butanone	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
2-Hexanone	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Acetone	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Benzene	30,000	8,000		ppbv	8000	4/12/2012 5:43 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Bromoform	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Bromomethane	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Chloroethane	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Chloroform	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Chloromethane	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/22/2012 11:53:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-023	**Matrix:**	Air
Client Sample ID:	VA1081		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	57,000	16,000		ppbv	8000	4/12/2012 5:43 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	4/12/2012 5:43 AM
Heptane	27,000	8,000		ppbv	8000	4/12/2012 5:43 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	4/12/2012 5:43 AM
m,p-Xylene	10,000	16,000	J	ppbv	8000	4/12/2012 5:43 AM
Methylene chloride	ND	40,000	U	ppbv	8000	4/12/2012 5:43 AM
n-Hexane	41,000	16,000		ppbv	8000	4/12/2012 5:43 AM
Naphthalene	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
o-Xylene	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Propylene	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Styrene	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Toluene	59,000	8,000		ppbv	8000	4/12/2012 5:43 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Trichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	4/12/2012 5:43 AM
Xylenes, Total	10,000	24,000	J	ppbv	8000	4/12/2012 5:43 AM
Surr: 4-Bromofluorobenzene	94.2	70-130		%REC	8000	4/12/2012 5:43 AM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	2,800,000	940,000		µg/m³	8000	4/13/2012 8:50 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	4/13/2012 8:50 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	4/13/2012 8:50 PM
Surr: 4-Bromofluorobenzene	94.8	70-130		%REC	8000	4/13/2012 8:50 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/20/2012 1:42:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-024	**Matrix:**	Air
Client Sample ID:	VA1151		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.66	0.10		%	1	4/6/2012 11:29 AM
Carbon Monoxide	ND	0.10	U	%	1	4/6/2012 11:29 AM
Methane	ND	0.50	U	%	1	4/6/2012 11:29 AM
Nitrogen	79	0.10		%	1	4/6/2012 11:29 AM
Oxygen	20	0.10		%	1	4/6/2012 11:29 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
2-Butanone	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
2-Hexanone	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Acetone	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Benzene	71,000	8,000		ppbv	8000	4/12/2012 2:39 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Bromoform	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Bromomethane	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Chloroethane	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Chloroform	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Chloromethane	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/20/2012 1:42:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-024	**Matrix:**	Air
Client Sample ID:	VA1151		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	150,000	16,000		ppbv	8000	4/12/2012 2:39 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	4/12/2012 2:39 PM
Heptane	130,000	8,000		ppbv	8000	4/12/2012 2:39 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	4/12/2012 2:39 PM
m,p-Xylene	17,000	16,000		ppbv	8000	4/12/2012 2:39 PM
Methylene chloride	ND	40,000	U	ppbv	8000	4/12/2012 2:39 PM
n-Hexane	120,000	16,000		ppbv	8000	4/12/2012 2:39 PM
Naphthalene	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
o-Xylene	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Propylene	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Styrene	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Toluene	150,000	8,000		ppbv	8000	4/12/2012 2:39 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Trichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	4/12/2012 2:39 PM
Xylenes, Total	17,000	24,000	J	ppbv	8000	4/12/2012 2:39 PM
Surr: 4-Bromofluorobenzene	95.3	70-130		%REC	8000	4/12/2012 2:39 PM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	3,700,000	940,000		µg/m³	8000	4/11/2012 7:54 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	4/11/2012 7:54 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	4/11/2012 7:54 PM
Surr: 4-Bromofluorobenzene	97.2	70-130		%REC	8000	4/11/2012 7:54 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/20/2012 2:30:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-025	**Matrix:**	Air
Client Sample ID:	VA1152		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.62	0.10		%	1	4/6/2012 11:43 AM
Carbon Monoxide	ND	0.10	U	%	1	4/6/2012 11:43 AM
Methane	ND	0.50	U	%	1	4/6/2012 11:43 AM
Nitrogen	79	0.10		%	1	4/6/2012 11:43 AM
Oxygen	20	0.10		%	1	4/6/2012 11:43 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
2-Butanone	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
2-Hexanone	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Acetone	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Benzene	43,000	8,000		ppbv	8000	4/12/2012 6:06 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Bromoform	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Bromomethane	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Chloroethane	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Chloroform	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Chloromethane	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/20/2012 2:30:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-025	**Matrix:**	Air
Client Sample ID:	VA1152		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	93,000	16,000		ppbv	8000	4/12/2012 6:06 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	4/12/2012 6:06 PM
Heptane	83,000	8,000		ppbv	8000	4/12/2012 6:06 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	4/12/2012 6:06 PM
m,p-Xylene	12,000	16,000	J	ppbv	8000	4/12/2012 6:06 PM
Methylene chloride	ND	40,000	U	ppbv	8000	4/12/2012 6:06 PM
n-Hexane	77,000	16,000		ppbv	8000	4/12/2012 6:06 PM
Naphthalene	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
o-Xylene	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Propylene	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Styrene	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Toluene	99,000	8,000		ppbv	8000	4/12/2012 6:06 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Trichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	4/12/2012 6:06 PM
Xylenes, Total	12,000	24,000	J	ppbv	8000	4/12/2012 6:06 PM
Surr: 4-Bromofluorobenzene	93.5	70-130		%REC	8000	4/12/2012 6:06 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,600,000	940,000		µg/m³	8000	4/12/2012 4:03 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	4/12/2012 4:03 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	4/12/2012 4:03 PM
Surr: 4-Bromofluorobenzene	94.0	70-130		%REC	8000	4/12/2012 4:03 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/20/2012 3:22:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-026	**Matrix:**	Air
Client Sample ID:	VA1153		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.080	0.10	J	%	1	4/6/2012 11:58 AM
Carbon Monoxide	ND	0.10	U	%	1	4/6/2012 11:58 AM
Methane	ND	0.50	U	%	1	4/6/2012 11:58 AM
Nitrogen	79	0.10		%	1	4/6/2012 11:58 AM
Oxygen	21	0.10		%	1	4/6/2012 11:58 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
2-Butanone	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
2-Hexanone	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Acetone	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Benzene	30,000	8,000		ppbv	8000	4/12/2012 7:30 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Bromoform	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Bromomethane	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Chloroethane	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Chloroform	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Chloromethane	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/20/2012 3:22:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-026	**Matrix:**	Air
Client Sample ID:	VA1153		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	64,000	16,000		ppbv	8000	4/12/2012 7:30 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	4/12/2012 7:30 PM
Heptane	62,000	8,000		ppbv	8000	4/12/2012 7:30 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	4/12/2012 7:30 PM
m,p-Xylene	9,000	16,000	J	ppbv	8000	4/12/2012 7:30 PM
Methylene chloride	ND	40,000	U	ppbv	8000	4/12/2012 7:30 PM
n-Hexane	46,000	16,000		ppbv	8000	4/12/2012 7:30 PM
Naphthalene	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
o-Xylene	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Propylene	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Styrene	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Toluene	72,000	8,000		ppbv	8000	4/12/2012 7:30 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Trichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	4/12/2012 7:30 PM
Xylenes, Total	9,000	24,000	J	ppbv	8000	4/12/2012 7:30 PM
Surr: 4-Bromofluorobenzene	95.1	70-130		%REC	8000	4/12/2012 7:30 PM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	2,200,000	940,000		µg/m³	8000	4/12/2012 5:31 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	4/12/2012 5:31 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	4/12/2012 5:31 PM
Surr: 4-Bromofluorobenzene	94.1	70-130		%REC	8000	4/12/2012 5:31 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/20/2012 4:04:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-027	**Matrix:**	Air
Client Sample ID:	VA1154		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.53	0.10		%	1	4/6/2012 12:16 PM
Carbon Monoxide	ND	0.10	U	%	1	4/6/2012 12:16 PM
Methane	ND	0.50	U	%	1	4/6/2012 12:16 PM
Nitrogen	82	0.10		%	1	4/6/2012 12:16 PM
Oxygen	17	0.10		%	1	4/6/2012 12:16 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RD2**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
2-Butanone	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
2-Hexanone	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Acetone	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Benzene	140,000	8,000		ppbv	8000	4/13/2012 8:17 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Bromoform	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Bromomethane	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Chloroethane	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Chloroform	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Chloromethane	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/20/2012 4:04:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-027	**Matrix:**	Air
Client Sample ID:	VA1154		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	97,000	16,000		ppbv	8000	4/13/2012 8:17 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Ethylbenzene	8,200	16,000	J	ppbv	8000	4/13/2012 8:17 PM
Heptane	67,000	8,000		ppbv	8000	4/13/2012 8:17 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	4/13/2012 8:17 PM
m,p-Xylene	19,000	16,000		ppbv	8000	4/13/2012 8:17 PM
Methylene chloride	ND	40,000	U	ppbv	8000	4/13/2012 8:17 PM
n-Hexane	74,000	16,000		ppbv	8000	4/13/2012 8:17 PM
Naphthalene	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
o-Xylene	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Propylene	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Styrene	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Toluene	340,000	8,000		ppbv	8000	4/13/2012 8:17 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Trichloroethene	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	4/13/2012 8:17 PM
Xylenes, Total	19,000	24,000	J	ppbv	8000	4/13/2012 8:17 PM
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	8000	4/13/2012 8:17 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	5,000,000	940,000		µg/m³	8000	4/12/2012 7:42 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	4/12/2012 7:42 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	4/12/2012 7:42 PM
Surr: 4-Bromofluorobenzene	92.8	70-130		%REC	8000	4/12/2012 7:42 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/22/2012 8:23:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-028	**Matrix:**	Air
Client Sample ID:	VA1155		

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	4/6/2012 12:31 PM
Carbon Monoxide	ND	0.10	U	%	1	4/6/2012 12:31 PM
Methane	ND	0.50	U	%	1	4/6/2012 12:31 PM
Nitrogen	80	0.10		%	1	4/6/2012 12:31 PM
Oxygen	20	0.10		%	1	4/6/2012 12:31 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	4/11/2012 6:09 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	4/11/2012 6:09 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	4/11/2012 6:09 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	4/11/2012 6:09 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	4/11/2012 6:09 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	4/11/2012 6:09 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	4/11/2012 6:09 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	4/11/2012 6:09 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	4/11/2012 6:09 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	4/11/2012 6:09 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	4/11/2012 6:09 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	4/11/2012 6:09 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	4/11/2012 6:09 PM
1,3-Butadiene	ND	800	U	ppbv	800	4/11/2012 6:09 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	4/11/2012 6:09 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	4/11/2012 6:09 PM
2-Butanone	ND	800	U	ppbv	800	4/11/2012 6:09 PM
2-Hexanone	ND	800	U	ppbv	800	4/11/2012 6:09 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	4/11/2012 6:09 PM
Acetone	11,000	800		ppbv	800	4/11/2012 6:09 PM
Benzene	7,600	800		ppbv	800	4/11/2012 6:09 PM
Benzyl chloride	ND	800	U	ppbv	800	4/11/2012 6:09 PM
Bromodichloromethane	ND	800	U	ppbv	800	4/11/2012 6:09 PM
Bromoform	ND	800	U	ppbv	800	4/11/2012 6:09 PM
Bromomethane	ND	800	U	ppbv	800	4/11/2012 6:09 PM
Carbon disulfide	ND	800	U	ppbv	800	4/11/2012 6:09 PM
Carbon tetrachloride	ND	800	U	ppbv	800	4/11/2012 6:09 PM
Chlorobenzene	ND	800	U	ppbv	800	4/11/2012 6:09 PM
Chlorodibromomethane	ND	800	U	ppbv	800	4/11/2012 6:09 PM
Chloroethane	ND	800	U	ppbv	800	4/11/2012 6:09 PM
Chloroform	ND	800	U	ppbv	800	4/11/2012 6:09 PM
Chloromethane	ND	800	U	ppbv	800	4/11/2012 6:09 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	4/11/2012 6:09 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	4/11/2012 6:09 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/22/2012 8:23:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-028	**Matrix:**	Air
Client Sample ID:	VA1155		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	15,000	1,600		ppbv	800	4/11/2012 6:09 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	4/11/2012 6:09 PM
Ethyl acetate	ND	800	U	ppbv	800	4/11/2012 6:09 PM
Ethylbenzene	1,500	1,600	J	ppbv	800	4/11/2012 6:09 PM
Heptane	11,000	800		ppbv	800	4/11/2012 6:09 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	4/11/2012 6:09 PM
m,p-Xylene	3,700	1,600		ppbv	800	4/11/2012 6:09 PM
Methylene chloride	ND	4,000	U	ppbv	800	4/11/2012 6:09 PM
n-Hexane	9,200	1,600		ppbv	800	4/11/2012 6:09 PM
Naphthalene	ND	800	U	ppbv	800	4/11/2012 6:09 PM
o-Xylene	1,100	800		ppbv	800	4/11/2012 6:09 PM
Propylene	ND	800	U	ppbv	800	4/11/2012 6:09 PM
Styrene	ND	800	U	ppbv	800	4/11/2012 6:09 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	4/11/2012 6:09 PM
Tetrachloroethene	ND	800	U	ppbv	800	4/11/2012 6:09 PM
Tetrahydrofuran	ND	800	U	ppbv	800	4/11/2012 6:09 PM
Toluene	25,000	800		ppbv	800	4/11/2012 6:09 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	4/11/2012 6:09 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	4/11/2012 6:09 PM
Trichloroethene	ND	800	U	ppbv	800	4/11/2012 6:09 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	4/11/2012 6:09 PM
Vinyl acetate	ND	800	U	ppbv	800	4/11/2012 6:09 PM
Vinyl chloride	ND	800	U	ppbv	800	4/11/2012 6:09 PM
Xylenes, Total	4,800	2,400		ppbv	800	4/11/2012 6:09 PM
Surr: 4-Bromofluorobenzene	93.9	70-130		%REC	800	4/11/2012 6:09 PM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	900,000	94,000		µg/m³	800	4/13/2012 2:14 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	4/13/2012 2:14 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	4/13/2012 2:14 AM
Surr: 4-Bromofluorobenzene	98.1	70-130		%REC	800	4/13/2012 2:14 AM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/22/2012 9:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-029	**Matrix:**	Air
Client Sample ID:	VA1156		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.41	0.10		%	1	4/6/2012 12:46 PM
Carbon Monoxide	ND	0.10	U	%	1	4/6/2012 12:46 PM
Methane	ND	0.50	U	%	1	4/6/2012 12:46 PM
Nitrogen	80	0.10		%	1	4/6/2012 12:46 PM
Oxygen	20	0.10		%	1	4/6/2012 12:46 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	4/11/2012 6:54 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	4/11/2012 6:54 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	4/11/2012 6:54 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	4/11/2012 6:54 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	4/11/2012 6:54 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	4/11/2012 6:54 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	4/11/2012 6:54 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	4/11/2012 6:54 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	4/11/2012 6:54 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	4/11/2012 6:54 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	4/11/2012 6:54 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	4/11/2012 6:54 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	4/11/2012 6:54 PM
1,3-Butadiene	ND	800	U	ppbv	800	4/11/2012 6:54 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	4/11/2012 6:54 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	4/11/2012 6:54 PM
2-Butanone	ND	800	U	ppbv	800	4/11/2012 6:54 PM
2-Hexanone	ND	800	U	ppbv	800	4/11/2012 6:54 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	4/11/2012 6:54 PM
Acetone	2,100	800		ppbv	800	4/11/2012 6:54 PM
Benzene	6,300	800		ppbv	800	4/11/2012 6:54 PM
Benzyl chloride	ND	800	U	ppbv	800	4/11/2012 6:54 PM
Bromodichloromethane	ND	800	U	ppbv	800	4/11/2012 6:54 PM
Bromoform	ND	800	U	ppbv	800	4/11/2012 6:54 PM
Bromomethane	ND	800	U	ppbv	800	4/11/2012 6:54 PM
Carbon disulfide	ND	800	U	ppbv	800	4/11/2012 6:54 PM
Carbon tetrachloride	ND	800	U	ppbv	800	4/11/2012 6:54 PM
Chlorobenzene	ND	800	U	ppbv	800	4/11/2012 6:54 PM
Chlorodibromomethane	ND	800	U	ppbv	800	4/11/2012 6:54 PM
Chloroethane	ND	800	U	ppbv	800	4/11/2012 6:54 PM
Chloroform	ND	800	U	ppbv	800	4/11/2012 6:54 PM
Chloromethane	ND	800	U	ppbv	800	4/11/2012 6:54 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	4/11/2012 6:54 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	4/11/2012 6:54 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/22/2012 9:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-029	**Matrix:**	Air
Client Sample ID:	VA1156		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	9,900	1,600		ppbv	800	4/11/2012 6:54 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	4/11/2012 6:54 PM
Ethyl acetate	ND	800	U	ppbv	800	4/11/2012 6:54 PM
Ethylbenzene	1,500	1,600	J	ppbv	800	4/11/2012 6:54 PM
Heptane	7,300	800		ppbv	800	4/11/2012 6:54 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	4/11/2012 6:54 PM
m,p-Xylene	3,800	1,600		ppbv	800	4/11/2012 6:54 PM
Methylene chloride	ND	4,000	U	ppbv	800	4/11/2012 6:54 PM
n-Hexane	6,900	1,600		ppbv	800	4/11/2012 6:54 PM
Naphthalene	ND	800	U	ppbv	800	4/11/2012 6:54 PM
o-Xylene	1,100	800		ppbv	800	4/11/2012 6:54 PM
Propylene	ND	800	U	ppbv	800	4/11/2012 6:54 PM
Styrene	ND	800	U	ppbv	800	4/11/2012 6:54 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	4/11/2012 6:54 PM
Tetrachloroethene	ND	800	U	ppbv	800	4/11/2012 6:54 PM
Tetrahydrofuran	ND	800	U	ppbv	800	4/11/2012 6:54 PM
Toluene	30,000	800		ppbv	800	4/11/2012 6:54 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	4/11/2012 6:54 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	4/11/2012 6:54 PM
Trichloroethene	ND	800	U	ppbv	800	4/11/2012 6:54 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	4/11/2012 6:54 PM
Vinyl acetate	ND	800	U	ppbv	800	4/11/2012 6:54 PM
Vinyl chloride	ND	800	U	ppbv	800	4/11/2012 6:54 PM
Xylenes, Total	4,800	2,400		ppbv	800	4/11/2012 6:54 PM
Surr: 4-Bromofluorobenzene	93.9	70-130		%REC	800	4/11/2012 6:54 PM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	870,000	94,000		µg/m³	800	4/13/2012 3:01 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	4/13/2012 3:01 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	4/13/2012 3:01 AM
Surr: 4-Bromofluorobenzene	97.3	70-130		%REC	800	4/13/2012 3:01 AM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/20/2012 12:10:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-030	**Matrix:**	Air
Client Sample ID:	VA1157		

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	4/6/2012 1:01 PM
Carbon Monoxide	ND	0.10	U	%	1	4/6/2012 1:01 PM
Methane	ND	0.50	U	%	1	4/6/2012 1:01 PM
Nitrogen	79	0.10		%	1	4/6/2012 1:01 PM
Oxygen	20	0.10		%	1	4/6/2012 1:01 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	4/11/2012 7:39 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	4/11/2012 7:39 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	4/11/2012 7:39 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	4/11/2012 7:39 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	4/11/2012 7:39 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	4/11/2012 7:39 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	4/11/2012 7:39 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	4/11/2012 7:39 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	4/11/2012 7:39 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	4/11/2012 7:39 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	4/11/2012 7:39 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	4/11/2012 7:39 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	4/11/2012 7:39 PM
1,3-Butadiene	ND	800	U	ppbv	800	4/11/2012 7:39 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	4/11/2012 7:39 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	4/11/2012 7:39 PM
2-Butanone	ND	800	U	ppbv	800	4/11/2012 7:39 PM
2-Hexanone	ND	800	U	ppbv	800	4/11/2012 7:39 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	4/11/2012 7:39 PM
Acetone	ND	800	U	ppbv	800	4/11/2012 7:39 PM
Benzene	11,000	800		ppbv	800	4/11/2012 7:39 PM
Benzyl chloride	ND	800	U	ppbv	800	4/11/2012 7:39 PM
Bromodichloromethane	ND	800	U	ppbv	800	4/11/2012 7:39 PM
Bromoform	ND	800	U	ppbv	800	4/11/2012 7:39 PM
Bromomethane	ND	800	U	ppbv	800	4/11/2012 7:39 PM
Carbon disulfide	ND	800	U	ppbv	800	4/11/2012 7:39 PM
Carbon tetrachloride	ND	800	U	ppbv	800	4/11/2012 7:39 PM
Chlorobenzene	ND	800	U	ppbv	800	4/11/2012 7:39 PM
Chlorodibromomethane	ND	800	U	ppbv	800	4/11/2012 7:39 PM
Chloroethane	ND	800	U	ppbv	800	4/11/2012 7:39 PM
Chloroform	ND	800	U	ppbv	800	4/11/2012 7:39 PM
Chloromethane	ND	800	U	ppbv	800	4/11/2012 7:39 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	4/11/2012 7:39 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	4/11/2012 7:39 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/20/2012 12:10:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-030	**Matrix:**	Air
Client Sample ID:	VA1157		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	18,000	1,600		ppbv	800	4/11/2012 7:39 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	4/11/2012 7:39 PM
Ethyl acetate	ND	800	U	ppbv	800	4/11/2012 7:39 PM
Ethylbenzene	1,500	1,600	J	ppbv	800	4/11/2012 7:39 PM
Heptane	18,000	800		ppbv	800	4/11/2012 7:39 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	4/11/2012 7:39 PM
m,p-Xylene	4,600	1,600		ppbv	800	4/11/2012 7:39 PM
Methylene chloride	ND	4,000	U	ppbv	800	4/11/2012 7:39 PM
n-Hexane	13,000	1,600		ppbv	800	4/11/2012 7:39 PM
Naphthalene	ND	800	U	ppbv	800	4/11/2012 7:39 PM
o-Xylene	1,200	800		ppbv	800	4/11/2012 7:39 PM
Propylene	ND	800	U	ppbv	800	4/11/2012 7:39 PM
Styrene	ND	800	U	ppbv	800	4/11/2012 7:39 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	4/11/2012 7:39 PM
Tetrachloroethene	ND	800	U	ppbv	800	4/11/2012 7:39 PM
Tetrahydrofuran	ND	800	U	ppbv	800	4/11/2012 7:39 PM
Toluene	29,000	800		ppbv	800	4/11/2012 7:39 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	4/11/2012 7:39 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	4/11/2012 7:39 PM
Trichloroethene	ND	800	U	ppbv	800	4/11/2012 7:39 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	4/11/2012 7:39 PM
Vinyl acetate	ND	800	U	ppbv	800	4/11/2012 7:39 PM
Vinyl chloride	ND	800	U	ppbv	800	4/11/2012 7:39 PM
Xylenes, Total	5,800	2,400		ppbv	800	4/11/2012 7:39 PM
Surr: 4-Bromofluorobenzene	93.5	70-130		%REC	800	4/11/2012 7:39 PM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RD2**
C5-C8 Aliphatic Hydrocarbons	1,000,000	94,000		µg/m³	800	4/11/2012 1:37 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	4/11/2012 1:37 AM
C9-C12 Aliphatic Hydrocarbons	52,000	150,000	J	µg/m³	800	4/11/2012 1:37 AM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	800	4/11/2012 1:37 AM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/20/2012 12:45:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-031	**Matrix:**	Air
Client Sample ID:	VA1158		

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	4/6/2012 1:16 PM
Carbon Monoxide	ND	0.10	U	%	1	4/6/2012 1:16 PM
Methane	ND	0.50	U	%	1	4/6/2012 1:16 PM
Nitrogen	79	0.10		%	1	4/6/2012 1:16 PM
Oxygen	21	0.10		%	1	4/6/2012 1:16 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	4/11/2012 9:08 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	4/11/2012 9:08 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	4/11/2012 9:08 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	4/11/2012 9:08 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	4/11/2012 9:08 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	4/11/2012 9:08 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	4/11/2012 9:08 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	4/11/2012 9:08 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	4/11/2012 9:08 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	4/11/2012 9:08 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	4/11/2012 9:08 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	4/11/2012 9:08 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	4/11/2012 9:08 PM
1,3-Butadiene	ND	800	U	ppbv	800	4/11/2012 9:08 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	4/11/2012 9:08 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	4/11/2012 9:08 PM
2-Butanone	ND	800	U	ppbv	800	4/11/2012 9:08 PM
2-Hexanone	ND	800	U	ppbv	800	4/11/2012 9:08 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	4/11/2012 9:08 PM
Acetone	ND	800	U	ppbv	800	4/11/2012 9:08 PM
Benzene	6,500	800		ppbv	800	4/11/2012 9:08 PM
Benzyl chloride	ND	800	U	ppbv	800	4/11/2012 9:08 PM
Bromodichloromethane	ND	800	U	ppbv	800	4/11/2012 9:08 PM
Bromoform	ND	800	U	ppbv	800	4/11/2012 9:08 PM
Bromomethane	ND	800	U	ppbv	800	4/11/2012 9:08 PM
Carbon disulfide	ND	800	U	ppbv	800	4/11/2012 9:08 PM
Carbon tetrachloride	ND	800	U	ppbv	800	4/11/2012 9:08 PM
Chlorobenzene	ND	800	U	ppbv	800	4/11/2012 9:08 PM
Chlorodibromomethane	ND	800	U	ppbv	800	4/11/2012 9:08 PM
Chloroethane	ND	800	U	ppbv	800	4/11/2012 9:08 PM
Chloroform	ND	800	U	ppbv	800	4/11/2012 9:08 PM
Chloromethane	ND	800	U	ppbv	800	4/11/2012 9:08 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	4/11/2012 9:08 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	4/11/2012 9:08 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/20/2012 12:45:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-031	**Matrix:**	Air
Client Sample ID:	VA1158		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	9,100	1,600		ppbv	800	4/11/2012 9:08 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	4/11/2012 9:08 PM
Ethyl acetate	ND	800	U	ppbv	800	4/11/2012 9:08 PM
Ethylbenzene	1,400	1,600	J	ppbv	800	4/11/2012 9:08 PM
Heptane	14,000	800		ppbv	800	4/11/2012 9:08 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	4/11/2012 9:08 PM
m,p-Xylene	4,300	1,600		ppbv	800	4/11/2012 9:08 PM
Methylene chloride	ND	4,000	U	ppbv	800	4/11/2012 9:08 PM
n-Hexane	7,500	1,600		ppbv	800	4/11/2012 9:08 PM
Naphthalene	ND	800	U	ppbv	800	4/11/2012 9:08 PM
o-Xylene	1,100	800		ppbv	800	4/11/2012 9:08 PM
Propylene	ND	800	U	ppbv	800	4/11/2012 9:08 PM
Styrene	ND	800	U	ppbv	800	4/11/2012 9:08 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	4/11/2012 9:08 PM
Tetrachloroethene	ND	800	U	ppbv	800	4/11/2012 9:08 PM
Tetrahydrofuran	ND	800	U	ppbv	800	4/11/2012 9:08 PM
Toluene	24,000	800		ppbv	800	4/11/2012 9:08 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	4/11/2012 9:08 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	4/11/2012 9:08 PM
Trichloroethene	ND	800	U	ppbv	800	4/11/2012 9:08 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	4/11/2012 9:08 PM
Vinyl acetate	ND	800	U	ppbv	800	4/11/2012 9:08 PM
Vinyl chloride	ND	800	U	ppbv	800	4/11/2012 9:08 PM
Xylenes, Total	5,400	2,400		ppbv	800	4/11/2012 9:08 PM
Surr: 4-Bromofluorobenzene	93.6	70-130		%REC	800	4/11/2012 9:08 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	540,000	94,000		µg/m³	800	4/11/2012 2:23 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	4/11/2012 2:23 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	4/11/2012 2:23 AM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	800	4/11/2012 2:23 AM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/20/2012 1:22:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-032	**Matrix:**	Air
Client Sample ID:	VA1159		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.053	0.10	J	%	1	4/6/2012 1:38 PM
Carbon Monoxide	ND	0.10	U	%	1	4/6/2012 1:38 PM
Methane	ND	0.50	U	%	1	4/6/2012 1:38 PM
Nitrogen	79	0.10		%	1	4/6/2012 1:38 PM
Oxygen	21	0.10		%	1	4/6/2012 1:38 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	4/11/2012 9:53 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	4/11/2012 9:53 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	4/11/2012 9:53 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	4/11/2012 9:53 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	4/11/2012 9:53 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	4/11/2012 9:53 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	4/11/2012 9:53 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	4/11/2012 9:53 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	4/11/2012 9:53 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	4/11/2012 9:53 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	4/11/2012 9:53 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	4/11/2012 9:53 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	4/11/2012 9:53 PM
1,3-Butadiene	ND	800	U	ppbv	800	4/11/2012 9:53 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	4/11/2012 9:53 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	4/11/2012 9:53 PM
2-Butanone	ND	800	U	ppbv	800	4/11/2012 9:53 PM
2-Hexanone	ND	800	U	ppbv	800	4/11/2012 9:53 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	4/11/2012 9:53 PM
Acetone	ND	800	U	ppbv	800	4/11/2012 9:53 PM
Benzene	5,500	800		ppbv	800	4/11/2012 9:53 PM
Benzyl chloride	ND	800	U	ppbv	800	4/11/2012 9:53 PM
Bromodichloromethane	ND	800	U	ppbv	800	4/11/2012 9:53 PM
Bromoform	ND	800	U	ppbv	800	4/11/2012 9:53 PM
Bromomethane	ND	800	U	ppbv	800	4/11/2012 9:53 PM
Carbon disulfide	ND	800	U	ppbv	800	4/11/2012 9:53 PM
Carbon tetrachloride	ND	800	U	ppbv	800	4/11/2012 9:53 PM
Chlorobenzene	ND	800	U	ppbv	800	4/11/2012 9:53 PM
Chlorodibromomethane	ND	800	U	ppbv	800	4/11/2012 9:53 PM
Chloroethane	ND	800	U	ppbv	800	4/11/2012 9:53 PM
Chloroform	ND	800	U	ppbv	800	4/11/2012 9:53 PM
Chloromethane	ND	800	U	ppbv	800	4/11/2012 9:53 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	4/11/2012 9:53 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	4/11/2012 9:53 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/20/2012 1:22:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-032	**Matrix:**	Air
Client Sample ID:	VA1159		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	9,400	1,600		ppbv	800	4/11/2012 9:53 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	4/11/2012 9:53 PM
Ethyl acetate	ND	800	U	ppbv	800	4/11/2012 9:53 PM
Ethylbenzene	1,200	1,600	J	ppbv	800	4/11/2012 9:53 PM
Heptane	12,000	800		ppbv	800	4/11/2012 9:53 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	4/11/2012 9:53 PM
m,p-Xylene	3,600	1,600		ppbv	800	4/11/2012 9:53 PM
Methylene chloride	ND	4,000	U	ppbv	800	4/11/2012 9:53 PM
n-Hexane	7,600	1,600		ppbv	800	4/11/2012 9:53 PM
Naphthalene	ND	800	U	ppbv	800	4/11/2012 9:53 PM
o-Xylene	940	800		ppbv	800	4/11/2012 9:53 PM
Propylene	ND	800	U	ppbv	800	4/11/2012 9:53 PM
Styrene	ND	800	U	ppbv	800	4/11/2012 9:53 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	4/11/2012 9:53 PM
Tetrachloroethene	ND	800	U	ppbv	800	4/11/2012 9:53 PM
Tetrahydrofuran	ND	800	U	ppbv	800	4/11/2012 9:53 PM
Toluene	20,000	800		ppbv	800	4/11/2012 9:53 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	4/11/2012 9:53 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	4/11/2012 9:53 PM
Trichloroethene	ND	800	U	ppbv	800	4/11/2012 9:53 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	4/11/2012 9:53 PM
Vinyl acetate	ND	800	U	ppbv	800	4/11/2012 9:53 PM
Vinyl chloride	ND	800	U	ppbv	800	4/11/2012 9:53 PM
Xylenes, Total	4,600	2,400		ppbv	800	4/11/2012 9:53 PM
Surr: 4-Bromofluorobenzene	92.6	70-130		%REC	800	4/11/2012 9:53 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	500,000	94,000		µg/m³	800	4/11/2012 3:08 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	4/11/2012 3:08 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	4/11/2012 3:08 AM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	800	4/11/2012 3:08 AM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/20/2012 1:22:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-033	**Matrix:**	Air
Client Sample ID:	VA1160		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.78	0.10		%	1	4/6/2012 1:53 PM
Carbon Monoxide	ND	0.10	U	%	1	4/6/2012 1:53 PM
Methane	ND	0.50	U	%	1	4/6/2012 1:53 PM
Nitrogen	80	0.10		%	1	4/6/2012 1:53 PM
Oxygen	19	0.10		%	1	4/6/2012 1:53 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	4/11/2012 10:38 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	4/11/2012 10:38 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	4/11/2012 10:38 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	4/11/2012 10:38 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	4/11/2012 10:38 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	4/11/2012 10:38 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	4/11/2012 10:38 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	4/11/2012 10:38 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	4/11/2012 10:38 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	4/11/2012 10:38 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	4/11/2012 10:38 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	4/11/2012 10:38 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	4/11/2012 10:38 PM
1,3-Butadiene	ND	800	U	ppbv	800	4/11/2012 10:38 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	4/11/2012 10:38 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	4/11/2012 10:38 PM
2-Butanone	ND	800	U	ppbv	800	4/11/2012 10:38 PM
2-Hexanone	ND	800	U	ppbv	800	4/11/2012 10:38 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	4/11/2012 10:38 PM
Acetone	860	800		ppbv	800	4/11/2012 10:38 PM
Benzene	6,000	800		ppbv	800	4/11/2012 10:38 PM
Benzyl chloride	ND	800	U	ppbv	800	4/11/2012 10:38 PM
Bromodichloromethane	ND	800	U	ppbv	800	4/11/2012 10:38 PM
Bromoform	ND	800	U	ppbv	800	4/11/2012 10:38 PM
Bromomethane	ND	800	U	ppbv	800	4/11/2012 10:38 PM
Carbon disulfide	ND	800	U	ppbv	800	4/11/2012 10:38 PM
Carbon tetrachloride	ND	800	U	ppbv	800	4/11/2012 10:38 PM
Chlorobenzene	ND	800	U	ppbv	800	4/11/2012 10:38 PM
Chlorodibromomethane	ND	800	U	ppbv	800	4/11/2012 10:38 PM
Chloroethane	ND	800	U	ppbv	800	4/11/2012 10:38 PM
Chloroform	ND	800	U	ppbv	800	4/11/2012 10:38 PM
Chloromethane	ND	800	U	ppbv	800	4/11/2012 10:38 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	4/11/2012 10:38 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	4/11/2012 10:38 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/20/2012 1:22:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-033	**Matrix:**	Air
Client Sample ID:	VA1160		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	11,000	1,600		ppbv	800	4/11/2012 10:38 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	4/11/2012 10:38 PM
Ethyl acetate	ND	800	U	ppbv	800	4/11/2012 10:38 PM
Ethylbenzene	1,300	1,600	J	ppbv	800	4/11/2012 10:38 PM
Heptane	14,000	800		ppbv	800	4/11/2012 10:38 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	4/11/2012 10:38 PM
m,p-Xylene	4,000	1,600		ppbv	800	4/11/2012 10:38 PM
Methylene chloride	ND	4,000	U	ppbv	800	4/11/2012 10:38 PM
n-Hexane	8,200	1,600		ppbv	800	4/11/2012 10:38 PM
Naphthalene	ND	800	U	ppbv	800	4/11/2012 10:38 PM
o-Xylene	1,100	800		ppbv	800	4/11/2012 10:38 PM
Propylene	ND	800	U	ppbv	800	4/11/2012 10:38 PM
Styrene	ND	800	U	ppbv	800	4/11/2012 10:38 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	4/11/2012 10:38 PM
Tetrachloroethene	ND	800	U	ppbv	800	4/11/2012 10:38 PM
Tetrahydrofuran	ND	800	U	ppbv	800	4/11/2012 10:38 PM
Toluene	22,000	800		ppbv	800	4/11/2012 10:38 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	4/11/2012 10:38 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	4/11/2012 10:38 PM
Trichloroethene	ND	800	U	ppbv	800	4/11/2012 10:38 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	4/11/2012 10:38 PM
Vinyl acetate	ND	800	U	ppbv	800	4/11/2012 10:38 PM
Vinyl chloride	ND	800	U	ppbv	800	4/11/2012 10:38 PM
Xylenes, Total	5,100	2,400		ppbv	800	4/11/2012 10:38 PM
Surr: 4-Bromofluorobenzene	91.6	70-130		%REC	800	4/11/2012 10:38 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	570,000	94,000		µg/m³	800	4/11/2012 6:25 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	4/11/2012 6:25 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	4/11/2012 6:25 PM
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	800	4/11/2012 6:25 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/20/2012 2:19:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-034	**Matrix:**	Air
Client Sample ID:	VA1161		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.69	0.10		%	1	4/6/2012 3:10 PM
Carbon Monoxide	ND	0.10	U	%	1	4/6/2012 3:10 PM
Methane	ND	0.50	U	%	1	4/6/2012 3:10 PM
Nitrogen	80	0.10		%	1	4/6/2012 3:10 PM
Oxygen	19	0.10		%	1	4/6/2012 3:10 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
2-Butanone	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
2-Hexanone	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Acetone	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Benzene	30,000	8,000		ppbv	8000	4/12/2012 5:25 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Bromoform	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Bromomethane	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Chloroethane	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Chloroform	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Chloromethane	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/20/2012 2:19:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-034	**Matrix:**	Air
Client Sample ID:	VA1161		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	82,000	16,000		ppbv	8000	4/12/2012 5:25 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	4/12/2012 5:25 PM
Heptane	43,000	8,000		ppbv	8000	4/12/2012 5:25 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	4/12/2012 5:25 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	4/12/2012 5:25 PM
Methylene chloride	ND	40,000	U	ppbv	8000	4/12/2012 5:25 PM
n-Hexane	75,000	16,000		ppbv	8000	4/12/2012 5:25 PM
Naphthalene	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
o-Xylene	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Propylene	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Styrene	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Toluene	50,000	8,000		ppbv	8000	4/12/2012 5:25 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Trichloroethene	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	4/12/2012 5:25 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	4/12/2012 5:25 PM
Surr: 4-Bromofluorobenzene	94.0	70-130		%REC	8000	4/12/2012 5:25 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	4,200,000	2,300,000		µg/m³	20000	4/12/2012 3:20 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	4/12/2012 3:20 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	4/12/2012 3:20 PM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	20000	4/12/2012 3:20 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/20/2012 2:58:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-035	**Matrix:**	Air
Client Sample ID:	VA1162		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	0.23	0.10		%	1	4/6/2012 3:25 PM
Carbon Monoxide	ND	0.10	U	%	1	4/6/2012 3:25 PM
Methane	ND	0.50	U	%	1	4/6/2012 3:25 PM
Nitrogen	79	0.10		%	1	4/6/2012 3:25 PM
Oxygen	20	0.10		%	1	4/6/2012 3:25 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
1,3-Butadiene	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
2-Butanone	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
2-Hexanone	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Acetone	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Benzene	60,000	20,000		ppbv	20000	4/12/2012 6:48 PM
Benzyl chloride	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Bromodichloromethane	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Bromoform	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Bromomethane	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Carbon disulfide	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Chlorobenzene	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Chloroethane	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Chloroform	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Chloromethane	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/20/2012 2:58:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-035	**Matrix:**	Air
Client Sample ID:	VA1162		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	130,000	40,000		ppbv	20000	4/12/2012 6:48 PM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Ethyl acetate	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Ethylbenzene	ND	40,000	U	ppbv	20000	4/12/2012 6:48 PM
Heptane	83,000	20,000		ppbv	20000	4/12/2012 6:48 PM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	4/12/2012 6:48 PM
m,p-Xylene	ND	40,000	U	ppbv	20000	4/12/2012 6:48 PM
Methylene chloride	ND	100,000	U	ppbv	20000	4/12/2012 6:48 PM
n-Hexane	91,000	40,000		ppbv	20000	4/12/2012 6:48 PM
Naphthalene	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
o-Xylene	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Propylene	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Styrene	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Tetrachloroethene	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Toluene	120,000	20,000		ppbv	20000	4/12/2012 6:48 PM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Trichloroethene	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Vinyl acetate	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Vinyl chloride	ND	20,000	U	ppbv	20000	4/12/2012 6:48 PM
Xylenes, Total	ND	60,000	U	ppbv	20000	4/12/2012 6:48 PM
Surr: 4-Bromofluorobenzene	95.6	70-130		%REC	20000	4/12/2012 6:48 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	5,400,000	2,300,000		µg/m³	20000	4/12/2012 4:47 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	4/12/2012 4:47 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	4/12/2012 4:47 PM
Surr: 4-Bromofluorobenzene	93.5	70-130		%REC	20000	4/12/2012 4:47 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/20/2012 3:33:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-036	**Matrix:**	Air
Client Sample ID:	VA1163		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	1.5	0.10		%	1	4/6/2012 3:40 PM
Carbon Monoxide	ND	0.10	U	%	1	4/6/2012 3:40 PM
Methane	ND	0.50	U	%	1	4/6/2012 3:40 PM
Nitrogen	81	0.10		%	1	4/6/2012 3:40 PM
Oxygen	17	0.10		%	1	4/6/2012 3:40 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RD2**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
1,3-Butadiene	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
2-Butanone	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
2-Hexanone	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Acetone	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Benzene	120,000	20,000		ppbv	20000	4/13/2012 8:58 PM
Benzyl chloride	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Bromodichloromethane	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Bromoform	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Bromomethane	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Carbon disulfide	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Chlorobenzene	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Chloroethane	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Chloroform	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Chloromethane	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/20/2012 3:33:00 PM
Project:	Kirtland AFB		
Lab ID:	1203984-036	**Matrix:**	Air
Client Sample ID:	VA1163		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	430,000	40,000		ppbv	20000	4/13/2012 8:58 PM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Ethyl acetate	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Ethylbenzene	ND	40,000	U	ppbv	20000	4/13/2012 8:58 PM
Heptane	100,000	20,000		ppbv	20000	4/13/2012 8:58 PM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	4/13/2012 8:58 PM
m,p-Xylene	ND	40,000	U	ppbv	20000	4/13/2012 8:58 PM
Methylene chloride	ND	100,000	U	ppbv	20000	4/13/2012 8:58 PM
n-Hexane	140,000	40,000		ppbv	20000	4/13/2012 8:58 PM
Naphthalene	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
o-Xylene	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Propylene	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Styrene	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Tetrachloroethene	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Toluene	160,000	20,000		ppbv	20000	4/13/2012 8:58 PM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Trichloroethene	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Vinyl acetate	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Vinyl chloride	ND	20,000	U	ppbv	20000	4/13/2012 8:58 PM
Xylenes, Total	ND	60,000	U	ppbv	20000	4/13/2012 8:58 PM
Surr: 4-Bromofluorobenzene	96.2	70-130		%REC	20000	4/13/2012 8:58 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	15,000,000	4,700,000		µg/m³	40000	4/12/2012 6:58 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300,000	U	µg/m³	40000	4/12/2012 6:58 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600,000	U	µg/m³	40000	4/12/2012 6:58 PM
Surr: 4-Bromofluorobenzene	92.8	70-130		%REC	40000	4/12/2012 6:58 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-037	**Matrix:**	Air
Client Sample ID:	VA8078-TB		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RD2**
1,1,1-Trichloroethane	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
1,1,2,2-Tetrachloroethane	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
1,1,2-Trichloroethane	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
1,1-Dichloroethane	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
1,1-Dichloroethene	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
1,2,4-Trichlorobenzene	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
1,2,4-Trimethylbenzene	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
1,2-Dibromoethane	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
1,2-Dichlorobenzene	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
1,2-Dichloroethane	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
1,2-Dichloropropane	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
1,3,5-Trimethylbenzene	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
1,3-Butadiene	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
1,3-Dichlorobenzene	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
1,4-Dichlorobenzene	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
2-Butanone	1.2	1.0		ppbv	1	4/13/2012 3:24 PM
2-Hexanone	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
4-Methyl-2-pentanone	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
Acetone	8.8	1.0		ppbv	1	4/13/2012 3:24 PM
Benzene	49	1.0		ppbv	1	4/13/2012 3:24 PM
Benzyl chloride	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
Bromodichloromethane	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
Bromoform	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
Bromomethane	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
Carbon disulfide	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
Carbon tetrachloride	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
Chlorobenzene	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
Chlorodibromomethane	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
Chloroethane	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
Chloroform	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
Chloromethane	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
cis-1,2-Dichloroethene	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
cis-1,3-dichloropropene	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
Cyclohexane	260	16		ppbv	8	4/14/2012 1:08 AM
Dichlorodifluoromethane	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
Ethyl acetate	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
Ethylbenzene	2.6	2.0		ppbv	1	4/13/2012 3:24 PM
Heptane	34	1.0		ppbv	1	4/13/2012 3:24 PM
Hexachlorobutadiene	ND	2.0	U	ppbv	1	4/13/2012 3:24 PM
m,p-Xylene	8.9	2.0		ppbv	1	4/13/2012 3:24 PM
Methylene chloride	ND	5.0	U	ppbv	1	4/13/2012 3:24 PM

RTI Laboratories - Analytical Report

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	3/21/2012 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1203984-037	**Matrix:**	Air
Client Sample ID:	VA8078-TB		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
n-Hexane	88	16		ppbv	8	4/14/2012 1:08 AM
Naphthalene	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
o-Xylene	2.4	1.0		ppbv	1	4/13/2012 3:24 PM
Propylene	3.8	1.0		ppbv	1	4/13/2012 3:24 PM
Styrene	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
tert-Butyl Methyl Ether	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
Tetrachloroethene	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
Tetrahydrofuran	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
Toluene	110	8.0		ppbv	8	4/14/2012 1:08 AM
trans-1,2-Dichloroethene	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
trans-1,3-dichloropropene	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
Trichloroethene	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
Trichlorofluoromethane	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
Vinyl acetate	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
Vinyl chloride	ND	1.0	U	ppbv	1	4/13/2012 3:24 PM
Xylenes, Total	11	3.0		ppbv	1	4/13/2012 3:24 PM
Surr: 4-Bromofluorobenzene	99.0	70-130		%REC	1	4/13/2012 3:24 PM

RTI Laboratories - DATES REPORT

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1203984-001A	VA1044	3/22/2012 9:46 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/13/2012 2:11 PM
				EPA_TO15-Volatile Organic Compounds			4/12/2012 12:01 AM
1203984-001B	VA1044	3/22/2012 9:46 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/2/2012 4:36 PM
1203984-002A	VA1045	3/22/2012 10:10 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/13/2012 3:37 PM
				EPA_TO15-Volatile Organic Compounds			4/12/2012 1:24 AM
				EPA_TO15-Volatile Organic Compounds			4/13/2012 9:39 PM
1203984-002B	VA1045	3/22/2012 10:10 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/2/2012 4:59 PM
1203984-003A	VA1046	3/22/2012 10:46 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/14/2012 6:44 PM
				EPA_TO15-Volatile Organic Compounds			4/12/2012 2:50 AM
				EPA_TO15-Volatile Organic Compounds			4/12/2012 4:02 PM
1203984-003B	VA1046	3/22/2012 10:46 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/2/2012 5:27 PM
1203984-004A	VA1047	3/22/2012 11:17 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/14/2012 7:27 PM
				EPA_TO15-Volatile Organic Compounds			4/12/2012 4:16 AM
				EPA_TO15-Volatile Organic Compounds			4/12/2012 4:43 PM
1203984-004B	VA1047	3/22/2012 11:17 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/3/2012 10:51 AM
1203984-005A	VA1053	3/22/2012 9:47 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/13/2012 2:54 PM
				EPA_TO15-Volatile Organic Compounds			4/12/2012 12:42 AM
1203984-005B	VA1053	3/22/2012 9:47 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/3/2012 11:07 AM

RTI Laboratories - DATES REPORT

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1203984-006A	VA1054	3/22/2012 10:22 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/13/2012 4:24 PM
				EPA_TO15-Volatile Organic Compounds			4/12/2012 2:09 AM
1203984-006B	VA1054	3/22/2012 10:22 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/3/2012 11:26 AM
1203984-007A	VA1055	3/22/2012 10:51 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/13/2012 6:40 PM
				EPA_TO15-Volatile Organic Compounds			4/12/2012 3:35 AM
1203984-007B	VA1055	3/22/2012 10:51 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/3/2012 11:41 AM
1203984-008A	VA1056	3/22/2012 11:22 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/13/2012 8:06 PM
				EPA_TO15-Volatile Organic Compounds			4/12/2012 5:01 AM
1203984-008B	VA1056	3/22/2012 11:22 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/3/2012 11:57 AM
1203984-009A	VA1066	3/21/2012 9:06 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/12/2012 1:59 AM
				EPA_TO15-Volatile Organic Compounds			4/13/2012 4:46 PM
1203984-009B	VA1066	3/21/2012 9:06 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/3/2012 12:12 PM
1203984-010A	VA1067	3/21/2012 9:45 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/11/2012 5:39 PM
				EPA_TO15-Volatile Organic Compounds			4/8/2012 4:52 PM
1203984-010B	VA1067	3/21/2012 9:45 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/3/2012 12:28 PM
1203984-011A	VA1068	3/21/2012 10:26 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/12/2012 2:50 AM
				EPA_TO15-Volatile Organic Compounds			4/8/2012 5:37 PM

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Date Reported: 4/18/2012
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Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1203984-011B	VA1068	3/21/2012 10:26 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/3/2012 12:43 PM
1203984-012A	VA1069	3/21/2012 11:01 AM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			4/13/2012 9:33 PM
				EPA_TO15-Volatile Organic Compounds			4/8/2012 6:18 PM
1203984-012B	VA1069	3/21/2012 11:01 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/3/2012 12:58 PM
1203984-013A	VA1070	3/21/2012 8:50 AM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			4/12/2012 1:13 AM
				EPA_TO15-Volatile Organic Compounds			4/13/2012 6:12 PM
1203984-013B	VA1070	3/21/2012 8:50 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/3/2012 1:18 PM
1203984-014A	VA1071	3/21/2012 9:36 AM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			4/11/2012 4:06 PM
				EPA_TO15-Volatile Organic Compounds			4/8/2012 3:26 PM
1203984-014B	VA1071	3/21/2012 9:36 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/5/2012 10:03 AM
1203984-015A	VA1072	3/21/2012 9:36 AM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			4/11/2012 4:49 PM
				EPA_TO15-Volatile Organic Compounds			4/8/2012 4:07 PM
				EPA_TO15-Volatile Organic Compounds			4/13/2012 6:53 PM
1203984-015B	VA1072	3/21/2012 9:36 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/5/2012 10:19 AM
1203984-016A	VA1073	3/21/2012 12:57 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			4/12/2012 9:08 PM
				EPA_TO15-Volatile Organic Compounds			4/8/2012 7:42 PM
1203984-016B	VA1073	3/21/2012 12:57 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/5/2012 10:35 AM

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Date Reported: 4/18/2012
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Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1203984-017A	VA1074	3/21/2012 1:27 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/12/2012 9:52 PM
				EPA_TO15-Volatile Organic Compounds			4/8/2012 8:24 PM
1203984-017B	VA1074	3/21/2012 1:27 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/5/2012 10:50 AM
1203984-018A	VA1075	3/21/2012 1:52 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/14/2012 8:11 PM
				EPA_TO15-Volatile Organic Compounds			4/8/2012 9:06 PM
1203984-018B	VA1075	3/21/2012 1:52 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/5/2012 11:06 AM
1203984-019A	VA1076	3/21/2012 2:15 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/14/2012 9:39 PM
				EPA_TO15-Volatile Organic Compounds			4/8/2012 9:47 PM
1203984-019B	VA1076	3/21/2012 2:15 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/5/2012 11:30 AM
1203984-020A	VA1077	3/21/2012 2:42 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/13/2012 12:02 AM
				EPA_TO15-Volatile Organic Compounds			4/8/2012 10:29 PM
				EPA_TO15-Volatile Organic Compounds			4/13/2012 7:35 PM
1203984-020B	VA1077	3/21/2012 2:42 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/5/2012 11:45 AM
1203984-021A	VA1078	3/21/2012 3:21 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/13/2012 12:45 AM
				EPA_TO15-Volatile Organic Compounds			4/8/2012 11:14 PM
1203984-021B	VA1078	3/21/2012 3:21 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/5/2012 12:16 PM
1203984-022A	VA1079	3/21/2012 3:39 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/14/2012 11:07 PM
				EPA_TO15-Volatile Organic Compounds			4/8/2012 11:58 PM

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Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1203984-022B	VA1079	3/21/2012 3:39 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/5/2012 12:34 PM
1203984-023A	VA1081	3/22/2012 11:53 AM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			4/13/2012 8:50 PM
				EPA_TO15-Volatile Organic Compounds			4/12/2012 5:43 AM
1203984-023B	VA1081	3/22/2012 11:53 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/5/2012 12:55 PM
1203984-024A	VA1151	3/20/2012 1:42 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			4/11/2012 7:54 PM
				EPA_TO15-Volatile Organic Compounds			4/12/2012 2:39 PM
1203984-024B	VA1151	3/20/2012 1:42 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/6/2012 11:29 AM
1203984-025A	VA1152	3/20/2012 2:30 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			4/12/2012 4:03 PM
				EPA_TO15-Volatile Organic Compounds			4/12/2012 6:06 PM
1203984-025B	VA1152	3/20/2012 2:30 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/6/2012 11:43 AM
1203984-026A	VA1153	3/20/2012 3:22 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			4/12/2012 5:31 PM
				EPA_TO15-Volatile Organic Compounds			4/12/2012 7:30 PM
1203984-026B	VA1153	3/20/2012 3:22 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/6/2012 11:58 AM
1203984-027A	VA1154	3/20/2012 4:04 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			4/12/2012 7:42 PM
				EPA_TO15-Volatile Organic Compounds			4/13/2012 8:17 PM
1203984-027B	VA1154	3/20/2012 4:04 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/6/2012 12:16 PM

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Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1203984-028A	VA1155	3/22/2012 8:23 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/13/2012 2:14 AM
				EPA_TO15-Volatile Organic Compounds			4/11/2012 6:09 PM
1203984-028B	VA1155	3/22/2012 8:23 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/6/2012 12:31 PM
1203984-029A	VA1156	3/22/2012 9:00 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/13/2012 3:01 AM
				EPA_TO15-Volatile Organic Compounds			4/11/2012 6:54 PM
1203984-029B	VA1156	3/22/2012 9:00 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/6/2012 12:46 PM
1203984-030A	VA1157	3/20/2012 12:10 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/11/2012 1:37 AM
				EPA_TO15-Volatile Organic Compounds			4/11/2012 7:39 PM
1203984-030B	VA1157	3/20/2012 12:10 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/6/2012 1:01 PM
1203984-031A	VA1158	3/20/2012 12:45 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/11/2012 2:23 AM
				EPA_TO15-Volatile Organic Compounds			4/11/2012 9:08 PM
1203984-031B	VA1158	3/20/2012 12:45 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/6/2012 1:16 PM
1203984-032A	VA1159	3/20/2012 1:22 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/11/2012 3:08 AM
				EPA_TO15-Volatile Organic Compounds			4/11/2012 9:53 PM
1203984-032B	VA1159	3/20/2012 1:22 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/6/2012 1:38 PM
1203984-033A	VA1160	3/20/2012 1:22 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			4/11/2012 6:25 PM
				EPA_TO15-Volatile Organic Compounds			4/11/2012 10:38 PM

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Date Reported: 4/18/2012
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Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1203984-033B	VA1160	3/20/2012 1:22 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/6/2012 1:53 PM
1203984-034A	VA1161	3/20/2012 2:19 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			4/12/2012 3:20 PM
				EPA_TO15-Volatile Organic Compounds			4/12/2012 5:25 PM
1203984-034B	VA1161	3/20/2012 2:19 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/6/2012 3:10 PM
1203984-035A	VA1162	3/20/2012 2:58 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			4/12/2012 4:47 PM
				EPA_TO15-Volatile Organic Compounds			4/12/2012 6:48 PM
1203984-035B	VA1162	3/20/2012 2:58 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/6/2012 3:25 PM
1203984-036A	VA1163	3/20/2012 3:33 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			4/12/2012 6:58 PM
				EPA_TO15-Volatile Organic Compounds			4/13/2012 8:58 PM
1203984-036B	VA1163	3/20/2012 3:33 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			4/6/2012 3:40 PM
1203984-037A	VA8078-TB	3/21/2012 8:00 AM	Air	EPA_TO15-Volatile Organic Compounds			4/13/2012 3:24 PM
				EPA_TO15-Volatile Organic Compounds			4/14/2012 1:08 AM

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47327

Sample ID:	MBLK-040212 TCD	Samp Type:	MBLK	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	47327	
Client ID:	PBW	Batch ID:	R47327	TestNo:	ASTM-D2504			Analysis Date:	4/2/2012	SeqNo:	924921	

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-040212 TCD	Samp Type:	LCS	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	47327	
Client ID:	LCSW	Batch ID:	R47327	TestNo:	ASTM-D2504			Analysis Date:	4/2/2012	SeqNo:	924923	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.6	0.10	2.500	0	105	70	130	2.596	0.920	0	
Carbon Monoxide	2.7	0.10	2.500	0	108	70	130	2.706	0.482	0	
Methane	2.1	0.50	2.000	0	104	70	130	2.085	0.192	0	
Nitrogen	2.6	0.10	2.500	0	105	70	130	2.702	2.93	0	
Oxygen	2.4	0.10	2.500	0	98.0	70	130	2.477	1.10	0	

Sample ID:	1203903-026BDUP	Samp Type:	DUP	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	47327	
Client ID:	ZZZZZZ	Batch ID:	R47327	TestNo:	ASTM-D2504			Analysis Date:	4/2/2012	SeqNo:	924935	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	1.2	0.10						1.246	0.483	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	80	0.10						80.60	0.358	20	
Oxygen	17	0.10						16.68	0.354	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47413

Sample ID:	MBLK-040312 TCD	Samp Type:	MBLK	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	47413	
Client ID:	PBW	Batch ID:	R47413	TestNo:	ASTM-D2504			Analysis Date:	4/3/2012	SeqNo:	926359	

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-040312 TCD	Samp Type:	LCS	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	47413	
Client ID:	LCSW	Batch ID:	R47413	TestNo:	ASTM-D2504			Analysis Date:	4/3/2012	SeqNo:	926361	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.6	0.10	2.500	0	105	70	130	2.620	0.229	0	
Carbon Monoxide	2.7	0.10	2.500	0	108	70	130	2.685	0.668	0	
Methane	2.1	0.50	2.000	0	105	70	130	2.086	0.764	0	
Nitrogen	2.6	0.10	2.500	0	106	70	130	2.647	0.0378	0	
Oxygen	2.5	0.10	2.500	0	99.1	70	130	2.466	0.445	0	

Sample ID:	1203984-013BDUP	Samp Type:	DUP	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	47413	
Client ID:	VA1070	Batch ID:	R47413	TestNo:	ASTM-D2504			Analysis Date:	4/3/2012	SeqNo:	926373	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.40	0.10						0.4130	1.96	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	78	0.10						78.19	0.161	20	
Oxygen	20	0.10						20.41	0.181	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203984

Date Reported: 4/18/2012
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Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47439

Sample ID: **MBLK-040512 TCD** Samp Type: **MBLK** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **47439**
Client ID: **PBW** Batch ID: **R47439** TestNo: **ASTM-D2504** Analysis Date: **4/5/2012** SeqNo: **926731**

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-040512 TCD-A** Samp Type: **LCS** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **47439**
Client ID: **LCSW** Batch ID: **R47439** TestNo: **ASTM-D2504** Analysis Date: **4/5/2012** SeqNo: **926733**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.5	0.10	2.500	0	102	70	130	0	0	0	
Carbon Monoxide	2.7	0.10	2.500	0	108	70	130	0	0	0	
Methane	2.1	0.50	2.000	0	104	70	130	0	0	0	
Nitrogen	2.7	0.10	2.500	0	109	70	130	0	0	0	
Oxygen	2.5	0.10	2.500	0	99.3	70	130	0	0	0	

Sample ID: **1203984-023BDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **47439**
Client ID: **VA1081** Batch ID: **R47439** TestNo: **ASTM-D2504** Analysis Date: **4/5/2012** SeqNo: **926745**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.091	0.10						0.08700	4.49	20	J
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	79	0.10						78.79	0.784	20	
Oxygen	21	0.10						20.99	0.0810	20	

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Date Reported: 4/18/2012
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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

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Date Reported: 4/18/2012
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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#: 1203984

Date Reported: 4/18/2012
Revision v1

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:	VA1069	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#: 1203984

Date Reported: 4/18/2012
Revision v1

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: **VA1069** 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#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47543

Sample ID:	MBLK-040612 TCD	Samp Type:	MBLK	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	47543	
Client ID:	PBW	Batch ID:	R47543	TestNo:	ASTM-D2504			Analysis Date:	4/6/2012	SeqNo:	928821	

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-040612 TCD	Samp Type:	LCS	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	47543	
Client ID:	LCSW	Batch ID:	R47543	TestNo:	ASTM-D2504			Analysis Date:	4/6/2012	SeqNo:	928823	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.7	0.10	2.500	0	106	70	130	2.657	0.188	0	
Carbon Monoxide	2.7	0.10	2.500	0	108	70	130	2.743	1.69	0	
Methane	2.1	0.50	2.000	0	105	70	130	2.119	0.901	0	
Nitrogen	2.6	0.10	2.500	0	106	70	130	2.872	8.08	0	
Oxygen	2.5	0.10	2.500	0	98.9	70	130	2.544	2.87	0	

Sample ID:	1203984-033BDUP	Samp Type:	DUP	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	47543	
Client ID:	VA1160	Batch ID:	R47543	TestNo:	ASTM-D2504			Analysis Date:	4/6/2012	SeqNo:	928835	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.76	0.10						0.7850	3.90	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	79	0.10						79.61	0.148	20	
Oxygen	19	0.10						19.38	0.114	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47586

Sample ID:	MBLK VOA9 041012	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	47586	
Client ID:	PBW	Batch ID:	R47586	TestNo:	MA_APH			Analysis Date:	4/10/2012	SeqNo:	929576	
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		94.2	70	130				

Sample ID:	1203903-017Adup	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	47586	
Client ID:	ZZZZZZ	Batch ID:	R47586	TestNo:	MA_APH			Analysis Date:	4/10/2012	SeqNo:	929584	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons		1,500,000	190,000						1,432,000	6.20	30	
C9-C10 Aromatic Hydrocarbons		ND	210,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons		ND	300,000						0	0	30	U
Surr: 4-Bromofluorobenzene		140,000		143,200		99.8	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47623

Sample ID:	MBLK VOA9 041112	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	47623	
Client ID:	PBW	Batch ID:	R47623	TestNo:	MA_APH			Analysis Date:	4/11/2012	SeqNo:	930324	

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		92.7	70	130				

Sample ID:	1203984-033Adup	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	47623	
Client ID:	VA1160	Batch ID:	R47623	TestNo:	MA_APH			Analysis Date:	4/11/2012	SeqNo:	930332	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	530,000	94,000						570,400	6.41	30	
C9-C10 Aromatic Hydrocarbons	ND	110,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	ND	150,000						0	0	30	U
Surr: 4-Bromofluorobenzene	71,000		71,600		99.4	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47626

Sample ID:	MBLK VOA1 041112	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47626
Client ID:	PBW	Batch ID:	R47626	TestNo:	TO-15			Analysis Date:	4/11/2012	SeqNo:	930388

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#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47626

Sample ID:	MBLK VOA1 041112	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47626	
Client ID:	PBW	Batch ID:	R47626	TestNo:	TO-15			Analysis Date:	4/11/2012	SeqNo:	930388	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									U
cis-1,2-Dichloroethene	ND	1.0									U
cis-1,3-dichloropropene	ND	1.0									U
Cyclohexane	ND	2.0									U
Dichlorodifluoromethane	ND	1.0									U
Ethyl acetate	ND	1.0									U
Ethylbenzene	ND	2.0									U
Heptane	ND	1.0									U
Hexachlorobutadiene	ND	2.0									U
m,p-Xylene	ND	2.0									U
Methylene chloride	ND	5.0									U
n-Hexane	ND	2.0									U
Naphthalene	ND	1.0									U
o-Xylene	ND	1.0									U
Propylene	ND	1.0									U
Styrene	ND	1.0									U
tert-Butyl Methyl Ether	ND	1.0									U
Tetrachloroethene	ND	1.0									U
Tetrahydrofuran	ND	1.0									U
Toluene	ND	1.0									U
trans-1,2-Dichloroethene	ND	1.0									U
trans-1,3-dichloropropene	ND	1.0									U
Trichloroethene	ND	1.0									U
Trichlorofluoromethane	ND	1.0									U
Vinyl acetate	ND	1.0									U
Vinyl chloride	ND	1.0									U
Xylenes, Total	ND	3.0									U
Surr: 4-Bromofluorobenzene	12		12.50		95.4	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47626

Sample ID:	1203984-030Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47626
Client ID:	VA1157	Batch ID:	R47626	TestNo:	TO-15			Analysis Date:	4/11/2012	SeqNo:	930395

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	800						0	0	25	U
1,1,2,2-Tetrachloroethane	ND	800						0	0	25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800						0	0	25	U
1,1,2-Trichloroethane	ND	800						0	0	25	U
1,1-Dichloroethane	ND	800						0	0	25	U
1,1-Dichloroethene	ND	800						0	0	25	U
1,2,4-Trichlorobenzene	ND	800						0	0	25	U
1,2,4-Trimethylbenzene	ND	800						0	0	25	U
1,2-Dibromoethane	ND	800						0	0	25	U
1,2-Dichlorobenzene	ND	800						0	0	25	U
1,2-Dichloroethane	ND	800						0	0	25	U
1,2-Dichloropropane	ND	800						0	0	25	U
1,3,5-Trimethylbenzene	ND	800						0	0	25	U
1,3-Butadiene	ND	800						0	0	25	U
1,3-Dichlorobenzene	ND	800						0	0	25	U
1,4-Dichlorobenzene	ND	800						0	0	25	U
2-Butanone	ND	800						0	0	25	U
2-Hexanone	ND	800						0	0	25	U
4-Methyl-2-pentanone	ND	800						0	0	25	U
Acetone	930	800						0	200	25	R
Benzene	12,000	800						10,840	9.36	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#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47626

Sample ID:	1203984-030Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47626	
Client ID:	VA1157	Batch ID:	R47626	TestNo:	TO-15			Analysis Date:	4/11/2012	SeqNo:	930395	

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	19,000	1,600						18,460	4.49	25	
Dichlorodifluoromethane	ND	800						0	0	25	U
Ethyl acetate	ND	800						0	0	25	U
Ethylbenzene	1,700	1,600						1,472	11.8	25	
Heptane	19,000	800						18,480	5.06	25	
Hexachlorobutadiene	ND	1,600						0	0	25	U
m,p-Xylene	5,100	1,600						4,576	10.4	25	
Methylene chloride	ND	4,000						0	0	25	U
n-Hexane	14,000	1,600						12,600	7.87	25	
Naphthalene	ND	800						0	0	25	U
o-Xylene	1,300	800						1,176	11.5	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	32,000	800						29,300	7.82	25	
trans-1,2-Dichloroethene	ND	800						0	0	25	U
trans-1,3-dichloropropene	ND	800						0	0	25	U
Trichloroethene	ND	800						0	0	25	U
Trichlorofluoromethane	ND	800						0	0	25	U
Vinyl acetate	ND	800						0	0	25	U
Vinyl chloride	ND	800						0	0	25	U
Xylenes, Total	6,400	2,400						5,752	10.7	25	
Surr: 4-Bromofluorobenzene	9,400		10,000		93.5	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47672

Sample ID:	MBLK VOA9 041212	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	47672	
Client ID:	PBW	Batch ID:	R47672	TestNo:	MA_APH			Analysis Date:	4/12/2012	SeqNo:	931219	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	ND	120									U
C9-C10 Aromatic Hydrocarbons	ND	130									U
C9-C12 Aliphatic Hydrocarbons	ND	190									U
Surr: 4-Bromofluorobenzene	81		89.50		91.0	70	130				

Sample ID:	1203984-026Adup	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	47672	
Client ID:	VA1153	Batch ID:	R47672	TestNo:	MA_APH			Analysis Date:	4/12/2012	SeqNo:	931224	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	2,300,000	940,000						2,224,000	3.83	30	
C9-C10 Aromatic Hydrocarbons	ND	1,100,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000						0	0	30	U
Surr: 4-Bromofluorobenzene	680,000		716,000		94.6	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47673

Sample ID:	MBLK VOA1 041212	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47673	
Client ID:	PBW	Batch ID:	R47673	TestNo:	TO-15			Analysis Date:	4/12/2012	SeqNo:	931244	

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#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R47673

Sample ID:	MBLK VOA1 041212	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47673	
Client ID:	PBW	Batch ID:	R47673	TestNo:	TO-15			Analysis Date:	4/12/2012	SeqNo:	931244	

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		93.0	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47673

Sample ID:	1203984-024ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47673
Client ID:	VA1151	Batch ID:	R47673	TestNo:	TO-15			Analysis Date:	4/12/2012	SeqNo:	931255

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	57,000	8,000						71,120	22.4	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#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R47673

Sample ID:	1203984-024ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47673	
Client ID:	VA1151	Batch ID:	R47673	TestNo:	TO-15			Analysis Date:	4/12/2012	SeqNo:	931255	

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	130,000	16,000						148,100	12.8	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	110,000	8,000						127,100	16.9	25	
Hexachlorobutadiene	ND	16,000						0	0	25	U
m,p-Xylene	13,000	16,000						16,560	24.4	25	J
Methylene chloride	ND	40,000						0	0	25	U
n-Hexane	110,000	16,000						124,100	9.38	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	110,000	8,000						145,800	27.5	25	R
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						16,560	24.4	25	J
Surr: 4-Bromofluorobenzene	94,000		100,000		94.0	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47706

Sample ID:	MBLK VOA9 041312	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	47706	
Client ID:	PBW	Batch ID:	R47706	TestNo:	MA_APH			Analysis Date:	4/13/2012	SeqNo:	931916	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	ND	120									U
C9-C10 Aromatic Hydrocarbons	ND	130									U
C9-C12 Aliphatic Hydrocarbons	ND	190									U
Surr: 4-Bromofluorobenzene	82		89.50		92.2	70	130				

Sample ID:	1203984-006Adup	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	47706	
Client ID:	VA1054	Batch ID:	R47706	TestNo:	MA_APH			Analysis Date:	4/13/2012	SeqNo:	931921	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	880,000	94,000						784,400	11.8	30	
C9-C10 Aromatic Hydrocarbons	ND	110,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	92,000	150,000						61,710	39.8	30	JR
Surr: 4-Bromofluorobenzene	72,000		71,600		101	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47707

Sample ID:	MBLK VOA9 041412	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	47707	
Client ID:	PBW	Batch ID:	R47707	TestNo:	MA_APH			Analysis Date:	4/14/2012	SeqNo:	931931	

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		93.8	70	130				

Sample ID:	1203984-018Adup	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	47707	
Client ID:	VA1075	Batch ID:	R47707	TestNo:	MA_APH			Analysis Date:	4/14/2012	SeqNo:	931935	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	1,300,000	190,000						1,243,000	1.92	30	
C9-C10 Aromatic Hydrocarbons	ND	210,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	48,000	300,000						0	200	30	JR
Surr: 4-Bromofluorobenzene	140,000		143,200		98.5	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47712

Sample ID:	MBLK VOA1 041312	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47712	
Client ID:	PBW	Batch ID:	R47712	TestNo:	TO-15			Analysis Date:	4/13/2012	SeqNo:	931992	

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#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47712

Sample ID:	MBLK VOA1 041312	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47712	
Client ID:	PBW	Batch ID:	R47712	TestNo:	TO-15			Analysis Date:	4/13/2012	SeqNo:	931992	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									U
cis-1,2-Dichloroethene	ND	1.0									U
cis-1,3-dichloropropene	ND	1.0									U
Cyclohexane	ND	2.0									U
Dichlorodifluoromethane	ND	1.0									U
Ethyl acetate	ND	1.0									U
Ethylbenzene	ND	2.0									U
Heptane	ND	1.0									U
Hexachlorobutadiene	ND	2.0									U
m,p-Xylene	ND	2.0									U
Methylene chloride	ND	5.0									U
n-Hexane	ND	2.0									U
Naphthalene	ND	1.0									U
o-Xylene	ND	1.0									U
Propylene	ND	1.0									U
Styrene	ND	1.0									U
tert-Butyl Methyl Ether	ND	1.0									U
Tetrachloroethene	ND	1.0									U
Tetrahydrofuran	ND	1.0									U
Toluene	ND	1.0									U
trans-1,2-Dichloroethene	ND	1.0									U
trans-1,3-dichloropropene	ND	1.0									U
Trichloroethene	ND	1.0									U
Trichlorofluoromethane	ND	1.0									U
Vinyl acetate	ND	1.0									U
Vinyl chloride	ND	1.0									U
Xylenes, Total	ND	3.0									U
Surr: 4-Bromofluorobenzene	12		12.50		95.4	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47712

Sample ID:	1203984-009Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47712
Client ID:	VA1066	Batch ID:	R47712	TestNo:	TO-15			Analysis Date:	4/13/2012	SeqNo:	931994

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	800						0	0	25	U
1,1,2,2-Tetrachloroethane	ND	800						0	0	25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800						0	0	25	U
1,1,2-Trichloroethane	ND	800						0	0	25	U
1,1-Dichloroethane	ND	800						0	0	25	U
1,1-Dichloroethene	ND	800						0	0	25	U
1,2,4-Trichlorobenzene	ND	800						0	0	25	U
1,2,4-Trimethylbenzene	ND	800						0	0	25	U
1,2-Dibromoethane	ND	800						0	0	25	U
1,2-Dichlorobenzene	ND	800						0	0	25	U
1,2-Dichloroethane	ND	800						0	0	25	U
1,2-Dichloropropane	ND	800						0	0	25	U
1,3,5-Trimethylbenzene	ND	800						0	0	25	U
1,3-Butadiene	ND	800						0	0	25	U
1,3-Dichlorobenzene	ND	800						0	0	25	U
1,4-Dichlorobenzene	ND	800						0	0	25	U
2-Butanone	ND	800						0	0	25	U
2-Hexanone	ND	800						0	0	25	U
4-Methyl-2-pentanone	ND	800						0	0	25	U
Acetone	810	800						0	200	25	R
Benzene	2,200	800						1,936	12.0	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#: 1203984

Date Reported: 4/18/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R47712

Sample ID:	1203984-009Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	47712	
Client ID:	VA1066	Batch ID:	R47712	TestNo:	TO-15			Analysis Date:	4/13/2012	SeqNo:	931994	

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	3,500	1,600						3,240	6.45	25	
Dichlorodifluoromethane	ND	800						0	0	25	U
Ethyl acetate	ND	800						0	0	25	U
Ethylbenzene	ND	1,600						0	0	25	U
Heptane	3,200	800						2,912	8.17	25	
Hexachlorobutadiene	ND	1,600						0	0	25	U
m,p-Xylene	1,300	1,600						1,168	11.6	25	J
Methylene chloride	ND	4,000						0	0	25	U
n-Hexane	1,700	1,600						1,632	4.78	25	
Naphthalene	ND	800						0	0	25	U
o-Xylene	ND	800						0	0	25	U
Propylene	ND	800						0	0	25	U
Styrene	ND	800						0	0	25	U
tert-Butyl Methyl Ether	ND	800						0	0	25	U
Tetrachloroethene	ND	800						0	0	25	U
Tetrahydrofuran	ND	800						0	0	25	U
Toluene	7,300	800						6,424	12.6	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	1,300	2,400						1,168	11.6	25	J
Surr: 4-Bromofluorobenzene	9,500		10,000		95.4	70	130		0	25	

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

18-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
04081203.D 040312V1.M Mon Apr 09 10:16:29 2012 Page 1

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

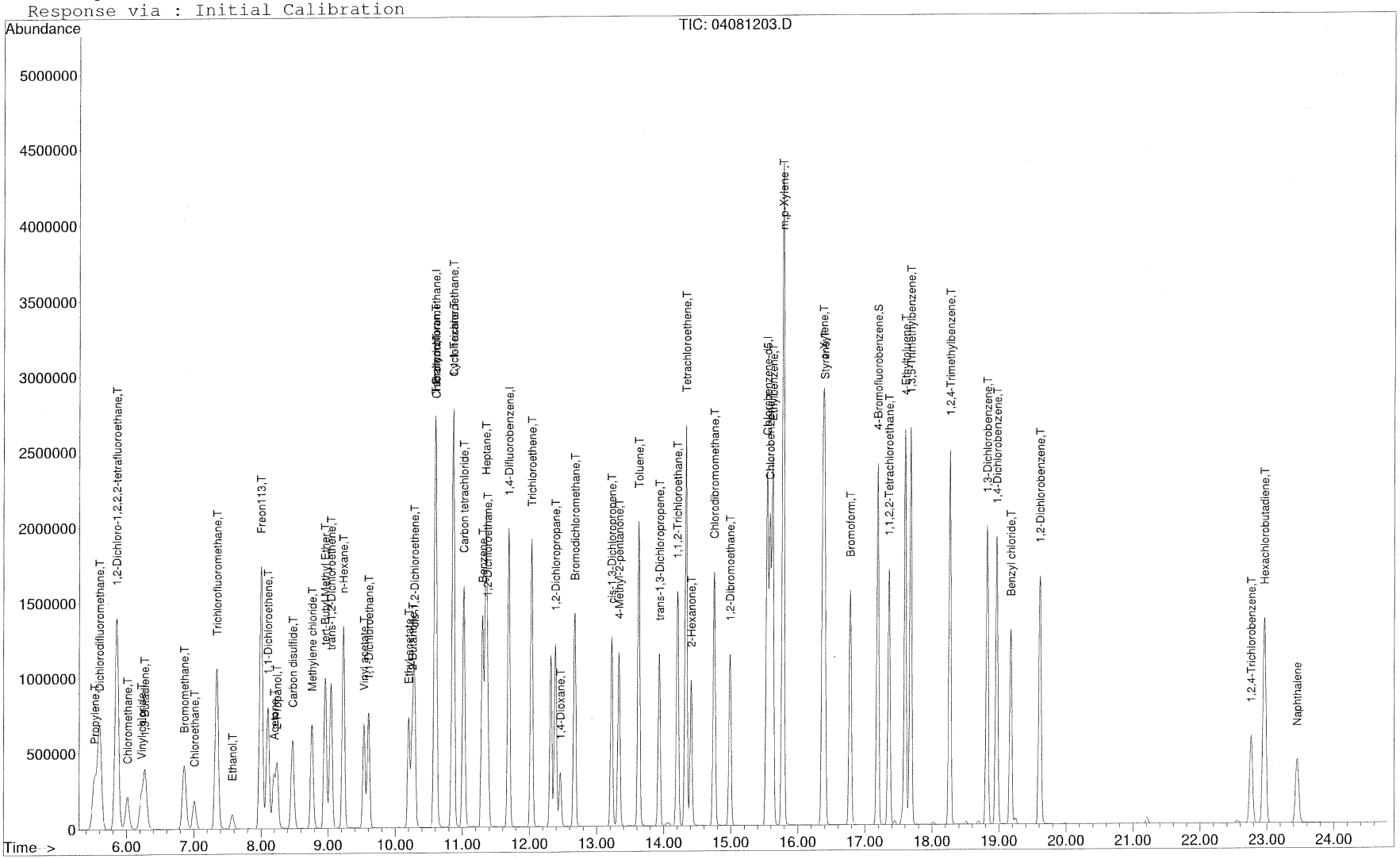
Quant Method : C:\HPCHEM\1\METHODS\040312V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Apr 04 16:36:31 2012
Response via : Initial Calibration
DataAcq Meth : 040312V1

	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

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



RTI Laboratories

Run ID: VOA1_120411A **Run No.:** 47626

Analytical Run Date: 4/11/2012 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

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

Column Length: 60m

Run Comments: ch rev 4/13/12/PR by RD2 on 12apr12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 041112	BFB_TUNE	TUNE	R47626	4/11/2012 10:05:00 AM	Celeste Hoitash		
CCV VOA1 041112	EPA_TO15	CCV	R47626	4/11/2012 12:22:00 PM	Celeste Hoitash		
RLVS VOA1 041112	EPA_TO15	RLVS	R47626	4/11/2012 1:04:00 PM	Celeste Hoitash		
MBLK VOA1 041112	EPA_TO15	MBLK	R47626	4/11/2012 1:53:00 PM	Celeste Hoitash		
1203903-020A	EPA_TO15	SAMP	R47626	4/11/2012 4:01:00 PM	Celeste Hoitash		
1203903-025A	EPA_TO15	SAMP	R47626	4/11/2012 4:43:00 PM	Celeste Hoitash		
1203903-026A	EPA_TO15	SAMP	R47626	4/11/2012 5:24:00 PM	Celeste Hoitash		
1203984-028A	EPA_TO15	SAMP	R47626	4/11/2012 6:09:00 PM	Celeste Hoitash		
1203984-029A	EPA_TO15	SAMP	R47626	4/11/2012 6:54:00 PM	Celeste Hoitash		
1203984-030A	EPA_TO15	SAMP	R47626	4/11/2012 7:39:00 PM	Celeste Hoitash		
1203984-030Adup	EPA_TO15	DUP	R47626	4/11/2012 8:23:00 PM	Celeste Hoitash		
1203984-031A	EPA_TO15	SAMP	R47626	4/11/2012 9:08:00 PM	Celeste Hoitash		
1203984-032A	EPA_TO15	SAMP	R47626	4/11/2012 9:53:00 PM	Celeste Hoitash		
1203984-033A	EPA_TO15	SAMP	R47626	4/11/2012 10:38:00 PM	Celeste Hoitash		
1203984-001A	EPA_TO15	SAMP	R47626	4/12/2012 12:01:00 AM	Celeste Hoitash		
1203984-005A	EPA_TO15	SAMP	R47626	4/12/2012 12:42:00 AM	Celeste Hoitash		
1203984-002A	EPA_TO15	SAMP	R47626	4/12/2012 1:24:00 AM	Celeste Hoitash		
1203984-006A	EPA_TO15	SAMP	R47626	4/12/2012 2:09:00 AM	Celeste Hoitash		
1203984-003A	EPA_TO15	SAMP	R47626	4/12/2012 2:50:00 AM	Celeste Hoitash		
1203984-007A	EPA_TO15	SAMP	R47626	4/12/2012 3:35:00 AM	Celeste Hoitash		
1203984-004A	EPA_TO15	SAMP	R47626	4/12/2012 4:16:00 AM	Celeste Hoitash		
1203984-008A	EPA_TO15	SAMP	R47626	4/12/2012 5:01:00 AM	Celeste Hoitash		
1203984-023A	EPA_TO15	SAMP	R47626	4/12/2012 5:43:00 AM	Celeste Hoitash		
RLVS2 VOA1 04111	EPA_TO15	RLVS	R47626	4/12/2012 6:25:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

18-Apr-12

RunNo 47626

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
930384	BFB VOA1 041112	BFB_TUNE	TUNE	\1\DATA\041112	4/11/2012 10:05:	1	R47626		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		84.8	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		98.3	98.3		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		16.9	16.9		100	0	0	0	0	0	17%	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		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
930386	CCV VOA1 041112	EPA_TO15	CCV	\1\DATA\041112	4/11/2012 12:22:	1	R47626		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	11.33	11.33		9.6	0	0	0.107	1	0	118%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	11.09	11.09		10	0	0	0.211	1	0	111%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	11.38	11.38		9.8	0	0	0.108	1	0	116%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	11.61	11.61		9.8	0	0	0.2	1	0	118%	70	130	0%	
1,1-Dichloroethane	A	ppbv	10.63	10.63		9.7	0	0	0.111	1	0	110%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.84	10.84		9.9	0	0	0.097	1	0	109%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	7.78	7.78		9.1	0	0	0.271	1	0	85%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	10.79	10.79		9.8	0	0	0.245	1	0	110%	70	130	0%	
1,2-Dibromoethane	A	ppbv	11.55	11.55		9.6	0	0	0.186	1	0	120%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	10.23	10.23		9.7	0	0	0.208	1	0	105%	70	130	0%	
1,2-Dichloroethane	A	ppbv	11.07	11.07		9.7	0	0	0.196	1	0	114%	70	130	0%	
1,2-Dichloropropane	A	ppbv	11.64	11.64		9.8	0	0	0.224	1	0	119%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	10.88	10.88		9.7	0	0	0.24	1	0	112%	70	130	0%	
1,3-Butadiene	A	ppbv	12.09	12.09		9.8	0	0	0.152	1	0	123%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	10.48	10.48		9.7	0	0	0.202	1	0	108%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
930386	CCV VOA1 041112	EPA_TO15	CCV	\1\DATA\041112	4/11/2012 12:22:	1	R47626		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	10.36	10.36		9.6	0	0	0.194	1	0	108%	70	130	0%	
1,4-Dioxane	A	ppbv	11.11	11.11		9.6	0	0	0.128	1	0	116%	70	130	0%	
2-Butanone	A	ppbv	11.19	11.19		9.9	0	0	0.287	1	0	113%	70	130	0%	
2-Hexanone	A	ppbv	11.31	11.31		9.8	0	0	0.135	1	0	115%	70	130	0%	
2-Propanol	A	ppbv	10.37	10.37		10.1	0	0	0.329	1	0	103%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	11.29	11.29		10	0	0	0.157	1	0	113%	70	130	0%	
Acetone	A	ppbv	10.71	10.71		10	0	0	0.43	1	0	107%	70	130	0%	
Benzene	A	ppbv	10.71	10.71		9.6	0	0	0.126	1	0	112%	70	130	0%	
Benzyl chloride	A	ppbv	10.29	10.29		9.7	0	0	0.155	1	0	106%	70	130	0%	
Bromodichloromethane	A	ppbv	11.39	11.39		9.6	0	0	0.156	1	0	119%	70	130	0%	
Bromoform	A	ppbv	11.05	11.05		9.6	0	0	0.197	1	0	115%	70	130	0%	
Bromomethane	A	ppbv	10.14	10.14		9.3	0	0	0.075	1	0	109%	70	130	0%	
Carbon disulfide	A	ppbv	10.59	10.59		9.7	0	0	0.093	1	0	109%	70	130	0%	
Carbon tetrachloride	A	ppbv	10.8	10.8		9.5	0	0	0.114	1	0	114%	70	130	0%	
Chlorobenzene	A	ppbv	11.72	11.72		9.9	0	0	0.275	1	0	118%	70	130	0%	
Chlorodibromomethane	A	ppbv	11.82	11.82		9.2	0	0	0.165	1	0	128%	70	130	0%	
Chloroethane	A	ppbv	9.8	9.8		9.8	0	0	0.063	1	0	100%	70	130	0%	
Chloroform	A	ppbv	11.55	11.55		9.4	0	0	0.126	1	0	123%	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	10.85	10.85		9.8	0	0	0.107	1	0	111%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	11.14	11.14		9.5	0	0	0.166	1	0	117%	70	130	0%	
Cyclohexane	A	ppbv	11.53	11.53		9.8	0	0	0.684	2	0	118%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.66	9.66		9.2	0	0	0.086	1	0	105%	70	130	0%	
Ethanol	A	ppbv	9.57	9.57		9.2	0	0	1.962	5	0	104%	70	130	0%	
Ethyl acetate	A	ppbv	10.77	10.77		9.8	0	0	0.157	1	0	110%	70	130	0%	
Ethylbenzene	A	ppbv	11.64	11.64		9.8	0	0	0.737	2	0	119%	70	130	0%	
Heptane	A	ppbv	12.31	12.31		9.9	0	0	0.249	1	0	124%	70	130	0%	
Hexachlorobutadiene	A	ppbv	9.7	9.7		9.4	0	0	0.374	2	0	103%	70	130	0%	
m,p-Xylene	A	ppbv	22.98	22.98		19.2	0	0	0.524	2	0	120%	70	130	0%	
Methylene chloride	A	ppbv	10.78	10.78		10	0	0	2.077	5	0	108%	70	130	0%	
n-Hexane	A	ppbv	10.99	10.99		10.1	0	0	0.692	2	0	109%	70	130	0%	
Naphthalene	A	ppbv	8.06	8.06		9.2	0	0	0.247	1	0	88%	70	130	0%	
o-Xylene	A	ppbv	11.89	11.89		10	0	0	0.258	1	0	119%	70	130	0%	
Propylene	A	ppbv	10.16	10.16		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
930386	CCV VOA1 041112	EPA_TO15	CCV	\1\DATA\041112	4/11/2012 12:22:	1	R47626		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	11.71	11.71		9.8	0	0	0.263	1	0	119%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	10.84	10.84		9.9	0	0	0.228	1	0	109%	70	130	0%	
Tetrachloroethene	A	ppbv	11.68	11.68		9.6	0	0	0.148	1	0	122%	70	130	0%	
Tetrahydrofuran	A	ppbv	11.64	11.64		10	0	0	0.201	1	0	116%	70	130	0%	
Toluene	A	ppbv	11.76	11.76		9.8	0	0	0.158	1	0	120%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.77	10.77		9.8	0	0	0.117	1	0	110%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	10.65	10.65		9.1	0	0	0.171	1	0	117%	70	130	0%	
Trichloroethene	A	ppbv	11.55	11.55		9.6	0	0	0.119	1	0	120%	70	130	0%	
Trichlorofluoromethane	A	ppbv	10.71	10.71		9.6	0	0	0.148	1	0	112%	70	130	0%	
Vinyl acetate	A	ppbv	11.15	11.15		9.9	0	0	0.266	1	0	113%	70	130	0%	
Vinyl chloride	A	ppbv	11.35	11.35		9.4	0	0	0.072	1	0	121%	70	130	0%	
Xylenes, Total	C	ppbv	34.87	34.87		29.2	0	0	0.782	3	0	119%	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	11.97	11.97		12.5	0	0	0	0	0	96%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
930387	RLVS VOA1 041112	EPA_TO15	RLVS	\1\DATA\041112	4/11/2012 1:04:0	1	R47626		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	1.01	1.01		0.996	0	0	0.107	1	0	101%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.36	1.36		1	0	0	0.211	1	0	136%	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	1.05	1.05		0.98	0	0	0.2	1	0	107%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1	1		0.97	0	0	0.111	1	0	103%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1.02	1.02		0.99	0	0	0.097	1	0	103%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.32	1.32		0.91	0	0	0.271	1	0	145%	70	130	0%	S
1,2,4-Trimethylbenzene	A	ppbv	1.36	1.36		0.98	0	0	0.245	1	0	139%	70	130	0%	S
1,2-Dibromoethane	A	ppbv	1.02	1.02		0.96	0	0	0.186	1	0	106%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.39	1.39		0.97	0	0	0.208	1	0	143%	70	130	0%	S
1,2-Dichloroethane	A	ppbv	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\041112\04111203.D Vial: 3
Acq On : 11 Apr 2012 12:22 pm Operator: RACHEL HILL
Sample : CCV VOA1 041112 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	94	0.00
2	T	Propylene	0.933	0.930	0.3	88	0.01
3	T	Dichlorodifluoromethane	3.299	3.463	-5.0	91	0.01
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.423	2.621	-8.2	92	0.01
5	T	Chloromethane	0.975	1.093	-12.1	92	0.02
6	T	Vinyl chloride	0.908	1.096	-20.7	100	0.00
7	T	1,3-Butadiene	0.604	0.745	-23.3	97	0.00
8	T	Bromomethane	1.211	1.321	-9.1	94	0.00
9	T	Chloroethane	0.672	0.716	-6.5	91	0.01
10	T	Trichlorofluoromethane	3.078	3.433	-11.5	91	0.01
11	T	Ethanol	0.384	0.399	-3.9	82	0.01
12	T	Freon113	2.077	2.411	-16.1	91	0.01
13	T	1,1-Dichloroethene	1.532	1.678	-9.5	90	0.00
14	T	Acetone	1.520	1.628	-7.1	84	0.01
15	T	Carbon disulfide	2.662	2.907	-9.2	91	0.01
16	T	2-Propanol	1.547	1.588	-2.7	82	0.01
17	T	Methylene chloride	1.125	1.212	-7.7	90	0.00
18	T	tert-Butyl Methyl Ether	2.677	2.930	-9.5	83	0.00
19	T	trans-1,2-Dichloroethene	1.451	1.594	-9.9	89	0.00
20	T	n-Hexane	1.604	1.745	-8.8	87	0.01
21	T	1,1-Dichloroethane	1.915	2.098	-9.6	89	0.00
22	T	Vinyl acetate	2.421	2.727	-12.6	82	0.00
23	T	cis-1,2-Dichloroethene	1.146	1.270	-10.8	88	0.00
24	T	2-Butanone	1.588	1.796	-13.1	87	0.00
25	T	Ethyl acetate	2.033	2.235	-9.9	84	0.01
26	T	Tetrahydrofuran	0.986	1.148	-16.4	85	0.01
27	T	Chloroform	2.018	2.378	-17.8	90	0.00
28	T	1,1,1-Trichloroethane	2.172	2.563	-18.0	89	0.00
29	T	Cyclohexane	1.517	1.786	-17.7	87	0.01
30	T	Carbon tetrachloride	2.467	2.804	-13.7	88	0.00
31	T	Benzene	3.050	3.401	-11.5	85	0.00
32	T	1,2-Dichloroethane	1.236	1.410	-14.1	84	0.01
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	90	0.01
34	T	Heptane	0.502	0.624	-24.3	84	0.00
35	T	Trichloroethene	0.447	0.537	-20.1	88	0.01
36	T	1,2-Dichloropropane	0.332	0.394	-18.7	84	0.00
37	T	1,4-Dioxane	0.194	0.224	-15.5	86	0.01
38	T	Bromodichloromethane	0.632	0.750	-18.7	85	0.00
39	T	cis-1,3-Dichloropropene	0.535	0.628	-17.4	83	0.01
40	T	4-Methyl-2-pentanone	0.233	0.263	-12.9	81	0.00
41	T	Toluene	1.053	1.263	-19.9	84	0.00
42	T	trans-1,3-Dichloropropene	0.495	0.580	-17.2	84	0.00
43	T	1,1,2-Trichloroethane	0.372	0.441	-18.5	85	0.00
44	T	Tetrachloroethene	0.563	0.685	-21.7	89	0.00
45	T	2-Hexanone	0.451	0.520	-15.3	80	0.00
46	T	Chlorodibromomethane	0.654	0.789	-20.6	85	0.00
47	T	1,2-Dibromoethane	0.571	0.687	-20.3	85	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	91	0.01
49	T	Chlorobenzene	0.918	1.087	-18.4	85	0.00
50	T	Ethylbenzene	1.443	1.715	-18.8	84	0.01
51	T	m,p-Xylene	1.122	1.343	-19.7	88	0.00
52	T	o-Xylene	1.148	1.365	-18.9	83	0.00
53	T	Styrene	0.882	1.054	-19.5	83	0.01
54	T	Bromoform	0.651	0.749	-15.1	82	0.01
55	S	4-Bromofluorobenzene	0.627	0.600	4.3	87	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\041112\04111203.D Vial: 3
Acq On : 11 Apr 2012 12:22 pm Operator: RACHEL HILL
Sample : CCV VOA1 041112 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	0.840	-10.8	82	0.00
57	T	4-Ethyltoluene	1.526	1.709	-12.0	82	0.01
58	T	1,3,5-Trimethylbenzene	1.302	1.461	-12.2	83	0.00
59	T	1,2,4-Trimethylbenzene	1.254	1.381	-10.1	82	0.01
60	T	1,3-Dichlorobenzene	0.823	0.890	-8.1	83	0.00
61	T	1,4-Dichlorobenzene	0.794	0.857	-7.9	83	0.00
62	T	Benzyl chloride	0.930	0.987	-6.1	78	0.00
63	T	1,2-Dichlorobenzene	0.742	0.783	-5.5	83	0.00
64	T	1,2,4-Trichlorobenzene	0.279	0.238	14.7	70	0.00
65	T	Hexachlorobutadiene	0.347	0.358	-3.2	74	0.01
66		Naphthalene	0.539	0.472	12.4	71	0.02

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\041112\04111203.D Vial: 3
Acq On : 11 Apr 2012 12:22 pm Operator: RACHEL HILL
Sample : CCV VOA1 041112 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 11 12:47 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	616464	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.69	114	1983862	12.50	ppbv		0.01
48) Chlorobenzene-d5	15.54	117	1737484	12.50	ppbv		0.01
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.19	95	1042945	11.97	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 95.76%				
Target Compounds							Qvalue
2) Propylene	5.52	41	467666	10.16	ppbv		99
3) Dichlorodifluoromethane	5.60	85	1571235	9.66	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.86	135	1228068	10.28	ppbv	#	86
5) Chloromethane	6.02	50	512192	10.65	ppbv		100
6) Vinyl chloride	6.22	62	508091	11.35	ppbv		100
7) 1,3-Butadiene	6.27	39	360187	12.09	ppbv		95
8) Bromomethane	6.86	94	605744	10.14	ppbv		99
9) Chloroethane	7.01	64	324821	9.80	ppbv		98
10) Trichlorofluoromethane	7.34	101	1625222	10.71	ppbv		99
11) Ethanol	7.58	45	180940	9.57	ppbv		99
12) Freon113	8.00	101	1165269	11.38	ppbv		95
13) 1,1-Dichloroethene	8.10	61	819437	10.84	ppbv		99
14) Acetone	8.19	43	802754	10.71	ppbv	#	94
15) Carbon disulfide	8.47	76	1390442	10.59	ppbv	#	100
16) 2-Propanol	8.24	45	790921	10.37	ppbv		79
17) Methylene chloride	8.76	49	597802	10.78	ppbv		98
18) tert-Butyl Methyl Ether	8.96	73	1430496	10.84	ppbv		97
19) trans-1,2-Dichloroethene	9.04	61	770615	10.77	ppbv		98
20) n-Hexane	9.23	57	869173	10.99	ppbv		98
21) 1,1-Dichloroethane	9.60	63	1003600	10.63	ppbv		100
22) Vinyl acetate	9.53	43	1331207	11.15	ppbv		99
23) cis-1,2-Dichloroethene	10.29	96	613615	10.85	ppbv		99
24) 2-Butanone	10.25	43	876697	11.19	ppbv		100
25) Ethyl acetate	10.20	43	1080112	10.77	ppbv	#	100
26) Tetrahydrofuran	10.59	42	566061	11.64	ppbv		96
27) Chloroform	10.61	83	1149127	11.55	ppbv		97
28) 1,1,1-Trichloroethane	10.86	97	1213674	11.33	ppbv		100
29) Cyclohexane	10.87	56	863142	11.53	ppbv		98
30) Carbon tetrachloride	11.02	117	1313492	10.80	ppbv		99
31) Benzene	11.30	78	1610083	10.71	ppbv		100
32) 1,2-Dichloroethane	11.38	62	674691	11.07	ppbv		99
34) Heptane	11.35	43	980902	12.31	ppbv		97
35) Trichloroethene	12.03	130	818667	11.55	ppbv		97
36) 1,2-Dichloropropane	12.39	63	612479	11.64	ppbv		100
37) 1,4-Dioxane	12.46	88	341179	11.11	ppbv		96
38) Bromodichloromethane	12.67	83	1143001	11.39	ppbv		97
39) cis-1,3-Dichloropropene	13.23	75	946386	11.14	ppbv		100
40) 4-Methyl-2-pentanone	13.33	58	418101	11.29	ppbv		98
41) Toluene	13.63	91	1964857	11.76	ppbv		100
42) trans-1,3-Dichloropropene	13.93	75	837185	10.65	ppbv		99
43) 1,1,2-Trichloroethane	14.20	97	685744	11.61	ppbv		99
44) Tetrachloroethene	14.33	166	1043020	11.68	ppbv		96
45) 2-Hexanone	14.41	43	809006	11.31	ppbv		95
46) Chlorodibromomethane	14.75	129	1227781	11.82	ppbv		99
47) 1,2-Dibromoethane	14.99	107	1046741	11.55	ppbv		100
49) Chlorobenzene	15.58	112	1495333	11.72	ppbv		99
50) Ethylbenzene	15.63	91	2335920	11.64	ppbv		99
51) m,p-Xylene	15.78	91	3584827	22.98	ppbv		99
52) o-Xylene	16.37	91	1897695	11.89	ppbv		98

(#) = qualifier out of range (m) = manual integration
04111203.D 040312V1.M Thu Apr 12 10:15:30 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\041112\04111203.D Vial: 3
Acq On : 11 Apr 2012 12:22 pm Operator: RACHEL HILL
Sample : CCV VOA1 041112 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 11 12:47 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

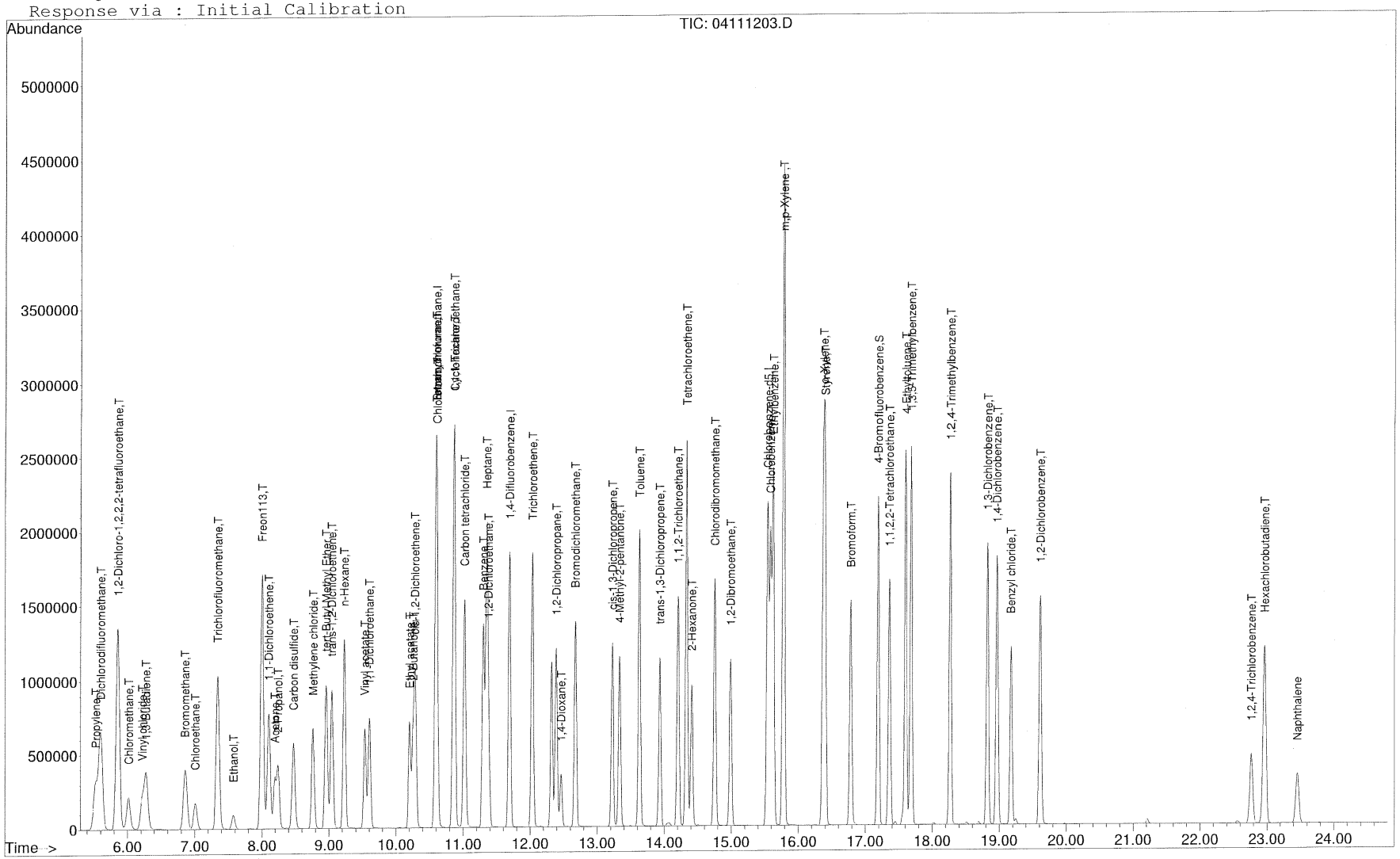
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53)	Styrene	16.40	104	1436366	11.71	ppbv	99
54)	Bromoform	16.78	173	998948	11.05	ppbv	99
56)	1,1,2,2-Tetrachloroethane	17.36	83	1168105	11.09	ppbv	97
57)	4-Ethyltoluene	17.60	105	2327367	10.97	ppbv	100
58)	1,3,5-Trimethylbenzene	17.68	105	1969259	10.88	ppbv	100
59)	1,2,4-Trimethylbenzene	18.27	105	1881560	10.79	ppbv	100
60)	1,3-Dichlorobenzene	18.82	146	1199916	10.48	ppbv	99
61)	1,4-Dichlorobenzene	18.96	146	1143297	10.36	ppbv	99
62)	Benzyl chloride	19.17	91	1330203	10.29	ppbv	99
63)	1,2-Dichlorobenzene	19.61	146	1055193	10.23	ppbv	99
64)	1,2,4-Trichlorobenzene	22.77	180	301345	7.78	ppbv	97
65)	Hexachlorobutadiene	22.96	225	468074	9.70	ppbv	99
66)	Naphthalene	23.46	128	604074	8.06	ppbv	100

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\041112\04111203.D Vial: 3
Acq On : 11 Apr 2012 12:22 pm Operator: RACHEL HILL
Sample : CCV VOA1 041112 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 11 12:47 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_120412A **Run No.:** 47673

Analytical Run Date: 4/12/2012 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

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

Column Length: 60m

Run Comments: PR by RD2 on 13apr12 041312rsl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 041212	BFB_TUNE	TUNE	R47673	4/12/2012 9:27:00 AM	Robert Lynch		
CCV VOA1 041212	EPA_TO15	CCV	R47673	4/12/2012 10:51:00 AM	Robert Lynch		
RLVS VOA1 041212	EPA_TO15	RLVS	R47673	4/12/2012 11:35:00 AM	Robert Lynch		
MBLK VOA1 041212	EPA_TO15	MBLK	R47673	4/12/2012 12:26:00 PM	Robert Lynch		
1203903-026A	EPA_TO15	SAMP	R47673	4/12/2012 1:09:00 PM	Robert Lynch		
1203984-024A	EPA_TO15	SAMP	R47673	4/12/2012 2:39:00 PM	Robert Lynch		
1203984-024ADUP	EPA_TO15	DUP	R47673	4/12/2012 3:20:00 PM	Robert Lynch		
1203984-003A	EPA_TO15	SAMP	R47673	4/12/2012 4:02:00 PM	Robert Lynch		
1203984-004A	EPA_TO15	SAMP	R47673	4/12/2012 4:43:00 PM	Robert Lynch		
1203984-034A	EPA_TO15	SAMP	R47673	4/12/2012 5:25:00 PM	Robert Lynch		
1203984-025A	EPA_TO15	SAMP	R47673	4/12/2012 6:06:00 PM	Robert Lynch		
1203984-035A	EPA_TO15	SAMP	R47673	4/12/2012 6:48:00 PM	Robert Lynch		
1203984-026A	EPA_TO15	SAMP	R47673	4/12/2012 7:30:00 PM	Robert Lynch		
RLVS2 VOA1 04121	EPA_TO15	RLVS	R47673	4/13/2012 9:20:00 AM	Robert Lynch		Liquid Nitrogen ran out in middle of night. Changed first thing in morning and ran ending RLVS. This is why there is such a time gap between RLVS2 and last sample analyzed.

RTI Laboratories

ANALYTICAL RUN Summary

18-Apr-12

RunNo 47673

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
931241	BFB VOA1 041212	BFB_TUNE	TUNE	\1\DATA\041212	4/12/2012 9:27:0	1	R47673		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		84.1	84.1		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		98.2	98.2		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		16.9	16.9		100	0	0	0	0	0	17%	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		7.1	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
931242	CCV VOA1 041212	EPA_TO15	CCV	\1\DATA\041212	4/12/2012 10:51:	1	R47673		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	10.8	10.8		9.6	0	0	0.107	1	0	113%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.57	10.57		10	0	0	0.211	1	0	106%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.47	10.47		9.8	0	0	0.108	1	0	107%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	11.04	11.04		9.8	0	0	0.2	1	0	113%	70	130	0%	
1,1-Dichloroethane	A	ppbv	9.99	9.99		9.7	0	0	0.111	1	0	103%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.02	10.02		9.9	0	0	0.097	1	0	101%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	7.36	7.36		9.1	0	0	0.271	1	0	81%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	10.39	10.39		9.8	0	0	0.245	1	0	106%	70	130	0%	
1,2-Dibromoethane	A	ppbv	10.94	10.94		9.6	0	0	0.186	1	0	114%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	9.65	9.65		9.7	0	0	0.208	1	0	99%	70	130	0%	
1,2-Dichloroethane	A	ppbv	10.62	10.62		9.7	0	0	0.196	1	0	109%	70	130	0%	
1,2-Dichloropropane	A	ppbv	11.03	11.03		9.8	0	0	0.224	1	0	113%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	10.48	10.48		9.7	0	0	0.24	1	0	108%	70	130	0%	
1,3-Butadiene	A	ppbv	12.05	12.05		9.8	0	0	0.152	1	0	123%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.86	9.86		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
931242	CCV VOA1 041212	EPA_TO15	CCV	.\1\DATA\041212	4/12/2012 10:51:	1	R47673		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.77	9.77		9.6	0	0	0.194	1	0	102%	70	130	0%	
1,4-Dioxane	A	ppbv	10.47	10.47		9.6	0	0	0.128	1	0	109%	70	130	0%	
2-Butanone	A	ppbv	10.61	10.61		9.9	0	0	0.287	1	0	107%	70	130	0%	
2-Hexanone	A	ppbv	10.57	10.57		9.8	0	0	0.135	1	0	108%	70	130	0%	
2-Propanol	A	ppbv	9.65	9.65		10.1	0	0	0.329	1	0	96%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	10.53	10.53		10	0	0	0.157	1	0	105%	70	130	0%	
Acetone	A	ppbv	10.23	10.23		10	0	0	0.43	1	0	102%	70	130	0%	
Benzene	A	ppbv	10.35	10.35		9.6	0	0	0.126	1	0	108%	70	130	0%	
Benzyl chloride	A	ppbv	9.85	9.85		9.7	0	0	0.155	1	0	102%	70	130	0%	
Bromodichloromethane	A	ppbv	10.83	10.83		9.6	0	0	0.156	1	0	113%	70	130	0%	
Bromoform	A	ppbv	10.51	10.51		9.6	0	0	0.197	1	0	109%	70	130	0%	
Bromomethane	A	ppbv	9.34	9.34		9.3	0	0	0.075	1	0	100%	70	130	0%	
Carbon disulfide	A	ppbv	9.69	9.69		9.7	0	0	0.093	1	0	100%	70	130	0%	
Carbon tetrachloride	A	ppbv	10.23	10.23		9.5	0	0	0.114	1	0	108%	70	130	0%	
Chlorobenzene	A	ppbv	11.21	11.21		9.9	0	0	0.275	1	0	113%	70	130	0%	
Chlorodibromomethane	A	ppbv	11.24	11.24		9.2	0	0	0.165	1	0	122%	70	130	0%	
Chloroethane	A	ppbv	8.89	8.89		9.8	0	0	0.063	1	0	91%	70	130	0%	
Chloroform	A	ppbv	10.94	10.94		9.4	0	0	0.126	1	0	116%	70	130	0%	
Chloromethane	A	ppbv	9.86	9.86		9.8	0	0	0.104	1	0	101%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	10.25	10.25		9.8	0	0	0.107	1	0	105%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	10.61	10.61		9.5	0	0	0.166	1	0	112%	70	130	0%	
Cyclohexane	A	ppbv	10.82	10.82		9.8	0	0	0.684	2	0	110%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	8.97	8.97		9.2	0	0	0.086	1	0	98%	70	130	0%	
Ethanol	A	ppbv	8.92	8.92		9.2	0	0	1.962	5	0	97%	70	130	0%	
Ethyl acetate	A	ppbv	10.43	10.43		9.8	0	0	0.157	1	0	106%	70	130	0%	
Ethylbenzene	A	ppbv	11.23	11.23		9.8	0	0	0.737	2	0	115%	70	130	0%	
Heptane	A	ppbv	11.72	11.72		9.9	0	0	0.249	1	0	118%	70	130	0%	
Hexachlorobutadiene	A	ppbv	9.3	9.3		9.4	0	0	0.374	2	0	99%	70	130	0%	
m,p-Xylene	A	ppbv	22.13	22.13		19.2	0	0	0.524	2	0	115%	70	130	0%	
Methylene chloride	A	ppbv	9.93	9.93		10	0	0	2.077	5	0	99%	70	130	0%	
n-Hexane	A	ppbv	10.36	10.36		10.1	0	0	0.692	2	0	103%	70	130	0%	
Naphthalene	A	ppbv	7.48	7.48		9.2	0	0	0.247	1	0	81%	70	130	0%	
o-Xylene	A	ppbv	11.36	11.36		10	0	0	0.258	1	0	114%	70	130	0%	
Propylene	A	ppbv	9.29	9.29		10.2	0	0	0.075	1	0	91%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
931242	CCV VOA1 041212	EPA_TO15	CCV	\1\DATA\041212\	4/12/2012 10:51:	1	R47673		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	11.15	11.15		9.8	0	0	0.263	1	0	114%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	10.21	10.21		9.9	0	0	0.228	1	0	103%	70	130	0%	
Tetrachloroethene	A	ppbv	11.04	11.04		9.6	0	0	0.148	1	0	115%	70	130	0%	
Tetrahydrofuran	A	ppbv	11.18	11.18		10	0	0	0.201	1	0	112%	70	130	0%	
Toluene	A	ppbv	11.27	11.27		9.8	0	0	0.158	1	0	115%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	9.89	9.89		9.8	0	0	0.117	1	0	101%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	10.03	10.03		9.1	0	0	0.171	1	0	110%	70	130	0%	
Trichloroethene	A	ppbv	11.02	11.02		9.6	0	0	0.119	1	0	115%	70	130	0%	
Trichlorofluoromethane	A	ppbv	9.84	9.84		9.6	0	0	0.148	1	0	103%	70	130	0%	
Vinyl acetate	A	ppbv	10.67	10.67		9.9	0	0	0.266	1	0	108%	70	130	0%	
Vinyl chloride	A	ppbv	10.51	10.51		9.4	0	0	0.072	1	0	112%	70	130	0%	
Xylenes, Total	C	ppbv	33.49	33.49		29.2	0	0	0.782	3	0	115%	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	12.07	12.07		12.5	0	0	0	0	0	97%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
931243	RLVS VOA1 041212	EPA_TO15	RLVS	\1\DATA\041212\	4/12/2012 11:35:	1	R47673		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	1.07	1.07		0.996	0	0	0.107	1	0	107%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.39	1.39		1	0	0	0.211	1	0	139%	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	1.08	1.08		0.98	0	0	0.2	1	0	110%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1.03	1.03		0.97	0	0	0.111	1	0	106%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1.04	1.04		0.99	0	0	0.097	1	0	105%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.37	1.37		0.91	0	0	0.271	1	0	151%	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	1.05	1.05		0.96	0	0	0.186	1	0	109%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.45	1.45		0.97	0	0	0.208	1	0	149%	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	1.07	1.07		0.98	0	0	0.224	1	0	109%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\041212\04121203.D Vial: 3
Acq On : 12 Apr 2012 10:51 am Operator: RACHEL HILL
Sample : CCV VOA1 041212 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	91	0.00
2	T	Propylene	0.933	0.850	8.9	78	0.01
3	T	Dichlorodifluoromethane	3.299	3.216	2.5	82	0.01
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.423	2.416	0.3	82	0.01
5	T	Chloromethane	0.975	1.012	-3.8	82	0.02
6	T	Vinyl chloride	0.908	1.015	-11.8	89	0.01
7	T	1,3-Butadiene	0.604	0.743	-23.0	94	0.01
8	T	Bromomethane	1.211	1.216	-0.4	83	0.00
9	T	Chloroethane	0.672	0.650	3.3	80	0.02
10	T	Trichlorofluoromethane	3.078	3.157	-2.6	81	0.01
11	T	Ethanol	0.384	0.372	3.1	74	0.00
12	T	Freon113	2.077	2.219	-6.8	82	0.01
13	T	1,1-Dichloroethene	1.532	1.551	-1.2	81	0.01
14	T	Acetone	1.520	1.554	-2.2	78	0.01
15	T	Carbon disulfide	2.662	2.658	0.2	80	0.01
16	T	2-Propanol	1.547	1.478	4.5	74	0.01
17	T	Methylene chloride	1.125	1.117	0.7	80	0.00
18	T	tert-Butyl Methyl Ether	2.677	2.759	-3.1	76	0.00
19	T	trans-1,2-Dichloroethene	1.451	1.464	-0.9	79	0.00
20	T	n-Hexane	1.604	1.645	-2.6	80	0.00
21	T	1,1-Dichloroethane	1.915	1.972	-3.0	81	0.00
22	T	Vinyl acetate	2.421	2.609	-7.8	76	0.00
23	T	cis-1,2-Dichloroethene	1.146	1.199	-4.6	81	0.00
24	T	2-Butanone	1.588	1.703	-7.2	80	0.00
25	T	Ethyl acetate	2.033	2.165	-6.5	79	0.01
26	T	Tetrahydrofuran	0.986	1.103	-11.9	79	0.01
27	T	Chloroform	2.018	2.252	-11.6	82	0.00
28	T	1,1,1-Trichloroethane	2.172	2.442	-12.4	82	0.00
29	T	Cyclohexane	1.517	1.676	-10.5	79	0.01
30	T	Carbon tetrachloride	2.467	2.656	-7.7	81	0.00
31	T	Benzene	3.050	3.289	-7.8	79	0.00
32	T	1,2-Dichloroethane	1.236	1.353	-9.5	78	0.01
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	88	0.01
34	T	Heptane	0.502	0.594	-18.3	79	0.00
35	T	Trichloroethene	0.447	0.513	-14.8	83	0.01
36	T	1,2-Dichloropropane	0.332	0.373	-12.3	78	0.00
37	T	1,4-Dioxane	0.194	0.211	-8.8	80	0.00
38	T	Bromodichloromethane	0.632	0.713	-12.8	79	0.00
39	T	cis-1,3-Dichloropropene	0.535	0.598	-11.8	78	0.01
40	T	4-Methyl-2-pentanone	0.233	0.246	-5.6	74	0.00
41	T	Toluene	1.053	1.210	-14.9	79	0.00
42	T	trans-1,3-Dichloropropene	0.495	0.546	-10.3	77	0.00
43	T	1,1,2-Trichloroethane	0.372	0.419	-12.6	79	0.00
44	T	Tetrachloroethene	0.563	0.647	-14.9	83	0.00
45	T	2-Hexanone	0.451	0.486	-7.8	74	0.00
46	T	Chlorodibromomethane	0.654	0.751	-14.8	79	0.00
47	T	1,2-Dibromoethane	0.571	0.651	-14.0	79	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	88	0.00
49	T	Chlorobenzene	0.918	1.039	-13.2	79	0.00
50	T	Ethylbenzene	1.443	1.654	-14.6	78	0.00
51	T	m,p-Xylene	1.122	1.293	-15.2	82	0.00
52	T	o-Xylene	1.148	1.305	-13.7	77	0.00
53	T	Styrene	0.882	1.004	-13.8	77	0.00
54	T	Bromoform	0.651	0.712	-9.4	76	0.01
55	S	4-Bromofluorobenzene	0.627	0.605	3.5	85	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\041212\04121203.D Vial: 3
Acq On : 12 Apr 2012 10:51 am Operator: RACHEL HILL
Sample : CCV VOA1 041212 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	0.801	-5.7	76	0.00
57	T	4-Ethyltoluene	1.526	1.665	-9.1	78	0.00
58	T	1,3,5-Trimethylbenzene	1.302	1.407	-8.1	78	0.00
59	T	1,2,4-Trimethylbenzene	1.254	1.330	-6.1	77	0.01
60	T	1,3-Dichlorobenzene	0.823	0.837	-1.7	75	0.00
61	T	1,4-Dichlorobenzene	0.794	0.808	-1.8	75	0.00
62	T	Benzyl chloride	0.930	0.945	-1.6	72	0.00
63	T	1,2-Dichlorobenzene	0.742	0.738	0.5	76	0.00
64	T	1,2,4-Trichlorobenzene	0.279	0.225	19.4	64	0.00
65	T	Hexachlorobutadiene	0.347	0.343	1.2	69	0.00
66		Naphthalene	0.539	0.438	18.7	64	0.01

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\041212\04121203.D Vial: 3
Acq On : 12 Apr 2012 10:51 am Operator: RACHEL HILL
Sample : CCV VOA1 041212 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 12 11:16 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	10.60	130	597635	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.69	114	1946674	12.50	ppbv		0.01
48) Chlorobenzene-d5	15.54	117	1680252	12.50	ppbv		0.00
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.19	95	1017228	12.07	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 96.56%				
Target Compounds							Qvalue
2) Propylene	5.52	41	414371	9.29	ppbv		99
3) Dichlorodifluoromethane	5.60	85	1414460	8.97	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.86	135	1097557	9.48	ppbv	#	85
5) Chloromethane	6.02	50	459450	9.86	ppbv		99
6) Vinyl chloride	6.22	62	456120	10.51	ppbv		100
7) 1,3-Butadiene	6.28	39	347980	12.05	ppbv		95
8) Bromomethane	6.86	94	540751	9.34	ppbv		99
9) Chloroethane	7.01	64	285739	8.89	ppbv		98
10) Trichlorofluoromethane	7.34	101	1448921	9.84	ppbv		99
11) Ethanol	7.57	45	163523	8.92	ppbv		99
12) Freon113	8.00	101	1039583	10.47	ppbv		95
13) 1,1-Dichloroethene	8.11	61	733895	10.02	ppbv		98
14) Acetone	8.20	43	743174	10.23	ppbv	#	95
15) Carbon disulfide	8.47	76	1232650	9.69	ppbv	#	100
16) 2-Propanol	8.24	45	713656	9.65	ppbv		82
17) Methylene chloride	8.76	49	533929	9.93	ppbv		98
18) tert-Butyl Methyl Ether	8.96	73	1306109	10.21	ppbv		98
19) trans-1,2-Dichloroethene	9.04	61	685952	9.89	ppbv		99
20) n-Hexane	9.23	57	794560	10.36	ppbv		97
21) 1,1-Dichloroethane	9.60	63	914336	9.99	ppbv		100
22) Vinyl acetate	9.53	43	1234819	10.67	ppbv		99
23) cis-1,2-Dichloroethene	10.29	96	561899	10.25	ppbv		98
24) 2-Butanone	10.25	43	805929	10.61	ppbv		99
25) Ethyl acetate	10.20	43	1014170	10.43	ppbv	#	100
26) Tetrahydrofuran	10.59	42	527350	11.18	ppbv		96
27) Chloroform	10.61	83	1055274	10.94	ppbv		98
28) 1,1,1-Trichloroethane	10.86	97	1121025	10.80	ppbv		100
29) Cyclohexane	10.87	56	785060	10.82	ppbv		99
30) Carbon tetrachloride	11.02	117	1206514	10.23	ppbv		99
31) Benzene	11.30	78	1509743	10.35	ppbv		100
32) 1,2-Dichloroethane	11.38	62	627357	10.62	ppbv		99
34) Heptane	11.35	43	916342	11.72	ppbv		98
35) Trichloroethene	12.03	130	766555	11.02	ppbv		97
36) 1,2-Dichloropropane	12.39	63	569531	11.03	ppbv		99
37) 1,4-Dioxane	12.46	88	315651	10.47	ppbv		95
38) Bromodichloromethane	12.67	83	1066080	10.83	ppbv		98
39) cis-1,3-Dichloropropene	13.23	75	884715	10.61	ppbv		99
40) 4-Methyl-2-pentanone	13.33	58	382729	10.53	ppbv		98
41) Toluene	13.63	91	1846802	11.27	ppbv		99
42) trans-1,3-Dichloropropene	13.93	75	773593	10.03	ppbv		99
43) 1,1,2-Trichloroethane	14.21	97	640178	11.04	ppbv		99
44) Tetrachloroethene	14.33	166	967107	11.04	ppbv		96
45) 2-Hexanone	14.41	43	741657	10.57	ppbv		94
46) Chlorodibromomethane	14.75	129	1145475	11.24	ppbv		99
47) 1,2-Dibromoethane	14.99	107	972689	10.94	ppbv		99
49) Chlorobenzene	15.59	112	1383228	11.21	ppbv		99
50) Ethylbenzene	15.62	91	2178353	11.23	ppbv		99
51) m,p-Xylene	15.78	91	3338302	22.13	ppbv		99
52) o-Xylene	16.37	91	1753697	11.36	ppbv		98

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\041212\04121203.D Vial: 3
Acq On : 12 Apr 2012 10:51 am Operator: RACHEL HILL
Sample : CCV VOA1 041212 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 12 11:16 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

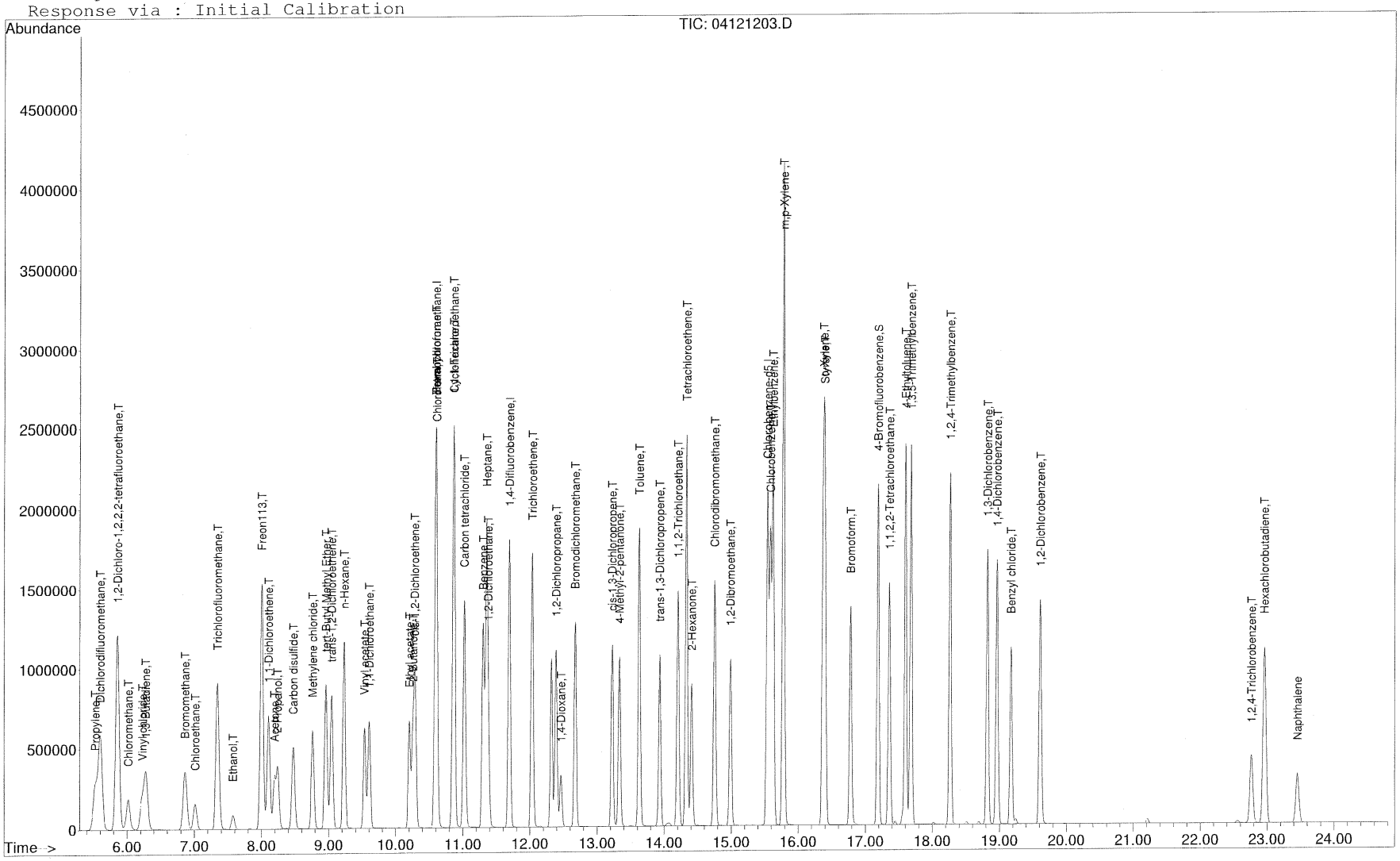
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53)	Styrene	16.40	104	1321980	11.15	ppbv	99
54)	Bromoform	16.78	173	918993	10.51	ppbv	99
56)	1,1,2,2-Tetrachloroethane	17.36	83	1076539	10.57	ppbv	98
57)	4-Ethyltoluene	17.60	105	2193908	10.69	ppbv	100
58)	1,3,5-Trimethylbenzene	17.68	105	1833997	10.48	ppbv	99
59)	1,2,4-Trimethylbenzene	18.27	105	1752152	10.39	ppbv	100
60)	1,3-Dichlorobenzene	18.82	146	1091472	9.86	ppbv	99
61)	1,4-Dichlorobenzene	18.96	146	1042031	9.77	ppbv	100
62)	Benzyl chloride	19.17	91	1232059	9.85	ppbv	99
63)	1,2-Dichlorobenzene	19.61	146	962565	9.65	ppbv	99
64)	1,2,4-Trichlorobenzene	22.76	180	275726	7.36	ppbv	97
65)	Hexachlorobutadiene	22.96	225	433872	9.30	ppbv	99
66)	Naphthalene	23.45	128	542008	7.48	ppbv	99

(#) = qualifier out of range (m) = manual integration
04121203.D 040312V1.M Fri Apr 13 11:35:35 2012 Page 2

Quantitation Report

Data File : C:\HPCHEM\1\DATA\041212\04121203.D Vial: 3
Acq On : 12 Apr 2012 10:51 am Operator: RACHEL HILL
Sample : CCV VOA1 041212 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 12 11:16 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_120413A **Run No.:** 47712

Analytical Run Date: 4/13/2012 **InstrumentID:** VOA1

Analyst: Rachel Dear **Column:**

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

Column Length: 60m

Run Comments: PR - RH3 041712 041712rsl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 041312	BFB_TUNE	TUNE	R47712	4/13/2012 10:14:00 AM	Robert Lynch		
CCV VOA1 041312	EPA_TO15	CCV	R47712	4/13/2012 1:03:00 PM	Robert Lynch		
RLVS VOA1 041312	EPA_TO15	RLVS	R47712	4/13/2012 1:45:00 PM	Robert Lynch		
MBLK VOA1 041312	EPA_TO15	MBLK	R47712	4/13/2012 2:34:00 PM	Robert Lynch		
1203984-037A	EPA_TO15	SAMP	R47712	4/13/2012 3:24:00 PM	Robert Lynch		
1203984-009A	EPA_TO15	SAMP	R47712	4/13/2012 4:46:00 PM	Robert Lynch		
1203984-009Adup	EPA_TO15	DUP	R47712	4/13/2012 5:31:00 PM	Robert Lynch		
1203984-013A	EPA_TO15	SAMP	R47712	4/13/2012 6:12:00 PM	Robert Lynch		
1203984-015A	EPA_TO15	SAMP	R47712	4/13/2012 6:53:00 PM	Robert Lynch		
1203984-020A	EPA_TO15	SAMP	R47712	4/13/2012 7:35:00 PM	Robert Lynch		
1203984-027A	EPA_TO15	SAMP	R47712	4/13/2012 8:17:00 PM	Robert Lynch		
1203984-036A	EPA_TO15	SAMP	R47712	4/13/2012 8:58:00 PM	Robert Lynch		
1203984-002A	EPA_TO15	SAMP	R47712	4/13/2012 9:39:00 PM	Robert Lynch		
1203984-037A	EPA_TO15	SAMP	R47712	4/14/2012 1:08:00 AM	Robert Lynch		
RLVS2 VOA1 04131	EPA_TO15	RLVS	R47712	4/14/2012 2:39:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

18-Apr-12

RunNo 47712

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
931989	BFB VOA1 041312	BFB_TUNE	TUNE	\1\DATA\041312	4/13/2012 10:14:	1	R47712		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		84.5	84.5		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		96.8	96.8		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.8	6.8		100	0	0	0	0	0	7%	5	9	0%	
50	M		16.7	16.7		100	0	0	0	0	0	17%	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		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
931990	CCV VOA1 041312	EPA_TO15	CCV	\1\DATA\041312	4/13/2012 1:03:0	1	R47712		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	9.22	9.22		9.6	0	0	0.107	1	0	96%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	9.14	9.14		10	0	0	0.211	1	0	91%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	9.22	9.22		9.8	0	0	0.108	1	0	94%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.1	9.1		9.8	0	0	0.2	1	0	93%	70	130	0%	
1,1-Dichloroethane	A	ppbv	8.61	8.61		9.7	0	0	0.111	1	0	89%	70	130	0%	
1,1-Dichloroethene	A	ppbv	8.93	8.93		9.9	0	0	0.097	1	0	90%	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	8.8	8.8		9.8	0	0	0.245	1	0	90%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.14	9.14		9.6	0	0	0.186	1	0	95%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	8.63	8.63		9.7	0	0	0.208	1	0	89%	70	130	0%	
1,2-Dichloroethane	A	ppbv	8.33	8.33		9.7	0	0	0.196	1	0	86%	70	130	0%	
1,2-Dichloropropane	A	ppbv	8.83	8.83		9.8	0	0	0.224	1	0	90%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	8.83	8.83		9.7	0	0	0.24	1	0	91%	70	130	0%	
1,3-Butadiene	A	ppbv	12.18	12.18		9.8	0	0	0.152	1	0	124%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	8.57	8.57		9.7	0	0	0.202	1	0	88%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
931990	CCV VOA1 041312	EPA_TO15	CCV	\1\DATA\041312	4/13/2012 1:03:0	1	R47712		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	8.52	8.52		9.6	0	0	0.194	1	0	89%	70	130	0%	
1,4-Dioxane	A	ppbv	8.32	8.32		9.6	0	0	0.128	1	0	87%	70	130	0%	
2-Butanone	A	ppbv	7.68	7.68		9.9	0	0	0.287	1	0	78%	70	130	0%	
2-Hexanone	A	ppbv	8	8		9.8	0	0	0.135	1	0	82%	70	130	0%	
2-Propanol	A	ppbv	8.23	8.23		10.1	0	0	0.329	1	0	81%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	8.46	8.46		10	0	0	0.157	1	0	85%	70	130	0%	
Acetone	A	ppbv	7.75	7.75		10	0	0	0.43	1	0	78%	70	130	0%	
Benzene	A	ppbv	8.22	8.22		9.6	0	0	0.126	1	0	86%	70	130	0%	
Benzyl chloride	A	ppbv	8.62	8.62		9.7	0	0	0.155	1	0	89%	70	130	0%	
Bromodichloromethane	A	ppbv	9.21	9.21		9.6	0	0	0.156	1	0	96%	70	130	0%	
Bromoform	A	ppbv	8.92	8.92		9.6	0	0	0.197	1	0	93%	70	130	0%	
Bromomethane	A	ppbv	8.95	8.95		9.3	0	0	0.075	1	0	96%	70	130	0%	
Carbon disulfide	A	ppbv	9.07	9.07		9.7	0	0	0.093	1	0	94%	70	130	0%	
Carbon tetrachloride	A	ppbv	8.79	8.79		9.5	0	0	0.114	1	0	93%	70	130	0%	
Chlorobenzene	A	ppbv	9.25	9.25		9.9	0	0	0.275	1	0	93%	70	130	0%	
Chlorodibromomethane	A	ppbv	9.39	9.39		9.2	0	0	0.165	1	0	102%	70	130	0%	
Chloroethane	A	ppbv	8.3	8.3		9.8	0	0	0.063	1	0	85%	70	130	0%	
Chloroform	A	ppbv	9.46	9.46		9.4	0	0	0.126	1	0	101%	70	130	0%	
Chloromethane	A	ppbv	9.56	9.56		9.8	0	0	0.104	1	0	98%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	8.97	8.97		9.8	0	0	0.107	1	0	92%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	8.7	8.7		9.5	0	0	0.166	1	0	92%	70	130	0%	
Cyclohexane	A	ppbv	9.42	9.42		9.8	0	0	0.684	2	0	96%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	8.75	8.75		9.2	0	0	0.086	1	0	95%	70	130	0%	
Ethanol	A	ppbv	7.28	7.28		9.2	0	0	1.962	5	0	79%	70	130	0%	
Ethyl acetate	A	ppbv	7.84	7.84		9.8	0	0	0.157	1	0	80%	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	10.02	10.02		9.9	0	0	0.249	1	0	101%	70	130	0%	
Hexachlorobutadiene	A	ppbv	7.71	7.71		9.4	0	0	0.374	2	0	82%	70	130	0%	
m,p-Xylene	A	ppbv	18.44	18.44		19.2	0	0	0.524	2	0	96%	70	130	0%	
Methylene chloride	A	ppbv	8.67	8.67		10	0	0	2.077	5	0	87%	70	130	0%	
n-Hexane	A	ppbv	8.88	8.88		10.1	0	0	0.692	2	0	88%	70	130	0%	
Naphthalene	A	ppbv	6.79	6.79		9.2	0	0	0.247	1	0	74%	70	130	0%	
o-Xylene	A	ppbv	9.41	9.41		10	0	0	0.258	1	0	94%	70	130	0%	
Propylene	A	ppbv	9.16	9.16		10.2	0	0	0.075	1	0	90%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
931990	CCV VOA1 041312	EPA_TO15	CCV	\1\DATA\041312	4/13/2012 1:03:0	1	R47712		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	9.27	9.27		9.8	0	0	0.263	1	0	95%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	7.79	7.79		9.9	0	0	0.228	1	0	79%	70	130	0%	
Tetrachloroethene	A	ppbv	9.66	9.66		9.6	0	0	0.148	1	0	101%	70	130	0%	
Tetrahydrofuran	A	ppbv	8.93	8.93		10	0	0	0.201	1	0	89%	70	130	0%	
Toluene	A	ppbv	9.21	9.21		9.8	0	0	0.158	1	0	94%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	8.63	8.63		9.8	0	0	0.117	1	0	88%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	8.23	8.23		9.1	0	0	0.171	1	0	90%	70	130	0%	
Trichloroethene	A	ppbv	9.55	9.55		9.6	0	0	0.119	1	0	99%	70	130	0%	
Trichlorofluoromethane	A	ppbv	9.04	9.04		9.6	0	0	0.148	1	0	94%	70	130	0%	
Vinyl acetate	A	ppbv	8	8		9.9	0	0	0.266	1	0	81%	70	130	0%	
Vinyl chloride	A	ppbv	10.23	10.23		9.4	0	0	0.072	1	0	109%	70	130	0%	
Xylenes, Total	C	ppbv	27.85	27.85		29.2	0	0	0.782	3	0	95%	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	12.1	12.1		12.5	0	0	0	0	0	97%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
931991	RLVS VOA1 041312	EPA_TO15	RLVS	\1\DATA\041312	4/13/2012 1:45:0	1	R47712		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	1.42	1.42		1	0	0	0.211	1	0	142%	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	1.09	1.09		0.98	0	0	0.2	1	0	111%	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	1.01	1.01		0.99	0	0	0.097	1	0	102%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.59	1.59		0.91	0	0	0.271	1	0	175%	70	130	0%	S
1,2,4-Trimethylbenzene	A	ppbv	1.42	1.42		0.98	0	0	0.245	1	0	145%	70	130	0%	S
1,2-Dibromoethane	A	ppbv	1.06	1.06		0.96	0	0	0.186	1	0	110%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.5	1.5		0.97	0	0	0.208	1	0	155%	70	130	0%	S
1,2-Dichloroethane	A	ppbv	1.02	1.02		0.97	0	0	0.196	1	0	105%	70	130	0%	
1,2-Dichloropropane	A	ppbv	1.09	1.09		0.98	0	0	0.224	1	0	111%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\041312\04131203.D Vial: 3
Acq On : 13 Apr 2012 1:03 pm Operator: RACHEL HILL
Sample : CCV VOA1 041312 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	95	0.00
2	T	Propylene	0.933	0.838	10.2	80	0.02
3	T	Dichlorodifluoromethane	3.299	3.139	4.8	84	0.01
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.423	2.391	1.3	85	0.01
5	T	Chloromethane	0.975	0.981	-0.6	84	0.02
6	T	Vinyl chloride	0.908	0.988	-8.8	91	0.00
7	T	1,3-Butadiene	0.604	0.751	-24.3	100	0.01
8	T	Bromomethane	1.211	1.165	3.8	84	0.01
9	T	Chloroethane	0.672	0.607	9.7	78	0.02
10	T	Trichlorofluoromethane	3.078	2.900	5.8	78	0.02
11	T	Ethanol	0.384	0.303	21.1	64	0.01
12	T	Freon113	2.077	1.954	5.9	75	0.01
13	T	1,1-Dichloroethene	1.532	1.382	9.8	75	0.01
14	T	Acetone	1.520	1.179	22.4	62	0.01
15	T	Carbon disulfide	2.662	2.489	6.5	79	0.02
16	T	2-Propanol	1.547	1.260	18.6	66	0.01
17	T	Methylene chloride	1.125	0.975	13.3	73	0.01
18	T	tert-Butyl Methyl Ether	2.677	2.107	21.3	61	0.01
19	T	trans-1,2-Dichloroethene	1.451	1.277	12.0	72	0.00
20	T	n-Hexane	1.604	1.410	12.1	72	0.01
21	T	1,1-Dichloroethane	1.915	1.699	11.3	73	0.01
22	T	Vinyl acetate	2.421	1.956	19.2	60	0.01
23	T	cis-1,2-Dichloroethene	1.146	1.050	8.4	74	0.00
24	T	2-Butanone	1.588	1.232	22.4	61	0.01
25	T	Ethyl acetate	2.033	1.626	20.0	62	0.01
26	T	Tetrahydrofuran	0.986	0.881	10.6	66	0.01
27	T	Chloroform	2.018	1.947	3.5	75	0.00
28	T	1,1,1-Trichloroethane	2.172	2.086	4.0	73	0.01
29	T	Cyclohexane	1.517	1.458	3.9	72	0.01
30	T	Carbon tetrachloride	2.467	2.284	7.4	73	0.01
31	T	Benzene	3.050	2.610	14.4	66	0.00
32	T	1,2-Dichloroethane	1.236	1.061	14.2	64	0.01
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	92	0.01
34	T	Heptane	0.502	0.508	-1.2	70	0.01
35	T	Trichloroethene	0.447	0.444	0.7	75	0.01
36	T	1,2-Dichloropropane	0.332	0.299	9.9	65	0.00
37	T	1,4-Dioxane	0.194	0.168	13.4	66	0.01
38	T	Bromodichloromethane	0.632	0.606	4.1	70	0.01
39	T	cis-1,3-Dichloropropene	0.535	0.490	8.4	67	0.01
40	T	4-Methyl-2-pentanone	0.233	0.197	15.5	62	0.01
41	T	Toluene	1.053	0.989	6.1	67	0.00
42	T	trans-1,3-Dichloropropene	0.495	0.448	9.5	66	0.01
43	T	1,1,2-Trichloroethane	0.372	0.346	7.0	68	0.00
44	T	Tetrachloroethene	0.563	0.566	-0.5	76	0.01
45	T	2-Hexanone	0.451	0.368	18.4	58	0.00
46	T	Chlorodibromomethane	0.654	0.627	4.1	69	0.00
47	T	1,2-Dibromoethane	0.571	0.543	4.9	69	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	93	0.01
49	T	Chlorobenzene	0.918	0.857	6.6	69	0.00
50	T	Ethylbenzene	1.443	1.363	5.5	68	0.01
51	T	m,p-Xylene	1.122	1.078	3.9	73	0.00
52	T	o-Xylene	1.148	1.081	5.8	68	0.01
53	T	Styrene	0.882	0.834	5.4	68	0.01
54	T	Bromoform	0.651	0.604	7.2	68	0.01
55	S	4-Bromofluorobenzene	0.627	0.607	3.2	90	0.00

(#) = Out of Range
04131203.D 040312V1.M Mon Apr 16 11:25:07 2012 Page 1

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\041312\04131203.D Vial: 3
Acq On : 13 Apr 2012 1:03 pm Operator: RACHEL HILL
Sample : CCV VOA1 041312 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	0.693	8.6	70	0.00
57	T	4-Ethyltoluene	1.526	1.394	8.7	69	0.01
58	T	1,3,5-Trimethylbenzene	1.302	1.185	9.0	69	0.00
59	T	1,2,4-Trimethylbenzene	1.254	1.127	10.1	69	0.01
60	T	1,3-Dichlorobenzene	0.823	0.727	11.7	69	0.00
61	T	1,4-Dichlorobenzene	0.794	0.705	11.2	70	0.00
62	T	Benzyl chloride	0.930	0.827	11.1	67	0.00
63	T	1,2-Dichlorobenzene	0.742	0.660	11.1	72	0.00
64	T	1,2,4-Trichlorobenzene	0.279	0.199	28.7	60	0.00
65	T	Hexachlorobutadiene	0.347	0.285	17.9	61	0.01
66		Naphthalene	0.539	0.398	26.2	61	0.01

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\041312\04131203.D Vial: 3
Acq On : 13 Apr 2012 1:03 pm Operator: RACHEL HILL
Sample : CCV VOA1 041312 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 13 13:28 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	625683	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.69	114	2030392	12.50	ppbv		0.01
48) Chlorobenzene-d5	15.54	117	1784597	12.50	ppbv		0.01
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.19	95	1082571	12.10	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 96.80%				
Target Compounds							Qvalue
2) Propylene	5.53	41	427841	9.16	ppbv		99
3) Dichlorodifluoromethane	5.60	85	1445672	8.75	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.86	135	1137122	9.38	ppbv	#	86
5) Chloromethane	6.01	50	466636	9.56	ppbv		98
6) Vinyl chloride	6.22	62	465002	10.23	ppbv		99
7) 1,3-Butadiene	6.28	39	368229	12.18	ppbv		95
8) Bromomethane	6.86	94	542520	8.95	ppbv		98
9) Chloroethane	7.01	64	279371	8.30	ppbv		99
10) Trichlorofluoromethane	7.35	101	1393540	9.04	ppbv		99
11) Ethanol	7.58	45	139719	7.28	ppbv		100
12) Freon113	8.00	101	958655	9.22	ppbv		95
13) 1,1-Dichloroethene	8.10	61	684889	8.93	ppbv		99
14) Acetone	8.19	43	589894	7.75	ppbv		98
15) Carbon disulfide	8.48	76	1208277	9.07	ppbv	#	100
16) 2-Propanol	8.24	45	636776	8.23	ppbv	#	72
17) Methylene chloride	8.76	49	488283	8.67	ppbv		97
18) tert-Butyl Methyl Ether	8.96	73	1044272	7.79	ppbv		97
19) trans-1,2-Dichloroethene	9.04	61	626604	8.63	ppbv		99
20) n-Hexane	9.23	57	712594	8.88	ppbv		97
21) 1,1-Dichloroethane	9.61	63	824959	8.61	ppbv		100
22) Vinyl acetate	9.54	43	969267	8.00	ppbv		99
23) cis-1,2-Dichloroethene	10.29	96	514907	8.97	ppbv		99
24) 2-Butanone	10.25	43	610505	7.68	ppbv		96
25) Ethyl acetate	10.20	43	797619	7.84	ppbv	#	100
26) Tetrahydrofuran	10.59	42	441016	8.93	ppbv		97
27) Chloroform	10.61	83	954947	9.46	ppbv		97
28) 1,1,1-Trichloroethane	10.86	97	1002310	9.22	ppbv		100
29) Cyclohexane	10.87	56	715434	9.42	ppbv		98
30) Carbon tetrachloride	11.02	117	1085864	8.79	ppbv		99
31) Benzene	11.30	78	1254029	8.22	ppbv		99
32) 1,2-Dichloroethane	11.38	62	515000	8.33	ppbv		99
34) Heptane	11.35	43	817379	10.02	ppbv		97
35) Trichloroethene	12.03	130	692903	9.55	ppbv		97
36) 1,2-Dichloropropane	12.39	63	475221	8.83	ppbv		100
37) 1,4-Dioxane	12.46	88	261697	8.32	ppbv		95
38) Bromodichloromethane	12.68	83	945293	9.21	ppbv		98
39) cis-1,3-Dichloropropene	13.22	75	756219	8.70	ppbv		100
40) 4-Methyl-2-pentanone	13.33	58	320526	8.46	ppbv		99
41) Toluene	13.63	91	1574588	9.21	ppbv		99
42) trans-1,3-Dichloropropene	13.94	75	662078	8.23	ppbv		100
43) 1,1,2-Trichloroethane	14.20	97	550470	9.10	ppbv		99
44) Tetrachloroethene	14.33	166	883067	9.66	ppbv		96
45) 2-Hexanone	14.41	43	585676	8.00	ppbv		95
46) Chlorodibromomethane	14.75	129	998111	9.39	ppbv		99
47) 1,2-Dibromoethane	14.99	107	847097	9.14	ppbv		99
49) Chlorobenzene	15.58	112	1211583	9.25	ppbv		99
50) Ethylbenzene	15.63	91	1907130	9.26	ppbv		98
51) m,p-Xylene	15.78	91	2954751	18.44	ppbv		98
52) o-Xylene	16.37	91	1543156	9.41	ppbv		98

(#) = qualifier out of range (m) = manual integration
04131203.D 040312V1.M Mon Apr 16 11:25:07 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\041312\04131203.D Vial: 3
Acq On : 13 Apr 2012 1:03 pm Operator: RACHEL HILL
Sample : CCV VOA1 041312 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 13 13:28 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

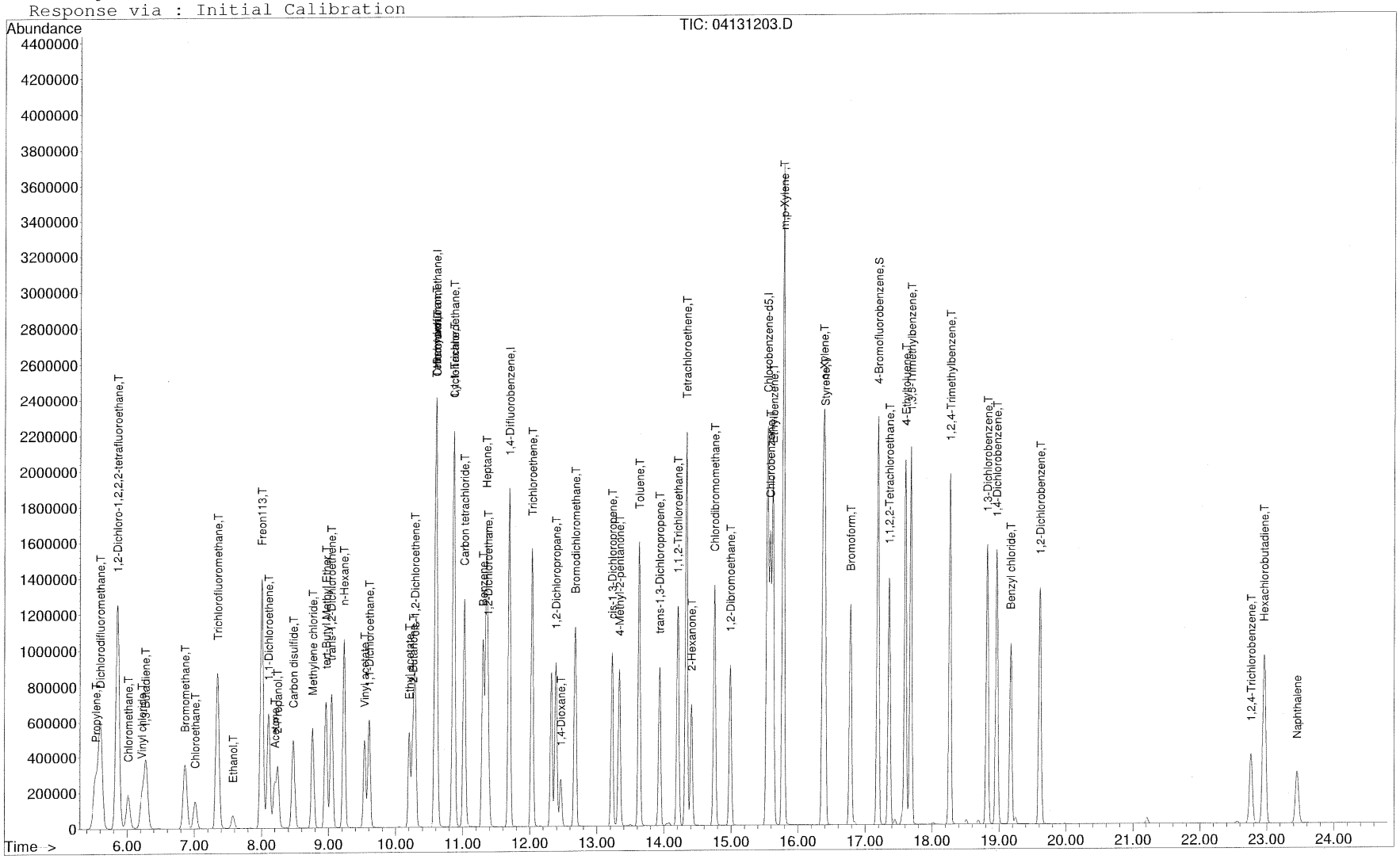
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53) Styrene	16.40	104	1167185	9.27	ppbv	99
54) Bromoform	16.78	173	828194	8.92	ppbv	99
56) 1,1,2,2-Tetrachloroethane	17.36	83	988769	9.14	ppbv	98
57) 4-Ethyltoluene	17.60	105	1950453	8.95	ppbv	100
58) 1,3,5-Trimethylbenzene	17.68	105	1641557	8.83	ppbv	99
59) 1,2,4-Trimethylbenzene	18.27	105	1576382	8.80	ppbv	100
60) 1,3-Dichlorobenzene	18.82	146	1007358	8.57	ppbv	100
61) 1,4-Dichlorobenzene	18.96	146	966167	8.52	ppbv	99
62) Benzyl chloride	19.17	91	1145404	8.62	ppbv	99
63) 1,2-Dichlorobenzene	19.61	146	914139	8.63	ppbv	99
64) 1,2,4-Trichlorobenzene	22.76	180	258840	6.50	ppbv	96
65) Hexachlorobutadiene	22.96	225	382125	7.71	ppbv	99
66) Naphthalene	23.45	128	522107	6.79	ppbv	99

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\041312\04131203.D Vial: 3
Acq On : 13 Apr 2012 1:03 pm Operator: RACHEL HILL
Sample : CCV VOA1 041312 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Apr 13 13:28 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\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
04031211.D 040312V1.M Thu Apr 05 09:27:06 2012 Page 1

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

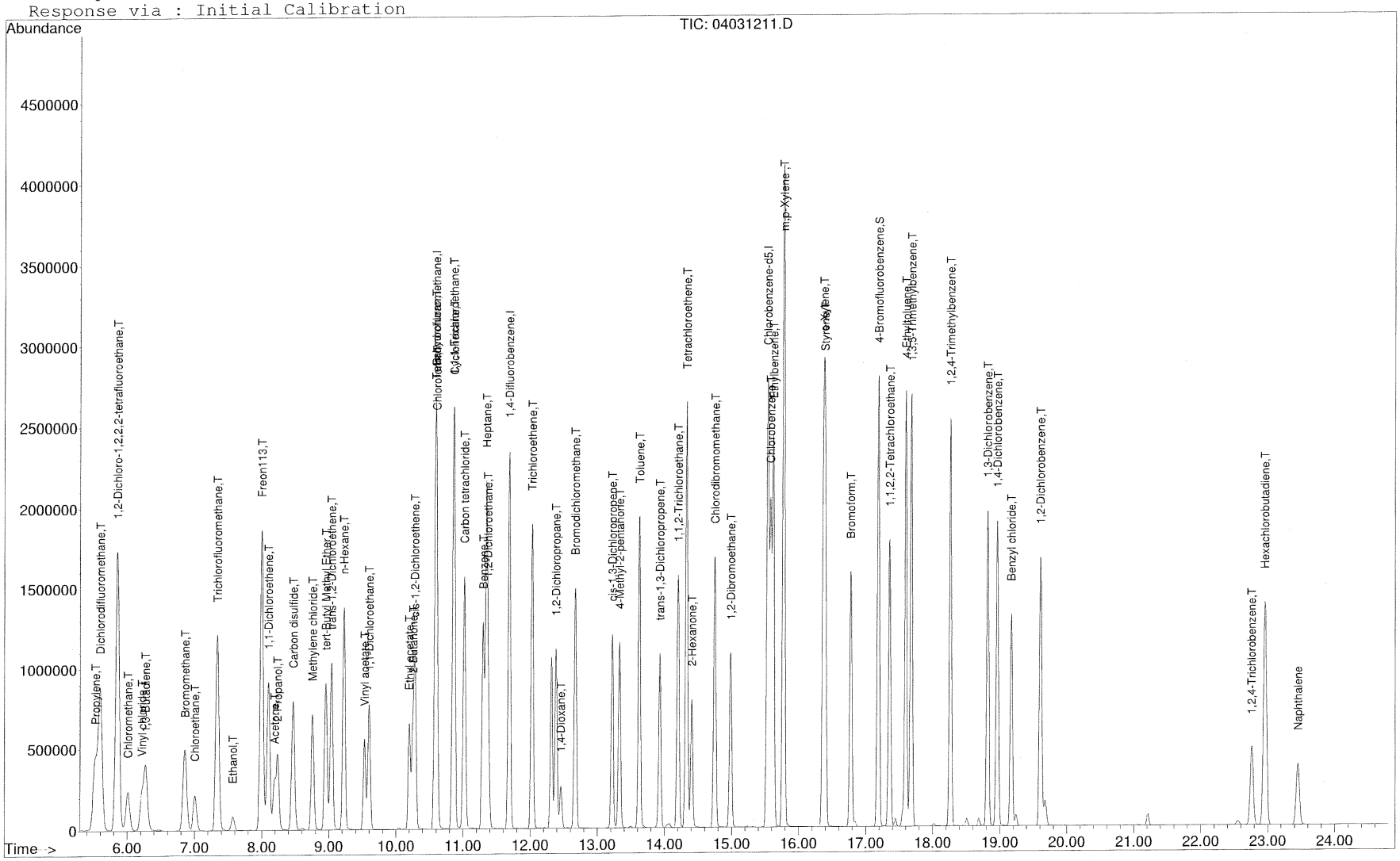
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53) Styrene	16.39	104	1439944	9.11	ppbv	99
54) Bromoform	16.78	173	1095257	9.40	ppbv	99
56) 1,1,2,2-Tetrachloroethane	17.36	83	1284091	9.46	ppbv	98
57) 4-Ethyltoluene	17.60	105	2483939	9.09	ppbv	100
58) 1,3,5-Trimethylbenzene	17.68	105	2091124	8.97	ppbv	100
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
04031211.D 040312V1.M Thu Apr 05 09:27:07 2012 Page 2

Quantitation 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
Quant Time: Apr 5 10:04 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: VOA9_120410A **Run No.:** 47586

Analytical Run Date: 4/10/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

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

Column Length: 60m

Run Comments: PR - 041112 RH3 041212rswl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 041012	BFB_TUNE	TUNE	R47586	4/10/2012 9:20:00 AM	Robert Lynch		
CCV VOA9 041012	MA_APH	CCV	R47586	4/10/2012 10:27:00 AM	Robert Lynch		
RLVS VOA9 041012	MA_APH	RLVS	R47586	4/10/2012 11:09:00 AM	Robert Lynch		
MBLK VOA9 041012	MA_APH	MBLK	R47586	4/10/2012 11:59:00 AM	Robert Lynch		
1203903-006A	MA_APH	SAMP	R47586	4/10/2012 1:22:00 PM	Robert Lynch		
1203903-014A	MA_APH	SAMP	R47586	4/10/2012 2:04:00 PM	Robert Lynch		
1203903-001A	MA_APH	SAMP	R47586	4/10/2012 2:51:00 PM	Robert Lynch		
1203903-002A	MA_APH	SAMP	R47586	4/10/2012 3:34:00 PM	Robert Lynch		
1203903-013A	MA_APH	SAMP	R47586	4/10/2012 5:09:00 PM	Robert Lynch		
1203903-017A	MA_APH	SAMP	R47586	4/10/2012 5:53:00 PM	Robert Lynch		
1203903-017Adup	MA_APH	DUP	R47586	4/10/2012 6:37:00 PM	Robert Lynch		
1203903-004A	MA_APH	SAMP	R47586	4/10/2012 7:26:00 PM	Robert Lynch		
1203903-019A	MA_APH	SAMP	R47586	4/10/2012 8:58:00 PM	Robert Lynch		
1203903-025A	MA_APH	SAMP	R47586	4/10/2012 9:41:00 PM	Robert Lynch		
1203903-008A	MA_APH	SAMP	R47586	4/11/2012 12:02:00 AM	Robert Lynch		
1203903-020A	MA_APH	SAMP	R47586	4/11/2012 12:51:00 AM	Robert Lynch		
1203984-030A	MA_APH	SAMP	R47586	4/11/2012 1:37:00 AM	Robert Lynch		
1203984-031A	MA_APH	SAMP	R47586	4/11/2012 2:23:00 AM	Robert Lynch		
1203984-032A	MA_APH	SAMP	R47586	4/11/2012 3:08:00 AM	Robert Lynch		
1203903-003A	MA_APH	SAMP	R47586	4/11/2012 3:51:00 AM	Robert Lynch		
RLVS VOA9 041012	MA_APH	RLVS	R47586	4/11/2012 4:34:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

18-Apr-12

RunNo 47586

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
929573	BFB VOA9 041012	BFB_TUNE	TUNE	\1\DATA\041012	4/10/2012 9:20:0	1	R47586		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		57.6	57.6		100	0	0	0	0	0	58%	50	120	0%	
175	M		7.5	7.5		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		6.9	6.9		100	0	0	0	0	0	7%	5	9	0%	
50	M		26.4	26.4		100	0	0	0	0	0	26%	8	40	0%	
75	M		50.9	50.9		100	0	0	0	0	0	51%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
929574	CCV VOA9 041012	MA_APH	CCV	\1\DATA\041012	4/10/2012 10:27:	1	R47586		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	213.04	213.04		234	0	0	0	0	0	91%	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	247.36	247.36		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	348.48	348.48		378	0	0	0	0	0	92%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	84.42	84.42		89.5	0	0	0	0	0	94%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\041012\04101202.D Vial: 2
Acq On : 10 Apr 2012 10:27 am Operator: RACHEL HILL
Sample : CCV VOA9 041012 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	27.265	6.6	92	-0.02
2	L1	C5-C8 Aliphatic HC {2}	36.400	32.831	9.8	91	-0.02
3	L1	C5-C8 Aliphatic HC {3}	41.800	37.935	9.2	92	-0.02
4	L1	C5-C8 Aliphatic HC {4}	35.400	31.964	9.7	91	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	38.087	9.7	92	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	44.756	8.7	93	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	213.041	9.0	92	0.19
8	L1	C9-C12 Aliphatic HC	54.600	53.124	2.7	100	-0.01
9	L1	C9-C12 Aliphatic HC {2}	54.600	50.504	7.5	94	-0.01
10	L1	C9-C12 Aliphatic HC {3}	61.200	55.623	9.1	94	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	57.208	5.9	98	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	62.220	11.1	94	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	67.204	12.7	97	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	348.477	7.8	96	-0.01
15	L1	C9-C10 Aromatic HC	51.700	47.623	7.9	98	-0.01
16	L1	C9-C10 Aromatic HC {2}	51.200	47.396	7.4	99	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	48.495	7.1	98	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	53.273	9.2	98	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	49.596	5.7	101	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	54.305	7.5	99	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	247.356	7.0	99	-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	114	-0.01
41	S	4-Bromofluorobenzene	89.500	84.417	5.7	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
04101202.D 040312V9.M Wed Apr 11 10:46:24 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\041012\04101202.D Vial: 2
Acq On : 10 Apr 2012 10:27 am Operator: RACHEL HILL
Sample : CCV VOA9 041012 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 10 14:04 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

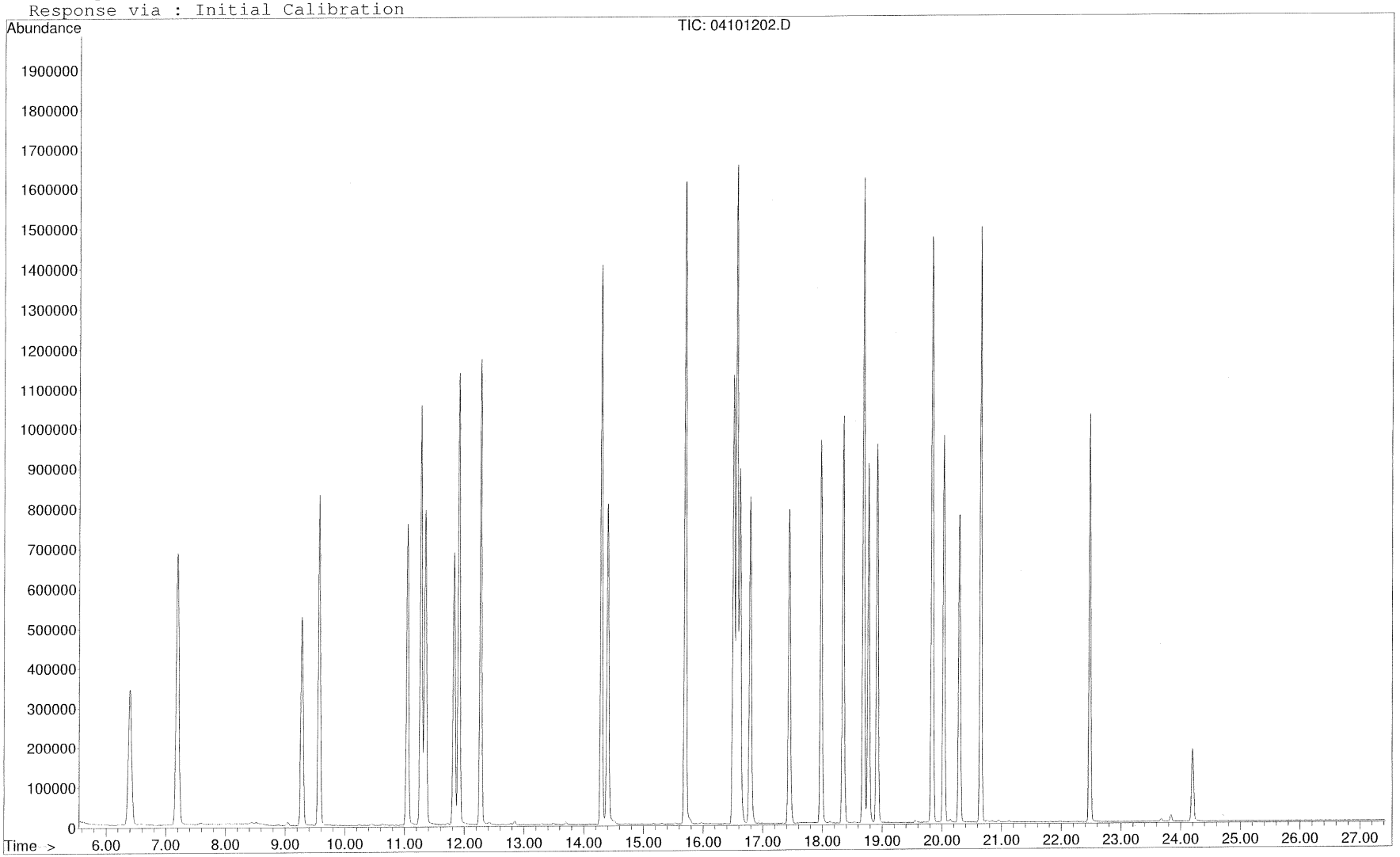
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	749684	12.50	ug/m3	-0.01
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.35	95	498662	84.42	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 94.32%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2354546	27.27	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2037444	32.83	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2624732	37.93	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	1987634	31.96	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2560874	38.09	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	2963530	44.76	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	14528760m	213.04	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	3677774	53.12	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	3473498	50.50	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3280166	55.62	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	3249888	57.21	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.65	TIC	2997248	62.22	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.48	TIC	2013746	67.20	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	18692320m	348.48	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	213701	47.62	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	222952	47.40	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	329265	48.49	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.03	120	73095	53.27	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.29	120	246760	49.60	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.03	134	179372	54.30	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1265145m	247.36	ug/m3	

(#) = qualifier out of range (m) = manual integration
04101202.D 040312V9.M Wed Apr 11 10:47:13 2012 Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\041012\04101202.D Vial: 2
Acq On : 10 Apr 2012 10:27 am Operator: RACHEL HILL
Sample : CCV VOA9 041012 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 10 14:04 2012 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_120411A **Run No.:** 47623

Analytical Run Date: 4/11/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

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

Column Length: 60m

Run Comments: ch rev 4/17/12/PR - 041412 AW

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 041112	BFB_TUNE	TUNE	R47623	4/11/2012 9:57:00 AM	Celeste Hoitash		
CCV VOA9 041112	MA_APH	CCV	R47623	4/11/2012 10:40:00 AM	Celeste Hoitash		
RLVS VOA9 041112	MA_APH	RLVS	R47623	4/11/2012 11:22:00 AM	Celeste Hoitash		
MBLK VOA9 041112	MA_APH	MBLK	R47623	4/11/2012 12:12:00 PM	Celeste Hoitash		
1203903-007A	MA_APH	SAMP	R47623	4/11/2012 1:55:00 PM	Celeste Hoitash		
1203903-026A	MA_APH	SAMP	R47623	4/11/2012 2:38:00 PM	Celeste Hoitash		
1203903-015A	MA_APH	SAMP	R47623	4/11/2012 3:23:00 PM	Celeste Hoitash		
1203984-014A	MA_APH	SAMP	R47623	4/11/2012 4:06:00 PM	Celeste Hoitash		
1203984-015A	MA_APH	SAMP	R47623	4/11/2012 4:49:00 PM	Celeste Hoitash		
1203984-010A	MA_APH	SAMP	R47623	4/11/2012 5:39:00 PM	Celeste Hoitash		
1203984-033A	MA_APH	SAMP	R47623	4/11/2012 6:25:00 PM	Celeste Hoitash		
1203984-033Adup	MA_APH	DUP	R47623	4/11/2012 7:11:00 PM	Celeste Hoitash		
1203984-024A	MA_APH	SAMP	R47623	4/11/2012 7:54:00 PM	Celeste Hoitash		
1203984-013A	MA_APH	SAMP	R47623	4/12/2012 1:13:00 AM	Celeste Hoitash		
1203984-009A	MA_APH	SAMP	R47623	4/12/2012 1:59:00 AM	Celeste Hoitash		
1203984-011A	MA_APH	SAMP	R47623	4/12/2012 2:50:00 AM	Celeste Hoitash		
RLVS2 VOA9 04111	MA_APH	RLVS	R47623	4/12/2012 9:47:00 AM	Celeste Hoitash		Sequence table was entered incorrectly causing analytical standard to sit in concentrator and not inject into GC. RLVS did not inject until the following morning. Reported and analytes de-selected only to demonstrate what had occurred.
RLVS2 VOA9 04111	MA_APH	RLVS	R47623	4/12/2012 10:31:00 AM	Celeste Hoitash		Re-ran RLVS standard out of 24 hr time clock to demonstrate that instrument is in working order - that ending RLVS would have passed if it had been injected correctly.

RTI Laboratories

ANALYTICAL RUN Summary

18-Apr-12

RunNo 47623

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
930321	BFB VOA9 041112	BFB_TUNE	TUNE	\1\DATA\041112	4/11/2012 9:57:0	1	R47623		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		58.5	58.5		100	0	0	0	0	0	59%	50	120	0%	
175	M		8.1	8.1		100	0	0	0	0	0	8%	4	9	0%	
176	M		95.8	95.8		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	26		100	0	0	0	0	0	26%	8	40	0%	
75	M		50.7	50.7		100	0	0	0	0	0	51%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		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
930322	CCV VOA9 041112	MA_APH	CCV	\1\DATA\041112	4/11/2012 10:40:	1	R47623		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
C5-C8 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C5-C8 Aliphatic HC - TOTAL	A	µg/m³	216.68	216.68		234	0	0	0	0	0	93%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	258.17	258.17		266	0	0	0	0	0	97%	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	350.93	350.93		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	90.17	90.17		89.5	0	0	0	0	0	101%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\041112\04111202.D Vial: 2
Acq On : 11 Apr 2012 10:40 am Operator: RACHEL HILL
Sample : CCV VOA9 041112 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	27.687	5.2	93	-0.01
2	L1	C5-C8 Aliphatic HC {2}	36.400	33.712	7.4	93	-0.02
3	L1	C5-C8 Aliphatic HC {3}	41.800	38.793	7.2	94	-0.02
4	L1	C5-C8 Aliphatic HC {4}	35.400	32.353	8.6	92	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	38.543	8.7	94	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	45.404	7.3	94	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	216.682	7.4	94	0.20
8	L1	C9-C12 Aliphatic HC	54.600	50.976	6.6	96	-0.02
9	L1	C9-C12 Aliphatic HC {2}	54.600	50.315	7.8	93	-0.02
10	L1	C9-C12 Aliphatic HC {3}	61.200	57.213	6.5	96	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	57.117	6.1	97	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	63.837	8.8	97	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	71.433	7.2	104	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	350.929	7.2	97	-0.02
15	L1	C9-C10 Aromatic HC	51.700	49.789	3.7	103	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	49.127	4.0	103	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	50.444	3.4	102	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	56.999	2.9	105	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	51.631	1.8	105	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	57.029	2.8	104	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	258.174	2.9	103	-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	85	-0.01
41	S	4-Bromofluorobenzene	89.500	90.167	-0.7	86	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
04111202.D 040312V9.M Thu Apr 12 11:06:40 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\041112\04111202.D Vial: 2
Acq On : 11 Apr 2012 10:40 am Operator: RACHEL HILL
Sample : CCV VOA9 041112 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 11 18:14 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

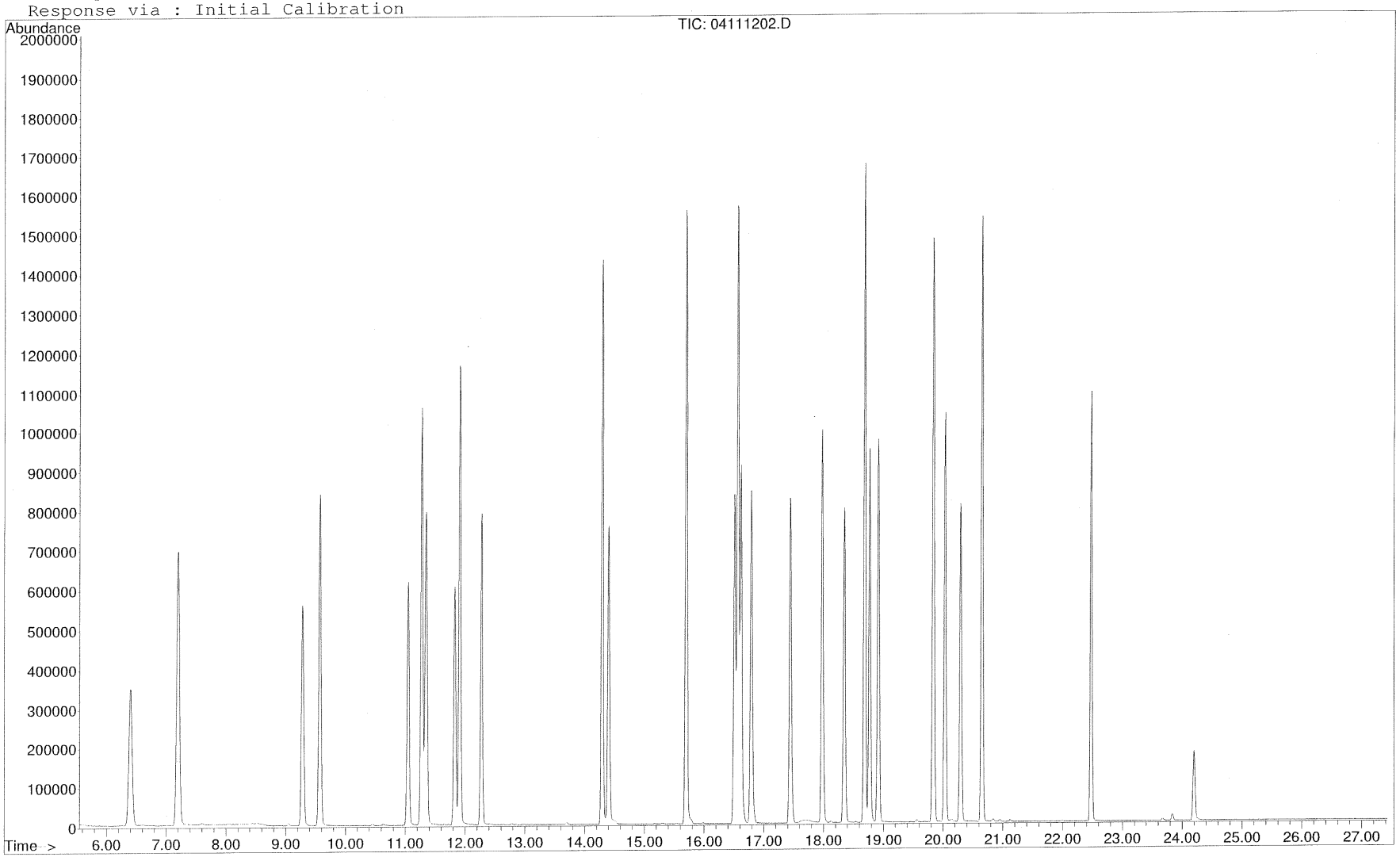
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	559942	12.50	ug/m3	-0.01
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.34	95	397822	90.17	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 100.75%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.20	TIC	2391015	27.69	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2092098	33.71	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2684134	38.79	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	2011859	32.35	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2591540	38.54	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3006415	45.40	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.20	TIC	14777061m	216.68	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	3529065	50.98	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	3460523	50.32	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3373915	57.21	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	3244699	57.12	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.65	TIC	3075171	63.84	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.48	TIC	2140475	71.43	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	18823848m	350.93	ug/m3	
15) C9-C10 Aromatic HC	17.98	120	223423	49.79	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	231095	49.13	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	342500	50.44	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.03	120	78207	57.00	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.29	120	256885	51.63	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.03	134	188369	57.03	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1320479m	258.17	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\041112\04111202.D Vial: 2
Acq On : 11 Apr 2012 10:40 am Operator: RACHEL HILL
Sample : CCV VOA9 041112 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 11 18:14 2012 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_120412A **Run No.:** 47672

Analytical Run Date: 4/12/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

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

Column Length: 60m

Run Comments: PR, RH3 041312 041312rsl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 041212	BFB_TUNE	TUNE	R47672	4/12/2012 12:13:00 PM	Robert Lynch		
CCV VOA9 041212	MA_APH	CCV	R47672	4/12/2012 12:57:00 PM	Robert Lynch		
RLVS VOA9 041212	MA_APH	RLVS	R47672	4/12/2012 1:41:00 PM	Robert Lynch		
MBLK VOA9 041212	MA_APH	MBLK	R47672	4/12/2012 2:31:00 PM	Robert Lynch		
1203984-034A	MA_APH	SAMP	R47672	4/12/2012 3:20:00 PM	Robert Lynch		
1203984-025A	MA_APH	SAMP	R47672	4/12/2012 4:03:00 PM	Robert Lynch		
1203984-035A	MA_APH	SAMP	R47672	4/12/2012 4:47:00 PM	Robert Lynch		
1203984-026A	MA_APH	SAMP	R47672	4/12/2012 5:31:00 PM	Robert Lynch		
1203984-026Adup	MA_APH	DUP	R47672	4/12/2012 6:15:00 PM	Robert Lynch		
1203984-036A	MA_APH	SAMP	R47672	4/12/2012 6:58:00 PM	Robert Lynch		
1203984-027A	MA_APH	SAMP	R47672	4/12/2012 7:42:00 PM	Robert Lynch		
1203984-016A	MA_APH	SAMP	R47672	4/12/2012 9:08:00 PM	Robert Lynch		
1203984-017A	MA_APH	SAMP	R47672	4/12/2012 9:52:00 PM	Robert Lynch		
1203984-020A	MA_APH	SAMP	R47672	4/13/2012 12:02:00 AM	Robert Lynch		
1203984-021A	MA_APH	SAMP	R47672	4/13/2012 12:45:00 AM	Robert Lynch		
1203984-028A	MA_APH	SAMP	R47672	4/13/2012 2:14:00 AM	Robert Lynch		
1203984-029A	MA_APH	SAMP	R47672	4/13/2012 3:01:00 AM	Robert Lynch		
RLVS2 VOA9 04121	MA_APH	RLVS	R47672	4/13/2012 4:30:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

18-Apr-12

RunNo 47672

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
931216	BFB VOA9 041212	BFB_TUNE	TUNE	\1\DATA\041212	4/12/2012 12:13:	1	R47672		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		58.8	58.8		100	0	0	0	0	0	59%	50	120	0%	
175	M		7.3	7.3		100	0	0	0	0	0	7%	4	9	0%	
176	M		95.6	95.6		100	0	0	0	0	0	96%	93	101	0%	
177	M		6.5	6.5		100	0	0	0	0	0	7%	5	9	0%	
50	M		25.5	25.5		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		6.8	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
931217	CCV VOA9 041212	MA_APH	CCV	\1\DATA\041212	4/12/2012 12:57:	1	R47672		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	214.8	214.8		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	248.98	248.98		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	339.15	339.15		378	0	0	0	0	0	90%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	87.74	87.74		89.5	0	0	0	0	0	98%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\041212\04121202.D Vial: 2
Acq On : 12 Apr 2012 12:57 pm Operator: RACHEL HILL
Sample : CCV VOA9 041212 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	28.726	1.6	97	-0.02
2	L1	C5-C8 Aliphatic HC {2}	36.400	32.871	9.7	91	-0.02
3	L1	C5-C8 Aliphatic HC {3}	41.800	38.075	8.9	92	-0.02
4	L1	C5-C8 Aliphatic HC {4}	35.400	31.400	11.3	90	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	38.025	9.9	92	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	45.072	8.0	94	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	214.799	8.2	93	0.19
8	L1	C9-C12 Aliphatic HC	54.600	50.837	6.9	95	-0.02
9	L1	C9-C12 Aliphatic HC {2}	54.600	47.336	13.3	88	-0.01
10	L1	C9-C12 Aliphatic HC {3}	61.200	55.250	9.7	93	-0.01
11	L1	C9-C12 Aliphatic HC {4}	60.800	55.313	9.0	94	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	62.252	11.1	94	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	67.331	12.6	98	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	339.145	10.3	93	-0.02
15	L1	C9-C10 Aromatic HC	51.700	47.207	8.7	97	-0.01
16	L1	C9-C10 Aromatic HC {2}	51.200	47.722	6.8	100	-0.01
17	L1	C9-C10 Aromatic HC {3}	52.200	48.538	7.0	99	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	54.987	6.3	101	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	49.905	5.1	101	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	55.653	5.2	102	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	248.980	6.4	100	-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	85	-0.01
41	S	4-Bromofluorobenzene	89.500	87.736	2.0	83	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
04121202.D 040312V9.M Fri Apr 13 09:59:34 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\041212\04121202.D Vial: 2
Acq On : 12 Apr 2012 12:57 pm Operator: RACHEL HILL
Sample : CCV VOA9 041212 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 13 9:28 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

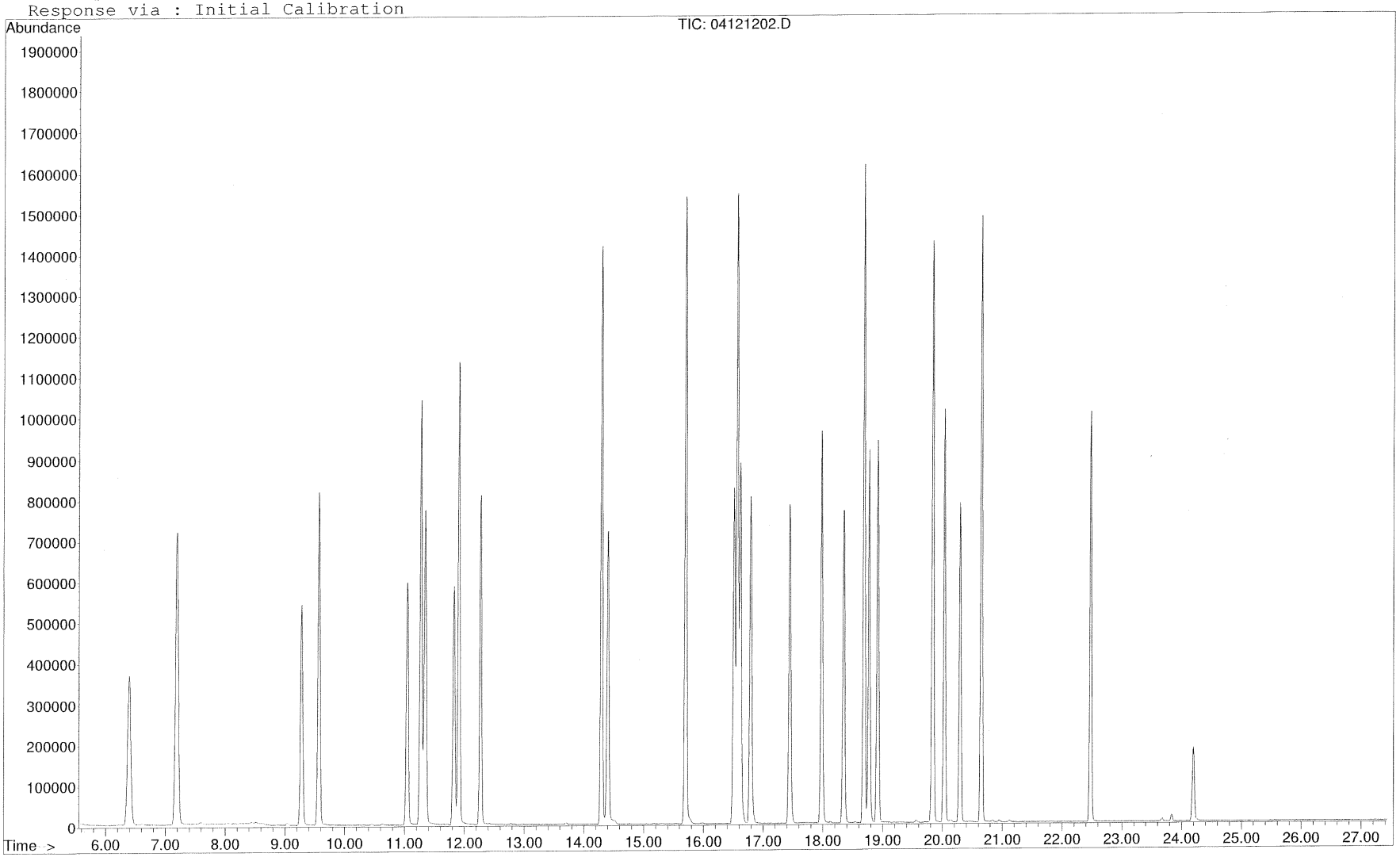
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	559087	12.50	ug/m3	-0.01
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.34	95	386506	87.74	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 98.03%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2480688	28.73	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2039884	32.87	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.27	TIC	2634439	38.07	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	1952590	31.40	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2556685	38.02	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	2984415	45.07	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	14648701m	214.80	ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	3519404	50.84	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	3255612	47.34	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3258182	55.25	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	3142212	55.31	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.65	TIC	2998812	62.25	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.48	TIC	2017577	67.33	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	18191799m	339.15	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	211834	47.21	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	224488	47.72	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	329560	48.54	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.03	120	75446	54.99	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.29	120	248300	49.91	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.03	134	183824	55.65	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1273452m	248.98	ug/m3	

(#) = qualifier out of range (m) = manual integration
04121202.D 040312V9.M Fri Apr 13 10:00:22 2012 Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\041212\04121202.D Vial: 2
Acq On : 12 Apr 2012 12:57 pm Operator: RACHEL HILL
Sample : CCV VOA9 041212 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 13 9:28 2012 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_120413A **Run No.:** 47706

Analytical Run Date: 4/13/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

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

Column Length: 60m

Run Comments: PR - RH3 041712 041712rsl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 041312	BFB_TUNE	TUNE	R47706	4/13/2012 9:11:00 AM	Robert Lynch		
CCV VOA9 041312	MA_APH	CCV	R47706	4/13/2012 11:02:00 AM	Robert Lynch		
RLVS VOA9 041312	MA_APH	RLVS	R47706	4/13/2012 12:36:00 PM	Robert Lynch		
MBLK VOA9 041312	MA_APH	MBLK	R47706	4/13/2012 1:27:00 PM	Robert Lynch		
1203984-001A	MA_APH	SAMP	R47706	4/13/2012 2:11:00 PM	Robert Lynch		
1203984-005A	MA_APH	SAMP	R47706	4/13/2012 2:54:00 PM	Robert Lynch		
1203984-002A	MA_APH	SAMP	R47706	4/13/2012 3:37:00 PM	Robert Lynch		
1203984-006A	MA_APH	SAMP	R47706	4/13/2012 4:24:00 PM	Robert Lynch		
1203984-006Adup	MA_APH	DUP	R47706	4/13/2012 5:10:00 PM	Robert Lynch		
1203984-007A	MA_APH	SAMP	R47706	4/13/2012 6:40:00 PM	Robert Lynch		
1203984-008A	MA_APH	SAMP	R47706	4/13/2012 8:06:00 PM	Robert Lynch		
1203984-023A	MA_APH	SAMP	R47706	4/13/2012 8:50:00 PM	Robert Lynch		
1203984-012A	MA_APH	SAMP	R47706	4/13/2012 9:33:00 PM	Robert Lynch		
RLVS2 VOA9 04131	MA_APH	RLVS	R47706	4/14/2012 1:22:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

18-Apr-12

RunNo 47706

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
931913	BFB VOA9 041312	BFB_TUNE	TUNE	.\1\DATA\041312	4/13/2012 9:11:0	1	R47706		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		60.8	60.8		100	0	0	0	0	0	61%	50	120	0%	
175	M		7.1	7.1		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		6.3	6.3		100	0	0	0	0	0	6%	5	9	0%	
50	M		25.2	25.2		100	0	0	0	0	0	25%	8	40	0%	
75	M		50.7	50.7		100	0	0	0	0	0	51%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		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
931914	CCV VOA9 041312	MA_APH	CCV	.\1\DATA\041312	4/13/2012 11:02:	1	R47706		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	181.89	181.89		234	0	0	0	0	0	78%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	208.6	208.6		266	0	0	0	0	0	78%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	282.75	282.75		378	0	0	0	0	0	75%	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	88.74	88.74		89.5	0	0	0	0	0	99%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\041312\04131203.D Vial: 3
Acq On : 13 Apr 2012 11:02 am Operator: RACHEL HILL
Sample : CCV VOA9 041312 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	25.386	13.1	86	-0.02
2	L1	C5-C8 Aliphatic HC {2}	36.400	27.825	23.6	77	-0.02
3	L1	C5-C8 Aliphatic HC {3}	41.800	32.340	22.6	79	-0.03
4	L1	C5-C8 Aliphatic HC {4}	35.400	26.434	25.3	75	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	31.640	25.0	77	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	37.404	23.7	78	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	181.894	22.3	79	0.19
8	L1	C9-C12 Aliphatic HC	54.600	42.007	23.1	79	-0.02
9	L1	C9-C12 Aliphatic HC {2}	54.600	41.461	24.1	77	-0.02
10	L1	C9-C12 Aliphatic HC {3}	61.200	46.124	24.6	78	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	46.017	24.3	78	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	50.806	27.4	77	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	54.239	29.6	79	-0.01
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	282.746	25.2	78	-0.02
15	L1	C9-C10 Aromatic HC	51.700	39.737	23.1	82	-0.01
16	L1	C9-C10 Aromatic HC {2}	51.200	40.083	21.7	84	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	40.579	22.3	82	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	44.944	23.4	82	-0.01
19	L1	C9-C10 Aromatic HC {5}	52.600	42.322	19.5	86	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	46.109	21.4	84	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	208.600	21.6	84	-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	83	-0.01
41	S	4-Bromofluorobenzene	89.500	88.743	0.8	83	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
04131203.D 040312V9.M Mon Apr 16 09:46:42 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\041312\04131203.D Vial: 3
Acq On : 13 Apr 2012 11:02 am Operator: RACHEL HILL
Sample : CCV VOA9 041312 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 16 9:44 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	547417	12.50	ug/m3	-0.01
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.34	95	382780	88.74	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 99.15%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2192307	25.39	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	1726788	27.83	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.27	TIC	2237652	32.34	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	1643802	26.43	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2127384	31.64	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	2476703	37.40	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	12404636m	181.89	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	2908096	42.01	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	2851581	41.46	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	2720011	46.12	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	2614114	46.02	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.65	TIC	2447433	50.81	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.47	TIC	1625276	54.24	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	15166511m	282.75	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	178313	39.74	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	188553	40.08	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	275517	40.58	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	61667	44.94	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.29	120	210569	42.32	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.03	134	152301	46.11	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1066920m	208.60	ug/m3	

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

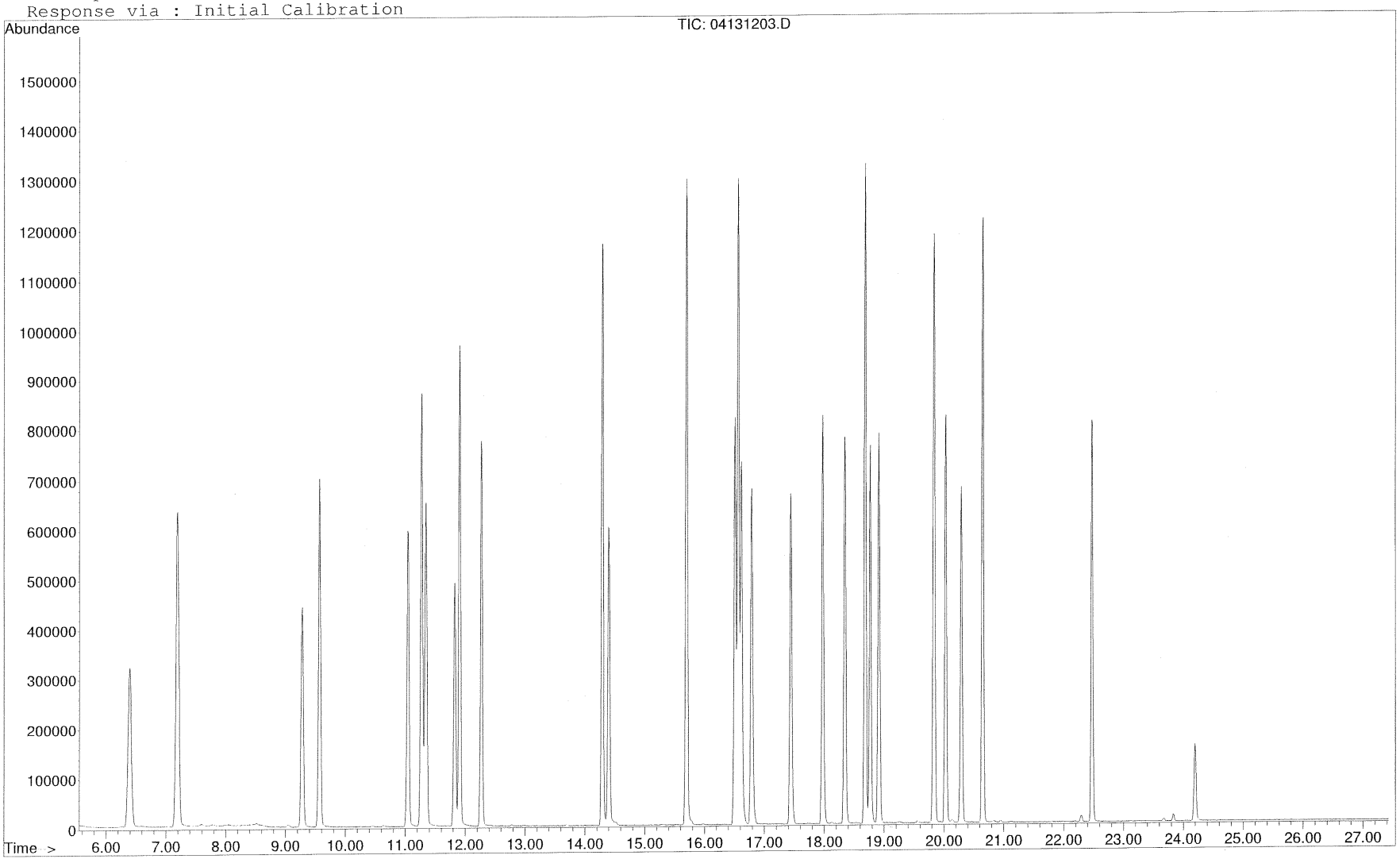
Quantitation Report

Data File : C:\HPCHEM\1\DATA\041312\04131203.D
Acq On : 13 Apr 2012 11:02 am
Sample : CCV VOA9 041312
Misc : CCV MA_APH
MS Integration Params: rteint.p
Quant Time: Apr 16 9:44 2012

Vial: 3
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_120414A **Run No.:** 47707

Analytical Run Date: 4/14/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

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

Column Length: 60m

Run Comments: PR - RH3 041712 041712rsl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 041412	BFB_TUNE	TUNE	R47707	4/14/2012 3:46:00 PM	Robert Lynch		
CCV VOA9 041412	MA_APH	CCV	R47707	4/14/2012 4:29:00 PM	Robert Lynch		
RLVS VOA9 041412	MA_APH	RLVS	R47707	4/14/2012 5:12:00 PM	Robert Lynch		
MBLK VOA9 041412	MA_APH	MBLK	R47707	4/14/2012 6:01:00 PM	Robert Lynch		
1203984-003A	MA_APH	SAMP	R47707	4/14/2012 6:44:00 PM	Robert Lynch		
1203984-004A	MA_APH	SAMP	R47707	4/14/2012 7:27:00 PM	Robert Lynch		
1203984-018A	MA_APH	SAMP	R47707	4/14/2012 8:11:00 PM	Robert Lynch		
1203984-018Adup	MA_APH	DUP	R47707	4/14/2012 8:55:00 PM	Robert Lynch		
1203984-019A	MA_APH	SAMP	R47707	4/14/2012 9:39:00 PM	Robert Lynch		
1203984-022A	MA_APH	SAMP	R47707	4/14/2012 11:07:00 PM	Robert Lynch		
RLVS VOA9 041412	MA_APH	RLVS	R47707	4/14/2012 11:49:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

18-Apr-12

RunNo 47707

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
931928	BFB VOA9 041412	BFB_TUNE	TUNE	\1\DATA\041412	4/14/2012 3:46:0	1	R47707		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	60		100	0	0	0	0	0	60%	50	120	0%	
175	M		7.6	7.6		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		6.6	6.6		100	0	0	0	0	0	7%	5	9	0%	
50	M		24.7	24.7		100	0	0	0	0	0	25%	8	40	0%	
75	M		50.1	50.1		100	0	0	0	0	0	50%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
931929	CCV VOA9 041412	MA_APH	CCV	\1\DATA\041412	4/14/2012 4:29:0	1	R47707		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	210.61	210.61		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	249.86	249.86		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	338.5	338.5		378	0	0	0	0	0	90%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	88.39	88.39		89.5	0	0	0	0	0	99%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\041412\04141202.D Vial: 2
Acq On : 14 Apr 2012 4:29 pm Operator: RACHEL HILL
Sample : CCV VOA9 041412 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	26.662	8.7	90	-0.02
2	L1	C5-C8 Aliphatic HC {2}	36.400	32.822	9.8	91	-0.02
3	L1	C5-C8 Aliphatic HC {3}	41.800	38.050	9.0	92	-0.02
4	L1	C5-C8 Aliphatic HC {4}	35.400	31.526	10.9	90	-0.02
5	L1	C5-C8 Aliphatic HC {5}	42.200	37.202	11.8	90	-0.02
6	L1	C5-C8 Aliphatic HC {6}	49.000	44.232	9.7	92	-0.02
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	210.605	10.0	91	0.19
8	L1	C9-C12 Aliphatic HC	54.600	49.898	8.6	94	-0.02
9	L1	C9-C12 Aliphatic HC {2}	54.600	49.009	10.2	91	-0.02
10	L1	C9-C12 Aliphatic HC {3}	61.200	54.644	10.7	92	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	54.866	9.8	94	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	61.449	12.2	93	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	67.844	11.9	98	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	338.504	10.4	93	-0.02
15	L1	C9-C10 Aromatic HC	51.700	47.552	8.0	98	-0.01
16	L1	C9-C10 Aromatic HC {2}	51.200	47.264	7.7	99	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	48.841	6.4	99	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	55.159	6.0	101	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	50.202	4.6	102	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	56.065	4.5	102	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	249.865	6.1	100	-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	89	-0.01
41	S	4-Bromofluorobenzene	89.500	88.388	1.2	89	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
04141202.D 040312V9.M Mon Apr 16 09:53:12 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\041412\04141202.D Vial: 2
Acq On : 14 Apr 2012 4:29 pm Operator: RACHEL HILL
Sample : CCV VOA9 041412 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 16 9:42 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

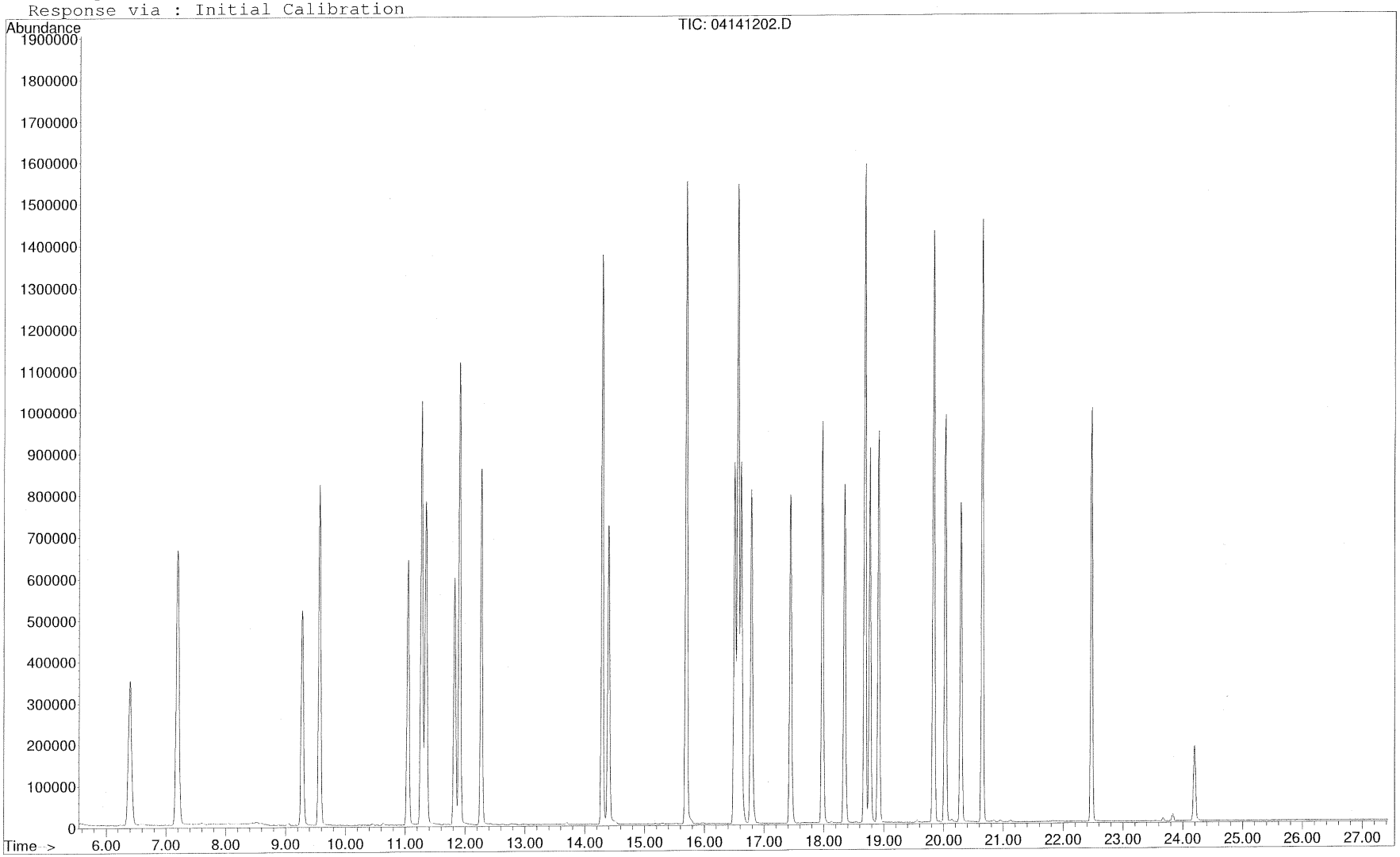
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	590633	12.50	ug/m3	-0.01
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.34	95	411348	88.39	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery =	98.76%		
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2302440	26.66	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2036845	32.82	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2632733	38.05	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	1960439	31.53	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2501345	37.20	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	2928847	44.23	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	14362649m	210.61	ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	3454390	49.90	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	3370681	49.01	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3222438	54.64	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	3116817	54.87	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.65	TIC	2960150	61.45	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.48	TIC	2032924	67.84	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	18157400m	338.50	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	213385	47.55	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	222334	47.26	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	331613	48.84	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.03	120	75683	55.16	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.29	120	249778	50.20	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.03	134	185185	56.06	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1277978m	249.86	ug/m3	

(#) = qualifier out of range (m) = manual integration
04141202.D 040312V9.M Mon Apr 16 09:53:29 2012 Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\041412\04141202.D Vial: 2
Acq On : 14 Apr 2012 4:29 pm Operator: RACHEL HILL
Sample : CCV VOA9 041412 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 16 9:42 2012 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

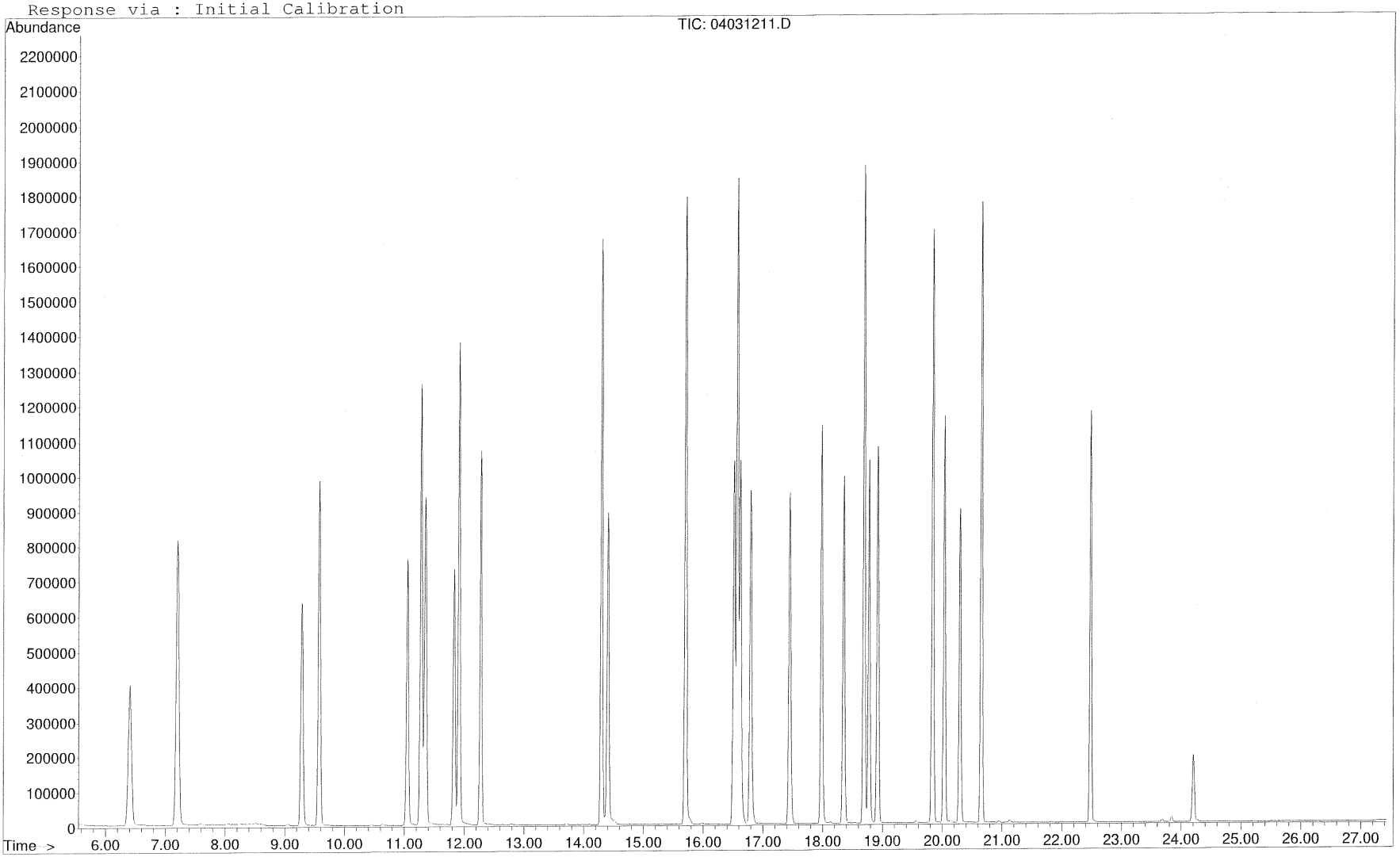
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	702663	12.50	ug/m3	0.00
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.35	95	491589	88.79	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 99.21%			
Target Compounds						Qvalue
1) C5-C8 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 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

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_120402A **Run No.:** 47327

Analytical Run Date: 4/2/2012 **InstrumentID:** GC-TCD 1

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

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

Column Length: 2m

Run Comments: ch rev 4/3/12/PR 040312JDH rsl040312

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
MBLK-040212 TCD	ASTM-D2504	MBLK	R47327	4/2/2012 11:08:00 AM	Robert Lynch		
CCV-040212 TCD	ASTM-D2504	CCV	R47327	4/2/2012 12:00:00 PM	Robert Lynch		
LCS-040212 TCD	ASTM-D2504	LCS	R47327	4/2/2012 12:15:00 PM	Robert Lynch		
CRQL-040212 TCD	ASTM-D2504	CRQL	R47327	4/2/2012 12:47:00 PM	Robert Lynch		
1203903-020B	ASTM-D2504	SAMP	R47327	4/2/2012 1:12:00 PM	Robert Lynch		
1203903-021B	ASTM-D2504	SAMP	R47327	4/2/2012 1:31:00 PM	Robert Lynch		
1203903-022B	ASTM-D2504	SAMP	R47327	4/2/2012 1:47:00 PM	Robert Lynch		
1203903-023B	ASTM-D2504	SAMP	R47327	4/2/2012 2:39:00 PM	Robert Lynch		
1203903-024B	ASTM-D2504	SAMP	R47327	4/2/2012 3:07:00 PM	Robert Lynch		
1203903-025B	ASTM-D2504	SAMP	R47327	4/2/2012 3:29:00 PM	Robert Lynch		
1203903-026B	ASTM-D2504	SAMP	R47327	4/2/2012 3:49:00 PM	Robert Lynch		
1203984-001B	ASTM-D2504	SAMP	R47327	4/2/2012 4:36:00 PM	Robert Lynch		
1203984-002B	ASTM-D2504	SAMP	R47327	4/2/2012 4:59:00 PM	Robert Lynch		
1203984-003B	ASTM-D2504	SAMP	R47327	4/2/2012 5:27:00 PM	Robert Lynch		
1203903-026BDUP	ASTM-D2504	DUP	R47327	4/2/2012 5:44:00 PM	Robert Lynch		
CCV 040212 TCD-B	ASTM-D2504	CCV	R47327	4/2/2012 6:01:00 PM	Robert Lynch		
CRQL 040212 TCD-B	ASTM-D2504	CRQL	R47327	4/2/2012 6:45:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

18-Apr-12

RunNo 47327

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
924921	MBLK-040212 TCD	ASTM-D2504	MBLK	...TA\040212\0402	4/2/2012 11:08:0	1	R47327		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
924922	CCV-040212 TCD	ASTM-D2504	CCV	...TA\040212\0402	4/2/2012 12:00:0	1	R47327		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.596	2.596		2.5	0	0	0.025	0.1	0	104%	85	115	0%	
Carbon Monoxide	A	%	2.706	2.706		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.085	2.085		2	0	0	0.025	0.5	0	104%	85	115	0%	
Nitrogen	A	%	2.702	2.702		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Oxygen	A	%	2.477	2.477		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
924923	LCS-040212 TCD	ASTM-D2504	LCS	...TA\040212\0402	4/2/2012 12:15:0	1	R47327		0	924922	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.62	2.62		2.5	0	2.596	0.025	0.1	0	105%	70	130	1%	
Carbon Monoxide	A	%	2.693	2.693		2.5	0	2.706	0.025	0.1	0	108%	70	130	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
924936	CCV 040212 TCD-B	ASTM-D2504	CCV	.TA\040212\0402	4/2/2012 6:01:00	1	R47327		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.633	2.633		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Carbon Monoxide	A	%	2.734	2.734		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	%	2.09	2.09		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.657	2.657		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Oxygen	A	%	2.484	2.484		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
924937	CRQL 040212 TCD-B	ASTM-D2504	CRQL	.TA\040212\0402	4/2/2012 6:45:00	1	R47327		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.306	0.306		0.3	0	0	0.025	0.1	0	102%	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	%	1.447	1.447		1.39	0	0	0.025	0.1	0	104%	80	120	0%	
Oxygen	A	%	0.085	0.085		0.08	0	0	0.025	0.1	0	106%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\040212\04021202.D Vial: 1
Acq On : 2 Apr 2012 12:00 pm Operator:
Sample : CCV-040212 TCD 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	2.477	0.9	0	0.05
2	Nitrogen	2.500	2.702	-8.1	0	0.03
3	Carbon Monoxide	2.500	2.706	-8.2	0	0.00
4	Methane	2.000	2.085	-4.2	0	0.03
5	Carbon dioxide	2.500	2.596	-3.8	0	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040212\04021202.D Vial: 1
Acq On : 2 Apr 2012 12:00 pm Operator:
Sample : CCV-040212 TCD Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 2 11:30 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 :

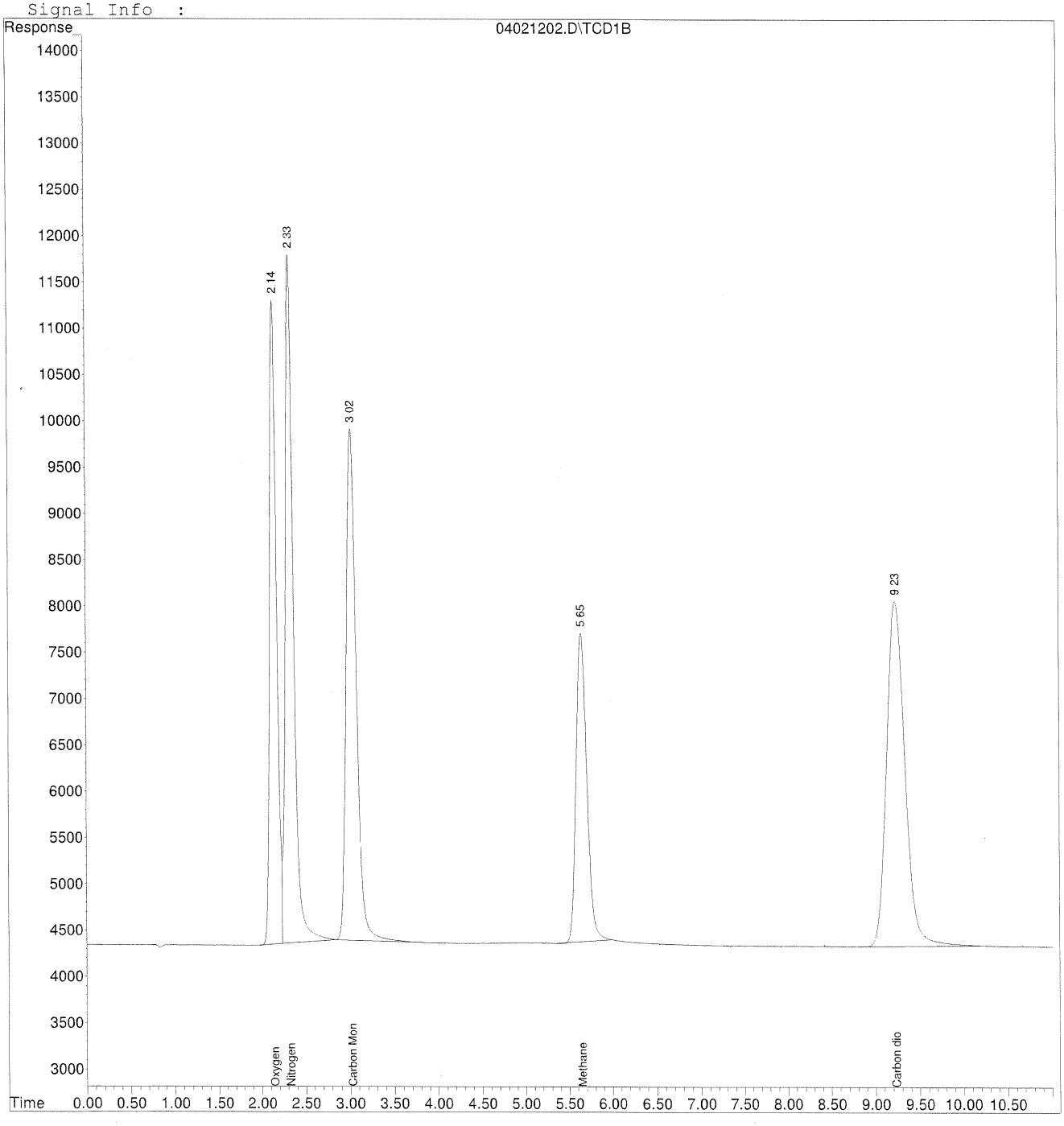
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	383718	2.477 %
2)	Nitrogen	2.33	474235	2.702 %
3)	Carbon Monoxide	3.03	436262	2.706 %
4)	Methane	5.65	281546	2.085 %
5)	Carbon dioxide	9.23	533097	2.596 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040212\04021202.D Vial: 1
Acq On : 2 Apr 2012 12:00 pm Operator:
Sample : CCV-040212 TCD Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 2 11:30 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\040212\04021216.D Vial: 1
Acq On : 2 Apr 2012 6:01 pm Operator:
Sample : CCV 040212 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	2.484	0.6	0	0.05
2	Nitrogen	2.500	2.657	-6.3	0	0.03
3	Carbon Monoxide	2.500	2.734	-9.4	0	0.00
4	Methane	2.000	2.090	-4.5	0	0.02
5	Carbon dioxide	2.500	2.633	-5.3	0	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040212\04021216.D Vial: 1
Acq On : 2 Apr 2012 6:01 pm Operator:
Sample : CCV 040212 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 2 17:27 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 :

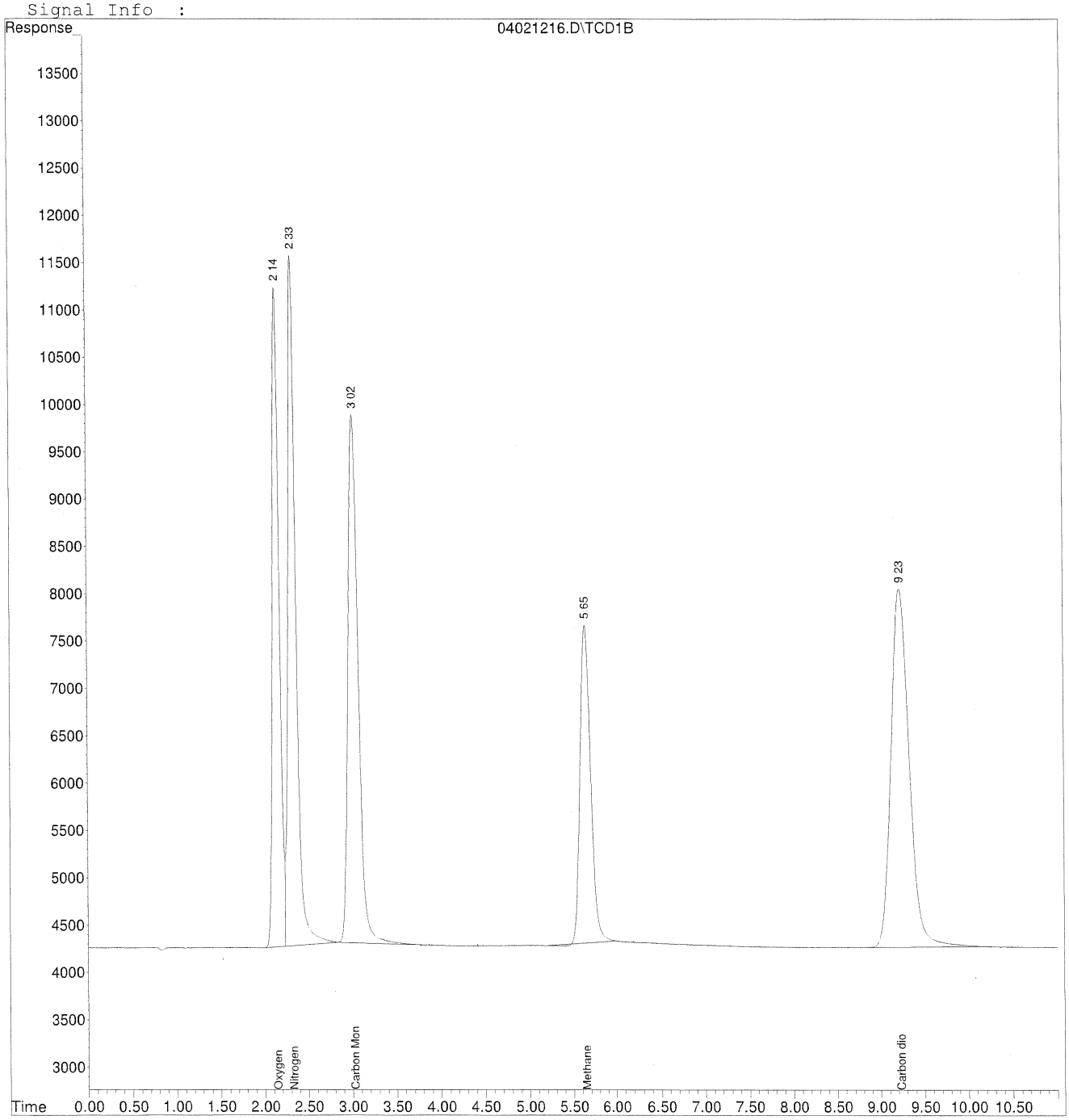
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	384822	2.484 %
2)	Nitrogen	2.33	466328	2.657 %
3)	Carbon Monoxide	3.03	440672	2.734 %
4)	Methane	5.65	282248	2.090 %
5)	Carbon dioxide	9.23	540741	2.633 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040212\04021216.D Vial: 1
Acq On : 2 Apr 2012 6:01 pm Operator:
Sample : CCV 040212 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 2 17:27 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 :



RTI Laboratories

Run ID: GC-TCD 1_120403A **Run No.:** 47413

Analytical Run Date: 4/3/2012 **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: PR 040512JDH 040512rsl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
MBLK-040312 TCD	ASTM-D2504	MBLK	R47413	4/3/2012 9:25:00 AM	Deborah Griffiths		
CCV 040312 TCD-A	ASTM-D2504	CCV	R47413	4/3/2012 9:41:00 AM	Robert Lynch		
LCS-040312 TCD	ASTM-D2504	LCS	R47413	4/3/2012 10:01:00 AM	Robert Lynch		
CRQL 040312 TCD-A	ASTM-D2504	CRQL	R47413	4/3/2012 10:34:00 AM	Robert Lynch		
1203984-004B	ASTM-D2504	SAMP	R47413	4/3/2012 10:51:00 AM	Robert Lynch		
1203984-005B	ASTM-D2504	SAMP	R47413	4/3/2012 11:07:00 AM	Robert Lynch		
1203984-006B	ASTM-D2504	SAMP	R47413	4/3/2012 11:26:00 AM	Robert Lynch		
1203984-007B	ASTM-D2504	SAMP	R47413	4/3/2012 11:41:00 AM	Robert Lynch		
1203984-008B	ASTM-D2504	SAMP	R47413	4/3/2012 11:57:00 AM	Robert Lynch		
1203984-009B	ASTM-D2504	SAMP	R47413	4/3/2012 12:12:00 PM	Robert Lynch		
1203984-010B	ASTM-D2504	SAMP	R47413	4/3/2012 12:28:00 PM	Robert Lynch		
1203984-011B	ASTM-D2504	SAMP	R47413	4/3/2012 12:43:00 PM	Robert Lynch		
1203984-012B	ASTM-D2504	SAMP	R47413	4/3/2012 12:58:00 PM	Robert Lynch		
1203984-013B	ASTM-D2504	SAMP	R47413	4/3/2012 1:18:00 PM	Robert Lynch		
1203984-013BDUP	ASTM-D2504	DUP	R47413	4/3/2012 1:38:00 PM	Deborah Griffiths		
CCV 040312 TCD-B	ASTM-D2504	CCV	R47413	4/3/2012 1:55:00 PM	Robert Lynch		
CRQL 040312 TCD-B	ASTM-D2504	CRQL	R47413	4/3/2012 2:28:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

18-Apr-12

RunNo 47413

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
926359	MBLK-040312 TCD	ASTM-D2504	MBLK	...TA\040312\0403	4/3/2012 9:25:00	1	R47413		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
926360	CCV 040312 TCD-A	ASTM-D2504	CCV	...TA\040312\0403	4/3/2012 9:41:00	1	R47413		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.62	2.62		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Carbon Monoxide	A	%	2.685	2.685		2.5	0	0	0.025	0.1	0	107%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.086	2.086		2	0	0	0.025	0.5	0	104%	85	115	0%	
Nitrogen	A	%	2.647	2.647		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Oxygen	A	%	2.466	2.466		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
926361	LCS-040312 TCD	ASTM-D2504	LCS	...TA\040312\0403	4/3/2012 10:01:0	1	R47413		0	926360	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.614	2.614		2.5	0	2.62	0.025	0.1	0	105%	70	130	0%	
Carbon Monoxide	A	%	2.703	2.703		2.5	0	2.685	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
926374	CCV 040312 TCD-B	ASTM-D2504	CCV	‹TA\040312\0403	4/3/2012 1:55:00	1	R47413		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.652	2.652		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Carbon Monoxide	A	%	2.683	2.683		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	%	2.083	2.083		2	0	0	0.025	0.5	0	104%	85	115	0%	
Nitrogen	A	%	2.675	2.675		2.5	0	0	0.025	0.1	0	107%	85	115	0%	
Oxygen	A	%	2.473	2.473		2.5	0	0	0.025	0.1	0	99%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
926375	CRQL 040312 TCD-B	ASTM-D2504	CRQL	‹TA\040312\0403	4/3/2012 2:28:00	1	R47413		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.306	0.306		0.3	0	0	0.025	0.1	0	102%	80	120	0%	
Carbon Monoxide	A	%	0.145	0.145		0.14	0	0	0.025	0.1	0	104%	80	120	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	80	120	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	80	120	0%	
Methane	A	%	0.093	0.093		0.09	0	0	0.025	0.5	0	103%	80	120	0%	
Nitrogen	A	%	1.424	1.424		1.39	0	0	0.025	0.1	0	102%	80	120	0%	
Oxygen	A	%	0.083	0.083		0.08	0	0	0.025	0.1	0	104%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\040312\04031202.D Vial: 1
Acq On : 3 Apr 2012 9:41 am Operator:
Sample : CCV 040312 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 : 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	2.466	1.4	0	0.05
2	Nitrogen	2.500	2.647	-5.9	0	0.03
3	Carbon Monoxide	2.500	2.685	-7.4	0	0.00
4	Methane	2.000	2.086	-4.3	0	0.03
5	Carbon dioxide	2.500	2.620	-4.8	0	0.01

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040312\04031202.D Vial: 1
Acq On : 3 Apr 2012 9:41 am Operator:
Sample : CCV 040312 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 3 8:59 2012 Quant Results File: 122211.RES

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

Volume Inj. :
Signal Phase :
Signal Info :

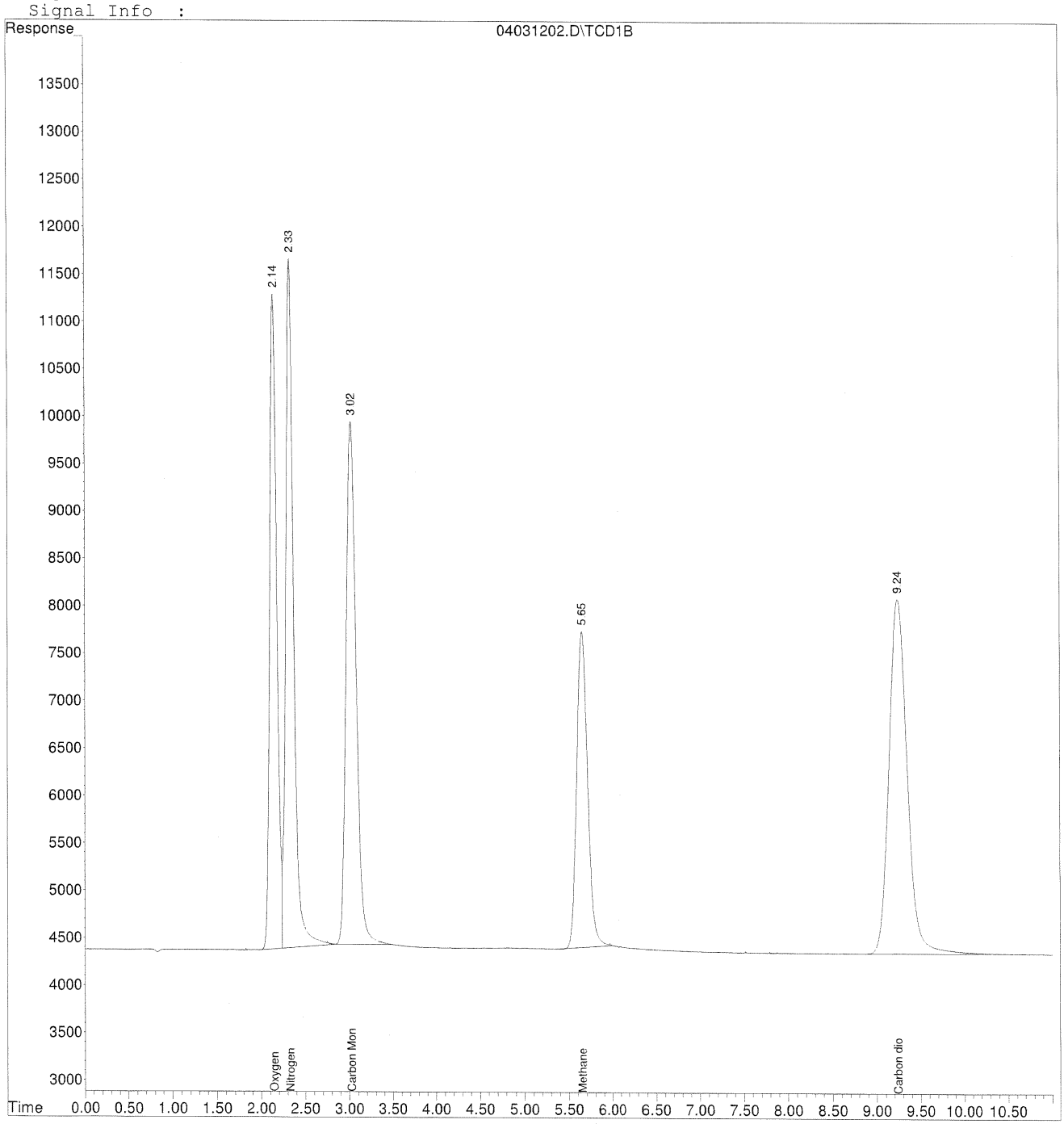
	Compound	R.T.	Response	Conc Units
Target Compounds				
1)	Oxygen	2.14	382089	2.466 %
2)	Nitrogen	2.33	464529	2.647 %
3)	Carbon Monoxide	3.03	432756	2.685 %
4)	Methane	5.65	281665	2.086 %
5)	Carbon dioxide	9.24	538174	2.620 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040312\04031202.D Vial: 1
Acq On : 3 Apr 2012 9:41 am Operator:
Sample : CCV 040312 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 3 8:59 2012 Quant Results File: 122211.RES

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

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\040312\04031216.D Vial: 1
Acq On : 3 Apr 2012 1:55 pm Operator:
Sample : CCV 040312 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	2.473	1.1	0	0.05
2	Nitrogen	2.500	2.675	-7.0	0	0.03
3	Carbon Monoxide	2.500	2.683	-7.3	0	0.00
4	Methane	2.000	2.083	-4.2	0	0.03
5	Carbon dioxide	2.500	2.652	-6.1	0	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040312\04031216.D Vial: 1
Acq On : 3 Apr 2012 1:55 pm Operator:
Sample : CCV 040312 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 3 13:09 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 :

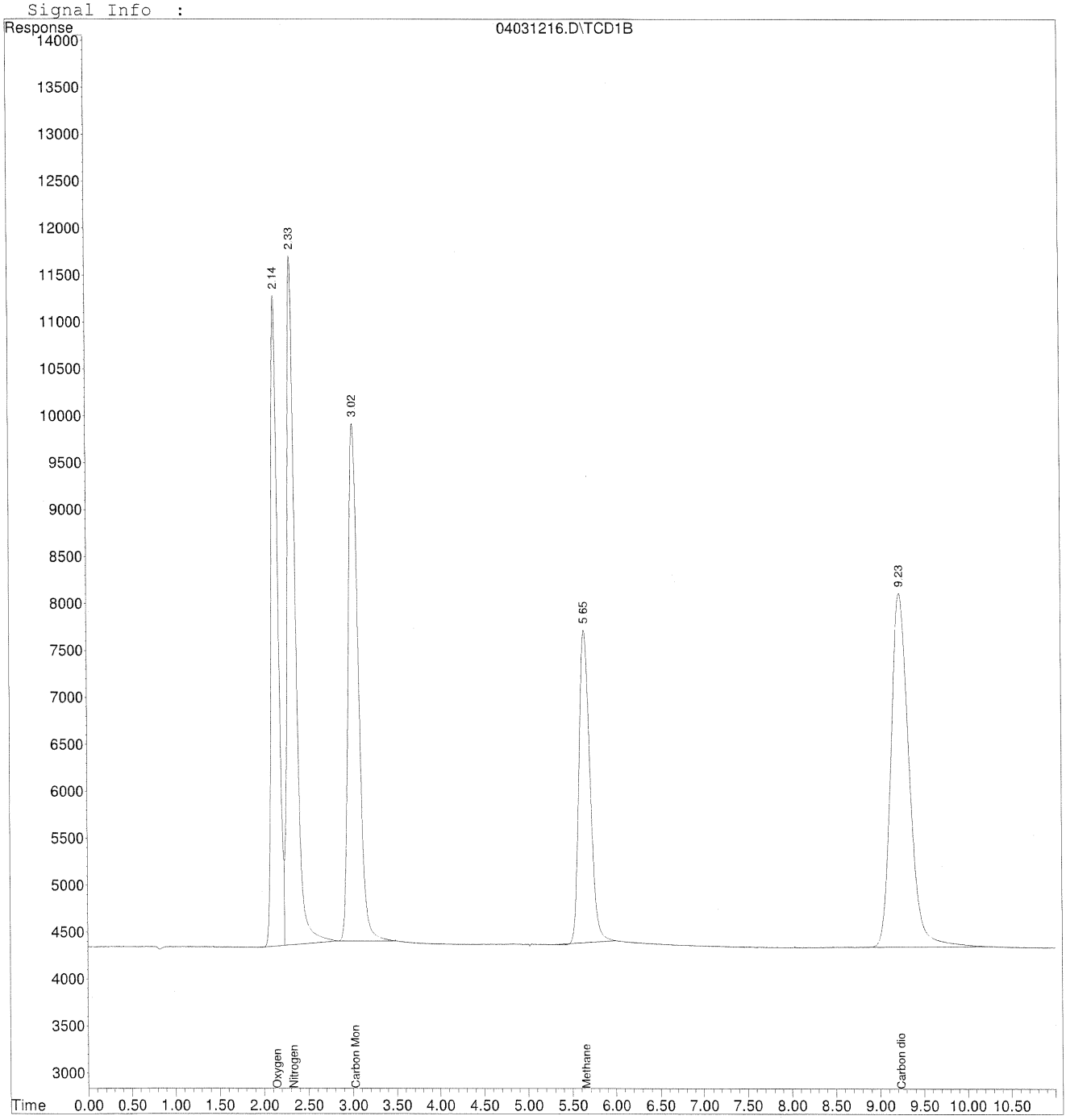
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	383090	2.473 %
2)	Nitrogen	2.33	469520	2.675 %
3)	Carbon Monoxide	3.03	432452	2.683 %
4)	Methane	5.65	281313	2.083 %
5)	Carbon dioxide	9.24	544671	2.652 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040312\04031216.D Vial: 1
Acq On : 3 Apr 2012 1:55 pm Operator:
Sample : CCV 040312 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 3 13:09 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_120405A **Run No.:** 47439

Analytical Run Date: 4/5/2012 **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 4-5-12 MSB 041712rsl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
MBLK-040512 TCD	ASTM-D2504	MBLK	R47439	4/5/2012 8:44:00 AM	Robert Lynch		
CCV 040512 TCD-A	ASTM-D2504	CCV	R47439	4/5/2012 9:02:00 AM	Robert Lynch		
LCS-040512 TCD-A	ASTM-D2504	LCS	R47439	4/5/2012 9:33:00 AM	Robert Lynch		
CRQL 040512 TCD-A	ASTM-D2504	CRQL	R47439	4/5/2012 9:48:00 AM	Robert Lynch		
1203984-014B	ASTM-D2504	SAMP	R47439	4/5/2012 10:03:00 AM	Robert Lynch		
1203984-015B	ASTM-D2504	SAMP	R47439	4/5/2012 10:19:00 AM	Robert Lynch		
1203984-016B	ASTM-D2504	SAMP	R47439	4/5/2012 10:35:00 AM	Robert Lynch		
1203984-017B	ASTM-D2504	SAMP	R47439	4/5/2012 10:50:00 AM	Robert Lynch		
1203984-018B	ASTM-D2504	SAMP	R47439	4/5/2012 11:06:00 AM	Robert Lynch		
1203984-019B	ASTM-D2504	SAMP	R47439	4/5/2012 11:30:00 AM	Robert Lynch		
1203984-020B	ASTM-D2504	SAMP	R47439	4/5/2012 11:45:00 AM	Robert Lynch		
1203984-021B	ASTM-D2504	SAMP	R47439	4/5/2012 12:16:00 PM	Robert Lynch		
1203984-022B	ASTM-D2504	SAMP	R47439	4/5/2012 12:34:00 PM	Robert Lynch		
1203984-023B	ASTM-D2504	SAMP	R47439	4/5/2012 12:55:00 PM	Robert Lynch		
1203984-023BDUP	ASTM-D2504	DUP	R47439	4/5/2012 2:00:00 PM	Robert Lynch		
CCV 040512 TCD-B	ASTM-D2504	CCV	R47439	4/5/2012 2:18:00 PM	Robert Lynch		
CRQL 040512 TCD-B	ASTM-D2504	CRQL	R47439	4/5/2012 3:14:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

18-Apr-12

RunNo 47439

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
926731	MBLK-040512 TCD	ASTM-D2504	MBLK	...TA\040512\0405	4/5/2012 8:44:00	1	R47439		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
926732	CCV 040512 TCD-A	ASTM-D2504	CCV	...TA\040512\0405	4/5/2012 9:02:00	1	R47439		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.631	2.631		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Carbon Monoxide	A	%	2.693	2.693		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	%	2.104	2.104		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.737	2.737		2.5	0	0	0.025	0.1	0	109%	85	115	0%	
Oxygen	A	%	2.502	2.502		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
926733	LCS-040512 TCD-A	ASTM-D2504	LCS	...TA\040512\0405	4/5/2012 9:33:00	1	R47439		0	926732	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.543	2.543		2.5	0	0	0.025	0.1	0	102%	70	130	0%	
Carbon Monoxide	A	%	2.692	2.692		2.5	0	0	0.025	0.1	0	108%	70	130	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
926746	CCV 040512 TCD-B	ASTM-D2504	CCV	.TA\040512\0405	4/5/2012 2:18:00	1	R47439		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.632	2.632		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Carbon Monoxide	A	%	2.697	2.697		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.109	2.109		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.71	2.71		2.5	0	0	0.025	0.1	0	108%	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
926747	CRQL 040512 TCD-B	ASTM-D2504	CRQL	.TA\040512\0405	4/5/2012 3:14:00	1	R47439		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.301	0.301		0.3	0	0	0.025	0.1	0	100%	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	%	0.092	0.092		0.09	0	0	0.025	0.5	0	102%	80	120	0%	
Nitrogen	A	%	1.413	1.413		1.39	0	0	0.025	0.1	0	102%	80	120	0%	
Oxygen	A	%	0.076	0.076		0.08	0	0	0.025	0.1	0	95%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\040512\04051202.D Vial: 1
Acq On : 5 Apr 2012 9:02 am Operator:
Sample : CCV 040512 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 : 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	2.502	-0.1	0	0.05
2	Nitrogen	2.500	2.737	-9.5	0	0.03
3	Carbon Monoxide	2.500	2.693	-7.7	0	0.00
4	Methane	2.000	2.104	-5.2	0	0.03
5	Carbon dioxide	2.500	2.631	-5.2	0	0.01

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040512\04051202.D Vial: 1
Acq On : 5 Apr 2012 9:02 am Operator:
Sample : CCV 040512 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 5 9:43 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 :

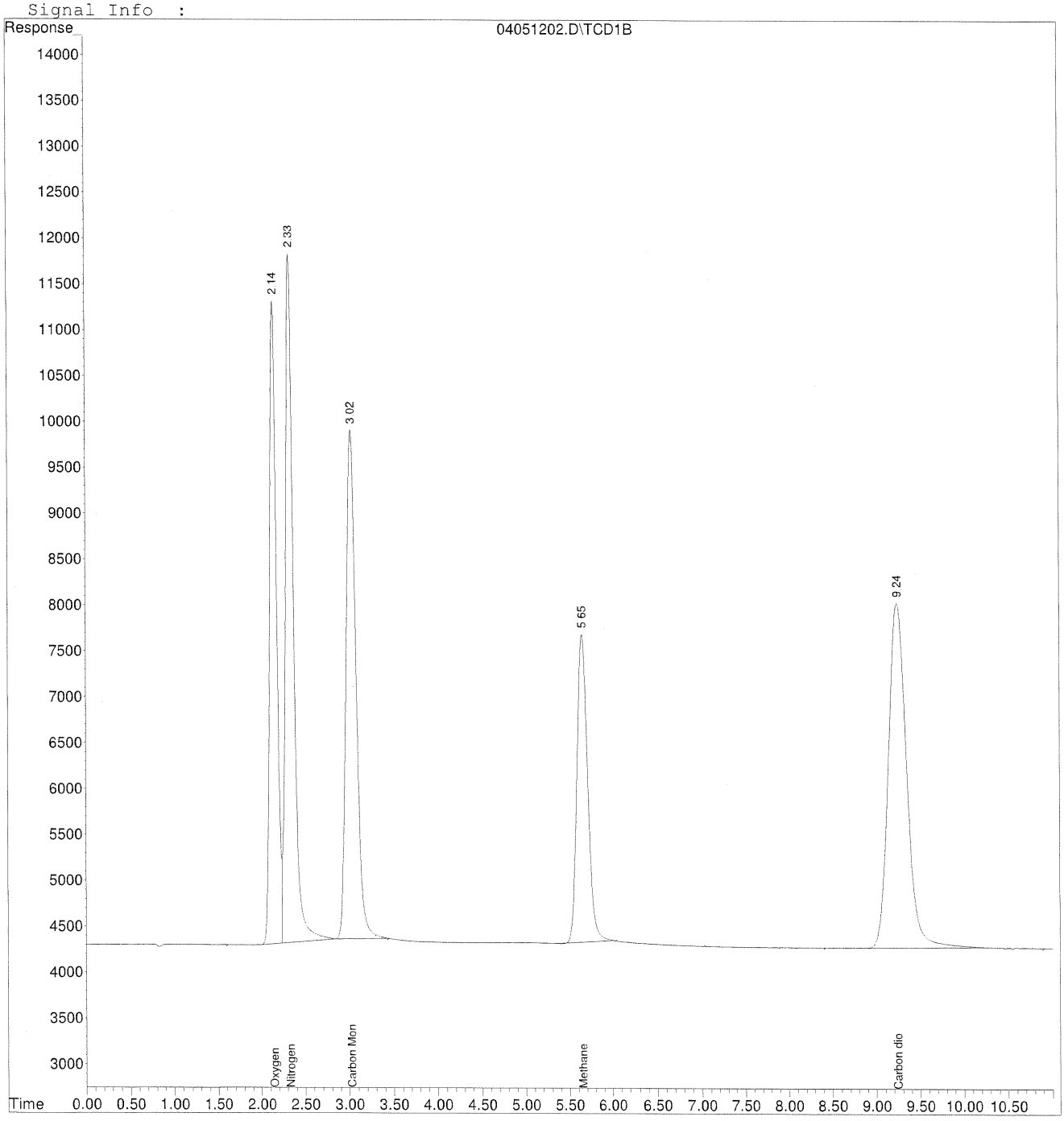
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	387526	2.502 %
2)	Nitrogen	2.33	480366	2.737 %
3)	Carbon Monoxide	3.03	434042	2.693 %
4)	Methane	5.65	284195	2.104 %
5)	Carbon dioxide	9.24	540257	2.631 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040512\04051202.D Vial: 1
Acq On : 5 Apr 2012 9:02 am Operator:
Sample : CCV 040512 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 5 9:43 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\040512\04051216.D Vial: 1
Acq On : 5 Apr 2012 2:18 pm Operator:
Sample : CCV 040512 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	2.710	-8.4	0	0.03
3	Carbon Monoxide	2.500	2.697	-7.9	0	0.00
4	Methane	2.000	2.109	-5.4	0	0.03
5	Carbon dioxide	2.500	2.632	-5.3	0	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040512\04051216.D Vial: 1
Acq On : 5 Apr 2012 2:18 pm Operator:
Sample : CCV 040512 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 5 13:34 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 :

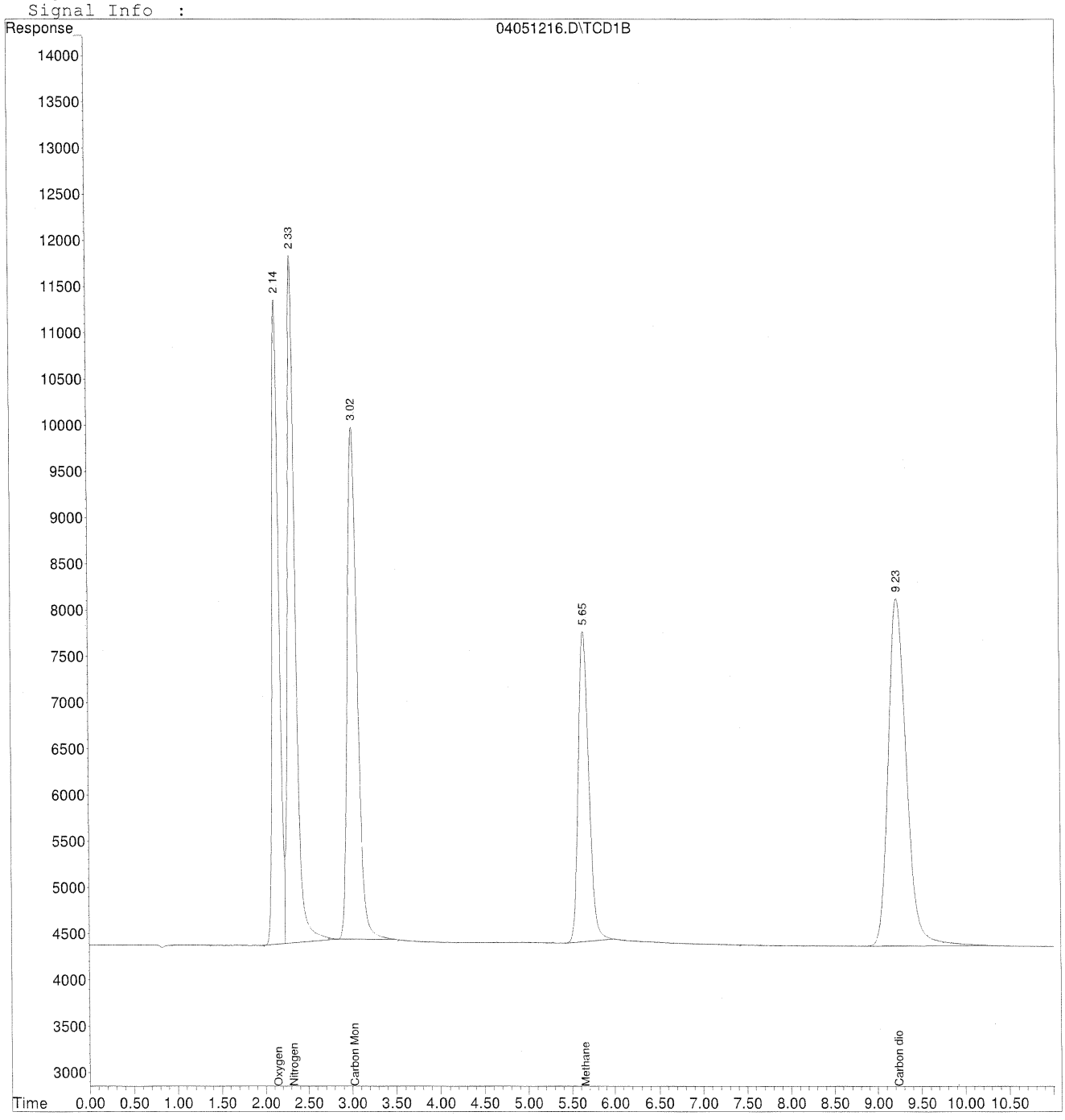
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	385937	2.491 %
2)	Nitrogen	2.33	475711	2.710 %
3)	Carbon Monoxide	3.03	434779	2.697 %
4)	Methane	5.65	284878	2.109 %
5)	Carbon dioxide	9.24	540604	2.632 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040512\04051216.D Vial: 1
Acq On : 5 Apr 2012 2:18 pm Operator:
Sample : CCV 040512 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 5 13:34 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_120406A **Run No.:** 47543

Analytical Run Date: 4/6/2012 **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 04-10-12 MSB 041012rsl

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
MBLK-040612 TCD	ASTM-D2504	MBLK	R47543	4/6/2012 9:16:00 AM	Robert Lynch		
CCV 040612 TCD-A	ASTM-D2504	CCV	R47543	4/6/2012 9:41:00 AM	Robert Lynch		
LCS-040612 TCD	ASTM-D2504	LCS	R47543	4/6/2012 9:56:00 AM	Robert Lynch		
CRQL 040612 TCD-A	ASTM-D2504	CRQL	R47543	4/6/2012 11:13:00 AM	Robert Lynch		
1203984-024B	ASTM-D2504	SAMP	R47543	4/6/2012 11:29:00 AM	Robert Lynch		
1203984-025B	ASTM-D2504	SAMP	R47543	4/6/2012 11:43:00 AM	Robert Lynch		
1203984-026B	ASTM-D2504	SAMP	R47543	4/6/2012 11:58:00 AM	Robert Lynch		
1203984-027B	ASTM-D2504	SAMP	R47543	4/6/2012 12:16:00 PM	Robert Lynch		
1203984-028B	ASTM-D2504	SAMP	R47543	4/6/2012 12:31:00 PM	Robert Lynch		
1203984-029B	ASTM-D2504	SAMP	R47543	4/6/2012 12:46:00 PM	Robert Lynch		
1203984-030B	ASTM-D2504	SAMP	R47543	4/6/2012 1:01:00 PM	Robert Lynch		
1203984-031B	ASTM-D2504	SAMP	R47543	4/6/2012 1:16:00 PM	Robert Lynch		
1203984-032B	ASTM-D2504	SAMP	R47543	4/6/2012 1:38:00 PM	Robert Lynch		
1203984-033B	ASTM-D2504	SAMP	R47543	4/6/2012 1:53:00 PM	Robert Lynch		
1203984-033BDUP	ASTM-D2504	DUP	R47543	4/6/2012 2:08:00 PM	Robert Lynch		
CCV 040612 TCD-B	ASTM-D2504	CCV	R47543	4/6/2012 2:55:00 PM	Robert Lynch		
1203984-034B	ASTM-D2504	SAMP	R47543	4/6/2012 3:10:00 PM	Robert Lynch		
1203984-035B	ASTM-D2504	SAMP	R47543	4/6/2012 3:25:00 PM	Robert Lynch		
1203984-036B	ASTM-D2504	SAMP	R47543	4/6/2012 3:40:00 PM	Robert Lynch		
CCV 040612 TCD-C	ASTM-D2504	CCV	R47543	4/6/2012 3:56:00 PM	Robert Lynch		
CRQL 040612 TCD-B	ASTM-D2504	CRQL	R47543	4/6/2012 4:26:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

18-Apr-12

RunNo 47543

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
928821	MBLK-040612 TCD	ASTM-D2504	MBLK	...TA\040612\0406	4/6/2012 9:16:00	1	R47543		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
928822	CCV 040612 TCD-A	ASTM-D2504	CCV	...TA\040612\0406	4/6/2012 9:41:00	1	R47543		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	%	2.743	2.743		2.5	0	0	0.025	0.1	0	110%	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	%	2.119	2.119		2	0	0	0.025	0.5	0	106%	85	115	0%	
Nitrogen	A	%	2.872	2.872		2.5	0	0	0.025	0.1	0	115%	85	115	0%	
Oxygen	A	%	2.544	2.544		2.5	0	0	0.025	0.1	0	102%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
928823	LCS-040612 TCD	ASTM-D2504	LCS	...TA\040612\0406	4/6/2012 9:56:00	1	R47543		0	928822	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.652	2.652		2.5	0	2.657	0.025	0.1	0	106%	70	130	0%	
Carbon Monoxide	A	%	2.697	2.697		2.5	0	2.743	0.025	0.1	0	108%	70	130	2%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	

1

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
928836	CCV 040612 TCD-B	ASTM-D2504	CCV	..TA\040612\0406	4/6/2012 2:55:00	1	R47543		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.6	2.6		2.5	0	0	0.025	0.1	0	104%	85	115	0%	
Carbon Monoxide	A	%	2.712	2.712		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.099	2.099		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.674	2.674		2.5	0	0	0.025	0.1	0	107%	85	115	0%	
Oxygen	A	%	2.488	2.488		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
928837	1203984-034B (Container-01 of 01)	ASTM-D2504	SAMP	..TA\040612\0406	4/6/2012 3:10:00	1	R47543		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.687	0.687		0	0	0	0.025	0.1	0	0%	0	0	0%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	79.931	79.931		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	18.814	18.814		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
928838	1203984-035B (Container-01 of 01)	ASTM-D2504	SAMP	..TA\040612\0406	4/6/2012 3:25:00	1	R47543		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.226	0.226		0	0	0	0.025	0.1	0	0%	0	0	0%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	79.111	79.111		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
928838	1203984-035B (Container-01 of 01)	ASTM-D2504	SAMP	...TA\040612\0406	4/6/2012 3:25:00	1	R47543		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	%	20.178	20.178		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
928839	1203984-036B (Container-01 of 01)	ASTM-D2504	SAMP	...TA\040612\0406	4/6/2012 3:40:00	1	R47543		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	1.508	1.508		0	0	0	0.025	0.1	0	0%	0	0	0%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	80.727	80.727		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	17.209	17.209		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
928840	CCV 040612 TCD-C	ASTM-D2504	CCV	...TA\040612\0406	4/6/2012 3:56:00	1	R47543		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.621	2.621		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Carbon Monoxide	A	%	2.698	2.698		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.103	2.103		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.826	2.826		2.5	0	0	0.025	0.1	0	113%	85	115	0%	
Oxygen	A	%	2.522	2.522		2.5	0	0	0.025	0.1	0	101%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
928841	CRQL 040612 TCD-B	ASTM-D2504	CRQL	...TA\040612\0406	4/6/2012 4:26:00	1	R47543		0	0	

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

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\040612\04061202.D Vial: 1
Acq On : 6 Apr 2012 9:41 am Operator:
Sample : CCV 040612 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 : 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	2.544	-1.8	0	0.05
2	Nitrogen	2.500	2.872	-14.9	0	0.04
3	Carbon Monoxide	2.500	2.743	-9.7	0	0.01
4	Methane	2.000	2.119	-6.0	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\040612\04061202.D Vial: 1
Acq On : 6 Apr 2012 9:41 am Operator:
Sample : CCV 040612 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 6 10:03 2012 Quant Results File: 122211.RES

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

Volume Inj. :
Signal Phase :
Signal Info :

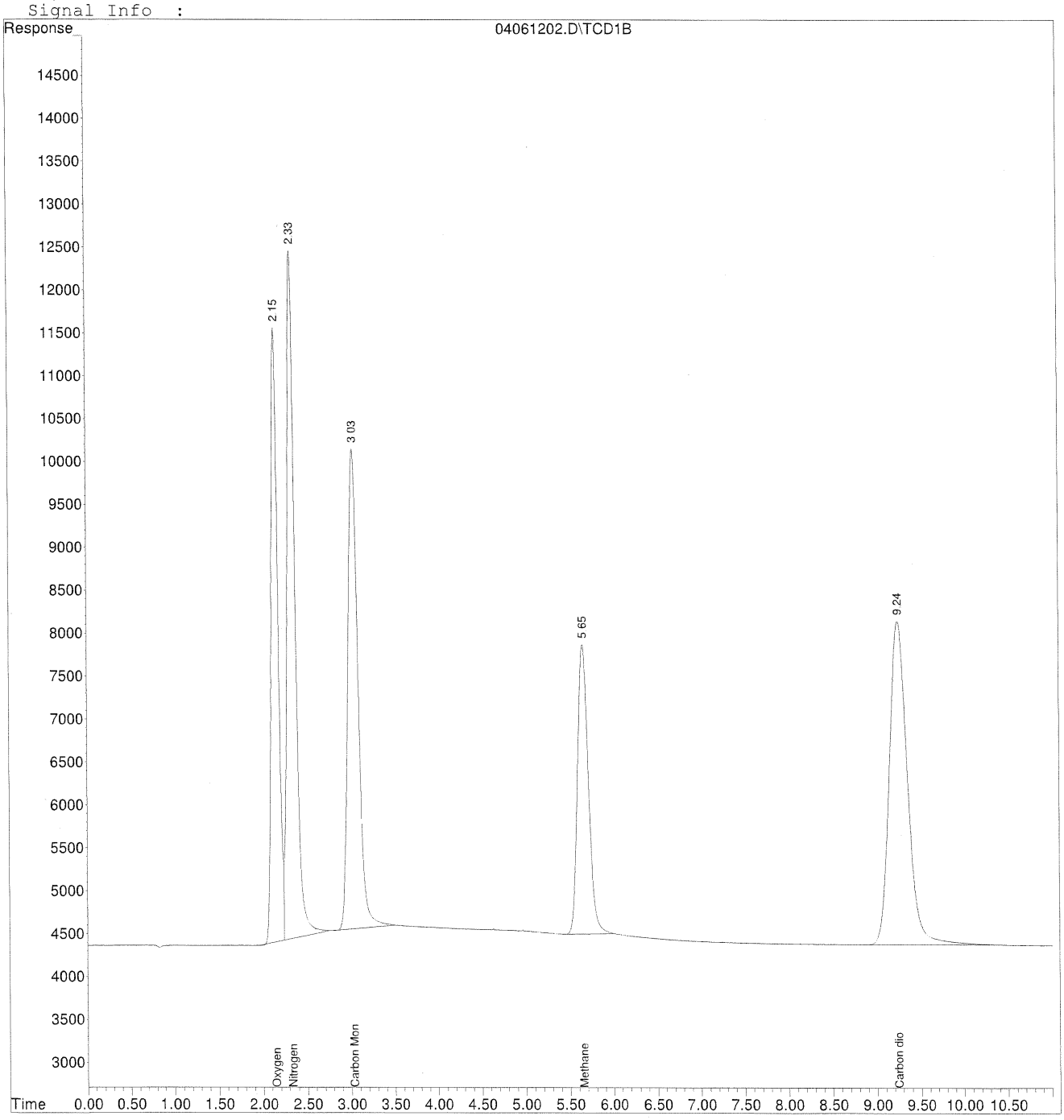
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	394035	2.544 %
2)	Nitrogen	2.34	504092	2.872 %
3)	Carbon Monoxide	3.03	442198	2.743 %
4)	Methane	5.66	286212	2.119 %
5)	Carbon dioxide	9.25	545593	2.657 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040612\04061202.D Vial: 1
Acq On : 6 Apr 2012 9:41 am Operator:
Sample : CCV 040612 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 6 10:03 2012 Quant Results File: 122211.RES

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

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\040612\04061216.D Vial: 1
Acq On : 6 Apr 2012 2:55 pm Operator:
Sample : CCV 040612 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	2.488	0.5	0	0.05
2	Nitrogen	2.500	2.674	-7.0	0	0.03
3	Carbon Monoxide	2.500	2.712	-8.5	0	0.00
4	Methane	2.000	2.099	-5.0	0	0.03
5	Carbon dioxide	2.500	2.600	-4.0	0	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040612\04061216.D Vial: 1
Acq On : 6 Apr 2012 2:55 pm Operator:
Sample : CCV 040612 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 6 14:06 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 :

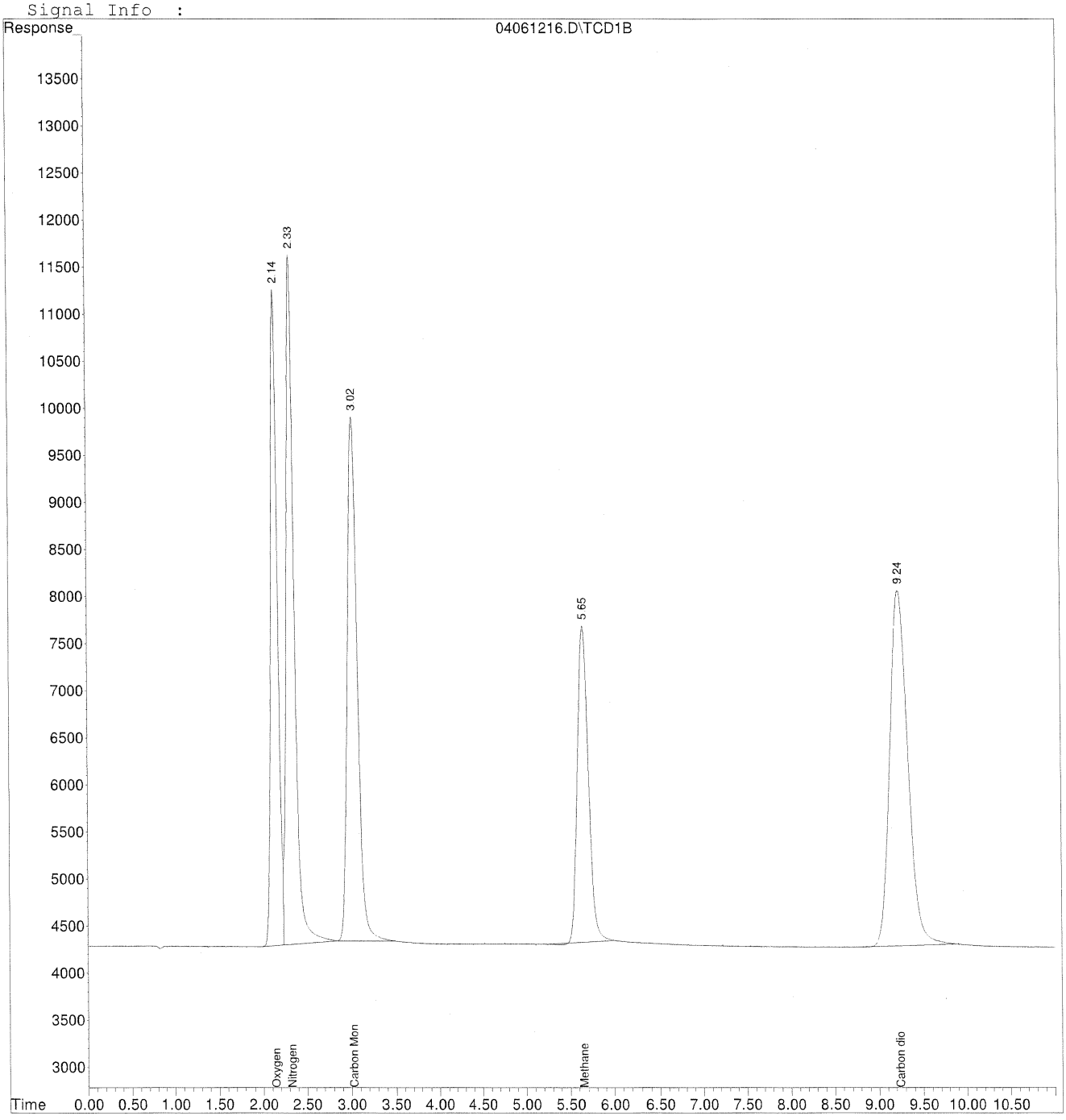
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	385503	2.488 %
2)	Nitrogen	2.33	469288	2.674 %
3)	Carbon Monoxide	3.03	437135	2.712 %
4)	Methane	5.65	283508	2.099 %
5)	Carbon dioxide	9.24	534057	2.600 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040612\04061216.D Vial: 1
Acq On : 6 Apr 2012 2:55 pm Operator:
Sample : CCV 040612 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 6 14:06 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\040612\04061220.D Vial: 1
Acq On : 6 Apr 2012 3:56 pm Operator:
Sample : CCV 040612 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 : 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	2.522	-0.9	0	0.05
2	Nitrogen	2.500	2.826	-13.0	0	0.03
3	Carbon Monoxide	2.500	2.698	-7.9	0	0.00
4	Methane	2.000	2.103	-5.2	0	0.03
5	Carbon dioxide	2.500	2.621	-4.8	0	0.01

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040612\04061220.D Vial: 1
Acq On : 6 Apr 2012 3:56 pm Operator:
Sample : CCV 040612 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 6 15:08 2012 Quant Results File: 122211.RES

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

Volume Inj. :
Signal Phase :
Signal Info :

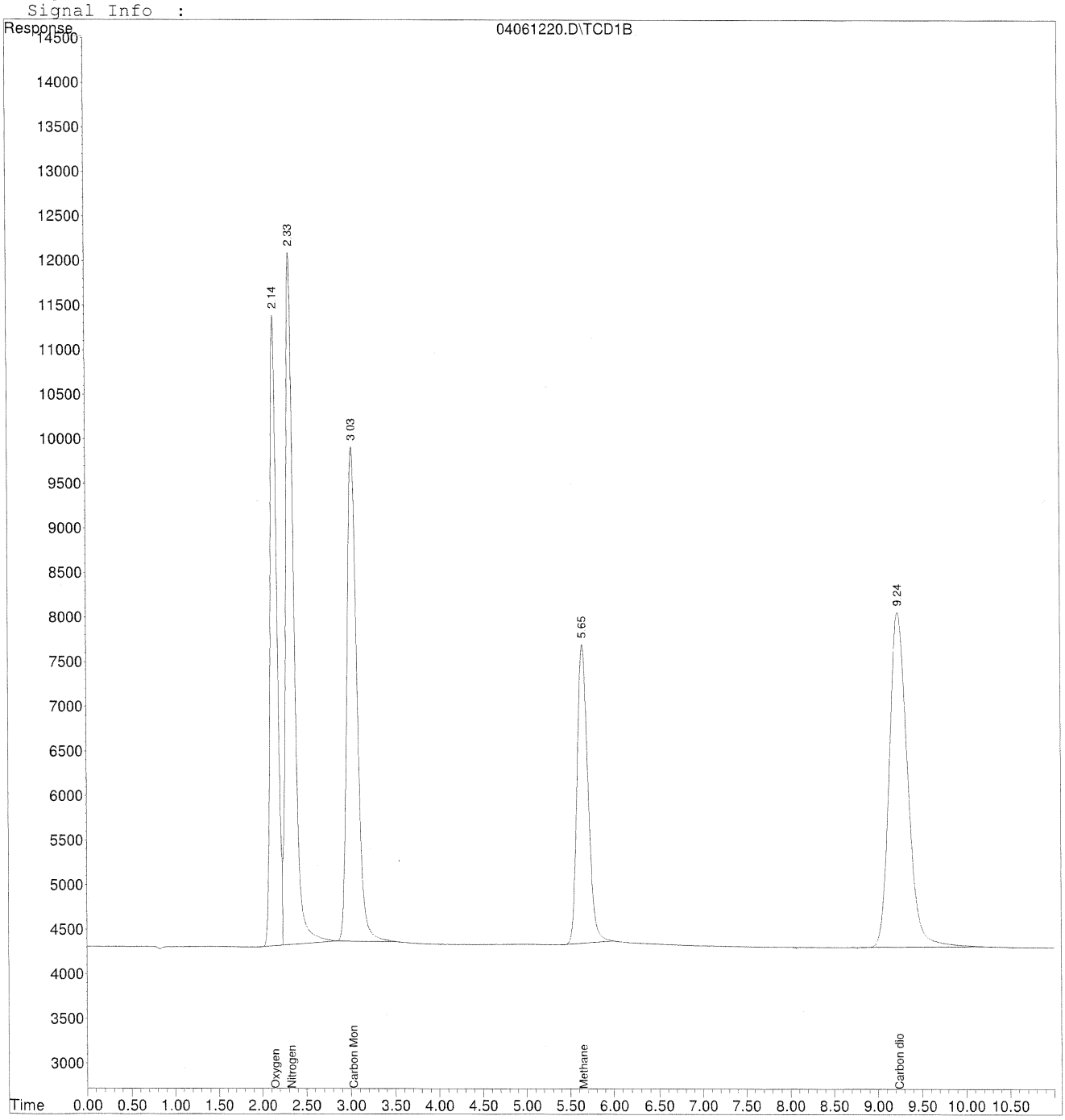
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	390657	2.522 %
2)	Nitrogen	2.33	495942	2.826 %
3)	Carbon Monoxide	3.03	434883	2.698 %
4)	Methane	5.65	283996	2.103 %
5)	Carbon dioxide	9.24	538225	2.621 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\040612\04061220.D Vial: 1
Acq On : 6 Apr 2012 3:56 pm Operator:
Sample : CCV 040612 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 6 15:08 2012 Quant Results File: 122211.RES

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

Volume Inj. :
Signal Phase :
Signal Info :



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

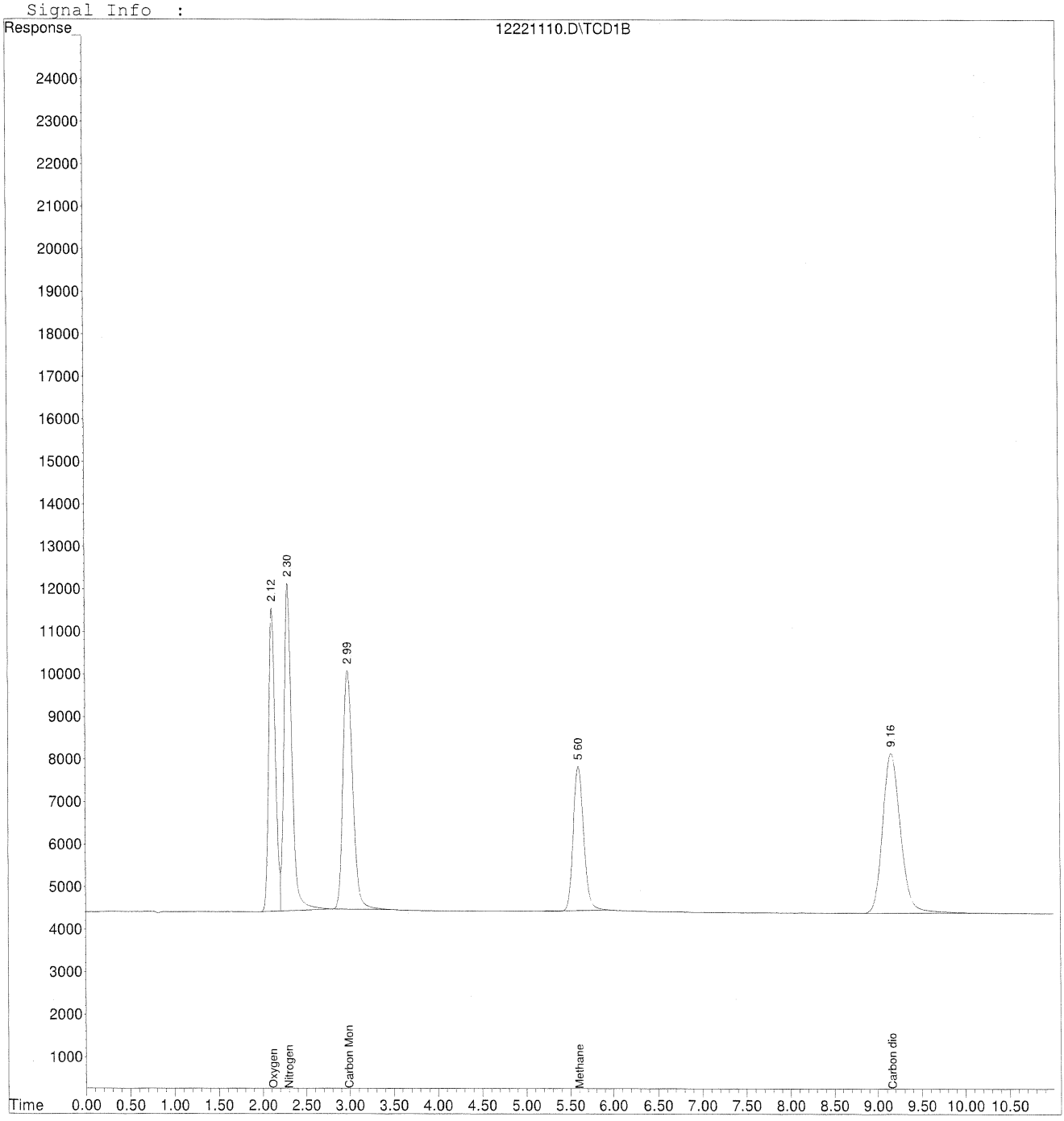
Volume Inj. :
Signal Phase :
Signal Info :

	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 :