Atmospheric Analysis & Consulting, Inc.

CLIENT	: Soil Water Air Protection Enterprise
PROJECT NAME	: Bridgeton Sanitary Landfill Air Quality Assessment
AAC PROJECT NO.	: 130597
REPORT DATE	: 05/21/2013

On May 17, 2013, Atmospheric Analysis & Consulting, Inc. received four (4) 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 W8-Canister	130597-63048	507.6
U-2 W6-Canister	130597-63049	316.6
D-1 W4-Canister	130597-63050	614.5
D-2 K-Canister	130597-63051	174.8

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 60 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

Atmospheric Analysis & Consulting, Inc.

SAMPLE RECEIPT / LOG-IN REPORT

AAC Project **130597** **Received By: J. Zachman**

Sample Receipt Date	Project Desc	Clients ID	Matrix	Sampling Date/Time	Sampled By	Sample #	Analysis Requested
5/17/2013 1045	Soil Water Air Protection Enterprise (SWAPE) Bridgeton Sanitary Landfill Air Quality Assessment	U-1 W8 Canister	Summa Canister	5/14/2013	Client	63048	TO15 ASTM D5504
5/17/2013 1045	Soil Water Air Protection Enterprise (SWAPE) Bridgeton Sanitary Landfill Air Quality Assessment	U-2 W6 Canister	Summa Canister	5/14/2013	Client	63049	TO15 ASTM D5504
5/17/2013 1045	Soil Water Air Protection Enterprise (SWAPE) Bridgeton Sanitary Landfill Air Quality Assessment	D-1 W4 Canister	Summa Canister	5/14/2013	Client	63050	TO15 ASTM D5504
5/17/2013 1045	Soil Water Air Protection Enterprise (SWAPE) Bridgeton Sanitary Landfill Air Quality Assessment	D-2 K Canister	Summa Canister	5/14/2013	Client	63051	TO15 ASTM D5504

TURN AROUND TIME: Normal (10days)

Lab Due Date: 5/24/2013

Total Samples: 4

REMARKS:

Client returned 4 x Summa canisters + 4 x Flows.

CANISTER PRESSURE LOG

Client: Soil Water Air Protection Ent Project No.: 130597

Date: 5/17/2013

Canister #	Sample #	Initial Pressure	Final Pressure
577	63048	507.6	1019.7
578	63049	316.6	1020.5
703	63050	614.5	1017.8
700	63051	174.8	1028.3

1

AM#130597

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 14 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	Carboxylic 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
63048	U-1 W8	Canister		5/14/13	4 Hr	X	X											Canister # 577
63049	U-2 W6	Canister		5/14/13	4 Hr	X	X											Canister # 578
63050	D-1 W4	Canister		5/14/13	4 Hr	X	X											Canister # 703
63051	D-2 K	Canister		5/14/13	4 Hr	X	X											Canister # 2155

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:	12 Noon	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date: 5/17/13	Time: 1045

-Fed Ex

Atmospheric Analysis and Consulting Inc.
Canister Sampling Field Data Sheet

GENERAL INFORMATION

Project Name and/or ID No.: **Bridgeton Sanitary Landfill**

Site Address and/or ID No: **13570 St Charles Rock Rd, Bridgeton, MO 63044**

Sample Name and/or ID No.: ~~UD~~ U1-W3/577 **Canister**

AAC Batch ID: 130597 AAC Sample ID: 63048

SAMPLING INFORMATION

Start Date/Time: **May** 14 / 10:53AM Stop Date/Time: **May** 14 / 14:53

Start Temp/Pressure*: 27°C 14.7 psi Stop Temp/Pressure*: 33 C 14.67psi

Initial Can Pressure**: -29 Final Can Pressure**: -9

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

Comments: _____

John Blank May 14, 2013

Sampler Name (Print) *Sampler Signature/Date*

Jeff Miller 5/14/13

LABORATORY INFORMATION

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

Canister Serial No.: 577 Flow Controller Serial No: 694

Initial Pressure: 1.4 Certified Flow Rate: 18.0

Return Pressure: 507.6 Certified By/Date: JZ 4/10/2013

Final Pressure: 1019.7 Flow Rate upon Return: 19.3

Date Shipped From Lab: 4/25/2013 Shipped By: JZ

Date Returned to Lab: 5/17/2013 Received By: JZ

Flow Controller Certification File ID: M503/0328132

Canister Certification File ID: M503/0405B15

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

5/20/13 5/20/13

Chemist Signature/Date *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.: **Bridgeton Sanitary Landfill**

Site Address and/or ID No: **13570 St Charles Rock Rd, Bridgeton, MO 63044**

Sample Name and/or ID No.: U2-W/578 **Canister**

AAC Batch ID: 130597 AAC Sample ID: 63049

SAMPLING INFORMATION

Start Date/Time: **May** 14 / 11:09 Stop Date/Time: **May** 14 / 15:09

Start Temp/Pressure*: 27°C 14.7 psi Stop Temp/Pressure*: 33 C 14.67 psi

Initial Can Pressure**: -30 Final Can Pressure**: -17

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

Comments: _____

John Blank
Sampler Name (Print)

May 14 **, 2013**
Sampler Signature/Date 5/14/13

Jeff Miller

LABORATORY INFORMATION

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

Canister Serial No.: 578 Flow Controller Serial No: 710

Initial Pressure: 1.3 Certified Flow Rate: 18.1

Return Pressure: 31.6 Certified By/Date: JZ 4/5/2013

Final Pressure: 1020.5 Flow Rate upon Return: 13.6

Date Shipped From Lab: 4/25/2013 Shipped By: JZ

Date Returned to Lab: 5/17/2013 Received By: JZ

Flow Controller Certification File ID: 130503/032812

Canister Certification File ID: 130503/040213A

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

05/20/13
Chemist Signature/Date

5/20/13
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.: **Bridgeton Sanitary Landfill**

Site Address and/or ID No: **13570 St Charles Rock Rd, Bridgeton, MO 63044**

Sample Name and/or ID No.: MD 1-W4/703 **Canister**

AAC Batch ID: 130597 AAC Sample ID: 63050

SAMPLING INFORMATION

Start Date/Time: **May** 14 / 10:13 Stop Date/Time: **May** 14 / 14:13

Start Temp/Pressure*: 26 C 14.7 psi Stop Temp/Pressure*: 33 C 14.67 psi

Initial Can Pressure**: -29 Final Can Pressure**: -4

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

Comments: _____

John Blank
Sampler Name (Print)

May 14, 2013
Sampler Signature/Date

Jeff Miller 5/14/13

LABORATORY INFORMATION

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

Canister Serial No.: 703 Flow Controller Serial No: 715

Initial Pressure: 1.5 Certified Flow Rate: 18.0

Return Pressure: 6 14.5 Certified By/Date: JZ 4/26/2013

Final Pressure: 10 17.8 Flow Rate upon Return: 21.8

Date Shipped From Lab: 4/25/2013 Shipped By: JZ

Date Returned to Lab: 5/17/2013 Received By: JZ

Flow Controller Certification File ID: MS03/042613 05

Canister Certification File ID: MS02/041132 1

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

5/20/13
Chemist Signature/Date

5/20/13
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.: **Bridgeton Sanitary Landfill**

Site Address and/or ID No: **13570 St Charles Rock Rd, Bridgeton, MO 63044**

Sample Name and/or ID No.: **[redacted]/D 2-K / 2155 Canister**

700 CG 05/17/13

AAC Batch ID: 130597 AAC Sample ID: 63051

SAMPLING INFORMATION

Start Date/Time: **May** 14 / 10:36 Stop Date/Time: **May** 14 / 14:36

Start Temp/Pressure*: 26 C 14.7 **psi** Stop Temp/Pressure*: 33 C 14.67 **psi**

Initial Can Pressure**: - 30 Final Can Pressure**: - 22.5

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

Comments: _____

John Blank May 14, 2013

Sampler Name (Print) ***Sampler Signature/Date***

Jeff Miller 5/14/13

LABORATORY INFORMATION

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

Canister Serial No.: 2155 Flow Controller Serial No: 717

CG 05/17/13

Initial Pressure: 2.3 Certified Flow Rate: 18.0

Return Pressure: 174.8 Certified By/Date: JZ 4/5/2013

Final Pressure: 1028.3 Flow Rate upon Return: 11.0

Date Shipped From Lab: 4/25/2013 Shipped By: JZ

Date Returned to Lab: 5/17/2013 Received By: JZ

Flow Controller Certification File ID: 1503/05260320

Canister Certification File ID: 1503/03071316

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

05/20/13 5/20/13

Chemist Signature/Date ***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 : **130597**
MATRIX : **AIR**
UNITS : **PPB (v/v)**

DATE RECEIVED : **05/17/2013**
DATE REPORTED : **05/21/2013**

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	U-1 W8-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	U-2 W6-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	130597-63048				130597-63049				
Date Sampled	05/14/2013				05/14/2013				
Date Analyzed	05/20/2013				05/20/2013				
Can Dilution Factor	2.01				3.22				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Chlorodifluoromethane	0.32	J	1.0	1.00	0.35	J	1.0	1.61	0.5
Propene	<SRL	U	1.0	2.01	<SRL	U	1.0	3.22	1.0
Dichlorodifluoromethane	0.58	J	1.0	1.00	0.68	J	1.0	1.61	0.5
Chloromethane	0.42	J	1.0	1.00	0.58	J	1.0	1.61	0.5
Dichlorotetrafluoroethane	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Vinyl Chloride	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Methanol	17.2		1.0	10.0	19.1		1.0	16.1	5.0
1,3-Butadiene	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Bromomethane	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Chloroethane	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Dichlorofluoromethane	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Ethanol	5.54		1.0	4.02	8.06		1.0	6.45	2.0
Vinyl Bromide	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Acetone	8.24		1.0	4.02	8.25		1.0	6.45	2.0
Trichlorofluoromethane	0.28	J	1.0	1.00	0.26	J	1.0	1.61	0.5
2-Propanol (IPA)	0.48	J	1.0	4.02	1.74	J	1.0	6.45	2.0
Acrylonitrile	<SRL	U	1.0	2.01	<SRL	U	1.0	3.22	1.0
1,1-Dichloroethene	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Methylene Chloride (DCM)	<SRL	U	1.0	2.01	<SRL	U	1.0	3.22	1.0
Allyl Chloride	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Carbon Disulfide	NR	U	1.0	1.00	NR	U	1.0	1.61	0.5
Trichlorotrifluoroethane	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
trans-1,2-Dichloroethene	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
1,1-Dichloroethane	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Methyl Tert Butyl Ether (MTBE)	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Vinyl Acetate	<SRL	U	1.0	2.01	<SRL	U	1.0	3.22	1.0
2-Butanone (MEK)	0.98	J	1.0	2.01	0.90	J	1.0	3.22	1.0
cis-1,2-Dichloroethene	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Hexane	1.02		1.0	1.00	<SRL	U	1.0	1.61	0.5
Chloroform	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Ethyl Acetate	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Tetrahydrofuran	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
1,2-Dichloroethane	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
1,1,1-Trichloroethane	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	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 : 130597
MATRIX : AIR
UNITS : PPB (v/v)

DATE RECEIVED : 05/17/2013
DATE REPORTED : 05/21/2013

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	U-1 W8-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	U-2 W6-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	130597-63048				130597-63049				
Date Sampled	05/14/2013				05/14/2013				
Date Analyzed	05/20/2013				05/20/2013				
Can Dilution Factor	2.01				3.22				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Benzene	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Carbon Tetrachloride	0.10	J	1.0	1.00	<SRL	U	1.0	1.61	0.5
Cyclohexane	0.14	J	1.0	1.00	<SRL	U	1.0	1.61	0.5
1,2-Dichloropropane	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Bromodichloromethane	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
1,4-Dioxane	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Trichloroethene (TCE)	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
2,2,4-Trimethylpentane	0.76	J	1.0	1.00	0.81	J	1.0	1.61	0.5
Heptane	0.44	J	1.0	1.00	0.42	J	1.0	1.61	0.5
cis-1,3-Dichloropropene	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
4-Methyl-2-pentanone (MiBK)	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
trans-1,3-Dichloropropene	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
1,1,2-Trichloroethane	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Toluene	1.17		1.0	1.00	1.74		1.0	1.61	0.5
2-Hexanone (MBK)	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Dibromochloromethane	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
1,2-Dibromoethane	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Tetrachloroethene (PCE)	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Chlorobenzene	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Ethylbenzene	0.30	J	1.0	1.00	0.52	J	1.0	1.61	0.5
m & p-Xylenes	1.02	J	1.0	2.01	1.68	J	1.0	3.22	1.0
Bromoform	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Styrene	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
1,1,2,2-Tetrachloroethane	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
o-Xylene	0.44	J	1.0	1.00	0.74	J	1.0	1.61	0.5
4-Ethyltoluene	0.20	J	1.0	1.00	0.29	J	1.0	1.61	0.5
1,3,5-Trimethylbenzene	0.20	J	1.0	1.00	0.32	J	1.0	1.61	0.5
1,2,4-Trimethylbenzene	0.70	J	1.0	1.00	1.13	J	1.0	1.61	0.5
Benzyl Chloride (a-Chlorotoluene)	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
1,3-Dichlorobenzene	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
1,4-Dichlorobenzene	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
1,2-Dichlorobenzene	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
1,2,4-Trichlorobenzene	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
Hexachlorobutadiene	<SRL	U	1.0	1.00	<SRL	U	1.0	1.61	0.5
BFB-Surrogate Std. % Recovery	102%				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

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

Laboratory Analysis Report

CLIENT : Soil Water Air Protection Enterprise
PROJECT NO : 130597
MATRIX : AIR
UNITS : ug/m3

DATE RECEIVED : 05/17/2013
DATE REPORTED : 05/21/2013

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	U-1 W8-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	U-2 W6-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	130597-63048				130597-63049				
Date Sampled	05/14/2013				05/14/2013				
Date Analyzed	05/20/2013				05/20/2013				
Can Dilution Factor	2.01				3.22				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Chlorodifluoromethane	1.1	J	1.0	3.6	1.3	J	1.0	5.7	1.8
Propene	<SRL	U	1.0	3.5	<SRL	U	1.0	5.5	1.7
Dichlorodifluoromethane	2.9	J	1.0	5.0	3.4	J	1.0	8.0	2.5
Chloromethane	0.9	J	1.0	2.1	1.2	J	1.0	3.3	1.0
Dichlorotetrafluoroethane	<SRL	U	1.0	7.0	<SRL	U	1.0	11.3	3.5
Vinyl Chloride	<SRL	U	1.0	2.6	<SRL	U	1.0	4.1	1.3
Methanol	22.5		1.0	13.2	25.0		1.0	21.1	6.6
1,3-Butadiene	<SRL	U	1.0	2.2	<SRL	U	1.0	3.6	1.1
Bromomethane	<SRL	U	1.0	3.9	<SRL	U	1.0	6.3	1.9
Chloroethane	<SRL	U	1.0	2.6	<SRL	U	1.0	4.3	1.3
Dichlorofluoromethane	<SRL	U	1.0	4.2	<SRL	U	1.0	6.8	2.1
Ethanol	10.4		1.0	7.6	15.2		1.0	12.1	3.8
Vinyl Bromide	<SRL	U	1.0	4.4	<SRL	U	1.0	7.1	2.2
Acetone	19.6		1.0	9.5	19.6		1.0	15.3	4.8
Trichlorofluoromethane	1.6	J	1.0	5.6	1.5	J	1.0	9.1	2.8
2-Propanol (IPA)	1.2	J	1.0	9.9	4.3	J	1.0	15.8	4.9
Acrylonitrile	<SRL	U	1.0	4.4	<SRL	U	1.0	7.0	2.2
1,1-Dichloroethene	<SRL	U	1.0	4.0	<SRL	U	1.0	6.4	2.0
Methylene Chloride (DCM)	<SRL	U	1.0	7.0	<SRL	U	1.0	11.2	3.5
Allyl Chloride	<SRL	U	1.0	3.1	<SRL	U	1.0	5.0	1.6
Carbon Disulfide	NR	U	1.0	3.1	NR	U	1.0	5.0	1.6
Trichlorotrifluoroethane	<SRL	U	1.0	7.7	<SRL	U	1.0	12.4	3.8
trans-1,2-Dichloroethene	<SRL	U	1.0	4.0	<SRL	U	1.0	6.4	2.0
1,1-Dichloroethane	<SRL	U	1.0	4.1	<SRL	U	1.0	6.5	2.0
Methyl Tert Butyl Ether (MTBE)	<SRL	U	1.0	3.6	<SRL	U	1.0	5.8	1.8
Vinyl Acetate	<SRL	U	1.0	7.1	<SRL	U	1.0	11.3	3.5
2-Butanone (MEK)	2.9	J	1.0	5.9	2.7	J	1.0	9.5	2.9
cis-1,2-Dichloroethene	<SRL	U	1.0	4.0	<SRL	U	1.0	6.4	2.0
Hexane	3.6		1.0	3.5	<SRL	U	1.0	5.7	1.8
Chloroform	<SRL	U	1.0	4.9	<SRL	U	1.0	7.9	2.4
Ethyl Acetate	<SRL	U	1.0	3.6	<SRL	U	1.0	5.8	1.8
Tetrahydrofuran	<SRL	U	1.0	3.0	<SRL	U	1.0	4.8	1.5
1,2-Dichloroethane	<SRL	U	1.0	4.1	<SRL	U	1.0	6.5	2.0
1,1,1-Trichloroethane	<SRL	U	1.0	5.5	<SRL	U	1.0	8.8	2.7

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 : 130597
MATRIX : AIR
UNITS : ug/m3

DATE RECEIVED : 05/17/2013
DATE REPORTED : 05/21/2013

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	U-1 W8-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	U-2 W6-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	130597-63048				130597-63049				
Date Sampled	05/14/2013				05/14/2013				
Date Analyzed	05/20/2013				05/20/2013				
Can Dilution Factor	2.01				3.22				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Benzene	<SRL	U	1.0	3.2	<SRL	U	1.0	5.1	1.6
Carbon Tetrachloride	0.6	J	1.0	6.3	<SRL	U	1.0	10.1	3.1
Cyclohexane	0.5	J	1.0	3.5	<SRL	U	1.0	5.5	1.7
1,2-Dichloropropane	<SRL	U	1.0	4.6	<SRL	U	1.0	7.4	2.3
Bromodichloromethane	<SRL	U	1.0	6.7	<SRL	U	1.0	10.8	3.4
1,4-Dioxane	<SRL	U	1.0	3.6	<SRL	U	1.0	5.8	1.8
Trichloroethene (TCE)	<SRL	U	1.0	5.4	<SRL	U	1.0	8.7	2.7
2,2,4-Trimethylpentane	3.6	J	1.0	4.7	3.8	J	1.0	7.5	2.3
Heptane	1.8	J	1.0	4.1	1.7	J	1.0	6.6	2.0
cis-1,3-Dichloropropene	<SRL	U	1.0	4.6	<SRL	U	1.0	7.3	2.3
4-Methyl-2-pentanone (MiBK)	<SRL	U	1.0	4.1	<SRL	U	1.0	6.6	2.0
trans-1,3-Dichloropropene	<SRL	U	1.0	4.6	<SRL	U	1.0	7.3	2.3
1,1,2-Trichloroethane	<SRL	U	1.0	5.5	<SRL	U	1.0	8.8	2.7
Toluene	4.4		1.0	3.8	6.6		1.0	6.1	1.9
2-Hexanone (MBK)	<SRL	U	1.0	4.1	<SRL	U	1.0	6.6	2.0
Dibromochloromethane	<SRL	U	1.0	8.6	<SRL	U	1.0	13.7	4.3
1,2-Dibromoethane	<SRL	U	1.0	7.7	<SRL	U	1.0	12.4	3.8
Tetrachloroethene (PCE)	<SRL	U	1.0	6.8	<SRL	U	1.0	10.9	3.4
Chlorobenzene	<SRL	U	1.0	4.6	<SRL	U	1.0	7.4	2.3
Ethylbenzene	1.3	J	1.0	4.4	2.2	J	1.0	7.0	2.2
m & p-Xylenes	4.5	J	1.0	8.7	7.3	J	1.0	14.0	4.3
Bromoform	<SRL	U	1.0	10.4	<SRL	U	1.0	16.7	5.2
Styrene	<SRL	U	1.0	4.3	<SRL	U	1.0	6.9	2.1
1,1,2,2-Tetrachloroethane	<SRL	U	1.0	6.9	<SRL	U	1.0	11.1	3.4
o-Xylene	1.9	J	1.0	4.4	3.2	J	1.0	7.0	2.2
4-Ethyltoluene	1.0	J	1.0	4.9	1.4	J	1.0	7.9	2.5
1,3,5-Trimethylbenzene	1.0	J	1.0	4.9	1.6	J	1.0	7.9	2.5
1,2,4-Trimethylbenzene	3.5	J	1.0	4.9	5.6	J	1.0	7.9	2.5
Benzyl Chloride (a-Chlorotoluene)	<SRL	U	1.0	5.2	<SRL	U	1.0	8.3	2.6
1,3-Dichlorobenzene	<SRL	U	1.0	6.0	<SRL	U	1.0	9.7	3.0
1,4-Dichlorobenzene	<SRL	U	1.0	6.0	<SRL	U	1.0	9.7	3.0
1,2-Dichlorobenzene	<SRL	U	1.0	6.0	<SRL	U	1.0	9.7	3.0
1,2,4-Trichlorobenzene	<SRL	U	1.0	7.5	<SRL	U	1.0	12.0	3.7
Hexachlorobutadiene	<SRL	U	1.0	10.7	<SRL	U	1.0	17.2	5.3
BFB-Surrogate Std. % Recovery	102%				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

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 : 130597
MATRIX : AIR
UNITS : PPB (v/v)

DATE RECEIVED : 05/17/2013
DATE REPORTED : 05/21/2013

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	D-1 W4-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	D-2 K-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	130597-63050				130597-63051				
Date Sampled	05/14/2013				05/14/2013				
Date Analyzed	05/20/2013				05/20/2013				
Can Dilution Factor	1.66				5.88				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Chlorodifluoromethane	0.31	J	1.0	0.83	0.35	J	1.0	2.94	0.5
Propene	<SRL	U	1.0	1.66	5.06	J	1.0	5.88	1.0
Dichlorodifluoromethane	0.60	J	1.0	0.83	0.71	J	1.0	2.94	0.5
Chloromethane	0.46	J	1.0	0.83	0.71	J	1.0	2.94	0.5
Dichlorotetrafluoroethane	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
Vinyl Chloride	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
Methanol	37.3		1.0	8.28	62.3		1.0	29.4	5.0
1,3-Butadiene	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
Bromomethane	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
Chloroethane	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
Dichlorofluoromethane	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
Ethanol	6.26		1.0	3.31	32.5		1.0	11.8	2.0
Vinyl Bromide	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
Acetone	8.55		1.0	3.31	24.9		1.0	11.8	2.0
Trichlorofluoromethane	0.27	J	1.0	0.83	<SRL	U	1.0	2.94	0.5
2-Propanol (IPA)	0.80	J	1.0	3.31	31.2		1.0	11.8	2.0
Acrylonitrile	<SRL	U	1.0	1.66	<SRL	U	1.0	5.88	1.0
1,1-Dichloroethene	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
Methylene Chloride (DCM)	<SRL	U	1.0	1.66	<SRL	U	1.0	5.88	1.0
Allyl Chloride	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
Carbon Disulfide	NR	U	1.0	0.83	NR	U	1.0	2.94	0.5
Trichlorotrifluoroethane	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
trans-1,2-Dichloroethene	<SRL	U	1.0	0.83	0.71	J	1.0	2.94	0.5
1,1-Dichloroethane	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
Methyl Tert Butyl Ether (MTBE)	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
Vinyl Acetate	<SRL	U	1.0	1.66	<SRL	U	1.0	5.88	1.0
2-Butanone (MEK)	1.86		1.0	1.66	2.65	J	1.0	5.88	1.0
cis-1,2-Dichloroethene	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
Hexane	0.91		1.0	0.83	4.35		1.0	2.94	0.5
Chloroform	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
Ethyl Acetate	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
Tetrahydrofuran	0.94		1.0	0.83	1.06	J	1.0	2.94	0.5
1,2-Dichloroethane	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
1,1,1-Trichloroethane	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	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 : 130597
MATRIX : AIR
UNITS : PPB (v/v)

DATE RECEIVED : 05/17/2013
DATE REPORTED : 05/21/2013

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	D-1 W4-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	D-2 K-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	130597-63050				130597-63051				
Date Sampled	05/14/2013				05/14/2013				
Date Analyzed	05/20/2013				05/20/2013				
Can Dilution Factor	1.66				5.88				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Benzene	2.34		1.0	0.83	3.12		1.0	2.94	0.5
Carbon Tetrachloride	0.10	J	1.0	0.83	<SRL	U	1.0	2.94	0.5
Cyclohexane	0.13	J	1.0	0.83	0.76	J	1.0	2.94	0.5
1,2-Dichloropropane	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
Bromodichloromethane	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
1,4-Dioxane	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
Trichloroethene (TCE)	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
2,2,4-Trimethylpentane	0.65	J	1.0	0.83	3.88		1.0	2.94	0.5
Heptane	0.46	J	1.0	0.83	2.47	J	1.0	2.94	0.5
cis-1,3-Dichloropropene	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
4-Methyl-2-pentanone (MiBK)	0.10	J	1.0	0.83	0.24	J	1.0	2.94	0.5
trans-1,3-Dichloropropene	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
1,1,2-Trichloroethane	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
Toluene	1.39		1.0	0.83	8.53		1.0	2.94	0.5
2-Hexanone (MBK)	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
Dibromochloromethane	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
1,2-Dibromoethane	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
Tetrachloroethene (PCE)	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
Chlorobenzene	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
Ethylbenzene	0.38	J	1.0	0.83	1.53	J	1.0	2.94	0.5
m & p-Xylenes	1.11	J	1.0	1.66	4.71	J	1.0	5.88	1.0
Bromoform	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
Styrene	<SRL	U	1.0	0.83	0.88	J	1.0	2.94	0.5
1,1,2,2-Tetrachloroethane	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
o-Xylene	0.45	J	1.0	0.83	2.24	J	1.0	2.94	0.5
4-Ethyltoluene	0.18	J	1.0	0.83	0.82	J	1.0	2.94	0.5
1,3,5-Trimethylbenzene	0.18	J	1.0	0.83	1.00	J	1.0	2.94	0.5
1,2,4-Trimethylbenzene	0.65	J	1.0	0.83	3.18		1.0	2.94	0.5
Benzyl Chloride (a-Chlorotoluene)	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
1,3-Dichlorobenzene	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
1,4-Dichlorobenzene	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
1,2-Dichlorobenzene	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
1,2,4-Trichlorobenzene	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
Hexachlorobutadiene	<SRL	U	1.0	0.83	<SRL	U	1.0	2.94	0.5
BFB-Surrogate Std. % Recovery	104%				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).
SQL - Sample Quantitation Limit is the Limit Of Quantitation (LOQ) x Dilution Factors.
NR - Not Reported on these analysis.

Marcus Hueppe
Laboratoy Director

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

Laboratory Analysis Report

CLIENT : Soil Water Air Protection Enterprise
PROJECT NO : 130597
MATRIX : AIR
UNITS : ug/m3

DATE RECEIVED : 05/17/2013
DATE REPORTED : 05/21/2013

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	D-1 W4-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	D-2 K-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	130597-63050				130597-63051				
Date Sampled	05/14/2013				05/14/2013				
Date Analyzed	05/20/2013				05/20/2013				
Can Dilution Factor	1.66				5.88				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Chlorodifluoromethane	1.1	J	1.0	2.9	1.3	J	1.0	10.4	1.8
Propene	<SRL	U	1.0	2.9	8.7	J	1.0	10.1	1.7
Dichlorodifluoromethane	3.0	J	1.0	4.1	3.5	J	1.0	14.5	2.5
Chloromethane	1.0	J	1.0	1.7	1.5	J	1.0	6.1	1.0
Dichlorotetrafluoroethane	<SRL	U	1.0	5.8	<SRL	U	1.0	20.6	3.5
Vinyl Chloride	<SRL	U	1.0	2.1	<SRL	U	1.0	7.5	1.3
Methanol	48.9		1.0	10.9	81.6		1.0	38.5	6.6
1,3-Butadiene	<SRL	U	1.0	1.8	<SRL	U	1.0	6.5	1.1
Bromomethane	<SRL	U	1.0	3.2	<SRL	U	1.0	11.4	1.9
Chloroethane	<SRL	U	1.0	2.2	<SRL	U	1.0	7.8	1.3
Dichlorofluoromethane	<SRL	U	1.0	3.5	<SRL	U	1.0	12.4	2.1
Ethanol	11.8		1.0	6.2	61.3		1.0	22.2	3.8
Vinyl Bromide	<SRL	U	1.0	3.6	<SRL	U	1.0	12.9	2.2
Acetone	20.3		1.0	7.9	59.1		1.0	27.9	4.8
Trichlorofluoromethane	1.5	J	1.0	4.7	<SRL	U	1.0	16.5	2.8
2-Propanol (IPA)	2.0	J	1.0	8.1	76.6		1.0	28.9	4.9
Acrylonitrile	<SRL	U	1.0	3.6	<SRL	U	1.0	12.8	2.2
1,1-Dichloroethene	<SRL	U	1.0	3.3	<SRL	U	1.0	11.7	2.0
Methylene Chloride (DCM)	<SRL	U	1.0	5.8	<SRL	U	1.0	20.4	3.5
Allyl Chloride	<SRL	U	1.0	2.6	<SRL	U	1.0	9.2	1.6
Carbon Disulfide	NR	U	1.0	2.6	NR	U	1.0	9.2	1.6
Trichlorotrifluoroethane	<SRL	U	1.0	6.3	<SRL	U	1.0	22.5	3.8
trans-1,2-Dichloroethene	<SRL	U	1.0	3.3	2.8	J	1.0	11.7	2.0
1,1-Dichloroethane	<SRL	U	1.0	3.4	<SRL	U	1.0	11.9	2.0
Methyl Tert Butyl Ether (MTBE)	<SRL	U	1.0	3.0	<SRL	U	1.0	10.6	1.8
Vinyl Acetate	<SRL	U	1.0	5.8	<SRL	U	1.0	20.7	3.5
2-Butanone (MEK)	5.5		1.0	4.9	7.8	J	1.0	17.3	2.9
cis-1,2-Dichloroethene	<SRL	U	1.0	3.3	<SRL	U	1.0	11.7	2.0
Hexane	3.2		1.0	2.9	15.3		1.0	10.4	1.8
Chloroform	<SRL	U	1.0	4.0	<SRL	U	1.0	14.4	2.4
Ethyl Acetate	<SRL	U	1.0	3.0	<SRL	U	1.0	10.6	1.8
Tetrahydrofuran	2.8		1.0	2.4	3.1	J	1.0	8.7	1.5
1,2-Dichloroethane	<SRL	U	1.0	3.4	<SRL	U	1.0	11.9	2.0
1,1,1-Trichloroethane	<SRL	U	1.0	4.5	<SRL	U	1.0	16.0	2.7

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 : **130597**
MATRIX : **AIR**
UNITS : **ug/m3**

DATE RECEIVED : **05/17/2013**
DATE REPORTED : **05/21/2013**

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	D-1 W4-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	D-2 K-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	130597-63050				130597-63051				
Date Sampled	05/14/2013				05/14/2013				
Date Analyzed	05/20/2013				05/20/2013				
Can Dilution Factor	1.66				5.88				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Benzene	7.5		1.0	2.6	10.0		1.0	9.4	1.6
Carbon Tetrachloride	0.6	J	1.0	5.2	<SRL	U	1.0	18.5	3.1
Cyclohexane	0.5	J	1.0	2.9	2.6	J	1.0	10.1	1.7
1,2-Dichloropropane	<SRL	U	1.0	3.8	<SRL	U	1.0	13.6	2.3
Bromodichloromethane	<SRL	U	1.0	5.5	<SRL	U	1.0	19.7	3.4
1,4-Dioxane	<SRL	U	1.0	3.0	<SRL	U	1.0	10.6	1.8
Trichloroethene (TCE)	<SRL	U	1.0	4.5	<SRL	U	1.0	15.8	2.7
2,2,4-Trimethylpentane	3.0	J	1.0	3.9	18.1		1.0	13.7	2.3
Heptane	1.9	J	1.0	3.4	10.1	J	1.0	12.1	2.0
cis-1,3-Dichloropropene	<SRL	U	1.0	3.8	<SRL	U	1.0	13.3	2.3
4-Methyl-2-pentanone (MiBK)	0.4	J	1.0	3.4	1.0	J	1.0	12.0	2.0
trans-1,3-Dichloropropene	<SRL	U	1.0	3.8	<SRL	U	1.0	13.3	2.3
1,1,2-Trichloroethane	<SRL	U	1.0	4.5	<SRL	U	1.0	16.0	2.7
Toluene	5.2		1.0	3.1	32.1		1.0	11.1	1.9
2-Hexanone (MBK)	<SRL	U	1.0	3.4	<SRL	U	1.0	12.0	2.0
Dibromochloromethane	<SRL	U	1.0	7.1	<SRL	U	1.0	25.1	4.3
1,2-Dibromoethane	<SRL	U	1.0	6.4	<SRL	U	1.0	22.6	3.8
Tetrachloroethene (PCE)	<SRL	U	1.0	5.6	<SRL	U	1.0	19.9	3.4
Chlorobenzene	<SRL	U	1.0	3.8	<SRL	U	1.0	13.5	2.3
Ethylbenzene	1.7	J	1.0	3.6	6.6	J	1.0	12.8	2.2
m & p-Xylenes	4.8	J	1.0	7.2	20.4	J	1.0	25.5	4.3
Bromoform	<SRL	U	1.0	8.6	<SRL	U	1.0	30.4	5.2
Styrene	<SRL	U	1.0	3.5	3.8	J	1.0	12.5	2.1
1,1,2,2-Tetrachloroethane	<SRL	U	1.0	5.7	<SRL	U	1.0	20.2	3.4
o-Xylene	1.9	J	1.0	3.6	9.7	J	1.0	12.8	2.2
4-Ethyltoluene	0.9	J	1.0	4.1	4.1	J	1.0	14.5	2.5
1,3,5-Trimethylbenzene	0.9	J	1.0	4.1	4.9	J	1.0	14.5	2.5
1,2,4-Trimethylbenzene	3.2	J	1.0	4.1	15.6		1.0	14.5	2.5
Benzyl Chloride (a-Chlorotoluene)	<SRL	U	1.0	4.3	<SRL	U	1.0	15.2	2.6
1,3-Dichlorobenzene	<SRL	U	1.0	5.0	<SRL	U	1.0	17.7	3.0
1,4-Dichlorobenzene	<SRL	U	1.0	5.0	<SRL	U	1.0	17.7	3.0
1,2-Dichlorobenzene	<SRL	U	1.0	5.0	<SRL	U	1.0	17.7	3.0
1,2,4-Trichlorobenzene	<SRL	U	1.0	6.1	<SRL	U	1.0	21.8	3.7
Hexachlorobutadiene	<SRL	U	1.0	8.8	<SRL	U	1.0	31.4	5.3
BFB-Surrogate Std. % Recovery	104%				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).
SQL - Sample Quantitation Limit is the Limit Of Quantitation (LOQ) x Dilution Factors.
NR - Not Reported on these analysis.

Marcus Hueppe
Laboratoy Director

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

TO-15 QC REPORT

ANALYSIS DATE : 05/20/2013 **INSTRUMENT ID** : GC/MS-03
ANALYST : JJG **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	10.18	102
Chlorodifluoromethane	10.10	10.26	102
Propene	11.00	10.92	99
Dichlorodifluoromethane	9.80	10.08	103
Chloromethane	10.10	10.06	100
Dichlorotetrafluoroethane	10.10	10.13	100
Vinyl Chloride	10.20	10.13	99
Methanol	4.90	5.27	108
1,3-Butadiene	10.50	10.48	100
Bromomethane	10.20	9.15	90
Chloroethane	10.00	9.61	96
Dichlorofluoromethane	10.00	10.28	103
Ethanol	9.80	10.34	106
Vinyl Bromide	10.20	10.56	104
Acetone	10.80	9.73	90
Trichlorofluoromethane	10.10	11.18	111
2-Propanol (IPA)	11.00	10.46	95
Acrylonitrile	10.50	11.08	106
1,1-Dichloroethene	10.50	10.27	98
Methylene Chloride (DCM)	10.40	9.95	96
Allyl Chloride	11.00	11.62	106
Carbon Disulfide	10.50	9.94	95
Trichlorotrifluoroethane	10.40	10.41	100
trans-1,2-Dichloroethene	10.40	10.75	103
1,1-Dichloroethane	10.40	10.47	101
Methyl Tert Butyl Ether (MTBE)	10.60	11.19	106
Vinyl Acetate	9.70	10.24	106
2-Butanone (MEK)	10.60	11.00	104
cis-1,2-Dichloroethene	10.60	10.48	99
Hexane	10.70	10.81	101
Chloroform	10.60	11.01	104
Ethyl Acetate	11.00	11.51	105
Tetrahydrofuran	10.80	10.77	100
1,2-Dichloroethane	10.40	11.21	108
1,1,1-Trichloroethane	10.50	11.32	108

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

ANALYSIS DATE : 05/20/2013 **INSTRUMENT ID** : GC/MS-03
ANALYST : JJG **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	9.62	92
Carbon Tetrachloride	10.10	10.51	104
Cyclohexane	10.50	9.94	95
1,2-Dichloropropane	10.50	9.92	94
Bromodichloromethane	10.30	10.87	106
1,4-Dioxane	10.30	9.91	96
Trichloroethene (TCE)	10.30	10.22	99
2,2,4-Trimethylpentane	10.90	10.56	97
Heptane	10.70	10.28	96
cis-1,3-Dichloropropene	11.00	10.84	99
4-Methyl-2-pentanone (MiBK)	10.30	10.39	101
trans-1,3-Dichloropropene	9.80	9.88	101
1,1,2-Trichloroethane	10.60	10.26	97
Toluene	10.60	10.25	97
2-Hexanone (MBK)	10.80	10.57	98
Dibromochloromethane	11.00	11.51	105
1,2-Dibromoethane	10.40	10.30	99
Tetrachloroethene (PCE)	10.40	10.21	98
Chlorobenzene	10.60	10.41	98
Ethylbenzene	10.50	10.21	97
m & p-Xylenes	20.60	19.59	95
Bromoform	10.30	10.43	101
Styrene	10.40	9.89	95
1,1,2,2-Tetrachloroethane	10.60	10.21	96
o-Xylene	10.60	9.94	94
4-Ethyltoluene	10.40	10.41	100
1,3,5-Trimethylbenzene	10.20	9.59	94
1,2,4-Trimethylbenzene	10.20	10.58	104
Benzyl Chloride (a-Chlorotoluene)	10.00	11.13	111
1,3-Dichlorobenzene	10.00	10.59	106
1,4-Dichlorobenzene	10.00	9.95	100
1,2-Dichlorobenzene	10.00	10.24	102
1,2,4-Trichlorobenzene	9.30	9.60	103
Hexachlorobutadiene	9.80	10.13	103

* - %REC should be 70-130%

Marcus Hueppe
Laboratory Director

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

Quality Control/Quality Assurance Report

CLIENT ID	**: Laboratory Control Spike**	**DATE ANALYZED**	**: 05/20/2013**
AAC ID	**: LCS/LCSD**	**DATE REPORTED**	**: 05/20/2013**
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	10.27	9.91	98	94	3.6
Methylene Chloride (DCM)	0.0	10.40	9.95	9.60	96	92	3.6
Benzene	0.0	10.50	9.62	9.95	92	95	3.4
Trichloroethene (TCE)	0.0	10.30	10.22	10.18	99	99	0.4
Toluene	0.0	10.60	10.25	10.19	97	96	0.6
Tetrachloroethene (PCE)	0.0	10.40	10.21	10.18	98	98	0.3
Chlorobenzene	0.0	10.60	10.41	10.35	98	98	0.6
Ethylbenzene	0.0	10.50	10.21	10.04	97	96	1.7
m & p-Xylenes	0.0	20.60	19.59	19.20	95	93	2.0
o-Xylene	0.0	10.60	9.94	10.06	94	95	1.2

* Must be 70-130%

** Must be < 25%

Marcus Hueppe
Laboratory Director

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

Method Blank Analysis Report

MATRIX	**: AIR**	**ANALYSIS DATE**	**: 05/20/2013**
UNITS	**: ppbv**	**REPORT DATE**	**: 05/20/2013**

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID / *AAC ID*	Method Blank MB 052013	RL
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

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

Method Blank Analysis Report

MATRIX	**: AIR**	**ANALYSIS DATE**	**: 05/20/2013**
UNITS	**: ppbv**	**REPORT DATE**	**: 05/20/2013**

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID / *AAC ID*	Method Blank MB 052013	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

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

Quality Control/Quality Assurance Report

AAC ID	**: 130597-63048**	**DATE ANALYZED**	**: 05/20/2013**
MATRIX	**: Air**	**DATE REPORTED**	**: 05/20/2013**
		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	17.2	17.3	0.6
1,3-Butadiene	<SRL	<SRL	0.0
Bromomethane	<SRL	<SRL	0.0
Chloroethane	<SRL	<SRL	0.0
Dichlorofluoromethane	<SRL	<SRL	0.0
Ethanol	5.54	5.56	0.4
Vinyl Bromide	<SRL	<SRL	0.0
Acetone	8.24	8.04	2.5
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	1.02	0.98	4.0
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

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

Quality Control/Quality Assurance Report

AAC ID	**: 130597-63048**	**DATE ANALYZED**	**: 05/20/2013**
MATRIX	**: Air**	**DATE REPORTED**	**: 05/20/2013**
		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	1.17	1.15	1.7
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%	104%	2.0

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\052013\
Data File : 05201305.D
Acq On : 20 May 2013 11:44
Operator : JJG
Sample : 130597-63048 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 20 15:18:58 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	145590	10.00 ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	790345	10.00 ppbv	0.00
55) Chlorobenzene-d5	20.285	117	750102	10.00 ppbv	0.00
System Monitoring Compounds					
63) 4-Bromofluorobenzene(BFB)	22.710	174	479494	10.21 ppbv	0.00
Spiked Amount 10.000			Recovery = 102.10%		
Target Compounds					Qvalue
2) Chlorodifluoromethane	4.818	51	4516	0.16 ppbv #	96
3) Propene	0.000		0	N.D. d	
4) Dichlorodifluoromethane	4.890	85	14589	0.29 ppbv	98
5) Chloromethane	5.288	52	975	0.21 ppbv #	10
6) Dichlorotetrafluoroethane	5.324	135	204	N.D.	
7) VinylChloride	0.000		0	N.D.	
8) Methanol	5.867	31	39778m	8.56 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	17153m	2.76 ppbv	
14) VinylBromide	0.000		0	N.D.	
15) Acetone	7.984	58	32335m	4.10 ppbv	
16) Trichlorofluoromethane	7.659	103	4061	0.14 ppbv #	95
17) 2-Propanol(IPA)	8.238	45	6570m	0.24 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	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	0.000		0	N.D. d	
28) 2-Butanone(MEK)	11.494	72	3961	0.49 ppbv #	35
29) cis-1,2-Dichloroethene	0.000		0	N.D.	
30) Hexane	11.458	86	1972	0.51 ppbv #	49
31) Chloroform	12.493	83	995	N.D.	
32) EthylAcetate	12.118	43	1448	N.D.	

5/20/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201305.D
Acq On : 20 May 2013 11:44
Operator : JJG
Sample : 130597-63048 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 20 15:18:58 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

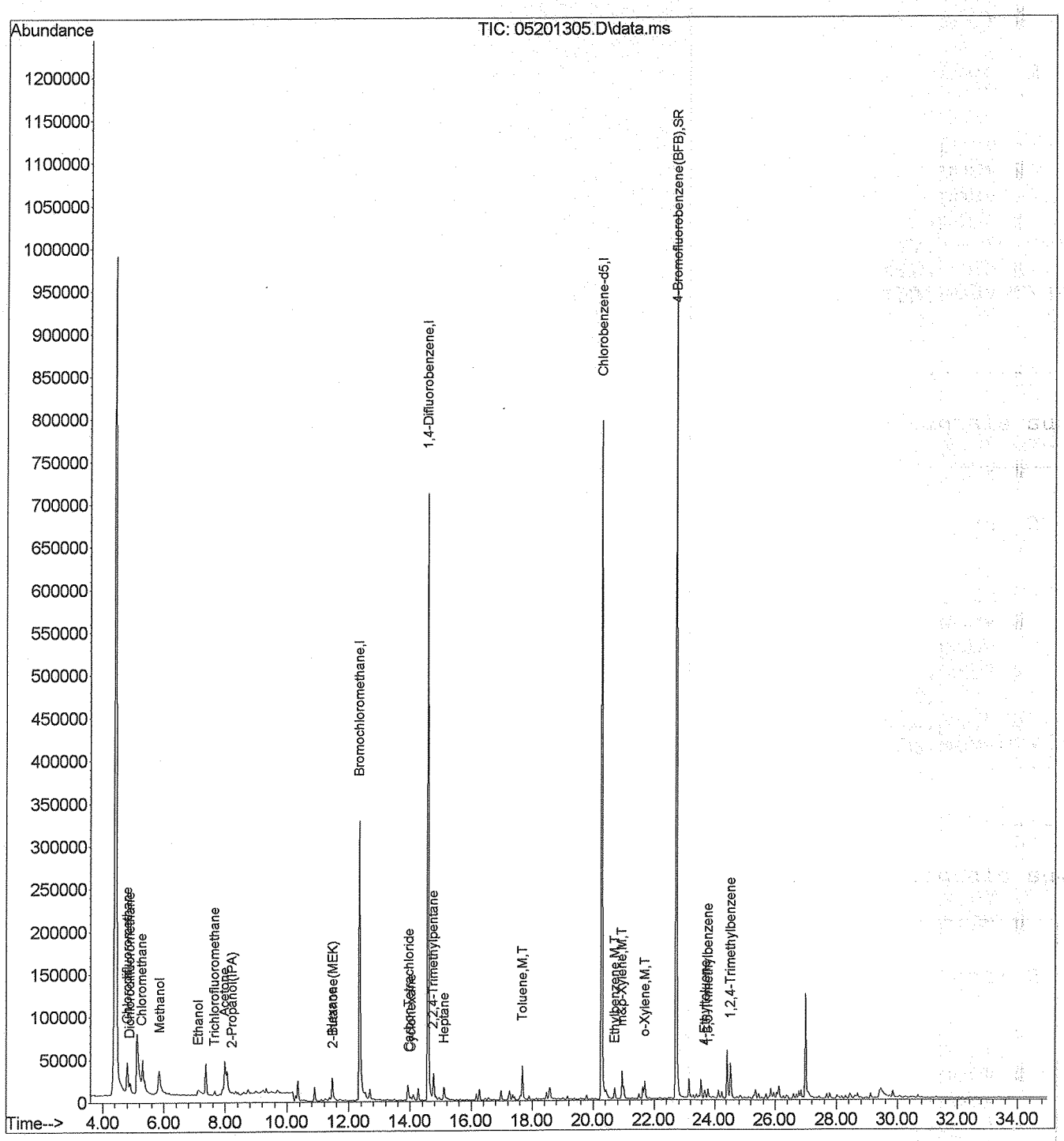
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Tetrahydrofuran	0.000		0	N.D.	
34) 1,2-Dichloroethane	13.634	62	123	N.D.	
35) 1,1,1-Trichloroethane	0.000		0	N.D.	
37) Benzene	0.000		0	N.D. d	
38) CarbonTetrachloride	13.973	117	2480	0.05 ppbv	93
39) Cyclohexane	14.026	69	612	0.07 ppbv #	92
40) 1,2-Dichloropropane	15.257	63	116	N.D.	
41) Bromodichloromethane	0.000		0	N.D.	
42) 1,4-Dioxane	0.000		0	N.D.	
43) Trichloroethene(TCE)	15.292	130	259	N.D.	
44) 2,2,4-Trimethylpentane	14.757	57	39593	0.38 ppbv	96
45) Heptane	15.114	71	4039	0.22 ppbv #	86
46) cis-1,3-Dichloropropene	0.000		0	N.D.	
47) 4-Methyl-2-pentanone(M...	16.576	58	710	N.D.	
48) trans-1,3-Dichloropropene	17.682	75	154	N.D.	
49) 1,1,2-Trichloroethane	0.000		0	N.D.	
50) Toluene	17.682	91	42772	0.58 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	116	N.D.	
56) Chlorobenzene	0.000		0	N.D.	
57) Ethylbenzene	20.713	91	14549	0.15 ppbv	98
58) m&p-Xylene	20.945	106	19939	0.51 ppbv #	89
59) Bromoform	0.000		0	N.D.	
60) Styrene	21.694	104	1167	N.D.	
61) 1,1,2,2-Tetrachloroethane	22.354	83	122	N.D.	
62) o-Xylene	21.694	91	17217	0.22 ppbv	97
64) 4-Ethyltoluene	23.691	120	3288	0.10 ppbv	95
65) 1,3,5-Trimethylbenzene	23.780	120	4534	0.10 ppbv #	91
66) 1,2,4-Trimethylbenzene	24.529	120	16063	0.35 ppbv	94
67) BenzylChloride(a-Chlor...	25.189	91	424	N.D.	
68) 1,3-Dichlorobenzene	25.064	146	678	N.D.	
69) 1,4-Dichlorobenzene	25.296	146	1203	N.D.	
70) 1,2-Dichlorobenzene	25.867	146	924	N.D.	
71) 1,2,4-Trichlorobenzene	29.451	180	2361	N.D.	
72) Hexachlorobutadiene	30.075	225	876	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201305.D
Acq On : 20 May 2013 11:44
Operator : JJG
Sample : 130597-63048 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 20 15:18:58 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\052013\
Data File : 05201307.D
Acq On : 20 May 2013 13:20
Operator : JJG
Sample : 130597-63049 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 20 17:50:50 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	142515	10.00 ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	791178	10.00 ppbv	0.00
55) Chlorobenzene-d5	20.285	117	740079	10.00 ppbv	0.00
System Monitoring Compounds					
63) 4-Bromofluorobenzene(BFB)	22.710	174	467395	10.09 ppbv	0.00
Spiked Amount 10.000			Recovery = 100.90%		
Target Compounds					Qvalue
2) Chlorodifluoromethane	4.835	51	3076	0.11 ppbv #	91
3) Propene	0.000		0	N.D. d	
4) Dichlorodifluoromethane	4.908	85	10044	0.21 ppbv	97
5) Chloromethane	5.288	52	818	0.18 ppbv #	1
6) Dichlorotetrafluoroethane	0.000		0	N.D.	
7) VinylChloride	0.000		0	N.D.	
8) Methanol	5.867	31	27227m	5.93 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	15223m	2.50 ppbv	
14) VinylBromide	0.000		0	N.D.	
15) Acetone	8.002	58	19738m	2.56 ppbv	
16) Trichlorofluoromethane	7.659	103	2361	0.08 ppbv #	93
17) 2-Propanol(IPA)	8.238	45	14188m	0.54 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	719	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	1396	N.D.	
28) 2-Butanone(MEK)	11.512	72	2185	0.28 ppbv #	67
29) cis-1,2-Dichloroethene	0.000		0	N.D.	
30) Hexane	0.000		0	N.D. d	
31) Chloroform	12.493	83	334	N.D.	
32) EthylAcetate	12.136	43	825	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201307.D
Acq On : 20 May 2013 13:20
Operator : JJG
Sample : 130597-63049 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 20 17:50:50 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	1270	N.D.	
39) Cyclohexane	14.026	69	124	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	294	N.D.	
44) 2,2,4-Trimethylpentane	14.757	57	26450	0.25 ppbv	98
45) Heptane	15.114	71	2449	0.13 ppbv	92
46) cis-1,3-Dichloropropene	0.000		0	N.D.	
47) 4-Methyl-2-pentanone(M...	16.576	58	256	N.D.	
48) trans-1,3-Dichloropropene	17.682	75	111	N.D.	
49) 1,1,2-Trichloroethane	0.000		0	N.D.	
50) Toluene	17.682	91	40216m	0.54 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	20.285	114	139	N.D.	
57) Ethylbenzene	20.713	91	15193	0.16 ppbv	97
58) m&p-Xylene	20.945	106	20041	0.52 ppbv #	94
59) Bromoform	0.000		0	N.D.	
60) Styrene	21.676	104	862	N.D.	
61) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
62) o-Xylene	21.694	91	17786	0.23 ppbv	92
64) 4-Ethyltoluene	23.691	120	2876	0.09 ppbv #	89
65) 1,3,5-Trimethylbenzene	23.780	120	4500	0.10 ppbv #	92
66) 1,2,4-Trimethylbenzene	24.529	120	15887	0.35 ppbv #	93
67) BenzylChloride(a-Chlor...	25.189	91	107	N.D.	
68) 1,3-Dichlorobenzene	25.082	146	228	N.D.	
69) 1,4-Dichlorobenzene	25.296	146	764	N.D.	
70) 1,2-Dichlorobenzene	25.849	146	128	N.D.	
71) 1,2,4-Trichlorobenzene	29.451	180	798	N.D.	
72) Hexachlorobutadiene	30.075	225	181	N.D.	

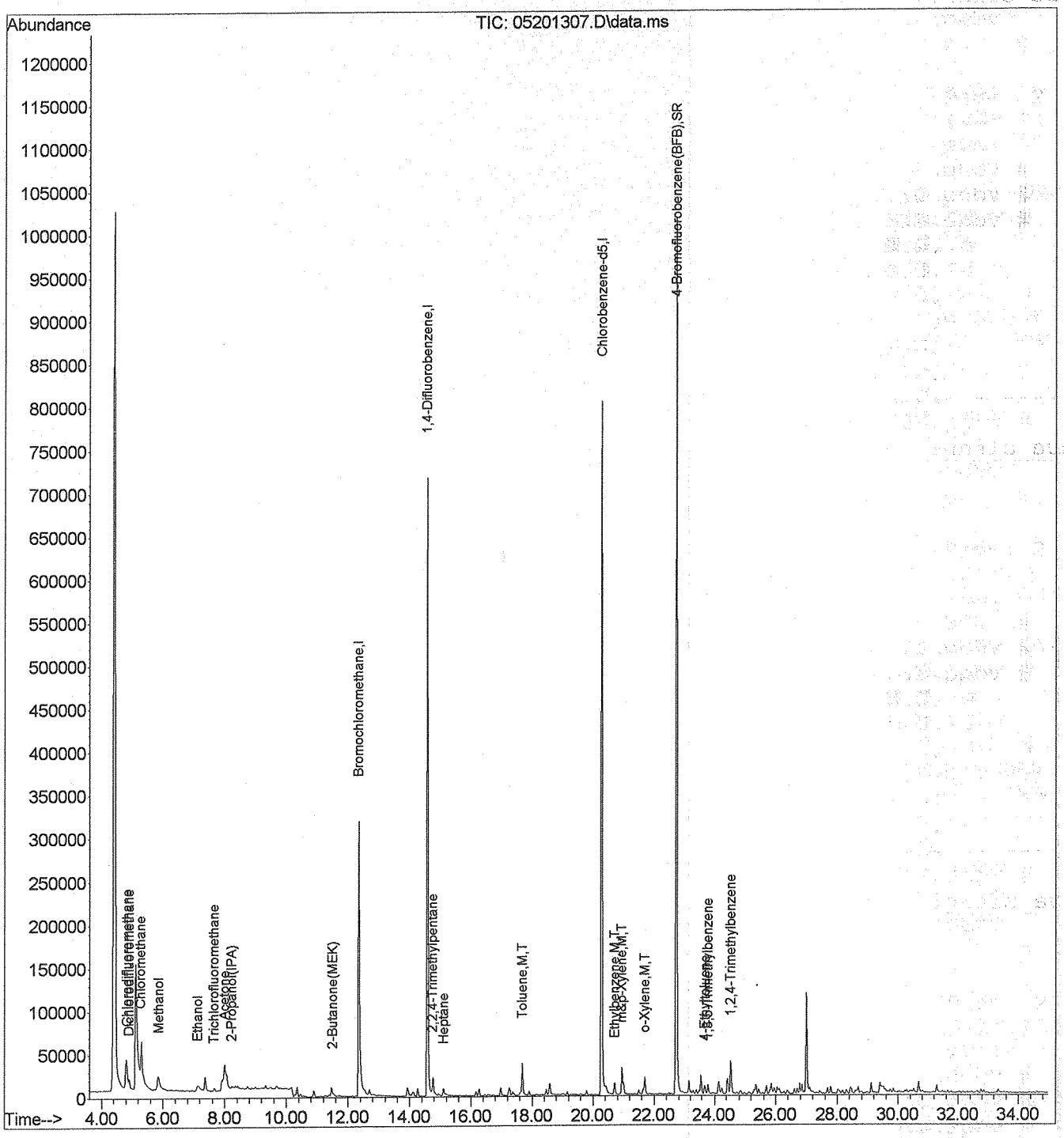
(#) = qualifier out of range (m) = manual integration (+) = signals summed

5/20/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201307.D
Acq On : 20 May 2013 13:20
Operator : JJG
Sample : 130597-63049 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 20 17:50:50 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\052013\
Data File : 05201308.D
Acq On : 20 May 2013 14:08
Operator : JJG
Sample : 130597-63050 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 20 18:41:17 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	141218	10.00	ppbv		0.00
36) 1,4-Difluorobenzene	14.579	114	778335	10.00	ppbv		0.00
55) Chlorobenzene-d5	20.285	117	732351	10.00	ppbv		0.00
System Monitoring Compounds							
63) 4-Bromofluorobenzene(BFB)	22.710	174	475368	10.37	ppbv		0.00
Spiked Amount 10.000			Recovery = 103.70%				
Target Compounds							Qvalue
2) Chlorodifluoromethane	4.817	51	5268	0.19	ppbv	#	94
3) Propene	0.000		0	N.D.	d		
4) Dichlorodifluoromethane	4.908	85	17441	0.36	ppbv		98
5) Chloromethane	5.288	52	1289	0.28	ppbv	#	1
6) Dichlorotetrafluoroethane	5.324	135	257	N.D.			
7) VinylChloride	0.000		0	N.D.			
8) Methanol	5.849	31	96765m	22.53	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	7.079	45	22744m	3.78	ppbv		
14) VinylBromide	0.000		0	N.D.			
15) Acetone	7.966	58	39431m	5.16	ppbv		
16) Trichlorofluoromethane	7.658	103	4517	0.16	ppbv	#	98
17) 2-Propanol(IPA)	8.219	45	12522m	0.48	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	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	0.000		0	N.D.	d		
28) 2-Butanone(MEK)	11.459	72	8787	1.12	ppbv	#	1
29) cis-1,2-Dichloroethene	0.000		0	N.D.			
30) Hexane	11.459	86	2051	0.55	ppbv	#	42
31) Chloroform	12.511	83	891	N.D.			
32) EthylAcetate	0.000		0	N.D.	d		

05/20/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201308.D
Acq On : 20 May 2013 14:08
Operator : JJG
Sample : 130597-63050 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 20 18:41:17 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	12.725	72	4525	0.57 ppbv #	78
34) 1,2-Dichloroethane	13.616	62	112	N.D.	
35) 1,1,1-Trichloroethane	0.000		0	N.D.	
37) Benzene	13.937	78	80800	1.41 ppbv	97
38) CarbonTetrachloride	13.973	117	2708	0.06 ppbv #	97
39) Cyclohexane	14.026	69	713	0.08 ppbv #	1
40) 1,2-Dichloropropane	15.417	63	120	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	39602	0.39 ppbv #	94
45) Heptane	15.096	71	5093	0.28 ppbv #	73
46) cis-1,3-Dichloropropene	0.000		0	N.D.	
47) 4-Methyl-2-pentanone(M...	16.558	58	1332	0.06 ppbv #	68
48) trans-1,3-Dichloropropene	17.682	75	401	N.D.	
49) 1,1,2-Trichloroethane	0.000		0	N.D. d	
50) Toluene	17.682	91	61267m	0.84 ppbv	
51) 2-Hexanone(MBK)	18.199	58	672	N.D.	
52) Dibromochloromethane	19.019	129	119	N.D.	
53) 1,2-Dibromoethane	0.000		0	N.D.	
54) Tetrachloroethene(PCE)	19.019	166	114	N.D.	
56) Chlorobenzene	0.000		0	N.D.	
57) Ethylbenzene	20.713	91	22552	0.23 ppbv	98
58) m&p-Xylene	20.945	106	25377	0.67 ppbv #	93
59) Bromoform	0.000		0	N.D.	
60) Styrene	21.658	104	1440	N.D.	
61) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
62) o-Xylene	21.694	91	20962	0.27 ppbv	99
64) 4-Ethyltoluene	23.673	120	3435	0.11 ppbv #	87
65) 1,3,5-Trimethylbenzene	23.780	120	5194	0.11 ppbv #	70
66) 1,2,4-Trimethylbenzene	24.529	120	17570	0.39 ppbv #	87
67) BenzylChloride(a-Chlor...	25.189	91	117	N.D.	
68) 1,3-Dichlorobenzene	25.064	146	141	N.D.	
69) 1,4-Dichlorobenzene	0.000		0	N.D. d	
70) 1,2-Dichlorobenzene	25.849	146	281	N.D.	
71) 1,2,4-Trichlorobenzene	29.451	180	611	N.D.	
72) Hexachlorobutadiene	30.075	225	118	N.D.	

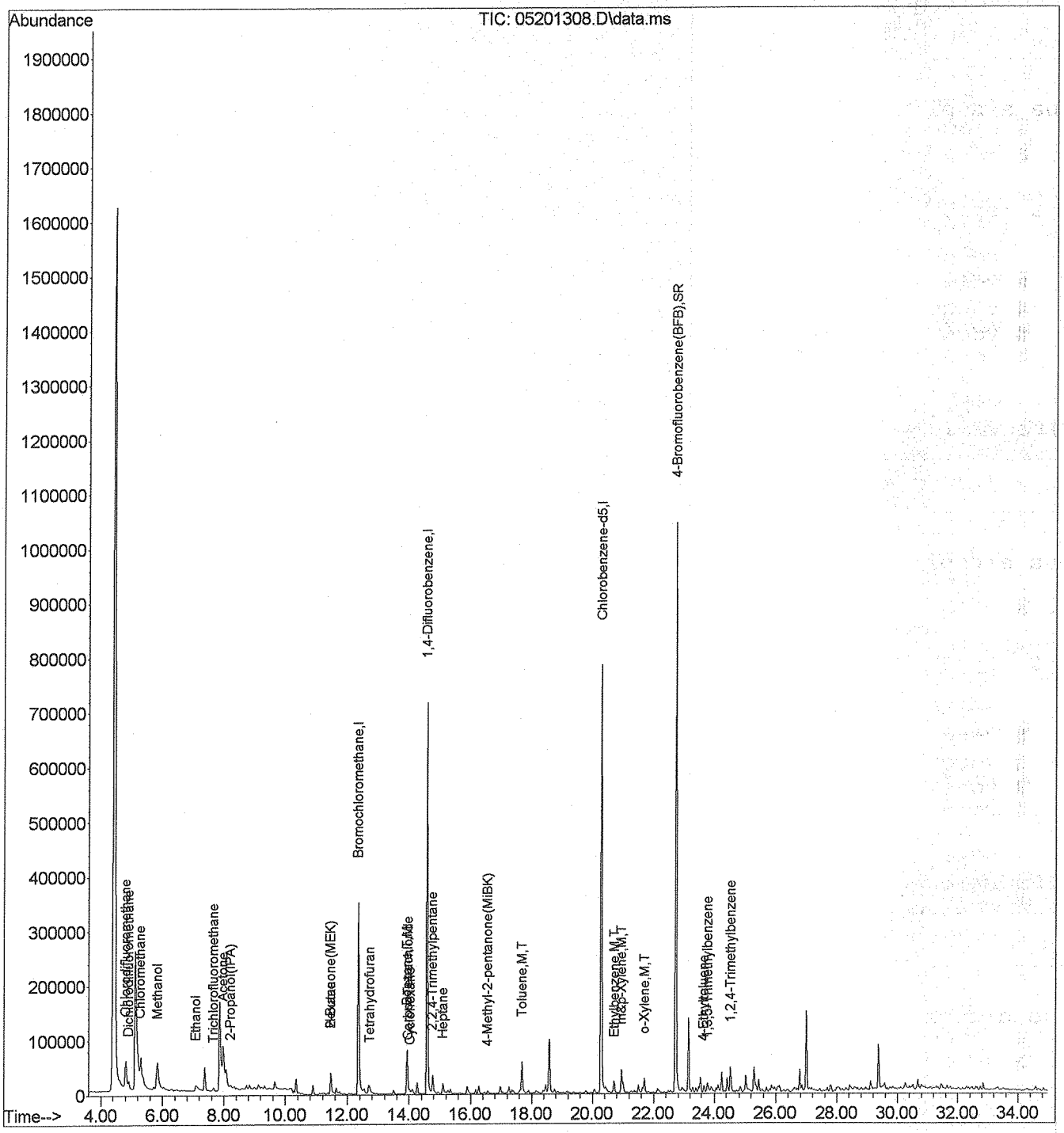
(#) = qualifier out of range (m) = manual integration (+) = signals summed

05/20/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201308.D
Acq On : 20 May 2013 14:08
Operator : JJG
Sample : 130597-63050 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 20 18:41:17 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



05/20/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201309.D
Acq On : 20 May 2013 14:56
Operator : JJG
Sample : 130597-63051 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 20 18:44:03 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	142936	10.00 ppbv		0.00
36) 1,4-Difluorobenzene	14.579	114	779054	10.00 ppbv		0.00
55) Chlorobenzene-d5	20.285	117	733160	10.00 ppbv		0.00
System Monitoring Compounds						
63) 4-Bromofluorobenzene(BFB)	22.711	174	473626	10.32 ppbv		0.00
Spiked Amount 10.000			Recovery = 103.20%			
Target Compounds						Qvalue
2) Chlorodifluoromethane	4.836	51	1751	0.06 ppbv	#	69
3) Propene	4.781	42	6370	0.86 ppbv	#	81
4) Dichlorodifluoromethane	4.908	85	5626	0.12 ppbv		97
5) Chloromethane	5.288	52	543	0.12 ppbv	#	1
6) Dichlorotetrafluoroethane	0.000		0	N.D.		
7) VinylChloride	0.000		0	N.D.		
8) Methanol	5.849	31	47984m	10.59 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	7.080	45	33682m	5.53 ppbv		
14) VinylBromide	0.000		0	N.D.		
15) Acetone	7.984	58	32740m	4.23 ppbv		
16) Trichlorofluoromethane	0.000		0	N.D. d		
17) 2-Propanol(IPA)	8.183	45	140470m	5.30 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	0.000		0	N.D. d		
22) CarbonDisulfide	0.000		0	N.D. d		
23) Trichlorotrifluoroethane	8.998	103	375	N.D.		
24) trans-1,2-Dichloroethene	10.424	96	2082	0.12 ppbv	#	81
25) 1,1-Dichloroethane	0.000		0	N.D.		
26) MethylTertButylEther(M...	10.496	73	114	N.D.		
27) VinylAcetate	0.000		0	N.D. d		
28) 2-Butanone(MEK)	11.494	72	3564	0.45 ppbv	#	1
29) cis-1,2-Dichloroethene	0.000		0	N.D.		
30) Hexane	11.459	86	2803	0.74 ppbv	#	76
31) Chloroform	12.511	83	806	N.D.		
32) EthylAcetate	0.000		0	N.D. d		

05/20/2013

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201309.D
Acq On : 20 May 2013 14:56
Operator : JJG
Sample : 130597-63051 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 20 18:44:03 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	12.743	72	1461	0.18 ppbv #	51
34) 1,2-Dichloroethane	0.000		0	N.D.	
35) 1,1,1-Trichloroethane	0.000		0	N.D.	
37) Benzene	13.937	78	30241	0.53 ppbv	95
38) CarbonTetrachloride	13.973	117	662	N.D.	
39) Cyclohexane	14.027	69	1082	0.13 ppbv #	63
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)	15.310	130	236	N.D.	
44) 2,2,4-Trimethylpentane	14.758	57	67357	0.66 ppbv #	93
45) Heptane	15.096	71	7709	0.42 ppbv #	86
46) cis-1,3-Dichloropropene	0.000		0	N.D.	
47) 4-Methyl-2-pentanone(M...	16.576	58	844	0.04 ppbv #	61
48) trans-1,3-Dichloropropene	17.682	75	910	N.D.	
49) 1,1,2-Trichloroethane	17.860	97	354	N.D.	
50) Toluene	17.682	91	105241m	1.45 ppbv	
51) 2-Hexanone(MBK)	0.000		0	N.D.	
52) Dibromochloromethane	19.019	129	703	N.D.	
53) 1,2-Dibromoethane	0.000		0	N.D.	
54) Tetrachloroethene(PCE)	19.019	166	930	N.D.	
56) Chlorobenzene	20.285	114	135	N.D.	
57) Ethylbenzene	20.713	91	25085	0.26 ppbv	97
58) m&p-Xylene	20.945	106	30471	0.80 ppbv #	92
59) Bromoform	0.000		0	N.D.	
60) Styrene	21.659	104	9505	0.15 ppbv #	94
61) 1,1,2,2-Tetrachloroethane	22.318	83	108	N.D.	
62) o-Xylene	21.694	91	29268	0.38 ppbv	96
64) 4-Ethyltoluene	23.691	120	4528	0.14 ppbv	96
65) 1,3,5-Trimethylbenzene	23.781	120	7763	0.17 ppbv #	89
66) 1,2,4-Trimethylbenzene	24.529	120	24410	0.54 ppbv	91
67) BenzylChloride(a-Chlor...	25.189	91	140	N.D.	
68) 1,3-Dichlorobenzene	0.000		0	N.D.	
69) 1,4-Dichlorobenzene	25.296	146	184	N.D.	
70) 1,2-Dichlorobenzene	0.000		0	N.D.	
71) 1,2,4-Trichlorobenzene	29.469	180	338	N.D.	
72) Hexachlorobutadiene	0.000		0	N.D.	

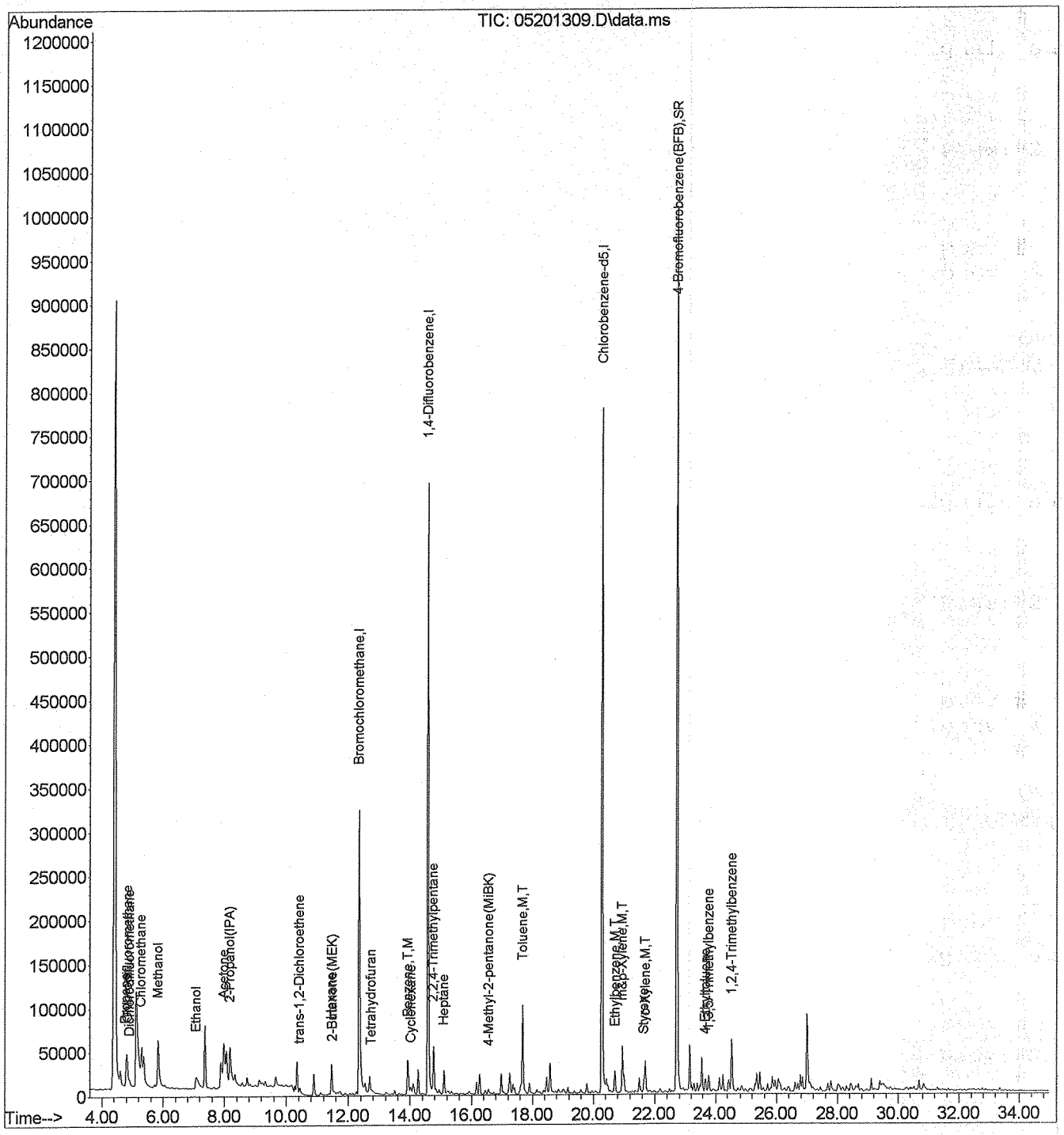
(#) = qualifier out of range (m) = manual integration (+) = signals summed

05/20/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201309.D
Acq On : 20 May 2013 14:56
Operator : JJG
Sample : 130597-63051 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 20 18:44:03 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

5/20/13

Sequence Name: C:\msdchem\1\sequence\2013\052013.S
Comment: GCMS-03
Operator: JJG
Data Path: C:\MSDCHEM\1\MS03\2013\052013\
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

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

Line			Sample Name/Misc Info
1)	Sample	1	05201301 TO15-5MS TO15 BFB 052013
2)	Sample	1	05201302 TO15-5MS TO15 CCV 052013
3)	Sample	1	05201303 TO15-5MS TO15 LCSD 052013
4)	Sample	1	05201304 TO15-5MS TO15 MB 052013
5)	Sample	2	05201305 TO15-5MS 130597-63048 x1
6)	Sample	2	05201306 TO15-5MS 130597-63048 x1 dp
7)	Sample	3	05201307 TO15-5MS 130597-63049 x1
8)	Sample	4	05201308 TO15-5MS 130597-63050 x1
9)	Sample	5	05201309 TO15-5MS 130597-63051 x1
10)	Sample	6	05201310 TO15-5MS Flow Check#051713-01
11)	Sample	16	05201311 TO15-5MS TO15 0.25ppbv MDL#1
12)	Sample	16	05201312 TO15-5MS TO15 0.25ppbv MDL#2
13)	Sample	16	05201313 TO15-5MS TO15 0.25ppbv MDL#3
14)	Sample	16	05201314 TO15-5MS TO15 0.10ppbv MDL#1
15)	Sample	16	05201315 TO15-5MS TO15 0.10ppbv MDL#2
16)	Sample	16	05201316 TO15-5MS TO15 0.10ppbv MDL#3
17)	Sample	16	05201317 TO15-5MS TO15 0.05ppbv MDL#1
18)	Sample	16	05201318 TO15-5MS TO15 0.05ppbv MDL#2
19)	Sample	16	05201319 TO15-5MS TO15 0.05ppbv MDL#3
20)	Sample	16	05201320 TO15-5MS TO15 0.05ppbv MDL#4
21)	Sample	16	05201321 TO15-5MS TO15 0.05ppbv MDL#5
22)	Sample	16	05201322 TO15-5MS TO15 0.05ppbv MDL#6
23)	Sample	16	05201323 TO15-5MS TO15 0.05ppbv MDL#7
24)	Sample	1	05201324 TO15-5MS TO15 0.50ppbv MDL#1
25)	Sample	1	05201325 TO15-5MS TO15 0.50ppbv MDL#2
26)	Sample	1	05201326 TO15-5MS TO15 0.50ppbv MDL#3
27)	Sample	1	05201327 TO15-5MS TO15 0.50ppbv MDL#4
28)	Sample	1	05201328 TO15-5MS TO15 2.00ppbv MDL#1
29)	Sample	1	05201329 TO15-5MS TO15 2.00ppbv MDL#2
30)	Sample	1	05201330 TO15-5MS TO15 2.00ppbv MDL#3
31)	Sample	1	05201331 TO15-5MS Can Check#000663

5/20/13

5/20/13

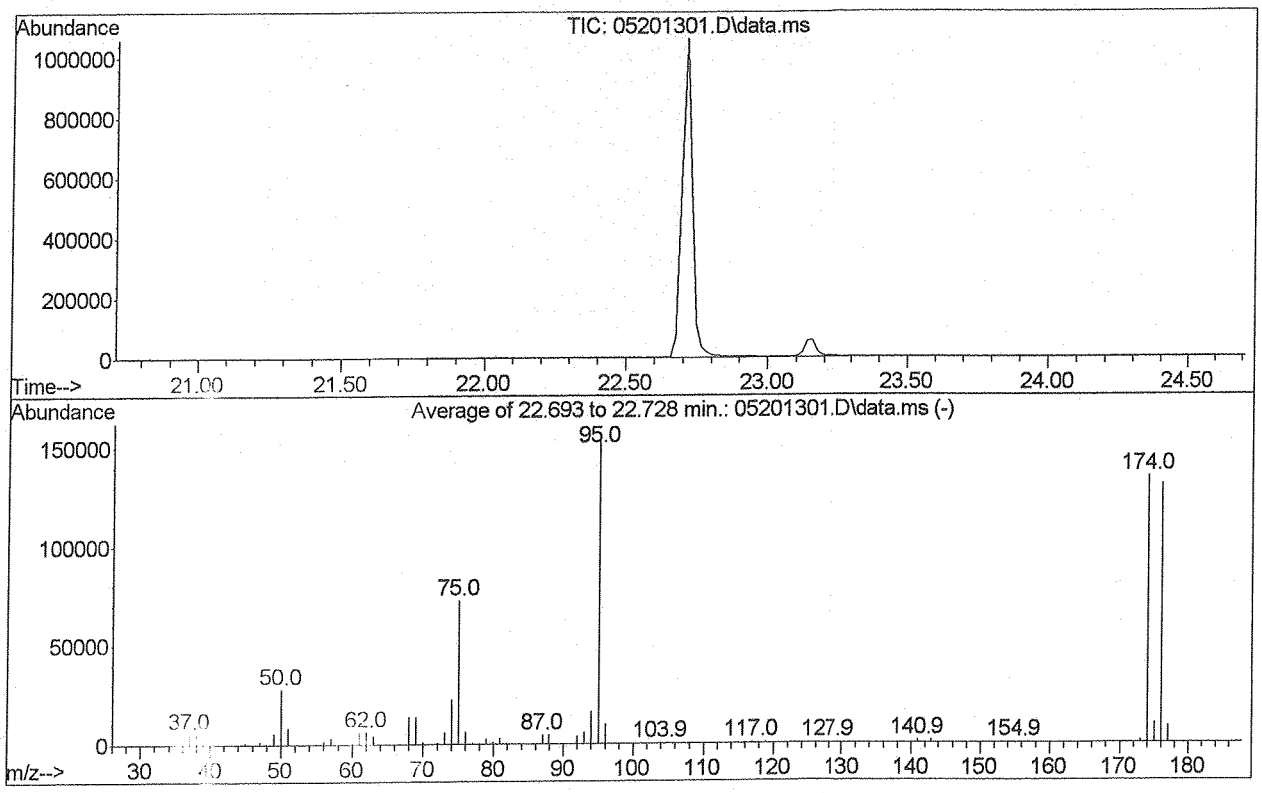
Comments: _____

Analyst: _____ **Date:** 5/20/13

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201301.D
Acq On : 20 May 2013 8:30 am
Operator : JJG
Sample : TO15 BFB 052013
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	18.2	28152	PASS
75	95	30	60	46.9	72677	PASS
95	95	100	100	100.0	155029	PASS
96	95	5	9	6.7	10315	PASS
173	174	0.00	2	0.9	1250	PASS
174	95	50	100	86.9	134797	PASS
175	174	5	9	7.5	10114	PASS
176	174	95	101	97.3	131200	PASS
177	176	5	9	6.5	8588	PASS

05/20/13

Scan 1059

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201302.D
Acq On : 20 May 2013 9:16
Operator : JJG
Sample : TO15 CCV 052013
Misc : IS/Surr: PS082712-02 + Cal: PS040413-01
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 20 15:10:48 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	143576	10.00	ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	771909	10.00	ppbv	0.00
55) Chlorobenzene-d5	20.285	117	728376	10.00	ppbv	0.00
System Monitoring Compounds						
63) 4-Bromofluorobenzene(BFB)	22.710	174	464060	10.18	ppbv	0.00
Spiked Amount 10.000			Recovery = 101.80%			
Target Compounds						Qvalue
2) Chlorodifluoromethane	4.818	51	291794	10.26	ppbv	98
3) Propene	4.781	42	81603m	10.92	ppbv	
4) Dichlorodifluoromethane	4.908	85	494692	10.08	ppbv	99
5) Chloromethane	5.288	52	46353m	10.06	ppbv	
6) Dichlorotetrafluoroethane	5.324	135	338768	10.13	ppbv	87
7) VinylChloride	5.668	62	165430m	10.13	ppbv	
8) Methanol	5.867	31	24437m	5.27	ppbv	
9) 1,3-Butadiene	5.867	54	108659m	10.48	ppbv	
10) Bromomethane	6.446	96	107576m	9.15	ppbv	
11) Chloroethane	6.736	66	25524	9.61	ppbv	98
12) Dichlorofluoromethane	7.007	67	361081	10.28	ppbv	98
13) Ethanol	7.043	45	63310m	10.34	ppbv	
14) VinylBromide	7.261	108	145824m	10.56	ppbv	
15) Acetone	7.966	58	75676m	9.73	ppbv	
16) Trichlorofluoromethane	7.677	103	320744	11.18	ppbv	99
17) 2-Propanol(IPA)	8.165	45	278535m	10.46	ppbv	
18) Acrylonitrile	8.962	52	128929m	11.08	ppbv	
19) 1,1-Dichloroethene	8.726	96	167885	10.27	ppbv	95
20) MethyleneChloride(DCM)	9.324	84	149347m	9.95	ppbv	
21) AllylChloride	9.305	39	152903m	11.62	ppbv	
22) CarbonDisulfide	9.486	76	482461m	9.94	ppbv	
23) Trichlorotrifluoroethane	8.998	103	244998	10.41	ppbv	98
24) trans-1,2-Dichloroethene	10.424	96	188989m	10.75	ppbv	
25) 1,1-Dichloroethane	10.906	63	375435	10.47	ppbv	100
26) MethylTertButylEther(M...	10.442	73	532942	11.19	ppbv	98
27) VinylAcetate	10.888	43	453781m	10.24	ppbv	
28) 2-Butanone(MEK)	11.423	72	87526	11.00	ppbv	93
29) cis-1,2-Dichloroethene	11.904	96	198379	10.48	ppbv	98
30) Hexane	11.476	86	41018	10.81	ppbv	89
31) Chloroform	12.511	83	438727	11.01	ppbv	98
32) EthylAcetate	12.011	43	461179	11.51	ppbv	96

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201302.D
Acq On : 20 May 2013 9:16
Operator : JJG
Sample : TO15 CCV 052013
Misc : IS/Surr: PS082712-02 + Cal: PS040413-01
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 20 15:10:48 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	86339	10.77	ppbv		91
34) 1,2-Dichloroethane	13.598	62	324164	11.21	ppbv		98
35) 1,1,1-Trichloroethane	13.331	97	499351	11.32	ppbv		99
37) Benzene	13.937	78	547051	9.62	ppbv		98
38) CarbonTetrachloride	13.973	117	494267	10.51	ppbv		99
39) Cyclohexane	14.026	69	83769	9.94	ppbv		93
40) 1,2-Dichloropropane	15.399	63	226882	9.92	ppbv		96
41) Bromodichloromethane	15.756	85	318819	10.87	ppbv		98
42) 1,4-Dioxane	15.524	88	132902m	9.91	ppbv		
43) Trichloroethene(TCE)	15.292	130	281501	10.22	ppbv		99
44) 2,2,4-Trimethylpentane	14.775	57	1069045	10.56	ppbv		98
45) Heptane	15.114	71	185709	10.28	ppbv		98
46) cis-1,3-Dichloropropene	16.648	75	353115	10.84	ppbv		97
47) 4-Methyl-2-pentanone(M...	16.523	58	215485	10.39	ppbv		96
48) trans-1,3-Dichloropropene	17.539	75	327805	9.88	ppbv		99
49) 1,1,2-Trichloroethane	17.931	97	260422	10.26	ppbv		97
50) Toluene	17.682	91	739649	10.25	ppbv		100
51) 2-Hexanone(MBK)	18.128	58	271737	10.57	ppbv		94
52) Dibromochloromethane	18.877	129	561094	11.51	ppbv		99
53) 1,2-Dibromoethane	19.233	107	428469	10.30	ppbv		100
54) Tetrachloroethene(PCE)	19.019	166	412614	10.21	ppbv		98
56) Chlorobenzene	20.357	114	197081	10.41	ppbv		98
57) Ethylbenzene	20.695	91	981614	10.21	ppbv		99
58) m&p-Xylene	20.945	106	740845	19.59	ppbv	#	93
59) Bromoform	21.837	173	529166	10.43	ppbv		99
60) Styrene	21.640	104	604919	9.89	ppbv		98
61) 1,1,2,2-Tetrachloroethane	22.336	83	559748	10.21	ppbv		98
62) o-Xylene	21.694	91	764291	9.94	ppbv		99
64) 4-Ethyltoluene	23.673	120	328644	10.41	ppbv		98
65) 1,3,5-Trimethylbenzene	23.780	120	442338	9.59	ppbv		97
66) 1,2,4-Trimethylbenzene	24.529	120	475453	10.58	ppbv		98
67) BenzylChloride(a-Chlor...	25.153	91	753014	11.13	ppbv		99
68) 1,3-Dichlorobenzene	25.046	146	748687	10.59	ppbv		99
69) 1,4-Dichlorobenzene	25.260	146	708025m	9.95	ppbv		
70) 1,2-Dichlorobenzene	25.831	146	756953m	10.24	ppbv		
71) 1,2,4-Trichlorobenzene	29.433	180	702250m	9.60	ppbv		
72) Hexachlorobutadiene	30.075	225	599913m	10.13	ppbv		

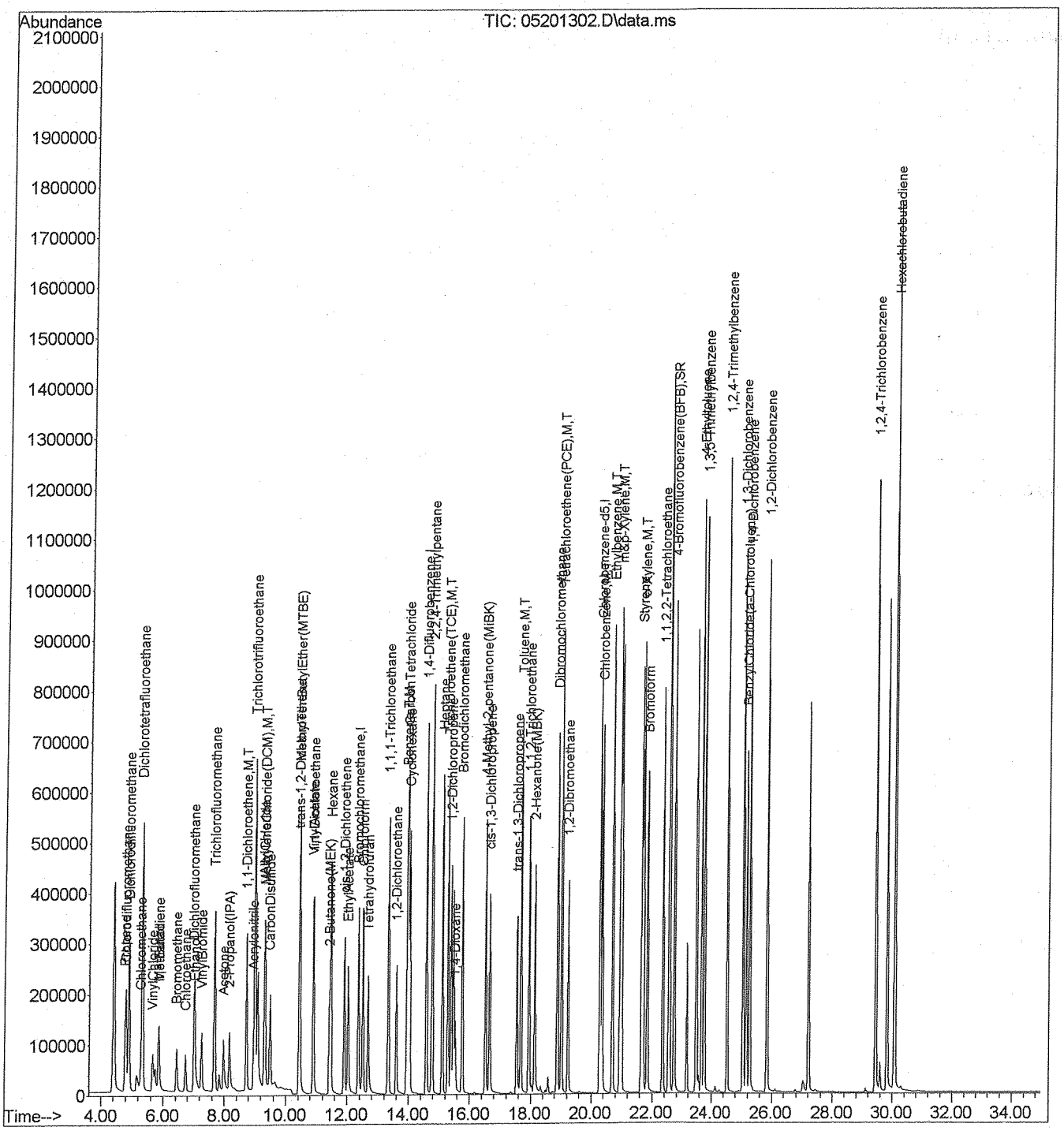
(#) = qualifier out of range (m) = manual integration (+) = signals summed

05/20/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201302.D
Acq On : 20 May 2013 9:16
Operator : JJG
Sample : TO15 CCV 052013
Misc : IS/Surr: PS082712-02 + Cal: PS040413-01
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 20 15:10:48 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\052013\
Data File : 05201303.D
Acq On : 20 May 2013 10:08
Operator : JJG
Sample : TO15 LCSD 052013
Misc : IS/Surr: PS082712-02 + Cal: PS040413-01
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 20 15:13:30 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	152556	10.00	ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	794135	10.00	ppbv	0.00
55) Chlorobenzene-d5	20.285	117	761722	10.00	ppbv	0.00
System Monitoring Compounds						
63) 4-Bromofluorobenzene(BFB)	22.711	174	476998	10.01	ppbv	0.00
Spiked Amount 10.000			Recovery = 100.10%			
Target Compounds						Qvalue
2) Chlorodifluoromethane	4.817	51	303974	10.06	ppbv	100
3) Propene	4.781	42	87596	11.04	ppbv	99
4) Dichlorodifluoromethane	4.908	85	520885m	9.99	ppbv	
5) Chloromethane	5.288	52	51259m	10.47	ppbv	
6) Dichlorotetrafluoroethane	5.342	135	368027	10.35	ppbv	99
7) VinylChloride	5.668	62	182843m	10.54	ppbv	
8) Methanol	5.867	31	24827m	5.04	ppbv	
9) 1,3-Butadiene	5.867	54	116950m	10.62	ppbv	
10) Bromomethane	6.446	96	124047m	9.93	ppbv	
11) Chloroethane	6.736	66	28238	10.00	ppbv	99
12) Dichlorofluoromethane	7.025	67	379194	10.16	ppbv	100
13) Ethanol	7.061	45	66127m	10.16	ppbv	
14) VinylBromide	7.261	108	157402m	10.73	ppbv	
15) Acetone	7.966	58	77640m	9.40	ppbv	
16) Trichlorofluoromethane	7.677	103	321049	10.54	ppbv	98
17) 2-Propanol(IPA)	8.165	45	284498m	10.06	ppbv	
18) Acrylonitrile	8.962	52	133005m	10.75	ppbv	
19) 1,1-Dichloroethene	8.726	96	172274	9.91	ppbv	94
20) MethyleneChloride(DCM)	9.323	84	153136m	9.60	ppbv	
21) AllylChloride	9.305	39	150889m	10.79	ppbv	
22) CarbonDisulfide	9.486	76	497311m	9.64	ppbv	
23) Trichlorotrifluoroethane	8.998	103	254299	10.17	ppbv	99
24) trans-1,2-Dichloroethene	10.424	96	202904m	10.86	ppbv	
25) 1,1-Dichloroethane	10.906	63	386178	10.13	ppbv	99
26) MethylTertButylEther(M...	10.460	73	547978	10.83	ppbv	99
27) VinylAcetate	10.888	43	462337m	9.82	ppbv	
28) 2-Butanone(MEK)	11.423	72	89975	10.64	ppbv	89
29) cis-1,2-Dichloroethene	11.905	96	210020	10.44	ppbv	98
30) Hexane	11.477	86	41847	10.38	ppbv	93
31) Chloroform	12.493	83	454880	10.74	ppbv	96
32) EthylAcetate	12.011	43	479187	11.25	ppbv #	97

05/20/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201303.D
Acq On : 20 May 2013 10:08
Operator : JJG
Sample : TO15 LCSD 052013
Misc : IS/Surr: PS082712-02 + Cal: PS040413-01
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 20 15:13:30 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

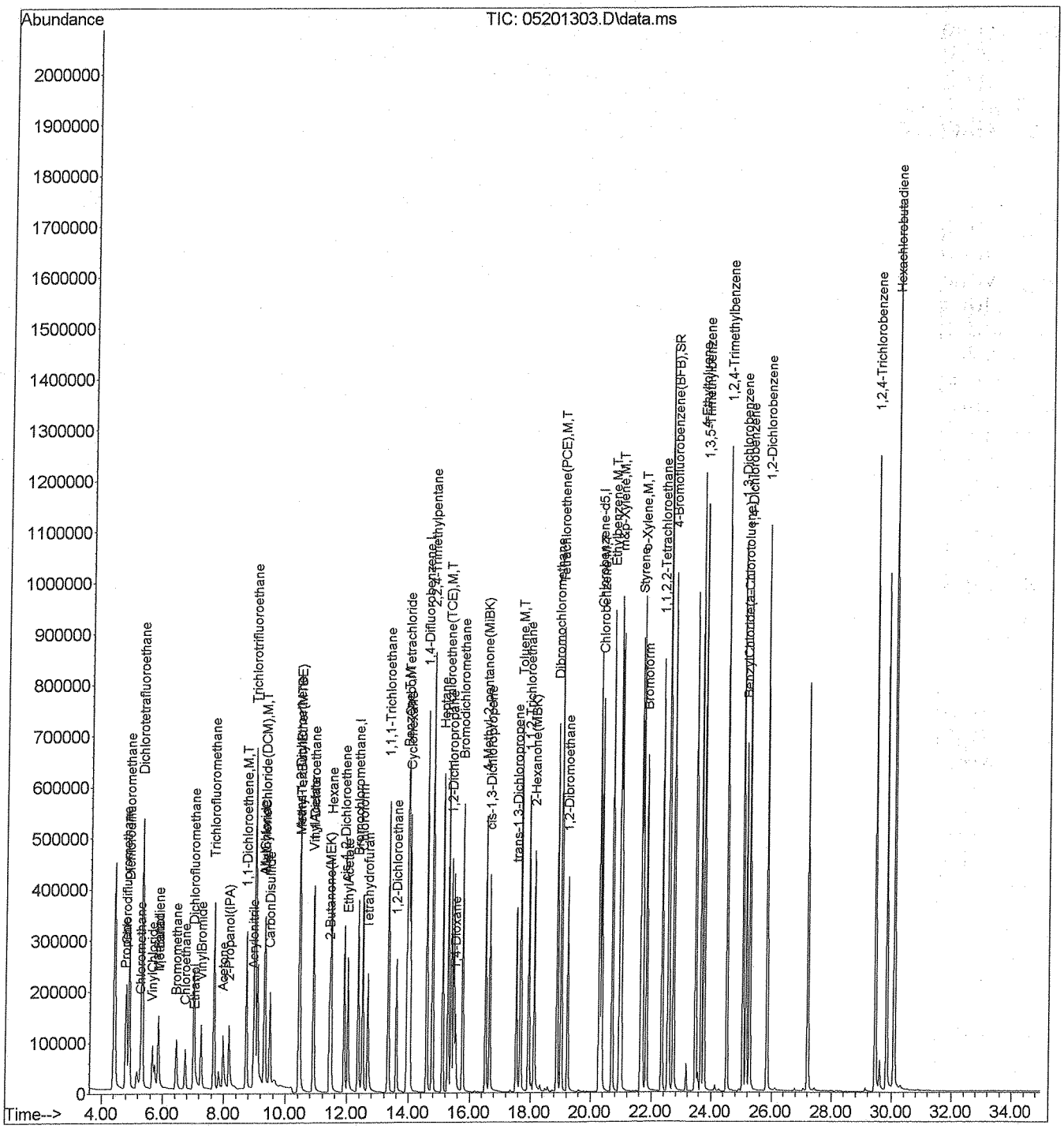
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
33) Tetrahydrofuran	12.671	72	90442m	10.62	ppbv		
34) 1,2-Dichloroethane	13.599	62	335654	10.93	ppbv		98
35) 1,1,1-Trichloroethane	13.331	97	511877	10.92	ppbv		100
37) Benzene	13.937	78	581905	9.95	ppbv		99
38) CarbonTetrachloride	13.973	117	512676	10.60	ppbv		98
39) Cyclohexane	14.026	69	88291	10.18	ppbv		93
40) 1,2-Dichloropropane	15.400	63	236548	10.05	ppbv		97
41) Bromodichloromethane	15.756	85	320799	10.63	ppbv		100
42) 1,4-Dioxane	15.524	88	141683m	10.27	ppbv		
43) Trichloroethene(TCE)	15.293	130	288607	10.18	ppbv		98
44) 2,2,4-Trimethylpentane	14.775	57	1124746	10.80	ppbv		99
45) Heptane	15.114	71	194332	10.46	ppbv		95
46) cis-1,3-Dichloropropene	16.648	75	372944	11.13	ppbv		98
47) 4-Methyl-2-pentanone(M...	16.523	58	220138	10.32	ppbv		98
48) trans-1,3-Dichloropropene	17.539	75	346666	10.16	ppbv		99
49) 1,1,2-Trichloroethane	17.932	97	269003	10.30	ppbv		98
50) Toluene	17.682	91	756607	10.19	ppbv		100
51) 2-Hexanone(MBK)	18.128	58	287314	10.87	ppbv		98
52) Dibromochloromethane	18.877	129	572137	11.41	ppbv		99
53) 1,2-Dibromoethane	19.233	107	439448	10.27	ppbv		98
54) Tetrachloroethene(PCE)	19.019	166	423610	10.18	ppbv		98
56) Chlorobenzene	20.357	114	205021	10.35	ppbv		99
57) Ethylbenzene	20.696	91	1008992	10.04	ppbv		100
58) m&p-Xylene	20.945	106	759479	19.20	ppbv		95
59) Bromoform	21.819	173	546426	10.29	ppbv	#	96
60) Styrene	21.641	104	651232	10.18	ppbv		99
61) 1,1,2,2-Tetrachloroethane	22.336	83	601822	10.50	ppbv		99
62) o-Xylene	21.694	91	808676	10.06	ppbv		100
64) 4-Ethyltoluene	23.674	120	346452	10.49	ppbv		99
65) 1,3,5-Trimethylbenzene	23.781	120	460933	9.55	ppbv		98
66) 1,2,4-Trimethylbenzene	24.529	120	489304	10.41	ppbv		99
67) BenzylChloride(a-Chlor...	25.154	91	779146	11.02	ppbv		99
68) 1,3-Dichlorobenzene	25.047	146	764676	10.34	ppbv		99
69) 1,4-Dichlorobenzene	25.261	146	728879m	9.80	ppbv		
70) 1,2-Dichlorobenzene	25.831	146	767808m	9.93	ppbv		
71) 1,2,4-Trichlorobenzene	29.433	180	729797m	9.54	ppbv		
72) Hexachlorobutadiene	30.075	225	603707m	9.75	ppbv		

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201303.D
Acq On : 20 May 2013 10:08
Operator : JJG
Sample : TO15 LCSD 052013
Misc : IS/Surr: PS082712-02 + Cal: PS040413-01
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 20 15:13:30 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



5/20/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201304.D
Acq On : 20 May 2013 10:56
Operator : JJG
Sample : TO15 MB 052013
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 20 15:16:45 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	147959	10.00	ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	803870	10.00	ppbv	0.00
55) Chlorobenzene-d5	20.285	117	747823	10.00	ppbv	0.00
System Monitoring Compounds						
63) 4-Bromofluorobenzene(BFB)	22.710	174	477532	10.20	ppbv	0.00
Spiked Amount 10.000			Recovery = 102.00%			
Target Compounds						Qvalue
2) Chlorodifluoromethane	0.000		0	N.D.		
3) Propene	4.835	42	245	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)	8.310	45	357	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	9.522	76	921	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.	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.		

05/20/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201304.D
Acq On : 20 May 2013 10:56
Operator : JJG
Sample : TO15 MB 052013
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 20 15:16:45 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	13.955	78	1768	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	480	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	288	N.D.	
57) Ethylbenzene	20.713	91	649	N.D.	
58) m&p-Xylene	21.034	106	245	N.D.	
59) Bromoform	0.000		0	N.D.	
60) Styrene	21.694	104	478	N.D.	
61) 1,1,2,2-Tetrachloroethane	22.354	83	131	N.D.	
62) o-Xylene	21.712	91	483	N.D.	
64) 4-Ethyltoluene	23.709	120	123	N.D.	
65) 1,3,5-Trimethylbenzene	23.709	120	123	N.D.	
66) 1,2,4-Trimethylbenzene	24.565	120	281	N.D.	
67) BenzylChloride(a-Chlor...	25.225	91	888	N.D.	
68) 1,3-Dichlorobenzene	25.064	146	1801	N.D.	
69) 1,4-Dichlorobenzene	25.296	146	2498	N.D.	
70) 1,2-Dichlorobenzene	25.867	146	1709	N.D.	
71) 1,2,4-Trichlorobenzene	29.469	180	2820	N.D.	
72) Hexachlorobutadiene	30.075	225	1034	N.D.	

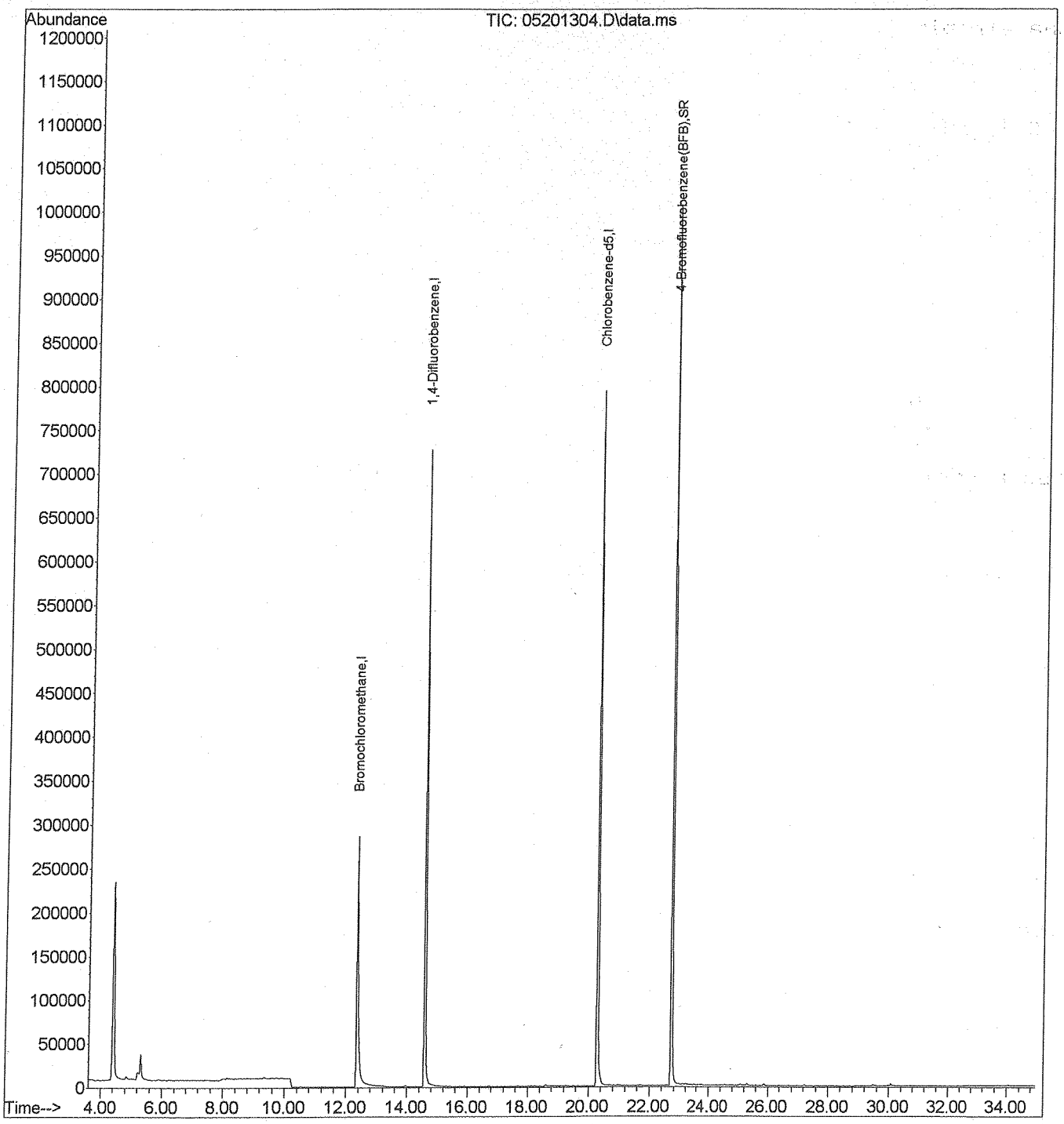
(#) = qualifier out of range (m) = manual integration (+) = signals summed

5/22/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201304.D
Acq On : 20 May 2013 10:56
Operator : JJG
Sample : TO15 MB 052013
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 20 15:16:45 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



05/20/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201305.D
Acq On : 20 May 2013 11:44
Operator : JJG
Sample : 130597-63048 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 20 15:18:58 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	145590	10.00 ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	790345	10.00 ppbv	0.00
55) Chlorobenzene-d5	20.285	117	750102	10.00 ppbv	0.00
System Monitoring Compounds					
63) 4-Bromofluorobenzene(BFB)	22.710	174	479494	10.21 ppbv	0.00
Spiked Amount 10.000			Recovery = 102.10%		
Target Compounds					Qvalue
2) Chlorodifluoromethane	4.818	51	4516	0.16 ppbv #	96
3) Propene	0.000		0	N.D. d	
4) Dichlorodifluoromethane	4.890	85	14589	0.29 ppbv	98
5) Chloromethane	5.288	52	975	0.21 ppbv #	10
6) Dichlorotetrafluoroethane	5.324	135	204	N.D.	
7) VinylChloride	0.000		0	N.D.	
8) Methanol	5.867	31	39778m	8.56 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	17153m	2.76 ppbv	
14) VinylBromide	0.000		0	N.D.	
15) Acetone	7.984	58	32335m	4.10 ppbv	
16) Trichlorofluoromethane	7.659	103	4061	0.14 ppbv #	95
17) 2-Propanol(IPA)	8.238	45	6570m	0.24 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	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	0.000		0	N.D. d	
28) 2-Butanone(MEK)	11.494	72	3961	0.49 ppbv #	35
29) cis-1,2-Dichloroethene	0.000		0	N.D.	
30) Hexane	11.458	86	1972	0.51 ppbv #	49
31) Chloroform	12.493	83	995	N.D.	
32) EthylAcetate	12.118	43	1448	N.D.	

05/20/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201305.D
Acq On : 20 May 2013 11:44
Operator : JJG
Sample : 130597-63048 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 20 15:18:58 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	13.634	62	123	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	2480	0.05 ppbv	93
39) Cyclohexane	14.026	69	612	0.07 ppbv #	92
40) 1,2-Dichloropropane	15.257	63	116	N.D.	
41) Bromodichloromethane	0.000		0	N.D.	
42) 1,4-Dioxane	0.000		0	N.D.	
43) Trichloroethene(TCE)	15.292	130	259	N.D.	
44) 2,2,4-Trimethylpentane	14.757	57	39593	0.38 ppbv	96
45) Heptane	15.114	71	4039	0.22 ppbv #	86
46) cis-1,3-Dichloropropene	0.000		0	N.D.	
47) 4-Methyl-2-pentanone(M...	16.576	58	710	N.D.	
48) trans-1,3-Dichloropropene	17.682	75	154	N.D.	
49) 1,1,2-Trichloroethane	0.000		0	N.D.	
50) Toluene	17.682	91	42772	0.58 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	116	N.D.	
56) Chlorobenzene	0.000		0	N.D.	
57) Ethylbenzene	20.713	91	14549	0.15 ppbv	98
58) m&p-Xylene	20.945	106	19939	0.51 ppbv #	89
59) Bromoform	0.000		0	N.D.	
60) Styrene	21.694	104	1167	N.D.	
61) 1,1,2,2-Tetrachloroethane	22.354	83	122	N.D.	
62) o-Xylene	21.694	91	17217	0.22 ppbv	97
64) 4-Ethyltoluene	23.691	120	3288	0.10 ppbv	95
65) 1,3,5-Trimethylbenzene	23.780	120	4534	0.10 ppbv #	91
66) 1,2,4-Trimethylbenzene	24.529	120	16063	0.35 ppbv	94
67) BenzylChloride(a-Chlor...	25.189	91	424	N.D.	
68) 1,3-Dichlorobenzene	25.064	146	678	N.D.	
69) 1,4-Dichlorobenzene	25.296	146	1203	N.D.	
70) 1,2-Dichlorobenzene	25.867	146	924	N.D.	
71) 1,2,4-Trichlorobenzene	29.451	180	2361	N.D.	
72) Hexachlorobutadiene	30.075	225	876	N.D.	

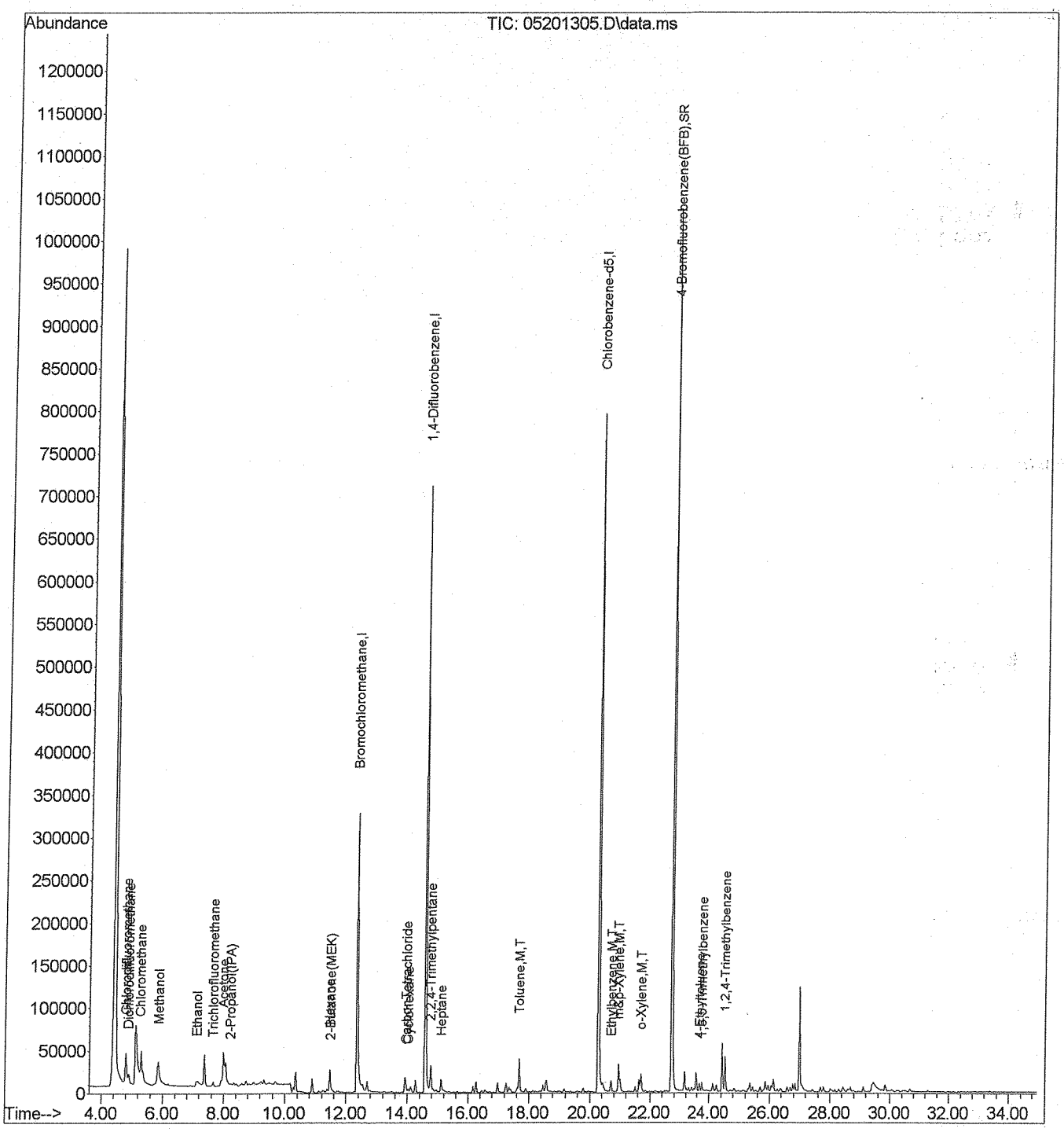
(#) = qualifier out of range (m) = manual integration (+) = signals summed

5/20/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201305.D
Acq On : 20 May 2013 11:44
Operator : JJG
Sample : 130597-63048 x1
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 20 15:18:58 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



05/20/13

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201306.D
Acq On : 20 May 2013 12:32
Operator : JJG
Sample : 130597-63048 x1 dp
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 20 15:22:35 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	142078	10.00 ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	794580	10.00 ppbv	0.00
55) Chlorobenzene-d5	20.285	117	739144	10.00 ppbv	0.00
System Monitoring Compounds					
63) 4-Bromofluorobenzene(BFB)	22.710	174	482007	10.42 ppbv	0.00
Spiked Amount 10.000			Recovery = 104.20%		
Target Compounds					Qvalue
2) Chlorodifluoromethane	4.817	51	4288	0.15 ppbv #	96
3) Propene	0.000		0	N.D. d	
4) Dichlorodifluoromethane	4.890	85	14587	0.30 ppbv	97
5) Chloromethane	5.288	52	1200	0.26 ppbv #	9
6) Dichlorotetrafluoroethane	5.306	135	115	N.D.	
7) VinylChloride	0.000		0	N.D.	
8) Methanol	5.867	31	39075m	8.62 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	16766m	2.77 ppbv	
14) VinylBromide	0.000		0	N.D.	
15) Acetone	7.984	58	30798m	4.00 ppbv	
16) Trichlorofluoromethane	7.658	103	3728	0.13 ppbv	96
17) 2-Propanol(IPA)	8.256	45	6065	0.23 ppbv #	1
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	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	0.000		0	N.D. d	
28) 2-Butanone(MEK)	11.494	72	3272m	0.42 ppbv	
29) cis-1,2-Dichloroethene	0.000		0	N.D.	
30) Hexane	11.459	86	1825	0.49 ppbv #	60
31) Chloroform	12.493	83	688	N.D.	
32) EthylAcetate	12.136	43	1347	N.D.	

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201306.D
Acq On : 20 May 2013 12:32
Operator : JJG
Sample : 130597-63048 x1 dp
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 20 15:22:35 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	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	2283	0.05 ppbv	95
39) Cyclohexane	14.008	69	600	0.07 ppbv #	85
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	38580	0.37 ppbv	98
45) Heptane	15.096	71	4205	0.23 ppbv #	65
46) cis-1,3-Dichloropropene	0.000		0	N.D.	
47) 4-Methyl-2-pentanone(M...	16.576	58	528	N.D.	
48) trans-1,3-Dichloropropene	17.682	75	125	N.D.	
49) 1,1,2-Trichloroethane	0.000		0	N.D.	
50) Toluene	17.682	91	42407	0.57 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)	0.000		0	N.D.	
56) Chlorobenzene	20.285	114	234	N.D.	
57) Ethylbenzene	20.713	91	15014	0.15 ppbv	99
58) m&p-Xylene	20.945	106	19638	0.51 ppbv #	91
59) Bromoform	0.000		0	N.D.	
60) Styrene	21.694	104	921	N.D.	
61) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
62) o-Xylene	21.694	91	17748	0.23 ppbv #	95
64) 4-Ethyltoluene	23.691	120	2993	0.09 ppbv	99
65) 1,3,5-Trimethylbenzene	23.780	120	4222	0.09 ppbv #	91
66) 1,2,4-Trimethylbenzene	24.529	120	16049	0.35 ppbv	91
67) BenzylChloride(a-Chlor...	25.189	91	125	N.D.	
68) 1,3-Dichlorobenzene	25.064	146	278	N.D.	
69) 1,4-Dichlorobenzene	25.278	146	711	N.D.	
70) 1,2-Dichlorobenzene	25.849	146	383	N.D.	
71) 1,2,4-Trichlorobenzene	29.451	180	1267	N.D.	
72) Hexachlorobutadiene	30.075	225	299	N.D.	

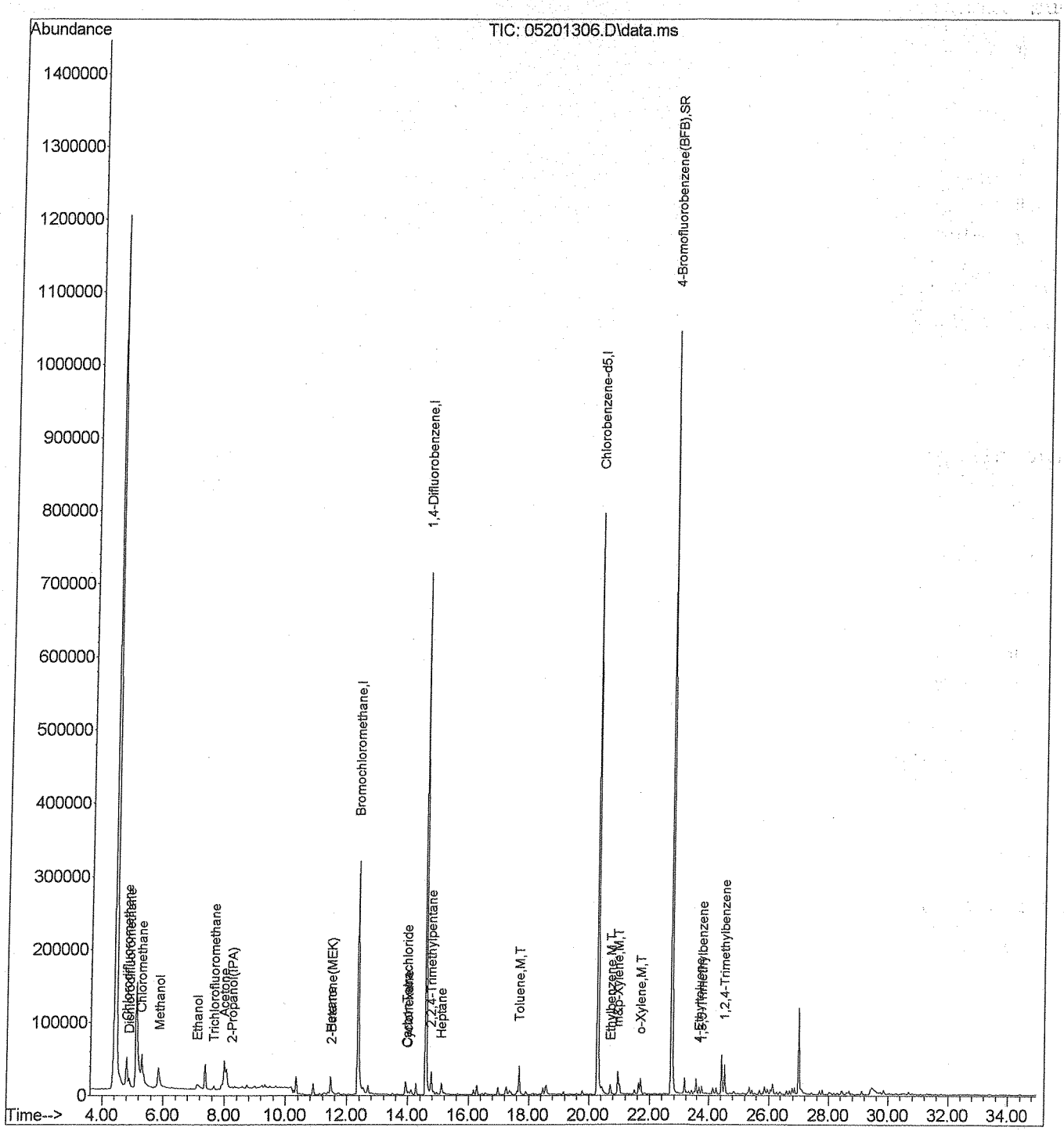
(#) = qualifier out of range (m) = manual integration (+) = signals summed

05/20/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\052013\
Data File : 05201306.D
Acq On : 20 May 2013 12:32
Operator : JJG
Sample : 130597-63048 x1 dp
Misc : IS/Surr: PS082712-02 + 500mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 20 15:22:35 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



05/20/13

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

Response Factor Report MS03 Enhanced

Method Path : C:\msdchem\1\METHODS\2013\
Method File : 051513.M
Title : TO-15/TO-14

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

Method Path : C:\msdchem\1\METHODS\2013\
Method File : 051513.M
Title : TO-15/TO-14

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