RTI Laboratories, Inc.

Date: *30-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: 1111752

CASE NARRATIVE

SAMPLE RECEIPT:
Samples were received at the RTI Laboratory, Livonia, MI via commercial delivery on 11/23/2011. Samples were received in good condition. The sample set consisted of 46 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 44658:

- Sample ID 1111752-005dup: RPD results exceeded control limits for Tetrahydrofuran (200%) due to low sample concentration.

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: *30-Dec.-11*

CLIENT: Shaw Environmental & Infrastructure, Inc.
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CASE NARRATIVE

Fixed Gases (Noncondensable Gases/Light Hydrocarbons) Analyses:

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

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

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

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

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

Date: 12/30/2011

RTI Laboratories - Definitions and Acronyms

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Definitions:

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

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

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

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

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

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

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

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

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

PL: Permit limit; only applicable to wastewater reports.

Qual: Qualifier that applies to the analyte reported

Result: Analyte concentration reported

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

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

Qualifiers:

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

Shaw® Shaw E & I

111752

FS003.10

Ref. Document # 140705-SV058

Page 1 of 3

Form 3. Shaw E & I Chain of Custody Form

Project Number: 140705

Project Name / Location: KAFB-BFFS

Purchase Order #:

Project Contact: Diane Oshlo (Name & phone #) 303-319-8155

Send Report To: Pam Moss

Phone/Fax Number:

Address: 7604 technology way STE 300

City: Denver, CO 80237

Shipment Date: 11/17/11

Waybill/Airbill Number: 1Z10335E0342766183

Lab Destination: Livonia MI

Contact Name / ph. #: mi chael truchan 734 422-8000

Sampler's Name(s):

	Sample ID Number	Sample Description	Collection Information Date	Time	G/C	Matrix	# of containers	Container type	Preservative HCL	NaOH	HNO_3	H_2SO_4	Ice	Analyses Requested TO-15	APH-MADEP	ASTM D2504	Turn Around Time Requested	Bottle Vac #'s
1	VA8058-TB		11/8/11	0800		AS	1	BV						X				738
2	VA0797		11/8/11	1247		AS	2	BV/TB						X	X	X		656
3	VA0798		11/8/11	1322		AS	2	BV/TB						X	X	X		713
4	VA0799		11/8/11	1358		AS	2	BV/TB						X	X	X		768
5	VA0800		11/8/11	1447		AS	2	BV/TB						X	X	X		584
6	VA0801		11/8/11	1526		AS	2	BV/TB						X	X	X		759
7	VA0802		11/8/11	1606		AS	2	BV/TB						X	X	X		528
8	VA0704		11/9/11	1432		AS	2	BV/TB						X	X	X		676
9	VA0705		11/9/11	1457		AS	2	BV/TB						X	X	X		719
10	VA0706		11/9/11	1526		AS	2	BV/TB						X	X	X		525

Special Instructions:
Dangerous goods / Flammable
Disposal by Lab

QC/Data Package Level Required: I II III IV/Project Specific:

Relinquished By	Date	Time	Received By	Date	Time
K Noger	11/17/11	1400	Christa Conrades		

G/C Codes
C = Composite G = Grab

Matrix Codes
DW = Drinking Water SO = Soil
GW = Ground Water SL = Sludge
WW = Waste Water CP = Chip Samples
SW = Surface Water WP = Wipe Samples
LIQ = Other Liquid SOL = Other Solid
AS = Air Sample SED = Sediment

Shaw Shaw E & I

FS003.1_0

Form 3. Shaw E & I COC Continuation Page

COC Ref. Document # 140705-SV058 Page 2 of 3

Project Number: 140705 Shipment Date: 11/17/11

Project Name / Location: KAFB-BEES

	Sample ID Number	Sample Description	Collection Information Date	Time	G/C	Matrix	# of containers	Container type	Preservative HCL	NaOH	HNO_3	H_2SO_4	Ice		Analyses Requested TO-15	APH-MADEP	ASTM D2504								Turn Around Time Requested	Bottle Vac #s
11	VA0707		11/9/11	1552		AS	2	BV	TB						X	X	X									707
12	VA0824		11/9/11	0928		AS	2	BV	TB						X	X	X									566
13	VA0825		11/9/11	0957		AS	2	BV	TB						X	X	X									526
14	VA0826		11/9/11	1030		AS	2	BV	TB						X	X	X									718
15	VA0827		11/9/11	1110		AS	2	BV	TB						X	X	X									520
16	VA0828		11/9/11	1201		AS	2	BV	TB						X	X	X									648
17	VA0829		11/9/11	1201		AS	2	BV	TB						X	X	X									758
18	VA0830		11/9/11	1248		AS	2	BV	TB						X	X	X									564
19	VA0838		11/10/11	1425		AS	2	BV	TB						X	X	X									72
20	VA0839		11/10/11	1502		AS	2	BV	TB						X	X	X									589
21	VA0840		11/10/11	1535		AS	2	BV	TB						X	X	X									662
22	VA0841		11/10/11	1610		AS	2	BV	TB						X	X	X									23
23	VA0842		11/15/11	0910		AS	2	BV	TB						X	X	X									846
24	VA0843		11/15/11	0952		AS	2	BV	TB						X	X	X									580
25	VA0755-R		11/15/11	1113		AS	1	BV							X	X										696
26	VA0811-R		11/15/11	1250		AS	1	BV							X	X										686
27	VA0790		11/15/11	1359		AS	2	BV	TB						X	X	X									667
28	VA0791		11/15/11	1435		AS	2	BV	TB						X	X	X									606

Shaw Shaw E & I

FS003.1_0

Form 3. Shaw E & I COC Continuation Page

COC Ref. Document # 140705-SV058 Page 3 of 3

Project Number: 140705 Shipment Date: 11/17/11

Project Name / Location: KAFB-BFFS

	Sample ID Number	Sample Description	Collection Information Date	Time	G/C	Matrix	# of containers	Container type	Preservative HCL	NaOH	HNO_3	H_2SO_4	Ice	Analyses Requested TO-15	APH-MADEP	ASTM D2504								Turn Around Time Requested	Bottle Vac #
29	VA0792		11/15/11	1509		AS	2	BV/TB						X	X	X									112
30	VA0793		11/15/11	1540		AS	2	BV/TB						X	X	X									847
31	VA0794		11/16/11	0906		AS	2	BV/TB						X	X	X									39
32	VA0795		11/16/11	0906		AS	2	BV/TB						X	X	X									594
33	VA0796		11/16/11	1001		AS	2	BV/TB						X	X	X									83
34	VA0747		11/16/11	1148		AS	2	BV/TB						X	X	X									63
35	VA0748		11/16/11	1220		AS	2	BV/TB						X	X	X									582
36	VA0749		11/16/11	1220		AS	2	BV/TB						X	X	X									576
37	VA0750		11/16/11	1306		AS	2	BV/TB						X	X	X									25
38	VA0751		11/16/11	1336		AS	2	BV/TB						X	X	X									36
39	VA0769		11/16/11	1417		AS	2	BV/TB						X	X	X									635
40	VA0910		11/17/11	0855		AS	2	BV/TB						X	X	X									397
41	VA0911		11/17/11	0922		AS	2	BV/TB						X	X	X									610
42	VA0912		11/17/11	0955		AS	2	BV/TB						X	X	X									845
43	VA0913		11/17/11	0955		AS	2	BV/TB						X	X	X									578
44	VA0914		11/17/11	1046		AS	2	BV/TB						X	X	X									91
45	VA0915		11/17/11	1128		AS	2	BV/TB						X	X	X									603
46	VA0916		11/17/11	1211		AS	2	BV/TB						X	X	X									607

CUSTODY SEAL
DATE 11/17/11
SIGNATURE TC Nagy

QEC
Quality Environme
800-255-3950 · 3

T - 10 Door : 1215
MI 48150
UPST 872876 MI 482 9-02

UPS GROUND

RTI LABORATORIES
31628 GLENDALE ST
LIVONIA MI 48150
P: RED2 S: MN
19F-FL2
1Z10335E034251 8219
PTY8RJP MILIV202 Nov 23 02:52:52
US 4821 HIP 11.1.3 LP2844

CUSTODY SEAL
DATE 11/17/11
SIGNATURE TC Nagy

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

633 99

011 US 6059 N

CUSTODY SEAL
DATE 11/17/11
SIGNATURE TC Nagy

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

UPS GROUND

1Z10335E0341098603

P29D130 1428682 Nov 21 23:08:53 2011 US
SS2030 HIP 11.1.3 BTLP2844L
6059 N

T - 10 Door : 1215
MI 48150
UPST 872876 MI 482 9-02

UPS GROUND

1Z10335E0342767183

1428682 Nov 21 23:17:07 2011 US
SS2030 HIP 11.1.3 BTLP2844L
6059 N

CUSTODY SEAL
DATE 11/17/11
SIGNATURE TC Nagy

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

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: **11/23/2011 11:00:00 AM**

Work Order Number **1111752** RcptNo: **1**

Received by: **Christine Conradis**

Completed by:

Reviewed by: Kathy Jones

Completed Date: 11/23/2011 1:13:11 PM

Reviewed Date: 11/27/2011 7:50:31 PM

Carrier name: UPS

Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐	Not Present	☐
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐		
Is it clear what analyses were requested?	Yes ☑	No ☐		
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present	☑
Samples in proper container/bottle?	Yes ☑	No ☐		
Were correct preservatives used and noted?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
Were container lables complete (ID, Pres, Date)?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Was an attempt made to cool the samples?	Yes ☐	No ☑		
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☐	No ☑		
Response when temperature is outside of range:	Not required			
Preservative added to bottles:				
Sample Temp. taken and recorded upon receipt?	Yes ☐	No ☑	To	°C
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials	☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA	☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	No Water	☑
Are Samples considered acceptable?	Yes ☑	No ☐		
Custody Seals present?	Yes ☐	No ☑		
Traffic Report or Packing Lists present?	Yes ☐	No ☑		
Airbill or Sticker?	Air Bill ☑	Sticker ☐	Not Present	☐
Airbill No:	1Z10335E0342518219			
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
1111752-001A	Container-01 of 01	Bottle				
1111752-002A	Container-01 of 01	Bottle				
1111752-002B	Container-01 of 01	Bottle				
1111752-003A	Container-01 of 01	Bottle				
1111752-003B	Container-01 of 01	Bottle				
1111752-004A	Container-01 of 01	Bottle				
1111752-004B	Container-01 of 01	Bottle				
1111752-005A	Container-01 of 01	Bottle				
1111752-005B	Container-01 of 01	Bottle				
1111752-006A	Container-01 of 01	Bottle				
1111752-006B	Container-01 of 01	Bottle				
1111752-007A	Container-01 of 01	Bottle				
1111752-007B	Container-01 of 01	Bottle				
1111752-008A	Container-01 of 01	Bottle				
1111752-008B	Container-01 of 01	Bottle				
1111752-009A	Container-01 of 01	Bottle				
1111752-009B	Container-01 of 01	Bottle				
1111752-010A	Container-01 of 01	Bottle				
1111752-010B	Container-01 of 01	Bottle				
1111752-011A	Container-01 of 01	Bottle				
1111752-011B	Container-01 of 01	Bottle				
1111752-012A	Container-01 of 01	Bottle				
1111752-012B	Container-01 of 01	Bottle				
1111752-013A	Container-01 of 01	Bottle				
1111752-013B	Container-01 of 01	Bottle				
1111752-014A	Container-01 of 01	Bottle				
1111752-014B	Container-01 of 01	Bottle				
1111752-015A	Container-01 of 01	Bottle				
1111752-015B	Container-01 of 01	Bottle				
1111752-016A	Container-01 of 01	Bottle				
1111752-016B	Container-01 of 01	Bottle				
1111752-017A	Container-01 of 01	Bottle				
1111752-017B	Container-01 of 01	Bottle				
1111752-018A	Container-01 of 01	Bottle				

SampID	ContainerID	Type	Org pH	Adj pH	Req Min pH	Req Max pH
1111752-018B	Container-01 of 01	Bottle				
1111752-019A	Container-01 of 01	Bottle				
1111752-019B	Container-01 of 01	Bottle				
1111752-020A	Container-01 of 01	Bottle				
1111752-020B	Container-01 of 01	Bottle				
1111752-021A	Container-01 of 01	Bottle				
1111752-021B	Container-01 of 01	Bottle				
1111752-022A	Container-01 of 01	Bottle				
1111752-022B	Container-01 of 01	Bottle				
1111752-023A	Container-01 of 01	Bottle				
1111752-023B	Container-01 of 01	Bottle				
1111752-024A	Container-01 of 01	Bottle				
1111752-024B	Container-01 of 01	Bottle				
1111752-025A	Container-01 of 01	Bottle				
1111752-026A	Container-01 of 01	Bottle				
1111752-027A	Container-01 of 01	Bottle				
1111752-027B	Container-01 of 01	Bottle				
1111752-028A	Container-01 of 01	Bottle				
1111752-028B	Container-01 of 01	Bottle				
1111752-029A	Container-01 of 01	Bottle				
1111752-029B	Container-01 of 01	Bottle				
1111752-030A	Container-01 of 01	Bottle				
1111752-030B	Container-01 of 01	Bottle				
1111752-031A	Container-01 of 01	Bottle				
1111752-031B	Container-01 of 01	Bottle				
1111752-032A	Container-01 of 01	Bottle				
1111752-032B	Container-01 of 01	Bottle				
1111752-033A	Container-01 of 01	Bottle				
1111752-033B	Container-01 of 01	Bottle				
1111752-034A	Container-01 of 01	Bottle				
1111752-034B	Container-01 of 01	Bottle				
1111752-035A	Container-01 of 01	Bottle				
1111752-035B	Container-01 of 01	Bottle				
1111752-036A	Container-01 of 01	Bottle				

SampID	ContainerID	Type	Org pH	Adj pH	Req Min pH	Req Max pH
1111752-036B	Container-01 of 01	Bottle				
1111752-037A	Container-01 of 01	Bottle				
1111752-037B	Container-01 of 01	Bottle				
1111752-038A	Container-01 of 01	Bottle				
1111752-038B	Container-01 of 01	Bottle				
1111752-039A	Container-01 of 01	Bottle				
1111752-039B	Container-01 of 01	Bottle				
1111752-040A	Container-01 of 01	Bottle				
1111752-040B	Container-01 of 01	Bottle				
1111752-041A	Container-01 of 01	Bottle				
1111752-041B	Container-01 of 01	Bottle				
1111752-042A	Container-01 of 01	Bottle				
1111752-042B	Container-01 of 01	Bottle				
1111752-043A	Container-01 of 01	Bottle				
1111752-043B	Container-01 of 01	Bottle				
1111752-044A	Container-01 of 01	Bottle				
1111752-044B	Container-01 of 01	Bottle				
1111752-045A	Container-01 of 01	Bottle				
1111752-045B	Container-01 of 01	Bottle				
1111752-046A	Container-01 of 01	Bottle				
1111752-046B	Container-01 of 01	Bottle				

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: Comments:

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

Client Instructions:

Date Contacted: Contacted By:

Regarding:

CorrectiveAction:

RTI Laboratories - Workorder Sample Summary

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1111752-001	VA8058-TB		11/8/2011 8:00 AM	11/23/2011 11:00 AM	Air
1111752-002	VA0797		11/8/2011 12:47 PM	11/23/2011 11:00 AM	Air
1111752-002	VA0797		11/8/2011 12:47 PM	11/23/2011 11:00 AM	Air
1111752-003	VA0798		11/8/2011 1:22 PM	11/23/2011 11:00 AM	Air
1111752-003	VA0798		11/8/2011 1:22 PM	11/23/2011 11:00 AM	Air
1111752-004	VA0799		11/8/2011 1:58 PM	11/23/2011 11:00 AM	Air
1111752-004	VA0799		11/8/2011 1:58 PM	11/23/2011 11:00 AM	Air
1111752-005	VA0800		11/8/2011 2:47 PM	11/23/2011 11:00 AM	Air
1111752-005	VA0800		11/8/2011 2:47 PM	11/23/2011 11:00 AM	Air
1111752-006	VA0801		11/8/2011 3:26 PM	11/23/2011 11:00 AM	Air
1111752-006	VA0801		11/8/2011 3:26 PM	11/23/2011 11:00 AM	Air
1111752-007	VA0802		11/8/2011 4:06 PM	11/23/2011 11:00 AM	Air
1111752-007	VA0802		11/8/2011 4:06 PM	11/23/2011 11:00 AM	Air
1111752-008	VA0704		11/9/2011 2:32 PM	11/23/2011 11:00 AM	Air
1111752-008	VA0704		11/9/2011 2:32 PM	11/23/2011 11:00 AM	Air
1111752-009	VA0705		11/9/2011 2:57 PM	11/23/2011 11:00 AM	Air
1111752-009	VA0705		11/9/2011 2:57 PM	11/23/2011 11:00 AM	Air
1111752-010	VA0706		11/9/2011 3:26 PM	11/23/2011 11:00 AM	Air
1111752-010	VA0706		11/9/2011 3:26 PM	11/23/2011 11:00 AM	Air
1111752-011	VA0707		11/9/2011 3:52 PM	11/23/2011 11:00 AM	Air
1111752-011	VA0707		11/9/2011 3:52 PM	11/23/2011 11:00 AM	Air
1111752-012	VA0824		11/9/2011 9:28 AM	11/23/2011 11:00 AM	Air
1111752-012	VA0824		11/9/2011 9:28 AM	11/23/2011 11:00 AM	Air
1111752-013	VA0825		11/9/2011 9:57 AM	11/23/2011 11:00 AM	Air
1111752-013	VA0825		11/9/2011 9:57 AM	11/23/2011 11:00 AM	Air
1111752-014	VA0826		11/9/2011 10:30 AM	11/23/2011 11:00 AM	Air
1111752-014	VA0826		11/9/2011 10:30 AM	11/23/2011 11:00 AM	Air
1111752-015	VA0827		11/9/2011 11:10 AM	11/23/2011 11:00 AM	Air
1111752-015	VA0827		11/9/2011 11:10 AM	11/23/2011 11:00 AM	Air
1111752-016	VA0828		11/9/2011 12:01 PM	11/23/2011 11:00 AM	Air
1111752-016	VA0828		11/9/2011 12:01 PM	11/23/2011 11:00 AM	Air
1111752-017	VA0829		11/9/2011 12:01 PM	11/23/2011 11:00 AM	Air
1111752-017	VA0829		11/9/2011 12:01 PM	11/23/2011 11:00 AM	Air
1111752-018	VA0830		11/9/2011 12:48 PM	11/23/2011 11:00 AM	Air
1111752-018	VA0830		11/9/2011 12:48 PM	11/23/2011 11:00 AM	Air
1111752-019	VA0838		11/10/2011 2:25 PM	11/23/2011 11:00 AM	Air
1111752-019	VA0838		11/10/2011 2:25 PM	11/23/2011 11:00 AM	Air
1111752-020	VA0839		11/10/2011 3:02 PM	11/23/2011 11:00 AM	Air
1111752-020	VA0839		11/10/2011 3:02 PM	11/23/2011 11:00 AM	Air
1111752-021	VA0840		11/10/2011 3:35 PM	11/23/2011 11:00 AM	Air
1111752-021	VA0840		11/10/2011 3:35 PM	11/23/2011 11:00 AM	Air
1111752-022	VA0841		11/10/2011 4:10 PM	11/23/2011 11:00 AM	Air
1111752-022	VA0841		11/10/2011 4:10 PM	11/23/2011 11:00 AM	Air
1111752-023	VA0842		11/15/2011 9:10 AM	11/23/2011 11:00 AM	Air
1111752-023	VA0842		11/15/2011 9:10 AM	11/23/2011 11:00 AM	Air

RTI Laboratories - Workorder Sample Summary

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1111752-024	VA0843		11/15/2011 9:52 AM	11/23/2011 11:00 AM	Air
1111752-024	VA0843		11/15/2011 9:52 AM	11/23/2011 11:00 AM	Air
1111752-025	VA0755-R		11/15/2011 11:13 AM	11/23/2011 11:00 AM	Air
1111752-026	VA0811-R		11/15/2011 12:50 PM	11/23/2011 11:00 AM	Air
1111752-027	VA0790		11/15/2011 1:59 PM	11/23/2011 11:00 AM	Air
1111752-027	VA0790		11/15/2011 1:59 PM	11/23/2011 11:00 AM	Air
1111752-028	VA0791		11/15/2011 2:35 PM	11/23/2011 11:00 AM	Air
1111752-028	VA0791		11/15/2011 2:35 PM	11/23/2011 11:00 AM	Air
1111752-029	VA0792		11/15/2011 3:09 PM	11/23/2011 11:00 AM	Air
1111752-029	VA0792		11/15/2011 3:09 PM	11/23/2011 11:00 AM	Air
1111752-030	VA0793		11/15/2011 3:40 PM	11/23/2011 11:00 AM	Air
1111752-030	VA0793		11/15/2011 3:40 PM	11/23/2011 11:00 AM	Air
1111752-031	VA0794		11/16/2011 9:06 AM	11/23/2011 11:00 AM	Air
1111752-031	VA0794		11/16/2011 9:06 AM	11/23/2011 11:00 AM	Air
1111752-032	VA0795		11/16/2011 9:06 AM	11/23/2011 11:00 AM	Air
1111752-032	VA0795		11/16/2011 9:06 AM	11/23/2011 11:00 AM	Air
1111752-033	VA0796		11/16/2011 10:01 AM	11/23/2011 11:00 AM	Air
1111752-033	VA0796		11/16/2011 10:01 AM	11/23/2011 11:00 AM	Air
1111752-034	VA0747		11/16/2011 11:48 AM	11/23/2011 11:00 AM	Air
1111752-034	VA0747		11/16/2011 11:48 AM	11/23/2011 11:00 AM	Air
1111752-035	VA0748		11/16/2011 12:20 PM	11/23/2011 11:00 AM	Air
1111752-035	VA0748		11/16/2011 12:20 PM	11/23/2011 11:00 AM	Air
1111752-036	VA0749		11/16/2011 12:20 PM	11/23/2011 11:00 AM	Air
1111752-036	VA0749		11/16/2011 12:20 PM	11/23/2011 11:00 AM	Air
1111752-037	VA0750		11/16/2011 1:06 PM	11/23/2011 11:00 AM	Air
1111752-037	VA0750		11/16/2011 1:06 PM	11/23/2011 11:00 AM	Air
1111752-038	VA0751		11/16/2011 1:36 PM	11/23/2011 11:00 AM	Air
1111752-038	VA0751		11/16/2011 1:36 PM	11/23/2011 11:00 AM	Air
1111752-039	VA0769		11/16/2011 2:17 PM	11/23/2011 11:00 AM	Air
1111752-039	VA0769		11/16/2011 2:17 PM	11/23/2011 11:00 AM	Air
1111752-040	VA0910		11/17/2011 8:55 AM	11/23/2011 11:00 AM	Air
1111752-040	VA0910		11/17/2011 8:55 AM	11/23/2011 11:00 AM	Air
1111752-041	VA0911		11/17/2011 9:22 AM	11/23/2011 11:00 AM	Air
1111752-041	VA0911		11/17/2011 9:22 AM	11/23/2011 11:00 AM	Air
1111752-042	VA0912		11/17/2011 9:55 AM	11/23/2011 11:00 AM	Air
1111752-042	VA0912		11/17/2011 9:55 AM	11/23/2011 11:00 AM	Air
1111752-043	VA0913		11/17/2011 9:55 AM	11/23/2011 11:00 AM	Air
1111752-043	VA0913		11/17/2011 9:55 AM	11/23/2011 11:00 AM	Air
1111752-044	VA0914		11/17/2011 10:46 AM	11/23/2011 11:00 AM	Air
1111752-044	VA0914		11/17/2011 10:46 AM	11/23/2011 11:00 AM	Air
1111752-045	VA7915		11/17/2011 11:28 AM	11/23/2011 11:00 AM	Air
1111752-045	VA7915		11/17/2011 11:28 AM	11/23/2011 11:00 AM	Air
1111752-046	VA7916		11/17/2011 12:11 PM	11/23/2011 11:00 AM	Air
1111752-046	VA7916		11/17/2011 12:11 PM	11/23/2011 11:00 AM	Air

RTI Laboratories - DATES REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1111752-001A	VA8058-TB	11/8/2011 8:00 AM	Air				
				EPA_TO15-Volatile Organic Compounds			12/3/2011 3:25 AM
1111752-002A	VA0797	11/8/2011 12:47 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			11/29/2011 1:56 AM
				EPA_TO15-Volatile Organic Compounds			12/3/2011 4:13 AM
1111752-002B	VA0797	11/8/2011 12:47 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/6/2011 11:20 AM
1111752-003A	VA0798	11/8/2011 1:22 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			11/29/2011 2:45 AM
				EPA_TO15-Volatile Organic Compounds			12/3/2011 5:00 AM
				EPA_TO15-Volatile Organic Compounds			12/5/2011 12:27 PM
1111752-003B	VA0798	11/8/2011 1:22 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/6/2011 11:38 AM
1111752-004A	VA0799	11/8/2011 1:58 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/1/2011 5:38 AM
				EPA_TO15-Volatile Organic Compounds			12/3/2011 5:48 AM
1111752-004B	VA0799	11/8/2011 1:58 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/6/2011 11:58 AM
1111752-005A	VA0800	11/8/2011 2:47 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			11/28/2011 5:57 PM
				EPA_TO15-Volatile Organic Compounds			12/3/2011 6:28 AM
1111752-005B	VA0800	11/8/2011 2:47 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/6/2011 12:17 PM
1111752-006A	VA0801	11/8/2011 3:26 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			11/28/2011 6:40 PM
				EPA_TO15-Volatile Organic Compounds			12/3/2011 7:50 AM
1111752-006B	VA0801	11/8/2011 3:26 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/6/2011 12:35 PM

RTI Laboratories - DATES REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1111752-007A	VA0802	11/8/2011 4:06 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			11/28/2011 7:23 PM
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/1/2011 3:25 AM
				EPA_TO15-Volatile Organic Compounds			12/3/2011 8:31 AM
1111752-007B	VA0802	11/8/2011 4:06 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/6/2011 12:55 PM
1111752-008A	VA0704	11/9/2011 2:32 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/1/2011 6:41 PM
				EPA_TO15-Volatile Organic Compounds			12/3/2011 9:12 AM
1111752-008B	VA0704	11/9/2011 2:32 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/6/2011 1:14 PM
1111752-009A	VA0705	11/9/2011 2:57 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/1/2011 7:27 PM
				EPA_TO15-Volatile Organic Compounds			12/3/2011 9:53 AM
1111752-009B	VA0705	11/9/2011 2:57 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/6/2011 1:37 PM
1111752-010A	VA0706	11/9/2011 3:26 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			11/30/2011 8:24 PM
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/1/2011 8:16 PM
				EPA_TO15-Volatile Organic Compounds			12/5/2011 3:28 PM
1111752-010B	VA0706	11/9/2011 3:26 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/6/2011 2:23 PM
1111752-011A	VA0707	11/9/2011 3:52 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/1/2011 6:27 AM
				EPA_TO15-Volatile Organic Compounds			12/3/2011 11:21 AM
1111752-011B	VA0707	11/9/2011 3:52 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/6/2011 2:45 PM
1111752-012A	VA0824	11/9/2011 9:28 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			11/29/2011 8:41 AM

RTI Laboratories - DATES REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1111752-012A	VA0824	11/9/2011 9:28 AM	Air				
				EPA_TO15-Volatile Organic Compounds			12/3/2011 12:09 PM
1111752-012B	VA0824	11/9/2011 9:28 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/6/2011 3:58 PM
1111752-013A	VA0825	11/9/2011 9:57 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			11/29/2011 7:01 AM
				EPA_TO15-Volatile Organic Compounds			12/3/2011 12:56 PM
1111752-013B	VA0825	11/9/2011 9:57 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/6/2011 4:48 PM
1111752-014A	VA0826	11/9/2011 10:30 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			11/29/2011 7:51 AM
				EPA_TO15-Volatile Organic Compounds			12/5/2011 1:09 PM
1111752-014B	VA0826	11/9/2011 10:30 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/6/2011 5:12 PM
1111752-015A	VA0827	11/9/2011 11:10 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			11/28/2011 10:58 PM
				EPA_TO15-Volatile Organic Compounds			12/3/2011 2:17 PM
1111752-015B	VA0827	11/9/2011 11:10 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/6/2011 5:35 PM
1111752-016A	VA0828	11/9/2011 12:01 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			11/28/2011 11:41 PM
				EPA_TO15-Volatile Organic Compounds			12/3/2011 2:58 PM
1111752-016B	VA0828	11/9/2011 12:01 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/6/2011 5:57 PM
1111752-017A	VA0829	11/9/2011 12:01 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			11/29/2011 12:23 AM
				EPA_TO15-Volatile Organic Compounds			12/3/2011 3:38 PM

RTI Laboratories - DATES REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1111752-017B	VA0829	11/9/2011 12:01 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/6/2011 6:24 PM
1111752-018A	VA0830	11/9/2011 12:48 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			11/30/2011 10:31 PM
				EPA_TO15-Volatile Organic Compounds			12/3/2011 4:17 PM
				EPA_TO15-Volatile Organic Compounds			12/5/2011 7:44 PM
1111752-018B	VA0830	11/9/2011 12:48 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/6/2011 6:46 PM
1111752-019A	VA0838	11/10/2011 2:25 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/1/2011 8:27 AM
				EPA_TO15-Volatile Organic Compounds			12/3/2011 5:05 PM
1111752-019B	VA0838	11/10/2011 2:25 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/6/2011 7:07 PM
1111752-020A	VA0839	11/10/2011 3:02 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/5/2011 2:47 PM
				EPA_TO15-Volatile Organic Compounds			12/5/2011 4:10 PM
1111752-020B	VA0839	11/10/2011 3:02 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/6/2011 7:33 PM
1111752-021A	VA0840	11/10/2011 3:35 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/1/2011 9:55 PM
				EPA_TO15-Volatile Organic Compounds			12/5/2011 9:11 PM
1111752-021B	VA0840	11/10/2011 3:35 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/7/2011 12:30 PM
1111752-022A	VA0841	11/10/2011 4:10 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/1/2011 9:13 AM
				EPA_TO15-Volatile Organic Compounds			12/3/2011 7:11 PM
1111752-022B	VA0841	11/10/2011 4:10 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/7/2011 12:51 PM

RTI Laboratories - DATES REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1111752-023A	VA0842	11/15/2011 9:10 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/1/2011 9:58 AM
				EPA_TO15-Volatile Organic Compounds			12/5/2011 9:58 PM
1111752-023B	VA0842	11/15/2011 9:10 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/7/2011 1:10 PM
1111752-024A	VA0843	11/15/2011 9:52 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/1/2011 10:44 AM
				EPA_TO15-Volatile Organic Compounds			12/5/2011 10:44 PM
1111752-024B	VA0843	11/15/2011 9:52 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/7/2011 1:30 PM
1111752-025A	VA0755-R	11/15/2011 11:13 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/1/2011 11:26 AM
				EPA_TO15-Volatile Organic Compounds			12/3/2011 9:15 PM
1111752-026A	VA0811-R	11/15/2011 12:50 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/5/2011 5:42 PM
				EPA_TO15-Volatile Organic Compounds			12/3/2011 9:56 PM
1111752-027A	VA0790	11/15/2011 1:59 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/5/2011 3:30 PM
				EPA_TO15-Volatile Organic Compounds			12/5/2011 11:27 PM
1111752-027B	VA0790	11/15/2011 1:59 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/7/2011 2:07 PM
1111752-028A	VA0791	11/15/2011 2:35 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/2/2011 3:55 AM
				EPA_TO15-Volatile Organic Compounds			12/6/2011 12:10 AM
				EPA_TO15-Volatile Organic Compounds			12/6/2011 2:25 PM
1111752-028B	VA0791	11/15/2011 2:35 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/7/2011 2:33 PM
1111752-029A	VA0792	11/15/2011 3:09 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/5/2011 4:13 PM

RTI Laboratories - DATES REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1111752-029A	VA0792	11/15/2011 3:09 PM	Air				
				EPA_TO15-Volatile Organic Compounds			12/6/2011 3:05 PM
1111752-029B	VA0792	11/15/2011 3:09 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/7/2011 2:52 PM
1111752-030A	VA0793	11/15/2011 3:40 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/1/2011 10:38 PM
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/5/2011 6:28 PM
				EPA_TO15-Volatile Organic Compounds			12/6/2011 2:29 AM
1111752-030B	VA0793	11/15/2011 3:40 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/7/2011 3:19 PM
1111752-031A	VA0794	11/16/2011 9:06 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/5/2011 7:15 PM
				EPA_TO15-Volatile Organic Compounds			12/6/2011 3:14 AM
1111752-031B	VA0794	11/16/2011 9:06 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/7/2011 3:43 PM
1111752-032A	VA0795	11/16/2011 9:06 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/7/2011 4:34 PM
				EPA_TO15-Volatile Organic Compounds			12/9/2011 12:28 AM
1111752-032B	VA0795	11/16/2011 9:06 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/7/2011 4:05 PM
1111752-033A	VA0796	11/16/2011 10:01 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/2/2011 1:28 AM
				EPA_TO15-Volatile Organic Compounds			12/6/2011 4:27 PM
1111752-033B	VA0796	11/16/2011 10:01 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/7/2011 5:20 PM
1111752-034A	VA0747	11/16/2011 11:48 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/6/2011 2:26 PM
				EPA_TO15-Volatile Organic Compounds			12/8/2011 1:05 PM

RTI Laboratories - DATES REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1111752-034B	VA0747	11/16/2011 11:48 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/7/2011 5:42 PM
1111752-035A	VA0748	11/16/2011 12:20 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/5/2011 8:44 PM
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/6/2011 4:40 PM
				EPA_TO15-Volatile Organic Compounds			12/6/2011 6:42 PM
1111752-035B	VA0748	11/16/2011 12:20 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/7/2011 6:10 PM
1111752-036A	VA0749	11/16/2011 12:20 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/6/2011 7:35 AM
				EPA_TO15-Volatile Organic Compounds			12/6/2011 7:30 PM
1111752-036B	VA0749	11/16/2011 12:20 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/7/2011 6:31 PM
1111752-037A	VA0750	11/16/2011 1:06 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/5/2011 10:52 PM
				EPA_TO15-Volatile Organic Compounds			12/8/2011 1:50 PM
				EPA_TO15-Volatile Organic Compounds			12/9/2011 1:09 AM
1111752-037B	VA0750	11/16/2011 1:06 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/8/2011 11:19 AM
1111752-038A	VA0751	11/16/2011 1:36 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/7/2011 1:15 PM
				EPA_TO15-Volatile Organic Compounds			12/6/2011 8:11 PM
1111752-038B	VA0751	11/16/2011 1:36 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/8/2011 11:44 AM
1111752-039A	VA0769	11/16/2011 2:17 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/6/2011 6:05 PM
				EPA_TO15-Volatile Organic Compounds			12/6/2011 8:53 PM

RTI Laboratories - DATES REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1111752-039B	VA0769	11/16/2011 2:17 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/8/2011 12:08 PM
1111752-040A	VA0910	11/17/2011 8:55 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/6/2011 8:24 AM
				EPA_TO15-Volatile Organic Compounds			12/6/2011 9:41 PM
1111752-040B	VA0910	11/17/2011 8:55 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/8/2011 12:34 PM
1111752-041A	VA0911	11/17/2011 9:22 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/6/2011 3:08 PM
				EPA_TO15-Volatile Organic Compounds			12/6/2011 3:46 PM
1111752-041B	VA0911	11/17/2011 9:22 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/8/2011 12:57 PM
1111752-042A	VA0912	11/17/2011 9:55 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/6/2011 3:51 PM
				EPA_TO15-Volatile Organic Compounds			12/6/2011 10:22 PM
1111752-042B	VA0912	11/17/2011 9:55 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/8/2011 1:16 PM
1111752-043A	VA0913	11/17/2011 9:55 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/6/2011 9:13 AM
				EPA_TO15-Volatile Organic Compounds			12/6/2011 11:10 PM
1111752-043B	VA0913	11/17/2011 9:55 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/8/2011 1:43 PM
1111752-044A	VA0914	11/17/2011 10:46 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/13/2011 12:48 PM
				EPA_TO15-Volatile Organic Compounds			12/6/2011 11:51 PM
1111752-044B	VA0914	11/17/2011 10:46 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/8/2011 2:05 PM

RTI Laboratories - DATES REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1111752-045A	VA7915	11/17/2011 11:28 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/7/2011 11:01 PM
				EPA_TO15-Volatile Organic Compounds			12/7/2011 12:32 AM
1111752-045B	VA7915	11/17/2011 11:28 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/8/2011 2:27 PM
1111752-046A	VA7916	11/17/2011 12:11 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			12/7/2011 11:43 PM
				EPA_TO15-Volatile Organic Compounds			12/7/2011 1:13 AM
1111752-046B	VA7916	11/17/2011 12:11 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			12/8/2011 3:00 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/8/2011 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-001	**Matrix:**	Air
Client Sample ID:	VA8058-TB		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	12/3/2011 3:25 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	12/3/2011 3:25 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	12/3/2011 3:25 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	12/3/2011 3:25 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	12/3/2011 3:25 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	12/3/2011 3:25 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	12/3/2011 3:25 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	12/3/2011 3:25 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	12/3/2011 3:25 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	12/3/2011 3:25 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	12/3/2011 3:25 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	12/3/2011 3:25 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	12/3/2011 3:25 AM
1,3-Butadiene	ND	40	U	ppbv	40	12/3/2011 3:25 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	12/3/2011 3:25 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	12/3/2011 3:25 AM
2-Butanone	ND	40	U	ppbv	40	12/3/2011 3:25 AM
2-Hexanone	ND	40	U	ppbv	40	12/3/2011 3:25 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Acetone	42	40		ppbv	40	12/3/2011 3:25 AM
Benzene	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Benzyl chloride	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Bromodichloromethane	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Bromoform	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Bromomethane	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Carbon disulfide	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Carbon tetrachloride	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Chlorobenzene	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Chlorodibromomethane	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Chloroethane	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Chloroform	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Chloromethane	ND	40	U	ppbv	40	12/3/2011 3:25 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	12/3/2011 3:25 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Cyclohexane	52	80	J	ppbv	40	12/3/2011 3:25 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Ethyl acetate	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Ethylbenzene	ND	80	U	ppbv	40	12/3/2011 3:25 AM
Heptane	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	12/3/2011 3:25 AM
m,p-Xylene	ND	80	U	ppbv	40	12/3/2011 3:25 AM
Methylene chloride	ND	200	U	ppbv	40	12/3/2011 3:25 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/8/2011 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-001	**Matrix:**	Air
Client Sample ID:	VA8058-TB		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
n-Hexane	56	80	J	ppbv	40	12/3/2011 3:25 AM
Naphthalene	ND	40	U	ppbv	40	12/3/2011 3:25 AM
o-Xylene	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Propylene	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Styrene	ND	40	U	ppbv	40	12/3/2011 3:25 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Tetrachloroethene	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Tetrahydrofuran	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Toluene	43	40		ppbv	40	12/3/2011 3:25 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	12/3/2011 3:25 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Trichloroethene	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Vinyl acetate	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Vinyl chloride	ND	40	U	ppbv	40	12/3/2011 3:25 AM
Xylenes, Total	ND	120	U	ppbv	40	12/3/2011 3:25 AM
Surr: 4-Bromofluorobenzene	112	70-130		%REC	40	12/3/2011 3:25 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/8/2011 12:47:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-002	**Matrix:**	Air
Client Sample ID:	VA0797		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.30	0.10		%	1	12/6/2011 11:20 AM
Carbon Monoxide	ND	0.10	U	%	1	12/6/2011 11:20 AM
Methane	ND	0.50	U	%	1	12/6/2011 11:20 AM
Nitrogen	79	0.10		%	1	12/6/2011 11:20 AM
Oxygen	21	0.10		%	1	12/6/2011 11:20 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	12/3/2011 4:13 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	12/3/2011 4:13 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	12/3/2011 4:13 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	12/3/2011 4:13 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	12/3/2011 4:13 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	12/3/2011 4:13 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	12/3/2011 4:13 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	12/3/2011 4:13 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	12/3/2011 4:13 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	12/3/2011 4:13 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	12/3/2011 4:13 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	12/3/2011 4:13 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	12/3/2011 4:13 AM
1,3-Butadiene	ND	400	U	ppbv	400	12/3/2011 4:13 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	12/3/2011 4:13 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	12/3/2011 4:13 AM
2-Butanone	ND	400	U	ppbv	400	12/3/2011 4:13 AM
2-Hexanone	ND	400	U	ppbv	400	12/3/2011 4:13 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	12/3/2011 4:13 AM
Acetone	440	400		ppbv	400	12/3/2011 4:13 AM
Benzene	ND	400	U	ppbv	400	12/3/2011 4:13 AM
Benzyl chloride	ND	400	U	ppbv	400	12/3/2011 4:13 AM
Bromodichloromethane	ND	400	U	ppbv	400	12/3/2011 4:13 AM
Bromoform	ND	400	U	ppbv	400	12/3/2011 4:13 AM
Bromomethane	ND	400	U	ppbv	400	12/3/2011 4:13 AM
Carbon disulfide	ND	400	U	ppbv	400	12/3/2011 4:13 AM
Carbon tetrachloride	ND	400	U	ppbv	400	12/3/2011 4:13 AM
Chlorobenzene	ND	400	U	ppbv	400	12/3/2011 4:13 AM
Chlorodibromomethane	ND	400	U	ppbv	400	12/3/2011 4:13 AM
Chloroethane	ND	400	U	ppbv	400	12/3/2011 4:13 AM
Chloroform	ND	400	U	ppbv	400	12/3/2011 4:13 AM
Chloromethane	ND	400	U	ppbv	400	12/3/2011 4:13 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	12/3/2011 4:13 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	12/3/2011 4:13 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/8/2011 12:47:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-002	**Matrix:**	Air
Client Sample ID:	VA0797		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	440	800	J	ppbv	400	12/3/2011 4:13 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	12/3/2011 4:13 AM
Ethyl acetate	ND	400	U	ppbv	400	12/3/2011 4:13 AM
Ethylbenzene	520	800	J	ppbv	400	12/3/2011 4:13 AM
Heptane	620	400		ppbv	400	12/3/2011 4:13 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	12/3/2011 4:13 AM
m,p-Xylene	1,900	800		ppbv	400	12/3/2011 4:13 AM
Methylene chloride	960	2,000	J	ppbv	400	12/3/2011 4:13 AM
n-Hexane	590	800	J	ppbv	400	12/3/2011 4:13 AM
Naphthalene	ND	400	U	ppbv	400	12/3/2011 4:13 AM
o-Xylene	600	400		ppbv	400	12/3/2011 4:13 AM
Propylene	ND	400	U	ppbv	400	12/3/2011 4:13 AM
Styrene	ND	400	U	ppbv	400	12/3/2011 4:13 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	12/3/2011 4:13 AM
Tetrachloroethene	ND	400	U	ppbv	400	12/3/2011 4:13 AM
Tetrahydrofuran	ND	400	U	ppbv	400	12/3/2011 4:13 AM
Toluene	2,600	400		ppbv	400	12/3/2011 4:13 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	12/3/2011 4:13 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	12/3/2011 4:13 AM
Trichloroethene	ND	400	U	ppbv	400	12/3/2011 4:13 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	12/3/2011 4:13 AM
Vinyl acetate	ND	400	U	ppbv	400	12/3/2011 4:13 AM
Vinyl chloride	ND	400	U	ppbv	400	12/3/2011 4:13 AM
Xylenes, Total	2,500	1,200		ppbv	400	12/3/2011 4:13 AM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	400	12/3/2011 4:13 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	170,000	47,000		µg/m³	400	11/29/2011 1:56 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	11/29/2011 1:56 AM
C9-C12 Aliphatic Hydrocarbons	29,000	76,000	J	µg/m³	400	11/29/2011 1:56 AM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	400	11/29/2011 1:56 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/8/2011 1:22:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-003	**Matrix:**	Air
Client Sample ID:	VA0798		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.52	0.10		%	1	12/6/2011 11:38 AM
Carbon Monoxide	ND	0.10	U	%	1	12/6/2011 11:38 AM
Methane	ND	0.50	U	%	1	12/6/2011 11:38 AM
Nitrogen	79	0.10		%	1	12/6/2011 11:38 AM
Oxygen	20	0.10		%	1	12/6/2011 11:38 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	12/3/2011 5:00 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	12/3/2011 5:00 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	12/3/2011 5:00 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	12/3/2011 5:00 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	12/3/2011 5:00 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	12/3/2011 5:00 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	12/3/2011 5:00 AM
1,2,4-Trimethylbenzene	730	400		ppbv	400	12/3/2011 5:00 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	12/3/2011 5:00 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	12/3/2011 5:00 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	12/3/2011 5:00 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	12/3/2011 5:00 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	12/3/2011 5:00 AM
1,3-Butadiene	ND	400	U	ppbv	400	12/3/2011 5:00 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	12/3/2011 5:00 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	12/3/2011 5:00 AM
2-Butanone	ND	400	U	ppbv	400	12/3/2011 5:00 AM
2-Hexanone	ND	400	U	ppbv	400	12/3/2011 5:00 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	12/3/2011 5:00 AM
Acetone	650	400		ppbv	400	12/3/2011 5:00 AM
Benzene	2,100	800		ppbv	800	12/5/2011 12:27 PM
Benzyl chloride	ND	400	U	ppbv	400	12/3/2011 5:00 AM
Bromodichloromethane	ND	400	U	ppbv	400	12/3/2011 5:00 AM
Bromoform	ND	400	U	ppbv	400	12/3/2011 5:00 AM
Bromomethane	ND	400	U	ppbv	400	12/3/2011 5:00 AM
Carbon disulfide	ND	400	U	ppbv	400	12/3/2011 5:00 AM
Carbon tetrachloride	ND	400	U	ppbv	400	12/3/2011 5:00 AM
Chlorobenzene	ND	400	U	ppbv	400	12/3/2011 5:00 AM
Chlorodibromomethane	ND	400	U	ppbv	400	12/3/2011 5:00 AM
Chloroethane	ND	400	U	ppbv	400	12/3/2011 5:00 AM
Chloroform	ND	400	U	ppbv	400	12/3/2011 5:00 AM
Chloromethane	ND	400	U	ppbv	400	12/3/2011 5:00 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	12/3/2011 5:00 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	12/3/2011 5:00 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/8/2011 1:22:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-003	**Matrix:**	Air
Client Sample ID:	VA0798		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	4,700	1,600		ppbv	800	12/5/2011 12:27 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	12/3/2011 5:00 AM
Ethyl acetate	ND	400	U	ppbv	400	12/3/2011 5:00 AM
Ethylbenzene	2,000	800		ppbv	400	12/3/2011 5:00 AM
Heptane	16,000	400		ppbv	400	12/3/2011 5:00 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	12/3/2011 5:00 AM
m,p-Xylene	5,400	800		ppbv	400	12/3/2011 5:00 AM
Methylene chloride	2,000	2,000	J	ppbv	400	12/3/2011 5:00 AM
n-Hexane	3,700	1,600		ppbv	800	12/5/2011 12:27 PM
Naphthalene	ND	400	U	ppbv	400	12/3/2011 5:00 AM
o-Xylene	1,500	400		ppbv	400	12/3/2011 5:00 AM
Propylene	1,500	400		ppbv	400	12/3/2011 5:00 AM
Styrene	ND	400	U	ppbv	400	12/3/2011 5:00 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	12/3/2011 5:00 AM
Tetrachloroethene	ND	400	U	ppbv	400	12/3/2011 5:00 AM
Tetrahydrofuran	ND	400	U	ppbv	400	12/3/2011 5:00 AM
Toluene	7,800	800		ppbv	800	12/5/2011 12:27 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	12/3/2011 5:00 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	12/3/2011 5:00 AM
Trichloroethene	ND	400	U	ppbv	400	12/3/2011 5:00 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	12/3/2011 5:00 AM
Vinyl acetate	ND	400	U	ppbv	400	12/3/2011 5:00 AM
Vinyl chloride	ND	400	U	ppbv	400	12/3/2011 5:00 AM
Xylenes, Total	7,000	1,200		ppbv	400	12/3/2011 5:00 AM
Surr: 4-Bromofluorobenzene	108	70-130		%REC	400	12/3/2011 5:00 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	210,000	47,000		µg/m³	400	11/29/2011 2:45 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	11/29/2011 2:45 AM
C9-C12 Aliphatic Hydrocarbons	31,000	76,000	J	µg/m³	400	11/29/2011 2:45 AM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	400	11/29/2011 2:45 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/8/2011 1:58:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-004	**Matrix:**	Air
Client Sample ID:	VA0799		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.57	0.10		%	1	12/6/2011 11:58 AM
Carbon Monoxide	ND	0.10	U	%	1	12/6/2011 11:58 AM
Methane	ND	0.50	U	%	1	12/6/2011 11:58 AM
Nitrogen	81	0.10		%	1	12/6/2011 11:58 AM
Oxygen	18	0.10		%	1	12/6/2011 11:58 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	12/3/2011 5:48 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	12/3/2011 5:48 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	12/3/2011 5:48 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	12/3/2011 5:48 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	12/3/2011 5:48 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	12/3/2011 5:48 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	12/3/2011 5:48 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	12/3/2011 5:48 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	12/3/2011 5:48 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	12/3/2011 5:48 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	12/3/2011 5:48 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	12/3/2011 5:48 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	12/3/2011 5:48 AM
1,3-Butadiene	ND	800	U	ppbv	800	12/3/2011 5:48 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	12/3/2011 5:48 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	12/3/2011 5:48 AM
2-Butanone	ND	800	U	ppbv	800	12/3/2011 5:48 AM
2-Hexanone	ND	800	U	ppbv	800	12/3/2011 5:48 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Acetone	1,400	800		ppbv	800	12/3/2011 5:48 AM
Benzene	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Benzyl chloride	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Bromodichloromethane	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Bromoform	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Bromomethane	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Carbon disulfide	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Carbon tetrachloride	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Chlorobenzene	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Chlorodibromomethane	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Chloroethane	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Chloroform	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Chloromethane	ND	800	U	ppbv	800	12/3/2011 5:48 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	12/3/2011 5:48 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	12/3/2011 5:48 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/8/2011 1:58:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-004	**Matrix:**	Air
Client Sample ID:	VA0799		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,500	1,600	J	ppbv	800	12/3/2011 5:48 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Ethyl acetate	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Ethylbenzene	ND	1,600	U	ppbv	800	12/3/2011 5:48 AM
Heptane	2,300	800		ppbv	800	12/3/2011 5:48 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	12/3/2011 5:48 AM
m,p-Xylene	2,400	1,600		ppbv	800	12/3/2011 5:48 AM
Methylene chloride	4,200	4,000		ppbv	800	12/3/2011 5:48 AM
n-Hexane	1,900	1,600		ppbv	800	12/3/2011 5:48 AM
Naphthalene	ND	800	U	ppbv	800	12/3/2011 5:48 AM
o-Xylene	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Propylene	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Styrene	ND	800	U	ppbv	800	12/3/2011 5:48 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Tetrachloroethene	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Tetrahydrofuran	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Toluene	4,500	800		ppbv	800	12/3/2011 5:48 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	12/3/2011 5:48 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Trichloroethene	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Vinyl acetate	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Vinyl chloride	ND	800	U	ppbv	800	12/3/2011 5:48 AM
Xylenes, Total	2,400	2,400		ppbv	800	12/3/2011 5:48 AM
Surr: 4-Bromofluorobenzene	110	70-130		%REC	800	12/3/2011 5:48 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	170,000	47,000		µg/m³	400	12/1/2011 5:38 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	12/1/2011 5:38 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	12/1/2011 5:38 AM
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	400	12/1/2011 5:38 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/8/2011 2:47:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-005	**Matrix:**	Air
Client Sample ID:	VA0800		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.81	0.10		%	1	12/6/2011 12:17 PM
Carbon Monoxide	ND	0.10	U	%	1	12/6/2011 12:17 PM
Methane	ND	0.50	U	%	1	12/6/2011 12:17 PM
Nitrogen	81	0.10		%	1	12/6/2011 12:17 PM
Oxygen	18	0.10		%	1	12/6/2011 12:17 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
2-Butanone	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
2-Hexanone	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
Acetone	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
Benzene	47,000	8,000		ppbv	8000	12/3/2011 6:28 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
Bromoform	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
Bromomethane	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
Chloroethane	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
Chloroform	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
Chloromethane	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/8/2011 2:47:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-005	**Matrix:**	Air
Client Sample ID:	VA0800		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	140,000	16,000		ppbv	8000	12/3/2011 6:28 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	12/3/2011 6:28 AM
Heptane	65,000	8,000		ppbv	8000	12/3/2011 6:28 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	12/3/2011 6:28 AM
m,p-Xylene	ND	16,000	U	ppbv	8000	12/3/2011 6:28 AM
Methylene chloride	ND	40,000	U	ppbv	8000	12/3/2011 6:28 AM
n-Hexane	160,000	16,000		ppbv	8000	12/3/2011 6:28 AM
Naphthalene	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
o-Xylene	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
Propylene	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
Styrene	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
Tetrahydrofuran	39,000	8,000		ppbv	8000	12/3/2011 6:28 AM
Toluene	84,000	8,000		ppbv	8000	12/3/2011 6:28 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
Trichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	12/3/2011 6:28 AM
Xylenes, Total	ND	24,000	U	ppbv	8000	12/3/2011 6:28 AM
Surr: 4-Bromofluorobenzene	113	70-130		%REC	8000	12/3/2011 6:28 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	9,300,000	940,000		µg/m³	8000	11/28/2011 5:57 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	11/28/2011 5:57 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	11/28/2011 5:57 PM
Surr: 4-Bromofluorobenzene	94.2	70-130		%REC	8000	11/28/2011 5:57 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/8/2011 3:26:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-006	**Matrix:**	Air
Client Sample ID:	VA0801		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	0.77	0.10		%	1	12/6/2011 12:35 PM
Carbon Monoxide	ND	0.10	U	%	1	12/6/2011 12:35 PM
Methane	ND	0.50	U	%	1	12/6/2011 12:35 PM
Nitrogen	81	0.10		%	1	12/6/2011 12:35 PM
Oxygen	18	0.10		%	1	12/6/2011 12:35 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
2-Butanone	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
2-Hexanone	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
Acetone	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
Benzene	170,000	8,000		ppbv	8000	12/3/2011 7:50 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
Bromoform	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
Bromomethane	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
Chloroethane	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
Chloroform	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
Chloromethane	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/8/2011 3:26:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-006	**Matrix:**	Air
Client Sample ID:	VA0801		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	270,000	16,000		ppbv	8000	12/3/2011 7:50 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
Ethylbenzene	8,700	16,000	J	ppbv	8000	12/3/2011 7:50 AM
Heptane	140,000	8,000		ppbv	8000	12/3/2011 7:50 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	12/3/2011 7:50 AM
m,p-Xylene	18,000	16,000		ppbv	8000	12/3/2011 7:50 AM
Methylene chloride	ND	40,000	U	ppbv	8000	12/3/2011 7:50 AM
n-Hexane	270,000	16,000		ppbv	8000	12/3/2011 7:50 AM
Naphthalene	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
o-Xylene	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
Propylene	14,000	8,000		ppbv	8000	12/3/2011 7:50 AM
Styrene	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
Toluene	270,000	8,000		ppbv	8000	12/3/2011 7:50 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
Trichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	12/3/2011 7:50 AM
Xylenes, Total	18,000	24,000	J	ppbv	8000	12/3/2011 7:50 AM
Surr: 4-Bromofluorobenzene	113	70-130		%REC	8000	12/3/2011 7:50 AM
Mass APH Air		**Method:**				**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	13,000,000	940,000		µg/m³	8000	11/28/2011 6:40 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	11/28/2011 6:40 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	11/28/2011 6:40 PM
Surr: 4-Bromofluorobenzene	93.0	70-130		%REC	8000	11/28/2011 6:40 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/8/2011 4:06:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-007	**Matrix:**	Air
Client Sample ID:	VA0802		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.98	0.10		%	1	12/6/2011 12:55 PM
Carbon Monoxide	ND	0.10	U	%	1	12/6/2011 12:55 PM
Methane	ND	0.50	U	%	1	12/6/2011 12:55 PM
Nitrogen	80	0.10		%	1	12/6/2011 12:55 PM
Oxygen	19	0.10		%	1	12/6/2011 12:55 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
1,3-Butadiene	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
2-Butanone	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
2-Hexanone	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
Acetone	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
Benzene	660,000	20,000		ppbv	20000	12/3/2011 8:31 AM
Benzyl chloride	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
Bromodichloromethane	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
Bromoform	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
Bromomethane	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
Carbon disulfide	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
Chlorobenzene	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
Chloroethane	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
Chloroform	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
Chloromethane	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/8/2011 4:06:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-007	**Matrix:**	Air
Client Sample ID:	VA0802		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	940,000	40,000		ppbv	20000	12/3/2011 8:31 AM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
Ethyl acetate	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
Ethylbenzene	23,000	40,000	J	ppbv	20000	12/3/2011 8:31 AM
Heptane	610,000	20,000		ppbv	20000	12/3/2011 8:31 AM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	12/3/2011 8:31 AM
m,p-Xylene	69,000	40,000		ppbv	20000	12/3/2011 8:31 AM
Methylene chloride	ND	100,000	U	ppbv	20000	12/3/2011 8:31 AM
n-Hexane	1,000,000	40,000		ppbv	20000	12/3/2011 8:31 AM
Naphthalene	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
o-Xylene	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
Propylene	31,000	20,000		ppbv	20000	12/3/2011 8:31 AM
Styrene	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
Tetrachloroethene	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
Toluene	880,000	20,000		ppbv	20000	12/3/2011 8:31 AM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
Trichloroethene	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
Vinyl acetate	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
Vinyl chloride	ND	20,000	U	ppbv	20000	12/3/2011 8:31 AM
Xylenes, Total	69,000	60,000		ppbv	20000	12/3/2011 8:31 AM
Surr: 4-Bromofluorobenzene	112	70-130		%REC	20000	12/3/2011 8:31 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	36,000,000	2,300,000		µg/m³	20000	12/1/2011 3:25 AM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	12/1/2011 3:25 AM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	12/1/2011 3:25 AM
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	20000	12/1/2011 3:25 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/9/2011 2:32:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-008	**Matrix:**	Air
Client Sample ID:	VA0704		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	2.9	0.10		%	1	12/6/2011 1:14 PM
Carbon Monoxide	ND	0.10	U	%	1	12/6/2011 1:14 PM
Methane	ND	0.50	U	%	1	12/6/2011 1:14 PM
Nitrogen	80	0.10		%	1	12/6/2011 1:14 PM
Oxygen	17	0.10		%	1	12/6/2011 1:14 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
2-Butanone	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
2-Hexanone	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Acetone	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Benzene	22,000	8,000		ppbv	8000	12/3/2011 9:12 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Bromoform	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Bromomethane	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Chloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Chloroform	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Chloromethane	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/9/2011 2:32:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-008	**Matrix:**	Air
Client Sample ID:	VA0704		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	40,000	16,000		ppbv	8000	12/3/2011 9:12 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	12/3/2011 9:12 AM
Heptane	39,000	8,000		ppbv	8000	12/3/2011 9:12 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	12/3/2011 9:12 AM
m,p-Xylene	9,800	16,000	J	ppbv	8000	12/3/2011 9:12 AM
Methylene chloride	ND	40,000	U	ppbv	8000	12/3/2011 9:12 AM
n-Hexane	29,000	16,000		ppbv	8000	12/3/2011 9:12 AM
Naphthalene	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
o-Xylene	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Propylene	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Styrene	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Toluene	54,000	8,000		ppbv	8000	12/3/2011 9:12 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Trichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	12/3/2011 9:12 AM
Xylenes, Total	9,800	24,000	J	ppbv	8000	12/3/2011 9:12 AM
Surr: 4-Bromofluorobenzene	112	70-130		%REC	8000	12/3/2011 9:12 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,500,000	94,000		µg/m³	800	12/1/2011 6:41 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	12/1/2011 6:41 PM
C9-C12 Aliphatic Hydrocarbons	55,000	150,000	J	µg/m³	800	12/1/2011 6:41 PM
Surr: 4-Bromofluorobenzene	99.2	70-130		%REC	800	12/1/2011 6:41 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/9/2011 2:57:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-009	**Matrix:**	Air
Client Sample ID:	VA0705		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	4.8	0.10		%	1	12/6/2011 1:37 PM
Carbon Monoxide	ND	0.10	U	%	1	12/6/2011 1:37 PM
Methane	ND	0.50	U	%	1	12/6/2011 1:37 PM
Nitrogen	82	0.10		%	1	12/6/2011 1:37 PM
Oxygen	14	0.10		%	1	12/6/2011 1:37 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
2-Butanone	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
2-Hexanone	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Acetone	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Benzene	18,000	8,000		ppbv	8000	12/3/2011 9:53 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Bromoform	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Bromomethane	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Chloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Chloroform	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Chloromethane	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/9/2011 2:57:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-009	**Matrix:**	Air
Client Sample ID:	VA0705		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	63,000	16,000		ppbv	8000	12/3/2011 9:53 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	12/3/2011 9:53 AM
Heptane	29,000	8,000		ppbv	8000	12/3/2011 9:53 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	12/3/2011 9:53 AM
m,p-Xylene	ND	16,000	U	ppbv	8000	12/3/2011 9:53 AM
Methylene chloride	ND	40,000	U	ppbv	8000	12/3/2011 9:53 AM
n-Hexane	61,000	16,000		ppbv	8000	12/3/2011 9:53 AM
Naphthalene	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
o-Xylene	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Propylene	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Styrene	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Toluene	37,000	8,000		ppbv	8000	12/3/2011 9:53 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Trichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	12/3/2011 9:53 AM
Xylenes, Total	ND	24,000	U	ppbv	8000	12/3/2011 9:53 AM
Surr: 4-Bromofluorobenzene	113	70-130		%REC	8000	12/3/2011 9:53 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	890,000	94,000		µg/m³	800	12/1/2011 7:27 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	12/1/2011 7:27 PM
C9-C12 Aliphatic Hydrocarbons	45,000	150,000	J	µg/m³	800	12/1/2011 7:27 PM
Surr: 4-Bromofluorobenzene	97.1	70-130		%REC	800	12/1/2011 7:27 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/9/2011 3:26:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-010	**Matrix:**	Air
Client Sample ID:	VA0706		

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	12/6/2011 2:23 PM
Carbon Monoxide	ND	0.10	U	%	1	12/6/2011 2:23 PM
Methane	ND	0.50	U	%	1	12/6/2011 2:23 PM
Nitrogen	79	0.10		%	1	12/6/2011 2:23 PM
Oxygen	21	0.10		%	1	12/6/2011 2:23 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	80	U	ppbv	80	12/5/2011 3:28 PM
1,1,2,2-Tetrachloroethane	ND	80	U	ppbv	80	12/5/2011 3:28 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	80	U	ppbv	80	12/5/2011 3:28 PM
1,1,2-Trichloroethane	ND	80	U	ppbv	80	12/5/2011 3:28 PM
1,1-Dichloroethane	ND	80	U	ppbv	80	12/5/2011 3:28 PM
1,1-Dichloroethene	ND	80	U	ppbv	80	12/5/2011 3:28 PM
1,2,4-Trichlorobenzene	ND	80	U	ppbv	80	12/5/2011 3:28 PM
1,2,4-Trimethylbenzene	280	80		ppbv	80	12/5/2011 3:28 PM
1,2-Dibromoethane	ND	80	U	ppbv	80	12/5/2011 3:28 PM
1,2-Dichlorobenzene	ND	80	U	ppbv	80	12/5/2011 3:28 PM
1,2-Dichloroethane	ND	80	U	ppbv	80	12/5/2011 3:28 PM
1,2-Dichloropropane	ND	80	U	ppbv	80	12/5/2011 3:28 PM
1,3,5-Trimethylbenzene	130	80		ppbv	80	12/5/2011 3:28 PM
1,3-Butadiene	ND	80	U	ppbv	80	12/5/2011 3:28 PM
1,3-Dichlorobenzene	ND	80	U	ppbv	80	12/5/2011 3:28 PM
1,4-Dichlorobenzene	ND	80	U	ppbv	80	12/5/2011 3:28 PM
2-Butanone	ND	80	U	ppbv	80	12/5/2011 3:28 PM
2-Hexanone	ND	80	U	ppbv	80	12/5/2011 3:28 PM
4-Methyl-2-pentanone	ND	80	U	ppbv	80	12/5/2011 3:28 PM
Acetone	ND	80	U	ppbv	80	12/5/2011 3:28 PM
Benzene	1,500	80		ppbv	80	12/5/2011 3:28 PM
Benzyl chloride	ND	80	U	ppbv	80	12/5/2011 3:28 PM
Bromodichloromethane	ND	80	U	ppbv	80	12/5/2011 3:28 PM
Bromoform	ND	80	U	ppbv	80	12/5/2011 3:28 PM
Bromomethane	ND	80	U	ppbv	80	12/5/2011 3:28 PM
Carbon disulfide	ND	80	U	ppbv	80	12/5/2011 3:28 PM
Carbon tetrachloride	ND	80	U	ppbv	80	12/5/2011 3:28 PM
Chlorobenzene	ND	80	U	ppbv	80	12/5/2011 3:28 PM
Chlorodibromomethane	ND	80	U	ppbv	80	12/5/2011 3:28 PM
Chloroethane	ND	80	U	ppbv	80	12/5/2011 3:28 PM
Chloroform	ND	80	U	ppbv	80	12/5/2011 3:28 PM
Chloromethane	ND	80	U	ppbv	80	12/5/2011 3:28 PM
cis-1,2-Dichloroethene	ND	80	U	ppbv	80	12/5/2011 3:28 PM
cis-1,3-dichloropropene	ND	80	U	ppbv	80	12/5/2011 3:28 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/9/2011 3:26:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-010	**Matrix:**	Air
Client Sample ID:	VA0706		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,800	160		ppbv	80	12/5/2011 3:28 PM
Dichlorodifluoromethane	ND	80	U	ppbv	80	12/5/2011 3:28 PM
Ethyl acetate	ND	80	U	ppbv	80	12/5/2011 3:28 PM
Ethylbenzene	700	160		ppbv	80	12/5/2011 3:28 PM
Heptane	2,900	80		ppbv	80	12/5/2011 3:28 PM
Hexachlorobutadiene	ND	160	U	ppbv	80	12/5/2011 3:28 PM
m,p-Xylene	2,700	160		ppbv	80	12/5/2011 3:28 PM
Methylene chloride	ND	400	U	ppbv	80	12/5/2011 3:28 PM
n-Hexane	2,200	160		ppbv	80	12/5/2011 3:28 PM
Naphthalene	ND	80	U	ppbv	80	12/5/2011 3:28 PM
o-Xylene	790	80		ppbv	80	12/5/2011 3:28 PM
Propylene	ND	80	U	ppbv	80	12/5/2011 3:28 PM
Styrene	ND	80	U	ppbv	80	12/5/2011 3:28 PM
tert-Butyl Methyl Ether	ND	80	U	ppbv	80	12/5/2011 3:28 PM
Tetrachloroethene	ND	80	U	ppbv	80	12/5/2011 3:28 PM
Tetrahydrofuran	ND	80	U	ppbv	80	12/5/2011 3:28 PM
Toluene	4,500	80		ppbv	80	12/5/2011 3:28 PM
trans-1,2-Dichloroethene	ND	80	U	ppbv	80	12/5/2011 3:28 PM
trans-1,3-dichloropropene	ND	80	U	ppbv	80	12/5/2011 3:28 PM
Trichloroethene	ND	80	U	ppbv	80	12/5/2011 3:28 PM
Trichlorofluoromethane	ND	80	U	ppbv	80	12/5/2011 3:28 PM
Vinyl acetate	ND	80	U	ppbv	80	12/5/2011 3:28 PM
Vinyl chloride	ND	80	U	ppbv	80	12/5/2011 3:28 PM
Xylenes, Total	3,500	240		ppbv	80	12/5/2011 3:28 PM
Surr: 4-Bromofluorobenzene	127	70-130		%REC	80	12/5/2011 3:28 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	330,000	47,000		µg/m³	400	12/1/2011 8:16 PM
C9-C10 Aromatic Hydrocarbons	15,000	53,000	J	µg/m³	400	12/1/2011 8:16 PM
C9-C12 Aliphatic Hydrocarbons	52,000	76,000	J	µg/m³	400	12/1/2011 8:16 PM
Surr: 4-Bromofluorobenzene	98.9	70-130		%REC	400	12/1/2011 8:16 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/9/2011 3:52:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-011	**Matrix:**	Air
Client Sample ID:	VA0707		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.44	0.10		%	1	12/6/2011 2:45 PM
Carbon Monoxide	ND	0.10	U	%	1	12/6/2011 2:45 PM
Methane	ND	0.50	U	%	1	12/6/2011 2:45 PM
Nitrogen	79	0.10		%	1	12/6/2011 2:45 PM
Oxygen	21	0.10		%	1	12/6/2011 2:45 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	12/3/2011 11:21 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	12/3/2011 11:21 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	12/3/2011 11:21 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	12/3/2011 11:21 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	12/3/2011 11:21 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	12/3/2011 11:21 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	12/3/2011 11:21 AM
1,2,4-Trimethylbenzene	640	400		ppbv	400	12/3/2011 11:21 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	12/3/2011 11:21 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	12/3/2011 11:21 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	12/3/2011 11:21 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	12/3/2011 11:21 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	12/3/2011 11:21 AM
1,3-Butadiene	ND	400	U	ppbv	400	12/3/2011 11:21 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	12/3/2011 11:21 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	12/3/2011 11:21 AM
2-Butanone	ND	400	U	ppbv	400	12/3/2011 11:21 AM
2-Hexanone	ND	400	U	ppbv	400	12/3/2011 11:21 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	12/3/2011 11:21 AM
Acetone	ND	400	U	ppbv	400	12/3/2011 11:21 AM
Benzene	8,700	400		ppbv	400	12/3/2011 11:21 AM
Benzyl chloride	ND	400	U	ppbv	400	12/3/2011 11:21 AM
Bromodichloromethane	ND	400	U	ppbv	400	12/3/2011 11:21 AM
Bromoform	ND	400	U	ppbv	400	12/3/2011 11:21 AM
Bromomethane	ND	400	U	ppbv	400	12/3/2011 11:21 AM
Carbon disulfide	ND	400	U	ppbv	400	12/3/2011 11:21 AM
Carbon tetrachloride	ND	400	U	ppbv	400	12/3/2011 11:21 AM
Chlorobenzene	ND	400	U	ppbv	400	12/3/2011 11:21 AM
Chlorodibromomethane	ND	400	U	ppbv	400	12/3/2011 11:21 AM
Chloroethane	ND	400	U	ppbv	400	12/3/2011 11:21 AM
Chloroform	ND	400	U	ppbv	400	12/3/2011 11:21 AM
Chloromethane	ND	400	U	ppbv	400	12/3/2011 11:21 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	12/3/2011 11:21 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	12/3/2011 11:21 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/9/2011 3:52:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-011	**Matrix:**	Air
Client Sample ID:	VA0707		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	11,000	800		ppbv	400	12/3/2011 11:21 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	12/3/2011 11:21 AM
Ethyl acetate	ND	400	U	ppbv	400	12/3/2011 11:21 AM
Ethylbenzene	1,600	800		ppbv	400	12/3/2011 11:21 AM
Heptane	11,000	400		ppbv	400	12/3/2011 11:21 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	12/3/2011 11:21 AM
m,p-Xylene	5,900	800		ppbv	400	12/3/2011 11:21 AM
Methylene chloride	1,200	2,000	J	ppbv	400	12/3/2011 11:21 AM
n-Hexane	7,700	800		ppbv	400	12/3/2011 11:21 AM
Naphthalene	ND	400	U	ppbv	400	12/3/2011 11:21 AM
o-Xylene	1,600	400		ppbv	400	12/3/2011 11:21 AM
Propylene	ND	400	U	ppbv	400	12/3/2011 11:21 AM
Styrene	ND	400	U	ppbv	400	12/3/2011 11:21 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	12/3/2011 11:21 AM
Tetrachloroethene	ND	400	U	ppbv	400	12/3/2011 11:21 AM
Tetrahydrofuran	ND	400	U	ppbv	400	12/3/2011 11:21 AM
Toluene	21,000	400		ppbv	400	12/3/2011 11:21 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	12/3/2011 11:21 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	12/3/2011 11:21 AM
Trichloroethene	ND	400	U	ppbv	400	12/3/2011 11:21 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	12/3/2011 11:21 AM
Vinyl acetate	ND	400	U	ppbv	400	12/3/2011 11:21 AM
Vinyl chloride	ND	400	U	ppbv	400	12/3/2011 11:21 AM
Xylenes, Total	7,500	1,200		ppbv	400	12/3/2011 11:21 AM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	400	12/3/2011 11:21 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	580,000	47,000		µg/m³	400	12/1/2011 6:27 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	12/1/2011 6:27 AM
C9-C12 Aliphatic Hydrocarbons	43,000	76,000	J	µg/m³	400	12/1/2011 6:27 AM
Surr: 4-Bromofluorobenzene	95.3	70-130		%REC	400	12/1/2011 6:27 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/9/2011 9:28:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-012	**Matrix:**	Air
Client Sample ID:	VA0824		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.36	0.10		%	1	12/6/2011 3:58 PM
Carbon Monoxide	ND	0.10	U	%	1	12/6/2011 3:58 PM
Methane	ND	0.50	U	%	1	12/6/2011 3:58 PM
Nitrogen	78	0.10		%	1	12/6/2011 3:58 PM
Oxygen	21	0.10		%	1	12/6/2011 3:58 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	12/3/2011 12:09 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	12/3/2011 12:09 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	12/3/2011 12:09 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	12/3/2011 12:09 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	12/3/2011 12:09 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	12/3/2011 12:09 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	12/3/2011 12:09 PM
1,2,4-Trimethylbenzene	560	400		ppbv	400	12/3/2011 12:09 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	12/3/2011 12:09 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	12/3/2011 12:09 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	12/3/2011 12:09 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	12/3/2011 12:09 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	12/3/2011 12:09 PM
1,3-Butadiene	ND	400	U	ppbv	400	12/3/2011 12:09 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	12/3/2011 12:09 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	12/3/2011 12:09 PM
2-Butanone	ND	400	U	ppbv	400	12/3/2011 12:09 PM
2-Hexanone	ND	400	U	ppbv	400	12/3/2011 12:09 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	12/3/2011 12:09 PM
Acetone	450	400		ppbv	400	12/3/2011 12:09 PM
Benzene	3,700	400		ppbv	400	12/3/2011 12:09 PM
Benzyl chloride	ND	400	U	ppbv	400	12/3/2011 12:09 PM
Bromodichloromethane	ND	400	U	ppbv	400	12/3/2011 12:09 PM
Bromoform	ND	400	U	ppbv	400	12/3/2011 12:09 PM
Bromomethane	ND	400	U	ppbv	400	12/3/2011 12:09 PM
Carbon disulfide	ND	400	U	ppbv	400	12/3/2011 12:09 PM
Carbon tetrachloride	ND	400	U	ppbv	400	12/3/2011 12:09 PM
Chlorobenzene	ND	400	U	ppbv	400	12/3/2011 12:09 PM
Chlorodibromomethane	ND	400	U	ppbv	400	12/3/2011 12:09 PM
Chloroethane	ND	400	U	ppbv	400	12/3/2011 12:09 PM
Chloroform	ND	400	U	ppbv	400	12/3/2011 12:09 PM
Chloromethane	ND	400	U	ppbv	400	12/3/2011 12:09 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	12/3/2011 12:09 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	12/3/2011 12:09 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/9/2011 9:28:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-012	**Matrix:**	Air
Client Sample ID:	VA0824		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	3,400	800		ppbv	400	12/3/2011 12:09 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	12/3/2011 12:09 PM
Ethyl acetate	ND	400	U	ppbv	400	12/3/2011 12:09 PM
Ethylbenzene	1,200	800		ppbv	400	12/3/2011 12:09 PM
Heptane	3,500	400		ppbv	400	12/3/2011 12:09 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	12/3/2011 12:09 PM
m,p-Xylene	4,500	800		ppbv	400	12/3/2011 12:09 PM
Methylene chloride	990	2,000	J	ppbv	400	12/3/2011 12:09 PM
n-Hexane	2,100	800		ppbv	400	12/3/2011 12:09 PM
Naphthalene	ND	400	U	ppbv	400	12/3/2011 12:09 PM
o-Xylene	1,300	400		ppbv	400	12/3/2011 12:09 PM
Propylene	ND	400	U	ppbv	400	12/3/2011 12:09 PM
Styrene	ND	400	U	ppbv	400	12/3/2011 12:09 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	12/3/2011 12:09 PM
Tetrachloroethene	ND	400	U	ppbv	400	12/3/2011 12:09 PM
Tetrahydrofuran	ND	400	U	ppbv	400	12/3/2011 12:09 PM
Toluene	16,000	400		ppbv	400	12/3/2011 12:09 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	12/3/2011 12:09 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	12/3/2011 12:09 PM
Trichloroethene	ND	400	U	ppbv	400	12/3/2011 12:09 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	12/3/2011 12:09 PM
Vinyl acetate	ND	400	U	ppbv	400	12/3/2011 12:09 PM
Vinyl chloride	ND	400	U	ppbv	400	12/3/2011 12:09 PM
Xylenes, Total	5,800	1,200		ppbv	400	12/3/2011 12:09 PM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	400	12/3/2011 12:09 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	210,000	47,000		µg/m³	400	11/29/2011 8:41 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	11/29/2011 8:41 AM
C9-C12 Aliphatic Hydrocarbons	34,000	76,000	J	µg/m³	400	11/29/2011 8:41 AM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	400	11/29/2011 8:41 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/9/2011 9:57:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-013	**Matrix:**	Air
Client Sample ID:	VA0825		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.51	0.10		%	1	12/6/2011 4:48 PM
Carbon Monoxide	ND	0.10	U	%	1	12/6/2011 4:48 PM
Methane	ND	0.50	U	%	1	12/6/2011 4:48 PM
Nitrogen	80	0.10		%	1	12/6/2011 4:48 PM
Oxygen	20	0.10		%	1	12/6/2011 4:48 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	12/3/2011 12:56 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	12/3/2011 12:56 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	12/3/2011 12:56 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	12/3/2011 12:56 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	12/3/2011 12:56 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	12/3/2011 12:56 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	12/3/2011 12:56 PM
1,2,4-Trimethylbenzene	440	400		ppbv	400	12/3/2011 12:56 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	12/3/2011 12:56 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	12/3/2011 12:56 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	12/3/2011 12:56 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	12/3/2011 12:56 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	12/3/2011 12:56 PM
1,3-Butadiene	ND	400	U	ppbv	400	12/3/2011 12:56 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	12/3/2011 12:56 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	12/3/2011 12:56 PM
2-Butanone	ND	400	U	ppbv	400	12/3/2011 12:56 PM
2-Hexanone	ND	400	U	ppbv	400	12/3/2011 12:56 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	12/3/2011 12:56 PM
Acetone	410	400		ppbv	400	12/3/2011 12:56 PM
Benzene	2,200	400		ppbv	400	12/3/2011 12:56 PM
Benzyl chloride	ND	400	U	ppbv	400	12/3/2011 12:56 PM
Bromodichloromethane	ND	400	U	ppbv	400	12/3/2011 12:56 PM
Bromoform	ND	400	U	ppbv	400	12/3/2011 12:56 PM
Bromomethane	ND	400	U	ppbv	400	12/3/2011 12:56 PM
Carbon disulfide	ND	400	U	ppbv	400	12/3/2011 12:56 PM
Carbon tetrachloride	ND	400	U	ppbv	400	12/3/2011 12:56 PM
Chlorobenzene	ND	400	U	ppbv	400	12/3/2011 12:56 PM
Chlorodibromomethane	ND	400	U	ppbv	400	12/3/2011 12:56 PM
Chloroethane	ND	400	U	ppbv	400	12/3/2011 12:56 PM
Chloroform	ND	400	U	ppbv	400	12/3/2011 12:56 PM
Chloromethane	ND	400	U	ppbv	400	12/3/2011 12:56 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	12/3/2011 12:56 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	12/3/2011 12:56 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/9/2011 9:57:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-013	**Matrix:**	Air
Client Sample ID:	VA0825		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	3,000	800		ppbv	400	12/3/2011 12:56 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	12/3/2011 12:56 PM
Ethyl acetate	ND	400	U	ppbv	400	12/3/2011 12:56 PM
Ethylbenzene	830	800		ppbv	400	12/3/2011 12:56 PM
Heptane	3,000	400		ppbv	400	12/3/2011 12:56 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	12/3/2011 12:56 PM
m,p-Xylene	3,000	800		ppbv	400	12/3/2011 12:56 PM
Methylene chloride	1,100	2,000	J	ppbv	400	12/3/2011 12:56 PM
n-Hexane	1,800	800		ppbv	400	12/3/2011 12:56 PM
Naphthalene	ND	400	U	ppbv	400	12/3/2011 12:56 PM
o-Xylene	860	400		ppbv	400	12/3/2011 12:56 PM
Propylene	ND	400	U	ppbv	400	12/3/2011 12:56 PM
Styrene	ND	400	U	ppbv	400	12/3/2011 12:56 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	12/3/2011 12:56 PM
Tetrachloroethene	ND	400	U	ppbv	400	12/3/2011 12:56 PM
Tetrahydrofuran	ND	400	U	ppbv	400	12/3/2011 12:56 PM
Toluene	10,000	400		ppbv	400	12/3/2011 12:56 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	12/3/2011 12:56 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	12/3/2011 12:56 PM
Trichloroethene	ND	400	U	ppbv	400	12/3/2011 12:56 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	12/3/2011 12:56 PM
Vinyl acetate	ND	400	U	ppbv	400	12/3/2011 12:56 PM
Vinyl chloride	ND	400	U	ppbv	400	12/3/2011 12:56 PM
Xylenes, Total	3,800	1,200		ppbv	400	12/3/2011 12:56 PM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	400	12/3/2011 12:56 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	210,000	47,000		µg/m³	400	11/29/2011 7:01 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	11/29/2011 7:01 AM
C9-C12 Aliphatic Hydrocarbons	22,000	76,000	J	µg/m³	400	11/29/2011 7:01 AM
Surr: 4-Bromofluorobenzene	99.3	70-130		%REC	400	11/29/2011 7:01 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/9/2011 10:30:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-014	**Matrix:**	Air
Client Sample ID:	VA0826		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.42	0.10		%	1	12/6/2011 5:12 PM
Carbon Monoxide	ND	0.10	U	%	1	12/6/2011 5:12 PM
Methane	ND	0.50	U	%	1	12/6/2011 5:12 PM
Nitrogen	81	0.10		%	1	12/6/2011 5:12 PM
Oxygen	19	0.10		%	1	12/6/2011 5:12 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	80	U	ppbv	80	12/5/2011 1:09 PM
1,1,2,2-Tetrachloroethane	ND	80	U	ppbv	80	12/5/2011 1:09 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	80	U	ppbv	80	12/5/2011 1:09 PM
1,1,2-Trichloroethane	ND	80	U	ppbv	80	12/5/2011 1:09 PM
1,1-Dichloroethane	ND	80	U	ppbv	80	12/5/2011 1:09 PM
1,1-Dichloroethene	ND	80	U	ppbv	80	12/5/2011 1:09 PM
1,2,4-Trichlorobenzene	ND	80	U	ppbv	80	12/5/2011 1:09 PM
1,2,4-Trimethylbenzene	380	80		ppbv	80	12/5/2011 1:09 PM
1,2-Dibromoethane	ND	80	U	ppbv	80	12/5/2011 1:09 PM
1,2-Dichlorobenzene	ND	80	U	ppbv	80	12/5/2011 1:09 PM
1,2-Dichloroethane	ND	80	U	ppbv	80	12/5/2011 1:09 PM
1,2-Dichloropropane	ND	80	U	ppbv	80	12/5/2011 1:09 PM
1,3,5-Trimethylbenzene	160	80		ppbv	80	12/5/2011 1:09 PM
1,3-Butadiene	ND	80	U	ppbv	80	12/5/2011 1:09 PM
1,3-Dichlorobenzene	ND	80	U	ppbv	80	12/5/2011 1:09 PM
1,4-Dichlorobenzene	ND	80	U	ppbv	80	12/5/2011 1:09 PM
2-Butanone	ND	80	U	ppbv	80	12/5/2011 1:09 PM
2-Hexanone	ND	80	U	ppbv	80	12/5/2011 1:09 PM
4-Methyl-2-pentanone	ND	80	U	ppbv	80	12/5/2011 1:09 PM
Acetone	ND	80	U	ppbv	80	12/5/2011 1:09 PM
Benzene	1,400	80		ppbv	80	12/5/2011 1:09 PM
Benzyl chloride	ND	80	U	ppbv	80	12/5/2011 1:09 PM
Bromodichloromethane	ND	80	U	ppbv	80	12/5/2011 1:09 PM
Bromoform	ND	80	U	ppbv	80	12/5/2011 1:09 PM
Bromomethane	ND	80	U	ppbv	80	12/5/2011 1:09 PM
Carbon disulfide	ND	80	U	ppbv	80	12/5/2011 1:09 PM
Carbon tetrachloride	ND	80	U	ppbv	80	12/5/2011 1:09 PM
Chlorobenzene	ND	80	U	ppbv	80	12/5/2011 1:09 PM
Chlorodibromomethane	ND	80	U	ppbv	80	12/5/2011 1:09 PM
Chloroethane	ND	80	U	ppbv	80	12/5/2011 1:09 PM
Chloroform	ND	80	U	ppbv	80	12/5/2011 1:09 PM
Chloromethane	ND	80	U	ppbv	80	12/5/2011 1:09 PM
cis-1,2-Dichloroethene	ND	80	U	ppbv	80	12/5/2011 1:09 PM
cis-1,3-dichloropropene	ND	80	U	ppbv	80	12/5/2011 1:09 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/9/2011 10:30:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-014	**Matrix:**	Air
Client Sample ID:	VA0826		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,100	160		ppbv	80	12/5/2011 1:09 PM
Dichlorodifluoromethane	ND	80	U	ppbv	80	12/5/2011 1:09 PM
Ethyl acetate	ND	80	U	ppbv	80	12/5/2011 1:09 PM
Ethylbenzene	770	160		ppbv	80	12/5/2011 1:09 PM
Heptane	2,500	80		ppbv	80	12/5/2011 1:09 PM
Hexachlorobutadiene	ND	160	U	ppbv	80	12/5/2011 1:09 PM
m,p-Xylene	2,900	160		ppbv	80	12/5/2011 1:09 PM
Methylene chloride	ND	400	U	ppbv	80	12/5/2011 1:09 PM
n-Hexane	1,200	160		ppbv	80	12/5/2011 1:09 PM
Naphthalene	ND	80	U	ppbv	80	12/5/2011 1:09 PM
o-Xylene	860	80		ppbv	80	12/5/2011 1:09 PM
Propylene	ND	80	U	ppbv	80	12/5/2011 1:09 PM
Styrene	ND	80	U	ppbv	80	12/5/2011 1:09 PM
tert-Butyl Methyl Ether	ND	80	U	ppbv	80	12/5/2011 1:09 PM
Tetrachloroethene	ND	80	U	ppbv	80	12/5/2011 1:09 PM
Tetrahydrofuran	ND	80	U	ppbv	80	12/5/2011 1:09 PM
Toluene	5,200	80		ppbv	80	12/5/2011 1:09 PM
trans-1,2-Dichloroethene	ND	80	U	ppbv	80	12/5/2011 1:09 PM
trans-1,3-dichloropropene	ND	80	U	ppbv	80	12/5/2011 1:09 PM
Trichloroethene	ND	80	U	ppbv	80	12/5/2011 1:09 PM
Trichlorofluoromethane	ND	80	U	ppbv	80	12/5/2011 1:09 PM
Vinyl acetate	ND	80	U	ppbv	80	12/5/2011 1:09 PM
Vinyl chloride	ND	80	U	ppbv	80	12/5/2011 1:09 PM
Xylenes, Total	3,800	240		ppbv	80	12/5/2011 1:09 PM
Surr: 4-Bromofluorobenzene	111	70-130		%REC	80	12/5/2011 1:09 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	170,000	47,000		µg/m³	400	11/29/2011 7:51 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	11/29/2011 7:51 AM
C9-C12 Aliphatic Hydrocarbons	27,000	76,000	J	µg/m³	400	11/29/2011 7:51 AM
Surr: 4-Bromofluorobenzene	98.1	70-130		%REC	400	11/29/2011 7:51 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/9/2011 11:10:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-015	**Matrix:**	Air
Client Sample ID:	VA0827		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.35	0.10		%	1	12/6/2011 5:35 PM
Carbon Monoxide	ND	0.10	U	%	1	12/6/2011 5:35 PM
Methane	ND	0.50	U	%	1	12/6/2011 5:35 PM
Nitrogen	79	0.10		%	1	12/6/2011 5:35 PM
Oxygen	20	0.10		%	1	12/6/2011 5:35 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
2-Butanone	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
2-Hexanone	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Acetone	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Benzene	27,000	8,000		ppbv	8000	12/3/2011 2:17 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Bromoform	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Bromomethane	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Chloroethane	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Chloroform	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Chloromethane	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/9/2011 11:10:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-015	**Matrix:**	Air
Client Sample ID:	VA0827		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	93,000	16,000		ppbv	8000	12/3/2011 2:17 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	12/3/2011 2:17 PM
Heptane	51,000	8,000		ppbv	8000	12/3/2011 2:17 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	12/3/2011 2:17 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	12/3/2011 2:17 PM
Methylene chloride	ND	40,000	U	ppbv	8000	12/3/2011 2:17 PM
n-Hexane	76,000	16,000		ppbv	8000	12/3/2011 2:17 PM
Naphthalene	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
o-Xylene	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Propylene	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Styrene	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Toluene	50,000	8,000		ppbv	8000	12/3/2011 2:17 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Trichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	12/3/2011 2:17 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	12/3/2011 2:17 PM
Surr: 4-Bromofluorobenzene	111	70-130		%REC	8000	12/3/2011 2:17 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,600,000	940,000		µg/m³	8000	11/28/2011 10:58 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	11/28/2011 10:58 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	11/28/2011 10:58 PM
Surr: 4-Bromofluorobenzene	93.8	70-130		%REC	8000	11/28/2011 10:58 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/9/2011 12:01:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-016	**Matrix:**	Air
Client Sample ID:	VA0828		

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	12/6/2011 5:57 PM
Carbon Monoxide	ND	0.10	U	%	1	12/6/2011 5:57 PM
Methane	ND	0.50	U	%	1	12/6/2011 5:57 PM
Nitrogen	80	0.10		%	1	12/6/2011 5:57 PM
Oxygen	19	0.10		%	1	12/6/2011 5:57 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
1,1,2,2-Tetrachloroethane	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
1,1,2-Trichloroethane	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
1,1-Dichloroethane	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
1,1-Dichloroethene	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
1,2,4-Trichlorobenzene	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
1,2,4-Trimethylbenzene	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
1,2-Dibromoethane	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
1,2-Dichlorobenzene	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
1,2-Dichloroethane	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
1,2-Dichloropropane	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
1,3,5-Trimethylbenzene	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
1,3-Butadiene	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
1,3-Dichlorobenzene	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
1,4-Dichlorobenzene	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
2-Butanone	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
2-Hexanone	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
4-Methyl-2-pentanone	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Acetone	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Benzene	54,000	16,000		ppbv	16000	12/3/2011 2:58 PM
Benzyl chloride	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Bromodichloromethane	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Bromoform	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Bromomethane	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Carbon disulfide	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Carbon tetrachloride	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Chlorobenzene	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Chlorodibromomethane	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Chloroethane	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Chloroform	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Chloromethane	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
cis-1,2-Dichloroethene	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
cis-1,3-dichloropropene	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/9/2011 12:01:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-016	**Matrix:**	Air
Client Sample ID:	VA0828		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	150,000	32,000		ppbv	16000	12/3/2011 2:58 PM
Dichlorodifluoromethane	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Ethyl acetate	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Ethylbenzene	ND	32,000	U	ppbv	16000	12/3/2011 2:58 PM
Heptane	71,000	16,000		ppbv	16000	12/3/2011 2:58 PM
Hexachlorobutadiene	ND	32,000	U	ppbv	16000	12/3/2011 2:58 PM
m,p-Xylene	ND	32,000	U	ppbv	16000	12/3/2011 2:58 PM
Methylene chloride	ND	80,000	U	ppbv	16000	12/3/2011 2:58 PM
n-Hexane	120,000	32,000		ppbv	16000	12/3/2011 2:58 PM
Naphthalene	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
o-Xylene	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Propylene	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Styrene	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
tert-Butyl Methyl Ether	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Tetrachloroethene	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Tetrahydrofuran	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Toluene	67,000	16,000		ppbv	16000	12/3/2011 2:58 PM
trans-1,2-Dichloroethene	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
trans-1,3-dichloropropene	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Trichloroethene	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Trichlorofluoromethane	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Vinyl acetate	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Vinyl chloride	ND	16,000	U	ppbv	16000	12/3/2011 2:58 PM
Xylenes, Total	ND	48,000	U	ppbv	16000	12/3/2011 2:58 PM
Surr: 4-Bromofluorobenzene	112	70-130		%REC	16000	12/3/2011 2:58 PM
Mass APH Air		**Method:**				**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	5,800,000	940,000		µg/m³	8000	11/28/2011 11:41 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	11/28/2011 11:41 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	11/28/2011 11:41 PM
Surr: 4-Bromofluorobenzene	92.9	70-130		%REC	8000	11/28/2011 11:41 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/9/2011 12:01:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-017	**Matrix:**	Air
Client Sample ID:	VA0829		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.48	0.10		%	1	12/6/2011 6:24 PM
Carbon Monoxide	ND	0.10	U	%	1	12/6/2011 6:24 PM
Methane	ND	0.50	U	%	1	12/6/2011 6:24 PM
Nitrogen	80	0.10		%	1	12/6/2011 6:24 PM
Oxygen	19	0.10		%	1	12/6/2011 6:24 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
2-Butanone	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
2-Hexanone	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
Acetone	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
Benzene	91,000	8,000		ppbv	8000	12/3/2011 3:38 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
Bromoform	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
Bromomethane	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
Chloroethane	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
Chloroform	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
Chloromethane	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/9/2011 12:01:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-017	**Matrix:**	Air
Client Sample ID:	VA0829		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	230,000	16,000		ppbv	8000	12/3/2011 3:38 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	12/3/2011 3:38 PM
Heptane	110,000	8,000		ppbv	8000	12/3/2011 3:38 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	12/3/2011 3:38 PM
m,p-Xylene	12,000	16,000	J	ppbv	8000	12/3/2011 3:38 PM
Methylene chloride	ND	40,000	U	ppbv	8000	12/3/2011 3:38 PM
n-Hexane	200,000	16,000		ppbv	8000	12/3/2011 3:38 PM
Naphthalene	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
o-Xylene	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
Propylene	9,000	8,000		ppbv	8000	12/3/2011 3:38 PM
Styrene	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
Toluene	120,000	8,000		ppbv	8000	12/3/2011 3:38 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
Trichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	12/3/2011 3:38 PM
Xylenes, Total	12,000	24,000	J	ppbv	8000	12/3/2011 3:38 PM
Surr: 4-Bromofluorobenzene	112	70-130		%REC	8000	12/3/2011 3:38 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	4,700,000	940,000		µg/m³	8000	11/29/2011 12:23 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	11/29/2011 12:23 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	11/29/2011 12:23 AM
Surr: 4-Bromofluorobenzene	93.1	70-130		%REC	8000	11/29/2011 12:23 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/9/2011 12:48:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-018	**Matrix:**	Air
Client Sample ID:	VA0830		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.75	0.10		%	1	12/6/2011 6:46 PM
Carbon Monoxide	ND	0.10	U	%	1	12/6/2011 6:46 PM
Methane	ND	0.50	U	%	1	12/6/2011 6:46 PM
Nitrogen	80	0.10		%	1	12/6/2011 6:46 PM
Oxygen	19	0.10		%	1	12/6/2011 6:46 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
1,3-Butadiene	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
2-Butanone	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
2-Hexanone	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
Acetone	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
Benzene	700,000	20,000		ppbv	20000	12/3/2011 4:17 PM
Benzyl chloride	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
Bromodichloromethane	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
Bromoform	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
Bromomethane	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
Carbon disulfide	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
Chlorobenzene	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
Chloroethane	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
Chloroform	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
Chloromethane	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/9/2011 12:48:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-018	**Matrix:**	Air
Client Sample ID:	VA0830		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,100,000	80,000		ppbv	40000	12/5/2011 7:44 PM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
Ethyl acetate	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
Ethylbenzene	28,000	40,000	J	ppbv	20000	12/3/2011 4:17 PM
Heptane	1,000,000	20,000		ppbv	20000	12/3/2011 4:17 PM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	12/3/2011 4:17 PM
m,p-Xylene	88,000	40,000		ppbv	20000	12/3/2011 4:17 PM
Methylene chloride	ND	100,000	U	ppbv	20000	12/3/2011 4:17 PM
n-Hexane	1,100,000	80,000		ppbv	40000	12/5/2011 7:44 PM
Naphthalene	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
o-Xylene	21,000	20,000		ppbv	20000	12/3/2011 4:17 PM
Propylene	29,000	20,000		ppbv	20000	12/3/2011 4:17 PM
Styrene	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
Tetrachloroethene	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
Toluene	990,000	20,000		ppbv	20000	12/3/2011 4:17 PM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
Trichloroethene	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
Vinyl acetate	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
Vinyl chloride	ND	20,000	U	ppbv	20000	12/3/2011 4:17 PM
Xylenes, Total	110,000	60,000		ppbv	20000	12/3/2011 4:17 PM
Surr: 4-Bromofluorobenzene	110	70-130		%REC	20000	12/3/2011 4:17 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	30,000,000	2,300,000		µg/m³	20000	11/30/2011 10:31 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	11/30/2011 10:31 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	11/30/2011 10:31 PM
Surr: 4-Bromofluorobenzene	95.3	70-130		%REC	20000	11/30/2011 10:31 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/10/2011 2:25:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-019	**Matrix:**	Air
Client Sample ID:	VA0838		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.52	0.10		%	1	12/6/2011 7:07 PM
Carbon Monoxide	ND	0.10	U	%	1	12/6/2011 7:07 PM
Methane	ND	0.50	U	%	1	12/6/2011 7:07 PM
Nitrogen	78	0.10		%	1	12/6/2011 7:07 PM
Oxygen	21	0.10		%	1	12/6/2011 7:07 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
1,2,4-Trimethylbenzene	56,000	8,000		ppbv	8000	12/3/2011 5:05 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
1,3,5-Trimethylbenzene	23,000	8,000		ppbv	8000	12/3/2011 5:05 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
2-Butanone	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
2-Hexanone	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
Acetone	26,000	8,000		ppbv	8000	12/3/2011 5:05 PM
Benzene	21,000	8,000		ppbv	8000	12/3/2011 5:05 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
Bromoform	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
Bromomethane	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
Chloroethane	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
Chloroform	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
Chloromethane	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/10/2011 2:25:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-019	**Matrix:**	Air
Client Sample ID:	VA0838		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	33,000	16,000		ppbv	8000	12/3/2011 5:05 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
Ethylbenzene	36,000	16,000		ppbv	8000	12/3/2011 5:05 PM
Heptane	49,000	8,000		ppbv	8000	12/3/2011 5:05 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	12/3/2011 5:05 PM
m,p-Xylene	150,000	16,000		ppbv	8000	12/3/2011 5:05 PM
Methylene chloride	54,000	40,000		ppbv	8000	12/3/2011 5:05 PM
n-Hexane	22,000	16,000		ppbv	8000	12/3/2011 5:05 PM
Naphthalene	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
o-Xylene	52,000	8,000		ppbv	8000	12/3/2011 5:05 PM
Propylene	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
Styrene	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
Toluene	150,000	8,000		ppbv	8000	12/3/2011 5:05 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
Trichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	12/3/2011 5:05 PM
Xylenes, Total	210,000	24,000		ppbv	8000	12/3/2011 5:05 PM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	8000	12/3/2011 5:05 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	290,000	47,000		µg/m³	400	12/1/2011 8:27 AM
C9-C10 Aromatic Hydrocarbons	86,000	53,000		µg/m³	400	12/1/2011 8:27 AM
C9-C12 Aliphatic Hydrocarbons	570,000	76,000		µg/m³	400	12/1/2011 8:27 AM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	400	12/1/2011 8:27 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/10/2011 3:02:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-020	**Matrix:**	Air
Client Sample ID:	VA0839		

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	12/6/2011 7:33 PM
Carbon Monoxide	ND	0.10	U	%	1	12/6/2011 7:33 PM
Methane	ND	0.50	U	%	1	12/6/2011 7:33 PM
Nitrogen	79	0.10		%	1	12/6/2011 7:33 PM
Oxygen	20	0.10		%	1	12/6/2011 7:33 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	12/5/2011 4:10 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	12/5/2011 4:10 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	12/5/2011 4:10 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	12/5/2011 4:10 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	12/5/2011 4:10 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	12/5/2011 4:10 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	12/5/2011 4:10 PM
1,2,4-Trimethylbenzene	49	40		ppbv	40	12/5/2011 4:10 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	12/5/2011 4:10 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	12/5/2011 4:10 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	12/5/2011 4:10 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	12/5/2011 4:10 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	12/5/2011 4:10 PM
1,3-Butadiene	ND	40	U	ppbv	40	12/5/2011 4:10 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	12/5/2011 4:10 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	12/5/2011 4:10 PM
2-Butanone	ND	40	U	ppbv	40	12/5/2011 4:10 PM
2-Hexanone	ND	40	U	ppbv	40	12/5/2011 4:10 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	12/5/2011 4:10 PM
Acetone	ND	40	U	ppbv	40	12/5/2011 4:10 PM
Benzene	65	40		ppbv	40	12/5/2011 4:10 PM
Benzyl chloride	ND	40	U	ppbv	40	12/5/2011 4:10 PM
Bromodichloromethane	ND	40	U	ppbv	40	12/5/2011 4:10 PM
Bromoform	ND	40	U	ppbv	40	12/5/2011 4:10 PM
Bromomethane	ND	40	U	ppbv	40	12/5/2011 4:10 PM
Carbon disulfide	ND	40	U	ppbv	40	12/5/2011 4:10 PM
Carbon tetrachloride	ND	40	U	ppbv	40	12/5/2011 4:10 PM
Chlorobenzene	ND	40	U	ppbv	40	12/5/2011 4:10 PM
Chlorodibromomethane	ND	40	U	ppbv	40	12/5/2011 4:10 PM
Chloroethane	ND	40	U	ppbv	40	12/5/2011 4:10 PM
Chloroform	ND	40	U	ppbv	40	12/5/2011 4:10 PM
Chloromethane	ND	40	U	ppbv	40	12/5/2011 4:10 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	12/5/2011 4:10 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	12/5/2011 4:10 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/10/2011 3:02:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-020	**Matrix:**	Air
Client Sample ID:	VA0839		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	150	80		ppbv	40	12/5/2011 4:10 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	12/5/2011 4:10 PM
Ethyl acetate	ND	40	U	ppbv	40	12/5/2011 4:10 PM
Ethylbenzene	44	80	J	ppbv	40	12/5/2011 4:10 PM
Heptane	190	40		ppbv	40	12/5/2011 4:10 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	12/5/2011 4:10 PM
m,p-Xylene	150	80		ppbv	40	12/5/2011 4:10 PM
Methylene chloride	ND	200	U	ppbv	40	12/5/2011 4:10 PM
n-Hexane	70	80	J	ppbv	40	12/5/2011 4:10 PM
Naphthalene	ND	40	U	ppbv	40	12/5/2011 4:10 PM
o-Xylene	52	40		ppbv	40	12/5/2011 4:10 PM
Propylene	ND	40	U	ppbv	40	12/5/2011 4:10 PM
Styrene	ND	40	U	ppbv	40	12/5/2011 4:10 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	12/5/2011 4:10 PM
Tetrachloroethene	ND	40	U	ppbv	40	12/5/2011 4:10 PM
Tetrahydrofuran	ND	40	U	ppbv	40	12/5/2011 4:10 PM
Toluene	310	40		ppbv	40	12/5/2011 4:10 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	12/5/2011 4:10 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	12/5/2011 4:10 PM
Trichloroethene	ND	40	U	ppbv	40	12/5/2011 4:10 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	12/5/2011 4:10 PM
Vinyl acetate	ND	40	U	ppbv	40	12/5/2011 4:10 PM
Vinyl chloride	ND	40	U	ppbv	40	12/5/2011 4:10 PM
Xylenes, Total	200	120		ppbv	40	12/5/2011 4:10 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	40	12/5/2011 4:10 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	14,000	4,700		µg/m³	40	12/5/2011 2:47 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	12/5/2011 2:47 PM
C9-C12 Aliphatic Hydrocarbons	11,000	7,600		µg/m³	40	12/5/2011 2:47 PM
Surr: 4-Bromofluorobenzene	88.5	70-130		%REC	40	12/5/2011 2:47 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/10/2011 3:35:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-021	**Matrix:**	Air
Client Sample ID:	VA0840		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.95	0.10		%	1	12/7/2011 12:30 PM
Carbon Monoxide	ND	0.10	U	%	1	12/7/2011 12:30 PM
Methane	ND	0.50	U	%	1	12/7/2011 12:30 PM
Nitrogen	80	0.10		%	1	12/7/2011 12:30 PM
Oxygen	18	0.10		%	1	12/7/2011 12:30 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	12/5/2011 9:11 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	12/5/2011 9:11 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	12/5/2011 9:11 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	12/5/2011 9:11 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	12/5/2011 9:11 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	12/5/2011 9:11 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	12/5/2011 9:11 PM
1,2,4-Trimethylbenzene	52	40		ppbv	40	12/5/2011 9:11 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	12/5/2011 9:11 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	12/5/2011 9:11 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	12/5/2011 9:11 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	12/5/2011 9:11 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	12/5/2011 9:11 PM
1,3-Butadiene	ND	40	U	ppbv	40	12/5/2011 9:11 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	12/5/2011 9:11 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	12/5/2011 9:11 PM
2-Butanone	ND	40	U	ppbv	40	12/5/2011 9:11 PM
2-Hexanone	ND	40	U	ppbv	40	12/5/2011 9:11 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	12/5/2011 9:11 PM
Acetone	42	40		ppbv	40	12/5/2011 9:11 PM
Benzene	480	40		ppbv	40	12/5/2011 9:11 PM
Benzyl chloride	ND	40	U	ppbv	40	12/5/2011 9:11 PM
Bromodichloromethane	ND	40	U	ppbv	40	12/5/2011 9:11 PM
Bromoform	ND	40	U	ppbv	40	12/5/2011 9:11 PM
Bromomethane	ND	40	U	ppbv	40	12/5/2011 9:11 PM
Carbon disulfide	ND	40	U	ppbv	40	12/5/2011 9:11 PM
Carbon tetrachloride	ND	40	U	ppbv	40	12/5/2011 9:11 PM
Chlorobenzene	ND	40	U	ppbv	40	12/5/2011 9:11 PM
Chlorodibromomethane	ND	40	U	ppbv	40	12/5/2011 9:11 PM
Chloroethane	ND	40	U	ppbv	40	12/5/2011 9:11 PM
Chloroform	ND	40	U	ppbv	40	12/5/2011 9:11 PM
Chloromethane	ND	40	U	ppbv	40	12/5/2011 9:11 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	12/5/2011 9:11 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	12/5/2011 9:11 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/10/2011 3:35:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-021	**Matrix:**	Air
Client Sample ID:	VA0840		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	210	80		ppbv	40	12/5/2011 9:11 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	12/5/2011 9:11 PM
Ethyl acetate	ND	40	U	ppbv	40	12/5/2011 9:11 PM
Ethylbenzene	44	80	J	ppbv	40	12/5/2011 9:11 PM
Heptane	170	40		ppbv	40	12/5/2011 9:11 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	12/5/2011 9:11 PM
m,p-Xylene	150	80		ppbv	40	12/5/2011 9:11 PM
Methylene chloride	ND	200	U	ppbv	40	12/5/2011 9:11 PM
n-Hexane	110	80		ppbv	40	12/5/2011 9:11 PM
Naphthalene	ND	40	U	ppbv	40	12/5/2011 9:11 PM
o-Xylene	50	40		ppbv	40	12/5/2011 9:11 PM
Propylene	81	40		ppbv	40	12/5/2011 9:11 PM
Styrene	ND	40	U	ppbv	40	12/5/2011 9:11 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	12/5/2011 9:11 PM
Tetrachloroethene	ND	40	U	ppbv	40	12/5/2011 9:11 PM
Tetrahydrofuran	ND	40	U	ppbv	40	12/5/2011 9:11 PM
Toluene	600	40		ppbv	40	12/5/2011 9:11 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	12/5/2011 9:11 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	12/5/2011 9:11 PM
Trichloroethene	ND	40	U	ppbv	40	12/5/2011 9:11 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	12/5/2011 9:11 PM
Vinyl acetate	ND	40	U	ppbv	40	12/5/2011 9:11 PM
Vinyl chloride	ND	40	U	ppbv	40	12/5/2011 9:11 PM
Xylenes, Total	200	120		ppbv	40	12/5/2011 9:11 PM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	40	12/5/2011 9:11 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	180,000	47,000		µg/m³	400	12/1/2011 9:55 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	12/1/2011 9:55 PM
C9-C12 Aliphatic Hydrocarbons	12,000	76,000	J	µg/m³	400	12/1/2011 9:55 PM
Surr: 4-Bromofluorobenzene	97.4	70-130		%REC	400	12/1/2011 9:55 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/10/2011 4:10:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-022	**Matrix:**	Air
Client Sample ID:	VA0841		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	0.40	0.10		%	1	12/7/2011 12:51 PM
Carbon Monoxide	ND	0.10	U	%	1	12/7/2011 12:51 PM
Methane	ND	0.50	U	%	1	12/7/2011 12:51 PM
Nitrogen	80	0.10		%	1	12/7/2011 12:51 PM
Oxygen	18	0.10		%	1	12/7/2011 12:51 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
2-Butanone	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
2-Hexanone	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
Acetone	9,700	8,000		ppbv	8000	12/3/2011 7:11 PM
Benzene	210,000	8,000		ppbv	8000	12/3/2011 7:11 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
Bromoform	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
Bromomethane	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
Chloroethane	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
Chloroform	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
Chloromethane	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/10/2011 4:10:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-022	**Matrix:**	Air
Client Sample ID:	VA0841		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	85,000	16,000		ppbv	8000	12/3/2011 7:11 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
Ethylbenzene	8,200	16,000	J	ppbv	8000	12/3/2011 7:11 PM
Heptane	20,000	8,000		ppbv	8000	12/3/2011 7:11 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	12/3/2011 7:11 PM
m,p-Xylene	16,000	16,000		ppbv	8000	12/3/2011 7:11 PM
Methylene chloride	39,000	40,000	J	ppbv	8000	12/3/2011 7:11 PM
n-Hexane	81,000	16,000		ppbv	8000	12/3/2011 7:11 PM
Naphthalene	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
o-Xylene	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
Propylene	9,000	8,000		ppbv	8000	12/3/2011 7:11 PM
Styrene	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
Toluene	440,000	8,000		ppbv	8000	12/3/2011 7:11 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
Trichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	12/3/2011 7:11 PM
Xylenes, Total	16,000	24,000	J	ppbv	8000	12/3/2011 7:11 PM
Surr: 4-Bromofluorobenzene	115	70-130		%REC	8000	12/3/2011 7:11 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	830,000	94,000		µg/m³	800	12/1/2011 9:13 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	12/1/2011 9:13 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	12/1/2011 9:13 AM
Surr: 4-Bromofluorobenzene	96.7	70-130		%REC	800	12/1/2011 9:13 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/15/2011 9:10:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-023	**Matrix:**	Air
Client Sample ID:	VA0842		

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	12/7/2011 1:10 PM
Carbon Monoxide	ND	0.10	U	%	1	12/7/2011 1:10 PM
Methane	ND	0.50	U	%	1	12/7/2011 1:10 PM
Nitrogen	79	0.10		%	1	12/7/2011 1:10 PM
Oxygen	20	0.10		%	1	12/7/2011 1:10 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	12/5/2011 9:58 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	12/5/2011 9:58 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	12/5/2011 9:58 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	12/5/2011 9:58 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	12/5/2011 9:58 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	12/5/2011 9:58 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	12/5/2011 9:58 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	12/5/2011 9:58 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	12/5/2011 9:58 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	12/5/2011 9:58 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	12/5/2011 9:58 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	12/5/2011 9:58 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	12/5/2011 9:58 PM
1,3-Butadiene	ND	800	U	ppbv	800	12/5/2011 9:58 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	12/5/2011 9:58 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	12/5/2011 9:58 PM
2-Butanone	ND	800	U	ppbv	800	12/5/2011 9:58 PM
2-Hexanone	ND	800	U	ppbv	800	12/5/2011 9:58 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	12/5/2011 9:58 PM
Acetone	900	800		ppbv	800	12/5/2011 9:58 PM
Benzene	3,400	800		ppbv	800	12/5/2011 9:58 PM
Benzyl chloride	ND	800	U	ppbv	800	12/5/2011 9:58 PM
Bromodichloromethane	ND	800	U	ppbv	800	12/5/2011 9:58 PM
Bromoform	ND	800	U	ppbv	800	12/5/2011 9:58 PM
Bromomethane	ND	800	U	ppbv	800	12/5/2011 9:58 PM
Carbon disulfide	ND	800	U	ppbv	800	12/5/2011 9:58 PM
Carbon tetrachloride	ND	800	U	ppbv	800	12/5/2011 9:58 PM
Chlorobenzene	ND	800	U	ppbv	800	12/5/2011 9:58 PM
Chlorodibromomethane	ND	800	U	ppbv	800	12/5/2011 9:58 PM
Chloroethane	ND	800	U	ppbv	800	12/5/2011 9:58 PM
Chloroform	ND	800	U	ppbv	800	12/5/2011 9:58 PM
Chloromethane	ND	800	U	ppbv	800	12/5/2011 9:58 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	12/5/2011 9:58 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	12/5/2011 9:58 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/15/2011 9:10:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-023	**Matrix:**	Air
Client Sample ID:	VA0842		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	5,400	1,600		ppbv	800	12/5/2011 9:58 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	12/5/2011 9:58 PM
Ethyl acetate	ND	800	U	ppbv	800	12/5/2011 9:58 PM
Ethylbenzene	ND	1,600	U	ppbv	800	12/5/2011 9:58 PM
Heptane	1,600	800		ppbv	800	12/5/2011 9:58 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	12/5/2011 9:58 PM
m,p-Xylene	860	1,600	J	ppbv	800	12/5/2011 9:58 PM
Methylene chloride	3,500	4,000	J	ppbv	800	12/5/2011 9:58 PM
n-Hexane	5,700	1,600		ppbv	800	12/5/2011 9:58 PM
Naphthalene	ND	800	U	ppbv	800	12/5/2011 9:58 PM
o-Xylene	ND	800	U	ppbv	800	12/5/2011 9:58 PM
Propylene	ND	800	U	ppbv	800	12/5/2011 9:58 PM
Styrene	ND	800	U	ppbv	800	12/5/2011 9:58 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	12/5/2011 9:58 PM
Tetrachloroethene	ND	800	U	ppbv	800	12/5/2011 9:58 PM
Tetrahydrofuran	ND	800	U	ppbv	800	12/5/2011 9:58 PM
Toluene	13,000	800		ppbv	800	12/5/2011 9:58 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	12/5/2011 9:58 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	12/5/2011 9:58 PM
Trichloroethene	ND	800	U	ppbv	800	12/5/2011 9:58 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	12/5/2011 9:58 PM
Vinyl acetate	ND	800	U	ppbv	800	12/5/2011 9:58 PM
Vinyl chloride	ND	800	U	ppbv	800	12/5/2011 9:58 PM
Xylenes, Total	860	2,400	J	ppbv	800	12/5/2011 9:58 PM
Surr: 4-Bromofluorobenzene	117	70-130		%REC	800	12/5/2011 9:58 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	640,000	94,000		µg/m³	800	12/1/2011 9:58 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	12/1/2011 9:58 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	12/1/2011 9:58 AM
Surr: 4-Bromofluorobenzene	97.3	70-130		%REC	800	12/1/2011 9:58 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/15/2011 9:52:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-024	**Matrix:**	Air
Client Sample ID:	VA0843		

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	12/7/2011 1:30 PM
Carbon Monoxide	ND	0.10	U	%	1	12/7/2011 1:30 PM
Methane	ND	0.50	U	%	1	12/7/2011 1:30 PM
Nitrogen	78	0.10		%	1	12/7/2011 1:30 PM
Oxygen	20	0.10		%	1	12/7/2011 1:30 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	12/5/2011 10:44 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	12/5/2011 10:44 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	12/5/2011 10:44 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	12/5/2011 10:44 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	12/5/2011 10:44 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	12/5/2011 10:44 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	12/5/2011 10:44 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	12/5/2011 10:44 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	12/5/2011 10:44 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	12/5/2011 10:44 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	12/5/2011 10:44 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	12/5/2011 10:44 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	12/5/2011 10:44 PM
1,3-Butadiene	ND	800	U	ppbv	800	12/5/2011 10:44 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	12/5/2011 10:44 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	12/5/2011 10:44 PM
2-Butanone	ND	800	U	ppbv	800	12/5/2011 10:44 PM
2-Hexanone	ND	800	U	ppbv	800	12/5/2011 10:44 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Acetone	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Benzene	4,700	800		ppbv	800	12/5/2011 10:44 PM
Benzyl chloride	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Bromodichloromethane	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Bromoform	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Bromomethane	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Carbon disulfide	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Carbon tetrachloride	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Chlorobenzene	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Chlorodibromomethane	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Chloroethane	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Chloroform	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Chloromethane	ND	800	U	ppbv	800	12/5/2011 10:44 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	12/5/2011 10:44 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	12/5/2011 10:44 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/15/2011 9:52:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-024	**Matrix:**	Air
Client Sample ID:	VA0843		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	8,100	1,600		ppbv	800	12/5/2011 10:44 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Ethyl acetate	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Ethylbenzene	ND	1,600	U	ppbv	800	12/5/2011 10:44 PM
Heptane	1,700	800		ppbv	800	12/5/2011 10:44 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	12/5/2011 10:44 PM
m,p-Xylene	ND	1,600	U	ppbv	800	12/5/2011 10:44 PM
Methylene chloride	2,000	4,000	J	ppbv	800	12/5/2011 10:44 PM
n-Hexane	7,100	1,600		ppbv	800	12/5/2011 10:44 PM
Naphthalene	ND	800	U	ppbv	800	12/5/2011 10:44 PM
o-Xylene	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Propylene	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Styrene	ND	800	U	ppbv	800	12/5/2011 10:44 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Tetrachloroethene	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Tetrahydrofuran	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Toluene	19,000	800		ppbv	800	12/5/2011 10:44 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	12/5/2011 10:44 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Trichloroethene	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Vinyl acetate	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Vinyl chloride	ND	800	U	ppbv	800	12/5/2011 10:44 PM
Xylenes, Total	ND	2,400	U	ppbv	800	12/5/2011 10:44 PM
Surr: 4-Bromofluorobenzene	119	70-130		%REC	800	12/5/2011 10:44 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,000,000	94,000		µg/m³	800	12/1/2011 10:44 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	12/1/2011 10:44 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	12/1/2011 10:44 AM
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	800	12/1/2011 10:44 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/15/2011 11:13:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-025	**Matrix:**	Air
Client Sample ID:	VA0755-R		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
2-Butanone	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
2-Hexanone	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Acetone	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Benzene	11,000	8,000		ppbv	8000	12/3/2011 9:15 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Bromoform	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Bromomethane	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Chloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Chloroform	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Chloromethane	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Cyclohexane	28,000	16,000		ppbv	8000	12/3/2011 9:15 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	12/3/2011 9:15 PM
Heptane	16,000	8,000		ppbv	8000	12/3/2011 9:15 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	12/3/2011 9:15 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	12/3/2011 9:15 PM
Methylene chloride	ND	40,000	U	ppbv	8000	12/3/2011 9:15 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/15/2011 11:13:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-025	**Matrix:**	Air
Client Sample ID:	VA0755-R		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
n-Hexane	17,000	16,000		ppbv	8000	12/3/2011 9:15 PM
Naphthalene	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
o-Xylene	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Propylene	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Styrene	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Toluene	20,000	8,000		ppbv	8000	12/3/2011 9:15 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Trichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	12/3/2011 9:15 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	12/3/2011 9:15 PM
Surr: 4-Bromofluorobenzene	112	70-130		%REC	8000	12/3/2011 9:15 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,300,000	940,000		µg/m³	8000	12/1/2011 11:26 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	12/1/2011 11:26 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	12/1/2011 11:26 AM
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	8000	12/1/2011 11:26 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/15/2011 12:50:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-026	**Matrix:**	Air
Client Sample ID:	VA0811-R		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
2-Butanone	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
2-Hexanone	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Acetone	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Benzene	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Bromoform	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Bromomethane	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Chloroethane	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Chloroform	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Chloromethane	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Cyclohexane	42,000	16,000		ppbv	8000	12/3/2011 9:56 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	12/3/2011 9:56 PM
Heptane	13,000	8,000		ppbv	8000	12/3/2011 9:56 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	12/3/2011 9:56 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	12/3/2011 9:56 PM
Methylene chloride	ND	40,000	U	ppbv	8000	12/3/2011 9:56 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/15/2011 12:50:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-026	**Matrix:**	Air
Client Sample ID:	VA0811-R		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
n-Hexane	30,000	16,000		ppbv	8000	12/3/2011 9:56 PM
Naphthalene	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
o-Xylene	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Propylene	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Styrene	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Toluene	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Trichloroethene	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	12/3/2011 9:56 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	12/3/2011 9:56 PM
Surr: 4-Bromofluorobenzene	112	70-130		%REC	8000	12/3/2011 9:56 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,300,000	94,000		µg/m³	800	12/5/2011 5:42 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	12/5/2011 5:42 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	12/5/2011 5:42 PM
Surr: 4-Bromofluorobenzene	85.2	70-130		%REC	800	12/5/2011 5:42 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/15/2011 1:59:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-027	**Matrix:**	Air
Client Sample ID:	VA0790		

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	12/7/2011 2:07 PM
Carbon Monoxide	ND	0.10	U	%	1	12/7/2011 2:07 PM
Methane	ND	0.50	U	%	1	12/7/2011 2:07 PM
Nitrogen	79	0.10		%	1	12/7/2011 2:07 PM
Oxygen	20	0.10		%	1	12/7/2011 2:07 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	12/5/2011 11:27 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	12/5/2011 11:27 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	12/5/2011 11:27 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	12/5/2011 11:27 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	12/5/2011 11:27 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	12/5/2011 11:27 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	12/5/2011 11:27 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	12/5/2011 11:27 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	12/5/2011 11:27 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	12/5/2011 11:27 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	12/5/2011 11:27 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	12/5/2011 11:27 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	12/5/2011 11:27 PM
1,3-Butadiene	ND	40	U	ppbv	40	12/5/2011 11:27 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	12/5/2011 11:27 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	12/5/2011 11:27 PM
2-Butanone	ND	40	U	ppbv	40	12/5/2011 11:27 PM
2-Hexanone	ND	40	U	ppbv	40	12/5/2011 11:27 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Acetone	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Benzene	44	40		ppbv	40	12/5/2011 11:27 PM
Benzyl chloride	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Bromodichloromethane	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Bromoform	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Bromomethane	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Carbon disulfide	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Carbon tetrachloride	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Chlorobenzene	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Chlorodibromomethane	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Chloroethane	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Chloroform	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Chloromethane	ND	40	U	ppbv	40	12/5/2011 11:27 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	12/5/2011 11:27 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	12/5/2011 11:27 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/15/2011 1:59:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-027	**Matrix:**	Air
Client Sample ID:	VA0790		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	140	80		ppbv	40	12/5/2011 11:27 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Ethyl acetate	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Ethylbenzene	ND	80	U	ppbv	40	12/5/2011 11:27 PM
Heptane	82	40		ppbv	40	12/5/2011 11:27 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	12/5/2011 11:27 PM
m,p-Xylene	80	80		ppbv	40	12/5/2011 11:27 PM
Methylene chloride	ND	200	U	ppbv	40	12/5/2011 11:27 PM
n-Hexane	100	80		ppbv	40	12/5/2011 11:27 PM
Naphthalene	ND	40	U	ppbv	40	12/5/2011 11:27 PM
o-Xylene	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Propylene	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Styrene	ND	40	U	ppbv	40	12/5/2011 11:27 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Tetrachloroethene	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Tetrahydrofuran	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Toluene	250	40		ppbv	40	12/5/2011 11:27 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	12/5/2011 11:27 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Trichloroethene	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Vinyl acetate	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Vinyl chloride	ND	40	U	ppbv	40	12/5/2011 11:27 PM
Xylenes, Total	80	120	J	ppbv	40	12/5/2011 11:27 PM
Surr: 4-Bromofluorobenzene	115	70-130		%REC	40	12/5/2011 11:27 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	9,100	4,700		µg/m³	40	12/5/2011 3:30 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	12/5/2011 3:30 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	12/5/2011 3:30 PM
Surr: 4-Bromofluorobenzene	86.9	70-130		%REC	40	12/5/2011 3:30 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/15/2011 2:35:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-028	**Matrix:**	Air
Client Sample ID:	VA0791		

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	12/7/2011 2:33 PM
Carbon Monoxide	ND	0.10	U	%	1	12/7/2011 2:33 PM
Methane	ND	0.50	U	%	1	12/7/2011 2:33 PM
Nitrogen	79	0.10		%	1	12/7/2011 2:33 PM
Oxygen	19	0.10		%	1	12/7/2011 2:33 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	12/6/2011 2:25 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	12/6/2011 2:25 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	12/6/2011 2:25 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	12/6/2011 2:25 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	12/6/2011 2:25 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	12/6/2011 2:25 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	12/6/2011 2:25 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	12/6/2011 2:25 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	12/6/2011 2:25 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	12/6/2011 2:25 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	12/6/2011 2:25 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	12/6/2011 2:25 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	12/6/2011 2:25 PM
1,3-Butadiene	ND	40	U	ppbv	40	12/6/2011 2:25 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	12/6/2011 2:25 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	12/6/2011 2:25 PM
2-Butanone	ND	40	U	ppbv	40	12/6/2011 2:25 PM
2-Hexanone	ND	40	U	ppbv	40	12/6/2011 2:25 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Acetone	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Benzene	330	40		ppbv	40	12/6/2011 2:25 PM
Benzyl chloride	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Bromodichloromethane	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Bromoform	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Bromomethane	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Carbon disulfide	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Carbon tetrachloride	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Chlorobenzene	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Chlorodibromomethane	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Chloroethane	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Chloroform	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Chloromethane	ND	40	U	ppbv	40	12/6/2011 2:25 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	12/6/2011 2:25 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	12/6/2011 2:25 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/15/2011 2:35:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-028	**Matrix:**	Air
Client Sample ID:	VA0791		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,300	80		ppbv	40	12/6/2011 2:25 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Ethyl acetate	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Ethylbenzene	ND	80	U	ppbv	40	12/6/2011 2:25 PM
Heptane	140	40		ppbv	40	12/6/2011 2:25 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	12/6/2011 2:25 PM
m,p-Xylene	96	80		ppbv	40	12/6/2011 2:25 PM
Methylene chloride	ND	200	U	ppbv	40	12/6/2011 2:25 PM
n-Hexane	190	80		ppbv	40	12/6/2011 2:25 PM
Naphthalene	ND	40	U	ppbv	40	12/6/2011 2:25 PM
o-Xylene	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Propylene	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Styrene	ND	40	U	ppbv	40	12/6/2011 2:25 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Tetrachloroethene	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Tetrahydrofuran	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Toluene	340	40		ppbv	40	12/6/2011 2:25 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	12/6/2011 2:25 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Trichloroethene	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Vinyl acetate	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Vinyl chloride	ND	40	U	ppbv	40	12/6/2011 2:25 PM
Xylenes, Total	96	120	J	ppbv	40	12/6/2011 2:25 PM
Surr: 4-Bromofluorobenzene	110	70-130		%REC	40	12/6/2011 2:25 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	130,000	47,000		µg/m³	400	12/2/2011 3:55 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	12/2/2011 3:55 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	12/2/2011 3:55 AM
Surr: 4-Bromofluorobenzene	95.1	70-130		%REC	400	12/2/2011 3:55 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/15/2011 3:09:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-029	**Matrix:**	Air
Client Sample ID:	VA0792		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.82	0.10		%	1	12/7/2011 2:52 PM
Carbon Monoxide	ND	0.10	U	%	1	12/7/2011 2:52 PM
Methane	ND	0.50	U	%	1	12/7/2011 2:52 PM
Nitrogen	78	0.10		%	1	12/7/2011 2:52 PM
Oxygen	20	0.10		%	1	12/7/2011 2:52 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	12/6/2011 3:05 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	12/6/2011 3:05 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	12/6/2011 3:05 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	12/6/2011 3:05 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	12/6/2011 3:05 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	12/6/2011 3:05 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	12/6/2011 3:05 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	12/6/2011 3:05 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	12/6/2011 3:05 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	12/6/2011 3:05 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	12/6/2011 3:05 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	12/6/2011 3:05 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	12/6/2011 3:05 PM
1,3-Butadiene	ND	40	U	ppbv	40	12/6/2011 3:05 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	12/6/2011 3:05 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	12/6/2011 3:05 PM
2-Butanone	ND	40	U	ppbv	40	12/6/2011 3:05 PM
2-Hexanone	ND	40	U	ppbv	40	12/6/2011 3:05 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	12/6/2011 3:05 PM
Acetone	ND	40	U	ppbv	40	12/6/2011 3:05 PM
Benzene	170	40		ppbv	40	12/6/2011 3:05 PM
Benzyl chloride	ND	40	U	ppbv	40	12/6/2011 3:05 PM
Bromodichloromethane	ND	40	U	ppbv	40	12/6/2011 3:05 PM
Bromoform	ND	40	U	ppbv	40	12/6/2011 3:05 PM
Bromomethane	ND	40	U	ppbv	40	12/6/2011 3:05 PM
Carbon disulfide	ND	40	U	ppbv	40	12/6/2011 3:05 PM
Carbon tetrachloride	62	40		ppbv	40	12/6/2011 3:05 PM
Chlorobenzene	ND	40	U	ppbv	40	12/6/2011 3:05 PM
Chlorodibromomethane	ND	40	U	ppbv	40	12/6/2011 3:05 PM
Chloroethane	ND	40	U	ppbv	40	12/6/2011 3:05 PM
Chloroform	ND	40	U	ppbv	40	12/6/2011 3:05 PM
Chloromethane	ND	40	U	ppbv	40	12/6/2011 3:05 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	12/6/2011 3:05 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	12/6/2011 3:05 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/15/2011 3:09:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-029	**Matrix:**	Air
Client Sample ID:	VA0792		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	190	80		ppbv	40	12/6/2011 3:05 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	12/6/2011 3:05 PM
Ethyl acetate	ND	40	U	ppbv	40	12/6/2011 3:05 PM
Ethylbenzene	ND	80	U	ppbv	40	12/6/2011 3:05 PM
Heptane	82	40		ppbv	40	12/6/2011 3:05 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	12/6/2011 3:05 PM
m,p-Xylene	70	80	J	ppbv	40	12/6/2011 3:05 PM
Methylene chloride	ND	200	U	ppbv	40	12/6/2011 3:05 PM
n-Hexane	43	80	J	ppbv	40	12/6/2011 3:05 PM
Naphthalene	ND	40	U	ppbv	40	12/6/2011 3:05 PM
o-Xylene	ND	40	U	ppbv	40	12/6/2011 3:05 PM
Propylene	ND	40	U	ppbv	40	12/6/2011 3:05 PM
Styrene	ND	40	U	ppbv	40	12/6/2011 3:05 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	12/6/2011 3:05 PM
Tetrachloroethene	ND	40	U	ppbv	40	12/6/2011 3:05 PM
Tetrahydrofuran	ND	40	U	ppbv	40	12/6/2011 3:05 PM
Toluene	240	40		ppbv	40	12/6/2011 3:05 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	12/6/2011 3:05 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	12/6/2011 3:05 PM
Trichloroethene	ND	40	U	ppbv	40	12/6/2011 3:05 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	12/6/2011 3:05 PM
Vinyl acetate	ND	40	U	ppbv	40	12/6/2011 3:05 PM
Vinyl chloride	ND	40	U	ppbv	40	12/6/2011 3:05 PM
Xylenes, Total	70	120	J	ppbv	40	12/6/2011 3:05 PM
Surr: 4-Bromofluorobenzene	110	70-130		%REC	40	12/6/2011 3:05 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	16,000	4,700		µg/m³	40	12/5/2011 4:13 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	12/5/2011 4:13 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	12/5/2011 4:13 PM
Surr: 4-Bromofluorobenzene	87.3	70-130		%REC	40	12/5/2011 4:13 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/15/2011 3:40:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-030	**Matrix:**	Air
Client Sample ID:	VA0793		

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	12/7/2011 3:19 PM
Carbon Monoxide	ND	0.10	U	%	1	12/7/2011 3:19 PM
Methane	ND	0.50	U	%	1	12/7/2011 3:19 PM
Nitrogen	79	0.10		%	1	12/7/2011 3:19 PM
Oxygen	20	0.10		%	1	12/7/2011 3:19 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	12/6/2011 2:29 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	12/6/2011 2:29 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	12/6/2011 2:29 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	12/6/2011 2:29 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	12/6/2011 2:29 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	12/6/2011 2:29 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	12/6/2011 2:29 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	12/6/2011 2:29 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	12/6/2011 2:29 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	12/6/2011 2:29 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	12/6/2011 2:29 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	12/6/2011 2:29 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	12/6/2011 2:29 AM
1,3-Butadiene	ND	800	U	ppbv	800	12/6/2011 2:29 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	12/6/2011 2:29 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	12/6/2011 2:29 AM
2-Butanone	ND	800	U	ppbv	800	12/6/2011 2:29 AM
2-Hexanone	ND	800	U	ppbv	800	12/6/2011 2:29 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Acetone	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Benzene	4,600	800		ppbv	800	12/6/2011 2:29 AM
Benzyl chloride	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Bromodichloromethane	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Bromoform	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Bromomethane	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Carbon disulfide	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Carbon tetrachloride	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Chlorobenzene	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Chlorodibromomethane	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Chloroethane	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Chloroform	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Chloromethane	ND	800	U	ppbv	800	12/6/2011 2:29 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	12/6/2011 2:29 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	12/6/2011 2:29 AM

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WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/15/2011 3:40:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-030	**Matrix:**	Air
Client Sample ID:	VA0793		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,500	1,600	J	ppbv	800	12/6/2011 2:29 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Ethyl acetate	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Ethylbenzene	ND	1,600	U	ppbv	800	12/6/2011 2:29 AM
Heptane	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	12/6/2011 2:29 AM
m,p-Xylene	ND	1,600	U	ppbv	800	12/6/2011 2:29 AM
Methylene chloride	ND	4,000	U	ppbv	800	12/6/2011 2:29 AM
n-Hexane	ND	1,600	U	ppbv	800	12/6/2011 2:29 AM
Naphthalene	ND	800	U	ppbv	800	12/6/2011 2:29 AM
o-Xylene	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Propylene	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Styrene	ND	800	U	ppbv	800	12/6/2011 2:29 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Tetrachloroethene	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Tetrahydrofuran	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Toluene	7,600	800		ppbv	800	12/6/2011 2:29 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	12/6/2011 2:29 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Trichloroethene	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Vinyl acetate	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Vinyl chloride	ND	800	U	ppbv	800	12/6/2011 2:29 AM
Xylenes, Total	ND	2,400	U	ppbv	800	12/6/2011 2:29 AM
Surr: 4-Bromofluorobenzene	117	70-130		%REC	800	12/6/2011 2:29 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	190,000	94,000		µg/m³	800	12/5/2011 6:28 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	12/5/2011 6:28 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	12/5/2011 6:28 PM
Surr: 4-Bromofluorobenzene	86.6	70-130		%REC	800	12/5/2011 6:28 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/16/2011 9:06:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-031	**Matrix:**	Air
Client Sample ID:	VA0794		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.15	0.10		%	1	12/7/2011 3:43 PM
Carbon Monoxide	ND	0.10	U	%	1	12/7/2011 3:43 PM
Methane	ND	0.50	U	%	1	12/7/2011 3:43 PM
Nitrogen	79	0.10		%	1	12/7/2011 3:43 PM
Oxygen	21	0.10		%	1	12/7/2011 3:43 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	12/6/2011 3:14 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	12/6/2011 3:14 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	12/6/2011 3:14 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	12/6/2011 3:14 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	12/6/2011 3:14 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	12/6/2011 3:14 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	12/6/2011 3:14 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	12/6/2011 3:14 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	12/6/2011 3:14 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	12/6/2011 3:14 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	12/6/2011 3:14 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	12/6/2011 3:14 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	12/6/2011 3:14 AM
1,3-Butadiene	ND	800	U	ppbv	800	12/6/2011 3:14 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	12/6/2011 3:14 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	12/6/2011 3:14 AM
2-Butanone	ND	800	U	ppbv	800	12/6/2011 3:14 AM
2-Hexanone	ND	800	U	ppbv	800	12/6/2011 3:14 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Acetone	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Benzene	3,600	800		ppbv	800	12/6/2011 3:14 AM
Benzyl chloride	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Bromodichloromethane	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Bromoform	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Bromomethane	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Carbon disulfide	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Carbon tetrachloride	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Chlorobenzene	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Chlorodibromomethane	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Chloroethane	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Chloroform	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Chloromethane	ND	800	U	ppbv	800	12/6/2011 3:14 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	12/6/2011 3:14 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	12/6/2011 3:14 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/16/2011 9:06:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-031	**Matrix:**	Air
Client Sample ID:	VA0794		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	6,100	1,600		ppbv	800	12/6/2011 3:14 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Ethyl acetate	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Ethylbenzene	ND	1,600	U	ppbv	800	12/6/2011 3:14 AM
Heptane	1,100	800		ppbv	800	12/6/2011 3:14 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	12/6/2011 3:14 AM
m,p-Xylene	ND	1,600	U	ppbv	800	12/6/2011 3:14 AM
Methylene chloride	ND	4,000	U	ppbv	800	12/6/2011 3:14 AM
n-Hexane	6,800	1,600		ppbv	800	12/6/2011 3:14 AM
Naphthalene	ND	800	U	ppbv	800	12/6/2011 3:14 AM
o-Xylene	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Propylene	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Styrene	ND	800	U	ppbv	800	12/6/2011 3:14 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Tetrachloroethene	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Tetrahydrofuran	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Toluene	7,300	800		ppbv	800	12/6/2011 3:14 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	12/6/2011 3:14 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Trichloroethene	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Vinyl acetate	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Vinyl chloride	ND	800	U	ppbv	800	12/6/2011 3:14 AM
Xylenes, Total	ND	2,400	U	ppbv	800	12/6/2011 3:14 AM
Surr: 4-Bromofluorobenzene	116	70-130		%REC	800	12/6/2011 3:14 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	660,000	94,000		µg/m³	800	12/5/2011 7:15 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	12/5/2011 7:15 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	12/5/2011 7:15 PM
Surr: 4-Bromofluorobenzene	87.2	70-130		%REC	800	12/5/2011 7:15 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/16/2011 9:06:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-032	**Matrix:**	Air
Client Sample ID:	VA0795		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.14	0.10		%	1	12/7/2011 4:05 PM
Carbon Monoxide	ND	0.10	U	%	1	12/7/2011 4:05 PM
Methane	ND	0.50	U	%	1	12/7/2011 4:05 PM
Nitrogen	78	0.10		%	1	12/7/2011 4:05 PM
Oxygen	21	0.10		%	1	12/7/2011 4:05 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
1,1,2,2-Tetrachloroethane	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
1,1,2-Trichloroethane	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
1,1-Dichloroethane	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
1,1-Dichloroethene	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
1,2,4-Trichlorobenzene	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
1,2,4-Trimethylbenzene	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
1,2-Dibromoethane	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
1,2-Dichlorobenzene	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
1,2-Dichloroethane	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
1,2-Dichloropropane	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
1,3,5-Trimethylbenzene	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
1,3-Butadiene	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
1,3-Dichlorobenzene	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
1,4-Dichlorobenzene	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
2-Butanone	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
2-Hexanone	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
4-Methyl-2-pentanone	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Acetone	15	8.0		ppbv	8	12/9/2011 12:28 AM
Benzene	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Benzyl chloride	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Bromodichloromethane	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Bromoform	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Bromomethane	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Carbon disulfide	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Carbon tetrachloride	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Chlorobenzene	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Chlorodibromomethane	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Chloroethane	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Chloroform	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Chloromethane	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
cis-1,2-Dichloroethene	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
cis-1,3-dichloropropene	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/16/2011 9:06:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-032	**Matrix:**	Air
Client Sample ID:	VA0795		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	12	16	J	ppbv	8	12/9/2011 12:28 AM
Dichlorodifluoromethane	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Ethyl acetate	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Ethylbenzene	ND	16	U	ppbv	8	12/9/2011 12:28 AM
Heptane	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Hexachlorobutadiene	ND	16	U	ppbv	8	12/9/2011 12:28 AM
m,p-Xylene	ND	16	U	ppbv	8	12/9/2011 12:28 AM
Methylene chloride	ND	40	U	ppbv	8	12/9/2011 12:28 AM
n-Hexane	18	16		ppbv	8	12/9/2011 12:28 AM
Naphthalene	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
o-Xylene	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Propylene	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Styrene	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
tert-Butyl Methyl Ether	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Tetrachloroethene	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Tetrahydrofuran	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Toluene	37	8.0		ppbv	8	12/9/2011 12:28 AM
trans-1,2-Dichloroethene	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
trans-1,3-dichloropropene	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Trichloroethene	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Trichlorofluoromethane	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Vinyl acetate	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Vinyl chloride	ND	8.0	U	ppbv	8	12/9/2011 12:28 AM
Xylenes, Total	ND	24	U	ppbv	8	12/9/2011 12:28 AM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	8	12/9/2011 12:28 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,600	470		µg/m³	4	12/7/2011 4:34 PM
C9-C10 Aromatic Hydrocarbons	ND	530	U	µg/m³	4	12/7/2011 4:34 PM
C9-C12 Aliphatic Hydrocarbons	ND	760	U	µg/m³	4	12/7/2011 4:34 PM
Surr: 4-Bromofluorobenzene	87.4	70-130		%REC	4	12/7/2011 4:34 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/16/2011 10:01:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-033	**Matrix:**	Air
Client Sample ID:	VA0796		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	1.3	0.10		%	1	12/7/2011 5:20 PM
Carbon Monoxide	ND	0.10	U	%	1	12/7/2011 5:20 PM
Methane	ND	0.50	U	%	1	12/7/2011 5:20 PM
Nitrogen	82	0.10		%	1	12/7/2011 5:20 PM
Oxygen	15	0.10		%	1	12/7/2011 5:20 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
2-Butanone	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
2-Hexanone	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
Acetone	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
Benzene	130,000	8,000		ppbv	8000	12/6/2011 4:27 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
Bromoform	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
Bromomethane	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
Chloroethane	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
Chloroform	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
Chloromethane	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/16/2011 10:01:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-033	**Matrix:**	Air
Client Sample ID:	VA0796		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	260,000	16,000		ppbv	8000	12/6/2011 4:27 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	12/6/2011 4:27 PM
Heptane	90,000	8,000		ppbv	8000	12/6/2011 4:27 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	12/6/2011 4:27 PM
m,p-Xylene	11,000	16,000	J	ppbv	8000	12/6/2011 4:27 PM
Methylene chloride	ND	40,000	U	ppbv	8000	12/6/2011 4:27 PM
n-Hexane	250,000	16,000		ppbv	8000	12/6/2011 4:27 PM
Naphthalene	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
o-Xylene	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
Propylene	15,000	8,000		ppbv	8000	12/6/2011 4:27 PM
Styrene	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
Toluene	190,000	8,000		ppbv	8000	12/6/2011 4:27 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
Trichloroethene	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	12/6/2011 4:27 PM
Xylenes, Total	11,000	24,000	J	ppbv	8000	12/6/2011 4:27 PM
Surr: 4-Bromofluorobenzene	116	70-130		%REC	8000	12/6/2011 4:27 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	13,000,000	940,000		µg/m³	8000	12/2/2011 1:28 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	12/2/2011 1:28 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	12/2/2011 1:28 AM
Surr: 4-Bromofluorobenzene	93.1	70-130		%REC	8000	12/2/2011 1:28 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/16/2011 11:48:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-034	**Matrix:**	Air
Client Sample ID:	VA0747		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.40	0.10		%	1	12/7/2011 5:42 PM
Carbon Monoxide	ND	0.10	U	%	1	12/7/2011 5:42 PM
Methane	ND	0.50	U	%	1	12/7/2011 5:42 PM
Nitrogen	80	0.10		%	1	12/7/2011 5:42 PM
Oxygen	18	0.10		%	1	12/7/2011 5:42 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	12/8/2011 1:05 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	12/8/2011 1:05 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	12/8/2011 1:05 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	12/8/2011 1:05 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	12/8/2011 1:05 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	12/8/2011 1:05 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	12/8/2011 1:05 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	12/8/2011 1:05 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	12/8/2011 1:05 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	12/8/2011 1:05 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	12/8/2011 1:05 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	12/8/2011 1:05 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	12/8/2011 1:05 PM
1,3-Butadiene	ND	400	U	ppbv	400	12/8/2011 1:05 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	12/8/2011 1:05 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	12/8/2011 1:05 PM
2-Butanone	ND	400	U	ppbv	400	12/8/2011 1:05 PM
2-Hexanone	ND	400	U	ppbv	400	12/8/2011 1:05 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	12/8/2011 1:05 PM
Acetone	440	400		ppbv	400	12/8/2011 1:05 PM
Benzene	810	400		ppbv	400	12/8/2011 1:05 PM
Benzyl chloride	ND	400	U	ppbv	400	12/8/2011 1:05 PM
Bromodichloromethane	ND	400	U	ppbv	400	12/8/2011 1:05 PM
Bromoform	ND	400	U	ppbv	400	12/8/2011 1:05 PM
Bromomethane	ND	400	U	ppbv	400	12/8/2011 1:05 PM
Carbon disulfide	ND	400	U	ppbv	400	12/8/2011 1:05 PM
Carbon tetrachloride	ND	400	U	ppbv	400	12/8/2011 1:05 PM
Chlorobenzene	ND	400	U	ppbv	400	12/8/2011 1:05 PM
Chlorodibromomethane	ND	400	U	ppbv	400	12/8/2011 1:05 PM
Chloroethane	ND	400	U	ppbv	400	12/8/2011 1:05 PM
Chloroform	ND	400	U	ppbv	400	12/8/2011 1:05 PM
Chloromethane	ND	400	U	ppbv	400	12/8/2011 1:05 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	12/8/2011 1:05 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	12/8/2011 1:05 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/16/2011 11:48:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-034	**Matrix:**	Air
Client Sample ID:	VA0747		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,200	800		ppbv	400	12/8/2011 1:05 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	12/8/2011 1:05 PM
Ethyl acetate	ND	400	U	ppbv	400	12/8/2011 1:05 PM
Ethylbenzene	ND	800	U	ppbv	400	12/8/2011 1:05 PM
Heptane	660	400		ppbv	400	12/8/2011 1:05 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	12/8/2011 1:05 PM
m,p-Xylene	470	800	J	ppbv	400	12/8/2011 1:05 PM
Methylene chloride	1,600	2,000	J	ppbv	400	12/8/2011 1:05 PM
n-Hexane	1,200	800		ppbv	400	12/8/2011 1:05 PM
Naphthalene	ND	400	U	ppbv	400	12/8/2011 1:05 PM
o-Xylene	ND	400	U	ppbv	400	12/8/2011 1:05 PM
Propylene	ND	400	U	ppbv	400	12/8/2011 1:05 PM
Styrene	ND	400	U	ppbv	400	12/8/2011 1:05 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	12/8/2011 1:05 PM
Tetrachloroethene	ND	400	U	ppbv	400	12/8/2011 1:05 PM
Tetrahydrofuran	ND	400	U	ppbv	400	12/8/2011 1:05 PM
Toluene	2,600	400		ppbv	400	12/8/2011 1:05 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	12/8/2011 1:05 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	12/8/2011 1:05 PM
Trichloroethene	ND	400	U	ppbv	400	12/8/2011 1:05 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	12/8/2011 1:05 PM
Vinyl acetate	ND	400	U	ppbv	400	12/8/2011 1:05 PM
Vinyl chloride	ND	400	U	ppbv	400	12/8/2011 1:05 PM
Xylenes, Total	470	1,200	J	ppbv	400	12/8/2011 1:05 PM
Surr: 4-Bromofluorobenzene	112	70-130		%REC	400	12/8/2011 1:05 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	31,000	4,700		µg/m³	40	12/6/2011 2:26 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	12/6/2011 2:26 PM
C9-C12 Aliphatic Hydrocarbons	2,100	7,600	J	µg/m³	40	12/6/2011 2:26 PM
Surr: 4-Bromofluorobenzene	85.6	70-130		%REC	40	12/6/2011 2:26 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/16/2011 12:20:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-035	**Matrix:**	Air
Client Sample ID:	VA0748		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.43	0.10		%	1	12/7/2011 6:10 PM
Carbon Monoxide	ND	0.10	U	%	1	12/7/2011 6:10 PM
Methane	ND	0.50	U	%	1	12/7/2011 6:10 PM
Nitrogen	80	0.10		%	1	12/7/2011 6:10 PM
Oxygen	19	0.10		%	1	12/7/2011 6:10 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	12/6/2011 6:42 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	12/6/2011 6:42 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	12/6/2011 6:42 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	12/6/2011 6:42 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	12/6/2011 6:42 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	12/6/2011 6:42 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	12/6/2011 6:42 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	12/6/2011 6:42 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	12/6/2011 6:42 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	12/6/2011 6:42 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	12/6/2011 6:42 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	12/6/2011 6:42 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	12/6/2011 6:42 PM
1,3-Butadiene	ND	400	U	ppbv	400	12/6/2011 6:42 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	12/6/2011 6:42 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	12/6/2011 6:42 PM
2-Butanone	ND	400	U	ppbv	400	12/6/2011 6:42 PM
2-Hexanone	ND	400	U	ppbv	400	12/6/2011 6:42 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Acetone	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Benzene	3,300	400		ppbv	400	12/6/2011 6:42 PM
Benzyl chloride	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Bromodichloromethane	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Bromoform	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Bromomethane	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Carbon disulfide	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Carbon tetrachloride	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Chlorobenzene	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Chlorodibromomethane	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Chloroethane	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Chloroform	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Chloromethane	ND	400	U	ppbv	400	12/6/2011 6:42 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	12/6/2011 6:42 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	12/6/2011 6:42 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/16/2011 12:20:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-035	**Matrix:**	Air
Client Sample ID:	VA0748		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	5,200	800		ppbv	400	12/6/2011 6:42 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Ethyl acetate	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Ethylbenzene	ND	800	U	ppbv	400	12/6/2011 6:42 PM
Heptane	1,500	400		ppbv	400	12/6/2011 6:42 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	12/6/2011 6:42 PM
m,p-Xylene	960	800		ppbv	400	12/6/2011 6:42 PM
Methylene chloride	ND	2,000	U	ppbv	400	12/6/2011 6:42 PM
n-Hexane	2,800	800		ppbv	400	12/6/2011 6:42 PM
Naphthalene	ND	400	U	ppbv	400	12/6/2011 6:42 PM
o-Xylene	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Propylene	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Styrene	ND	400	U	ppbv	400	12/6/2011 6:42 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Tetrachloroethene	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Tetrahydrofuran	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Toluene	6,400	400		ppbv	400	12/6/2011 6:42 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	12/6/2011 6:42 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Trichloroethene	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Vinyl acetate	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Vinyl chloride	ND	400	U	ppbv	400	12/6/2011 6:42 PM
Xylenes, Total	960	1,200	J	ppbv	400	12/6/2011 6:42 PM
Surr: 4-Bromofluorobenzene	114	70-130		%REC	400	12/6/2011 6:42 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	44,000	4,700		µg/m³	40	12/6/2011 4:40 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	12/6/2011 4:40 PM
C9-C12 Aliphatic Hydrocarbons	1,200	7,600	J	µg/m³	40	12/6/2011 4:40 PM
Surr: 4-Bromofluorobenzene	87.4	70-130		%REC	40	12/6/2011 4:40 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/16/2011 12:20:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-036	**Matrix:**	Air
Client Sample ID:	VA0749		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.50	0.10		%	1	12/7/2011 6:31 PM
Carbon Monoxide	ND	0.10	U	%	1	12/7/2011 6:31 PM
Methane	ND	0.50	U	%	1	12/7/2011 6:31 PM
Nitrogen	80	0.10		%	1	12/7/2011 6:31 PM
Oxygen	19	0.10		%	1	12/7/2011 6:31 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	12/6/2011 7:30 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	12/6/2011 7:30 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	12/6/2011 7:30 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	12/6/2011 7:30 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	12/6/2011 7:30 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	12/6/2011 7:30 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	12/6/2011 7:30 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	12/6/2011 7:30 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	12/6/2011 7:30 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	12/6/2011 7:30 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	12/6/2011 7:30 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	12/6/2011 7:30 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	12/6/2011 7:30 PM
1,3-Butadiene	ND	400	U	ppbv	400	12/6/2011 7:30 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	12/6/2011 7:30 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	12/6/2011 7:30 PM
2-Butanone	ND	400	U	ppbv	400	12/6/2011 7:30 PM
2-Hexanone	ND	400	U	ppbv	400	12/6/2011 7:30 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Acetone	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Benzene	3,000	400		ppbv	400	12/6/2011 7:30 PM
Benzyl chloride	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Bromodichloromethane	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Bromoform	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Bromomethane	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Carbon disulfide	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Carbon tetrachloride	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Chlorobenzene	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Chlorodibromomethane	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Chloroethane	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Chloroform	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Chloromethane	ND	400	U	ppbv	400	12/6/2011 7:30 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	12/6/2011 7:30 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	12/6/2011 7:30 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/16/2011 12:20:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-036	**Matrix:**	Air
Client Sample ID:	VA0749		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	4,300	800		ppbv	400	12/6/2011 7:30 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Ethyl acetate	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Ethylbenzene	ND	800	U	ppbv	400	12/6/2011 7:30 PM
Heptane	1,300	400		ppbv	400	12/6/2011 7:30 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	12/6/2011 7:30 PM
m,p-Xylene	950	800		ppbv	400	12/6/2011 7:30 PM
Methylene chloride	ND	2,000	U	ppbv	400	12/6/2011 7:30 PM
n-Hexane	2,400	800		ppbv	400	12/6/2011 7:30 PM
Naphthalene	ND	400	U	ppbv	400	12/6/2011 7:30 PM
o-Xylene	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Propylene	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Styrene	ND	400	U	ppbv	400	12/6/2011 7:30 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Tetrachloroethene	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Tetrahydrofuran	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Toluene	6,500	400		ppbv	400	12/6/2011 7:30 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	12/6/2011 7:30 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Trichloroethene	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Vinyl acetate	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Vinyl chloride	ND	400	U	ppbv	400	12/6/2011 7:30 PM
Xylenes, Total	950	1,200	J	ppbv	400	12/6/2011 7:30 PM
Surr: 4-Bromofluorobenzene	109	70-130		%REC	400	12/6/2011 7:30 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	260,000	47,000		µg/m³	400	12/6/2011 7:35 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	12/6/2011 7:35 AM
C9-C12 Aliphatic Hydrocarbons	16,000	76,000	J	µg/m³	400	12/6/2011 7:35 AM
Surr: 4-Bromofluorobenzene	85.3	70-130		%REC	400	12/6/2011 7:35 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/16/2011 1:06:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-037	**Matrix:**	Air
Client Sample ID:	VA0750		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.67	0.10		%	1	12/8/2011 11:19 AM
Carbon Monoxide	ND	0.10	U	%	1	12/8/2011 11:19 AM
Methane	ND	0.50	U	%	1	12/8/2011 11:19 AM
Nitrogen	81	0.10		%	1	12/8/2011 11:19 AM
Oxygen	18	0.10		%	1	12/8/2011 11:19 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	12/8/2011 1:50 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	12/8/2011 1:50 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	12/8/2011 1:50 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	12/8/2011 1:50 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	12/8/2011 1:50 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	12/8/2011 1:50 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	12/8/2011 1:50 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	12/8/2011 1:50 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	12/8/2011 1:50 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	12/8/2011 1:50 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	12/8/2011 1:50 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	12/8/2011 1:50 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	12/8/2011 1:50 PM
1,3-Butadiene	ND	800	U	ppbv	800	12/8/2011 1:50 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	12/8/2011 1:50 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	12/8/2011 1:50 PM
2-Butanone	ND	800	U	ppbv	800	12/8/2011 1:50 PM
2-Hexanone	ND	800	U	ppbv	800	12/8/2011 1:50 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	12/8/2011 1:50 PM
Acetone	ND	800	U	ppbv	800	12/8/2011 1:50 PM
Benzene	38,000	800		ppbv	800	12/8/2011 1:50 PM
Benzyl chloride	ND	800	U	ppbv	800	12/8/2011 1:50 PM
Bromodichloromethane	ND	800	U	ppbv	800	12/8/2011 1:50 PM
Bromoform	ND	800	U	ppbv	800	12/8/2011 1:50 PM
Bromomethane	ND	800	U	ppbv	800	12/8/2011 1:50 PM
Carbon disulfide	ND	800	U	ppbv	800	12/8/2011 1:50 PM
Carbon tetrachloride	ND	800	U	ppbv	800	12/8/2011 1:50 PM
Chlorobenzene	ND	800	U	ppbv	800	12/8/2011 1:50 PM
Chlorodibromomethane	ND	800	U	ppbv	800	12/8/2011 1:50 PM
Chloroethane	ND	800	U	ppbv	800	12/8/2011 1:50 PM
Chloroform	ND	800	U	ppbv	800	12/8/2011 1:50 PM
Chloromethane	ND	800	U	ppbv	800	12/8/2011 1:50 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	12/8/2011 1:50 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	12/8/2011 1:50 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/16/2011 1:06:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-037	**Matrix:**	Air
Client Sample ID:	VA0750		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	350,000	16,000		ppbv	8000	12/9/2011 1:09 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	12/8/2011 1:50 PM
Ethyl acetate	ND	800	U	ppbv	800	12/8/2011 1:50 PM
Ethylbenzene	2,900	1,600		ppbv	800	12/8/2011 1:50 PM
Heptane	180,000	8,000		ppbv	8000	12/9/2011 1:09 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	12/8/2011 1:50 PM
m,p-Xylene	6,700	1,600		ppbv	800	12/8/2011 1:50 PM
Methylene chloride	ND	4,000	U	ppbv	800	12/8/2011 1:50 PM
n-Hexane	350,000	16,000		ppbv	8000	12/9/2011 1:09 AM
Naphthalene	ND	800	U	ppbv	800	12/8/2011 1:50 PM
o-Xylene	1,500	800		ppbv	800	12/8/2011 1:50 PM
Propylene	8,900	800		ppbv	800	12/8/2011 1:50 PM
Styrene	ND	800	U	ppbv	800	12/8/2011 1:50 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	12/8/2011 1:50 PM
Tetrachloroethene	ND	800	U	ppbv	800	12/8/2011 1:50 PM
Tetrahydrofuran	ND	800	U	ppbv	800	12/8/2011 1:50 PM
Toluene	100,000	8,000		ppbv	8000	12/9/2011 1:09 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	12/8/2011 1:50 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	12/8/2011 1:50 PM
Trichloroethene	ND	800	U	ppbv	800	12/8/2011 1:50 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	12/8/2011 1:50 PM
Vinyl acetate	ND	800	U	ppbv	800	12/8/2011 1:50 PM
Vinyl chloride	ND	800	U	ppbv	800	12/8/2011 1:50 PM
Xylenes, Total	8,200	2,400		ppbv	800	12/8/2011 1:50 PM
Surr: 4-Bromofluorobenzene	116	70-130		%REC	800	12/8/2011 1:50 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,300,000	94,000		µg/m³	800	12/5/2011 10:52 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	12/5/2011 10:52 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	12/5/2011 10:52 PM
Surr: 4-Bromofluorobenzene	86.5	70-130		%REC	800	12/5/2011 10:52 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/16/2011 1:36:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-038	**Matrix:**	Air
Client Sample ID:	VA0751		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	1.3	0.10		%	1	12/8/2011 11:44 AM
Carbon Monoxide	ND	0.10	U	%	1	12/8/2011 11:44 AM
Methane	ND	0.50	U	%	1	12/8/2011 11:44 AM
Nitrogen	81	0.10		%	1	12/8/2011 11:44 AM
Oxygen	18	0.10		%	1	12/8/2011 11:44 AM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
1,3-Butadiene	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
2-Butanone	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
2-Hexanone	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Acetone	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Benzene	450,000	20,000		ppbv	20000	12/6/2011 8:11 PM
Benzyl chloride	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Bromodichloromethane	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Bromoform	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Bromomethane	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Carbon disulfide	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Chlorobenzene	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Chloroethane	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Chloroform	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Chloromethane	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/16/2011 1:36:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-038	**Matrix:**	Air
Client Sample ID:	VA0751		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,000,000	40,000		ppbv	20000	12/6/2011 8:11 PM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Ethyl acetate	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Ethylbenzene	ND	40,000	U	ppbv	20000	12/6/2011 8:11 PM
Heptane	680,000	20,000		ppbv	20000	12/6/2011 8:11 PM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	12/6/2011 8:11 PM
m,p-Xylene	48,000	40,000		ppbv	20000	12/6/2011 8:11 PM
Methylene chloride	ND	100,000	U	ppbv	20000	12/6/2011 8:11 PM
n-Hexane	1,100,000	40,000		ppbv	20000	12/6/2011 8:11 PM
Naphthalene	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
o-Xylene	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Propylene	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Styrene	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Tetrachloroethene	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Toluene	580,000	20,000		ppbv	20000	12/6/2011 8:11 PM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Trichloroethene	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Vinyl acetate	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Vinyl chloride	ND	20,000	U	ppbv	20000	12/6/2011 8:11 PM
Xylenes, Total	48,000	60,000	J	ppbv	20000	12/6/2011 8:11 PM
Surr: 4-Bromofluorobenzene	117	70-130		%REC	20000	12/6/2011 8:11 PM
Mass APH Air		**Method:**				**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	24,000,000	4,700,000		µg/m³	40000	12/7/2011 1:15 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300,000	U	µg/m³	40000	12/7/2011 1:15 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600,000	U	µg/m³	40000	12/7/2011 1:15 PM
Surr: 4-Bromofluorobenzene	84.1	70-130		%REC	40000	12/7/2011 1:15 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/16/2011 2:17:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-039	**Matrix:**	Air
Client Sample ID:	VA0769		

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	12/8/2011 12:08 PM
Carbon Monoxide	ND	0.10	U	%	1	12/8/2011 12:08 PM
Methane	ND	0.50	U	%	1	12/8/2011 12:08 PM
Nitrogen	81	0.10		%	1	12/8/2011 12:08 PM
Oxygen	18	0.10		%	1	12/8/2011 12:08 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
1,3-Butadiene	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
2-Butanone	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
2-Hexanone	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Acetone	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Benzene	470,000	20,000		ppbv	20000	12/6/2011 8:53 PM
Benzyl chloride	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Bromodichloromethane	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Bromoform	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Bromomethane	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Carbon disulfide	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Chlorobenzene	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Chloroethane	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Chloroform	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Chloromethane	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/16/2011 2:17:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-039	**Matrix:**	Air
Client Sample ID:	VA0769		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,100,000	40,000		ppbv	20000	12/6/2011 8:53 PM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Ethyl acetate	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Ethylbenzene	ND	40,000	U	ppbv	20000	12/6/2011 8:53 PM
Heptane	640,000	20,000		ppbv	20000	12/6/2011 8:53 PM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	12/6/2011 8:53 PM
m,p-Xylene	52,000	40,000		ppbv	20000	12/6/2011 8:53 PM
Methylene chloride	ND	100,000	U	ppbv	20000	12/6/2011 8:53 PM
n-Hexane	1,100,000	40,000		ppbv	20000	12/6/2011 8:53 PM
Naphthalene	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
o-Xylene	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Propylene	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Styrene	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Tetrachloroethene	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Toluene	590,000	20,000		ppbv	20000	12/6/2011 8:53 PM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Trichloroethene	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Vinyl acetate	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Vinyl chloride	ND	20,000	U	ppbv	20000	12/6/2011 8:53 PM
Xylenes, Total	52,000	60,000	J	ppbv	20000	12/6/2011 8:53 PM
Surr: 4-Bromofluorobenzene	114	70-130		%REC	20000	12/6/2011 8:53 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	40,000,000	2,300,000		µg/m³	20000	12/6/2011 6:05 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	12/6/2011 6:05 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	12/6/2011 6:05 PM
Surr: 4-Bromofluorobenzene	89.6	70-130		%REC	20000	12/6/2011 6:05 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/17/2011 8:55:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-040	**Matrix:**	Air
Client Sample ID:	VA0910		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.16	0.10		%	1	12/8/2011 12:34 PM
Carbon Monoxide	ND	0.10	U	%	1	12/8/2011 12:34 PM
Methane	ND	0.50	U	%	1	12/8/2011 12:34 PM
Nitrogen	79	0.10		%	1	12/8/2011 12:34 PM
Oxygen	21	0.10		%	1	12/8/2011 12:34 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	12/6/2011 9:41 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	12/6/2011 9:41 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	12/6/2011 9:41 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	12/6/2011 9:41 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	12/6/2011 9:41 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	12/6/2011 9:41 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	12/6/2011 9:41 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	12/6/2011 9:41 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	12/6/2011 9:41 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	12/6/2011 9:41 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	12/6/2011 9:41 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	12/6/2011 9:41 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	12/6/2011 9:41 PM
1,3-Butadiene	ND	400	U	ppbv	400	12/6/2011 9:41 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	12/6/2011 9:41 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	12/6/2011 9:41 PM
2-Butanone	ND	400	U	ppbv	400	12/6/2011 9:41 PM
2-Hexanone	ND	400	U	ppbv	400	12/6/2011 9:41 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Acetone	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Benzene	3,200	400		ppbv	400	12/6/2011 9:41 PM
Benzyl chloride	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Bromodichloromethane	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Bromoform	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Bromomethane	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Carbon disulfide	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Carbon tetrachloride	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Chlorobenzene	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Chlorodibromomethane	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Chloroethane	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Chloroform	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Chloromethane	ND	400	U	ppbv	400	12/6/2011 9:41 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	12/6/2011 9:41 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	12/6/2011 9:41 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/17/2011 8:55:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-040	**Matrix:**	Air
Client Sample ID:	VA0910		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	4,700	800		ppbv	400	12/6/2011 9:41 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Ethyl acetate	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Ethylbenzene	ND	800	U	ppbv	400	12/6/2011 9:41 PM
Heptane	5,200	400		ppbv	400	12/6/2011 9:41 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	12/6/2011 9:41 PM
m,p-Xylene	1,200	800		ppbv	400	12/6/2011 9:41 PM
Methylene chloride	ND	2,000	U	ppbv	400	12/6/2011 9:41 PM
n-Hexane	4,600	800		ppbv	400	12/6/2011 9:41 PM
Naphthalene	ND	400	U	ppbv	400	12/6/2011 9:41 PM
o-Xylene	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Propylene	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Styrene	ND	400	U	ppbv	400	12/6/2011 9:41 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Tetrachloroethene	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Tetrahydrofuran	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Toluene	8,200	400		ppbv	400	12/6/2011 9:41 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	12/6/2011 9:41 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Trichloroethene	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Vinyl acetate	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Vinyl chloride	ND	400	U	ppbv	400	12/6/2011 9:41 PM
Xylenes, Total	1,200	1,200		ppbv	400	12/6/2011 9:41 PM
Surr: 4-Bromofluorobenzene	113	70-130		%REC	400	12/6/2011 9:41 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	210,000	47,000		µg/m³	400	12/6/2011 8:24 AM
C9-C10 Aromatic Hydrocarbons	15,000	53,000	J	µg/m³	400	12/6/2011 8:24 AM
C9-C12 Aliphatic Hydrocarbons	11,000	76,000	J	µg/m³	400	12/6/2011 8:24 AM
Surr: 4-Bromofluorobenzene	87.8	70-130		%REC	400	12/6/2011 8:24 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/17/2011 9:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-041	**Matrix:**	Air
Client Sample ID:	VA0911		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.15	0.10		%	1	12/8/2011 12:57 PM
Carbon Monoxide	ND	0.10	U	%	1	12/8/2011 12:57 PM
Methane	ND	0.50	U	%	1	12/8/2011 12:57 PM
Nitrogen	79	0.10		%	1	12/8/2011 12:57 PM
Oxygen	21	0.10		%	1	12/8/2011 12:57 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	12/6/2011 3:46 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	12/6/2011 3:46 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	12/6/2011 3:46 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	12/6/2011 3:46 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	12/6/2011 3:46 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	12/6/2011 3:46 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	12/6/2011 3:46 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	12/6/2011 3:46 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	12/6/2011 3:46 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	12/6/2011 3:46 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	12/6/2011 3:46 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	12/6/2011 3:46 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	12/6/2011 3:46 PM
1,3-Butadiene	ND	40	U	ppbv	40	12/6/2011 3:46 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	12/6/2011 3:46 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	12/6/2011 3:46 PM
2-Butanone	ND	40	U	ppbv	40	12/6/2011 3:46 PM
2-Hexanone	ND	40	U	ppbv	40	12/6/2011 3:46 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	12/6/2011 3:46 PM
Acetone	ND	40	U	ppbv	40	12/6/2011 3:46 PM
Benzene	730	40		ppbv	40	12/6/2011 3:46 PM
Benzyl chloride	ND	40	U	ppbv	40	12/6/2011 3:46 PM
Bromodichloromethane	ND	40	U	ppbv	40	12/6/2011 3:46 PM
Bromoform	ND	40	U	ppbv	40	12/6/2011 3:46 PM
Bromomethane	ND	40	U	ppbv	40	12/6/2011 3:46 PM
Carbon disulfide	ND	40	U	ppbv	40	12/6/2011 3:46 PM
Carbon tetrachloride	ND	40	U	ppbv	40	12/6/2011 3:46 PM
Chlorobenzene	ND	40	U	ppbv	40	12/6/2011 3:46 PM
Chlorodibromomethane	ND	40	U	ppbv	40	12/6/2011 3:46 PM
Chloroethane	ND	40	U	ppbv	40	12/6/2011 3:46 PM
Chloroform	ND	40	U	ppbv	40	12/6/2011 3:46 PM
Chloromethane	ND	40	U	ppbv	40	12/6/2011 3:46 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	12/6/2011 3:46 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	12/6/2011 3:46 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/17/2011 9:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-041	**Matrix:**	Air
Client Sample ID:	VA0911		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,100	80		ppbv	40	12/6/2011 3:46 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	12/6/2011 3:46 PM
Ethyl acetate	ND	40	U	ppbv	40	12/6/2011 3:46 PM
Ethylbenzene	110	80		ppbv	40	12/6/2011 3:46 PM
Heptane	1,500	40		ppbv	40	12/6/2011 3:46 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	12/6/2011 3:46 PM
m,p-Xylene	370	80		ppbv	40	12/6/2011 3:46 PM
Methylene chloride	ND	200	U	ppbv	40	12/6/2011 3:46 PM
n-Hexane	1,100	80		ppbv	40	12/6/2011 3:46 PM
Naphthalene	ND	40	U	ppbv	40	12/6/2011 3:46 PM
o-Xylene	88	40		ppbv	40	12/6/2011 3:46 PM
Propylene	ND	40	U	ppbv	40	12/6/2011 3:46 PM
Styrene	ND	40	U	ppbv	40	12/6/2011 3:46 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	12/6/2011 3:46 PM
Tetrachloroethene	ND	40	U	ppbv	40	12/6/2011 3:46 PM
Tetrahydrofuran	ND	40	U	ppbv	40	12/6/2011 3:46 PM
Toluene	2,000	40		ppbv	40	12/6/2011 3:46 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	12/6/2011 3:46 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	12/6/2011 3:46 PM
Trichloroethene	ND	40	U	ppbv	40	12/6/2011 3:46 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	12/6/2011 3:46 PM
Vinyl acetate	ND	40	U	ppbv	40	12/6/2011 3:46 PM
Vinyl chloride	ND	40	U	ppbv	40	12/6/2011 3:46 PM
Xylenes, Total	450	120		ppbv	40	12/6/2011 3:46 PM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	40	12/6/2011 3:46 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	61,000	4,700		µg/m³	40	12/6/2011 3:08 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	12/6/2011 3:08 PM
C9-C12 Aliphatic Hydrocarbons	1,500	7,600	J	µg/m³	40	12/6/2011 3:08 PM
Surr: 4-Bromofluorobenzene	87.3	70-130		%REC	40	12/6/2011 3:08 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/17/2011 9:55:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-042	**Matrix:**	Air
Client Sample ID:	VA0912		

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	12/8/2011 1:16 PM
Carbon Monoxide	ND	0.10	U	%	1	12/8/2011 1:16 PM
Methane	ND	0.50	U	%	1	12/8/2011 1:16 PM
Nitrogen	79	0.10		%	1	12/8/2011 1:16 PM
Oxygen	20	0.10		%	1	12/8/2011 1:16 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	12/6/2011 10:22 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	12/6/2011 10:22 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	12/6/2011 10:22 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	12/6/2011 10:22 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	12/6/2011 10:22 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	12/6/2011 10:22 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	12/6/2011 10:22 PM
1,2,4-Trimethylbenzene	40	40		ppbv	40	12/6/2011 10:22 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	12/6/2011 10:22 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	12/6/2011 10:22 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	12/6/2011 10:22 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	12/6/2011 10:22 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	12/6/2011 10:22 PM
1,3-Butadiene	ND	40	U	ppbv	40	12/6/2011 10:22 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	12/6/2011 10:22 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	12/6/2011 10:22 PM
2-Butanone	ND	40	U	ppbv	40	12/6/2011 10:22 PM
2-Hexanone	ND	40	U	ppbv	40	12/6/2011 10:22 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	12/6/2011 10:22 PM
Acetone	ND	40	U	ppbv	40	12/6/2011 10:22 PM
Benzene	960	40		ppbv	40	12/6/2011 10:22 PM
Benzyl chloride	ND	40	U	ppbv	40	12/6/2011 10:22 PM
Bromodichloromethane	ND	40	U	ppbv	40	12/6/2011 10:22 PM
Bromoform	ND	40	U	ppbv	40	12/6/2011 10:22 PM
Bromomethane	ND	40	U	ppbv	40	12/6/2011 10:22 PM
Carbon disulfide	ND	40	U	ppbv	40	12/6/2011 10:22 PM
Carbon tetrachloride	ND	40	U	ppbv	40	12/6/2011 10:22 PM
Chlorobenzene	ND	40	U	ppbv	40	12/6/2011 10:22 PM
Chlorodibromomethane	ND	40	U	ppbv	40	12/6/2011 10:22 PM
Chloroethane	ND	40	U	ppbv	40	12/6/2011 10:22 PM
Chloroform	ND	40	U	ppbv	40	12/6/2011 10:22 PM
Chloromethane	ND	40	U	ppbv	40	12/6/2011 10:22 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	12/6/2011 10:22 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	12/6/2011 10:22 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/17/2011 9:55:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-042	**Matrix:**	Air
Client Sample ID:	VA0912		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,500	80		ppbv	40	12/6/2011 10:22 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	12/6/2011 10:22 PM
Ethyl acetate	ND	40	U	ppbv	40	12/6/2011 10:22 PM
Ethylbenzene	140	80		ppbv	40	12/6/2011 10:22 PM
Heptane	1,700	40		ppbv	40	12/6/2011 10:22 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	12/6/2011 10:22 PM
m,p-Xylene	460	80		ppbv	40	12/6/2011 10:22 PM
Methylene chloride	ND	200	U	ppbv	40	12/6/2011 10:22 PM
n-Hexane	1,400	80		ppbv	40	12/6/2011 10:22 PM
Naphthalene	ND	40	U	ppbv	40	12/6/2011 10:22 PM
o-Xylene	110	40		ppbv	40	12/6/2011 10:22 PM
Propylene	ND	40	U	ppbv	40	12/6/2011 10:22 PM
Styrene	ND	40	U	ppbv	40	12/6/2011 10:22 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	12/6/2011 10:22 PM
Tetrachloroethene	ND	40	U	ppbv	40	12/6/2011 10:22 PM
Tetrahydrofuran	ND	40	U	ppbv	40	12/6/2011 10:22 PM
Toluene	2,300	40		ppbv	40	12/6/2011 10:22 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	12/6/2011 10:22 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	12/6/2011 10:22 PM
Trichloroethene	ND	40	U	ppbv	40	12/6/2011 10:22 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	12/6/2011 10:22 PM
Vinyl acetate	ND	40	U	ppbv	40	12/6/2011 10:22 PM
Vinyl chloride	ND	40	U	ppbv	40	12/6/2011 10:22 PM
Xylenes, Total	570	120		ppbv	40	12/6/2011 10:22 PM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	40	12/6/2011 10:22 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	87,000	4,700		µg/m³	40	12/6/2011 3:51 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	12/6/2011 3:51 PM
C9-C12 Aliphatic Hydrocarbons	4,700	7,600	J	µg/m³	40	12/6/2011 3:51 PM
Surr: 4-Bromofluorobenzene	90.1	70-130		%REC	40	12/6/2011 3:51 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/17/2011 9:55:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-043	**Matrix:**	Air
Client Sample ID:	VA0913		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.15	0.10		%	1	12/8/2011 1:43 PM
Carbon Monoxide	ND	0.10	U	%	1	12/8/2011 1:43 PM
Methane	ND	0.50	U	%	1	12/8/2011 1:43 PM
Nitrogen	80	0.10		%	1	12/8/2011 1:43 PM
Oxygen	20	0.10		%	1	12/8/2011 1:43 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	12/6/2011 11:10 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	12/6/2011 11:10 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	12/6/2011 11:10 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	12/6/2011 11:10 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	12/6/2011 11:10 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	12/6/2011 11:10 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	12/6/2011 11:10 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	12/6/2011 11:10 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	12/6/2011 11:10 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	12/6/2011 11:10 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	12/6/2011 11:10 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	12/6/2011 11:10 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	12/6/2011 11:10 PM
1,3-Butadiene	ND	400	U	ppbv	400	12/6/2011 11:10 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	12/6/2011 11:10 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	12/6/2011 11:10 PM
2-Butanone	ND	400	U	ppbv	400	12/6/2011 11:10 PM
2-Hexanone	ND	400	U	ppbv	400	12/6/2011 11:10 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	12/6/2011 11:10 PM
Acetone	ND	400	U	ppbv	400	12/6/2011 11:10 PM
Benzene	4,600	400		ppbv	400	12/6/2011 11:10 PM
Benzyl chloride	ND	400	U	ppbv	400	12/6/2011 11:10 PM
Bromodichloromethane	ND	400	U	ppbv	400	12/6/2011 11:10 PM
Bromoform	ND	400	U	ppbv	400	12/6/2011 11:10 PM
Bromomethane	ND	400	U	ppbv	400	12/6/2011 11:10 PM
Carbon disulfide	ND	400	U	ppbv	400	12/6/2011 11:10 PM
Carbon tetrachloride	ND	400	U	ppbv	400	12/6/2011 11:10 PM
Chlorobenzene	ND	400	U	ppbv	400	12/6/2011 11:10 PM
Chlorodibromomethane	ND	400	U	ppbv	400	12/6/2011 11:10 PM
Chloroethane	ND	400	U	ppbv	400	12/6/2011 11:10 PM
Chloroform	ND	400	U	ppbv	400	12/6/2011 11:10 PM
Chloromethane	ND	400	U	ppbv	400	12/6/2011 11:10 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	12/6/2011 11:10 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	12/6/2011 11:10 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/17/2011 9:55:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-043	**Matrix:**	Air
Client Sample ID:	VA0913		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	7,600	800		ppbv	400	12/6/2011 11:10 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	12/6/2011 11:10 PM
Ethyl acetate	ND	400	U	ppbv	400	12/6/2011 11:10 PM
Ethylbenzene	610	800	J	ppbv	400	12/6/2011 11:10 PM
Heptane	8,500	400		ppbv	400	12/6/2011 11:10 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	12/6/2011 11:10 PM
m,p-Xylene	1,900	800		ppbv	400	12/6/2011 11:10 PM
Methylene chloride	ND	2,000	U	ppbv	400	12/6/2011 11:10 PM
n-Hexane	6,100	800		ppbv	400	12/6/2011 11:10 PM
Naphthalene	ND	400	U	ppbv	400	12/6/2011 11:10 PM
o-Xylene	480	400		ppbv	400	12/6/2011 11:10 PM
Propylene	ND	400	U	ppbv	400	12/6/2011 11:10 PM
Styrene	ND	400	U	ppbv	400	12/6/2011 11:10 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	12/6/2011 11:10 PM
Tetrachloroethene	ND	400	U	ppbv	400	12/6/2011 11:10 PM
Tetrahydrofuran	ND	400	U	ppbv	400	12/6/2011 11:10 PM
Toluene	13,000	400		ppbv	400	12/6/2011 11:10 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	12/6/2011 11:10 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	12/6/2011 11:10 PM
Trichloroethene	ND	400	U	ppbv	400	12/6/2011 11:10 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	12/6/2011 11:10 PM
Vinyl acetate	ND	400	U	ppbv	400	12/6/2011 11:10 PM
Vinyl chloride	ND	400	U	ppbv	400	12/6/2011 11:10 PM
Xylenes, Total	2,400	1,200		ppbv	400	12/6/2011 11:10 PM
Surr: 4-Bromofluorobenzene	110	70-130		%REC	400	12/6/2011 11:10 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	320,000	47,000		µg/m³	400	12/6/2011 9:13 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	12/6/2011 9:13 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	12/6/2011 9:13 AM
Surr: 4-Bromofluorobenzene	87.4	70-130		%REC	400	12/6/2011 9:13 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/17/2011 10:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-044	**Matrix:**	Air
Client Sample ID:	VA0914		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.34	0.10		%	1	12/8/2011 2:05 PM
Carbon Monoxide	ND	0.10	U	%	1	12/8/2011 2:05 PM
Methane	ND	0.50	U	%	1	12/8/2011 2:05 PM
Nitrogen	80	0.10		%	1	12/8/2011 2:05 PM
Oxygen	19	0.10		%	1	12/8/2011 2:05 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
2-Butanone	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
2-Hexanone	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Acetone	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Benzene	12,000	8,000		ppbv	8000	12/6/2011 11:51 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Bromoform	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Bromomethane	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Chloroethane	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Chloroform	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Chloromethane	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/17/2011 10:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-044	**Matrix:**	Air
Client Sample ID:	VA0914		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	56,000	16,000		ppbv	8000	12/6/2011 11:51 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	12/6/2011 11:51 PM
Heptane	17,000	8,000		ppbv	8000	12/6/2011 11:51 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	12/6/2011 11:51 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	12/6/2011 11:51 PM
Methylene chloride	ND	40,000	U	ppbv	8000	12/6/2011 11:51 PM
n-Hexane	41,000	16,000		ppbv	8000	12/6/2011 11:51 PM
Naphthalene	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
o-Xylene	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Propylene	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Styrene	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Toluene	24,000	8,000		ppbv	8000	12/6/2011 11:51 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Trichloroethene	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	12/6/2011 11:51 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	12/6/2011 11:51 PM
Surr: 4-Bromofluorobenzene	116	70-130		%REC	8000	12/6/2011 11:51 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,000,000	190,000		µg/m³	1600	12/13/2011 12:48 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	12/13/2011 12:48 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	12/13/2011 12:48 PM
Surr: 4-Bromofluorobenzene	94.4	70-130		%REC	1600	12/13/2011 12:48 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/17/2011 11:28:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-045	**Matrix:**	Air
Client Sample ID:	VA7915		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	0.39	0.10		%	1	12/8/2011 2:27 PM
Carbon Monoxide	ND	0.10	U	%	1	12/8/2011 2:27 PM
Methane	ND	0.50	U	%	1	12/8/2011 2:27 PM
Nitrogen	81	0.10		%	1	12/8/2011 2:27 PM
Oxygen	19	0.10		%	1	12/8/2011 2:27 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
2-Butanone	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
2-Hexanone	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
Acetone	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
Benzene	15,000	8,000		ppbv	8000	12/7/2011 12:32 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
Bromoform	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
Bromomethane	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
Chloroethane	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
Chloroform	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
Chloromethane	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/17/2011 11:28:00 AM
Project:	Kirtland AFB		
Lab ID:	1111752-045	**Matrix:**	Air
Client Sample ID:	VA7915		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	47,000	16,000		ppbv	8000	12/7/2011 12:32 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	12/7/2011 12:32 AM
Heptane	9,600	8,000		ppbv	8000	12/7/2011 12:32 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	12/7/2011 12:32 AM
m,p-Xylene	ND	16,000	U	ppbv	8000	12/7/2011 12:32 AM
Methylene chloride	ND	40,000	U	ppbv	8000	12/7/2011 12:32 AM
n-Hexane	34,000	16,000		ppbv	8000	12/7/2011 12:32 AM
Naphthalene	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
o-Xylene	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
Propylene	9,700	8,000		ppbv	8000	12/7/2011 12:32 AM
Styrene	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
Toluene	26,000	8,000		ppbv	8000	12/7/2011 12:32 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
Trichloroethene	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	12/7/2011 12:32 AM
Xylenes, Total	ND	24,000	U	ppbv	8000	12/7/2011 12:32 AM
Surr: 4-Bromofluorobenzene	116	70-130		%REC	8000	12/7/2011 12:32 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	6,800,000	940,000		µg/m³	8000	12/7/2011 11:01 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	12/7/2011 11:01 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	12/7/2011 11:01 PM
Surr: 4-Bromofluorobenzene	87.0	70-130		%REC	8000	12/7/2011 11:01 PM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/17/2011 12:11:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-046	**Matrix:**	Air
Client Sample ID:	VA7916		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: MB**
Carbon dioxide	0.29	0.10		%	1	12/8/2011 3:00 PM
Carbon Monoxide	ND	0.10	U	%	1	12/8/2011 3:00 PM
Methane	ND	0.50	U	%	1	12/8/2011 3:00 PM
Nitrogen	80	0.10		%	1	12/8/2011 3:00 PM
Oxygen	19	0.10		%	1	12/8/2011 3:00 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
2-Butanone	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
2-Hexanone	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
Acetone	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
Benzene	110,000	8,000		ppbv	8000	12/7/2011 1:13 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
Bromoform	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
Bromomethane	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
Chloroethane	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
Chloroform	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
Chloromethane	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM

RTI Laboratories - Analytical Report

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	11/17/2011 12:11:00 PM
Project:	Kirtland AFB		
Lab ID:	1111752-046	**Matrix:**	Air
Client Sample ID:	VA7916		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	210,000	16,000		ppbv	8000	12/7/2011 1:13 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	12/7/2011 1:13 AM
Heptane	140,000	8,000		ppbv	8000	12/7/2011 1:13 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	12/7/2011 1:13 AM
m,p-Xylene	13,000	16,000	J	ppbv	8000	12/7/2011 1:13 AM
Methylene chloride	ND	40,000	U	ppbv	8000	12/7/2011 1:13 AM
n-Hexane	160,000	16,000		ppbv	8000	12/7/2011 1:13 AM
Naphthalene	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
o-Xylene	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
Propylene	10,000	8,000		ppbv	8000	12/7/2011 1:13 AM
Styrene	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
Toluene	200,000	8,000		ppbv	8000	12/7/2011 1:13 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
Trichloroethene	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	12/7/2011 1:13 AM
Xylenes, Total	13,000	24,000	J	ppbv	8000	12/7/2011 1:13 AM
Surr: 4-Bromofluorobenzene	114	70-130		%REC	8000	12/7/2011 1:13 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	11,000,000	940,000		µg/m³	8000	12/7/2011 11:43 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	12/7/2011 11:43 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	12/7/2011 11:43 PM
Surr: 4-Bromofluorobenzene	86.8	70-130		%REC	8000	12/7/2011 11:43 PM

RTI Laboratories - QC SUMMARY REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R44554**

Sample ID:	**BLK 112811 VOA9**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**44554**
Client ID:	**PBW**	Batch ID:	**R44554**	TestNo:	**MA_APH**			Analysis Date:	**11/28/2011**	SeqNo:	**875131**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	ND	120									U
C9-C10 Aromatic Hydrocarbons	ND	130									U
C9-C12 Aliphatic Hydrocarbons	ND	190									U
Surr: 4-Bromofluorobenzene	88		89.50		98.4	70	130				

Sample ID:	**1111752-007Adup**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**44554**
Client ID:	**VA0802**	Batch ID:	**R44554**	TestNo:	**MA_APH**			Analysis Date:	**11/28/2011**	SeqNo:	**875137**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	19,000,000	940,000						19,830,000	2.37	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	680,000		716,000		95.4	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R44604**

Sample ID:	**BLK1 113011 VOA9**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**44604**
Client ID:	**PBW**	Batch ID:	**R44604**	TestNo:	**MA_APH**			Analysis Date:	**11/30/2011**	SeqNo:	**876312**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	ND	120									U
C9-C10 Aromatic Hydrocarbons	ND	130									U
C9-C12 Aliphatic Hydrocarbons	ND	190									U
Surr: 4-Bromofluorobenzene	85		89.50		95.2	70	130				

Sample ID:	**1111752-010ADUP**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**44604**
Client ID:	**VA0706**	Batch ID:	**R44604**	TestNo:	**MA_APH**			Analysis Date:	**11/30/2011**	SeqNo:	**876315**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	620,000	940,000						591,800	4.89	30	J
C9-C10 Aromatic Hydrocarbons	ND	1,100,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000						0	0	30	U
Surr: 4-Bromofluorobenzene	700,000		716,000		98.4	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R44658

Sample ID:	**MBLK VOA1 120211**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**44658**
Client ID:	**PBW**	Batch ID:	**R44658**	TestNo:	**TO-15**			Analysis Date:	**12/3/2011**	SeqNo:	**877938**

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

RTI Laboratories - QC SUMMARY REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R44658**

Sample ID:	**MBLK VOA1 120211**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**44658**
Client ID:	**PBW**	Batch ID:	**R44658**	TestNo:	**TO-15**			Analysis Date:	**12/3/2011**	SeqNo:	**877938**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									U
cis-1,2-Dichloroethene	ND	1.0									U
cis-1,3-dichloropropene	ND	1.0									U
Cyclohexane	ND	2.0									U
Dichlorodifluoromethane	ND	1.0									U
Ethyl acetate	ND	1.0									U
Ethylbenzene	ND	2.0									U
Heptane	ND	1.0									U
Hexachlorobutadiene	ND	2.0									U
m,p-Xylene	ND	2.0									U
Methylene chloride	ND	5.0									U
n-Hexane	ND	2.0									U
Naphthalene	ND	1.0									U
o-Xylene	ND	1.0									U
Propylene	ND	1.0									U
Styrene	ND	1.0									U
tert-Butyl Methyl Ether	ND	1.0									U
Tetrachloroethene	ND	1.0									U
Tetrahydrofuran	ND	1.0									U
Toluene	ND	1.0									U
trans-1,2-Dichloroethene	ND	1.0									U
trans-1,3-dichloropropene	ND	1.0									U
Trichloroethene	ND	1.0									U
Trichlorofluoromethane	ND	1.0									U
Vinyl acetate	ND	1.0									U
Vinyl chloride	ND	1.0									U
Xylenes, Total	ND	3.0									U
Surr: 4-Bromofluorobenzene	14		12.50		110	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R44658**

Sample ID:	**1111752-005Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**44658**
Client ID:	**VA0800**	Batch ID:	**R44658**	TestNo:	**TO-15**			Analysis Date:	**12/3/2011**	SeqNo:	**877944**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	8,000						0	0	25	U
1,1,2,2-Tetrachloroethane	ND	8,000						0	0	25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000						0	0	25	U
1,1,2-Trichloroethane	ND	8,000						0	0	25	U
1,1-Dichloroethane	ND	8,000						0	0	25	U
1,1-Dichloroethene	ND	8,000						0	0	25	U
1,2,4-Trichlorobenzene	ND	8,000						0	0	25	U
1,2,4-Trimethylbenzene	ND	8,000						0	0	25	U
1,2-Dibromoethane	ND	8,000						0	0	25	U
1,2-Dichlorobenzene	ND	8,000						0	0	25	U
1,2-Dichloroethane	ND	8,000						0	0	25	U
1,2-Dichloropropane	ND	8,000						0	0	25	U
1,3,5-Trimethylbenzene	ND	8,000						0	0	25	U
1,3-Butadiene	ND	8,000						0	0	25	U
1,3-Dichlorobenzene	ND	8,000						0	0	25	U
1,4-Dichlorobenzene	ND	8,000						0	0	25	U
2-Butanone	ND	8,000						0	0	25	U
2-Hexanone	ND	8,000						0	0	25	U
4-Methyl-2-pentanone	ND	8,000						0	0	25	U
Acetone	ND	8,000						0	0	25	U
Benzene	48,000	8,000						47,200	2.18	25	
Benzyl chloride	ND	8,000						0	0	25	U
Bromodichloromethane	ND	8,000						0	0	25	U
Bromoform	ND	8,000						0	0	25	U
Bromomethane	ND	8,000						0	0	25	U
Carbon disulfide	ND	8,000						0	0	25	U
Carbon tetrachloride	ND	8,000						0	0	25	U
Chlorobenzene	ND	8,000						0	0	25	U
Chlorodibromomethane	ND	8,000						0	0	25	U
Chloroethane	ND	8,000						0	0	25	U
Chloroform	ND	8,000						0	0	25	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R44658**

Sample ID:	**1111752-005Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**44658**
Client ID:	**VA0800**	Batch ID:	**R44658**	TestNo:	**TO-15**			Analysis Date:	**12/3/2011**	SeqNo:	**877944**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	8,000						0	0	25	U
cis-1,2-Dichloroethene	ND	8,000						0	0	25	U
cis-1,3-dichloropropene	ND	8,000						0	0	25	U
Cyclohexane	140,000	16,000						141,600	0.623	25	
Dichlorodifluoromethane	ND	8,000						0	0	25	U
Ethyl acetate	ND	8,000						0	0	25	U
Ethylbenzene	ND	16,000						0	0	25	U
Heptane	66,000	8,000						65,120	1.83	25	
Hexachlorobutadiene	ND	16,000						0	0	25	U
m,p-Xylene	ND	16,000						0	0	25	U
Methylene chloride	ND	40,000						0	0	25	U
n-Hexane	150,000	16,000						156,900	3.05	25	
Naphthalene	ND	8,000						0	0	25	U
o-Xylene	ND	8,000						0	0	25	U
Propylene	ND	8,000						0	0	25	U
Styrene	ND	8,000						0	0	25	U
tert-Butyl Methyl Ether	ND	8,000						0	0	25	U
Tetrachloroethene	ND	8,000						0	0	25	U
Tetrahydrofuran	ND	8,000						38,960	200	25	RU
Toluene	87,000	8,000						83,760	3.75	25	
trans-1,2-Dichloroethene	ND	8,000						0	0	25	U
trans-1,3-dichloropropene	ND	8,000						0	0	25	U
Trichloroethene	ND	8,000						0	0	25	U
Trichlorofluoromethane	ND	8,000						0	0	25	U
Vinyl acetate	ND	8,000						0	0	25	U
Vinyl chloride	ND	8,000						0	0	25	U
Xylenes, Total	ND	24,000						0	0	25	U
Surr: 4-Bromofluorobenzene	110,000		100,000		113	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R44664**

Sample ID:	**BLK1 120111 VOA9**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**44664**
Client ID:	**PBW**	Batch ID:	**R44664**	TestNo:	**MA_APH**			Analysis Date:	**12/1/2011**	SeqNo:	**878108**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	ND	120									U
C9-C10 Aromatic Hydrocarbons	ND	130									U
C9-C12 Aliphatic Hydrocarbons	ND	190									U
Surr: 4-Bromofluorobenzene	83		89.50		93.0	70	130				

Sample ID:	**1111752-030ADUP**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**44664**
Client ID:	**VA0793**	Batch ID:	**R44664**	TestNo:	**MA_APH**			Analysis Date:	**12/1/2011**	SeqNo:	**878114**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	550,000	940,000						591,700	7.96	30	J
C9-C10 Aromatic Hydrocarbons	ND	1,100,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000						0	0	30	U
Surr: 4-Bromofluorobenzene	690,000		716,000		95.8	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R44693**

Sample ID:	**MBLK VOA1 120511**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**44693**
Client ID:	**PBW**	Batch ID:	**R44693**	TestNo:	**TO-15**			Analysis Date:	**12/5/2011**	SeqNo:	**878712**

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

RTI Laboratories - QC SUMMARY REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R44693

Sample ID:	**MBLK VOA1 120511**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**44693**
Client ID:	**PBW**	Batch ID:	**R44693**	TestNo:	**TO-15**			Analysis Date:	**12/5/2011**	SeqNo:	**878712**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									U
cis-1,2-Dichloroethene	ND	1.0									U
cis-1,3-dichloropropene	ND	1.0									U
Cyclohexane	ND	2.0									U
Dichlorodifluoromethane	ND	1.0									U
Ethyl acetate	ND	1.0									U
Ethylbenzene	ND	2.0									U
Heptane	ND	1.0									U
Hexachlorobutadiene	ND	2.0									U
m,p-Xylene	ND	2.0									U
Methylene chloride	ND	5.0									U
n-Hexane	ND	2.0									U
Naphthalene	ND	1.0									U
o-Xylene	ND	1.0									U
Propylene	ND	1.0									U
Styrene	ND	1.0									U
tert-Butyl Methyl Ether	ND	1.0									U
Tetrachloroethene	ND	1.0									U
Tetrahydrofuran	ND	1.0									U
Toluene	ND	1.0									U
trans-1,2-Dichloroethene	ND	1.0									U
trans-1,3-dichloropropene	ND	1.0									U
Trichloroethene	ND	1.0									U
Trichlorofluoromethane	ND	1.0									U
Vinyl acetate	ND	1.0									U
Vinyl chloride	ND	1.0									U
Xylenes, Total	ND	3.0									U
Surr: 4-Bromofluorobenzene	15		12.50		117	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R44693

Sample ID:	1111752-028Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	44693
Client ID:	VA0791	Batch ID:	R44693	TestNo:	TO-15			Analysis Date:	12/6/2011	SeqNo:	878724

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	8,000						0	0	25	U
1,1,2,2-Tetrachloroethane	ND	8,000						0	0	25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000						0	0	25	U
1,1,2-Trichloroethane	ND	8,000						0	0	25	U
1,1-Dichloroethane	ND	8,000						0	0	25	U
1,1-Dichloroethene	ND	8,000						0	0	25	U
1,2,4-Trichlorobenzene	ND	8,000						0	0	25	U
1,2,4-Trimethylbenzene	ND	8,000						0	0	25	U
1,2-Dibromoethane	ND	8,000						0	0	25	U
1,2-Dichlorobenzene	ND	8,000						0	0	25	U
1,2-Dichloroethane	ND	8,000						0	0	25	U
1,2-Dichloropropane	ND	8,000						0	0	25	U
1,3,5-Trimethylbenzene	ND	8,000						0	0	25	U
1,3-Butadiene	ND	8,000						0	0	25	U
1,3-Dichlorobenzene	ND	8,000						0	0	25	U
1,4-Dichlorobenzene	ND	8,000						0	0	25	U
2-Butanone	ND	8,000						0	0	25	U
2-Hexanone	ND	8,000						0	0	25	U
4-Methyl-2-pentanone	ND	8,000						0	0	25	U
Acetone	ND	8,000						0	0	25	U
Benzene	ND	8,000						0	0	25	U
Benzyl chloride	ND	8,000						0	0	25	U
Bromodichloromethane	ND	8,000						0	0	25	U
Bromoform	ND	8,000						0	0	25	U
Bromomethane	ND	8,000						0	0	25	U
Carbon disulfide	ND	8,000						0	0	25	U
Carbon tetrachloride	ND	8,000						0	0	25	U
Chlorobenzene	ND	8,000						0	0	25	U
Chlorodibromomethane	ND	8,000						0	0	25	U
Chloroethane	ND	8,000						0	0	25	U
Chloroform	ND	8,000						0	0	25	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R44693

Sample ID:	1111752-028Adup	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	44693
Client ID:	VA0791	Batch ID:	R44693	TestNo:	TO-15			Analysis Date:	12/6/2011	SeqNo:	878724

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	8,000						0	0	25	U
cis-1,2-Dichloroethene	ND	8,000						0	0	25	U
cis-1,3-dichloropropene	ND	8,000						0	0	25	U
Cyclohexane	ND	16,000						0	0	25	U
Dichlorodifluoromethane	ND	8,000						0	0	25	U
Ethyl acetate	ND	8,000						0	0	25	U
Ethylbenzene	ND	16,000						0	0	25	U
Heptane	ND	8,000						0	0	25	U
Hexachlorobutadiene	ND	16,000						0	0	25	U
m,p-Xylene	ND	16,000						0	0	25	U
Methylene chloride	ND	40,000						0	0	25	U
n-Hexane	ND	16,000						0	0	25	U
Naphthalene	ND	8,000						0	0	25	U
o-Xylene	ND	8,000						0	0	25	U
Propylene	ND	8,000						0	0	25	U
Styrene	ND	8,000						0	0	25	U
tert-Butyl Methyl Ether	ND	8,000						0	0	25	U
Tetrachloroethene	ND	8,000						0	0	25	U
Tetrahydrofuran	ND	8,000						0	0	25	U
Toluene	ND	8,000						0	0	25	U
trans-1,2-Dichloroethene	ND	8,000						0	0	25	U
trans-1,3-dichloropropene	ND	8,000						0	0	25	U
Trichloroethene	ND	8,000						0	0	25	U
Trichlorofluoromethane	ND	8,000						0	0	25	U
Vinyl acetate	ND	8,000						0	0	25	U
Vinyl chloride	ND	8,000						0	0	25	U
Xylenes, Total	ND	24,000						0	0	25	U
Surr: 4-Bromofluorobenzene	120,000		100,000		119	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R44694**

Sample ID:	**BLK1 120511 VOA9**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**44694**
Client ID:	**PBW**	Batch ID:	**R44694**	TestNo:	**MA_APH**			Analysis Date:	**12/5/2011**	SeqNo:	**878770**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	ND	120									U
C9-C10 Aromatic Hydrocarbons	ND	130									U
C9-C12 Aliphatic Hydrocarbons	ND	190									U
Surr: 4-Bromofluorobenzene	76		89.50		85.2	70	130				

Sample ID:	**1111752-035ADUP**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**44694**
Client ID:	**VA0748**	Batch ID:	**R44694**	TestNo:	**MA_APH**			Analysis Date:	**12/5/2011**	SeqNo:	**878778**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	610,000	940,000						625,400	3.26	30	J
C9-C10 Aromatic Hydrocarbons	ND	1,100,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000						0	0	30	U
Surr: 4-Bromofluorobenzene	610,000		716,000		85.3	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R44740**

Sample ID:	**MBLK VOA1 120611**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**44740**		
Client ID:	**PBW**	Batch ID:	**R44740**	TestNo:	**TO-15**			Analysis Date:	**12/6/2011**	SeqNo:	**879755**		

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#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R44740**

Sample ID:	**MBLK VOA1 120611**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**44740**
Client ID:	**PBW**	Batch ID:	**R44740**	TestNo:	**TO-15**			Analysis Date:	**12/6/2011**	SeqNo:	**879755**

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#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R44740

Sample ID:	1111752-033ADUP	Samp Type:	DUP	Test Code:	EPA_TO15	Units:	ppbv	Prep Date:		RunNo:	44740
Client ID:	VA0796	Batch ID:	R44740	TestNo:	TO-15			Analysis Date:	12/6/2011	SeqNo:	879762

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	130,000	8,000						130,500	0.615	25	
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#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R44740**

Sample ID:	**1111752-033ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**44740**
Client ID:	**VA0796**	Batch ID:	**R44740**	TestNo:	**TO-15**			Analysis Date:	**12/6/2011**	SeqNo:	**879762**

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	260,000	16,000						260,700	1.05	25	
Dichlorodifluoromethane	ND	8,000						0	0	25	
Ethyl acetate	ND	8,000						0	0	25	
Ethylbenzene	ND	16,000						0	0	25	
Heptane	90,000	8,000						89,760	0	25	
Hexachlorobutadiene	ND	16,000						0	0	25	
m,p-Xylene	10,000	16,000						10,560	3.08	25	J
Methylene chloride	ND	40,000						0	0	25	
n-Hexane	250,000	16,000						247,000	0.999	25	
Naphthalene	ND	8,000						0	0	25	
o-Xylene	ND	8,000						0	0	25	
Propylene	14,000	8,000						14,800	3.86	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	190,000	8,000						187,800	0.594	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	10,000	24,000						10,560	3.08	25	J
Surr: 4-Bromofluorobenzene	120,000		100,000		115	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R44744

Sample ID:	BLK1 120611 VOA9	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	44744
Client ID:	PBW	Batch ID:	R44744	TestNo:	MA_APH			Analysis Date:	12/6/2011	SeqNo:	879889

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	74		89.50		83.2	70	130				

Sample ID:	1111882-001ADUP	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	44744
Client ID:	ZZZZZZ	Batch ID:	R44744	TestNo:	MA_APH			Analysis Date:	12/6/2011	SeqNo:	879896

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	490,000	940,000						536,700	8.22	30	J
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	620,000		716,000		86.3	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R44754

Sample ID:	BLK1 120711 VOA9	Samp Type:	MBLK	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	44754
Client ID:	PBW	Batch ID:	R44754	TestNo:	MA_APH			Analysis Date:	12/7/2011	SeqNo:	880073

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	75		89.50		83.7	70	130				

Sample ID:	1111882-011Adup	Samp Type:	DUP	Test Code:	MA_APH	Units:	µg/m³	Prep Date:		RunNo:	44754
Client ID:	ZZZZZZ	Batch ID:	R44754	TestNo:	MA_APH			Analysis Date:	12/7/2011	SeqNo:	880082

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	480,000	940,000						565,800	16.4	30	J
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	630,000		716,000		88.4	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R44784**

Sample ID: **mblk** Samp Type: **MBLK** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **44784**

Client ID: **PBW** Batch ID: **R44784** TestNo: **ASTM-D2504** Analysis Date: **12/6/2011** SeqNo: **880793**

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: **44784**

Client ID: **LCSW** Batch ID: **R44784** TestNo: **ASTM-D2504** Analysis Date: **12/6/2011** SeqNo: **880795**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.9	0.10	2.500	0	114	70	130	2.843	0.456	0	
Carbon Monoxide	2.8	0.10	2.500	0	111	70	130	2.767	0.108	0	
Methane	2.1	0.50	2.000	0	106	70	130	2.100	0.712	0	
Nitrogen	2.7	0.10	2.500	0	107	70	130	2.680	0.112	0	
Oxygen	2.7	0.10	2.500	0	107	70	130	2.669	0.374	0	

Sample ID: **1111752-011bdup** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **44784**

Client ID: **VA0707** Batch ID: **R44784** TestNo: **ASTM-D2504** Analysis Date: **12/6/2011** SeqNo: **880807**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.45	0.10						0.4430	0.899	20	
Carbon Monoxide	ND	0.10						0	0	20	
Methane	ND	0.50						0	0	20	
Nitrogen	79	0.10						78.74	0.118	20	
Oxygen	21	0.10						20.76	0.576	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: R44785

Sample ID:	mblk	Samp Type:	MBLK	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	44785
Client ID:	PBW	Batch ID:	R44785	TestNo:	ASTM-D2504			Analysis Date:	12/7/2011	SeqNo:	880820

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:	44785
Client ID:	LCSW	Batch ID:	R44785	TestNo:	ASTM-D2504			Analysis Date:	12/7/2011	SeqNo:	880822

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.8	0.10	2.500	0	114	70	130	2.866	0.665	0	
Carbon Monoxide	2.7	0.10	2.500	0	109	70	130	2.746	0.584	0	
Methane	2.1	0.50	2.000	0	106	70	130	2.137	0.563	0	
Nitrogen	2.7	0.10	2.500	0	107	70	130	2.658	0.488	0	
Oxygen	2.7	0.10	2.500	0	106	70	130	2.655	0	0	

Sample ID:	1111752-032bdup	Samp Type:	DUP	Test Code:	ASTM-D2504	Units:	%	Prep Date:		RunNo:	44785
Client ID:	VA0795	Batch ID:	R44785	TestNo:	ASTM-D2504			Analysis Date:	12/7/2011	SeqNo:	880834

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.15	0.10						0.1420	4.14	20	
Carbon Monoxide	ND	0.10						0	0	20	
Methane	ND	0.50						0	0	20	
Nitrogen	79	0.10						78.49	0.522	20	
Oxygen	21	0.10						20.63	0.546	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R44786**

Sample ID: **mblk** Samp Type: **MBLK** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **44786**

Client ID: **PBW** Batch ID: **R44786** TestNo: **ASTM-D2504** Analysis Date: **12/8/2011** SeqNo: **880842**

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: **44786**

Client ID: **LCSW** Batch ID: **R44786** TestNo: **ASTM-D2504** Analysis Date: **12/8/2011** SeqNo: **880844**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.9	0.10	2.500	0	114	70	130	2.870	0.314	0	
Carbon Monoxide	2.8	0.10	2.500	0	111	70	130	2.831	2.29	0	
Methane	2.1	0.50	2.000	0	106	70	130	2.120	0.141	0	
Nitrogen	2.8	0.10	2.500	0	111	70	130	2.643	4.66	0	
Oxygen	2.7	0.10	2.500	0	108	70	130	2.669	1.27	0	

Sample ID: **1111752-046bdup** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **%** Prep Date: RunNo: **44786**

Client ID: **VA7916** Batch ID: **R44786** TestNo: **ASTM-D2504** Analysis Date: **12/8/2011** SeqNo: **880856**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.28	0.10						0.2850	0.704	20	
Carbon Monoxide	ND	0.10						0	0	20	
Methane	ND	0.50						0	0	20	
Nitrogen	80	0.10						80.44	0.519	20	
Oxygen	19	0.10						19.50	1.03	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R44800**

Sample ID:	**MBLK VOA1 120711**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**44800**
Client ID:	**PBW**	Batch ID:	**R44800**	TestNo:	**TO-15**			Analysis Date:	**12/8/2011**	SeqNo:	**881025**

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#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R44800**

Sample ID:	**MBLK VOA1 120711**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**44800**
Client ID:	**PBW**	Batch ID:	**R44800**	TestNo:	**TO-15**			Analysis Date:	**12/8/2011**	SeqNo:	**881025**

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		113	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R44800**

Sample ID:	**1111882-006Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**44800**
Client ID:	**ZZZZZZ**	Batch ID:	**R44800**	TestNo:	**TO-15**			Analysis Date:	**12/8/2011**	SeqNo:	**881034**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	800						0	0	25	
1,1,2,2-Tetrachloroethane	ND	800						0	0	25	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800						0	0	25	
1,1,2-Trichloroethane	ND	800						0	0	25	
1,1-Dichloroethane	ND	800						0	0	25	
1,1-Dichloroethene	ND	800						0	0	25	
1,2,4-Trichlorobenzene	ND	800						0	0	25	
1,2,4-Trimethylbenzene	ND	800						0	0	25	
1,2-Dibromoethane	ND	800						0	0	25	
1,2-Dichlorobenzene	ND	800						0	0	25	
1,2-Dichloroethane	ND	800						0	0	25	
1,2-Dichloropropane	ND	800						0	0	25	
1,3,5-Trimethylbenzene	ND	800						0	0	25	
1,3-Butadiene	ND	800						0	0	25	
1,3-Dichlorobenzene	ND	800						0	0	25	
1,4-Dichlorobenzene	ND	800						0	0	25	
2-Butanone	ND	800						0	0	25	
2-Hexanone	ND	800						0	0	25	
4-Methyl-2-pentanone	ND	800						0	0	25	
Acetone	1,100	800						928.0	14.4	25	
Benzene	2,700	800						2,392	13.1	25	
Benzyl chloride	ND	800						0	0	25	
Bromodichloromethane	ND	800						0	0	25	
Bromoform	ND	800						0	0	25	
Bromomethane	ND	800						0	0	25	
Carbon disulfide	ND	800						0	0	25	
Carbon tetrachloride	ND	800						0	0	25	
Chlorobenzene	ND	800						0	0	25	
Chlorodibromomethane	ND	800						0	0	25	
Chloroethane	ND	800						0	0	25	
Chloroform	ND	800						0	0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R44800**

Sample ID:	**1111882-006Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**44800**
Client ID:	**ZZZZZZ**	Batch ID:	**R44800**	TestNo:	**TO-15**			Analysis Date:	**12/8/2011**	SeqNo:	**881034**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	800						0	0	25	
cis-1,2-Dichloroethene	ND	800						0	0	25	
cis-1,3-dichloropropene	ND	800						0	0	25	
Cyclohexane	5,100	1,600						4,416	14.1	25	
Dichlorodifluoromethane	ND	800						0	0	25	
Ethyl acetate	ND	800						0	0	25	
Ethylbenzene	ND	1,600						0	0	25	
Heptane	2,500	800						2,296	9.62	25	
Hexachlorobutadiene	ND	1,600						0	0	25	
m,p-Xylene	980	1,600						864.0	13.0	25	J
Methylene chloride	6,200	4,000						5,640	9.72	25	
n-Hexane	5,200	1,600						4,600	11.6	25	
Naphthalene	ND	800						0	0	25	
o-Xylene	ND	800						0	0	25	
Propylene	1,600	800						1,584	2.04	25	
Styrene	ND	800						0	0	25	
tert-Butyl Methyl Ether	ND	800						0	0	25	
Tetrachloroethene	ND	800						0	0	25	
Tetrahydrofuran	ND	800						0	0	25	
Toluene	6,400	800						5,480	15.7	25	
trans-1,2-Dichloroethene	ND	800						0	0	25	
trans-1,3-dichloropropene	ND	800						0	0	25	
Trichloroethene	ND	800						0	0	25	
Trichlorofluoromethane	ND	800						0	0	25	
Vinyl acetate	ND	800						0	0	25	
Vinyl chloride	ND	800						0	0	25	
Xylenes, Total	980	2,400						864.0	13.0	25	J
Surr: 4-Bromofluorobenzene	11,000		10,000		113	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1111752

Date Reported: 12/21/2011
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R44881**

Sample ID:	**Blank 121311 VOA**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**44881**
Client ID:	**PBW**	Batch ID:	**R44881**	TestNo:	**MA_APH**			Analysis Date:	**12/13/2011**	SeqNo:	**882992**

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	83		89.50		92.7	70	130				

Sample ID:	**1111882-011Adup2**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**44881**
Client ID:	**ZZZZZZ**	Batch ID:	**R44881**	TestNo:	**MA_APH**			Analysis Date:	**12/13/2011**	SeqNo:	**883000**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	24,000	4,700						22,520	6.72	30	
C9-C10 Aromatic Hydrocarbons	ND	5,300						0	0	30	
C9-C12 Aliphatic Hydrocarbons	ND	7,600						0	0	30	
Surr: 4-Bromofluorobenzene	3,600		3,580		100	70	130		0	30	

RTI Laboratories

Run ID: VOA1_111202A **Run No.:** 44658

Analytical Run Date: 12/2/2011 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

Calibration ID: 44658 **Column ID:** 0.25mm, 1.4umFT

Column Length: 30m

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB1 VOA1 120211	BFB_TUNE	TUNE	R44658	12/2/2011 6:18:00 PM	Robert Lynch		
1ppbv ICAL	EPA_TO15	ICAL	R44658	12/2/2011 7:42:00 PM	Robert Lynch		
10ppbv ICAL	EPA_TO15	ICAL	R44658	12/2/2011 8:23:00 PM	Robert Lynch		
12ppbv ICAL	EPA_TO15	ICAL	R44658	12/2/2011 9:04:00 PM	Robert Lynch		
15ppbv ICAL	EPA_TO15	ICAL	R44658	12/2/2011 9:45:00 PM	Robert Lynch		
20ppbv ICAL	EPA_TO15	ICAL	R44658	12/2/2011 10:27:00 PM	Robert Lynch		
30ppbv ICAL	EPA_TO15	ICAL	R44658	12/2/2011 11:10:00 PM	Robert Lynch		
50ppbv ICAL	EPA_TO15	ICAL	R44658	12/2/2011 11:53:00 PM	Robert Lynch		
BFB2 VOA1 120211	BFB_TUNE	TUNE	R44658	12/3/2011 12:33:00 AM	Robert Lynch		
ICV VOA1 120211	EPA_TO15	ICV	R44658	12/3/2011 1:14:00 AM	Robert Lynch		
RLVS1 VOA1 12021	EPA_TO15	RLVS	R44658	12/3/2011 1:56:00 AM	Robert Lynch		
MBLK VOA1 120211	EPA_TO15	MBLK	R44658	12/3/2011 2:44:00 AM	Robert Lynch		
1111752-001A	EPA_TO15	SAMP	R44658	12/3/2011 3:25:00 AM	Robert Lynch		
1111752-002A	EPA_TO15	SAMP	R44658	12/3/2011 4:13:00 AM	Robert Lynch		
1111752-003A	EPA_TO15	SAMP	R44658	12/3/2011 5:00:00 AM	Robert Lynch		
1111752-004A	EPA_TO15	SAMP	R44658	12/3/2011 5:48:00 AM	Robert Lynch		
1111752-005A	EPA_TO15	SAMP	R44658	12/3/2011 6:28:00 AM	Robert Lynch		
1111752-005Adup	EPA_TO15	DUP	R44658	12/3/2011 7:09:00 AM	Charles O`Bryan		
1111752-006A	EPA_TO15	SAMP	R44658	12/3/2011 7:50:00 AM	Robert Lynch		
1111752-007A	EPA_TO15	SAMP	R44658	12/3/2011 8:31:00 AM	Robert Lynch		
1111752-008A	EPA_TO15	SAMP	R44658	12/3/2011 9:12:00 AM	Robert Lynch		
1111752-009A	EPA_TO15	SAMP	R44658	12/3/2011 9:53:00 AM	Robert Lynch		
1111752-011A	EPA_TO15	SAMP	R44658	12/3/2011 11:21:00 AM	Robert Lynch		
1111752-012A	EPA_TO15	SAMP	R44658	12/3/2011 12:09:00 PM	Robert Lynch		
1111752-013A	EPA_TO15	SAMP	R44658	12/3/2011 12:56:00 PM	Robert Lynch		
1111752-015A	EPA_TO15	SAMP	R44658	12/3/2011 2:17:00 PM	Robert Lynch		
1111752-016A	EPA_TO15	SAMP	R44658	12/3/2011 2:58:00 PM	Robert Lynch		
1111752-017A	EPA_TO15	SAMP	R44658	12/3/2011 3:38:00 PM	Robert Lynch		
1111752-018A	EPA_TO15	SAMP	R44658	12/3/2011 4:17:00 PM	Robert Lynch		
1111752-019A	EPA_TO15	SAMP	R44658	12/3/2011 5:05:00 PM	Robert Lynch		
1111752-022A	EPA_TO15	SAMP	R44658	12/3/2011 7:11:00 PM	Robert Lynch		
1111752-025A	EPA_TO15	SAMP	R44658	12/3/2011 9:15:00 PM	Robert Lynch		
1111752-026A	EPA_TO15	SAMP	R44658	12/3/2011 9:56:00 PM	Robert Lynch		
RLVS2 VOA1 12021	EPA_TO15	RLVS	R44658	12/3/2011 11:20:00 PM	Robert Lynch		

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
877936	ICV VOA1 120211	EPA_TO15	ICV	.\1\DATA\120211	12/3/2011 1:14:0	1	R44658		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	10.34	10.34		9.6	0	0	0.107	1	0	108%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.69	10.69		10	0	0	0.211	1	0	107%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.87	10.87		9.8	0	0	0.108	1	0	111%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	10.01	10.01		9.8	0	0	0.2	1	0	102%	70	130	0%	
1,1-Dichloroethane	A	ppbv	10.49	10.49		9.7	0	0	0.111	1	0	108%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.76	10.76		9.9	0	0	0.097	1	0	109%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	7.9	7.9		9.1	0	0	0.271	1	0	87%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	10.13	10.13		9.8	0	0	0.245	1	0	103%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.94	9.94		9.6	0	0	0.186	1	0	104%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	10.47	10.47		9.7	0	0	0.208	1	0	108%	70	130	0%	
1,2-Dichloroethane	A	ppbv	10.02	10.02		9.7	0	0	0.196	1	0	103%	70	130	0%	
1,2-Dichloropropane	A	ppbv	10.29	10.29		9.8	0	0	0.224	1	0	105%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.88	9.88		9.7	0	0	0.24	1	0	102%	70	130	0%	
1,3-Butadiene	A	ppbv	11.3	11.3		9.8	0	0	0.152	1	0	115%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	10.31	10.31		9.7	0	0	0.202	1	0	106%	70	130	0%	
1,4-Dichlorobenzene	A	ppbv	9.99	9.99		9.6	0	0	0.194	1	0	104%	70	130	0%	
1,4-Dioxane	A	ppbv	10.17	10.17		9.6	0	0	0.128	1	0	106%	70	130	0%	
2-Butanone	A	ppbv	10.3	10.3		9.9	0	0	0.287	1	0	104%	70	130	0%	
2-Hexanone	A	ppbv	10.46	10.46		9.8	0	0	0.135	1	0	107%	70	130	0%	
2-Propanol	A	ppbv	10.97	10.97		10.1	0	0	0.329	1	0	109%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	10.61	10.61		10	0	0	0.157	1	0	106%	70	130	0%	
Acetone	A	ppbv	10.55	10.55		10	0	0	0.43	1	0	106%	70	130	0%	
Benzene	A	ppbv	10.12	10.12		9.6	0	0	0.126	1	0	105%	70	130	0%	
Benzyl chloride	A	ppbv	10.83	10.83		9.7	0	0	0.155	1	0	112%	70	130	0%	
Bromodichloromethane	A	ppbv	10.09	10.09		9.6	0	0	0.156	1	0	105%	70	130	0%	
Bromoform	A	ppbv	10.12	10.12		9.6	0	0	0.197	1	0	105%	70	130	0%	
Bromomethane	A	ppbv	10.04	10.04		9.3	0	0	0.075	1	0	108%	70	130	0%	
Carbon disulfide	A	ppbv	10.67	10.67		9.7	0	0	0.093	1	0	110%	70	130	0%	
Carbon tetrachloride	A	ppbv	10.07	10.07		9.5	0	0	0.114	1	0	106%	70	130	0%	
Chlorobenzene	A	ppbv	10.26	10.26		9.9	0	0	0.275	1	0	104%	70	130	0%	
Chlorodibromomethane	A	ppbv	10.08	10.08		9.2	0	0	0.165	1	0	110%	70	130	0%	
Chloroethane	A	ppbv	10.08	10.08		9.8	0	0	0.063	1	0	103%	70	130	0%	
Chloroform	A	ppbv	10.6	10.6		9.4	0	0	0.126	1	0	113%	70	130	0%	
Chloromethane	A	ppbv	10.2	10.2		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
877936	ICV VOA1 120211	EPA_TO15	ICV	:\1\DATA\120211	12/3/2011 1:14:0	1	R44658		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	10.46	10.46		9.8	0	0	0.107	1	0	107%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	9.95	9.95		9.5	0	0	0.166	1	0	105%	70	130	0%	
Cyclohexane	A	ppbv	11.1	11.1		9.8	0	0	0.684	2	0	113%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.76	9.76		9.2	0	0	0.086	1	0	106%	70	130	0%	
Ethanol	A	ppbv	9.72	9.72		9.2	0	0	1.962	5	0	106%	70	130	0%	
Ethyl acetate	A	ppbv	10.2	10.2		9.8	0	0	0.157	1	0	104%	70	130	0%	
Ethylbenzene	A	ppbv	10.28	10.28		9.8	0	0	0.737	2	0	105%	70	130	0%	
Heptane	A	ppbv	11.11	11.11		9.9	0	0	0.249	1	0	112%	70	130	0%	
Hexachlorobutadiene	A	ppbv	8.91	8.91		9.4	0	0	0.374	2	0	95%	70	130	0%	
m,p-Xylene	A	ppbv	20.95	20.95		19.2	0	0	0.524	2	0	109%	70	130	0%	
Methylene chloride	A	ppbv	10.49	10.49		10	0	0	2.077	5	0	105%	70	130	0%	
n-Hexane	A	ppbv	11.07	11.07		10.1	0	0	0.692	2	0	110%	70	130	0%	
Naphthalene	A	ppbv	7.88	7.88		9.2	0	0	0.247	1	0	86%	70	130	0%	
o-Xylene	A	ppbv	10.38	10.38		10	0	0	0.258	1	0	104%	70	130	0%	
Propylene	A	ppbv	10.89	10.89		10.2	0	0	0.075	1	0	107%	70	130	0%	
Styrene	A	ppbv	10.17	10.17		9.8	0	0	0.263	1	0	104%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	10.39	10.39		9.9	0	0	0.228	1	0	105%	70	130	0%	
Tetrachloroethene	A	ppbv	10.36	10.36		9.6	0	0	0.148	1	0	108%	70	130	0%	
Tetrahydrofuran	A	ppbv	10.77	10.77		10	0	0	0.201	1	0	108%	70	130	0%	
Toluene	A	ppbv	10.14	10.14		9.8	0	0	0.158	1	0	103%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.62	10.62		9.8	0	0	0.117	1	0	108%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	9.49	9.49		9.1	0	0	0.171	1	0	104%	70	130	0%	
Trichloroethene	A	ppbv	10.4	10.4		9.6	0	0	0.119	1	0	108%	70	130	0%	
Trichlorofluoromethane	A	ppbv	10.3	10.3		9.6	0	0	0.148	1	0	107%	70	130	0%	
Vinyl acetate	A	ppbv	11.02	11.02		9.9	0	0	0.266	1	0	111%	70	130	0%	
Vinyl chloride	A	ppbv	11.68	11.68		9.4	0	0	0.072	1	0	124%	70	130	0%	
Xylenes, Total	C	ppbv	31.33	31.33		29.2	0	0	0.782	3	0	107%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		1.25	0	0	0	0	0	1000%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	12.81	12.81		12.5	0	0	0	0	0	102%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\120211\12021111.D Vial: 11
Acq On : 3 Dec 2011 1:14 am Operator: RACHEL HILL
Sample : ICV VOA1 120211 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\120211V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sat Dec 03 15:08:24 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	118	0.00
2	T	Propylene	1.151	1.229	-6.8	111	0.00
3	T	Dichlorodifluoromethane	3.060	3.246	-6.1	110	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.259	2.405	-6.5	113	0.00
5	T	Chloromethane	1.140	1.223	-7.3	108	0.00
6	T	Vinyl chloride	1.335	1.658	-24.2	114	0.00
7	T	1,3-Butadiene	1.035	1.194	-15.4	112	0.00
8	T	Bromomethane	1.251	1.351	-8.0	114	0.00
9	T	Chloroethane	0.733	0.803	-9.5	113	0.00
10	T	Trichlorofluoromethane	2.587	2.776	-7.3	111	0.00
11	T	Ethanol	0.305	0.322	-5.6	105	0.00
12	T	Freon113	2.197	2.436	-10.9	110	0.00
13	T	1,1-Dichloroethene	1.713	1.861	-8.6	108	0.00
14	T	Acetone	1.583	1.669	-5.4	103	0.00
15	T	Carbon disulfide	3.269	3.596	-10.0	111	0.00
16	T	2-Propanol	1.490	1.619	-8.7	110	0.00
17	T	Methylene chloride	1.373	1.441	-5.0	107	0.00
18	T	tert-Butyl Methyl Ether	2.339	2.456	-5.0	105	0.00
19	T	trans-1,2-Dichloroethene	1.664	1.803	-8.4	109	0.00
20	T	n-Hexane	1.833	2.008	-9.5	109	0.00
21	T	1,1-Dichloroethane	1.988	2.149	-8.1	108	0.00
22	T	Vinyl acetate	2.432	2.708	-11.3	106	0.00
23	T	cis-1,2-Dichloroethene	1.163	1.242	-6.8	110	0.00
24	T	2-Butanone	1.677	1.744	-4.0	100	0.00
25	T	Ethyl acetate	2.237	2.328	-4.1	99	0.00
26	T	Tetrahydrofuran	1.012	1.090	-7.7	105	0.00
27	T	Chloroform	2.057	2.224	-8.1	108	0.00
28	T	1,1,1-Trichloroethane	1.947	2.097	-7.7	108	0.00
29	T	Cyclohexane	1.774	2.009	-13.2	109	0.00
30	T	Carbon tetrachloride	1.832	1.942	-6.0	108	0.00
31	T	Benzene	2.832	2.986	-5.4	106	0.00
32	T	1,2-Dichloroethane	1.105	1.141	-3.3	103	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	118	0.00
34	T	Heptane	0.642	0.721	-12.3	109	0.00
35	T	Trichloroethene	0.412	0.446	-8.3	111	0.00
36	T	1,2-Dichloropropane	0.322	0.338	-5.0	105	0.00
37	T	1,4-Dioxane	0.128	0.136	-6.3	105	0.00
38	T	Bromodichloromethane	0.562	0.590	-5.0	107	0.00
39	T	cis-1,3-Dichloropropene	0.475	0.497	-4.6	106	0.00
40	T	4-Methyl-2-pentanone	0.209	0.222	-6.2	105	0.00
41	T	Toluene	0.885	0.915	-3.4	105	0.00
42	T	trans-1,3-Dichloropropene	0.399	0.416	-4.3	107	0.00
43	T	1,1,2-Trichloroethane	0.307	0.314	-2.3	106	0.00
44	T	Tetrachloroethene	0.450	0.486	-8.0	111	0.00
45	T	2-Hexanone	0.409	0.436	-6.6	104	0.00
46	T	Chlorodibromomethane	0.458	0.472	-3.1	108	0.00
47	T	1,2-Dibromoethane	0.441	0.456	-3.4	107	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	118	0.00
49	T	Chlorobenzene	0.894	0.927	-3.7	108	0.00
50	T	Ethylbenzene	1.448	1.520	-5.0	108	0.00
51	T	m,p-Xylene	1.080	1.179	-9.2	108	0.00
52	T	o-Xylene	1.043	1.083	-3.8	108	0.00
53	T	Styrene	0.759	0.787	-3.7	108	0.00
54	T	Bromoform	0.567	0.598	-5.5	110	0.00
55	S	4-Bromofluorobenzene	0.550	0.564	-2.5	118	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\120211\12021111.D Vial: 11
Acq On : 3 Dec 2011 1:14 am Operator: RACHEL HILL
Sample : ICV VOA1 120211 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\120211V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sat Dec 03 15:08:24 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	0.822	0.879	-6.9	108	0.00
57	T	4-Ethyltoluene	1.282	1.323	-3.2	109	0.00
58	T	1,3,5-Trimethylbenzene	1.062	1.082	-1.9	109	0.00
59	T	1,2,4-Trimethylbenzene	1.009	1.043	-3.4	108	0.00
60	T	1,3-Dichlorobenzene	0.643	0.683	-6.2	107	0.00
61	T	1,4-Dichlorobenzene	0.606	0.631	-4.1	104	0.00
62	T	Benzyl chloride	0.692	0.773	-11.7	106	0.00
63	T	1,2-Dichlorobenzene	0.594	0.641	-7.9	108	0.00
64	T	1,2,4-Trichlorobenzene	0.103	0.090	12.6	94	0.00
65	T	Hexachlorobutadiene	0.228	0.216	5.3	95	0.00
66		Naphthalene	0.167	0.143	14.4	91	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
12021111.D 120211V1.M Tue Dec 06 17:41:31 2011

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\120211\12021111.D Vial: 11
Acq On : 3 Dec 2011 1:14 am Operator: RACHEL HILL
Sample : ICV VOA1 120211 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Dec 3 15:09 2011 Quant Results File: 120211V1.RES

Quant Method : C:\HPCHEM\1\METHODS\120211V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sat Dec 03 15:08:24 2011
Response via : Initial Calibration
DataAcq Meth : 120211V1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.59	130	616710	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.69	114	2047903	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.54	117	1271707	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.19	95	716961	12.81	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 102.48%

Target Compounds						Qvalue
2) Propylene	5.52	41	618290	10.89	ppbv	98
3) Dichlorodifluoromethane	5.59	85	1473155	9.76	ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.85	135	1127127	10.11	ppbv #	78
5) Chloromethane	6.01	50	573356	10.20	ppbv	99
6) Vinyl chloride	6.22	62	769099	11.68	ppbv	99
7) 1,3-Butadiene	6.27	39	577250	11.30	ppbv	99
8) Bromomethane	6.85	94	619782	10.04	ppbv	99
9) Chloroethane	7.01	64	364675	10.08	ppbv	99
10) Trichlorofluoromethane	7.34	101	1314586	10.30	ppbv	99
11) Ethanol	7.56	45	146136	9.72	ppbv	99
12) Freon113	7.99	101	1177867	10.87	ppbv	92
13) 1,1-Dichloroethene	8.10	61	908929	10.76	ppbv	96
14) Acetone	8.18	43	823647	10.55	ppbv	99
15) Carbon disulfide	8.47	76	1720959	10.67	ppbv #	100
16) 2-Propanol	8.23	45	806712	10.97	ppbv	80
17) Methylene chloride	8.76	49	710820	10.49	ppbv	90
18) tert-Butyl Methyl Ether	8.95	73	1199581	10.39	ppbv	93
19) trans-1,2-Dichloroethene	9.04	61	871596	10.62	ppbv	94
20) n-Hexane	9.22	57	1000675	11.07	ppbv	98
21) 1,1-Dichloroethane	9.60	63	1028428	10.49	ppbv	99
22) Vinyl acetate	9.53	43	1322721	11.02	ppbv	98
23) cis-1,2-Dichloroethene	10.28	96	600451	10.46	ppbv	95
24) 2-Butanone	10.25	43	852043	10.30	ppbv	96
25) Ethyl acetate	10.20	43	1125367	10.20	ppbv #	99
26) Tetrahydrofuran	10.58	42	537525	10.77	ppbv	94
27) Chloroform	10.60	83	1075222	10.60	ppbv	99
28) 1,1,1-Trichloroethane	10.86	97	993261	10.34	ppbv	98
29) Cyclohexane	10.86	56	971371	11.10	ppbv	94
30) Carbon tetrachloride	11.02	117	910071	10.07	ppbv	98
31) Benzene	11.30	78	1414214	10.12	ppbv	99
32) 1,2-Dichloroethane	11.38	62	545909	10.02	ppbv	98
34) Heptane	11.35	43	1168688	11.11	ppbv	94
35) Trichloroethene	12.03	130	701016	10.40	ppbv	95
36) 1,2-Dichloropropane	12.38	63	543116	10.29	ppbv #	95
37) 1,4-Dioxane	12.46	88	214119	10.17	ppbv	95
38) Bromodichloromethane	12.67	83	928408	10.09	ppbv	99
39) cis-1,3-Dichloropropene	13.22	75	773663	9.95	ppbv	98
40) 4-Methyl-2-pentanone	13.33	58	363033	10.61	ppbv	93
41) Toluene	13.63	91	1468954	10.14	ppbv	98
42) trans-1,3-Dichloropropene	13.93	75	620361	9.49	ppbv	99
43) 1,1,2-Trichloroethane	14.20	97	504413	10.01	ppbv	97
44) Tetrachloroethene	14.33	166	764032	10.36	ppbv	99
45) 2-Hexanone	14.41	43	700542	10.46	ppbv	99
46) Chlorodibromomethane	14.75	129	757110	10.08	ppbv	99
47) 1,2-Dibromoethane	14.99	107	717844	9.94	ppbv	99
49) Chlorobenzene	15.58	112	933493	10.26	ppbv	95
50) Ethylbenzene	15.63	91	1515139	10.28	ppbv	95
51) m,p-Xylene	15.78	91	2302675	20.95	ppbv	95
52) o-Xylene	16.37	91	1101847	10.38	ppbv	94

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\120211\12021111.D Vial: 11
Acq On : 3 Dec 2011 1:14 am Operator: RACHEL HILL
Sample : ICV VOA1 120211 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Dec 3 15:09 2011 Quant Results File: 120211V1.RES

Quant Method : C:\HPCHEM\1\METHODS\120211V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sat Dec 03 15:08:24 2011
Response via : Initial Calibration
DataAcq Meth : 120211V1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
53) Styrene	16.40	104	784952	10.17 ppbv	99
54) Bromoform	16.78	173	583706	10.12 ppbv	99
56) 1,1,2,2-Tetrachloroethane	17.36	83	894283	10.69 ppbv	99
57) 4-Ethyltoluene	17.60	105	1318602	10.11 ppbv	96
58) 1,3,5-Trimethylbenzene	17.68	105	1068067	9.88 ppbv	98
59) 1,2,4-Trimethylbenzene	18.27	105	1040063	10.13 ppbv	98
60) 1,3-Dichlorobenzene	18.82	146	674332	10.31 ppbv	99
61) 1,4-Dichlorobenzene	18.96	146	616307	9.99 ppbv	99
62) Benzyl chloride	19.18	91	762729	10.83 ppbv	98
63) 1,2-Dichlorobenzene	19.61	146	632470	10.47 ppbv	99
64) 1,2,4-Trichlorobenzene	22.76	180	83064	7.90 ppbv	98
65) Hexachlorobutadiene	22.96	225	206396	8.91 ppbv	99
66) Naphthalene	23.45	128	133663	7.88 ppbv	98

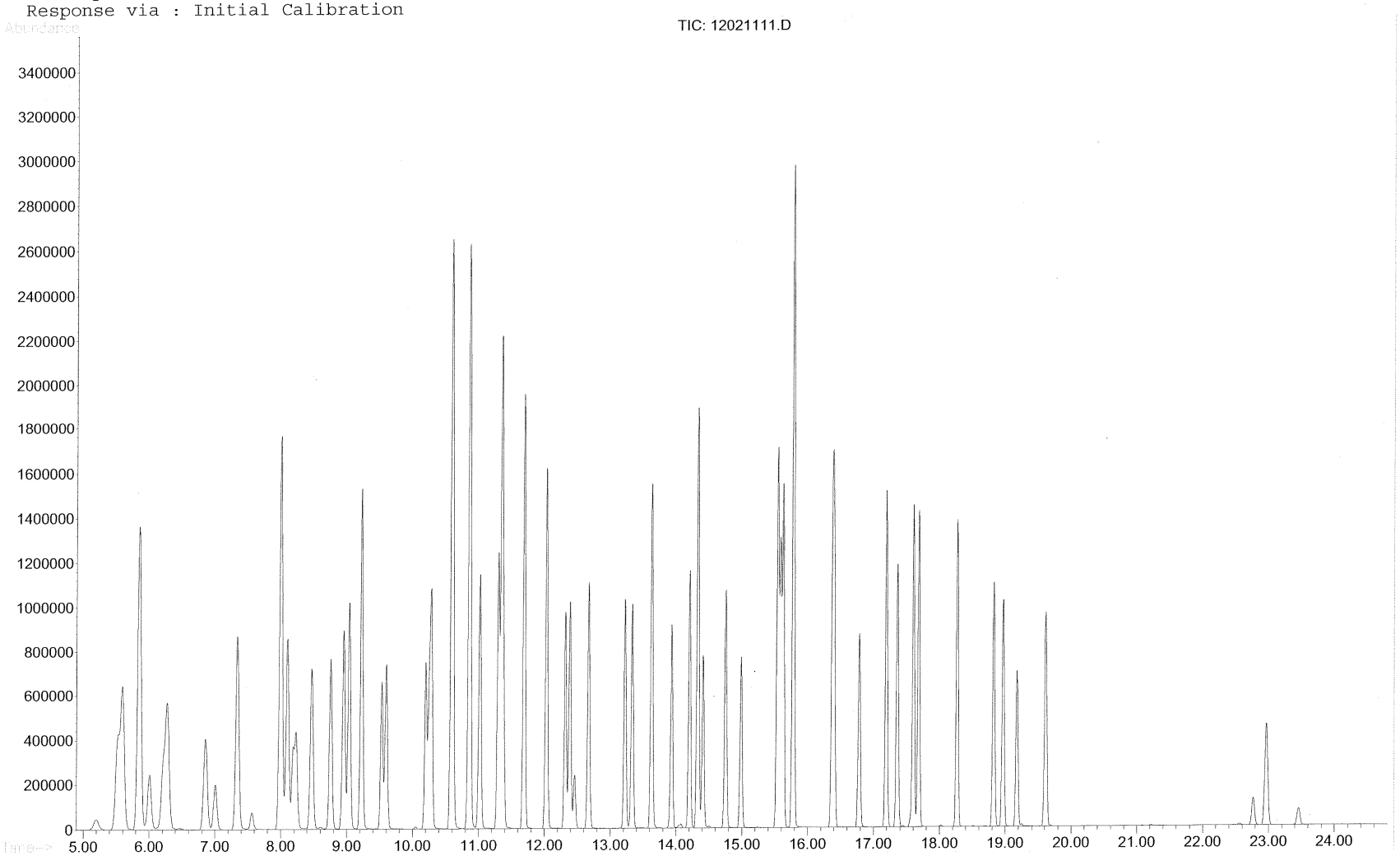
(#) = qualifier out of range (m) = manual integration
12021111.D 120211V1.M Tue Dec 06 17:41:28 2011

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120211\12021111.D
Acq On : 3 Dec 2011 1:14 am
Sample : ICV VOA1 120211
Misc : ICV EPA TO15
MS Integration Params: CLME.P
Quant Time: Dec 3 15:09 2011

Vial: 11
Operator: RACHEL HILL
Inst : VOA 1
Multiplr: 1.00
Quant Results File: 120211V1.RES

Method : C:\HPCHEM\1\METHODS\120211V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sat Dec 03 15:08:24 2011
Response via : Initial Calibration



RTI Laboratories

Run ID: **VOA1_111205A** **Run No.:** 44693

Analytical Run Date: 12/5/2011 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

Calibration ID: 44658 **Column ID:** 0.25mm, 1.4umFT

Column Length: 30m

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB1 VOA1 120511	BFB_TUNE	TUNE	R44693	12/5/2011 8:31:00 AM	Robert Lynch		
CCV VOA1 120511	EPA_TO15	CCV	R44693	12/5/2011 9:53:00 AM	Robert Lynch		
RLVS1 VOA1 12051	EPA_TO15	RLVS	R44693	12/5/2011 10:37:00 AM	Robert Lynch		
MBLK VOA1 120511	EPA_TO15	MBLK	R44693	12/5/2011 11:43:00 AM	Robert Lynch		
1111752-003A	EPA_TO15	SAMP	R44693	12/5/2011 12:27:00 PM	Robert Lynch		
1111752-014A	EPA_TO15	SAMP	R44693	12/5/2011 1:09:00 PM	Robert Lynch		
1111752-010A	EPA_TO15	SAMP	R44693	12/5/2011 3:28:00 PM	Robert Lynch		
1111752-020A	EPA_TO15	SAMP	R44693	12/5/2011 4:10:00 PM	Robert Lynch		
1111752-018A	EPA_TO15	SAMP	R44693	12/5/2011 7:44:00 PM	Robert Lynch		
1111752-021A	EPA_TO15	SAMP	R44693	12/5/2011 9:11:00 PM	Robert Lynch		
1111752-023A	EPA_TO15	SAMP	R44693	12/5/2011 9:58:00 PM	Robert Lynch		
1111752-024A	EPA_TO15	SAMP	R44693	12/5/2011 10:44:00 PM	Robert Lynch		
1111752-027A	EPA_TO15	SAMP	R44693	12/5/2011 11:27:00 PM	Robert Lynch		
1111752-028A	EPA_TO15	SAMP	R44693	12/6/2011 12:10:00 AM	Robert Lynch		Over diluted sample. Will re-run at lower dilution. Reported here to show that sample and duplicate were analyzed.
1111752-028Adup	EPA_TO15	DUP	R44693	12/6/2011 12:53:00 AM	Charles O`Bryan		
1111752-030A	EPA_TO15	SAMP	R44693	12/6/2011 2:29:00 AM	Robert Lynch		
1111752-031A	EPA_TO15	SAMP	R44693	12/6/2011 3:14:00 AM	Robert Lynch		
RLVS2 VOA1 12051	EPA_TO15	RLVS	R44693	12/6/2011 4:41:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

22-Dec-11

RunNo 44693

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
878709	BFB1 VOA1 120511	BFB_TUNE	TUNE	.\1\DATA\120511	12/5/2011 8:31:0	1	R44693		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0.5	0.5		100	0	0	0	0	0	1%	0	2	0%	
174	M		88.6	88.6		100	0	0	0	0	0	89%	50	120	0%	
175	M		6.9	6.9		100	0	0	0	0	0	7%	4	9	0%	
176	M		99.1	99.1		100	0	0	0	0	0	99%	93	101	0%	
177	M		6.3	6.3		100	0	0	0	0	0	6%	5	9	0%	
50	M		18.4	18.4		100	0	0	0	0	0	18%	8	40	0%	
75	M		41.4	41.4		100	0	0	0	0	0	41%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.2	6.2		100	0	0	0	0	0	6%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
878710	CCV VOA1 120511	EPA_TO15	CCV	.\1\DATA\120511	12/5/2011 9:53:0	1	R44693		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	10.01	10.01		9.6	0	0	0.107	1	0	104%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.5	10.5		10	0	0	0.211	1	0	105%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.5	10.5		9.8	0	0	0.108	1	0	107%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.58	9.58		9.8	0	0	0.2	1	0	98%	70	130	0%	
1,1-Dichloroethane	A	ppbv	10	10		9.7	0	0	0.111	1	0	103%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.85	10.85		9.9	0	0	0.097	1	0	110%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	8.59	8.59		9.1	0	0	0.271	1	0	94%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	9.86	9.86		9.8	0	0	0.245	1	0	101%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.46	9.46		9.6	0	0	0.186	1	0	99%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	10.28	10.28		9.7	0	0	0.208	1	0	106%	70	130	0%	
1,2-Dichloroethane	A	ppbv	9.47	9.47		9.7	0	0	0.196	1	0	98%	70	130	0%	
1,2-Dichloropropane	A	ppbv	9.55	9.55		9.8	0	0	0.224	1	0	97%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.51	9.51		9.7	0	0	0.24	1	0	98%	70	130	0%	
1,3-Butadiene	A	ppbv	11.68	11.68		9.8	0	0	0.152	1	0	119%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	10.09	10.09		9.7	0	0	0.202	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
878710	CCV VOA1 120511	EPA_TO15	CCV	\1\DATA\120511	12/5/2011 9:53:0	1	R44693		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.81	9.81		9.6	0	0	0.194	1	0	102%	70	130	0%	
1,4-Dioxane	A	ppbv	9.81	9.81		9.6	0	0	0.128	1	0	102%	70	130	0%	
2-Butanone	A	ppbv	9.94	9.94		9.9	0	0	0.287	1	0	100%	70	130	0%	
2-Hexanone	A	ppbv	10.25	10.25		9.8	0	0	0.135	1	0	105%	70	130	0%	
2-Propanol	A	ppbv	10.6	10.6		10.1	0	0	0.329	1	0	105%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	10.21	10.21		10	0	0	0.157	1	0	102%	70	130	0%	
Acetone	A	ppbv	9.87	9.87		10	0	0	0.43	1	0	99%	70	130	0%	
Benzene	A	ppbv	9.41	9.41		9.6	0	0	0.126	1	0	98%	70	130	0%	
Benzyl chloride	A	ppbv	11.04	11.04		9.7	0	0	0.155	1	0	114%	70	130	0%	
Bromodichloromethane	A	ppbv	9.56	9.56		9.6	0	0	0.156	1	0	100%	70	130	0%	
Bromoform	A	ppbv	9.54	9.54		9.6	0	0	0.197	1	0	99%	70	130	0%	
Bromomethane	A	ppbv	10.21	10.21		9.3	0	0	0.075	1	0	110%	70	130	0%	
Carbon disulfide	A	ppbv	10.81	10.81		9.7	0	0	0.093	1	0	111%	70	130	0%	
Carbon tetrachloride	A	ppbv	9.75	9.75		9.5	0	0	0.114	1	0	103%	70	130	0%	
Chlorobenzene	A	ppbv	9.46	9.46		9.9	0	0	0.275	1	0	96%	70	130	0%	
Chlorodibromomethane	A	ppbv	9.57	9.57		9.2	0	0	0.165	1	0	104%	70	130	0%	
Chloroethane	A	ppbv	10.3	10.3		9.8	0	0	0.063	1	0	105%	70	130	0%	
Chloroform	A	ppbv	10.27	10.27		9.4	0	0	0.126	1	0	109%	70	130	0%	
Chloromethane	A	ppbv	10.39	10.39		9.8	0	0	0.104	1	0	106%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.93	9.93		9.8	0	0	0.107	1	0	101%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	9.41	9.41		9.5	0	0	0.166	1	0	99%	70	130	0%	
Cyclohexane	A	ppbv	10.7	10.7		9.8	0	0	0.684	2	0	109%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	10.17	10.17		9.2	0	0	0.086	1	0	111%	70	130	0%	
Ethanol	A	ppbv	9.46	9.46		9.2	0	0	1.962	5	0	103%	70	130	0%	
Ethyl acetate	A	ppbv	9.93	9.93		9.8	0	0	0.157	1	0	101%	70	130	0%	
Ethylbenzene	A	ppbv	9.54	9.54		9.8	0	0	0.737	2	0	97%	70	130	0%	
Heptane	A	ppbv	10.92	10.92		9.9	0	0	0.249	1	0	110%	70	130	0%	
Hexachlorobutadiene	A	ppbv	9.26	9.26		9.4	0	0	0.374	2	0	99%	70	130	0%	
m,p-Xylene	A	ppbv	19.46	19.46		19.2	0	0	0.524	2	0	101%	70	130	0%	
Methylene chloride	A	ppbv	10.31	10.31		10	0	0	2.077	5	0	103%	70	130	0%	
n-Hexane	A	ppbv	10.7	10.7		10.1	0	0	0.692	2	0	106%	70	130	0%	
Naphthalene	A	ppbv	8.81	8.81		9.2	0	0	0.247	1	0	96%	70	130	0%	
o-Xylene	A	ppbv	9.71	9.71		10	0	0	0.258	1	0	97%	70	130	0%	
Propylene	A	ppbv	11.3	11.3		10.2	0	0	0.075	1	0	111%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
878710	CCV VOA1 120511	EPA_TO15	CCV	.\1\DATA\120511	12/5/2011 9:53:0	1	R44693		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	9.62	9.62		9.8	0	0	0.263	1	0	98%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	9.28	9.28		9.9	0	0	0.228	1	0	94%	70	130	0%	
Tetrachloroethene	A	ppbv	9.96	9.96		9.6	0	0	0.148	1	0	104%	70	130	0%	
Tetrahydrofuran	A	ppbv	10.19	10.19		10	0	0	0.201	1	0	102%	70	130	0%	
Toluene	A	ppbv	9.61	9.61		9.8	0	0	0.158	1	0	98%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.31	10.31		9.8	0	0	0.117	1	0	105%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	9.06	9.06		9.1	0	0	0.171	1	0	100%	70	130	0%	
Trichloroethene	A	ppbv	9.85	9.85		9.6	0	0	0.119	1	0	103%	70	130	0%	
Trichlorofluoromethane	A	ppbv	10.43	10.43		9.6	0	0	0.148	1	0	109%	70	130	0%	
Vinyl acetate	A	ppbv	10.23	10.23		9.9	0	0	0.266	1	0	103%	70	130	0%	
Vinyl chloride	A	ppbv	11.75	11.75		9.4	0	0	0.072	1	0	125%	70	130	0%	
Xylenes, Total	C	ppbv	29.17	29.17		29.2	0	0	0.782	3	0	100%	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	13.07	13.07		12.5	0	0	0	0	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
878711	RLVS1 VOA1 12051	EPA_TO15	RLVS	.\1\DATA\120511	12/5/2011 10:37:	1	R44693		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	0.9	0.9		0.996	0	0	0.107	1	0	90%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.26	1.26		1	0	0	0.211	1	0	126%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	0.96	0.96		0.98	0	0	0.108	1	0	98%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.93	0.93		0.98	0	0	0.2	1	0	95%	70	130	0%	
1,1-Dichloroethane	A	ppbv	0.97	0.97		0.97	0	0	0.111	1	0	100%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1	1		0.99	0	0	0.097	1	0	101%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.11	1.11		0.91	0	0	0.271	1	0	122%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	1.32	1.32		0.98	0	0	0.245	1	0	135%	70	130	0%	S
1,2-Dibromoethane	A	ppbv	0.91	0.91		0.96	0	0	0.186	1	0	95%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.22	1.22		0.97	0	0	0.208	1	0	126%	70	130	0%	
1,2-Dichloroethane	A	ppbv	0.99	0.99		0.97	0	0	0.196	1	0	102%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.95	0.95		0.98	0	0	0.224	1	0	97%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\120511\12051103.D Vial: 1
Acq On : 5 Dec 2011 9:53 am Operator: RACHEL HILL
Sample : CCV VOA1 120511 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\120211V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sat Dec 03 15:08:24 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	103	0.00
2	T	Propylene	1.151	1.275	-10.8	100	0.00
3	T	Dichlorodifluoromethane	3.060	3.384	-10.6	100	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.259	2.509	-11.1	103	0.00
5	T	Chloromethane	1.140	1.246	-9.3	95	0.00
6	T	Vinyl chloride	1.335	1.668	-24.9	100	0.00
7	T	1,3-Butadiene	1.035	1.234	-19.2	101	0.00
8	T	Bromomethane	1.251	1.373	-9.8	100	0.00
9	T	Chloroethane	0.733	0.821	-12.0	100	0.00
10	T	Trichlorofluoromethane	2.587	2.811	-8.7	97	0.00
11	T	Ethanol	0.305	0.313	-2.6	89	0.00
12	T	Freon113	2.197	2.353	-7.1	93	0.00
13	T	1,1-Dichloroethene	1.713	1.877	-9.6	95	0.00
14	T	Acetone	1.583	1.563	1.3	84	0.00
15	T	Carbon disulfide	3.269	3.644	-11.5	98	0.00
16	T	2-Propanol	1.490	1.564	-5.0	92	0.00
17	T	Methylene chloride	1.373	1.416	-3.1	91	0.00
18	T	tert-Butyl Methyl Ether	2.339	2.192	6.3	81	0.00
19	T	trans-1,2-Dichloroethene	1.664	1.750	-5.2	92	0.00
20	T	n-Hexane	1.833	1.941	-5.9	92	0.00
21	T	1,1-Dichloroethane	1.988	2.050	-3.1	90	0.00
22	T	Vinyl acetate	2.432	2.513	-3.3	86	0.00
23	T	cis-1,2-Dichloroethene	1.163	1.179	-1.4	91	0.00
24	T	2-Butanone	1.677	1.683	-0.4	84	0.00
25	T	Ethyl acetate	2.237	2.266	-1.3	84	0.00
26	T	Tetrahydrofuran	1.012	1.031	-1.9	86	0.00
27	T	Chloroform	2.057	2.156	-4.8	91	0.00
28	T	1,1,1-Trichloroethane	1.947	2.030	-4.3	90	0.00
29	T	Cyclohexane	1.774	1.938	-9.2	91	0.00
30	T	Carbon tetrachloride	1.832	1.881	-2.7	91	0.00
31	T	Benzene	2.832	2.777	1.9	85	0.00
32	T	1,2-Dichloroethane	1.105	1.078	2.4	84	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	103	0.00
34	T	Heptane	0.642	0.709	-10.4	93	0.00
35	T	Trichloroethene	0.412	0.422	-2.4	92	0.00
36	T	1,2-Dichloropropane	0.322	0.314	2.5	85	0.00
37	T	1,4-Dioxane	0.128	0.131	-2.3	88	0.00
38	T	Bromodichloromethane	0.562	0.560	0.4	88	0.00
39	T	cis-1,3-Dichloropropene	0.475	0.470	1.1	87	0.00
40	T	4-Methyl-2-pentanone	0.209	0.213	-1.9	88	0.00
41	T	Toluene	0.885	0.867	2.0	87	0.00
42	T	trans-1,3-Dichloropropene	0.399	0.397	0.5	89	0.00
43	T	1,1,2-Trichloroethane	0.307	0.301	2.0	88	0.00
44	T	Tetrachloroethene	0.450	0.467	-3.8	93	0.00
45	T	2-Hexanone	0.409	0.428	-4.6	89	0.00
46	T	Chlorodibromomethane	0.458	0.447	2.4	89	0.00
47	T	1,2-Dibromoethane	0.441	0.434	1.6	88	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	106	0.00
49	T	Chlorobenzene	0.894	0.854	4.5	89	0.00
50	T	Ethylbenzene	1.448	1.410	2.6	89	0.00
51	T	m,p-Xylene	1.080	1.095	-1.4	89	0.00
52	T	o-Xylene	1.043	1.013	2.9	90	0.00
53	T	Styrene	0.759	0.745	1.8	91	0.00
54	T	Bromoform	0.567	0.563	0.7	92	0.00
55	S	4-Bromofluorobenzene	0.550	0.576	-4.7	108	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\120511\12051103.D Vial: 1
Acq On : 5 Dec 2011 9:53 am Operator: RACHEL HILL
Sample : CCV VOA1 120511 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\120211V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sat Dec 03 15:08:24 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	0.822	0.864	-5.1	94	0.00
57	T	4-Ethyltoluene	1.282	1.263	1.5	93	0.00
58	T	1,3,5-Trimethylbenzene	1.062	1.041	2.0	94	0.00
59	T	1,2,4-Trimethylbenzene	1.009	1.015	-0.6	94	0.00
60	T	1,3-Dichlorobenzene	0.643	0.669	-4.0	93	0.00
61	T	1,4-Dichlorobenzene	0.606	0.620	-2.3	91	0.00
62	T	Benzyl chloride	0.692	0.788	-13.9	97	0.00
63	T	1,2-Dichlorobenzene	0.594	0.630	-6.1	95	0.00
64	T	1,2,4-Trichlorobenzene	0.103	0.098	4.9	91	0.00
65	T	Hexachlorobutadiene	0.228	0.224	1.8	88	0.00
66		Naphthalene	0.167	0.160	4.2	90	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\120511\12051103.D Vial: 1
Acq On : 5 Dec 2011 9:53 am Operator: RACHEL HILL
Sample : CCV VOA1 120511 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Dec 5 10:18 2011 Quant Results File: 120211V1.RES

Quant Method : C:\HPCHEM\1\METHODS\120211V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sat Dec 03 15:08:24 2011
Response via : Initial Calibration
DataAcq Meth : 120211V1

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	10.59	130	536160	12.50 ppbv	0.00
33) 1,4-Difluorobenzene	11.69	114	1781953	12.50 ppbv	0.00
48) Chlorobenzene-d5	15.54	117	1135067	12.50 ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.19	95	653268	13.07 ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 104.56%

Target Compounds					Qvalue
2) Propylene	5.52	41	557839	11.30 ppbv	98
3) Dichlorodifluoromethane	5.59	85	1335336	10.17 ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.84	135	1022344	10.55 ppbv #	79
5) Chloromethane	6.01	50	507857	10.39 ppbv	99
6) Vinyl chloride	6.21	62	672411	11.75 ppbv	99
7) 1,3-Butadiene	6.27	39	518647	11.68 ppbv	98
8) Bromomethane	6.85	94	547704	10.21 ppbv	99
9) Chloroethane	7.00	64	324091	10.30 ppbv	99
10) Trichlorofluoromethane	7.33	101	1157374	10.43 ppbv	98
11) Ethanol	7.56	45	123673	9.46 ppbv	100
12) Freon113	8.00	101	989022	10.50 ppbv	92
13) 1,1-Dichloroethene	8.10	61	796909	10.85 ppbv	95
14) Acetone	8.19	43	670299	9.87 ppbv	98
15) Carbon disulfide	8.46	76	1516285	10.81 ppbv #	100
16) 2-Propanol	8.23	45	677548	10.60 ppbv #	77
17) Methylene chloride	8.76	49	607282	10.31 ppbv	89
18) tert-Butyl Methyl Ether	8.96	73	930691	9.28 ppbv #	92
19) trans-1,2-Dichloroethene	9.04	61	735521	10.31 ppbv	93
20) n-Hexane	9.22	57	841003	10.70 ppbv	97
21) 1,1-Dichloroethane	9.60	63	853115	10.00 ppbv	98
22) Vinyl acetate	9.53	43	1067306	10.23 ppbv	97
23) cis-1,2-Dichloroethene	10.28	96	495693	9.93 ppbv	94
24) 2-Butanone	10.25	43	714561	9.94 ppbv	93
25) Ethyl acetate	10.20	43	952665	9.93 ppbv #	100
26) Tetrahydrofuran	10.59	42	442261	10.19 ppbv	92
27) Chloroform	10.61	83	906194	10.27 ppbv	100
28) 1,1,1-Trichloroethane	10.85	97	835690	10.01 ppbv	97
29) Cyclohexane	10.86	56	814694	10.70 ppbv	92
30) Carbon tetrachloride	11.02	117	766667	9.75 ppbv	99
31) Benzene	11.30	78	1143626	9.41 ppbv	98
32) 1,2-Dichloroethane	11.38	62	448697	9.47 ppbv	98
34) Heptane	11.35	43	1000099	10.92 ppbv #	93
35) Trichloroethene	12.03	130	577606	9.85 ppbv	95
36) 1,2-Dichloropropane	12.39	63	438410	9.55 ppbv #	95
37) 1,4-Dioxane	12.46	88	179767	9.81 ppbv	93
38) Bromodichloromethane	12.67	83	765787	9.56 ppbv	99
39) cis-1,3-Dichloropropene	13.22	75	636500	9.41 ppbv	98
40) 4-Methyl-2-pentanone	13.33	58	303794	10.21 ppbv	92
41) Toluene	13.63	91	1211868	9.61 ppbv	98
42) trans-1,3-Dichloropropene	13.93	75	515199	9.06 ppbv	99
43) 1,1,2-Trichloroethane	14.21	97	419899	9.58 ppbv	97
44) Tetrachloroethene	14.33	166	639184	9.96 ppbv	99
45) 2-Hexanone	14.41	43	597312	10.25 ppbv	98
46) Chlorodibromomethane	14.75	129	625031	9.57 ppbv	100
47) 1,2-Dibromoethane	14.99	107	594589	9.46 ppbv	100
49) Chlorobenzene	15.58	112	768117	9.46 ppbv #	94
50) Ethylbenzene	15.62	91	1255102	9.54 ppbv	95
51) m,p-Xylene	15.78	91	1909348	19.46 ppbv	94
52) o-Xylene	16.37	91	919884	9.71 ppbv #	93

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\120511\12051103.D Vial: 1
Acq On : 5 Dec 2011 9:53 am Operator: RACHEL HILL
Sample : CCV VOA1 120511 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Dec 5 10:18 2011 Quant Results File: 120211V1.RES

Quant Method : C:\HPCHEM\1\METHODS\120211V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sat Dec 03 15:08:24 2011
Response via : Initial Calibration
DataAcq Meth : 120211V1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
53) Styrene	16.40	104	662936	9.62 ppbv	99
54) Bromoform	16.78	173	490776	9.54 ppbv	98
56) 1,1,2,2-Tetrachloroethane	17.36	83	784388	10.50 ppbv	98
57) 4-Ethyltoluene	17.60	105	1124376	9.66 ppbv	97
58) 1,3,5-Trimethylbenzene	17.68	105	916968	9.51 ppbv	98
59) 1,2,4-Trimethylbenzene	18.27	105	903598	9.86 ppbv	98
60) 1,3-Dichlorobenzene	18.82	146	588937	10.09 ppbv	98
61) 1,4-Dichlorobenzene	18.97	146	540070	9.81 ppbv	99
62) Benzyl chloride	19.18	91	694164	11.04 ppbv	98
63) 1,2-Dichlorobenzene	19.61	146	554704	10.28 ppbv	98
64) 1,2,4-Trichlorobenzene	22.77	180	80586	8.59 ppbv	96
65) Hexachlorobutadiene	22.97	225	191614	9.26 ppbv	100
66) Naphthalene	23.45	128	133478	8.81 ppbv	98

(#) = qualifier out of range (m) = manual integration
12051103.D 120211V1.M Tue Dec 06 18:07:42 2011

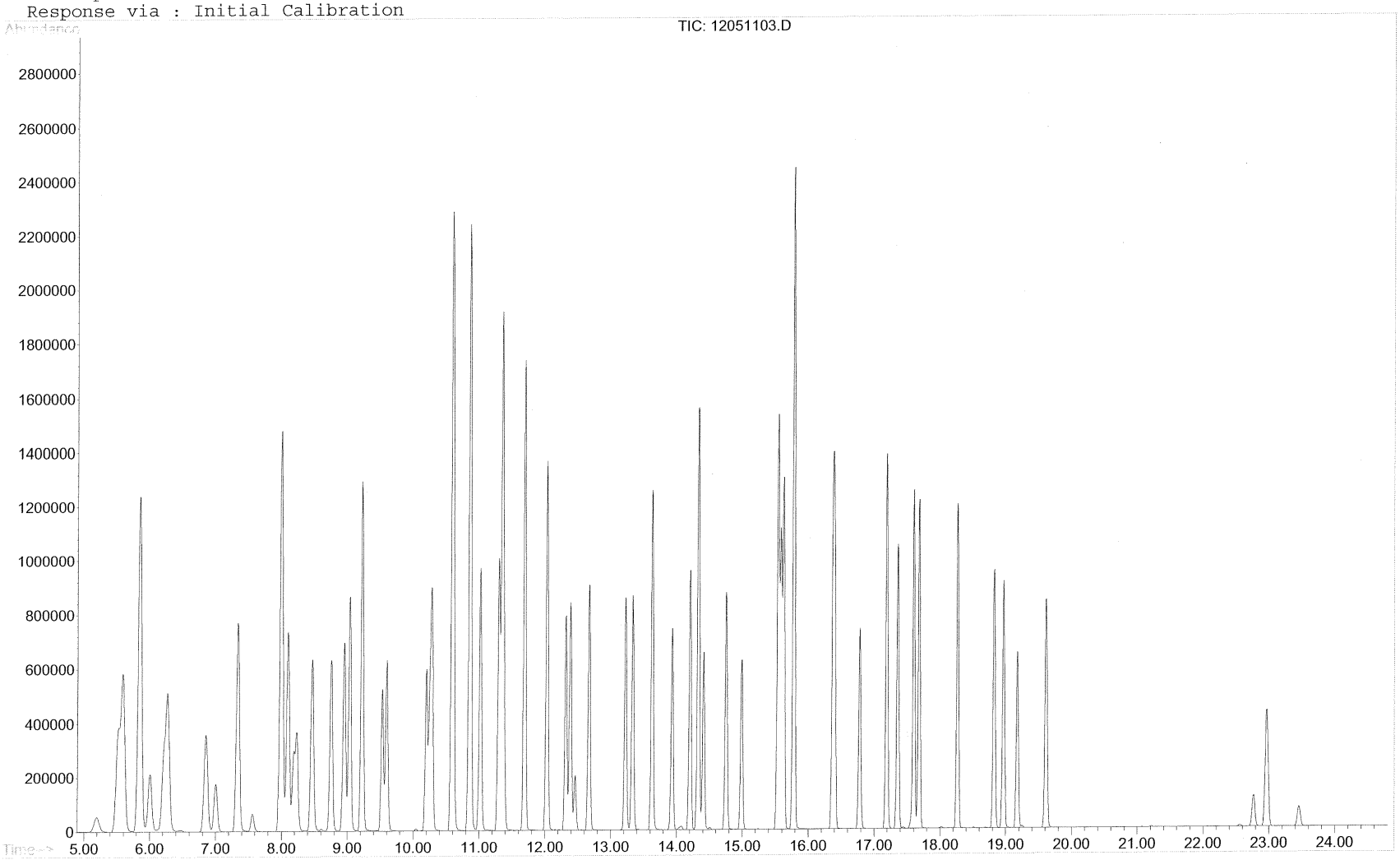
Quantitation Report

Data File : C:\HPCHEM\1\DATA\120511\12051103.D
Acq On : 5 Dec 2011 9:53 am
Sample : CCV VOA1 120511
Misc : CCV EPA TO15
MS Integration Params: CLME.P
Quant Time: Dec 5 10:18 2011

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

Quant Results File: 120211V1.RES

Method : C:\HPCHEM\1\METHODS\120211V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sat Dec 03 15:08:24 2011
Response via : Initial Calibration



RTI Laboratories

Run ID: **VOA1_111207A** **Run No.:** 44740

Analytical Run Date: 12/7/2011 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

Calibration ID: 44658 **Column ID:** 0.25mm, 1.4umFT

Column Length: 30m

Run Comments: *Ran on 12/6/2011. Accidentally created sequence with incorrect date.

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB1 VOA1 120611	BFB_TUNE	TUNE	R44740	12/6/2011 9:14:00 AM	Robert Lynch		
CCV VOA1 120611	EPA_TO15	CCV	R44740	12/6/2011 10:38:00 AM	Robert Lynch		
RLVS1 VOA1 12061	EPA_TO15	RLVS	R44740	12/6/2011 11:21:00 AM	Robert Lynch		
MBLK VOA1 120611	EPA_TO15	MBLK	R44740	12/6/2011 12:07:00 PM	Robert Lynch		
1112086-001A	EPA_TO15	SAMP	R44740	12/6/2011 12:55:00 PM	Robert Lynch		
1112086-004A	EPA_TO15	SAMP	R44740	12/6/2011 1:43:00 PM	Robert Lynch		
1111752-028A	EPA_TO15	SAMP	R44740	12/6/2011 2:25:00 PM	Robert Lynch		
1111752-029A	EPA_TO15	SAMP	R44740	12/6/2011 3:05:00 PM	Robert Lynch		
1111752-041A	EPA_TO15	SAMP	R44740	12/6/2011 3:46:00 PM	Robert Lynch		
1111752-033A	EPA_TO15	SAMP	R44740	12/6/2011 4:27:00 PM	Robert Lynch		
1111752-033ADUP	EPA_TO15	DUP	R44740	12/6/2011 5:08:00 PM	Robert Lynch		
1111752-035A	EPA_TO15	SAMP	R44740	12/6/2011 6:42:00 PM	Robert Lynch		
1111752-036A	EPA_TO15	SAMP	R44740	12/6/2011 7:30:00 PM	Robert Lynch		
1111752-038A	EPA_TO15	SAMP	R44740	12/6/2011 8:11:00 PM	Robert Lynch		
1111752-039A	EPA_TO15	SAMP	R44740	12/6/2011 8:53:00 PM	Robert Lynch		
1111752-040A	EPA_TO15	SAMP	R44740	12/6/2011 9:41:00 PM	Robert Lynch		
1111752-042A	EPA_TO15	SAMP	R44740	12/6/2011 10:22:00 PM	Robert Lynch		
1111752-043A	EPA_TO15	SAMP	R44740	12/6/2011 11:10:00 PM	Robert Lynch		
1111752-044A	EPA_TO15	SAMP	R44740	12/6/2011 11:51:00 PM	Robert Lynch		
1111752-045A	EPA_TO15	SAMP	R44740	12/7/2011 12:32:00 AM	Robert Lynch		
1111752-046A	EPA_TO15	SAMP	R44740	12/7/2011 1:13:00 AM	Robert Lynch		
RLVS2 VOA1 12061	EPA_TO15	RLVS	R44740	12/7/2011 1:56:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

22-Dec-11

RunNo 44740

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
879752	BFB1 VOA1 120611	BFB_TUNE	TUNE	\1\DATA\120611	12/6/2011 9:14:0	1	R44740		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0.6	0.6		100	0	0	0	0	0	1%	0	2	0%	
174	M		82.3	82.3		100	0	0	0	0	0	82%	50	120	0%	
175	M		7.1	7.1		100	0	0	0	0	0	7%	4	9	0%	
176	M		99.8	99.8		100	0	0	0	0	0	100%	93	101	0%	
177	M		6.6	6.6		100	0	0	0	0	0	7%	5	9	0%	
50	M		20	20		100	0	0	0	0	0	20%	8	40	0%	
75	M		44.3	44.3		100	0	0	0	0	0	44%	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
879753	CCV VOA1 120611	EPA_TO15	CCV	\1\DATA\120611	12/6/2011 10:38:	1	R44740		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	10.15	10.15		9.6	0	0	0.107	1	0	106%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.37	10.37		10	0	0	0.211	1	0	104%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.66	10.66		9.8	0	0	0.108	1	0	109%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.44	9.44		9.8	0	0	0.2	1	0	96%	70	130	0%	
1,1-Dichloroethane	A	ppbv	10.07	10.07		9.7	0	0	0.111	1	0	104%	70	130	0%	
1,1-Dichloroethene	A	ppbv	11.09	11.09		9.9	0	0	0.097	1	0	112%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	8.67	8.67		9.1	0	0	0.271	1	0	95%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	9.77	9.77		9.8	0	0	0.245	1	0	100%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.41	9.41		9.6	0	0	0.186	1	0	98%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	10.2	10.2		9.7	0	0	0.208	1	0	105%	70	130	0%	
1,2-Dichloroethane	A	ppbv	9.54	9.54		9.7	0	0	0.196	1	0	98%	70	130	0%	
1,2-Dichloropropane	A	ppbv	9.51	9.51		9.8	0	0	0.224	1	0	97%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.37	9.37		9.7	0	0	0.24	1	0	97%	70	130	0%	
1,3-Butadiene	A	ppbv	12.45	12.45		9.8	0	0	0.152	1	0	127%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.88	9.88		9.7	0	0	0.202	1	0	102%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
879753	CCV VOA1 120611	EPA_TO15	CCV	\1\DATA\120611	12/6/2011 10:38:	1	R44740		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.54	9.54		9.6	0	0	0.194	1	0	99%	70	130	0%	
1,4-Dioxane	A	ppbv	9.68	9.68		9.6	0	0	0.128	1	0	101%	70	130	0%	
2-Butanone	A	ppbv	9.43	9.43		9.9	0	0	0.287	1	0	95%	70	130	0%	
2-Hexanone	A	ppbv	10.08	10.08		9.8	0	0	0.135	1	0	103%	70	130	0%	
2-Propanol	A	ppbv	10.7	10.7		10.1	0	0	0.329	1	0	106%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	10.15	10.15		10	0	0	0.157	1	0	102%	70	130	0%	
Acetone	A	ppbv	9.91	9.91		10	0	0	0.43	1	0	99%	70	130	0%	
Benzene	A	ppbv	9.5	9.5		9.6	0	0	0.126	1	0	99%	70	130	0%	
Benzyl chloride	A	ppbv	10.94	10.94		9.7	0	0	0.155	1	0	113%	70	130	0%	
Bromodichloromethane	A	ppbv	9.46	9.46		9.6	0	0	0.156	1	0	99%	70	130	0%	
Bromoform	A	ppbv	9.22	9.22		9.6	0	0	0.197	1	0	96%	70	130	0%	
Bromomethane	A	ppbv	11.13	11.13		9.3	0	0	0.075	1	0	120%	70	130	0%	
Carbon disulfide	A	ppbv	11.01	11.01		9.7	0	0	0.093	1	0	114%	70	130	0%	
Carbon tetrachloride	A	ppbv	9.87	9.87		9.5	0	0	0.114	1	0	104%	70	130	0%	
Chlorobenzene	A	ppbv	9.42	9.42		9.9	0	0	0.275	1	0	95%	70	130	0%	
Chlorodibromomethane	A	ppbv	9.4	9.4		9.2	0	0	0.165	1	0	102%	70	130	0%	
Chloroethane	A	ppbv	10.99	10.99		9.8	0	0	0.063	1	0	112%	70	130	0%	
Chloroform	A	ppbv	10.4	10.4		9.4	0	0	0.126	1	0	111%	70	130	0%	
Chloromethane	A	ppbv	10.99	10.99		9.8	0	0	0.104	1	0	112%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	10.06	10.06		9.8	0	0	0.107	1	0	103%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	9.32	9.32		9.5	0	0	0.166	1	0	98%	70	130	0%	
Cyclohexane	A	ppbv	10.98	10.98		9.8	0	0	0.684	2	0	112%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	10.72	10.72		9.2	0	0	0.086	1	0	117%	70	130	0%	
Ethanol	A	ppbv	9.47	9.47		9.2	0	0	1.962	5	0	103%	70	130	0%	
Ethyl acetate	A	ppbv	9.72	9.72		9.8	0	0	0.157	1	0	99%	70	130	0%	
Ethylbenzene	A	ppbv	9.42	9.42		9.8	0	0	0.737	2	0	96%	70	130	0%	
Heptane	A	ppbv	10.89	10.89		9.9	0	0	0.249	1	0	110%	70	130	0%	
Hexachlorobutadiene	A	ppbv	9.42	9.42		9.4	0	0	0.374	2	0	100%	70	130	0%	
m,p-Xylene	A	ppbv	19.19	19.19		19.2	0	0	0.524	2	0	100%	70	130	0%	
Methylene chloride	A	ppbv	10.59	10.59		10	0	0	2.077	5	0	106%	70	130	0%	
n-Hexane	A	ppbv	10.82	10.82		10.1	0	0	0.692	2	0	107%	70	130	0%	
Naphthalene	A	ppbv	8.81	8.81		9.2	0	0	0.247	1	0	96%	70	130	0%	
o-Xylene	A	ppbv	9.51	9.51		10	0	0	0.258	1	0	95%	70	130	0%	
Propylene	A	ppbv	11.7	11.7		10.2	0	0	0.075	1	0	115%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
879753	CCV VOA1 120611	EPA_TO15	CCV	.\1\DATA\120611	12/6/2011 10:38:	1	R44740		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	9.46	9.46		9.8	0	0	0.263	1	0	97%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	9.1	9.1		9.9	0	0	0.228	1	0	92%	70	130	0%	
Tetrachloroethene	A	ppbv	9.85	9.85		9.6	0	0	0.148	1	0	103%	70	130	0%	
Tetrahydrofuran	A	ppbv	10.17	10.17		10	0	0	0.201	1	0	102%	70	130	0%	
Toluene	A	ppbv	9.54	9.54		9.8	0	0	0.158	1	0	97%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.47	10.47		9.8	0	0	0.117	1	0	107%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	9.06	9.06		9.1	0	0	0.171	1	0	100%	70	130	0%	
Trichloroethene	A	ppbv	9.7	9.7		9.6	0	0	0.119	1	0	101%	70	130	0%	
Trichlorofluoromethane	A	ppbv	11.12	11.12		9.6	0	0	0.148	1	0	116%	70	130	0%	
Vinyl acetate	A	ppbv	10.25	10.25		9.9	0	0	0.266	1	0	104%	70	130	0%	
Vinyl chloride	A	ppbv	11.96	11.96		9.4	0	0	0.072	1	0	127%	70	130	0%	
Xylenes, Total	C	ppbv	28.7	28.7		29.2	0	0	0.782	3	0	98%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		1.25	0	0	0	0	0	1000%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	12.89	12.89		12.5	0	0	0	0	0	103%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
879754	RLVS1 VOA1 12061	EPA_TO15	RLVS	.\1\DATA\120611	12/6/2011 11:21:	1	R44740		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	0.92	0.92		0.996	0	0	0.107	1	0	92%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.21	1.21		1	0	0	0.211	1	0	121%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	0.96	0.96		0.98	0	0	0.108	1	0	98%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.93	0.93		0.98	0	0	0.2	1	0	95%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1.02	1.02		0.97	0	0	0.111	1	0	105%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1.02	1.02		0.99	0	0	0.097	1	0	103%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.13	1.13		0.91	0	0	0.271	1	0	124%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	1.27	1.27		0.98	0	0	0.245	1	0	130%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.9	0.9		0.96	0	0	0.186	1	0	94%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.18	1.18		0.97	0	0	0.208	1	0	122%	70	130	0%	
1,2-Dichloroethane	A	ppbv	1.06	1.06		0.97	0	0	0.196	1	0	109%	70	130	0%	
1,2-Dichloropropane	A	ppbv	1	1		0.98	0	0	0.224	1	0	102%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\120611\12061103.D Vial: 2
Acq On : 6 Dec 2011 10:38 am Operator: RACHEL HILL
Sample : CCV VOA1 120611 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\120211V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sat Dec 03 15:08:24 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	99	0.00
2	T	Propylene	1.151	1.321	-14.8	100	0.00
3	T	Dichlorodifluoromethane	3.060	3.566	-16.5	101	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.259	2.587	-14.5	102	0.00
5	T	Chloromethane	1.140	1.318	-15.6	97	0.00
6	T	Vinyl chloride	1.335	1.698	-27.2	98	0.00
7	T	1,3-Butadiene	1.035	1.316	-27.1	103	0.00
8	T	Bromomethane	1.251	1.498	-19.7	105	0.00
9	T	Chloroethane	0.733	0.876	-19.5	102	0.00
10	T	Trichlorofluoromethane	2.587	2.996	-15.8	100	0.00
11	T	Ethanol	0.305	0.314	-3.0	85	0.00
12	T	Freon113	2.197	2.389	-8.7	90	0.00
13	T	1,1-Dichloroethene	1.713	1.918	-12.0	93	0.00
14	T	Acetone	1.583	1.568	0.9	81	0.00
15	T	Carbon disulfide	3.269	3.709	-13.5	96	0.00
16	T	2-Propanol	1.490	1.579	-6.0	89	0.00
17	T	Methylene chloride	1.373	1.454	-5.9	90	0.00
18	T	tert-Butyl Methyl Ether	2.339	2.149	8.1	77	0.00
19	T	trans-1,2-Dichloroethene	1.664	1.777	-6.8	90	0.00
20	T	n-Hexane	1.833	1.964	-7.1	89	0.00
21	T	1,1-Dichloroethane	1.988	2.065	-3.9	87	0.00
22	T	Vinyl acetate	2.432	2.518	-3.5	83	0.00
23	T	cis-1,2-Dichloroethene	1.163	1.194	-2.7	88	0.00
24	T	2-Butanone	1.677	1.597	4.8	76	0.00
25	T	Ethyl acetate	2.237	2.218	0.8	79	0.00
26	T	Tetrahydrofuran	1.012	1.029	-1.7	83	0.00
27	T	Chloroform	2.057	2.182	-6.1	88	0.00
28	T	1,1,1-Trichloroethane	1.947	2.059	-5.8	88	0.00
29	T	Cyclohexane	1.774	1.987	-12.0	90	0.00
30	T	Carbon tetrachloride	1.832	1.904	-3.9	89	0.00
31	T	Benzene	2.832	2.803	1.0	83	0.00
32	T	1,2-Dichloroethane	1.105	1.087	1.6	82	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	100	0.00
34	T	Heptane	0.642	0.706	-10.0	90	0.00
35	T	Trichloroethene	0.412	0.416	-1.0	88	0.00
36	T	1,2-Dichloropropane	0.322	0.313	2.8	82	0.00
37	T	1,4-Dioxane	0.128	0.130	-1.6	84	0.00
38	T	Bromodichloromethane	0.562	0.553	1.6	85	0.00
39	T	cis-1,3-Dichloropropene	0.475	0.466	1.9	84	0.00
40	T	4-Methyl-2-pentanone	0.209	0.212	-1.4	85	0.00
41	T	Toluene	0.885	0.861	2.7	84	0.00
42	T	trans-1,3-Dichloropropene	0.399	0.397	0.5	86	0.00
43	T	1,1,2-Trichloroethane	0.307	0.296	3.6	85	0.00
44	T	Tetrachloroethene	0.450	0.462	-2.7	89	0.00
45	T	2-Hexanone	0.409	0.420	-2.7	85	0.00
46	T	Chlorodibromomethane	0.458	0.440	3.9	85	0.00
47	T	1,2-Dibromoethane	0.441	0.432	2.0	85	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	103	0.00
49	T	Chlorobenzene	0.894	0.851	4.8	86	0.00
50	T	Ethylbenzene	1.448	1.392	3.9	86	0.00
51	T	m,p-Xylene	1.080	1.080	0.0	86	0.00
52	T	o-Xylene	1.043	0.992	4.9	86	0.00
53	T	Styrene	0.759	0.733	3.4	88	0.00
54	T	Bromoform	0.567	0.544	4.1	87	0.00
55	S	4-Bromofluorobenzene	0.550	0.568	-3.3	104	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\120611\12061103.D Vial: 2
Acq On : 6 Dec 2011 10:38 am Operator: RACHEL HILL
Sample : CCV VOA1 120611 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\120211V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sat Dec 03 15:08:24 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	0.822	0.853	-3.8	91	0.00
57	T	4-Ethyltoluene	1.282	1.232	3.9	88	0.00
58	T	1,3,5-Trimethylbenzene	1.062	1.027	3.3	90	0.00
59	T	1,2,4-Trimethylbenzene	1.009	1.007	0.2	91	0.00
60	T	1,3-Dichlorobenzene	0.643	0.655	-1.9	89	0.00
61	T	1,4-Dichlorobenzene	0.606	0.602	0.7	87	0.00
62	T	Benzyl chloride	0.692	0.781	-12.9	94	0.00
63	T	1,2-Dichlorobenzene	0.594	0.625	-5.2	92	0.00
64	T	1,2,4-Trichlorobenzene	0.103	0.098	4.9	90	0.00
65	T	Hexachlorobutadiene	0.228	0.228	0.0	87	0.00
66		Naphthalene	0.167	0.160	4.2	88	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\120611\12061103.D Vial: 2
Acq On : 6 Dec 2011 10:38 am Operator: RACHEL HILL
Sample : CCV VOA1 120611 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Dec 6 11:03 2011 Quant Results File: 120211V1.RES

Quant Method : C:\HPCHEM\1\METHODS\120211V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sat Dec 03 15:08:24 2011
Response via : Initial Calibration
DataAcq Meth : 120211V1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.59	130	514755	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.69	114	1731377	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.54	117	1108420	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.19	95	629240	12.89	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 103.12%

Target Compounds						Qvalue
2) Propylene	5.52	41	554780	11.70	ppbv	99
3) Dichlorodifluoromethane	5.59	85	1351030	10.72	ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.84	135	1012098	10.88	ppbv #	79
5) Chloromethane	6.00	50	515694	10.99	ppbv	99
6) Vinyl chloride	6.21	62	657276	11.96	ppbv	99
7) 1,3-Butadiene	6.27	39	531066	12.45	ppbv	98
8) Bromomethane	6.85	94	573538	11.13	ppbv	99
9) Chloroethane	7.00	64	332004	10.99	ppbv	99
10) Trichlorofluoromethane	7.33	101	1184287	11.12	ppbv	98
11) Ethanol	7.56	45	118774	9.47	ppbv	100
12) Freon113	7.99	101	964231	10.66	ppbv	91
13) 1,1-Dichloroethene	8.09	61	781899	11.09	ppbv	95
14) Acetone	8.18	43	645901	9.91	ppbv	97
15) Carbon disulfide	8.47	76	1481714	11.01	ppbv #	100
16) 2-Propanol	8.23	45	656812	10.70	ppbv #	77
17) Methylene chloride	8.75	49	598596	10.59	ppbv	88
18) tert-Butyl Methyl Ether	8.95	73	876190	9.10	ppbv #	91
19) trans-1,2-Dichloroethene	9.04	61	717325	10.47	ppbv	92
20) n-Hexane	9.22	57	816791	10.82	ppbv	97
21) 1,1-Dichloroethane	9.60	63	824693	10.07	ppbv	98
22) Vinyl acetate	9.53	43	1026435	10.25	ppbv	97
23) cis-1,2-Dichloroethene	10.28	96	481859	10.06	ppbv	94
24) 2-Butanone	10.25	43	651044	9.43	ppbv	95
25) Ethyl acetate	10.20	43	894951	9.72	ppbv #	99
26) Tetrahydrofuran	10.58	42	423944	10.17	ppbv	92
27) Chloroform	10.60	83	880637	10.40	ppbv	100
28) 1,1,1-Trichloroethane	10.86	97	814156	10.15	ppbv	96
29) Cyclohexane	10.86	56	802077	10.98	ppbv	93
30) Carbon tetrachloride	11.02	117	744999	9.87	ppbv	98
31) Benzene	11.30	78	1108008	9.50	ppbv	98
32) 1,2-Dichloroethane	11.37	62	434089	9.54	ppbv	98
34) Heptane	11.35	43	968744	10.89	ppbv #	93
35) Trichloroethene	12.03	130	553208	9.70	ppbv	95
36) 1,2-Dichloropropane	12.39	63	424549	9.51	ppbv #	96
37) 1,4-Dioxane	12.46	88	172360	9.68	ppbv	94
38) Bromodichloromethane	12.67	83	735703	9.46	ppbv	99
39) cis-1,3-Dichloropropene	13.22	75	612877	9.32	ppbv	98
40) 4-Methyl-2-pentanone	13.33	58	293587	10.15	ppbv	92
41) Toluene	13.63	91	1168769	9.54	ppbv	98
42) trans-1,3-Dichloropropene	13.93	75	500661	9.06	ppbv	98
43) 1,1,2-Trichloroethane	14.20	97	402008	9.44	ppbv	97
44) Tetrachloroethene	14.33	166	614292	9.85	ppbv	99
45) 2-Hexanone	14.41	43	570614	10.08	ppbv	98
46) Chlorodibromomethane	14.75	129	596726	9.40	ppbv	99
47) 1,2-Dibromoethane	14.99	107	574088	9.41	ppbv	99
49) Chlorobenzene	15.58	112	746735	9.42	ppbv #	94
50) Ethylbenzene	15.63	91	1209962	9.42	ppbv	94
51) m,p-Xylene	15.78	91	1838130	19.19	ppbv	94
52) o-Xylene	16.37	91	879775	9.51	ppbv #	93

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\120611\12061103.D Vial: 2
Acq On : 6 Dec 2011 10:38 am Operator: RACHEL HILL
Sample : CCV VOA1 120611 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Dec 6 11:03 2011 Quant Results File: 120211V1.RES

Quant Method : C:\HPCHEM\1\METHODS\120211V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sat Dec 03 15:08:24 2011
Response via : Initial Calibration
DataAcq Meth : 120211V1

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
53)	Styrene	16.40	104	636584	9.46 ppbv	99
54)	Bromoform	16.78	173	463404	9.22 ppbv	98
56)	1,1,2,2-Tetrachloroethane	17.36	83	756541	10.37 ppbv #	99
57)	4-Ethyltoluene	17.60	105	1070500	9.42 ppbv	96
58)	1,3,5-Trimethylbenzene	17.68	105	883008	9.37 ppbv	98
59)	1,2,4-Trimethylbenzene	18.27	105	874841	9.77 ppbv	98
60)	1,3-Dichlorobenzene	18.82	146	563041	9.88 ppbv	98
61)	1,4-Dichlorobenzene	18.97	146	512836	9.54 ppbv	99
62)	Benzyl chloride	19.18	91	671604	10.94 ppbv	98
63)	1,2-Dichlorobenzene	19.61	146	537345	10.20 ppbv	98
64)	1,2,4-Trichlorobenzene	22.76	180	79474	8.67 ppbv	97
65)	Hexachlorobutadiene	22.97	225	190260	9.42 ppbv	99
66)	Naphthalene	23.45	128	130262	8.81 ppbv	98

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

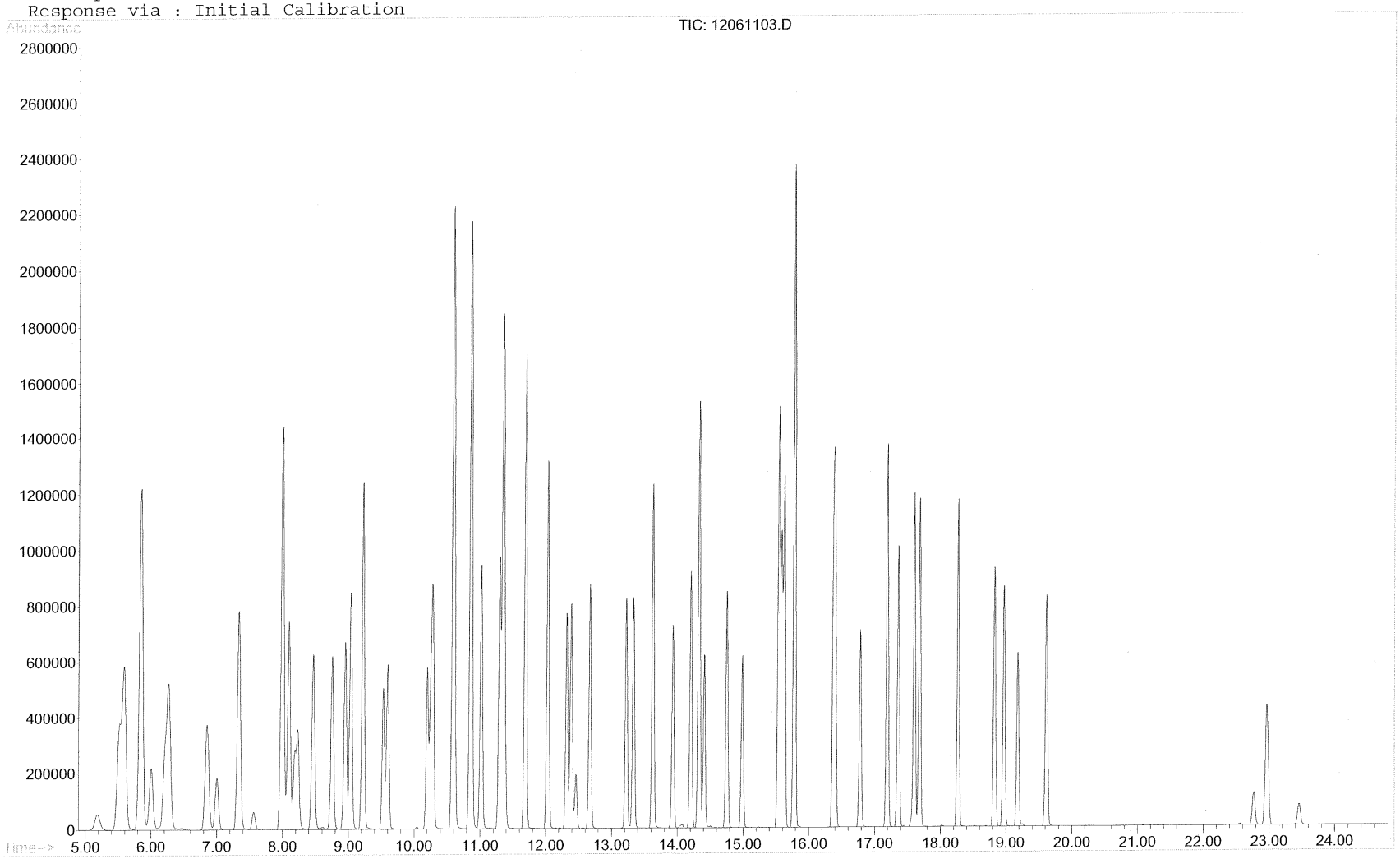
Quantitation Report

Data File : C:\HPCHEM\1\DATA\120611\12061103.D
Acq On : 6 Dec 2011 10:38 am
Sample : CCV VOA1 120611
Misc : CCV EPA TO15
MS Integration Params: CLME.P
Quant Time: Dec 6 11:03 2011

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

Quant Results File: 120211V1.RES

Method : C:\HPCHEM\1\METHODS\120211V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sat Dec 03 15:08:24 2011
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA1_111207B **Run No.:** 44800

Analytical Run Date: 12/7/2011 **InstrumentID:** VOA1

Analyst: Rachel Hill **Column:**

Calibration ID: 44800 **Column ID:** 0.25mm, 1.4umFT

Column Length: 30m

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB1 VOA1 120711	BFB_TUNE	TUNE	R44800	12/7/2011 12:26:00 PM	Robert Lynch		
1ppbv ICAL	EPA_TO15	ICAL	R44800	12/7/2011 4:58:00 PM	Robert Lynch		
10ppbv ICAL	EPA_TO15	ICAL	R44800	12/7/2011 5:39:00 PM	Robert Lynch		
12ppbv ICAL	EPA_TO15	ICAL	R44800	12/7/2011 6:21:00 PM	Robert Lynch		
15ppbv ICAL	EPA_TO15	ICAL	R44800	12/7/2011 7:02:00 PM	Robert Lynch		
20ppbv ICAL	EPA_TO15	ICAL	R44800	12/7/2011 7:44:00 PM	Robert Lynch		
30ppbv ICAL	EPA_TO15	ICAL	R44800	12/7/2011 8:26:00 PM	Robert Lynch		
50ppbv ICAL	EPA_TO15	ICAL	R44800	12/7/2011 9:10:00 PM	Robert Lynch		
BFB2 VOA1 120711	BFB_TUNE	TUNE	R44800	12/7/2011 9:50:00 PM	Robert Lynch		
ICV VOA1 120711	EPA_TO15	ICV	R44800	12/7/2011 10:31:00 PM	Robert Lynch		
BFB3 VOA1 120711	BFB_TUNE	TUNE	R44800	12/8/2011 6:42:00 AM	Robert Lynch		
CCV VOA1 120711	EPA_TO15	CCV	R44800	12/8/2011 7:24:00 AM	Robert Lynch		
RLVS VOA1 120711	EPA_TO15	RLVS	R44800	12/8/2011 9:06:00 AM	Robert Lynch		
MBLK VOA1 120711	EPA_TO15	MBLK	R44800	12/8/2011 9:54:00 AM	Robert Lynch		
1111752-034A	EPA_TO15	SAMP	R44800	12/8/2011 1:05:00 PM	Robert Lynch		
1111752-037A	EPA_TO15	SAMP	R44800	12/8/2011 1:50:00 PM	Robert Lynch		
1111882-001A	EPA_TO15	SAMP	R44800	12/8/2011 2:33:00 PM	Robert Lynch		
1111882-002A	EPA_TO15	SAMP	R44800	12/8/2011 3:15:00 PM	Robert Lynch		
1111882-003A	EPA_TO15	SAMP	R44800	12/8/2011 3:56:00 PM	Robert Lynch		
1111882-004A	EPA_TO15	SAMP	R44800	12/8/2011 4:45:00 PM	Robert Lynch		
1111882-005A	EPA_TO15	SAMP	R44800	12/8/2011 5:26:00 PM	Robert Lynch		
1111882-006A	EPA_TO15	SAMP	R44800	12/8/2011 6:10:00 PM	Robert Lynch		
1111882-006Adup	EPA_TO15	DUP	R44800	12/8/2011 6:54:00 PM	Robert Lynch		
1111882-007A	EPA_TO15	SAMP	R44800	12/8/2011 7:38:00 PM	Robert Lynch		
1111882-008A	EPA_TO15	SAMP	R44800	12/8/2011 8:19:00 PM	Robert Lynch		
1111882-009A	EPA_TO15	SAMP	R44800	12/8/2011 9:00:00 PM	Robert Lynch		
1111882-010A	EPA_TO15	SAMP	R44800	12/8/2011 9:41:00 PM	Robert Lynch		
1111882-015A	EPA_TO15	SAMP	R44800	12/8/2011 11:44:00 PM	Robert Lynch		
1111752-032A	EPA_TO15	SAMP	R44800	12/9/2011 12:28:00 AM	Robert Lynch		
1111752-037A	EPA_TO15	SAMP	R44800	12/9/2011 1:09:00 AM	Robert Lynch		
1111882-013A	EPA_TO15	SAMP	R44800	12/9/2011 1:50:00 AM	Robert Lynch		
1111882-014A	EPA_TO15	SAMP	R44800	12/9/2011 2:35:00 AM	Robert Lynch		
1112148-036A	EPA_TO15	SAMP	R44800	12/9/2011 3:16:00 AM	Robert Lynch		
RLVS2 VOA1 12071	EPA_TO15	RLVS	R44800	12/9/2011 4:39:00 AM	Robert Lynch		

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
881022	ICV VOA1 120711	EPA_TO15	ICV	.\1\DATA\120711	12/7/2011 10:31:	1	R44800		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	11.55	11.55		9.6	0	0	0.107	1	0	120%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	11.73	11.73		10	0	0	0.211	1	0	117%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	12.11	12.11		9.8	0	0	0.108	1	0	124%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	11.71	11.71		9.8	0	0	0.2	1	0	119%	70	130	0%	
1,1-Dichloroethane	A	ppbv	11.57	11.57		9.7	0	0	0.111	1	0	119%	70	130	0%	
1,1-Dichloroethene	A	ppbv	11.85	11.85		9.9	0	0	0.097	1	0	120%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	9.21	9.21		9.1	0	0	0.271	1	0	101%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	11.15	11.15		9.8	0	0	0.245	1	0	114%	70	130	0%	
1,2-Dibromoethane	A	ppbv	11.45	11.45		9.6	0	0	0.186	1	0	119%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	11.16	11.16		9.7	0	0	0.208	1	0	115%	70	130	0%	
1,2-Dichloroethane	A	ppbv	11.7	11.7		9.7	0	0	0.196	1	0	121%	70	130	0%	
1,2-Dichloropropane	A	ppbv	12.11	12.11		9.8	0	0	0.224	1	0	124%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	11.09	11.09		9.7	0	0	0.24	1	0	114%	70	130	0%	
1,3-Butadiene	A	ppbv	11.92	11.92		9.8	0	0	0.152	1	0	122%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	11.17	11.17		9.7	0	0	0.202	1	0	115%	70	130	0%	
1,4-Dichlorobenzene	A	ppbv	11.12	11.12		9.6	0	0	0.194	1	0	116%	70	130	0%	
1,4-Dioxane	A	ppbv	11.78	11.78		9.6	0	0	0.128	1	0	123%	70	130	0%	
2-Butanone	A	ppbv	12.57	12.57		9.9	0	0	0.287	1	0	127%	70	130	0%	
2-Hexanone	A	ppbv	12.05	12.05		9.8	0	0	0.135	1	0	123%	70	130	0%	
2-Propanol	A	ppbv	12.18	12.18		10.1	0	0	0.329	1	0	121%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	12.24	12.24		10	0	0	0.157	1	0	122%	70	130	0%	
Acetone	A	ppbv	12.5	12.5		10	0	0	0.43	1	0	125%	70	130	0%	
Benzene	A	ppbv	11.82	11.82		9.6	0	0	0.126	1	0	123%	70	130	0%	
Benzyl chloride	A	ppbv	11.95	11.95		9.7	0	0	0.155	1	0	123%	70	130	0%	
Bromodichloromethane	A	ppbv	11.63	11.63		9.6	0	0	0.156	1	0	121%	70	130	0%	
Bromoform	A	ppbv	11.54	11.54		9.6	0	0	0.197	1	0	120%	70	130	0%	
Bromomethane	A	ppbv	10.4	10.4		9.3	0	0	0.075	1	0	112%	70	130	0%	
Carbon disulfide	A	ppbv	11.35	11.35		9.7	0	0	0.093	1	0	117%	70	130	0%	
Carbon tetrachloride	A	ppbv	11.2	11.2		9.5	0	0	0.114	1	0	118%	70	130	0%	
Chlorobenzene	A	ppbv	11.88	11.88		9.9	0	0	0.275	1	0	120%	70	130	0%	
Chlorodibromomethane	A	ppbv	11.69	11.69		9.2	0	0	0.165	1	0	127%	70	130	0%	
Chloroethane	A	ppbv	10.56	10.56		9.8	0	0	0.063	1	0	108%	70	130	0%	
Chloroform	A	ppbv	11.63	11.63		9.4	0	0	0.126	1	0	124%	70	130	0%	
Chloromethane	A	ppbv	10.55	10.55		9.8	0	0	0.104	1	0	108%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
881022	ICV VOA1 120711	EPA_TO15	ICV	:\1\DATA\120711	12/7/2011 10:31:	1	R44800		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	11.56	11.56		9.8	0	0	0.107	1	0	118%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	11.63	11.63		9.5	0	0	0.166	1	0	122%	70	130	0%	
Cyclohexane	A	ppbv	12.19	12.19		9.8	0	0	0.684	2	0	124%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.76	9.76		9.2	0	0	0.086	1	0	106%	70	130	0%	
Ethanol	A	ppbv	11.5	11.5		9.2	0	0	1.962	5	0	125%	70	130	0%	
Ethyl acetate	A	ppbv	12.01	12.01		9.8	0	0	0.157	1	0	123%	70	130	0%	
Ethylbenzene	A	ppbv	11.92	11.92		9.8	0	0	0.737	2	0	122%	70	130	0%	
Heptane	A	ppbv	12.32	12.32		9.9	0	0	0.249	1	0	124%	70	130	0%	
Hexachlorobutadiene	A	ppbv	9.56	9.56		9.4	0	0	0.374	2	0	102%	70	130	0%	
m,p-Xylene	A	ppbv	24.33	24.33		19.2	0	0	0.524	2	0	127%	70	130	0%	
Methylene chloride	A	ppbv	11.36	11.36		10	0	0	2.077	5	0	114%	70	130	0%	
n-Hexane	A	ppbv	12.08	12.08		10.1	0	0	0.692	2	0	120%	70	130	0%	
Naphthalene	A	ppbv	9.24	9.24		9.2	0	0	0.247	1	0	100%	70	130	0%	
o-Xylene	A	ppbv	12.52	12.52		10	0	0	0.258	1	0	125%	70	130	0%	
Propylene	A	ppbv	10.81	10.81		10.2	0	0	0.075	1	0	106%	70	130	0%	
Styrene	A	ppbv	12.08	12.08		9.8	0	0	0.263	1	0	123%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	12.24	12.24		9.9	0	0	0.228	1	0	124%	70	130	0%	
Tetrachloroethene	A	ppbv	11.61	11.61		9.6	0	0	0.148	1	0	121%	70	130	0%	
Tetrahydrofuran	A	ppbv	12.37	12.37		10	0	0	0.201	1	0	124%	70	130	0%	
Toluene	A	ppbv	12.01	12.01		9.8	0	0	0.158	1	0	123%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	11.63	11.63		9.8	0	0	0.117	1	0	119%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	10.97	10.97		9.1	0	0	0.171	1	0	121%	70	130	0%	
Trichloroethene	A	ppbv	11.5	11.5		9.6	0	0	0.119	1	0	120%	70	130	0%	
Trichlorofluoromethane	A	ppbv	11.03	11.03		9.6	0	0	0.148	1	0	115%	70	130	0%	
Vinyl acetate	A	ppbv	12.84	12.84		9.9	0	0	0.266	1	0	130%	70	130	0%	
Vinyl chloride	A	ppbv	11.65	11.65		9.4	0	0	0.072	1	0	124%	70	130	0%	
Xylenes, Total	C	ppbv	36.85	36.85		29.2	0	0	0.782	3	0	126%	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	12.8	12.8		12.5	0	0	0	0	0	102%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
881014	BFB3 VOA1 120711	BFB_TUNE	TUNE	:\1\DATA\120711	12/8/2011 6:42:0	1	R44800		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0.6	0.6		100	0	0	0	0	0	1%	0	2	0%	
174	M		81.6	81.6		100	0	0	0	0	0	82%	50	120	0%	
175	M		7.2	7.2		100	0	0	0	0	0	7%	4	9	0%	
176	M		100.4	100.4		100	0	0	0	0	0	100%	93	101	0%	
177	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	
50	M		18.1	18.1		100	0	0	0	0	0	18%	8	40	0%	
75	M		41.8	41.8		100	0	0	0	0	0	42%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.8	6.8		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
881023	CCV VOA1 120711	EPA_TO15	CCV	:\1\DATA\120711	12/8/2011 7:24:0	1	R44800		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	9.24	9.24		9.6	0	0	0.107	1	0	96%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	9.61	9.61		10	0	0	0.211	1	0	96%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.19	10.19		9.8	0	0	0.108	1	0	104%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	8.29	8.29		9.8	0	0	0.2	1	0	85%	70	130	0%	
1,1-Dichloroethane	A	ppbv	9.09	9.09		9.7	0	0	0.111	1	0	94%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.37	10.37		9.9	0	0	0.097	1	0	105%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	7.95	7.95		9.1	0	0	0.271	1	0	87%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	9.18	9.18		9.8	0	0	0.245	1	0	94%	70	130	0%	
1,2-Dibromoethane	A	ppbv	8.34	8.34		9.6	0	0	0.186	1	0	87%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	9.63	9.63		9.7	0	0	0.208	1	0	99%	70	130	0%	
1,2-Dichloroethane	A	ppbv	8.19	8.19		9.7	0	0	0.196	1	0	84%	70	130	0%	
1,2-Dichloropropane	A	ppbv	8.1	8.1		9.8	0	0	0.224	1	0	83%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	8.83	8.83		9.7	0	0	0.24	1	0	91%	70	130	0%	
1,3-Butadiene	A	ppbv	11.31	11.31		9.8	0	0	0.152	1	0	115%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.38	9.38		9.7	0	0	0.202	1	0	97%	70	130	0%	
1,4-Dichlorobenzene	A	ppbv	9.23	9.23		9.6	0	0	0.194	1	0	96%	70	130	0%	
1,4-Dioxane	A	ppbv	8.29	8.29		9.6	0	0	0.128	1	0	86%	70	130	0%	
2-Butanone	A	ppbv	8.17	8.17		9.9	0	0	0.287	1	0	83%	70	130	0%	
2-Hexanone	A	ppbv	8.41	8.41		9.8	0	0	0.135	1	0	86%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
881023	CCV VOA1 120711	EPA_TO15	CCV	\1\DATA\120711	12/8/2011 7:24:0	1	R44800		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
2-Propanol	A	ppbv	9.21	9.21		10.1	0	0	0.329	1	0	91%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	8.55	8.55		10	0	0	0.157	1	0	86%	70	130	0%	
Acetone	A	ppbv	8.29	8.29		10	0	0	0.43	1	0	83%	70	130	0%	
Benzene	A	ppbv	8.33	8.33		9.6	0	0	0.126	1	0	87%	70	130	0%	
Benzyl chloride	A	ppbv	9.73	9.73		9.7	0	0	0.155	1	0	100%	70	130	0%	
Bromodichloromethane	A	ppbv	8.29	8.29		9.6	0	0	0.156	1	0	86%	70	130	0%	
Bromoform	A	ppbv	10.31	10.31		9.6	0	0	0.197	1	0	107%	70	130	0%	
Bromomethane	A	ppbv	10.01	10.01		9.3	0	0	0.075	1	0	108%	70	130	0%	
Carbon disulfide	A	ppbv	10.5	10.5		9.7	0	0	0.093	1	0	108%	70	130	0%	
Carbon tetrachloride	A	ppbv	9.01	9.01		9.5	0	0	0.114	1	0	95%	70	130	0%	
Chlorobenzene	A	ppbv	8.62	8.62		9.9	0	0	0.275	1	0	87%	70	130	0%	
Chlorodibromomethane	A	ppbv	8.53	8.53		9.2	0	0	0.165	1	0	93%	70	130	0%	
Chloroethane	A	ppbv	9.91	9.91		9.8	0	0	0.063	1	0	101%	70	130	0%	
Chloroform	A	ppbv	9.43	9.43		9.4	0	0	0.126	1	0	100%	70	130	0%	
Chloromethane	A	ppbv	9.23	9.23		9.8	0	0	0.104	1	0	94%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.25	9.25		9.8	0	0	0.107	1	0	94%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	8.05	8.05		9.5	0	0	0.166	1	0	85%	70	130	0%	
Cyclohexane	A	ppbv	9.93	9.93		9.8	0	0	0.684	2	0	101%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.39	9.39		9.2	0	0	0.086	1	0	102%	70	130	0%	
Ethanol	A	ppbv	8.21	8.21		9.2	0	0	1.962	5	0	89%	70	130	0%	
Ethyl acetate	A	ppbv	7.88	7.88		9.8	0	0	0.157	1	0	80%	70	130	0%	
Ethylbenzene	A	ppbv	8.53	8.53		9.8	0	0	0.737	2	0	87%	70	130	0%	
Heptane	A	ppbv	9.4	9.4		9.9	0	0	0.249	1	0	95%	70	130	0%	
Hexachlorobutadiene	A	ppbv	8.29	8.29		9.4	0	0	0.374	2	0	88%	70	130	0%	
m,p-Xylene	A	ppbv	17.81	17.81		19.2	0	0	0.524	2	0	93%	70	130	0%	
Methylene chloride	A	ppbv	9.41	9.41		10	0	0	2.077	5	0	94%	70	130	0%	
n-Hexane	A	ppbv	9.88	9.88		10.1	0	0	0.692	2	0	98%	70	130	0%	
Naphthalene	A	ppbv	8.59	8.59		9.2	0	0	0.247	1	0	93%	70	130	0%	
o-Xylene	A	ppbv	8.98	8.98		10	0	0	0.258	1	0	90%	70	130	0%	
Propylene	A	ppbv	10.39	10.39		10.2	0	0	0.075	1	0	102%	70	130	0%	
Styrene	A	ppbv	8.98	8.98		9.8	0	0	0.263	1	0	92%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	7.94	7.94		9.9	0	0	0.228	1	0	80%	70	130	0%	
Tetrachloroethene	A	ppbv	9.16	9.16		9.6	0	0	0.148	1	0	95%	70	130	0%	
Tetrahydrofuran	A	ppbv	8.74	8.74		10	0	0	0.201	1	0	87%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
881023	CCV VOA1 120711	EPA_TO15	CCV	\1\DATA\120711	12/8/2011 7:24:0	1	R44800		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Toluene	A	ppbv	8.31	8.31		9.8	0	0	0.158	1	0	85%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	9.49	9.49		9.8	0	0	0.117	1	0	97%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	7.85	7.85		9.1	0	0	0.171	1	0	86%	70	130	0%	
Trichloroethene	A	ppbv	8.88	8.88		9.6	0	0	0.119	1	0	93%	70	130	0%	
Trichlorofluoromethane	A	ppbv	10.15	10.15		9.6	0	0	0.148	1	0	106%	70	130	0%	
Vinyl acetate	A	ppbv	8.32	8.32		9.9	0	0	0.266	1	0	84%	70	130	0%	
Vinyl chloride	A	ppbv	11.14	11.14		9.4	0	0	0.072	1	0	119%	70	130	0%	
Xylenes, Total	C	ppbv	26.79	26.79		29.2	0	0	0.782	3	0	92%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		1.25	0	0	0	0	0	1000%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	13.43	13.43		12.5	0	0	0	0	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
881024	RLVS VOA1 120711	EPA_TO15	RLVS	\1\DATA\120711	12/8/2011 9:06:0	1	R44800		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	0.87	0.87		0.996	0	0	0.107	1	0	87%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.18	1.18		1	0	0	0.211	1	0	118%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	0.92	0.92		0.98	0	0	0.108	1	0	94%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.87	0.87		0.98	0	0	0.2	1	0	89%	70	130	0%	
1,1-Dichloroethane	A	ppbv	0.94	0.94		0.97	0	0	0.111	1	0	97%	70	130	0%	
1,1-Dichloroethene	A	ppbv	0.96	0.96		0.99	0	0	0.097	1	0	97%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.2	1.2		0.91	0	0	0.271	1	0	132%	70	130	0%	S
1,2,4-Trimethylbenzene	A	ppbv	1.25	1.25		0.98	0	0	0.245	1	0	128%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.85	0.85		0.96	0	0	0.186	1	0	89%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.17	1.17		0.97	0	0	0.208	1	0	121%	70	130	0%	
1,2-Dichloroethane	A	ppbv	0.96	0.96		0.97	0	0	0.196	1	0	99%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.89	0.89		0.98	0	0	0.224	1	0	91%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	1.22	1.22		0.97	0	0	0.24	1	0	126%	70	130	0%	
1,3-Butadiene	A	ppbv	1.02	1.02		0.98	0	0	0.152	1	0	104%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	1.15	1.15		0.97	0	0	0.202	1	0	119%	70	130	0%	
1,4-Dichlorobenzene	A	ppbv	1.07	1.07		0.96	0	0	0.194	1	0	111%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\120711\12071115.D Vial: 2
Acq On : 8 Dec 2011 7:24 am Operator: RACHEL HILL
Sample : CCV VOA1 120711 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\120711V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Dec 08 12:11:06 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	118	0.00
2	T	Propylene	1.210	1.232	-1.8	111	0.00
3	T	Dichlorodifluoromethane	3.234	3.301	-2.1	110	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.367	2.539	-7.3	114	0.00
5	T	Chloromethane	1.111	1.080	2.8	101	0.00
6	T	Vinyl chloride	1.356	1.607	-18.5	109	0.00
7	T	1,3-Butadiene	1.043	1.204	-15.4	107	-0.01
8	T	Bromomethane	1.267	1.364	-7.7	114	0.00
9	T	Chloroethane	0.750	0.807	-7.6	112	0.00
10	T	Trichlorofluoromethane	2.606	2.755	-5.7	108	0.00
11	T	Ethanol	0.327	0.292	10.7	85	0.00
12	T	Freon113	2.214	2.301	-3.9	100	0.00
13	T	1,1-Dichloroethene	1.735	1.817	-4.7	103	0.00
14	T	Acetone	1.666	1.381	17.1	76	0.00
15	T	Carbon disulfide	3.296	3.569	-8.3	109	0.00
16	T	2-Propanol	1.615	1.473	8.8	88	0.00
17	T	Methylene chloride	1.417	1.333	5.9	95	0.00
18	T	tert-Butyl Methyl Ether	2.438	1.956	19.8	74	0.00
19	T	trans-1,2-Dichloroethene	1.702	1.649	3.1	95	0.00
20	T	n-Hexane	1.880	1.839	2.2	95	0.00
21	T	1,1-Dichloroethane	2.017	1.891	6.2	92	0.00
22	T	Vinyl acetate	2.647	2.225	15.9	74	0.00
23	T	cis-1,2-Dichloroethene	1.189	1.122	5.6	93	0.00
24	T	2-Butanone	1.782	1.470	17.5	76	0.00
25	T	Ethyl acetate	2.392	1.923	19.6	72	0.00
26	T	Tetrahydrofuran	1.046	0.914	12.6	79	0.00
27	T	Chloroform	2.084	2.005	3.8	92	0.00
28	T	1,1,1-Trichloroethane	1.971	1.897	3.8	92	0.00
29	T	Cyclohexane	1.785	1.809	-1.3	94	0.00
30	T	Carbon tetrachloride	1.891	1.793	5.2	92	0.00
31	T	Benzene	2.941	2.552	13.2	80	0.00
32	T	1,2-Dichloroethane	1.142	0.964	15.6	78	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	126	0.00
34	T	Heptane	0.666	0.633	5.0	92	0.00
35	T	Trichloroethene	0.424	0.392	7.5	95	0.00
36	T	1,2-Dichloropropane	0.337	0.279	17.2	80	0.00
37	T	1,4-Dioxane	0.135	0.117	13.3	86	0.00
38	T	Bromodichloromethane	0.580	0.501	13.6	85	0.00
39	T	cis-1,3-Dichloropropene	0.500	0.424	15.2	84	0.00
40	T	4-Methyl-2-pentanone	0.220	0.188	14.5	84	0.00
41	T	Toluene	0.917	0.777	15.3	83	0.00
42	T	trans-1,3-Dichloropropene	0.421	0.363	13.8	86	0.00
43	T	1,1,2-Trichloroethane	0.320	0.271	15.3	86	0.00
44	T	Tetrachloroethene	0.459	0.438	4.6	97	0.00
45	T	2-Hexanone	0.434	0.372	14.3	83	0.00
46	T	Chlorodibromomethane	0.472	0.411	12.9	88	0.00
47	T	1,2-Dibromoethane	0.456	0.397	12.9	88	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	126	0.00
49	T	Chlorobenzene	0.917	0.799	12.9	88	0.00
50	T	Ethylbenzene	1.485	1.292	13.0	86	0.00
51	T	m,p-Xylene	1.100	1.020	7.3	88	0.00
52	T	o-Xylene	1.071	0.961	10.3	90	0.00
53	T	Styrene	0.777	0.712	8.4	92	0.00
54	T	Bromoform	0.578	0.621	-7.4	109	0.00
55	S	4-Bromofluorobenzene	0.571	0.613	-7.4	134	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\120711\12071115.D Vial: 2
Acq On : 8 Dec 2011 7:24 am Operator: RACHEL HILL
Sample : CCV VOA1 120711 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\120711V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Dec 08 12:11:06 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	0.850	0.817	3.9	97	0.00
57	T	4-Ethyltoluene	1.317	1.188	9.8	95	0.00
58	T	1,3,5-Trimethylbenzene	1.097	0.998	9.0	97	0.00
59	T	1,2,4-Trimethylbenzene	1.050	0.984	6.3	99	0.00
60	T	1,3-Dichlorobenzene	0.661	0.639	3.3	99	0.00
61	T	1,4-Dichlorobenzene	0.612	0.588	3.9	98	0.00
62	T	Benzyl chloride	0.745	0.748	-0.4	95	0.00
63	T	1,2-Dichlorobenzene	0.613	0.608	0.8	101	0.00
64	T	1,2,4-Trichlorobenzene	0.104	0.091	12.5	96	0.00
65	T	Hexachlorobutadiene	0.239	0.211	11.7	96	0.00
66		Naphthalene	0.165	0.154	6.7	103	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\120711\12071115.D Vial: 2
Acq On : 8 Dec 2011 7:24 am Operator: RACHEL HILL
Sample : CCV VOA1 120711 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Dec 9 10:07 2011 Quant Results File: 120711V1.RES

Quant Method : C:\HPCHEM\1\METHODS\120711V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Dec 08 12:11:06 2011
Response via : Initial Calibration
DataAcq Meth : 120711V1

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	10.59	130	664724	12.50 ppbv	0.00
33) 1,4-Difluorobenzene	11.69	114	2278810	12.50 ppbv	0.00
48) Chlorobenzene-d5	15.54	117	1425733	12.50 ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.19	95	873994	13.43 ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 107.44%

Target Compounds					Qvalue
2) Propylene	5.52	41	668288	10.39 ppbv	99
3) Dichlorodifluoromethane	5.59	85	1614735	9.39 ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.85	135	1282915	10.19 ppbv #	81
5) Chloromethane	6.00	50	545589	9.23 ppbv	99
6) Vinyl chloride	6.21	62	803491	11.14 ppbv	100
7) 1,3-Butadiene	6.27	39	627212	11.31 ppbv	97
8) Bromomethane	6.85	94	674340	10.01 ppbv	99
9) Chloroethane	7.01	64	395025	9.91 ppbv	100
10) Trichlorofluoromethane	7.34	101	1406586	10.15 ppbv	99
11) Ethanol	7.57	45	142682	8.21 ppbv	99
12) Freon113	7.99	101	1199038	10.19 ppbv	92
13) 1,1-Dichloroethene	8.10	61	956634	10.37 ppbv	96
14) Acetone	8.19	43	734389	8.29 ppbv	97
15) Carbon disulfide	8.47	76	1840941	10.50 ppbv #	100
16) 2-Propanol	8.23	45	791195	9.21 ppbv #	72
17) Methylene chloride	8.76	49	708777	9.41 ppbv	91
18) tert-Butyl Methyl Ether	8.95	73	1029536	7.94 ppbv #	92
19) trans-1,2-Dichloroethene	9.04	61	859139	9.49 ppbv	94
20) n-Hexane	9.22	57	987777	9.88 ppbv	98
21) 1,1-Dichloroethane	9.60	63	975570	9.09 ppbv	98
22) Vinyl acetate	9.53	43	1171438	8.32 ppbv	98
23) cis-1,2-Dichloroethene	10.29	96	584640	9.25 ppbv	95
24) 2-Butanone	10.25	43	773662	8.17 ppbv	94
25) Ethyl acetate	10.20	43	1001950	7.88 ppbv #	99
26) Tetrahydrofuran	10.59	42	486112	8.74 ppbv	94
27) Chloroform	10.60	83	1044673	9.43 ppbv	100
28) 1,1,1-Trichloroethane	10.86	97	968410	9.24 ppbv	98
29) Cyclohexane	10.87	56	942886	9.93 ppbv	94
30) Carbon tetrachloride	11.02	117	905721	9.01 ppbv	99
31) Benzene	11.30	78	1302841	8.33 ppbv	99
32) 1,2-Dichloroethane	11.38	62	497476	8.19 ppbv	98
34) Heptane	11.35	43	1141727	9.40 ppbv	94
35) Trichloroethene	12.03	130	686045	8.88 ppbv	95
36) 1,2-Dichloropropane	12.39	63	498232	8.10 ppbv	96
37) 1,4-Dioxane	12.46	88	204136	8.29 ppbv	94
38) Bromodichloromethane	12.67	83	876450	8.29 ppbv	99
39) cis-1,3-Dichloropropene	13.22	75	734046	8.05 ppbv	98
40) 4-Methyl-2-pentanone	13.33	58	343263	8.55 ppbv	93
41) Toluene	13.63	91	1388507	8.31 ppbv	98
42) trans-1,3-Dichloropropene	13.93	75	601718	7.85 ppbv	98
43) 1,1,2-Trichloroethane	14.21	97	483423	8.29 ppbv	97
44) Tetrachloroethene	14.33	166	767228	9.16 ppbv	99
45) 2-Hexanone	14.41	43	665225	8.41 ppbv	99
46) Chlorodibromomethane	14.75	129	734388	8.53 ppbv	100
47) 1,2-Dibromoethane	14.99	107	694160	8.34 ppbv	99
49) Chlorobenzene	15.58	112	902447	8.62 ppbv	95
50) Ethylbenzene	15.63	91	1444541	8.53 ppbv	95
51) m,p-Xylene	15.78	91	2234057	17.81 ppbv	95
52) o-Xylene	16.37	91	1095931	8.98 ppbv	94

(#) = qualifier out of range (m) = manual integration
12071115.D 120711V1.M Fri Dec 09 17:11:45 2011

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\120711\12071115.D Vial: 2
Acq On : 8 Dec 2011 7:24 am Operator: RACHEL HILL
Sample : CCV VOA1 120711 Inst : VOA 1
Misc : CCV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Dec 9 10:07 2011 Quant Results File: 120711V1.RES

Quant Method : C:\HPCHEM\1\METHODS\120711V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Dec 08 12:11:06 2011
Response via : Initial Calibration
DataAcq Meth : 120711V1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
53) Styrene	16.40	104	795463	8.98 ppbv	98
54) Bromoform	16.78	173	679825	10.31 ppbv	99
56) 1,1,2,2-Tetrachloroethane	17.36	83	931686	9.61 ppbv #	99
57) 4-Ethyltoluene	17.60	105	1327700	8.84 ppbv	97
58) 1,3,5-Trimethylbenzene	17.69	105	1104505	8.83 ppbv	97
59) 1,2,4-Trimethylbenzene	18.27	105	1099879	9.18 ppbv	98
60) 1,3-Dichlorobenzene	18.83	146	707211	9.38 ppbv	99
61) 1,4-Dichlorobenzene	18.97	146	644122	9.23 ppbv	99
62) Benzyl chloride	19.18	91	827643	9.73 ppbv	98
63) 1,2-Dichlorobenzene	19.62	146	673111	9.63 ppbv	99
64) 1,2,4-Trichlorobenzene	22.77	180	94548	7.95 ppbv	98
65) Hexachlorobutadiene	22.97	225	226057	8.29 ppbv	99
66) Naphthalene	23.46	128	161656	8.59 ppbv	99

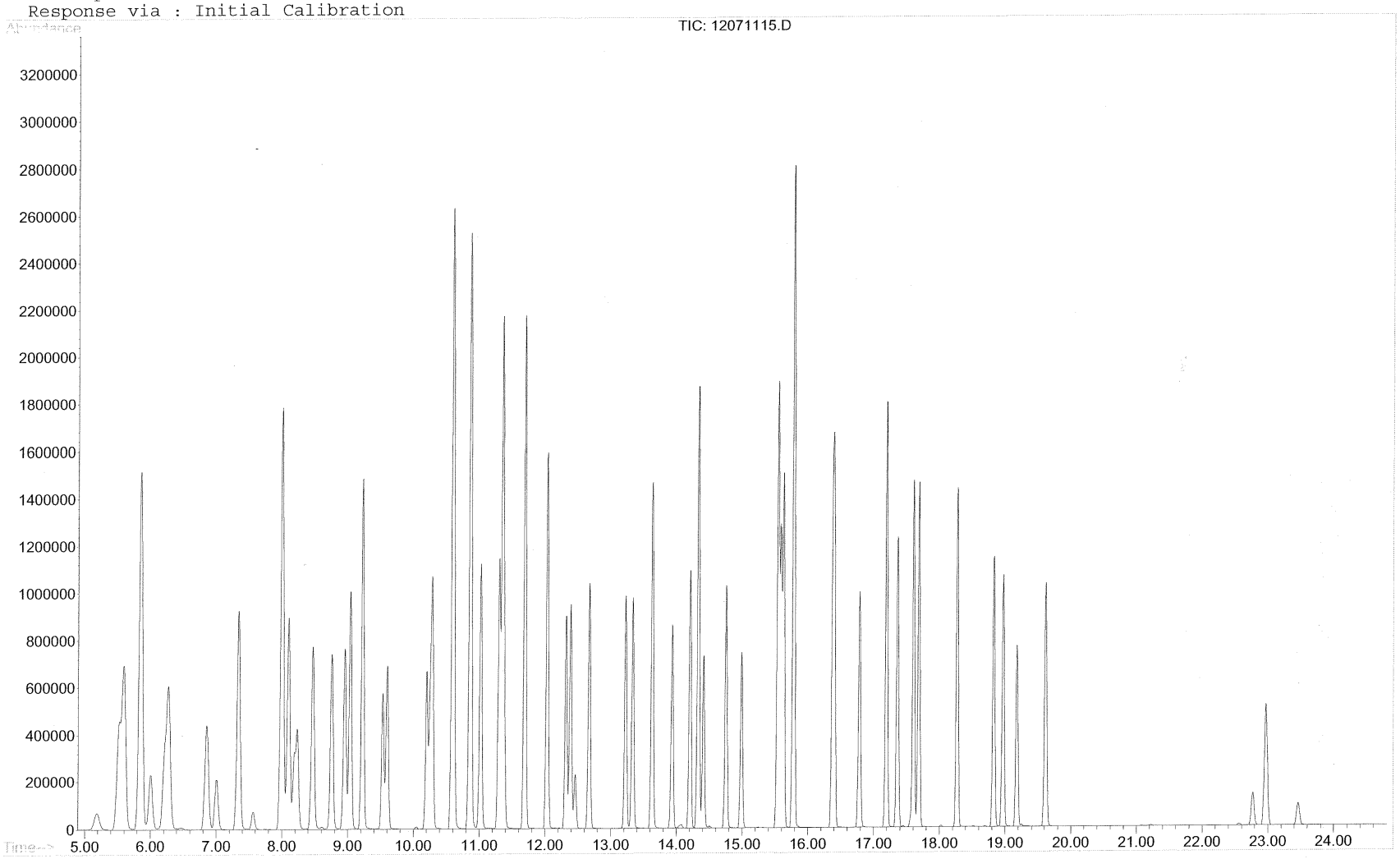
(#) = qualifier out of range (m) = manual integration
12071115.D 120711V1.M Fri Dec 09 17:11:45 2011

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120711\12071115.D
Acq On : 8 Dec 2011 7:24 am
Sample : CCV VOA1 120711
Misc : CCV EPA TO15
MS Integration Params: CLME.P
Quant Time: Dec 9 10:07 2011

Vial: 2
Operator: RACHEL HILL
Inst : VOA 1
Multiplr: 1.00
Quant Results File: 120711V1.RES

Method : C:\HPCHEM\1\METHODS\120711V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Dec 08 12:11:06 2011
Response via : Initial Calibration



Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\120211V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sat Dec 03 15:08:24 2011
Response via : Initial Calibration

Calibration Files
2 =12021103.D 4 =12021104.D 5 =12021105.D
6 =12021106.D 7 =12021107.D 8 =12021108.D

		Compound	2	4	5	6	7	8	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------							
2)	T	Propylene	1.186	1.307	1.239	1.144	1.072	1.039	1.151	8.59
3)	T	Dichlorodifluoromet	2.926	3.486	3.336	3.087	2.888	2.806	3.060	8.43
4)	T	1,2-Dichloro-1,2,2,	2.066	2.515	2.472	2.309	2.201	2.131	2.259	7.89
5)	T	Chloromethane	1.170	1.343	1.253	1.148	1.063	1.000	1.140	11.33
6)	T	Vinyl chloride	1.436	1.719	1.675	1.543	1.340	0.932	1.335	28.76
7)	T	1,3-Butadiene	1.087	1.256	1.214	1.118	1.033	0.938	1.035	21.08
8)	T	Bromomethane	1.171	1.406	1.379	1.267	1.180	1.152	1.251	8.29
9)	T	Chloroethane	0.684	0.844	0.824	0.748	0.685	0.666	0.733	10.07
10)	T	Trichlorofluorometh	2.469	2.967	2.909	2.610	2.411	2.370	2.587	9.81
11)	T	Ethanol	0.232	0.364	0.362	0.311	0.287	0.273	0.305	16.95
12)	T	Freon113	2.110	2.611	2.568	2.284	2.066	1.972	2.197	14.12
13)	T	1,1-Dichloroethene	1.717	2.037	1.957	1.724	1.557	1.509	1.713	12.65
14)	T	Acetone	1.662	1.922	1.879	1.574	1.406	1.326	1.583	15.92
15)	T	Carbon disulfide	3.215	3.822	3.707	3.323	3.046	2.909	3.269	11.51
16)	T	2-Propanol	1.285	1.748	1.747	1.533	1.404	1.342	1.490	12.86
17)	T	Methylene chloride	1.649	1.595	1.540	1.343	1.205	1.144	1.373	16.06
18)	T	tert-Butyl Methyl E	2.450	2.771	2.759	2.328	2.087	1.981	2.339	14.44
19)	T	trans-1,2-Dichloroe	1.674	1.956	1.908	1.684	1.529	1.456	1.664	12.48
20)	T	n-Hexane	1.832	2.171	2.137	1.861	1.694	1.606	1.833	13.55
21)	T	1,1-Dichloroethane	1.938	2.347	2.317	1.999	1.830	1.741	1.988	12.74
22)	T	Vinyl acetate	1.835	3.013	3.083	2.564	2.279	2.133	2.432	19.49
23)	T	cis-1,2-Dichloroeth	1.123	1.339	1.334	1.169	1.082	1.045	1.163	10.80
24)	T	2-Butanone	1.699	2.066	2.110	1.693	1.450	1.355	1.677	18.75
25)	T	Ethyl acetate	2.105	2.778	2.724	2.345	2.027	1.871	2.237	17.53
26)	T	Tetrahydrofuran	0.984	1.228	1.231	1.042	0.935	0.861	1.012	16.56
27)	T	Chloroform	2.046	2.448	2.407	2.113	1.926	1.793	2.057	14.32
28)	T	1,1,1-Trichloroetha	1.808	2.307	2.331	2.022	1.851	1.730	1.947	14.72
29)	T	Cyclohexane	1.857	2.185	2.148	1.844	1.644	1.488	1.774	19.09
30)	T	Carbon tetrachlorid	1.638	2.119	2.135	1.868	1.740	1.683	1.832	11.78
31)	T	Benzene	2.920	3.346	3.388	2.842	2.573	2.412	2.832	14.84
32)	T	1,2-Dichloroethane	1.109	1.316	1.328	1.111	1.010	0.943	1.105	14.99
33)	I	1,4-Difluorobenzene	----------ISTD----------							
34)	T	Heptane	0.648	0.783	0.782	0.683	0.613	0.550	0.642	19.33
35)	T	Trichloroethene	0.383	0.474	0.481	0.431	0.404	0.379	0.412	13.17
36)	T	1,2-Dichloropropane	0.310	0.382	0.388	0.330	0.304	0.282	0.322	15.00
37)	T	1,4-Dioxane	0.108	0.153	0.156	0.135	0.123	0.115	0.128	15.70
38)	T	Bromodichloromethan	0.514	0.650	0.670	0.584	0.545	0.507	0.562	13.76
39)	T	cis-1,3-Dichloropro	0.426	0.556	0.567	0.487	0.458	0.426	0.475	13.78
40)	T	4-Methyl-2-pentanon	0.167	0.249	0.255	0.218	0.205	0.189	0.209	16.08
41)	T	Toluene	0.849	1.026	1.060	0.914	0.846	0.783	0.885	14.13
42)	T	trans-1,3-Dichlorop	0.348	0.460	0.473	0.416	0.385	0.363	0.399	13.07
43)	T	1,1,2-Trichloroetha	0.288	0.350	0.360	0.316	0.296	0.281	0.307	11.82
44)	T	Tetrachloroethene	0.428	0.518	0.531	0.474	0.451	0.412	0.450	14.69
45)	T	2-Hexanone	0.329	0.496	0.500	0.431	0.397	0.366	0.409	17.02
46)	T	Chlorodibromomethan	0.392	0.518	0.545	0.481	0.452	0.429	0.458	12.98
47)	T	1,2-Dibromoethane	0.418	0.505	0.520	0.453	0.424	0.399	0.441	12.65
48)	I	Chlorobenzene-d5	----------ISTD----------							
49)	T	Chlorobenzene	0.869	1.017	1.041	0.913	0.857	0.823	0.894	11.85
50)	T	Ethylbenzene	1.468	1.670	1.707	1.492	1.387	1.297	1.448	14.20
51)	T	m,p-Xylene	1.125	1.294	1.330	1.147	1.045	0.921	1.080	20.19
52)	T	o-Xylene	1.056	1.189	1.226	1.050	1.015	0.952	1.043	13.37
53)	T	Styrene	0.774	0.861	0.879	0.761	0.742	0.694	0.759	12.52
54)	T	Bromoform	0.532	0.643	0.664	0.572	0.556	0.533	0.567	11.99
55)	S	4-Bromofluorobenzen	0.635	0.565	0.553	0.533	0.536	0.519	0.550	7.55
56)	T	1,1,2,2-Tetrachloro	1.010	0.968	0.946	0.802	0.752	0.688	0.822	19.13
57)	T	4-Ethyltoluene	1.660	1.438	1.437	1.223	1.160	1.086	1.282	18.73

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

Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\120211V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sat Dec 03 15:08:24 2011
Response via : Initial Calibration

Calibration Files
2 =12021103.D 4 =12021104.D 5 =12021105.D
6 =12021106.D 7 =12021107.D 8 =12021108.D

		Compound	2	4	5	6	7	8	Avg	%RSD
58)	T	1,3,5-Trimethylbenz	1.435	1.177	1.192	0.997	0.949	0.890	1.062	20.55
59)	T	1,2,4-Trimethylbenz	1.354	1.140	1.118	0.958	0.904	0.841	1.009	20.46
60)	T	1,3-Dichlorobenzene	0.759	0.756	0.739	0.631	0.593	0.543	0.643	17.41
61)	T	1,4-Dichlorobenzene	0.678	0.717	0.702	0.603	0.564	0.519	0.606	16.16
62)	T	Benzyl chloride	0.431	0.860	0.871	0.737	0.711	0.660	0.692	22.49
63)	T	1,2-Dichlorobenzene	0.724	0.700	0.679	0.578	0.545	0.492	0.594	18.46
64)	T	1,2,4-Trichlorobenz	0.101	0.113	0.120	0.097	0.097	0.095	0.103	9.06
65)	T	Hexachlorobutadiene		0.269	0.266	0.222	0.212	0.198	0.228	14.14
66)		Naphthalene		0.187	0.191	0.157	0.156	0.150	0.167	10.49

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

Compound List Report VOA 1

Method : C:\HPCHEM\1\METHODS\120211V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sat Dec 03 15:08:24 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	0.521	A	2	A	B
3	T	Dichlorodifluoromethane	85	5.59	0.528	A	3	A	B
4	T	1,2-Dichloro-1,2,2,2-tetrafluo	135	5.85	0.552	A	2	A	B
5	T	Chloromethane	50	6.00	0.567	A	3	A	B
6	T	Vinyl chloride	62	6.21	0.587	A	2	A	B
7	T	1,3-Butadiene	39	6.27	0.592	A	2	A	B
8	T	Bromomethane	94	6.85	0.646	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	7.56	0.714	A	2	A	B
12	T	Freon113	101	7.99	0.755	A	2	A	B
13	T	1,1-Dichloroethene	61	8.10	0.764	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	10.58	0.999	A	2	A	B
27	T	Chloroform	83	10.61	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	11.01	1.040	A	3	A	B
31	T	Benzene	78	11.30	1.067	A	3	A	B
32	T	1,2-Dichloroethane	62	11.38	1.074	A	3	A	B
33	I	1,4-Difluorobenzene	114	11.69	1.000	A	2	A	B
34	T	Heptane	43	11.34	0.970	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	13.62	1.166	A	2	A	B
42	T	trans-1,3-Dichloropropene	75	13.93	1.192	A	3	A	B
43	T	1,1,2-Trichloroethane	97	14.21	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	14.98	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	18.96	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	23.45	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
-----------------------------------------------------------------------
          120211V1.M     Tue Dec 06 17:41:01 2011
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Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\120711V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Dec 08 12:11:06 2011
Response via : Initial Calibration

Calibration Files
2 =12071105.D 4 =12071106.D 5 =12071107.D
6 =12071108.D 7 =12071109.D 8 =12071110.D

		Compound	2	4	5	6	7	8	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------							
2)	T	Propylene	1.257	1.311	1.254	1.200	1.156	1.105	1.210	5.74
3)	T	Dichlorodifluoromet	3.070	3.556	3.382	3.260	3.186	3.034	3.234	5.68
4)	T	1,2-Dichloro-1,2,2,	2.183	2.636	2.501	2.414	2.431	2.207	2.367	7.40
5)	T	Chloromethane	1.166	1.268	1.178	1.121	1.012	0.992	1.111	9.08
6)	T	Vinyl chloride	1.467	1.740	1.601	1.419	1.135	0.773	1.356	25.79
7)	T	1,3-Butadiene	1.119	1.324	1.194	1.152	1.048	0.833	1.043	22.60
8)	T	Bromomethane	1.179	1.414	1.329	1.302	1.179	1.174	1.267	7.30
9)	T	Chloroethane	0.734	0.847	0.789	0.773	0.684	0.680	0.750	7.91
10)	T	Trichlorofluorometh	2.507	3.003	2.737	2.720	2.391	2.370	2.606	8.70
11)	T	Ethanol	0.268	0.403	0.343	0.355	0.298	0.294	0.327	15.13
12)	T	Freon113	2.121	2.708	2.377	2.407	2.063	1.978	2.214	13.48
13)	T	1,1-Dichloroethene	1.737	2.086	1.816	1.813	1.562	1.522	1.735	11.21
14)	T	Acetone	1.740	2.138	1.706	1.763	1.420	1.395	1.666	15.50
15)	T	Carbon disulfide	3.299	3.853	3.496	3.435	3.001	2.923	3.296	9.99
16)	T	2-Propanol	1.488	1.983	1.685	1.695	1.471	1.439	1.615	11.85
17)	T	Methylene chloride	1.772	1.652	1.431	1.425	1.215	1.178	1.417	15.99
18)	T	tert-Butyl Methyl E	2.540	3.115	2.466	2.584	2.069	2.036	2.438	15.19
19)	T	trans-1,2-Dichloroe	1.691	2.049	1.778	1.800	1.535	1.496	1.702	11.40
20)	T	n-Hexane	1.891	2.293	1.986	1.997	1.696	1.647	1.880	12.58
21)	T	1,1-Dichloroethane	1.981	2.436	2.125	2.120	1.795	1.775	2.017	11.52
22)	T	Vinyl acetate	2.065	3.556	2.788	2.927	2.317	2.229	2.647	21.02
23)	T	cis-1,2-Dichloroeth	1.114	1.417	1.230	1.258	1.087	1.085	1.189	10.21
24)	T	2-Butanone	1.784	2.271	1.827	1.794	1.555	1.459	1.782	15.82
25)	T	Ethyl acetate	2.318	3.140	2.517	2.557	2.090	2.018	2.392	16.38
26)	T	Tetrahydrofuran	1.006	1.364	1.101	1.132	0.935	0.886	1.046	16.28
27)	T	Chloroform	2.064	2.567	2.222	2.234	1.919	1.811	2.084	13.53
28)	T	1,1,1-Trichloroetha	1.850	2.441	2.134	2.145	1.835	1.725	1.971	14.12
29)	T	Cyclohexane	1.852	2.267	1.969	1.955	1.640	1.485	1.785	18.01
30)	T	Carbon tetrachlorid	1.671	2.296	1.997	2.028	1.758	1.716	1.891	11.93
31)	T	Benzene	3.040	3.759	3.021	3.146	2.576	2.459	2.941	15.32
32)	T	1,2-Dichloroethane	1.179	1.466	1.178	1.214	0.991	0.960	1.142	15.44
33)	I	1,4-Difluorobenzene	----------ISTD----------							
34)	T	Heptane	0.680	0.864	0.741	0.734	0.628	0.567	0.666	20.08
35)	T	Trichloroethene	0.380	0.520	0.458	0.469	0.413	0.391	0.424	14.73
36)	T	1,2-Dichloropropane	0.320	0.438	0.354	0.372	0.308	0.293	0.337	16.47
37)	T	1,4-Dioxane	0.111	0.171	0.146	0.150	0.126	0.120	0.135	15.60
38)	T	Bromodichloromethan	0.515	0.738	0.619	0.641	0.547	0.522	0.580	15.56
39)	T	cis-1,3-Dichloropro	0.447	0.636	0.526	0.548	0.465	0.446	0.500	14.89
40)	T	4-Methyl-2-pentanon	0.181	0.281	0.235	0.245	0.208	0.199	0.220	15.97
41)	T	Toluene	0.865	1.171	0.962	1.019	0.856	0.802	0.917	15.84
42)	T	trans-1,3-Dichlorop	0.363	0.531	0.440	0.463	0.395	0.381	0.421	14.54
43)	T	1,1,2-Trichloroetha	0.294	0.398	0.330	0.351	0.301	0.289	0.320	13.44
44)	T	Tetrachloroethene	0.419	0.567	0.504	0.507	0.458	0.420	0.459	16.17
45)	T	2-Hexanone	0.378	0.564	0.460	0.478	0.404	0.385	0.434	16.42
46)	T	Chlorodibromomethan	0.401	0.584	0.493	0.528	0.456	0.441	0.472	14.35
47)	T	1,2-Dibromoethane	0.426	0.567	0.476	0.502	0.429	0.412	0.456	13.86
48)	I	Chlorobenzene-d5	----------ISTD----------							
49)	T	Chlorobenzene	0.860	1.138	0.954	0.993	0.873	0.837	0.917	13.36
50)	T	Ethylbenzene	1.444	1.890	1.559	1.626	1.402	1.320	1.485	15.95
51)	T	m,p-Xylene	1.129	1.455	1.210	1.235	1.045	0.918	1.100	21.91
52)	T	o-Xylene	1.029	1.347	1.120	1.171	1.019	0.977	1.071	15.24
53)	T	Styrene	0.753	0.969	0.803	0.846	0.736	0.720	0.777	14.48
54)	T	Bromoform	0.524	0.714	0.606	0.634	0.557	0.537	0.578	13.86
55)	S	4-Bromofluorobenzen	0.654	0.576	0.567	0.568	0.548	0.542	0.571	6.92
56)	T	1,1,2,2-Tetrachloro	1.058	1.053	0.890	0.885	0.754	0.702	0.850	20.22
57)	T	4-Ethyltoluene	1.699	1.570	1.325	1.360	1.169	1.096	1.317	19.18

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

Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\120711V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Dec 08 12:11:06 2011
Response via : Initial Calibration

Calibration Files
2 =12071105.D 4 =12071106.D 5 =12071107.D
6 =12071108.D 7 =12071109.D 8 =12071110.D

		Compound	2	4	5	6	7	8	Avg	%RSD
58)	T	1,3,5-Trimethylbenz	1.470	1.292	1.099	1.112	0.967	0.910	1.097	20.46
59)	T	1,2,4-Trimethylbenz	1.420	1.246	1.064	1.063	0.922	0.856	1.050	21.35
60)	T	1,3-Dichlorobenzene	0.782	0.809	0.701	0.685	0.588	0.558	0.661	17.42
61)	T	1,4-Dichlorobenzene	0.686	0.754	0.642	0.643	0.558	0.524	0.612	15.85
62)	T	Benzyl chloride	0.504	0.992	0.836	0.845	0.731	0.691	0.745	21.62
63)	T	1,2-Dichlorobenzene	0.754	0.760	0.637	0.628	0.547	0.509	0.613	19.05
64)	T	1,2,4-Trichlorobenz	0.106	0.119	0.100	0.110	0.096	0.096	0.104	7.95
65)	T	Hexachlorobutadiene	0.308	0.275	0.231	0.243	0.204	0.202	0.239	16.74
66)		Naphthalene	0.158	0.188	0.166	0.176	0.153	0.153	0.165	7.69

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

Compound List Report VOA 1

Method : C:\HPCHEM\1\METHODS\120711V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Dec 08 12:11:06 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	10.60	1.000	A	2	A	B
2	T	Propylene	41	5.53	0.522	A	2	A	B
3	T	Dichlorodifluoromethane	85	5.60	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	6.22	0.587	A	2	A	B
7	T	1,3-Butadiene	39	6.28	0.593	A	2	A	B
8	T	Bromomethane	94	6.86	0.648	A	3	A	B
9	T	Chloroethane	64	7.01	0.661	A	3	A	B
10	T	Trichlorofluoromethane	101	7.34	0.693	A	3	A	B
11	T	Ethanol	45	7.57	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	0.765	A	2	A	B
14	T	Acetone	43	8.19	0.773	A	2	A	B
15	T	Carbon disulfide	76	8.47	0.800	A	3	A	B
16	T	2-Propanol	45	8.24	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	8.96	0.845	A	2	A	B
19	T	trans-1,2-Dichloroethene	61	9.04	0.853	A	2	A	B
20	T	n-Hexane	57	9.22	0.871	A	3	A	B
21	T	1,1-Dichloroethane	63	9.60	0.906	A	3	A	B
22	T	Vinyl acetate	43	9.53	0.900	A	2	A	B
23	T	cis-1,2-Dichloroethene	96	10.28	0.970	A	3	A	B
24	T	2-Butanone	43	10.25	0.967	A	2	A	B
25	T	Ethyl acetate	43	10.20	0.962	A	3	A	B
26	T	Tetrahydrofuran	42	10.58	0.999	A	2	A	B
27	T	Chloroform	83	10.61	1.001	A	2	A	B
28	T	1,1,1-Trichloroethane	97	10.86	1.025	A	3	A	B
29	T	Cyclohexane	56	10.87	1.026	A	2	A	B
30	T	Carbon tetrachloride	117	11.02	1.040	A	3	A	B
31	T	Benzene	78	11.30	1.067	A	3	A	B
32	T	1,2-Dichloroethane	62	11.38	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	0.970	A	3	A	B
35	T	Trichloroethene	130	12.03	1.029	A	3	A	B
36	T	1,2-Dichloropropane	63	12.39	1.059	A	3	A	B
37	T	1,4-Dioxane	88	12.46	1.066	A	2	A	B
38	T	Bromodichloromethane	83	12.67	1.084	A	2	A	B
39	T	cis-1,3-Dichloropropene	75	13.23	1.131	A	2	A	B
40	T	4-Methyl-2-pentanone	58	13.34	1.140	A	3	A	B
41	T	Toluene	91	13.63	1.165	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	1.225	A	3	A	B
45	T	2-Hexanone	43	14.41	1.233	A	2	A	B
46	T	Chlorodibromomethane	129	14.75	1.262	A	2	A	B
47	T	1,2-Dibromoethane	107	14.99	1.282	A	2	A	B
48	I	Chlorobenzene-d5	117	15.54	1.000	A	2	A	B
49	T	Chlorobenzene	112	15.58	1.003	A	3	A	B
50	T	Ethylbenzene	91	15.63	1.005	A	2	A	B
51	T	m,p-Xylene	91	15.78	1.015	A	2	A	B
52	T	o-Xylene	91	16.37	1.054	A	2	A	B
53	T	Styrene	104	16.40	1.055	A	3	A	B
54	T	Bromoform	173	16.78	1.080	A	3	A	B
55	S	4-Bromofluorobenzene	95	17.19	1.106	A	2	A	B
56	T	1,1,2,2-Tetrachloroethane	83	17.36	1.117	A	2	A	B
57	T	4-Ethyltoluene	105	17.60	1.133	A	1	A	B
58	T	1,3,5-Trimethylbenzene	105	17.69	1.138	A	2	A	B
59	T	1,2,4-Trimethylbenzene	105	18.27	1.175	A	2	A	B
60	T	1,3-Dichlorobenzene	146	18.82	1.211	A	3	A	B
61	T	1,4-Dichlorobenzene	146	18.97	1.220	A	3	A	B
62	T	Benzyl chloride	91	19.18	1.234	A	2	A	B
63	T	1,2-Dichlorobenzene	146	19.61	1.262	A	3	A	B
64	T	1,2,4-Trichlorobenzene	180	22.77	1.465	A	3	A	B
65	T	Hexachlorobutadiene	225	22.97	1.478	A	2	A	B
66		Naphthalene	128	23.46	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
-----------------------------------------------------------------------
          120711V1.M     Fri Dec 09 17:10:35 2011
```

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\120711\12071113.D Vial: 2
Acq On : 7 Dec 2011 10:31 pm Operator: RACHEL HILL
Sample : ICV VOA1 120711 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\120711V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Dec 08 12:11:06 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	112	0.00
2	T	Propylene	1.210	1.282	-6.0	110	0.00
3	T	Dichlorodifluoromethane	3.234	3.432	-6.1	108	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.367	2.528	-6.8	108	0.00
5	T	Chloromethane	1.111	1.234	-11.1	109	0.00
6	T	Vinyl chloride	1.356	1.681	-24.0	108	0.00
7	T	1,3-Butadiene	1.043	1.269	-21.7	108	0.00
8	T	Bromomethane	1.267	1.417	-11.8	112	0.00
9	T	Chloroethane	0.750	0.860	-14.7	114	0.00
10	T	Trichlorofluoromethane	2.606	2.994	-14.9	112	0.00
11	T	Ethanol	0.327	0.409	-25.1	114	0.00
12	T	Freon113	2.214	2.735	-23.5	113	0.00
13	T	1,1-Dichloroethene	1.735	2.076	-19.7	112	0.00
14	T	Acetone	1.666	2.084	-25.1	109	0.00
15	T	Carbon disulfide	3.296	3.857	-17.0	112	0.00
16	T	2-Propanol	1.615	1.948	-20.6	110	0.00
17	T	Methylene chloride	1.417	1.610	-13.6	109	0.00
18	T	tert-Butyl Methyl Ether	2.438	3.015	-23.7	109	0.00
19	T	trans-1,2-Dichloroethene	1.702	2.019	-18.6	111	0.00
20	T	n-Hexane	1.880	2.248	-19.6	110	0.00
21	T	1,1-Dichloroethane	2.017	2.407	-19.3	111	0.00
22	T	Vinyl acetate	2.647	3.432	-29.7	108	0.00
23	T	cis-1,2-Dichloroethene	1.189	1.402	-17.9	111	0.00
24	T	2-Butanone	1.782	2.262	-26.9	112	0.00
25	T	Ethyl acetate	2.392	2.931	-22.5	105	0.00
26	T	Tetrahydrofuran	1.046	1.293	-23.6	106	0.00
27	T	Chloroform	2.084	2.473	-18.7	108	0.00
28	T	1,1,1-Trichloroethane	1.971	2.370	-20.2	109	0.00
29	T	Cyclohexane	1.785	2.221	-24.4	110	0.00
30	T	Carbon tetrachloride	1.891	2.229	-17.9	109	0.00
31	T	Benzene	2.941	3.621	-23.1	108	0.00
32	T	1,2-Dichloroethane	1.142	1.377	-20.6	105	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	113	0.00
34	T	Heptane	0.666	0.829	-24.5	108	0.00
35	T	Trichloroethene	0.424	0.508	-19.8	110	0.00
36	T	1,2-Dichloropropane	0.337	0.417	-23.7	107	0.00
37	T	1,4-Dioxane	0.135	0.166	-23.0	109	0.00
38	T	Bromodichloromethane	0.580	0.703	-21.2	107	0.00
39	T	cis-1,3-Dichloropropene	0.500	0.612	-22.4	109	0.00
40	T	4-Methyl-2-pentanone	0.220	0.269	-22.3	108	0.00
41	T	Toluene	0.917	1.124	-22.6	108	0.00
42	T	trans-1,3-Dichloropropene	0.421	0.507	-20.4	108	0.00
43	T	1,1,2-Trichloroethane	0.320	0.382	-19.4	108	0.00
44	T	Tetrachloroethene	0.459	0.555	-20.9	110	0.00
45	T	2-Hexanone	0.434	0.534	-23.0	107	0.00
46	T	Chlorodibromomethane	0.472	0.563	-19.3	109	0.00
47	T	1,2-Dibromoethane	0.456	0.544	-19.3	108	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	112	0.00
49	T	Chlorobenzene	0.917	1.101	-20.1	109	0.00
50	T	Ethylbenzene	1.485	1.806	-21.6	107	0.00
51	T	m,p-Xylene	1.100	1.394	-26.7	108	0.00
52	T	o-Xylene	1.071	1.340	-25.1	112	0.00
53	T	Styrene	0.777	0.957	-23.2	111	0.00
54	T	Bromoform	0.578	0.695	-20.2	109	0.00
55	S	4-Bromofluorobenzene	0.571	0.584	-2.3	114	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\120711\12071113.D Vial: 2
Acq On : 7 Dec 2011 10:31 pm Operator: RACHEL HILL
Sample : ICV VOA1 120711 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\120711V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Dec 08 12:11:06 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	0.850	0.997	-17.3	106	0.00
57	T	4-Ethyltoluene	1.317	1.514	-15.0	108	0.00
58	T	1,3,5-Trimethylbenzene	1.097	1.254	-14.3	109	0.00
59	T	1,2,4-Trimethylbenzene	1.050	1.195	-13.8	108	0.00
60	T	1,3-Dichlorobenzene	0.661	0.761	-15.1	106	0.00
61	T	1,4-Dichlorobenzene	0.612	0.709	-15.8	106	0.00
62	T	Benzyl chloride	0.745	0.919	-23.4	104	0.00
63	T	1,2-Dichlorobenzene	0.613	0.705	-15.0	104	0.00
64	T	1,2,4-Trichlorobenzene	0.104	0.105	-1.0	100	0.00
65	T	Hexachlorobutadiene	0.239	0.243	-1.7	99	0.00
66		Naphthalene	0.165	0.166	-0.6	99	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\120711\12071113.D Vial: 2
Acq On : 7 Dec 2011 10:31 pm Operator: RACHEL HILL
Sample : ICV VOA1 120711 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Dec 9 10:07 2011 Quant Results File: 120711V1.RES

Quant Method : C:\HPCHEM\1\METHODS\120711V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Dec 08 12:11:06 2011
Response via : Initial Calibration
DataAcq Meth : 120711V1

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	10.59	130	631942	12.50 ppbv	0.00
33) 1,4-Difluorobenzene	11.69	114	2044313	12.50 ppbv	0.00
48) Chlorobenzene-d5	15.54	117	1276095	12.50 ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.19	95	745868	12.80 ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 102.40%

Target Compounds					Qvalue
2) Propylene	5.53	41	661020	10.81 ppbv	99
3) Dichlorodifluoromethane	5.60	85	1596459	9.76 ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.85	135	1214014	10.14 ppbv #	79
5) Chloromethane	6.01	50	592800	10.55 ppbv	99
6) Vinyl chloride	6.22	62	798833	11.65 ppbv	99
7) 1,3-Butadiene	6.28	39	628594	11.92 ppbv	97
8) Bromomethane	6.86	94	666165	10.40 ppbv	99
9) Chloroethane	7.01	64	400087	10.56 ppbv	100
10) Trichlorofluoromethane	7.34	101	1453238	11.03 ppbv	99
11) Ethanol	7.57	45	190004	11.50 ppbv	99
12) Freon113	8.00	101	1354979	12.11 ppbv	93
13) 1,1-Dichloroethene	8.10	61	1039126	11.85 ppbv	96
14) Acetone	8.19	43	1053361	12.50 ppbv	99
15) Carbon disulfide	8.47	76	1891667	11.35 ppbv #	100
16) 2-Propanol	8.23	45	994518	12.18 ppbv	83
17) Methylene chloride	8.76	49	813945	11.36 ppbv	92
18) tert-Butyl Methyl Ether	8.96	73	1508813	12.24 ppbv	93
19) trans-1,2-Dichloroethene	9.04	61	1000529	11.63 ppbv	94
20) n-Hexane	9.23	57	1148022	12.08 ppbv	98
21) 1,1-Dichloroethane	9.60	63	1180145	11.57 ppbv	99
22) Vinyl acetate	9.53	43	1717577	12.84 ppbv	98
23) cis-1,2-Dichloroethene	10.28	96	694768	11.56 ppbv	95
24) 2-Butanone	10.25	43	1131899	12.57 ppbv	93
25) Ethyl acetate	10.20	43	1452386	12.01 ppbv #	99
26) Tetrahydrofuran	10.59	42	653864	12.37 ppbv	94
27) Chloroform	10.61	83	1225302	11.63 ppbv	99
28) 1,1,1-Trichloroethane	10.86	97	1150351	11.55 ppbv	98
29) Cyclohexane	10.87	56	1100351	12.19 ppbv	94
30) Carbon tetrachloride	11.02	117	1070444	11.20 ppbv	99
31) Benzene	11.30	78	1757522	11.82 ppbv	99
32) 1,2-Dichloroethane	11.38	62	675500	11.70 ppbv	98
34) Heptane	11.35	43	1343040	12.32 ppbv	95
35) Trichloroethene	12.03	130	797005	11.50 ppbv	95
36) 1,2-Dichloropropane	12.39	63	668241	12.11 ppbv	96
37) 1,4-Dioxane	12.46	88	260119	11.78 ppbv	94
38) Bromodichloromethane	12.67	83	1103170	11.63 ppbv	99
39) cis-1,3-Dichloropropene	13.22	75	951161	11.63 ppbv	98
40) 4-Methyl-2-pentanone	13.33	58	440651	12.24 ppbv	93
41) Toluene	13.63	91	1801268	12.01 ppbv	98
42) trans-1,3-Dichloropropene	13.94	75	754694	10.97 ppbv	99
43) 1,1,2-Trichloroethane	14.21	97	612303	11.71 ppbv	97
44) Tetrachloroethene	14.33	166	871999	11.61 ppbv	99
45) 2-Hexanone	14.41	43	855222	12.05 ppbv	98
46) Chlorodibromomethane	14.76	129	902839	11.69 ppbv	99
47) 1,2-Dibromoethane	14.99	107	854853	11.45 ppbv	100
49) Chlorobenzene	15.58	112	1112384	11.88 ppbv	95
50) Ethylbenzene	15.62	91	1806719	11.92 ppbv	96
51) m,p-Xylene	15.78	91	2732021	24.33 ppbv	95
52) o-Xylene	16.37	91	1367859	12.52 ppbv	95

(#) = qualifier out of range (m) = manual integration
12071113.D 120711V1.M Fri Dec 09 17:10:45 2011

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\120711\12071113.D Vial: 2
Acq On : 7 Dec 2011 10:31 pm Operator: RACHEL HILL
Sample : ICV VOA1 120711 Inst : VOA 1
Misc : ICV EPA TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Dec 9 10:07 2011 Quant Results File: 120711V1.RES

Quant Method : C:\HPCHEM\1\METHODS\120711V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Dec 08 12:11:06 2011
Response via : Initial Calibration
DataAcq Meth : 120711V1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
53) Styrene	16.40	104	957747	12.08 ppbv	100
54) Bromoform	16.78	173	680758	11.54 ppbv	98
56) 1,1,2,2-Tetrachloroethane	17.36	83	1018093	11.73 ppbv	99
57) 4-Ethyltoluene	17.60	105	1514617	11.26 ppbv	97
58) 1,3,5-Trimethylbenzene	17.69	105	1241716	11.09 ppbv	98
59) 1,2,4-Trimethylbenzene	18.27	105	1195241	11.15 ppbv	98
60) 1,3-Dichlorobenzene	18.83	146	753321	11.17 ppbv	99
61) 1,4-Dichlorobenzene	18.97	146	694515	11.12 ppbv	99
62) Benzyl chloride	19.18	91	909576	11.95 ppbv	98
63) 1,2-Dichlorobenzene	19.62	146	698456	11.16 ppbv	99
64) 1,2,4-Trichlorobenzene	22.77	180	97962	9.21 ppbv	98
65) Hexachlorobutadiene	22.97	225	233477	9.56 ppbv	99
66) Naphthalene	23.46	128	155683	9.24 ppbv	98

(#) = qualifier out of range (m) = manual integration
12071113.D 120711V1.M Fri Dec 09 17:10:45 2011

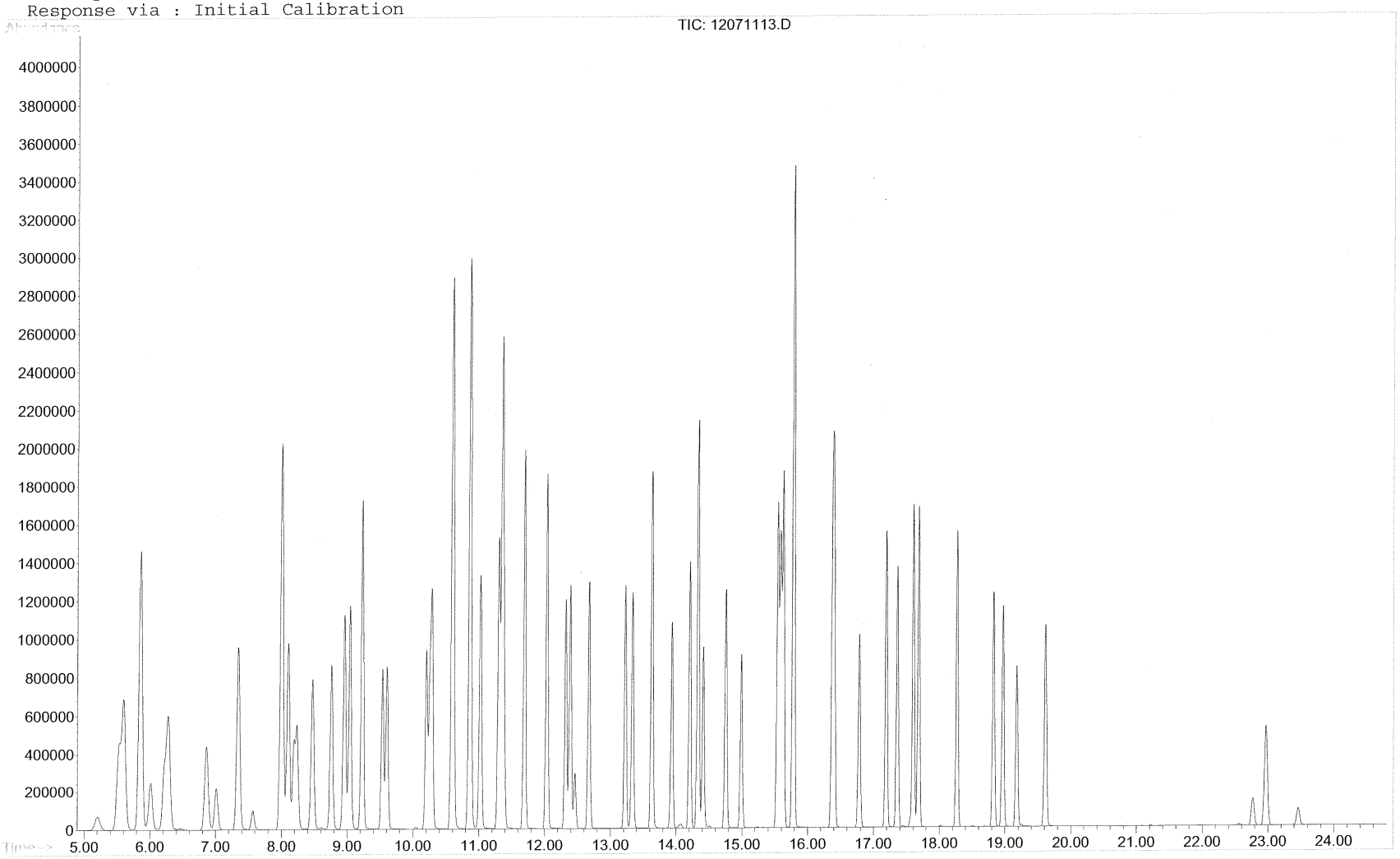
Quantitation Report

Data File : C:\HPCHEM\1\DATA\120711\12071113.D
Acq On : 7 Dec 2011 10:31 pm
Sample : ICV VOA1 120711
Misc : ICV EPA TO15
MS Integration Params: CLME.P
Quant Time: Dec 9 10:07 2011

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

Quant Results File: 120711V1.RES

Method : C:\HPCHEM\1\METHODS\120711V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Thu Dec 08 12:11:06 2011
Response via : Initial Calibration



RTI Laboratories

Run ID: **VOA9_111128A** **Run No.:** 44554

Analytical Run Date: 11/28/2011 **InstrumentID:** VOA9

Analyst: Rachel Hill **Column:**

Calibration ID: 44138 **Column ID:**

Column Length:

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB 112811 VOA9	BFB_TUNE	TUNE	R44554	11/28/2011 12:26:00 PM	Robert Lynch		
CCV 112811 VOA9	MA_APH	CCV	R44554	11/28/2011 1:09:00 PM	Robert Lynch		
RLVS1 112811 VOA	MA_APH	RLVS	R44554	11/28/2011 1:53:00 PM	Robert Lynch		
BLK 112811 VOA9	MA_APH	MBLK	R44554	11/28/2011 2:43:00 PM	Robert Lynch		
1111752-005A	MA_APH	SAMP	R44554	11/28/2011 5:57:00 PM	Robert Lynch		
1111752-006A	MA_APH	SAMP	R44554	11/28/2011 6:40:00 PM	Robert Lynch		
1111752-007A	MA_APH	SAMP	R44554	11/28/2011 7:23:00 PM	Robert Lynch		
1111752-007Adup	MA_APH	DUP	R44554	11/28/2011 8:06:00 PM	Robert Lynch		
1111752-015A	MA_APH	SAMP	R44554	11/28/2011 10:58:00 PM	Robert Lynch		
1111752-016A	MA_APH	SAMP	R44554	11/28/2011 11:41:00 PM	Robert Lynch		
1111752-017A	MA_APH	SAMP	R44554	11/29/2011 12:23:00 AM	Robert Lynch		
1111752-002A	MA_APH	SAMP	R44554	11/29/2011 1:56:00 AM	Robert Lynch		
1111752-003A	MA_APH	SAMP	R44554	11/29/2011 2:45:00 AM	Robert Lynch		
1111752-013A	MA_APH	SAMP	R44554	11/29/2011 7:01:00 AM	Robert Lynch		
1111752-014A	MA_APH	SAMP	R44554	11/29/2011 7:51:00 AM	Robert Lynch		
1111752-012A	MA_APH	SAMP	R44554	11/29/2011 8:41:00 AM	Robert Lynch		
RLVS1 112811 VOA	MA_APH	RLVS	R44554	11/29/2011 10:50:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

22-Dec-11

RunNo 44554

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
875103	BFB 112811 VOA9	BFB_TUNE	TUNE	.\1\DATA\112811	11/28/2011 12:2	1	R44554		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		59.6	59.6		100	0	0	0	0	0	60%	50	120	0%	
175	M		7.4	7.4		100	0	0	0	0	0	7%	4	9	0%	
176	M		95.7	95.7		100	0	0	0	0	0	96%	93	101	0%	
177	M		6.6	6.6		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		51.1	51.1		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
875126	CCV 112811 VOA9	MA_APH	CCV	.\1\DATA\112811	11/28/2011 1:09:	1	R44554		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	239.07	239.07		234	0	0	0	0	0	102%	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	271.35	271.35		266	0	0	0	0	0	102%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	388.67	388.67		378	0	0	0	0	0	103%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	87.01	87.01		89.5	0	0	0	0	0	97%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\112811\11281102.D Vial: 2
Acq On : 28 Nov 2011 1:09 pm Operator: RACHEL HILL
Sample : CCV 112811 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 30 11:44 2011 Quant Results File: 110811V9.RES

Quant Method : C:\HPCHEM\1\METHODS\110811V9.M (RTE Integrator)
Title : MASS APH
Last Update : Thu Nov 10 11:53:00 2011
Response via : Initial Calibration
DataAcq Meth : 110811V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.50	117	732377	12.50	ug/m3	-0.02

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.33	95	488562	87.01	ug/m3	-0.01

Spiked Amount 89.500 Range 70 - 130 Recovery = 97.22%

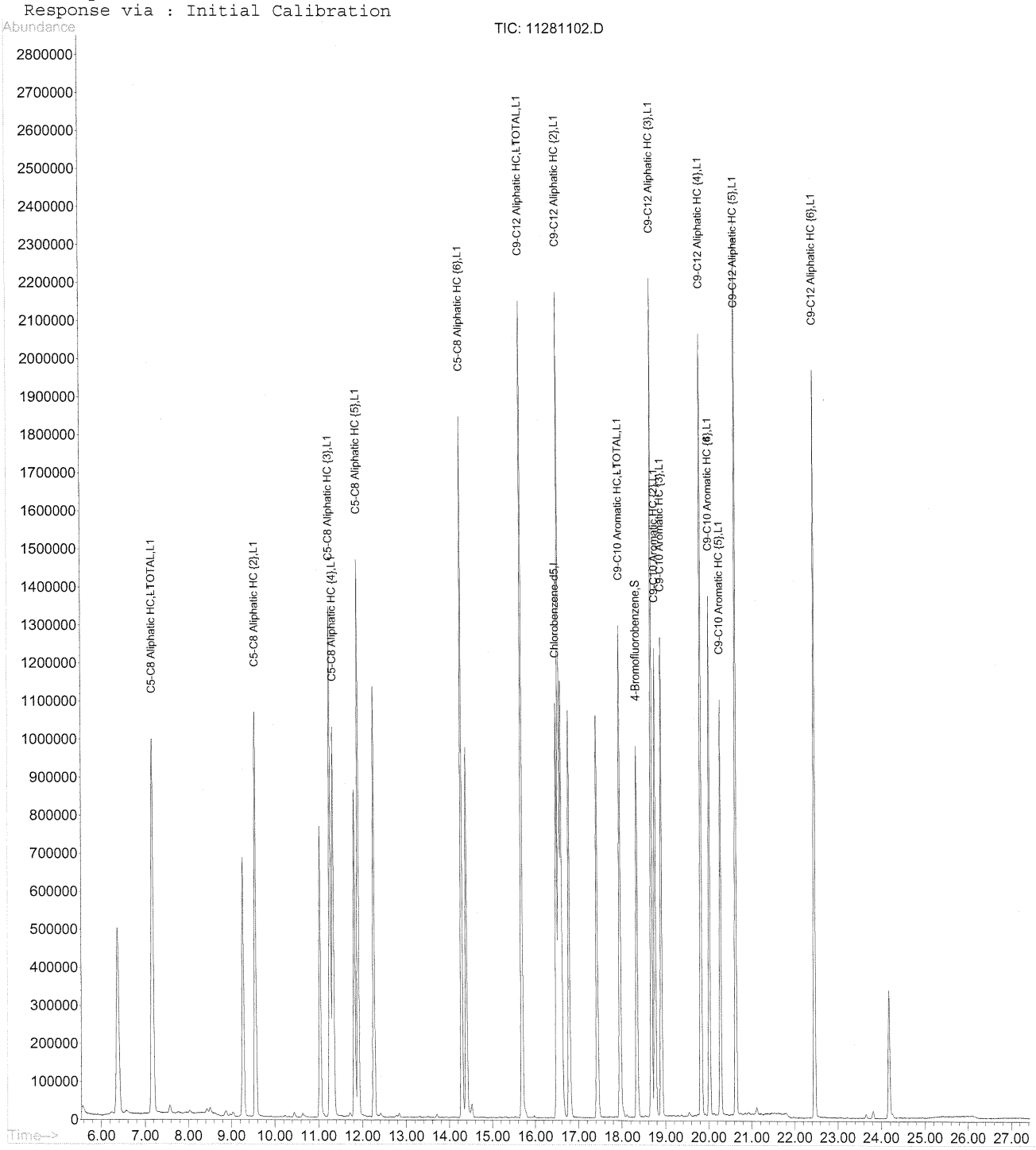
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.18	TIC	3396388	34.67	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.56	TIC	2680381	36.11	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.27	TIC	3390746	41.25	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2596402	35.26	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	3246671	41.38	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3896391	49.19	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.18	TIC	19206979m	239.07	ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	4880437	55.92	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	4790895	55.79	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	4603053	62.68	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	4521655	63.36	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	4801262	73.27	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.46	TIC	4039656	77.58	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	27636958m	388.67	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	283704	52.19	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	298325	51.52	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	441329	53.27	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	104596	59.96	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	348103	54.07	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	251276	60.04	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1727333m	271.35	ug/m3	

(#) = qualifier out of range (m) = manual integration
11281102.D 110811V9.M Thu Dec 01 12:05:27 2011

Quantitation Report

Data File : C:\HPCHEM\1\DATA\112811\11281102.D Vial: 2
Acq On : 28 Nov 2011 1:09 pm Operator: RACHEL HILL
Sample : CCV 112811 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 30 11:44 2011 Quant Results File: 110811V9.RES

Method : C:\HPCHEM\1\METHODS\110811V9.M (RTE Integrator)
Title : MASS APH
Last Update : Thu Nov 10 11:53:00 2011
Response via : Initial Calibration



RTI Laboratories

Run ID: **VOA9_111129A** **Run No.:** 44604

Analytical Run Date: 11/29/2011 **InstrumentID:** VOA9

Analyst: Rachel Hill **Column:**

Calibration ID: 44604 **Column ID:**

Column Length:

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB 112911 VOA9	BFB_TUNE	TUNE	R44604	11/29/2011 11:48:00 AM	Robert Lynch		
APH ICAL Level 1	MA_APH	ICAL	R44604	11/29/2011 4:01:00 PM	Robert Lynch		
APH ICAL Level 2	MA_APH	ICAL	R44604	11/29/2011 4:45:00 PM	Robert Lynch		
APH ICAL Level 3	MA_APH	ICAL	R44604	11/29/2011 5:28:00 PM	Robert Lynch		
APH ICAL Level 4	MA_APH	ICAL	R44604	11/29/2011 6:11:00 PM	Robert Lynch		
APH ICAL Level 5	MA_APH	ICAL	R44604	11/29/2011 6:55:00 PM	Robert Lynch		
APH ICAL Level 6	MA_APH	ICAL	R44604	11/29/2011 7:40:00 PM	Robert Lynch		
APH ICAL Level 7	MA_APH	ICAL	R44604	11/29/2011 8:26:00 PM	Robert Lynch		
BFB2 112911 VOA9	BFB_TUNE	TUNE	R44604	11/29/2011 9:08:00 PM	Robert Lynch		
ICV 112911 VOA9	MA_APH	ICV	R44604	11/29/2011 9:56:00 PM	Robert Lynch		Original ICV accidentally ran with summa can closed. Re-ran again below first thing in the morning before continuing with analysis.
ICV 112911 VOA9	MA_APH	ICV	R44604	11/30/2011 10:36:00 AM	Robert Lynch		
BFB3 110811 VOA9	BFB_TUNE	TUNE	R44604	11/30/2011 5:29:00 PM	Robert Lynch		
CCV 113011 VOA9	MA_APH	CCV	R44604	11/30/2011 6:12:00 PM	Robert Lynch		
RLVS1 113011 VOA	MA_APH	RLVS	R44604	11/30/2011 6:54:00 PM	Robert Lynch		
BLK1 113011 VOA9	MA_APH	MBLK	R44604	11/30/2011 7:42:00 PM	Robert Lynch		
1111752-010A	MA_APH	SAMP	R44604	11/30/2011 8:24:00 PM	Robert Lynch		Over-diluted sample. Will re-run at lower dilution. Reporting here to show that sample and duplicate were analyzed.
1111752-010ADUP	MA_APH	DUP	R44604	11/30/2011 9:07:00 PM	Robert Lynch		
1111752-018A	MA_APH	SAMP	R44604	11/30/2011 10:31:00 PM	Robert Lynch		
1111752-007A	MA_APH	SAMP	R44604	12/1/2011 3:25:00 AM	Robert Lynch		
1111752-004A	MA_APH	SAMP	R44604	12/1/2011 5:38:00 AM	Robert Lynch		
1111752-011A	MA_APH	SAMP	R44604	12/1/2011 6:27:00 AM	Robert Lynch		
1111752-019A	MA_APH	SAMP	R44604	12/1/2011 8:27:00 AM	Robert Lynch		
1111752-022A	MA_APH	SAMP	R44604	12/1/2011 9:13:00 AM	Robert Lynch		
1111752-023A	MA_APH	SAMP	R44604	12/1/2011 9:58:00 AM	Robert Lynch		
1111752-024A	MA_APH	SAMP	R44604	12/1/2011 10:44:00 AM	Robert Lynch		
1111752-025A	MA_APH	SAMP	R44604	12/1/2011 11:26:00 AM	Robert Lynch		
RLVS2 112911 VOA	MA_APH	RLVS	R44604	12/1/2011 2:59:00 PM	Robert Lynch		

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
876298	BFB2 112911 VOA9	BFB_TUNE	TUNE	\1\DATA\112911	11/29/2011 9:08:	1	R44604		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		59	59		100	0	0	0	0	0	59%	50	120	0%	
175	M		7.1	7.1		100	0	0	0	0	0	7%	4	9	0%	
176	M		96.4	96.4		100	0	0	0	0	0	96%	93	101	0%	
177	M		6.5	6.5		100	0	0	0	0	0	7%	5	9	0%	
50	M		26.1	26.1		100	0	0	0	0	0	26%	8	40	0%	
75	M		51.3	51.3		100	0	0	0	0	0	51%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.5	6.5		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
876307	ICV 112911 VOA9	MA_APH	ICV	\1\DATA\112911	11/29/2011 9:56:	1	R44604		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	15.46	15.46		222	0	0	0	0	0	7%	70	130	0%	S
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	16.26	16.26		185	0	0	0	0	0	9%	70	130	0%	S
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	23.76	23.76		281	0	0	0	0	0	8%	70	130	0%	S
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	85.53	85.53		89.5	0	0	0	0	0	96%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
876308	ICV 112911 VOA9	MA_APH	ICV	\1\DATA\112911	11/30/2011 10:3	1	R44604		0	0	

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

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
876308	ICV 112911 VOA9	MA_APH	ICV	\1\DATA\112911	11/30/2011 10:3	1	R44604		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	236.12	236.12		234	0	0	0	0	0	101%	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	265.32	265.32		266	0	0	0	0	0	100%	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	387.65	387.65		378	0	0	0	0	0	103%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	88.53	88.53		89.5	0	0	0	0	0	99%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
876309	BFB3 110811 VOA9	BFB_TUNE	TUNE	\1\DATA\112911	11/30/2011 5:29:	1	R44604		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		7.4	7.4		100	0	0	0	0	0	7%	4	9	0%	
176	M		96.5	96.5		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.8	6.8		100	0	0	0	0	0	7%	5	9	0%	
50	M		26.9	26.9		100	0	0	0	0	0	27%	8	40	0%	
75	M		51.5	51.5		100	0	0	0	0	0	52%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.9	6.9		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
876310	CCV 113011 VOA9	MA_APH	CCV	\1\DATA\112911	11/30/2011 6:12:	1	R44604		0	0	

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

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
876310	CCV 113011 VOA9	MA_APH	CCV	.\1\DATA\112911	11/30/2011 6:12:	1	R44604		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	218.06	218.06		234	0	0	0	0	0	93%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	254.38	254.38		266	0	0	0	0	0	96%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	364.52	364.52		378	0	0	0	0	0	96%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	91.17	91.17		89.5	0	0	0	0	0	102%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
876311	RLVS1 113011 VOA	MA_APH	RLVS	.\1\DATA\112911	11/30/2011 6:54:	1	R44604		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	110.63	110.63		117	0	0	0	0	0	95%	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	129.28	129.28		133	0	0	0	0	0	97%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	185.27	185.27		189	0	0	0	0	0	98%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	89.4	89.4		89.5	0	0	0	0	0	100%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\113011\11301102.D Vial: 1
Acq On : 30 Nov 2011 6:12 pm Operator: RACHEL HILL
Sample : CCV 113011 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 1 14:42 2011 Quant Results File: 112911V9.RES

Quant Method : C:\HPCHEM\1\METHODS\112911V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Nov 30 11:30:11 2011
Response via : Initial Calibration
DataAcq Meth : 112911V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	708343	12.50	ug/m3	-0.01

System Monitoring Compounds
41) 4-Bromofluorobenzene 18.33 95 489874 91.17 ug/m3 -0.01
Spiked Amount 89.500 Range 70 - 130 Recovery = 101.87%

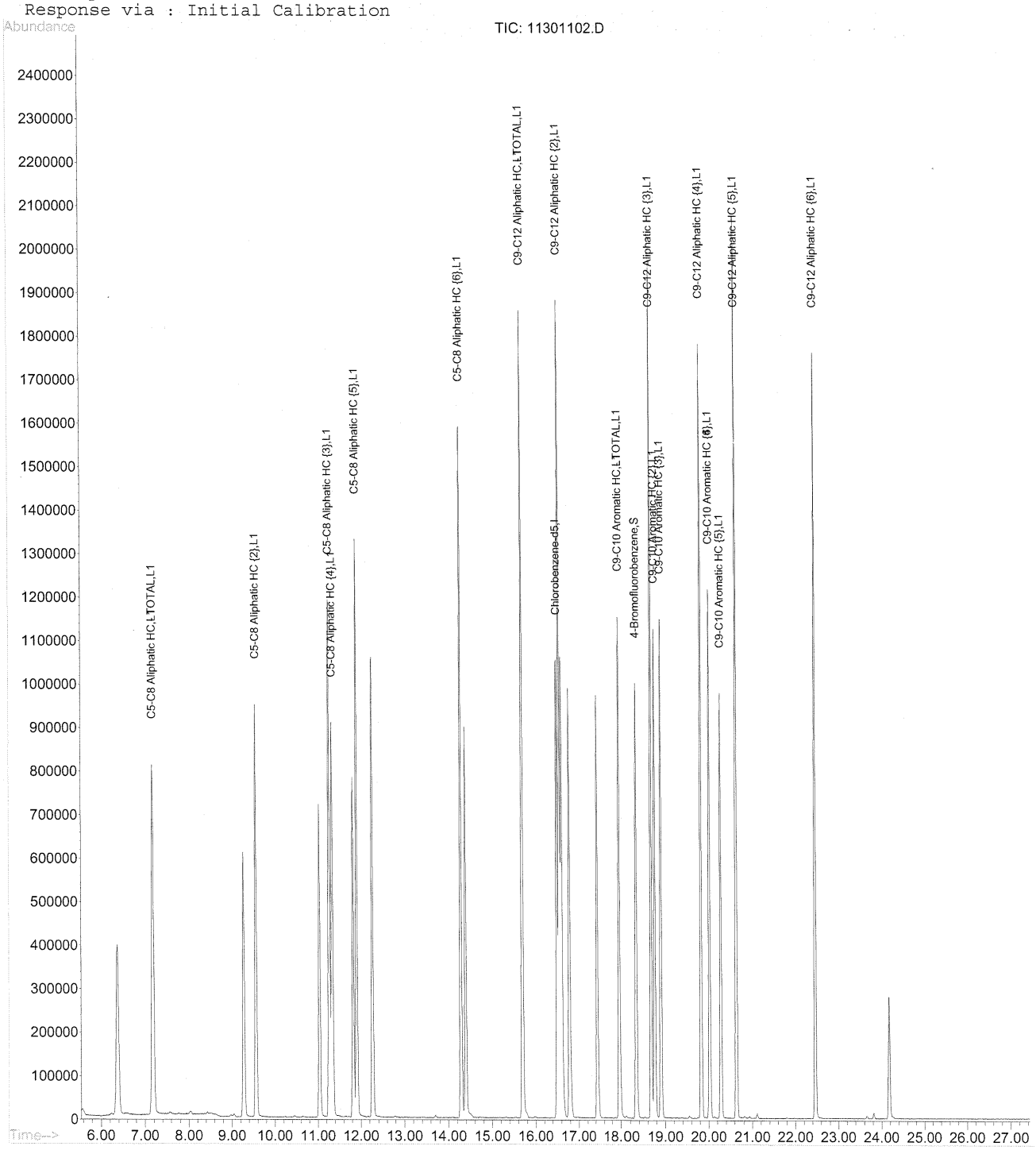
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.17	TIC	2770311	26.97	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.56	TIC	2346767	33.96	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.27	TIC	2961419	38.63	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2295369	33.42	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2892488	39.52	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3360222	45.71	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.17	TIC	16626576m	218.06	ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	4133806	51.07	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	4090519	51.92	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	4041594	59.44	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	3872822	58.64	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	4168900	68.95	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.46	TIC	3548024	75.60	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	23855665m	364.52	ug/m3	
15) C9-C10 Aromatic HC	17.97	120	253967	49.10	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	268737	48.66	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	395831	50.15	ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	92111	55.81	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	307716	50.34	ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	222523	55.82	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1540885m	254.38	ug/m3	

(#) = qualifier out of range (m) = manual integration
11301102.D 112911V9.M Wed Dec 07 14:04:00 2011

Quantitation Report

Data File : C:\HPCHEM\1\DATA\113011\11301102.D Vial: 1
Acq On : 30 Nov 2011 6:12 pm Operator: RACHEL HILL
Sample : CCV 113011 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 1 14:42 2011 Quant Results File: 112911V9.RES

Method : C:\HPCHEM\1\METHODS\112911V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Nov 30 11:30:11 2011
Response via : Initial Calibration



RTI Laboratories

Run ID: **VOA9_111201A** **Run No.:** 44664

Analytical Run Date: 12/1/2011 **InstrumentID:** VOA9

Analyst: Rachel Hill **Column:**

Calibration ID: 44604 **Column ID:**

Column Length:

Run Comments: Liquid Nitrogen ran out mid-analysis. Another tank was not available to continue on with the run.

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB1 120111 VOA9	BFB_TUNE	TUNE	R44664	12/1/2011 3:41:00 PM	Robert Lynch		
CCV 120111 VOA9	MA_APH	CCV	R44664	12/1/2011 4:24:00 PM	Robert Lynch		
RLVS1 120111 VOA	MA_APH	RLVS	R44664	12/1/2011 5:06:00 PM	Robert Lynch		
BLK1 120111 VOA9	MA_APH	MBLK	R44664	12/1/2011 5:56:00 PM	Robert Lynch		
1111752-008A	MA_APH	SAMP	R44664	12/1/2011 6:41:00 PM	Robert Lynch		
1111752-009A	MA_APH	SAMP	R44664	12/1/2011 7:27:00 PM	Robert Lynch		
1111752-010A	MA_APH	SAMP	R44664	12/1/2011 8:16:00 PM	Robert Lynch		
1111752-021A	MA_APH	SAMP	R44664	12/1/2011 9:55:00 PM	Robert Lynch		
1111752-030A	MA_APH	SAMP	R44664	12/1/2011 10:38:00 PM	Robert Lynch		Sample over-diluted. Will re-run at lower dilution. Reported here to show that sample and duplicate were analyzed.
1111752-030ADUP	MA_APH	DUP	R44664	12/1/2011 11:20:00 PM	Robert Lynch		
1111752-033A	MA_APH	SAMP	R44664	12/2/2011 1:28:00 AM	Robert Lynch		
1111752-028A	MA_APH	SAMP	R44664	12/2/2011 3:55:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

22-Dec-11

RunNo 44664

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
878105	BFB1 120111 VOA9	BFB_TUNE	TUNE	.\1\DATA\120111	12/1/2011 3:41:0	1	R44664		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		57.7	57.7		100	0	0	0	0	0	58%	50	120	0%	
175	M		7.5	7.5		100	0	0	0	0	0	8%	4	9	0%	
176	M		96.3	96.3		100	0	0	0	0	0	96%	93	101	0%	
177	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	
50	M		26.7	26.7		100	0	0	0	0	0	27%	8	40	0%	
75	M		50.7	50.7		100	0	0	0	0	0	51%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		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
878106	CCV 120111 VOA9	MA_APH	CCV	.\1\DATA\120111	12/1/2011 4:24:0	1	R44664		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	215.5	215.5		234	0	0	0	0	0	92%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	254.6	254.6		266	0	0	0	0	0	96%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	360.08	360.08		378	0	0	0	0	0	95%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	90.87	90.87		89.5	0	0	0	0	0	102%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\120111\12011102.D Vial: 2
Acq On : 1 Dec 2011 4:24 pm Operator: RACHEL HILL
Sample : CCV 120111 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 5 10:15 2011 Quant Results File: 112911V9.RES

Quant Method : C:\HPCHEM\1\METHODS\112911V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Nov 30 11:30:11 2011
Response via : Initial Calibration
DataAcq Meth : 112911V9

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
40) Chlorobenzene-d5	16.50	117	622173	12.50 ug/m3	-0.02

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.34	95	428896	90.87 ug/m3	-0.01

Spiked Amount 89.500 Range 70 - 130 Recovery = 101.53%

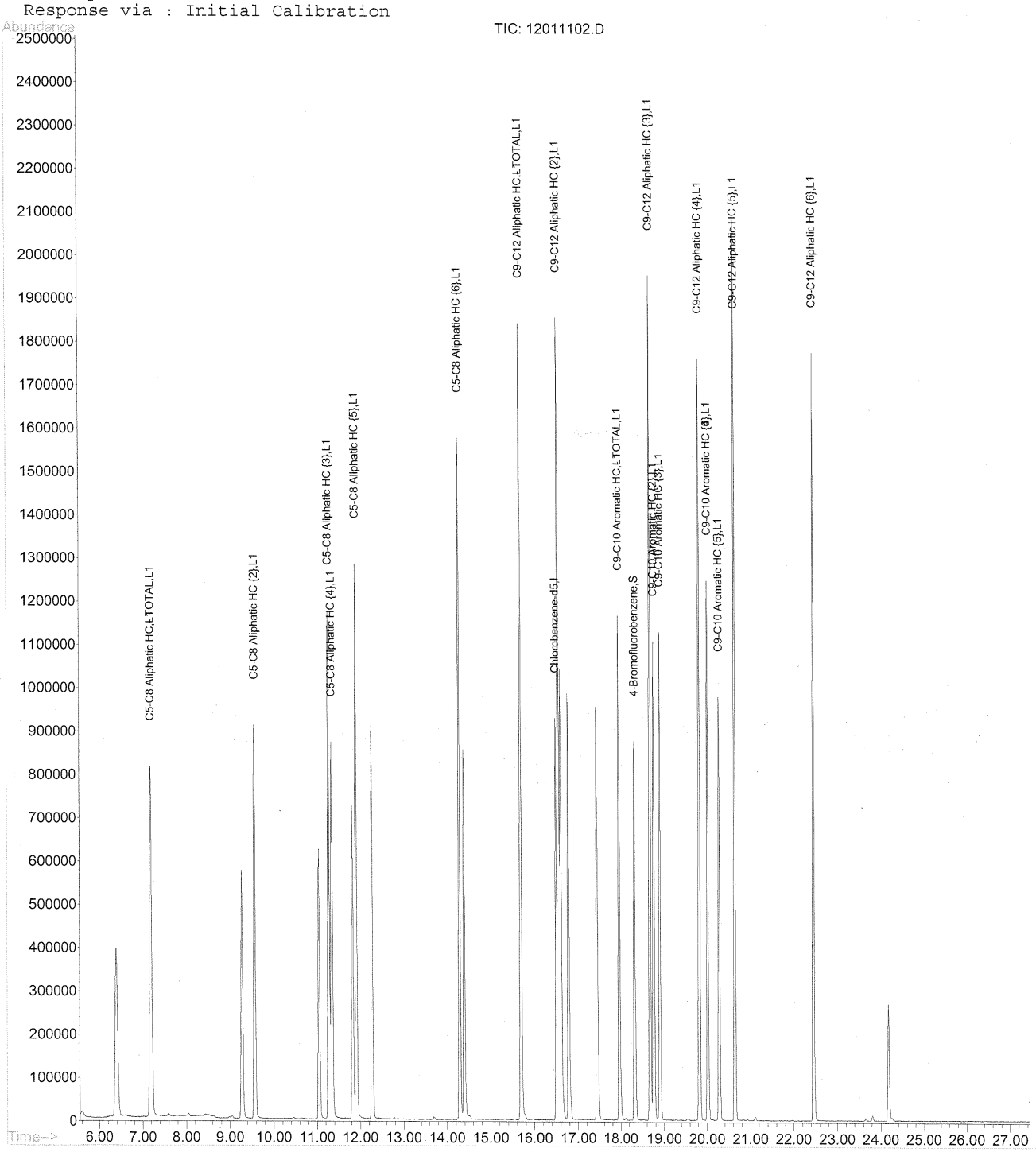
Target Compounds					Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2797946	27.24 ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2258229	32.68 ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2949357	38.47 ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2212371	32.22 ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2872337	39.25 ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3341589	45.45 ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	16431829m	215.50 ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	4123770	50.95 ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	3833034	48.65 ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	4042897	59.46 ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	3895097	58.98 ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	4162611	68.85 ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.46	TIC	3507773	74.74 ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	23565182m	360.08 ug/m3	
15) C9-C10 Aromatic HC	17.97	120	253614	49.04 ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	267993	48.53 ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	394654	50.01 ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	92729	56.19 ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	309991	50.71 ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	223251	56.00 ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1542232m	254.60 ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120111\12011102.D Vial: 2
Acq On : 1 Dec 2011 4:24 pm Operator: RACHEL HILL
Sample : CCV 120111 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 5 10:15 2011 Quant Results File: 112911V9.RES

Method : C:\HPCHEM\1\METHODS\112911V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Nov 30 11:30:11 2011
Response via : Initial Calibration



RTI Laboratories

Run ID: **VOA9_111205A** **Run No.:** 44694

Analytical Run Date: 12/5/2011 **InstrumentID:** VOA9

Analyst: Rachel Hill **Column:**

Calibration ID: 44604 **Column ID:**

Column Length:

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB1 120511 VOA9	BFB_TUNE	TUNE	R44694	12/5/2011 10:55:00 AM	Robert Lynch		
CCV 120511 VOA9	MA_APH	CCV	R44694	12/5/2011 11:38:00 AM	Robert Lynch		
RLVS1 120511 VOA	MA_APH	RLVS	R44694	12/5/2011 12:21:00 PM	Robert Lynch		
BLK1 120511 VOA9	MA_APH	MBLK	R44694	12/5/2011 2:04:00 PM	Robert Lynch		
1111752-020A	MA_APH	SAMP	R44694	12/5/2011 2:47:00 PM	Robert Lynch		
1111752-027A	MA_APH	SAMP	R44694	12/5/2011 3:30:00 PM	Robert Lynch		
1111752-029A	MA_APH	SAMP	R44694	12/5/2011 4:13:00 PM	Robert Lynch		
1111752-026A	MA_APH	SAMP	R44694	12/5/2011 5:42:00 PM	Robert Lynch		
1111752-030A	MA_APH	SAMP	R44694	12/5/2011 6:28:00 PM	Robert Lynch		
1111752-031A	MA_APH	SAMP	R44694	12/5/2011 7:15:00 PM	Robert Lynch		
1111752-035A	MA_APH	SAMP	R44694	12/5/2011 8:44:00 PM	Robert Lynch		Over diluted sample. Will re-run at lower dilution. Reported here to show that sample and duplicate were analyzed.
1111752-035ADUP	MA_APH	DUP	R44694	12/5/2011 9:26:00 PM	Robert Lynch		
1111752-037A	MA_APH	SAMP	R44694	12/5/2011 10:52:00 PM	Robert Lynch		
1111752-036A	MA_APH	SAMP	R44694	12/6/2011 7:35:00 AM	Robert Lynch		
1111752-040A	MA_APH	SAMP	R44694	12/6/2011 8:24:00 AM	Robert Lynch		
1111752-043A	MA_APH	SAMP	R44694	12/6/2011 9:13:00 AM	Robert Lynch		
RLVS1 120511 VOA	MA_APH	RLVS	R44694	12/6/2011 9:56:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

22-Dec-11

RunNo 44694

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
878742	BFB1 120511 VOA9	BFB_TUNE	TUNE	.\1\DATA\120511	12/5/2011 10:55:	1	R44694		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		58.9	58.9		100	0	0	0	0	0	59%	50	120	0%	
175	M		7.2	7.2		100	0	0	0	0	0	7%	4	9	0%	
176	M		97	97		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.6	6.6		100	0	0	0	0	0	7%	5	9	0%	
50	M		26.3	26.3		100	0	0	0	0	0	26%	8	40	0%	
75	M		51.5	51.5		100	0	0	0	0	0	52%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
878768	CCV 120511 VOA9	MA_APH	CCV	.\1\DATA\120511	12/5/2011 11:38:	1	R44694		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	207.03	207.03		234	0	0	0	0	0	88%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	238.33	238.33		266	0	0	0	0	0	90%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	341.35	341.35		378	0	0	0	0	0	90%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	79.92	79.92		89.5	0	0	0	0	0	89%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\120511\12051102.D Vial: 2
Acq On : 5 Dec 2011 11:38 am Operator: RACHEL HILL
Sample : CCV 120511 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 6 9:38 2011 Quant Results File: 112911V9.RES

Quant Method : C:\HPCHEM\1\METHODS\112911V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Nov 30 11:30:11 2011
Response via : Initial Calibration
DataAcq Meth : 112911V9

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
40) Chlorobenzene-d5	16.50	117	776684	12.50 ug/m3	-0.02

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.33	95	470902	79.92 ug/m3	-0.01

Spiked Amount 89.500 Range 70 - 130 Recovery = 89.30%

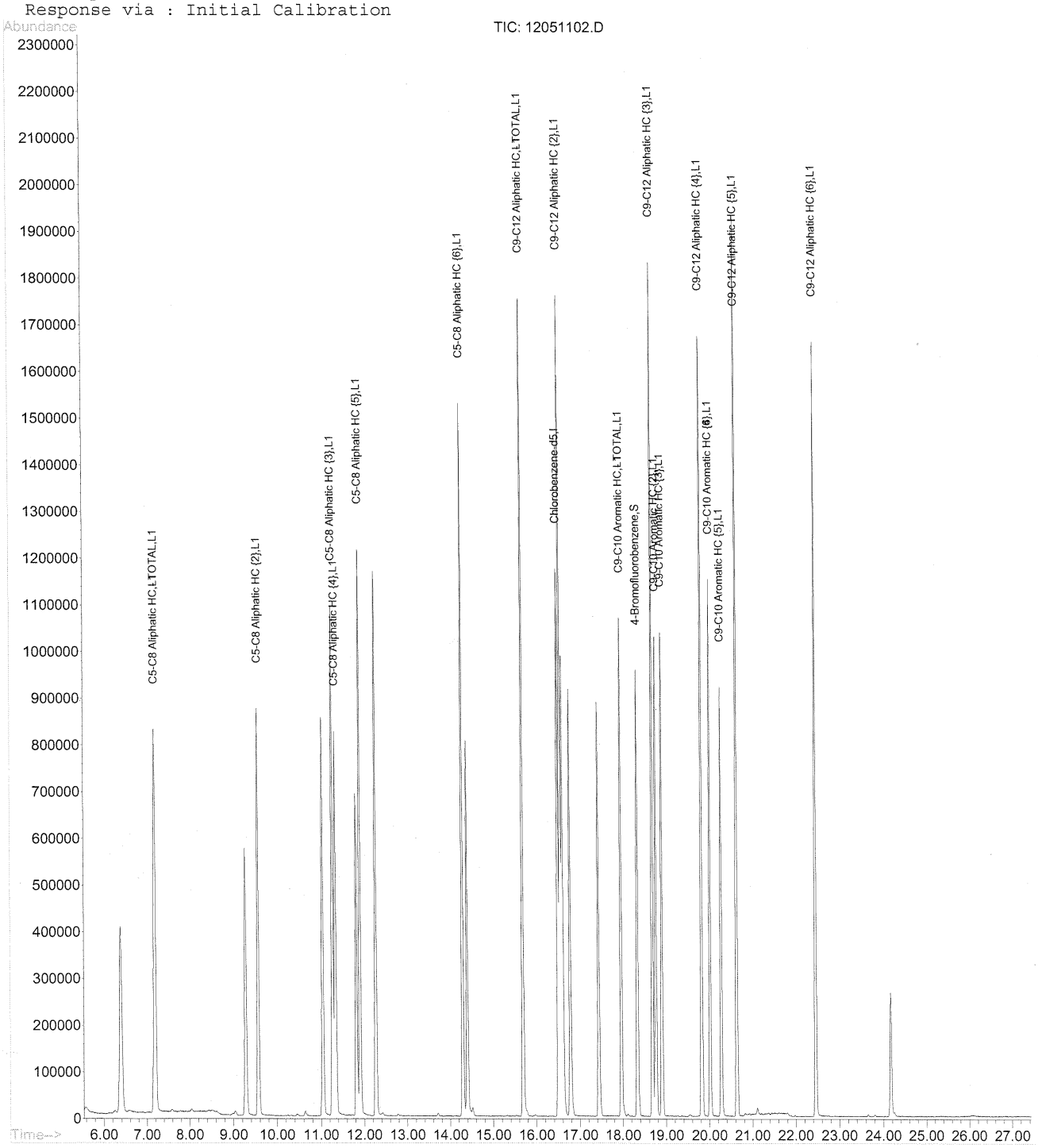
Target Compounds					Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2836708	27.62 ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2162328	31.29 ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2814911	36.72 ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2081245	30.31 ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2690407	36.76 ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3200297	43.53 ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	15785896m	207.03 ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	3984659	49.23 ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	3718309	47.20 ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.67	TIC	3817708	56.15 ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.82	TIC	3657749	55.39 ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	3876591	64.12 ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.46	TIC	3284551	69.98 ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	22339567m	341.35 ug/m3	
15) C9-C10 Aromatic HC	17.97	120	235080	45.45 ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	252452	45.71 ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	369075	46.76 ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	87605	53.08 ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	290573	47.53 ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	208865	52.39 ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1443650m	238.33 ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120511\12051102.D Vial: 2
Acq On : 5 Dec 2011 11:38 am Operator: RACHEL HILL
Sample : CCV 120511 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 6 9:38 2011 Quant Results File: 112911V9.RES

Method : C:\HPCHEM\1\METHODS\112911V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Nov 30 11:30:11 2011
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA9_111206A **Run No.:** 44744

Analytical Run Date: 12/6/2011 **InstrumentID:** VOA9

Analyst: Rachel Hill **Column:**

Calibration ID: **Column ID:**

Column Length:

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB1 120611 VOA9	BFB_TUNE	TUNE	R44744	12/6/2011 10:38:00 AM	Robert Lynch		
CCV 120611 VOA9	MA_APH	CCV	R44744	12/6/2011 11:21:00 AM	Robert Lynch		
RLVS1 120611 VOA	MA_APH	RLVS	R44744	12/6/2011 12:12:00 PM	Robert Lynch		
BLK1 120611 VOA9	MA_APH	MBLK	R44744	12/6/2011 1:01:00 PM	Robert Lynch		
1111752-034A	MA_APH	SAMP	R44744	12/6/2011 2:26:00 PM	Robert Lynch		
1111752-041A	MA_APH	SAMP	R44744	12/6/2011 3:08:00 PM	Robert Lynch		
1111752-042A	MA_APH	SAMP	R44744	12/6/2011 3:51:00 PM	Robert Lynch		
1111752-035A	MA_APH	SAMP	R44744	12/6/2011 4:40:00 PM	Robert Lynch		
1111752-039A	MA_APH	SAMP	R44744	12/6/2011 6:05:00 PM	Robert Lynch		
1111882-001A	MA_APH	SAMP	R44744	12/6/2011 6:47:00 PM	Robert Lynch		Over-diluted sample. Will re-run at a lower dilution. Reported here to show that sample and duplicate were analyzed.
1111882-001ADUP	MA_APH	DUP	R44744	12/6/2011 7:30:00 PM	Robert Lynch		
1111882-006A	MA_APH	SAMP	R44744	12/6/2011 11:02:00 PM	Robert Lynch		
1111882-007A	MA_APH	SAMP	R44744	12/6/2011 11:44:00 PM	Robert Lynch		
1111882-008A	MA_APH	SAMP	R44744	12/7/2011 8:32:00 AM	Robert Lynch		
RLVS2 120611 VOA	MA_APH	RLVS	R44744	12/7/2011 9:15:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

22-Dec-11

RunNo 44744

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
879901	BFB1 120611 VOA9	BFB_TUNE	TUNE	\1\DATA\120611	12/6/2011 10:38:	1	R44744		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		57.5	57.5		100	0	0	0	0	0	58%	50	120	0%	
175	M		7.3	7.3		100	0	0	0	0	0	7%	4	9	0%	
176	M		96.5	96.5		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.9	6.9		100	0	0	0	0	0	7%	5	9	0%	
50	M		27.3	27.3		100	0	0	0	0	0	27%	8	40	0%	
75	M		51.4	51.4		100	0	0	0	0	0	51%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.9	6.9		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
879887	CCV 120611 VOA9	MA_APH	CCV	\1\DATA\120611	12/6/2011 11:21:	1	R44744		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	215.04	215.04		234	0	0	0	0	0	92%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	248.66	248.66		266	0	0	0	0	0	93%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	0	0%	0	0	0%	
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	357.08	357.08		378	0	0	0	0	0	94%	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	80.06	80.06		89.5	0	0	0	0	0	89%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\120611\12061102.D Vial: 2
Acq On : 6 Dec 2011 11:21 am Operator: RACHEL HILL
Sample : CCV 120611 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 6 14:12 2011 Quant Results File: 112911V9.RES

Quant Method : C:\HPCHEM\1\METHODS\112911V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Nov 30 11:30:11 2011
Response via : Initial Calibration
DataAcq Meth : 112911V9

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	699110	12.50 ug/m3	-0.01

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.33	95	424563	80.06 ug/m3	-0.01

Spiked Amount 89.500 Range 70 - 130 Recovery = 89.45%

Target Compounds

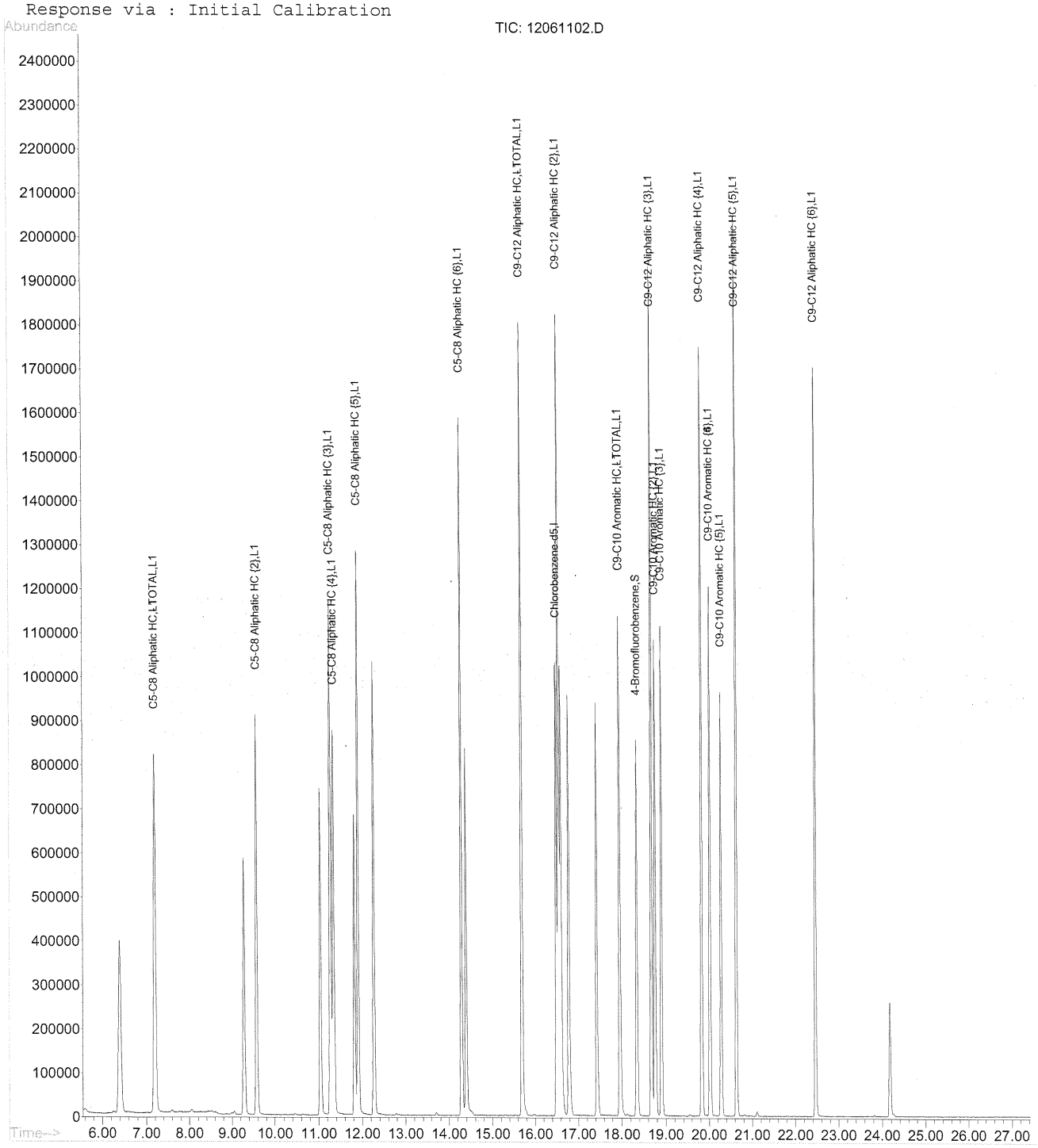
					Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2823686	27.49 ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2275896	32.94 ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2897319	37.80 ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	2234422	32.54 ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2833558	38.72 ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3331664	45.32 ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	16396545m	215.04 ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	4071438	50.30 ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	3995097	50.71 ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3978052	58.51 ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	3802859	57.58 ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	4079916	67.48 ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.46	TIC	3441478	73.33 ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	23368840m	357.08 ug/m3	
15) C9-C10 Aromatic HC	17.97	120	246912	47.74 ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	263253	47.67 ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	385080	48.79 ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	89692	54.35 ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	301884	49.38 ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	219414	55.04 ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1506235m	248.66 ug/m3	

(#) = qualifier out of range (m) = manual integration
12061102.D 112911V9.M Fri Dec 09 10:24:54 2011

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120611\12061102.D Vial: 2
Acq On : 6 Dec 2011 11:21 am Operator: RACHEL HILL
Sample : CCV 120611 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 6 14:12 2011 Quant Results File: 112911V9.RES

Method : C:\HPCHEM\1\METHODS\112911V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Nov 30 11:30:11 2011
Response via : Initial Calibration



RTI Laboratories

Run ID: **VOA9_111207A** **Run No.:** 44754

Analytical Run Date: 12/7/2011 **InstrumentID:** VOA9

Analyst: Rachel Hill **Column:**

Calibration ID: **Column ID:**

Column Length:

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB1 120711 VOA9	BFB_TUNE	TUNE	R44754	12/7/2011 10:05:00 AM	Robert Lynch		
CCV 120711 VOA9	MA_APH	CCV	R44754	12/7/2011 10:48:00 AM	Robert Lynch		
RLVS1 120711 VOA	MA_APH	RLVS	R44754	12/7/2011 11:31:00 AM	Robert Lynch		
BLK1 120711 VOA9	MA_APH	MBLK	R44754	12/7/2011 12:33:00 PM	Robert Lynch		
1111752-038A	MA_APH	SAMP	R44754	12/7/2011 1:15:00 PM	Robert Lynch		
1111882-001A	MA_APH	SAMP	R44754	12/7/2011 1:58:00 PM	Robert Lynch		
1111882-002A	MA_APH	SAMP	R44754	12/7/2011 2:41:00 PM	Robert Lynch		
1111882-003A	MA_APH	SAMP	R44754	12/7/2011 3:49:00 PM	Robert Lynch		
1111752-032A	MA_APH	SAMP	R44754	12/7/2011 4:34:00 PM	Robert Lynch		
1111882-004A	MA_APH	SAMP	R44754	12/7/2011 5:17:00 PM	Robert Lynch		
1111882-005A	MA_APH	SAMP	R44754	12/7/2011 5:59:00 PM	Robert Lynch		
1111882-011A	MA_APH	SAMP	R44754	12/7/2011 6:42:00 PM	Robert Lynch		Over diluted sample. Will re-run at lower dilution. Reported here to show that sample and duplicate were analyzed.
1111882-011Adup	MA_APH	DUP	R44754	12/7/2011 7:25:00 PM	Robert Lynch		
1111752-045A	MA_APH	SAMP	R44754	12/7/2011 11:01:00 PM	Robert Lynch		
1111752-046A	MA_APH	SAMP	R44754	12/7/2011 11:43:00 PM	Robert Lynch		
1111882-012A	MA_APH	SAMP	R44754	12/8/2011 6:43:00 AM	Robert Lynch		
1111882-014A	MA_APH	SAMP	R44754	12/8/2011 8:11:00 AM	Robert Lynch		
RLVS2 120711 VOA	MA_APH	RLVS	R44754	12/8/2011 8:54:00 AM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

22-Dec-11

RunNo 44754

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
880053	BFB1 120711 VOA9	BFB_TUNE	TUNE	.\1\DATA\120711	12/7/2011 10:05:	1	R44754		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		59	59		100	0	0	0	0	0	59%	50	120	0%	
175	M		7.5	7.5		100	0	0	0	0	0	8%	4	9	0%	
176	M		96.4	96.4		100	0	0	0	0	0	96%	93	101	0%	
177	M		6.6	6.6		100	0	0	0	0	0	7%	5	9	0%	
50	M		27	27		100	0	0	0	0	0	27%	8	40	0%	
75	M		50.9	50.9		100	0	0	0	0	0	51%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
880071	CCV 120711 VOA9	MA_APH	CCV	.\1\DATA\120711	12/7/2011 10:48:	1	R44754		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	220.5	220.5		234	0	0	0	0	0	94%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	0	0%	0	0	0%	
C9-C10 Aromatic HC - TOTAL	A	µg/m³	251.94	251.94		266	0	0	0	0	0	95%	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	361.37	361.37		378	0	0	0	0	0	96%	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	79.74	79.74		89.5	0	0	0	0	0	89%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\120711\12071102.D Vial: 2
Acq On : 7 Dec 2011 10:48 am Operator: RACHEL HILL
Sample : CCV 120711 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 8 9:15 2011 Quant Results File: 112911V9.RES

Quant Method : C:\HPCHEM\1\METHODS\112911V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Nov 30 11:30:11 2011
Response via : Initial Calibration
DataAcq Meth : 112911V9

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
40) Chlorobenzene-d5	16.50	117	637051	12.50 ug/m3	-0.02

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.33	95	385352	79.74 ug/m3	-0.01

Spiked Amount 89.500 Range 70 - 130 Recovery = 89.09%

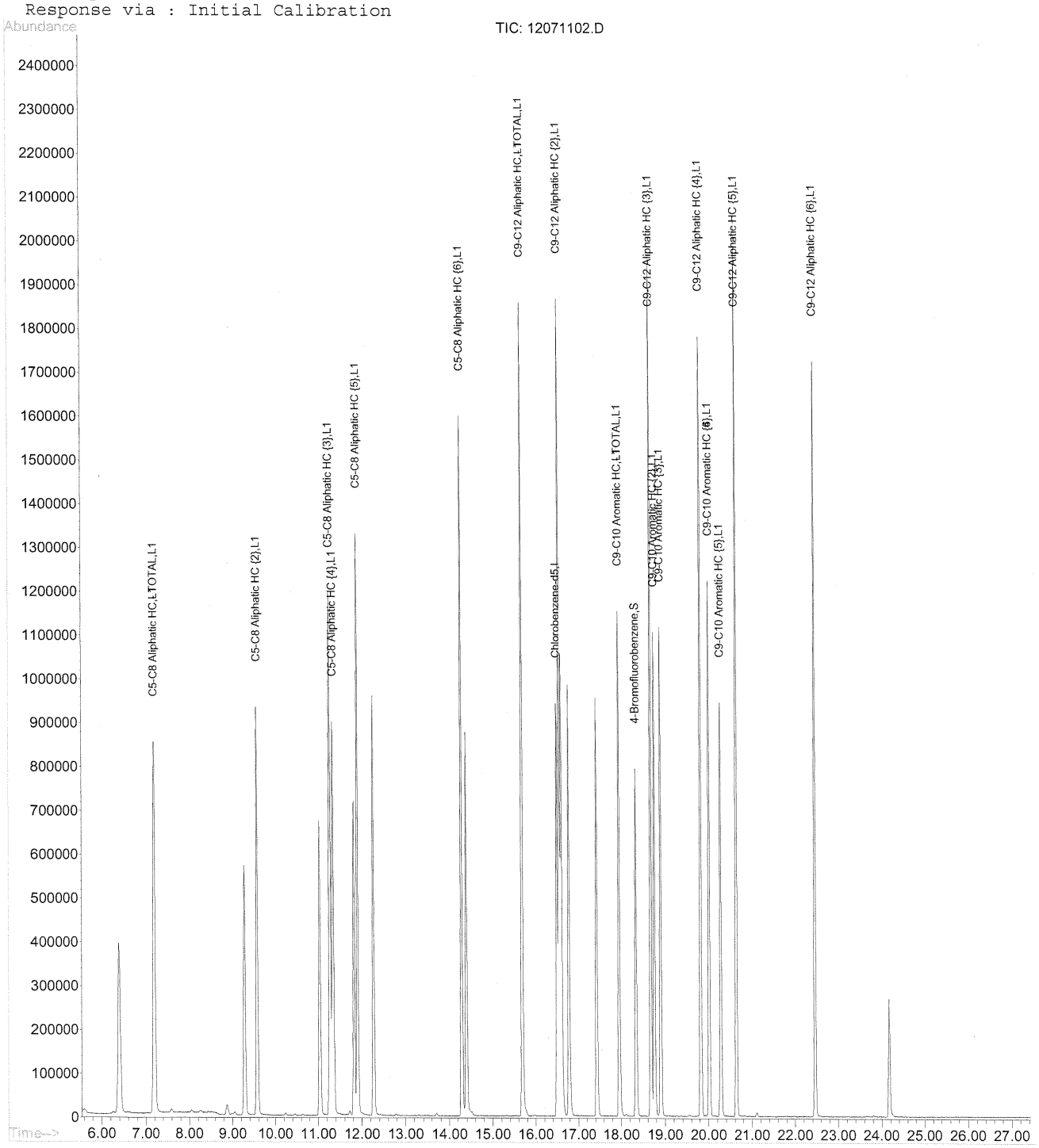
Target Compounds					Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	2928477	28.51 ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2326282	33.67 ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2973577	38.79 ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	2284690	33.27 ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2909867	39.76 ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3389959	46.11 ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	16812852m	220.50 ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	4152064	51.30 ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	4046690	51.37 ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	4016228	59.07 ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	3852997	58.34 ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	4105658	67.91 ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.46	TIC	3476380	74.07 ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	23650017m	361.37 ug/m3	
15) C9-C10 Aromatic HC	17.97	120	252813	48.88 ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	266282	48.22 ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	391231	49.57 ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	90573	54.88 ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	303466	49.64 ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	221766	55.63 ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1526131m	251.94 ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120711\12071102.D Vial: 2
Acq On : 7 Dec 2011 10:48 am Operator: RACHEL HILL
Sample : CCV 120711 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 8 9:15 2011 Quant Results File: 112911V9.RES

Method : C:\HPCHEM\1\METHODS\112911V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Nov 30 11:30:11 2011
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA9_111213A **Run No.:** 44881

Analytical Run Date: 12/13/2011 **InstrumentID:** VOA9

Analyst: Rachel Hill **Column:**

Calibration ID: 44926 **Column ID:**

Column Length:

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB 121311 VOA9	BFB_TUNE	TUNE	R44881	12/13/2011 9:33:00 AM	Robert Lynch		
CCV 121311 VOA9	MA_APH	CCV	R44881	12/13/2011 10:17:00 AM	Robert Lynch		
RLVS 121311 VOA9	MA_APH	RLVS	R44881	12/13/2011 11:04:00 AM	Robert Lynch		
Blank 121311 VOA	MA_APH	MBLK	R44881	12/13/2011 12:03:00 PM	Robert Lynch		
1111752-044A	MA_APH	SAMP	R44881	12/13/2011 12:48:00 PM	Robert Lynch		
1111882-009A	MA_APH	SAMP	R44881	12/13/2011 1:31:00 PM	Robert Lynch		
1111882-010A	MA_APH	SAMP	R44881	12/13/2011 2:15:00 PM	Robert Lynch		
1111882-011A	MA_APH	SAMP	R44881	12/13/2011 2:58:00 PM	Robert Lynch		
1111882-011Adup2	MA_APH	DUP	R44881	12/13/2011 3:41:00 PM	Robert Lynch		
1112143-023A	MA_APH	SAMP	R44881	12/13/2011 10:11:00 PM	Robert Lynch		
RLVS2 121311 VOA	MA_APH	RLVS	R44881	12/13/2011 10:54:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

22-Dec-11

RunNo 44881

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
882974	BFB 121311 VOA9	BFB_TUNE	TUNE	\1\DATA\121311	12/13/2011 9:33:	1	R44881		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		60.3	60.3		100	0	0	0	0	0	60%	50	120	0%	
175	M		7.1	7.1		100	0	0	0	0	0	7%	4	9	0%	
176	M		96.1	96.1		100	0	0	0	0	0	96%	93	101	0%	
177	M		6.4	6.4		100	0	0	0	0	0	6%	5	9	0%	
50	M		26.6	26.6		100	0	0	0	0	0	27%	8	40	0%	
75	M		50.5	50.5		100	0	0	0	0	0	51%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.9	6.9		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
882990	CCV 121311 VOA9	MA_APH	CCV	\1\DATA\121311	12/13/2011 10:1	1	R44881		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	249.46	249.46		234	0	0	0	0	0	107%	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	281.43	281.43		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	418.28	418.28		378	0	0	0	0	0	111%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	0	0%	0	0	0%	
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	88.52	88.52		89.5	0	0	0	0	0	99%	70	130	0%	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\121311\12131102.D Vial: 1
Acq On : 13 Dec 2011 10:17 am Operator: RACHEL HILL
Sample : CCV 121311 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 14 9:11 2011 Quant Results File: 120811V9.RES

Quant Method : C:\HPCHEM\1\METHODS\120811V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Dec 09 15:12:44 2011
Response via : Initial Calibration
DataAcq Meth : 112911V9

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
40) Chlorobenzene-d5	16.50	117	672658	12.50 ug/m3	-0.02

System Monitoring Compounds
41) 4-Bromofluorobenzene 18.33 95 453032 88.52 ug/m3 -0.02
Spiked Amount 89.500 Range 70 - 130 Recovery = 98.91%

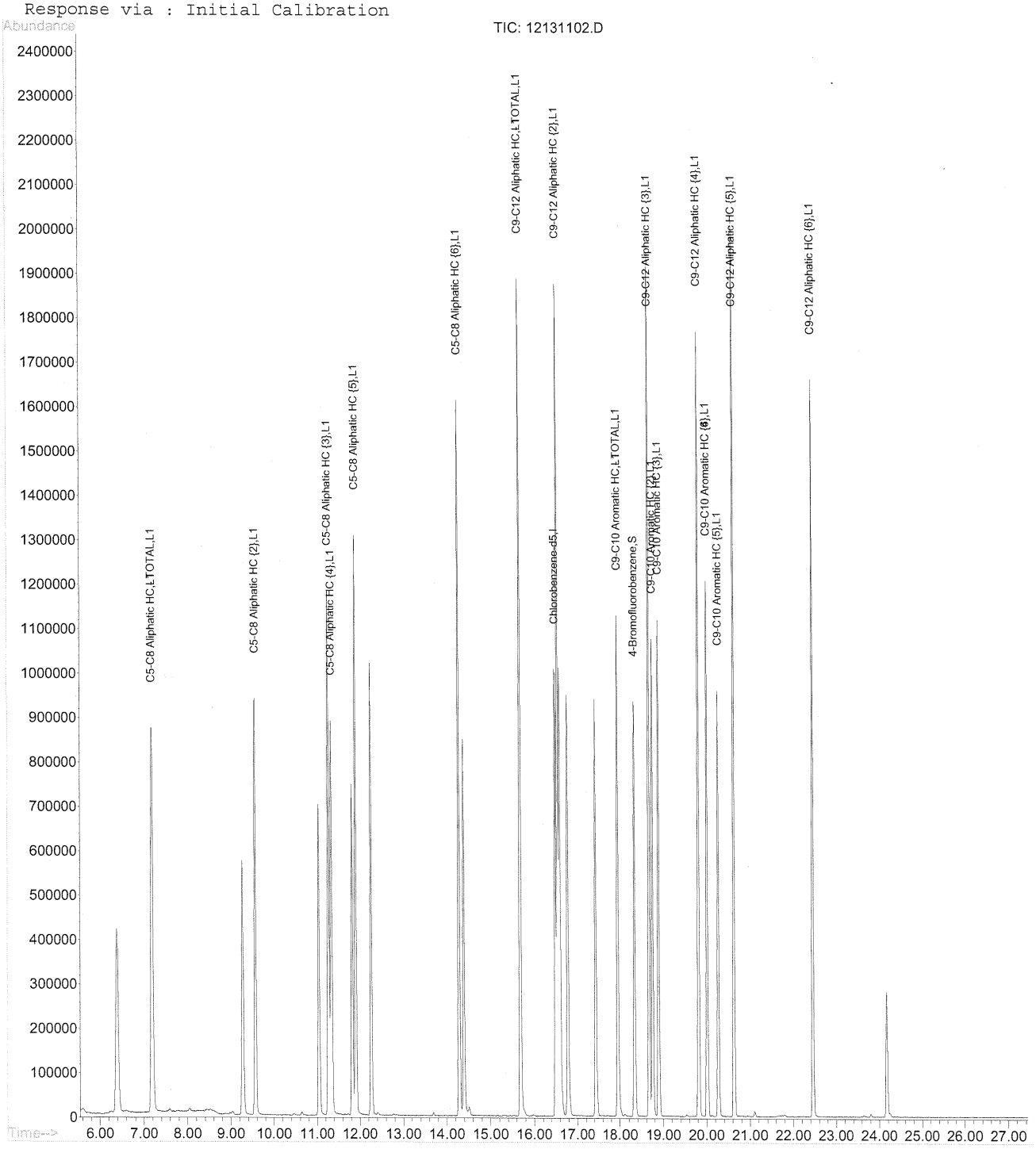
Target Compounds					Qvalue
1) C5-C8 Aliphatic HC	7.19	TIC	3029386	32.90 ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2324962	38.53 ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.27	TIC	2924357	43.40 ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2263257	37.74 ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2866443	44.18 ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3363160	52.03 ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.19	TIC	16771565m	249.46 ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	4198903	59.94 ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	4074099	59.95 ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.67	TIC	3980897	66.83 ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.82	TIC	3809697	66.15 ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.63	TIC	4093310	78.98 ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.45	TIC	3352660	87.83 ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	23509566m	418.28 ug/m3	
15) C9-C10 Aromatic HC	17.97	120	247384	54.05 ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	262764	53.67 ug/m3	100
17) C9-C10 Aromatic HC {3}	18.90	120	386611	55.24 ug/m3	100
18) C9-C10 Aromatic HC {4}	20.01	120	90373	62.24 ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	300805	55.85 ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	218101	62.36 ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.96	TIC	1506038m	281.43 ug/m3	

(#) = qualifier out of range (m) = manual integration
12131102.D 120811V9.M Thu Dec 15 14:24:12 2011

Quantitation Report

Data File : C:\HPCHEM\1\DATA\121311\12131102.D Vial: 1
Acq On : 13 Dec 2011 10:17 am Operator: RACHEL HILL
Sample : CCV 121311 VOA9 Inst : GC/MS Ins
Misc : CCV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 14 9:11 2011 Quant Results File: 120811V9.RES

Method : C:\HPCHEM\1\METHODS\120811V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Dec 09 15:12:44 2011
Response via : Initial Calibration



Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\110811V9.M (RTE Integrator)
Title : MASS APH
Last Update : Thu Nov 10 11:53:00 2011
Response via : Initial Calibration

Calibration Files
1 =11091103.D 2 =11091104.D 3 =11091105.D
4 =11091106.D 5 =11091107.D 6 =11091108.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)	L1	C5-C8 Aliphatic HC	1.267	1.045	0.995	0.952	0.931	0.870	0.980	E5	15.32
2)	L1	C5-C8 Aliphatic HC	9.278	7.772	7.270	7.057	7.231	6.910	7.423	E4	12.27
3)	L1	C5-C8 Aliphatic HC	1.031	0.856	0.816	0.777	0.799	0.762	0.822	E5	12.48
4)	L1	C5-C8 Aliphatic HC	9.032	7.792	7.136	6.960	7.237	6.840	7.363	E4	11.29
5)	L1	C5-C8 Aliphatic HC	9.571	8.263	7.750	7.485	7.639	7.355	7.847	E4	11.08
6)	L1	C5-C8 Aliphatic HC	9.630	8.316	7.853	7.611	7.743	7.423	7.920	E4	11.01
7)	L1	C5-C8 Aliphatic HC	9.976	8.452	7.945	7.679	7.815	7.433	8.034	E4	12.12
8)	L1	C9-C12 Aliphatic HC	1.074	0.929	0.866	0.853	0.846	0.808	0.873	E5	12.29
9)	L1	C9-C12 Aliphatic HC	1.030	0.912	0.847	0.868	0.847	0.801	0.859	E5	11.56
10)	L1	C9-C12 Aliphatic HC	9.134	7.767	7.393	7.225	7.150	6.714	7.344	E4	13.12
11)	L1	C9-C12 Aliphatic HC	8.859	7.553	7.174	6.980	6.859	6.539	7.137	E4	12.68
12)	L1	C9-C12 Aliphatic HC	8.075	6.905	6.554	6.552	6.364	6.005	6.553	E4	12.57
13)	L1	C9-C12 Aliphatic HC	6.350	5.378	5.020	5.239	5.061	4.905	5.207	E4	11.05
14)	L1	C9-C12 Aliphatic HC	8.729	7.506	7.064	7.058	6.913	6.570	7.111	E4	12.18
15)	L1	C9-C10 Aromatic HC	6.487	5.529	5.253	5.225	5.258	5.203	5.436	E3	8.87
16)	L1	C9-C10 Aromatic HC	6.973	5.906	5.604	5.506	5.582	5.495	5.791	E3	9.36
17)	L1	C9-C10 Aromatic HC	1.003	0.848	0.803	0.798	0.800	0.780	0.828	E4	9.77
18)	L1	C9-C10 Aromatic HC	2.061	1.748	1.700	1.688	1.717	1.682	1.745	E3	8.31
19)	L1	C9-C10 Aromatic HC	7.763	6.525	6.244	6.163	6.220	6.121	6.438	E3	9.39
20)	L1	C9-C10 Aromatic HC	4.970	4.241	4.039	4.008	4.063	4.034	4.185	E3	8.56
21)	L1	C9-C10 Aromatic HC	7.658	6.487	6.159	6.092	6.140	6.065	6.366	E3	9.32
22)		C5-C8 Aliphatic	9.976	8.452	7.945	7.679	7.815	7.433	8.034	E4	12.12
23)	L1	non C5-C8	9.718	8.446	8.002	7.671	7.448	7.125	7.883	E4	12.42
24)	L1	non C5-C8 {2}	7.002	5.486	5.058	4.913	5.082	4.792	5.234	E4	16.38
25)	L1	non C5-C8 {3}	3.178	3.229	3.248	3.081	3.219	3.146	3.175	E4	1.92
26)	L1	non C5-C8 {4}	8.371	7.065	6.611	6.370	6.455	6.158	6.685	E4	12.63
27)	L1	non C5-C8 {5}	4.928	5.055	5.101	4.768	4.800	4.736	4.860	E4	3.57
28)	L1	non C5-C8 {6}	7.563	6.312	6.032	5.821	5.986	5.712	6.125	E4	11.25
29)	L1	non C5-C8 - TOTAL	5.380	5.391	5.305	5.196	5.412	5.362	5.318	E4	1.79
30)		C9-C12 Aliphatic	8.729	7.506	7.064	7.058	6.913	6.570	7.111	E4	12.18
31)	L1	non C9-C12	4.730	4.707	4.761	4.405	4.472	4.415	4.573	E4	3.39
32)	L1	non C9-C12 {2}	7.167	5.912	5.632	5.235	5.298	5.106	5.535	E4	15.54
33)	L1	non C9-C12 {3}	7.131	6.085	5.633	5.630	5.646	5.475	5.842	E4	10.55
34)	L1	non C9-C12 {4}	6.996	5.940	5.558	5.442	5.549	5.355	5.716	E4	10.69
35)	L1	non C9-C12 {5}	2.785	2.861	2.954	2.804	2.856	2.818	2.861	E4	2.37
36)	L1	non C9-C12 - TOTAL	4.154	3.982	3.870	3.731	3.807	3.729	3.832	E4	5.11
37)	L1	C9-C10 Aromatic	7.658	6.487	6.159	6.092	6.140	6.065	6.366	E3	9.32
38)	L1	C9-C10 Aromatic {2}	7.658	6.487	6.159	6.092	6.140	6.065	6.366	E3	9.32
39)	L1	C9-C10 Aromatic - T	7.658	6.487	6.159	6.092	6.140	6.065	6.366	E3	9.32
40)	I	Chlorobenzene-d5	----------ISTD----------								
41)	S	4-Bromofluorobenzen	0.094	0.094	0.094	0.096	0.096	0.097	0.096		1.94

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

Compound List Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\110811V9.M (RTE Integrator)
Title : MASS APH
Last Update : Thu Nov 10 11:53:00 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

110811V9.M Fri Nov 11 14:46:45 2011

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\110911\11091111.D Vial: 11
Acq On : 9 Nov 2011 10:52 pm Operator: RACHEL HILL
Sample : ICV 110911 VOA9 Inst : GC/MS Ins
Misc : ICV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 10 11:59 2011 Quant Results File: 110811V9.RES

Quant Method : C:\HPCHEM\1\METHODS\110811V9.M (RTE Integrator)
Title : MASS APH
Last Update : Thu Nov 10 11:53:00 2011
Response via : Initial Calibration
DataAcq Meth : 110811V9

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
40) Chlorobenzene-d5	16.51	117	769870	12.50 ug/m3	-0.01

System Monitoring Compounds
41) 4-Bromofluorobenzene 18.34 95 529805 89.76 ug/m3 0.00
Spiked Amount 89.500 Range 70 - 130 Recovery = 100.29%

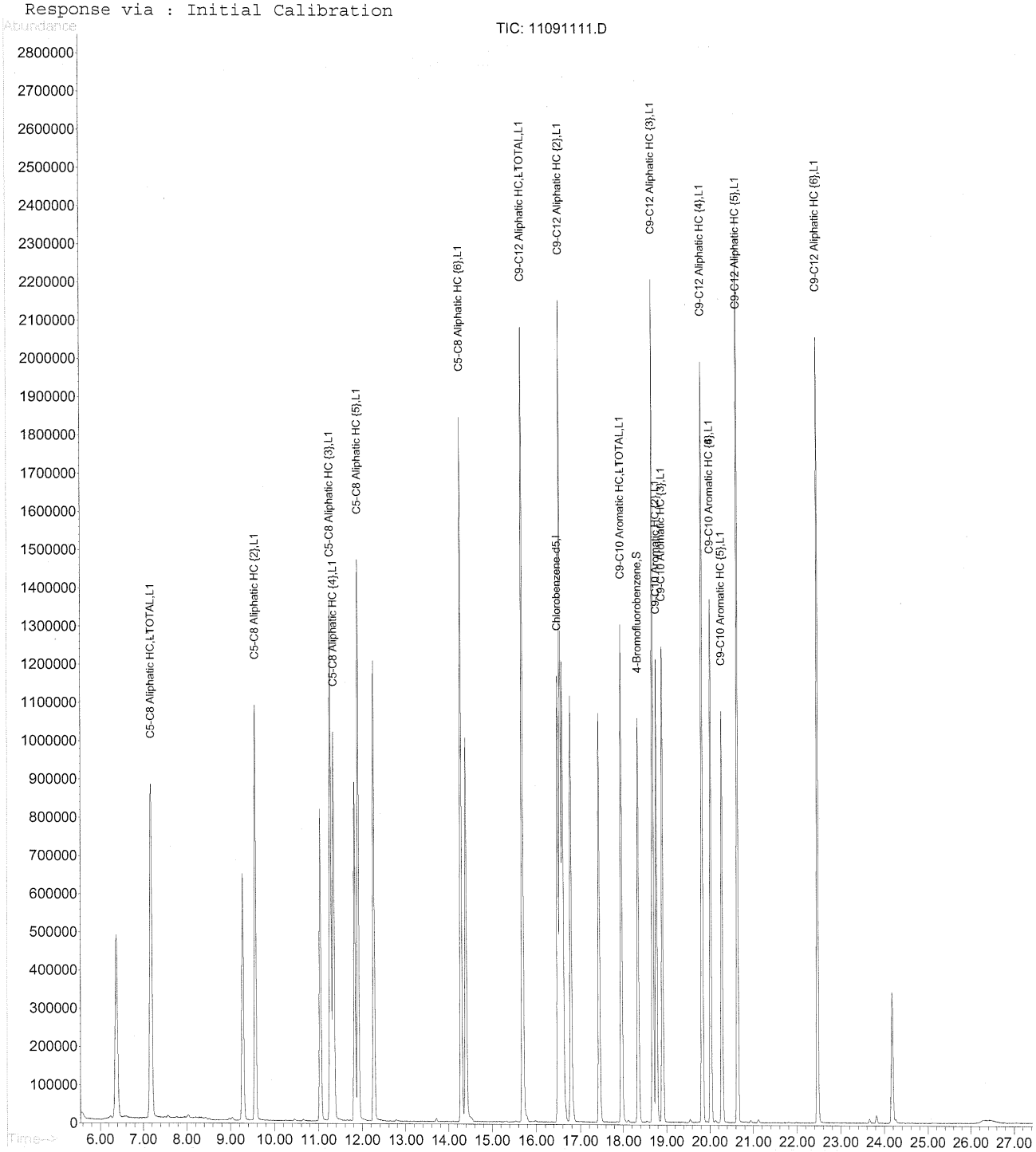
Target Compounds					Qvalue
1) C5-C8 Aliphatic HC	7.18	TIC	2998675	30.61 ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.56	TIC	2711088	36.52 ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	3476650	42.30 ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	2591553	35.20 ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	3344542	42.62 ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3916769	49.45 ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.18	TIC	19039277m	236.98 ug/m3	
8) C9-C12 Aliphatic HC	15.70	TIC	4841534	55.48 ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.57	TIC	4762244	55.46 ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	4628233	63.02 ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.83	TIC	4424417	62.00 ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	4754794	72.56 ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.47	TIC	4163156	79.95 ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.70	TIC	27574378m	387.79 ug/m3	
15) C9-C10 Aromatic HC	17.97	120	278222	51.19 ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	295920	51.10 ug/m3	100
17) C9-C10 Aromatic HC {3}	18.91	120	431121	52.04 ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	101596	58.24 ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	336824	52.32 ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	246161	58.82 ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1689844m	265.46 ug/m3	

(#) = qualifier out of range (m) = manual integration
11091111.D 110811V9.M Fri Nov 11 14:46:54 2011

Quantitation Report

Data File : C:\HPCHEM\1\DATA\110911\11091111.D Vial: 11
Acq On : 9 Nov 2011 10:52 pm Operator: RACHEL HILL
Sample : ICV 110911 VOA9 Inst : GC/MS Ins
Misc : ICV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 10 11:59 2011 Quant Results File: 110811V9.RES

Method : C:\HPCHEM\1\METHODS\110811V9.M (RTE Integrator)
Title : MASS APH
Last Update : Thu Nov 10 11:53:00 2011
Response via : Initial Calibration



Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\112911V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Nov 30 11:30:11 2011
Response via : Initial Calibration

Calibration Files
1 =11291105.D 2 =11291106.D 3 =11291107.D
4 =11291108.D 5 =11291109.D 6 =11291110.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)	L1	C5-C8 Aliphatic HC	1.302	1.053	1.051	1.019	0.970	0.915	1.027	E5	13.46
2)	L1	C5-C8 Aliphatic HC	8.114	7.052	7.074	6.541	6.507	6.508	6.910	E4	8.50
3)	L1	C5-C8 Aliphatic HC	8.819	7.742	7.802	7.349	7.247	7.394	7.666	E4	7.21
4)	L1	C5-C8 Aliphatic HC	8.135	7.066	6.994	6.389	6.498	6.423	6.867	E4	9.05
5)	L1	C5-C8 Aliphatic HC	8.400	7.425	7.387	7.017	7.058	7.011	7.318	E4	7.04
6)	L1	C5-C8 Aliphatic HC	8.351	7.423	7.508	7.101	7.130	7.110	7.352	E4	6.71
7)	L1	C5-C8 Aliphatic HC	8.956	7.757	7.762	7.329	7.271	7.196	7.625	E4	8.43
8)	L1	C9-C12 Aliphatic HC	9.305	8.243	8.274	7.919	7.902	7.737	8.094	E4	7.79
9)	L1	C9-C12 Aliphatic HC	9.349	8.094	8.079	7.539	7.725	7.259	7.878	E4	9.52
10)	L1	C9-C12 Aliphatic HC	7.755	6.941	7.106	6.643	6.627	6.464	6.799	E4	7.93
11)	L1	C9-C12 Aliphatic HC	7.545	6.718	6.790	6.412	6.403	6.321	6.604	E4	7.34
12)	L1	C9-C12 Aliphatic HC	6.796	6.151	6.320	5.936	5.903	5.789	6.046	E4	7.18
13)	L1	C9-C12 Aliphatic HC	5.061	4.762	4.896	4.526	4.583	4.647	4.693	E4	4.94
14)	L1	C9-C12 Aliphatic HC	7.451	6.673	6.773	6.360	6.384	6.245	6.544	E4	7.45
15)	L1	C9-C10 Aromatic HC	5.576	5.191	5.245	4.969	4.991	5.044	5.172	E3	4.02
16)	L1	C9-C10 Aromatic HC	6.137	5.505	5.574	5.197	5.238	5.399	5.523	E3	5.68
17)	L1	C9-C10 Aromatic HC	8.749	7.853	7.947	7.583	7.628	7.648	7.892	E3	5.08
18)	L1	C9-C10 Aromatic HC	1.782	1.625	1.685	1.577	1.602	1.630	1.650	E3	4.09
19)	L1	C9-C10 Aromatic HC	6.741	6.086	6.212	5.763	5.893	5.928	6.113	E3	5.23
20)	L1	C9-C10 Aromatic HC	4.384	3.957	4.015	3.778	3.848	3.891	3.987	E3	4.95
21)	L1	C9-C10 Aromatic HC	6.676	6.045	6.120	5.752	5.813	5.905	6.057	E3	5.06
22)		C5-C8 Aliphatic	8.956	7.757	7.762	7.329	7.271	7.196	7.625	E4	8.43
23)	L1	non C5-C8	8.994	7.560	7.622	7.419	7.160	6.929	7.497	E4	9.73
24)	L1	non C5-C8 {2}	5.780	5.129	5.070	4.547	4.585	4.573	4.896	E4	9.45
25)	L1	non C5-C8 {3}	2.750	2.617	2.573	2.663	2.587	2.637	2.653	E4	2.68
26)	L1	non C5-C8 {4}	7.316	6.399	6.341	5.712	5.714	5.584	6.079	E4	10.76
27)	L1	non C5-C8 {5}	4.299	4.086	3.956	4.132	3.908	3.937	4.048	E4	3.39
28)	L1	non C5-C8 {6}	6.314	5.595	5.846	5.170	5.151	5.391	5.574	E4	7.32
29)	L1	non C5-C8 - TOTAL	4.657	4.688	4.806	4.685	4.748	4.956	4.811	E4	3.67
30)		C9-C12 Aliphatic	7.451	6.673	6.773	6.360	6.384	6.245	6.544	E4	7.45
31)	L1	non C9-C12	4.041	3.917	3.999	4.033	3.767	4.053	4.010	E4	3.73
32)	L1	non C9-C12 {2}	5.785	5.285	5.265	5.138	4.948	4.684	5.151	E4	6.78
33)	L1	non C9-C12 {3}	6.102	5.488	5.623	5.185	5.226	5.265	5.467	E4	5.85
34)	L1	non C9-C12 {4}	5.897	5.362	5.434	5.042	5.122	5.107	5.319	E4	5.50
35)	L1	non C9-C12 {5}	2.450	2.403	2.434	2.552	2.472	2.538	2.512	E4	4.46
36)	L1	non C9-C12 - TOTAL	3.537	3.481	3.555	3.480	3.458	3.499	3.525	E4	2.01
37)	L1	C9-C10 Aromatic	6.676	6.045	6.120	5.752	5.813	5.905	6.057	E3	5.06
38)	L1	C9-C10 Aromatic {2}	6.676	6.045	6.120	5.752	5.813	5.905	6.057	E3	5.06
39)	L1	C9-C10 Aromatic - T	6.676	6.045	6.120	5.752	5.813	5.905	6.057	E3	5.06
40)	I	Chlorobenzene-d5	----------ISTD----------								
41)	S	4-Bromofluorobenzen	0.092	0.093	0.095	0.096	0.095	0.095	0.095		2.03

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

Compound List Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\112911V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Nov 30 11:30:11 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

112911V9.M Wed Dec 07 14:00:54 2011

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\112911\11291116.D Vial: 11
Acq On : 30 Nov 2011 10:36 am Operator: RACHEL HILL
Sample : ICV 112911 VOA9 Inst : GC/MS Ins
Misc : ICV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 1 14:41 2011 Quant Results File: 112911V9.RES

Quant Method : C:\HPCHEM\1\METHODS\112911V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Nov 30 11:30:11 2011
Response via : Initial Calibration
DataAcq Meth : 112911V9

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
40) Chlorobenzene-d5	16.50	117	673717	12.50 ug/m3	-0.02

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.34	95	452444	88.53 ug/m3	-0.01

Spiked Amount 89.500 Range 70 - 130 Recovery = 98.92%

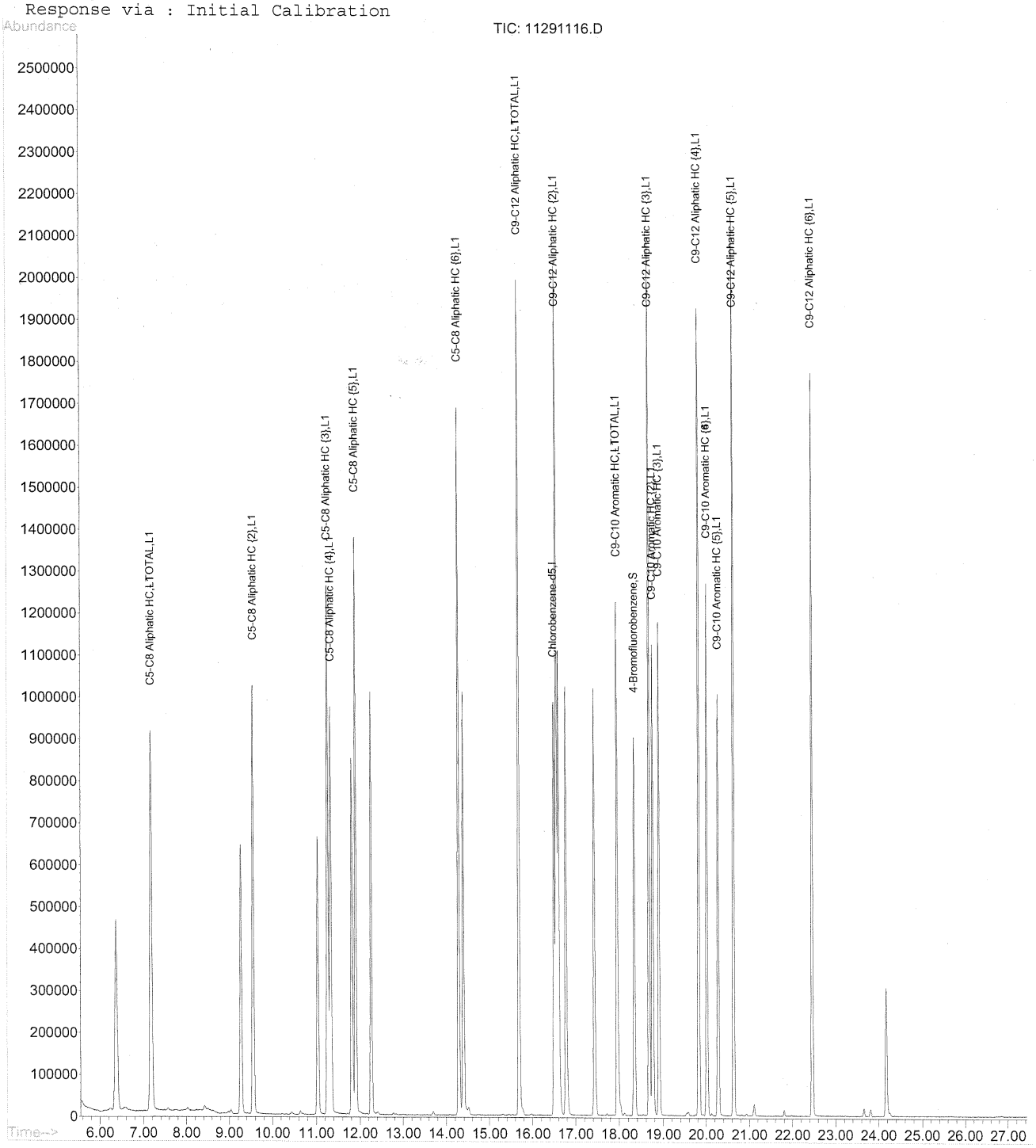
Target Compounds					Qvalue
1) C5-C8 Aliphatic HC	7.17	TIC	3119927	30.38 ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.56	TIC	2545427	36.84 ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.26	TIC	3183391	41.53 ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.34	TIC	2475694	36.05 ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.90	TIC	3072096	41.98 ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3607242	49.07 ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.17	TIC	18003777m	236.12 ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	4496356	55.55 ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	4421114	56.12 ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.67	TIC	4304821	63.32 ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.82	TIC	4283294	64.86 ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	4309659	71.28 ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.46	TIC	3554528	75.74 ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	25369772m	387.65 ug/m3	
15) C9-C10 Aromatic HC	17.97	120	267708	51.76 ug/m3	100
16) C9-C10 Aromatic HC {2}	18.76	120	281263	50.93 ug/m3	100
17) C9-C10 Aromatic HC {3}	18.90	120	412004	52.20 ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	95355	57.78 ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	318448	52.09 ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	232364	58.29 ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1607142m	265.32 ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\112911\11291116.D Vial: 11
Acq On : 30 Nov 2011 10:36 am Operator: RACHEL HILL
Sample : ICV 112911 VOA9 Inst : GC/MS Ins
Misc : ICV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 1 14:41 2011 Quant Results File: 112911V9.RES

Method : C:\HPCHEM\1\METHODS\112911V9.M (RTE Integrator)
Title : MASS APH
Last Update : Wed Nov 30 11:30:11 2011
Response via : Initial Calibration



Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\120811V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Dec 09 15:12:44 2011
Response via : Initial Calibration

Calibration Files
1 =12081105.D 2 =12081106.D 3 =12081107.D
4 =12081108.D 5 =12081109.D 6 =12081110.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)	L1	C5-C8 Aliphatic HC	1.003	0.912	0.926	0.941	0.909	0.887	0.921	E5	4.72
2)	L1	C5-C8 Aliphatic HC	5.976	5.755	5.905	6.139	5.955	6.207	6.034	E4	3.16
3)	L1	C5-C8 Aliphatic HC	6.811	6.430	6.479	6.826	6.683	6.891	6.738	E4	3.29
4)	L1	C5-C8 Aliphatic HC	5.994	5.696	5.938	6.058	5.892	6.171	5.997	E4	3.00
5)	L1	C5-C8 Aliphatic HC	6.468	6.159	6.305	6.645	6.547	6.640	6.489	E4	2.96
6)	L1	C5-C8 Aliphatic HC	6.411	6.156	6.253	6.592	6.560	6.753	6.463	E4	3.18
7)	L1	C5-C8 Aliphatic HC	6.813	6.444	6.571	6.852	6.705	6.843	6.723	E4	2.37
8)	L1	C9-C12 Aliphatic HC	6.988	6.737	6.809	7.226	7.179	7.209	7.006	E4	2.88
9)	L1	C9-C12 Aliphatic HC	6.716	6.269	6.575	6.908	7.114	7.095	6.796	E4	4.43
10)	L1	C9-C12 Aliphatic HC	5.898	5.717	5.862	6.172	6.134	6.132	5.957	E4	3.13
11)	L1	C9-C12 Aliphatic HC	5.752	5.495	5.608	5.947	5.822	5.969	5.759	E4	2.99
12)	L1	C9-C12 Aliphatic HC	5.043	4.950	5.034	5.384	5.315	5.385	5.182	E4	3.48
13)	L1	C9-C12 Aliphatic HC	3.552	3.506	3.707	3.900	3.978	4.069	3.817	E4	5.97
14)	L1	C9-C12 Aliphatic HC	5.516	5.319	5.473	5.788	5.786	5.843	5.621	E4	3.47
15)	L1	C9-C10 Aromatic HC	4.384	4.282	4.358	4.694	4.604	4.831	4.577	E3	5.25
16)	L1	C9-C10 Aromatic HC	4.786	4.607	4.675	4.896	4.924	5.139	4.896	E3	4.77
17)	L1	C9-C10 Aromatic HC	6.862	6.622	6.645	7.117	7.008	7.347	6.999	E3	4.42
18)	L1	C9-C10 Aromatic HC	1.377	1.345	1.386	1.473	1.471	1.555	1.452	E3	5.90
19)	L1	C9-C10 Aromatic HC	5.254	5.062	5.142	5.452	5.384	5.633	5.386	E3	4.78
20)	L1	C9-C10 Aromatic HC	3.327	3.292	3.314	3.553	3.556	3.698	3.497	E3	5.36
21)	L1	C9-C10 Aromatic HC	5.197	5.043	5.090	5.416	5.363	5.637	5.351	E3	4.85
22)		C5-C8 Aliphatic	6.813	6.444	6.571	6.852	6.705	6.843	6.723	E4	2.37
23)	L1	non C5-C8	7.058	6.318	6.447	6.698	6.556	6.525	6.576	E4	3.70
24)	L1	non C5-C8 {2}	4.078	3.970	3.994	4.192	3.941	4.217	4.098	E4	3.36
25)	L1	non C5-C8 {3}	2.923	2.907	2.950	2.892	2.952	2.921	2.950	E4	2.39
26)	L1	non C5-C8 {4}	5.108	4.788	4.869	5.117	4.843	5.078	4.989	E4	2.97
27)	L1	non C5-C8 {5}	4.242	4.277	4.316	4.197	4.304	4.128	4.274	E4	2.39
28)	L1	non C5-C8 {6}	4.654	4.585	4.827	5.094	4.997	5.215	4.956	E4	5.61
29)	L1	non C5-C8 - TOTAL	4.057	4.170	4.314	4.503	4.499	4.745	4.462	E4	7.02
30)		C9-C12 Aliphatic	5.516	5.319	5.473	5.788	5.786	5.843	5.621	E4	3.47
31)	L1	non C9-C12	4.212	4.311	4.243	4.112	4.161	4.144	4.265	E4	4.49
32)	L1	non C9-C12 {2}	4.702	4.196	4.485	4.577	4.570	4.856	4.573	E4	4.46
33)	L1	non C9-C12 {3}	4.644	4.575	4.651	4.940	4.843	5.045	4.830	E4	4.39
34)	L1	non C9-C12 {4}	4.538	4.433	4.500	4.769	4.698	4.890	4.683	E4	4.28
35)	L1	non C9-C12 {5}	2.575	2.653	2.672	2.668	2.714	2.742	2.706	E4	3.94
36)	L1	non C9-C12 - TOTAL	3.262	3.224	3.263	3.346	3.341	3.479	3.348	E4	3.36
37)	L1	C9-C10 Aromatic	5.197	5.043	5.090	5.416	5.363	5.637	5.351	E3	4.85
38)	L1	C9-C10 Aromatic {2}	5.197	5.043	5.090	5.416	5.363	5.637	5.351	E3	4.85
39)	L1	C9-C10 Aromatic - T	5.197	5.043	5.090	5.416	5.363	5.637	5.351	E3	4.85
40)	I	Chlorobenzene-d5	----------ISTD----------								
41)	S	4-Bromofluorobenzen	0.094	0.095	0.095	0.095	0.094	0.096	0.095		1.05

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

Compound List Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\120811V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Dec 09 15:12:44 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

120811V9.M Thu Dec 15 14:22:36 2011

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\120811\12081113.D Vial: 1
Acq On : 8 Dec 2011 10:11 pm Operator: RACHEL HILL
Sample : ICV 120811 VOA9 Inst : GC/MS Ins
Misc : ICV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 9 15:14 2011 Quant Results File: 120811V9.RES

Quant Method : C:\HPCHEM\1\METHODS\120811V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Dec 09 15:12:44 2011
Response via : Initial Calibration
DataAcq Meth : 112911V9

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
40) Chlorobenzene-d5	16.50	117	730519	12.50 ug/m3	-0.01

System Monitoring Compounds
41) 4-Bromofluorobenzene 18.34 95 494439 88.96 ug/m3 0.00
Spiked Amount 89.500 Range 70 - 130 Recovery = 99.40%

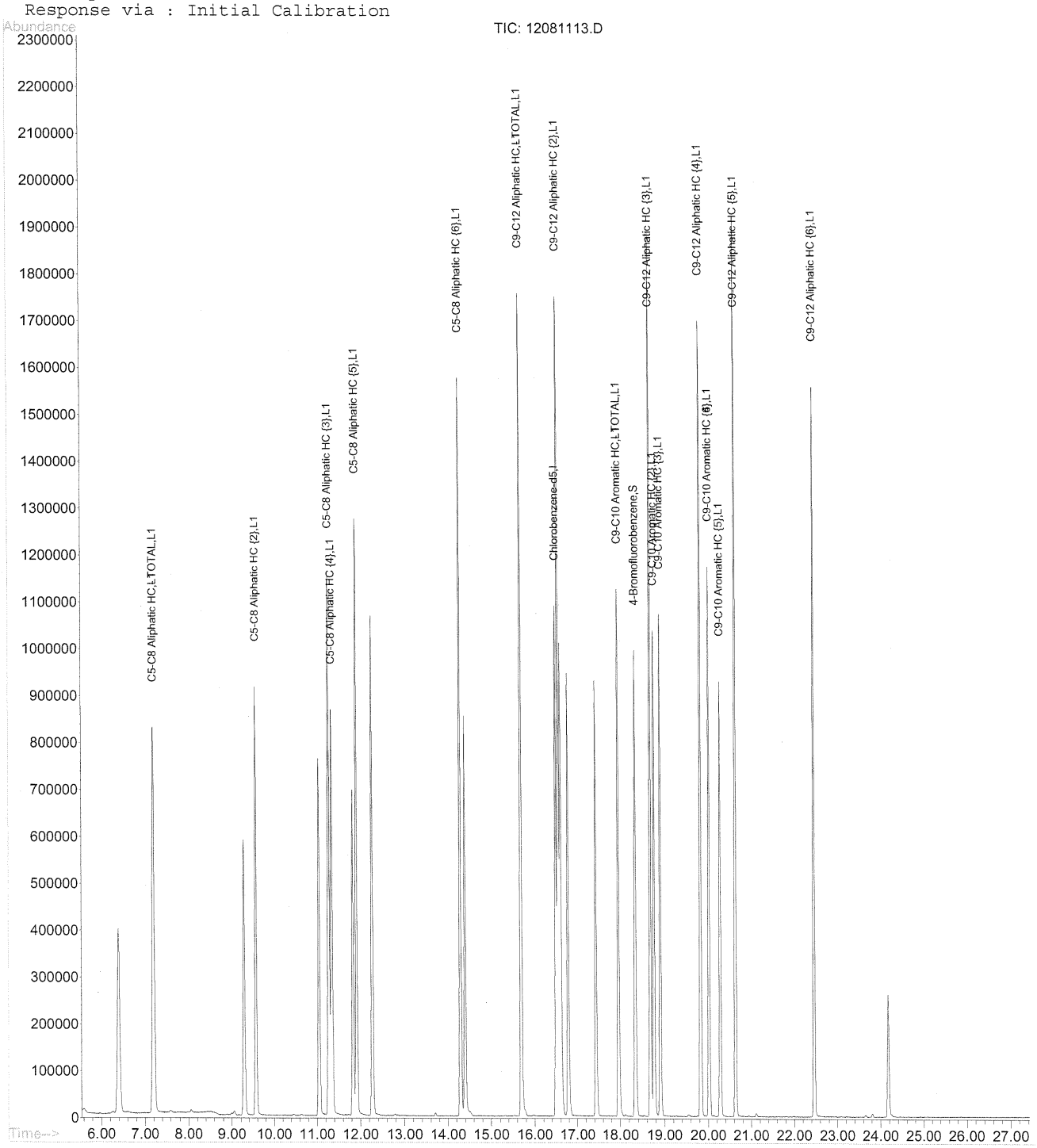
Target Compounds					Qvalue
1) C5-C8 Aliphatic HC	7.20	TIC	2845858	30.91 ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.57	TIC	2281662	37.81 ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.28	TIC	2934886	43.56 ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.35	TIC	2190154	36.52 ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.91	TIC	2809491	43.30 ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.29	TIC	3298818	51.04 ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.20	TIC	16360869m	243.36 ug/m3	
8) C9-C12 Aliphatic HC	15.69	TIC	4004893	57.17 ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.56	TIC	3896548	57.34 ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.68	TIC	3861831	64.83 ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.82	TIC	3693963	64.14 ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.64	TIC	3898133	75.22 ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.46	TIC	3123330	81.82 ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.69	TIC	22478698m	399.94 ug/m3	
15) C9-C10 Aromatic HC	17.97	120	242070	52.89 ug/m3	100
16) C9-C10 Aromatic HC {2}	18.77	120	253767	51.83 ug/m3	100
17) C9-C10 Aromatic HC {3}	18.90	120	376911	53.85 ug/m3	100
18) C9-C10 Aromatic HC {4}	20.02	120	87827	60.49 ug/m3	100
19) C9-C10 Aromatic HC {5}	20.28	120	297960	55.32 ug/m3	100
20) C9-C10 Aromatic HC {6}	20.02	134	214094	61.22 ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.97	TIC	1472629m	275.19 ug/m3	

(#) = qualifier out of range (m) = manual integration
12081113.D 120811V9.M Thu Dec 15 14:22:54 2011

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120811\12081113.D Vial: 1
Acq On : 8 Dec 2011 10:11 pm Operator: RACHEL HILL
Sample : ICV 120811 VOA9 Inst : GC/MS Ins
Misc : ICV MA APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 9 15:14 2011 Quant Results File: 120811V9.RES

Method : C:\HPCHEM\1\METHODS\120811V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Dec 09 15:12:44 2011
Response via : Initial Calibration



RTI Laboratories

Run ID: GC-TCD 1_111206A **Run No.:** 44784

Analytical Run Date: 12/6/2011 **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	R44784	12/6/2011 9:57:00 AM	Robert Lynch		
ccv std 1-2 a	ASTM-D2504	CCV	R44784	12/6/2011 10:19:00 AM	Robert Lynch		
lcs	ASTM-D2504	LCS	R44784	12/6/2011 10:41:00 AM	Robert Lynch		
crql std 2% a	ASTM-D2504	CRQL	R44784	12/6/2011 11:01:00 AM	Robert Lynch		
1111752-002b	ASTM-D2504	SAMP	R44784	12/6/2011 11:20:00 AM	Robert Lynch		
1111752-003b	ASTM-D2504	SAMP	R44784	12/6/2011 11:38:00 AM	Robert Lynch		
1111752-004b	ASTM-D2504	SAMP	R44784	12/6/2011 11:58:00 AM	Robert Lynch		
1111752-005b	ASTM-D2504	SAMP	R44784	12/6/2011 12:17:00 PM	Robert Lynch		
1111752-006b	ASTM-D2504	SAMP	R44784	12/6/2011 12:35:00 PM	Robert Lynch		
1111752-007b	ASTM-D2504	SAMP	R44784	12/6/2011 12:55:00 PM	Robert Lynch		
1111752-008b	ASTM-D2504	SAMP	R44784	12/6/2011 1:14:00 PM	Robert Lynch		
1111752-009b	ASTM-D2504	SAMP	R44784	12/6/2011 1:37:00 PM	Robert Lynch		
1111752-010b	ASTM-D2504	SAMP	R44784	12/6/2011 2:23:00 PM	Robert Lynch		
1111752-011b	ASTM-D2504	SAMP	R44784	12/6/2011 2:45:00 PM	Robert Lynch		
1111752-011bdup	ASTM-D2504	DUP	R44784	12/6/2011 3:12:00 PM	Robert Lynch		
ccv std 1-2 b	ASTM-D2504	CCV	R44784	12/6/2011 3:35:00 PM	Robert Lynch		
1111752-012b	ASTM-D2504	SAMP	R44784	12/6/2011 3:58:00 PM	Robert Lynch		
1111752-013b	ASTM-D2504	SAMP	R44784	12/6/2011 4:48:00 PM	Robert Lynch		
1111752-014b	ASTM-D2504	SAMP	R44784	12/6/2011 5:12:00 PM	Robert Lynch		
1111752-015b	ASTM-D2504	SAMP	R44784	12/6/2011 5:35:00 PM	Robert Lynch		
1111752-016b	ASTM-D2504	SAMP	R44784	12/6/2011 5:57:00 PM	Robert Lynch		
1111752-017b	ASTM-D2504	SAMP	R44784	12/6/2011 6:24:00 PM	Robert Lynch		
1111752-018b	ASTM-D2504	SAMP	R44784	12/6/2011 6:46:00 PM	Robert Lynch		
1111752-019b	ASTM-D2504	SAMP	R44784	12/6/2011 7:07:00 PM	Robert Lynch		
1111752-020b	ASTM-D2504	SAMP	R44784	12/6/2011 7:33:00 PM	Robert Lynch		
ccv std 1-2 c	ASTM-D2504	CCV	R44784	12/6/2011 7:58:00 PM	Robert Lynch		
crql std 2% c	ASTM-D2504	CRQL	R44784	12/6/2011 8:36:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

22-Dec-11

RunNo 44784

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
880793	mblk	ASTM-D2504	MBLK	ıTA\120611\1206	12/6/2011 9:57:0	1	R44784		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
880794	ccv std 1-2 a	ASTM-D2504	CCV	ıTA\120611\1206	12/6/2011 10:19:	1	R44784		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.843	2.843		2.5	0	0	0.025	0.1	0	114%	85	115	0%	
Carbon Monoxide	A	%	2.767	2.767		2.5	0	0	0.025	0.1	0	111%	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	%	2.1	2.1		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	%	2.68	2.68		2.5	0	0	0.025	0.1	0	107%	85	115	0%	
Oxygen	A	%	2.669	2.669		2.5	0	0	0.025	0.1	0	107%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
880795	lcs	ASTM-D2504	LCS	ıTA\120611\1206	12/6/2011 10:41:	1	R44784		0	880794	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.856	2.856		2.5	0	2.843	0.025	0.1	0	114%	70	130	0%	
Carbon Monoxide	A	%	2.764	2.764		2.5	0	2.767	0.025	0.1	0	111%	70	130	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Methane	A	%	2.115	2.115		2	0	2.1	0.025	0.5	0	106%	70	130	1%	
Nitrogen	A	%	2.677	2.677		2.5	0	2.68	0.025	0.1	0	107%	70	130	0%	
Oxygen	A	%	2.679	2.679		2.5	0	2.669	0.025	0.1	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
880806	1111752-011b (Container-01 of 01)	ASTM-D2504	SAMP	ıTA\120611\1206	12/6/2011 2:45:0	1	R44784		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	%	20.757	20.757		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
880807	1111752-011bdup	ASTM-D2504	DUP	ıTA\120611\1206	12/6/2011 3:12:0	1	R44784		0	880806	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.447	0.447		0	0	0.443	0.025	0.1	0	0%	0	0	1%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	78.829	78.829		0	0	78.736	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	20.877	20.877		0	0	20.757	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
880808	ccv std 1-2 b	ASTM-D2504	CCV	ıTA\120611\1206	12/6/2011 3:35:0	1	R44784		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.85	2.85		2.5	0	0	0.025	0.1	0	114%	85	115	0%	
Carbon Monoxide	A	%	2.745	2.745		2.5	0	0	0.025	0.1	0	110%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.145	2.145		2	0	0	0.025	0.5	0	107%	85	115	0%	
Nitrogen	A	%	2.736	2.736		2.5	0	0	0.025	0.1	0	109%	85	115	0%	
Oxygen	A	%	2.686	2.686		2.5	0	0	0.025	0.1	0	107%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
880809	1111752-012b (Container-01 of 01)	ASTM-D2504	SAMP	ıTA\120611\1206	12/6/2011 3:58:0	1	R44784		0	0	

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

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
880816	1111752-019b (Container-01 of 01)	ASTM-D2504	SAMP	ATA\120611\1206	12/6/2011 7:07:0	1	R44784		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	%	20.931	20.931		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
880817	1111752-020b (Container-01 of 01)	ASTM-D2504	SAMP	ATA\120611\1206	12/6/2011 7:33:0	1	R44784		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	1.117	1.117		0	0	0	0.025	0.1	0	0%	0	0	0%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	79.179	79.179		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	19.844	19.844		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
880818	ccv std 1-2 c	ASTM-D2504	CCV	ATA\120611\1206	12/6/2011 7:58:0	1	R44784		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.853	2.853		2.5	0	0	0.025	0.1	0	114%	85	115	0%	
Carbon Monoxide	A	%	2.773	2.773		2.5	0	0	0.025	0.1	0	111%	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	%	2.155	2.155		2	0	0	0.025	0.5	0	108%	85	115	0%	
Nitrogen	A	%	2.68	2.68		2.5	0	0	0.025	0.1	0	107%	85	115	0%	
Oxygen	A	%	2.685	2.685		2.5	0	0	0.025	0.1	0	107%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
880819	crql std 2% c	ASTM-D2504	CRQL	ATA\120611\1206	12/6/2011 8:36:0	1	R44784		0	0	

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

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\120611\12061102.D Vial: 1
Acq On : 6 Dec 2011 10:19 am 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	2.669	-6.8	0	0.04
2	Nitrogen	2.500	2.680	-7.2	0	0.03
3	Carbon Monoxide	2.500	2.767	-10.7	0	0.00
4	Methane	2.000	2.100	-5.0	0	0.00
5	Carbon dioxide	2.500	2.843	-13.7	0	-0.03

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\120611\12061102.D Vial: 1
Acq On : 6 Dec 2011 10:19 am 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 Thu Dec 08 19:52:37 2011 TESTCAL

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\2\DATA\120611\12061102.D Vial: 1
Acq On : 6 Dec 2011 10:19 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 17:39 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 :

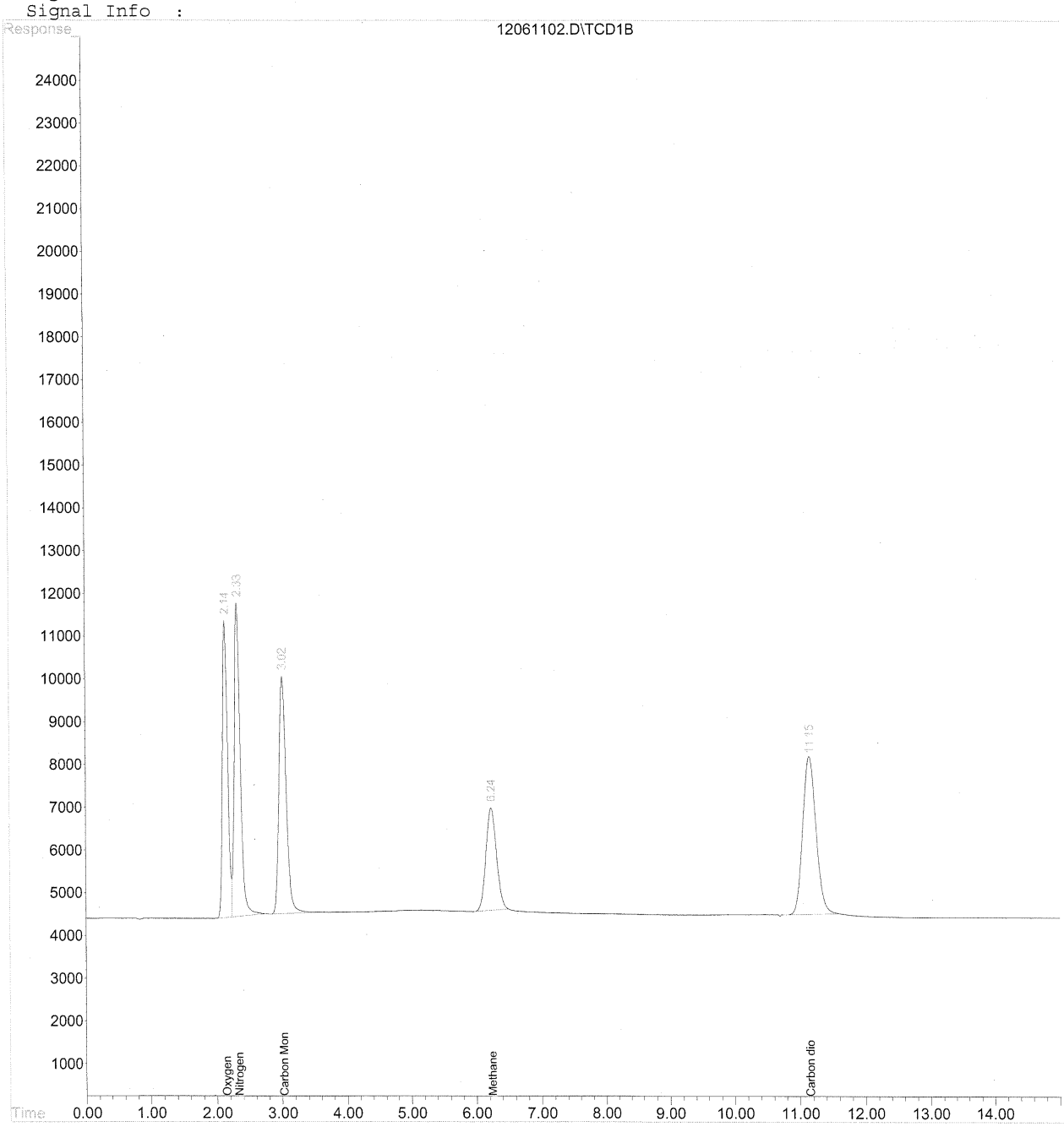
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	382824	2.669 %
2)	Nitrogen	2.33	461730	2.680 %
3)	Carbon Monoxide	3.02	435831	2.767 %
4)	Methane	6.24	271675	2.100 %
5)	Carbon dioxide	11.15	517428	2.843 %

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\2\DATA\120611\12061102.D Vial: 1
Acq On : 6 Dec 2011 10:19 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Dec 8 17:39 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\120611\12061116.D Vial: 1
Acq On : 6 Dec 2011 3:35 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	2.686	-7.4	0	0.04
2	Nitrogen	2.500	2.736	-9.4	0	0.03
3	Carbon Monoxide	2.500	2.745	-9.8	0	0.00
4	Methane	2.000	2.145	-7.3	0	-0.01
5	Carbon dioxide	2.500	2.850	-14.0	0	-0.04

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\120611\12061116.D Vial: 1
Acq On : 6 Dec 2011 3:35 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 Dec 08 19:52:25 2011 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\120611\12061116.D Vial: 1
Acq On : 6 Dec 2011 3:35 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 17:40 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 :

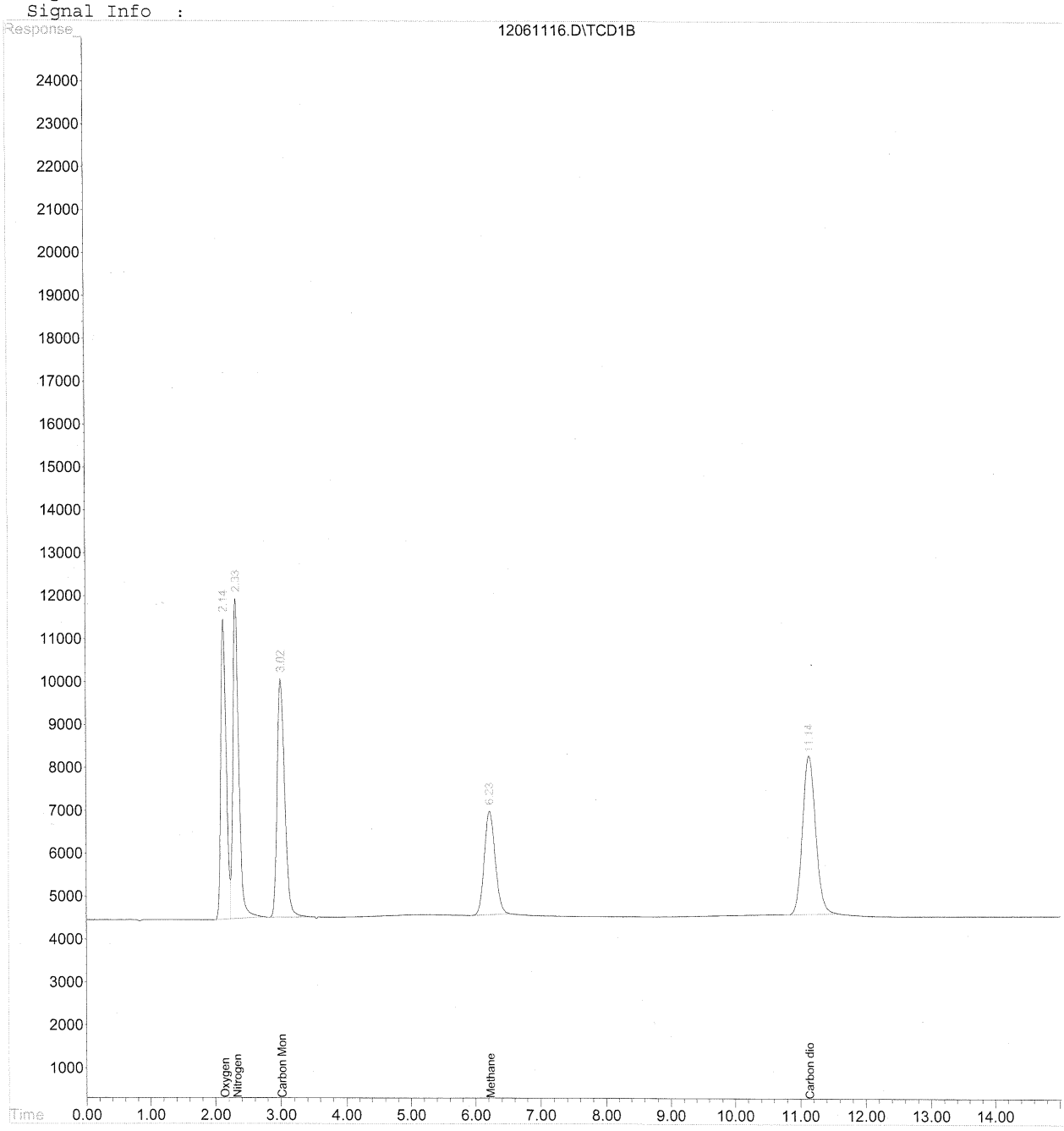
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	385258	2.686 %
2)	Nitrogen	2.33	471273	2.736 %
3)	Carbon Monoxide	3.02	432364	2.745 %
4)	Methane	6.23	277988	2.145 %
5)	Carbon dioxide	11.14	518668	2.850 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\120611\12061116.D Vial: 1
Acq On : 6 Dec 2011 3:35 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Dec 8 17:40 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\120611\12061126.D Vial: 1
Acq On : 6 Dec 2011 7:58 pm Operator:
Sample : ccv std 1-2 c 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	2.685	-7.4	0	0.04
2	Nitrogen	2.500	2.680	-7.2	0	0.03
3	Carbon Monoxide	2.500	2.773	-10.9	0	0.00
4	Methane	2.000	2.155	-7.7	0	0.00
5	Carbon dioxide	2.500	2.853	-14.1	0	-0.03

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\120611\12061126.D Vial: 1
Acq On : 6 Dec 2011 7:58 pm Operator:
Sample : ccv std 1-2 c 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 Dec 08 19:52:02 2011 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\120611\12061126.D Vial: 1
Acq On : 6 Dec 2011 7:58 pm Operator:
Sample : ccv std 1-2 c Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 17:41 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 :

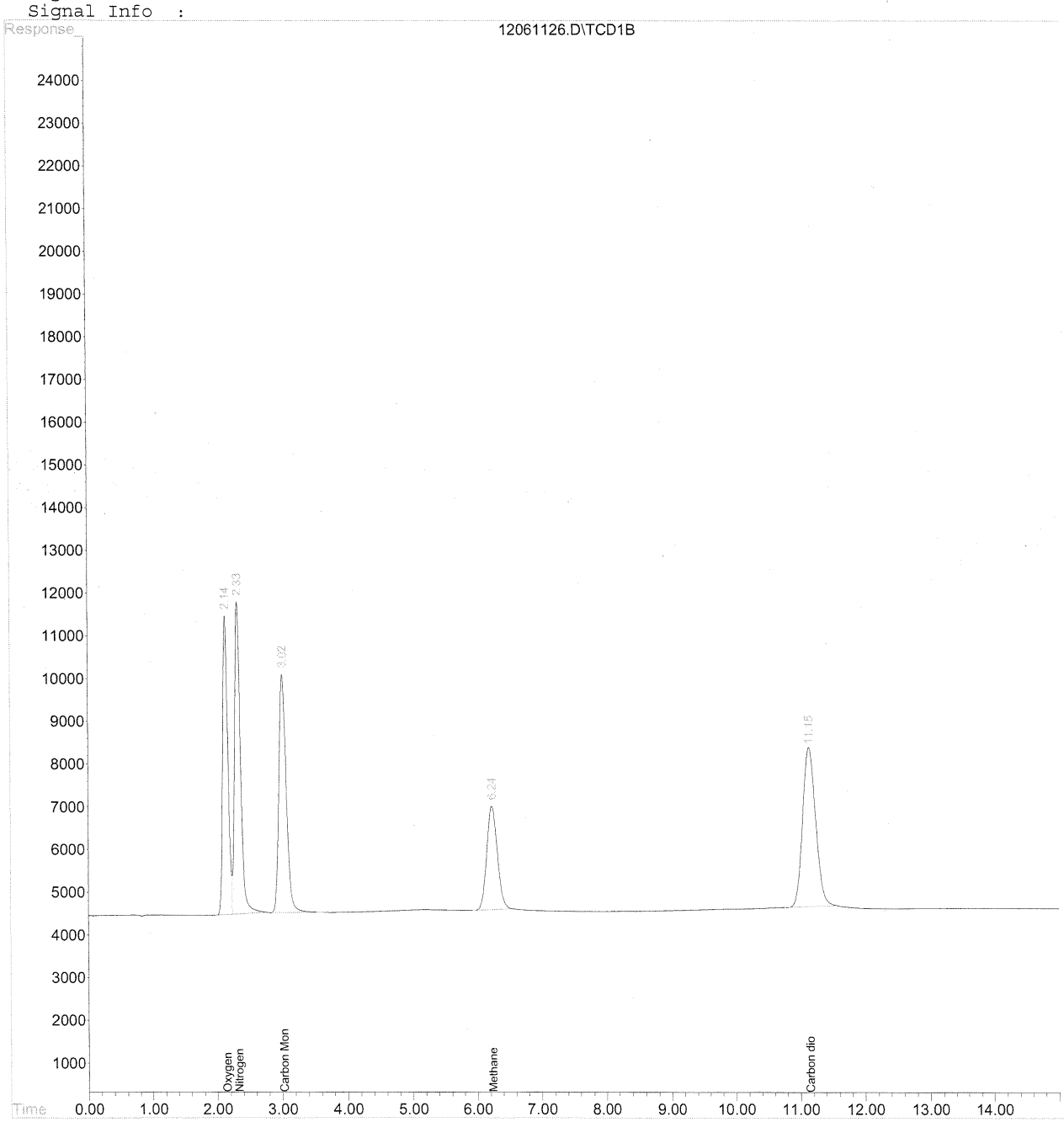
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1)	Oxygen	2.14	385015	2.685	%
2)	Nitrogen	2.33	461728	2.680	%
3)	Carbon Monoxide	3.02	436730	2.773	%
4)	Methane	6.24	279478	2.155	%
5)	Carbon dioxide	11.15	519270	2.853	%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\120611\12061126.D Vial: 1
Acq On : 6 Dec 2011 7:58 pm Operator:
Sample : ccv std 1-2 c Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Dec 8 17:41 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_111207A** **Run No.:** 44785

Analytical Run Date: 12/7/2011 **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	R44785	12/7/2011 10:40:00 AM	Robert Lynch		
ccv std 1-2 a	ASTM-D2504	CCV	R44785	12/7/2011 11:04:00 AM	Robert Lynch		
lcs	ASTM-D2504	LCS	R44785	12/7/2011 11:34:00 AM	Robert Lynch		
crql std 2% a	ASTM-D2504	CRQL	R44785	12/7/2011 11:54:00 AM	Robert Lynch		
1111752-021b	ASTM-D2504	SAMP	R44785	12/7/2011 12:30:00 PM	Robert Lynch		
1111752-022b	ASTM-D2504	SAMP	R44785	12/7/2011 12:51:00 PM	Robert Lynch		
1111752-023b	ASTM-D2504	SAMP	R44785	12/7/2011 1:10:00 PM	Robert Lynch		
1111752-024b	ASTM-D2504	SAMP	R44785	12/7/2011 1:30:00 PM	Robert Lynch		
1111752-027b	ASTM-D2504	SAMP	R44785	12/7/2011 2:07:00 PM	Robert Lynch		
1111752-028b	ASTM-D2504	SAMP	R44785	12/7/2011 2:33:00 PM	Robert Lynch		
1111752-029b	ASTM-D2504	SAMP	R44785	12/7/2011 2:52:00 PM	Robert Lynch		
1111752-030b	ASTM-D2504	SAMP	R44785	12/7/2011 3:19:00 PM	Robert Lynch		
1111752-031b	ASTM-D2504	SAMP	R44785	12/7/2011 3:43:00 PM	Robert Lynch		
1111752-032b	ASTM-D2504	SAMP	R44785	12/7/2011 4:05:00 PM	Robert Lynch		
1111752-032bdup	ASTM-D2504	DUP	R44785	12/7/2011 4:36:00 PM	Robert Lynch		
ccv std 1-2 b	ASTM-D2504	CCV	R44785	12/7/2011 4:56:00 PM	Robert Lynch		
1111752-033b	ASTM-D2504	SAMP	R44785	12/7/2011 5:20:00 PM	Robert Lynch		
1111752-034b	ASTM-D2504	SAMP	R44785	12/7/2011 5:42:00 PM	Robert Lynch		
1111752-035b	ASTM-D2504	SAMP	R44785	12/7/2011 6:10:00 PM	Robert Lynch		
1111752-036b	ASTM-D2504	SAMP	R44785	12/7/2011 6:31:00 PM	Robert Lynch		
ccv std 1-2 c	ASTM-D2504	CCV	R44785	12/7/2011 6:53:00 PM	Robert Lynch		
crql std 2% c	ASTM-D2504	CRQL	R44785	12/7/2011 7:38:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

22-Dec-11

RunNo 44785

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
880820	mblk	ASTM-D2504	MBLK	\TA\120711\1207	12/7/2011 10:40:	1	R44785		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
880821	ccv std 1-2 a	ASTM-D2504	CCV	\TA\120711\1207	12/7/2011 11:04:	1	R44785		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.866	2.866		2.5	0	0	0.025	0.1	0	115%	85	115	0%	
Carbon Monoxide	A	%	2.746	2.746		2.5	0	0	0.025	0.1	0	110%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.137	2.137		2	0	0	0.025	0.5	0	107%	85	115	0%	
Nitrogen	A	%	2.658	2.658		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Oxygen	A	%	2.655	2.655		2.5	0	0	0.025	0.1	0	106%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
880822	lcs	ASTM-D2504	LCS	\TA\120711\1207	12/7/2011 11:34:	1	R44785		0	880821	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.847	2.847		2.5	0	2.866	0.025	0.1	0	114%	70	130	1%	
Carbon Monoxide	A	%	2.73	2.73		2.5	0	2.746	0.025	0.1	0	109%	70	130	1%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	70	130	0%	
Methane	A	%	2.125	2.125		2	0	2.137	0.025	0.5	0	106%	70	130	1%	
Nitrogen	A	%	2.671	2.671		2.5	0	2.658	0.025	0.1	0	107%	70	130	0%	
Oxygen	A	%	2.655	2.655		2.5	0	2.655	0.025	0.1	0	106%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
880833	1111752-032b (Container-01 of 01)	ASTM-D2504	SAMP	\TA\120711\1207	12/7/2011 4:05:0	1	R44785		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	%	20.627	20.627		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
880834	1111752-032bdup	ASTM-D2504	DUP	\TA\120711\1207	12/7/2011 4:36:0	1	R44785		0	880833	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.148	0.148		0	0	0.142	0.025	0.1	0	0%	0	0	4%	
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	%	78.898	78.898		0	0	78.487	0.025	0.1	0	0%	0	0	1%	
Oxygen	A	%	20.74	20.74		0	0	20.627	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
880835	ccv std 1-2 b	ASTM-D2504	CCV	\TA\120711\1207	12/7/2011 4:56:0	1	R44785		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.856	2.856		2.5	0	0	0.025	0.1	0	114%	85	115	0%	
Carbon Monoxide	A	%	2.784	2.784		2.5	0	0	0.025	0.1	0	111%	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	%	2.126	2.126		2	0	0	0.025	0.5	0	106%	85	115	0%	
Nitrogen	A	%	2.646	2.646		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Oxygen	A	%	2.657	2.657		2.5	0	0	0.025	0.1	0	106%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
880836	1111752-033b (Container-01 of 01)	ASTM-D2504	SAMP	\TA\120711\1207	12/7/2011 5:20:0	1	R44785		0	0	

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

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
880838	1111752-035b (Container-01 of 01)	ASTM-D2504	SAMP	ıTA\120711\1207	12/7/2011 6:10:0	1	R44785		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	%	19.127	19.127		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
880839	1111752-036b (Container-01 of 01)	ASTM-D2504	SAMP	ıTA\120711\1207	12/7/2011 6:31:0	1	R44785		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.502	0.502		0	0	0	0.025	0.1	0	0%	0	0	0%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	80.078	80.078		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	%	18.664	18.664		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
880840	ccv std 1-2 c	ASTM-D2504	CCV	ıTA\120711\1207	12/7/2011 6:53:0	1	R44785		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.845	2.845		2.5	0	0	0.025	0.1	0	114%	85	115	0%	
Carbon Monoxide	A	%	2.748	2.748		2.5	0	0	0.025	0.1	0	110%	85	115	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	85	115	0%	
Methane	A	%	2.122	2.122		2	0	0	0.025	0.5	0	106%	85	115	0%	
Nitrogen	A	%	2.704	2.704		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Oxygen	A	%	2.669	2.669		2.5	0	0	0.025	0.1	0	107%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
880841	crql std 2% c	ASTM-D2504	CRQL	ıTA\120711\1207	12/7/2011 7:38:0	1	R44785		0	0	

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

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\120711\12071102.D Vial: 1
Acq On : 7 Dec 2011 11:04 am 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	2.655	-6.2	0	0.00
2	Nitrogen	2.500	2.658	-6.3	0	0.00
3	Carbon Monoxide	2.500	2.746	-9.8	0	-0.05
4	Methane	2.000	2.137	-6.9	0	-0.07
5	Carbon dioxide	2.500	2.866	-14.6	0	-0.09

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\120711\12071102.D Vial: 1
Acq On : 7 Dec 2011 11:04 am 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 Thu Dec 08 19:59:14 2011 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\120711\12071102.D Vial: 1
Acq On : 7 Dec 2011 11:04 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 17:38 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	2.11	380714	2.655 %
2)	Nitrogen	2.29	457918	2.658 %
3)	Carbon Monoxide	2.97f	432463	2.746 %
4)	Methane	6.18f	276878	2.137 %
5)	Carbon dioxide	11.09f	521755	2.866 %

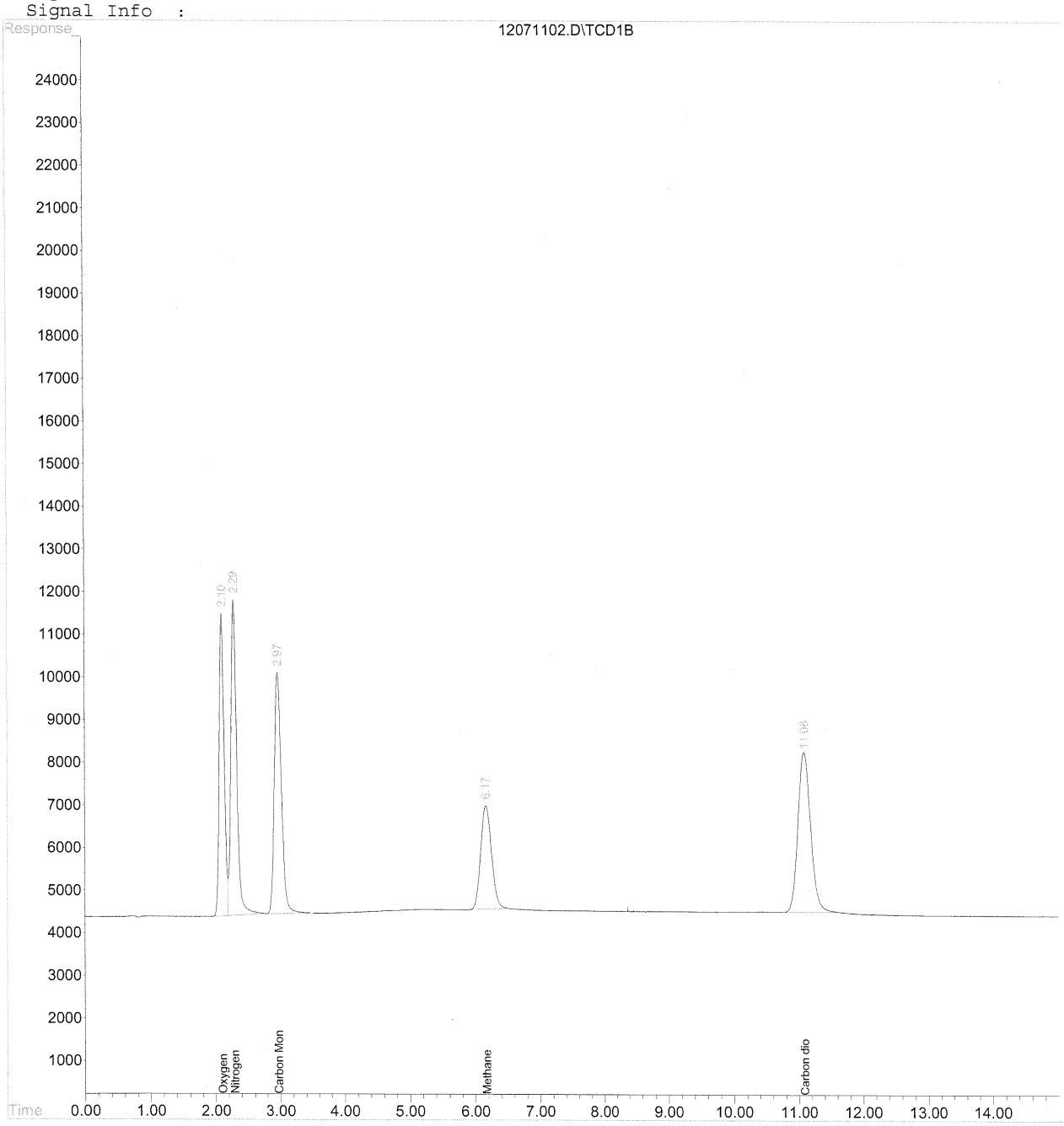
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\120711\12071102.D          Vial: 1
Acq On    :  7 Dec 2011  11:04 am                   Operator:
Sample    : ccv std 1-2 a                           Inst    : GC/TCD
Misc      : CCV  ASTM-D2504                         Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Dec  8 17:38 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\120711\12071116.D Vial: 1
Acq On : 7 Dec 2011 4:56 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	2.657	-6.3	0	0.03
2	Nitrogen	2.500	2.646	-5.8	0	0.02
3	Carbon Monoxide	2.500	2.784	-11.4	0	-0.02
4	Methane	2.000	2.126	-6.3	0	-0.03
5	Carbon dioxide	2.500	2.856	-14.2	0	-0.06

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\120711\12071116.D Vial: 1
Acq On : 7 Dec 2011 4:56 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 Dec 08 19:59:04 2011 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\120711\12071116.D Vial: 1
Acq On : 7 Dec 2011 4:56 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 17:38 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	380980	2.657	%
2)	Nitrogen	2.32	455813	2.646	%
3)	Carbon Monoxide	3.01	438454	2.784	%
4)	Methane	6.22	275291	2.126	%
5)	Carbon dioxide	11.12f	519845	2.856	%

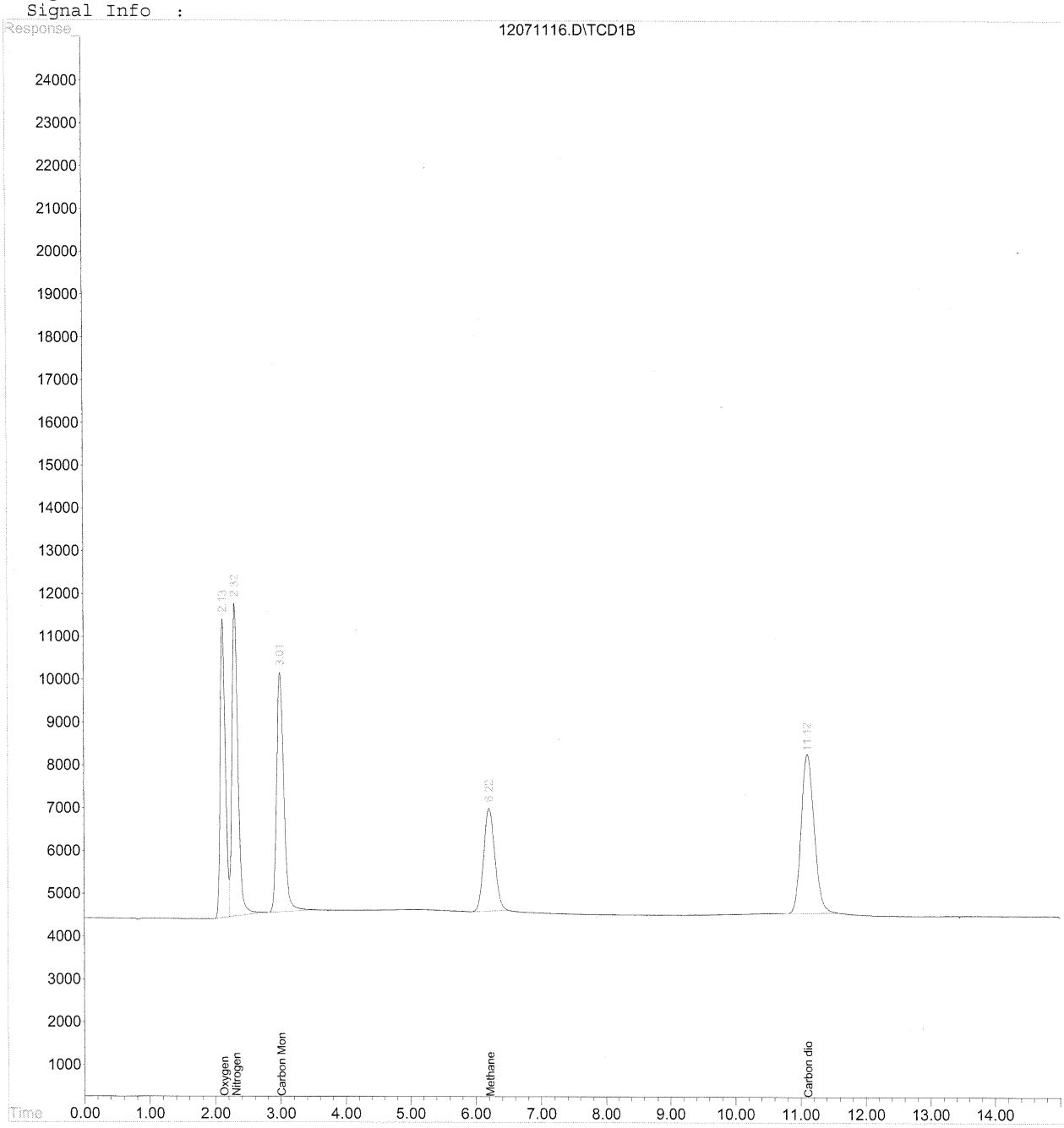
(f)=RT Delta > 1/2 Window (m)=manual int.
12071116.D 030511.M Thu Dec 08 19:57:53 2011 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\120711\12071116.D Vial: 1
Acq On : 7 Dec 2011 4:56 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Dec 8 17:38 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\120711\12071121.D Vial: 1
Acq On : 7 Dec 2011 6:53 pm Operator:
Sample : ccv std 1-2 c 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	2.669	-6.8	0	0.03
2	Nitrogen	2.500	2.704	-8.2	0	0.02
3	Carbon Monoxide	2.500	2.748	-9.9	0	-0.02
4	Methane	2.000	2.122	-6.1	0	-0.03
5	Carbon dioxide	2.500	2.845	-13.8	0	-0.05

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\120711\12071121.D Vial: 1
Acq On : 7 Dec 2011 6:53 pm Operator:
Sample : ccv std 1-2 c 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 Dec 08 19:58:52 2011 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\120711\12071121.D Vial: 1
Acq On : 7 Dec 2011 6:53 pm Operator:
Sample : ccv std 1-2 c Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 17:38 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	382701	2.669 %
2)	Nitrogen	2.32	465742	2.704 %
3)	Carbon Monoxide	3.01	432841	2.748 %
4)	Methane	6.22	274821	2.122 %
5)	Carbon dioxide	11.12f	517848	2.845 %

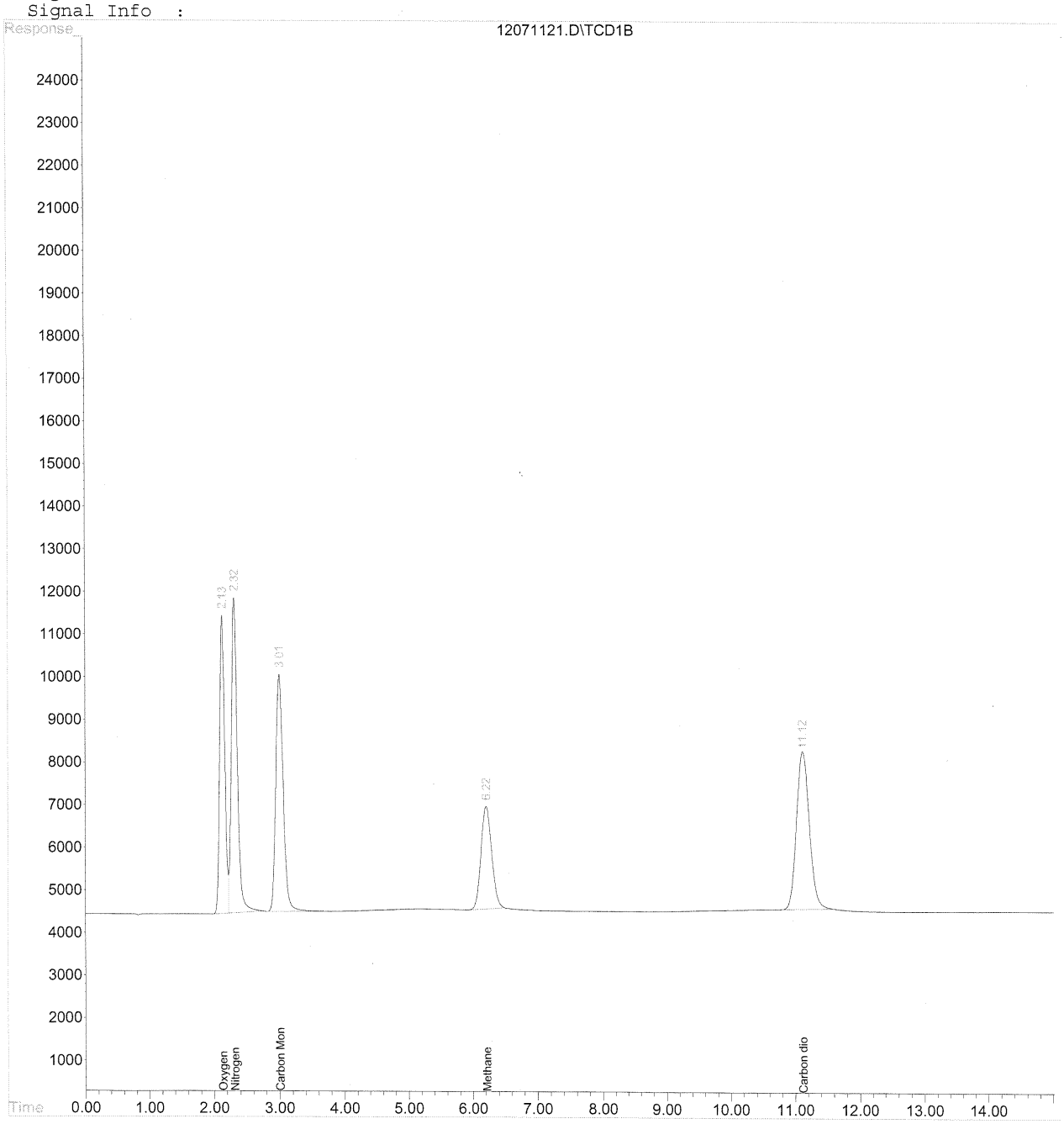
(f)=RT Delta > 1/2 Window (m)=manual int.
12071121.D 030511.M Thu Dec 08 19:57:53 2011 TESTCAL

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\120711\12071121.D          Vial: 1
Acq On    :  7 Dec 2011   6:53 pm                   Operator:
Sample    : ccv std 1-2 c                           Inst    : GC/TCD
Misc      : CCV  ASTM-D2504                         Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Dec  8 17:38 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_111208A **Run No.:** 44786

Analytical Run Date: 12/8/2011 **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	R44786	12/8/2011 9:57:00 AM	Robert Lynch		
ccv std 1-2 a	ASTM-D2504	CCV	R44786	12/8/2011 10:17:00 AM	Robert Lynch		
lcs	ASTM-D2504	LCS	R44786	12/8/2011 10:43:00 AM	Robert Lynch		
crql std 2% a	ASTM-D2504	CRQL	R44786	12/8/2011 11:01:00 AM	Robert Lynch		
1111752-037b	ASTM-D2504	SAMP	R44786	12/8/2011 11:19:00 AM	Robert Lynch		
1111752-038b	ASTM-D2504	SAMP	R44786	12/8/2011 11:44:00 AM	Robert Lynch		
1111752-039b	ASTM-D2504	SAMP	R44786	12/8/2011 12:08:00 PM	Robert Lynch		
1111752-040b	ASTM-D2504	SAMP	R44786	12/8/2011 12:34:00 PM	Robert Lynch		
1111752-041b	ASTM-D2504	SAMP	R44786	12/8/2011 12:57:00 PM	Robert Lynch		
1111752-042b	ASTM-D2504	SAMP	R44786	12/8/2011 1:16:00 PM	Robert Lynch		
1111752-043b	ASTM-D2504	SAMP	R44786	12/8/2011 1:43:00 PM	Robert Lynch		
1111752-044b	ASTM-D2504	SAMP	R44786	12/8/2011 2:05:00 PM	Robert Lynch		
1111752-045b	ASTM-D2504	SAMP	R44786	12/8/2011 2:27:00 PM	Robert Lynch		
1111752-046b	ASTM-D2504	SAMP	R44786	12/8/2011 3:00:00 PM	Robert Lynch		
1111752-046bdup	ASTM-D2504	DUP	R44786	12/8/2011 3:23:00 PM	Robert Lynch		
ccv std 1-2 b	ASTM-D2504	CCV	R44786	12/8/2011 3:44:00 PM	Robert Lynch		
crql std 2% b	ASTM-D2504	CRQL	R44786	12/8/2011 4:03:00 PM	Robert Lynch		

RTI Laboratories

ANALYTICAL RUN Summary

22-Dec-11

RunNo 44786

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
880842	mblk	ASTM-D2504	MBLK	\TA\120811\1208	12/8/2011 9:57:0	1	R44786		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
880843	ccv std 1-2 a	ASTM-D2504	CCV	\TA\120811\1208	12/8/2011 10:17:	1	R44786		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.87	2.87		2.5	0	0	0.025	0.1	0	115%	85	115	0%	
Carbon Monoxide	A	%	2.831	2.831		2.5	0	0	0.025	0.1	0	113%	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	%	2.12	2.12		2	0	0	0.025	0.5	0	106%	85	115	0%	
Nitrogen	A	%	2.643	2.643		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Oxygen	A	%	2.669	2.669		2.5	0	0	0.025	0.1	0	107%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
880844	lcs	ASTM-D2504	LCS	\TA\120811\1208	12/8/2011 10:43:	1	R44786		0	880843	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.861	2.861		2.5	0	2.87	0.025	0.1	0	114%	70	130	0%	
Carbon Monoxide	A	%	2.767	2.767		2.5	0	2.831	0.025	0.1	0	111%	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	%	2.123	2.123		2	0	2.12	0.025	0.5	0	106%	70	130	0%	
Nitrogen	A	%	2.769	2.769		2.5	0	2.643	0.025	0.1	0	111%	70	130	5%	
Oxygen	A	%	2.703	2.703		2.5	0	2.669	0.025	0.1	0	108%	70	130	1%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
880855	1111752-046b (Container-01 of 01)	ASTM-D2504	SAMP	\TA\120811\1208	12/8/2011 3:00:0	1	R44786		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	%	19.498	19.498		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
880856	1111752-046bdup	ASTM-D2504	DUP	\TA\120811\1208	12/8/2011 3:23:0	1	R44786		0	880855	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.283	0.283		0	0	0.285	0.025	0.1	0	0%	0	0	1%	
Carbon Monoxide	A	%	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	
Ethane	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Hydrogen	A	%		0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Methane	A	%	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	
Nitrogen	A	%	80.022	80.022		0	0	80.438	0.025	0.1	0	0%	0	0	1%	
Oxygen	A	%	19.298	19.298		0	0	19.498	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
880857	ccv std 1-2 b	ASTM-D2504	CCV	\TA\120811\1208	12/8/2011 3:44:0	1	R44786		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	2.86	2.86		2.5	0	0	0.025	0.1	0	114%	85	115	0%	
Carbon Monoxide	A	%	2.775	2.775		2.5	0	0	0.025	0.1	0	111%	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	%	2.124	2.124		2	0	0	0.025	0.5	0	106%	85	115	0%	
Nitrogen	A	%	2.682	2.682		2.5	0	0	0.025	0.1	0	107%	85	115	0%	
Oxygen	A	%	2.68	2.68		2.5	0	0	0.025	0.1	0	107%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
880858	crql std 2% b	ASTM-D2504	CRQL	\TA\120811\1208	12/8/2011 4:03:0	1	R44786		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	%	0.349	0.349		0.3	0	0	0.025	0.1	0	116%	80	120	0%	
Carbon Monoxide	A	%	0.143	0.143		0.14	0	0	0.025	0.1	0	102%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\120811\12081102.D Vial: 1
Acq On : 8 Dec 2011 10:17 am 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	2.669	-6.8	0	0.04
2	Nitrogen	2.500	2.643	-5.7	0	0.03
3	Carbon Monoxide	2.500	2.831	-13.2	0	0.00
4	Methane	2.000	2.120	-6.0	0	-0.02
5	Carbon dioxide	2.500	2.870	-14.8	0	-0.04

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\120811\12081102.D Vial: 1
Acq On : 8 Dec 2011 10:17 am 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 Thu Dec 08 20:05:13 2011 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\120811\12081102.D Vial: 1
Acq On : 8 Dec 2011 10:17 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 17:26 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 :

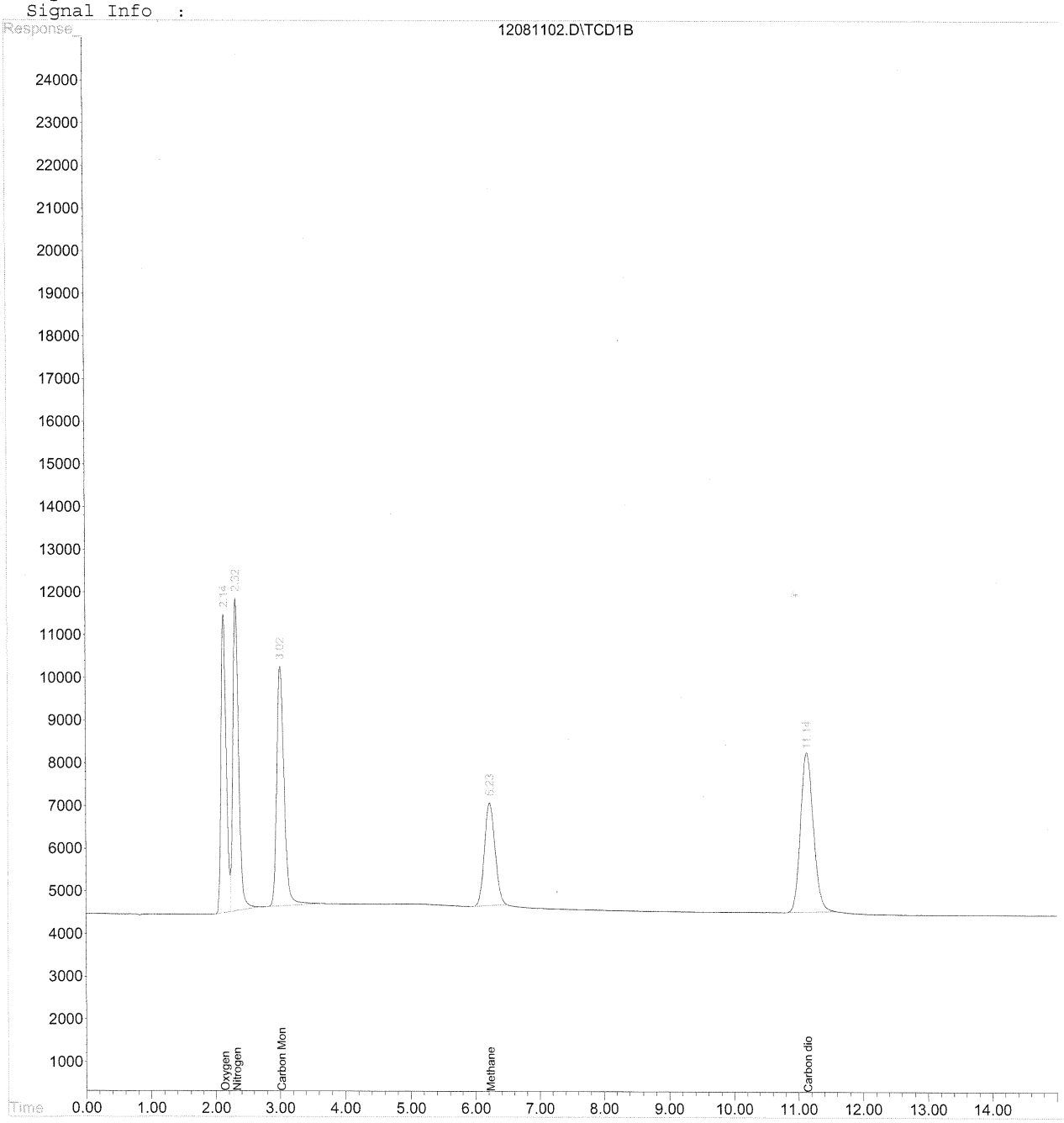
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1)	Oxygen	2.14	382690	2.669	%
2)	Nitrogen	2.33	455264	2.643	%
3)	Carbon Monoxide	3.02	445898	2.831	%
4)	Methane	6.23	274581	2.120	%
5)	Carbon dioxide	11.14	522481	2.870	%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\120811\12081102.D Vial: 1
Acq On : 8 Dec 2011 10:17 am Operator:
Sample : ccv std 1-2 a Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Dec 8 17:26 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\120811\12081116.D Vial: 1
Acq On : 8 Dec 2011 3:44 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	2.680	-7.2	0	0.04
2	Nitrogen	2.500	2.682	-7.3	0	0.02
3	Carbon Monoxide	2.500	2.775	-11.0	0	-0.01
4	Methane	2.000	2.124	-6.2	0	-0.02
5	Carbon dioxide	2.500	2.860	-14.4	0	-0.04

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\120811\12081116.D Vial: 1
Acq On : 8 Dec 2011 3:44 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 Dec 08 20:05:03 2011 TESTCAL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\120811\12081116.D Vial: 1
Acq On : 8 Dec 2011 3:44 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 17:27 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 :

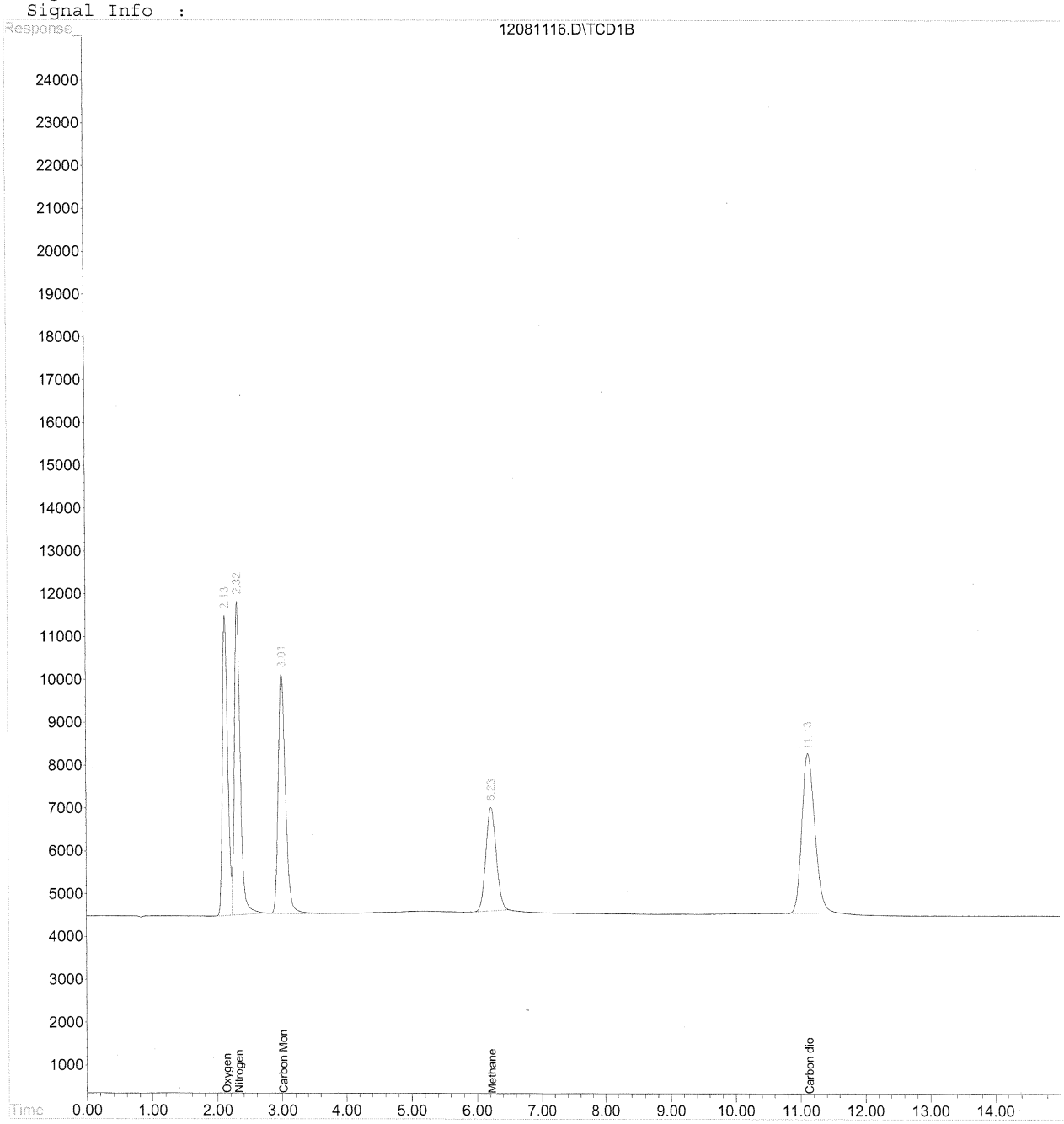
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	384381	2.680 %
2)	Nitrogen	2.32	462081	2.682 %
3)	Carbon Monoxide	3.01	437061	2.775 %
4)	Methane	6.23	275073	2.124 %
5)	Carbon dioxide	11.14	520575	2.860 %

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\120811\12081116.D Vial: 1
Acq On : 8 Dec 2011 3:44 pm Operator:
Sample : ccv std 1-2 b Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Dec 8 17:27 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 :



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

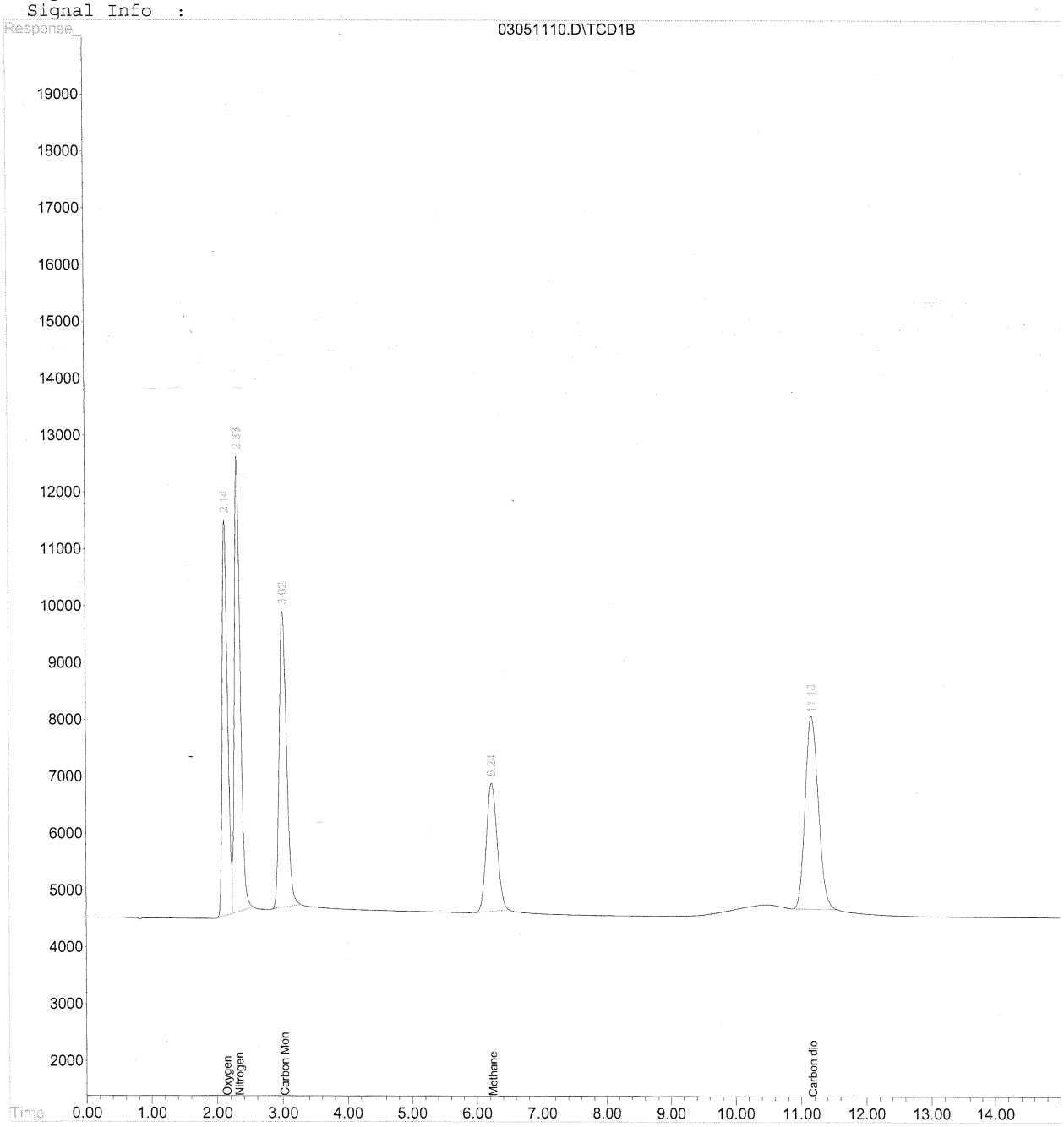
Quant Method : C:\HPCHEM\2\METHODS\030511.M (Chemstation Integrator)
Title :
Last Update : Thu May 12 16:13:25 2011
Response via : Initial Calibration
DataAcq Meth : TCD.M

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 :