Atmospheric Analysis & Consulting, Inc.

CLIENT	: Soil Water Air Protection Enterprise
PROJECT NAME	: Bridgeton Sanitary Landfill Air Quality Assessment
AAC PROJECT NO.	: 131144
REPORT DATE	: 08/26/2013

On August 26, 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 FR Service-Canister	131144-65859	660.3
U-2 W6-Canister	131144-65860	623.3
D-1 W2-Canister	131144-65861	736.7
D-2 K-Canister	131144-65862	597.4

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 61 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 **131144** **Received By: J. Zachman**

Sample Receipt Date	Project Desc	Clients ID	Matrix	Sampling Date/Time	Sampled By	Sample #	Analysis Requested
8/26/2013 1130	Soil Water Air Protection Enterprise (SWAPE) Bridgeton Sanitary Landfill Air Quality Assessment	U-1 FR Service Canister	Summa Canister	8/21/2013	Client	65859	TO15 ASTM D5504
8/26/2013 1130	Soil Water Air Protection Enterprise (SWAPE) Bridgeton Sanitary Landfill Air Quality Assessment	U-2 W6	Summa Canister	8/21/2013	Client	65860	TO15 ASTM D5504
8/26/2013 1130	Soil Water Air Protection Enterprise (SWAPE) Bridgeton Sanitary Landfill Air Quality Assessment	D-1 W2	Summa Canister	8/21/2013	Client	65861	TO15 ASTM D5504
8/26/2013 1130	Soil Water Air Protection Enterprise (SWAPE) Bridgeton Sanitary Landfill Air Quality Assessment	D-2 K	Summa Canister	8/21/2013	Client	65862	TO15 ASTM D5504

TURN AROUND TIME: Normal (10days)

Lab Due Date: 9/2/2013

Total Samples: 4

REMARKS:
Client returned 4 x Summa canisters + 4 x Flows. "Standard TAT for all analyses. If possible deliver report within 2 weeks. Provide Level IV QC package for all analyses."

CANISTER PRESSURE LOG

Client: Soil Water Air Protection Ent Project No.: 131144

Date: 8/26/2013

Canister #	Sample #	Initial Pressure	Final Pressure
798	65859	660.3	1021.1
801	65860	623.3	1022.0
800	65861	736.7	1028.5
702	65862	597.4	1021.7

1

AAC# 131144

CHAIN OF CUSTODY RECORD / ANALYTICAL REQUEST FORM

Client Name: SOIL / WATER AIR PROTECTION ENTERPRISE	Telephone No. / Fax No.: (310) 434-0110 / (310) 434-0011
Project Manager: PAUL ROSENFELD, PH.D.	Date: August 21st — Page 1 of 1
Address: 1640 FIFTH STREET, SUITE 204, SANTA MONICA, CA 90401	
Project Name and Location: BRIDGETON SANITARY LANDFILL AIR QUALITY ASSESSMENT	
Sampled By: John Blank	Sampler Signature: John Blank

LAB ID	SAMPLE ID NUMBER	Type	Date	Time	VOCS - EPA TO-15	Reduced Sulfur Compounds - ASTM D5504	Carbonyls - EPA TO-11A	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	
65859	U-1 FR Service	Canister		August 21st	303 min	X	X											Canister # 798
65860	U-2 W6	Canister		August 21st	330 min	X	X											Canister # 801
65861	D-1 W2	Canister		August 21st	300 min	X	X											Canister # 800
65862	D-2 K per coc 8/26/13	Canister		August 21st	270 min	X	X											Canister # 702

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: August 21st — 12 Noon	Received By:	Date: — Time:
Relinquished By:	Date: — Time:	Received By:	Date: — Time:
Relinquished By:	Date: — Time:	Received By:	Date: 8/26/13 — Time: 1130

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.: **U- 1** **Canister #798** **Flow Control #808**

AAC Batch ID: 131144 AAC Sample ID: 65859

SAMPLING INFORMATION

Start Date/Time: **Aug 21st, 2013 – 10:12 AM** Stop Date/Time: **Aug 21st, 2013 – 15:15 PM**

Start Temp/Pressure*: **27 C / 30.14 inHg** Stop Temp/Pressure*: **32 C / 30.10 inHg**

Initial Can Pressure**: **- 31 inHg** Final Can Pressure**: **- 5 inHg**

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

Comments: _____

John A Blank

John Blank **August 21st, 2013**

Sampler Name (Print) *Sampler Signature/Date*

LABORATORY INFORMATION

Canister Size: 6 – Liter Sampling Period: 303 Minutes

Canister Serial No.: **798** Flow Controller Serial No: **808**

Initial Pressure: 3.1 Certified Flow Rate: 18.0

Return Pressure: 660.3 Certified By/Date: JJ 8/1/13

Final Pressure: 1021.1 Flow Rate upon Return: NR

Date Shipped From Lab: 8/1/13 Shipped By: JJ

Date Returned to Lab: 8/26/13 Received By: JJ

Flow Controller Certification File ID: 4508/073/1310

Canister Certification File ID: 4508/073/1304

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

08/27/13 8/27/13

Chemist Signature/Date *Lab Manager Signature/Date*

Sampler is required to fill out all highlighted sections during sampling.

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.: **U-2 W6** **Canister # 801** **Flow Control # 804**

AAC Batch ID: 131144 AAC Sample ID: 65860

SAMPLING INFORMATION

Start Date/Time: **Aug 21st, 2013 – 10:30 AM** Stop Date/Time: **Aug 21st, 2013 – 16:00 PM**

Start Temp/Pressure*: **27 C / 30.14 inHg** Stop Temp/Pressure*: **32 C / 30.10 inHg**

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

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

Comments: _____

John Blank
Sampler Name (Print)

August 21st, 2013
Sampler Signature/Date

Canister Size: 6 – Liter Sampling Period: 330Minutes

Canister Serial No: **801** Flow Controller Serial No: **804**

Initial Pressure: 2.4 Certified Flow Rate: 18.0

Return Pressure: 623.3 Certified By/Date: JJ 8/1/13

Final Pressure: 1022.0 Flow Rate upon Return: NR

Date Shipped From Lab: 8/1/13 Shipped By: JJ

Date Returned to Lab: 8/26/13 Received By: JJ

Flow Controller Certification File ID: MS03/07231310

Canister Certification File ID: MS03/07231309

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

08/27/13
Chemist Signature/Date

MK 8/27/13
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.: **D-1 W2** **Canister # 800** **Flow Control # 693**

AAC Batch ID: 131194 AAC Sample ID: 605861

SAMPLING INFORMATION

Start Date/Time: **Aug 21st, 2013 – 10:40 AM** Stop Date/Time: **Aug 14th, 2013 – 15:20 PM**

Start Temp/Pressure*: **27 C / 30.14 inHg** Stop Temp/Pressure*: **32 C / 30.10 inHg**

Initial Can Pressure**: **- 27 inHg** Final Can Pressure**: **- 1 inHg**

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

Comments: _____

John Blank
Sampler Name (Print)

August 21st, 2013
Sampler Signature/Date

LABORATORY INFORMATION

Canister Size: 6 – Liter Sampling Period: 280 Minutes

Canister Serial No.: **800** Flow Controller Serial No: **693**

Initial Pressure: 3.1 Certified Flow Rate: 18.0

Return Pressure: 736.7 Certified By/Date: 8/1/13

Final Pressure: 1028.5 Flow Rate upon Return: NR

Date Shipped From Lab: 8/1/13 Shipped By:

Date Returned to Lab: 8/26/13 Received By:

Flow Controller Certification File ID: M603/073113/0

Canister Certification File ID: M503/073104

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

8/27/13
Chemist Signature/Date

5/27/17
Lab Manager Signature/Date

Atmospheric Analysis and Consulting Inc.
Canister Sampling Field Data Sheet

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

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.: **D- 2 K** **Canister # 702** **Flow Control # 692**

AAC Batch ID: 131144 AAC Sample ID: 65862

SAMPLING INFORMATION

Start Date/Time: **Aug 21st, 2013 – 10:55 AM** Stop Date/Time: **Aug 21st, 2013 – 15:25 PM**

Start Temp/Pressure*: **27 C / 30.14 inHg** Stop Temp/Pressure*: **32 C / 30.10 inHg**

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

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

Comments: _____

John A Blank

John Blank **August 21st, 2013**
Sampler Name (Print) *Sampler Signature/Date*

LABORATORY INFORMATION

Canister Size: 6 – Liter Sampling Period: 270 Minutes

Canister Serial No.: **702** Flow Controller Serial No: **692**

Initial Pressure: 2.9 Certified Flow Rate: 18.0

Return Pressure: 597.4 Certified By/Date: JJ 8/1/13

Final Pressure: 1021.7 Flow Rate upon Return: NR

Date Shipped From Lab: 8/1/13 Shipped By: JJ

Date Returned to Lab: 8/26/13 Received By: JJ

Flow Controller Certification File ID: 1403/073113FC

Canister Certification File ID: 1303/072313C

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

8/27/13 MB 8/27/13

Chemist Signature/Date *Lab Manager Signature/Date*

American Environmental Laboratories

ISO 9001:2000 Certification #A1836US

MDNR **Bridgeton Landfill** **Date: August 21st**

Chain of Custody Weekly Sampling Event

Air Sampler calibrated for 1 Liter per Minute Flow Rate
Flow Rate calibrated with BIOS - Defender 510M - S/N 131756
SUMMA Canister with a 4 hour flow valve

Temperature	
Start	27 C
Stop	32 G

Barometric Pressure		
Start	30.14	InHg
Stop	30.10	InHg

Sample Point ID	U-1 FR Service		Start		Stop		Total Time	
Canister Serial #	798	Canister Time	10:12		15:15		303	min
Flow Control #	808	Vacuum	-31	InHg	-5	InHg		
Sample Pump #	59912	Flow Rate	1.029	L/M	1.13	L/M	1.0795	Average L/M
Sample Tube	226-20	Tube Time	10:12		14:12		240	min
Sample Tube #	44400601540				Total Liters Sampled / Tube		259.08	

Sample Point ID	U-2 W6		Start		Stop		Total Time	
Canister Serial #	801	Time	10:30		16:00		330	min
Flow Control #	804	Vacuum	-30	InHg	-5	InHg		
Sample Pump #	67992	Flow Rate	1.039	L/M	1.081	L/M	1.06	Average L/M
Sample Tube	226-20	Tube Time	10:30		14:30		240	min
Sample Tube #	44400600712				Total Liters Sampled / Tube		254.40	

Sample Point ID	D-1 W4		Start		Stop		Total Time	
Canister Serial #	800	Time	10:40		15:20		280	min
Flow Control #	643	Vacuum	-27	InHg	-1	InHg		
Sample Pump #	67385	Flow Rate	1.044	L/M	1.065	L/M	1.0545	Average L/M
Sample Tube	226-20	Time	10:40		14:40		240	min
Sample Tube #	44400600711				Total Liters Sampled / Tube		253.08	

Sample Point ID	D-2 K		Start		Stop		Total Time	
Canister Serial #	702	Time	10:55		15:25		270	min
Flow Control #	692	Vacuum	-29	InHg	-5	InHg		
Sample Pump #	67835	Flow Rate	1.049	L/M	1.098	L/M	1.0735	Average L/M
Sample Tube	226-20	Time	10:55		14:55		240	min
Sample Tube #	44400600716				Total Liters Sampled / Tube		257.64	

Possible Sample Point ID **W1 - W2 - W3 - W4 - W5 - W6 - W7**

Prepared by:

3441 Morgan Ford Rd. St. Louis, MO 63116 Tel: 314-664-2800 Fax: 314-664-2442

TO-15 REPORTS

Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report

CLIENT : Soil Water Air Protection Enterprise
PROJECT NO : 131144
MATRIX : AIR
UNITS : PPB (v/v)

DATE RECEIVED : 08/26/2013
DATE REPORTED : 08/26/2013

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	U-1 FR Service-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	U-2 W6-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	131144-65859				131144-65860				
Date Sampled	08/21/2013				08/21/2013				
Date Analyzed	08/26/2013				08/26/2013				
Can Dilution Factor	1.55				1.64				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Chlorodifluoromethane	0.37	J	1.0	0.77	0.34	J	1.0	0.82	0.5
Propene	0.62	J	1.0	1.55	0.69	J	1.0	1.64	1.0
Dichlorodifluoromethane	0.63	J	1.0	0.77	0.61	J	1.0	0.82	0.5
Chloromethane	0.53	J	1.0	0.77	0.46	J	1.0	0.82	0.5
Dichlorotetrafluoroethane	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Vinyl Chloride	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Methanol	11.5		1.0	7.73	9.94		1.0	8.20	5.0
1,3-Butadiene	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Bromomethane	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Chloroethane	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Dichlorofluoromethane	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Ethanol	6.82		1.0	3.09	5.39		1.0	3.28	2.0
Vinyl Bromide	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Acetone	4.86		1.0	3.09	5.98		1.0	3.28	2.0
Trichlorofluoromethane	0.46	J	1.0	0.77	0.30	J	1.0	0.82	0.5
2-Propanol (IPA)	1.05	J	1.0	3.09	1.46	J	1.0	3.28	2.0
Acrylonitrile	<SRL	U	1.0	1.55	<SRL	U	1.0	1.64	1.0
1,1-Dichloroethene	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Methylene Chloride (DCM)	<SRL	U	1.0	1.55	<SRL	U	1.0	1.64	1.0
Allyl Chloride	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Carbon Disulfide	NR	U	1.0	0.77	NR	U	1.0	0.82	0.5
Trichlorotrifluoroethane	0.09	J	1.0	0.77	<SRL	U	1.0	0.82	0.5
trans-1,2-Dichloroethene	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
1,1-Dichloroethane	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Methyl Tert Butyl Ether (MTBE)	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Vinyl Acetate	<SRL	U	1.0	1.55	<SRL	U	1.0	1.64	1.0
2-Butanone (MEK)	<SRL	U	1.0	1.55	<SRL	U	1.0	1.64	1.0
cis-1,2-Dichloroethene	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Hexane	0.28	J	1.0	0.77	0.26	J	1.0	0.82	0.5
Chloroform	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Ethyl Acetate	0.11	J	1.0	0.77	<SRL	U	1.0	0.82	0.5
Tetrahydrofuran	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
1,2-Dichloroethane	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
1,1,1-Trichloroethane	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	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 : **131144**
MATRIX : **AIR**
UNITS : **PPB (v/v)**

DATE RECEIVED : **08/26/2013**
DATE REPORTED : **08/26/2013**

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	U-1 FR Service-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	U-2 W6-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	131144-65859				131144-65860				
Date Sampled	08/21/2013				08/21/2013				
Date Analyzed	08/26/2013				08/26/2013				
Can Dilution Factor	1.55				1.64				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Benzene	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Carbon Tetrachloride	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Cyclohexane	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
1,2-Dichloropropane	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Bromodichloromethane	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
1,4-Dioxane	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Trichloroethene (TCE)	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
2,2,4-Trimethylpentane	0.19	J	1.0	0.77	0.20	J	1.0	0.82	0.5
Heptane	0.11	J	1.0	0.77	0.11	J	1.0	0.82	0.5
cis-1,3-Dichloropropene	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
4-Methyl-2-pentanone (MiBK)	<SRL	U	1.0	0.77	0.11	J	1.0	0.82	0.5
trans-1,3-Dichloropropene	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
1,1,2-Trichloroethane	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Toluene	0.63	J	1.0	0.77	0.66	J	1.0	0.82	0.5
2-Hexanone (MBK)	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Dibromochloromethane	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
1,2-Dibromoethane	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Tetrachloroethene (PCE)	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Chlorobenzene	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Ethylbenzene	0.14	J	1.0	0.77	0.15	J	1.0	0.82	0.5
m & p-Xylenes	0.49	J	1.0	1.55	0.54	J	1.0	1.64	1.0
Bromoform	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Styrene	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
1,1,2,2-Tetrachloroethane	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
o-Xylene	0.22	J	1.0	0.77	0.25	J	1.0	0.82	0.5
4-Ethyltoluene	0.09	J	1.0	0.77	0.10	J	1.0	0.82	0.5
1,3,5-Trimethylbenzene	0.08	J	1.0	0.77	0.08	J	1.0	0.82	0.5
1,2,4-Trimethylbenzene	0.34	J	1.0	0.77	0.36	J	1.0	0.82	0.5
Benzyl Chloride (a-Chlorotoluene)	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
1,3-Dichlorobenzene	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
1,4-Dichlorobenzene	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
1,2-Dichlorobenzene	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
1,2,4-Trichlorobenzene	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
Hexachlorobutadiene	<SRL	U	1.0	0.77	<SRL	U	1.0	0.82	0.5
BFB-Surrogate Std. % Recovery	102%				104%				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 : 131144
MATRIX : AIR
UNITS : ug/m3

DATE RECEIVED : 08/26/2013
DATE REPORTED : 08/26/2013

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	U-1 FR Service-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	U-2 W6-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	131144-65859				131144-65860				
Date Sampled	08/21/2013				08/21/2013				
Date Analyzed	08/26/2013				08/26/2013				
Can Dilution Factor	1.55				1.64				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Chlorodifluoromethane	1.3	J	1.0	2.7	1.2	J	1.0	2.9	1.8
Propene	1.1	J	1.0	2.7	1.2	J	1.0	2.8	1.7
Dichlorodifluoromethane	3.1	J	1.0	3.8	3.0	J	1.0	4.1	2.5
Chloromethane	1.1	J	1.0	1.6	1.0	J	1.0	1.7	1.0
Dichlorotetrafluoroethane	<SRL	U	1.0	5.4	<SRL	U	1.0	5.7	3.5
Vinyl Chloride	<SRL	U	1.0	2.0	<SRL	U	1.0	2.1	1.3
Methanol	15.1		1.0	10.1	13.0		1.0	10.7	6.6
1,3-Butadiene	<SRL	U	1.0	1.7	<SRL	U	1.0	1.8	1.1
Bromomethane	<SRL	U	1.0	3.0	<SRL	U	1.0	3.2	1.9
Chloroethane	<SRL	U	1.0	2.0	<SRL	U	1.0	2.2	1.3
Dichlorofluoromethane	<SRL	U	1.0	3.3	<SRL	U	1.0	3.5	2.1
Ethanol	12.9		1.0	5.8	10.2		1.0	6.2	3.8
Vinyl Bromide	<SRL	U	1.0	3.4	<SRL	U	1.0	3.6	2.2
Acetone	11.5		1.0	7.3	14.2		1.0	7.8	4.8
Trichlorofluoromethane	2.6	J	1.0	4.3	1.7	J	1.0	4.6	2.8
2-Propanol (IPA)	2.6	J	1.0	7.6	3.6	J	1.0	8.1	4.9
Acrylonitrile	<SRL	U	1.0	3.4	<SRL	U	1.0	3.6	2.2
1,1-Dichloroethene	<SRL	U	1.0	3.1	<SRL	U	1.0	3.3	2.0
Methylene Chloride (DCM)	<SRL	U	1.0	5.4	<SRL	U	1.0	5.7	3.5
Allyl Chloride	<SRL	U	1.0	2.4	<SRL	U	1.0	2.6	1.6
Carbon Disulfide	NR	U	1.0	2.4	NR	U	1.0	2.6	1.6
Trichlorotrifluoroethane	0.7	J	1.0	5.9	<SRL	U	1.0	6.3	3.8
trans-1,2-Dichloroethene	<SRL	U	1.0	3.1	<SRL	U	1.0	3.3	2.0
1,1-Dichloroethane	<SRL	U	1.0	3.1	<SRL	U	1.0	3.3	2.0
Methyl Tert Butyl Ether (MTBE)	<SRL	U	1.0	2.8	<SRL	U	1.0	3.0	1.8
Vinyl Acetate	<SRL	U	1.0	5.4	<SRL	U	1.0	5.8	3.5
2-Butanone (MEK)	<SRL	U	1.0	4.6	<SRL	U	1.0	4.8	2.9
cis-1,2-Dichloroethene	<SRL	U	1.0	3.1	<SRL	U	1.0	3.3	2.0
Hexane	1.0	J	1.0	2.7	0.9	J	1.0	2.9	1.8
Chloroform	<SRL	U	1.0	3.8	<SRL	U	1.0	4.0	2.4
Ethyl Acetate	0.4	J	1.0	2.8	<SRL	U	1.0	3.0	1.8
Tetrahydrofuran	<SRL	U	1.0	2.3	<SRL	U	1.0	2.4	1.5
1,2-Dichloroethane	<SRL	U	1.0	3.1	<SRL	U	1.0	3.3	2.0
1,1,1-Trichloroethane	<SRL	U	1.0	4.2	<SRL	U	1.0	4.5	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 : **131144**
MATRIX : **AIR**
UNITS : **ug/m3**

DATE RECEIVED : **08/26/2013**
DATE REPORTED : **08/26/2013**

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	U-1 FR Service-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	U-2 W6-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	131144-65859				131144-65860				
Date Sampled	08/21/2013				08/21/2013				
Date Analyzed	08/26/2013				08/26/2013				
Can Dilution Factor	1.55				1.64				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Benzene	<SRL	U	1.0	2.5	<SRL	U	1.0	2.6	1.6
Carbon Tetrachloride	<SRL	U	1.0	4.9	<SRL	U	1.0	5.2	3.1
Cyclohexane	<SRL	U	1.0	2.7	<SRL	U	1.0	2.8	1.7
1,2-Dichloropropane	<SRL	U	1.0	3.6	<SRL	U	1.0	3.8	2.3
Bromodichloromethane	<SRL	U	1.0	5.2	<SRL	U	1.0	5.5	3.4
1,4-Dioxane	<SRL	U	1.0	2.8	<SRL	U	1.0	3.0	1.8
Trichloroethene (TCE)	<SRL	U	1.0	4.2	<SRL	U	1.0	4.4	2.7
2,2,4-Trimethylpentane	0.9	J	1.0	3.6	0.9	J	1.0	3.8	2.3
Heptane	0.4	J	1.0	3.2	0.5	J	1.0	3.4	2.0
cis-1,3-Dichloropropene	<SRL	U	1.0	3.5	<SRL	U	1.0	3.7	2.3
4-Methyl-2-pentanone (MiBK)	<SRL	U	1.0	3.2	0.5	J	1.0	3.4	2.0
trans-1,3-Dichloropropene	<SRL	U	1.0	3.5	<SRL	U	1.0	3.7	2.3
1,1,2-Trichloroethane	<SRL	U	1.0	4.2	<SRL	U	1.0	4.5	2.7
Toluene	2.4	J	1.0	2.9	2.5	J	1.0	3.1	1.9
2-Hexanone (MBK)	<SRL	U	1.0	3.2	<SRL	U	1.0	3.4	2.0
Dibromochloromethane	<SRL	U	1.0	6.6	<SRL	U	1.0	7.0	4.3
1,2-Dibromoethane	<SRL	U	1.0	5.9	<SRL	U	1.0	6.3	3.8
Tetrachloroethene (PCE)	<SRL	U	1.0	5.2	<SRL	U	1.0	5.6	3.4
Chlorobenzene	<SRL	U	1.0	3.6	<SRL	U	1.0	3.8	2.3
Ethylbenzene	0.6	J	1.0	3.4	0.6	J	1.0	3.6	2.2
m & p-Xylenes	2.2	J	1.0	6.7	2.4	J	1.0	7.1	4.3
Bromoform	<SRL	U	1.0	8.0	<SRL	U	1.0	8.5	5.2
Styrene	<SRL	U	1.0	3.3	<SRL	U	1.0	3.5	2.1
1,1,2,2-Tetrachloroethane	<SRL	U	1.0	5.3	<SRL	U	1.0	5.6	3.4
o-Xylene	0.9	J	1.0	3.4	1.1	J	1.0	3.6	2.2
4-Ethyltoluene	0.5	J	1.0	3.8	0.5	J	1.0	4.0	2.5
1,3,5-Trimethylbenzene	0.4	J	1.0	3.8	0.4	J	1.0	4.0	2.5
1,2,4-Trimethylbenzene	1.7	J	1.0	3.8	1.8	J	1.0	4.0	2.5
Benzyl Chloride (a-Chlorotoluene)	<SRL	U	1.0	4.0	<SRL	U	1.0	4.2	2.6
1,3-Dichlorobenzene	<SRL	U	1.0	4.6	<SRL	U	1.0	4.9	3.0
1,4-Dichlorobenzene	<SRL	U	1.0	4.6	<SRL	U	1.0	4.9	3.0
1,2-Dichlorobenzene	<SRL	U	1.0	4.6	<SRL	U	1.0	4.9	3.0
1,2,4-Trichlorobenzene	<SRL	U	1.0	5.7	<SRL	U	1.0	6.1	3.7
Hexachlorobutadiene	<SRL	U	1.0	8.2	<SRL	U	1.0	8.7	5.3
BFB-Surrogate Std. % Recovery	102%				104%				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 : 131144
MATRIX : AIR
UNITS : PPB (v/v)

DATE RECEIVED : 08/26/2013
DATE REPORTED : 08/26/2013

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	D-1 W2-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	D-2 K-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	131144-65861				131144-65862				
Date Sampled	08/21/2013				08/21/2013				
Date Analyzed	08/26/2013				08/26/2013				
Can Dilution Factor	1.40				1.71				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Chlorodifluoromethane	0.34	J	1.0	0.70	0.32	J	1.0	0.86	0.5
Propene	0.60	J	1.0	1.40	0.72	J	1.0	1.71	1.0
Dichlorodifluoromethane	0.60	J	1.0	0.70	0.62	J	1.0	0.86	0.5
Chloromethane	0.46	J	1.0	0.70	0.46	J	1.0	0.86	0.5
Dichlorotetrafluoroethane	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
Vinyl Chloride	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
Methanol	12.6		1.0	6.98	15.6		1.0	8.55	5.0
1,3-Butadiene	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
Bromomethane	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
Chloroethane	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
Dichlorofluoromethane	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
Ethanol	4.20		1.0	2.79	6.02		1.0	3.42	2.0
Vinyl Bromide	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
Acetone	5.22		1.0	2.79	5.73		1.0	3.42	2.0
Trichlorofluoromethane	0.32	J	1.0	0.70	0.31	J	1.0	0.86	0.5
2-Propanol (IPA)	0.98	J	1.0	2.79	0.50	J	1.0	3.42	2.0
Acrylonitrile	<SRL	U	1.0	1.40	<SRL	U	1.0	1.71	1.0
1,1-Dichloroethene	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
Methylene Chloride (DCM)	<SRL	U	1.0	1.40	<SRL	U	1.0	1.71	1.0
Allyl Chloride	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
Carbon Disulfide	NR	U	1.0	0.70	NR	U	1.0	0.86	0.5
Trichlorotrifluoroethane	0.08	J	1.0	0.70	<SRL	U	1.0	0.86	0.5
trans-1,2-Dichloroethene	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
1,1-Dichloroethane	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
Methyl Tert Butyl Ether (MTBE)	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
Vinyl Acetate	<SRL	U	1.0	1.40	<SRL	U	1.0	1.71	1.0
2-Butanone (MEK)	0.52	J	1.0	1.40	<SRL	U	1.0	1.71	1.0
cis-1,2-Dichloroethene	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
Hexane	<SRL	U	1.0	0.70	0.31	J	1.0	0.86	0.5
Chloroform	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
Ethyl Acetate	<SRL	U	1.0	0.70	0.10	J	1.0	0.86	0.5
Tetrahydrofuran	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
1,2-Dichloroethane	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
1,1,1-Trichloroethane	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5

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 : 131144
MATRIX : AIR
UNITS : PPB (v/v)

DATE RECEIVED : 08/26/2013
DATE REPORTED : 08/26/2013

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	D-1 W2-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	D-2 K-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	131144-65861				131144-65862				
Date Sampled	08/21/2013				08/21/2013				
Date Analyzed	08/26/2013				08/26/2013				
Can Dilution Factor	1.40				1.71				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Benzene	0.34	J	1.0	0.70	0.31	J	1.0	0.86	0.5
Carbon Tetrachloride	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
Cyclohexane	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
1,2-Dichloropropane	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
Bromodichloromethane	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
1,4-Dioxane	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
Trichloroethene (TCE)	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
2,2,4-Trimethylpentane	0.11	J	1.0	0.70	0.21	J	1.0	0.86	0.5
Heptane	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
cis-1,3-Dichloropropene	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
4-Methyl-2-pentanone (MiBK)	0.10	J	1.0	0.70	<SRL	U	1.0	0.86	0.5
trans-1,3-Dichloropropene	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
1,1,2-Trichloroethane	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
Toluene	0.52	J	1.0	0.70	0.82	J	1.0	0.86	0.5
2-Hexanone (MBK)	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
Dibromochloromethane	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
1,2-Dibromoethane	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
Tetrachloroethene (PCE)	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
Chlorobenzene	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
Ethylbenzene	0.14	J	1.0	0.70	0.21	J	1.0	0.86	0.5
m & p-Xylenes	0.43	J	1.0	1.40	0.72	J	1.0	1.71	1.0
Bromoform	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
Styrene	<SRL	U	1.0	0.70	0.09	J	1.0	0.86	0.5
1,1,2,2-Tetrachloroethane	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
o-Xylene	0.20	J	1.0	0.70	0.31	J	1.0	0.86	0.5
4-Ethyltoluene	0.08	J	1.0	0.70	0.12	J	1.0	0.86	0.5
1,3,5-Trimethylbenzene	0.08	J	1.0	0.70	0.10	J	1.0	0.86	0.5
1,2,4-Trimethylbenzene	0.29	J	1.0	0.70	0.46	J	1.0	0.86	0.5
Benzyl Chloride (a-Chlorotoluene)	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
1,3-Dichlorobenzene	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
1,4-Dichlorobenzene	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
1,2-Dichlorobenzene	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
1,2,4-Trichlorobenzene	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
Hexachlorobutadiene	<SRL	U	1.0	0.70	<SRL	U	1.0	0.86	0.5
BFB-Surrogate Std. % Recovery	105%				106%				70-130%

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

Marcus Hueppe
Laboratoy Director

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 : 131144
MATRIX : AIR
UNITS : ug/m3

DATE RECEIVED : 08/26/2013
DATE REPORTED : 08/26/2013

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	D-1 W2-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	D-2 K-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	131144-65861				131144-65862				
Date Sampled	08/21/2013				08/21/2013				
Date Analyzed	08/26/2013				08/26/2013				
Can Dilution Factor	1.40				1.71				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Chlorodifluoromethane	1.2	J	1.0	2.5	1.2	J	1.0	3.0	1.8
Propene	1.0	J	1.0	2.4	1.2	J	1.0	2.9	1.7
Dichlorodifluoromethane	3.0	J	1.0	3.5	3.0	J	1.0	4.2	2.5
Chloromethane	1.0	J	1.0	1.4	1.0	J	1.0	1.8	1.0
Dichlorotetrafluoroethane	<SRL	U	1.0	4.9	<SRL	U	1.0	6.0	3.5
Vinyl Chloride	<SRL	U	1.0	1.8	<SRL	U	1.0	2.2	1.3
Methanol	16.6		1.0	9.1	20.4		1.0	11.2	6.6
1,3-Butadiene	<SRL	U	1.0	1.5	<SRL	U	1.0	1.9	1.1
Bromomethane	<SRL	U	1.0	2.7	<SRL	U	1.0	3.3	1.9
Chloroethane	<SRL	U	1.0	1.8	<SRL	U	1.0	2.3	1.3
Dichlorofluoromethane	<SRL	U	1.0	2.9	<SRL	U	1.0	3.6	2.1
Ethanol	7.9		1.0	5.3	11.3		1.0	6.4	3.8
Vinyl Bromide	<SRL	U	1.0	3.1	<SRL	U	1.0	3.7	2.2
Acetone	12.4		1.0	6.6	13.6		1.0	8.1	4.8
Trichlorofluoromethane	1.8	J	1.0	3.9	1.7	J	1.0	4.8	2.8
2-Propanol (IPA)	2.4	J	1.0	6.9	1.2	J	1.0	8.4	4.9
Acrylonitrile	<SRL	U	1.0	3.0	<SRL	U	1.0	3.7	2.2
1,1-Dichloroethene	<SRL	U	1.0	2.8	<SRL	U	1.0	3.4	2.0
Methylene Chloride (DCM)	<SRL	U	1.0	4.8	<SRL	U	1.0	5.9	3.5
Allyl Chloride	<SRL	U	1.0	2.2	<SRL	U	1.0	2.7	1.6
Carbon Disulfide	NR	U	1.0	2.2	NR	U	1.0	2.7	1.6
Trichlorotrifluoroethane	0.6	J	1.0	5.4	<SRL	U	1.0	6.6	3.8
trans-1,2-Dichloroethene	<SRL	U	1.0	2.8	<SRL	U	1.0	3.4	2.0
1,1-Dichloroethane	<SRL	U	1.0	2.8	<SRL	U	1.0	3.5	2.0
Methyl Tert Butyl Ether (MTBE)	<SRL	U	1.0	2.5	<SRL	U	1.0	3.1	1.8
Vinyl Acetate	<SRL	U	1.0	4.9	<SRL	U	1.0	6.0	3.5
2-Butanone (MEK)	1.5	J	1.0	4.1	<SRL	U	1.0	5.0	2.9
cis-1,2-Dichloroethene	<SRL	U	1.0	2.8	<SRL	U	1.0	3.4	2.0
Hexane	<SRL	U	1.0	2.5	1.1	J	1.0	3.0	1.8
Chloroform	<SRL	U	1.0	3.4	<SRL	U	1.0	4.2	2.4
Ethyl Acetate	<SRL	U	1.0	2.5	0.4	J	1.0	3.1	1.8
Tetrahydrofuran	<SRL	U	1.0	2.1	<SRL	U	1.0	2.5	1.5
1,2-Dichloroethane	<SRL	U	1.0	2.8	<SRL	U	1.0	3.5	2.0
1,1,1-Trichloroethane	<SRL	U	1.0	3.8	<SRL	U	1.0	4.7	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 : **131144**
MATRIX : **AIR**
UNITS : **ug/m3**

DATE RECEIVED : **08/26/2013**
DATE REPORTED : **08/26/2013**

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	D-1 W2-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	D-2 K-Canister			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	131144-65861				131144-65862				
Date Sampled	08/21/2013				08/21/2013				
Date Analyzed	08/26/2013				08/26/2013				
Can Dilution Factor	1.40				1.71				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Benzene	1.1	J	1.0	2.2	1.0	J	1.0	2.7	1.6
Carbon Tetrachloride	<SRL	U	1.0	4.4	<SRL	U	1.0	5.4	3.1
Cyclohexane	<SRL	U	1.0	2.4	<SRL	U	1.0	2.9	1.7
1,2-Dichloropropane	<SRL	U	1.0	3.2	<SRL	U	1.0	4.0	2.3
Bromodichloromethane	<SRL	U	1.0	4.7	<SRL	U	1.0	5.7	3.4
1,4-Dioxane	<SRL	U	1.0	2.5	<SRL	U	1.0	3.1	1.8
Trichloroethene (TCE)	<SRL	U	1.0	3.8	<SRL	U	1.0	4.6	2.7
2,2,4-Trimethylpentane	0.5	J	1.0	3.3	1.0	J	1.0	4.0	2.3
Heptane	<SRL	U	1.0	2.9	<SRL	U	1.0	3.5	2.0
cis-1,3-Dichloropropene	<SRL	U	1.0	3.2	<SRL	U	1.0	3.9	2.3
4-Methyl-2-pentanone (MiBK)	0.4	J	1.0	2.9	<SRL	U	1.0	3.5	2.0
trans-1,3-Dichloropropene	<SRL	U	1.0	3.2	<SRL	U	1.0	3.9	2.3
1,1,2-Trichloroethane	<SRL	U	1.0	3.8	<SRL	U	1.0	4.7	2.7
Toluene	2.0	J	1.0	2.6	3.1	J	1.0	3.2	1.9
2-Hexanone (MBK)	<SRL	U	1.0	2.9	<SRL	U	1.0	3.5	2.0
Dibromochloromethane	<SRL	U	1.0	5.9	<SRL	U	1.0	7.3	4.3
1,2-Dibromoethane	<SRL	U	1.0	5.4	<SRL	U	1.0	6.6	3.8
Tetrachloroethene (PCE)	<SRL	U	1.0	4.7	<SRL	U	1.0	5.8	3.4
Chlorobenzene	<SRL	U	1.0	3.2	<SRL	U	1.0	3.9	2.3
Ethylbenzene	0.6	J	1.0	3.0	0.9	J	1.0	3.7	2.2
m & p-Xylenes	1.9	J	1.0	6.1	3.1	J	1.0	7.4	4.3
Bromoform	<SRL	U	1.0	7.2	<SRL	U	1.0	8.8	5.2
Styrene	<SRL	U	1.0	3.0	0.4	J	1.0	3.6	2.1
1,1,2,2-Tetrachloroethane	<SRL	U	1.0	4.8	<SRL	U	1.0	5.9	3.4
o-Xylene	0.9	J	1.0	3.0	1.3	J	1.0	3.7	2.2
4-Ethyltoluene	0.4	J	1.0	3.4	0.6	J	1.0	4.2	2.5
1,3,5-Trimethylbenzene	0.4	J	1.0	3.4	0.5	J	1.0	4.2	2.5
1,2,4-Trimethylbenzene	1.4	J	1.0	3.4	2.3	J	1.0	4.2	2.5
Benzyl Chloride (a-Chlorotoluene)	<SRL	U	1.0	3.6	<SRL	U	1.0	4.4	2.6
1,3-Dichlorobenzene	<SRL	U	1.0	4.2	<SRL	U	1.0	5.1	3.0
1,4-Dichlorobenzene	<SRL	U	1.0	4.2	<SRL	U	1.0	5.1	3.0
1,2-Dichlorobenzene	<SRL	U	1.0	4.2	<SRL	U	1.0	5.1	3.0
1,2,4-Trichlorobenzene	<SRL	U	1.0	5.2	<SRL	U	1.0	6.3	3.7
Hexachlorobutadiene	<SRL	U	1.0	7.4	<SRL	U	1.0	9.1	5.3
BFB-Surrogate Std. % Recovery	105%				106%				70-130%

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

Marcus Hueppe
Laboratoy Director

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

TO-15 QC REPORT

ANALYSIS DATE : 08/26/2013
ANALYST : JJG
INSTRUMENT ID : GC/MS-03
CALIBRATION STD ID : PS071613-02

VOLATILE ORGANIC COMPOUNDS BY EPA METHOD TO-15

Continuing Calibration Verification of the 07/22/2013 Calibration

Compounds	*Conc*	*Daily Conc*	*%REC**
4-BFB (surrogate standard)	10.00	10.15	102
Chlorodifluoromethane	10.10	9.62	95
Propene	11.00	10.14	92
Dichlorodifluoromethane	9.80	9.33	95
Chloromethane	10.10	9.28	92
Dichlorotetrafluoroethane	10.10	9.92	98
Vinyl Chloride	10.20	9.65	95
Methanol	4.90	4.93	101
1,3-Butadiene	10.50	9.63	92
Bromomethane	10.20	8.46	83
Chloroethane	10.00	10.34	103
Dichlorofluoromethane	10.00	9.81	98
Ethanol	9.80	10.15	104
Vinyl Bromide	10.20	10.28	101
Acetone	10.80	9.59	89
Trichlorofluoromethane	10.10	10.21	101
2-Propanol (IPA)	11.00	10.61	96
Acrylonitrile	10.50	9.88	94
1,1-Dichloroethene	10.50	9.96	95
Methylene Chloride (DCM)	10.40	9.48	91
Allyl Chloride	11.00	9.12	83
Carbon Disulfide	10.50	9.35	89
Trichlorotrifluoroethane	10.40	9.98	96
trans-1,2-Dichloroethene	10.40	10.53	101
1,1-Dichloroethane	10.40	9.99	96
Methyl Tert Butyl Ether (MTBE)	10.60	11.12	105
Vinyl Acetate	9.70	9.15	94
2-Butanone (MEK)	10.60	10.63	100
cis-1,2-Dichloroethene	10.60	10.15	96
Hexane	10.70	10.43	97
Chloroform	10.60	10.54	99
Ethyl Acetate	11.00	10.53	96
Tetrahydrofuran	10.80	10.23	95
1,2-Dichloroethane	10.40	10.39	100
1,1,1-Trichloroethane	10.50	10.51	100

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

ANALYSIS DATE : 08/26/2013 **INSTRUMENT ID** : GC/MS-03
ANALYST : JJG **CALIBRATION STD ID** : PS071613-02

VOLATILE ORGANIC COMPOUNDS BY EPA METHOD TO-15

Continuing Calibration Verification of the 07/22/2013 Calibration

Compounds	*Conc*	*Daily Conc*	*%REC**
Benzene	10.50	9.46	90
Carbon Tetrachloride	10.10	9.69	96
Cyclohexane	10.50	9.41	90
1,2-Dichloropropane	10.50	9.52	91
Bromodichloromethane	10.30	9.63	93
1,4-Dioxane	10.30	9.41	91
Trichloroethene (TCE)	10.30	9.91	96
2,2,4-Trimethylpentane	10.90	10.59	97
Heptane	10.70	10.24	96
cis-1,3-Dichloropropene	11.00	10.19	93
4-Methyl-2-pentanone (MiBK)	10.30	9.94	97
trans-1,3-Dichloropropene	9.80	9.14	93
1,1,2-Trichloroethane	10.60	9.88	93
Toluene	10.60	10.24	97
2-Hexanone (MBK)	10.80	10.24	95
Dibromochloromethane	11.00	10.91	99
1,2-Dibromoethane	10.40	9.77	94
Tetrachloroethene (PCE)	10.40	10.01	96
Chlorobenzene	10.60	10.68	101
Ethylbenzene	10.50	10.41	99
m & p-Xylenes	20.60	20.12	98
Bromoform	10.30	10.26	100
Styrene	10.40	10.24	98
1,1,2,2-Tetrachloroethane	10.60	10.21	96
o-Xylene	10.60	10.33	97
4-Ethyltoluene	10.40	10.53	101
1,3,5-Trimethylbenzene	10.20	9.66	95
1,2,4-Trimethylbenzene	10.20	10.27	101
Benzyl Chloride (a-Chlorotoluene)	10.00	10.69	107
1,3-Dichlorobenzene	10.00	10.03	100
1,4-Dichlorobenzene	10.00	9.94	99
1,2-Dichlorobenzene	10.00	9.75	98
1,2,4-Trichlorobenzene	9.30	9.43	101
Hexachlorobutadiene	9.80	10.55	108

* - %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**	**: 08/26/2013**
AAC ID	**: LCS/LCSD**	**DATE REPORTED**	**: 08/26/2013**
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	9.96	9.67	95	92	3.0
Methylene Chloride (DCM)	0.0	10.40	9.48	9.53	91	92	0.5
Benzene	0.0	10.50	9.46	9.68	90	92	2.3
Trichloroethene (TCE)	0.0	10.30	9.91	9.96	96	97	0.5
Toluene	0.0	10.60	10.24	10.34	97	98	1.0
Tetrachloroethene (PCE)	0.0	10.40	10.01	10.21	96	98	2.0
Chlorobenzene	0.0	10.60	10.68	10.44	101	98	2.3
Ethylbenzene	0.0	10.50	10.41	10.30	99	98	1.1
m & p-Xylenes	0.0	20.60	20.12	20.00	98	97	0.6
o-Xylene	0.0	10.60	10.33	10.39	97	98	0.6

* 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**	**: 08/26/2013**
UNITS	**: ppbv**	**REPORT DATE**	**: 08/26/2013**

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	Method Blank	RL
AAC ID	MB 082613	
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**	**: 08/26/2013**
UNITS	**: ppbv**	**REPORT DATE**	**: 08/26/2013**

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID / *AAC ID*	Method Blank MB 082613	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	103%	--

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	**: 131139-65821**	**DATE ANALYZED**	**: 08/26/2013**
MATRIX	**: Air**	**DATE REPORTED**	**: 08/26/2013**
		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	<SRL	<SRL	0.0
1,3-Butadiene	<SRL	<SRL	0.0
Bromomethane	<SRL	<SRL	0.0
Chloroethane	<SRL	<SRL	0.0
Dichlorofluoromethane	<SRL	<SRL	0.0
Ethanol	4.64	4.32	7.1
Vinyl Bromide	<SRL	<SRL	0.0
Acetone	3.44	3.44	0.0
Trichlorofluoromethane	<SRL	<SRL	0.0
2-Propanol (IPA)	<SRL	<SRL	0.0
Acrylonitrile	<SRL	<SRL	0.0
1,1-Dichloroethene	<SRL	<SRL	0.0
Methylene Chloride (DCM)	<SRL	<SRL	0.0
Allyl Chloride	<SRL	<SRL	0.0
Carbon Disulfide	<SRL	<SRL	0.0
Trichlorotrifluoroethane	<SRL	<SRL	0.0
trans-1,2-Dichloroethene	<SRL	<SRL	0.0
1,1-Dichloroethane	<SRL	<SRL	0.0
Methyl Tert Butyl Ether (MTBE)	<SRL	<SRL	0.0
Vinyl Acetate	<SRL	<SRL	0.0
2-Butanone (MEK)	<SRL	<SRL	0.0
cis-1,2-Dichloroethene	<SRL	<SRL	0.0
Hexane	<SRL	<SRL	0.0
Chloroform	<SRL	<SRL	0.0
Ethyl Acetate	<SRL	<SRL	0.0
Tetrahydrofuran	<SRL	<SRL	0.0
1,2-Dichloroethane	<SRL	<SRL	0.0
1,1,1-Trichloroethane	<SRL	<SRL	0.0
Benzene	<SRL	<SRL	0.0
Carbon Tetrachloride	<SRL	<SRL	0.0

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	**: 131139-65821**	**DATE ANALYZED**	**: 08/26/2013**
MATRIX	**: Air**	**DATE REPORTED**	**: 08/26/2013**
		UNITS	**: ppbv**

TO-15 Duplicate Analysis

Compound	Sample Conc	Duplicate Conc	% RPD
Cyclohexane	<SRL	<SRL	0.0
1,2-Dichloropropane	<SRL	<SRL	0.0
Bromodichloromethane	<SRL	<SRL	0.0
1,4-Dioxane	<SRL	<SRL	0.0
Trichloroethene (TCE)	<SRL	<SRL	0.0
2,2,4-Trimethylpentane	<SRL	<SRL	0.0
Heptane	<SRL	<SRL	0.0
cis-1,3-Dichloropropene	<SRL	<SRL	0.0
4-Methyl-2-pentanone (MiBK)	<SRL	<SRL	0.0
trans-1,3-Dichloropropene	<SRL	<SRL	0.0
1,1,2-Trichloroethane	<SRL	<SRL	0.0
Toluene	<SRL	<SRL	0.0
2-Hexanone (MBK)	<SRL	<SRL	0.0
Dibromochloromethane	<SRL	<SRL	0.0
1,2-Dibromoethane	<SRL	<SRL	0.0
Tetrachloroethene (PCE)	<SRL	<SRL	0.0
Chlorobenzene	<SRL	<SRL	0.0
Ethylbenzene	<SRL	<SRL	0.0
m & p-Xylenes	<SRL	<SRL	0.0
Bromoform	<SRL	<SRL	0.0
Styrene	<SRL	<SRL	0.0
1,1,2,2-Tetrachloroethane	<SRL	<SRL	0.0
o-Xylene	<SRL	<SRL	0.0
4-Ethyltoluene	<SRL	<SRL	0.0
1,3,5-Trimethylbenzene	<SRL	<SRL	0.0
1,2,4-Trimethylbenzene	<SRL	<SRL	0.0
Benzyl Chloride (a-Chlorotoluene)	<SRL	<SRL	0.0
1,3-Dichlorobenzene	<SRL	<SRL	0.0
1,4-Dichlorobenzene	<SRL	<SRL	0.0
1,2-Dichlorobenzene	<SRL	<SRL	0.0
1,2,4-Trichlorobenzene	<SRL	<SRL	0.0
Hexachlorobutadiene	<SRL	<SRL	0.0
System Monitoring Compounds			
BFB-Surrogate Std. % Recovery	104%	104%	0.2

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\082613\
Data File : 08261310.D
Acq On : 26 Aug 2013 15:53
Operator : JJG
Sample : 131044-65859 x1
Misc : IS/Surr: PS082213-03 + 500mL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 16:30:31 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Bromochloromethane	12.350	128	159428	10.00 ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	936573	10.00 ppbv	0.00
55) Chlorobenzene-d5	20.267	117	914975	10.00 ppbv	0.00
System Monitoring Compounds					
63) 4-Bromofluorobenzene(BFB)	22.710	174	538655	10.24 ppbv	0.00
Spiked Amount 10.000			Recovery = 102.40%		
Target Compounds					Qvalue
2) Chlorodifluoromethane	4.836	51	9944	0.24 ppbv #	97
3) Propene	4.799	42	4957	0.40 ppbv #	56
4) Dichlorodifluoromethane	4.908	85	23712	0.41 ppbv	99
5) Chloromethane	5.306	52	2659	0.34 ppbv #	1
6) Dichlorotetrafluoroethane	5.342	135	303	N.D.	
7) VinylChloride	0.000		0	N.D.	
8) Methanol	5.885	31	71918m	7.43 ppbv	
9) 1,3-Butadiene	0.000		0	N.D.	
10) Bromomethane	0.000		0	N.D. d	
11) Chloroethane	0.000		0	N.D. d	
12) Dichlorofluoromethane	0.000		0	N.D.	
13) Ethanol	7.134	45	47104m	4.41 ppbv	
14) VinylBromide	0.000		0	N.D.	
15) Acetone	8.002	58	38015m	3.14 ppbv	
16) Trichlorofluoromethane	7.659	103	9932	0.30 ppbv	95
17) 2-Propanol(IPA)	8.238	45	26596m	0.68 ppbv	
18) Acrylonitrile	9.088	52	109	N.D.	
19) 1,1-Dichloroethene	0.000		0	N.D.	
20) MethyleneChloride(DCM)	0.000		0	N.D. d	
21) AllylChloride	9.269	39	78	N.D.	
22) CarbonDisulfide	0.000		0	N.D. d	
23) Trichlorotrifluoroethane	8.998	103	1705	0.06 ppbv	90
24) trans-1,2-Dichloroethene	10.442	96	494	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)	0.000		0	N.D. d	
29) cis-1,2-Dichloroethene	0.000		0	N.D.	
30) Hexane	11.476	86	910	0.18 ppbv	75
31) Chloroform	12.493	83	1349	N.D.	
32) EthylAcetate	12.082	43	4390m	0.07 ppbv	

08/26/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261310.D
Acq On : 26 Aug 2013 15:53
Operator : JJG
Sample : 131044-65859 x1
Misc : IS/Surr: PS082213-03 + 500mL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 16:30:31 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration

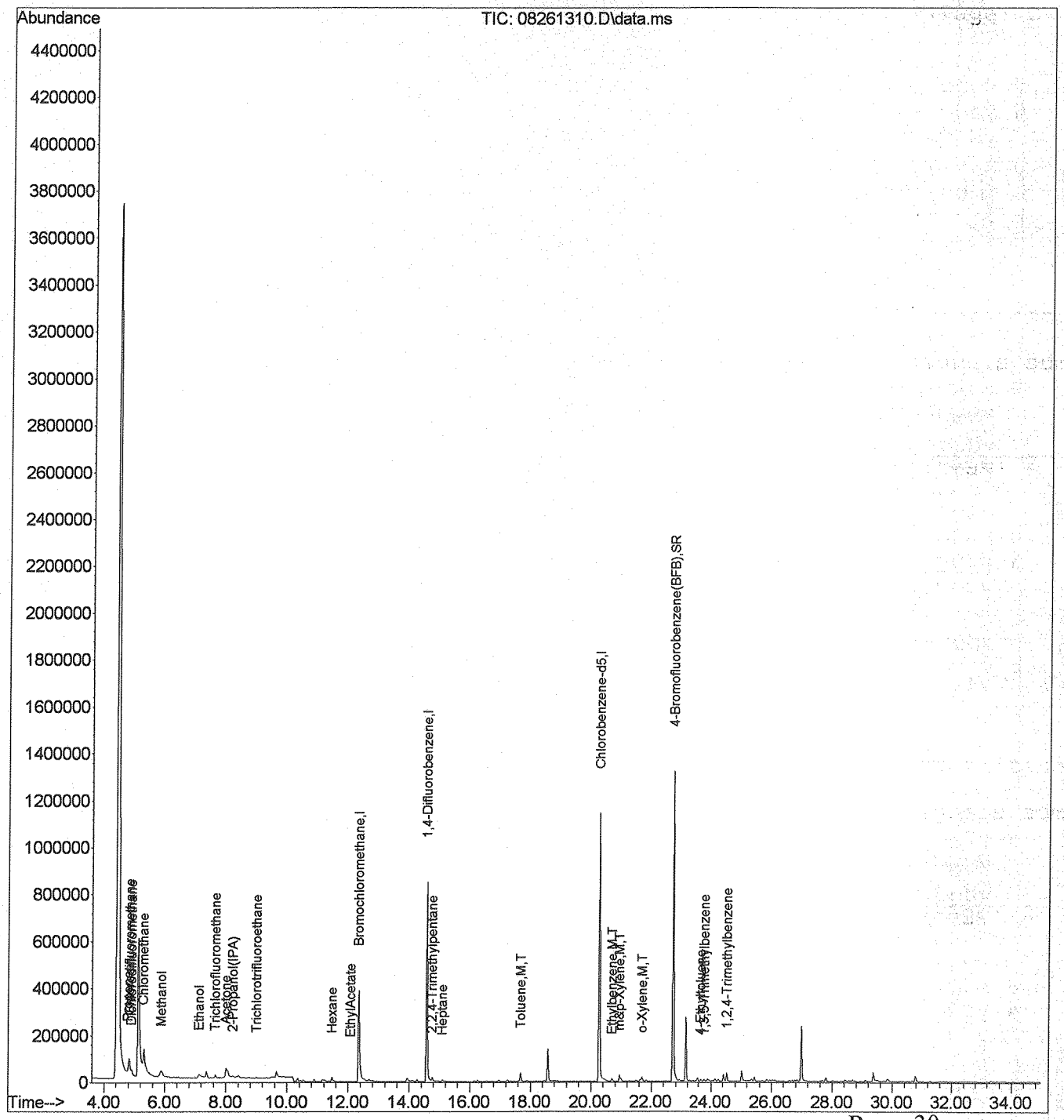
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Tetrahydrofuran	0.000		0	N.D. d	
34) 1,2-Dichloroethane	13.616	62	107	N.D.	
35) 1,1,1-Trichloroethane	13.313	97	671	N.D.	
37) Benzene	0.000		0	N.D. d	
38) CarbonTetrachloride	0.000		0	N.D. d	
39) Cyclohexane	14.026	69	436	N.D.	
40) 1,2-Dichloropropane	15.346	63	1050	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	19515m	0.12 ppbv	
45) Heptane	15.096	71	1892	0.07 ppbv #	80
46) cis-1,3-Dichloropropene	0.000		0	N.D.	
47) 4-Methyl-2-pentanone(M...	0.000		0	N.D. d	
48) trans-1,3-Dichloropropene	17.664	75	601	N.D.	
49) 1,1,2-Trichloroethane	0.000		0	N.D.	
50) Toluene	17.682	91	40150m	0.41 ppbv	
51) 2-Hexanone(MBK)	0.000		0	N.D.	
52) Dibromochloromethane	19.001	129	249	N.D.	
53) 1,2-Dibromoethane	0.000		0	N.D.	
54) Tetrachloroethene(PCE)	19.019	166	132	N.D.	
56) Chlorobenzene	20.285	114	306	N.D.	
57) Ethylbenzene	20.695	91	12092	0.09 ppbv #	93
58) m&p-Xylene	20.945	106	15799	0.32 ppbv	90
59) Bromoform	0.000		0	N.D.	
60) Styrene	21.658	104	1645	N.D.	
61) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
62) o-Xylene	21.694	91	14513	0.14 ppbv	96
64) 4-Ethyltoluene	23.673	120	2193	0.06 ppbv #	82
65) 1,3,5-Trimethylbenzene	23.780	120	2922	0.05 ppbv #	80
66) 1,2,4-Trimethylbenzene	24.529	120	12352	0.22 ppbv	94
67) BenzylChloride(a-Chlor...	25.189	91	111	N.D.	
68) 1,3-Dichlorobenzene	25.064	146	290	N.D.	
69) 1,4-Dichlorobenzene	25.278	146	499	N.D.	
70) 1,2-Dichlorobenzene	0.000		0	N.D.	
71) 1,2,4-Trichlorobenzene	29.451	180	556	N.D.	
72) Hexachlorobutadiene	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261310.D
Acq On : 26 Aug 2013 15:53
Operator : JJG
Sample : 131044-65859 x1
Misc : IS/Surr: PS082213-03 + 500mL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 16:30:31 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261311.D
Acq On : 26 Aug 2013 16:42
Operator : JJG
Sample : 131044-65860 x1
Misc : IS/Surr: PS082213-03 + 500mL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 18:39:59 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	12.350	128	167449	10.00	ppbv		0.00
36) 1,4-Difluorobenzene	14.579	114	956887	10.00	ppbv		0.00
55) Chlorobenzene-d5	20.267	117	908475	10.00	ppbv		0.00
System Monitoring Compounds							
63) 4-Bromofluorobenzene(BFB)	22.710	174	542204	10.38	ppbv		0.00
Spiked Amount 10.000			Recovery = 103.80%				
Target Compounds							Qvalue
2) Chlorodifluoromethane	4.817	51	9135	0.21	ppbv	#	97
3) Propene	4.799	42	5472	0.42	ppbv	#	56
4) Dichlorodifluoromethane	4.908	85	22387	0.37	ppbv		99
5) Chloromethane	5.288	52	2334	0.28	ppbv	#	26
6) Dichlorotetrafluoroethane	5.324	135	308	N.D.			
7) VinylChloride	0.000		0	N.D.			
8) Methanol	5.885	31	61541m	6.06	ppbv		
9) 1,3-Butadiene	0.000		0	N.D.			
10) Bromomethane	0.000		0	N.D.	d		
11) Chloroethane	0.000		0	N.D.	d		
12) Dichlorofluoromethane	0.000		0	N.D.			
13) Ethanol	7.134	45	36938m	3.29	ppbv		
14) VinylBromide	0.000		0	N.D.			
15) Acetone	8.002	58	46346m	3.65	ppbv		
16) Trichlorofluoromethane	7.659	103	6256	0.18	ppbv	#	97
17) 2-Propanol(IPA)	8.220	45	36556m	0.89	ppbv		
18) Acrylonitrile	9.124	52	109	N.D.			
19) 1,1-Dichloroethene	0.000		0	N.D.			
20) MethyleneChloride(DCM)	0.000		0	N.D.	d		
21) AllylChloride	9.251	39	441	N.D.			
22) CarbonDisulfide	0.000		0	N.D.	d		
23) Trichlorotrifluoroethane	0.000		0	N.D.	d		
24) trans-1,2-Dichloroethene	0.000		0	N.D.			
25) 1,1-Dichloroethane	0.000		0	N.D.			
26) MethylTertButylEther(M...	0.000		0	N.D.			
27) VinylAcetate	0.000		0	N.D.	d		
28) 2-Butanone(MEK)	0.000		0	N.D.	d		
29) cis-1,2-Dichloroethene	0.000		0	N.D.			
30) Hexane	11.458	86	825m	0.16	ppbv		
31) Chloroform	12.493	83	1299	N.D.			
32) EthylAcetate	0.000		0	N.D.	d		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261311.D
Acq On : 26 Aug 2013 16:42
Operator : JJG
Sample : 131044-65860 x1
Misc : IS/Surr: PS082213-03 + 500mL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 18:39:59 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration

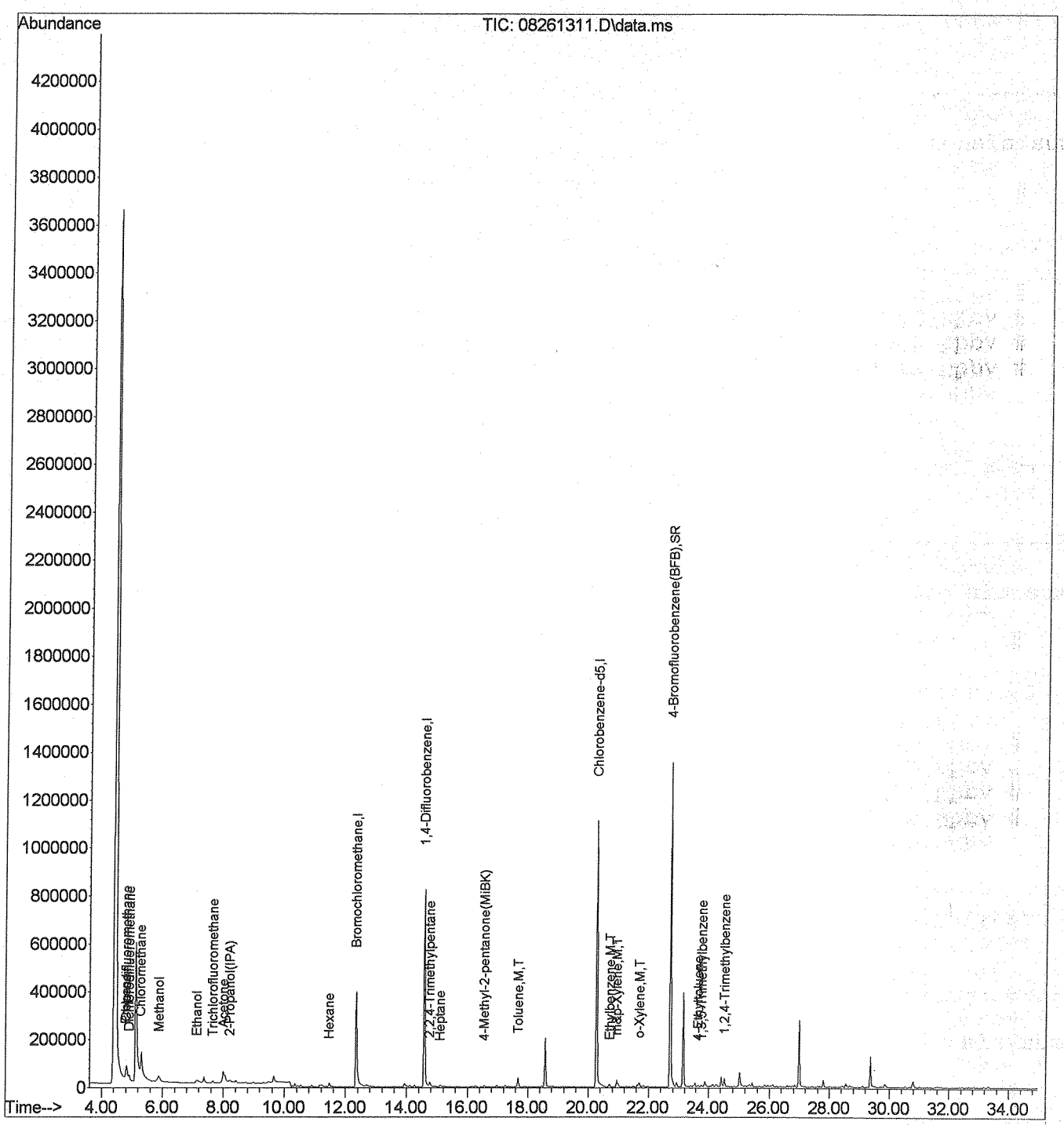
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Tetrahydrofuran	12.760	72	395	N.D.	
34) 1,2-Dichloroethane	0.000		0	N.D.	
35) 1,1,1-Trichloroethane	0.000		0	N.D.	
37) Benzene	0.000		0	N.D. d	
38) CarbonTetrachloride	0.000		0	N.D. d	
39) Cyclohexane	14.008	69	330	N.D.	
40) 1,2-Dichloropropane	15.399	63	1031	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	19498m	0.12 ppbv	
45) Heptane	15.096	71	1765	0.07 ppbv #	67
46) cis-1,3-Dichloropropene	0.000		0	N.D.	
47) 4-Methyl-2-pentanone(M...	16.558	58	2376	0.07 ppbv	83
48) trans-1,3-Dichloropropene	17.664	75	1057	N.D.	
49) 1,1,2-Trichloroethane	0.000		0	N.D.	
50) Toluene	17.682	91	40056	0.40 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)	19.001	166	116	N.D.	
56) Chlorobenzene	20.356	114	107	N.D.	
57) Ethylbenzene	20.713	91	12213	0.09 ppbv	99
58) m&p-Xylene	20.945	106	15851	0.33 ppbv #	88
59) Bromoform	0.000		0	N.D.	
60) Styrene	21.658	104	1566	N.D.	
61) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
62) o-Xylene	21.694	91	15036	0.15 ppbv #	93
64) 4-Ethyltoluene	23.673	120	2359	0.06 ppbv #	82
65) 1,3,5-Trimethylbenzene	23.780	120	2734	0.05 ppbv #	83
66) 1,2,4-Trimethylbenzene	24.529	120	11957	0.22 ppbv #	96
67) BenzylChloride(a-Chlor...	25.171	91	175	N.D.	
68) 1,3-Dichlorobenzene	25.046	146	329	N.D.	
69) 1,4-Dichlorobenzene	25.278	146	690	N.D.	
70) 1,2-Dichlorobenzene	0.000		0	N.D.	
71) 1,2,4-Trichlorobenzene	29.451	180	547	N.D.	
72) Hexachlorobutadiene	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261311.D
Acq On : 26 Aug 2013 16:42
Operator : JJG
Sample : 131044-65860 x1
Misc : IS/Surr: PS082213-03 + 500mL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 18:39:59 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261312.D
Acq On : 26 Aug 2013 17:30
Operator : JJG
Sample : 131044-65861 x1
Misc : IS/Surr: PS082213-03 + 500mL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 18:42:38 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Bromochloromethane	12.350	128	159597	10.00 ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	960988	10.00 ppbv	0.00
55) Chlorobenzene-d5	20.267	117	886819	10.00 ppbv	0.00
System Monitoring Compounds					
63) 4-Bromofluorobenzene(BFB)	22.710	174	532561	10.45 ppbv	0.00
Spiked Amount 10.000			Recovery = 104.50%		
Target Compounds					Qvalue
2) Chlorodifluoromethane	4.835	51	9660	0.24 ppbv #	95
3) Propene	4.799	42	5326	0.43 ppbv #	77
4) Dichlorodifluoromethane	4.908	85	24828	0.43 ppbv	99
5) Chloromethane	5.288	52	2613	0.33 ppbv #	1
6) Dichlorotetrafluoroethane	5.324	135	331	N.D.	
7) VinylChloride	0.000		0	N.D.	
8) Methanol	5.867	31	87664m	9.05 ppbv	
9) 1,3-Butadiene	0.000		0	N.D.	
10) Bromomethane	0.000		0	N.D. d	
11) Chloroethane	0.000		0	N.D. d	
12) Dichlorofluoromethane	0.000		0	N.D.	
13) Ethanol	7.116	45	32149m	3.01 ppbv	
14) VinylBromide	0.000		0	N.D.	
15) Acetone	7.984	58	45300m	3.74 ppbv	
16) Trichlorofluoromethane	7.658	103	7528	0.23 ppbv #	98
17) 2-Propanol(IPA)	8.219	45	27327m	0.70 ppbv	
18) Acrylonitrile	0.000		0	N.D.	
19) 1,1-Dichloroethene	0.000		0	N.D.	
20) MethyleneChloride(DCM)	0.000		0	N.D. d	
21) AllylChloride	9.251	39	726	N.D.	
22) CarbonDisulfide	0.000		0	N.D. d	
23) Trichlorotrifluoroethane	8.998	103	1541	0.06 ppbv #	97
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	1598	N.D.	
28) 2-Butanone(MEK)	11.458	72	4100	0.37 ppbv #	42
29) cis-1,2-Dichloroethene	0.000		0	N.D.	
30) Hexane	0.000		0	N.D. d	
31) Chloroform	12.493	83	1089	N.D.	
32) EthylAcetate	0.000		0	N.D. d	

072213.M Mon Aug 26 18:43:08 2013

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261312.D
Acq On : 26 Aug 2013 17:30
Operator : JJG
Sample : 131044-65861 x1
Misc : IS/Surr: PS082213-03 + 500mL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 18:42:38 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration

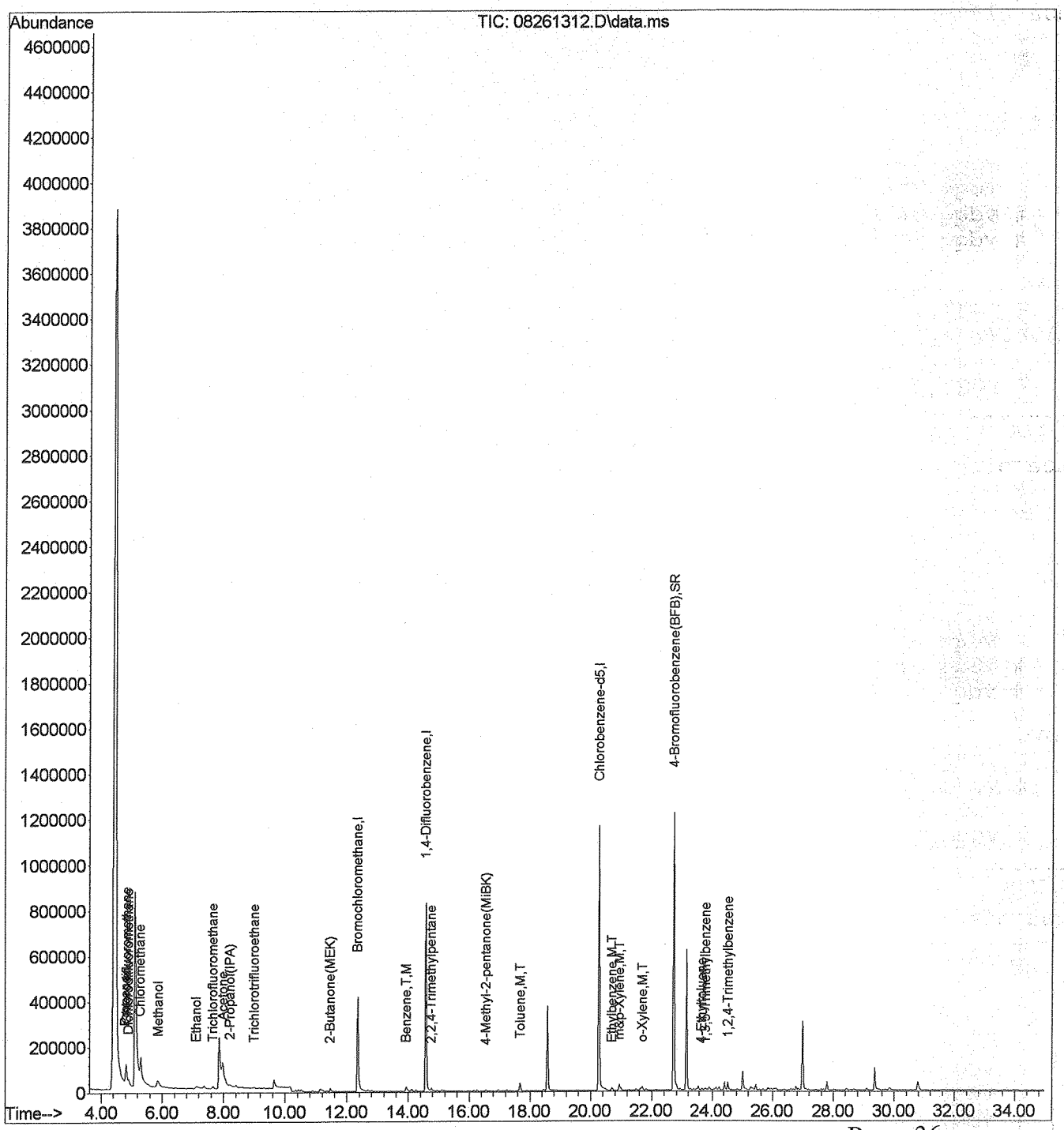
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Tetrahydrofuran	0.000		0	N.D. d	
34) 1,2-Dichloroethane	13.598	62	141	N.D.	
35) 1,1,1-Trichloroethane	0.000		0	N.D.	
37) Benzene	13.937	78	19846	0.24 ppbv	94
38) CarbonTetrachloride	0.000		0	N.D. d	
39) Cyclohexane	14.008	69	114	N.D.	
40) 1,2-Dichloropropane	15.417	63	646	N.D.	
41) Bromodichloromethane	0.000		0	N.D.	
42) 1,4-Dioxane	15.488	88	108	N.D.	
43) Trichloroethene(TCE)	0.000		0	N.D.	
44) 2,2,4-Trimethylpentane	14.757	57	12533m	0.08 ppbv	
45) Heptane	0.000		0	N.D. d	
46) cis-1,3-Dichloropropene	0.000		0	N.D.	
47) 4-Methyl-2-pentanone(M...	16.558	58	2298	0.07 ppbv #	64
48) trans-1,3-Dichloropropene	17.664	75	1312	N.D.	
49) 1,1,2-Trichloroethane	17.842	97	451	N.D.	
50) Toluene	17.682	91	36988	0.37 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	278	N.D.	
57) Ethylbenzene	20.695	91	12487	0.10 ppbv #	95
58) m&p-Xylene	20.945	106	14659	0.31 ppbv #	91
59) Bromoform	0.000		0	N.D.	
60) Styrene	21.658	104	1466	N.D.	
61) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
62) o-Xylene	21.694	91	13792	0.14 ppbv	98
64) 4-Ethyltoluene	23.673	120	2121	0.06 ppbv	86
65) 1,3,5-Trimethylbenzene	23.780	120	3176	0.06 ppbv #	86
66) 1,2,4-Trimethylbenzene	24.529	120	11576	0.21 ppbv #	87
67) BenzylChloride(a-Chlor...	25.189	91	320	N.D.	
68) 1,3-Dichlorobenzene	25.046	146	255	N.D.	
69) 1,4-Dichlorobenzene	25.278	146	1377	N.D.	
70) 1,2-Dichlorobenzene	0.000		0	N.D.	
71) 1,2,4-Trichlorobenzene	29.451	180	357	N.D.	
72) Hexachlorobutadiene	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261312.D
Acq On : 26 Aug 2013 17:30
Operator : JJG
Sample : 131044-65861 x1
Misc : IS/Surr: PS082213-03 + 500mL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 18:42:38 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration



072213.M Mon Aug 26 18:43:08 2013 Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261313.D
Acq On : 26 Aug 2013 18:18
Operator : JJG
Sample : 131044-65862 x1
Misc : IS/Surr: PS082213-03 + 500mL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 19:38:28 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Bromochloromethane	12.350	128	162670	10.00 ppbv	0.00
36) 1,4-Difluorobenzene	14.561	114	974320	10.00 ppbv	-0.02
55) Chlorobenzene-d5	20.267	117	870269	10.00 ppbv	0.00
System Monitoring Compounds					
63) 4-Bromofluorobenzene(BFB)	22.710	174	528765	10.57 ppbv	0.00
Spiked Amount 10.000			Recovery = 105.70%		
Target Compounds					Qvalue
2) Chlorodifluoromethane	4.817	51	7984	0.19 ppbv #	94
3) Propene	4.799	42	5331	0.42 ppbv #	84
4) Dichlorodifluoromethane	4.908	85	21334	0.36 ppbv	99
5) Chloromethane	5.288	52	2195	0.27 ppbv #	10
6) Dichlorotetrafluoroethane	5.324	135	301	N.D.	
7) VinylChloride	0.000		0	N.D.	
8) Methanol	5.867	31	89966m	9.11 ppbv	
9) 1,3-Butadiene	0.000		0	N.D.	
10) Bromomethane	0.000		0	N.D. d	
11) Chloroethane	0.000		0	N.D. d	
12) Dichlorofluoromethane	0.000		0	N.D.	
13) Ethanol	7.115	45	38315m	3.52 ppbv	
14) VinylBromide	0.000		0	N.D.	
15) Acetone	8.002	58	41350m	3.35 ppbv	
16) Trichlorofluoromethane	7.658	103	5939	0.18 ppbv	95
17) 2-Propanol(IPA)	8.237	45	11499m	0.29 ppbv	
18) Acrylonitrile	0.000		0	N.D.	
19) 1,1-Dichloroethene	0.000		0	N.D.	
20) MethyleneChloride(DCM)	0.000		0	N.D. d	
21) AllylChloride	9.251	39	598	N.D.	
22) CarbonDisulfide	0.000		0	N.D. d	
23) Trichlorotrifluoroethane	0.000		0	N.D. d	
24) trans-1,2-Dichloroethene	0.000		0	N.D.	
25) 1,1-Dichloroethane	0.000		0	N.D.	
26) MethylTertButylEther(M...	10.424	73	311	N.D.	
27) VinylAcetate	10.888	43	2423	N.D.	
28) 2-Butanone(MEK)	0.000		0	N.D. d	
29) cis-1,2-Dichloroethene	0.000		0	N.D.	
30) Hexane	11.458	86	908	0.18 ppbv	85
31) Chloroform	12.492	83	1302	N.D.	
32) EthylAcetate	12.064	43	3876	0.06 ppbv #	68

072213.M Mon Aug 26 19:38:58 2013

08/26/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261313.D
Acq On : 26 Aug 2013 18:18
Operator : JJG
Sample : 131044-65862 x1
Misc : IS/Surr: PS082213-03 + 500mL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 19:38:28 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration

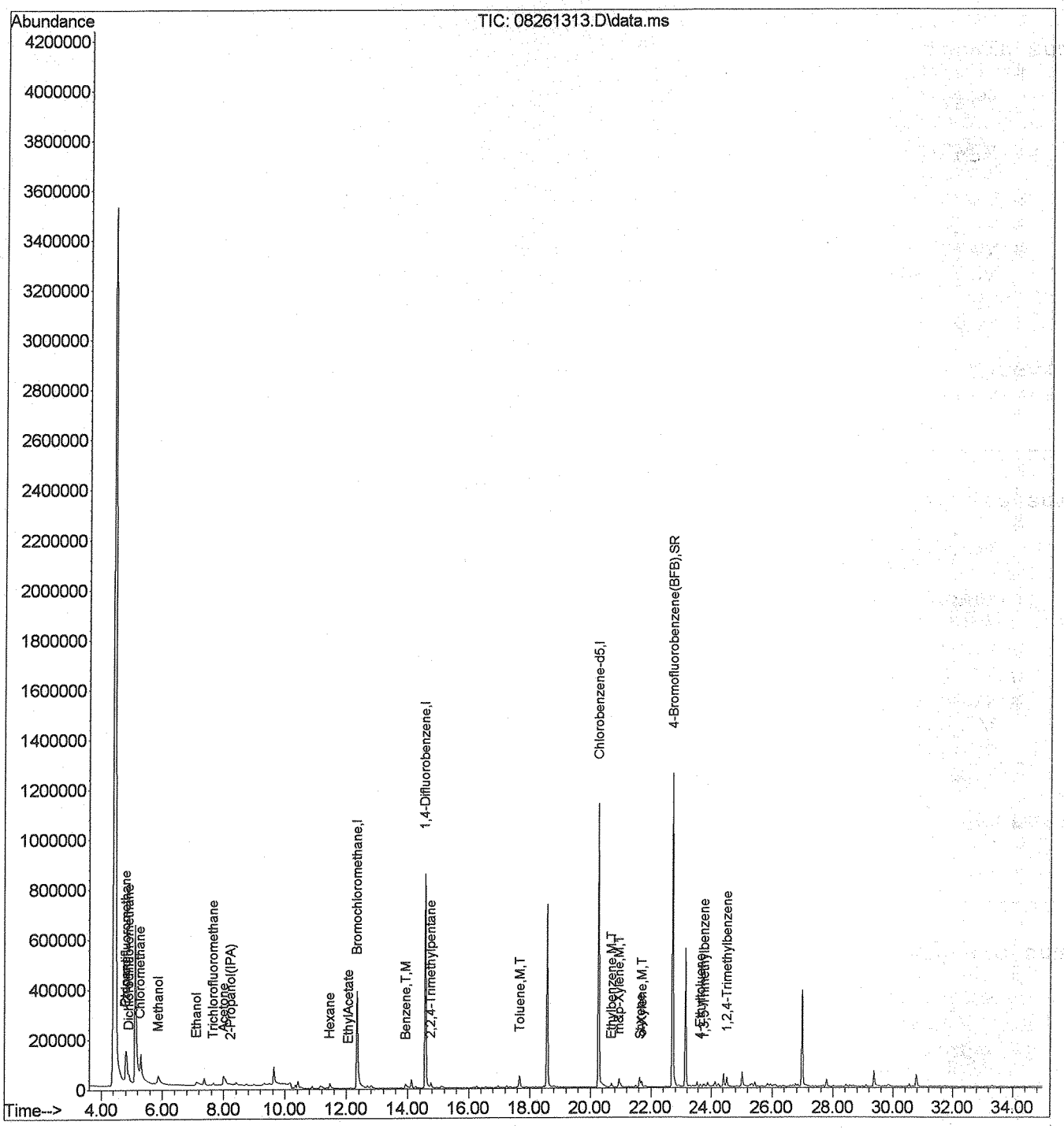
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Tetrahydrofuran	0.000		0	N.D. d	
34) 1,2-Dichloroethane	0.000		0	N.D.	
35) 1,1,1-Trichloroethane	0.000		0	N.D.	
37) Benzene	13.937	78	15327	0.18 ppbv #	95
38) CarbonTetrachloride	0.000		0	N.D. d	
39) Cyclohexane	14.008	69	340	N.D.	
40) 1,2-Dichloropropane	15.381	63	481	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	19309(m)	0.12 ppbv	
45) Heptane	0.000		0	N.D. d	
46) cis-1,3-Dichloropropene	0.000		0	N.D.	
47) 4-Methyl-2-pentanone(M...	16.558	58	1277	N.D.	
48) trans-1,3-Dichloropropene	0.000		0	N.D. d	
49) 1,1,2-Trichloroethane	0.000		0	N.D.	
50) Toluene	17.682	91	48355	0.48 ppbv #	98
51) 2-Hexanone(MBK)	0.000		0	N.D.	
52) Dibromochloromethane	0.000		0	N.D.	
53) 1,2-Dibromoethane	0.000		0	N.D.	
54) Tetrachloroethene(PCE)	0.000		0	N.D.	
56) Chlorobenzene	20.267	114	152	N.D.	
57) Ethylbenzene	20.695	91	14491	0.12 ppbv #	96
58) m&p-Xylene	20.945	106	19386	0.42 ppbv	97
59) Bromoform	0.000		0	N.D.	
60) Styrene	21.658	104	3776	0.05 ppbv #	70
61) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
62) o-Xylene	21.694	91	16875	0.18 ppbv #	96
64) 4-Ethyltoluene	23.673	120	2676	0.07 ppbv #	97
65) 1,3,5-Trimethylbenzene	23.780	120	3464	0.06 ppbv #	83
66) 1,2,4-Trimethylbenzene	24.529	120	14306	0.27 ppbv	93
67) BenzylChloride(a-Chlor...	25.171	91	112	N.D.	
68) 1,3-Dichlorobenzene	25.046	146	253	N.D.	
69) 1,4-Dichlorobenzene	25.278	146	630	N.D.	
70) 1,2-Dichlorobenzene	0.000		0	N.D.	
71) 1,2,4-Trichlorobenzene	29.451	180	256	N.D.	
72) Hexachlorobutadiene	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261313.D
Acq On : 26 Aug 2013 18:18
Operator : JJG
Sample : 131044-65862 x1
Misc : IS/Surr: PS082213-03 + 500mL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 19:38:28 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration



8/26/13

TO-15 RAW QC & ICAL SUMMARY

MS #3 Instrument Logbook

Sequence Name: C:\msdchem\1\sequence\2013\082613.S
Comment: GCMS-03
Operator: JJG
Data Path: C:\MSDCHEM\1\MS03\2013\082613\
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

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

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

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

Line			Sample Name/Misc Info
1)	Sample	1	08261301 TO15-5MS TO15 BFB 082613
2)	Sample	1	08261302 TO15-5MS TO15 CCV 082613
3)	Sample	1	08261303 TO15-5MS TO15 LCSD 082613
4)	Sample	1	08261304 TO15-5MS TO15 MB 082613
5)	Sample	2	08261305 TO15-5MS Can Check#000423
6)	Sample	3	08261306 TO15-5MS 131039-65820 x1
7)	Sample	4	08261307 TO15-5MS 131039-65821 x1
8)	Sample	4	08261308 TO15-5MS 131039-65821 x1 dp
9)	Sample	3	08261309 TO15-5MS 131039-65820 x2
10)	Sample	5	08261310 TO15-5MS 131044-65859 x1
11)	Sample	6	08261311 TO15-5MS 131044-65860 x1
12)	Sample	7	08261312 TO15-5MS 131044-65861 x1
13)	Sample	8	08261313 TO15-5MS 131044-65862 x1
14)	Sample	9	08261314 TO15-5MS Flow Check#082613-01

8/26/13

8/26/13

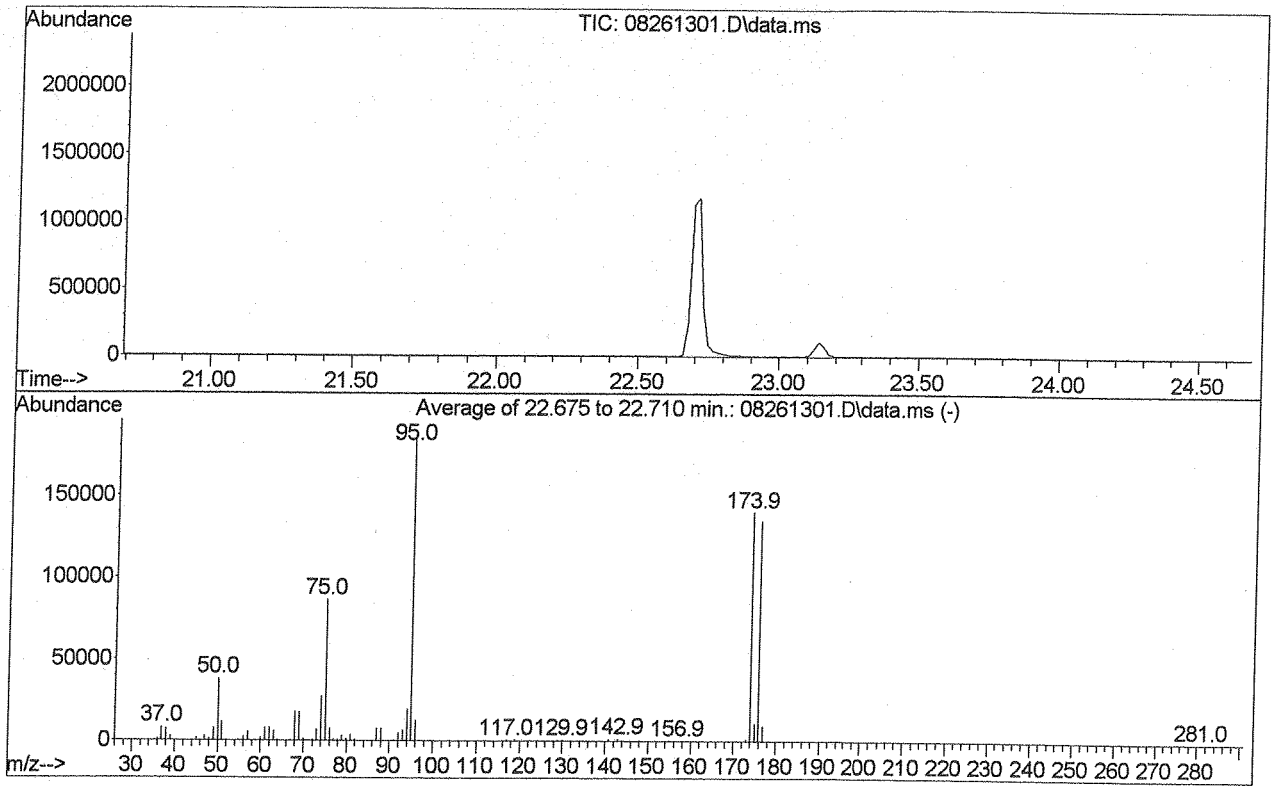
Comments:

Analyst: **Date:** 8/26/13

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261301.D
Acq On : 26 Aug 2013 8:46 am
Operator : JJG
Sample : TO15 BFB 082613
Misc : IS/Surr: PS082213-03 + 500mL cc#000214
ALS Vial : 1 Sample Multiplier: 1

Integration File: PAMS.P

Method : C:\msdchem\1\METHODS\2013\072213.M
Title : TO-15/TO-14
Last Update : Tue Jul 23 12:50:49 2013



AutoFind: Scans 1063, 1064, 1065; 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	20.3	38006	PASS
75	95	30	60	46.2	86232	PASS
95	95	100	100	100.0	186845	PASS
96	95	5	9	6.8	12670	PASS
173	174	0.00	2	0.8	1122	PASS
174	95	50	100	74.9	139987	PASS
175	174	5	9	7.5	10522	PASS
176	174	95	101	96.3	134851	PASS
177	176	5	9	6.8	9110	PASS

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261302.D
Acq On : 26 Aug 2013 9:32
Operator : JJG
Sample : TO15 CCV 082613
Misc : IS/Surr: PS082213-03 + Cal: PS071613-02
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 26 11:41:24 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	12.350	128	209879	10.00	ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	1144269	10.00	ppbv	0.00
55) Chlorobenzene-d5	20.267	117	1066935	10.00	ppbv	0.00
System Monitoring Compounds						
63) 4-Bromofluorobenzene(BFB)	22.710	174	622280	10.15	ppbv	0.00
Spiked Amount 10.000			Recovery = 101.50%			
Target Compounds						Qvalue
2) Chlorodifluoromethane	4.817	51	517175m	9.62	ppbv	
3) Propene	4.781	42	164900m	10.14	ppbv	
4) Dichlorodifluoromethane	4.908	85	705946	9.33	ppbv	99
5) Chloromethane	5.288	52	96797m	9.28	ppbv	
6) Dichlorotetrafluoroethane	5.342	135	445811	9.92	ppbv	89
7) VinylChloride	5.668	62	308294m	9.65	ppbv	
8) Methanol	5.867	31	62851m	4.93	ppbv	
9) 1,3-Butadiene	5.867	54	205198m	9.63	ppbv	
10) Bromomethane	6.446	96	180651m	8.46	ppbv	
11) Chloroethane	6.735	66	48325	10.34	ppbv	99
12) Dichlorofluoromethane	7.007	67	606368	9.81	ppbv	100
13) Ethanol	7.043	45	142800m	10.15	ppbv	
14) VinylBromide	7.260	108	229146m	10.28	ppbv	
15) Acetone	7.966	58	152795m	9.59	ppbv	
16) Trichlorofluoromethane	7.676	103	439879	10.21	ppbv	98
17) 2-Propanol(IPA)	8.165	45	543508m	10.61	ppbv	
18) Acrylonitrile	8.961	52	231835m	9.88	ppbv	
19) 1,1-Dichloroethene	8.726	96	249574m	9.96	ppbv	
20) MethyleneChloride(DCM)	9.323	84	244899m	9.48	ppbv	
21) AllylChloride	9.305	39	240368m	9.12	ppbv	
22) CarbonDisulfide	9.486	76	813483m	9.35	ppbv	
23) Trichlorotrifluoroethane	8.998	103	355940	9.98	ppbv	99
24) trans-1,2-Dichloroethene	10.424	96	298994m	10.53	ppbv	
25) 1,1-Dichloroethane	10.906	63	646410	9.99	ppbv	99
26) MethylTertButylEther(M...	10.442	73	779397	11.12	ppbv	100
27) VinylAcetate	10.888	43	890406m	9.15	ppbv	
28) 2-Butanone(MEK)	11.423	72	156415	10.63	ppbv #	87
29) cis-1,2-Dichloroethene	11.886	96	316532	10.15	ppbv	99
30) Hexane	11.458	86	67520	10.43	ppbv	96
31) Chloroform	12.493	83	671317	10.54	ppbv	100
32) EthylAcetate	12.011	43	881180	10.53	ppbv	100

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261302.D
Acq On : 26 Aug 2013 9:32
Operator : JJG
Sample : TO15 CCV 082613
Misc : IS/Surr: PS082213-03 + Cal: PS071613-02
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 26 11:41:24 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration

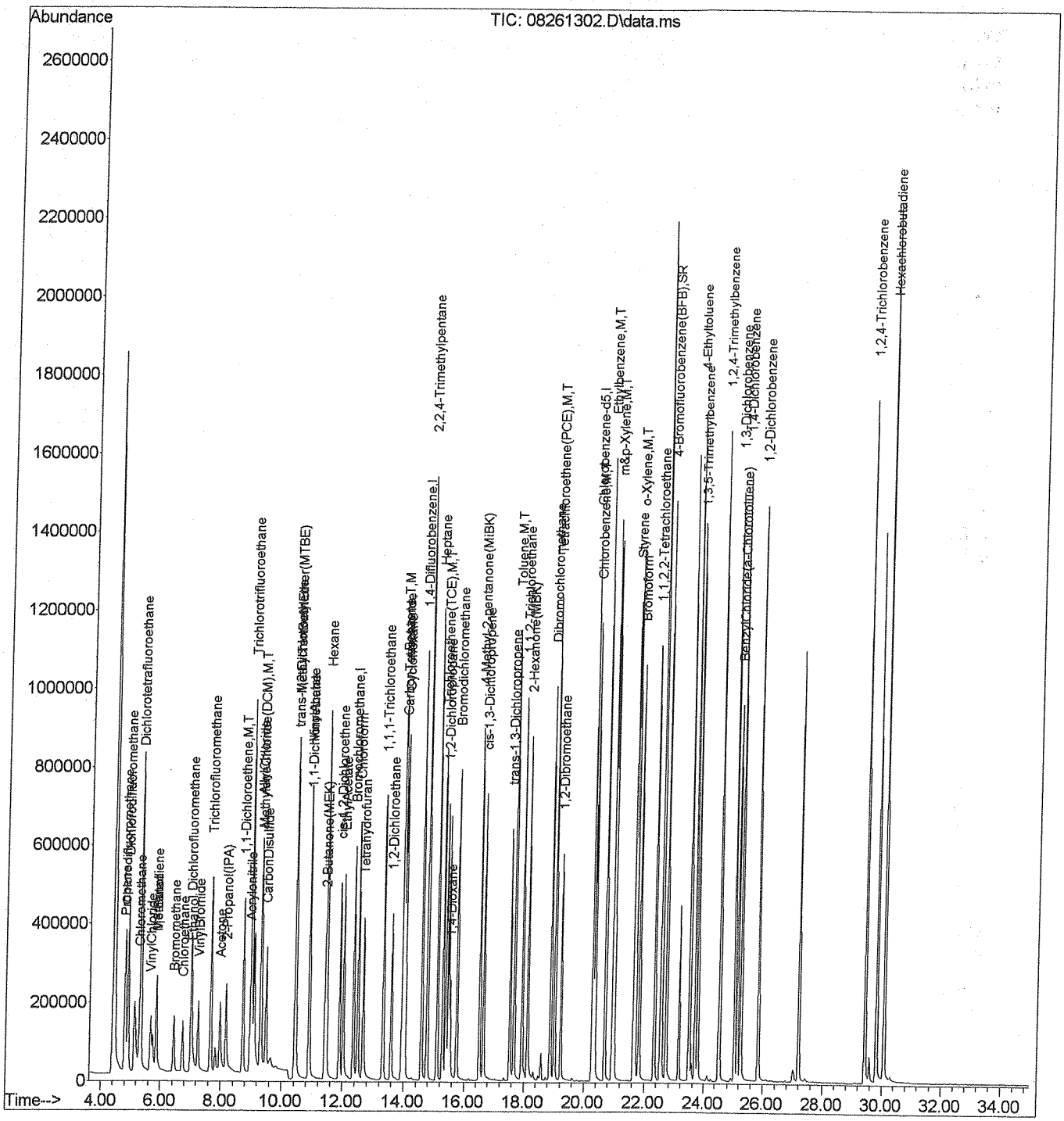
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) Tetrahydrofuran	12.653	72	152469	10.23	ppbv	97
34) 1,2-Dichloroethane	13.580	62	483505	10.39	ppbv	98
35) 1,1,1-Trichloroethane	13.331	97	696310	10.51	ppbv	99
37) Benzene	13.937	78	947765	9.46	ppbv	99
38) CarbonTetrachloride	13.973	117	652446	9.69	ppbv	99
39) Cyclohexane	14.026	69	144598	9.41	ppbv	96
40) 1,2-Dichloropropane	15.381	63	416894	9.52	ppbv	97
41) Bromodichloromethane	15.756	85	465287	9.63	ppbv	100
42) 1,4-Dioxane	15.524	88	224035m	9.41	ppbv	
43) Trichloroethene(TCE)	15.292	130	405040	9.91	ppbv	99
44) 2,2,4-Trimethylpentane	14.757	57	2043246	10.59	ppbv	100
45) Heptane	15.096	71	331771	10.24	ppbv	98
46) cis-1,3-Dichloropropene	16.648	75	575299	10.19	ppbv	99
47) 4-Methyl-2-pentanone(M...	16.505	58	391486	9.94	ppbv	94
48) trans-1,3-Dichloropropene	17.521	75	514496	9.14	ppbv	98
49) 1,1,2-Trichloroethane	17.931	97	418624	9.88	ppbv	100
50) Toluene	17.664	91	1216453	10.24	ppbv	99
51) 2-Hexanone(MBK)	18.110	58	501724	10.24	ppbv	96
52) Dibromochloromethane	18.877	129	767032	10.91	ppbv	99
53) 1,2-Dibromoethane	19.215	107	636503	9.77	ppbv	100
54) Tetrachloroethene(PCE)	19.001	166	543210	10.01	ppbv #	92
56) Chlorobenzene	20.339	114	302275	10.68	ppbv	92
57) Ethylbenzene	20.695	91	1574224	10.41	ppbv	98
58) m&p-Xylene	20.945	106	1145953	20.12	ppbv	99
59) Bromoform	21.819	173	742844	10.26	ppbv	97
60) Styrene	21.640	104	935370	10.24	ppbv	99
61) 1,1,2,2-Tetrachloroethane	22.318	83	971055	10.21	ppbv	99
62) o-Xylene	21.694	91	1215118	10.33	ppbv	99
64) 4-Ethyltoluene	23.673	120	487929	10.53	ppbv	98
65) 1,3,5-Trimethylbenzene	23.780	120	636174	9.66	ppbv	100
66) 1,2,4-Trimethylbenzene	24.529	120	666818	10.27	ppbv	99
67) BenzylChloride(a-Chlor...	25.153	91	1138329	10.69	ppbv	99
68) 1,3-Dichlorobenzene	25.029	146	951393	10.03	ppbv	97
69) 1,4-Dichlorobenzene	25.260	146	948534m	9.94	ppbv	
70) 1,2-Dichlorobenzene	25.831	146	969838m	9.75	ppbv	
71) 1,2,4-Trichlorobenzene	29.433	180	886316m	9.43	ppbv	
72) Hexachlorobutadiene	30.057	225	772165m	10.55	ppbv	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261302.D
Acq On : 26 Aug 2013 9:32
Operator : JJG
Sample : TO15 CCV 082613
Misc : IS/Surr: PS082213-03 + Cal: PS071613-02
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 26 11:41:24 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration



Qualification Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261303.D
Acq On : 26 Aug 2013 10:18
Operator : JJG
Sample : TO15 LCSD 082613
Misc : IS/Surr: PS082213-03 + Cal: PS071613-02
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 26 11:43:42 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	12.350	128	211318	10.00	ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	1121960	10.00	ppbv	0.00
55) Chlorobenzene-d5	20.267	117	1067287	10.00	ppbv	0.00
System Monitoring Compounds						
63) 4-Bromofluorobenzene(BFB)	22.710	174	623483	10.16	ppbv	0.00
Spiked Amount 10.000			Recovery = 101.60%			
Target Compounds						Qvalue
2) Chlorodifluoromethane	4.817	51	527964m	9.76	ppbv	
3) Propene	4.781	42	168261m	10.28	ppbv	
4) Dichlorodifluoromethane	4.908	85	733687	9.63	ppbv	99
5) Chloromethane	5.288	52	98827m	9.41	ppbv	
6) Dichlorotetrafluoroethane	5.324	135	456028	10.08	ppbv	97
7) VinylChloride	5.668	62	314553m	9.77	ppbv	
8) Methanol	5.867	31	62241m	4.85	ppbv	
9) 1,3-Butadiene	5.849	54	215698m	10.06	ppbv	
10) Bromomethane	6.446	96	189411m	8.81	ppbv	
11) Chloroethane	6.736	66	46219m	9.82	ppbv	
12) Dichlorofluoromethane	7.007	67	603129	9.69	ppbv	100
13) Ethanol	7.043	45	136736m	9.66	ppbv	
14) VinylBromide	7.260	108	230694m	10.28	ppbv	
15) Acetone	7.966	58	153926m	9.59	ppbv	
16) Trichlorofluoromethane	7.677	103	438651	10.11	ppbv	97
17) 2-Propanol(IPA)	8.165	45	533222m	10.34	ppbv	
18) Acrylonitrile	8.961	52	233412m	9.88	ppbv	
19) 1,1-Dichloroethene	8.726	96	243929	9.67	ppbv	97
20) MethyleneChloride(DCM)	9.323	84	247722m	9.53	ppbv	
21) AllylChloride	9.305	39	254904m	9.61	ppbv	
22) CarbonDisulfide	9.486	76	819037m	9.35	ppbv	
23) Trichlorotrifluoroethane	8.998	103	354099	9.86	ppbv	99
24) trans-1,2-Dichloroethene	10.424	96	290629m	10.17	ppbv	
25) 1,1-Dichloroethane	10.906	63	642347	9.86	ppbv	100
26) MethylTertButylEther(M...	10.442	73	770731	10.92	ppbv	100
27) VinylAcetate	10.888	43	886135m	9.04	ppbv	
28) 2-Butanone(MEK)	11.423	72	158466	10.69	ppbv #	87
29) cis-1,2-Dichloroethene	11.886	96	319504	10.17	ppbv	99
30) Hexane	11.458	86	69582	10.67	ppbv	97
31) Chloroform	12.493	83	651956	10.17	ppbv	100
32) EthylAcetate	12.011	43	901188	10.70	ppbv	100

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261303.D
Acq On : 26 Aug 2013 10:18
Operator : JJG
Sample : TO15 LCSD 082613
Misc : IS/Surr: PS082213-03 + Cal: PS071613-02
ALS Vial : 1 Sample Multiplier: 1

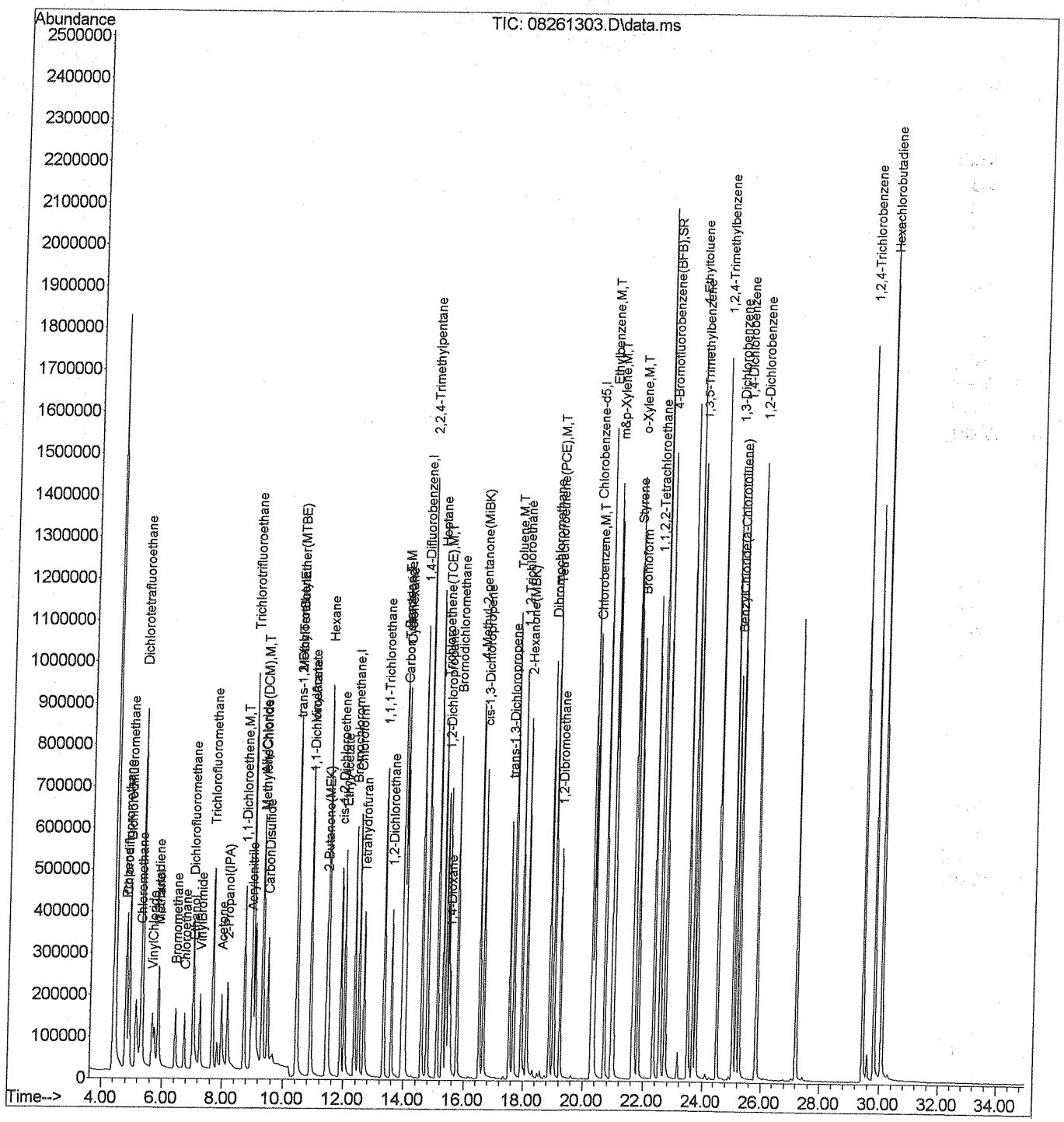
Quant Time: Aug 26 11:43:42 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Tetrahydrofuran	12.671	72	150897	10.06 ppbv	92
34) 1,2-Dichloroethane	13.580	62	474301	10.13 ppbv	100
35) 1,1,1-Trichloroethane	13.331	97	690461	10.35 ppbv	98
37) Benzene	13.937	78	950235	9.68 ppbv	100
38) CarbonTetrachloride	13.973	117	657969	9.96 ppbv	99
39) Cyclohexane	14.026	69	144144	9.57 ppbv	96
40) 1,2-Dichloropropane	15.399	63	417809	9.73 ppbv	99
41) Bromodichloromethane	15.756	85	470640	9.94 ppbv	100
42) 1,4-Dioxane	15.524	88	223379m	9.57 ppbv	
43) Trichloroethene(TCE)	15.292	130	399101	9.96 ppbv	98
44) 2,2,4-Trimethylpentane	14.757	57	1942259	10.27 ppbv	99
45) Heptane	15.096	71	329050	10.36 ppbv	99
46) cis-1,3-Dichloropropene	16.647	75	592058	10.70 ppbv	99
47) 4-Methyl-2-pentanone(M...	16.505	58	401766	10.40 ppbv	95
48) trans-1,3-Dichloropropene	17.521	75	506829	9.18 ppbv	98
49) 1,1,2-Trichloroethane	17.931	97	420644	10.13 ppbv	97
50) Toluene	17.664	91	1204912	10.34 ppbv	99
51) 2-Hexanone(MBK)	18.110	58	513039	10.67 ppbv	98
52) Dibromochloromethane	18.876	129	762718	11.07 ppbv	99
53) 1,2-Dibromoethane	19.215	107	640795m	10.03 ppbv	
54) Tetrachloroethene(PCE)	19.019	166	543355	10.21 ppbv	99
56) Chlorobenzene	20.356	114	295593	10.44 ppbv	99
57) Ethylbenzene	20.695	91	1557971	10.30 ppbv	99
58) m&p-Xylene	20.945	106	1139470	20.00 ppbv	99
59) Bromoform	21.819	173	750343	10.36 ppbv	99
60) Styrene	21.640	104	938608	10.27 ppbv	99
61) 1,1,2,2-Tetrachloroethane	22.336	83	976983	10.27 ppbv	100
62) o-Xylene	21.694	91	1222781	10.39 ppbv	99
64) 4-Ethyltoluene	23.673	120	488934	10.55 ppbv	96
65) 1,3,5-Trimethylbenzene	23.780	120	667963	10.14 ppbv	99
66) 1,2,4-Trimethylbenzene	24.529	120	677494	10.43 ppbv	98
67) BenzylChloride(a-Chlor...	25.153	91	1141039	10.71 ppbv	99
68) 1,3-Dichlorobenzene	25.028	146	948389	10.00 ppbv	99
69) 1,4-Dichlorobenzene	25.260	146	941561m	9.86 ppbv	
70) 1,2-Dichlorobenzene	25.831	146	984721m	9.90 ppbv	
71) 1,2,4-Trichlorobenzene	29.433	180	907584m	9.65 ppbv	
72) Hexachlorobutadiene	30.075	225	739275m	10.10 ppbv	

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

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261303.D
Acq On : 26 Aug 2013 10:18
Operator : JJG
Sample : TO15 LCSD 082613
Misc : IS/Surr: PS082213-03 + Cal: PS071613-02
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 26 11:43:42 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration



Page:

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261304.D
Acq On : 26 Aug 2013 11:06
Operator : JJG
Sample : TO15 MB 082613
Misc : IS/Surr: PS082213-03 + 500mL cc#000214
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 26 11:44:40 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	12.350	128	196283	10.00	ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	1112620	10.00	ppbv	0.00
55) Chlorobenzene-d5	20.267	117	1024559	10.00	ppbv	0.00
System Monitoring Compounds						
63) 4-Bromofluorobenzene(BFB)	22.710	174	604379	10.26	ppbv	0.00
Spiked Amount 10.000			Recovery = 102.60%			
Target Compounds						Qvalue
2) Chlorodifluoromethane	0.000		0	N.D.		
3) Propene	0.000		0	N.D.	d	
4) Dichlorodifluoromethane	0.000		0	N.D.		
5) Chloromethane	5.306	52	127	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.	d	
12) Dichlorofluoromethane	0.000		0	N.D.		
13) Ethanol	0.000		0	N.D.	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)	8.165	45	929	N.D.		
18) Acrylonitrile	9.088	52	459	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.		
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	10.923	43	328	N.D.		
28) 2-Butanone(MEK)	11.547	72	279	N.D.		
29) cis-1,2-Dichloroethene	0.000		0	N.D.		
30) Hexane	0.000		0	N.D.		
31) Chloroform	0.000		0	N.D.		
32) EthylAcetate	12.118	43	1564	N.D.		

8/26/13

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261304.D
Acq On : 26 Aug 2013 11:06
Operator : JJG
Sample : TO15 MB 082613
Misc : IS/Surr: PS082213-03 + 500mL cc#000214
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 26 11:44:40 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration

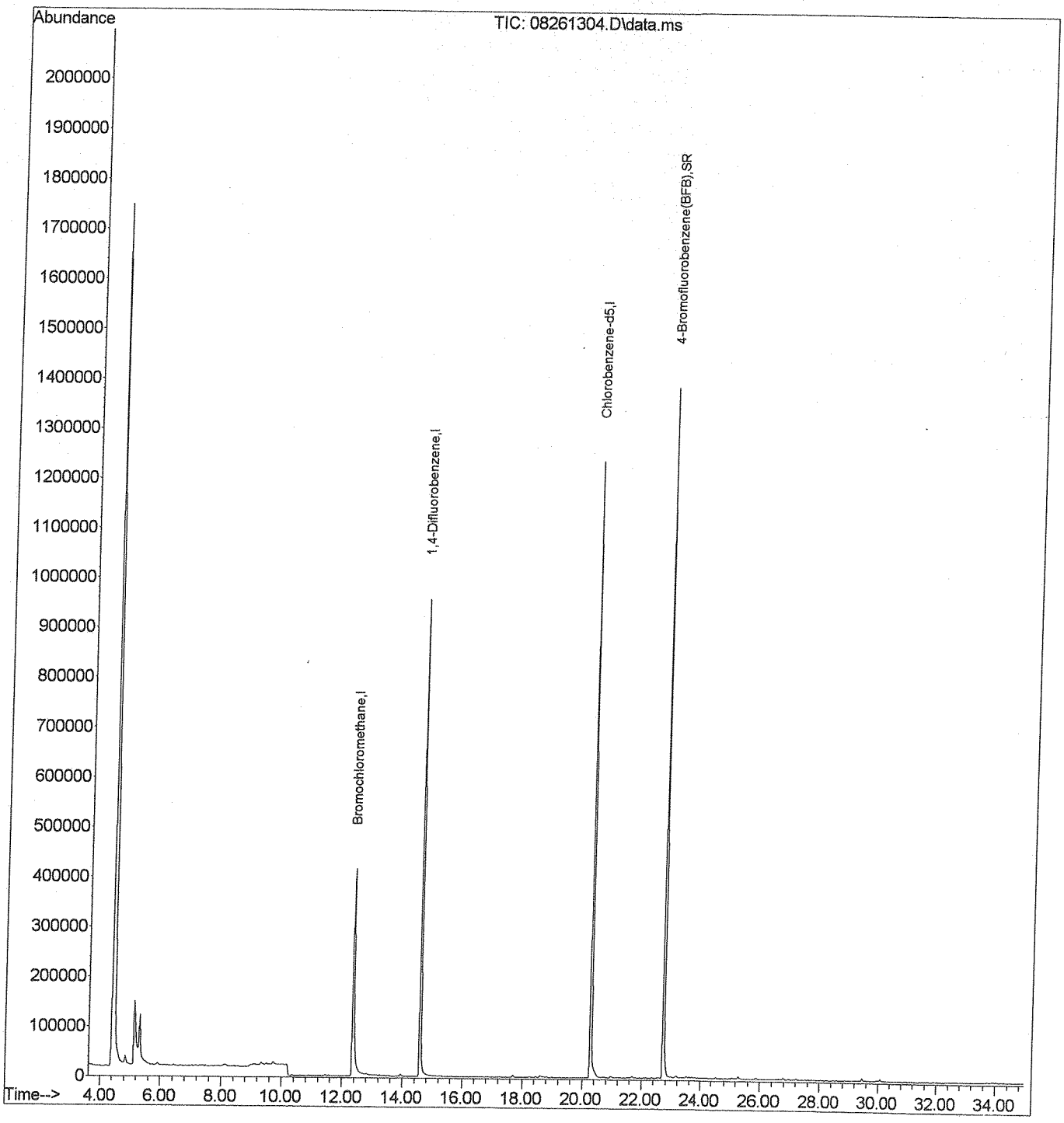
Compound	R.T.	QIon	Response	Conc Units Dev(Min)
33) Tetrahydrofuran	12.796	72	122	N.D.
34) 1,2-Dichloroethane	0.000		0	N.D.
35) 1,1,1-Trichloroethane	0.000		0	N.D.
37) Benzene	0.000		0	N.D. d
38) CarbonTetrachloride	0.000		0	N.D.
39) Cyclohexane	0.000		0	N.D.
40) 1,2-Dichloropropane	0.000		0	N.D.
41) 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	0.000		0	N.D. d
51) 2-Hexanone(MBK)	18.252	58	794	N.D.
52) Dibromochloromethane	0.000		0	N.D.
53) 1,2-Dibromoethane	19.269	107	108	N.D.
54) Tetrachloroethene(PCE)	19.019	166	112	N.D.
56) Chlorobenzene	20.356	114	645	N.D.
57) Ethylbenzene	20.713	91	2271	N.D.
58) m&p-Xylene	20.963	106	2162	N.D.
59) Bromoform	21.854	173	232	N.D.
60) Styrene	21.676	104	1728	N.D.
61) 1,1,2,2-Tetrachloroethane	22.336	83	603	N.D.
62) o-Xylene	21.694	91	1948	N.D.
64) 4-Ethyltoluene	23.691	120	636	N.D.
65) 1,3,5-Trimethylbenzene	23.798	120	783	N.D.
66) 1,2,4-Trimethylbenzene	24.547	120	896	N.D.
67) BenzylChloride(a-Chlor...	25.207	91	2023	N.D.
68) 1,3-Dichlorobenzene	25.064	146	3133	N.D.
69) 1,4-Dichlorobenzene	0.000		0	N.D. d
70) 1,2-Dichlorobenzene	25.849	146	2137	N.D.
71) 1,2,4-Trichlorobenzene	0.000		0	N.D. d
72) Hexachlorobutadiene	30.057	225	1663	N.D.

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261304.D
Acq On : 26 Aug 2013 11:06
Operator : JJG
Sample : TO15 MB 082613
Misc : IS/Surr: PS082213-03 + 500mL cc#000214
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 26 11:44:40 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261307.D
Acq On : 26 Aug 2013 13:30
Operator : JJG
Sample : 131039-65821 x1
Misc : IS/Surr: PS082213-03 + 500mL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 26 14:34:46 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Bromochloromethane	12.350	128	175585	10.00 ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	994626	10.00 ppbv	0.00
55) Chlorobenzene-d5	20.267	117	944458	10.00 ppbv	0.00
System Monitoring Compounds					
63) 4-Bromofluorobenzene(BFB)	22.710	174	562173	10.36 ppbv	0.00
Spiked Amount 10.000			Recovery = 103.60%		
Target Compounds					Qvalue
2) Chlorodifluoromethane	4.836	51	12441	0.28 ppbv #	98
3) Propene	0.000		0	N.D. d	
4) Dichlorodifluoromethane	4.908	85	25540	0.40 ppbv	98
5) Chloromethane	5.306	52	3246	0.37 ppbv #	13
6) Dichlorotetrafluoroethane	5.342	135	376	N.D.	
7) VinylChloride	0.000		0	N.D.	
8) Methanol	5.903	31	315810	2.96 ppbv	
9) 1,3-Butadiene	5.867	54	149	N.D.	
10) Bromomethane	0.000		0	N.D. d	
11) Chloroethane	0.000		0	N.D. d	
12) Dichlorofluoromethane	0.000		0	N.D.	
13) Ethanol	7.152	45	38144	3.24 ppbv	
14) VinylBromide	0.000		0	N.D.	
15) Acetone	8.057	58	32002	2.40 ppbv	
16) Trichlorofluoromethane	7.659	103	7127	0.20 ppbv #	98
17) 2-Propanol(IPA)	8.238	45	34198	0.80 ppbv	
18) Acrylonitrile	9.052	52	223	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	10.888	43	2643	N.D.	
28) 2-Butanone(MEK)	0.000		0	N.D. d	
29) cis-1,2-Dichloroethene	0.000		0	N.D.	
30) Hexane	0.000		0	N.D. d	
31) Chloroform	12.493	83	963	N.D.	
32) EthylAcetate	0.000		0	N.D. d	

8/26/13

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261307.D
Acq On : 26 Aug 2013 13:30
Operator : JJG
Sample : 131039-65821 x1
Misc : IS/Surr: PS082213-03 + 500mL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 26 14:34:46 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration

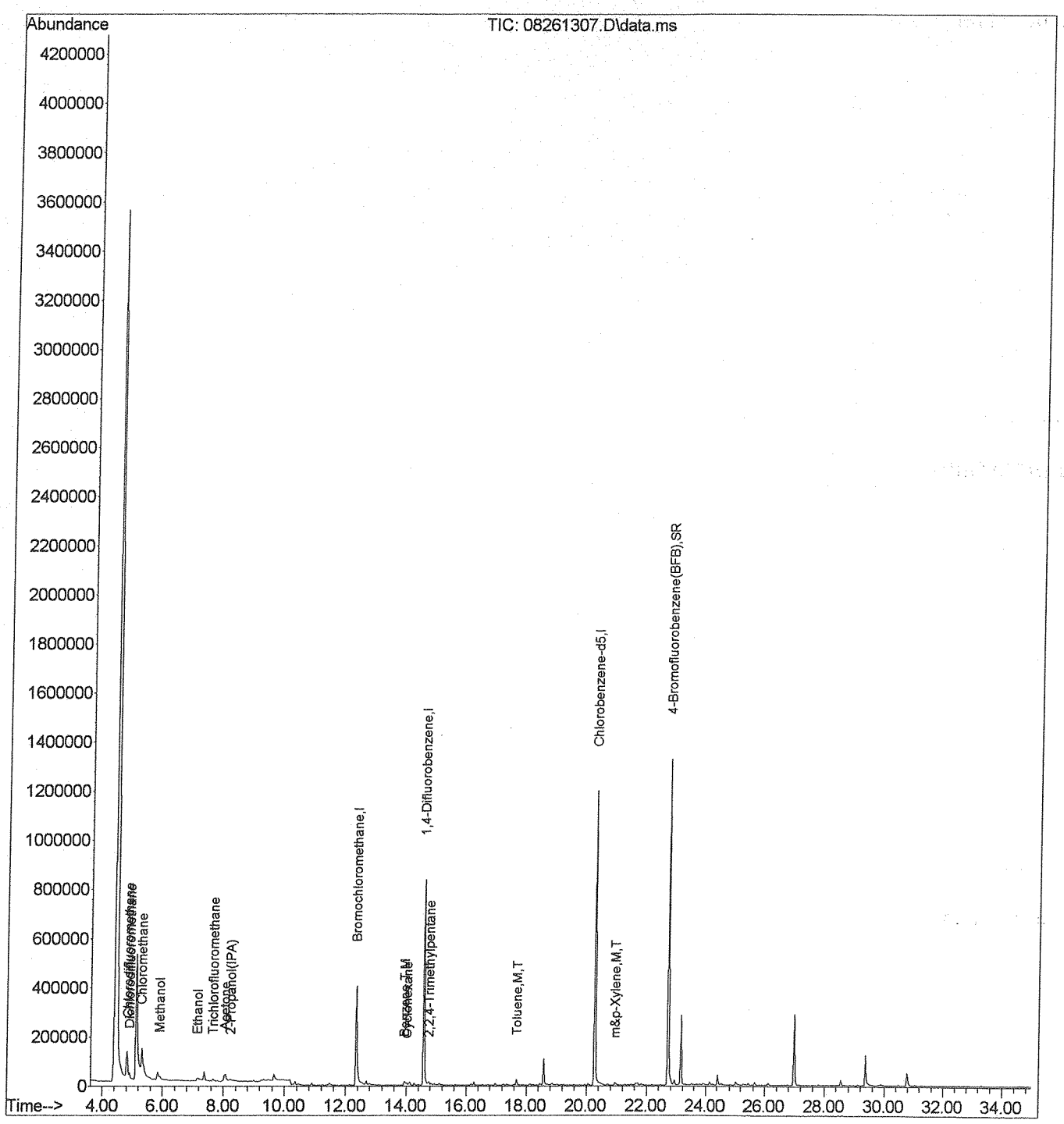
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Tetrahydrofuran	12.796	72	137	N.D.	
34) 1,2-Dichloroethane	13.616	62	121	N.D.	
35) 1,1,1-Trichloroethane	13.313	97	123	N.D.	
37) Benzene	13.937	78	15246	0.18 ppbv	96
38) CarbonTetrachloride	0.000		0	N.D. d	
39) Cyclohexane	14.008	69	1343	0.10 ppbv #	37
40) 1,2-Dichloropropane	15.435	63	323	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	9842	0.06 ppbv	
45) Heptane	0.000		0	N.D. d	
46) cis-1,3-Dichloropropene	0.000		0	N.D.	
47) 4-Methyl-2-pentanone(M...	16.594	58	113	N.D.	
48) trans-1,3-Dichloropropene	17.682	75	516	N.D.	
49) 1,1,2-Trichloroethane	0.000		0	N.D.	
50) Toluene	17.682	91	24500	0.24 ppbv #	96
51) 2-Hexanone(MBK)	0.000		0	N.D.	
52) Dibromochloromethane	19.019	129	521	N.D.	
53) 1,2-Dibromoethane	0.000		0	N.D.	
54) Tetrachloroethene(PCE)	19.019	166	832	N.D.	
56) Chlorobenzene	20.357	114	484	N.D.	
57) Ethylbenzene	20.713	91	4819	N.D.	
58) m&p-Xylene	20.945	106	5432	0.11 ppbv #	94
59) Bromoform	21.837	173	144	N.D.	
60) Styrene	21.658	104	863	N.D.	
61) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
62) o-Xylene	0.000		0	N.D. d	
64) 4-Ethyltoluene	23.673	120	373	N.D.	
65) 1,3,5-Trimethylbenzene	23.780	120	745	N.D.	
66) 1,2,4-Trimethylbenzene	24.529	120	1997	N.D.	
67) BenzylChloride(a-Chlor...	25.189	91	150	N.D.	
68) 1,3-Dichlorobenzene	25.064	146	280	N.D.	
69) 1,4-Dichlorobenzene	25.278	146	997	N.D.	
70) 1,2-Dichlorobenzene	25.849	146	315	N.D.	
71) 1,2,4-Trichlorobenzene	29.451	180	1089	N.D.	
72) Hexachlorobutadiene	30.057	225	110	N.D.	

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

8/26/13

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261307.D
Acq On : 26 Aug 2013 13:30
Operator : JJG
Sample : 131039-65821 x1
Misc : IS/Surr: PS082213-03 + 500mL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 26 14:34:46 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration



08/26/13

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261308.D
Acq On : 26 Aug 2013 14:19
Operator : JJG
Sample : 131039-65821 x1 dp
Misc : IS/Surr: PS082213-03 + 500mL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 26 14:57:14 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Bromochloromethane	12.350	128	165552	10.00 ppbv	0.00
36) 1,4-Difluorobenzene	14.579	114	961374	10.00 ppbv	0.00
55) Chlorobenzene-d5	20.267	117	905263	10.00 ppbv	0.00
System Monitoring Compounds					
63) 4-Bromofluorobenzene(BFB)	22.710	174	540291	10.38 ppbv	0.00
Spiked Amount 10.000			Recovery = 103.80%		
Target Compounds					Qvalue
2) Chlorodifluoromethane	4.835	51	13004	0.31 ppbv #	96
3) Propene	0.000		0	N.D. d	
4) Dichlorodifluoromethane	4.908	85	26144	0.44 ppbv	99
5) Chloromethane	5.306	52	3211	0.39 ppbv #	32
6) Dichlorotetrafluoroethane	5.324	135	439	N.D.	
7) VinylChloride	0.000		0	N.D.	
8) Methanol	5.903	31	28726m	2.86 ppbv	
9) 1,3-Butadiene	5.867	54	167	N.D.	
10) Bromomethane	0.000		0	N.D. d	
11) Chloroethane	0.000		0	N.D. d	
12) Dichlorofluoromethane	0.000		0	N.D.	
13) Ethanol	7.152	45	33441m	3.01 ppbv	
14) VinylBromide	0.000		0	N.D.	
15) Acetone	8.057	58	30152m	2.40 ppbv	
16) Trichlorofluoromethane	7.659	103	6739	0.20 ppbv #	95
17) 2-Propanol(IPA)	8.238	45	30912m	0.77 ppbv	
18) Acrylonitrile	0.000		0	N.D.	
19) 1,1-Dichloroethene	0.000		0	N.D.	
20) MethyleneChloride(DCM)	0.000		0	N.D. d	
21) AllylChloride	9.233	39	812	N.D.	
22) CarbonDisulfide	0.000		0	N.D. d	
23) Trichlorotrifluoroethane	0.000		0	N.D. d	
24) trans-1,2-Dichloroethene	0.000		0	N.D.	
25) 1,1-Dichloroethane	0.000		0	N.D.	
26) MethylTertButylEther(M...	0.000		0	N.D.	
27) VinylAcetate	10.888	43	2672	N.D.	
28) 2-Butanone(MEK)	0.000		0	N.D. d	
29) cis-1,2-Dichloroethene	0.000		0	N.D.	
30) Hexane	0.000		0	N.D. d	
31) Chloroform	12.493	83	1024	N.D.	
32) EthylAcetate	0.000		0	N.D. d	

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261308.D
Acq On : 26 Aug 2013 14:19
Operator : JJG
Sample : 131039-65821 x1 dp
Misc : IS/Surr: PS082213-03 + 500mL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 26 14:57:14 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration

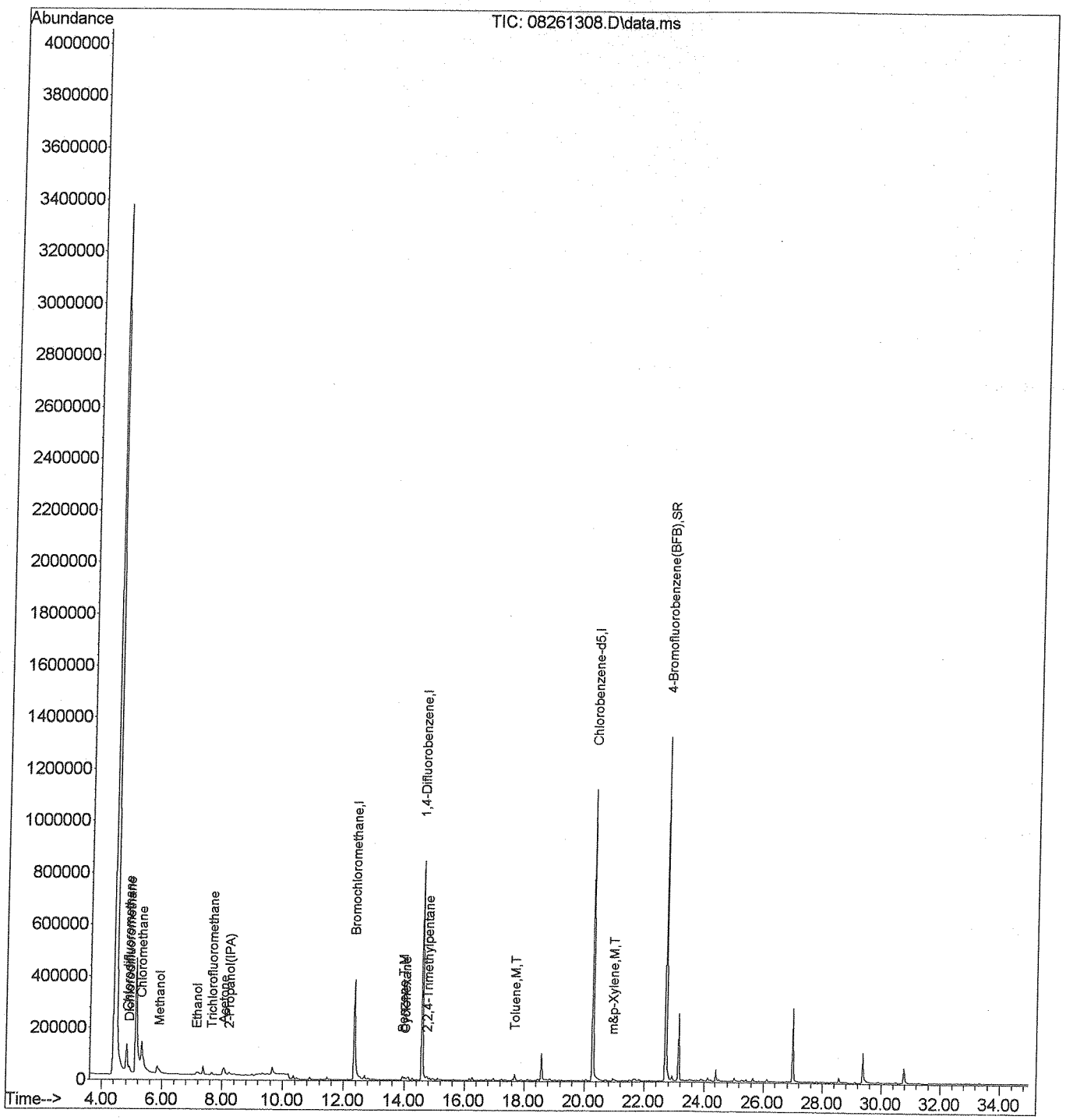
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) Tetrahydrofuran	0.000		0	N.D.	
34) 1,2-Dichloroethane	0.000		0	N.D.	
35) 1,1,1-Trichloroethane	0.000		0	N.D.	
37) Benzene	13.937	78	13477	0.16 ppbv	96
38) CarbonTetrachloride	0.000		0	N.D. d	
39) Cyclohexane	14.008	69	1338	0.10 ppbv #	45
40) 1,2-Dichloropropane	15.417	63	378	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	9673m	0.06 ppbv	
45) Heptane	0.000		0	N.D. d	
46) cis-1,3-Dichloropropene	0.000		0	N.D.	
47) 4-Methyl-2-pentanone(M...	16.594	58	114	N.D.	
48) trans-1,3-Dichloropropene	17.682	75	414	N.D.	
49) 1,1,2-Trichloroethane	0.000		0	N.D.	
50) Toluene	17.682	91	24192	0.24 ppbv #	99
51) 2-Hexanone(MBK)	0.000		0	N.D.	
52) Dibromochloromethane	19.001	129	498	N.D.	
53) 1,2-Dibromoethane	0.000		0	N.D.	
54) Tetrachloroethene(PCE)	19.019	166	775	N.D.	
56) Chlorobenzene	20.303	114	560	N.D.	
57) Ethylbenzene	20.713	91	4807	N.D.	
58) m&p-Xylene	20.945	106	5081	0.11 ppbv #	93
59) Bromoform	0.000		0	N.D.	
60) Styrene	21.676	104	900	N.D.	
61) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
62) o-Xylene	0.000		0	N.D. d	
64) 4-Ethyltoluene	23.673	120	338	N.D.	
65) 1,3,5-Trimethylbenzene	23.780	120	635	N.D.	
66) 1,2,4-Trimethylbenzene	24.529	120	1841	N.D.	
67) BenzylChloride(a-Chlor...	25.171	91	107	N.D.	
68) 1,3-Dichlorobenzene	25.046	146	118	N.D.	
69) 1,4-Dichlorobenzene	25.278	146	772	N.D.	
70) 1,2-Dichlorobenzene	25.849	146	234	N.D.	
71) 1,2,4-Trichlorobenzene	29.451	180	610	N.D.	
72) Hexachlorobutadiene	0.000		0	N.D.	

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

8/26/13

Data Path : C:\msdchem\1\MS03\2013\082613\
Data File : 08261308.D
Acq On : 26 Aug 2013 14:19
Operator : JJG
Sample : 131039-65821 x1 dp
Misc : IS/Surr: PS082213-03 + 500mL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 26 14:57:14 2013
Quant Method : C:\msdchem\1\METHODS\2013\072213.M
Quant Title : TO-15/TO-14
QLast Update : Tue Jul 23 12:50:49 2013
Response via : Initial Calibration



Method Path : C:\msdchem\1\METHODS\2013\
Method File : 072213.M
Title : TO-15/TO-14
Last Update : Tue Jul 23 12:38:41 2013
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	0.5	1	10	C:\msdchem\1\MS03\2013\072213\07221327.D
2	1.0	1	10	C:\msdchem\1\MS03\2013\072213\07221326.D
3	2.0	2	10	C:\msdchem\1\MS03\2013\072213\07221325.D
4	5.0	5	10	C:\msdchem\1\MS03\2013\072213\07221324.D
5	10	10	10	C:\msdchem\1\MS03\2013\072213\07221323.D
6	20	20	10	C:\msdchem\1\MS03\2013\072213\07221322.D
7	50	51	10	C:\msdchem\1\MS03\2013\072213\07221321.D

#	ID	Update Time	Quant Time	Acquisition Time
1	0.5	Jul 23 09:46 2013	Jul 23 09:05 2013	23 Jul 2013 6:08
2	1.0	Jul 23 09:46 2013	Jul 23 09:02 2013	23 Jul 2013 5:21
3	2.0	Jul 23 09:46 2013	Jul 23 08:56 2013	23 Jul 2013 4:33
4	5.0	Jul 23 09:45 2013	Jul 23 08:53 2013	23 Jul 2013 3:45
5	10	Jul 23 09:45 2013	Jul 23 08:51 2013	23 Jul 2013 2:57
6	20	Jul 23 09:45 2013	Jul 23 08:48 2013	23 Jul 2013 2:09
7	50	Jul 23 09:44 2013	Jul 23 08:45 2013	23 Jul 2013 1:21

072213.M Tue Jul 23 12:40:08 2013

 7/24/13

Response Factor Report MS03 Enhanced

Method Path : C:\msdchem\1\METHODS\2013\
Method File : 072213.M
Title : TO-15/TO-14
Last Update : Tue Jul 23 12:50:49 2013
Response Via : Initial Calibration

Calibration Files
0.5 =07221327.D 1.0 =07221326.D 2.0 =07221325.D 5.0 =07221324.D 10 =07221323.D 20 =07221322.D
50 =07221321.D

		Compound	0.5	1.0	2.0	5.0	10	20	50	Avg	%RSD
1)	I	Bromochloromethane	ISTD								
2)		Chlorodifluoro...	2.952	2.719	2.720	2.599	2.471	2.310	2.156	2.561	10.57
3)		Propene	0.814	0.743	0.820	0.802	0.755	0.763	0.727	0.775	4.74
4)		Dichlorodifluo...	4.148	3.728	3.871	3.688	3.495	3.251	3.053	3.605	10.31
5)		Chloromethane	0.674	0.529	0.574	0.494	0.458	0.415	0.334	0.497	22.24
6)		Dichlorotetraf...	2.427	2.214	2.351	2.209	2.106	1.936	1.751	2.142	10.98
7)		VinylChloride	1.683	1.535	1.640	1.564	1.507	1.399	1.332	1.523	8.19
8)		Methanol		1.022	0.934	0.765	0.706	0.628	0.597	0.775	21.89
9)		1,3-Butadiene	1.114	1.036	1.097	1.063	1.045	0.935	0.813	1.015	10.44
10)		Bromomethane	1.291	1.082	1.098	1.045	0.973	0.880	0.756	1.018	16.80
11)		Chloroethane	0.227	0.230	0.232	0.229	0.222	0.210	0.209	0.223	4.38
12)		Dichlorofluoro...	3.326	3.078	3.179	2.973	2.867	2.682	2.505	2.944	9.68
13)		Ethanol	0.733	0.689	0.652	0.772	0.690	0.612	0.543	0.670	11.40
14)		VinylBromide	1.079	1.057	1.127	1.110	1.080	1.015	0.965	1.062	5.28
15)		Acetone	1.060	0.846	0.781	0.699	0.679	0.640	0.608	0.759	20.53
16)		Trichlorofluor...	2.286	2.161	2.184	2.085	2.036	1.886	1.737	2.054	9.16
17)		2-Propanol(IPA)	3.119	2.473	2.598	2.550	2.369	2.106	1.869	2.440	16.23
18)		Acrylonitrile	1.219	1.170	1.268	1.135	1.125	1.039	0.868	1.118	11.81
19)	M,T	1,1-Dichloroet...	1.345	1.306	1.308	1.264	1.165	1.021	0.947	1.194	13.02
20)	M,T	MethyleneChlor...	1.534	1.330	1.307	1.223	1.173	1.061	0.987	1.231	14.82
21)		AllylChloride	1.657	1.353	1.313	1.281	1.157	1.017	1.011	1.256	17.84
22)		CarbonDisulfide	5.264	4.508	4.405	4.060	3.861	3.478	3.439	4.145	15.52
23)		Trichlorotrifl...	1.998	1.892	1.886	1.743	1.645	1.491	1.242	1.699	15.54
24)		trans-1,2-Dich...	1.471	1.451	1.461	1.391	1.320	1.241	1.135	1.353	9.43
25)		1,1-Dichloroet...	3.654	3.319	3.417	3.155	2.942	2.692	2.400	3.083	14.13
26)		MethylTertButy...	3.919	3.680	3.710	3.558	3.256	2.857	2.405	3.341	16.17
27)		VinylAcetate	5.168	4.915	5.159	4.848	4.602	4.189	3.580	4.637	12.43
28)		2-Butanone(MEK)	0.710	0.699	0.735	0.741	0.714	0.678	0.631	0.701	5.34

7/24/13

Method Path : C:\msdchem\1\METHODS\2013\
Method File : 072213.M
Title : TO-15/TO-14

29)		cis-1,2-Dichlo...	1.634	1.584	1.572	1.509	1.454	1.363	1.289	1.486	8.44
30)		Hexane	0.370	0.338	0.332	0.315	0.303	0.261	0.240	0.309	14.59
31)		Chloroform	3.448	3.182	3.244	3.085	3.007	2.759	2.509	3.034	10.36
32)		EthylAcetate	4.276	4.147	4.376	4.275	3.968	3.679	3.189	3.987	10.62
33)		Tetrahydrofuran	0.825	0.736	0.758	0.723	0.690	0.651	0.587	0.710	10.81
34)		1,2-Dichloroet...	2.326	2.253	2.430	2.291	2.177	2.077	1.963	2.217	7.13
35)		1,1,1-Trichlor...	3.599	3.382	3.447	3.239	3.063	2.801	2.576	3.158	11.63
36)	I	1,4-Difluorobenzene	----------	ISTD	----------						
37)	T,M	Benzene	1.065	0.986	0.941	0.901	0.833	0.755	0.647	0.875	16.28
38)		CarbonTetrachl...	0.677	0.646	0.646	0.609	0.568	0.523	0.453	0.589	13.49
39)		Cyclohexane	0.161	0.151	0.147	0.135	0.127	0.116	0.103	0.134	15.23
40)		1,2-Dichloropr...	0.469	0.427	0.398	0.388	0.361	0.335	0.300	0.383	14.81
41)		Bromodichlorom...	0.472	0.453	0.457	0.436	0.413	0.380	0.343	0.422	11.00
42)		1,4-Dioxane	0.235	0.225	0.221	0.211	0.200	0.190	0.176	0.208	9.97
43)	M,T	Trichloroethen...	0.410	0.384	0.375	0.367	0.344	0.331	0.289	0.357	11.09
44)		2,2,4-Trimethy...	2.025	1.899	1.819	1.732	1.628	1.485	1.217	1.686	16.14
45)		Heptane	0.331	0.309	0.298	0.286	0.275	0.258	0.226	0.283	12.22
46)		cis-1,3-Dichlo...	0.538	0.531	0.513	0.508	0.490	0.455	0.417	0.493	8.81
47)		4-Methyl-2-pen...	0.365	0.363	0.369	0.359	0.349	0.321	0.284	0.344	8.99
48)		trans-1,3-Dich...	0.538	0.527	0.521	0.493	0.471	0.463	0.430	0.492	7.97
49)		1,1,2-Trichlor...	0.434	0.410	0.399	0.373	0.354	0.328	0.293	0.370	13.26
50)	M,T	Toluene	1.219	1.151	1.141	1.056	0.996	0.904	0.802	1.038	14.28
51)		2-Hexanone(MBK)	0.439	0.458	0.470	0.446	0.429	0.400	0.357	0.428	9.03
52)		Dibromochlorom...	0.667	0.662	0.659	0.642	0.606	0.575	0.489	0.614	10.55
53)		1,2-Dibromoethane	0.619	0.623	0.619	0.586	0.558	0.519	0.461	0.569	10.77
54)	M,T	Tetrachloroeth...	0.554	0.525	0.513	0.482	0.456	0.421	0.370	0.474	13.45
55)	I	Chlorobenzene-d5	----------	ISTD	----------						
56)	M,T	Chlorobenzene	0.296	0.300	0.279	0.262	0.261	0.246	0.215	0.265	11.14
57)	M,T	Ethylbenzene	1.632	1.611	1.568	1.425	1.409	1.223	1.054	1.418	15.13
58)	M,T	m&p-Xylene	0.633	0.598	0.574	0.540	0.512	0.474	0.406	0.534	14.48
59)		Bromoform	0.749	0.738	0.739	0.693	0.687	0.618	0.527	0.679	11.88
60)		Styrene	0.925	0.921	0.903	0.869	0.866	0.789	0.720	0.856	8.86
61)		1,1,2,2-Tetrac...	1.044	1.040	0.970	0.903	0.876	0.782	0.627	0.892	16.75
62)	M,T	o-Xylene	1.340	1.255	1.190	1.103	1.066	0.948	0.817	1.103	16.29
63)	SR	4-Bromofluorob...	0.577	0.582	0.569	0.554	0.582	0.571	0.588	0.575	1.94
64)		4-Ethyltoluene	0.498	0.492	0.467	0.443	0.444	0.398	0.337	0.434	11.81

Method Path : C:\msdchem\1\METHODS\2013\
Method File : 072213.M
Title : TO-15/TO-14

65)	1,3,5-Trimethy...	0.684	0.705	0.681	0.623	0.612	0.544	0.471	0.617	13.72
66)	1,2,4-Trimethy...	0.658	0.673	0.669	0.623	0.606	0.566	0.464	0.609	12.23
67)	BenzylChloride...	0.807	0.959	0.986	1.063	1.081	1.090	0.999	0.998	9.82
68)	1,3-Dichlorobe...	0.934	0.964	0.956	0.916	0.912	0.825	0.715	0.889	10.05
69)	1,4-Dichlorobe...	1.028	1.004	0.965	0.900	0.871	0.796	0.698	0.895	13.19
70)	1,2-Dichlorobe...	1.100	1.065	1.010	0.920	0.894	0.828	0.706	0.932	14.85
71)	1,2,4-Trichlor...	0.899	0.951	0.942	0.935	0.909	0.843	0.691	0.881	10.39
72)	Hexachlorobuta...	0.762	0.771	0.750	0.699	0.696	0.622	0.500	0.686	14.06

(#) = Out of Range