Atmospheric Analysis & Consulting, Inc.

CLIENT	: Soil Water Air Protection Enterprise
PROJECT NAME	: Bridgeton Sanitary Landfill Air Quality Assessment
AAC PROJECT NO.	: 130647
REPORT DATE	: 06/03/2013

On May 30, 2013, Atmospheric Analysis & Consulting, Inc. received eight (8) Six-Liter Summa Canisters for Volatile Organic Compounds analysis by EPA method TO-15. Upon receipt each sample was assigned a unique Laboratory ID number as follows:

Client ID	Lab ID	Return Pressure (mmHga)
U-1 W7N-Canister	130647-63190	517.8
U-2 W7S-Canister	130647-63191	588.7
D-1 JWest-Canister	130647-63192	580.1
D-2 W4-Canister	130647-63193	390.1
U-1 W7E-Canister	130647-63194	699.5
U-2 W7W-Canister	130647-63195	609.0
D-1 W5-Canister	130647-63196	641.1
D-2 I-Canister	130647-63197	380.1

An initial reading of each canister's vacuum was taken and recorded. Subsequently, each canister was brought to positive pressure using UHP-He and the final pressure was recorded.

TO-15 Analysis - Up to a 500 mL aliquot of sample is concentrated, put through a water and CO_2 management system, cryofocused and injected into the GC/MS (full scan mode) for analysis following EPA Method TO-15 as specified in the SOW.

No problems were encountered during receiving, preparation and/ or analysis of these samples. The test results included in this report meet all requirements of the NELAC Standards and/or AAC SOP# TO.15.10.

I certify that this data is technically accurate, complete and in compliance with the terms and conditions of the contract. The Laboratory Director or his designee, as verified by the following signature, has authorized the release of the data contained in this hardcopy data package.

If you have any questions or require further explanation of data results, please contact the undersigned.

Marcus Hueppe
Laboratory Director

This report consists of 79 pages.

ACCREDITED IN ACCORDANCE WITH nelac Certificate#E87837

1534 Eastman Ave., Ste. A • Ventura, • CA 93003 www.aaclab.com • (805) 650-1642 • FAX (805) 650-1644

CANISTER PRESSURE LOG

Client: Soil Water Air Protection Ent Project No.: 130647

Date: 5/30/2013

Canister #	Sample #	Initial Pressure	Final Pressure
687	63190	517.8	1015.2
705	63191	588.7	1018.5
704	63192	580.1	1021.6
706	63193	390.1	1025.8
701	63194	699.5	1019.9
723	63195	609.0	1023.6
669	63196	641.1	1016.6
734	63197	380.1	1030.3

1

AAC#130647

CHAIN OF CUSTODY RECORD / ANALYTICAL REQUEST FORM

Bridgeton Sanitary Landfill Air Quality Assessment

Client Name: SOIL / WATER AIR PROTECTION ENTERPRISE	Telephone No. / Fax No.: (310) 434-0110 / (310) 434-0011
Project Manager: PAUL ROSENFELD, PH.D.	Date: **may 22nd, 2013**
Address: 1640 FIFTH STREET, SUITE 204, SANTA MONICA, CA 90401	Page 1 of 1
Project Name and Location: BRIDGETON SANITARY LANDFILL AIR QUALITY ASSESSMENT	
Sampled By: John Blank	Sampler Signature: John Blank

LAB ID	SAMPLE ID NUMBER		Type	Date	Time	VOCS - EPA TO-15	Reduced Sulfur Compounds - ASTM D5504	Carbonyls - EPA TO-11A	Carboxlyic Acids - Tube GC-MS	HCL - NIOSH 7903	Ammonia - OSHA ID-188	SO2 - OSHA ID-200	HCN - NIOSH 6010	Amines - NIOSH 2010M	Fixed Gases - EPA 3C	PAHs / Dioxins EPA TO-13A / 9A	Mercury - NIOSH 6009	Odor Evaluation	Special Instructions / Conditions of Receipt
63190	U-1 W7N	Canister		22-May	4 Hr	X	X												Canister # 687 (805)
63191	U-2 W7S	Canister		22-May	4 Hr	X	X												Canister # 705 (803)
63192	D-1 JWest	Canister		22-May	4 Hr	X	X												Canister # 704 (804)
63193	D-2 W4	Canister		22-May	4 Hr	X	X												Canister # 706 (709)

REQUESTED TESTS / ANALYSES

Requested Turnaround Time: Standard turn-around for all analyses. If possible deliver report within 2 weeks.	QC Requirements: Provide Level IV QC Package for all Analyses.

Relinquished By: **John Blank**	Date: **may 22nd,**	12 Noon	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date: 5/30/13	Time: 1100

AAC# 130647

CHAIN OF CUSTODY RECORD / ANALYTICAL REQUEST FORM

Bridgeton Sanitary Landfill Air Quality Assessment

Client Name: SOIL / WATER AIR PROTECTION ENTERPRISE	Telephone No. / Fax No.: (310) 434-0110 / (310) 434-0011	Date: May 23 — Page 1 of 1
Project Manager: PAUL ROSENFELD, PH.D.		
Address: 1640 FIFTH STREET, SUITE 204, SANTA MONICA, CA 90401		
Project Name and Location: BRIDGETON SANITARY LANDFILL AIR QUALITY ASSESSMENT		
Sampled By: John Blank	Sampler Signature: John Blank	

LAB ID	SAMPLE ID NUMBER		Type	Date	Time	VOCS - EPA TO-15	Reduced Sulfur Compounds - ASTM D5504	Carbonyls - EPA TO-11A	Carboxlyic Acids - Tube GC-MS	HCL - NIOSH 7903	Ammonia - OSHA ID-188	SO2 - OSHA ID-200	HCN - NIOSH 6010	Amines - NIOSH 2010M	Fixed Gases - EPA 3C	PAHs / Dioxins EPA TO-13A / 9A	Mercury - NIOSH 6009	Odor Evaluation	Special Instructions / Conditions of Receipt
603194	U-1 W76	Canister		may 23	4 Hr	X	X												Canister # 701
603195	U-2 W7W	Canister		"	4 Hr	X	X												Canister # ~~654~~ 723
603196	D-1 . W5	Canister ✓		"	4 Hr	X	X												Canister # ~~723~~ 669
603197	D-2 - I	Canister		"	4 Hr	X	X												Canister # 734

Requested Turnaround Time: Standard turn-around for all analyses. If possible deliver report within 2 weeks.	QC Requirements: Provide Level IV QC Package for all Analyses.

Relinquished By: John Blank	Date: 23	12 Noon	Received By:	Date:	**Time:**	
Relinquished By:	Date:	Time:	Received By:	Date:	**Time:**	
Relinquished By:	Date:	Time:	Received By:	Date: 5/30/13	**Time:** 1100	

Atmospheric Analysis and Consulting Inc.
Canister Sampling Field Data Sheet

GENERAL INFORMATION

Project Name and/or ID No.: SWAPE Project: 601 Bridgeton Landfill

Site Address and/or ID No: Bridgeton Sanitary Landfill, Bridgeton, Missouri

Sample Name and/or ID No.: U-1 INTN Canister

AAC Batch ID: 130647 AAC Sample ID: 63190

SAMPLING INFORMATION

Start Date/Time: 5/22/13 10:07 Stop Date/Time: 5/22/13 14:07

Start Temp/Pressure*: 18°C / 29.7 Stop Temp/Pressure*: 19°C / 29.7

Initial Can Pressure**: -29 Final Can Pressure**: -9.5

** Ambient Barometric Reading where sample is being taken (C / inHg) ** Flow Controller Gauge Reading (inHg)*

Comments:

JOHN BLANK
Sampler Name (Print)

Sampler Signature/Date

LABORATORY INFORMATION

Canister Size: 6-Liter Sampling Period: 4-Hour

Canister Serial No.: 687 Flow Controller Serial No: 805

Initial Pressure: 4.0 Certified Flow Rate: 18.0

Return Pressure: 517.8 Certified By/Date: JJ 5/23/2013

Final Pressure: 1015.2 Flow Rate upon Return: 22.1

Date Shipped From Lab: 5/13/2013 Shipped By: JJ

Date Returned to Lab: 5/30/2013 Received By: JJ

Flow Controller Certification File ID: MS03/05061305

Canister Certification File ID: MS03/05101320

Certification Type: SIM ____ SCAN ✓ NJLL ____ PAMS ____ Other ____

6/3/13
Chemist Signature/Date

MW 6/3/13
Lab Manager Signature/Date

Sampler is required to fill out all highlighted sections during sampling. All remaining sections will be completed upon return by the laboratory.

Atmospheric Analysis and Consulting Inc.
Canister Sampling Field Data Sheet

GENERAL INFORMATION

Project Name and/or ID No.: SWAPE Project: 601 Bridgeton Landfill

Site Address and/or ID No: Bridgeton Sanitary Landfill, Bridgeton, Missouri

Sample Name and/or ID No.: U-2 WTS Canister

AAC Batch ID: 130647 AAC Sample ID: 63191

SAMPLING INFORMATION

Start Date/Time: 5/22/13 10:14 Stop Date/Time: 5/22/13 14:14

Start Temp/Pressure*: 18°C / 29.7 Stop Temp/Pressure*: 19°C / 29.7

Initial Can Pressure**: -30 Final Can Pressure**: -5

** Ambient Barometric Reading where sample is being taken (C / inHg) ** Flow Controller Gauge Reading (inHg)*

Comments:

John Blank
Sampler Name (Print)

Sampler Signature/Date

LABORATORY INFORMATION

Canister Size: 6-Liter Sampling Period: 4-Hour

Canister Serial No.: 705 Flow Controller Serial No: 803

Initial Pressure: 4.2 Certified Flow Rate: 18.0

Return Pressure: 588.7 Certified By/Date: 5/23/2013

Final Pressure: 1018.5 Flow Rate upon Return: 21.5

Date Shipped From Lab: 5/13/2013 Shipped By:

Date Returned to Lab: 5/30/2013 Received By:

Flow Controller Certification File ID: m503/05061305

Canister Certification File ID: m503/05101317

Certification Type: SIM ____ SCAN ✓ NILL ____ PAMS ____ Other ____

Chemist Signature/Date

6/5/13
Lab Manager Signature/Date

Sampler is required to fill out all highlighted sections during sampling. All remaining sections will be completed upon return by the laboratory.

Atmospheric Analysis and Consulting Inc.
Canister Sampling Field Data Sheet

GENERAL INFORMATION

Project Name and/or ID No.: SWAPE Project: 601 Bridgeton Landfill

Site Address and/or ID No: Bridgeton Sanitary Landfill, Bridgeton, Missouri

Sample Name and/or ID No.: D-1 INLET CANISTER

AAC Batch ID: 130647 AAC Sample ID: 63192

SAMPLING INFORMATION

Start Date/Time: 5/22/13 9:23 Stop Date/Time: 5/22/13 13:23

Start Temp/Pressure*: 18C / 29.7 Stop Temp/Pressure*: 19C / 29.7

Initial Can Pressure**: -29 Final Can Pressure**: -7.5

** Ambient Barometric Reading where sample is being taken (C / inHg) ** Flow Controller Gauge Reading (inHg)*

Comments:

John BLANK
Sampler Name (Print)

Sampler Signature/Date

LABORATORY INFORMATION

Canister Size: 6-Liter Sampling Period: 4-Hour

Canister Serial No.: 704 Flow Controller Serial No: 804

Initial Pressure: 4.0 Certified Flow Rate: 18.0

Return Pressure: 580.1 Certified By/Date: [illegible] 5/23/2013

Final Pressure: 1021.6 Flow Rate upon Return: 20.2

Date Shipped From Lab: 5/13/2013 Shipped By: [illegible]

Date Returned to Lab: 5/30/2013 Received By: [illegible]

Flow Controller Certification File ID: MS031 05061305

Canister Certification File ID: MS031 05101316

Certification Type: SIM ___ SCAN ✓ NJLL ___ PAMS ___ Other ___

Chemist Signature/Date

[illegible] 6/5/2013
Lab Manager Signature/Date

Sampler is required to fill out all highlighted sections during sampling.
All remaining sections will be completed upon return by the laboratory.

Atmospheric Analysis and Consulting Inc.
Canister Sampling Field Data Sheet

GENERAL INFORMATION

Project Name and/or ID No.: SWAPE Project: 601 Bridgeton Landfill

Site Address and/or ID No: Bridgeton Sanitary Landfill, Bridgeton, Missouri

Sample Name and/or ID No.: D-2 WY Canister

AAC Batch ID: 130647 AAC Sample ID: 63193

SAMPLING INFORMATION

Start Date/Time: 5/22/13 9:28 Stop Date/Time: 5/22/13 13:38

Start Temp/Pressure*: 18°C / 29.7 Stop Temp/Pressure*: 19°C / 29.7

Initial Can Pressure**: -2 Final Can Pressure**: -15

** Ambient Barometric Reading where sample is being taken (C / inHg) ** Flow Controller Gauge Reading (inHg)*

Comments:

John Blank
Sampler Name (Print)

Sampler Signature/Date

LABORATORY INFORMATION

Canister Size: 6-Liter Sampling Period: 4-Hour

Canister Serial No.: 706 Flow Controller Serial No: 709

Initial Pressure: 4.0 Certified Flow Rate: 18.0

Return Pressure: 390.1 Certified By/Date: 5/23/2013

Final Pressure: 1025.8 Flow Rate upon Return: 21.8

Date Shipped From Lab: 5/13/2013 Shipped By:

Date Returned to Lab: 5/30/2013 Received By:

Flow Controller Certification File ID: MS03/0506/305

Canister Certification File ID: MS03/0510/315

Certification Type: SIM ___ SCAN ✓ NJLL ___ PAMS ___ Other ___

06/03/0
Chemist Signature/Date

MK 6/5/13
Lab Manager Signature/Date

Sampler is required to fill out all highlighted sections during sampling. All remaining sections will be completed upon return by the laboratory.

Atmospheric Analysis and Consulting Inc.
Canister Sampling Field Data Sheet

GENERAL INFORMATION

Project Name and/or ID No.: SWAPE Project: 601 Bridgeton Landfill

Site Address and/or ID No: Bridgeton Sanitary Landfill, Bridgeton, Missouri

Sample Name and/or ID No.: V-1 WTE Canister

AAC Batch ID: 130647 AAC Sample ID: 63199

SAMPLING INFORMATION

Start Date/Time: 5/23/13 8:45 Stop Date/Time: 5/23/13 12:45

Start Temp/Pressure*: 16°C / 29.9 Stop Temp/Pressure*: 17°C / 30.03

Initial Can Pressure**: -26.5 Final Can Pressure**: -0.5

** Ambient Barometric Reading where sample is being taken (C / inHg) ** Flow Controller Gauge Reading (inHg)*

Comments:

Jonathan Blount
Sampler Name (Print)

Jonathan Blount
Sampler Signature/Date

LABORATORY INFORMATION

Canister Size: 6-Liter Sampling Period: 4-Hour

Canister Serial No.: 701 Flow Controller Serial No: 715

Initial Pressure: 0.3 Certified Flow Rate: 18.0

Return Pressure: 699.5 Certified By/Date: JJ 5/20/2013

Final Pressure: 1019.9 Flow Rate upon Return: 18.4

Date Shipped From Lab: 5/8/2013 Shipped By: JJ

Date Returned to Lab: 5/30/2013 Received By: JJ

Flow Controller Certification File ID: MS03/05201310

Canister Certification File ID: MS03/05071313

Certification Type: SIM ___ SCAN ✓ NILL ___ PAMS ___ Other ___

06/03/13
Chemist Signature/Date

MM 6/5/13
Lab Manager Signature/Date

Sampler is required to fill out all highlighted sections during sampling.
All remaining sections will be completed upon return by the laboratory.

Atmospheric Analysis and Consulting Inc.
Canister Sampling Field Data Sheet

GENERAL INFORMATION

Project Name and/or ID No.: SWAPE Project: 601 Bridgeton Landfill

Site Address and/or ID No: Bridgeton Sanitary Landfill, Bridgeton, Missouri

Sample Name and/or ID No.: U-2 W7W Canister

AAC Batch ID: 130617 AAC Sample ID: 03195

SAMPLING INFORMATION

Start Date/Time: 5/23/13 8:50 Stop Date/Time: 5/23/13 12:50

Start Temp/Pressure*: 16C/29.9 Stop Temp/Pressure*: 17C/30.03

Initial Can Pressure**: -30 Final Can Pressure**: -5

** Ambient Barometric Reading where sample is being taken (C / inHg) ** Flow Controller Gauge Reading (inHg)*

Comments:

John Blank
Sampler Name (Print)

Sampler Signature/Date

LABORATORY INFORMATION

Canister Size: 6-Liter Sampling Period: 4-Hour

Canister Serial No.: 723 Flow Controller Serial No: 694

Initial Pressure: 0.3 Certified Flow Rate: 18.0

Return Pressure: 6090 Certified By/Date: JJ 5/20/2013

Final Pressure: 10236 Flow Rate upon Return: 18.8

Date Shipped From Lab: 5/18/2013 Shipped By: JJ

Date Returned to Lab: 5/30/2013 Received By: JJ

Flow Controller Certification File ID: M503/052013/0

Canister Certification File ID: M503/050713/15

Certification Type: SIM ___ SCAN ✓ NJLL ___ PAMS ___ Other ___

Chemist Signature/Date

MM 6/5/13
Lab Manager Signature/Date

Sampler is required to fill out all highlighted sections during sampling. All remaining sections will be completed upon return by the laboratory.

Atmospheric Analysis and Consulting Inc.
Canister Sampling Field Data Sheet

GENERAL INFORMATION

Project Name and/or ID No.: SWAPE Project: 601 Bridgeton Landfill

Site Address and/or ID No: Bridgeton Sanitary Landfill, Bridgeton, Missouri

Sample Name and/or ID No.: D-1 1115 Canister

AAC Batch ID: 130647 AAC Sample ID: 63196

SAMPLING INFORMATION

Start Date/Time: 5/23/13 9:30 Stop Date/Time: 5/23/13 13:30

Start Temp/Pressure*: 16°C / 29.9 Stop Temp/Pressure*: 17°C / 30.03

Initial Can Pressure**: -30 Final Can Pressure**: -11

** Ambient Barometric Reading where sample is being taken (C / inHg) ** Flow Controller Gauge Reading (inHg)*

Comments:

John Blank
Sampler Name (Print)

Sampler Signature/Date

LABORATORY INFORMATION

Canister Size: 6-Liter Sampling Period: 4-Hour

Canister Serial No.: 669 Flow Controller Serial No: 698

Initial Pressure: 0.3 Certified Flow Rate: 18.0

Return Pressure: 641.1 Certified By/Date: 5/17/2013

Final Pressure: 1016.6 Flow Rate upon Return:

Date Shipped From Lab: 5/8/2013 Shipped By:

Date Returned to Lab: 5/30/2013 Received By:

Flow Controller Certification File ID: M803/5141322

Canister Certification File ID: M603/050713I7

Certification Type: SIM ____ SCAN ✓ NJLL ____ PAMS ____ Other ____

6/3/13
Chemist Signature/Date

6/5/13
Lab Manager Signature/Date

Sampler is required to fill out all highlighted sections during sampling.
All remaining sections will be completed upon return by the laboratory.

Atmospheric Analysis and Consulting Inc.
Canister Sampling Field Data Sheet

GENERAL INFORMATION

Project Name and/or ID No.: SWAPE Project: 601 Bridgeton Landfill

Site Address and/or ID No: Bridgeton Sanitary Landfill, Bridgeton, Missouri

Sample Name and/or ID No.: D-2 I Canister

AAC Batch ID: 130697 AAC Sample ID: 63/97

SAMPLING INFORMATION

Start Date/Time: 5/23/13 10:10 Stop Date/Time: 5/23/13 14:10

Start Temp/Pressure*: 16°C/29.9 Stop Temp/Pressure*: 17°C/30.03

Initial Can Pressure**: -30 Final Can Pressure**: -12

** Ambient Barometric Reading where sample is being taken (C / inHg) ** Flow Controller Gauge Reading (inHg)*

Comments:

John Blank
Sampler Name (Print)

Sampler Signature/Date

LABORATORY INFORMATION

Canister Size: 6-Liter Sampling Period: 4-Hour

Canister Serial No.: 734 Flow Controller Serial No: 718

Initial Pressure: 0.3 Certified Flow Rate: 18.0

Return Pressure: 380.1 Certified By/Date: JJ 5/17/2013

Final Pressure: 1030.3 Flow Rate upon Return:

Date Shipped From Lab: 5/8/2013 Shipped By: JJ

Date Returned to Lab: 5/30/2013 Received By: JJ

Flow Controller Certification File ID: M503/05141322

Canister Certification File ID: M503/05071316

Certification Type: SIM ___ SCAN √ NJLL ___ PAMS ___ Other ___

Chemist Signature/Date

MM 6/5/13
Lab Manager Signature/Date

Sampler is required to fill out all highlighted sections during sampling. All remaining sections will be completed upon return by the laboratory.

TO-15 REPORTS

Laboratory Analysis Report

CLIENT : Soil Water Air Protection Enterprise
PROJECT NO : 130647
MATRIX : AIR
UNITS : PPB (v/v)

DATE RECEIVED : 05/30/2013
DATE REPORTED : 06/03/2013

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	U-1 W7N-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	U-2 W7S-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	130647-63190				130647-63191				
Date Sampled	05/22/2013				05/22/2013				
Date Analyzed	05/31/2013				05/31/2013				
Can Dilution Factor	1.96				1.73				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Chlorodifluoromethane	0.31	J	1.0	0.98	0.28	J	1.0	0.87	0.5
Propene	<SRL	U	1.0	1.96	<SRL	U	1.0	1.73	1.0
Dichlorodifluoromethane	0.55	J	1.0	0.98	0.55	J	1.0	0.87	0.5
Chloromethane	0.45	J	1.0	0.98	0.54	J	1.0	0.87	0.5
Dichlorotetrafluoroethane	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Vinyl Chloride	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Methanol	14.4		1.0	9.80	22.4		1.0	8.65	5.0
1,3-Butadiene	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Bromomethane	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Chloroethane	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Dichlorofluoromethane	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Ethanol	5.80		1.0	3.92	4.24		1.0	3.46	2.0
Vinyl Bromide	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Acetone	5.12		1.0	3.92	4.45		1.0	3.46	2.0
Trichlorofluoromethane	0.27	J	1.0	0.98	0.26	J	1.0	0.87	0.5
2-Propanol (IPA)	1.65	J	1.0	3.92	1.25	J	1.0	3.46	2.0
Acrylonitrile	<SRL	U	1.0	1.96	<SRL	U	1.0	1.73	1.0
1,1-Dichloroethene	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Methylene Chloride (DCM)	<SRL	U	1.0	1.96	<SRL	U	1.0	1.73	1.0
Allyl Chloride	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Carbon Disulfide	NR	U	1.0	0.98	NR	U	1.0	0.87	0.5
Trichlorotrifluoroethane	<SRL	U	1.0	0.98	0.10	J	1.0	0.87	0.5
trans-1,2-Dichloroethene	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
1,1-Dichloroethane	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Methyl Tert Butyl Ether (MTBE)	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Vinyl Acetate	<SRL	U	1.0	1.96	<SRL	U	1.0	1.73	1.0
2-Butanone (MEK)	<SRL	U	1.0	1.96	0.42	J	1.0	1.73	1.0
cis-1,2-Dichloroethene	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Hexane	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Chloroform	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Ethyl Acetate	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Tetrahydrofuran	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
1,2-Dichloroethane	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
1,1,1-Trichloroethane	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5

1534 Eastman Ave., Ste. A • Ventura, • CA 93003 www.aaclab.com • (805) 650-1642 • FAX (805) 650-1644

Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report

CLIENT : **Soil Water Air Protection Enterprise**
PROJECT NO : **130647**
MATRIX : **AIR**
UNITS : **PPB (v/v)**

DATE RECEIVED : **05/30/2013**
DATE REPORTED : **06/03/2013**

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	U-1 W7N-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	U-2 W7S-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	130647-63190				130647-63191				
Date Sampled	05/22/2013				05/22/2013				
Date Analyzed	05/31/2013				05/31/2013				
Can Dilution Factor	1.96				1.73				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Benzene	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Carbon Tetrachloride	<SRL	U	1.0	0.98	0.09	J	1.0	0.87	0.5
Cyclohexane	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
1,2-Dichloropropane	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Bromodichloromethane	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
1,4-Dioxane	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Trichloroethene (TCE)	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
2,2,4-Trimethylpentane	0.43	J	1.0	0.98	0.26	J	1.0	0.87	0.5
Heptane	0.14	J	1.0	0.98	0.10	J	1.0	0.87	0.5
cis-1,3-Dichloropropene	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
4-Methyl-2-pentanone (MiBK)	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
trans-1,3-Dichloropropene	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
1,1,2-Trichloroethane	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Toluene	0.61	J	1.0	0.98	0.57	J	1.0	0.87	0.5
2-Hexanone (MBK)	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Dibromochloromethane	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
1,2-Dibromoethane	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Tetrachloroethene (PCE)	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Chlorobenzene	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Ethylbenzene	0.14	J	1.0	0.98	0.16	J	1.0	0.87	0.5
m & p-Xylenes	0.47	J	1.0	1.96	0.47	J	1.0	1.73	1.0
Bromoform	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Styrene	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
1,1,2,2-Tetrachloroethane	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
o-Xylene	0.22	J	1.0	0.98	0.21	J	1.0	0.87	0.5
4-Ethyltoluene	<SRL	U	1.0	0.98	0.10	J	1.0	0.87	0.5
1,3,5-Trimethylbenzene	<SRL	U	1.0	0.98	0.09	J	1.0	0.87	0.5
1,2,4-Trimethylbenzene	0.31	J	1.0	0.98	0.29	J	1.0	0.87	0.5
Benzyl Chloride (a-Chlorotoluene)	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
1,3-Dichlorobenzene	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
1,4-Dichlorobenzene	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
1,2-Dichlorobenzene	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
1,2,4-Trichlorobenzene	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
Hexachlorobutadiene	<SRL	U	1.0	0.98	<SRL	U	1.0	0.87	0.5
BFB-Surrogate Std. % Recovery	102%				106%				70-130%

U - Compound was analyzed for, but was not detected at or above the SRL.
J - Analyte was detected. However the analyte concentration is an estimated value, which is between the Sample Reporting Limit (SRL) and the Sample Quantitation Limit (SQL).
SQL - Sample Quantitation Limit is the Limit Of Quantitation (LOQ) x Dilution Factors.
NR - Not Reported on these analysis.

Marcus Hueppe
Laboratoy Director

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Laboratory Analysis Report

CLIENT : Soil Water Air Protection Enterprise
PROJECT NO : 130647
MATRIX : AIR
UNITS : PPB (v/v)

DATE RECEIVED : 05/30/2013
DATE REPORTED : 06/03/2013

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	D-1 JWest-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	D-2 W4-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	130647-63192				130647-63193				
Date Sampled	05/22/2013				05/22/2013				
Date Analyzed	05/31/2013				05/31/2013				
Can Dilution Factor	1.76				2.63				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Chlorodifluoromethane	0.28	J	1.0	0.88	0.32	J	1.0	1.31	0.5
Propene	1.18	J	1.0	1.76	2.08	J	1.0	2.63	1.0
Dichlorodifluoromethane	0.55	J	1.0	0.88	0.58	J	1.0	1.31	0.5
Chloromethane	0.51	J	1.0	0.88	0.55	J	1.0	1.31	0.5
Dichlorotetrafluoroethane	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Vinyl Chloride	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Methanol	23.0		1.0	8.81	97.2		1.0	13.2	5.0
1,3-Butadiene	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Bromomethane	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Chloroethane	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Dichlorofluoromethane	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Ethanol	5.42		1.0	3.52	10.2		1.0	5.26	2.0
Vinyl Bromide	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Acetone	7.19		1.0	3.52	15.3		1.0	5.26	2.0
Trichlorofluoromethane	0.30	J	1.0	0.88	0.32	J	1.0	1.31	0.5
2-Propanol (IPA)	9.42		1.0	3.52	19.9		1.0	5.26	2.0
Acrylonitrile	<SRL	U	1.0	1.76	<SRL	U	1.0	2.63	1.0
1,1-Dichloroethene	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Methylene Chloride (DCM)	<SRL	U	1.0	1.76	<SRL	U	1.0	2.63	1.0
Allyl Chloride	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Carbon Disulfide	NR	U	1.0	0.88	NR	U	1.0	1.31	0.5
Trichlorotrifluoroethane	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
trans-1,2-Dichloroethene	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
1,1-Dichloroethane	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Methyl Tert Butyl Ether (MTBE)	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Vinyl Acetate	<SRL	U	1.0	1.76	<SRL	U	1.0	2.63	1.0
2-Butanone (MEK)	0.62	J	1.0	1.76	2.34	J	1.0	2.63	1.0
cis-1,2-Dichloroethene	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Hexane	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Chloroform	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Ethyl Acetate	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Tetrahydrofuran	<SRL	U	1.0	0.88	1.45		1.0	1.31	0.5
1,2-Dichloroethane	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
1,1,1-Trichloroethane	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5

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Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report

CLIENT : Soil Water Air Protection Enterprise
PROJECT NO : 130647
MATRIX : AIR
UNITS : PPB (v/v)

DATE RECEIVED : 05/30/2013
DATE REPORTED : 06/03/2013

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	D-1 JWest-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	D-2 W4-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	130647-63192				130647-63193				
Date Sampled	05/22/2013				05/22/2013				
Date Analyzed	05/31/2013				05/31/2013				
Can Dilution Factor	1.76				2.63				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Benzene	0.41	J	1.0	0.88	1.68		1.0	1.31	0.5
Carbon Tetrachloride	0.09	J	1.0	0.88	<SRL	U	1.0	1.31	0.5
Cyclohexane	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
1,2-Dichloropropane	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Bromodichloromethane	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
1,4-Dioxane	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Trichloroethene (TCE)	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
2,2,4-Trimethylpentane	0.37	J	1.0	0.88	0.58	J	1.0	1.31	0.5
Heptane	0.12	J	1.0	0.88	0.18	J	1.0	1.31	0.5
cis-1,3-Dichloropropene	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
4-Methyl-2-pentanone (MiBK)	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
trans-1,3-Dichloropropene	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
1,1,2-Trichloroethane	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Toluene	0.58	J	1.0	0.88	1.00	J	1.0	1.31	0.5
2-Hexanone (MBK)	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Dibromochloromethane	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
1,2-Dibromoethane	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Tetrachloroethene (PCE)	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Chlorobenzene	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Ethylbenzene	0.16	J	1.0	0.88	0.32	J	1.0	1.31	0.5
m & p-Xylenes	0.48	J	1.0	1.76	0.79	J	1.0	2.63	1.0
Bromoform	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Styrene	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
1,1,2,2-Tetrachloroethane	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
o-Xylene	0.21	J	1.0	0.88	0.37	J	1.0	1.31	0.5
4-Ethyltoluene	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
1,3,5-Trimethylbenzene	0.09	J	1.0	0.88	0.13	J	1.0	1.31	0.5
1,2,4-Trimethylbenzene	0.32	J	1.0	0.88	0.47	J	1.0	1.31	0.5
Benzyl Chloride (a-Chlorotoluene)	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
1,3-Dichlorobenzene	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
1,4-Dichlorobenzene	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
1,2-Dichlorobenzene	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
1,2,4-Trichlorobenzene	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
Hexachlorobutadiene	<SRL	U	1.0	0.88	<SRL	U	1.0	1.31	0.5
BFB-Surrogate Std. % Recovery	103%				105%				70-130%

U - Compound was analyzed for, but was not detected at or above the SRL.
J - Analyte was detected. However the analyte concentration is an estimated value, which is between the Sample Reporting Limit (SRL) and the Sample Quantitation Limit (SQL).
SQL - Sample Quantitation Limit is the Limit Of Quantitation (LOQ) x Dilution Factors.
NR - Not Reported on these analysis.

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Laboratory Analysis Report

CLIENT : Soil Water Air Protection Enterprise
PROJECT NO : 130647
MATRIX : AIR
UNITS : PPB (v/v)

DATE RECEIVED : 05/30/2013
DATE REPORTED : 06/03/2013

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	U-1 W7E-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	U-2 W7W-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	130647-63194				130647-63195				
Date Sampled	05/23/2013				05/23/2013				
Date Analyzed	05/31/2013				05/31/2013				
Can Dilution Factor	1.46				1.68				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Chlorodifluoromethane	0.29	J	1.0	0.73	0.30	J	1.0	0.84	0.5
Propene	1.05	J	1.0	1.46	1.31	J	1.0	1.68	1.0
Dichlorodifluoromethane	0.54	J	1.0	0.73	0.55	J	1.0	0.84	0.5
Chloromethane	0.48	J	1.0	0.73	0.50	J	1.0	0.84	0.5
Dichlorotetrafluoroethane	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Vinyl Chloride	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Methanol	8.41		1.0	7.29	110		5.0	42.0	5.0
1,3-Butadiene	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Bromomethane	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Chloroethane	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Dichlorofluoromethane	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Ethanol	2.77	J	1.0	2.92	9.88		1.0	3.36	2.0
Vinyl Bromide	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Acetone	7.07		1.0	2.92	8.86		1.0	3.36	2.0
Trichlorofluoromethane	0.28	J	1.0	0.73	0.27	J	1.0	0.84	0.5
2-Propanol (IPA)	9.19		1.0	2.92	3.24	J	1.0	3.36	2.0
Acrylonitrile	<SRL	U	1.0	1.46	<SRL	U	1.0	1.68	1.0
1,1-Dichloroethene	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Methylene Chloride (DCM)	<SRL	U	1.0	1.46	<SRL	U	1.0	1.68	1.0
Allyl Chloride	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Carbon Disulfide	NR	U	1.0	0.73	NR	U	1.0	0.84	0.5
Trichlorotrifluoroethane	0.10	J	1.0	0.73	0.10	J	1.0	0.84	0.5
trans-1,2-Dichloroethene	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
1,1-Dichloroethane	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Methyl Tert Butyl Ether (MTBE)	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Vinyl Acetate	<SRL	U	1.0	1.46	<SRL	U	1.0	1.68	1.0
2-Butanone (MEK)	0.44	J	1.0	1.46	3.06		1.0	1.68	1.0
cis-1,2-Dichloroethene	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Hexane	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Chloroform	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Ethyl Acetate	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Tetrahydrofuran	<SRL	U	1.0	0.73	1.55		1.0	0.84	0.5
1,2-Dichloroethane	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
1,1,1-Trichloroethane	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5

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Laboratory Analysis Report

CLIENT : Soil Water Air Protection Enterprise
PROJECT NO : 130647
MATRIX : AIR
UNITS : PPB (v/v)

DATE RECEIVED : 05/30/2013
DATE REPORTED : 06/03/2013

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	U-1 W7E-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	U-2 W7W-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	130647-63194				130647-63195				
Date Sampled	05/23/2013				05/23/2013				
Date Analyzed	05/31/2013				05/31/2013				
Can Dilution Factor	1.46				1.68				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Benzene	<SRL	U	1.0	0.73	2.03		1.0	0.84	0.5
Carbon Tetrachloride	0.09	J	1.0	0.73	0.10	J	1.0	0.84	0.5
Cyclohexane	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
1,2-Dichloropropane	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Bromodichloromethane	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
1,4-Dioxane	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Trichloroethene (TCE)	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
2,2,4-Trimethylpentane	0.10	J	1.0	0.73	0.39	J	1.0	0.84	0.5
Heptane	<SRL	U	1.0	0.73	0.18	J	1.0	0.84	0.5
cis-1,3-Dichloropropene	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
4-Methyl-2-pentanone (MiBK)	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
trans-1,3-Dichloropropene	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
1,1,2-Trichloroethane	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Toluene	0.34	J	1.0	0.73	0.99		1.0	0.84	0.5
2-Hexanone (MBK)	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Dibromochloromethane	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
1,2-Dibromoethane	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Tetrachloroethene (PCE)	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Chlorobenzene	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Ethylbenzene	0.09	J	1.0	0.73	0.25	J	1.0	0.84	0.5
m & p-Xylenes	0.26	J	1.0	1.46	0.59	J	1.0	1.68	1.0
Bromoform	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Styrene	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
1,1,2,2-Tetrachloroethane	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
o-Xylene	0.13	J	1.0	0.73	0.25	J	1.0	0.84	0.5
4-Ethyltoluene	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
1,3,5-Trimethylbenzene	<SRL	U	1.0	0.73	0.08	J	1.0	0.84	0.5
1,2,4-Trimethylbenzene	0.17	J	1.0	0.73	0.30	J	1.0	0.84	0.5
Benzyl Chloride (a-Chlorotoluene)	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
1,3-Dichlorobenzene	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
1,4-Dichlorobenzene	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
1,2-Dichlorobenzene	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
1,2,4-Trichlorobenzene	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
Hexachlorobutadiene	<SRL	U	1.0	0.73	<SRL	U	1.0	0.84	0.5
BFB-Surrogate Std. % Recovery	105%				103%				70-130%

U - Compound was analyzed for, but was not detected at or above the SRL.
J - Analyte was detected. However the analyte concentration is an estimated value, which is between the Sample Reporting Limit (SRL) and the Sample Quantitation Limit (SQL).
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Laboratory Analysis Report

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PROJECT NO : 130647
MATRIX : AIR
UNITS : PPB (v/v)

DATE RECEIVED : 05/30/2013
DATE REPORTED : 06/03/2013

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	D-1 W5-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	D-2 1-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	130647-63196				130647-63197				
Date Sampled	05/23/2013				05/23/2013				
Date Analyzed	05/31/2013				05/31/2013				
Can Dilution Factor	1.59				2.71				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Chlorodifluoromethane	0.29	J	1.0	0.79	0.41	J	1.0	1.36	0.5
Propene	0.79	J	1.0	1.59	4.39		1.0	2.71	1.0
Dichlorodifluoromethane	0.54	J	1.0	0.79	0.60	J	1.0	1.36	0.5
Chloromethane	0.51	J	1.0	0.79	0.52	J	1.0	1.36	0.5
Dichlorotetrafluoroethane	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Vinyl Chloride	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Methanol	7.55	J	1.0	7.93	49.8		1.0	13.6	5.0
1,3-Butadiene	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Bromomethane	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Chloroethane	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Dichlorofluoromethane	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Ethanol	2.66	J	1.0	3.17	7.18		1.0	5.42	2.0
Vinyl Bromide	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Acetone	4.23		1.0	3.17	6.97		1.0	5.42	2.0
Trichlorofluoromethane	0.27	J	1.0	0.79	0.30	J	1.0	1.36	0.5
2-Propanol (IPA)	2.58	J	1.0	3.17	2.20	J	1.0	5.42	2.0
Acrylonitrile	<SRL	U	1.0	1.59	<SRL	U	1.0	2.71	1.0
1,1-Dichloroethene	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Methylene Chloride (DCM)	<SRL	U	1.0	1.59	<SRL	U	1.0	2.71	1.0
Allyl Chloride	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Carbon Disulfide	NR	U	1.0	0.79	NR	U	1.0	1.36	0.5
Trichlorotrifluoroethane	0.10	J	1.0	0.79	<SRL	U	1.0	1.36	0.5
trans-1,2-Dichloroethene	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
1,1-Dichloroethane	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Methyl Tert Butyl Ether (MTBE)	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Vinyl Acetate	<SRL	U	1.0	1.59	<SRL	U	1.0	2.71	1.0
2-Butanone (MEK)	<SRL	U	1.0	1.59	1.06	J	1.0	2.71	1.0
cis-1,2-Dichloroethene	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Hexane	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Chloroform	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Ethyl Acetate	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Tetrahydrofuran	<SRL	U	1.0	0.79	0.54	J	1.0	1.36	0.5
1,2-Dichloroethane	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
1,1,1-Trichloroethane	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5

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Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report

CLIENT : Soil Water Air Protection Enterprise
PROJECT NO : 130647
MATRIX : AIR
UNITS : PPB (v/v)

DATE RECEIVED : 05/30/2013
DATE REPORTED : 06/03/2013

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	D-1 W5-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	D-2 I-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	130647-63196				130647-63197				
Date Sampled	05/23/2013				05/23/2013				
Date Analyzed	05/31/2013				05/31/2013				
Can Dilution Factor	1.59				2.71				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Benzene	<SRL	U	1.0	0.79	1.25	J	1.0	1.36	0.5
Carbon Tetrachloride	0.10	J	1.0	0.79	<SRL	U	1.0	1.36	0.5
Cyclohexane	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
1,2-Dichloropropane	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Bromodichloromethane	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
1,4-Dioxane	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Trichloroethene (TCE)	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
2,2,4-Trimethylpentane	0.14	J	1.0	0.79	0.49	J	1.0	1.36	0.5
Heptane	<SRL	U	1.0	0.79	0.16	J	1.0	1.36	0.5
cis-1,3-Dichloropropene	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
4-Methyl-2-pentanone (MiBK)	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
trans-1,3-Dichloropropene	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
1,1,2-Trichloroethane	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Toluene	0.36	J	1.0	0.79	0.95	J	1.0	1.36	0.5
2-Hexanone (MBK)	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Dibromochloromethane	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
1,2-Dibromoethane	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Tetrachloroethene (PCE)	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Chlorobenzene	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Ethylbenzene	0.10	J	1.0	0.79	0.24	J	1.0	1.36	0.5
m & p-Xylenes	0.32	J	1.0	1.59	0.70	J	1.0	2.71	1.0
Bromoform	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Styrene	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
1,1,2,2-Tetrachloroethane	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
o-Xylene	0.16	J	1.0	0.79	0.33	J	1.0	1.36	0.5
4-Ethyltoluene	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
1,3,5-Trimethylbenzene	<SRL	U	1.0	0.79	0.14	J	1.0	1.36	0.5
1,2,4-Trimethylbenzene	0.24	J	1.0	0.79	0.49	J	1.0	1.36	0.5
Benzyl Chloride (a-Chlorotoluene)	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
1,3-Dichlorobenzene	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
1,4-Dichlorobenzene	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
1,2-Dichlorobenzene	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
1,2,4-Trichlorobenzene	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
Hexachlorobutadiene	<SRL	U	1.0	0.79	<SRL	U	1.0	1.36	0.5
BFB-Surrogate Std. % Recovery	103%				101%				70-130%

U - Compound was analyzed for, but was not detected at or above the SRL.
J - Analyte was detected. However the analyte concentration is an estimated value, which is between the Sample Reporting Limit (SRL) and the Sample Quantitation Limit (SQL).
SQL - Sample Quantitation Limit is the Limit Of Quantitation (LOQ) x Dilution Factors.
NR - Not Reported on these analysis.

Marcus Hueppe
Laboratoy Director

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TO-15 QC REPORT

ANALYSIS DATE : 05/31/2013
ANALYST : JJG
INSTRUMENT ID : GC/MS-03
CALIBRATION STD ID : PS040413-01

VOLATILE ORGANIC COMPOUNDS BY EPA METHOD TO-15

Continuing Calibration Verification of the 05/15/2013 Calibration

Compounds	*Conc*	*Daily Conc*	*%REC**
4-BFB (surrogate standard)	10.00	9.62	96
Chlorodifluoromethane	10.10	9.72	96
Propene	11.00	10.37	94
Dichlorodifluoromethane	9.80	9.67	99
Chloromethane	10.10	10.04	99
Dichlorotetrafluoroethane	10.10	10.14	100
Vinyl Chloride	10.20	9.66	95
Methanol	4.90	4.94	101
1,3-Butadiene	10.50	9.53	91
Bromomethane	10.20	8.75	86
Chloroethane	10.00	9.67	97
Dichlorofluoromethane	10.00	10.24	102
Ethanol	9.80	10.10	103
Vinyl Bromide	10.20	10.40	102
Acetone	10.80	9.57	89
Trichlorofluoromethane	10.10	10.69	106
2-Propanol (IPA)	11.00	10.12	92
Acrylonitrile	10.50	10.83	103
1,1-Dichloroethene	10.50	10.20	97
Methylene Chloride (DCM)	10.40	9.74	94
Allyl Chloride	11.00	10.88	99
Carbon Disulfide	10.50	9.63	92
Trichlorotrifluoroethane	10.40	10.25	99
trans-1,2-Dichloroethene	10.40	10.15	98
1,1-Dichloroethane	10.40	9.86	95
Methyl Tert Butyl Ether (MTBE)	10.60	10.57	100
Vinyl Acetate	9.70	9.68	100
2-Butanone (MEK)	10.60	10.85	102
cis-1,2-Dichloroethene	10.60	10.22	96
Hexane	10.70	9.70	91
Chloroform	10.60	10.56	100
Ethyl Acetate	11.00	11.00	100
Tetrahydrofuran	10.80	10.41	96
1,2-Dichloroethane	10.40	10.70	103
1,1,1-Trichloroethane	10.50	10.83	103

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ANALYSIS DATE : 05/31/2013
ANALYST : JJG
INSTRUMENT ID : GC/MS-03
CALIBRATION STD ID : PS040413-01

VOLATILE ORGANIC COMPOUNDS BY EPA METHOD TO-15

Continuing Calibration Verification of the 05/15/2013 Calibration

Compounds	*Conc*	*Daily Conc*	*%REC**
Benzene	10.50	9.97	95
Carbon Tetrachloride	10.10	10.65	105
Cyclohexane	10.50	9.92	94
1,2-Dichloropropane	10.50	10.24	98
Bromodichloromethane	10.30	10.68	104
1,4-Dioxane	10.30	10.25	100
Trichloroethene (TCE)	10.30	10.38	101
2,2,4-Trimethylpentane	10.90	10.62	97
Heptane	10.70	10.55	99
cis-1,3-Dichloropropene	11.00	10.95	100
4-Methyl-2-pentanone (MiBK)	10.30	10.36	101
trans-1,3-Dichloropropene	9.80	9.96	102
1,1,2-Trichloroethane	10.60	10.83	102
Toluene	10.60	10.46	99
2-Hexanone (MBK)	10.80	10.89	101
Dibromochloromethane	11.00	11.62	106
1,2-Dibromoethane	10.40	10.42	100
Tetrachloroethene (PCE)	10.40	10.54	101
Chlorobenzene	10.60	10.05	95
Ethylbenzene	10.50	9.94	95
m & p-Xylenes	20.60	18.61	90
Bromoform	10.30	10.01	97
Styrene	10.40	9.76	94
1,1,2,2-Tetrachloroethane	10.60	9.68	91
o-Xylene	10.60	9.52	90
4-Ethyltoluene	10.40	9.88	95
1,3,5-Trimethylbenzene	10.20	9.40	92
1,2,4-Trimethylbenzene	10.20	9.80	96
Benzyl Chloride (a-Chlorotoluene)	10.00	10.07	101
1,3-Dichlorobenzene	10.00	9.57	96
1,4-Dichlorobenzene	10.00	9.31	93
1,2-Dichlorobenzene	10.00	9.41	94
1,2,4-Trichlorobenzene	9.30	9.03	97
Hexachlorobutadiene	9.80	9.40	96

* - %REC should be 70-130%

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Quality Control/Quality Assurance Report

CLIENT ID	**: Laboratory Control Spike**	**DATE ANALYZED**	**: 05/31/2013**
AAC ID	**: LCS/LCSD**	**DATE REPORTED**	**: 05/31/2013**
MEDIA	**: Air**	**UNITS**	**: ppbv**

TO-15 Laboratory Control Spike Recovery

Compound	Sample Conc.	Spike Added	Spike Res	Dup Spike Res	Spike % Rec *	Spike Dup % Rec *	RPD** %
1,1-Dichloroethene	0.0	10.50	10.20	10.00	97	95	2.0
Methylene Chloride (DCM)	0.0	10.40	9.74	9.75	94	94	0.1
Benzene	0.0	10.50	9.97	9.80	95	93	1.7
Trichloroethene (TCE)	0.0	10.30	10.38	10.12	101	98	2.5
Toluene	0.0	10.60	10.46	10.34	99	98	1.2
Tetrachloroethene (PCE)	0.0	10.40	10.54	10.24	101	98	2.9
Chlorobenzene	0.0	10.60	10.05	10.37	95	98	3.1
Ethylbenzene	0.0	10.50	9.94	10.11	95	96	1.7
m & p-Xylenes	0.0	20.60	18.61	19.96	90	97	7.0
o-Xylene	0.0	10.60	9.52	9.87	90	93	3.6

* Must be 70-130%

** Must be < 25%

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Method Blank Analysis Report

MATRIX	**: AIR**	**ANALYSIS DATE**	**: 05/31/2013**
UNITS	**: ppbv**	**REPORT DATE**	**: 05/31/2013**

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	Method Blank	RL
AAC ID	MB 053113	
Chlorodifluoromethane	<RL	0.5
Propene	<RL	1.0
Dichlorodifluoromethane	<RL	0.5
Chloromethane	<RL	0.5
Dichlorotetrafluoroethane	<RL	0.5
Vinyl Chloride	<RL	0.5
Methanol	<RL	5.0
1,3-Butadiene	<RL	0.5
Bromomethane	<RL	0.5
Chloroethane	<RL	0.5
Dichlorofluoromethane	<RL	0.5
Ethanol	<RL	2.0
Vinyl Bromide	<RL	0.5
Acetone	<RL	2.0
Trichlorofluoromethane	<RL	0.5
2-Propanol (IPA)	<RL	2.0
Acrylonitrile	<RL	1.0
1,1-Dichloroethene	<RL	0.5
Methylene Chloride (DCM)	<RL	1.0
Allyl Chloride	<RL	0.5
Carbon Disulfide	<RL	0.5
Trichlorotrifluoroethane	<RL	0.5
trans-1,2-Dichloroethene	<RL	0.5
1,1-Dichloroethane	<RL	0.5
Methyl Tert Butyl Ether (MTBE)	<RL	0.5
Vinyl Acetate	<RL	1.0
2-Butanone (MEK)	<RL	1.0
cis-1,2-Dichloroethene	<RL	0.5
Hexane	<RL	0.5
Chloroform	<RL	0.5
Ethyl Acetate	<RL	0.5
Tetrahydrofuran	<RL	0.5
1,2-Dichloroethane	<RL	0.5
1,1,1-Trichloroethane	<RL	0.5
Benzene	<RL	0.5
Carbon Tetrachloride	<RL	0.5
Cyclohexane	<RL	0.5
1,2-Dichloropropane	<RL	0.5
Bromodichloromethane	<RL	0.5
1,4-Dioxane	<RL	0.5
Trichloroethene (TCE)	<RL	0.5
2,2,4-Trimethylpentane	<RL	0.5
Heptane	<RL	0.5

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Method Blank Analysis Report

MATRIX : AIR
UNITS : ppbv
ANALYSIS DATE : 05/31/2013
REPORT DATE : 05/31/2013

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID / *AAC ID*	Method Blank MB 053113	RL
cis-1,3-Dichloropropene	<RL	0.5
4-Methyl-2-pentanone (MiBK)	<RL	0.5
trans-1,3-Dichloropropene	<RL	0.5
1,1,2-Trichloroethane	<RL	0.5
Toluene	<RL	0.5
2-Hexanone (MBK)	<RL	0.5
Dibromochloromethane	<RL	0.5
1,2-Dibromoethane	<RL	0.5
Tetrachloroethene (PCE)	<RL	0.5
Chlorobenzene	<RL	0.5
Ethylbenzene	<RL	0.5
m & p-Xylenes	<RL	1.0
Bromoform	<RL	0.5
Styrene	<RL	0.5
1,1,2,2-Tetrachloroethane	<RL	0.5
o-Xylene	<RL	0.5
4-Ethyltoluene	<RL	0.5
1,3,5-Trimethylbenzene	<RL	0.5
1,2,4-Trimethylbenzene	<RL	0.5
Benzyl Chloride (a-Chlorotoluene)	<RL	0.5
1,3-Dichlorobenzene	<RL	0.5
1,4-Dichlorobenzene	<RL	0.5
1,2-Dichlorobenzene	<RL	0.5
1,2,4-Trichlorobenzene	<RL	0.5
Hexachlorobutadiene	<RL	0.5
System Monitoring Compounds		
BFB-Surrogate Std. % Recovery	102%	--

RL - Reporting Limit

Marcus Hueppe
Laboratory Director

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Quality Control/Quality Assurance Report

AAC ID	**: 130647-63190**	**DATE ANALYZED**	**: 05/31/2013**
MATRIX	**: Air**	**DATE REPORTED**	**: 05/31/2013**
		UNITS	**: ppbv**

TO-15 Duplicate Analysis

Compound	Sample Conc	Duplicate Conc	% RPD
Chlorodifluoromethane	<SRL	<SRL	0.0
Propene	<SRL	<SRL	0.0
Dichlorodifluoromethane	<SRL	<SRL	0.0
Chloromethane	<SRL	<SRL	0.0
Dichlorotetrafluoroethane	<SRL	<SRL	0.0
Vinyl Chloride	<SRL	<SRL	0.0
Methanol	14.4	14.7	2.1
1,3-Butadiene	<SRL	<SRL	0.0
Bromomethane	<SRL	<SRL	0.0
Chloroethane	<SRL	<SRL	0.0
Dichlorofluoromethane	<SRL	<SRL	0.0
Ethanol	5.80	5.59	3.7
Vinyl Bromide	<SRL	<SRL	0.0
Acetone	5.12	5.02	2.0
Trichlorofluoromethane	<SRL	<SRL	0.0
2-Propanol (IPA)	<SRL	<SRL	0.0
Acrylonitrile	<SRL	<SRL	0.0
1,1-Dichloroethene	<SRL	<SRL	0.0
Methylene Chloride (DCM)	<SRL	<SRL	0.0
Allyl Chloride	<SRL	<SRL	0.0
Carbon Disulfide	<SRL	<SRL	0.0
Trichlorotrifluoroethane	<SRL	<SRL	0.0
trans-1,2-Dichloroethene	<SRL	<SRL	0.0
1,1-Dichloroethane	<SRL	<SRL	0.0
Methyl Tert Butyl Ether (MTBE)	<SRL	<SRL	0.0
Vinyl Acetate	<SRL	<SRL	0.0
2-Butanone (MEK)	<SRL	<SRL	0.0
cis-1,2-Dichloroethene	<SRL	<SRL	0.0
Hexane	<SRL	<SRL	0.0
Chloroform	<SRL	<SRL	0.0
Ethyl Acetate	<SRL	<SRL	0.0
Tetrahydrofuran	<SRL	<SRL	0.0
1,2-Dichloroethane	<SRL	<SRL	0.0
1,1,1-Trichloroethane	<SRL	<SRL	0.0
Benzene	<SRL	<SRL	0.0
Carbon Tetrachloride	<SRL	<SRL	0.0

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Quality Control/Quality Assurance Report

AAC ID	**: 130647-63190**	**DATE ANALYZED**	**: 05/31/2013**
MATRIX	**: Air**	**DATE REPORTED**	**: 05/31/2013**
		UNITS	**: ppbv**

TO-15 Duplicate Analysis

Compound	Sample Conc	Duplicate Conc	% RPD
Cyclohexane	<SRL	<SRL	0.0
1,2-Dichloropropane	<SRL	<SRL	0.0
Bromodichloromethane	<SRL	<SRL	0.0
1,4-Dioxane	<SRL	<SRL	0.0
Trichloroethene (TCE)	<SRL	<SRL	0.0
2,2,4-Trimethylpentane	<SRL	<SRL	0.0
Heptane	<SRL	<SRL	0.0
cis-1,3-Dichloropropene	<SRL	<SRL	0.0
4-Methyl-2-pentanone (MiBK)	<SRL	<SRL	0.0
trans-1,3-Dichloropropene	<SRL	<SRL	0.0
1,1,2-Trichloroethane	<SRL	<SRL	0.0
Toluene	<SRL	<SRL	0.0
2-Hexanone (MBK)	<SRL	<SRL	0.0
Dibromochloromethane	<SRL	<SRL	0.0
1,2-Dibromoethane	<SRL	<SRL	0.0
Tetrachloroethene (PCE)	<SRL	<SRL	0.0
Chlorobenzene	<SRL	<SRL	0.0
Ethylbenzene	<SRL	<SRL	0.0
m & p-Xylenes	<SRL	<SRL	0.0
Bromoform	<SRL	<SRL	0.0
Styrene	<SRL	<SRL	0.0
1,1,2,2-Tetrachloroethane	<SRL	<SRL	0.0
o-Xylene	<SRL	<SRL	0.0
4-Ethyltoluene	<SRL	<SRL	0.0
1,3,5-Trimethylbenzene	<SRL	<SRL	0.0
1,2,4-Trimethylbenzene	<SRL	<SRL	0.0
Benzyl Chloride (a-Chlorotoluene)	<SRL	<SRL	0.0
1,3-Dichlorobenzene	<SRL	<SRL	0.0
1,4-Dichlorobenzene	<SRL	<SRL	0.0
1,2-Dichlorobenzene	<SRL	<SRL	0.0
1,2,4-Trichlorobenzene	<SRL	<SRL	0.0
Hexachlorobutadiene	<SRL	<SRL	0.0
System Monitoring Compounds			
BFB-Surrogate Std. % Recovery	102%	105%	2.8

SRL - Sample Reporting Limit

Marcus Hueppe
Laboratory Director

1534 Eastman Ave., Ste. A • Ventura, • CA 93003 www.aaclab.com • (805) 650-1642 • FAX (805) 650-1644

TO-15 RAW DATA

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311305.D
Acq On : 31 May 2013 11:41
Operator : JJG
Sample : 130647-63190 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 31 16:03:57 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Bromochloromethane	12.350	128	141154	10.00 ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	774304	10.00 ppbv	0.00
55) Chlorobenzene-d5	20.285	117	740604	10.00 ppbv	0.00
System Monitoring Compounds					
63) 4-Bromofluorobenzene(BFB)	22.710	174	470787	10.16 ppbv	0.00
Spiked Amount 10.000			Recovery = 101.60%		
Target Compounds					Qvalue
2) Chlorodifluoromethane	4.835	51	4423	0.16 ppbv #	96
3) Propene	0.000		0	N.D. d	
4) Dichlorodifluoromethane	4.908	85	13542	0.28 ppbv	98
5) Chloromethane	5.306	52	1042	0.23 ppbv #	6
6) Dichlorotetrafluoroethane	5.324	135	228	N.D.	
7) VinylChloride	0.000		0	N.D.	
8) Methanol	5.867	31	33313m	7.37 ppbv	
9) 1,3-Butadiene	0.000		0	N.D.	
10) Bromomethane	0.000		0	N.D. d	
11) Chloroethane	0.000		0	N.D. d	
12) Dichlorofluoromethane	0.000		0	N.D.	
13) Ethanol	7.134	45	17815m	2.96 ppbv	
14) VinylBromide	0.000		0	N.D.	
15) Acetone	8.002	58	19956m	2.61 ppbv	
16) Trichlorofluoromethane	7.658	103	3831	0.14 ppbv	97
17) 2-Propanol(IPA)	8.219	45	22036m	0.84 ppbv	
18) Acrylonitrile	0.000		0	N.D.	
19) 1,1-Dichloroethene	0.000		0	N.D.	
20) MethyleneChloride(DCM)	0.000		0	N.D. d	
21) AllylChloride	9.233	39	128	N.D.	
22) CarbonDisulfide	0.000		0	N.D. d	
23) Trichlorotrifluoroethane	0.000		0	N.D. d	
24) trans-1,2-Dichloroethene	0.000		0	N.D.	
25) 1,1-Dichloroethane	0.000		0	N.D.	
26) MethylTertButylEther(M...	0.000		0	N.D.	
27) VinylAcetate	10.888	43	1152	N.D.	
28) 2-Butanone(MEK)	0.000		0	N.D. d	
29) cis-1,2-Dichloroethene	0.000		0	N.D.	
30) Hexane	0.000		0	N.D. d	
31) Chloroform	12.493	83	396	N.D.	
32) EthylAcetate	0.000		0	N.D. d	

05/31/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311305.D
Acq On : 31 May 2013 11:41
Operator : JJG
Sample : 130647-63190 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 31 16:03:57 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Tetrahydrofuran	0.000		0	N.D.	
34) 1,2-Dichloroethane	0.000		0	N.D.	
35) 1,1,1-Trichloroethane	0.000		0	N.D.	
37) Benzene	0.000		0	N.D. d	
38) CarbonTetrachloride	0.000		0	N.D. d	
39) Cyclohexane	14.008	69	282	N.D.	
40) 1,2-Dichloropropane	0.000		0	N.D.	
41) Bromodichloromethane	0.000		0	N.D.	
42) 1,4-Dioxane	0.000		0	N.D.	
43) Trichloroethene(TCE)	0.000		0	N.D.	
44) 2,2,4-Trimethylpentane	14.757	57	22408	0.22 ppbv #	98
45) Heptane	15.096	71	1229	0.07 ppbv #	83
46) cis-1,3-Dichloropropene	0.000		0	N.D.	
47) 4-Methyl-2-pentanone(M...	0.000		0	N.D.	
48) trans-1,3-Dichloropropene	17.682	75	120	N.D.	
49) 1,1,2-Trichloroethane	0.000		0	N.D.	
50) Toluene	17.682	91	22183	0.31 ppbv	97
51) 2-Hexanone(MBK)	0.000		0	N.D.	
52) Dibromochloromethane	0.000		0	N.D.	
53) 1,2-Dibromoethane	0.000		0	N.D.	
54) Tetrachloroethene(PCE)	0.000		0	N.D.	
56) Chlorobenzene	20.285	114	147	N.D.	
57) Ethylbenzene	20.713	91	7119	0.07 ppbv #	96
58) m&p-Xylene	20.963	106	9179	0.24 ppbv #	97
59) Bromoform	0.000		0	N.D.	
60) Styrene	21.676	104	595	N.D.	
61) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
62) o-Xylene	21.694	91	8412	0.11 ppbv	95
64) 4-Ethyltoluene	0.000		0	N.D. d	
65) 1,3,5-Trimethylbenzene	0.000		0	N.D. d	
66) 1,2,4-Trimethylbenzene	24.547	120	7269	0.16 ppbv #	96
67) BenzylChloride(a-Chlor...	25.207	91	379	N.D.	
68) 1,3-Dichlorobenzene	25.064	146	586	N.D.	
69) 1,4-Dichlorobenzene	25.296	146	1078	N.D.	
70) 1,2-Dichlorobenzene	25.849	146	614	N.D.	
71) 1,2,4-Trichlorobenzene	29.451	180	1944	N.D.	
72) Hexachlorobutadiene	30.075	225	613	N.D.	

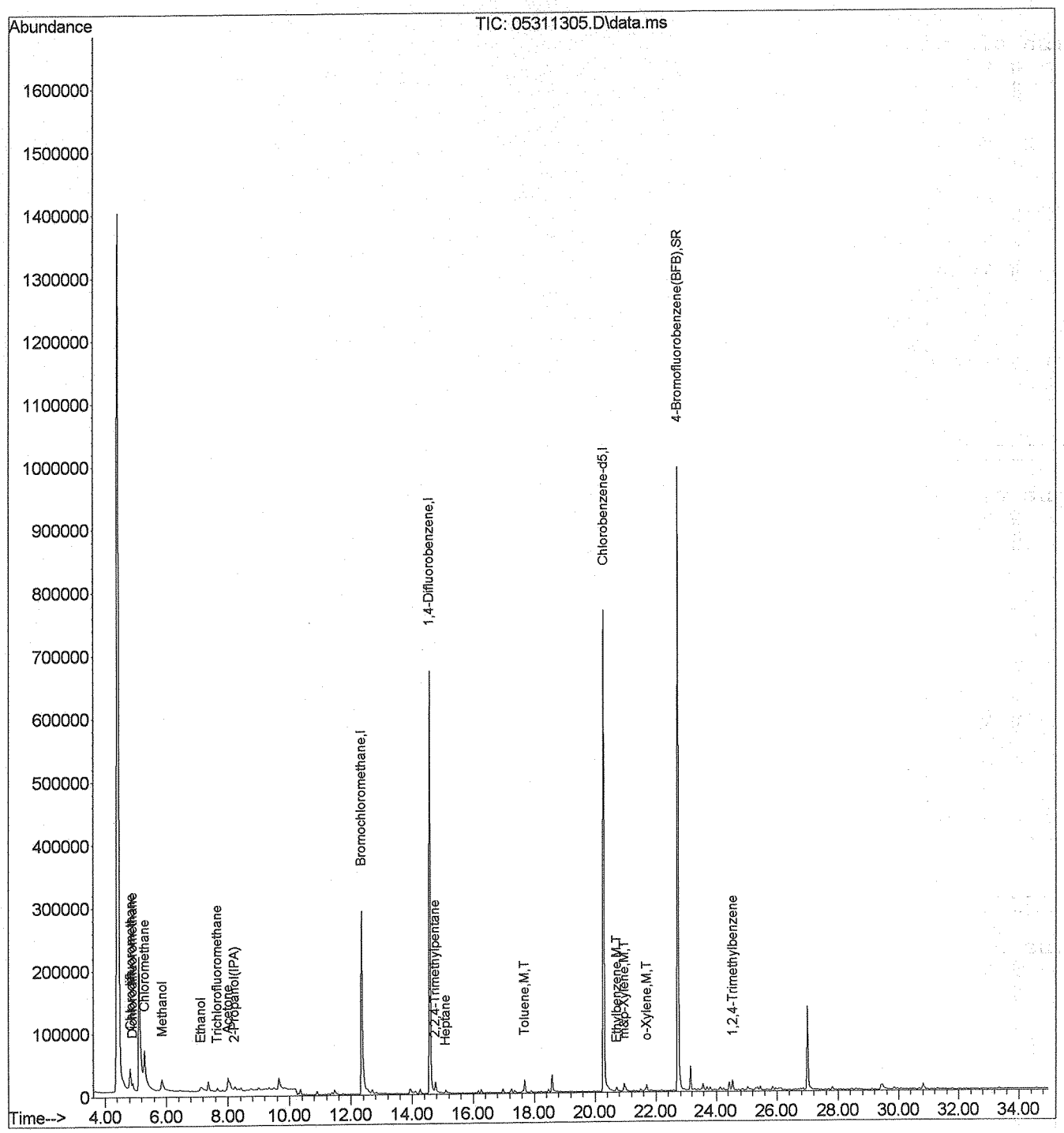
(#) = qualifier out of range (m) = manual integration (+) = signals summed

05/31/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311305.D
Acq On : 31 May 2013 11:41
Operator : JJG
Sample : 130647-63190 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 31 16:03:57 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311307.D
Acq On : 31 May 2013 13:17
Operator : JJG
Sample : 130647-63191 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 31 17:22:39 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	12.350	128	139720	10.00	ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	790516	10.00	ppbv	0.00
55) Chlorobenzene-d5	20.285	117	723185	10.00	ppbv	0.00
System Monitoring Compounds						
63) 4-Bromofluorobenzene(BFB)	22.710	174	479053	10.59	ppbv	0.00
Spiked Amount 10.000			Recovery = 105.90%			
Target Compounds						Qvalue
2) Chlorodifluoromethane	4.817	51	4526	0.16	ppbv #	93
3) Propene	0.000		0	N.D.	d	
4) Dichlorodifluoromethane	4.908	85	15333	0.32	ppbv	96
5) Chloromethane	5.288	52	1401	0.31	ppbv #	1
6) Dichlorotetrafluoroethane	5.324	135	277	N.D.		
7) VinylChloride	0.000		0	N.D.		
8) Methanol	5.849	31	56898m	12.95	ppbv	
9) 1,3-Butadiene	0.000		0	N.D.		
10) Bromomethane	0.000		0	N.D.	d	
11) Chloroethane	0.000		0	N.D.		
12) Dichlorofluoromethane	0.000		0	N.D.		
13) Ethanol	7.116	45	14605m	2.45	ppbv	
14) VinylBromide	0.000		0	N.D.		
15) Acetone	8.002	58	19481m	2.57	ppbv	
16) Trichlorofluoromethane	7.658	103	4243	0.15	ppbv #	94
17) 2-Propanol(IPA)	8.219	45	18652m	0.72	ppbv	
18) Acrylonitrile	0.000		0	N.D.		
19) 1,1-Dichloroethene	0.000		0	N.D.		
20) MethyleneChloride(DCM)	0.000		0	N.D.	d	
21) AllylChloride	9.269	39	136	N.D.		
22) CarbonDisulfide	0.000		0	N.D.	d	
23) Trichlorotrifluoroethane	8.998	103	1303	0.06	ppbv #	98
24) trans-1,2-Dichloroethene	0.000		0	N.D.		
25) 1,1-Dichloroethane	0.000		0	N.D.		
26) MethylTertButylEther(M...	0.000		0	N.D.		
27) VinylAcetate	10.905	43	961	N.D.		
28) 2-Butanone(MEK)	11.494	72	1876	0.24	ppbv #	63
29) cis-1,2-Dichloroethene	0.000		0	N.D.		
30) Hexane	0.000		0	N.D.	d	
31) Chloroform	12.492	83	362	N.D.		
32) EthylAcetate	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311307.D
Acq On : 31 May 2013 13:17
Operator : JJG
Sample : 130647-63191 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 31 17:22:39 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Tetrahydrofuran	0.000		0	N.D.	
34) 1,2-Dichloroethane	13.616	62	108	N.D.	
35) 1,1,1-Trichloroethane	0.000		0	N.D.	
37) Benzene	0.000		0	N.D. d	
38) CarbonTetrachloride	13.973	117	2409	0.05 ppbv	88
39) Cyclohexane	14.026	69	129	N.D.	
40) 1,2-Dichloropropane	0.000		0	N.D.	
41) Bromodichloromethane	0.000		0	N.D.	
42) 1,4-Dioxane	0.000		0	N.D.	
43) Trichloroethene(TCE)	0.000		0	N.D.	
44) 2,2,4-Trimethylpentane	14.757	57	15064	0.15 ppbv	97
45) Heptane	15.096	71	1098	0.06 ppbv #	60
46) cis-1,3-Dichloropropene	0.000		0	N.D.	
47) 4-Methyl-2-pentanone(M...	0.000		0	N.D.	
48) trans-1,3-Dichloropropene	0.000		0	N.D.	
49) 1,1,2-Trichloroethane	0.000		0	N.D.	
50) Toluene	17.682	91	24085m	0.33 ppbv	
51) 2-Hexanone(MBK)	0.000		0	N.D.	
52) Dibromochloromethane	0.000		0	N.D.	
53) 1,2-Dibromoethane	0.000		0	N.D.	
54) Tetrachloroethene(PCE)	0.000		0	N.D.	
56) Chlorobenzene	20.267	114	240	N.D.	
57) Ethylbenzene	20.713	91	8170	0.09 ppbv #	95
58) m&p-Xylene	20.963	106	10218	0.27 ppbv #	98
59) Bromoform	0.000		0	N.D.	
60) Styrene	21.676	104	1037	N.D.	
61) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
62) o-Xylene	21.694	91	9116	0.12 ppbv #	93
64) 4-Ethyltoluene	23.691	120	1878	0.06 ppbv #	84
65) 1,3,5-Trimethylbenzene	23.780	120	2187	0.05 ppbv #	95
66) 1,2,4-Trimethylbenzene	24.547	120	7596	0.17 ppbv #	97
67) BenzylChloride(a-Chlor...	25.296	91	1042	N.D.	
68) 1,3-Dichlorobenzene	25.064	146	145	N.D.	
69) 1,4-Dichlorobenzene	25.296	146	197	N.D.	
70) 1,2-Dichlorobenzene	25.849	146	122	N.D.	
71) 1,2,4-Trichlorobenzene	29.468	180	800	N.D.	
72) Hexachlorobutadiene	30.075	225	118	N.D.	

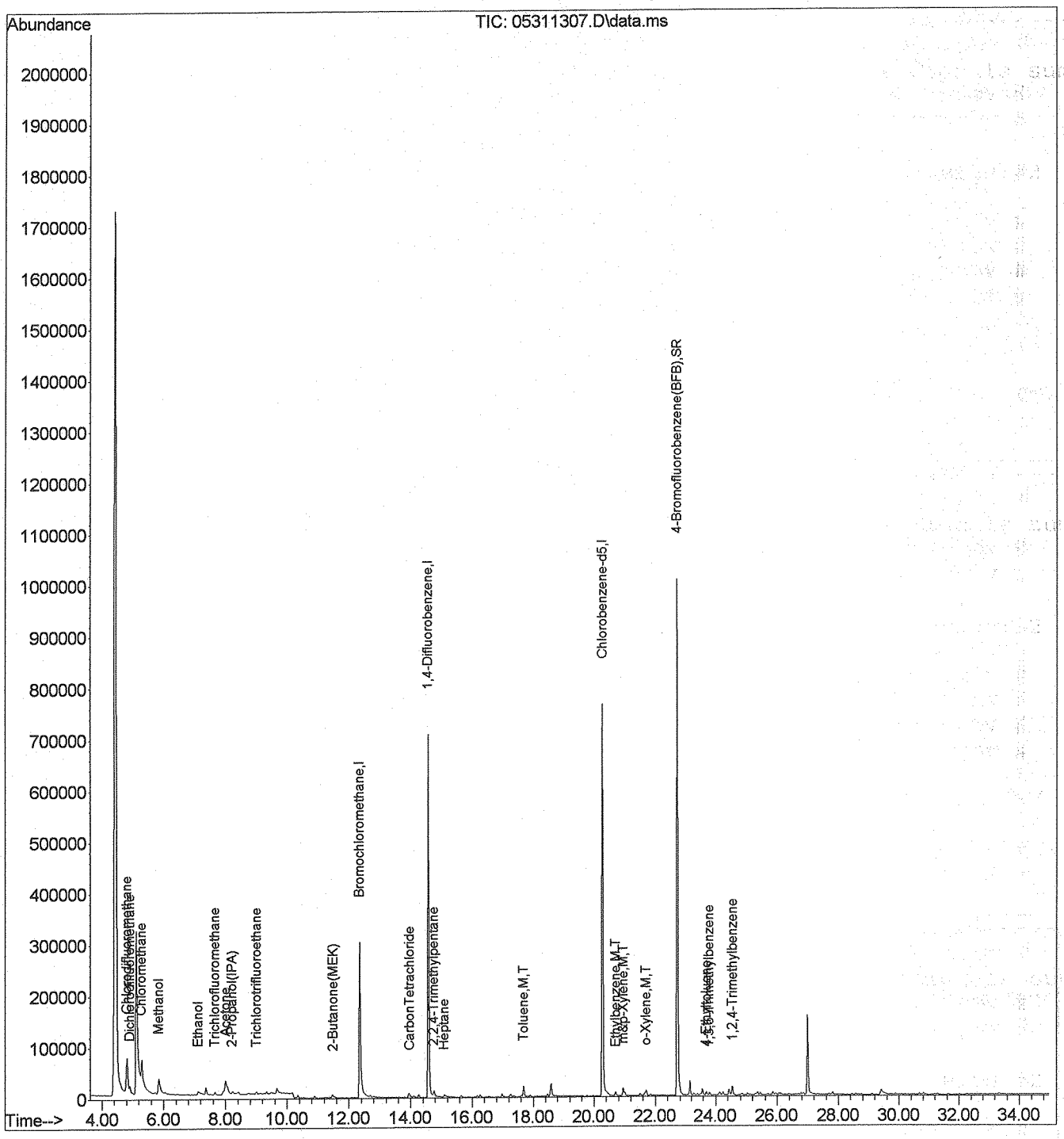
(#) = qualifier out of range (m) = manual integration (+) = signals summed

05/31/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311307.D
Acq On : 31 May 2013 13:17
Operator : JJG
Sample : 130647-63191 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 31 17:22:39 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311308.D
Acq On : 31 May 2013 14:05
Operator : JJG
Sample : 130647-63192 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 31 17:25:02 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Bromochloromethane	12.350	128	141112	10.00 ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	783640	10.00 ppbv	0.00
55) Chlorobenzene-d5	20.285	117	727240	10.00 ppbv	0.00
System Monitoring Compounds					
63) 4-Bromofluorobenzene(BFB)	22.711	174	470326	10.33 ppbv	0.00
Spiked Amount 10.000			Recovery = 103.30%		
Target Compounds					Qvalue
2) Chlorodifluoromethane	4.836	51	4600	0.16 ppbv #	94
3) Propene	4.799	42	4919	0.67 ppbv #	69
4) Dichlorodifluoromethane	4.908	85	14821	0.31 ppbv	96
5) Chloromethane	5.306	52	1326	0.29 ppbv #	1
6) Dichlorotetrafluoroethane	5.342	135	268	N.D.	
7) VinylChloride	0.000		0	N.D.	
8) Methanol	5.849	31	57834m	13.04 ppbv	
9) 1,3-Butadiene	0.000		0	N.D.	
10) Bromomethane	0.000		0	N.D. d	
11) Chloroethane	0.000		0	N.D.	
12) Dichlorofluoromethane	0.000		0	N.D.	
13) Ethanol	7.098	45	18513m	3.08 ppbv	
14) VinylBromide	0.000		0	N.D.	
15) Acetone	7.984	58	31149m	4.08 ppbv	
16) Trichlorofluoromethane	7.659	103	4866	0.17 ppbv #	94
17) 2-Propanol(IPA)	8.165	45	139906m	5.35 ppbv	
18) Acrylonitrile	0.000		0	N.D.	
19) 1,1-Dichloroethene	0.000		0	N.D.	
20) MethyleneChloride(DCM)	0.000		0	N.D. d	
21) AllylChloride	9.342	39	258	N.D.	
22) CarbonDisulfide	0.000		0	N.D. d	
23) Trichlorotrifluoroethane	0.000		0	N.D. d	
24) trans-1,2-Dichloroethene	0.000		0	N.D.	
25) 1,1-Dichloroethane	0.000		0	N.D.	
26) MethylTertButylEther(M...	0.000		0	N.D.	
27) VinylAcetate	10.888	43	1213	N.D.	
28) 2-Butanone(MEK)	11.477	72	2742	0.35 ppbv #	15
29) cis-1,2-Dichloroethene	0.000		0	N.D.	
30) Hexane	0.000		0	N.D. d	
31) Chloroform	12.511	83	369	N.D.	
32) EthylAcetate	0.000		0	N.D. d	

5/31/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311308.D
Acq On : 31 May 2013 14:05
Operator : JJG
Sample : 130647-63192 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 31 17:25:02 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Tetrahydrofuran	0.000		0	N.D. d	
34) 1,2-Dichloroethane	0.000		0	N.D.	
35) 1,1,1-Trichloroethane	0.000		0	N.D.	
37) Benzene	13.937	78	13166	0.23 ppbv	100
38) CarbonTetrachloride	13.973	117	2518	0.05 ppbv #	93
39) Cyclohexane	0.000		0	N.D. d	
40) 1,2-Dichloropropane	0.000		0	N.D.	
41) Bromodichloromethane	0.000		0	N.D.	
42) 1,4-Dioxane	0.000		0	N.D.	
43) Trichloroethene(TCE)	0.000		0	N.D.	
44) 2,2,4-Trimethylpentane	14.758	57	21710	0.21 ppbv	96
45) Heptane	15.096	71	1264	0.07 ppbv #	63
46) cis-1,3-Dichloropropene	0.000		0	N.D.	
47) 4-Methyl-2-pentanone(M...	0.000		0	N.D.	
48) trans-1,3-Dichloropropene	17.682	75	167	N.D.	
49) 1,1,2-Trichloroethane	17.860	97	444	N.D.	
50) Toluene	17.682	91	24200	0.33 ppbv #	99
51) 2-Hexanone(MBK)	0.000		0	N.D.	
52) Dibromochloromethane	0.000		0	N.D.	
53) 1,2-Dibromoethane	0.000		0	N.D.	
54) Tetrachloroethene(PCE)	19.019	166	132	N.D.	
56) Chlorobenzene	20.285	114	113	N.D.	
57) Ethylbenzene	20.713	91	8270	0.09 ppbv #	97
58) m&p-Xylene	20.945	106	10082	0.27 ppbv #	92
59) Bromoform	21.855	173	299	N.D.	
60) Styrene	21.676	104	744	N.D.	
61) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
62) o-Xylene	21.694	91	9284	0.12 ppbv #	96
64) 4-Ethyltoluene	0.000		0	N.D. d	
65) 1,3,5-Trimethylbenzene	23.780	120	2076	0.05 ppbv #	80
66) 1,2,4-Trimethylbenzene	24.529	120	7873	0.18 ppbv #	97
67) BenzylChloride(a-Chlor...	25.296	91	1557	N.D.	
68) 1,3-Dichlorobenzene	0.000		0	N.D.	
69) 1,4-Dichlorobenzene	25.296	146	1201	N.D.	
70) 1,2-Dichlorobenzene	0.000		0	N.D.	
71) 1,2,4-Trichlorobenzene	29.451	180	644	N.D.	
72) Hexachlorobutadiene	0.000		0	N.D.	

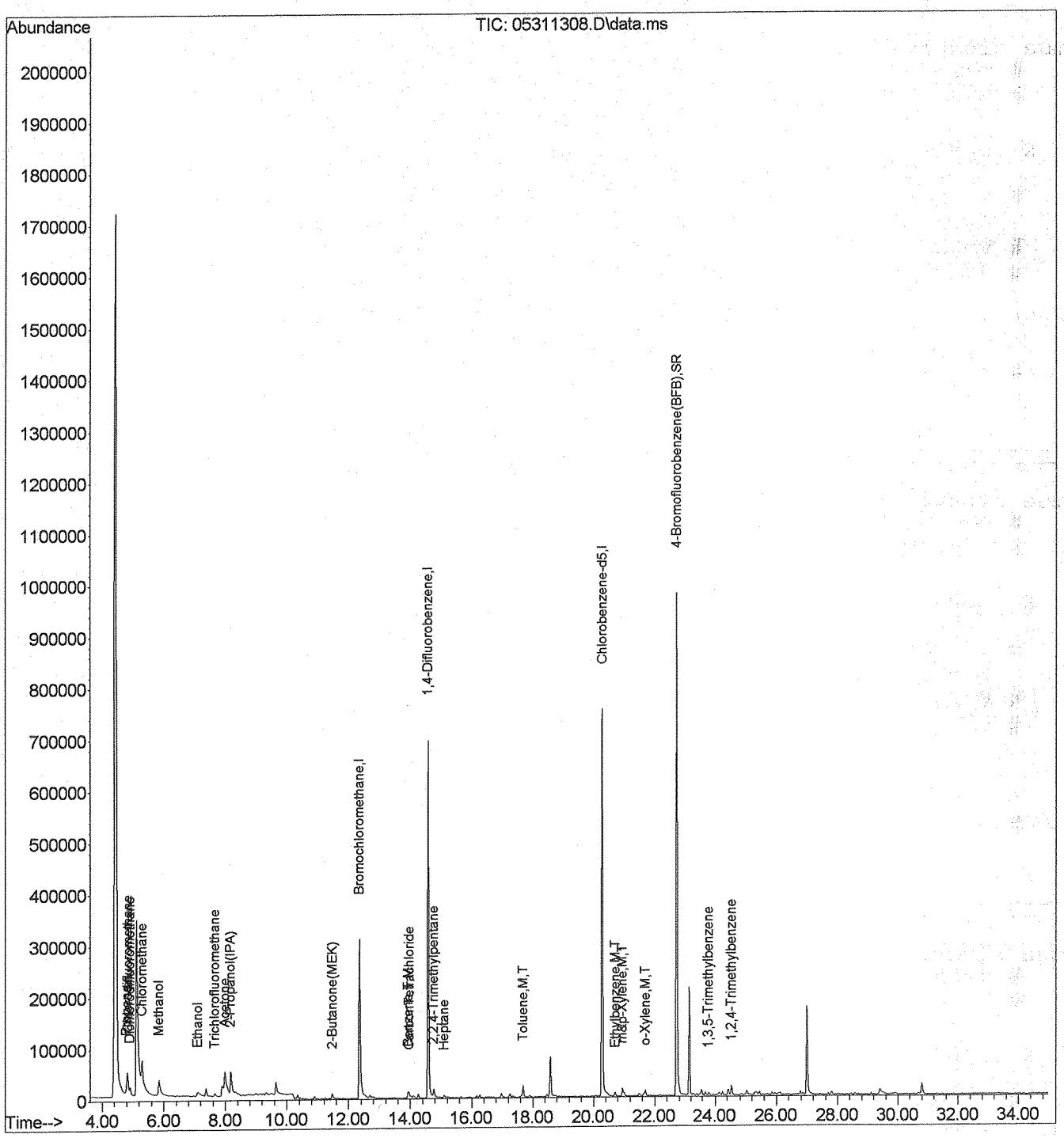
(#) = qualifier out of range (m) = manual integration (+) = signals summed

05/31/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311308.D
Acq On : 31 May 2013 14:05
Operator : JJG
Sample : 130647-63192 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 31 17:25:02 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311309.D
Acq On : 31 May 2013 14:53
Operator : JJG
Sample : 130647-63193 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 31 17:27:20 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Bromochloromethane	12.350	128	145692	10.00 ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	789564	10.00 ppbv	0.00
55) Chlorobenzene-d5	20.285	117	723900	10.00 ppbv	0.00
System Monitoring Compounds					
63) 4-Bromofluorobenzene(BFB)	22.710	174	474094	10.47 ppbv	0.00
Spiked Amount 10.000			Recovery = 104.70%		
Target Compounds					Qvalue
2) Chlorodifluoromethane	4.835	51	3463	0.12 ppbv #	90
3) Propene	4.799	42	5984	0.79 ppbv #	91
4) Dichlorodifluoromethane	4.908	85	10713	0.22 ppbv	97
5) Chloromethane	5.306	52	998	0.21 ppbv #	31
6) Dichlorotetrafluoroethane	0.000		0	N.D.	
7) VinylChloride	0.000		0	N.D.	
8) Methanol	5.795	31	155556m	36.98 ppbv	
9) 1,3-Butadiene	0.000		0	N.D.	
10) Bromomethane	0.000		0	N.D. d	
11) Chloroethane	0.000		0	N.D.	
12) Dichlorofluoromethane	0.000		0	N.D.	
13) Ethanol	7.061	45	24025m	3.87 ppbv	
14) VinylBromide	0.000		0	N.D.	
15) Acetone	7.966	58	45727m	5.80 ppbv	
16) Trichlorofluoromethane	7.658	103	3467	0.12 ppbv #	96
17) 2-Propanol(IPA)	8.165	45	204412m	7.57 ppbv	
18) Acrylonitrile	0.000		0	N.D.	
19) 1,1-Dichloroethene	0.000		0	N.D.	
20) MethyleneChloride(DCM)	0.000		0	N.D. d	
21) AllylChloride	9.305	39	206	N.D.	
22) CarbonDisulfide	0.000		0	N.D. d	
23) Trichlorotrifluoroethane	8.998	103	872	N.D.	
24) trans-1,2-Dichloroethene	0.000		0	N.D.	
25) 1,1-Dichloroethane	0.000		0	N.D.	
26) MethylTertButylEther(M...	0.000		0	N.D.	
27) VinylAcetate	10.888	43	1207	N.D.	
28) 2-Butanone(MEK)	11.459	72	7171	0.89 ppbv #	53
29) cis-1,2-Dichloroethene	0.000		0	N.D.	
30) Hexane	0.000		0	N.D. d	
31) Chloroform	12.511	83	354	N.D.	
32) EthylAcetate	0.000		0	N.D. d	

05/31/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311309.D
Acq On : 31 May 2013 14:53
Operator : JJG
Sample : 130647-63193 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 31 17:27:20 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

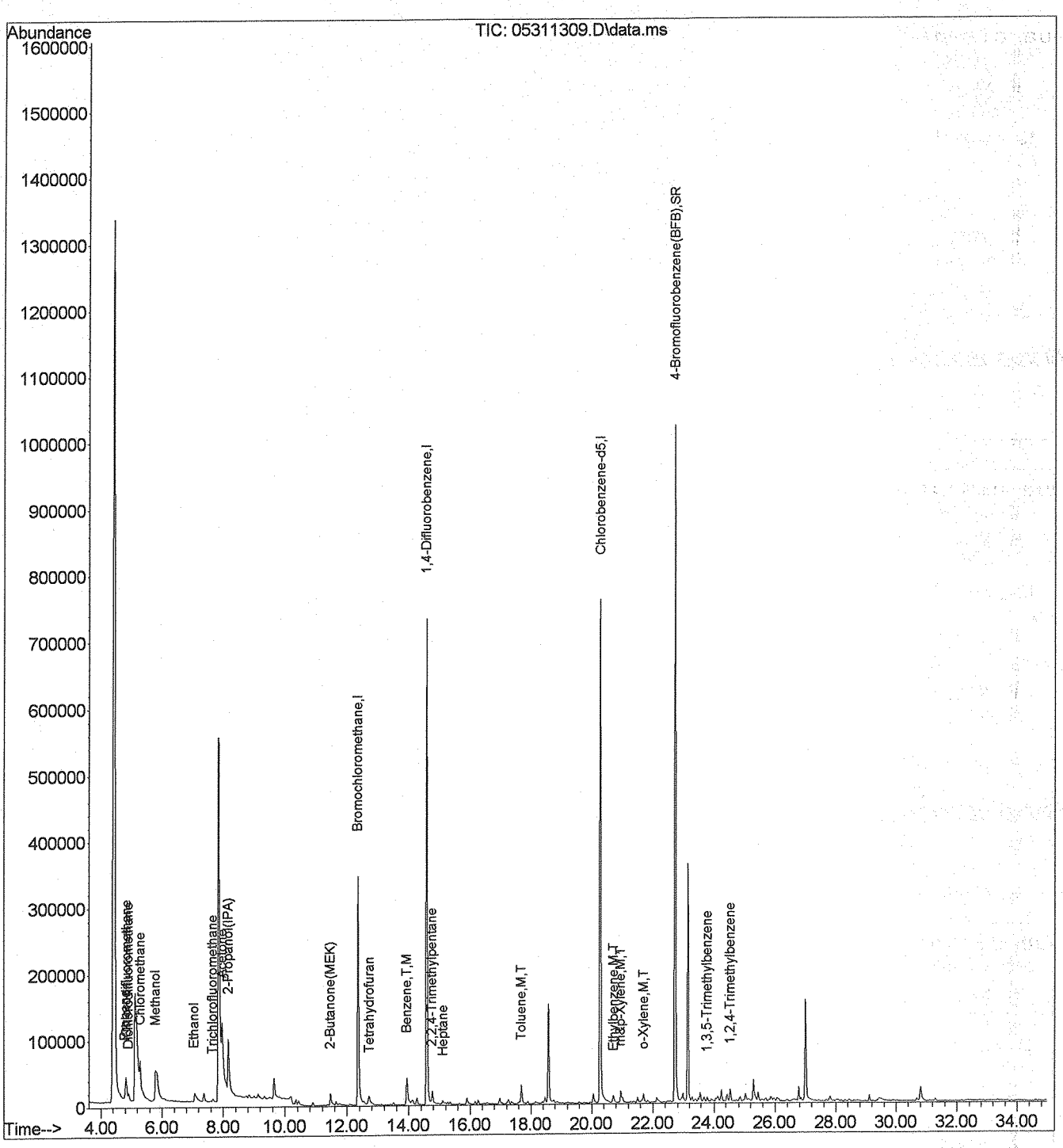
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Tetrahydrofuran	12.725	72	4497	0.55 ppbv #	82
34) 1,2-Dichloroethane	0.000		0	N.D.	
35) 1,1,1-Trichloroethane	0.000		0	N.D.	
37) Benzene	13.937	78	37133	0.64 ppbv	98
38) CarbonTetrachloride	13.973	117	1760	N.D.	
39) Cyclohexane	14.026	69	287	N.D.	
40) 1,2-Dichloropropane	15.275	63	107	N.D.	
41) Bromodichloromethane	0.000		0	N.D.	
42) 1,4-Dioxane	0.000		0	N.D.	
43) Trichloroethene(TCE)	0.000		0	N.D.	
44) 2,2,4-Trimethylpentane	14.757	57	22522	0.22 ppbv #	94
45) Heptane	15.114	71	1277	0.07 ppbv #	78
46) cis-1,3-Dichloropropene	0.000		0	N.D.	
47) 4-Methyl-2-pentanone(M...	16.576	58	433	N.D.	
48) trans-1,3-Dichloropropene	17.682	75	609	N.D.	
49) 1,1,2-Trichloroethane	0.000		0	N.D. d	
50) Toluene	17.682	91	28342	0.38 ppbv	97
51) 2-Hexanone(MBK)	18.217	58	428	N.D.	
52) Dibromochloromethane	0.000		0	N.D.	
53) 1,2-Dibromoethane	0.000		0	N.D.	
54) Tetrachloroethene(PCE)	19.019	166	132	N.D.	
56) Chlorobenzene	20.285	114	116	N.D.	
57) Ethylbenzene	20.713	91	11131	0.12 ppbv #	96
58) m&p-Xylene	20.945	106	11313	0.30 ppbv #	83
59) Bromoform	0.000		0	N.D.	
60) Styrene	21.694	104	739	N.D.	
61) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
62) o-Xylene	21.694	91	10589	0.14 ppbv #	94
64) 4-Ethyltoluene	0.000		0	N.D. d	
65) 1,3,5-Trimethylbenzene	23.780	120	2255	0.05 ppbv #	93
66) 1,2,4-Trimethylbenzene	24.529	120	8105	0.18 ppbv #	96
67) BenzylChloride(a-Chlor...	25.118	91	332	N.D.	
68) 1,3-Dichlorobenzene	25.064	146	108	N.D.	
69) 1,4-Dichlorobenzene	25.296	146	1239	N.D.	
70) 1,2-Dichlorobenzene	0.000		0	N.D.	
71) 1,2,4-Trichlorobenzene	29.451	180	454	N.D.	
72) Hexachlorobutadiene	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311309.D
Acq On : 31 May 2013 14:53
Operator : JJG
Sample : 130647-63193 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 31 17:27:20 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311310.D
Acq On : 31 May 2013 15:41
Operator : JJG
Sample : 130647-63194 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 31 17:28:53 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Bromochloromethane	12.350	128	137679	10.00 ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	784034	10.00 ppbv	0.00
55) Chlorobenzene-d5	20.285	117	723118	10.00 ppbv	0.00
System Monitoring Compounds					
63) 4-Bromofluorobenzene(BFB)	22.711	174	477035	10.54 ppbv	0.00
Spiked Amount 10.000			Recovery = 105.40%		
Target Compounds					Qvalue
2) Chlorodifluoromethane	4.835	51	5513	0.20 ppbv #	93
3) Propene	4.799	42	5174	0.72 ppbv	89
4) Dichlorodifluoromethane	4.908	85	17237	0.37 ppbv	99
5) Chloromethane	5.306	52	1475	0.33 ppbv #	1
6) Dichlorotetrafluoroethane	5.342	135	325	N.D.	
7) VinylChloride	0.000		0	N.D.	
8) Methanol	5.867	31	25594m	5.77 ppbv	
9) 1,3-Butadiene	0.000		0	N.D.	
10) Bromomethane	0.000		0	N.D. d	
11) Chloroethane	0.000		0	N.D.	
12) Dichlorofluoromethane	0.000		0	N.D.	
13) Ethanol	7.134	45	11167m	1.90 ppbv	
14) VinylBromide	0.000		0	N.D.	
15) Acetone	7.984	58	36157m	4.85 ppbv	
16) Trichlorofluoromethane	7.659	103	5098	0.19 ppbv #	93
17) 2-Propanol(IPA)	8.165	45	160925m	6.30 ppbv	
18) Acrylonitrile	0.000		0	N.D.	
19) 1,1-Dichloroethene	0.000		0	N.D.	
20) MethyleneChloride(DCM)	0.000		0	N.D. d	
21) AllylChloride	9.323	39	115	N.D.	
22) CarbonDisulfide	0.000		0	N.D. d	
23) Trichlorotrifluoroethane	8.998	103	1535	0.07 ppbv #	81
24) trans-1,2-Dichloroethene	0.000		0	N.D.	
25) 1,1-Dichloroethane	0.000		0	N.D.	
26) MethylTertButylEther(M...	10.424	73	281	N.D.	
27) VinylAcetate	10.906	43	262	N.D.	
28) 2-Butanone(MEK)	11.476	72	2314	0.30 ppbv #	61
29) cis-1,2-Dichloroethene	0.000		0	N.D.	
30) Hexane	0.000		0	N.D.	
31) Chloroform	12.493	83	463	N.D.	
32) EthylAcetate	0.000		0	N.D. d	

5/31/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311310.D
Acq On : 31 May 2013 15:41
Operator : JJG
Sample : 130647-63194 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 31 17:28:53 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

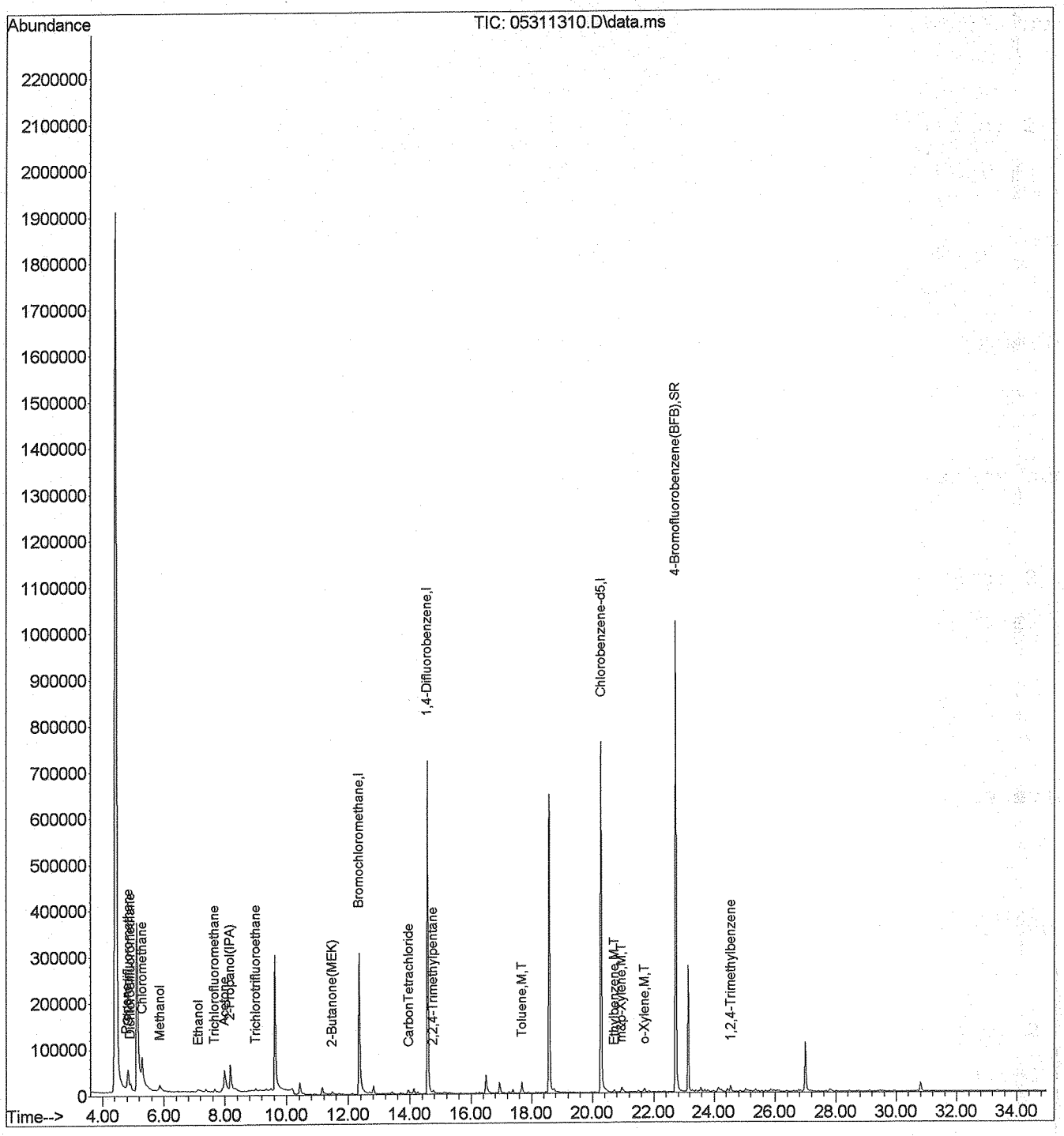
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Tetrahydrofuran	0.000		0	N.D.	
34) 1,2-Dichloroethane	0.000		0	N.D.	
35) 1,1,1-Trichloroethane	0.000		0	N.D.	
37) Benzene	0.000		0	N.D. d	
38) CarbonTetrachloride	13.973	117	2960	0.06 ppbv #	95
39) Cyclohexane	0.000		0	N.D.	
40) 1,2-Dichloropropane	0.000		0	N.D.	
41) Bromodichloromethane	0.000		0	N.D.	
42) 1,4-Dioxane	0.000		0	N.D.	
43) Trichloroethene(TCE)	15.292	130	948	N.D.	
44) 2,2,4-Trimethylpentane	14.758	57	7544	0.07 ppbv #	93
45) Heptane	15.096	71	536	N.D.	
46) cis-1,3-Dichloropropene	0.000		0	N.D.	
47) 4-Methyl-2-pentanone(M...	16.576	58	116	N.D.	
48) trans-1,3-Dichloropropene	0.000		0	N.D. d	
49) 1,1,2-Trichloroethane	17.860	97	872	N.D.	
50) Toluene	17.682	91	17020	0.23 ppbv #	99
51) 2-Hexanone(MBK)	0.000		0	N.D.	
52) Dibromochloromethane	19.019	129	122	N.D.	
53) 1,2-Dibromoethane	0.000		0	N.D.	
54) Tetrachloroethene(PCE)	19.019	166	144	N.D.	
56) Chlorobenzene	0.000		0	N.D.	
57) Ethylbenzene	20.713	91	5705	0.06 ppbv #	94
58) m&p-Xylene	20.945	106	6779	0.18 ppbv #	92
59) Bromoform	0.000		0	N.D.	
60) Styrene	21.676	104	371	N.D.	
61) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
62) o-Xylene	21.694	91	6579	0.09 ppbv #	97
64) 4-Ethyltoluene	23.691	120	1070	N.D.	
65) 1,3,5-Trimethylbenzene	23.780	120	1365	N.D.	
66) 1,2,4-Trimethylbenzene	24.547	120	5225	0.12 ppbv	95
67) BenzylChloride(a-Chlor...	25.296	91	116	N.D.	
68) 1,3-Dichlorobenzene	0.000		0	N.D.	
69) 1,4-Dichlorobenzene	0.000		0	N.D.	
70) 1,2-Dichlorobenzene	0.000		0	N.D.	
71) 1,2,4-Trichlorobenzene	29.469	180	303	N.D.	
72) Hexachlorobutadiene	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311310.D
Acq On : 31 May 2013 15:41
Operator : JJG
Sample : 130647-63194 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 31 17:28:53 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311311.D
Acq On : 31 May 2013 16:29
Operator : JJG
Sample : 130647-63195 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 31 17:31:17 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	12.350	128	141367	10.00	ppbv		0.00
36) 1,4-Difluorobenzene	14.579	114	779067	10.00	ppbv		0.00
55) Chlorobenzene-d5	20.285	117	737017	10.00	ppbv		0.00
System Monitoring Compounds							
63) 4-Bromofluorobenzene(BFB)	22.711	174	474399	10.29	ppbv		0.00
Spiked Amount 10.000			Recovery = 102.90%				
Target Compounds							Qvalue
2) Chlorodifluoromethane	4.836	51	4962	0.18	ppbv	#	94
3) Propene	4.781	42	5764	0.78	ppbv		95
4) Dichlorodifluoromethane	4.908	85	16086	0.33	ppbv		98
5) Chloromethane	5.288	52	1341	0.30	ppbv	#	1
6) Dichlorotetrafluoroethane	5.324	135	185	N.D.			
7) VinylChloride	0.000		0	N.D.			
8) Methanol	5.758	31	268837m	77.54	ppbv		
9) 1,3-Butadiene	0.000		0	N.D.			
10) Bromomethane	0.000		0	N.D.	d		
11) Chloroethane	0.000		0	N.D.			
12) Dichlorofluoromethane	0.000		0	N.D.			
13) Ethanol	7.061	45	35469m	5.88	ppbv		
14) VinylBromide	0.000		0	N.D.			
15) Acetone	7.966	58	40367m	5.27	ppbv		
16) Trichlorofluoromethane	7.659	103	4518	0.16	ppbv	#	98
17) 2-Propanol(IPA)	8.183	45	50565m	1.93	ppbv		
18) Acrylonitrile	0.000		0	N.D.			
19) 1,1-Dichloroethene	0.000		0	N.D.			
20) MethyleneChloride(DCM)	0.000		0	N.D.	d		
21) AllylChloride	0.000		0	N.D.	d		
22) CarbonDisulfide	0.000		0	N.D.	d		
23) Trichlorotrifluoroethane	8.998	103	1314	0.06	ppbv	#	96
24) trans-1,2-Dichloroethene	0.000		0	N.D.			
25) 1,1-Dichloroethane	0.000		0	N.D.			
26) MethylTertButylEther(M...	0.000		0	N.D.			
27) VinylAcetate	0.000		0	N.D.	d		
28) 2-Butanone(MEK)	11.441	72	14243	1.82	ppbv	#	76
29) cis-1,2-Dichloroethene	0.000		0	N.D.			
30) Hexane	0.000		0	N.D.	d		
31) Chloroform	12.493	83	423	N.D.			
32) EthylAcetate	0.000		0	N.D.	d		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311311.D
Acq On : 31 May 2013 16:29
Operator : JJG
Sample : 130647-63195 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 31 17:31:17 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Tetrahydrofuran	12.707	72	7298	0.92 ppbv #	70
34) 1,2-Dichloroethane	13.616	62	250	N.D.	
35) 1,1,1-Trichloroethane	0.000		0	N.D.	
37) Benzene	13.937	78	69331	1.21 ppbv	98
38) CarbonTetrachloride	13.973	117	2752	0.06 ppbv #	98
39) Cyclohexane	14.026	69	334	N.D.	
40) 1,2-Dichloropropane	15.257	63	621	N.D.	
41) Bromodichloromethane	0.000		0	N.D.	
42) 1,4-Dioxane	15.667	88	247	N.D.	
43) Trichloroethene(TCE)	15.292	130	345	N.D.	
44) 2,2,4-Trimethylpentane	14.758	57	23874	0.23 ppbv #	92
45) Heptane	15.096	71	2023	0.11 ppbv #	49
46) cis-1,3-Dichloropropene	0.000		0	N.D.	
47) 4-Methyl-2-pentanone(M...	16.559	58	717	N.D.	
48) trans-1,3-Dichloropropene	17.682	75	438	N.D.	
49) 1,1,2-Trichloroethane	0.000		0	N.D. d	
50) Toluene	17.682	91	42656	0.59 ppbv	98
51) 2-Hexanone(MBK)	18.199	58	898	N.D.	
52) Dibromochloromethane	0.000		0	N.D.	
53) 1,2-Dibromoethane	0.000		0	N.D.	
54) Tetrachloroethene(PCE)	19.019	166	107	N.D.	
56) Chlorobenzene	20.285	114	113	N.D.	
57) Ethylbenzene	20.713	91	14900	0.15 ppbv #	97
58) m&p-Xylene	20.945	106	13385	0.35 ppbv #	85
59) Bromoform	0.000		0	N.D.	
60) Styrene	21.676	104	1180	N.D.	
61) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
62) o-Xylene	21.694	91	11432	0.15 ppbv	97
64) 4-Ethyltoluene	0.000		0	N.D. d	
65) 1,3,5-Trimethylbenzene	23.780	120	2203	0.05 ppbv #	92
66) 1,2,4-Trimethylbenzene	24.529	120	8163	0.18 ppbv #	86
67) BenzylChloride(a-Chlor...	25.189	91	107	N.D.	
68) 1,3-Dichlorobenzene	0.000		0	N.D.	
69) 1,4-Dichlorobenzene	0.000		0	N.D. d	
70) 1,2-Dichlorobenzene	0.000		0	N.D.	
71) 1,2,4-Trichlorobenzene	29.451	180	383	N.D.	
72) Hexachlorobutadiene	0.000		0	N.D.	

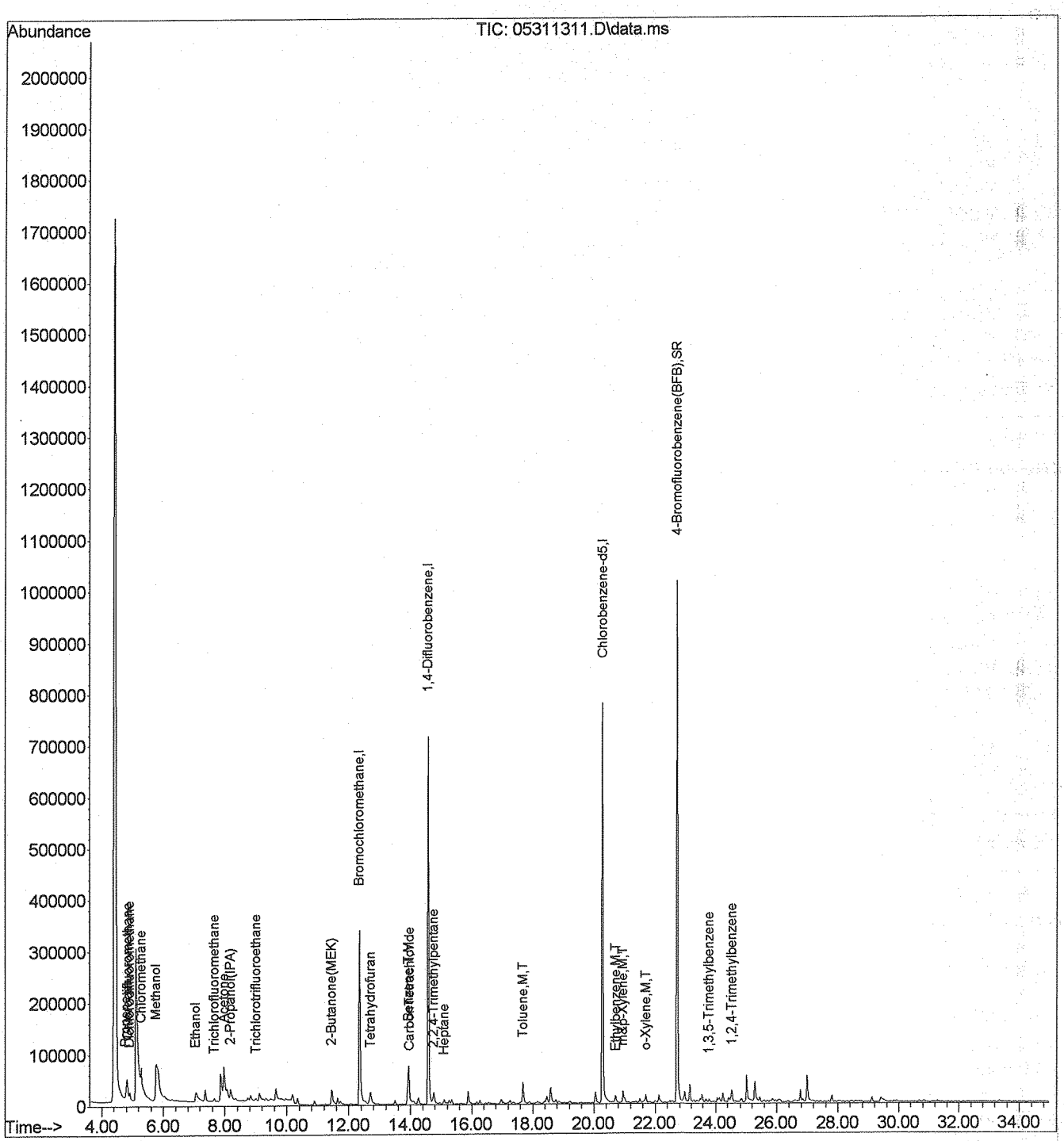
(#) = qualifier out of range (m) = manual integration (+) = signals summed

05/31/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311311.D
Acq On : 31 May 2013 16:29
Operator : JJG
Sample : 130647-63195 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 31 17:31:17 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311325.D
Acq On : 1 Jun 2013 3:42
Operator : JJG
Sample : 130647-63195 x5
Misc : IS/Surr: PS082712-02 + 100mL
ALS Vial : 7 Sample Multiplier: 5

Quant Time: Jun 03 10:40:35 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Bromochloromethane	12.350	128	139575	10.00 ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	767427	10.00 ppbv	0.00
55) Chlorobenzene-d5	20.285	117	739357	10.00 ppbv	0.00
System Monitoring Compounds					
63) 4-Bromofluorobenzene(BFB)	22.710	174	465572	10.06 ppbv	0.00
Spiked Amount 10.000			Recovery = 100.60%		
Target Compounds					Qvalue
2) Chlorodifluoromethane	4.836	51	1177	N.D.	
3) Propene	4.799	42	1214	N.D.	
4) Dichlorodifluoromethane	4.908	85	3127	N.D.	
5) Chloromethane	5.306	52	109	N.D.	
6) Dichlorotetrafluoroethane	0.000		0	N.D.	
7) VinylChloride	0.000		0	N.D.	
8) Methanol	5.849	31	57267m	65.26 ppbv	
9) 1,3-Butadiene	0.000		0	N.D.	
10) Bromomethane	6.446	96	309	N.D.	
11) Chloroethane	0.000		0	N.D.	
12) Dichlorofluoromethane	0.000		0	N.D.	
13) Ethanol	7.116	45	6711m	5.64 ppbv	
14) VinylBromide	0.000		0	N.D.	
15) Acetone	8.021	58	8703	5.76 ppbv #	86
16) Trichlorofluoromethane	7.659	103	826	N.D.	
17) 2-Propanol(IPA)	8.238	45	11395	N.D.	
18) Acrylonitrile	0.000		0	N.D.	
19) 1,1-Dichloroethene	0.000		0	N.D.	
20) MethyleneChloride(DCM)	9.323	84	1452	N.D.	
21) AllylChloride	9.251	39	111	N.D.	
22) CarbonDisulfide	9.486	76	4308	N.D.	
23) Trichlorotrifluoroethane	0.000		0	N.D.	
24) trans-1,2-Dichloroethene	0.000		0	N.D.	
25) 1,1-Dichloroethane	0.000		0	N.D.	
26) MethylTertButylEther(M...	0.000		0	N.D.	
27) VinylAcetate	10.888	43	272	N.D.	
28) 2-Butanone(MEK)	11.512	72	1868	N.D.	
29) cis-1,2-Dichloroethene	0.000		0	N.D.	
30) Hexane	0.000		0	N.D.	
31) Chloroform	0.000		0	N.D.	
32) EthylAcetate	12.118	43	893	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311325.D
Acq On : 1 Jun 2013 3:42
Operator : JJG
Sample : 130647-63195 x5
Misc : IS/Surr: PS082712-02 + 100mL
ALS Vial : 7 Sample Multiplier: 5

Quant Time: Jun 03 10:40:35 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

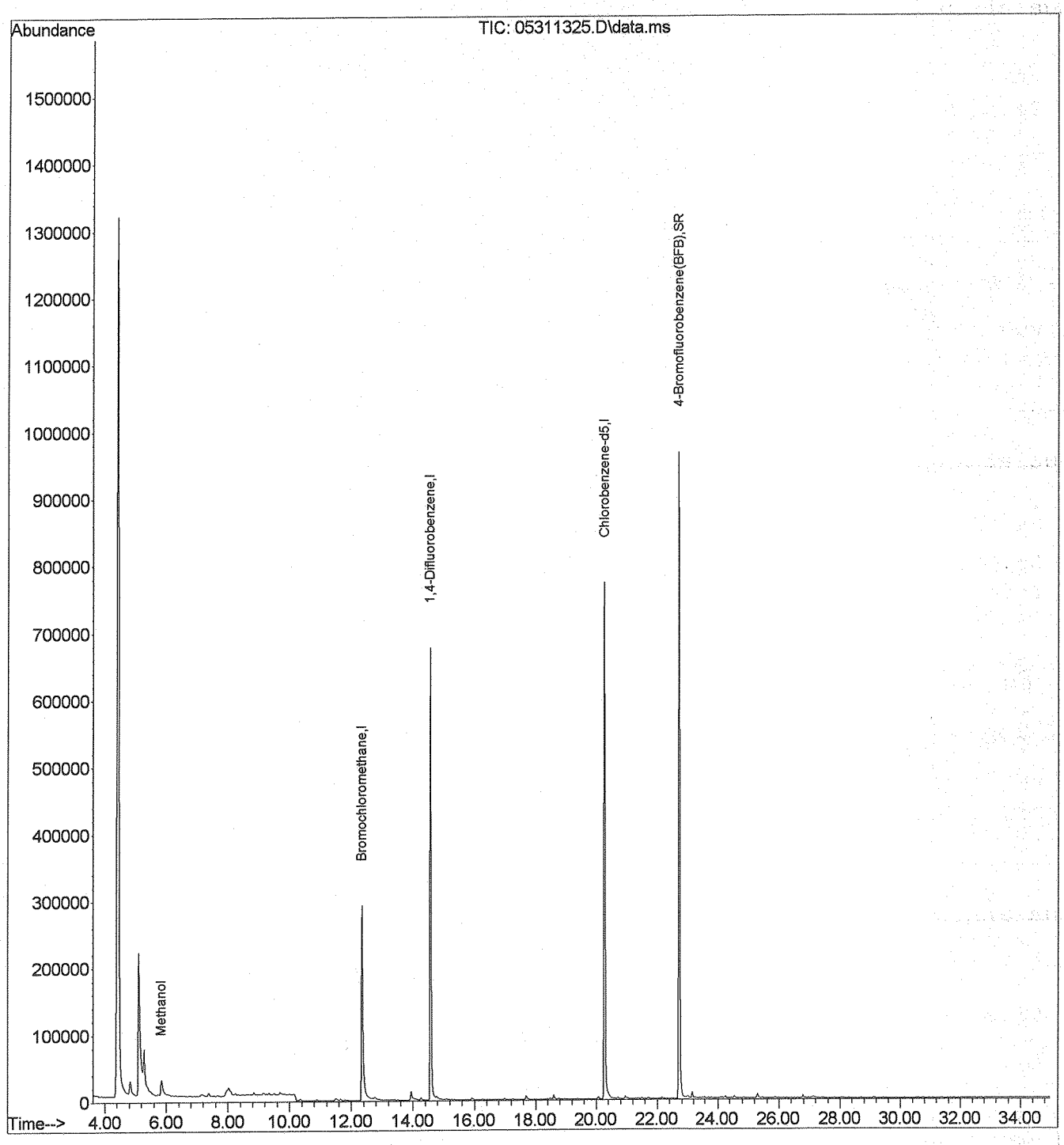
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Tetrahydrofuran	12.760	72	1298	N.D.	
34) 1,2-Dichloroethane	0.000		0	N.D.	
35) 1,1,1-Trichloroethane	0.000		0	N.D.	
37) Benzene	13.937	78	15744	N.D.	
38) CarbonTetrachloride	13.973	117	385	N.D.	
39) Cyclohexane	0.000		0	N.D.	
40) 1,2-Dichloropropane	15.346	63	107	N.D.	
41) Bromodichloromethane	0.000		0	N.D.	
42) 1,4-Dioxane	0.000		0	N.D.	
43) Trichloroethene(TCE)	0.000		0	N.D.	
44) 2,2,4-Trimethylpentane	14.757	57	5448	N.D.	
45) Heptane	15.114	71	280	N.D.	
46) cis-1,3-Dichloropropene	0.000		0	N.D.	
47) 4-Methyl-2-pentanone(M...	0.000		0	N.D.	
48) trans-1,3-Dichloropropene	0.000		0	N.D.	
49) 1,1,2-Trichloroethane	17.860	97	337	N.D.	
50) Toluene	17.682	91	7903	N.D.	
51) 2-Hexanone(MBK)	0.000		0	N.D.	
52) Dibromochloromethane	0.000		0	N.D.	
53) 1,2-Dibromoethane	0.000		0	N.D.	
54) Tetrachloroethene(PCE)	0.000		0	N.D.	
56) Chlorobenzene	20.285	114	347	N.D.	
57) Ethylbenzene	20.713	91	2751	N.D.	
58) m&p-Xylene	20.963	106	2429	N.D.	
59) Bromoform	0.000		0	N.D.	
60) Styrene	0.000		0	N.D.	
61) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
62) o-Xylene	21.712	91	2302	N.D.	
64) 4-Ethyltoluene	23.691	120	241	N.D.	
65) 1,3,5-Trimethylbenzene	23.798	120	353	N.D.	
66) 1,2,4-Trimethylbenzene	24.547	120	1395	N.D.	
67) BenzylChloride(a-Chlor...	25.296	91	1345	N.D.	
68) 1,3-Dichlorobenzene	0.000		0	N.D.	
69) 1,4-Dichlorobenzene	25.296	146	531	N.D.	
70) 1,2-Dichlorobenzene	0.000		0	N.D.	
71) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
72) Hexachlorobutadiene	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311325.D
Acq On : 1 Jun 2013 3:42
Operator : JJG
Sample : 130647-63195 x5
Misc : IS/Surr: PS082712-02 + 100mL
ALS Vial : 7 Sample Multiplier: 5

Quant Time: Jun 03 10:40:35 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration



6/03/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311312.D
Acq On : 31 May 2013 17:17
Operator : JJG
Sample : 130647-63196 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 31 17:54:05 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Bromochloromethane	12.350	128	142255	10.00 ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	797341	10.00 ppbv	0.00
55) Chlorobenzene-d5	20.285	117	733498	10.00 ppbv	0.00
System Monitoring Compounds					
63) 4-Bromofluorobenzene(BFB)	22.710	174	472162	10.29 ppbv	0.00
Spiked Amount 10.000			Recovery = 102.90%		
Target Compounds					Qvalue
2) Chlorodifluoromethane	4.835	51	4964	0.18 ppbv #	92
3) Propene	4.799	42	3671	0.50 ppbv	90
4) Dichlorodifluoromethane	4.908	85	16683	0.34 ppbv	99
5) Chloromethane	5.306	52	1448	0.32 ppbv #	21
6) Dichlorotetrafluoroethane	5.342	135	299	N.D.	
7) VinylChloride	0.000		0	N.D.	
8) Methanol	5.867	31	21870m	4.76 ppbv	
9) 1,3-Butadiene	0.000		0	N.D.	
10) Bromomethane	0.000		0	N.D. d	
11) Chloroethane	0.000		0	N.D. d	
12) Dichlorofluoromethane	0.000		0	N.D.	
13) Ethanol	7.134	45	10168m	1.68 ppbv	
14) VinylBromide	0.000		0	N.D.	
15) Acetone	7.984	58	20537m	2.67 ppbv	
16) Trichlorofluoromethane	7.658	103	4719	0.17 ppbv	88
17) 2-Propanol(IPA)	8.201	45	42972m	1.63 ppbv	
18) Acrylonitrile	0.000		0	N.D.	
19) 1,1-Dichloroethene	0.000		0	N.D.	
20) MethyleneChloride(DCM)	0.000		0	N.D. d	
21) AllylChloride	9.323	39	352	N.D.	
22) CarbonDisulfide	0.000		0	N.D. d	
23) Trichlorotrifluoroethane	8.998	103	1312	0.06 ppbv #	94
24) trans-1,2-Dichloroethene	0.000		0	N.D.	
25) 1,1-Dichloroethane	0.000		0	N.D.	
26) MethylTertButylEther(M...	0.000		0	N.D.	
27) VinylAcetate	10.888	43	418	N.D.	
28) 2-Butanone(MEK)	0.000		0	N.D. d	
29) cis-1,2-Dichloroethene	0.000		0	N.D.	
30) Hexane	0.000		0	N.D.	
31) Chloroform	12.511	83	369	N.D.	
32) EthylAcetate	0.000		0	N.D. d	

5/31/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311312.D
Acq On : 31 May 2013 17:17
Operator : JJG
Sample : 130647-63196 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 31 17:54:05 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Tetrahydrofuran	0.000		0	N.D.	
34) 1,2-Dichloroethane	0.000		0	N.D.	
35) 1,1,1-Trichloroethane	0.000		0	N.D.	
37) Benzene	0.000		0	N.D. d	
38) CarbonTetrachloride	13.973	117	2991	0.06 ppbv	92
39) Cyclohexane	0.000		0	N.D.	
40) 1,2-Dichloropropane	15.364	63	109	N.D.	
41) Bromodichloromethane	0.000		0	N.D.	
42) 1,4-Dioxane	0.000		0	N.D.	
43) Trichloroethene(TCE)	15.292	130	897	N.D.	
44) 2,2,4-Trimethylpentane	14.757	57	9902	0.09 ppbv #	92
45) Heptane	15.096	71	734	N.D.	
46) cis-1,3-Dichloropropene	0.000		0	N.D.	
47) 4-Methyl-2-pentanone(M...	0.000		0	N.D.	
48) trans-1,3-Dichloropropene	0.000		0	N.D.	
49) 1,1,2-Trichloroethane	0.000		0	N.D.	
50) Toluene	17.682	91	17067	0.23 ppbv #	97
51) 2-Hexanone(MBK)	0.000		0	N.D.	
52) Dibromochloromethane	19.019	129	141	N.D.	
53) 1,2-Dibromoethane	0.000		0	N.D.	
54) Tetrachloroethene(PCE)	0.000		0	N.D.	
56) Chlorobenzene	20.303	114	219	N.D.	
57) Ethylbenzene	20.713	91	6055	0.06 ppbv #	92
58) m&p-Xylene	20.963	106	7648	0.20 ppbv #	93
59) Bromoform	0.000		0	N.D.	
60) Styrene	21.676	104	761	N.D.	
61) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
62) o-Xylene	21.694	91	7753	0.10 ppbv #	93
64) 4-Ethyltoluene	0.000		0	N.D. d	
65) 1,3,5-Trimethylbenzene	0.000		0	N.D. d	
66) 1,2,4-Trimethylbenzene	24.547	120	6839	0.15 ppbv #	95
67) BenzylChloride(a-Chlor...	25.296	91	281	N.D.	
68) 1,3-Dichlorobenzene	0.000		0	N.D.	
69) 1,4-Dichlorobenzene	0.000		0	N.D.	
70) 1,2-Dichlorobenzene	0.000		0	N.D.	
71) 1,2,4-Trichlorobenzene	29.451	180	107	N.D.	
72) Hexachlorobutadiene	0.000		0	N.D.	

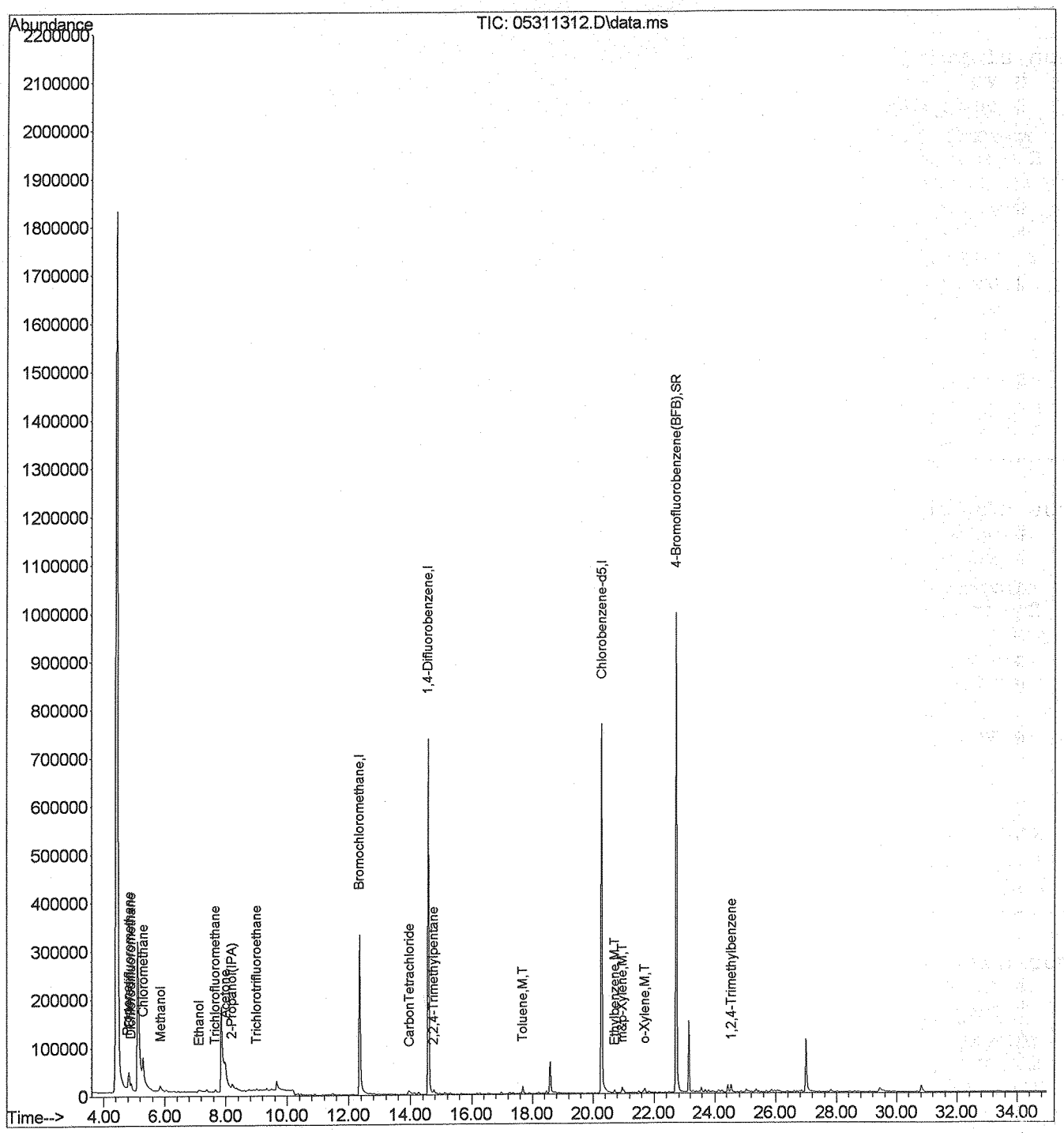
(#) = qualifier out of range (m) = manual integration (+) = signals summed

5/31/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311312.D
Acq On : 31 May 2013 17:17
Operator : JJG
Sample : 130647-63196 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 31 17:54:05 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration



05/31/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311313.D
Acq On : 31 May 2013 18:05
Operator : JJG
Sample : 130647-63197 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 03 09:32:30 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	12.350	128	141173	10.00	ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	788186	10.00	ppbv	0.00
55) Chlorobenzene-d5	20.267	117	733920	10.00	ppbv	-0.02
System Monitoring Compounds						
63) 4-Bromofluorobenzene(BFB)	22.710	174	461519	10.05	ppbv	0.00
Spiked Amount 10.000			Recovery = 100.50%			
Target Compounds						Qvalue
2) Chlorodifluoromethane	4.835	51	4067	0.15	ppbv #	90
3) Propene	4.781	42	11923	1.62	ppbv	91
4) Dichlorodifluoromethane	4.908	85	10684	0.22	ppbv	96
5) Chloromethane	5.306	52	861	0.19	ppbv #	1
6) Dichlorotetrafluoroethane	0.000		0	N.D.		
7) VinylChloride	0.000		0	N.D.		
8) Methanol	5.849	31	80080m	18.38	ppbv	
9) 1,3-Butadiene	0.000		0	N.D.		
10) Bromomethane	0.000		0	N.D.	d	
11) Chloroethane	0.000		0	N.D.	d	
12) Dichlorofluoromethane	0.000		0	N.D.		
13) Ethanol	7.097	45	15931m	2.65	ppbv	
14) VinylBromide	0.000		0	N.D.		
15) Acetone	8.002	58	19636	2.57	ppbv #	97
16) Trichlorofluoromethane	7.658	103	3041	0.11	ppbv #	96
17) 2-Propanol(IPA)	8.219	45	21244m	0.81	ppbv	
18) Acrylonitrile	0.000		0	N.D.		
19) 1,1-Dichloroethene	0.000		0	N.D.		
20) MethyleneChloride(DCM)	0.000		0	N.D.	d	
21) AllylChloride	9.197	39	111	N.D.		
22) CarbonDisulfide	0.000		0	N.D.	d	
23) Trichlorotrifluoroethane	8.998	103	781	N.D.		
24) trans-1,2-Dichloroethene	0.000		0	N.D.		
25) 1,1-Dichloroethane	0.000		0	N.D.		
26) MethylTertButylEther(M...	0.000		0	N.D.		
27) VinylAcetate	10.888	43	764	N.D.		
28) 2-Butanone(MEK)	11.512	72	3012	0.39	ppbv	73
29) cis-1,2-Dichloroethene	0.000		0	N.D.		
30) Hexane	0.000		0	N.D.	d	
31) Chloroform	0.000		0	N.D.		
32) EthylAcetate	0.000		0	N.D.	d	

06/03/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311313.D
Acq On : 31 May 2013 18:05
Operator : JJG
Sample : 130647-63197 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 03 09:32:30 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Tetrahydrofuran	12.760	72	1597	0.20 ppbv	96
34) 1,2-Dichloroethane	0.000		0	N.D.	
35) 1,1,1-Trichloroethane	0.000		0	N.D.	
37) Benzene	13.937	78	26897	0.46 ppbv	98
38) CarbonTetrachloride	0.000		0	N.D. d	
39) Cyclohexane	14.026	69	117	N.D.	
40) 1,2-Dichloropropane	0.000		0	N.D.	
41) Bromodichloromethane	0.000		0	N.D.	
42) 1,4-Dioxane	0.000		0	N.D.	
43) Trichloroethene(TCE)	15.292	130	113	N.D.	
44) 2,2,4-Trimethylpentane	14.757	57	18156	0.18 ppbv #	96
45) Heptane	15.096	71	1177	0.06 ppbv #	73
46) cis-1,3-Dichloropropene	0.000		0	N.D.	
47) 4-Methyl-2-pentanone(M...	0.000		0	N.D.	
48) trans-1,3-Dichloropropene	0.000		0	N.D.	
49) 1,1,2-Trichloroethane	17.860	97	494	N.D.	
50) Toluene	17.682	91	25650	0.35 ppbv #	98
51) 2-Hexanone(MBK)	0.000		0	N.D.	
52) Dibromochloromethane	0.000		0	N.D.	
53) 1,2-Dibromoethane	0.000		0	N.D.	
54) Tetrachloroethene(PCE)	0.000		0	N.D.	
56) Chlorobenzene	20.267	114	123	N.D.	
57) Ethylbenzene	20.713	91	8440	0.09 ppbv #	96
58) m&p-Xylene	20.945	106	9921	0.26 ppbv #	79
59) Bromoform	0.000		0	N.D.	
60) Styrene	21.676	104	1153	N.D.	
61) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
62) o-Xylene	21.694	91	9268	0.12 ppbv #	93
64) 4-Ethyltoluene	0.000		0	N.D. d	
65) 1,3,5-Trimethylbenzene	23.780	120	2464	0.05 ppbv #	88
66) 1,2,4-Trimethylbenzene	24.529	120	8118	0.18 ppbv #	97
67) BenzylChloride(a-Chlor...	25.118	91	256	N.D.	
68) 1,3-Dichlorobenzene	0.000		0	N.D.	
69) 1,4-Dichlorobenzene	25.296	146	668	N.D.	
70) 1,2-Dichlorobenzene	0.000		0	N.D.	
71) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
72) Hexachlorobutadiene	0.000		0	N.D.	

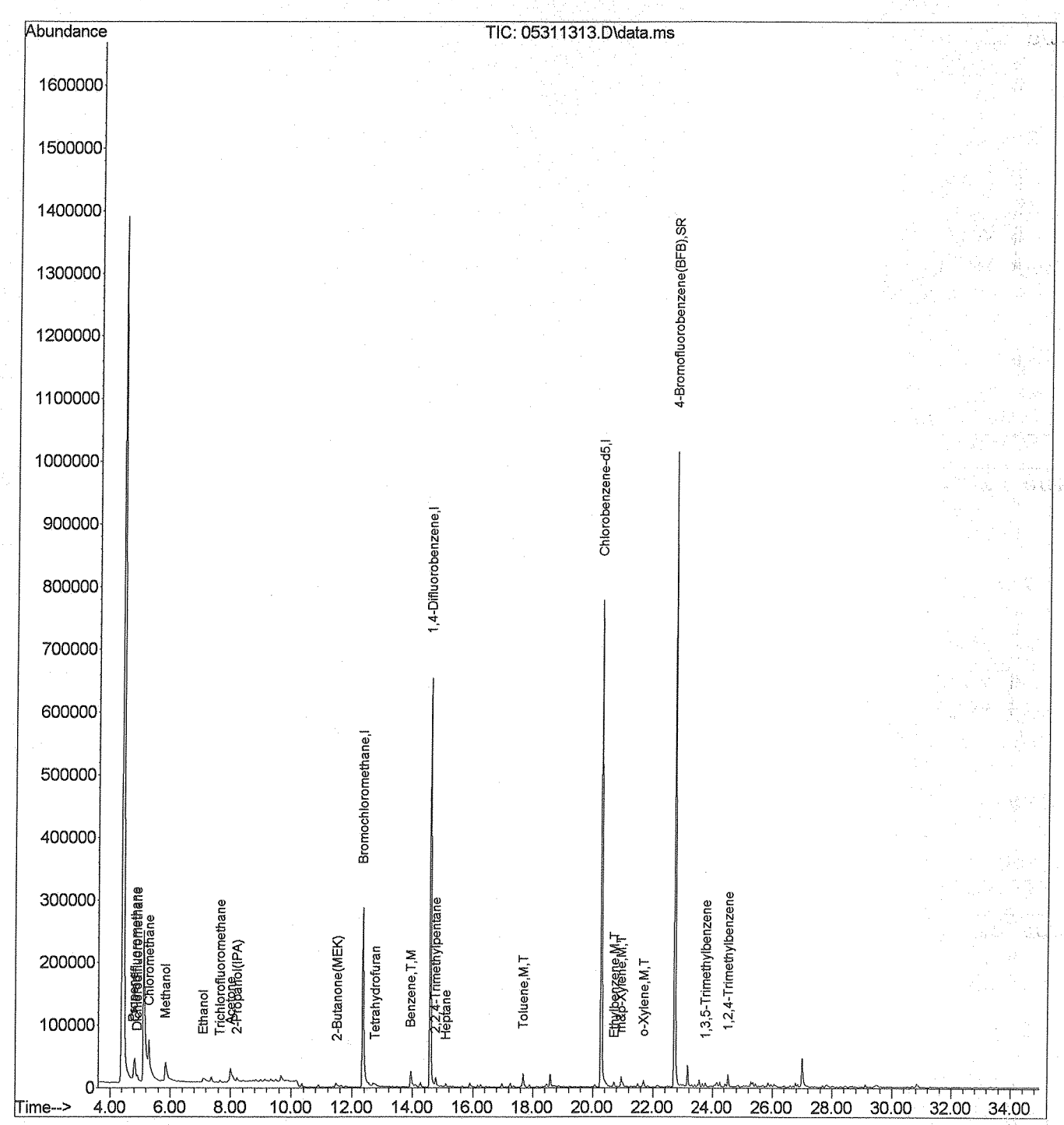
(#) = qualifier out of range (m) = manual integration (+) = signals summed

6/3/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311313.D
Acq On : 31 May 2013 18:05
Operator : JJG
Sample : 130647-63197 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 03 09:32:30 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration



TO-15 RAW QC & ICAL SUMMARY

MS #3 Instrument Logbook

Sequence Name: C:\msdchem\1\sequence\2013\053113.S
Comment: GCMS-03
Operator: JJG
Data Path: C:\MSDCHEM\1\MS03\2013\053113\
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line			Sample Name/Misc Info
1)	Sample	1	05311301 TO15-5MS TO15 BFB 053113
2)	Sample	1	05311302 TO15-5MS TO15 CCV 053113
3)	Sample	1	05311303 TO15-5MS TO15 LCSD 053113
4)	Sample	1	05311304 TO15-5MS TO15 MB 053113
5)	Sample	2	05311305 TO15-5MS 130647-63190 x1
6)	Sample	2	05311306 TO15-5MS 130647-63190 x1 dp
7)	Sample	3	05311307 TO15-5MS 130647-63191 x1
8)	Sample	4	05311308 TO15-5MS 130647-63192 x1
9)	Sample	5	05311309 TO15-5MS 130647-63193 x1
10)	Sample	6	05311310 TO15-5MS 130647-63194 x1
11)	Sample	7	05311311 TO15-5MS 130647-63195 x1
12)	Sample	8	05311312 TO15-5MS 130647-63196 x1
13)	Sample	9	05311313 TO15-5MS 130647-63197 x1
14)	Sample	10	05311314 TO15-5MS 130650-63200 x1
15)	Sample	11	05311315 TO15-5MS 130650-63209 x1
16)	Sample	12	05311316 TO15-5MS 130650-63218 x1
17)	Sample	13	05311317 TO15-5MS 130650-63227 x1
18)	Sample	14	05311318 TO15-5MS 130650-63236 x1
19)	Sample	15	05311319 TO15-5MS 130650-63245 x1
20)	Sample	16	05311320 TO15-5MS 130653-63265 x1
21)	Sample	2	05311321 TO15-5MS 130653-63266 x1
22)	Sample	3	05311322 TO15-5MS 130653-63267 x1
23)	Sample	4	05311323 TO15-5MS 130653-63268 x1
24)	Sample	5	05311324 TO15-5MS 130647-63193 x2
25)	Sample	7	05311325 TO15-5MS 130647-63195 x5
26)	Sample	6	05311326 TO15-5MS Flow Check#053113-01
27)	Sample	1	05311327 TO15-5MS Can Check#000529

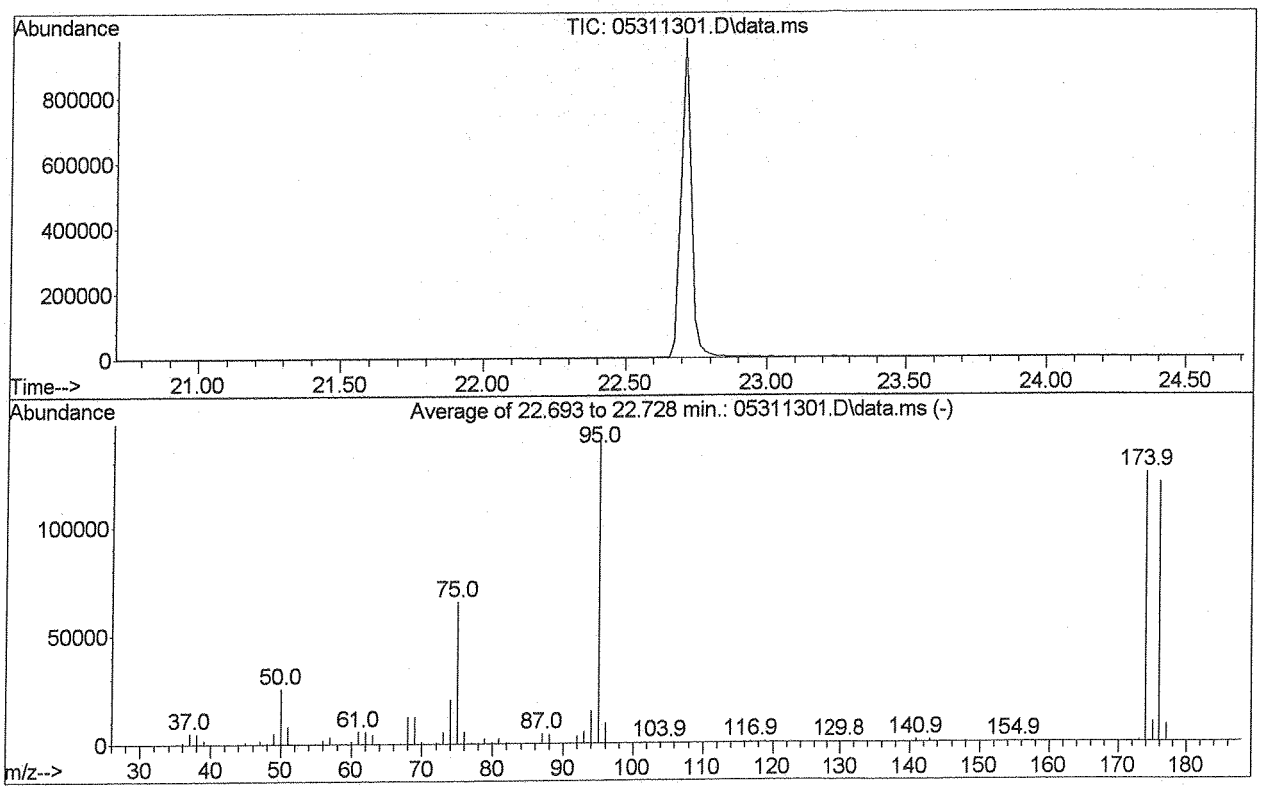
Comments: _____

Analyst: _____ **Date:** 06/03/13

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311301.D
Acq On : 31 May 2013 8:32 am
Operator : JJG
Sample : TO15 BFB 053113
Misc : IS/Surr: PS082712-02 + 50mL
ALS Vial : 1 Sample Multiplier: 1

Integration File: PAMS.P

Method : C:\msdchem\1\METHODS\2013\051513.M
Title : TO-15/TO-14
Last Update : Thu May 16 10:13:39 2013



AutoFind: Scans 1064, 1065, 1066; Background Corrected with Scan 1059

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.1	25488	PASS
75	95	30	60	46.4	65440	PASS
95	95	100	100	100.0	141003	PASS
96	95	5	9	6.6	9311	PASS
173	174	0.00	2	0.9	1137	PASS
174	95	50	100	88.2	124371	PASS
175	174	5	9	7.3	9107	PASS
176	174	95	101	96.6	120152	PASS
177	176	5	9	6.8	8113	PASS

5/31/13

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311302.D
Acq On : 31 May 2013 9:19
Operator : JJG
Sample : TO15 CCV 053113
Misc : IS/Surr: PS082712-02 + Cal: PS040413-01
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 31 15:58:54 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	12.350	128	146685	10.00	ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	752301	10.00	ppbv	0.00
55) Chlorobenzene-d5	20.285	117	756486	10.00	ppbv	0.00
System Monitoring Compounds						
63) 4-Bromofluorobenzene(BFB)	22.711	174	455206	9.62	ppbv	0.00
Spiked Amount 10.000			Recovery = 96.20%			
Target Compounds						Qvalue
2) Chlorodifluoromethane	4.817	51	282455	9.72	ppbv	100
3) Propene	4.781	42	79110m	10.37	ppbv	
4) Dichlorodifluoromethane	4.908	85	485056	9.67	ppbv	99
5) Chloromethane	5.288	52	47233m	10.04	ppbv	
6) Dichlorotetrafluoroethane	5.324	135	346658	10.14	ppbv	89
7) VinylChloride	5.668	62	161122m	9.66	ppbv	
8) Methanol	5.849	31	23428m	4.94	ppbv	
9) 1,3-Butadiene	5.849	54	100966m	9.53	ppbv	
10) Bromomethane	6.446	96	105092m	8.75	ppbv	
11) Chloroethane	6.736	66	26251	9.67	ppbv	98
12) Dichlorofluoromethane	7.007	67	367549m	10.24	ppbv	
13) Ethanol	7.043	45	63181m	10.10	ppbv	
14) VinylBromide	7.261	108	146782m	10.40	ppbv	
15) Acetone	7.966	58	76006m	9.57	ppbv	
16) Trichlorofluoromethane	7.677	103	313168	10.69	ppbv	99
17) 2-Propanol(IPA)	8.147	45	275368m	10.12	ppbv	
18) Acrylonitrile	8.962	52	128832m	10.83	ppbv	
19) 1,1-Dichloroethene	8.726	96	170377	10.20	ppbv	96
20) MethyleneChloride(DCM)	9.323	84	149386m	9.74	ppbv	
21) AllylChloride	9.305	39	146219m	10.88	ppbv	
22) CarbonDisulfide	9.486	76	477553m	9.63	ppbv	
23) Trichlorotrifluoroethane	8.998	103	246483	10.25	ppbv	97
24) trans-1,2-Dichloroethene	10.424	96	182437m	10.15	ppbv	
25) 1,1-Dichloroethane	10.906	63	361184	9.86	ppbv	100
26) MethylTertButylEther(M...	10.442	73	514412	10.57	ppbv	99
27) VinylAcetate	10.888	43	438278m	9.68	ppbv	
28) 2-Butanone(MEK)	11.423	72	88194m	10.85	ppbv	
29) cis-1,2-Dichloroethene	11.905	96	197672	10.22	ppbv	99
30) Hexane	11.477	86	37597	9.70	ppbv	84
31) Chloroform	12.493	83	429780	10.56	ppbv	97
32) EthylAcetate	12.011	43	450464	11.00	ppbv	97

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311302.D
Acq On : 31 May 2013 9:19
Operator : JJG
Sample : TO15 CCV 053113
Misc : IS/Surr: PS082712-02 + Cal: PS040413-01
ALS Vial : 1 Sample Multiplier: 1

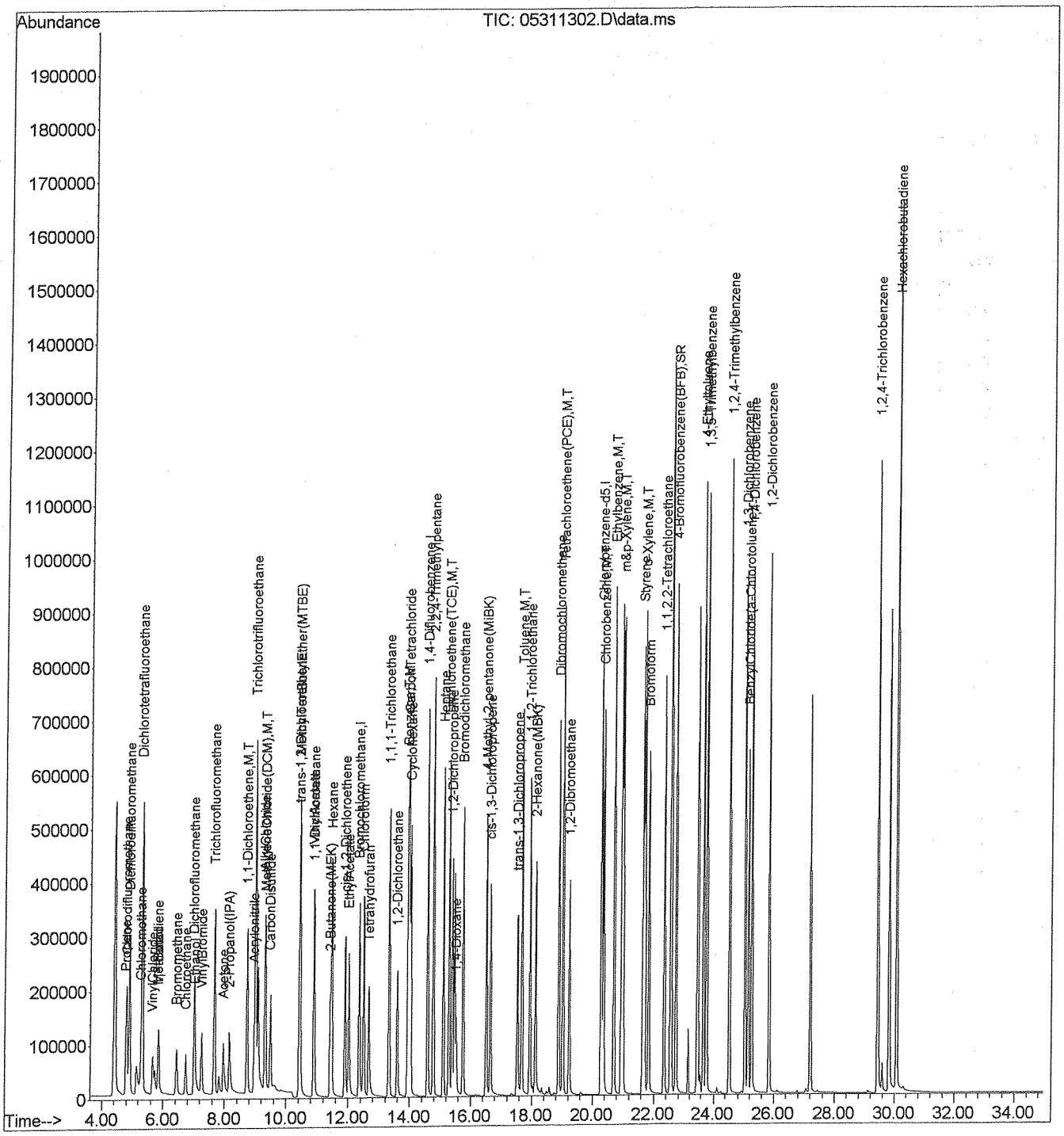
Quant Time: May 31 15:58:54 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
33) Tetrahydrofuran	12.671	72	85231m	10.41	ppbv		
34) 1,2-Dichloroethane	13.599	62	315891	10.70	ppbv		97
35) 1,1,1-Trichloroethane	13.331	97	487892	10.83	ppbv		99
37) Benzene	13.937	78	552734	9.97	ppbv		99
38) CarbonTetrachloride	13.973	117	487943	10.65	ppbv		99
39) Cyclohexane	14.026	69	81482	9.92	ppbv		95
40) 1,2-Dichloropropane	15.400	63	228251	10.24	ppbv		96
41) Bromodichloromethane	15.756	85	305276	10.68	ppbv		99
42) 1,4-Dioxane	15.524	88	134023m	10.25	ppbv		
43) Trichloroethene(TCE)	15.293	130	278715	10.38	ppbv		99
44) 2,2,4-Trimethylpentane	14.775	57	1047326	10.62	ppbv		99
45) Heptane	15.114	71	185741	10.55	ppbv		99
46) cis-1,3-Dichloropropene	16.648	75	347585	10.95	ppbv		98
47) 4-Methyl-2-pentanone(M...	16.523	58	209434	10.36	ppbv		98
48) trans-1,3-Dichloropropene	17.539	75	322018	9.96	ppbv		99
49) 1,1,2-Trichloroethane	17.932	97	268071	10.83	ppbv		99
50) Toluene	17.682	91	735162	10.46	ppbv		99
51) 2-Hexanone(MBK)	18.128	58	272743	10.89	ppbv		97
52) Dibromochloromethane	18.877	129	552160	11.62	ppbv		99
53) 1,2-Dibromoethane	19.233	107	422672	10.42	ppbv		99
54) Tetrachloroethene(PCE)	19.019	166	415184	10.54	ppbv		99
56) Chlorobenzene	20.357	114	197607	10.05	ppbv		99
57) Ethylbenzene	20.696	91	992383	9.94	ppbv		100
58) m&p-Xylene	20.999	106	731019	18.61	ppbv		98
59) Bromoform	21.819	173	527500	10.01	ppbv	#	96
60) Styrene	21.641	104	619961	9.76	ppbv		100
61) 1,1,2,2-Tetrachloroethane	22.336	83	550882	9.68	ppbv		99
62) o-Xylene	21.694	91	760234	9.52	ppbv		99
64) 4-Ethyltoluene	23.674	120	324083	9.88	ppbv		99
65) 1,3,5-Trimethylbenzene	23.781	120	450315	9.40	ppbv		99
66) 1,2,4-Trimethylbenzene	24.529	120	457427	9.80	ppbv		99
67) BenzylChloride(a-Chlor...	25.154	91	707251	10.07	ppbv		100
68) 1,3-Dichlorobenzene	25.047	146	703212	9.57	ppbv		99
69) 1,4-Dichlorobenzene	25.261	146	687499m	9.31	ppbv		
70) 1,2-Dichlorobenzene	25.831	146	722735m	9.41	ppbv		
71) 1,2,4-Trichlorobenzene	29.433	180	686176m	9.03	ppbv		
72) Hexachlorobutadiene	30.075	225	578384m	9.40	ppbv		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311302.D
Acq On : 31 May 2013 9:19
Operator : JJG
Sample : TO15 CCV 053113
Misc : IS/Surr: PS082712-02 + Cal: PS040413-01
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 31 15:58:54 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration



Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311303.D
Acq On : 31 May 2013 10:05
Operator : JJG
Sample : TO15 LCSD 053113
Misc : IS/Surr: PS082712-02 + Cal: PS040413-01
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 31 16:01:04 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	12.350	128	148225	10.00	ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	769764	10.00	ppbv	0.00
55) Chlorobenzene-d5	20.285	117	730036	10.00	ppbv	0.00
System Monitoring Compounds						
63) 4-Bromofluorobenzene(BFB)	22.710	174	462255	10.12	ppbv	0.00
Spiked Amount 10.000			Recovery = 101.20%			
Target Compounds						Qvalue
2) Chlorodifluoromethane	4.817	51	277483m	9.45	ppbv	
3) Propene	4.781	42	78550m	10.19	ppbv	
4) Dichlorodifluoromethane	4.908	85	473004	9.33	ppbv	99
5) Chloromethane	5.288	52	46073m	9.69	ppbv	
6) Dichlorotetrafluoroethane	5.324	135	340828	9.87	ppbv	92
7) VinylChloride	5.650	62	165177m	9.80	ppbv	
8) Methanol	5.849	31	22878m	4.78	ppbv	
9) 1,3-Butadiene	5.849	54	105277m	9.84	ppbv	
10) Bromomethane	6.446	96	111831m	9.21	ppbv	
11) Chloroethane	6.736	66	26950	9.83	ppbv	
12) Dichlorofluoromethane	7.007	67	350375	9.66	ppbv	
13) Ethanol	7.043	45	59358m	9.39	ppbv	
14) VinylBromide	7.260	108	148341m	10.40	ppbv	
15) Acetone	7.966	58	77767m	9.69	ppbv	
16) Trichlorofluoromethane	7.677	103	307607	10.39	ppbv	99
17) 2-Propanol(IPA)	8.147	45	272676m	9.92	ppbv	
18) Acrylonitrile	8.961	52	126782m	10.55	ppbv	
19) 1,1-Dichloroethene	8.726	96	168791	10.00	ppbv	97
20) MethyleneChloride(DCM)	9.323	84	151145m	9.75	ppbv	
21) AllylChloride	9.305	39	148303m	10.92	ppbv	
22) CarbonDisulfide	9.486	76	486256m	9.70	ppbv	
23) Trichlorotrifluoroethane	8.998	103	248277	10.22	ppbv	97
24) trans-1,2-Dichloroethene	10.424	96	185793m	10.23	ppbv	
25) 1,1-Dichloroethane	10.906	63	360683	9.74	ppbv	100
26) MethylTertButylEther(M...	10.442	73	515449m	10.48	ppbv	
27) VinylAcetate	10.888	43	436529m	9.54	ppbv	
28) 2-Butanone(MEK)	11.423	72	87320m	10.63	ppbv	
29) cis-1,2-Dichloroethene	11.904	96	200309	10.25	ppbv	99
30) Hexane	11.476	86	38543	9.84	ppbv	87
31) Chloroform	12.493	83	433724	10.54	ppbv	97
32) EthylAcetate	12.011	43	444177	10.73	ppbv	97

05/31/13

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311303.D
Acq On : 31 May 2013 10:05
Operator : JJG
Sample : TO15 LCSD 053113
Misc : IS/Surr: PS082712-02 + Cal: PS040413-01
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 31 16:01:04 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

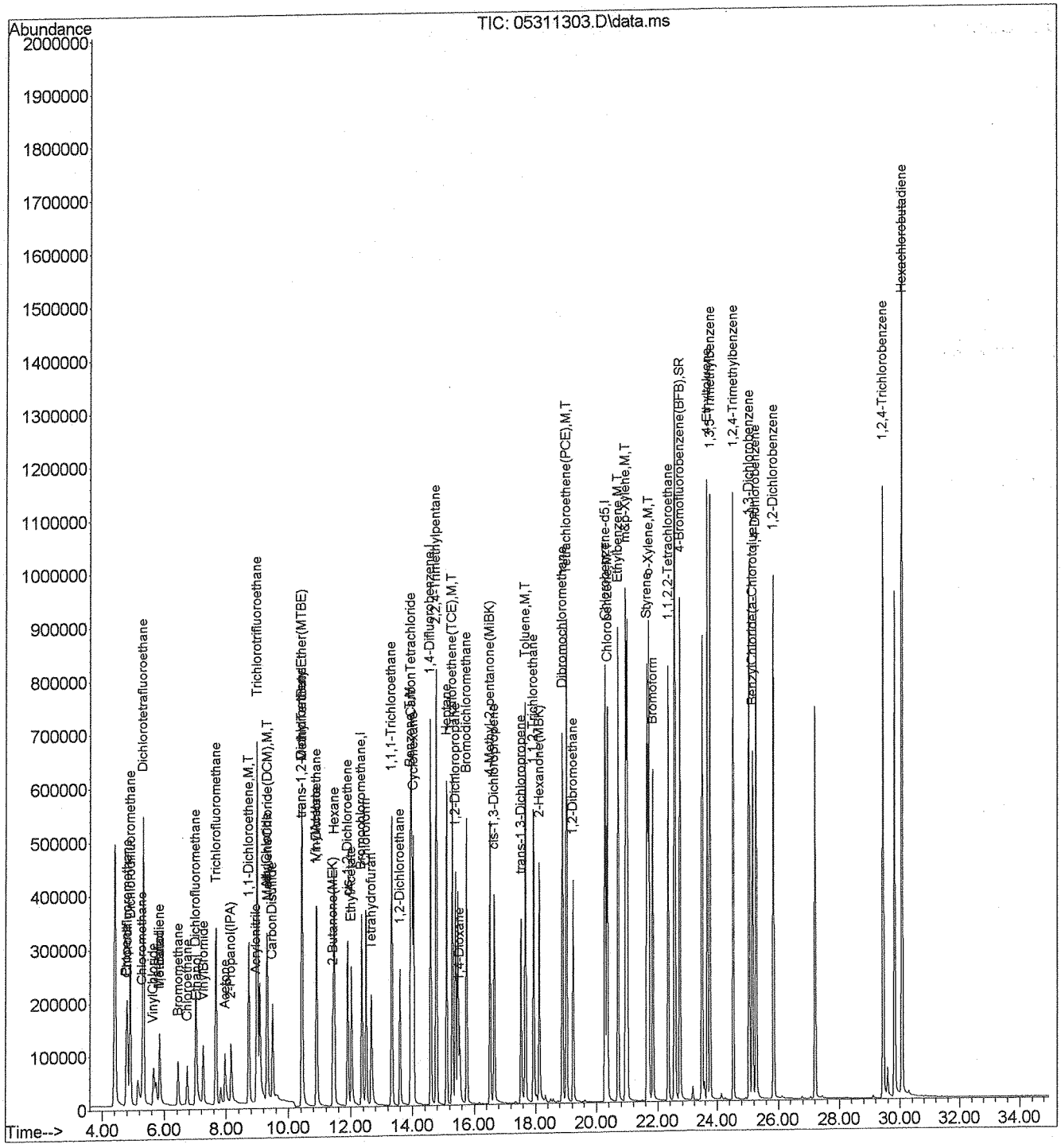
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) Tetrahydrofuran	12.671	72	86404m	10.44	ppbv	
34) 1,2-Dichloroethane	13.598	62	316194	10.60	ppbv	99
35) 1,1,1-Trichloroethane	13.331	97	486237	10.68	ppbv	99
37) Benzene	13.937	78	555998	9.80	ppbv	99
38) CarbonTetrachloride	13.973	117	490779	10.47	ppbv	99
39) Cyclohexane	14.026	69	83350	9.92	ppbv	94
40) 1,2-Dichloropropane	15.399	63	225436	9.89	ppbv	97
41) Bromodichloromethane	15.756	85	306686	10.48	ppbv	98
42) 1,4-Dioxane	15.524	88	134724m	10.07	ppbv	
43) Trichloroethene(TCE)	15.292	130	278045	10.12	ppbv	98
44) 2,2,4-Trimethylpentane	14.775	57	1051308	10.41	ppbv	99
45) Heptane	15.114	71	179210	9.95	ppbv	97
46) cis-1,3-Dichloropropene	16.647	75	355245	10.94	ppbv	98
47) 4-Methyl-2-pentanone(M...	16.523	58	209891	10.15	ppbv	98
48) trans-1,3-Dichloropropene	17.539	75	321126	9.71	ppbv	99
49) 1,1,2-Trichloroethane	17.931	97	266677	10.53	ppbv	99
50) Toluene	17.682	91	743636	10.34	ppbv	100
51) 2-Hexanone(MBK)	18.127	58	268499	10.48	ppbv	97
52) Dibromochloromethane	18.876	129	558658	11.49	ppbv	99
53) 1,2-Dibromoethane	19.233	107	428542	10.33	ppbv	99
54) Tetrachloroethene(PCE)	19.019	166	413007	10.24	ppbv	99
56) Chlorobenzene	20.356	114	196745	10.37	ppbv	98
57) Ethylbenzene	20.695	91	974128	10.11	ppbv	100
58) m&p-Xylene	20.945	106	756674	19.96	ppbv	95
59) Bromoform	21.836	173	518783	10.20	ppbv	100
60) Styrene	21.640	104	623918	10.17	ppbv	100
61) 1,1,2,2-Tetrachloroethane	22.336	83	563905	10.26	ppbv	98
62) o-Xylene	21.694	91	760674	9.87	ppbv	100
64) 4-Ethyltoluene	23.673	120	329642	10.42	ppbv	100
65) 1,3,5-Trimethylbenzene	23.780	120	456676	9.88	ppbv	99
66) 1,2,4-Trimethylbenzene	24.529	120	454079	10.08	ppbv	98
67) BenzylChloride(a-Chlor...	25.153	91	721619	10.65	ppbv	99
68) 1,3-Dichlorobenzene	25.046	146	714472	10.08	ppbv	99
69) 1,4-Dichlorobenzene	25.260	146	708397m	9.94	ppbv	
70) 1,2-Dichlorobenzene	25.831	146	723618m	9.76	ppbv	
71) 1,2,4-Trichlorobenzene	29.433	180	694134m	9.47	ppbv	
72) Hexachlorobutadiene	30.075	225	576795m	9.72	ppbv	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311303.D
Acq On : 31 May 2013 10:05
Operator : JJG
Sample : TO15 LCSD 053113
Misc : IS/Surr: PS082712-02 + Cal: PS040413-01
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 31 16:01:04 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration



Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311304.D
Acq On : 31 May 2013 10:53
Operator : JJG
Sample : TO15 MB 053113
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 31 16:01:41 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	12.350	128	138528	10.00	ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	768901	10.00	ppbv	0.00
55) Chlorobenzene-d5	20.285	117	714667	10.00	ppbv	0.00
System Monitoring Compounds						
63) 4-Bromofluorobenzene(BFB)	22.711	174	457690	10.23	ppbv	0.00
Spiked Amount 10.000			Recovery = 102.30%			
Target Compounds						Qvalue
2) Chlorodifluoromethane	0.000		0	N.D.		
3) Propene	4.836	42	129	N.D.		
4) Dichlorodifluoromethane	0.000		0	N.D.		
5) Chloromethane	0.000		0	N.D.		
6) Dichlorotetrafluoroethane	0.000		0	N.D.		
7) VinylChloride	0.000		0	N.D.		
8) Methanol	0.000		0	N.D.	d	
9) 1,3-Butadiene	0.000		0	N.D.		
10) Bromomethane	0.000		0	N.D.	d	
11) Chloroethane	0.000		0	N.D.		
12) Dichlorofluoromethane	0.000		0	N.D.		
13) Ethanol	0.000		0	N.D.		
14) VinylBromide	0.000		0	N.D.		
15) Acetone	0.000		0	N.D.	d	
16) Trichlorofluoromethane	0.000		0	N.D.		
17) 2-Propanol(IPA)	8.328	45	241	N.D.		
18) Acrylonitrile	0.000		0	N.D.		
19) 1,1-Dichloroethene	0.000		0	N.D.		
20) MethyleneChloride(DCM)	0.000		0	N.D.	d	
21) AllylChloride	0.000		0	N.D.		
22) CarbonDisulfide	0.000		0	N.D.	d	
23) Trichlorotrifluoroethane	0.000		0	N.D.		
24) trans-1,2-Dichloroethene	0.000		0	N.D.		
25) 1,1-Dichloroethane	0.000		0	N.D.		
26) MethylTertButylEther(M...	0.000		0	N.D.		
27) VinylAcetate	0.000		0	N.D.		
28) 2-Butanone(MEK)	0.000		0	N.D.		
29) cis-1,2-Dichloroethene	0.000		0	N.D.		
30) Hexane	0.000		0	N.D.		
31) Chloroform	0.000		0	N.D.		
32) EthylAcetate	0.000		0	N.D.		

05/31/13

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311304.D
Acq On : 31 May 2013 10:53
Operator : JJG
Sample : TO15 MB 053113
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 31 16:01:41 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

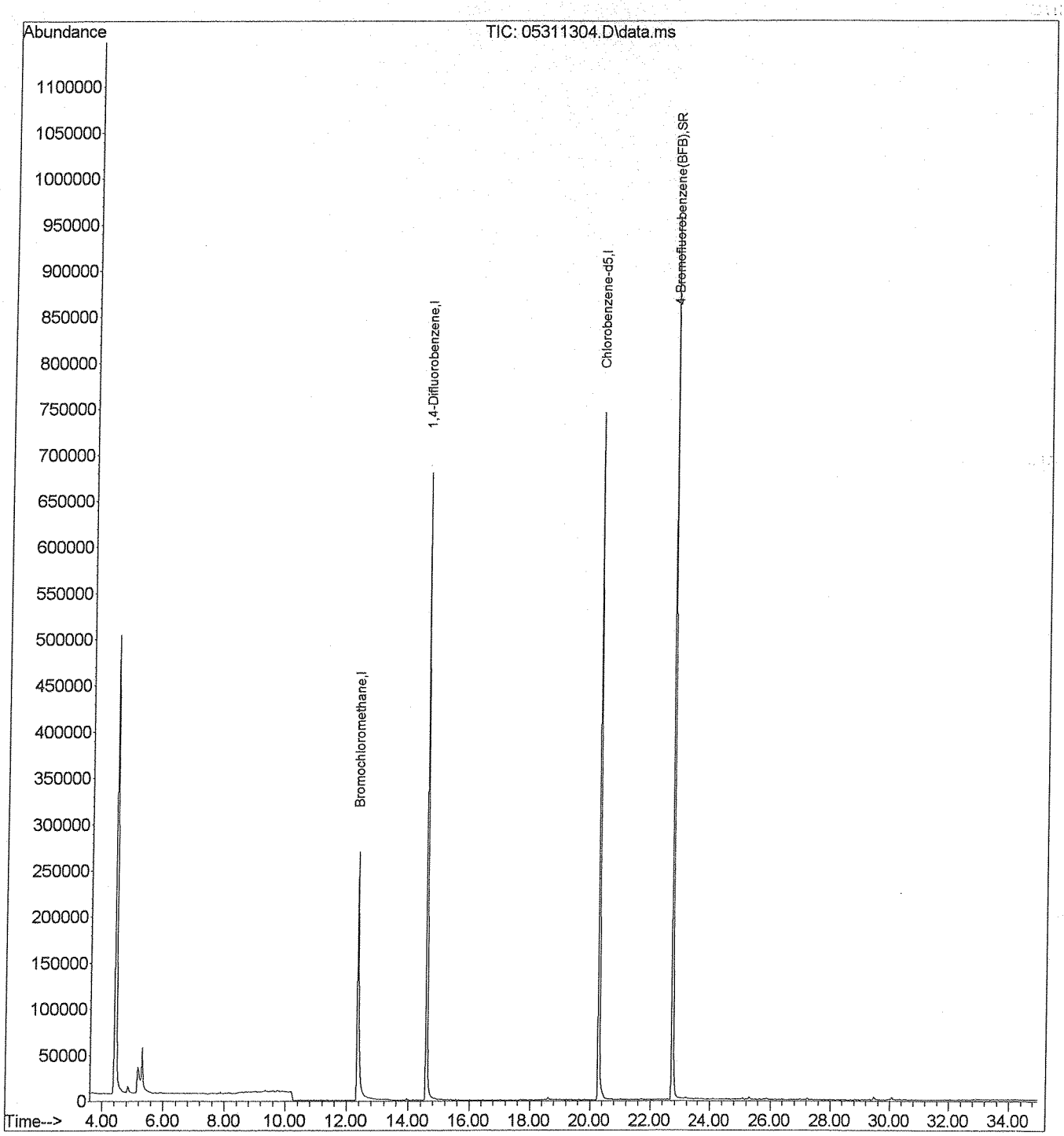
Compound	R.T.	QIon	Response	Conc Units Dev(Min)
33) Tetrahydrofuran	0.000		0	N.D.
34) 1,2-Dichloroethane	0.000		0	N.D.
35) 1,1,1-Trichloroethane	0.000		0	N.D.
37) Benzene	13.937	78	2127	N.D.
38) CarbonTetrachloride	0.000		0	N.D.
39) Cyclohexane	0.000		0	N.D.
40) 1,2-Dichloropropane	0.000		0	N.D.
41) Bromodichloromethane	0.000		0	N.D.
42) 1,4-Dioxane	0.000		0	N.D.
43) Trichloroethene(TCE)	0.000		0	N.D.
44) 2,2,4-Trimethylpentane	0.000		0	N.D.
45) Heptane	0.000		0	N.D.
46) cis-1,3-Dichloropropene	0.000		0	N.D.
47) 4-Methyl-2-pentanone(M...	0.000		0	N.D.
48) trans-1,3-Dichloropropene	0.000		0	N.D.
49) 1,1,2-Trichloroethane	0.000		0	N.D.
50) Toluene	17.700	91	769	N.D.
51) 2-Hexanone(MBK)	0.000		0	N.D.
52) Dibromochloromethane	0.000		0	N.D.
53) 1,2-Dibromoethane	0.000		0	N.D.
54) Tetrachloroethene(PCE)	0.000		0	N.D.
56) Chlorobenzene	20.357	114	123	N.D.
57) Ethylbenzene	20.731	91	740	N.D.
58) m&p-Xylene	21.017	106	120	N.D.
59) Bromoform	0.000		0	N.D.
60) Styrene	21.694	104	296	N.D.
61) 1,1,2,2-Tetrachloroethane	22.354	83	175	N.D.
62) o-Xylene	21.712	91	581	N.D.
64) 4-Ethyltoluene	23.691	120	254	N.D.
65) 1,3,5-Trimethylbenzene	23.798	120	381	N.D.
66) 1,2,4-Trimethylbenzene	24.565	120	306	N.D.
67) BenzylChloride(a-Chlor...	25.207	91	770	N.D.
68) 1,3-Dichlorobenzene	25.064	146	2005	N.D.
69) 1,4-Dichlorobenzene	25.296	146	2609	N.D.
70) 1,2-Dichlorobenzene	25.867	146	1342	N.D.
71) 1,2,4-Trichlorobenzene	0.000		0	N.D. d
72) Hexachlorobutadiene	30.075	225	1188	N.D.

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311304.D
Acq On : 31 May 2013 10:53
Operator : JJG
Sample : TO15 MB 053113
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 31 16:01:41 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311305.D
Acq On : 31 May 2013 11:41
Operator : JJG
Sample : 130647-63190 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 31 16:03:57 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Bromochloromethane	12.350	128	141154	10.00 ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	774304	10.00 ppbv	0.00
55) Chlorobenzene-d5	20.285	117	740604	10.00 ppbv	0.00
System Monitoring Compounds					
63) 4-Bromofluorobenzene(BFB)	22.710	174	470787	10.16 ppbv	0.00
Spiked Amount 10.000			Recovery = 101.60%		
Target Compounds					Qvalue
2) Chlorodifluoromethane	4.835	51	4423	0.16 ppbv #	96
3) Propene	0.000		0	N.D. d	
4) Dichlorodifluoromethane	4.908	85	13542	0.28 ppbv	98
5) Chloromethane	5.306	52	1042	0.23 ppbv #	6
6) Dichlorotetrafluoroethane	5.324	135	228	N.D.	
7) VinylChloride	0.000		0	N.D.	
8) Methanol	5.867	31	33313m	7.37 ppbv	
9) 1,3-Butadiene	0.000		0	N.D.	
10) Bromomethane	0.000		0	N.D. d	
11) Chloroethane	0.000		0	N.D. d	
12) Dichlorofluoromethane	0.000		0	N.D.	
13) Ethanol	7.134	45	17815m	2.96 ppbv	
14) VinylBromide	0.000		0	N.D.	
15) Acetone	8.002	58	19956m	2.61 ppbv	
16) Trichlorofluoromethane	7.658	103	3831	0.14 ppbv	97
17) 2-Propanol(IPA)	8.219	45	22036m	0.84 ppbv	
18) Acrylonitrile	0.000		0	N.D.	
19) 1,1-Dichloroethene	0.000		0	N.D.	
20) MethyleneChloride(DCM)	0.000		0	N.D. d	
21) AllylChloride	9.233	39	128	N.D.	
22) CarbonDisulfide	0.000		0	N.D. d	
23) Trichlorotrifluoroethane	0.000		0	N.D. d	
24) trans-1,2-Dichloroethene	0.000		0	N.D.	
25) 1,1-Dichloroethane	0.000		0	N.D.	
26) MethylTertButylEther(M...	0.000		0	N.D.	
27) VinylAcetate	10.888	43	1152	N.D.	
28) 2-Butanone(MEK)	0.000		0	N.D. d	
29) cis-1,2-Dichloroethene	0.000		0	N.D.	
30) Hexane	0.000		0	N.D. d	
31) Chloroform	12.493	83	396	N.D.	
32) EthylAcetate	0.000		0	N.D. d	

05/31/13

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311305.D
Acq On : 31 May 2013 11:41
Operator : JJG
Sample : 130647-63190 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 2 Sample Multiplier: 1

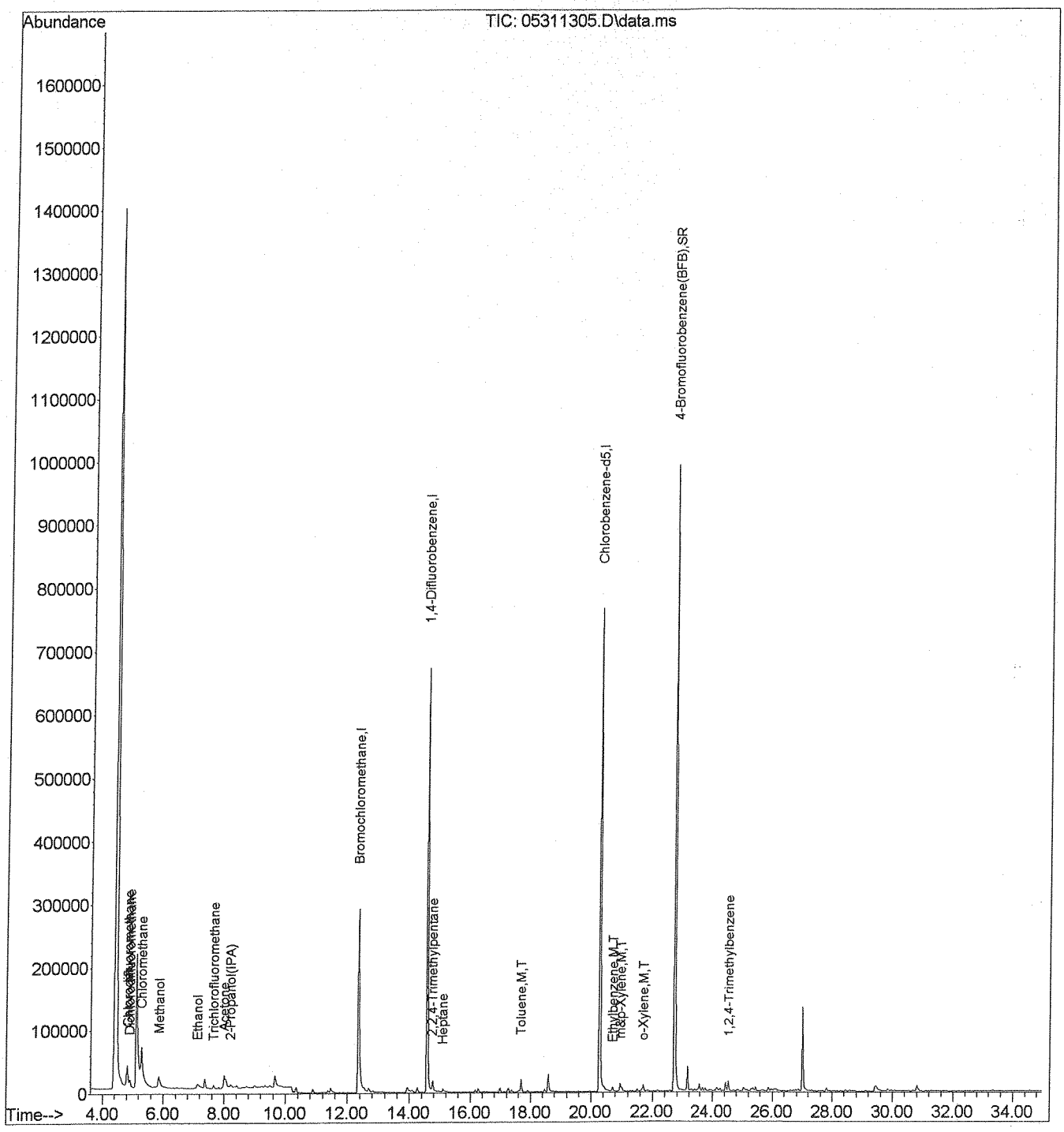
Quant Time: May 31 16:03:57 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Tetrahydrofuran	0.000		0	N.D.	
34) 1,2-Dichloroethane	0.000		0	N.D.	
35) 1,1,1-Trichloroethane	0.000		0	N.D.	
37) Benzene	0.000		0	N.D. d	
38) CarbonTetrachloride	0.000		0	N.D. d	
39) Cyclohexane	14.008	69	282	N.D.	
40) 1,2-Dichloropropane	0.000		0	N.D.	
41) Bromodichloromethane	0.000		0	N.D.	
42) 1,4-Dioxane	0.000		0	N.D.	
43) Trichloroethene(TCE)	0.000		0	N.D.	
44) 2,2,4-Trimethylpentane	14.757	57	22408	0.22 ppbv #	98
45) Heptane	15.096	71	1229	0.07 ppbv #	83
46) cis-1,3-Dichloropropene	0.000		0	N.D.	
47) 4-Methyl-2-pentanone(M...	0.000		0	N.D.	
48) trans-1,3-Dichloropropene	17.682	75	120	N.D.	
49) 1,1,2-Trichloroethane	0.000		0	N.D.	
50) Toluene	17.682	91	22183	0.31 ppbv	97
51) 2-Hexanone(MBK)	0.000		0	N.D.	
52) Dibromochloromethane	0.000		0	N.D.	
53) 1,2-Dibromoethane	0.000		0	N.D.	
54) Tetrachloroethene(PCE)	0.000		0	N.D.	
56) Chlorobenzene	20.285	114	147	N.D.	
57) Ethylbenzene	20.713	91	7119	0.07 ppbv #	96
58) m&p-Xylene	20.963	106	9179	0.24 ppbv #	97
59) Bromoform	0.000		0	N.D.	
60) Styrene	21.676	104	595	N.D.	
61) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
62) o-Xylene	21.694	91	8412	0.11 ppbv	95
64) 4-Ethyltoluene	0.000		0	N.D. d	
65) 1,3,5-Trimethylbenzene	0.000		0	N.D. d	
66) 1,2,4-Trimethylbenzene	24.547	120	7269	0.16 ppbv #	96
67) BenzylChloride(a-Chlor...	25.207	91	379	N.D.	
68) 1,3-Dichlorobenzene	25.064	146	586	N.D.	
69) 1,4-Dichlorobenzene	25.296	146	1078	N.D.	
70) 1,2-Dichlorobenzene	25.849	146	614	N.D.	
71) 1,2,4-Trichlorobenzene	29.451	180	1944	N.D.	
72) Hexachlorobutadiene	30.075	225	613	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311305.D
Acq On : 31 May 2013 11:41
Operator : JJG
Sample : 130647-63190 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 31 16:03:57 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311306.D
Acq On : 31 May 2013 12:29
Operator : JJG
Sample : 130647-63190 x1 dp
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 31 16:06:29 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Bromochloromethane	12.350	128	139450	10.00 ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	768342	10.00 ppbv	0.00
55) Chlorobenzene-d5	20.285	117	721337	10.00 ppbv	0.00
System Monitoring Compounds					
63) 4-Bromofluorobenzene(BFB)	22.711	174	471546	10.45 ppbv	0.00
Spiked Amount 10.000			Recovery = 104.50%		
Target Compounds					Qvalue
2) Chlorodifluoromethane	4.836	51	4269	0.15 ppbv #	96
3) Propene	0.000		0	N.D. d	
4) Dichlorodifluoromethane	4.908	85	13742	0.29 ppbv #	98
5) Chloromethane	5.306	52	1085	0.24 ppbv #	13
6) Dichlorotetrafluoroethane	5.324	135	113	N.D.	
7) VinylChloride	0.000		0	N.D.	
8) Methanol	5.867	31	33394m	7.48 ppbv	
9) 1,3-Butadiene	0.000		0	N.D.	
10) Bromomethane	0.000		0	N.D. d	
11) Chloroethane	0.000		0	N.D.	
12) Dichlorofluoromethane	0.000		0	N.D.	
13) Ethanol	7.134	45	16964m	2.85 ppbv	
14) VinylBromide	0.000		0	N.D.	
15) Acetone	8.002	58	19353m	2.56 ppbv	
16) Trichlorofluoromethane	7.659	103	3946	0.14 ppbv	95
17) 2-Propanol(IPA)	8.220	45	22233m	0.86 ppbv	
18) Acrylonitrile	0.000		0	N.D.	
19) 1,1-Dichloroethene	0.000		0	N.D.	
20) MethyleneChloride(DCM)	0.000		0	N.D. d	
21) AllylChloride	9.251	39	237	N.D.	
22) CarbonDisulfide	0.000		0	N.D. d	
23) Trichlorotrifluoroethane	8.998	103	910	N.D.	
24) trans-1,2-Dichloroethene	0.000		0	N.D.	
25) 1,1-Dichloroethane	0.000		0	N.D.	
26) MethylTertButylEther(M...	0.000		0	N.D.	
27) VinylAcetate	10.888	43	1305	N.D.	
28) 2-Butanone(MEK)	0.000		0	N.D. d	
29) cis-1,2-Dichloroethene	0.000		0	N.D.	
30) Hexane	0.000		0	N.D. d	
31) Chloroform	12.493	83	322	N.D.	
32) EthylAcetate	0.000		0	N.D. d	

05/31/13

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311306.D
Acq On : 31 May 2013 12:29
Operator : JJG
Sample : 130647-63190 x1 dp
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 31 16:06:29 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration

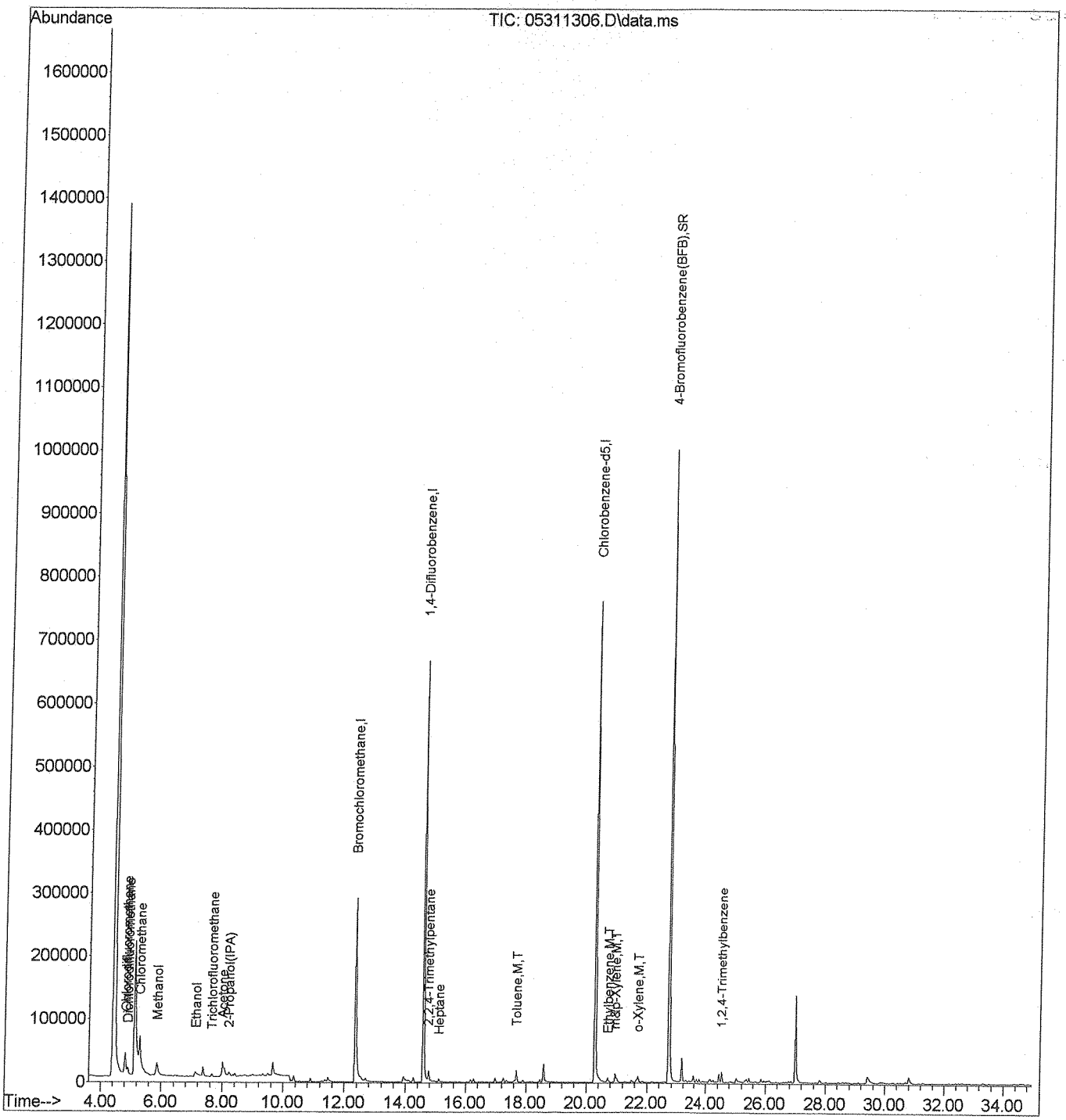
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Tetrahydrofuran	0.000		0	N.D.	
34) 1,2-Dichloroethane	0.000		0	N.D.	
35) 1,1,1-Trichloroethane	0.000		0	N.D.	
37) Benzene	0.000		0	N.D. d	
38) CarbonTetrachloride	0.000		0	N.D. d	
39) Cyclohexane	14.026	69	297	N.D.	
40) 1,2-Dichloropropane	15.275	63	117	N.D.	
41) Bromodichloromethane	0.000		0	N.D.	
42) 1,4-Dioxane	0.000		0	N.D.	
43) Trichloroethene(TCE)	0.000		0	N.D.	
44) 2,2,4-Trimethylpentane	14.758	57	21428	0.21 ppbv	95
45) Heptane	15.114	71	1228	0.07 ppbv #	89
46) cis-1,3-Dichloropropene	0.000		0	N.D.	
47) 4-Methyl-2-pentanone(M...	0.000		0	N.D.	
48) trans-1,3-Dichloropropene	17.682	75	132	N.D.	
49) 1,1,2-Trichloroethane	0.000		0	N.D.	
50) Toluene	17.682	91	20636m	0.29 ppbv	
51) 2-Hexanone(MBK)	0.000		0	N.D.	
52) Dibromochloromethane	0.000		0	N.D.	
53) 1,2-Dibromoethane	0.000		0	N.D.	
54) Tetrachloroethene(PCE)	0.000		0	N.D.	
56) Chlorobenzene	20.268	114	256	N.D.	
57) Ethylbenzene	20.713	91	7287	0.08 ppbv #	96
58) m&p-Xylene	20.945	106	8927	0.24 ppbv #	94
59) Bromoform	0.000		0	N.D.	
60) Styrene	21.676	104	657	N.D.	
61) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
62) o-Xylene	21.694	91	8082	0.11 ppbv #	92
64) 4-Ethyltoluene	0.000		0	N.D. d	
65) 1,3,5-Trimethylbenzene	0.000		0	N.D. d	
66) 1,2,4-Trimethylbenzene	24.529	120	7104	0.16 ppbv	97
67) BenzylChloride(a-Chlor...	25.189	91	112	N.D.	
68) 1,3-Dichlorobenzene	25.064	146	149	N.D.	
69) 1,4-Dichlorobenzene	25.296	146	505	N.D.	
70) 1,2-Dichlorobenzene	25.867	146	303	N.D.	
71) 1,2,4-Trichlorobenzene	29.451	180	1067	N.D.	
72) Hexachlorobutadiene	30.075	225	267	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\053113\
Data File : 05311306.D
Acq On : 31 May 2013 12:29
Operator : JJG
Sample : 130647-63190 x1 dp
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 31 16:06:29 2013
Quant Method : C:\msdchem\1\METHODS\2013\051513.M
Quant Title : TO-15/TO-14
QLast Update : Thu May 16 10:13:39 2013
Response via : Initial Calibration



Calibration Status Report MS03 Enhanced

Method Path : C:\msdchem\1\METHODS\2013\
Method File : 051513.M
Title : TO-15/TO-14
Last Update : Thu May 16 10:13:39 2013
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	0.5	1	10	C:\msdchem\1\MS03\2013\051513\05151311.D
2	1.0	1	10	C:\msdchem\1\MS03\2013\051513\05151310.D
3	2.0	2	10	C:\msdchem\1\MS03\2013\051513\05151309.D
4	5.0	5	10	C:\msdchem\1\MS03\2013\051513\05151308.D
5	10	10	10	C:\msdchem\1\MS03\2013\051513\05151307.D
6	20	20	10	C:\msdchem\1\MS03\2013\051513\05151306.D
7	50	51	10	C:\msdchem\1\MS03\2013\051513\05151305.D

#	ID	Update Time	Quant Time	Acquisition Time
1	0.5	May 16 10:04 2013	May 15 17:01 2013	15 May 2013 16:25
2	1.0	May 16 10:04 2013	May 15 16:55 2013	15 May 2013 15:40
3	2.0	May 16 10:04 2013	May 15 16:52 2013	15 May 2013 14:53
4	5.0	May 16 10:03 2013	May 15 15:19 2013	15 May 2013 14:07
5	10	May 16 10:03 2013	May 15 13:55 2013	15 May 2013 13:21
6	20	May 16 10:03 2013	May 15 13:53 2013	15 May 2013 12:35
7	50	May 16 10:03 2013	May 15 13:50 2013	15 May 2013 11:48

051513.M Thu May 16 10:15:15 2013

Response Factor Report MS03 Enhanced

Method Path : C:\msdchem\1\METHODS\2013\
Method File : 051513.M
Title : TO-15/TO-14
Last Update : Thu May 16 10:13:39 2013
Response Via : Initial Calibration

Calibration Files
0.5 =05151311.D 1.0 =05151310.D 2.0 =05151309.D 5.0 =05151308.D 10 =05151307.D 20 =05151306.D
50 =05151305.D

		Compound	0.5	1.0	2.0	5.0	10	20	50	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------								
2)		Chlorodifluoro...	2.089	2.153	2.101	2.025	1.904	1.810	1.786	1.981	7.44
3)		Propene	0.516	0.538	0.543	0.530	0.511	0.503	0.502	0.520	3.16
4)		Dichlorodifluo...	3.667	3.778	3.625	3.449	3.255	3.109	3.048	3.419	8.40
5)		Chloromethane	0.306	0.351	0.359	0.346	0.335	0.307	0.243	0.321	12.54
6)		Dichlorotetraf...	2.437	2.578	2.525	2.366	2.249	2.146	2.008	2.330	8.87
7)		VinylChloride	1.119	1.165	1.194	1.159	1.138	1.103	1.085	1.138	3.35
8)		Methanol		0.467	0.401	0.345	0.325	0.314	0.302	0.359	17.59
9)		1,3-Butadiene	0.661	0.757	0.783	0.769	0.750	0.696	0.638	0.722	7.88
10)		Bromomethane	0.912	0.907	0.885	0.831	0.790	0.768	0.638	0.819	11.91
11)		Chloroethane	0.201	0.195	0.200	0.184	0.171	0.177	0.167	0.185	7.45
12)		Dichlorofluoro...	2.569	2.604	2.585	2.470	2.365	2.317	2.217	2.447	6.14
13)		Ethanol	0.438	0.486	0.443	0.421	0.414	0.410	0.372	0.426	8.19
14)		VinylBromide	0.913	0.985	1.013	1.000	0.954	0.955	0.914	0.962	4.10
15)		Acetone	0.717	0.643	0.532	0.487	0.468	0.473	0.472	0.542	18.30
16)		Trichlorofluor...	2.166	2.190	2.089	1.956	1.896	1.864	1.820	1.997	7.53
17)		2-Propanol(IPA)	2.202	2.238	2.186	1.792	1.640	1.508	1.412	1.854	18.98
18)		Acrylonitrile	0.759	0.846	0.865	0.860	0.819	0.805	0.720	0.811	6.70
19)	M,T	1,1-Dichloroet...	1.126	1.244	1.222	1.158	1.131	1.093	1.000	1.139	7.17
20)	M,T	MethyleneChlor...	1.192	1.150	1.088	1.078	1.000	0.935	0.876	1.046	10.90
21)		AllylChloride	1.018	0.993	0.990	0.947	0.912	0.791	0.764	0.917	11.04
22)		CarbonDisulfide	3.799	3.684	3.581	3.365	3.184	3.094	2.965	3.382	9.36
23)		Trichlorotrifl...	1.791	1.899	1.777	1.674	1.586	1.456	1.291	1.639	12.89
24)		trans-1,2-Dich...	1.186	1.375	1.235	1.308	1.238	1.156	1.076	1.225	8.05
25)		1,1-Dichloroet...	2.829	2.839	2.719	2.571	2.383	2.197	1.949	2.498	13.53
26)		MethylTertButy...	3.471	3.740	3.529	3.441	3.284	3.047	2.705	3.317	10.38
27)		VinylAcetate	3.239	3.305	3.371	3.266	3.089	2.850	2.479	3.086	10.33
28)		2-Butanone(MEK)	0.480	0.548	0.589	0.592	0.595	0.548	0.526	0.554	7.60

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29)		cis-1,2-Dichlo...	1.339	1.387	1.385	1.382	1.308	1.264	1.167	1.319	6.17
30)		Hexane	0.270	0.298	0.295	0.272	0.256	0.239	0.219	0.264	10.89
31)		Chloroform	2.980	3.005	2.926	2.844	2.659	2.617	2.396	2.775	8.12
32)		EthylAcetate	2.836	3.052	2.959	2.914	2.819	2.582	2.380	2.792	8.36
33)		Tetrahydrofuran	0.574	0.569	0.601	0.585	0.559	0.535	0.483	0.558	7.01
34)		1,2-Dichloroet...	2.043	2.248	2.117	2.034	1.930	1.874	1.847	2.013	7.07
35)		1,1,1-Trichlor...	3.350	3.382	3.301	3.075	2.948	2.834	2.618	3.073	9.43
36)	I	1,4-Difluorobenzene	----------ISTD----------								
37)	T,M	Benzene	0.840	0.830	0.802	0.758	0.721	0.648	0.558	0.737	14.02
38)		CarbonTetrachl...	0.664	0.694	0.674	0.620	0.600	0.541	0.469	0.609	13.26
39)		Cyclohexane	0.121	0.121	0.117	0.111	0.109	0.098	0.087	0.109	11.74
40)		1,2-Dichloropr...	0.324	0.333	0.328	0.306	0.291	0.265	0.226	0.296	13.14
41)		Bromodichlorom...	0.411	0.420	0.409	0.393	0.371	0.346	0.311	0.380	10.47
42)		1,4-Dioxane	0.175	0.182	0.184	0.183	0.179	0.165	0.147	0.174	7.67
43)	M,T	Trichloroethen...	0.378	0.389	0.390	0.369	0.352	0.328	0.293	0.357	10.02
44)		2,2,4-Trimethy...	1.494	1.513	1.438	1.352	1.312	1.136	0.935	1.312	16.01
45)		Heptane	0.250	0.247	0.252	0.241	0.240	0.218	0.189	0.234	9.72
46)		cis-1,3-Dichlo...	0.443	0.456	0.446	0.443	0.425	0.389	0.351	0.422	9.07
47)		4-Methyl-2-pen...	0.264	0.293	0.298	0.287	0.277	0.248	0.212	0.269	11.25
48)		trans-1,3-Dich...	0.406	0.438	0.451	0.457	0.441	0.423	0.391	0.430	5.59
49)		1,1,2-Trichlor...	0.350	0.366	0.351	0.346	0.330	0.297	0.262	0.329	11.16
50)	M,T	Toluene	1.036	1.035	1.017	0.944	0.952	0.835	0.723	0.935	12.54
51)		2-Hexanone(MBK)	0.339	0.353	0.364	0.351	0.351	0.307	0.266	0.333	10.43
52)		Dibromochlorom...	0.667	0.684	0.678	0.663	0.647	0.577	0.504	0.632	10.56
53)		1,2-Dibromoethane	0.584	0.579	0.577	0.568	0.528	0.494	0.443	0.539	9.97
54)	M,T	Tetrachloroeth...	0.591	0.589	0.566	0.551	0.517	0.458	0.394	0.524	14.01
55)	I	Chlorobenzene-d5	----------ISTD----------								
56)	M,T	Chlorobenzene	0.280	0.286	0.275	0.270	0.258	0.243	0.208	0.260	10.37
57)	M,T	Ethylbenzene	1.493	1.508	1.428	1.373	1.283	1.189	0.964	1.320	14.66
58)	M,T	m&p-Xylene	0.595	0.611	0.556	0.534	0.502	0.455	0.383	0.519	15.49
59)		Bromoform	0.762	0.809	0.762	0.719	0.685	0.627	0.514	0.697	14.37
60)		Styrene	0.895	0.947	0.887	0.890	0.834	0.768	0.660	0.840	11.58
61)		1,1,2,2-Tetrac...	0.834	0.866	0.828	0.795	0.730	0.671	0.544	0.753	15.13
62)	M,T	o-Xylene	1.255	1.276	1.150	1.089	0.982	0.893	0.746	1.056	18.39
63)	SR	4-Bromofluorob...	0.633	0.653	0.621	0.628	0.618	0.610	0.617	0.626	2.29
64)		4-Ethyltoluene	0.453	0.499	0.463	0.465	0.439	0.394	0.321	0.433	13.60

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65)	1,3,5-Trimethy...	0.738	0.738	0.689	0.655	0.614	0.551	0.450	0.633	16.58
66)	1,2,4-Trimethy...	0.683	0.701	0.662	0.647	0.606	0.555	0.465	0.617	13.44
67)	BenzylChloride...	0.792	0.849	0.988	0.987	1.014	0.994	0.876	0.928	9.45
68)	1,3-Dichlorobe...	1.007	1.071	1.056	1.046	0.966	0.902	0.748	0.971	11.78
69)	1,4-Dichlorobe...	1.123	1.125	1.062	1.020	0.936	0.861	0.709	0.977	15.58
70)	1,2-Dichlorobe...	1.116	1.179	1.130	1.079	0.969	0.899	0.735	1.015	15.50
71)	1,2,4-Trichlor...	0.991	1.125	1.099	1.117	1.025	0.921	0.751	1.004	13.37
72)	Hexachlorobuta...	0.954	0.987	0.907	0.861	0.768	0.693	0.522	0.813	20.26

(#) = Out of Range