Atmospheric Analysis & Consulting, Inc.

CLIENT : Weston Solutions, Inc.
PROJECT NAME : Sweet Kleen/NY
PROJECT NUMBER : 2-110811-085043-0001
AAC PROJECT NO. : 110957
REPORT DATE : 11/17/2011

312981

On November 10, 2011, 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)
SKL-01-110811-001	110957-53715	671.8
SKL-02-110811-001	110957-53716	715.7
TB-110811-AA	110957-53717	6.7
TB-110811-SG	110957-53718	6.8

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

The electronic submission of the data was provided on 11/18/2011. No problems were encountered during 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 145 pages.

ACCREDITED IN ACCORDANCE WITH nelac Certificate#E87837

RECEIVED DEC - 1 2011 By

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

Atmospheric Analysis & Consulting, Inc.

SAMPLE RECEIPT / LOG-IN REPORT

AAC Project **110957** **Received By:** **W. Horn**

Sample Receipt Date	Project Desc	Clients ID	Matrix	Sampling Date/Time	Sampled By	Sample #	Analysis Requested
11/10/2011 0935	Weston Solutions Sweet Kleen Industries	SKL - 01 - 110811 - 001	Summa Canister	11/8/2011 1525-1515	Client	53715	TO-15 SIM
11/10/2011 0935	Weston Solutions Sweet Kleen Industries	SKL - 02 - 110811 - 001	Summa Canister	11/8/2011 1525-1515	Client	53716	TO-15 SIM
11/10/2011 0935	Weston Solutions Sweet Kleen Industries	TB - 110811 - AA	Summa Canister	11/8/2011	Client	53717	TO-15 SIM
11/10/2011 0935	Weston Solutions Sweet Kleen Industries	TB - 110811 - SG	Summa Canister	11/8/2011	Client	53718	TO-15 SIM

TURN AROUND TIME: Normal (10days)

Lab Due Date: 11/17/2011

Total Samples: 4

REMARKS:
Client returned 4 x Summa Canisters + 4 x Flows. " Samples to be analyzed for TCL-VOCs via EPA Method TO-15. Two Trip Blanks are submitted with this shipment. Please email all results to Sean Hettinger (Sean.Hettinger@westonsolutions.com) and Smita Sumbaly (S.Sumbaly@westonsolutions.com). Three Week TAT for written results".

Atmospheric Analysis & Consulting, Inc.

CANISTER PRESSURE LOG

Client: Weston Solutions Project No.: 110957

Date: 11/10/2011

Canister #	Sample #	Initial Pressure	Final Pressure
384	53715	671.8	1021.0
401	53716	715.7	1014.3
445	53717	6.7	1016.8
428	53718	6.8	1019.6

1

 AAC # 110957

RFP # 181 / PO# 0077514

Edison, NJ

EPA Contract Number: EP-W-06-072

CHAIN OF CUSTODY RECORD

Sweet Kleen/NY

Lab: Atmospheric Analysis and Consulting, Inc.

Lab Contact: Dr. Sucha Parmar

No: 2-110811-085043-0001

DateShipped: 11/9/2011

Lab Address: 1534 Eastman Avenue, Suite A

Lab Phone: 805-650-1642

Lab #	Sample #	Location	Analyses	Matrix	Collected	Numb Cont	Container	Preservative	MS/MSD
53715	SKL-01-110811-001	Pipe	TO-15	Air	11/8/2011	1	Summa Canister	None	N
53716	SKL-02-110811-001	Ambient	TO-15	Air	11/8/2011	1	Summa Canister	None	N
53717	TB-110811-AA	TB-110811-AA	TO-15	Air	11/8/2011	1	Summa Canister	None	N
53718	TB-110811-SG	TB-110811-SG	TO-15	Air	11/8/2011	1	Summa Canister	None	N

Special Instructions: Samples to be analyzed for TCL-VOCs via EPA Method no. TO-15. Two Trip Blanks are submitted with this shipment. Please email all results to Sean Hettinger (Sean.Hettinger@westonsolutions.com) and Smita Sumbaly (S.Sumbaly@westonsolutions.com) Three Week TAT for written results.

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All Samples All Analyses	[signature]	11/9/11	Fedex	11/9/11	1730						
			[signature]	11/10/11	0935						

Page 4

Laboratory Name: Atmospheric Analysis + Consulting

Laboratory Code: AAC

Case or DAS No.: RFP #181 PO# 0077514

SDG No./First Sample in SDG: SKL-01-110811-001
(Lowest EPA Sample Number in first shipment received under SDG.)

Sample Receipt Date: 11/10/2011
MM/DD/YYYY

Last Sample in SDG: TB-110811-SG
(Highest EPA Sample Number in last shipment of samples received under SDG.)

Sample Receipt Date: 11/10/2011
MM/DD/YYYY

EPA Sample Numbers in the SDG (List in alphanumeric order):

1. SKL-01-110811-001
2. SKL-02-110811-001
3. TB-110811-AA
4. TB-110811-SG
5.
6.
7.
8.
9.
10.
11.
12.
13.
14.
15.
16.
17.
18.
19.
20.

Note: There are a maximum of 20 field samples in an SDG.

Comments:

Signature

Lab Director
Title

Marcus Huppe
Print Name

10/10/2011
Date

Please make copies of this form and complete one form per SDG. FAX the completed form within 3 days of receipt of the last sample received for each SDG to:

Adly Michael, RSCC
USEPA Region 2
DESA-HWSB-HWSS, MS 215
2890 Woodbridge Ave.
Edison, NJ 08837
Fax: (732) 321-6622

Precautionary Measures Against Hidden Hazards in Laboratory Samples

Notice to Laboratory Personnel

Background

Under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) of 1980, as amended, Section 311 of the Clean Water Act (CWA), as amended, by the Oil Pollution Act of 1990 (OPA), Subtitle I of the Resource Conversation and Recovery Act (RCRA), and pursuant to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and Presidential Decision Document (PDD) #39, the Environmental Protection Agency (EPA) has been delegated the responsibility to undertake response actions with respect to, as a general matter, the release or threat of release of oil, petroleum products, hazardous substances, or pollutant and contaminants, that pose an actual or potential threat to human health or welfare, or to the environment. EPA is responsible for conducting evaluations and cleanups of uncontrolled hazardous substance disposal sites and placing those that are considered to pose a significant threat to the public health or the environment on the National Priorities List (NPL).

EPA's successful implementation of these emergency response action responsibilities requires that technical support capabilities be provided in the form of a contracted Removal Support Team (RST) for EPA. The WESTON RST Contract EP-W-06-072, provides this support to EPA Region II.

Hazard Communication

The samples which accompany this notice were shipped to your laboratory for analysis in accordance with applicable D.O.T. or IATA Regulations and were collected by the WESTON RST and tentatively designated by the field response team, as either environmental or hazardous material samples.

In general, *Environmental Samples* are collected from streams, farm ponds, small lakes, wells, and off-site soil locations that are not reasonable expected to be contaminated with hazardous materials. Samples of on-site soils or water, and materials collected from drums, bulk storage tanks, obviously contaminated ponds, impoundments, lagoons, pools, and leachates from hazardous waste sites are considered *Hazardous Samples*. Samples which are obtained from a known radioactive material contamination site or which demonstrate beta or gamma activity greater than three times average background as scanned with a radiation survey meter are considered *Radioactive Samples*.

The samples which accompany this notice were tentatively classified by the field response team as:

X Environmental _____ Hazardous _____ Comb. (Enviro. & Hazard.) _____ Radioactive

The field team which collected the samples, used the following Level(s) of personal protection as designated by EPA and OSHA conventions to provide protection against possible radiological or chemical exposure:

_____ Level A _____ Level B _____ Level C X Level D

The information is intended for use as a guide for the safe handling of these laboratory samples in accordance with EPA and OSHA regulations. The Sample classification(s) and Levels of personal protection used by the WESTON RST are not represented to be, nor are they adequate or applicable in all situations, nor are they intended to serve as substitutes for professional/personal judgment.

Laboratory Name Atmospheric Analysis and Consulting, Inc. *RFP No.* 181
Prepared by: [illegible] *Date* 11/9/14

WESTON Office: Region II RST, Edison, NJ; Phone: 732-585-4400 Fax: 732-225-7037

Atmospheric Analysis and Consulting Inc.
Canister Sampling Field Data Sheet

GENERAL INFORMATION

Project Name and/or ID No.: Sweet Kleen Industries

Site Address and/or ID No: 760 Kensington Ave, Buffalo, NY

Sample Name and/or ID No.: SKL-01-110811-001

AAC Batch ID: 110957 AAC Sample ID: 53715

SAMPLING INFORMATION

Start Date/Time: 11/8/11 3:35pm Stop Date/Time: 11/9/11 15:15

Start Temp/Pressure*: 69.8°F, pressure 30.11 in Stop Temp/Pressure*: 66.5°F, pressure 29.78 in

Initial Can Pressure**: 30" Hg Final Can Pressure**: 3" Hg

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

Comments:

Sean Hettinger
Sampler Name (Print)

11/9/11
Sampler Signature/Date

LABORATORY INFORMATION

Canister Size: 6 – Liter Sampling Period: 24-Hour

Canister Serial No.: 000384 Flow Controller Serial No: 000642

Initial Pressure: 5.5 mmHgA Certified Flow Rate: 3.8 ml/min

Return Pressure: 671.8 mmHgA Certified By/Date: WESLEY HORN 11/1/11

Final Pressure: 1021.0 mmHgA Flow Rate upon Return: 3.9 ml/min

Date Shipped From Lab: 11/1/11 Shipped By: Wesley Horn

Date Returned to Lab: 11/10/11 Received By: WESLEY HORN

Flow Controller Certification File ID: M501/102611/06

Canister Certification File ID: M501/102511/23

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

11/01/11
Chemist Signature/Date

Lab Manager Signature/Date

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

Atmospheric Analysis and Consulting Inc.
Canister Sampling Field Data Sheet

2

GENERAL INFORMATION

Project Name and/or ID No.: Sweet Kleen Industries

Site Address and/or ID No: 760 Kensington Ave, Buffalo, NY

Sample Name and/or ID No.: SKL-02-110811-001

AAC Batch ID: 110957 AAC Sample ID: 53716

SAMPLING INFORMATION

Start Date/Time: 11/8/11 15:25 Stop Date/Time: 11/9/11 15:15

Start Temp/Pressure*: 69.8°F, pressure 30.11 in Stop Temp/Pressure*: 66.5°F, pressure 29.78 in

Initial Can Pressure**: 30" Hg Final Can Pressure**: 2" Hg

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

Comments:

Sean Hettinger
Sampler Name (Print)

11/9/11
Sampler Signature/Date

LABORATORY INFORMATION

Canister Size: 6 – Liter Sampling Period: 24-Hour

Canister Serial No.: 000401 Flow Controller Serial No: 000618

Initial Pressure: 5.4 mmHgA Certified Flow Rate: 3.9 ml/min

Return Pressure: 715.7 mmHgA Certified By/Date: WESLEY HORN 11/1/11

Final Pressure: 1014.3 mmHgA Flow Rate upon Return: 3.9 ml/min

Date Shipped From Lab: 11/1/11 Shipped By: Wesley Horn

Date Returned to Lab: 11/10/11 Received By: WESLEY HORN

Flow Controller Certification File ID: MS01/10261106

Canister Certification File ID: MS01/10251120

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

11/01/11
Chemist Signature/Date

Lab Manager Signature/Date

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

Atmospheric Analysis and Consulting Inc.
Canister Sampling Field Data Sheet

GENERAL INFORMATION

Project Name and/or ID No.: Sweet Keen Industries

Site Address and/or ID No: 760 Kensington Ave, Buffalo, NY

Sample Name and/or ID No.: TB-110811-AA

AAC Batch ID: 110957 AAC Sample ID: 53717

SAMPLING INFORMATION

Start Date/Time: _____ Stop Date/Time: _____

Start Temp/Pressure*: _____ Stop Temp/Pressure*: _____

Initial Can Pressure**: _____ Final Can Pressure**: _____

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

Comments: Trip Blank

Sean McHinger — 11/8/11

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

LABORATORY INFORMATION

Canister Size: 6 – Liter Sampling Period: 24-Hour

Canister Serial No.: 000445 Flow Controller Serial No: 000650

Initial Pressure: 6.7 mmHg A Certified Flow Rate: 3.9 ml/min

Return Pressure: 6.7 mmHg A Certified By/Date: WESLEY HORN 11/1/11

Final Pressure: 1016.8 mmHg A Flow Rate upon Return: 3.9 ml/min

Date Shipped From Lab: 11/1/11 Shipped By: Wesley Horn

Date Returned to Lab: 11/10/11 Received By: WESLEY HORN

Flow Controller Certification File ID: MS01/10261106

Canister Certification File ID: MS01/10251121

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

11/01/11

Chemist Signature/Date ***Lab Manager Signature/Date***

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

Atmospheric Analysis and Consulting Inc.
Canister Sampling Field Data Sheet

GENERAL INFORMATION

Project Name and/or ID No.: Sweet Kleen Industries

Site Address and/or ID No: 760 Kensington Ave, Buffalo, NY

Sample Name and/or ID No.: TB-110811-SG

AAC Batch ID: 110957 AAC Sample ID: 53718

SAMPLING INFORMATION

Start Date/Time: _____ Stop Date/Time: _____

Start Temp/Pressure*: _____ Stop Temp/Pressure*: _____

Initial Can Pressure**: _____ Final Can Pressure**: _____

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

Comments: Trip Blank

Sean Hettinger — *Sampler Name (Print)*

11/9/11 — *Sampler Signature/Date*

LABORATORY INFORMATION

Canister Size: 6 – Liter Sampling Period: 24-Hour

Canister Serial No.: 000428 Flow Controller Serial No: 000638

Initial Pressure: 6.8 mm HgA Certified Flow Rate: 3.8 ml/min

Return Pressure: 6.8 mm HgA Certified By/Date: WESLEY HORN 11/1/11

Final Pressure: 1019.6 mm HgA Flow Rate upon Return: 3.6 ml/min

Date Shipped From Lab: 11/1/11 Shipped By: Wesley Horn

Date Returned to Lab: 11/10/11 Received By: WESLEY HORN

Flow Controller Certification File ID: M501/10261106

Canister Certification File ID: M501/10251122

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

11/01/11 — *Chemist Signature/Date*

Lab Manager Signature/Date

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

SIM REPORTS

Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report

CLIENT	**Weston Solutions, Inc.**	**DATE SHIPPED**	**11/09/2011**
PROJECT NO	**110957**	**DATE RECEIVED**	**11/10/2011**
MATRIX	**AIR**	**DATE REPORTED**	**11/17/2011**
UNITS	**PPB (v/v)**	**COC NUMBER**	**2-110811-085043-0001**

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15 SIM

Client ID	SKL-01-110811-001			Sample Reporting Limit (SRL) (MRLxDF's)	SKL-02-110811-001			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	110957-53715				110957-53716				
Sampling Date/Time	11/08/2011 03:25 PM				11/08/2011 03:25 PM				
Analysis Date/Time	11/15/2011 11:49 AM				11/15/2011 05:02 PM				
QC Batch	MS01_111511				MS01_111511				
Can Dilution Factor	1.52				1.42				
	Result	**Qualifier**	**Analysis DF**		**Result**	**Qualifier**	**Analysis DF**		
Chlorodifluoromethane	0.283		1.0	0.053	0.372		1.0	0.050	0.035
Dichlorodifluoromethane	0.544		1.0	0.053	0.549		1.0	0.050	0.035
Chloromethane	0.409		1.0	0.053	0.517		1.0	0.050	0.035
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	<SRL	U	1.0	0.053	<SRL	U	1.0	0.050	0.035
Vinyl Chloride	6.10		100	5.32	<SRL	U	1.0	0.050	0.035
1,3-Butadiene	0.489		1.0	0.053	0.097		1.0	0.050	0.035
Bromomethane	<SRL	U	1.0	0.053	<SRL	U	1.0	0.050	0.035
Chloroethane	<SRL	U	1.0	0.053	<SRL	U	1.0	0.050	0.035
Dichlorofluoromethane	<SRL	U	1.0	0.053	<SRL	U	1.0	0.050	0.035
Vinyl Bromide	<SRL	U	1.0	0.053	<SRL	U	1.0	0.050	0.035
Trichlorofluoromethane	0.302		1.0	0.053	0.276		1.0	0.050	0.035
1,1-Dichloroethylene	0.698		1.0	0.053	<SRL	U	1.0	0.050	0.035
Allyl Chloride	<SRL	U	1.0	0.053	<SRL	U	1.0	0.050	0.035
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.079		1.0	0.053	0.082		1.0	0.050	0.035
t-1,2-Dichloroethylene	30.4		100	5.32	<SRL	U	1.0	0.050	0.035
1,1-Dichloroethane	0.099		1.0	0.053	<SRL	U	1.0	0.050	0.035
MTBE	<SRL	U	1.0	0.053	<SRL	U	1.0	0.050	0.035
cis-1,2-Dichloroethene	1623		2000	106	0.107		1.0	0.050	0.035
Chloroform	0.192		1.0	0.053	<SRL	U	1.0	0.050	0.035
1,2-Dichloroethane	<SRL	U	1.0	0.053	<SRL	U	1.0	0.050	0.035
1,1,1-Trichloroethane	<SRL	U	1.0	0.053	<SRL	U	1.0	0.050	0.035

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Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report

CLIENT	Weston Solutions, Inc.	DATE SHIPPED	11/09/2011
PROJECT NO	110957	DATE RECEIVED	11/10/2011
MATRIX	AIR	DATE REPORTED	11/17/2011
UNITS	PPB (v/v)	COC NUMBER	2-110811-085043-0001

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15 SIM

Client ID	SKL-01-110811-001			Sample Reporting Limit (SRL) (MRLxDF's)	SKL-02-110811-001			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	110957-53715				110957-53716				
Sampling Date/Time	11/08/2011 03:25 PM				11/08/2011 03:25 PM				
Analysis Date/Time	11/15/2011 11:49 AM				11/15/2011 05:02 PM				
QC Batch	MS01_111511				MS01_111511				
Can Dilution Factor	1.52				1.42				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Benzene	1.248		1.0	0.053	0.514		1.0	0.050	0.035
Carbon Tetrachloride	0.086		1.0	0.053	0.093		1.0	0.050	0.035
1,2-Dichloropropane	0.066		1.0	0.053	<SRL	U	1.0	0.050	0.035
Bromodichloromethane	<SRL	U	1.0	0.053	<SRL	U	1.0	0.050	0.035
Trichloroethene	157		2000	106	0.565		1.0	0.050	0.035
cis-1,3-Dichloropropene	<SRL	U	1.0	0.053	<SRL	U	1.0	0.050	0.035
t-1,3-Dichloropropene	<SRL	U	1.0	0.053	<SRL	U	1.0	0.050	0.035
1,1,2-Trichloroethane	<SRL	U	1.0	0.053	<SRL	U	1.0	0.050	0.035
Toluene	0.899		1.0	0.152	1.30		1.0	0.142	0.100
Dibromochloromethane	<SRL	U	1.0	0.053	<SRL	U	1.0	0.050	0.035
1,2-Dibromoethane	<SRL	U	1.0	0.053	<SRL	U	1.0	0.050	0.035
Tetrachloroethylene	386		2000	106	0.437		1.0	0.050	0.035
Chlorobenzene	<SRL	U	1.0	0.053	<SRL	U	1.0	0.050	0.035
Ethylbenzene	0.224		1.0	0.053	0.343		1.0	0.050	0.035
m- & p-Xylenes	0.636		1.0	0.106	1.05		5.0	0.496	0.070
Bromoform	<SRL	U	1.0	0.053	<SRL	U	1.0	0.050	0.035
Styrene	0.420		1.0	0.053	0.076		1.0	0.050	0.035
1,1,2,2-Tetrachloroethane	<SRL	U	1.0	0.053	<SRL	U	1.0	0.050	0.035
o-Xylene	0.295		1.0	0.053	0.366		1.0	0.050	0.035
4-Ethyltoluene	0.129		1.0	0.053	0.078		1.0	0.050	0.035
1,3,5-Trimethylbenzene	0.118		1.0	0.053	0.083		1.0	0.050	0.035
1,2,4-Trimethylbenzene	0.478		1.0	0.053	0.271		1.0	0.050	0.035
Benzyl Chloride	<SRL	U	1.0	0.053	<SRL	U	1.0	0.050	0.035
1,3-Dichlorobenzene	<SRL	U	1.0	0.053	<SRL	U	1.0	0.050	0.035
1,4-Dichlorobenzene	<SRL	U	1.0	0.053	<SRL	U	1.0	0.050	0.035
1,2-Dichlorobenzene	<SRL	U	1.0	0.053	<SRL	U	1.0	0.050	0.035
Hexachlorobutadiene	<SRL	U	1.0	0.053	<SRL	U	1.0	0.050	0.035
BFB-Surrogate Std. % Recovery	101%				102%				70-130%

U - Compound was analyzed for, but was not detected at or above the SRL.

Marcus Hueppe
Laboratory Director

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

Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report

CLIENT	Weston Solutions, Inc.	DATE SHIPPED	11/09/2011
PROJECT NO	110957	DATE RECEIVED	11/10/2011
MATRIX	AIR	DATE REPORTED	11/17/2011
UNITS	ug/m3	COC NUMBER	2-110811-085043-0001

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15 SIM

Client ID	SKL-01-110811-001			Sample Reporting Limit (SRL) (MRLxDF's)	SKL-02-110811-001			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	110957-53715				110957-53716				
Sampling Date/Time	11/08/2011 03:25 PM				11/08/2011 03:25 PM				
Analysis Date/Time	11/15/2011 11:49 AM				11/15/2011 05:02 PM				
QC Batch	MS01 111511				MS01 111511				
Can Dilution Factor	1.52				1.42				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Chlorodifluoromethane	1.00		1.0	0.19	1.32		1.0	0.18	0.12
Dichlorodifluoromethane	2.29		1.0	0.22	2.31		1.0	0.21	0.15
Chloromethane	0.84		1.0	0.11	1.07		1.0	0.10	0.07
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	<SRL	U	1.0	0.37	<SRL	U	1.0	0.35	0.24
Vinyl Chloride	15.6		100	13.6	<SRL	U	1.0	0.13	0.09
1,3-Butadiene	1.08		1.0	0.12	0.22		1.0	0.11	0.08
Bromomethane	<SRL	U	1.0	0.21	<SRL	U	1.0	0.19	0.14
Chloroethane	<SRL	U	1.0	0.14	<SRL	U	1.0	0.13	0.09
Dichlorofluoromethane	<SRL	U	1.0	0.22	<SRL	U	1.0	0.21	0.15
Vinyl Bromide	<SRL	U	1.0	0.23	<SRL	U	1.0	0.22	0.15
Trichlorofluoromethane	1.57		1.0	0.28	1.44		1.0	0.26	0.18
1,1-Dichloroethylene	2.74		1.0	0.21	<SRL	U	1.0	0.20	0.14
Allyl Chloride	<SRL	U	1.0	0.17	<SRL	U	1.0	0.16	0.11
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.61		1.0	0.41	0.63		1.0	0.38	0.27
t-1,2-Dichloroethylene	121		100	21.1	<SRL	U	1.0	0.20	0.14
1,1-Dichloroethane	0.40		1.0	0.21	<SRL	U	1.0	0.20	0.14
MTBE	<SRL	U	1.0	0.19	<SRL	U	1.0	0.18	0.13
cis-1,2-Dichloroethene	6373		2000	418	0.42		1.0	0.20	0.14
Chloroform	0.94		1.0	0.26	<SRL	U	1.0	0.24	0.17
1,2-Dichloroethane	<SRL	U	1.0	0.21	<SRL	U	1.0	0.20	0.14
1,1,1-Trichloroethane	<SRL	U	1.0	0.29	<SRL	U	1.0	0.27	0.19

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Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report

CLIENT	**Weston Solutions, Inc.**	**DATE SHIPPED**	**11/09/2011**
PROJECT NO	**110957**	**DATE RECEIVED**	**11/10/2011**
MATRIX	**AIR**	**DATE REPORTED**	**11/17/2011**
UNITS	**ug/m3**	**COC NUMBER**	**2-110811-085043-0001**

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15 SIM

Client ID	SKL-01-110811-001			Sample Reporting Limit (SRL) (MRLxDF's)	SKL-02-110811-001			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	110957-53715				110957-53716				
Sampling Date/Time	11/08/2011 03:25 PM				11/08/2011 03:25 PM				
Analysis Date/Time	11/15/2011 11:49 AM				11/15/2011 05:02 PM				
QC Batch	MS01_111511				MS01_111511				
Can Dilution Factor	1.52				1.42				
	Result	**Qualifier**	**Analysis DF**		**Result**	**Qualifier**	**Analysis DF**		
Benzene	3.98		1.0	0.17	1.64		1.0	0.16	0.11
Carbon Tetrachloride	0.55		1.0	0.34	0.58		1.0	0.31	0.22
1,2-Dichloropropane	0.31		1.0	0.25	<SRL	U	1.0	0.23	0.16
Bromodichloromethane	<SRL	U	1.0	0.36	<SRL	U	1.0	0.33	0.23
Trichloroethene	839		2000	570	3.03		1.0	0.27	0.19
cis-1,3-Dichloropropene	<SRL	U	1.0	0.24	<SRL	U	1.0	0.22	0.16
t-1,3-Dichloropropene	<SRL	U	1.0	0.24	<SRL	U	1.0	0.22	0.16
1,1,2-Trichloroethane	<SRL	U	1.0	0.29	<SRL	U	1.0	0.27	0.19
Toluene	3.38		1.0	0.57	4.90		1.0	0.53	0.38
Dibromochloromethane	<SRL	U	1.0	0.45	<SRL	U	1.0	0.42	0.30
1,2-Dibromoethane	<SRL	U	1.0	0.40	<SRL	U	1.0	0.38	0.26
Tetrachloroethylene	2617		2000	722	2.97		1.0	0.34	0.24
Chlorobenzene	<SRL	U	1.0	0.25	<SRL	U	1.0	0.23	0.16
Ethylbenzene	0.97		1.0	0.23	1.49		1.0	0.22	0.15
m- & p-Xylenes	2.76		1.0	0.46	4.54		5.0	2.15	0.30
Bromoform	<SRL	U	1.0	0.55	<SRL	U	1.0	0.51	0.36
Styrene	1.79		1.0	0.23	0.33		1.0	0.21	0.15
1,1,2,2-Tetrachloroethane	<SRL	U	1.0	0.37	<SRL	U	1.0	0.34	0.24
o-Xylene	1.28		1.0	0.23	1.59		1.0	0.22	0.15
4-Ethyltoluene	0.63		1.0	0.26	0.38		1.0	0.24	0.17
1,3,5-Trimethylbenzene	0.58		1.0	0.26	0.41		1.0	0.24	0.17
1,2,4-Trimethylbenzene	2.34		1.0	0.26	1.33		1.0	0.24	0.17
Benzyl Chloride	<SRL	U	1.0	0.28	<SRL	U	1.0	0.26	0.18
1,3-Dichlorobenzene	<SRL	U	1.0	0.32	<SRL	U	1.0	0.30	0.21
1,4-Dichlorobenzene	<SRL	U	1.0	0.32	<SRL	U	1.0	0.30	0.21
1,2-Dichlorobenzene	<SRL	U	1.0	0.32	<SRL	U	1.0	0.30	0.21
Hexachlorobutadiene	<SRL	U	1.0	0.57	<SRL	U	1.0	0.53	0.37
BFB-Surrogate Std. % Recovery	101%				102%				70-130%

U - Compound was analyzed for, but was not detected at or above the SRL.

Marcus Hueppe
Laboratory Director

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Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report

CLIENT	Weston Solutions, Inc.	DATE SHIPPED	11/09/2011
PROJECT NO	110957	DATE RECEIVED	11/10/2011
MATRIX	AIR	DATE REPORTED	11/17/2011
UNITS	PPB (v/v)	COC NUMBER	2-110811-085043-0001

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15 SIM

Client ID	TB-110811-AA			Sample Reporting Limit (SRL) (MRLxDF's)	TB-110811-SG			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	110957-53717				110957-53718				
Sampling Date/Time	11/08/2011 12:00 AM				11/08/2011 12:00 AM				
Analysis Date/Time	11/15/2011 06:31 PM				11/15/2011 07:16 PM				
QC Batch	MS01_111511				MS01_111511				
Can Dilution Factor	1.00				1.00				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Chlorodifluoromethane	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
Dichlorodifluoromethane	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
Chloromethane	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
Vinyl Chloride	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
1,3-Butadiene	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
Bromomethane	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
Chloroethane	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
Dichlorofluoromethane	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
Vinyl Bromide	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
Trichlorofluoromethane	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
1,1-Dichloroethylene	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
Allyl Chloride	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
1,1,2-Trichloro-1,2,2-Trifluoroethane	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
t-1,2-Dichloroethylene	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
1,1-Dichloroethane	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
MTBE	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
cis-1,2-Dichloroethene	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
Chloroform	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
1,2-Dichloroethane	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
1,1,1-Trichloroethane	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035

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Laboratory Analysis Report

CLIENT	Weston Solutions, Inc.	DATE SHIPPED	11/09/2011
PROJECT NO	110957	DATE RECEIVED	11/10/2011
MATRIX	AIR	DATE REPORTED	11/17/2011
UNITS	PPB (v/v)	COC NUMBER	2-110811-085043-0001

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15 SIM

Client ID	TB-110811-AA			Sample Reporting Limit (SRL) (MRLxDF's)	TB-110811-SG			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	110957-53717				110957-53718				
Sampling Date/Time	11/08/2011 12:00 AM				11/08/2011 12:00 AM				
Analysis Date/Time	11/15/2011 06:31 PM				11/15/2011 07:16 PM				
QC Batch	MS01_111511				MS01_111511				
Can Dilution Factor	1.00				1.00				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Benzene	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
Carbon Tetrachloride	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
1,2-Dichloropropane	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
Bromodichloromethane	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
Trichloroethene	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
cis-1,3-Dichloropropene	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
t-1,3-Dichloropropene	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
1,1,2-Trichloroethane	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
Toluene	0.148		1.0	0.100	<SRL	U	1.0	0.100	0.100
Dibromochloromethane	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
1,2-Dibromoethane	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
Tetrachloroethylene	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
Chlorobenzene	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
Ethylbenzene	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
m- & p-Xylenes	<SRL	U	1.0	0.070	<SRL	U	1.0	0.070	0.070
Bromoform	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
Styrene	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
1,1,2,2-Tetrachloroethane	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
o-Xylene	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
4-Ethyltoluene	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
1,3,5-Trimethylbenzene	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
1,2,4-Trimethylbenzene	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
Benzyl Chloride	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
1,3-Dichlorobenzene	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
1,4-Dichlorobenzene	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
1,2-Dichlorobenzene	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
Hexachlorobutadiene	<SRL	U	1.0	0.035	<SRL	U	1.0	0.035	0.035
BFB-Surrogate Std. % Recovery	100%				101%				70-130%

U - Compound was analyzed for, but was not detected at or above the SRL.

Marcus Hueppe
Laboratory Director

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Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report

CLIENT	Weston Solutions, Inc.	DATE SHIPPED	11/09/2011
PROJECT NO	110957	DATE RECEIVED	11/10/2011
MATRIX	AIR	DATE REPORTED	11/17/2011
UNITS	ug/m3	COC NUMBER	2-110811-085043-0001

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15 SIM

Client ID	TB-110811-AA			Sample Reporting Limit (SRL) (MRLxDF's)	TB-110811-SG			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	110957-53717				110957-53718				
Sampling Date/Time	11/08/2011 12:00 AM				11/08/2011 12:00 AM				
Analysis Date/Time	11/15/2011 06:31 PM				11/15/2011 07:16 PM				
QC Batch	MS01_111511				MS01_111511				
Can Dilution Factor	1.00				1.00				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Chlorodifluoromethane	<SRL	U	1.0	0.12	<SRL	U	1.0	0.12	0.12
Dichlorodifluoromethane	<SRL	U	1.0	0.15	<SRL	U	1.0	0.15	0.15
Chloromethane	<SRL	U	1.0	0.07	<SRL	U	1.0	0.07	0.07
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	<SRL	U	1.0	0.25	<SRL	U	1.0	0.25	0.24
Vinyl Chloride	<SRL	U	1.0	0.09	<SRL	U	1.0	0.09	0.09
1,3-Butadiene	<SRL	U	1.0	0.08	<SRL	U	1.0	0.08	0.08
Bromomethane	<SRL	U	1.0	0.14	<SRL	U	1.0	0.14	0.14
Chloroethane	<SRL	U	1.0	0.09	<SRL	U	1.0	0.09	0.09
Dichlorofluoromethane	<SRL	U	1.0	0.15	<SRL	U	1.0	0.15	0.15
Vinyl Bromide	<SRL	U	1.0	0.15	<SRL	U	1.0	0.15	0.15
Trichlorofluoromethane	<SRL	U	1.0	0.18	<SRL	U	1.0	0.18	0.18
1,1-Dichloroethylene	<SRL	U	1.0	0.14	<SRL	U	1.0	0.14	0.14
Allyl Chloride	<SRL	U	1.0	0.11	<SRL	U	1.0	0.11	0.11
1,1,2-Trichloro-1,2,2-Trifluoroethane	<SRL	U	1.0	0.27	<SRL	U	1.0	0.27	0.27
t-1,2-Dichloroethylene	<SRL	U	1.0	0.14	<SRL	U	1.0	0.14	0.14
1,1-Dichloroethane	<SRL	U	1.0	0.14	<SRL	U	1.0	0.14	0.14
MTBE	<SRL	U	1.0	0.13	<SRL	U	1.0	0.13	0.13
cis-1,2-Dichloroethene	<SRL	U	1.0	0.14	<SRL	U	1.0	0.14	0.14
Chloroform	<SRL	U	1.0	0.17	<SRL	U	1.0	0.17	0.17
1,2-Dichloroethane	<SRL	U	1.0	0.14	<SRL	U	1.0	0.14	0.14
1,1,1-Trichloroethane	<SRL	U	1.0	0.19	<SRL	U	1.0	0.19	0.19

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Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report

CLIENT	Weston Solutions, Inc.	DATE SHIPPED	11/09/2011
PROJECT NO	110957	DATE RECEIVED	11/10/2011
MATRIX	AIR	DATE REPORTED	11/17/2011
UNITS	ug/m3	COC NUMBER	2-110811-085043-0001

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15 SIM

Client ID	TB-110811-AA			Sample Reporting Limit (SRL) (MRLxDF's)	TB-110811-SG			Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
AAC ID	110957-53717				110957-53718				
Sampling Date/Time	11/08/2011 12:00 AM				11/08/2011 12:00 AM				
Analysis Date/Time	11/15/2011 06:31 PM				11/15/2011 07:16 PM				
QC Batch	MS01_111511				MS01_111511				
Can Dilution Factor	1.00				1.00				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Benzene	<SRL	U	1.0	0.11	<SRL	U	1.0	0.11	0.11
Carbon Tetrachloride	<SRL	U	1.0	0.22	<SRL	U	1.0	0.22	0.22
1,2-Dichloropropane	<SRL	U	1.0	0.16	<SRL	U	1.0	0.16	0.16
Bromodichloromethane	<SRL	U	1.0	0.24	<SRL	U	1.0	0.24	0.23
Trichloroethene	<SRL	U	1.0	0.19	<SRL	U	1.0	0.19	0.19
cis-1,3-Dichloropropene	<SRL	U	1.0	0.16	<SRL	U	1.0	0.16	0.16
t-1,3-Dichloropropene	<SRL	U	1.0	0.16	<SRL	U	1.0	0.16	0.16
1,1,2-Trichloroethane	<SRL	U	1.0	0.19	<SRL	U	1.0	0.19	0.19
Toluene	0.56		1.0	0.38	<SRL	U	1.0	0.38	0.38
Dibromochloromethane	<SRL	U	1.0	0.30	<SRL	U	1.0	0.30	0.30
1,2-Dibromoethane	<SRL	U	1.0	0.27	<SRL	U	1.0	0.27	0.26
Tetrachloroethylene	<SRL	U	1.0	0.24	<SRL	U	1.0	0.24	0.24
Chlorobenzene	<SRL	U	1.0	0.16	<SRL	U	1.0	0.16	0.16
Ethylbenzene	<SRL	U	1.0	0.15	<SRL	U	1.0	0.15	0.15
m- & p-Xylenes	<SRL	U	1.0	0.30	<SRL	U	1.0	0.30	0.30
Bromoform	<SRL	U	1.0	0.36	<SRL	U	1.0	0.36	0.36
Styrene	<SRL	U	1.0	0.15	<SRL	U	1.0	0.15	0.15
1,1,2,2-Tetrachloroethane	<SRL	U	1.0	0.24	<SRL	U	1.0	0.24	0.24
o-Xylene	<SRL	U	1.0	0.15	<SRL	U	1.0	0.15	0.15
4-Ethyltoluene	<SRL	U	1.0	0.17	<SRL	U	1.0	0.17	0.17
1,3,5-Trimethylbenzene	<SRL	U	1.0	0.17	<SRL	U	1.0	0.17	0.17
1,2,4-Trimethylbenzene	<SRL	U	1.0	0.17	<SRL	U	1.0	0.17	0.17
Benzyl Chloride	<SRL	U	1.0	0.18	<SRL	U	1.0	0.18	0.18
1,3-Dichlorobenzene	<SRL	U	1.0	0.21	<SRL	U	1.0	0.21	0.21
1,4-Dichlorobenzene	<SRL	U	1.0	0.21	<SRL	U	1.0	0.21	0.21
1,2-Dichlorobenzene	<SRL	U	1.0	0.21	<SRL	U	1.0	0.21	0.21
Hexachlorobutadiene	<SRL	U	1.0	0.37	<SRL	U	1.0	0.37	0.37
BFB-Surrogate Std. % Recovery	100%				101%				70-130%

U - Compound was analyzed for, but was not detected at or above the SRL.

Marcus Hueppe
Laboratory Director

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SIM QC REPORT

Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report
VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

INSTRUMENT ID : GC/MS-01 **ANALYSIS DATE** : 11/15/2011

AREA COUNT LIMITS			RETENTION TIME LIMITS		
Lower Limit -40%	Mean ICAL Area Count	Upper Limit +40%	Lower Limit -0.33	Mean ICAL RT	Upper Limit +0.33
151475	252458	353441	14.600	14.930	15.260
574811	958018	1341226	18.385	18.715	19.045
524455	874092	1223728	23.327	23.657	23.987

INTERNAL STANDARD AREA AND RETENTION TIME REPORT

Sample ID	IS #1 Response Area*	IS #1 Retention Time**	IS #2 Response Area*	IS #2 Retention Time**	IS #3 Response Area*	IS #3 Retention Time**	Pass/Fail TO-15 Criteria
LCS-111511	239220	14.928	910029	18.697	815314	23.657	Pass
LCSD-111511	234439	14.928	894585	18.697	800675	23.657	Pass
MB-111511	238335	14.928	894760	18.715	839862	23.655	Pass
110957-53715 x1	235936	14.945	840690	18.714	781736	23.657	Pass
110957-53715 x100	206745	14.928	737696	18.715	674365	23.657	Pass
110957-53715 x2000	202181	14.928	754254	18.714	682437	23.657	Pass
110957-53715 x2000 dp	197990	14.928	738338	18.714	664173	23.657	Pass
110957-53716 x1	200594	14.928	764289	18.714	708285	23.655	Pass
110957-53716 x5	197588	14.928	746909	18.715	680435	23.657	Pass
110957-53717 x1	196855	14.928	745499	18.715	670199	23.657	Pass
110957-53718 x1	191909	14.928	720153	18.715	649538	23.657	Pass

* Internal Standard Area Response should be within +/- 40% of the mean calibration value.
** Internal Standard Retention Time should be within +/- 0.33min. of the mean calibration value.

Marcus Hueppe
Laboratory Director

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Atmospheric Analysis & Consulting, Inc.

ANALYSIS DATE : 11/15/2011 **INSTRUMENT ID : GC/MS-01**
ANALYST : JJG **CALIBRATION STD ID : PS111011-02**

VOLATILE ORGANIC COMPOUNDS BY EPA METHOD TO-15 SIM
Continuing Calibration Verification of the 11/14/2011 Calibration

Compounds	ICAL RRF	Daily RRF	%D
4-BFB (surrogate standard)	0.960	0.971	1.2
Chlorodifluoromethane	1.795	1.673	6.8
Dichlorodifluoromethane	4.888	4.602	5.8
Chloromethane	0.720	0.630	12.4
1,2-Dichloro-1,1,2,2-Tetrafluoroetha	4.108	3.891	5.3
Vinyl Chloride	0.871	0.837	3.9
1,3-Butadiene	0.486	0.463	4.7
Bromomethane	1.216	1.118	8.1
Chloroethane	0.433	0.394	9.2
Dichlorofluoromethane	2.838	2.702	4.8
Vinyl Bromide	1.205	1.113	7.6
Trichlorofluoromethane	5.570	5.333	4.2
1,1-Dichloroethylene	1.250	1.146	8.4
Allyl Chloride	0.524	0.444	15.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	2.853	2.615	8.3
t-1,2-Dichloroethylene	1.061	0.965	9.0
1,1-Dichloroethane	1.690	1.598	5.4
MTBE	1.002	0.964	3.7
cis-1,2-Dichloroethene	0.823	0.769	6.6
Chloroform	2.971	2.819	5.1
1,2-Dichloroethane	1.772	1.652	6.8
1,1,1-Trichloroethane	2.856	2.722	4.7

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Atmospheric Analysis & Consulting, Inc.

ANALYSIS DATE : 11/15/2011
ANALYST : JJG

INSTRUMENT ID : GC/MS-01
CALIBRATION STD ID : PS111011-02

VOLATILE ORGANIC COMPOUNDS BY EPA METHOD TO-15 SIM

Continuing Calibration Verification of the 11/14/2011 Calibration

Compounds	ICAL RRF	Daily RRF	%D
Benzene	0.500	0.441	11.9
Carbon Tetrachloride	0.857	0.810	5.6
1,2-Dichloropropane	0.165	0.151	8.3
Bromodichloromethane	0.694	0.669	3.6
Trichloroethene	0.310	0.293	5.6
cis-1,3-Dichloropropene	0.257	0.246	4.3
t-1,3-Dichloropropene	0.237	0.226	4.4
1,1,2-Trichloroethane	0.358	0.341	4.8
Toluene	0.919	0.835	9.2
Dibromochloromethane	0.680	0.661	2.8
1,2-Dibromoethane	0.505	0.488	3.4
Tetrachloroethylene	0.437	0.419	4.2
Chlorobenzene	0.989	0.937	5.2
Ethylbenzene	0.976	0.933	4.4
m- & p-Xylenes	0.339	0.331	2.2
Bromoform	0.834	0.818	1.9
Styrene	0.420	0.407	3.1
1,1,2,2-Tetrachloroethane	0.988	0.972	1.7
o-Xylene	0.686	0.691	0.7
4-Ethyltoluene	0.823	0.803	2.5
1,3,5-Trimethylbenzene	0.768	0.771	0.4
1,2,4-Trimethylbenzene	0.686	0.651	5.1
Benzyl Chloride	0.568	0.617	8.6
1,3-Dichlorobenzene	0.800	0.852	6.5
1,4-Dichlorobenzene	0.740	0.774	4.7
1,2-Dichlorobenzene	0.711	0.734	3.3
Hexachlorobutadiene	0.742	0.846	13.9

%D should be within +/- 30%

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Atmospheric Analysis & Consulting, Inc.

ANALYSIS DATE : 11/15/2011
ANALYST : JJG

INSTRUMENT ID : GC/MS-01
CALIBRATION STD ID : PS111011-02

VOLATILE ORGANIC COMPOUNDS BY EPA METHOD TO-15 SIM

Continuing Calibration Verification of the 11/14/2011 Calibration

Compounds	Conc	Daily Conc	%REC
4-BFB (surrogate standard)	10.0	10.12	101
Chlorodifluoromethane	0.200	0.186	93
Dichlorodifluoromethane	0.200	0.188	94
Chloromethane	0.200	0.175	88
1,2-Dichloro-1,1,2,2-Tetrafluoroetha	0.200	0.189	95
Vinyl Chloride	0.200	0.192	96
1,3-Butadiene	0.200	0.191	95
Bromomethane	0.200	0.184	92
Chloroethane	0.200	0.182	91
Dichlorofluoromethane	0.200	0.190	95
Vinyl Bromide	0.200	0.185	92
Trichlorofluoromethane	0.200	0.192	96
1,1-Dichloroethene	0.200	0.183	92
Allyl Chloride	0.200	0.170	85
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.200	0.183	92
trans-1,2-Dichloroethene	0.200	0.182	91
1,1-Dichloroethane	0.200	0.189	95
MTBE	0.200	0.193	96
cis-1,2-Dichloroethene	0.200	0.187	93
Chloroform	0.200	0.190	95
1,2-Dichloroethane	0.200	0.186	93
1,1,1-Trichloroethane	0.200	0.191	95

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Atmospheric Analysis & Consulting, Inc.

ANALYSIS DATE : 11/15/2011
ANALYST : JJG

INSTRUMENT ID : GC/MS-01
CALIBRATION STD ID : PS111011-02

VOLATILE ORGANIC COMPOUNDS BY EPA METHOD TO-15 SIM

Continuing Calibration Verification of the 11/14/2011 Calibration

Compounds	Conc	Daily Conc	%REC
Benzene	0.200	0.176	88
Carbon Tetrachloride	0.200	0.189	94
1,2-Dichloropropane	0.200	0.183	92
Bromodichloromethane	0.200	0.193	96
Trichloroethene	0.200	0.189	94
cis-1,3-Dichloropropene	0.200	0.191	96
trans-1,3-Dichloropropene	0.200	0.191	96
1,1,2-Trichloroethane	0.200	0.190	95
Toluene	0.200	0.218	109
Dibromochloromethane	0.200	0.194	97
1,2-Dibromoethane	0.200	0.193	97
Tetrachloroethene	0.200	0.192	96
Chlorobenzene	0.200	0.190	95
Ethylbenzene	0.200	0.191	96
m- & p-Xylenes	0.400	0.391	98
Bromoform	0.200	0.196	98
Styrene	0.200	0.194	97
1,1,2,2-Tetrachloroethane	0.200	0.197	98
o-Xylene	0.200	0.201	101
4-Ethyltoluene	0.200	0.195	98
1,3,5-Trimethylbenzene	0.200	0.201	100
1,2,4-Trimethylbenzene	0.200	0.190	95
Benzyl Chloride	0.200	0.217	109
1,3-Dichlorobenzene	0.200	0.213	107
1,4-Dichlorobenzene	0.200	0.209	105
1,2-Dichlorobenzene	0.200	0.207	103
Hexachlorobutadiene	0.200	0.228	114

%REC should be 70-130%

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Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

CLIENT ID	: Laboratory Control Spike	DATE ANALYZED	: 11/15/2011
AAC ID	: LCS/LCSD	DATE REPORTED	: 11/15/2011
MEDIA	: Air	UNITS	: ppbv

TO-15 SIM Laboratory Control Spike Recovery

Compound	Sample Conc.	Spike Added	Spike Res	Dup Spike Res	Spike % Rec *	Spike Dup % Rec *	RPD** %
CHLORODIFLUOROMETHANE	0.0	0.200	0.186	0.191	93	96	2.6
DICHLORODIFLUOROMETHANE	0.0	0.200	0.188	0.192	94	96	2.0
CHLOROMETHANE	0.0	0.200	0.175	0.178	88	89	1.6
1,2 DICHLORO-1,1,2,2-TETRAFLUOROETHANE	0.0	0.200	0.189	0.192	95	96	1.1
VINYL CHLORIDE	0.0	0.200	0.192	0.193	96	96	0.4
1,3-BUTADIENE	0.0	0.200	0.190	0.193	95	96	1.1
BROMOMETHANE	0.0	0.200	0.184	0.190	92	95	3.2
CHLOROETHANE	0.0	0.200	0.182	0.196	91	98	7.7
DICHLOROFLUOROMETHANE	0.0	0.200	0.190	0.194	95	97	1.8
VINYL BROMIDE	0.0	0.200	0.185	0.188	92	94	1.7
TRICHLOROFLUOROMETHANE	0.0	0.200	0.191	0.195	96	97	1.6
1,1-DICHLOROETHENE	0.0	0.200	0.183	0.184	92	92	0.5
ALLYL CHLORIDE	0.0	0.200	0.169	0.178	85	89	4.8
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.0	0.200	0.183	0.186	92	93	1.3
TRANS-1,2-DICHLOROETHYLENE	0.0	0.200	0.182	0.184	91	92	0.9
1,1-DICHLOROETHANE	0.0	0.200	0.189	0.189	95	95	0.2
MTBE	0.0	0.200	0.193	0.195	96	97	1.3
CIS-1,2-DICHLOROETHYLENE	0.0	0.200	0.187	0.195	93	97	4.2
CHLOROFORM	0.0	0.200	0.190	0.192	95	96	1.4
1,2-DICHLOROETHANE	0.0	0.200	0.186	0.192	93	96	3.1
1,1,1-TRICHLOROETHANE	0.0	0.200	0.191	0.192	95	96	0.5

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Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

CLIENT ID	: Laboratory Control Spike	DATE ANALYZED	: 11/15/2011
AAC ID	: LCS/LCSD	DATE REPORTED	: 11/15/2011
MEDIA	: Air	UNITS	: ppbv

TO-15 SIM Laboratory Control Spike Recovery

Compound	Sample Conc.	Spike Added	Spike Res	Dup Spike Res	Spike % Rec *	Spike Dup % Rec *	RPD** %
BENZENE	0.0	0.200	0.176	0.178	88	89	1.1
CARBON TETRACHLORIDE	0.0	0.200	0.189	0.193	94	97	2.4
1,2-DICHLOROPROPANE	0.0	0.200	0.183	0.184	92	92	0.3
BROMODICHLOROMETHANE	0.0	0.200	0.193	0.194	96	97	0.8
TRICHLOROETHENE	0.0	0.200	0.189	0.186	94	93	1.5
CIS-1,3-DICHLOROPROPENE	0.0	0.200	0.191	0.195	96	97	1.6
TRANS-1,3-DICHLOROPROPENE	0.0	0.200	0.191	0.193	96	96	0.9
1,1,2-TRICHLOROETHANE	0.0	0.200	0.190	0.190	95	95	0.2
TOLUENE	0.0	0.200	0.218	0.216	109	108	0.9
DIBROMOCHLOROMETHANE	0.0	0.200	0.194	0.192	97	96	1.1
1,2-DIBROMOETHANE	0.0	0.200	0.193	0.198	97	99	2.3
TETRACHLOROETHYLENE	0.0	0.200	0.192	0.195	96	97	1.6
CHLOROBENZENE	0.0	0.200	0.190	0.191	95	95	0.8
ETHYLBENZENE	0.0	0.200	0.191	0.189	96	95	1.1
M-, & P-XYLENE	0.0	0.400	0.391	0.401	98	100	2.4
BROMOFORM	0.0	0.200	0.196	0.195	98	97	0.6
STYRENE	0.0	0.200	0.194	0.201	97	100	3.4
1,1,2,2-TETRACHLORETHANE	0.0	0.200	0.197	0.198	98	99	0.7
O-XYLENE	0.0	0.200	0.201	0.204	101	102	1.4
4-ETHYLTOLUENE	0.0	0.200	0.195	0.196	98	98	0.6
1,3,5-TRIMETHYLBENZENE	0.0	0.200	0.201	0.199	100	100	0.8
1,2,4-TRIMETHYLBENZENE	0.0	0.200	0.190	0.192	95	96	1.0
BENZYL CHLORIDE	0.0	0.200	0.217	0.214	109	107	1.4
1,3-DICHLOROBENZENE	0.0	0.200	0.213	0.215	107	108	0.9
1,4-DICHLOROBENZENE	0.0	0.200	0.209	0.207	105	104	1.0
1,2-DICHLOROBENZENE	0.0	0.200	0.207	0.205	103	103	0.6
HEXACHLOROBUTADIENE	0.0	0.200	0.228	0.225	114	113	1.1

* Must be 70-130%

** Must be < 25%

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Method Blank Analysis Report

MATRIX	: AIR	ANALYSIS DATE	: 11/15/2011
UNITS	: ppbv	REPORT DATE	: 11/15/2011

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15 SIM

Client ID / AAC ID	Method Blank MB 111511	RL
CHLORODIFLUOROMETHANE	<RL	0.035
DICHLORODIFLUOROMETHANE	<RL	0.035
CHLOROMETHANE	<RL	0.035
1,2 DICHLORO-1,1,2,2-TETRAFLUOROETHAN	<RL	0.035
VINYL CHLORIDE	<RL	0.035
1,3-BUTADIENE	<RL	0.035
BROMOMETHANE	<RL	0.035
CHLOROETHANE	<RL	0.035
DICHLOROFLUOROMETHANE	<RL	0.035
VINYL BROMIDE	<RL	0.035
TRICHLOROFLUOROMETHANE	<RL	0.035
1,1-DICHLOROETHENE	<RL	0.035
ALLYL CHLORIDE	<RL	0.035
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<RL	0.035
TRANS-1,2-DICHLOROETHYLENE	<RL	0.035
1,1-DICHLOROETHANE	<RL	0.035
MTBE	<RL	0.035
CIS-1,2-DICHLOROETHYLENE	<RL	0.035
CHLOROFORM	<RL	0.035
1,2-DICHLOROETHANE	<RL	0.035
1,1,1-TRICHLOROETHANE	<RL	0.035
BENZENE	<RL	0.035
CARBON TETRACHLORIDE	<RL	0.035
1,2-DICHLOROPROPANE	<RL	0.035
BROMODICHLOROMETHANE	<RL	0.035
TRICHLOROETHENE	<RL	0.035

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Atmospheric Analysis & Consulting, Inc.

Method Blank Analysis Report

MATRIX	: AIR	ANALYSIS DATE	: 11/15/2011
UNITS	: ppbv	REPORT DATE	: 11/15/2011

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15 SIM

Client ID / AAC ID	Method Blank MB 111511	RL
CIS-1,3-DICHLOROPROPENE	<RL	0.035
TRANS-1,3-DICHLOROPROPENE	<RL	0.035
1,1,2-TRICHLOROETHANE	<RL	0.035
TOLUENE	<RL	0.100
DIBROMOCHLOROMETHANE	<RL	0.035
1,2-DIBROMOETHANE	<RL	0.035
TETRACHLOROETHYLENE	<RL	0.035
CHLOROBENZENE	<RL	0.035
ETHYLBENZENE	<RL	0.035
M-, & P-XYLENE	<RL	0.070
BROMOFORM	<RL	0.035
STYRENE	<RL	0.035
1,1,2,2-TETRACHLORETHANE	<RL	0.035
O-XYLENE	<RL	0.035
4-ETHYLTOLUENE	<RL	0.035
1,3,5-TRIMETHYLBENZENE	<RL	0.035
1,2,4-TRIMETHYLBENZENE	<RL	0.035
BENZYL CHLORIDE	<RL	0.035
1,3-DICHLOROBENZENE	<RL	0.035
1,4-DICHLOROBENZENE	<RL	0.035
1,2-DICHLOROBENZENE	<RL	0.035
HEXACHLOROBUTADIENE	<RL	0.035
System Monitoring Compounds		
BFB-Surrogate Std. % Recovery	97%	--

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Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

AAC ID	: 110957-53715	**DATE ANALYZED**	: 11/15/2011
MATRIX	: Air	**DATE REPORTED**	: 11/15/2011
		UNITS	: ppbv

TO-15 SIM Duplicate Analysis

Compound	Sample Conc	Duplicate Conc	% RPD
CHLORODIFLUOROMETHANE	<SRL	<SRL	0.0
DICHLORODIFLUOROMETHANE	<SRL	<SRL	0.0
CHLOROMETHANE	<SRL	<SRL	0.0
1,2 DICHLORO-1,1,2,2-TETRAFLUOROETHANE	<SRL	<SRL	0.0
VINYL CHLORIDE	<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
VINYL BROMIDE	<SRL	<SRL	0.0
TRICHLOROFLUOROMETHANE	<SRL	<SRL	0.0
1,1-DICHLOROETHENE	<SRL	<SRL	0.0
ALLYL CHLORIDE	<SRL	<SRL	0.0
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<SRL	<SRL	0.0
TRANS-1,2-DICHLOROETHYLENE	<SRL	<SRL	0.0
1,1-DICHLOROETHANE	<SRL	<SRL	0.0
MTBE	<SRL	<SRL	0.0
CIS-1,2-DICHLOROETHYLENE	1623	1537	5.4
CHLOROFORM	<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
1,2-DICHLOROPROPANE	<SRL	<SRL	0.0
BROMODICHLOROMETHANE	<SRL	<SRL	0.0
TRICHLOROETHENE	157	150	4.5

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Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

AAC ID	: 110957-53715	DATE ANALYZED	: 11/15/2011
MATRIX	: Air	DATE REPORTED	: 11/15/2011
		UNITS	: ppbv

TO-15 SIM Duplicate Analysis

Compound	Sample Conc	Duplicate Conc	% RPD
CIS-1,3-DICHLOROPROPENE	<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
DIBROMOCHLOROMETHANE	<SRL	<SRL	0.0
1,2-DIBROMOETHANE	<SRL	<SRL	0.0
TETRACHLOROETHYLENE	386	366	5.2
CHLOROBENZENE	<SRL	<SRL	0.0
ETHYLBENZENE	<SRL	<SRL	0.0
M-, & P-XYLENE	<SRL	<SRL	0.0
BROMOFORM	<SRL	<SRL	0.0
STYRENE	<SRL	<SRL	0.0
1,1,2,2-TETRACHLORETHANE	<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	<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
HEXACHLOROBUTADIENE	<SRL	<SRL	0.0
System Monitoring Compounds			
BFB-Surrogate Std. % Recovery	98%	99%	1.1

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SIM RAW DATA

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151105.D
Acq On : 15 Nov 2011 11:49
Operator : JJG
Sample : 110957-53715 x1
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 15 14:00:33 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.945	49	235936	10000.00 pptv	0.02
23) 1,4-Difluorobenzene	18.714	114	840690	10000.00 pptv	0.00
36) Chlorobenzene-d5	23.657	117	781736	10000.00 pptv	0.00
System Monitoring Compounds					
44) BFB(4-Bromochlorobenzene)	25.177	174	760305	10131.72 pptv	0.00
Spiked Amount 10000.000				Recovery = 101.32%	
Target Compounds					Qvalue
2) Chlorodifluoromethane	3.995	51	7897	186.46 pptv	99
3) Dichlorodifluoromethane	4.184	85	41260	357.80 pptv	99
4) Chloromethane	4.441	50	4566	268.94 pptv	99
5) Dichlorotetrafluoroethane	4.681	85	1092	N.D.	
6) VinylChloride	4.852	62	77839	3788.60 pptv	96
7) 1,3-Butadiene	5.126	54	3686m	321.46 pptv	
8) Bromomethane	5.606	96	119	N.D.	
9) Chloroethane	5.966	64	267	N.D.	
10) Dichlorofluoromethane	6.206	67	95	N.D.	
11) VinylBromide	6.703	108	11	N.D.	
12) Trichlorofluoromethane	7.611	101	26072	198.40 pptv	98
13) 1,1-Dichloroethene	9.118	61	13540	459.04 pptv	99
14) AllylChloride	9.821	41	54	N.D.	
15) Trichlorotrifluoroethane	10.369	101	3504	52.06 pptv	100
16) trans-1,2-Dichloroethene	12.048	61	844397	33,746.22 pptv	98
17) 1,1-Dichloroethane	12.545	63	2601m	65.25 pptv	
18) MTBE	13.094	73	34	N.D.	
19) cis-1,2-Dichloroethene	14.636	61	32478064	1,671,871.98 pptv #	82
20) Chloroform	15.305	83	8836	126.07 pptv	97
21) 1,2-Dichloroethane	16.830	62	583	N.D.	
22) 1,1,1-Trichloroethane	17.310	97	1105	N.D.	
24) Benzene	18.046	78	34533	821.15 pptv	96
25) CarbonTetrachloride	18.286	117	4100m	56.89 pptv	
26) 1,2-Dichloropropane	19.280	76	604m	43.57 pptv	
27) Bromodichloromethane	0.000	83	0	N.D. d	
28) Trichloroethene	19.623	130	3908449	149,982.28 pptv	89

11/15/11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151105.D
Acq On : 15 Nov 2011 11:49
Operator : JJG
Sample : 110957-53715 x1
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 15 14:00:33 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

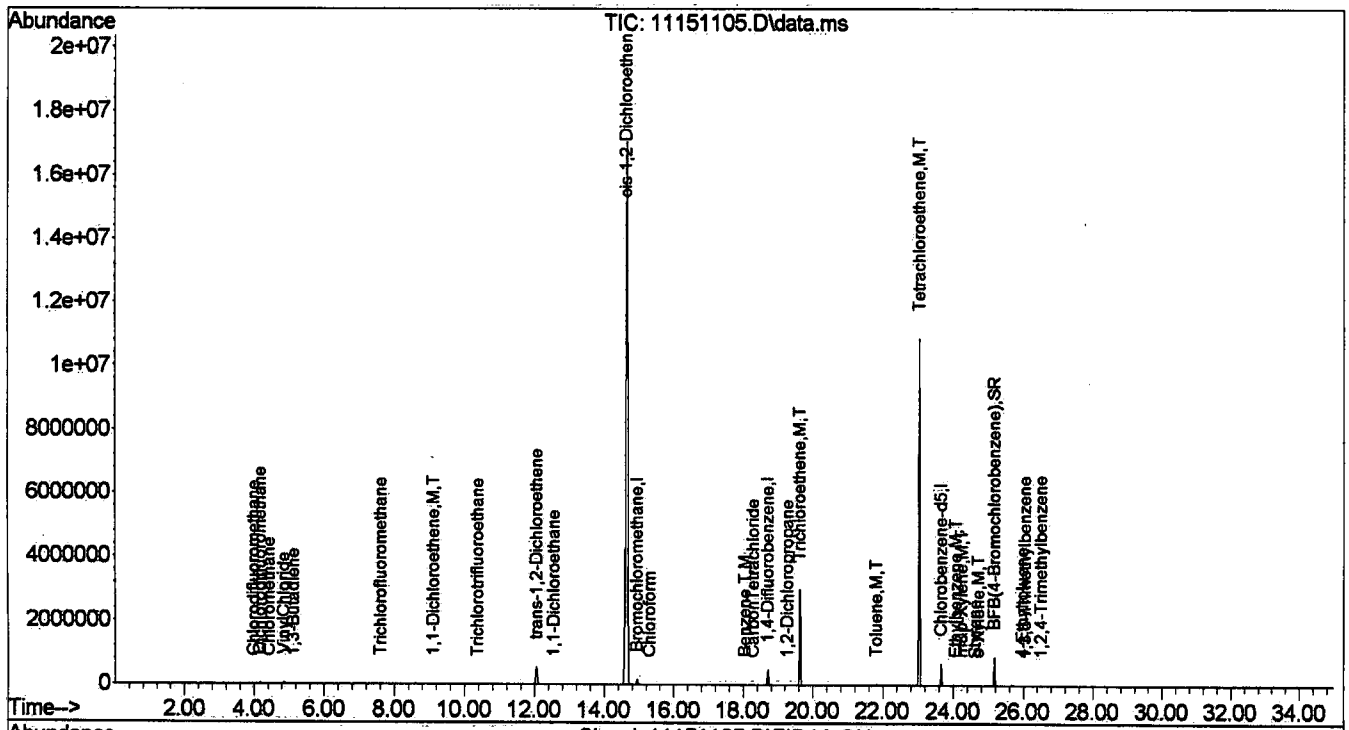
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
29) cis-1,3-Dichloropropene	20.702	75	7	N.D.	
30) trans-1,3-Dichloropropene	21.319	75	9	N.D.	
31) 1,1,2-Trichloroethane	21.508	97	109	N.D.	
32) Toluene	21.812	91	40558m	591.67 pptv	
33) Dibromochloromethane	22.264	129	43	N.D.	
34) 1,2-Dibromoethane	22.509	107	14	N.D.	
35) Tetrachloroethene	23.036	166	12057155	328195.13 pptv	
97					
37) Chlorobenzene	23.694	112	805	N.D.	
38) Ethylbenzene	24.079	91	11220	147.09 pptv	97
39) m&p-Xylene	24.249	106	11074m	418.36 pptv	
40) Bromoform	24.327	173	131	N.D.	
41) Styrene	24.620	104	9062	276.27 pptv	97
42) 1,1,2,2-Tetrachloroethane	24.729	83	176	N.D.	
43) o-Xylene	24.729	91	10398m	193.96 pptv	
45) 4-Ethyltoluene	25.981	105	5457	84.78 pptv #	46
46) 1,3,5-Trimethylbenzene	26.058	105	4647	77.37 pptv #	95
47) 1,2,4-Trimethylbenzene	26.506	105	16854m	314.28 pptv	
48) BenzylChloride	26.645	91	208	N.D.	
49) 1,3-Dichlorobenzene	26.676	146	178	N.D.	
50) 1,4-Dichlorobenzene	26.754	146	1668	N.D.	
51) 1,2-Dichlorobenzene	27.140	146	686	N.D.	
52) Hexachlorobutadiene	29.831	225	96	N.D.	

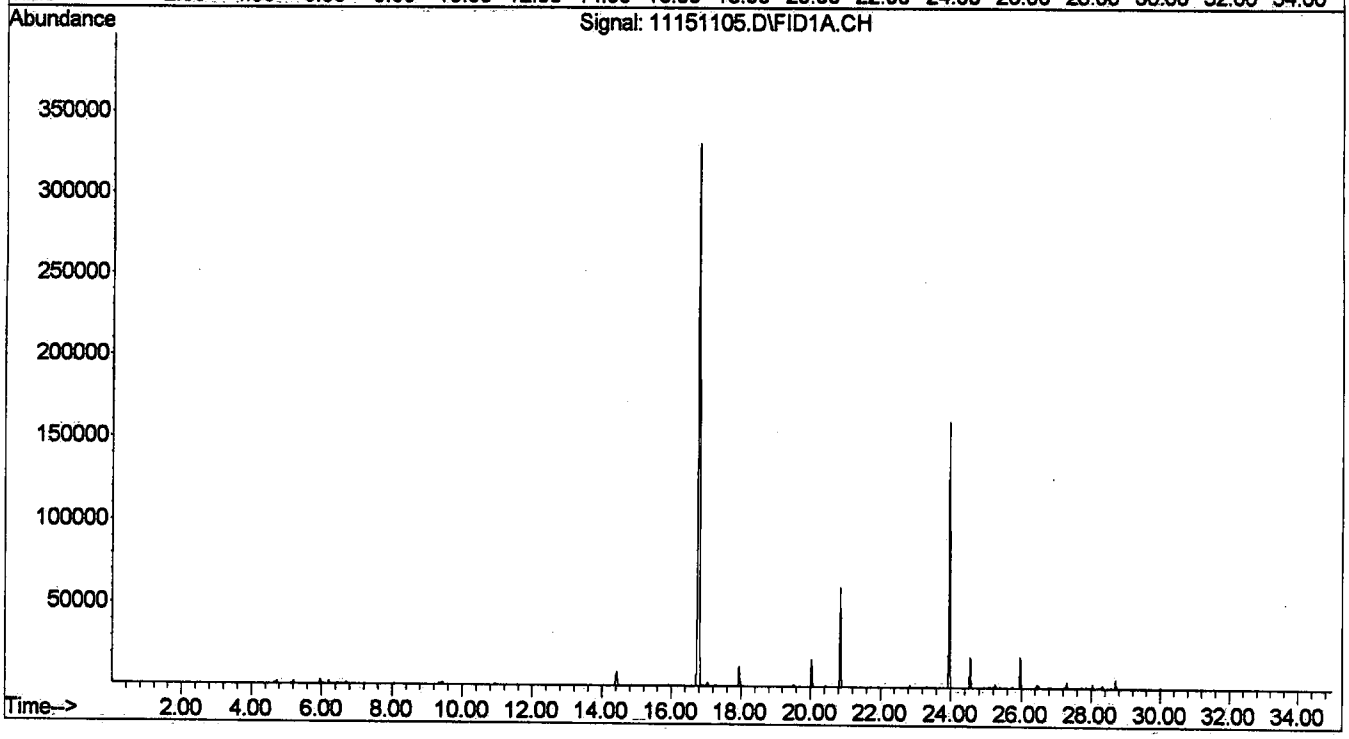
(#) = qualifier out of range (m) = manual integration (+) = signals summed

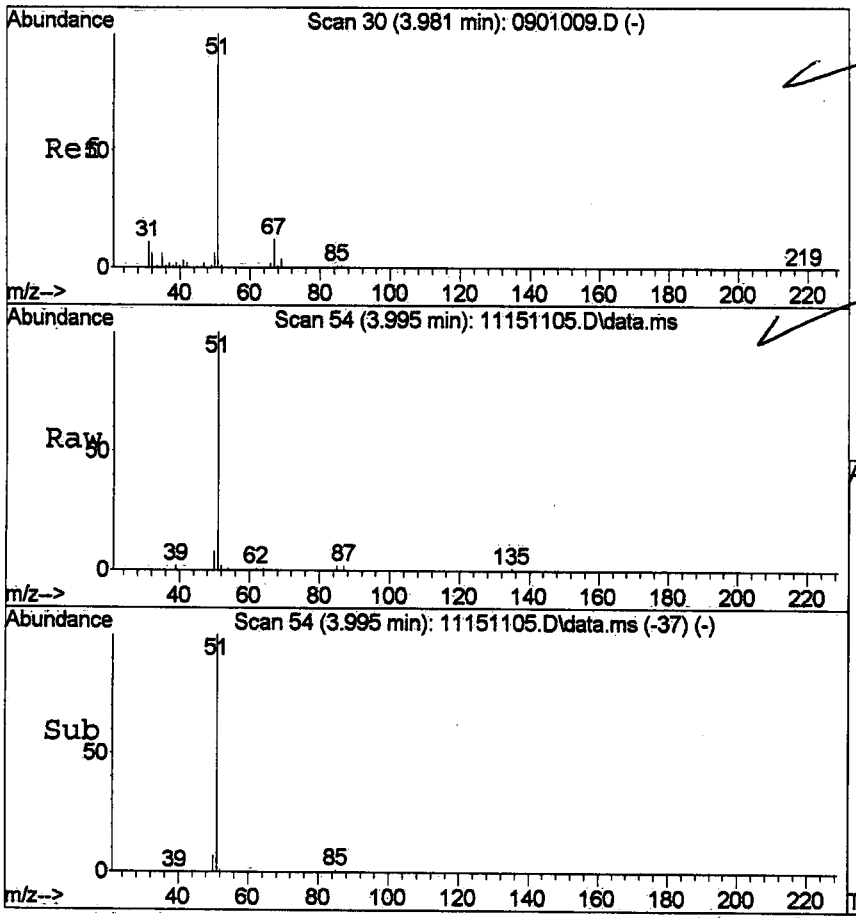
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151105.D
Acq On : 15 Nov 2011 11:49
Operator : JJG
Sample : 110957-53715 x1
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 15 14:00:33 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration



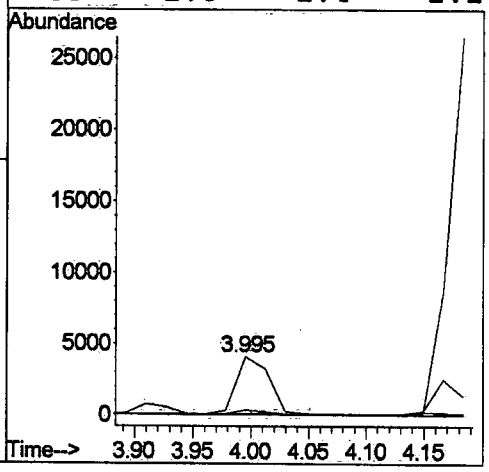


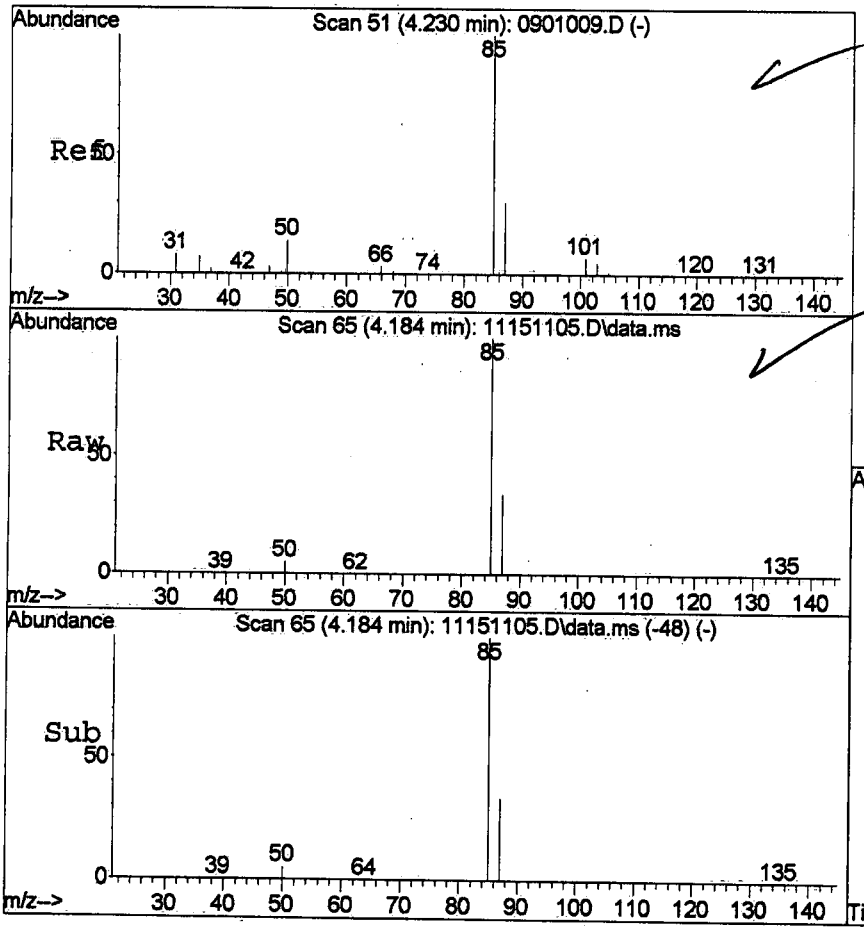


#2
Chlorodifluoromethane
Concen: 186.46 pptv
RT: 3.995 min Scan# 54
Delta R.T. -0.000 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion: 51 Resp: 7897

Ion	Ratio	Lower	Upper
51	100		
50	8.3	6.4	9.6
67	0.0	0.0	0.0
85	1.8	1.4	2.2

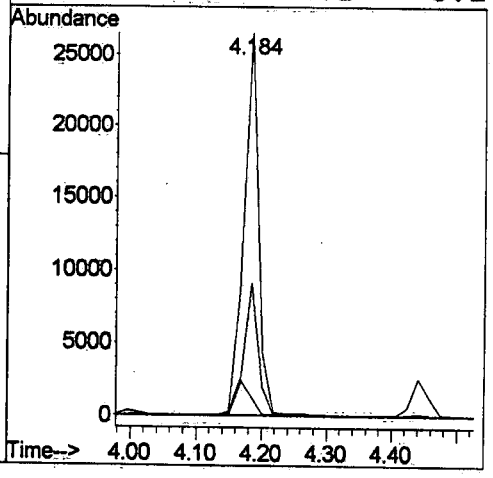


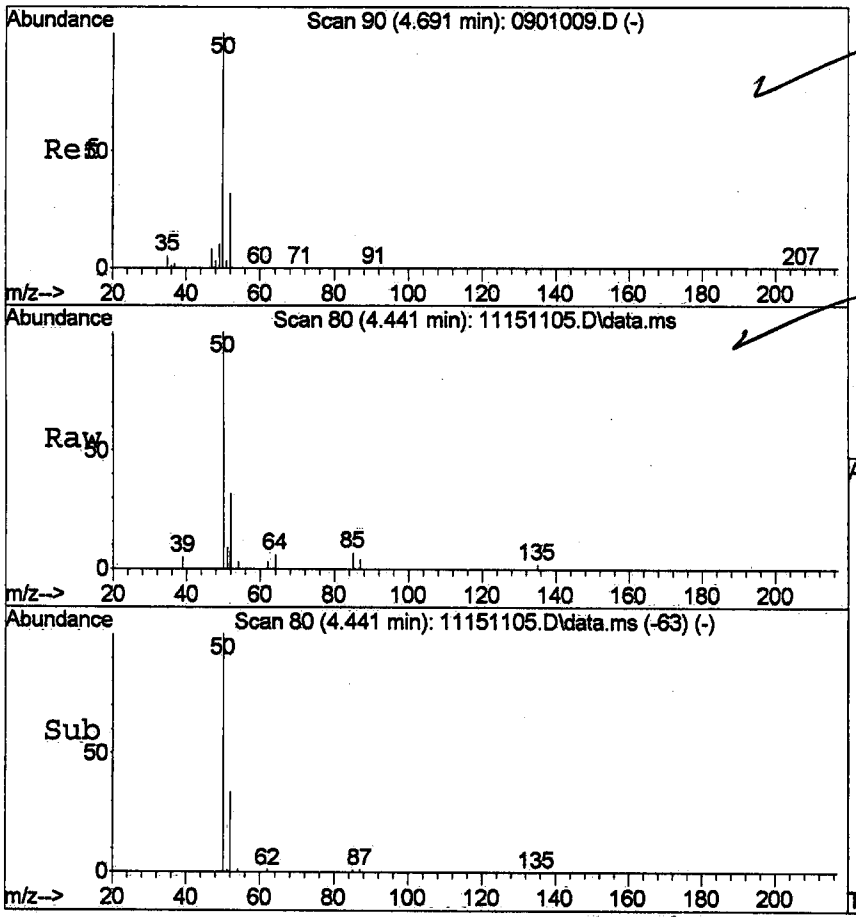


#3
Dichlorodifluoromethane
Concen: 357.80 pptv
RT: 4.184 min Scan# 65
Delta R.T. -0.000 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion: 85 Resp: 41260

Ion	Ratio	Lower	Upper
85	100		
87	34.2	27.8	41.6
101	0.0	0.0	0.0
50	5.0	4.1	6.1

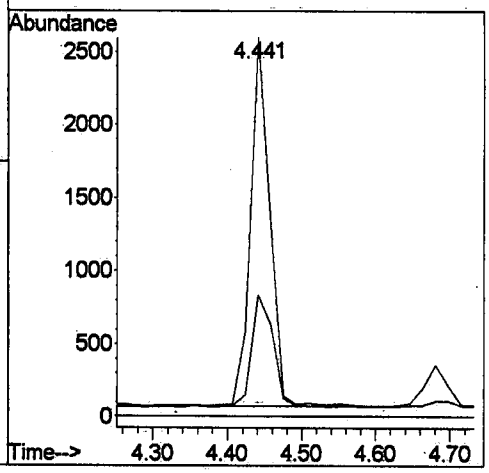


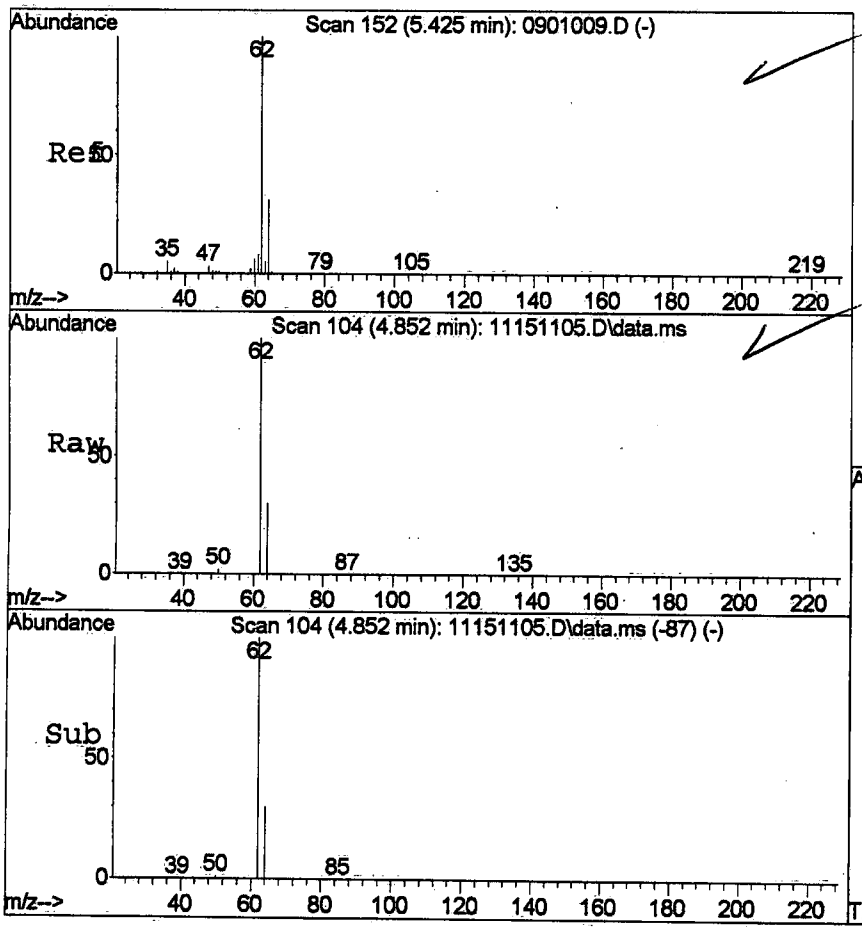


#4
Chloromethane
Concen: 268.94 pptv
RT: 4.441 min Scan# 80
Delta R.T. -0.000 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion: 50 Resp: 4566

Ion	Ratio	Lower	Upper
50	100		
52	32.2	26.2	39.4
49	0.0	0.0	0.0

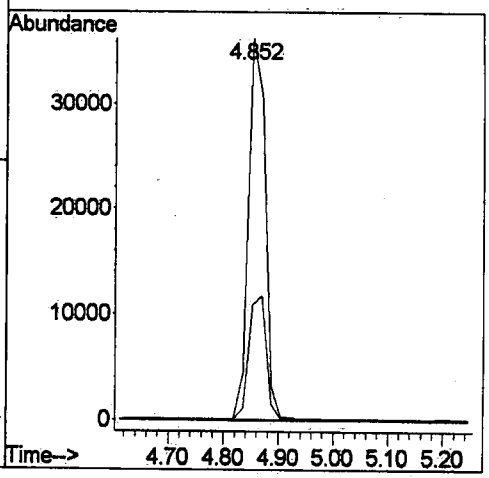


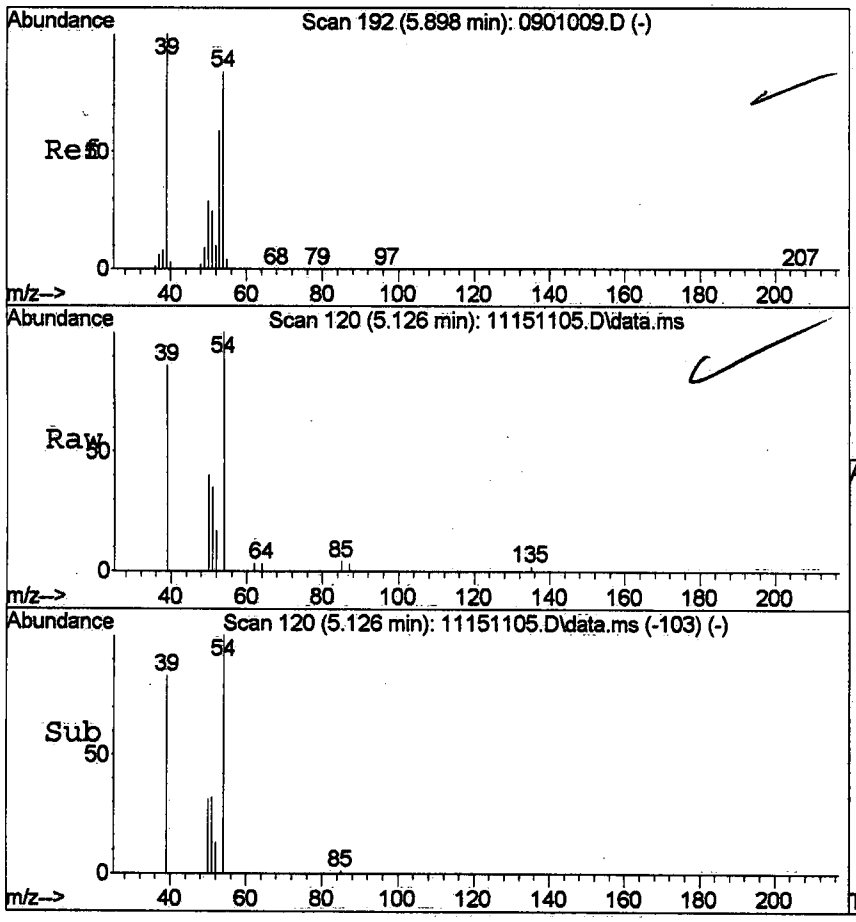


#6
VinylChloride
Concen: 3788.60 pptv
RT: 4.852 min Scan# 104
Delta R.T. -0.000 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion: 62 Resp: 77839

Ion	Ratio	Lower	Upper
62	100		
64	30.0	25.6	38.4
61	0.0	0.0	0.0

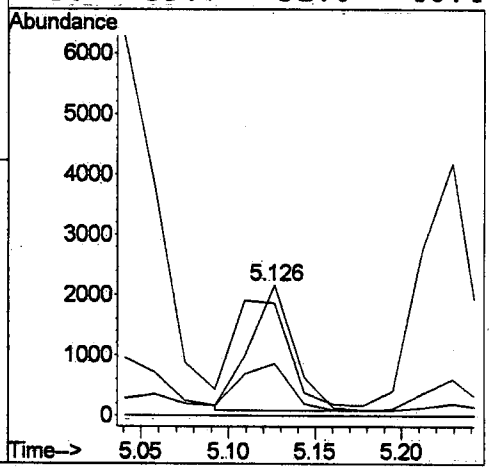


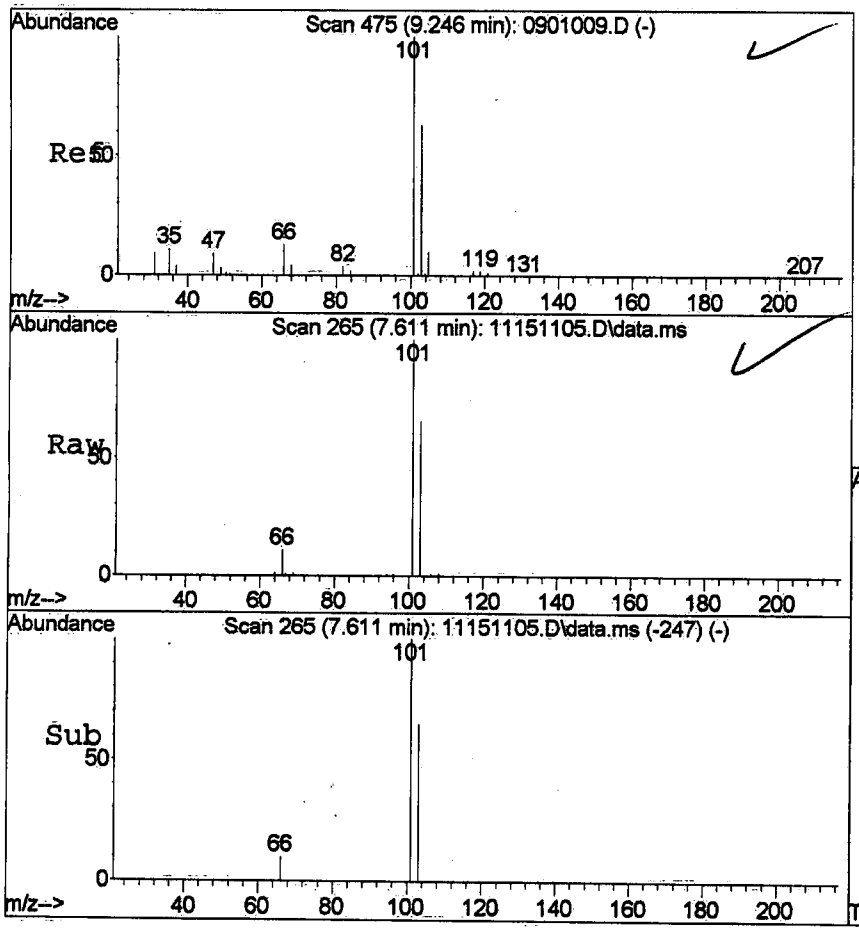


#7
1,3-Butadiene
Concen: 321.46 pptv
RT: 5.126 min Scan# 120
Delta R.T. -0.000 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion: 54 Resp: 3686

Ion	Ratio	Lower	Upper
54	100		
39	86.1	66.0	99.0
53	0.0	0.0	0.0
50	39.7	31.0	46.4

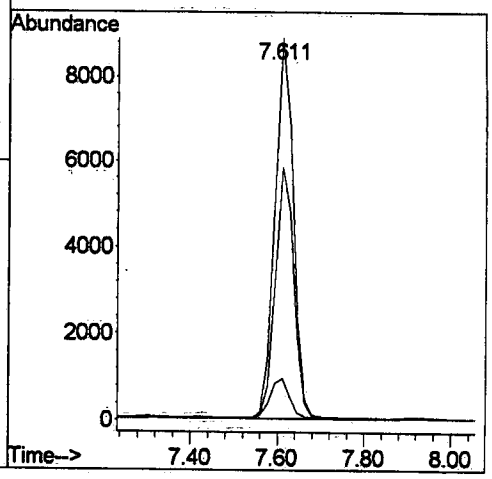


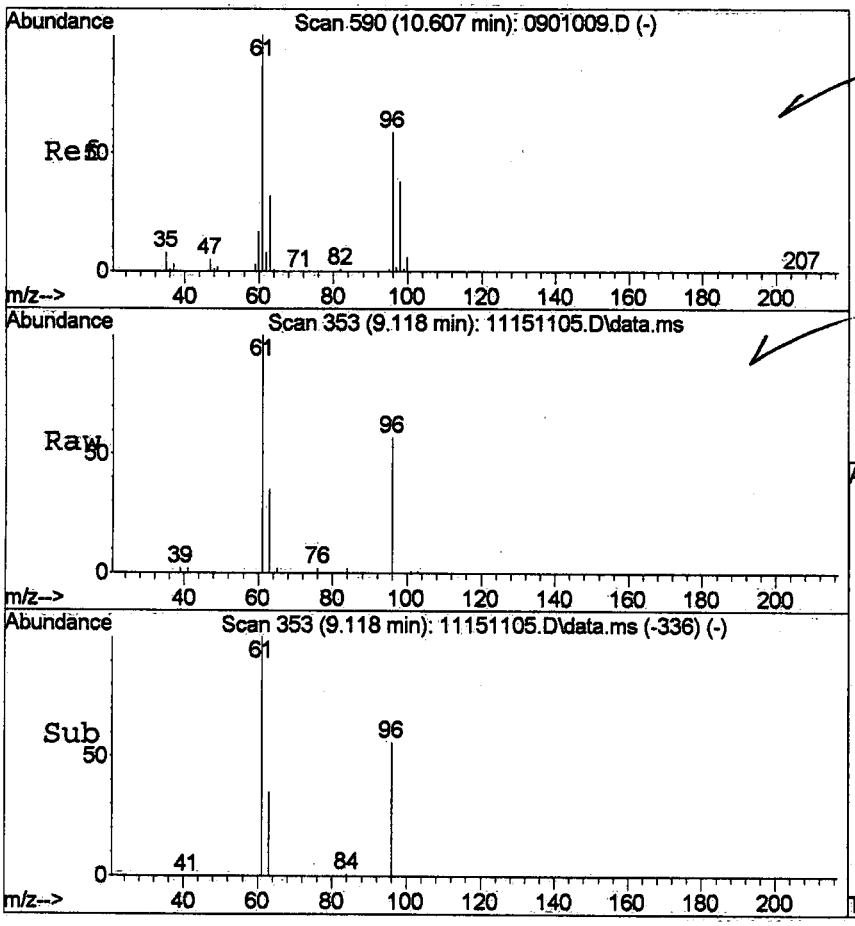


#12
Trichlorofluoromethane
Concen: 198.40 pptv
RT: 7.611 min Scan# 265
Delta R.T. -0.000 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion:101 Resp: 26072

Ion	Ratio	Lower	Upper
101	100		
103	65.7	51.0	76.4
66	10.9	8.9	13.3

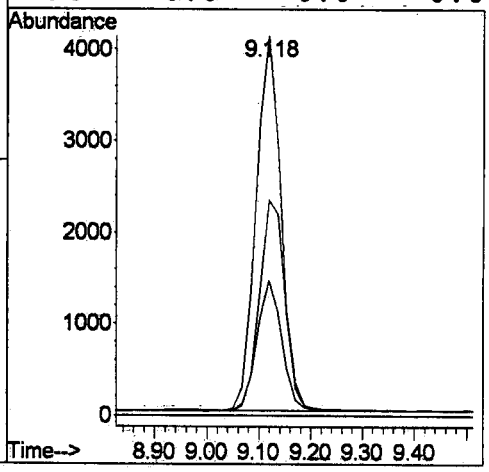


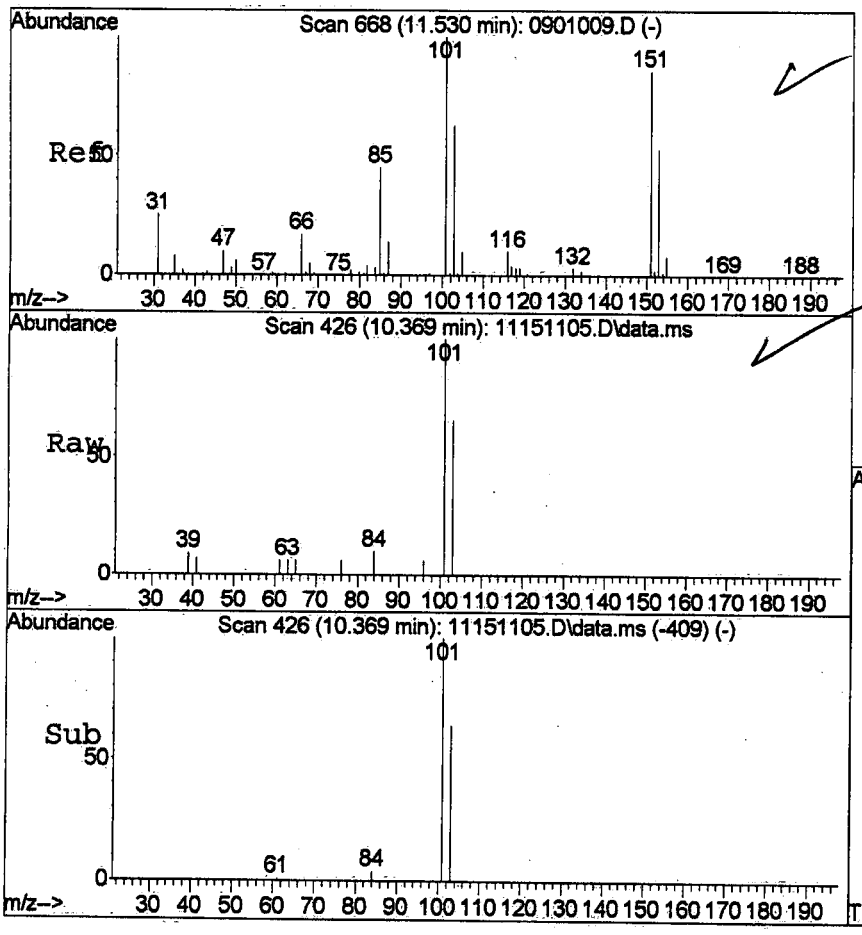


#13
1,1-Dichloroethene
Concen: 459.04 pptv
RT: 9.118 min Scan# 353
Delta R.T. -0.000 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion: 61 Resp: 13540

Ion	Ratio	Lower	Upper
61	100		
96	56.7	46.5	69.7
63	35.5	28.2	42.4
98	0.0	0.0	0.0

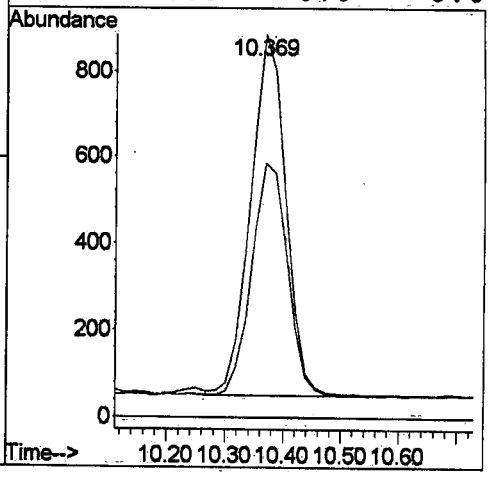


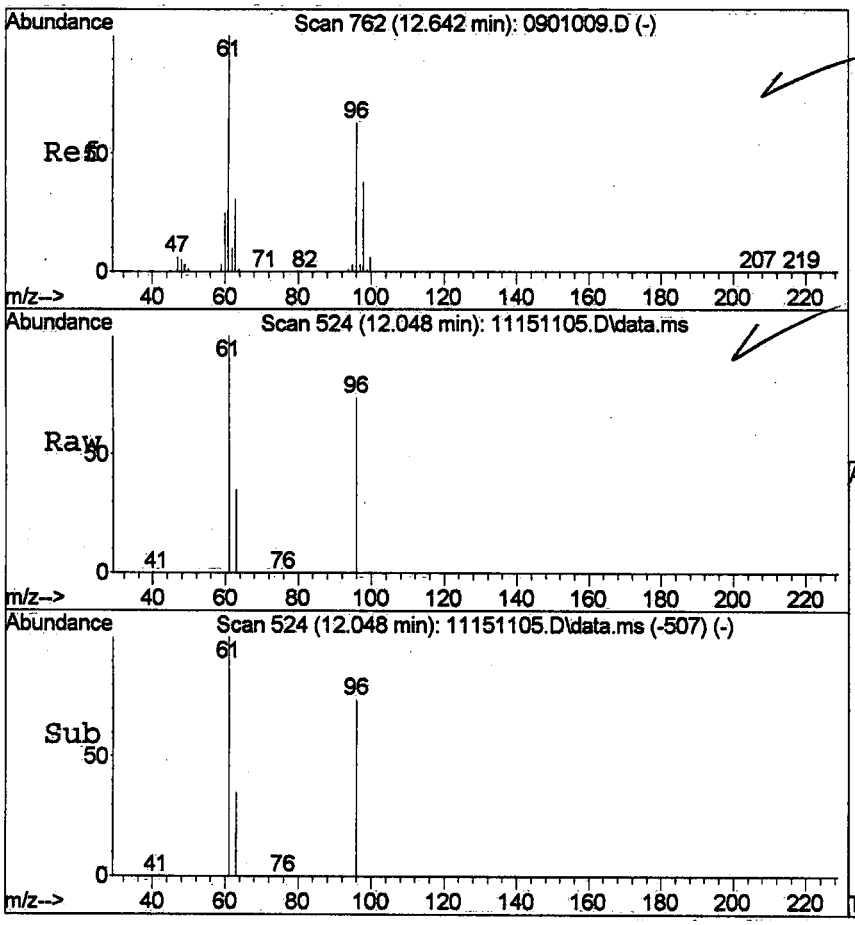


#15
Trichlorotrifluoroethane
Concen: 52.06 pptv
RT: 10.369 min Scan# 426
Delta R.T. -0.000 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion:101 Resp: 3504

Ion	Ratio	Lower	Upper
101	100		
103	66.0	52.7	79.1
151	0.0	0.0	0.0
153	0.0	0.0	0.0

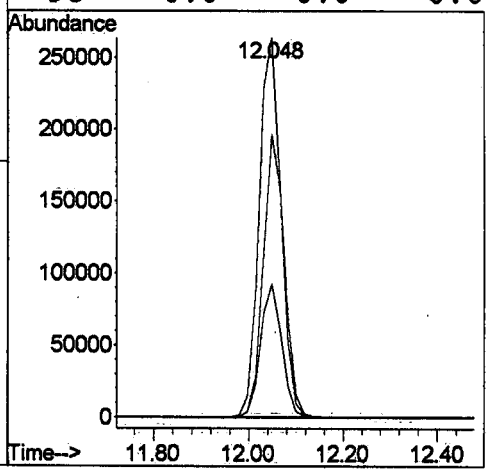


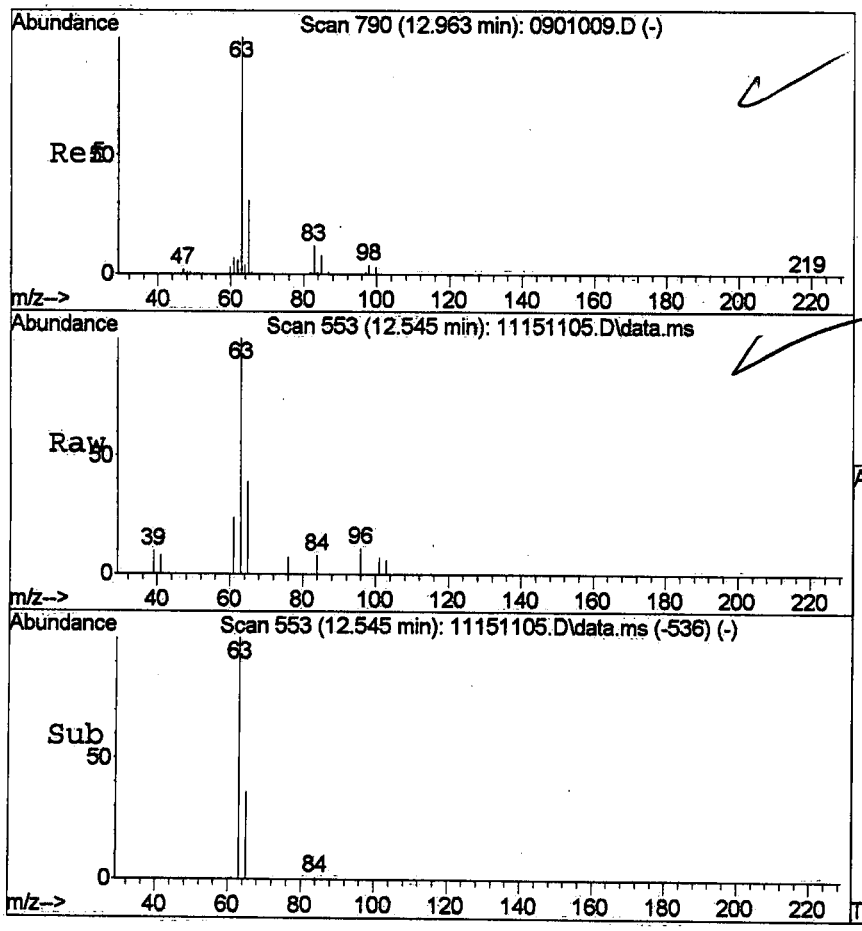


#16
trans-1,2-Dichloroethene
Concen: 33746.22 pptv
RT: 12.048 min Scan# 524
Delta R.T. -0.000 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion: 61 Resp: 844397

Ion	Ratio	Lower	Upper
61	100		
96	74.4	57.4	86.0
63	35.0	28.1	42.1
98	0.0	0.0	0.0

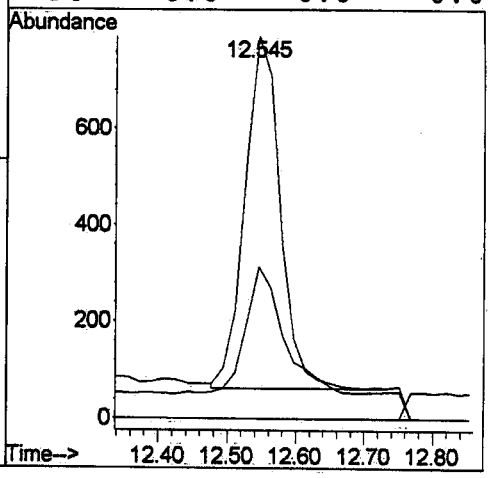


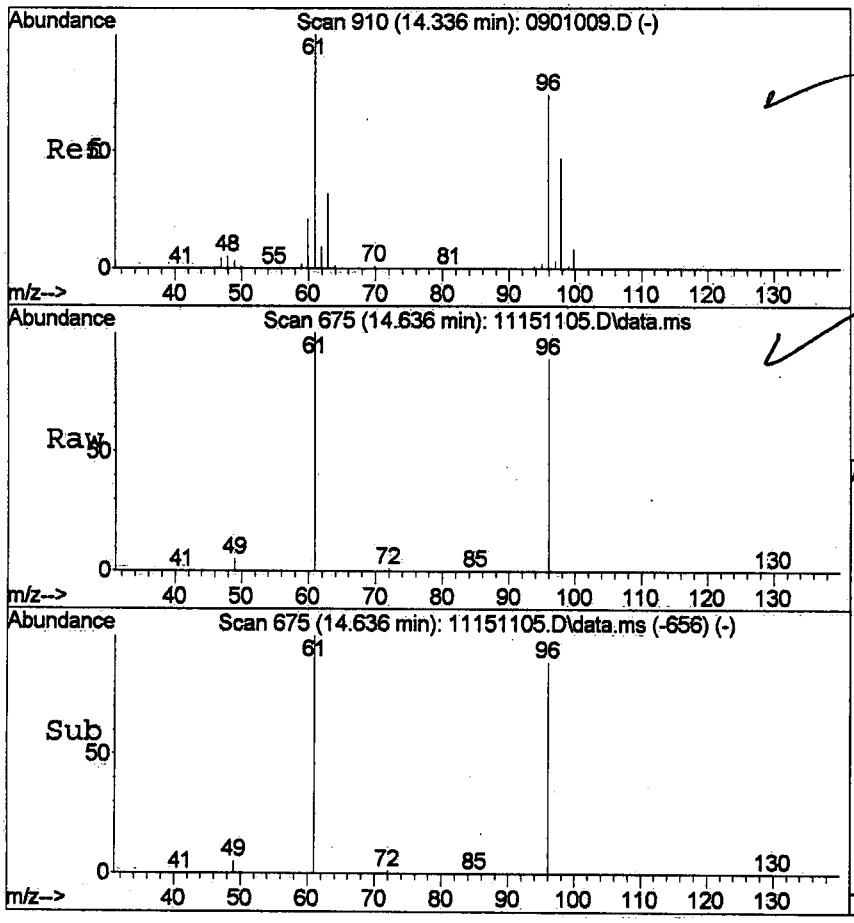


#17
1,1-Dichloroethane
Concen: 65.25 pptv
RT: 12.545 min Scan# 553
Delta R.T. -0.000 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion: 63 Resp: 2601

Ion	Ratio	Lower	Upper
63	100		
65	39.5	28.0	42.0
83	0.0	0.0	0.0
98	0.0	0.0	0.0

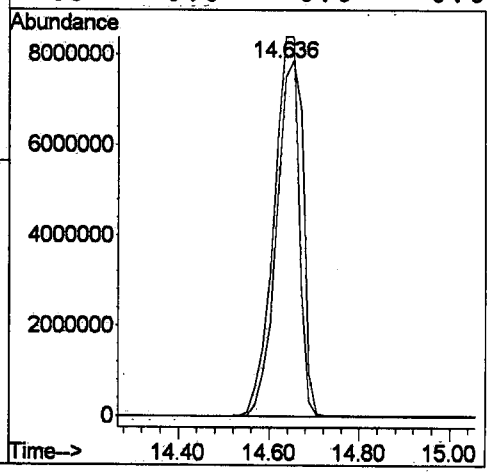


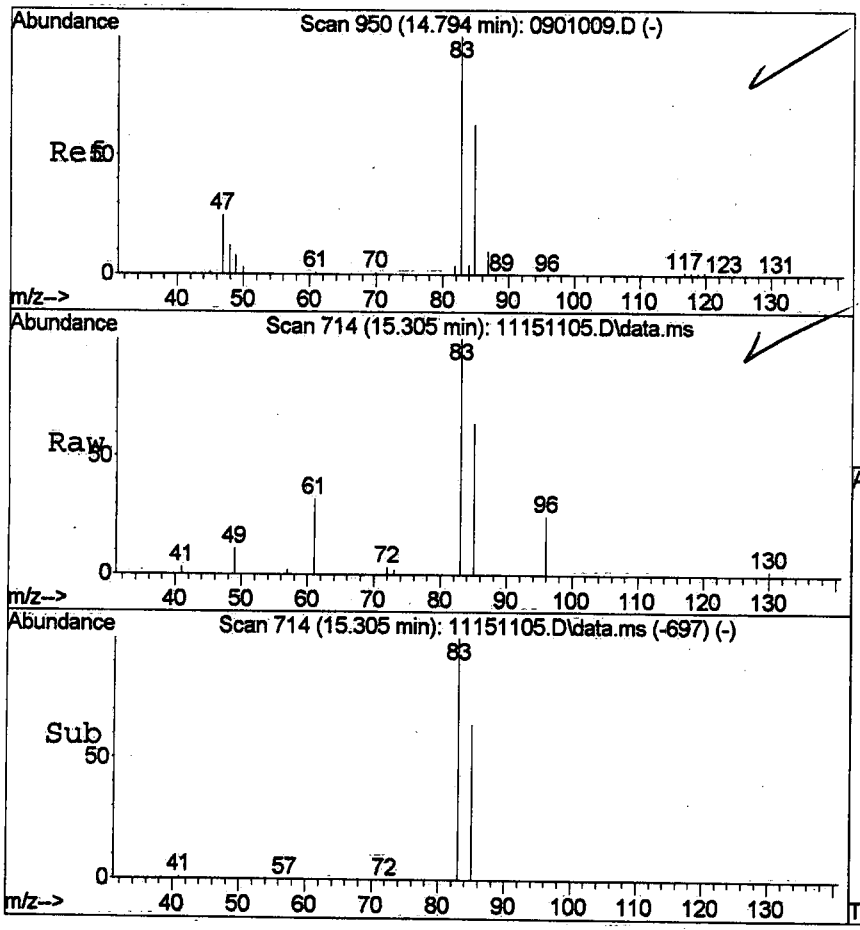


#19
cis-1,2-Dichloroethene
Concen: 1671871.98 pptv
RT: 14.636 min Scan# 675
Delta R.T. 0.034 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion: 61 Resp:32478064

Ion	Ratio	Lower	Upper
61	100		
96	89.5	59.5	89.3#
98	0.0	0.0	0.0
63	0.0	0.0	0.0

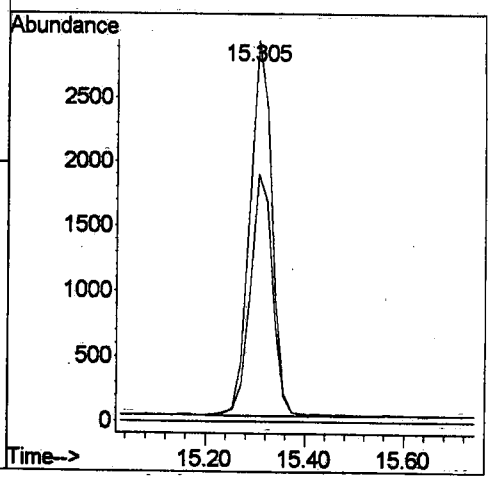


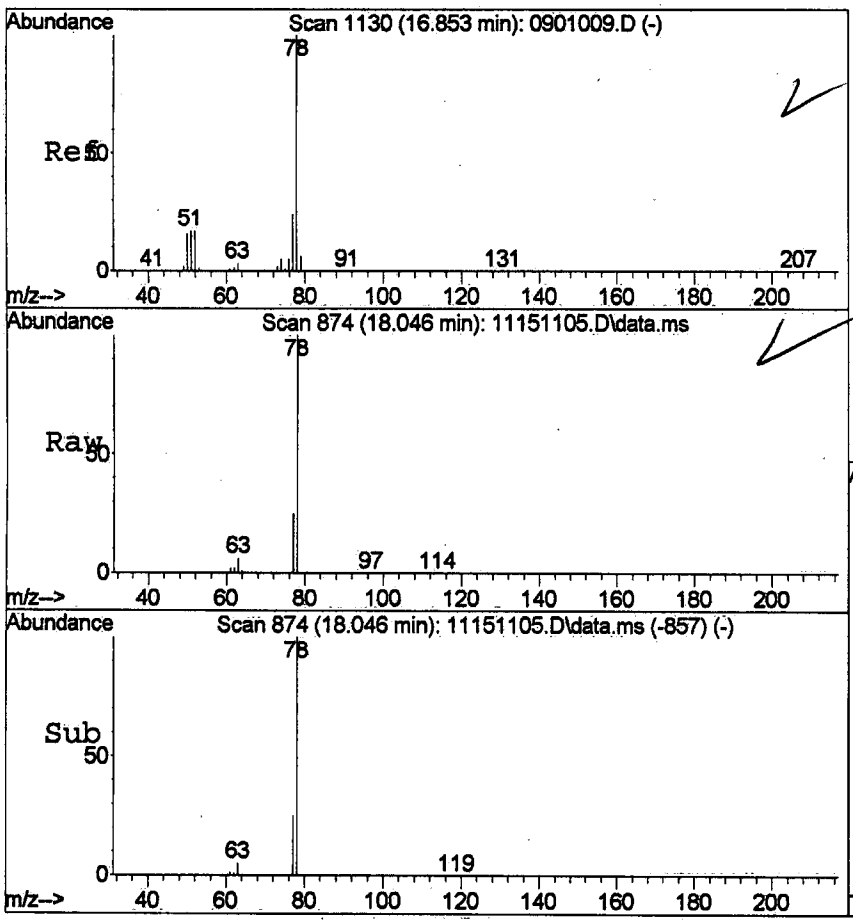


#20
Chloroform
Concen: 126.07 pptv
RT: 15.305 min Scan# 714
Delta R.T. -0.000 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion: 83 Resp: 8836

Ion	Ratio	Lower	Upper
83	100		
85	64.4	53.3	79.9
47	0.0	0.0	0.0

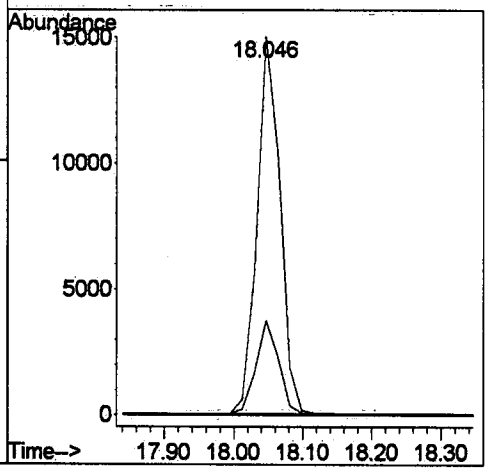


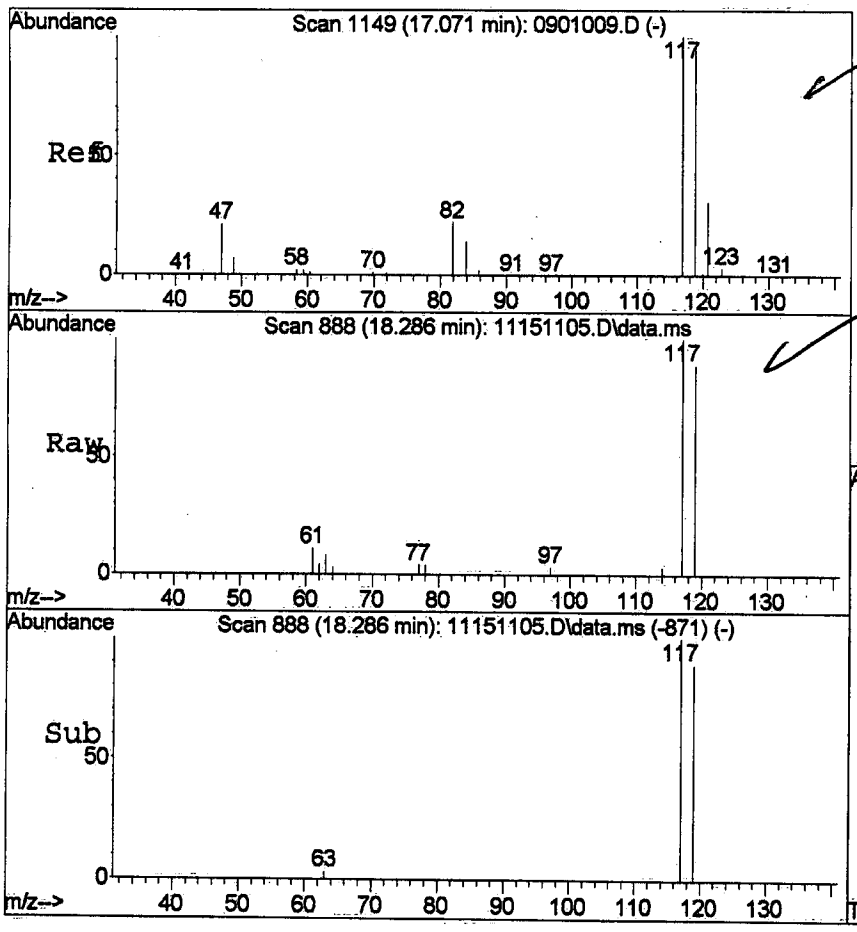


#24
Benzene
Concen: 821.15 pptv
RT: 18.046 min Scan# 874
Delta R.T. -0.000 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion: 78 Resp: 34533

Ion	Ratio	Lower	Upper
78	100		
77	25.1	21.6	32.4
50	0.0	0.0	0.0

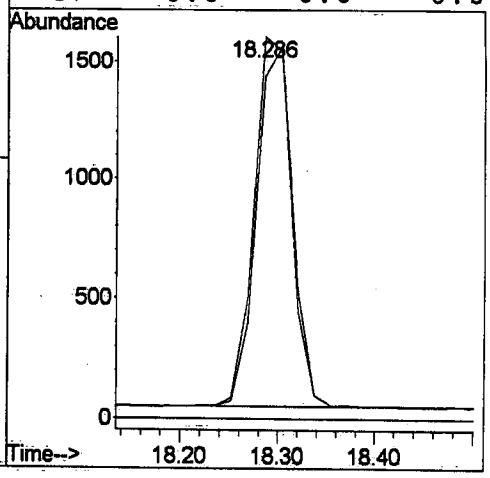


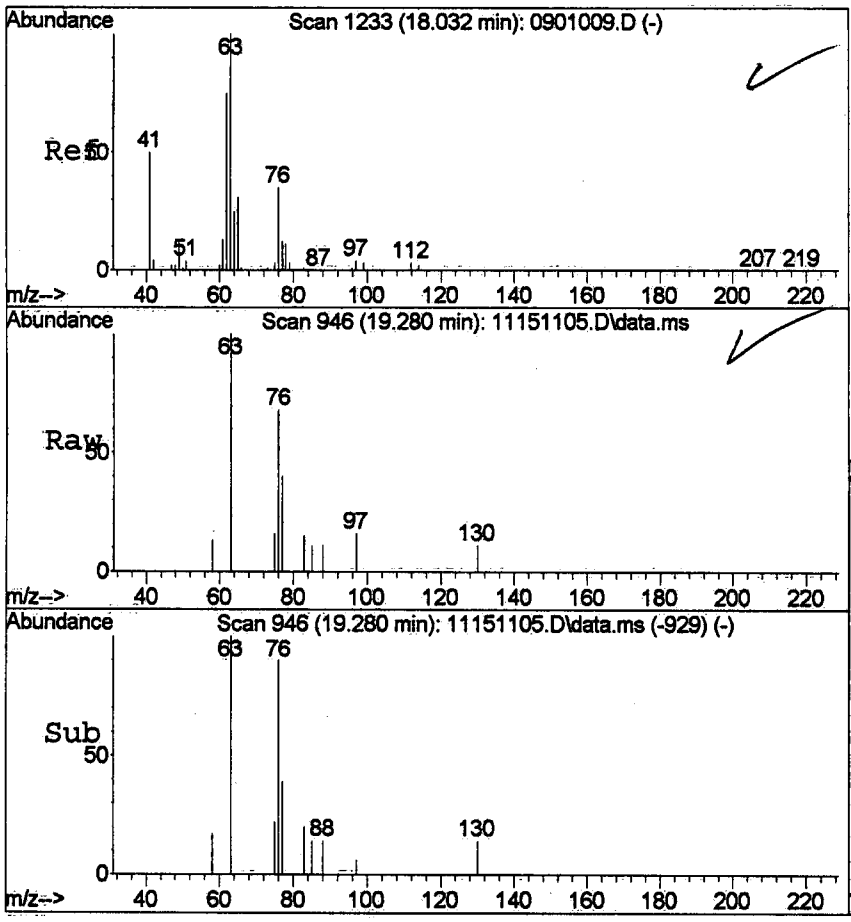


#25
CarbonTetrachloride
Concen: 56.89 pptv
RT: 18.286 min Scan# 888
Delta R.T. -0.000 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion:117 Resp: 4100

Ion	Ratio	Lower	Upper
117	100		
119	89.4	70.1	105.1
82	0.0	0.0	0.0
47	0.0	0.0	0.0

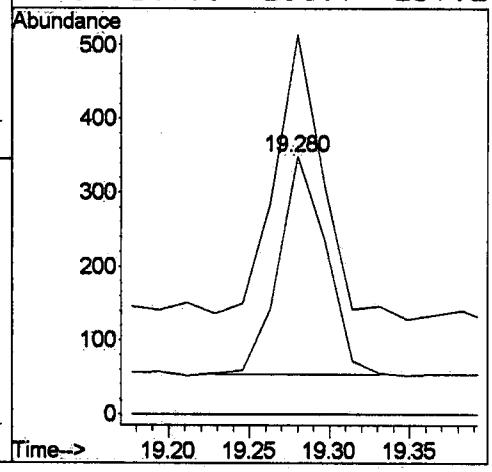


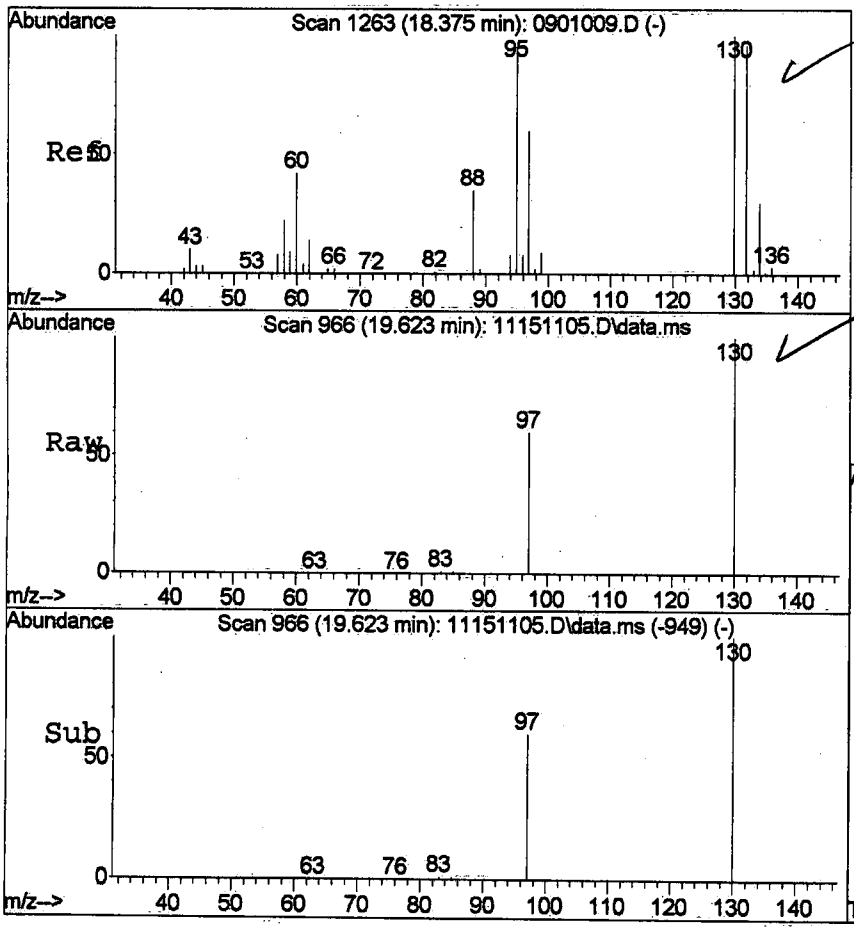


#26
1,2-Dichloropropane
Concen: 43.57 pptv
RT: 19.280 min Scan# 946
Delta R.T. -0.000 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion: 76 Resp: 604

Ion	Ratio	Lower	Upper
76	100		
41	0.0	0.0	0.0
62	0.0	0.0	0.0
63	147.0	104.7	157.1

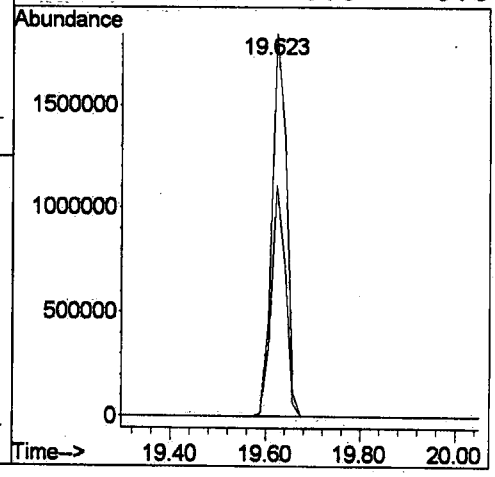


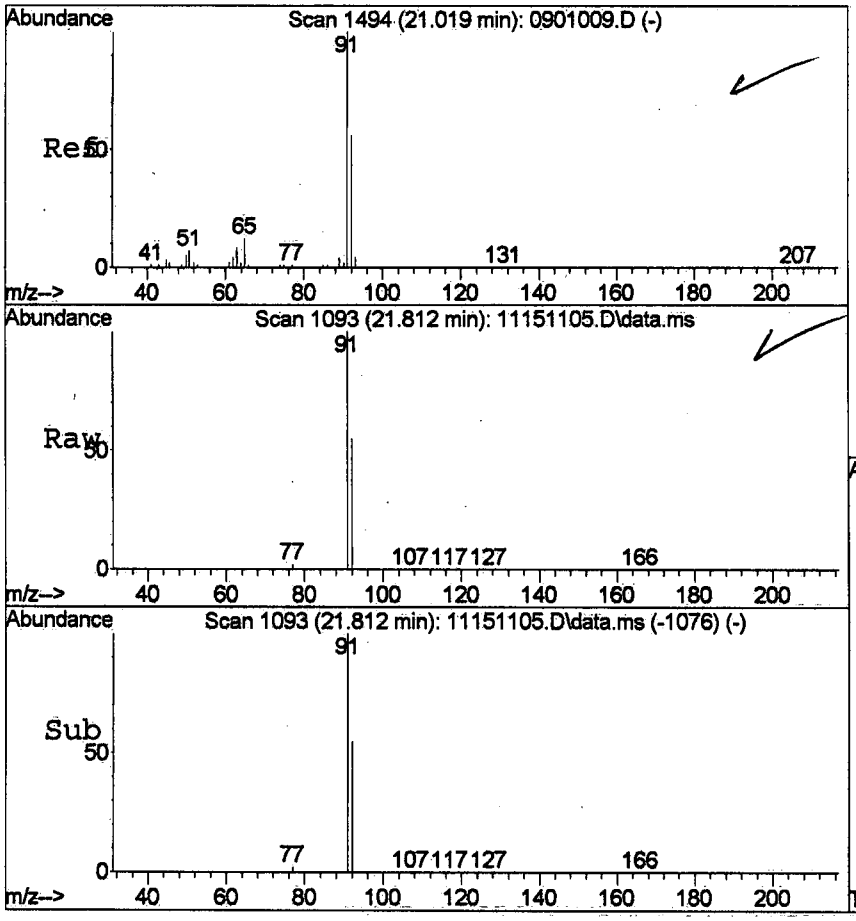


#28
Trichloroethene
Concen: 149982.28 pptv
RT: 19.623 min Scan# 966
Delta R.T. -0.000 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion:130 Resp: 3908449

Ion	Ratio	Lower	Upper
130	100		
95	0.0	0.0	0.0
97	59.7	54.6	82.0
132	0.0	0.0	0.0

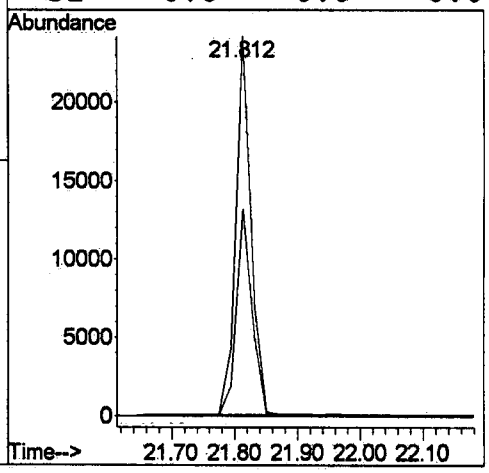


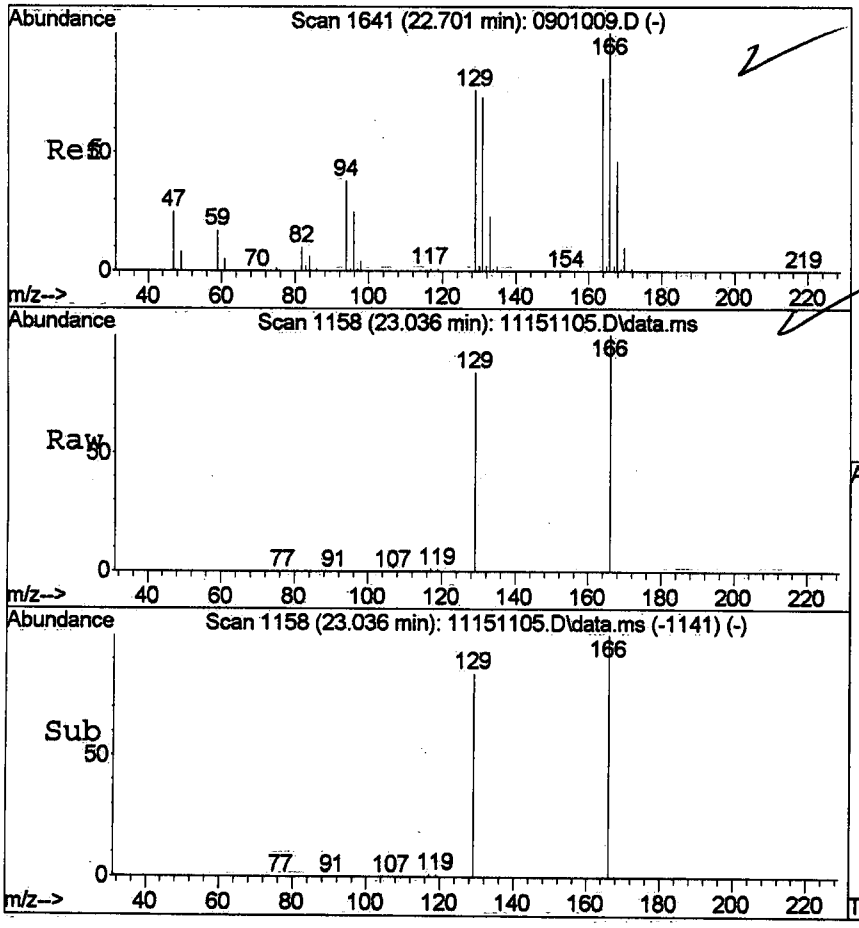


#32
Toluene
Concen: 591.67 pptv
RT: 21.812 min Scan# 1093
Delta R.T. 0.000 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion: 91 Resp: 40558

Ion	Ratio	Lower	Upper
91	100		
92	54.5	45.1	67.7
65	0.0	0.0	0.0
51	0.0	0.0	0.0

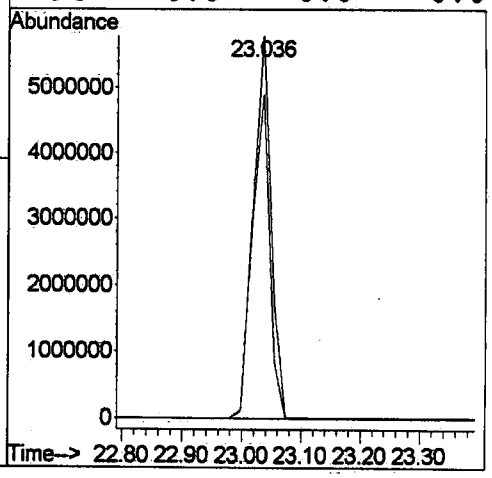


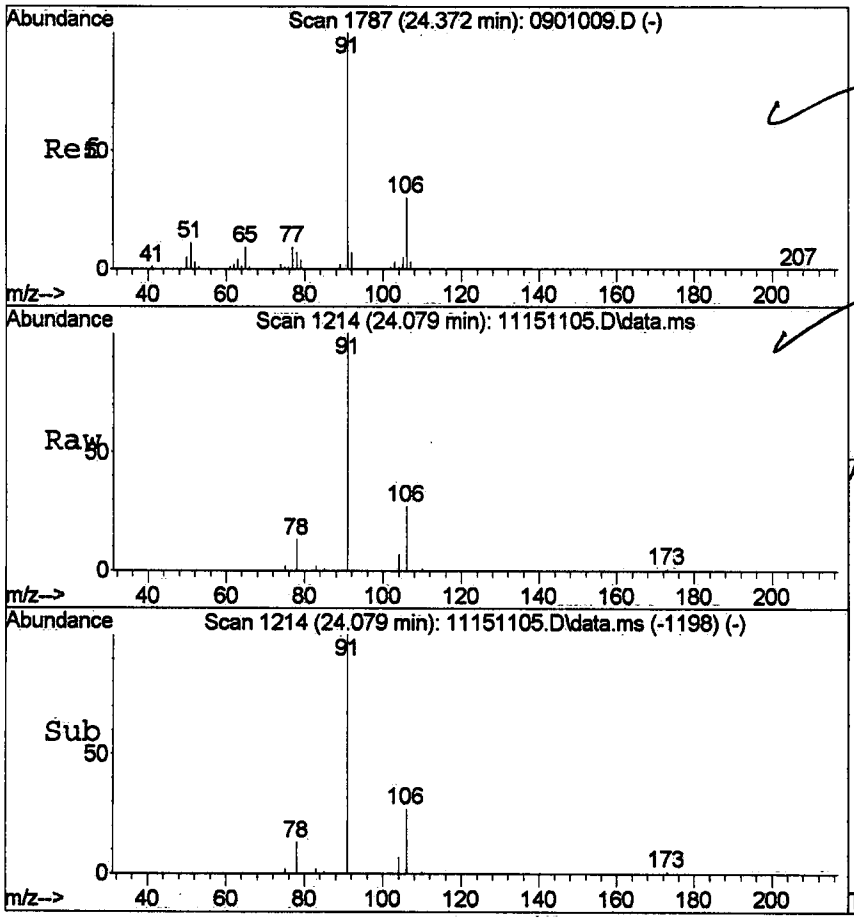


#35
Tetrachloroethene
Concen: 328195.13 pptv
RT: 23.036 min Scan# 1158
Delta R.T. 0.019 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion:166 Resp:12057155

Ion	Ratio	Lower	Upper
166	100		
129	84.5	65.5	98.3
164	0.0	0.0	0.0
94	0.0	0.0	0.0

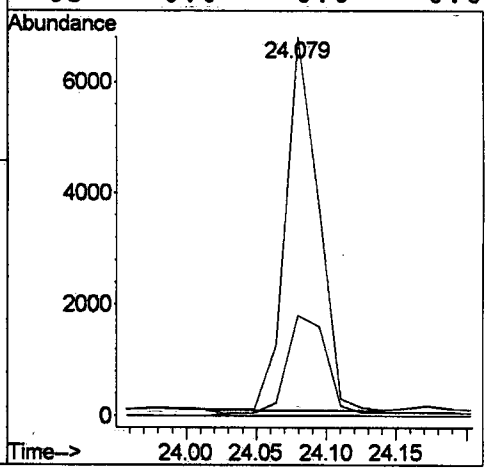


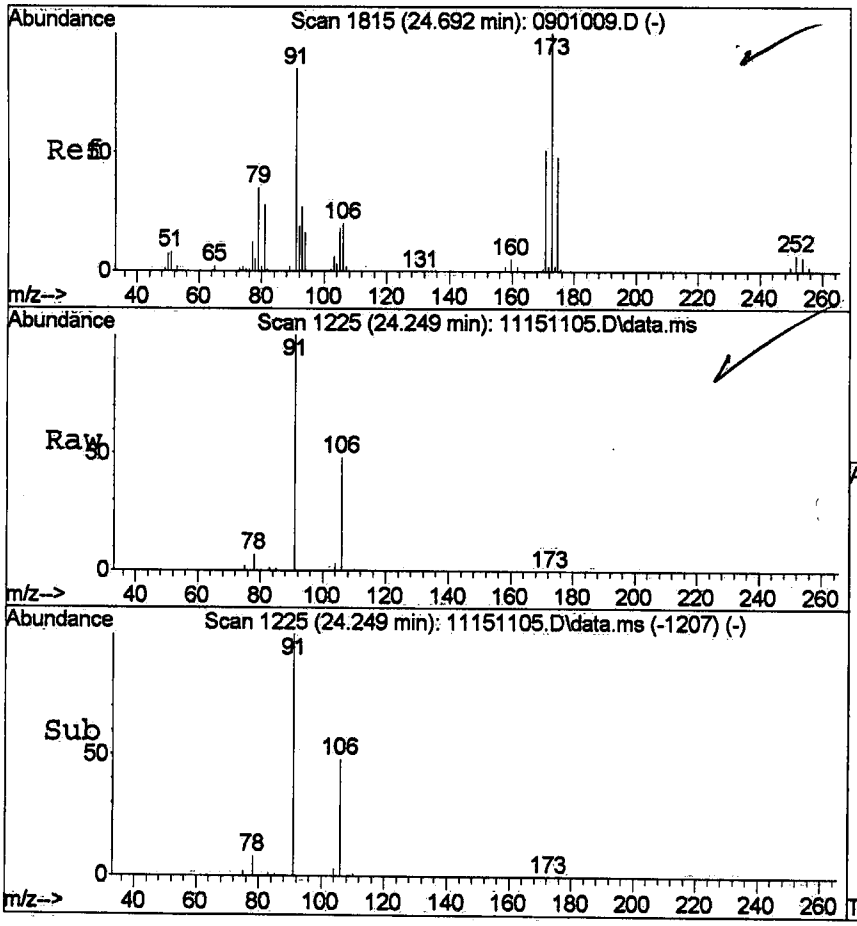


#38
Ethylbenzene
Concen: 147.09 pptv
RT: 24.079 min Scan# 1214
Delta R.T. 0.000 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion: 91 Resp: 11220

Ion	Ratio	Lower	Upper
91	100		
106	26.6	22.3	33.5
77	0.0	0.0	0.0
65	0.0	0.0	0.0

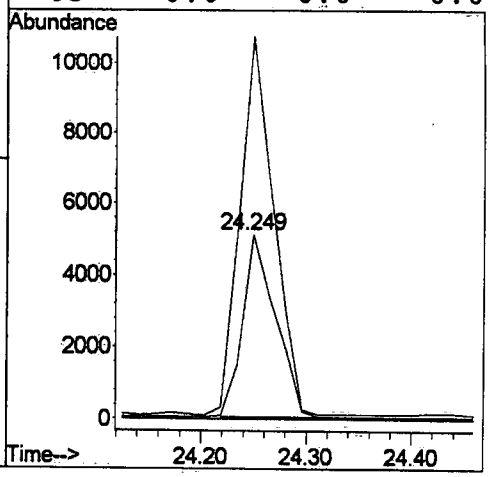


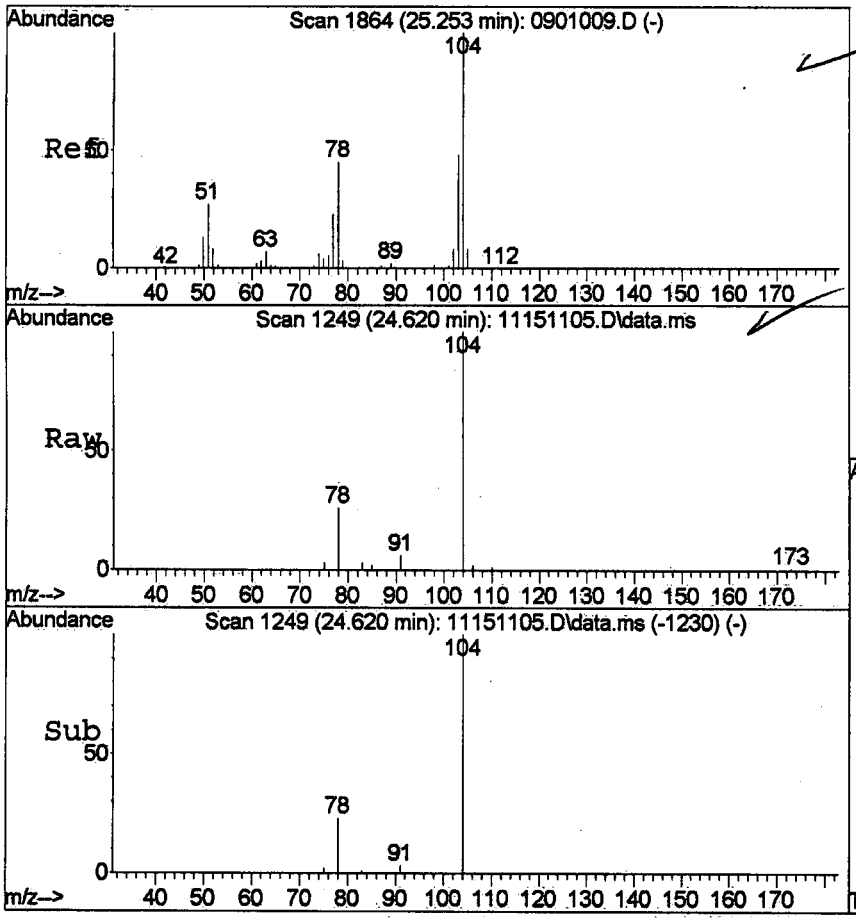


#39
m&p-Xylene
Concen: 418.36 pptv
RT: 24.249 min Scan# 1225
Delta R.T. 0.000 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion:106 Resp: 11074

Ion	Ratio	Lower	Upper
106	100		
91	209.8	164.3	246.5
77	0.0	0.0	0.0
65	0.0	0.0	0.0

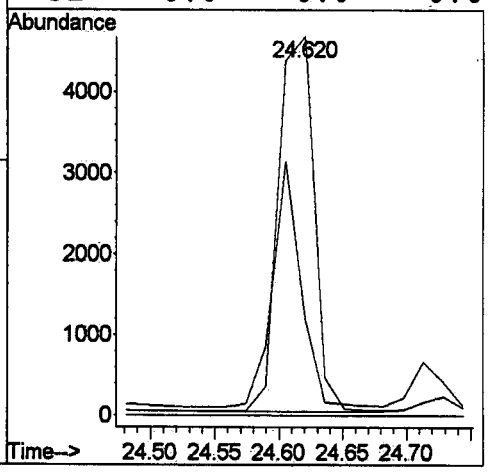


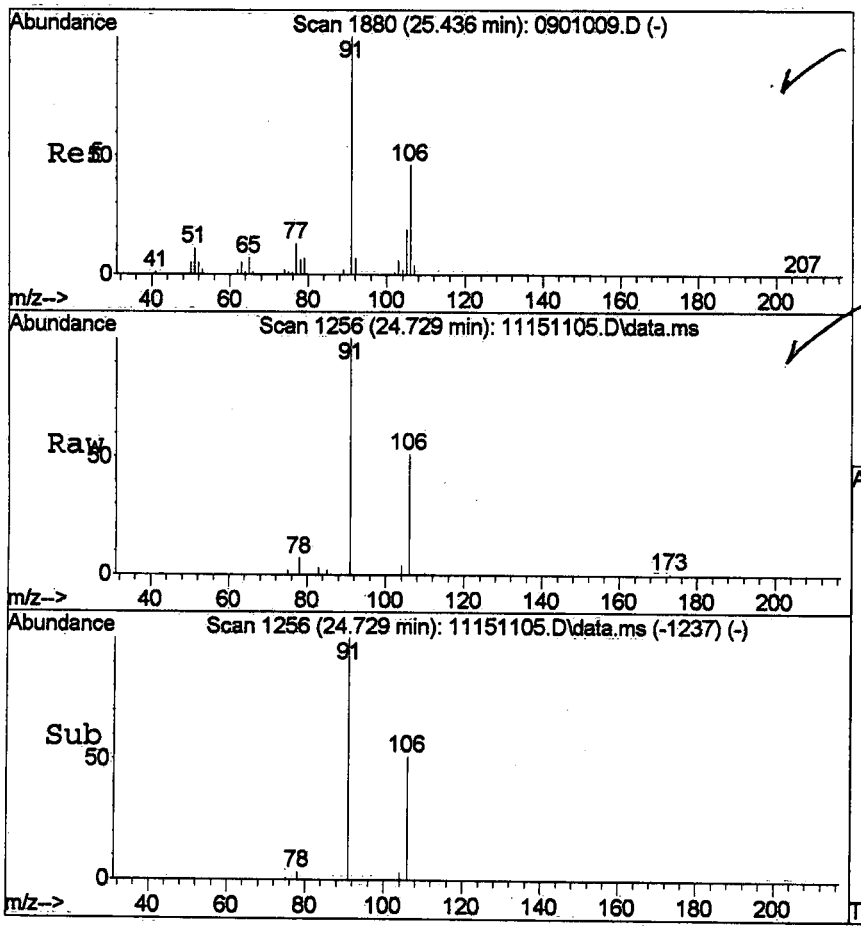


#41
Styrene
Concen: 276.27 pptv
RT: 24.620 min Scan# 1249
Delta R.T. 0.000 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion:104 Resp: 9062

Ion	Ratio	Lower	Upper
104	100		
103	0.0	0.0	0.0
78	25.5	19.1	28.7
51	0.0	0.0	0.0

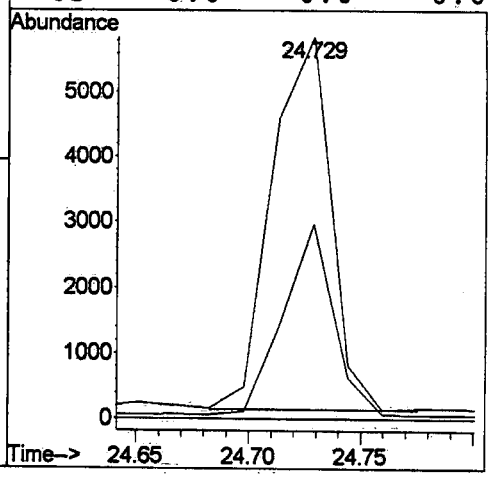


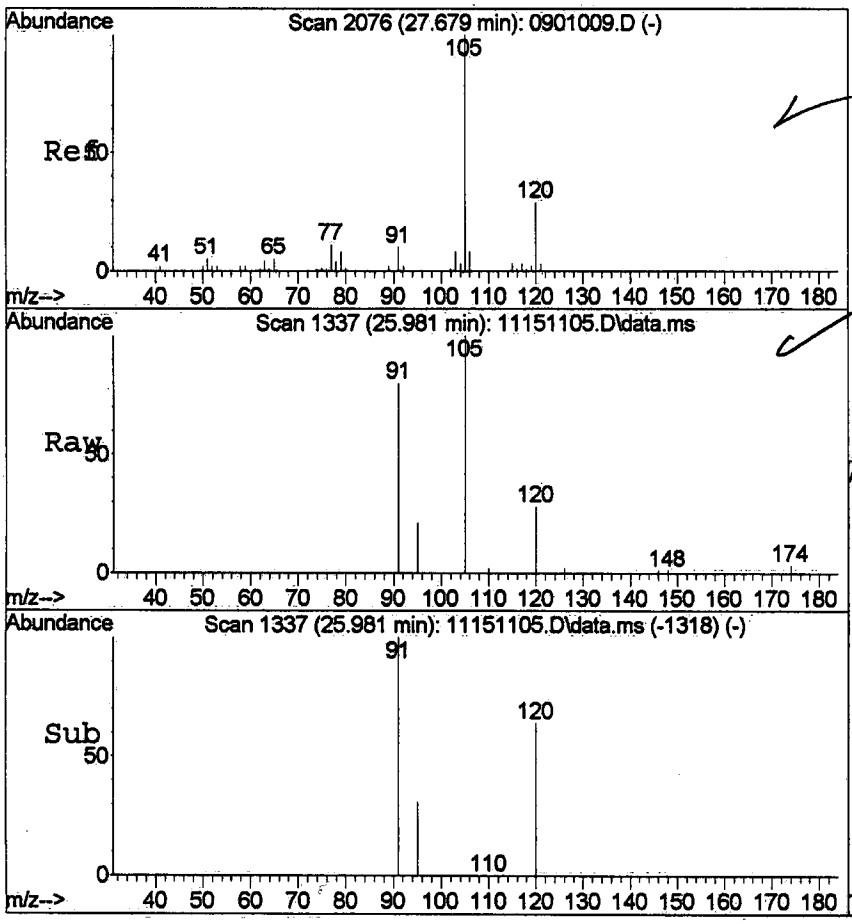


#43
o-Xylene
Concen: 193.96 pptv
RT: 24.729 min Scan# 1256
Delta R.T. 0.001 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion: 91 Resp: 10398

Ion	Ratio	Lower	Upper
91	100		
106	50.7	42.2	63.2
77	0.0	0.0	0.0
65	0.0	0.0	0.0

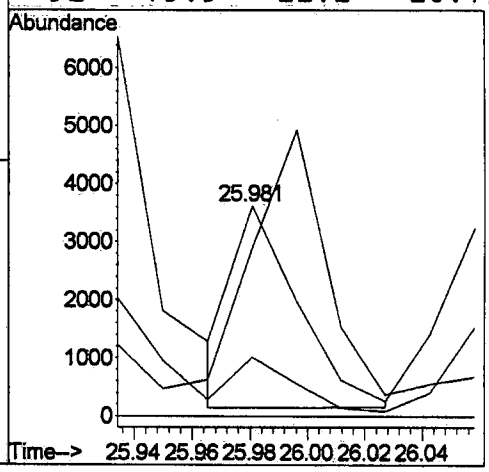


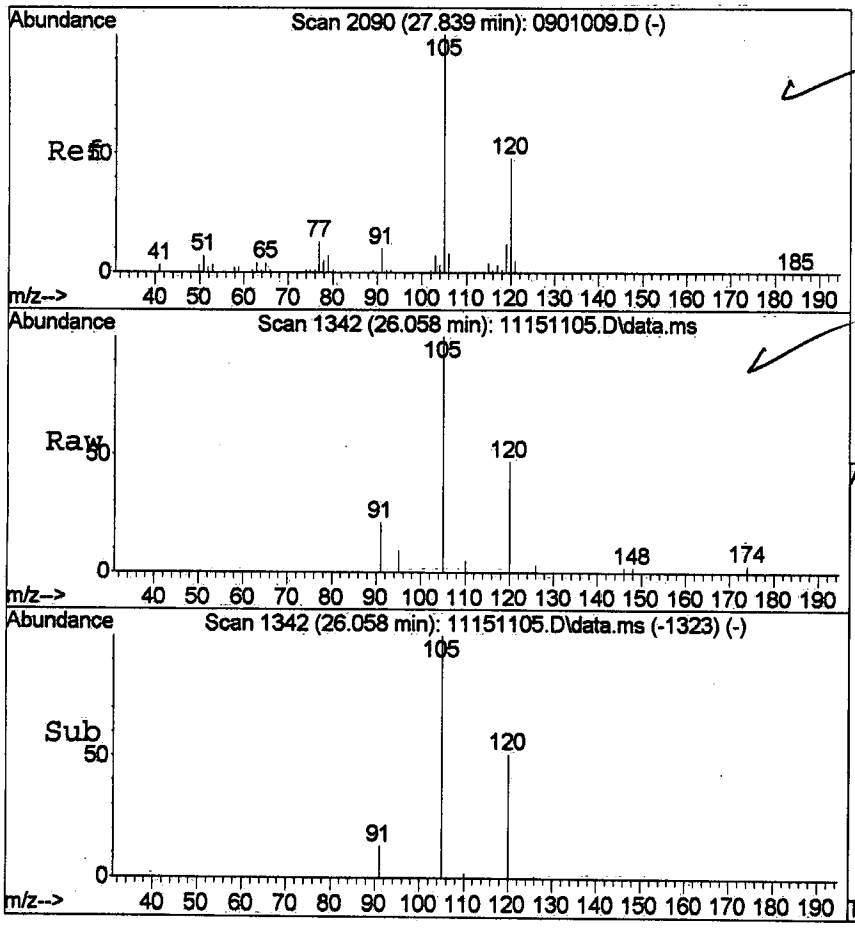


#45
4-Ethyltoluene
Concen: 84.78 pptv
RT: 25.981 min Scan# 1337
Delta R.T. 0.001 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion:105 Resp: 5457

Ion	Ratio	Lower	Upper
105	100		
120	28.0	23.7	35.5
77	0.0	0.0	0.0
91	79.9	11.1	16.7#

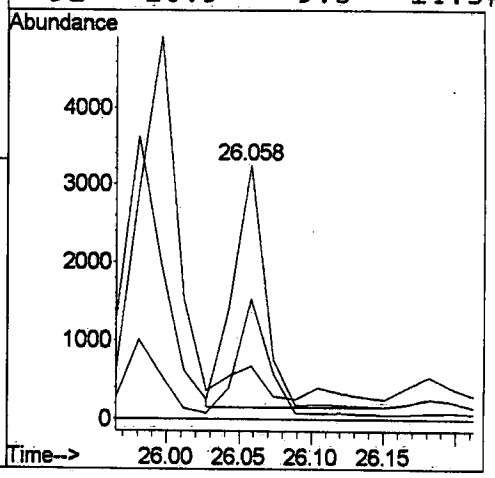


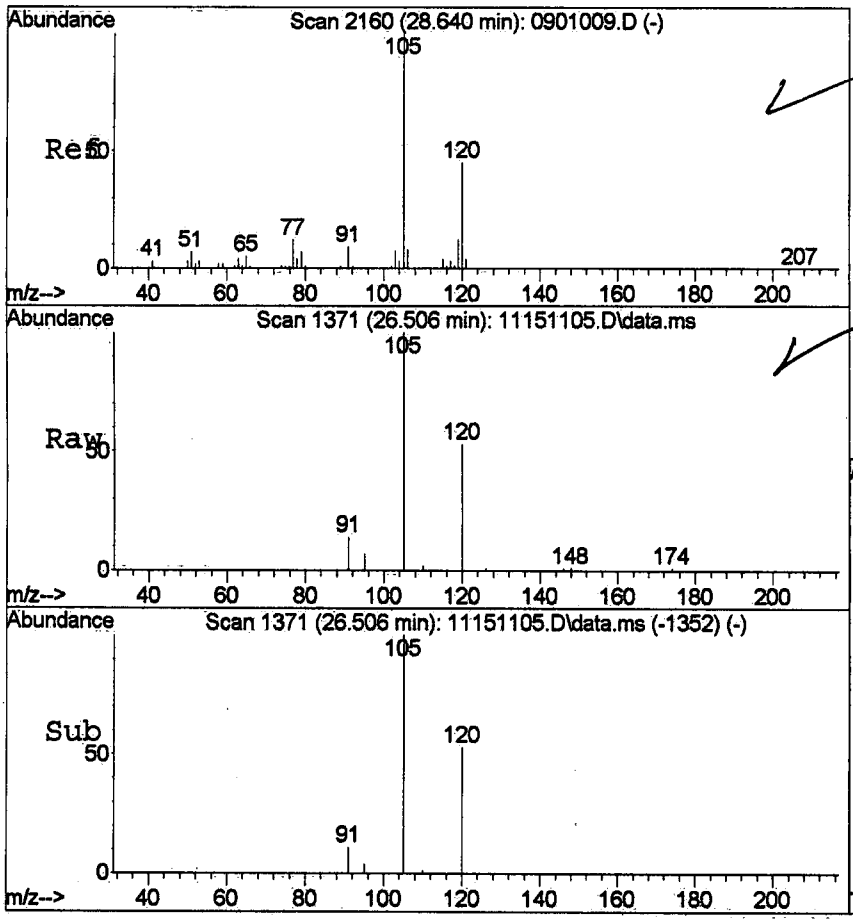


#46
1,3,5-Trimethylbenzene
Concen: 77.37 pptv
RT: 26.058 min Scan# 1342
Delta R.T. 0.000 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion:105 Resp: 4647

Ion	Ratio	Lower	Upper
105	100		
120	47.2	37.8	56.8
77	0.0	0.0	0.0
91	20.9	9.5	14.3#

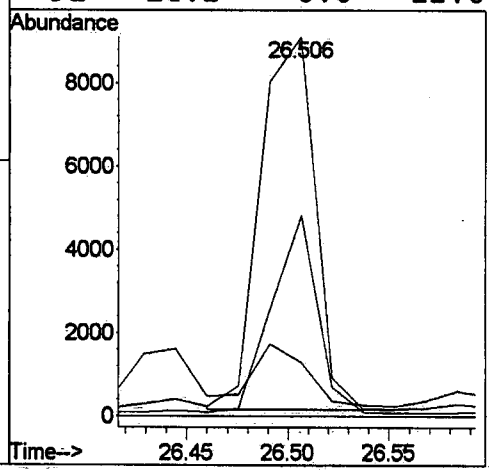




#47
1,2,4-Trimethylbenzene
Concen: 314.28 pptv
RT: 26.506 min Scan# 1371
Delta R.T. 0.000 min
Lab File: 11151105.D
Acq: 15 Nov 2011 11:49 am

Tgt Ion:105 Resp: 16854

Ion	Ratio	Lower	Upper
105	100		
120	52.9	45.4	68.0
77	0.0	0.0	0.0
91	14.2	8.6	12.8#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151111.D
Acq On : 15 Nov 2011 16:16
Operator : JJG
Sample : 110957-53715 x100
Misc : IS/Surr: PS082311-02 + 500mL x100 (Sig #1); (Sig #2)
ALS Vial : 1 Sample Multiplier: 100

Quant Time: Nov 15 17:50:44 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.928	49	206745	10000.00 pptv	0.00
23) 1,4-Difluorobenzene	18.715	114	737696	10000.00 pptv	0.00
36) Chlorobenzene-d5	23.657	117	674365	10000.00 pptv	0.00

System Monitoring Compounds					
44) BFB(4-Bromochlorobenzene)	25.177	174	644488	9955.78 pptv	0.00

Spiked Amount 10000.000 Recovery = 99.56%

Target Compounds					Qvalue
2) Chlorodifluoromethane	4.012	51	220	N.D.	
3) Dichlorodifluoromethane	4.184	85	437	N.D.	
4) Chloromethane	0.000	50	0	N.D. d	
5) Dichlorotetrafluoroethane	4.681	85	20	N.D.	
6) VinylChloride	4.852	62	722	4010.31 pptv #	86
7) 1,3-Butadiene	5.126	54	39	N.D.	
8) Bromomethane	5.589	96	30	N.D.	
9) Chloroethane	5.966	64	23	N.D.	
10) Dichlorofluoromethane	6.223	67	111	N.D.	
11) VinylBromide	6.823	108	23	N.D.	
12) Trichlorofluoromethane	7.611	101	280	N.D.	
13) 1,1-Dichloroethene	0.000	61	0	N.D. d	
14) AllylChloride	9.838	41	23	N.D.	
15) Trichlorotrifluoroethane	10.369	101	78	N.D.	
16) trans-1,2-Dichloroethene	12.049	61	4387	20,008.08 pptv	98
17) 1,1-Dichloroethane	12.545	63	153	N.D.	
18) MTBE	13.008	73	7	N.D.	
19) cis-1,2-Dichloroethene	14.602	61	232818	1,367,693.04 pptv	87
20) Chloroform	15.305	83	141	N.D.	
21) 1,2-Dichloroethane	16.830	62	37	N.D.	
22) 1,1,1-Trichloroethane	17.310	97	46	N.D.	
24) Benzene	0.000	78	0	N.D. d	
25) CarbonTetrachloride	18.286	117	50	N.D.	
26) 1,2-Dichloropropane	19.297	76	12	N.D.	
27) Bromodichloromethane	19.623	83	408	N.D.	
28) Trichloroethene	19.623	130	205560	89894.39 pptv	

11/15/11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151111.D
Acq On : 15 Nov 2011 16:16
Operator : JJG
Sample : 110957-53715 x100
Misc : IS/Surr: PS082311-02 + 500mL x100 (Sig #1); (Sig #2)
ALS Vial : 1 Sample Multiplier: 100

Quant Time: Nov 15 17:50:44 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units Dev(Min)
29) cis-1,3-Dichloropropene	20.685	75	23	N.D.
30) trans-1,3-Dichloropropene	21.336	75	11	N.D.
31) 1,1,2-Trichloroethane	0.000	97	0	N.D.
32) Toluene	0.000	91	0	N.D. d
33) Dibromochloromethane	22.245	129	11	N.D.
34) 1,2-Dibromoethane	22.509	107	10	N.D.
35) Tetrachloroethene	23.017	166	74548m	231,250.00 pptv
37) Chlorobenzene	23.694	112	156	N.D.
38) Ethylbenzene	24.079	91	562	N.D.
39) m&p-Xylene	0.000	106	0	N.D. d
40) Bromoform	24.327	173	32	N.D.
41) Styrene	24.621	104	133	N.D.
42) 1,1,2,2-Tetrachloroethane	24.698	83	65	N.D.
43) o-Xylene	24.729	91	371	N.D.
45) 4-Ethyltoluene	25.981	105	218	N.D.
46) 1,3,5-Trimethylbenzene	26.058	105	237	N.D.
47) 1,2,4-Trimethylbenzene	0.000	105	0	N.D. d
48) BenzylChloride	26.584	91	210	N.D.
49) 1,3-Dichlorobenzene	26.676	146	104	N.D.
50) 1,4-Dichlorobenzene	26.754	146	314	N.D.
51) 1,2-Dichlorobenzene	27.140	146	110	N.D.
52) Hexachlorobutadiene	29.831	225	69	N.D.

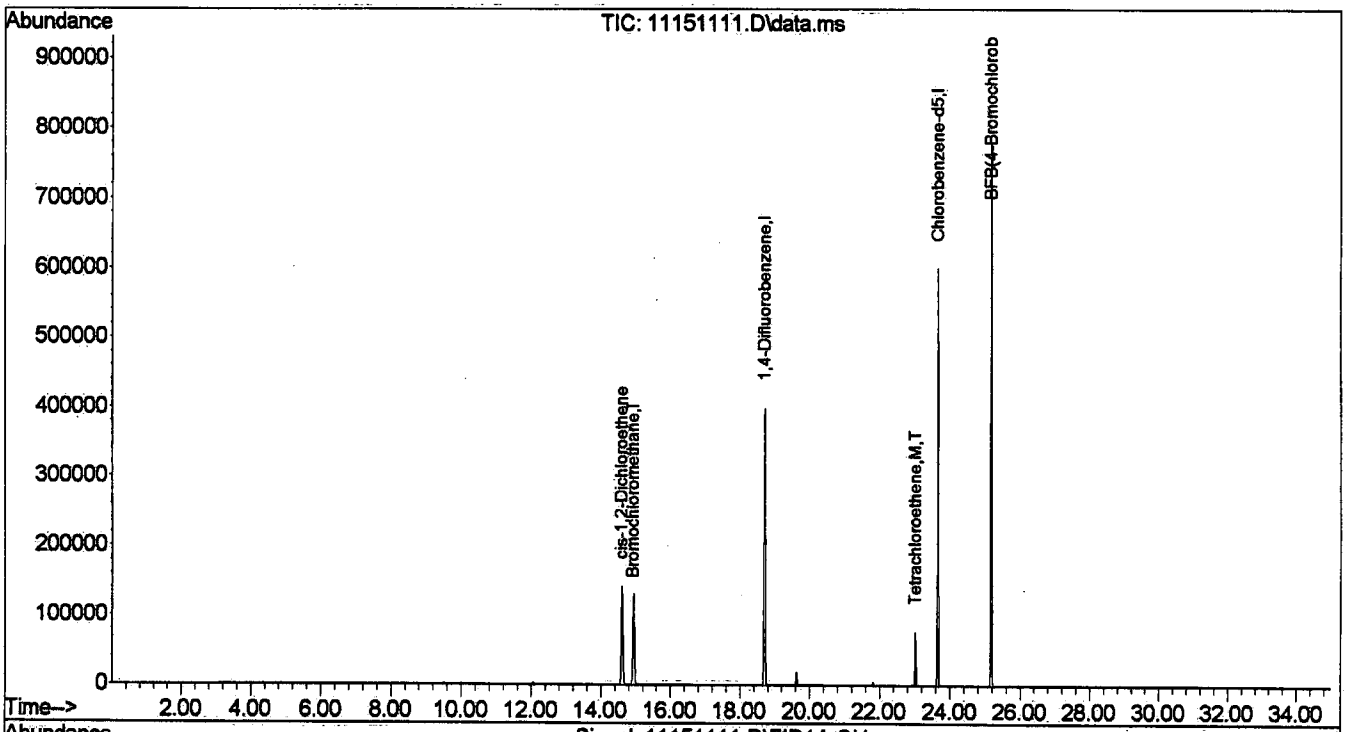
(#) = qualifier out of range (m) = manual integration (+) = signals summed

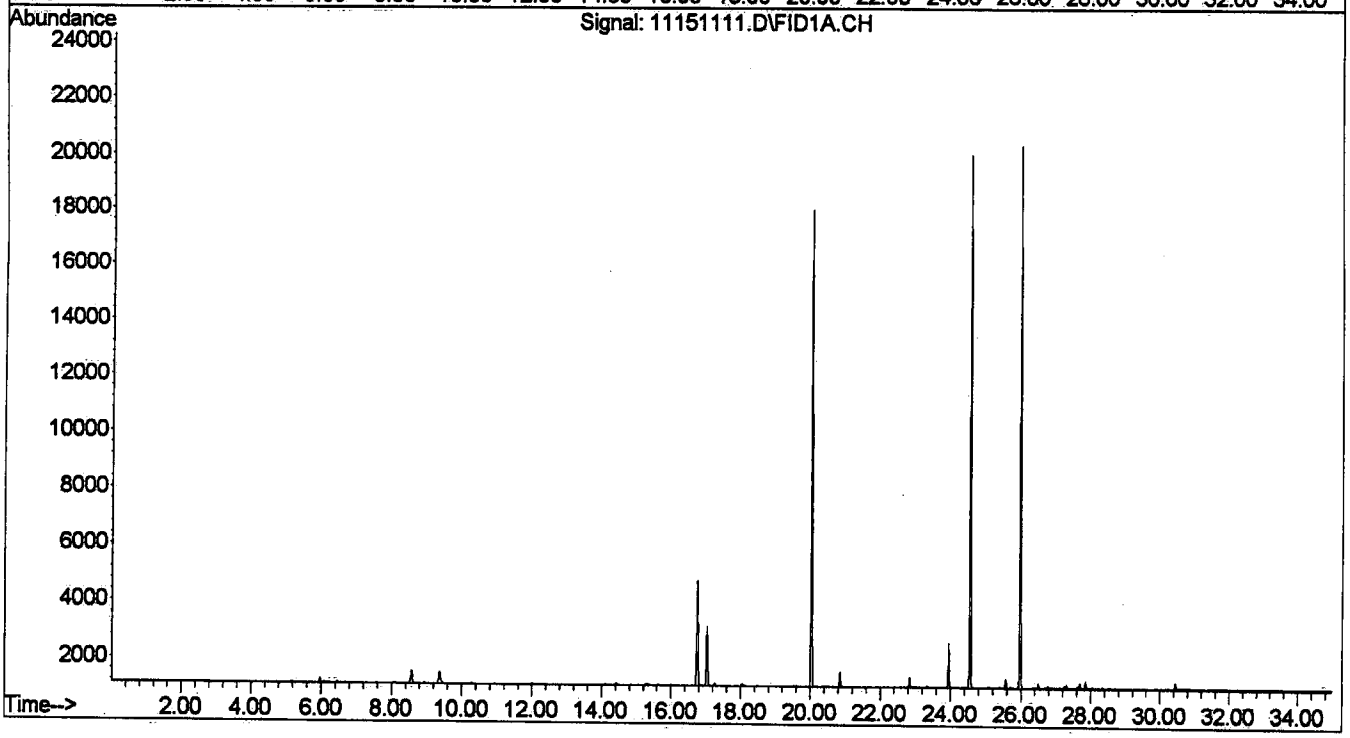
11/15/11

Quantitation Report (QT Reviewed)

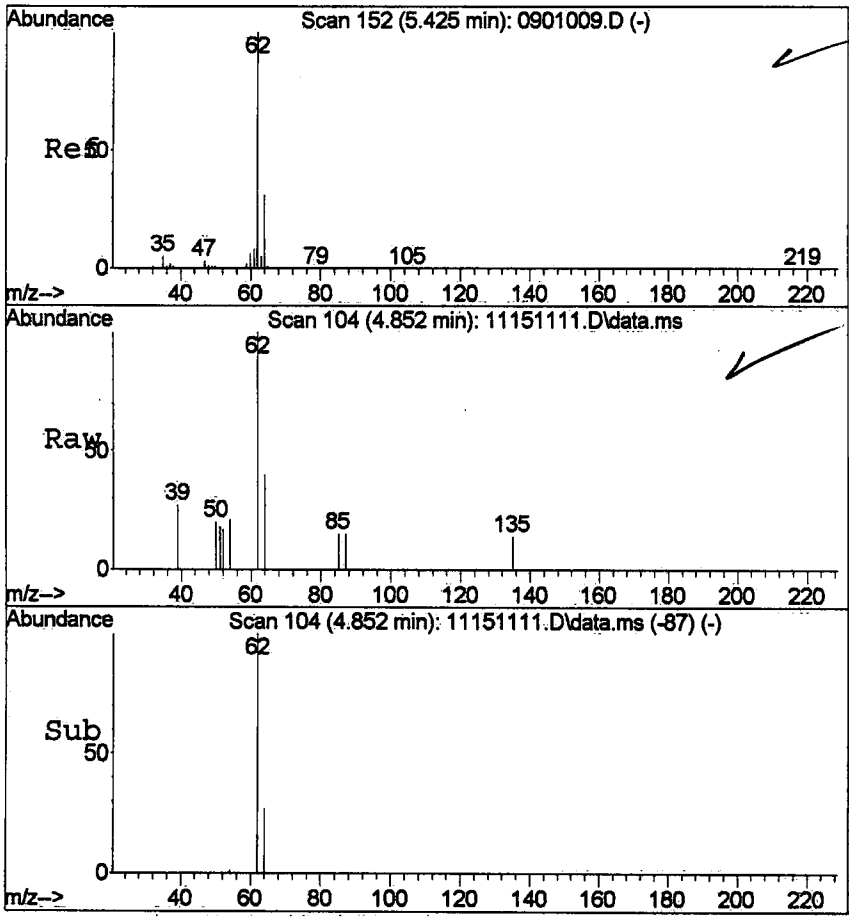
Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151111.D
Acq On : 15 Nov 2011 16:16
Operator : JJG
Sample : 110957-53715 x100
Misc : IS/Surr: PS082311-02 + 500mL x100 (Sig #1); (Sig #2)
ALS Vial : 1 Sample Multiplier: 100

Quant Time: Nov 15 17:50:44 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration





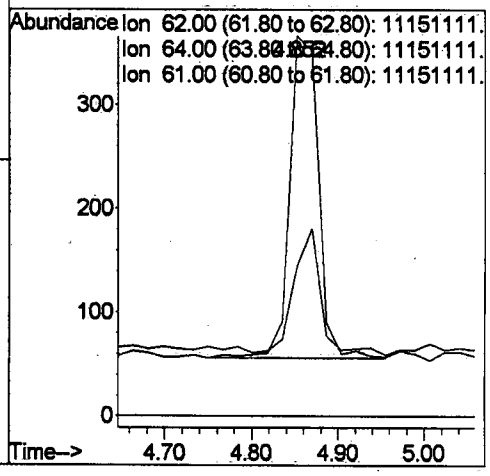
11/15/11

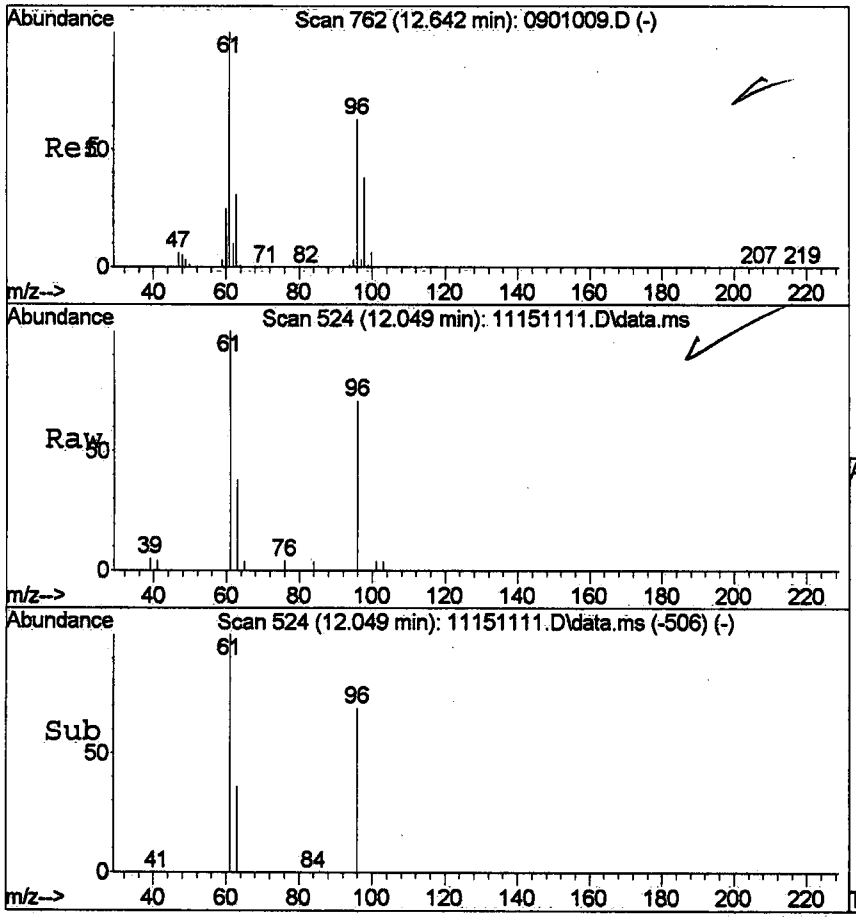


#6
VinylChloride
Concen: 4010.31 pptv
RT: 4.852 min Scan# 104
Delta R.T. -0.000 min
Lab File: 11151111.D
Acq: 15 Nov 2011 4:16 pm

Tgt Ion: 62 Resp: 722

Ion	Ratio	Lower	Upper
62	100		
64	39.6	25.6	38.4#
61	0.0	0.0	0.0

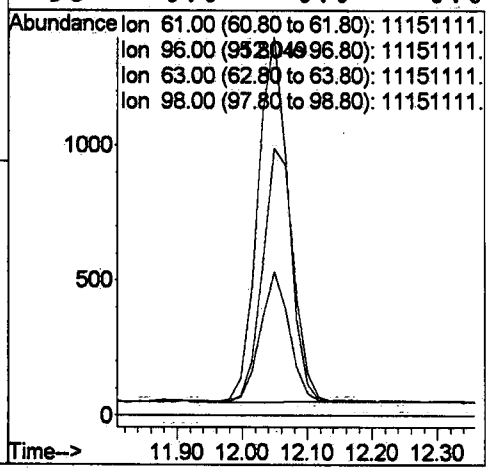




#16
trans-1,2-Dichloroethene
Concen: 20008.08 pptv
RT: 12.049 min Scan# 524
Delta R.T. -0.000 min
Lab File: 11151111.D
Acq: 15 Nov 2011 4:16 pm

Tgt Ion: 61 Resp: 4387

Ion	Ratio	Lower	Upper
61	100		
96	70.7	57.4	86.0
63	38.0	28.1	42.1
98	0.0	0.0	0.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151109.D
Acq On : 15 Nov 2011 14:48
Operator : JJG
Sample : 110957-53715 x2000
Misc : IS/Surr: PS082311-02 + 25mL x100 (Sig #1); (Sig #2)
ALS Vial : 1 Sample Multiplier: 2000

Quant Time: Nov 15 17:54:34 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.928	49	202181	10000.00 pptv	0.00
23) 1,4-Difluorobenzene	18.714	114	754254	10000.00 pptv	0.00
36) Chlorobenzene-d5	23.657	117	682437	10000.00 pptv	0.00

System Monitoring Compounds					
44) BFB(4-Bromochlorobenzene)	25.177	174	644002	9830.60 pptv	0.00

Spiked Amount 10000.000 Recovery = 98.31%

Target Compounds					Qvalue
2) Chlorodifluoromethane	0.000	51	0	N.D. d	
3) Dichlorodifluoromethane	4.184	85	45	N.D.	
4) Chloromethane	0.000	50	0	N.D. d	
5) Dichlorotetrafluoroethane	4.612	85	20	N.D.	
6) VinylChloride	0.000	62	0	N.D. d	
7) 1,3-Butadiene	0.000	54	0	N.D.	
8) Bromomethane	0.000	96	0	N.D. d	
9) Chloroethane	0.000	64	0	N.D. d	
10) Dichlorofluoromethane	6.206	67	17	N.D.	
11) VinylBromide	0.000	108	0	N.D. d	
12) Trichlorofluoromethane	0.000	101	0	N.D. d	
13) 1,1-Dichloroethene	0.000	61	0	N.D. d	
14) AllylChloride	0.000	41	0	N.D. d	
15) Trichlorotrifluoroethane	0.000	101	0	N.D. d	
16) trans-1,2-Dichloroethene	0.000	61	0	N.D. d	
17) 1,1-Dichloroethane	0.000	63	0	N.D.	
18) MTBE	0.000	73	0	N.D. d	
19) cis-1,2-Dichloroethene	14.602	61	8889	1067946.90 pptv	
20) Chloroform	15.305	83	19	N.D.	
21) 1,2-Dichloroethane	16.830	62	17	N.D.	
22) 1,1,1-Trichloroethane	17.292	97	17	N.D.	
24) Benzene	0.000	78	0	N.D. d	
25) CarbonTetrachloride	18.235	117	6	N.D.	
26) 1,2-Dichloropropane	0.000	76	0	N.D. d	
27) Bromodichloromethane	0.000	83	0	N.D. d	
28) Trichloroethene	19.623	130	1205	103079.15 pptv	
29) cis-1,3-Dichloropropene	0.000	75	0	N.D. d	

11/15/11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151109.D
Acq On : 15 Nov 2011 14:48
Operator : JJG
Sample : 110957-53715 x2000
Misc : IS/Surr: PS082311-02 + 25mL x100 (Sig #1); (Sig #2)
ALS Vial : 1 Sample Multiplier: 2000

Quant Time: Nov 15 17:54:34 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

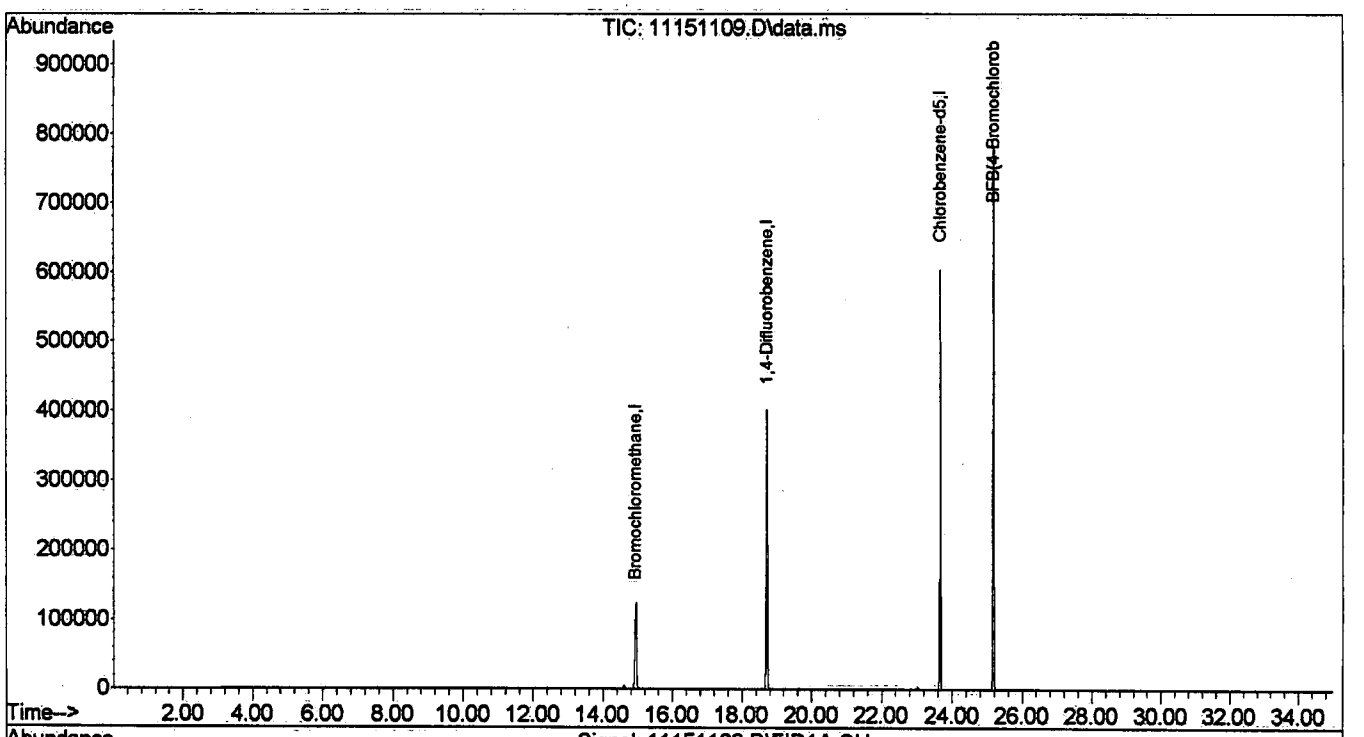
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
30) trans-1,3-Dichloropropene	0.000	75	0	N.D.	d
31) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
32) Toluene	0.000	91	0	N.D.	d
33) Dibromochloromethane	22.264	129	3	N.D.	
34) 1,2-Dibromoethane	22.509	107	7	N.D.	
35) Tetrachloroethene	23.017	166	4180m	253636.54 pptv	
37) Chlorobenzene	0.000	112	0	N.D.	d
38) Ethylbenzene	0.000	91	0	N.D.	d
39) m&p-Xylene	0.000	106	0	N.D.	d
40) Bromoform	24.327	173	14	N.D.	
41) Styrene	0.000	104	0	N.D.	d
42) 1,1,2,2-Tetrachloroethane	24.713	83	7	N.D.	
43) o-Xylene	0.000	91	0	N.D.	d
45) 4-Ethyltoluene	0.000	105	0	N.D.	d
46) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	d
47) 1,2,4-Trimethylbenzene	0.000	105	0	N.D.	d
48) BenzylChloride	0.000	91	0	N.D.	d
49) 1,3-Dichlorobenzene	0.000	146	0	N.D.	d
50) 1,4-Dichlorobenzene	0.000	146	0	N.D.	d
51) 1,2-Dichlorobenzene	0.000	146	0	N.D.	d
52) Hexachlorobutadiene	29.831	225	8	N.D.	

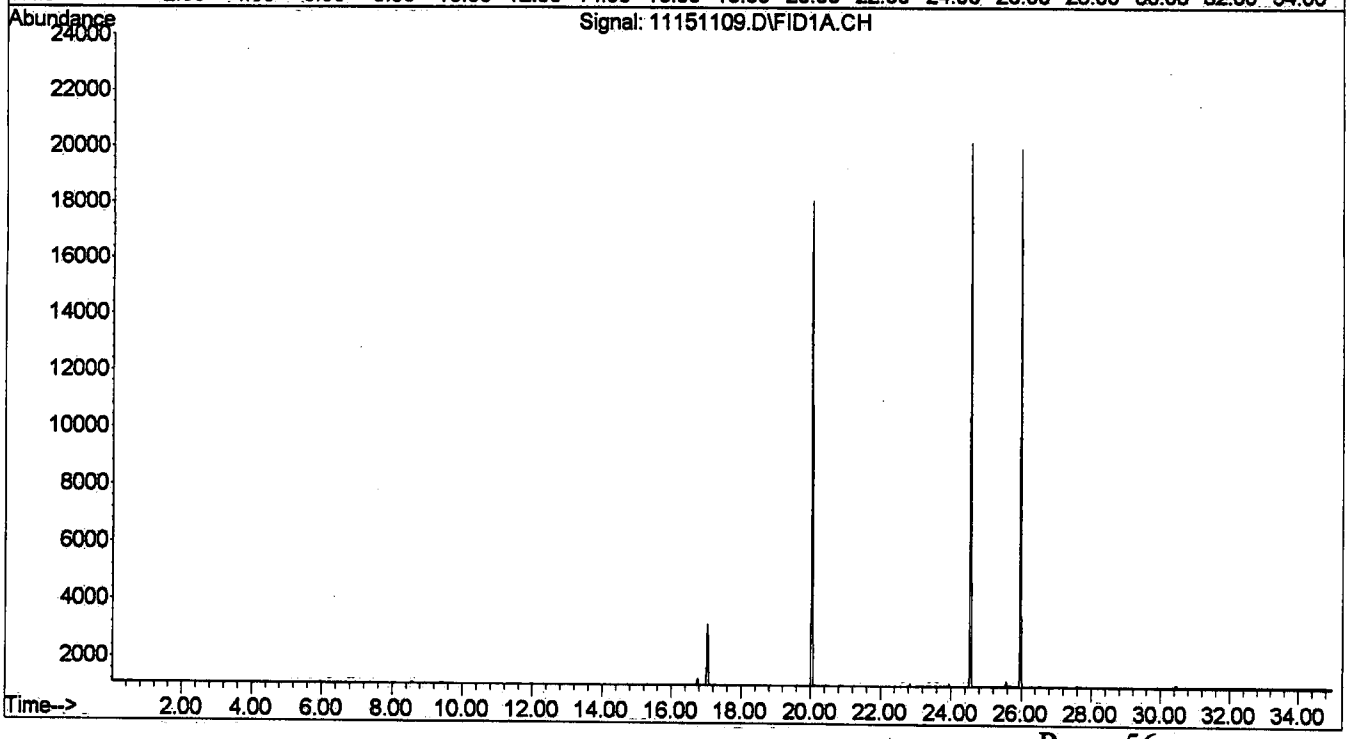
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

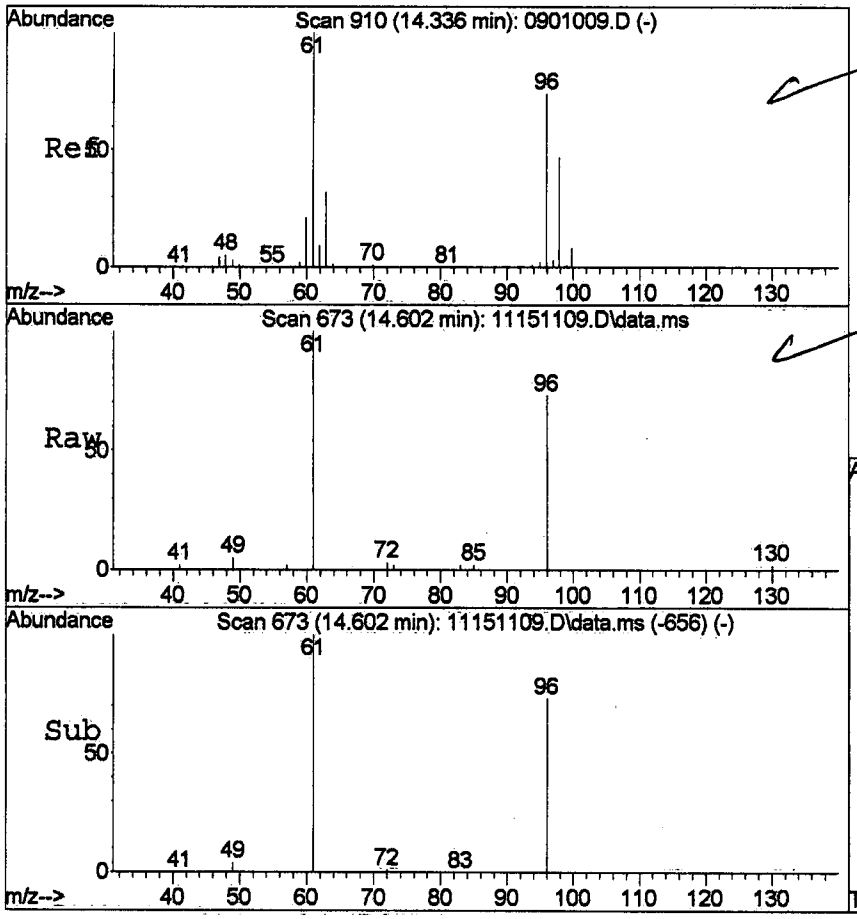
Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151109.D
Acq On : 15 Nov 2011 14:48
Operator : JJG
Sample : 110957-53715 x2000
Misc : IS/Surr: PS082311-02 + 25mL x100 (Sig #1); (Sig #2)
ALS Vial : 1 Sample Multiplier: 2000

Quant Time: Nov 15 17:54:34 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration





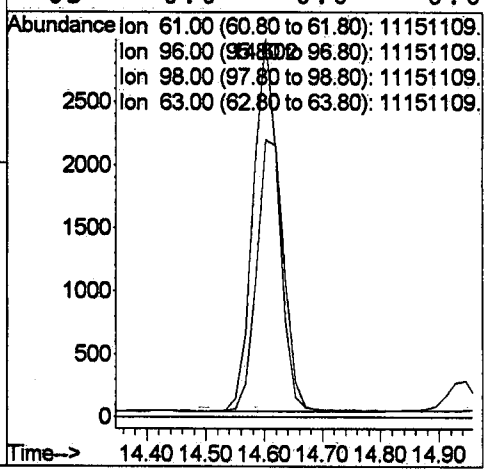
11/15/11

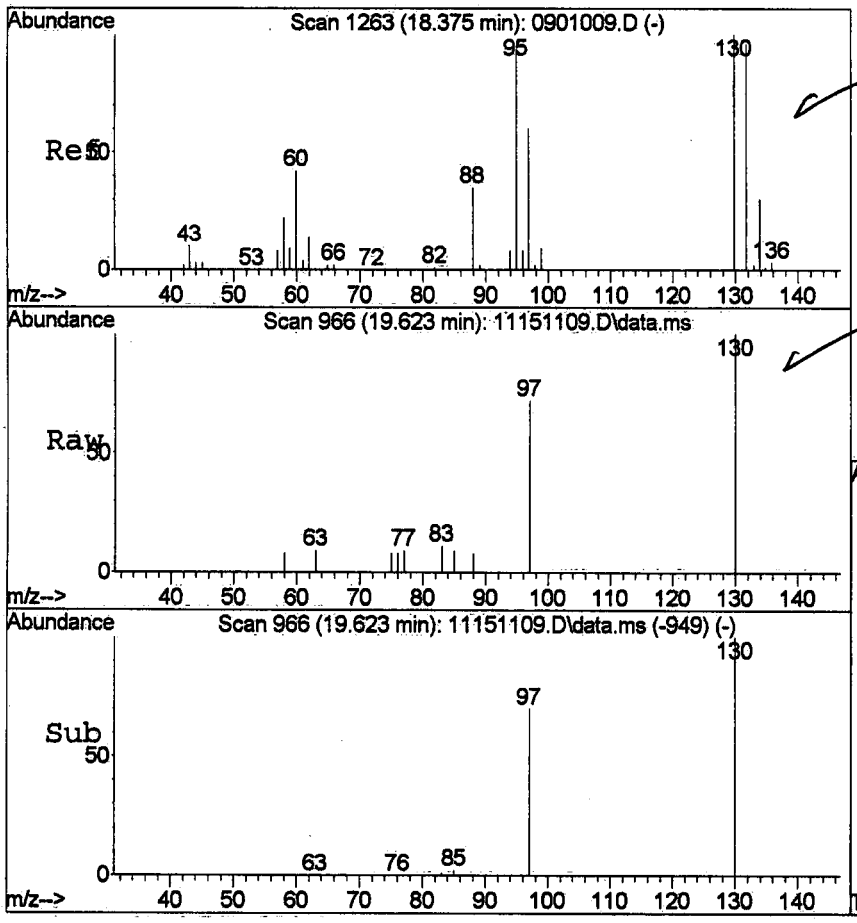


#19
cis-1,2-Dichloroethene
Concen: 1067946.90 pptv
RT: 14.602 min Scan# 673
Delta R.T. -0.000 min
Lab File: 11151109.D
Acq: 15 Nov 2011 2:48 pm

Tgt Ion: 61 Resp: 8889

Ion	Ratio	Lower	Upper
61	100		
96	73.3	59.5	89.3
98	0.0	0.0	0.0
63	0.0	0.0	0.0

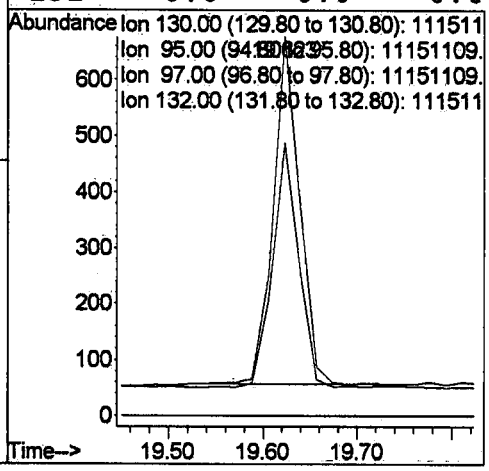


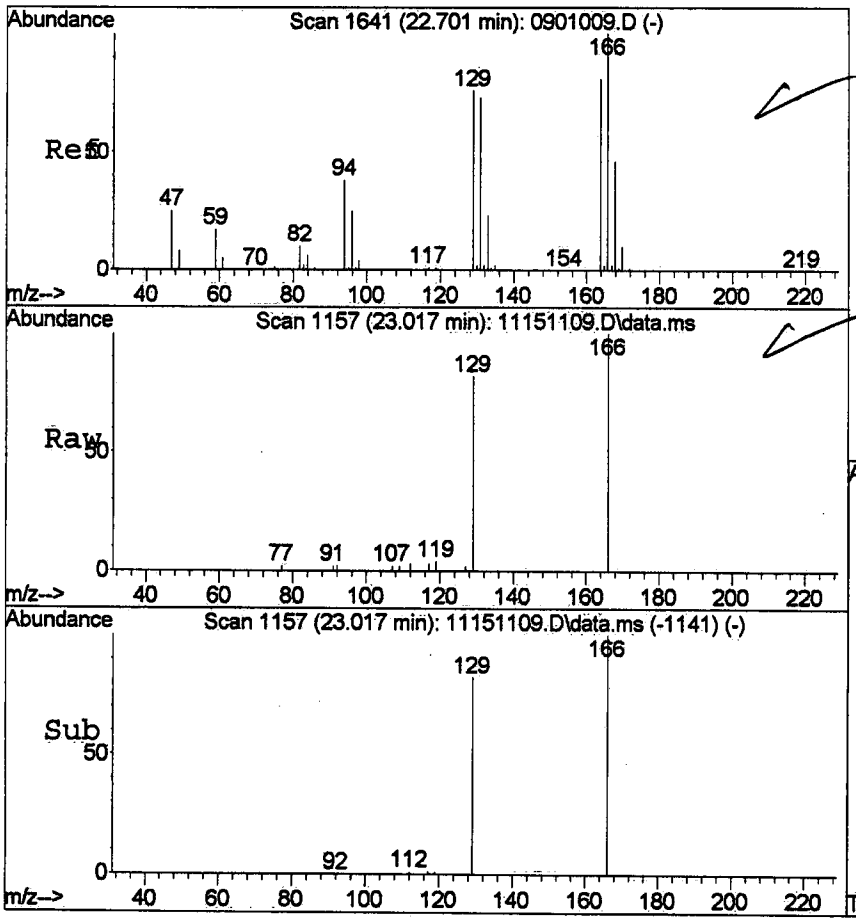


#28
Trichloroethene
Concen: 103079.15 pptv
RT: 19.623 min Scan# 966
Delta R.T. -0.000 min
Lab File: 11151109.D
Acq: 15 Nov 2011 2:48 pm

Tgt Ion:130 Resp: 1205

Ion	Ratio	Lower	Upper
130	100		
95	0.0	0.0	0.0
97	72.0	54.6	82.0
132	0.0	0.0	0.0

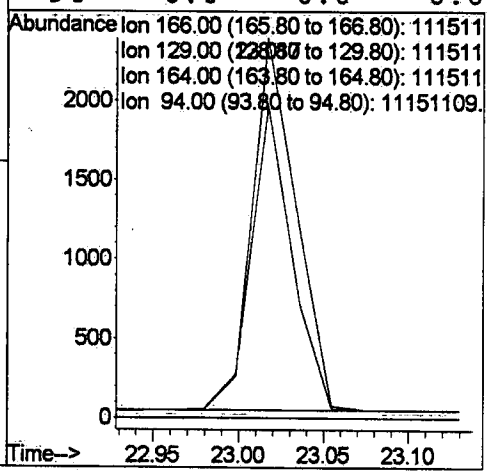




#35
Tetrachloroethene
Concen: 253636.54 pptv
RT: 23.017 min Scan# 1157
Delta R.T. -0.000 min
Lab File: 11151109.D
Acq: 15 Nov 2011 2:48 pm

Tgt Ion:166 Resp: 4180

Ion	Ratio	Lower	Upper
166	100		
129	82.2	65.5	98.3
164	0.0	0.0	0.0
94	0.0	0.0	0.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151112.D
Acq On : 15 Nov 2011 17:02
Operator : JJG
Sample : 110957-53716 x1 rr
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 15 17:59:23 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.928	49	200594	10000.00 pptv	0.00
23) 1,4-Difluorobenzene	18.714	114	764289	10000.00 pptv	0.00
36) Chlorobenzene-d5	23.655	117	708285	10000.00 pptv	0.00
System Monitoring Compounds					
44) BFB(4-Bromochlorobenzene)	25.175	174	694543	10215.19 pptv	0.00
Spiked Amount 10000.000			Recovery	= 102.15%	
Target Compounds					Qvalue
2) Chlorodifluoromethane	3.995	51	9463	262.81 pptv	100
3) Dichlorodifluoromethane	4.184	85	37958	387.16 pptv	99
4) Chloromethane	4.441	50	5270	365.10 pptv	95
5) Dichlorotetrafluoroethane	4.681	85	1039	N.D.	
6) VinylChloride	4.852	62	42	N.D.	
7) 1,3-Butadiene	5.126	54	667	68.42 pptv	
8) Bromomethane	5.606	96	153	N.D.	
9) Chloroethane	5.966	64	102	N.D.	
10) Dichlorofluoromethane	6.206	67	87	N.D.	
11) VinylBromide	6.703	108	15	N.D.	
12) Trichlorofluoromethane	7.611	101	21741	194.60 pptv	98
13) 1,1-Dichloroethene	9.118	61	19	N.D.	
14) AllylChloride	9.821	41	49	N.D.	
15) Trichlorotrifluoroethane	10.369	101	3301	57.68 pptv	99
16) trans-1,2-Dichloroethene	12.048	61	144	N.D.	
17) 1,1-Dichloroethane	12.545	63	36	N.D.	
18) MTBE	12.940	73	9	N.D.	
19) cis-1,2-Dichloroethene	14.602	61	1242	75.20 pptv	
20) Chloroform	15.305	83	1460	N.D.	
21) 1,2-Dichloroethane	16.830	62	534	N.D.	
22) 1,1,1-Trichloroethane	17.292	97	387	N.D.	
24) Benzene	18.046	78	13871	362.81 pptv	97
25) CarbonTetrachloride	18.286	117	4283	65.37 pptv	95
26) 1,2-Dichloropropane	19.280	76	53	N.D.	
27) Bromodichloromethane	19.554	83	198	N.D.	
28) Trichloroethene	19.623	130	9441	398.50 pptv	96
29) cis-1,3-Dichloropropene	20.719	75	9	N.D.	
30) trans-1,3-Dichloropropene	21.319	75	17	N.D.	
31) 1,1,2-Trichloroethane	0.000	97	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151112.D
Acq On : 15 Nov 2011 17:02
Operator : JJG
Sample : 110957-53716 x1 rr
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 15 17:59:23 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

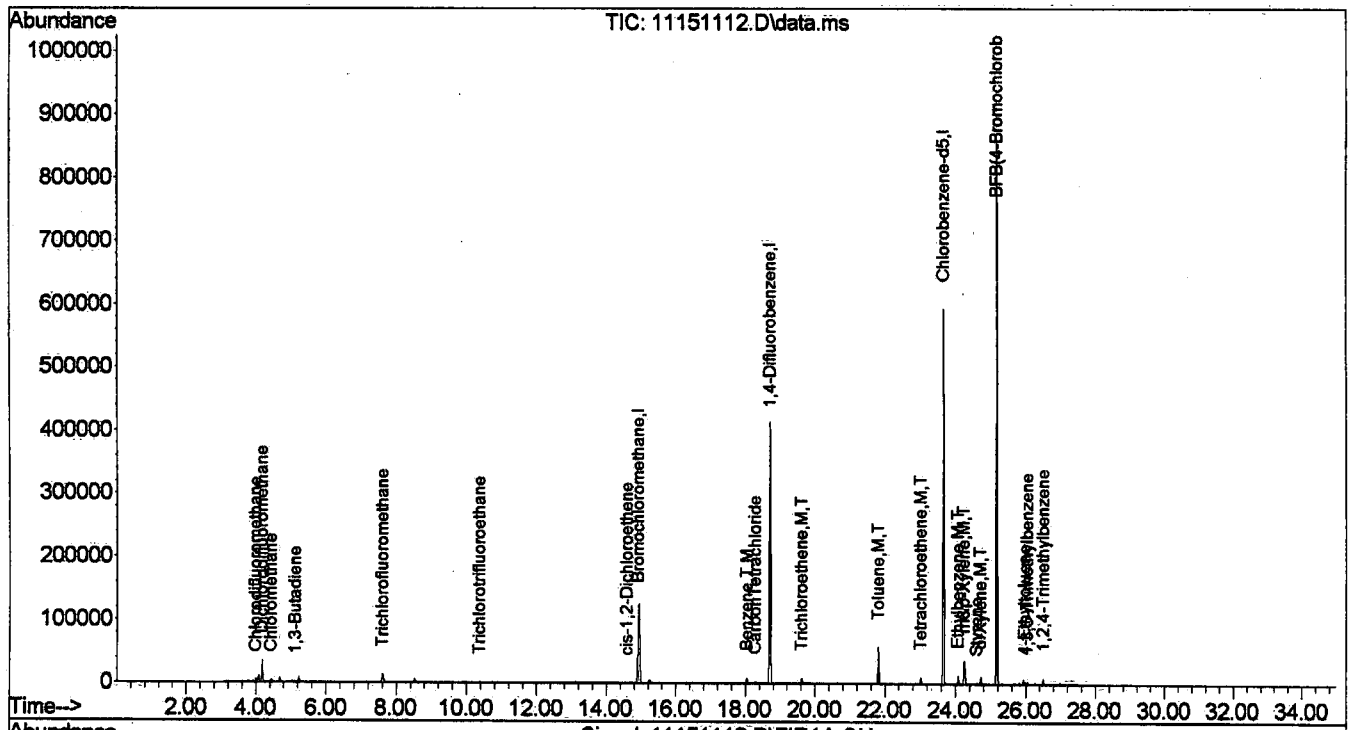
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
32) Toluene	21.811	91	63925m	918.21 pptv	
33) Dibromochloromethane	22.262	129	67	N.D.	
34) 1,2-Dibromoethane	22.563	107	45	N.D.	
35) Tetrachloroethene	23.015	166	10303	308.48 pptv	97
37) Chlorobenzene	23.730	112	361	N.D.	
38) Ethylbenzene	24.078	91	16730	242.07 pptv	96
39) m&p-Xylene	24.248	106	25151m	1048.71 pptv	
40) Bromoform	24.325	173	71	N.D.	
41) Styrene	24.619	104	1598	53.77 pptv #	83
42) 1,1,2,2-Tetrachloroethane	24.650	83	59	N.D.	
43) o-Xylene	24.727	91	12561	258.60 pptv	96
45) 4-Ethyltoluene	25.979	105	3203m	54.92 pptv	
46) 1,3,5-Trimethylbenzene	26.056	105	3171	58.27 pptv #	98
47) 1,2,4-Trimethylbenzene	26.505	105	9279	190.97 pptv	94
48) BenzylChloride	26.644	91	51	N.D.	
49) 1,3-Dichlorobenzene	26.675	146	68	N.D.	
50) 1,4-Dichlorobenzene	26.752	146	769	N.D.	
51) 1,2-Dichlorobenzene	27.138	146	66	N.D.	
52) Hexachlorobutadiene	29.830	225	64	N.D.	

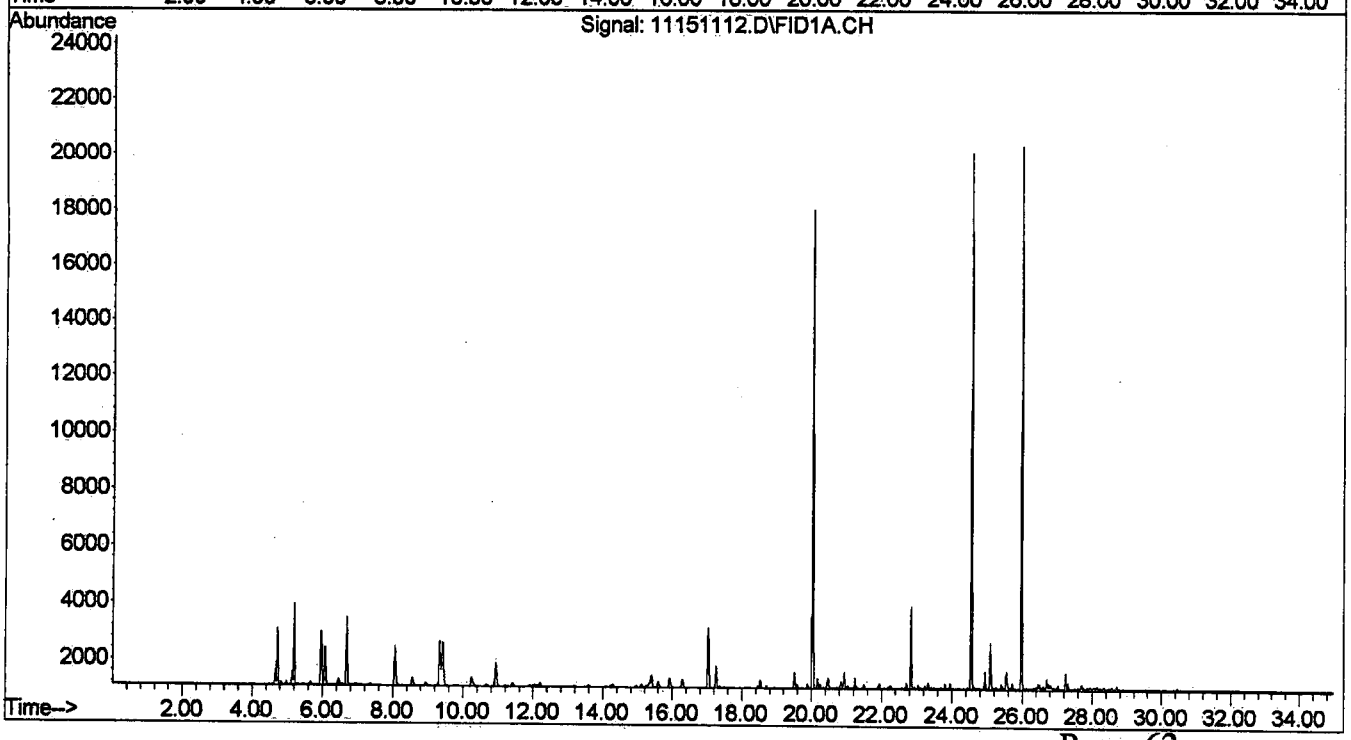
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

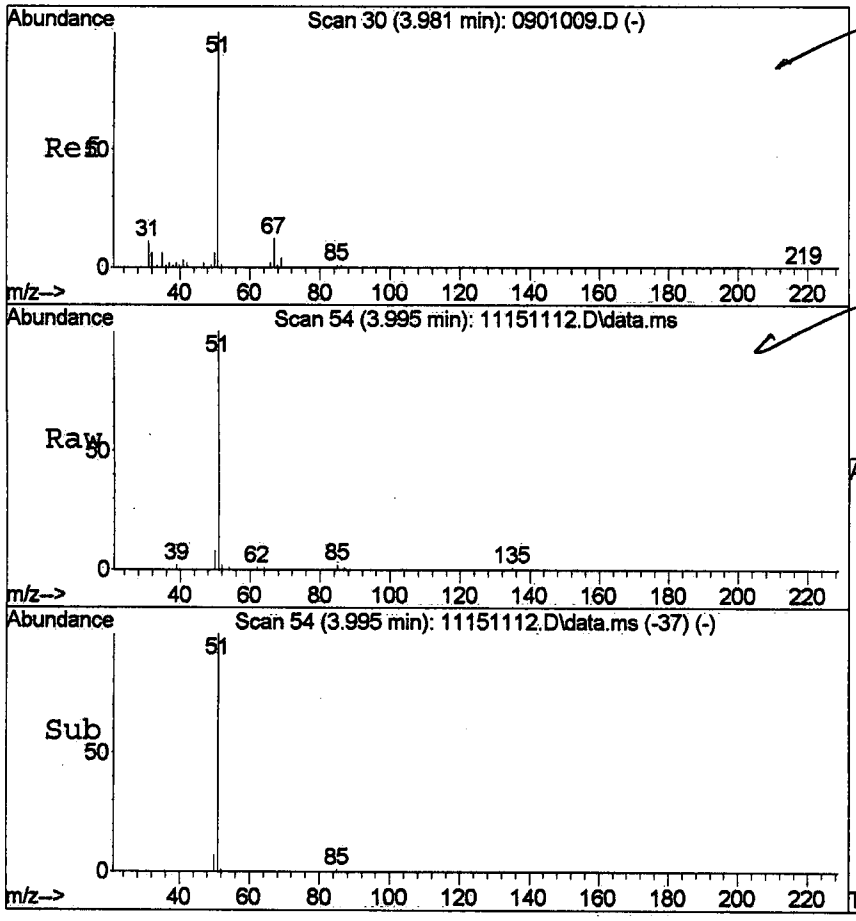
Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151112.D
Acq On : 15 Nov 2011 17:02
Operator : JJG
Sample : 110957-53716 x1 rr
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 15 17:59:23 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration





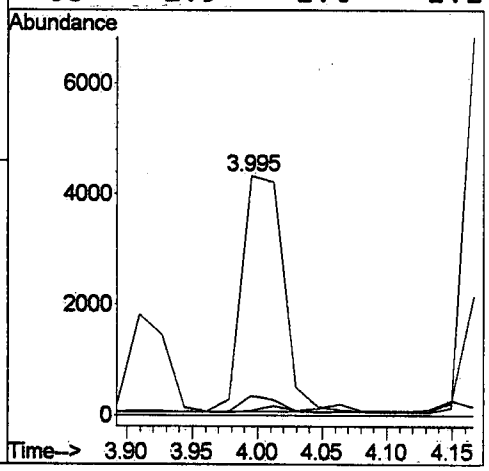
SIM111411.M Tue Nov 15 17:59:30 2011

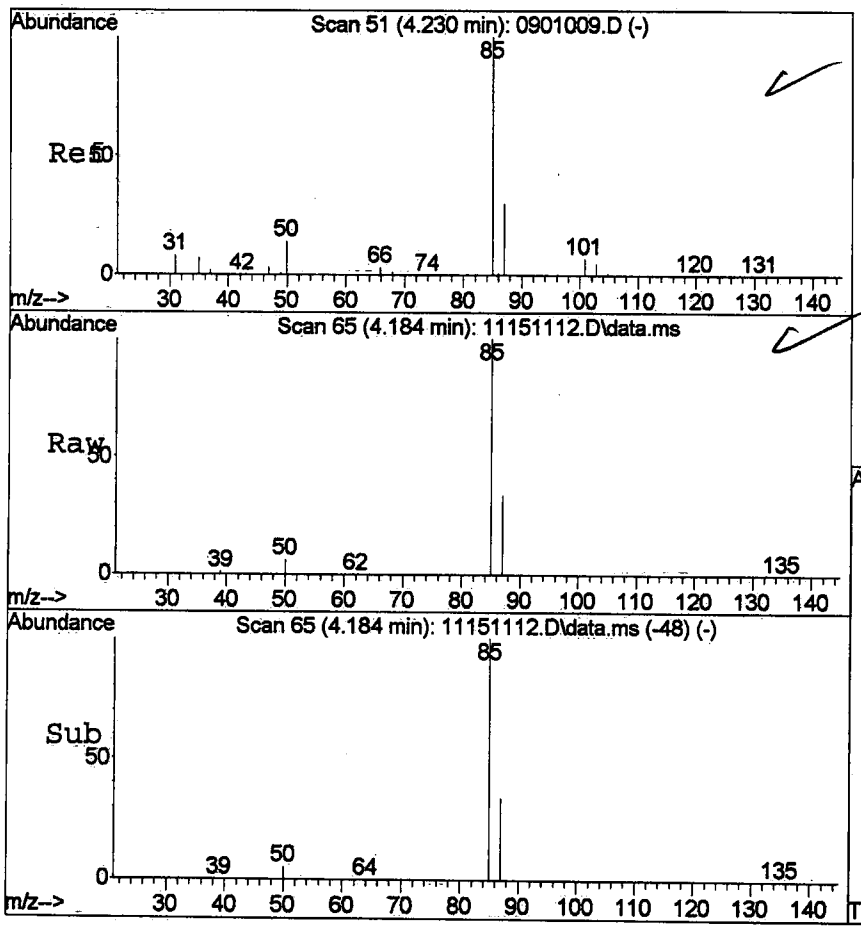


#2
Chlorodifluoromethane
Concen: 262.81 pptv
RT: 3.995 min Scan# 54
Delta R.T. -0.000 min
Lab File: 11151112.D
Acq: 15 Nov 2011 5:02 pm

Tgt Ion: 51 Resp: 9463

Ion	Ratio	Lower	Upper
51	100		
50	8.1	6.4	9.6
67	0.0	0.0	0.0
85	1.9	1.4	2.2

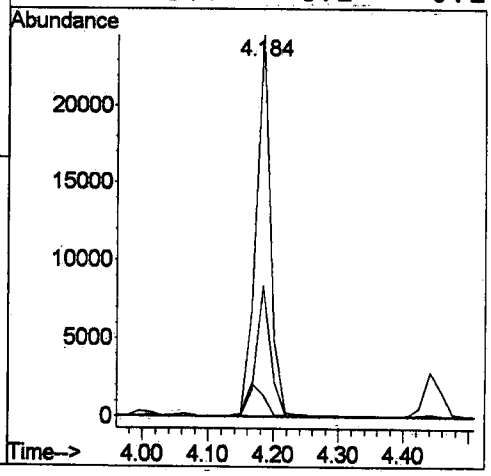


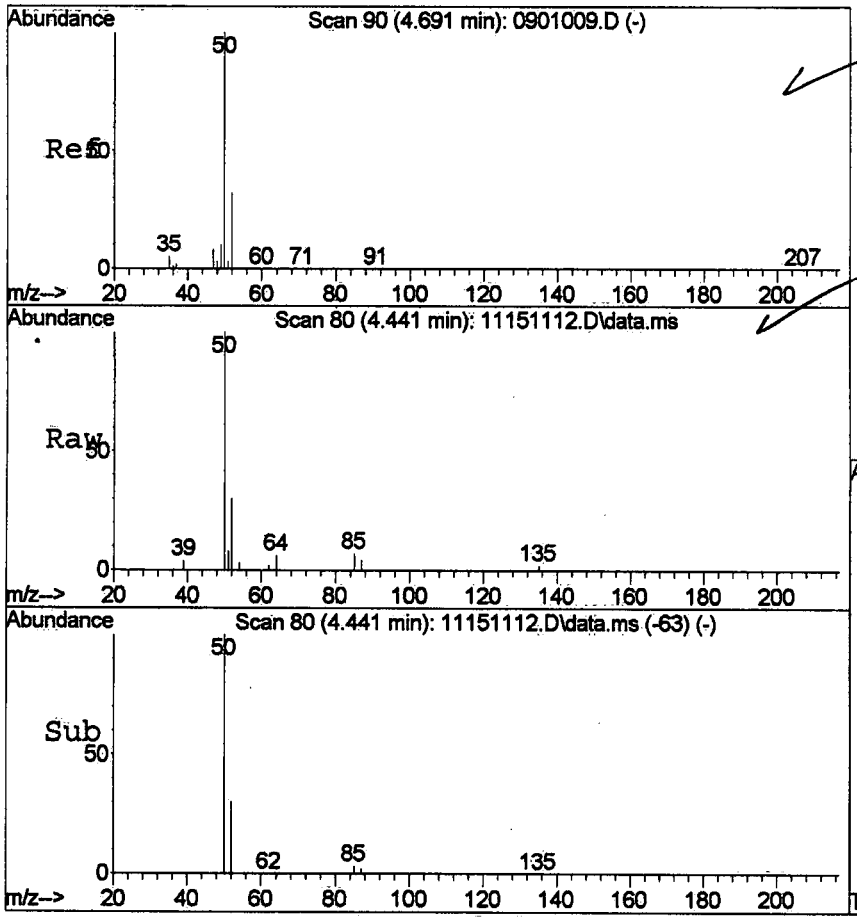


#3
Dichlorodifluoromethane
Concen: 387.16 pptv
RT: 4.184 min Scan# 65
Delta R.T. -0.000 min
Lab File: 11151112.D
Acq: 15 Nov 2011 5:02 pm

Tgt Ion: 85 Resp: 37958

Ion	Ratio	Lower	Upper
85	100		
87	34.0	27.8	41.6
101	0.0	0.0	0.0
50	5.7	4.1	6.1

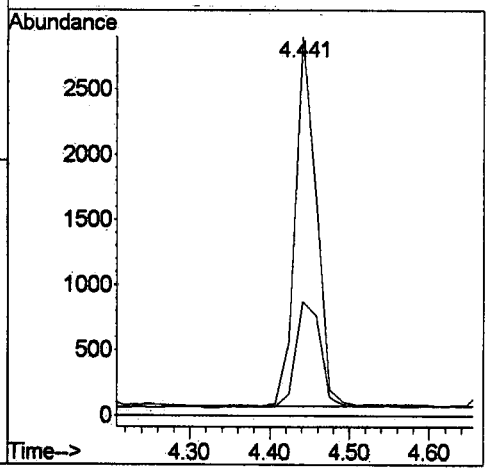


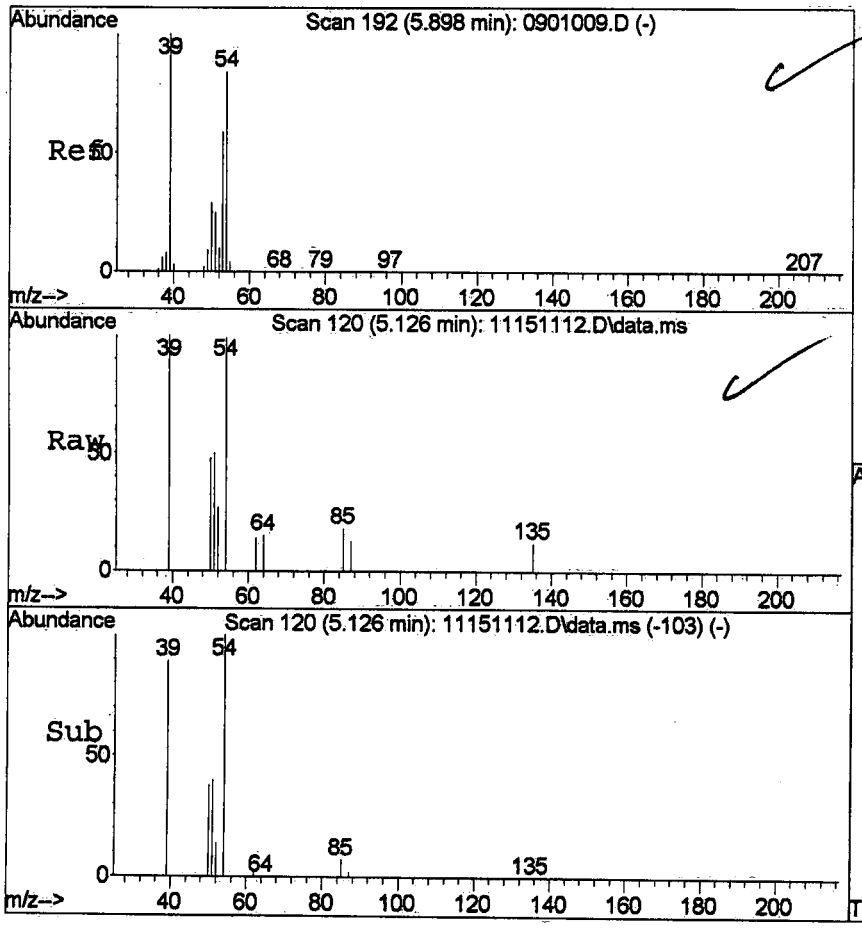


#4
Chloromethane
Concen: 365.10 pptv
RT: 4.441 min Scan# 80
Delta R.T. -0.000 min
Lab File: 11151112.D
Acq: 15 Nov 2011 5:02 pm

Tgt Ion: 50 Resp: 5270

Ion	Ratio	Lower	Upper
50	100		
52	30.0	26.2	39.4
49	0.0	0.0	0.0

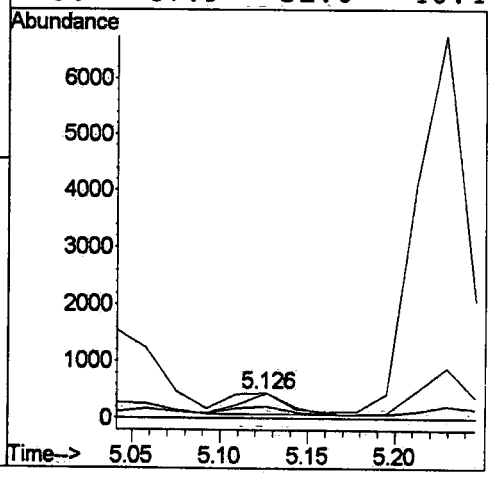


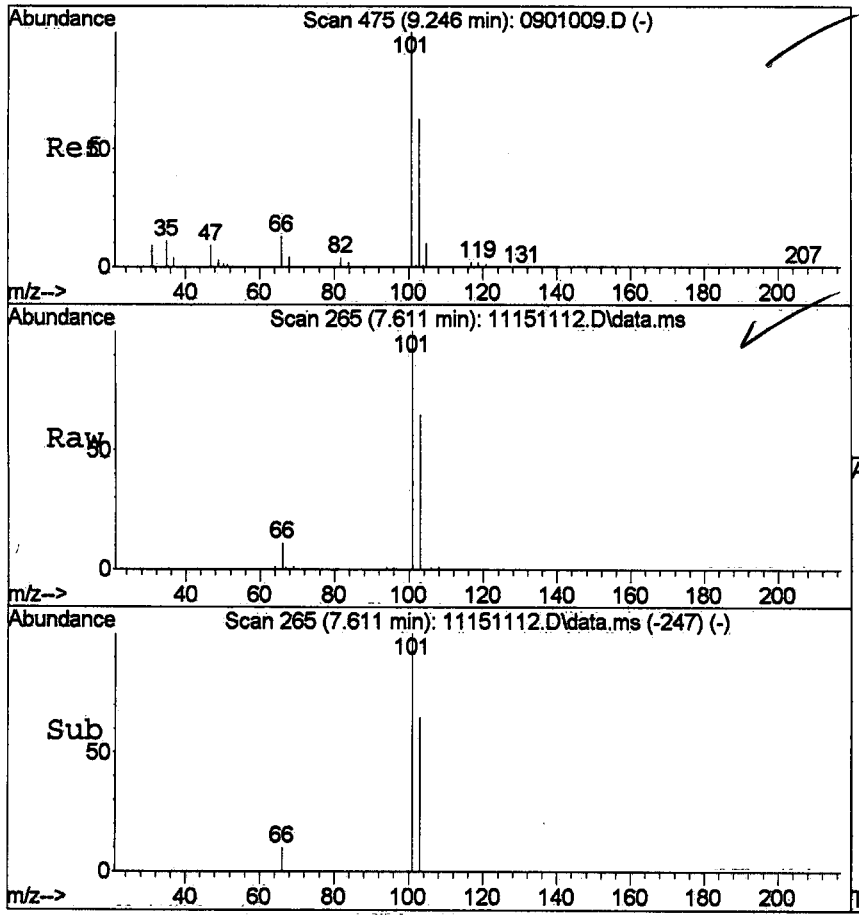


#7
1,3-Butadiene
Concen: 68.42 pptv
RT: 5.126 min Scan# 120
Delta R.T. -0.000 min
Lab File: 11151112.D
Acq: 15 Nov 2011 5:02 pm

Tgt Ion: 54 Resp: 667

Ion	Ratio	Lower	Upper
54	100		
39	100.7	66.0	99.0#
53	0.0	0.0	0.0
50	47.9	31.0	46.4#

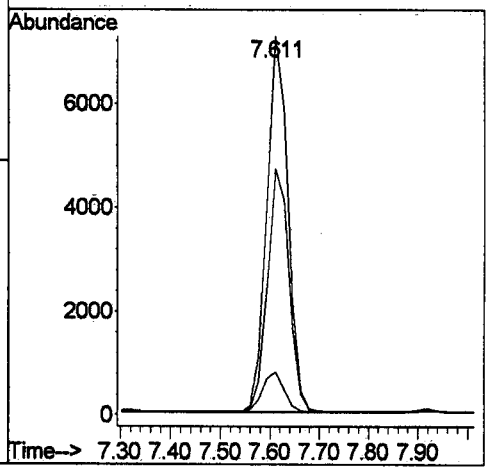


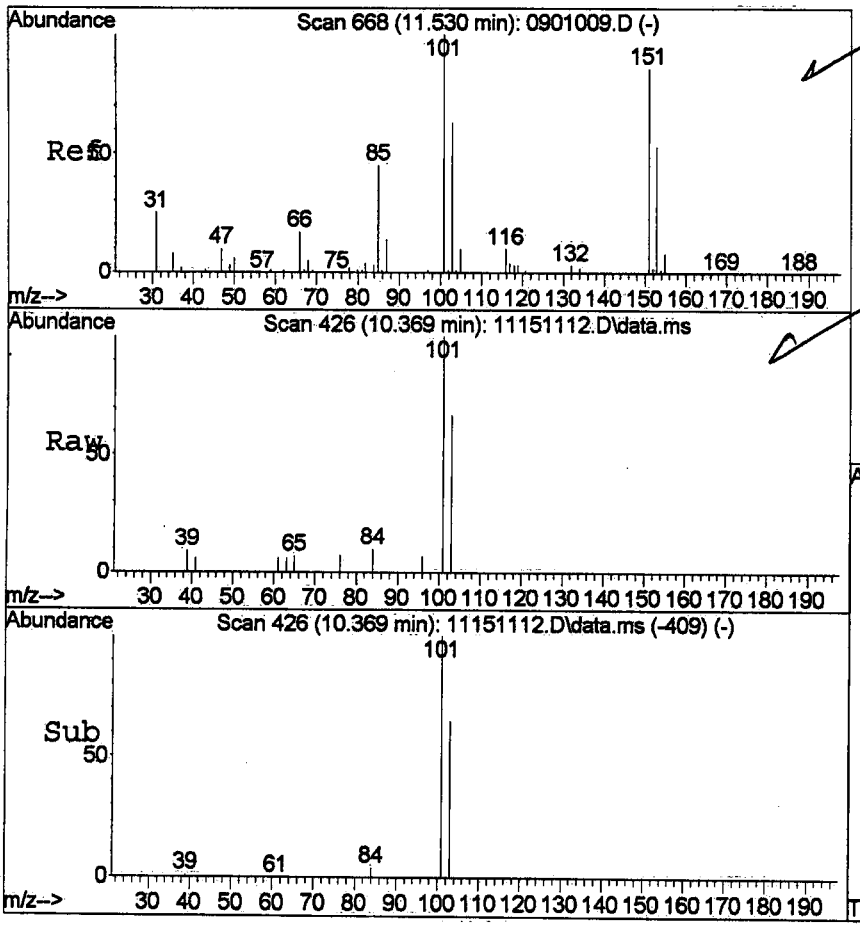


#12
Trichlorofluoromethane
Concen: 194.60 pptv
RT: 7.611 min Scan# 265
Delta R.T. -0.000 min
Lab File: 11151112.D
Acq: 15 Nov 2011 5:02 pm

Tgt Ion:101 Resp: 21741

Ion	Ratio	Lower	Upper
101	100		
103	65.1	51.0	76.4
66	11.3	8.9	13.3

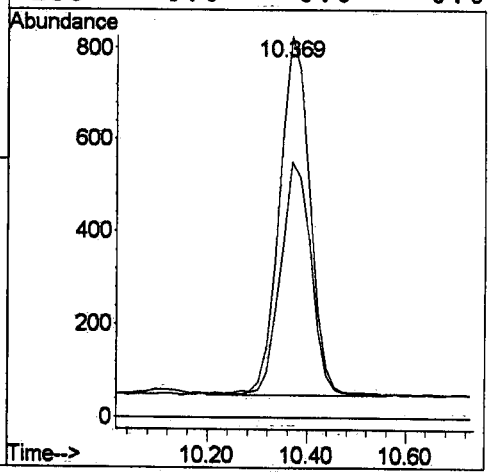


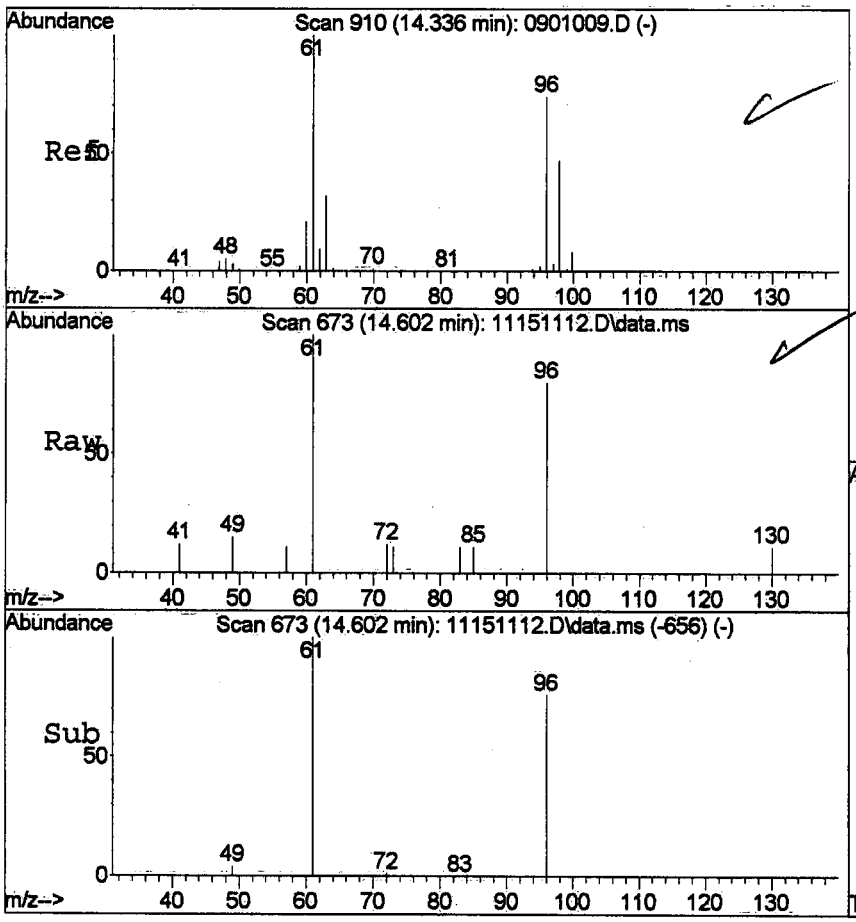


#15
Trichlorotrifluoroethane
Concen: 57.68 pptv
RT: 10.369 min Scan# 426
Delta R.T. -0.000 min
Lab File: 11151112.D
Acq: 15 Nov 2011 5:02 pm

Tgt Ion:101 Resp: 3301

Ion	Ratio	Lower	Upper
101	100		
103	66.7	52.7	79.1
151	0.0	0.0	0.0
153	0.0	0.0	0.0

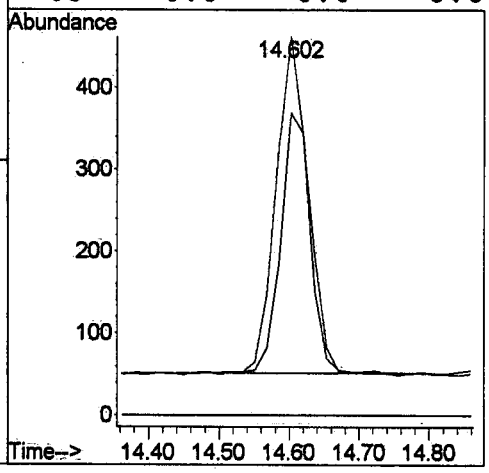


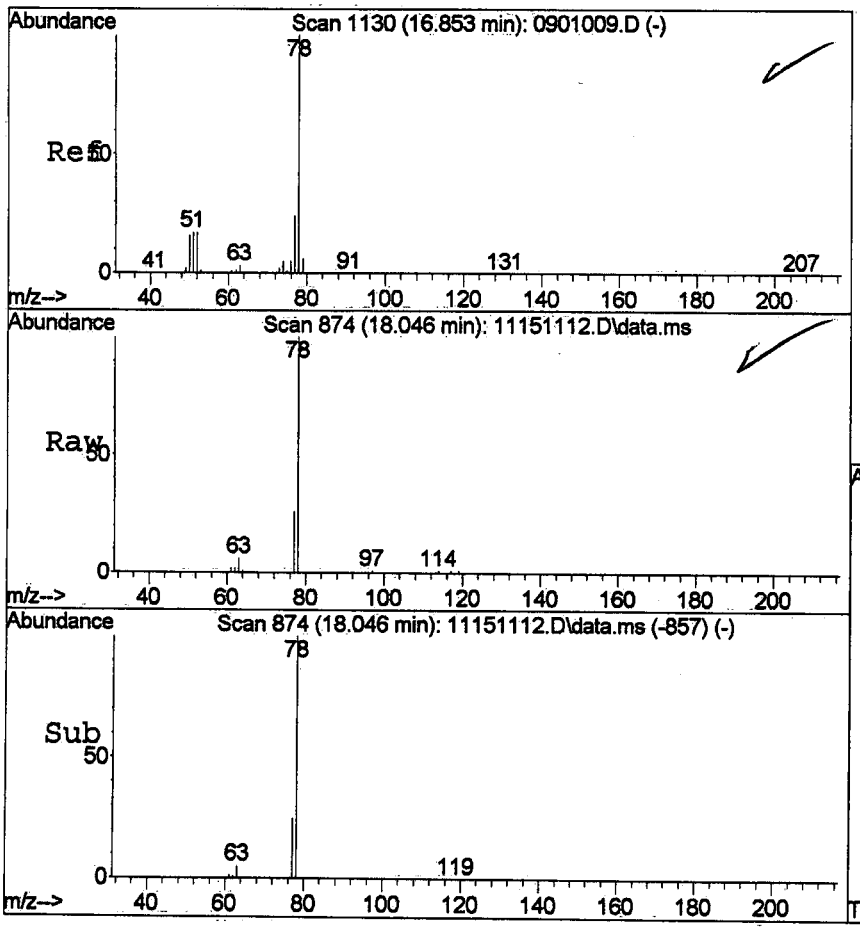


#19
cis-1,2-Dichloroethene
Concen: 75.20 pptv
RT: 14.602 min Scan# 673
Delta R.T. -0.000 min
Lab File: 11151112.D
Acq: 15 Nov 2011 5:02 pm

Tgt Ion: 61 Resp: 1242

Ion	Ratio	Lower	Upper
61	100		
96	79.9	59.5	89.3
98	0.0	0.0	0.0
63	0.0	0.0	0.0

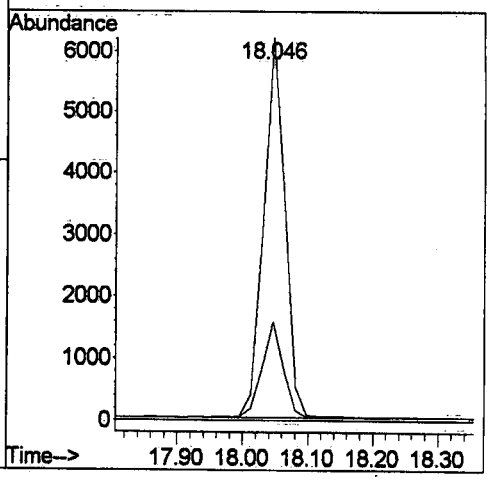


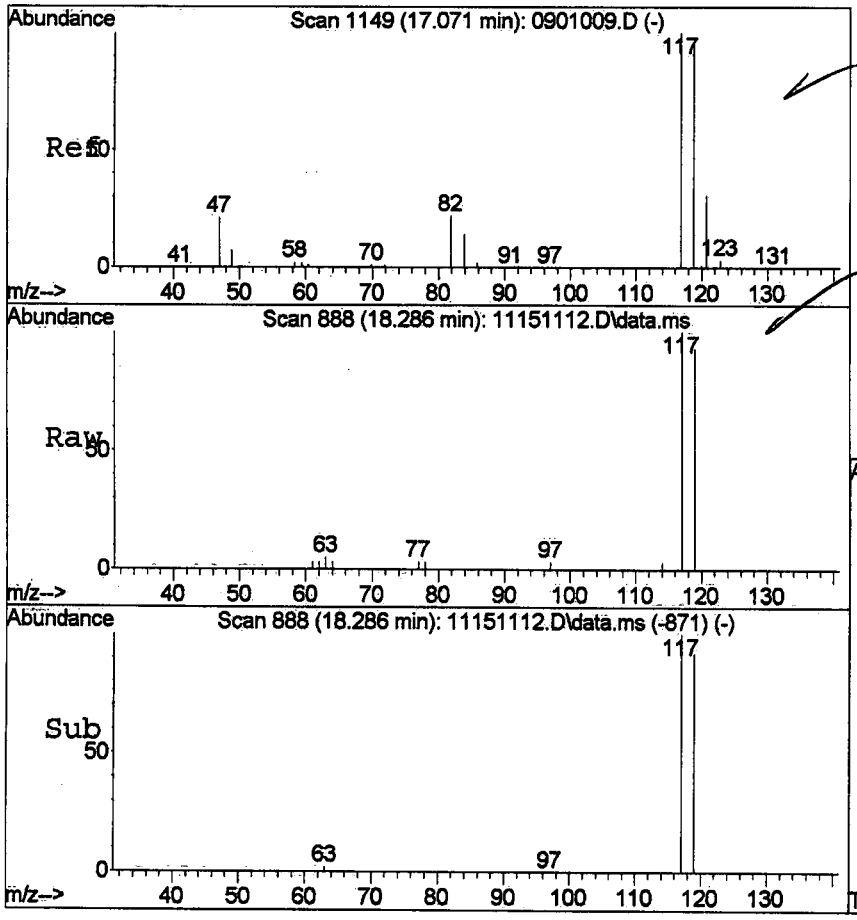


#24
Benzene
Concen: 362.81 pptv
RT: 18.046 min Scan# 874
Delta R.T. -0.000 min
Lab File: 11151112.D
Acq: 15 Nov 2011 5:02 pm

Tgt Ion: 78 Resp: 13871

Ion	Ratio	Lower	Upper
78	100		
77	25.5	21.6	32.4
50	0.0	0.0	0.0

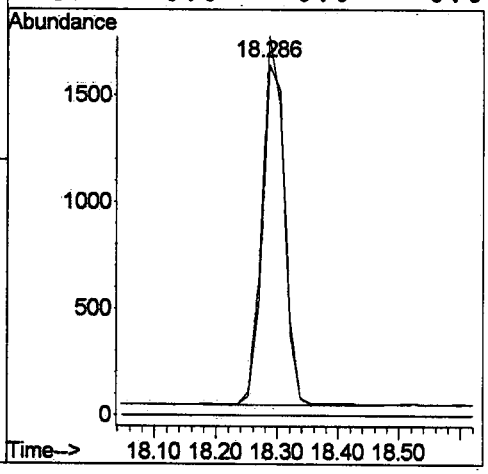


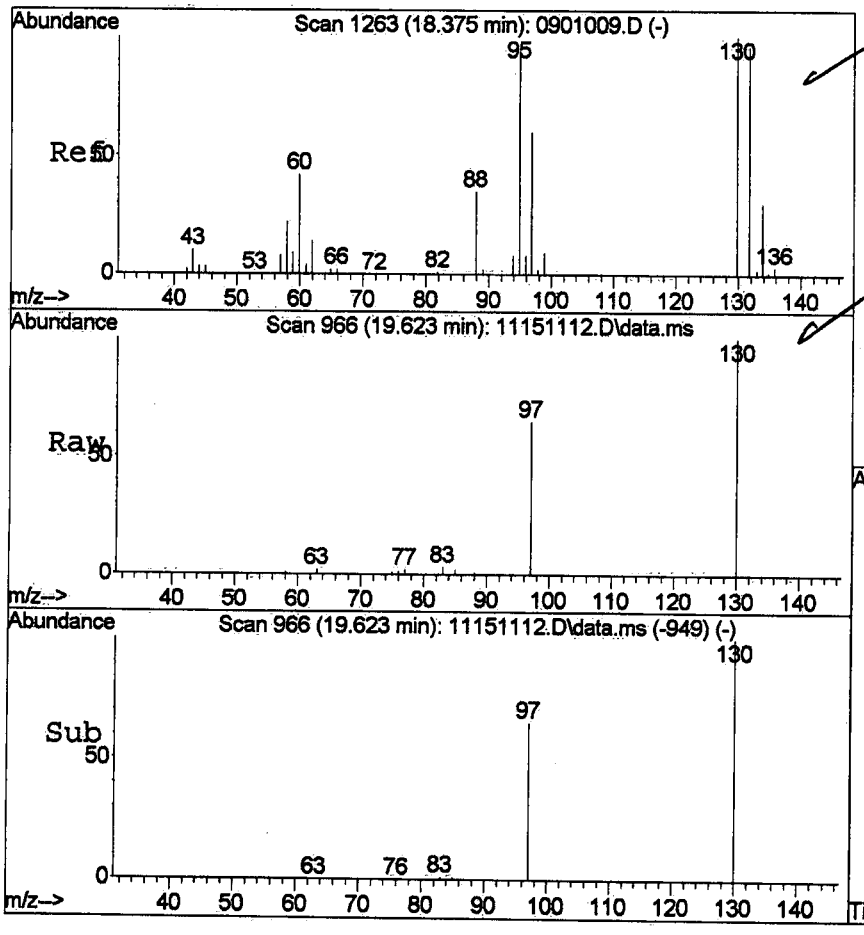


#25
CarbonTetrachloride
Concen: 65.37 pptv
RT: 18.286 min Scan# 888
Delta R.T. -0.000 min
Lab File: 11151112.D
Acq: 15 Nov 2011 5:02 pm

Tgt Ion:117 Resp: 4283

Ion	Ratio	Lower	Upper
117	100		
119	92.5	70.1	105.1
82	0.0	0.0	0.0
47	0.0	0.0	0.0

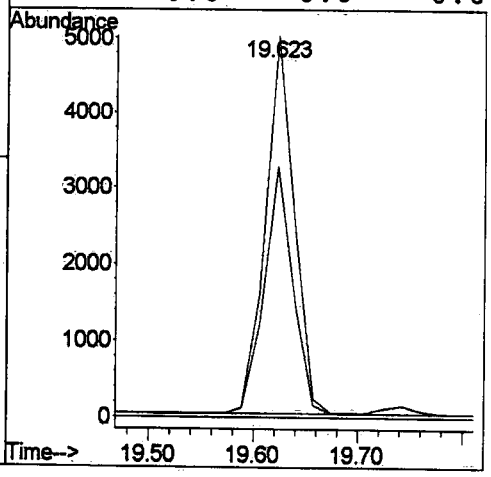


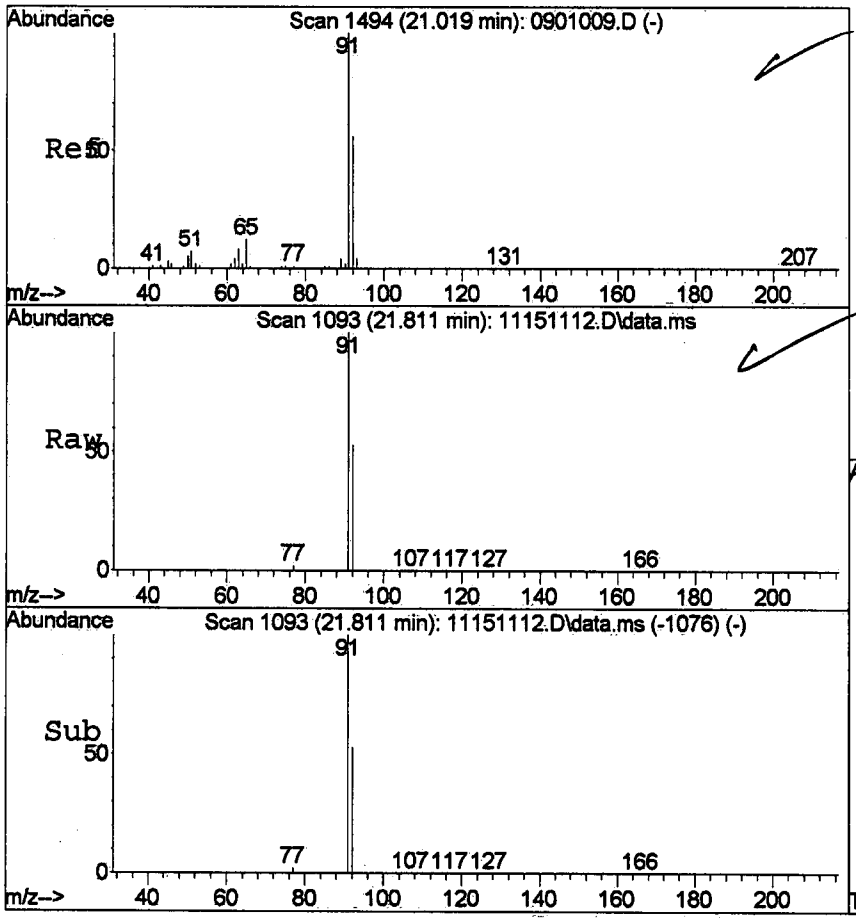


#28
Trichloroethene
Concen: 398.50 pptv
RT: 19.623 min Scan# 966
Delta R.T. -0.000 min
Lab File: 11151112.D
Acq: 15 Nov 2011 5:02 pm

Tgt Ion:130 Resp: 9441

Ion	Ratio	Lower	Upper
130	100		
95	0.0	0.0	0.0
97	65.3	54.6	82.0
132	0.0	0.0	0.0

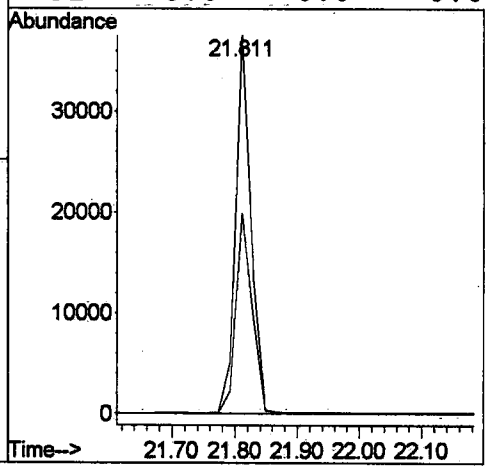


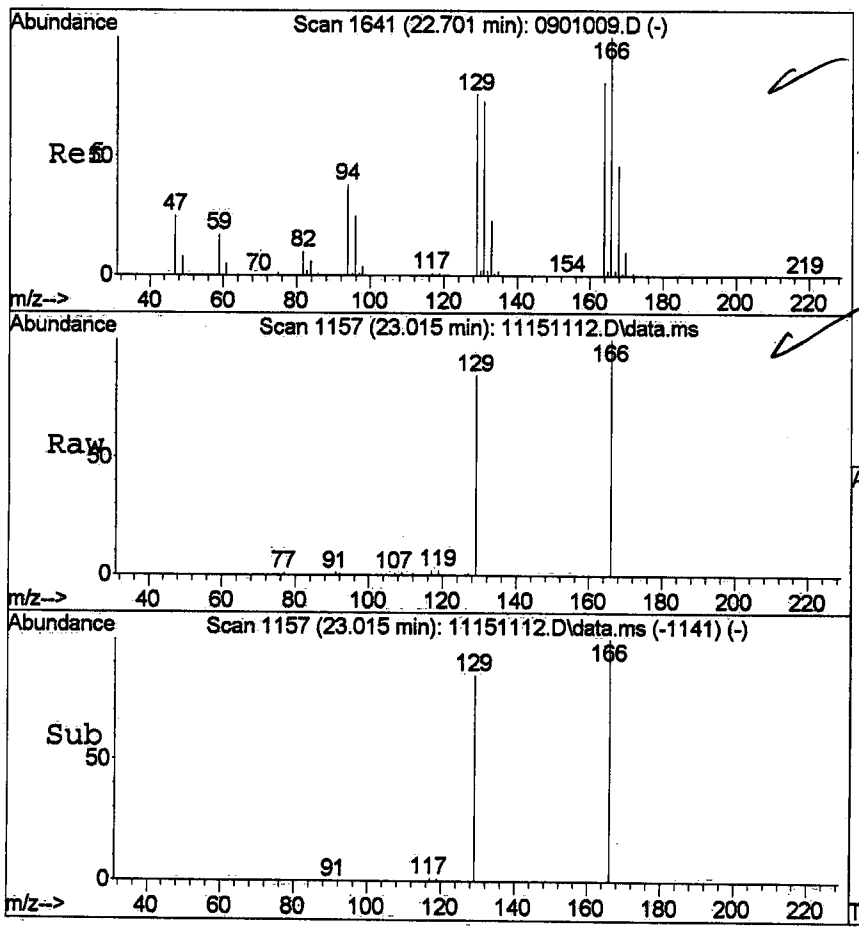


#32
Toluene
Concen: 918.21 pptv
RT: 21.811 min Scan# 1093
Delta R.T. -0.001 min
Lab File: 11151112.D
Acq: 15 Nov 2011 5:02 pm

Tgt Ion: 91 Resp: 63925

Ion	Ratio	Lower	Upper
91	100		
92	53.1	45.1	67.7
65	0.0	0.0	0.0
51	0.0	0.0	0.0

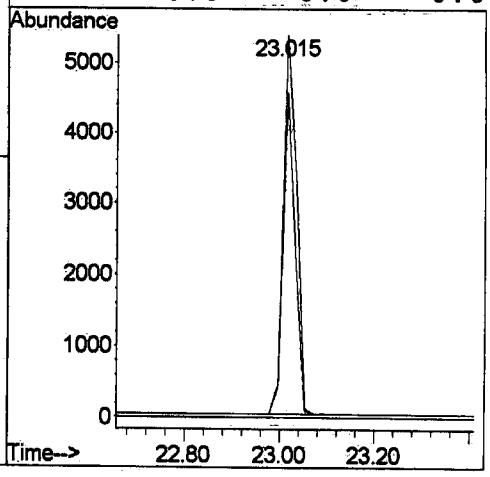


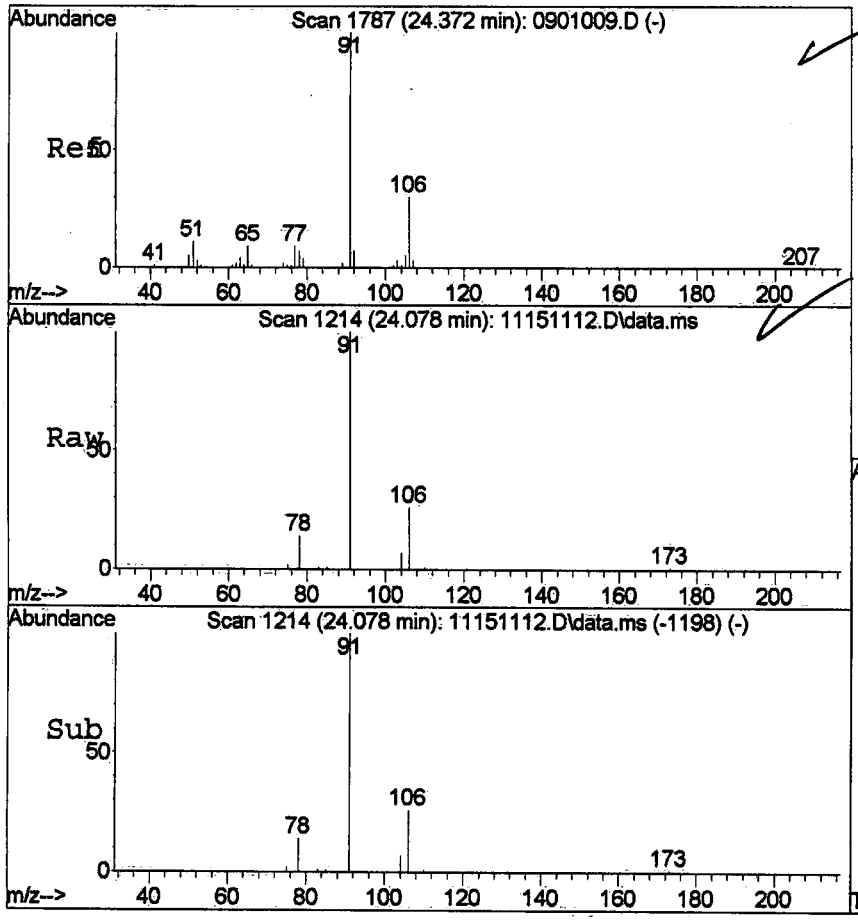


#35
Tetrachloroethene
Concen: 308.48 pptv
RT: 23.015 min Scan# 1157
Delta R.T. -0.002 min
Lab File: 11151112.D
Acq: 15 Nov 2011 5:02 pm

Tgt Ion:166 Resp: 10303

Ion	Ratio	Lower	Upper
166	100		
129	84.8	65.5	98.3
164	0.0	0.0	0.0
94	0.0	0.0	0.0

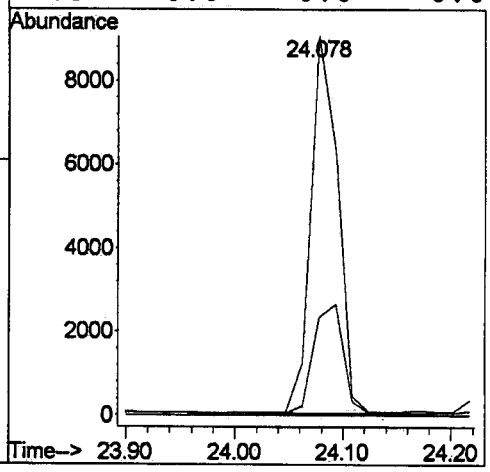


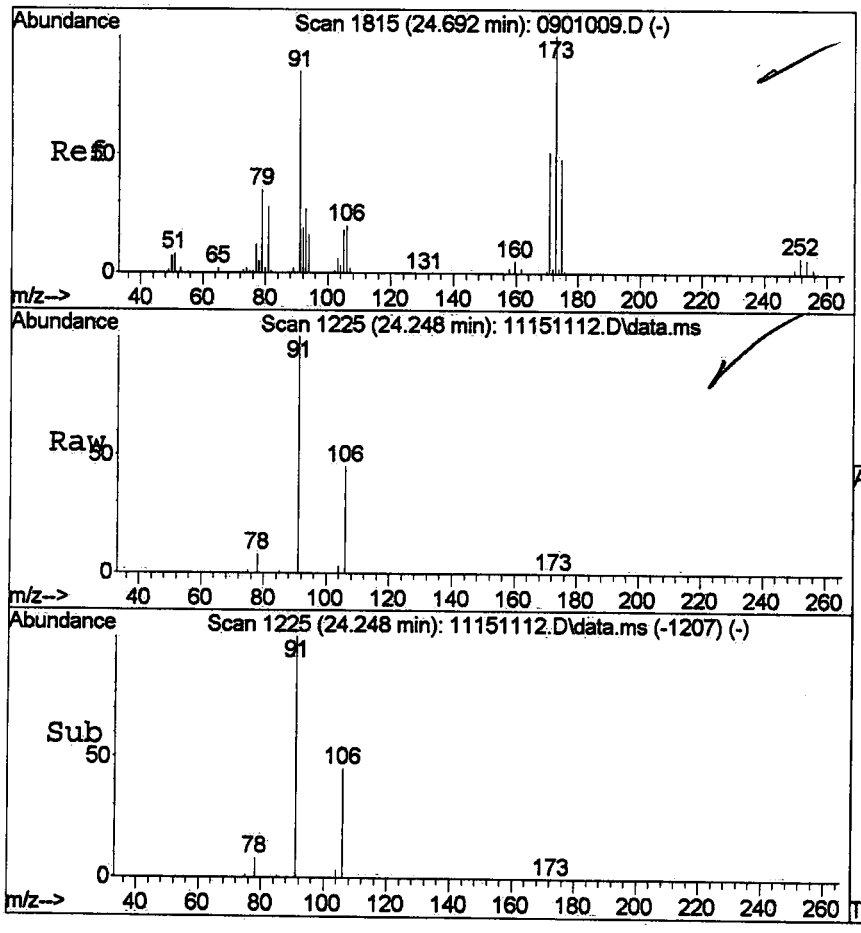


#38
Ethylbenzene
Concen: 242.07 pptv
RT: 24.078 min Scan# 1214
Delta R.T. -0.001 min
Lab File: 11151112.D
Acq: 15 Nov 2011 5:02 pm

Tgt Ion: 91 Resp: 16730

Ion	Ratio	Lower	Upper
91	100		
106	25.8	22.3	33.5
77	0.0	0.0	0.0
65	0.0	0.0	0.0

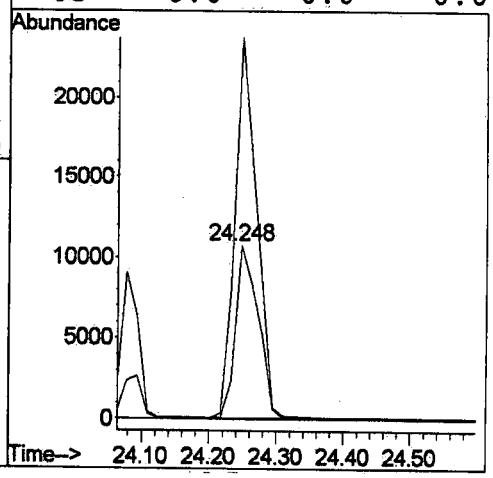


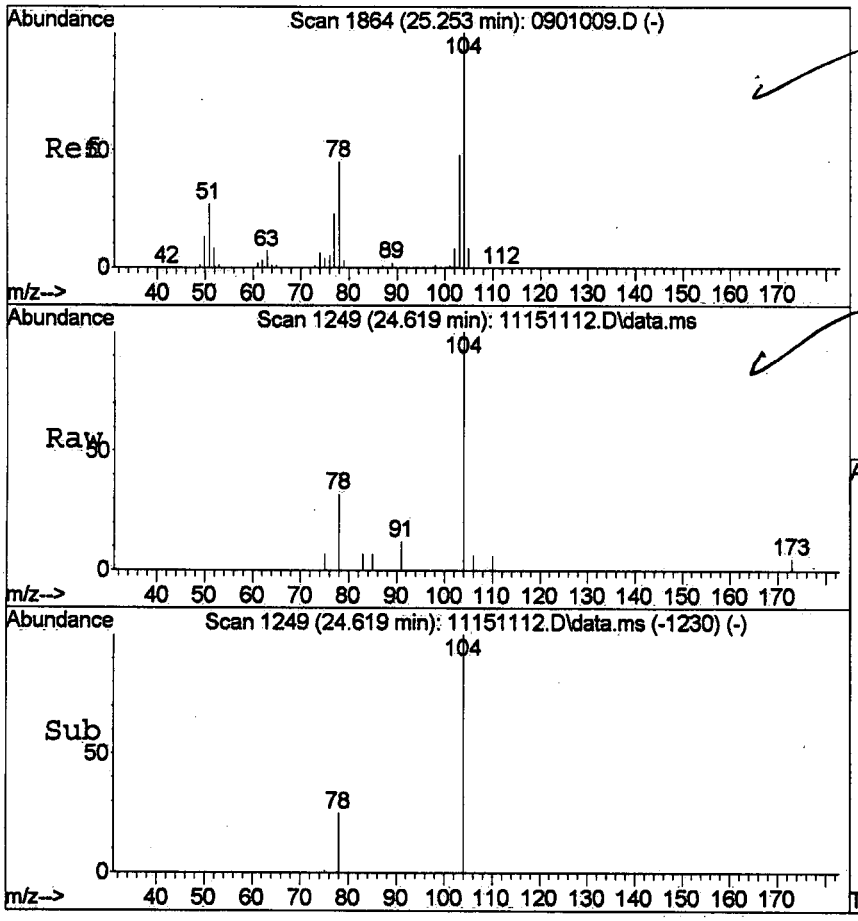


#39
m&p-Xylene
Concen: 1048.71 pptv
RT: 24.248 min Scan# 1225
Delta R.T. -0.001 min
Lab File: 11151112.D
Acq: 15 Nov 2011 5:02 pm

Tgt Ion:106 Resp: 25151

Ion	Ratio	Lower	Upper
106	100		
91	221.8	164.3	246.5
77	0.0	0.0	0.0
65	0.0	0.0	0.0

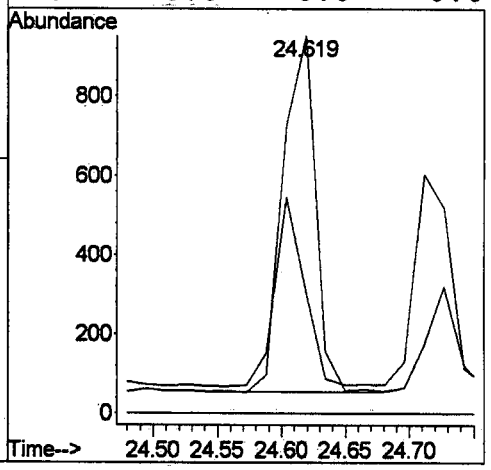


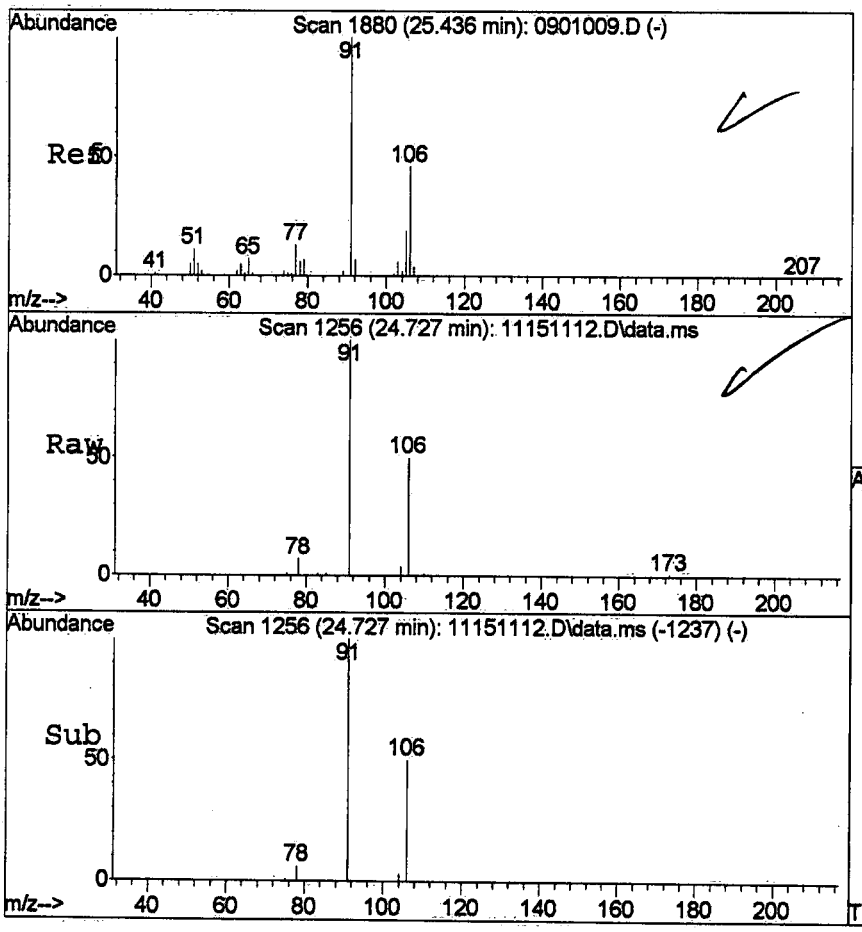


#41
Styrene
Concen: 53.77 pptv
RT: 24.619 min Scan# 1249
Delta R.T. -0.001 min
Lab File: 11151112.D
Acq: 15 Nov 2011 5:02 pm

Tgt Ion:104 Resp: 1598

Ion	Ratio	Lower	Upper
104	100		
103	0.0	0.0	0.0
78	32.3	19.1	28.7#
51	0.0	0.0	0.0

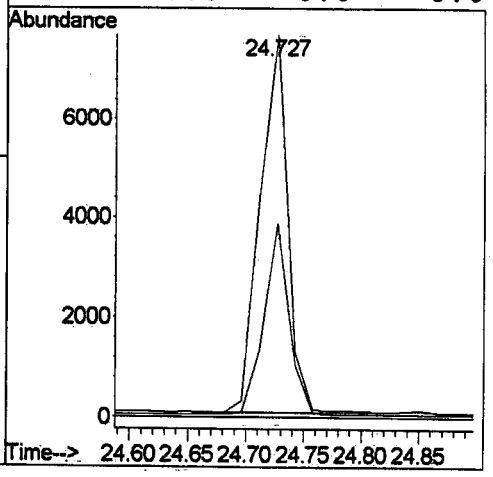


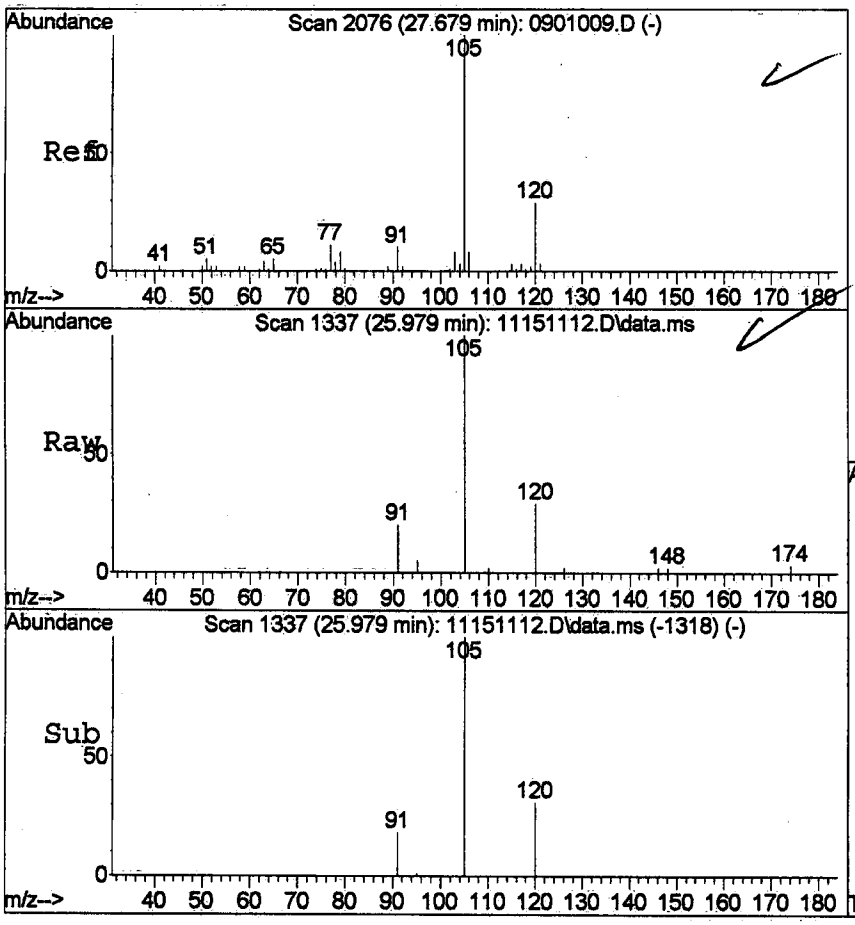


#43
o-Xylene
Concen: 258.60 pptv
RT: 24.727 min Scan# 1256
Delta R.T. -0.001 min
Lab File: 11151112.D
Acq: 15 Nov 2011 5:02 pm

Tgt Ion: 91 Resp: 12561

Ion	Ratio	Lower	Upper
91	100		
106	50.2	42.2	63.2
77	0.0	0.0	0.0
65	0.0	0.0	0.0

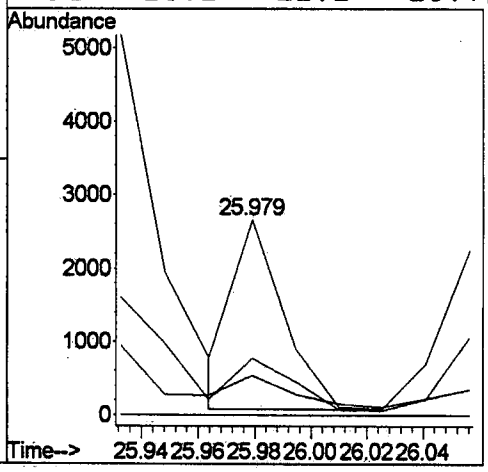


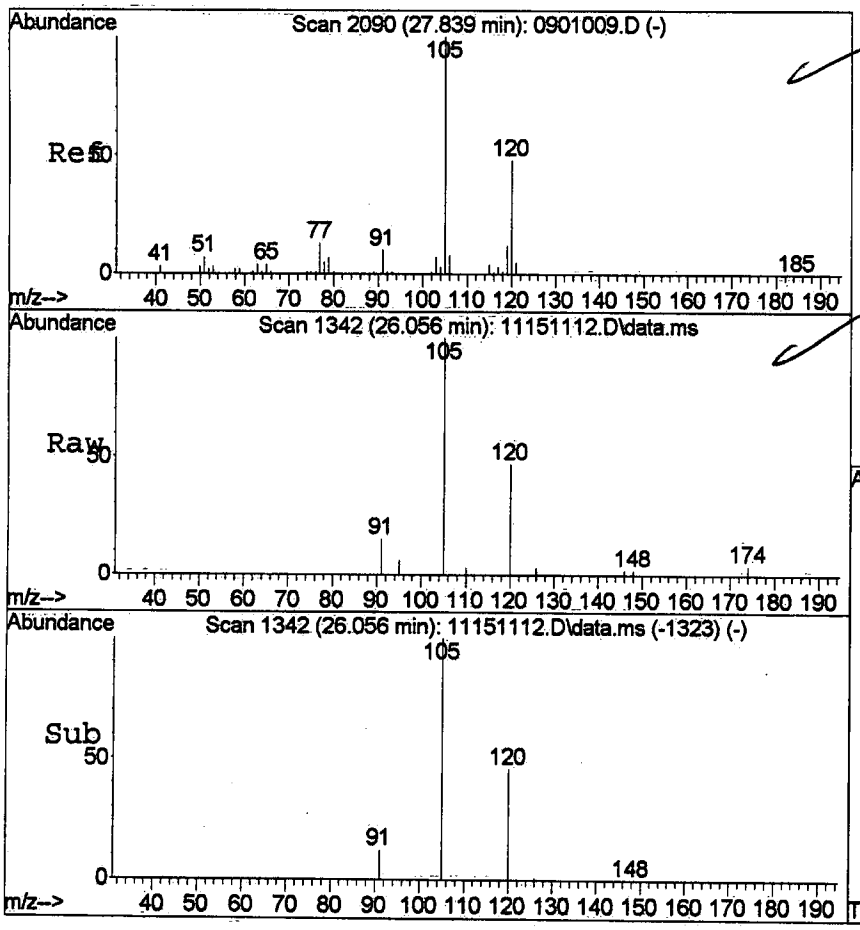


#45
4-Ethyltoluene
Concen: 54.92 pptv
RT: 25.979 min Scan# 1337
Delta R.T. -0.001 min
Lab File: 11151112.D
Acq: 15 Nov 2011 5:02 pm

Tgt Ion:105 Resp: 3203

Ion	Ratio	Lower	Upper
105	100		
120	28.9	23.7	35.5
77	0.0	0.0	0.0
91	20.2	11.1	16.7#

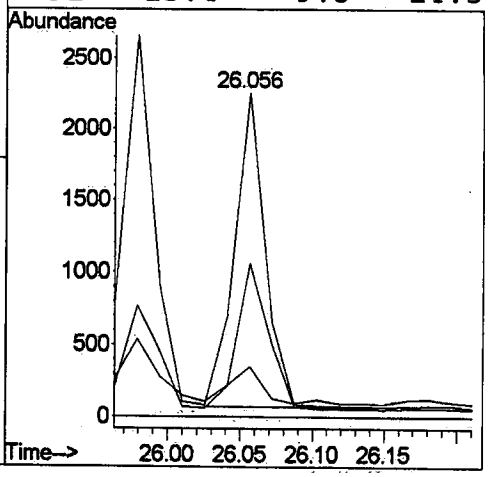


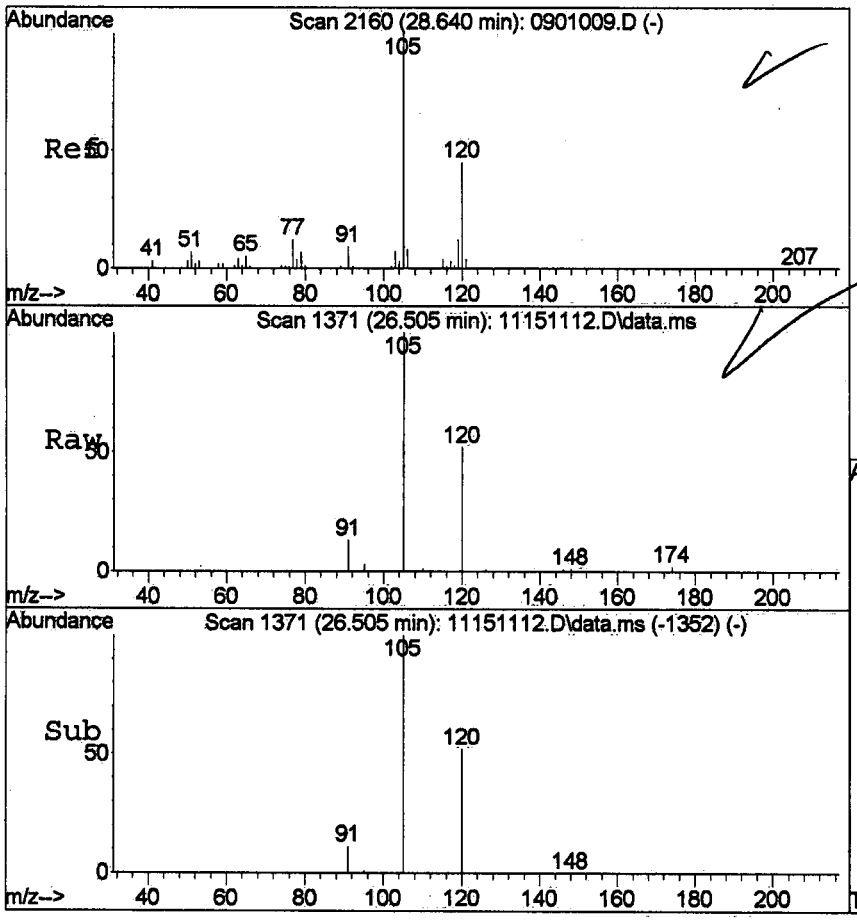


#46
1,3,5-Trimethylbenzene
Concen: 58.27 pptv
RT: 26.056 min Scan# 1342
Delta R.T. -0.002 min
Lab File: 11151112.D
Acq: 15 Nov 2011 5:02 pm

Tgt Ion:105 Resp: 3171

Ion	Ratio	Lower	Upper
105	100		
120	47.2	37.8	56.8
77	0.0	0.0	0.0
91	15.4	9.5	14.3#

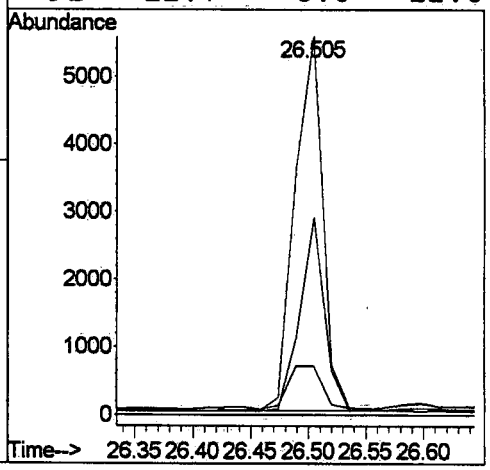




#47
1,2,4-Trimethylbenzene
Concen: 190.97 pptv
RT: 26.505 min Scan# 1371
Delta R.T. -0.001 min
Lab File: 11151112.D
Acq: 15 Nov 2011 5:02 pm

Tgt Ion:105 Resp: 9279

Ion	Ratio	Lower	Upper
105	100		
120	52.3	45.4	68.0
77	0.0	0.0	0.0
91	12.7	8.6	12.8



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151113.D
Acq On : 15 Nov 2011 17:46
Operator : JJG
Sample : 110957-53716 x5
Misc : IS/Surr: PS082311-02 + 100mL (Sig #1); (Sig #2)
ALS Vial : 2 Sample Multiplier: 5

Quant Time: Nov 15 18:25:09 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.928	49	197588	10000.00 pptv	0.00
23) 1,4-Difluorobenzene	18.715	114	746909	10000.00 pptv	0.00
36) Chlorobenzene-d5	23.657	117	680435	10000.00 pptv	0.00

System Monitoring Compounds					
44) BFB(4-Bromochlorobenzene)	25.177	174	640470	9805.45 pptv	0.00

Spiked Amount 10000.000 Recovery = 98.05%

Target Compounds					Qvalue
2) Chlorodifluoromethane	3.995	51	1900	267.85 pptv #	90
3) Dichlorodifluoromethane	4.184	85	7750	401.25 pptv	
4) Chloromethane	4.441	50	1098	386.13 pptv	93
5) Dichlorotetrafluoroethane	4.681	85	200	N.D.	
6) VinylChloride	4.852	62	37	N.D.	
7) 1,3-Butadiene	5.127	54	134	N.D.	
8) Bromomethane	5.606	96	457	N.D.	
9) Chloroethane	5.949	64	29	N.D.	
10) Dichlorofluoromethane	6.206	67	61	N.D.	
11) VinylBromide	6.600	108	27	N.D.	
12) Trichlorofluoromethane	7.611	101	4405	200.14 pptv #	96
13) 1,1-Dichloroethene	9.136	61	15	N.D.	
14) AllylChloride	9.907	41	21	N.D.	
15) Trichlorotrifluoroethane	10.369	101	691	N.D.	
16) trans-1,2-Dichloroethene	12.049	61	52	N.D.	
17) 1,1-Dichloroethane	0.000	63	0	N.D.	
18) MTBE	12.923	73	2	N.D.	
19) cis-1,2-Dichloroethene	14.602	61	255	N.D.	
20) Chloroform	15.305	83	294	N.D.	
21) 1,2-Dichloroethane	16.813	62	129	N.D.	
22) 1,1,1-Trichloroethane	17.293	97	85	N.D.	
24) Benzene	18.046	78	2512	336.16 pptv	98
25) CarbonTetrachloride	18.286	117	840	N.D.	
26) 1,2-Dichloropropane	19.280	76	11	N.D.	
27) Bromodichloromethane	19.726	83	85	N.D.	
28) Trichloroethene	19.623	130	1707	368.64 pptv	99
29) cis-1,3-Dichloropropene	20.685	75	9	N.D.	
30) trans-1,3-Dichloropropene	21.354	75	4	N.D.	
31) 1,1,2-Trichloroethane	0.000	97	0	N.D.	

11/15/11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151113.D
Acq On : 15 Nov 2011 17:46
Operator : JJG
Sample : 110957-53716 x5
Misc : IS/Surr: PS082311-02 + 100mL (Sig #1); (Sig #2)
ALS Vial : 2 Sample Multiplier: 5

Quant Time: Nov 15 18:25:09 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

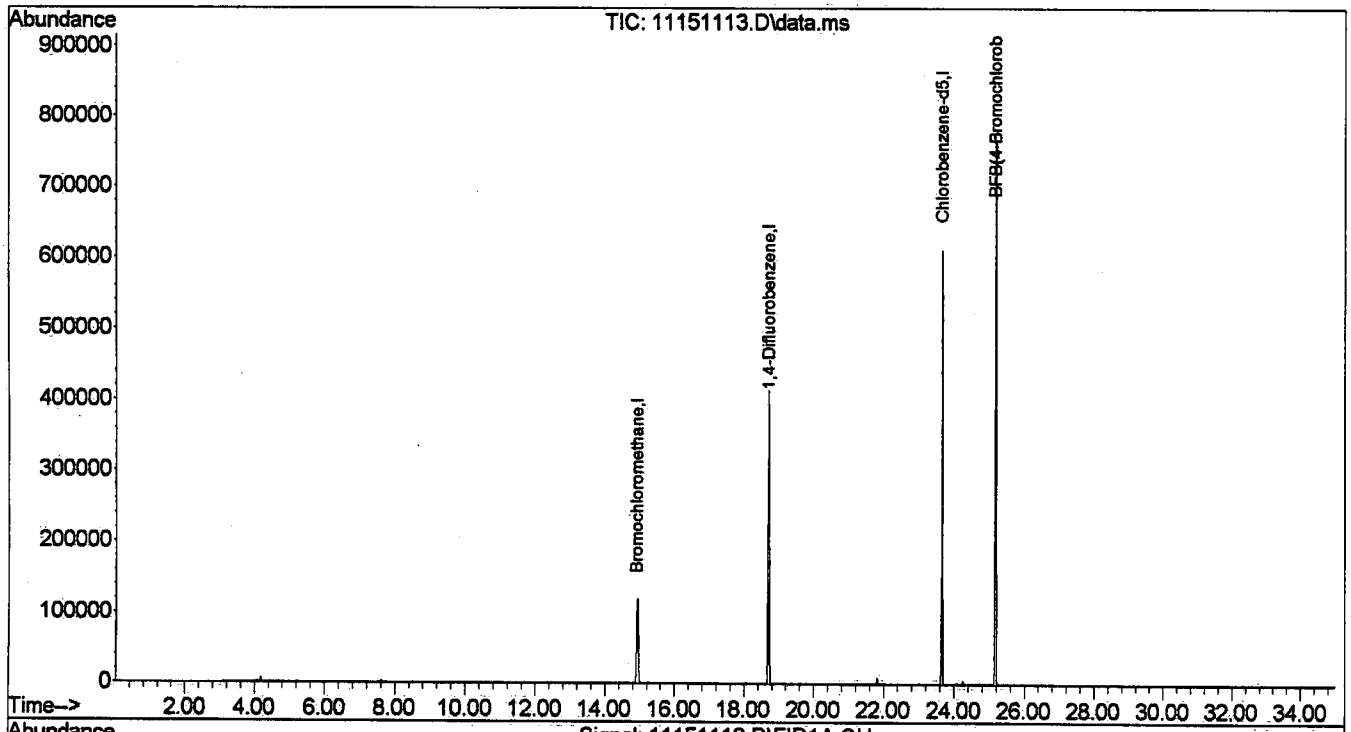
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
32) Toluene	21.813	91	9629	816.91 pptv	
33) Dibromochloromethane	22.264	129	12	N.D.	
34) 1,2-Dibromoethane	22.509	107	18	N.D.	
35) Tetrachloroethene	23.017	166	1846	282.79 pptv	99
37) Chlorobenzene	23.657	112	150	N.D.	
38) Ethylbenzene	24.080	91	2911	219.22 pptv	98
39) m&p-Xylene	24.250	106	3402	738.29 pptv	
40) Bromoform	24.327	173	29	N.D.	
41) Styrene	24.605	104	255	N.D.	
42) 1,1,2,2-Tetrachloroethane	24.729	83	29	N.D.	
43) o-Xylene	24.729	91	1857	198.98 pptv	95
45) 4-Ethyltoluene	25.935	105	1873	N.D.	
46) 1,3,5-Trimethylbenzene	26.058	105	492	N.D.	
47) 1,2,4-Trimethylbenzene	26.491	105	1548	N.D.	
48) BenzylChloride	26.646	91	41	N.D.	
49) 1,3-Dichlorobenzene	26.677	146	32	N.D.	
50) 1,4-Dichlorobenzene	26.754	146	151	N.D.	
51) 1,2-Dichlorobenzene	27.140	146	37	N.D.	
52) Hexachlorobutadiene	29.831	225	14	N.D.	

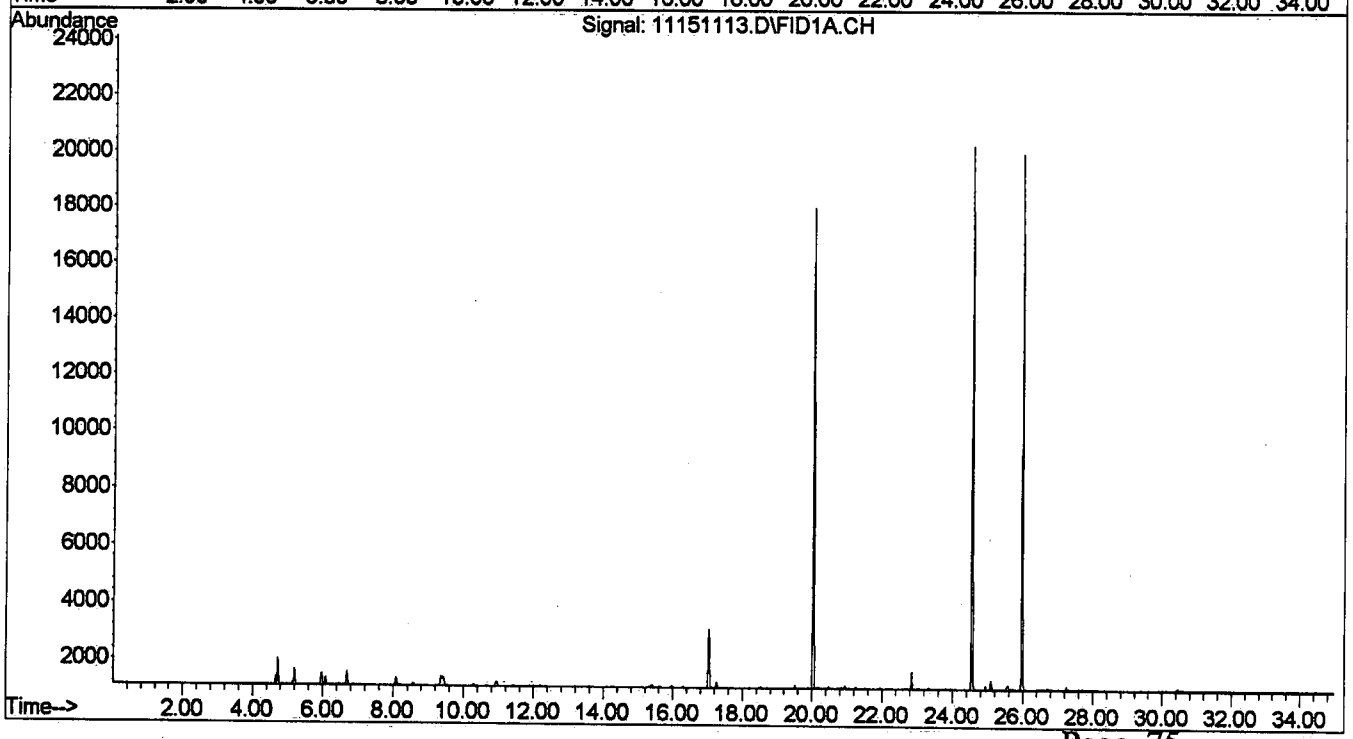
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151113.D
Acq On : 15 Nov 2011 17:46
Operator : JJG
Sample : 110957-53716 x5
Misc : IS/Surr: PS082311-02 + 100mL (Sig #1); (Sig #2)
ALS Vial : 2 Sample Multiplier: 5

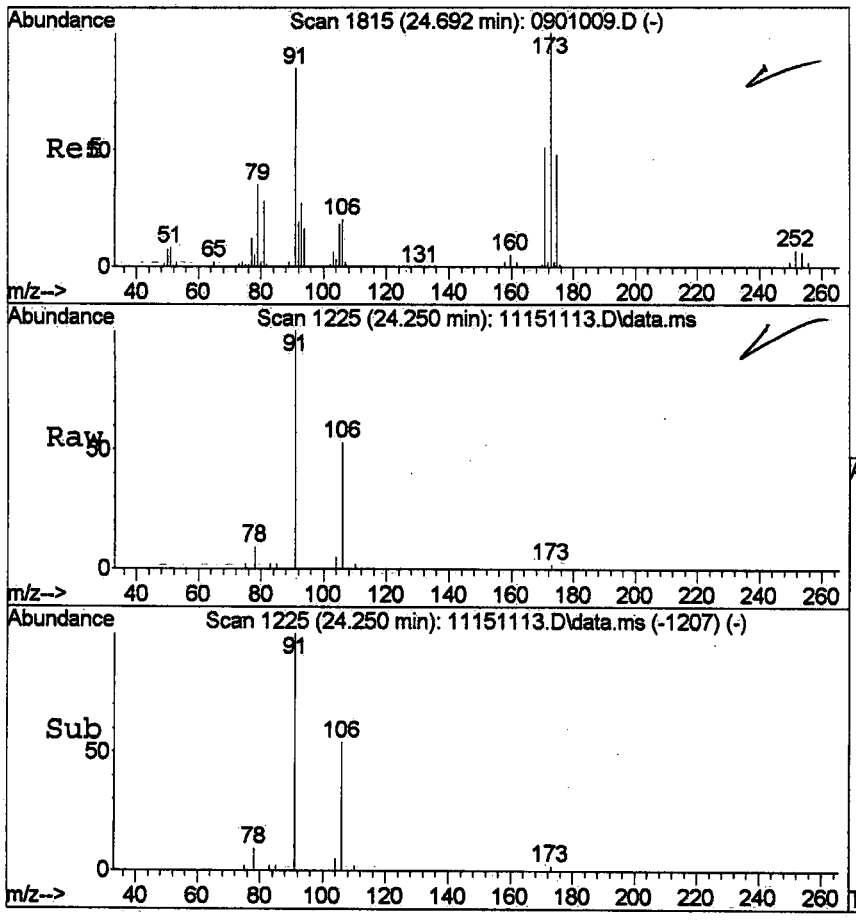
Quant Time: Nov 15 18:25:09 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration





SIM111411.M Tue Nov 15 18:26:07 2011

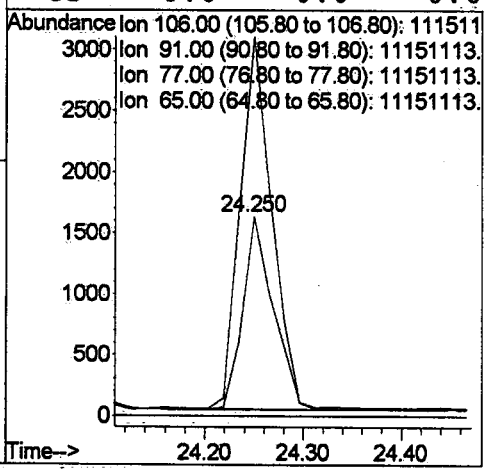
11/15/11



#39
m&p-Xylene
Concen: 738.29 pptv m
RT: 24.250 min Scan# 1225
Delta R.T. 0.001 min
Lab File: 11151113.D
Acq: 15 Nov 2011 17:46

Tgt Ion:106 Resp: 3402

Ion	Ratio	Lower	Upper
106	100		
91	189.6	164.3	246.5
77	0.0	0.0	0.0
65	0.0	0.0	0.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151114.D
Acq On : 15 Nov 2011 18:31
Operator : JJG
Sample : 110957-53717 x1
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 16 13:57:06 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.928	49	196855	10000.00 pptv	0.00
23) 1,4-Difluorobenzene	18.715	114	745499	10000.00 pptv	0.00
36) Chlorobenzene-d5	23.657	117	670199	10000.00 pptv	0.00

System Monitoring Compounds					
44) BFB(4-Bromochlorobenzene)	25.177	174	640397	9954.08 pptv	0.00

Spiked Amount 10000.000 Recovery = 99.54%

Target Compounds					Qvalue
2) Chlorodifluoromethane	3.995	51	159	N.D.	
3) Dichlorodifluoromethane	4.184	85	346	N.D.	
4) Chloromethane	4.441	50	143	N.D.	
5) Dichlorotetrafluoroethane	4.698	85	46	N.D.	
6) VinylChloride	4.818	62	41	N.D.	
7) 1,3-Butadiene	5.126	54	8	N.D.	
8) Bromomethane	5.366	96	298	N.D.	
9) Chloroethane	5.966	64	59	N.D.	
10) Dichlorofluoromethane	6.240	67	36	N.D.	
11) VinylBromide	6.634	108	19	N.D.	
12) Trichlorofluoromethane	7.611	101	330	N.D.	
13) 1,1-Dichloroethene	9.118	61	25	N.D.	
14) AllylChloride	9.633	41	150	N.D.	
15) Trichlorotrifluoroethane	10.369	101	66	N.D.	
16) trans-1,2-Dichloroethene	12.049	61	42	N.D.	
17) 1,1-Dichloroethane	0.000	63	0	N.D.	
18) MTBE	12.922	73	1	N.D.	
19) cis-1,2-Dichloroethene	14.602	61	102	N.D.	
20) Chloroform	15.288	83	120	N.D.	
21) 1,2-Dichloroethane	16.830	62	105	N.D.	
22) 1,1,1-Trichloroethane	17.310	97	20	N.D.	
24) Benzene	18.046	78	341	N.D.	
25) CarbonTetrachloride	18.303	117	72	N.D.	
26) 1,2-Dichloropropane	19.280	76	337	N.D.	
27) Bromodichloromethane	19.554	83	31	N.D.	
28) Trichloroethene	19.623	130	88	N.D.	
29) cis-1,3-Dichloropropene	20.737	75	3	N.D.	
30) trans-1,3-Dichloropropene	21.319	75	7	N.D.	
31) 1,1,2-Trichloroethane	0.000	97	0	N.D.	

11/16/11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151114.D
Acq On : 15 Nov 2011 18:31
Operator : JJG
Sample : 110957-53717 x1
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 16 13:57:06 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units Dev(Min)
32) Toluene	21.812	91	8862m	148.47 pptv
33) Dibromochloromethane	22.245	129	6	N.D.
34) 1,2-Dibromoethane	22.546	107	16	N.D.
35) Tetrachloroethene	23.017	166	93	N.D.
37) Chlorobenzene	23.694	112	154	N.D.
38) Ethylbenzene	24.079	91	462	N.D.
39) m&p-Xylene	24.250	106	601	N.D.
40) Bromoform	24.327	173	6	N.D.
41) Styrene	24.605	104	130	N.D.
42) 1,1,2,2-Tetrachloroethane	24.698	83	17	N.D.
43) o-Xylene	24.729	91	219	N.D.
45) 4-Ethyltoluene	25.981	105	55	N.D.
46) 1,3,5-Trimethylbenzene	26.058	105	87	N.D.
47) 1,2,4-Trimethylbenzene	26.506	105	152	N.D.
48) BenzylChloride	26.645	91	42	N.D.
49) 1,3-Dichlorobenzene	26.676	146	40	N.D.
50) 1,4-Dichlorobenzene	26.754	146	51	N.D.
51) 1,2-Dichlorobenzene	27.140	146	46	N.D.
52) Hexachlorobutadiene	29.831	225	11	N.D.

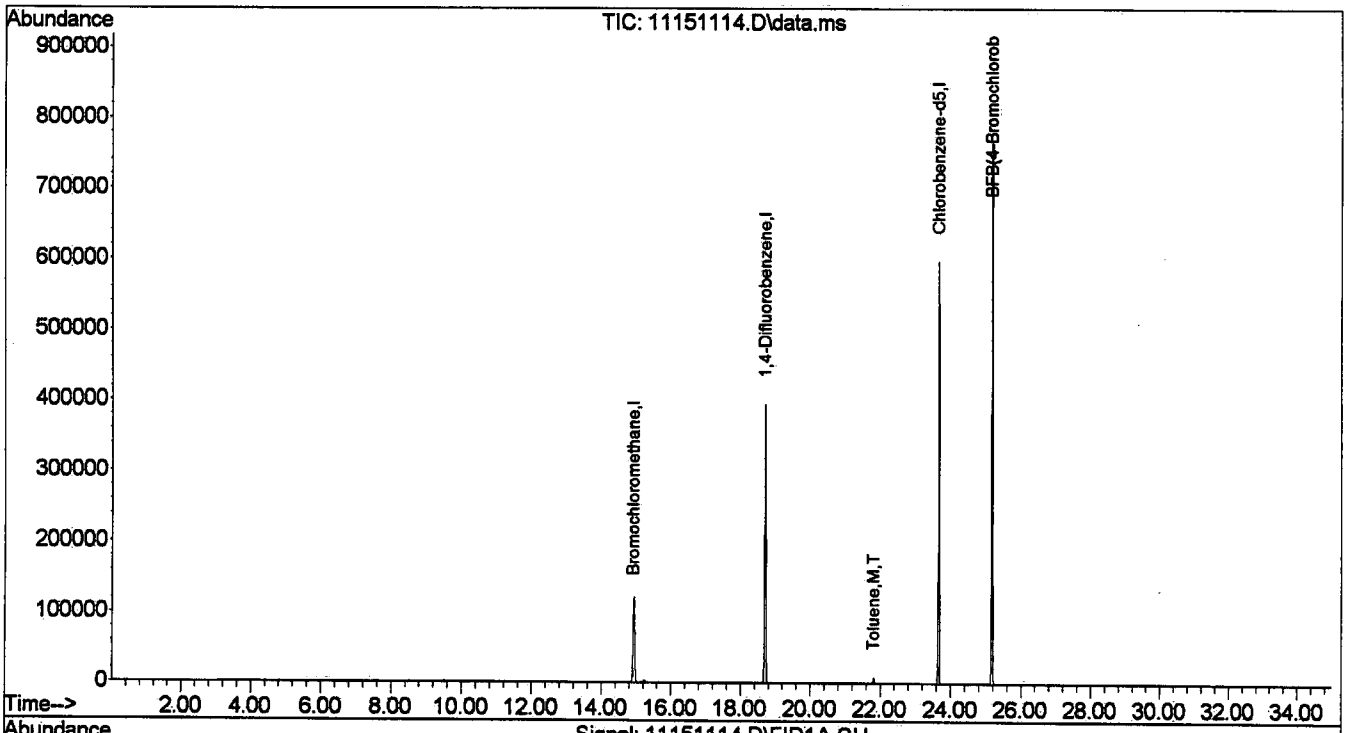
(#) = qualifier out of range (m) = manual integration (+) = signals summed

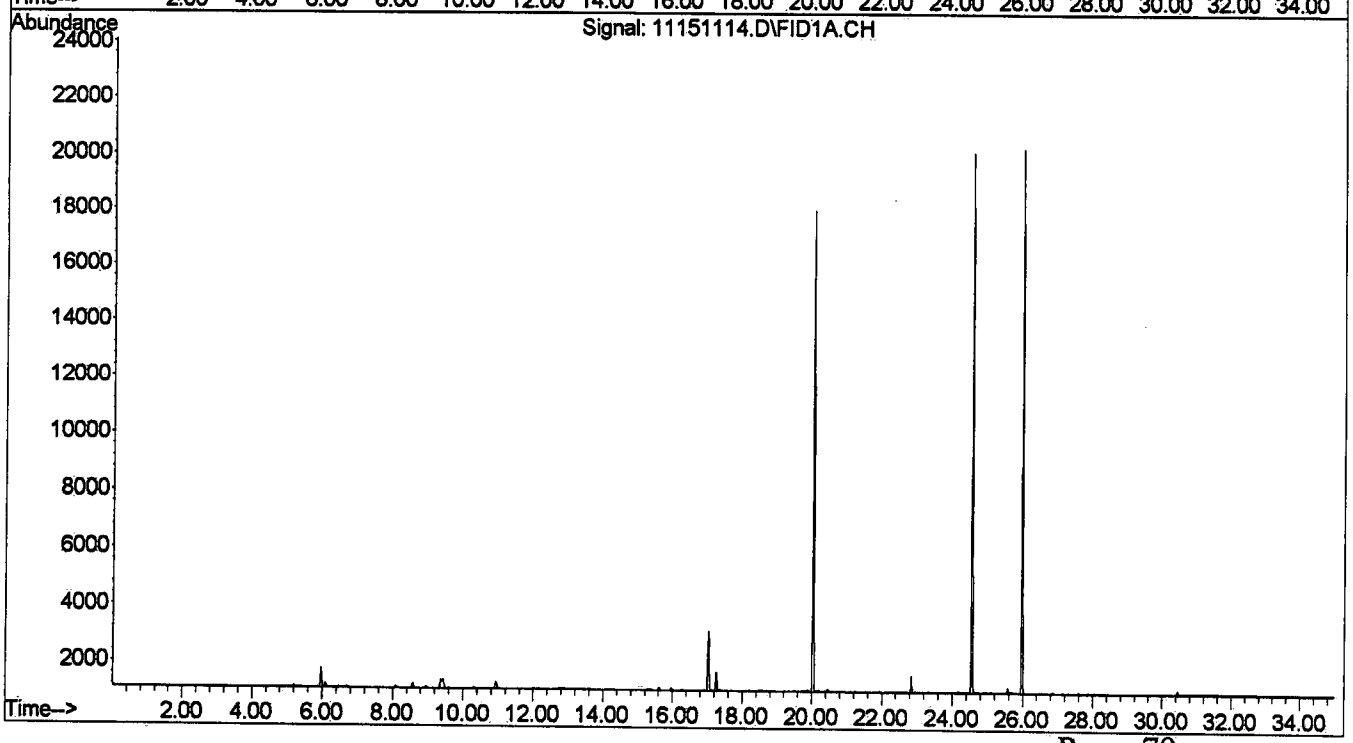
11/16/11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151114.D
Acq On : 15 Nov 2011 18:31
Operator : JJG
Sample : 110957-53717 x1
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 3 Sample Multiplier: 1

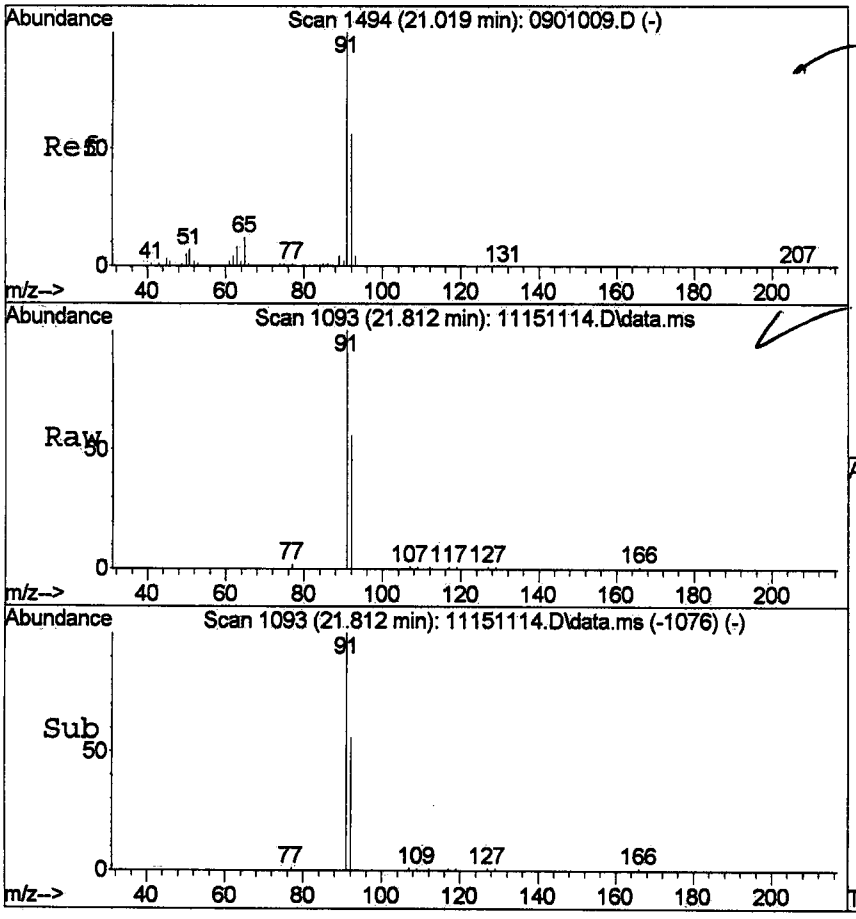
Quant Time: Nov 16 13:57:06 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration





SIM111411.M Wed Nov 16 13:57:19 2011

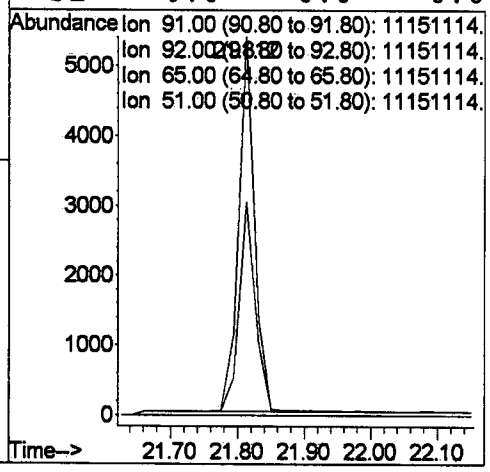
11/16/11



#32
Toluene
Concen: 148.47 pptv
RT: 21.812 min Scan# 1093
Delta R.T. 0.000 min
Lab File: 11151114.D
Acq: 15 Nov 2011 6:31 pm

Tgt Ion: 91 Resp: 8862

Ion	Ratio	Lower	Upper
91	100		
92	56.4	45.1	67.7
65	0.0	0.0	0.0
51	0.0	0.0	0.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151115.D
Acq On : 15 Nov 2011 19:16
Operator : JJG
Sample : 110957-53718 x1
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 16 13:58:06 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.928	49	191909	10000.00 pptv	0.00
23) 1,4-Difluorobenzene	18.715	114	720153	10000.00 pptv	0.00
36) Chlorobenzene-d5	23.657	117	649538	10000.00 pptv	0.00
System Monitoring Compounds					
44) BFB(4-Bromochlorobenzene)	25.177	174	629224	10091.51 pptv	0.00
Spiked Amount 10000.000			Recovery	= 100.92%	

Target Compounds					Qvalue
2) Chlorodifluoromethane	4.012	51	93	N.D.	
3) Dichlorodifluoromethane	4.184	85	168	N.D.	
4) Chloromethane	4.441	50	93	N.D.	
5) Dichlorotetrafluoroethane	4.681	85	20	N.D.	
6) VinylChloride	4.869	62	15	N.D.	
7) 1,3-Butadiene	5.127	54	2	N.D.	
8) Bromomethane	5.606	96	400	N.D.	
9) Chloroethane	5.966	64	27	N.D.	
10) Dichlorofluoromethane	6.275	67	40	N.D.	
11) VinylBromide	6.669	108	14	N.D.	
12) Trichlorofluoromethane	7.611	101	173	N.D.	
13) 1,1-Dichloroethene	9.101	61	3	N.D.	
14) AllylChloride	9.873	41	13	N.D.	
15) Trichlorotrifluoroethane	10.369	101	56	N.D.	
16) trans-1,2-Dichloroethene	12.083	61	16	N.D.	
17) 1,1-Dichloroethane	0.000	63	0	N.D.	
18) MTBE	12.974	73	4	N.D.	
19) cis-1,2-Dichloroethene	14.602	61	97	N.D.	
20) Chloroform	15.236	83	117	N.D.	
21) 1,2-Dichloroethane	16.830	62	28	N.D.	
22) 1,1,1-Trichloroethane	17.293	97	22	N.D.	
24) Benzene	18.046	78	208	N.D.	
25) CarbonTetrachloride	18.286	117	6	N.D.	
26) 1,2-Dichloropropane	19.280	76	3	N.D.	
27) Bromodichloromethane	19.554	83	23	N.D.	
28) Trichloroethene	19.537	130	25	N.D.	
29) cis-1,3-Dichloropropene	20.771	75	12	N.D.	
30) trans-1,3-Dichloropropene	21.354	75	11	N.D.	
31) 1,1,2-Trichloroethane	0.000	97	0	N.D.	

11/16/11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151115.D
Acq On : 15 Nov 2011 19:16
Operator : JJG
Sample : 110957-53718 x1
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 16 13:58:06 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

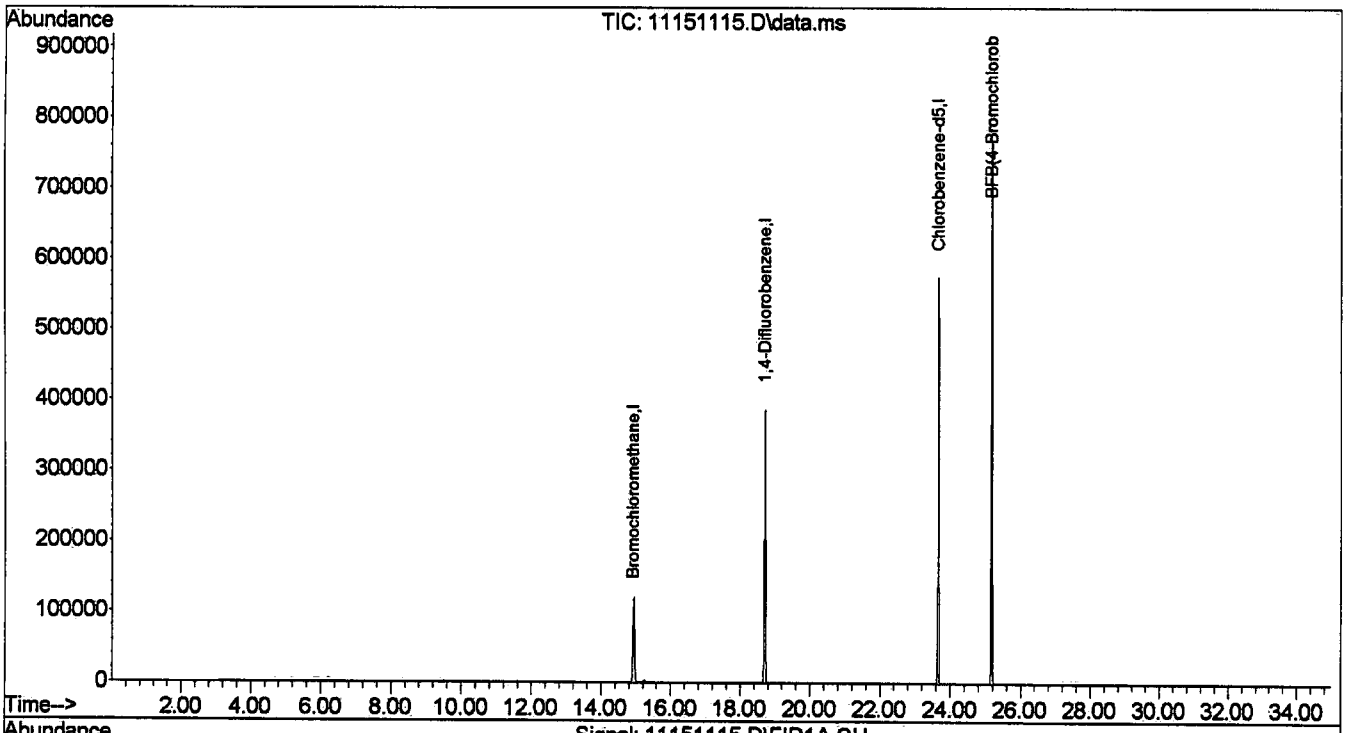
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
32) Toluene	21.813	91	1992	N.D.	
33) Dibromochloromethane	22.264	129	10	N.D.	
34) 1,2-Dibromoethane	22.434	107	12	N.D.	
35) Tetrachloroethene	23.017	166	102	N.D.	
37) Chlorobenzene	23.657	112	123	N.D.	
38) Ethylbenzene	24.080	91	71	N.D.	
39) m&p-Xylene	24.250	106	314	N.D.	
40) Bromoform	24.281	173	7	N.D.	
41) Styrene	24.621	104	40	N.D.	
42) 1,1,2,2-Tetrachloroethane	24.683	83	19	N.D.	
43) o-Xylene	24.729	91	61	N.D.	
45) 4-Ethyltoluene	25.935	105	28	N.D.	
46) 1,3,5-Trimethylbenzene	26.058	105	33	N.D.	
47) 1,2,4-Trimethylbenzene	26.491	105	61	N.D.	
48) BenzylChloride	26.646	91	24	N.D.	
49) 1,3-Dichlorobenzene	26.677	146	30	N.D.	
50) 1,4-Dichlorobenzene	26.754	146	48	N.D.	
51) 1,2-Dichlorobenzene	27.140	146	38	N.D.	
52) Hexachlorobutadiene	29.831	225	9	N.D.	

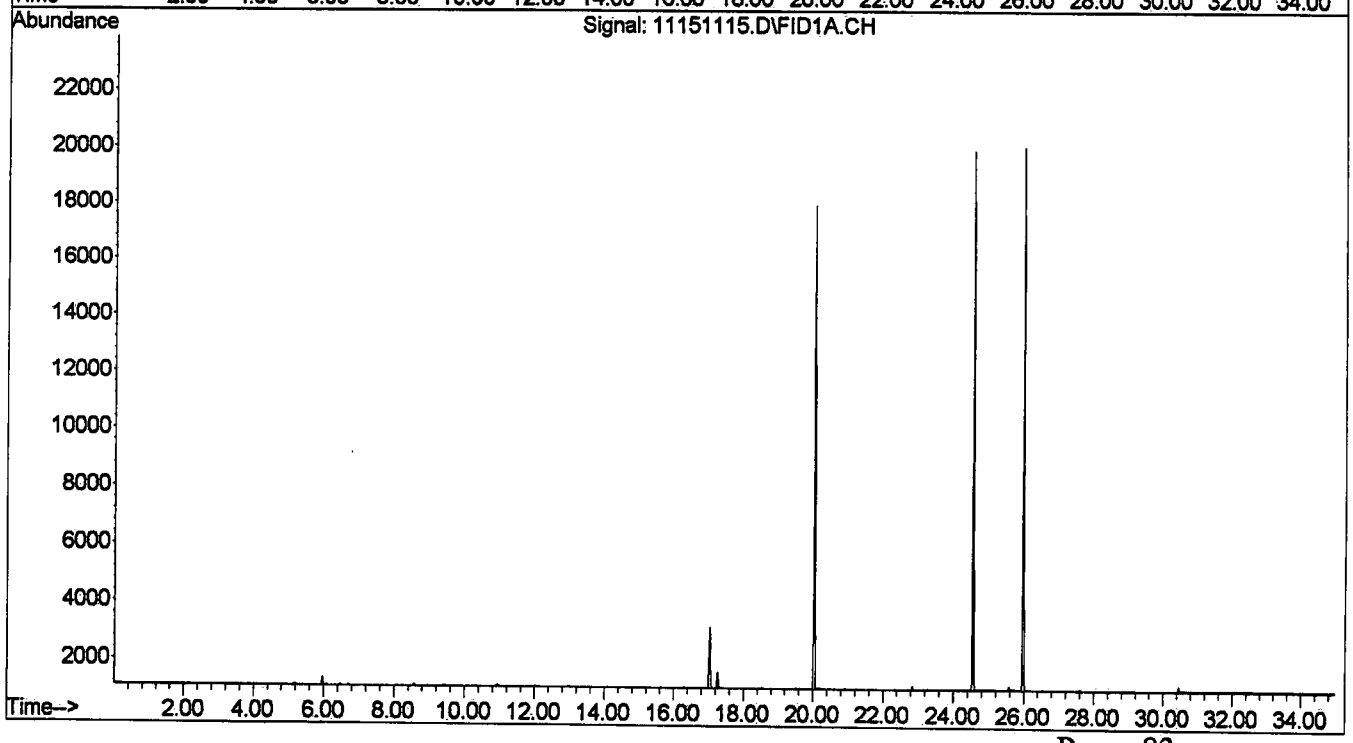
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151115.D
Acq On : 15 Nov 2011 19:16
Operator : JJG
Sample : 110957-53718 x1
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 16 13:58:06 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration





SIM RAW QC & ICAL SUMMARY

MS #1 Instrument Logbook

Sequence Name: C:\msdchem\1\sequence\2011\111511.S
Comment: GCMS-01
Operator: JJG
Data Path: C:\MSDCHEM\1\MS01\2011\111511\
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

11/16/11

Line			Sample Name/Misc Info		
1)	Sample	31	11151101	TO15B	TO15 BFB 111511
2)	Sample	31	11151102	SIMB	SIM CCV 111511
3)	Sample	31	11151103	SIMB	SIM LCSD 111511
4)	Sample	21	11151104	SIMB	SIM MB 111511
5)	Sample	1	11151105	SIMB	110957-53715 x1
6)	Sample	1	11151106	SIMB	110957-53715 x20
7)	Sample	2	11151107	SIMB	110957-53716 x1
8)	Sample	2	11151108	SIMB	110957-53716 x1 dp
9)	Sample	1	11151109	SIMB	110957-53715 x2000
10)	Sample	1	11151110	SIMB	110957-53715 x2000 dp
11)	Sample	1	11151111	SIMB	110957-53715 x100
12)	Sample	2	11151112	SIMB	110957-53716 x1 rr
13)	Sample	2	11151113	SIMB	110957-53716 x5
14)	Sample	3	11151114	SIMB	110957-53717 x1
15)	Sample	4	11151115	SIMB	110957-53718 x1
16)	Sample	2	11151116	SIMB	110957-53716 x1 conf.

11/16/11

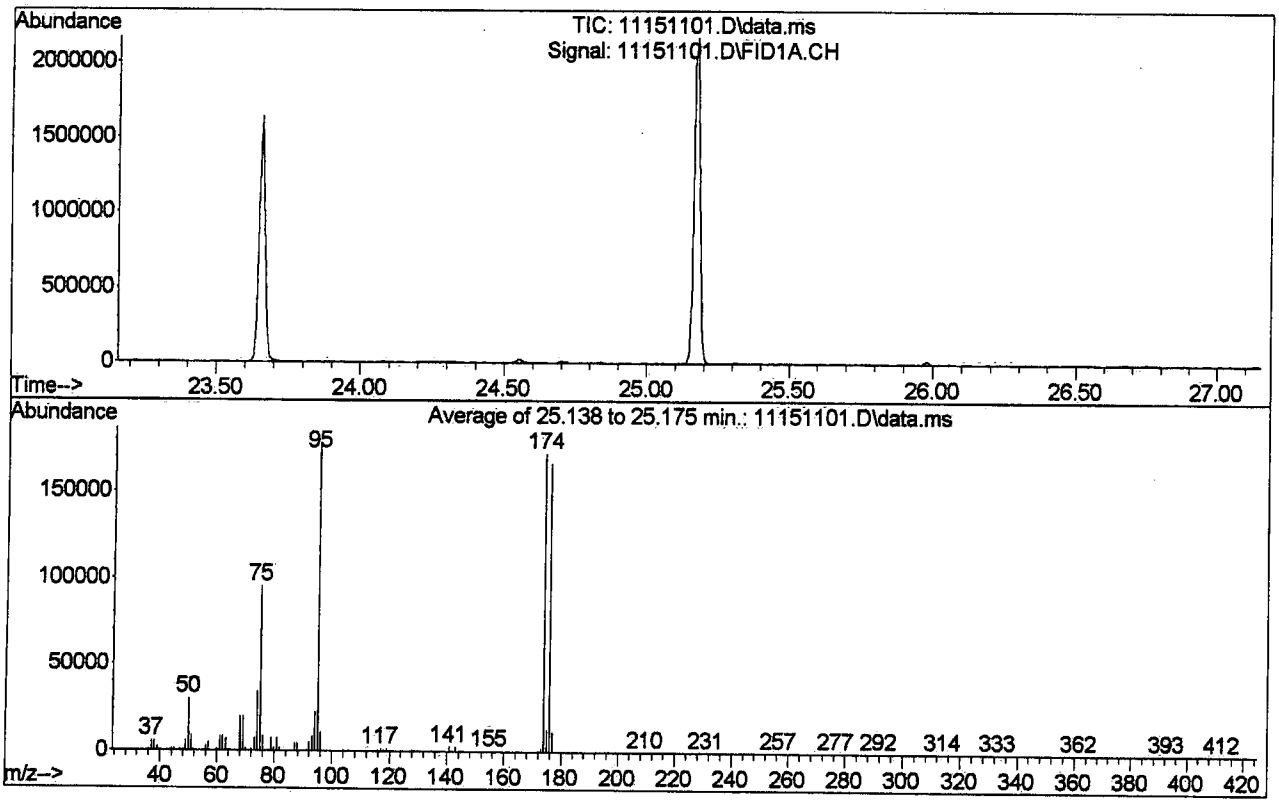
Comments:

Analyst: **Date:** 11/16/11

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151101.D
Acq On : 15 Nov 2011 8:48 am
Operator : JJG
Sample : TO15 BFB 111511
Misc : IS/Surr: PS082311-02 + 50mL (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: PAMS.P
Integration File signal 2: rteint2.p

Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Title : TO-15
Last Update : Tue Oct 25 17:54:29 2011



Spectrum Information: Average of 25.138 to 25.175 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.9	30174	PASS
75	95	30	60	53.5	95277	PASS
95	95	100	100	100.0	178245	PASS
96	95	5	9	6.2	11102	PASS
173	174	0.00	2	1.1	1872	PASS
174	95	50	100	96.8	172500	PASS
175	174	5	9	7.5	12939	PASS
176	174	95	101	96.7	166771	PASS
177	176	5	9	6.8	11415	PASS

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151102.D
Acq On : 15 Nov 2011 9:33
Operator : JJG
Sample : SIM CCV 111511
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 10:39:05 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.928	49	239220	10000.00 pptv	0.00
23) 1,4-Difluorobenzene	18.697	114	910029	10000.00 pptv	-0.02
36) Chlorobenzene-d5	23.657	117	815314	10000.00 pptv	0.00
System Monitoring Compounds					
44) BFB(4-Bromochlorobenzene)	25.177	174	792077	10120.41 pptv	0.00
Spiked Amount 10000.000			Recovery	= 101.20%	

Target Compounds					Qvalue
2) Chlorodifluoromethane	4.012	51	8005	186.42 pptv #	96
3) Dichlorodifluoromethane	4.184	85	22017	188.31 pptv	98
4) Chloromethane	4.441	50	3015	175.15 pptv	97
5) Dichlorotetrafluoroethane	4.681	85	18615	189.44 pptv	97
6) VinylChloride	4.852	62	4003	192.16 pptv	98
7) 1,3-Butadiene	5.126	54	2215m	190.52 pptv	
8) Bromomethane	5.606	96	5348m	183.90 pptv	
9) Chloroethane	5.966	64	1883m	181.59 pptv	
10) Dichlorofluoromethane	6.206	67	12927	190.41 pptv	99
11) VinylBromide	6.668	108	5327	184.83 pptv	97
12) Trichlorofluoromethane	7.611	101	25517	191.51 pptv	99
13) 1,1-Dichloroethene	9.118	61	5481	183.27 pptv	97
14) AllylChloride	9.821	41	2125	169.52 pptv	97
15) Trichlorotrifluoroethane	10.369	101	12510	183.31 pptv	100
16) trans-1,2-Dichloroethene	12.049	61	4617	181.98 pptv	97
17) 1,1-Dichloroethane	12.545	63	7644m	189.12 pptv	
18) MTBE	12.940	73	4614	192.54 pptv	97
19) cis-1,2-Dichloroethene	14.602	61	3680	186.83 pptv	96
20) Chloroform	15.305	83	13485	189.76 pptv	98
21) 1,2-Dichloroethane	16.813	62	7904	186.45 pptv	92
22) 1,1,1-Trichloroethane	17.292	97	13024	190.62 pptv	95
24) Benzene	18.046	78	8019	176.15 pptv	97
25) CarbonTetrachloride	18.286	117	14737	188.90 pptv	93
26) 1,2-Dichloropropane	19.280	76	2752m	183.40 pptv	
27) Bromodichloromethane	19.537	83	12180	192.73 pptv	99
28) Trichloroethene	19.623	130	5328	188.88 pptv	96
29) cis-1,3-Dichloropropene	20.719	75	4480	191.49 pptv	93
30) trans-1,3-Dichloropropene	21.319	75	4119	191.15 pptv #	78
31) 1,1,2-Trichloroethane	21.508	97	6201m	190.40 pptv	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151102.D
Acq On : 15 Nov 2011 9:33
Operator : JJG
Sample : SIM CCV 111511
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 10:39:05 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) Toluene	21.812	91	151920	217.90	pptv	
33) Dibromochloromethane	22.264	129	12022	194.38	pptv	97
34) 1,2-Dibromoethane	22.509	107	8880	193.28	pptv	95
35) Tetrachloroethene	23.017	166	7617	191.54	pptv	97
37) Chlorobenzene	23.694	112	15286	189.58	pptv	89
38) Ethylbenzene	24.079	91	15213	191.22	pptv	99
39) m&p-Xylene	24.265	106	108050	391.39	pptv	
40) Bromoform	24.327	173	13337	196.12	pptv	95
41) Styrene	24.605	104	6632	193.86	pptv #	30
42) 1,1,2,2-Tetrachloroethane	24.698	83	15849	196.69	pptv	98
43) o-Xylene	24.729	91	11266	201.49	pptv	95
45) 4-Ethyltoluene	25.981	105	130950	195.07	pptv	
46) 1,3,5-Trimethylbenzene	26.058	105	12578	200.79	pptv	95
47) 1,2,4-Trimethylbenzene	26.491	105	10617	189.82	pptv #	73
48) BenzylChloride	26.645	91	10058	217.28	pptv	93
49) 1,3-Dichlorobenzene	26.676	146	13901	213.06	pptv	100
50) 1,4-Dichlorobenzene	26.754	146	12626	209.37	pptv	98
51) 1,2-Dichlorobenzene	27.140	146	11973	206.65	pptv	100
52) Hexachlorobutadiene	29.831	225	13791	227.89	pptv	100

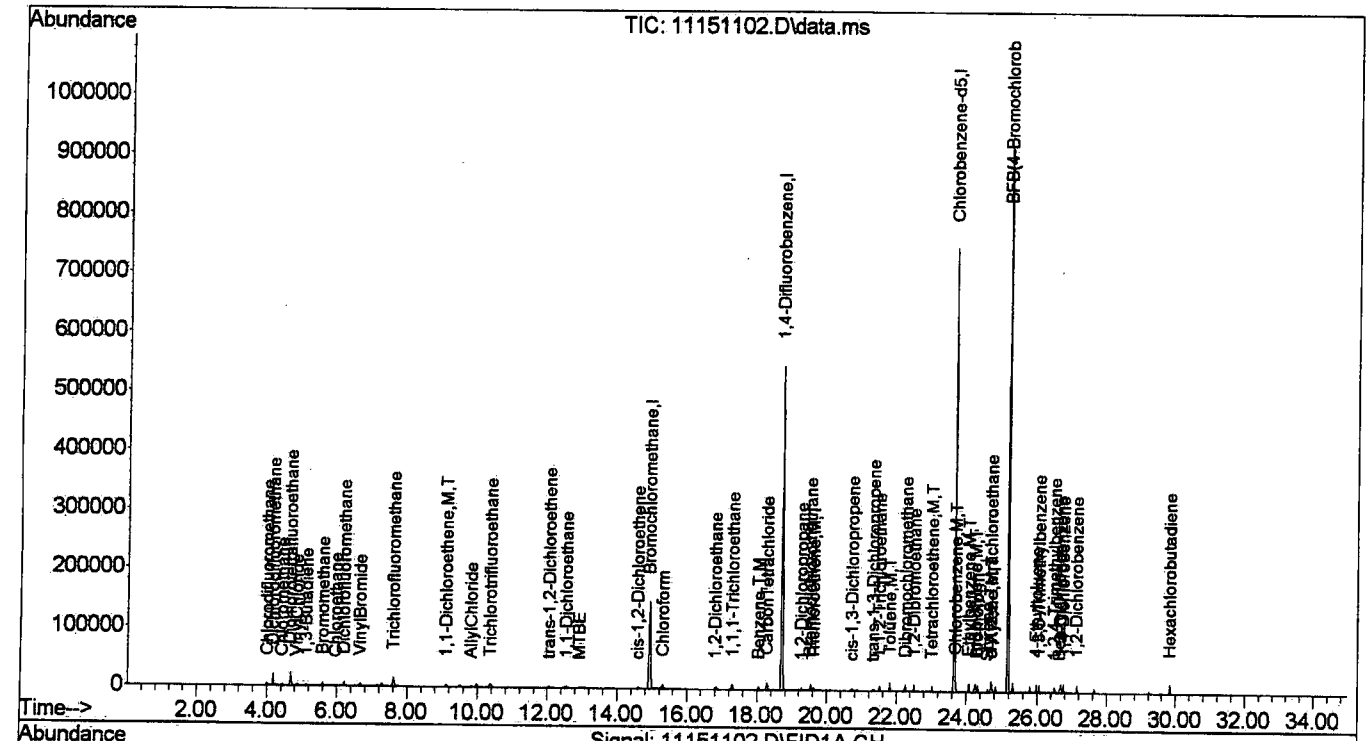
(#) = qualifier out of range (m) = manual integration (+) = signals summed

11/15/11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151102.D
Acq On : 15 Nov 2011 9:33
Operator : JJG
Sample : SIM CCV 111511
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 10:39:05 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151103.D
Acq On : 15 Nov 2011 10:19
Operator : JJG
Sample : SIM LCSD 111511
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 12:38:51 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.928	49	234439	10000.00 pptv	0.00
23) 1,4-Difluorobenzene	18.697	114	894585	10000.00 pptv	-0.02
36) Chlorobenzene-d5	23.657	117	800675	10000.00 pptv	0.00
System Monitoring Compounds					
44) BFB(4-Bromochlorobenzene)	25.177	174	775329	10087.54 pptv	0.00
Spiked Amount 10000.000			Recovery = 100.88%		
Target Compounds					Qvalue
2) Chlorodifluoromethane	3.995	51	8053	191.36 pptv	98
3) Dichlorodifluoromethane	4.184	85	22005	192.04 pptv	97
4) Chloromethane	4.441	50	3003	178.01 pptv	100
5) Dichlorotetrafluoroethane	4.681	85	18448	191.57 pptv	97
6) VinylChloride	4.852	62	3938	192.90 pptv	99
7) 1,3-Butadiene	5.126	54	2194m	192.56 pptv	
8) Bromomethane	5.606	96	5412m	189.89 pptv	
9) Chloroethane	5.966	64	1993	196.11 pptv	100
10) Dichlorofluoromethane	6.206	67	12896	193.82 pptv	100
11) VinylBromide	6.668	108	5311	188.04 pptv	98
12) Trichlorofluoromethane	7.611	101	25410	194.60 pptv	99
13) 1,1-Dichloroethene	9.118	61	5401	184.28 pptv	96
14) AllylChloride	9.821	41	2185	177.86 pptv	97
15) Trichlorotrifluoroethane	10.369	101	12417	185.66 pptv	98
16) trans-1,2-Dichloroethene	12.048	61	4566	183.64 pptv	97
17) 1,1-Dichloroethane	12.545	63	7503m	189.41 pptv	
18) MTBE	12.940	73	4579m	194.98 pptv	
19) cis-1,2-Dichloroethene	14.602	61	3762	194.89 pptv	99
20) Chloroform	15.305	83	13404	192.47 pptv	98
21) 1,2-Dichloroethane	16.813	62	7993	192.39 pptv	90
22) 1,1,1-Trichloroethane	17.292	97	12834	191.67 pptv	97
24) Benzene	18.046	78	7973	178.17 pptv	97
25) CarbonTetrachloride	18.286	117	14841	193.52 pptv	94
26) 1,2-Dichloropropane	19.280	76	2712m	183.86 pptv	
27) Bromodichloromethane	19.537	83	12067	194.24 pptv	98
28) Trichloroethene	19.623	130	5162m	186.15 pptv	
29) cis-1,3-Dichloropropene	20.719	75	4475	194.58 pptv	98
30) trans-1,3-Dichloropropene	21.336	75	4085	192.85 pptv	100
31) 1,1,2-Trichloroethane	21.508	97	6084m	190.04 pptv	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151103.D
Acq On : 15 Nov 2011 10:19
Operator : JJG
Sample : SIM LCSD 111511
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 12:38:51 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) Toluene	21.812	91	14806m	215.90	pptv	
33) Dibromochloromethane	22.264	129	11691	192.29	pptv	100
34) 1,2-Dibromoethane	22.509	107	8928	197.68	pptv	99
35) Tetrachloroethene	23.017	166	7612	194.72	pptv	98
37) Chlorobenzene	23.694	112	15125	191.01	pptv	93
38) Ethylbenzene	24.079	91	14777	189.14	pptv	99
39) m&p-Xylene	24.265	106	10867m	400.83	pptv	
40) Bromoform	24.327	173	13020	194.96	pptv	98
41) Styrene	24.605	104	6737	200.53	pptv #	27
42) 1,1,2,2-Tetrachloroethane	24.698	83	15671	198.04	pptv	98
43) o-Xylene	24.729	91	11223	204.40	pptv	96
45) 4-Ethyltoluene	25.981	105	12935m	196.21	pptv	
46) 1,3,5-Trimethylbenzene	26.058	105	12257	199.24	pptv	97
47) 1,2,4-Trimethylbenzene	26.491	105	10533	191.76	pptv #	73
48) BenzylChloride	26.645	91	9740m	214.26	pptv	
49) 1,3-Dichlorobenzene	26.676	146	13778	215.04	pptv	99
50) 1,4-Dichlorobenzene	26.754	146	12274	207.25	pptv	99
51) 1,2-Dichlorobenzene	27.140	146	11689	205.44	pptv	100
52) Hexachlorobutadiene	29.831	225	13399	225.47	pptv	99

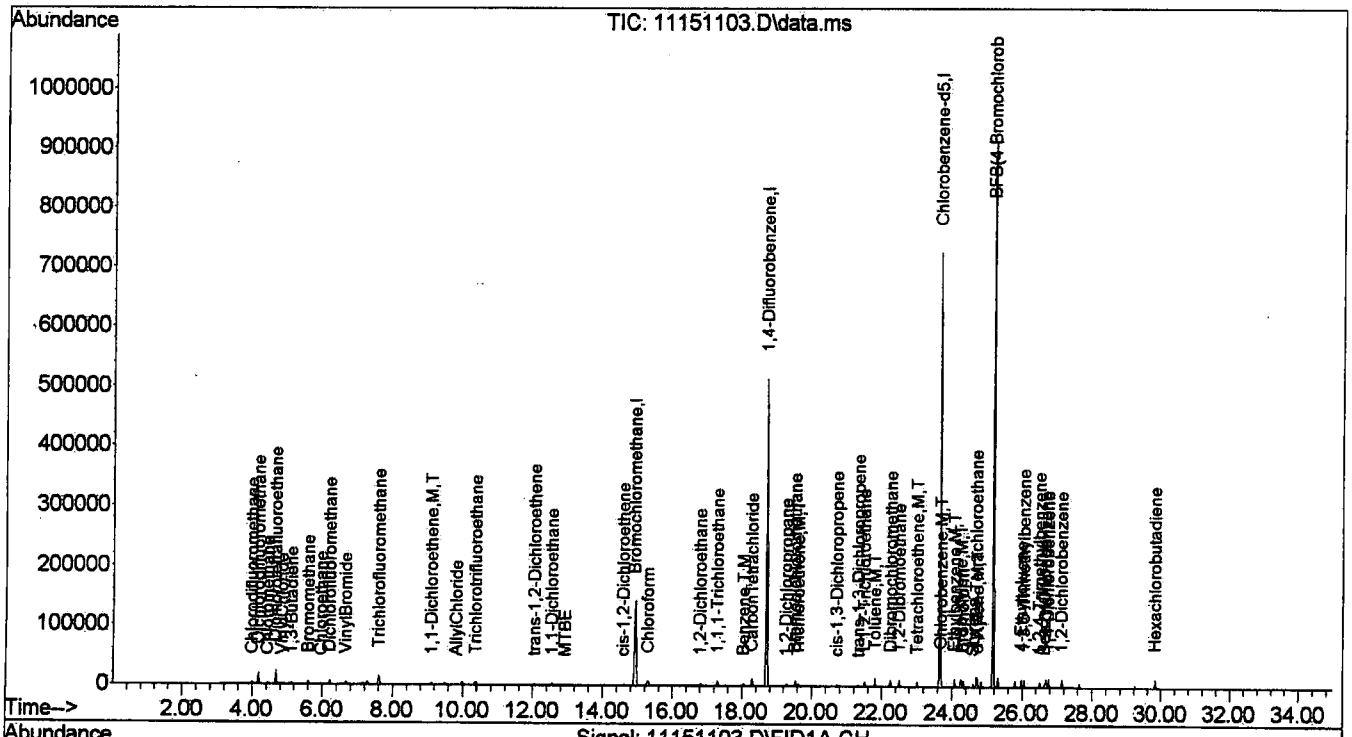
(#) = qualifier out of range (m) = manual integration (+) = signals summed

11/15/11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151103.D
Acq On : 15 Nov 2011 10:19
Operator : JJG
Sample : SIM LCSD 111511
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 12:38:51 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151104.D
Acq On : 15 Nov 2011 11:04
Operator : JJG
Sample : SIM MB 111511
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Nov 15 12:40:27 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.928	49	238335	10000.00 pptv	0.00
23) 1,4-Difluorobenzene	18.715	114	894760	10000.00 pptv	0.00
36) Chlorobenzene-d5	23.655	117	839862	10000.00 pptv	0.00

System Monitoring Compounds					
44) BFB(4-Bromochlorobenzene)	25.175	174	779053	9663.06 pptv	0.00

Spiked Amount 10000.000 Recovery = 96.63%

Target Compounds				Qvalue
2) Chlorodifluoromethane	4.012	51	29	N.D.
3) Dichlorodifluoromethane	4.184	85	30	N.D.
4) Chloromethane	4.441	50	51	N.D.
5) Dichlorotetrafluoroethane	4.681	85	12	N.D.
6) VinylChloride	4.818	62	62	N.D.
7) 1,3-Butadiene	0.000	54	0	N.D.
8) Bromomethane	5.606	96	23	N.D.
9) Chloroethane	5.966	64	48	N.D.
10) Dichlorofluoromethane	6.189	67	25	N.D.
11) VinylBromide	6.686	108	21	N.D.
12) Trichlorofluoromethane	7.611	101	54	N.D.
13) 1,1-Dichloroethene	9.084	61	14	N.D.
14) AllylChloride	9.787	41	5	N.D.
15) Trichlorotrifluoroethane	10.352	101	81	N.D.
16) trans-1,2-Dichloroethene	12.031	61	24	N.D.
17) 1,1-Dichloroethane	0.000	63	0	N.D.
18) MTBE	13.008	73	15	N.D.
19) cis-1,2-Dichloroethene	14.602	61	550	N.D.
20) Chloroform	15.288	83	19	N.D.
21) 1,2-Dichloroethane	16.813	62	26	N.D.
22) 1,1,1-Trichloroethane	17.293	97	27	N.D.
24) Benzene	18.046	78	209	N.D.
25) CarbonTetrachloride	18.286	117	7	N.D.
26) 1,2-Dichloropropane	19.263	76	9	N.D.
27) Bromodichloromethane	19.537	83	13	N.D.
28) Trichloroethene	19.417	130	11	N.D.
29) cis-1,3-Dichloropropene	20.702	75	12	N.D.
30) trans-1,3-Dichloropropene	21.319	75	5	N.D.
31) 1,1,2-Trichloroethane	21.525	97	28	N.D.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151104.D
Acq On : 15 Nov 2011 11:04
Operator : JJG
Sample : SIM MB 111511
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Nov 15 12:40:27 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

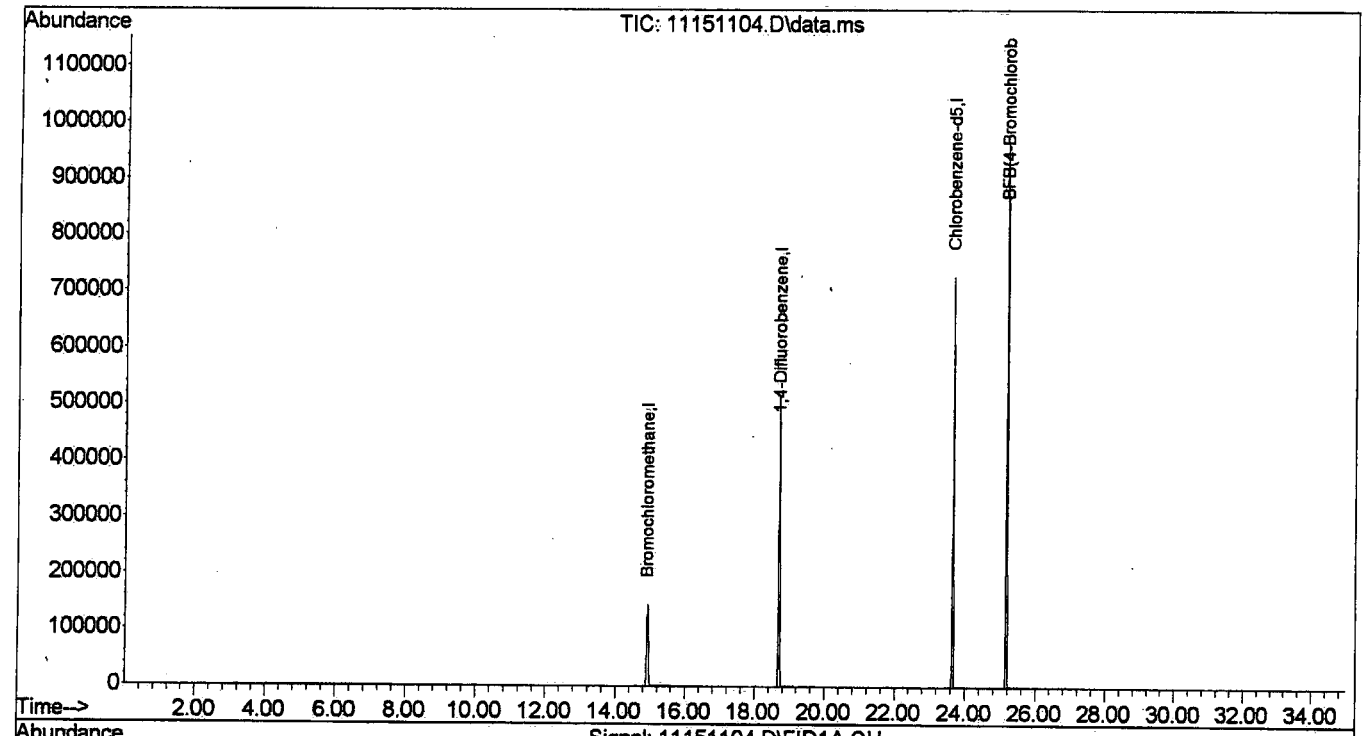
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
32) Toluene	0.000	91	0	N.D. d	
33) Dibromochloromethane	22.262	129	38	N.D.	
34) 1,2-Dibromoethane	22.507	107	34	N.D.	
35) Tetrachloroethene	23.015	166	317	N.D.	
37) Chlorobenzene	23.655	112	138	N.D.	
38) Ethylbenzene	24.078	91	205	N.D.	
39) m&p-Xylene	24.248	106	115	N.D.	
40) Bromoform	24.325	173	78	N.D.	
41) Styrene	24.619	104	70	N.D.	
42) 1,1,2,2-Tetrachloroethane	24.696	83	150	N.D.	
43) o-Xylene	24.727	91	120	N.D.	
45) 4-Ethyltoluene	25.979	105	125	N.D.	
46) 1,3,5-Trimethylbenzene	26.057	105	101	N.D.	
47) 1,2,4-Trimethylbenzene	26.505	105	139	N.D.	
48) BenzylChloride	26.644	91	93	N.D.	
49) 1,3-Dichlorobenzene	26.675	146	125	N.D.	
50) 1,4-Dichlorobenzene	26.675	146	125	N.D.	
51) 1,2-Dichlorobenzene	27.139	146	160	N.D.	
52) Hexachlorobutadiene	29.830	225	61	N.D.	

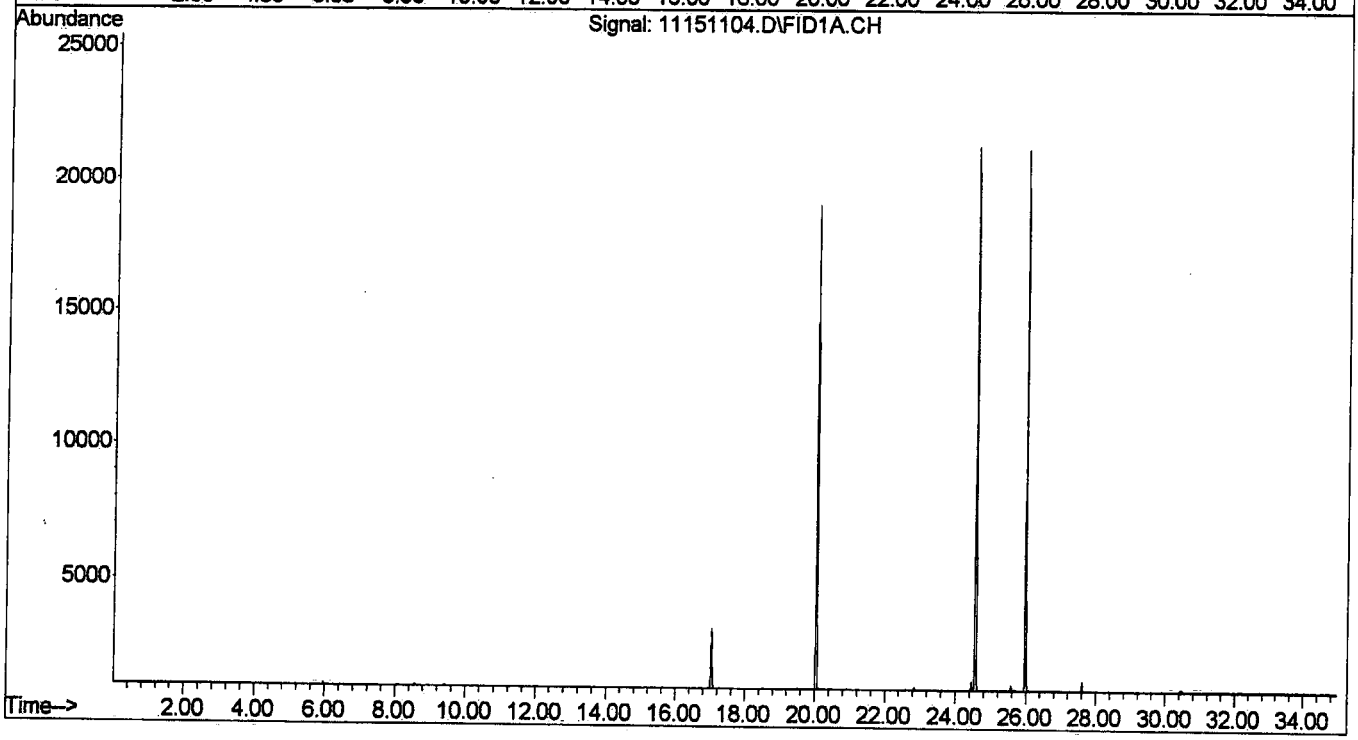
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151104.D
Acq On : 15 Nov 2011 11:04
Operator : JJG
Sample : SIM MB 111511
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Nov 15 12:40:27 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151109.D
Acq On : 15 Nov 2011 14:48
Operator : JJG
Sample : 110957-53715 x2000
Misc : IS/Surr: PS082311-02 + 25mL x100 (Sig #1); (Sig #2)
ALS Vial : 1 Sample Multiplier: 2000

Quant Time: Nov 15 17:54:34 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.928	49	202181	10000.00 pptv	0.00
23) 1,4-Difluorobenzene	18.714	114	754254	10000.00 pptv	0.00
36) Chlorobenzene-d5	23.657	117	682437	10000.00 pptv	0.00

System Monitoring Compounds					
44) BFB(4-Bromochlorobenzene)	25.177	174	644002	9830.60 pptv	0.00

Spiked Amount 10000.000 Recovery = 98.31%

Target Compounds					Qvalue
2) Chlorodifluoromethane	0.000	51	0	N.D. d	
3) Dichlorodifluoromethane	4.184	85	45	N.D.	
4) Chloromethane	0.000	50	0	N.D. d	
5) Dichlorotetrafluoroethane	4.612	85	20	N.D.	
6) VinylChloride	0.000	62	0	N.D. d	
7) 1,3-Butadiene	0.000	54	0	N.D.	
8) Bromomethane	0.000	96	0	N.D. d	
9) Chloroethane	0.000	64	0	N.D. d	
10) Dichlorofluoromethane	6.206	67	17	N.D.	
11) VinylBromide	0.000	108	0	N.D. d	
12) Trichlorofluoromethane	0.000	101	0	N.D. d	
13) 1,1-Dichloroethene	0.000	61	0	N.D. d	
14) AllylChloride	0.000	41	0	N.D. d	
15) Trichlorotrifluoroethane	0.000	101	0	N.D. d	
16) trans-1,2-Dichloroethene	0.000	61	0	N.D. d	
17) 1,1-Dichloroethane	0.000	63	0	N.D.	
18) MTBE	0.000	73	0	N.D. d	
19) cis-1,2-Dichloroethene	14.602	61	8889m	1067946.90 pptv	
20) Chloroform	15.305	83	19	N.D.	
21) 1,2-Dichloroethane	16.830	62	17	N.D.	
22) 1,1,1-Trichloroethane	17.292	97	17	N.D.	
24) Benzene	0.000	78	0	N.D. d	
25) CarbonTetrachloride	18.235	117	6	N.D.	
26) 1,2-Dichloropropane	0.000	76	0	N.D. d	
27) Bromodichloromethane	0.000	83	0	N.D. d	
28) Trichloroethene	19.623	130	1205m	103079.15 pptv	
29) cis-1,3-Dichloropropene	0.000	75	0	N.D. d	

11/15/11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151109.D
Acq On : 15 Nov 2011 14:48
Operator : JJG
Sample : 110957-53715 x2000
Misc : IS/Surr: PS082311-02 + 25mL x100 (Sig #1); (Sig #2)
ALS Vial : 1 Sample Multiplier: 2000

Quant Time: Nov 15 17:54:34 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

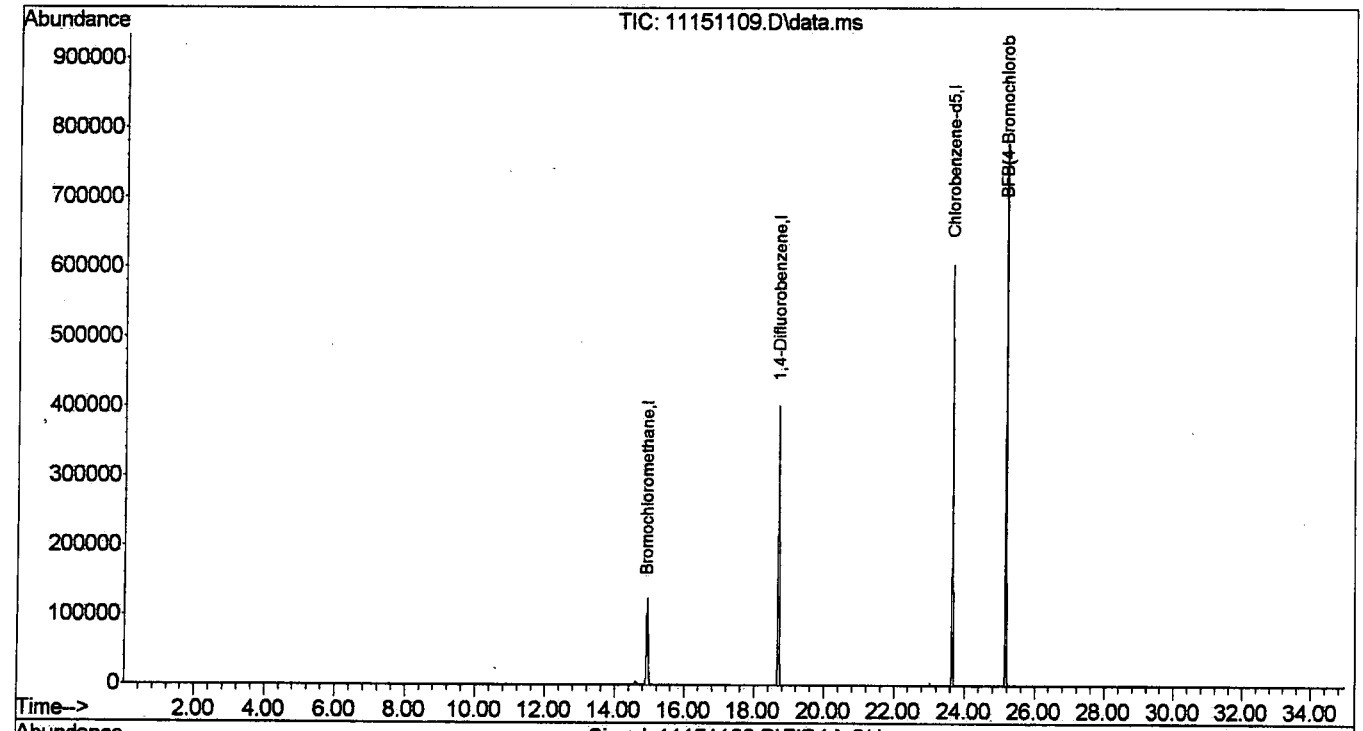
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
30) trans-1,3-Dichloropropene	0.000	75	0	N.D.	d
31) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
32) Toluene	0.000	91	0	N.D.	d
33) Dibromochloromethane	22.264	129	3	N.D.	
34) 1,2-Dibromoethane	22.509	107	7	N.D.	
35) Tetrachloroethene	23.017	166	4180m	253636.54 pptv	
37) Chlorobenzene	0.000	112	0	N.D.	d
38) Ethylbenzene	0.000	91	0	N.D.	d
39) m&p-Xylene	0.000	106	0	N.D.	d
40) Bromoform	24.327	173	14	N.D.	
41) Styrene	0.000	104	0	N.D.	d
42) 1,1,2,2-Tetrachloroethane	24.713	83	7	N.D.	
43) o-Xylene	0.000	91	0	N.D.	d
45) 4-Ethyltoluene	0.000	105	0	N.D.	d
46) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	d
47) 1,2,4-Trimethylbenzene	0.000	105	0	N.D.	d
48) BenzylChloride	0.000	91	0	N.D.	d
49) 1,3-Dichlorobenzene	0.000	146	0	N.D.	d
50) 1,4-Dichlorobenzene	0.000	146	0	N.D.	d
51) 1,2-Dichlorobenzene	0.000	146	0	N.D.	d
52) Hexachlorobutadiene	29.831	225	8	N.D.	

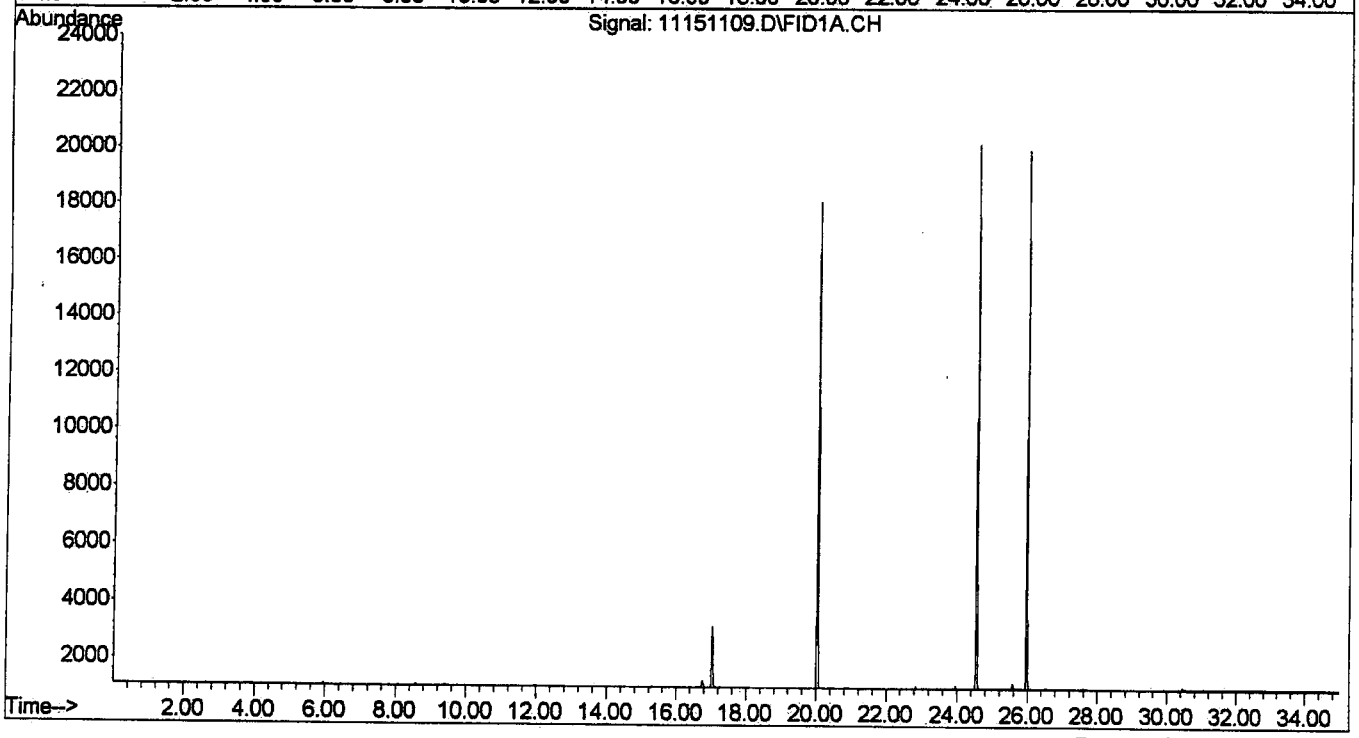
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151109.D
Acq On : 15 Nov 2011 14:48
Operator : JJG
Sample : 110957-53715 x2000
Misc : IS/Surr: PS082311-02 + 25mL x100 (Sig #1); (Sig #2)
ALS Vial : 1 Sample Multiplier: 2000

Quant Time: Nov 15 17:54:34 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration





11/15/11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151110.D
Acq On : 15 Nov 2011 15:31
Operator : JJG
Sample : 110957-53715 x2000 dp
Misc : IS/Surr: PS082311-02 + 25mL x100 (Sig #1); (Sig #2)
ALS Vial : 1 Sample Multiplier: 2000

Quant Time: Nov 15 17:55:19 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.928	49	197990	10000.00 pptv	0.00
23) 1,4-Difluorobenzene	18.714	114	738338	10000.00 pptv	0.00
36) Chlorobenzene-d5	23.657	117	664173	10000.00 pptv	0.00

System Monitoring Compounds					
44) BFB(4-Bromochlorobenzene)	25.177	174	633768	9940.42 pptv	0.00

Spiked Amount 10000.000 Recovery = 99.40%

Target Compounds					Qvalue
2) Chlorodifluoromethane	0.000	51	0	N.D. d	
3) Dichlorodifluoromethane	4.184	85	45	N.D.	
4) Chloromethane	0.000	50	0	N.D. d	
5) Dichlorotetrafluoroethane	4.681	85	7	N.D.	
6) VinylChloride	0.000	62	0	N.D. d	
7) 1,3-Butadiene	0.000	54	0	N.D. d	
8) Bromomethane	0.000	96	0	N.D. d	
9) Chloroethane	0.000	64	0	N.D. d	
10) Dichlorofluoromethane	0.000	67	0	N.D. d	
11) VinylBromide	0.000	108	0	N.D. d	
12) Trichlorofluoromethane	7.593	101	49	N.D.	
13) 1,1-Dichloroethene	0.000	61	0	N.D. d	
14) AllylChloride	0.000	41	0	N.D. d	
15) Trichlorotrifluoroethane	0.000	101	0	N.D. d	
16) trans-1,2-Dichloroethene	0.000	61	0	N.D. d	
17) 1,1-Dichloroethane	0.000	63	0	N.D.	
18) MTBE	0.000	73	0	N.D. d	
19) cis-1,2-Dichloroethene	14.602	61	8241	1011052.60 pptv	96
20) Chloroform	0.000	83	0	N.D. d	
21) 1,2-Dichloroethane	16.813	62	10	N.D.	
22) 1,1,1-Trichloroethane	0.000	97	0	N.D. d	
24) Benzene	0.000	78	0	N.D. d	
25) CarbonTetrachloride	18.252	117	17	N.D.	
26) 1,2-Dichloropropane	0.000	76	0	N.D. d	
27) Bromodichloromethane	19.486	83	13	N.D.	
28) Trichloroethene	19.623	130	11280	98572.39 pptv	
29) cis-1,3-Dichloropropene	0.000	75	0	N.D. d	

11/15/11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151110.D
Acq On : 15 Nov 2011 15:31
Operator : JJG
Sample : 110957-53715 x2000 dp
Misc : IS/Surr: PS082311-02 + 25mL x100 (Sig #1); (Sig #2)
ALS Vial : 1 Sample Multiplier: 2000

Quant Time: Nov 15 17:55:19 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
30) trans-1,3-Dichloropropene	0.000	75	0	N.D.	d
31) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
32) Toluene	0.000	91	0	N.D.	d
33) Dibromochloromethane	0.000	129	0	N.D.	d
34) 1,2-Dibromoethane	0.000	107	0	N.D.	d
35) Tetrachloroethene	23.017	166	3885	240818.01 pptv	
99					
37) Chlorobenzene	0.000	112	0	N.D.	d
38) Ethylbenzene	0.000	91	0	N.D.	d
39) m&p-Xylene	0.000	106	0	N.D.	d
40) Bromoform	24.311	173	5	N.D.	
41) Styrene	0.000	104	0	N.D.	d
42) 1,1,2,2-Tetrachloroethane	24.729	83	8	N.D.	
43) o-Xylene	0.000	91	0	N.D.	d
45) 4-Ethyltoluene	0.000	105	0	N.D.	d
46) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	d
47) 1,2,4-Trimethylbenzene	0.000	105	0	N.D.	d
48) BenzylChloride	0.000	91	0	N.D.	d
49) 1,3-Dichlorobenzene	0.000	146	0	N.D.	d
50) 1,4-Dichlorobenzene	0.000	146	0	N.D.	d
51) 1,2-Dichlorobenzene	0.000	146	0	N.D.	d
52) Hexachlorobutadiene	0.000	225	0	N.D.	d

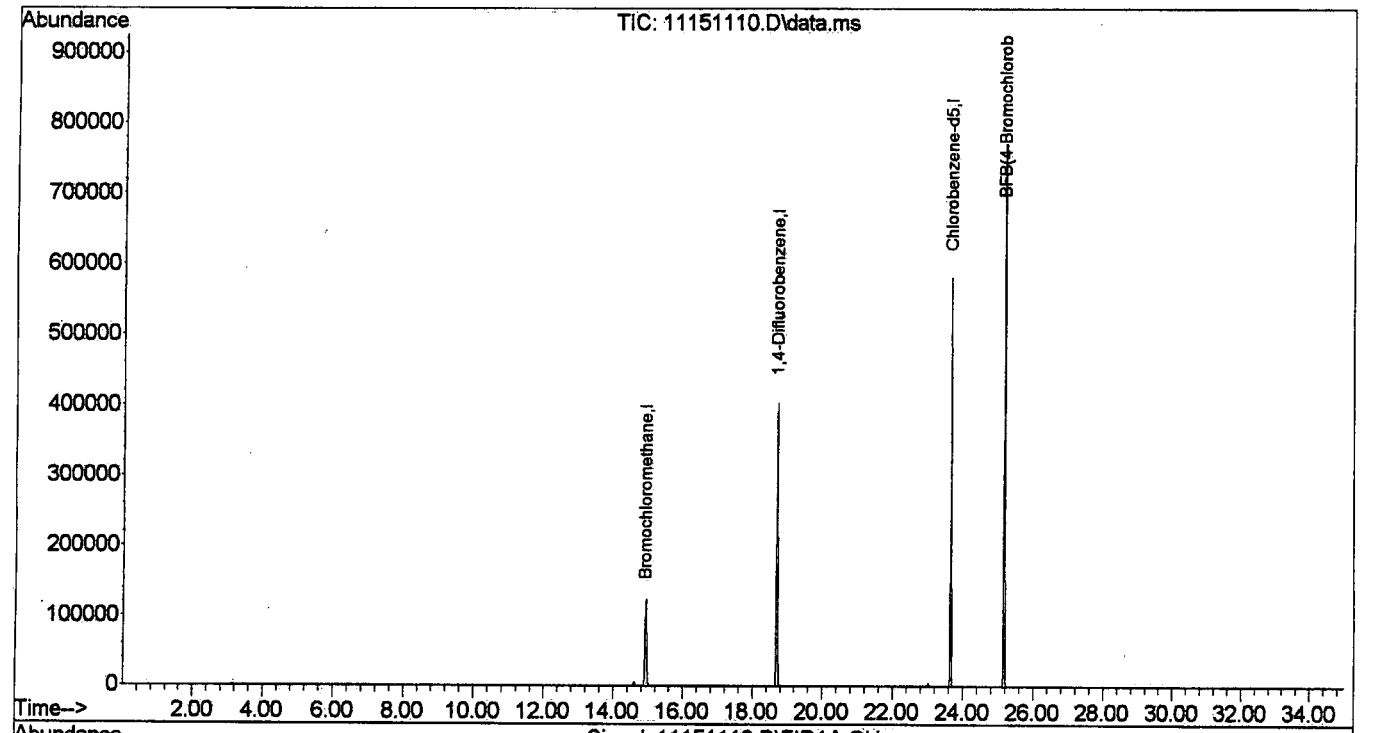
(#) = qualifier out of range (m) = manual integration (+) = signals summed

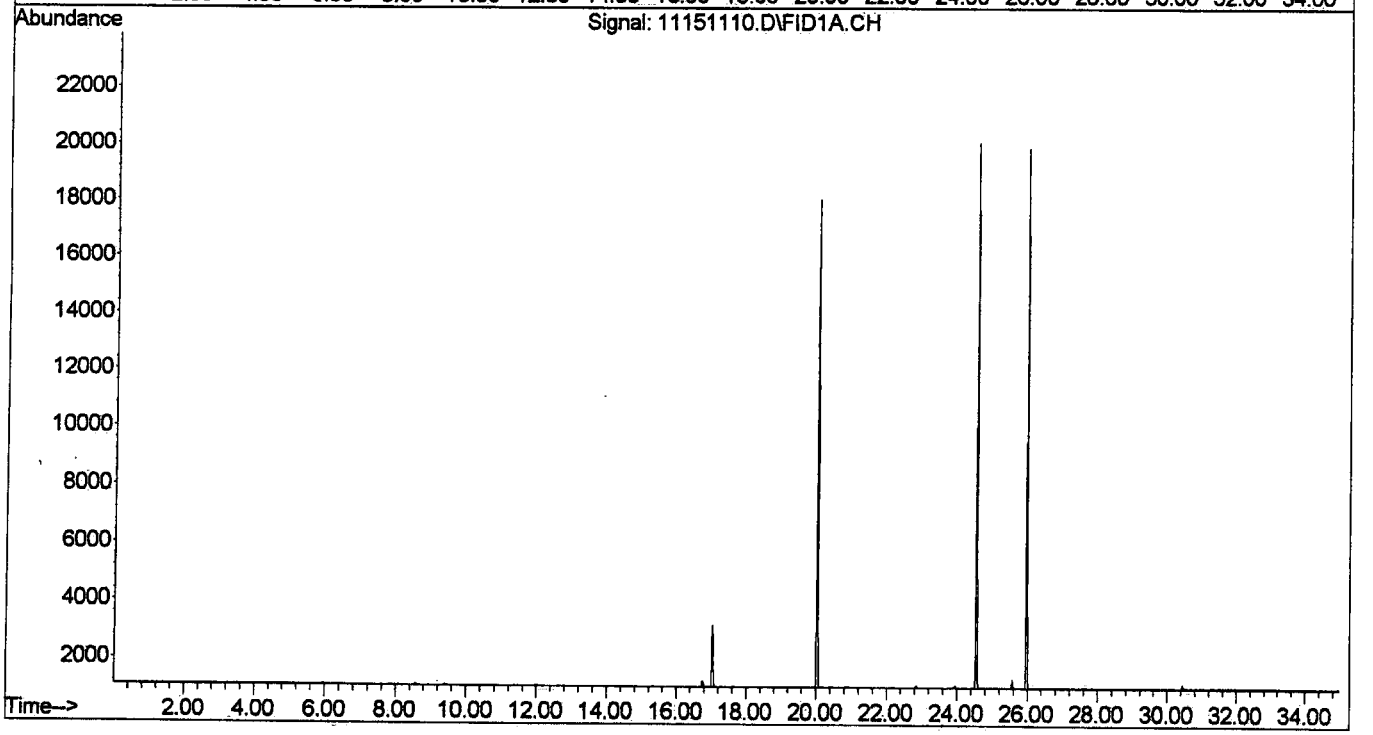
11/15/11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111511\
Data File : 11151110.D
Acq On : 15 Nov 2011 15:31
Operator : JJG
Sample : 110957-53715 x2000 dp
Misc : IS/Surr: PS082311-02 + 25mL x100 (Sig #1); (Sig #2)
ALS Vial : 1 Sample Multiplier: 2000

Quant Time: Nov 15 17:55:19 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM111411.M
Quant Title : TO-15
QLast Update : Tue Nov 15 10:26:57 2011
Response via : Initial Calibration

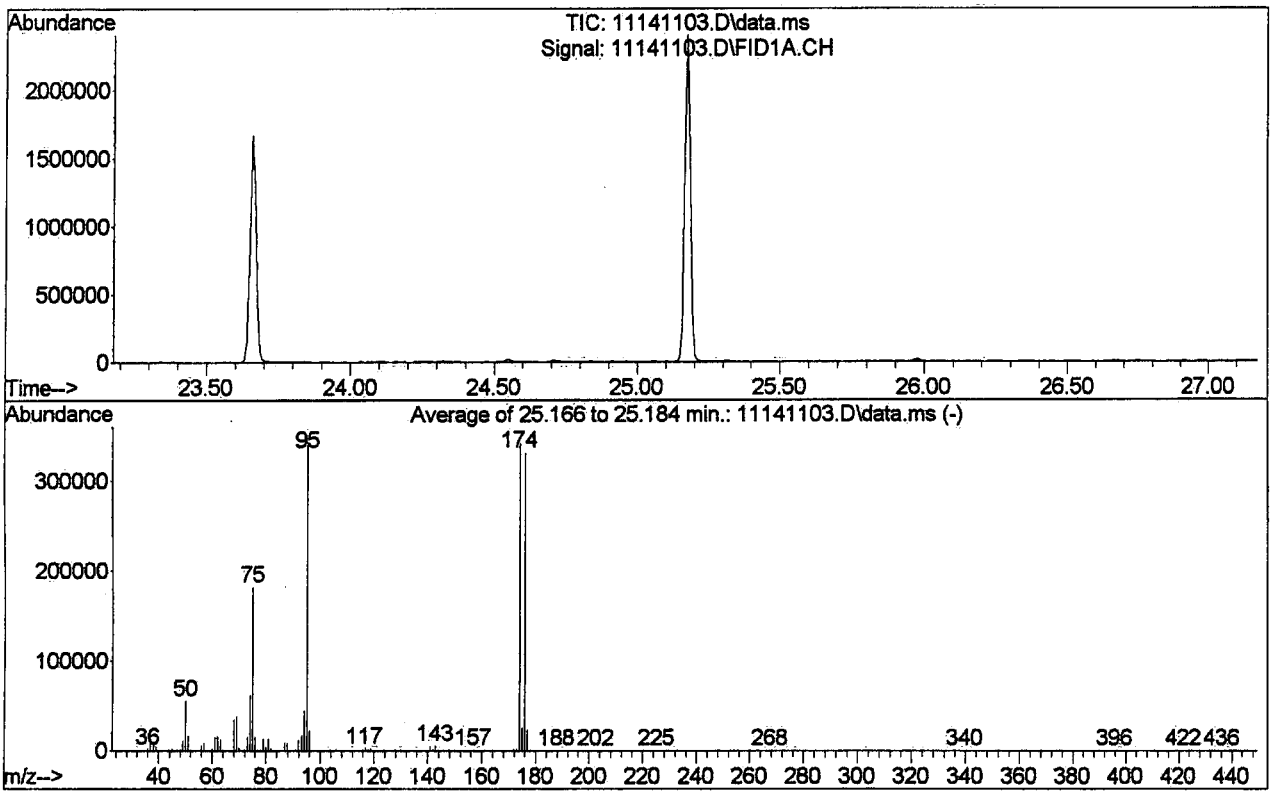




Data Path : C:\msdchem\1\MS01\2011\111411\
Data File : 11141103.D
Acq On : 14 Nov 2011 12:01 pm
Operator : JJG
Sample : TO15 BFB 111411
Misc : IS/Surr: PS082311-02 + 50mL (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: PAMS.P
Integration File signal 2: rteint2.p

Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Title : TO-15
Last Update : Tue Oct 25 17:54:29 2011



AutoFind: Scans 2424, 2425, 2426; Background Corrected with Scan 2419

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.3	55789	PASS
75	95	30	60	52.9	181570	PASS
95	95	100	100	100.0	342976	PASS
96	95	5	9	6.5	22400	PASS
173	174	0.00	2	0.8	2847	PASS
174	95	50	100	99.7	341781	PASS
175	174	5	9	7.5	25629	PASS
176	174	95	101	96.7	330666	PASS
177	176	5	9	7.0	23044	PASS

Calibration Status Report Instrument #1

Method Path : C:\msdchem\1\METHODS\2011\
Method File : SIM111411.M
Title : TO-15
Last Update : Tue Nov 15 10:26:57 2011
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1000	1000	10000	C:\msdchem\1\MS01\2011\111411\11141106.D
2	400	400	10000	C:\msdchem\1\MS01\2011\111411\11141107.D
3	200	200	10000	C:\msdchem\1\MS01\2011\111411\11141108.D
4	100	100	10000	C:\msdchem\1\MS01\2011\111411\11141109.D
5	40	40	10000	C:\msdchem\1\MS01\2011\111411\11141110.D
6	20	20	10000	C:\msdchem\1\MS01\2011\111411\11141111.D
7	10	10	10000	C:\msdchem\1\MS01\2011\111411\11141112.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1000	Nov 15 10:13 2011	Nov 15 09:21 2011	14 Nov 2011 14:32
2	400	Nov 15 10:13 2011	Nov 15 09:26 2011	14 Nov 2011 15:16
3	200	Nov 15 10:13 2011	Nov 15 09:54 2011	14 Nov 2011 16:01
4	100	Nov 15 10:14 2011	Nov 15 09:56 2011	14 Nov 2011 16:45
5	40	Nov 15 10:14 2011	Nov 15 10:00 2011	14 Nov 2011 17:29
6	20	Nov 15 10:14 2011	Nov 15 10:06 2011	14 Nov 2011 18:13
7	10	Nov 15 10:14 2011	Nov 15 10:12 2011	14 Nov 2011 18:57

SIM111411.M Tue Nov 15 10:28:45 2011

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Response Factor Report Instrument #1

Method Path : C:\msdchem\1\METHODS\2011\
Method File : SIM111411.M
Title : TO-15
Last Update : Tue Nov 15 10:26:57 2011
Response Via : Initial Calibration

Calibration Files
1000=11141106.D 400 =11141107.D 200 =11141108.D 100 =11141109.D 40 =11141110.D 20 =11141111.D
10 =11141112.D

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		Compound	1000	400	200	100	40	20	10	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------								
2)		Chlorodifluoro...	1.515	1.666	1.688	1.677	1.844	1.906	2.271	1.795	13.68
3)		Dichlorodifluo...	3.939	4.481	4.559	4.633	5.017	5.455	6.129	4.888	14.75
4)		Chloromethane	0.573	0.621	0.656	0.665	0.715	0.786	1.022	0.720	20.79
5)		Dichlorotetraf...	3.446	3.772	3.786	3.882	4.218	4.526	5.124	4.108	13.79
6)		VinylChloride	0.764	0.821	0.836	0.817	0.927	0.883	1.047	0.871	10.73
7)		1,3-Butadiene	0.450	0.461	0.472	0.461	0.484	0.538	0.536	0.486	7.53
8)		Bromomethane	1.039	1.126	1.117	1.181	1.214	1.278	1.554	1.216	13.79
9)		Chloroethane	0.372	0.405	0.414	0.412	0.442	0.461	0.528	0.433	11.61
10)		Dichlorofluoro...	2.405	2.581	2.627	2.726	2.913	3.105	3.511	2.838	13.19
11)		VinylBromide	1.034	1.095	1.137	1.121	1.198	1.336	1.512	1.205	13.76
12)		Trichlorofluor...	4.758	4.645	4.952	5.301	5.792	6.230	7.311	5.570	17.17
13)	M,T	1,1-Dichloroet...	1.494	1.053	1.106	1.093	1.219	1.295	1.491	1.250	14.78
14)		AllylChloride	0.675	0.428	0.456	0.442	0.483	0.488	0.695	0.524	21.42
15)		Trichlorotrifl...	2.699	2.514	2.565	2.614	2.878	3.101	3.599	2.853	13.55
16)		trans-1,2-Dich...	1.288	0.922	0.961	0.965	0.993	1.081	1.215	1.061	13.26
17)		1,1-Dichloroet...	1.661	1.550	1.557	1.546	1.673	1.766	2.074	1.690	11.13
18)		MTBE	OUTLIER	0.951	0.964	0.962	0.996	1.014	1.123	1.002	6.37
19)		cis-1,2-Dichlo...	0.969	0.750	0.763	0.739	0.787	0.813	0.943	0.823	11.42
20)		Chloroform	2.654	2.721	2.763	2.780	3.006	3.117	3.754	2.971	12.88
21)		1,2-Dichloroet...	1.669	1.616	1.629	1.640	1.761	1.935	2.153	1.772	11.39
22)		1,1,1-Trichlor...	2.670	2.631	2.672	2.664	2.817	3.094	3.444	2.856	10.69
23)	I	1,4-Difluorobenzene	----------ISTD----------								
24)	T,M	Benzene	0.532	0.435	0.430	0.435	0.473	0.561	0.635	0.500	15.73
25)		CarbonTetrachl...	0.802	0.787	0.794	0.792	0.875	0.912	1.038	0.857	10.91
26)		1,2-Dichloropr...	0.159	0.146	0.147	0.152	0.159	0.184	0.207	0.165	13.67
27)		Bromodichlorom...	0.661	0.640	0.645	0.645	0.694	0.753	0.825	0.694	10.08

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Response Factor Report Instrument #1

Method Path : C:\msdchem\1\METHODS\2011\
Method File : SIM111411.M
Title : TO-15

28)	M,T	Trichloroethene	0.310	0.276	0.281	0.288	0.319	0.331	0.365	0.310	10.23
29)		cis-1,3-Dichlo...	0.287	0.247	0.240	0.237	0.246	0.258	0.285	0.257	8.08
30)		trans-1,3-Dich...	0.270	0.229	0.220	0.216	0.215	0.255	0.252	0.237	9.32
31)		1,1,2-Trichlor...	0.344	0.326	0.325	0.327	0.362	0.368	0.453	0.358	12.67
32)	M,T	Toluene	0.937	0.767	0.790	0.861	1.240	OUTLIER	OUTLIER	0.919	20.83
33)		Dibromochlorom...	0.705	0.650	0.632	0.618	0.651	0.700	0.802	0.680	9.29
34)		1,2-Dibromoethane	0.538	0.498	0.473	0.455	0.479	0.501	0.589	0.505	9.03
35)	M,T	Tetrachloroethene	0.430	0.409	0.408	0.412	0.420	0.439	0.540	0.437	10.72
36)	I	Chlorobenzene-d5	----------ISTD----------								
37)	M,T	Chlorobenzene	0.892	0.884	0.891	0.911	0.983	1.078	1.285	0.989	14.99
38)	M,T	Ethylbenzene	OUTLIER	0.971	0.878	0.881	0.975	0.970	1.180	0.976	11.27
39)	M,T	m&p-Xylene	OUTLIER	0.384	0.312	0.297	0.303	0.340	0.395	0.339	12.50
40)		Bromoform	0.904	0.809	0.760	0.754	0.780	0.817	1.015	0.834	11.33
41)		Styrene	OUTLIER	0.435	0.384	0.369	0.398	0.435	0.497	0.420	11.08
42)		1,1,2,2-Tetrac...	1.080	0.946	0.887	0.891	0.924	1.012	1.179	0.988	11.02
43)	M,T	o-Xylene	OUTLIER	0.837	0.658	0.600	0.591	0.619	0.810	0.686	15.97
44)	SR	BFB(4-Bromochl...	1.015	0.967	0.952	0.956	0.944	0.940	0.946	0.960	2.69
45)		4-Ethyltoluene	OUTLIER	0.911	0.767	0.716	0.742	0.831	0.974	0.823	12.34
46)		1,3,5-Trimethy...		0.991	0.730	0.667	0.654	0.731	0.836	0.768	16.46
47)		1,2,4-Trimethy...		0.734	0.619	0.578	0.631	0.675	0.879	0.686	15.79
48)		BenzylChloride		0.657	0.569	0.517	0.504	0.536	0.623	0.568	10.74
49)		1,3-Dichlorobe...		0.980	0.793	0.715	0.700	0.755	0.858	0.800	13.12
50)		1,4-Dichlorobe...		0.906	0.716	0.655	0.635	0.683	0.842	0.740	14.82
51)		1,2-Dichlorobe...		0.806	0.681	0.631	0.636	0.676	0.834	0.711	12.33
52)		Hexachlorobuta...		0.828	0.759	0.701	0.677	0.660	0.828	0.742	10.05

(#) = Out of Range

11/15/11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111411\
Data File : 11141106.D
Acq On : 14 Nov 2011 14:32
Operator : JJG
Sample : SIM 1000pptv std.
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 09:21:55 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.945	49	282437	10000.00 pptv	0.02
23) 1,4-Difluorobenzene	18.715	114	1047853	10000.00 pptv	0.00
36) Chlorobenzene-d5	23.657	117	943252	10000.00 pptv	0.00
System Monitoring Compounds					
45) BFB(4-Bromochlorobenzene)	25.177	174	957208	10417.25 pptv	0.00
Spiked Amount 10000.000			Recovery	= 104.17%	

Target Compounds					Qvalue
2) Chlorodifluoromethane	3.995	51	42776	819.07 pptv #	98
3) Dichlorodifluoromethane	4.184	85	111264	743.29 pptv	98
4) Chloromethane	4.441	50	16180	732.44 pptv	94
5) Dichlorotetrafluoroethane	4.681	85	97322	759.08 pptv	95
6) VinylChloride	4.852	62	21588	752.83 pptv	96
7) 1,3-Butadiene	5.127	54	12699m	759.43 pptv	
8) Bromomethane	5.606	96	29350m	735.23 pptv	
9) Chloroethane	5.966	64	10500	694.34 pptv	88
10) Dichlorofluoromethane	6.223	67	67923	744.53 pptv	95
11) VinylBromide	6.669	108	29201	745.99 pptv	99
12) Trichlorofluoromethane	7.611	101	134371	762.50 pptv	98
13) 1,1-Dichloroethene	9.119	61	42190	1119.11 pptv	97
14) AllylChloride	9.821	41	19062	1174.56 pptv	91
15) Trichlorotrifluoroethane	10.369	101	76231	925.35 pptv	98
16) trans-1,2-Dichloroethene	12.049	61	36367	1118.49 pptv	95
17) 1,1-Dichloroethane	12.546	63	46900m	934.42 pptv	
18) MTBE	12.888	73	53415m	1611.02 pptv	
19) cis-1,2-Dichloroethene	14.602	61	27377	1042.71 pptv	88
20) Chloroform	15.322	83	74970	865.51 pptv	98
21) 1,2-Dichloroethane	16.830	62	47144	882.44 pptv	91
22) 1,1,1-Trichloroethane	17.293	97	75423	900.06 pptv	99
24) Benzene	18.046	78	55777	1001.17 pptv	98
25) CarbonTetrachloride	18.286	117	84009	874.12 pptv	98
26) 1,2-Dichloropropane	19.280	76	16633	929.42 pptv	94
27) Bromodichloromethane	19.554	83	69222	900.89 pptv	87
28) Trichloroethene	19.623	130	32505	936.33 pptv	97
29) cis-1,3-Dichloropropene	20.720	75	30111	1006.88 pptv	95
30) trans-1,3-Dichloropropene	21.336	75	28324	1053.40 pptv	95
31) 1,1,2-Trichloroethane	21.525	97	36064m	934.25 pptv	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111411\
Data File : 11141106.D
Acq On : 14 Nov 2011 14:32
Operator : JJG
Sample : SIM 1000pptv std.
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 09:21:55 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

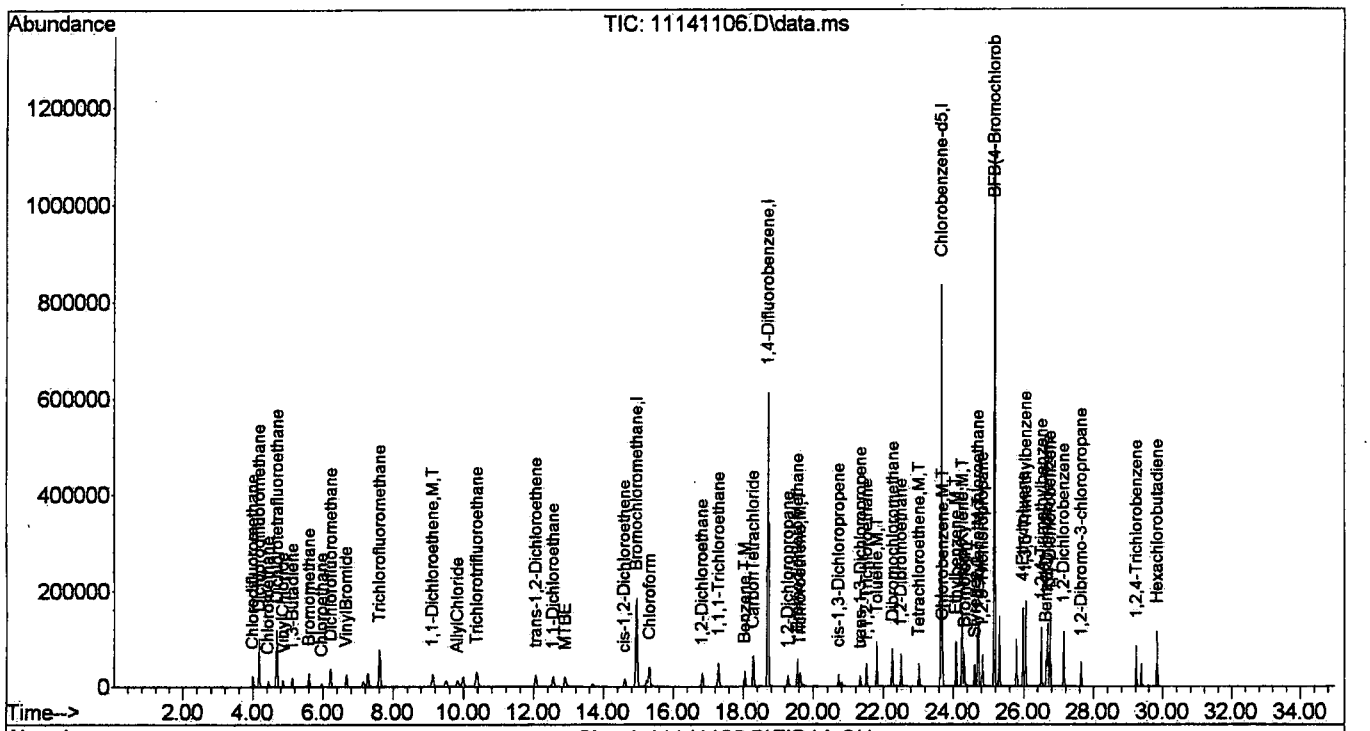
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) Toluene	21.813	91	98148	1098.04	pptv	95
33) Dibromochloromethane	22.264	129	73877	950.88	pptv	100
34) 1,2-Dibromoethane	22.509	107	56399	999.34	pptv	99
35) Tetrachloroethene	23.017	166	45100	837.98	pptv	99
37) Chlorobenzene	23.694	112	84135	869.44	pptv	99
38) Ethylbenzene	24.080	91	114043	1154.92	pptv	94
39) m&p-Xylene	24.265	106	108377	3090.46	pptv	
40) Bromoform	24.327	173	85245	978.90	pptv	97
41) Styrene	24.621	104	57126	1310.11	pptv	97
42) 1,1,2,2-Tetrachloroethane	24.698	83	101886	1071.34	pptv	99
43) o-Xylene	24.729	91	126665	1778.92	pptv	93
44) 1,2,3-Trichloropropane	24.837	110	32164	1107.71	pptv	98
46) 4-Ethyltoluene	25.981	105	153150	1732.17	pptv	
47) 1,3,5-Trimethylbenzene	26.058	105	157252	1862.84	pptv	95
48) 1,2,4-Trimethylbenzene	26.506	105	119386	1642.46	pptv	92
49) BenzylChloride	26.646	91	96387	1588.01	pptv	96
50) 1,3-Dichlorobenzene	26.677	146	128440	1453.86	pptv	100
51) 1,4-Dichlorobenzene	26.754	146	120055	1462.80	pptv	99
52) 1,2-Dichlorobenzene	27.140	146	103549	1341.70	pptv	98
53) 1,2-Dibromo-3-chloropr...	27.650	157	48212	1445.49	pptv	96
54) 1,2,4-Trichlorobenzene	29.228	180	59125	1021.90	pptv	97
55) Hexachlorobutadiene	29.831	225	105963	1160.30	pptv	97

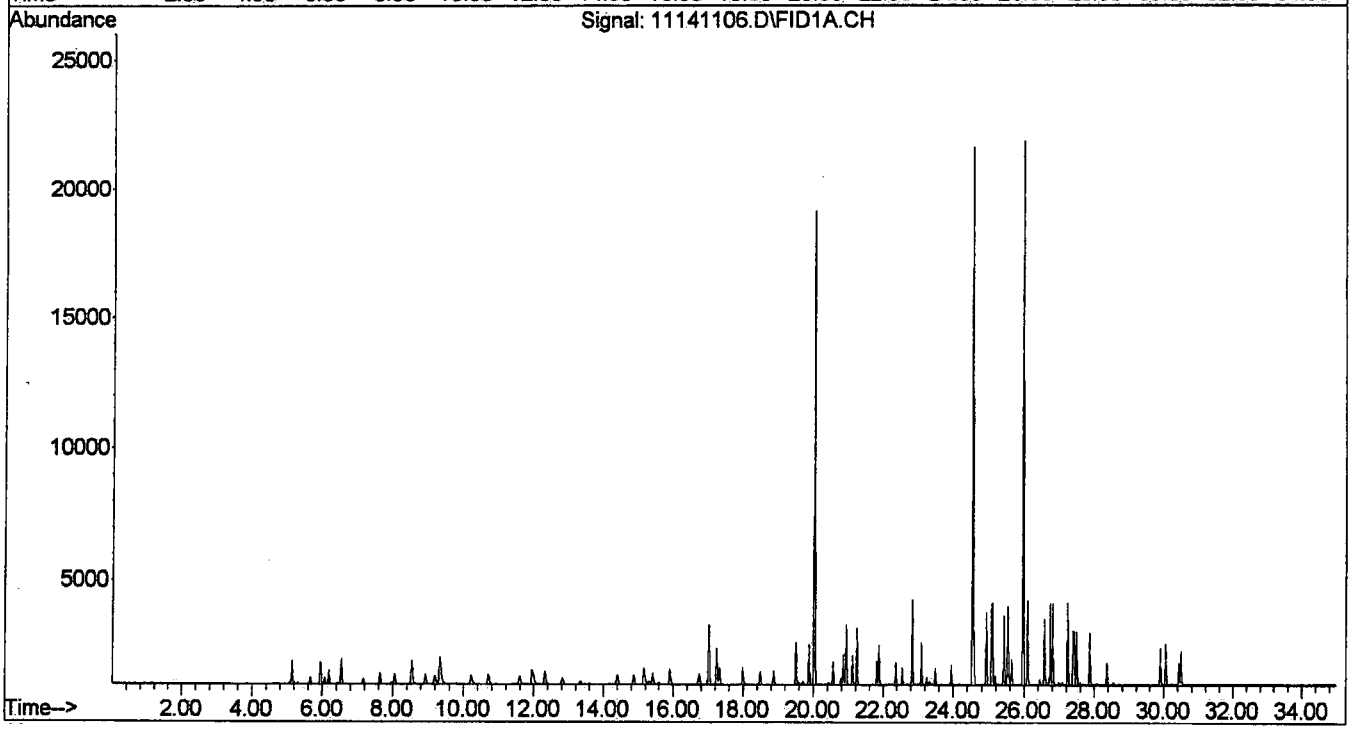
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111411\
Data File : 11141106.D
Acq On : 14 Nov 2011 14:32
Operator : JJG
Sample : SIM 1000pptv std.
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 09:21:55 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111411\
Data File : 11141107.D
Acq On : 14 Nov 2011 15:16
Operator : JJG
Sample : SIM 400pptv std.
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 09:26:24 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.928	49	258932	10000.00 pptv	0.00
23) 1,4-Difluorobenzene	18.715	114	1005376	10000.00 pptv	0.00
36) Chlorobenzene-d5	23.657	117	923167	10000.00 pptv	0.00
System Monitoring Compounds					
45) BFB(4-Bromochlorobenzene)	25.177	174	892963	9929.50 pptv	0.00
Spiked Amount 10000.000			Recovery = 99.30%		
Target Compounds					Qvalue
2) Chlorodifluoromethane	3.995	51	17254	360.37 pptv #	97
3) Dichlorodifluoromethane	4.184	85	46410	338.18 pptv	100
4) Chloromethane	4.441	50	6428	317.40 pptv	95
5) Dichlorotetrafluoroethane	4.681	85	39068	332.38 pptv	96
6) VinylChloride	4.852	62	8504	323.48 pptv	99
7) 1,3-Butadiene	5.127	54	4776m	311.54 pptv	
8) Bromomethane	5.606	96	11664m	318.71 pptv	
9) Chloroethane	5.966	64	4193	302.44 pptv	93
10) Dichlorofluoromethane	6.206	67	26731	319.61 pptv	96
11) VinylBromide	6.669	108	11342	316.05 pptv	97
12) Trichlorofluoromethane	7.611	101	48108	297.77 pptv	99
13) 1,1-Dichloroethene	9.118	61	10911	315.69 pptv	98
14) AllylChloride	9.821	41	4438	298.28 pptv	95
15) Trichlorotrifluoroethane	10.369	101	26037	344.75 pptv	99
16) trans-1,2-Dichloroethene	12.049	61	9547	320.28 pptv	96
17) 1,1-Dichloroethane	12.546	63	16058m	348.98 pptv	
18) MTBE	12.905	73	9854m	324.18 pptv	
19) cis-1,2-Dichloroethene	14.602	61	7771	322.84 pptv	97
20) Chloroform	15.305	83	28177	354.83 pptv	98
21) 1,2-Dichloroethane	16.830	62	16742	341.82 pptv	97
22) 1,1,1-Trichloroethane	17.293	97	27251	354.72 pptv	98
24) Benzene	18.046	78	17488	327.16 pptv	98
25) CarbonTetrachloride	18.286	117	31658	343.32 pptv	99
26) 1,2-Dichloropropane	19.280	76	5891m	343.09 pptv	
27) Bromodichloromethane	19.537	83	25736	349.09 pptv	99
28) Trichloroethene	19.623	130	11096m	333.13 pptv	
29) cis-1,3-Dichloropropene	20.719	75	9946	346.64 pptv	96
30) trans-1,3-Dichloropropene	21.336	75	9205	356.81 pptv	98
31) 1,1,2-Trichloroethane	21.508	97	13110m	353.97 pptv	

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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111411\
Data File : 11141107.D
Acq On : 14 Nov 2011 15:16
Operator : JJG
Sample : SIM 400pptv std.
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 09:26:24 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

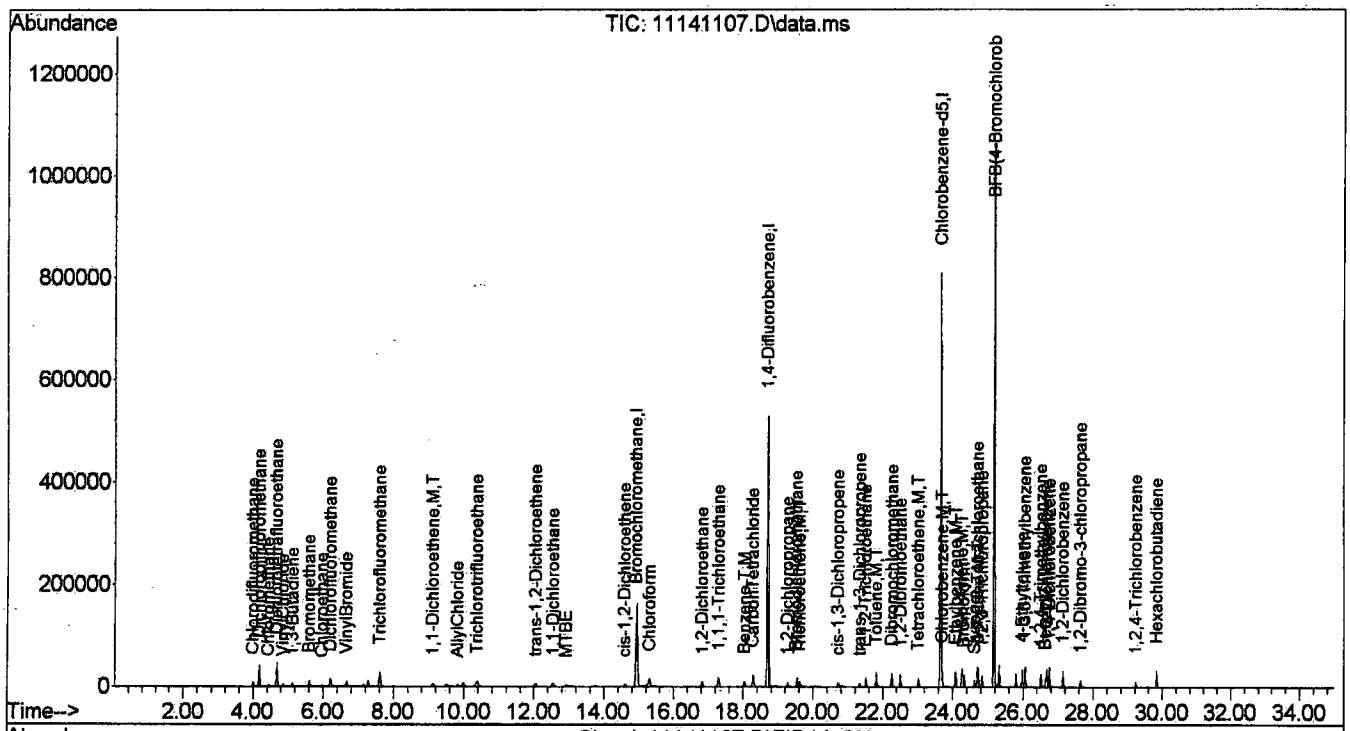
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
32) Toluene	21.813	91	30845m	425.56 pptv	
33) Dibromochloromethane	22.264	129	26143	350.71 pptv	99
34) 1,2-Dibromoethane	22.509	107	20045	370.18 pptv	99
35) Tetrachloroethene	23.017	166	16463	318.82 pptv	96
37) Chlorobenzene	23.694	112	32630	344.53 pptv	99
38) Ethylbenzene	24.080	91	35853	370.98 pptv	98
39) m&p-Xylene	24.265	106	28391m	827.21 pptv	
40) Bromoform	24.327	173	29885	350.65 pptv	98
41) Styrene	24.621	104	16045	375.98 pptv	99
42) 1,1,2,2-Tetrachloroethane	24.698	83	34916	375.13 pptv	100
43) o-Xylene	24.729	91	30914m	443.61 pptv	
44) 1,2,3-Trichloropropane	24.837	110	11020	387.78 pptv	98
46) 4-Ethyltoluene	25.981	105	33638m	388.73 pptv	
47) 1,3,5-Trimethylbenzene	26.058	105	36585	442.82 pptv	97
48) 1,2,4-Trimethylbenzene	26.506	105	27107	381.04 pptv	98
49) BenzylChloride	26.646	91	24263m	408.44 pptv	
50) 1,3-Dichlorobenzene	26.676	146	36194	418.61 pptv	100
51) 1,4-Dichlorobenzene	26.754	146	33468	416.66 pptv	98
52) 1,2-Dichlorobenzene	27.140	146	29756	393.94 pptv	97
53) 1,2-Dibromo-3-chloropr...	27.650	157	12526m	383.72 pptv	
54) 1,2,4-Trichlorobenzene	29.228	180	7432	295.43 pptv	97
55) Hexachlorobutadiene	29.831	225	30586	342.20 pptv	97

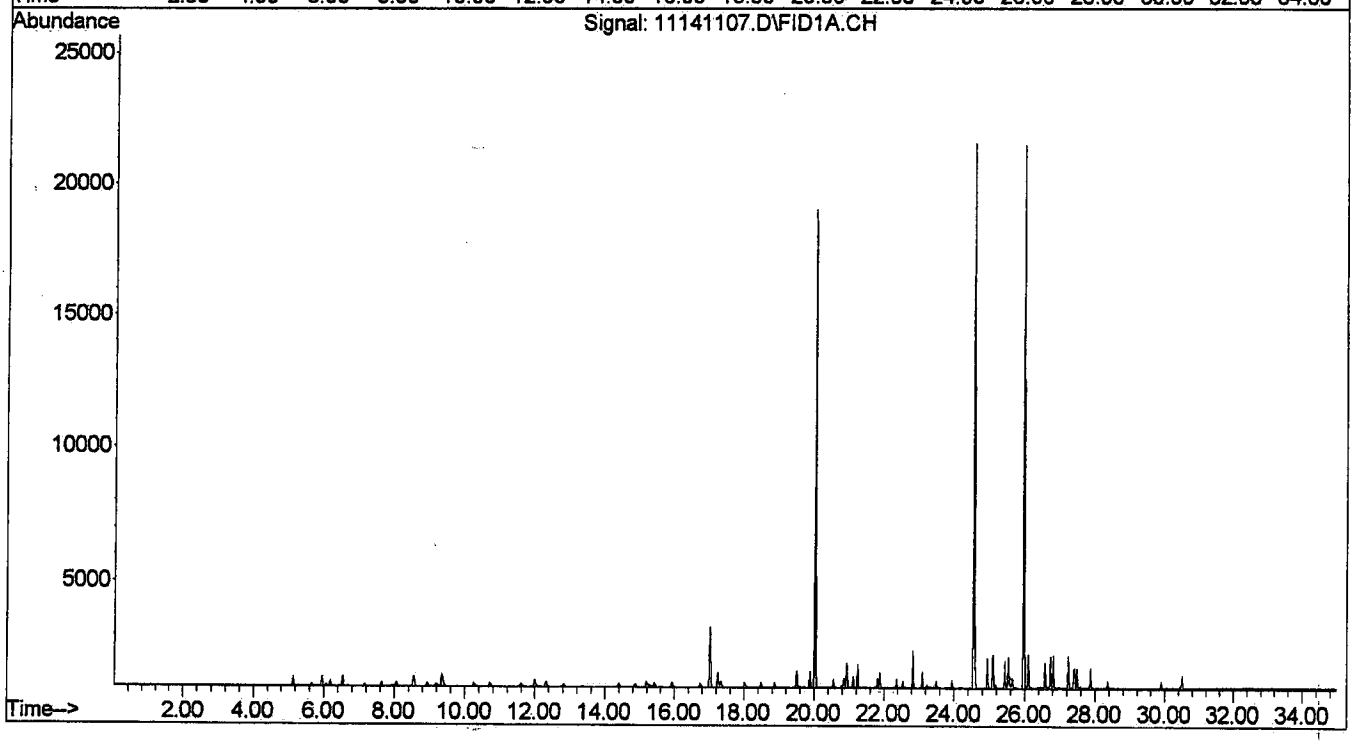
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111411\
Data File : 11141107.D
Acq On : 14 Nov 2011 15:16
Operator : JJG
Sample : SIM 400pptv std.
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 09:26:24 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111411\
Data File : 11141108.D
Acq On : 14 Nov 2011 16:01
Operator : JJG
Sample : SIM 200pptv std.
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 09:54:13 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.928	49	253136	10000.00 pptv	0.00
23) 1,4-Difluorobenzene	18.715	114	975136	10000.00 pptv	0.00
36) Chlorobenzene-d5	23.657	117	900560	10000.00 pptv	0.00

System Monitoring Compounds					
45) BFB(4-Bromochlorobenzene)	25.177	174	857126	9770.27 pptv	0.00

Spiked Amount 10000.000 Recovery = 97.70%

Target Compounds					Qvalue
2) Chlorodifluoromethane	3.995	51	8544	182.54 pptv #	100
3) Dichlorodifluoromethane	4.184	85	23080	172.03 pptv	100
4) Chloromethane	4.441	50	3320	167.69 pptv	99
5) Dichlorotetrafluoroethane	4.681	85	19168	166.81 pptv	99
6) VinylChloride	4.852	62	4233	164.70 pptv	100
7) 1,3-Butadiene	5.127	54	2391m	159.54 pptv	
8) Bromomethane	5.606	96	5654	158.03 pptv	98
9) Chloroethane	5.966	64	2097	154.72 pptv	100
10) Dichlorofluoromethane	6.206	67	13298	162.64 pptv	98
11) VinylBromide	6.669	108	5755	164.04 pptv	98
12) Trichlorofluoromethane	7.611	101	25070	158.73 pptv	98
13) 1,1-Dichloroethene	9.119	61	5597	165.65 pptv	99
14) AllylChloride	9.821	41	2308	158.68 pptv	95
15) Trichlorotrifluoroethane	10.369	101	12987	175.89 pptv	99
16) trans-1,2-Dichloroethene	12.049	61	4863	166.88 pptv	100
17) 1,1-Dichloroethane	12.546	63	7881m	175.19 pptv	
18) MTBE	12.940	73	4878m	164.15 pptv	
19) cis-1,2-Dichloroethene	14.602	61	3864	164.20 pptv	96
20) Chloroform	15.305	83	13988	180.18 pptv	100
21) 1,2-Dichloroethane	16.830	62	8249	172.28 pptv	97
22) 1,1,1-Trichloroethane	17.293	97	13530	180.15 pptv	99
24) Benzene	18.046	78	8386	161.75 pptv	97
25) CarbonTetrachloride	18.286	117	15478	173.06 pptv	97
26) 1,2-Dichloropropane	19.280	76	2861m	171.79 pptv	
27) Bromodichloromethane	19.537	83	12576	175.88 pptv	99
28) Trichloroethene	19.623	130	5489	169.90 pptv	98
29) cis-1,3-Dichloropropene	20.720	75	4671	167.84 pptv	98
30) trans-1,3-Dichloropropene	21.336	75	4290	171.45 pptv	99
31) 1,1,2-Trichloroethane	21.508	97	6337m	176.40 pptv	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111411\
Data File : 11141108.D
Acq On : 14 Nov 2011 16:01
Operator : JJG
Sample : SIM 200pptv std.
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 09:54:13 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

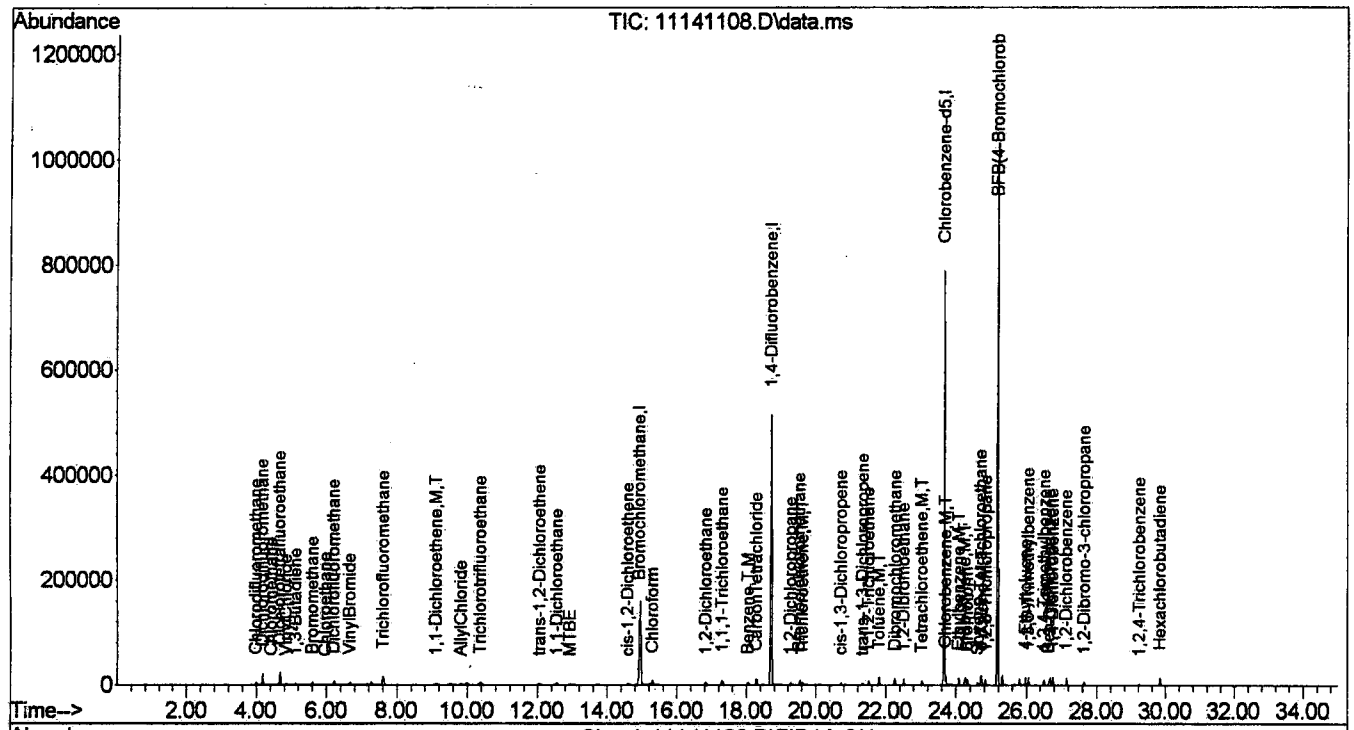
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) Toluene	21.813	91	15401(m)	221.85	pptv	
33) Dibromochloromethane	22.264	129	12324	170.45	pptv	98
34) 1,2-Dibromoethane	22.509	107	9230	175.74	pptv	100
35) Tetrachloroethene	23.017	166	7957	158.87	pptv	99
37) Chlorobenzene	23.694	112	16042	173.64	pptv	99
38) Ethylbenzene	24.080	91	15806	167.66	pptv	99
39) m&p-Xylene	24.250	106	11228(m)	335.35	pptv	
40) Bromoform	24.327	173	13684	164.59	pptv	96
41) Styrene	24.621	104	6915	166.10	pptv	100
42) 1,1,2,2-Tetrachloroethane	24.698	83	15977	175.96	pptv	99
43) o-Xylene	24.729	91	11857	174.42	pptv	97
44) 1,2,3-Trichloropropane	24.837	110	4849	174.91	pptv	92
46) 4-Ethyltoluene	25.981	105	13806(m)	163.55	pptv	
47) 1,3,5-Trimethylbenzene	26.058	105	13155	163.22	pptv	99
48) 1,2,4-Trimethylbenzene	26.506	105	11155	160.74	pptv	99
49) BenzylChloride	26.646	91	10251	176.89	pptv	100
50) 1,3-Dichlorobenzene	26.676	146	14287	169.39	pptv	98
51) 1,4-Dichlorobenzene	26.754	146	12905	164.69	pptv	98
52) 1,2-Dichlorobenzene	27.140	146	12257	166.35	pptv	99
53) 1,2-Dibromo-3-chloropr...	27.650	157	5473(m)	171.87	pptv	
54) 1,2,4-Trichlorobenzene	29.228	180	1335	85.26	pptv	93
55) Hexachlorobutadiene	29.831	225	13670	156.78	pptv	98

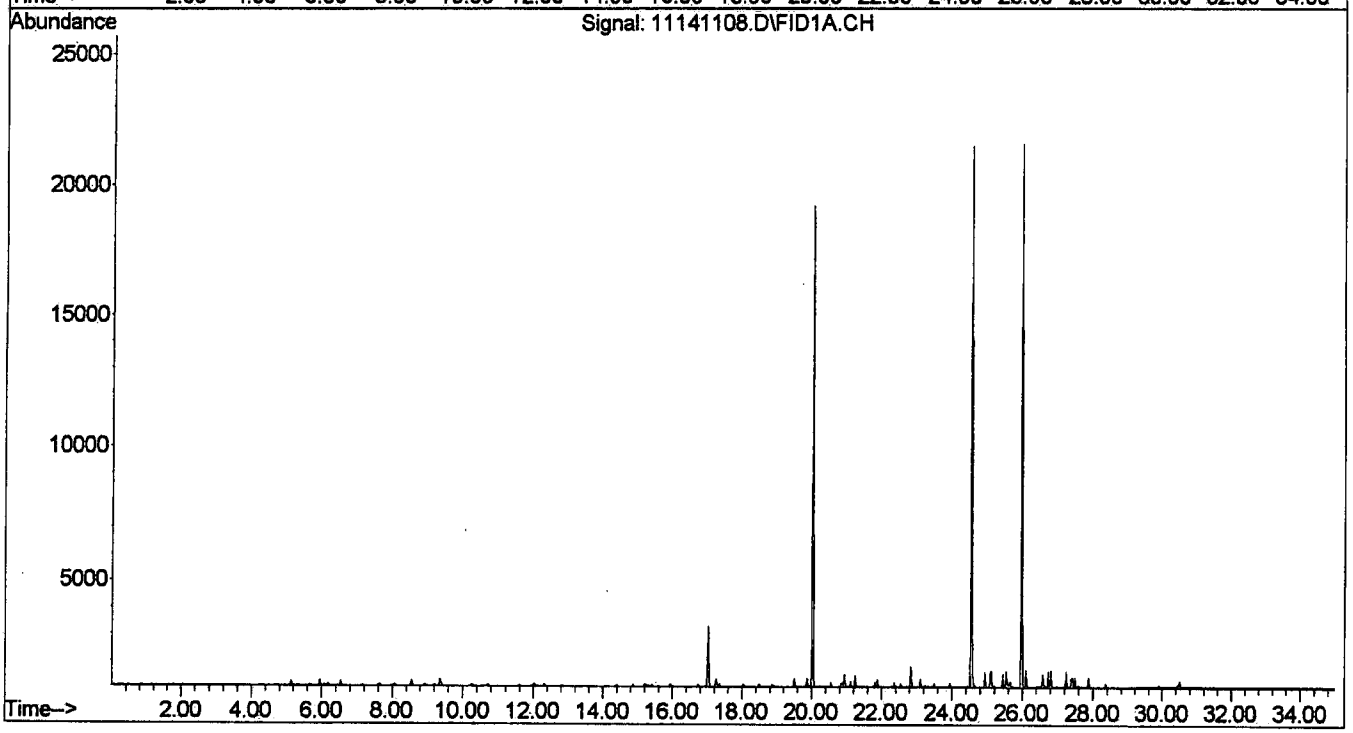
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111411\
Data File : 11141108.D
Acq On : 14 Nov 2011 16:01
Operator : JJG
Sample : SIM 200pptv std.
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 09:54:13 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111411\
Data File : 11141109.D
Acq On : 14 Nov 2011 16:45
Operator : JJG
Sample : SIM 100pptv std.
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 09:56:59 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.928	49	248972	10000.00 pptv	0.00
23) 1,4-Difluorobenzene	18.714	114	955594	10000.00 pptv	0.00
36) Chlorobenzene-d5	23.657	117	869464	10000.00 pptv	0.00

System Monitoring Compounds					
45) BFB(4-Bromochlorobenzene)	25.177	174	831353	9815.41 pptv	0.00

Spiked Amount 10000.000 Recovery = 98.15%

Target Compounds					Qvalue
2) Chlorodifluoromethane	3.995	51	4175	90.69 pptv #	96
3) Dichlorodifluoromethane	4.184	85	11535	87.42 pptv	98
4) Chloromethane	4.441	50	1656m	85.04 pptv	
5) Dichlorotetrafluoroethane	4.681	85	9664	85.51 pptv	98
6) VinylChloride	4.852	62	2034m	80.46 pptv	
7) 1,3-Butadiene	5.126	54	1147m	77.81 pptv	
8) Bromomethane	5.606	96	2941m	83.58 pptv	
9) Chloroethane	5.966	64	1027m	77.04 pptv	
10) Dichlorofluoromethane	6.206	67	6786	84.38 pptv	99
11) VinylBromide	6.668	108	2792	80.91 pptv	99
12) Trichlorofluoromethane	7.611	101	13197	84.95 pptv	99
13) 1,1-Dichloroethene	9.118	61	2722	81.91 pptv	98
14) AllylChloride	9.821	41	1101	76.96 pptv	94
15) Trichlorotrifluoroethane	10.369	101	6509	89.63 pptv	99
16) trans-1,2-Dichloroethene	12.048	61	2403	83.84 pptv	98
17) 1,1-Dichloroethane	12.545	63	3850m	87.02 pptv	
18) MTBE	12.957	73	2396m	81.98 pptv	
19) cis-1,2-Dichloroethene	14.602	61	1840	79.50 pptv	97
20) Chloroform	15.305	83	6921	90.64 pptv	100
21) 1,2-Dichloroethane	16.830	62	4084	86.72 pptv	97
22) 1,1,1-Trichloroethane	17.292	97	6632	89.78 pptv	95
24) Benzene	18.046	78	4159	81.86 pptv	98
25) CarbonTetrachloride	18.286	117	7572	86.39 pptv	100
26) 1,2-Dichloropropane	19.280	76	1453m	89.03 pptv	
27) Bromodichloromethane	19.537	83	6160	87.91 pptv	99
28) Trichloroethene	19.623	130	2748	86.80 pptv	98
29) cis-1,3-Dichloropropene	20.719	75	2268	83.16 pptv	97
30) trans-1,3-Dichloropropene	21.336	75	2067	84.30 pptv	98
31) 1,1,2-Trichloroethane	21.508	97	3126m	88.80 pptv	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111411\
Data File : 11141109.D
Acq On : 14 Nov 2011 16:45
Operator : JJG
Sample : SIM 100pptv std.
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 09:56:59 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

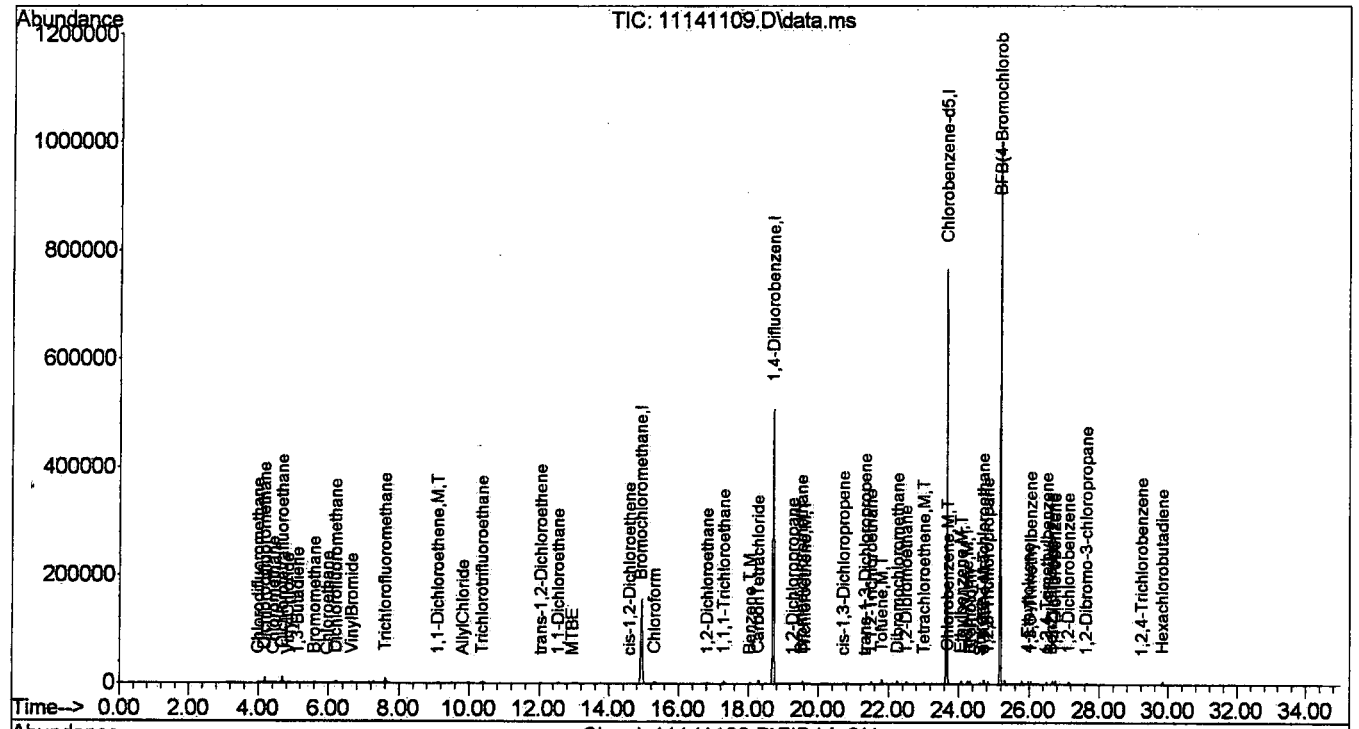
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) Toluene	21.812	91	8226	112.52	pptv	
33) Dibromochloromethane	22.264	129	5902	83.30	pptv	99
34) 1,2-Dibromoethane	22.509	107	4348	84.48	pptv	98
35) Tetrachloroethene	23.017	166	3940	80.28	pptv	100
37) Chlorobenzene	23.694	112	7919	88.78	pptv	100
38) Ethylbenzene	24.079	91	7662	84.18	pptv	100
39) m&p-Xylene	24.249	106	5170	159.94	pptv	
40) Bromoform	24.327	173	6552	81.62	pptv	97
41) Styrene	24.620	104	3209	79.84	pptv	99
42) 1,1,2,2-Tetrachloroethane	24.698	83	7745	88.35	pptv	98
43) o-Xylene	24.729	91	5213	79.43	pptv	99
44) 1,2,3-Trichloropropane	24.837	110	2226	83.17	pptv	87
46) 4-Ethyltoluene	25.981	105	6227	76.41	pptv	
47) 1,3,5-Trimethylbenzene	26.058	105	5803	74.58	pptv	100
48) 1,2,4-Trimethylbenzene	26.506	105	5027	75.03	pptv	94
49) BenzylChloride	26.645	91	4495	80.34	pptv	98
50) 1,3-Dichlorobenzene	26.676	146	6221	76.39	pptv	99
51) 1,4-Dichlorobenzene	26.754	146	5697	75.31	pptv	99
52) 1,2-Dichlorobenzene	27.140	146	5488	77.14	pptv	99
53) 1,2-Dibromo-3-chloropr...	27.650	157	2415	78.55	pptv	
54) 1,2,4-Trichlorobenzene	29.228	180	103	8.59	pptv	93
55) Hexachlorobutadiene	29.831	225	6094	72.39	pptv	100

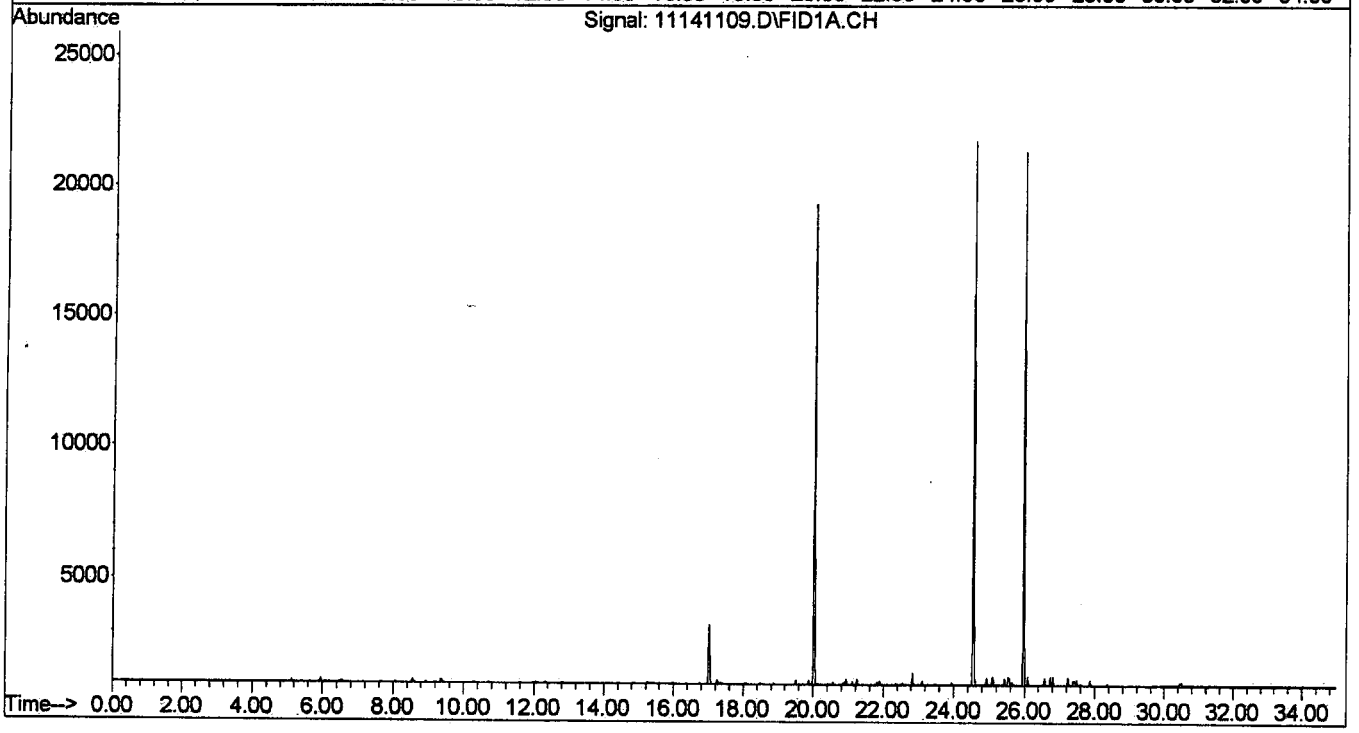
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111411\
Data File : 11141109.D
Acq On : 14 Nov 2011 16:45
Operator : JJG
Sample : SIM 100pptv std.
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 09:56:59 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111411\
Data File : 11141110.D
Acq On : 14 Nov 2011 17:29
Operator : JJG
Sample : SIM 40pptv std.
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 10:00:20 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.928	49	244431	10000.00 pptv	0.00
23) 1,4-Difluorobenzene	18.715	114	925375	10000.00 pptv	0.00
36) Chlorobenzene-d5	23.657	117	842612	10000.00 pptv	0.00

System Monitoring Compounds					
45) BFB(4-Bromochlorobenzene)	25.177	174	795191	9687.64 pptv	0.00

Spiked Amount 10000.000 Recovery = 96.88%

Target Compounds					Qvalue
2) Chlorodifluoromethane	3.995	51	1803	39.89 pptv #	87
3) Dichlorodifluoromethane	4.184	85	4905	37.86 pptv #	99
4) Chloromethane	4.441	50	699m	36.56 pptv	
5) Dichlorotetrafluoroethane	4.681	85	4124	37.17 pptv	97
6) VinylChloride	4.852	62	906	36.51 pptv #	81
7) 1,3-Butadiene	5.127	54	473m	32.68 pptv	
8) Bromomethane	5.606	96	1187m	34.36 pptv	
9) Chloroethane	5.966	64	432m	33.01 pptv	
10) Dichlorofluoromethane	6.206	67	2848	36.07 pptv	99
11) VinylBromide	6.669	108	1171	34.57 pptv	98
12) Trichlorofluoromethane	7.611	101	5663	37.13 pptv #	97
13) 1,1-Dichloroethene	9.119	61	1192	36.53 pptv	94
14) AllylChloride	9.821	41	472	33.61 pptv	86
15) Trichlorotrifluoroethane	10.369	101	2814	39.47 pptv	97
16) trans-1,2-Dichloroethene	12.049	61	971	34.51 pptv #	85
17) 1,1-Dichloroethane	12.546	63	1636m	37.66 pptv	
18) MTBE	12.991	73	974m	33.94 pptv	
19) cis-1,2-Dichloroethene	14.602	61	769m	33.84 pptv	
20) Chloroform	15.305	83	2939	39.21 pptv	99
21) 1,2-Dichloroethane	16.830	62	1722	37.24 pptv	95
22) 1,1,1-Trichloroethane	17.293	97	2754	37.97 pptv #	94
24) Benzene	18.046	78	1750	35.57 pptv	94
25) CarbonTetrachloride	18.286	117	3239	38.16 pptv	97
26) 1,2-Dichloropropane	19.280	76	590m	37.33 pptv	
27) Bromodichloromethane	19.537	83	2567m	37.83 pptv	
28) Trichloroethene	19.623	130	1180	38.49 pptv	97
29) cis-1,3-Dichloropropene	20.720	75	910	34.46 pptv	89
30) trans-1,3-Dichloropropene	21.336	75	796	33.52 pptv	88
31) 1,1,2-Trichloroethane	21.508	97	1340m	39.31 pptv	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111411\
Data File : 11141110.D
Acq On : 14 Nov 2011 17:29
Operator : JJG
Sample : SIM 40pptv std.
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 10:00:20 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

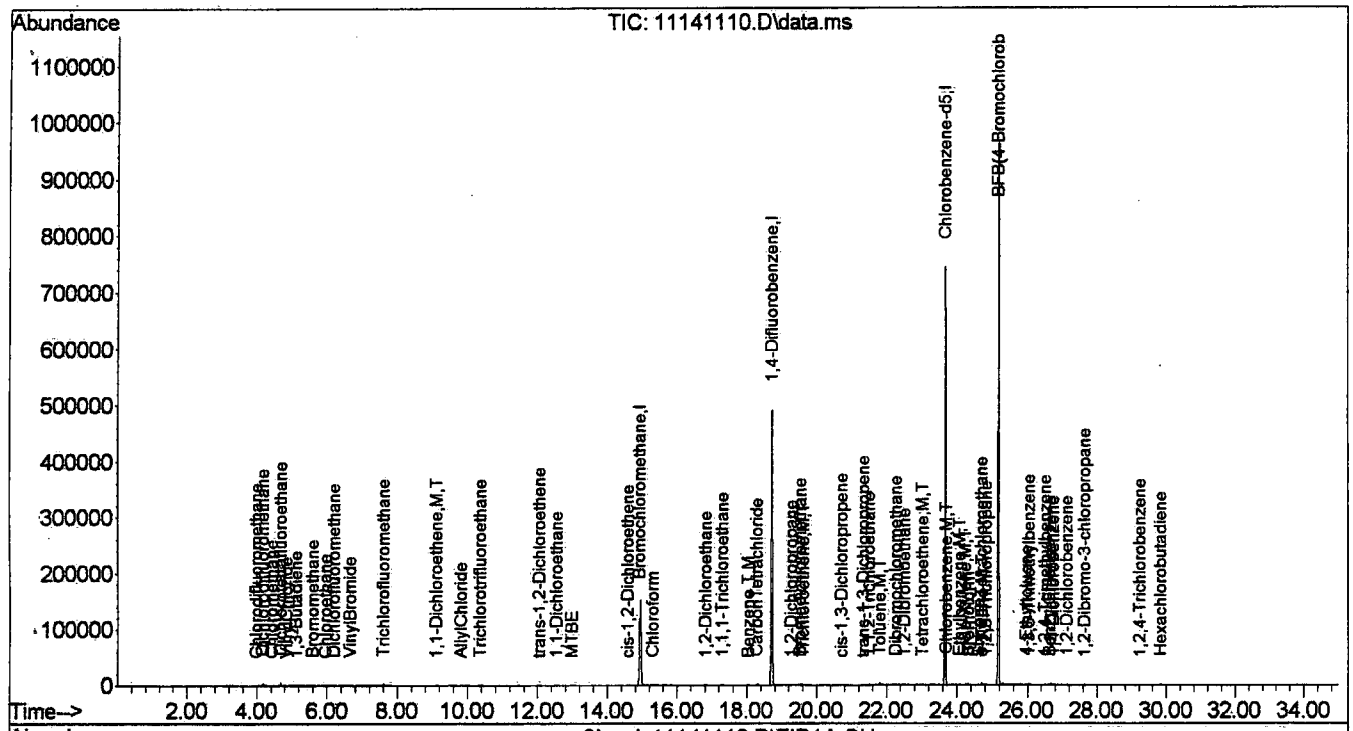
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) Toluene	21.813	91	4590m	53.46	pptv	
33) Dibromochloromethane	22.264	129	2408m	35.10	pptv	
34) 1,2-Dibromoethane	22.509	107	1772	35.55	pptv	100
35) Tetrachloroethene	23.017	166	1554	32.70	pptv	95
37) Chlorobenzene	23.694	112	3313	38.33	pptv	95
38) Ethylbenzene	24.080	91	3286	37.25	pptv	99
39) m&p-Xylene	24.250	106	2045m	65.28	pptv	
40) Bromoform	24.327	173	2629	33.80	pptv	93
41) Styrene	24.621	104	1340	34.40	pptv	100
42) 1,1,2,2-Tetrachloroethane	24.698	83	3113	36.64	pptv	97
43) o-Xylene	24.729	91	1991	31.30	pptv	93
44) 1,2,3-Trichloropropane	24.837	110	896	34.54	pptv #	70
46) 4-Ethyltoluene	25.981	105	2500m	31.65	pptv	
47) 1,3,5-Trimethylbenzene	26.058	105	2205m	29.24	pptv	
48) 1,2,4-Trimethylbenzene	26.506	105	2127m	32.76	pptv	
49) BenzylChloride	26.646	91	1700m	31.35	pptv	
50) 1,3-Dichlorobenzene	26.676	146	2358	29.88	pptv	94
51) 1,4-Dichlorobenzene	26.754	146	2140	29.19	pptv	96
52) 1,2-Dichlorobenzene	27.140	146	2143m	31.08	pptv	
53) 1,2-Dibromo-3-chloropr...	27.650	157	919m	30.84	pptv	
54) 1,2,4-Trichlorobenzene	29.228	180	53	4.62	pptv	100
55) Hexachlorobutadiene	29.831	225	2283	27.98	pptv	96

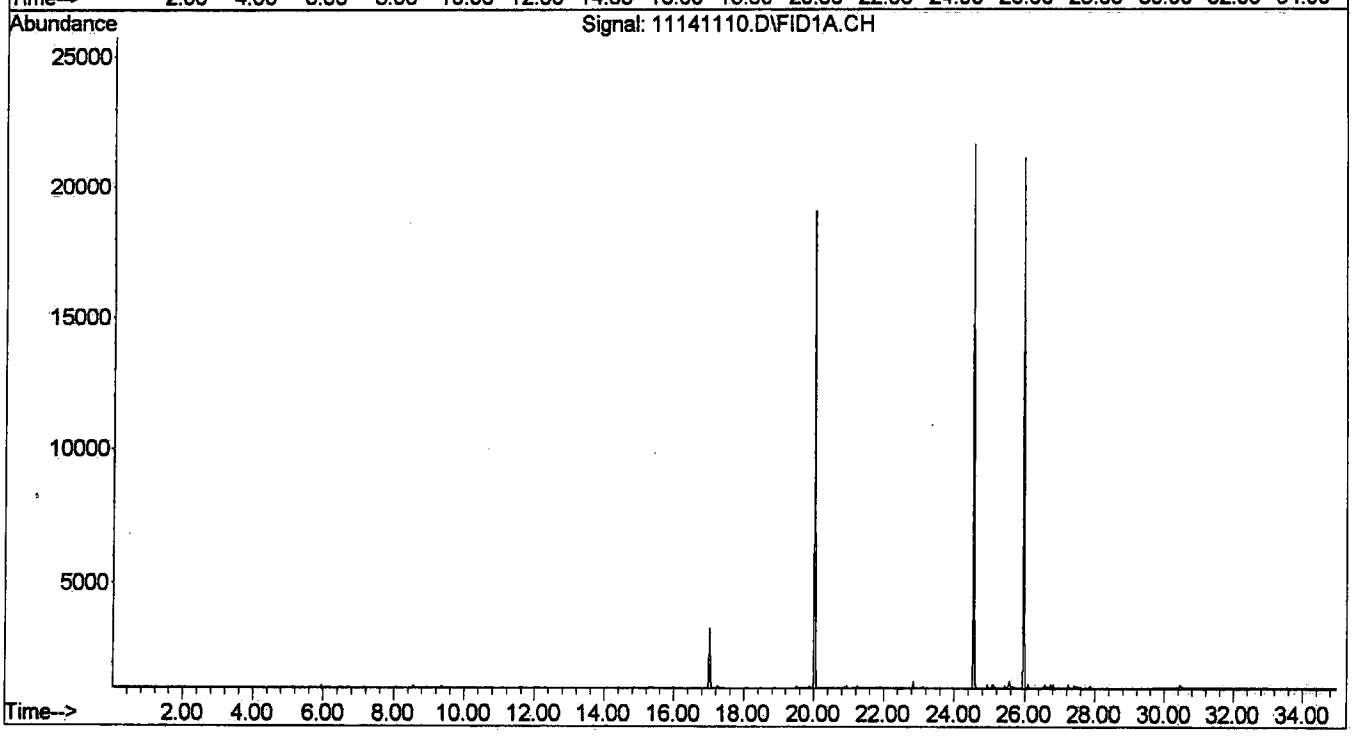
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111411\
Data File : 11141110.D
Acq On : 14 Nov 2011 17:29
Operator : JJG
Sample : SIM 40pptv std.
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 10:00:20 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111411\
Data File : 11141111.D
Acq On : 14 Nov 2011 18:13
Operator : JJG
Sample : SIM 20pptv std.
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 10:06:44 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.928	49	240606	10000.00 pptv	0.00
23) 1,4-Difluorobenzene	18.715	114	904158	10000.00 pptv	0.00
36) Chlorobenzene-d5	23.657	117	827068	10000.00 pptv	0.00

System Monitoring Compounds					
45) BFB(4-Bromochlorobenzene)	25.177	174	777565	9650.95 pptv	0.00

Spiked Amount 10000.000 Recovery = 96.51%

Target Compounds					Qvalue
2) Chlorodifluoromethane	3.995	51	917m	20.61 pptv	
3) Dichlorodifluoromethane	4.184	85	2625	20.58 pptv #	94
4) Chloromethane	4.441	50	378m	20.09 pptv	
5) Dichlorotetrafluoroethane	4.681	85	2178m	19.94 pptv	
6) VinylChloride	4.852	62	425m	17.40 pptv	
7) 1,3-Butadiene	5.126	54	259m	18.18 pptv	
8) Bromomethane	5.606	96	615m	18.08 pptv	
9) Chloroethane	5.966	64	222m	17.23 pptv	
10) Dichlorofluoromethane	6.206	67	1494	19.22 pptv #	85
11) VinylBromide	6.668	108	643m	19.28 pptv	
12) Trichlorofluoromethane	7.611	101	2998	19.97 pptv #	94
13) 1,1-Dichloroethene	9.118	61	623m	19.40 pptv	
14) AllylChloride	9.821	41	235m	17.00 pptv	
15) Trichlorotrifluoroethane	10.386	101	1492	21.26 pptv	94
16) trans-1,2-Dichloroethene	12.049	61	520m	18.77 pptv	
17) 1,1-Dichloroethane	12.545	63	850m	19.88 pptv	
18) MTBE	13.008	73	488m	17.28 pptv	
19) cis-1,2-Dichloroethene	14.602	61	391m	17.48 pptv	
20) Chloroform	15.305	83	1500m	20.33 pptv	
21) 1,2-Dichloroethane	16.830	62	931	20.46 pptv	95
22) 1,1,1-Trichloroethane	17.292	97	1489m	20.86 pptv	
24) Benzene	18.046	78	1015m	21.11 pptv	
25) CarbonTetrachloride	18.286	117	1650m	19.90 pptv	
26) 1,2-Dichloropropane	19.280	76	332m	21.50 pptv	
27) Bromodichloromethane	19.537	83	1362m	20.54 pptv	
28) Trichloroethene	19.623	130	598	19.96 pptv	100
29) cis-1,3-Dichloropropene	20.719	75	466m	18.06 pptv	
30) trans-1,3-Dichloropropene	21.336	75	461m	19.87 pptv	
31) 1,1,2-Trichloroethane	21.508	97	666m	19.99 pptv	

11/15/11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111411\
Data File : 11141111.D
Acq On : 14 Nov 2011 18:13
Operator : JJG
Sample : SIM 20pptv std.
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 10:06:44 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

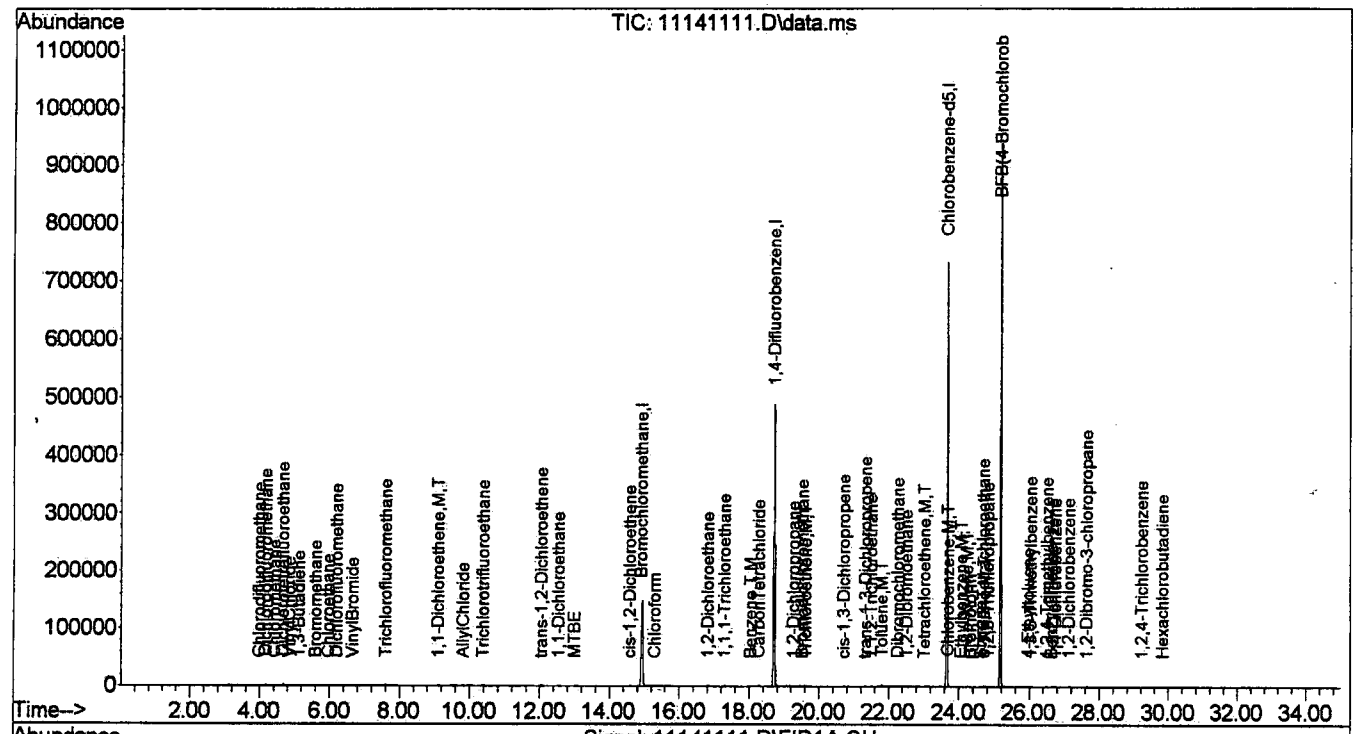
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
32) Toluene	21.812	91	3293m	31.44 pptv	
33) Dibromochloromethane	22.264	129	1266m	18.88 pptv	
34) 1,2-Dibromoethane	22.509	107	906m	18.60 pptv	
35) Tetrachloroethene	23.017	166	794m	17.10 pptv	
37) Chlorobenzene	23.694	112	1783m	21.01 pptv	
38) Ethylbenzene	24.079	91	1604m	18.53 pptv	
39) m&p-Xylene	24.250	106	1124m	36.55 pptv	
40) Bromoform	24.327	173	1351m	17.69 pptv	
41) Styrene	24.621	104	720m	18.83 pptv	
42) 1,1,2,2-Tetrachloroethane	24.698	83	1674m	20.07 pptv	
43) o-Xylene	24.729	91	1024m	16.40 pptv	
44) 1,2,3-Trichloropropane	24.837	110	467	18.34 pptv #	56
46) 4-Ethyltoluene	25.981	105	1375m	17.74 pptv	
47) 1,3,5-Trimethylbenzene	26.058	105	1210m	16.35 pptv	
48) 1,2,4-Trimethylbenzene	26.506	105	1116	17.51 pptv #	84
49) BenzylChloride	26.645	91	887m	16.67 pptv	
50) 1,3-Dichlorobenzene	26.676	146	1249m	16.12 pptv	
51) 1,4-Dichlorobenzene	26.754	146	1130	15.70 pptv	95
52) 1,2-Dichlorobenzene	27.140	146	1118m	16.52 pptv	
53) 1,2-Dibromo-3-chloropr...	27.650	157	455m	15.56 pptv	
54) 1,2,4-Trichlorobenzene	29.228	180	32	2.86 pptv	99
55) Hexachlorobutadiene	29.831	225	1091m	13.62 pptv	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111411\
Data File : 11141111.D
Acq On : 14 Nov 2011 18:13
Operator : JJG
Sample : SIM 20pptv std.
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 10:06:44 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111411\
Data File : 11141112.D
Acq On : 14 Nov 2011 18:57
Operator : JJG
Sample : SIM 10pptv std.
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 10:12:40 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.928	49	238692	10000.00 pptv	0.00
23) 1,4-Difluorobenzene	18.715	114	892636	10000.00 pptv	0.00
36) Chlorobenzene-d5	23.657	117	812519	10000.00 pptv	0.00

System Monitoring Compounds					
45) BFB(4-Bromochlorobenzene)	25.177	174	768402	9707.99 pptv	0.00

Spiked Amount 10000.000 Recovery = 97.08%

Target Compounds					Qvalue
2) Chlorodifluoromethane	3.995	51	542m	12.28 pptv	
3) Dichlorodifluoromethane	4.184	85	1463m	11.56 pptv	
4) Chloromethane	4.441	50	244m	13.07 pptv	
5) Dichlorotetrafluoroethane	4.681	85	1223m	11.29 pptv	
6) VinylChloride	4.852	62	250m	10.32 pptv	
7) 1,3-Butadiene	5.126	54	128m	9.06 pptv	
8) Bromomethane	5.606	96	371m	11.00 pptv	
9) Chloroethane	5.966	64	126m	9.86 pptv	
10) Dichlorofluoromethane	6.206	67	838m	10.87 pptv	
11) VinylBromide	6.668	108	361m	10.91 pptv	
12) Trichlorofluoromethane	7.611	101	1745m	11.72 pptv	
13) 1,1-Dichloroethene	9.118	61	356m	11.17 pptv	
14) AllylChloride	9.838	41	166m	12.10 pptv	
15) Trichlorotrifluoroethane	10.369	101	859m	12.34 pptv	
16) trans-1,2-Dichloroethene	12.048	61	290m	10.55 pptv	
17) 1,1-Dichloroethane	12.545	63	495m	11.67 pptv	
18) MTBE	13.025	73	268m	9.56 pptv	
19) cis-1,2-Dichloroethene	14.602	61	225m	10.14 pptv	
20) Chloroform	15.305	83	896m	12.24 pptv	
21) 1,2-Dichloroethane	16.830	62	514m	11.38 pptv	
22) 1,1,1-Trichloroethane	17.292	97	822m	11.61 pptv	
24) Benzene	18.046	78	567m	11.95 pptv	
25) CarbonTetrachloride	18.286	117	927m	11.32 pptv	
26) 1,2-Dichloropropane	19.280	76	185m	12.14 pptv	
27) Bromodichloromethane	19.537	83	736m	11.24 pptv	
28) Trichloroethene	19.623	130	326m	11.02 pptv	
29) cis-1,3-Dichloropropene	20.719	75	254m	9.97 pptv	
30) trans-1,3-Dichloropropene	21.336	75	225m	9.82 pptv	
31) 1,1,2-Trichloroethane	21.508	97	404m	12.29 pptv	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111411\
Data File : 11141112.D
Acq On : 14 Nov 2011 18:57
Operator : JJG
Sample : SIM 10pptv std.
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 10:12:40 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

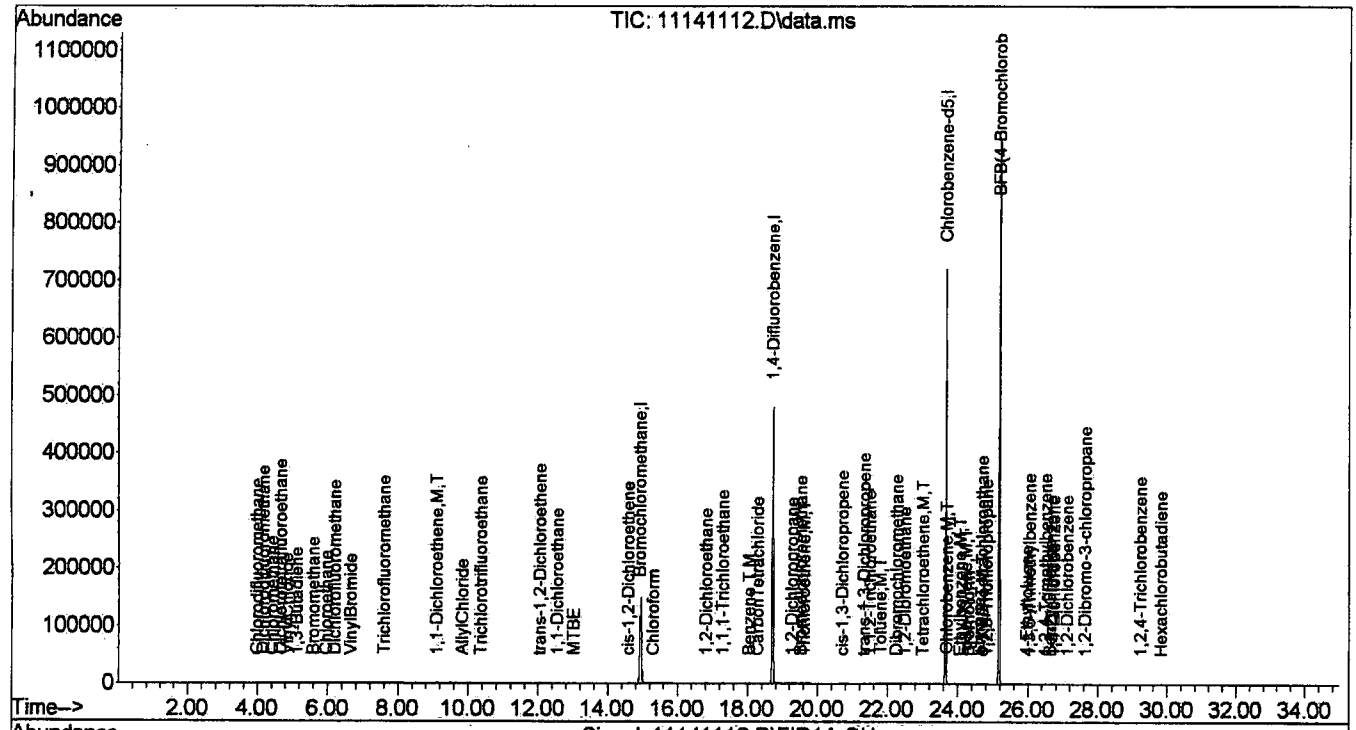
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
32) Toluene	21.812	91	2629m	19.64 pptv	
33) Dibromochloromethane	22.264	129	716	10.82 pptv	96
34) 1,2-Dibromoethane	22.509	107	526m	10.94 pptv	
35) Tetrachloroethene	23.017	166	482m	10.51 pptv	
37) Chlorobenzene	23.694	112	1044m	12.52 pptv	
38) Ethylbenzene	24.079	91	959	11.27 pptv	96
39) m&p-Xylene	24.249	106	642m	21.25 pptv	
40) Bromoform	24.327	173	825m	11.00 pptv	
41) Styrene	24.620	104	404m	10.76 pptv	
42) 1,1,2,2-Tetrachloroethane	24.698	83	958m	11.69 pptv	
43) o-Xylene	24.729	91	658m	10.73 pptv	
44) 1,2,3-Trichloropropane	24.837	110	266m	10.63 pptv	
46) 4-Ethyltoluene	25.981	105	791m	10.39 pptv	
47) 1,3,5-Trimethylbenzene	26.058	105	679m	9.34 pptv	
48) 1,2,4-Trimethylbenzene	26.506	105	714m	11.40 pptv	
49) BenzylChloride	26.645	91	506m	9.68 pptv	
50) 1,3-Dichlorobenzene	26.676	146	697	9.16 pptv	85
51) 1,4-Dichlorobenzene	26.754	146	684m	9.68 pptv	
52) 1,2-Dichlorobenzene	27.140	146	678m	10.20 pptv	
53) 1,2-Dibromo-3-chloropr...	27.650	157	272m	9.47 pptv	
54) 1,2,4-Trichlorobenzene	29.228	180	35	3.18 pptv	89
55) Hexachlorobutadiene	29.831	225	673	8.56 pptv	97

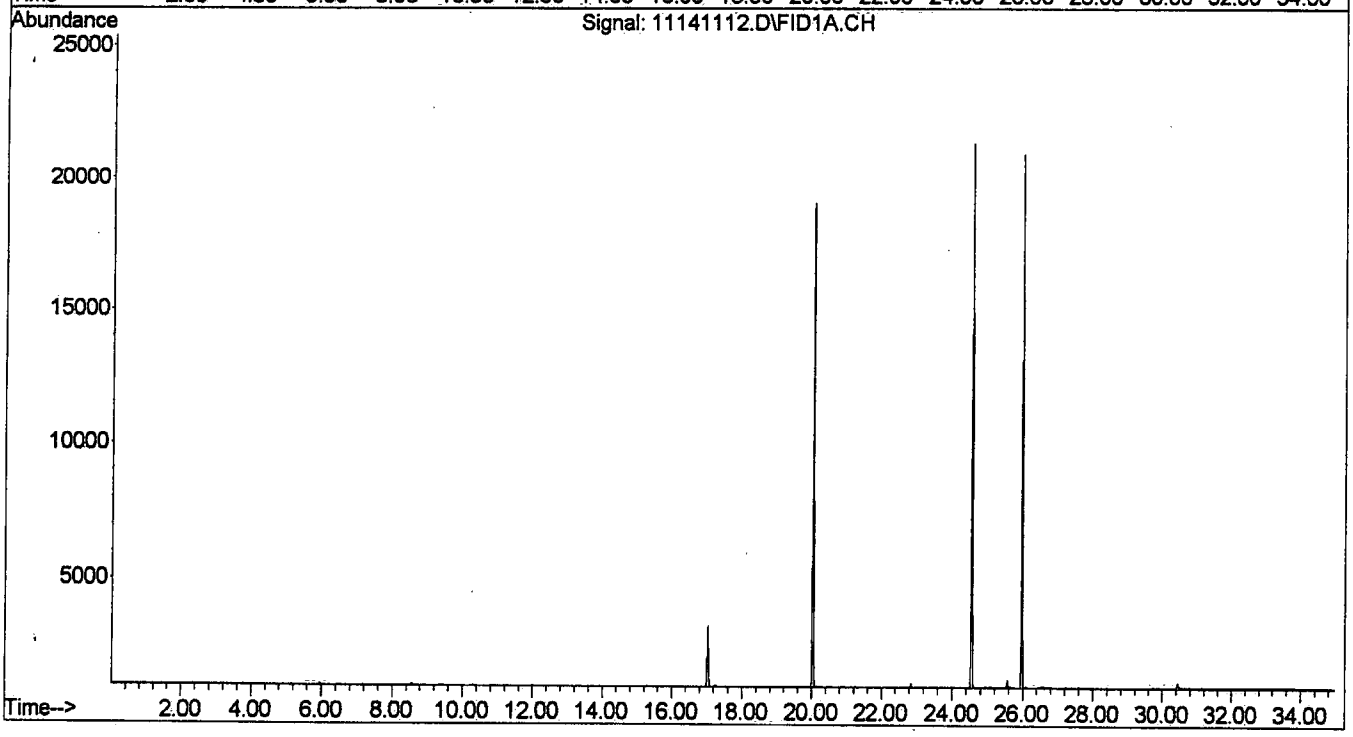
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\111411\
Data File : 11141112.D
Acq On : 14 Nov 2011 18:57
Operator : JJG
Sample : SIM 10pptv std.
Misc : IS/Surr: PS082311-02 + Cal: PS111011-02 (Sig #1); (Sig #2)
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Nov 15 10:12:40 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration





CANISTER CERTIFICATION

Summa Canister Pressure Check Record

Canister ID	Initial			After 24 Hours			Vacuum Loss (mmHga)
	Date	Time	Vaccum (mmHga)	Date	Time	Vaccum (mmHga)	
000384	10/26/11	11:00 AM	0.0	11/01/11	11:00 AM	5.5	5.5
000401	10/26/11	11:00 AM	0.0	11/01/11	11:00 AM	5.4	5.4
000445	10/26/11	11:00 AM	0.0	11/01/11	11:00 AM	6.7	6.7
000428	10/26/11	11:00 AM	0.0	11/01/11	11:00 AM	6.8	6.8

Marcus Hueppe
Laboratory Director

Cleaning System Check - Individually Certified

Cleaning System #1 - With Heating Bands	
Start Cleaner: 10/24/2011 8:05 AM	
Stop Cleaner: 10/24/2011 5:15 PM	
Number of Cycles: 5 + 3 + 3	
Cleaned by: Jerome Greuel	
Method of Certification: TO-15/(*TO-15_SIM)	
Certified by: Jerome Greuel	
Can #000525	Data File: MS03\10251104
Can #000556	Data File: MS03\10251106
Can #000498	Data File: MS03\10251107
Can #000429	Data File: MS03\10251108
Can #000558	Data File: MS01\10251116*
Can #000446	Data File: MS01\10251117*
Can #000542	Data File: MS01\10251118*
Can #000514	Data File: MS01\10251119*
Can #000401	Data File: MS01\10251120*
Can #000445	Data File: MS01\10251121*
Can #000428	Data File: MS01\10251122*
Can #000384	Data File: MS01\10251123*
Can #000423	Data File: MS03\10251112
Can #000382	Data File: MS03\10251113
Can #000381	Data File: MS03\10251114
Can #000520	Data File: MS03\10251115

10/26/11

Comments: _____

Analyst: _____ Date: 10/26/11

Page: 135 of _____

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\102511\
Data File : 10251123.D
Acq On : 26 Oct 2011 1:27
Operator : JJG
Sample : Can Check#000384
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 26 11:23:53 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.928	49	146338	10000.00 pptv	0.00
23) 1,4-Difluorobenzene	18.715	114	543728	10000.00 pptv	0.00
36) Chlorobenzene-d5	23.657	117	493410	10000.00 pptv	0.00

System Monitoring Compounds

45) BFB(4-Bromochlorobenzene)	25.177	174	491750	10230.83 pptv	0.00

Spiked Amount 10000.000 Recovery = 102.31%

Target Compounds

					Qvalue
2) Chlorodifluoromethane	4.029	51	34	N.D.	
3) Dichlorodifluoromethane	4.184	85	11	N.D.	
4) Chloromethane	4.441	50	45	N.D.	
5) Dichlorotetrafluoroethane	4.681	85	22	N.D.	
6) VinylChloride	4.852	62	14	N.D.	
7) 1,3-Butadiene	0.000	54	0	N.D.	
8) Bromomethane	5.606	96	22	N.D.	
9) Chloroethane	5.966	64	16	N.D.	
10) Dichlorofluoromethane	6.206	67	16	N.D.	
11) VinylBromide	6.668	108	7	N.D.	
12) Trichlorofluoromethane	7.628	101	14	N.D.	
13) 1,1-Dichloroethene	9.187	61	5	N.D.	
14) AllylChloride	9.872	41	5	N.D.	
15) Trichlorotrifluoroethane	10.386	101	25	N.D.	
16) trans-1,2-Dichloroethene	12.083	61	1	N.D.	
17) 1,1-Dichloroethane	0.000	63	0	N.D.	
18) MTBE	12.922	73	0	N.D.	
19) cis-1,2-Dichloroethene	14.619	61	10	N.D.	
20) Chloroform	15.322	83	9	N.D.	
21) 1,2-Dichloroethane	16.813	62	10	N.D.	
22) 1,1,1-Trichloroethane	17.327	97	4	N.D.	
24) Benzene	18.046	78	70	N.D.	
25) CarbonTetrachloride	18.252	117	13	N.D.	
26) 1,2-Dichloropropane	19.348	76	10	N.D.	
27) Bromodichloromethane	19.708	83	1	N.D.	
28) Trichloroethene	19.623	130	20	N.D.	
29) cis-1,3-Dichloropropene	20.719	75	11	N.D.	
30) trans-1,3-Dichloropropene	21.388	75	5	N.D.	
31) 1,1,2-Trichloroethane	0.000	97	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\102511\
Data File : 10251123.D
Acq On : 26 Oct 2011 1:27
Operator : JJG
Sample : Can Check#000384
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 26 11:23:53 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

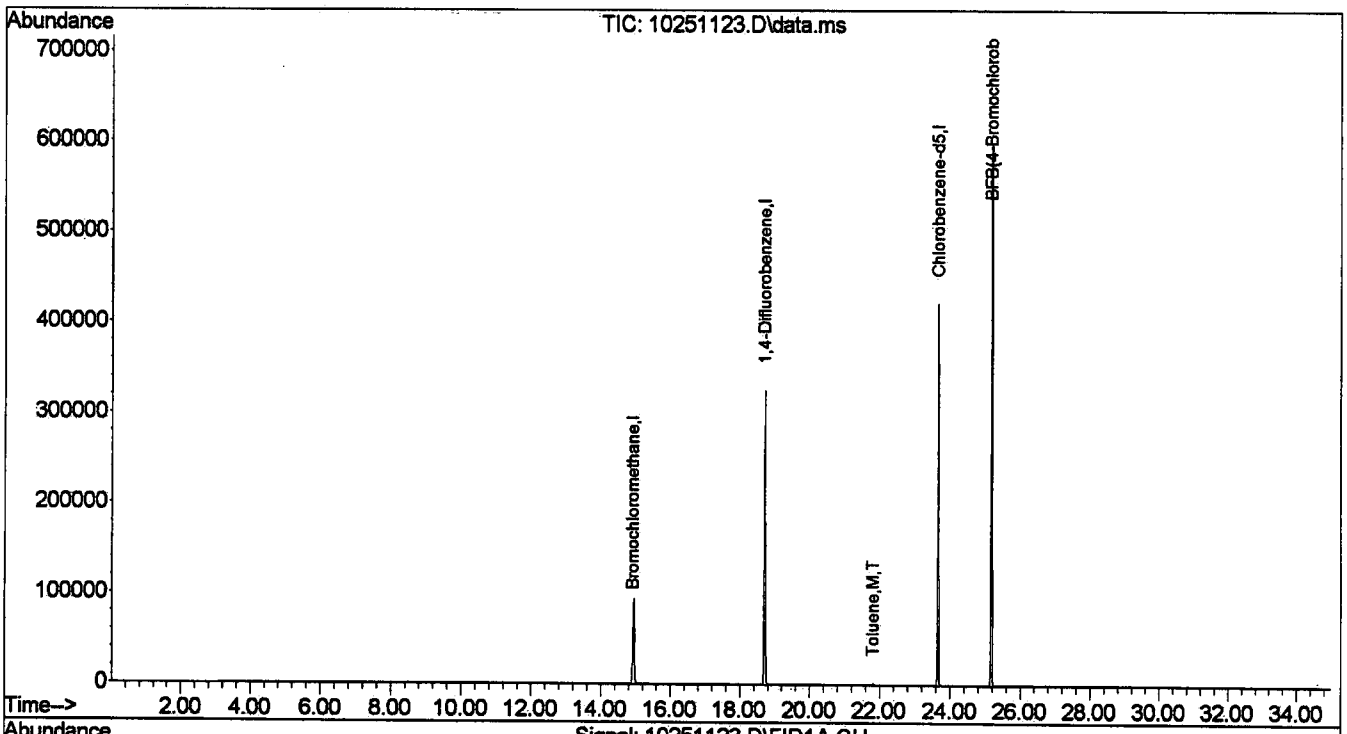
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
32) Toluene	21.812	91	1756	24.47 pptv	
33) Dibromochloromethane	22.264	129	8	N.D.	
34) 1,2-Dibromoethane	22.509	107	15	N.D.	
35) Tetrachloroethene	23.017	166	51	N.D.	
37) Chlorobenzene	23.657	112	80	N.D.	
38) Ethylbenzene	24.079	91	102	N.D.	
39) m&p-Xylene	24.249	106	59	N.D.	
40) Bromoform	24.327	173	7	N.D.	
41) Styrene	24.620	104	30	N.D.	
42) 1,1,2,2-Tetrachloroethane	24.698	83	15	N.D.	
43) o-Xylene	24.729	91	45	N.D.	
44) 1,2,3-Trichloropropane	24.837	110	9	N.D.	
46) 4-Ethyltoluene	25.981	105	13	N.D.	
47) 1,3,5-Trimethylbenzene	26.058	105	19	N.D.	
48) 1,2,4-Trimethylbenzene	26.506	105	44	N.D.	
49) BenzylChloride	26.645	91	25	N.D.	
50) 1,3-Dichlorobenzene	26.676	146	33	N.D.	
51) 1,4-Dichlorobenzene	26.754	146	62	N.D.	
52) 1,2-Dichlorobenzene	27.140	146	27	N.D.	
53) 1,2-Dibromo-3-chloropr...	27.650	157	8	N.D.	
54) 1,2,4-Trichlorobenzene	29.228	180	7	N.D.	
55) Hexachlorobutadiene	29.831	225	22	N.D.	

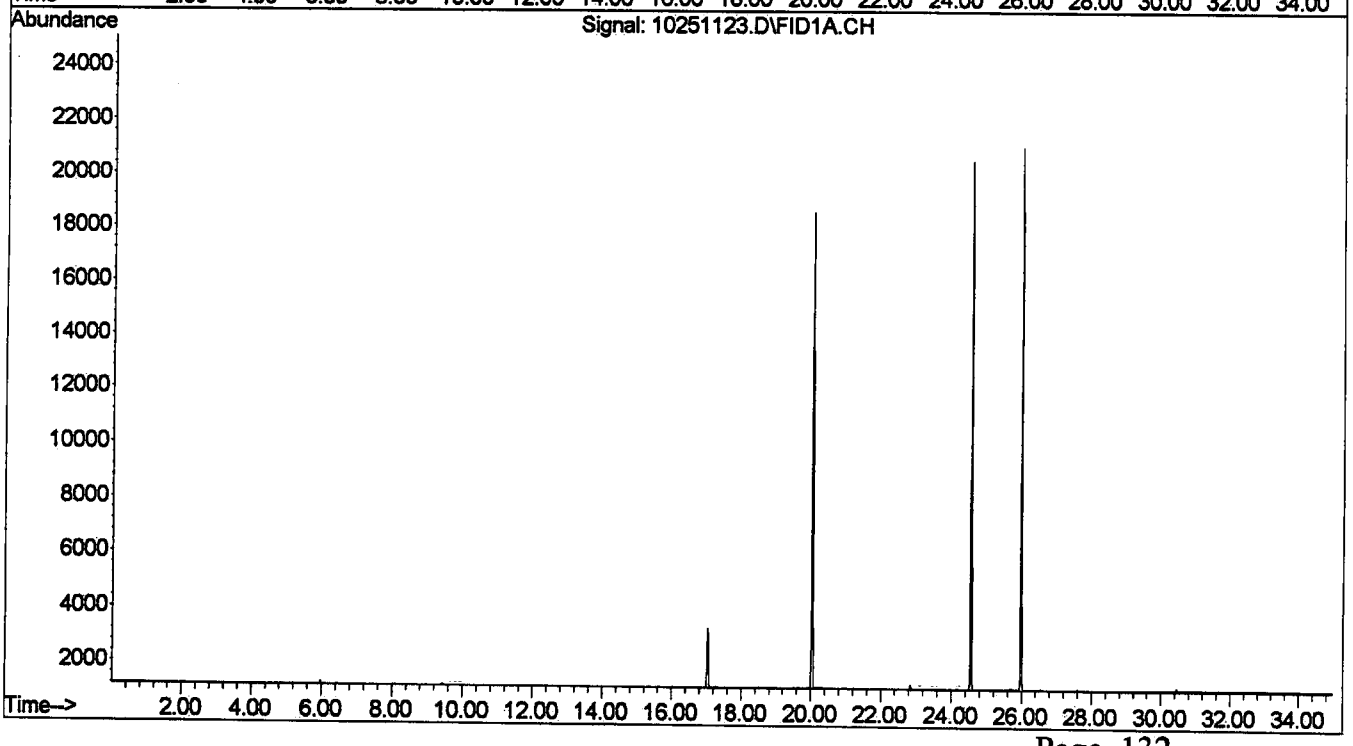
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\102511\
Data File : 10251123.D
Acq On : 26 Oct 2011 1:27
Operator : JJG
Sample : Can Check#000384
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 26 11:23:53 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration





SIM102511.M Thu Oct 27 10:21:37 2011

Page:

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\102511\
Data File : 10251120.D
Acq On : 25 Oct 2011 23:09
Operator : JJG
Sample : Can Check#000401
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 26 11:19:42 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.945	49	147701	10000.00 pptv	0.02
23) 1,4-Difluorobenzene	18.715	114	549548	10000.00 pptv	0.00
36) Chlorobenzene-d5	23.657	117	495830	10000.00 pptv	0.00

System Monitoring Compounds					
45) BFB(4-Bromochlorobenzene)	25.177	174	496826	10285.98 pptv	0.00

Spiked Amount 10000.000 Recovery = 102.86%

Target Compounds					Qvalue
2) Chlorodifluoromethane	4.012	51	17	N.D.	
3) Dichlorodifluoromethane	4.184	85	15	N.D.	
4) Chloromethane	4.441	50	51	N.D.	
5) Dichlorotetrafluoroethane	4.698	85	11	N.D.	
6) VinylChloride	4.869	62	3	N.D.	
7) 1,3-Butadiene	0.000	54	0	N.D.	
8) Bromomethane	5.606	96	15	N.D.	
9) Chloroethane	5.983	64	5	N.D.	
10) Dichlorofluoromethane	6.206	67	29	N.D.	
11) VinylBromide	6.720	108	17	N.D.	
12) Trichlorofluoromethane	7.594	101	11	N.D.	
13) 1,1-Dichloroethene	9.136	61	9	N.D.	
14) AllylChloride	9.838	41	9	N.D.	
15) Trichlorotrifluoroethane	10.403	101	35	N.D.	
16) trans-1,2-Dichloroethene	12.014	61	9	N.D.	
17) 1,1-Dichloroethane	0.000	63	0	N.D.	
18) MTBE	13.008	73	7	N.D.	
19) cis-1,2-Dichloroethene	14.585	61	6	N.D.	
20) Chloroform	15.305	83	16	N.D.	
21) 1,2-Dichloroethane	16.898	62	4	N.D.	
22) 1,1,1-Trichloroethane	17.327	97	11	N.D.	
24) Benzene	18.046	78	121	N.D.	
25) CarbonTetrachloride	18.286	117	13	N.D.	
26) 1,2-Dichloropropane	19.280	76	6	N.D.	
27) Bromodichloromethane	19.486	83	25	N.D.	
28) Trichloroethene	19.623	130	27	N.D.	
29) cis-1,3-Dichloropropene	20.702	75	5	N.D.	
30) trans-1,3-Dichloropropene	21.371	75	1	N.D.	
31) 1,1,2-Trichloroethane	0.000	97	0	N.D.	

10/27/11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\102511\
Data File : 10251120.D
Acq On : 25 Oct 2011 23:09
Operator : JJG
Sample : Can Check#000401
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 26 11:19:42 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

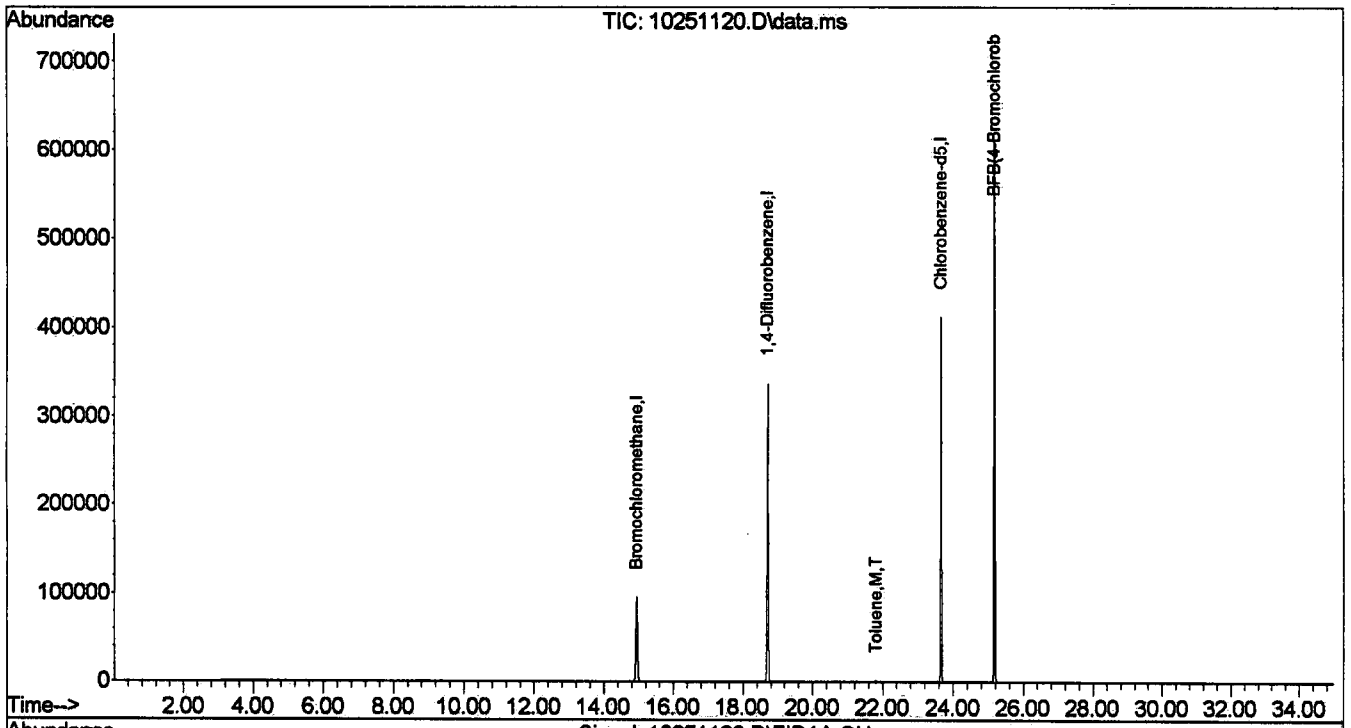
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
32) Toluene	21.812	91	1815	<25.71 pptv	
33) Dibromochloromethane	22.264	129	7	N.D.	
34) 1,2-Dibromoethane	22.528	107	5	N.D.	
35) Tetrachloroethene	23.205	166	1	N.D.	
37) Chlorobenzene	23.657	112	51	N.D.	
38) Ethylbenzene	24.079	91	115	N.D.	
39) m&p-Xylene	24.249	106	57	N.D.	
40) Bromoform	24.327	173	6	N.D.	
41) Styrene	24.620	104	63	N.D.	
42) 1,1,2,2-Tetrachloroethane	24.698	83	9	N.D.	
43) o-Xylene	24.729	91	49	N.D.	
44) 1,2,3-Trichloropropane	24.837	110	2	N.D.	
46) 4-Ethyltoluene	25.981	105	23	N.D.	
47) 1,3,5-Trimethylbenzene	26.058	105	39	N.D.	
48) 1,2,4-Trimethylbenzene	26.506	105	58	N.D.	
49) BenzylChloride	26.645	91	21	N.D.	
50) 1,3-Dichlorobenzene	26.676	146	35	N.D.	
51) 1,4-Dichlorobenzene	26.754	146	59	N.D.	
52) 1,2-Dichlorobenzene	27.140	146	29	N.D.	
53) 1,2-Dibromo-3-chloropr...	27.650	157	3	N.D.	
54) 1,2,4-Trichlorobenzene	29.228	180	5	N.D.	
55) Hexachlorobutadiene	29.831	225	13	N.D.	

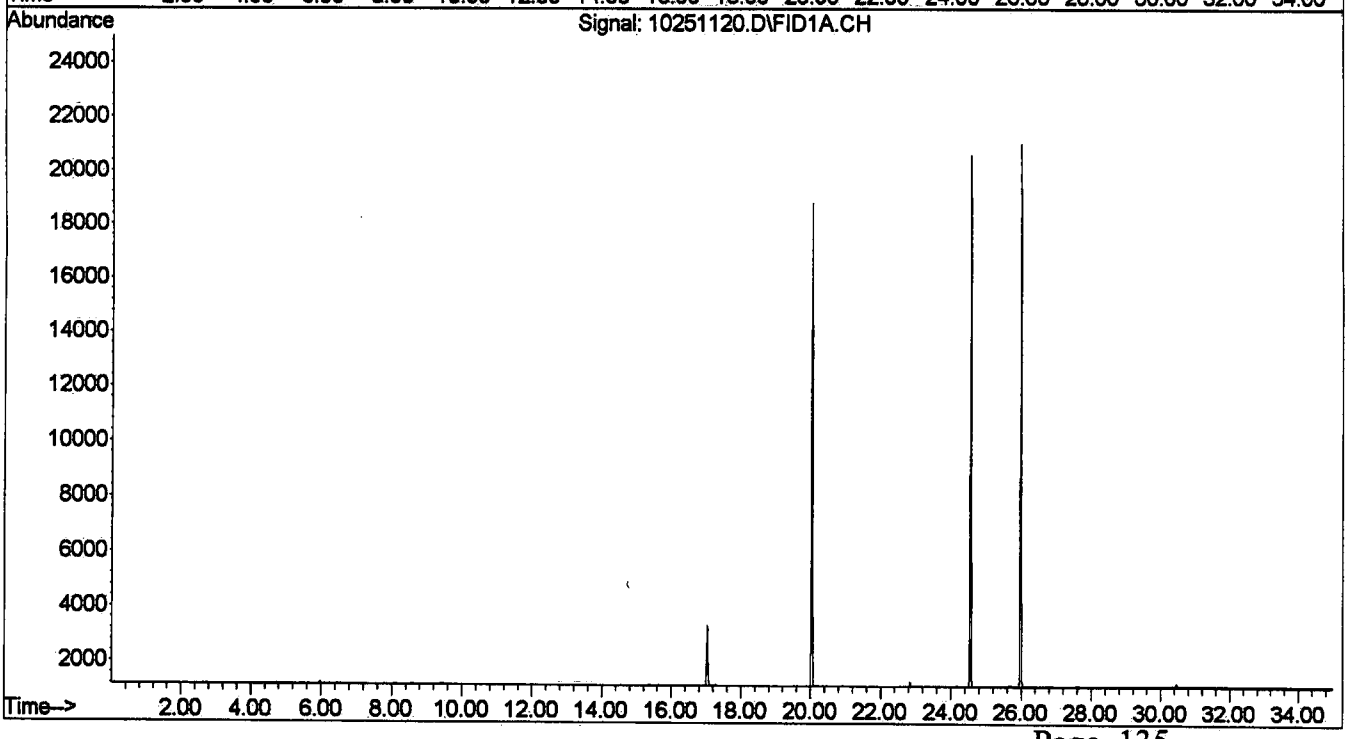
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\102511\
Data File : 10251120.D
Acq On : 25 Oct 2011 23:09
Operator : JJG
Sample : Can Check#000401
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 26 11:19:42 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration





SIM102511.M Thu Oct 27 10:21:13 2011

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\102511\
Data File : 10251121.D
Acq On : 25 Oct 2011 23:55
Operator : JJG
Sample : Can Check#000445
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 26 11:21:32 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.945	49	146514	10000.00 pptv	0.02
23) 1,4-Difluorobenzene	18.714	114	547782	10000.00 pptv	0.00
36) Chlorobenzene-d5	23.657	117	492055	10000.00 pptv	0.00
System Monitoring Compounds					
45) BFB(4-Bromochlorobenzene)	25.177	174	492627	10277.30 pptv	0.00

Spiked Amount 10000.000 Recovery = 102.77%

Target Compounds				Qvalue
2) Chlorodifluoromethane	4.029	51	19	N.D.
3) Dichlorodifluoromethane	4.184	85	8	N.D.
4) Chloromethane	4.441	50	42	N.D.
5) Dichlorotetrafluoroethane	4.698	85	5	N.D.
6) VinylChloride	4.869	62	8	N.D.
7) 1,3-Butadiene	0.000	54	0	N.D.
8) Bromomethane	5.589	96	4	N.D.
9) Chloroethane	5.966	64	17	N.D.
10) Dichlorofluoromethane	6.223	67	20	N.D.
11) VinylBromide	6.651	108	11	N.D.
12) Trichlorofluoromethane	7.628	101	7	N.D.
13) 1,1-Dichloroethene	9.170	61	4	N.D.
14) AllylChloride	9.872	41	9	N.D.
15) Trichlorotrifluoroethane	10.386	101	24	N.D.
16) trans-1,2-Dichloroethene	12.048	61	6	N.D.
17) 1,1-Dichloroethane	0.000	63	0	N.D.
18) MTBE	12.922	73	8	N.D.
19) cis-1,2-Dichloroethene	14.568	61	5	N.D.
20) Chloroform	15.305	83	28	N.D.
21) 1,2-Dichloroethane	16.813	62	16	N.D.
22) 1,1,1-Trichloroethane	17.310	97	7	N.D.
24) Benzene	18.046	78	70	N.D.
25) CarbonTetrachloride	18.286	117	12	N.D.
26) 1,2-Dichloropropane	19.263	76	4	N.D.
27) Bromodichloromethane	19.588	83	13	N.D.
28) Trichloroethene	19.640	130	35	N.D.
29) cis-1,3-Dichloropropene	20.685	75	13	N.D.
30) trans-1,3-Dichloropropene	21.388	75	10	N.D.
31) 1,1,2-Trichloroethane	0.000	97	0	N.D.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\102511\
Data File : 10251121.D
Acq On : 25 Oct 2011 23:55
Operator : JJG
Sample : Can Check#000445
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 26 11:21:32 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

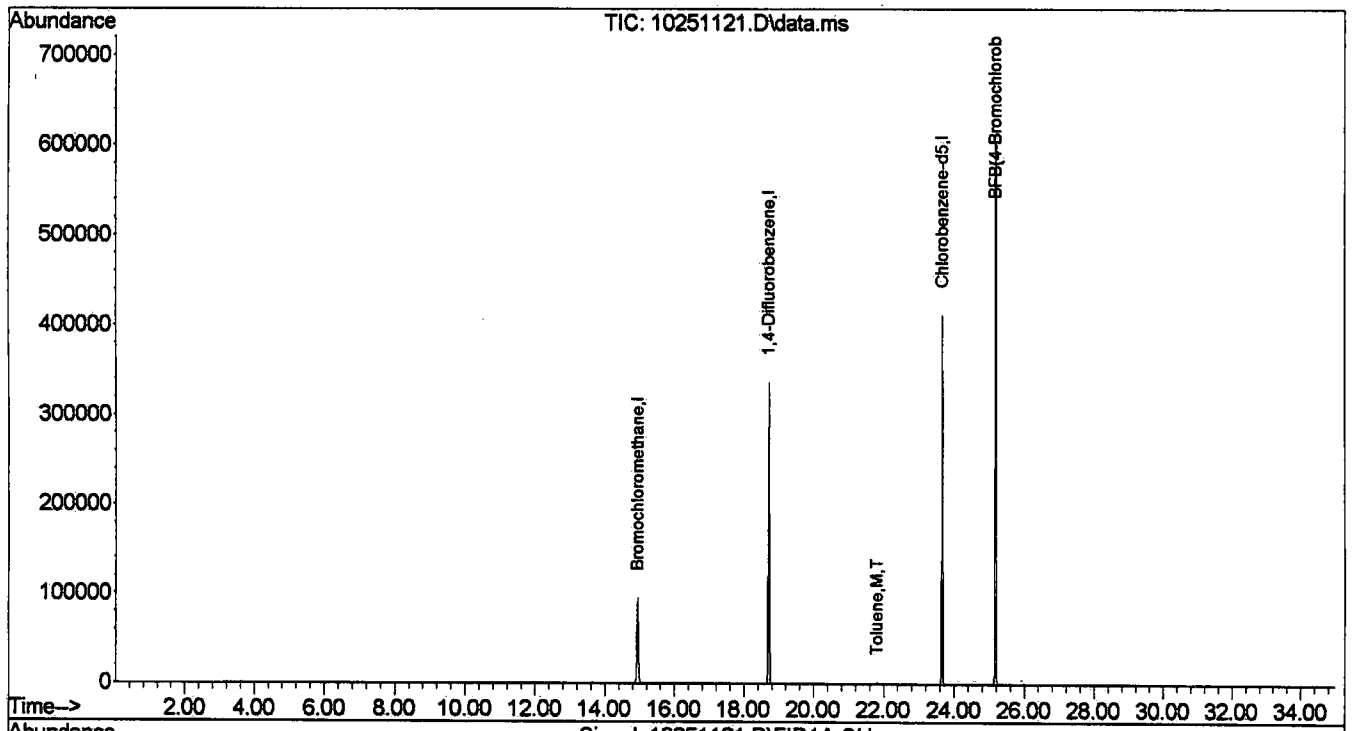
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
32) Toluene	21.812	91	1768m	<24.43 pptv	
33) Dibromochloromethane	22.226	129	3	N.D.	
34) 1,2-Dibromoethane	22.452	107	10	N.D.	
35) Tetrachloroethene	23.017	166	52	N.D.	
37) Chlorobenzene	23.657	112	59	N.D.	
38) Ethylbenzene	24.079	91	100	N.D.	
39) m&p-Xylene	24.249	106	51	N.D.	
40) Bromoform	24.327	173	8	N.D.	
41) Styrene	24.620	104	28	N.D.	
42) 1,1,2,2-Tetrachloroethane	24.667	83	19	N.D.	
43) o-Xylene	24.729	91	44	N.D.	
44) 1,2,3-Trichloropropane	24.852	110	5	N.D.	
46) 4-Ethyltoluene	25.981	105	18	N.D.	
47) 1,3,5-Trimethylbenzene	26.058	105	22	N.D.	
48) 1,2,4-Trimethylbenzene	26.506	105	47	N.D.	
49) BenzylChloride	26.645	91	20	N.D.	
50) 1,3-Dichlorobenzene	26.676	146	43	N.D.	
51) 1,4-Dichlorobenzene	26.754	146	71	N.D.	
52) 1,2-Dichlorobenzene	27.140	146	26	N.D.	
53) 1,2-Dibromo-3-chloropr...	27.650	157	5	N.D.	
54) 1,2,4-Trichlorobenzene	29.228	180	6	N.D.	
55) Hexachlorobutadiene	29.831	225	25	N.D.	

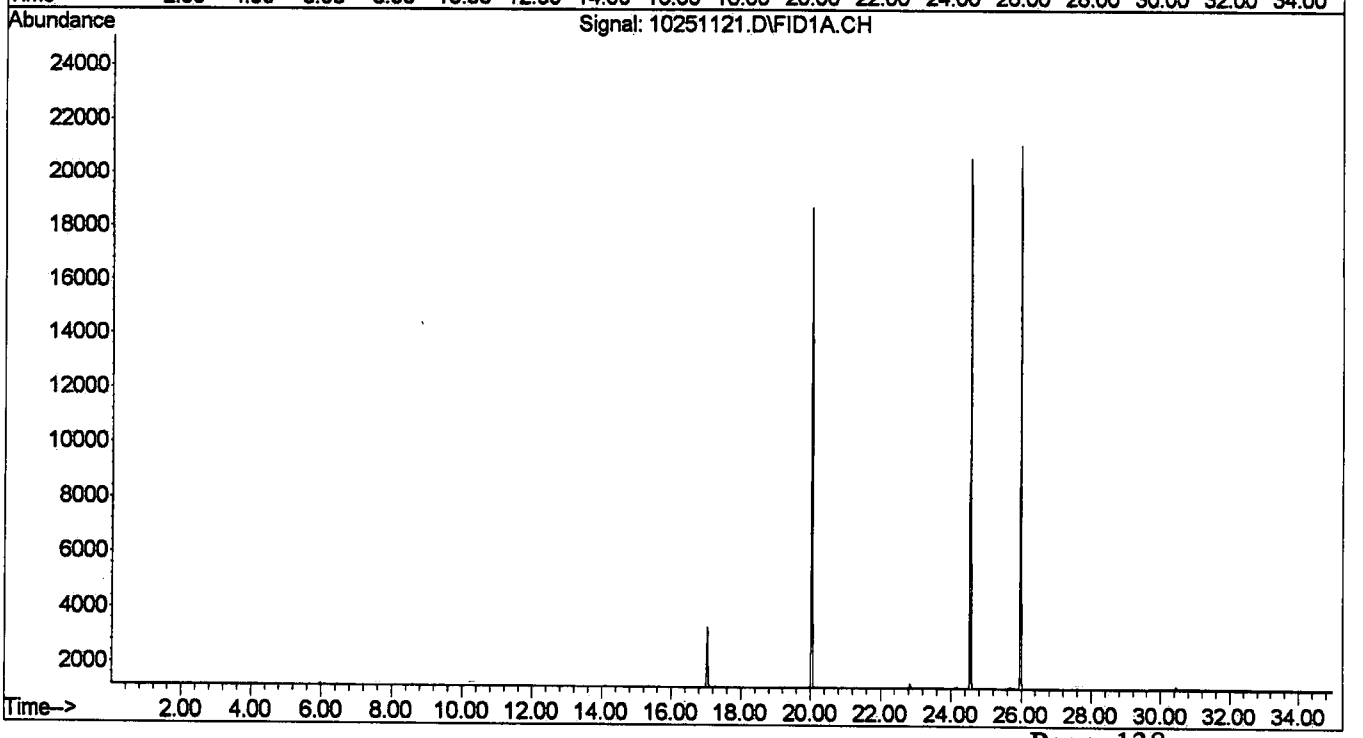
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\102511\
Data File : 10251121.D
Acq On : 25 Oct 2011 23:55
Operator : JJG
Sample : Can Check#000445
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 26 11:21:32 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration





SIM102511.M Thu Oct 27 10:21:21 2011

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\102511\
Data File : 10251122.D
Acq On : 26 Oct 2011 00:41
Operator : JJG
Sample : Can Check#000428
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 26 11:22:25 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.928	49	146954	10000.00 pptv	0.00
23) 1,4-Difluorobenzene	18.714	114	547294	10000.00 pptv	0.00
36) Chlorobenzene-d5	23.657	117	494631	10000.00 pptv	0.00
System Monitoring Compounds					
45) BFB(4-Bromochlorobenzene)	25.177	174	493287	10237.47 pptv	0.00
Spiked Amount 10000.000			Recovery	= 102.37%	

Target Compounds				Qvalue
2) Chlorodifluoromethane	4.029	51	30	N.D.
3) Dichlorodifluoromethane	4.184	85	23	N.D.
4) Chloromethane	4.441	50	35	N.D.
5) Dichlorotetrafluoroethane	4.664	85	17	N.D.
6) VinylChloride	4.818	62	22	N.D.
7) 1,3-Butadiene	0.000	54	0	N.D.
8) Bromomethane	5.606	96	14	N.D.
9) Chloroethane	5.949	64	16	N.D.
10) Dichlorofluoromethane	6.172	67	6	N.D.
11) VinylBromide	6.685	108	7	N.D.
12) Trichlorofluoromethane	7.611	101	6	N.D.
13) 1,1-Dichloroethene	9.187	61	9	N.D.
14) AllylChloride	9.804	41	16	N.D.
15) Trichlorotrifluoroethane	10.369	101	26	N.D.
16) trans-1,2-Dichloroethene	12.100	61	20	N.D.
17) 1,1-Dichloroethane	0.000	63	0	N.D.
18) MTBE	12.922	73	6	N.D.
19) cis-1,2-Dichloroethene	14.533	61	16	N.D.
20) Chloroform	15.305	83	13	N.D.
21) 1,2-Dichloroethane	16.830	62	4	N.D.
22) 1,1,1-Trichloroethane	17.224	97	3	N.D.
24) Benzene	18.046	78	81	N.D.
25) CarbonTetrachloride	18.286	117	8	N.D.
26) 1,2-Dichloropropane	19.263	76	3	N.D.
27) Bromodichloromethane	19.554	83	21	N.D.
28) Trichloroethene	19.623	130	29	N.D.
29) cis-1,3-Dichloropropene	20.736	75	7	N.D.
30) trans-1,3-Dichloropropene	21.336	75	1	N.D.
31) 1,1,2-Trichloroethane	0.000	97	0	N.D.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\102511\
Data File : 10251122.D
Acq On : 26 Oct 2011 00:41
Operator : JJG
Sample : Can Check#000428
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 26 11:22:25 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

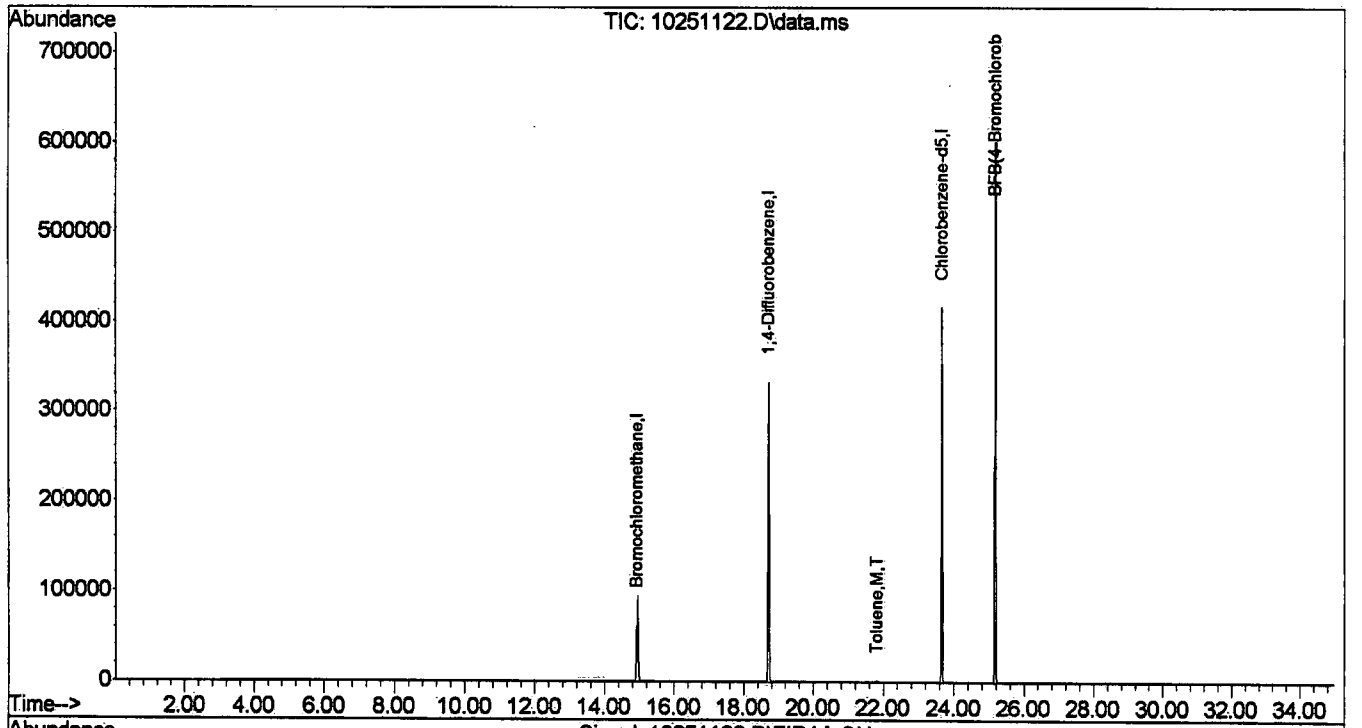
Internal Standards	R.T.	QIon	Response	Conc Units Dev(Min)
32) Toluene	21.812	91	1839	<26.68 pptv
33) Dibromochloromethane	22.320	129	2	N.D.
34) 1,2-Dibromoethane	22.509	107	8	N.D.
35) Tetrachloroethene	23.036	166	45	N.D.
37) Chlorobenzene	23.657	112	71	N.D.
38) Ethylbenzene	24.079	91	116	N.D.
39) m&p-Xylene	24.265	106	62	N.D.
40) Bromoform	24.327	173	7	N.D.
41) Styrene	24.620	104	25	N.D.
42) 1,1,2,2-Tetrachloroethane	24.698	83	16	N.D.
43) o-Xylene	24.729	91	38	N.D.
44) 1,2,3-Trichloropropane	24.821	110	6	N.D.
46) 4-Ethyltoluene	25.934	105	39	N.D.
47) 1,3,5-Trimethylbenzene	26.058	105	26	N.D.
48) 1,2,4-Trimethylbenzene	26.506	105	57	N.D.
49) BenzylChloride	26.645	91	28	N.D.
50) 1,3-Dichlorobenzene	26.676	146	32	N.D.
51) 1,4-Dichlorobenzene	26.754	146	65	N.D.
52) 1,2-Dichlorobenzene	27.140	146	31	N.D.
53) 1,2-Dibromo-3-chloropr...	27.650	157	11	N.D.
54) 1,2,4-Trichlorobenzene	29.197	180	11	N.D.
55) Hexachlorobutadiene	29.831	225	6	N.D.

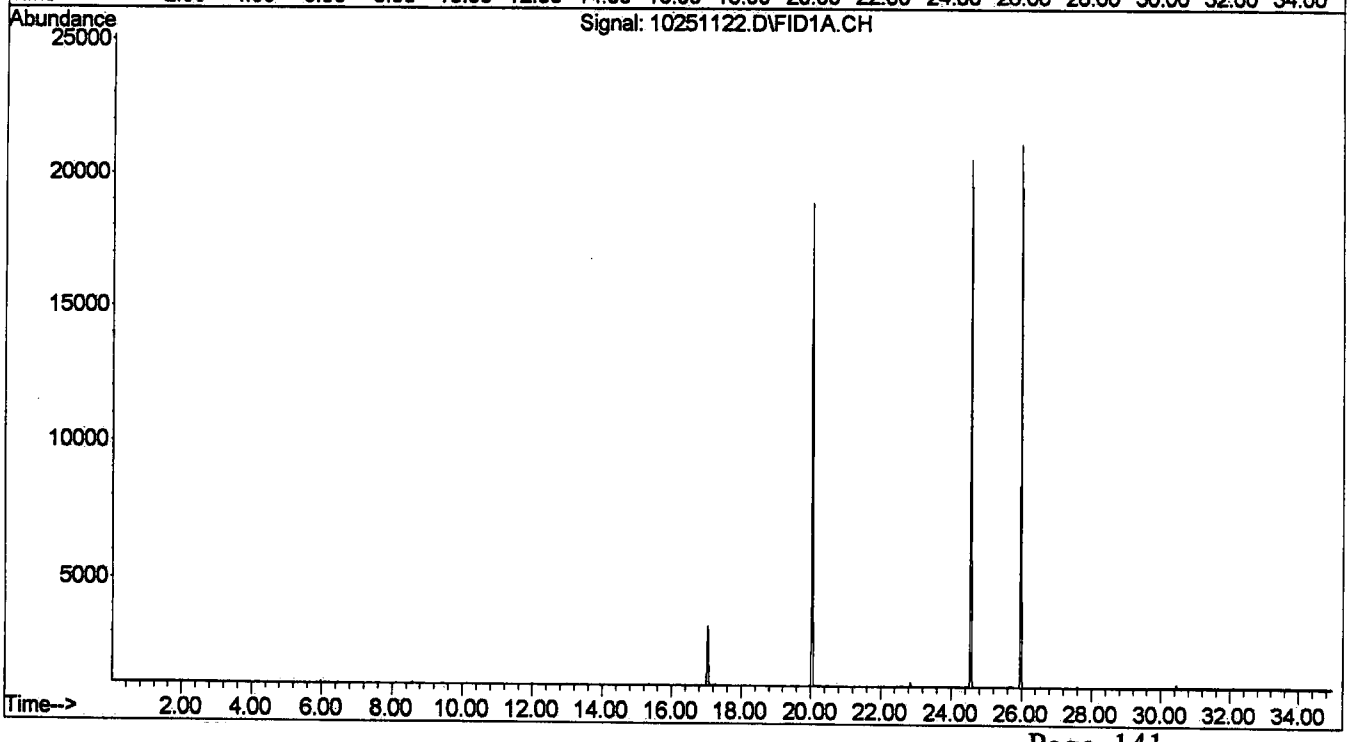
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\102511\
Data File : 10251122.D
Acq On : 26 Oct 2011 00:41
Operator : JJG
Sample : Can Check#000428
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 26 11:22:25 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration





SIM102511.M Thu Oct 27 10:21:29 2011

10/27/11

Cleaning System Check - Batch: 102511-01

Flow Cleaning System - Vacuum Baked		
Start Cleaner: 10/25/2011 1:25 PM		
Stop Cleaner: 10/26/2011 3:15 PM		
Oven Temperature: 60°C		
Cleaned by: Jerome Greuel		
Method of Certification: TO-15_SIM		
Certified by: Jerome Greuel		
Data File: MS01/10261106 - Can #000431		
Flow #000604	Flow #000650	Flow #000642
Flow #000618	Flow #000638	---

10/27/11

Cleaning System Check - Batch: 102711-01

Flow Cleaning System - Vacuum Baked		
Start Cleaner: 10/27/2011 9:35 AM		
Stop Cleaner: 10/27/2011 12:15 PM		
Oven Temperature: 60°C		
Cleaned by: Jerome Greuel		
Method of Certification: TO-15_SIM		
Certified by: Jerome Greuel		
Data File: MS01/10271110 - Can #000431		
Flow #000698	Flow #000693	Flow #000691
Flow #000694	Flow #000692	---

10/27/11

Comments: _____

Analyst: Jerome Greuel Date: 10/27/11

Page: 139 of _____

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\102611\
Data File : 10261106.D
Acq On : 26 Oct 2011 16:30
Operator : JJG
Sample : Flow Check#102511-01
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 26 17:08:06 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	14.928	49	179286	10000.00 pptv	0.00
23) 1,4-Difluorobenzene	18.697	114	666053	10000.00 pptv	-0.02
36) Chlorobenzene-d5	23.657	117	604337	10000.00 pptv	0.00

System Monitoring Compounds					
45) BFB(4-Bromochlorobenzene)	25.177	174	586232	9957.83 pptv	0.00

Spiked Amount 10000.000 Recovery = 99.58%

Target Compounds					Qvalue
2) Chlorodifluoromethane	0.000	51	0	N.D. d	
3) Dichlorodifluoromethane	4.184	85	59	N.D.	
4) Chloromethane	4.441	50	67	N.D.	
5) Dichlorotetrafluoroethane	4.681	85	16	N.D.	
6) VinylChloride	4.852	62	50	N.D.	
7) 1,3-Butadiene	0.000	54	0	N.D.	
8) Bromomethane	5.521	96	22	N.D.	
9) Chloroethane	5.949	64	20	N.D.	
10) Dichlorofluoromethane	6.206	67	25	N.D.	
11) VinylBromide	6.651	108	10	N.D.	
12) Trichlorofluoromethane	7.611	101	46	N.D.	
13) 1,1-Dichloroethene	9.135	61	8	N.D.	
14) AllylChloride	9.838	41	9	N.D.	
15) Trichlorotrifluoroethane	10.369	101	84	N.D.	
16) trans-1,2-Dichloroethene	12.066	61	2	N.D.	
17) 1,1-Dichloroethane	0.000	63	0	N.D.	
18) MTBE	12.974	73	4	N.D.	
19) cis-1,2-Dichloroethene	14.619	61	9	N.D.	
20) Chloroform	15.288	83	39	N.D.	
21) 1,2-Dichloroethane	16.813	62	8	N.D.	
22) 1,1,1-Trichloroethane	17.292	97	6	N.D.	
24) Benzene	18.046	78	162	N.D.	
25) CarbonTetrachloride	18.286	117	23	N.D.	
26) 1,2-Dichloropropane	19.297	76	4	N.D.	
27) Bromodichloromethane	19.554	83	35	N.D.	
28) Trichloroethene	19.623	130	47	N.D.	
29) cis-1,3-Dichloropropene	20.685	75	8	N.D.	
30) trans-1,3-Dichloropropene	21.285	75	14	N.D.	
31) 1,1,2-Trichloroethane	0.000	97	0	N.D.	

10/26/11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\102611\
Data File : 10261106.D
Acq On : 26 Oct 2011 16:30
Operator : JJG
Sample : Flow Check#102511-01
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 26 17:08:06 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units Dev(Min)
32) Toluene	21.812	91	2625	<36.47 pptv
33) Dibromochloromethane	22.245	129	6	N.D.
34) 1,2-Dibromoethane	22.527	107	10	N.D.
35) Tetrachloroethene	23.017	166	95	N.D.
37) Chlorobenzene	23.694	112	78	N.D.
38) Ethylbenzene	24.079	91	175	N.D.
39) m&p-Xylene	24.249	106	110	N.D.
40) Bromoform	24.327	173	18	N.D.
41) Styrene	24.605	104	43	N.D.
42) 1,1,2,2-Tetrachloroethane	24.698	83	37	N.D.
43) o-Xylene	24.713	91	75	N.D.
44) 1,2,3-Trichloropropane	24.837	110	16	N.D.
46) 4-Ethyltoluene	25.981	105	37	N.D.
47) 1,3,5-Trimethylbenzene	26.058	105	45	N.D.
48) 1,2,4-Trimethylbenzene	26.491	105	87	N.D.
49) BenzylChloride	26.645	91	32	N.D.
50) 1,3-Dichlorobenzene	26.676	146	54	N.D.
51) 1,4-Dichlorobenzene	26.754	146	91	N.D.
52) 1,2-Dichlorobenzene	27.140	146	54	N.D.
53) 1,2-Dibromo-3-chloropr...	27.635	157	20	N.D.
54) 1,2,4-Trichlorobenzene	29.228	180	12	N.D.
55) Hexachlorobutadiene	29.831	225	28	N.D.

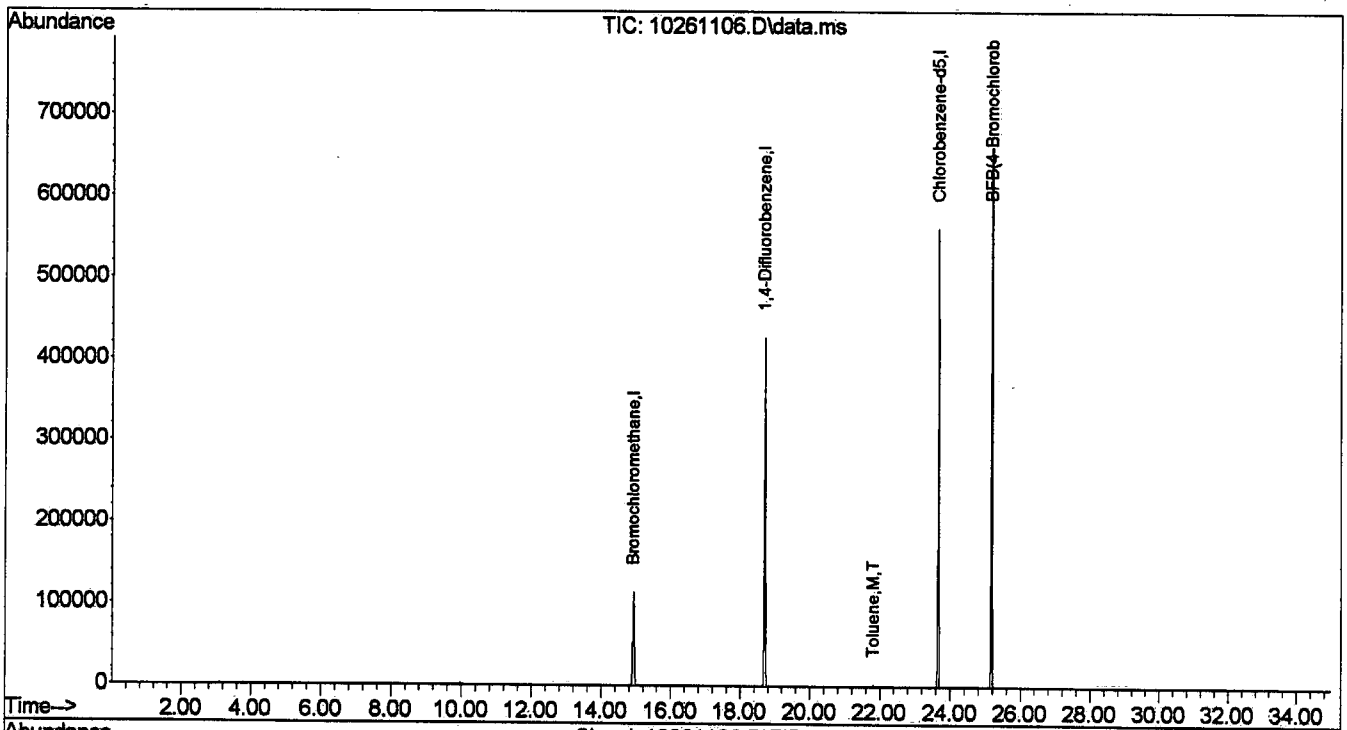
(#) = qualifier out of range (m) = manual integration (+) = signals summed

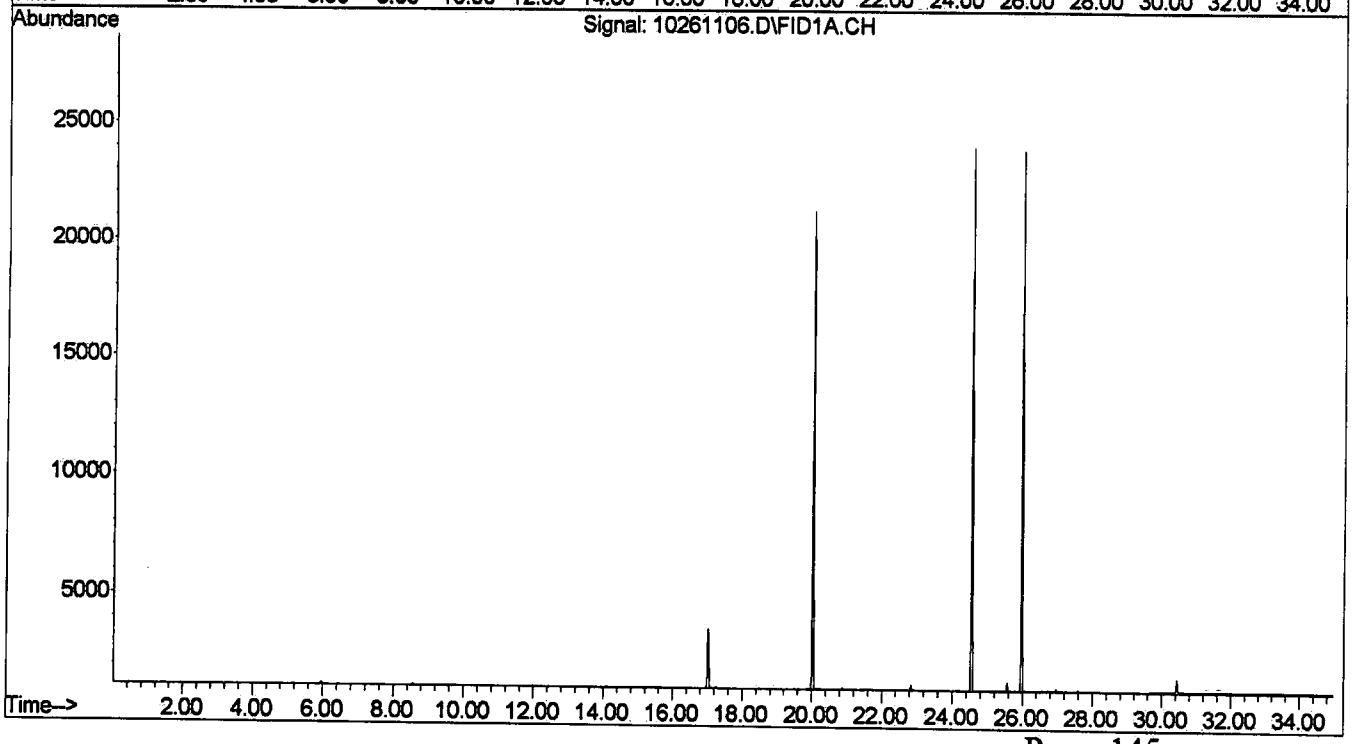
10/20/11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\MS01\2011\102611\
Data File : 10261106.D
Acq On : 26 Oct 2011 16:30
Operator : JJG
Sample : Flow Check#102511-01
Misc : IS/Surr: PS082311-02 + 500mL (Sig #1); (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 26 17:08:06 2011
Quant Method : C:\msdchem\1\METHODS\2011\SIM102511.M
Quant Title : TO-15
QLast Update : Tue Oct 25 17:54:29 2011
Response via : Initial Calibration





SIM102511.M Wed Oct 26 17:08:15 2011