RTI Laboratories, Inc.

Date: *06-Dec.-11*

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: 1110757

CASE NARRATIVE

SAMPLE RECEIPT:
Samples were received at the RTI Laboratory, Livonia, MI via commercial delivery on 10/24/2011. Samples were received in good condition. The sample set consisted of 35 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.

Analytical Sequence ID 43931:

- Sample ID 1110757-016ADUP exhibited RPD results outside acceptance limits for Benzene (28.3%).

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.

RTI Laboratories, Inc.

Date: *06-Dec.-11*

CLIENT: Shaw Environmental & Infrastructure, Inc.
Project: Kirtland AFB
CO#: 501
Tracking #: 140705-036A
Project No.: 140705
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Task Order: 02
Work Order: 1110757

CASE NARRATIVE

Fixed Gases (Noncondensable Gases/Light Hydrocarbons) Analyses:

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

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

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

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

Signed: _____ Date: 12/12/2011
Charles O'Bryan, Director, Quality Management

RTI Laboratories - Definitions and Acronyms

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Definitions:

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

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

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

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

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

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

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

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

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

PL: Permit limit; only applicable to wastewater reports.

Qual: Qualifier that applies to the analyte reported

Result: Analyte concentration reported

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

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

Qualifiers:

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

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

57

Reference Document No: 140705-SV055

Page 1 of 4

1110757

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

Samples Shipment Date: 18 OCT 2011
Lab Destination: RTI Laboratories
Lab Contact: Mike Truchan
Project Contact: Pamela Moss
Carrier/Waybill No.: UPS/2323121172

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

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

Special Instructions:

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

1. Relinquished By (Signature/Affiliation): Tom Nagler — Date: 10/18/11 Time: 1600
2. Relinquished By (Signature/Affiliation): — Date: Time:
3. Relinquished By (Signature/Affiliation): — Date: Time:

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

1. Received By (Signature/Affiliation): [illegible] / RTI Laboratories — Date: 10-24-11 Time: 10:17
2. Received By (Signature/Affiliation): — Date: Time:
3. Received By (Signature/Affiliation): — Date: Time:

Comments:

Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	Sample Vol	Units Fil	CID	Condition On Receipt
[illegible]	[illegible]	11 OCT 2011	11 46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504		N		
[illegible]	[illegible]	11 OCT 2011	12 27	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15		N		
[illegible]	[illegible]	[illegible]	15 41	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15		N		
[illegible]	[illegible]	[illegible]	15 41	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504		N		
[illegible]	[illegible]	[illegible]	15 41	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15		N		
[illegible]	[illegible]	[illegible]	15 41	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504		N		
[illegible]	[illegible]	[illegible]	9 28	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by		N		

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1110766 MF
57

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV055

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Filt	CID	Condition On Receipt
VA0702	SVMW-04-295-GS-VA0702-REG	10-OCT-2011	9:28	1 L Tedlar Bag	1	None Required	MA DEP VOCs / TPH by TO-15					
							Fixed Gases by ASTM D2504			N		
VA0703	SVMW-04-295-GS-VA0703-REG	10-OCT-2011	10:04	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by			N		
							MA DEP VOCs / TPH by TO-15					
VA0705	SVMW-04-295-GS-VA0705-REG	10-OCT-2011	10:04	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
							Air Phase Petroleum Hydrocarbons by			N		
VA0721	SVMW-05-295-GS-VA0721-REG	10-OCT-2011	10:57	1 L BOTTLEVAC	1	None Required	MA DEP VOCs / TPH by TO-15					
							Fixed Gases by ASTM D2504			N		
VA0724	SVMW-05-295-GS-VA0724-REG	10-OCT-2011	10:57	1 L Tedlar Bag	1	None Required	Air Phase Petroleum Hydrocarbons by			N		
							MA DEP VOCs / TPH by TO-15					
VA0722	SVMW-06-295-GS-VA0722-REG	10-OCT-2011	11:29	1 L BOTTLEVAC	1	None Required	Fixed Gases by ASTM D2504			N		
							Air Phase Petroleum Hydrocarbons by			N		
VA0723	SVMW-06-295-GS-VA0723-REG	10-OCT-2011	11:29	1 L Tedlar Bag	1	None Required	MA DEP VOCs / TPH by TO-15					
							Fixed Gases by ASTM D2504			N		
VA0725	SVMW-09-295-GS-VA0725-REG	10-OCT-2011	12:21	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by			N		
							MA DEP VOCs / TPH by TO-15					
VA0726	SVMW-09-295-GS-VA0726-REG	10-OCT-2011	12:21	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
							Air Phase Petroleum Hydrocarbons by			N		
VA0724	SVMW-09-295-GS-VA0724-REG	10-OCT-2011	12:51	1 L BOTTLEVAC	1	None Required	MA DEP VOCs / TPH by TO-15					
							Fixed Gases by ASTM D2504			N		
VA0727	SVMW-09-295-GS-VA0727-REG	10-OCT-2011	12:51	1 L Tedlar Bag	1	None Required	Air Phase Petroleum Hydrocarbons by			N		
							MA DEP VOCs / TPH by TO-15					
VA0811	KAFB-100117-GS-GS-VA0811-REG	11-OCT-2011	14:55	1 L BOTTLEVAC	1	None Required	Fixed Gases by ASTM D2504			N		
							Air Phase Petroleum Hydrocarbons by			N		
VA0812	KAFB-100117-GS-GS-VA0812-REG	11-OCT-2011	14:55	1 L Tedlar Bag	1	None Required	MA DEP VOCs / TPH by TO-15					
							Fixed Gases by ASTM D2504			N		
VA0813	KAFB-100117-GS-GS-VA0813-REG	11-OCT-2011	15:23	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by			N		
							MA DEP VOCs / TPH by TO-15					
VA0814	KAFB-100117-GS-GS-VA0814-REG	11-OCT-2011	15:23	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
							Air Phase Petroleum Hydrocarbons by			N		
VA0811	KAFB-100117-GS-GS-VA0811-REG	11-OCT-2011	16:01	1 L BOTTLEVAC	1	None Required	MA DEP VOCs / TPH by TO-15					
							Fixed Gases by ASTM D2504			N		
VA0815	KAFB-100117-GS-GS-VA0815-REG	11-OCT-2011	16:01	1 L Tedlar Bag	1	None Required	Air Phase Petroleum Hydrocarbons by			N		
							MA DEP VOCs / TPH by TO-15					
VA0911	KAFB-100117-GS-GS-VA0911-REG	12-OCT-2011	8:55	1 L BOTTLEVAC	1	None Required	Fixed Gases by ASTM D2504			N		
							Air Phase Petroleum Hydrocarbons by			N		
VA0914	KAFB-100117-GS-GS-VA0914-REG	12-OCT-2011	8:55	1 L Tedlar Bag	1	None Required	MA DEP VOCs / TPH by TO-15					
							Fixed Gases by ASTM D2504			N		
VA0912	KAFB-100117-GS-GS-VA0912-REG	12-OCT-2011	9:45	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by			N		
							MA DEP VOCs / TPH by TO-15					
VA0913	KAFB-100117-GS-GS-VA0913-REG	12-OCT-2011	9:45	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
							Fixed Gases by ASTM D2504			N		
VA0916	KAFB-100117-GS-GS-VA0916-REG	12-OCT-2011	10:48	1 L Tedlar Bag	1	None Required	Air Phase Petroleum Hydrocarbons by			N		
							MA DEP VOCs / TPH by TO-15					
VA0917	KAFB-100117-GS-GS-VA0917-REG	12-OCT-2011	10:48	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by			N		
							MA DEP VOCs / TPH by TO-15					
VA0951	KAFB-100117-GS-GS-VA0951-REG	12-OCT-2011	15:15	1 L BOTTLEVAC	1	None Required	Fixed Gases by ASTM D2504			N		
VA0952	KAFB-100117-GS-GS-VA0952-REG	12-OCT-2011	15:15	1 L Tedlar Bag	1	None Required						

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57

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV055

Sample No	Sample Name	Sample Date	Sample Time	Container	Preservative	Requested Testing Program	Sample Vol	Units	Filt	CID	Condition On Receipt
VA0915	KAFB-106120-250-GS-VA0915-REG	10-OCT-2011	15:50	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA0916	KAFB-106120-250-GS-VA0916-REG	10-OCT-2011	15:50	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA0917	KAFB-106120-250-GS-VA0917-REG	10-OCT-2011	16:21	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA0918	KAFB-106120-250-GS-VA0918-REG	10-OCT-2011	16:21	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA0919	KAFB-106120-250-GS-VA0919-REG	11-OCT-2011	9:42	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA0920	KAFB-106120-250-GS-VA0920-REG	11-OCT-2011	9:42	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA0921	KAFB-106120-250-GS-VA0921-REG	11-OCT-2011	10:25	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA0922	KAFB-106120-250-GS-VA0922-REG	11-OCT-2011	10:25	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA0923	KAFB-106120-250-GS-VA0923-REG	11-OCT-2011	11:05	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA0924	KAFB-106120-250-GS-VA0924-REG	11-OCT-2011	11:05	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA0925	KAFB-106120-250-GS-VA0925-REG	11-OCT-2011	11:50	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA0926	KAFB-106120-250-GS-VA0926-REG	11-OCT-2011	11:50	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA0927	KAFB-106121-250-GS-VA0927-REG	06-OCT-2011	12:28	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA0928	KAFB-106121-250-GS-VA0928-REG	06-OCT-2011	12:28	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA0929	KAFB-106121-250-GS-VA0929-REG	06-OCT-2011	13:12	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA0930	KAFB-106121-250-GS-VA0930-REG	06-OCT-2011	13:12	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA0931	KAFB-106121-250-GS-VA0931-REG	06-OCT-2011	13:52	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA0932	KAFB-106121-250-GS-VA0932-REG	06-OCT-2011	13:52	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA0916	KAFB-106120-250-GS-VA0916-REG	11-OCT-2011	9:45	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA0917	KAFB-106120-250-GS-VA0917-REG	11-OCT-2011	9:45	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA0918	KAFB-106120-250-GS-VA0918-REG	11-OCT-2011	10:25	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA0919	KAFB-106120-250-GS-VA0919-REG	11-OCT-2011	10:25	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA0920	KAFB-106120-250-GS-VA0920-REG	11-OCT-2011	11:07	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA0921	KAFB-106120-250-GS-VA0921-REG	11-OCT-2011	11:07	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA0922	KAFB-106120-250-GS-VA0922-REG	11-OCT-2011	14:00	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA0923	KAFB-106120-250-GS-VA0923-REG	11-OCT-2011	14:00	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		
VA0924	KAFB-106120-250-GS-VA0924-REG	11-OCT-2011	14:44	1 L BOTTLEVAC	1 None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
VA0925	KAFB-106120-250-GS-VA0925-REG	11-OCT-2011	14:44	1 L Tedlar Bag	1 None Required	Fixed Gases by ASTM D2504			N		

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Shaw E & I, Inc.

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57

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV055

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
[illegible]	[illegible]	[illegible]	14:44	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
[illegible]	[illegible]	[illegible]	14:44	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
[illegible]	[illegible]	[illegible]	15:47	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15			N		
[illegible]	[illegible]	[illegible]	15:47	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
[illegible]	[illegible]	[illegible]	8:00	40 mL VOA VIAL AF	2	HCl pH 2 AF	~~VOCs by SW846 8260B~~ AF			N		

1 L Bottlevac None AF 10-25-11

Sample	Bottle	Regulator
VAO 702	0624	SGS 124
923	547	SGS 40
919	0639	SGS 78
834	VAC 7	SGS 23
922	0585	SGS 8
918	VAC 102	SGS 100
578-R	VAC 9	SGS 7
917	VAC 119	SGS 81
836	0634	SGS 12
921	552	3 —
920	548	SGS 19
831	18	SGS 117
701	0636	SGS 102

Containers
255-3900

CUSTODY SEAL
DATE 10/18/14
SIGNATURE

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

T - 10
UPST 943384

Door: 1249
MI 48150
MI 482 9-02

UPS GROUND

1Z1033E03422655O0

6059 N

RTI LABORATORIES
31528 GLENDALE ST
LIVONIA MI 48150

P: RED2 S: MNITE L: 3
SRTH-3280
1Z1033E23422655O0

CU
DAT
SIG

	Bottle	Regulator
VA8565	VAC 22	SGS 121
↓ 700	0697	SGS 96
729	VAC 16	SGS 93
855	0627	SGS 73
856	0630	SGS 33
832	0638	SGS 11
854	0672	SGS 43
853	VAC32	SGS 39
703	0836	SGS 115
862	0633	SGS 17
861	VAC 98	SGS 54
VA8055-TB	0724	—
0852	VAC 105	SGS 59
723	0596	SGS 89
833	0626	SGS 50
837	0632	SGS 6
722	VAC 17	SGS 9
835	0625	—
851	0597	SGS 48
721	VAC 10	SGS 5
860	0785	SGS 66

CU[illegible] SEAL

DATE 10/15/11

SIGNATURE [illegible]

Quality Environmental Cons[illegible]
800-255-3950 · 304-2[illegible]

T - 10 Door: 1249
MI 48150
UPST 943384 MI 482 9-02

UPS GROUND

1Z10335E0342166493

6059 N

[illegible] LABORATORIES
31628 GLENDALE ST
LIVONIA MI 48150

P: RED2 S: MNITE 1:3

SRTH-3280

1Z10335E0342166493

[illegible]

RTI LABORATORIES
31628 GLENDALE ST
LIVONIA MI 48150

P: RED2 S: MNITE I: 3
SRTH-3280
1Z10335E0341926088

CUSTODY SEAL
DATE 10/8/11
SIGNATURE

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

Tedlar Bags

Cooler : TEST AMERICA

RTI LABORATORIES, INC.

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

Sample Receipt Checklist

Client Name: **SHA04**

Date and Time Received: **10/24/2011 10:17:00 AM**

Work Order Number **1110757** RcptNo: **1**

Received by: **Armando Flores**

Completed by:

Reviewed by:

Completed Date: 10/26/2011 9:30:18 AM

Reviewed Date:

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

Case Number: SDG: SAS:

Adjusted? _____ Checked by

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

SampID	ContainerID	Type	Org pH	Adj pH	Req Min pH	Req Max pH
1110757-001A	Container-1 of 1	Bottle				
1110757-002A	Container-1 of 1	Bottle				
1110757-003A	Container-1 of 1	Bottle				
1110757-003B	Container-1 of 1	Bottle				
1110757-004A	Container-1 of 1	Bottle				
1110757-004B	Container-1 of 1	Bottle				
1110757-005A	Container-1 of 1	Bottle				
1110757-005B	Container-1 of 1	Bottle				
1110757-006A	Container-1 of 1	Bottle				
1110757-006B	Container-1 of 1	Bottle				
1110757-007A	Container-1 of 1	Bottle				
1110757-007B	Container-1 of 1	Bottle				
1110757-008A	Container-1 of 1	Bottle				
1110757-008B	Container-1 of 1	Bottle				
1110757-009A	Container-1 of 1	Bottle				
1110757-009B	Container-1 of 1	Bottle				
1110757-010A	Container-1 of 1	Bottle				
1110757-010B	Container-1 of 1	Bottle				
1110757-011A	Container-1 of 1	Bottle				
1110757-011B	Container-1 of 1	Bottle				
1110757-012A	Container-1 of 1	Bottle				
1110757-012B	Container-1 of 1	Bottle				
1110757-013A	Container-1 of 1	Bottle				
1110757-013B	Container-1 of 1	Bottle				
1110757-014A	Container-1 of 1	Bottle				
1110757-014B	Container-1 of 1	Bottle				
1110757-015A	Container-1 of 1	Bottle				
1110757-015B	Container-1 of 1	Bottle				
1110757-016A	Container-1 of 1	Bottle				
1110757-016B	Container-1 of 1	Bottle				
1110757-017A	Container-1 of 1	Bottle				
1110757-017B	Container-1 of 1	Bottle				
1110757-018A	Container-1 of 1	Bottle				
1110757-018B	Container-1 of 1	Bottle				

SampID	ContainerID	Type	Org pH	Adj pH	Req Min pH	Req Max pH
1110757-019A	Container-1 of 1	Bottle				
1110757-019B	Container-1 of 1	Bottle				
1110757-020A	Container-1 of 1	Bottle				
1110757-020B	Container-1 of 1	Bottle				
1110757-021A	Container-1 of 1	Bottle				
1110757-021B	Container-1 of 1	Bottle				
1110757-022A	Container-1 of 1	Bottle				
1110757-022B	Container-1 of 1	Bottle				
1110757-023A	Container-1 of 1	Bottle				
1110757-023B	Container-1 of 1	Bottle				
1110757-024A	Container-1 of 1	Bottle				
1110757-024B	Container-1 of 1	Bottle				
1110757-025A	Container-1 of 1	Bottle				
1110757-025B	Container-1 of 1	Bottle				
1110757-026A	Container-1 of 1	Bottle				
1110757-026B	Container-1 of 1	Bottle				
1110757-027A	Container-1 of 1	Bottle				
1110757-027B	Container-1 of 1	Bottle				
1110757-028A	Container-1 of 1	Bottle				
1110757-028B	Container-1 of 1	Bottle				
1110757-029A	Container-1 of 1	Bottle				
1110757-029B	Container-1 of 1	Bottle				
1110757-030A	Container-1 of 1	Bottle				
1110757-030B	Container-1 of 1	Bottle				
1110757-031A	Container-1 of 1	Bottle				
1110757-031B	Container-1 of 1	Bottle				
1110757-032A	Container-1 of 1	Bottle				
1110757-032B	Container-1 of 1	Bottle				
1110757-033A	Container-01 of 01	Bottle				
1110757-033B	Container-01 of 01	Bottle				
1110757-034A	Container-01 of 01	Bottle				
1110757-034B	Container-01 of 01	Bottle				
1110757-035A	Container-01 of 01	Bottle				

Cooler Information

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

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
Cardboard B	n/a	Good	Yes		10/18/2011	See COC
Cardboard B	n/a	Good	Yes		10/18/2011	See COC
TEST AMER	n/a	Good	Yes		10/18/2011	See COC

Adjusted? _____ Checked by _____

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

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

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

Client Instructions:

Date Contacted: Contacted By:

Regarding:

CorrectiveAction:

Comments:
UPS Tracking Nos.
1Z10335E0342166493,
1Z10335E0341906088,
1Z10335E0342265500

RTI Laboratories - Workorder Sample Summary

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1110757-001	VA0544R		10/11/2011 11:46 AM	10/24/2011 10:17 AM	Air
1110757-002	VA0578-R		10/11/2011 12:27 PM	10/24/2011 10:17 AM	Air
1110757-003	VA0700-FQ		10/6/2011 3:41 PM	10/24/2011 10:17 AM	Air
1110757-003	VA0700-FQ		10/6/2011 3:41 PM	10/24/2011 10:17 AM	Air
1110757-004	VA0701-FQ		10/6/2011 3:41 PM	10/24/2011 10:17 AM	Air
1110757-004	VA0701-FQ		10/6/2011 3:41 PM	10/24/2011 10:17 AM	Air
1110757-005	VA0702		10/10/2011 9:28 AM	10/24/2011 10:17 AM	Air
1110757-005	VA0702		10/10/2011 9:28 AM	10/24/2011 10:17 AM	Air
1110757-006	VA0703		10/10/2011 10:04 AM	10/24/2011 10:17 AM	Air
1110757-006	VA0703		10/10/2011 10:04 AM	10/24/2011 10:17 AM	Air
1110757-007	VA0721		10/10/2011 10:57 AM	10/24/2011 10:17 AM	Air
1110757-007	VA0721		10/10/2011 10:57 AM	10/24/2011 10:17 AM	Air
1110757-008	VA0722		10/10/2011 11:29 AM	10/24/2011 10:17 AM	Air
1110757-008	VA0722		10/10/2011 11:29 AM	10/24/2011 10:17 AM	Air
1110757-009	VA0723		10/10/2011 12:21 PM	10/24/2011 10:17 AM	Air
1110757-009	VA0723		10/10/2011 12:21 PM	10/24/2011 10:17 AM	Air
1110757-010	VA0724		10/10/2011 12:51 PM	10/24/2011 10:17 AM	Air
1110757-010	VA0724		10/10/2011 12:51 PM	10/24/2011 10:17 AM	Air
1110757-011	VA0831		10/11/2011 2:55 PM	10/24/2011 10:17 AM	Air
1110757-011	VA0831		10/11/2011 2:55 PM	10/24/2011 10:17 AM	Air
1110757-012	VA0832		10/11/2011 3:23 PM	10/24/2011 10:17 AM	Air
1110757-012	VA0832		10/11/2011 3:23 PM	10/24/2011 10:17 AM	Air
1110757-013	VA0833		10/11/2011 4:01 PM	10/24/2011 10:17 AM	Air
1110757-013	VA0833		10/11/2011 4:01 PM	10/24/2011 10:17 AM	Air
1110757-014	VA0834		10/12/2011 8:55 AM	10/24/2011 10:17 AM	Air
1110757-014	VA0834		10/12/2011 8:55 AM	10/24/2011 10:17 AM	Air
1110757-015	VA0835		10/12/2011 9:45 AM	10/24/2011 10:17 AM	Air
1110757-015	VA0835		10/12/2011 9:45 AM	10/24/2011 10:17 AM	Air
1110757-016	VA0836		10/12/2011 9:45 AM	10/24/2011 10:17 AM	Air
1110757-016	VA0836		10/12/2011 9:45 AM	10/24/2011 10:17 AM	Air
1110757-017	VA0837		10/12/2011 10:48 AM	10/24/2011 10:17 AM	Air
1110757-017	VA0837		10/12/2011 10:48 AM	10/24/2011 10:17 AM	Air
1110757-018	VA0851		10/10/2011 3:15 PM	10/24/2011 10:17 AM	Air
1110757-018	VA0851		10/10/2011 3:15 PM	10/24/2011 10:17 AM	Air
1110757-019	VA0852		10/10/2011 3:50 PM	10/24/2011 10:17 AM	Air
1110757-019	VA0852		10/10/2011 3:50 PM	10/24/2011 10:17 AM	Air
1110757-020	VA0853		10/10/2011 4:21 PM	10/24/2011 10:17 AM	Air
1110757-020	VA0853		10/10/2011 4:21 PM	10/24/2011 10:17 AM	Air
1110757-021	VA0854		10/11/2011 9:42 AM	10/24/2011 10:17 AM	Air
1110757-021	VA0854		10/11/2011 9:42 AM	10/24/2011 10:17 AM	Air
1110757-022	VA0855		10/11/2011 10:25 AM	10/24/2011 10:17 AM	Air
1110757-022	VA0855		10/11/2011 10:25 AM	10/24/2011 10:17 AM	Air
1110757-023	VA0856		10/11/2011 11:05 AM	10/24/2011 10:17 AM	Air
1110757-023	VA0856		10/11/2011 11:05 AM	10/24/2011 10:17 AM	Air
1110757-024	VA0860		10/6/2011 11:50 AM	10/24/2011 10:17 AM	Air

RTI Laboratories - Workorder Sample Summary

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1110757-024	VA0860		10/6/2011 11:50 AM	10/24/2011 10:17 AM	Air
1110757-025	VA0861		10/6/2011 12:28 PM	10/24/2011 10:17 AM	Air
1110757-025	VA0861		10/6/2011 12:28 PM	10/24/2011 10:17 AM	Air
1110757-026	VA0862		10/6/2011 1:12 PM	10/24/2011 10:17 AM	Air
1110757-026	VA0862		10/6/2011 1:12 PM	10/24/2011 10:17 AM	Air
1110757-027	VA0863		10/6/2011 1:52 PM	10/24/2011 10:17 AM	Air
1110757-027	VA0863		10/6/2011 1:52 PM	10/24/2011 10:17 AM	Air
1110757-028	VA0917		10/13/2011 9:45 AM	10/24/2011 10:17 AM	Air
1110757-028	VA0917		10/13/2011 9:45 AM	10/24/2011 10:17 AM	Air
1110757-029	VA0918		10/13/2011 10:25 AM	10/24/2011 10:17 AM	Air
1110757-029	VA0918		10/13/2011 10:25 AM	10/24/2011 10:17 AM	Air
1110757-030	VA0919		10/13/2011 11:07 AM	10/24/2011 10:17 AM	Air
1110757-030	VA0919		10/13/2011 11:07 AM	10/24/2011 10:17 AM	Air
1110757-031	VA0920		10/13/2011 2:00 PM	10/24/2011 10:17 AM	Air
1110757-031	VA0920		10/13/2011 2:00 PM	10/24/2011 10:17 AM	Air
1110757-032	VA0921		10/13/2011 2:44 PM	10/24/2011 10:17 AM	Air
1110757-032	VA0921		10/13/2011 2:44 PM	10/24/2011 10:17 AM	Air
1110757-033	VA0922		10/13/2011 2:44 PM	10/24/2011 10:17 AM	Air
1110757-033	VA0922		10/13/2011 2:44 PM	10/24/2011 10:17 AM	Air
1110757-034	VA0923		10/13/2011 3:47 PM	10/24/2011 10:17 AM	Air
1110757-034	VA0923		10/13/2011 3:47 PM	10/24/2011 10:17 AM	Air
1110757-035	VA8055-TB		10/6/2011 8:00 AM	10/24/2011 10:17 AM	Air

RTI Laboratories - DATES REPORT

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1110757-001A	VA0544R	10/11/2011 11:46 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/9/2011 4:28 PM
1110757-002A	VA0578-R	10/11/2011 12:27 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			10/25/2011 8:16 PM
				EPA_TO15-Volatile Organic Compounds			11/2/2011 5:14 AM
1110757-003A	VA0700-FQ	10/6/2011 3:41 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			10/25/2011 8:58 PM
				EPA_TO15-Volatile Organic Compounds			11/1/2011 4:51 AM
1110757-003B	VA0700-FQ	10/6/2011 3:41 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/3/2011 2:28 PM
1110757-004A	VA0701-FQ	10/6/2011 3:41 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			11/3/2011 1:00 PM
				EPA_TO15-Volatile Organic Compounds			11/1/2011 6:13 AM
1110757-004B	VA0701-FQ	10/6/2011 3:41 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/3/2011 3:02 PM
1110757-005A	VA0702	10/10/2011 9:28 AM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			10/26/2011 3:22 AM
				EPA_TO15-Volatile Organic Compounds			11/1/2011 6:56 AM
1110757-005B	VA0702	10/10/2011 9:28 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/8/2011 2:35 PM
1110757-006A	VA0703	10/10/2011 10:04 AM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			10/26/2011 7:18 AM
				EPA_TO15-Volatile Organic Compounds			11/1/2011 7:40 AM
1110757-006B	VA0703	10/10/2011 10:04 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/8/2011 2:56 PM
1110757-007A	VA0721	10/10/2011 10:57 AM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			10/25/2011 11:47 PM
				EPA_TO15-Volatile Organic Compounds			11/1/2011 8:21 AM

RTI Laboratories - DATES REPORT

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1110757-007B	VA0721	10/10/2011 10:57 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/8/2011 3:18 PM
1110757-008A	VA0722	10/10/2011 11:29 AM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			11/3/2011 1:42 PM
				EPA_TO15-Volatile Organic Compounds			11/1/2011 9:01 AM
				EPA_TO15-Volatile Organic Compounds			11/1/2011 2:35 PM
1110757-008B	VA0722	10/10/2011 11:29 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/8/2011 3:44 PM
1110757-009A	VA0723	10/10/2011 12:21 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			10/31/2011 8:47 PM
				EPA_TO15-Volatile Organic Compounds			11/1/2011 9:42 AM
1110757-009B	VA0723	10/10/2011 12:21 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/8/2011 4:18 PM
1110757-010A	VA0724	10/10/2011 12:51 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			10/26/2011 2:36 AM
				EPA_TO15-Volatile Organic Compounds			11/1/2011 10:23 AM
1110757-010B	VA0724	10/10/2011 12:51 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/8/2011 4:49 PM
1110757-011A	VA0831	10/11/2011 2:55 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			10/26/2011 10:12 AM
				EPA_TO15-Volatile Organic Compounds			11/2/2011 5:58 AM
1110757-011B	VA0831	10/11/2011 2:55 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/9/2011 4:52 PM
1110757-012A	VA0832	10/11/2011 3:23 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			10/26/2011 3:16 PM
				EPA_TO15-Volatile Organic Compounds			11/2/2011 6:39 AM
1110757-012B	VA0832	10/11/2011 3:23 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/9/2011 5:17 PM

RTI Laboratories - DATES REPORT

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1110757-013A	VA0833	10/11/2011 4:01 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/27/2011 1:58 AM
				EPA_TO15-Volatile Organic Compounds			11/2/2011 7:26 AM
1110757-013B	VA0833	10/11/2011 4:01 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/9/2011 5:51 PM
1110757-014A	VA0834	10/12/2011 8:55 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/26/2011 5:23 PM
				EPA_TO15-Volatile Organic Compounds			11/2/2011 8:06 AM
1110757-014B	VA0834	10/12/2011 8:55 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/9/2011 6:10 PM
1110757-015A	VA0835	10/12/2011 9:45 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/26/2011 6:05 PM
				EPA_TO15-Volatile Organic Compounds			11/2/2011 8:47 AM
1110757-015B	VA0835	10/12/2011 9:45 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/9/2011 6:33 PM
1110757-016A	VA0836	10/12/2011 9:45 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/26/2011 6:48 PM
				EPA_TO15-Volatile Organic Compounds			11/2/2011 9:27 AM
1110757-016B	VA0836	10/12/2011 9:45 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/9/2011 6:53 PM
1110757-017A	VA0837	10/12/2011 10:48 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/31/2011 9:30 PM
				EPA_TO15-Volatile Organic Compounds			11/2/2011 10:49 AM
				EPA_TO15-Volatile Organic Compounds			11/2/2011 4:36 PM
1110757-017B	VA0837	10/12/2011 10:48 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/9/2011 7:22 PM
1110757-018A	VA0851	10/10/2011 3:15 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/27/2011 3:25 AM
				EPA_TO15-Volatile Organic Compounds			11/1/2011 11:05 AM

RTI Laboratories - DATES REPORT

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1110757-018B	VA0851	10/10/2011 3:15 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/8/2011 5:26 PM
1110757-019A	VA0852	10/10/2011 3:50 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			10/27/2011 2:42 AM
				EPA_TO15-Volatile Organic Compounds			11/1/2011 11:47 AM
1110757-019B	VA0852	10/10/2011 3:50 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/8/2011 5:55 PM
1110757-020A	VA0853	10/10/2011 4:21 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			10/27/2011 4:09 AM
				EPA_TO15-Volatile Organic Compounds			11/1/2011 12:29 PM
1110757-020B	VA0853	10/10/2011 4:21 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/8/2011 6:36 PM
1110757-021A	VA0854	10/11/2011 9:42 AM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			10/31/2011 12:12 PM
				EPA_TO15-Volatile Organic Compounds			11/1/2011 1:13 PM
1110757-021B	VA0854	10/11/2011 9:42 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/8/2011 7:19 PM
1110757-022A	VA0855	10/11/2011 10:25 AM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			10/27/2011 7:41 AM
				EPA_TO15-Volatile Organic Compounds			11/1/2011 1:55 PM
1110757-022B	VA0855	10/11/2011 10:25 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/9/2011 7:47 PM
1110757-023A	VA0856	10/11/2011 11:05 AM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			10/26/2011 11:45 PM
				EPA_TO15-Volatile Organic Compounds			11/3/2011 10:34 PM
1110757-023B	VA0856	10/11/2011 11:05 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/9/2011 8:06 PM

RTI Laboratories - DATES REPORT

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1110757-024A	VA0860	10/6/2011 11:50 AM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			10/27/2011 8:30 AM
				EPA_TO15-Volatile Organic Compounds			11/1/2011 2:01 AM
1110757-024B	VA0860	10/6/2011 11:50 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/3/2011 3:44 PM
1110757-025A	VA0861	10/6/2011 12:28 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			10/27/2011 9:19 AM
				EPA_TO15-Volatile Organic Compounds			11/1/2011 2:48 AM
1110757-025B	VA0861	10/6/2011 12:28 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/3/2011 4:11 PM
1110757-026A	VA0862	10/6/2011 1:12 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			10/31/2011 10:12 PM
				EPA_TO15-Volatile Organic Compounds			11/1/2011 4:43 PM
1110757-026B	VA0862	10/6/2011 1:12 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/3/2011 4:36 PM
1110757-027A	VA0863	10/6/2011 1:52 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			10/31/2011 12:55 PM
				EPA_TO15-Volatile Organic Compounds			11/1/2011 4:11 AM
1110757-027B	VA0863	10/6/2011 1:52 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/3/2011 5:11 PM
1110757-028A	VA0917	10/13/2011 9:45 AM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			10/31/2011 1:39 PM
				EPA_TO15-Volatile Organic Compounds			11/2/2011 11:31 AM
1110757-028B	VA0917	10/13/2011 9:45 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/10/2011 3:39 PM
1110757-029A	VA0918	10/13/2011 10:25 AM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			10/31/2011 2:22 PM
				EPA_TO15-Volatile Organic Compounds			11/2/2011 12:13 PM

RTI Laboratories - DATES REPORT

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1110757-029B	VA0918	10/13/2011 10:25 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/10/2011 4:25 PM
1110757-030A	VA0919	10/13/2011 11:07 AM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			10/31/2011 3:11 PM
				EPA_TO15-Volatile Organic Compounds			11/2/2011 1:01 PM
1110757-030B	VA0919	10/13/2011 11:07 AM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/10/2011 4:45 PM
1110757-031A	VA0920	10/13/2011 2:00 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			11/4/2011 12:25 AM
				EPA_TO15-Volatile Organic Compounds			11/2/2011 1:53 PM
1110757-031B	VA0920	10/13/2011 2:00 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/10/2011 5:03 PM
1110757-032A	VA0921	10/13/2011 2:44 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			10/31/2011 4:35 PM
				EPA_TO15-Volatile Organic Compounds			11/2/2011 2:34 PM
1110757-032B	VA0921	10/13/2011 2:44 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/10/2011 5:23 PM
1110757-033A	VA0922	10/13/2011 2:44 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			10/31/2011 5:17 PM
				EPA_TO15-Volatile Organic Compounds			11/2/2011 3:15 PM
1110757-033B	VA0922	10/13/2011 2:44 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/10/2011 5:56 PM
1110757-034A	VA0923	10/13/2011 3:47 PM	Air	MA_APH-Air-Phase Petroleum Hydrocarbons			11/3/2011 3:11 PM
				EPA_TO15-Volatile Organic Compounds			11/2/2011 3:56 PM
				EPA_TO15-Volatile Organic Compounds			11/3/2011 11:15 PM
1110757-034B	VA0923	10/13/2011 3:47 PM	Air	ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			11/10/2011 6:31 PM

RTI Laboratories - DATES REPORT

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1110757-035A	VA8055-TB	10/6/2011 8:00 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			11/3/2011 12:17 PM
				EPA_TO15-Volatile Organic Compounds			11/1/2011 1:14 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/11/2011 11:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-001	**Matrix:**	Air
Client Sample ID:	VA0544R		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.65	0.10		%	1	11/9/2011 4:28 PM
Carbon Monoxide	ND	0.10		%	1	11/9/2011 4:28 PM
Methane	ND	0.50		%	1	11/9/2011 4:28 PM
Nitrogen	77	0.10		%	1	11/9/2011 4:28 PM
Oxygen	20	0.10		%	1	11/9/2011 4:28 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/11/2011 12:27:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-002	**Matrix:**	Air
Client Sample ID:	VA0578-R		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
1,1,2,2-Tetrachloroethane	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
1,1,2-Trichloroethane	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
1,1-Dichloroethane	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
1,1-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
1,2,4-Trichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
1,2,4-Trimethylbenzene	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
1,2-Dibromoethane	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
1,2-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
1,2-Dichloroethane	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
1,2-Dichloropropane	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
1,3,5-Trimethylbenzene	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
1,3-Butadiene	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
1,3-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
1,4-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
2-Butanone	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
2-Hexanone	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
4-Methyl-2-pentanone	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Acetone	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Benzene	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Benzyl chloride	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Bromodichloromethane	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Bromoform	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Bromomethane	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Carbon disulfide	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Carbon tetrachloride	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Chlorobenzene	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Chlorodibromomethane	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Chloroethane	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Chloroform	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Chloromethane	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
cis-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
cis-1,3-dichloropropene	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Cyclohexane	30,000	16,000		ppbv	8000	11/2/2011 5:14 AM
Dichlorodifluoromethane	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Ethyl acetate	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Ethylbenzene	ND	16,000		ppbv	8000	11/2/2011 5:14 AM
Heptane	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Hexachlorobutadiene	ND	16,000		ppbv	8000	11/2/2011 5:14 AM
m,p-Xylene	ND	16,000		ppbv	8000	11/2/2011 5:14 AM
Methylene chloride	21,000	40,000	J	ppbv	8000	11/2/2011 5:14 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/11/2011 12:27:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-002	**Matrix:**	Air
Client Sample ID:	VA0578-R		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
n-Hexane	34,000	16,000		ppbv	8000	11/2/2011 5:14 AM
Naphthalene	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
o-Xylene	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Propylene	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Styrene	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
tert-Butyl Methyl Ether	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Tetrachloroethene	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Tetrahydrofuran	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Toluene	9,000	8,000		ppbv	8000	11/2/2011 5:14 AM
trans-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
trans-1,3-dichloropropene	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Trichloroethene	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Trichlorofluoromethane	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Vinyl acetate	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Vinyl chloride	ND	8,000		ppbv	8000	11/2/2011 5:14 AM
Xylenes, Total	ND	24,000		ppbv	8000	11/2/2011 5:14 AM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	8000	11/2/2011 5:14 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	14,000,000	940,000		µg/m³	8000	10/25/2011 8:16 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000		µg/m³	8000	10/25/2011 8:16 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000		µg/m³	8000	10/25/2011 8:16 PM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	8000	10/25/2011 8:16 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/6/2011 3:41:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-003	**Matrix:**	Air
Client Sample ID:	VA0700-FQ		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	4.5	0.10		%	1	11/3/2011 2:28 PM
Carbon Monoxide	ND	0.10		%	1	11/3/2011 2:28 PM
Methane	ND	0.50		%	1	11/3/2011 2:28 PM
Nitrogen	82	0.10		%	1	11/3/2011 2:28 PM
Oxygen	13	0.10		%	1	11/3/2011 2:28 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
1,1,2,2-Tetrachloroethane	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
1,1,2-Trichloroethane	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
1,1-Dichloroethane	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
1,1-Dichloroethene	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
1,2,4-Trichlorobenzene	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
1,2,4-Trimethylbenzene	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
1,2-Dibromoethane	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
1,2-Dichlorobenzene	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
1,2-Dichloroethane	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
1,2-Dichloropropane	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
1,3,5-Trimethylbenzene	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
1,3-Butadiene	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
1,3-Dichlorobenzene	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
1,4-Dichlorobenzene	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
2-Butanone	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
2-Hexanone	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
4-Methyl-2-pentanone	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Acetone	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Benzene	14,000	8,000		ppbv	8000	11/1/2011 4:51 AM
Benzyl chloride	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Bromodichloromethane	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Bromoform	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Bromomethane	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Carbon disulfide	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Carbon tetrachloride	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Chlorobenzene	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Chlorodibromomethane	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Chloroethane	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Chloroform	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Chloromethane	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
cis-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
cis-1,3-dichloropropene	ND	8,000		ppbv	8000	11/1/2011 4:51 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/6/2011 3:41:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-003	**Matrix:**	Air
Client Sample ID:	VA0700-FQ		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	17,000	16,000		ppbv	8000	11/1/2011 4:51 AM
Dichlorodifluoromethane	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Ethyl acetate	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Ethylbenzene	ND	16,000		ppbv	8000	11/1/2011 4:51 AM
Heptane	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Hexachlorobutadiene	ND	16,000		ppbv	8000	11/1/2011 4:51 AM
m,p-Xylene	ND	16,000		ppbv	8000	11/1/2011 4:51 AM
Methylene chloride	ND	40,000		ppbv	8000	11/1/2011 4:51 AM
n-Hexane	11,000	16,000	J	ppbv	8000	11/1/2011 4:51 AM
Naphthalene	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
o-Xylene	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Propylene	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Styrene	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
tert-Butyl Methyl Ether	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Tetrachloroethene	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Tetrahydrofuran	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Toluene	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
trans-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
trans-1,3-dichloropropene	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Trichloroethene	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Trichlorofluoromethane	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Vinyl acetate	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Vinyl chloride	ND	8,000		ppbv	8000	11/1/2011 4:51 AM
Xylenes, Total	ND	24,000		ppbv	8000	11/1/2011 4:51 AM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	8000	11/1/2011 4:51 AM
Mass APH Air **Air-Phase Petroleum Hydrocarbons**	**Method:**					**Analyst: RH3**
C5-C8 Aliphatic Hydrocarbons	3,500,000	940,000		µg/m³	8000	10/25/2011 8:58 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000		µg/m³	8000	10/25/2011 8:58 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000		µg/m³	8000	10/25/2011 8:58 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	8000	10/25/2011 8:58 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/6/2011 3:41:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-004	**Matrix:**	Air
Client Sample ID:	VA0701-FQ		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	5.8	0.10		%	1	11/3/2011 3:02 PM
Carbon Monoxide	ND	0.10		%	1	11/3/2011 3:02 PM
Methane	ND	0.50		%	1	11/3/2011 3:02 PM
Nitrogen	84	0.10		%	1	11/3/2011 3:02 PM
Oxygen	9.8	0.10		%	1	11/3/2011 3:02 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
1,1,2,2-Tetrachloroethane	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
1,1,2-Trichloroethane	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
1,1-Dichloroethane	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
1,1-Dichloroethene	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
1,2,4-Trichlorobenzene	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
1,2,4-Trimethylbenzene	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
1,2-Dibromoethane	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
1,2-Dichlorobenzene	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
1,2-Dichloroethane	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
1,2-Dichloropropane	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
1,3,5-Trimethylbenzene	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
1,3-Butadiene	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
1,3-Dichlorobenzene	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
1,4-Dichlorobenzene	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
2-Butanone	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
2-Hexanone	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
4-Methyl-2-pentanone	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Acetone	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Benzene	290,000	20,000		ppbv	20000	11/1/2011 6:13 AM
Benzyl chloride	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Bromodichloromethane	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Bromoform	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Bromomethane	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Carbon disulfide	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Carbon tetrachloride	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Chlorobenzene	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Chlorodibromomethane	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Chloroethane	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Chloroform	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Chloromethane	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
cis-1,2-Dichloroethene	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
cis-1,3-dichloropropene	ND	20,000		ppbv	20000	11/1/2011 6:13 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/6/2011 3:41:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-004	**Matrix:**	Air
Client Sample ID:	VA0701-FQ		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,100,000	40,000		ppbv	20000	11/1/2011 6:13 AM
Dichlorodifluoromethane	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Ethyl acetate	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Ethylbenzene	ND	40,000		ppbv	20000	11/1/2011 6:13 AM
Heptane	500,000	20,000		ppbv	20000	11/1/2011 6:13 AM
Hexachlorobutadiene	ND	40,000		ppbv	20000	11/1/2011 6:13 AM
m,p-Xylene	38,000	40,000	J	ppbv	20000	11/1/2011 6:13 AM
Methylene chloride	ND	100,000		ppbv	20000	11/1/2011 6:13 AM
n-Hexane	1,300,000	40,000		ppbv	20000	11/1/2011 6:13 AM
Naphthalene	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
o-Xylene	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Propylene	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Styrene	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
tert-Butyl Methyl Ether	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Tetrachloroethene	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Tetrahydrofuran	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Toluene	300,000	20,000		ppbv	20000	11/1/2011 6:13 AM
trans-1,2-Dichloroethene	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
trans-1,3-dichloropropene	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Trichloroethene	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Trichlorofluoromethane	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Vinyl acetate	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Vinyl chloride	ND	20,000		ppbv	20000	11/1/2011 6:13 AM
Xylenes, Total	38,000	60,000	J	ppbv	20000	11/1/2011 6:13 AM
Surr: 4-Bromofluorobenzene	108	70-130		%REC	20000	11/1/2011 6:13 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	51,000,000	4,700,000		µg/m³	40000	11/3/2011 1:00 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300,000		µg/m³	40000	11/3/2011 1:00 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600,000		µg/m³	40000	11/3/2011 1:00 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	40000	11/3/2011 1:00 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/10/2011 9:28:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-005	**Matrix:**	Air
Client Sample ID:	VA0702		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.45	0.10		%	1	11/8/2011 2:35 PM
Carbon Monoxide	ND	0.10		%	1	11/8/2011 2:35 PM
Methane	ND	0.50		%	1	11/8/2011 2:35 PM
Nitrogen	78	0.10		%	1	11/8/2011 2:35 PM
Oxygen	21	0.10		%	1	11/8/2011 2:35 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800		ppbv	800	11/1/2011 6:56 AM
1,1,2,2-Tetrachloroethane	ND	800		ppbv	800	11/1/2011 6:56 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800		ppbv	800	11/1/2011 6:56 AM
1,1,2-Trichloroethane	ND	800		ppbv	800	11/1/2011 6:56 AM
1,1-Dichloroethane	ND	800		ppbv	800	11/1/2011 6:56 AM
1,1-Dichloroethene	ND	800		ppbv	800	11/1/2011 6:56 AM
1,2,4-Trichlorobenzene	ND	800		ppbv	800	11/1/2011 6:56 AM
1,2,4-Trimethylbenzene	ND	800		ppbv	800	11/1/2011 6:56 AM
1,2-Dibromoethane	ND	800		ppbv	800	11/1/2011 6:56 AM
1,2-Dichlorobenzene	ND	800		ppbv	800	11/1/2011 6:56 AM
1,2-Dichloroethane	ND	800		ppbv	800	11/1/2011 6:56 AM
1,2-Dichloropropane	ND	800		ppbv	800	11/1/2011 6:56 AM
1,3,5-Trimethylbenzene	ND	800		ppbv	800	11/1/2011 6:56 AM
1,3-Butadiene	ND	800		ppbv	800	11/1/2011 6:56 AM
1,3-Dichlorobenzene	ND	800		ppbv	800	11/1/2011 6:56 AM
1,4-Dichlorobenzene	ND	800		ppbv	800	11/1/2011 6:56 AM
2-Butanone	ND	800		ppbv	800	11/1/2011 6:56 AM
2-Hexanone	ND	800		ppbv	800	11/1/2011 6:56 AM
4-Methyl-2-pentanone	ND	800		ppbv	800	11/1/2011 6:56 AM
Acetone	ND	800		ppbv	800	11/1/2011 6:56 AM
Benzene	10,000	800		ppbv	800	11/1/2011 6:56 AM
Benzyl chloride	ND	800		ppbv	800	11/1/2011 6:56 AM
Bromodichloromethane	ND	800		ppbv	800	11/1/2011 6:56 AM
Bromoform	ND	800		ppbv	800	11/1/2011 6:56 AM
Bromomethane	ND	800		ppbv	800	11/1/2011 6:56 AM
Carbon disulfide	ND	800		ppbv	800	11/1/2011 6:56 AM
Carbon tetrachloride	ND	800		ppbv	800	11/1/2011 6:56 AM
Chlorobenzene	ND	800		ppbv	800	11/1/2011 6:56 AM
Chlorodibromomethane	ND	800		ppbv	800	11/1/2011 6:56 AM
Chloroethane	ND	800		ppbv	800	11/1/2011 6:56 AM
Chloroform	ND	800		ppbv	800	11/1/2011 6:56 AM
Chloromethane	ND	800		ppbv	800	11/1/2011 6:56 AM
cis-1,2-Dichloroethene	ND	800		ppbv	800	11/1/2011 6:56 AM
cis-1,3-dichloropropene	ND	800		ppbv	800	11/1/2011 6:56 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/10/2011 9:28:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-005	**Matrix:**	Air
Client Sample ID:	VA0702		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	20,000	1,600		ppbv	800	11/1/2011 6:56 AM
Dichlorodifluoromethane	ND	800		ppbv	800	11/1/2011 6:56 AM
Ethyl acetate	ND	800		ppbv	800	11/1/2011 6:56 AM
Ethylbenzene	ND	1,600		ppbv	800	11/1/2011 6:56 AM
Heptane	20,000	800		ppbv	800	11/1/2011 6:56 AM
Hexachlorobutadiene	ND	1,600		ppbv	800	11/1/2011 6:56 AM
m,p-Xylene	1,900	1,600		ppbv	800	11/1/2011 6:56 AM
Methylene chloride	2,800	4,000	J	ppbv	800	11/1/2011 6:56 AM
n-Hexane	11,000	1,600		ppbv	800	11/1/2011 6:56 AM
Naphthalene	ND	800		ppbv	800	11/1/2011 6:56 AM
o-Xylene	ND	800		ppbv	800	11/1/2011 6:56 AM
Propylene	ND	800		ppbv	800	11/1/2011 6:56 AM
Styrene	ND	800		ppbv	800	11/1/2011 6:56 AM
tert-Butyl Methyl Ether	ND	800		ppbv	800	11/1/2011 6:56 AM
Tetrachloroethene	ND	800		ppbv	800	11/1/2011 6:56 AM
Tetrahydrofuran	ND	800		ppbv	800	11/1/2011 6:56 AM
Toluene	8,700	800		ppbv	800	11/1/2011 6:56 AM
trans-1,2-Dichloroethene	ND	800		ppbv	800	11/1/2011 6:56 AM
trans-1,3-dichloropropene	ND	800		ppbv	800	11/1/2011 6:56 AM
Trichloroethene	ND	800		ppbv	800	11/1/2011 6:56 AM
Trichlorofluoromethane	ND	800		ppbv	800	11/1/2011 6:56 AM
Vinyl acetate	ND	800		ppbv	800	11/1/2011 6:56 AM
Vinyl chloride	ND	800		ppbv	800	11/1/2011 6:56 AM
Xylenes, Total	1,900	2,400	J	ppbv	800	11/1/2011 6:56 AM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	800	11/1/2011 6:56 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,300,000	94,000		µg/m³	800	10/26/2011 3:22 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000		µg/m³	800	10/26/2011 3:22 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000		µg/m³	800	10/26/2011 3:22 AM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	800	10/26/2011 3:22 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/10/2011 10:04:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-006	**Matrix:**	Air
Client Sample ID:	VA0703		

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	11/8/2011 2:56 PM
Carbon Monoxide	ND	0.10		%	1	11/8/2011 2:56 PM
Methane	ND	0.50		%	1	11/8/2011 2:56 PM
Nitrogen	78	0.10		%	1	11/8/2011 2:56 PM
Oxygen	21	0.10		%	1	11/8/2011 2:56 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800		ppbv	800	11/1/2011 7:40 AM
1,1,2,2-Tetrachloroethane	ND	800		ppbv	800	11/1/2011 7:40 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800		ppbv	800	11/1/2011 7:40 AM
1,1,2-Trichloroethane	ND	800		ppbv	800	11/1/2011 7:40 AM
1,1-Dichloroethane	ND	800		ppbv	800	11/1/2011 7:40 AM
1,1-Dichloroethene	ND	800		ppbv	800	11/1/2011 7:40 AM
1,2,4-Trichlorobenzene	ND	800		ppbv	800	11/1/2011 7:40 AM
1,2,4-Trimethylbenzene	ND	800		ppbv	800	11/1/2011 7:40 AM
1,2-Dibromoethane	ND	800		ppbv	800	11/1/2011 7:40 AM
1,2-Dichlorobenzene	ND	800		ppbv	800	11/1/2011 7:40 AM
1,2-Dichloroethane	ND	800		ppbv	800	11/1/2011 7:40 AM
1,2-Dichloropropane	ND	800		ppbv	800	11/1/2011 7:40 AM
1,3,5-Trimethylbenzene	ND	800		ppbv	800	11/1/2011 7:40 AM
1,3-Butadiene	ND	800		ppbv	800	11/1/2011 7:40 AM
1,3-Dichlorobenzene	ND	800		ppbv	800	11/1/2011 7:40 AM
1,4-Dichlorobenzene	ND	800		ppbv	800	11/1/2011 7:40 AM
2-Butanone	ND	800		ppbv	800	11/1/2011 7:40 AM
2-Hexanone	ND	800		ppbv	800	11/1/2011 7:40 AM
4-Methyl-2-pentanone	ND	800		ppbv	800	11/1/2011 7:40 AM
Acetone	ND	800		ppbv	800	11/1/2011 7:40 AM
Benzene	5,500	800		ppbv	800	11/1/2011 7:40 AM
Benzyl chloride	ND	800		ppbv	800	11/1/2011 7:40 AM
Bromodichloromethane	ND	800		ppbv	800	11/1/2011 7:40 AM
Bromoform	ND	800		ppbv	800	11/1/2011 7:40 AM
Bromomethane	ND	800		ppbv	800	11/1/2011 7:40 AM
Carbon disulfide	ND	800		ppbv	800	11/1/2011 7:40 AM
Carbon tetrachloride	ND	800		ppbv	800	11/1/2011 7:40 AM
Chlorobenzene	ND	800		ppbv	800	11/1/2011 7:40 AM
Chlorodibromomethane	ND	800		ppbv	800	11/1/2011 7:40 AM
Chloroethane	ND	800		ppbv	800	11/1/2011 7:40 AM
Chloroform	ND	800		ppbv	800	11/1/2011 7:40 AM
Chloromethane	ND	800		ppbv	800	11/1/2011 7:40 AM
cis-1,2-Dichloroethene	ND	800		ppbv	800	11/1/2011 7:40 AM
cis-1,3-dichloropropene	ND	800		ppbv	800	11/1/2011 7:40 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/10/2011 10:04:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-006	**Matrix:**	Air
Client Sample ID:	VA0703		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	5,800	1,600		ppbv	800	11/1/2011 7:40 AM
Dichlorodifluoromethane	ND	800		ppbv	800	11/1/2011 7:40 AM
Ethyl acetate	ND	800		ppbv	800	11/1/2011 7:40 AM
Ethylbenzene	ND	1,600		ppbv	800	11/1/2011 7:40 AM
Heptane	3,900	800		ppbv	800	11/1/2011 7:40 AM
Hexachlorobutadiene	ND	1,600		ppbv	800	11/1/2011 7:40 AM
m,p-Xylene	1,800	1,600		ppbv	800	11/1/2011 7:40 AM
Methylene chloride	2,400	4,000	J	ppbv	800	11/1/2011 7:40 AM
n-Hexane	3,500	1,600		ppbv	800	11/1/2011 7:40 AM
Naphthalene	ND	800		ppbv	800	11/1/2011 7:40 AM
o-Xylene	ND	800		ppbv	800	11/1/2011 7:40 AM
Propylene	ND	800		ppbv	800	11/1/2011 7:40 AM
Styrene	ND	800		ppbv	800	11/1/2011 7:40 AM
tert-Butyl Methyl Ether	ND	800		ppbv	800	11/1/2011 7:40 AM
Tetrachloroethene	ND	800		ppbv	800	11/1/2011 7:40 AM
Tetrahydrofuran	ND	800		ppbv	800	11/1/2011 7:40 AM
Toluene	5,900	800		ppbv	800	11/1/2011 7:40 AM
trans-1,2-Dichloroethene	ND	800		ppbv	800	11/1/2011 7:40 AM
trans-1,3-dichloropropene	ND	800		ppbv	800	11/1/2011 7:40 AM
Trichloroethene	ND	800		ppbv	800	11/1/2011 7:40 AM
Trichlorofluoromethane	ND	800		ppbv	800	11/1/2011 7:40 AM
Vinyl acetate	ND	800		ppbv	800	11/1/2011 7:40 AM
Vinyl chloride	ND	800		ppbv	800	11/1/2011 7:40 AM
Xylenes, Total	1,800	2,400	J	ppbv	800	11/1/2011 7:40 AM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	800	11/1/2011 7:40 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	730,000	94,000		µg/m³	800	10/26/2011 7:18 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000		µg/m³	800	10/26/2011 7:18 AM
C9-C12 Aliphatic Hydrocarbons	77,000	150,000	J	µg/m³	800	10/26/2011 7:18 AM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	800	10/26/2011 7:18 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/10/2011 10:57:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-007	**Matrix:**	Air
Client Sample ID:	VA0721		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	5.1	0.10		%	1	11/8/2011 3:18 PM
Carbon Monoxide	ND	0.10		%	1	11/8/2011 3:18 PM
Methane	ND	0.50		%	1	11/8/2011 3:18 PM
Nitrogen	82	0.10		%	1	11/8/2011 3:18 PM
Oxygen	12	0.10		%	1	11/8/2011 3:18 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
1,1,2,2-Tetrachloroethane	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
1,1,2-Trichloroethane	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
1,1-Dichloroethane	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
1,1-Dichloroethene	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
1,2,4-Trichlorobenzene	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
1,2,4-Trimethylbenzene	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
1,2-Dibromoethane	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
1,2-Dichlorobenzene	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
1,2-Dichloroethane	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
1,2-Dichloropropane	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
1,3,5-Trimethylbenzene	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
1,3-Butadiene	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
1,3-Dichlorobenzene	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
1,4-Dichlorobenzene	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
2-Butanone	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
2-Hexanone	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
4-Methyl-2-pentanone	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Acetone	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Benzene	44,000	8,000		ppbv	8000	11/1/2011 8:21 AM
Benzyl chloride	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Bromodichloromethane	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Bromoform	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Bromomethane	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Carbon disulfide	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Carbon tetrachloride	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Chlorobenzene	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Chlorodibromomethane	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Chloroethane	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Chloroform	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Chloromethane	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
cis-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
cis-1,3-dichloropropene	ND	8,000		ppbv	8000	11/1/2011 8:21 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/10/2011 10:57:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-007	**Matrix:**	Air
Client Sample ID:	VA0721		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	78,000	16,000		ppbv	8000	11/1/2011 8:21 AM
Dichlorodifluoromethane	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Ethyl acetate	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Ethylbenzene	ND	16,000		ppbv	8000	11/1/2011 8:21 AM
Heptane	22,000	8,000		ppbv	8000	11/1/2011 8:21 AM
Hexachlorobutadiene	ND	16,000		ppbv	8000	11/1/2011 8:21 AM
m,p-Xylene	ND	16,000		ppbv	8000	11/1/2011 8:21 AM
Methylene chloride	ND	40,000		ppbv	8000	11/1/2011 8:21 AM
n-Hexane	37,000	16,000		ppbv	8000	11/1/2011 8:21 AM
Naphthalene	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
o-Xylene	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Propylene	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Styrene	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
tert-Butyl Methyl Ether	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Tetrachloroethene	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Tetrahydrofuran	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Toluene	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
trans-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
trans-1,3-dichloropropene	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Trichloroethene	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Trichlorofluoromethane	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Vinyl acetate	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Vinyl chloride	ND	8,000		ppbv	8000	11/1/2011 8:21 AM
Xylenes, Total	ND	24,000		ppbv	8000	11/1/2011 8:21 AM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	8000	11/1/2011 8:21 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	6,500,000	940,000		µg/m³	8000	10/25/2011 11:47 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000		µg/m³	8000	10/25/2011 11:47 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000		µg/m³	8000	10/25/2011 11:47 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	8000	10/25/2011 11:47 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/10/2011 11:29:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-008	**Matrix:**	Air
Client Sample ID:	VA0722		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	6.5	0.10		%	1	11/8/2011 3:44 PM
Carbon Monoxide	ND	0.10		%	1	11/8/2011 3:44 PM
Methane	ND	0.50		%	1	11/8/2011 3:44 PM
Nitrogen	85	0.10		%	1	11/8/2011 3:44 PM
Oxygen	7.1	0.10		%	1	11/8/2011 3:44 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
1,1,2,2-Tetrachloroethane	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
1,1,2-Trichloroethane	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
1,1-Dichloroethane	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
1,1-Dichloroethene	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
1,2,4-Trichlorobenzene	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
1,2,4-Trimethylbenzene	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
1,2-Dibromoethane	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
1,2-Dichlorobenzene	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
1,2-Dichloroethane	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
1,2-Dichloropropane	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
1,3,5-Trimethylbenzene	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
1,3-Butadiene	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
1,3-Dichlorobenzene	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
1,4-Dichlorobenzene	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
2-Butanone	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
2-Hexanone	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
4-Methyl-2-pentanone	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Acetone	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Benzene	500,000	20,000		ppbv	20000	11/1/2011 9:01 AM
Benzyl chloride	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Bromodichloromethane	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Bromoform	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Bromomethane	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Carbon disulfide	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Carbon tetrachloride	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Chlorobenzene	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Chlorodibromomethane	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Chloroethane	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Chloroform	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Chloromethane	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
cis-1,2-Dichloroethene	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
cis-1,3-dichloropropene	ND	20,000		ppbv	20000	11/1/2011 9:01 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/10/2011 11:29:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-008	**Matrix:**	Air
Client Sample ID:	VA0722		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,900,000	80,000		ppbv	40000	11/1/2011 2:35 PM
Dichlorodifluoromethane	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Ethyl acetate	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Ethylbenzene	ND	40,000		ppbv	20000	11/1/2011 9:01 AM
Heptane	610,000	20,000		ppbv	20000	11/1/2011 9:01 AM
Hexachlorobutadiene	ND	40,000		ppbv	20000	11/1/2011 9:01 AM
m,p-Xylene	39,000	40,000	J	ppbv	20000	11/1/2011 9:01 AM
Methylene chloride	ND	100,000		ppbv	20000	11/1/2011 9:01 AM
n-Hexane	1,700,000	80,000		ppbv	40000	11/1/2011 2:35 PM
Naphthalene	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
o-Xylene	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Propylene	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Styrene	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
tert-Butyl Methyl Ether	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Tetrachloroethene	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Tetrahydrofuran	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Toluene	550,000	20,000		ppbv	20000	11/1/2011 9:01 AM
trans-1,2-Dichloroethene	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
trans-1,3-dichloropropene	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Trichloroethene	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Trichlorofluoromethane	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Vinyl acetate	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Vinyl chloride	ND	20,000		ppbv	20000	11/1/2011 9:01 AM
Xylenes, Total	39,000	60,000	J	ppbv	20000	11/1/2011 9:01 AM
Surr: 4-Bromofluorobenzene	126	70-130		%REC	20000	11/1/2011 9:01 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	59,000,000	4,700,000		µg/m³	40000	11/3/2011 1:42 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300,000		µg/m³	40000	11/3/2011 1:42 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600,000		µg/m³	40000	11/3/2011 1:42 PM
Surr: 4-Bromofluorobenzene	99.6	70-130		%REC	40000	11/3/2011 1:42 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/10/2011 12:21:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-009	**Matrix:**	Air
Client Sample ID:	VA0723		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	1.5	0.10		%	1	11/8/2011 4:18 PM
Carbon Monoxide	ND	0.10		%	1	11/8/2011 4:18 PM
Methane	ND	0.50		%	1	11/8/2011 4:18 PM
Nitrogen	80	0.10		%	1	11/8/2011 4:18 PM
Oxygen	18	0.10		%	1	11/8/2011 4:18 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
1,1,2,2-Tetrachloroethane	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
1,1,2-Trichloroethane	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
1,1-Dichloroethane	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
1,1-Dichloroethene	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
1,2,4-Trichlorobenzene	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
1,2,4-Trimethylbenzene	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
1,2-Dibromoethane	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
1,2-Dichlorobenzene	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
1,2-Dichloroethane	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
1,2-Dichloropropane	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
1,3,5-Trimethylbenzene	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
1,3-Butadiene	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
1,3-Dichlorobenzene	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
1,4-Dichlorobenzene	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
2-Butanone	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
2-Hexanone	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
4-Methyl-2-pentanone	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Acetone	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Benzene	19,000	8,000		ppbv	8000	11/1/2011 9:42 AM
Benzyl chloride	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Bromodichloromethane	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Bromoform	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Bromomethane	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Carbon disulfide	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Carbon tetrachloride	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Chlorobenzene	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Chlorodibromomethane	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Chloroethane	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Chloroform	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Chloromethane	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
cis-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
cis-1,3-dichloropropene	ND	8,000		ppbv	8000	11/1/2011 9:42 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/10/2011 12:21:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-009	**Matrix:**	Air
Client Sample ID:	VA0723		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	72,000	16,000		ppbv	8000	11/1/2011 9:42 AM
Dichlorodifluoromethane	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Ethyl acetate	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Ethylbenzene	ND	16,000		ppbv	8000	11/1/2011 9:42 AM
Heptane	50,000	8,000		ppbv	8000	11/1/2011 9:42 AM
Hexachlorobutadiene	ND	16,000		ppbv	8000	11/1/2011 9:42 AM
m,p-Xylene	ND	16,000		ppbv	8000	11/1/2011 9:42 AM
Methylene chloride	ND	40,000		ppbv	8000	11/1/2011 9:42 AM
n-Hexane	75,000	16,000		ppbv	8000	11/1/2011 9:42 AM
Naphthalene	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
o-Xylene	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Propylene	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Styrene	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
tert-Butyl Methyl Ether	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Tetrachloroethene	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Tetrahydrofuran	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Toluene	28,000	8,000		ppbv	8000	11/1/2011 9:42 AM
trans-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
trans-1,3-dichloropropene	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Trichloroethene	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Trichlorofluoromethane	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Vinyl acetate	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Vinyl chloride	ND	8,000		ppbv	8000	11/1/2011 9:42 AM
Xylenes, Total	ND	24,000		ppbv	8000	11/1/2011 9:42 AM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	8000	11/1/2011 9:42 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	3,000,000	940,000		µg/m³	8000	10/31/2011 8:47 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000		µg/m³	8000	10/31/2011 8:47 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000		µg/m³	8000	10/31/2011 8:47 PM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	8000	10/31/2011 8:47 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/10/2011 12:51:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-010	**Matrix:**	Air
Client Sample ID:	VA0724		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.99	0.10		%	1	11/8/2011 4:49 PM
Carbon Monoxide	ND	0.10		%	1	11/8/2011 4:49 PM
Methane	ND	0.50		%	1	11/8/2011 4:49 PM
Nitrogen	79	0.10		%	1	11/8/2011 4:49 PM
Oxygen	20	0.10		%	1	11/8/2011 4:49 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
1,1,2,2-Tetrachloroethane	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
1,1,2-Trichloroethane	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
1,1-Dichloroethane	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
1,1-Dichloroethene	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
1,2,4-Trichlorobenzene	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
1,2,4-Trimethylbenzene	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
1,2-Dibromoethane	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
1,2-Dichlorobenzene	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
1,2-Dichloroethane	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
1,2-Dichloropropane	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
1,3,5-Trimethylbenzene	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
1,3-Butadiene	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
1,3-Dichlorobenzene	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
1,4-Dichlorobenzene	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
2-Butanone	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
2-Hexanone	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
4-Methyl-2-pentanone	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
Acetone	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
Benzene	120,000	8,000		ppbv	8000	11/1/2011 10:23 AM
Benzyl chloride	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
Bromodichloromethane	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
Bromoform	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
Bromomethane	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
Carbon disulfide	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
Carbon tetrachloride	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
Chlorobenzene	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
Chlorodibromomethane	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
Chloroethane	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
Chloroform	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
Chloromethane	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
cis-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
cis-1,3-dichloropropene	ND	8,000		ppbv	8000	11/1/2011 10:23 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/10/2011 12:51:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-010	**Matrix:**	Air
Client Sample ID:	VA0724		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	270,000	16,000		ppbv	8000	11/1/2011 10:23 AM
Dichlorodifluoromethane	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
Ethyl acetate	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
Ethylbenzene	26,000	16,000		ppbv	8000	11/1/2011 10:23 AM
Heptane	180,000	8,000		ppbv	8000	11/1/2011 10:23 AM
Hexachlorobutadiene	ND	16,000		ppbv	8000	11/1/2011 10:23 AM
m,p-Xylene	45,000	16,000		ppbv	8000	11/1/2011 10:23 AM
Methylene chloride	ND	40,000		ppbv	8000	11/1/2011 10:23 AM
n-Hexane	240,000	16,000		ppbv	8000	11/1/2011 10:23 AM
Naphthalene	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
o-Xylene	15,000	8,000		ppbv	8000	11/1/2011 10:23 AM
Propylene	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
Styrene	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
tert-Butyl Methyl Ether	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
Tetrachloroethene	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
Tetrahydrofuran	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
Toluene	270,000	8,000		ppbv	8000	11/1/2011 10:23 AM
trans-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
trans-1,3-dichloropropene	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
Trichloroethene	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
Trichlorofluoromethane	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
Vinyl acetate	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
Vinyl chloride	ND	8,000		ppbv	8000	11/1/2011 10:23 AM
Xylenes, Total	60,000	24,000		ppbv	8000	11/1/2011 10:23 AM
Surr: 4-Bromofluorobenzene	97.2	70-130		%REC	8000	11/1/2011 10:23 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	11,000,000	940,000		µg/m³	8000	10/26/2011 2:36 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000		µg/m³	8000	10/26/2011 2:36 AM
C9-C12 Aliphatic Hydrocarbons	610,000	1,500,000	J	µg/m³	8000	10/26/2011 2:36 AM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	8000	10/26/2011 2:36 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/11/2011 2:55:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-011	**Matrix:**	Air
Client Sample ID:	VA0831		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	1.2	0.10		%	1	11/9/2011 4:52 PM
Carbon Monoxide	ND	0.10		%	1	11/9/2011 4:52 PM
Methane	ND	0.50		%	1	11/9/2011 4:52 PM
Nitrogen	78	0.10		%	1	11/9/2011 4:52 PM
Oxygen	20	0.10		%	1	11/9/2011 4:52 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800		ppbv	800	11/2/2011 5:58 AM
1,1,2,2-Tetrachloroethane	ND	800		ppbv	800	11/2/2011 5:58 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800		ppbv	800	11/2/2011 5:58 AM
1,1,2-Trichloroethane	ND	800		ppbv	800	11/2/2011 5:58 AM
1,1-Dichloroethane	ND	800		ppbv	800	11/2/2011 5:58 AM
1,1-Dichloroethene	ND	800		ppbv	800	11/2/2011 5:58 AM
1,2,4-Trichlorobenzene	ND	800		ppbv	800	11/2/2011 5:58 AM
1,2,4-Trimethylbenzene	820	800		ppbv	800	11/2/2011 5:58 AM
1,2-Dibromoethane	ND	800		ppbv	800	11/2/2011 5:58 AM
1,2-Dichlorobenzene	ND	800		ppbv	800	11/2/2011 5:58 AM
1,2-Dichloroethane	ND	800		ppbv	800	11/2/2011 5:58 AM
1,2-Dichloropropane	ND	800		ppbv	800	11/2/2011 5:58 AM
1,3,5-Trimethylbenzene	ND	800		ppbv	800	11/2/2011 5:58 AM
1,3-Butadiene	ND	800		ppbv	800	11/2/2011 5:58 AM
1,3-Dichlorobenzene	ND	800		ppbv	800	11/2/2011 5:58 AM
1,4-Dichlorobenzene	ND	800		ppbv	800	11/2/2011 5:58 AM
2-Butanone	ND	800		ppbv	800	11/2/2011 5:58 AM
2-Hexanone	ND	800		ppbv	800	11/2/2011 5:58 AM
4-Methyl-2-pentanone	ND	800		ppbv	800	11/2/2011 5:58 AM
Acetone	810	800		ppbv	800	11/2/2011 5:58 AM
Benzene	1,300	800		ppbv	800	11/2/2011 5:58 AM
Benzyl chloride	ND	800		ppbv	800	11/2/2011 5:58 AM
Bromodichloromethane	ND	800		ppbv	800	11/2/2011 5:58 AM
Bromoform	ND	800		ppbv	800	11/2/2011 5:58 AM
Bromomethane	ND	800		ppbv	800	11/2/2011 5:58 AM
Carbon disulfide	ND	800		ppbv	800	11/2/2011 5:58 AM
Carbon tetrachloride	ND	800		ppbv	800	11/2/2011 5:58 AM
Chlorobenzene	ND	800		ppbv	800	11/2/2011 5:58 AM
Chlorodibromomethane	ND	800		ppbv	800	11/2/2011 5:58 AM
Chloroethane	ND	800		ppbv	800	11/2/2011 5:58 AM
Chloroform	ND	800		ppbv	800	11/2/2011 5:58 AM
Chloromethane	ND	800		ppbv	800	11/2/2011 5:58 AM
cis-1,2-Dichloroethene	ND	800		ppbv	800	11/2/2011 5:58 AM
cis-1,3-dichloropropene	ND	800		ppbv	800	11/2/2011 5:58 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/11/2011 2:55:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-011	**Matrix:**	Air
Client Sample ID:	VA0831		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	13,000	1,600		ppbv	800	11/2/2011 5:58 AM
Dichlorodifluoromethane	ND	800		ppbv	800	11/2/2011 5:58 AM
Ethyl acetate	ND	800		ppbv	800	11/2/2011 5:58 AM
Ethylbenzene	940	1,600	J	ppbv	800	11/2/2011 5:58 AM
Heptane	3,300	800		ppbv	800	11/2/2011 5:58 AM
Hexachlorobutadiene	ND	1,600		ppbv	800	11/2/2011 5:58 AM
m,p-Xylene	2,500	1,600		ppbv	800	11/2/2011 5:58 AM
Methylene chloride	2,100	4,000	J	ppbv	800	11/2/2011 5:58 AM
n-Hexane	6,500	1,600		ppbv	800	11/2/2011 5:58 AM
Naphthalene	ND	800		ppbv	800	11/2/2011 5:58 AM
o-Xylene	920	800		ppbv	800	11/2/2011 5:58 AM
Propylene	ND	800		ppbv	800	11/2/2011 5:58 AM
Styrene	ND	800		ppbv	800	11/2/2011 5:58 AM
tert-Butyl Methyl Ether	ND	800		ppbv	800	11/2/2011 5:58 AM
Tetrachloroethene	ND	800		ppbv	800	11/2/2011 5:58 AM
Tetrahydrofuran	ND	800		ppbv	800	11/2/2011 5:58 AM
Toluene	6,200	800		ppbv	800	11/2/2011 5:58 AM
trans-1,2-Dichloroethene	ND	800		ppbv	800	11/2/2011 5:58 AM
trans-1,3-dichloropropene	ND	800		ppbv	800	11/2/2011 5:58 AM
Trichloroethene	ND	800		ppbv	800	11/2/2011 5:58 AM
Trichlorofluoromethane	ND	800		ppbv	800	11/2/2011 5:58 AM
Vinyl acetate	ND	800		ppbv	800	11/2/2011 5:58 AM
Vinyl chloride	ND	800		ppbv	800	11/2/2011 5:58 AM
Xylenes, Total	3,400	2,400		ppbv	800	11/2/2011 5:58 AM
Surr: 4-Bromofluorobenzene	99.7	70-130		%REC	800	11/2/2011 5:58 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	660,000	94,000		µg/m³	800	10/26/2011 10:12 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000		µg/m³	800	10/26/2011 10:12 AM
C9-C12 Aliphatic Hydrocarbons	100,000	150,000	J	µg/m³	800	10/26/2011 10:12 AM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	800	10/26/2011 10:12 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/11/2011 3:23:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-012	**Matrix:**	Air
Client Sample ID:	VA0832		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	1.5	0.10		%	1	11/9/2011 5:17 PM
Carbon Monoxide	ND	0.10		%	1	11/9/2011 5:17 PM
Methane	ND	0.50		%	1	11/9/2011 5:17 PM
Nitrogen	79	0.10		%	1	11/9/2011 5:17 PM
Oxygen	18	0.10		%	1	11/9/2011 5:17 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
1,1,2,2-Tetrachloroethane	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
1,1,2-Trichloroethane	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
1,1-Dichloroethane	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
1,1-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
1,2,4-Trichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
1,2,4-Trimethylbenzene	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
1,2-Dibromoethane	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
1,2-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
1,2-Dichloroethane	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
1,2-Dichloropropane	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
1,3,5-Trimethylbenzene	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
1,3-Butadiene	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
1,3-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
1,4-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
2-Butanone	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
2-Hexanone	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
4-Methyl-2-pentanone	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Acetone	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Benzene	18,000	8,000		ppbv	8000	11/2/2011 6:39 AM
Benzyl chloride	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Bromodichloromethane	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Bromoform	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Bromomethane	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Carbon disulfide	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Carbon tetrachloride	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Chlorobenzene	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Chlorodibromomethane	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Chloroethane	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Chloroform	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Chloromethane	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
cis-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
cis-1,3-dichloropropene	ND	8,000		ppbv	8000	11/2/2011 6:39 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/11/2011 3:23:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-012	**Matrix:**	Air
Client Sample ID:	VA0832		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	87,000	16,000		ppbv	8000	11/2/2011 6:39 AM
Dichlorodifluoromethane	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Ethyl acetate	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Ethylbenzene	ND	16,000		ppbv	8000	11/2/2011 6:39 AM
Heptane	29,000	8,000		ppbv	8000	11/2/2011 6:39 AM
Hexachlorobutadiene	ND	16,000		ppbv	8000	11/2/2011 6:39 AM
m,p-Xylene	ND	16,000		ppbv	8000	11/2/2011 6:39 AM
Methylene chloride	ND	40,000		ppbv	8000	11/2/2011 6:39 AM
n-Hexane	66,000	16,000		ppbv	8000	11/2/2011 6:39 AM
Naphthalene	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
o-Xylene	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Propylene	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Styrene	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
tert-Butyl Methyl Ether	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Tetrachloroethene	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Tetrahydrofuran	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Toluene	19,000	8,000		ppbv	8000	11/2/2011 6:39 AM
trans-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
trans-1,3-dichloropropene	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Trichloroethene	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Trichlorofluoromethane	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Vinyl acetate	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Vinyl chloride	ND	8,000		ppbv	8000	11/2/2011 6:39 AM
Xylenes, Total	ND	24,000		ppbv	8000	11/2/2011 6:39 AM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	8000	11/2/2011 6:39 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	3,300,000	940,000		µg/m³	8000	10/26/2011 3:16 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000		µg/m³	8000	10/26/2011 3:16 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000		µg/m³	8000	10/26/2011 3:16 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	8000	10/26/2011 3:16 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/11/2011 4:01:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-013	**Matrix:**	Air
Client Sample ID:	VA0833		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	1.1	0.10		%	1	11/9/2011 5:51 PM
Carbon Monoxide	ND	0.10		%	1	11/9/2011 5:51 PM
Methane	ND	0.50		%	1	11/9/2011 5:51 PM
Nitrogen	79	0.10		%	1	11/9/2011 5:51 PM
Oxygen	19	0.10		%	1	11/9/2011 5:51 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400		ppbv	400	11/2/2011 7:26 AM
1,1,2,2-Tetrachloroethane	ND	400		ppbv	400	11/2/2011 7:26 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400		ppbv	400	11/2/2011 7:26 AM
1,1,2-Trichloroethane	ND	400		ppbv	400	11/2/2011 7:26 AM
1,1-Dichloroethane	ND	400		ppbv	400	11/2/2011 7:26 AM
1,1-Dichloroethene	ND	400		ppbv	400	11/2/2011 7:26 AM
1,2,4-Trichlorobenzene	ND	400		ppbv	400	11/2/2011 7:26 AM
1,2,4-Trimethylbenzene	ND	400		ppbv	400	11/2/2011 7:26 AM
1,2-Dibromoethane	ND	400		ppbv	400	11/2/2011 7:26 AM
1,2-Dichlorobenzene	ND	400		ppbv	400	11/2/2011 7:26 AM
1,2-Dichloroethane	ND	400		ppbv	400	11/2/2011 7:26 AM
1,2-Dichloropropane	ND	400		ppbv	400	11/2/2011 7:26 AM
1,3,5-Trimethylbenzene	ND	400		ppbv	400	11/2/2011 7:26 AM
1,3-Butadiene	ND	400		ppbv	400	11/2/2011 7:26 AM
1,3-Dichlorobenzene	ND	400		ppbv	400	11/2/2011 7:26 AM
1,4-Dichlorobenzene	ND	400		ppbv	400	11/2/2011 7:26 AM
2-Butanone	ND	400		ppbv	400	11/2/2011 7:26 AM
2-Hexanone	ND	400		ppbv	400	11/2/2011 7:26 AM
4-Methyl-2-pentanone	ND	400		ppbv	400	11/2/2011 7:26 AM
Acetone	1,100	400		ppbv	400	11/2/2011 7:26 AM
Benzene	780	400		ppbv	400	11/2/2011 7:26 AM
Benzyl chloride	ND	400		ppbv	400	11/2/2011 7:26 AM
Bromodichloromethane	ND	400		ppbv	400	11/2/2011 7:26 AM
Bromoform	ND	400		ppbv	400	11/2/2011 7:26 AM
Bromomethane	ND	400		ppbv	400	11/2/2011 7:26 AM
Carbon disulfide	ND	400		ppbv	400	11/2/2011 7:26 AM
Carbon tetrachloride	ND	400		ppbv	400	11/2/2011 7:26 AM
Chlorobenzene	ND	400		ppbv	400	11/2/2011 7:26 AM
Chlorodibromomethane	ND	400		ppbv	400	11/2/2011 7:26 AM
Chloroethane	ND	400		ppbv	400	11/2/2011 7:26 AM
Chloroform	ND	400		ppbv	400	11/2/2011 7:26 AM
Chloromethane	ND	400		ppbv	400	11/2/2011 7:26 AM
cis-1,2-Dichloroethene	ND	400		ppbv	400	11/2/2011 7:26 AM
cis-1,3-dichloropropene	ND	400		ppbv	400	11/2/2011 7:26 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/11/2011 4:01:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-013	**Matrix:**	Air
Client Sample ID:	VA0833		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,800	800		ppbv	400	11/2/2011 7:26 AM
Dichlorodifluoromethane	ND	400		ppbv	400	11/2/2011 7:26 AM
Ethyl acetate	ND	400		ppbv	400	11/2/2011 7:26 AM
Ethylbenzene	510	800	J	ppbv	400	11/2/2011 7:26 AM
Heptane	1,500	400		ppbv	400	11/2/2011 7:26 AM
Hexachlorobutadiene	ND	800		ppbv	400	11/2/2011 7:26 AM
m,p-Xylene	1,300	800		ppbv	400	11/2/2011 7:26 AM
Methylene chloride	9,300	2,000		ppbv	400	11/2/2011 7:26 AM
n-Hexane	2,200	800		ppbv	400	11/2/2011 7:26 AM
Naphthalene	ND	400		ppbv	400	11/2/2011 7:26 AM
o-Xylene	500	400		ppbv	400	11/2/2011 7:26 AM
Propylene	ND	400		ppbv	400	11/2/2011 7:26 AM
Styrene	ND	400		ppbv	400	11/2/2011 7:26 AM
tert-Butyl Methyl Ether	ND	400		ppbv	400	11/2/2011 7:26 AM
Tetrachloroethene	ND	400		ppbv	400	11/2/2011 7:26 AM
Tetrahydrofuran	ND	400		ppbv	400	11/2/2011 7:26 AM
Toluene	3,400	400		ppbv	400	11/2/2011 7:26 AM
trans-1,2-Dichloroethene	ND	400		ppbv	400	11/2/2011 7:26 AM
trans-1,3-dichloropropene	ND	400		ppbv	400	11/2/2011 7:26 AM
Trichloroethene	ND	400		ppbv	400	11/2/2011 7:26 AM
Trichlorofluoromethane	ND	400		ppbv	400	11/2/2011 7:26 AM
Vinyl acetate	ND	400		ppbv	400	11/2/2011 7:26 AM
Vinyl chloride	ND	400		ppbv	400	11/2/2011 7:26 AM
Xylenes, Total	1,800	1,200		ppbv	400	11/2/2011 7:26 AM
Surr: 4-Bromofluorobenzene	98.0	70-130		%REC	400	11/2/2011 7:26 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	230,000	47,000		µg/m³	400	10/27/2011 1:58 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000		µg/m³	400	10/27/2011 1:58 AM
C9-C12 Aliphatic Hydrocarbons	94,000	76,000		µg/m³	400	10/27/2011 1:58 AM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	400	10/27/2011 1:58 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/12/2011 8:55:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-014	**Matrix:**	Air
Client Sample ID:	VA0834		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.94	0.10		%	1	11/9/2011 6:10 PM
Carbon Monoxide	ND	0.10		%	1	11/9/2011 6:10 PM
Methane	ND	0.50		%	1	11/9/2011 6:10 PM
Nitrogen	78	0.10		%	1	11/9/2011 6:10 PM
Oxygen	18	0.10		%	1	11/9/2011 6:10 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
1,1,2,2-Tetrachloroethane	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
1,1,2-Trichloroethane	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
1,1-Dichloroethane	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
1,1-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
1,2,4-Trichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
1,2,4-Trimethylbenzene	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
1,2-Dibromoethane	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
1,2-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
1,2-Dichloroethane	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
1,2-Dichloropropane	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
1,3,5-Trimethylbenzene	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
1,3-Butadiene	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
1,3-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
1,4-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
2-Butanone	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
2-Hexanone	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
4-Methyl-2-pentanone	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Acetone	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Benzene	24,000	8,000		ppbv	8000	11/2/2011 8:06 AM
Benzyl chloride	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Bromodichloromethane	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Bromoform	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Bromomethane	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Carbon disulfide	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Carbon tetrachloride	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Chlorobenzene	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Chlorodibromomethane	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Chloroethane	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Chloroform	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Chloromethane	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
cis-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
cis-1,3-dichloropropene	ND	8,000		ppbv	8000	11/2/2011 8:06 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/12/2011 8:55:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-014	**Matrix:**	Air
Client Sample ID:	VA0834		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	77,000	16,000		ppbv	8000	11/2/2011 8:06 AM
Dichlorodifluoromethane	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Ethyl acetate	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Ethylbenzene	ND	16,000		ppbv	8000	11/2/2011 8:06 AM
Heptane	39,000	8,000		ppbv	8000	11/2/2011 8:06 AM
Hexachlorobutadiene	ND	16,000		ppbv	8000	11/2/2011 8:06 AM
m,p-Xylene	ND	16,000		ppbv	8000	11/2/2011 8:06 AM
Methylene chloride	ND	40,000		ppbv	8000	11/2/2011 8:06 AM
n-Hexane	69,000	16,000		ppbv	8000	11/2/2011 8:06 AM
Naphthalene	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
o-Xylene	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Propylene	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Styrene	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
tert-Butyl Methyl Ether	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Tetrachloroethene	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Tetrahydrofuran	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Toluene	32,000	8,000		ppbv	8000	11/2/2011 8:06 AM
trans-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
trans-1,3-dichloropropene	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Trichloroethene	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Trichlorofluoromethane	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Vinyl acetate	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Vinyl chloride	ND	8,000		ppbv	8000	11/2/2011 8:06 AM
Xylenes, Total	ND	24,000		ppbv	8000	11/2/2011 8:06 AM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	8000	11/2/2011 8:06 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	4,200,000	940,000		µg/m³	8000	10/26/2011 5:23 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000		µg/m³	8000	10/26/2011 5:23 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000		µg/m³	8000	10/26/2011 5:23 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	8000	10/26/2011 5:23 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/12/2011 9:45:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-015	**Matrix:**	Air
Client Sample ID:	VA0835		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	1.5	0.10		%	1	11/9/2011 6:33 PM
Carbon Monoxide	ND	0.10		%	1	11/9/2011 6:33 PM
Methane	ND	0.50		%	1	11/9/2011 6:33 PM
Nitrogen	79	0.10		%	1	11/9/2011 6:33 PM
Oxygen	17	0.10		%	1	11/9/2011 6:33 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
1,1,2,2-Tetrachloroethane	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
1,1,2-Trichloroethane	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
1,1-Dichloroethane	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
1,1-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
1,2,4-Trichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
1,2,4-Trimethylbenzene	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
1,2-Dibromoethane	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
1,2-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
1,2-Dichloroethane	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
1,2-Dichloropropane	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
1,3,5-Trimethylbenzene	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
1,3-Butadiene	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
1,3-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
1,4-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
2-Butanone	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
2-Hexanone	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
4-Methyl-2-pentanone	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Acetone	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Benzene	58,000	8,000		ppbv	8000	11/2/2011 8:47 AM
Benzyl chloride	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Bromodichloromethane	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Bromoform	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Bromomethane	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Carbon disulfide	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Carbon tetrachloride	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Chlorobenzene	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Chlorodibromomethane	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Chloroethane	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Chloroform	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Chloromethane	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
cis-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
cis-1,3-dichloropropene	ND	8,000		ppbv	8000	11/2/2011 8:47 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/12/2011 9:45:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-015	**Matrix:**	Air
Client Sample ID:	VA0835		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	160,000	16,000		ppbv	8000	11/2/2011 8:47 AM
Dichlorodifluoromethane	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Ethyl acetate	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Ethylbenzene	ND	16,000		ppbv	8000	11/2/2011 8:47 AM
Heptane	97,000	8,000		ppbv	8000	11/2/2011 8:47 AM
Hexachlorobutadiene	ND	16,000		ppbv	8000	11/2/2011 8:47 AM
m,p-Xylene	13,000	16,000	J	ppbv	8000	11/2/2011 8:47 AM
Methylene chloride	ND	40,000		ppbv	8000	11/2/2011 8:47 AM
n-Hexane	140,000	16,000		ppbv	8000	11/2/2011 8:47 AM
Naphthalene	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
o-Xylene	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Propylene	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Styrene	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
tert-Butyl Methyl Ether	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Tetrachloroethene	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Tetrahydrofuran	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Toluene	87,000	8,000		ppbv	8000	11/2/2011 8:47 AM
trans-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
trans-1,3-dichloropropene	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Trichloroethene	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Trichlorofluoromethane	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Vinyl acetate	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Vinyl chloride	ND	8,000		ppbv	8000	11/2/2011 8:47 AM
Xylenes, Total	13,000	24,000	J	ppbv	8000	11/2/2011 8:47 AM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	8000	11/2/2011 8:47 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	4,400,000	940,000		µg/m³	8000	10/26/2011 6:05 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000		µg/m³	8000	10/26/2011 6:05 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000		µg/m³	8000	10/26/2011 6:05 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	8000	10/26/2011 6:05 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/12/2011 9:45:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-016	**Matrix:**	Air
Client Sample ID:	VA0836		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.83	0.10		%	1	11/9/2011 6:53 PM
Carbon Monoxide	ND	0.10		%	1	11/9/2011 6:53 PM
Methane	ND	0.50		%	1	11/9/2011 6:53 PM
Nitrogen	78	0.10		%	1	11/9/2011 6:53 PM
Oxygen	19	0.10		%	1	11/9/2011 6:53 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
1,1,2,2-Tetrachloroethane	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
1,1,2-Trichloroethane	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
1,1-Dichloroethane	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
1,1-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
1,2,4-Trichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
1,2,4-Trimethylbenzene	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
1,2-Dibromoethane	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
1,2-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
1,2-Dichloroethane	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
1,2-Dichloropropane	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
1,3,5-Trimethylbenzene	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
1,3-Butadiene	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
1,3-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
1,4-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
2-Butanone	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
2-Hexanone	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
4-Methyl-2-pentanone	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Acetone	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Benzene	44,000	8,000		ppbv	8000	11/2/2011 9:27 AM
Benzyl chloride	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Bromodichloromethane	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Bromoform	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Bromomethane	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Carbon disulfide	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Carbon tetrachloride	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Chlorobenzene	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Chlorodibromomethane	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Chloroethane	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Chloroform	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Chloromethane	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
cis-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
cis-1,3-dichloropropene	ND	8,000		ppbv	8000	11/2/2011 9:27 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/12/2011 9:45:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-016	**Matrix:**	Air
Client Sample ID:	VA0836		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	110,000	16,000		ppbv	8000	11/2/2011 9:27 AM
Dichlorodifluoromethane	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Ethyl acetate	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Ethylbenzene	ND	16,000		ppbv	8000	11/2/2011 9:27 AM
Heptane	74,000	8,000		ppbv	8000	11/2/2011 9:27 AM
Hexachlorobutadiene	ND	16,000		ppbv	8000	11/2/2011 9:27 AM
m,p-Xylene	12,000	16,000	J	ppbv	8000	11/2/2011 9:27 AM
Methylene chloride	ND	40,000		ppbv	8000	11/2/2011 9:27 AM
n-Hexane	100,000	16,000		ppbv	8000	11/2/2011 9:27 AM
Naphthalene	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
o-Xylene	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Propylene	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Styrene	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
tert-Butyl Methyl Ether	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Tetrachloroethene	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Tetrahydrofuran	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Toluene	75,000	8,000		ppbv	8000	11/2/2011 9:27 AM
trans-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
trans-1,3-dichloropropene	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Trichloroethene	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Trichlorofluoromethane	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Vinyl acetate	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Vinyl chloride	ND	8,000		ppbv	8000	11/2/2011 9:27 AM
Xylenes, Total	12,000	24,000	J	ppbv	8000	11/2/2011 9:27 AM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	8000	11/2/2011 9:27 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	4,900,000	940,000		µg/m³	8000	10/26/2011 6:48 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000		µg/m³	8000	10/26/2011 6:48 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000		µg/m³	8000	10/26/2011 6:48 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	8000	10/26/2011 6:48 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/12/2011 10:48:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-017	**Matrix:**	Air
Client Sample ID:	VA0837		

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	11/9/2011 7:22 PM
Carbon Monoxide	ND	0.10		%	1	11/9/2011 7:22 PM
Methane	ND	0.50		%	1	11/9/2011 7:22 PM
Nitrogen	78	0.10		%	1	11/9/2011 7:22 PM
Oxygen	20	0.10		%	1	11/9/2011 7:22 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
1,1,2,2-Tetrachloroethane	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
1,1,2-Trichloroethane	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
1,1-Dichloroethane	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
1,1-Dichloroethene	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
1,2,4-Trichlorobenzene	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
1,2,4-Trimethylbenzene	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
1,2-Dibromoethane	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
1,2-Dichlorobenzene	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
1,2-Dichloroethane	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
1,2-Dichloropropane	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
1,3,5-Trimethylbenzene	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
1,3-Butadiene	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
1,3-Dichlorobenzene	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
1,4-Dichlorobenzene	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
2-Butanone	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
2-Hexanone	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
4-Methyl-2-pentanone	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Acetone	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Benzene	520,000	20,000		ppbv	20000	11/2/2011 10:49 AM
Benzyl chloride	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Bromodichloromethane	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Bromoform	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Bromomethane	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Carbon disulfide	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Carbon tetrachloride	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Chlorobenzene	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Chlorodibromomethane	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Chloroethane	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Chloroform	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Chloromethane	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
cis-1,2-Dichloroethene	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
cis-1,3-dichloropropene	ND	20,000		ppbv	20000	11/2/2011 10:49 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/12/2011 10:48:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-017	**Matrix:**	Air
Client Sample ID:	VA0837		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,100,000	80,000		ppbv	40000	11/2/2011 4:36 PM
Dichlorodifluoromethane	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Ethyl acetate	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Ethylbenzene	ND	40,000		ppbv	20000	11/2/2011 10:49 AM
Heptane	650,000	20,000		ppbv	20000	11/2/2011 10:49 AM
Hexachlorobutadiene	ND	40,000		ppbv	20000	11/2/2011 10:49 AM
m,p-Xylene	43,000	40,000		ppbv	20000	11/2/2011 10:49 AM
Methylene chloride	ND	100,000		ppbv	20000	11/2/2011 10:49 AM
n-Hexane	1,400,000	80,000		ppbv	40000	11/2/2011 4:36 PM
Naphthalene	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
o-Xylene	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Propylene	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Styrene	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
tert-Butyl Methyl Ether	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Tetrachloroethene	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Tetrahydrofuran	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Toluene	520,000	20,000		ppbv	20000	11/2/2011 10:49 AM
trans-1,2-Dichloroethene	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
trans-1,3-dichloropropene	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Trichloroethene	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Trichlorofluoromethane	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Vinyl acetate	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Vinyl chloride	ND	20,000		ppbv	20000	11/2/2011 10:49 AM
Xylenes, Total	43,000	60,000	J	ppbv	20000	11/2/2011 10:49 AM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	20000	11/2/2011 10:49 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	32,000,000	2,300,000		µg/m³	20000	10/31/2011 9:30 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000		µg/m³	20000	10/31/2011 9:30 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000		µg/m³	20000	10/31/2011 9:30 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	20000	10/31/2011 9:30 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/10/2011 3:15:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-018	**Matrix:**	Air
Client Sample ID:	VA0851		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.38	0.10		%	1	11/8/2011 5:26 PM
Carbon Monoxide	ND	0.10		%	1	11/8/2011 5:26 PM
Methane	ND	0.50		%	1	11/8/2011 5:26 PM
Nitrogen	78	0.10		%	1	11/8/2011 5:26 PM
Oxygen	21	0.10		%	1	11/8/2011 5:26 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
1,1,2,2-Tetrachloroethane	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
1,1,2-Trichloroethane	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
1,1-Dichloroethane	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
1,1-Dichloroethene	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
1,2,4-Trichlorobenzene	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
1,2,4-Trimethylbenzene	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
1,2-Dibromoethane	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
1,2-Dichlorobenzene	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
1,2-Dichloroethane	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
1,2-Dichloropropane	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
1,3,5-Trimethylbenzene	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
1,3-Butadiene	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
1,3-Dichlorobenzene	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
1,4-Dichlorobenzene	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
2-Butanone	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
2-Hexanone	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
4-Methyl-2-pentanone	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
Acetone	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
Benzene	5,100	1,600		ppbv	1600	11/1/2011 11:05 AM
Benzyl chloride	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
Bromodichloromethane	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
Bromoform	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
Bromomethane	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
Carbon disulfide	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
Carbon tetrachloride	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
Chlorobenzene	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
Chlorodibromomethane	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
Chloroethane	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
Chloroform	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
Chloromethane	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
cis-1,2-Dichloroethene	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
cis-1,3-dichloropropene	ND	1,600		ppbv	1600	11/1/2011 11:05 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/10/2011 3:15:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-018	**Matrix:**	Air
Client Sample ID:	VA0851		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	11,000	3,200		ppbv	1600	11/1/2011 11:05 AM
Dichlorodifluoromethane	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
Ethyl acetate	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
Ethylbenzene	2,600	3,200	J	ppbv	1600	11/1/2011 11:05 AM
Heptane	9,100	1,600		ppbv	1600	11/1/2011 11:05 AM
Hexachlorobutadiene	ND	3,200		ppbv	1600	11/1/2011 11:05 AM
m,p-Xylene	5,700	3,200		ppbv	1600	11/1/2011 11:05 AM
Methylene chloride	ND	8,000		ppbv	1600	11/1/2011 11:05 AM
n-Hexane	5,400	3,200		ppbv	1600	11/1/2011 11:05 AM
Naphthalene	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
o-Xylene	2,000	1,600		ppbv	1600	11/1/2011 11:05 AM
Propylene	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
Styrene	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
tert-Butyl Methyl Ether	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
Tetrachloroethene	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
Tetrahydrofuran	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
Toluene	19,000	1,600		ppbv	1600	11/1/2011 11:05 AM
trans-1,2-Dichloroethene	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
trans-1,3-dichloropropene	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
Trichloroethene	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
Trichlorofluoromethane	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
Vinyl acetate	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
Vinyl chloride	ND	1,600		ppbv	1600	11/1/2011 11:05 AM
Xylenes, Total	7,600	4,800		ppbv	1600	11/1/2011 11:05 AM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1600	11/1/2011 11:05 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,200,000	190,000		µg/m³	1600	10/27/2011 3:25 AM
C9-C10 Aromatic Hydrocarbons	ND	210,000		µg/m³	1600	10/27/2011 3:25 AM
C9-C12 Aliphatic Hydrocarbons	260,000	300,000	J	µg/m³	1600	10/27/2011 3:25 AM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1600	10/27/2011 3:25 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/10/2011 3:50:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-019	**Matrix:**	Air
Client Sample ID:	VA0852		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.63	0.10		%	1	11/8/2011 5:55 PM
Carbon Monoxide	ND	0.10		%	1	11/8/2011 5:55 PM
Methane	ND	0.50		%	1	11/8/2011 5:55 PM
Nitrogen	79	0.10		%	1	11/8/2011 5:55 PM
Oxygen	20	0.10		%	1	11/8/2011 5:55 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
1,1,2,2-Tetrachloroethane	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
1,1,2-Trichloroethane	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
1,1-Dichloroethane	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
1,1-Dichloroethene	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
1,2,4-Trichlorobenzene	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
1,2,4-Trimethylbenzene	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
1,2-Dibromoethane	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
1,2-Dichlorobenzene	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
1,2-Dichloroethane	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
1,2-Dichloropropane	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
1,3,5-Trimethylbenzene	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
1,3-Butadiene	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
1,3-Dichlorobenzene	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
1,4-Dichlorobenzene	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
2-Butanone	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
2-Hexanone	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
4-Methyl-2-pentanone	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Acetone	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Benzene	2,800	1,600		ppbv	1600	11/1/2011 11:47 AM
Benzyl chloride	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Bromodichloromethane	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Bromoform	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Bromomethane	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Carbon disulfide	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Carbon tetrachloride	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Chlorobenzene	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Chlorodibromomethane	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Chloroethane	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Chloroform	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Chloromethane	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
cis-1,2-Dichloroethene	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
cis-1,3-dichloropropene	ND	1,600		ppbv	1600	11/1/2011 11:47 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/10/2011 3:50:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-019	**Matrix:**	Air
Client Sample ID:	VA0852		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	5,500	3,200		ppbv	1600	11/1/2011 11:47 AM
Dichlorodifluoromethane	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Ethyl acetate	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Ethylbenzene	ND	3,200		ppbv	1600	11/1/2011 11:47 AM
Heptane	4,500	1,600		ppbv	1600	11/1/2011 11:47 AM
Hexachlorobutadiene	ND	3,200		ppbv	1600	11/1/2011 11:47 AM
m,p-Xylene	3,400	3,200		ppbv	1600	11/1/2011 11:47 AM
Methylene chloride	ND	8,000		ppbv	1600	11/1/2011 11:47 AM
n-Hexane	2,900	3,200	J	ppbv	1600	11/1/2011 11:47 AM
Naphthalene	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
o-Xylene	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Propylene	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Styrene	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
tert-Butyl Methyl Ether	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Tetrachloroethene	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Tetrahydrofuran	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Toluene	10,000	1,600		ppbv	1600	11/1/2011 11:47 AM
trans-1,2-Dichloroethene	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
trans-1,3-dichloropropene	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Trichloroethene	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Trichlorofluoromethane	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Vinyl acetate	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Vinyl chloride	ND	1,600		ppbv	1600	11/1/2011 11:47 AM
Xylenes, Total	3,400	4,800	J	ppbv	1600	11/1/2011 11:47 AM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1600	11/1/2011 11:47 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	840,000	190,000		µg/m³	1600	10/27/2011 2:42 AM
C9-C10 Aromatic Hydrocarbons	ND	210,000		µg/m³	1600	10/27/2011 2:42 AM
C9-C12 Aliphatic Hydrocarbons	130,000	300,000	J	µg/m³	1600	10/27/2011 2:42 AM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1600	10/27/2011 2:42 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/10/2011 4:21:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-020	**Matrix:**	Air
Client Sample ID:	VA0853		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.22	0.10		%	1	11/8/2011 6:36 PM
Carbon Monoxide	ND	0.10		%	1	11/8/2011 6:36 PM
Methane	ND	0.50		%	1	11/8/2011 6:36 PM
Nitrogen	79	0.10		%	1	11/8/2011 6:36 PM
Oxygen	21	0.10		%	1	11/8/2011 6:36 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
1,1,2,2-Tetrachloroethane	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
1,1,2-Trichloroethane	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
1,1-Dichloroethane	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
1,1-Dichloroethene	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
1,2,4-Trichlorobenzene	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
1,2,4-Trimethylbenzene	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
1,2-Dibromoethane	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
1,2-Dichlorobenzene	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
1,2-Dichloroethane	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
1,2-Dichloropropane	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
1,3,5-Trimethylbenzene	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
1,3-Butadiene	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
1,3-Dichlorobenzene	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
1,4-Dichlorobenzene	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
2-Butanone	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
2-Hexanone	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
4-Methyl-2-pentanone	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Acetone	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Benzene	2,800	1,600		ppbv	1600	11/1/2011 12:29 PM
Benzyl chloride	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Bromodichloromethane	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Bromoform	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Bromomethane	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Carbon disulfide	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Carbon tetrachloride	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Chlorobenzene	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Chlorodibromomethane	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Chloroethane	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Chloroform	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Chloromethane	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
cis-1,2-Dichloroethene	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
cis-1,3-dichloropropene	ND	1,600		ppbv	1600	11/1/2011 12:29 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/10/2011 4:21:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-020	**Matrix:**	Air
Client Sample ID:	VA0853		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	6,700	3,200		ppbv	1600	11/1/2011 12:29 PM
Dichlorodifluoromethane	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Ethyl acetate	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Ethylbenzene	1,800	3,200	J	ppbv	1600	11/1/2011 12:29 PM
Heptane	5,700	1,600		ppbv	1600	11/1/2011 12:29 PM
Hexachlorobutadiene	ND	3,200		ppbv	1600	11/1/2011 12:29 PM
m,p-Xylene	4,100	3,200		ppbv	1600	11/1/2011 12:29 PM
Methylene chloride	ND	8,000		ppbv	1600	11/1/2011 12:29 PM
n-Hexane	3,100	3,200	J	ppbv	1600	11/1/2011 12:29 PM
Naphthalene	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
o-Xylene	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Propylene	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Styrene	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
tert-Butyl Methyl Ether	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Tetrachloroethene	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Tetrahydrofuran	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Toluene	12,000	1,600		ppbv	1600	11/1/2011 12:29 PM
trans-1,2-Dichloroethene	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
trans-1,3-dichloropropene	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Trichloroethene	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Trichlorofluoromethane	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Vinyl acetate	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Vinyl chloride	ND	1,600		ppbv	1600	11/1/2011 12:29 PM
Xylenes, Total	4,100	4,800	J	ppbv	1600	11/1/2011 12:29 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1600	11/1/2011 12:29 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	690,000	190,000		µg/m³	1600	10/27/2011 4:09 AM
C9-C10 Aromatic Hydrocarbons	ND	210,000		µg/m³	1600	10/27/2011 4:09 AM
C9-C12 Aliphatic Hydrocarbons	130,000	300,000	J	µg/m³	1600	10/27/2011 4:09 AM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1600	10/27/2011 4:09 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/11/2011 9:42:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-021	**Matrix:**	Air
Client Sample ID:	VA0854		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.27	0.10		%	1	11/8/2011 7:19 PM
Carbon Monoxide	ND	0.10		%	1	11/8/2011 7:19 PM
Methane	ND	0.50		%	1	11/8/2011 7:19 PM
Nitrogen	78	0.10		%	1	11/8/2011 7:19 PM
Oxygen	21	0.10		%	1	11/8/2011 7:19 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800		ppbv	800	11/1/2011 1:13 PM
1,1,2,2-Tetrachloroethane	ND	800		ppbv	800	11/1/2011 1:13 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800		ppbv	800	11/1/2011 1:13 PM
1,1,2-Trichloroethane	ND	800		ppbv	800	11/1/2011 1:13 PM
1,1-Dichloroethane	ND	800		ppbv	800	11/1/2011 1:13 PM
1,1-Dichloroethene	ND	800		ppbv	800	11/1/2011 1:13 PM
1,2,4-Trichlorobenzene	ND	800		ppbv	800	11/1/2011 1:13 PM
1,2,4-Trimethylbenzene	ND	800		ppbv	800	11/1/2011 1:13 PM
1,2-Dibromoethane	ND	800		ppbv	800	11/1/2011 1:13 PM
1,2-Dichlorobenzene	ND	800		ppbv	800	11/1/2011 1:13 PM
1,2-Dichloroethane	ND	800		ppbv	800	11/1/2011 1:13 PM
1,2-Dichloropropane	ND	800		ppbv	800	11/1/2011 1:13 PM
1,3,5-Trimethylbenzene	ND	800		ppbv	800	11/1/2011 1:13 PM
1,3-Butadiene	ND	800		ppbv	800	11/1/2011 1:13 PM
1,3-Dichlorobenzene	ND	800		ppbv	800	11/1/2011 1:13 PM
1,4-Dichlorobenzene	ND	800		ppbv	800	11/1/2011 1:13 PM
2-Butanone	ND	800		ppbv	800	11/1/2011 1:13 PM
2-Hexanone	ND	800		ppbv	800	11/1/2011 1:13 PM
4-Methyl-2-pentanone	ND	800		ppbv	800	11/1/2011 1:13 PM
Acetone	ND	800		ppbv	800	11/1/2011 1:13 PM
Benzene	1,400	800		ppbv	800	11/1/2011 1:13 PM
Benzyl chloride	ND	800		ppbv	800	11/1/2011 1:13 PM
Bromodichloromethane	ND	800		ppbv	800	11/1/2011 1:13 PM
Bromoform	ND	800		ppbv	800	11/1/2011 1:13 PM
Bromomethane	ND	800		ppbv	800	11/1/2011 1:13 PM
Carbon disulfide	ND	800		ppbv	800	11/1/2011 1:13 PM
Carbon tetrachloride	ND	800		ppbv	800	11/1/2011 1:13 PM
Chlorobenzene	ND	800		ppbv	800	11/1/2011 1:13 PM
Chlorodibromomethane	ND	800		ppbv	800	11/1/2011 1:13 PM
Chloroethane	ND	800		ppbv	800	11/1/2011 1:13 PM
Chloroform	ND	800		ppbv	800	11/1/2011 1:13 PM
Chloromethane	ND	800		ppbv	800	11/1/2011 1:13 PM
cis-1,2-Dichloroethene	ND	800		ppbv	800	11/1/2011 1:13 PM
cis-1,3-dichloropropene	ND	800		ppbv	800	11/1/2011 1:13 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/11/2011 9:42:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-021	**Matrix:**	Air
Client Sample ID:	VA0854		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	3,700	1,600		ppbv	800	11/1/2011 1:13 PM
Dichlorodifluoromethane	ND	800		ppbv	800	11/1/2011 1:13 PM
Ethyl acetate	ND	800		ppbv	800	11/1/2011 1:13 PM
Ethylbenzene	1,000	1,600	J	ppbv	800	11/1/2011 1:13 PM
Heptane	3,100	800		ppbv	800	11/1/2011 1:13 PM
Hexachlorobutadiene	ND	1,600		ppbv	800	11/1/2011 1:13 PM
m,p-Xylene	2,600	1,600		ppbv	800	11/1/2011 1:13 PM
Methylene chloride	ND	4,000		ppbv	800	11/1/2011 1:13 PM
n-Hexane	1,600	1,600		ppbv	800	11/1/2011 1:13 PM
Naphthalene	ND	800		ppbv	800	11/1/2011 1:13 PM
o-Xylene	930	800		ppbv	800	11/1/2011 1:13 PM
Propylene	ND	800		ppbv	800	11/1/2011 1:13 PM
Styrene	ND	800		ppbv	800	11/1/2011 1:13 PM
tert-Butyl Methyl Ether	ND	800		ppbv	800	11/1/2011 1:13 PM
Tetrachloroethene	ND	800		ppbv	800	11/1/2011 1:13 PM
Tetrahydrofuran	ND	800		ppbv	800	11/1/2011 1:13 PM
Toluene	7,000	800		ppbv	800	11/1/2011 1:13 PM
trans-1,2-Dichloroethene	ND	800		ppbv	800	11/1/2011 1:13 PM
trans-1,3-dichloropropene	ND	800		ppbv	800	11/1/2011 1:13 PM
Trichloroethene	ND	800		ppbv	800	11/1/2011 1:13 PM
Trichlorofluoromethane	ND	800		ppbv	800	11/1/2011 1:13 PM
Vinyl acetate	ND	800		ppbv	800	11/1/2011 1:13 PM
Vinyl chloride	ND	800		ppbv	800	11/1/2011 1:13 PM
Xylenes, Total	3,600	2,400		ppbv	800	11/1/2011 1:13 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	800	11/1/2011 1:13 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	350,000	94,000		µg/m³	800	10/31/2011 12:12 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000		µg/m³	800	10/31/2011 12:12 PM
C9-C12 Aliphatic Hydrocarbons	89,000	150,000	J	µg/m³	800	10/31/2011 12:12 PM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	800	10/31/2011 12:12 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/11/2011 10:25:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-022	**Matrix:**	Air
Client Sample ID:	VA0855		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.21	0.10		%	1	11/9/2011 7:47 PM
Carbon Monoxide	ND	0.10		%	1	11/9/2011 7:47 PM
Methane	ND	0.50		%	1	11/9/2011 7:47 PM
Nitrogen	78	0.10		%	1	11/9/2011 7:47 PM
Oxygen	20	0.10		%	1	11/9/2011 7:47 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
1,1,2,2-Tetrachloroethane	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
1,1,2-Trichloroethane	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
1,1-Dichloroethane	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
1,1-Dichloroethene	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
1,2,4-Trichlorobenzene	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
1,2,4-Trimethylbenzene	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
1,2-Dibromoethane	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
1,2-Dichlorobenzene	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
1,2-Dichloroethane	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
1,2-Dichloropropane	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
1,3,5-Trimethylbenzene	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
1,3-Butadiene	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
1,3-Dichlorobenzene	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
1,4-Dichlorobenzene	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
2-Butanone	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
2-Hexanone	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
4-Methyl-2-pentanone	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
Acetone	1,600	1,600		ppbv	1600	11/1/2011 1:55 PM
Benzene	3,500	1,600		ppbv	1600	11/1/2011 1:55 PM
Benzyl chloride	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
Bromodichloromethane	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
Bromoform	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
Bromomethane	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
Carbon disulfide	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
Carbon tetrachloride	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
Chlorobenzene	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
Chlorodibromomethane	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
Chloroethane	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
Chloroform	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
Chloromethane	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
cis-1,2-Dichloroethene	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
cis-1,3-dichloropropene	ND	1,600		ppbv	1600	11/1/2011 1:55 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/11/2011 10:25:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-022	**Matrix:**	Air
Client Sample ID:	VA0855		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	8,200	3,200		ppbv	1600	11/1/2011 1:55 PM
Dichlorodifluoromethane	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
Ethyl acetate	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
Ethylbenzene	ND	3,200		ppbv	1600	11/1/2011 1:55 PM
Heptane	2,200	1,600		ppbv	1600	11/1/2011 1:55 PM
Hexachlorobutadiene	ND	3,200		ppbv	1600	11/1/2011 1:55 PM
m,p-Xylene	ND	3,200		ppbv	1600	11/1/2011 1:55 PM
Methylene chloride	17,000	8,000		ppbv	1600	11/1/2011 1:55 PM
n-Hexane	9,700	3,200		ppbv	1600	11/1/2011 1:55 PM
Naphthalene	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
o-Xylene	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
Propylene	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
Styrene	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
tert-Butyl Methyl Ether	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
Tetrachloroethene	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
Tetrahydrofuran	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
Toluene	6,000	1,600		ppbv	1600	11/1/2011 1:55 PM
trans-1,2-Dichloroethene	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
trans-1,3-dichloropropene	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
Trichloroethene	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
Trichlorofluoromethane	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
Vinyl acetate	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
Vinyl chloride	ND	1,600		ppbv	1600	11/1/2011 1:55 PM
Xylenes, Total	ND	4,800		ppbv	1600	11/1/2011 1:55 PM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1600	11/1/2011 1:55 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,600,000	190,000		µg/m³	1600	10/27/2011 7:41 AM
C9-C10 Aromatic Hydrocarbons	ND	210,000		µg/m³	1600	10/27/2011 7:41 AM
C9-C12 Aliphatic Hydrocarbons	ND	300,000		µg/m³	1600	10/27/2011 7:41 AM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1600	10/27/2011 7:41 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/11/2011 11:05:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-023	**Matrix:**	Air
Client Sample ID:	VA0856		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.19	0.10		%	1	11/9/2011 8:06 PM
Carbon Monoxide	ND	0.10		%	1	11/9/2011 8:06 PM
Methane	ND	0.50		%	1	11/9/2011 8:06 PM
Nitrogen	78	0.10		%	1	11/9/2011 8:06 PM
Oxygen	20	0.10		%	1	11/9/2011 8:06 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
1,1,2,2-Tetrachloroethane	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
1,1,2-Trichloroethane	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
1,1-Dichloroethane	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
1,1-Dichloroethene	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
1,2,4-Trichlorobenzene	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
1,2,4-Trimethylbenzene	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
1,2-Dibromoethane	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
1,2-Dichlorobenzene	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
1,2-Dichloroethane	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
1,2-Dichloropropane	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
1,3,5-Trimethylbenzene	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
1,3-Butadiene	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
1,3-Dichlorobenzene	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
1,4-Dichlorobenzene	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
2-Butanone	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
2-Hexanone	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
4-Methyl-2-pentanone	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Acetone	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Benzene	23,000	8,000		ppbv	8000	11/3/2011 10:34 PM
Benzyl chloride	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Bromodichloromethane	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Bromoform	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Bromomethane	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Carbon disulfide	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Carbon tetrachloride	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Chlorobenzene	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Chlorodibromomethane	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Chloroethane	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Chloroform	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Chloromethane	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
cis-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
cis-1,3-dichloropropene	ND	8,000		ppbv	8000	11/3/2011 10:34 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/11/2011 11:05:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-023	**Matrix:**	Air
Client Sample ID:	VA0856		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	51,000	16,000		ppbv	8000	11/3/2011 10:34 PM
Dichlorodifluoromethane	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Ethyl acetate	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Ethylbenzene	ND	16,000		ppbv	8000	11/3/2011 10:34 PM
Heptane	15,000	8,000		ppbv	8000	11/3/2011 10:34 PM
Hexachlorobutadiene	ND	16,000		ppbv	8000	11/3/2011 10:34 PM
m,p-Xylene	ND	16,000		ppbv	8000	11/3/2011 10:34 PM
Methylene chloride	ND	40,000		ppbv	8000	11/3/2011 10:34 PM
n-Hexane	57,000	16,000		ppbv	8000	11/3/2011 10:34 PM
Naphthalene	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
o-Xylene	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Propylene	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Styrene	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
tert-Butyl Methyl Ether	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Tetrachloroethene	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Tetrahydrofuran	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Toluene	40,000	8,000		ppbv	8000	11/3/2011 10:34 PM
trans-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
trans-1,3-dichloropropene	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Trichloroethene	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Trichlorofluoromethane	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Vinyl acetate	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Vinyl chloride	ND	8,000		ppbv	8000	11/3/2011 10:34 PM
Xylenes, Total	ND	24,000		ppbv	8000	11/3/2011 10:34 PM
Surr: 4-Bromofluorobenzene	111	70-130		%REC	8000	11/3/2011 10:34 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	6,100,000	940,000		µg/m³	8000	10/26/2011 11:45 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000		µg/m³	8000	10/26/2011 11:45 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000		µg/m³	8000	10/26/2011 11:45 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	8000	10/26/2011 11:45 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/6/2011 11:50:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-024	**Matrix:**	Air
Client Sample ID:	VA0860		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.17	0.10		%	1	11/3/2011 3:44 PM
Carbon Monoxide	ND	0.10		%	1	11/3/2011 3:44 PM
Methane	ND	0.50		%	1	11/3/2011 3:44 PM
Nitrogen	79	0.10		%	1	11/3/2011 3:44 PM
Oxygen	21	0.10		%	1	11/3/2011 3:44 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400		ppbv	400	11/1/2011 2:01 AM
1,1,2,2-Tetrachloroethane	ND	400		ppbv	400	11/1/2011 2:01 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400		ppbv	400	11/1/2011 2:01 AM
1,1,2-Trichloroethane	ND	400		ppbv	400	11/1/2011 2:01 AM
1,1-Dichloroethane	ND	400		ppbv	400	11/1/2011 2:01 AM
1,1-Dichloroethene	ND	400		ppbv	400	11/1/2011 2:01 AM
1,2,4-Trichlorobenzene	ND	400		ppbv	400	11/1/2011 2:01 AM
1,2,4-Trimethylbenzene	740	400		ppbv	400	11/1/2011 2:01 AM
1,2-Dibromoethane	ND	400		ppbv	400	11/1/2011 2:01 AM
1,2-Dichlorobenzene	ND	400		ppbv	400	11/1/2011 2:01 AM
1,2-Dichloroethane	ND	400		ppbv	400	11/1/2011 2:01 AM
1,2-Dichloropropane	ND	400		ppbv	400	11/1/2011 2:01 AM
1,3,5-Trimethylbenzene	ND	400		ppbv	400	11/1/2011 2:01 AM
1,3-Butadiene	ND	400		ppbv	400	11/1/2011 2:01 AM
1,3-Dichlorobenzene	ND	400		ppbv	400	11/1/2011 2:01 AM
1,4-Dichlorobenzene	ND	400		ppbv	400	11/1/2011 2:01 AM
2-Butanone	ND	400		ppbv	400	11/1/2011 2:01 AM
2-Hexanone	ND	400		ppbv	400	11/1/2011 2:01 AM
4-Methyl-2-pentanone	ND	400		ppbv	400	11/1/2011 2:01 AM
Acetone	790	400		ppbv	400	11/1/2011 2:01 AM
Benzene	530	400		ppbv	400	11/1/2011 2:01 AM
Benzyl chloride	ND	400		ppbv	400	11/1/2011 2:01 AM
Bromodichloromethane	ND	400		ppbv	400	11/1/2011 2:01 AM
Bromoform	ND	400		ppbv	400	11/1/2011 2:01 AM
Bromomethane	ND	400		ppbv	400	11/1/2011 2:01 AM
Carbon disulfide	ND	400		ppbv	400	11/1/2011 2:01 AM
Carbon tetrachloride	ND	400		ppbv	400	11/1/2011 2:01 AM
Chlorobenzene	ND	400		ppbv	400	11/1/2011 2:01 AM
Chlorodibromomethane	ND	400		ppbv	400	11/1/2011 2:01 AM
Chloroethane	ND	400		ppbv	400	11/1/2011 2:01 AM
Chloroform	ND	400		ppbv	400	11/1/2011 2:01 AM
Chloromethane	ND	400		ppbv	400	11/1/2011 2:01 AM
cis-1,2-Dichloroethene	ND	400		ppbv	400	11/1/2011 2:01 AM
cis-1,3-dichloropropene	ND	400		ppbv	400	11/1/2011 2:01 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/6/2011 11:50:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-024	**Matrix:**	Air
Client Sample ID:	VA0860		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,800	800		ppbv	400	11/1/2011 2:01 AM
Dichlorodifluoromethane	ND	400		ppbv	400	11/1/2011 2:01 AM
Ethyl acetate	ND	400		ppbv	400	11/1/2011 2:01 AM
Ethylbenzene	640	800	J	ppbv	400	11/1/2011 2:01 AM
Heptane	1,800	400		ppbv	400	11/1/2011 2:01 AM
Hexachlorobutadiene	ND	800		ppbv	400	11/1/2011 2:01 AM
m,p-Xylene	2,000	800		ppbv	400	11/1/2011 2:01 AM
Methylene chloride	3,800	2,000		ppbv	400	11/1/2011 2:01 AM
n-Hexane	1,200	800		ppbv	400	11/1/2011 2:01 AM
Naphthalene	ND	400		ppbv	400	11/1/2011 2:01 AM
o-Xylene	660	400		ppbv	400	11/1/2011 2:01 AM
Propylene	ND	400		ppbv	400	11/1/2011 2:01 AM
Styrene	ND	400		ppbv	400	11/1/2011 2:01 AM
tert-Butyl Methyl Ether	ND	400		ppbv	400	11/1/2011 2:01 AM
Tetrachloroethene	ND	400		ppbv	400	11/1/2011 2:01 AM
Tetrahydrofuran	ND	400		ppbv	400	11/1/2011 2:01 AM
Toluene	3,500	400		ppbv	400	11/1/2011 2:01 AM
trans-1,2-Dichloroethene	ND	400		ppbv	400	11/1/2011 2:01 AM
trans-1,3-dichloropropene	ND	400		ppbv	400	11/1/2011 2:01 AM
Trichloroethene	ND	400		ppbv	400	11/1/2011 2:01 AM
Trichlorofluoromethane	ND	400		ppbv	400	11/1/2011 2:01 AM
Vinyl acetate	ND	400		ppbv	400	11/1/2011 2:01 AM
Vinyl chloride	ND	400		ppbv	400	11/1/2011 2:01 AM
Xylenes, Total	2,600	1,200		ppbv	400	11/1/2011 2:01 AM
Surr: 4-Bromofluorobenzene	91.1	70-130		%REC	400	11/1/2011 2:01 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	250,000	47,000		µg/m³	400	10/27/2011 8:30 AM
C9-C10 Aromatic Hydrocarbons	25,000	53,000	J	µg/m³	400	10/27/2011 8:30 AM
C9-C12 Aliphatic Hydrocarbons	150,000	76,000		µg/m³	400	10/27/2011 8:30 AM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	400	10/27/2011 8:30 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/6/2011 12:28:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-025	**Matrix:**	Air
Client Sample ID:	VA0861		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.18	0.10		%	1	11/3/2011 4:11 PM
Carbon Monoxide	ND	0.10		%	1	11/3/2011 4:11 PM
Methane	ND	0.50		%	1	11/3/2011 4:11 PM
Nitrogen	79	0.10		%	1	11/3/2011 4:11 PM
Oxygen	21	0.10		%	1	11/3/2011 4:11 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400		ppbv	400	11/1/2011 2:48 AM
1,1,2,2-Tetrachloroethane	ND	400		ppbv	400	11/1/2011 2:48 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400		ppbv	400	11/1/2011 2:48 AM
1,1,2-Trichloroethane	ND	400		ppbv	400	11/1/2011 2:48 AM
1,1-Dichloroethane	ND	400		ppbv	400	11/1/2011 2:48 AM
1,1-Dichloroethene	ND	400		ppbv	400	11/1/2011 2:48 AM
1,2,4-Trichlorobenzene	ND	400		ppbv	400	11/1/2011 2:48 AM
1,2,4-Trimethylbenzene	1,100	400		ppbv	400	11/1/2011 2:48 AM
1,2-Dibromoethane	ND	400		ppbv	400	11/1/2011 2:48 AM
1,2-Dichlorobenzene	ND	400		ppbv	400	11/1/2011 2:48 AM
1,2-Dichloroethane	ND	400		ppbv	400	11/1/2011 2:48 AM
1,2-Dichloropropane	ND	400		ppbv	400	11/1/2011 2:48 AM
1,3,5-Trimethylbenzene	410	400		ppbv	400	11/1/2011 2:48 AM
1,3-Butadiene	ND	400		ppbv	400	11/1/2011 2:48 AM
1,3-Dichlorobenzene	ND	400		ppbv	400	11/1/2011 2:48 AM
1,4-Dichlorobenzene	ND	400		ppbv	400	11/1/2011 2:48 AM
2-Butanone	ND	400		ppbv	400	11/1/2011 2:48 AM
2-Hexanone	ND	400		ppbv	400	11/1/2011 2:48 AM
4-Methyl-2-pentanone	ND	400		ppbv	400	11/1/2011 2:48 AM
Acetone	530	400		ppbv	400	11/1/2011 2:48 AM
Benzene	660	400		ppbv	400	11/1/2011 2:48 AM
Benzyl chloride	ND	400		ppbv	400	11/1/2011 2:48 AM
Bromodichloromethane	ND	400		ppbv	400	11/1/2011 2:48 AM
Bromoform	ND	400		ppbv	400	11/1/2011 2:48 AM
Bromomethane	ND	400		ppbv	400	11/1/2011 2:48 AM
Carbon disulfide	ND	400		ppbv	400	11/1/2011 2:48 AM
Carbon tetrachloride	ND	400		ppbv	400	11/1/2011 2:48 AM
Chlorobenzene	ND	400		ppbv	400	11/1/2011 2:48 AM
Chlorodibromomethane	ND	400		ppbv	400	11/1/2011 2:48 AM
Chloroethane	ND	400		ppbv	400	11/1/2011 2:48 AM
Chloroform	ND	400		ppbv	400	11/1/2011 2:48 AM
Chloromethane	ND	400		ppbv	400	11/1/2011 2:48 AM
cis-1,2-Dichloroethene	ND	400		ppbv	400	11/1/2011 2:48 AM
cis-1,3-dichloropropene	ND	400		ppbv	400	11/1/2011 2:48 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/6/2011 12:28:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-025	**Matrix:**	Air
Client Sample ID:	VA0861		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,900	800		ppbv	400	11/1/2011 2:48 AM
Dichlorodifluoromethane	ND	400		ppbv	400	11/1/2011 2:48 AM
Ethyl acetate	ND	400		ppbv	400	11/1/2011 2:48 AM
Ethylbenzene	900	800		ppbv	400	11/1/2011 2:48 AM
Heptane	2,600	400		ppbv	400	11/1/2011 2:48 AM
Hexachlorobutadiene	ND	800		ppbv	400	11/1/2011 2:48 AM
m,p-Xylene	2,900	800		ppbv	400	11/1/2011 2:48 AM
Methylene chloride	2,000	2,000		ppbv	400	11/1/2011 2:48 AM
n-Hexane	1,100	800		ppbv	400	11/1/2011 2:48 AM
Naphthalene	ND	400		ppbv	400	11/1/2011 2:48 AM
o-Xylene	1,100	400		ppbv	400	11/1/2011 2:48 AM
Propylene	ND	400		ppbv	400	11/1/2011 2:48 AM
Styrene	ND	400		ppbv	400	11/1/2011 2:48 AM
tert-Butyl Methyl Ether	ND	400		ppbv	400	11/1/2011 2:48 AM
Tetrachloroethene	ND	400		ppbv	400	11/1/2011 2:48 AM
Tetrahydrofuran	ND	400		ppbv	400	11/1/2011 2:48 AM
Toluene	5,300	400		ppbv	400	11/1/2011 2:48 AM
trans-1,2-Dichloroethene	ND	400		ppbv	400	11/1/2011 2:48 AM
trans-1,3-dichloropropene	ND	400		ppbv	400	11/1/2011 2:48 AM
Trichloroethene	ND	400		ppbv	400	11/1/2011 2:48 AM
Trichlorofluoromethane	ND	400		ppbv	400	11/1/2011 2:48 AM
Vinyl acetate	ND	400		ppbv	400	11/1/2011 2:48 AM
Vinyl chloride	ND	400		ppbv	400	11/1/2011 2:48 AM
Xylenes, Total	4,000	1,200		ppbv	400	11/1/2011 2:48 AM
Surr: 4-Bromofluorobenzene	109	70-130		%REC	400	11/1/2011 2:48 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	270,000	47,000		µg/m³	400	10/27/2011 9:19 AM
C9-C10 Aromatic Hydrocarbons	23,000	53,000	J	µg/m³	400	10/27/2011 9:19 AM
C9-C12 Aliphatic Hydrocarbons	140,000	76,000		µg/m³	400	10/27/2011 9:19 AM
Surr: 4-Bromofluorobenzene	108	70-130		%REC	400	10/27/2011 9:19 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/6/2011 1:12:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-026	**Matrix:**	Air
Client Sample ID:	VA0862		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.19	0.10		%	1	11/3/2011 4:36 PM
Carbon Monoxide	ND	0.10		%	1	11/3/2011 4:36 PM
Methane	ND	0.50		%	1	11/3/2011 4:36 PM
Nitrogen	79	0.10		%	1	11/3/2011 4:36 PM
Oxygen	20	0.10		%	1	11/3/2011 4:36 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800		ppbv	800	11/1/2011 4:43 PM
1,1,2,2-Tetrachloroethane	ND	800		ppbv	800	11/1/2011 4:43 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800		ppbv	800	11/1/2011 4:43 PM
1,1,2-Trichloroethane	ND	800		ppbv	800	11/1/2011 4:43 PM
1,1-Dichloroethane	ND	800		ppbv	800	11/1/2011 4:43 PM
1,1-Dichloroethene	ND	800		ppbv	800	11/1/2011 4:43 PM
1,2,4-Trichlorobenzene	ND	800		ppbv	800	11/1/2011 4:43 PM
1,2,4-Trimethylbenzene	ND	800		ppbv	800	11/1/2011 4:43 PM
1,2-Dibromoethane	ND	800		ppbv	800	11/1/2011 4:43 PM
1,2-Dichlorobenzene	ND	800		ppbv	800	11/1/2011 4:43 PM
1,2-Dichloroethane	ND	800		ppbv	800	11/1/2011 4:43 PM
1,2-Dichloropropane	ND	800		ppbv	800	11/1/2011 4:43 PM
1,3,5-Trimethylbenzene	ND	800		ppbv	800	11/1/2011 4:43 PM
1,3-Butadiene	ND	800		ppbv	800	11/1/2011 4:43 PM
1,3-Dichlorobenzene	ND	800		ppbv	800	11/1/2011 4:43 PM
1,4-Dichlorobenzene	ND	800		ppbv	800	11/1/2011 4:43 PM
2-Butanone	ND	800		ppbv	800	11/1/2011 4:43 PM
2-Hexanone	ND	800		ppbv	800	11/1/2011 4:43 PM
4-Methyl-2-pentanone	ND	800		ppbv	800	11/1/2011 4:43 PM
Acetone	ND	800		ppbv	800	11/1/2011 4:43 PM
Benzene	4,200	800		ppbv	800	11/1/2011 4:43 PM
Benzyl chloride	ND	800		ppbv	800	11/1/2011 4:43 PM
Bromodichloromethane	ND	800		ppbv	800	11/1/2011 4:43 PM
Bromoform	ND	800		ppbv	800	11/1/2011 4:43 PM
Bromomethane	ND	800		ppbv	800	11/1/2011 4:43 PM
Carbon disulfide	ND	800		ppbv	800	11/1/2011 4:43 PM
Carbon tetrachloride	ND	800		ppbv	800	11/1/2011 4:43 PM
Chlorobenzene	ND	800		ppbv	800	11/1/2011 4:43 PM
Chlorodibromomethane	ND	800		ppbv	800	11/1/2011 4:43 PM
Chloroethane	ND	800		ppbv	800	11/1/2011 4:43 PM
Chloroform	ND	800		ppbv	800	11/1/2011 4:43 PM
Chloromethane	ND	800		ppbv	800	11/1/2011 4:43 PM
cis-1,2-Dichloroethene	ND	800		ppbv	800	11/1/2011 4:43 PM
cis-1,3-dichloropropene	ND	800		ppbv	800	11/1/2011 4:43 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/6/2011 1:12:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-026	**Matrix:**	Air
Client Sample ID:	VA0862		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	20,000	1,600		ppbv	800	11/1/2011 4:43 PM
Dichlorodifluoromethane	ND	800		ppbv	800	11/1/2011 4:43 PM
Ethyl acetate	ND	800		ppbv	800	11/1/2011 4:43 PM
Ethylbenzene	940	1,600	J	ppbv	800	11/1/2011 4:43 PM
Heptane	5,300	800		ppbv	800	11/1/2011 4:43 PM
Hexachlorobutadiene	ND	1,600		ppbv	800	11/1/2011 4:43 PM
m,p-Xylene	2,400	1,600		ppbv	800	11/1/2011 4:43 PM
Methylene chloride	ND	4,000		ppbv	800	11/1/2011 4:43 PM
n-Hexane	19,000	1,600		ppbv	800	11/1/2011 4:43 PM
Naphthalene	ND	800		ppbv	800	11/1/2011 4:43 PM
o-Xylene	830	800		ppbv	800	11/1/2011 4:43 PM
Propylene	2,000	800		ppbv	800	11/1/2011 4:43 PM
Styrene	ND	800		ppbv	800	11/1/2011 4:43 PM
tert-Butyl Methyl Ether	ND	800		ppbv	800	11/1/2011 4:43 PM
Tetrachloroethene	ND	800		ppbv	800	11/1/2011 4:43 PM
Tetrahydrofuran	ND	800		ppbv	800	11/1/2011 4:43 PM
Toluene	11,000	800		ppbv	800	11/1/2011 4:43 PM
trans-1,2-Dichloroethene	ND	800		ppbv	800	11/1/2011 4:43 PM
trans-1,3-dichloropropene	ND	800		ppbv	800	11/1/2011 4:43 PM
Trichloroethene	ND	800		ppbv	800	11/1/2011 4:43 PM
Trichlorofluoromethane	ND	800		ppbv	800	11/1/2011 4:43 PM
Vinyl acetate	ND	800		ppbv	800	11/1/2011 4:43 PM
Vinyl chloride	ND	800		ppbv	800	11/1/2011 4:43 PM
Xylenes, Total	3,200	2,400		ppbv	800	11/1/2011 4:43 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	800	11/1/2011 4:43 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	3,400,000	940,000		µg/m³	8000	10/31/2011 10:12 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000		µg/m³	8000	10/31/2011 10:12 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000		µg/m³	8000	10/31/2011 10:12 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	8000	10/31/2011 10:12 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/6/2011 1:52:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-027	**Matrix:**	Air
Client Sample ID:	VA0863		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.12	0.10		%	1	11/3/2011 5:11 PM
Carbon Monoxide	ND	0.10		%	1	11/3/2011 5:11 PM
Methane	ND	0.50		%	1	11/3/2011 5:11 PM
Nitrogen	79	0.10		%	1	11/3/2011 5:11 PM
Oxygen	21	0.10		%	1	11/3/2011 5:11 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
1,1,2,2-Tetrachloroethane	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
1,1,2-Trichloroethane	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
1,1-Dichloroethane	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
1,1-Dichloroethene	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
1,2,4-Trichlorobenzene	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
1,2,4-Trimethylbenzene	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
1,2-Dibromoethane	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
1,2-Dichlorobenzene	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
1,2-Dichloroethane	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
1,2-Dichloropropane	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
1,3,5-Trimethylbenzene	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
1,3-Butadiene	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
1,3-Dichlorobenzene	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
1,4-Dichlorobenzene	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
2-Butanone	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
2-Hexanone	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
4-Methyl-2-pentanone	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Acetone	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Benzene	3,600	1,600		ppbv	1600	11/1/2011 4:11 AM
Benzyl chloride	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Bromodichloromethane	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Bromoform	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Bromomethane	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Carbon disulfide	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Carbon tetrachloride	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Chlorobenzene	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Chlorodibromomethane	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Chloroethane	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Chloroform	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Chloromethane	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
cis-1,2-Dichloroethene	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
cis-1,3-dichloropropene	ND	1,600		ppbv	1600	11/1/2011 4:11 AM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/6/2011 1:52:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-027	**Matrix:**	Air
Client Sample ID:	VA0863		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	11,000	3,200		ppbv	1600	11/1/2011 4:11 AM
Dichlorodifluoromethane	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Ethyl acetate	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Ethylbenzene	ND	3,200		ppbv	1600	11/1/2011 4:11 AM
Heptane	3,200	1,600		ppbv	1600	11/1/2011 4:11 AM
Hexachlorobutadiene	ND	3,200		ppbv	1600	11/1/2011 4:11 AM
m,p-Xylene	ND	3,200		ppbv	1600	11/1/2011 4:11 AM
Methylene chloride	ND	8,000		ppbv	1600	11/1/2011 4:11 AM
n-Hexane	12,000	3,200		ppbv	1600	11/1/2011 4:11 AM
Naphthalene	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
o-Xylene	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Propylene	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Styrene	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
tert-Butyl Methyl Ether	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Tetrachloroethene	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Tetrahydrofuran	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Toluene	7,100	1,600		ppbv	1600	11/1/2011 4:11 AM
trans-1,2-Dichloroethene	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
trans-1,3-dichloropropene	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Trichloroethene	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Trichlorofluoromethane	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Vinyl acetate	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Vinyl chloride	ND	1,600		ppbv	1600	11/1/2011 4:11 AM
Xylenes, Total	ND	4,800		ppbv	1600	11/1/2011 4:11 AM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1600	11/1/2011 4:11 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,800,000	190,000		µg/m³	1600	10/31/2011 12:55 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000		µg/m³	1600	10/31/2011 12:55 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000		µg/m³	1600	10/31/2011 12:55 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1600	10/31/2011 12:55 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/13/2011 9:45:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-028	**Matrix:**	Air
Client Sample ID:	VA0917		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.21	0.10		%	1	11/10/2011 3:39 PM
Carbon Monoxide	ND	0.10		%	1	11/10/2011 3:39 PM
Methane	ND	0.50		%	1	11/10/2011 3:39 PM
Nitrogen	79	0.10		%	1	11/10/2011 3:39 PM
Oxygen	21	0.10		%	1	11/10/2011 3:39 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
1,1,2,2-Tetrachloroethane	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
1,1,2-Trichloroethane	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
1,1-Dichloroethane	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
1,1-Dichloroethene	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
1,2,4-Trichlorobenzene	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
1,2,4-Trimethylbenzene	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
1,2-Dibromoethane	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
1,2-Dichlorobenzene	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
1,2-Dichloroethane	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
1,2-Dichloropropane	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
1,3,5-Trimethylbenzene	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
1,3-Butadiene	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
1,3-Dichlorobenzene	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
1,4-Dichlorobenzene	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
2-Butanone	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
2-Hexanone	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
4-Methyl-2-pentanone	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Acetone	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Benzene	2,400	1,600		ppbv	1600	11/2/2011 11:31 AM
Benzyl chloride	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Bromodichloromethane	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Bromoform	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Bromomethane	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Carbon disulfide	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Carbon tetrachloride	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Chlorobenzene	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Chlorodibromomethane	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Chloroethane	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Chloroform	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Chloromethane	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
cis-1,2-Dichloroethene	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
cis-1,3-dichloropropene	ND	1,600		ppbv	1600	11/2/2011 11:31 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/13/2011 9:45:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-028	**Matrix:**	Air
Client Sample ID:	VA0917		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	8,000	3,200		ppbv	1600	11/2/2011 11:31 AM
Dichlorodifluoromethane	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Ethyl acetate	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Ethylbenzene	ND	3,200		ppbv	1600	11/2/2011 11:31 AM
Heptane	3,700	1,600		ppbv	1600	11/2/2011 11:31 AM
Hexachlorobutadiene	ND	3,200		ppbv	1600	11/2/2011 11:31 AM
m,p-Xylene	ND	3,200		ppbv	1600	11/2/2011 11:31 AM
Methylene chloride	3,600	8,000	J	ppbv	1600	11/2/2011 11:31 AM
n-Hexane	4,700	3,200		ppbv	1600	11/2/2011 11:31 AM
Naphthalene	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
o-Xylene	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Propylene	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Styrene	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
tert-Butyl Methyl Ether	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Tetrachloroethene	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Tetrahydrofuran	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Toluene	5,600	1,600		ppbv	1600	11/2/2011 11:31 AM
trans-1,2-Dichloroethene	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
trans-1,3-dichloropropene	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Trichloroethene	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Trichlorofluoromethane	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Vinyl acetate	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Vinyl chloride	ND	1,600		ppbv	1600	11/2/2011 11:31 AM
Xylenes, Total	ND	4,800		ppbv	1600	11/2/2011 11:31 AM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1600	11/2/2011 11:31 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	750,000	190,000		µg/m³	1600	10/31/2011 1:39 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000		µg/m³	1600	10/31/2011 1:39 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000		µg/m³	1600	10/31/2011 1:39 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1600	10/31/2011 1:39 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/13/2011 10:25:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-029	**Matrix:**	Air
Client Sample ID:	VA0918		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.20	0.10		%	1	11/10/2011 4:25 PM
Carbon Monoxide	ND	0.10		%	1	11/10/2011 4:25 PM
Methane	ND	0.50		%	1	11/10/2011 4:25 PM
Nitrogen	79	0.10		%	1	11/10/2011 4:25 PM
Oxygen	21	0.10		%	1	11/10/2011 4:25 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
1,1,2,2-Tetrachloroethane	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
1,1,2-Trichloroethane	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
1,1-Dichloroethane	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
1,1-Dichloroethene	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
1,2,4-Trichlorobenzene	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
1,2,4-Trimethylbenzene	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
1,2-Dibromoethane	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
1,2-Dichlorobenzene	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
1,2-Dichloroethane	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
1,2-Dichloropropane	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
1,3,5-Trimethylbenzene	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
1,3-Butadiene	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
1,3-Dichlorobenzene	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
1,4-Dichlorobenzene	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
2-Butanone	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
2-Hexanone	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
4-Methyl-2-pentanone	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Acetone	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Benzene	4,000	1,600		ppbv	1600	11/2/2011 12:13 PM
Benzyl chloride	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Bromodichloromethane	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Bromoform	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Bromomethane	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Carbon disulfide	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Carbon tetrachloride	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Chlorobenzene	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Chlorodibromomethane	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Chloroethane	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Chloroform	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Chloromethane	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
cis-1,2-Dichloroethene	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
cis-1,3-dichloropropene	ND	1,600		ppbv	1600	11/2/2011 12:13 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/13/2011 10:25:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-029	**Matrix:**	Air
Client Sample ID:	VA0918		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	17,000	3,200		ppbv	1600	11/2/2011 12:13 PM
Dichlorodifluoromethane	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Ethyl acetate	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Ethylbenzene	ND	3,200		ppbv	1600	11/2/2011 12:13 PM
Heptane	7,600	1,600		ppbv	1600	11/2/2011 12:13 PM
Hexachlorobutadiene	ND	3,200		ppbv	1600	11/2/2011 12:13 PM
m,p-Xylene	ND	3,200		ppbv	1600	11/2/2011 12:13 PM
Methylene chloride	ND	8,000		ppbv	1600	11/2/2011 12:13 PM
n-Hexane	9,500	3,200		ppbv	1600	11/2/2011 12:13 PM
Naphthalene	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
o-Xylene	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Propylene	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Styrene	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
tert-Butyl Methyl Ether	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Tetrachloroethene	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Tetrahydrofuran	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Toluene	7,900	1,600		ppbv	1600	11/2/2011 12:13 PM
trans-1,2-Dichloroethene	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
trans-1,3-dichloropropene	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Trichloroethene	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Trichlorofluoromethane	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Vinyl acetate	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Vinyl chloride	ND	1,600		ppbv	1600	11/2/2011 12:13 PM
Xylenes, Total	ND	4,800		ppbv	1600	11/2/2011 12:13 PM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1600	11/2/2011 12:13 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,200,000	190,000		µg/m³	1600	10/31/2011 2:22 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000		µg/m³	1600	10/31/2011 2:22 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000		µg/m³	1600	10/31/2011 2:22 PM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1600	10/31/2011 2:22 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/13/2011 11:07:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-030	**Matrix:**	Air
Client Sample ID:	VA0919		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.20	0.10		%	1	11/10/2011 4:45 PM
Carbon Monoxide	ND	0.10		%	1	11/10/2011 4:45 PM
Methane	ND	0.50		%	1	11/10/2011 4:45 PM
Nitrogen	79	0.10		%	1	11/10/2011 4:45 PM
Oxygen	20	0.10		%	1	11/10/2011 4:45 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400		ppbv	400	11/2/2011 1:01 PM
1,1,2,2-Tetrachloroethane	ND	400		ppbv	400	11/2/2011 1:01 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400		ppbv	400	11/2/2011 1:01 PM
1,1,2-Trichloroethane	ND	400		ppbv	400	11/2/2011 1:01 PM
1,1-Dichloroethane	ND	400		ppbv	400	11/2/2011 1:01 PM
1,1-Dichloroethene	ND	400		ppbv	400	11/2/2011 1:01 PM
1,2,4-Trichlorobenzene	ND	400		ppbv	400	11/2/2011 1:01 PM
1,2,4-Trimethylbenzene	ND	400		ppbv	400	11/2/2011 1:01 PM
1,2-Dibromoethane	ND	400		ppbv	400	11/2/2011 1:01 PM
1,2-Dichlorobenzene	ND	400		ppbv	400	11/2/2011 1:01 PM
1,2-Dichloroethane	ND	400		ppbv	400	11/2/2011 1:01 PM
1,2-Dichloropropane	ND	400		ppbv	400	11/2/2011 1:01 PM
1,3,5-Trimethylbenzene	ND	400		ppbv	400	11/2/2011 1:01 PM
1,3-Butadiene	ND	400		ppbv	400	11/2/2011 1:01 PM
1,3-Dichlorobenzene	ND	400		ppbv	400	11/2/2011 1:01 PM
1,4-Dichlorobenzene	ND	400		ppbv	400	11/2/2011 1:01 PM
2-Butanone	ND	400		ppbv	400	11/2/2011 1:01 PM
2-Hexanone	ND	400		ppbv	400	11/2/2011 1:01 PM
4-Methyl-2-pentanone	ND	400		ppbv	400	11/2/2011 1:01 PM
Acetone	610	400		ppbv	400	11/2/2011 1:01 PM
Benzene	760	400		ppbv	400	11/2/2011 1:01 PM
Benzyl chloride	ND	400		ppbv	400	11/2/2011 1:01 PM
Bromodichloromethane	ND	400		ppbv	400	11/2/2011 1:01 PM
Bromoform	ND	400		ppbv	400	11/2/2011 1:01 PM
Bromomethane	ND	400		ppbv	400	11/2/2011 1:01 PM
Carbon disulfide	ND	400		ppbv	400	11/2/2011 1:01 PM
Carbon tetrachloride	ND	400		ppbv	400	11/2/2011 1:01 PM
Chlorobenzene	ND	400		ppbv	400	11/2/2011 1:01 PM
Chlorodibromomethane	ND	400		ppbv	400	11/2/2011 1:01 PM
Chloroethane	ND	400		ppbv	400	11/2/2011 1:01 PM
Chloroform	ND	400		ppbv	400	11/2/2011 1:01 PM
Chloromethane	ND	400		ppbv	400	11/2/2011 1:01 PM
cis-1,2-Dichloroethene	ND	400		ppbv	400	11/2/2011 1:01 PM
cis-1,3-dichloropropene	ND	400		ppbv	400	11/2/2011 1:01 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/13/2011 11:07:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-030	**Matrix:**	Air
Client Sample ID:	VA0919		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,400	800		ppbv	400	11/2/2011 1:01 PM
Dichlorodifluoromethane	ND	400		ppbv	400	11/2/2011 1:01 PM
Ethyl acetate	ND	400		ppbv	400	11/2/2011 1:01 PM
Ethylbenzene	ND	800		ppbv	400	11/2/2011 1:01 PM
Heptane	1,400	400		ppbv	400	11/2/2011 1:01 PM
Hexachlorobutadiene	ND	800		ppbv	400	11/2/2011 1:01 PM
m,p-Xylene	1,100	800		ppbv	400	11/2/2011 1:01 PM
Methylene chloride	2,000	2,000		ppbv	400	11/2/2011 1:01 PM
n-Hexane	2,300	800		ppbv	400	11/2/2011 1:01 PM
Naphthalene	ND	400		ppbv	400	11/2/2011 1:01 PM
o-Xylene	ND	400		ppbv	400	11/2/2011 1:01 PM
Propylene	ND	400		ppbv	400	11/2/2011 1:01 PM
Styrene	ND	400		ppbv	400	11/2/2011 1:01 PM
tert-Butyl Methyl Ether	ND	400		ppbv	400	11/2/2011 1:01 PM
Tetrachloroethene	ND	400		ppbv	400	11/2/2011 1:01 PM
Tetrahydrofuran	ND	400		ppbv	400	11/2/2011 1:01 PM
Toluene	2,600	400		ppbv	400	11/2/2011 1:01 PM
trans-1,2-Dichloroethene	ND	400		ppbv	400	11/2/2011 1:01 PM
trans-1,3-dichloropropene	ND	400		ppbv	400	11/2/2011 1:01 PM
Trichloroethene	ND	400		ppbv	400	11/2/2011 1:01 PM
Trichlorofluoromethane	ND	400		ppbv	400	11/2/2011 1:01 PM
Vinyl acetate	ND	400		ppbv	400	11/2/2011 1:01 PM
Vinyl chloride	ND	400		ppbv	400	11/2/2011 1:01 PM
Xylenes, Total	1,100	1,200	J	ppbv	400	11/2/2011 1:01 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	400	11/2/2011 1:01 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	200,000	47,000		µg/m³	400	10/31/2011 3:11 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000		µg/m³	400	10/31/2011 3:11 PM
C9-C12 Aliphatic Hydrocarbons	57,000	76,000	J	µg/m³	400	10/31/2011 3:11 PM
Surr: 4-Bromofluorobenzene	112	70-130		%REC	400	10/31/2011 3:11 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/13/2011 2:00:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-031	**Matrix:**	Air
Client Sample ID:	VA0920		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.60	0.10		%	1	11/10/2011 5:03 PM
Carbon Monoxide	ND	0.10		%	1	11/10/2011 5:03 PM
Methane	ND	0.50		%	1	11/10/2011 5:03 PM
Nitrogen	79	0.10		%	1	11/10/2011 5:03 PM
Oxygen	19	0.10		%	1	11/10/2011 5:03 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800		ppbv	800	11/2/2011 1:53 PM
1,1,2,2-Tetrachloroethane	ND	800		ppbv	800	11/2/2011 1:53 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800		ppbv	800	11/2/2011 1:53 PM
1,1,2-Trichloroethane	ND	800		ppbv	800	11/2/2011 1:53 PM
1,1-Dichloroethane	ND	800		ppbv	800	11/2/2011 1:53 PM
1,1-Dichloroethene	ND	800		ppbv	800	11/2/2011 1:53 PM
1,2,4-Trichlorobenzene	ND	800		ppbv	800	11/2/2011 1:53 PM
1,2,4-Trimethylbenzene	ND	800		ppbv	800	11/2/2011 1:53 PM
1,2-Dibromoethane	ND	800		ppbv	800	11/2/2011 1:53 PM
1,2-Dichlorobenzene	ND	800		ppbv	800	11/2/2011 1:53 PM
1,2-Dichloroethane	ND	800		ppbv	800	11/2/2011 1:53 PM
1,2-Dichloropropane	ND	800		ppbv	800	11/2/2011 1:53 PM
1,3,5-Trimethylbenzene	ND	800		ppbv	800	11/2/2011 1:53 PM
1,3-Butadiene	ND	800		ppbv	800	11/2/2011 1:53 PM
1,3-Dichlorobenzene	ND	800		ppbv	800	11/2/2011 1:53 PM
1,4-Dichlorobenzene	ND	800		ppbv	800	11/2/2011 1:53 PM
2-Butanone	ND	800		ppbv	800	11/2/2011 1:53 PM
2-Hexanone	ND	800		ppbv	800	11/2/2011 1:53 PM
4-Methyl-2-pentanone	ND	800		ppbv	800	11/2/2011 1:53 PM
Acetone	1,200	800		ppbv	800	11/2/2011 1:53 PM
Benzene	2,200	800		ppbv	800	11/2/2011 1:53 PM
Benzyl chloride	ND	800		ppbv	800	11/2/2011 1:53 PM
Bromodichloromethane	ND	800		ppbv	800	11/2/2011 1:53 PM
Bromoform	ND	800		ppbv	800	11/2/2011 1:53 PM
Bromomethane	ND	800		ppbv	800	11/2/2011 1:53 PM
Carbon disulfide	ND	800		ppbv	800	11/2/2011 1:53 PM
Carbon tetrachloride	ND	800		ppbv	800	11/2/2011 1:53 PM
Chlorobenzene	ND	800		ppbv	800	11/2/2011 1:53 PM
Chlorodibromomethane	ND	800		ppbv	800	11/2/2011 1:53 PM
Chloroethane	ND	800		ppbv	800	11/2/2011 1:53 PM
Chloroform	ND	800		ppbv	800	11/2/2011 1:53 PM
Chloromethane	ND	800		ppbv	800	11/2/2011 1:53 PM
cis-1,2-Dichloroethene	ND	800		ppbv	800	11/2/2011 1:53 PM
cis-1,3-dichloropropene	ND	800		ppbv	800	11/2/2011 1:53 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/13/2011 2:00:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-031	**Matrix:**	Air
Client Sample ID:	VA0920		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	6,500	1,600		ppbv	800	11/2/2011 1:53 PM
Dichlorodifluoromethane	ND	800		ppbv	800	11/2/2011 1:53 PM
Ethyl acetate	ND	800		ppbv	800	11/2/2011 1:53 PM
Ethylbenzene	ND	1,600		ppbv	800	11/2/2011 1:53 PM
Heptane	4,400	800		ppbv	800	11/2/2011 1:53 PM
Hexachlorobutadiene	ND	1,600		ppbv	800	11/2/2011 1:53 PM
m,p-Xylene	1,400	1,600	J	ppbv	800	11/2/2011 1:53 PM
Methylene chloride	3,100	4,000	J	ppbv	800	11/2/2011 1:53 PM
n-Hexane	4,000	1,600		ppbv	800	11/2/2011 1:53 PM
Naphthalene	ND	800		ppbv	800	11/2/2011 1:53 PM
o-Xylene	ND	800		ppbv	800	11/2/2011 1:53 PM
Propylene	ND	800		ppbv	800	11/2/2011 1:53 PM
Styrene	ND	800		ppbv	800	11/2/2011 1:53 PM
tert-Butyl Methyl Ether	ND	800		ppbv	800	11/2/2011 1:53 PM
Tetrachloroethene	ND	800		ppbv	800	11/2/2011 1:53 PM
Tetrahydrofuran	ND	800		ppbv	800	11/2/2011 1:53 PM
Toluene	5,000	800		ppbv	800	11/2/2011 1:53 PM
trans-1,2-Dichloroethene	ND	800		ppbv	800	11/2/2011 1:53 PM
trans-1,3-dichloropropene	ND	800		ppbv	800	11/2/2011 1:53 PM
Trichloroethene	ND	800		ppbv	800	11/2/2011 1:53 PM
Trichlorofluoromethane	ND	800		ppbv	800	11/2/2011 1:53 PM
Vinyl acetate	ND	800		ppbv	800	11/2/2011 1:53 PM
Vinyl chloride	ND	800		ppbv	800	11/2/2011 1:53 PM
Xylenes, Total	1,400	2,400	J	ppbv	800	11/2/2011 1:53 PM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	800	11/2/2011 1:53 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	460,000	47,000		µg/m³	400	11/4/2011 12:25 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000		µg/m³	400	11/4/2011 12:25 AM
C9-C12 Aliphatic Hydrocarbons	92,000	76,000		µg/m³	400	11/4/2011 12:25 AM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	400	11/4/2011 12:25 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/13/2011 2:44:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-032	**Matrix:**	Air
Client Sample ID:	VA0921		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.79	0.10		%	1	11/10/2011 5:23 PM
Carbon Monoxide	ND	0.10		%	1	11/10/2011 5:23 PM
Methane	ND	0.50		%	1	11/10/2011 5:23 PM
Nitrogen	81	0.10		%	1	11/10/2011 5:23 PM
Oxygen	17	0.10		%	1	11/10/2011 5:23 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
1,1,2,2-Tetrachloroethane	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
1,1,2-Trichloroethane	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
1,1-Dichloroethane	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
1,1-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
1,2,4-Trichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
1,2,4-Trimethylbenzene	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
1,2-Dibromoethane	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
1,2-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
1,2-Dichloroethane	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
1,2-Dichloropropane	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
1,3,5-Trimethylbenzene	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
1,3-Butadiene	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
1,3-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
1,4-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
2-Butanone	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
2-Hexanone	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
4-Methyl-2-pentanone	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Acetone	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Benzene	11,000	8,000		ppbv	8000	11/2/2011 2:34 PM
Benzyl chloride	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Bromodichloromethane	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Bromoform	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Bromomethane	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Carbon disulfide	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Carbon tetrachloride	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Chlorobenzene	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Chlorodibromomethane	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Chloroethane	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Chloroform	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Chloromethane	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
cis-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
cis-1,3-dichloropropene	ND	8,000		ppbv	8000	11/2/2011 2:34 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/13/2011 2:44:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-032	**Matrix:**	Air
Client Sample ID:	VA0921		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	62,000	16,000		ppbv	8000	11/2/2011 2:34 PM
Dichlorodifluoromethane	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Ethyl acetate	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Ethylbenzene	ND	16,000		ppbv	8000	11/2/2011 2:34 PM
Heptane	19,000	8,000		ppbv	8000	11/2/2011 2:34 PM
Hexachlorobutadiene	ND	16,000		ppbv	8000	11/2/2011 2:34 PM
m,p-Xylene	ND	16,000		ppbv	8000	11/2/2011 2:34 PM
Methylene chloride	ND	40,000		ppbv	8000	11/2/2011 2:34 PM
n-Hexane	45,000	16,000		ppbv	8000	11/2/2011 2:34 PM
Naphthalene	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
o-Xylene	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Propylene	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Styrene	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
tert-Butyl Methyl Ether	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Tetrachloroethene	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Tetrahydrofuran	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Toluene	22,000	8,000		ppbv	8000	11/2/2011 2:34 PM
trans-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
trans-1,3-dichloropropene	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Trichloroethene	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Trichlorofluoromethane	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Vinyl acetate	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Vinyl chloride	ND	8,000		ppbv	8000	11/2/2011 2:34 PM
Xylenes, Total	ND	24,000		ppbv	8000	11/2/2011 2:34 PM
Surr: 4-Bromofluorobenzene	110	70-130		%REC	8000	11/2/2011 2:34 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	5,000,000	940,000		µg/m³	8000	10/31/2011 4:35 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000		µg/m³	8000	10/31/2011 4:35 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000		µg/m³	8000	10/31/2011 4:35 PM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	8000	10/31/2011 4:35 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/13/2011 2:44:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-033	**Matrix:**	Air
Client Sample ID:	VA0922		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.73	0.10		%	1	11/10/2011 5:56 PM
Carbon Monoxide	ND	0.10		%	1	11/10/2011 5:56 PM
Methane	ND	0.50		%	1	11/10/2011 5:56 PM
Nitrogen	82	0.10		%	1	11/10/2011 5:56 PM
Oxygen	17	0.10		%	1	11/10/2011 5:56 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
1,1,2,2-Tetrachloroethane	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
1,1,2-Trichloroethane	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
1,1-Dichloroethane	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
1,1-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
1,2,4-Trichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
1,2,4-Trimethylbenzene	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
1,2-Dibromoethane	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
1,2-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
1,2-Dichloroethane	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
1,2-Dichloropropane	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
1,3,5-Trimethylbenzene	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
1,3-Butadiene	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
1,3-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
1,4-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
2-Butanone	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
2-Hexanone	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
4-Methyl-2-pentanone	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Acetone	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Benzene	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Benzyl chloride	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Bromodichloromethane	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Bromoform	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Bromomethane	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Carbon disulfide	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Carbon tetrachloride	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Chlorobenzene	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Chlorodibromomethane	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Chloroethane	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Chloroform	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Chloromethane	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
cis-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
cis-1,3-dichloropropene	ND	8,000		ppbv	8000	11/2/2011 3:15 PM

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/13/2011 2:44:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-033	**Matrix:**	Air
Client Sample ID:	VA0922		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	37,000	16,000		ppbv	8000	11/2/2011 3:15 PM
Dichlorodifluoromethane	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Ethyl acetate	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Ethylbenzene	ND	16,000		ppbv	8000	11/2/2011 3:15 PM
Heptane	12,000	8,000		ppbv	8000	11/2/2011 3:15 PM
Hexachlorobutadiene	ND	16,000		ppbv	8000	11/2/2011 3:15 PM
m,p-Xylene	ND	16,000		ppbv	8000	11/2/2011 3:15 PM
Methylene chloride	ND	40,000		ppbv	8000	11/2/2011 3:15 PM
n-Hexane	27,000	16,000		ppbv	8000	11/2/2011 3:15 PM
Naphthalene	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
o-Xylene	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Propylene	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Styrene	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
tert-Butyl Methyl Ether	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Tetrachloroethene	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Tetrahydrofuran	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Toluene	13,000	8,000		ppbv	8000	11/2/2011 3:15 PM
trans-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
trans-1,3-dichloropropene	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Trichloroethene	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Trichlorofluoromethane	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Vinyl acetate	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Vinyl chloride	ND	8,000		ppbv	8000	11/2/2011 3:15 PM
Xylenes, Total	ND	24,000		ppbv	8000	11/2/2011 3:15 PM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	8000	11/2/2011 3:15 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	5,500,000	940,000		µg/m³	8000	10/31/2011 5:17 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000		µg/m³	8000	10/31/2011 5:17 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000		µg/m³	8000	10/31/2011 5:17 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	8000	10/31/2011 5:17 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/13/2011 3:47:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-034	**Matrix:**	Air
Client Sample ID:	VA0923		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.47	0.10		%	1	11/10/2011 6:31 PM
Carbon Monoxide	ND	0.10		%	1	11/10/2011 6:31 PM
Methane	ND	0.50		%	1	11/10/2011 6:31 PM
Nitrogen	81	0.10		%	1	11/10/2011 6:31 PM
Oxygen	18	0.10		%	1	11/10/2011 6:31 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
1,1,2,2-Tetrachloroethane	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
1,1,2-Trichloroethane	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
1,1-Dichloroethane	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
1,1-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
1,2,4-Trichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
1,2,4-Trimethylbenzene	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
1,2-Dibromoethane	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
1,2-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
1,2-Dichloroethane	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
1,2-Dichloropropane	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
1,3,5-Trimethylbenzene	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
1,3-Butadiene	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
1,3-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
1,4-Dichlorobenzene	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
2-Butanone	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
2-Hexanone	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
4-Methyl-2-pentanone	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
Acetone	65,000	8,000		ppbv	8000	11/2/2011 3:56 PM
Benzene	160,000	8,000		ppbv	8000	11/2/2011 3:56 PM
Benzyl chloride	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
Bromodichloromethane	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
Bromoform	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
Bromomethane	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
Carbon disulfide	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
Carbon tetrachloride	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
Chlorobenzene	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
Chlorodibromomethane	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
Chloroethane	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
Chloroform	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
Chloromethane	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
cis-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
cis-1,3-dichloropropene	ND	8,000		ppbv	8000	11/2/2011 3:56 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/13/2011 3:47:00 PM
Project:	Kirtland AFB		
Lab ID:	1110757-034	**Matrix:**	Air
Client Sample ID:	VA0923		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	980,000	40,000		ppbv	20000	11/3/2011 11:15 PM
Dichlorodifluoromethane	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
Ethyl acetate	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
Ethylbenzene	ND	16,000		ppbv	8000	11/2/2011 3:56 PM
Heptane	220,000	8,000		ppbv	8000	11/2/2011 3:56 PM
Hexachlorobutadiene	ND	16,000		ppbv	8000	11/2/2011 3:56 PM
m,p-Xylene	13,000	16,000	J	ppbv	8000	11/2/2011 3:56 PM
Methylene chloride	ND	40,000		ppbv	8000	11/2/2011 3:56 PM
n-Hexane	1,100,000	40,000		ppbv	20000	11/3/2011 11:15 PM
Naphthalene	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
o-Xylene	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
Propylene	21,000	8,000		ppbv	8000	11/2/2011 3:56 PM
Styrene	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
tert-Butyl Methyl Ether	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
Tetrachloroethene	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
Tetrahydrofuran	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
Toluene	250,000	8,000		ppbv	8000	11/2/2011 3:56 PM
trans-1,2-Dichloroethene	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
trans-1,3-dichloropropene	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
Trichloroethene	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
Trichlorofluoromethane	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
Vinyl acetate	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
Vinyl chloride	ND	8,000		ppbv	8000	11/2/2011 3:56 PM
Xylenes, Total	13,000	24,000	J	ppbv	8000	11/2/2011 3:56 PM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	8000	11/2/2011 3:56 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	32,000,000	2,300,000		µg/m³	20000	11/3/2011 3:11 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000		µg/m³	20000	11/3/2011 3:11 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000		µg/m³	20000	11/3/2011 3:11 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	20000	11/3/2011 3:11 PM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/6/2011 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-035	**Matrix:**	Air
Client Sample ID:	VA8055-TB		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40		ppbv	40	11/1/2011 1:14 AM
1,1,2,2-Tetrachloroethane	ND	40		ppbv	40	11/1/2011 1:14 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40		ppbv	40	11/1/2011 1:14 AM
1,1,2-Trichloroethane	ND	40		ppbv	40	11/1/2011 1:14 AM
1,1-Dichloroethane	ND	40		ppbv	40	11/1/2011 1:14 AM
1,1-Dichloroethene	ND	40		ppbv	40	11/1/2011 1:14 AM
1,2,4-Trichlorobenzene	ND	40		ppbv	40	11/1/2011 1:14 AM
1,2,4-Trimethylbenzene	ND	40		ppbv	40	11/1/2011 1:14 AM
1,2-Dibromoethane	ND	40		ppbv	40	11/1/2011 1:14 AM
1,2-Dichlorobenzene	ND	40		ppbv	40	11/1/2011 1:14 AM
1,2-Dichloroethane	ND	40		ppbv	40	11/1/2011 1:14 AM
1,2-Dichloropropane	ND	40		ppbv	40	11/1/2011 1:14 AM
1,3,5-Trimethylbenzene	ND	40		ppbv	40	11/1/2011 1:14 AM
1,3-Butadiene	ND	40		ppbv	40	11/1/2011 1:14 AM
1,3-Dichlorobenzene	ND	40		ppbv	40	11/1/2011 1:14 AM
1,4-Dichlorobenzene	ND	40		ppbv	40	11/1/2011 1:14 AM
2-Butanone	ND	40		ppbv	40	11/1/2011 1:14 AM
2-Hexanone	ND	40		ppbv	40	11/1/2011 1:14 AM
4-Methyl-2-pentanone	ND	40		ppbv	40	11/1/2011 1:14 AM
Acetone	130	40		ppbv	40	11/1/2011 1:14 AM
Benzene	ND	40		ppbv	40	11/1/2011 1:14 AM
Benzyl chloride	ND	40		ppbv	40	11/1/2011 1:14 AM
Bromodichloromethane	ND	40		ppbv	40	11/1/2011 1:14 AM
Bromoform	ND	40		ppbv	40	11/1/2011 1:14 AM
Bromomethane	ND	40		ppbv	40	11/1/2011 1:14 AM
Carbon disulfide	ND	40		ppbv	40	11/1/2011 1:14 AM
Carbon tetrachloride	ND	40		ppbv	40	11/1/2011 1:14 AM
Chlorobenzene	ND	40		ppbv	40	11/1/2011 1:14 AM
Chlorodibromomethane	ND	40		ppbv	40	11/1/2011 1:14 AM
Chloroethane	ND	40		ppbv	40	11/1/2011 1:14 AM
Chloroform	ND	40		ppbv	40	11/1/2011 1:14 AM
Chloromethane	ND	40		ppbv	40	11/1/2011 1:14 AM
cis-1,2-Dichloroethene	ND	40		ppbv	40	11/1/2011 1:14 AM
cis-1,3-dichloropropene	ND	40		ppbv	40	11/1/2011 1:14 AM
Cyclohexane	ND	80		ppbv	40	11/1/2011 1:14 AM
Dichlorodifluoromethane	ND	40		ppbv	40	11/1/2011 1:14 AM
Ethyl acetate	ND	40		ppbv	40	11/1/2011 1:14 AM
Ethylbenzene	ND	80		ppbv	40	11/1/2011 1:14 AM
Heptane	ND	40		ppbv	40	11/1/2011 1:14 AM
Hexachlorobutadiene	ND	80		ppbv	40	11/1/2011 1:14 AM
m,p-Xylene	ND	80		ppbv	40	11/1/2011 1:14 AM
Methylene chloride	ND	200		ppbv	40	11/1/2011 1:14 AM

RTI Laboratories - Analytical Report

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	10/6/2011 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1110757-035	**Matrix:**	Air
Client Sample ID:	VA8055-TB		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
n-Hexane	ND	80		ppbv	40	11/1/2011 1:14 AM
Naphthalene	ND	40		ppbv	40	11/1/2011 1:14 AM
o-Xylene	ND	40		ppbv	40	11/1/2011 1:14 AM
Propylene	ND	40		ppbv	40	11/1/2011 1:14 AM
Styrene	ND	40		ppbv	40	11/1/2011 1:14 AM
tert-Butyl Methyl Ether	ND	40		ppbv	40	11/1/2011 1:14 AM
Tetrachloroethene	ND	40		ppbv	40	11/1/2011 1:14 AM
Tetrahydrofuran	ND	40		ppbv	40	11/1/2011 1:14 AM
Toluene	65	40		ppbv	40	11/1/2011 1:14 AM
trans-1,2-Dichloroethene	ND	40		ppbv	40	11/1/2011 1:14 AM
trans-1,3-dichloropropene	ND	40		ppbv	40	11/1/2011 1:14 AM
Trichloroethene	ND	40		ppbv	40	11/1/2011 1:14 AM
Trichlorofluoromethane	ND	40		ppbv	40	11/1/2011 1:14 AM
Vinyl acetate	ND	40		ppbv	40	11/1/2011 1:14 AM
Vinyl chloride	ND	40		ppbv	40	11/1/2011 1:14 AM
Xylenes, Total	ND	120		ppbv	40	11/1/2011 1:14 AM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	40	11/1/2011 1:14 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	3,600	4,700	J	µg/m³	40	11/3/2011 12:17 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300		µg/m³	40	11/3/2011 12:17 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600		µg/m³	40	11/3/2011 12:17 PM
Surr: 4-Bromofluorobenzene	99.8	70-130		%REC	40	11/3/2011 12:17 PM

RTI Laboratories - QC SUMMARY REPORT

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R43704

Sample ID:	BLK1 102511 VOA9	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	43704	
Client ID:	PBW	Batch ID:	R43704	TestNo:	MA_APH			Analysis Date:	10/25/2011	SeqNo:	855491	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	100	120									J
C9-C10 Aromatic Hydrocarbons	ND	130									
C9-C12 Aliphatic Hydrocarbons	ND	190									
Surr: 4-Bromofluorobenzene	95		89.50		106	70	130				

Sample ID:	1110757-007ADUP	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	43704	
Client ID:	VA0721	Batch ID:	R43704	TestNo:	MA_APH			Analysis Date:	10/26/2011	SeqNo:	855499	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	6,400,000	940,000						6,528,000	2.53	30	
C9-C10 Aromatic Hydrocarbons	ND	1,100,000						0	0	30	
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000						0	0	30	
Surr: 4-Bromofluorobenzene	730,000		716,000		102	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R43743

Sample ID:	BLK1 102611 VOA9	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	43743	
Client ID:	PBW	Batch ID:	R43743	TestNo:	MA_APH			Analysis Date:	10/26/2011	SeqNo:	856484	

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									
C9-C10 Aromatic Hydrocarbons	ND	130									
C9-C12 Aliphatic Hydrocarbons	ND	190									
Surr: 4-Bromofluorobenzene	94		89.50		105	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R43869

Sample ID:	BLK 103111 VOA9	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	43869	
Client ID:	PBW	Batch ID:	R43869	TestNo:	MA_APH			Analysis Date:	10/31/2011	SeqNo:	859342	

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									
C9-C10 Aromatic Hydrocarbons	ND	130									
C9-C12 Aliphatic Hydrocarbons	ND	190									
Surr: 4-Bromofluorobenzene	93		89.50		104	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R43871

Sample ID:	MBLK VOA1 103111	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	43871
Client ID:	PBW	Batch ID:	R43871	TestNo:	TO-15			Analysis Date:	10/31/2011	SeqNo:	859413

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									
1,1,2,2-Tetrachloroethane	ND	1.0									
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0									
1,1,2-Trichloroethane	ND	1.0									
1,1-Dichloroethane	ND	1.0									
1,1-Dichloroethene	ND	1.0									
1,2,4-Trichlorobenzene	ND	1.0									
1,2,4-Trimethylbenzene	ND	1.0									
1,2-Dibromoethane	ND	1.0									
1,2-Dichlorobenzene	ND	1.0									
1,2-Dichloroethane	ND	1.0									
1,2-Dichloropropane	ND	1.0									
1,3,5-Trimethylbenzene	ND	1.0									
1,3-Butadiene	ND	1.0									
1,3-Dichlorobenzene	ND	1.0									
1,4-Dichlorobenzene	ND	1.0									
2-Butanone	ND	1.0									
2-Hexanone	ND	1.0									
4-Methyl-2-pentanone	ND	1.0									
Acetone	ND	1.0									
Benzene	ND	1.0									
Benzyl chloride	ND	1.0									
Bromodichloromethane	ND	1.0									
Bromoform	ND	1.0									
Bromomethane	ND	1.0									
Carbon disulfide	ND	1.0									
Carbon tetrachloride	ND	1.0									
Chlorobenzene	ND	1.0									
Chlorodibromomethane	ND	1.0									
Chloroethane	ND	1.0									
Chloroform	ND	1.0									

RTI Laboratories - QC SUMMARY REPORT

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R43871

Sample ID:	MBLK VOA1 103111	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	43871
Client ID:	PBW	Batch ID:	R43871	TestNo:	TO-15			Analysis Date:	10/31/2011	SeqNo:	859413

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									
cis-1,2-Dichloroethene	ND	1.0									
cis-1,3-dichloropropene	ND	1.0									
Cyclohexane	ND	2.0									
Dichlorodifluoromethane	ND	1.0									
Ethyl acetate	ND	1.0									
Ethylbenzene	ND	2.0									
Heptane	ND	1.0									
Hexachlorobutadiene	ND	2.0									
m,p-Xylene	ND	2.0									
Methylene chloride	ND	5.0									
n-Hexane	ND	2.0									
Naphthalene	ND	1.0									
o-Xylene	ND	1.0									
Propylene	ND	1.0									
Styrene	ND	1.0									
tert-Butyl Methyl Ether	ND	1.0									
Tetrachloroethene	ND	1.0									
Tetrahydrofuran	ND	1.0									
Toluene	ND	1.0									
trans-1,2-Dichloroethene	ND	1.0									
trans-1,3-dichloropropene	ND	1.0									
Trichloroethene	ND	1.0									
Trichlorofluoromethane	ND	1.0									
Vinyl acetate	ND	1.0									
Vinyl chloride	ND	1.0									
Xylenes, Total	ND	3.0									
Surr: 4-Bromofluorobenzene	14		12.50		109	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R43931

Sample ID:	MBLK2 VOA1 10311	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	43931
Client ID:	PBW	Batch ID:	R43931	TestNo:	TO-15			Analysis Date:	11/2/2011	SeqNo:	860877

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									
1,1,2,2-Tetrachloroethane	ND	1.0									
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0									
1,1,2-Trichloroethane	ND	1.0									
1,1-Dichloroethane	ND	1.0									
1,1-Dichloroethene	ND	1.0									
1,2,4-Trichlorobenzene	ND	1.0									
1,2,4-Trimethylbenzene	ND	1.0									
1,2-Dibromoethane	ND	1.0									
1,2-Dichlorobenzene	ND	1.0									
1,2-Dichloroethane	ND	1.0									
1,2-Dichloropropane	ND	1.0									
1,3,5-Trimethylbenzene	ND	1.0									
1,3-Butadiene	ND	1.0									
1,3-Dichlorobenzene	ND	1.0									
1,4-Dichlorobenzene	ND	1.0									
2-Butanone	ND	1.0									
2-Hexanone	ND	1.0									
4-Methyl-2-pentanone	ND	1.0									
Acetone	ND	1.0									
Benzene	ND	1.0									
Benzyl chloride	ND	1.0									
Bromodichloromethane	ND	1.0									
Bromoform	ND	1.0									
Bromomethane	ND	1.0									
Carbon disulfide	ND	1.0									
Carbon tetrachloride	ND	1.0									
Chlorobenzene	ND	1.0									
Chlorodibromomethane	ND	1.0									
Chloroethane	ND	1.0									
Chloroform	ND	1.0									

RTI Laboratories - QC SUMMARY REPORT

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R43931

Sample ID:	MBLK2 VOA1 10311	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	43931	
Client ID:	PBW	Batch ID:	R43931	TestNo:	TO-15			Analysis Date:	11/2/2011	SeqNo:	860877	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									
cis-1,2-Dichloroethene	ND	1.0									
cis-1,3-dichloropropene	ND	1.0									
Cyclohexane	ND	2.0									
Dichlorodifluoromethane	ND	1.0									
Ethyl acetate	ND	1.0									
Ethylbenzene	ND	2.0									
Heptane	ND	1.0									
Hexachlorobutadiene	ND	2.0									
m,p-Xylene	ND	2.0									
Methylene chloride	ND	5.0									
n-Hexane	ND	2.0									
Naphthalene	ND	1.0									
o-Xylene	ND	1.0									
Propylene	ND	1.0									
Styrene	ND	1.0									
tert-Butyl Methyl Ether	ND	1.0									
Tetrachloroethene	ND	1.0									
Tetrahydrofuran	ND	1.0									
Toluene	ND	1.0									
trans-1,2-Dichloroethene	ND	1.0									
trans-1,3-dichloropropene	ND	1.0									
Trichloroethene	ND	1.0									
Trichlorofluoromethane	ND	1.0									
Vinyl acetate	ND	1.0									
Vinyl chloride	ND	1.0									
Xylenes, Total	ND	3.0									
Surr: 4-Bromofluorobenzene	13		12.50		105	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R43931

Sample ID:	1110757-016ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	43931
Client ID:	VA0836	Batch ID:	R43931	TestNo:	TO-15			Analysis Date:	11/2/2011	SeqNo:	860885

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	
1,1,2,2-Tetrachloroethane	ND	8,000						0	0	25	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000						0	0	25	
1,1,2-Trichloroethane	ND	8,000						0	0	25	
1,1-Dichloroethane	ND	8,000						0	0	25	
1,1-Dichloroethene	ND	8,000						0	0	25	
1,2,4-Trichlorobenzene	ND	8,000						0	0	25	
1,2,4-Trimethylbenzene	ND	8,000						0	0	25	
1,2-Dibromoethane	ND	8,000						0	0	25	
1,2-Dichlorobenzene	ND	8,000						0	0	25	
1,2-Dichloroethane	ND	8,000						0	0	25	
1,2-Dichloropropane	ND	8,000						0	0	25	
1,3,5-Trimethylbenzene	ND	8,000						0	0	25	
1,3-Butadiene	ND	8,000						0	0	25	
1,3-Dichlorobenzene	ND	8,000						0	0	25	
1,4-Dichlorobenzene	ND	8,000						0	0	25	
2-Butanone	ND	8,000						0	0	25	
2-Hexanone	ND	8,000						0	0	25	
4-Methyl-2-pentanone	ND	8,000						0	0	25	
Acetone	ND	8,000						0	0	25	
Benzene	59,000	8,000						44,480	28.3	25	R
Benzyl chloride	ND	8,000						0	0	25	
Bromodichloromethane	ND	8,000						0	0	25	
Bromoform	ND	8,000						0	0	25	
Bromomethane	ND	8,000						0	0	25	
Carbon disulfide	ND	8,000						0	0	25	
Carbon tetrachloride	ND	8,000						0	0	25	
Chlorobenzene	ND	8,000						0	0	25	
Chlorodibromomethane	ND	8,000						0	0	25	
Chloroethane	ND	8,000						0	0	25	
Chloroform	ND	8,000						0	0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R43931

Sample ID:	1110757-016ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	43931
Client ID:	VA0836	Batch ID:	R43931	TestNo:	TO-15			Analysis Date:	11/2/2011	SeqNo:	860885

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	
cis-1,2-Dichloroethene	ND	8,000						0	0	25	
cis-1,3-dichloropropene	ND	8,000						0	0	25	
Cyclohexane	140,000	16,000						113,500	18.1	25	
Dichlorodifluoromethane	ND	8,000						0	0	25	
Ethyl acetate	ND	8,000						0	0	25	
Ethylbenzene	ND	16,000						0	0	25	
Heptane	87,000	8,000						74,000	15.8	25	
Hexachlorobutadiene	ND	16,000						0	0	25	
m,p-Xylene	14,000	16,000						12,400	13.8	25	J
Methylene chloride	ND	40,000						0	0	25	
n-Hexane	120,000	16,000						103,000	17.6	25	
Naphthalene	ND	8,000						0	0	25	
o-Xylene	ND	8,000						0	0	25	
Propylene	ND	8,000						0	0	25	
Styrene	ND	8,000						0	0	25	
tert-Butyl Methyl Ether	ND	8,000						0	0	25	
Tetrachloroethene	ND	8,000						0	0	25	
Tetrahydrofuran	ND	8,000						0	0	25	
Toluene	93,000	8,000						74,720	21.3	25	
trans-1,2-Dichloroethene	ND	8,000						0	0	25	
trans-1,3-dichloropropene	ND	8,000						0	0	25	
Trichloroethene	ND	8,000						0	0	25	
Trichlorofluoromethane	ND	8,000						0	0	25	
Vinyl acetate	ND	8,000						0	0	25	
Vinyl chloride	ND	8,000						0	0	25	
Xylenes, Total	14,000	24,000						12,400	13.8	25	J
Surr: 4-Bromofluorobenzene	100,000		100,000		104	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R43969

Sample ID:	BLK 110311 VOA9	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	43969	
Client ID:	PBW	Batch ID:	R43969	TestNo:	MA_APH			Analysis Date:	11/3/2011	SeqNo:	861781	

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									
C9-C10 Aromatic Hydrocarbons	ND	130									
C9-C12 Aliphatic Hydrocarbons	ND	190									
Surr: 4-Bromofluorobenzene	93		89.50		104	70	130				

Sample ID:	1111023-002ADUP	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	43969	
Client ID:	ZZZZZZ	Batch ID:	R43969	TestNo:	MA_APH			Analysis Date:	11/3/2011	SeqNo:	861787	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	18,000,000	940,000						18,130,000	1.33	30	
C9-C10 Aromatic Hydrocarbons	ND	1,100,000						0	0	30	
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000						0	0	30	
Surr: 4-Bromofluorobenzene	750,000		716,000		104	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R44059

Sample ID:	BLK VOA1 110311	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	44059
Client ID:	PBW	Batch ID:	R44059	TestNo:	TO-15			Analysis Date:	11/3/2011	SeqNo:	864036

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									
1,1,2,2-Tetrachloroethane	ND	1.0									
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0									
1,1,2-Trichloroethane	ND	1.0									
1,1-Dichloroethane	ND	1.0									
1,1-Dichloroethene	ND	1.0									
1,2,4-Trichlorobenzene	ND	1.0									
1,2,4-Trimethylbenzene	ND	1.0									
1,2-Dibromoethane	ND	1.0									
1,2-Dichlorobenzene	ND	1.0									
1,2-Dichloroethane	ND	1.0									
1,2-Dichloropropane	ND	1.0									
1,3,5-Trimethylbenzene	ND	1.0									
1,3-Butadiene	ND	1.0									
1,3-Dichlorobenzene	ND	1.0									
1,4-Dichlorobenzene	ND	1.0									
2-Butanone	ND	1.0									
2-Hexanone	ND	1.0									
4-Methyl-2-pentanone	ND	1.0									
Acetone	ND	1.0									
Benzene	ND	1.0									
Benzyl chloride	ND	1.0									
Bromodichloromethane	ND	1.0									
Bromoform	ND	1.0									
Bromomethane	ND	1.0									
Carbon disulfide	ND	1.0									
Carbon tetrachloride	ND	1.0									
Chlorobenzene	ND	1.0									
Chlorodibromomethane	ND	1.0									
Chloroethane	ND	1.0									
Chloroform	ND	1.0									

RTI Laboratories - QC SUMMARY REPORT

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R44059

Sample ID:	BLK VOA1 110311	Samp Type:	MBLK	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	44059	
Client ID:	PBW	Batch ID:	R44059	TestNo:	TO-15			Analysis Date:	11/3/2011	SeqNo:	864036	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									
cis-1,2-Dichloroethene	ND	1.0									
cis-1,3-dichloropropene	ND	1.0									
Cyclohexane	ND	2.0									
Dichlorodifluoromethane	ND	1.0									
Ethyl acetate	ND	1.0									
Ethylbenzene	ND	2.0									
Heptane	ND	1.0									
Hexachlorobutadiene	ND	2.0									
m,p-Xylene	ND	2.0									
Methylene chloride	ND	5.0									
n-Hexane	ND	2.0									
Naphthalene	ND	1.0									
o-Xylene	ND	1.0									
Propylene	ND	1.0									
Styrene	ND	1.0									
tert-Butyl Methyl Ether	ND	1.0									
Tetrachloroethene	ND	1.0									
Tetrahydrofuran	ND	1.0									
Toluene	ND	1.0									
trans-1,2-Dichloroethene	ND	1.0									
trans-1,3-dichloropropene	ND	1.0									
Trichloroethene	ND	1.0									
Trichlorofluoromethane	ND	1.0									
Vinyl acetate	ND	1.0									
Vinyl chloride	ND	1.0									
Xylenes, Total	ND	3.0									
Surr: 4-Bromofluorobenzene	14		12.50		116	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R44166

Sample ID:	mblk	Samp Type:	MBLK	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	44166
Client ID:	PBW	Batch ID:	R44166	TestNo:	ASTM-D2504			Analysis Date:	11/3/2011	SeqNo:	866519

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	ND	0.10									
Carbon Monoxide	ND	0.10									
Methane	ND	0.50									
Nitrogen	ND	0.10									
Oxygen	ND	0.10									

Sample ID:	lcs	Samp Type:	LCS	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	44166
Client ID:	LCSW	Batch ID:	R44166	TestNo:	ASTM-D2504			Analysis Date:	11/3/2011	SeqNo:	866521

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	109	70	130	2.611	4.05	0	
Carbon Monoxide	2.5	0.10	2.500	0	101	70	130	2.579	2.16	0	
Methane	2.1	0.50	2.000	0	104	70	130	2.086	0.770	0	
Nitrogen	2.9	0.10	2.500	0	115	70	130	2.864	0.140	0	
Oxygen	2.6	0.10	2.500	0	104	70	130	2.589	0.539	0	

Sample ID:	1110757-027bdup	Samp Type:	DUP	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	44166
Client ID:	VA0863	Batch ID:	R44166	TestNo:	ASTM-D2504			Analysis Date:	11/3/2011	SeqNo:	866529

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.12	0.10						0.1190	1.67	20	
Carbon Monoxide	ND	0.10						0	0	20	
Methane	ND	0.50						0	0	20	
Nitrogen	79	0.10						78.82	0.0241	20	
Oxygen	21	0.10						20.72	0.0338	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R44167

Sample ID:	mblk	Samp Type:	MBLK	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	44167
Client ID:	PBW	Batch ID:	R44167	TestNo:	ASTM-D2504			Analysis Date:	11/8/2011	SeqNo:	866532

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	ND	0.10									
Carbon Monoxide	ND	0.10									
Methane	ND	0.50									
Nitrogen	ND	0.10									
Oxygen	ND	0.10									

Sample ID:	lcs	Samp Type:	LCS	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	44167
Client ID:	LCSW	Batch ID:	R44167	TestNo:	ASTM-D2504			Analysis Date:	11/8/2011	SeqNo:	866534

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.4	0.10	2.500	0	96.4	70	130	2.568	6.35	0	
Carbon Monoxide	2.2	0.10	2.500	0	89.6	70	130	2.498	10.9	0	
Methane	2.0	0.50	2.000	0	99.6	70	130	2.010	0.900	0	
Nitrogen	2.7	0.10	2.500	0	106	70	130	2.847	6.87	0	
Oxygen	2.3	0.10	2.500	0	93.9	70	130	2.547	8.13	0	

Sample ID:	1110757-021bdup	Samp Type:	DUP	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	44167
Client ID:	VA0854	Batch ID:	R44167	TestNo:	ASTM-D2504			Analysis Date:	11/8/2011	SeqNo:	866546

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.27	0.10						0.2740	0.366	20	
Carbon Monoxide	ND	0.10						0	0	20	
Methane	ND	0.50						0	0	20	
Nitrogen	79	0.10						78.47	0.186	20	
Oxygen	21	0.10						20.74	0.169	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R44168

Sample ID:	mblk	Samp Type:	MBLK	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	44168	
Client ID:	PBW	Batch ID:	R44168	TestNo:	ASTM-D2504			Analysis Date:	11/9/2011	SeqNo:	866549	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	ND	0.10									
Carbon Monoxide	ND	0.10									
Methane	ND	0.50									
Nitrogen	ND	0.10									
Oxygen	ND	0.10									

Sample ID:	lcs	Samp Type:	LCS	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	44168	
Client ID:	LCSW	Batch ID:	R44168	TestNo:	ASTM-D2504			Analysis Date:	11/9/2011	SeqNo:	866551	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.2	0.10	2.500	0	88.6	70	130	2.167	2.24	0	
Carbon Monoxide	2.2	0.10	2.500	0	86.2	70	130	2.150	0.186	0	
Methane	1.8	0.50	2.000	0	88.5	70	130	1.731	2.17	0	
Nitrogen	2.8	0.10	2.500	0	111	70	130	2.740	1.05	0	
Oxygen	2.3	0.10	2.500	0	91.4	70	130	2.259	1.19	0	

Sample ID:	1110757-023bdup	Samp Type:	DUP	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	44168	
Client ID:	VA0856	Batch ID:	R44168	TestNo:	ASTM-D2504			Analysis Date:	11/9/2011	SeqNo:	866563	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.20	0.10						0.1890	3.13	20	
Carbon Monoxide	ND	0.10						0	0	20	
Methane	ND	0.50						0	0	20	
Nitrogen	78	0.10						78.19	0.269	20	
Oxygen	20	0.10						19.65	0.224	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1110757

Date Reported: 12/6/2011
Revision v2

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** R44169

Sample ID:	mblk	Samp Type:	MBLK	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	44169
Client ID:	PBW	Batch ID:	R44169	TestNo:	ASTM-D2504			Analysis Date:	11/10/2011	SeqNo:	866618

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	ND	0.10									
Carbon Monoxide	ND	0.10									
Methane	ND	0.50									
Nitrogen	ND	0.10									
Oxygen	ND	0.10									

Sample ID:	lcs	Samp Type:	LCS	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	44169
Client ID:	LCSW	Batch ID:	R44169	TestNo:	ASTM-D2504			Analysis Date:	11/10/2011	SeqNo:	866620

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	100	70	130	2.525	0.715	0	
Carbon Monoxide	2.4	0.10	2.500	0	97.2	70	130	2.450	0.779	0	
Methane	2.0	0.50	2.000	0	99.9	70	130	2.008	0.549	0	
Nitrogen	2.9	0.10	2.500	0	116	70	130	2.871	1.42	0	
Oxygen	2.5	0.10	2.500	0	100	70	130	2.498	0.479	0	

Sample ID:	1110757-034bdup	Samp Type:	DUP	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	44169
Client ID:	VA0923	Batch ID:	R44169	TestNo:	ASTM-D2504			Analysis Date:	11/10/2011	SeqNo:	866629

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.46	0.10						0.4680	1.07	20	
Carbon Monoxide	ND	0.10						0	0	20	
Methane	ND	0.50						0	0	20	
Nitrogen	81	0.10						81.13	0.217	20	
Oxygen	18	0.10						18.15	1.26	20	

RTI Laboratories

Run ID: VOA1_111031A **Run No.:** 43871

Analytical Run Date: 10/31/2011 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

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

Column Length: 30m

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB1 VOA1 103111	BFB_TUNE	TUNE	R43871	10/31/2011 10:12:00 AM	Charles O`Bryan		
1ppbv ICAL	EPA_TO15	ICAL	R43871	10/31/2011 12:33:00 PM	Charles O`Bryan		
10ppbv ICAL	EPA_TO15	ICAL	R43871	10/31/2011 1:14:00 PM	Charles O`Bryan		
12ppbv ICAL	EPA_TO15	ICAL	R43871	10/31/2011 1:54:00 PM	Charles O`Bryan		
15ppbv ICAL	EPA_TO15	ICAL	R43871	10/31/2011 2:36:00 PM	Charles O`Bryan		
20ppbv ICAL	EPA_TO15	ICAL	R43871	10/31/2011 3:17:00 PM	Charles O`Bryan		
30ppbv ICAL	EPA_TO15	ICAL	R43871	10/31/2011 3:59:00 PM	Charles O`Bryan		
50ppbv ICAL	EPA_TO15	ICAL	R43871	10/31/2011 5:27:00 PM	Charles O`Bryan		
BFB2 VOA1 103111	BFB_TUNE	TUNE	R43871	10/31/2011 6:07:00 PM	Charles O`Bryan		
CCV VOA1 103111	EPA_TO15	CCV	R43871	10/31/2011 10:17:00 PM	Charles O`Bryan		
RLVS VOA1 103111	EPA_TO15	RLVS	R43871	10/31/2011 10:59:00 PM	Charles O`Bryan		
MBLK VOA1 103111	EPA_TO15	MBLK	R43871	10/31/2011 11:46:00 PM	Charles O`Bryan		
1110757-035A	EPA_TO15	SAMP	R43871	11/1/2011 1:14:00 AM	Charles O`Bryan		
1110757-024A	EPA_TO15	SAMP	R43871	11/1/2011 2:01:00 AM	Charles O`Bryan		
1110757-025A	EPA_TO15	SAMP	R43871	11/1/2011 2:48:00 AM	Charles O`Bryan		
1110757-027A	EPA_TO15	SAMP	R43871	11/1/2011 4:11:00 AM	Charles O`Bryan		
1110757-003A	EPA_TO15	SAMP	R43871	11/1/2011 4:51:00 AM	Charles O`Bryan		
1110757-003ADUP	EPA_TO15	SAMP	R43871	11/1/2011 5:32:00 AM	Charles O`Bryan		
1110757-004A	EPA_TO15	SAMP	R43871	11/1/2011 6:13:00 AM	Charles O`Bryan		
1110757-005A	EPA_TO15	SAMP	R43871	11/1/2011 6:56:00 AM	Charles O`Bryan		
1110757-006A	EPA_TO15	SAMP	R43871	11/1/2011 7:40:00 AM	Charles O`Bryan		
1110757-007A	EPA_TO15	SAMP	R43871	11/1/2011 8:21:00 AM	Charles O`Bryan		
1110757-008A	EPA_TO15	SAMP	R43871	11/1/2011 9:01:00 AM	Charles O`Bryan		
1110757-009A	EPA_TO15	SAMP	R43871	11/1/2011 9:42:00 AM	Charles O`Bryan		
1110757-010A	EPA_TO15	SAMP	R43871	11/1/2011 10:23:00 AM	Charles O`Bryan		
1110757-018A	EPA_TO15	SAMP	R43871	11/1/2011 11:05:00 AM	Charles O`Bryan		
1110757-019A	EPA_TO15	SAMP	R43871	11/1/2011 11:47:00 AM	Charles O`Bryan		
1110757-020A	EPA_TO15	SAMP	R43871	11/1/2011 12:29:00 PM	Charles O`Bryan		
1110757-021A	EPA_TO15	SAMP	R43871	11/1/2011 1:13:00 PM	Charles O`Bryan		
1110757-022A	EPA_TO15	SAMP	R43871	11/1/2011 1:55:00 PM	Charles O`Bryan		
1110757-008A	EPA_TO15	SAMP	R43871	11/1/2011 2:35:00 PM	Charles O`Bryan		
1110757-026A	EPA_TO15	SAMP	R43871	11/1/2011 4:43:00 PM	Charles O`Bryan		
RLVS2 VOA1 10311	EPA_TO15	RLVS	R43871	11/1/2011 5:25:00 PM	Charles O`Bryan		

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
859411	CCV VOA1 103111	EPA_TO15	CCV	\1\DATA\103111	10/31/2011 10:1	1	R43871		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	11.36	11.36		9.6	0	0	0.107	1	0	118%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.04	10.04		10	0	0	0.211	1	0	100%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	11.13	11.13		9.8	0	0	0.108	1	0	114%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.99	9.99		9.8	0	0	0.2	1	0	102%	70	130	0%	
1,1-Dichloroethane	A	ppbv	10.89	10.89		9.7	0	0	0.111	1	0	112%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.91	10.91		9.9	0	0	0.097	1	0	110%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	9.11	9.11		9.1	0	0	0.271	1	0	100%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	9.37	9.37		9.8	0	0	0.245	1	0	96%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.8	9.8		9.6	0	0	0.186	1	0	102%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	9.16	9.16		9.7	0	0	0.208	1	0	94%	70	130	0%	
1,2-Dichloroethane	A	ppbv	11.24	11.24		9.7	0	0	0.196	1	0	116%	70	130	0%	
1,2-Dichloropropane	A	ppbv	10.4	10.4		9.8	0	0	0.224	1	0	106%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.33	9.33		9.7	0	0	0.24	1	0	96%	70	130	0%	
1,3-Butadiene	A	ppbv	12.08	12.08		9.8	0	0	0.152	1	0	123%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.3	9.3		9.7	0	0	0.202	1	0	96%	70	130	0%	
1,4-Dichlorobenzene	A	ppbv	9.25	9.25		9.6	0	0	0.194	1	0	96%	70	130	0%	
1,4-Dioxane	A	ppbv	9.9	9.9		9.6	0	0	0.128	1	0	103%	70	130	0%	
2-Butanone	A	ppbv	10.73	10.73		9.9	0	0	0.287	1	0	108%	70	130	0%	
2-Hexanone	A	ppbv	10.05	10.05		9.8	0	0	0.135	1	0	103%	70	130	0%	
2-Propanol	A	ppbv	11.06	11.06		10.1	0	0	0.329	1	0	110%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	10.26	10.26		10	0	0	0.157	1	0	103%	70	130	0%	
Acetone	A	ppbv	11.06	11.06		10	0	0	0.43	1	0	111%	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	10.47	10.47		9.7	0	0	0.155	1	0	108%	70	130	0%	
Bromodichloromethane	A	ppbv	10.3	10.3		9.6	0	0	0.156	1	0	107%	70	130	0%	
Bromoform	A	ppbv	9.94	9.94		9.6	0	0	0.197	1	0	104%	70	130	0%	
Bromomethane	A	ppbv	9.89	9.89		9.3	0	0	0.075	1	0	106%	70	130	0%	
Carbon disulfide	A	ppbv	10.42	10.42		9.7	0	0	0.093	1	0	107%	70	130	0%	
Carbon tetrachloride	A	ppbv	10.89	10.89		9.5	0	0	0.114	1	0	115%	70	130	0%	
Chlorobenzene	A	ppbv	10.23	10.23		9.9	0	0	0.275	1	0	103%	70	130	0%	
Chlorodibromomethane	A	ppbv	10.06	10.06		9.2	0	0	0.165	1	0	109%	70	130	0%	
Chloroethane	A	ppbv	9.86	9.86		9.8	0	0	0.063	1	0	101%	70	130	0%	
Chloroform	A	ppbv	11.37	11.37		9.4	0	0	0.126	1	0	121%	70	130	0%	
Chloromethane	A	ppbv	10.18	10.18		9.8	0	0	0.104	1	0	104%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
859411	CCV VOA1 103111	EPA_TO15	CCV	\1\DATA\103111	10/31/2011 10:1	1	R43871		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
cis-1,2-Dichloroethene	A	ppbv	10.7	10.7		9.8	0	0	0.107	1	0	109%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	9.97	9.97		9.5	0	0	0.166	1	0	105%	70	130	0%	
Cyclohexane	A	ppbv	11.7	11.7		9.8	0	0	0.684	2	0	119%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.65	9.65		9.2	0	0	0.086	1	0	105%	70	130	0%	
Ethanol	A	ppbv	10.42	10.42		9.2	0	0	1.962	5	0	113%	70	130	0%	
Ethyl acetate	A	ppbv	10.86	10.86		9.8	0	0	0.157	1	0	111%	70	130	0%	
Ethylbenzene	A	ppbv	10.34	10.34		9.8	0	0	0.737	2	0	106%	70	130	0%	
Heptane	A	ppbv	11.21	11.21		9.9	0	0	0.249	1	0	113%	70	130	0%	
Hexachlorobutadiene	A	ppbv	10.01	10.01		9.4	0	0	0.374	2	0	106%	70	130	0%	
m,p-Xylene	A	ppbv	21.55	21.55		19.2	0	0	0.524	2	0	112%	70	130	0%	
Methylene chloride	A	ppbv	10.87	10.87		10	0	0	2.077	5	0	109%	70	130	0%	
n-Hexane	A	ppbv	11.36	11.36		10.1	0	0	0.692	2	0	112%	70	130	0%	
Naphthalene	A	ppbv	9.47	9.47		9.2	0	0	0.247	1	0	103%	70	130	0%	
o-Xylene	A	ppbv	10.42	10.42		10	0	0	0.258	1	0	104%	70	130	0%	
Propylene	A	ppbv	10.71	10.71		10.2	0	0	0.075	1	0	105%	70	130	0%	
Styrene	A	ppbv	10.12	10.12		9.8	0	0	0.263	1	0	103%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	11.14	11.14		9.9	0	0	0.228	1	0	113%	70	130	0%	
Tetrachloroethene	A	ppbv	10.1	10.1		9.6	0	0	0.148	1	0	105%	70	130	0%	
Tetrahydrofuran	A	ppbv	11.02	11.02		10	0	0	0.201	1	0	110%	70	130	0%	
Toluene	A	ppbv	10.23	10.23		9.8	0	0	0.158	1	0	104%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	11.02	11.02		9.8	0	0	0.117	1	0	112%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	9.5	9.5		9.1	0	0	0.171	1	0	104%	70	130	0%	
Trichloroethene	A	ppbv	10.08	10.08		9.6	0	0	0.119	1	0	105%	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	12.27	12.27		9.9	0	0	0.266	1	0	124%	70	130	0%	
Vinyl chloride	A	ppbv	11.05	11.05		9.4	0	0	0.072	1	0	118%	70	130	0%	
Xylenes, Total	C	ppbv	31.97	31.97		29.2	0	0	0.782	3	0	109%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		1.25	0	0	0	0	0	1000%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	12.65	12.65		12.5	0	0	0	0	0	101%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\103111\10311114.D Vial: 4
Acq On : 31 Oct 2011 10:17 pm Operator: RACHEL HILL
Sample : CCV VOA1 103111 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\103111V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Nov 01 13:22:33 2011
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	109	0.00
2	T	Propylene	1.296	1.362	-5.1	106	0.00
3	T	Dichlorodifluoromethane	3.369	3.535	-4.9	108	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.252	2.369	-5.2	108	0.00
5	T	Chloromethane	1.336	1.431	-7.1	103	0.00
6	T	Vinyl chloride	1.309	1.540	-17.6	100	0.00
7	T	1,3-Butadiene	1.174	1.448	-23.3	104	0.00
8	T	Bromomethane	1.223	1.300	-6.3	108	0.00
9	T	Chloroethane	0.759	0.814	-7.2	106	0.00
10	T	Trichlorofluoromethane	2.990	3.270	-9.4	109	0.00
11	T	Ethanol	0.354	0.401	-13.3	106	0.00
12	T	Freon113	2.368	2.689	-13.6	104	0.00
13	T	1,1-Dichloroethene	1.973	2.176	-10.3	105	0.00
14	T	Acetone	1.986	2.196	-10.6	102	0.00
15	T	Carbon disulfide	3.307	3.554	-7.5	105	0.00
16	T	2-Propanol	1.803	1.975	-9.5	104	0.00
17	T	Methylene chloride	1.533	1.667	-8.7	103	0.00
18	T	tert-Butyl Methyl Ether	2.666	3.001	-12.6	101	0.00
19	T	trans-1,2-Dichloroethene	1.886	2.121	-12.5	105	0.00
20	T	n-Hexane	2.060	2.315	-12.4	104	0.00
21	T	1,1-Dichloroethane	2.184	2.453	-12.3	104	0.00
22	T	Vinyl acetate	2.894	3.586	-23.9	100	0.00
23	T	cis-1,2-Dichloroethene	1.170	1.277	-9.1	105	0.00
24	T	2-Butanone	2.038	2.210	-8.4	95	0.00
25	T	Ethyl acetate	2.676	2.965	-10.8	98	0.00
26	T	Tetrahydrofuran	1.282	1.413	-10.2	98	0.00
27	T	Chloroform	2.376	2.757	-16.0	103	0.00
28	T	1,1,1-Trichloroethane	2.268	2.684	-18.3	104	0.00
29	T	Cyclohexane	2.050	2.448	-19.4	104	0.00
30	T	Carbon tetrachloride	2.078	2.382	-14.6	107	0.00
31	T	Benzene	2.928	3.265	-11.5	102	0.00
32	T	1,2-Dichloroethane	1.393	1.614	-15.9	100	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	114	0.00
34	T	Heptane	0.892	1.011	-13.3	103	0.00
35	T	Trichloroethene	0.484	0.508	-5.0	106	0.00
36	T	1,2-Dichloropropane	0.399	0.423	-6.0	101	0.00
37	T	1,4-Dioxane	0.143	0.147	-2.8	105	0.00
38	T	Bromodichloromethane	0.724	0.776	-7.2	104	0.00
39	T	cis-1,3-Dichloropropene	0.599	0.629	-5.0	101	0.00
40	T	4-Methyl-2-pentanone	0.265	0.271	-2.3	102	0.00
41	T	Toluene	1.027	1.072	-4.4	102	0.00
42	T	trans-1,3-Dichloropropene	0.516	0.539	-4.5	101	0.00
43	T	1,1,2-Trichloroethane	0.354	0.361	-2.0	102	0.00
44	T	Tetrachloroethene	0.526	0.553	-5.1	106	0.00
45	T	2-Hexanone	0.557	0.572	-2.7	99	0.00
46	T	Chlorodibromomethane	0.552	0.566	-2.5	102	0.00
47	T	1,2-Dibromoethane	0.521	0.533	-2.3	100	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	110	0.00
49	T	Chlorobenzene	1.016	1.050	-3.3	101	0.00
50	T	Ethylbenzene	1.681	1.774	-5.5	102	0.00
51	T	m,p-Xylene	1.340	1.504	-12.2	102	0.00
52	T	o-Xylene	1.239	1.291	-4.2	103	0.00
53	T	Styrene	0.858	0.886	-3.3	100	0.00
54	T	Bromoform	0.659	0.683	-3.6	100	0.00
55	S	4-Bromofluorobenzene	0.586	0.593	-1.2	107	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\103111\10311114.D Vial: 4
Acq On : 31 Oct 2011 10:17 pm Operator: RACHEL HILL
Sample : CCV VOA1 103111 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\103111V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Nov 01 13:22:33 2011
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	0.918	0.921	-0.3	98	0.00
57	T	4-Ethyltoluene	1.477	1.457	1.4	98	0.00
58	T	1,3,5-Trimethylbenzene	1.263	1.214	3.9	96	0.00
59	T	1,2,4-Trimethylbenzene	1.184	1.132	4.4	96	0.00
60	T	1,3-Dichlorobenzene	0.700	0.671	4.1	96	0.00
61	T	1,4-Dichlorobenzene	0.642	0.619	3.6	96	0.00
62	T	Benzyl chloride	0.776	0.838	-8.0	97	0.00
63	T	1,2-Dichlorobenzene	0.625	0.590	5.6	96	0.00
64	T	1,2,4-Trichlorobenzene	0.090	0.090	0.0	102	0.00
65	T	Hexachlorobutadiene	0.219	0.233	-6.4	105	0.00
66		Naphthalene	0.140	0.144	-2.9	106	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\103111\10311114.D Vial: 4
Acq On : 31 Oct 2011 10:17 pm Operator: RACHEL HILL
Sample : CCV VOA1 103111 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Nov 1 13:23 2011 Quant Results File: 103111V1.RES

Quant Method : C:\HPCHEM\1\METHODS\103111V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Nov 01 13:22:33 2011
Response via : Initial Calibration
DataAcq Meth : 103111V1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.59	130	611884	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.69	114	1836461	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.54	117	1134514	12.50	ppbv		0.00
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.19	95	673047	12.65	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 101.20%				
Target Compounds							Qvalue
2) Propylene	5.53	41	679867	10.71	ppbv		98
3) Dichlorodifluoromethane	5.58	85	1592040	9.65	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.84	135	1101691	10.00	ppbv	#	72
5) Chloromethane	6.00	50	665277	10.18	ppbv		99
6) Vinyl chloride	6.21	62	708470	11.05	ppbv	#	99
7) 1,3-Butadiene	6.26	39	694447	12.08	ppbv		93
8) Bromomethane	6.85	94	591828	9.89	ppbv		98
9) Chloroethane	7.00	64	366599	9.86	ppbv		96
10) Trichlorofluoromethane	7.34	101	1536787	10.50	ppbv		98
11) Ethanol	7.57	45	180627	10.42	ppbv		99
12) Freon113	7.99	101	1290155	11.13	ppbv		89
13) 1,1-Dichloroethene	8.09	61	1054337	10.91	ppbv	#	88
14) Acetone	8.18	43	1075138	11.06	ppbv		93
15) Carbon disulfide	8.46	76	1687452	10.42	ppbv	#	100
16) 2-Propanol	8.23	45	976312	11.06	ppbv	#	1
17) Methylene chloride	8.75	49	815825	10.87	ppbv	#	81
18) tert-Butyl Methyl Ether	8.95	73	1454172	11.14	ppbv	#	90
19) trans-1,2-Dichloroethene	9.03	61	1017684	11.02	ppbv	#	84
20) n-Hexane	9.22	57	1144768	11.36	ppbv		90
21) 1,1-Dichloroethane	9.59	63	1164704	10.89	ppbv	#	98
22) Vinyl acetate	9.53	43	1737804	12.27	ppbv	#	95
23) cis-1,2-Dichloroethene	10.28	96	612383	10.70	ppbv	#	83
24) 2-Butanone	10.25	43	1070764	10.73	ppbv	#	91
25) Ethyl acetate	10.20	43	1422263	10.86	ppbv	#	98
26) Tetrahydrofuran	10.58	42	691685	11.02	ppbv		91
27) Chloroform	10.60	83	1322618	11.37	ppbv		99
28) 1,1,1-Trichloroethane	10.86	97	1261292	11.36	ppbv		96
29) Cyclohexane	10.86	56	1174449	11.70	ppbv		89
30) Carbon tetrachloride	11.02	117	1107566	10.89	ppbv		98
31) Benzene	11.30	78	1534371	10.71	ppbv		95
32) 1,2-Dichloroethane	11.37	62	766374	11.24	ppbv	#	98
34) Heptane	11.35	43	1469839	11.21	ppbv	#	90
35) Trichloroethene	12.03	130	716127	10.08	ppbv		92
36) 1,2-Dichloropropane	12.39	63	608995	10.40	ppbv		97
37) 1,4-Dioxane	12.46	88	207954	9.90	ppbv	#	83
38) Bromodichloromethane	12.67	83	1094924	10.30	ppbv		99
39) cis-1,3-Dichloropropene	13.22	75	877878	9.97	ppbv		96
40) 4-Methyl-2-pentanone	13.33	58	398763	10.26	ppbv	#	92
41) Toluene	13.63	91	1543578	10.23	ppbv		97
42) trans-1,3-Dichloropropene	13.93	75	720222	9.50	ppbv		96
43) 1,1,2-Trichloroethane	14.20	97	520273	9.99	ppbv		96
44) Tetrachloroethene	14.33	166	779986	10.10	ppbv		98
45) 2-Hexanone	14.41	43	822956	10.05	ppbv		93
46) Chlorodibromomethane	14.75	129	815599	10.06	ppbv		99
47) 1,2-Dibromoethane	14.99	107	751069	9.80	ppbv		100
49) Chlorobenzene	15.58	112	943400	10.23	ppbv	#	87
50) Ethylbenzene	15.62	91	1578031	10.34	ppbv		92
51) m,p-Xylene	15.78	91	2621482	21.55	ppbv		91
52) o-Xylene	16.37	91	1171501	10.42	ppbv	#	88

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\103111\10311114.D Vial: 4
Acq On : 31 Oct 2011 10:17 pm Operator: RACHEL HILL
Sample : CCV VOA1 103111 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Nov 1 13:23 2011 Quant Results File: 103111V1.RES

Quant Method : C:\HPCHEM\1\METHODS\103111V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Nov 01 13:22:33 2011
Response via : Initial Calibration
DataAcq Meth : 103111V1

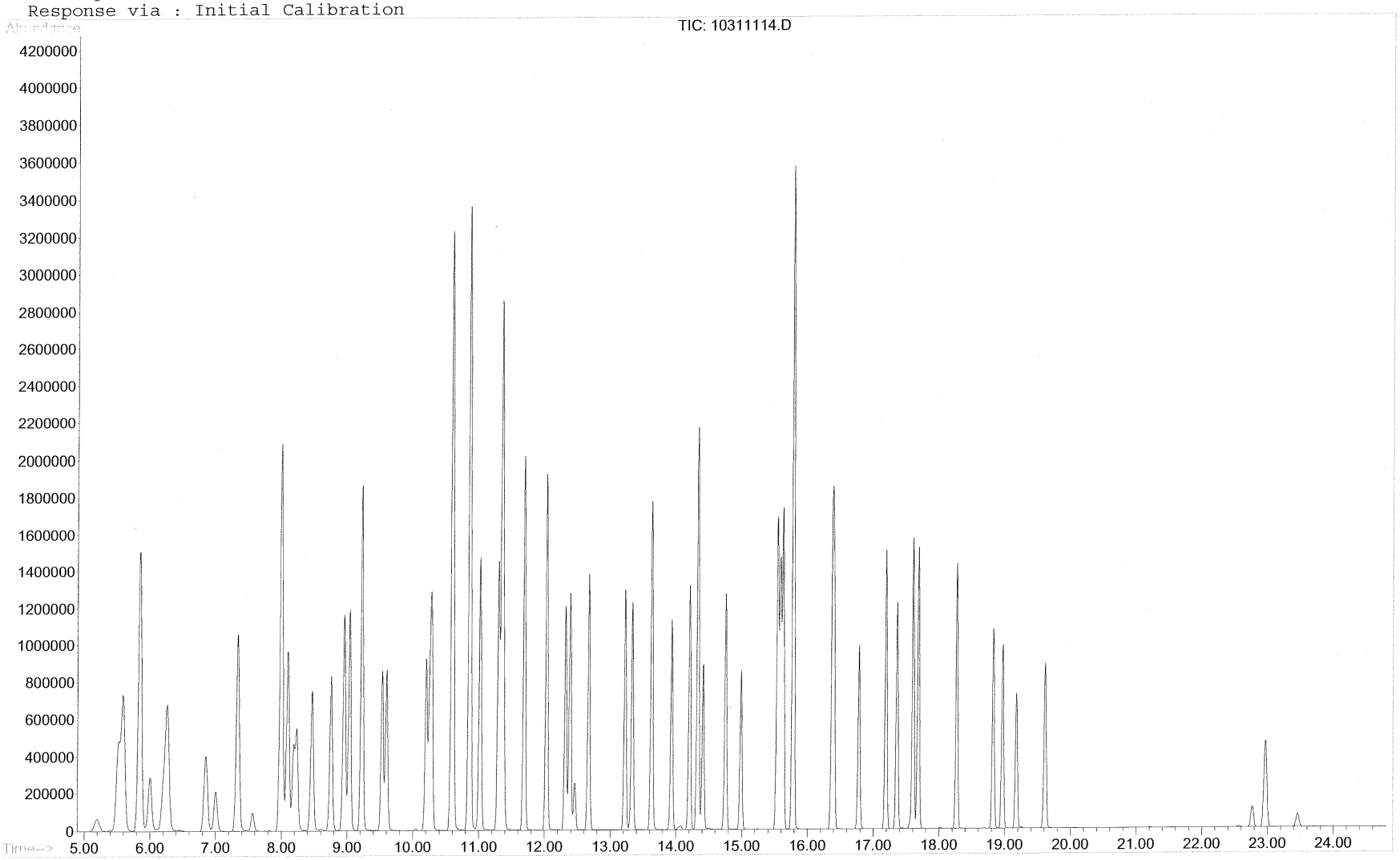
Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53) Styrene	16.40	104	787795	10.12	ppbv		96
54) Bromoform	16.78	173	594785	9.94	ppbv	#	98
56) 1,1,2,2-Tetrachloroethane	17.36	83	836329	10.04	ppbv	#	99
57) 4-Ethyltoluene	17.60	105	1295992	9.67	ppbv		96
58) 1,3,5-Trimethylbenzene	17.68	105	1068739	9.33	ppbv		96
59) 1,2,4-Trimethylbenzene	18.27	105	1006804	9.37	ppbv		96
60) 1,3-Dichlorobenzene	18.82	146	591062	9.30	ppbv		97
61) 1,4-Dichlorobenzene	18.97	146	538983	9.25	ppbv		97
62) Benzyl chloride	19.18	91	737952	10.47	ppbv		96
63) 1,2-Dichlorobenzene	19.61	146	519835	9.16	ppbv		97
64) 1,2,4-Trichlorobenzene	22.77	180	74142	9.11	ppbv		97
65) Hexachlorobutadiene	22.97	225	199197	10.01	ppbv		99
66) Naphthalene	23.45	128	120262	9.47	ppbv		99

(#) = qualifier out of range (m) = manual integration
10311114.D 103111V1.M Mon Dec 05 15:32:30 2011 Page 2

Quantitation Report

Data File : C:\HPCHEM\1\DATA\103111\10311114.D Vial: 4
Acq On : 31 Oct 2011 10:17 pm Operator: RACHEL HILL
Sample : CCV VOA1 103111 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Nov 1 13:23 2011 Quant Results File: 103111V1.RES

Method : C:\HPCHEM\1\METHODS\103111V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Nov 01 13:22:33 2011
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA1_111101A **Run No.:** 43931

Analytical Run Date: 11/1/2011 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

Calibration ID: 43931 **Column ID:** 0.25mm, 1.4umFT

Column Length: 30m

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB1 VOA1 110111	BFB_TUNE	TUNE	R43931	11/1/2011 8:10:00 PM	Charles O`Bryan		
1ppbv ICAL	EPA_TO15	ICAL	R43931	11/1/2011 9:34:00 PM	Charles O`Bryan		
10ppbv ICAL	EPA_TO15	ICAL	R43931	11/1/2011 10:14:00 PM	Charles O`Bryan		
12ppbv ICAL	EPA_TO15	ICAL	R43931	11/1/2011 10:55:00 PM	Charles O`Bryan		
15ppbv ICAL	EPA_TO15	ICAL	R43931	11/1/2011 11:36:00 PM	Charles O`Bryan		
20ppbv ICAL	EPA_TO15	ICAL	R43931	11/2/2011 12:18:00 AM	Charles O`Bryan		
30ppbv ICAL	EPA_TO15	ICAL	R43931	11/2/2011 1:00:00 AM	Charles O`Bryan		
50ppbv ICAL	EPA_TO15	ICAL	R43931	11/2/2011 1:43:00 AM	Charles O`Bryan		
BFB2 VOA1 103111	BFB_TUNE	TUNE	R43931	11/2/2011 2:24:00 AM	Charles O`Bryan		
CCV2 VOA1 103111	EPA_TO15	CCV	R43931	11/2/2011 3:04:00 AM	Charles O`Bryan		
RLVS3 VOA1 10311	EPA_TO15	RLVS	R43931	11/2/2011 3:46:00 AM	Charles O`Bryan		
MBLK2 VOA1 10311	EPA_TO15	MBLK	R43931	11/2/2011 4:33:00 AM	Charles O`Bryan		
1110757-002A	EPA_TO15	SAMP	R43931	11/2/2011 5:14:00 AM	Charles O`Bryan		
1110757-011A	EPA_TO15	SAMP	R43931	11/2/2011 5:58:00 AM	Charles O`Bryan		
1110757-012A	EPA_TO15	SAMP	R43931	11/2/2011 6:39:00 AM	Charles O`Bryan		
1110757-013A	EPA_TO15	SAMP	R43931	11/2/2011 7:26:00 AM	Charles O`Bryan		
1110757-014A	EPA_TO15	SAMP	R43931	11/2/2011 8:06:00 AM	Charles O`Bryan		
1110757-015A	EPA_TO15	SAMP	R43931	11/2/2011 8:47:00 AM	Charles O`Bryan		
1110757-016A	EPA_TO15	SAMP	R43931	11/2/2011 9:27:00 AM	Charles O`Bryan		
1110757-016ADUP	EPA_TO15	DUP	R43931	11/2/2011 10:08:00 AM	Celeste Hoitash		
1110757-017A	EPA_TO15	SAMP	R43931	11/2/2011 10:49:00 AM	Charles O`Bryan		
1110757-028A	EPA_TO15	SAMP	R43931	11/2/2011 11:31:00 AM	Charles O`Bryan		
1110757-029A	EPA_TO15	SAMP	R43931	11/2/2011 12:13:00 PM	Charles O`Bryan		
1110757-030A	EPA_TO15	SAMP	R43931	11/2/2011 1:01:00 PM	Charles O`Bryan		
1110757-031A	EPA_TO15	SAMP	R43931	11/2/2011 1:53:00 PM	Charles O`Bryan		
1110757-032A	EPA_TO15	SAMP	R43931	11/2/2011 2:34:00 PM	Charles O`Bryan		
1110757-033A	EPA_TO15	SAMP	R43931	11/2/2011 3:15:00 PM	Charles O`Bryan		
1110757-034A	EPA_TO15	SAMP	R43931	11/2/2011 3:56:00 PM	Charles O`Bryan		
1110757-017A	EPA_TO15	SAMP	R43931	11/2/2011 4:36:00 PM	Charles O`Bryan		
1111023-036A	EPA_TO15	SAMP	R43931	11/2/2011 5:17:00 PM	Charles O`Bryan		
RLVS3 VOA1 10311	EPA_TO15	RLVS	R43931	11/2/2011 11:32:00 PM	Charles O`Bryan		

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
860875	CCV2 VOA1 103111	EPA_TO15	CCV	\1\DATA\110111	11/2/2011 3:04:0	1	R43931		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	11.02	11.02		9.6	0	0	0.107	1	0	115%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	9.99	9.99		10	0	0	0.211	1	0	100%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	11	11		9.8	0	0	0.108	1	0	112%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.83	9.83		9.8	0	0	0.2	1	0	100%	70	130	0%	
1,1-Dichloroethane	A	ppbv	10.61	10.61		9.7	0	0	0.111	1	0	109%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.99	10.99		9.9	0	0	0.097	1	0	111%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	7.85	7.85		9.1	0	0	0.271	1	0	86%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	9.24	9.24		9.8	0	0	0.245	1	0	94%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.7	9.7		9.6	0	0	0.186	1	0	101%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	8.94	8.94		9.7	0	0	0.208	1	0	92%	70	130	0%	
1,2-Dichloroethane	A	ppbv	10.69	10.69		9.7	0	0	0.196	1	0	110%	70	130	0%	
1,2-Dichloropropane	A	ppbv	10.06	10.06		9.8	0	0	0.224	1	0	103%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.32	9.32		9.7	0	0	0.24	1	0	96%	70	130	0%	
1,3-Butadiene	A	ppbv	11.98	11.98		9.8	0	0	0.152	1	0	122%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.25	9.25		9.7	0	0	0.202	1	0	95%	70	130	0%	
1,4-Dichlorobenzene	A	ppbv	8.88	8.88		9.6	0	0	0.194	1	0	93%	70	130	0%	
1,4-Dioxane	A	ppbv	9.67	9.67		9.6	0	0	0.128	1	0	101%	70	130	0%	
2-Butanone	A	ppbv	10.51	10.51		9.9	0	0	0.287	1	0	106%	70	130	0%	
2-Hexanone	A	ppbv	9.76	9.76		9.8	0	0	0.135	1	0	100%	70	130	0%	
2-Propanol	A	ppbv	10.74	10.74		10.1	0	0	0.329	1	0	106%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	10.02	10.02		10	0	0	0.157	1	0	100%	70	130	0%	
Acetone	A	ppbv	10.51	10.51		10	0	0	0.43	1	0	105%	70	130	0%	
Benzene	A	ppbv	10.3	10.3		9.6	0	0	0.126	1	0	107%	70	130	0%	
Benzyl chloride	A	ppbv	10.24	10.24		9.7	0	0	0.155	1	0	106%	70	130	0%	
Bromodichloromethane	A	ppbv	10	10		9.6	0	0	0.156	1	0	104%	70	130	0%	
Bromoform	A	ppbv	9.7	9.7		9.6	0	0	0.197	1	0	101%	70	130	0%	
Bromomethane	A	ppbv	10.18	10.18		9.3	0	0	0.075	1	0	109%	70	130	0%	
Carbon disulfide	A	ppbv	10.8	10.8		9.7	0	0	0.093	1	0	111%	70	130	0%	
Carbon tetrachloride	A	ppbv	10.45	10.45		9.5	0	0	0.114	1	0	110%	70	130	0%	
Chlorobenzene	A	ppbv	9.92	9.92		9.9	0	0	0.275	1	0	100%	70	130	0%	
Chlorodibromomethane	A	ppbv	9.96	9.96		9.2	0	0	0.165	1	0	108%	70	130	0%	
Chloroethane	A	ppbv	10.21	10.21		9.8	0	0	0.063	1	0	104%	70	130	0%	
Chloroform	A	ppbv	11.14	11.14		9.4	0	0	0.126	1	0	119%	70	130	0%	
Chloromethane	A	ppbv	10.5	10.5		9.8	0	0	0.104	1	0	107%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
860875	CCV2 VOA1 103111	EPA_TO15	CCV	\1\DATA\110111	11/2/2011 3:04:0	1	R43931		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
cis-1,2-Dichloroethene	A	ppbv	10.45	10.45		9.8	0	0	0.107	1	0	107%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	9.83	9.83		9.5	0	0	0.166	1	0	103%	70	130	0%	
Cyclohexane	A	ppbv	11.38	11.38		9.8	0	0	0.684	2	0	116%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.75	9.75		9.2	0	0	0.086	1	0	106%	70	130	0%	
Ethanol	A	ppbv	10.17	10.17		9.2	0	0	1.962	5	0	111%	70	130	0%	
Ethyl acetate	A	ppbv	10.41	10.41		9.8	0	0	0.157	1	0	106%	70	130	0%	
Ethylbenzene	A	ppbv	10.02	10.02		9.8	0	0	0.737	2	0	102%	70	130	0%	
Heptane	A	ppbv	10.99	10.99		9.9	0	0	0.249	1	0	111%	70	130	0%	
Hexachlorobutadiene	A	ppbv	9.06	9.06		9.4	0	0	0.374	2	0	96%	70	130	0%	
m,p-Xylene	A	ppbv	20.56	20.56		19.2	0	0	0.524	2	0	107%	70	130	0%	
Methylene chloride	A	ppbv	10.84	10.84		10	0	0	2.077	5	0	108%	70	130	0%	
n-Hexane	A	ppbv	11.03	11.03		10.1	0	0	0.692	2	0	109%	70	130	0%	
Naphthalene	A	ppbv	8.18	8.18		9.2	0	0	0.247	1	0	89%	70	130	0%	
o-Xylene	A	ppbv	10.06	10.06		10	0	0	0.258	1	0	101%	70	130	0%	
Propylene	A	ppbv	10.88	10.88		10.2	0	0	0.075	1	0	107%	70	130	0%	
Styrene	A	ppbv	9.82	9.82		9.8	0	0	0.263	1	0	100%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	10.51	10.51		9.9	0	0	0.228	1	0	106%	70	130	0%	
Tetrachloroethene	A	ppbv	9.89	9.89		9.6	0	0	0.148	1	0	103%	70	130	0%	
Tetrahydrofuran	A	ppbv	10.72	10.72		10	0	0	0.201	1	0	107%	70	130	0%	
Toluene	A	ppbv	9.99	9.99		9.8	0	0	0.158	1	0	102%	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	9.4	9.4		9.1	0	0	0.171	1	0	103%	70	130	0%	
Trichloroethene	A	ppbv	9.88	9.88		9.6	0	0	0.119	1	0	103%	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	11.78	11.78		9.9	0	0	0.266	1	0	119%	70	130	0%	
Vinyl chloride	A	ppbv	12.05	12.05		9.4	0	0	0.072	1	0	128%	70	130	0%	
Xylenes, Total	C	ppbv	30.62	30.62		29.2	0	0	0.782	3	0	105%	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	12.62	12.62		12.5	0	0	0	0	0	101%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\110111\11011111.D Vial: 2
Acq On : 2 Nov 2011 3:04 am Operator: RACHEL HILL
Sample : CCV2 VOA1 103111 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\110111V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Nov 02 07:37:51 2011
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	106	0.00
2	T	Propylene	1.318	1.405	-6.6	103	0.00
3	T	Dichlorodifluoromethane	3.397	3.600	-6.0	105	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.225	2.377	-6.8	107	0.00
5	T	Chloromethane	1.416	1.565	-10.5	101	0.00
6	T	Vinyl chloride	1.431	1.834	-28.2	100	0.00
7	T	1,3-Butadiene	1.274	1.557	-22.2	104	0.00
8	T	Bromomethane	1.211	1.326	-9.5	107	0.00
9	T	Chloroethane	0.750	0.832	-10.9	106	0.00
10	T	Trichlorofluoromethane	2.980	3.261	-9.4	105	0.00
11	T	Ethanol	0.350	0.387	-10.6	105	0.00
12	T	Freon113	2.337	2.622	-12.2	105	0.00
13	T	1,1-Dichloroethene	1.958	2.173	-11.0	105	0.00
14	T	Acetone	1.978	2.079	-5.1	102	0.00
15	T	Carbon disulfide	3.208	3.571	-11.3	106	0.00
16	T	2-Propanol	1.827	1.943	-6.3	104	0.00
17	T	Methylene chloride	1.548	1.678	-8.4	103	0.00
18	T	tert-Butyl Methyl Ether	2.575	2.733	-6.1	103	0.00
19	T	trans-1,2-Dichloroethene	1.898	2.086	-9.9	104	0.00
20	T	n-Hexane	2.082	2.274	-9.2	103	0.00
21	T	1,1-Dichloroethane	2.142	2.344	-9.4	105	0.00
22	T	Vinyl acetate	2.841	3.379	-18.9	102	0.00
23	T	cis-1,2-Dichloroethene	1.160	1.238	-6.7	104	0.00
24	T	2-Butanone	2.010	2.135	-6.2	101	0.00
25	T	Ethyl acetate	2.611	2.773	-6.2	102	0.00
26	T	Tetrahydrofuran	1.292	1.386	-7.3	102	0.00
27	T	Chloroform	2.411	2.740	-13.6	104	0.00
28	T	1,1,1-Trichloroethane	2.291	2.629	-14.8	103	0.00
29	T	Cyclohexane	2.102	2.441	-16.1	103	0.00
30	T	Carbon tetrachloride	2.076	2.285	-10.1	105	0.00
31	T	Benzene	2.847	3.053	-7.2	103	0.00
32	T	1,2-Dichloroethane	1.403	1.546	-10.2	102	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	105	0.00
34	T	Heptane	0.889	0.987	-11.0	102	0.00
35	T	Trichloroethene	0.463	0.476	-2.8	105	0.00
36	T	1,2-Dichloropropane	0.372	0.382	-2.7	102	0.00
37	T	1,4-Dioxane	0.132	0.133	-0.8	106	0.00
38	T	Bromodichloromethane	0.681	0.709	-4.1	104	0.00
39	T	cis-1,3-Dichloropropene	0.562	0.581	-3.4	104	0.00
40	T	4-Methyl-2-pentanone	0.247	0.247	0.0	103	0.00
41	T	Toluene	0.954	0.973	-2.0	103	0.00
42	T	trans-1,3-Dichloropropene	0.482	0.498	-3.3	104	0.00
43	T	1,1,2-Trichloroethane	0.332	0.333	-0.3	103	0.00
44	T	Tetrachloroethene	0.501	0.516	-3.0	104	0.00
45	T	2-Hexanone	0.534	0.532	0.4	102	0.00
46	T	Chlorodibromomethane	0.513	0.522	-1.8	105	0.00
47	T	1,2-Dibromoethane	0.487	0.492	-1.0	104	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	105	0.00
49	T	Chlorobenzene	0.942	0.944	-0.2	103	0.00
50	T	Ethylbenzene	1.571	1.607	-2.3	104	0.00
51	T	m,p-Xylene	1.263	1.352	-7.0	103	0.00
52	T	o-Xylene	1.160	1.167	-0.6	104	0.00
53	T	Styrene	0.802	0.804	-0.2	104	0.00
54	T	Bromoform	0.609	0.615	-1.0	105	0.00
55	S	4-Bromofluorobenzene	0.596	0.602	-1.0	105	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\110111\11011111.D Vial: 2
Acq On : 2 Nov 2011 3:04 am Operator: RACHEL HILL
Sample : CCV2 VOA1 103111 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\110111V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Nov 02 07:37:51 2011
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	0.864	0.863	0.1	103	0.00
57	T	4-Ethyltoluene	1.427	1.394	2.3	104	0.00
58	T	1,3,5-Trimethylbenzene	1.230	1.182	3.9	104	0.00
59	T	1,2,4-Trimethylbenzene	1.144	1.079	5.7	102	0.00
60	T	1,3-Dichlorobenzene	0.627	0.598	4.6	101	0.00
61	T	1,4-Dichlorobenzene	0.585	0.541	7.5	101	0.00
62	T	Benzyl chloride	0.697	0.736	-5.6	104	0.00
63	T	1,2-Dichlorobenzene	0.576	0.531	7.8	102	0.00
64	T	1,2,4-Trichlorobenzene	0.080	0.069	13.7	102	0.00
65	T	Hexachlorobutadiene	0.199	0.192	3.5	107	0.00
66		Naphthalene	0.124	0.110	11.3	108	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\110111\11011111.D Vial: 2
Acq On : 2 Nov 2011 3:04 am Operator: RACHEL HILL
Sample : CCV2 VOA1 103111 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Nov 2 7:38 2011 Quant Results File: 110111V1.RES

Quant Method : C:\HPCHEM\1\METHODS\110111V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Nov 02 07:37:51 2011
Response via : Initial Calibration
DataAcq Meth : 110111V1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.59	130	514797	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.69	114	1588118	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.54	117	1020250	12.50	ppbv		0.00
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.19	95	613867	12.62	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 100.96%				
Target Compounds							Qvalue
2) Propylene	5.53	41	590260	10.88	ppbv		98
3) Dichlorodifluoromethane	5.59	85	1363824	9.75	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.84	135	929933	10.15	ppbv	#	71
5) Chloromethane	6.00	50	612118	10.50	ppbv		99
6) Vinyl chloride	6.21	62	709845	12.05	ppbv		99
7) 1,3-Butadiene	6.26	39	628576	11.98	ppbv		91
8) Bromomethane	6.85	94	507873	10.18	ppbv		98
9) Chloroethane	7.01	64	315208	10.21	ppbv		96
10) Trichlorofluoromethane	7.34	101	1289310	10.50	ppbv	#	98
11) Ethanol	7.56	45	146567	10.17	ppbv		98
12) Freon113	7.99	101	1058193	11.00	ppbv		88
13) 1,1-Dichloroethene	8.10	61	885996	10.99	ppbv	#	87
14) Acetone	8.19	43	856118	10.51	ppbv		92
15) Carbon disulfide	8.46	76	1426514	10.80	ppbv	#	100
16) 2-Propanol	8.23	45	808226	10.74	ppbv		83
17) Methylene chloride	8.75	49	691023	10.84	ppbv	#	79
18) tert-Butyl Methyl Ether	8.96	73	1114365	10.51	ppbv	#	89
19) trans-1,2-Dichloroethene	9.04	61	841801	10.77	ppbv	#	83
20) n-Hexane	9.22	57	945786	11.03	ppbv		89
21) 1,1-Dichloroethane	9.60	63	936236	10.61	ppbv	#	97
22) Vinyl acetate	9.53	43	1377827	11.78	ppbv	#	95
23) cis-1,2-Dichloroethene	10.28	96	499529	10.45	ppbv	#	82
24) 2-Butanone	10.25	43	870298	10.51	ppbv	#	89
25) Ethyl acetate	10.20	43	1119341	10.41	ppbv	#	98
26) Tetrahydrofuran	10.59	42	570601	10.72	ppbv		88
27) Chloroform	10.60	83	1105964	11.14	ppbv		100
28) 1,1,1-Trichloroethane	10.86	97	1039317	11.02	ppbv		95
29) Cyclohexane	10.86	56	985320	11.38	ppbv		87
30) Carbon tetrachloride	11.02	117	893855	10.45	ppbv		97
31) Benzene	11.30	78	1207230	10.30	ppbv		95
32) 1,2-Dichloroethane	11.37	62	617660	10.69	ppbv	#	98
34) Heptane	11.35	43	1242040	10.99	ppbv	#	88
35) Trichloroethene	12.03	130	580752	9.88	ppbv		92
36) 1,2-Dichloropropane	12.38	63	475685	10.06	ppbv		97
37) 1,4-Dioxane	12.46	88	161766	9.67	ppbv	#	82
38) Bromodichloromethane	12.67	83	865165	10.00	ppbv		99
39) cis-1,3-Dichloropropene	13.22	75	701496	9.83	ppbv		96
40) 4-Methyl-2-pentanone	13.33	58	314011	10.02	ppbv	#	91
41) Toluene	13.63	91	1211695	9.99	ppbv		97
42) trans-1,3-Dichloropropene	13.93	75	575701	9.40	ppbv		95
43) 1,1,2-Trichloroethane	14.20	97	414294	9.83	ppbv		96
44) Tetrachloroethene	14.33	166	629651	9.89	ppbv		98
45) 2-Hexanone	14.41	43	662132	9.76	ppbv		93
46) Chlorodibromomethane	14.75	129	649339	9.96	ppbv		99
47) 1,2-Dibromoethane	14.99	107	600220	9.70	ppbv		99
49) Chlorobenzene	15.58	112	762919	9.92	ppbv	#	87
50) Ethylbenzene	15.62	91	1285027	10.02	ppbv		91
51) m,p-Xylene	15.78	91	2119063	20.56	ppbv		90
52) o-Xylene	16.37	91	952736	10.06	ppbv	#	88

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\110111\11011111.D Vial: 2
Acq On : 2 Nov 2011 3:04 am Operator: RACHEL HILL
Sample : CCV2 VOA1 103111 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Nov 2 7:38 2011 Quant Results File: 110111V1.RES

Quant Method : C:\HPCHEM\1\METHODS\110111V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Nov 02 07:37:51 2011
Response via : Initial Calibration
DataAcq Meth : 110111V1

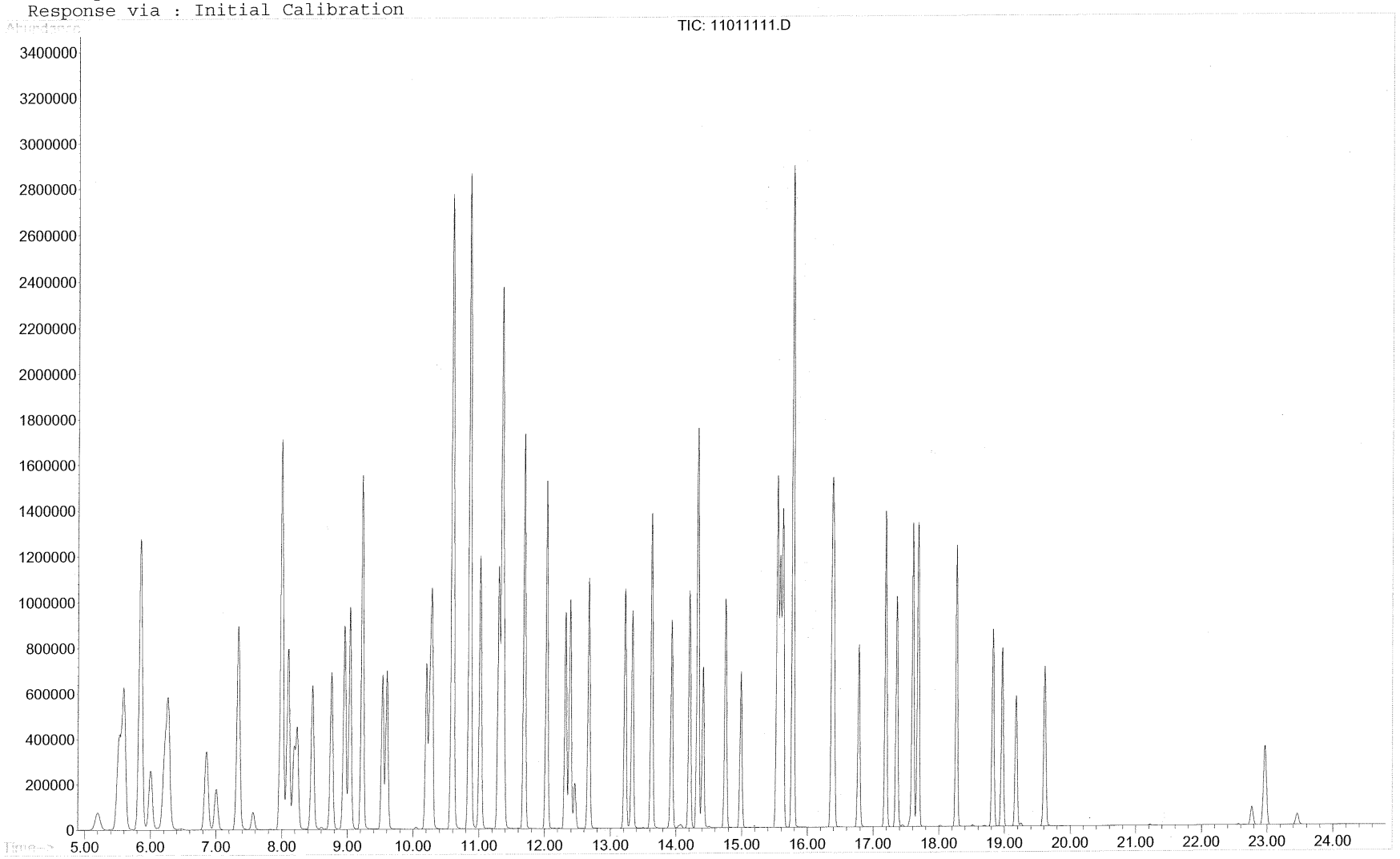
Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53) Styrene	16.40	104	642763	9.82	ppbv		96
54) Bromoform	16.78	173	482124	9.70	ppbv	#	97
56) 1,1,2,2-Tetrachloroethane	17.36	83	704418	9.99	ppbv	#	99
57) 4-Ethyltoluene	17.60	105	1115419	9.58	ppbv		95
58) 1,3,5-Trimethylbenzene	17.68	105	935479	9.32	ppbv		95
59) 1,2,4-Trimethylbenzene	18.27	105	863089	9.24	ppbv		96
60) 1,3-Dichlorobenzene	18.82	146	473444	9.25	ppbv	#	97
61) 1,4-Dichlorobenzene	18.97	146	423692	8.88	ppbv	#	97
62) Benzyl chloride	19.18	91	582711	10.24	ppbv		95
63) 1,2-Dichlorobenzene	19.61	146	420176	8.94	ppbv		97
64) 1,2,4-Trichlorobenzene	22.76	180	51306	7.85	ppbv		99
65) Hexachlorobutadiene	22.97	225	147163	9.06	ppbv		99
66) Naphthalene	23.45	128	82666	8.18	ppbv		99

(#) = qualifier out of range (m) = manual integration
11011111.D 110111V1.M Thu Dec 01 14:43:48 2011 Page 2

Quantitation Report

Data File : C:\HPCHEM\1\DATA\110111\11011111.D Vial: 2
Acq On : 2 Nov 2011 3:04 am Operator: RACHEL HILL
Sample : CCV2 VOA1 103111 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Nov 2 7:38 2011 Quant Results File: 110111V1.RES

Method : C:\HPCHEM\1\METHODS\110111V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Nov 02 07:37:51 2011
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA1_111103A **Run No.:** 44059

Analytical Run Date: 11/3/2011 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

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

Column Length: 30m

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB1 VOA1 110311	BFB_TUNE	TUNE	R44059	11/3/2011 9:23:00 AM	Charles O`Bryan		
1ppbv ICAL	EPA_TO15	ICAL	R44059	11/3/2011 2:56:00 PM	Charles O`Bryan		
10ppbv ICAL	EPA_TO15	ICAL	R44059	11/3/2011 3:36:00 PM	Charles O`Bryan		
12ppbv ICAL	EPA_TO15	ICAL	R44059	11/3/2011 4:17:00 PM	Charles O`Bryan		
15ppbv ICAL	EPA_TO15	ICAL	R44059	11/3/2011 4:58:00 PM	Charles O`Bryan		
20ppbv ICAL	EPA_TO15	ICAL	R44059	11/3/2011 5:39:00 PM	Charles O`Bryan		
30ppbv ICAL	EPA_TO15	ICAL	R44059	11/3/2011 6:21:00 PM	Charles O`Bryan		
50ppbv ICAL	EPA_TO15	ICAL	R44059	11/3/2011 7:05:00 PM	Charles O`Bryan		
BFB2 VOA1 110311	BFB_TUNE	TUNE	R44059	11/3/2011 7:44:00 PM	Charles O`Bryan		
ICV VOA1 110311	EPA_TO15	ICV	R44059	11/3/2011 8:25:00 PM	Charles O`Bryan		
RLVS VOA1 110311	EPA_TO15	RLVS	R44059	11/3/2011 9:07:00 PM	Charles O`Bryan		
BLK VOA1 110311	EPA_TO15	MBLK	R44059	11/3/2011 9:54:00 PM	Charles O`Bryan		
1110757-023A	EPA_TO15	SAMP	R44059	11/3/2011 10:34:00 PM	Charles O`Bryan		
1110757-034A	EPA_TO15	SAMP	R44059	11/3/2011 11:15:00 PM	Charles O`Bryan		
1111023-023A	EPA_TO15	SAMP	R44059	11/4/2011 12:02:00 AM	Charles O`Bryan		
1111023-024A	EPA_TO15	SAMP	R44059	11/4/2011 12:49:00 AM	Charles O`Bryan		
1111023-027A	EPA_TO15	SAMP	R44059	11/4/2011 3:10:00 AM	Charles O`Bryan		
1111023-028A	EPA_TO15	SAMP	R44059	11/4/2011 3:57:00 AM	Charles O`Bryan		
1111023-029A	EPA_TO15	SAMP	R44059	11/4/2011 4:44:00 AM	Charles O`Bryan		
1111023-017A	EPA_TO15	SAMP	R44059	11/4/2011 5:31:00 AM	Charles O`Bryan		
1111023-018A	EPA_TO15	SAMP	R44059	11/4/2011 6:12:00 AM	Charles O`Bryan		Over diluted sample. Will re-run at lower dilution. Reported here to show that sample and duplicate were analyzed.
1111023-018ADUP	EPA_TO15	SAMP	R44059	11/4/2011 6:52:00 AM	Celeste Hoitash		
1111023-021A	EPA_TO15	SAMP	R44059	11/4/2011 8:54:00 AM	Charles O`Bryan		
1111023-022A	EPA_TO15	SAMP	R44059	11/4/2011 9:35:00 AM	Charles O`Bryan		
1111023-001A	EPA_TO15	SAMP	R44059	11/4/2011 10:22:00 AM	Charles O`Bryan		
1111023-002A	EPA_TO15	SAMP	R44059	11/4/2011 11:02:00 AM	Charles O`Bryan		
1111023-005A	EPA_TO15	SAMP	R44059	11/4/2011 11:43:00 AM	Charles O`Bryan		
1111023-030A	EPA_TO15	SAMP	R44059	11/4/2011 12:30:00 PM	Charles O`Bryan		
1111023-031A	EPA_TO15	SAMP	R44059	11/4/2011 1:17:00 PM	Charles O`Bryan		
1111023-032A	EPA_TO15	SAMP	R44059	11/4/2011 2:04:00 PM	Charles O`Bryan		
1111023-033A	EPA_TO15	SAMP	R44059	11/4/2011 2:52:00 PM	Charles O`Bryan		
1111023-034A	EPA_TO15	SAMP	R44059	11/4/2011 3:32:00 PM	Charles O`Bryan		
1111023-035A	EPA_TO15	SAMP	R44059	11/4/2011 4:12:00 PM	Charles O`Bryan		
1111023-012A	EPA_TO15	SAMP	R44059	11/4/2011 5:40:00 PM	Charles O`Bryan		
RLVS2 VOA1 11031	EPA_TO15	RLVS	R44059	11/4/2011 6:22:00 PM	Charles O`Bryan		

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
864034	ICV VOA1 110311	EPA_TO15	ICV	\1\DATA\110311\11/3/2011 8:25:0		1	R44059		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	11.28	11.28		9.6	0	0	0.107	1	0	118%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.99	10.99		10	0	0	0.211	1	0	110%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	11.27	11.27		9.8	0	0	0.108	1	0	115%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	10.42	10.42		9.8	0	0	0.2	1	0	106%	70	130	0%	
1,1-Dichloroethane	A	ppbv	11.1	11.1		9.7	0	0	0.111	1	0	114%	70	130	0%	
1,1-Dichloroethene	A	ppbv	11.39	11.39		9.9	0	0	0.097	1	0	115%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	9.52	9.52		9.1	0	0	0.271	1	0	105%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	10.25	10.25		9.8	0	0	0.245	1	0	105%	70	130	0%	
1,2-Dibromoethane	A	ppbv	10.34	10.34		9.6	0	0	0.186	1	0	108%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	10.65	10.65		9.7	0	0	0.208	1	0	110%	70	130	0%	
1,2-Dichloroethane	A	ppbv	11.4	11.4		9.7	0	0	0.196	1	0	118%	70	130	0%	
1,2-Dichloropropane	A	ppbv	10.75	10.75		9.8	0	0	0.224	1	0	110%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	10.13	10.13		9.7	0	0	0.24	1	0	104%	70	130	0%	
1,3-Butadiene	A	ppbv	11.22	11.22		9.8	0	0	0.152	1	0	114%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	10.48	10.48		9.7	0	0	0.202	1	0	108%	70	130	0%	
1,4-Dichlorobenzene	A	ppbv	10.49	10.49		9.6	0	0	0.194	1	0	109%	70	130	0%	
1,4-Dioxane	A	ppbv	10.59	10.59		9.6	0	0	0.128	1	0	110%	70	130	0%	
2-Butanone	A	ppbv	10.91	10.91		9.9	0	0	0.287	1	0	110%	70	130	0%	
2-Hexanone	A	ppbv	10.51	10.51		9.8	0	0	0.135	1	0	107%	70	130	0%	
2-Propanol	A	ppbv	11.3	11.3		10.1	0	0	0.329	1	0	112%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	10.78	10.78		10	0	0	0.157	1	0	108%	70	130	0%	
Acetone	A	ppbv	11.44	11.44		10	0	0	0.43	1	0	114%	70	130	0%	
Benzene	A	ppbv	11.03	11.03		9.6	0	0	0.126	1	0	115%	70	130	0%	
Benzyl chloride	A	ppbv	11.78	11.78		9.7	0	0	0.155	1	0	121%	70	130	0%	
Bromodichloromethane	A	ppbv	10.48	10.48		9.6	0	0	0.156	1	0	109%	70	130	0%	
Bromoform	A	ppbv	10.45	10.45		9.6	0	0	0.197	1	0	109%	70	130	0%	
Bromomethane	A	ppbv	10.16	10.16		9.3	0	0	0.075	1	0	109%	70	130	0%	
Carbon disulfide	A	ppbv	10.89	10.89		9.7	0	0	0.093	1	0	112%	70	130	0%	
Carbon tetrachloride	A	ppbv	10.9	10.9		9.5	0	0	0.114	1	0	115%	70	130	0%	
Chlorobenzene	A	ppbv	10.52	10.52		9.9	0	0	0.275	1	0	106%	70	130	0%	
Chlorodibromomethane	A	ppbv	10.45	10.45		9.2	0	0	0.165	1	0	114%	70	130	0%	
Chloroethane	A	ppbv	10.25	10.25		9.8	0	0	0.063	1	0	105%	70	130	0%	
Chloroform	A	ppbv	11.48	11.48		9.4	0	0	0.126	1	0	122%	70	130	0%	
Chloromethane	A	ppbv	10.29	10.29		9.8	0	0	0.104	1	0	105%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
864034	ICV VOA1 110311	EPA_TO15	ICV	\1\DATA\110311\11/3/2011 8:25:0		1	R44059		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
cis-1,2-Dichloroethene	A	ppbv	10.93	10.93		9.8	0	0	0.107	1	0	112%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	10.39	10.39		9.5	0	0	0.166	1	0	109%	70	130	0%	
Cyclohexane	A	ppbv	11.5	11.5		9.8	0	0	0.684	2	0	117%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.86	9.86		9.2	0	0	0.086	1	0	107%	70	130	0%	
Ethanol	A	ppbv	10.57	10.57		9.2	0	0	1.962	5	0	115%	70	130	0%	
Ethyl acetate	A	ppbv	11.23	11.23		9.8	0	0	0.157	1	0	115%	70	130	0%	
Ethylbenzene	A	ppbv	10.62	10.62		9.8	0	0	0.737	2	0	108%	70	130	0%	
Heptane	A	ppbv	11.04	11.04		9.9	0	0	0.249	1	0	112%	70	130	0%	
Hexachlorobutadiene	A	ppbv	10.37	10.37		9.4	0	0	0.374	2	0	110%	70	130	0%	
m,p-Xylene	A	ppbv	21.71	21.71		19.2	0	0	0.524	2	0	113%	70	130	0%	
Methylene chloride	A	ppbv	11.2	11.2		10	0	0	2.077	5	0	112%	70	130	0%	
n-Hexane	A	ppbv	11.43	11.43		10.1	0	0	0.692	2	0	113%	70	130	0%	
Naphthalene	A	ppbv	9.93	9.93		9.2	0	0	0.247	1	0	108%	70	130	0%	
o-Xylene	A	ppbv	10.74	10.74		10	0	0	0.258	1	0	107%	70	130	0%	
Propylene	A	ppbv	10.78	10.78		10.2	0	0	0.075	1	0	106%	70	130	0%	
Styrene	A	ppbv	10.44	10.44		9.8	0	0	0.263	1	0	107%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	11.6	11.6		9.9	0	0	0.228	1	0	117%	70	130	0%	
Tetrachloroethene	A	ppbv	10.21	10.21		9.6	0	0	0.148	1	0	106%	70	130	0%	
Tetrahydrofuran	A	ppbv	11.4	11.4		10	0	0	0.201	1	0	114%	70	130	0%	
Toluene	A	ppbv	10.61	10.61		9.8	0	0	0.158	1	0	108%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	11.2	11.2		9.8	0	0	0.117	1	0	114%	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	10.19	10.19		9.6	0	0	0.119	1	0	106%	70	130	0%	
Trichlorofluoromethane	A	ppbv	10.87	10.87		9.6	0	0	0.148	1	0	113%	70	130	0%	
Vinyl acetate	A	ppbv	12.37	12.37		9.9	0	0	0.266	1	0	125%	70	130	0%	
Vinyl chloride	A	ppbv	11.54	11.54		9.4	0	0	0.072	1	0	123%	70	130	0%	
Xylenes, Total	C	ppbv	32.45	32.45		29.2	0	0	0.782	3	0	111%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		1.25	0	0	0	0	0	1000%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	13.08	13.08		12.5	0	0	0	0	0	105%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\110311\11031113.D Vial: 3
Acq On : 3 Nov 2011 8:25 pm Operator: RACHEL HILL
Sample : ICV VOA1 110311 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\110311V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Nov 04 09:39:32 2011
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	117	0.00
2	T	Propylene	1.346	1.422	-5.6	110	0.01
3	T	Dichlorodifluoromethane	3.327	3.566	-7.2	113	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.223	2.376	-6.9	114	0.00
5	T	Chloromethane	1.499	1.624	-8.3	106	0.00
6	T	Vinyl chloride	1.542	1.893	-22.8	108	0.00
7	T	1,3-Butadiene	1.315	1.506	-14.5	109	0.00
8	T	Bromomethane	1.224	1.337	-9.2	113	0.00
9	T	Chloroethane	0.772	0.860	-11.4	111	0.00
10	T	Trichlorofluoromethane	2.916	3.302	-13.2	116	0.00
11	T	Ethanol	0.375	0.431	-14.9	105	0.00
12	T	Freon113	2.378	2.736	-15.1	111	0.00
13	T	1,1-Dichloroethene	1.980	2.279	-15.1	110	0.00
14	T	Acetone	2.057	2.353	-14.4	103	0.00
15	T	Carbon disulfide	3.322	3.731	-12.3	111	0.00
16	T	2-Propanol	1.908	2.136	-11.9	106	0.00
17	T	Methylene chloride	1.588	1.778	-12.0	107	0.00
18	T	tert-Butyl Methyl Ether	2.699	3.161	-17.1	104	0.00
19	T	trans-1,2-Dichloroethene	1.914	2.187	-14.3	109	0.00
20	T	n-Hexane	2.134	2.414	-13.1	107	0.00
21	T	1,1-Dichloroethane	2.236	2.557	-14.4	106	0.00
22	T	Vinyl acetate	3.075	3.843	-25.0	102	0.00
23	T	cis-1,2-Dichloroethene	1.178	1.313	-11.5	108	0.00
24	T	2-Butanone	2.159	2.380	-10.2	94	0.00
25	T	Ethyl acetate	2.810	3.221	-14.6	101	0.00
26	T	Tetrahydrofuran	1.384	1.579	-14.1	101	0.00
27	T	Chloroform	2.451	2.871	-17.1	110	0.00
28	T	1,1,1-Trichloroethane	2.329	2.736	-17.5	110	0.00
29	T	Cyclohexane	2.189	2.569	-17.4	106	0.00
30	T	Carbon tetrachloride	2.065	2.369	-14.7	111	0.00
31	T	Benzene	3.008	3.455	-14.9	103	0.00
32	T	1,2-Dichloroethane	1.423	1.671	-17.4	105	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	119	0.00
34	T	Heptane	0.911	1.017	-11.6	105	0.00
35	T	Trichloroethene	0.462	0.490	-6.1	109	0.00
36	T	1,2-Dichloropropane	0.390	0.428	-9.7	102	0.00
37	T	1,4-Dioxane	0.139	0.154	-10.8	109	0.00
38	T	Bromodichloromethane	0.695	0.759	-9.2	107	0.00
39	T	cis-1,3-Dichloropropene	0.565	0.618	-9.4	105	0.00
40	T	4-Methyl-2-pentanone	0.262	0.283	-8.0	104	0.00
41	T	Toluene	1.003	1.086	-8.3	104	0.00
42	T	trans-1,3-Dichloropropene	0.482	0.531	-10.2	106	0.00
43	T	1,1,2-Trichloroethane	0.340	0.362	-6.5	105	0.00
44	T	Tetrachloroethene	0.504	0.537	-6.5	109	0.00
45	T	2-Hexanone	0.557	0.598	-7.4	103	0.00
46	T	Chlorodibromomethane	0.516	0.550	-6.6	107	0.00
47	T	1,2-Dibromoethane	0.479	0.515	-7.5	107	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	118	0.00
49	T	Chlorobenzene	0.972	1.033	-6.3	105	0.00
50	T	Ethylbenzene	1.659	1.798	-8.4	104	0.00
51	T	m,p-Xylene	1.330	1.504	-13.1	105	0.00
52	T	o-Xylene	1.209	1.298	-7.4	105	0.00
53	T	Styrene	0.816	0.870	-6.6	106	0.00
54	T	Bromoform	0.598	0.651	-8.9	110	0.00
55	S	4-Bromofluorobenzene	0.557	0.583	-4.7	124	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\110311\11031113.D Vial: 3
Acq On : 3 Nov 2011 8:25 pm Operator: RACHEL HILL
Sample : ICV VOA1 110311 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\110311V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Nov 04 09:39:32 2011
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	0.860	0.946	-10.0	111	0.00
57	T	4-Ethyltoluene	1.357	1.433	-5.6	111	0.00
58	T	1,3,5-Trimethylbenzene	1.140	1.190	-4.4	111	0.00
59	T	1,2,4-Trimethylbenzene	1.051	1.099	-4.6	113	0.00
60	T	1,3-Dichlorobenzene	0.630	0.680	-7.9	115	0.00
61	T	1,4-Dichlorobenzene	0.582	0.636	-9.3	114	0.00
62	T	Benzyl chloride	0.727	0.882	-21.3	113	0.00
63	T	1,2-Dichlorobenzene	0.571	0.627	-9.8	116	0.00
64	T	1,2,4-Trichlorobenzene	0.103	0.108	-4.9	108	0.00
65	T	Hexachlorobutadiene	0.242	0.267	-10.3	108	0.00
66		Naphthalene	0.163	0.176	-8.0	111	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\110311\11031113.D Vial: 3
Acq On : 3 Nov 2011 8:25 pm Operator: RACHEL HILL
Sample : ICV VOA1 110311 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Nov 4 9:40 2011 Quant Results File: 110311V1.RES

Quant Method : C:\HPCHEM\1\METHODS\110311V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Nov 04 09:39:32 2011
Response via : Initial Calibration
DataAcq Meth : 110111V1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.59	130	500567	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.69	114	1581788	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.54	117	978138	12.50	ppbv		0.00
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.19	95	570566	13.08	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 104.64%				
Target Compounds							Qvalue
2) Propylene	5.52	41	580960	10.78	ppbv		98
3) Dichlorodifluoromethane	5.59	85	1313657	9.86	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.84	135	903880	10.15	ppbv	#	71
5) Chloromethane	6.00	50	617773	10.29	ppbv		99
6) Vinyl chloride	6.21	62	712566	11.54	ppbv		99
7) 1,3-Butadiene	6.26	39	590861	11.22	ppbv		92
8) Bromomethane	6.85	94	497865	10.16	ppbv		99
9) Chloroethane	7.00	64	316707	10.25	ppbv		96
10) Trichlorofluoromethane	7.34	101	1269329	10.87	ppbv	#	98
11) Ethanol	7.56	45	158649	10.57	ppbv		99
12) Freon113	7.99	101	1073851	11.27	ppbv		88
13) 1,1-Dichloroethene	8.09	61	903315	11.39	ppbv	#	87
14) Acetone	8.18	43	942309	11.44	ppbv		94
15) Carbon disulfide	8.46	76	1449236	10.89	ppbv	#	100
16) 2-Propanol	8.23	45	863813	11.30	ppbv		86
17) Methylene chloride	8.75	49	712175	11.20	ppbv	#	80
18) tert-Butyl Methyl Ether	8.95	73	1253094	11.60	ppbv	#	89
19) trans-1,2-Dichloroethene	9.04	61	858270	11.20	ppbv	#	84
20) n-Hexane	9.22	57	976202	11.43	ppbv		90
21) 1,1-Dichloroethane	9.59	63	993316	11.10	ppbv	#	98
22) Vinyl acetate	9.53	43	1523399	12.37	ppbv	#	95
23) cis-1,2-Dichloroethene	10.28	96	515406	10.93	ppbv	#	83
24) 2-Butanone	10.25	43	943440	10.91	ppbv	#	90
25) Ethyl acetate	10.20	43	1263903	11.23	ppbv	#	98
26) Tetrahydrofuran	10.58	42	632155	11.40	ppbv		88
27) Chloroform	10.60	83	1126880	11.48	ppbv		100
28) 1,1,1-Trichloroethane	10.86	97	1051835	11.28	ppbv		95
29) Cyclohexane	10.86	56	1008189	11.50	ppbv		87
30) Carbon tetrachloride	11.02	117	901404	10.90	ppbv		97
31) Benzene	11.30	78	1328138	11.03	ppbv		95
32) 1,2-Dichloroethane	11.37	62	649246	11.40	ppbv	#	98
34) Heptane	11.35	43	1273577	11.04	ppbv	#	88
35) Trichloroethene	12.03	130	595159	10.19	ppbv		93
36) 1,2-Dichloropropane	12.38	63	530832	10.75	ppbv		97
37) 1,4-Dioxane	12.46	88	186790	10.59	ppbv	#	83
38) Bromodichloromethane	12.67	83	921478	10.48	ppbv		99
39) cis-1,3-Dichloropropene	13.22	75	743146	10.39	ppbv		96
40) 4-Methyl-2-pentanone	13.33	58	357555	10.78	ppbv	#	91
41) Toluene	13.63	91	1346434	10.61	ppbv		97
42) trans-1,3-Dichloropropene	13.93	75	611056	10.03	ppbv		96
43) 1,1,2-Trichloroethane	14.20	97	448376	10.42	ppbv		96
44) Tetrachloroethene	14.33	166	651967	10.21	ppbv		98
45) 2-Hexanone	14.41	43	741094	10.51	ppbv		93
46) Chlorodibromomethane	14.75	129	682261	10.45	ppbv		99
47) 1,2-Dibromoethane	14.99	107	626053	10.34	ppbv		99
49) Chlorobenzene	15.58	112	800563	10.52	ppbv	#	86
50) Ethylbenzene	15.63	91	1379156	10.62	ppbv		92
51) m,p-Xylene	15.78	91	2259255	21.71	ppbv		91
52) o-Xylene	16.37	91	1015894	10.74	ppbv	#	89

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\110311\11031113.D Vial: 3
Acq On : 3 Nov 2011 8:25 pm Operator: RACHEL HILL
Sample : ICV VOA1 110311 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Nov 4 9:40 2011 Quant Results File: 110311V1.RES

Quant Method : C:\HPCHEM\1\METHODS\110311V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Nov 04 09:39:32 2011
Response via : Initial Calibration
DataAcq Meth : 110111V1

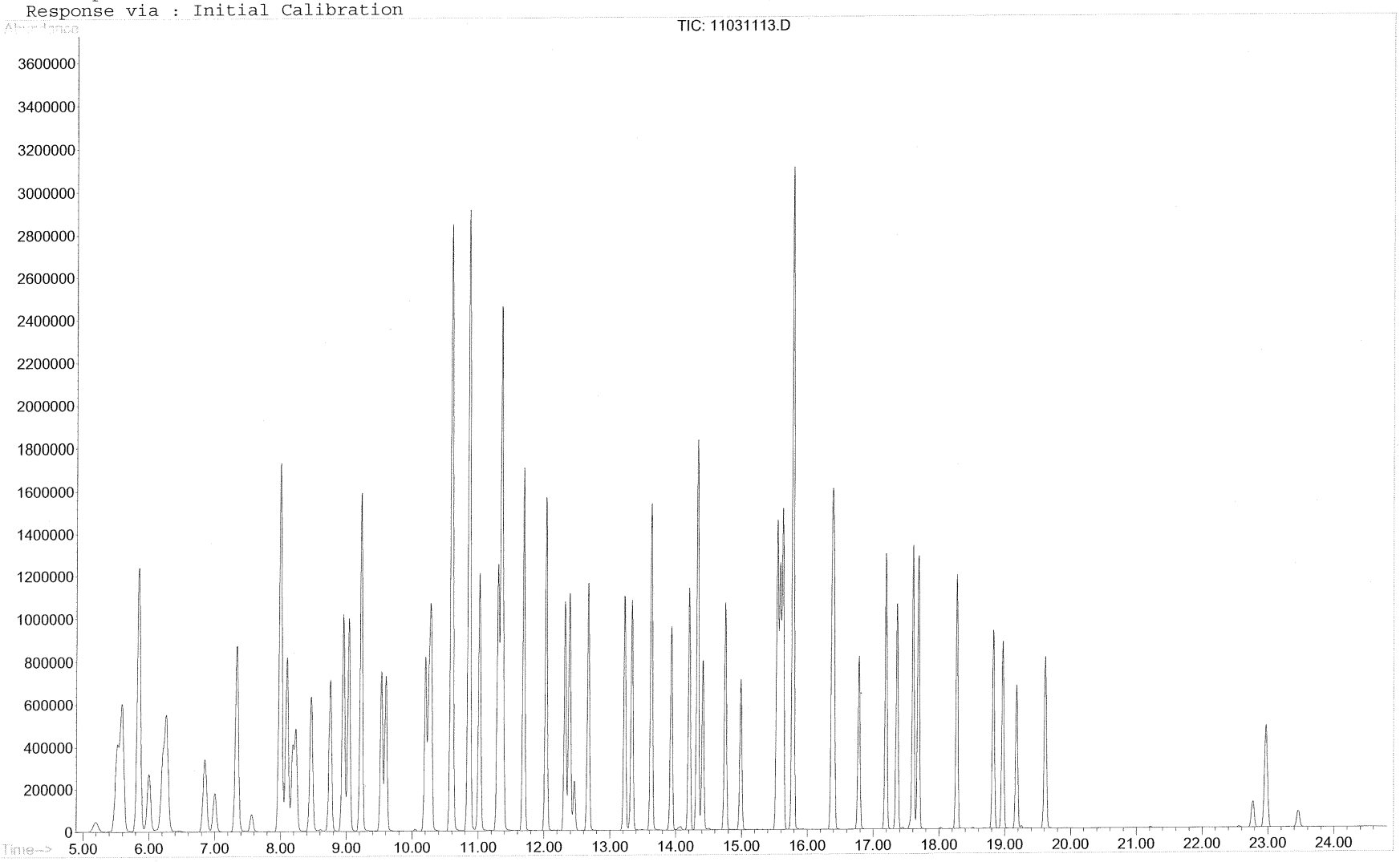
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.40	104	667065	10.44	ppbv		97
54)	Bromoform	16.78	173	489278	10.45	ppbv	#	98
56)	1,1,2,2-Tetrachloroethane	17.36	83	739942	10.99	ppbv	#	99
57)	4-Ethyltoluene	17.60	105	1098933	10.35	ppbv		95
58)	1,3,5-Trimethylbenzene	17.69	105	903560	10.13	ppbv		96
59)	1,2,4-Trimethylbenzene	18.27	105	842929	10.25	ppbv		96
60)	1,3-Dichlorobenzene	18.82	146	516238	10.48	ppbv		97
61)	1,4-Dichlorobenzene	18.97	146	477642	10.49	ppbv		97
62)	Benzyl chloride	19.18	91	669750	11.78	ppbv		96
63)	1,2-Dichlorobenzene	19.61	146	475755	10.65	ppbv		98
64)	1,2,4-Trichlorobenzene	22.77	180	76779	9.52	ppbv		99
65)	Hexachlorobutadiene	22.97	225	196622	10.37	ppbv		99
66)	Naphthalene	23.45	128	127037	9.93	ppbv		99

(#) = qualifier out of range (m) = manual integration
11031113.D 110311V1.M Wed Nov 09 14:05:00 2011 Page 2

Quantitation Report

Data File : C:\HPCHEM\1\DATA\110311\11031113.D Vial: 3
Acq On : 3 Nov 2011 8:25 pm Operator: RACHEL HILL
Sample : ICV VOA1 110311 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Nov 4 9:40 2011 Quant Results File: 110311V1.RES

Method : C:\HPCHEM\1\METHODS\110311V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Nov 04 09:39:32 2011
Response via : Initial Calibration



Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\103111V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Nov 01 13:22:33 2011
Response via : Initial Calibration

Calibration Files
2 =10311105.D 4 =10311106.D 5 =10311107.D
6 =10311108.D 7 =10311109.D 8 =10311110.D

		Compound	2	4	5	6	7	8	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------							
2)	T	Propylene	1.470	1.403	1.301	1.247	1.208	1.172	1.296	8.20
3)	T	Dichlorodifluoromet	3.684	3.577	3.348	3.202	3.170	3.158	3.369	6.18
4)	T	1,2-Dichloro-1,2,2,	2.083	2.405	2.263	2.201	2.248	2.281	2.252	4.30
5)	T	Chloromethane	1.548	1.517	1.396	1.317	1.245	1.162	1.336	11.83
6)	T	Vinyl chloride	1.421	1.688	1.486	1.279	1.149	1.065	1.309	17.81
7)	T	1,3-Butadiene	1.294	1.527	1.387	1.249	1.012	0.869	1.174	21.88
8)	T	Bromomethane	1.230	1.313	1.216	1.169	1.152	1.163	1.223	5.65
9)	T	Chloroethane	0.784	0.840	0.768	0.738	0.710	0.703	0.759	6.23
10)	T	Trichlorofluorometh	3.025	3.287	3.021	2.956	2.873	2.889	2.990	4.88
11)	T	Ethanol		0.414	0.368	0.363	0.316	0.318	0.354	10.31
12)	T	Freon113	2.232	2.810	2.496	2.482	2.311	2.231	2.368	10.75
13)	T	1,1-Dichloroethene	2.126	2.265	2.022	1.932	1.828	1.818	1.973	8.77
14)	T	Acetone	2.745	2.358	1.969	1.916	1.580	1.620	1.986	21.47
15)	T	Carbon disulfide	3.565	3.685	3.343	3.188	3.071	3.070	3.307	7.24
16)	T	2-Propanol	2.109	2.074	1.818	1.754	1.593	1.590	1.803	11.84
17)	T	Methylene chloride	1.941	1.763	1.538	1.477	1.330	1.323	1.533	15.49
18)	T	tert-Butyl Methyl E	3.001	3.229	2.679	2.665	2.152	2.359	2.666	13.66
19)	T	trans-1,2-Dichloroe	1.994	2.213	1.925	1.879	1.705	1.742	1.886	9.51
20)	T	n-Hexane	2.161	2.431	2.136	2.077	1.888	1.885	2.060	10.16
21)	T	1,1-Dichloroethane	2.278	2.565	2.233	2.163	1.944	2.006	2.184	9.42
22)	T	Vinyl acetate	1.995	3.900	3.232	3.141	2.563	2.656	2.894	20.81
23)	T	cis-1,2-Dichloroeth	1.156	1.329	1.162	1.161	1.058	1.133	1.170	6.96
24)	T	2-Butanone	2.432	2.544	2.035	2.110	1.632	1.746	2.038	17.23
25)	T	Ethyl acetate	3.130	3.316	2.681	2.702	2.176	2.330	2.676	15.72
26)	T	Tetrahydrofuran	1.709	1.573	1.327	1.274	1.063	1.029	1.282	21.62
27)	T	Chloroform	2.440	2.914	2.569	2.485	2.191	2.087	2.376	13.78
28)	T	1,1,1-Trichloroetha	2.159	2.807	2.490	2.426	2.151	2.006	2.268	14.50
29)	T	Cyclohexane	2.179	2.582	2.255	2.171	1.894	1.724	2.050	17.11
30)	T	Carbon tetrachlorid	1.934	2.421	2.161	2.158	1.970	1.988	2.078	8.75
31)	T	Benzene	3.152	3.489	2.974	2.941	2.475	2.636	2.928	11.39
32)	T	1,2-Dichloroethane	1.491	1.753	1.484	1.446	1.216	1.200	1.393	15.29
33)	I	1,4-Difluorobenzene	----------ISTD----------							
34)	T	Heptane	0.876	1.116	0.986	0.965	0.866	0.792	0.892	16.85
35)	T	Trichloroethene	0.434	0.546	0.494	0.503	0.481	0.495	0.484	8.26
36)	T	1,2-Dichloropropane	0.380	0.477	0.405	0.415	0.363	0.384	0.399	9.82
37)	T	1,4-Dioxane	0.183	0.159	0.139	0.141	0.122	0.125	0.143	15.12
38)	T	Bromodichloromethan	0.633	0.849	0.746	0.761	0.699	0.725	0.724	10.01
39)	T	cis-1,3-Dichloropro	0.540	0.706	0.613	0.615	0.555	0.591	0.599	9.15
40)	T	4-Methyl-2-pentanon	0.277	0.303	0.266	0.265	0.239	0.251	0.265	7.91
41)	T	Toluene	1.023	1.202	1.035	1.052	0.939	0.996	1.027	8.67
42)	T	trans-1,3-Dichlorop	0.430	0.609	0.533	0.534	0.487	0.511	0.516	10.46
43)	T	1,1,2-Trichloroetha	0.337	0.403	0.351	0.357	0.330	0.354	0.354	6.59
44)	T	Tetrachloroethene	0.510	0.592	0.544	0.544	0.531	0.518	0.526	8.53
45)	T	2-Hexanone	0.665	0.655	0.563	0.552	0.497	0.493	0.557	13.77
46)	T	Chlorodibromomethan	0.469	0.630	0.556	0.577	0.542	0.573	0.552	9.18
47)	T	1,2-Dibromoethane	0.483	0.605	0.525	0.533	0.495	0.519	0.521	7.97
48)	I	Chlorobenzene-d5	----------ISTD----------							
49)	T	Chlorobenzene	1.022	1.146	1.002	1.020	0.945	1.004	1.016	6.30
50)	T	Ethylbenzene	1.772	1.921	1.681	1.720	1.564	1.640	1.681	8.68
51)	T	m,p-Xylene	1.434	1.620	1.433	1.454	1.304	1.202	1.340	16.51
52)	T	o-Xylene	1.359	1.383	1.227	1.259	1.163	1.208	1.239	8.73
53)	T	Styrene	0.877	0.973	0.859	0.871	0.808	0.841	0.858	7.23
54)	T	Bromoform	0.595	0.755	0.679	0.690	0.649	0.655	0.659	8.64
55)	S	4-Bromofluorobenzen	0.634	0.612	0.606	0.596	0.577	0.543	0.586	6.25
56)	T	1,1,2,2-Tetrachloro	1.158	1.041	0.937	0.911	0.826	0.800	0.918	15.61
57)	T	4-Ethyltoluene	2.039	1.641	1.433	1.415	1.289	1.294	1.477	19.16

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

Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\103111V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Nov 01 13:22:33 2011
Response via : Initial Calibration

Calibration Files
2 =10311105.D 4 =10311106.D 5 =10311107.D
6 =10311108.D 7 =10311109.D 8 =10311110.D

		Compound	2	4	5	6	7	8	Avg	%RSD
58)	T	1,3,5-Trimethylbenz	1.791	1.388	1.218	1.202	1.095	1.106	1.263	20.55
59)	T	1,2,4-Trimethylbenz	1.726	1.294	1.150	1.123	1.027	0.999	1.184	22.22
60)	T	1,3-Dichlorobenzene	0.980	0.771	0.705	0.688	0.613	0.563	0.700	20.54
61)	T	1,4-Dichlorobenzene	0.853	0.708	0.649	0.640	0.576	0.519	0.642	17.64
62)	T	Benzyl chloride	0.535	0.950	0.877	0.867	0.765	0.712	0.776	17.69
63)	T	1,2-Dichlorobenzene	0.952	0.681	0.630	0.611	0.536	0.473	0.625	25.98
64)	T	1,2,4-Trichlorobenz		0.097	0.092	0.098	0.084	0.073	0.090	10.46
65)	T	Hexachlorobutadiene		0.246	0.227	0.242	0.202	0.177	0.219	11.98
66)		Naphthalene		0.150	0.145	0.157	0.134	0.112	0.140	11.26

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

Compound List Report VOA 1

Method : C:\HPCHEM\1\METHODS\103111V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Nov 01 13:22:33 2011
Response via : Initial Calibration
Total Cpnds : 66

PK#			Compound Name	QIon	Exp RT	Rel RT	Cal	#Qual	A/H	ID
1	I		Bromochloromethane	130	10.59	1.000	A	2	A	B
2		T	Propylene	41	5.52	0.522	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	6.01	0.567	A	3	A	B
6		T	Vinyl chloride	62	6.21	0.587	A	2	A	B
7		T	1,3-Butadiene	39	6.26	0.591	A	2	A	B
8		T	Bromomethane	94	6.85	0.647	A	3	A	B
9		T	Chloroethane	64	7.01	0.662	A	3	A	B
10		T	Trichlorofluoromethane	101	7.34	0.693	A	3	A	B
11		T	Ethanol	45	7.56	0.714	A	2	A	B
12		T	Freon113	101	8.00	0.755	A	2	A	B
13		T	1,1-Dichloroethene	61	8.10	0.764	A	2	A	B
14		T	Acetone	43	8.19	0.773	A	2	A	B
15		T	Carbon disulfide	76	8.47	0.800	A	3	A	B
16		T	2-Propanol	45	8.23	0.777	A	2	A	B
17		T	Methylene chloride	49	8.76	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	10.25	0.967	A	2	A	B
25		T	Ethyl acetate	43	10.20	0.963	A	3	A	B
26		T	Tetrahydrofuran	42	10.59	1.000	A	2	A	B
27		T	Chloroform	83	10.60	1.001	A	2	A	B
28		T	1,1,1-Trichloroethane	97	10.85	1.025	A	3	A	B
29		T	Cyclohexane	56	10.86	1.026	A	2	A	B
30		T	Carbon tetrachloride	117	11.02	1.040	A	3	A	B
31		T	Benzene	78	11.30	1.067	A	3	A	B
32		T	1,2-Dichloroethane	62	11.38	1.074	A	3	A	B
33	I		1,4-Difluorobenzene	114	11.69	1.000	A	2	A	B
34		T	Heptane	43	11.35	0.971	A	3	A	B
35		T	Trichloroethene	130	12.03	1.029	A	3	A	B
36		T	1,2-Dichloropropane	63	12.39	1.060	A	3	A	B
37		T	1,4-Dioxane	88	12.46	1.066	A	2	A	B
38		T	Bromodichloromethane	83	12.67	1.084	A	2	A	B
39		T	cis-1,3-Dichloropropene	75	13.22	1.131	A	2	A	B
40		T	4-Methyl-2-pentanone	58	13.33	1.140	A	3	A	B
41		T	Toluene	91	13.63	1.166	A	2	A	B
42		T	trans-1,3-Dichloropropene	75	13.93	1.191	A	3	A	B
43		T	1,1,2-Trichloroethane	97	14.20	1.215	A	3	A	B
44		T	Tetrachloroethene	166	14.33	1.226	A	3	A	B
45		T	2-Hexanone	43	14.41	1.233	A	2	A	B
46		T	Chlorodibromomethane	129	14.75	1.262	A	2	A	B
47		T	1,2-Dibromoethane	107	14.99	1.282	A	2	A	B
48	I		Chlorobenzene-d5	117	15.54	1.000	A	2	A	B
49		T	Chlorobenzene	112	15.58	1.003	A	3	A	B
50		T	Ethylbenzene	91	15.62	1.005	A	2	A	B
51		T	m,p-Xylene	91	15.78	1.015	A	2	A	B
52		T	o-Xylene	91	16.37	1.054	A	2	A	B
53		T	Styrene	104	16.40	1.055	A	3	A	B
54		T	Bromoform	173	16.78	1.080	A	3	A	B
55		S	4-Bromofluorobenzene	95	17.19	1.106	A	2	A	B
56		T	1,1,2,2-Tetrachloroethane	83	17.36	1.117	A	2	A	B
57		T	4-Ethyltoluene	105	17.60	1.133	A	1	A	B
58		T	1,3,5-Trimethylbenzene	105	17.68	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	18.97	1.220	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	22.77	1.465	A	3	A	B
65		T	Hexachlorobutadiene	225	22.97	1.478	A	2	A	B
66			Naphthalene	128	23.46	1.510	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
--------------------------------------------------------------------------------
          103111V1.M     Mon Dec 05 15:32:19 2011
```

Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\110111V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Nov 02 07:37:51 2011
Response via : Initial Calibration

Calibration Files
2 =11011103.D 4 =11011104.D 5 =11011105.D
6 =11011106.D 7 =11011107.D 8 =11011108.D

		Compound	2	4	5	6	7	8	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------							
2)	T	Propylene	1.478	1.436	1.379	1.311	1.204	1.178	1.318	8.88
3)	T	Dichlorodifluoromet	3.646	3.630	3.504	3.362	3.155	3.141	3.397	6.09
4)	T	1,2-Dichloro-1,2,2,	2.007	2.355	2.314	2.271	2.181	2.228	2.225	5.08
5)	T	Chloromethane	1.632	1.631	1.561	1.431	1.306	1.193	1.416	14.20
6)	T	Vinyl chloride	1.606	1.932	1.723	1.464	1.194	1.066	1.431	24.21
7)	T	1,3-Butadiene	1.544	1.588	1.524	1.419	1.096	0.891	1.274	24.97
8)	T	Bromomethane	1.189	1.315	1.252	1.212	1.136	1.124	1.211	5.64
9)	T	Chloroethane	0.777	0.828	0.788	0.752	0.695	0.675	0.750	7.13
10)	T	Trichlorofluorometh	2.977	3.267	3.126	3.014	2.855	2.784	2.980	5.78
11)	T	Ethanol		0.387	0.365	0.355	0.336	0.316	0.350	7.09
12)	T	Freon113	2.194	2.629	2.493	2.438	2.366	2.218	2.337	8.85
13)	T	1,1-Dichloroethene	2.088	2.194	2.060	1.948	1.842	1.777	1.958	8.25
14)	T	Acetone	2.829	2.152	1.955	1.858	1.765	1.628	1.978	21.07
15)	T	Carbon disulfide	3.364	3.561	3.376	3.196	2.980	2.896	3.208	7.44
16)	T	2-Propanol	2.200	1.976	1.853	1.783	1.692	1.606	1.827	11.25
17)	T	Methylene chloride	1.918	1.716	1.603	1.502	1.408	1.339	1.548	13.77
18)	T	tert-Butyl Methyl E	3.048	2.811	2.541	2.435	2.428	2.321	2.575	10.08
19)	T	trans-1,2-Dichloroe	1.996	2.112	1.982	1.899	1.811	1.753	1.898	7.41
20)	T	n-Hexane	2.198	2.323	2.187	2.094	2.019	1.915	2.082	8.24
21)	T	1,1-Dichloroethane	2.244	2.367	2.215	2.106	2.049	1.985	2.142	6.43
22)	T	Vinyl acetate	1.933	3.505	3.167	3.017	2.898	2.670	2.841	17.34
23)	T	cis-1,2-Dichloroeth	1.128	1.255	1.177	1.139	1.113	1.129	1.160	4.21
24)	T	2-Butanone	2.513	2.230	2.058	1.917	1.870	1.773	2.010	14.06
25)	T	Ethyl acetate	3.054	2.872	2.774	2.513	2.426	2.364	2.611	11.17
26)	T	Tetrahydrofuran	1.769	1.437	1.323	1.260	1.186	1.073	1.292	19.87
27)	T	Chloroform	2.460	2.782	2.616	2.512	2.360	2.170	2.411	11.27
28)	T	1,1,1-Trichloroetha	2.090	2.685	2.551	2.464	2.312	2.083	2.291	13.00
29)	T	Cyclohexane	2.202	2.505	2.352	2.231	2.041	1.802	2.102	15.27
30)	T	Carbon tetrachlorid	1.901	2.301	2.183	2.121	2.085	2.022	2.076	6.86
31)	T	Benzene	3.180	3.124	2.868	2.737	2.683	2.605	2.847	7.85
32)	T	1,2-Dichloroethane	1.563	1.601	1.478	1.414	1.366	1.238	1.403	11.63
33)	I	1,4-Difluorobenzene	----------ISTD----------							
34)	T	Heptane	0.842	1.019	0.983	0.961	0.918	0.837	0.889	13.45
35)	T	Trichloroethene	0.385	0.478	0.469	0.479	0.492	0.501	0.463	8.66
36)	T	1,2-Dichloropropane	0.349	0.395	0.370	0.370	0.378	0.379	0.372	3.90
37)	T	1,4-Dioxane	0.164	0.132	0.129	0.123	0.127	0.122	0.132	11.25
38)	T	Bromodichloromethan	0.571	0.717	0.695	0.696	0.717	0.720	0.681	7.99
39)	T	cis-1,3-Dichloropro	0.479	0.590	0.564	0.563	0.576	0.586	0.562	6.78
40)	T	4-Methyl-2-pentanon	0.254	0.254	0.243	0.241	0.244	0.246	0.247	2.09
41)	T	Toluene	0.934	0.997	0.942	0.942	0.962	0.972	0.954	2.55
42)	T	trans-1,3-Dichlorop	0.383	0.506	0.485	0.485	0.498	0.508	0.482	9.26
43)	T	1,1,2-Trichloroetha	0.306	0.339	0.322	0.326	0.336	0.348	0.332	4.34
44)	T	Tetrachloroethene	0.454	0.523	0.514	0.515	0.534	0.524	0.501	7.35
45)	T	2-Hexanone	0.658	0.550	0.525	0.512	0.518	0.501	0.534	11.08
46)	T	Chlorodibromomethan	0.413	0.523	0.508	0.519	0.548	0.566	0.513	9.48
47)	T	1,2-Dibromoethane	0.434	0.496	0.481	0.483	0.503	0.520	0.487	5.52
48)	I	Chlorobenzene-d5	----------ISTD----------							
49)	T	Chlorobenzene	0.946	0.960	0.915	0.918	0.944	0.973	0.942	2.21
50)	T	Ethylbenzene	1.663	1.629	1.551	1.550	1.575	1.599	1.571	4.74
51)	T	m,p-Xylene	1.350	1.380	1.330	1.330	1.320	1.206	1.263	12.57
52)	T	o-Xylene	1.271	1.182	1.139	1.129	1.166	1.186	1.160	5.80
53)	T	Styrene	0.818	0.816	0.783	0.785	0.811	0.835	0.802	2.95
54)	T	Bromoform	0.540	0.615	0.607	0.610	0.646	0.660	0.609	6.47
55)	S	4-Bromofluorobenzen	0.629	0.604	0.601	0.597	0.597	0.577	0.596	3.42
56)	T	1,1,2,2-Tetrachloro	1.083	0.884	0.843	0.822	0.839	0.821	0.864	12.03
57)	T	4-Ethyltoluene	1.922	1.415	1.344	1.329	1.365	1.353	1.427	15.67

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

Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\110111V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Nov 02 07:37:51 2011
Response via : Initial Calibration

Calibration Files
2 =11011103.D 4 =11011104.D 5 =11011105.D
6 =11011106.D 7 =11011107.D 8 =11011108.D

		Compound	2	4	5	6	7	8	Avg	%RSD
58)	T	1,3,5-Trimethylbenz	1.733	1.198	1.145	1.130	1.177	1.162	1.230	18.32
59)	T	1,2,4-Trimethylbenz	1.667	1.107	1.047	1.035	1.078	1.056	1.144	20.29
60)	T	1,3-Dichlorobenzene	0.776	0.620	0.602	0.586	0.607	0.596	0.627	10.56
61)	T	1,4-Dichlorobenzene	0.773	0.561	0.545	0.535	0.555	0.553	0.585	14.33
62)	T	Benzyl chloride	0.450	0.746	0.739	0.715	0.755	0.731	0.697	15.75
63)	T	1,2-Dichlorobenzene	0.873	0.548	0.533	0.512	0.533	0.509	0.576	22.86
64)	T	1,2,4-Trichlorobenz		0.071	0.075	0.070	0.083	0.090	0.080	11.93
65)	T	Hexachlorobutadiene		0.188	0.196	0.181	0.206	0.213	0.199	6.54
66)		Naphthalene		0.107	0.119	0.110	0.128	0.138	0.124	11.35

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

Compound List Report VOA 1

Method : C:\HPCHEM\1\METHODS\110111V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Wed Nov 02 07:37:51 2011
Response via : Initial Calibration
Total Cpnds : 66

PK#			Compound Name	QIon	Exp RT	Rel RT	Cal	#Qual	A/H	ID
1	I		Bromochloromethane	130	10.59	1.000	A	2	A	B
2		T	Propylene	41	5.52	0.522	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	6.01	0.567	A	3	A	B
6		T	Vinyl chloride	62	6.21	0.587	A	2	A	B
7		T	1,3-Butadiene	39	6.26	0.591	A	2	A	B
8		T	Bromomethane	94	6.85	0.647	A	3	A	B
9		T	Chloroethane	64	7.01	0.662	A	3	A	B
10		T	Trichlorofluoromethane	101	7.34	0.693	A	3	A	B
11		T	Ethanol	45	7.56	0.714	A	2	A	B
12		T	Freon113	101	8.00	0.755	A	2	A	B
13		T	1,1-Dichloroethene	61	8.10	0.764	A	2	A	B
14		T	Acetone	43	8.19	0.773	A	2	A	B
15		T	Carbon disulfide	76	8.47	0.800	A	3	A	B
16		T	2-Propanol	45	8.23	0.777	A	2	A	B
17		T	Methylene chloride	49	8.76	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	10.25	0.967	A	2	A	B
25		T	Ethyl acetate	43	10.20	0.963	A	3	A	B
26		T	Tetrahydrofuran	42	10.59	1.000	A	2	A	B
27		T	Chloroform	83	10.60	1.001	A	2	A	B
28		T	1,1,1-Trichloroethane	97	10.85	1.025	A	3	A	B
29		T	Cyclohexane	56	10.86	1.026	A	2	A	B
30		T	Carbon tetrachloride	117	11.02	1.040	A	3	A	B
31		T	Benzene	78	11.30	1.067	A	3	A	B
32		T	1,2-Dichloroethane	62	11.38	1.074	A	3	A	B
33	I		1,4-Difluorobenzene	114	11.69	1.000	A	2	A	B
34		T	Heptane	43	11.35	0.971	A	3	A	B
35		T	Trichloroethene	130	12.03	1.029	A	3	A	B
36		T	1,2-Dichloropropane	63	12.39	1.060	A	3	A	B
37		T	1,4-Dioxane	88	12.46	1.066	A	2	A	B
38		T	Bromodichloromethane	83	12.67	1.084	A	2	A	B
39		T	cis-1,3-Dichloropropene	75	13.22	1.131	A	2	A	B
40		T	4-Methyl-2-pentanone	58	13.33	1.140	A	3	A	B
41		T	Toluene	91	13.63	1.166	A	2	A	B
42		T	trans-1,3-Dichloropropene	75	13.93	1.191	A	3	A	B
43		T	1,1,2-Trichloroethane	97	14.20	1.215	A	3	A	B
44		T	Tetrachloroethene	166	14.33	1.226	A	3	A	B
45		T	2-Hexanone	43	14.41	1.233	A	2	A	B
46		T	Chlorodibromomethane	129	14.75	1.262	A	2	A	B
47		T	1,2-Dibromoethane	107	14.99	1.282	A	2	A	B
48	I		Chlorobenzene-d5	117	15.54	1.000	A	2	A	B
49		T	Chlorobenzene	112	15.58	1.003	A	3	A	B
50		T	Ethylbenzene	91	15.62	1.005	A	2	A	B
51		T	m,p-Xylene	91	15.78	1.015	A	2	A	B
52		T	o-Xylene	91	16.37	1.054	A	2	A	B
53		T	Styrene	104	16.40	1.055	A	3	A	B
54		T	Bromoform	173	16.78	1.080	A	3	A	B
55		S	4-Bromofluorobenzene	95	17.19	1.106	A	2	A	B
56		T	1,1,2,2-Tetrachloroethane	83	17.36	1.117	A	2	A	B
57		T	4-Ethyltoluene	105	17.60	1.133	A	1	A	B
58		T	1,3,5-Trimethylbenzene	105	17.68	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	18.97	1.220	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	22.77	1.465	A	3	A	B
65		T	Hexachlorobutadiene	225	22.97	1.478	A	2	A	B
66			Naphthalene	128	23.46	1.510	A	2	A	B

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Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
  A/H = Area or Height
ID  R = R.T.  B = R.T. & Q  Q = Qvalue L = Largest  A = All
--------------------------------------------------------------------------------
          110111V1.M     Thu Dec 01 14:43:40 2011
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Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\110311V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Nov 04 09:39:32 2011
Response via : Initial Calibration

Calibration Files
2 =11031105.D 4 =11031106.D 5 =11031107.D
6 =11031108.D 7 =11031109.D 8 =11031110.D

		Compound	2	4	5	6	7	8	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------							
2)	T	Propylene	1.557	1.519	1.491	1.311	1.287	1.120	1.346	13.43
3)	T	Dichlorodifluoromet	3.426	3.685	3.702	3.266	3.258	2.900	3.327	9.04
4)	T	1,2-Dichloro-1,2,2,	1.983	2.449	2.481	2.201	2.262	2.084	2.223	8.44
5)	T	Chloromethane	1.679	1.788	1.748	1.499	1.441	1.203	1.499	17.28
6)	T	Vinyl chloride	1.674	2.047	1.900	1.587	1.390	1.142	1.542	24.06
7)	T	1,3-Butadiene	1.535	1.618	1.595	1.387	1.263	0.940	1.315	23.36
8)	T	Bromomethane	1.198	1.382	1.391	1.193	1.195	1.070	1.224	9.85
9)	T	Chloroethane	0.784	0.906	0.901	0.748	0.743	0.650	0.772	13.10
10)	T	Trichlorofluorometh	2.781	3.336	3.388	2.761	2.857	2.602	2.916	10.81
11)	T	Ethanol		0.481	0.467	0.333	0.363	0.300	0.375	21.40
12)	T	Freon113	2.180	2.891	2.929	2.217	2.356	2.134	2.378	16.13
13)	T	1,1-Dichloroethene	2.038	2.430	2.370	1.830	1.869	1.653	1.980	15.94
14)	T	Acetone	2.677	2.678	2.520	1.679	1.836	1.519	2.057	26.52
15)	T	Carbon disulfide	3.351	3.954	3.909	3.151	3.216	2.795	3.322	13.79
16)	T	2-Propanol	2.130	2.372	2.271	1.723	1.823	1.515	1.908	18.40
17)	T	Methylene chloride	1.916	1.953	1.898	1.419	1.424	1.252	1.588	20.20
18)	T	tert-Butyl Methyl E	3.025	3.558	3.359	2.166	2.410	2.136	2.699	22.33
19)	T	trans-1,2-Dichloroe	1.934	2.360	2.325	1.751	1.776	1.620	1.914	16.26
20)	T	n-Hexane	2.148	2.653	2.615	1.951	1.998	1.813	2.134	17.08
21)	T	1,1-Dichloroethane	2.181	2.818	2.733	2.030	2.077	1.882	2.236	17.11
22)	T	Vinyl acetate	2.409	4.423	4.141	2.691	2.884	2.497	3.075	27.44
23)	T	cis-1,2-Dichloroeth	1.104	1.420	1.416	1.076	1.096	1.034	1.178	14.08
24)	T	2-Butanone	2.521	2.969	2.583	1.746	1.924	1.713	2.159	24.22
25)	T	Ethyl acetate	3.134	3.733	3.447	2.335	2.612	2.184	2.810	22.32
26)	T	Tetrahydrofuran	1.666	1.826	1.712	1.189	1.272	1.052	1.384	24.89
27)	T	Chloroform	2.340	3.061	3.025	2.334	2.391	2.093	2.451	17.86
28)	T	1,1,1-Trichloroetha	2.017	2.907	2.939	2.256	2.344	2.036	2.329	18.99
29)	T	Cyclohexane	2.172	2.837	2.775	2.113	2.112	1.774	2.189	21.82
30)	T	Carbon tetrachlorid	1.808	2.510	2.495	1.918	2.008	1.886	2.065	14.80
31)	T	Benzene	3.121	3.921	3.730	2.577	2.720	2.446	3.008	19.99
32)	T	1,2-Dichloroethane	1.417	1.874	1.797	1.243	1.340	1.174	1.423	21.11
33)	I	1,4-Difluorobenzene	----------ISTD----------							
34)	T	Heptane	0.789	1.150	1.134	0.870	0.964	0.802	0.911	19.82
35)	T	Trichloroethene	0.363	0.533	0.543	0.427	0.488	0.456	0.462	13.98
36)	T	1,2-Dichloropropane	0.335	0.499	0.479	0.334	0.391	0.347	0.390	17.98
37)	T	1,4-Dioxane	0.145	0.167	0.165	0.120	0.141	0.119	0.139	15.29
38)	T	Bromodichloromethan	0.534	0.843	0.828	0.625	0.730	0.665	0.695	16.12
39)	T	cis-1,3-Dichloropro	0.446	0.701	0.680	0.496	0.579	0.523	0.565	16.70
40)	T	4-Methyl-2-pentanon	0.228	0.324	0.312	0.229	0.269	0.236	0.262	15.49
41)	T	Toluene	0.874	1.245	1.199	0.872	1.015	0.915	1.003	15.70
42)	T	trans-1,3-Dichlorop	0.365	0.594	0.576	0.428	0.496	0.448	0.482	16.86
43)	T	1,1,2-Trichloroetha	0.280	0.409	0.395	0.296	0.349	0.320	0.340	14.11
44)	T	Tetrachloroethene	0.414	0.583	0.587	0.469	0.546	0.495	0.504	13.76
45)	T	2-Hexanone	0.578	0.691	0.651	0.487	0.554	0.477	0.557	15.97
46)	T	Chlorodibromomethan	0.380	0.608	0.594	0.461	0.547	0.521	0.516	15.28
47)	T	1,2-Dibromoethane	0.395	0.570	0.556	0.423	0.490	0.453	0.479	13.57
48)	I	Chlorobenzene-d5	----------ISTD----------							
49)	T	Chlorobenzene	0.900	1.160	1.137	0.840	0.963	0.899	0.972	12.92
50)	T	Ethylbenzene	1.577	2.036	1.965	1.448	1.644	1.518	1.659	14.79
51)	T	m,p-Xylene	1.232	1.680	1.648	1.229	1.391	1.189	1.330	19.82
52)	T	o-Xylene	1.157	1.453	1.406	1.057	1.203	1.137	1.209	13.27
53)	T	Styrene	0.774	0.964	0.938	0.712	0.813	0.771	0.816	11.90
54)	T	Bromoform	0.507	0.696	0.695	0.538	0.610	0.587	0.598	12.42
55)	S	4-Bromofluorobenzen	0.622	0.552	0.544	0.557	0.551	0.542	0.557	5.32
56)	T	1,1,2,2-Tetrachloro	1.046	1.002	0.970	0.761	0.811	0.736	0.860	16.52
57)	T	4-Ethyltoluene	1.782	1.521	1.462	1.150	1.261	1.176	1.357	17.70

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

Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\110311V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Nov 04 09:39:32 2011
Response via : Initial Calibration

Calibration Files
2 =11031105.D 4 =11031106.D 5 =11031107.D
6 =11031108.D 7 =11031109.D 8 =11031110.D

		Compound	2	4	5	6	7	8	Avg	%RSD
58)	T	1,3,5-Trimethylbenz	1.543	1.257	1.220	0.954	1.048	0.994	1.140	18.82
59)	T	1,2,4-Trimethylbenz	1.534	1.140	1.103	0.888	0.934	0.884	1.051	22.80
60)	T	1,3-Dichlorobenzene	0.894	0.698	0.688	0.551	0.555	0.518	0.630	22.30
61)	T	1,4-Dichlorobenzene	0.784	0.654	0.638	0.515	0.519	0.493	0.582	19.56
62)	T	Benzyl chloride	0.522	0.922	0.917	0.709	0.728	0.672	0.727	20.37
63)	T	1,2-Dichlorobenzene	0.886	0.636	0.616	0.501	0.485	0.452	0.571	28.05
64)	T	1,2,4-Trichlorobenz		0.118	0.116	0.091	0.092	0.101	0.103	11.03
65)	T	Hexachlorobutadiene		0.290	0.276	0.218	0.217	0.231	0.242	13.24
66)		Naphthalene		0.187	0.184	0.146	0.147	0.161	0.163	11.08

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

Compound List Report VOA 1

Method : C:\HPCHEM\1\METHODS\110311V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Nov 04 09:39:32 2011
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	5.58	0.527	A	3	A	B
4		T	1,2-Dichloro-1,2,2,2-tetrafluo	135	5.84	0.551	A	2	A	B
5		T	Chloromethane	50	6.00	0.566	A	3	A	B
6		T	Vinyl chloride	62	6.20	0.586	A	2	A	B
7		T	1,3-Butadiene	39	6.26	0.592	A	2	A	B
8		T	Bromomethane	94	6.84	0.646	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	7.55	0.714	A	2	A	B
12		T	Freon113	101	7.99	0.755	A	2	A	B
13		T	1,1-Dichloroethene	61	8.09	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	9.59	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	10.20	0.963	A	3	A	B
26		T	Tetrahydrofuran	42	10.58	1.000	A	2	A	B
27		T	Chloroform	83	10.60	1.001	A	2	A	B
28		T	1,1,1-Trichloroethane	97	10.86	1.025	A	3	A	B
29		T	Cyclohexane	56	10.86	1.026	A	2	A	B
30		T	Carbon tetrachloride	117	11.02	1.041	A	3	A	B
31		T	Benzene	78	11.30	1.067	A	3	A	B
32		T	1,2-Dichloroethane	62	11.37	1.074	A	3	A	B
33	I		1,4-Difluorobenzene	114	11.69	1.000	A	2	A	B
34		T	Heptane	43	11.35	0.971	A	3	A	B
35		T	Trichloroethene	130	12.03	1.029	A	3	A	B
36		T	1,2-Dichloropropane	63	12.38	1.060	A	3	A	B
37		T	1,4-Dioxane	88	12.46	1.066	A	2	A	B
38		T	Bromodichloromethane	83	12.67	1.084	A	2	A	B
39		T	cis-1,3-Dichloropropene	75	13.22	1.132	A	2	A	B
40		T	4-Methyl-2-pentanone	58	13.33	1.141	A	3	A	B
41		T	Toluene	91	13.63	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	14.33	1.226	A	3	A	B
45		T	2-Hexanone	43	14.41	1.233	A	2	A	B
46		T	Chlorodibromomethane	129	14.75	1.262	A	2	A	B
47		T	1,2-Dibromoethane	107	14.99	1.282	A	2	A	B
48	I		Chlorobenzene-d5	117	15.54	1.000	A	2	A	B
49		T	Chlorobenzene	112	15.58	1.003	A	3	A	B
50		T	Ethylbenzene	91	15.63	1.005	A	2	A	B
51		T	m,p-Xylene	91	15.78	1.015	A	2	A	B
52		T	o-Xylene	91	16.37	1.054	A	2	A	B
53		T	Styrene	104	16.40	1.055	A	3	A	B
54		T	Bromoform	173	16.78	1.080	A	3	A	B
55		S	4-Bromofluorobenzene	95	17.19	1.106	A	2	A	B
56		T	1,1,2,2-Tetrachloroethane	83	17.36	1.117	A	2	A	B
57		T	4-Ethyltoluene	105	17.60	1.133	A	1	A	B
58		T	1,3,5-Trimethylbenzene	105	17.69	1.138	A	2	A	B
59		T	1,2,4-Trimethylbenzene	105	18.27	1.175	A	2	A	B
60		T	1,3-Dichlorobenzene	146	18.82	1.211	A	3	A	B
61		T	1,4-Dichlorobenzene	146	18.97	1.220	A	3	A	B
62		T	Benzyl chloride	91	19.18	1.234	A	2	A	B
63		T	1,2-Dichlorobenzene	146	19.61	1.262	A	3	A	B
64		T	1,2,4-Trichlorobenzene	180	22.77	1.465	A	3	A	B
65		T	Hexachlorobutadiene	225	22.96	1.478	A	2	A	B
66			Naphthalene	128	23.45	1.509	A	2	A	B

```
Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
  A/H = Area or Height
ID  R = R.T.  B = R.T. & Q  Q = Qvalue L = Largest  A = All
--------------------------------------------------------------------------------
          110311V1.M     Wed Nov 09 14:02:22 2011
```

RTI Laboratories

Run ID: VOA9_111025A **Run No.:** 43704

Analytical Run Date: 10/25/2011 **InstrumentID:** VOA9

Analyst: Rachel Hill **Column:**

Calibration ID: 43407 **Column ID:**

Column Length:

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB1 102511 VOA9	BFB_TUNE	TUNE	R43704	10/25/2011 1:01:00 PM	Charles O`Bryan		
CCV 102511 VOA9	MA_APH	CCV	R43704	10/25/2011 1:43:00 PM	Charles O`Bryan		
RLVS1 102511 VOA	MA_APH	RLVS	R43704	10/25/2011 3:37:00 PM	Charles O`Bryan		
BLK1 102511 VOA9	MA_APH	MBLK	R43704	10/25/2011 4:26:00 PM	Charles O`Bryan		
1110367-022B	MA_APH	SAMP	R43704	10/25/2011 5:14:00 PM	Charles O`Bryan		
1110367-023B	MA_APH	SAMP	R43704	10/25/2011 5:57:00 PM	Charles O`Bryan		
1110367-028B	MA_APH	SAMP	R43704	10/25/2011 6:45:00 PM	Charles O`Bryan		
1110367-029B	MA_APH	SAMP	R43704	10/25/2011 7:34:00 PM	Charles O`Bryan		
1110757-002A	MA_APH	SAMP	R43704	10/25/2011 8:16:00 PM	Charles O`Bryan		
1110757-003A	MA_APH	SAMP	R43704	10/25/2011 8:58:00 PM	Charles O`Bryan		
1110757-007A	MA_APH	SAMP	R43704	10/25/2011 11:47:00 PM	Charles O`Bryan		
1110757-007ADUP	MA_APH	DUP	R43704	10/26/2011 12:30:00 AM	Charles O`Bryan		
1110757-010A	MA_APH	SAMP	R43704	10/26/2011 2:36:00 AM	Charles O`Bryan		
1110757-005A	MA_APH	SAMP	R43704	10/26/2011 3:22:00 AM	Charles O`Bryan		
1110757-006A	MA_APH	SAMP	R43704	10/26/2011 7:18:00 AM	Charles O`Bryan		
1110757-011A	MA_APH	SAMP	R43704	10/26/2011 10:12:00 AM	Charles O`Bryan		
RLVS2 102511 VOA	MA_APH	RLVS	R43704	10/26/2011 10:54:00 AM	Charles O`Bryan		

RTI Laboratories

ANALYTICAL RUN Summary

06-Dec-11

RunNo 43704

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
855488	BFB1 102511 VOA9	BFB_TUNE	TUNE	.\1\DATA\102511	10/25/2011 1:01:	1	R43704		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	58		100	0	0	0	0	0	58%	50	120	0%	
175	M		7.6	7.6		100	0	0	0	0	0	8%	4	9	0%	
176	M		98.1	98.1		100	0	0	0	0	0	98%	93	101	0%	
177	M		6.5	6.5		100	0	0	0	0	0	7%	5	9	0%	
50	M		25.7	25.7		100	0	0	0	0	0	26%	8	40	0%	
75	M		51.2	51.2		100	0	0	0	0	0	51%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.7	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
855489	CCV 102511 VOA9	MA_APH	CCV	.\1\DATA\102511	10/25/2011 1:43:	1	R43704		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	292.1	292.1		234	0	0	0	0	0	125%	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	281.01	281.01		266	0	0	0	0	0	106%	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	474.03	474.03		378	0	0	0	0	0	125%	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	93.16	93.16		89.5	0	0	0	0	0	104%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\102511\10251102.D Vial: 2
Acq On : 25 Oct 2011 1:43 pm Operator: RACHEL HILL
Sample : CCV 102511 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 26 6:05 2011 Quant Results File: 101111V9.RES

Quant Method : C:\HPCHEM\1\METHODS\101111V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 11 16:43:25 2011
Response via : Initial Calibration
DataAcq Meth : 101111V9

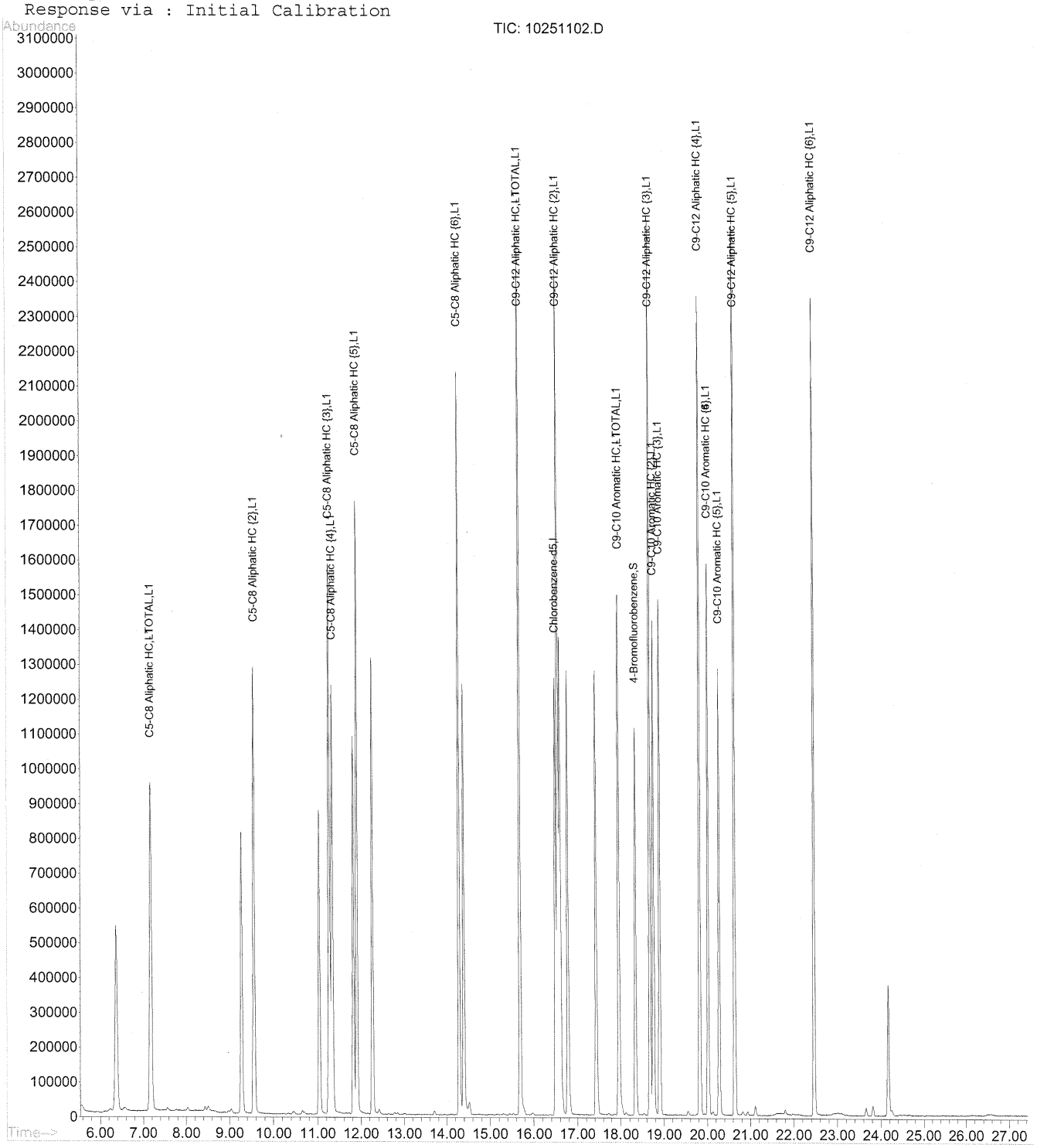
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	852608	12.50	ug/m3	-0.01
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.33	95	572489	93.16	ug/m3	-0.01
Spiked Amount 89.500	Range 70 - 130		Recovery = 104.09%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.17	TIC	3248184	40.16	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.56	TIC	3256250	44.72	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.27	TIC	4054878	50.64	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	3166015	43.28	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	3945396	52.28	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	4640776	60.85	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.17	TIC	22311499m	292.10	ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	5735238	68.32	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	5612592	69.40	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	5336150	77.15	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	5241532	74.83	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	5384268	89.47	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.46	TIC	4756362	94.57	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	32066142m	474.03	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	335362	54.64	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	350519	54.31	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	511696	55.35	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	120310	62.71	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	400355	55.65	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	291608	60.05	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	2009850m	281.01	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\102511\10251102.D Vial: 2
Acq On : 25 Oct 2011 1:43 pm Operator: RACHEL HILL
Sample : CCV 102511 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 26 6:05 2011 Quant Results File: 101111V9.RES

Method : C:\HPCHEM\1\METHODS\101111V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 11 16:43:25 2011
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA9_111026A **Run No.:** 43743

Analytical Run Date: 10/26/2011 **InstrumentID:** VOA9

Analyst: Rachel Hill **Column:**

Calibration ID: 43407 **Column ID:**

Column Length:

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB1 102611 VOA9	BFB_TUNE	TUNE	R43743	10/26/2011 11:39:00 AM	Charles O`Bryan		
CCV 102611 VOA9	MA_APH	CCV	R43743	10/26/2011 12:22:00 PM	Charles O`Bryan		
RLVS1 102611 VOA	MA_APH	RLVS	R43743	10/26/2011 1:44:00 PM	Charles O`Bryan		
BLK1 102611 VOA9	MA_APH	MBLK	R43743	10/26/2011 2:33:00 PM	Charles O`Bryan		
1110757-012A	MA_APH	SAMP	R43743	10/26/2011 3:16:00 PM	Charles O`Bryan		
1110757-012ADUP	MA_APH	SAMP	R43743	10/26/2011 3:58:00 PM	Celeste Hoitash		
1110757-014A	MA_APH	SAMP	R43743	10/26/2011 5:23:00 PM	Charles O`Bryan		
1110757-015A	MA_APH	SAMP	R43743	10/26/2011 6:05:00 PM	Charles O`Bryan		
1110757-016A	MA_APH	SAMP	R43743	10/26/2011 6:48:00 PM	Charles O`Bryan		
1110757-023A	MA_APH	SAMP	R43743	10/26/2011 11:45:00 PM	Charles O`Bryan		
1110757-013A	MA_APH	SAMP	R43743	10/27/2011 1:58:00 AM	Charles O`Bryan		
1110757-019A	MA_APH	SAMP	R43743	10/27/2011 2:42:00 AM	Charles O`Bryan		
1110757-018A	MA_APH	SAMP	R43743	10/27/2011 3:25:00 AM	Charles O`Bryan		
1110757-020A	MA_APH	SAMP	R43743	10/27/2011 4:09:00 AM	Charles O`Bryan		
1110757-022A	MA_APH	SAMP	R43743	10/27/2011 7:41:00 AM	Charles O`Bryan		
1110757-024A	MA_APH	SAMP	R43743	10/27/2011 8:30:00 AM	Charles O`Bryan		
1110757-025A	MA_APH	SAMP	R43743	10/27/2011 9:19:00 AM	Charles O`Bryan		
RLVS2 102611 VOA	MA_APH	RLVS	R43743	10/27/2011 10:01:00 AM	Charles O`Bryan		

RTI Laboratories

ANALYTICAL RUN Summary

06-Dec-11

RunNo 43743

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
856481	BFB1 102611 VOA9	BFB_TUNE	TUNE	.\1\DATA\102611	10/26/2011 11:3	1	R43743		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		57.2	57.2		100	0	0	0	0	0	57%	50	120	0%	
175	M		7.7	7.7		100	0	0	0	0	0	8%	4	9	0%	
176	M		97.5	97.5		100	0	0	0	0	0	98%	93	101	0%	
177	M		6.5	6.5		100	0	0	0	0	0	7%	5	9	0%	
50	M		27.4	27.4		100	0	0	0	0	0	27%	8	40	0%	
75	M		51.3	51.3		100	0	0	0	0	0	51%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.8	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
856482	CCV 102611 VOA9	MA_APH	CCV	.\1\DATA\102611	10/26/2011 12:2	1	R43743		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	252.37	252.37		234	0	0	0	0	0	108%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	231.24	231.24		266	0	0	0	0	0	87%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	393.29	393.29		378	0	0	0	0	0	104%	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	92.49	92.49		89.5	0	0	0	0	0	103%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\102611\10261102.D Vial: 2
Acq On : 26 Oct 2011 12:22 pm Operator: RACHEL HILL
Sample : CCV 102611 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 27 12:54 2011 Quant Results File: 101111V9.RES

Quant Method : C:\HPCHEM\1\METHODS\101111V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 11 16:43:25 2011
Response via : Initial Calibration
DataAcq Meth : 101111V9

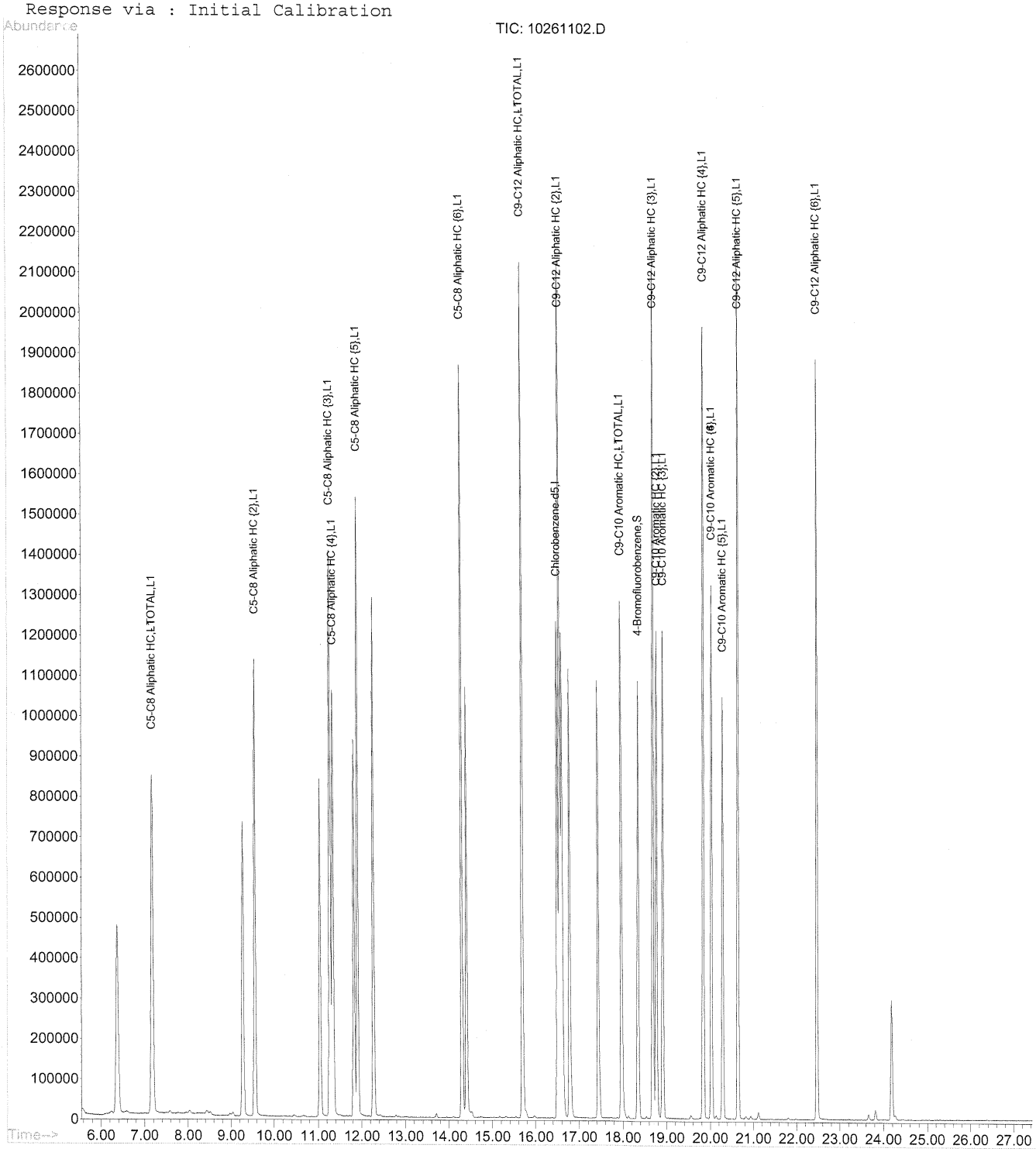
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	813666	12.50	ug/m3	-0.01
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.34	95	542376	92.49	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 103.34%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.17	TIC	2883415	35.65	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.56	TIC	2824968	38.79	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	3564795	44.52	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2680806	36.65	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	3381152	44.80	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3941565	51.68	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.17	TIC	19276701m	252.37	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	4855361	57.84	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	4555856	56.34	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	4478768	64.75	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	4361634	62.26	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	4515993	75.04	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.46	TIC	3836671	76.29	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	26604283m	393.29	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	275311	44.86	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	290899	45.07	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	422541	45.71	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	97253	50.70	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	328628	45.68	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	239261	49.27	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1653893m	231.24	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\102611\10261102.D Vial: 2
Acq On : 26 Oct 2011 12:22 pm Operator: RACHEL HILL
Sample : CCV 102611 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 27 12:54 2011 Quant Results File: 101111V9.RES

Method : C:\HPCHEM\1\METHODS\101111V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 11 16:43:25 2011
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA9_111031A **Run No.:** 43869

Analytical Run Date: 10/31/2011 **InstrumentID:** VOA9

Analyst: Rachel Hill **Column:**

Calibration ID: 43407 **Column ID:**

Column Length:

Run Comments: *RLVS was analyzed after CCV, though due to time change on computer it is showing up as being analyzed beforehand. This was not actually the case.

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB1 103111 VOA9	BFB_TUNE	TUNE	R43869	10/31/2011 10:07:00 AM	Charles O`Bryan		
RLVS1 103111 VOA	MA_APH	RLVS	R43869	10/31/2011 10:38:00 AM	Charles O`Bryan		
CCV 103111 VOA9	MA_APH	CCV	R43869	10/31/2011 10:49:00 AM	Charles O`Bryan		
BLK 103111 VOA9	MA_APH	MBLK	R43869	10/31/2011 11:26:00 AM	Charles O`Bryan		
1110757-021A	MA_APH	SAMP	R43869	10/31/2011 12:12:00 PM	Charles O`Bryan		
1110757-027A	MA_APH	SAMP	R43869	10/31/2011 12:55:00 PM	Charles O`Bryan		
1110757-028A	MA_APH	SAMP	R43869	10/31/2011 1:39:00 PM	Charles O`Bryan		
1110757-029A	MA_APH	SAMP	R43869	10/31/2011 2:22:00 PM	Charles O`Bryan		
1110757-030A	MA_APH	SAMP	R43869	10/31/2011 3:11:00 PM	Charles O`Bryan		
1110757-032A	MA_APH	SAMP	R43869	10/31/2011 4:35:00 PM	Charles O`Bryan		
1110757-033A	MA_APH	SAMP	R43869	10/31/2011 5:17:00 PM	Charles O`Bryan		
1110757-033ADUP	MA_APH	SAMP	R43869	10/31/2011 5:59:00 PM	Celeste Hoitash		
1110757-009A	MA_APH	SAMP	R43869	10/31/2011 8:47:00 PM	Charles O`Bryan		
1110757-017A	MA_APH	SAMP	R43869	10/31/2011 9:30:00 PM	Charles O`Bryan		
1110757-026A	MA_APH	SAMP	R43869	10/31/2011 10:12:00 PM	Charles O`Bryan		
1111023-003A	MA_APH	SAMP	R43869	10/31/2011 10:54:00 PM	Charles O`Bryan		
1111023-010A	MA_APH	SAMP	R43869	11/1/2011 6:35:00 AM	Charles O`Bryan		
1111023-011A	MA_APH	SAMP	R43869	11/1/2011 7:23:00 AM	Charles O`Bryan		
1111023-016A	MA_APH	SAMP	R43869	11/1/2011 8:12:00 AM	Charles O`Bryan		
RLVS2 103111 VOA	MA_APH	RLVS	R43869	11/1/2011 8:54:00 AM	Charles O`Bryan		

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
859366	CCV 103111 VOA9	MA_APH	CCV	\1\DATA\103111	10/31/2011 10:4	1	R43869		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	254.61	254.61		234	0	0	0	0	0	109%	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	243.19	243.19		266	0	0	0	0	0	91%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	413.55	413.55		378	0	0	0	0	0	109%	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	92.3	92.3		89.5	0	0	0	0	0	103%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
859342	BLK 103111 VOA9	MA_APH	MBLK	\1\DATA\103111	10/31/2011 11:2	1	R43869		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	166.52	166.52		0	0	0	0	0	0	0%	0	0	0%	
C5-C8 Aliphatic HC - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³	26.94	0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³	1.19	0		0	0	0	35.658	133	0	0%	0	0	0%	
C9-C12 Aliphatic	A	µg/m³	82.23	82.23		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³	0	0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³	-186.14	0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³	139.58	139.58		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³	268.37	268.37		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	93.12	93.12		89.5	0	0	0	0	0	104%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\103111\10311102.D Vial: 2
Acq On : 31 Oct 2011 10:49 am Operator: RACHEL HILL
Sample : CCV 103111 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 31 20:11 2011 Quant Results File: 101111V9.RES

Quant Method : C:\HPCHEM\1\METHODS\101111V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 11 16:43:25 2011
Response via : Initial Calibration
DataAcq Meth : 101111V9

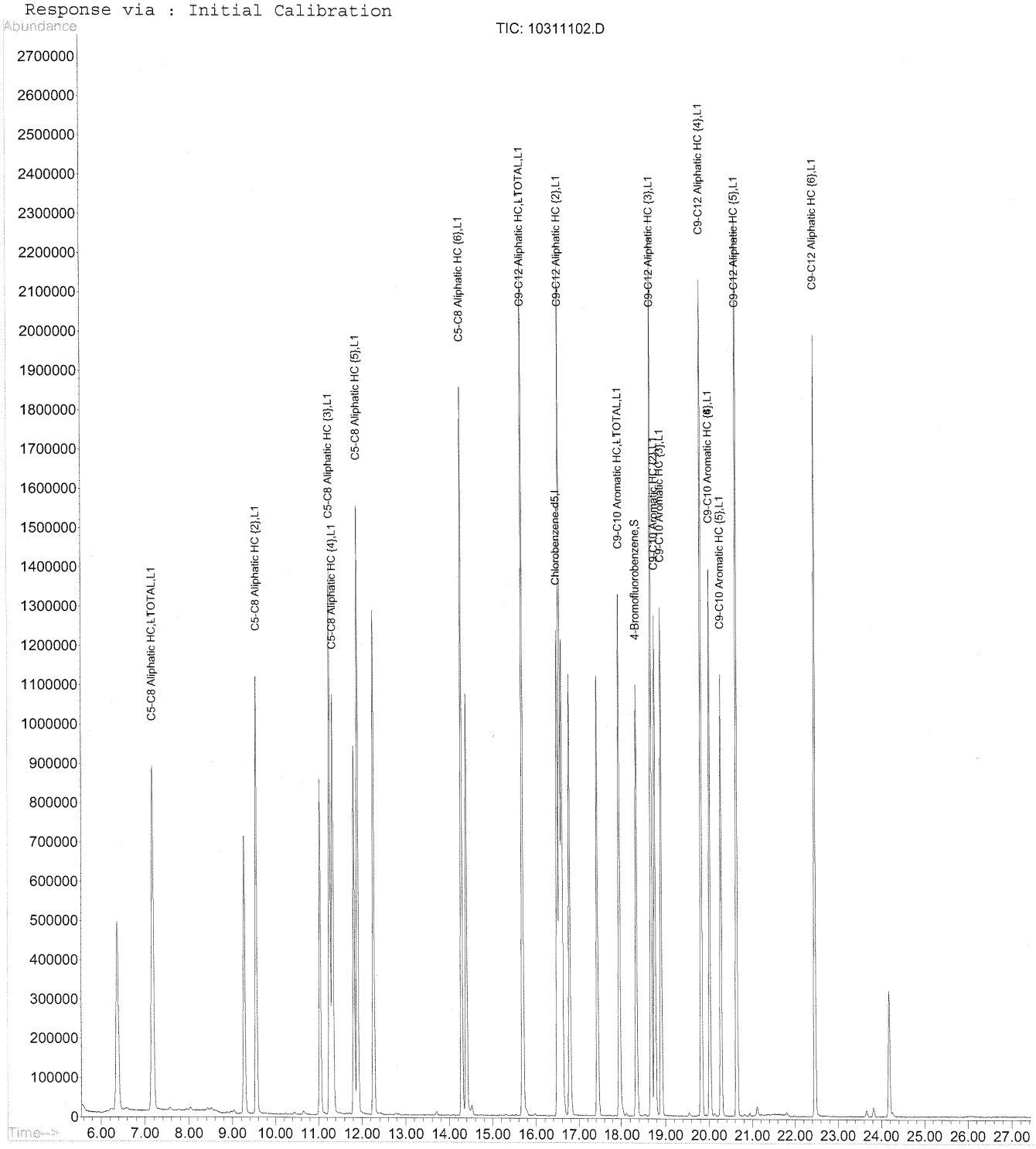
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	830392	12.50	ug/m3	-0.01
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.34	95	552402	92.30	ug/m3	-0.01
Spiked Amount 89.500	Range 70 - 130		Recovery = 103.13%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.17	TIC	3005924	37.16	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.56	TIC	2810429	38.59	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.27	TIC	3522454	43.99	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2736479	37.41	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	3389986	44.92	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3982143	52.21	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.17	TIC	19447415m	254.61	ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	4925267	58.67	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	4896965	60.55	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	4720051	68.24	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	4625289	66.03	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	4754528	79.00	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.47	TIC	4053176	80.59	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	27975276m	413.55	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	288659	47.03	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	302410	46.85	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	445320	48.17	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	104932	54.70	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	345806	48.07	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	252222	51.94	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1739349m	243.19	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\103111\10311102.D Vial: 2
Acq On : 31 Oct 2011 10:49 am Operator: RACHEL HILL
Sample : CCV 103111 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 31 20:11 2011 Quant Results File: 101111V9.RES

Method : C:\HPCHEM\1\METHODS\101111V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 11 16:43:25 2011
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA9_111103A **Run No.:** 43969

Analytical Run Date: 11/3/2011 **InstrumentID:** VOA9

Analyst: Rachel Hill **Column:**

Calibration ID: 43407 **Column ID:**

Column Length:

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB1 110311 VOA9	BFB_TUNE	TUNE	R43969	11/3/2011 9:17:00 AM	Charles O`Bryan		
CCV 110311 VOA9	MA_APH	CCV	R43969	11/3/2011 10:00:00 AM	Charles O`Bryan		
RLVS1 110311 VOA	MA_APH	RLVS	R43969	11/3/2011 10:46:00 AM	Charles O`Bryan		
BLK 110311 VOA9	MA_APH	MBLK	R43969	11/3/2011 11:35:00 AM	Charles O`Bryan		
1110757-035A	MA_APH	SAMP	R43969	11/3/2011 12:17:00 PM	Charles O`Bryan		
1110757-004A	MA_APH	SAMP	R43969	11/3/2011 1:00:00 PM	Charles O`Bryan		
1110757-008A	MA_APH	SAMP	R43969	11/3/2011 1:42:00 PM	Charles O`Bryan		
1110757-034A	MA_APH	SAMP	R43969	11/3/2011 3:11:00 PM	Charles O`Bryan		
1111023-002A	MA_APH	SAMP	R43969	11/3/2011 4:36:00 PM	Charles O`Bryan		
1111023-002ADUP	MA_APH	DUP	R43969	11/3/2011 5:18:00 PM	Charles O`Bryan		
1111023-005A	MA_APH	SAMP	R43969	11/3/2011 6:00:00 PM	Charles O`Bryan		
1111023-034A	MA_APH	SAMP	R43969	11/3/2011 9:30:00 PM	Charles O`Bryan		
1110757-031A	MA_APH	SAMP	R43969	11/4/2011 12:25:00 AM	Charles O`Bryan		
1111023-001A	MA_APH	SAMP	R43969	11/4/2011 1:14:00 AM	Charles O`Bryan		
1111023-030A	MA_APH	SAMP	R43969	11/4/2011 2:02:00 AM	Charles O`Bryan		
1111023-031A	MA_APH	SAMP	R43969	11/4/2011 2:51:00 AM	Charles O`Bryan		
1111023-032A	MA_APH	SAMP	R43969	11/4/2011 3:40:00 AM	Charles O`Bryan		
1111023-033A	MA_APH	SAMP	R43969	11/4/2011 4:29:00 AM	Charles O`Bryan		
1111023-012A	MA_APH	SAMP	R43969	11/4/2011 7:29:00 AM	Charles O`Bryan		
RLVS2 110311 VOA	MA_APH	RLVS	R43969	11/4/2011 8:11:00 AM	Charles O`Bryan		

RTI Laboratories

ANALYTICAL RUN Summary

06-Dec-11

RunNo 43969

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
861778	BFB1 110311 VOA9	BFB_TUNE	TUNE	.\1\DATA\110311	11/3/2011 9:17:0	1	R43969		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		57.8	57.8		100	0	0	0	0	0	58%	50	120	0%	
175	M		7.7	7.7		100	0	0	0	0	0	8%	4	9	0%	
176	M		96.2	96.2		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		26.4	26.4		100	0	0	0	0	0	26%	8	40	0%	
75	M		51.2	51.2		100	0	0	0	0	0	51%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.9	6.9		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
861779	CCV 110311 VOA9	MA_APH	CCV	.\1\DATA\110311	11/3/2011 10:00:	1	R43969		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	224.17	224.17		234	0	0	0	0	0	96%	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	200.72	200.72		266	0	0	0	0	0	75%	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	348.81	348.81		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	89.78	89.78		89.5	0	0	0	0	0	100%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\110311\11031102.D Vial: 2
Acq On : 3 Nov 2011 10:00 am Operator: RACHEL HILL
Sample : CCV 110311 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 4 8:28 2011 Quant Results File: 101111V9.RES

Quant Method : C:\HPCHEM\1\METHODS\101111V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 11 16:43:25 2011
Response via : Initial Calibration
DataAcq Meth : 101111V9

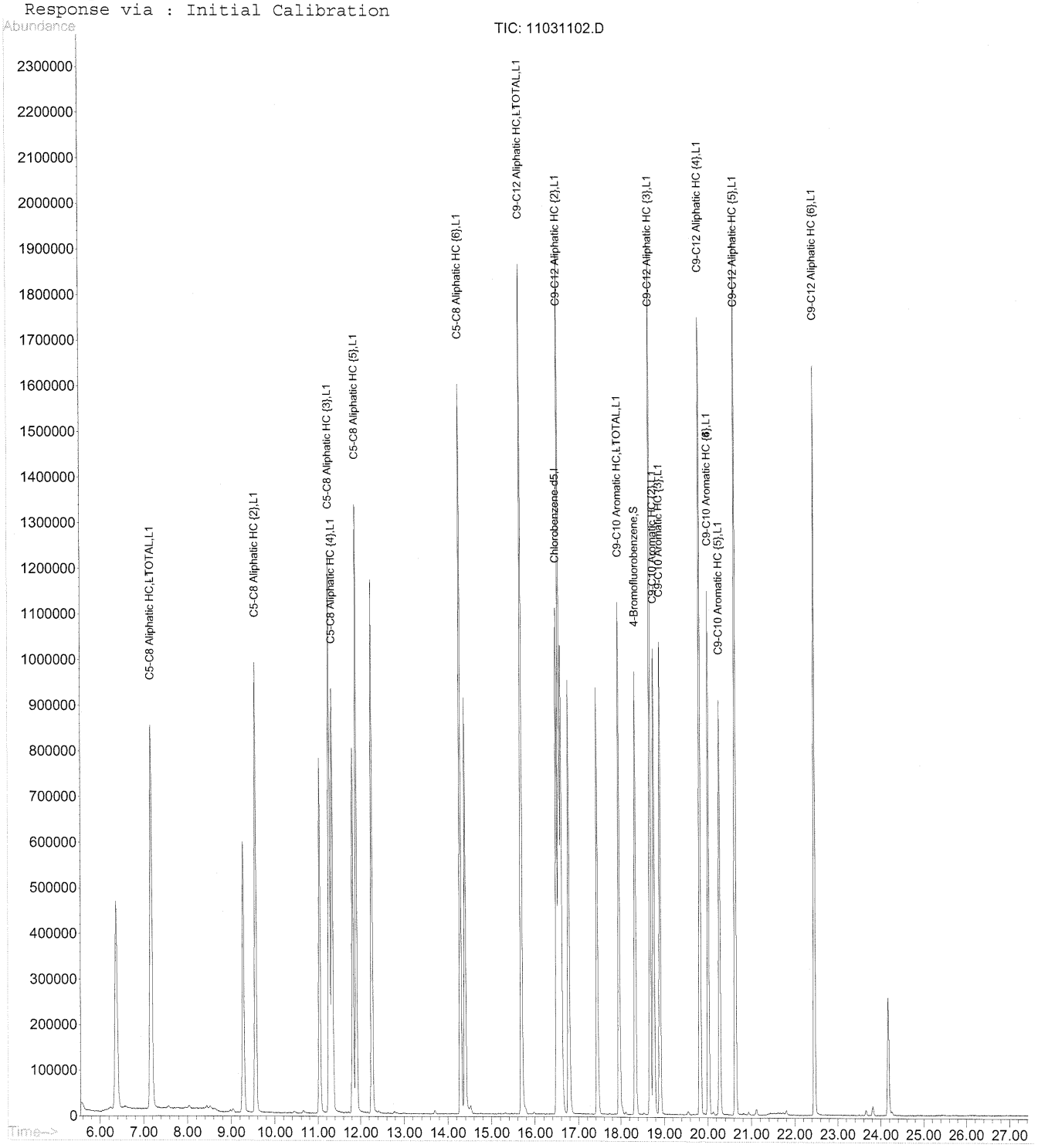
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.50	117	741688	12.50	ug/m3	-0.01
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.34	95	479905	89.78	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 100.31%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.17	TIC	2882636	35.64	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.56	TIC	2449732	33.64	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.27	TIC	3091183	38.61	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2346532	32.08	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2943153	39.00	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3409657	44.70	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.17	TIC	17122893m	224.17	ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	4276536	50.94	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	4198388	51.92	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3943271	57.01	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.82	TIC	3860529	55.11	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	3996748	66.41	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.46	TIC	3320483	66.02	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	23595955m	348.81	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	238121	38.80	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	249912	38.72	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	369071	39.92	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	85333	44.48	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	287197	39.92	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	205997	42.42	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1435631m	200.72	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\110311\11031102.D Vial: 2
Acq On : 3 Nov 2011 10:00 am Operator: RACHEL HILL
Sample : CCV 110311 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 4 8:28 2011 Quant Results File: 101111V9.RES

Method : C:\HPCHEM\1\METHODS\101111V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 11 16:43:25 2011
Response via : Initial Calibration



Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\101111V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 11 16:43:25 2011
Response via : Initial Calibration

Calibration Files
1 =10111103.D 2 =10111104.D 3 =10111105.D
4 =10111106.D 5 =10111107.D 6 =10111108.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)	L1	C5-C8 Aliphatic HC	9.890	8.523	8.255	8.056	7.739	7.306	8.088	E4	12.08
2)	L1	C5-C8 Aliphatic HC	9.106	7.873	7.399	7.239	6.879	6.476	7.282	E4	13.89
3)	L1	C5-C8 Aliphatic HC	9.980	8.743	8.224	7.857	7.654	7.172	8.007	E4	14.28
4)	L1	C5-C8 Aliphatic HC	8.816	7.700	7.378	7.418	6.924	6.592	7.315	E4	11.13
5)	L1	C5-C8 Aliphatic HC	9.283	8.120	7.709	7.646	7.258	6.700	7.546	E4	13.51
6)	L1	C5-C8 Aliphatic HC	9.395	8.276	8.020	7.710	7.314	6.720	7.627	E4	14.59
7)	L1	C5-C8 Aliphatic HC	9.409	8.212	7.830	7.659	7.297	6.808	7.638	E4	13.34
8)	L1	C9-C12 Aliphatic HC	1.049	0.916	0.886	0.855	0.801	0.735	0.839	E5	15.87
9)	L1	C9-C12 Aliphatic HC	9.874	8.947	8.514	8.172	7.613	7.184	8.087	E4	14.58
10)	L1	C9-C12 Aliphatic HC	8.599	7.639	7.437	6.998	6.546	6.048	6.917	E4	16.32
11)	L1	C9-C12 Aliphatic HC	8.742	7.741	7.468	7.138	6.609	6.098	7.005	E4	16.37
12)	L1	C9-C12 Aliphatic HC	7.428	6.630	6.495	6.127	5.726	5.262	6.018	E4	16.18
13)	L1	C9-C12 Aliphatic HC	5.988	5.459	5.425	5.139	4.757	4.533	5.029	E4	13.73
14)	L1	C9-C12 Aliphatic HC	8.333	7.436	7.224	6.876	6.406	5.953	6.765	E4	15.52
15)	L1	C9-C10 Aromatic HC	7.342	6.577	6.323	6.148	5.885	5.623	6.137	E3	11.83
16)	L1	C9-C10 Aromatic HC	7.710	6.919	6.622	6.419	6.171	5.935	6.454	E3	11.44
17)	L1	C9-C10 Aromatic HC	1.115	0.990	0.948	0.925	0.887	0.850	0.924	E4	12.20
18)	L1	C9-C10 Aromatic HC	2.297	2.079	2.008	1.928	1.825	1.753	1.918	E3	12.74
19)	L1	C9-C10 Aromatic HC	8.631	7.775	7.398	7.121	6.815	6.601	7.194	E3	11.82
20)	L1	C9-C10 Aromatic HC	5.825	5.221	5.063	4.866	4.639	4.440	4.856	E3	12.38
21)	L1	C9-C10 Aromatic HC	8.598	7.701	7.366	7.124	6.810	6.569	7.152	E3	12.06
22)		C5-C8 Aliphatic	9.409	8.212	7.830	7.659	7.297	6.808	7.638	E4	13.34
23)	L1	non C5-C8	7.955	6.956	6.894	6.603	6.360	6.045	6.643	E4	11.04
24)	L1	non C5-C8 {2}	7.000	6.146	5.794	5.513	5.295	4.830	5.585	E4	14.90
25)	L1	non C5-C8 {3}	3.412	3.296	3.297	3.303	3.249	3.234	3.286	E4	2.01
26)	L1	non C5-C8 {4}	8.559	7.448	7.065	6.877	6.604	6.242	6.950	E4	12.70
27)	L1	non C5-C8 {5}	5.179	4.983	5.007	5.023	4.891	4.696	4.909	E4	4.18
28)	L1	non C5-C8 {6}	8.059	6.933	6.548	6.387	6.031	5.591	6.394	E4	14.65
29)	L1	non C5-C8 - TOTAL	5.500	5.498	5.454	5.459	5.378	5.221	5.364	E4	3.24
30)		C9-C12 Aliphatic	8.333	7.436	7.224	6.876	6.406	5.953	6.765	E4	15.52
31)	L1	non C9-C12	5.078	4.786	4.716	4.896	4.810	4.493	4.725	E4	5.49
32)	L1	non C9-C12 {2}	7.165	6.398	6.232	5.887	5.691	5.059	5.834	E4	15.53
33)	L1	non C9-C12 {3}	7.390	6.569	6.269	6.054	5.829	5.531	6.100	E4	12.34
34)	L1	non C9-C12 {4}	7.301	6.528	6.224	5.984	5.723	5.452	6.032	E4	12.43
35)	L1	non C9-C12 {5}	2.980	2.959	2.929	2.919	2.900	2.835	2.909	E4	1.88
36)	L1	non C9-C12 - TOTAL	4.363	4.230	4.131	4.074	3.981	3.757	3.997	E4	7.75
37)	L1	C9-C10 Aromatic	8.598	7.701	7.366	7.124	6.810	6.569	7.152	E3	12.06
38)	L1	C9-C10 Aromatic {2}	8.598	7.701	7.366	7.124	6.810	6.569	7.152	E3	12.06
39)	L1	C9-C10 Aromatic - T	8.598	7.701	7.366	7.124	6.810	6.569	7.152	E3	12.06
40)	I	Chlorobenzene-d5	----------ISTD----------								
41)	S	4-Bromofluorobenzen	0.088	0.090	0.089	0.089	0.090	0.092	0.090		1.92

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

Compound List Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\101111V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 11 16:43:25 2011
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

101111V9.M Fri Nov 11 13:44:14 2011

RTI Laboratories

Run ID: GC-TCD 1_111103A **Run No.:** 44166

Analytical Run Date: 11/3/2011 **InstrumentID:** GC-TCD 1

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

Calibration ID: 43865 **Column ID:** 100/120mesh x 1mm ID

Column Length: 2m

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
mblk	ASTM-D2504	MBLK	R44166	11/3/2011 11:10:00 AM	Charles O`Bryan		
ccv std 1-2 b	ASTM-D2504	CCV	R44166	11/3/2011 1:28:00 PM	Charles O`Bryan		
lcs	ASTM-D2504	LCS	R44166	11/3/2011 1:49:00 PM	Charles O`Bryan		
crql std 2% a	ASTM-D2504	CRQL	R44166	11/3/2011 2:09:00 PM	Charles O`Bryan		
1110757-003b	ASTM-D2504	SAMP	R44166	11/3/2011 2:28:00 PM	Charles O`Bryan		
1110757-004b	ASTM-D2504	SAMP	R44166	11/3/2011 3:02:00 PM	Charles O`Bryan		
1110757-024b	ASTM-D2504	SAMP	R44166	11/3/2011 3:44:00 PM	Charles O`Bryan		
1110757-025b	ASTM-D2504	SAMP	R44166	11/3/2011 4:11:00 PM	Charles O`Bryan		
1110757-026b	ASTM-D2504	SAMP	R44166	11/3/2011 4:36:00 PM	Charles O`Bryan		
1110757-027b	ASTM-D2504	SAMP	R44166	11/3/2011 5:11:00 PM	Charles O`Bryan		
1110757-027bdup	ASTM-D2504	DUP	R44166	11/3/2011 5:40:00 PM	Charles O`Bryan		
ccv std 1-2 b	ASTM-D2504	CCV	R44166	11/3/2011 8:14:00 PM	Charles O`Bryan		
crql std 2% b	ASTM-D2504	CRQL	R44166	11/3/2011 8:51:00 PM	Charles O`Bryan		

RTI Laboratories

ANALYTICAL RUN Summary

06-Dec-11

RunNo 44166

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
866519	mblk	ASTM-D2504	MBLK	\TA\110311\1103	11/3/2011 11:10:	1	R44166		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
866520	ccv std 1-2 b	ASTM-D2504	CCV	\TA\110311\1103	11/3/2011 1:28:0	1	R44166		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.611	2.611		2.5	0	0	0.025	0.1	0	104%	85	115	0%	
Carbon Monoxide	A	%	2.579	2.579		2.5	0	0	0.025	0.1	0	103%	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	%	2.864	2.864		2.5	0	0	0.025	0.1	0	115%	85	115	0%	
Oxygen	A	%	2.589	2.589		2.5	0	0	0.025	0.1	0	104%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
866521	lcs	ASTM-D2504	LCS	\TA\110311\1103	11/3/2011 1:49:0	1	R44166		0	866520	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.719	2.719		2.5	0	2.611	0.025	0.1	0	109%	70	130	4%	
Carbon Monoxide	A	%	2.524	2.524		2.5	0	2.579	0.025	0.1	0	101%	70	130	2%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Methane	A	%	2.07	2.07		2	0	2.086	0.025	0.5	0	104%	70	130	1%	
Nitrogen	A	%	2.868	2.868		2.5	0	2.864	0.025	0.1	0	115%	70	130	0%	
Oxygen	A	%	2.603	2.603		2.5	0	2.589	0.025	0.1	0	104%	70	130	1%	

1

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
866530	ccv std 1-2 b	ASTM-D2504	CCV	\TA\110311\1103	11/3/2011 8:14:0	1	R44166		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.549	2.549		2.5	0	0	0.025	0.1	0	102%	85	115	0%	
Carbon Monoxide	A	%	2.336	2.336		2.5	0	0	0.025	0.1	0	93%	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	%	1.964	1.964		2	0	0	0.025	0.5	0	98%	85	115	0%	
Nitrogen	A	%	2.859	2.859		2.5	0	0	0.025	0.1	0	114%	85	115	0%	
Oxygen	A	%	2.46	2.46		2.5	0	0	0.025	0.1	0	98%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
866531	crql std 2% b	ASTM-D2504	CRQL	\TA\110311\1103	11/3/2011 8:51:0	1	R44166		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.347	0.347		0.3	0	0	0.025	0.1	0	116%	80	120	0%	
Carbon Monoxide	A	%	0.151	0.151		0.14	0	0	0.025	0.1	0	108%	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	%	0.103	0.103		0.09	0	0	0.025	0.5	0	114%	80	120	0%	
Nitrogen	A	%	1.356	1.356		1.39	0	0	0.025	0.1	0	98%	80	120	0%	
Oxygen	A	%	0.071	0.071		0.08	0	0	0.025	0.1	0	89%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\110311\11031102.D Vial: 1
Acq On : 3 Nov 2011 1:28 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title : Method d2504 air analysis
Last Update : Thu May 12 16:13:25 2011
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	2.589	-3.6	0	0.04
2	Nitrogen	2.500	2.864	-14.6	0	0.02
3	Carbon Monoxide	2.500	2.579	-3.2	0	-0.01
4	Methane	2.000	2.086	-4.3	0	-0.02
5	Carbon dioxide	2.500	2.611	-4.4	0	-0.04

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\110311\11031102.D Vial: 1
Acq On : 3 Nov 2011 1:28 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title : Method d2504 air analysis
Last Update : Thu May 12 16:13:25 2011
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 030511.M Thu Nov 10 15:52:18 2011 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\110311\11031102.D Vial: 1
Acq On : 3 Nov 2011 1:28 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : events.e
Quant Time: Nov 3 18:17 2011 Quant Results File: 030511.RES

Quant Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 28 17:37:02 2011
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

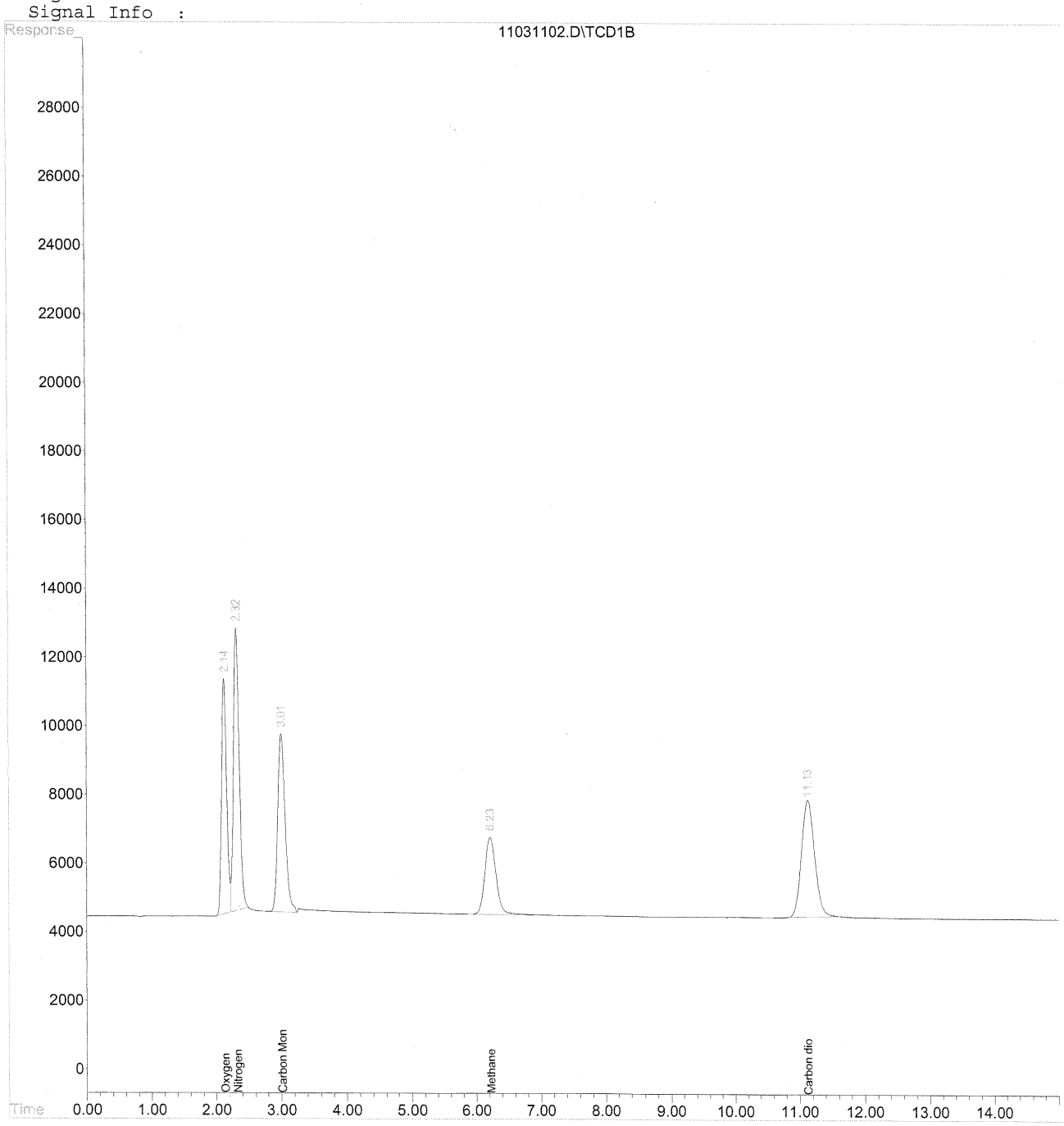
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	371218	2.589 %
2)	Nitrogen	2.32	493343	2.864 %
3)	Carbon Monoxide	3.01	406231	2.579 %
4)	Methane	6.23	269687	2.086 %
5)	Carbon dioxide	11.13	473807	2.611 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\110311\11031102.D Vial: 1
Acq On : 3 Nov 2011 1:28 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Nov 3 18:17 2011 Quant Results File: 030511.RES

Quant Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 28 17:37:02 2011
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\110311\11031112.D Vial: 1
Acq On : 3 Nov 2011 8:14 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title : Method d2504 air analysis
Last Update : Thu May 12 16:13:25 2011
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	2.460	1.6	0	0.04
2	Nitrogen	2.500	2.859	-14.4	0	0.02
3	Carbon Monoxide	2.500	2.336	6.6	0	-0.01
4	Methane	2.000	1.964	1.8	0	-0.02
5	Carbon dioxide	2.500	2.549	-2.0	0	-0.04

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\110311\11031112.D Vial: 1
Acq On : 3 Nov 2011 8:14 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title : Method d2504 air analysis
Last Update : Thu May 12 16:13:25 2011
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 030511.M Thu Nov 10 15:53:52 2011 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\110311\11031112.D Vial: 1
Acq On : 3 Nov 2011 8:14 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : events.e
Quant Time: Nov 3 23:27 2011 Quant Results File: 030511.RES

Quant Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 28 17:37:02 2011
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	352509	2.460 %
2)	Nitrogen	2.32	492505	2.859 %
3)	Carbon Monoxide	3.01	367957	2.336 %
4)	Methane	6.23	252646	1.964 %
5)	Carbon dioxide	11.13	462195	2.549 %

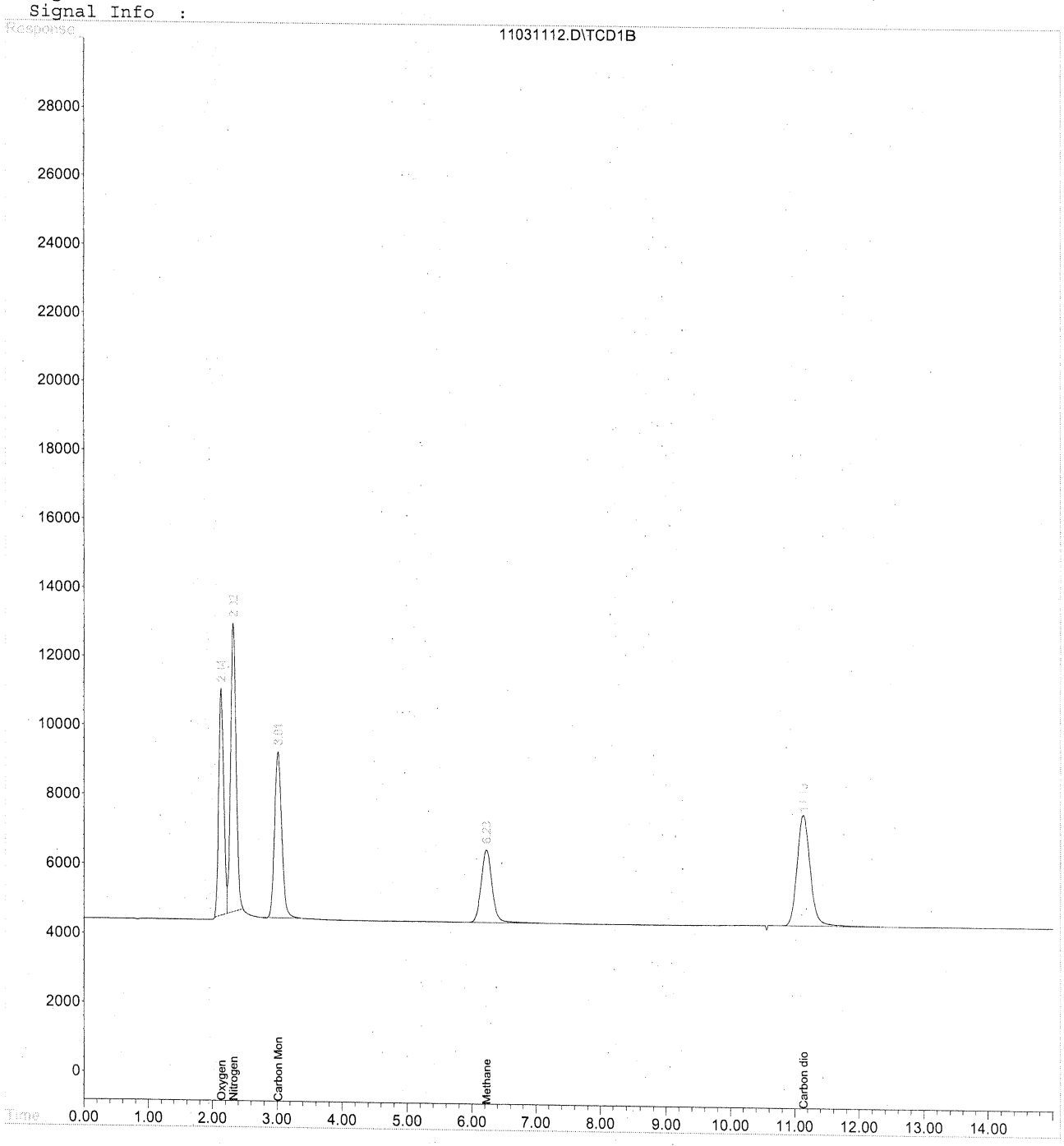
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\110311\11031112.D Vial: 1
Acq On : 3 Nov 2011 8:14 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Nov 3 23:27 2011 Quant Results File: 030511.RES

Quant Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 28 17:37:02 2011
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



RTI Laboratories

Run ID: GC-TCD 1_111108A **Run No.:** 44167

Analytical Run Date: 11/8/2011 **InstrumentID:** GC-TCD 1

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

Calibration ID: 43865 **Column ID:** 100/120mesh x 1mm ID

Column Length: 2m

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
mblk	ASTM-D2504	MBLK	R44167	11/8/2011 12:00:00 PM	Charles O`Bryan		
ccv std 1-2 a	ASTM-D2504	CCV	R44167	11/8/2011 1:10:00 PM	Charles O`Bryan		
lcs	ASTM-D2504	LCS	R44167	11/8/2011 1:33:00 PM	Charles O`Bryan		
crql std 2% a	ASTM-D2504	CRQL	R44167	11/8/2011 2:05:00 PM	Charles O`Bryan		
1110757-005b	ASTM-D2504	SAMP	R44167	11/8/2011 2:35:00 PM	Charles O`Bryan		
1110757-006b	ASTM-D2504	SAMP	R44167	11/8/2011 2:56:00 PM	Charles O`Bryan		
1110757-007b	ASTM-D2504	SAMP	R44167	11/8/2011 3:18:00 PM	Charles O`Bryan		
1110757-008b	ASTM-D2504	SAMP	R44167	11/8/2011 3:44:00 PM	Charles O`Bryan		
1110757-009b	ASTM-D2504	SAMP	R44167	11/8/2011 4:18:00 PM	Charles O`Bryan		
1110757-010b	ASTM-D2504	SAMP	R44167	11/8/2011 4:49:00 PM	Charles O`Bryan		
1110757-018b	ASTM-D2504	SAMP	R44167	11/8/2011 5:26:00 PM	Charles O`Bryan		
1110757-019b	ASTM-D2504	SAMP	R44167	11/8/2011 5:55:00 PM	Charles O`Bryan		
1110757-020b	ASTM-D2504	SAMP	R44167	11/8/2011 6:36:00 PM	Charles O`Bryan		
1110757-021b	ASTM-D2504	SAMP	R44167	11/8/2011 7:19:00 PM	Charles O`Bryan		
1110757-021bdup	ASTM-D2504	DUP	R44167	11/8/2011 7:53:00 PM	Charles O`Bryan		
ccv std 1-2 b	ASTM-D2504	CCV	R44167	11/8/2011 8:24:00 PM	Charles O`Bryan		
crql std 2% b	ASTM-D2504	CRQL	R44167	11/8/2011 8:43:00 PM	Charles O`Bryan		

RTI Laboratories

ANALYTICAL RUN Summary

06-Dec-11

RunNo 44167

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
866532	mblk	ASTM-D2504	MBLK	\TA\110811\1108	11/8/2011 12:00:	1	R44167		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
866533	ccv std 1-2 a	ASTM-D2504	CCV	\TA\110811\1108	11/8/2011 1:10:0	1	R44167		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.568	2.568		2.5	0	0	0.025	0.1	0	103%	85	115	0%	
Carbon Monoxide	A	%	2.498	2.498		2.5	0	0	0.025	0.1	0	100%	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	%	2.01	2.01		2	0	0	0.025	0.5	0	101%	85	115	0%	
Nitrogen	A	%	2.847	2.847		2.5	0	0	0.025	0.1	0	114%	85	115	0%	
Oxygen	A	%	2.547	2.547		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
866534	lcs	ASTM-D2504	LCS	\TA\110811\1108	11/8/2011 1:33:0	1	R44167		0	866533	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.41	2.41		2.5	0	2.568	0.025	0.1	0	96%	70	130	6%	
Carbon Monoxide	A	%	2.24	2.24		2.5	0	2.498	0.025	0.1	0	90%	70	130	11%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Methane	A	%	1.992	1.992		2	0	2.01	0.025	0.5	0	100%	70	130	1%	
Nitrogen	A	%	2.658	2.658		2.5	0	2.847	0.025	0.1	0	106%	70	130	7%	
Oxygen	A	%	2.348	2.348		2.5	0	2.547	0.025	0.1	0	94%	70	130	8%	

1

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
866545	1110757-021b (Container-1 of 1)	ASTM-D2504	SAMP	\TA\110811\1108	11/8/2011 7:19:0	1	R44167		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	%	20.742	20.742		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
866546	1110757-021bdup	ASTM-D2504	DUP	\TA\110811\1108	11/8/2011 7:53:0	1	R44167		0	866545	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.273	0.273		0	0	0.274	0.025	0.1	0	0%	0	0	0%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	78.614	78.614		0	0	78.468	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	20.777	20.777		0	0	20.742	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
866547	ccv std 1-2 b	ASTM-D2504	CCV	\TA\110811\1108	11/8/2011 8:24:0	1	R44167		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.36	2.36		2.5	0	0	0.025	0.1	0	94%	85	115	0%	
Carbon Monoxide	A	%	2.297	2.297		2.5	0	0	0.025	0.1	0	92%	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	%	1.903	1.903		2	0	0	0.025	0.5	0	95%	85	115	0%	
Nitrogen	A	%	2.729	2.729		2.5	0	0	0.025	0.1	0	109%	85	115	0%	
Oxygen	A	%	2.385	2.385		2.5	0	0	0.025	0.1	0	95%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
866548	crql std 2% b	ASTM-D2504	CRQL	\TA\110811\1108	11/8/2011 8:43:0	1	R44167		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.355	0.355		0.3	0	0	0.025	0.1	0	118%	80	120	0%	
Carbon Monoxide	A	%	0.16	0.16		0.14	0	0	0.025	0.1	0	114%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\110811\11081102.D Vial: 1
Acq On : 8 Nov 2011 1:10 pm Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title : Method d2504 air analysis
Last Update : Thu May 12 16:13:25 2011
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	2.547	-1.9	0	0.03
2	Nitrogen	2.500	2.847	-13.9	0	0.02
3	Carbon Monoxide	2.500	2.498	0.1	0	-0.01
4	Methane	2.000	2.010	-0.5	0	-0.02
5	Carbon dioxide	2.500	2.568	-2.7	0	-0.04

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\110811\11081102.D Vial: 1
Acq On : 8 Nov 2011 1:10 pm Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title : Method d2504 air analysis
Last Update : Thu May 12 16:13:25 2011
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 030511.M Tue Dec 06 10:36:24 2011 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\110811\11081102.D Vial: 1
Acq On : 8 Nov 2011 1:10 pm Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : events.e
Quant Time: Nov 10 14:45 2011 Quant Results File: 030511.RES

Quant Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title :
Last Update : Wed May 25 15:37:00 2011
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

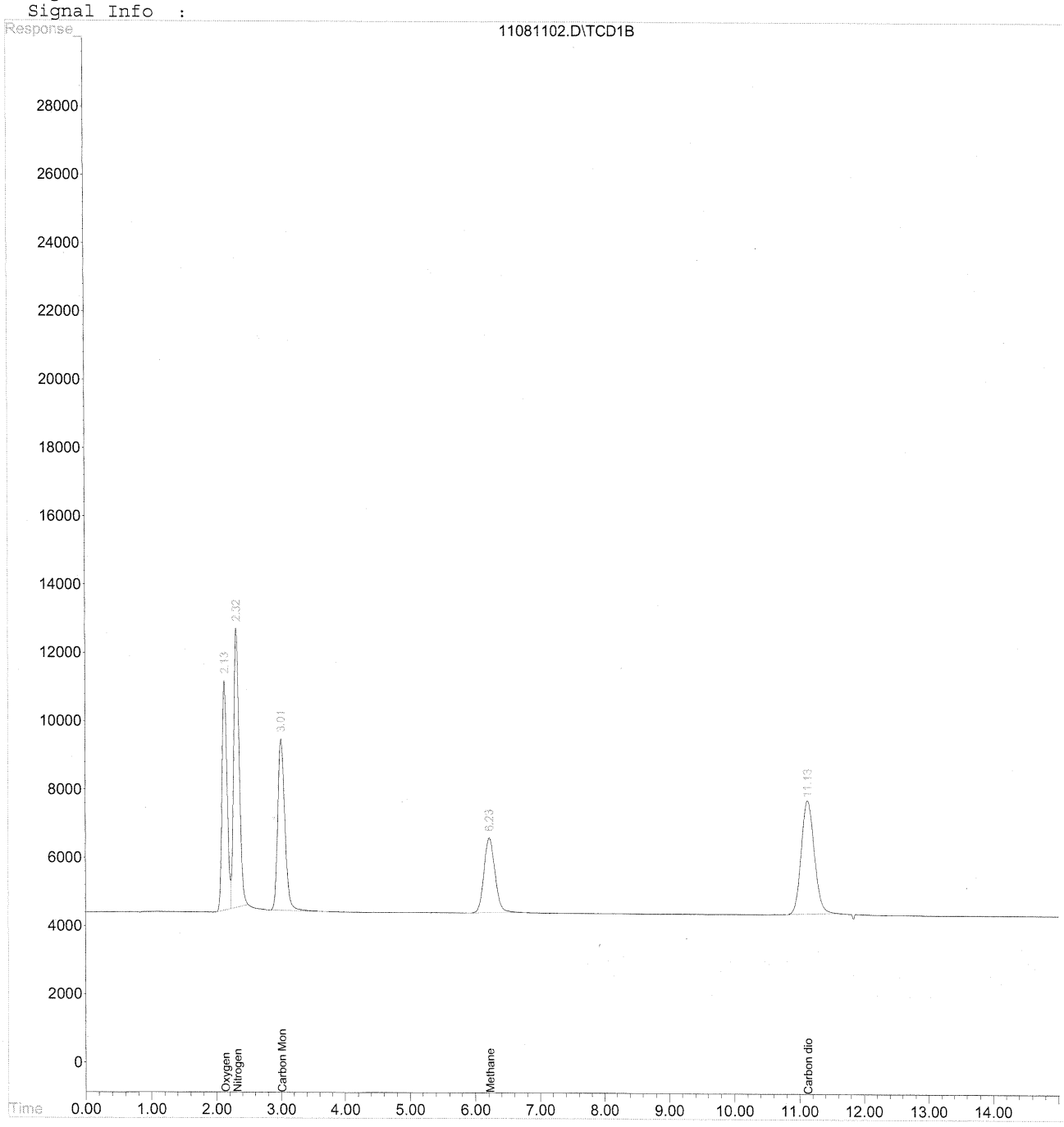
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.13	365107	2.547 %
2)	Nitrogen	2.32	490463	2.847 %
3)	Carbon Monoxide	3.01	393475	2.498 %
4)	Methane	6.23	259017	2.010 %
5)	Carbon dioxide	11.13	465673	2.568 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\110811\11081102.D Vial: 1
Acq On : 8 Nov 2011 1:10 pm Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Nov 10 14:45 2011 Quant Results File: 030511.RES

Quant Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title :
Last Update : Wed May 25 15:37:00 2011
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\110811\11081116.D Vial: 1
Acq On : 8 Nov 2011 8:24 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title : Method d2504 air analysis
Last Update : Thu May 12 16:13:25 2011
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	2.385	4.6	0	0.04
2	Nitrogen	2.500	2.729	-9.2	0	0.02
3	Carbon Monoxide	2.500	2.297	8.1	0	-0.01
4	Methane	2.000	1.903	4.8	0	-0.03
5	Carbon dioxide	2.500	2.360	5.6	0	-0.06

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\110811\11081116.D Vial: 1
Acq On : 8 Nov 2011 8:24 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title : Method d2504 air analysis
Last Update : Thu May 12 16:13:25 2011
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 030511.M Tue Dec 06 10:36:10 2011 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\110811\11081116.D Vial: 1
Acq On : 8 Nov 2011 8:24 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : events.e
Quant Time: Nov 10 14:46 2011 Quant Results File: 030511.RES

Quant Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title :
Last Update : Wed May 25 15:37:00 2011
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	341682	2.385 %
2)	Nitrogen	2.32	470192	2.729 %
3)	Carbon Monoxide	3.01	361761	2.297 %
4)	Methane	6.22	244207	1.903 %
5)	Carbon dioxide	11.12f	426750	2.360 %

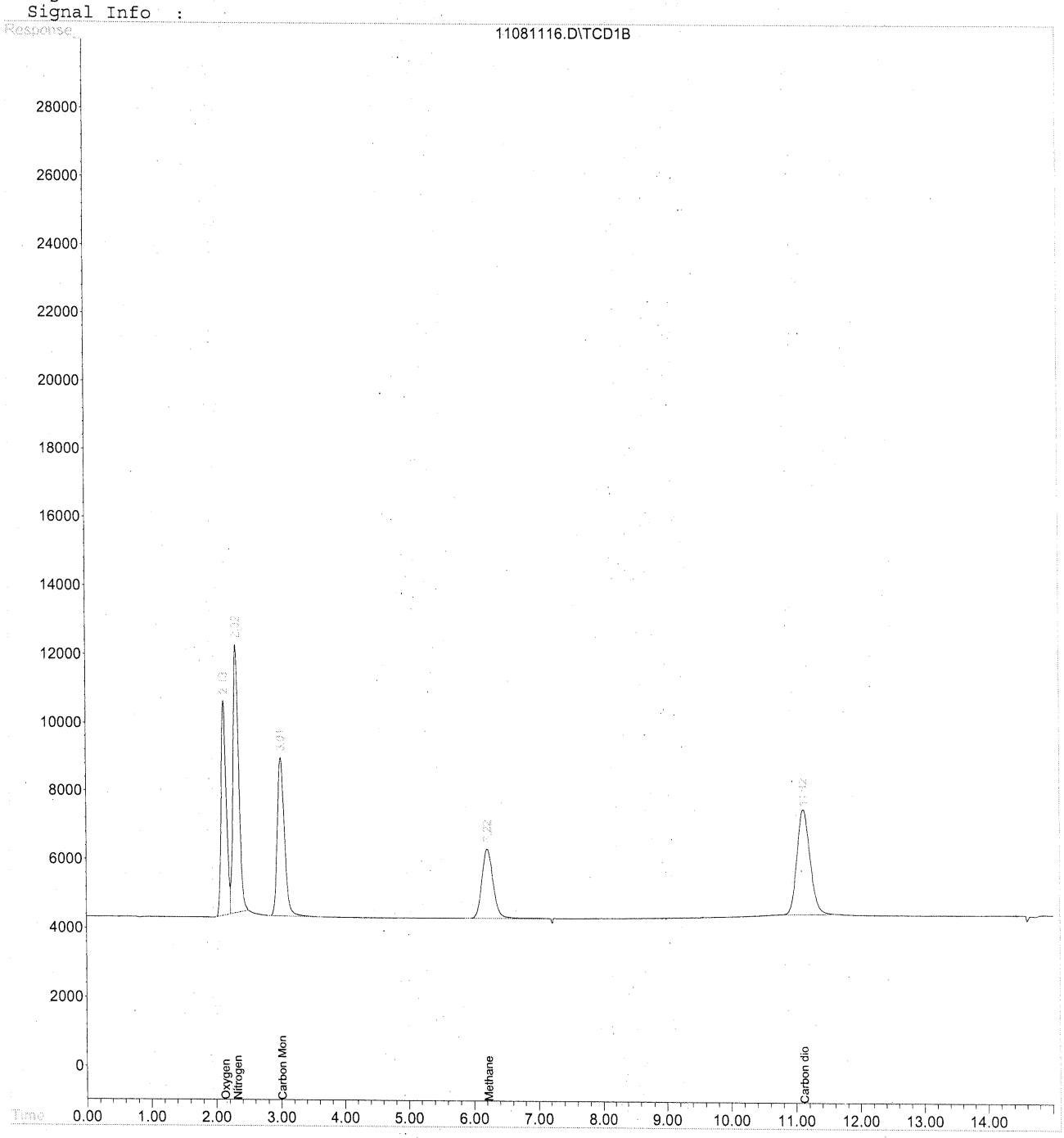
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\110811\11081116.D Vial: 1
Acq On : 8 Nov 2011 8:24 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Nov 10 14:46 2011 Quant Results File: 030511.RES

Quant Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title :
Last Update : Wed May 25 15:37:00 2011
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



RTI Laboratories

Run ID: GC-TCD 1_111109A **Run No.:** 44168

Analytical Run Date: 11/9/2011 **InstrumentID:** GC-TCD 1

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

Calibration ID: 43865 **Column ID:** 100/120mesh x 1mm ID

Column Length: 2m

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
mblk	ASTM-D2504	MBLK	R44168	11/9/2011 12:03:00 PM	Charles O`Bryan		
ccv std 1-2 a	ASTM-D2504	CCV	R44168	11/9/2011 1:28:00 PM	Charles O`Bryan		
lcs	ASTM-D2504	LCS	R44168	11/9/2011 1:51:00 PM	Charles O`Bryan		
crql std 2% a	ASTM-D2504	CRQL	R44168	11/9/2011 4:04:00 PM	Charles O`Bryan		
1110757-001a	ASTM-D2504	SAMP	R44168	11/9/2011 4:28:00 PM	Charles O`Bryan		
1110757-011b	ASTM-D2504	SAMP	R44168	11/9/2011 4:52:00 PM	Charles O`Bryan		
1110757-012b	ASTM-D2504	SAMP	R44168	11/9/2011 5:17:00 PM	Charles O`Bryan		
1110757-013b	ASTM-D2504	SAMP	R44168	11/9/2011 5:51:00 PM	Charles O`Bryan		
1110757-014b	ASTM-D2504	SAMP	R44168	11/9/2011 6:10:00 PM	Charles O`Bryan		
1110757-015b	ASTM-D2504	SAMP	R44168	11/9/2011 6:33:00 PM	Charles O`Bryan		
1110757-016b	ASTM-D2504	SAMP	R44168	11/9/2011 6:53:00 PM	Charles O`Bryan		
1110757-017b	ASTM-D2504	SAMP	R44168	11/9/2011 7:22:00 PM	Charles O`Bryan		
1110757-022b	ASTM-D2504	SAMP	R44168	11/9/2011 7:47:00 PM	Charles O`Bryan		
1110757-023b	ASTM-D2504	SAMP	R44168	11/9/2011 8:06:00 PM	Charles O`Bryan		
1110757-023bdup	ASTM-D2504	DUP	R44168	11/9/2011 8:28:00 PM	Charles O`Bryan		
ccv std 1-2 b	ASTM-D2504	CCV	R44168	11/9/2011 8:51:00 PM	Charles O`Bryan		
crql std 2% b	ASTM-D2504	CRQL	R44168	11/9/2011 9:57:00 PM	Charles O`Bryan		

RTI Laboratories

ANALYTICAL RUN Summary

06-Dec-11

RunNo 44168

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
866549	mblk	ASTM-D2504	MBLK	\TA\110911\1109	11/9/2011 12:03:	1	R44168		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
866550	ccv std 1-2 a	ASTM-D2504	CCV	\TA\110911\1109	11/9/2011 1:28:0	1	R44168		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.167	2.167		2.5	0	0	0.025	0.1	0	87%	85	115	0%	
Carbon Monoxide	A	%	2.15	2.15		2.5	0	0	0.025	0.1	0	86%	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	%	1.731	1.731		2	0	0	0.025	0.5	0	87%	85	115	0%	
Nitrogen	A	%	2.74	2.74		2.5	0	0	0.025	0.1	0	110%	85	115	0%	
Oxygen	A	%	2.259	2.259		2.5	0	0	0.025	0.1	0	90%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
866551	lcs	ASTM-D2504	LCS	\TA\110911\1109	11/9/2011 1:51:0	1	R44168		0	866550	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.216	2.216		2.5	0	2.167	0.025	0.1	0	89%	70	130	2%	
Carbon Monoxide	A	%	2.154	2.154		2.5	0	2.15	0.025	0.1	0	86%	70	130	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Methane	A	%	1.769	1.769		2	0	1.731	0.025	0.5	0	88%	70	130	2%	
Nitrogen	A	%	2.769	2.769		2.5	0	2.74	0.025	0.1	0	111%	70	130	1%	
Oxygen	A	%	2.286	2.286		2.5	0	2.259	0.025	0.1	0	91%	70	130	1%	

1

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
866562	1110757-023b (Container-1 of 1)	ASTM-D2504	SAMP	\TA\110911\1109	11/9/2011 8:06:0	1	R44168		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	%	19.65	19.65		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
866563	1110757-023bdup	ASTM-D2504	DUP	\TA\110911\1109	11/9/2011 8:28:0	1	R44168		0	866562	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.195	0.195		0	0	0.189	0.025	0.1	0	0%	0	0	3%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	78.405	78.405		0	0	78.194	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	19.694	19.694		0	0	19.65	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
866564	ccv std 1-2 b	ASTM-D2504	CCV	\TA\110911\1109	11/9/2011 8:51:0	1	R44168		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.313	2.313		2.5	0	0	0.025	0.1	0	93%	85	115	0%	
Carbon Monoxide	A	%	2.155	2.155		2.5	0	0	0.025	0.1	0	86%	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	%	1.748	1.748		2	0	0	0.025	0.5	0	87%	85	115	0%	
Nitrogen	A	%	2.871	2.871		2.5	0	0	0.025	0.1	0	115%	85	115	0%	
Oxygen	A	%	2.356	2.356		2.5	0	0	0.025	0.1	0	94%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
866565	crql std 2% b	ASTM-D2504	CRQL	\TA\110911\1109	11/9/2011 9:57:0	1	R44168		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.344	0.344		0.3	0	0	0.025	0.1	0	115%	80	120	0%	
Carbon Monoxide	A	%	0.157	0.157		0.14	0	0	0.025	0.1	0	112%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\110911\11091102.D Vial: 1
Acq On : 9 Nov 2011 1:28 pm Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title : Method d2504 air analysis
Last Update : Thu May 12 16:13:25 2011
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	2.259	9.6	0	0.03
2	Nitrogen	2.500	2.740	-9.6	0	0.02
3	Carbon Monoxide	2.500	2.150	14.0	0	-0.02
4	Methane	2.000	1.731	13.4	0	-0.03
5	Carbon dioxide	2.500	2.167	13.3	0	-0.05

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\110911\11091102.D Vial: 1
Acq On : 9 Nov 2011 1:28 pm Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title : Method d2504 air analysis
Last Update : Thu May 12 16:13:25 2011
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 030511.M Tue Dec 06 10:40:24 2011 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\110911\11091102.D Vial: 1
Acq On : 9 Nov 2011 1:28 pm Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : events.e
Quant Time: Nov 9 13:47 2011 Quant Results File: 030511.RES

Quant Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title :
Last Update : Wed May 25 15:37:00 2011
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.13	323488	2.259 %
2)	Nitrogen	2.32	472014	2.740 %
3)	Carbon Monoxide	3.01	338612	2.150 %
4)	Methane	6.22	220566	1.731 %
5)	Carbon dioxide	11.13f	391042	2.167 %

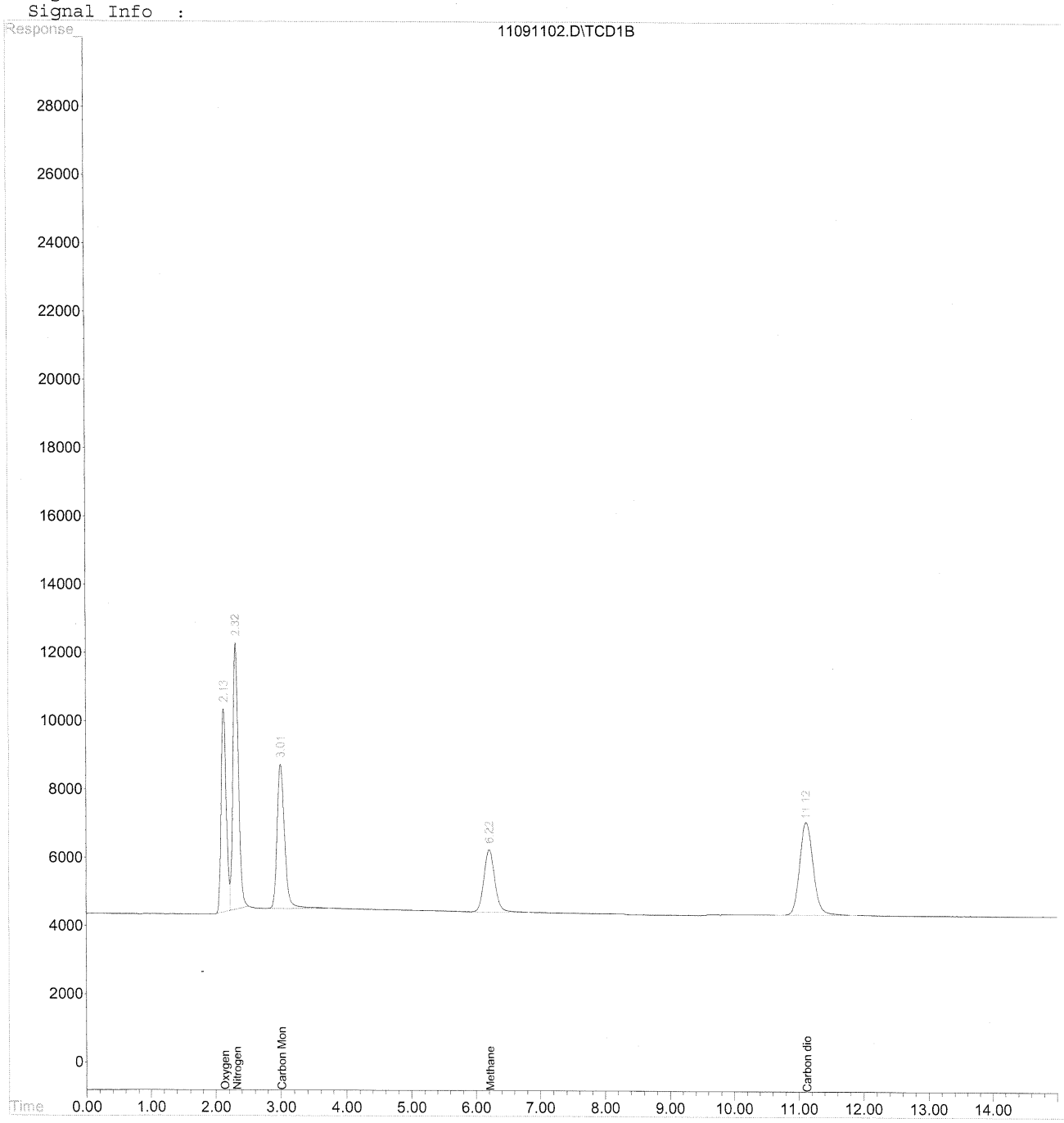
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\110911\11091102.D Vial: 1
Acq On : 9 Nov 2011 1:28 pm Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Nov 9 13:47 2011 Quant Results File: 030511.RES

Quant Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title :
Last Update : Wed May 25 15:37:00 2011
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\110911\11091116.D Vial: 1
Acq On : 9 Nov 2011 8:51 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title : Method d2504 air analysis
Last Update : Thu May 12 16:13:25 2011
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	2.356	5.8	0	0.03
2	Nitrogen	2.500	2.871	-14.8	0	0.02
3	Carbon Monoxide	2.500	2.155	13.8	0	-0.02
4	Methane	2.000	1.748	12.6	0	-0.03
5	Carbon dioxide	2.500	2.313	7.5	0	-0.06

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\110911\11091116.D Vial: 1
Acq On : 9 Nov 2011 8:51 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title : Method d2504 air analysis
Last Update : Thu May 12 16:13:25 2011
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 030511.M Tue Dec 06 10:40:13 2011 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\110911\11091116.D Vial: 1
Acq On : 9 Nov 2011 8:51 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : events.e
Quant Time: Nov 9 21:49 2011 Quant Results File: 030511.RES

Quant Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title :
Last Update : Wed May 25 15:37:00 2011
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
Target Compounds				
1)	Oxygen	2.13	337574	2.356 %
2)	Nitrogen	2.32	494559	2.871 %
3)	Carbon Monoxide	3.01	339360	2.155 %
4)	Methane	6.22	222793	1.748 %
5)	Carbon dioxide	11.12f	418127	2.313 %

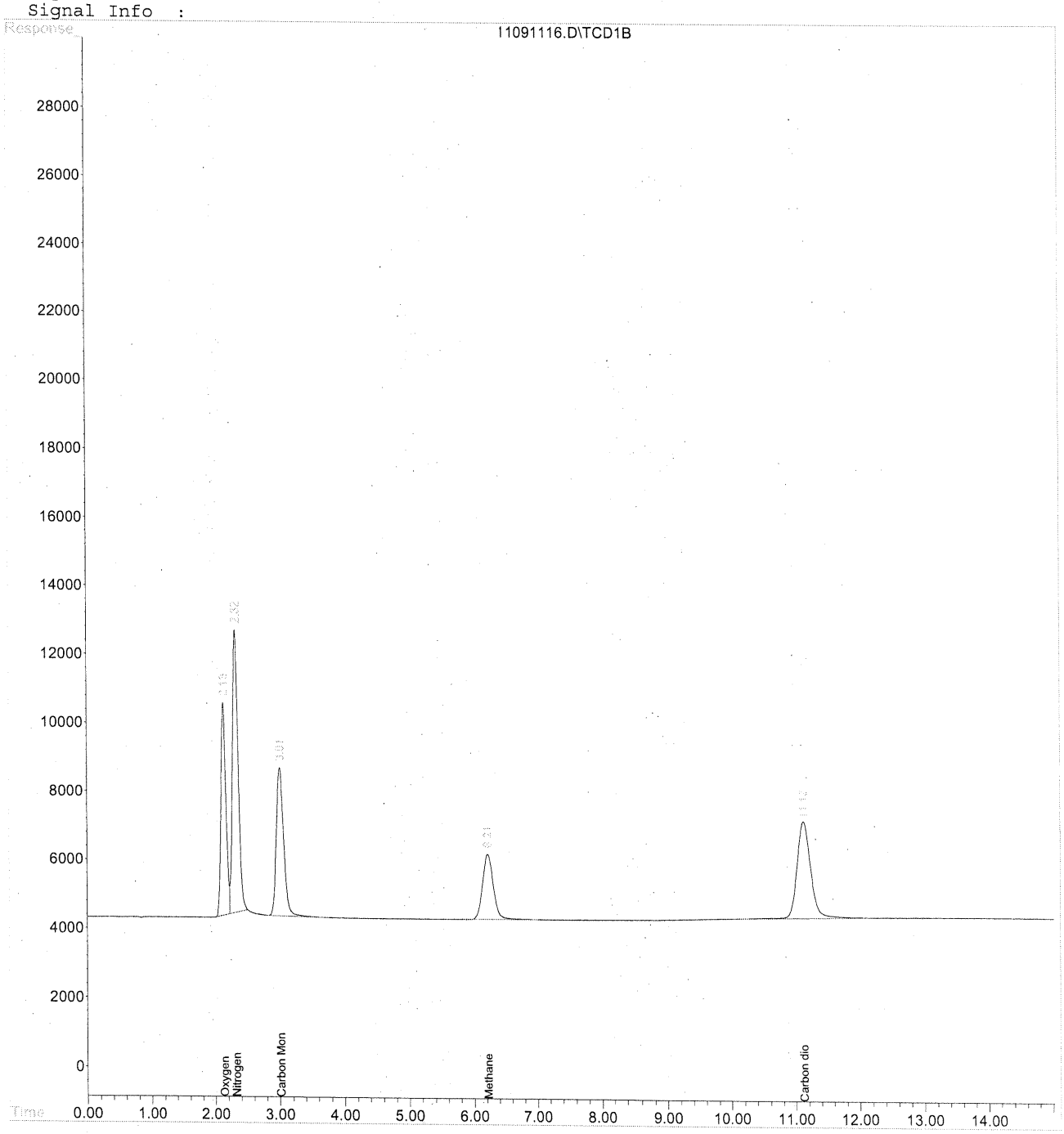
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\110911\11091116.D Vial: 1
Acq On : 9 Nov 2011 8:51 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Nov 9 21:49 2011 Quant Results File: 030511.RES

Quant Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title :
Last Update : Wed May 25 15:37:00 2011
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



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Run ID: GC-TCD 1_111110A **Run No.:** 44169

Analytical Run Date: 11/10/2011 **InstrumentID:** GC-TCD 1

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

Calibration ID: 43865 **Column ID:** 100/120mesh x 1mm ID

Column Length: 2m

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
mblk	ASTM-D2504	MBLK	R44169	11/10/2011 11:51:00 AM	Charles O`Bryan		
ccv std 1-2 a	ASTM-D2504	CCV	R44169	11/10/2011 1:51:00 PM	Charles O`Bryan		
lcs	ASTM-D2504	LCS	R44169	11/10/2011 2:22:00 PM	Charles O`Bryan		
crql std 2% a	ASTM-D2504	CRQL	R44169	11/10/2011 2:58:00 PM	Charles O`Bryan		
1110757-028b	ASTM-D2504	SAMP	R44169	11/10/2011 3:39:00 PM	Charles O`Bryan		
1110757-029b	ASTM-D2504	SAMP	R44169	11/10/2011 4:25:00 PM	Charles O`Bryan		
1110757-030b	ASTM-D2504	SAMP	R44169	11/10/2011 4:45:00 PM	Charles O`Bryan		
1110757-031b	ASTM-D2504	SAMP	R44169	11/10/2011 5:03:00 PM	Charles O`Bryan		
1110757-032b	ASTM-D2504	SAMP	R44169	11/10/2011 5:23:00 PM	Charles O`Bryan		
1110757-033b	ASTM-D2504	SAMP	R44169	11/10/2011 5:56:00 PM	Charles O`Bryan		
1110757-034b	ASTM-D2504	SAMP	R44169	11/10/2011 6:31:00 PM	Charles O`Bryan		
1110757-034bdup	ASTM-D2504	DUP	R44169	11/10/2011 6:57:00 PM	Charles O`Bryan		
ccv std 1-2 b	ASTM-D2504	CCV	R44169	11/10/2011 8:16:00 PM	Charles O`Bryan		
crql std 2% b	ASTM-D2504	CRQL	R44169	11/10/2011 9:23:00 PM	Charles O`Bryan		

RTI Laboratories

ANALYTICAL RUN Summary

06-Dec-11

RunNo 44169

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
866618	mblk	ASTM-D2504	MBLK	\TA\111011\1110	11/10/2011 11:5	1	R44169		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	0.025	0.1	0	0%	0	0	0%	
Carbon Monoxide	A	%		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	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%		0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%		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
866619	ccv std 1-2 a	ASTM-D2504	CCV	\TA\111011\1110	11/10/2011 1:51:	1	R44169		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.525	2.525		2.5	0	0	0.025	0.1	0	101%	85	115	0%	
Carbon Monoxide	A	%	2.45	2.45		2.5	0	0	0.025	0.1	0	98%	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	%	2.008	2.008		2	0	0	0.025	0.5	0	100%	85	115	0%	
Nitrogen	A	%	2.871	2.871		2.5	0	0	0.025	0.1	0	115%	85	115	0%	
Oxygen	A	%	2.498	2.498		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
866620	lcs	ASTM-D2504	LCS	\TA\111011\1110	11/10/2011 2:22:	1	R44169		0	866619	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.507	2.507		2.5	0	2.525	0.025	0.1	0	100%	70	130	1%	
Carbon Monoxide	A	%	2.431	2.431		2.5	0	2.45	0.025	0.1	0	97%	70	130	1%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Methane	A	%	1.997	1.997		2	0	2.008	0.025	0.5	0	100%	70	130	1%	
Nitrogen	A	%	2.912	2.912		2.5	0	2.871	0.025	0.1	0	116%	70	130	1%	
Oxygen	A	%	2.51	2.51		2.5	0	2.498	0.025	0.1	0	100%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
866629	1110757-034bdup	ASTM-D2504	DUP	\TA\111011\1110	11/10/2011 6:57:	1	R44169		0	866628	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.463	0.463		0	0	0.468	0.025	0.1	0	0%	0	0	1%	
Carbon Monoxide	A	%		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	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	80.953	80.953		0	0	81.129	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	17.922	17.922		0	0	18.15	0.025	0.1	0	0%	0	0	1%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
866630	ccv std 1-2 b	ASTM-D2504	CCV	\TA\111011\1110	11/10/2011 8:16:	1	R44169		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.609	2.609		2.5	0	0	0.025	0.1	0	104%	85	115	0%	
Carbon Monoxide	A	%	2.554	2.554		2.5	0	0	0.025	0.1	0	102%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.088	2.088		2	0	0	0.025	0.5	0	104%	85	115	0%	
Nitrogen	A	%	2.865	2.865		2.5	0	0	0.025	0.1	0	115%	85	115	0%	
Oxygen	A	%	2.561	2.561		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
866631	crql std 2% b	ASTM-D2504	CRQL	\TA\111011\1110	11/10/2011 9:23:	1	R44169		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.347	0.347		0.3	0	0	0.025	0.1	0	116%	80	120	0%	
Carbon Monoxide	A	%	0.151	0.151		0.14	0	0	0.025	0.1	0	108%	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	%	0.106	0.106		0.09	0	0	0.025	0.5	0	118%	80	120	0%	
Nitrogen	A	%	1.365	1.365		1.39	0	0	0.025	0.1	0	98%	80	120	0%	
Oxygen	A	%	0.075	0.075		0.08	0	0	0.025	0.1	0	94%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\111011\11101102.D Vial: 1
Acq On : 10 Nov 2011 1:51 pm Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title : Method d2504 air analysis
Last Update : Thu May 12 16:13:25 2011
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	2.498	0.1	0	0.02
2	Nitrogen	2.500	2.871	-14.8	0	0.00
3	Carbon Monoxide	2.500	2.450	2.0	0	-0.03
4	Methane	2.000	2.008	-0.4	0	-0.05
5	Carbon dioxide	2.500	2.525	-1.0	0	-0.08

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\111011\11101102.D Vial: 1
Acq On : 10 Nov 2011 1:51 pm Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title : Method d2504 air analysis
Last Update : Thu May 12 16:13:25 2011
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 030511.M Tue Dec 06 10:56:33 2011 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\111011\11101102.D Vial: 1
Acq On : 10 Nov 2011 1:51 pm Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : events.e
Quant Time: Nov 10 19:37 2011 Quant Results File: 030511.RES

Quant Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title :
Last Update : Wed May 25 15:37:00 2011
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1)	Oxygen	2.12	358045	2.498	%
2)	Nitrogen	2.31	494553	2.871	%
3)	Carbon Monoxide	2.99	385944	2.450	%
4)	Methane	6.19f	258770	2.008	%
5)	Carbon dioxide	11.10f	457609	2.525	%

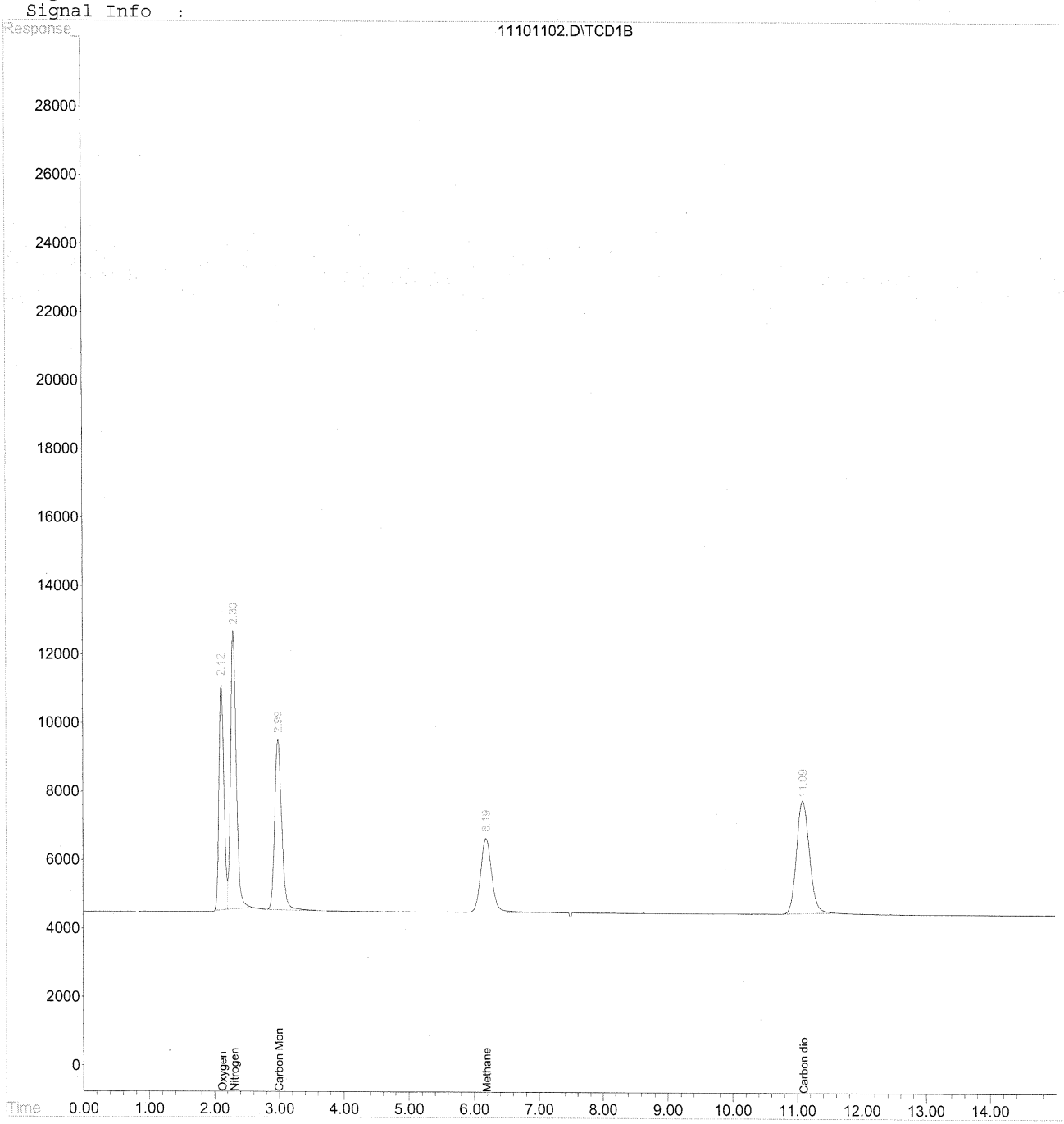
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\111011\11101102.D Vial: 1
Acq On : 10 Nov 2011 1:51 pm Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Nov 10 19:37 2011 Quant Results File: 030511.RES

Quant Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title :
Last Update : Wed May 25 15:37:00 2011
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\111011\11101113.D Vial: 1
Acq On : 10 Nov 2011 8:16 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title : Method d2504 air analysis
Last Update : Thu May 12 16:13:25 2011
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	2.561	-2.4	0	0.00
2	Nitrogen	2.500	2.865	-14.6	0	0.00
3	Carbon Monoxide	2.500	2.554	-2.2	0	-0.05
4	Methane	2.000	2.088	-4.4	0	-0.07
5	Carbon dioxide	2.500	2.609	-4.4	0	-0.11

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\111011\11101113.D Vial: 1
Acq On : 10 Nov 2011 8:16 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title : Method d2504 air analysis
Last Update : Thu May 12 16:13:25 2011
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 030511.M Tue Dec 06 10:56:22 2011 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\111011\11101113.D Vial: 1
Acq On : 10 Nov 2011 8:16 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : events.e
Quant Time: Nov 11 18:59 2011 Quant Results File: 030511.RES

Quant Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title :
Last Update : Fri Nov 11 18:58:31 2011
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.11	367200	2.561 %
2)	Nitrogen	2.29	493598	2.865 %
3)	Carbon Monoxide	2.98	402245	2.554 %
4)	Methane	6.17f	270026	2.088 %
5)	Carbon dioxide	11.07	473355	2.609 %

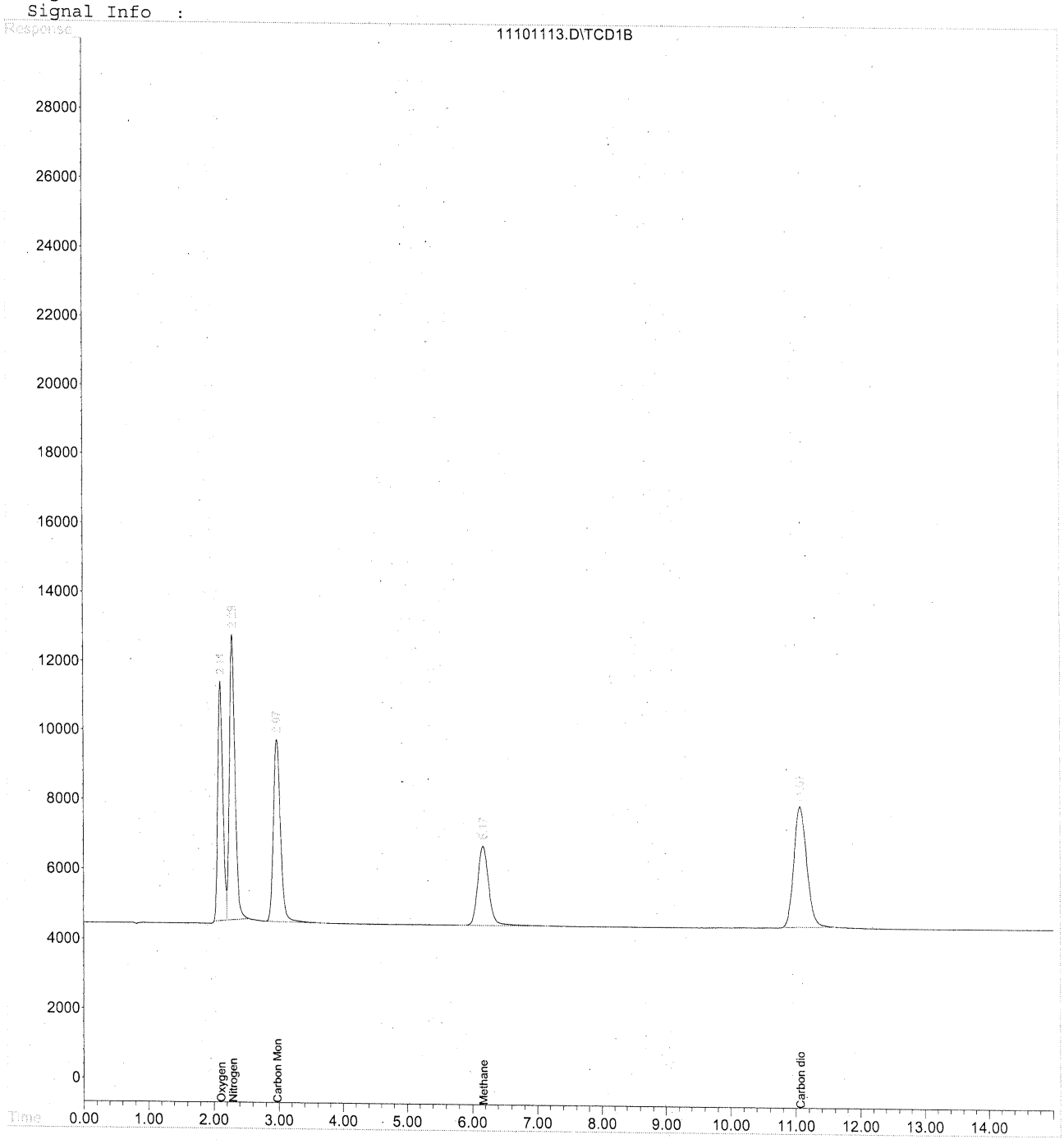
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\111011\11101113.D Vial: 1
Acq On : 10 Nov 2011 8:16 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Nov 11 18:59 2011 Quant Results File: 030511.RES

Quant Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title :
Last Update : Fri Nov 11 18:58:31 2011
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\030511.M (Chemstation Integrator)
Title : Method d2504 air analysis
Last Update : Thu May 12 16:13:25 2011

Calibration Files
1 =03051102.D 2 =03051103.D 3 =03051104.D
4 =03051105.D 5 =03051106.D 6 =03051107.D

	Compound	1	2	3	4	5	6	Avg		%RSD
1)	Oxygen	1.450	1.444	1.427	1.365	1.324	2.791	1.624	E5	32.03
2)	Nitrogen	1.748	1.695	1.678	1.586	1.522	2.053	1.723	E5	9.90
3)	Carbon Monoxide	1.690	1.628	1.621	1.517	1.472	1.522	1.575	E5	5.32
4)	Methane	1.422	1.364	1.344	1.267	1.212	1.210	1.303	E5	6.66
5)	Carbon dioxide	2.121	2.009	2.012	1.874	1.813	1.842	1.945	E5	6.21

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

030511.M Thu Oct 20 10:42:38 2011 TESTCAL

Compound List Report GC/TCD

Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title : Method d2504 air analysis
Last Update : Thu May 12 16:13:25 2011
Response via : Initial Calibration
Total Cpnds : 5

PK#	Type	Compound Name	Exp RT	Rel RT	Cal	A/H	ID
1		Oxygen	2.10	1.000	Q	A	R
2		Nitrogen	2.30	1.000	A	A	R
3		Carbon Monoxide	3.03	1.000	A	A	R
4		Methane	6.25	1.000	Q	A	R
5		Carbon dioxide	11.18	1.000	Q	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

030511.M Thu Oct 20 10:42:24 2011 TESTCAL

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\030511\03051110.D Vial: 1
Acq On : 5 Mar 2011 8:05 am Operator:
Sample : ICV STD 1-2 Inst : GC/TCD
Misc : ICAL ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title :
Last Update : Thu May 12 16:13:25 2011
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	2.652	-6.1	0	0.04
2	Nitrogen	2.500	2.834	-13.4	0	0.03
3	Carbon Monoxide	2.500	2.540	-1.6	0	0.00
4	Methane	2.000	1.986	0.7	0	0.00
5	Carbon dioxide	2.500	2.596	-3.8	0	0.00

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\030511\03051110.D Vial: 1
Acq On : 5 Mar 2011 8:05 am Operator:
Sample : ICV STD 1-2 Inst : GC/TCD
Misc : ICAL ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title :
Last Update : Thu May 12 16:13:25 2011
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 030511.M Thu Oct 20 10:35:49 2011 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\030511\03051110.D Vial: 1
Acq On : 5 Mar 2011 8:05 am Operator:
Sample : ICV STD 1-2 Inst : GC/TCD
Misc : ICAL ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Jun 16 9:53 2011 Quant Results File: 030511.RES

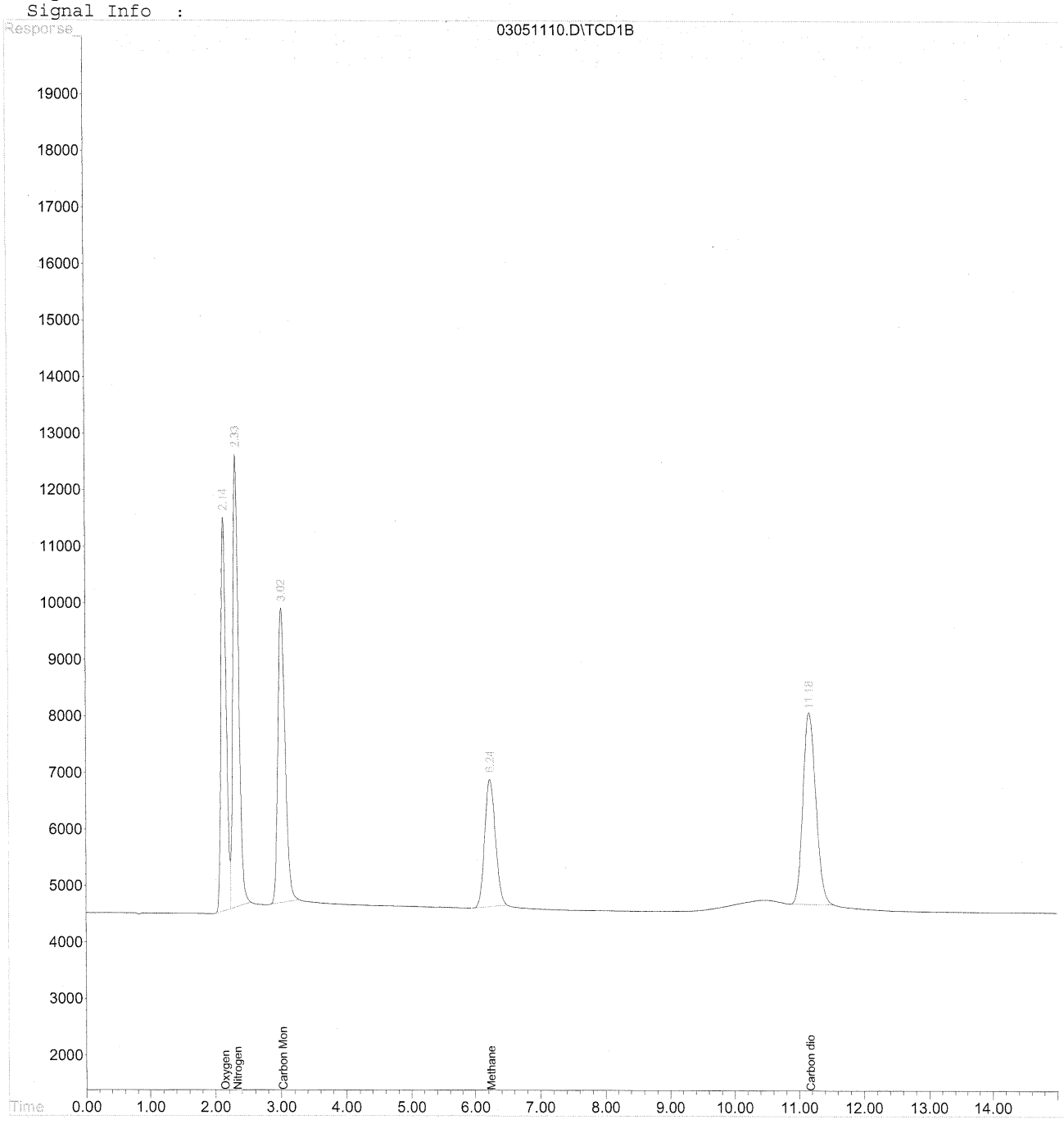
Quant Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title :
Last Update : Thu May 12 16:13:25 2011
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	380291	2.652 %
2)	Nitrogen	2.33	488166	2.834 %
3)	Carbon Monoxide	3.02	400088	2.540 %
4)	Methane	6.25	255799	1.986 %
5)	Carbon dioxide	11.18	470903	2.596 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\030511\03051110.D Vial: 1
Acq On : 5 Mar 2011 8:05 am Operator:
Sample : ICV STD 1-2 Inst : GC/TCD
Misc : ICAL ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Jun 16 9:53 2011 Quant Results File: 030511.RES

Quant Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title :
Last Update : Thu May 12 16:13:25 2011
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :