ICF International
Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
Phone: (510) 412-2300 Fax: (510) 412-2304

DATE: ~~August 20, 2015~~ Sep 11, 2015

TO: Richard Bauer, Chemistry TM, EPA Region 9, Laboratory Section, MTS-2

FROM: Ziyad Rajabi, Organic Group Leader

SUBJECT: Analytical Results for TDF 10101245

As assigned under EPA Contract No. EP-W-13-029, TDF 10101245, ESAT completed analysis of four air samples for the Middlefield-Ellis-Whisman project, Case R15S82, SDG 15224C, Work Order 1508028 for TO 15 SIM following EPA Region 9 Laboratory SOP 314 based on method TO15. The draft analytical report and raw data package are attached.

All current assignments for this TDF are complete. If you have any questions regarding this information please contact me at extension 22390.

EPA Region 9 Laboratory

DATA PACKAGE

Analysis:	**TO15 SIM**
Project Number:	**R15S82**
SDG Number:	**15224C**
Work Order:	**1508028**
ESAT DCN:	**18205**

Contents

- **Review Forms**
- **Tracking Forms**
- ***Sample Preparation***
- **Data**
  -Initial Calibration Data
  -Sample Data
- ***Miscellaneous Data***
- ***Canister Certification Data***

Sections in italics are included as applicable

REVIEW FORMS

PROJECT NOTES

MEW 2015 Sewer Pathway Investigation

Edit Done

21 day TAT

Report ug/m3

Send report copy (.pdf), Standard Excel EDD, and electronic copy of COC to Lee.Alana@epa.gov

Project Analyte and Reporting List:
Tetrachloroethene (PCE)
Trichloroethene (TCE)
Cis-1,2-dichloroethene (cis-1,2-DCE)
trans-1,2-DCE
Vinyl Chloride
Chloroform
1,2-Dichlorobenzene (1,2-DCB)
1,1-Dichloroethane (1,1-DCA)
1,1-Dichloroethene (1,1-DCE)
Freon-113
1,1,1-trichloroethane (1,1,1-TCA)
Benzene
Toluene
Ethylbenzene
o-Xylene
m,p-xylene

General Project Management and ESAT Contractor Oversight Review

Project Number: R15S82 SDG: 15224C

Analysis: TO 15 SIM Number of Pages: 440

Reviewer: Christopher Caguranga

- [x] Review project notes and requirements (including TDF) and verify that correct analytical procedures and any special instructions were followed. Note any significant deviations or omissions in report narrative or return to contractor for correction.
- [x] Review project memo field for each work order and include information pertinent to data users in report narrative. (Information important only to chemist reviewing the raw data package should be included in data package, but not in the report narrative).
- [x] Review chain of custody documentation and verify that information in report corresponds correctly. Verify that any sample shipping or handling issues are properly documented and reported.
- [x] Review analytical report and QC report and verify that qualifier flags for holding times, sample handling, surrogates, blanks, blank spikes, matrix QC, and calibration range have been appropriately applied.
- [x] Review LIMS Data Entry table for unaddressed outliers.
- [x] Verify that all major sections of data package are present.

Comments:

09/15/15

Reviewer Signature Date 09/15/15

G:\USER\ESAT\# LAB DATA Deliverables\R15S82\15224C-TO15SIM-18205.docx

ESAT Region 9 | **ICF International**
Case: R15S82 | **Analysis:** TO15 SIM | **TDF:** 10101245 | **Matrix:** air
DCN: 18205 | **Site:** Middlefield-Ellis-Whisman | **SDG:** 15224C

ESAT REGION 9 DATA PACKAGE TECHNICAL REVIEW GUIDE

Reviewer:	Package Prep (P): LLH	Technical (T): EM	Final (F): IR
	Date: 08/18/15	Date: 9/2/15	Date: 9-11-15

P T F N/A (✓ indicates that the item is present and reviewed for accuracy and completeness)

Report Section

- ☑ ☑ ☑ ESAT Cover Memo (original)
- ☑ ☑ ☑ TDF included and requirements met (e.g. project analytes, project QLs, special procedures)
- ☑ ☑ ☑ Draft LIMS Report

Data Package Cover

- ☑ ☑ ☐ ☑ Case, SDG, Work Order(s), TDF#-DCN [First numbered page in the data package]

Review Forms

- ☑ ☑ ☑ EPA Review Form and Technical Review Guide included and complete.
- em ☑ ☑ ☐ ☒ LIMS memo field; include as applicable.
- ☐ ☐ ☐ ☒ Discrepancy form(s) include as applicable
- ☑ ☑ ☑ ☐ Daily folder review forms are complete and reviewed; QC outliers noted
- ☑ ☑ ☑ ☐ Analysis matrix listing all analytical runs is included, as applicable

Tracking Forms

- ☑ ☑ ☑ Work Orders and Chains of Custody forms included and reviewed.
- ☑ ☑ ☑ Preparation and analyses performed within holding times. Qualify and/or explain deviations in memo field
- ☑ ☑ ☑ ☐ Cooler temperatures recorded on COC are within specification. Qualify and/or explain deviations in memo field

Sample Preparation

- ☑ ☑ ☑ ☐ Bench sheets and extraction logs, where applicable
- ☐ ☐ ☐ ☒ Sample cleanup data and records (e.g. GPC logs)
- ☐ ☐ ☐ ☒ Homogenization and Moisture data

Initial Calibration Data

Group ICAL data by instrument and analysis date:

- ☑ ☑ ☑ ☐ All ICALs associated with samples are present, reviewed, and pass SOP criteria. (If failure, discrepancy form must be included)
- ☑ ☑ ☑ ☐ Check for misidentification (e.g. isomers such as dichlorobenzene)

Sample Data

Group data for the following areas in sections by method, instrument, and analysis date.

Continuing Calibrations

- ☑ ☑ ☑ ☐ All CCALs associated with samples are present and meet SOP criteria. If not, discrepancy form included.
- ☑ ☑ ☐ Average RRFs from associated ICAL are correctly transposed to CCAL summary form
- ☑ ☑ ☐ CCAL RRFs and %Ds calculated correctly. Check at least 1 surrogate & 1 target analyte
- ☑ ☑ ☐ Check %Ds and RRFs against SOP criteria

ESAT Region 9 | **ICF International**
Case: R15S82 | **Analysis:** TO15 SIM | **TDF:** 10101245 | **Matrix:** air
DCN: 18205 | **Site:** Middlefield-Ellis-Whisman | **SDG:** 15224C

P T F N/A (✓ indicates that the item is present and reviewed for accuracy and completeness)

Quantitation Limit Standards

☐ ☑ ☐ ☐ Percent recoveries of 60-140% met; outliers noted and flagged

Laboratory Control Samples

☑ ☑ ☑ Percent recoveries met. If not, discrepancy form included unless not required because: _____

Method Blanks

☑ ☑ ☑ Present and no target analyte results > ½ QL; if not, flag data as appropriate

~~MS/MSD~~ or Duplicate Data

☑ ☑ ☑ ☐ Percent recoveries and RPDs were met; outliers are noted and flagged. Note significant deviations in LIMS memo field

Sample Data

☑ ☑ ☑ ☐ Bench sheet(s) and injection or run logs present for all samples
☑ ☑ ☑ ☐ Internal standards meet SOP criteria
☐ ☐ ☐ ☑ System Monitoring Compound/Surrogate recoveries met; outliers are noted and flagged
☑ ☑ ☐ All non-detects are reported as ND on the quantitation report and explained for QC samples
☑ ☑ ☐ Quantitation results are correctly calculated. Check at least one surrogate or one target analyte
☑ ☑ ☑ ☐ Mass spectral data are present for all target analytes
☑ ☑ ☑ ☐ Check for manual integrations (m) identified on quantitation reports. Verify presence of manual integration data, initialed and dated by a supervisor
☑ ☑ ☑ ☐ Compound concentrations exceeding the upper range of the instrument are reported from the dilution run
☑ ☑ Check for carry-over contamination
☐ ☐ ☐ ☑ Dilutions and reruns appropriate.
☐ ☐ ☑ TICs properly identified; TIC report and data present; proper TIC name used (Organics)
☑ ☑ ☑ ☐ QC outliers are appropriately flagged in LIMS

Miscellaneous Data

☐ ☐ ☐ ☑ Storage blank data present
☐ ☐ ☐ ☑ Other data, as applicable _____

Canister Certification Data (TO 15 only)

☑ ☑ ☑ ☐ Data and supporting QC present

Standards Records

☑ ☑ ☑ ☐ LIMS Standards pdf created and filed as:
I:\PDF\Standard\ R15S82 - 15224C - TO15SIM.pdf

For ESAT Files: ESAT Review form (original) and Cover Memo (copy)

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	TO15-SIM	Analyst Initial	LLH	Reviewer Initial	[illegible]	Batch Sequence	- S15H054
Instrument ID	AG5973M	Date Analyzed	08/14/15	Date	8/18/15	Chemstation Last Update	Aug 17 09:33:25 2015
Cases	#1508014			SDGs	Initial Calibration		

Review each item listed below. As problems are discovered list them in the non-conformance section of the form and provide and explanation in the discussion part of the table.

NA	A	PR	Item Description
	X	✓	Runlog (Present, legible, peer reviewed)
	X	✓	Tune/ Degradation Standard
	X	✓	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
	X	✓	Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation.
[illegible] X	X	X	QLS (level, frequency, and recovery) (include Chemstation summary)
X			Method / Extraction / Storage Blanks (frequency and contamination levels)
X			Surrogate Recoveries
	X	✓	IS Areas (SOP criteria met)
	X	✓	LCS/SCV (level, frequency, and recovery) (include Chemstation summary)
X			DUPLICATE
X			Samples (within calibration range, results calculated correctly)
X			Manual Integration Verified
X			Standard Prep Log (all pages present, legible, peer reviewed, legible)
X			Sample Prep/Extraction (all pages present, legible, peer reviewed)
X			Others: **SIM + 112TCA, 1122PCA**

NA = not applicable A = Analyst check PR = Peer Review Check

Non-conformance Report

QC	File ID	Result	QC Limit	High Bias	Low Bias	Flag ND	Flag Hits	Discussion
ICAL								OK
SCV2								OK

Clean Canister: 6L: 400 mL:

C:\Documents and Settings\INS_AG5973M\Desktop\daily review_TO-15SIM.doc

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	**TO15-SIM**	**Analyst Initial**	**LLH**	**Reviewer Initial**	[illegible]	**Batch Sequence**	**B15H074 S15H061**
Instrument ID	**AG5973M**	**Date Analyzed**	**08/17/15**	**Date**	8/19/15	**Chemstation Last Update**	**Aug 17 09:33:25 2015**
Cases	**R15S82**			**SDGs**	**15224C**		

Review each item listed below. As problems are discovered list them in the non-conformance section of the form and provide and explanation in the discussion part of the table.

NA	A	PR	Item Description
	X	✓	Runlog (Present, legible, peer reviewed)
	X	✓	Tune/ Degradation Standard
	X	✓	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
	X	✓	Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation.
	X	✓	QLS (level, frequency, and recovery) (include Chemstation summary)
	X	✓	Method / Extraction / Storage Blanks (frequency and contamination levels)
X			Surrogate Recoveries
	X	✓	IS Areas (SOP criteria met)
	X	✓	LCS/SCV (level, frequency, and recovery) (include Chemstation summary)
	X	✓	DUPLICATE
	X	✓	Samples (within calibration range, results calculated correctly)
X			Manual Integration Verified
X			Standard Prep Log (all pages present, legible, peer reviewed, legible)
X			Sample Prep/Extraction (all pages present, legible, peer reviewed)
X			Others: **SIM + 112TCA, 1122PCA**

NA = not applicable A = Analyst check PR = Peer Review Check

Non-conformance Report

QC	File ID	Result	QC Limit	High Bias	Low Bias	Flag ND	Flag Hits	Discussion
ICAL								OK
SCV2								OK
BS1	081715M02	116	57 – 111 %	X			X	1,2-Dibromoethane - NT

Clean Canister: 6L: 400 mL:

USEPA Region 9 Laboratory
Organic Analysis Summary

Case: R15S82
SDG: 15224C
Analysis: TO15-SIM

Analyst: LLH
Reviewed by: [illegible]
Workorder: 1508028

	400mL	SAMPLE ID	Dilution		
Instrument:			8/12/2015	AG5973M	AG5973M
Analysis Date:				8/12/2015	8/17/2015
Sequence:				S15H046	S15H061
Batch:				B15H054	B15H074
1508028-12	122	861Leong-OUT	1.48	60ml NU - too dilute	600ml RE1 RPT
1508028-13	123	PRVY-Co[redacted]Fairchild-OUT	1.49	60ml NU - too dilute	600ml RE1 RPT
1508028-14	134	600National-Trench1	1.48	60ml NU - too dilute	600ml RE1 RPT
B15H074-DUP1	134	600National-Trench1	1.48		600ml RPT
1508028-15	116	600National-OUT	1.48	60ml NU - too dilute	600ml RE1 RPT

Blank				B15H054-BLK1	B15H074-BLK1
Blank Spike				B15H054-BS1	B15H074-BS1
Duplicate					B15H074-DUP1

Definitions

RPT	Report
NU	Not Used
OC	Over calibration
OTT	Out of tune time
nX	Dilution, where n is dilution factor
NT	non-target

SAMPLE TRACKING FORMS

WORK ORDER

Printed: 8/12/2015 3:15:21PM

1508028

EPA Region 9 Laboratory

Client: California Site Cleanup Section 3
Project: MEW 2015 Sewer Pathway Investigation
Project Number: R15S82

Report To:
California Site Cleanup Section 3
Alana Lee
75 Hawthorne Street
San Francisco, CA 94105
Phone: (415) 972-3141
Fax: (415) 947-3526

Project Contact
California Site Cleanup Section 3
Alana Lee
75 Hawthorne Street
San Francisco, CA 94105
Phone :(415) 972-3141
Fax: (415) 947-3526

Shipping Containers	Description	Temp C	Custody Seals?	Containers Intact?	Labels COC Agree?	Preservation Confirmed?	Received on Ice?	Comments
Box	Default Cooler	21	No	Yes	Yes	No	No	

Date Due:	09/02/15 15:00 (21 day TAT)	SDG:	15224C
Received By:	Richard Bauer	Date Received:	08/12/15 08:20
Logged In By:	Susan Sturges	Date Logged In:	08/12/15 11:33

Analysis	Hold Time Expires	Comments
1508028-01 SC-861Leong [Air] Sampled 08/11/15 11:10 (GMT-08:00) Pacific Time (US & Can 1098		
VOCs, Soil Gas	09/10/15	16 analytes
1508028-02 SC-870Leong [Air] Sampled 08/11/15 11:20 (GMT-08:00) Pacific Time (US & Can 851		
VOCs, Soil Gas	09/10/15	16 analytes
1508028-03 SC-850Leong1 [Air] Sampled 08/11/15 11:27 (GMT-08:00) Pacific Time (US & Can 1101		
VOCs, Soil Gas	09/10/15	16 analytes
1508028-04 SC-850Leong2 [Air] Sampled 08/11/15 11:29 (GMT-08:00) Pacific Time (US & Can 1104		
VOCs, Soil Gas	09/10/15	16 analytes
1508028-05 SC-[redacted]Leong [Air] Sampled 08/11/15 12:02 (GMT-08:00) Pacific Time (US & Can 867		
VOCs, Soil Gas	09/10/15	16 analytes
1508028-06 SC-[redacted]Leong [Air] Sampled 08/11/15 12:07 (GMT-08:00) Pacific Time (US & Can 639		
VOCs, Soil Gas	09/10/15	16 analytes

00010

WORK ORDER

Printed: 8/12/2015 3:15:21PM

1508028

EPA Region 9 Laboratory

Client: California Site Cleanup Section 3 **Project Number:** R15S82
Project: MEW 2015 Sewer Pathway Investigation

Analysis	Hold Time Expires	Comments

Analysis	Expires	Comments
1508028-07 SC-[redacted]Leong [Air] Sampled 08/11/15 12:11 (GMT-08:00) Pacific Time (US &		**Can 868**
VOCs, Soil Gas	09/10/15	16 analytes
1508028-08 SC-850Leong3 [Air] Sampled 08/11/15 12:18 (GMT-08:00) Pacific Time (US &		**Can 636**
VOCs, Soil Gas	09/10/15	16 analytes
1508028-09 SC-889Leong [Air] Sampled 08/11/15 12:31 (GMT-08:00) Pacific Time (US &		**Can 632**
VOCs, Soil Gas	09/10/15	16 analytes
1508028-10 SC[redacted]epperwood [Air] Sampled 08/11/15 12:54 (GMT-08:00) Pacific Time (US &		**Can 1581**
VOCs, Soil Gas	09/10/15	16 analytes
1508028-11 SC-[redacted]vandale [Air] Sampled 08/11/15 13:07 (GMT-08:00) Pacific Time (US &		**Can 1590**
VOCs, Soil Gas	09/10/15	16 analytes
1508028-12 861Leong-OUT [Air] Sampled 08/11/15 11:10 (GMT-08:00) Pacific Time (US &		**Can 122**
TO15 SIM	09/10/15	16 analytes
1508028-13 [redacted]airchild-OUT [Air] Sampled 08/11/15 15:05 (GMT-08:00) Pacific Time (US &		**Can 123**
TO15 SIM	09/10/15	16 analytes
1508028-14 600National-Trench1 [Air] Sampled 08/11/15 15:53 (GMT-08:00) Pacific Time (US &		**Can 134**
TO15 SIM	09/10/15	16 analytes
1508028-15 600National-OUT [Air] Sampled 08/11/15 16:01 (GMT-08:00) Pacific Time (US &		**Can 116**
TO15 SIM	09/10/15	16 analytes

Reviewed By

Date

00011

U.S. Environmental Protection Agency	CHAIN OF CUSTODY RECORD	EPA REGION 9 75 Hawthorne Street San Francisco, California 94105
Project / Case Number R15S82 MEW - M6	Project: MEW OU3 Sewer Pathway Investigation - Aug 2015	EPA Project Manager contact: Alana Lee, 415-972-3141 Lee.Alana@epa.gov
EPA R9 Laboratory	Samplers: (Signature) [signature] [signature] [signature]	Analysis Requested: TO15

Lab ID	Sample ID (Location)	Canister ID	Comp	Grab	Sample Date	Sample Time	Initial Pressur	Final Pressure	PID reading	COMMENTS
	✓ F5-062	1580		X	8/11/2015	1322	-30	0"		Evandale/Emily
	✓ F5-060	1121		X	8/11/2015	1327	-30	0"		
	✓ F5-058	895		X	8/11/2015	1404	-30	0"		Leong - E
	✓ F5-056	852		X	8/11/2015	1408	-30	0"		Leong - W - centerline
	✓ F5-054-1	630		X	8/11/2015	1413	-30	0"		300 ml purge
	✓ F5-054-2	646		X	8/11/2015	1416	-30	0"		85 g Leong Pkg ~~Winston/Leong~~
	✓ F5-011	1110		X	8/11/2015	1425	-30	0"		Winston/Leong
	✓ F5-036	877		X	8/11/2015	1444	-30	0"		
	✓ F5-038	1097		X	8/11/2015	1450	-30	0"		
	✓ F6-002	1102		X	8/11/2015	1456	-30	0"		
	✓ F6-006	1105		X	8/11/2015	1504	-30	0"		
	✓ F6-003	1059		X	8/11/2015	1521	-30	0"		Evandale/Tyrella
	✓ F5-064	896		X	8/11/2015	1531	-30	0"		52/46 Evandale
	MH-Emily	1108		X	8/11/2015	1542	-30	0"		Emily/55 Evandale

Relinquished by: (Signature)	Date/Time	Received by: (Signature) Date/Time	
[signature]	8/12/15 8:20 AM	[signature]	8/12/15 0820

Received for Laboratory by: (Signature)	Date/Time	Temp
	✓	21°C

U.S. Environmental Protection Agency	CHAIN OF CUSTODY RECORD	EPA REGION 9 75 Hawthorne Street San Francisco, California 94105
Project / Case Number R15S82 MEW - M6	Project: MEW OU3 Sewer Pathway Investigation - Aug 2015	EPA Project Manager contact: Alana Lee, 415-972-3141 Lee.Alana@epa.gov
EPA R9 Laboratory	Samplers: (Signature) Matt C Plato [signature]	Analysis Requested: TO15

Lab ID	Sample ID (Location)	Canister ID	Comp	Grab	Sample Date	Sample Time	Initial Pressur	Final Pressure	PID reading	COMMENTS
	✓SC-3Fairchild1	899		X	8/11/2015	9:40	-30	0"		
	✓SC-3Fairchild2	873		X	8/11/2015	9:45	-30	0"		
	✓SC-3Fairchild3	882		X	8/11/2015	10:03	-30	0"		
	SC-[redacted]airchild	1589		X	8/11/2015	10:12	-30	0"		
	✓SC-[redacted]Tyrella	1106		X	8/11/2015	10:30	-30	0"		
	SC-[redacted]yrella	1056		X	8/11/2015	10:37	-30	0"		
	~~SC-10 Evandale~~	~~882~~		X	8/11/2015		-30	0"		NO SAMPLE
	SC-861 Leong	1098		X	8/11/2015	11:10	-30	0"		
	SC-870 Leong	851		X	8/11/2015	11:20	-30	0"		
	SC-850 Leong1	1101		X	8/11/2015	11:27	-30	0"		
	SC-850 Leong2	1104		X	8/11/2015	11:29	-30	0"		
	~~SC-[redacted]Leong~~	~~899~~		X	8/11/2015		-30	0"		No Sample
	SC-[redacted]eong	867		X	8/11/2015	1202	-30	0"		3ft tube, no cap
	SC-[redacted]Leong	639		X	8/11/2015	1207	-30	0"		3ft, no cap

Relinquished by: (Signature)	Date/Time	Received by: (Signature) Date/Time	
[signature]	8/12/15 8:20 AM		

Received for Laboratory by: (Signature)	Date/Time	Temp
[signature]	8/12/15 0820	21°C

U.S. Environmental Protection Agency	CHAIN OF CUSTODY RECORD	EPA REGION 9 75 Hawthorne Street San Francisco, California 94105
Project / Case Number R15S82 MEW - M6	Project: MEW OU3 Sewer Pathway Investigation - Aug 2015	EPA Project Manager contact: Alana Lee, 415-972-3141 Lee.Alana@epa.gov
EPA R9 Laboratory	Samplers: (Signature) Mathew Plato [signature]	Analysis Requested: TO15

Lab ID	Sample ID (Location)	Canister ID	Comp	Grab	Sample Date	Sample Time	Initial Pressur	Final Pressure	PID reading	COMMENTS
	SC-[redacted] Leong	868		X	8/11/2015	12:11	-30	0"		no cap, 3ft
	SC-850 Leong 3	636		X	8/11/2015	12:18	-30	0"		3ft
	SC-889 Leong	632		X	8/11/2015	12:31	-30	0"		1.5 ft
	SC-[redacted] Pepperwood	1581		X	8/11/2015	12:54	-30	0"		3 ft
	SC-[redacted] Evandale	1590		X	8/11/2015	1307	-30	0"		3ft, no cap
				X	8/11/2015		-30	0"		
				X	8/11/2015		-30	0"		
				X	8/11/2015		-30	0"		
				X	8/11/2015		-30	0"		
				X	8/11/2015		-30	0"		
				X	8/11/2015		-30	0"		
				X	8/11/2015		-30	0"		
				X	8/11/2015		-30	0"		
				X	8/11/2015		-30	0"		

[signature] 8/11/2015

Relinquished by: (Signature)	Date/Time	Received by: (Signature) Date/Time
[signature]	8/12/15 8:20 AM	[signature] 8/12/15 0820

Received for Laboratory by: (Signature)	Date/Time	Temp
		21°C

U.S. Environmental Protection Agency	CHAIN OF CUSTODY RECORD	EPA REGION 9 75 Hawthorne Street San Francisco, California 94105
Project / Case Number: R15S82 MEW - M6	Project: **MEW OU3 Sewer Pathway Investigation - August 2015**	EPA Project Manager contact: Alana Lee, 415-972-3141 Lee.Alana@epa.gov
EPA Region 9 Laboratory	Samplers: (Signature) Matthew C Plater [signature] [signature]	**Analysis Requested: TO15 SIM**

Lab ID	Sample ID (Location)	Canister ID	Flow Ctrl ID	Comp	Grab	Sample Date	Sample Time	Sample Pickup Date/Time	Initial Pressure	Final Pressure	COMMENTS
	861 Leong - OUT	0122	N/A		X	8/11/2015	11:10	8/11/2015 11:13	-30	-5	Ambient
	PRVY-Control [redacted] Fairchild - OUT	123	N/A		X	8/11/2015	1505	1507	-30	-10	Ambient
	600 Nahond - Trench 1	134	N/A		X	8/11/2015	1553	1555	-30	0	Trench - Street
	600 Nahond - OUT	116	N/A		X	8/11/2015	1601	1602	-30	-9	Ambient - Street - Windy

[signature] 8/11/2015

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	8/12/15 8:20 AM	[signature]	8/12/15 0820

Received for Laboratory by: (Signature)	Date/Time	Temp
		21°C

Cooler/Box/Env 1,2 of 2

U.S. Environmental Protection Agency
Region 9 Richmond Laboratory

1337 South 46th Street
Richmond, CA 94804

Sample Receipt Checklist

Project No: R155826 **Work Order No(s):** 1508027,-28 **Date:** 8/12/15 **by** BLS

CUSTODY SEALS Intact

Check if applies: ☐ External Seals ☐ Internal Seals ☒ Hand Delivered

☐ Yes ☐ No ☒ N/A- None

TEMPERATURE 21 °C Within Acceptable Range

☒ Yes ☐ No ☒ Ambient OK

Check if applies:
☐ Provided Temp Blank ☐ Between 6°C to 10°C ☐ Still cooling (sampled today & iced)
☐ Previously Frozen ☐ Insufficient/Melted Ice ☐ Delivery Delay

SAMPLE CONTAINERS Intact

☒ Yes ☐ No

If not intact, was volume recoverable for analysis? ☐ Yes ☐ No ☒ N/A

Check if applies: ☐ Bottle/Jar/Vial broken ☐ Cap broken or loose ☐ Other _____

CHAIN OF CUSTODY Received

COC complete and consistent with labels ☒ Yes ☐ No

Check if applies: ☐ Not relinquished ☐ Inconsistency resolved ☐ Follow-up needed (see comments) ☒ Yes ☐ No ☐ N/A

TAT and analyses match scheduling ☒ Yes ☐ No ☐ N/A

Check if applies: ☐ Preliminary Results ☐ Rush Request ☐ 7-day TAT

Within hold times ☐ Expires today ☒ Yes ☐ No ☐ N/A

All shipping and sample containers accounted for ☒ Yes ☐ No ☐ N/A

PRESERVATION / FILTRATION

☒ N/A No chem. pres./filtra.

Check if applies: ☐ Sample Receiving to preserve
☐ Analyst to filter and/or preserve

Preserved and/or filtered samples correctly identified ☐ Yes ☐ No ☒ N/A

Preserved samples (non-VOA vials) measured at correct pH ☐ Yes ☐ No ☒ N/A

Preservation/measured pH _____

Sample Receiving Preservation and/or pH Adjustments*

Sample ID	Initial pH	Pres.	Date/time Pres. added	Adjusted pH	pH after 16-hrs (metals)	Date/time of pH recheck	Rechecked by

*(continue on back, if needed)

FOLLOW-UP / COMMENTS _____

SAMPLE PREPARATION

PREPARATION BENCH SHEET

B15H074

EPA Region 9 Laboratory

rinted: 8/18/2015 9:48:11AM

Project: R15S82 - MEW 2015 Sewer Pathway Investigation

Matrix: Air **Analysis:TO15 SIM** **Prepared using: Air - - General Air prep** **(No Surrogate)**

Lab Number	SampleName	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Prepared By	Extraction Comments
1508028-12RE1 A	861Leong-OUT	08/17/15 10:14	600	400					LLH	Can 122
1508028-13RE1 A	PRVY-CC [redacted]airchild-OUT	08/17/15 10:14	600	400					LLH	Can 123
1508028-14RE1 A	600National-Trench1	08/17/15 10:14	600	400					LLH	Can 134
1508028-15RE1 A	600National-OUT	08/17/15 10:14	600	400					LLH	Can 116
B15H074-BLK1	Blank	08/17/15 10:14	400	400					LLH	
B15H074-BS1	LCS	08/17/15 10:14	400	400	1533101		250000		LLH	
B15H074-DUP1	Duplicate	08/17/15 10:14	600	400		508028-14RE			LLH	

Reagents

Reagent #	Description

Preparation Reviewed By — Date: 8/19/15

TO15 DILUTION LOGBOOK

DATE/ INITIAL	TIME	LAB SAMPLE #	CLIENT SAMPLE #	CAN ID	INITIAL PRESSURE (PSI)	INITIAL VOL (mL)	FINAL VOL (mL)	FINAL PRESSURE (PSI)	AMBIENT PRESSURE (PSI)	DILUTION FACTOR
8/12/15 EM	1:43	1508028-12	861 Leong - OUT	122	13.7	6L	6L	20.4	29.94/14.71	1.48
	1:49	-13	[redacted] Fairchild - OUT	123	14.0	6L	6L	20.9	–	1.49
	1:53	-14	600 National Trench 1	134	13.7	6L	6L	20.4	–	1.48
	1:58	-15	600 National - OUT	119	13.5	6L	6L	20.1	–	1.48
	5:43	1508027-01	F5-062	1580	14	400	400	28.5	29.91/14.69	2.03
	5:48	-02	F5-060	1121	14.1	400	400	29.5	–	2.09
	5:49	-03	F5-058	895	14.2	400	400	29.6	–	2.08
	6:01	-04	F5-056	852	14.2	400	400	28.0	–	1.97
	6:04	-05	F5-054-1	630	14.5	400	400	29.7	–	2.04
	6:07	-06	F5-054-2	646	14.5	400	400	28.1	–	1.93
	6:09	-07	F5-011	1110	14.2	400	400	29.6	–	2.08
	6:11	-08	F5-036	877	14.2	400	400	29.5	–	2.07
	6:13	-09	F5-038	1097	14.1	400	400	29.5	–	2.09
	6:15	-10	F6-002	1102	14.2	400	400	29.5	–	2.07
	6:17	-11	F6-006	1105	14.4	400	400	29.6	–	2.06
	6:19	-12	F6-005	1059	14.1	400	400	29.5	–	2.07
	6:21	-13	F5-064	896	14.4	400	400	29.6	–	2.05
	6:23	-14	MH-Emily	1108	14.1	400	400	29.4	–	2.08
	6:33	-15	SC-3 Fairchild 1	899	14.5	400	400	29.6	–	2.04
	6:35	-16	SC-3 Fairchild 2	873	14.5	400	400	29.7	–	2.04
	6:37	-17	~~SC-3 Fairchild 3~~ [redacted] Fairchild em 8/12/15	882	14.5	400	400	29.7	–	2.04
	6:39	-18	SC-[redacted] Tyrela em 8/12/15	1589	14.3	400	400	28.6	–	2.00
	6:41	-19	SC-[redacted] Tyrela em 8/12/15	1106	14.4	400	400	29.6	–	2.05
	6:42	-20	~~SC-~~ [redacted] ~~Leong~~ em 8/12/15	1056	14.6	400	400	29.7	–	2.03

USEPA REGION 9 LABORATORY

TO15 DILUTION LOGBOOK 02-15.xls

Reviewed by: CM

Date: 8/13/15

Instrument: AG5973M

Analysis Date: 08/14/15

INITIAL CALIBRATION DATA

ANALYSIS SEQUENCE

S15H054

Instrument: AG5973M

Calibration ID: 1508014

Printed: 8/17/2015 9:43:21AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
S15H054-TUN1	QC		1		1410062			
S15H054-CAL1	QC		2		1533071			
S15H054-CAL2	QC		3		1533072			
S15H054-CAL3	QC		4		1533073			
S15H054-CAL4	QC		5		1533074			
S15H054-CAL5	QC		6		1533075			
S15H054-SCV1	QC		7		1533078			
S15H054-SCV2	QC		8		1533077			

Samples Loaded By Date

Data Processed By Date

----------SEQUENCE TABLE ----------

Sequence Name: C:\Smart\2015\081415SMAA.SEQ
Date: 08-17-2015
Time: 09:44:06
Int. Std Volume: 40 cc

Sample Name	Inlet #	Auto Pos	Samp Vol.	Cal Std Vol.	Method	Time
PRIME	1	1	50	40	C:\Smart\TO15.CTD	12:00
BFB	1	1	50	40	C:\Smart\TO15.CTD	12:00
CAL1 50pptv SIM+	1	1	50		C:\Smart\TO15.CTD	12:00
CAL2 150pptv SIM+	1	1	150		C:\Smart\TO15.CTD	12:00
CAL3 250pptv SIM+	1	1	250		C:\Smart\TO15.CTD	12:00
CAL4 350pptv SIM+	1	1	350		C:\Smart\TO15.CTD	12:00
CAL5 500pptv SIM+	1	1	500		C:\Smart\TO15.CTD	12:00
IBL	1	2	400		C:\Smart\TO15.CTD	12:00
CAL1 50pptv SIM+	1	1	50		C:\Smart\TO15.CTD	12:00
SCV1 250pptv SIM+	1	3	250		C:\Smart\TO15.CTD	12:00
SCV1 250pptv SIM+	1	3	250		C:\Smart\TO15.CTD	12:00
SCV2 250pptv SIM+	1	4	250		C:\Smart\TO15.CTD	12:00
SCV2 250pptv SIM+	1	4	250		C:\Smart\TO15.CTD	12:00

Injection Log

Directory: C:\MSDChem\1\2015\Data\081415MAA

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	081415M01.D	1.	PRIME		14 Aug 2015 13:09
2	1	081415M02.D	1.	S15H054-TUN1	BFB 1410062	14 Aug 2015 13:57
3	1	081415M03.D	1.	S15H054-CAL1	50pptv 1533096 SIM	14 Aug 2015 14:43
4	1	081415M04.D	1.	S15H054-CAL2	150pptv 1533097 SIM	14 Aug 2015 15:32
5	1	081415M05.D	1.	S15H054-CAL3	250pptv 1533098 SIM	14 Aug 2015 16:23
6	1	081415M06.D	1.	S15H054-CAL4	350pptv 1533099 SIM	14 Aug 2015 17:15
7	1	081415M07.D	1.	S15H054-CAL5	500pptv 1533100 SIM	14 Aug 2015 18:10
8	2	081415M08.D	1.	IBL	400ml IBL	14 Aug 2015 19:04
9	1	081415M09.D	1.	S15H054CAL1 (Nu)	50pptv 1533096 SIM	14 Aug 2015 19:50
10	3	081415M10.D	1.	S15H054SCV1	250pptv 1533078 SIM	14 Aug 2015 20:41
11	3	081415M11.D	1.	S15H054SCV1	250pptv 1533078 SIM	14 Aug 2015 21:31
12	4	081415M12.D	1.	S15H054-SCV2	250pptv 1533077 SIM	14 Aug 2015 22:21
13	4	081415M13.D	1.	S15H054SCV2 (Nu)	250pptv 1533077 SIM	14 Aug 2015 23:12

[illegible]

GC/MS QA-QC Check Report

Tune File : C:\MSDCHEM\1\2015\DATA\081415MAA\081415M02.D
Tune Time : 14 Aug 2015 1:57 pm

Daily Calibration File : C:\MSDCHEM\1\2015\DATA\081415MAA\081415M05.D

File	Sample	Surrogate Recovery %			
			75705	201195	194937
			Internal Standard Responses		
081415M03.D	S15H054-CAL1	66141	163292	155433	
081415M04.D	S15H054-CAL2	72508	183765	180181	
081415M05.D	S15H054-CAL3	75705	201195	194937	
081415M06.D	S15H054-CAL4	74671	208543	200810	
081415M07.D	S15H054-CAL5	68175	181704	162741	
081415M08.D	IBL	69105	182272	176487	
081415M09.D	S15H054CAL1	62233	158007	150019	NU - not needed
081415M10.D	S15H054SCV1	69634	174043	162665	NU - RR diff SCV std
081415M11.D	S15H054SCV1	69397	168111	157358	NU - RR diff SCV std
081415M12.D	S15H054-SCV2	63694	159953	151801	
081415M13.D	S15H054SCV2	68843	174444	163651	NU - not needed

(fails) - fails 24hr time check * - fails criteria

Created: Mon Aug 17 09:44:05 2015 AG5973M

Response Factor Report AG5973M

Method Path : C:\MSDCHEM\1\2015\METHOD\
Method File : 081415SMAA.M
Title : TO15SIM
Last Update : Mon Aug 17 09:33:25 2015
Response Via : Initial Calibration

Calibration Files
50 =081415M03.D 150 =081415M04.D 250 =081415M05.D
350 =081415M06.D 500 =081415M07.D

		Compound	50	150	250	350	500	Avg	%RSD
1)	I	BROMOCHLOROMETHANE	ISTD						
2)	T	Vinyl chloride	0.902	0.771	0.730	0.717	0.744	0.773	9.73
3)	T	1,3-Butadiene	0.668	0.577	0.551	0.552	0.588	0.587	8.19
4)	T	Bromoethene	0.763	0.651	0.630	0.643	0.708	0.679	8.19
5)	T	1,1,2-Trichloro-1,2	2.200	1.883	1.751	1.722	1.805	1.872	10.32
6)	T	1,1-Dichloroethene	1.158	1.010	0.989	1.017	1.119	1.059	7.09
7)	T	Dichloromethane	1.337	1.025	0.932	0.899	0.936	1.026	17.56
8)	T	tert-Butyl methyl e	1.043	1.107	1.177	1.291	1.480	1.220	14.12
9)	T	trans-1,2-Dichloroe	1.105	1.009	1.009	1.043	1.134	1.060	5.38
10)	T	Hexane	0.617	0.593	0.629	0.691	0.789	0.664	11.90
11)	T	1,1-Dichloroethane	1.566	1.361	1.284	1.269	1.341	1.364	8.74
12)	T	cis-1,2-Dichloroeth	0.690	0.620	0.612	0.635	0.687	0.649	5.71
13)	T	Chloroform	2.266	1.980	1.853	1.816	1.913	1.965	9.11
14)	T	1,1,1-Trichloroetha	2.465	2.215	2.097	2.080	2.461	2.264	8.35
15)	T	Carbon tetrachlorid	2.376	2.528	2.037	2.354	2.141	2.287	8.59
16)	I	1,4-DIFLUOROBENZENE	ISTD						
17)	T	Benzene	1.107	1.078	1.041	1.012	1.148	1.077	4.96
18)	T	1,2-Dichloroethane	0.610	0.534	0.485	0.457	0.503	0.518	11.32
19)	T	Trichloroethene	0.475	0.441	0.417	0.411	0.464	0.442	6.40
20)	T	1,2-Dichloropropane	0.385	0.361	0.336	0.323	0.362	0.353	6.85
21)	I	CHLOROBENZENE-d5	ISTD						
22)	T	Toluene	0.807	0.844	0.866	0.905	1.150	0.915	14.89
23)	T	1,1,2-Trichloroetha	0.463	0.445	0.411	0.396	0.474	0.438	7.66
24)	T	Tetrachloroethene	0.628	0.628	0.597	0.588	0.716	0.632	8.02
25)	T	1,2-Dibromoethane (	0.534	0.527	0.502	0.494	0.603	0.532	8.09
26)	T	Chlorobenzene	0.865	0.890	0.852	0.844	1.024	0.895	8.25
27)	T	Ethylbenzene	0.917	1.020	1.065	1.128	1.452	1.116	18.15
28)	T	m&p-Xylene	0.695	0.831	0.904	0.979	1.258	0.933	22.44
29)	T	o-Xylene	0.735	0.794	0.837	0.896	1.162	0.885	18.75
30)	T	Styrene	0.468	0.546	0.593	0.641	0.840	0.618	22.65
31)	T	1,1,2,2-Tetrachloro	0.976	0.883	0.808	0.772	0.924	0.873	9.55
32)	T	1,3-Dichlorobenzene	0.967	0.874	0.832	0.829	1.007	0.902	8.99
33)	T	1,4-Dichlorobenzene	0.872	0.797	0.770	0.783	0.962	0.837	9.59
34)	T	1,2-Dichlorobenzene	0.957	0.837	0.784	0.777	0.942	0.859	9.98

(#) = Out of Range

RT DUPLICATE REPORT

Instrument Name: AG5973M
Sample Name: S15H054-CAL3
Misc Info: 250pptv 1533098 SIM
Date Acquired: 8/14/2015 16:23
QLast Update: Fri Aug 14 16:40:50 2015
Operator: LLH

#	Name	RT	CONC	Qion	
1)	BROMOCHLOROMETHANE	15.242	341.000	49	14.709
2)	Vinyl chloride	5.085	377.175	62	
3)	1,3-Butadiene	5.177	312.536	54	
4)	Bromoethene	6.975	317.112	106	
5)	1,1,2-Trichloro-1,2,2-trifluoroethane	8.920	316.376	150.9	
6)	1,1-Dichloroethene	8.972	347.228	61	
7)	Dichloromethane	11.088	315.622	49	
8)	tert-Butyl methyl ether (MTBE)	11.841	355.698	73	
9)	trans-1,2-Dichloroethene	11.852	308.200	61	
10)	Hexane	12.521	378.663	57	
11)	1,1-Dichloroethane	13.229	363.428	63	
12)	cis-1,2-Dichloroethene	14.709	353.280	96	
13)	Chloroform	15.414	324.751	82.9	
14)	1,1,1-Trichloroethane	15.706	301.627	96.9	
15)	Carbon tetrachloride	15.982	312.768	116.9	
16)	1,4-DIFLUOROBENZENE	17.296	375.000	114	16.642
17)	Benzene	16.470	334.792	78	
18)	1,2-Dichloroethane	16.642	308.455	62	
19)	Trichloroethene	17.718	320.380	129.9	
20)	1,2-Dichloropropane	18.217	324.175	63	
21)	CHLOROBENZENE-d5	22.231	341.000	117	21.548
22)	Toluene	19.952	274.852	91	
23)	1,1,2-Trichloroethane	20.711	239.916	96.9	
24)	Tetrachloroethene	20.814	246.246	165.9	
25)	1,2-Dibromoethane (EDB)	21.548	258.701	106.9	
26)	Chlorobenzene	22.282	270.410	112	
27)	Ethylbenzene	22.368	286.308	91	
28)	m&p-Xylene	22.558	586.261	91	
29)	o-Xylene	23.207	283.701	91	
30)	Styrene	23.241	323.540	104	
31)	1,1,2,2-Tetrachloroethane	24.285	243.788	82.9	
32)	1,3-Dichlorobenzene	25.789	281.730	146	
33)	1,4-Dichlorobenzene	25.939	300.674	146	
34)	1,2-Dichlorobenzene	26.548	265.105	146	

CHEMSTATION CONCENTRATION REPORT

Instrument Name: AG5973M
Sample Name: S15H054-SCV2
Misc Info: 250pptv 1533077 SIM
Date Acquired: 8/14/2015 22:21
QLast Update: Mon Aug 17 09:33:25 2(
Operator: LLH

#	Name	L1	L2	L3	L4	L5
1)	BROMOCHLOROMETHANE	341.00	341.00	341.00	341.00	341.00
2)	Vinyl chloride	60.00	180.00	300.00	420.00	600.00
3)	1,3-Butadiene	50.00	150.00	250.00	350.00	500.00
4)	Bromoethene	55.00	165.00	275.00	385.00	550.00
5)	1,1,2-Trichloro-1,2,2-trifluoroethane	55.00	165.00	275.00	385.00	550.00
6)	1,1-Dichloroethene	55.00	165.00	275.00	385.00	550.00
7)	Dichloromethane	55.00	165.00	275.00	385.00	550.00
8)	tert-Butyl methyl ether (MTBE)	55.00	165.00	275.00	385.00	550.00
9)	trans-1,2-Dichloroethene	50.00	150.00	250.00	350.00	500.00
10)	Hexane	55.00	165.00	275.00	385.00	550.00
11)	1,1-Dichloroethane	60.00	180.00	300.00	420.00	600.00
12)	cis-1,2-Dichloroethene	55.00	165.00	275.00	385.00	550.00
13)	Chloroform	55.00	165.00	275.00	385.00	550.00
14)	1,1,1-Trichloroethane	50.00	150.00	250.00	350.00	500.00
15)	Carbon tetrachloride	55.00	165.00	275.00	385.00	550.00
16)	1,4-DIFLUOROBENZENE	375.00	375.00	375.00	375.00	375.00
17)	Benzene	55.00	165.00	275.00	385.00	550.00
18)	1,2-Dichloroethane	55.00	165.00	275.00	385.00	550.00
19)	Trichloroethene	55.00	165.00	275.00	385.00	550.00
20)	1,2-Dichloropropane	55.00	165.00	275.00	385.00	550.00
21)	CHLOROBENZENE-d5	341.00	341.00	341.00	341.00	341.00
22)	Toluene	55.00	165.00	275.00	385.00	550.00
23)	1,1,2-Trichloroethane	55.00	165.00	275.00	385.00	550.00
24)	Tetrachloroethene	55.00	165.00	275.00	385.00	550.00
25)	1,2-Dibromoethane (EDB)	55.00	165.00	275.00	385.00	550.00
26)	Chlorobenzene	55.00	165.00	275.00	385.00	550.00
27)	Ethylbenzene	55.00	165.00	275.00	385.00	550.00
28)	m&p-Xylene	110.00	330.00	550.00	770.00	1100.00
29)	o-Xylene	55.00	165.00	275.00	385.00	550.00
30)	Styrene	55.00	165.00	275.00	385.00	550.00
31)	1,1,2,2-Tetrachloroethane	55.00	165.00	275.00	385.00	550.00
32)	1,3-Dichlorobenzene	55.00	165.00	275.00	385.00	550.00
33)	1,4-Dichlorobenzene	55.00	165.00	275.00	385.00	550.00
34)	1,2-Dichlorobenzene	55.00	165.00	275.00	385.00	550.00

CALIBRATION AREA REPORT

Instrument Name: AG5973M
Sample Name: S15H054-SCV2
Misc Info: 250pptv 1533077 SIM
Date Acquired: 8/14/2015 22:21
QLast Update: Mon Aug 17 09:33:25 20
Operator: LLH

#	Name	L1	L2	L3	L4	L5
1)	BROMOCHLOROMETHANE	66141	72508	75705	74671	68175
2)	Vinyl chloride	10503	29514	48597	65974	89201
3)	1,3-Butadiene	6482	18392	30563	42331	58732
4)	Bromoethene	8142	22849	38469	54222	77808
5)	1,1,2-Trichloro-1,2,2-trifluoroethane	23469	66057	106898	145157	198504
6)	1,1-Dichloroethene	12355	35427	60378	85734	123073
7)	Dichloromethane	14261	35968	56896	75768	102886
8)	tert-Butyl methyl ether (MTBE)	11127	38831	71879	108810	162770
9)	trans-1,2-Dichloroethene	10713	32177	55999	79957	113378
10)	Hexane	6579	20803	38426	58248	86810
11)	1,1-Dichloroethane	18229	52108	85499	116747	160817
12)	cis-1,2-Dichloroethene	7362	21746	37391	53544	75503
13)	Chloroform	24171	69457	113102	153105	210308
14)	1,1,1-Trichloroethane	23901	70660	116397	159444	246052
15)	Carbon tetrachloride	25346	88693	124348	198452	235469
16)	1,4-DIFLUOROBENZENE	163292	183765	201195	208543	181704
17)	Benzene	26507	87165	153663	216718	305975
18)	1,2-Dichloroethane	14614	43188	71553	97933	134050
19)	Trichloroethene	11386	35673	61543	87967	123671
20)	1,2-Dichloropropane	9216	29196	49540	69207	96583
21)	CHLOROBENZENE-d5	155433	180181	194937	200810	162741
22)	Toluene	20243	73571	136209	205273	301778
23)	1,1,2-Trichloroethane	11602	38779	64611	89695	124455
24)	Tetrachloroethene	15734	54746	93911	133407	188048
25)	1,2-Dibromoethane (EDB)	13394	45984	78975	112035	158371
26)	Chlorobenzene	21697	77604	134008	191430	268671
27)	Ethylbenzene	23001	88908	167364	255674	381082
28)	m&p-Xylene	34860	144870	284100	444128	660349
29)	o-Xylene	18426	69197	131520	203122	305040
30)	Styrene	11727	47572	93270	145429	220512
31)	1,1,2,2-Tetrachloroethane	24478	76994	127038	175041	242504
32)	1,3-Dichlorobenzene	24251	76218	130830	187874	264275
33)	1,4-Dichlorobenzene	21863	69529	121082	177478	252447
34)	1,2-Dichlorobenzene	24003	72958	123288	176055	247180

CHEMSTATION VS LIMS CONCENTRATION REPORT

Instrument Name: AG5973M
Sample Name: S15H054-SCV2
Misc Info: 250pptv 1533077 SIM
Date Acquired: 8/14/2015 22:21
QLast Update: Mon Aug 17 09:33:25 2015
Operator: LLH

#	Name	L1	L2	L3	L4	L5
		1	2	5	10	15
1)	BROMOCHLOROMETHANE					
2)	Vinyl chloride	OK	OK	OK	OK	OK
3)	1,3-Butadiene	OK	OK	OK	OK	OK
4)	Bromoethene	OK	OK	OK	OK	OK
5)	1,1,2-Trichloro-1,2,2-trifluoroethane	OK	OK	OK	OK	OK
6)	1,1-Dichloroethene	OK	OK	OK	OK	OK
7)	Dichloromethane	OK	OK	OK	OK	OK
8)	tert-Butyl methyl ether (MTBE)	OK	OK	OK	OK	OK
9)	trans-1,2-Dichloroethene	OK	OK	OK	OK	OK
10)	Hexane	OK	OK	OK	OK	OK
11)	1,1-Dichloroethane	OK	OK	OK	OK	OK
12)	cis-1,2-Dichloroethene	OK	OK	OK	OK	OK
13)	Chloroform	OK	OK	OK	OK	OK
14)	1,1,1-Trichloroethane	OK	OK	OK	OK	OK
15)	Carbon tetrachloride	OK	OK	OK	OK	OK
16)	1,4-DIFLUOROBENZENE					
17)	Benzene	OK	OK	OK	OK	OK
18)	1,2-Dichloroethane	OK	OK	OK	OK	OK
19)	Trichloroethene	OK	OK	OK	OK	OK
20)	1,2-Dichloropropane	OK	OK	OK	OK	OK
21)	CHLOROBENZENE-d5					
22)	Toluene	OK	OK	OK	OK	OK
23)	1,1,2-Trichloroethane	OK	OK	OK	OK	OK
24)	Tetrachloroethene	OK	OK	OK	OK	OK
25)	1,2-Dibromoethane (EDB)	OK	OK	OK	OK	OK
26)	Chlorobenzene	OK	OK	OK	OK	OK
27)	Ethylbenzene	OK	OK	OK	OK	OK
28)	m&p-Xylene	OK	OK	OK	OK	OK
29)	o-Xylene	OK	OK	OK	OK	OK
30)	Styrene	OK	OK	OK	OK	OK
31)	1,1,2,2-Tetrachloroethane	OK	OK	OK	OK	OK
32)	1,3-Dichlorobenzene	OK	OK	OK	OK	OK
33)	1,4-Dichlorobenzene	OK	OK	OK	OK	OK
34)	1,2-Dichlorobenzene	OK	OK	OK	OK	OK

LIMS CONCENTRATION REPORT

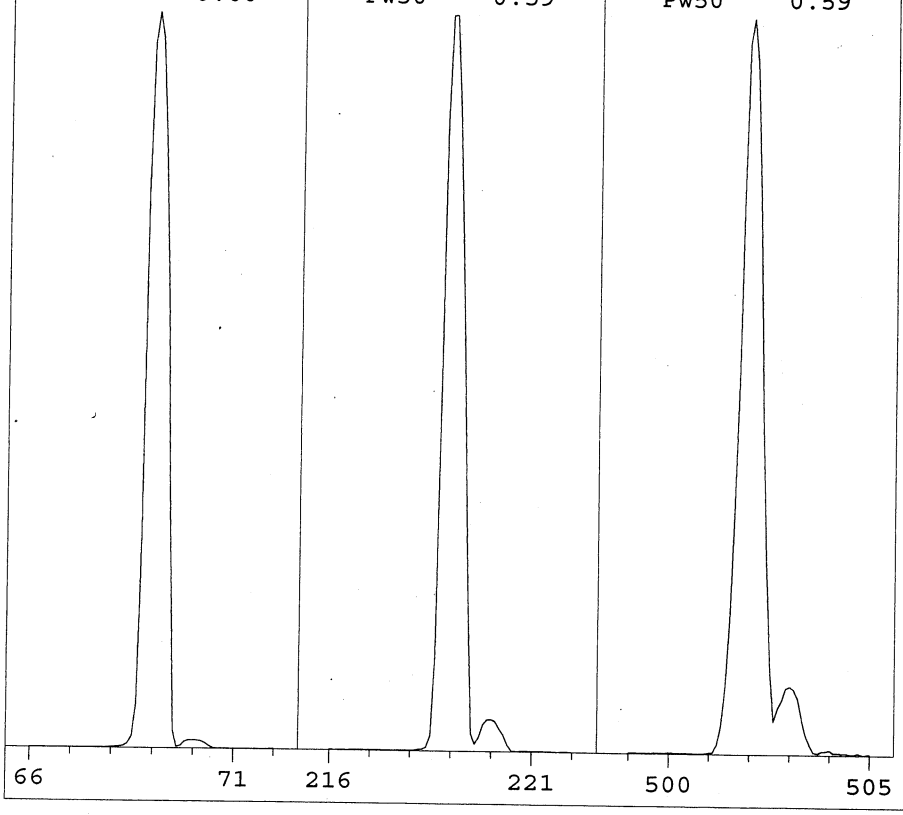
Instrument Name: AG5973M
Sample Name: S15H054-SCV2
Misc Info: 250pptv 1533077 SIM
Date Acquired: 8/14/2015 22:21
QLast Update: Mon Aug 17 09:33:25 :
Operator: LLH

#	Name	Amount	L1	L2	L3	L4	L5
			50	150	250	350	500
1)	BROMOCHLOROMETHANE	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
2)	Vinyl chloride	0.00048	60	180	300	420	600
3)	1,3-Butadiene	0.0004	50	150	250	350	500
4)	Bromoethene	0.00044	55	165	275	385	550
5)	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00044	55	165	275	385	550
6)	1,1-Dichloroethene	0.00044	55	165	275	385	550
7)	Dichloromethane	0.00044	55	165	275	385	550
8)	tert-Butyl methyl ether (MTBE)	0.00044	55	165	275	385	550
9)	trans-1,2-Dichloroethene	0.0004	50	150	250	350	500
10)	Hexane	0.00044	55	165	275	385	550
11)	1,1-Dichloroethane	0.00048	60	180	300	420	600
12)	cis-1,2-Dichloroethene	0.00044	55	165	275	385	550
13)	Chloroform	0.00044	55	165	275	385	550
14)	1,1,1-Trichloroethane	0.0004	50	150	250	350	500
15)	Carbon tetrachloride	0.00044	55	165	275	385	550
16)	1,4-DIFLUOROBENZENE	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
17)	Benzene	0.00044	55	165	275	385	550
18)	1,2-Dichloroethane	0.00044	55	165	275	385	550
19)	Trichloroethene	0.00044	55	165	275	385	550
20)	1,2-Dichloropropane	0.00044	55	165	275	385	550
21)	CHLOROBENZENE-d5	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
22)	Toluene	0.00044	55	165	275	385	550
23)	1,1,2-Trichloroethane	0.00044	55	165	275	385	550
24)	Tetrachloroethene	0.00044	55	165	275	385	550
25)	1,2-Dibromoethane (EDB)	0.00044	55	165	275	385	550
26)	Chlorobenzene	0.00044	55	165	275	385	550
27)	Ethylbenzene	0.00044	55	165	275	385	550
28)	m&p-Xylene	0.00088	110	330	550	770	1100
29)	o-Xylene	0.00044	55	165	275	385	550
30)	Styrene	0.00044	55	165	275	385	550
31)	1,1,2,2-Tetrachloroethane	0.00044	55	165	275	385	550
32)	1,3-Dichlorobenzene	0.000440	55	165	275	385	550
33)	1,4-Dichlorobenzene	0.00044	55	165	275	385	550
34)	1,2-Dichlorobenzene	0.00044	55	165	275	385	550

Fri Aug 14 10:45:46 2015
C:\MSDCHEM\1\5973N\ATUNE.U

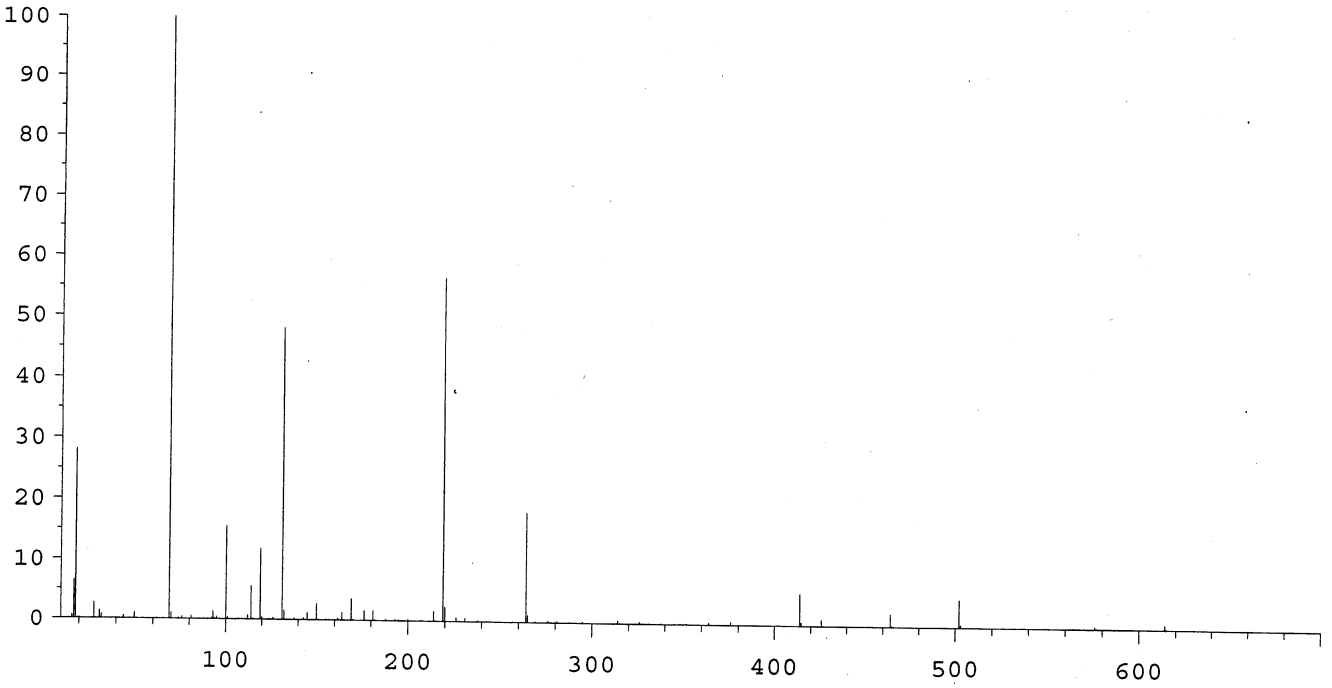
Instrument: AG5973M

Mass	69.00	Mass	219.00	Mass	502.00
Ab	478117	Ab	270197	Ab	22161
Pw50	0.60	Pw50	0.59	Pw50	0.59



Ion Pol	POS	MassGain	317
		MassOffs	-10
Emission	34.6	AmuGain	2349
ElEnrgy	69.9	AmuOffs	126
Filament	1	Wid219	-0.025
		DC Pol	POS
Repeller	31.30		
IonFcus	90.2	HEDEnab	ON
EntLens	9.5	EMVolts	1247
EntOffs	20.33		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Zones:			
MS Source	230	TurboSpd	100
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
153 peaks Base: 69.00 Abundance: 429824

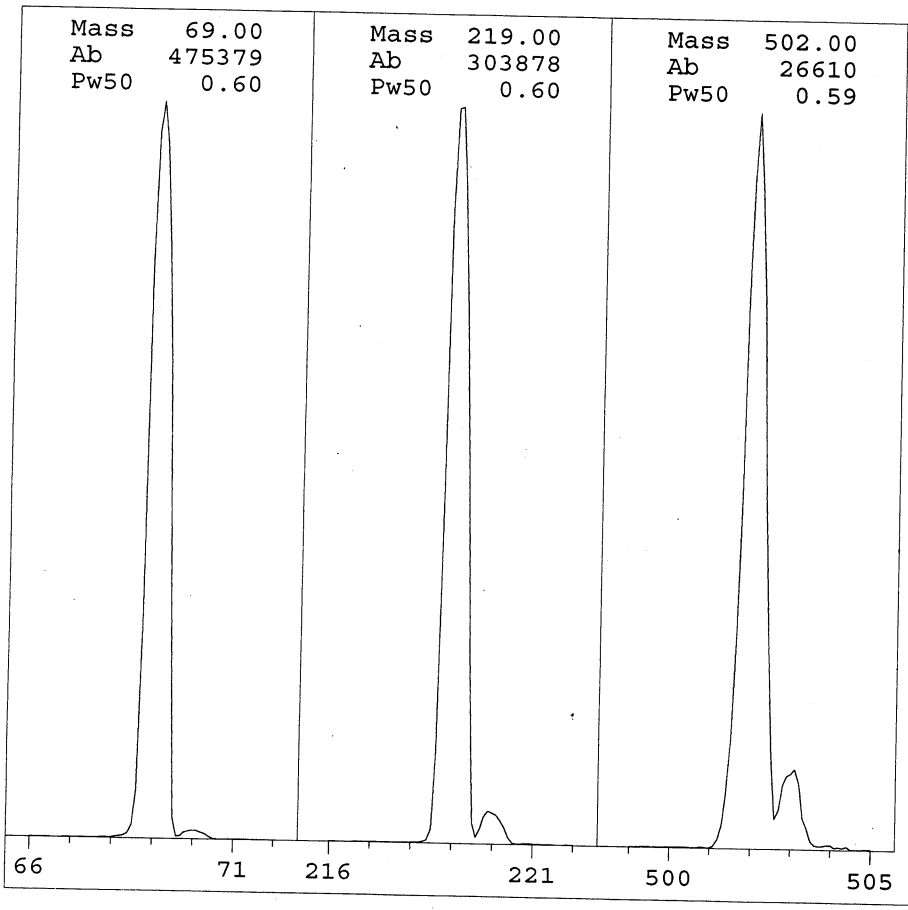


Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	429824	100.00	70.00	4552	1.06
219.00	243264	56.60	220.00	10291	4.23
502.00	19736	4.59	503.00	1997	10.12

Fri Aug 14 10:46:23 2015
C:\MSDCHEM\1\5973N\BFB081415.U

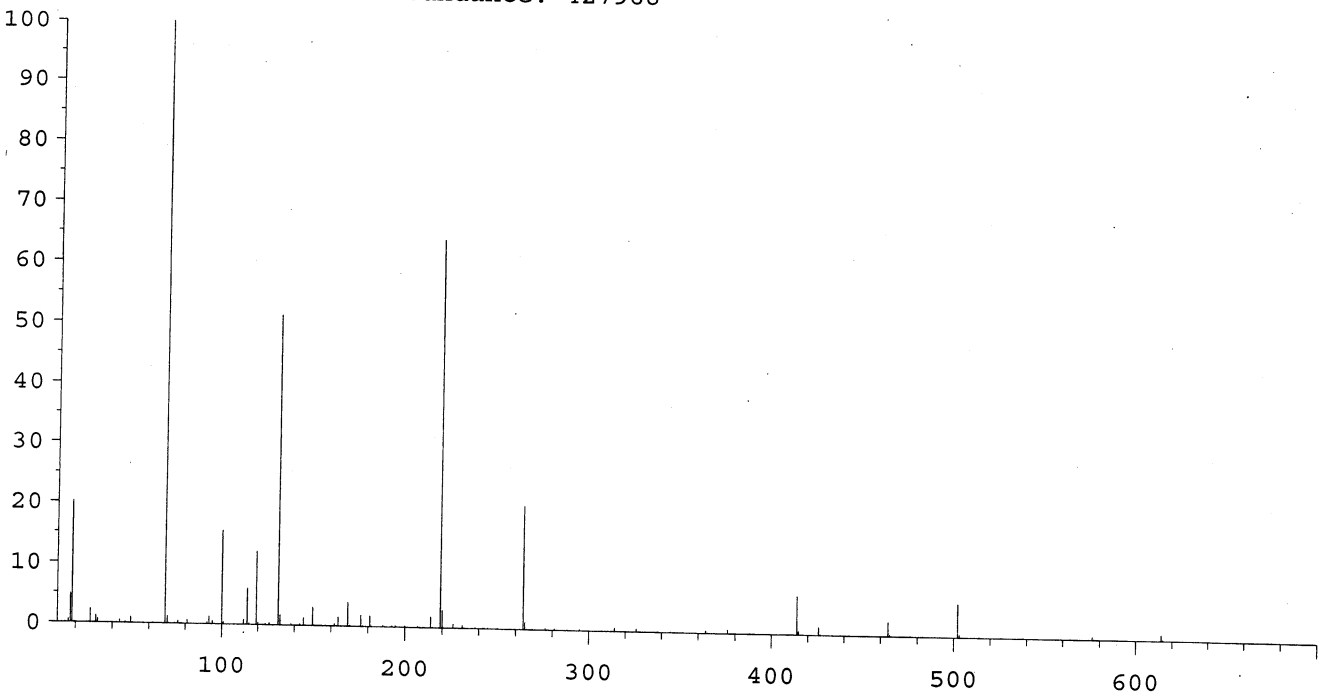
5973

Instrument: AG5973M



Ion Pol	POS	MassGain	317
		MassOffs	-10
Emission	34.6	AmuGain	2349
ElEnrgy	69.9	AmuOffs	126
Filament	1	Wid219	-0.025
		DC Pol	POS
Repeller	32.97		
IonFcus	90.2	HEDEnab	ON
EntLens	9.5	EMVolts	1247
EntOffs	20.33		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Zones:			
MS Source	230	TurboSpd	100
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
155 peaks Base: 69.00 Abundance: 427968



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	427968	100.00	70.10	4933	1.15
219.00	274688	64.18	220.00	12391	4.51
502.00	23648	5.53	503.00	2103	8.89

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M01.D
Acq On : 14 Aug 2015 1:09 pm
InstName : AG5973M
Operator : LLH
Sample : PRIME
Misc :
ALS Vial : 1 Sample Multiplier: 1

NU

Quant Time: Aug 14 13:54:30 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Fri Aug 14 09:06:52 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.25	49	55883	341.00	pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.29	114	123113	375.00	pptv	0.00
21) CHLOROBENZENE-d5	22.23	117	131510	341.00	pptv	0.00

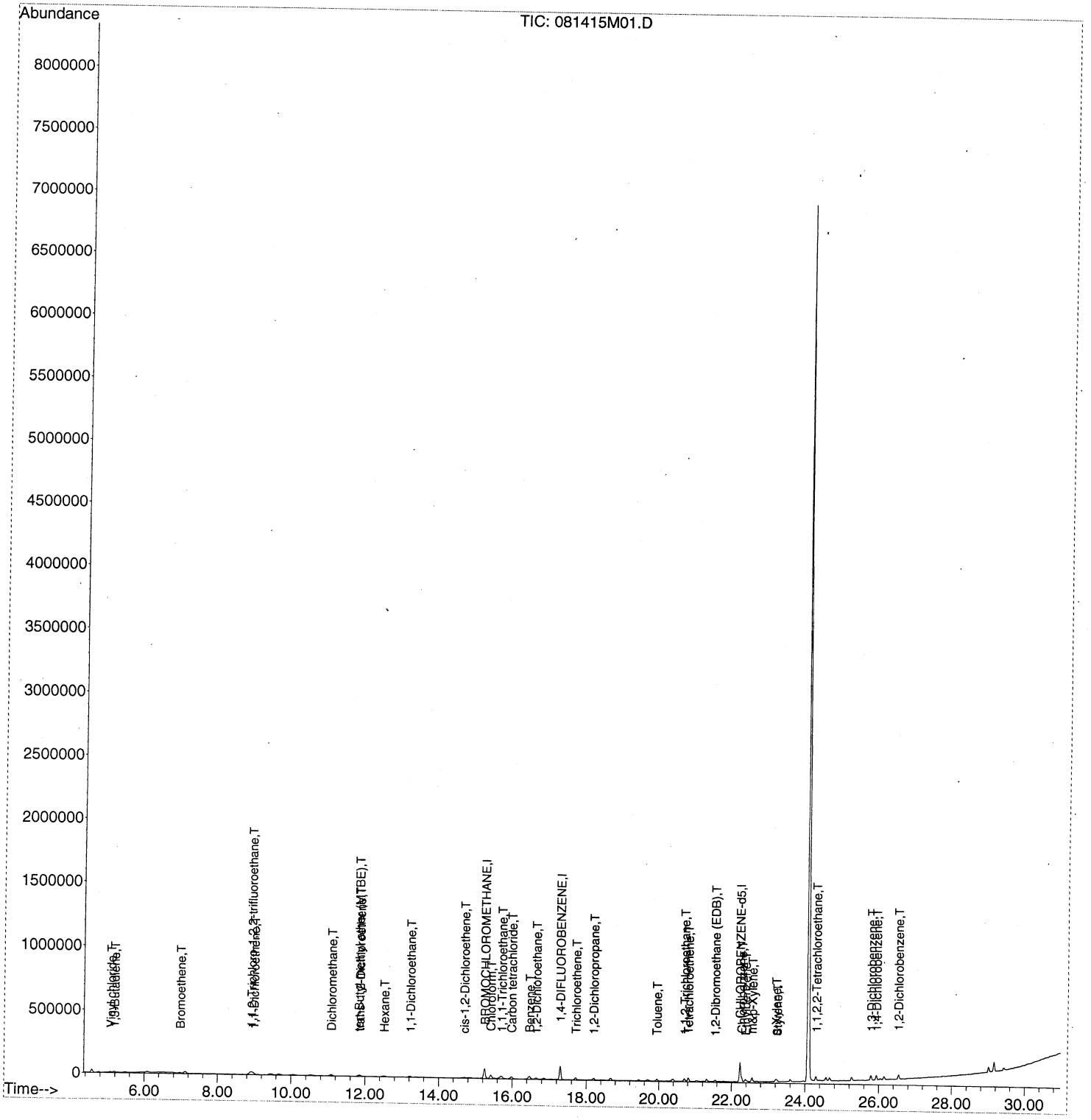
Target Compounds						Qvalue
2) Vinyl chloride	5.08	62	7564	113.55	pptv #	56
3) 1,3-Butadiene	5.18	54	4581	97.47	pptv	94
4) Bromoethene	6.98	106	5978	85.17	pptv #	60
5) 1,1,2-Trichloro-1,2,2-trif	8.92	151	24210	126.60	pptv	94
6) 1,1-Dichloroethene	8.99	61	8352	90.02	pptv	99
7) Dichloromethane	11.08	49	11231	113.64	pptv	95
8) tert-Butyl methyl ether (M	11.83	73	7196	58.81	pptv	77
9) trans-1,2-Dichloroethene	11.85	61	7319	71.78	pptv	99
10) Hexane	12.51	57	4403	80.41	pptv #	81
11) 1,1-Dichloroethane	13.22	63	12895	101.20	pptv #	75
12) cis-1,2-Dichloroethene	14.69	96	4668	81.99	pptv	92
13) Chloroform	15.41	83	17629	90.83	pptv #	86
14) 1,1,1-Trichloroethane	15.71	97	17034	79.31	pptv	98
15) Carbon tetrachloride	15.98	117	18258	86.03	pptv	99
17) Benzene	16.47	78	18314	87.19	pptv	99
18) 1,2-Dichloroethane	16.64	62	10781	100.29	pptv #	66
19) Trichloroethene	17.72	130	8513	93.06	pptv	99
20) 1,2-Dichloropropane	18.21	63	6653	93.78	pptv	90
22) Toluene	19.94	91	14166	46.24	pptv	96
23) 1,1,2-Trichloroethane	20.70	97	9554	54.93	pptv	97
24) Tetrachloroethene	20.81	166	11875	48.23	pptv	96
25) 1,2-Dibromoethane (EDB)	21.54	107	10194	53.55	pptv #	76
26) Chlorobenzene	22.28	112	17486	57.37	pptv	88
27) Ethylbenzene	22.38	91	18274	51.22	pptv	94
28) m&p-Xylene	22.56	91	26388	90.07	pptv	97
29) o-Xylene	23.21	91	14699	52.05	pptv	97
30) Styrene	23.25	104	9924	60.27	pptv	97
31) 1,1,2,2-Tetrachloroethane	24.30	83	22653	70.01	pptv	99
32) 1,3-Dichlorobenzene	25.79	146	22827	87.09	pptv	97
33) 1,4-Dichlorobenzene	25.93	146	20790	95.81	pptv	95
34) 1,2-Dichlorobenzene	26.54	146	22053	81.29	pptv	99

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

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M01.D
Acq On : 14 Aug 2015 1:09 pm
InstName : AG5973M
Operator : LLH
Sample : PRIME
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 13:54:30 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Fri Aug 14 09:06:52 2015
Response via : Initial Calibration

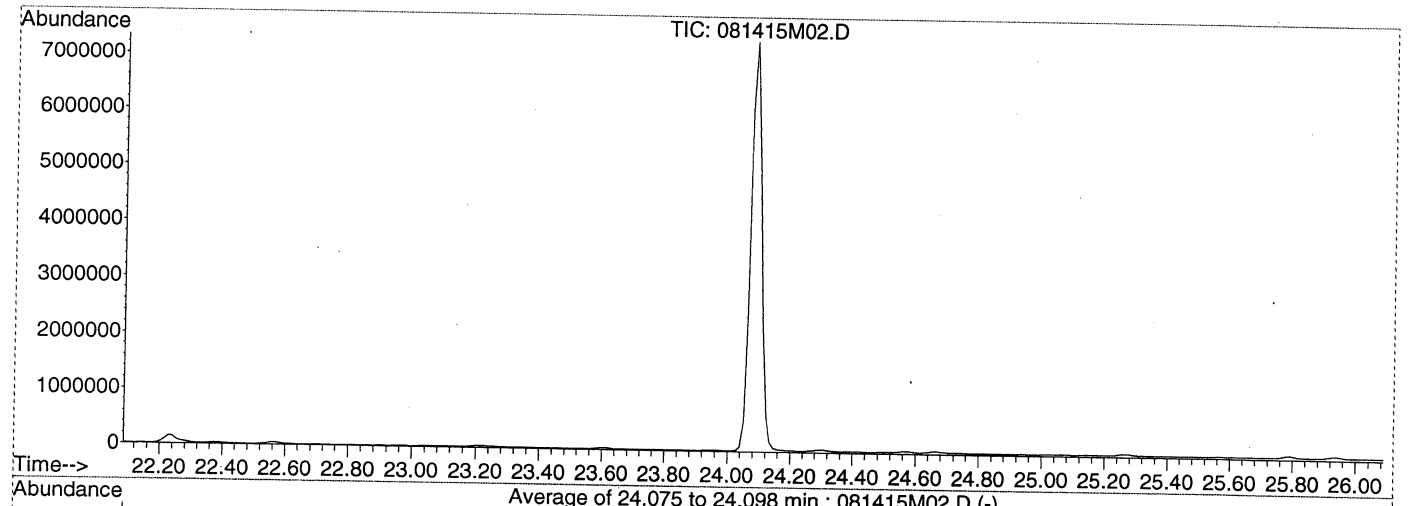


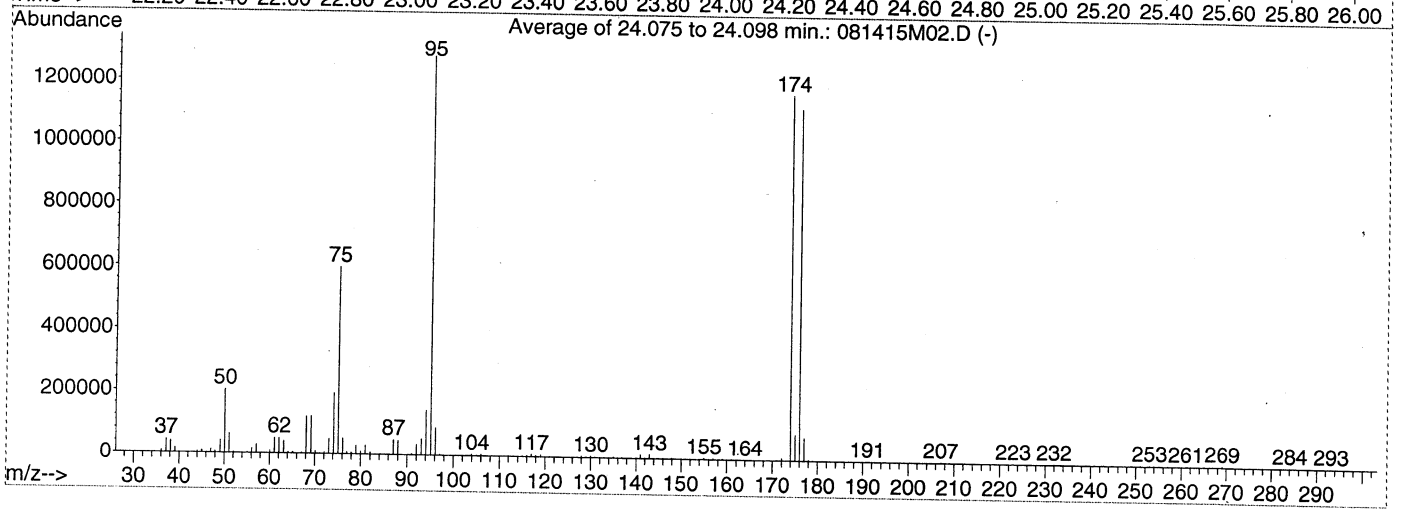
BFB

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M02.D
Acq On : 14 Aug 2015 1:57 pm
InstName : AG5973M
Operator : LLH
Sample : S15H054-TUN1
Misc : BFB 1410062
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\MSDCHEM\1\2015\METHOD\081415BFB.M
Title : TO15
Last Update : Mon Apr 06 12:32:18 2015





AutoFind: Scans 1668, 1669, 1670; Background Corrected with Scan 1661

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	15.9	203243	PASS
75	95	30	66	46.7	598165	PASS
95	95	100	100	100.0	1281877	PASS
96	95	5	9	6.8	87474	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	91.2	1169664	PASS
175	174	4	9	7.1	82605	PASS
176	174	93	101	96.2	1125077	PASS
177	176	5	9	6.6	74143	PASS

LLH 8/17/15

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M03.D
Acq On : 14 Aug 2015 2:43 pm
InstName : AG5973M
Operator : LLH
Sample : S15H054-CAL1
Misc : 50pptv 1533096 SIM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 16:40:27 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Fri Aug 14 16:13:51 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.25	49	66141	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.30	114	163292	375.00 pptv	0.00
21) CHLOROBENZENE-d5	22.23	117	155433	341.00 pptv	0.00

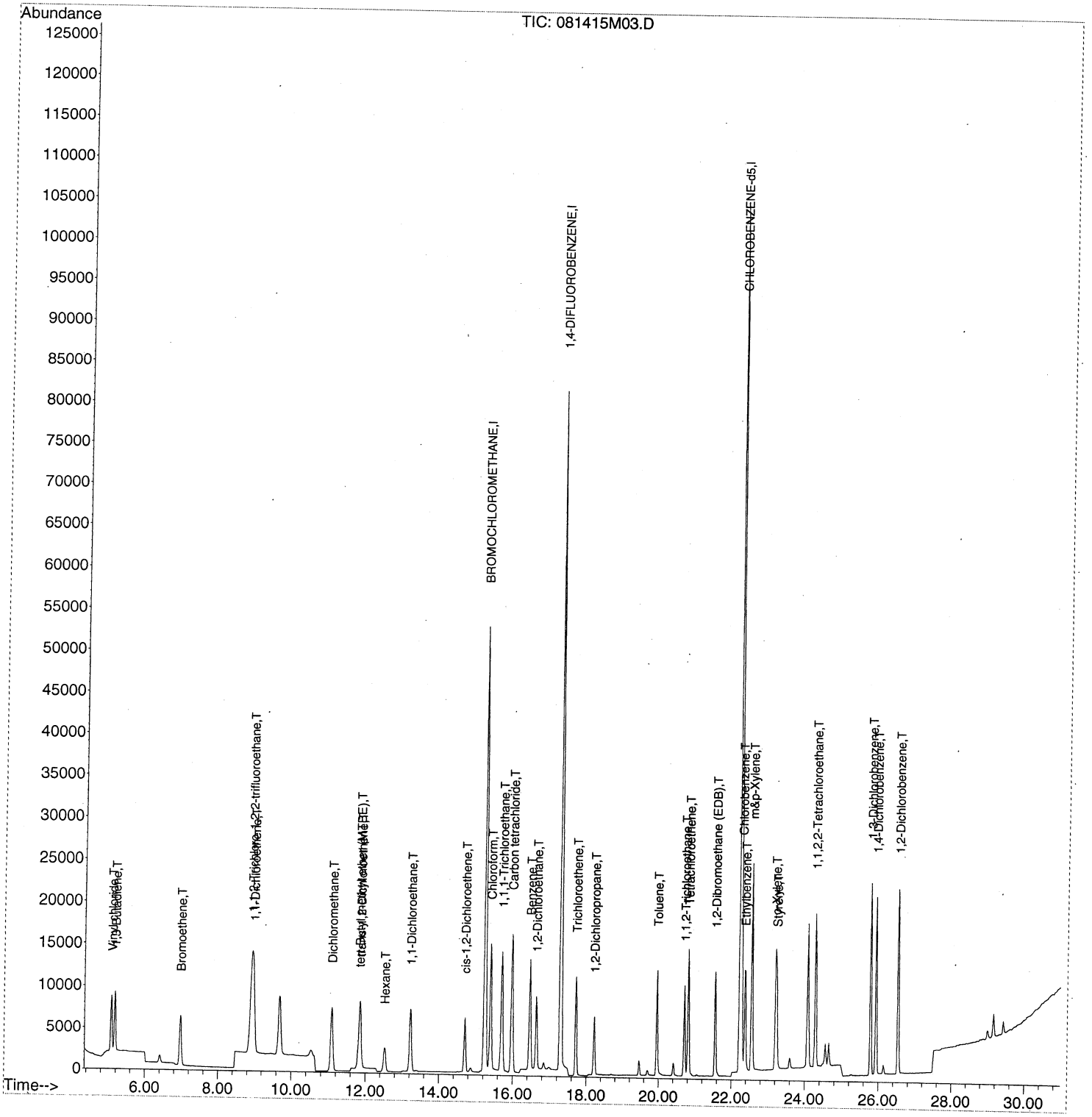
Target Compounds					Qvalue
2) Vinyl chloride	5.09	62	10503	93.30 pptv	99
3) 1,3-Butadiene	5.18	54	6482	75.87 pptv	99
4) Bromoethene	6.98	106	8142	76.82 pptv	95
5) 1,1,2-Trichloro-1,2,2-trif	8.92	151	23469	79.50 pptv	99
6) 1,1-Dichloroethene	8.97	61	12355	81.33 pptv	97
7) Dichloromethane	11.09	49	14261	90.55 pptv	96
8) tert-Butyl methyl ether (M	11.83	73	11127	63.02 pptv	99
9) trans-1,2-Dichloroethene	11.86	61	10713	67.49 pptv	99
10) Hexane	12.53	57	6579	74.21 pptv	99
11) 1,1-Dichloroethane	13.23	63	18229	88.69 pptv	99
12) cis-1,2-Dichloroethene	14.70	96	7362	79.62 pptv	98
13) Chloroform	15.40	83	24171	79.44 pptv	95
14) 1,1,1-Trichloroethane	15.71	97	23901	70.89 pptv	99
15) Carbon tetrachloride	15.98	117	25346	72.97 pptv	99
17) Benzene	16.47	78	26507	71.16 pptv	100
18) 1,2-Dichloroethane	16.64	62	14614	77.62 pptv	98
19) Trichloroethene	17.72	130	11386	73.03 pptv	99
20) 1,2-Dichloropropane	18.22	63	9216	74.30 pptv	98
22) Toluene	19.95	91	20243	51.23 pptv	99
23) 1,1,2-Trichloroethane	20.71	97	11602	54.03 pptv	98
24) Tetrachloroethene	20.81	166	15734	51.74 pptv	99
25) 1,2-Dibromoethane (EDB)	21.55	107	13394	55.03 pptv	97
26) Chlorobenzene	22.28	112	21697	54.91 pptv	94
27) Ethylbenzene	22.37	91	23001	49.35 pptv	99
28) m&p-Xylene	22.56	91	34860	90.22 pptv	100
29) o-Xylene	23.21	91	18426	49.85 pptv	100
30) Styrene	23.24	104	11727	51.02 pptv	100
31) 1,1,2,2-Tetrachloroethane	24.28	83	24478	58.91 pptv	100
32) 1,3-Dichlorobenzene	25.79	146	24251	65.49 pptv	99
33) 1,4-Dichlorobenzene	25.94	146	21863	68.09 pptv	99
34) 1,2-Dichlorobenzene	26.55	146	24003	64.73 pptv	100

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

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M03.D
Acq On : 14 Aug 2015 2:43 pm
InstName : AG5973M
Operator : LLH
Sample : S15H054-CAL1
Misc : 50pptv 1533096 SIM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 16:40:27 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Fri Aug 14 16:13:51 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M04.D
Acq On : 14 Aug 2015 3:32 pm
InstName : AG5973M
Operator : LLH
Sample : S15H054-CAL2
Misc : 150pptv 1533097 SIM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 16:40:33 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Fri Aug 14 16:13:51 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.24	49	72508	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.30	114	183765	375.00 pptv	0.00
21) CHLOROBENZENE-d5	22.25	117	180181	341.00 pptv	0.02

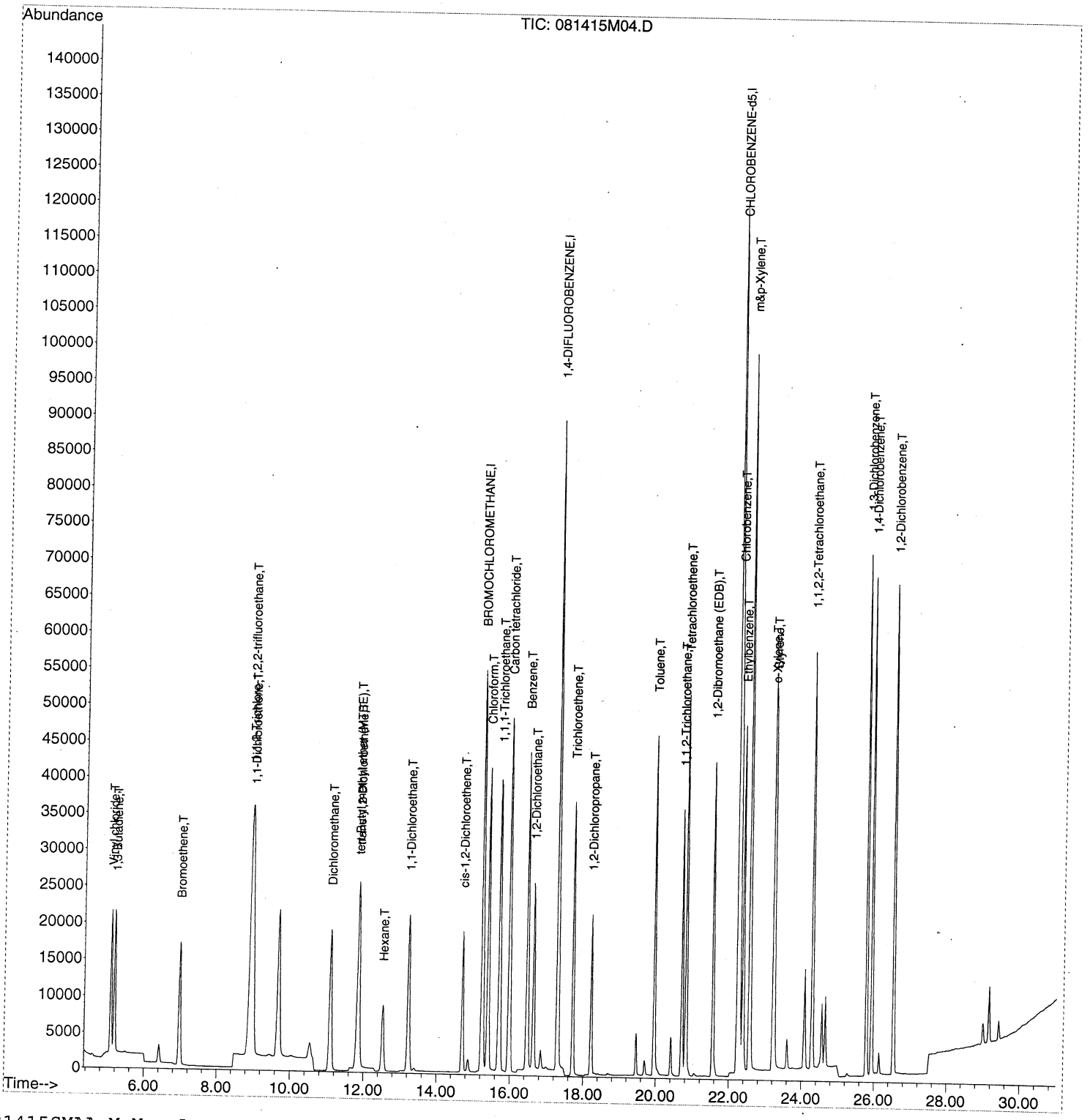
Target Compounds					Qvalue
2) Vinyl chloride	5.09	62	29514	239.17 pptv	99
3) 1,3-Butadiene	5.19	54	18392	196.37 pptv	100
4) Bromoethene	6.98	106	22849	196.66 pptv	96
5) 1,1,2-Trichloro-1,2,2-trif	8.94	151	66057	204.12 pptv	99
6) 1,1-Dichloroethene	8.97	61	35427	212.72 pptv	97
7) Dichloromethane	11.09	49	35968	208.32 pptv	96
8) tert-Butyl methyl ether (M	11.84	73	38831	200.63 pptv	99
9) trans-1,2-Dichloroethene	11.86	61	32177	184.90 pptv	98
10) Hexane	12.53	57	20803	214.04 pptv	100
11) 1,1-Dichloroethane	13.23	63	52108	231.26 pptv	99
12) cis-1,2-Dichloroethene	14.71	96	21746	214.52 pptv	98
13) Chloroform	15.41	83	69457	208.23 pptv	100
14) 1,1,1-Trichloroethane	15.72	97	70660	191.18 pptv	100
15) Carbon tetrachloride	15.98	117	88693	232.92 pptv	100
17) Benzene	16.47	78	87165	207.92 pptv	99
18) 1,2-Dichloroethane	16.64	62	43188	203.84 pptv	98
19) Trichloroethene	17.72	130	35673	203.32 pptv	99
20) 1,2-Dichloropropane	18.22	63	29196	209.17 pptv	98
22) Toluene	19.96	91	73571	160.61 pptv	100
23) 1,1,2-Trichloroethane	20.71	97	38779	155.79 pptv	99
24) Tetrachloroethene	20.82	166	54746	155.31 pptv	100
25) 1,2-Dibromoethane (EDB)	21.55	107	45984	162.97 pptv	98
26) Chlorobenzene	22.28	112	77604	169.42 pptv	99
27) Ethylbenzene	22.39	91	88908	164.55 pptv	99
28) m&p-Xylene	22.56	91	144870	323.43 pptv	99
29) o-Xylene	23.21	91	69197	161.49 pptv	99
30) Styrene	23.24	104	47572	178.53 pptv	97
31) 1,1,2,2-Tetrachloroethane	24.28	83	76994	159.85 pptv	99
32) 1,3-Dichlorobenzene	25.79	146	76218	177.57 pptv	99
33) 1,4-Dichlorobenzene	25.94	146	69529	186.80 pptv	99
34) 1,2-Dichlorobenzene	26.55	146	72958	169.73 pptv	100

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

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M04.D
Acq On : 14 Aug 2015 3:32 pm
InstName : AG5973M
Operator : LLH
Sample : S15H054-CAL2
Misc : 150pptv 1533097 SIM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 16:40:33 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Fri Aug 14 16:13:51 2015
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M05.D
Acq On : 14 Aug 2015 4:23 pm
InstName : AG5973M
Operator : LLH
Sample : S15H054-CAL3
Misc : 250pptv 1533098 SIM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 16:54:30 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Fri Aug 14 16:40:50 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	BROMOCHLOROMETHANE	1.000	1.000	0.0	100	0.00
2	T	Vinyl chloride	0.773	0.730	5.6	100	0.00
3	T	1,3-Butadiene	0.587	0.551	6.1	100	0.00
4	T	Bromoethene	0.679	0.630	7.2	100	0.00
5	T	1,1,2-Trichloro-1,2,2-trifl	1.872	1.751	6.5	100	0.00
6	T	1,1-Dichloroethene	1.059	0.989	6.6	100	0.00
7	T	Dichloromethane	1.026	0.932	9.2	100	0.00
8	T	tert-Butyl methyl ether (MT	1.220	1.177	3.5	100	0.00
9	T	trans-1,2-Dichloroethene	1.060	1.009	4.8	100	0.00
10	T	Hexane	0.664	0.629	5.3	100	0.00
11	T	1,1-Dichloroethane	1.364	1.284	5.9	100	0.00
12	T	cis-1,2-Dichloroethene	0.649	0.612	5.7	100	0.00
13	T	Chloroform	1.965	1.853	5.7	100	0.00
14	T	1,1,1-Trichloroethane	2.264	2.097	7.4	100	0.00
15	T	Carbon tetrachloride	2.287	2.037	10.9	100	0.00
16	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	100	0.00
17	T	Benzene	1.077	1.041	3.3	100	0.00
18	T	1,2-Dichloroethane	0.518	0.485	6.4	100	0.00
19	T	Trichloroethene	0.442	0.417	5.7	100	0.00
20	T	1,2-Dichloropropane	0.353	0.336	4.8	100	0.00
21	I	CHLOROBENZENE-d5	1.000	1.000	0.0	100	0.00
22	T	Toluene	0.915	0.866	5.4	100	0.00
23	T	1,1,2-Trichloroethane	0.438	0.411	6.2	100	0.00
24	T	Tetrachloroethene	0.632	0.597	5.5	100	0.00
25	T	1,2-Dibromoethane (EDB)	0.532	0.502	5.6	100	0.00
26	T	Chlorobenzene	0.895	0.852	4.8	100	0.00
27	T	Ethylbenzene	1.116	1.065	4.6	100	0.00
28	T	m&p-Xylene	0.933	0.904	3.1	100	0.00
29	T	o-Xylene	0.885	0.837	5.4	100	0.00
30	T	Styrene	0.618	0.593	4.0	100	0.00
31	T	1,1,2,2-Tetrachloroethane	0.873	0.808	7.4	100	0.00
32	T	1,3-Dichlorobenzene	0.902	0.832	7.8	100	0.00
33	T	1,4-Dichlorobenzene	0.837	0.770	8.0	100	0.00
34	T	1,2-Dichlorobenzene	0.859	0.784	8.7	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M05.D
Acq On : 14 Aug 2015 4:23 pm
InstName : AG5973M
Operator : LLH
Sample : S15H054-CAL3
Misc : 250pptv 1533098 SIM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 16:54:30 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Fri Aug 14 16:40:50 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.24	49	75705	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.31	114	201195	375.00 pptv	0.01
21) CHLOROBENZENE-d5	22.25	117	194937	341.00 pptv	0.02

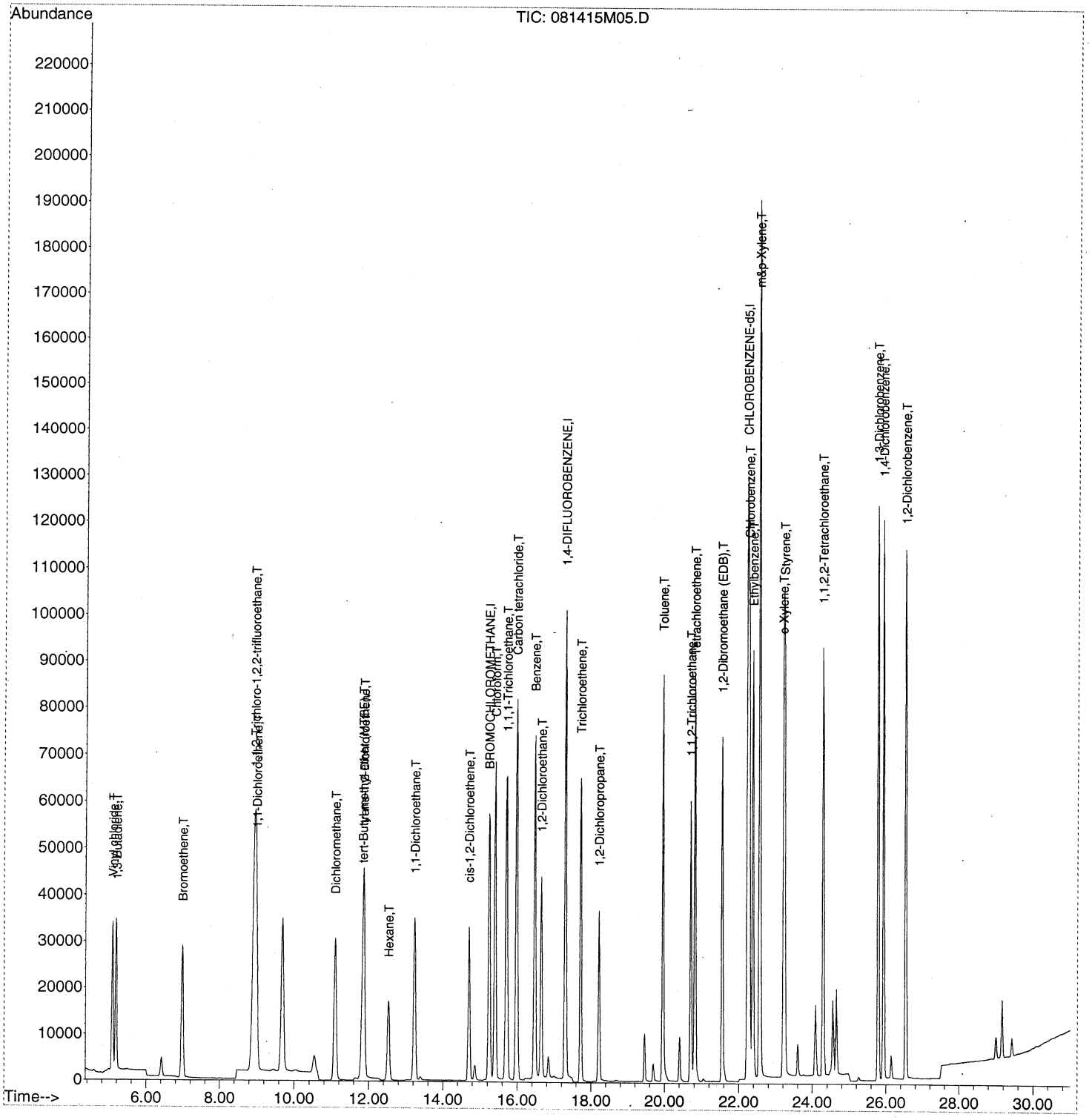
Target Compounds					Qvalue
2) Vinyl chloride	5.09	62	48597	377.17 pptv	99
3) 1,3-Butadiene	5.19	54	30563	312.54 pptv	99
4) Bromoethene	6.98	106	38469	317.11 pptv	96
5) 1,1,2-Trichloro-1,2,2-trif	8.94	151	106898	316.38 pptv	99
6) 1,1-Dichloroethene	8.99	61	60378	347.23 pptv	97
7) Dichloromethane	11.09	49	56896	315.62 pptv	96
8) tert-Butyl methyl ether (M	11.83	73	71879	355.70 pptv	98
9) trans-1,2-Dichloroethene	11.86	61	55999	308.20 pptv	98
10) Hexane	12.53	57	38426	378.66 pptv	99
11) 1,1-Dichloroethane	13.24	63	85499	363.43 pptv	99
12) cis-1,2-Dichloroethene	14.71	96	37391	353.28 pptv	98
13) Chloroform	15.41	83	113102	324.75 pptv	99
14) 1,1,1-Trichloroethane	15.72	97	116397	301.63 pptv	100
15) Carbon tetrachloride	15.99	117	124348	312.77 pptv	99
17) Benzene	16.48	78	153663	334.79 pptv	99
18) 1,2-Dichloroethane	16.65	62	71553	308.46 pptv	98
19) Trichloroethene	17.72	130	61543	320.38 pptv	99
20) 1,2-Dichloropropane	18.22	63	49540	324.17 pptv	98
22) Toluene	19.96	91	136209	274.85 pptv	99
23) 1,1,2-Trichloroethane	20.71	97	64611	239.92 pptv	99
24) Tetrachloroethene	20.83	166	93911	246.25 pptv	100
25) 1,2-Dibromoethane (EDB)	21.55	107	78975	258.70 pptv	98
26) Chlorobenzene	22.28	112	134008	270.41 pptv	100
27) Ethylbenzene	22.39	91	167364	286.31 pptv	99
28) m&p-Xylene	22.56	91	284100	586.26 pptv	99
29) o-Xylene	23.21	91	131520	283.70 pptv	99
30) Styrene	23.24	104	93270	323.54 pptv	96
31) 1,1,2,2-Tetrachloroethane	24.28	83	127038	243.79 pptv	99
32) 1,3-Dichlorobenzene	25.79	146	130830	281.73 pptv	100
33) 1,4-Dichlorobenzene	25.94	146	121082	300.67 pptv	99
34) 1,2-Dichlorobenzene	26.55	146	123288	265.11 pptv	100

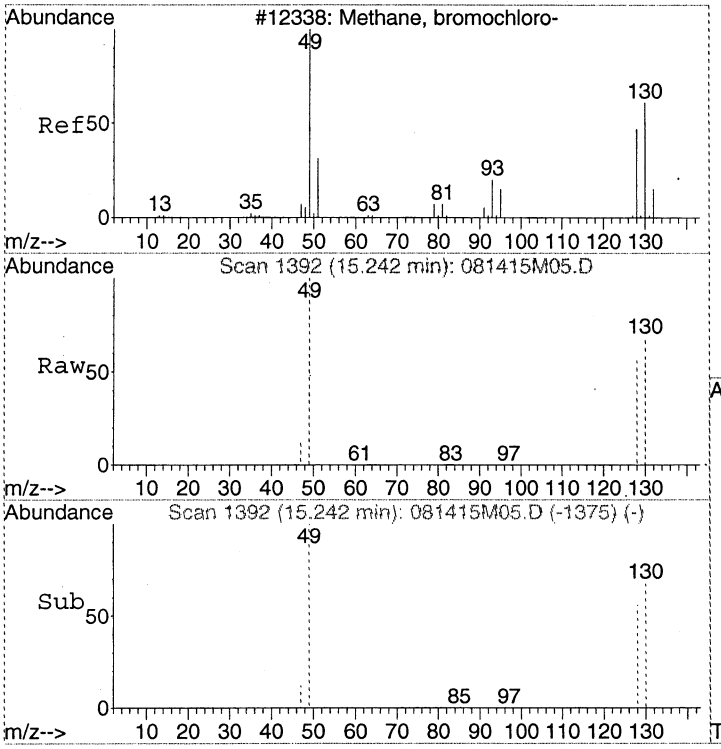
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M05.D
Acq On : 14 Aug 2015 4:23 pm
InstName : AG5973M
Operator : LLH
Sample : S15H054-CAL3
Misc : 250pptv 1533098 SIM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 16:54:30 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Fri Aug 14 16:40:50 2015
Response via : Initial Calibration

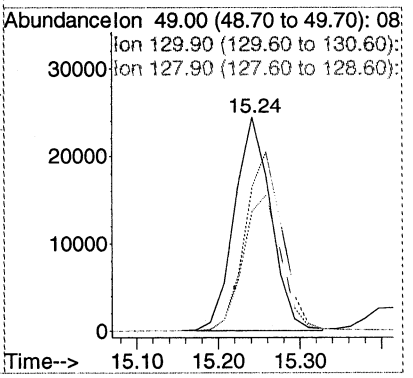


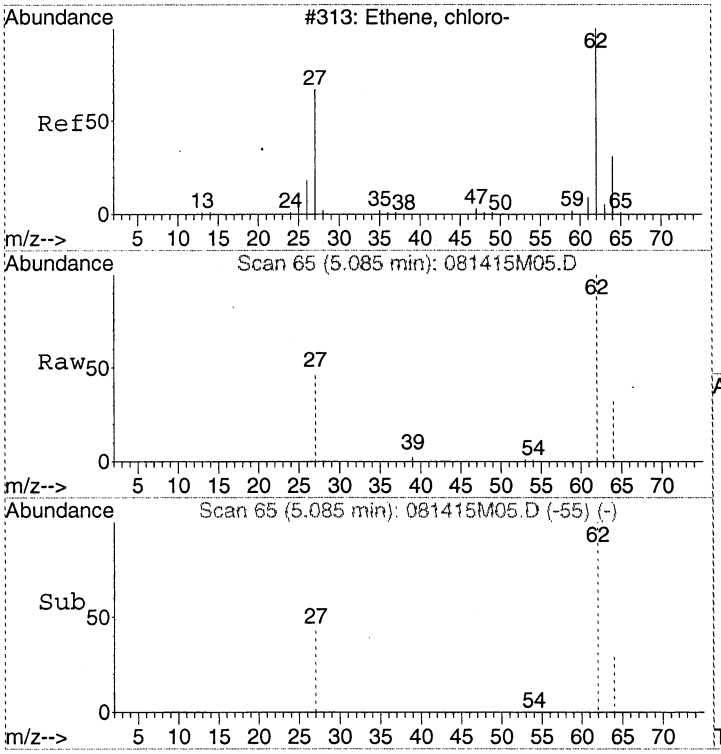


#1
BROMOCHLOROMETHANE
Concen: 341.00 pptv
RT: 15.24 min Scan# 1392
Delta R.T. 0.00 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion: 49 Resp: 75705

Ion	Ratio	Lower	Upper
49	100		
130	85.3	70.8	110.8
128	66.2	50.4	90.4

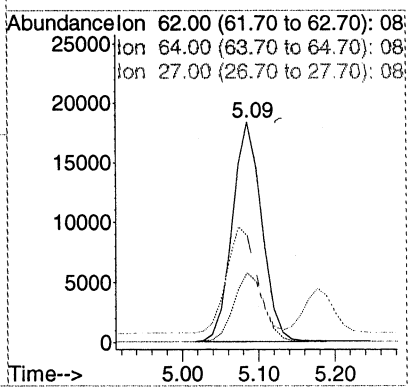


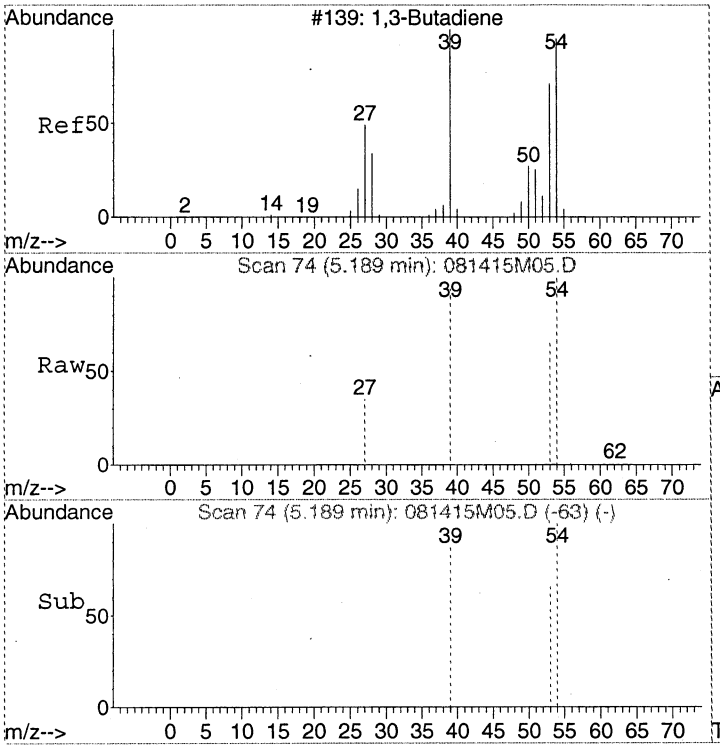


#2
Vinyl chloride
Concen: 377.17 pptv
RT: 5.09 min Scan# 65
Delta R.T. 0.00 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion: 62 Resp: 48597

Ion	Ratio	Lower	Upper
62	100		
64	31.8	12.2	52.2
27	48.9	28.2	68.2

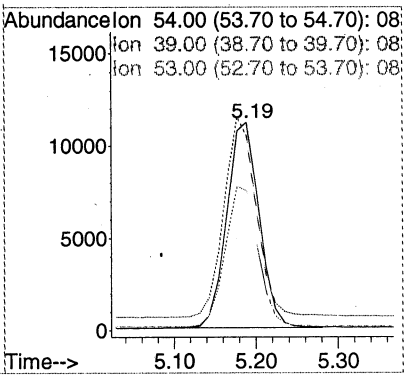


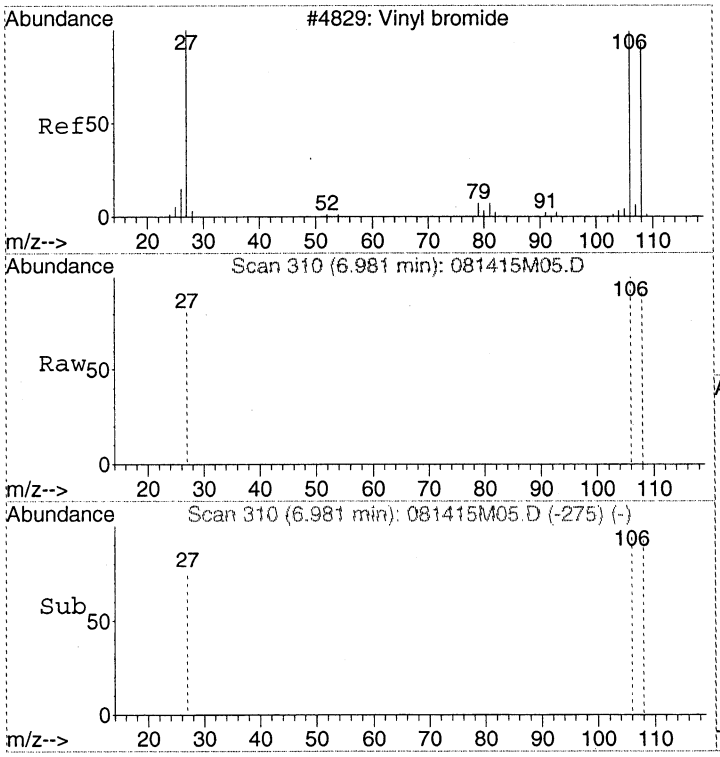


#3
1,3-Butadiene
Concen: 312.54 pptv
RT: 5.19 min Scan# 74
Delta R.T. 0.01 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion: 54 Resp: 30563

Ion	Ratio	Lower	Upper
54	100		
39	96.7	75.7	115.7
53	68.8	49.0	89.0

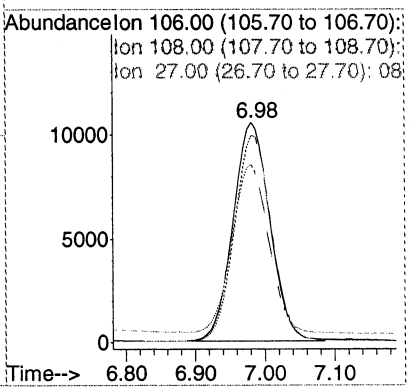


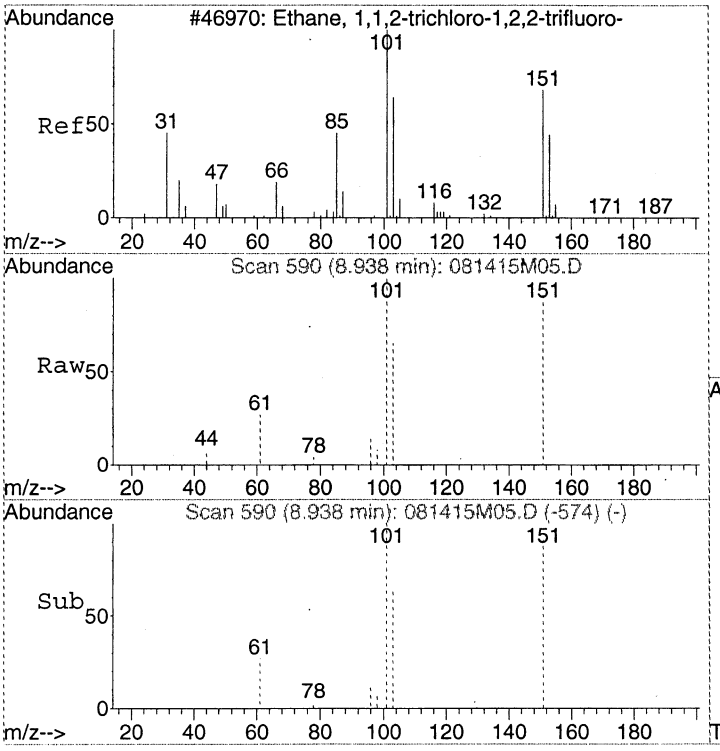


#4
Bromoethene
Concen: 317.11 pptv
RT: 6.98 min Scan# 310
Delta R.T. 0.01 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion:106 Resp: 38469

Ion	Ratio	Lower	Upper
106	100		
108	94.6	0.0	214.7
27	76.6	49.8	89.8

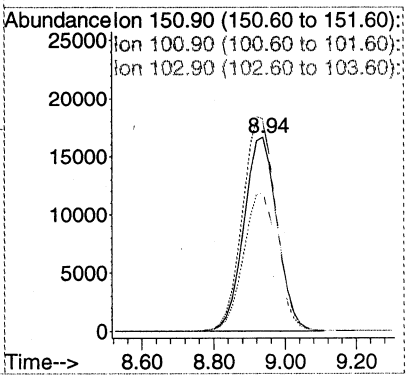


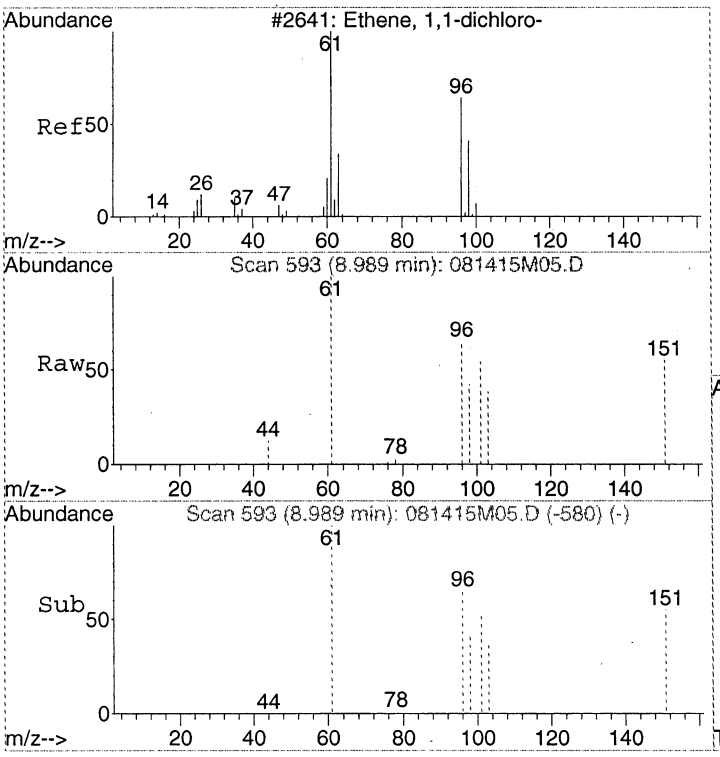


#5
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 316.38 pptv
RT: 8.94 min Scan# 590
Delta R.T. 0.02 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion:151 Resp: 106898

Ion	Ratio	Lower	Upper
151	100		
101	110.9	89.2	129.2
103	71.0	50.1	90.1

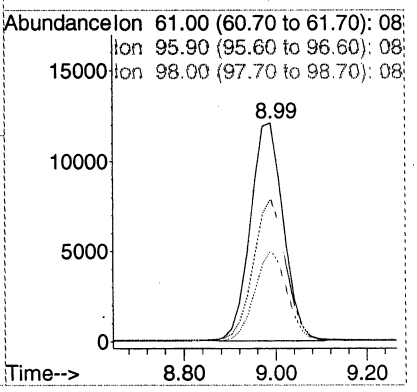


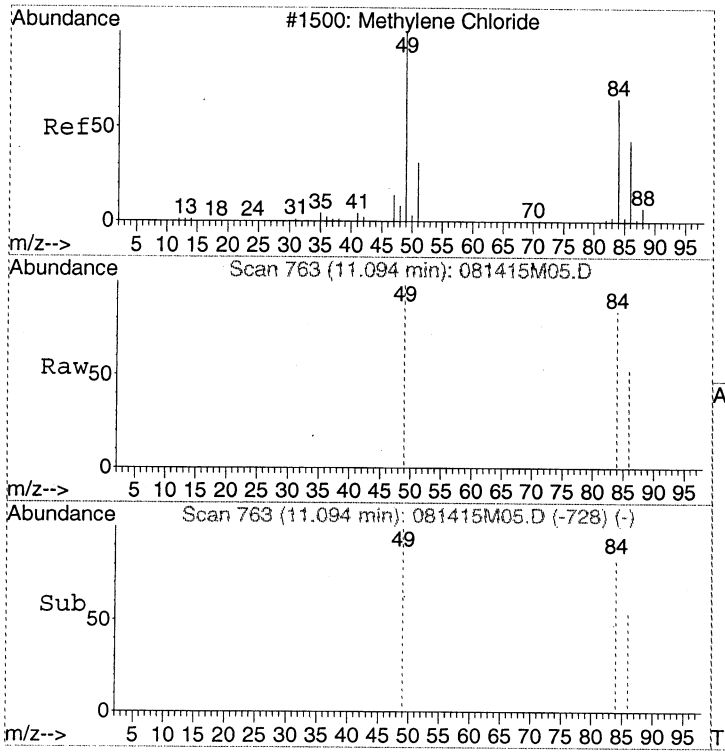


#6
1,1-Dichloroethene
Concen: 347.23 pptv
RT: 8.99 min Scan# 593
Delta R.T. 0.02 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion: 61 Resp: 60378

Ion	Ratio	Lower	Upper
61	100		
96	63.2	45.7	85.7
98	40.1	21.2	61.2

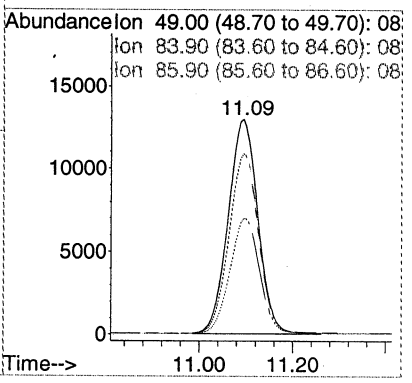


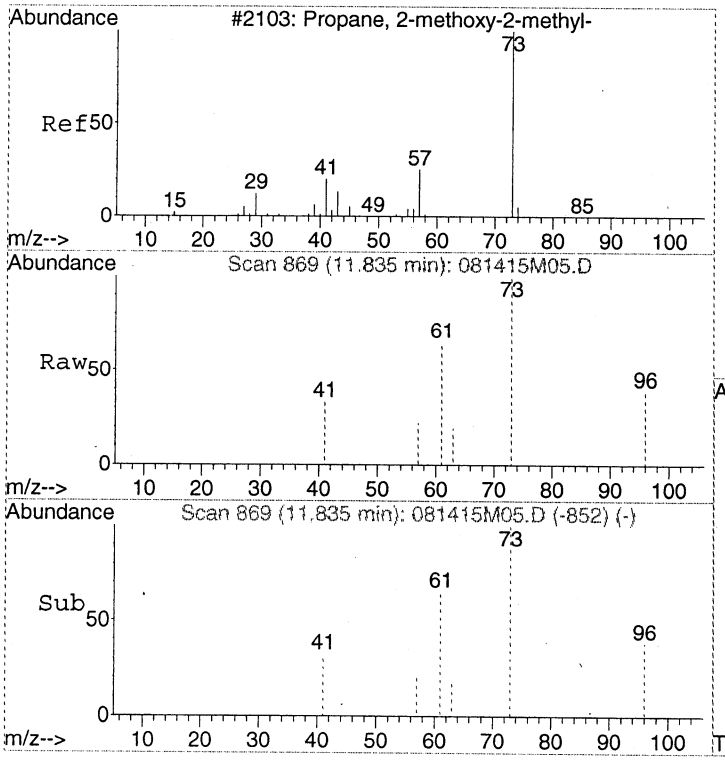


#7
Dichloromethane
Concen: 315.62 pptv
RT: 11.09 min Scan# 763
Delta R.T. 0.01 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion: 49 Resp: 56896

Ion	Ratio	Lower	Upper
49	100		
84	84.2	67.8	107.8
86	54.0	36.4	76.4

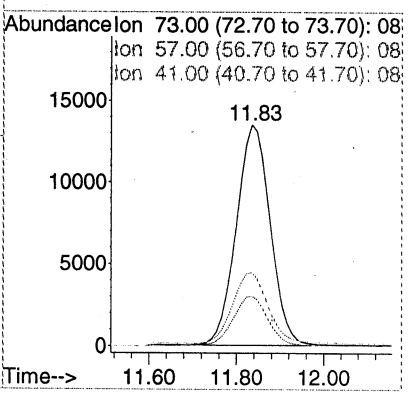


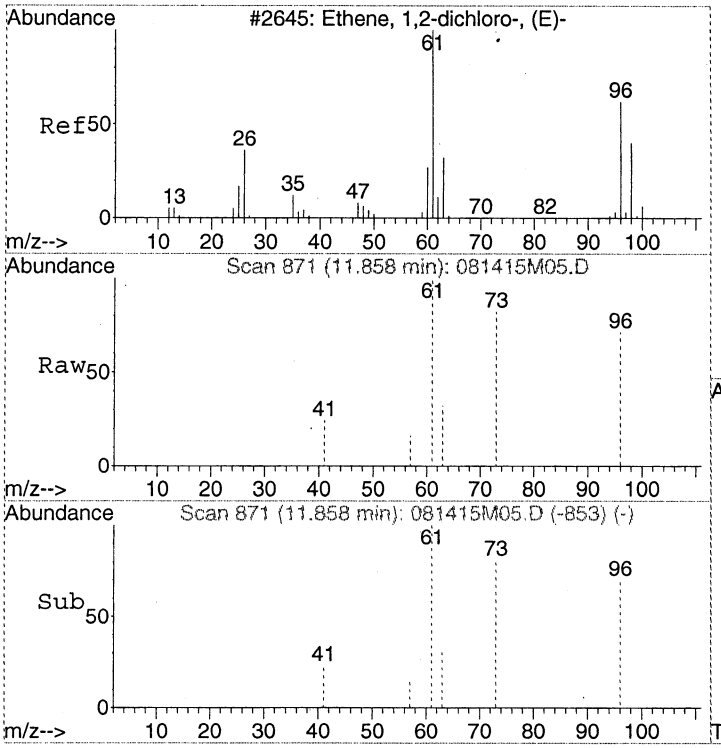


#8
tert-Butyl methyl ether (MTBE)
Concen: 355.70 pptv
RT: 11.83 min Scan# 869
Delta R.T. -0.01 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion: 73 Resp: 71879

Ion	Ratio	Lower	Upper
73	100		
57	22.0	2.1	42.1
41	33.3	15.5	55.5

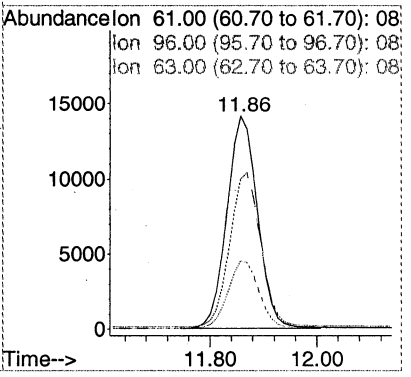


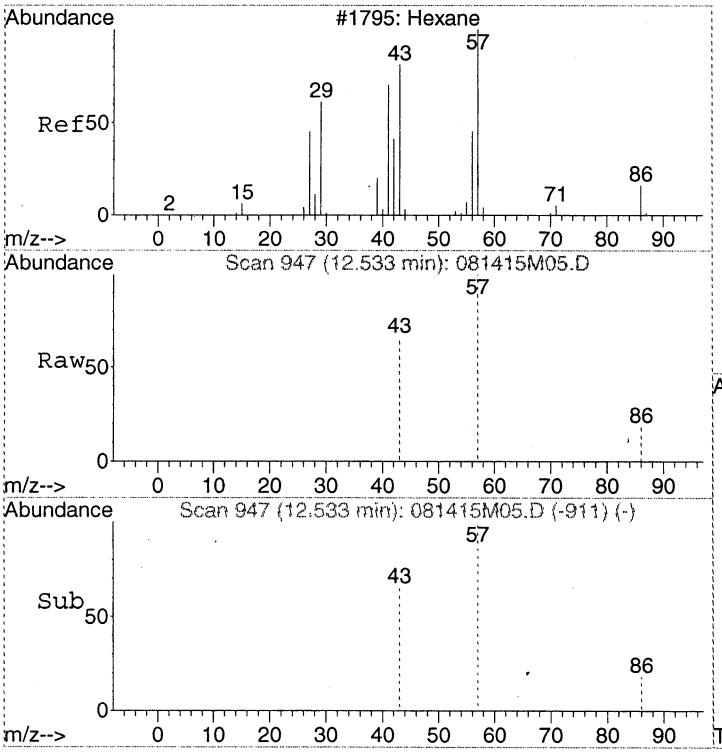


#9
trans-1,2-Dichloroethene
Concen: 308.20 pptv
RT: 11.86 min Scan# 871
Delta R.T. 0.01 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion: 61 Resp: 55999

Ion	Ratio	Lower	Upper
61	100		
96	73.4	55.2	95.2
63	32.2	12.4	52.4

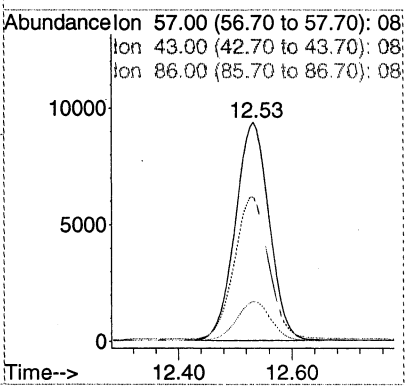


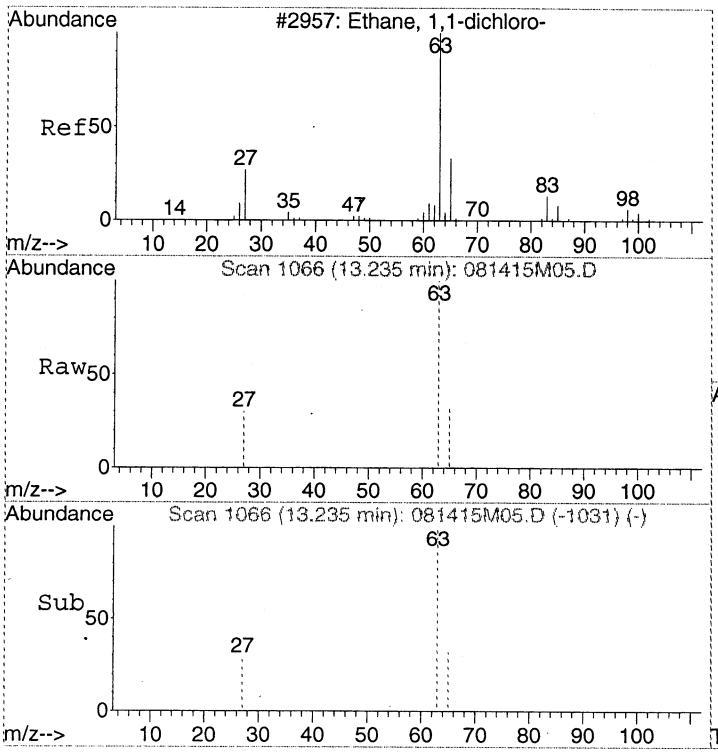


#10
Hexane
Concen: 378.66 pptv
RT: 12.53 min Scan# 947
Delta R.T. 0.01 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion: 57 Resp: 38426

Ion	Ratio	Lower	Upper
57	100		
43	66.4	47.5	87.5
86	18.0	0.0	38.3

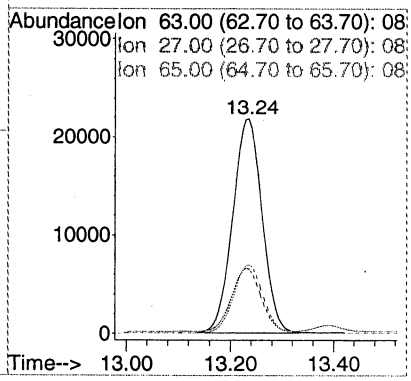


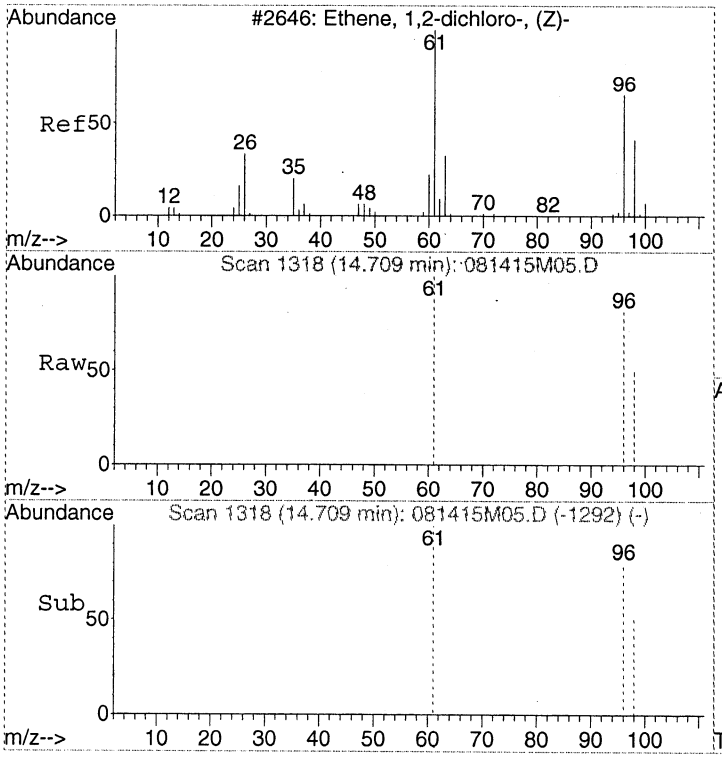


#11
1,1-Dichloroethane
Concen: 363.43 pptv
RT: 13.24 min Scan# 1066
Delta R.T. 0.01 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion: 63 Resp: 85499

Ion	Ratio	Lower	Upper
63	100		
27	29.1	8.2	48.2
65	31.6	11.7	51.7

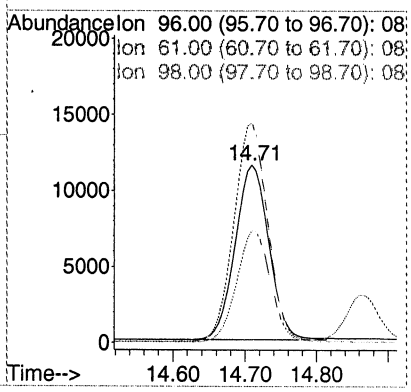


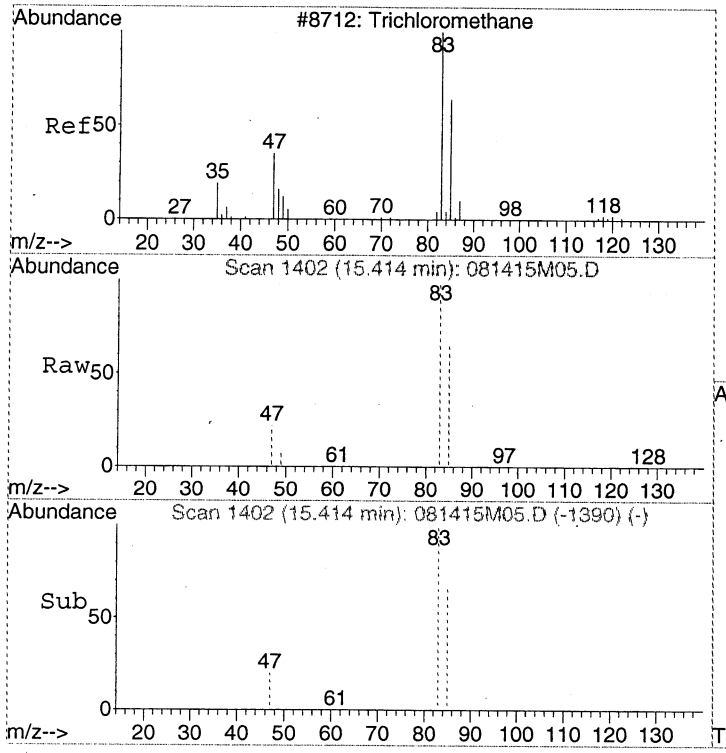


#12
cis-1,2-Dichloroethene
Concen: 353.28 pptv
RT: 14.71 min Scan# 1318
Delta R.T. 0.00 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion: 96 Resp: 37391

Ion	Ratio	Lower	Upper
96	100		
61	124.7	101.4	141.4
98	63.7	44.1	84.1

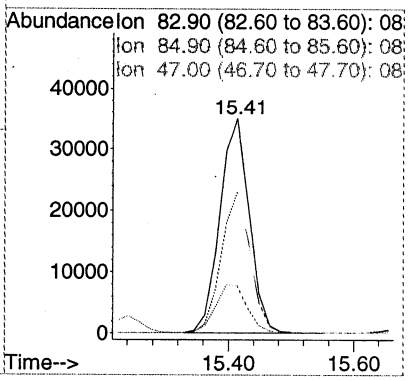


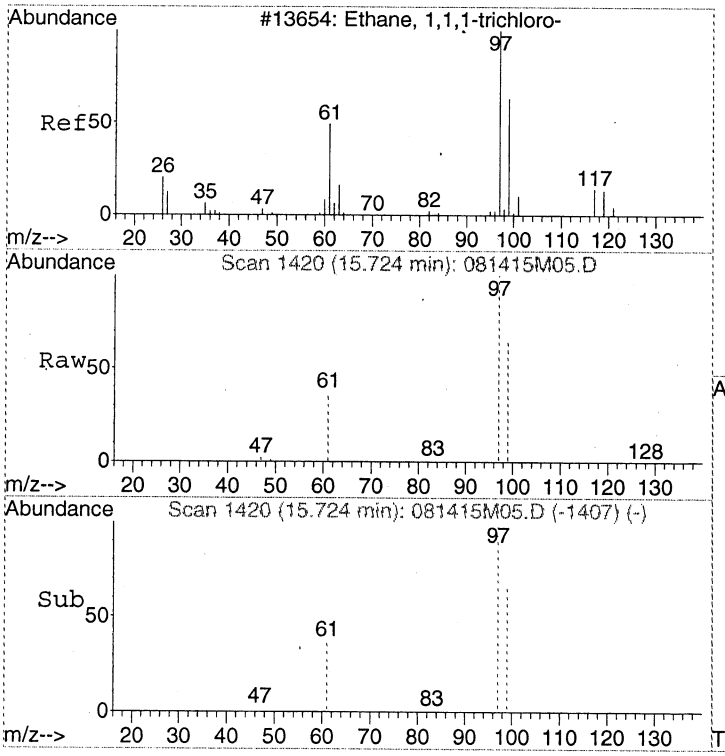


#13
Chloroform
Concen: 324.75 pptv
RT: 15.41 min Scan# 1402
Delta R.T. 0.00 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion: 83 Resp: 113102

Ion	Ratio	Lower	Upper
83	100		
85	64.8	44.7	84.7
47	24.4	6.2	46.2

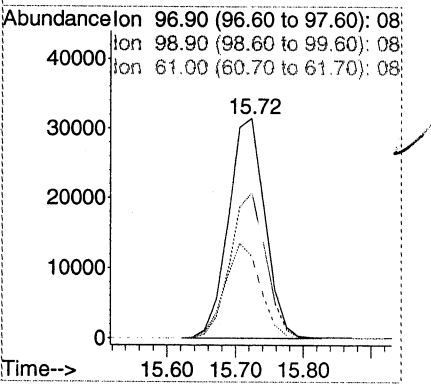


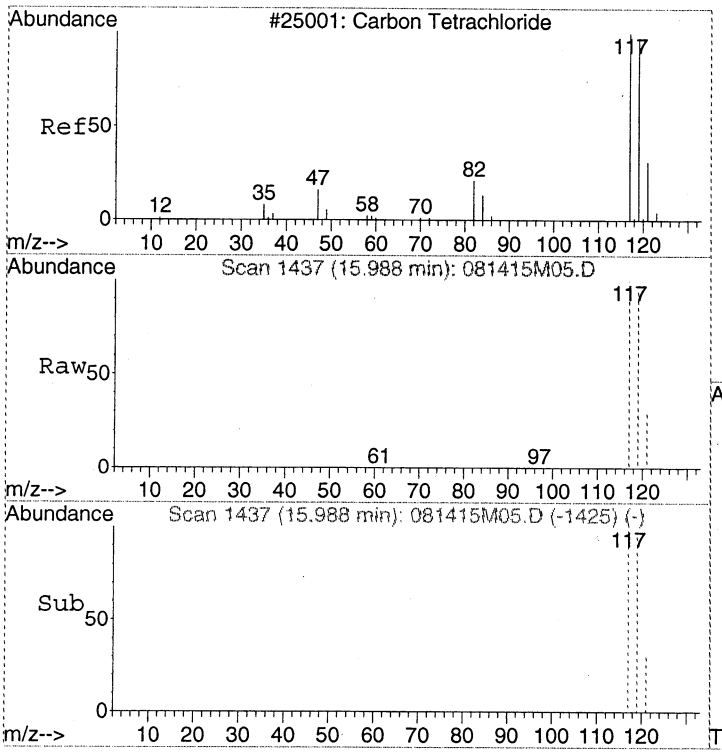


#14
1,1,1-Trichloroethane
Concen: 301.63 pptv
RT: 15.72 min Scan# 1420
Delta R.T. 0.02 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion: 97 Resp: 116397

Ion	Ratio	Lower	Upper
97	100		
99	64.5	44.8	84.8
61	41.7	21.5	61.5

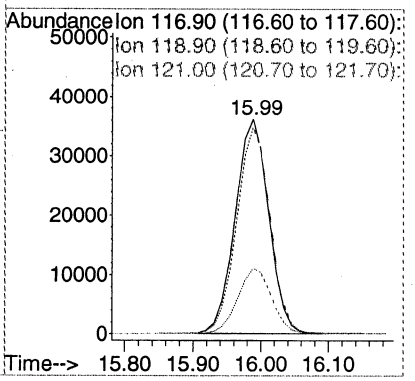


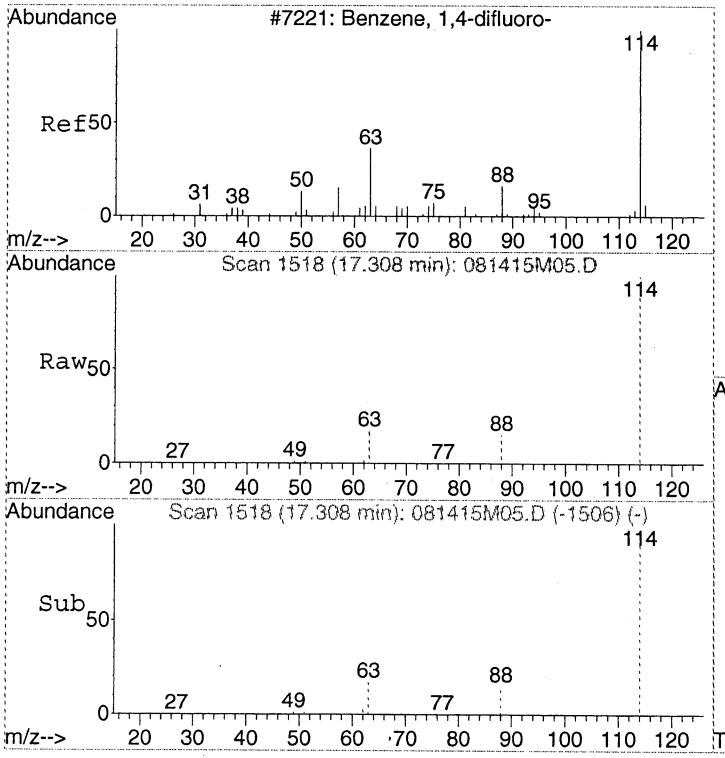


#15
Carbon tetrachloride
Concen: 312.77 pptv
RT: 15.99 min Scan# 1437
Delta R.T. 0.01 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion:117 Resp: 124348

Ion	Ratio	Lower	Upper
117	100		
119	96.1	76.4	116.4
121	30.7	11.3	51.3

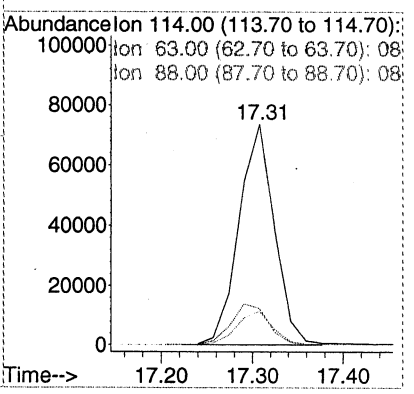


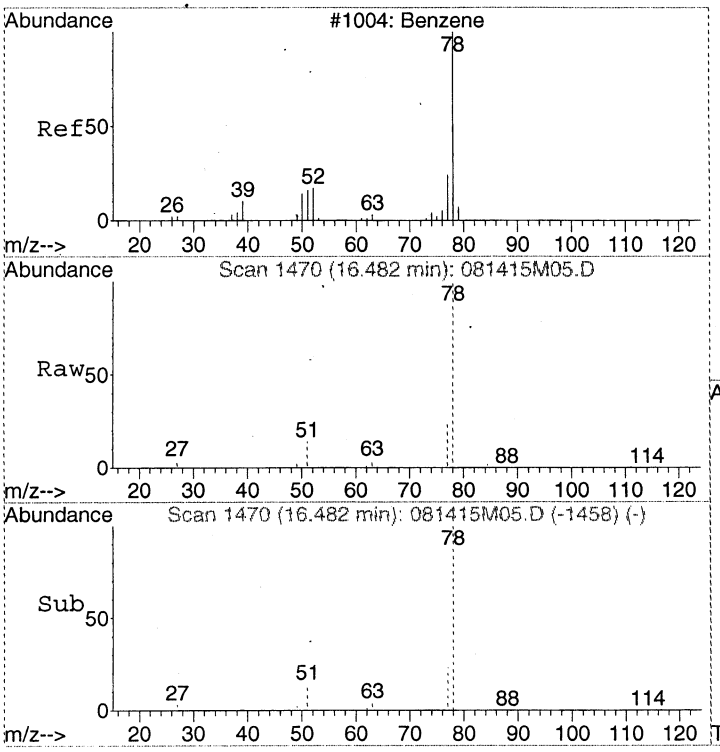


#16
1,4-DIFLUOROBENZENE
Concen: 375.00 pptv
RT: 17.31 min Scan# 1518
Delta R.T. 0.01 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion:114 Resp: 201195

Ion	Ratio	Lower	Upper
114	100		
63	19.9	0.0	39.3
88	15.7	0.0	35.6

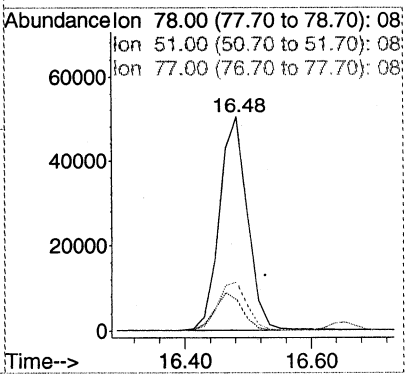


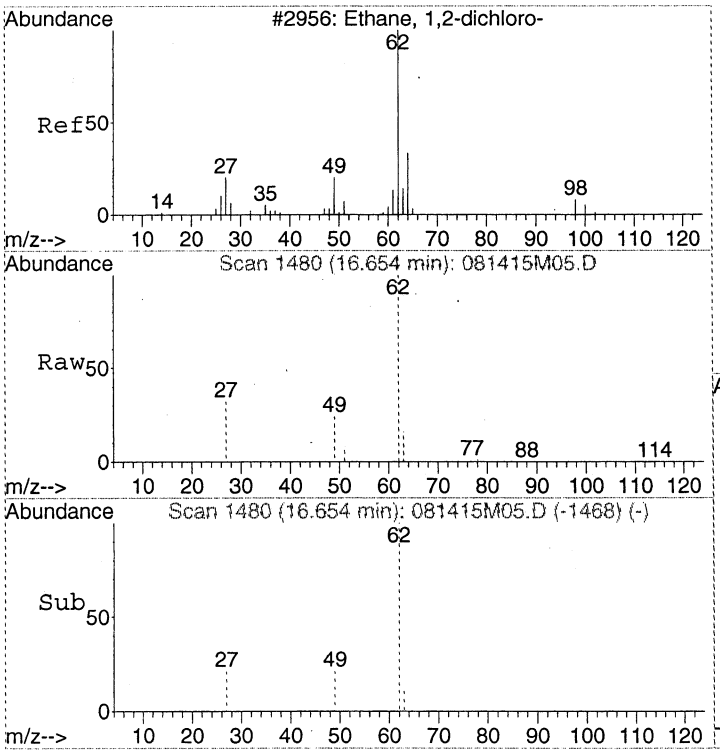


#17
Benzene
Concen: 334.79 pptv
RT: 16.48 min Scan# 1470
Delta R.T. 0.01 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion: 78 Resp: 153663

Ion	Ratio	Lower	Upper
78	100		
51	17.6	0.0	37.5
77	23.7	4.1	44.1

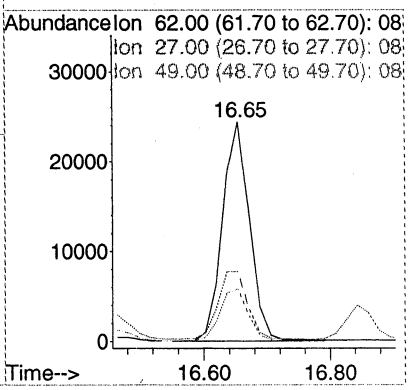


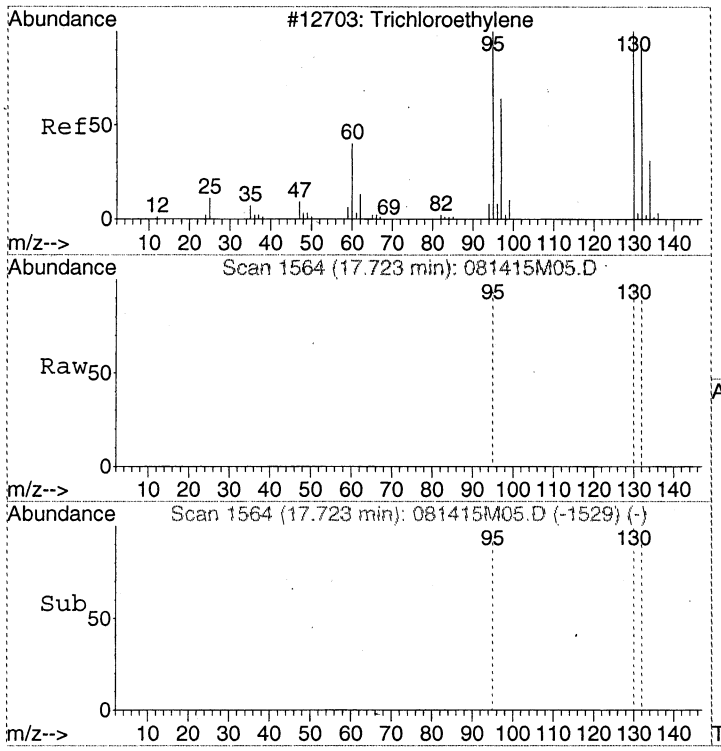


#18
1,2-Dichloroethane
Concen: 308.46 pptv
RT: 16.65 min Scan# 1480
Delta R.T. 0.01 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion: 62 Resp: 71553

Ion	Ratio	Lower	Upper
62	100		
27	33.3	11.9	51.9
49	24.7	3.8	43.8

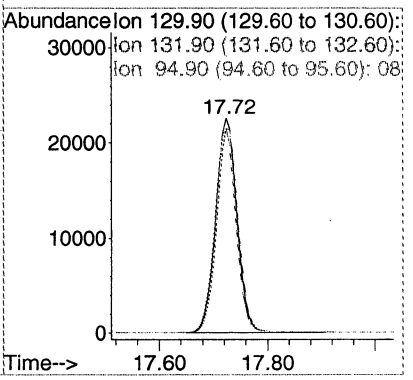


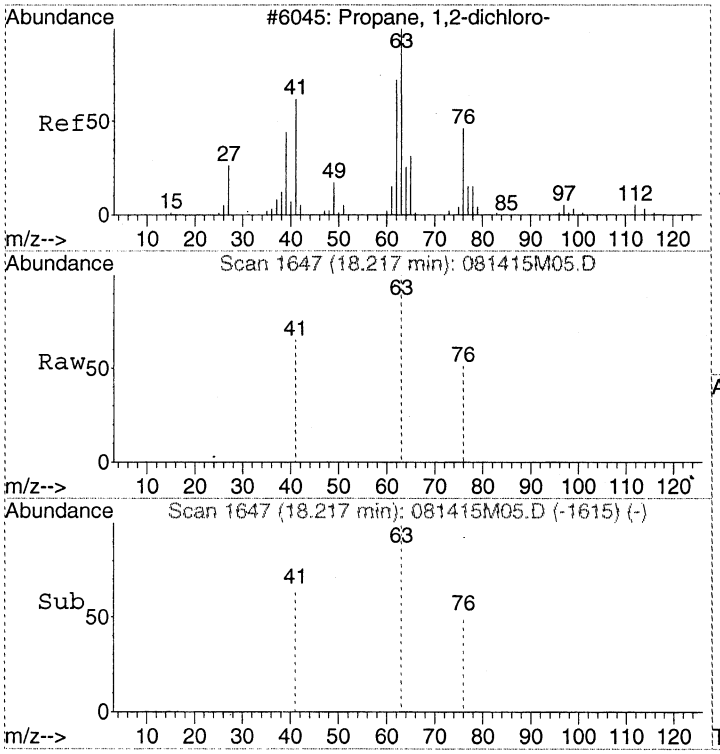


#19
Trichloroethene
Concen: 320.38 pptv
RT: 17.72 min Scan# 1564
Delta R.T. 0.01 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion:130 Resp: 61543

Ion	Ratio	Lower	Upper
130	100		
132	96.3	76.4	116.4
95	95.2	73.7	113.7

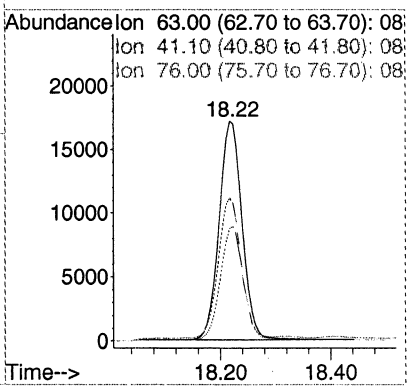


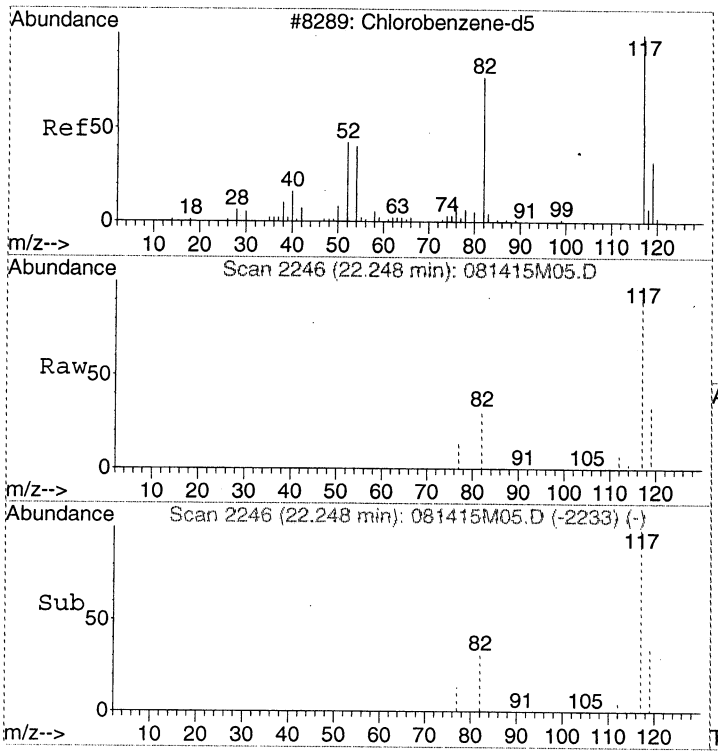


#20
1,2-Dichloropropane
Concen: 324.17 pptv
RT: 18.22 min Scan# 1647
Delta R.T. -0.00 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion: 63 Resp: 49540

Ion	Ratio	Lower	Upper
63	100		
41	63.1	43.6	83.6
76	51.6	33.8	73.8

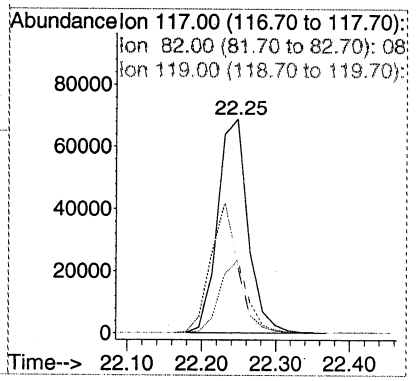


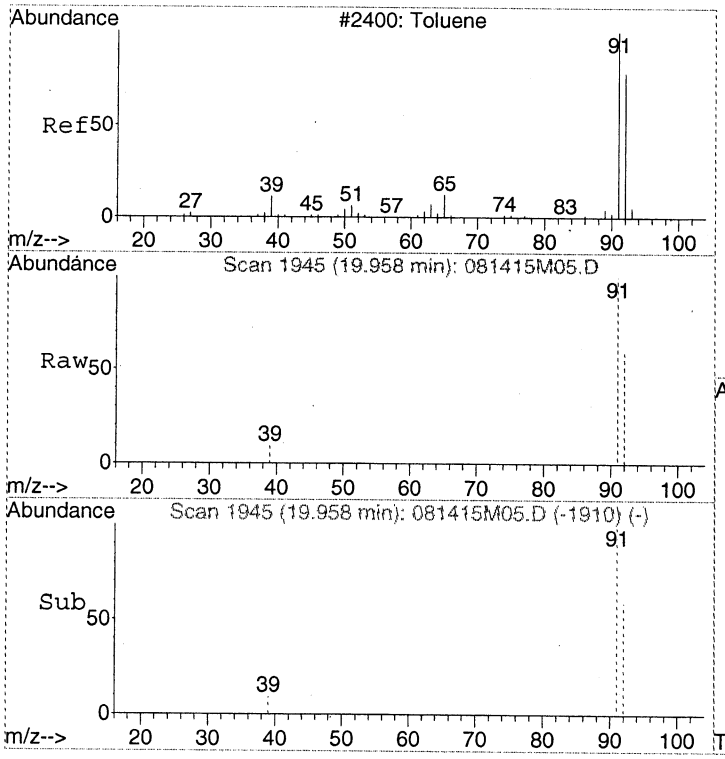


#21
CHLOROBENZENE-d5
Concen: 341.00 pptv
RT: 22.25 min Scan# 2246
Delta R.T. 0.02 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion:117 Resp: 194937

Ion	Ratio	Lower	Upper
117	100		
82	54.9	34.3	74.3
119	32.1	12.0	52.0

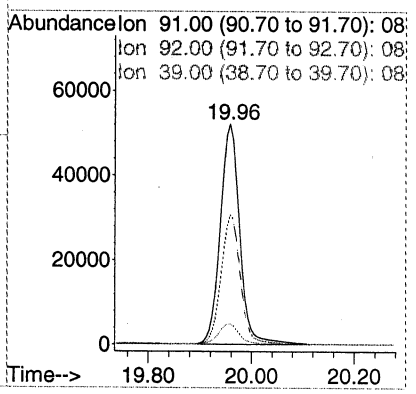


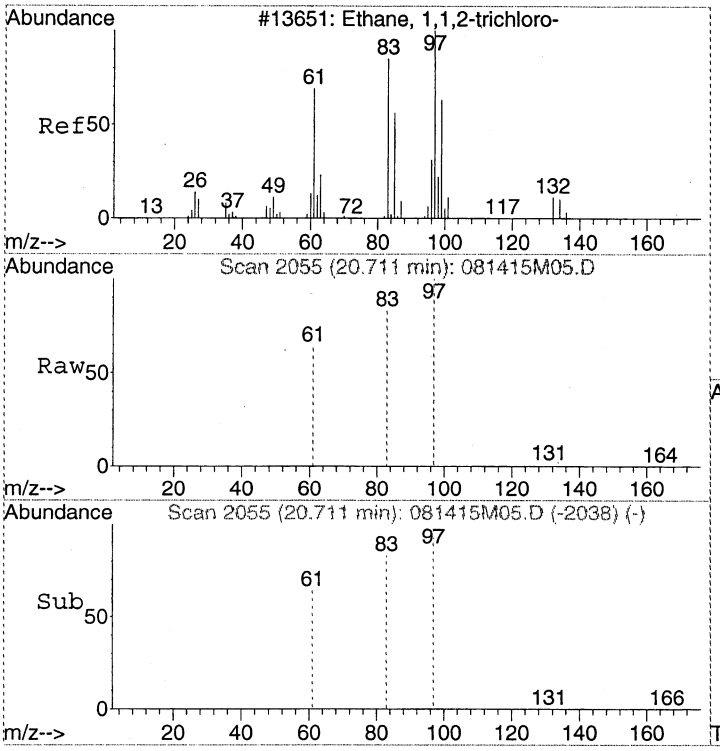


#22
Toluene
Concen: 274.85 pptv
RT: 19.96 min Scan# 1945
Delta R.T. 0.01 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion: 91 Resp: 136209

Ion	Ratio	Lower	Upper
91	100		
92	58.8	38.4	78.4
39	9.1	0.0	28.6

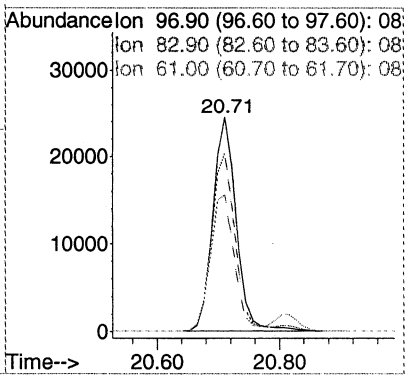


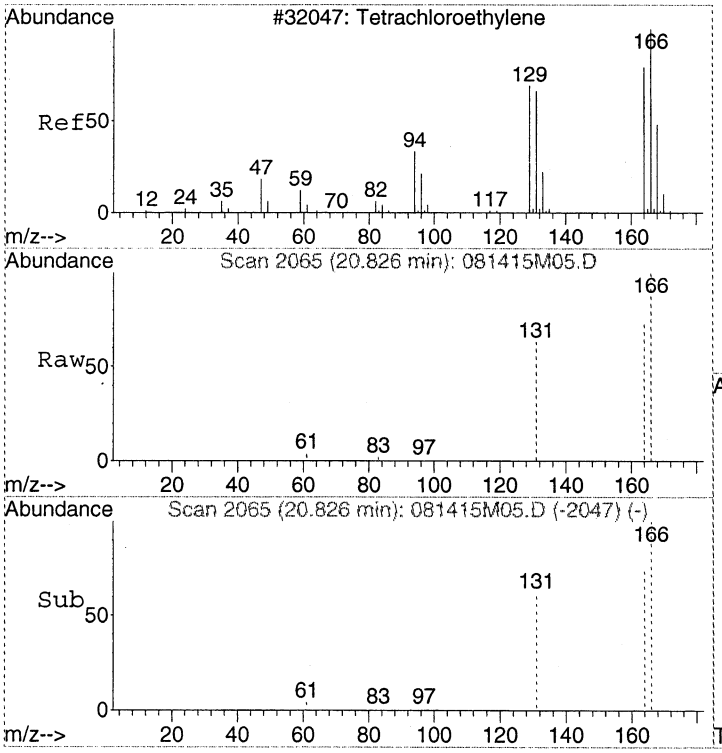


#23
1,1,2-Trichloroethane
Concen: 239.92 pptv
RT: 20.71 min Scan# 2055
Delta R.T. -0.00 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion: 97 Resp: 64611

Ion	Ratio	Lower	Upper
97	100		
83	82.6	61.5	101.5
61	65.1	44.5	84.5

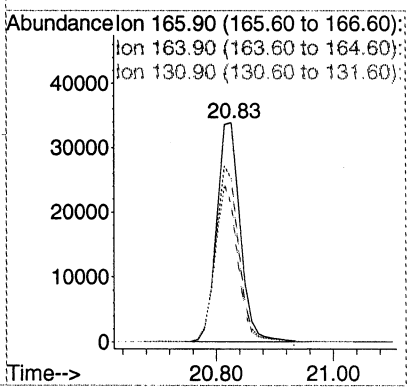


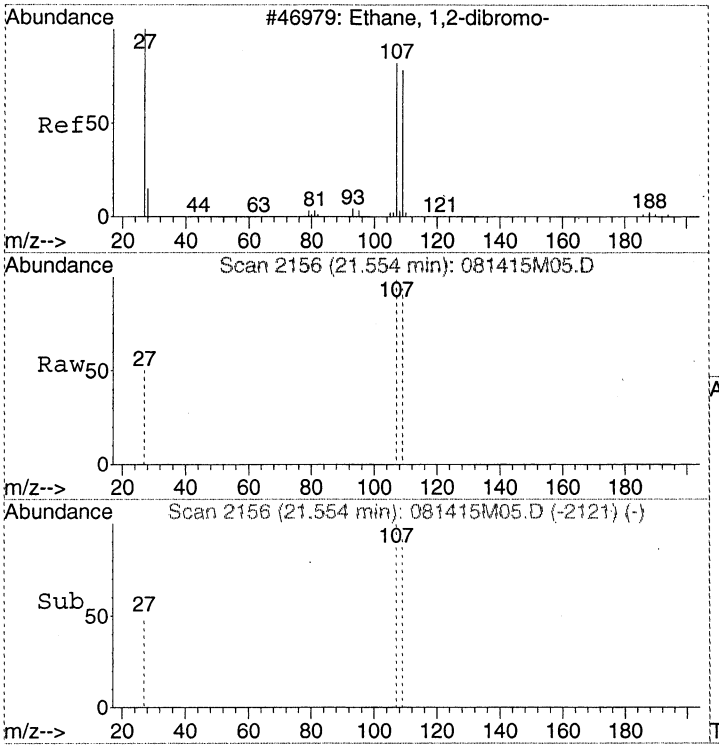


#24
Tetrachloroethene
Concen: 246.25 pptv
RT: 20.83 min Scan# 2065
Delta R.T. 0.01 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion:166 Resp: 93911

Ion	Ratio	Lower	Upper
166	100		
164	78.0	58.1	98.1
131	68.1	48.9	88.9

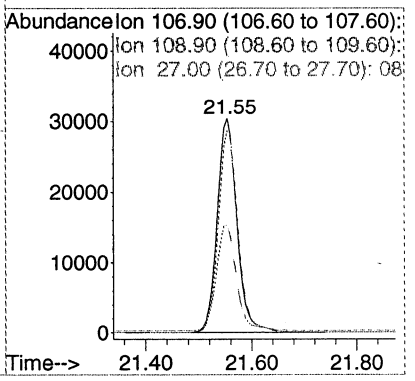


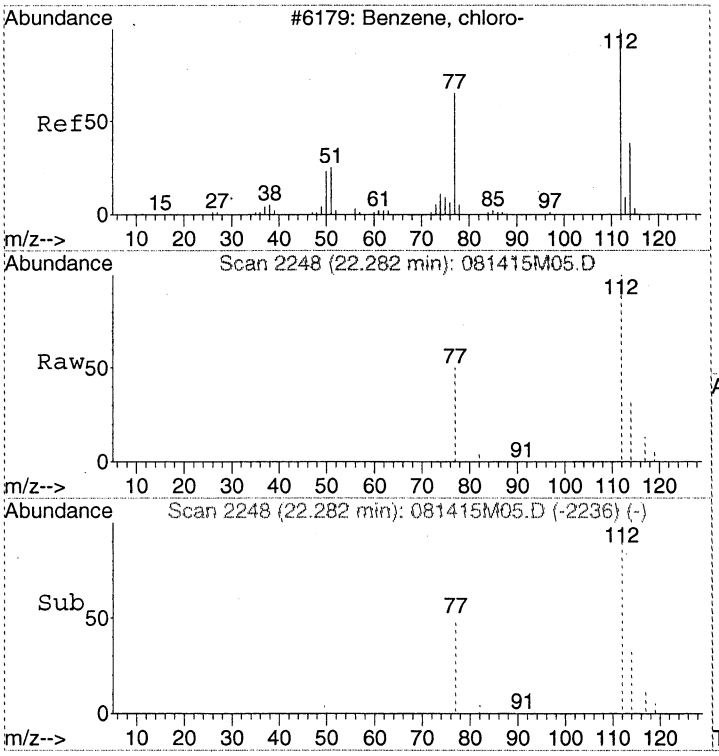


#25
1,2-Dibromoethane (EDB)
Concen: 258.70 pptv
RT: 21.55 min Scan# 2156
Delta R.T. 0.01 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion:107 Resp: 78975

Ion	Ratio	Lower	Upper
107	100		
109	94.3	74.0	114.0
27	50.6	27.0	67.0

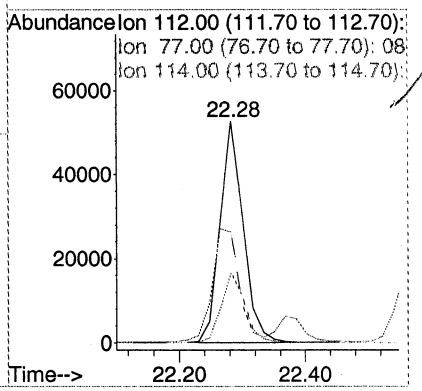


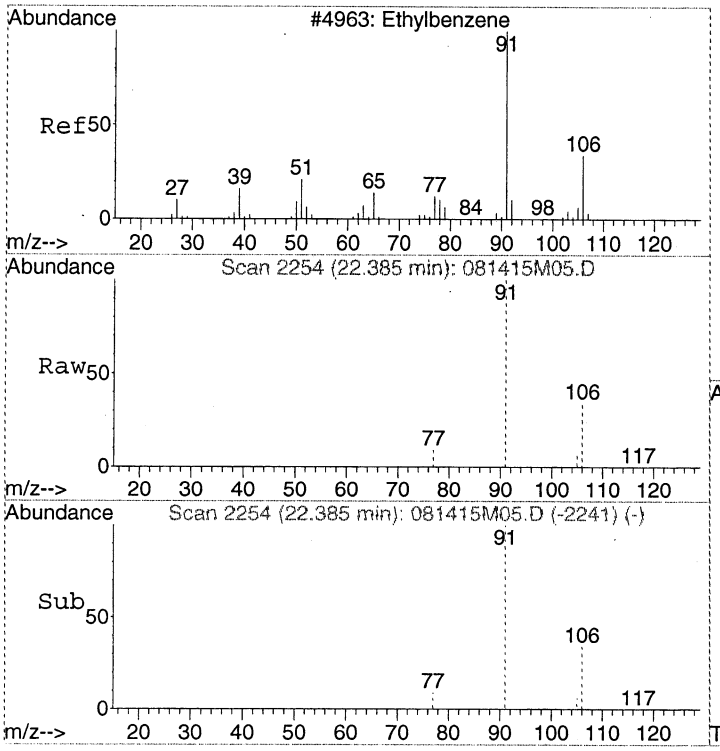


#26
Chlorobenzene
Concen: 270.41 pptv
RT: 22.28 min Scan# 2248
Delta R.T. -0.00 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion:112 Resp: 134008

Ion	Ratio	Lower	Upper
112	100		
77	59.3	38.8	78.8
114	32.1	12.1	52.1

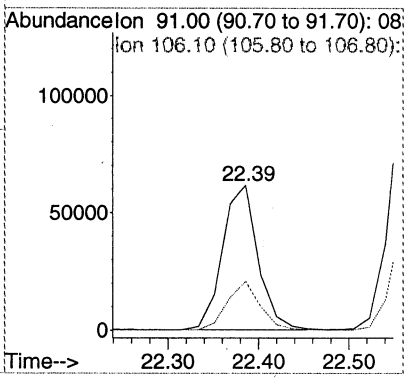


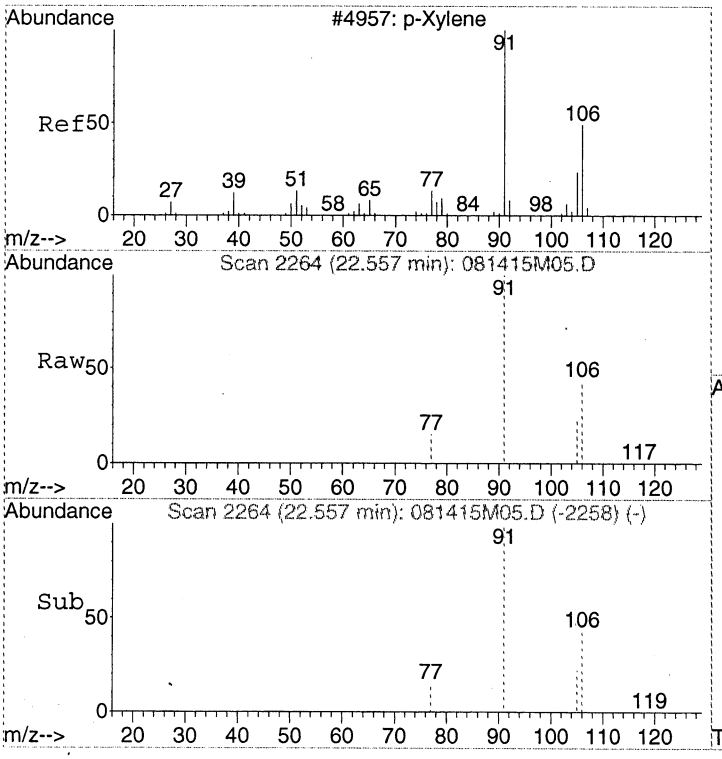


#27
Ethylbenzene
Concen: 286.31 pptv
RT: 22.39 min Scan# 2254
Delta R.T. 0.02 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion: 91 Resp: 167364

Ion	Ratio	Lower	Upper
91	100		
106	31.4	11.9	51.9

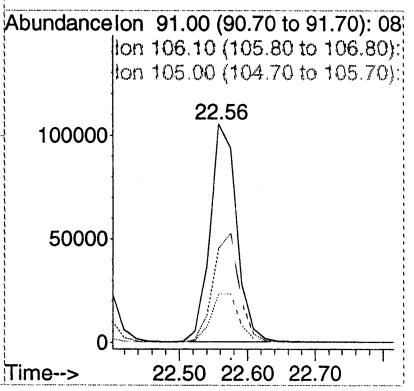


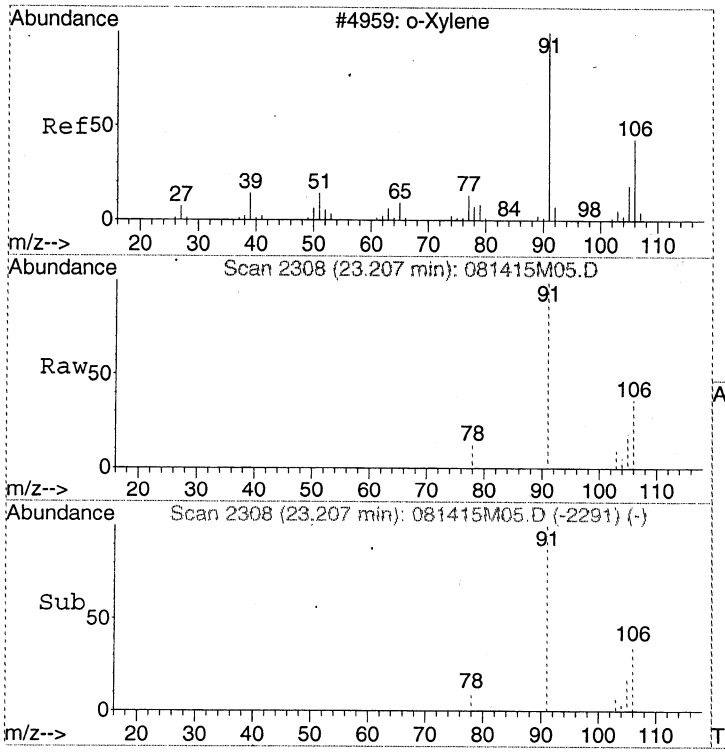


#28
m&p-Xylene
Concen: 586.26 pptv
RT: 22.56 min Scan# 2264
Delta R.T. -0.00 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion: 91 Resp: 284100

Ion	Ratio	Lower	Upper
91	100		
106	49.5	29.5	69.5
105	23.7	5.1	45.1

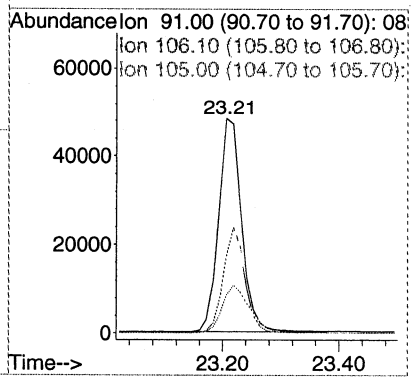


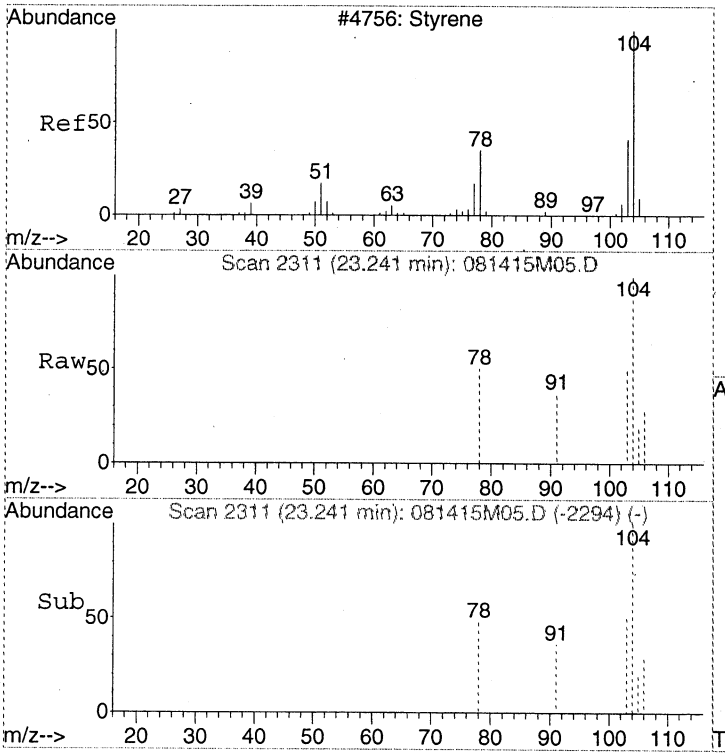


#29
o-Xylene
Concen: 283.70 pptv
RT: 23.21 min Scan# 2308
Delta R.T. -0.00 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion: 91 Resp: 131520

Ion	Ratio	Lower	Upper
91	100		
106	46.0	26.4	66.4
105	26.3	6.7	46.7

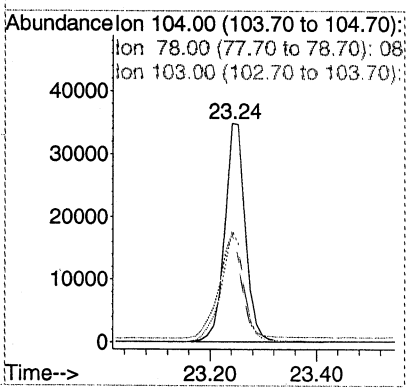


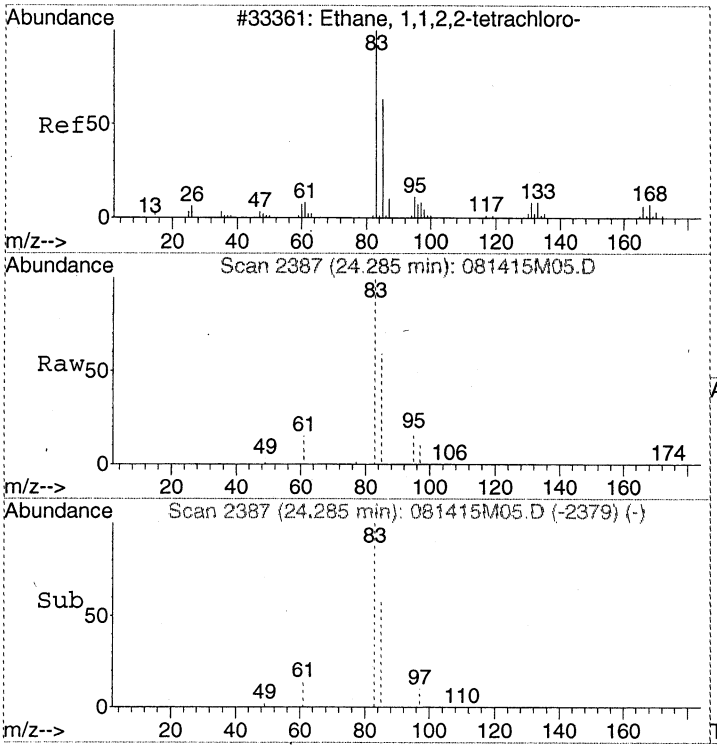


#30
Styrene
Concen: 323.54 pptv
RT: 23.24 min Scan# 2311
Delta R.T. -0.00 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion:104 Resp: 93270

Ion	Ratio	Lower	Upper
104	100		
78	53.4	36.7	76.7
103	54.8	37.2	77.2

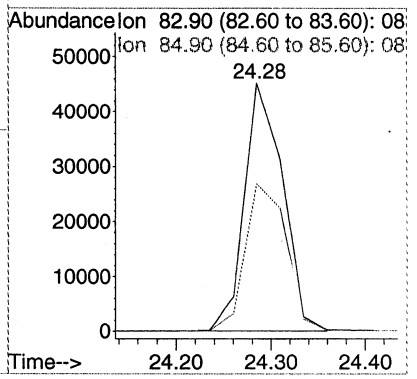


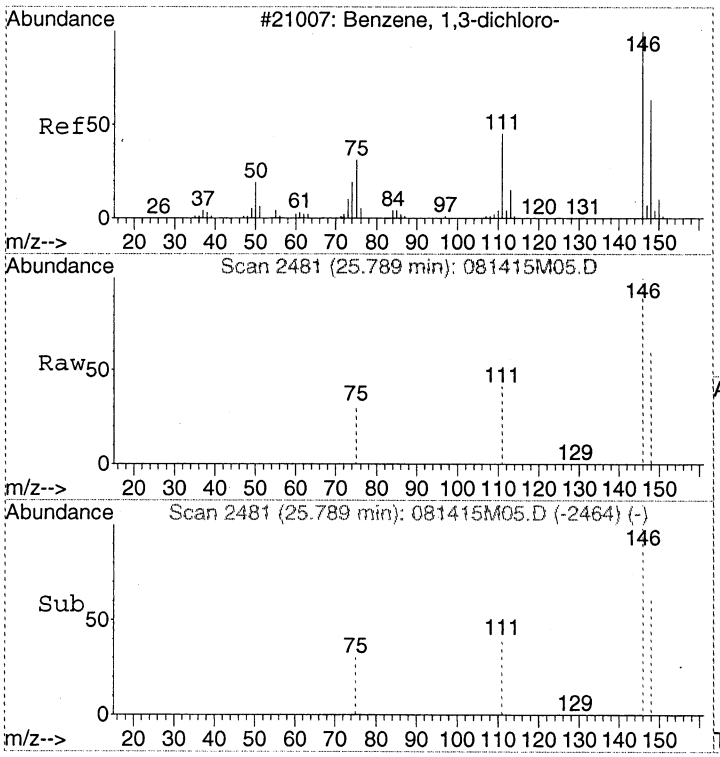


#31
1,1,2,2-Tetrachloroethane
Concen: 243.79 pptv
RT: 24.28 min Scan# 2387
Delta R.T. -0.00 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion: 83 Resp: 127038

Ion	Ratio	Lower	Upper
83	100		
85	63.6	44.0	84.0

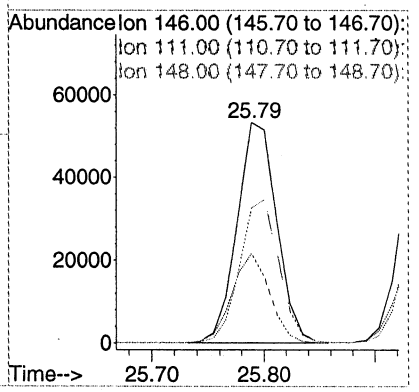


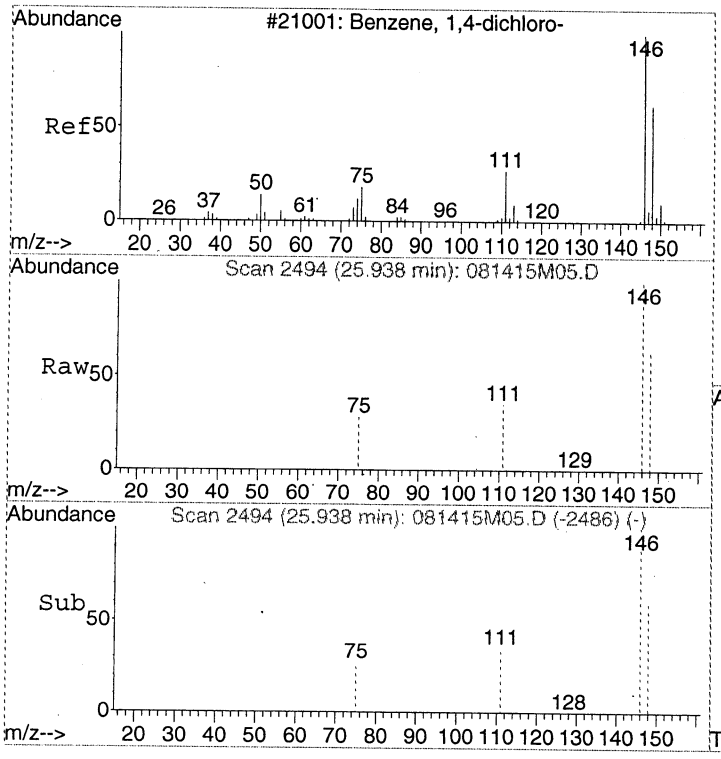


#32
1,3-Dichlorobenzene
Concen: 281.73 pptv
RT: 25.79 min Scan# 2481
Delta R.T. -0.00 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion:146 Resp: 130830

Ion	Ratio	Lower	Upper
146	100		
111	38.6	18.0	58.0
148	64.1	44.1	84.1

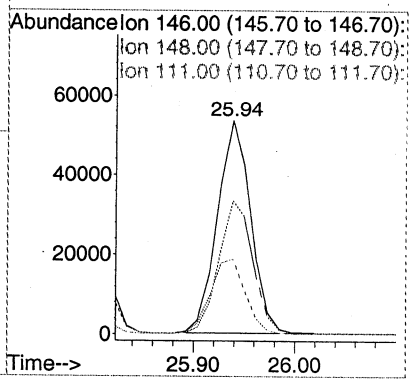


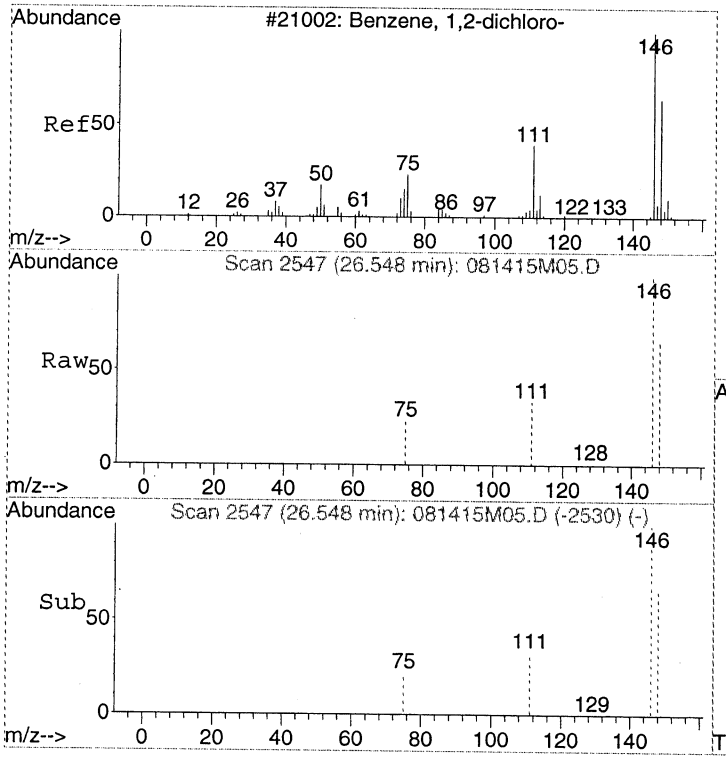


#33
1,4-Dichlorobenzene
Concen: 300.67 pptv
RT: 25.94 min Scan# 2494
Delta R.T. -0.00 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion:146 Resp: 121082

Ion	Ratio	Lower	Upper
146	100		
148	63.9	44.2	84.2
111	36.7	16.1	56.1

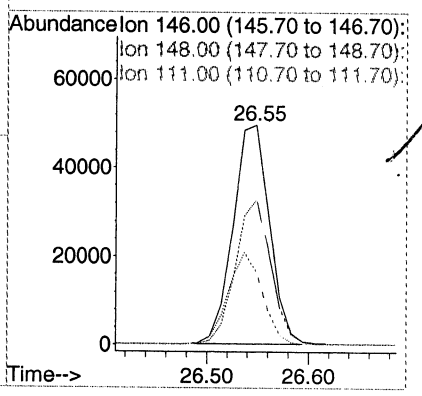




#34
1,2-Dichlorobenzene
Concen: 265.11 pptv
RT: 26.55 min Scan# 2547
Delta R.T. -0.00 min
Lab File: 081415M05.D
Acq: 14 Aug 2015 4:23 pm

Tgt Ion:146 Resp: 123288

Ion	Ratio	Lower	Upper
146	100		
148	63.8	44.0	84.0
111	40.0	19.7	59.7



Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M06.D
Acq On : 14 Aug 2015 5:15 pm
InstName : AG5973M
Operator : LLH
Sample : S15H054-CAL4
Misc : 350pptv 1533099 SIM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 17 09:32:26 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Fri Aug 14 17:00:10 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.24	49	74671	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.30	114	208543	375.00 pptv	-0.01
21) CHLOROBENZENE-d5	22.25	117	200810	341.00 pptv	0.00

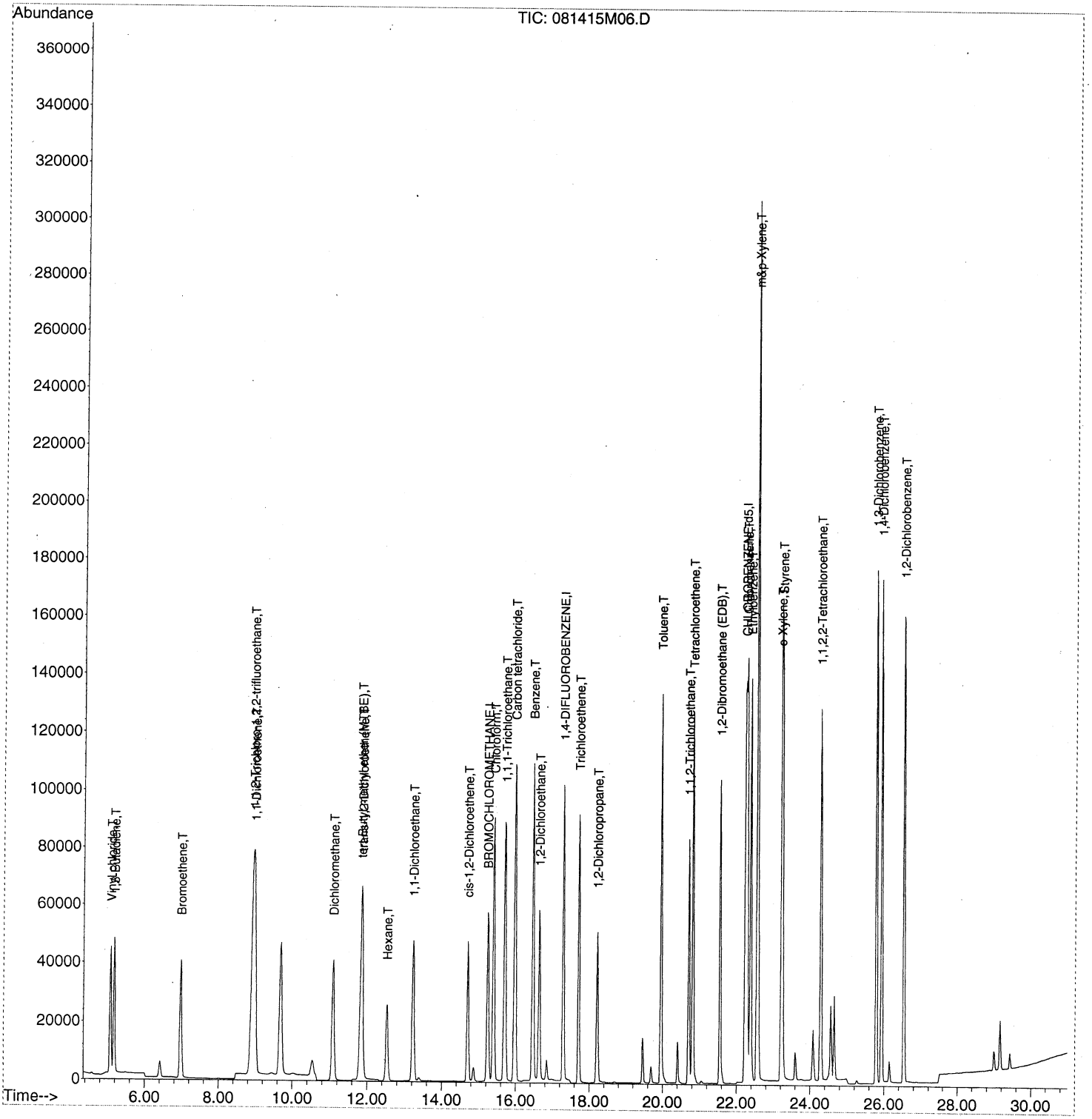
Target Compounds					Qvalue
2) Vinyl chloride	5.09	62	65974	376.09 pptv	100
3) 1,3-Butadiene	5.18	54	42331	322.96 pptv	100
4) Bromoethene	6.98	106	54222	363.33 pptv	100
5) 1,1,2-Trichloro-1,2,2-trif	8.94	151	145157	340.89 pptv	100
6) 1,1-Dichloroethene	8.97	61	85734	372.07 pptv	100
7) Dichloromethane	11.09	49	75768	315.14 pptv	99
8) tert-Butyl methyl ether (M	11.84	73	108810	448.04 pptv	98
9) trans-1,2-Dichloroethene	11.86	61	79957	350.82 pptv	100
10) Hexane	12.53	57	58248	433.92 pptv	99
11) 1,1-Dichloroethane	13.23	63	116747	379.78 pptv	100
12) cis-1,2-Dichloroethene	14.71	96	53544	381.59 pptv	100
13) Chloroform	15.41	83	153105	343.97 pptv	100
14) 1,1,1-Trichloroethane	15.72	97	159444	322.32 pptv	100
15) Carbon tetrachloride	15.98	117	198452	391.72 pptv	100
17) Benzene	16.47	78	216718	362.37 pptv	100
18) 1,2-Dichloroethane	16.64	62	97933	324.25 pptv	100
19) Trichloroethene	17.72	130	87967	355.80 pptv	100
20) 1,2-Dichloropropane	18.22	63	69207	345.16 pptv	99
22) Toluene	19.96	91	205273	415.35 pptv	100
23) 1,1,2-Trichloroethane	20.71	97	89695	346.54 pptv	99
24) Tetrachloroethene	20.82	166	133407	366.79 pptv	100
25) 1,2-Dibromoethane (EDB)	21.55	107	112035	364.91 pptv	99
26) Chlorobenzene	22.28	112	191430	373.93 pptv	100
27) Ethylbenzene	22.39	91	255674	433.90 pptv	100
28) m&p-Xylene	22.56	91	444128	931.22 pptv	99
29) o-Xylene	23.21	91	203122	437.49 pptv	100
30) Styrene	23.24	104	145429	461.11 pptv	99
31) 1,1,2,2-Tetrachloroethane	24.28	83	175041	334.28 pptv	100
32) 1,3-Dichlorobenzene	25.79	146	187874	357.96 pptv	100
33) 1,4-Dichlorobenzene	25.94	146	177478	370.58 pptv	100
34) 1,2-Dichlorobenzene	26.55	146	176055	347.83 pptv	100

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

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M06.D
Acq On : 14 Aug 2015 5:15 pm
InstName : AG5973M
Operator : LLH
Sample : S15H054-CAL4
Misc : 350pptv 1533099 SIM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 17 09:32:26 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Fri Aug 14 17:00:10 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M07.D
Acq On : 14 Aug 2015 6:10 pm
InstName : AG5973M
Operator : LLH
Sample : S15H054-CAL5
Misc : 500pptv 1533100 SIM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 17 09:32:56 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:32:50 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.25	49	68175	341.00	pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.31	114	181704	375.00	pptv	0.00
21) CHLOROBENZENE-d5	22.25	117	162741	341.00	pptv	0.00

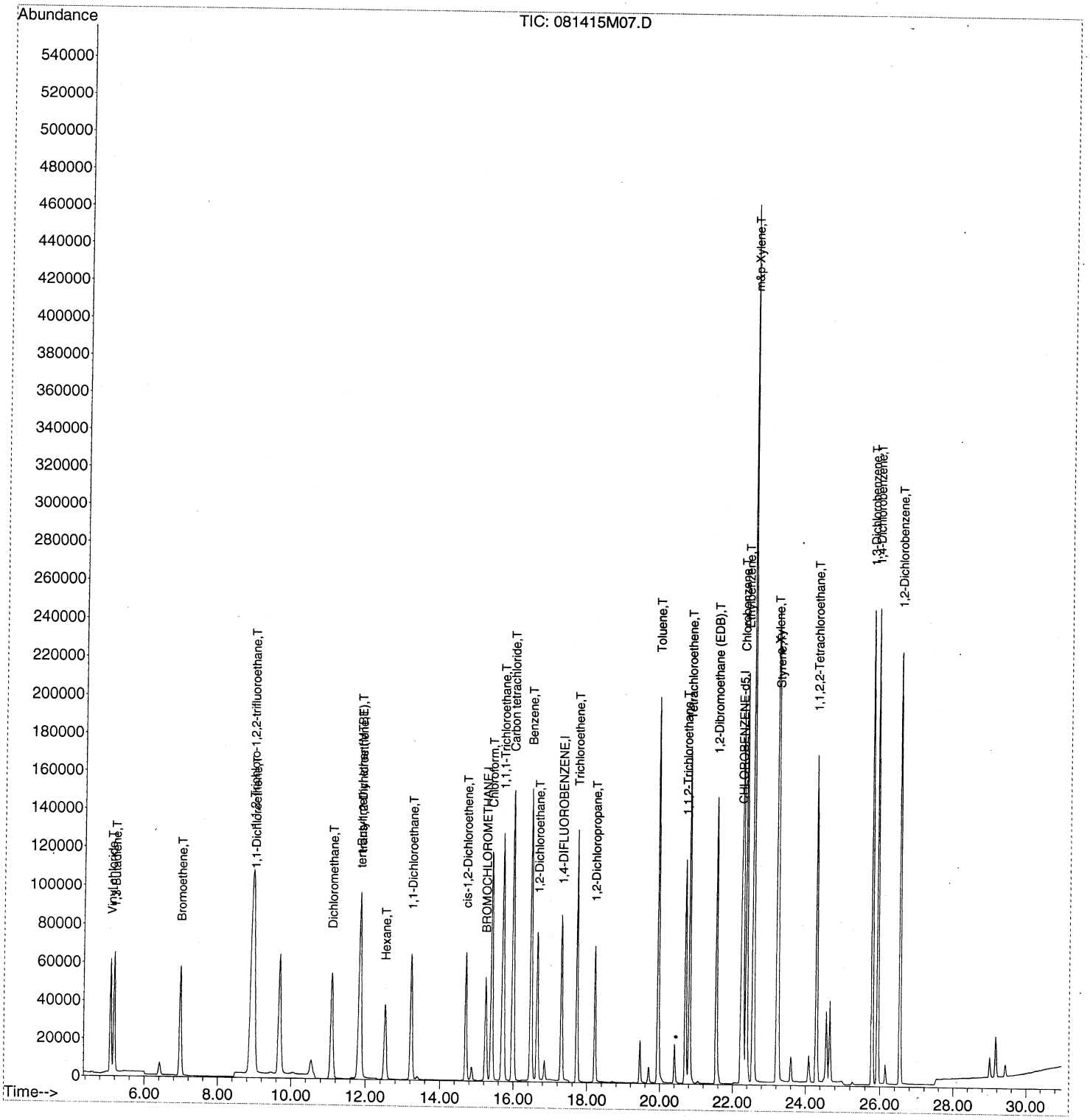
Target Compounds						Qvalue
2) Vinyl chloride	5.09	62	89201	571.90	pptv	99
3) 1,3-Butadiene	5.19	54	58732	500.45	pptv	99
4) Bromoethene	6.98	106	77808	579.20	pptv	100
5) 1,1,2-Trichloro-1,2,2-trif	8.94	151	198504	525.65	pptv	100
6) 1,1-Dichloroethene	8.99	61	123073	589.96	pptv	100
7) Dichloromethane	11.09	49	102886	490.97	pptv	99
8) tert-Butyl methyl ether (M	11.84	73	162770	705.22	pptv	96
9) trans-1,2-Dichloroethene	11.86	61	113378	544.54	pptv	100
10) Hexane	12.53	57	86810	686.51	pptv	98
11) 1,1-Dichloroethane	13.24	63	160817	587.04	pptv	100
12) cis-1,2-Dichloroethene	14.71	96	75503	590.66	pptv	100
13) Chloroform	15.40	83	210308	531.67	pptv	100
14) 1,1,1-Trichloroethane	15.71	97	246052	555.79	pptv	99
15) Carbon tetrachloride	15.98	117	235469	506.87	pptv	100
17) Benzene	16.47	78	305975	595.94	pptv	100
18) 1,2-Dichloroethane	16.66	62	134050	530.31	pptv	100
19) Trichloroethene	17.72	130	123671	585.20	pptv	100
20) 1,2-Dichloropropane	18.22	63	96583	567.52	pptv	99
22) Toluene	19.96	91	301778	738.89	pptv	100
23) 1,1,2-Trichloroethane	20.71	97	124455	608.51	pptv	99
24) Tetrachloroethene	20.83	166	188048	645.59	pptv	99
25) 1,2-Dibromoethane (EDB)	21.55	107	158371	644.91	pptv	99
26) Chlorobenzene	22.28	112	268671	652.26	pptv	99
27) Ethylbenzene	22.39	91	381082	773.45	pptv	100
28) m&p-Xylene	22.56	91	660349	1623.48	pptv	99
29) o-Xylene	23.21	91	305040	783.97	pptv	99
30) Styrene	23.25	104	220512	822.10	pptv	99
31) 1,1,2,2-Tetrachloroethane	24.28	83	242504	590.91	pptv	100
32) 1,3-Dichlorobenzene	25.79	146	264275	632.42	pptv	100
33) 1,4-Dichlorobenzene	25.94	146	252447	656.57	pptv	100
34) 1,2-Dichlorobenzene	26.55	146	247180	617.50	pptv	100

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

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M07.D
Acq On : 14 Aug 2015 6:10 pm
InstName : AG5973M
Operator : LLH
Sample : S15H054-CAL5
Misc : 500pptv 1533100 SIM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 17 09:32:56 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:32:50 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M08.D
Acq On : 14 Aug 2015 7:04 pm
InstName : AG5973M
Operator : LLH
Sample : IBL
Misc : 400ml IBL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 17 09:34:58 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.24	49	69105	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.31	114	182272	375.00 pptv	0.00
21) CHLOROBENZENE-d5	22.23	117	176487	341.00 pptv	-0.02

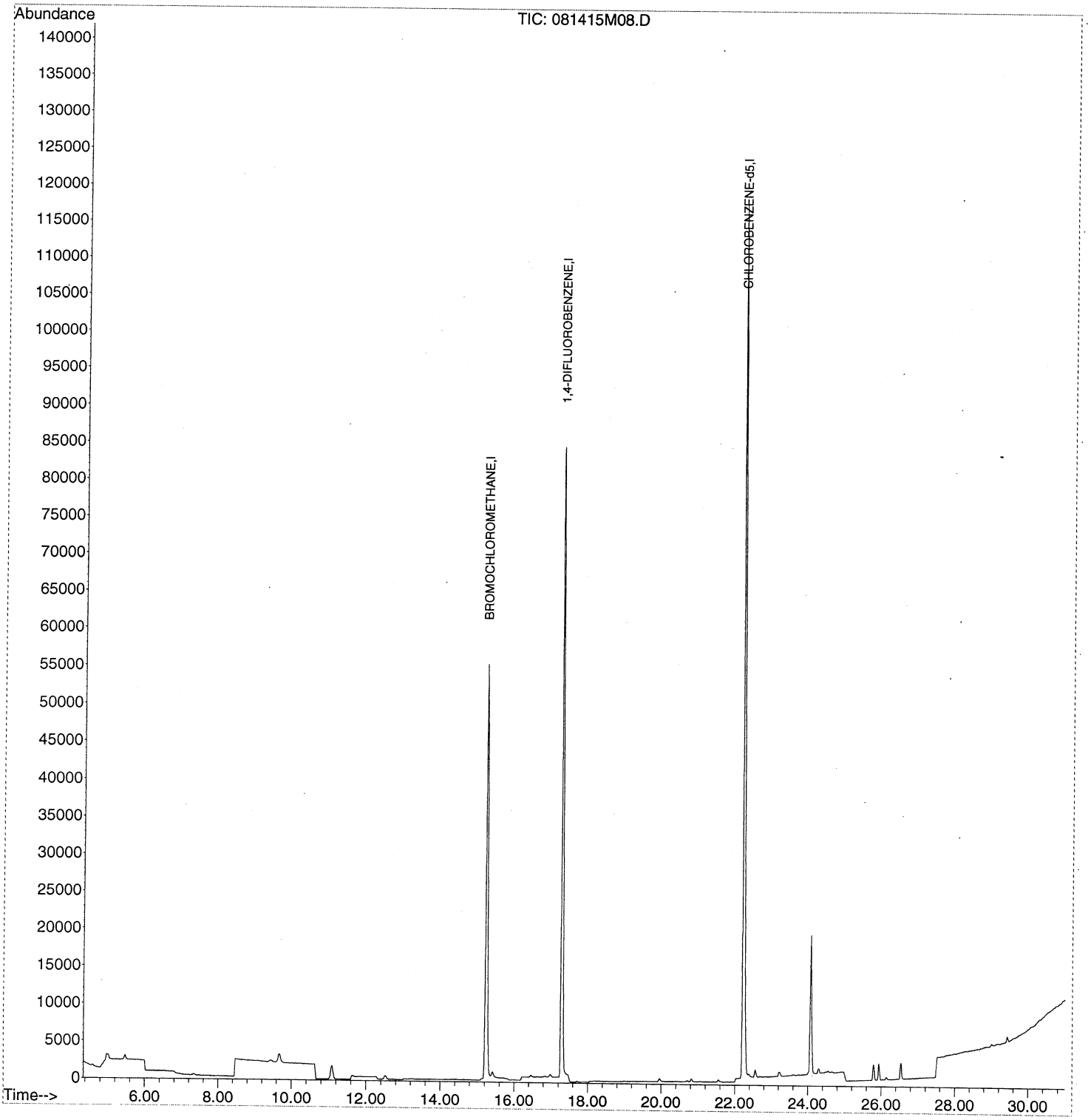
Target Compounds					Qvalue
2) Vinyl chloride	5.09	62	180	N.D.	
3) 1,3-Butadiene	5.18	54	28	N.D.	
4) Bromoethene	6.99	106	6	N.D.	
5) 1,1,2-Trichloro-1,2,2-trif	8.94	151	99	N.D.	
6) 1,1-Dichloroethene	8.97	61	39	N.D.	
7) Dichloromethane	11.09	49	3217	N.D.	
8) tert-Butyl methyl ether (M	11.83	73	124	N.D.	
9) trans-1,2-Dichloroethene	11.85	61	46	N.D.	
10) Hexane	12.52	57	1077	N.D.	
11) 1,1-Dichloroethane	13.22	63	27	N.D.	
12) cis-1,2-Dichloroethene	14.73	96	7	N.D.	
13) Chloroform	15.40	83	126	N.D.	
14) 1,1,1-Trichloroethane	15.71	97	59	N.D.	
15) Carbon tetrachloride	0.00	117	0	N.D.	
17) Benzene	16.46	78	503	N.D.	
18) 1,2-Dichloroethane	16.64	62	112	N.D.	
19) Trichloroethene	17.72	130	85	N.D.	
20) 1,2-Dichloropropane	18.06	63	84	N.D.	
22) Toluene	19.95	91	591	N.D.	
23) 1,1,2-Trichloroethane	20.71	97	158	N.D.	
24) Tetrachloroethene	20.81	166	222	N.D.	
25) 1,2-Dibromoethane (EDB)	21.55	107	336	N.D.	
26) Chlorobenzene	22.28	112	661	N.D.	
27) Ethylbenzene	22.39	91	644	N.D.	
28) m&p-Xylene	22.56	91	1518	N.D.	
29) o-Xylene	23.21	91	822	N.D.	
30) Styrene	23.25	104	469	N.D.	
31) 1,1,2,2-Tetrachloroethane	24.28	83	923	N.D.	
32) 1,3-Dichlorobenzene	25.79	146	2207	N.D.	
33) 1,4-Dichlorobenzene	25.94	146	2313	N.D.	
34) 1,2-Dichlorobenzene	26.55	146	2329	N.D.	

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

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M08.D
Acq On : 14 Aug 2015 7:04 pm
InstName : AG5973M
Operator : LLH
Sample : IBL
Misc : 400ml IBL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 17 09:34:58 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M09.D
Acq On : 14 Aug 2015 7:50 pm
InstName : AG5973M
Operator : LLH
Sample : S15H054CAL1
Misc : 50pptv 1533096 SIM
ALS Vial : 1 Sample Multiplier: 1

NU

Quant Time: Aug 17 09:35:11 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.23	49	62233	341.00 pptv	-0.01
16) 1,4-DIFLUOROBENZENE	17.30	114	158007	375.00 pptv	-0.01
21) CHLOROBENZENE-d5	22.23	117	150019	341.00 pptv	-0.02

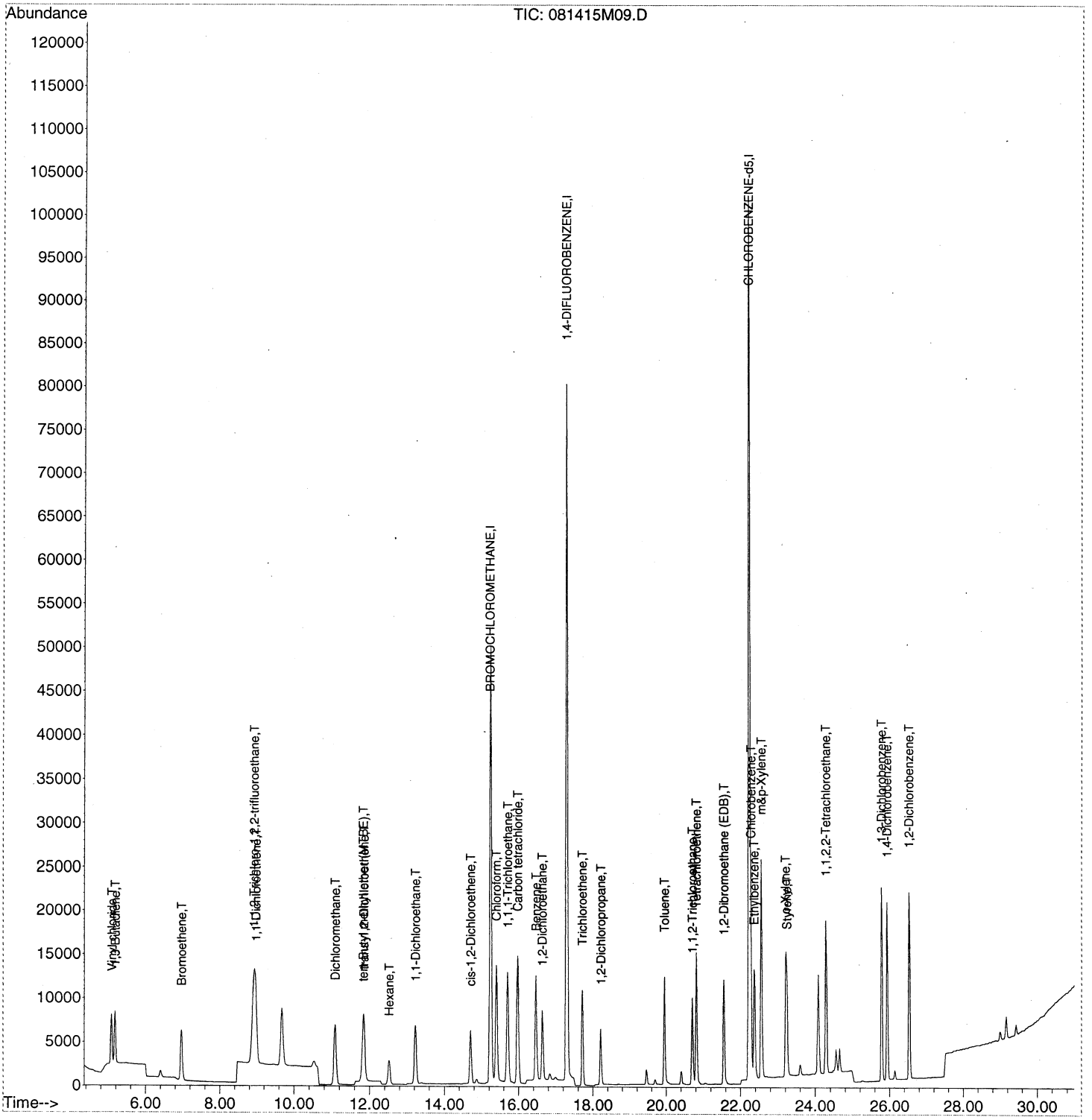
Target Compounds					Qvalue
2) Vinyl chloride	5.09	62	8730	61.89 pptv	99
3) 1,3-Butadiene	5.18	54	5449	50.85 pptv	99
4) Bromoethene	6.97	106	7691	62.06 pptv	97
5) 1,1,2-Trichloro-1,2,2-trif	8.92	151	20812	60.91 pptv	99
6) 1,1-Dichloroethene	8.97	61	11726	60.69 pptv	99
7) Dichloromethane	11.09	49	12693	67.81 pptv	100
8) tert-Butyl methyl ether (M	11.83	73	11240	50.50 pptv	98
9) trans-1,2-Dichloroethene	11.85	61	9837	50.85 pptv	99
10) Hexane	12.52	57	6207	51.23 pptv	98
11) 1,1-Dichloroethane	13.23	63	16130	64.78 pptv	99
12) cis-1,2-Dichloroethene	14.70	96	6789	57.33 pptv	99
13) Chloroform	15.40	83	21022	58.61 pptv	94
14) 1,1,1-Trichloroethane	15.71	97	23497	56.87 pptv	92
15) Carbon tetrachloride	15.98	117	22146	53.05 pptv	100
17) Benzene	16.47	78	24050	52.98 pptv	100
18) 1,2-Dichloroethane	16.64	62	12974	59.45 pptv	99
19) Trichloroethene	17.72	130	10464	56.22 pptv	100
20) 1,2-Dichloropropane	18.22	63	8316	55.84 pptv	98
22) Toluene	19.95	91	19901	49.46 pptv	99
23) 1,1,2-Trichloroethane	20.71	97	10920	56.71 pptv	99
24) Tetrachloroethene	20.81	166	15589	56.11 pptv	99
25) 1,2-Dibromoethane (EDB)	21.55	107	12944	55.27 pptv	99
26) Chlorobenzene	22.28	112	21729	55.17 pptv	95
27) Ethylbenzene	22.37	91	23553	47.96 pptv	100
28) m&p-Xylene	22.56	91	35662	86.85 pptv	99
29) o-Xylene	23.21	91	18707	48.07 pptv	100
30) Styrene	23.24	104	11575	42.60 pptv	96
31) 1,1,2,2-Tetrachloroethane	24.28	83	22790	59.36 pptv	99
32) 1,3-Dichlorobenzene	25.79	146	23055	58.11 pptv	100
33) 1,4-Dichlorobenzene	25.94	146	21030	57.12 pptv	100
34) 1,2-Dichlorobenzene	26.54	146	22867	60.49 pptv	100

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

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M09.D
Acq On : 14 Aug 2015 7:50 pm
InstName : AG5973M
Operator : LLH
Sample : S15H054CAL1
Misc : 50pptv 1533096 SIM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 17 09:35:11 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration



5 out

NU RR diff SCV std.

LLH 8/17/15

SCV REPORT

Instrument Name: AG5973M
Sample Name: S15H054SCV1
Misc Info: 250pptv 1533078 SIM
Date Acquired: 8/14/2015 20:41
QLast Update: Mon Aug 17 09:33:25 2015
Operator: LLH

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	BROMOCHLOROMETHANE	15.23	#N/A	341.00	#N/A	70.0	130.0	#N/A
2)	Vinyl chloride	5.09	265.00	214.21	81%	70.0	130.0	pass
3)	1,3-Butadiene	5.18	255.00	167.04	66%	70.0	130.0	FAIL
4)	Bromoethene	6.97	270.00	203.95	76%	70.0	130.0	pass
5)	1,1,2-Trichloro-1,2,2-trifluoroethane	8.92	260.00	206.48	79%	70.0	130.0	pass
6)	1,1-Dichloroethene	8.97	255.00	203.39	80%	70.0	130.0	pass
7)	Dichloromethane	11.09	260.00	200.88	77%	70.0	130.0	pass
8)	tert-Butyl methyl ether (MTBE)	11.83	272.50	201.48	74%	70.0	130.0	pass
9)	trans-1,2-Dichloroethene	11.86	275.00	182.99	67%	70.0	130.0	FAIL
10)	Hexane	12.52	260.00	189.00	73%	70.0	130.0	pass
11)	1,1-Dichloroethane	13.23	255.00	228.29	90%	70.0	130.0	pass
12)	cis-1,2-Dichloroethene	14.70	267.50	206.21	77%	70.0	130.0	pass
13)	Chloroform	15.40	265.00	210.89	80%	70.0	130.0	pass
14)	1,1,1-Trichloroethane	15.71	255.00	209.85	82%	70.0	130.0	pass
15)	Carbon tetrachloride	15.98	252.50	192.33	76%	70.0	130.0	pass
16)	1,4-DIFLUOROBENZENE	17.30	#N/A	375.00	#N/A	70.0	130.0	#N/A
17)	Benzene	16.47	267.50	217.90	81%	70.0	130.0	pass
18)	1,2-Dichloroethane	16.64	260.00	221.48	85%	70.0	130.0	pass
19)	Trichloroethene	17.72	275.00	246.96	90%	70.0	130.0	pass
20)	1,2-Dichloropropane	18.22	267.50	223.48	84%	70.0	130.0	pass
21)	CHLOROBENZENE-d5	22.23	#N/A	341.00	#N/A	70.0	130.0	#N/A
22)	Toluene	19.95	267.50	216.81	81%	70.0	130.0	pass
23)	1,1,2-Trichloroethane	20.71	267.50	225.90	84%	70.0	130.0	pass
24)	Tetrachloroethene	20.81	265.00	233.55	88%	70.0	130.0	pass
25)	1,2-Dibromoethane (EDB)	21.55	275.00	225.09	82%	70.0	130.0	pass
26)	Chlorobenzene	22.28	270.00	215.96	80%	70.0	130.0	pass
27)	Ethylbenzene	22.39	270.00	218.32	81%	70.0	130.0	pass
28)	m&p-Xylene	22.56	535.00	421.58	79%	70.0	130.0	pass
29)	o-Xylene	23.21	265.00	208.84	79%	70.0	130.0	pass
30)	Styrene	23.24	260.00	176.74	68%	70.0	130.0	FAIL
31)	1,1,2,2-Tetrachloroethane	24.28	262.50	195.47	74%	70.0	130.0	pass
32)	1,3-Dichlorobenzene	25.79	257.50	165.79	64%	70.0	130.0	FAIL
33)	1,4-Dichlorobenzene	25.94	257.50	143.34	56%	70.0	130.0	FAIL
34)	1,2-Dichlorobenzene	26.55	252.50	189.76	75%	70.0	130.0	pass

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M10.D
Acq On : 14 Aug 2015 8:41 pm
InstName : AG5973M
Operator : LLH
Sample : S15H054SCV1
Misc : 250pptv 1533078 SIM
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 17 09:35:19 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.23	49	69634	341.00	pptv	-0.01
16) 1,4-DIFLUOROBENZENE	17.30	114	174043	375.00	pptv	-0.01
21) CHLOROBENZENE-d5	22.23	117	162665	341.00	pptv	-0.02

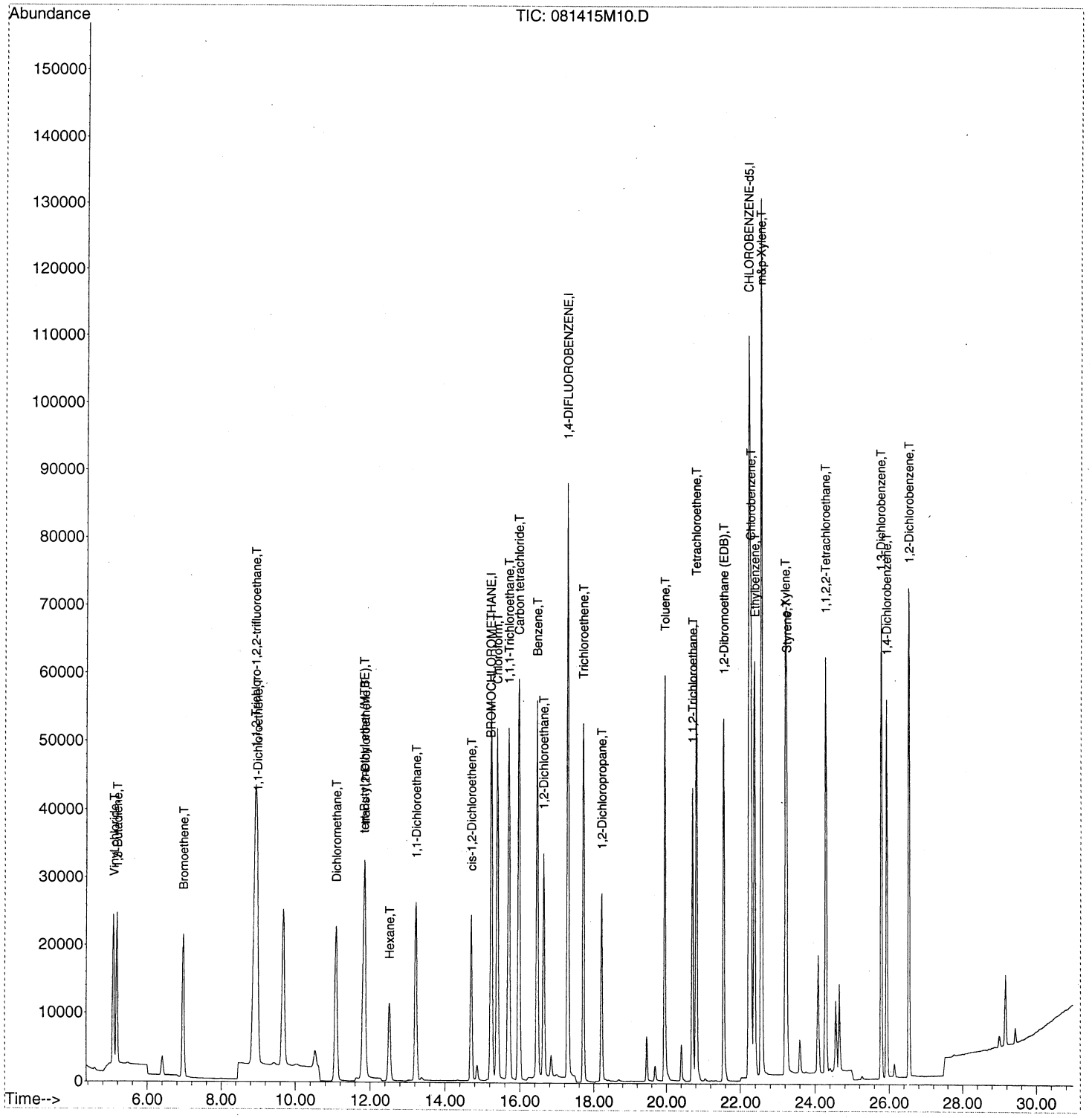
Target Compounds						Qvalue
2) Vinyl chloride	5.09	62	33807	214.21	pptv	99
3) 1,3-Butadiene	5.18	54	20027	167.04	pptv	100
4) Bromoethene	6.97	106	28281	203.95	pptv	99
5) 1,1,2-Trichloro-1,2,2-trif	8.92	151	78937	206.48	pptv	100
6) 1,1-Dichloroethene	8.97	61	43967	203.39	pptv	99
7) Dichloromethane	11.09	49	42073	200.88	pptv	100
8) tert-Butyl methyl ether (M	11.83	73	50178	201.48	pptv	98
9) trans-1,2-Dichloroethene	11.86	61	39608	182.99	pptv	100
10) Hexane	12.52	57	25623	189.00	pptv	98
11) 1,1-Dichloroethane	13.23	63	63601	228.29	pptv	99
12) cis-1,2-Dichloroethene	14.70	96	27322	206.21	pptv	99
13) Chloroform	15.40	83	84636	210.89	pptv	99
14) 1,1,1-Trichloroethane	15.71	97	97010	209.85	pptv	100
15) Carbon tetrachloride	15.98	117	89829	192.33	pptv	100
17) Benzene	16.47	78	108949	217.90	pptv	100
18) 1,2-Dichloroethane	16.64	62	53241	221.48	pptv	99
19) Trichloroethene	17.72	130	50629	246.96	pptv	100
20) 1,2-Dichloropropane	18.22	63	36661	223.48	pptv	99
22) Toluene	19.95	91	94590	216.81	pptv	100
23) 1,1,2-Trichloroethane	20.71	97	47163	225.90	pptv	99
24) Tetrachloroethene	20.81	166	70359	233.55	pptv	100
25) 1,2-Dibromoethane (EDB)	21.55	107	57156	225.09	pptv	99
26) Chlorobenzene	22.28	112	92218	215.96	pptv	99
27) Ethylbenzene	22.39	91	116253	218.32	pptv	100
28) m&p-Xylene	22.56	91	187712	421.58	pptv	99
29) o-Xylene	23.21	91	88132	208.84	pptv	100
30) Styrene	23.24	104	52074	176.74	pptv	97
31) 1,1,2,2-Tetrachloroethane	24.28	83	81375	195.47	pptv	100
32) 1,3-Dichlorobenzene	25.79	146	71322	165.79	pptv	100
33) 1,4-Dichlorobenzene	25.94	146	57224	143.34	pptv	100
34) 1,2-Dichlorobenzene	26.55	146	77789	189.76	pptv	100

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

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M10.D
Acq On : 14 Aug 2015 8:41 pm
InstName : AG5973M
Operator : LLH
Sample : S15H054SCV1
Misc : 250pptv 1533078 SIM
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 17 09:35:19 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration



00070

5 out

NU RR diff SCV std

SCV REPORT

Instrument Name: AG5973M
Sample Name: S15H054-SCV1
Misc Info: 250pptv 1533078 SIM
Date Acquired: 8/14/2015 21:31
QLast Update: Mon Aug 17 09:33:25 2015
Operator: LLH

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	BROMOCHLOROMETHANE	15.24	#N/A	341.00	#N/A	70.0	130.0	#N/A
2)	Vinyl chloride	5.09	265.00	210.57	79%	70.0	130.0	pass
3)	1,3-Butadiene	5.18	255.00	165.04	65%	70.0	130.0	FAIL
4)	Bromoethene	6.97	270.00	200.46	74%	70.0	130.0	pass
5)	1,1,2-Trichloro-1,2,2-trifluoroethane	8.92	260.00	202.52	78%	70.0	130.0	pass
6)	1,1-Dichloroethene	8.97	255.00	198.51	78%	70.0	130.0	pass
7)	Dichloromethane	11.09	260.00	196.89	76%	70.0	130.0	pass
8)	tert-Butyl methyl ether (MTBE)	11.83	272.50	194.55	71%	70.0	130.0	pass
9)	trans-1,2-Dichloroethene	11.85	275.00	178.51	65%	70.0	130.0	FAIL
10)	Hexane	12.52	260.00	184.13	71%	70.0	130.0	pass
11)	1,1-Dichloroethane	13.23	255.00	223.05	87%	70.0	130.0	pass
12)	cis-1,2-Dichloroethene	14.70	267.50	200.84	75%	70.0	130.0	pass
13)	Chloroform	15.40	265.00	206.33	78%	70.0	130.0	pass
14)	1,1,1-Trichloroethane	15.71	255.00	206.05	81%	70.0	130.0	pass
15)	Carbon tetrachloride	15.98	252.50	187.86	74%	70.0	130.0	pass
16)	1,4-DIFLUOROBENZENE	17.31	#N/A	375.00	#N/A	70.0	130.0	#N/A
17)	Benzene	16.46	267.50	218.33	82%	70.0	130.0	pass
18)	1,2-Dichloroethane	16.65	260.00	223.17	86%	70.0	130.0	pass
19)	Trichloroethene	17.72	275.00	247.35	90%	70.0	130.0	pass
20)	1,2-Dichloropropane	18.22	267.50	224.01	84%	70.0	130.0	pass
21)	CHLOROBENZENE-d5	22.23	#N/A	341.00	#N/A	70.0	130.0	#N/A
22)	Toluene	19.95	267.50	215.43	81%	70.0	130.0	pass
23)	1,1,2-Trichloroethane	20.71	267.50	226.11	85%	70.0	130.0	pass
24)	Tetrachloroethene	20.81	265.00	232.54	88%	70.0	130.0	pass
25)	1,2-Dibromoethane (EDB)	21.55	275.00	225.10	82%	70.0	130.0	pass
26)	Chlorobenzene	22.28	270.00	214.71	80%	70.0	130.0	pass
27)	Ethylbenzene	22.39	270.00	214.84	80%	70.0	130.0	pass
28)	m&p-Xylene	22.56	535.00	412.73	77%	70.0	130.0	pass
29)	o-Xylene	23.21	265.00	204.50	77%	70.0	130.0	pass
30)	Styrene	23.24	260.00	172.29	66%	70.0	130.0	FAIL
31)	1,1,2,2-Tetrachloroethane	24.28	262.50	192.83	73%	70.0	130.0	pass
32)	1,3-Dichlorobenzene	25.79	257.50	164.62	64%	70.0	130.0	FAIL
33)	1,4-Dichlorobenzene	25.94	257.50	141.97	55%	70.0	130.0	FAIL
34)	1,2-Dichlorobenzene	26.55	252.50	188.65	75%	70.0	130.0	pass

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M11.D
Acq On : 14 Aug 2015 9:31 pm
InstName : AG5973M
Operator : LLH
Sample : S15H054SCV1
Misc : 250pptv 1533078 SIM
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 17 09:36:48 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.24	49	69397	341.00	pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.31	114	168111	375.00	pptv	0.00
21) CHLOROBENZENE-d5	22.23	117	157358	341.00	pptv	-0.02

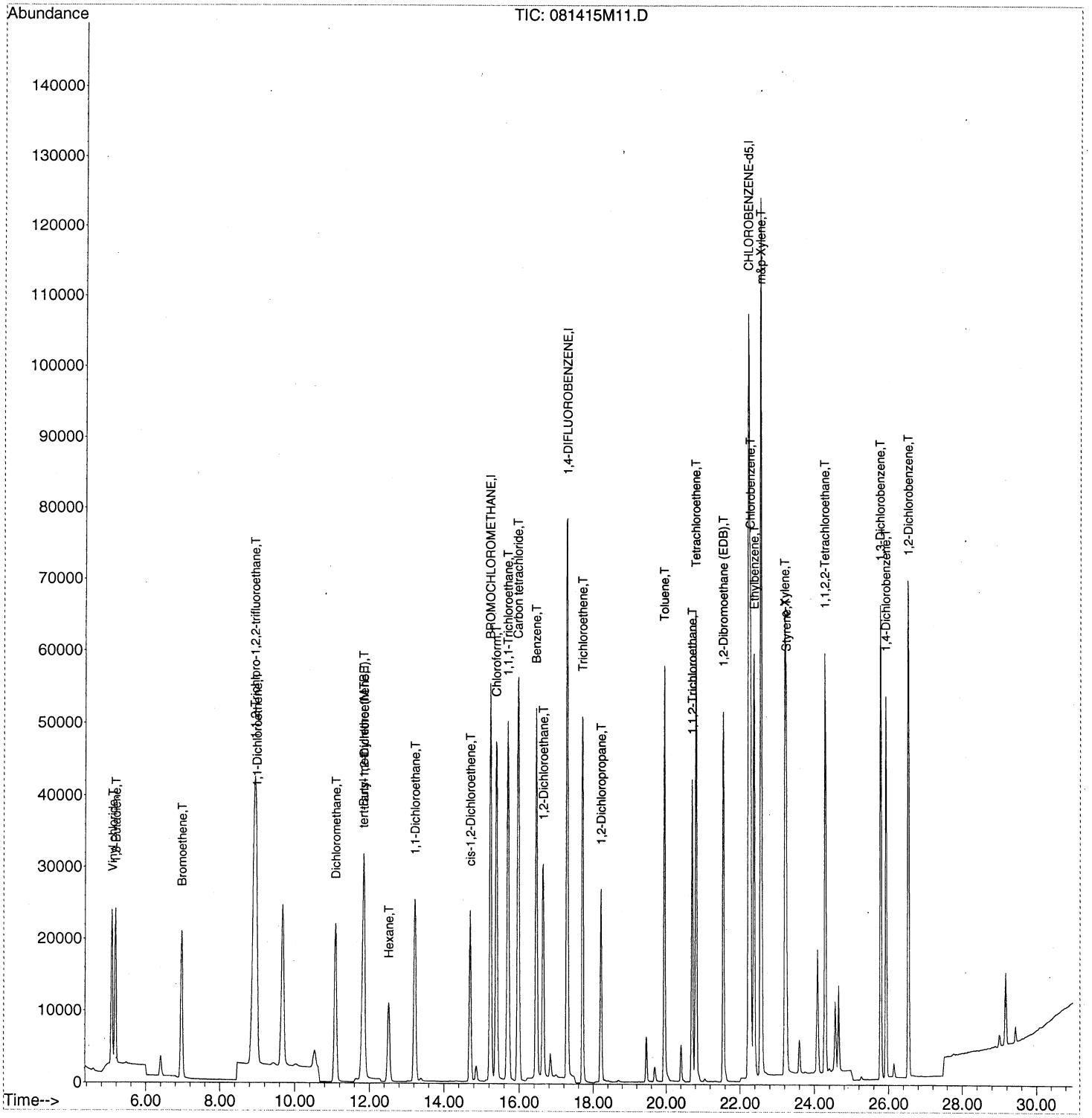
Target Compounds						Qvalue
2) Vinyl chloride	5.09	62	33119	210.57	pptv	100
3) 1,3-Butadiene	5.18	54	19720	165.04	pptv	100
4) Bromoethene	6.97	106	27703	200.46	pptv	99
5) 1,1,2-Trichloro-1,2,2-trif	8.92	151	77160	202.52	pptv	100
6) 1,1-Dichloroethene	8.97	61	42767	198.51	pptv	99
7) Dichloromethane	11.09	49	41097	196.89	pptv	99
8) tert-Butyl methyl ether (M	11.83	73	48289	194.55	pptv	98
9) trans-1,2-Dichloroethene	11.85	61	38507	178.51	pptv	100
10) Hexane	12.52	57	24877	184.13	pptv	98
11) 1,1-Dichloroethane	13.23	63	61930	223.05	pptv	99
12) cis-1,2-Dichloroethene	14.70	96	26519	200.84	pptv	99
13) Chloroform	15.40	83	82524	206.33	pptv	99
14) 1,1,1-Trichloroethane	15.71	97	94927	206.05	pptv	100
15) Carbon tetrachloride	15.98	117	87444	187.86	pptv	100
17) Benzene	16.46	78	105447	218.33	pptv	99
18) 1,2-Dichloroethane	16.65	62	51819	223.17	pptv	99
19) Trichloroethene	17.72	130	48981	247.35	pptv	100
20) 1,2-Dichloropropane	18.22	63	35496	224.01	pptv	99
22) Toluene	19.95	91	90919	215.43	pptv	100
23) 1,1,2-Trichloroethane	20.71	97	45667	226.11	pptv	99
24) Tetrachloroethene	20.81	166	67769	232.54	pptv	100
25) 1,2-Dibromoethane (EDB)	21.55	107	55294	225.10	pptv	99
26) Chlorobenzene	22.28	112	88696	214.71	pptv	99
27) Ethylbenzene	22.39	91	110670	214.84	pptv	100
28) m&p-Xylene	22.56	91	177775	412.73	pptv	99
29) o-Xylene	23.21	91	83486	204.50	pptv	99
30) Styrene	23.24	104	49106	172.29	pptv	96
31) 1,1,2,2-Tetrachloroethane	24.28	83	77656	192.83	pptv	100
32) 1,3-Dichlorobenzene	25.79	146	68508	164.62	pptv	100
33) 1,4-Dichlorobenzene	25.94	146	54827	141.97	pptv	100
34) 1,2-Dichlorobenzene	26.55	146	74811	188.65	pptv	100

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

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M11.D
Acq On : 14 Aug 2015 9:31 pm
InstName : AG5973M
Operator : LLH
Sample : S15H054SCV1
Misc : 250pptv 1533078 SIM
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 17 09:36:48 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration



Report

SCV REPORT

Instrument Name: AG5973M
Sample Name: S15H054-SCV2
Misc Info: 250pptv 1533077 SIM
Date Acquired: 8/14/2015 22:21
QLast Update: Mon Aug 17 09:33:25 2015
Operator: LLH

LLH 8/17/15

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	BROMOCHLOROMETHANE	15.23	#N/A	341.00	#N/A	70.0	130.0	#N/A
2)	Vinyl chloride	5.09	265.00	264.89	100%	70.0	130.0	pass
3)	1,3-Butadiene	5.18	255.00	208.54	82%	70.0	130.0	pass
4)	Bromoethene	6.97	270.00	255.30	95%	70.0	130.0	pass
5)	1,1,2-Trichloro-1,2,2-trifluoroethane	8.92	260.00	257.13	99%	70.0	130.0	pass
6)	1,1-Dichloroethene	8.97	255.00	255.25	100%	70.0	130.0	pass
7)	Dichloromethane	11.08	260.00	246.76	95%	70.0	130.0	pass
8)	tert-Butyl methyl ether (MTBE)	11.83	272.50	255.14	94%	70.0	130.0	pass
9)	trans-1,2-Dichloroethene	11.85	275.00	232.04	84%	70.0	130.0	pass
10)	Hexane	12.52	260.00	240.25	92%	70.0	130.0	pass
11)	1,1-Dichloroethane	13.23	255.00	285.82	112%	70.0	130.0	pass
12)	cis-1,2-Dichloroethene	14.70	267.50	260.68	97%	70.0	130.0	pass
13)	Chloroform	15.40	265.00	264.59	100%	70.0	130.0	pass
14)	1,1,1-Trichloroethane	15.71	255.00	262.06	103%	70.0	130.0	pass
15)	Carbon tetrachloride	15.98	252.50	245.65	97%	70.0	130.0	pass
16)	1,4-DIFLUOROBENZENE	17.30	#N/A	375.00	#N/A	70.0	130.0	#N/A
17)	Benzene	16.47	267.50	274.54	103%	70.0	130.0	pass
18)	1,2-Dichloroethane	16.64	260.00	280.17	108%	70.0	130.0	pass
19)	Trichloroethene	17.72	275.00	282.37	103%	70.0	130.0	pass
20)	1,2-Dichloropropane	18.22	267.50	278.30	104%	70.0	130.0	pass
21)	CHLOROBENZENE-d5	22.23	#N/A	341.00	#N/A	70.0	130.0	#N/A
22)	Toluene	19.95	267.50	273.96	102%	70.0	130.0	pass
23)	1,1,2-Trichloroethane	20.71	267.50	280.02	105%	70.0	130.0	pass
24)	Tetrachloroethene	20.81	265.00	286.96	108%	70.0	130.0	pass
25)	1,2-Dibromoethane (EDB)	21.55	275.00	302.68	110%	70.0	130.0	pass
26)	Chlorobenzene	22.28	270.00	281.01	104%	70.0	130.0	pass
27)	Ethylbenzene	22.39	270.00	281.47	104%	70.0	130.0	pass
28)	m&p-Xylene	22.56	535.00	579.73	108%	70.0	130.0	pass
29)	o-Xylene	23.21	265.00	276.37	104%	70.0	130.0	pass
30)	Styrene	23.24	260.00	268.41	103%	70.0	130.0	pass
31)	1,1,2,2-Tetrachloroethane	24.28	262.50	272.21	104%	70.0	130.0	pass
32)	1,3-Dichlorobenzene	25.79	257.50	264.68	103%	70.0	130.0	pass
33)	1,4-Dichlorobenzene	25.94	257.50	254.65	99%	70.0	130.0	pass
34)	1,2-Dichlorobenzene	26.55	252.50	276.17	109%	70.0	130.0	pass

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M12.D
Acq On : 14 Aug 2015 10:21 pm
InstName : AG5973M
Operator : LLH
Sample : S15H054-SCV2
Misc : 250pptv 1533077 SIM
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 17 09:38:04 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.23	49	63694	341.00 pptv	-0.01
16) 1,4-DIFLUOROBENZENE	17.30	114	159953	375.00 pptv	-0.01
21) CHLOROBENZENE-d5	22.23	117	151801	341.00 pptv	-0.02

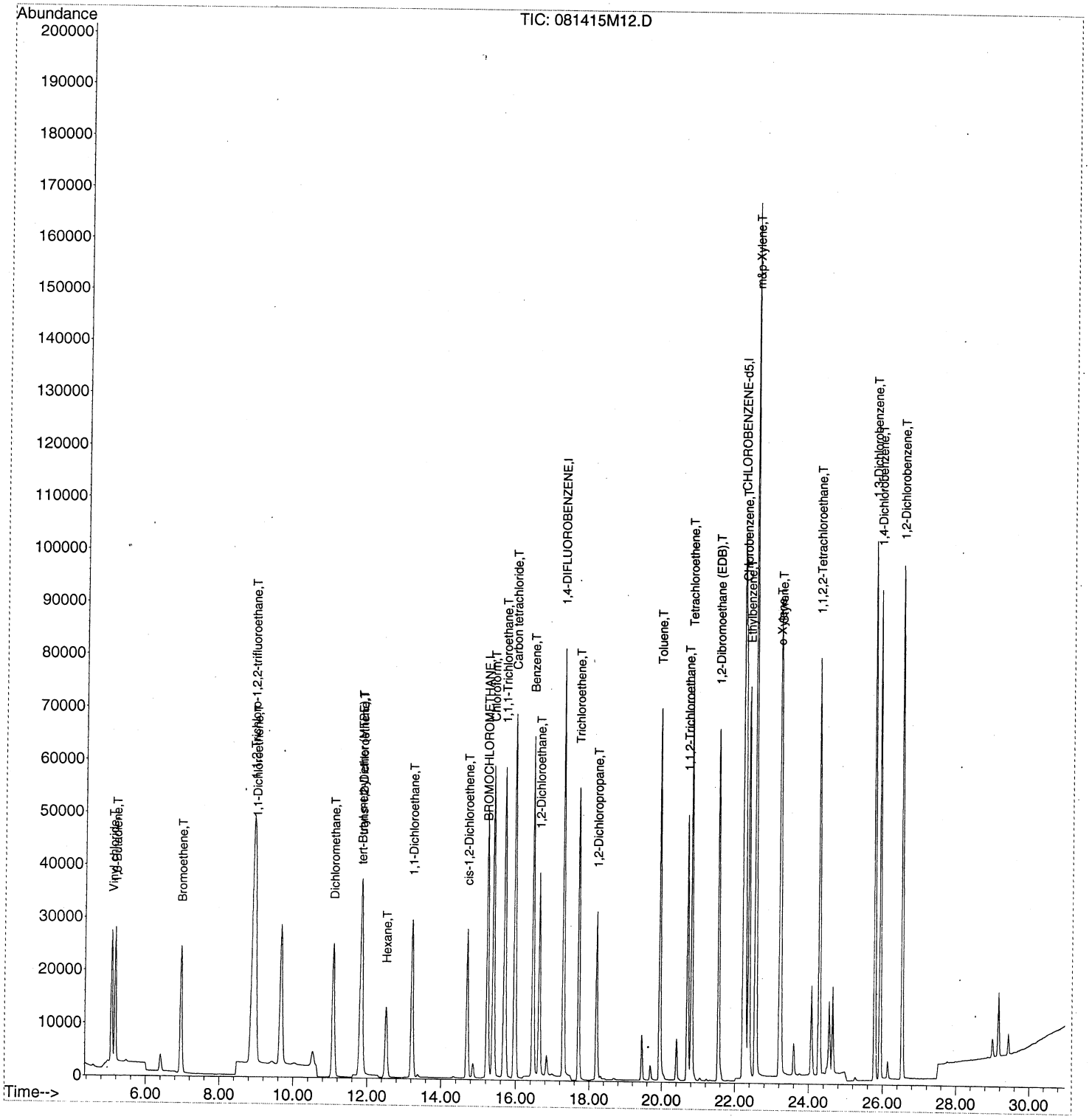
Target Compounds					Qvalue
2) Vinyl chloride	5.09	62	38239	264.89 pptv	100
3) 1,3-Butadiene	5.18	54	22869	208.54 pptv	100
4) Bromoethene	6.97	106	32382	255.30 pptv	99
5) 1,1,2-Trichloro-1,2,2-trif	8.92	151	89917	257.13 pptv	100
6) 1,1-Dichloroethene	8.97	61	50471	255.25 pptv	99
7) Dichloromethane	11.08	49	47275	246.76 pptv	99
8) tert-Butyl methyl ether (M	11.83	73	58122	255.14 pptv	98
9) trans-1,2-Dichloroethene	11.85	61	45942	232.04 pptv	99
10) Hexane	12.52	57	29792	240.25 pptv	98
11) 1,1-Dichloroethane	13.23	63	72836	285.82 pptv	99
12) cis-1,2-Dichloroethene	14.70	96	31592	260.68 pptv	99
13) Chloroform	15.40	83	97131	264.59 pptv	100
14) 1,1,1-Trichloroethane	15.71	97	110811	262.06 pptv	100
15) Carbon tetrachloride	15.98	117	104944	245.65 pptv	100
17) Benzene	16.47	78	126156	274.54 pptv	100
18) 1,2-Dichloroethane	16.64	62	61897	280.17 pptv	99
19) Trichloroethene	17.72	130	53202	282.37 pptv	100
20) 1,2-Dichloropropane	18.22	63	41958	278.30 pptv	99
22) Toluene	19.95	91	111538	273.96 pptv	100
23) 1,1,2-Trichloroethane	20.71	97	54558	280.02 pptv	99
24) Tetrachloroethene	20.81	166	80678	286.96 pptv	100
25) 1,2-Dibromoethane (EDB)	21.55	107	71725	302.68 pptv	99
26) Chlorobenzene	22.28	112	111983	281.01 pptv	99
27) Ethylbenzene	22.39	91	139868	281.47 pptv	100
28) m&p-Xylene	22.56	91	240886	579.73 pptv	99
29) o-Xylene	23.21	91	108841	276.37 pptv	100
30) Styrene	23.24	104	73800	268.41 pptv	99
31) 1,1,2,2-Tetrachloroethane	24.28	83	105753	272.21 pptv	100
32) 1,3-Dichlorobenzene	25.79	146	106262	264.68 pptv	100
33) 1,4-Dichlorobenzene	25.94	146	94868	254.65 pptv	100
34) 1,2-Dichlorobenzene	26.55	146	105648	276.17 pptv	100

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

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M12.D
Acq On : 14 Aug 2015 10:21 pm
InstName : AG5973M
Operator : LLH
Sample : S15H054-SCV2
Misc : 250pptv 1533077 SIM
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 17 09:38:04 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M13.D
Acq On : 14 Aug 2015 11:12 pm
InstName : AG5973M
Operator : LLH
Sample : S15H054SCV2
Misc : 250pptv 1533077 SIM
ALS Vial : 4 Sample Multiplier: 1

NU

Quant Time: Aug 17 09:40:18 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.23	49	68843	341.00 pptv	-0.01
16) 1,4-DIFLUOROBENZENE	17.30	114	174444	375.00 pptv	-0.01
21) CHLOROBENZENE-d5	22.23	117	163651	341.00 pptv	-0.02

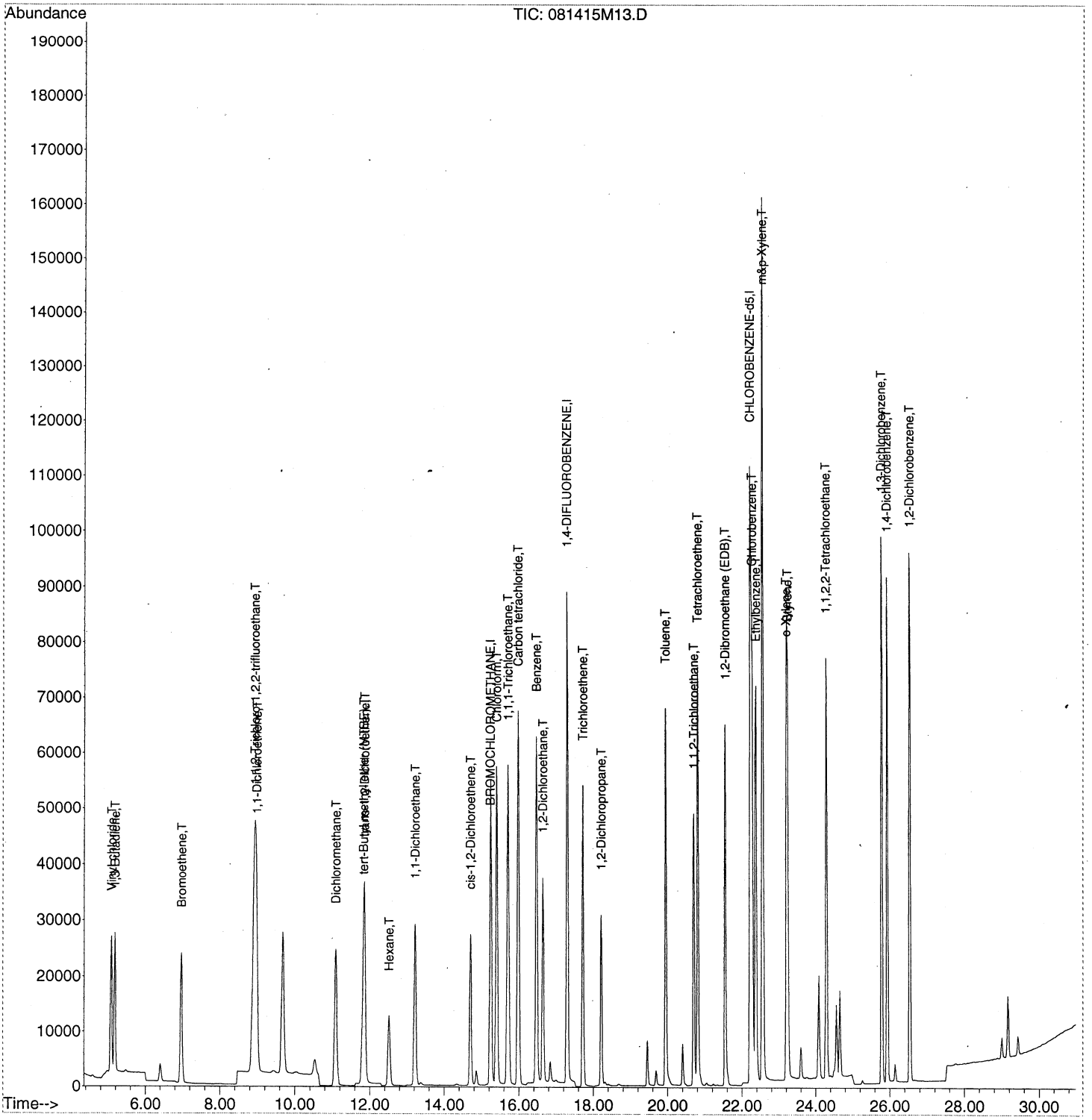
Target Compounds					Qvalue
2) Vinyl chloride	5.09	62	37589	240.91 pptv	99
3) 1,3-Butadiene	5.18	54	22502	189.84 pptv	100
4) Bromoethene	6.98	106	31572	230.29 pptv	99
5) 1,1,2-Trichloro-1,2,2-trif	8.92	151	86881	229.87 pptv	99
6) 1,1-Dichloroethene	8.97	61	49052	229.52 pptv	99
7) Dichloromethane	11.09	49	46112	222.69 pptv	99
8) tert-Butyl methyl ether (M	11.83	73	56506	229.49 pptv	98
9) trans-1,2-Dichloroethene	11.85	61	44615	208.49 pptv	99
10) Hexane	12.52	57	28893	215.57 pptv	97
11) 1,1-Dichloroethane	13.23	63	70740	256.83 pptv	99
12) cis-1,2-Dichloroethene	14.70	96	30562	233.32 pptv	99
13) Chloroform	15.40	83	94367	237.84 pptv	100
14) 1,1,1-Trichloroethane	15.71	97	107991	236.29 pptv	100
15) Carbon tetrachloride	15.98	117	101864	220.60 pptv	100
17) Benzene	16.47	78	122408	244.25 pptv	100
18) 1,2-Dichloroethane	16.64	62	60057	249.26 pptv	99
19) Trichloroethene	17.72	130	51687	251.54 pptv	100
20) 1,2-Dichloropropane	18.22	63	40671	247.35 pptv	99
22) Toluene	19.95	91	108064	246.21 pptv	100
23) 1,1,2-Trichloroethane	20.71	97	52849	251.61 pptv	99
24) Tetrachloroethene	20.81	166	78284	258.29 pptv	100
25) 1,2-Dibromoethane (EDB)	21.55	107	69623	272.53 pptv	99
26) Chlorobenzene	22.28	112	109579	255.07 pptv	100
27) Ethylbenzene	22.39	91	135695	253.30 pptv	100
28) m&p-Xylene	22.56	91	232078	518.09 pptv	100
29) o-Xylene	23.21	91	105246	247.89 pptv	100
30) Styrene	23.24	104	71072	239.77 pptv	99
31) 1,1,2,2-Tetrachloroethane	24.28	83	101535	242.43 pptv	100
32) 1,3-Dichlorobenzene	25.79	146	103055	238.11 pptv	100
33) 1,4-Dichlorobenzene	25.94	146	92233	229.65 pptv	100
34) 1,2-Dichlorobenzene	26.55	146	102428	248.36 pptv	100

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

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081415MAA\
Data File : 081415M13.D
Acq On : 14 Aug 2015 11:12 pm
InstName : AG5973M
Operator : LLH
Sample : S15H054SCV2
Misc : 250pptv 1533077 SIM
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 17 09:40:18 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration



SDG: 15224C

Instrument: AG5973M

Analysis Date: 08/17/15

SAMPLE DATA

ANALYSIS SEQUENCE

S15H061

Instrument: AG5973M

Calibration ID: 1508014

Printed: 8/18/2015 9:48:39AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
S15H061-TUN1	QC		1		1410062			
S15H061-CCV1	QC		2		1533098			
B15H074-BS1	QC		3					
S15H061-CRL1	QC		4		1533096			
B15H074-BLK1	QC		5			1533062		
1508028-12RE1	TO15 SIM	A	6			1533062	California Site Cleanup Section 3	Can 122
1508028-13RE1	TO15 SIM	A	7			1533062	California Site Cleanup Section 3	Can 123
1508028-14RE1	TO15 SIM	A	8			1533062	California Site Cleanup Section 3	Can 134
B15H074-DUP1	QC		9			1533062		
1508028-15RE1	TO15 SIM	A	10			1533062	California Site Cleanup Section 3	Can 116

Samples Loaded By Date

Data Processed By Date

----------SEQUENCE TABLE ----------

Sequence Name: C:\Smart\2015\081715SMAA.SEQ
Date: 08-18-2015
Time: 09:46:08
Int. Std Volume: 40 cc

Sample Name	Inlet #	Auto Pos	Samp Vol.	Cal Std Vol.	Method	Time
BFB	1	1	50	40	C:\Smart\TO15.CTD	12:00
CCV1 250pptv SIM+	1	1	250		C:\Smart\TO15.CTD	12:00
CRL1 50pptv SIM+	1	1	50		C:\Smart\TO15.CTD	12:00
BLANK	1	2	400		C:\Smart\TO15.CTD	12:00
1508028-12RE1	1	3	600		C:\Smart\TO15.CTD	12:00
1508028-13RE1	1	4	600		C:\Smart\TO15.CTD	12:00
1508028-15RE1	1	5	600		C:\Smart\TO15.CTD	12:00
1508028-14RE1	1	6	600		C:\Smart\TO15.CTD	12:00
1508028-14RE1 DUP	1	6	600		C:\Smart\TO15.CTD	12:00
CAN #415	1	7	400		C:\Smart\TO15.CTD	12:00
CAN #1194	1	8	400		C:\Smart\TO15.CTD	12:00
CAN #5019	1	9	400		C:\Smart\TO15.CTD	12:00
CAN #5720	1	10	400		C:\Smart\TO15.CTD	12:00

Injection Log

Directory: C:\MSDChem\1\2015\Data\081715MAA

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	081715M01.D	1.	S15H061-TUN1	BFB 1410062	17 Aug 2015 10:14
2	1	081715M02.D	1.	S15H061-CCV1@B15H074-BS1	250pptv 1533098@1533101 SIM	17 Aug 2015 11:04
3	1	081715M03.D	1.	S15H061-CRL1	50pptv 1533096 SIM	17 Aug 2015 11:50
4	2	081715M04.D	1.	B15H074-BLK1	400ml BLANK CAN #40	17 Aug 2015 12:49
5	3	081715M05.D	1.48	1508028-12RE1	600ml 861Leong-OUT	17 Aug 2015 13:51
6	4	081715M06.D	1.49	1508028-13RE1	600ml [redacted]Fairchild-OUT	17 Aug 2015 14:48
7	5	081715M07.D	1.48	1508028-15RE1	600ml 600National-OUT	17 Aug 2015 15:45
8	6	081715M08.D	1.48	1508028-14RE1	600ml 600National-Trench1	17 Aug 2015 16:41
9	6	081715M09.D	1.48	B15H074-DUP1	600ml 600National-Trench1 1508028-014RE	17 Aug 2015 17:39
10	7	081715M10.D	1.	CAN #415	400ml RECERTIFICATION	17 Aug 2015 18:33
11	8	081715M11.D	1.	CAN #1194	400ml RECERTIFICATION	17 Aug 2015 19:29
12	9	081715M12.D	1.	CAN #5019	400ml RECERTIFICATION	17 Aug 2015 20:25
13	10	081715M13.D	1.	CAN #5720	400ml RECERTIFICATION	17 Aug 2015 21:21

GC/MS QA-QC Check Report

Tune File : C:\MSDCHEM\1\2015\DATA\081715MAA\081715M01.D
Tune Time : 17 Aug 2015 10:14 am

Daily Calibration File : C:\MSDCHEM\1\2015\DATA\081715MAA\081715M02.D

File	Sample	Surrogate Recovery %			Internal Standard Responses			
					60025	140435	132962	
081715M02.D								
	S15H061-CCV1		60025	140435	132962			
081715M03.D								
	S15H061-CRL1		64322	150726	151513			
081715M04.D								
	B15H074-BLK1		60423	129593	127040			
081715M05.D								
	1508028-12RE1		64707	133220	131046			
081715M06.D								
	1508028-13RE1		56817	115832	102274			
081715M07.D								
	1508028-15RE1		55959	108293	97757			
081715M08.D								
	1508028-14RE1		61750	118418	116167			
081715M09.D								
	B15H074-DUP1		50507	120568	98604			
081715M10.D								
	CAN #415		44692	113446	111764	RE-CLEAN		
081715M11.D								
	CAN #1194		54087	119187	115834	RE-CLEAN		
081715M12.D								
	CAN #5019		57017	117958	117680	RE-CLEAN		
081715M13.D								
	CAN #5720		52538	103386	100912	RE-CLEAN		

(fails) - fails 24hr time check * - fails criteria

Created: Tue Aug 18 09:41:17 2015 AG5973M

Response Factor Report AG5973M

Method Path : C:\MSDCHEM\1\2015\METHOD\
Method File : 081415SMAA.M
Title : TO15SIM
Last Update : Mon Aug 17 09:33:25 2015
Response Via : Initial Calibration

Calibration Files
50 =081415M03.D 150 =081415M04.D 250 =081415M05.D
350 =081415M06.D 500 =081415M07.D

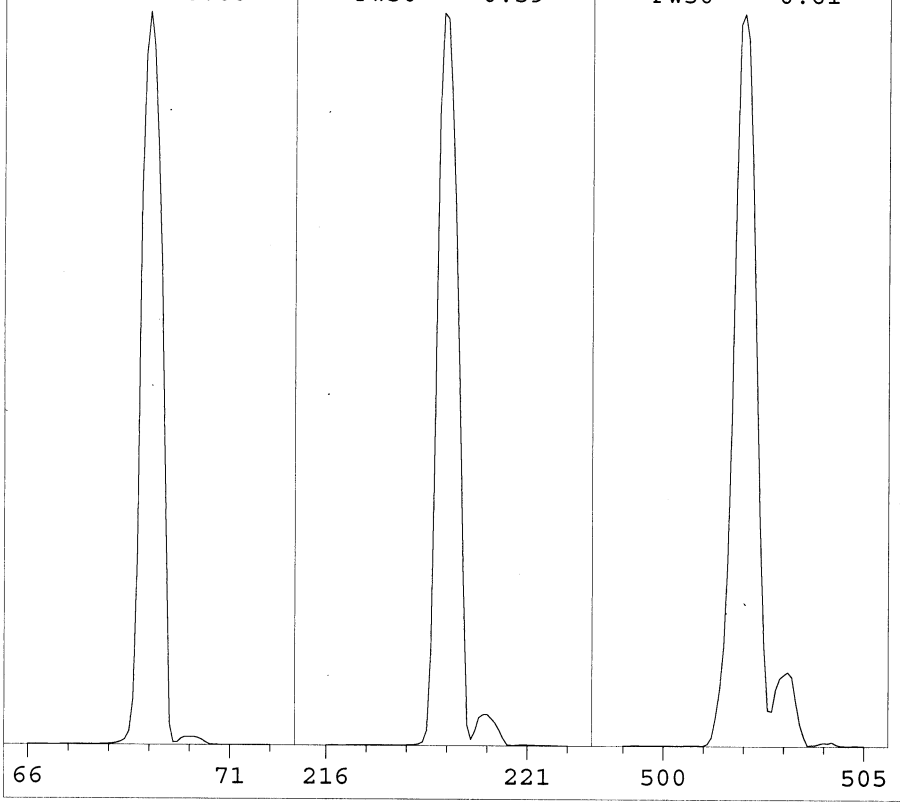
		Compound	50	150	250	350	500	Avg	%RSD
1)	I	BROMOCHLOROMETHANE	----------ISTD----------						
2)	T	Vinyl chloride	0.902	0.771	0.730	0.717	0.744	0.773	9.73
3)	T	1,3-Butadiene	0.668	0.577	0.551	0.552	0.588	0.587	8.19
4)	T	Bromoethene	0.763	0.651	0.630	0.643	0.708	0.679	8.19
5)	T	1,1,2-Trichloro-1,2	2.200	1.883	1.751	1.722	1.805	1.872	10.32
6)	T	1,1-Dichloroethene	1.158	1.010	0.989	1.017	1.119	1.059	7.09
7)	T	Dichloromethane	1.337	1.025	0.932	0.899	0.936	1.026	17.56
8)	T	tert-Butyl methyl e	1.043	1.107	1.177	1.291	1.480	1.220	14.12
9)	T	trans-1,2-Dichloroe	1.105	1.009	1.009	1.043	1.134	1.060	5.38
10)	T	Hexane	0.617	0.593	0.629	0.691	0.789	0.664	11.90
11)	T	1,1-Dichloroethane	1.566	1.361	1.284	1.269	1.341	1.364	8.74
12)	T	cis-1,2-Dichloroeth	0.690	0.620	0.612	0.635	0.687	0.649	5.71
13)	T	Chloroform	2.266	1.980	1.853	1.816	1.913	1.965	9.11
14)	T	1,1,1-Trichloroetha	2.465	2.215	2.097	2.080	2.461	2.264	8.35
15)	T	Carbon tetrachlorid	2.376	2.528	2.037	2.354	2.141	2.287	8.59
16)	I	1,4-DIFLUOROBENZENE	----------ISTD----------						
17)	T	Benzene	1.107	1.078	1.041	1.012	1.148	1.077	4.96
18)	T	1,2-Dichloroethane	0.610	0.534	0.485	0.457	0.503	0.518	11.32
19)	T	Trichloroethene	0.475	0.441	0.417	0.411	0.464	0.442	6.40
20)	T	1,2-Dichloropropane	0.385	0.361	0.336	0.323	0.362	0.353	6.85
21)	I	CHLOROBENZENE-d5	----------ISTD----------						
22)	T	Toluene	0.807	0.844	0.866	0.905	1.150	0.915	14.89
23)	T	1,1,2-Trichloroetha	0.463	0.445	0.411	0.396	0.474	0.438	7.66
24)	T	Tetrachloroethene	0.628	0.628	0.597	0.588	0.716	0.632	8.02
25)	T	1,2-Dibromoethane (	0.534	0.527	0.502	0.494	0.603	0.532	8.09
26)	T	Chlorobenzene	0.865	0.890	0.852	0.844	1.024	0.895	8.25
27)	T	Ethylbenzene	0.917	1.020	1.065	1.128	1.452	1.116	18.15
28)	T	m&p-Xylene	0.695	0.831	0.904	0.979	1.258	0.933	22.44
29)	T	o-Xylene	0.735	0.794	0.837	0.896	1.162	0.885	18.75
30)	T	Styrene	0.468	0.546	0.593	0.641	0.840	0.618	22.65
31)	T	1,1,2,2-Tetrachloro	0.976	0.883	0.808	0.772	0.924	0.873	9.55
32)	T	1,3-Dichlorobenzene	0.967	0.874	0.832	0.829	1.007	0.902	8.99
33)	T	1,4-Dichlorobenzene	0.872	0.797	0.770	0.783	0.962	0.837	9.59
34)	T	1,2-Dichlorobenzene	0.957	0.837	0.784	0.777	0.942	0.859	9.98

(#) = Out of Range

Mon Aug 17 09:48:23 2015
C:\MSDCHEM\1\5973N\BFB081715.U

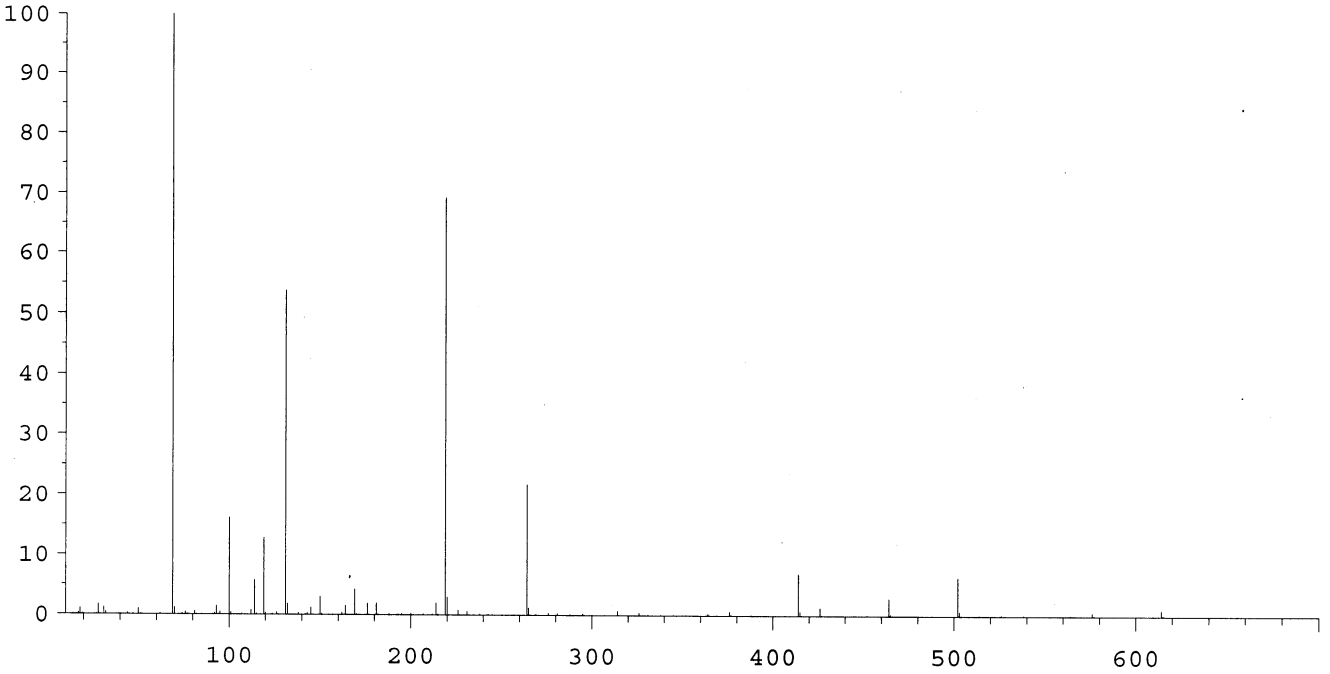
Instrument: AG5973M

Mass	69.00	Mass	218.90	Mass	502.00
Ab	505255	Ab	351158	Ab	31442
Pw50	0.60	Pw50	0.59	Pw50	0.61



Ion Pol	POS	MassGain	317
		MassOffs	-10
Emission	34.6	AmuGain	2349
ElEnrgy	69.9	AmuOffs	126
Filament	1	Wid219	-0.025
		DC Pol	POS
Repeller	32.97		
IonFcus	90.2	HEDEnab	ON
EntLens	9.5	EMVolts	1247
EntOffs	20.33		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Zones:			
MS Source	230	TurboSpd	100
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
155 peaks Base: 69.00 Abundance: 453184



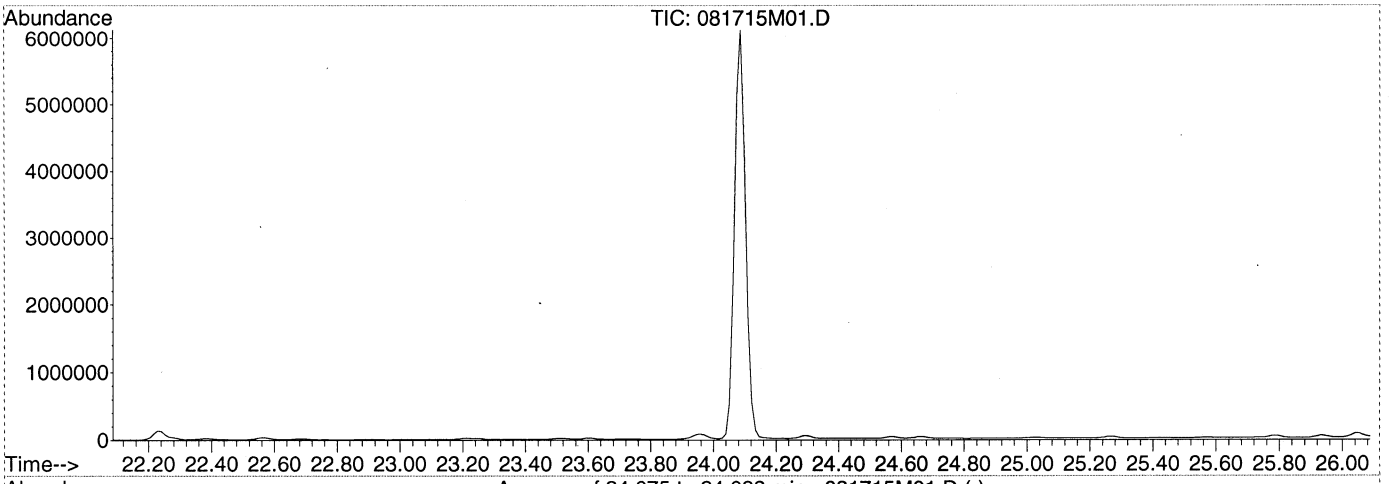
Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	453184	100.00	70.00	5161	1.14
219.00	313920	69.27	220.00	13302	4.24
502.00	28768	6.35	502.90	2946	10.24

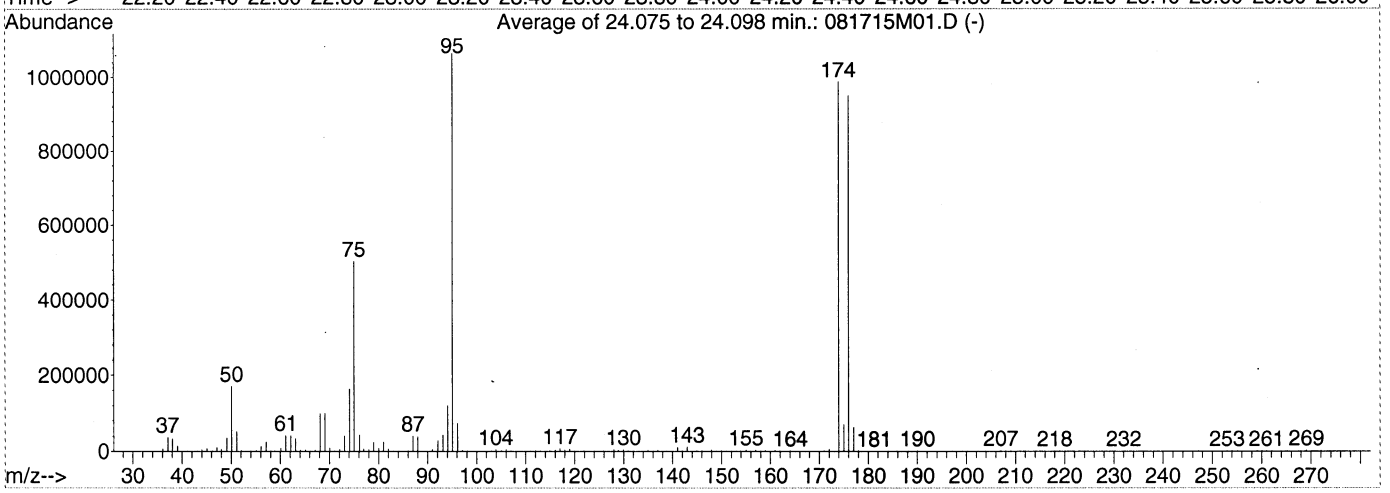
BFB

Data Path : C:\MSDChem\1\2015\Data\081715MAA\
Data File : 081715M01.D
Acq On : 17 Aug 2015 10:14 am
InstName : AG5973M
Operator : LLH
Sample : S15H061-TUN1
Misc : BFB 1410062
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\MSDCHEM\1\2015\METHOD\081415BFB.M
Title : TO15
Last Update : Mon Apr 06 12:32:18 2015





AutoFind: Scans 1668, 1669, 1670; Background Corrected with Scan 1661

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	16.0	170179	PASS
75	95	30	66	47.2	502778	PASS
95	95	100	100	100.0	1065002	PASS
96	95	5	9	6.8	72706	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	92.7	987498	PASS
175	174	4	9	7.0	69186	PASS
176	174	93	101	96.1	949440	PASS
177	176	5	9	6.6	62263	PASS

LLH 8/18/15

00085

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\2015\Data\081715MAA\
Data File : 081715M02.D
Acq On : 17 Aug 2015 11:04 am
InstName : AG5973M
Operator : LLH
Sample : S15H061-CCV1@B15H074-BS1
Misc : 250pptv 1533098@1533101 SIM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 17 11:36:05 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	BROMOCHLOROMETHANE	1.000	1.000	0.0	79	0.00
2	T	Vinyl chloride	0.773	0.695	10.1	76	0.00
3	T	1,3-Butadiene	0.587	0.514	12.4	74	0.00
4	T	Bromoethene	0.679	0.671	1.2	84	0.00
5	T	1,1,2-Trichloro-1,2,2-trifl	1.872	1.906	-1.8	86	-0.02
6	T	1,1-Dichloroethene	1.059	1.028	2.9	82	-0.02
7	T	Dichloromethane	1.026	1.011	1.5	86	0.00
8	T	tert-Butyl methyl ether (MT	1.220	1.163	4.7	78	0.00
9	T	trans-1,2-Dichloroethene	1.060	1.044	1.5	82	0.00
10	T	Hexane	0.664	0.614	7.5	77	0.00
11	T	1,1-Dichloroethane	1.364	1.366	-0.1	84	0.00
12	T	cis-1,2-Dichloroethene	0.649	0.612	5.7	79	0.00
13	T	Chloroform	1.965	1.994	-1.5	85	-0.01
14	T	1,1,1-Trichloroethane	2.264	2.504	-10.6	95	-0.01
15	T	Carbon tetrachloride	2.287	2.134	6.7	83	0.00
16	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	70	-0.01
17	T	Benzene	1.077	1.225	-13.7	82	-0.01
18	T	1,2-Dichloroethane	0.518	0.592	-14.3	85	-0.01
19	T	Trichloroethene	0.442	0.484	-9.5	81	0.00
20	T	1,2-Dichloropropane	0.353	0.398	-12.7	83	0.00
21	I	CHLOROBENZENE-d5	1.000	1.000	0.0	68	0.00
22	T	Toluene	0.915	1.007	-10.1	79	0.00
23	T	1,1,2-Trichloroethane	0.438	0.512	-16.9	85	0.00
24	T	Tetrachloroethene	0.632	0.730	-15.5	83	-0.01
25	T	1,2-Dibromoethane (EDB)	0.532	0.616	-15.8	84	0.00
26	T	Chlorobenzene	0.895	1.004	-12.2	80	0.00
27	T	Ethylbenzene	1.116	1.220	-9.3	78	0.00
28	T	m&p-Xylene	0.933	1.037	-11.1	78	0.00
29	T	o-Xylene	0.885	0.970	-9.6	79	0.00
30	T	Styrene	0.618	0.674	-9.1	77	0.00
31	T	1,1,2,2-Tetrachloroethane	0.873	1.024	-17.3	86	0.00
32	T	1,3-Dichlorobenzene	0.902	0.988	-9.5	81	0.00
33	T	1,4-Dichlorobenzene	0.837	0.896	-7.0	79	0.00
34	T	1,2-Dichlorobenzene	0.859	0.931	-8.4	81	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2015\Data\081715MAA\
Data File : 081715M02.D
Acq On : 17 Aug 2015 11:04 am
InstName : AG5973M
Operator : LLH
Sample : S15H061-CCV1@B15H074-BS1
Misc : 250pptv 1533098@1533101 SIM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 17 11:36:05 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.25	49	60025	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.30	114	140435	375.00 pptv	-0.01
21) CHLOROBENZENE-d5	22.25	117	132962	341.00 pptv	0.00

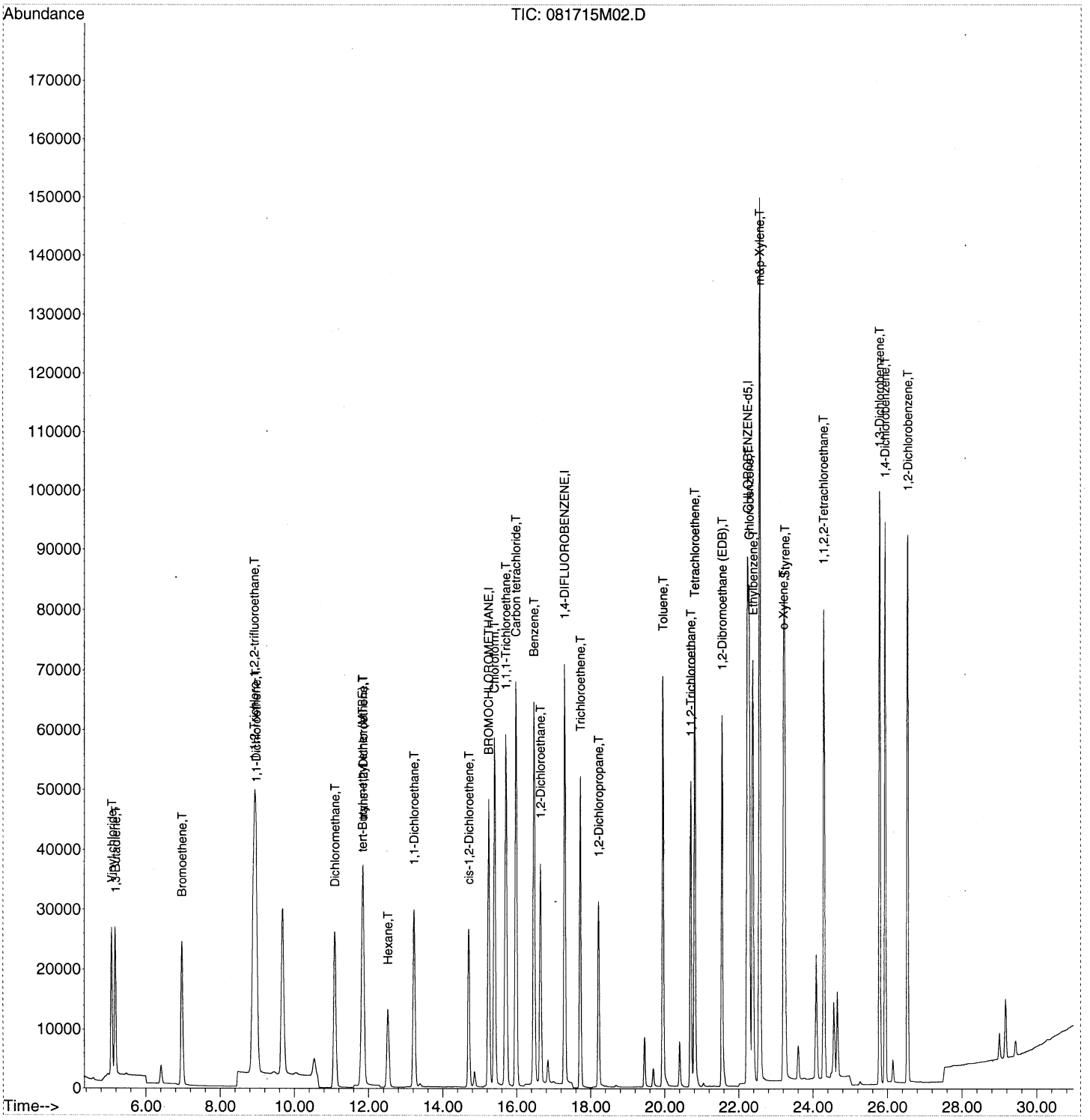
Target Compounds					Qvalue
2) Vinyl chloride	5.09	62	36716	269.89 pptv	99
3) 1,3-Butadiene	5.19	54	22621	218.88 pptv	99
4) Bromoethene	6.98	106	32491	271.81 pptv	99
5) 1,1,2-Trichloro-1,2,2-trif	8.92	151	92252	279.94 pptv	100
6) 1,1-Dichloroethene	8.97	61	49759	267.03 pptv	99
7) Dichloromethane	11.09	49	48919	270.95 pptv	99
8) tert-Butyl methyl ether (M	11.83	73	56285	262.18 pptv	97
9) trans-1,2-Dichloroethene	11.86	61	45936	246.19 pptv	99
10) Hexane	12.53	57	29709	254.22 pptv	97
11) 1,1-Dichloroethane	13.23	63	72136	300.37 pptv	99
12) cis-1,2-Dichloroethene	14.71	96	29638	259.50 pptv	99
13) Chloroform	15.40	83	96511	278.97 pptv	98
14) 1,1,1-Trichloroethane	15.71	97	110193	276.53 pptv	100
15) Carbon tetrachloride	15.98	117	103310	256.60 pptv	100
17) Benzene	16.47	78	126187	312.77 pptv	99
18) 1,2-Dichloroethane	16.64	62	60973	314.35 pptv	99
19) Trichloroethene	17.72	130	49848	301.33 pptv	100
20) 1,2-Dichloropropane	18.22	63	40946	309.33 pptv	98
22) Toluene	19.96	91	107984	302.81 pptv	100
23) 1,1,2-Trichloroethane	20.71	97	54853	321.43 pptv	99
24) Tetrachloroethene	20.81	166	78229	317.68 pptv	100
25) 1,2-Dibromoethane (EDB)	21.55	107	66045	318.20 pptv	99
26) Chlorobenzene	22.28	112	107627	308.34 pptv	100
27) Ethylbenzene	22.39	91	130782	300.47 pptv	100
28) m&p-Xylene	22.56	91	222429	611.15 pptv	99
29) o-Xylene	23.21	91	104003	301.51 pptv	100
30) Styrene	23.24	104	72239	299.95 pptv	99
31) 1,1,2,2-Tetrachloroethane	24.28	83	109814	322.71 pptv	100
32) 1,3-Dichlorobenzene	25.79	146	105961	301.33 pptv	100
33) 1,4-Dichlorobenzene	25.94	146	96060	294.38 pptv	100
34) 1,2-Dichlorobenzene	26.55	146	99844	297.98 pptv	100

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

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2015\Data\081715MAA\
Data File : 081715M02.D
Acq On : 17 Aug 2015 11:04 am
InstName : AG5973M
Operator : LLH
Sample : S15H061-CCV1@B15H074-BS1
Misc : 250pptv 1533098@1533101 SIM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 17 11:36:05 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration



1out - NT

LCS REPORT

Instrument Name: AG5973M
Sample Name: S15H061-CCV1@B15H074-BS1
Misc Info: 250pptv 1533098@1533101 SIM
Date Acquired: 8/17/2015 11:04
QLast Update: Mon Aug 17 09:33:25 2015
Operator: LLH

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	BROMOCHLOROMETHANE	15.25	341.00	341.00	100%	70.0	130.0	pass
2)	Vinyl chloride	5.09	300.00	269.89	90%	74.0	128.0	pass
3)	1,3-Butadiene	5.19	250.00	218.88	88%	71.0	127.0	pass
4)	Bromoethene	6.98	275.00	271.81	99%	67.0	125.0	pass
5)	1,1,2-Trichloro-1,2,2-trifluoroethane	8.92	275.00	279.94	102%	78.0	123.0	pass
6)	1,1-Dichloroethene	8.97	275.00	267.03	97%	77.0	129.0	pass
7)	Dichloromethane	11.09	275.00	270.95	99%	76.0	117.0	pass
8)	tert-Butyl methyl ether (MTBE)	11.83	275.00	262.18	95%	63.0	111.0	pass
9)	trans-1,2-Dichloroethene	11.86	250.00	246.19	98%	61.0	108.0	pass
10)	Hexane	12.53	275.00	254.22	92%	66.0	115.0	pass
11)	1,1-Dichloroethane	13.23	300.00	300.37	100%	76.0	133.0	pass
12)	cis-1,2-Dichloroethene	14.71	275.00	259.50	94%	64.0	142.0	pass
13)	Chloroform	15.40	275.00	278.97	101%	63.0	123.0	pass
14)	1,1,1-Trichloroethane	15.71	250.00	276.53	111%	65.0	121.0	pass
15)	Carbon tetrachloride	15.98	275.00	256.60	93%	69.0	121.0	pass
16)	1,4-DIFLUOROBENZENE	17.30	375.00	375.00	100%	70.0	130.0	pass
17)	Benzene	16.47	275.00	312.77	114%	65.0	123.0	pass
18)	1,2-Dichloroethane	16.64	275.00	314.35	114%	75.0	123.0	pass
19)	Trichloroethene	17.72	275.00	301.33	110%	57.0	144.0	pass
20)	1,2-Dichloropropane	18.22	275.00	309.33	112%	63.0	125.0	pass
21)	CHLOROBENZENE-d5	22.25	341.00	341.00	100%	70.0	130.0	pass
22)	Toluene	19.96	275.00	302.81	110%	68.0	119.0	pass
23)	1,1,2-Trichloroethane	20.71	275.00	321.43	117%	70.0	130.0	pass
24)	Tetrachloroethene	20.81	275.00	317.68	116%	67.0	123.0	pass
25)	1,2-Dibromoethane (EDB)	21.55	275.00	318.20	116%	67.0	111.0	FAIL
26)	Chlorobenzene	22.28	275.00	308.34	112%	57.0	126.0	pass
27)	Ethylbenzene	22.39	275.00	300.47	109%	70.0	130.0	pass
28)	m&p-Xylene	22.56	550.00	611.15	111%	51.0	121.0	pass
29)	o-Xylene	23.21	275.00	301.51	110%	57.0	118.0	pass
30)	Styrene	23.24	275.00	299.95	109%	57.0	128.0	pass
31)	1,1,2,2-Tetrachloroethane	24.28	275.00	322.71	117%	70.0	130.0	pass
32)	1,3-Dichlorobenzene	25.79	275.00	301.33	110%	70.0	130.0	pass
33)	1,4-Dichlorobenzene	25.94	275.00	294.38	107%	61.0	131.0	pass
34)	1,2-Dichlorobenzene	26.55	275.00	297.98	108%	43.0	124.0	pass

LLH 8/17/15

QLS REPORT

Instrument Name: AG5973M
Sample Name: S15H061-CRL1
Misc Info: 50pptv 1533096 SIM
Date Acquired: 8/17/2015 11:50
QLast Update: Mon Aug 17 09:33:25 201
Operator: LLH

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	BROMOCHLOROMETHANE	15.24	341.00	341.00	100%	70.0	130.0	pass
2)	Vinyl chloride	5.09	60.00	59.47	99%	74.0	128.0	pass
3)	1,3-Butadiene	5.19	50.00	46.77	94%	71.0	127.0	pass
4)	Bromoethene	6.98	55.00	50.28	91%	67.0	125.0	pass
5)	1,1,2-Trichloro-1,2,2-trifluoroethane	8.94	55.00	54.28	99%	78.0	123.0	pass
6)	1,1-Dichloroethene	8.99	55.00	48.86	89%	77.0	129.0	pass
7)	Dichloromethane	11.09	55.00	61.94	113%	76.0	117.0	pass
8)	tert-Butyl methyl ether (MTBE)	11.85	55.00	39.93	73%	63.0	111.0	pass
9)	trans-1,2-Dichloroethene	11.86	50.00	42.10	84%	61.0	108.0	pass
10)	Hexane	12.53	55.00	40.95	74%	66.0	115.0	pass
11)	1,1-Dichloroethane	13.24	60.00	57.62	96%	76.0	133.0	pass
12)	cis-1,2-Dichloroethene	14.71	55.00	47.41	86%	64.0	142.0	pass
13)	Chloroform	15.41	55.00	53.49	97%	63.0	123.0	pass
14)	1,1,1-Trichloroethane	15.72	50.00	46.14	92%	65.0	121.0	pass
15)	Carbon tetrachloride	15.98	55.00	58.31	106%	69.0	121.0	pass
16)	1,4-DIFLUOROBENZENE	17.31	375.00	375.00	100%	70.0	130.0	pass
17)	Benzene	16.47	55.00	49.20	89%	65.0	123.0	pass
18)	1,2-Dichloroethane	16.66	55.00	58.11	106%	75.0	123.0	pass
19)	Trichloroethene	17.72	55.00	52.77	96%	57.0	144.0	pass
20)	1,2-Dichloropropane	18.22	55.00	53.71	98%	63.0	125.0	pass
21)	CHLOROBENZENE-d5	22.25	341.00	341.00	100%	70.0	130.0	pass
22)	Toluene	19.96	55.00	42.57	77%	68.0	119.0	pass
23)	1,1,2-Trichloroethane	20.71	55.00	52.91	96%	70.0	130.0	pass
24)	Tetrachloroethene	20.83	55.00	50.05	91%	67.0	123.0	pass
25)	1,2-Dibromoethane (EDB)	21.55	55.00	50.10	91%	67.0	111.0	pass
26)	Chlorobenzene	22.28	55.00	48.59	88%	57.0	126.0	pass
27)	Ethylbenzene	22.39	55.00	40.27	73%	70.0	130.0	pass
28)	m&p-Xylene	22.56	110.00	71.63	65%	51.0	121.0	pass
29)	o-Xylene	23.21	55.00	39.80	72%	57.0	118.0	pass
30)	Styrene	23.24	55.00	35.93	65%	57.0	128.0	pass
31)	1,1,2,2-Tetrachloroethane	24.29	55.00	54.00	98%	70.0	130.0	pass
32)	1,3-Dichlorobenzene	25.79	55.00	49.55	90%	70.0	130.0	pass
33)	1,4-Dichlorobenzene	25.94	55.00	47.86	87%	61.0	131.0	pass
34)	1,2-Dichlorobenzene	26.55	55.00	51.12	93%	43.0	124.0	pass

LLH 8/18/15

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2015\Data\081715MAA\
Data File : 081715M03.D
Acq On : 17 Aug 2015 11:50 am
InstName : AG5973M
Operator : LLH
Sample : S15H061-CRL1
Misc : 50pptv 1533096 SIM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 17 12:25:00 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.24	49	64322	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.31	114	150726	375.00 pptv	0.00
21) CHLOROBENZENE-d5	22.25	117	151513	341.00 pptv	0.00

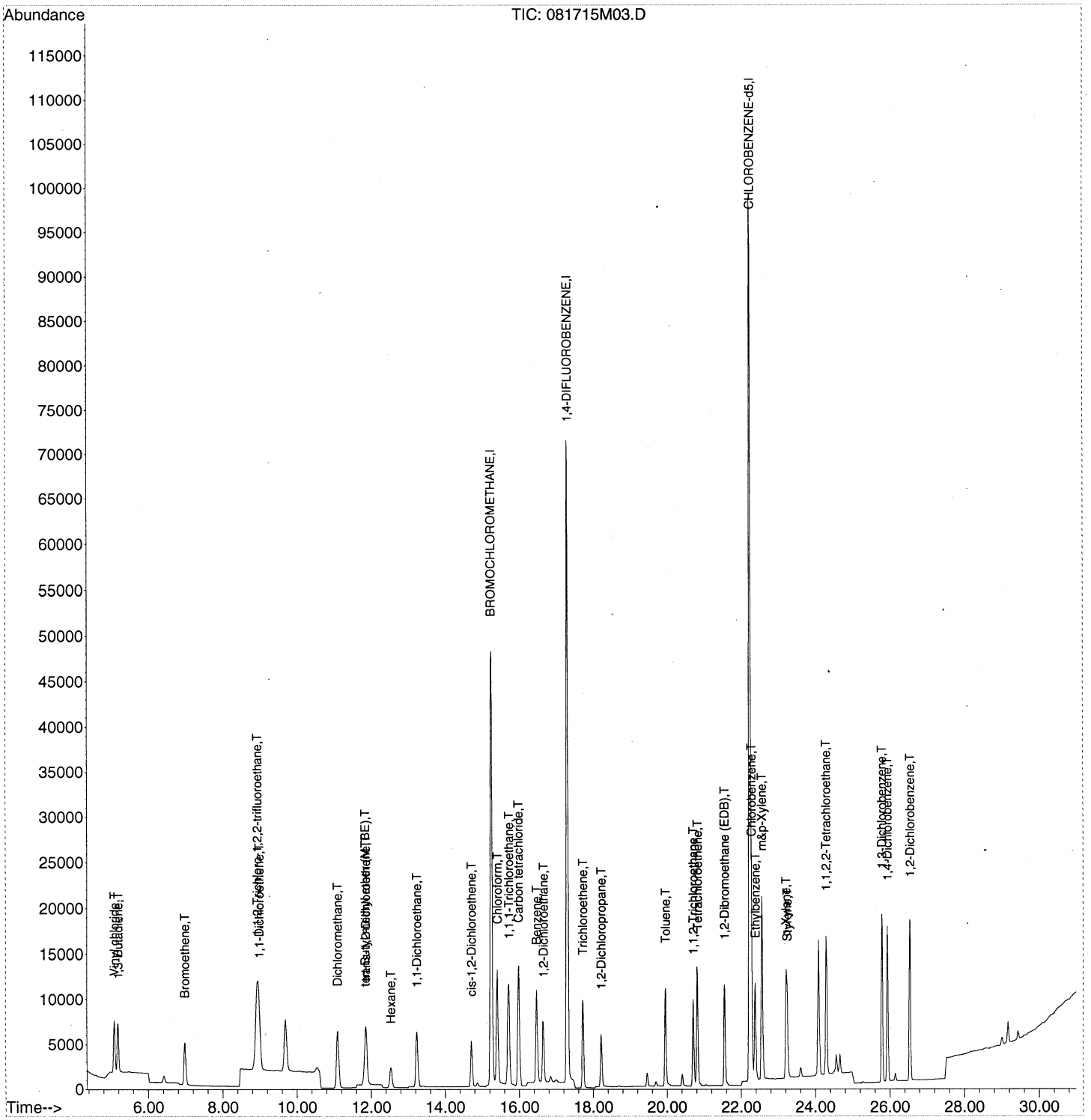
Target Compounds					Qvalue
2) Vinyl chloride	5.09	62	8670	59.47 pptv	100
3) 1,3-Butadiene	5.19	54	5179	46.77 pptv	97
4) Bromoethene	6.98	106	6440	50.28 pptv	96
5) 1,1,2-Trichloro-1,2,2-trif	8.94	151	19168	54.28 pptv	100
6) 1,1-Dichloroethene	8.99	61	9757	48.86 pptv	99
7) Dichloromethane	11.09	49	11984	61.94 pptv	99
8) tert-Butyl methyl ether (M	11.85	73	9185	39.93 pptv	95
9) trans-1,2-Dichloroethene	11.86	61	8417	42.10 pptv	99
10) Hexane	12.53	57	5128	40.95 pptv	96
11) 1,1-Dichloroethane	13.24	63	14829	57.62 pptv	99
12) cis-1,2-Dichloroethene	14.71	96	5802	47.41 pptv	100
13) Chloroform	15.41	83	19828	53.49 pptv	93
14) 1,1,1-Trichloroethane	15.72	97	19701	46.14 pptv	99
15) Carbon tetrachloride	15.98	117	25157	58.31 pptv	97
17) Benzene	16.47	78	21303	49.20 pptv	99
18) 1,2-Dichloroethane	16.66	62	12097	58.11 pptv	98
19) Trichloroethene	17.72	130	9369	52.77 pptv	100
20) 1,2-Dichloropropane	18.22	63	7631	53.71 pptv	97
22) Toluene	19.96	91	17299	42.57 pptv	99
23) 1,1,2-Trichloroethane	20.71	97	10290	52.91 pptv	98
24) Tetrachloroethene	20.83	166	14044	50.05 pptv	99
25) 1,2-Dibromoethane (EDB)	21.55	107	11849	50.10 pptv	98
26) Chlorobenzene	22.28	112	19328	48.59 pptv	94
27) Ethylbenzene	22.39	91	19971	40.27 pptv	100
28) m&p-Xylene	22.56	91	29709	71.63 pptv	99
29) o-Xylene	23.21	91	15644	39.80 pptv	99
30) Styrene	23.24	104	9861	35.93 pptv	97
31) 1,1,2,2-Tetrachloroethane	24.29	83	20941	54.00 pptv	100
32) 1,3-Dichlorobenzene	25.79	146	19855	49.55 pptv	100
33) 1,4-Dichlorobenzene	25.94	146	17796	47.86 pptv	100
34) 1,2-Dichlorobenzene	26.55	146	19520	51.12 pptv	100

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

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2015\Data\081715MAA\
Data File : 081715M03.D
Acq On : 17 Aug 2015 11:50 am
InstName : AG5973M
Operator : LLH
Sample : S15H061-CRL1
Misc : 50pptv 1533096 SIM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 17 12:25:00 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration



00092

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081715MAA\
Data File : 081715M04.D
Acq On : 17 Aug 2015 12:49 pm
InstName : AG5973M
Operator : LLH
Sample : B15H074-BLK1
Misc : 400ml BLANK CAN #40
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 17 13:22:57 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.25	49	60423	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.30	114	129593	375.00 pptv	-0.01
21) CHLOROBENZENE-d5	22.25	117	127040	341.00 pptv	0.00

Target Compounds					Qvalue
2) Vinyl chloride	5.09	62	172	N.D.	
3) 1,3-Butadiene	5.18	54	30	N.D.	
4) Bromoethene	7.12	106	3	N.D.	
5) 1,1,2-Trichloro-1,2,2-trif	8.92	151	103	N.D.	
6) 1,1-Dichloroethene	8.97	61	44	N.D.	
7) Dichloromethane	11.09	49	2971	N.D.	
8) tert-Butyl methyl ether (M	11.86	73	98	N.D.	
9) trans-1,2-Dichloroethene	11.86	61	35	N.D.	
10) Hexane	12.53	57	862	N.D.	
11) 1,1-Dichloroethane	13.22	63	8	N.D.	
12) cis-1,2-Dichloroethene	14.71	96	5	N.D.	
13) Chloroform	15.40	83	120	N.D.	
14) 1,1,1-Trichloroethane	15.71	97	81	N.D.	
15) Carbon tetrachloride	0.00	117	0	N.D.	
17) Benzene	16.47	78	439	N.D.	
18) 1,2-Dichloroethane	16.64	62	94	N.D.	
19) Trichloroethene	17.72	130	60	N.D.	
20) 1,2-Dichloropropane	18.06	63	166	N.D.	
22) Toluene	19.96	91	416	N.D.	
23) 1,1,2-Trichloroethane	20.71	97	97	N.D.	
24) Tetrachloroethene	20.81	166	110	N.D.	
25) 1,2-Dibromoethane (EDB)	21.55	107	119	N.D.	
26) Chlorobenzene	22.28	112	275	N.D.	
27) Ethylbenzene	22.39	91	235	N.D.	
28) m&p-Xylene	22.56	91	678	N.D.	
29) o-Xylene	23.21	91	416	N.D.	
30) Styrene	23.25	104	156	N.D.	
31) 1,1,2,2-Tetrachloroethane	24.28	83	344	N.D.	
32) 1,3-Dichlorobenzene	25.80	146	610	N.D.	
33) 1,4-Dichlorobenzene	25.94	146	630	N.D.	
34) 1,2-Dichlorobenzene	26.55	146	755	N.D.	

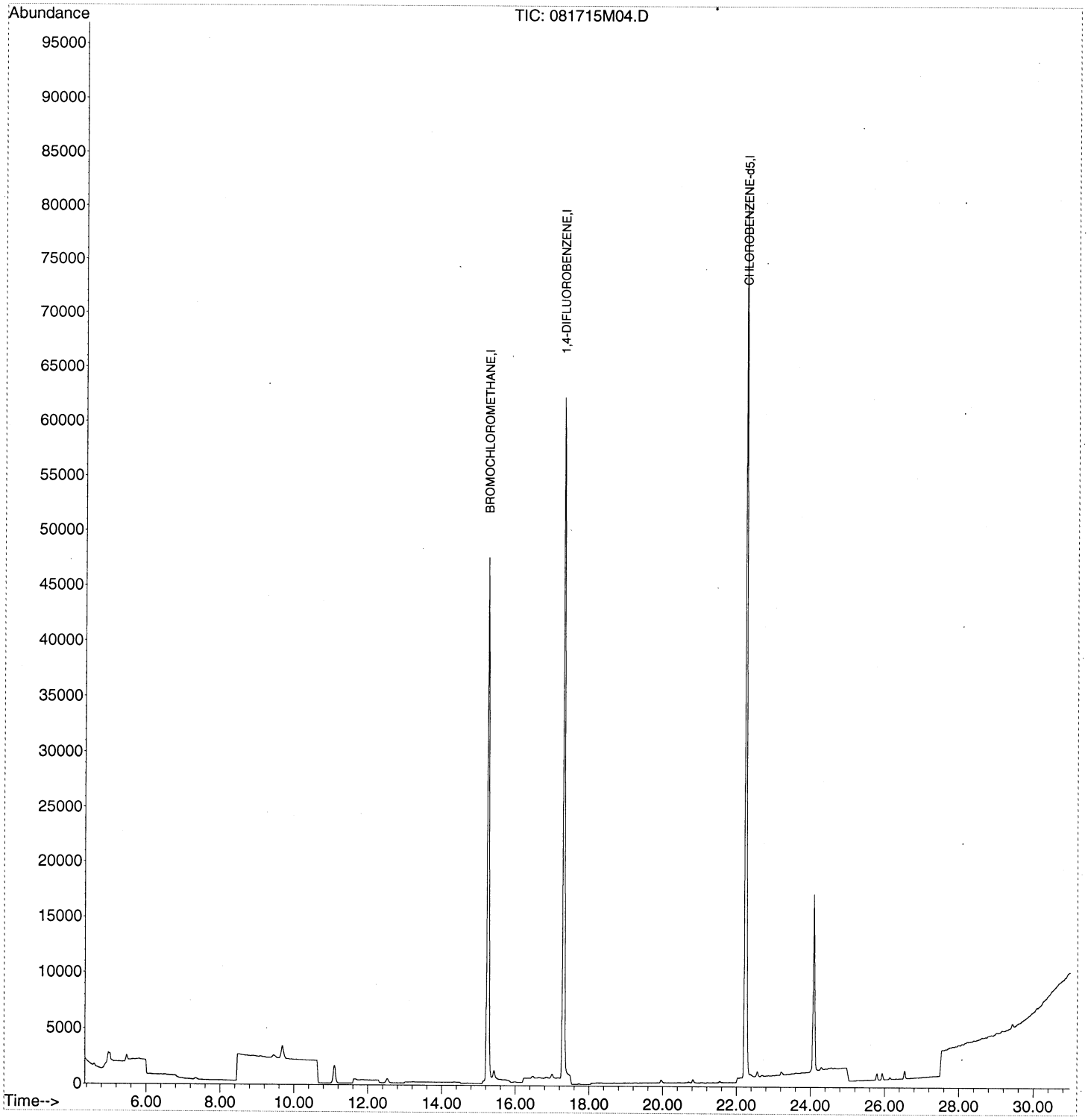
(#) = qualifier out of range (m) = manual integration (+) = signals summed

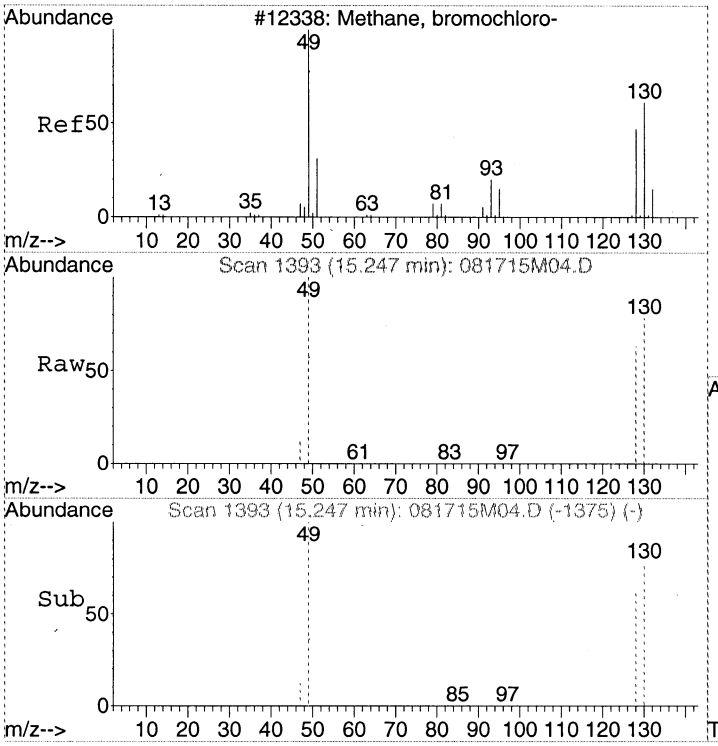
Cutghghs

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081715MAA\
Data File : 081715M04.D
Acq On : 17 Aug 2015 12:49 pm
InstName : AG5973M
Operator : LLH
Sample : B15H074-BLK1
Misc : 400ml BLANK CAN #40
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 17 13:22:57 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration

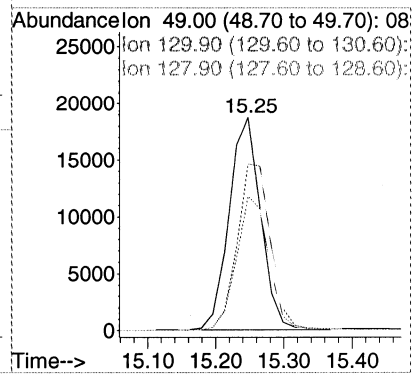


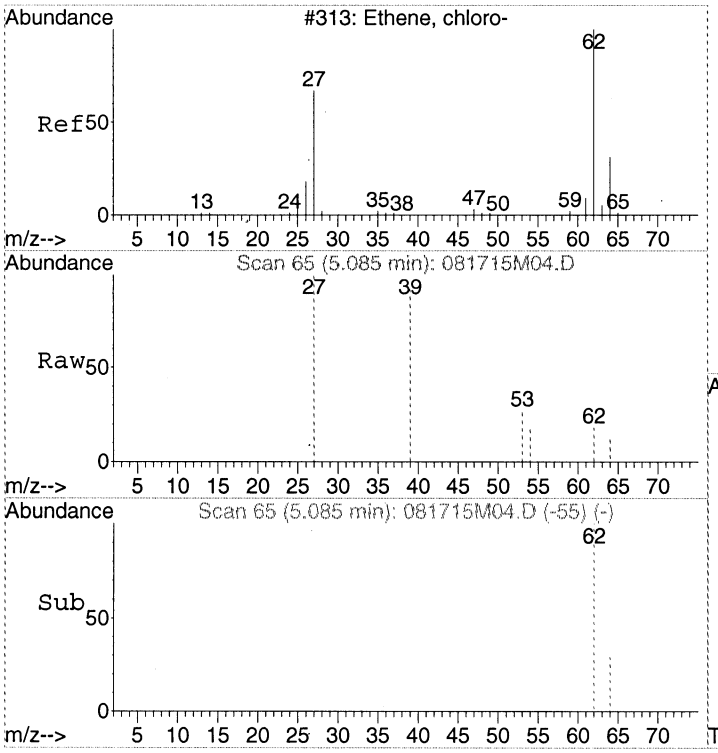


#1
BROMOCHLOROMETHANE
Concen: 341.00 pptv
RT: 15.25 min Scan# 1393
Delta R.T. 0.01 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion: 49 Resp: 60423

Ion	Ratio	Lower	Upper
49	100		
130	81.9	65.3	105.3
128	63.3	46.2	86.2

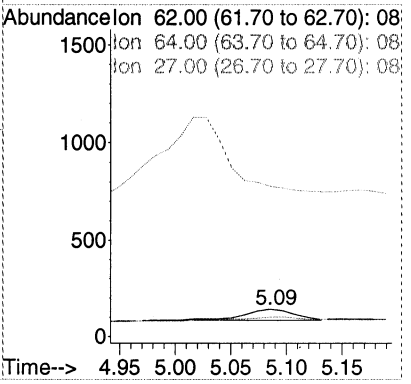


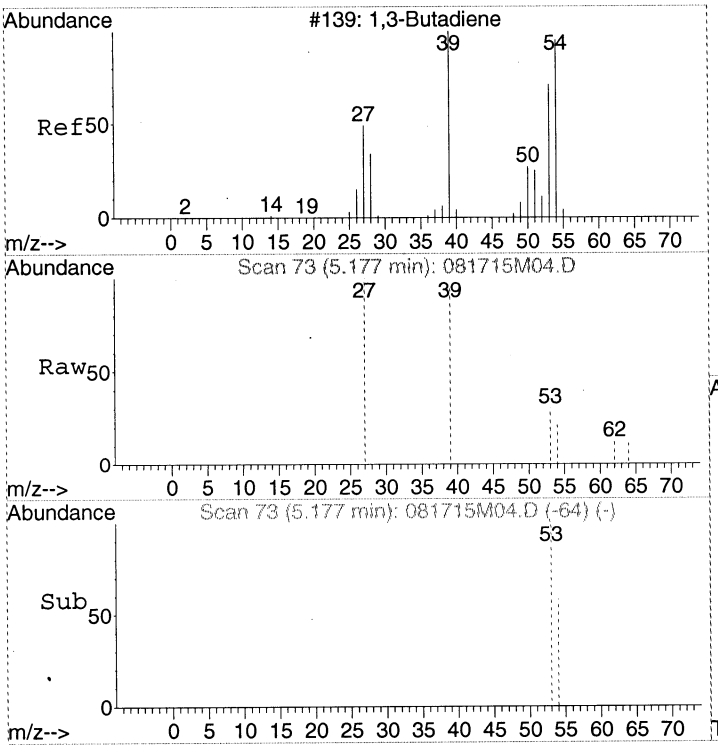


#2
Vinyl chloride
Concen: Below Cal
RT: 5.09 min Scan# 65
Delta R.T. -0.00 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion: 62 Resp: 172

Ion	Ratio	Lower	Upper
62	100		
64	35.5	11.8	51.8
27	0.0	28.9	68.9#

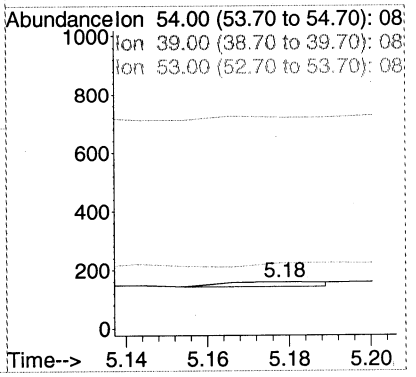


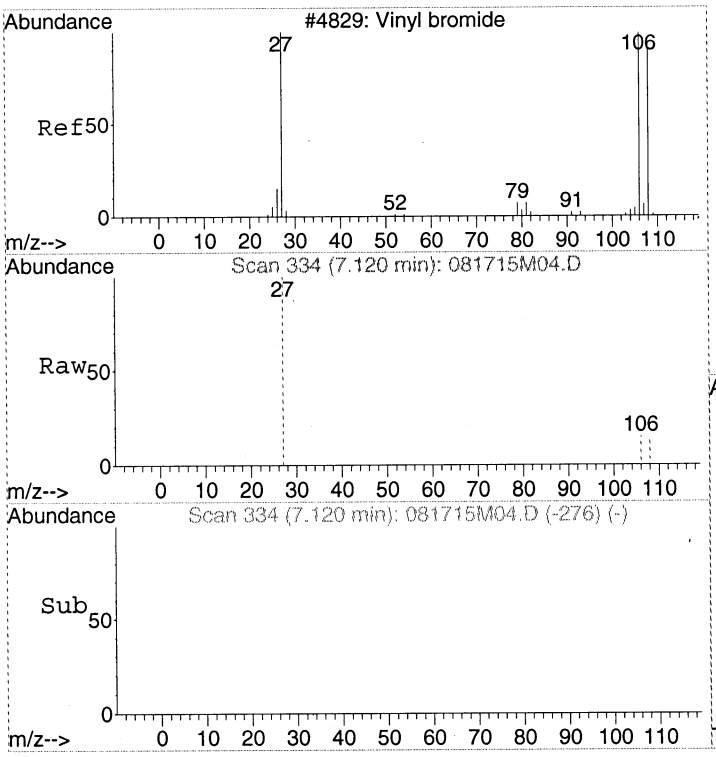


#3
1,3-Butadiene
Concen: Below Cal
RT: 5.18 min Scan# 73
Delta R.T. -0.01 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion: 54 Resp: 30

Ion	Ratio	Lower	Upper
54	100		
39	0.0	76.7	116.7#
53	93.3	48.8	88.8#

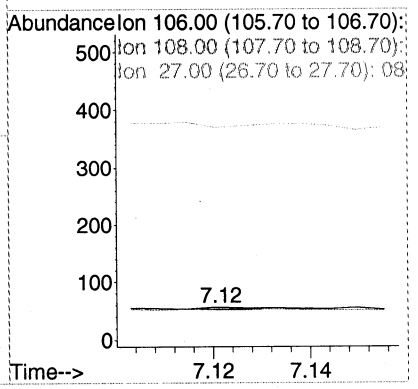


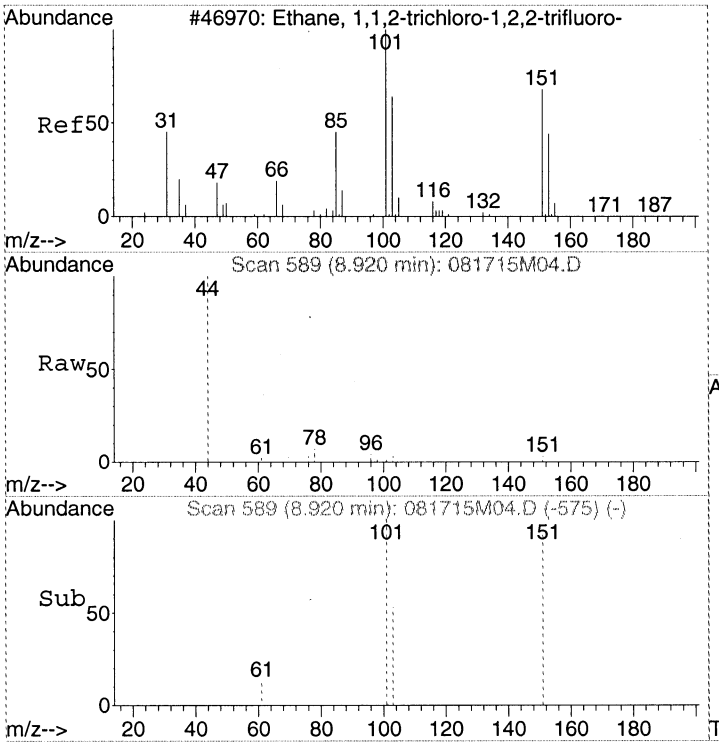


#4
Bromoethene
Concen: Below Cal
RT: 7.12 min Scan# 334
Delta R.T. 0.14 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion:106 Resp: 3

Ion	Ratio	Lower	Upper
106	100		
108	66.7	0.0	214.6
27	433.3	56.6	96.6#

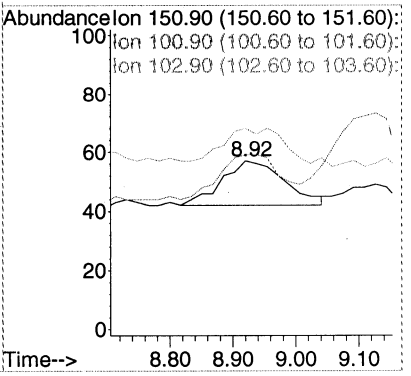


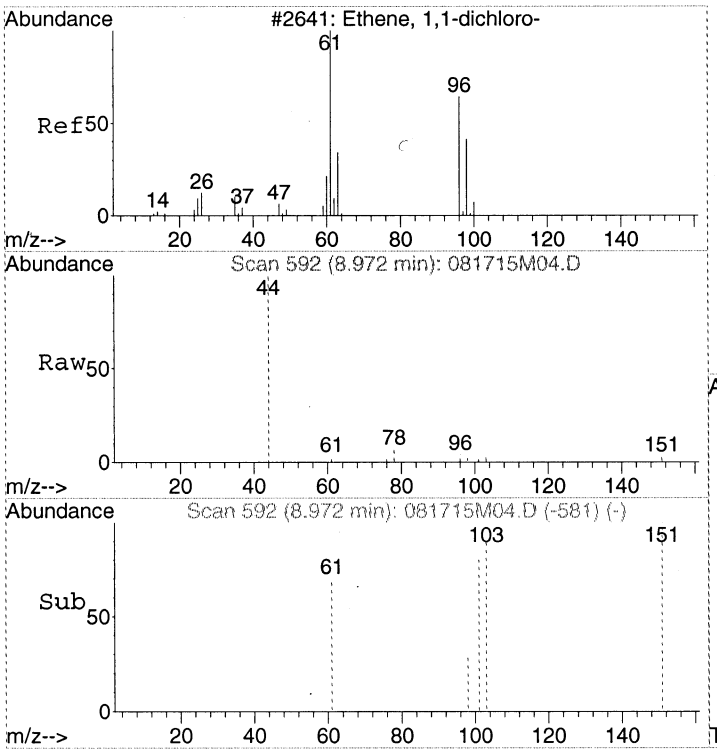


#5
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: Below Cal
RT: 8.92 min Scan# 589
Delta R.T. -0.02 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion:151 Resp: 103

Ion	Ratio	Lower	Upper
151	100		
101	97.1	90.9	130.9
103	39.8	51.0	91.0#

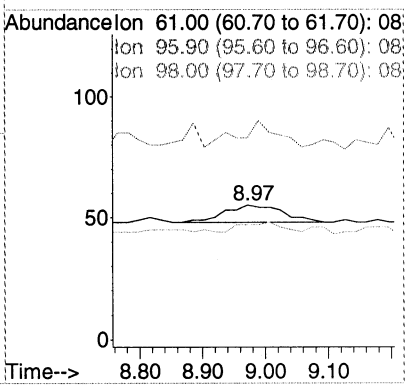


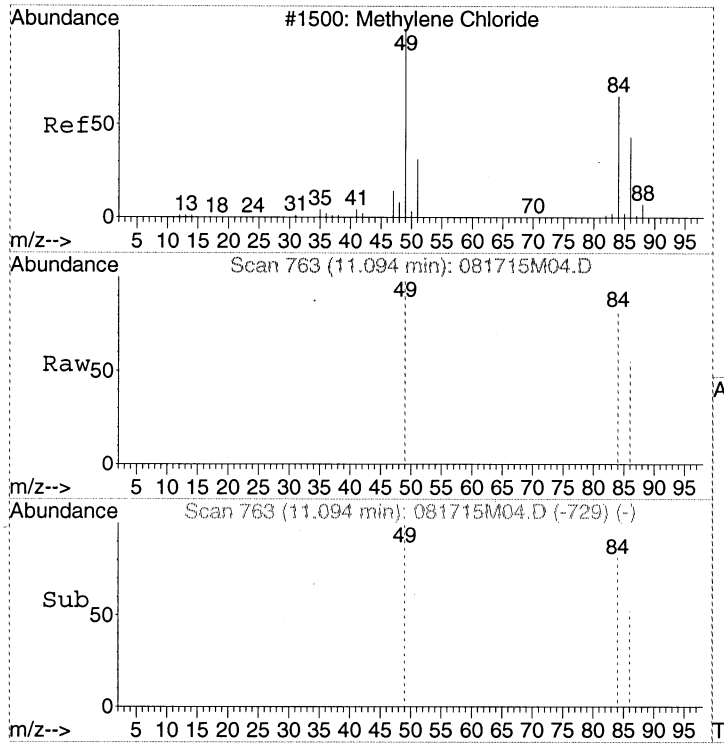


#6
1,1-Dichloroethene
Concen: Below Cal
RT: 8.97 min Scan# 592
Delta R.T. -0.02 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion: 61 Resp: 44

Ion	Ratio	Lower	Upper
61	100		
96	0.0	43.2	83.2#
98	0.0	20.1	60.1#

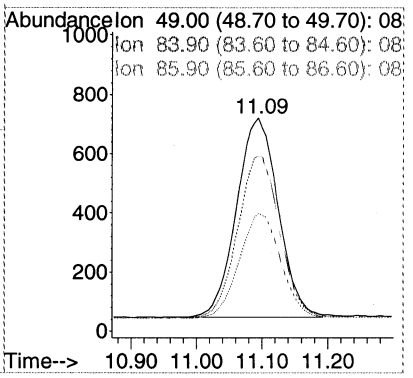


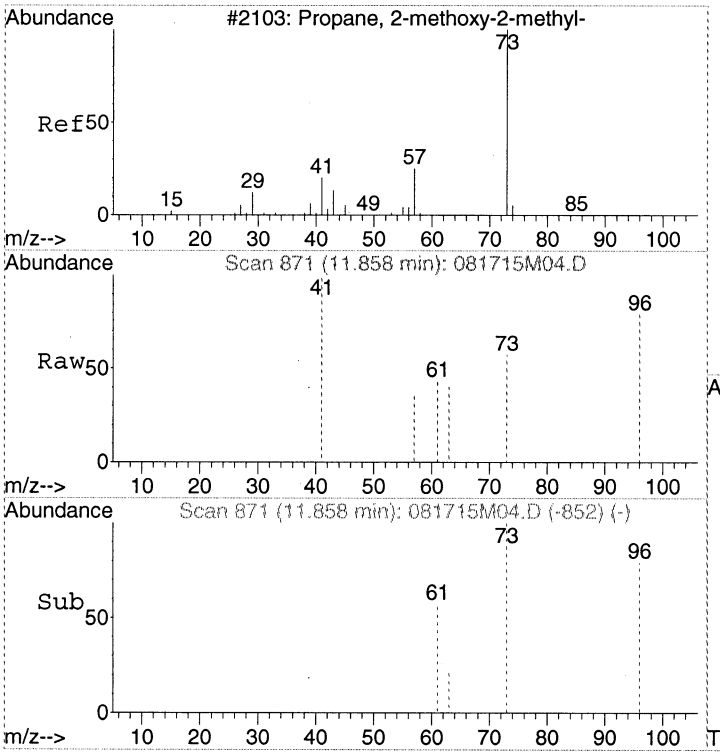


#7
Dichloromethane
Concen: Below Cal
RT: 11.09 min Scan# 763
Delta R.T. -0.00 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion: 49 Resp: 2971

Ion	Ratio	Lower	Upper
49	100		
84	81.9	64.2	104.2
86	52.7	34.0	74.0

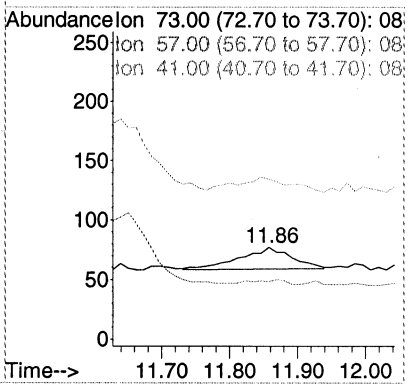


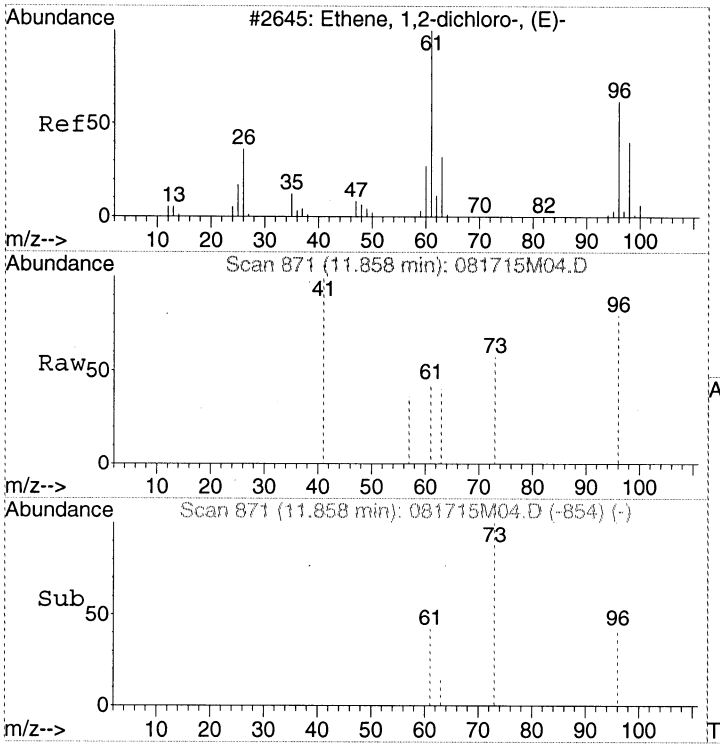


#8
tert-Butyl methyl ether (MTBE)
Concen: Below Cal
RT: 11.86 min Scan# 871
Delta R.T. 0.02 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion: 73 Resp: 98

Ion	Ratio	Lower	Upper
73	100		
57	5.1	2.0	42.0
41	0.0	13.3	53.3#

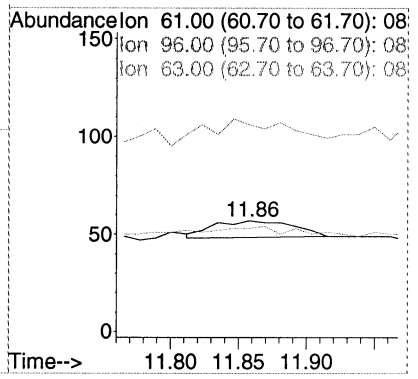


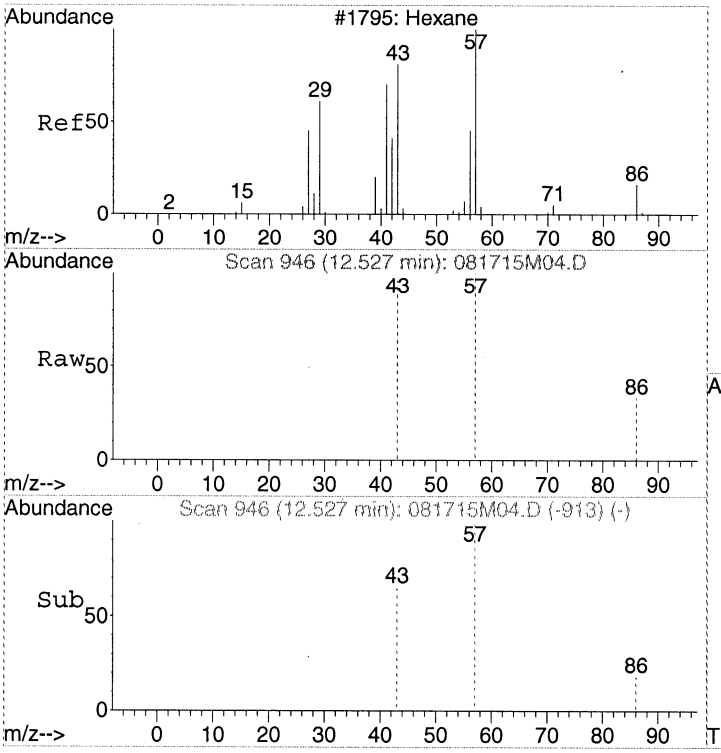


#9
trans-1,2-Dichloroethene
Concen: Below Cal
RT: 11.86 min Scan# 871
Delta R.T. -0.00 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion: 61 Resp: 35

Ion	Ratio	Lower	Upper
61	100		
96	0.0	53.4	93.4#
63	28.6	12.2	52.2

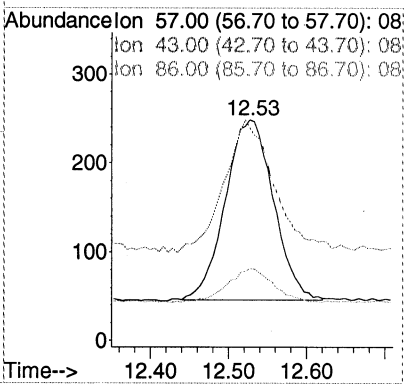


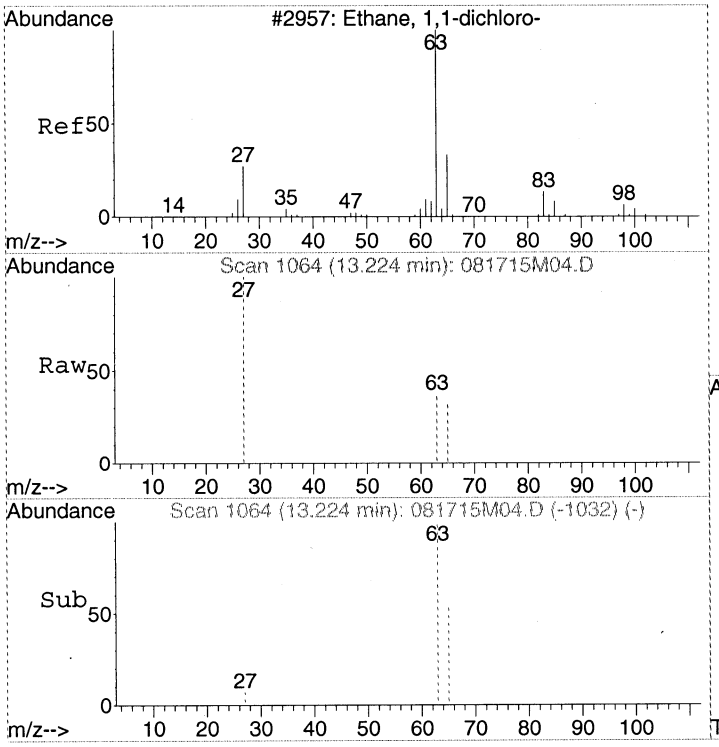


#10
Hexane
Concen: Below Cal
RT: 12.53 min Scan# 946
Delta R.T. -0.01 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion: 57 Resp: 862

Ion	Ratio	Lower	Upper
57	100		
43	74.6	46.4	86.4
86	16.9	0.0	38.0

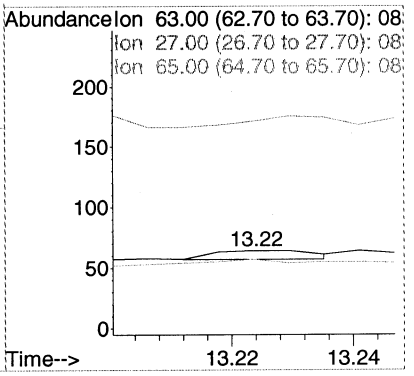


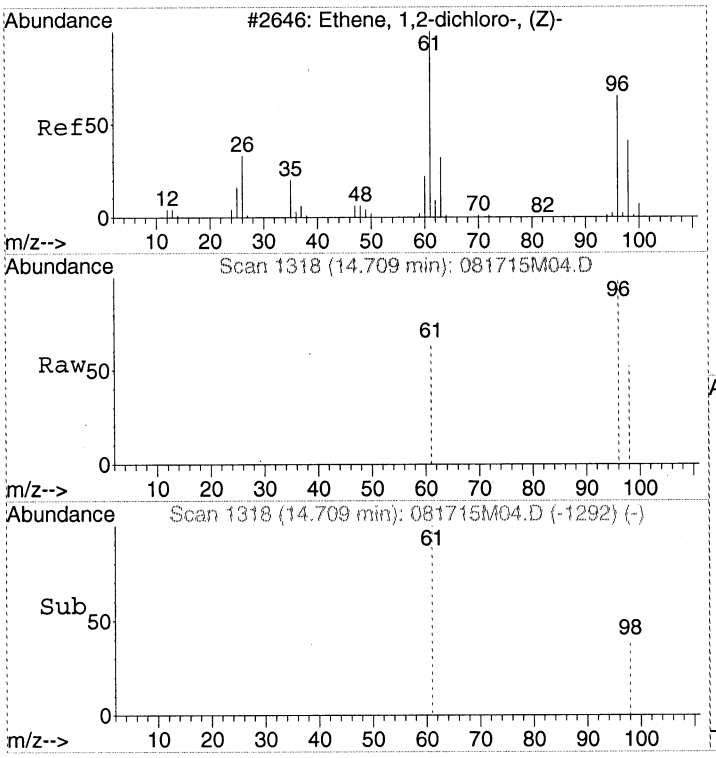


#11
1,1-Dichloroethane
Concen: Below Cal
RT: 13.22 min Scan# 1064
Delta R.T. -0.01 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion: 63 Resp: 8

Ion	Ratio	Lower	Upper
63	100		
27	112.5	9.1	49.1#
65	62.5	11.6	51.6#

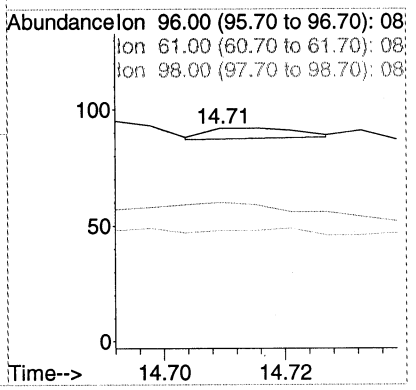


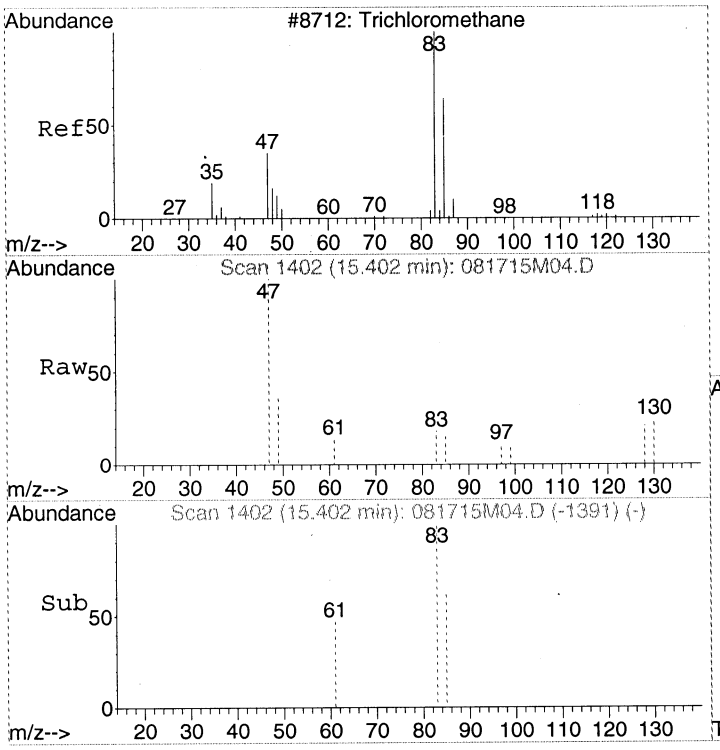


#12
cis-1,2-Dichloroethene
Concen: Below Cal
RT: 14.71 min Scan# 1318
Delta R.T. -0.00 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion: 96 Resp: 5

Ion	Ratio	Lower	Upper
96	100		
61	500.0	104.7	144.7#
98	140.0	43.7	83.7#

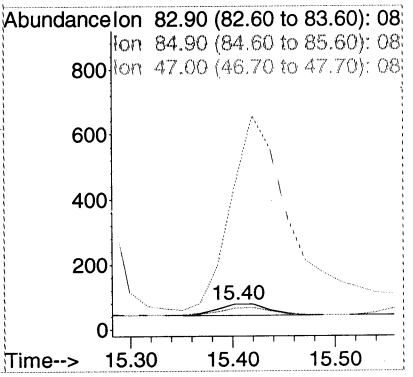


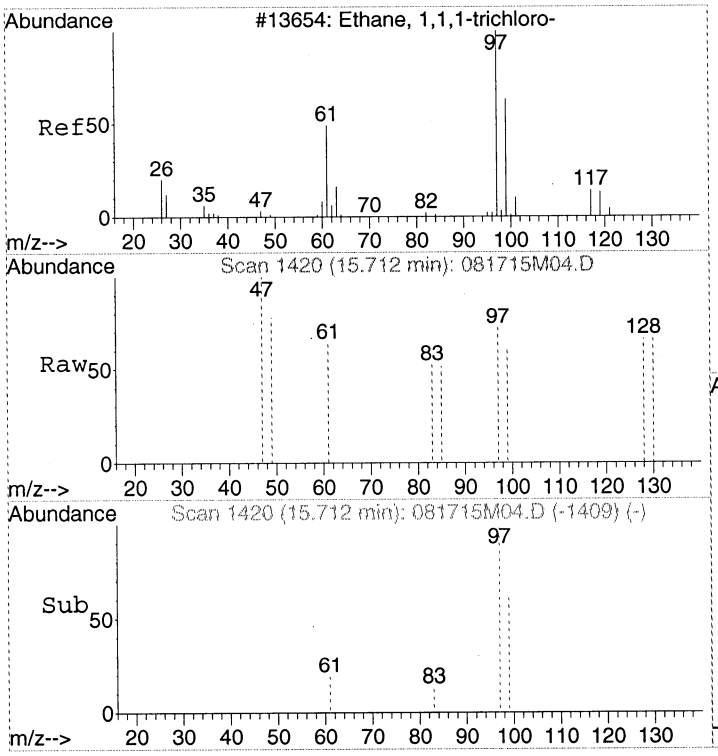


#13
Chloroform
Concen: Below Cal
RT: 15.40 min Scan# 1402
Delta R.T. -0.01 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion: 83 Resp: 120

Ion	Ratio	Lower	Upper
83	100		
85	71.7	44.8	84.8
47	2060.8	4.4	44.4#

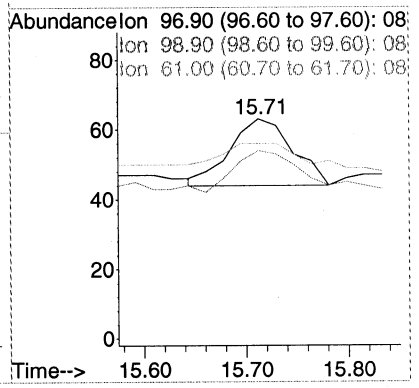


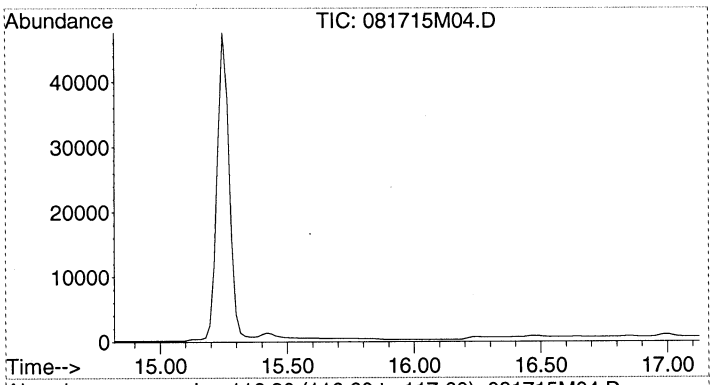


#14
1,1,1-Trichloroethane
Concen: Below Cal
RT: 15.71 min Scan# 1420
Delta R.T. -0.01 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion: 97 Resp: 81

Ion	Ratio	Lower	Upper
97	100		
99	64.2	44.5	84.5
61	55.6	21.7	61.7



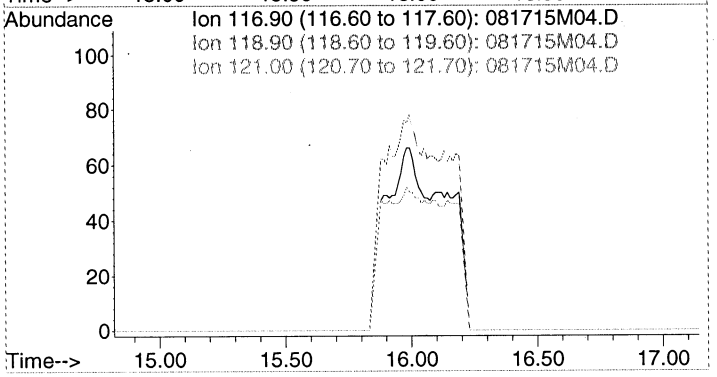


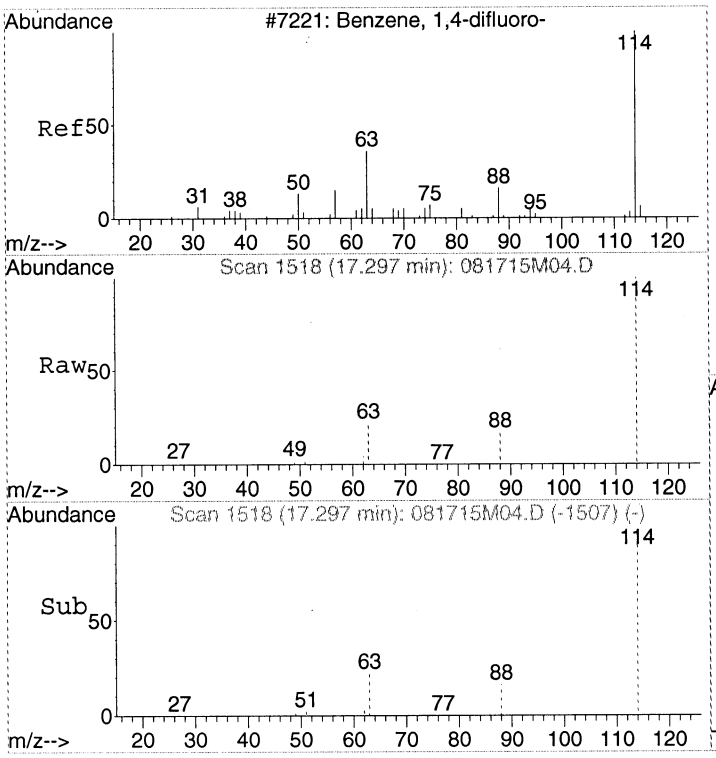
#15
Carbon tetrachloride
Concen: N.D.
Expected RT: 15.99 min

Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.1
121	30.7

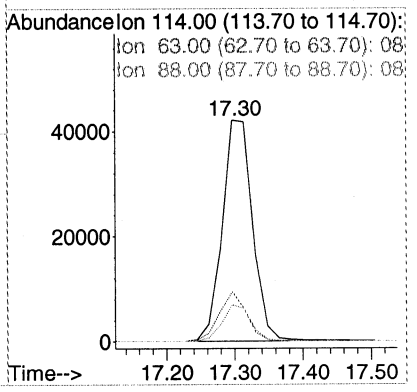


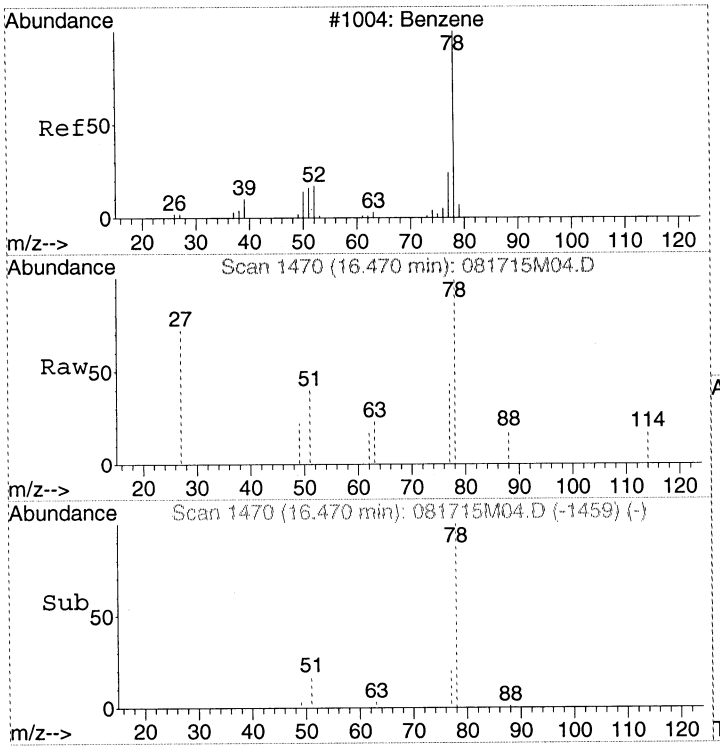


#16
1,4-DIFLUOROBENZENE
Concen: 375.00 pptv
RT: 17.30 min Scan# 1518
Delta R.T. -0.01 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion:114 Resp: 129593

Ion	Ratio	Lower	Upper
114	100		
63	20.2	0.0	39.9
88	15.7	0.0	35.7

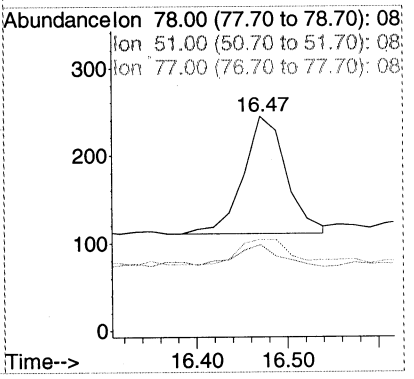


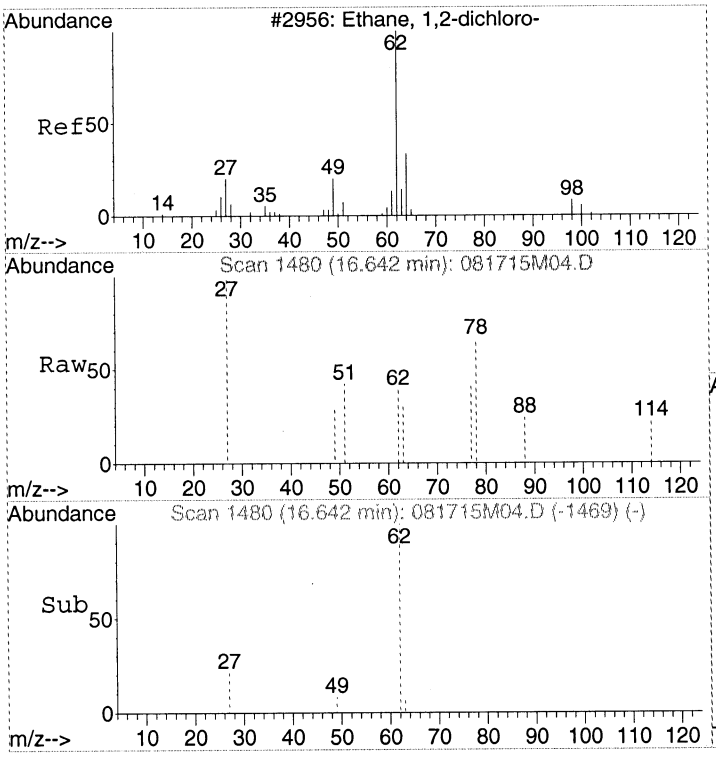


#17
Benzene
Concen: Below Cal
RT: 16.47 min Scan# 1470
Delta R.T. -0.01 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion: 78 Resp: 439

Ion	Ratio	Lower	Upper
78	100		
51	19.4	0.0	37.6
77	24.6	3.7	43.7

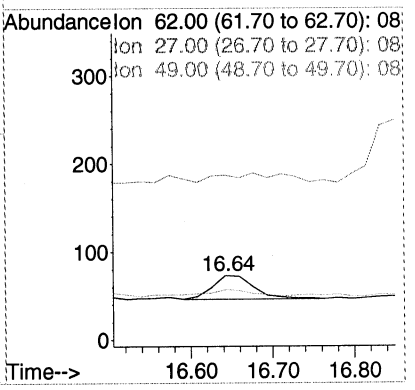


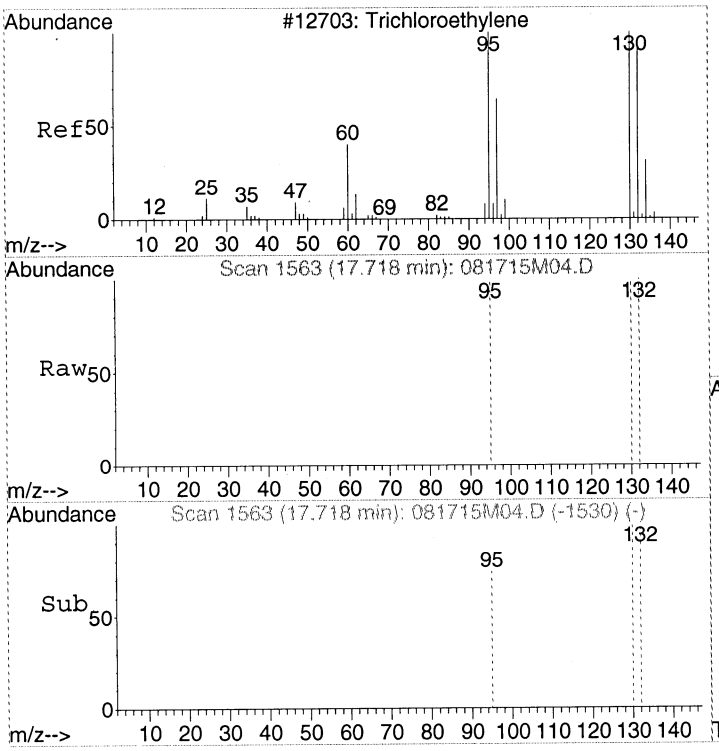


#18
1,2-Dichloroethane
Concen: Below Cal
RT: 16.64 min Scan# 1480
Delta R.T. -0.01 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion: 62 Resp: 94

Ion	Ratio	Lower	Upper
62	100		
27	30.9	13.3	53.3
49	29.8	4.7	44.7

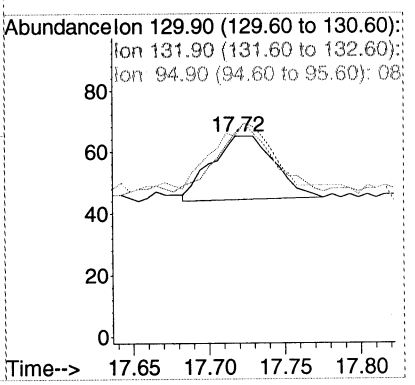


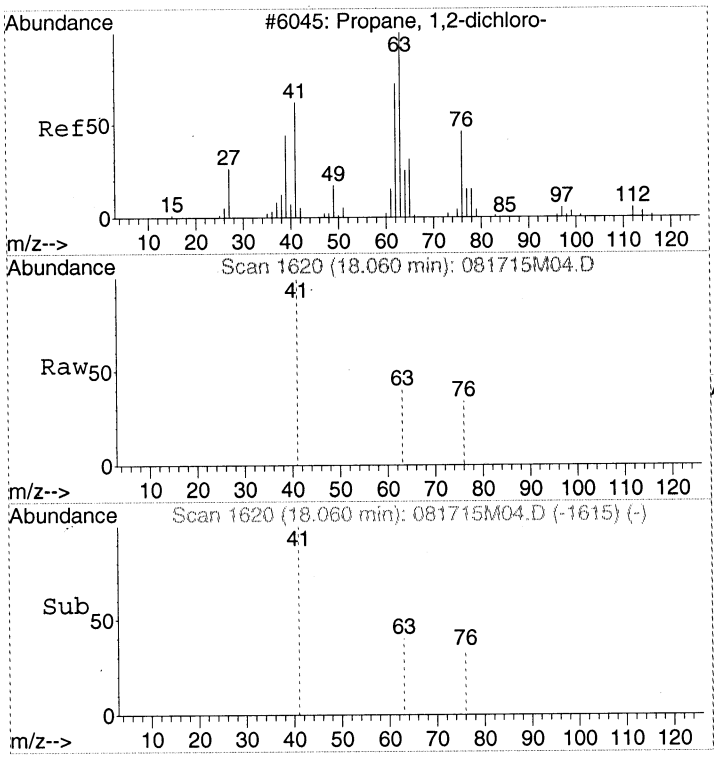


#19
Trichloroethene
Concen: Below Cal
RT: 17.72 min Scan# 1563
Delta R.T. -0.01 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion:130 Resp: 60

Ion	Ratio	Lower	Upper
130	100		
132	93.3	76.3	116.3
95	86.7	75.2	115.2

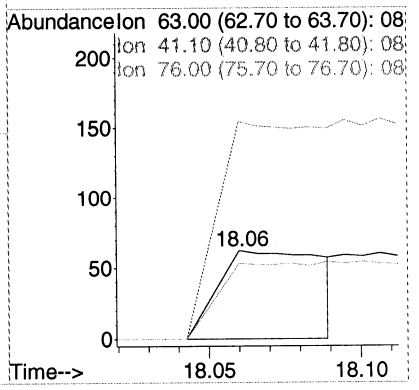


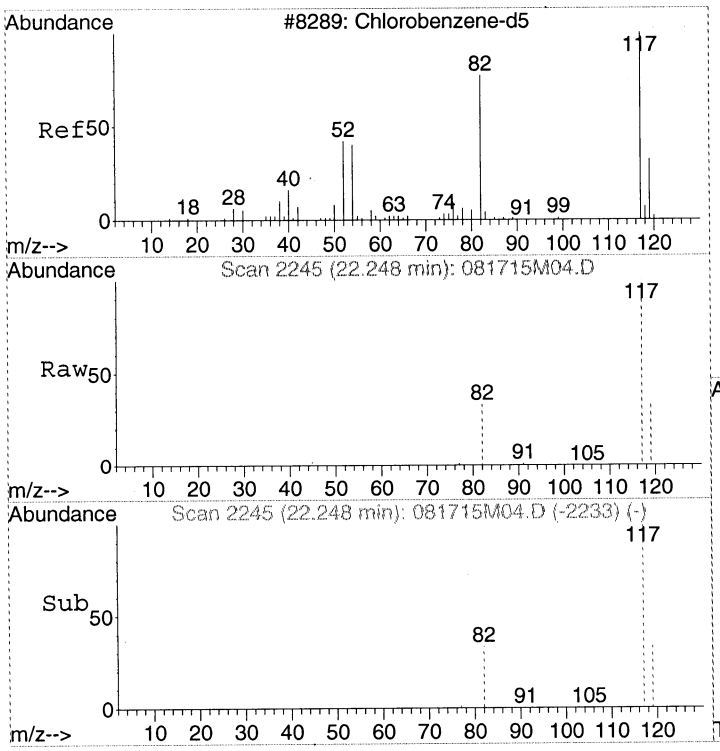


#20
1,2-Dichloropropane
Concen: Below Cal
RT: 18.06 min Scan# 1620
Delta R.T. -0.16 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion: 63 Resp: 166

Ion	Ratio	Lower	Upper
63	100		
41	190.4	43.1	83.1#
76	44.0	31.6	71.6

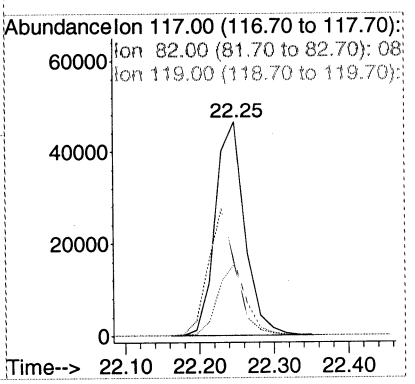


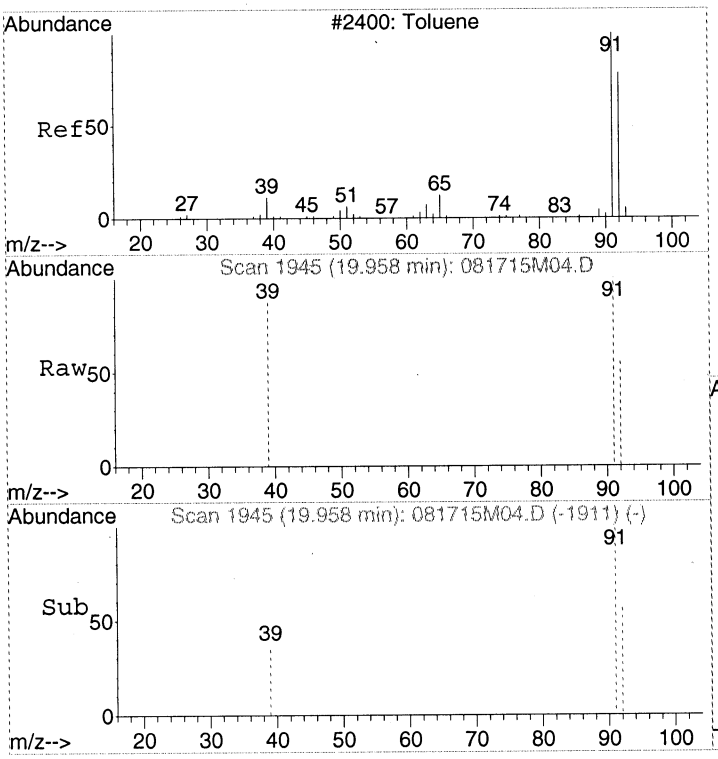


#21
CHLOROBENZENE-d5
Concen: 341.00 pptv
RT: 22.25 min Scan# 2245
Delta R.T. -0.00 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion:117 Resp: 127040

Ion	Ratio	Lower	Upper
117	100		
82	55.3	34.9	74.9
119	32.1	12.1	52.1

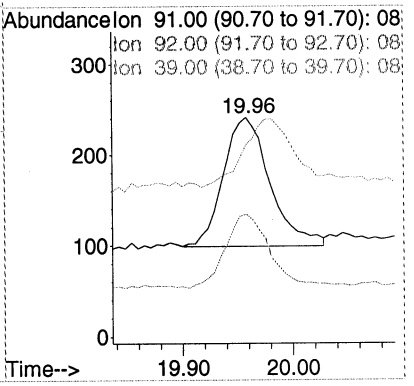


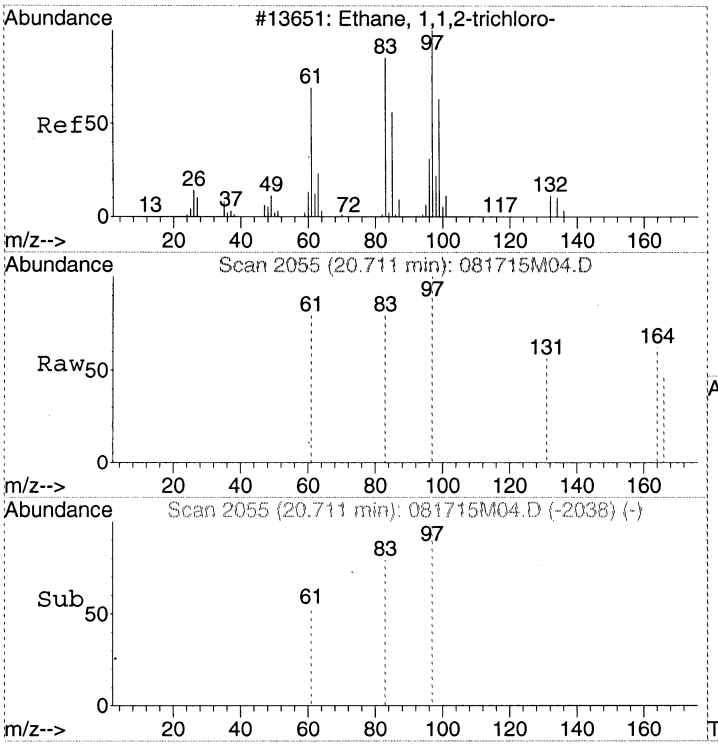


#22
Toluene
Concen: Below Cal
RT: 19.96 min Scan# 1945
Delta R.T. -0.00 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion: 91 Resp: 416

Ion	Ratio	Lower	Upper
91	100		
92	55.0	38.8	78.8
39	55.8	0.0	29.1#

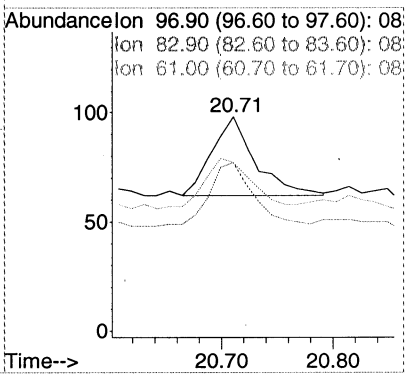


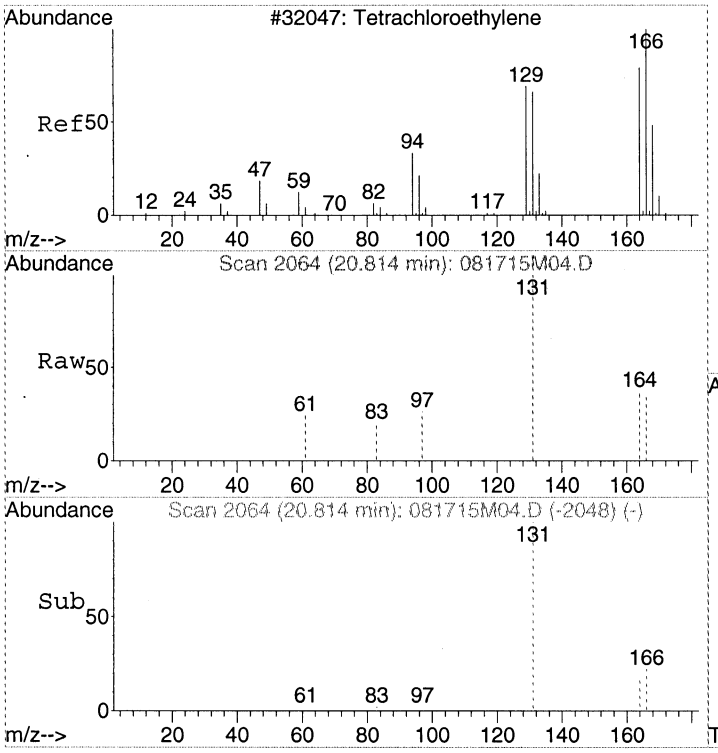


#23
1,1,2-Trichloroethane
Concen: Below Cal
RT: 20.71 min Scan# 2055
Delta R.T. -0.00 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion: 97 Resp: 97

Ion	Ratio	Lower	Upper
97	100		
83	83.5	62.6	102.6
61	69.1	45.1	85.1

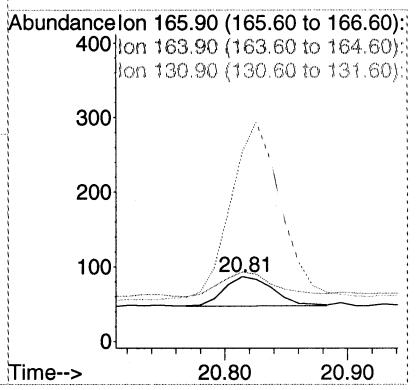


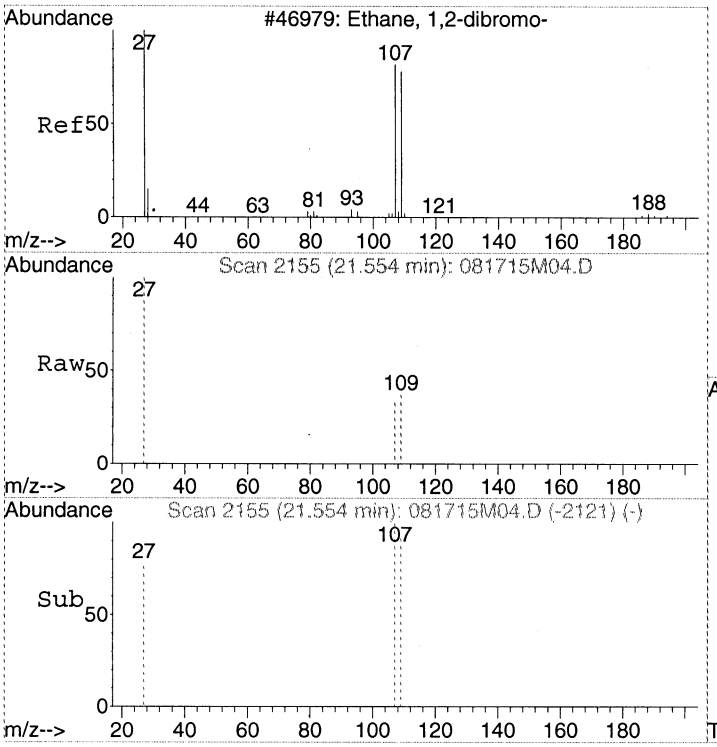


#24
Tetrachloroethene
Concen: Below Cal
RT: 20.81 min Scan# 2064
Delta R.T. -0.01 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion:166 Resp: 110

Ion	Ratio	Lower	Upper
166	100		
164	92.7	58.0	98.0
131	627.3	48.1	88.1#

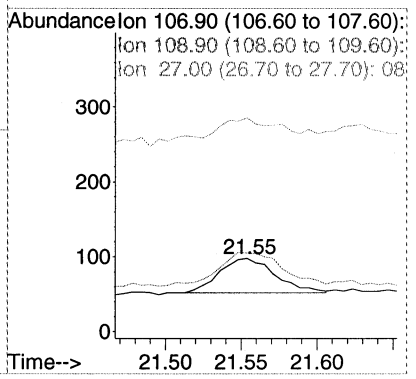


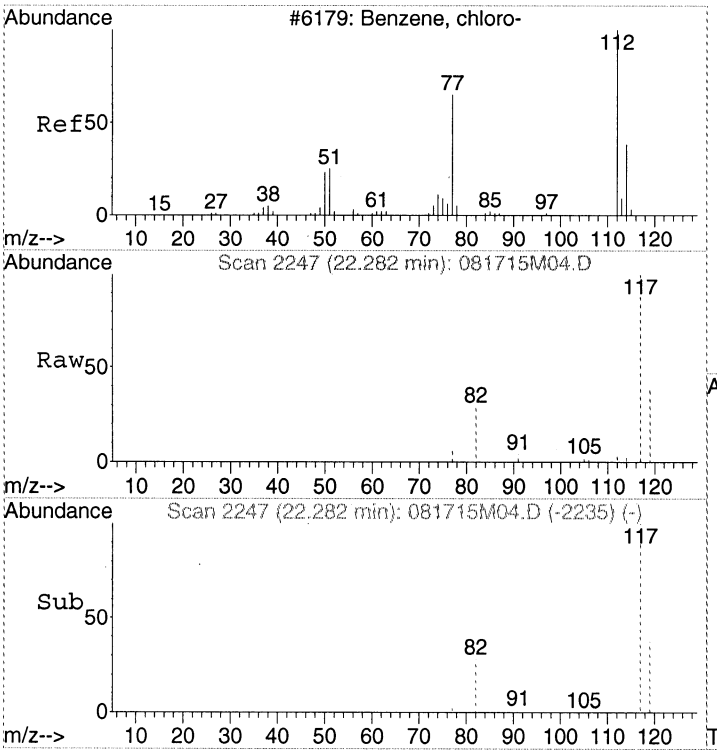


#25
1,2-Dibromoethane (EDB)
Concen: Below Cal
RT: 21.55 min Scan# 2155
Delta R.T. -0.00 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion:107 Resp: 119

Ion	Ratio	Lower	Upper
107	100		
109	108.4	74.3	114.3
27	49.6	30.6	70.6

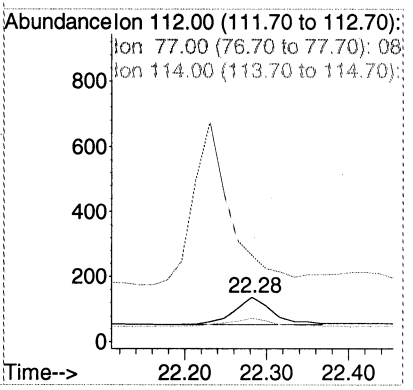


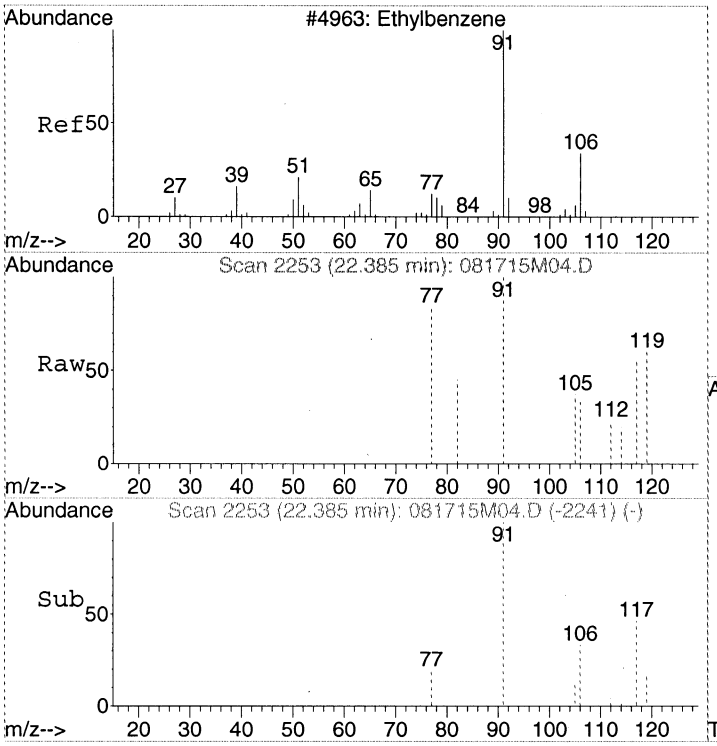


#26
Chlorobenzene
Concen: Below Cal
RT: 22.28 min Scan# 2247
Delta R.T. -0.00 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion:112 Resp: 275

Ion	Ratio	Lower	Upper
112	100		
77	0.0	39.3	79.3#
114	44.7	12.1	52.1

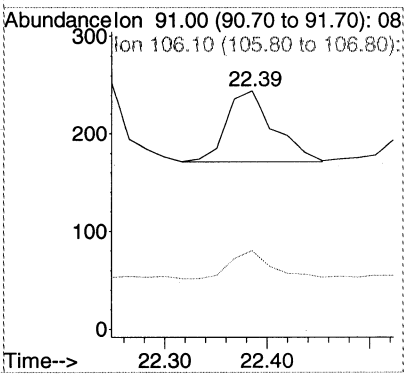


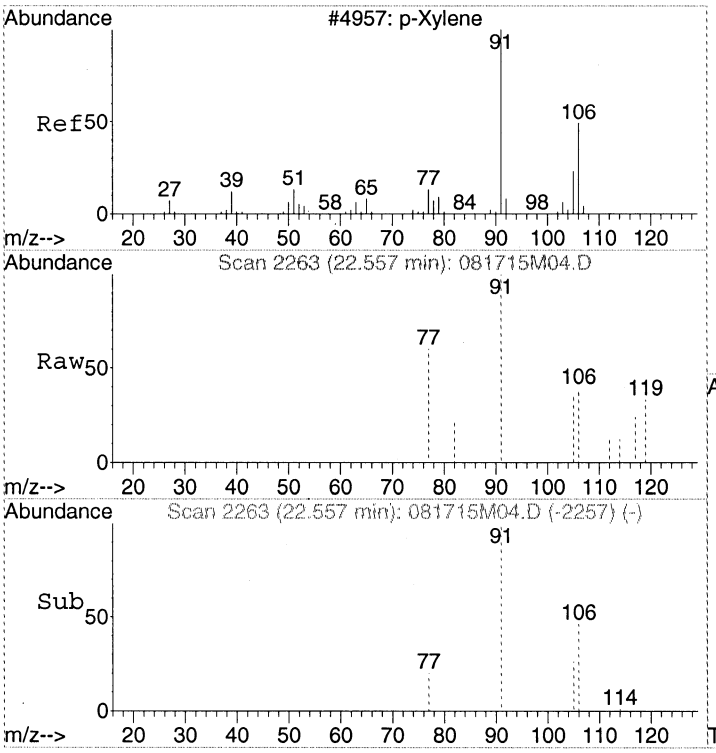


#27
Ethylbenzene
Concen: Below Cal
RT: 22.39 min Scan# 2253
Delta R.T. -0.00 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion: 91 Resp: 235

Ion	Ratio	Lower	Upper
91	100		
106	31.9	11.4	51.4

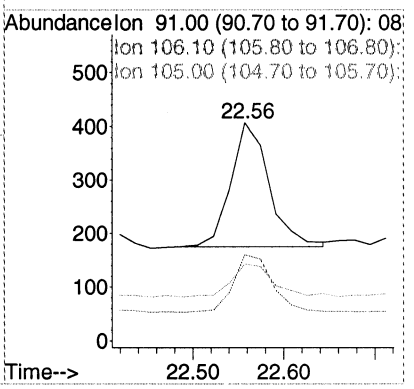


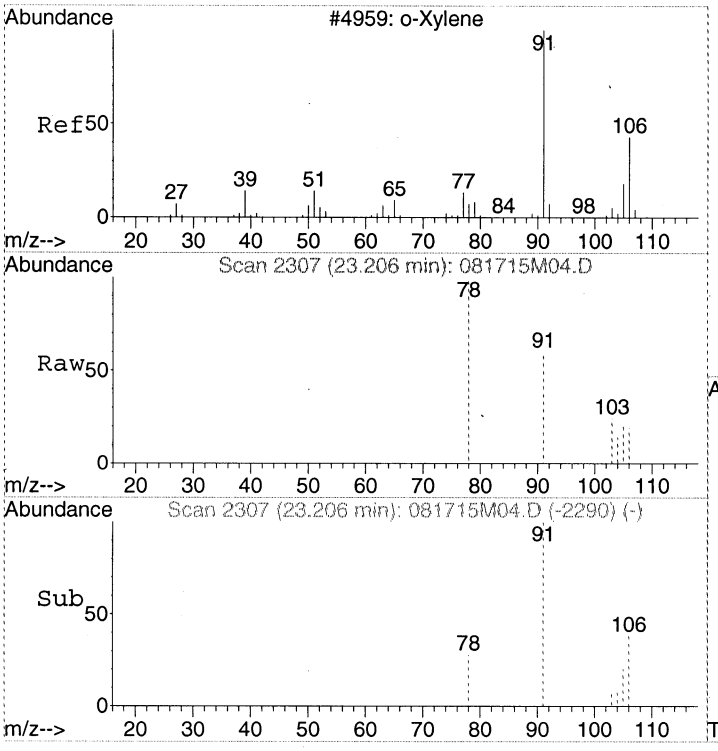


#28
m&p-Xylene
Concen: Below Cal
RT: 22.56 min Scan# 2263
Delta R.T. -0.00 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion: 91 Resp: 678

Ion	Ratio	Lower	Upper
91	100		
106	45.6	29.5	69.5
105	29.8	3.7	43.7

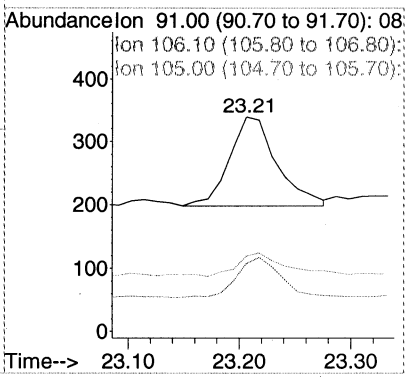


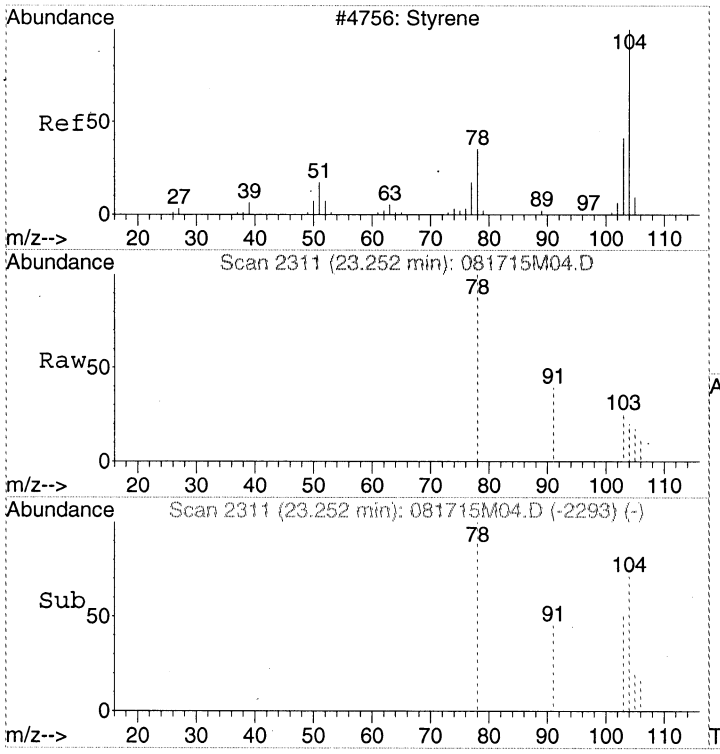


#29
o-Xylene
Concen: Below Cal
RT: 23.21 min Scan# 2307
Delta R.T. -0.00 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion: 91 Resp: 416

Ion	Ratio	Lower	Upper
91	100		
106	41.3	26.0	66.0
105	27.6	6.3	46.3

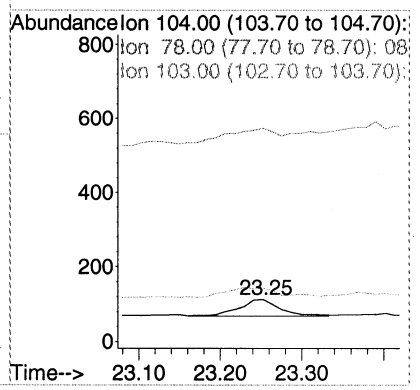


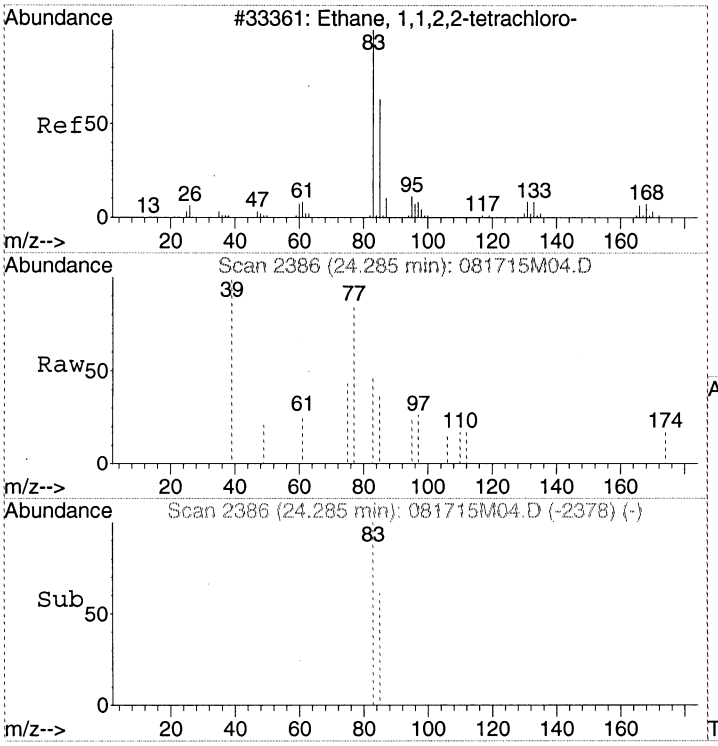


#30
Styrene
Concen: Below Cal
RT: 23.25 min Scan# 2311
Delta R.T. 0.01 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion:104 Resp: 156

Ion	Ratio	Lower	Upper
104	100		
78	112.8	33.4	73.4#
103	0.0	34.8	74.8#

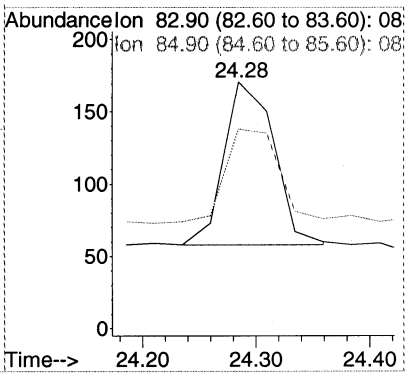


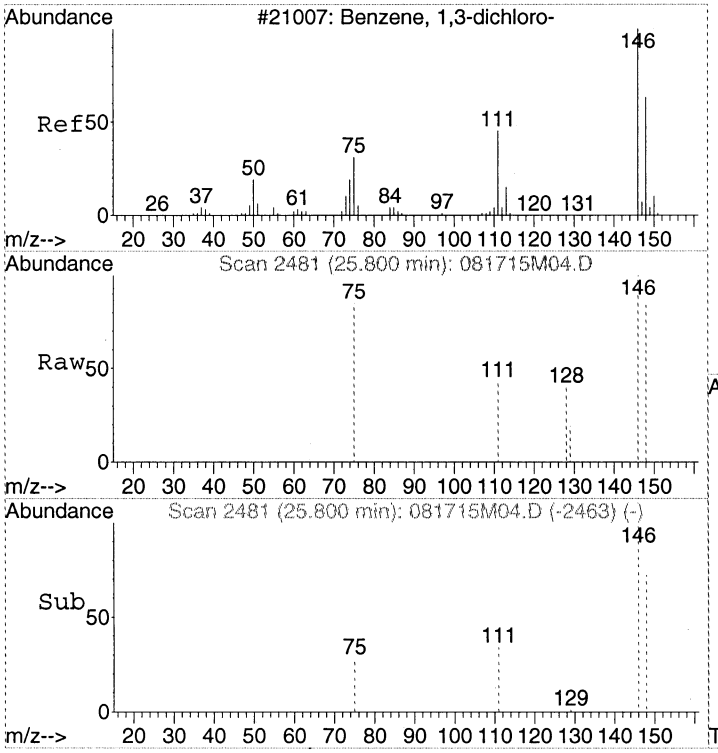


#31
1,1,2,2-Tetrachloroethane
Concen: Below Cal
RT: 24.28 min Scan# 2386
Delta R.T. -0.00 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion: 83 Resp: 344

Ion	Ratio	Lower	Upper
83	100		
85	59.6	43.6	83.6

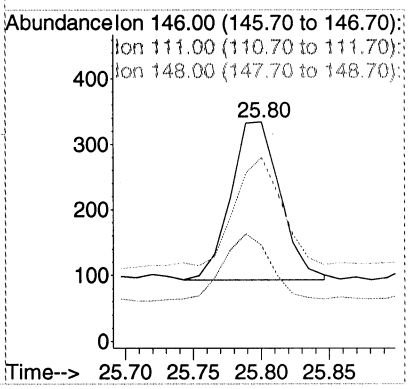


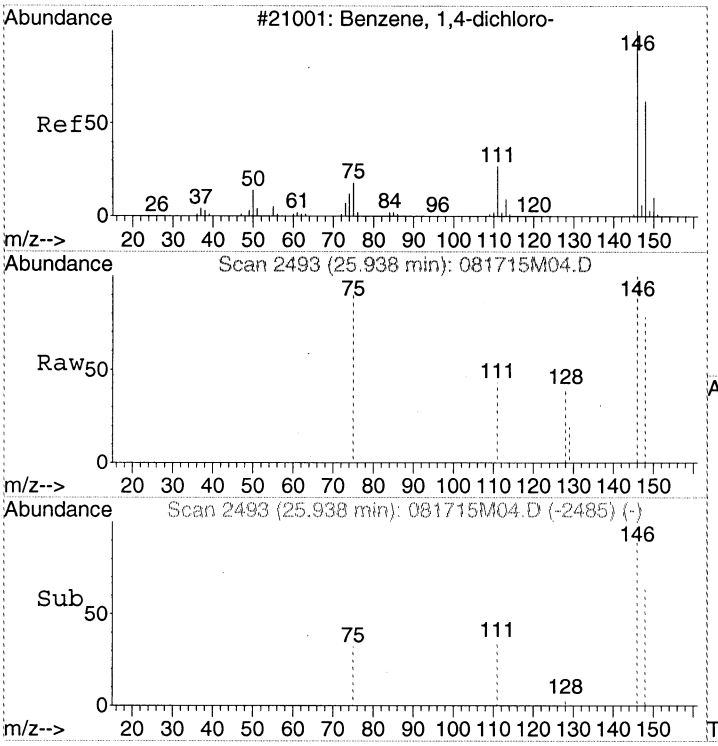


#32
1,3-Dichlorobenzene
Concen: Below Cal
RT: 25.80 min Scan# 2481
Delta R.T. 0.01 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion:146 Resp: 610

Ion	Ratio	Lower	Upper
146	100		
111	41.8	18.6	58.6
148	65.9	44.1	84.1

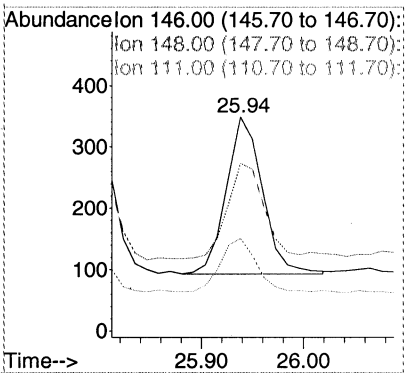


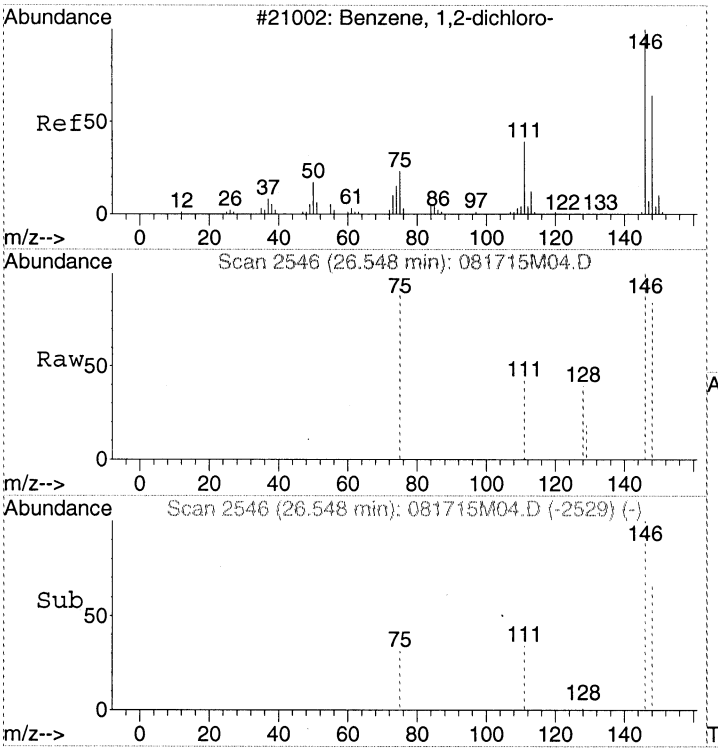


#33
1,4-Dichlorobenzene
Concen: Below Cal
RT: 25.94 min Scan# 2493
Delta R.T. -0.00 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion:146 Resp: 630

Ion	Ratio	Lower	Upper
146	100		
148	61.6	43.9	83.9
111	33.8	16.7	56.7

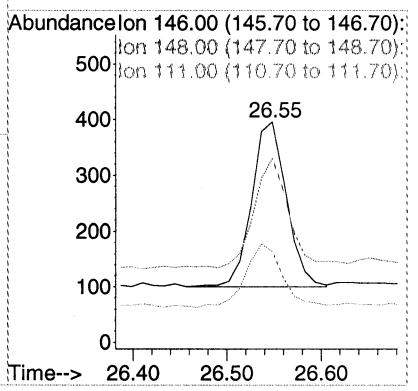




#34
1,2-Dichlorobenzene
Concen: Below Cal
RT: 26.55 min Scan# 2546
Delta R.T. -0.00 min
Lab File: 081715M04.D
Acq: 17 Aug 2015 12:49 pm

Tgt Ion:146 Resp: 755

Ion	Ratio	Lower	Upper
146	100		
148	64.8	43.8	83.8
111	41.2	20.0	60.0



Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081715MAA\
Data File : 081715M05.D
Acq On : 17 Aug 2015 1:51 pm
InstName : AG5973M
Operator : LLH
Sample : 1508028-12RE1
Misc : 600ml 861Leong-OUT
ALS Vial : 3 Sample Multiplier: 1.48

Report

Quant Time: Aug 17 14:59:07 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.25	49	64707	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.30	114	133220	375.00 pptv	-0.01
21) CHLOROBENZENE-d5	22.25	117	131046	341.00 pptv	0.00

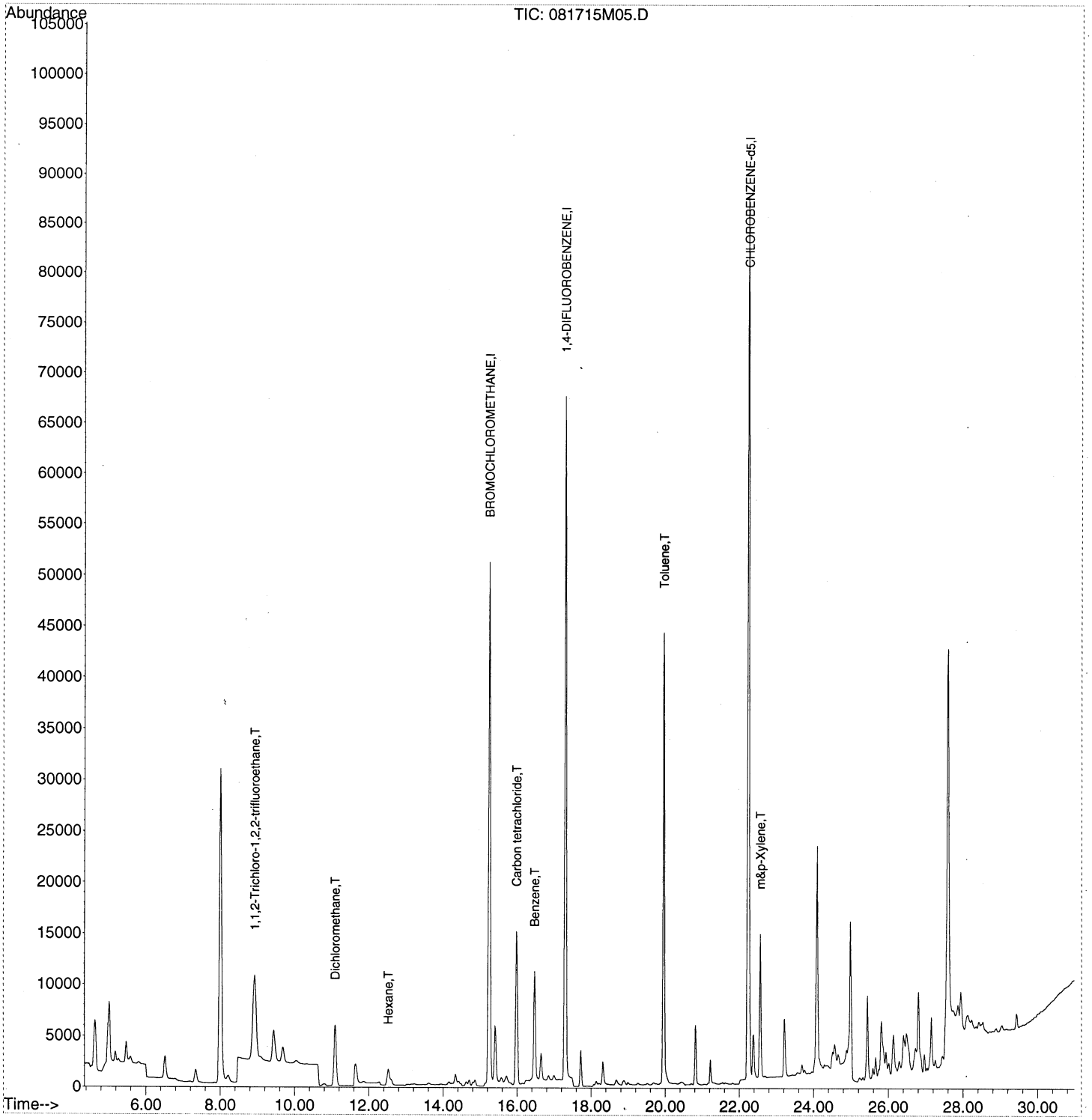
Target Compounds					Qvalue	
2) Vinyl chloride	5.09	62	86	N.D.		
3) 1,3-Butadiene	5.18	54	824	N.D.		
4) Bromoethene	6.98	106	6	N.D.		
5) 1,1,2-Trichloro-1,2,2-trif	8.92	151	18175	51.16 pptv	99	
6) 1,1-Dichloroethene	8.95	61	150	N.D.		
7) Dichloromethane	11.09	49	11170	57.39 pptv	97	M
8) tert-Butyl methyl ether (M	11.85	73	96	N.D.		
9) trans-1,2-Dichloroethene	11.86	61	213	N.D.		
10) Hexane	12.52	57	3527	28.00 pptv	91	M
11) 1,1-Dichloroethane	13.22	63	146	N.D.		
12) cis-1,2-Dichloroethene	14.70	96	636	N.D.		
13) Chloroform	15.40	83	8147	N.D.		
14) 1,1,1-Trichloroethane	15.71	97	938	N.D.		
15) Carbon tetrachloride	15.98	117	22818	52.57 pptv	99	M
17) Benzene	16.47	78	21747	56.82 pptv	97	
18) 1,2-Dichloroethane	16.64	62	4200	N.D.		
19) Trichloroethene	17.72	130	3393	N.D.		
20) 1,2-Dichloropropane	18.21	63	160	N.D.		
22) Toluene	19.95	91	70992	201.99 pptv	98	
23) 1,1,2-Trichloroethane	20.70	97	148	N.D.		
24) Tetrachloroethene	20.82	166	5827	N.D.		
25) 1,2-Dibromoethane (EDB)	21.55	107	147	N.D.		
26) Chlorobenzene	22.28	112	510	N.D.		
27) Ethylbenzene	22.37	91	8312	N.D.		
28) m&p-Xylene	22.56	91	19812	55.23 pptv	99	
29) o-Xylene	23.21	91	7942	N.D.		
30) Styrene	23.24	104	1572	N.D.		
31) 1,1,2,2-Tetrachloroethane	24.28	83	613	N.D.		
32) 1,3-Dichlorobenzene	25.80	146	1032	N.D.		
33) 1,4-Dichlorobenzene	25.94	146	1882	N.D.		
34) 1,2-Dichlorobenzene	26.54	146	1184	N.D.		

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

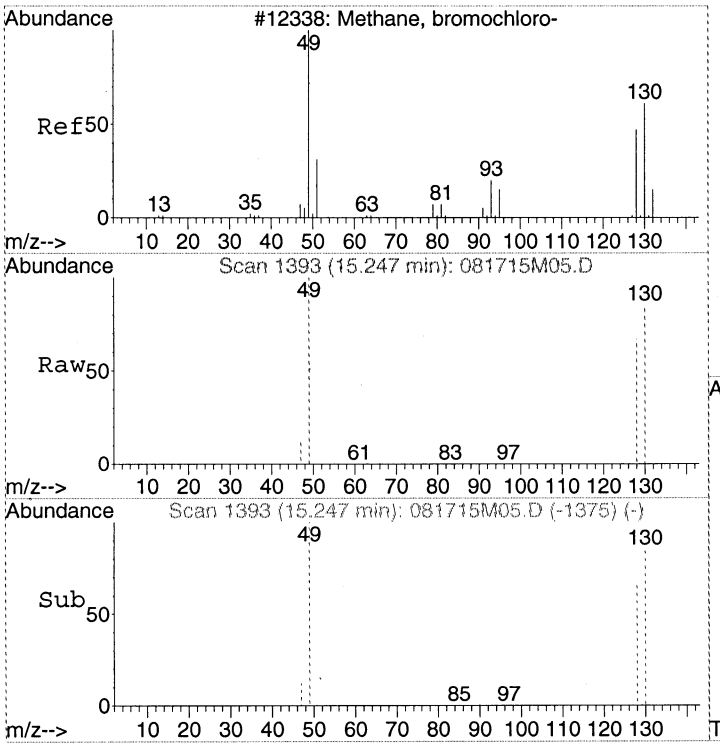
Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081715MAA\
Data File : 081715M05.D
Acq On : 17 Aug 2015 1:51 pm
InstName : AG5973M
Operator : LLH
Sample : 1508028-12RE1
Misc : 600ml 861Leong-OUT
ALS Vial : 3 Sample Multiplier: 1.48

Quant Time: Aug 17 14:59:07 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration



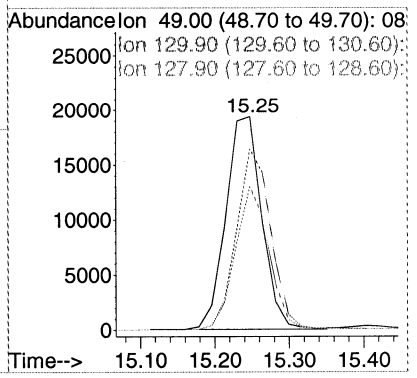
00113

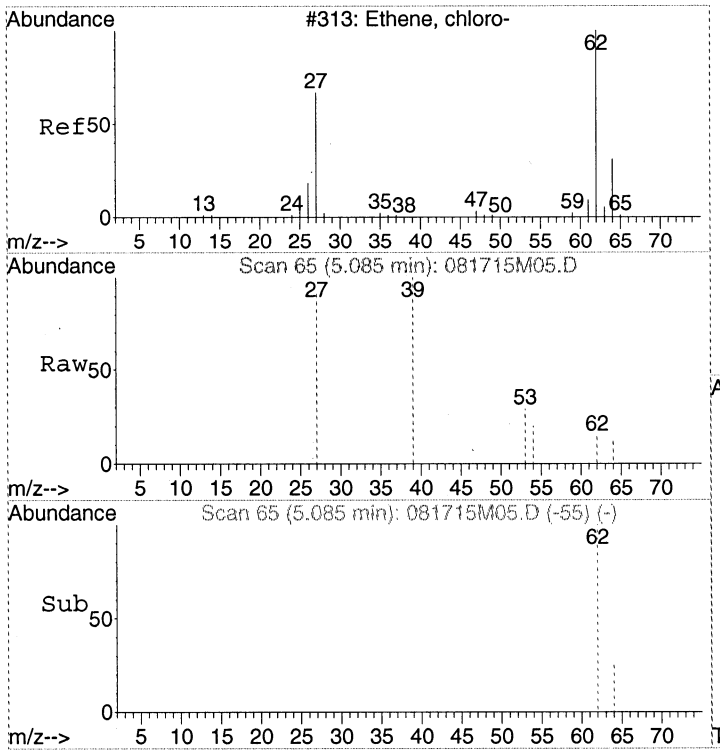


#1
BROMOCHLOROMETHANE
Concen: 341.00 pptv
RT: 15.25 min Scan# 1393
Delta R.T. 0.01 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion: 49 Resp: 64707

Ion	Ratio	Lower	Upper
49	100		
130	81.1	65.3	105.3
128	62.9	46.2	86.2

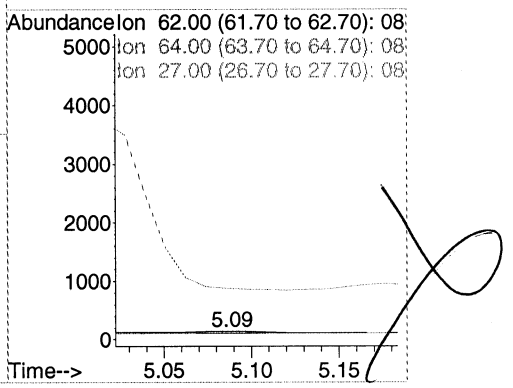


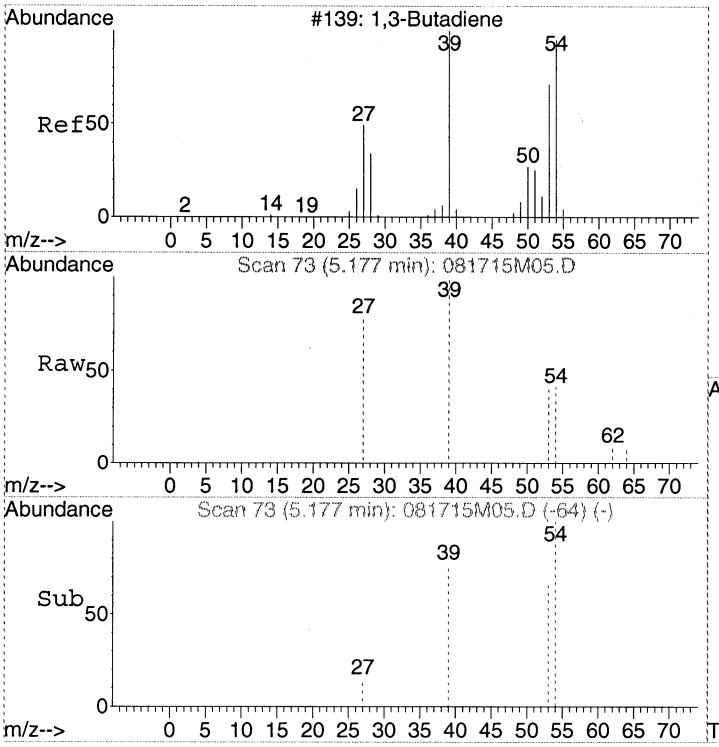


#2
Vinyl chloride
Concen: Below Cal
RT: 5.09 min Scan# 65
Delta R.T. -0.00 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion: 62 Resp: 86

Ion	Ratio	Lower	Upper
62	100		
64	19.8	11.8	51.8
27	0.0	28.9	68.9#

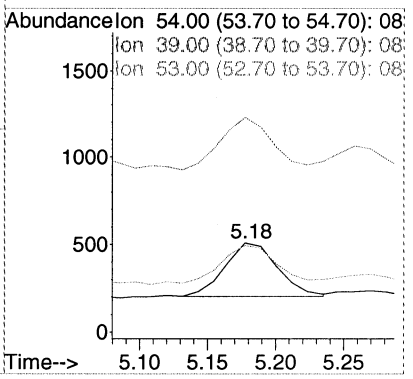


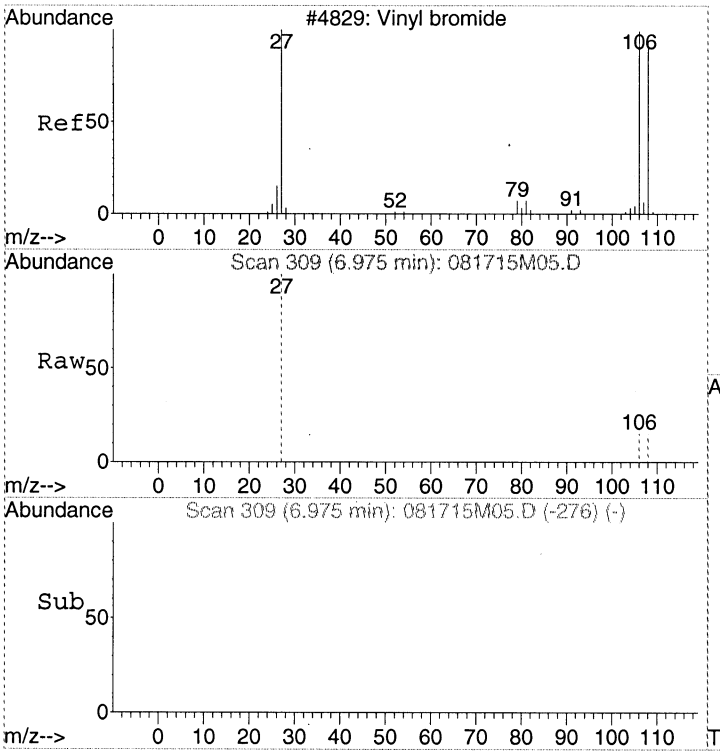


#3
1,3-Butadiene
Concen: Below Cal
RT: 5.18 min Scan# 73
Delta R.T. -0.01 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion: 54 Resp: 824

Ion	Ratio	Lower	Upper
54	100		
39	95.4	76.7	116.7
53	78.0	48.8	88.8

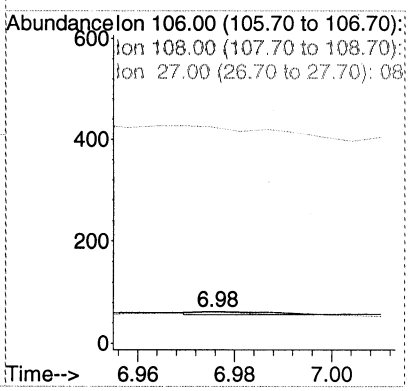


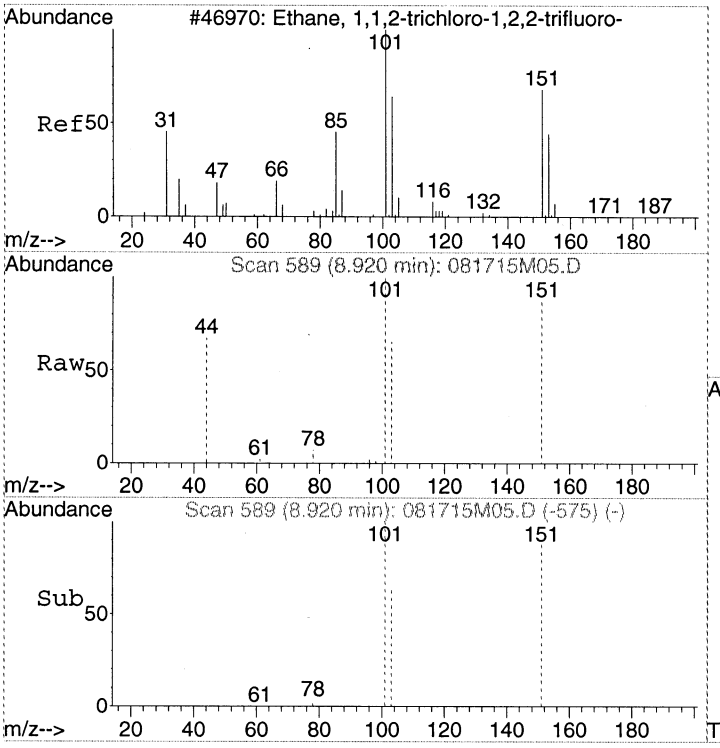


#4
Bromoethene
Concen: Below Cal
RT: 6.98 min Scan# 309
Delta R.T. -0.01 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion:106 Resp: 6

Ion	Ratio	Lower	Upper
106	100		
108	283.3	0.0	214.6#
27	0.0	56.6	96.6#

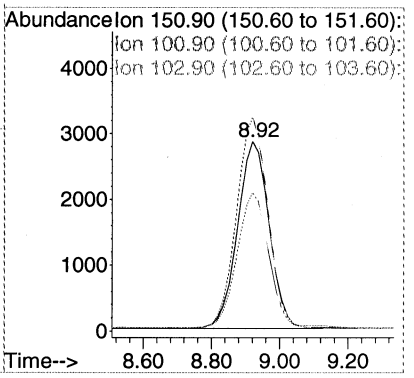


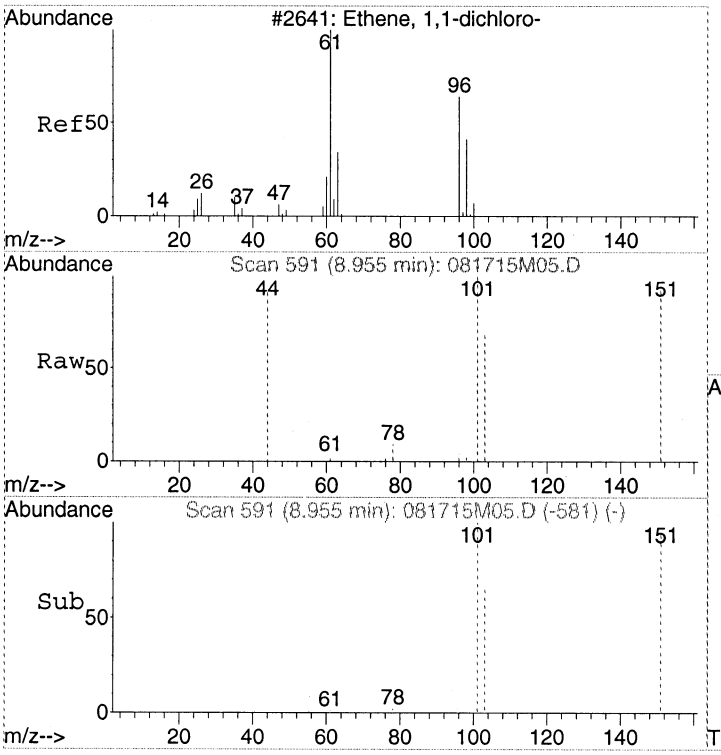


#5
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 51.16 pptv
RT: 8.92 min Scan# 589
Delta R.T. -0.02 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion:151 Resp: 18175

Ion	Ratio	Lower	Upper
151	100		
101	112.4	90.9	130.9
103	72.1	51.0	91.0

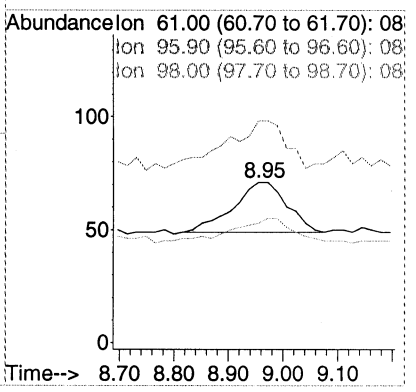


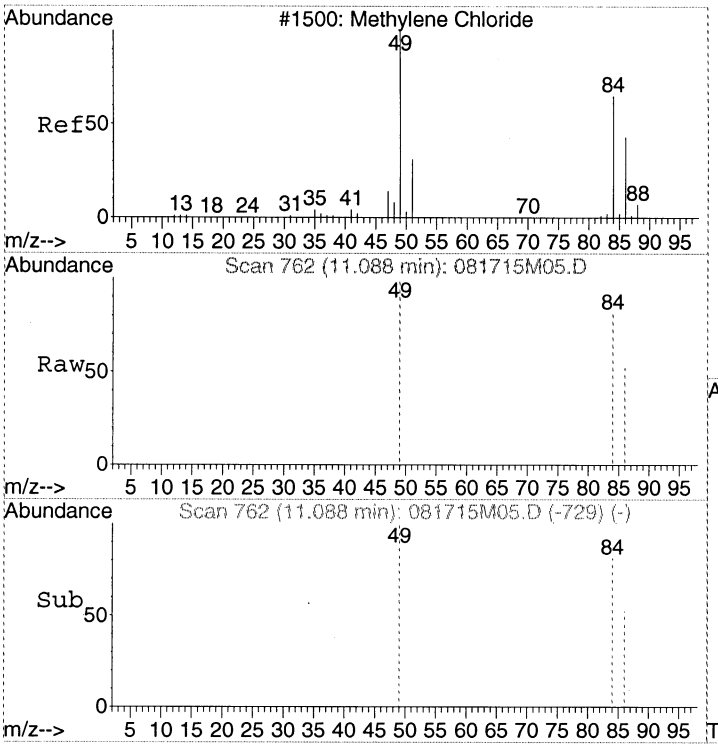


#6
1,1-Dichloroethene
Concen: Below Cal
RT: 8.95 min Scan# 591
Delta R.T. -0.03 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion: 61 Resp: 150

Ion	Ratio	Lower	Upper
61	100		
96	64.0	43.2	83.2
98	42.7	20.1	60.1

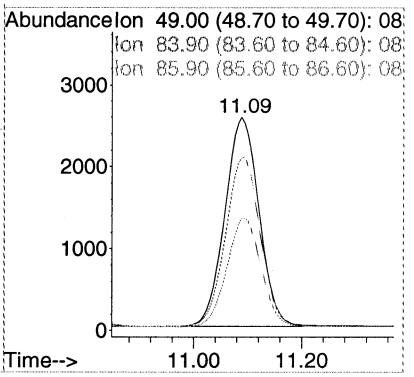


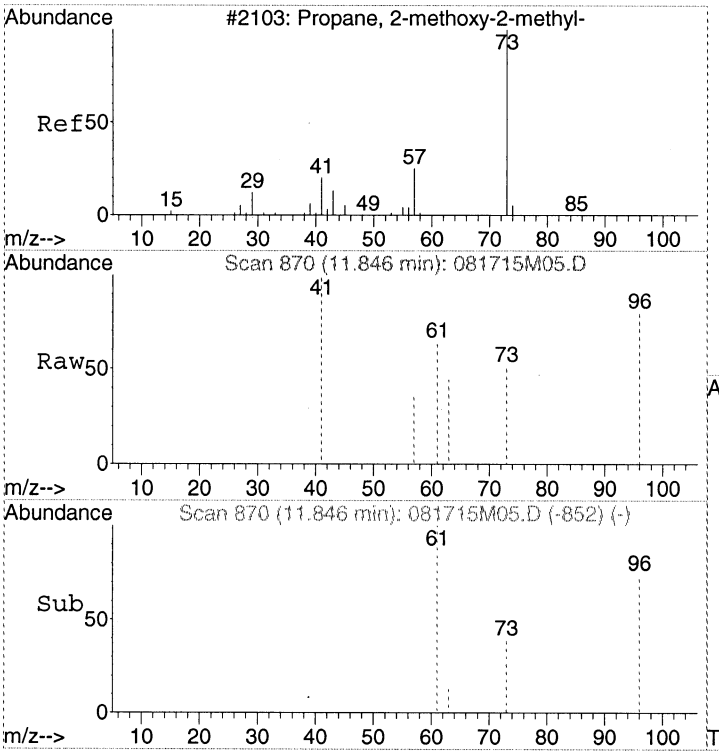


#7
Dichloromethane
Concen: 57.39 pptv
RT: 11.09 min Scan# 762
Delta R.T. -0.01 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion: 49 Resp: 11170

Ion	Ratio	Lower	Upper
49	100		
84	81.6	64.2	104.2
86	52.4	34.0	74.0

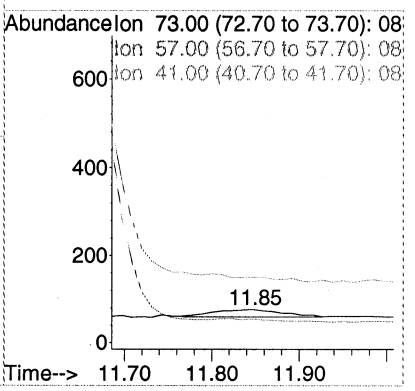


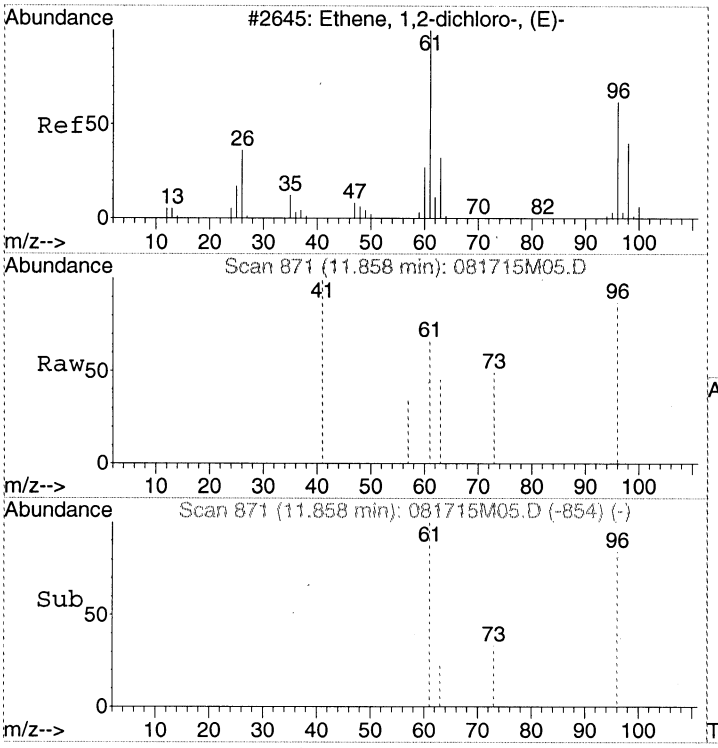


#8
tert-Butyl methyl ether (MTBE)
Concen: Below Cal
RT: 11.85 min Scan# 870
Delta R.T. 0.01 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion: 73 Resp: 96

Ion	Ratio	Lower	Upper
73	100		
57	0.0	2.0	42.0#
41	0.0	13.3	53.3#

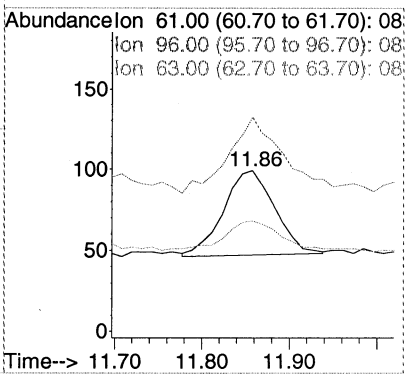


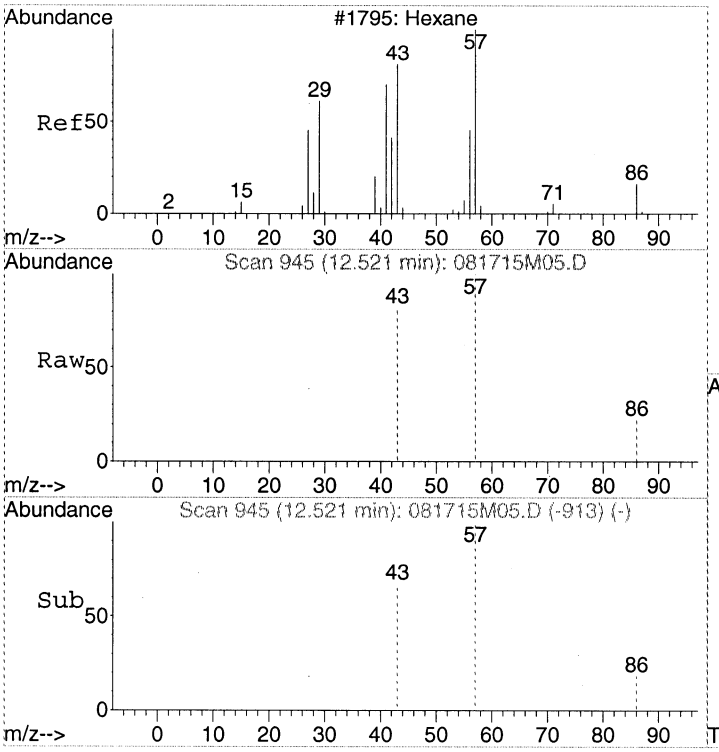


#9
trans-1,2-Dichloroethene
Concen: Below Cal
RT: 11.86 min Scan# 871
Delta R.T. -0.00 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion: 61 Resp: 213

Ion	Ratio	Lower	Upper
61	100		
96	96.2	53.4	93.4#
63	36.2	12.2	52.2

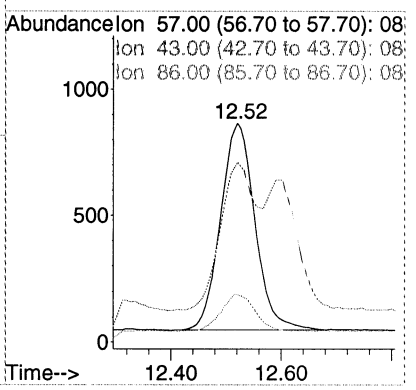


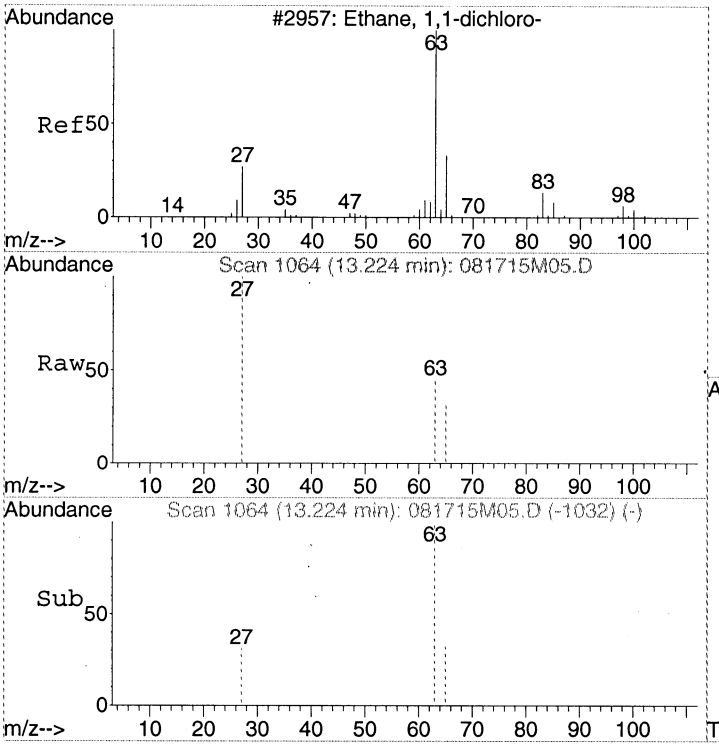


#10
Hexane
Concen: 28.00 pptv
RT: 12.52 min Scan# 945
Delta R.T. -0.01 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion: 57 Resp: 3527

Ion	Ratio	Lower	Upper
57	100		
43	75.2	46.4	86.4
86	17.2	0.0	38.0

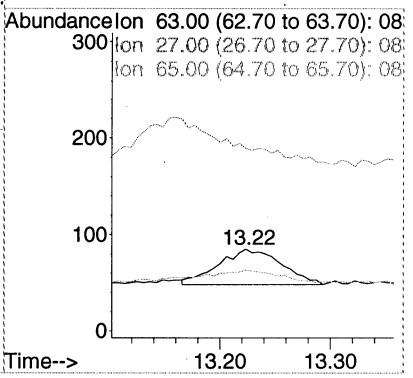


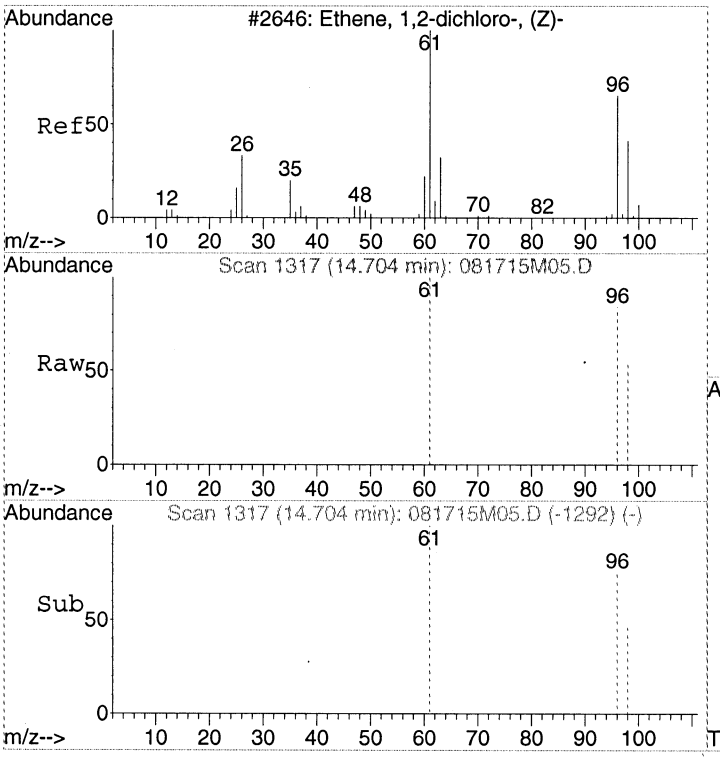


#11
1,1-Dichloroethane
Concen: Below Cal
RT: 13.22 min Scan# 1064
Delta R.T. -0.01 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion: 63 Resp: 146

Ion	Ratio	Lower	Upper
63	100		
27	0.0	9.1	49.1#
65	29.5	11.6	51.6

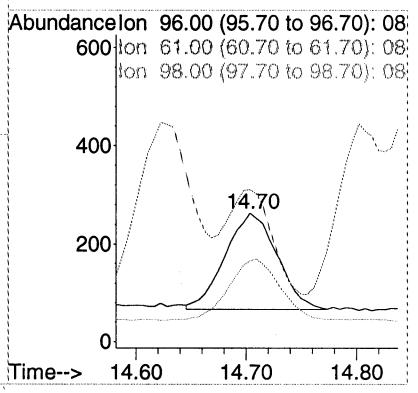


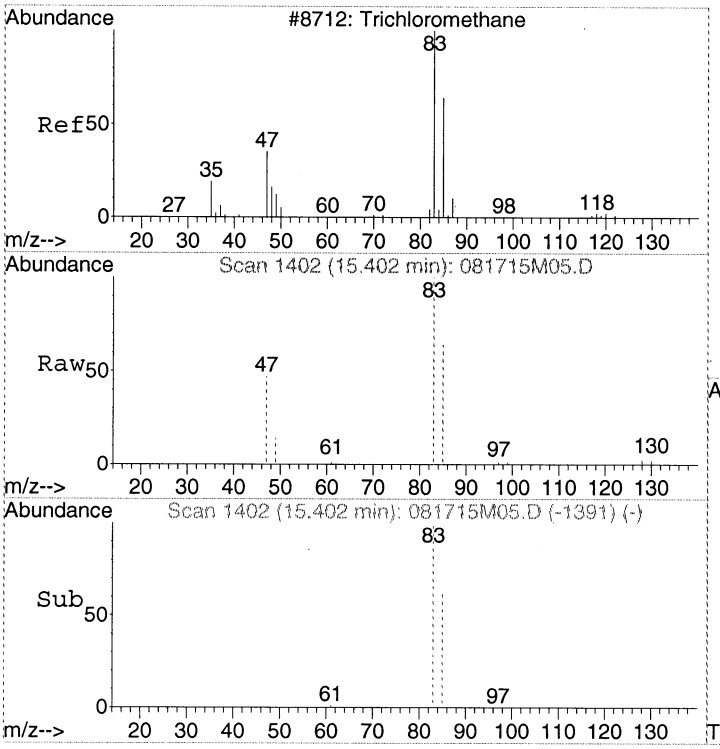


#12
cis-1,2-Dichloroethene
Concen: Below Cal
RT: 14.70 min Scan# 1317
Delta R.T. -0.01 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion: 96 Resp: 636

Ion	Ratio	Lower	Upper
96	100		
61	89.2	104.7	144.7#
98	64.6	43.7	83.7

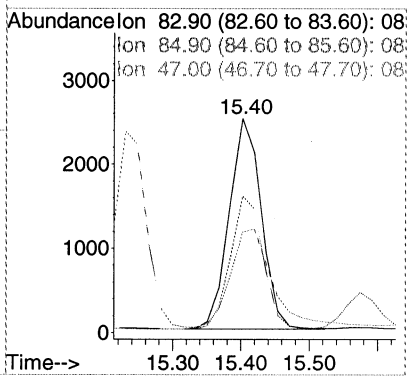


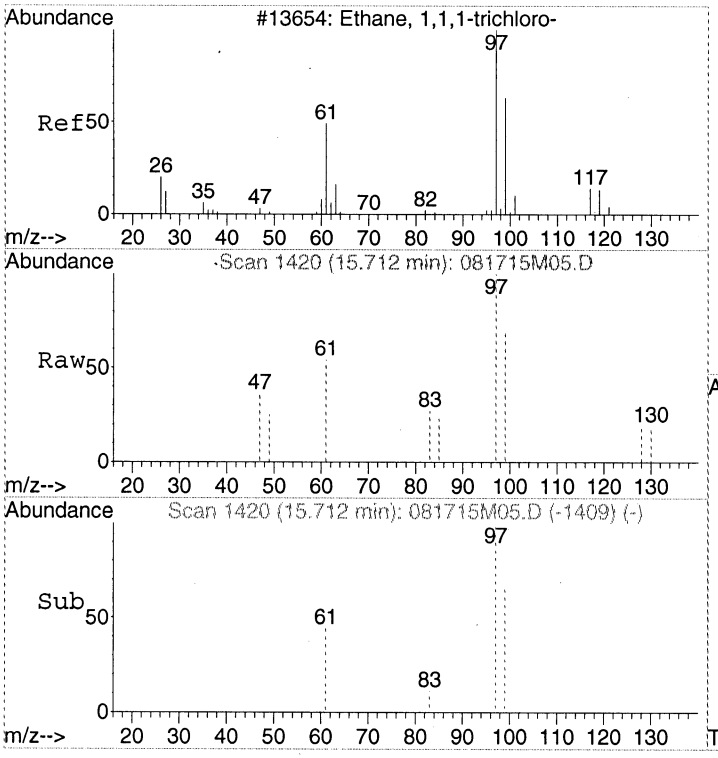


#13
Chloroform
Concen: Below Cal
RT: 15.40 min Scan# 1402
Delta R.T. -0.01 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion: 83 Resp: 8147

Ion	Ratio	Lower	Upper
83	100		
85	64.0	44.8	84.8
47	60.3	4.4	44.4#

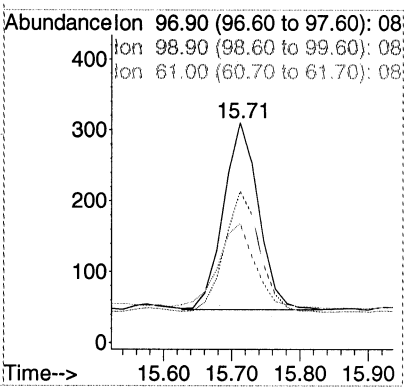


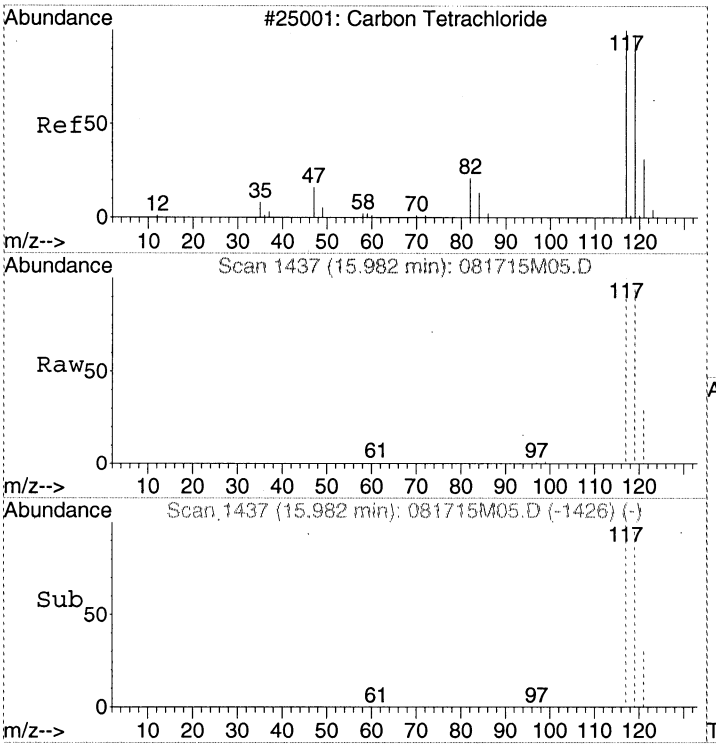


#14
1,1,1-Trichloroethane
Concen: Below Cal
RT: 15.71 min Scan# 1420
Delta R.T. -0.01 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion: 97 Resp: 938

Ion	Ratio	Lower	Upper
97	100		
99	64.9	44.5	84.5
61	48.0	21.7	61.7

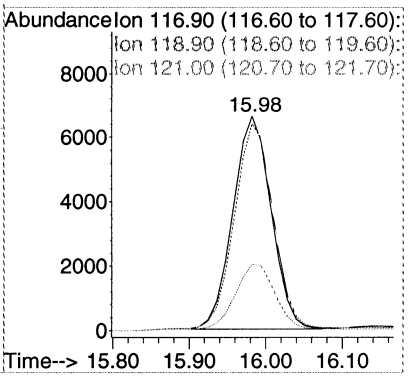


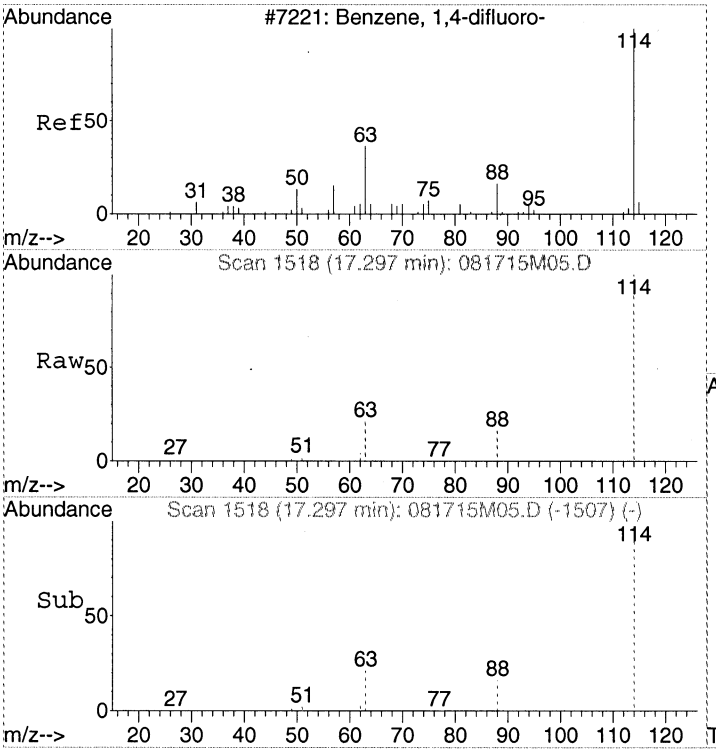


#15
Carbon tetrachloride
Concen: 52.57 pptv
RT: 15.98 min Scan# 1437
Delta R.T. -0.01 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion:117 Resp: 22818

Ion	Ratio	Lower	Upper
117	100		
119	97.1	76.1	116.1
121	31.1	10.7	50.7

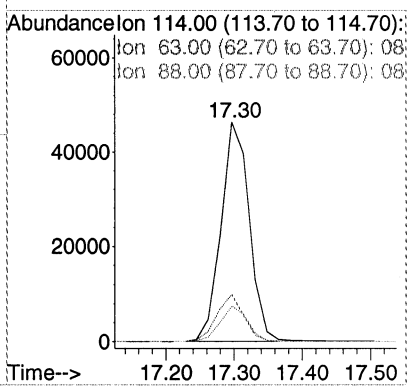


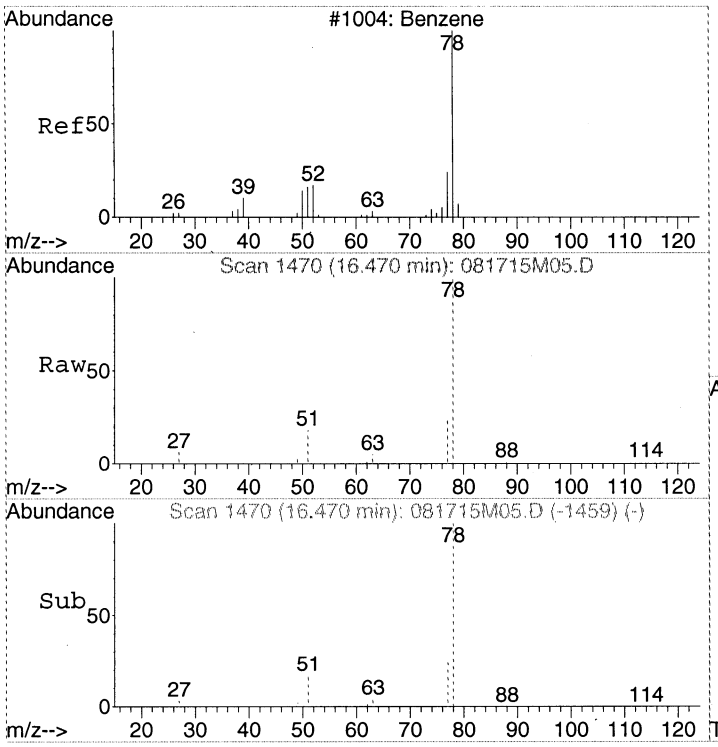


#16
1,4-DIFLUOROBENZENE
Concen: 375.00 pptv
RT: 17.30 min Scan# 1518
Delta R.T. -0.01 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion:114 Resp: 133220

Ion	Ratio	Lower	Upper
114	100		
63	20.6	0.0	39.9
88	15.7	0.0	35.7

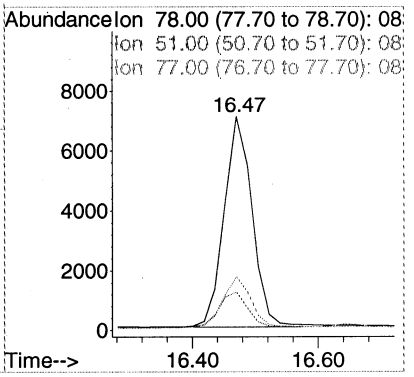


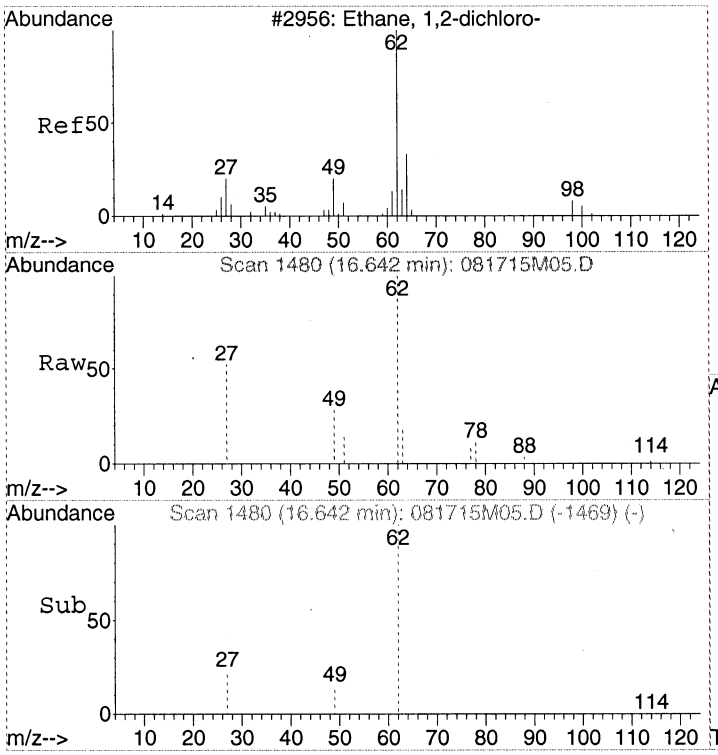


#17
Benzene
Concen: 56.82 pptv
RT: 16.47 min Scan# 1470
Delta R.T. -0.01 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion: 78 Resp: 21747

Ion	Ratio	Lower	Upper
78	100		
51	18.3	0.0	37.6
77	25.3	3.7	43.7

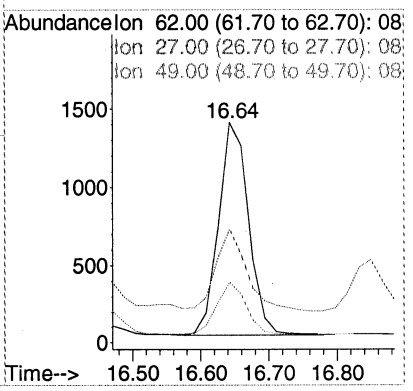


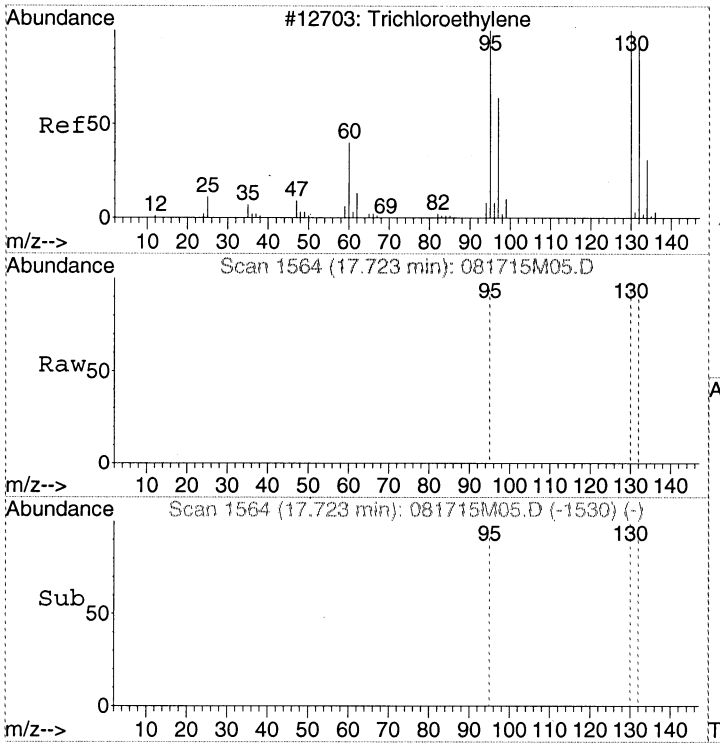


#18
1,2-Dichloroethane
Concen: Below Cal
RT: 16.64 min Scan# 1480
Delta R.T. -0.01 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion: 62 Resp: 4200

Ion	Ratio	Lower	Upper
62	100		
27	40.1	13.3	53.3
49	24.1	4.7	44.7

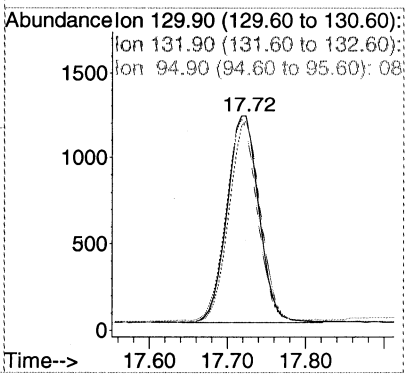


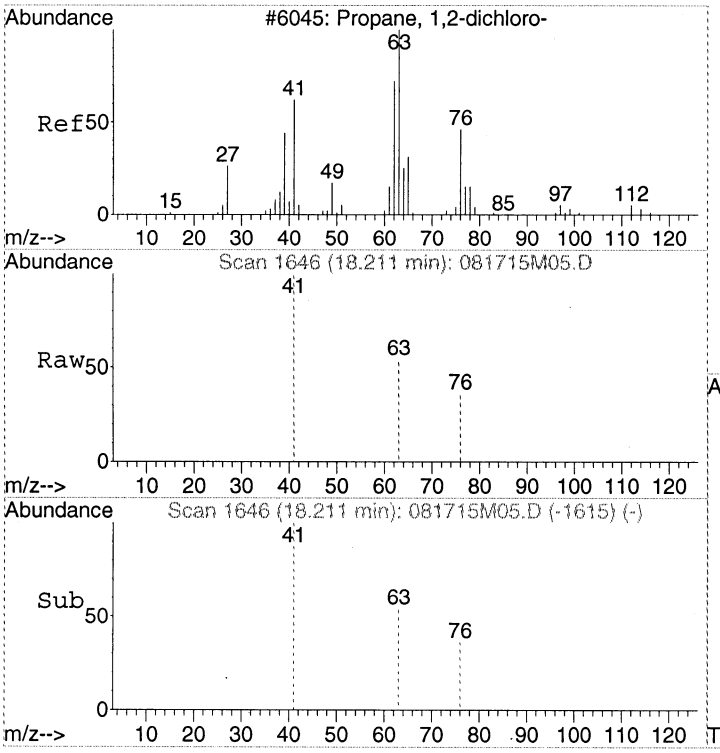


#19
Trichloroethene
Concen: Below Cal
RT: 17.72 min Scan# 1564
Delta R.T. -0.00 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion:130 Resp: 3393

Ion	Ratio	Lower	Upper
130	100		
132	95.5	76.3	116.3
95	93.7	75.2	115.2

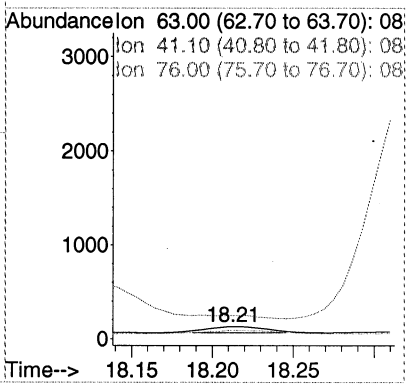


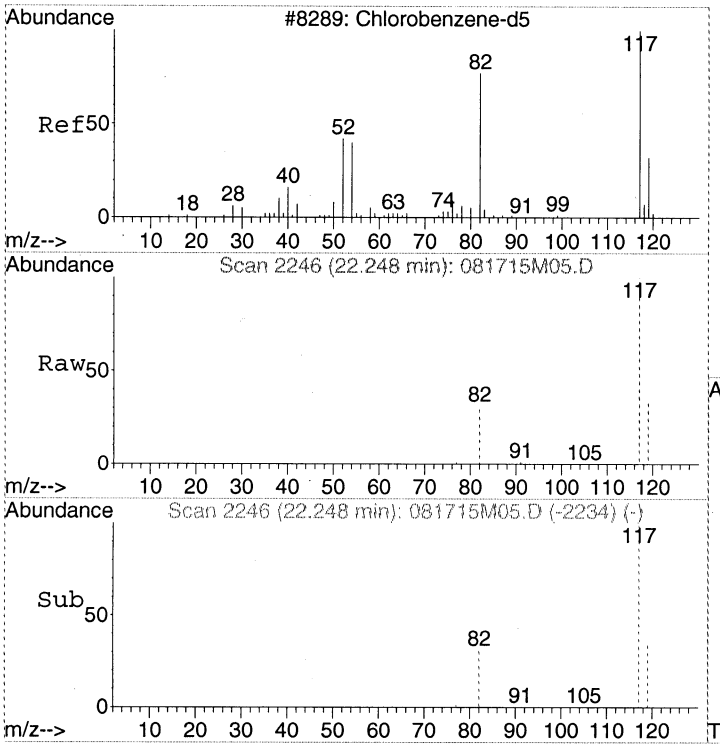


#20
1,2-Dichloropropane
Concen: Below Cal
RT: 18.21 min Scan# 1646
Delta R.T. -0.01 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion: 63 Resp: 160

Ion	Ratio	Lower	Upper
63	100		
41	0.0	43.1	83.1#
76	60.0	31.6	71.6

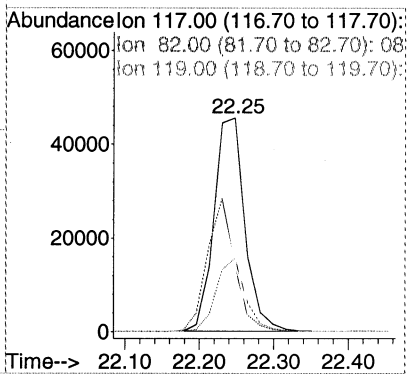


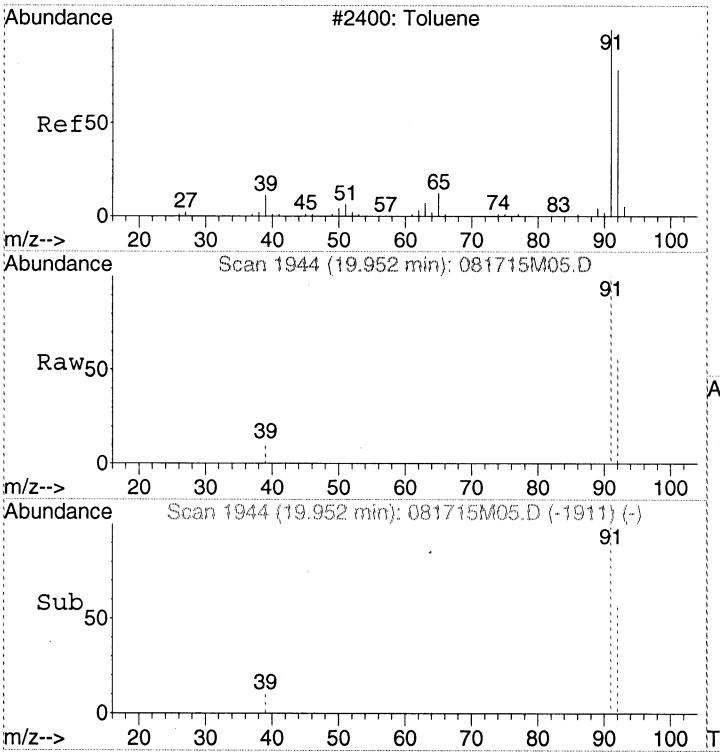


#21
CHLOROBENZENE-d5
Concen: 341.00 pptv
RT: 22.25 min Scan# 2246
Delta R.T. -0.00 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion:117 Resp: 131046

Ion	Ratio	Lower	Upper
117	100		
82	55.6	34.9	74.9
119	32.2	12.1	52.1

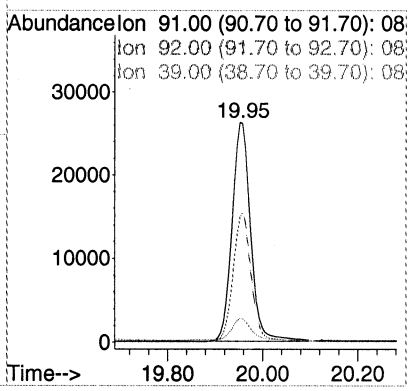


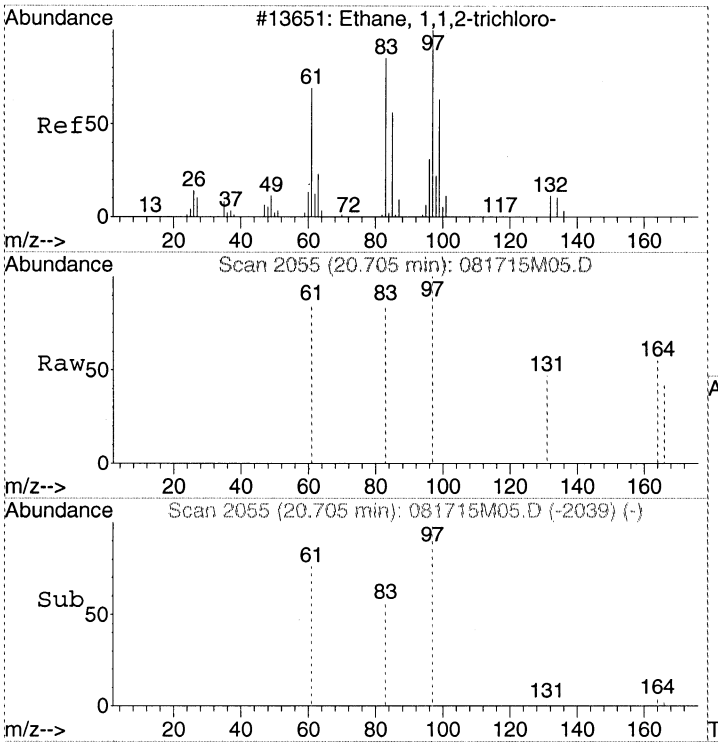


#22
Toluene
Concen: 201.99 pptv
RT: 19.95 min Scan# 1944
Delta R.T. -0.01 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion: 91 Resp: 70992

Ion	Ratio	Lower	Upper
91	100		
92	57.6	38.8	78.8
39	10.5	0.0	29.1

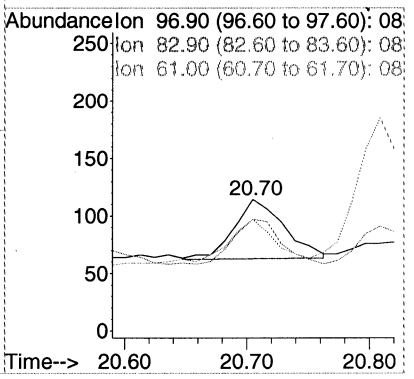


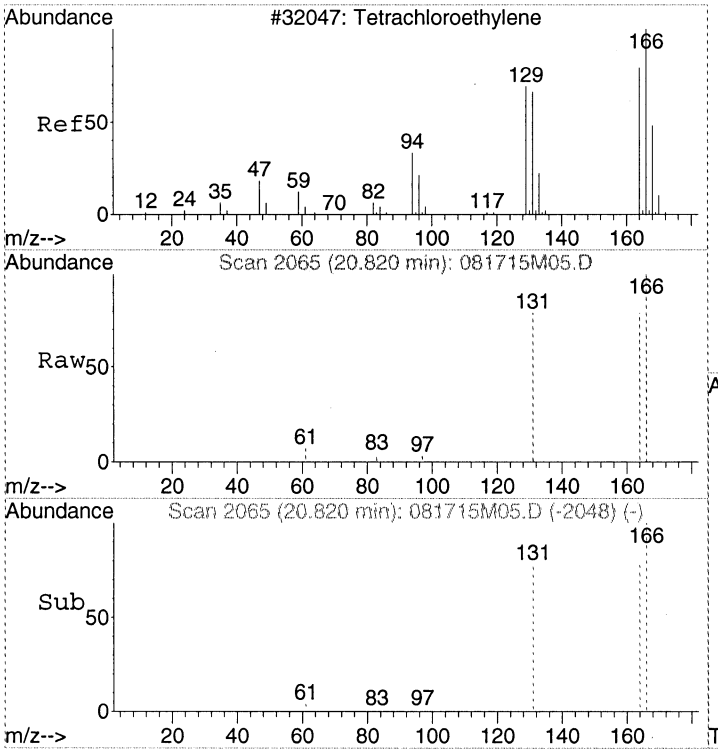


#23
1,1,2-Trichloroethane
Concen: Below Cal
RT: 20.70 min Scan# 2055
Delta R.T. -0.01 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion: 97 Resp: 148

Ion	Ratio	Lower	Upper
97	100		
83	74.3	62.6	102.6
61	60.8	45.1	85.1

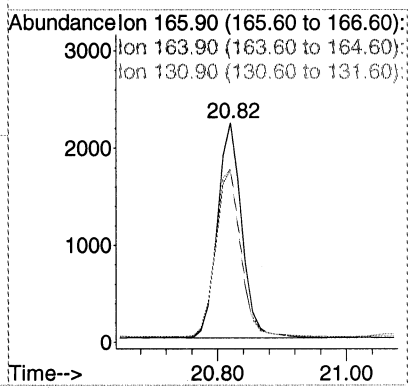


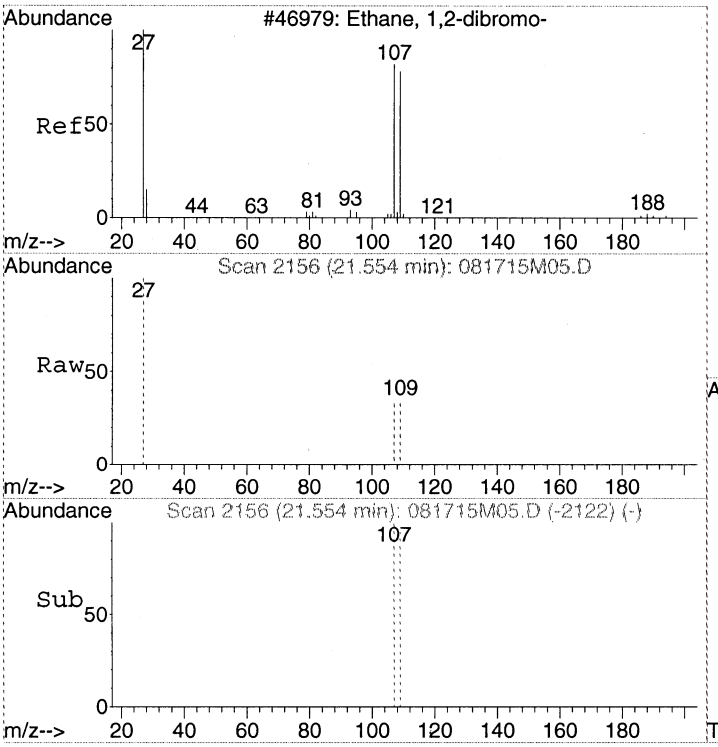


#24
Tetrachloroethene
Concen: Below Cal
RT: 20.82 min Scan# 2065
Delta R.T. -0.01 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion:166 Resp: 5827

Ion	Ratio	Lower	Upper
166	100		
164	79.5	58.0	98.0
131	83.2	48.1	88.1

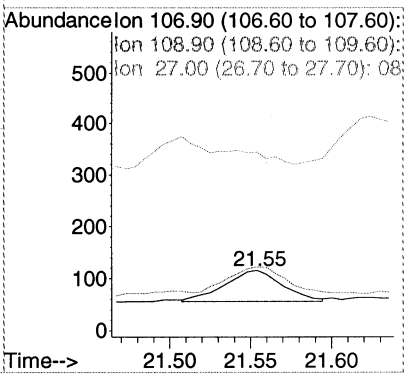


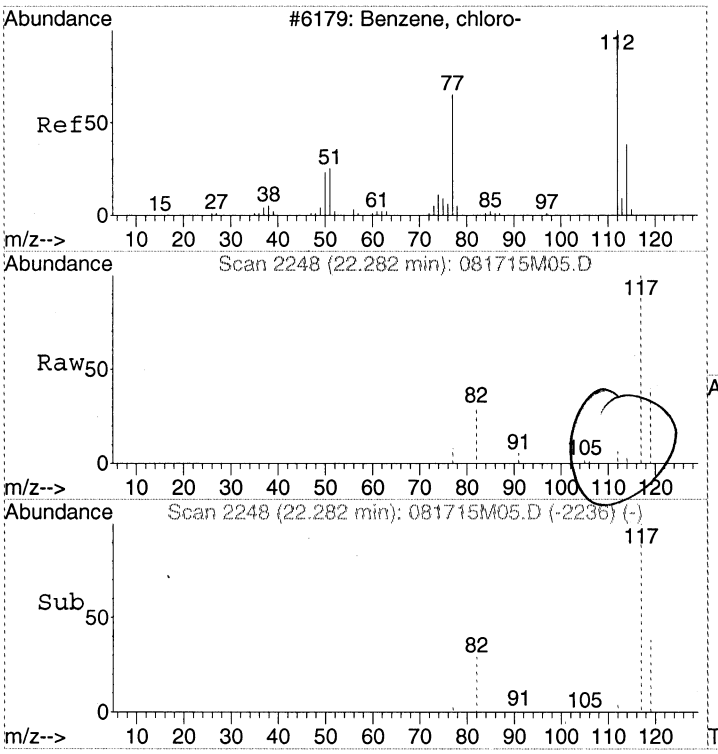


#25
1,2-Dibromoethane (EDB)
Concen: Below Cal
RT: 21.55 min Scan# 2156
Delta R.T. -0.00 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion:107 Resp: 147

Ion	Ratio	Lower	Upper
107	100		
109	92.5	74.3	114.3
27	0.0	30.6	70.6#

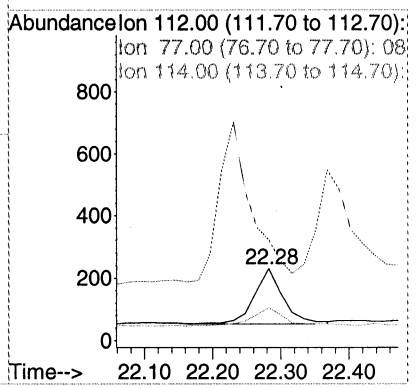


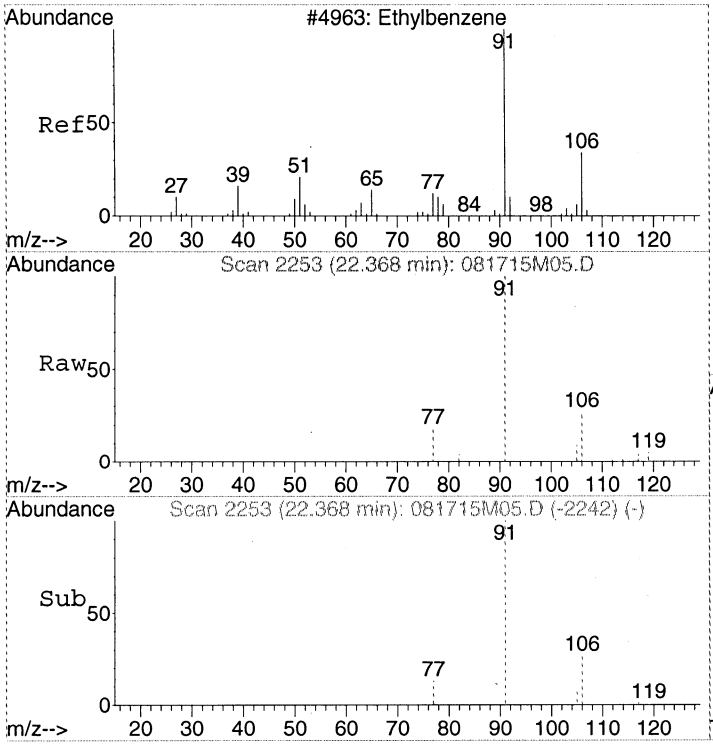


#26
Chlorobenzene
Concen: Below Cal
RT: 22.28 min Scan# 2248
Delta R.T. -0.00 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion:112 Resp: 510

Ion	Ratio	Lower	Upper
112	100		
77	0.0	39.3	79.3#
114	36.5	12.1	52.1

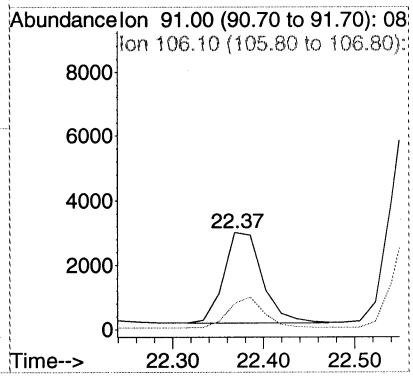


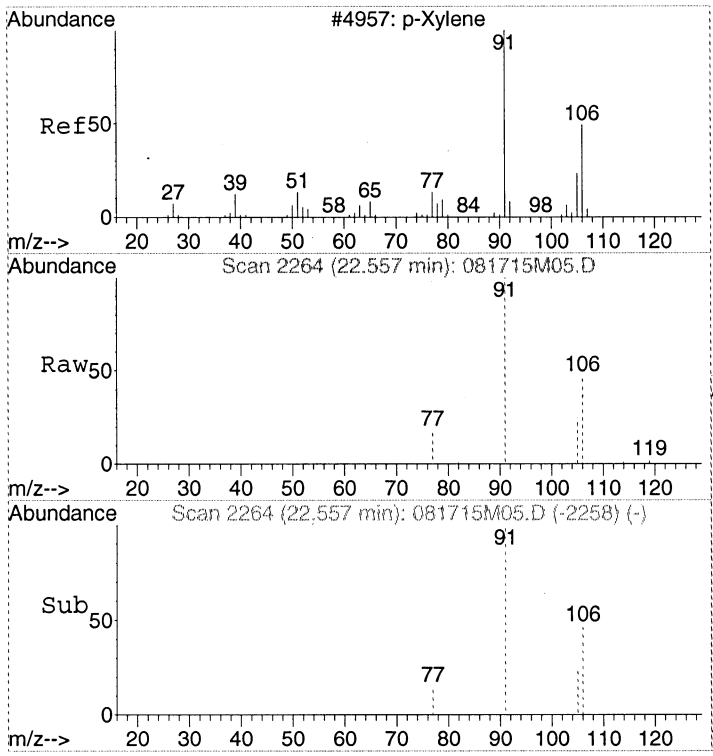


#27
Ethylbenzene
Concen: Below Cal
RT: 22.37 min Scan# 2253
Delta R.T. -0.02 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion: 91 Resp: 8312

Ion	Ratio	Lower	Upper
91	100		
106	30.5	11.4	51.4

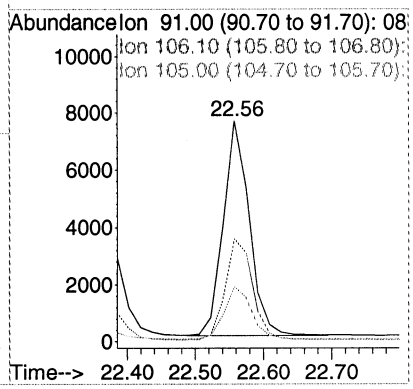


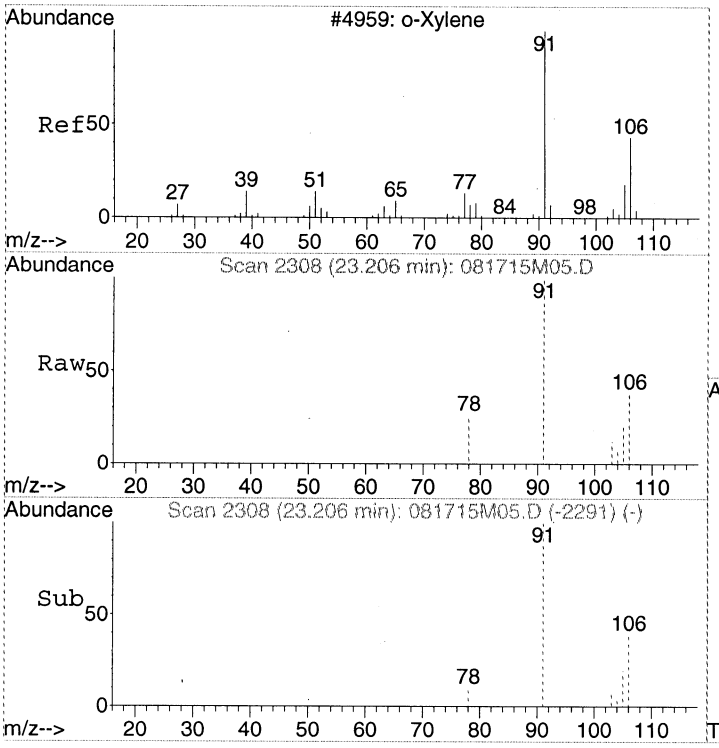


#28
m&p-Xylene
Concen: 55.23 pptv
RT: 22.56 min Scan# 2264
Delta R.T. -0.00 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion: 91 Resp: 19812

Ion	Ratio	Lower	Upper
91	100		
106	49.7	29.5	69.5
105	25.5	3.7	43.7

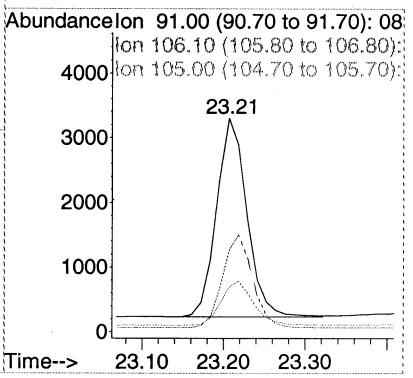


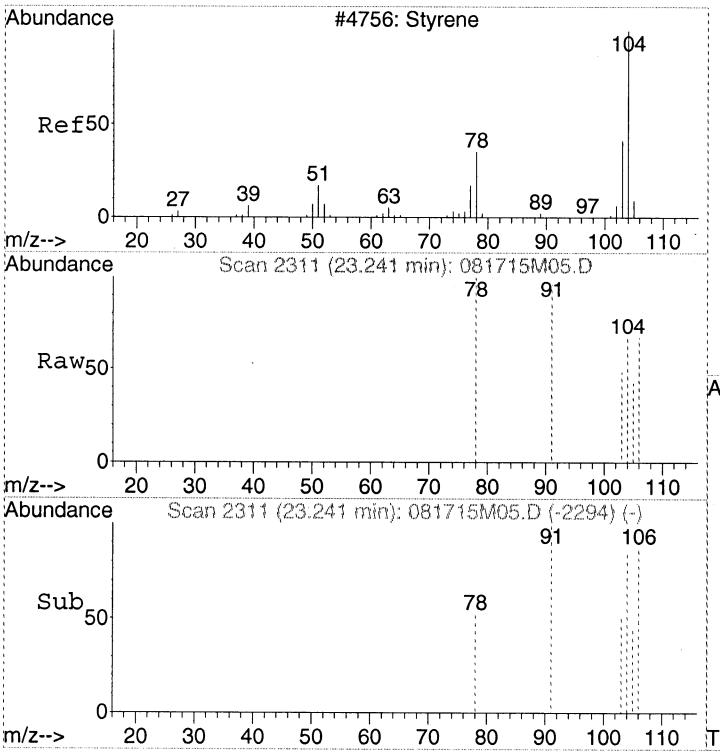


#29
o-Xylene
Concen: Below Cal
RT: 23.21 min Scan# 2308
Delta R.T. -0.00 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion: 91 Resp: 7942

Ion	Ratio	Lower	Upper
91	100		
106	46.0	26.0	66.0
105	23.8	6.3	46.3

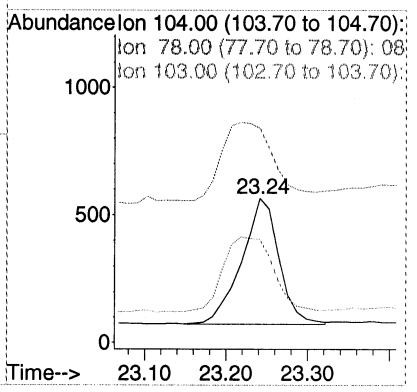


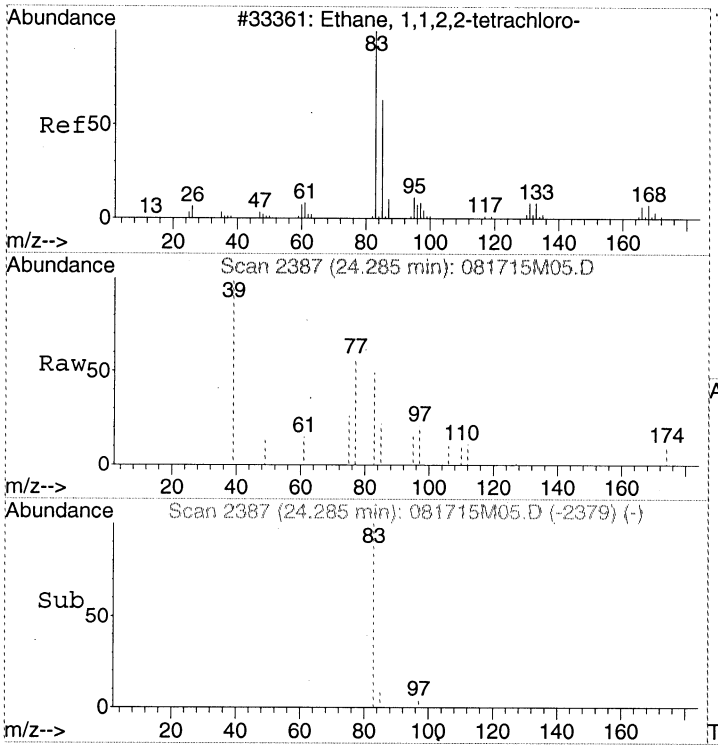


#30
Styrene
Concen: Below Cal
RT: 23.24 min Scan# 2311
Delta R.T. -0.00 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion:104 Resp: 1572

Ion	Ratio	Lower	Upper
104	100		
78	0.0	33.4	73.4#
103	0.0	34.8	74.8#

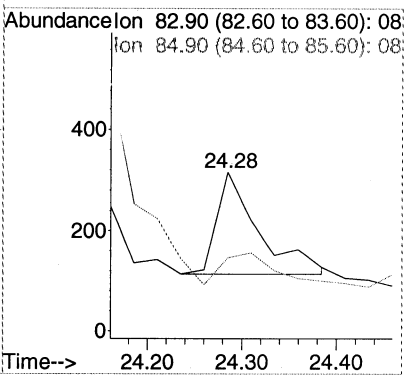


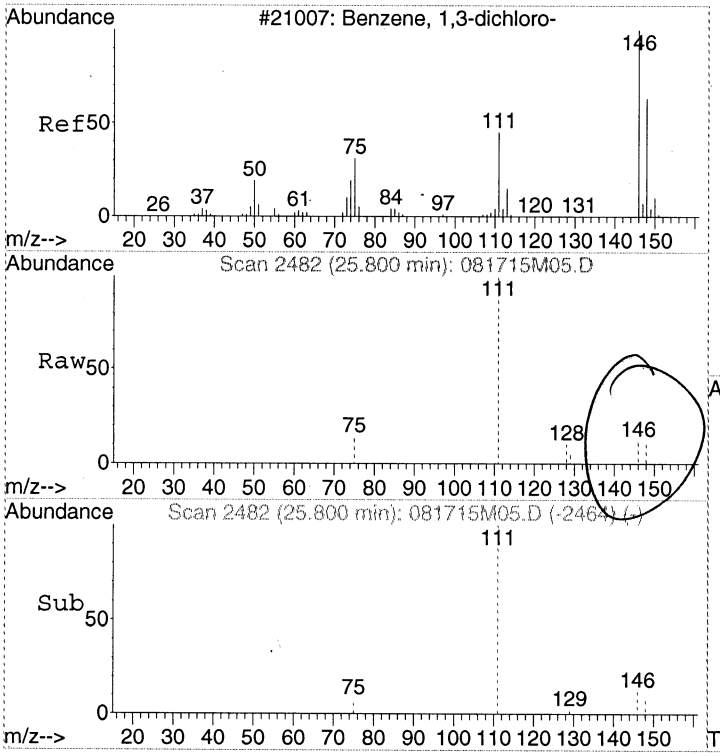


#31
1,1,2,2-Tetrachloroethane
Concen: Below Cal
RT: 24.28 min Scan# 2387
Delta R.T. -0.00 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion: 83 Resp: 613

Ion	Ratio	Lower	Upper
83	100		
85	0.0	43.6	83.6#

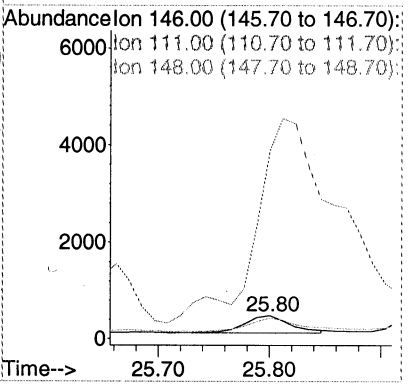


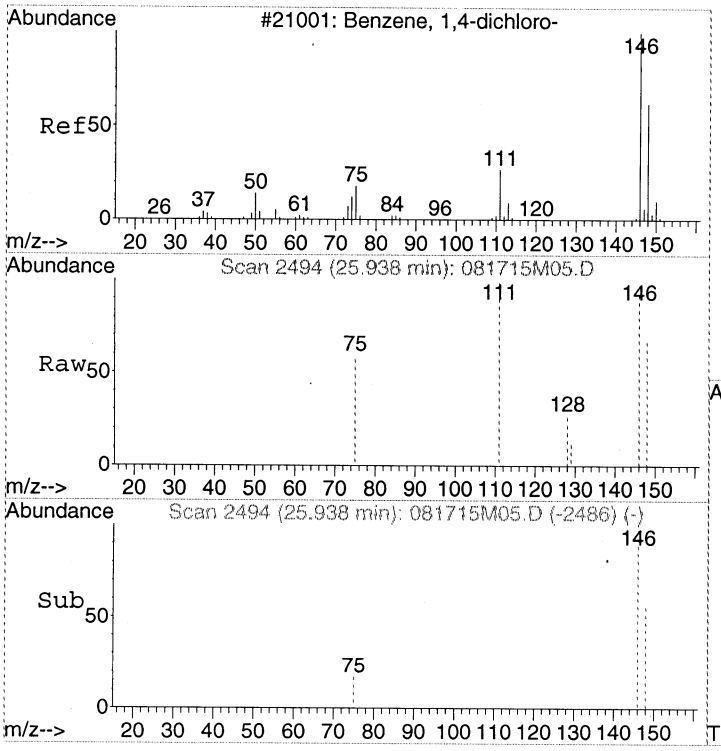


#32
1,3-Dichlorobenzene
Concen: Below Cal
RT: 25.80 min Scan# 2482
Delta R.T. 0.01 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion:146 Resp: 1032

Ion	Ratio	Lower	Upper
146	100		
111	1188.8	18.6	58.6#
148	84.4	44.1	84.1#

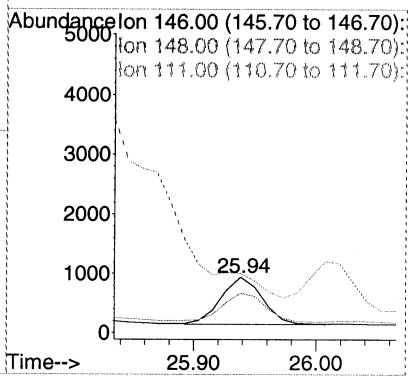


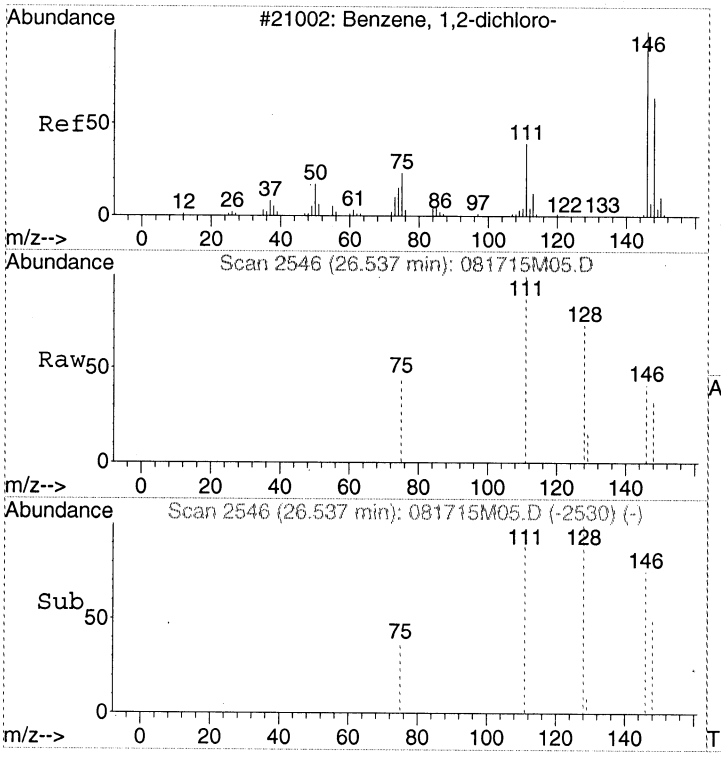


#33
1,4-Dichlorobenzene
Concen: Below Cal
RT: 25.94 min Scan# 2494
Delta R.T. -0.00 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion:146 Resp: 1882

Ion	Ratio	Lower	Upper
146	100		
148	62.1	43.9	83.9
111	0.0	16.7	56.7#

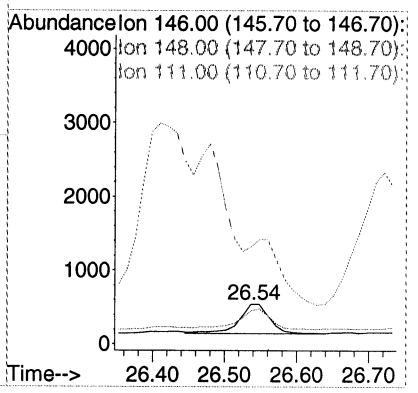




#34
1,2-Dichlorobenzene
Concen: Below Cal
RT: 26.54 min Scan# 2546
Delta R.T. -0.01 min
Lab File: 081715M05.D
Acq: 17 Aug 2015 1:51 pm

Tgt Ion:146 Resp: 1184

Ion	Ratio	Lower	Upper
146	100		
148	63.7	43.8	83.8
111	228.6	20.0	60.0#



Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081715MAA\
Data File : 081715M06.D
Acq On : 17 Aug 2015 2:48 pm
InstName : AG5973M
Operator : LLH
Sample : 1508028-13RE1
Misc : 600ml [redacted]Fairchild-OUT
ALS Vial : 4 Sample Multiplier: 1.49

Report

Quant Time: Aug 17 16:50:44 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.24	49	56817	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.30	114	115832	375.00 pptv	-0.01
21) CHLOROBENZENE-d5	22.23	117	102274	341.00 pptv	-0.02

Target Compounds					Qvalue	
2) Vinyl chloride	5.09	62	55	N.D.		
3) 1,3-Butadiene	5.18	54	1138	N.D.		
4) Bromoethene	6.98	106	5	N.D.		
5) 1,1,2-Trichloro-1,2,2-trif	8.92	151	17467	56.00 pptv	100	
6) 1,1-Dichloroethene	9.04	61	3	N.D.		
7) Dichloromethane	11.09	49	11665	68.26 pptv	98	NT
8) tert-Butyl methyl ether (M	11.82	73	32	N.D.		
9) trans-1,2-Dichloroethene	11.86	61	46	N.D.		
10) Hexane	12.52	57	1441	N.D.		
11) 1,1-Dichloroethane	13.22	63	116	N.D.		
12) cis-1,2-Dichloroethene	14.70	96	12	N.D.		
13) Chloroform	15.41	83	3410	N.D.		
14) 1,1,1-Trichloroethane	15.71	97	811	N.D.		
15) Carbon tetrachloride	15.98	117	25923	68.02 pptv	98	NT
17) Benzene	16.47	78	18615	55.94 pptv	99	
18) 1,2-Dichloroethane	16.64	62	1459	N.D.		
19) Trichloroethene	17.71	130	72	N.D.		
20) 1,2-Dichloropropane	18.22	63	129	N.D.		
22) Toluene	19.95	91	19900	72.55 pptv	98	
23) 1,1,2-Trichloroethane	20.71	97	88	N.D.		
24) Tetrachloroethene	20.81	166	341	N.D.		
25) 1,2-Dibromoethane (EDB)	21.55	107	64	N.D.		
26) Chlorobenzene	22.28	112	251	N.D.		
27) Ethylbenzene	22.37	91	4076	N.D.		
28) m&p-Xylene	22.56	91	10432	37.26 pptv	99	
29) o-Xylene	23.21	91	4498	N.D.		
30) Styrene	23.24	104	865	N.D.		
31) 1,1,2,2-Tetrachloroethane	24.28	83	252	N.D.		
32) 1,3-Dichlorobenzene	25.79	146	377	N.D.		
33) 1,4-Dichlorobenzene	25.94	146	1340	N.D.		
34) 1,2-Dichlorobenzene	26.54	146	441	N.D.		

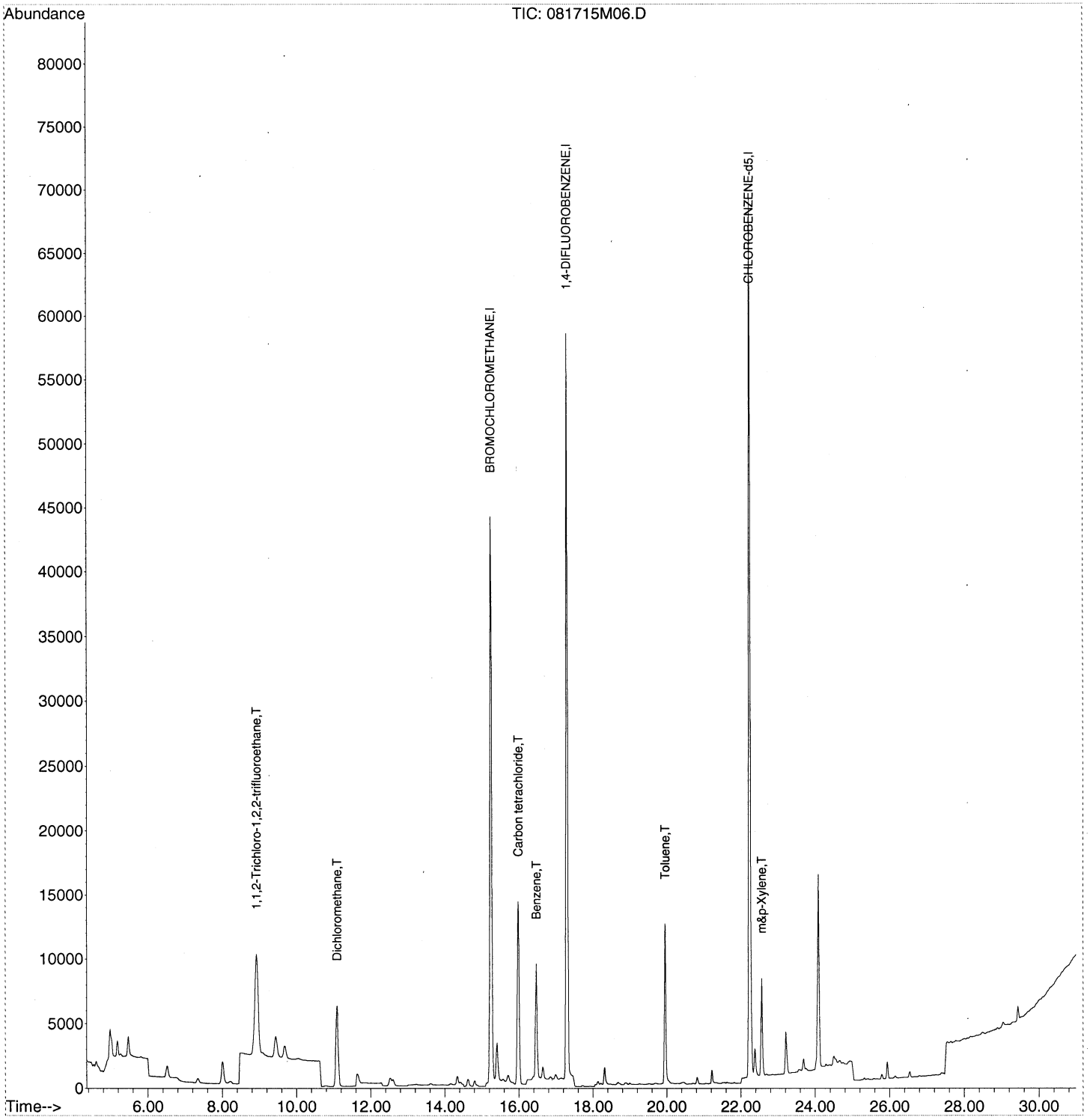
(#) = qualifier out of range (m) = manual integration (+) = signals summed

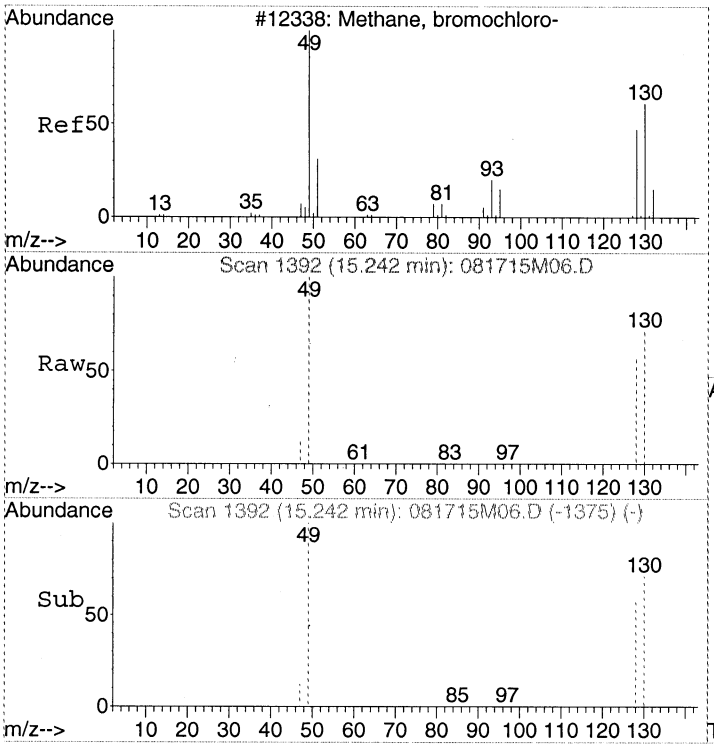
LLH 8/18/15

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081715MAA\
Data File : 081715M06.D
Acq On : 17 Aug 2015 2:48 pm
InstName : AG5973M
Operator : LLH
Sample : 1508028-13RE1
Misc : 600ml [redacted]Fairchild-OUT
ALS Vial : 4 Sample Multiplier: 1.49

Quant Time: Aug 17 16:50:44 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration

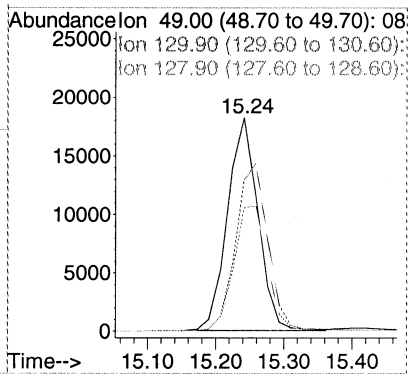


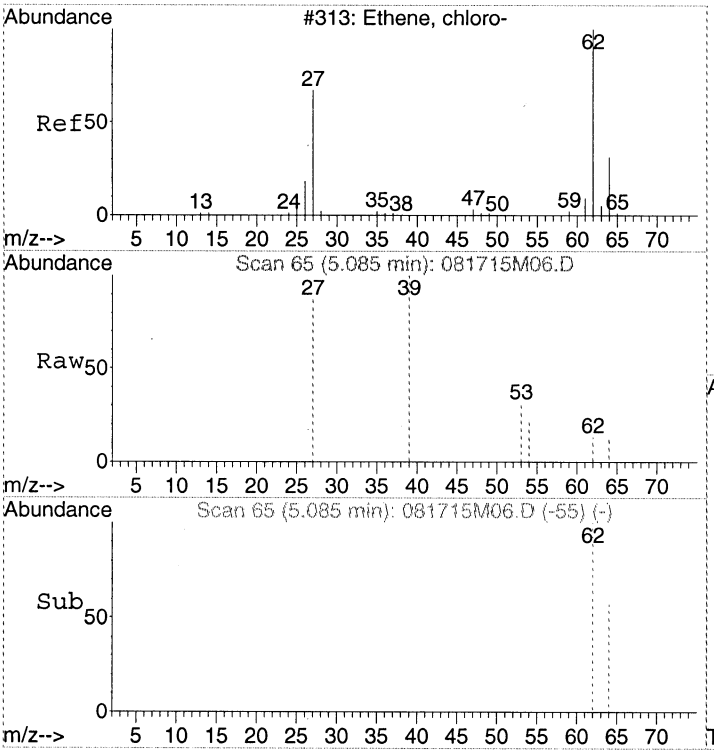


#1
BROMOCHLOROMETHANE
Concen: 341.00 pptv
RT: 15.24 min Scan# 1392
Delta R.T. -0.00 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion: 49 Resp: 56817

Ion	Ratio	Lower	Upper
49	100		
130	81.8	65.3	105.3
128	63.5	46.2	86.2

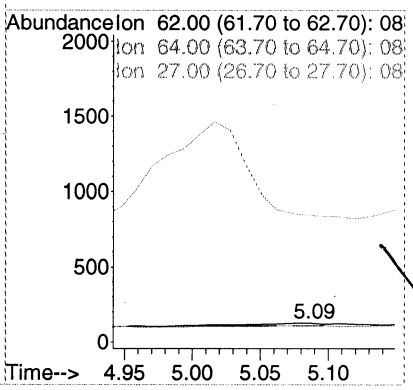


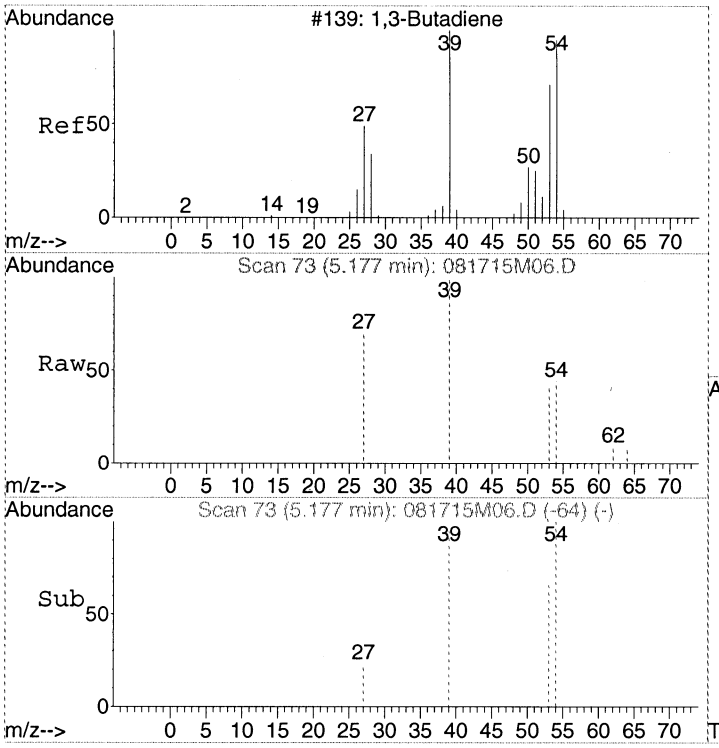


#2
Vinyl chloride
Concen: Below Cal
RT: 5.09 min Scan# 65
Delta R.T. -0.00 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion: 62 Resp: 55

Ion	Ratio	Lower	Upper
62	100		
64	41.8	11.8	51.8
27	0.0	28.9	68.9#

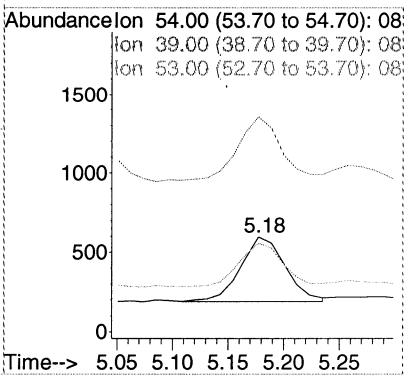


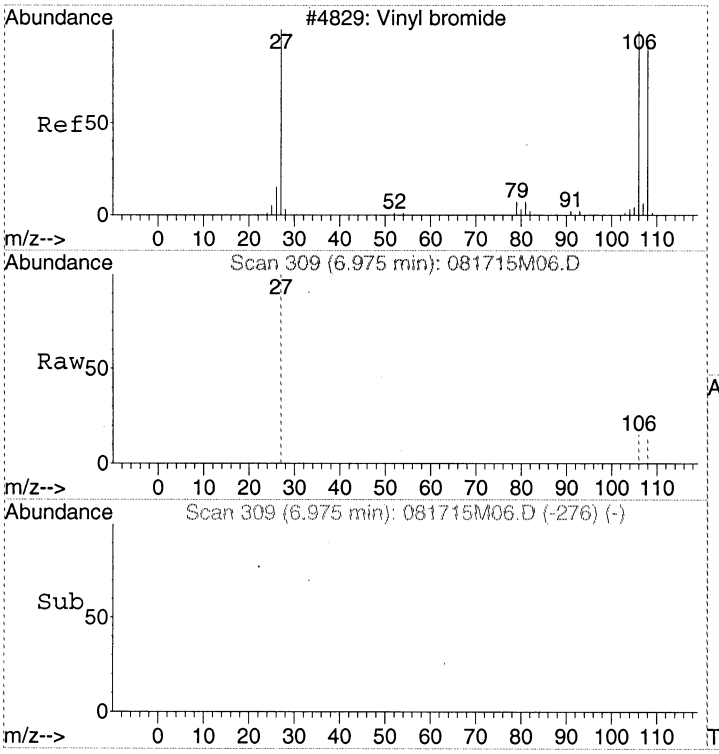


#3
1,3-Butadiene
Concen: Below Cal
RT: 5.18 min Scan# 73
Delta R.T. -0.01 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion: 54 Resp: 1138

Ion	Ratio	Lower	Upper
54	100		
39	95.7	76.7	116.7
53	64.9	48.8	88.8

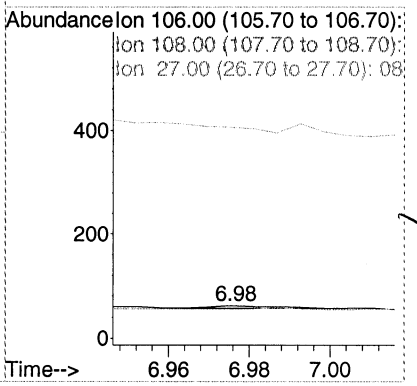


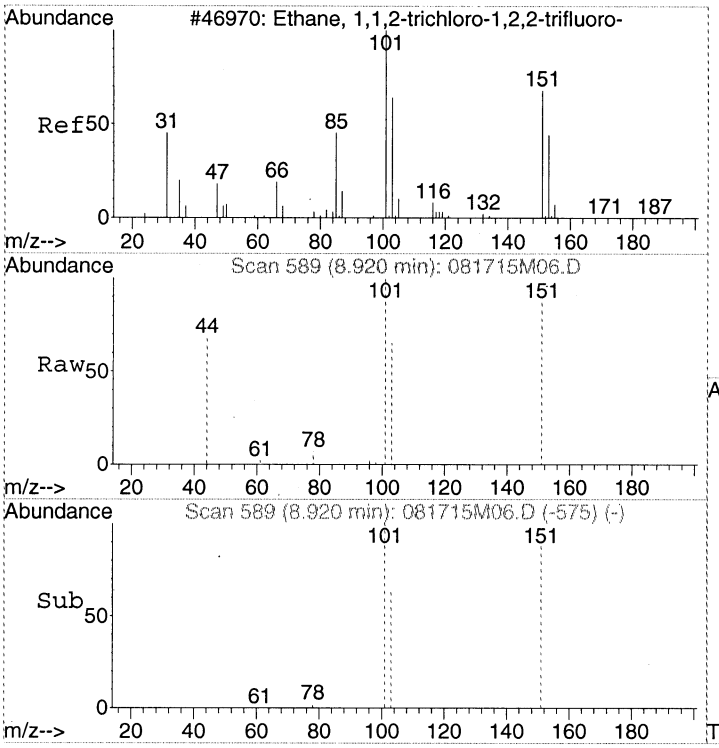


#4
Bromoethene
Concen: Below Cal
RT: 6.98 min Scan# 309
Delta R.T. -0.01 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion:106 Resp: 5

Ion	Ratio	Lower	Upper
106	100		
108	100.0	0.0	214.6
27	0.0	56.6	96.6#

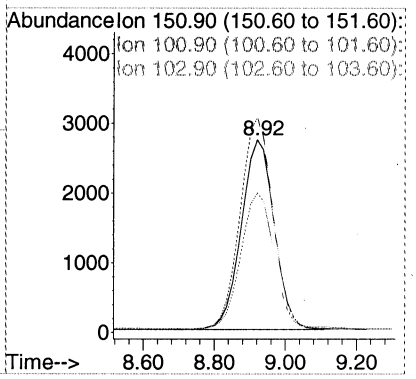


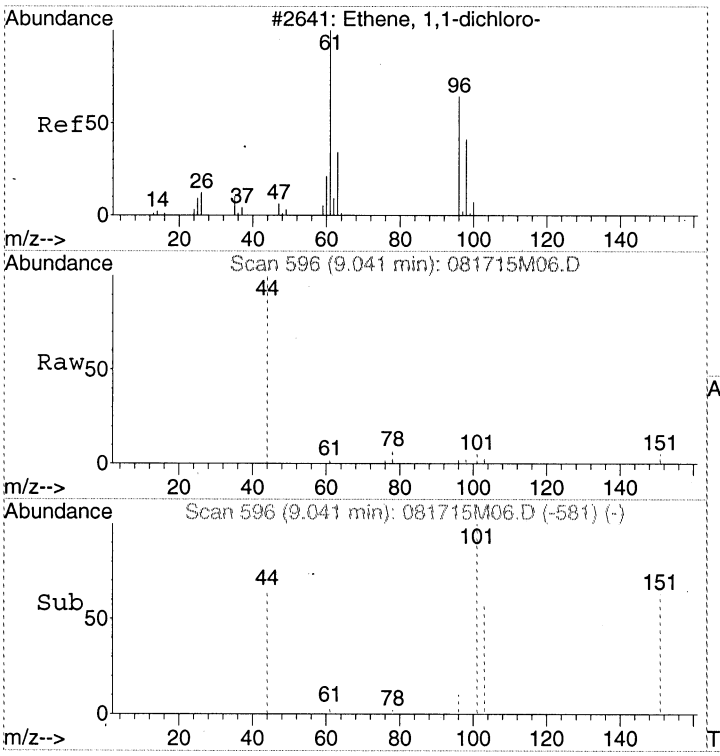


#5
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 56.00 pptv
RT: 8.92 min Scan# 589
Delta R.T. -0.02 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion:151 Resp: 17467

Ion	Ratio	Lower	Upper
151	100		
101	110.8	90.9	130.9
103	71.2	51.0	91.0

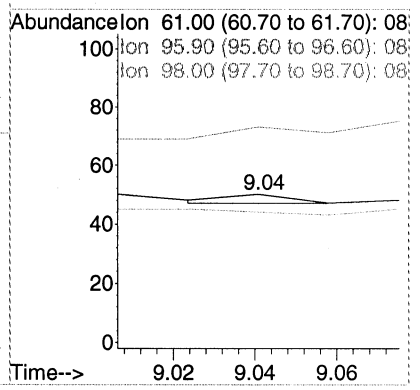


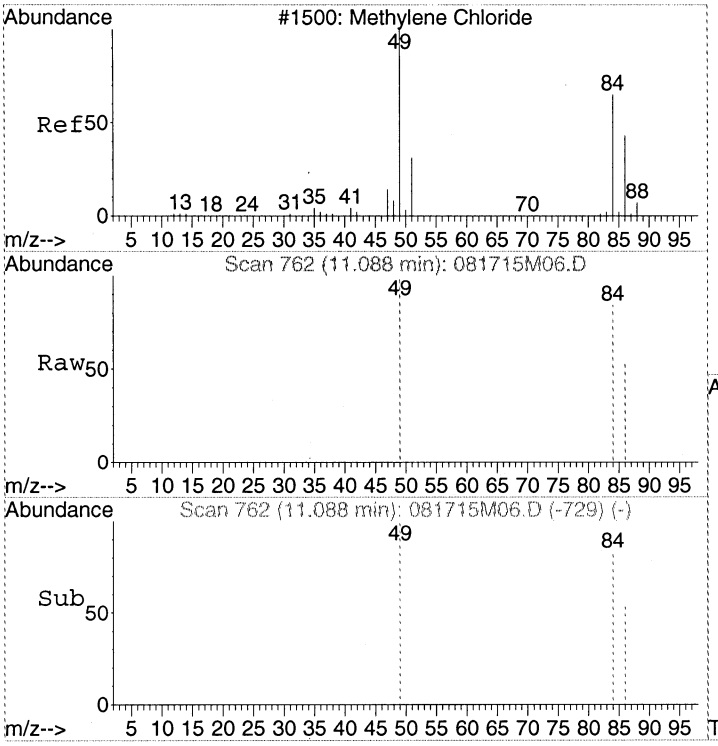


#6
1,1-Dichloroethene
Concen: Below Cal
RT: 9.04 min Scan# 596
Delta R.T. 0.05 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion: 61 Resp: 3

Ion	Ratio	Lower	Upper
61	100		
96	0.0	43.2	83.2#
98	0.0	20.1	60.1#

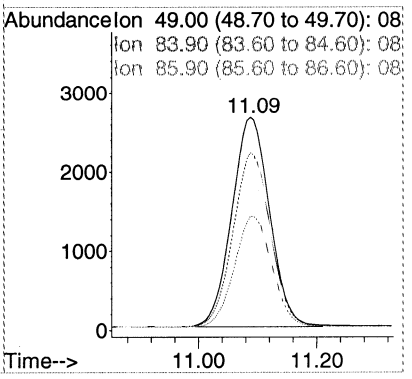


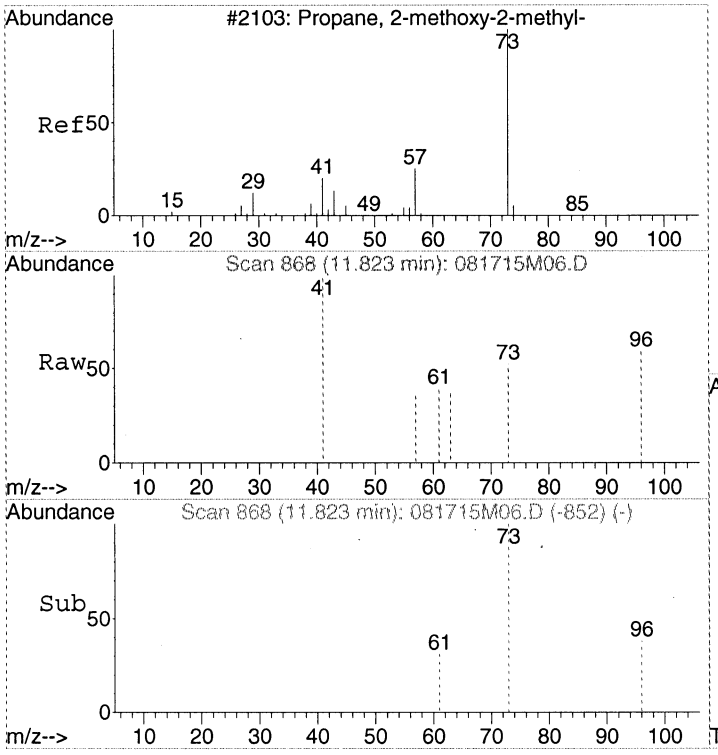


#7
Dichloromethane
Concen: 68.26 pptv
RT: 11.09 min Scan# 762
Delta R.T. -0.01 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion: 49 Resp: 11665

Ion	Ratio	Lower	Upper
49	100		
84	82.7	64.2	104.2
86	52.8	34.0	74.0

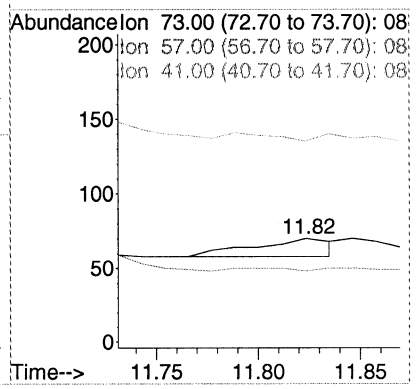


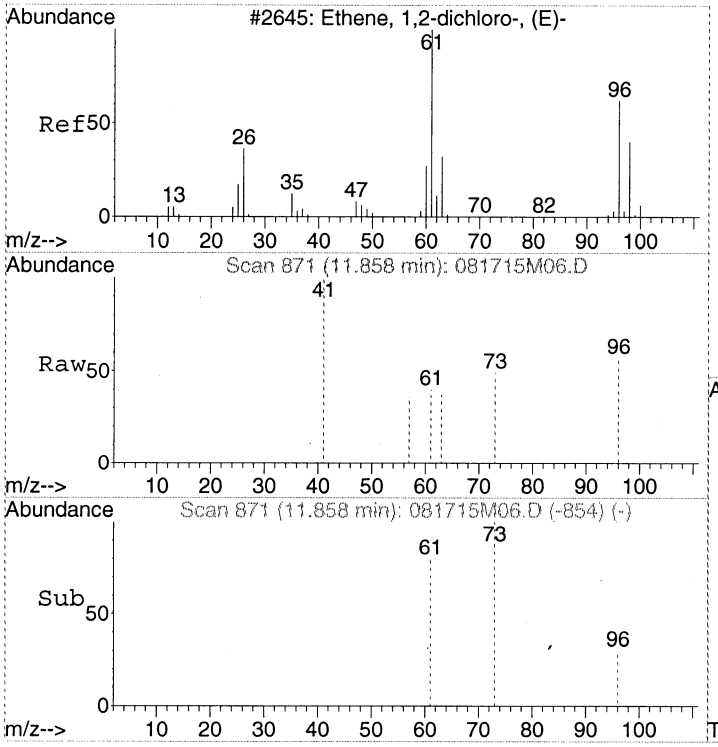


#8
tert-Butyl methyl ether (MTBE)
Concen: Below Cal
RT: 11.82 min Scan# 868
Delta R.T. -0.01 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion: 73 Resp: 32

Ion	Ratio	Lower	Upper
73	100		
57	0.0	2.0	42.0#
41	75.0	13.3	53.3#

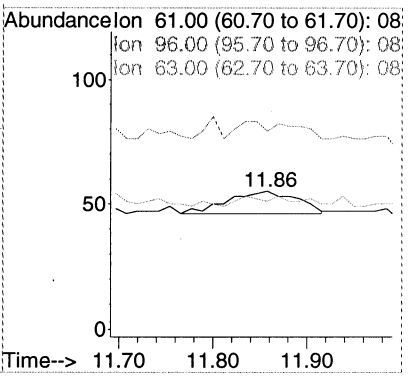


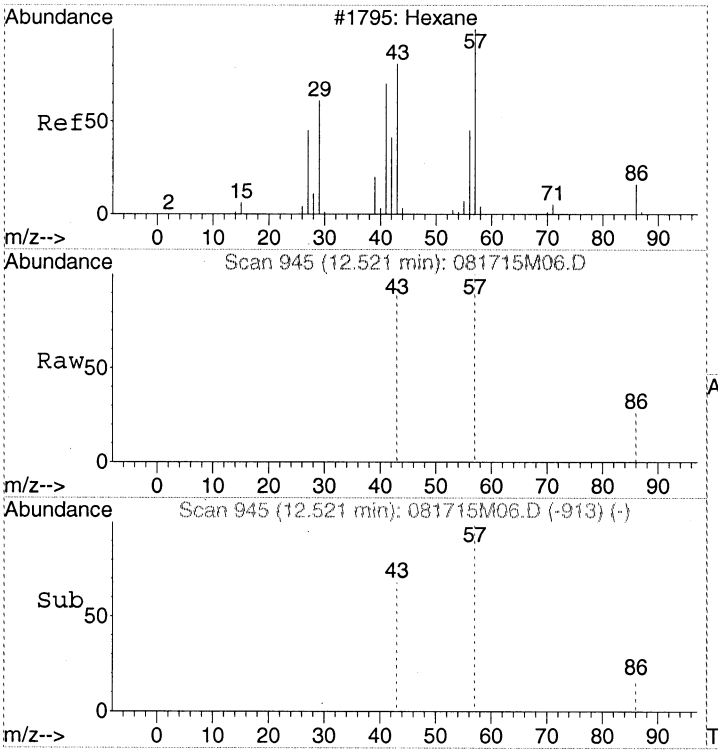


#9
trans-1,2-Dichloroethene
Concen: Below Cal
RT: 11.86 min Scan# 871
Delta R.T. -0.00 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion: 61 Resp: 46

Ion	Ratio	Lower	Upper
61	100		
96	34.8	53.4	93.4#
63	6.5	12.2	52.2#

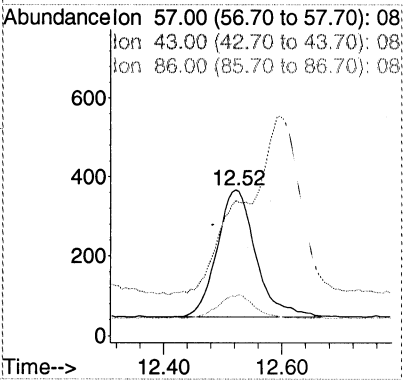


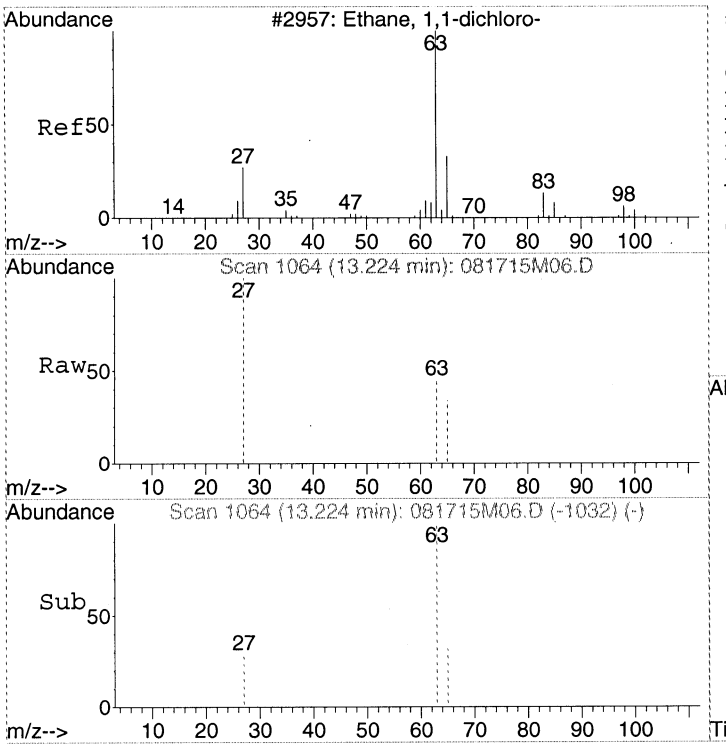


#10
Hexane
Concen: Below Cal
RT: 12.52 min Scan# 945
Delta R.T. -0.01 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion: 57 Resp: 1441

Ion	Ratio	Lower	Upper
57	100		
43	48.2	46.4	86.4
86	16.7	0.0	38.0

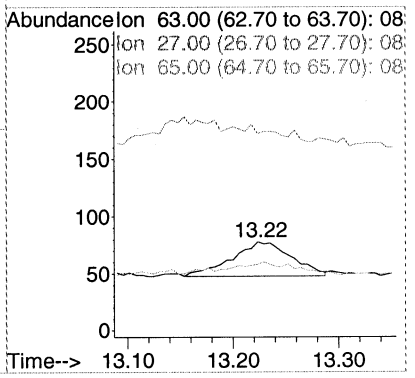


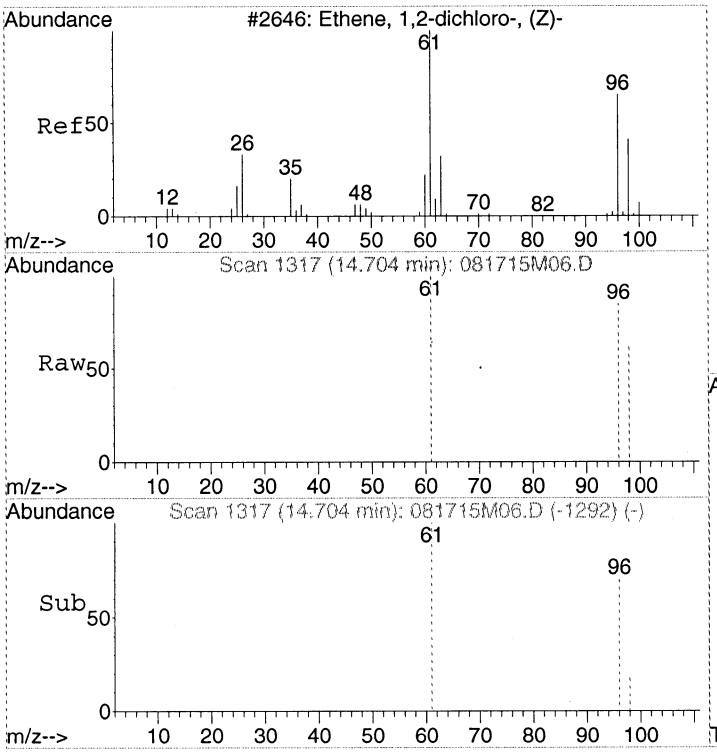


#11
1,1-Dichloroethane
Concen: Below Cal
RT: 13.22 min Scan# 1064
Delta R.T. -0.01 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion: 63 Resp: 116

Ion	Ratio	Lower	Upper
63	100		
27	2.6	9.1	49.1#
65	9.5	11.6	51.6#

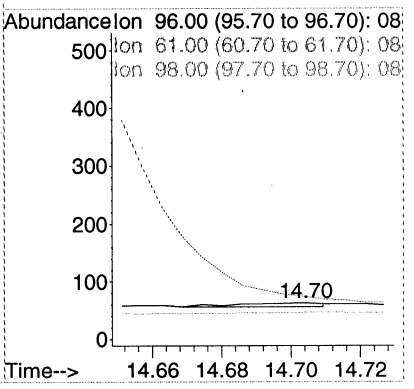


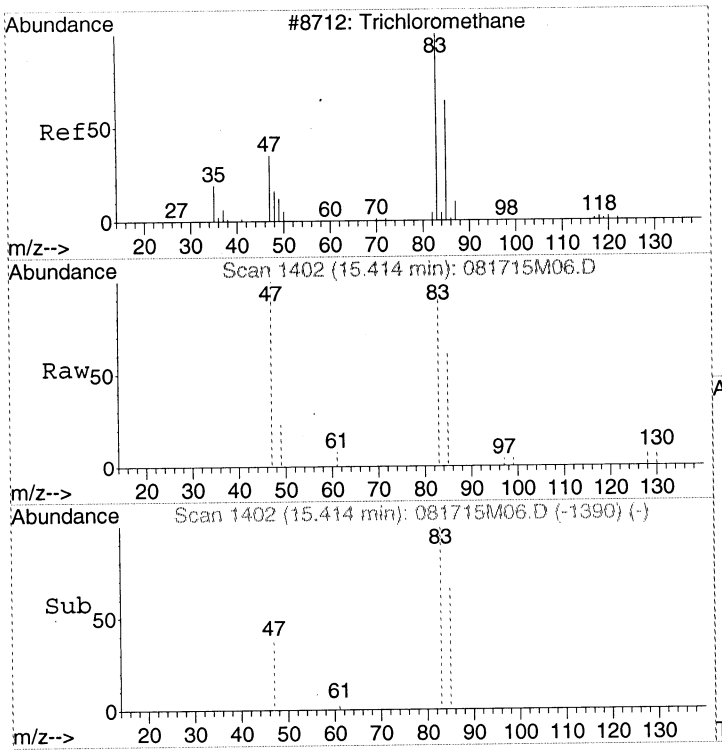


#12
cis-1,2-Dichloroethene
Concen: Below Cal
RT: 14.70 min Scan# 1317
Delta R.T. -0.01 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion: 96 Resp: 12

Ion	Ratio	Lower	Upper
96	100		
61	0.0	104.7	144.7#
98	16.7	43.7	83.7#

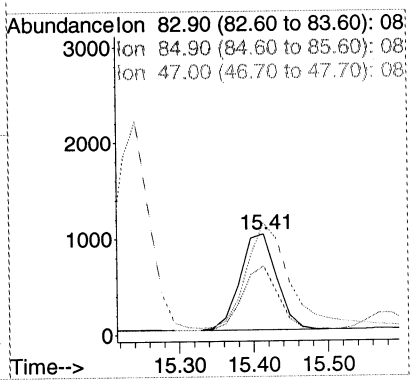


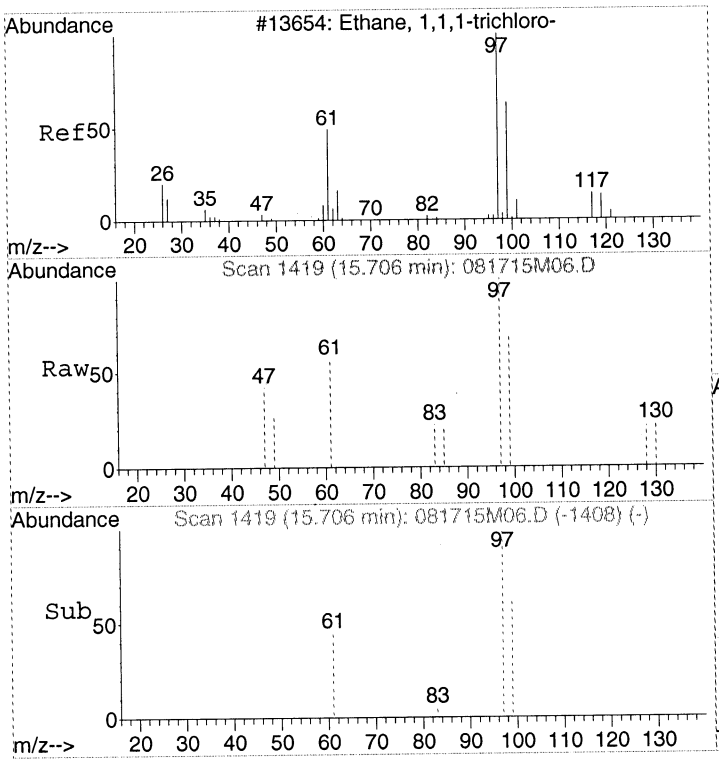


#13
Chloroform
Concen: Below Cal
RT: 15.41 min Scan# 1402
Delta R.T. -0.00 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion: 83 Resp: 3410

Ion	Ratio	Lower	Upper
83	100		
85	63.8	44.8	84.8
47	128.8	4.4	44.4#

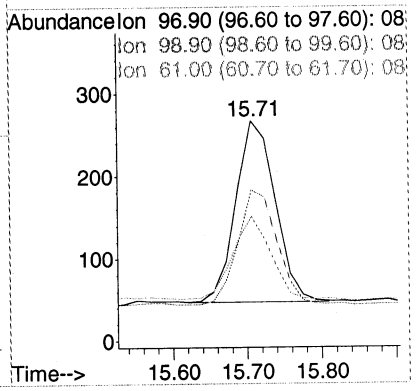


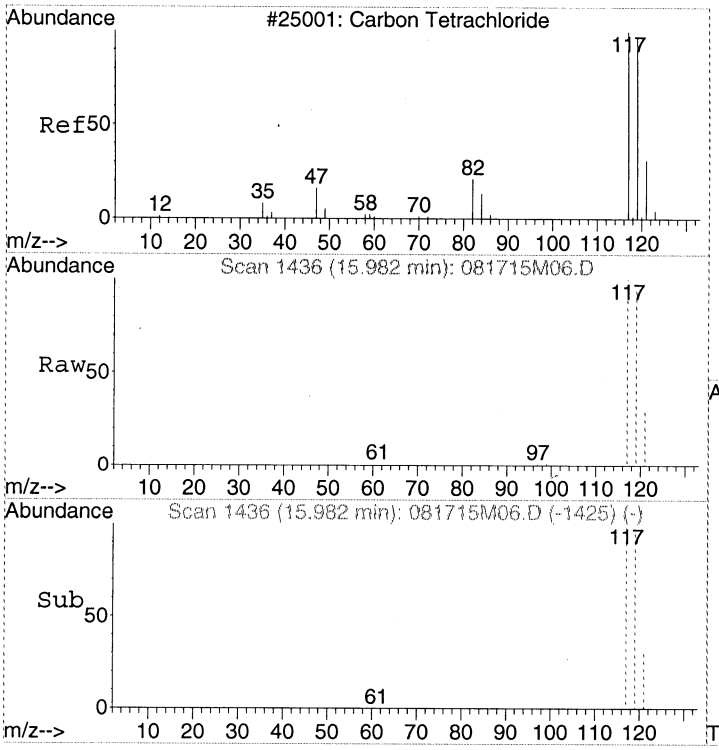


#14
1,1,1-Trichloroethane
Concen: Below Cal
RT: 15.71 min Scan# 1419
Delta R.T. -0.02 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion: 97 Resp: 811

Ion	Ratio	Lower	Upper
97	100		
99	62.4	44.5	84.5
61	43.8	21.7	61.7

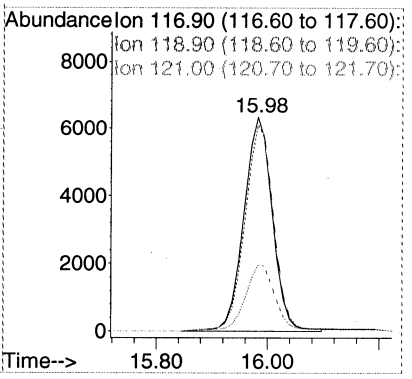


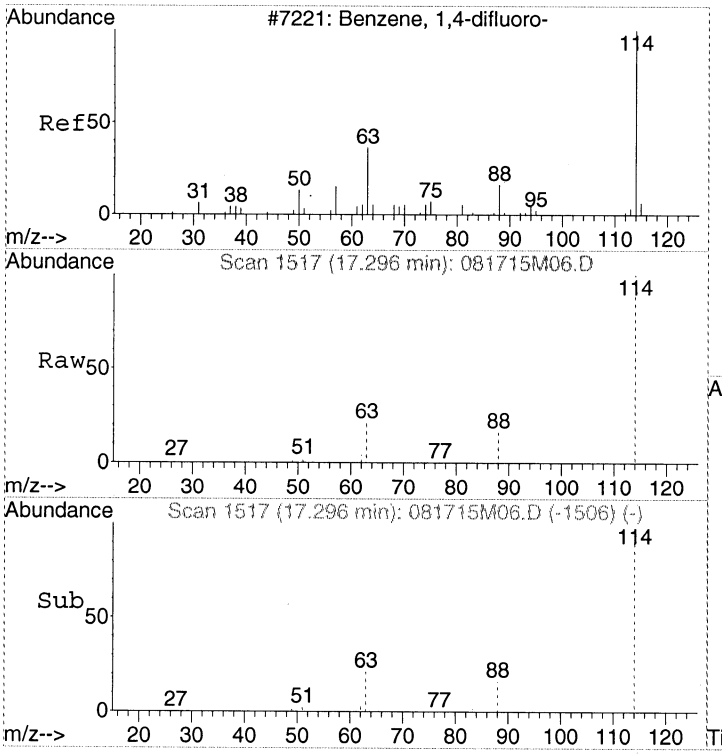


#15
Carbon tetrachloride
Concen: 68.02 pptv
RT: 15.98 min Scan# 1436
Delta R.T. -0.01 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion:117 Resp: 25923

Ion	Ratio	Lower	Upper
117	100		
119	97.6	76.1	116.1
121	32.7	10.7	50.7

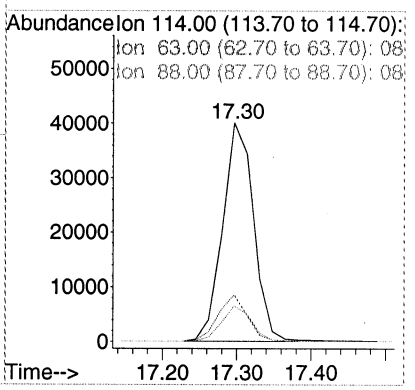


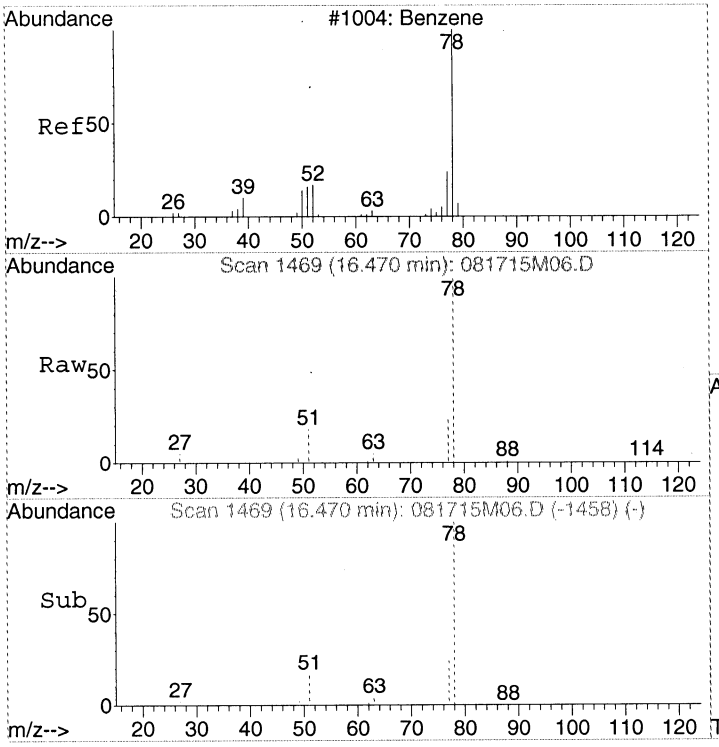


#16
1,4-DIFLUOROBENZENE
Concen: 375.00 pptv
RT: 17.30 min Scan# 1517
Delta R.T. -0.01 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion:114 Resp: 115832

Ion	Ratio	Lower	Upper
114	100		
63	20.2	0.0	39.9
88	15.8	0.0	35.7

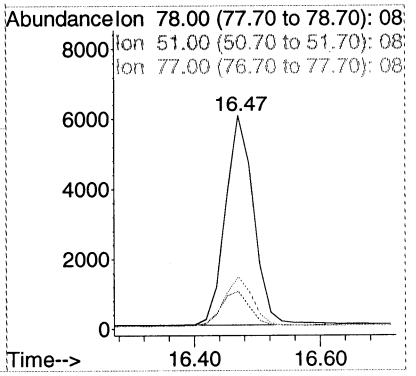


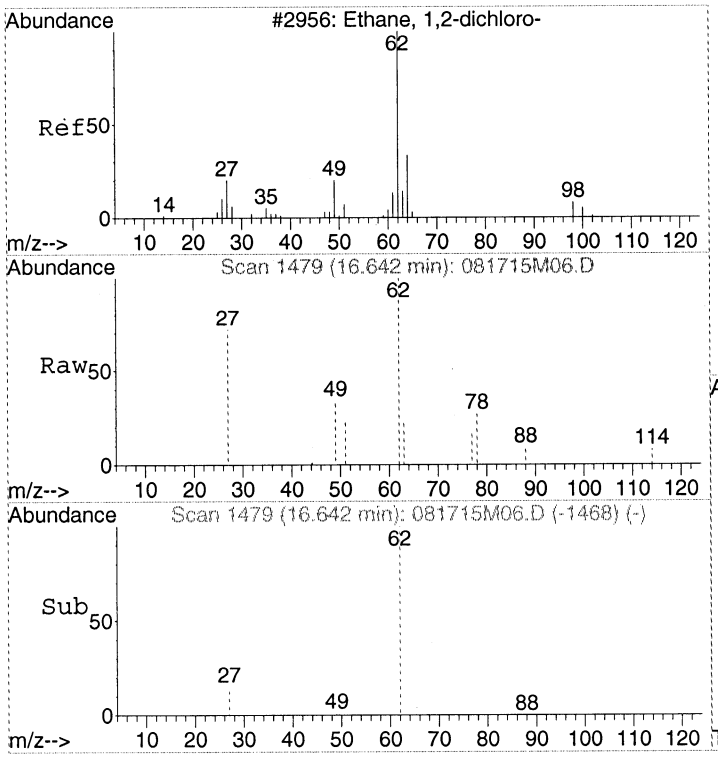


#17
Benzene
Concen: 55.94 pptv
RT: 16.47 min Scan# 1469
Delta R.T. -0.01 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion: 78 Resp: 18615

Ion	Ratio	Lower	Upper
78	100		
51	17.7	0.0	37.6
77	24.4	3.7	43.7

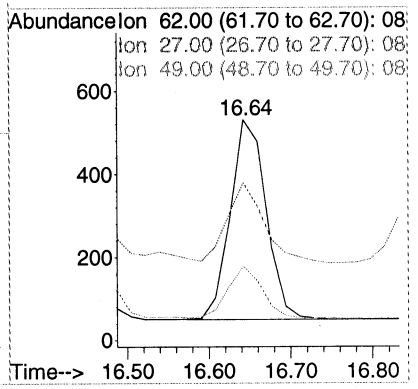


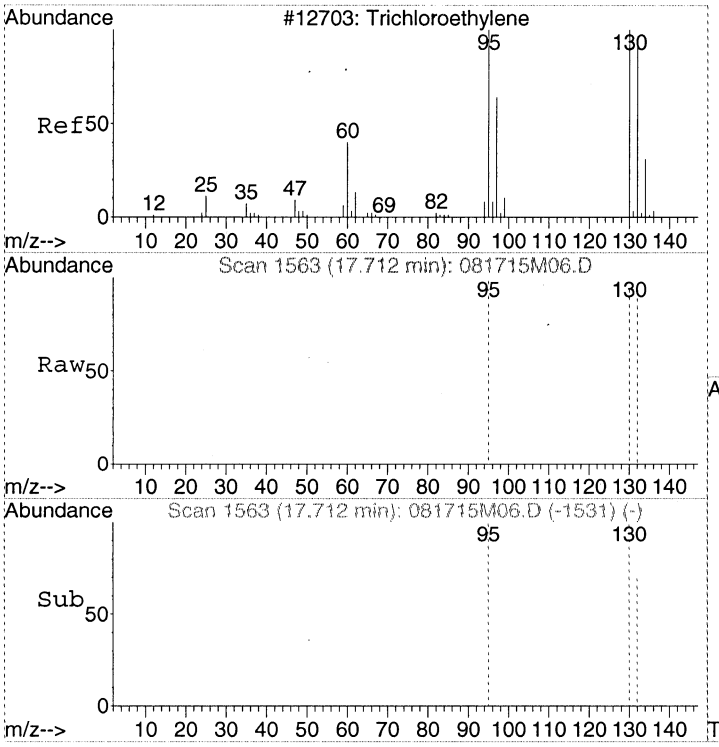


#18
1,2-Dichloroethane
Concen: Below Cal
RT: 16.64 min Scan# 1479
Delta R.T. -0.01 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion: 62 Resp: 1459

Ion	Ratio	Lower	Upper
62	100		
27	41.5	13.3	53.3
49	25.4	4.7	44.7

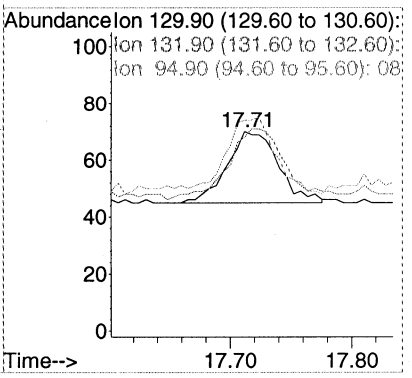


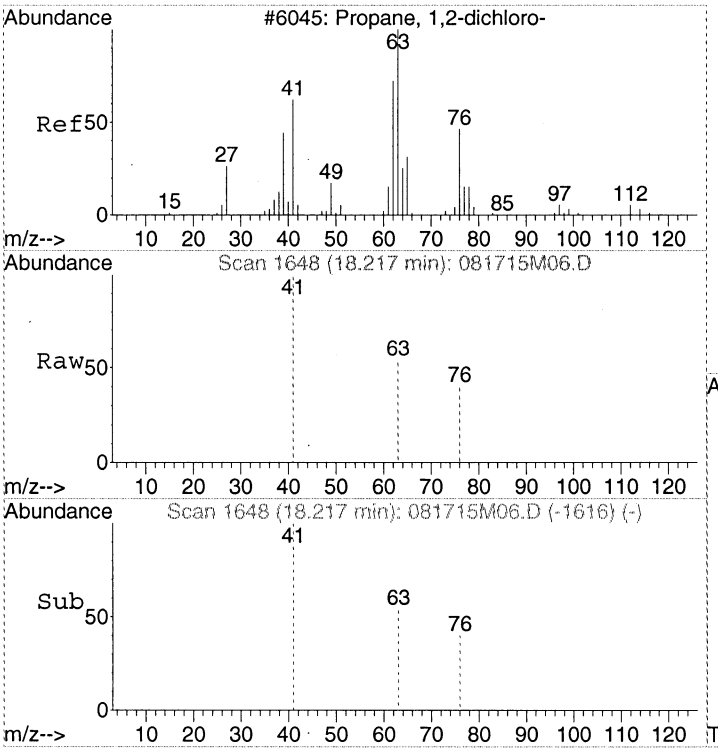


#19
Trichloroethene
Concen: Below Cal
RT: 17.71 min Scan# 1563
Delta R.T. -0.01 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion:130 Resp: 72

Ion	Ratio	Lower	Upper
130	100		
132	108.3	76.3	116.3
95	0.0	75.2	115.2#

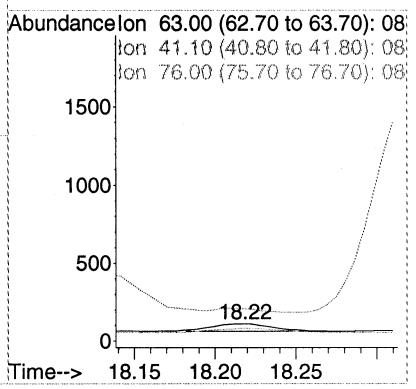




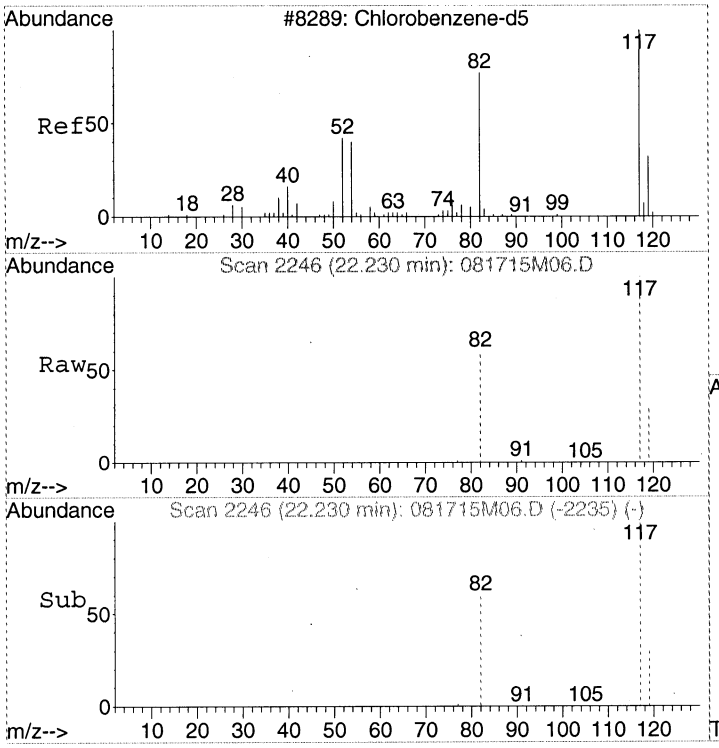
#20
1,2-Dichloropropane
Concen: Below Cal
RT: 18.22 min Scan# 1648
Delta R.T. -0.00 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion: 63 Resp: 129

Ion	Ratio	Lower	Upper
63	100		
41	0.0	43.1	83.1#
76	0.0	31.6	71.6#



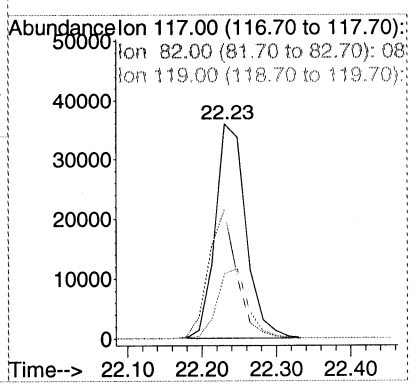
00142

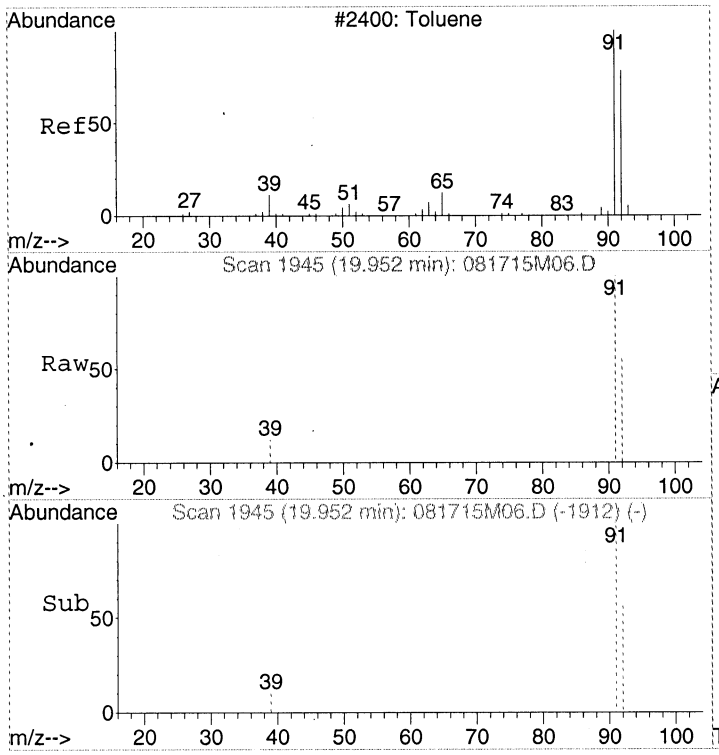


#21
CHLOROBENZENE-d5
Concen: 341.00 pptv
RT: 22.23 min Scan# 2246
Delta R.T. -0.02 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion:117 Resp: 102274

Ion	Ratio	Lower	Upper
117	100		
82	55.5	34.9	74.9
119	32.3	12.1	52.1

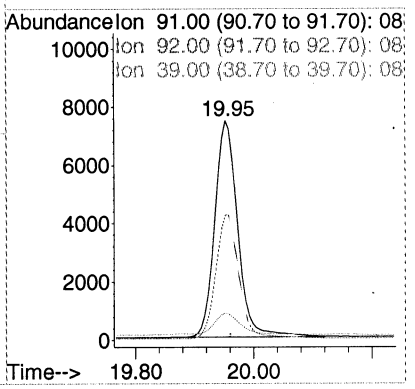


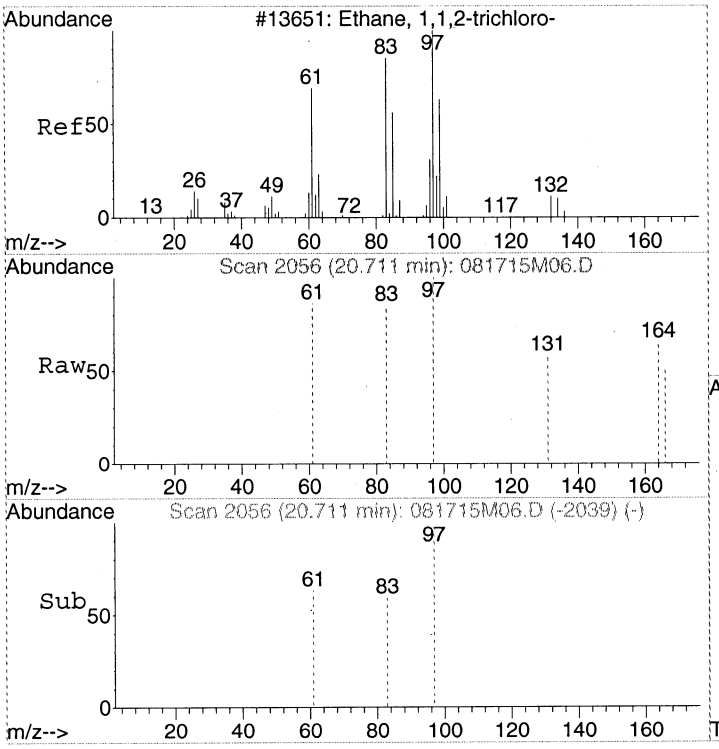


#22
Toluene
Concen: 72.55 pptv
RT: 19.95 min Scan# 1945
Delta R.T. -0.01 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion: 91 Resp: 19900

Ion	Ratio	Lower	Upper
91	100		
92	57.7	38.8	78.8
39	10.6	0.0	29.1

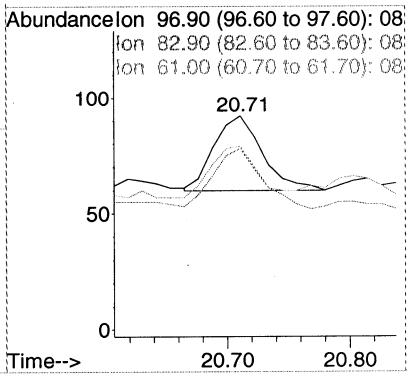


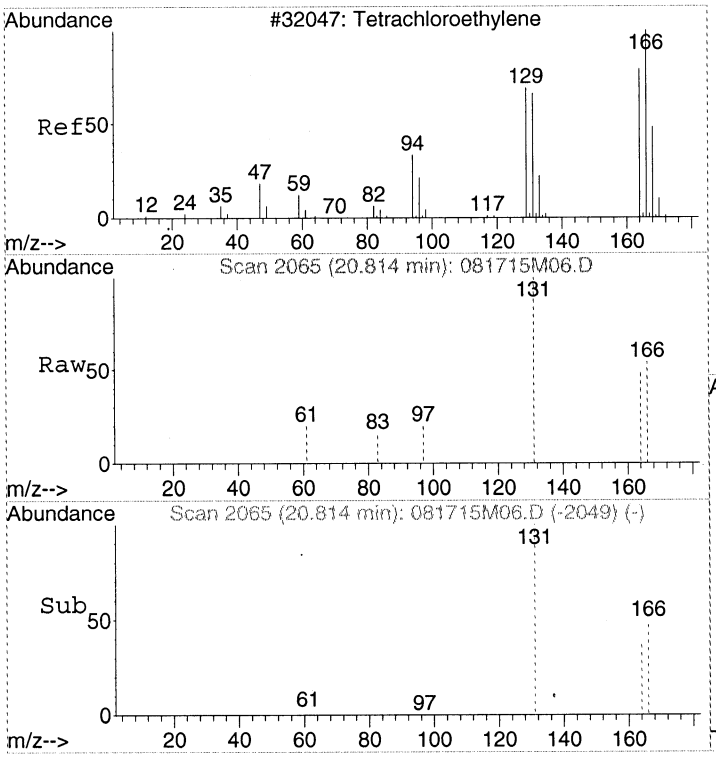


#23
1,1,2-Trichloroethane
Concen: Below Cal
RT: 20.71 min Scan# 2056
Delta R.T. -0.00 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion: 97 Resp: 88

Ion	Ratio	Lower	Upper
97	100		
83	80.7	62.6	102.6
61	64.8	45.1	85.1

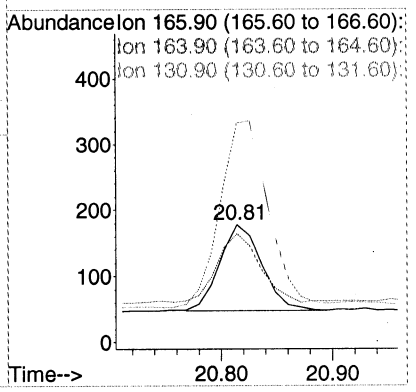


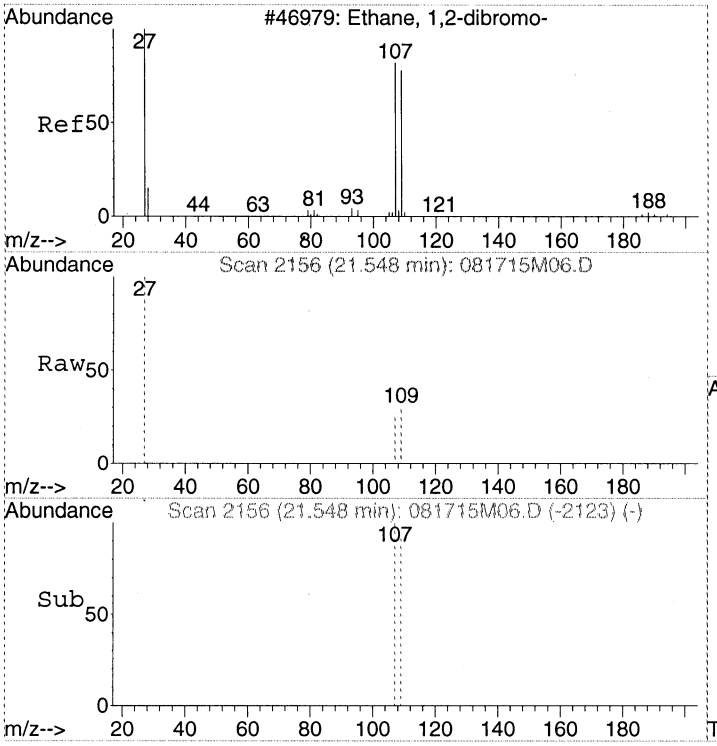


#24
Tetrachloroethene
Concen: Below Cal
RT: 20.81 min Scan# 2065
Delta R.T. -0.01 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion:166 Resp: 341

Ion	Ratio	Lower	Upper
166	100		
164	81.5	58.0	98.0
131	249.9	48.1	88.1#

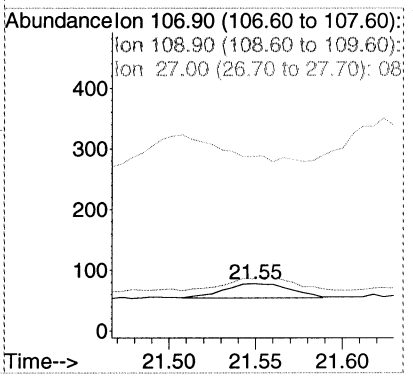


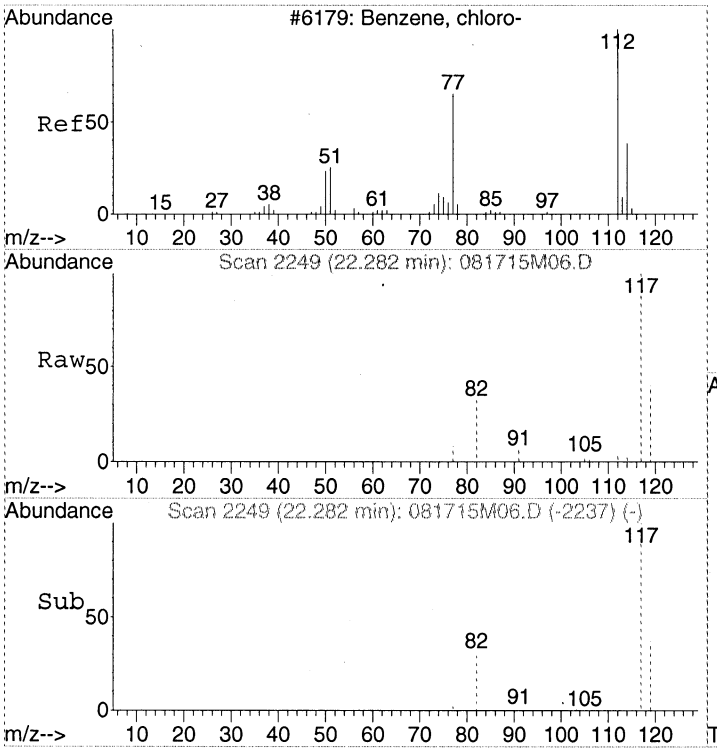


#25
1,2-Dibromoethane (EDB)
Concen: Below Cal
RT: 21.55 min Scan# 2156
Delta R.T. -0.01 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion:107 Resp: 64

Ion	Ratio	Lower	Upper
107	100		
109	93.8	74.3	114.3
27	0.0	30.6	70.6#

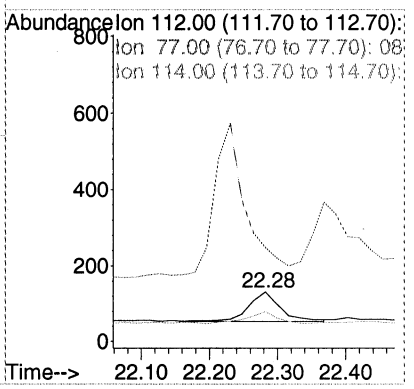


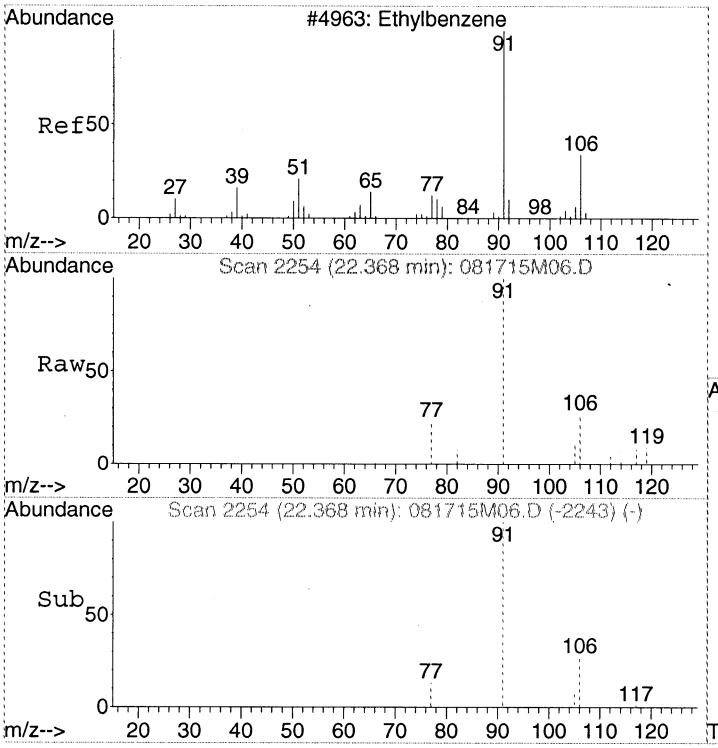


#26
Chlorobenzene
Concen: Below Cal
RT: 22.28 min Scan# 2249
Delta R.T. -0.00 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion:112 Resp: 251

Ion	Ratio	Lower	Upper
112	100		
77	0.0	39.3	79.3#
114	42.2	12.1	52.1

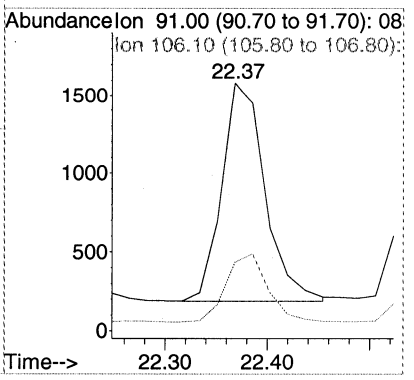


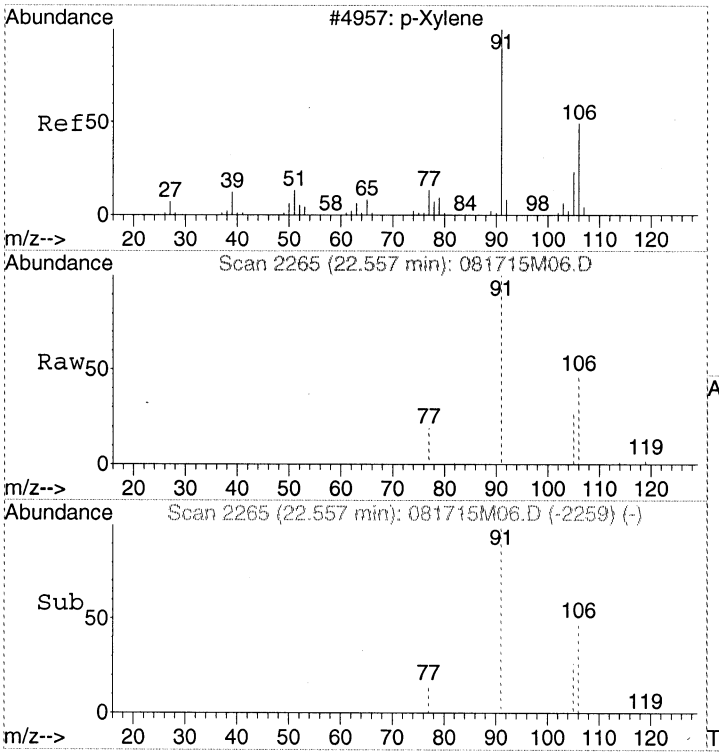


#27
Ethylbenzene
Concen: Below Cal
RT: 22.37 min Scan# 2254
Delta R.T. -0.02 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion: 91 Resp: 4076

Ion	Ratio	Lower	Upper
91	100		
106	30.1	11.4	51.4

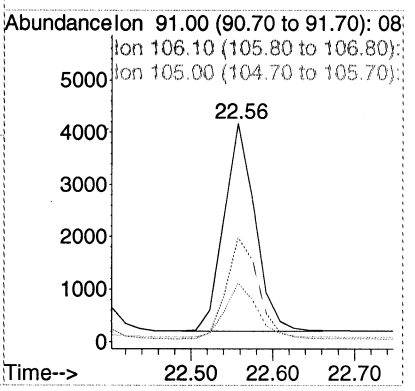


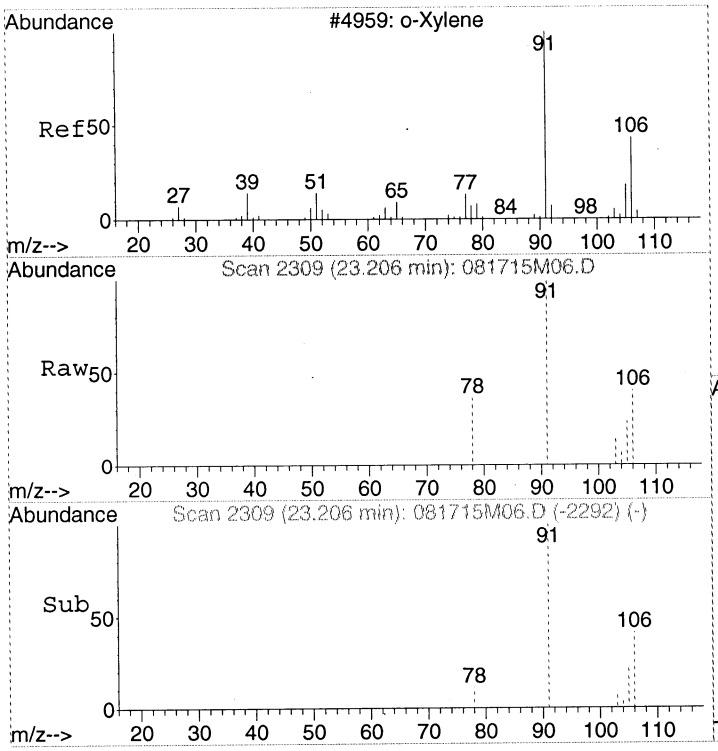


#28
m&p-Xylene
Concen: 37.26 pptv
RT: 22.56 min Scan# 2265
Delta R.T. -0.00 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion: 91 Resp: 10432

Ion	Ratio	Lower	Upper
91	100		
106	49.7	29.5	69.5
105	25.5	3.7	43.7

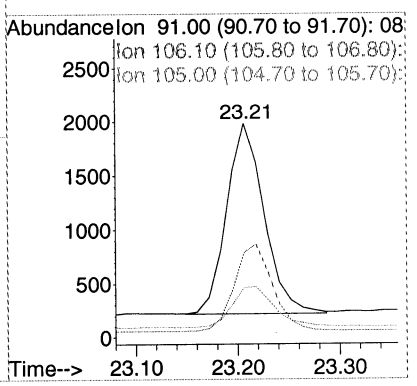


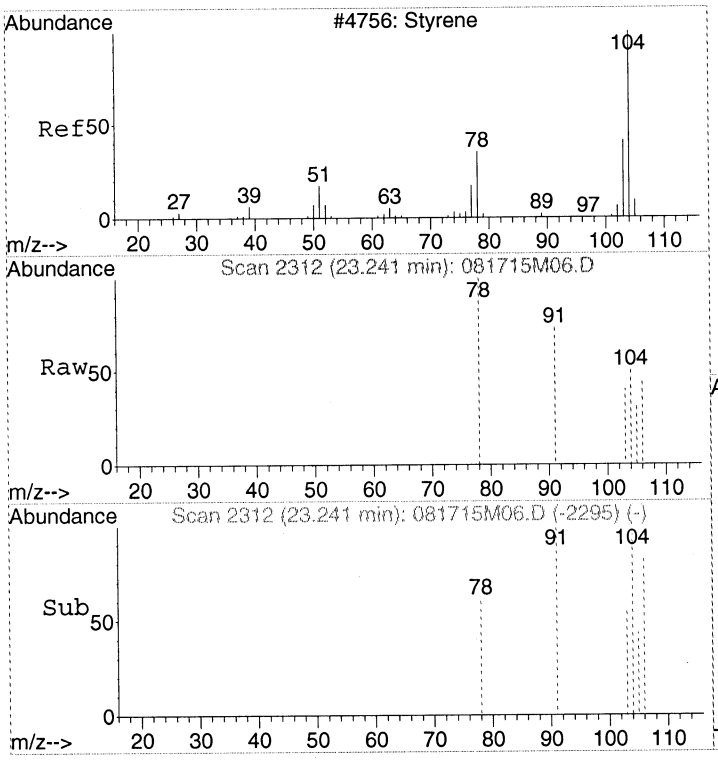


#29
o-Xylene
Concen: Below Cal
RT: 23.21 min Scan# 2309
Delta R.T. -0.00 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion: 91 Resp: 4498

Ion	Ratio	Lower	Upper
91	100		
106	46.6	26.0	66.0
105	24.6	6.3	46.3

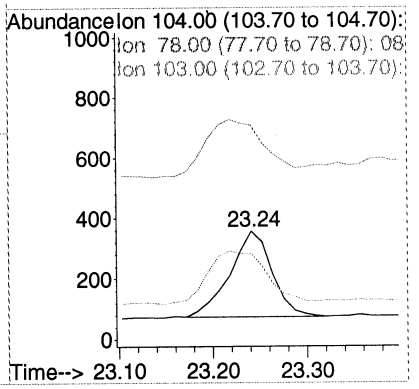


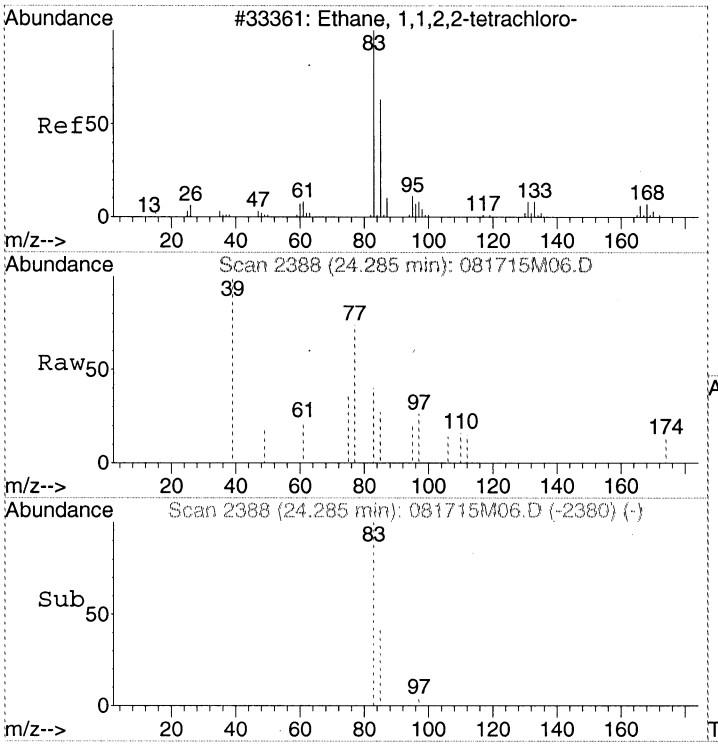


#30
Styrene
Concen: Below Cal
RT: 23.24 min Scan# 2312
Delta R.T. -0.00 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion:104 Resp: 865

Ion	Ratio	Lower	Upper
104	100		
78	0.0	33.4	73.4#
103	0.0	34.8	74.8#

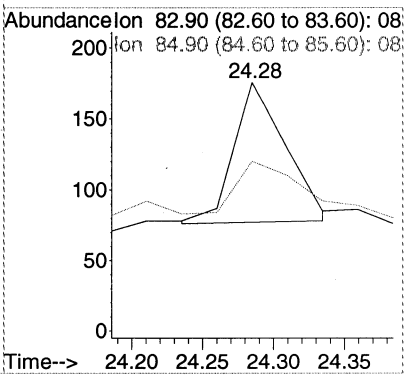


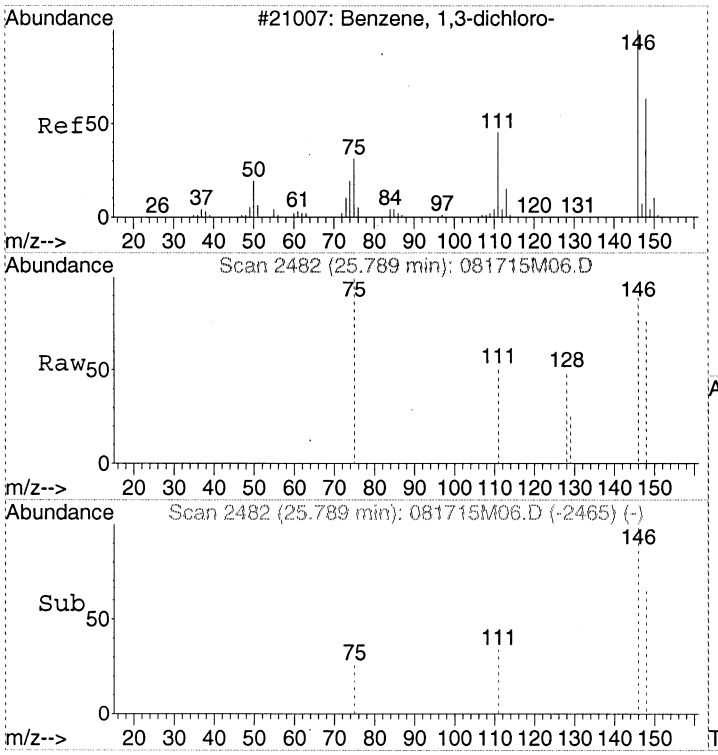


#31
1,1,2,2-Tetrachloroethane
Concen: Below Cal
RT: 24.28 min Scan# 2388
Delta R.T. -0.00 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion: 83 Resp: 252

Ion	Ratio	Lower	Upper
83	100		
85	47.2	43.6	83.6

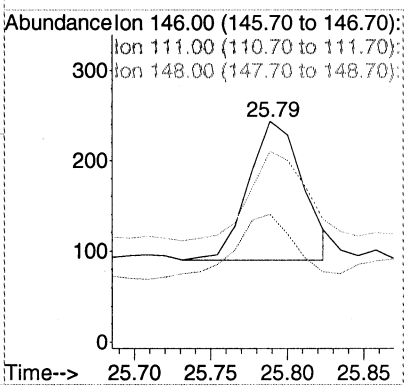


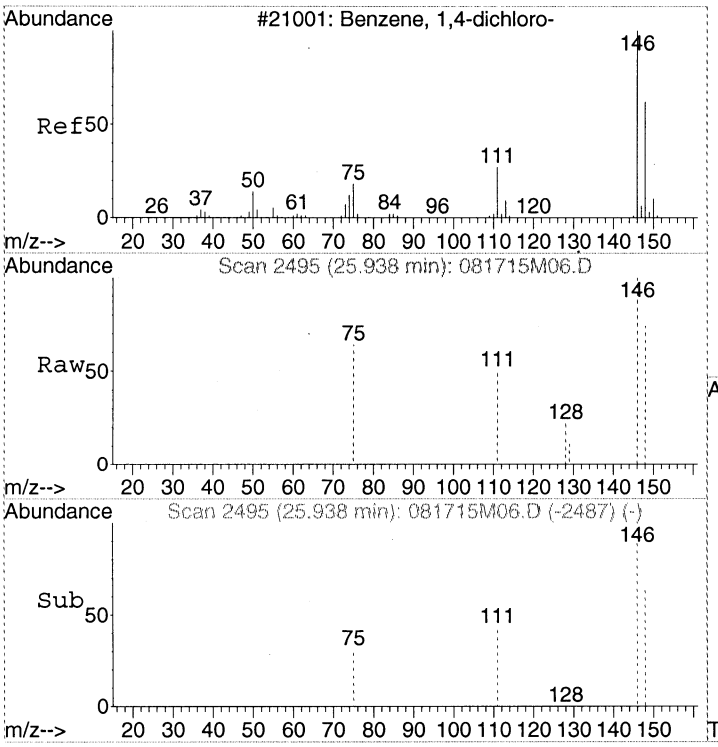


#32
1,3-Dichlorobenzene
Concen: Below Cal
RT: 25.79 min Scan# 2482
Delta R.T. -0.00 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion:146 Resp: 377

Ion	Ratio	Lower	Upper
146	100		
111	51.2	18.6	58.6
148	66.0	44.1	84.1

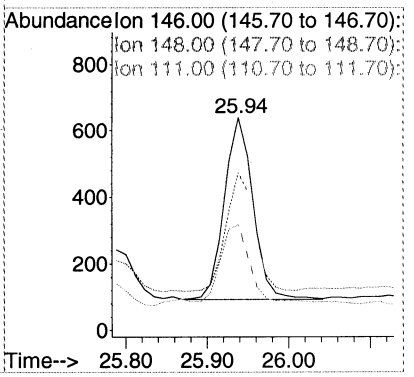


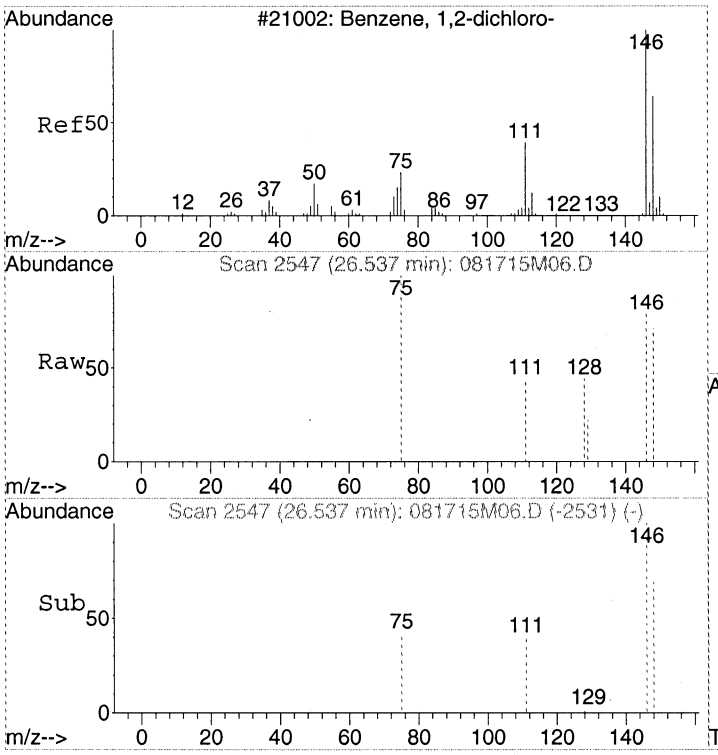


#33
1,4-Dichlorobenzene
Concen: Below Cal
RT: 25.94 min Scan# 2495
Delta R.T. -0.00 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion:146 Resp: 1340

Ion	Ratio	Lower	Upper
146	100		
148	63.3	43.9	83.9
111	40.8	16.7	56.7

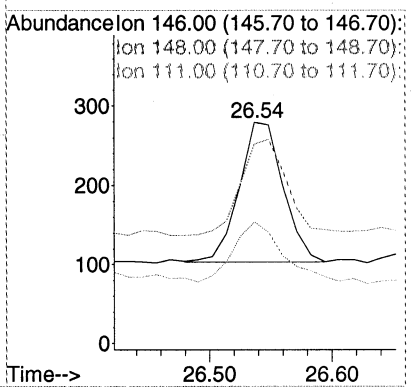




#34
1,2-Dichlorobenzene
Concen: Below Cal
RT: 26.54 min Scan# 2547
Delta R.T. -0.01 min
Lab File: 081715M06.D
Acq: 17 Aug 2015 2:48 pm

Tgt Ion:146 Resp: 441

Ion	Ratio	Lower	Upper
146	100		
148	72.6	43.8	83.8
111	51.5	20.0	60.0



Quantitation Report (Not Reviewed)

Report

Data Path : C:\MSDCHEM\1\2015\DATA\081715MAA\
Data File : 081715M07.D
Acq On : 17 Aug 2015 3:45 pm
InstName : AG5973M
Operator : LLH
Sample : 1508028-15RE1
Misc : 600ml 600National-OUT
ALS Vial : 5 Sample Multiplier: 1.48

Quant Time: Aug 17 16:50:54 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.24	49	55959	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.31	114	108293	375.00 pptv	0.00
21) CHLOROBENZENE-d5	22.25	117	97757	341.00 pptv	0.00

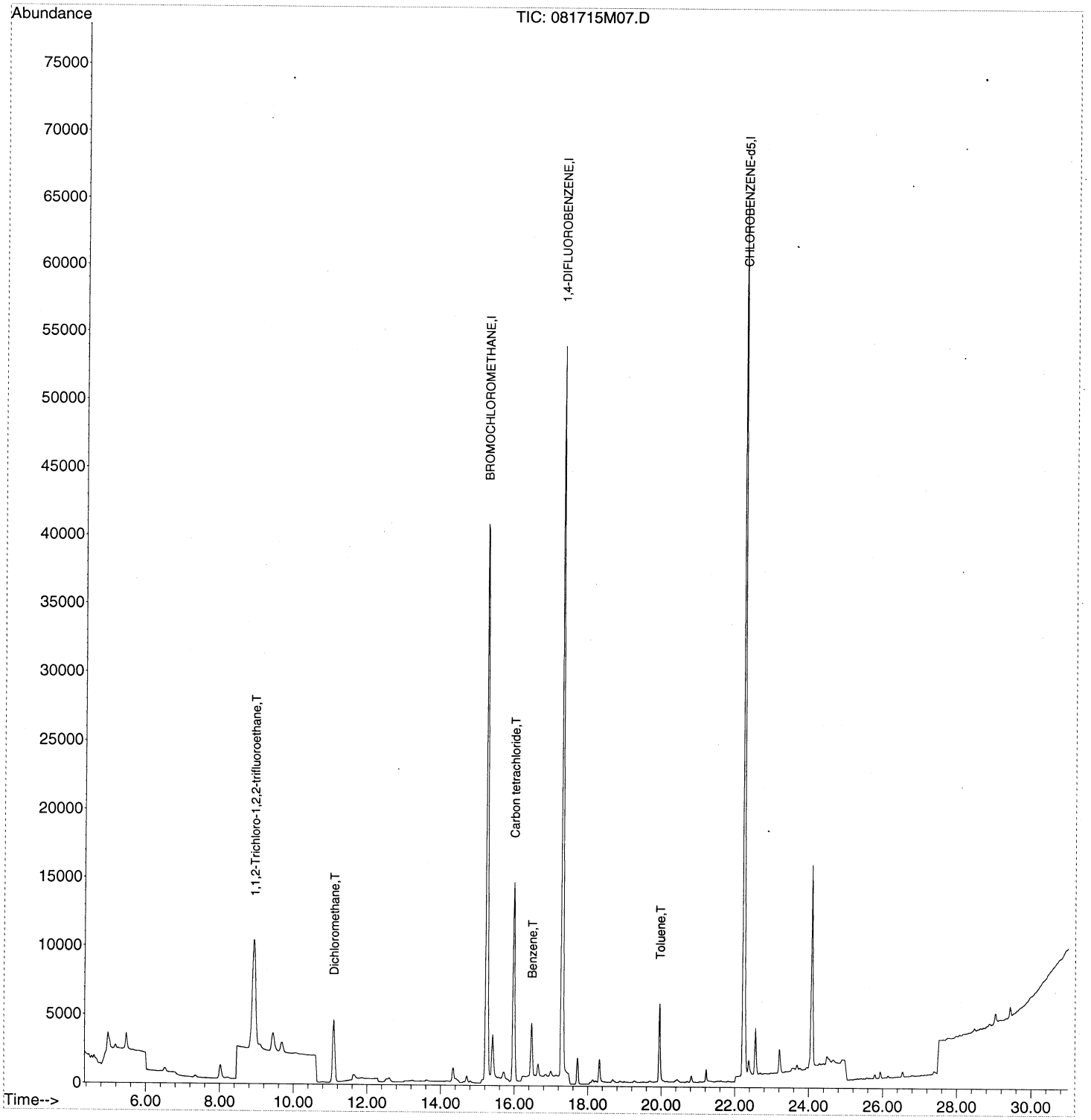
Target Compounds					Qvalue	
2) Vinyl chloride	5.09	62	19	N.D.		
3) 1,3-Butadiene	5.19	54	331	N.D.		
4) Bromoethene	7.13	106	78	N.D.		
5) 1,1,2-Trichloro-1,2,2-trif	8.94	151	17892	58.24 pptv	99	
6) 1,1-Dichloroethene	8.94	61	71	N.D.		
7) Dichloromethane	11.09	49	8619	51.21 pptv	97	MT
8) tert-Butyl methyl ether (M	11.83	73	50	N.D.		
9) trans-1,2-Dichloroethene	11.85	61	88	N.D.		
10) Hexane	12.53	57	550	N.D.		
11) 1,1-Dichloroethane	13.24	63	146	N.D.		
12) cis-1,2-Dichloroethene	14.71	96	577	N.D.		
13) Chloroform	15.41	83	3381	N.D.		
14) 1,1,1-Trichloroethane	15.72	97	941	N.D.		
15) Carbon tetrachloride	15.99	117	22032	58.70 pptv	99	MT
17) Benzene	16.48	78	8634	27.75 pptv	99	
18) 1,2-Dichloroethane	16.65	62	1429	N.D.		
19) Trichloroethene	17.72	130	1807	N.D.		
20) 1,2-Dichloropropane	18.22	63	141	N.D.		
22) Toluene	19.95	91	9260	35.32 pptv	97	
23) 1,1,2-Trichloroethane	20.71	97	86	N.D.		
24) Tetrachloroethene	20.81	166	285	N.D.		
25) 1,2-Dibromoethane (EDB)	21.55	107	59	N.D.		
26) Chlorobenzene	22.28	112	210	N.D.		
27) Ethylbenzene	22.37	91	2050	N.D.		
28) m&p-Xylene	22.56	91	4856	N.D.		
29) o-Xylene	23.21	91	2457	N.D.		
30) Styrene	23.24	104	353	N.D.		
31) 1,1,2,2-Tetrachloroethane	24.28	83	198	N.D.		
32) 1,3-Dichlorobenzene	25.80	146	301	N.D.		
33) 1,4-Dichlorobenzene	25.94	146	476	N.D.		
34) 1,2-Dichlorobenzene	26.55	146	405	N.D.		

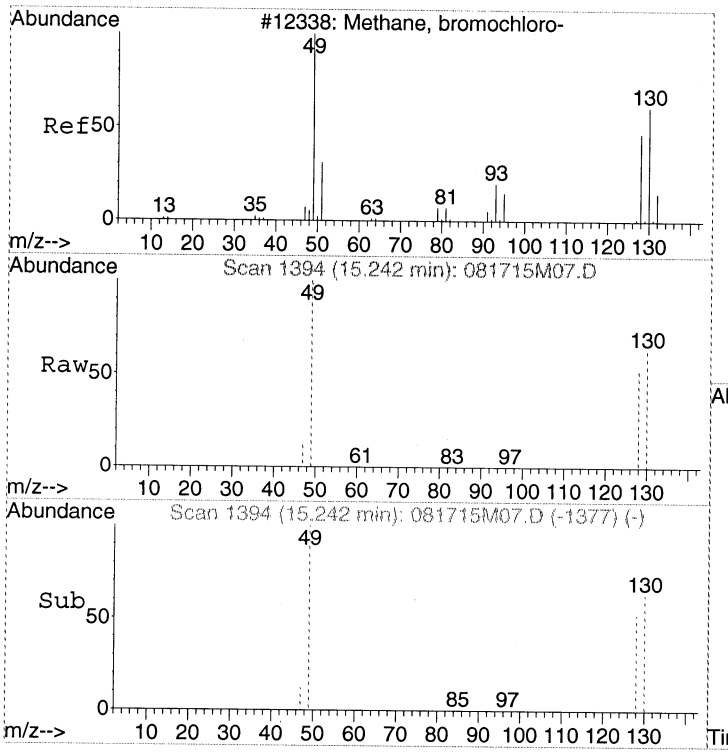
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081715MAA\
Data File : 081715M07.D
Acq On : 17 Aug 2015 3:45 pm
InstName : AG5973M
Operator : LLH
Sample : 1508028-15RE1
Misc : 600ml 600National-OUT
ALS Vial : 5 Sample Multiplier: 1.48

Quant Time: Aug 17 16:50:54 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration

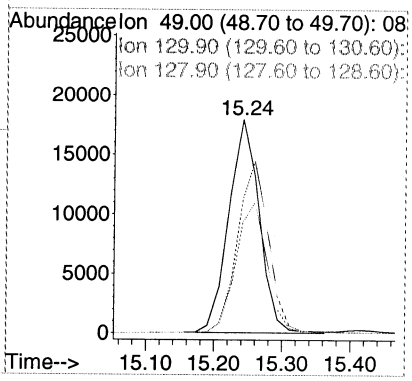


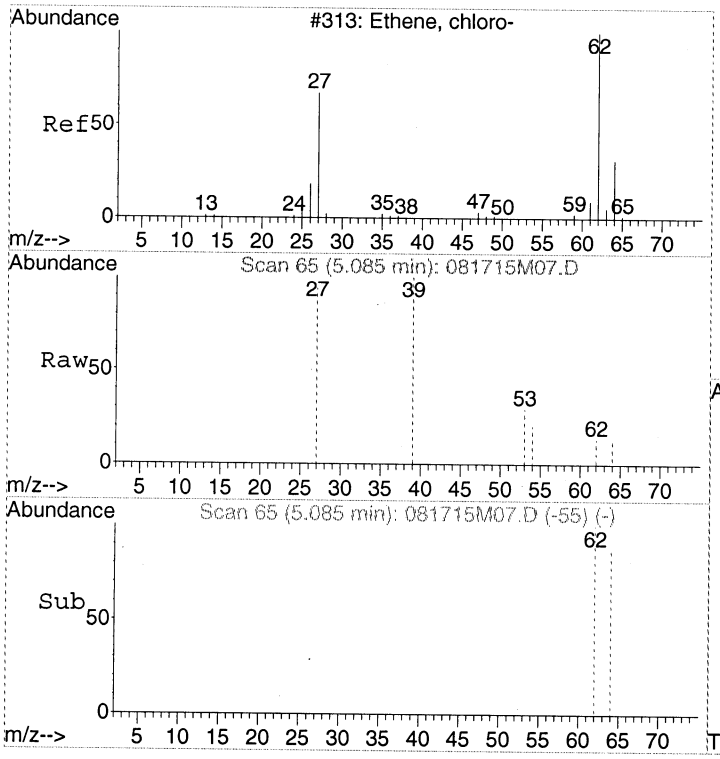


#1
BROMOCHLOROMETHANE
Concen: 341.00 pptv
RT: 15.24 min Scan# 1394
Delta R.T. 0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion: 49 Resp: 55959

Ion	Ratio	Lower	Upper
49	100		
130	80.9	65.3	105.3
128	62.5	46.2	86.2

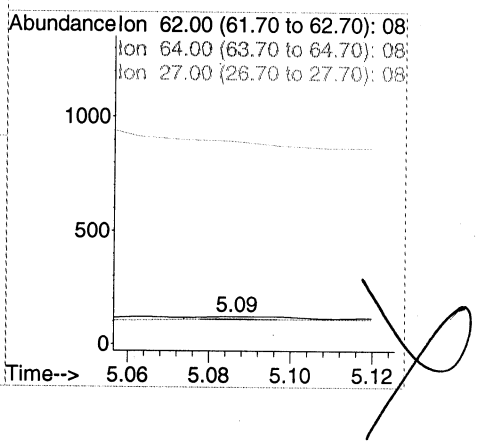


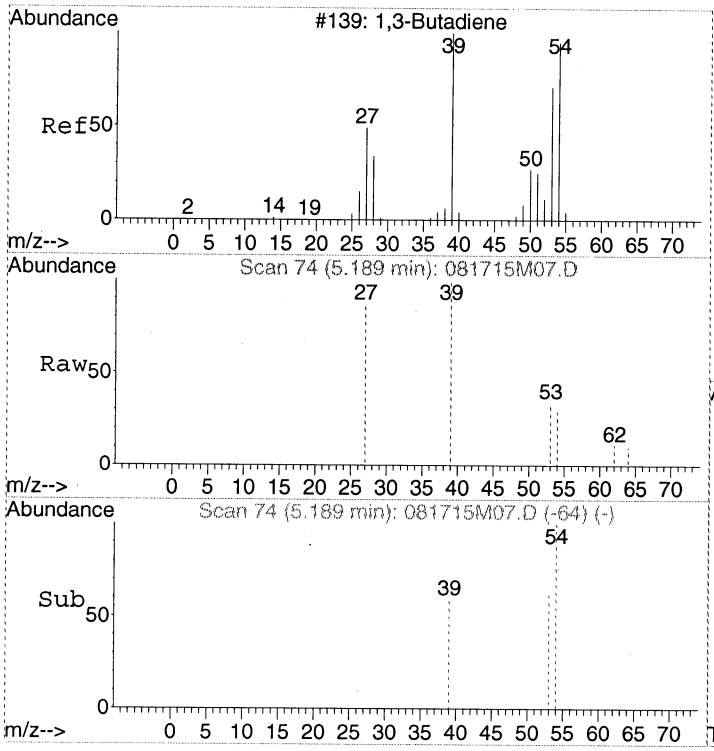


#2
Vinyl chloride
Concen: Below Cal
RT: 5.09 min Scan# 65
Delta R.T. -0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion: 62 Resp: 19

Ion	Ratio	Lower	Upper
62	100		
64	73.7	11.8	51.8#
27	0.0	28.9	68.9#

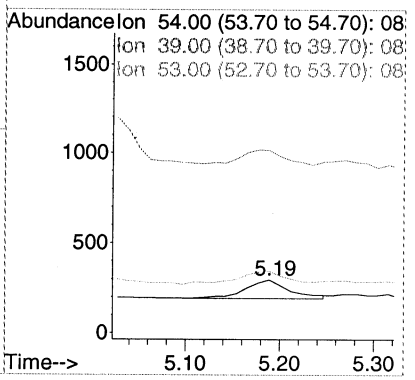


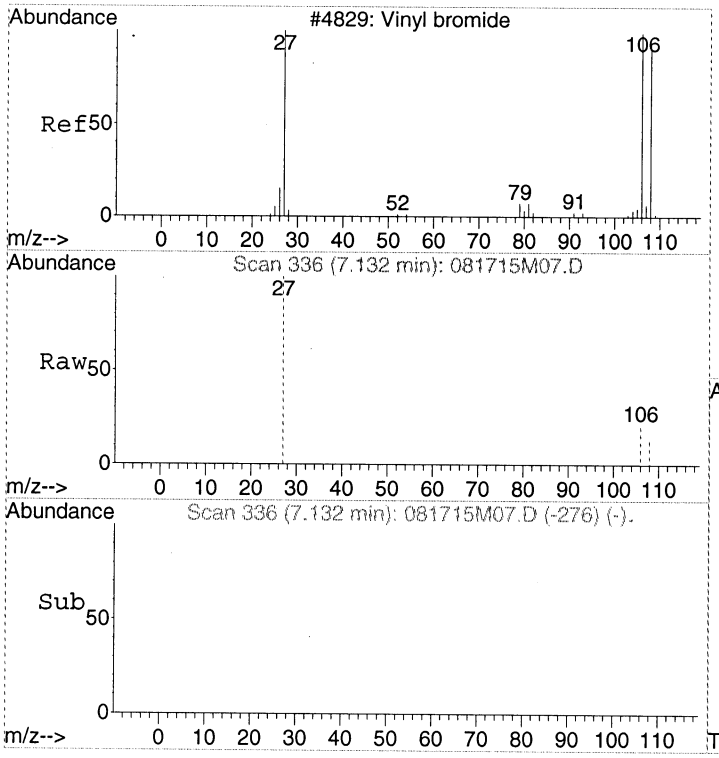


#3
1,3-Butadiene
Concen: Below Cal
RT: 5.19 min Scan# 74
Delta R.T. -0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion: 54 Resp: 331

Ion	Ratio	Lower	Upper
54	100		
39	82.5	76.7	116.7
53	61.0	48.8	88.8

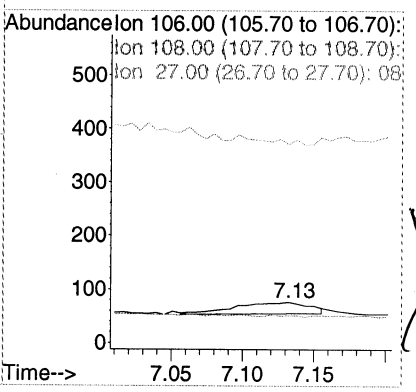


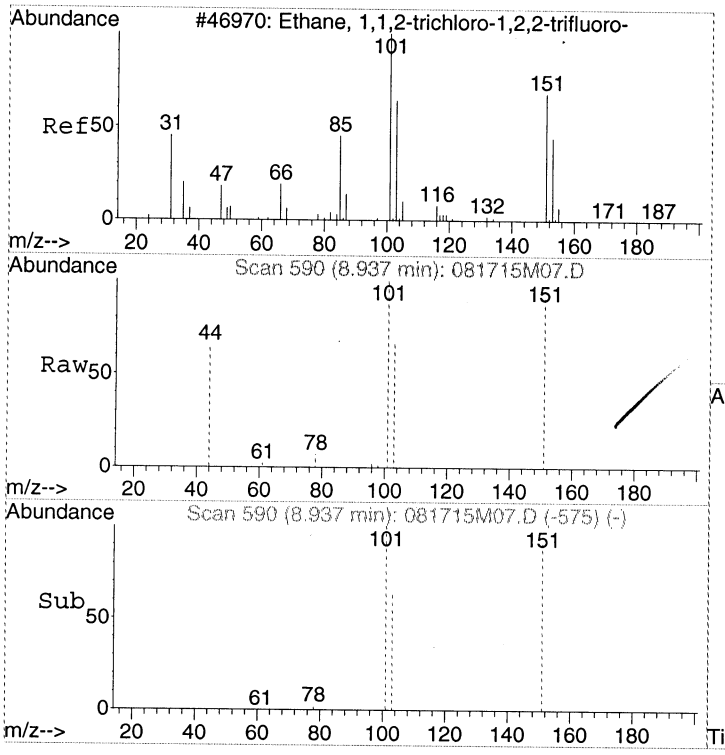


#4
Bromoethene
Concen: Below Cal
RT: 7.13 min Scan# 336
Delta R.T. 0.15 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion:106 Resp: 78

Ion	Ratio	Lower	Upper
106	100		
108	0.0	0.0	214.6
27	0.0	56.6	96.6#

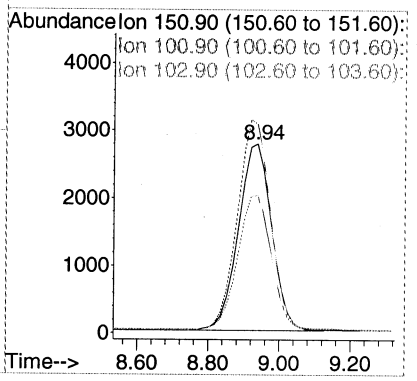


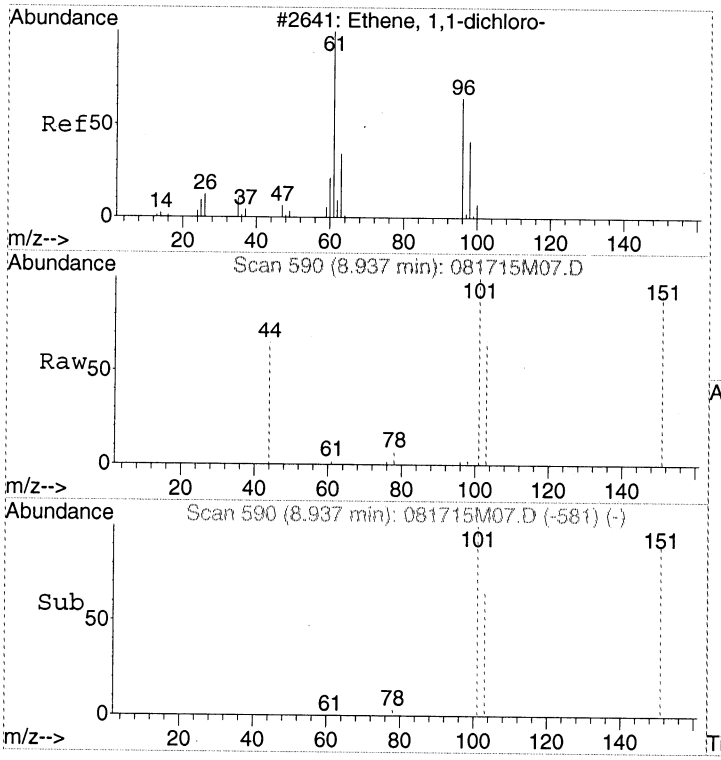


#5
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 58.24 pptv
RT: 8.94 min Scan# 590
Delta R.T. -0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion:151 Resp: 17892

Ion	Ratio	Lower	Upper
151	100		
101	111.9	90.9	130.9
103	71.9	51.0	91.0

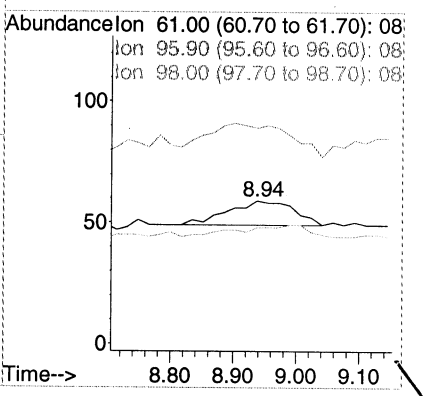


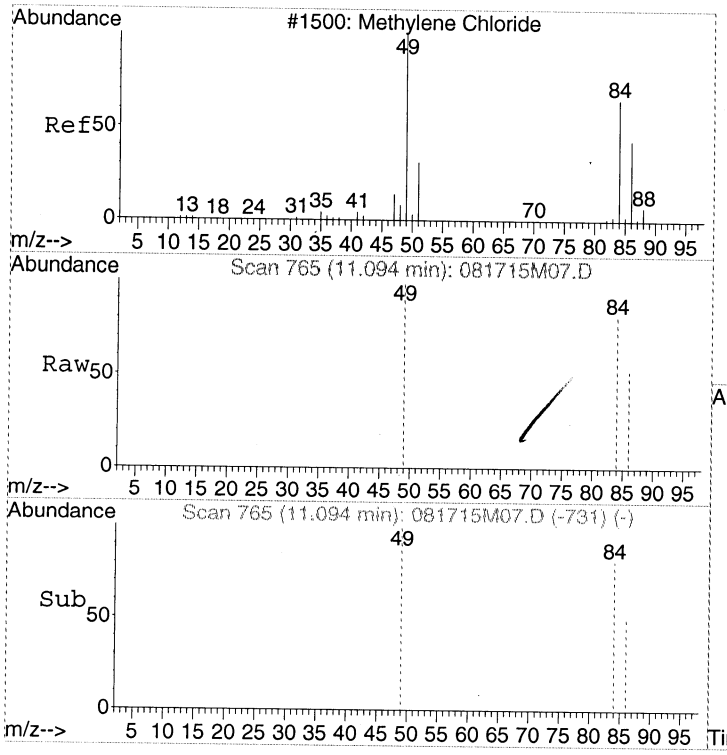


#6
1,1-Dichloroethene
Concen: Below Cal
RT: 8.94 min Scan# 590
Delta R.T. -0.05 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion: 61 Resp: 71

Ion	Ratio	Lower	Upper
61	100		
96	0.0	43.2	83.2#
98	2.8	20.1	60.1#

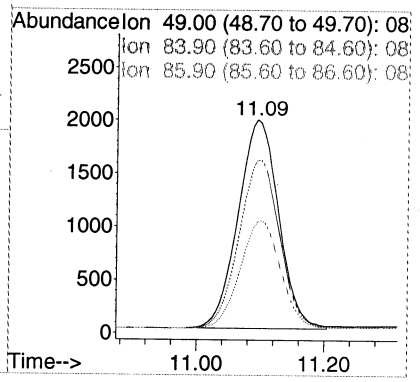


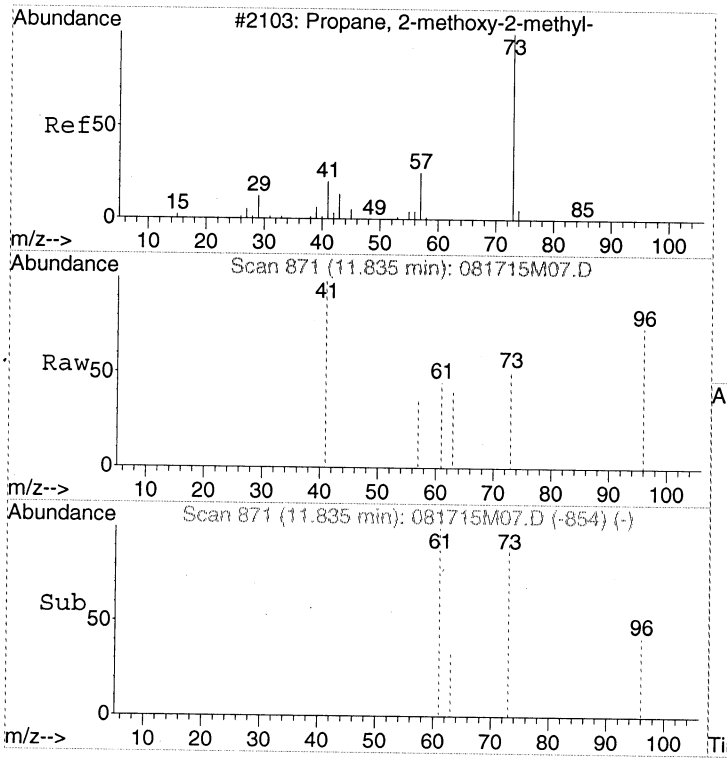


#7
Dichloromethane
Concen: 51.21 pptv
RT: 11.09 min Scan# 765
Delta R.T. 0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion: 49 Resp: 8619

Ion	Ratio	Lower	Upper
49	100		
84	81.3	64.2	104.2
86	52.2	34.0	74.0

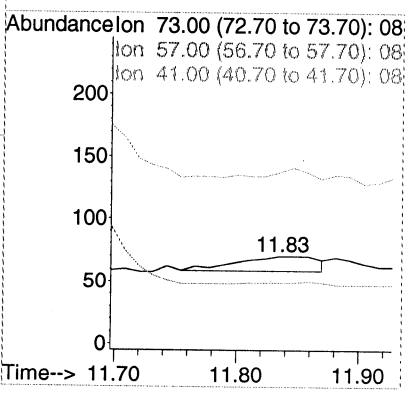


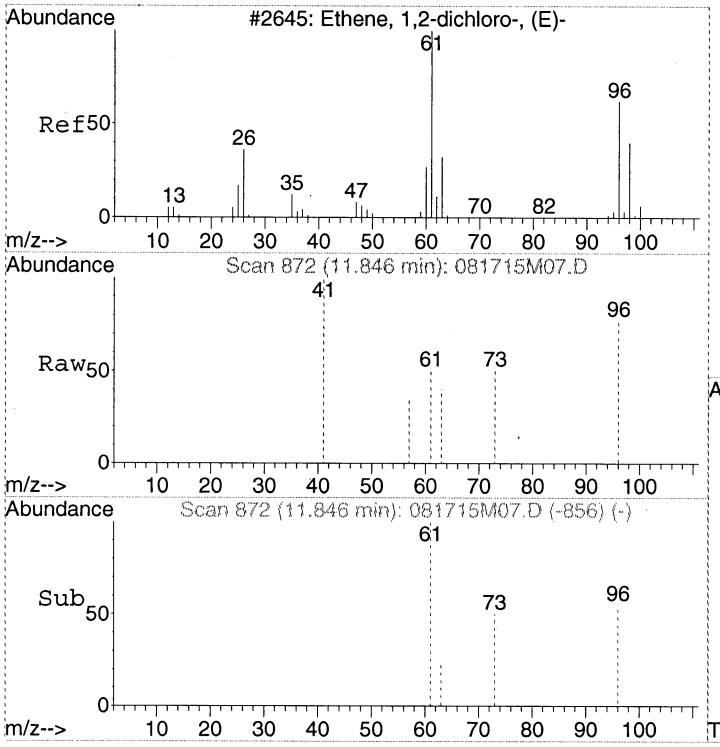


#8
tert-Butyl methyl ether (MTBE)
Concen: Below Cal
RT: 11.83 min Scan# 871
Delta R.T. 0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion: 73 Resp: 50

Ion	Ratio	Lower	Upper
73	100		
57	0.0	2.0	42.0#
41	30.0	13.3	53.3

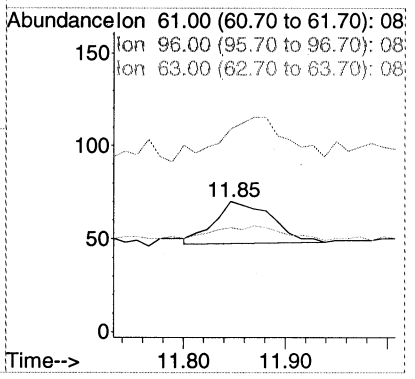


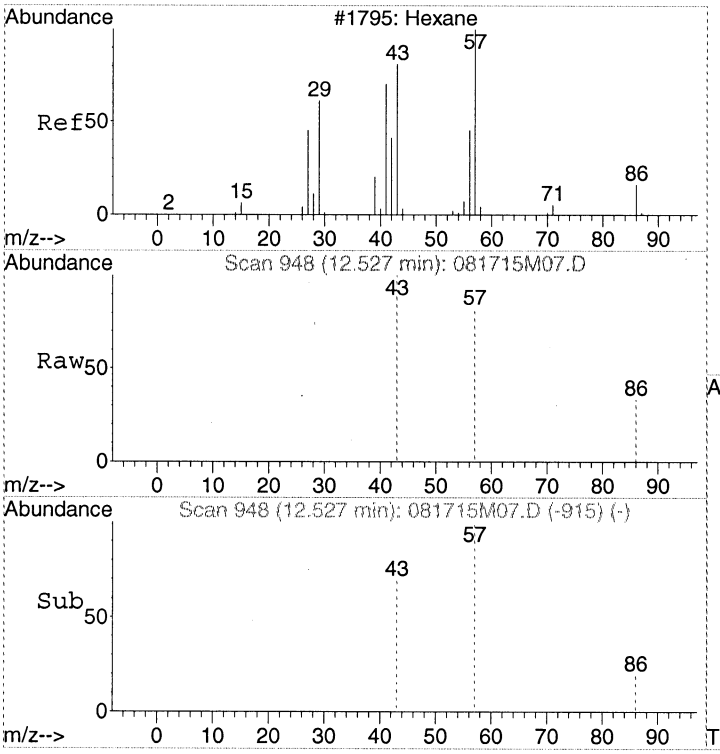


#9
trans-1,2-Dichloroethene
Concen: Below Cal
RT: 11.85 min Scan# 872
Delta R.T. -0.01 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion: 61 Resp: 88

Ion	Ratio	Lower	Upper
61	100		
96	0.0	53.4	93.4#
63	17.0	12.2	52.2

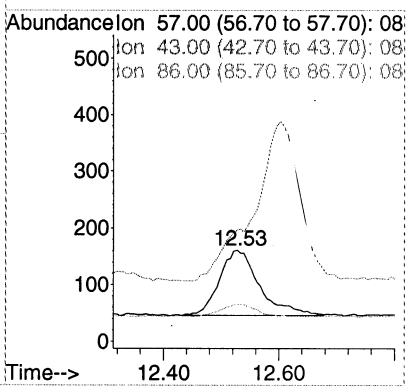


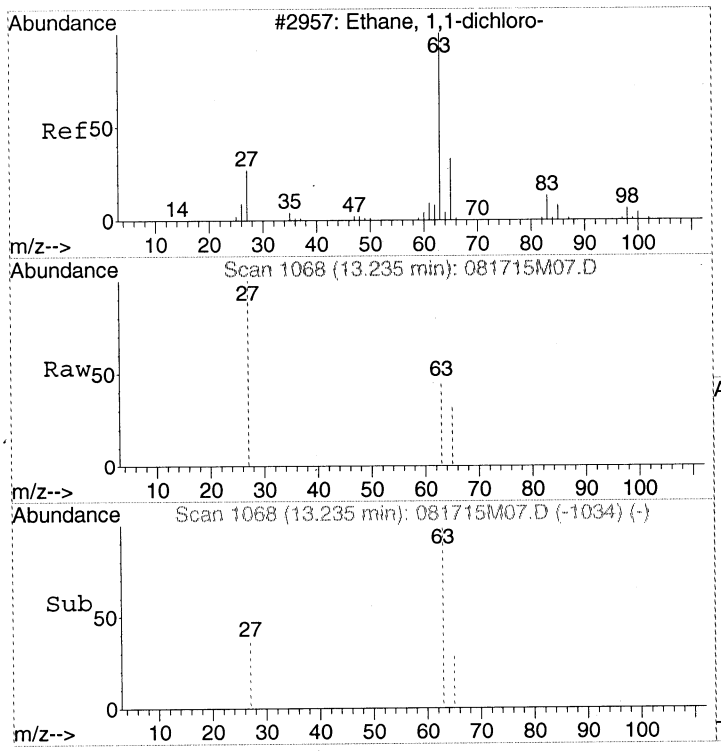


#10
Hexane
Concen: Below Cal
RT: 12.53 min Scan# 948
Delta R.T. -0.01 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion: 57 Resp: 550

Ion	Ratio	Lower	Upper
57	100		
43	46.4	46.4	86.4#
86	16.7	0.0	38.0

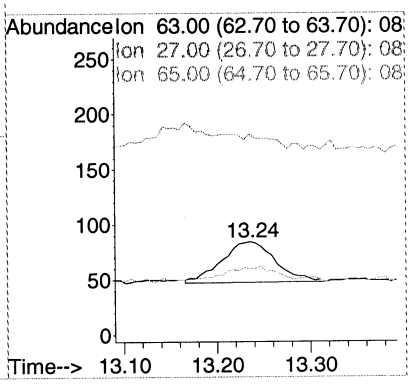


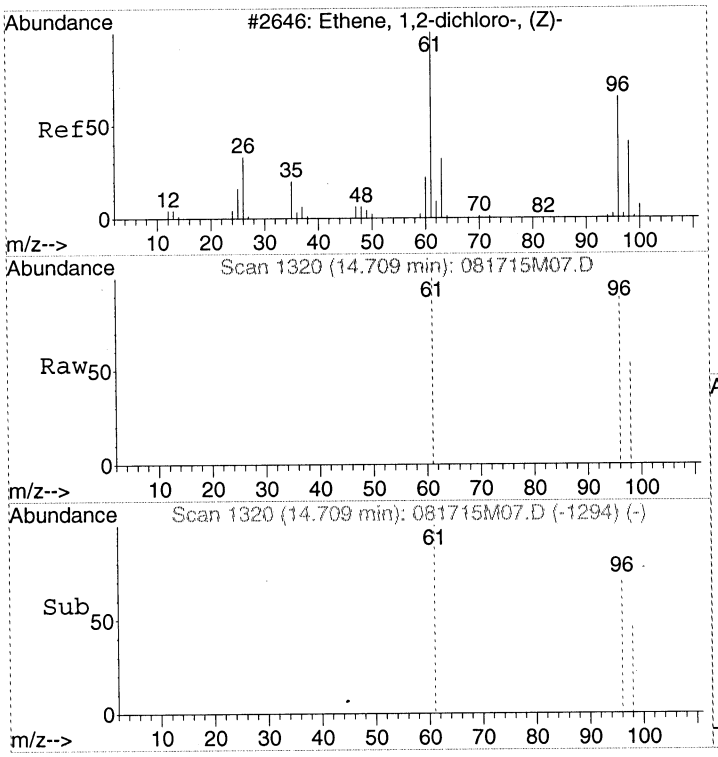


#11
1,1-Dichloroethane
Concen: Below Cal
RT: 13.24 min Scan# 1068
Delta R.T. 0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion: 63 Resp: 146

Ion	Ratio	Lower	Upper
63	100		
27	0.0	9.1	49.1#
65	5.5	11.6	51.6#

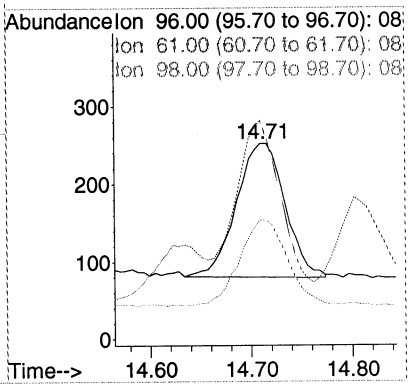


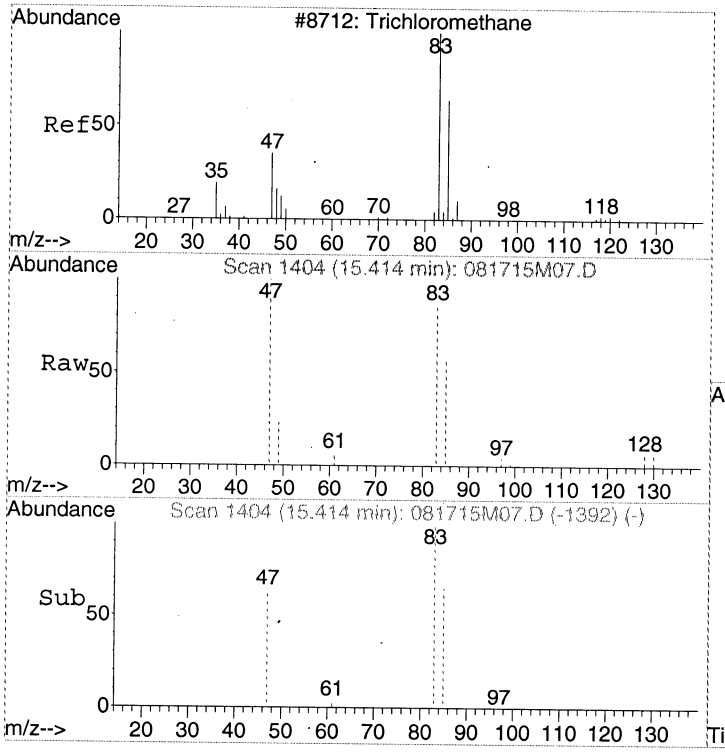


#12
cis-1,2-Dichloroethene
Concen: Below Cal
RT: 14.71 min Scan# 1320
Delta R.T. 0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion: 96 Resp: 577

Ion	Ratio	Lower	Upper
96	100		
61	106.4	104.7	144.7
98	63.4	43.7	83.7

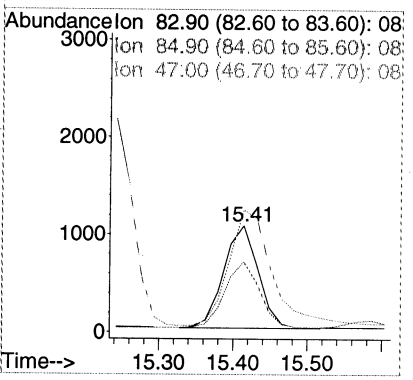


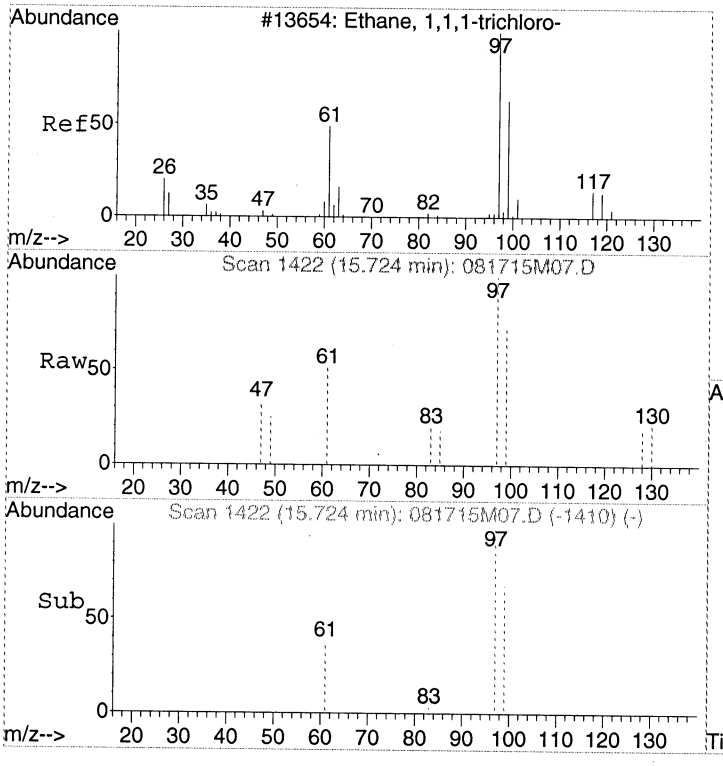


#13
Chloroform
Concen: Below Cal
RT: 15.41 min Scan# 1404
Delta R.T. 0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion: 83 Resp: 3381

Ion	Ratio	Lower	Upper
83	100		
85	65.0	44.8	84.8
47	143.2	4.4	44.4#

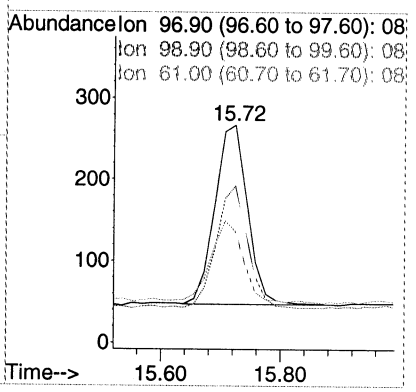


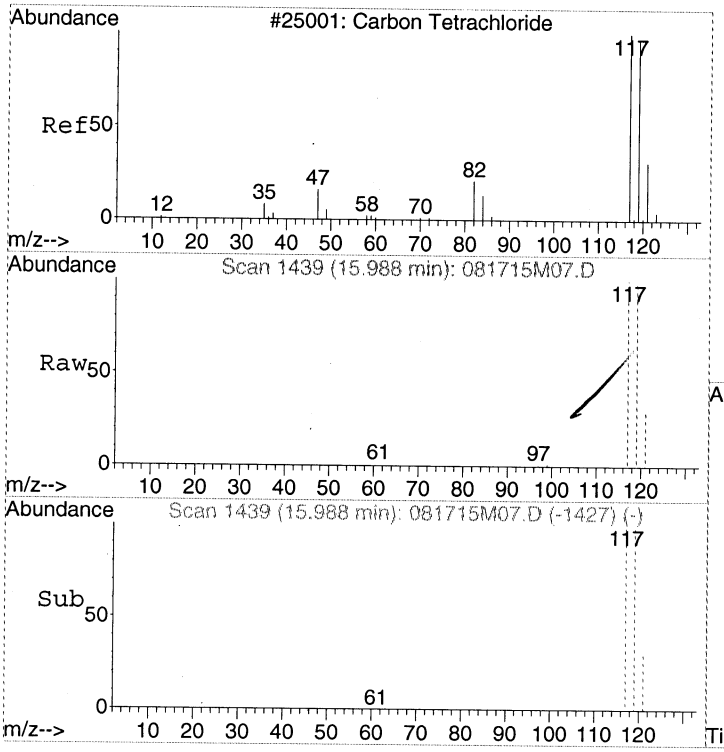


#14
1,1,1-Trichloroethane
Concen: Below Cal
RT: 15.72 min Scan# 1422
Delta R.T. 0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion: 97 Resp: 941

Ion	Ratio	Lower	Upper
97	100		
99	57.8	44.5	84.5
61	39.4	21.7	61.7

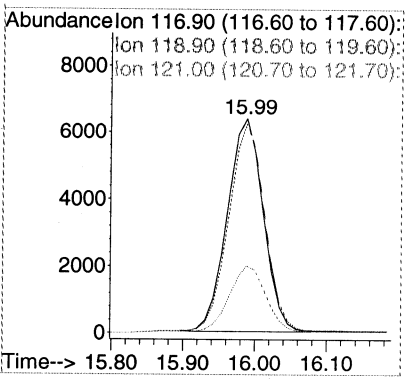


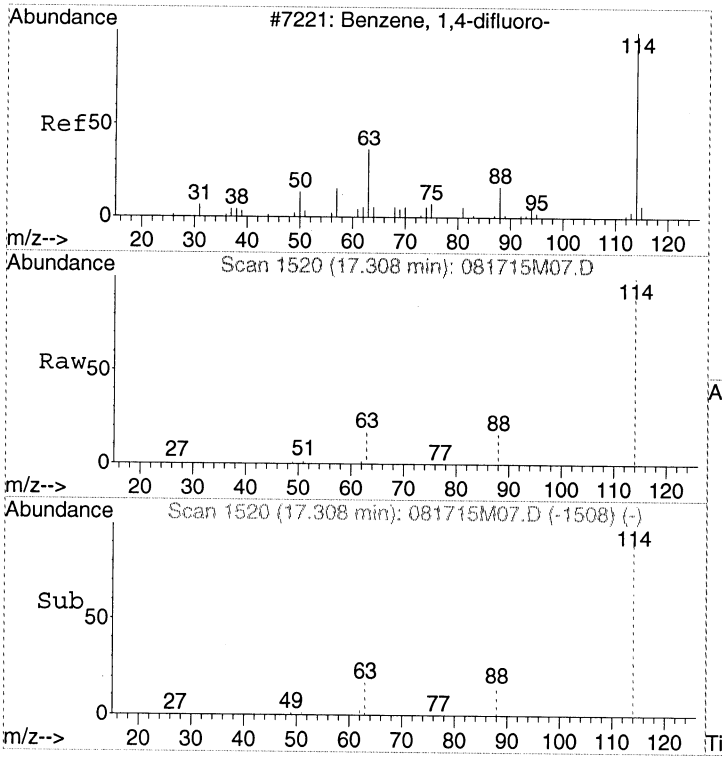


#15
Carbon tetrachloride
Concen: 58.70 pptv
RT: 15.99 min Scan# 1439
Delta R.T. 0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion:117 Resp: 22032

Ion	Ratio	Lower	Upper
117	100		
119	96.7	76.1	116.1
121	30.9	10.7	50.7

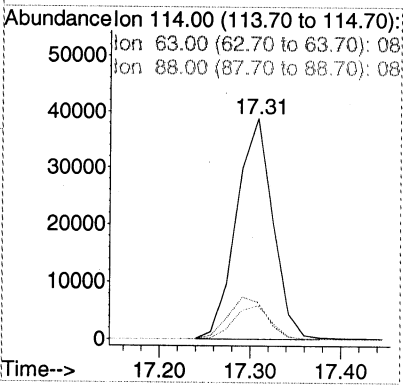


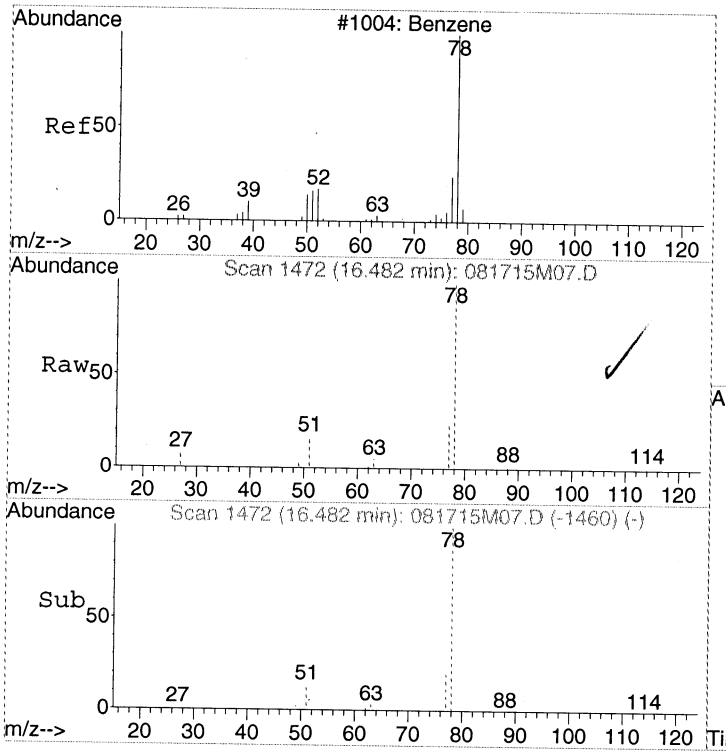


#16
1,4-DIFLUOROBENZENE
Concen: 375.00 pptv
RT: 17.31 min Scan# 1520
Delta R.T. 0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion:114 Resp: 108293

Ion	Ratio	Lower	Upper
114	100		
63	20.5	0.0	39.9
88	15.8	0.0	35.7

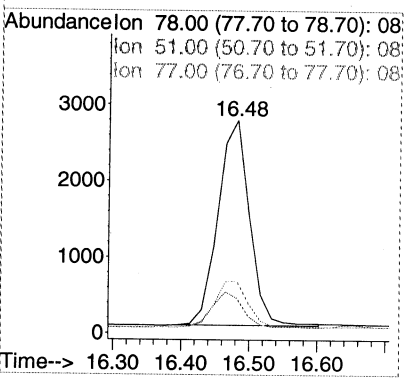


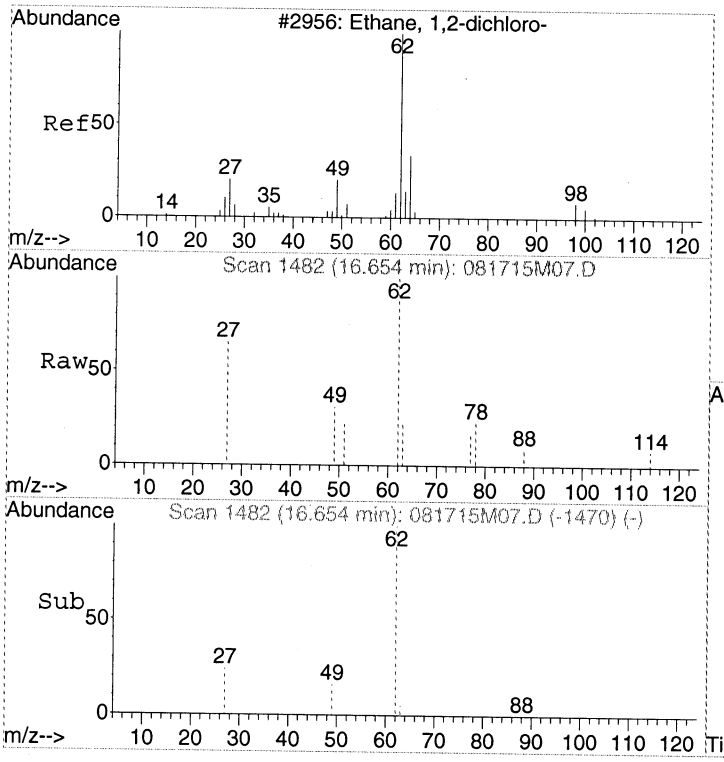


#17
Benzene
Concen: 27.75 pptv
RT: 16.48 min Scan# 1472
Delta R.T. 0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion: 78 Resp: 8634

Ion	Ratio	Lower	Upper
78	100		
51	16.6	0.0	37.6
77	24.0	3.7	43.7

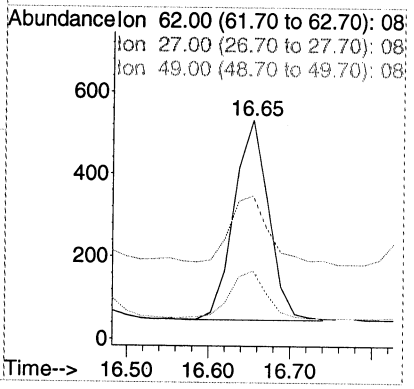


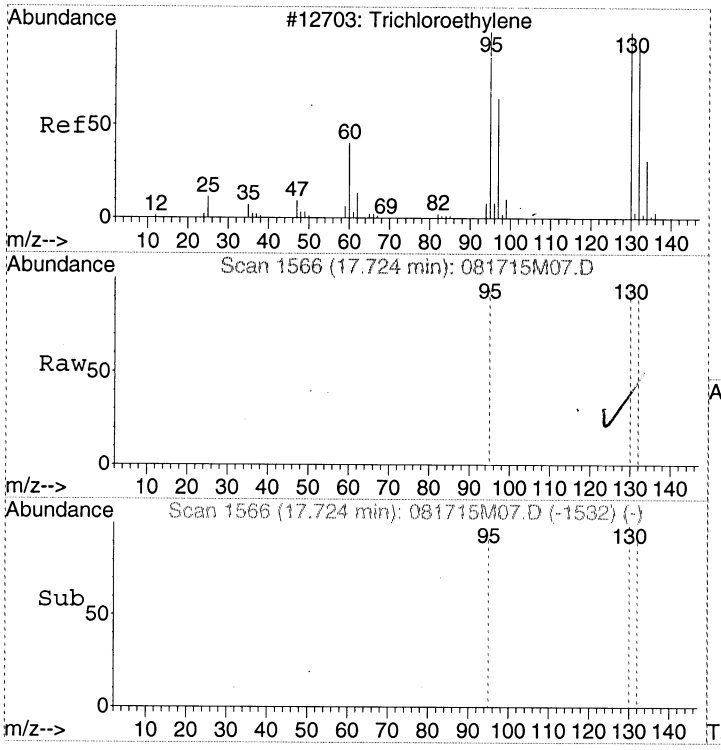


#18
1,2-Dichloroethane
Concen: Below Cal
RT: 16.65 min Scan# 1482
Delta R.T. 0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion: 62 Resp: 1429

Ion	Ratio	Lower	Upper
62	100		
27	40.0	13.3	53.3
49	25.5	4.7	44.7

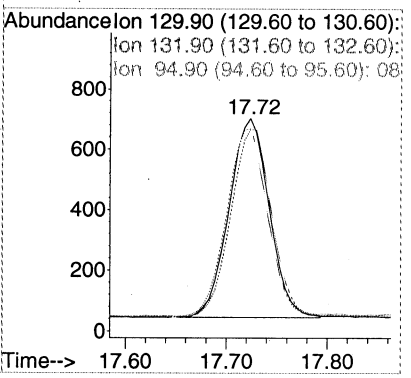


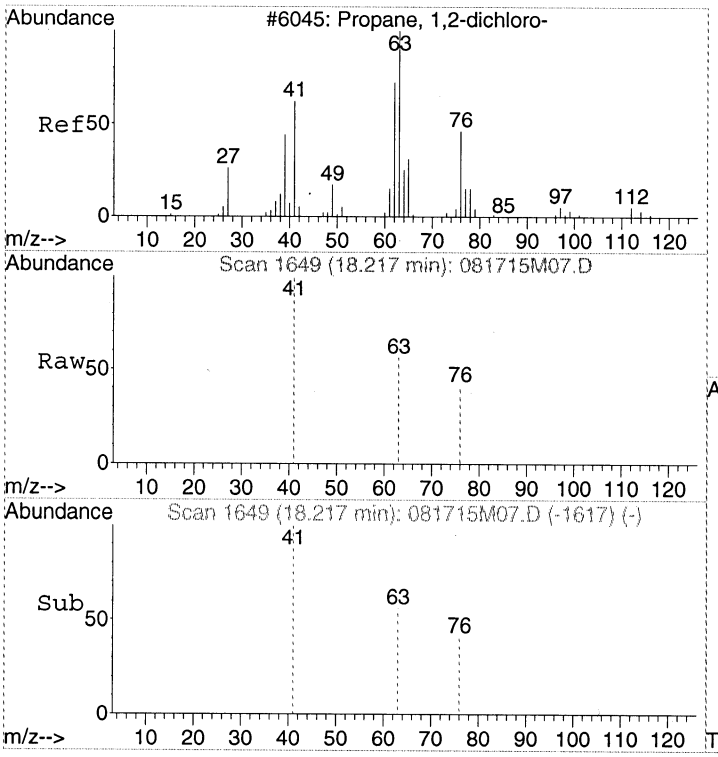


#19
Trichloroethene
Concen: Below Cal
RT: 17.72 min Scan# 1566
Delta R.T. 0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion:130 Resp: 1807

Ion	Ratio	Lower	Upper
130	100		
132	96.7	76.3	116.3
95	95.8	75.2	115.2

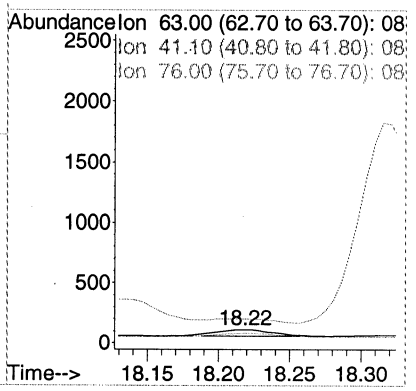


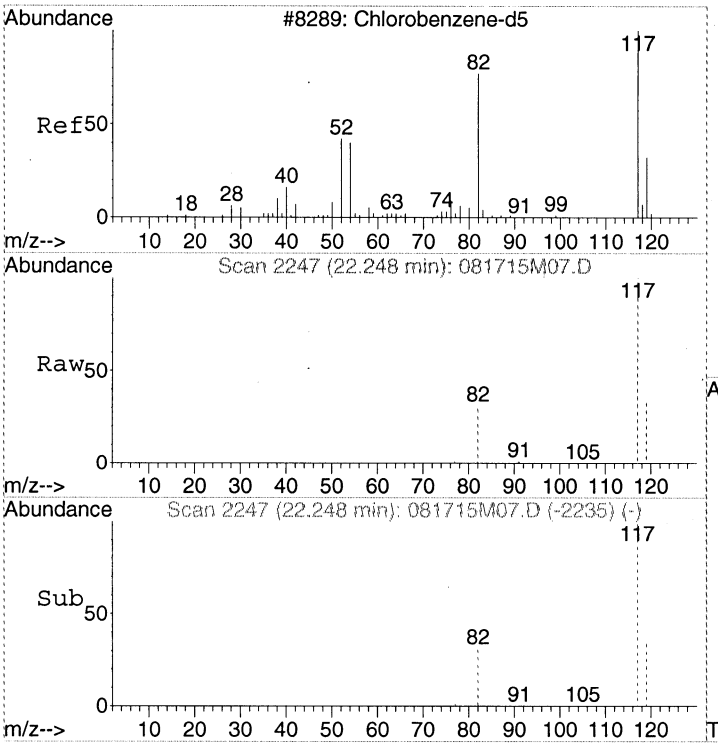


#20
1,2-Dichloropropane
Concen: Below Cal
RT: 18.22 min Scan# 1649
Delta R.T. 0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion: 63 Resp: 141

Ion	Ratio	Lower	Upper
63	100		
41	0.0	43.1	83.1#
76	50.4	31.6	71.6

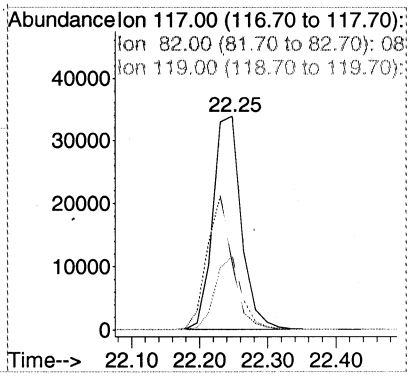


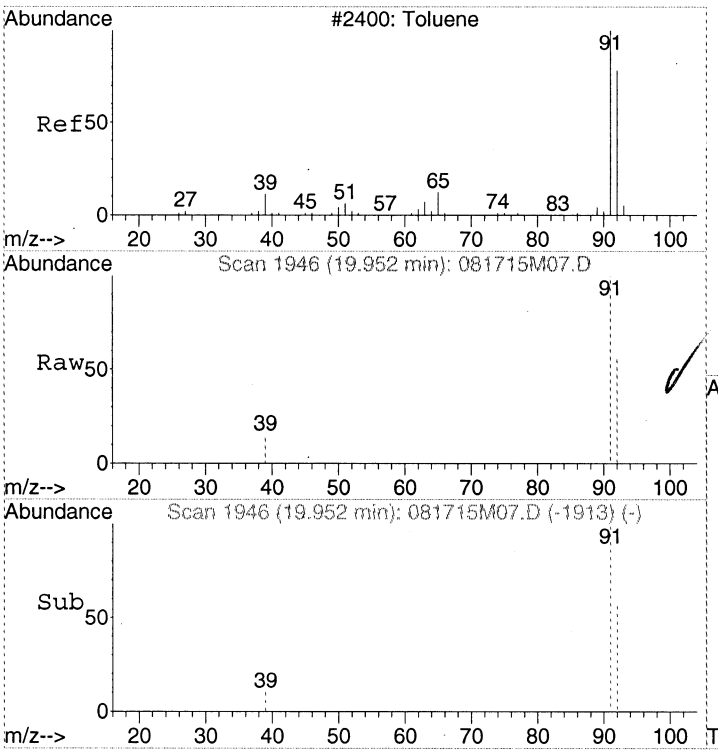


#21
CHLOROBENZENE-d5
Concen: 341.00 pptv
RT: 22.25 min Scan# 2247
Delta R.T. -0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion:117 Resp: 97757

Ion	Ratio	Lower	Upper
117	100		
82	55.6	34.9	74.9
119	32.2	12.1	52.1

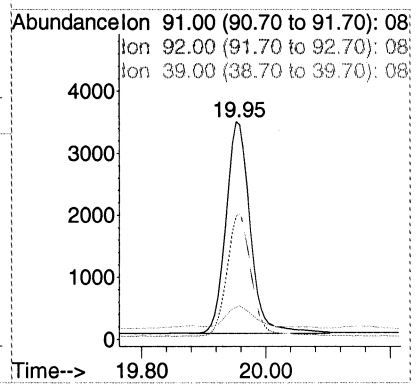


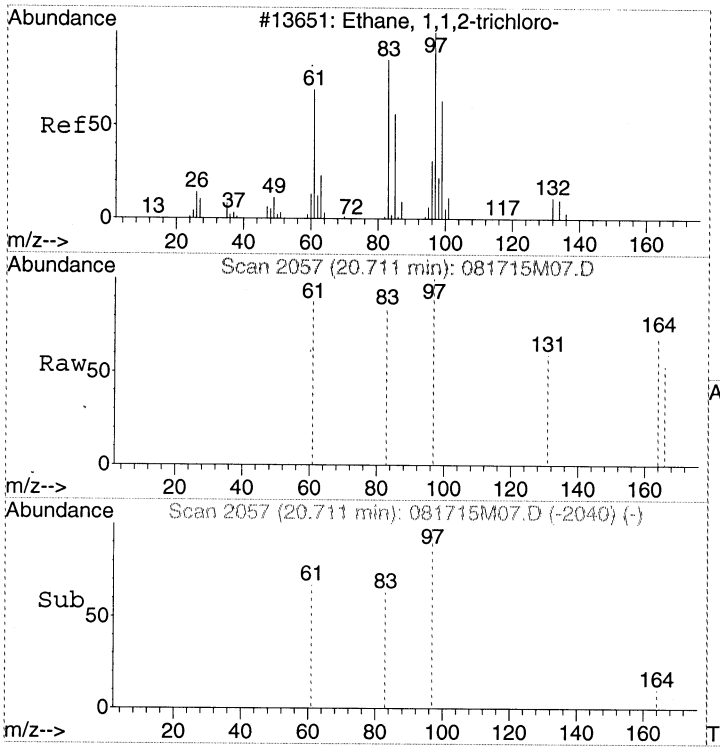


#22
Toluene
Concen: 35.32 pptv
RT: 19.95 min Scan# 1946
Delta R.T. -0.01 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion: 91 Resp: 9260

Ion	Ratio	Lower	Upper
91	100		
92	56.8	38.8	78.8
39	10.7	0.0	29.1

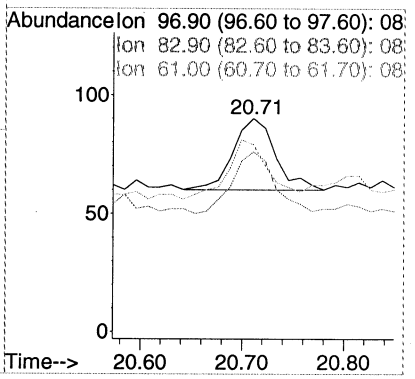


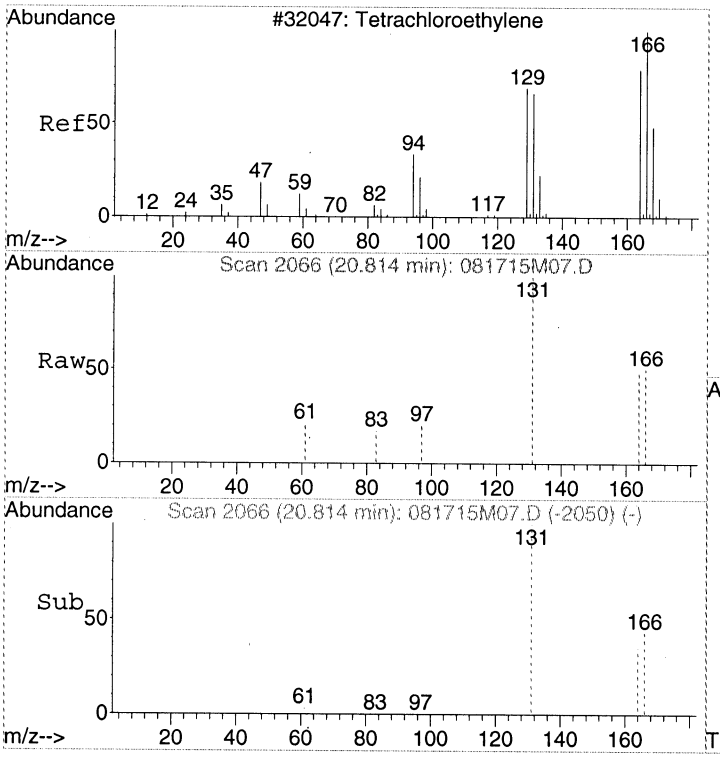


#23
1,1,2-Trichloroethane
Concen: Below Cal
RT: 20.71 min Scan# 2057
Delta R.T. 0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion: 97 Resp: 86

Ion	Ratio	Lower	Upper
97	100		
83	87.2	62.6	102.6
61	81.4	45.1	85.1

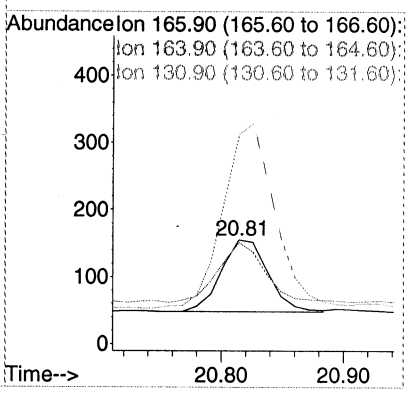


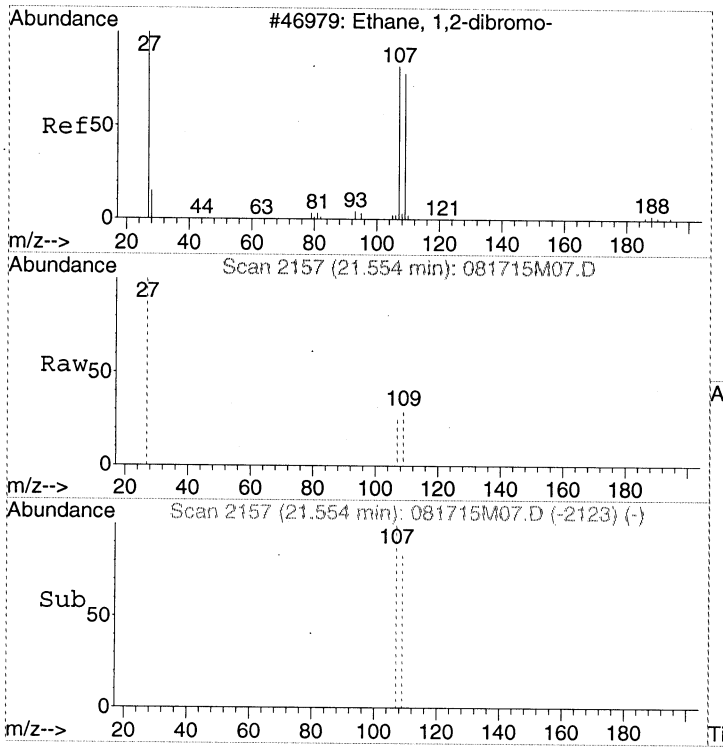


#24
Tetrachloroethene
Concen: Below Cal
RT: 20.81 min Scan# 2066
Delta R.T. -0.01 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion:166 Resp: 285

Ion	Ratio	Lower	Upper
166	100		
164	86.0	58.0	98.0
131	285.3	48.1	88.1#

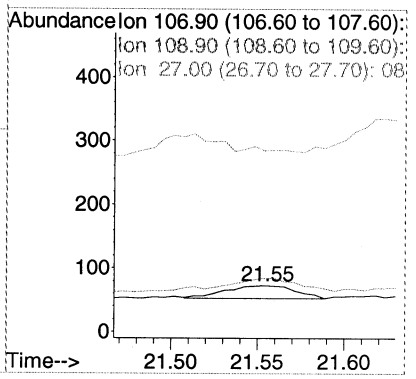


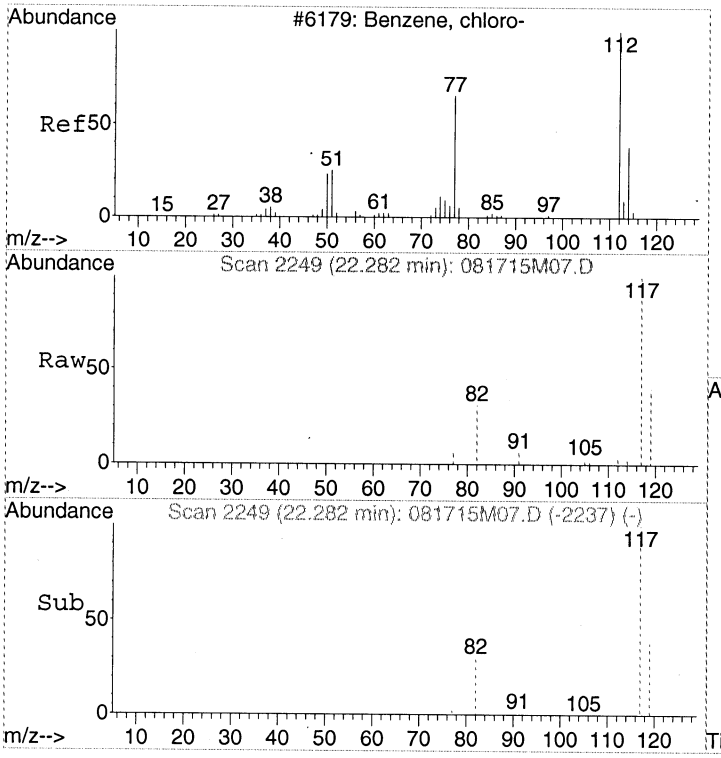


#25
1,2-Dibromoethane (EDB)
Concen: Below Cal
RT: 21.55 min Scan# 2157
Delta R.T. -0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion:107 Resp: 59

Ion	Ratio	Lower	Upper
107	100		
109	100.0	74.3	114.3
27	0.0	30.6	70.6#

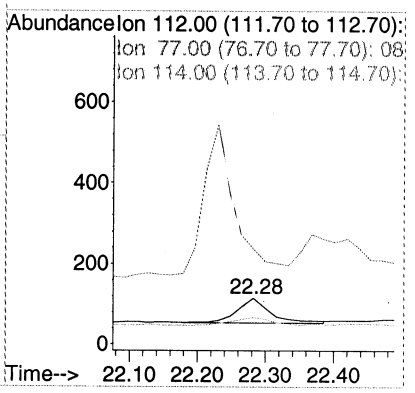


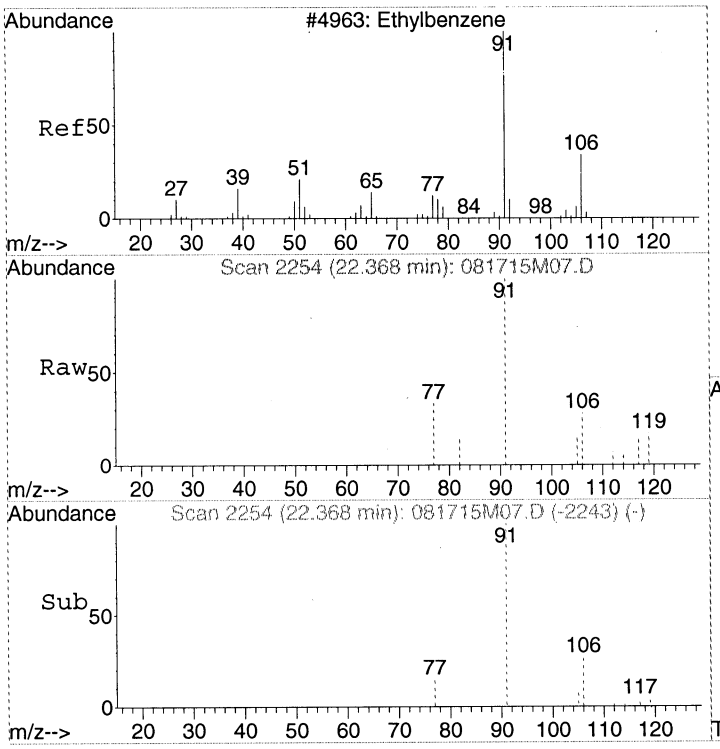


#26
Chlorobenzene
Concen: Below Cal
RT: 22.28 min Scan# 2249
Delta R.T. -0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion:112 Resp: 210

Ion	Ratio	Lower	Upper
112	100		
77	0.0	39.3	79.3#
114	36.7	12.1	52.1

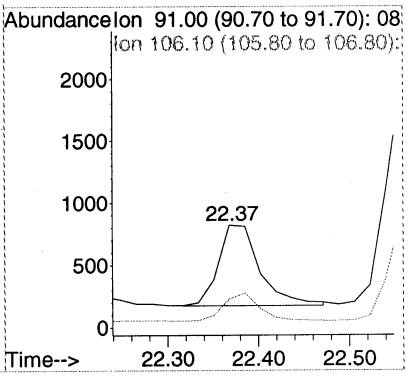


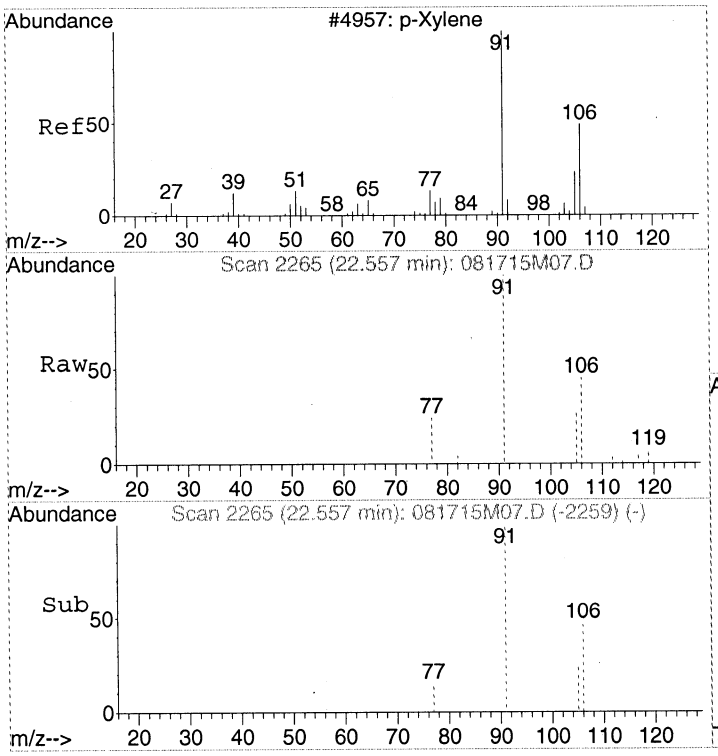


#27
Ethylbenzene
Concen: Below Cal
RT: 22.37 min Scan# 2254
Delta R.T. -0.02 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion: 91 Resp: 2050

Ion	Ratio	Lower	Upper
91	100		
106	29.9	11.4	51.4

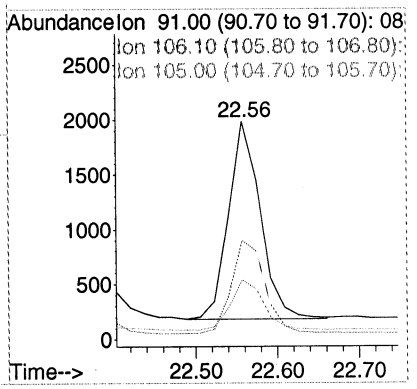


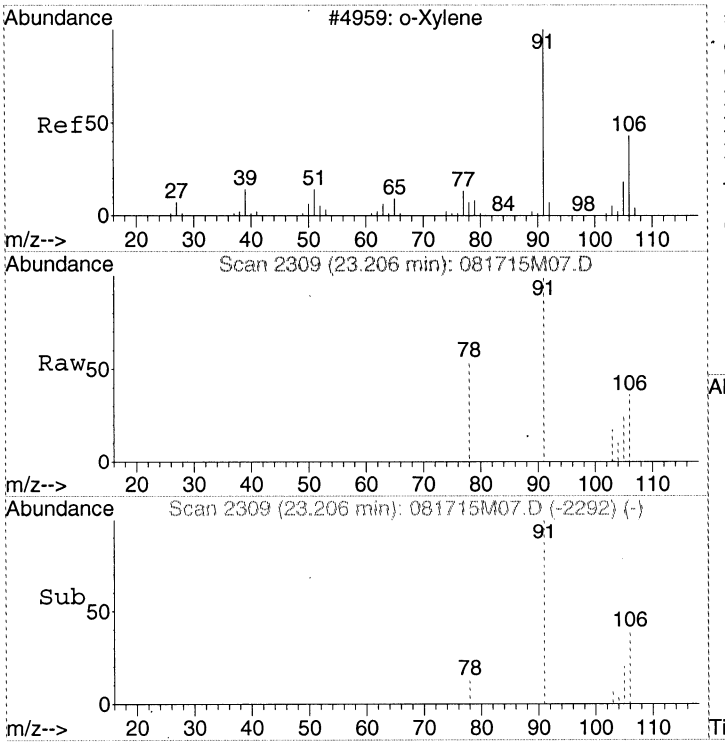


#28
m&p-Xylene
Concen: Below Cal
RT: 22.56 min Scan# 2265
Delta R.T. -0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion: 91 Resp: 4856

Ion	Ratio	Lower	Upper
91	100		
106	48.6	29.5	69.5
105	25.7	3.7	43.7

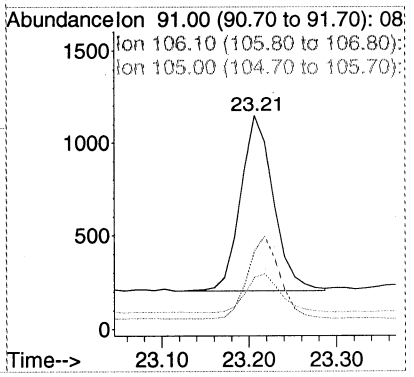


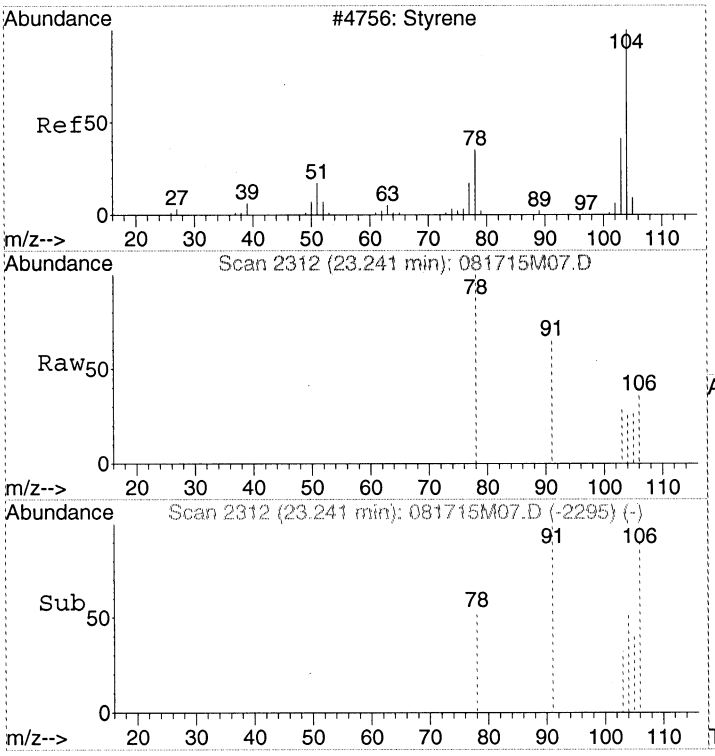


#29
o-Xylene
Concen: Below Cal
RT: 23.21 min Scan# 2309
Delta R.T. -0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion: 91 Resp: 2457

Ion	Ratio	Lower	Upper
91	100		
106	45.3	26.0	66.0
105	22.7	6.3	46.3

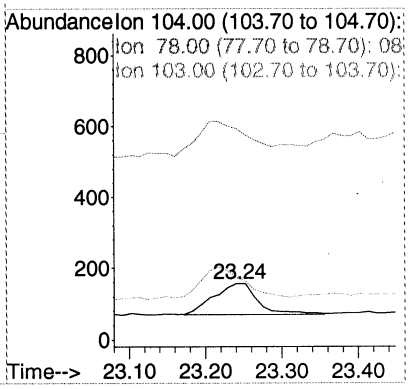


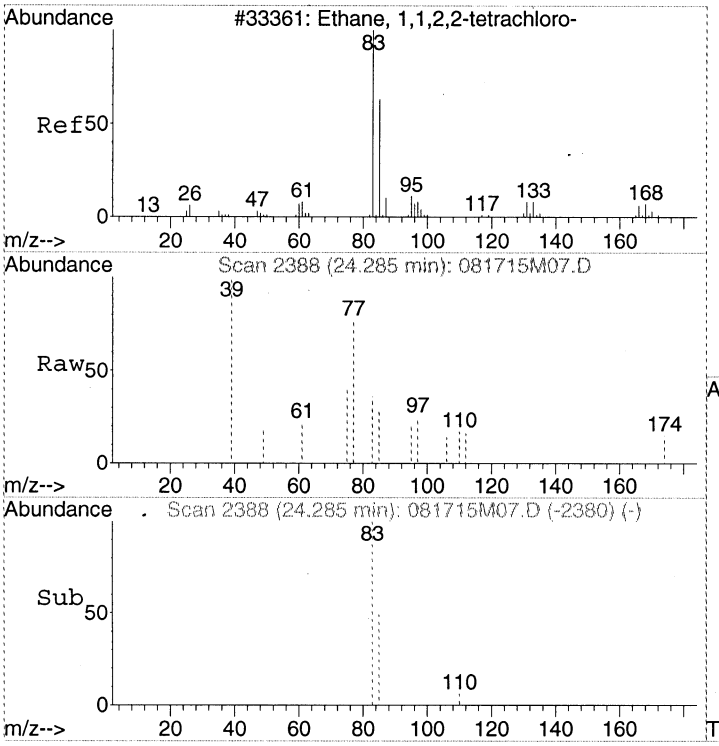


#30
Styrene
Concen: Below Cal
RT: 23.24 min Scan# 2312
Delta R.T. -0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion:104 Resp: 353

Ion	Ratio	Lower	Upper
104	100		
78	0.0	33.4	73.4#
103	0.0	34.8	74.8#

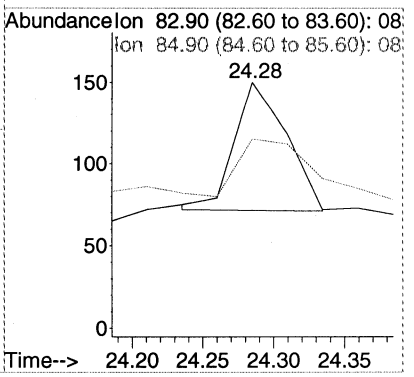


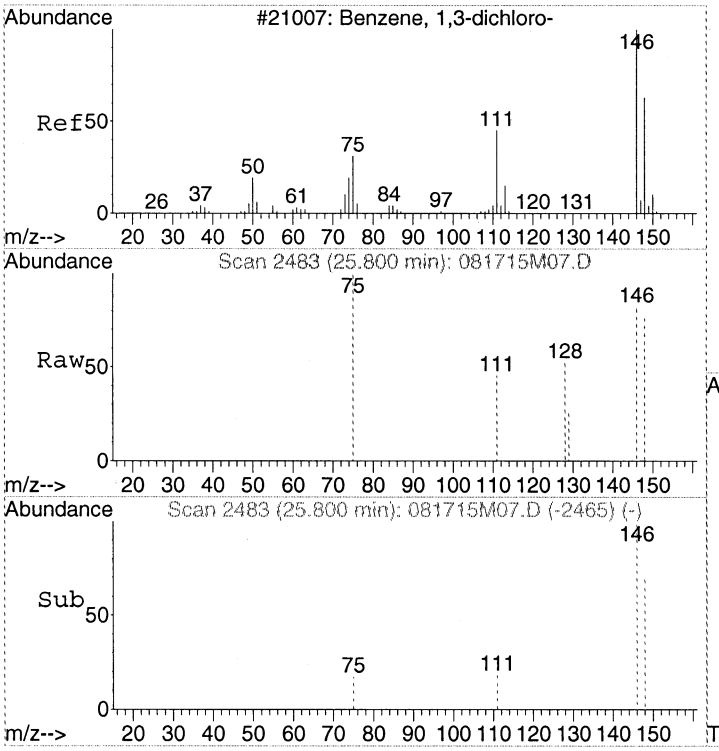


#31
1,1,2,2-Tetrachloroethane
Concen: Below Cal
RT: 24.28 min Scan# 2388
Delta R.T. -0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion: 83 Resp: 198

Ion	Ratio	Lower	Upper
83	100		
85	68.2	43.6	83.6

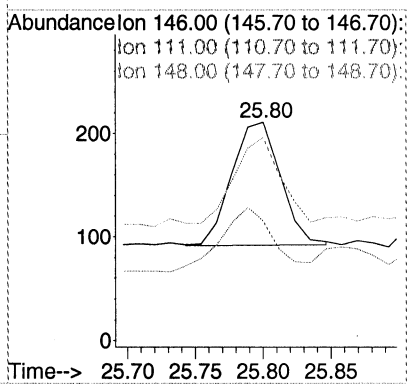


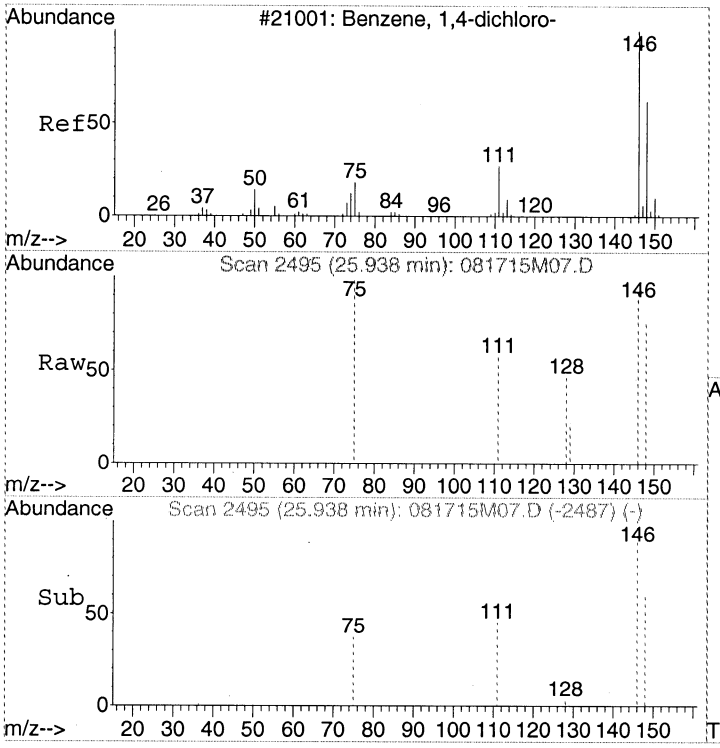


#32
1,3-Dichlorobenzene
Concen: Below Cal
RT: 25.80 min Scan# 2483
Delta R.T. 0.01 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion:146 Resp: 301

Ion	Ratio	Lower	Upper
146	100		
111	56.1	18.6	58.6
148	65.1	44.1	84.1

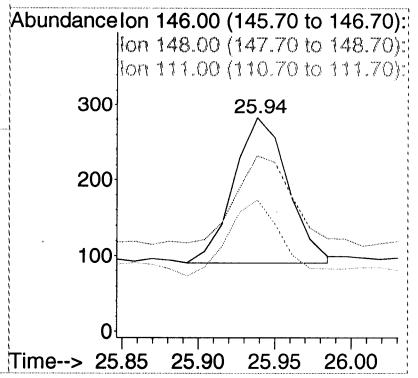


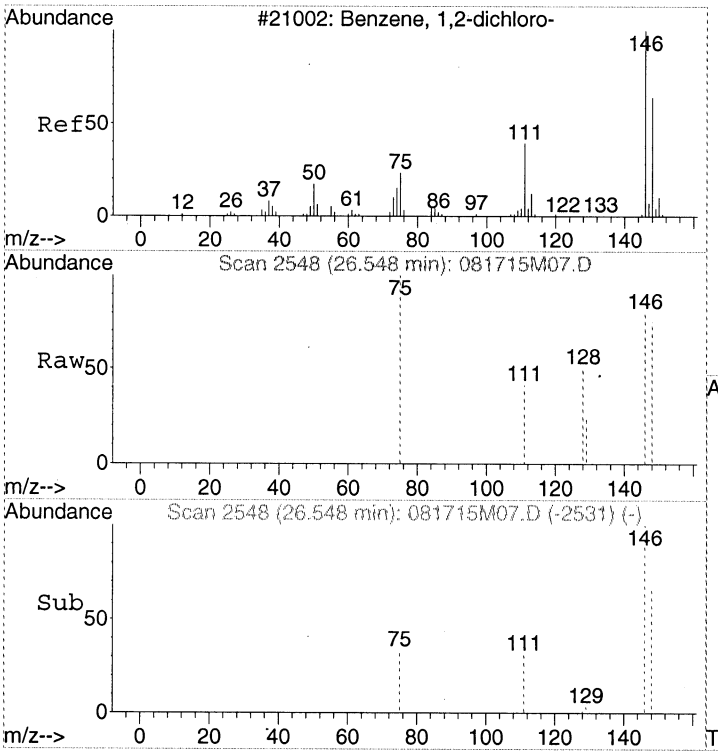


#33
1,4-Dichlorobenzene
Concen: Below Cal
RT: 25.94 min Scan# 2495
Delta R.T. -0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion:146 Resp: 476

Ion	Ratio	Lower	Upper
146	100		
148	64.9	43.9	83.9
111	50.8	16.7	56.7

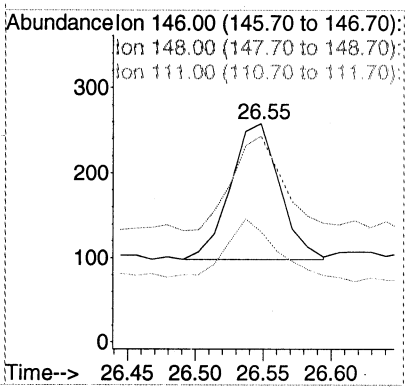




#34
1,2-Dichlorobenzene
Concen: Below Cal
RT: 26.55 min Scan# 2548
Delta R.T. -0.00 min
Lab File: 081715M07.D
Acq: 17 Aug 2015 3:45 pm

Tgt Ion:146 Resp: 405

Ion	Ratio	Lower	Upper
146	100		
148	73.1	43.8	83.8
111	51.6	20.0	60.0



Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081715MAA\
Data File : 081715M08.D
Acq On : 17 Aug 2015 4:41 pm
InstName : AG5973M
Operator : LLH
Sample : 1508028-14RE1
Misc : 600ml 600National-Trench1
ALS Vial : 6 Sample Multiplier: 1.48

Report

Quant Time: Aug 18 09:39:31 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration

with Late Eluters

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.24	49	61750	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.30	114	118418	375.00 pptv	-0.01
21) CHLOROBENZENE-d5	22.25	117	116167	341.00 pptv	0.00

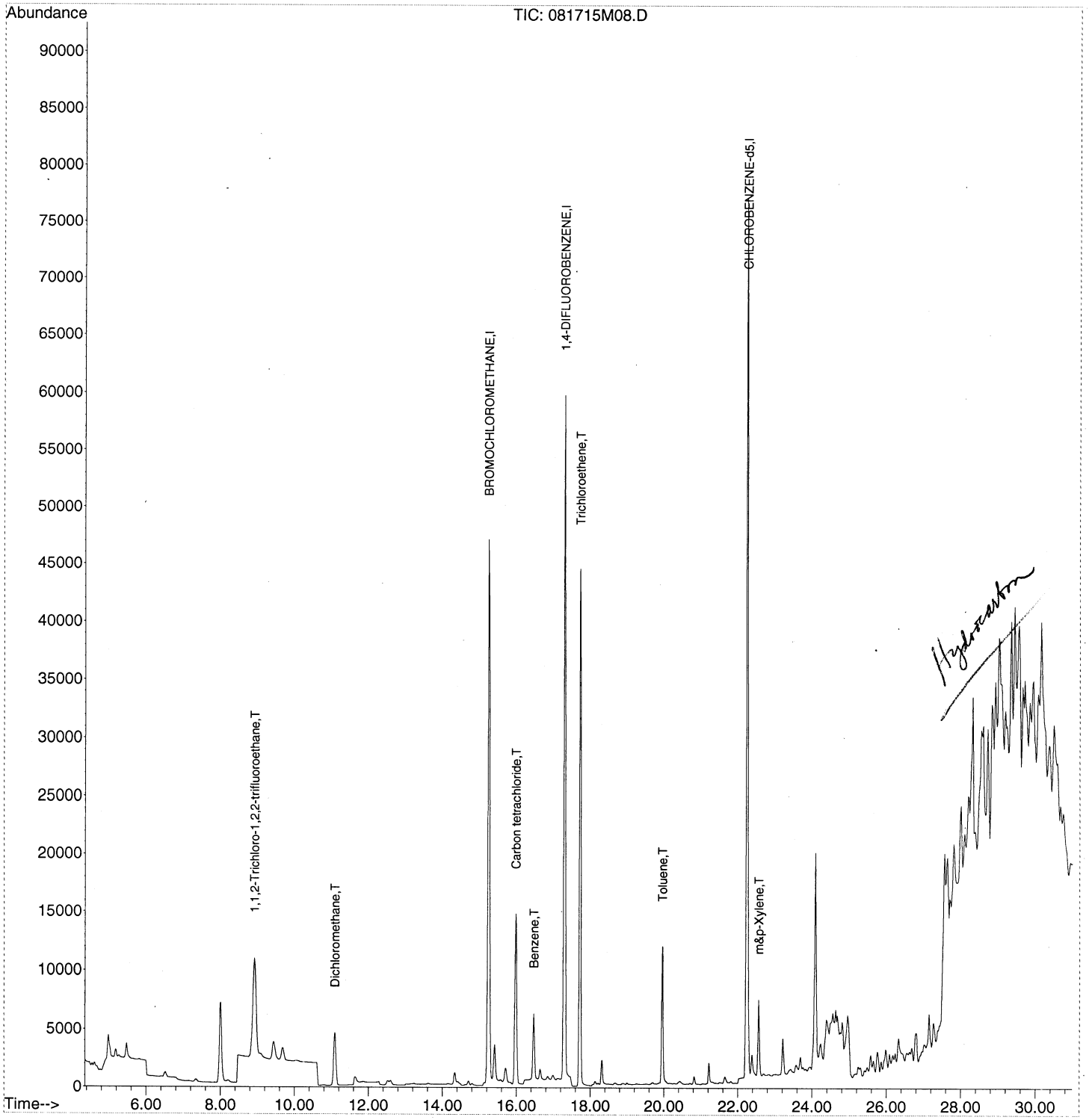
Target Compounds					Qvalue	
2) Vinyl chloride	5.09	62	37	N.D.		
3) 1,3-Butadiene	5.18	54	650	N.D.		
4) Bromoethene	6.96	106	5	N.D.		
5) 1,1,2-Trichloro-1,2,2-trif	8.92	151	18704	55.17 pptv	99	
6) 1,1-Dichloroethene	8.94	61	45	N.D.		
7) Dichloromethane	11.09	49	8636	46.50 pptv	97	NT
8) tert-Butyl methyl ether (M	11.82	73	31	N.D.		
9) trans-1,2-Dichloroethene	11.85	61	101	N.D.		
10) Hexane	12.52	57	912	N.D.		
11) 1,1-Dichloroethane	13.24	63	139	N.D.		
12) cis-1,2-Dichloroethene	14.71	96	441	N.D.		
13) Chloroform	15.41	83	3600	N.D.		
14) 1,1,1-Trichloroethane	15.71	97	1996	N.D.		
15) Carbon tetrachloride	15.98	117	26450	63.86 pptv	97	NT
17) Benzene	16.47	78	11821	34.75 pptv	100	
18) 1,2-Dichloroethane	16.64	62	1425	N.D.		
19) Trichloroethene	17.72	130	42562	305.13 pptv	99	
20) 1,2-Dichloropropane	18.21	63	127	N.D.		
22) Toluene	19.95	91	19243	61.76 pptv	96	
23) 1,1,2-Trichloroethane	20.71	97	93	N.D.		
24) Tetrachloroethene	20.81	166	492	N.D.		
25) 1,2-Dibromoethane (EDB)	21.55	107	68	N.D.		
26) Chlorobenzene	22.28	112	232	N.D.		
27) Ethylbenzene	22.37	91	3731	N.D.		
28) m&p-Xylene	22.56	91	9056	28.48 pptv	98	
29) o-Xylene	23.21	91	4482	N.D.		
30) Styrene	23.24	104	757	N.D.		
31) 1,1,2,2-Tetrachloroethane	24.24	83	1106	N.D.		
32) 1,3-Dichlorobenzene	25.79	146	438	N.D.		
33) 1,4-Dichlorobenzene	25.94	146	654	N.D.		
34) 1,2-Dichlorobenzene	26.55	146	683	N.D.		

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

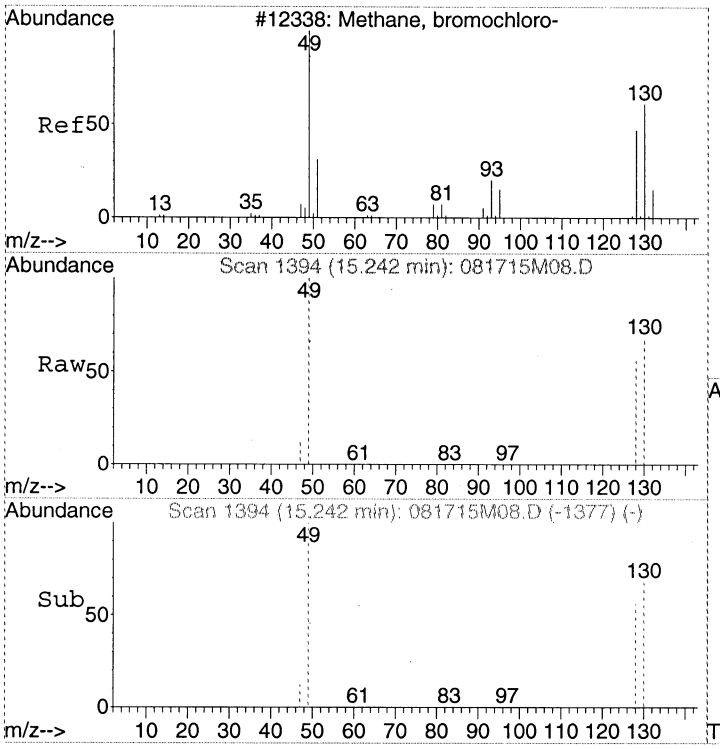
Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081715MAA\
Data File : 081715M08.D
Acq On : 17 Aug 2015 4:41 pm
InstName : AG5973M
Operator : LLH
Sample : 1508028-14RE1
Misc : 600ml 600National-Trench1
ALS Vial : 6 Sample Multiplier: 1.48

Quant Time: Aug 18 09:39:31 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration



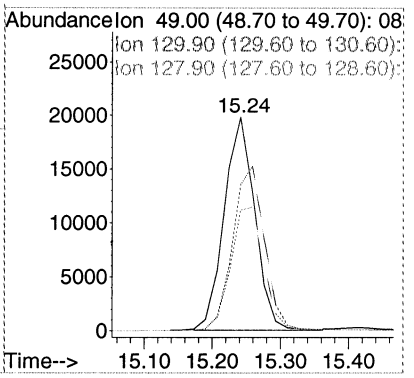
00170

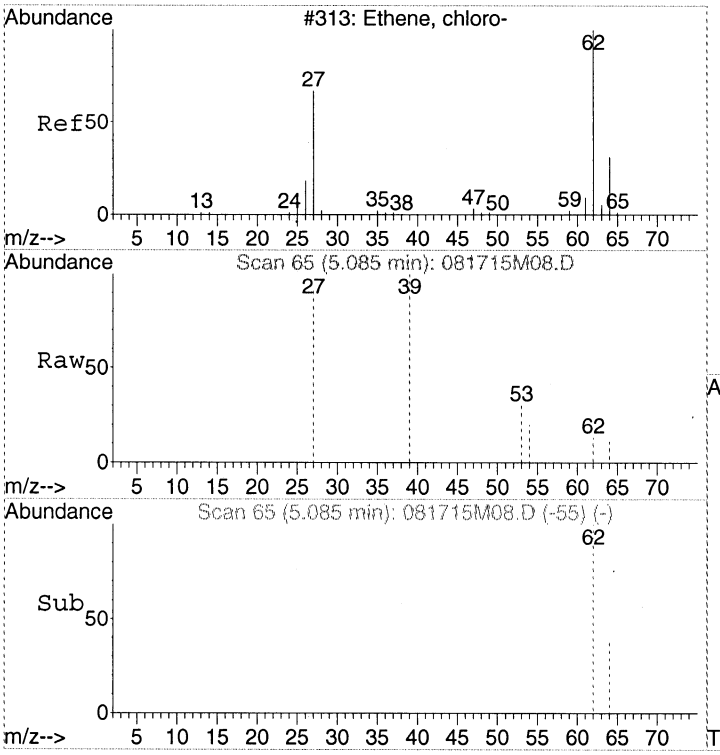


#1
BROMOCHLOROMETHANE
Concen: 341.00 pptv
RT: 15.24 min Scan# 1394
Delta R.T. 0.00 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion: 49 Resp: 61750

Ion	Ratio	Lower	Upper
49	100		
130	79.6	65.3	105.3
128	62.0	46.2	86.2

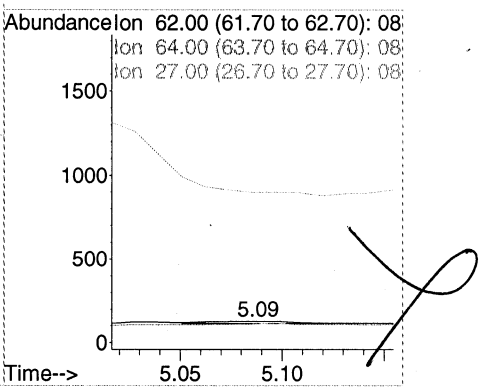


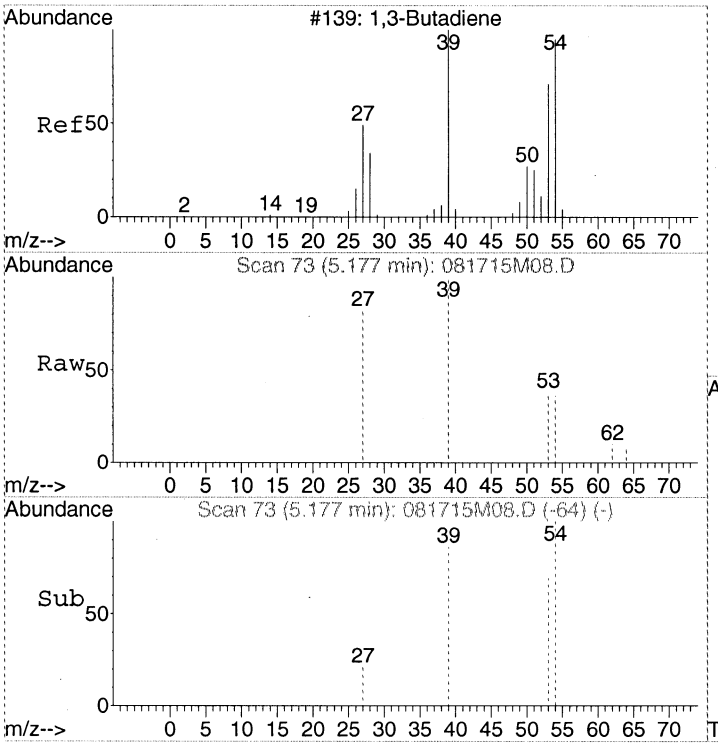


#2
Vinyl chloride
Concen: Below Cal
RT: 5.09 min Scan# 65
Delta R.T. -0.00 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion: 62 Resp: 37

Ion	Ratio	Lower	Upper
62	100		
64	70.3	11.8	51.8#
27	0.0	28.9	68.9#

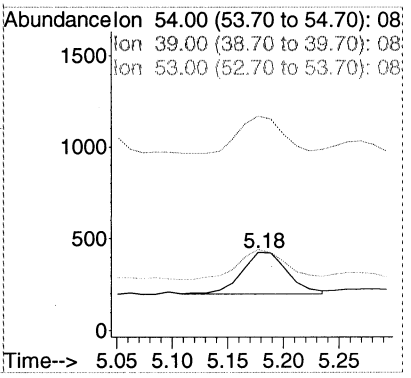


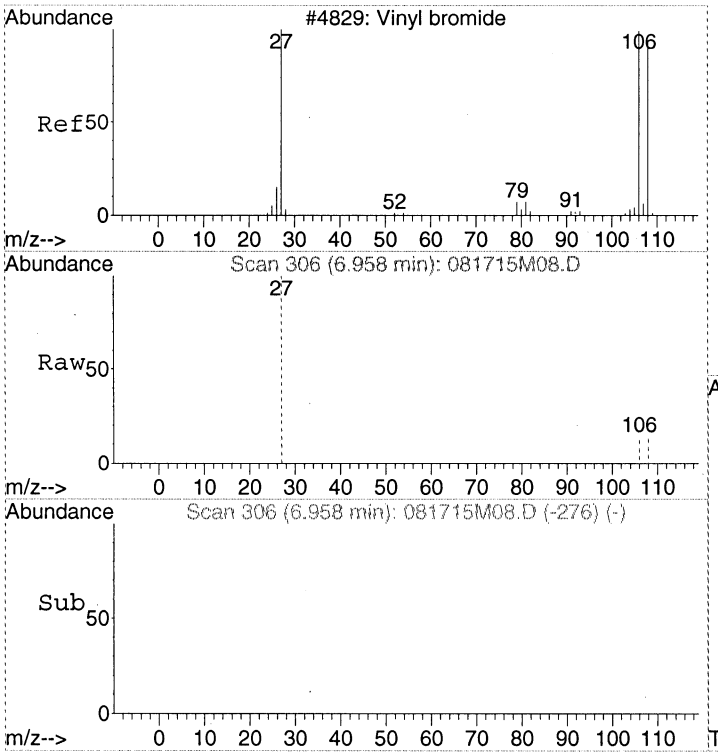


#3
1,3-Butadiene
Concen: Below Cal
RT: 5.18 min Scan# 73
Delta R.T. -0.01 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion: 54 Resp: 650

Ion	Ratio	Lower	Upper
54	100		
39	82.6	76.7	116.7
53	74.5	48.8	88.8

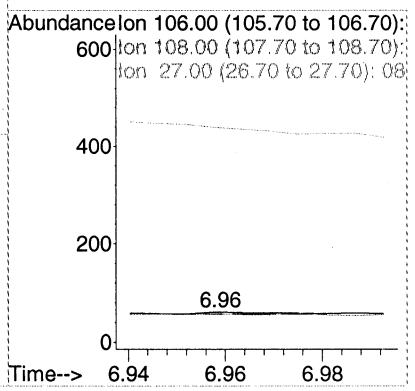


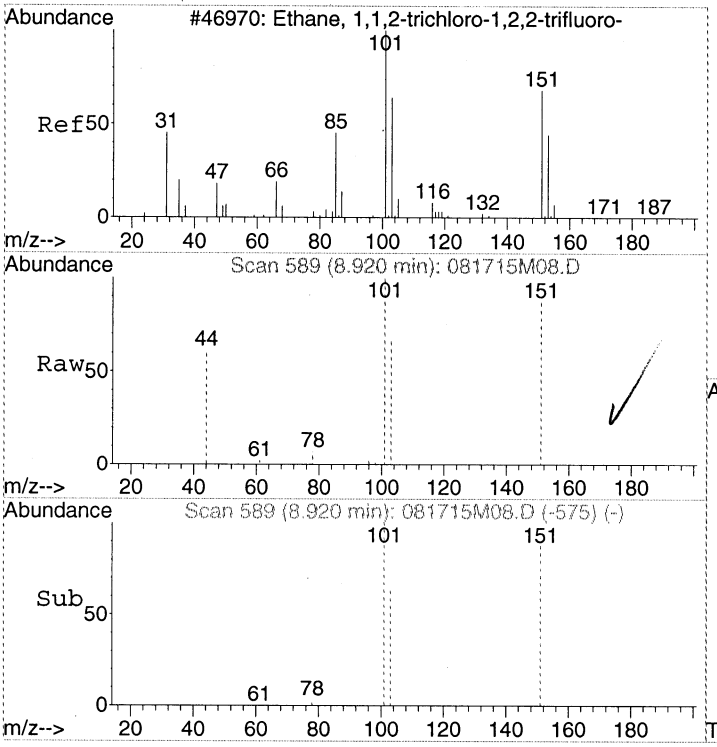


#4
Bromoethene
Concen: Below Cal
RT: 6.96 min Scan# 306
Delta R.T. -0.02 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion:106 Resp: 5

Ion	Ratio	Lower	Upper
106	100		
108	0.0	0.0	214.6
27	0.0	56.6	96.6#

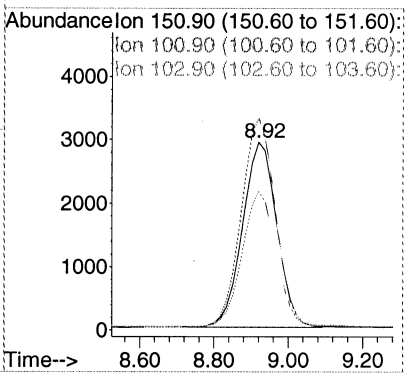


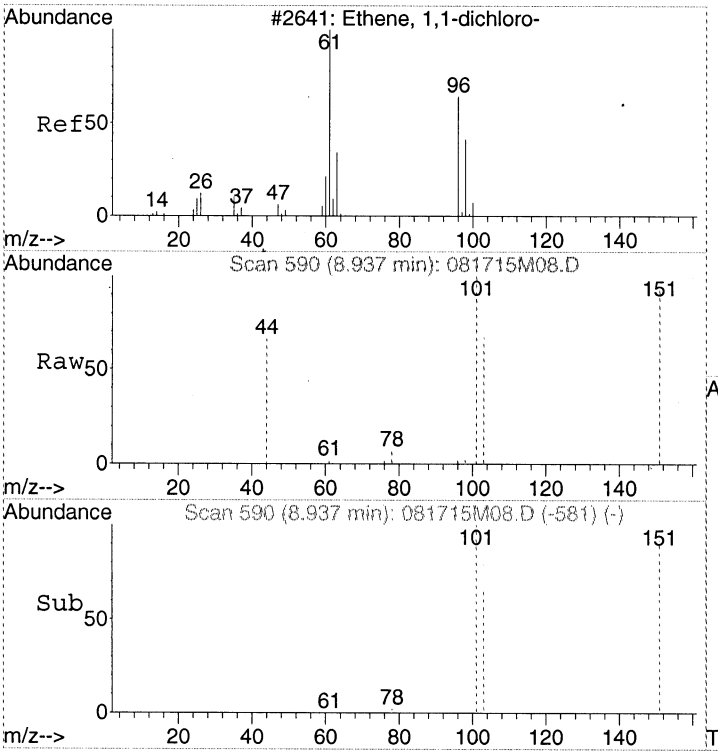


#5
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 55.17 pptv
RT: 8.92 min Scan# 589
Delta R.T. -0.02 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion:151 Resp: 18704

Ion	Ratio	Lower	Upper
151	100		
101	112.4	90.9	130.9
103	72.3	51.0	91.0

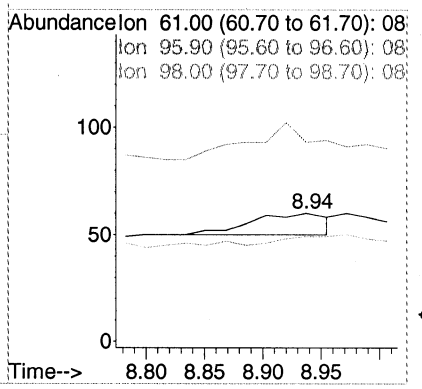


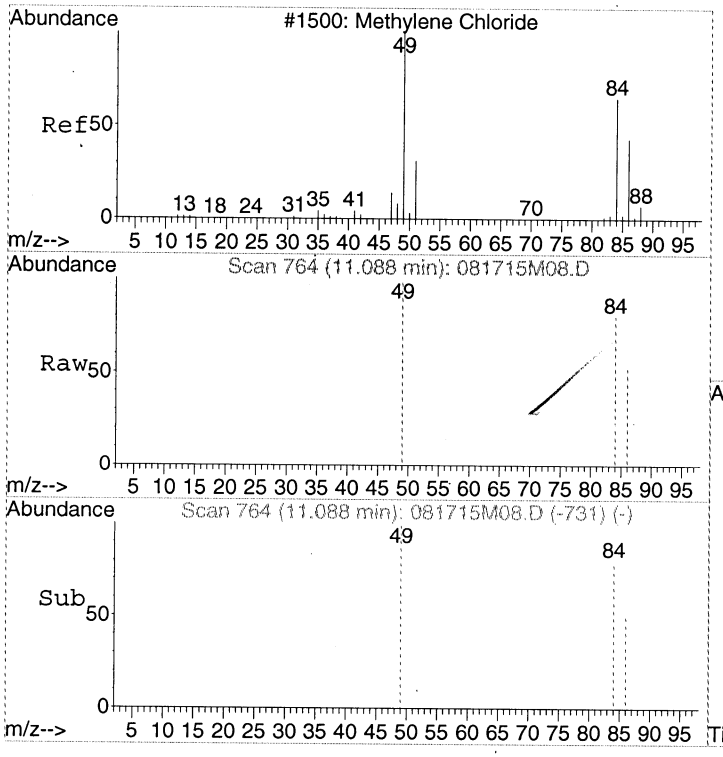


#6
1,1-Dichloroethene
Concen: Below Cal
RT: 8.94 min Scan# 590
Delta R.T. -0.05 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion: 61 Resp: 45

Ion	Ratio	Lower	Upper
61	100		
96	37.8	43.2	83.2#
98	0.0	20.1	60.1#

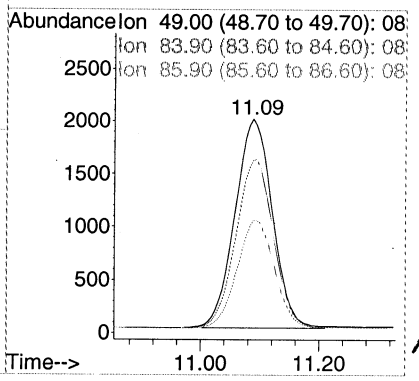


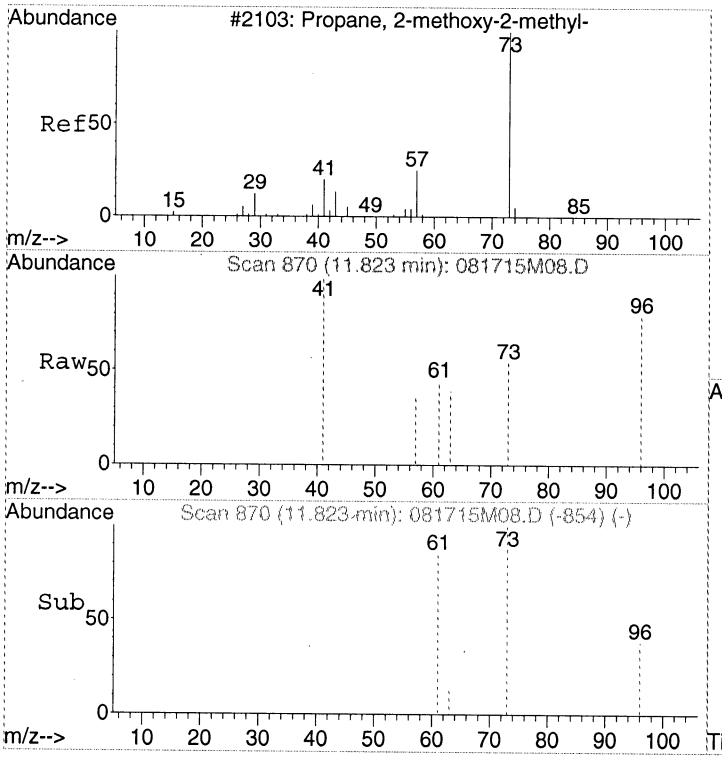


#7
Dichloromethane
Concen: 46.50 pptv
RT: 11.09 min Scan# 764
Delta R.T. -0.01 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion: 49 Resp: 8636

Ion	Ratio	Lower	Upper
49	100		
84	81.3	64.2	104.2
86	51.7	34.0	74.0

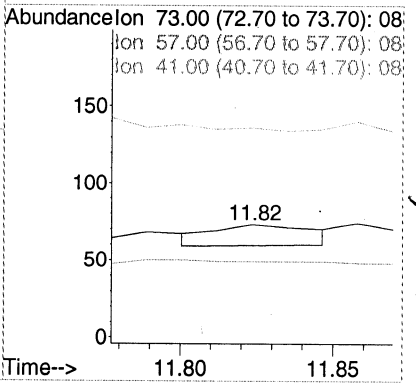


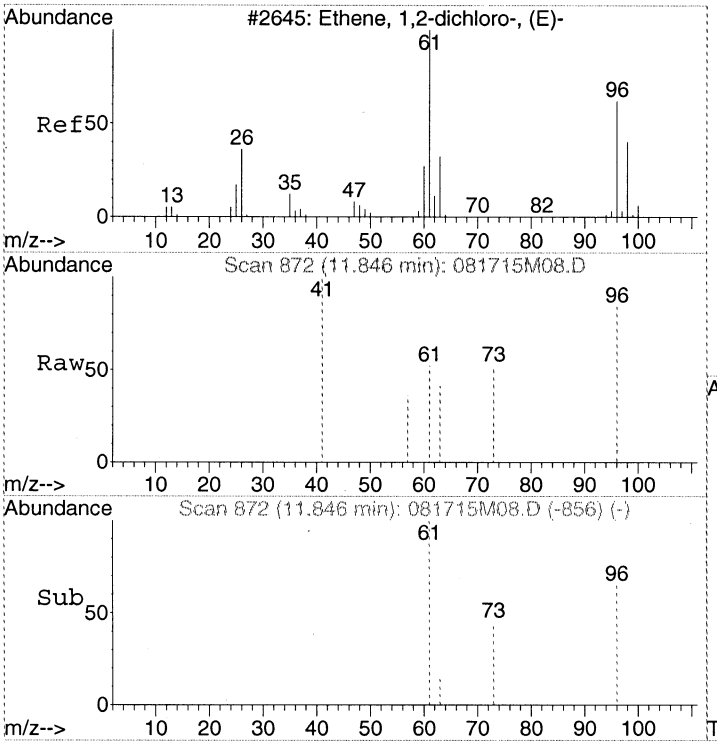


#8
tert-Butyl methyl ether (MTBE)
Concen: Below Cal
RT: 11.82 min Scan# 870
Delta R.T. -0.01 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion: 73 Resp: 31

Ion	Ratio	Lower	Upper
73	100		
57	0.0	2.0	42.0#
41	0.0	13.3	53.3#

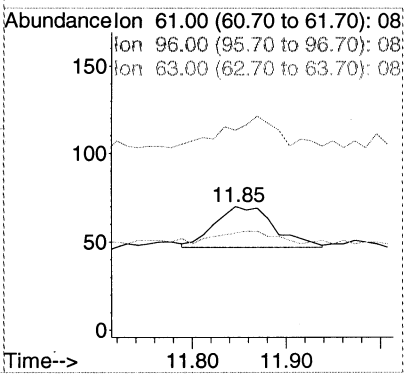


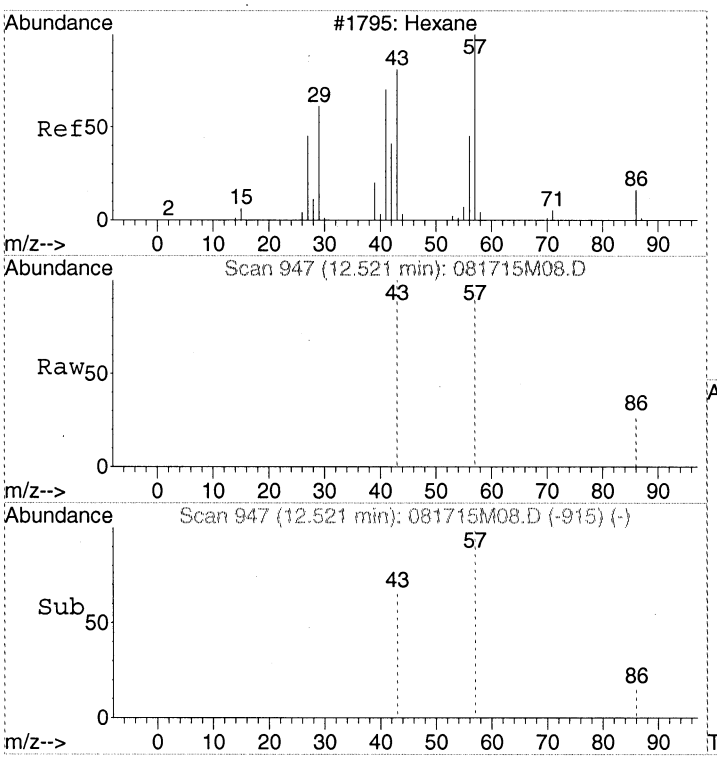


#9
trans-1,2-Dichloroethene
Concen: Below Cal
RT: 11.85 min Scan# 872
Delta R.T. -0.01 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion: 61 Resp: 101

Ion	Ratio	Lower	Upper
61	100		
96	0.0	53.4	93.4#
63	28.7	12.2	52.2

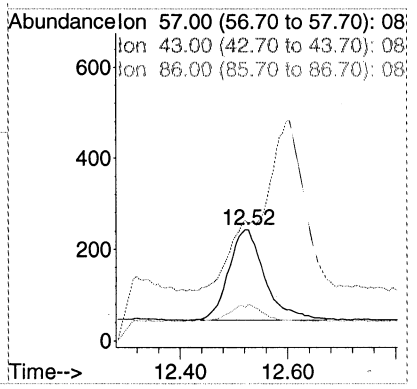


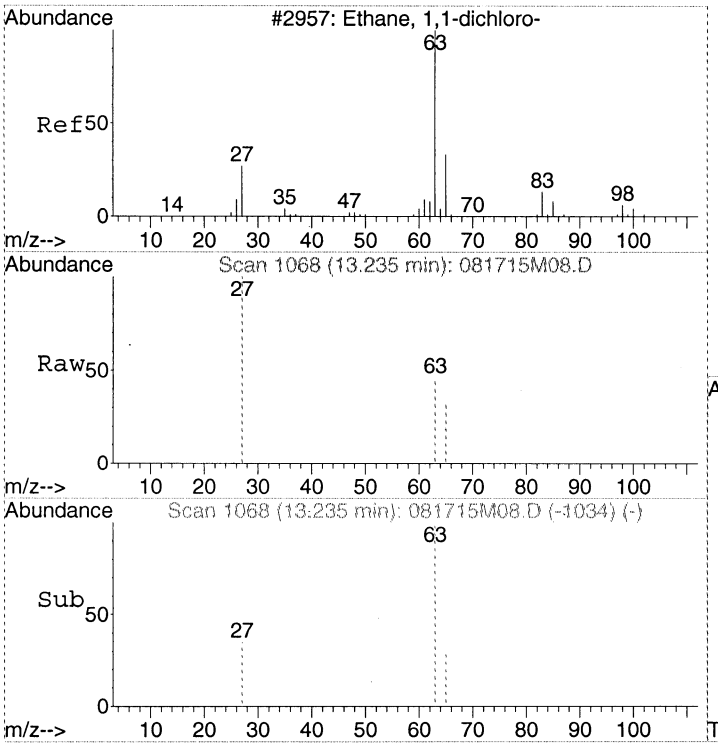


#10
Hexane
Concen: Below Cal
RT: 12.52 min Scan# 947
Delta R.T. -0.01 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion: 57 Resp: 912

Ion	Ratio	Lower	Upper
57	100		
43	43.4	46.4	86.4#
86	8.1	0.0	38.0

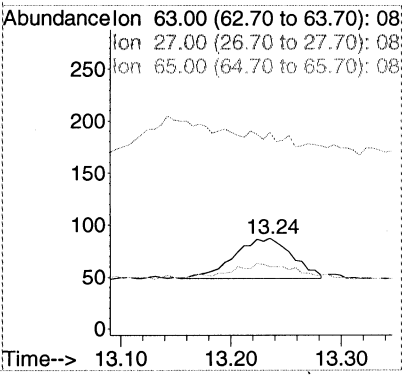


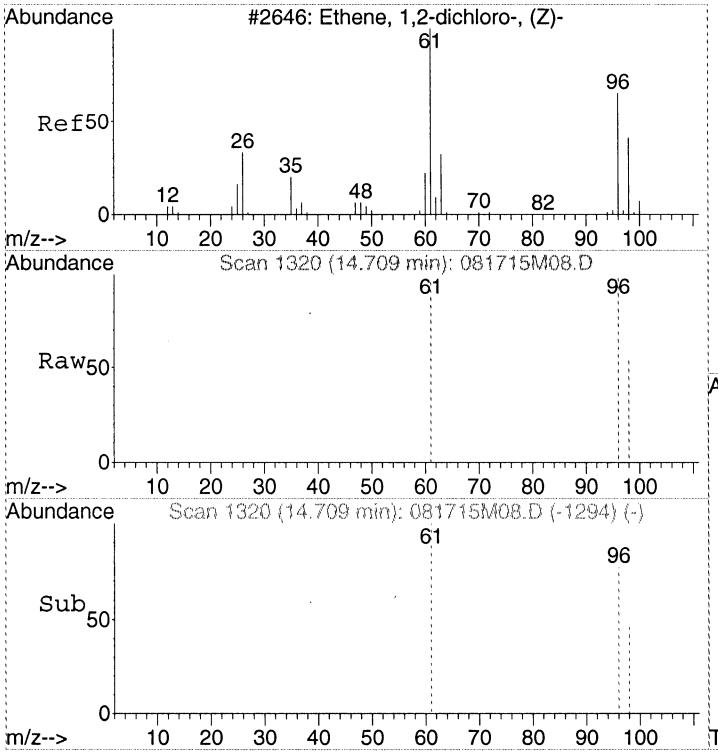


#11
1,1-Dichloroethane
Concen: Below Cal
RT: 13.24 min Scan# 1068
Delta R.T. 0.00 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion: 63 Resp: 139

Ion	Ratio	Lower	Upper
63	100		
27	7.2	9.1	49.1#
65	0.0	11.6	51.6#

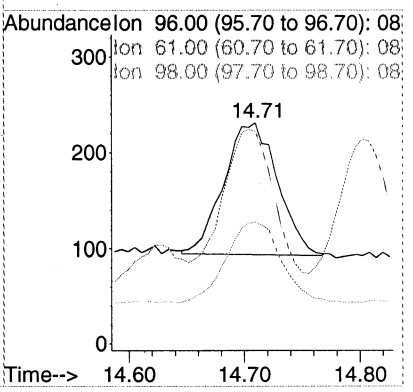


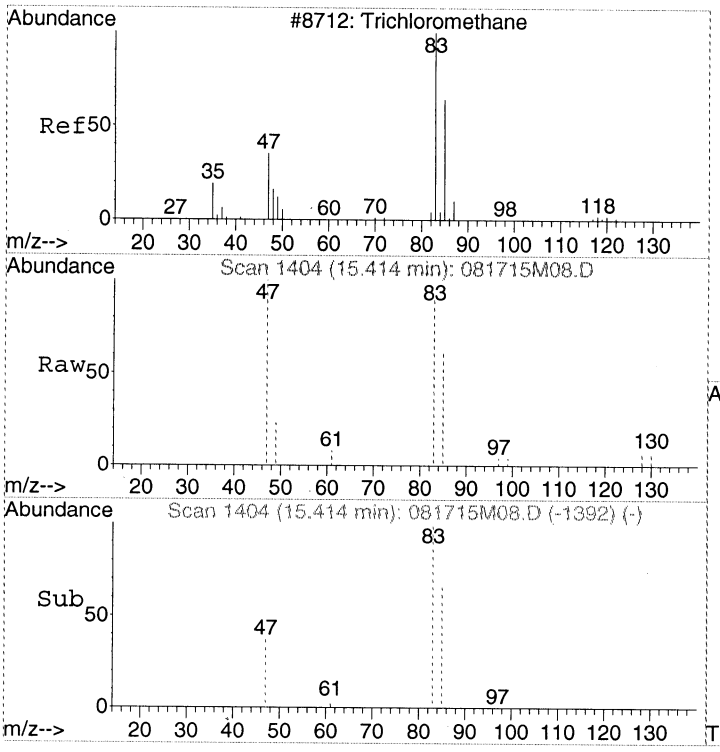


#12
cis-1,2-Dichloroethene
Concen: Below Cal
RT: 14.71 min Scan# 1320
Delta R.T. 0.00 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion: 96 Resp: 441

Ion	Ratio	Lower	Upper
96	100		
61	101.8	104.7	144.7#
98	64.6	43.7	83.7

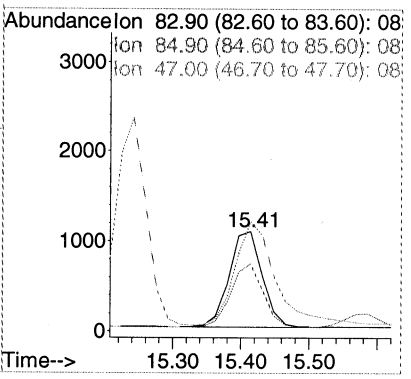


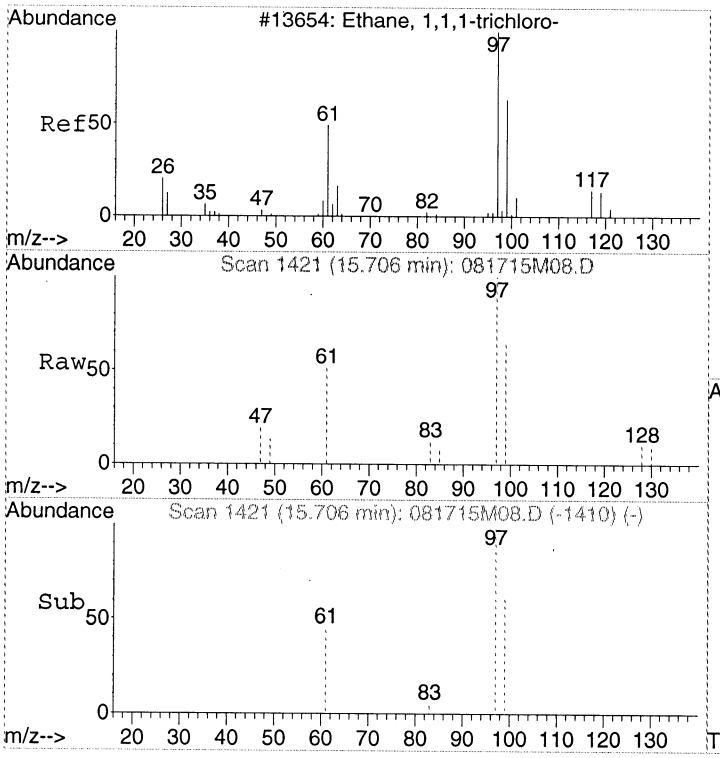


#13
Chloroform
Concen: Below Cal
RT: 15.41 min Scan# 1404
Delta R.T. 0.00 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion: 83 Resp: 3600

Ion	Ratio	Lower	Upper
83	100		
85	64.1	44.8	84.8
47	133.7	4.4	44.4#

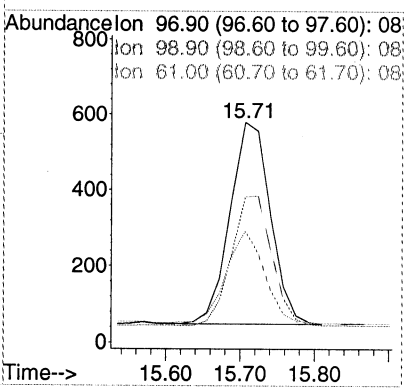


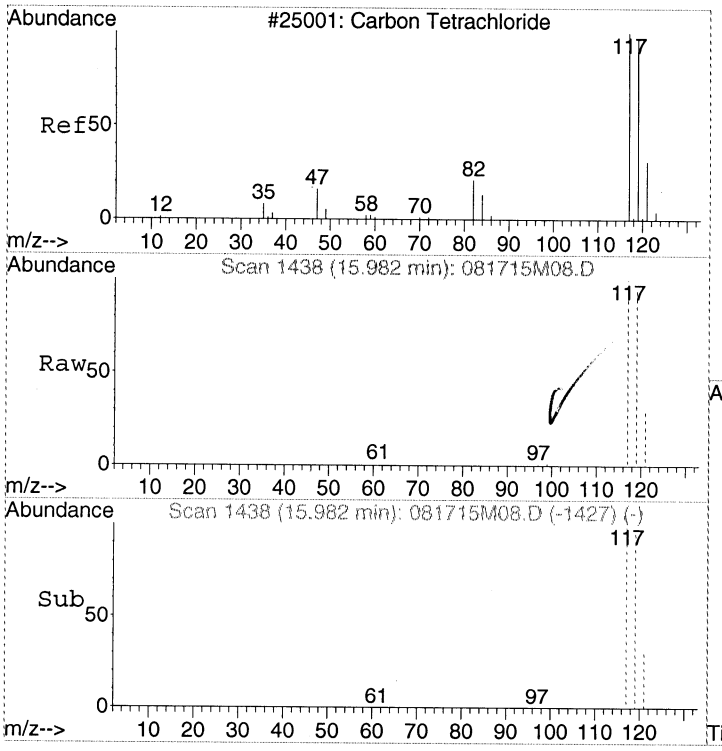


#14
1,1,1-Trichloroethane
Concen: Below Cal
RT: 15.71 min Scan# 1421
Delta R.T. -0.02 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion: 97 Resp: 1996

Ion	Ratio	Lower	Upper
97	100		
99	64.4	44.5	84.5
61	43.5	21.7	61.7

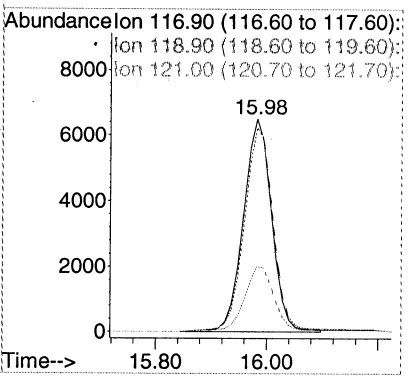


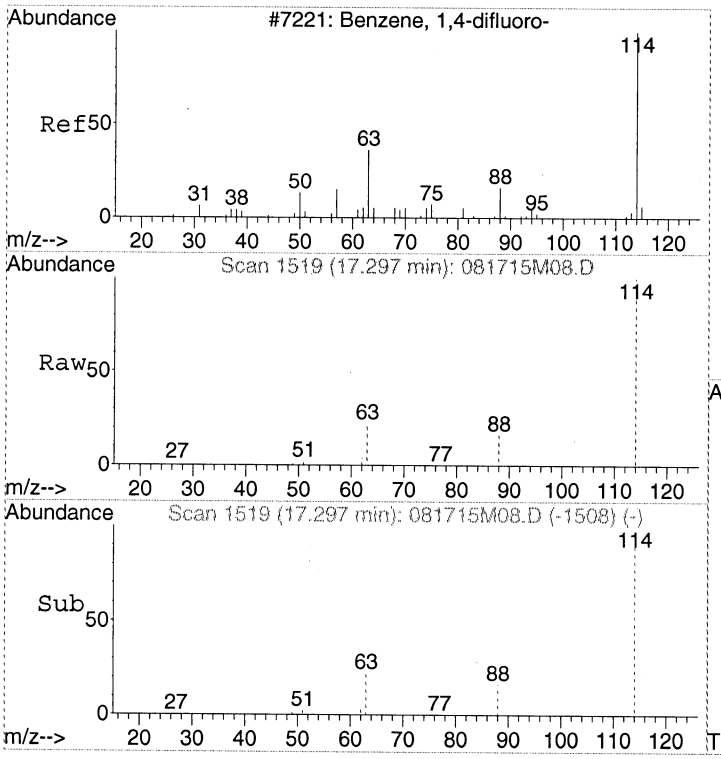


#15
Carbon tetrachloride
Concen: 63.86 pptv
RT: 15.98 min Scan# 1438
Delta R.T. -0.01 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion:117 Resp: 26450

Ion	Ratio	Lower	Upper
117	100		
119	98.4	76.1	116.1
121	32.9	10.7	50.7

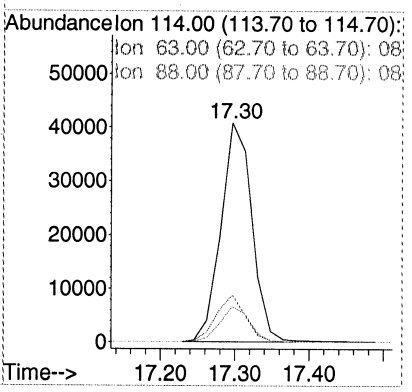


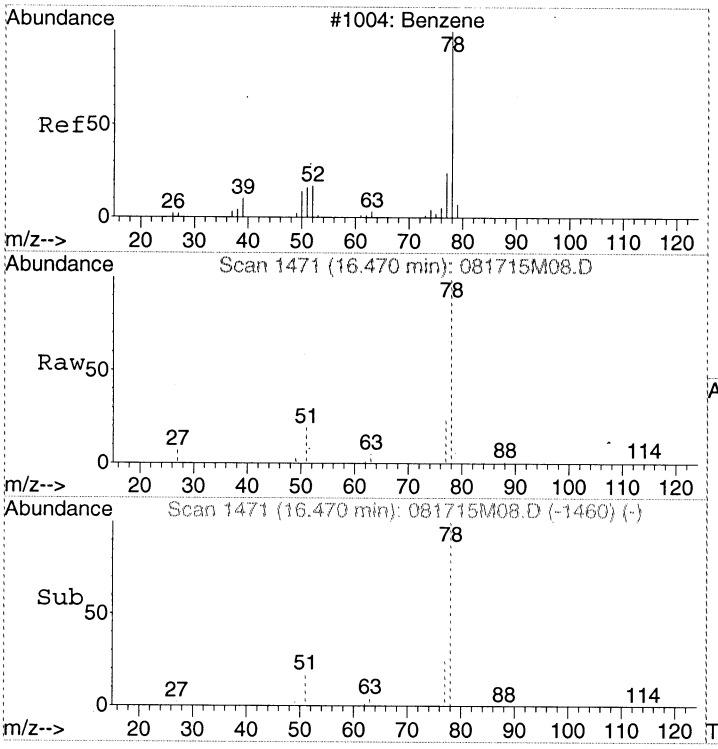


#16
1,4-DIFLUOROBENZENE
Concen: 375.00 pptv
RT: 17.30 min Scan# 1519
Delta R.T. -0.01 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion:114 Resp: 118418

Ion	Ratio	Lower	Upper
114	100		
63	20.5	0.0	39.9
88	15.7	0.0	35.7

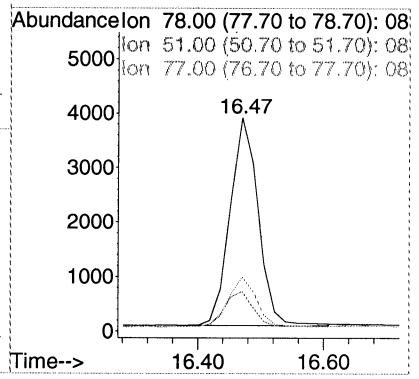


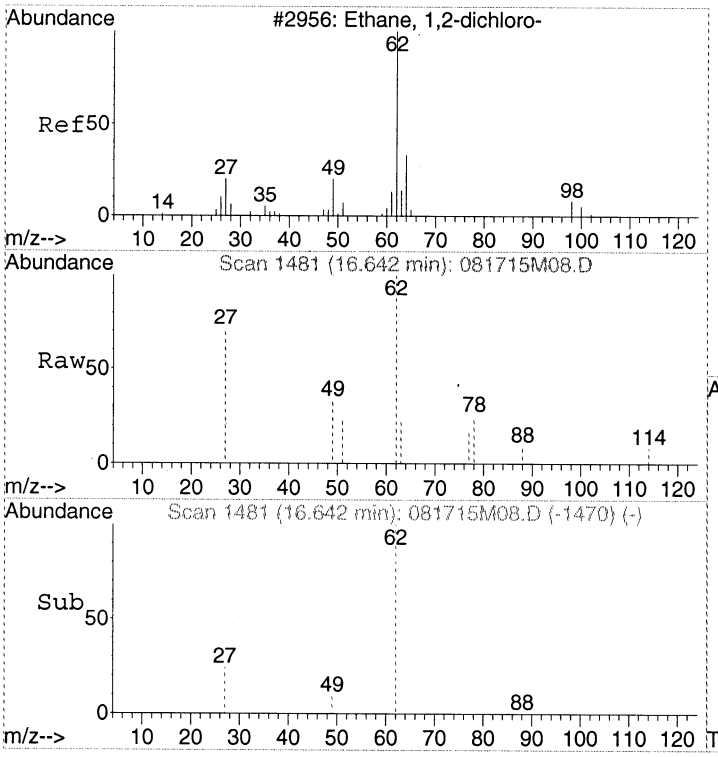


#17
Benzene
Concen: 34.75 pptv
RT: 16.47 min Scan# 1471
Delta R.T. -0.01 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion: 78 Resp: 11821

Ion	Ratio	Lower	Upper
78	100		
51	17.6	0.0	37.6
77	23.8	3.7	43.7

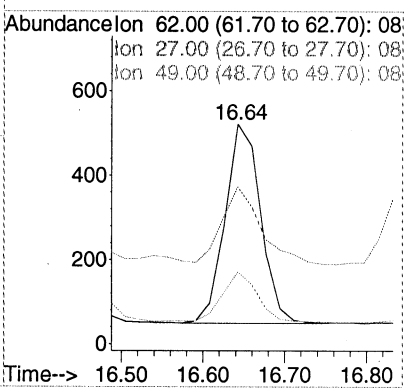


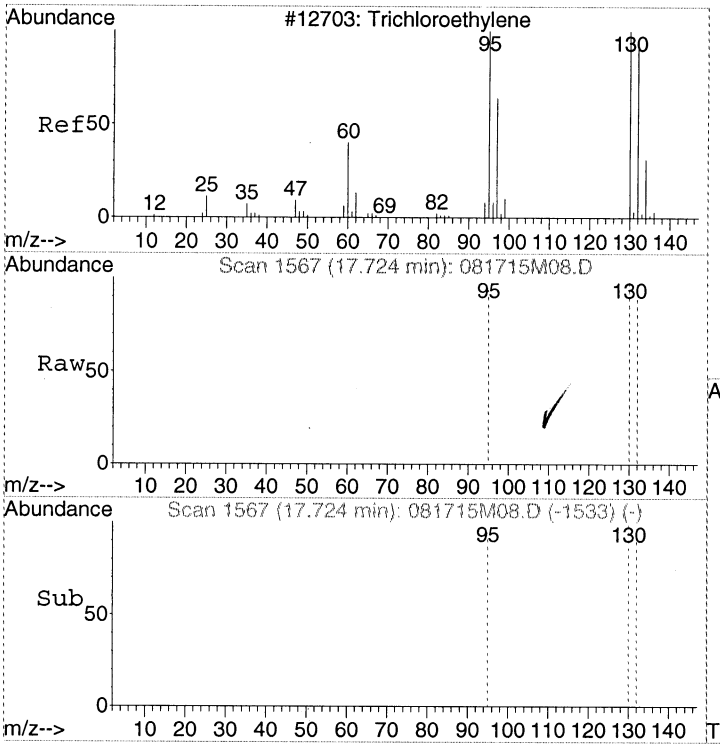


#18
1,2-Dichloroethane
Concen: Below Cal
RT: 16.64 min Scan# 1481
Delta R.T. -0.01 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion: 62 Resp: 1425

Ion	Ratio	Lower	Upper
62	100		
27	43.2	13.3	53.3
49	25.8	4.7	44.7

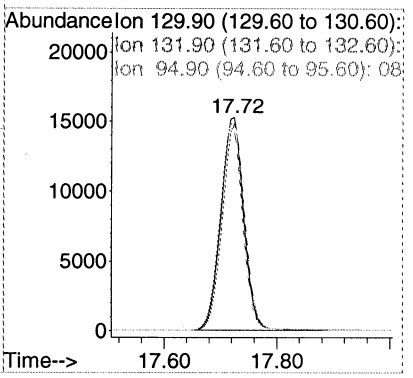


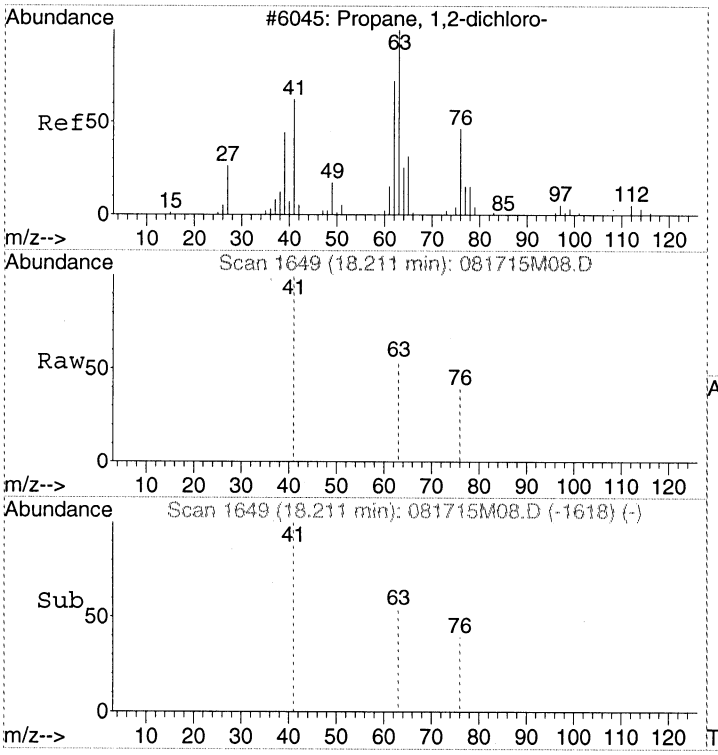


#19
Trichloroethene
Concen: 305.13 pptv
RT: 17.72 min Scan# 1567
Delta R.T. 0.00 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion:130 Resp: 42562

Ion	Ratio	Lower	Upper
130	100		
132	96.2	76.3	116.3
95	96.8	75.2	115.2

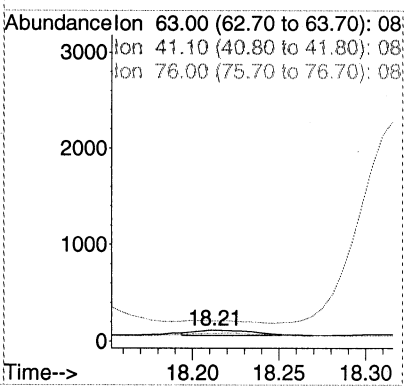


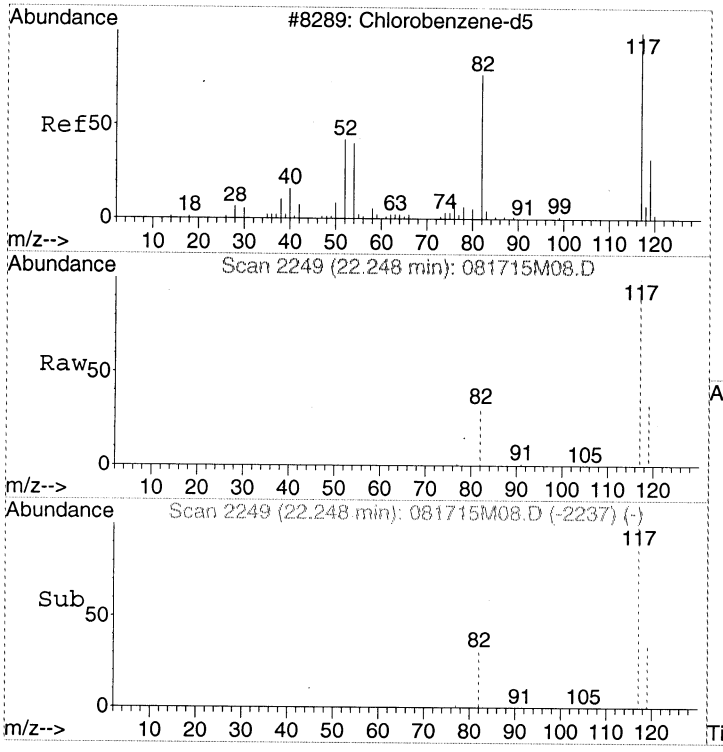


#20
1,2-Dichloropropane
Concen: Below Cal
RT: 18.21 min Scan# 1649
Delta R.T. -0.01 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion: 63 Resp: 127

Ion	Ratio	Lower	Upper
63	100		
41	0.0	43.1	83.1#
76	0.0	31.6	71.6#

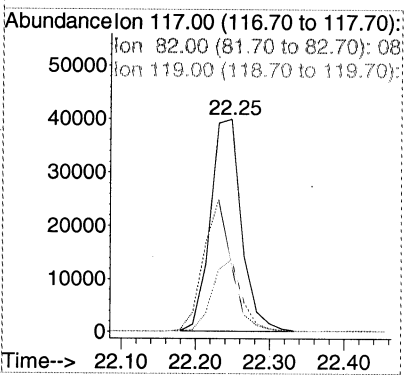


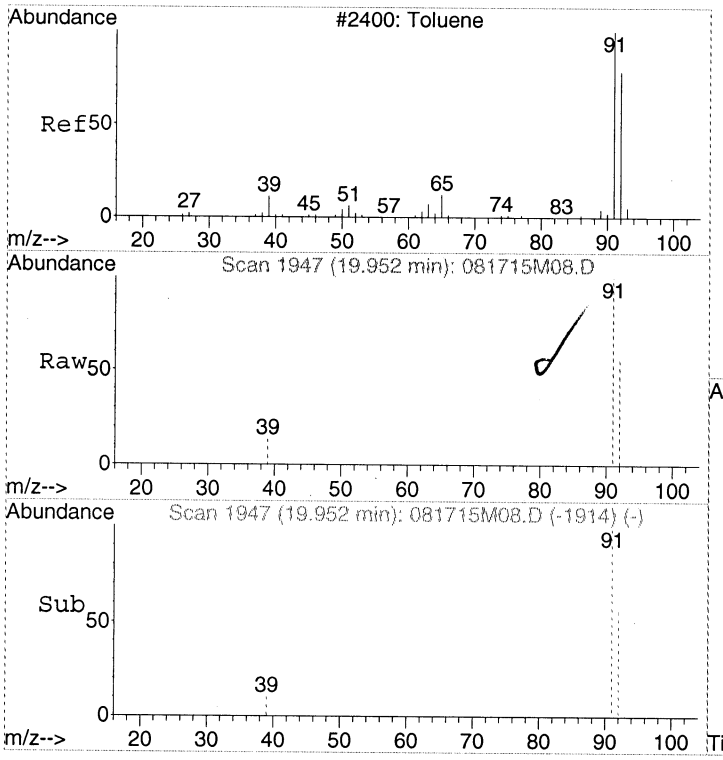


#21
CHLOROBENZENE-d5
Concen: 341.00 pptv
RT: 22.25 min Scan# 2249
Delta R.T. 0.00 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion:117 Resp: 116167

Ion	Ratio	Lower	Upper
117	100		
82	56.0	34.9	74.9
119	32.3	12.1	52.1

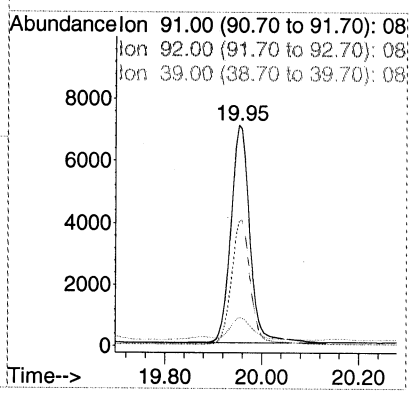


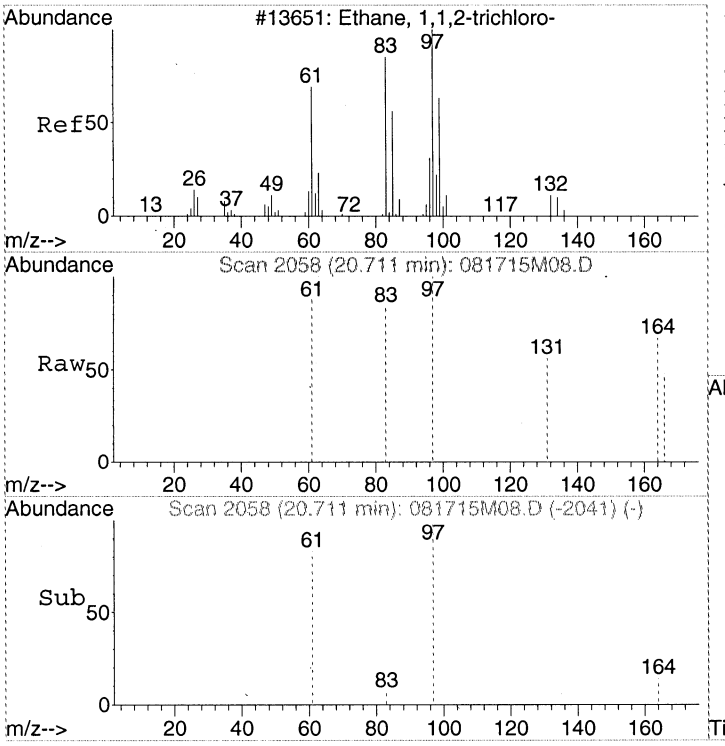


#22
Toluene
Concen: 61.76 pptv
RT: 19.95 min Scan# 1947
Delta R.T. -0.01 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion: 91 Resp: 19243

Ion	Ratio	Lower	Upper
91	100		
92	56.3	38.8	78.8
39	11.8	0.0	29.1

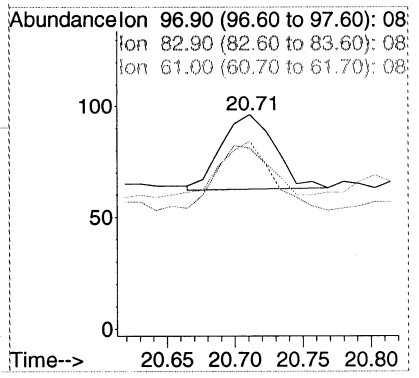


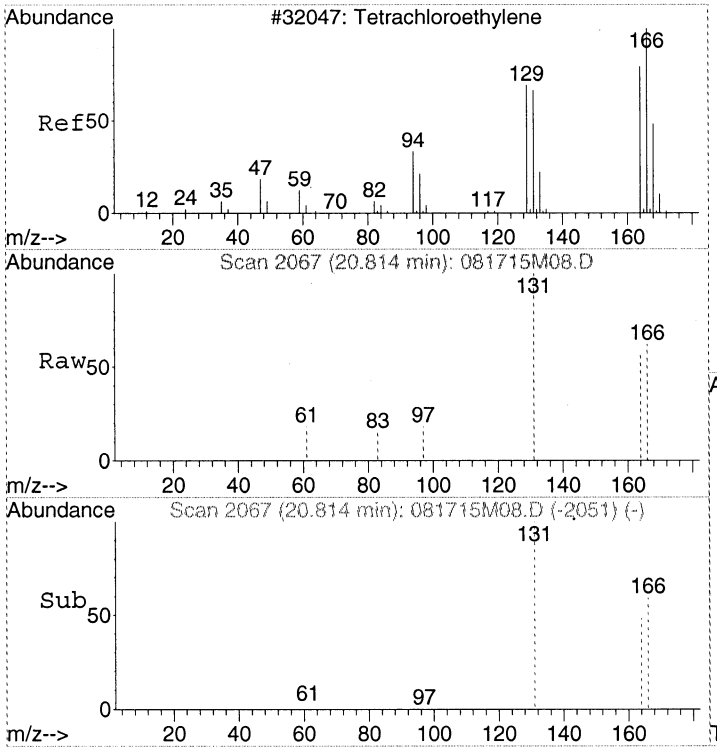


#23
1,1,2-Trichloroethane
Concen: Below Cal
RT: 20.71 min Scan# 2058
Delta R.T. 0.00 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion: 97 Resp: 93

Ion	Ratio	Lower	Upper
97	100		
83	92.5	62.6	102.6
61	67.7	45.1	85.1

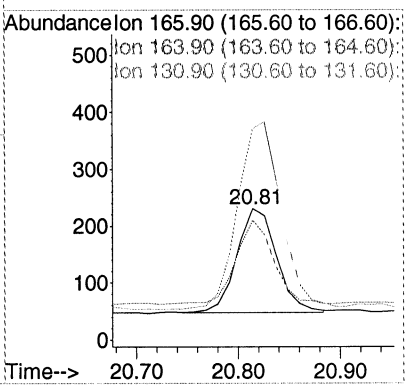


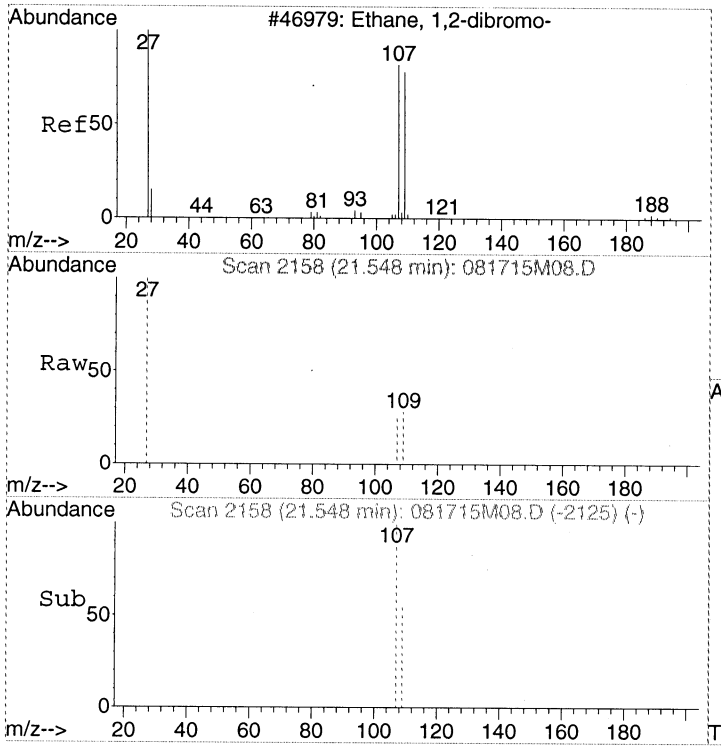


#24
Tetrachloroethene
Concen: Below Cal
RT: 20.81 min Scan# 2067
Delta R.T. -0.01 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion:166 Resp: 492

Ion	Ratio	Lower	Upper
166	100		
164	74.6	58.0	98.0
131	199.4	48.1	88.1#

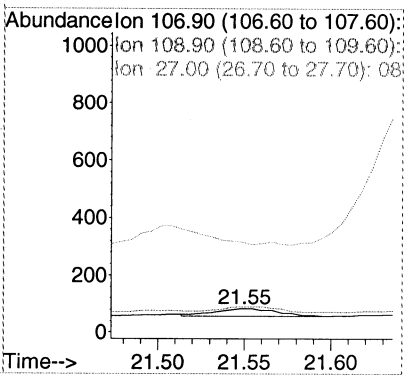


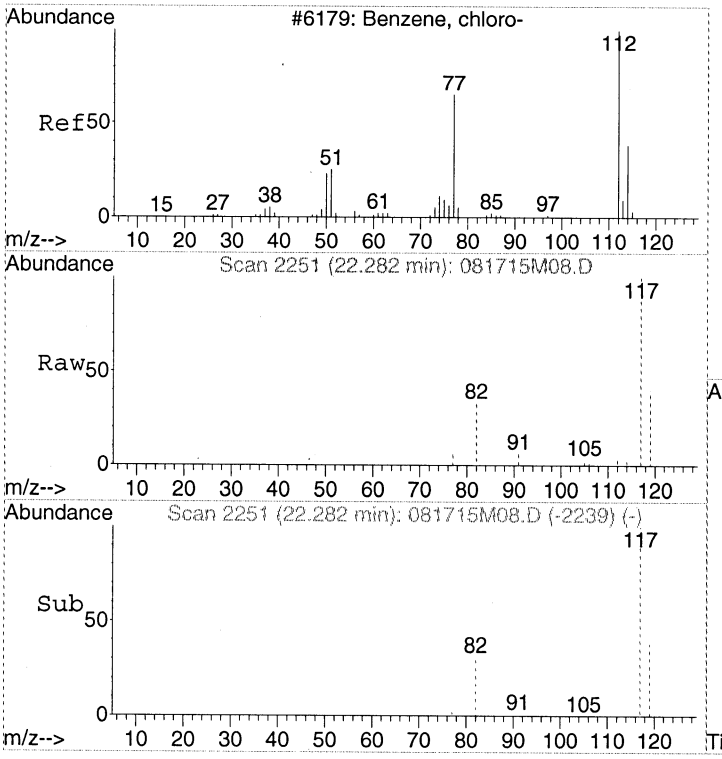


#25
1,2-Dibromoethane (EDB)
Concen: Below Cal
RT: 21.55 min Scan# 2158
Delta R.T. -0.01 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion:107 Resp: 68

Ion	Ratio	Lower	Upper
107	100		
109	63.2	74.3	114.3#
27	0.0	30.6	70.6#

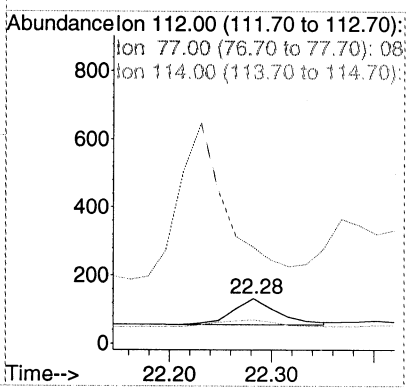


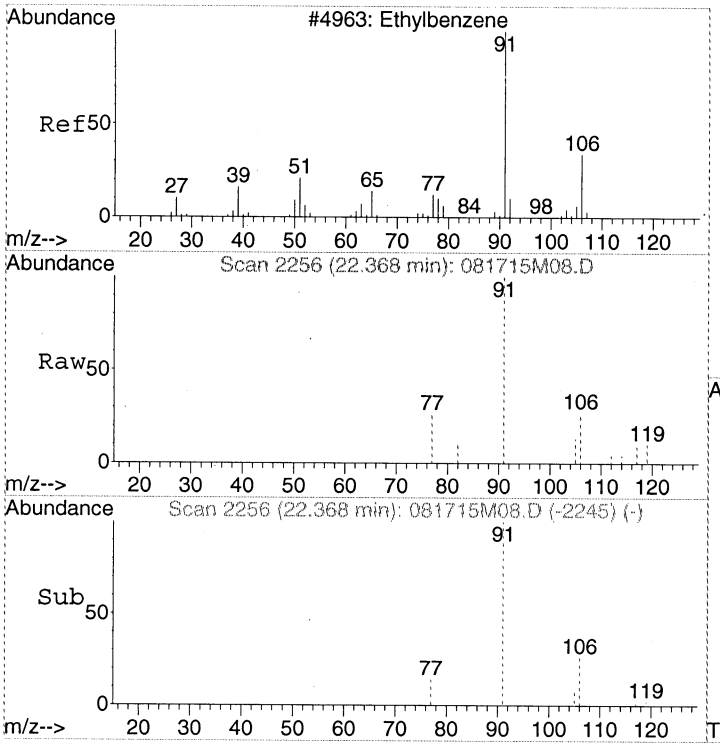


#26
Chlorobenzene
Concen: Below Cal
RT: 22.28 min Scan# 2251
Delta R.T. 0.00 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion:112 Resp: 232

Ion	Ratio	Lower	Upper
112	100		
77	0.0	39.3	79.3#
114	37.5	12.1	52.1

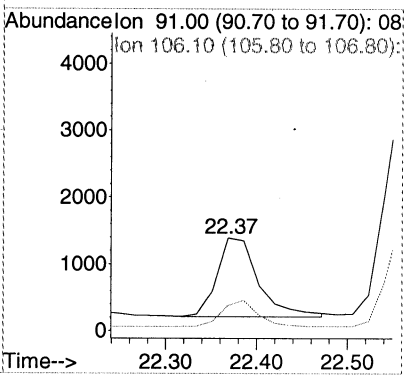


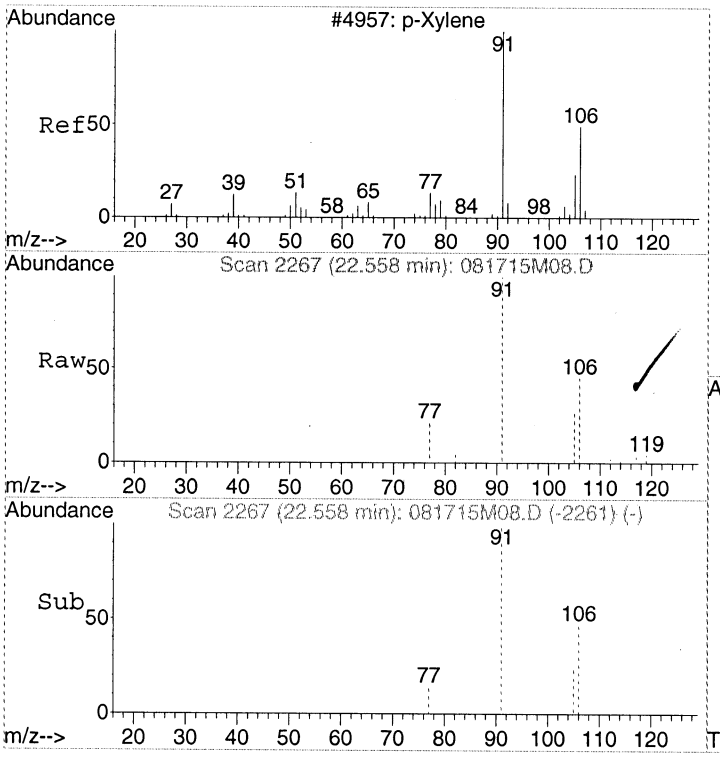


#27
Ethylbenzene
Concen: Below Cal
RT: 22.37 min Scan# 2256
Delta R.T. -0.02 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion: 91 Resp: 3731

Ion	Ratio	Lower	Upper
91	100		
106	28.7	11.4	51.4

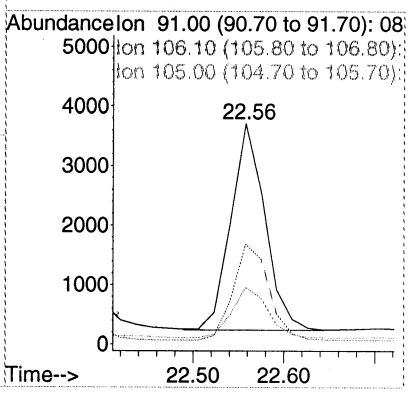


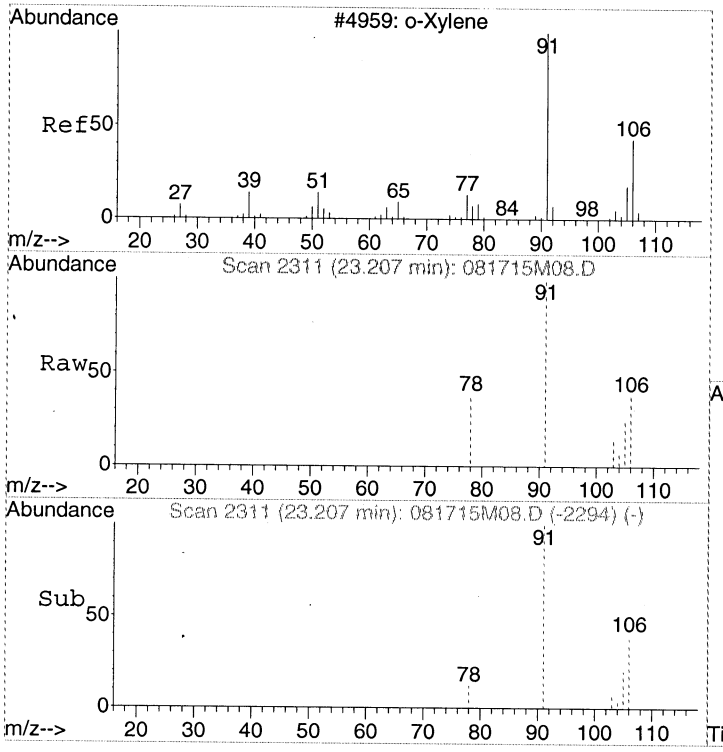


#28
m&p-Xylene
Concen: 28.48 pptv
RT: 22.56 min Scan# 2267
Delta R.T. 0.00 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion: 91 Resp: 9056

Ion	Ratio	Lower	Upper
91	100		
106	49.1	29.5	69.5
105	25.9	3.7	43.7

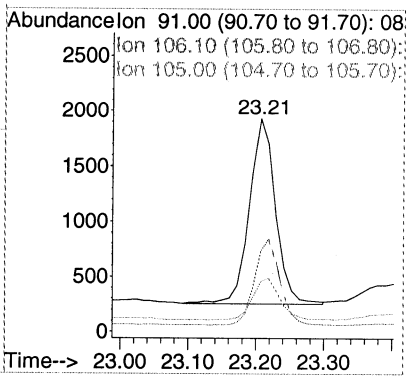


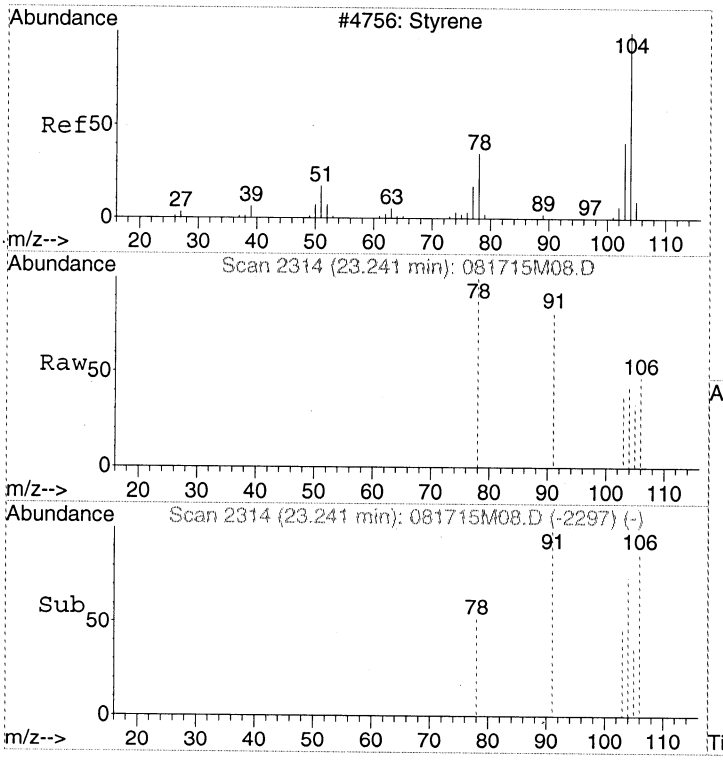


#29
o-Xylene
Concen: Below Cal
RT: 23.21 min Scan# 2311
Delta R.T. 0.00 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion: 91 Resp: 4482

Ion	Ratio	Lower	Upper
91	100		
106	44.7	26.0	66.0
105	23.2	6.3	46.3

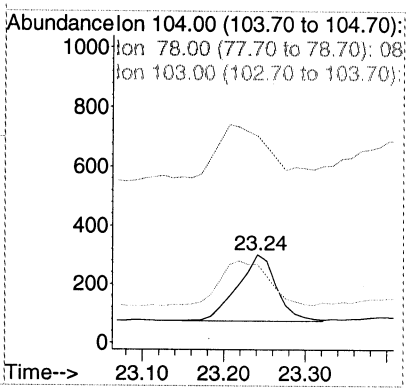


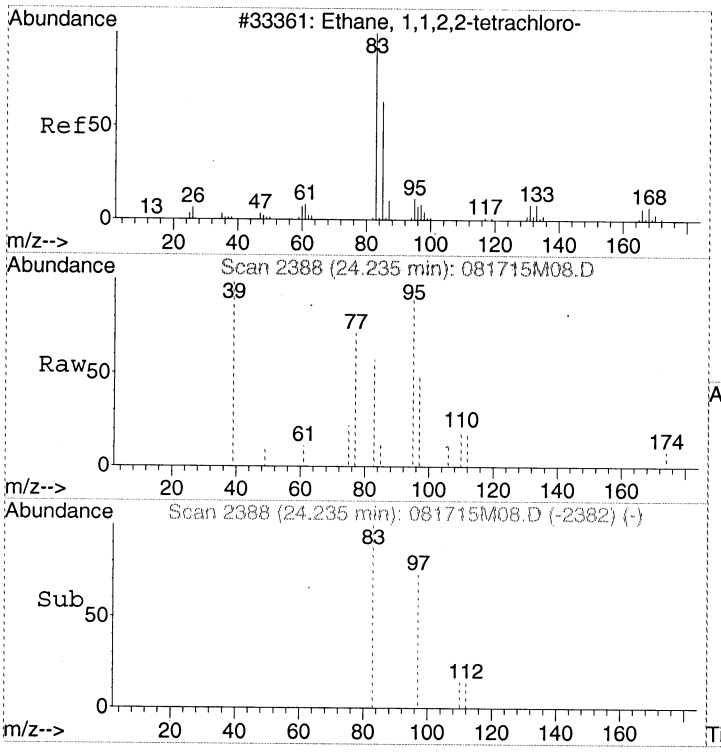


#30
Styrene
Concen: Below Cal
RT: 23.24 min Scan# 2314
Delta R.T. 0.00 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion:104 Resp: 757

Ion	Ratio	Lower	Upper
104	100		
78	0.0	33.4	73.4#
103	0.0	34.8	74.8#

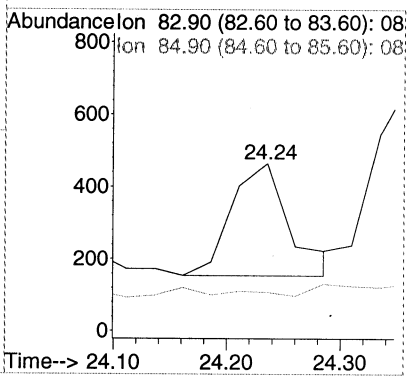


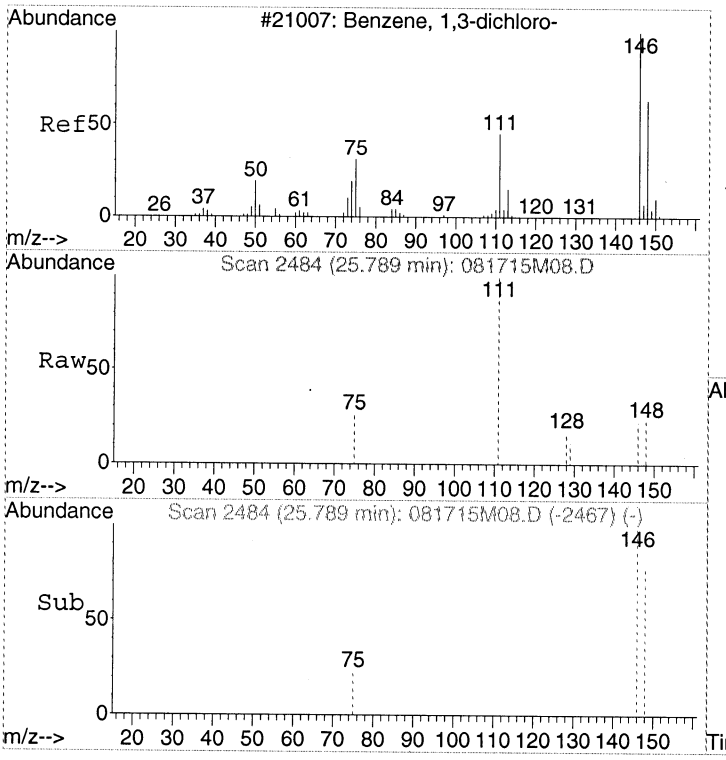


#31
1,1,2,2-Tetrachloroethane
Concen: Below Cal
RT: 24.24 min Scan# 2388
Delta R.T. -0.05 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion: 83 Resp: 1106

Ion	Ratio	Lower	Upper
83	100		
85	0.0	43.6	83.6#

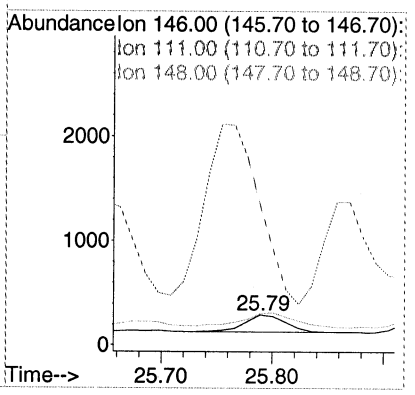


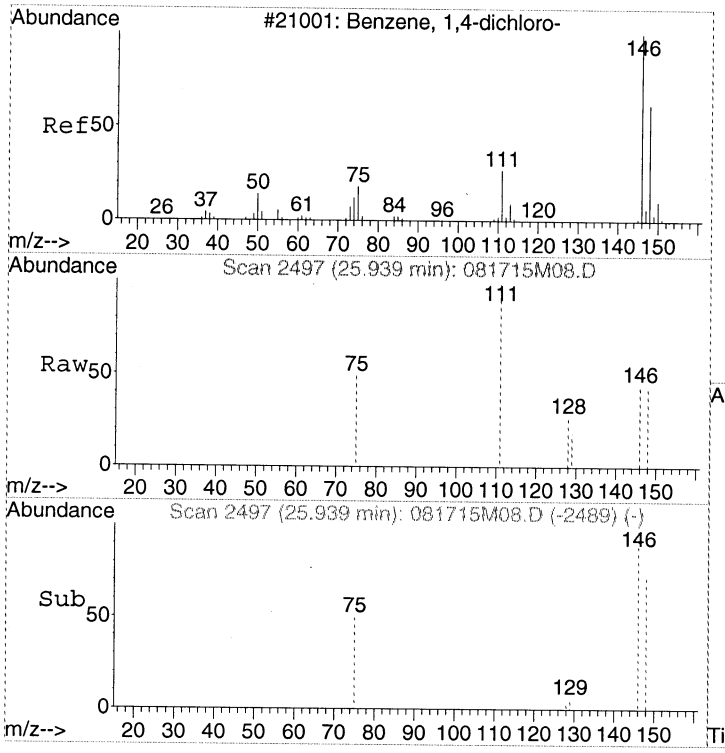


#32
1,3-Dichlorobenzene
Concen: Below Cal
RT: 25.79 min Scan# 2484
Delta R.T. 0.00 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion:146 Resp: 438

Ion	Ratio	Lower	Upper
146	100		
111	0.0	18.6	58.6#
148	90.9	44.1	84.1#

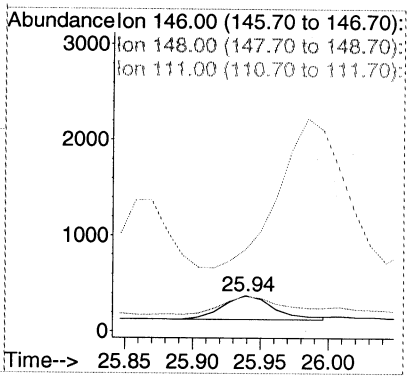


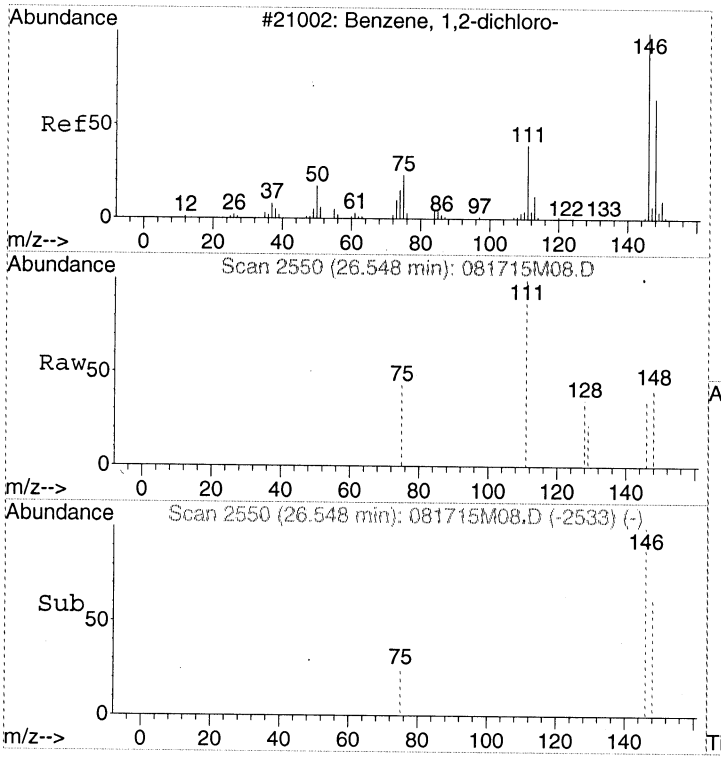


#33
1,4-Dichlorobenzene
Concen: Below Cal
RT: 25.94 min Scan# 2497
Delta R.T. 0.00 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion:146 Resp: 654

Ion	Ratio	Lower	Upper
146	100		
148	87.8	43.9	83.9#
111	0.0	16.7	56.7#

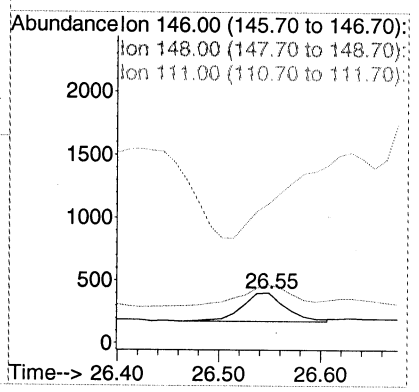




#34
1,2-Dichlorobenzene
Concen: Below Cal
RT: 26.55 min Scan# 2550
Delta R.T. 0.00 min
Lab File: 081715M08.D
Acq: 17 Aug 2015 4:41 pm

Tgt Ion:146 Resp: 683

Ion	Ratio	Lower	Upper
146	100		
148	98.8	43.8	83.8#
111	0.0	20.0	60.0#



Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081715MAA\
Data File : 081715M09.D
Acq On : 17 Aug 2015 5:39 pm
InstName : AG5973M
Operator : LLH
Sample : B15H074-DUP1
Misc : 600ml 600National-Trench1 1508028-014RE1
ALS Vial : 6 Sample Multiplier: 1.48

Report

Quant Time: Aug 18 09:39:40 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration

with Late Elutors

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.25	49	50507	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.30	114	120568	375.00 pptv	-0.01
21) CHLOROBENZENE-d5	22.25	117	98604	341.00 pptv	0.00

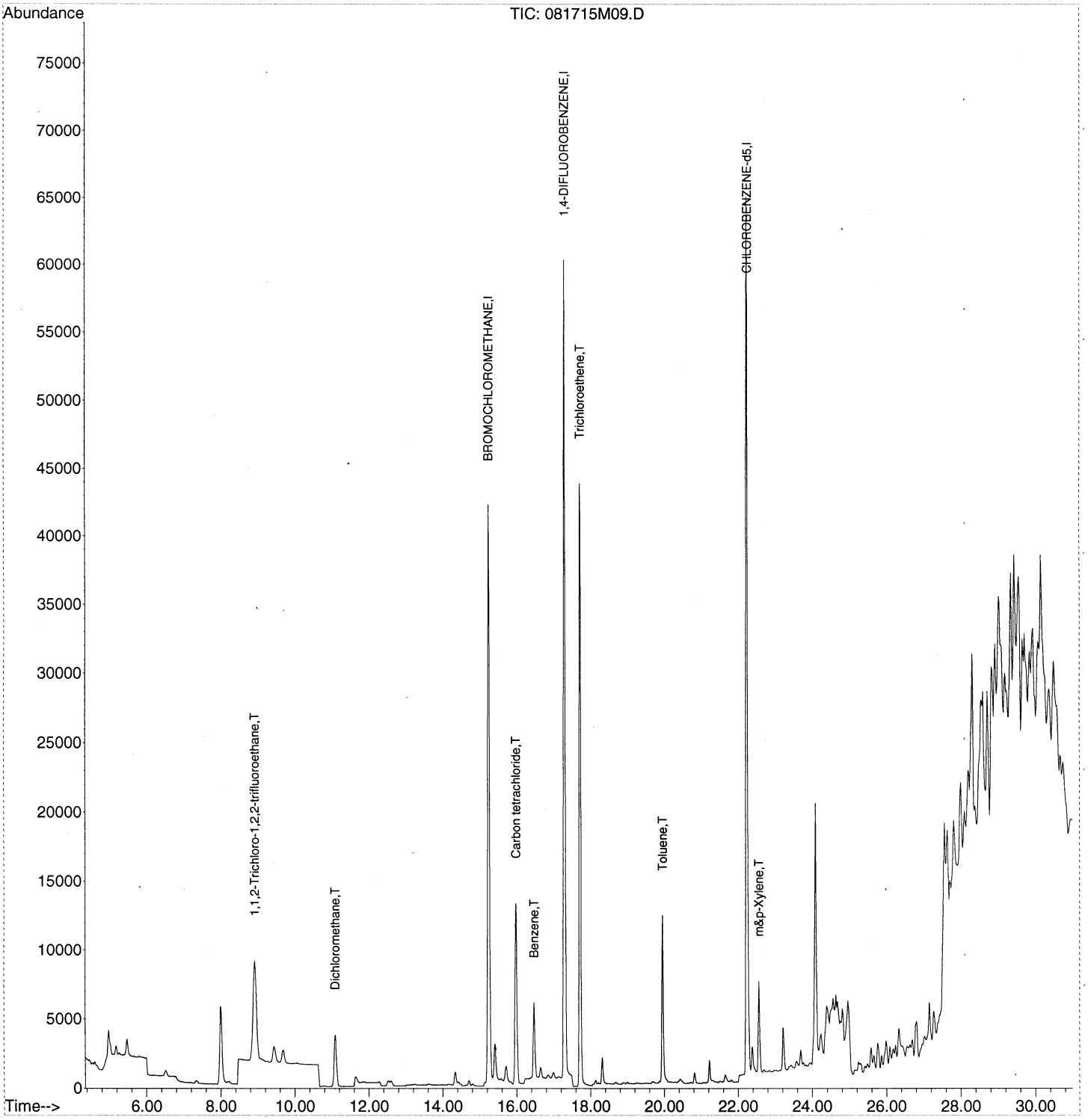
Target Compounds					Qvalue	
2) Vinyl chloride	5.09	62	45	N.D.		
3) 1,3-Butadiene	5.18	54	583	N.D.		
4) Bromoethene	6.99	106	4	N.D.		
5) 1,1,2-Trichloro-1,2,2-trif	8.92	151	16269	58.67 pptv	98	
6) 1,1-Dichloroethene	8.92	61	46	N.D.		
7) Dichloromethane	11.09	49	6619	43.57 pptv	96	M
8) tert-Butyl methyl ether (M	11.84	73	61	N.D.		
9) trans-1,2-Dichloroethene	11.85	61	78	N.D.		
10) Hexane	12.52	57	808	N.D.		
11) 1,1-Dichloroethane	13.22	63	122	N.D.		
12) cis-1,2-Dichloroethene	14.70	96	413	N.D.		
13) Chloroform	15.40	83	3147	N.D.		
14) 1,1,1-Trichloroethane	15.71	97	1798	N.D.		
15) Carbon tetrachloride	15.98	117	20017	59.09 pptv	99	M
17) Benzene	16.47	78	11286	32.58 pptv	99	
18) 1,2-Dichloroethane	16.64	62	1320	N.D.		
19) Trichloroethene	17.72	130	42223	297.30 pptv	100	
20) 1,2-Dichloropropane	18.22	63	111	N.D.		
22) Toluene	19.95	91	19991	75.59 pptv	98	
23) 1,1,2-Trichloroethane	20.71	97	93	N.D.		
24) Tetrachloroethene	20.82	166	508	N.D.		
25) 1,2-Dibromoethane (EDB)	21.55	107	61	N.D.		
26) Chlorobenzene	22.28	112	211	N.D.		
27) Ethylbenzene	22.37	91	3783	N.D.		
28) m&p-Xylene	22.56	91	9349	34.64 pptv	99	
29) o-Xylene	23.21	91	4435	N.D.		
30) Styrene	23.24	104	728	N.D.		
31) 1,1,2,2-Tetrachloroethane	24.24	83	1071	N.D.		
32) 1,3-Dichlorobenzene	25.80	146	443	N.D.		
33) 1,4-Dichlorobenzene	25.94	146	623	N.D.		
34) 1,2-Dichlorobenzene	26.55	146	592	N.D.		

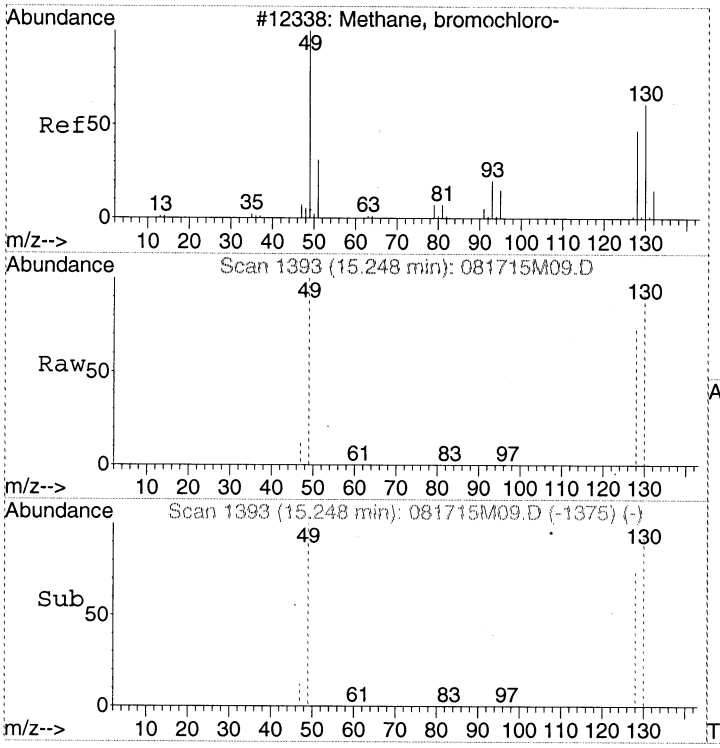
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081715MAA\
Data File : 081715M09.D
Acq On : 17 Aug 2015 5:39 pm
InstName : AG5973M
Operator : LLH
Sample : B15H074-DUP1
Misc : 600ml 600National-Trench1 1508028-014RE1
ALS Vial : 6 Sample Multiplier: 1.48

Quant Time: Aug 18 09:39:40 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081415SMAA.M
Quant Title : TO15SIM
QLast Update : Mon Aug 17 09:33:25 2015
Response via : Initial Calibration

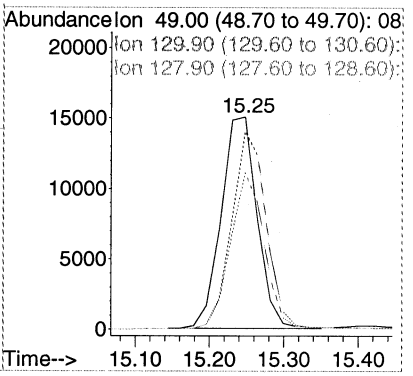


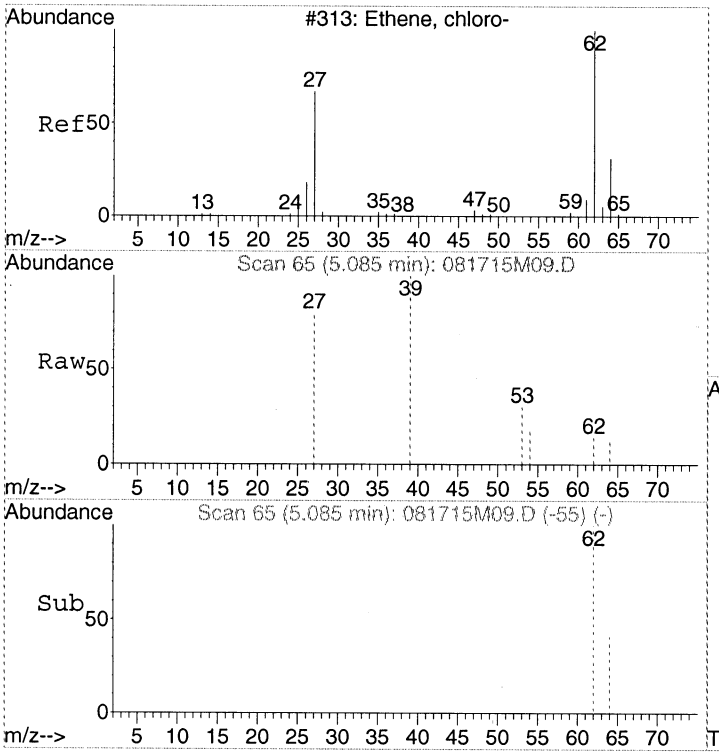


#1
BROMOCHLOROMETHANE
Concen: 341.00 pptv
RT: 15.25 min Scan# 1393
Delta R.T. 0.01 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion: 49 Resp: 50507

Ion	Ratio	Lower	Upper
49	100		
130	89.2	65.3	105.3
128	69.0	46.2	86.2

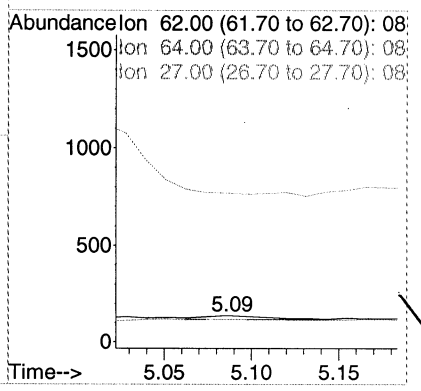


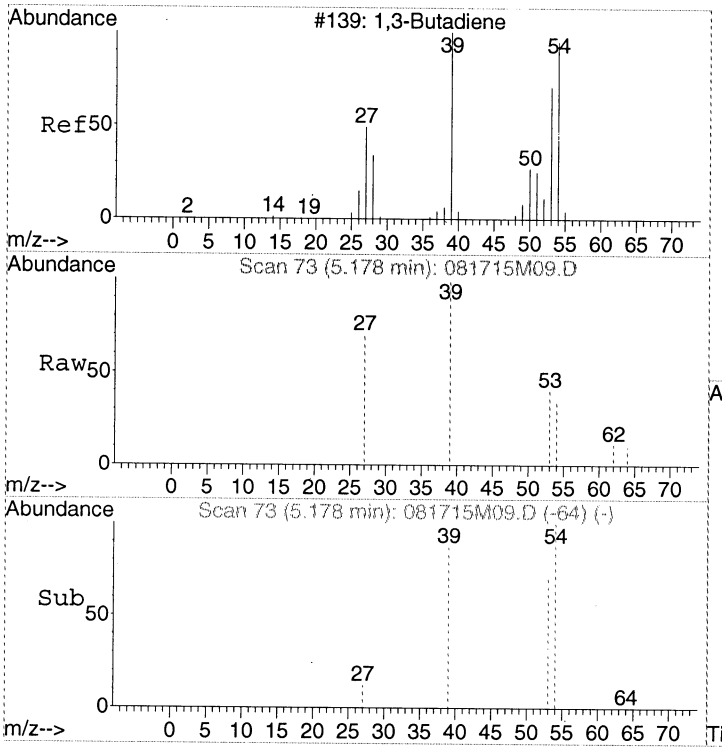


#2
Vinyl chloride
Concen: Below Cal
RT: 5.09 min Scan# 65
Delta R.T. 0.00 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion: 62 Resp: 45

Ion	Ratio	Lower	Upper
62	100		
64	42.2	11.8	51.8
27	0.0	28.9	68.9#

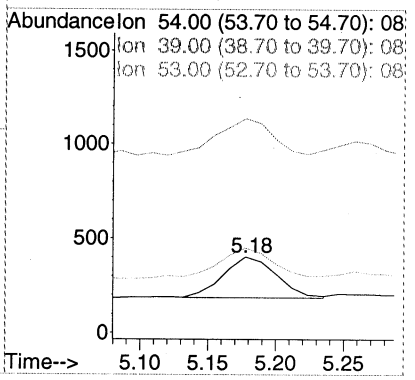


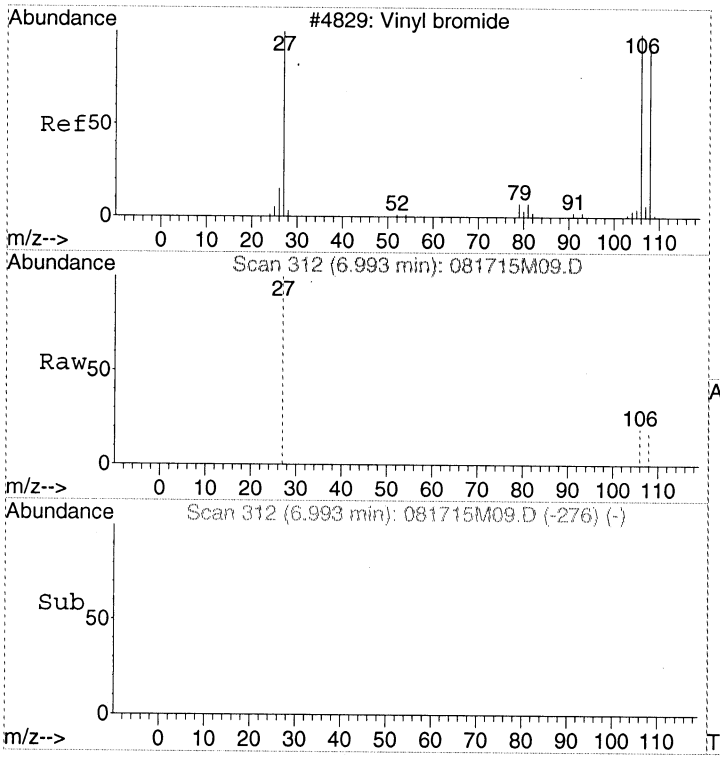


#3
1,3-Butadiene
Concen: Below Cal
RT: 5.18 min Scan# 73
Delta R.T. -0.01 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion: 54 Resp: 583

Ion	Ratio	Lower	Upper
54	100		
39	93.8	76.7	116.7
53	78.2	48.8	88.8

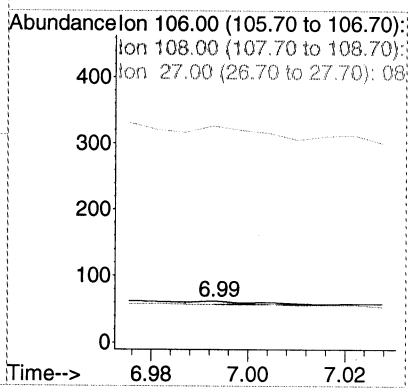


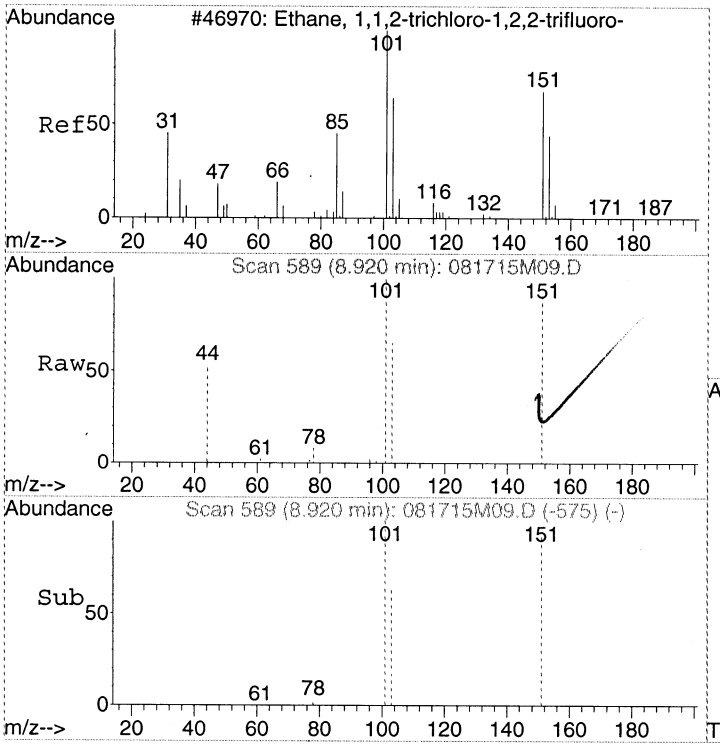


#4
Bromoethene
Concen: Below Cal
RT: 6.99 min Scan# 312
Delta R.T. 0.01 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion:106 Resp: 4

Ion	Ratio	Lower	Upper
106	100		
108	0.0	0.0	214.6
27	400.0	56.6	96.6#

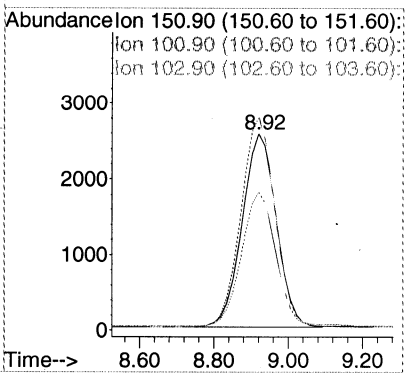


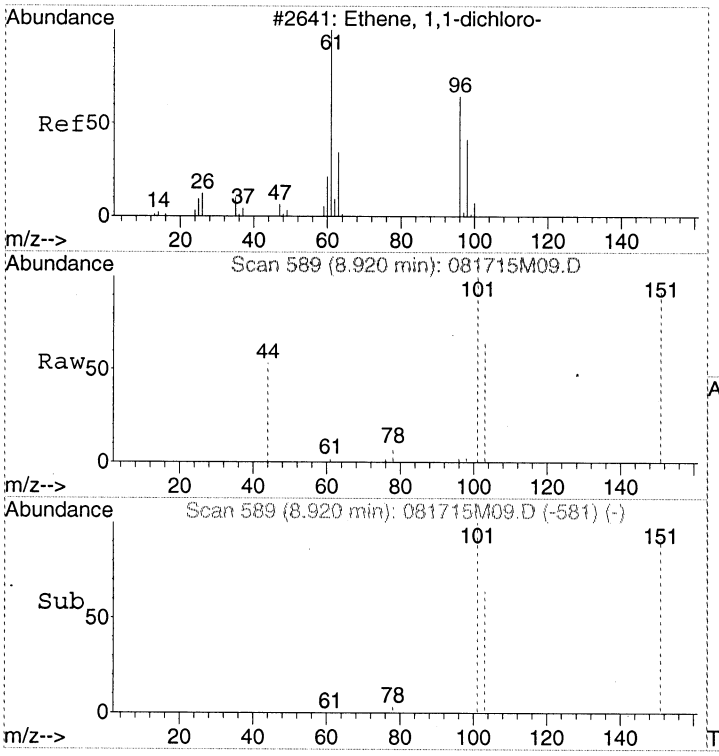


#5
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 58.67 pptv
RT: 8.92 min Scan# 589
Delta R.T. -0.02 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion:151 Resp: 16269

Ion	Ratio	Lower	Upper
151	100		
101	108.3	90.9	130.9
103	69.2	51.0	91.0

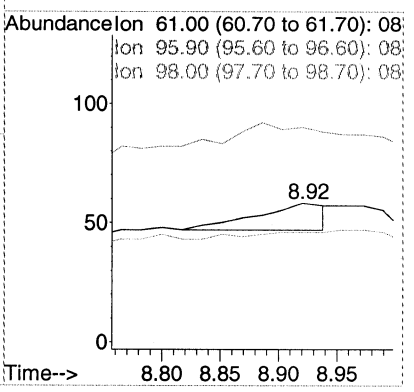


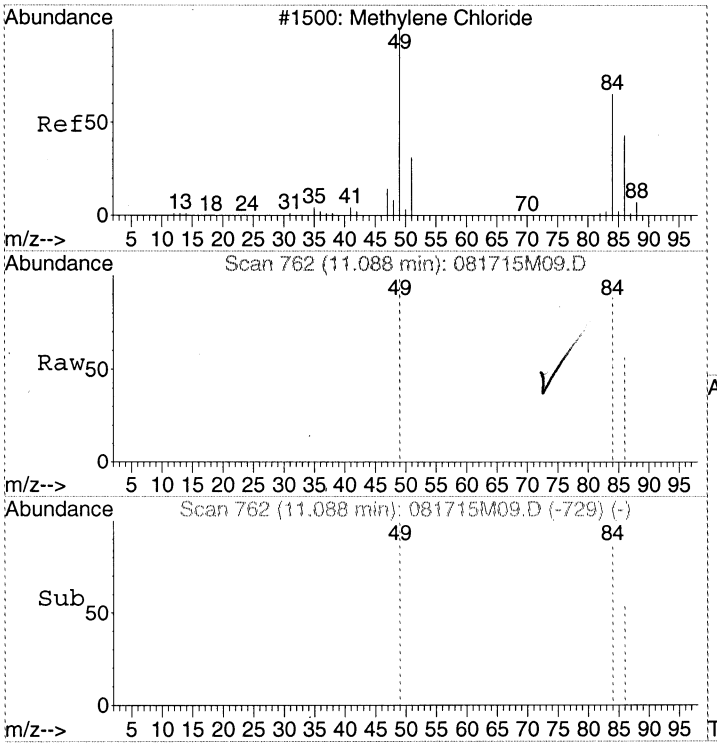


#6
1,1-Dichloroethene
Concen: Below Cal
RT: 8.92 min Scan# 589
Delta R.T. -0.07 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion: 61 Resp: 46

Ion	Ratio	Lower	Upper
61	100		
96	0.0	43.2	83.2#
98	0.0	20.1	60.1#

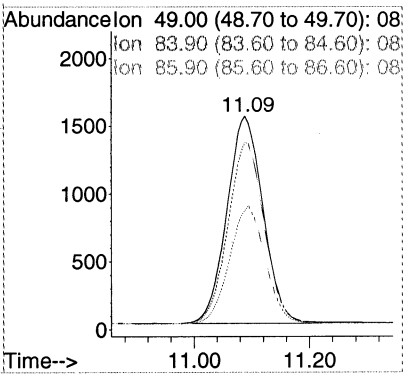


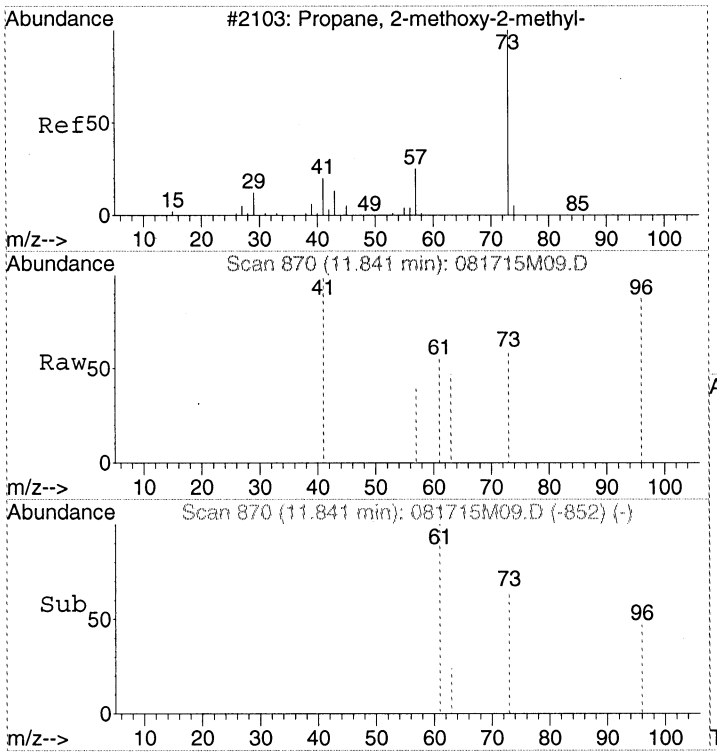


#7
Dichloromethane
Concen: 43.57 pptv
RT: 11.09 min Scan# 762
Delta R.T. -0.01 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion: 49 Resp: 6619

Ion	Ratio	Lower	Upper
49	100		
84	87.7	64.2	104.2
86	56.4	34.0	74.0

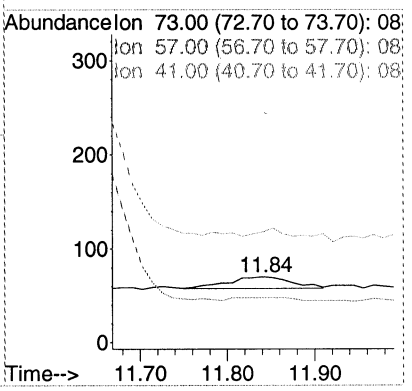


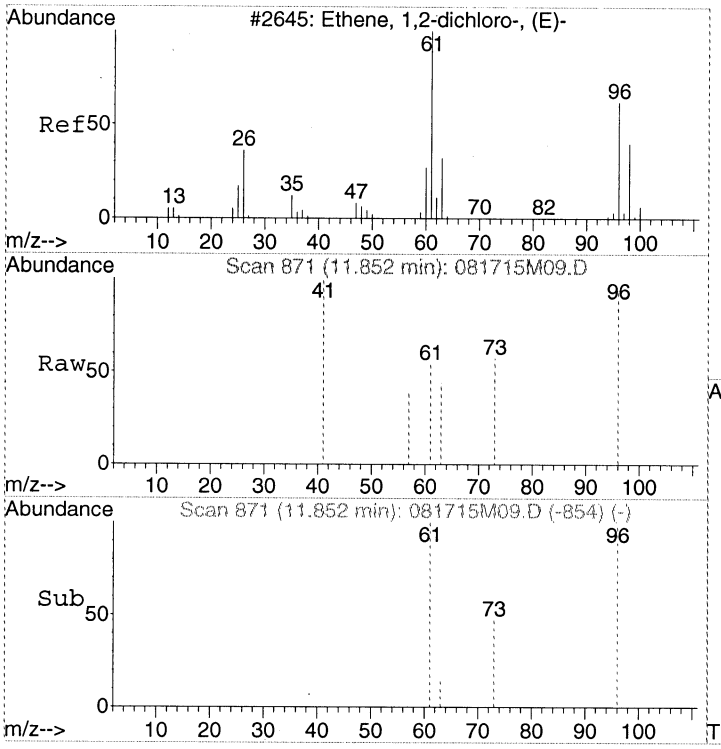


#8
tert-Butyl methyl ether (MTBE)
Concen: Below Cal
RT: 11.84 min Scan# 870
Delta R.T. 0.01 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion: 73 Resp: 61

Ion	Ratio	Lower	Upper
73	100		
57	0.0	2.0	42.0#
41	26.2	13.3	53.3

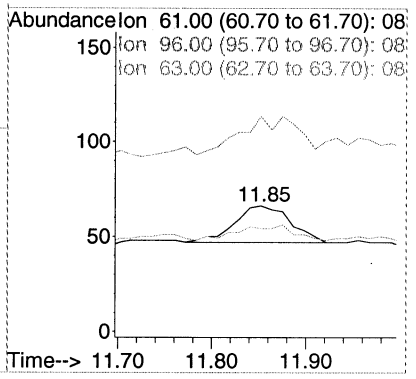


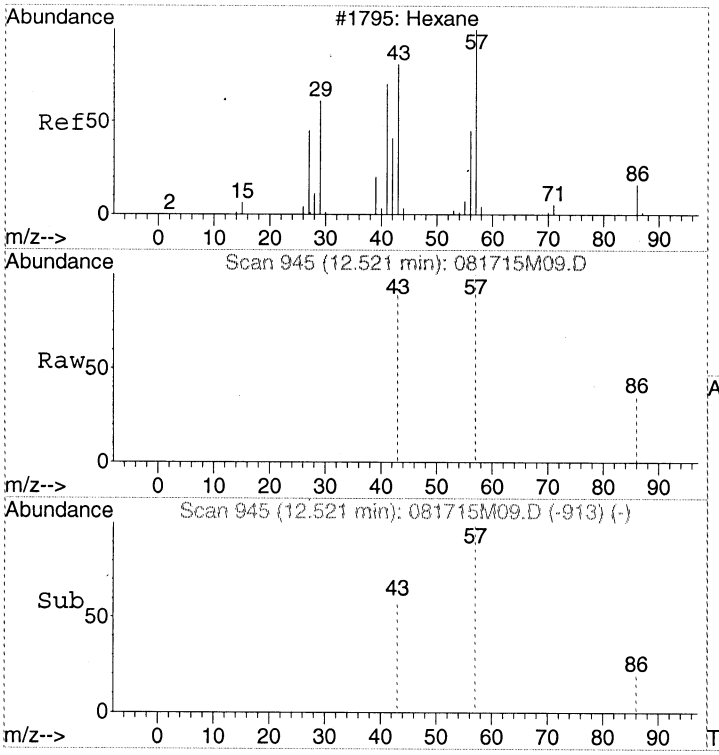


#9
trans-1,2-Dichloroethene
Concen: Below Cal
RT: 11.85 min Scan# 871
Delta R.T. -0.01 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion: 61 Resp: 78

Ion	Ratio	Lower	Upper
61	100		
96	64.1	53.4	93.4
63	21.8	12.2	52.2

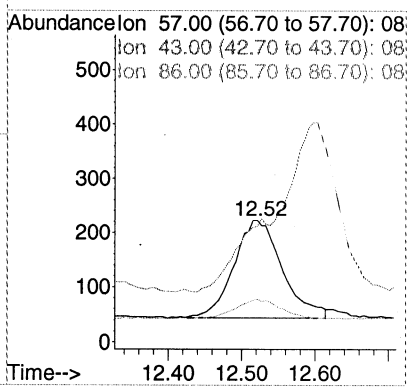


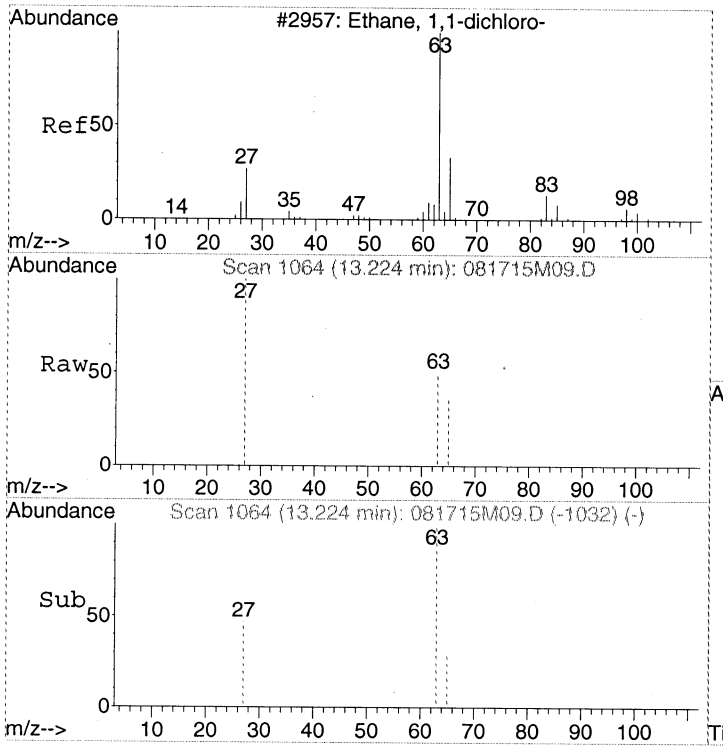


#10
Hexane
Concen: Below Cal
RT: 12.52 min Scan# 945
Delta R.T. -0.01 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion: 57 Resp: 808

Ion	Ratio	Lower	Upper
57	100		
43	53.2	46.4	86.4
86	9.5	0.0	38.0

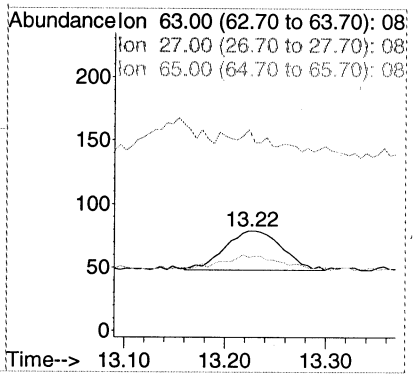


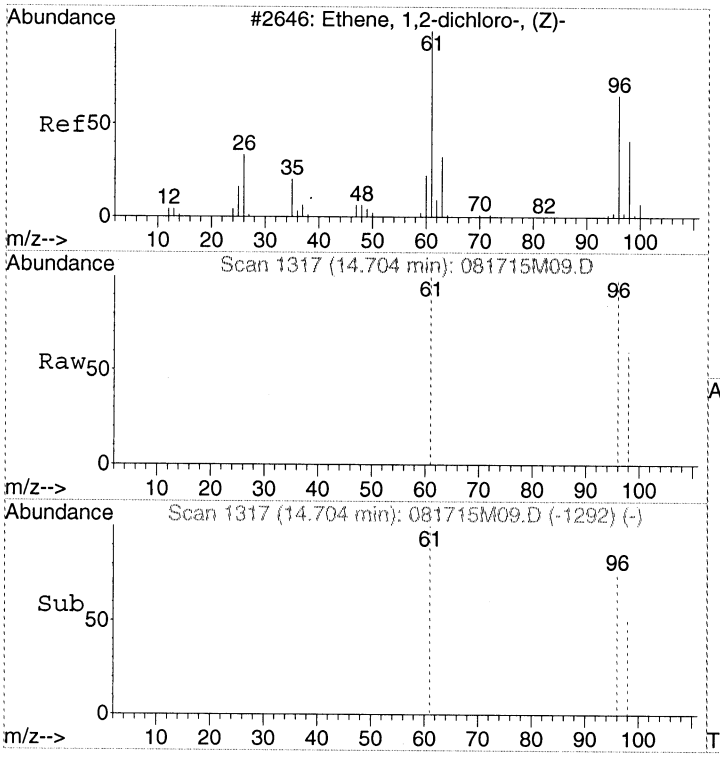


#11
1,1-Dichloroethane
Concen: Below Cal
RT: 13.22 min Scan# 1064
Delta R.T. -0.01 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion: 63 Resp: 122

Ion	Ratio	Lower	Upper
63	100		
27	12.3	9.1	49.1
65	2.5	11.6	51.6#

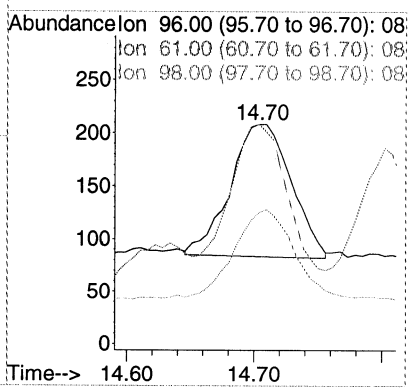


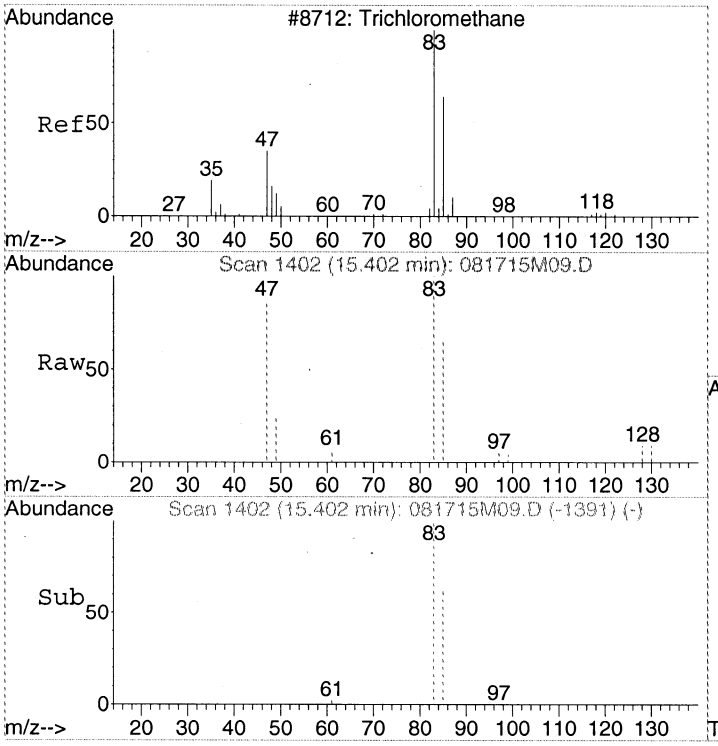


#12
cis-1,2-Dichloroethene
Concen: Below Cal
RT: 14.70 min Scan# 1317
Delta R.T. -0.01 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion: 96 Resp: 413

Ion	Ratio	Lower	Upper
96	100		
61	101.7	104.7	144.7#
98	68.3	43.7	83.7

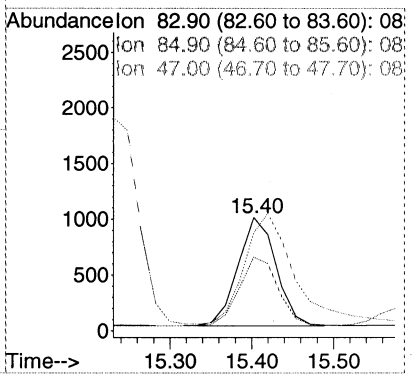


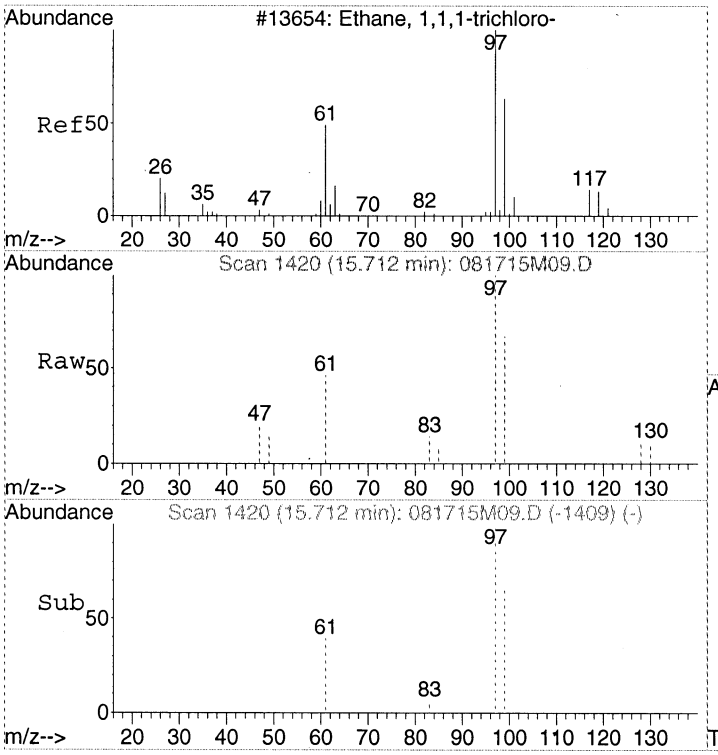


#13
Chloroform
Concen: Below Cal
RT: 15.40 min Scan# 1402
Delta R.T. -0.01 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion: 83 Resp: 3147

Ion	Ratio	Lower	Upper
83	100		
85	64.6	44.8	84.8
47	133.0	4.4	44.4#

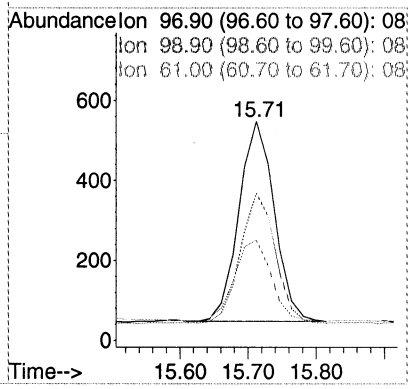


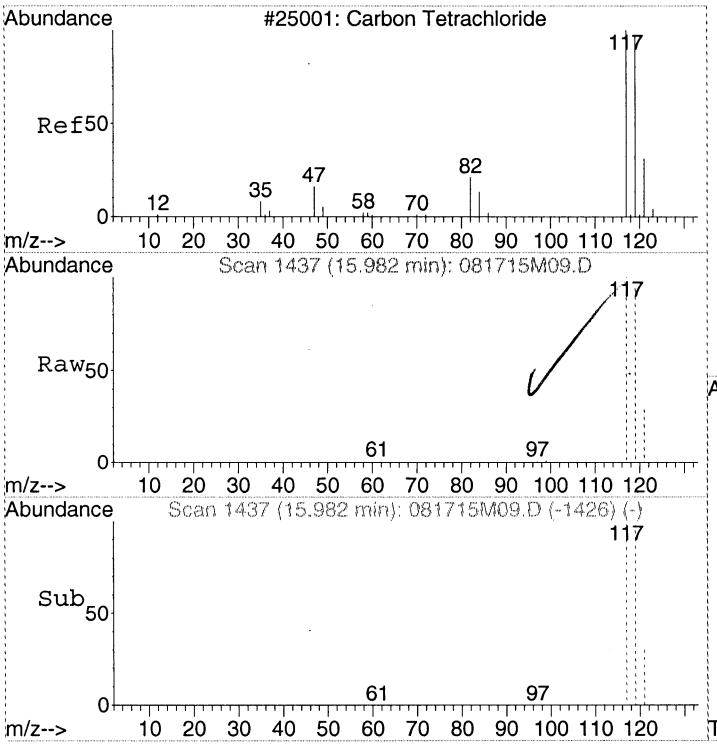


#14
1,1,1-Trichloroethane
Concen: Below Cal
RT: 15.71 min Scan# 1420
Delta R.T. -0.01 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion: 97 Resp: 1798

Ion	Ratio	Lower	Upper
97	100		
99	64.1	44.5	84.5
61	42.0	21.7	61.7

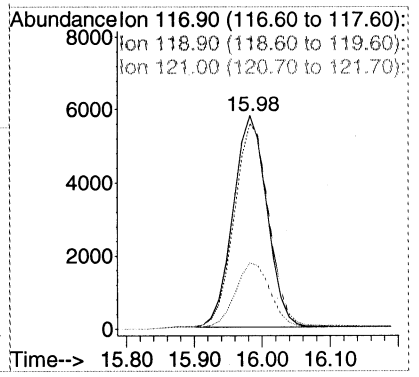


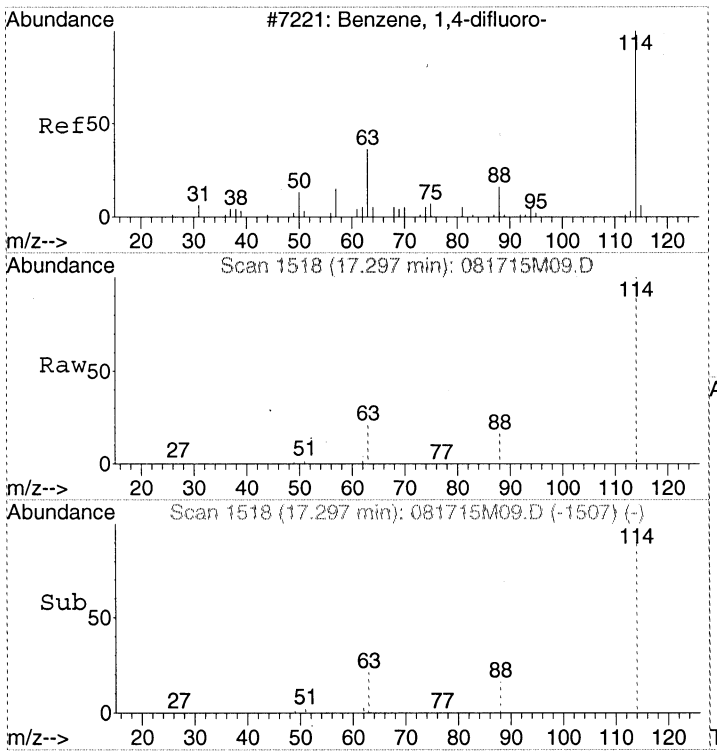


#15
Carbon tetrachloride
Concen: 59.09 pptv
RT: 15.98 min Scan# 1437
Delta R.T. -0.01 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion:117 Resp: 20017

Ion	Ratio	Lower	Upper
117	100		
119	97.5	76.1	116.1
121	31.0	10.7	50.7

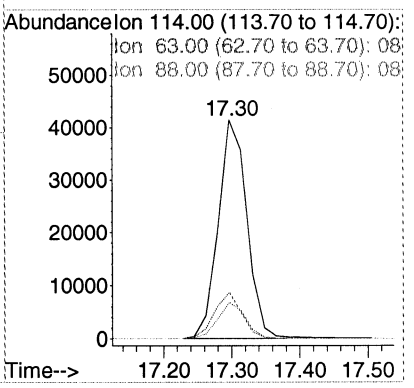


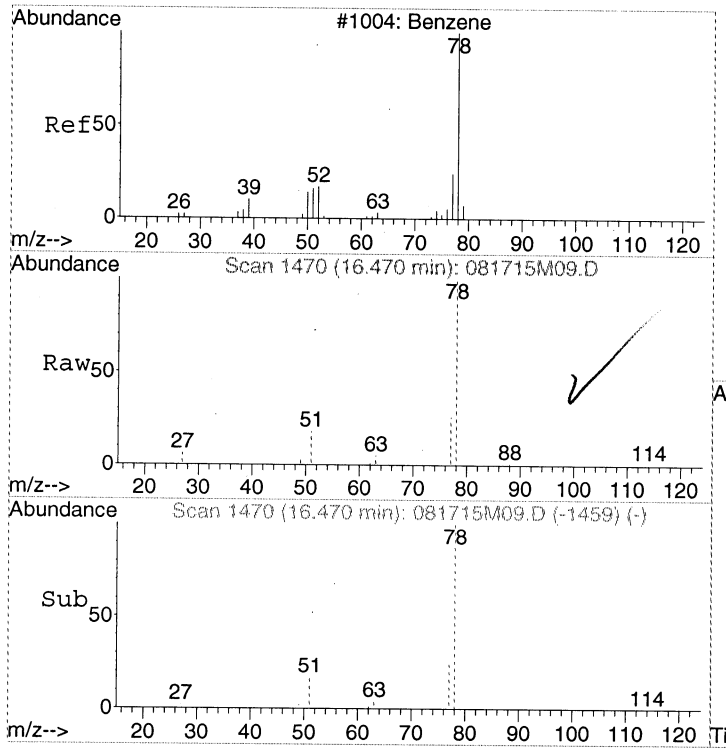


#16
1,4-DIFLUOROBENZENE
Concen: 375.00 pptv
RT: 17.30 min Scan# 1518
Delta R.T. -0.01 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion:114 Resp: 120568

Ion	Ratio	Lower	Upper
114	100		
63	19.7	0.0	39.9
88	15.7	0.0	35.7

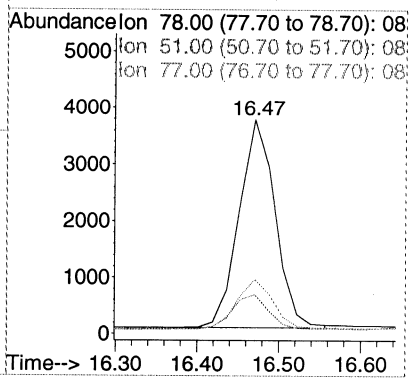


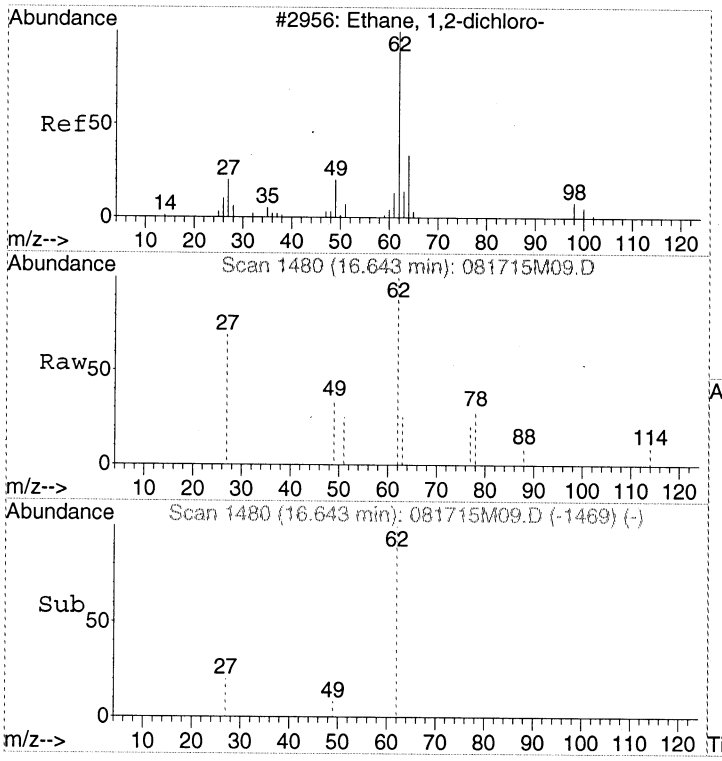


#17
Benzene
Concen: 32.58 pptv
RT: 16.47 min Scan# 1470
Delta R.T. -0.01 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion: 78 Resp: 11286

Ion	Ratio	Lower	Upper
78	100		
51	17.7	0.0	37.6
77	24.3	3.7	43.7

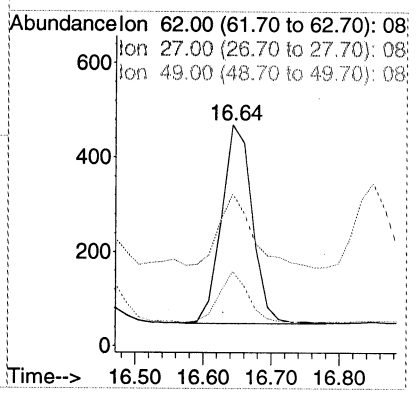


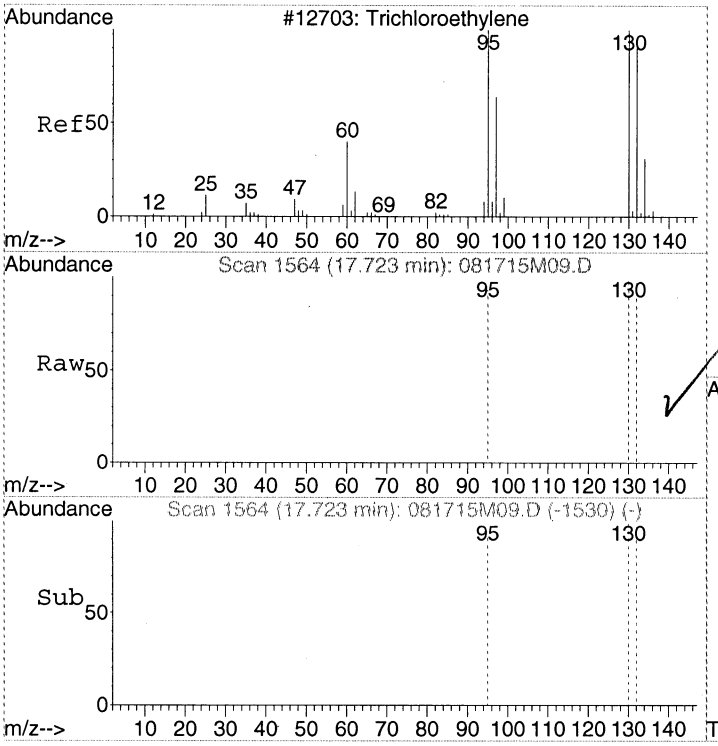


#18
1,2-Dichloroethane
Concen: Below Cal
RT: 16.64 min Scan# 1480
Delta R.T. -0.01 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion: 62 Resp: 1320

Ion	Ratio	Lower	Upper
62	100		
27	41.1	13.3	53.3
49	24.9	4.7	44.7

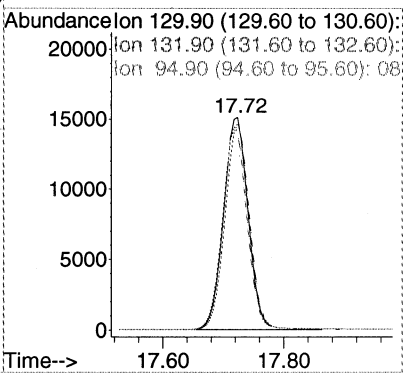


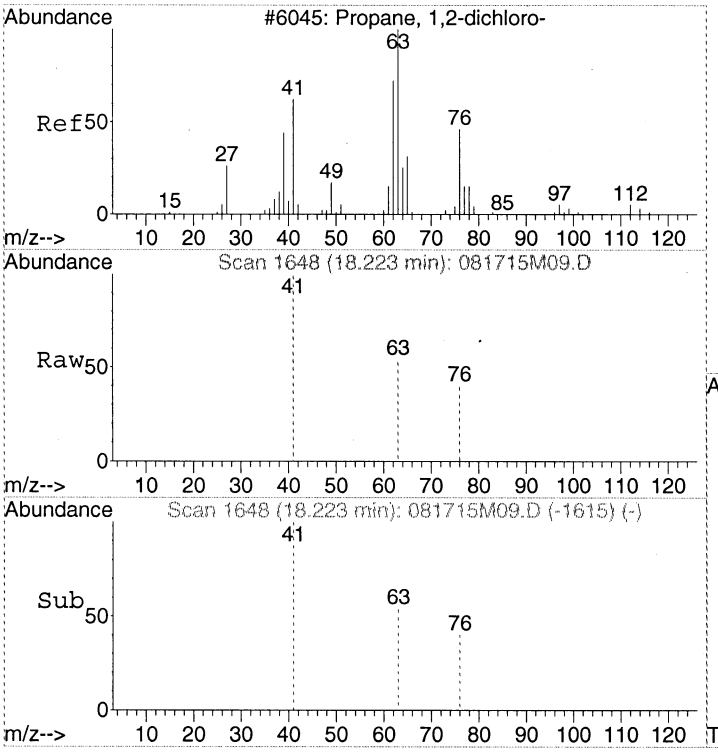


#19
Trichloroethene
Concen: 297.30 pptv
RT: 17.72 min Scan# 1564
Delta R.T. -0.00 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion:130 Resp: 42223

Ion	Ratio	Lower	Upper
130	100		
132	96.1	76.3	116.3
95	94.9	75.2	115.2

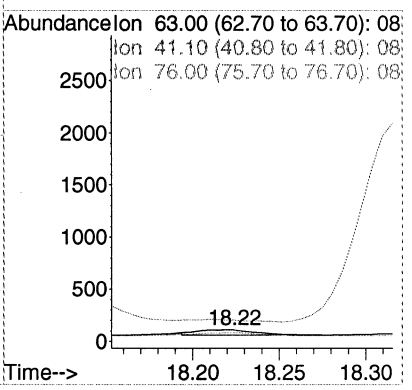


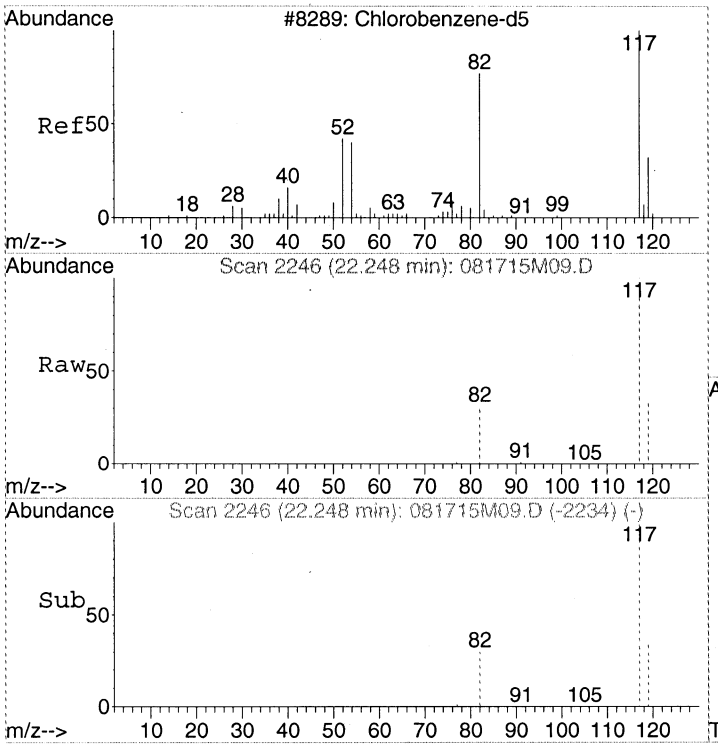


#20
1,2-Dichloropropane
Concen: Below Cal
RT: 18.22 min Scan# 1648
Delta R.T. 0.01 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion: 63 Resp: 111

Ion	Ratio	Lower	Upper
63	100		
41	0.0	43.1	83.1#
76	0.0	31.6	71.6#

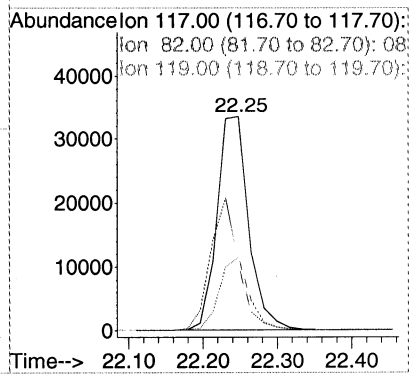


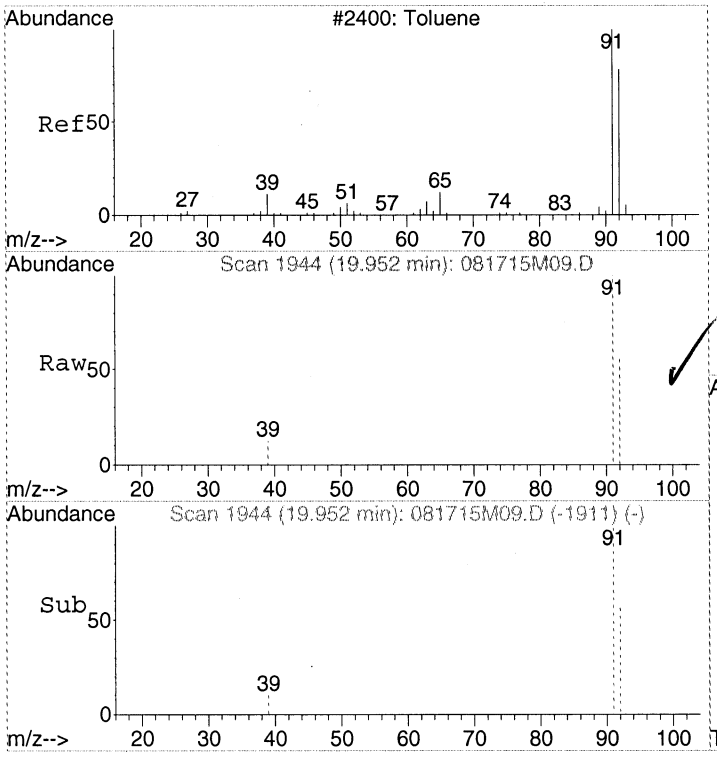


#21
CHLOROBENZENE-d5
Concen: 341.00 pptv
RT: 22.25 min Scan# 2246
Delta R.T. -0.00 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion:117 Resp: 98604

Ion	Ratio	Lower	Upper
117	100		
82	55.4	34.9	74.9
119	32.2	12.1	52.1

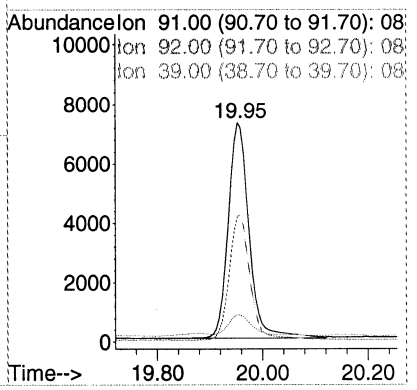


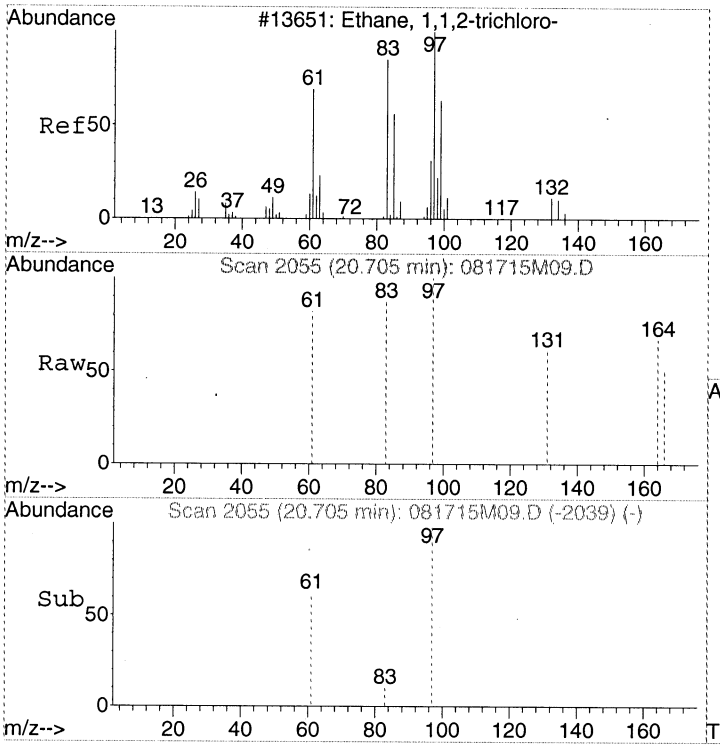


#22
Toluene
Concen: 75.59 pptv
RT: 19.95 min Scan# 1944
Delta R.T. -0.01 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion: 91 Resp: 19991

Ion	Ratio	Lower	Upper
91	100		
92	57.6	38.8	78.8
39	10.2	0.0	29.1

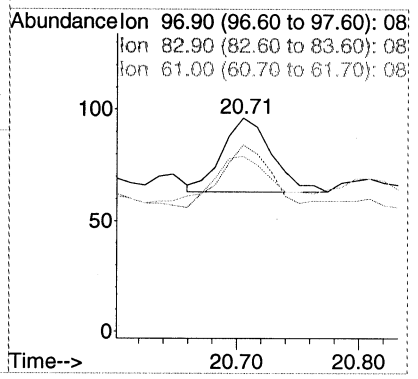


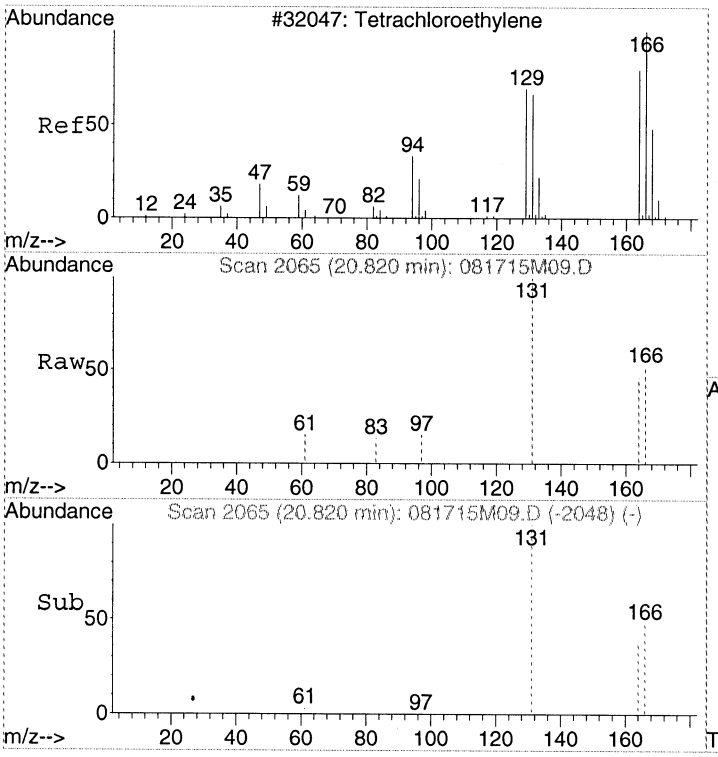


#23
1,1,2-Trichloroethane
Concen: Below Cal
RT: 20.71 min Scan# 2055
Delta R.T. -0.01 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion: 97 Resp: 93

Ion	Ratio	Lower	Upper
97	100		
83	82.8	62.6	102.6
61	76.3	45.1	85.1

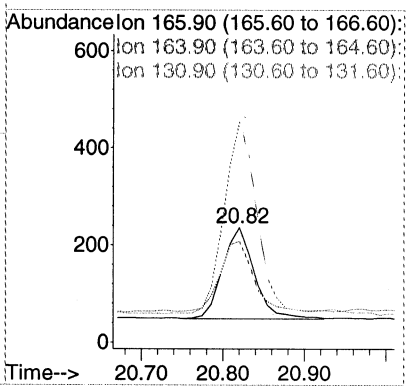


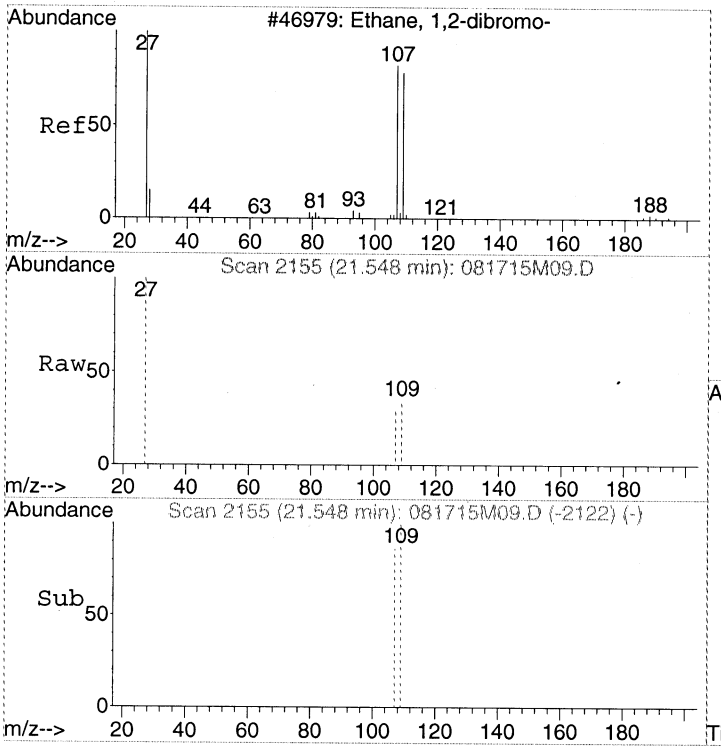


#24
Tetrachloroethene
Concen: Below Cal
RT: 20.82 min Scan# 2065
Delta R.T. -0.01 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion:166 Resp: 508

Ion	Ratio	Lower	Upper
166	100		
164	78.0	58.0	98.0
131	213.4	48.1	88.1#

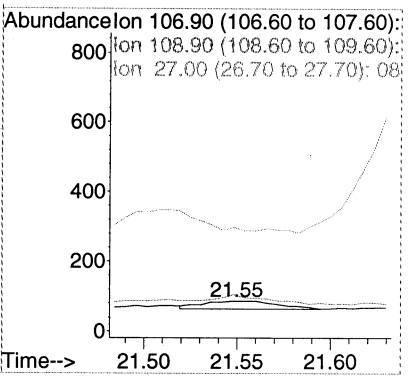


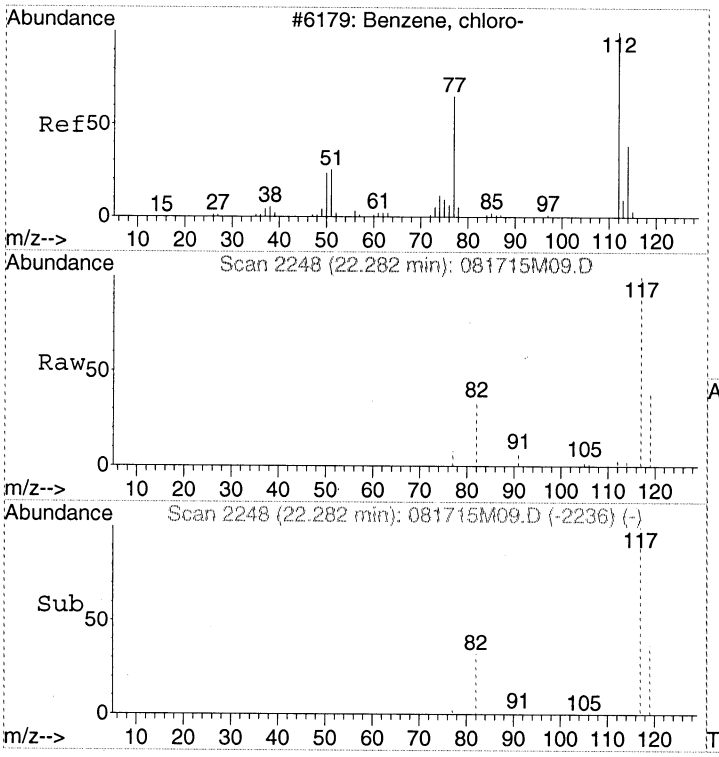


#25
1,2-Dibromoethane (EDB)
Concen: Below Cal
RT: 21.55 min Scan# 2155
Delta R.T. -0.01 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion:107 Resp: 61

Ion	Ratio	Lower	Upper
107	100		
109	73.8	74.3	114.3#
27	0.0	30.6	70.6#

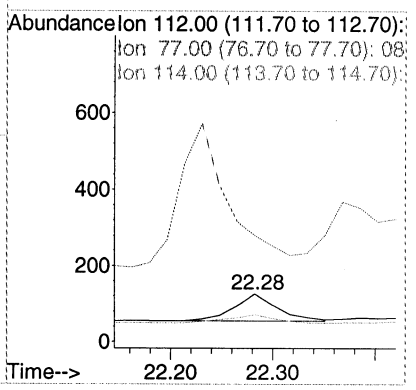




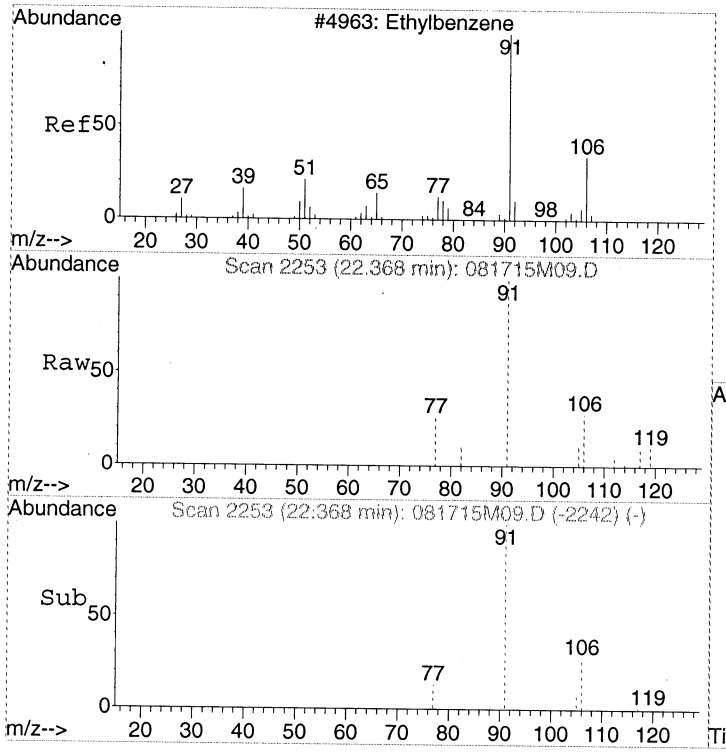
#26
Chlorobenzene
Concen: Below Cal
RT: 22.28 min Scan# 2248
Delta R.T. -0.00 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion:112 Resp: 211

Ion	Ratio	Lower	Upper
112	100		
77	0.0	39.3	79.3#
114	35.5	12.1	52.1



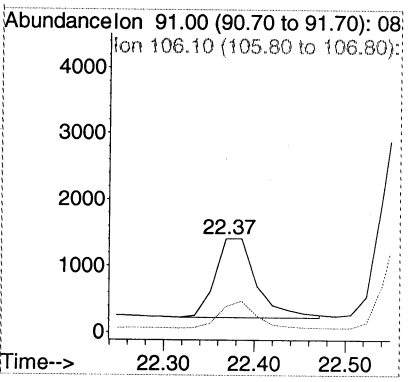
00262

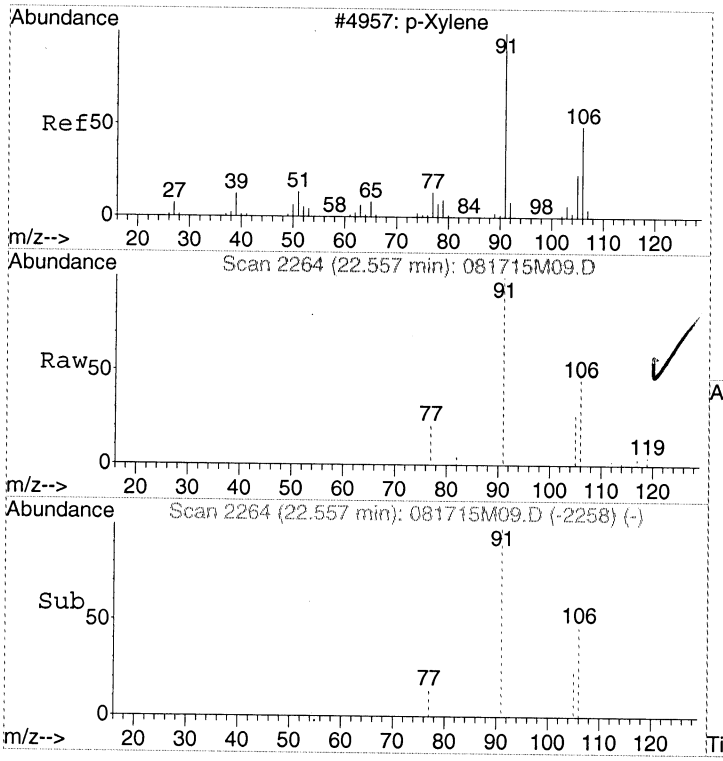


#27
Ethylbenzene
Concen: Below Cal
RT: 22.37 min Scan# 2253
Delta R.T. -0.02 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion: 91 Resp: 3783

Ion	Ratio	Lower	Upper
91	100		
106	30.1	11.4	51.4

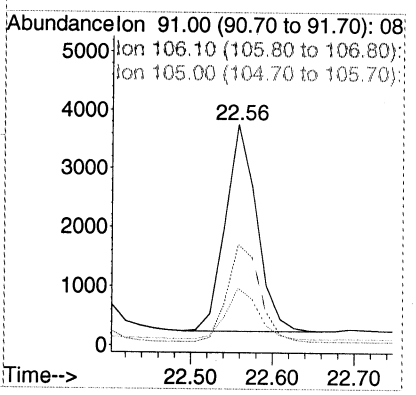


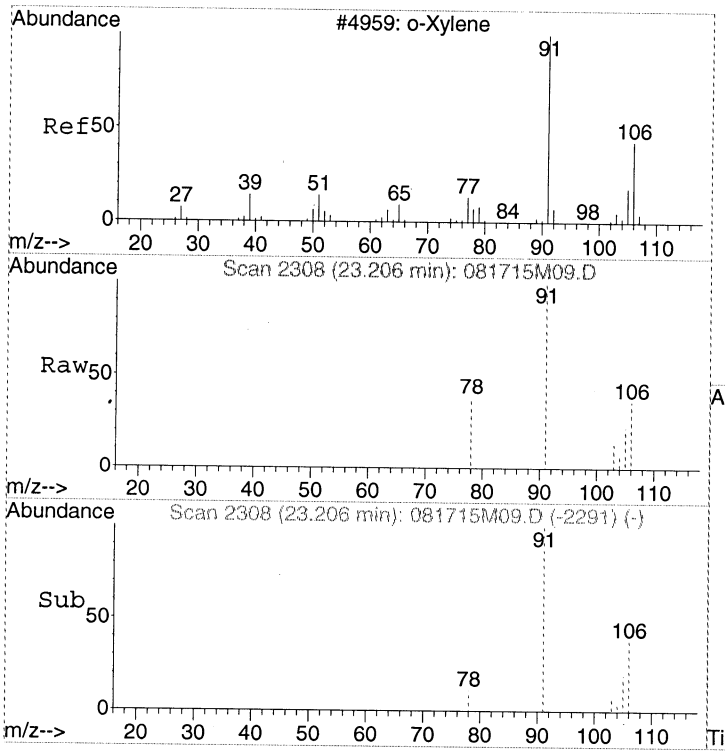


#28
m&p-Xylene
Concen: 34.64 pptv
RT: 22.56 min Scan# 2264
Delta R.T. 0.00 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion: 91 Resp: 9349

Ion	Ratio	Lower	Upper
91	100		
106	49.1	29.5	69.5
105	25.2	3.7	43.7

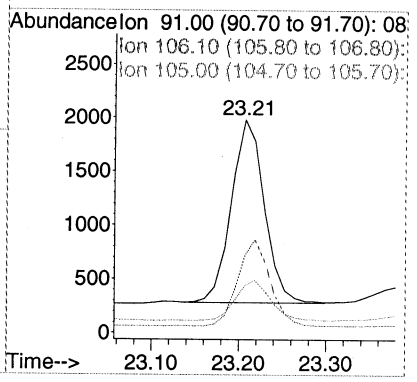


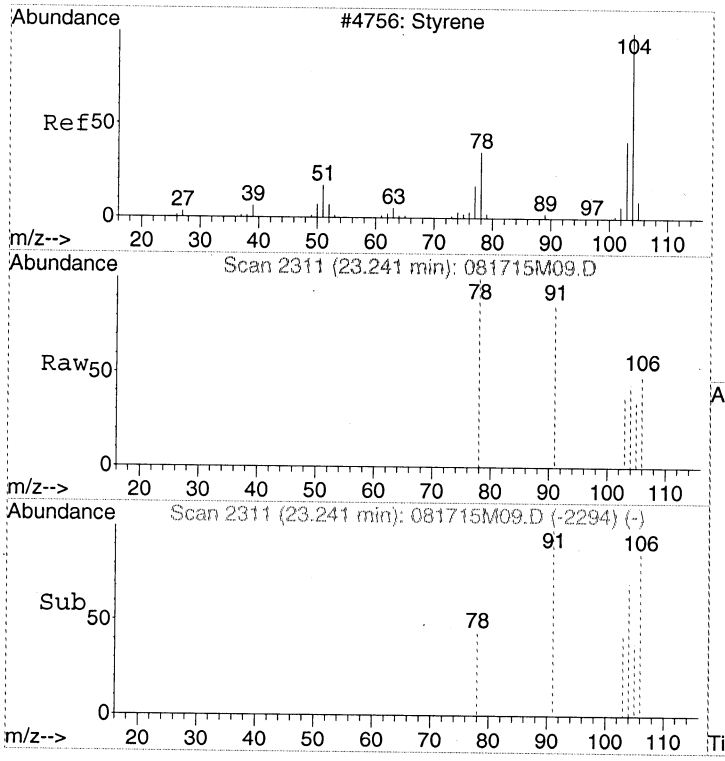


#29
o-Xylene
Concen: Below Cal
RT: 23.21 min Scan# 2308
Delta R.T. -0.00 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion: 91 Resp: 4435

Ion	Ratio	Lower	Upper
91	100		
106	46.5	26.0	66.0
105	23.5	6.3	46.3

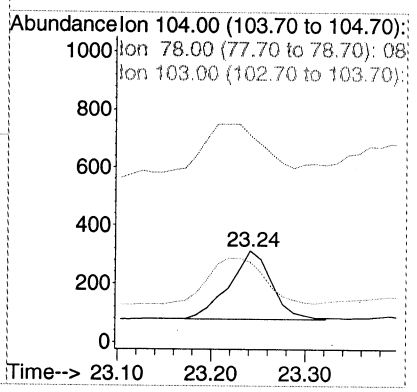


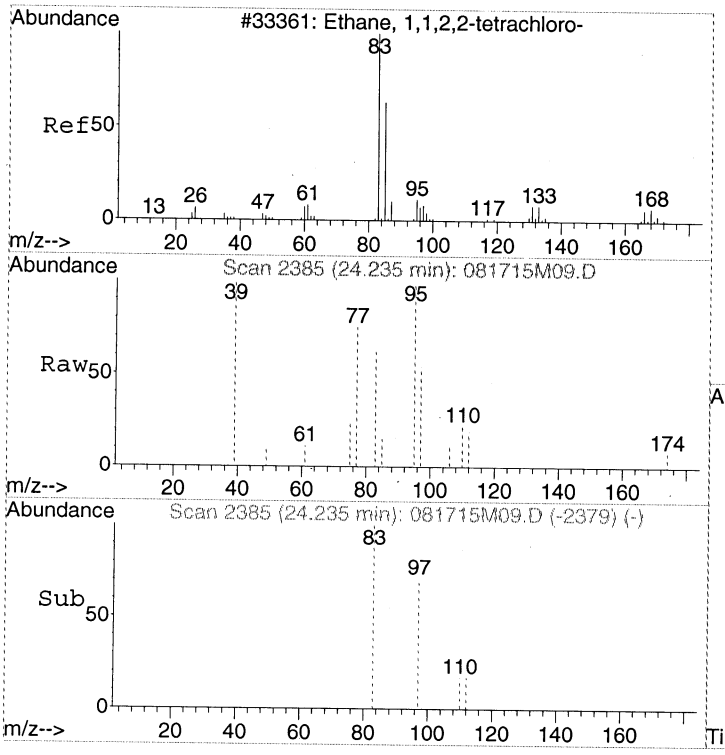


#30
Styrene
Concen: Below Cal
RT: 23.24 min Scan# 2311
Delta R.T. 0.00 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion:104 Resp: 728

Ion	Ratio	Lower	Upper
104	100		
78	0.0	33.4	73.4#
103	0.0	34.8	74.8#

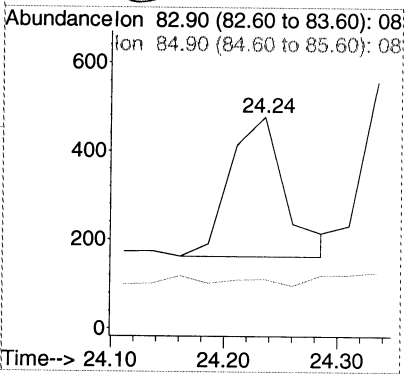


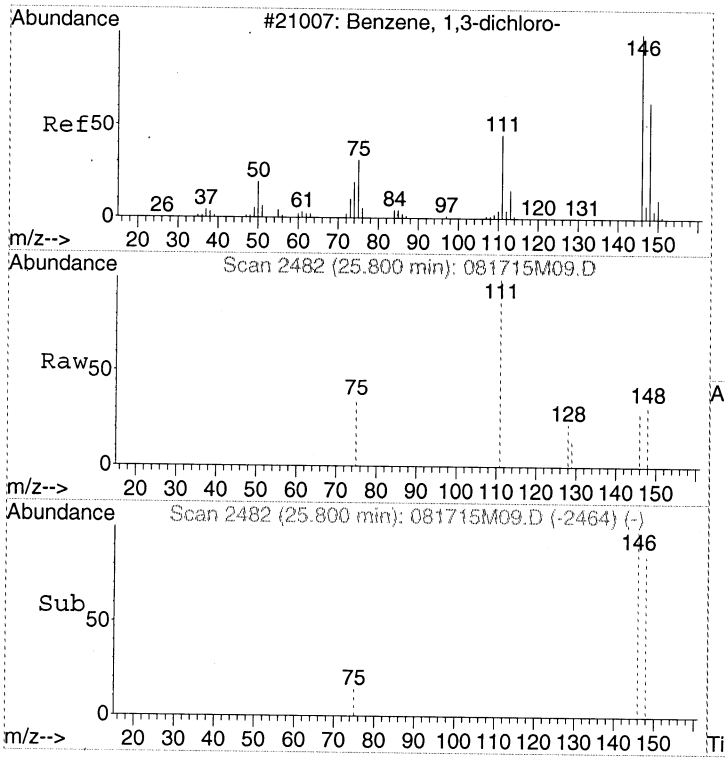


#31
1,1,2,2-Tetrachloroethane
Concen: Below Cal
RT: 24.24 min Scan# 2385
Delta R.T. -0.05 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion: 83 Resp: 1071

Ion	Ratio	Lower	Upper
83	100		
85	3.9	43.6	83.6#

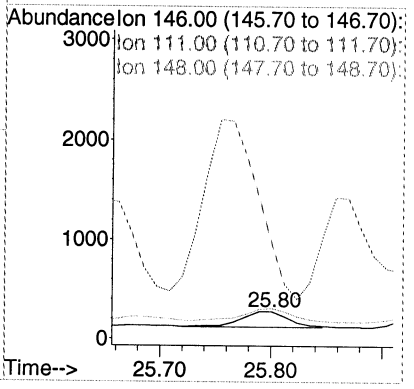


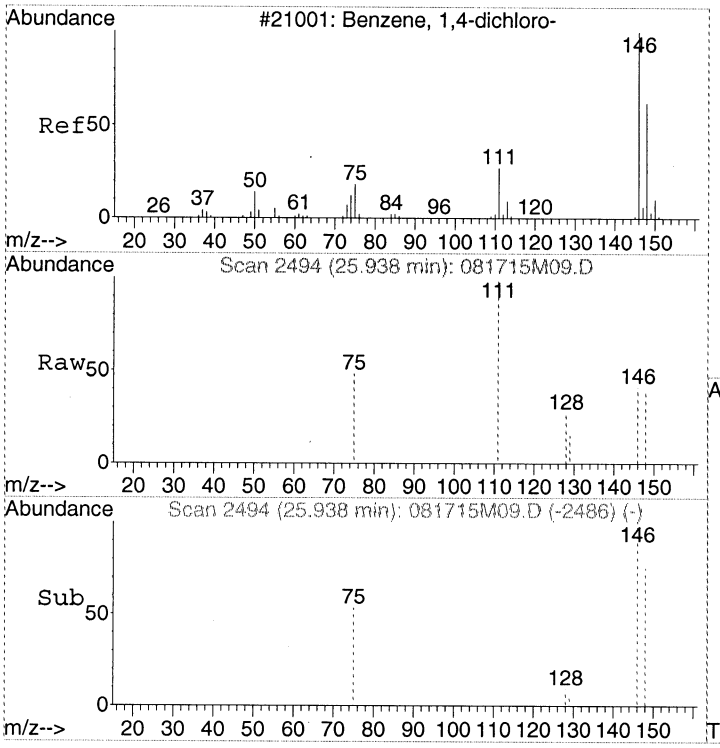


#32
1,3-Dichlorobenzene
Concen: Below Cal
RT: 25.80 min Scan# 2482
Delta R.T. 0.01 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion:146 Resp: 443

Ion	Ratio	Lower	Upper
146	100		
111	0.0	18.6	58.6#
148	87.6	44.1	84.1#

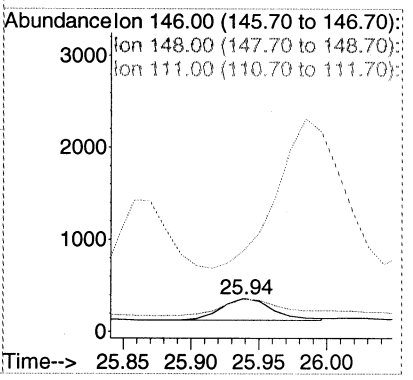


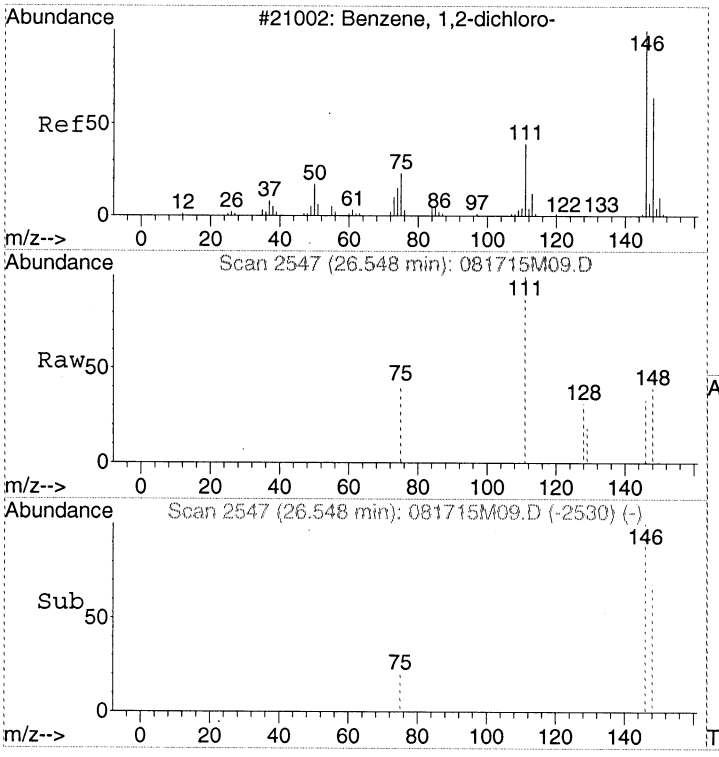


#33
1,4-Dichlorobenzene
Concen: Below Cal
RT: 25.94 min Scan# 2494
Delta R.T. -0.00 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion:146 Resp: 623

Ion	Ratio	Lower	Upper
146	100		
148	87.8	43.9	83.9#
111	0.0	16.7	56.7#

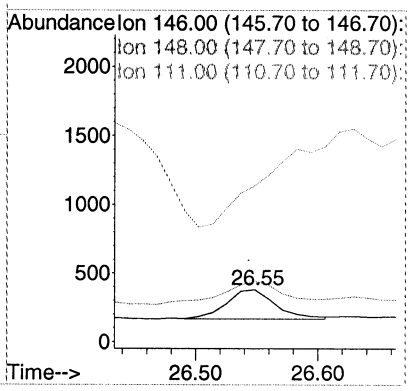




#34
1,2-Dichlorobenzene
Concen: Below Cal
RT: 26.55 min Scan# 2547
Delta R.T. 0.00 min
Lab File: 081715M09.D
Acq: 17 Aug 2015 5:39 pm

Tgt Ion:146 Resp: 592

Ion	Ratio	Lower	Upper
146	100		
148	101.5	43.8	83.8#
111	0.0	20.0	60.0#



CANISTER

CERTIFICATION

DATA

EPA Region 9 Laboratory

Canister Certification Status

Canister	Type	Status	Cert. Date	Cert. File
116	6L Low	Certified Clean	7/22/2015	072215M06
122	6L Low	Certified Clean	7/22/2015	072215M09
123	6L Low	Certified Clean	7/22/2015	072215M07
134	6L Low	Certified Clean	7/22/2015	072215M08

00208

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	**TO15SIM**	**Analyst Initial**	**LLH**	**Reviewer Initial**	TR	**Batch. Sequence**	- -
Instrument ID	**AG5973M**	**Date Analyzed**	**07/22/15**	**Date**	7/23/15	**Chemstation Last Update**	**Jul 23 12:20:05 2015**
Cases	-			**SDGs**	**Can Certification**		

Review each item listed below. As problems are discovered list them in the non-conformance section of the form and provide and explanation in the discussion part of the table.

NA	A	PR	Item Description
	X	✓	Runlog (Present, legible, peer reviewed)
	X	✓	Tune/ Degradation Standard
	X	✓	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
	X	✓	Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation.
	X	✓	QLS (level, frequency, and recovery) (include Chemstation summary)
	X	✓	Method / Extraction / Storage Blanks (frequency and contamination levels)
X			Surrogate Recoveries
	X	✓	IS Areas (SOP criteria met)
	X	✓	LCS/SCV (level, frequency, and recovery) (include Chemstation summary)
X			DUPLICATE
X			Samples (within calibration range, results calculated correctly)
X			Manual Integration Verified
X			Standard Prep Log (all pages present, legible, peer reviewed, legible)
X			Sample Prep/Extraction (all pages present, legible, peer reviewed)
	X		Others: **SIM + 112TCA, 1122PCA, 123TCP, DBCP, NAPH**

NA = not applicable A = Analyst check PR = Peer Review Check

Non-conformance Report

QC	File ID	Result	QC Limit	High Bias	Low Bias	Flag ND	Flag Hits	Discussion
ICAL								OK
SCV1	072215M12	68	70 - 130 %			X	X	Bromoethene
"	"	63	"			X	X	trans-1,2-Dichloroethene
								Daily QC = ok
IS	072215M12 →							Rerun
	" M18							

Clean Canister: 6L: 400 mL:

EPA Region 9 Laboratory
Canister Certification Status

Canister	Type	Status	Cert. Date	Cert. File
39	6L High	Certified Clean	7/22/2015	072215M05
116	6L Low	Certified Clean	7/22/2015	072215M06
122	6L Low	Certified Clean	7/22/2015	072215M09
123	6L Low	Certified Clean	7/22/2015	072215M07
134	6L Low	Certified Clean	7/22/2015	072215M08
448	6L Low	Certified Clean	7/22/2015	072215M10
492	6L Low	Certified Clean	7/22/2015	072215M11

SIM+ 112TCA, 1122PCA, 123TCP, DBCP, NAPH certified.

00210

----------SEQUENCE TABLE ----------

Sequence Name: C:\Smart\2015\072215SMAA.SEQ
Date: 07-23-2015
Time: 09:19:54
Int. Std Volume: 40 cc

Sample Name	Inlet	Auto #	Samp Pos	Cal Vol.	Std Vol.	Method	Time
BFB	1	1	50		40	C:\Smart\TO15.CTD	12:00
CCV1 250pptv SIM+A	1	1	250			C:\Smart\TO15.CTD	12:00
CRL1 50pptv SIM+A	1	1	50			C:\Smart\TO15.CTD	12:00
BLANK	1	2	400			C:\Smart\TO15.CTD	12:00
CAN #39 H	1	3	400			C:\Smart\TO15.CTD	12:00
CAN #116	1	4	400			C:\Smart\TO15.CTD	12:00
CAN #123	1	5	400			C:\Smart\TO15.CTD	12:00
CAN #134	1	6	400			C:\Smart\TO15.CTD	12:00
CAN #122	1	7	400			C:\Smart\TO15.CTD	12:00
CAN #448	1	8	400			C:\Smart\TO15.CTD	12:00
CAN #492	1	9	400			C:\Smart\TO15.CTD	12:00
CAN #504	1	10	400			C:\Smart\TO15.CTD	12:00
CAN #515	1	11	400			C:\Smart\TO15.CTD	12:00
CAN #772	1	12	400			C:\Smart\TO15.CTD	12:00
CAN #773	1	13	400			C:\Smart\TO15.CTD	12:00
CAN #767	1	14	400			C:\Smart\TO15.CTD	12:00
CAN #1187	1	15	400			C:\Smart\TO15.CTD	12:00
CAN #5716	1	16	400			C:\Smart\TO15.CTD	12:00

Injection Log

Directory: C:\MSDChem\1\2015\Data\072215MAA

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	072215M01.D	1.	S15Gxxx-TUN1	BFB 1410063	22 Jul 2015 10:40
2	1	072215M02.D	1.	S15Gxxx-CCV1@B15Gxxx-BS1	250pptv 1530041@1530044 SIM+ADDTL	22 Jul 2015 11:30
3	1	072215M03.D	1.	S15GXXX-CRL1	50pptv 1530039 SIM+ADDTL	22 Jul 2015 12:16
4	2	072215M04.D	1.	B15GXXX-BLK1	400ml BLANK	22 Jul 2015 13:12
5	3	072215M05.D	1.	CAN #39 H	400ml RECERTIFICATION	22 Jul 2015 14:36
6	4	072215M06.D	1.	CAN #116	400ml RECERTIFICATION	22 Jul 2015 15:28
7	5	072215M07.D	1.	CAN #123	400ml RECERTIFICATION	22 Jul 2015 16:21
8	6	072215M08.D	1.	CAN #134	400ml RECERTIFICATION	22 Jul 2015 17:13
9	7	072215M09.D	1.	CAN #122	400ml RECERTIFICATION	22 Jul 2015 18:06
10	8	072215M10.D	1.	CAN #448	400ml RECERTIFICATION	22 Jul 2015 18:58
11	9	072215M11.D	1.	CAN #492	400ml RECERTIFICATION	22 Jul 2015 19:51
12	10	072215M12.D	1.	CAN #504	400ml RECERTIFICATION	22 Jul 2015 20:43
13	11	072215M13.D	1.	CAN #515	400ml RECERTIFICATION	22 Jul 2015 21:36
14	12	072215M14.D	1.	CAN #772	400ml RECERTIFICATION	22 Jul 2015 22:28
15	13	072215M15.D	1.	CAN #773	400ml RECERTIFICATION	22 Jul 2015 23:21
16	14	072215M16.D	1.	CAN #767	400ml RECERTIFICATION	23 Jul 2015 00:13
17	15	072215M17.D	1.	CAN #1187	400ml RECERTIFICATION	23 Jul 2015 01:06
18	16	072215M18.D	1.	CAN #5716	400ml RECERTIFICATION	23 Jul 2015 01:59

GC/MS QA-QC Check Report

Tune File : C:\MSDCHEM\1\2015\DATA\072215MAA\072215M01.D
Tune Time : 22 Jul 2015 10:40 am

Daily Calibration File : C:\MSDCHEM\1\2015\DATA\072215MAA\072215M02.D

File	Sample	Surrogate Recovery %			Internal Standard Responses		
					103344	343709	257345
072215M02.D	S15Gxxx-CCV1	103344	343709	257345			
072215M03.D	S15GXXX-CRL1	92143	308147	235996			
072215M04.D	B15GXXX-BLK1	86875	279719	215486			
072215M05.D	CAN #39 H	88934	282351	228033			
072215M06.D	CAN #116	81107	252502	187218			
072215M07.D	CAN #123	79695	246143	183928			
072215M08.D	CAN #134	78580	241301	171663			
072215M09.D	CAN #122	73290	221520	157861			
072215M10.D	CAN #448	75965	227598	163275			
072215M11.D	CAN #492	77536	233147	169390			
072215M12.D	CAN #504	70504	212130	154123*			
072215M13.D	CAN #515	69144	203905*	147278*			
072215M14.D	CAN #772	66827	197020*	146549*			
072215M15.D	CAN #773	65092	189868*	150082*			
072215M16.D	CAN #767	65196	185900*	146065*			
072215M17.D	CAN #1187	62819	181709*	139321*			
072215M18.D	CAN #5716	62557	180679*	142204*			

RR

(fails) - fails 24hr time check * - fails criteria

Created: Thu Jul 23 09:23:26 2015 AG5973M

WA 7/23/15

Response Factor Report AG5973M

Method Path : C:\MSDCHEM\1\2015\METHOD\
Method File : 072115SIM+ADDLMAA.M
Title : TO15SIM
Last Update : Thu Jul 23 12:20:05 2015
Response Via : Initial Calibration

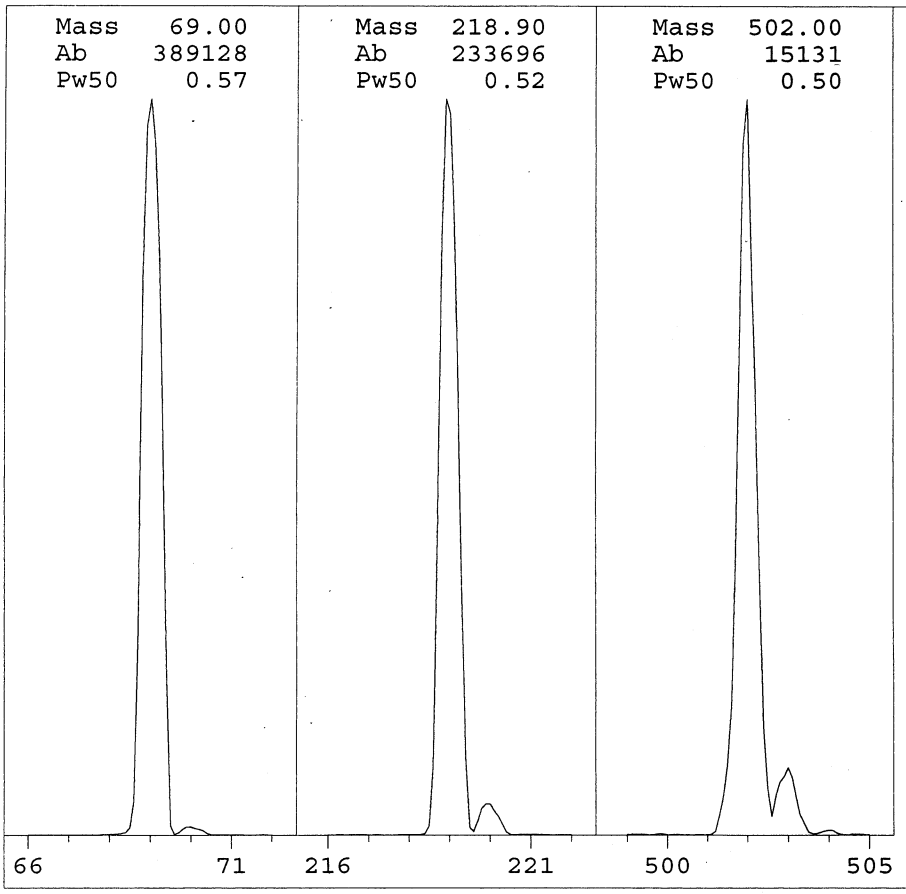
Calibration Files
50 =072115M07.D 150 =072115M08.D 250 =072115M09.D
350 =072115M10.D 500 =072115M11.D

		Compound	50	150	250	350	500	Avg	%RSD
1)	I	BROMOCHLOROMETHANE	----------ISTD----------						
2)	T	Vinyl chloride	0.775	0.667	0.547	0.571	0.559	0.624	15.52
3)	T	1,3-Butadiene	0.627	0.600	0.455	0.475	0.465	0.524	15.68
4)	T	Bromoethene	0.676	0.653	0.570	0.606	0.628	0.627	6.55
5)	T	1,1,2-Trichloro-1,2	1.351	1.327	1.153	1.222	1.221	1.254	6.54
6)	T	1,1-Dichloroethene	1.194	1.159	0.997	1.057	1.050	1.091	7.51
7)	T	Dichloromethane	1.111	0.924	0.773	0.798	0.777	0.877	16.53
8)	T	tert-Butyl methyl e	1.885	1.937	1.699	1.824	1.834	1.836	4.83
9)	T	trans-1,2-Dichloroe	1.142	1.106	0.950	1.006	0.998	1.040	7.70
10)	T	Hexane	1.102	1.090	0.946	1.011	1.007	1.031	6.27
11)	T	1,1-Dichloroethane	1.208	1.180	1.015	1.077	1.068	1.109	7.30
12)	T	cis-1,2-Dichloroeth	0.738	0.735	0.633	0.676	0.676	0.691	6.46
13)	T	Chloroform	1.453	1.429	1.225	1.298	1.287	1.339	7.33
14)	T	1,1,1-Trichloroetha	1.515	1.515	1.470	1.384	1.372	1.451	4.78
15)	T	Carbon tetrachlorid	1.186	1.201	1.038	1.097	1.241	1.152	7.19
16)	I	1,4-DIFLUOROBENZENE	----------ISTD----------						
17)	T	Benzene	0.732	0.721	0.658	0.658	0.659	0.686	5.46
18)	T	1,2-Dichloroethane	0.325	0.317	0.286	0.284	0.281	0.299	6.94
19)	T	Trichloroethene	0.309	0.317	0.291	0.294	0.298	0.302	3.62
20)	T	1,2-Dichloropropane	0.246	0.251	0.230	0.230	0.230	0.237	4.41
21)	I	CHLOROBENZENE-d5	----------ISTD----------						
22)	T	Toluene	0.904	0.936	0.962	0.920	1.071	0.959	6.92
23)	T	1,1,2-Trichloroetha	0.302	0.308	0.314	0.299	0.344	0.313	5.81
24)	T	Tetrachloroethene	0.448	0.464	0.476	0.456	0.529	0.475	6.75
25)	T	1,2-Dibromoethane (	0.402	0.418	0.430	0.409	0.475	0.427	6.73
26)	T	Chlorobenzene	0.702	0.722	0.738	0.707	0.819	0.737	6.47
27)	T	Ethylbenzene	1.107	1.132	1.171	1.126	1.309	1.169	6.97
28)	T	m&p-Xylene	0.860	0.876	0.914	0.881	1.029	0.912	7.48
29)	T	o-Xylene	0.881	0.876	0.911	0.874	1.020	0.912	6.78
30)	T	Styrene	0.628	0.633	0.663	0.641	0.752	0.663	7.76
31)	T	1,1,2,2-Tetrachloro	0.593	0.560	0.580	0.552	0.638	0.584	5.83
32)	T	1,2,3-Trichloroprop	0.491	0.467	0.478	0.452	0.522	0.482	5.49
33)	T	1,3-Dichlorobenzene	0.741	0.658	0.678	0.636	0.740	0.691	6.94
34)	T	1,4-Dichlorobenzene	0.731	0.648	0.666	0.627	0.727	0.680	6.91
35)	T	1,2-Dichlorobenzene	0.675	0.595	0.608	0.571	0.665	0.623	7.25
36)	T	1,2-Dibromo-3-chlor	0.298	0.266	0.272	0.252	0.297	0.277	7.21
37)	T	Naphthalene	1.287	1.037	1.004	0.910	1.078	1.063	13.15

(#) = Out of Range

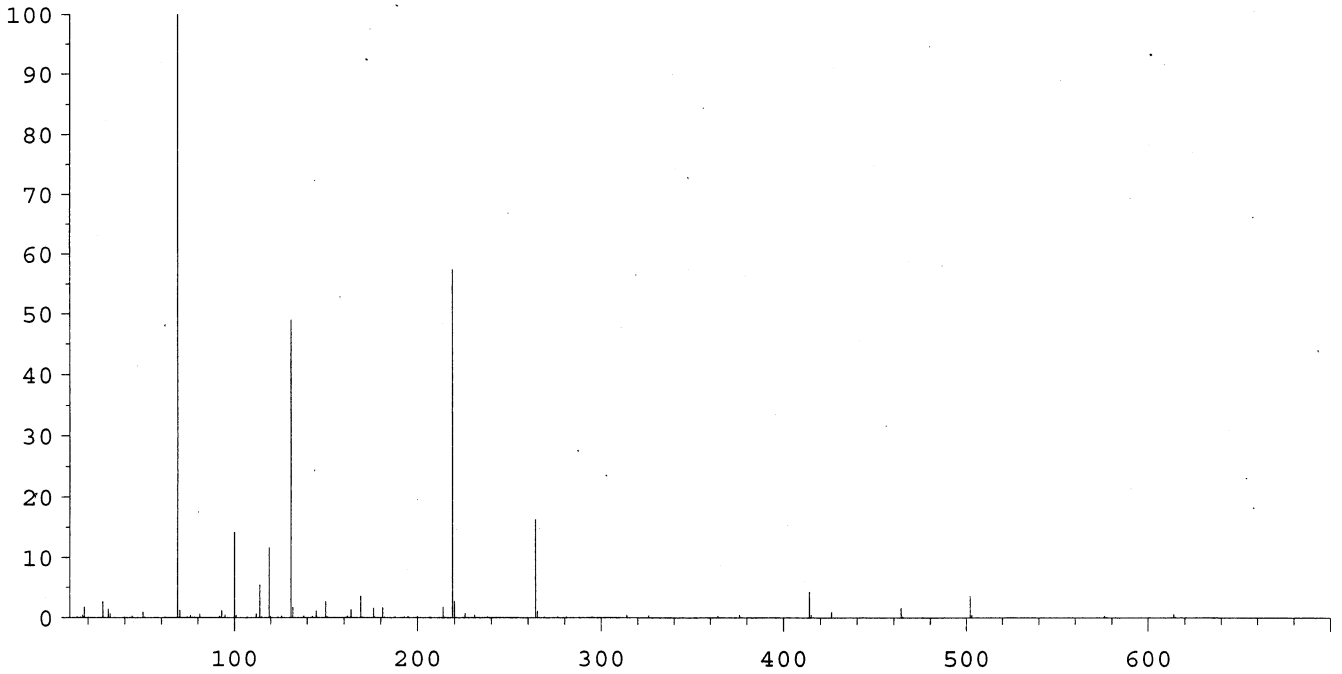
Wed Jul 22 10:22:28 2015
C:\MSDCHEM\1\5973N\BFB072215.U

Instrument: AG5973M



Ion Pol	POS	MassGain	320
		MassOffs	-10
Emission	34.6	AmuGain	2351
ElEnrgy	69.9	AmuOffs	126
Filament	1	Wid219	-0.025
		DC Pol	POS
Repeller	17.89		
IonFcus	90.2	HEDEnab	ON
EntLens	11.5	EMVolts	1235
EntOffs	20.33		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Zones:			
MS Source	230	TurboSpd	100
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
126 peaks Base: 69.00 Abundance: 351488



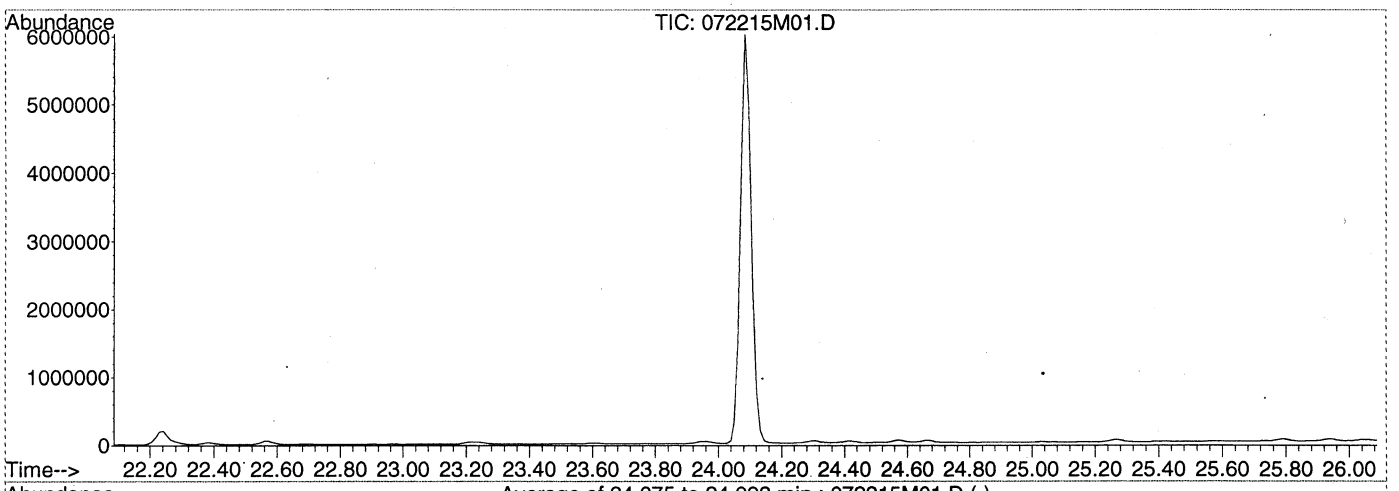
Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	351488	100.00	70.10	4133	1.18
219.00	201664	57.37	220.00	9349	4.64
502.00	12651	3.60	503.00	1183	9.35

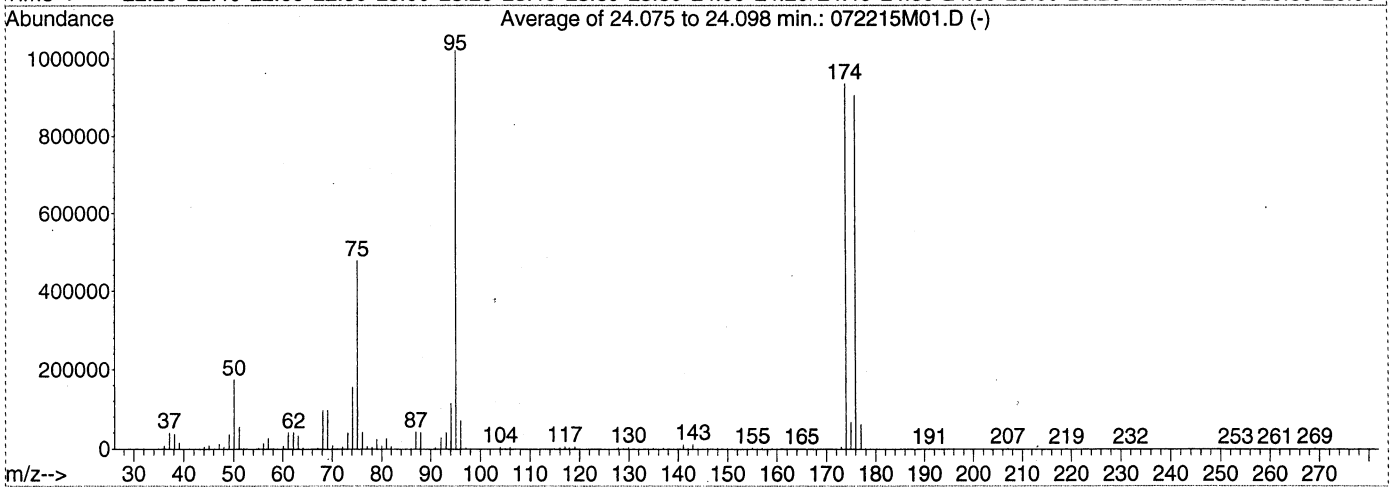
BFB

Data Path : C:\MSDChem\1\2015\Data\072215MAA\
Data File : 072215M01.D
Acq On : 22 Jul 2015 10:40 am
InstName : AG5973M
Operator : LLH
Sample : S15Gxxx-TUN1
Misc : BFB 1410063
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\MSDCHEM\1\2015\METHOD\072115BFB.M
Title : TO15
Last Update : Mon Apr 06 12:32:18 2015





AutoFind: Scans 1668, 1669, 1670; Background Corrected with Scan 1661

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	17.1	174165	PASS
75	95	30	66	46.8	477573	PASS
95	95	100	100	100.0	1021312	PASS
96	95	5	9	6.8	69538	PASS
173	174	0.00	2	0.5	4471	PASS
174	95	50	120	91.6	935040	PASS
175	174	4	9	7.1	66381	PASS
176	174	93	101	96.7	904640	PASS
177	176	5	9	6.7	60578	PASS

LLH 7/22/15

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\2015\Data\072215MAA\
Data File : 072215M02.D
Acq On : 22 Jul 2015 11:30 am
InstName : AG5973M
Operator : LLH
Sample : S15Gxxx-CCV1@B15Gxxx-BS1
Misc : 250pptv 1530041@1530044 SIM+ADDTL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 23 12:38:21 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\072115SIM+ADDLMAA.M
Quant Title : TO15SIM
QLast Update : Thu Jul 23 12:20:05 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	BROMOCHLOROMETHANE	1.000	1.000	0.0	98	0.00
2	T	Vinyl chloride	0.624	0.500	19.9	90	0.00
3	T	1,3-Butadiene	0.524	0.415	20.8	90	0.00
4	T	Bromoethene	0.627	0.526	16.1	90	0.00
5	T	1,1,2-Trichloro-1,2,2-trifl	1.254	1.045	16.7	89	0.00
6	T	1,1-Dichloroethene	1.091	0.910	16.6	90	0.00
7	T	Dichloromethane	0.877	0.714	18.6	91	0.00
8	T	tert-Butyl methyl ether (MT	1.836	1.520	17.2	88	0.00
9	T	trans-1,2-Dichloroethene	1.040	0.860	17.3	89	0.01
10	T	Hexane	1.031	0.845	18.0	88	0.00
11	T	1,1-Dichloroethane	1.109	0.920	17.0	89	0.00
12	T	cis-1,2-Dichloroethene	0.691	0.568	17.8	88	0.00
13	T	Chloroform	1.339	1.116	16.7	89	0.00
14	T	1,1,1-Trichloroethane	1.451	1.199	17.4	80	0.00
15	T	Carbon tetrachloride	1.152	1.154	-0.2	109	0.00
16	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	98	-0.01
17	T	Benzene	0.686	0.590	14.0	88	-0.01
18	T	1,2-Dichloroethane	0.299	0.260	13.0	89	0.00
19	T	Trichloroethene	0.302	0.260	13.9	88	0.00
20	T	1,2-Dichloropropane	0.237	0.208	12.2	89	0.00
21	I	CHLOROBENZENE-d5	1.000	1.000	0.0	100	0.00
22	T	Toluene	0.959	0.845	11.9	88	0.00
23	T	1,1,2-Trichloroethane	0.313	0.280	10.5	90	0.00
24	T	Tetrachloroethene	0.475	0.418	12.0	88	0.00
25	T	1,2-Dibromoethane (EDB)	0.427	0.382	10.5	89	0.00
26	T	Chlorobenzene	0.737	0.656	11.0	89	0.00
27	T	Ethylbenzene	1.169	1.042	10.9	89	0.00
28	T	m&p-Xylene	0.912	0.810	11.2	89	0.00
29	T	o-Xylene	0.912	0.811	11.1	89	0.00
30	T	Styrene	0.663	0.571	13.9	87	0.00
31	T	1,1,2,2-Tetrachloroethane	0.584	0.530	9.2	92	0.00
32	T	1,2,3-Trichloropropane	0.482	0.433	10.2	91	0.00
33	T	1,3-Dichlorobenzene	0.691	0.594	14.0	88	0.00
34	T	1,4-Dichlorobenzene	0.680	0.579	14.9	87	0.00
35	T	1,2-Dichlorobenzene	0.623	0.539	13.5	89	0.00
36	T	1,2-Dibromo-3-chloropropane	0.277	0.260	6.1	96	0.00
37	T	Naphthalene	1.063	0.866	18.5	87	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

LLH 7/23/15

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2015\Data\072215MAA\
Data File : 072215M02.D
Acq On : 22 Jul 2015 11:30 am
InstName : AG5973M
Operator : LLH
Sample : S15Gxxx-CCV1@B15Gxxx-BS1
Misc : 250pptv 1530041@1530044 SIM+ADDTL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 23 12:38:21 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\072115SIM+ADDLMAA.M
Quant Title : TO15SIM
QLast Update : Thu Jul 23 12:20:05 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.24	49	103344	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.30	114	343709	375.00 pptv	-0.01
21) CHLOROBENZENE-d5	22.25	117	257345	341.00 pptv	0.00

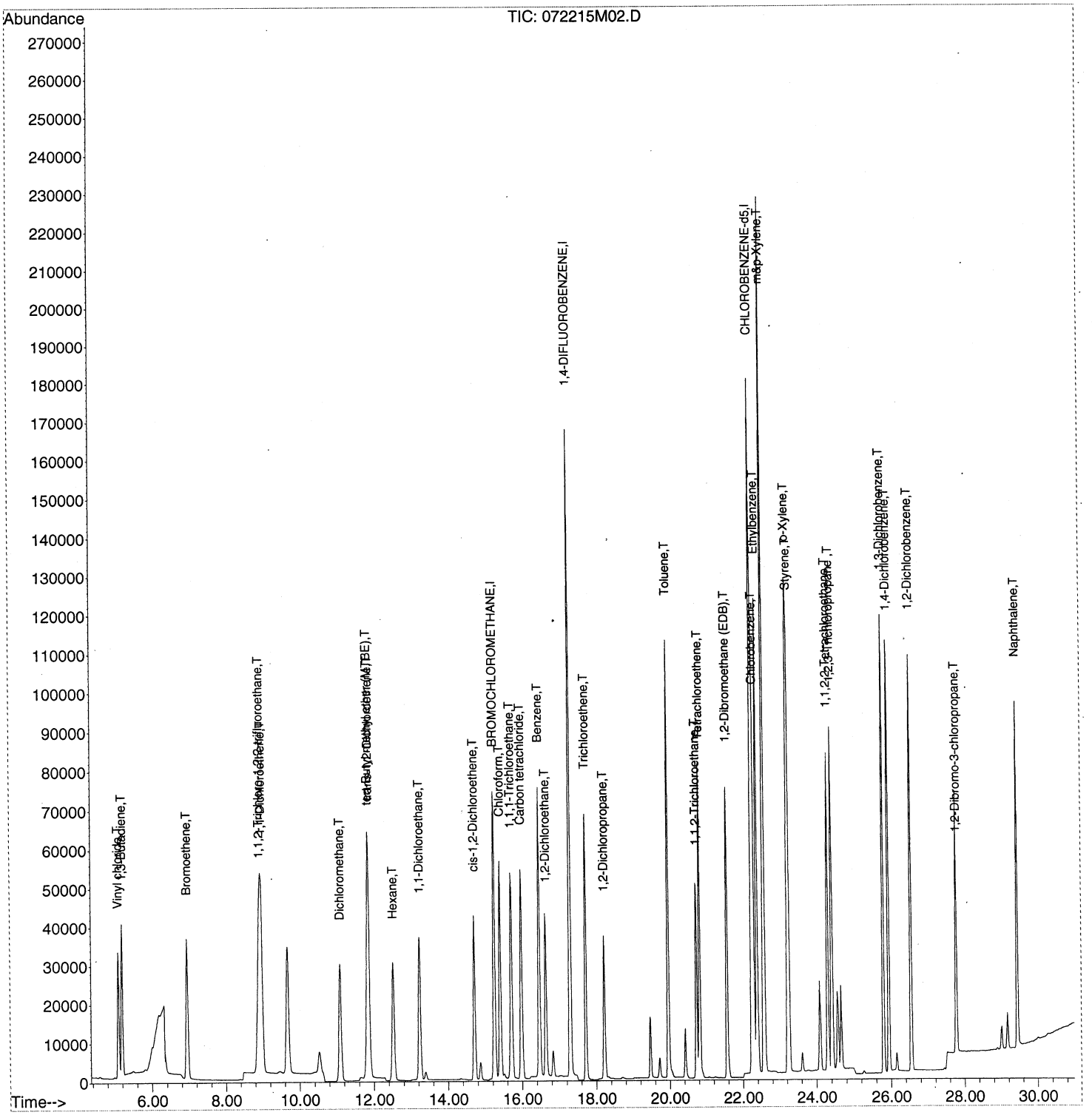
Target Compounds					Qvalue
2) Vinyl chloride	5.09	62	45497	240.73 pptv	99
3) 1,3-Butadiene	5.19	54	34597	217.75 pptv	99
4) Bromoethene	6.94	106	43814	230.64 pptv	99
5) 1,1,2-Trichloro-1,2,2-trif	8.90	151	87064	229.00 pptv	99
6) 1,1-Dichloroethene	8.95	61	75856	229.34 pptv	99
7) Dichloromethane	11.09	49	59499	223.91 pptv	99
8) tert-Butyl methyl ether (M	11.83	73	126655	227.64 pptv	99
9) trans-1,2-Dichloroethene	11.86	61	65126	206.58 pptv	99
10) Hexane	12.52	57	70425	225.34 pptv	99
11) 1,1-Dichloroethane	13.23	63	83643	248.78 pptv	100
12) cis-1,2-Dichloroethene	14.71	96	47304	225.72 pptv	100
13) Chloroform	15.41	83	93041	229.36 pptv	100
14) 1,1,1-Trichloroethane	15.71	97	90838	206.60 pptv	96
15) Carbon tetrachloride	15.98	117	96170	275.35 pptv	99
17) Benzene	16.47	78	148784	236.73 pptv	100
18) 1,2-Dichloroethane	16.66	62	65610	239.75 pptv	99
19) Trichloroethene	17.72	130	65659	237.35 pptv	99
20) 1,2-Dichloropropane	18.22	63	52542	241.40 pptv	99
22) Toluene	19.96	91	175465	242.53 pptv	100
23) 1,1,2-Trichloroethane	20.73	97	58146	245.84 pptv	99
24) Tetrachloroethene	20.83	166	86812	242.34 pptv	100
25) 1,2-Dibromoethane (EDB)	21.57	107	79203	245.98 pptv	99
26) Chlorobenzene	22.30	112	136175	244.67 pptv	100
27) Ethylbenzene	22.39	91	216284	245.15 pptv	99
28) m&p-Xylene	22.57	91	336269	488.54 pptv	100
29) o-Xylene	23.22	91	168228	244.33 pptv	99
30) Styrene	23.25	104	118469	236.62 pptv	99
31) 1,1,2,2-Tetrachloroethane	24.31	83	110098	249.62 pptv	100
32) 1,2,3-Trichloropropane	24.41	75	83605	229.76 pptv #	100
33) 1,3-Dichlorobenzene	25.80	146	123231	236.39 pptv	100
34) 1,4-Dichlorobenzene	25.95	146	120169	234.21 pptv	100
35) 1,2-Dichlorobenzene	26.55	146	111917	238.18 pptv	100
36) 1,2-Dibromo-3-chloropropan	27.79	157	48884	234.06 pptv	99
37) Naphthalene	29.43	128	166702	207.78 pptv	100

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

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2015\Data\072215MAA\
Data File : 072215M02.D
Acq On : 22 Jul 2015 11:30 am
InstName : AG5973M
Operator : LLH
Sample : S15Gxxx-CCV1@B15Gxxx-BS1
Misc : 250pptv 1530041@1530044 SIM+ADDTL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 23 12:38:21 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\072115SIM+ADDLMAA.M
Quant Title : TO15SIM
QLast Update : Thu Jul 23 12:20:05 2015
Response via : Initial Calibration



LCS REPORT

Instrument Name: AG5973M
Sample Name: S15Gxxx-CCV1@B15Gxxx-BS1
Misc Info: 250pptv 1530041@1530044 SIM+ADDTL
Date Acquired: 7/22/2015 11:30
QLast Update: Thu Jul 23 12:20:05 2015
Operator: LLH

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	BROMOCHLOROMETHANE	15.24	341.00	341.00	100%	70.0	130.0	pass
2)	Vinyl chloride	5.09	300.00	240.73	80%	74.0	128.0	pass
3)	1,3-Butadiene	5.19	275.00	217.75	79%	71.0	127.0	pass
4)	Bromoethene	6.94	275.00	230.64	84%	67.0	125.0	pass
5)	1,1,2-Trichloro-1,2,2-trifluoroethane	8.90	275.00	229.00	83%	78.0	123.0	pass
6)	1,1-Dichloroethene	8.95	275.00	229.34	83%	77.0	129.0	pass
7)	Dichloromethane	11.09	275.00	223.91	81%	76.0	117.0	pass
8)	tert-Butyl methyl ether (MTBE)	11.83	275.00	227.64	83%	63.0	111.0	pass
9)	trans-1,2-Dichloroethene	11.86	250.00	206.58	83%	61.0	108.0	pass
10)	Hexane	12.52	275.00	225.34	82%	66.0	115.0	pass
11)	1,1-Dichloroethane	13.23	300.00	248.78	83%	76.0	133.0	pass
12)	cis-1,2-Dichloroethene	14.71	275.00	225.72	82%	64.0	142.0	pass
13)	Chloroform	15.41	275.00	229.36	83%	63.0	123.0	pass
14)	1,1,1-Trichloroethane	15.71	250.00	206.60	83%	65.0	121.0	pass
15)	Carbon tetrachloride	15.98	275.00	275.35	100%	69.0	121.0	pass
16)	1,4-DIFLUOROBENZENE	17.30	375.00	375.00	100%	70.0	130.0	pass
17)	Benzene	16.47	275.00	236.73	86%	65.0	123.0	pass
18)	1,2-Dichloroethane	16.66	275.00	239.75	87%	75.0	123.0	pass
19)	Trichloroethene	17.72	275.00	237.35	86%	57.0	144.0	pass
20)	1,2-Dichloropropane	18.22	275.00	241.40	88%	63.0	125.0	pass
21)	CHLOROBENZENE-d5	22.25	341.00	341.00	100%	70.0	130.0	pass
22)	Toluene	19.96	275.00	242.53	88%	68.0	119.0	pass
23)	1,1,2-Trichloroethane	20.73	275.00	245.84	89%	70.0	130.0	pass
24)	Tetrachloroethene	20.83	275.00	242.34	88%	67.0	123.0	pass
25)	1,2-Dibromoethane (EDB)	21.57	275.00	245.98	89%	67.0	111.0	pass
26)	Chlorobenzene	22.30	275.00	244.67	89%	57.0	126.0	pass
27)	Ethylbenzene	22.39	275.00	245.15	89%	70.0	130.0	pass
28)	m&p-Xylene	22.57	550.00	488.54	89%	51.0	121.0	pass
29)	o-Xylene	23.22	275.00	244.33	89%	57.0	118.0	pass
30)	Styrene	23.25	275.00	236.62	86%	57.0	128.0	pass
31)	1,1,2,2-Tetrachloroethane	24.31	275.00	249.62	91%	70.0	130.0	pass
32)	1,2,3-Trichloropropane	24.41	255.63	229.76	90%	70.0	130.0	pass
33)	1,3-Dichlorobenzene	25.80	275.00	236.39	86%	62.0	130.0	pass
34)	1,4-Dichlorobenzene	25.95	275.00	234.21	85%	61.0	131.0	pass
35)	1,2-Dichlorobenzene	26.55	275.00	238.18	87%	43.0	124.0	pass
36)	1,2-Dibromo-3-chloropropane	27.79	249.00	234.06	94%	48.0	162.0	pass
37)	Naphthalene	29.43	255.00	207.78	81%	70.0	130.0	pass

QLS REPORT

Instrument Name: AG5973M
Sample Name: S15GXXX-CRL1
Misc Info: 50pptv 1530039 SIM+ADDTL
Date Acquired: 7/22/2015 12:16
QLast Update: Thu Jul 23 12:20:05 2015
Operator: LLH

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	BROMOCHLOROMETHANE	15.24	341.00	341.00	100%	70.0	130.0	pass
2)	Vinyl chloride	5.09	60.00	66.03	110%	74.0	128.0	pass
3)	1,3-Butadiene	5.18	55.00	57.20	104%	71.0	127.0	pass
4)	Bromoethene	6.97	55.00	49.79	91%	67.0	125.0	pass
5)	1,1,2-Trichloro-1,2,2-trifluoroethane	8.92	55.00	49.49	90%	78.0	123.0	pass
6)	1,1-Dichloroethene	8.97	55.00	50.23	91%	77.0	129.0	pass
7)	Dichloromethane	11.09	55.00	61.51	112%	76.0	117.0	pass
8)	tert-Butyl methyl ether (MTBE)	11.83	55.00	47.10	86%	63.0	111.0	pass
9)	trans-1,2-Dichloroethene	11.86	50.00	45.55	91%	61.0	108.0	pass
10)	Hexane	12.52	55.00	48.23	88%	66.0	115.0	pass
11)	1,1-Dichloroethane	13.23	60.00	54.65	91%	76.0	133.0	pass
12)	cis-1,2-Dichloroethene	14.71	55.00	49.07	89%	64.0	142.0	pass
13)	Chloroform	15.41	55.00	50.21	91%	63.0	123.0	pass
14)	1,1,1-Trichloroethane	15.71	50.00	44.64	89%	65.0	121.0	pass
15)	Carbon tetrachloride	15.99	55.00	50.06	91%	69.0	121.0	pass
16)	1,4-DIFLUOROBENZENE	17.31	375.00	375.00	100%	70.0	130.0	pass
17)	Benzene	16.48	55.00	50.05	91%	65.0	123.0	pass
18)	1,2-Dichloroethane	16.65	55.00	51.65	94%	75.0	123.0	pass
19)	Trichloroethene	17.72	55.00	48.51	88%	57.0	144.0	pass
20)	1,2-Dichloropropane	18.22	55.00	49.33	90%	63.0	125.0	pass
21)	CHLOROBENZENE-d5	22.25	341.00	341.00	100%	70.0	130.0	pass
22)	Toluene	19.96	55.00	46.14	84%	68.0	119.0	pass
23)	1,1,2-Trichloroethane	20.71	55.00	48.14	88%	70.0	130.0	pass
24)	Tetrachloroethene	20.83	55.00	46.78	85%	67.0	123.0	pass
25)	1,2-Dibromoethane (EDB)	21.56	55.00	47.02	85%	67.0	111.0	pass
26)	Chlorobenzene	22.28	55.00	47.51	86%	57.0	126.0	pass
27)	Ethylbenzene	22.39	55.00	47.09	86%	70.0	130.0	pass
28)	m&p-Xylene	22.56	110.00	91.95	84%	51.0	121.0	pass
29)	o-Xylene	23.22	55.00	47.25	86%	57.0	118.0	pass
30)	Styrene	23.25	55.00	44.03	80%	57.0	128.0	pass
31)	1,1,2,2-Tetrachloroethane	24.31	55.00	50.94	93%	70.0	130.0	pass
32)	1,2,3-Trichloropropane	24.41	51.13	47.62	93%	70.0	130.0	pass
33)	1,3-Dichlorobenzene	25.80	55.00	50.79	92%	62.0	130.0	pass
34)	1,4-Dichlorobenzene	25.94	55.00	50.57	92%	61.0	131.0	pass
35)	1,2-Dichlorobenzene	26.55	55.00	52.45	95%	43.0	124.0	pass
36)	1,2-Dibromo-3-chloropropane	27.79	49.90	49.98	100%	48.0	162.0	pass
37)	Naphthalene	29.43	51.00	54.06	106%	70.0	130.0	pass

LLH 7/22/15

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2015\Data\072215MAA\
Data File : 072215M03.D
Acq On : 22 Jul 2015 12:16 pm
InstName : AG5973M
Operator : LLH
Sample : S15GXXX-CRL1
Misc : 50pptv 1530039 SIM+ADDTL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 23 12:41:09 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\072115SIM+ADDLMAA.M
Quant Title : TO15SIM
QLast Update : Thu Jul 23 12:20:05 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.24	49	92143	341.00	pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.31	114	308147	375.00	pptv	0.00
21) CHLOROBENZENE-d5	22.25	117	235996	341.00	pptv	0.00

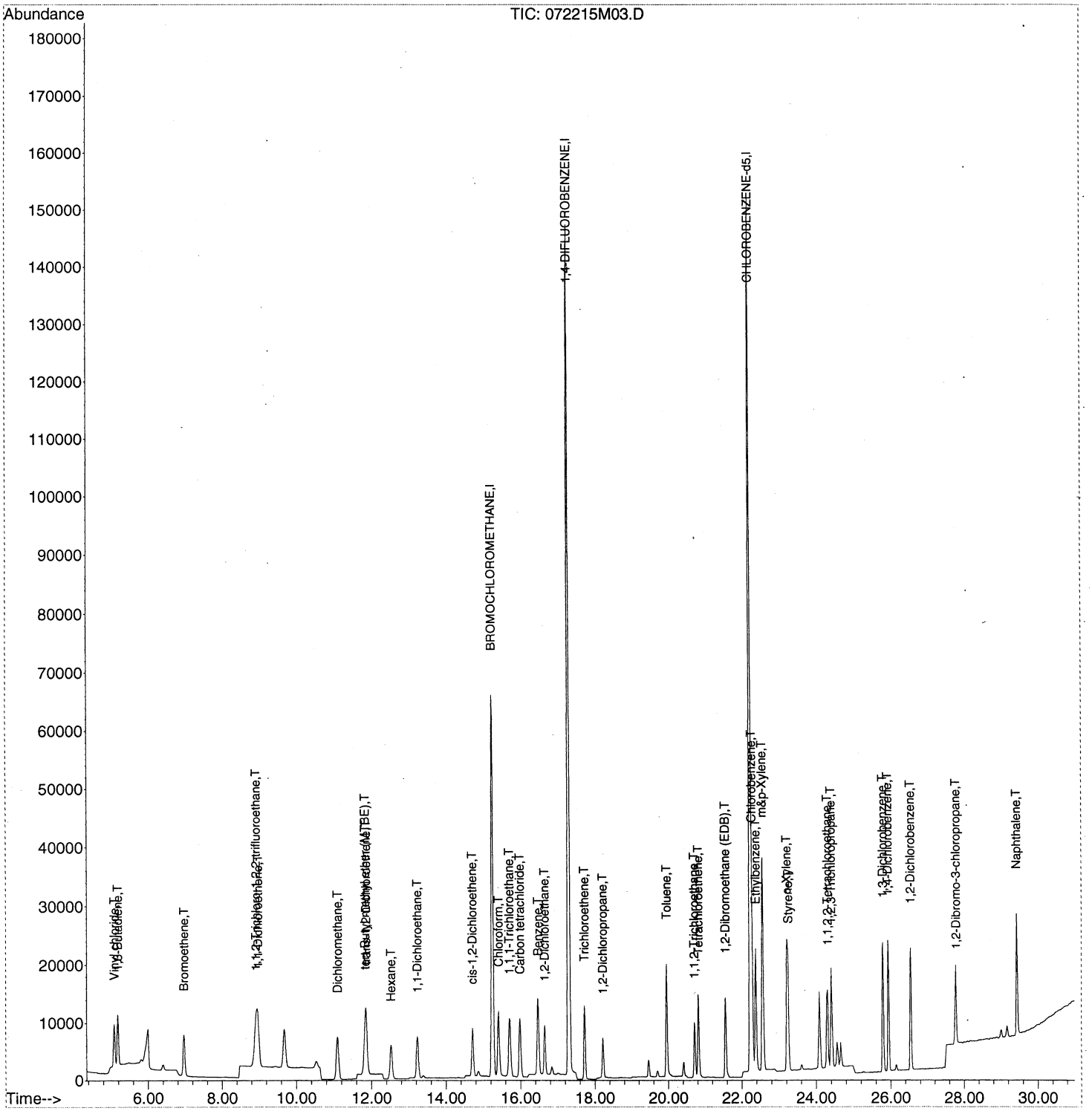
Target Compounds						Qvalue
2) Vinyl chloride	5.09	62	11127	66.03	pptv #	77
3) 1,3-Butadiene	5.18	54	8103	57.20	pptv	99
4) Bromoethene	6.97	106	8433	49.79	pptv	96
5) 1,1,2-Trichloro-1,2,2-trif	8.92	151	16777	49.49	pptv	98
6) 1,1-Dichloroethene	8.97	61	14815	50.23	pptv	98
7) Dichloromethane	11.09	49	14574	61.51	pptv	98
8) tert-Butyl methyl ether (M	11.83	73	23366	47.10	pptv	99
9) trans-1,2-Dichloroethene	11.86	61	12803	45.55	pptv	100
10) Hexane	12.52	57	13439	48.23	pptv	98
11) 1,1-Dichloroethane	13.23	63	16383	54.65	pptv	98
12) cis-1,2-Dichloroethene	14.71	96	9169	49.07	pptv	99
13) Chloroform	15.41	83	18162	50.21	pptv	92
14) 1,1,1-Trichloroethane	15.71	97	17500	44.64	pptv	96
15) Carbon tetrachloride	15.99	117	15588	50.06	pptv	95
17) Benzene	16.48	78	28203	50.05	pptv	100
18) 1,2-Dichloroethane	16.65	62	12673	51.65	pptv	99
19) Trichloroethene	17.72	130	12031	48.51	pptv	99
20) 1,2-Dichloropropane	18.22	63	9626	49.33	pptv	98
22) Toluene	19.96	91	30615	46.14	pptv	99
23) 1,1,2-Trichloroethane	20.71	97	10441	48.14	pptv	99
24) Tetrachloroethene	20.83	166	15368	46.78	pptv	98
25) 1,2-Dibromoethane (EDB)	21.56	107	13883	47.02	pptv	98
26) Chlorobenzene	22.28	112	24247	47.51	pptv	93
27) Ethylbenzene	22.39	91	38102	47.09	pptv	99
28) m&p-Xylene	22.56	91	58042	91.95	pptv	100
29) o-Xylene	23.22	91	29834	47.25	pptv	99
30) Styrene	23.25	104	20216	44.03	pptv	97
31) 1,1,2,2-Tetrachloroethane	24.31	83	20605	50.94	pptv	100
32) 1,2,3-Trichloropropane	24.41	75	15891	47.62	pptv #	98
33) 1,3-Dichlorobenzene	25.80	146	24281	50.79	pptv	99
34) 1,4-Dichlorobenzene	25.94	146	23796	50.57	pptv	100
35) 1,2-Dichlorobenzene	26.55	146	22599	52.45	pptv	100
36) 1,2-Dibromo-3-chloropropan	27.79	157	9572	49.98	pptv	95
37) Naphthalene	29.43	128	39772	54.06	pptv	100

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

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2015\Data\072215MAA\
Data File : 072215M03.D
Acq On : 22 Jul 2015 12:16 pm
InstName : AG5973M
Operator : LLH
Sample : S15GXXX-CRL1
Misc : 50pptv 1530039 SIM+ADDTL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 23 12:41:09 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\072115SIM+ADDLMAA.M
Quant Title : TO15SIM
QLast Update : Thu Jul 23 12:20:05 2015
Response via : Initial Calibration



00223

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\072215MAA\
Data File : 072215M04.D
Acq On : 22 Jul 2015 1:12 pm
InstName : AG5973M
Operator : LLH
Sample : B15GXXX-BLK1
Misc : 400ml BLANK
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 23 12:41:52 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\072115SIM+ADDLMAA.M
Quant Title : TO15SIM
QLast Update : Thu Jul 23 12:20:05 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.24	49	86875	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.31	114	279719	375.00 pptv	0.00
21) CHLOROBENZENE-d5	22.25	117	215486	341.00 pptv	0.00

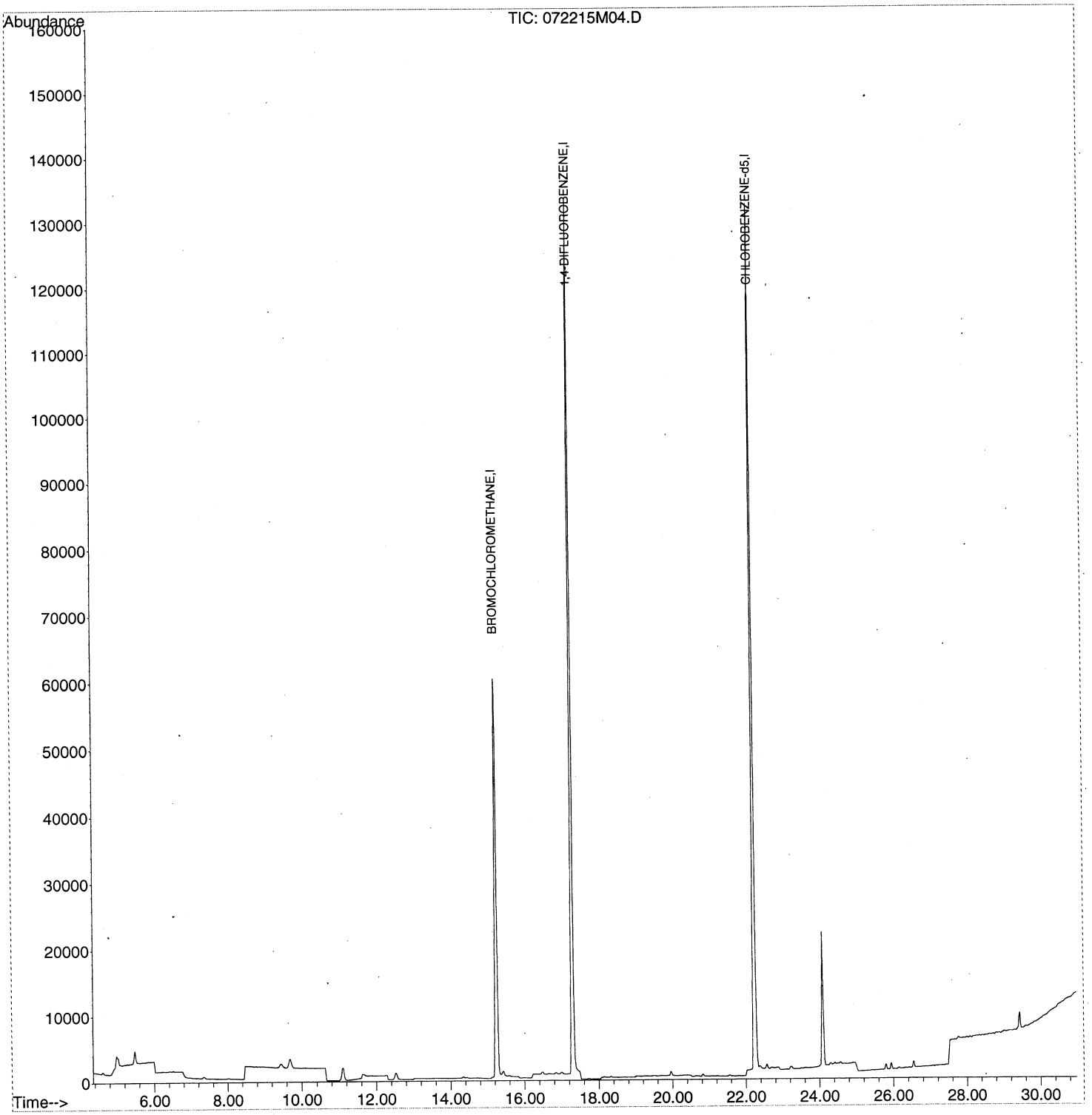
Target Compounds					Qvalue
2) Vinyl chloride	5.09	62	245	N.D.	
3) 1,3-Butadiene	5.19	54	81	N.D.	
4) Bromoethene	0.00	106	0	N.D.	
5) 1,1,2-Trichloro-1,2,2-trif	8.92	151	65	N.D.	
6) 1,1-Dichloroethene	8.97	61	89	N.D.	
7) Dichloromethane	11.09	49	3939	N.D.	
8) tert-Butyl methyl ether (M	11.85	73	162	N.D.	
9) trans-1,2-Dichloroethene	11.87	61	67	N.D.	
10) Hexane	12.52	57	2327	N.D.	
11) 1,1-Dichloroethane	13.23	63	3	N.D.	
12) cis-1,2-Dichloroethene	14.72	96	4	N.D.	
13) Chloroform	15.41	83	139	N.D.	
14) 1,1,1-Trichloroethane	15.71	97	73	N.D.	
15) Carbon tetrachloride	15.87	117	269	N.D.	
17) Benzene	16.48	78	719	N.D.	
18) 1,2-Dichloroethane	16.65	62	109	N.D.	
19) Trichloroethene	17.72	130	78	N.D.	
20) 1,2-Dichloropropane	18.07	63	129	N.D.	
22) Toluene	19.96	91	910	N.D.	
23) 1,1,2-Trichloroethane	20.71	97	95	N.D.	
24) Tetrachloroethene	20.81	166	178	N.D.	
25) 1,2-Dibromoethane (EDB)	21.55	107	175	N.D.	
26) Chlorobenzene	22.28	112	337	N.D.	
27) Ethylbenzene	22.39	91	700	N.D.	
28) m&p-Xylene	22.56	91	991	N.D.	
29) o-Xylene	23.21	91	607	N.D.	
30) Styrene	23.25	104	291	N.D.	
31) 1,1,2,2-Tetrachloroethane	24.31	83	456	N.D.	
32) 1,2,3-Trichloropropane	24.41	75	423	N.D.	
33) 1,3-Dichlorobenzene	25.80	146	889	N.D.	
34) 1,4-Dichlorobenzene	25.94	146	906	N.D.	
35) 1,2-Dichlorobenzene	26.55	146	1041	N.D.	
36) 1,2-Dibromo-3-chloropropan	27.78	157	225	N.D.	
37) Naphthalene	29.45	128	5618	N.D.	

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

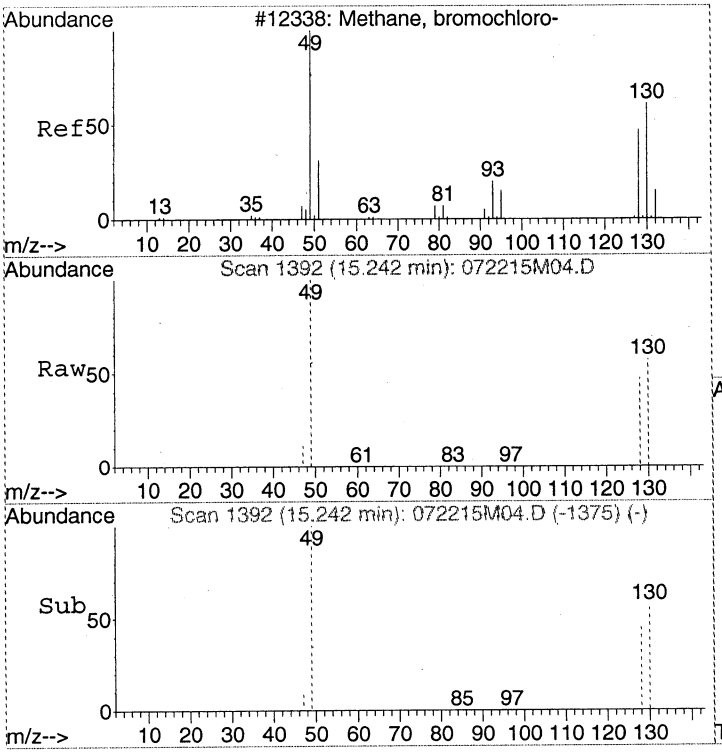
Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\072215MAA\
Data File : 072215M04.D
Acq On : 22 Jul 2015 1:12 pm
InstName : AG5973M
Operator : LLH
Sample : B15GXXX-BLK1
Misc : 400ml BLANK
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 23 12:41:52 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\072115SIM+ADDLMAA.M
Quant Title : TO15SIM
QLast Update : Thu Jul 23 12:20:05 2015
Response via : Initial Calibration



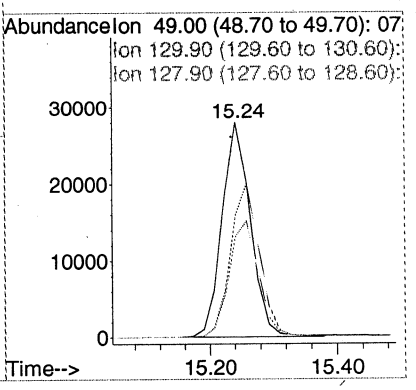
00225

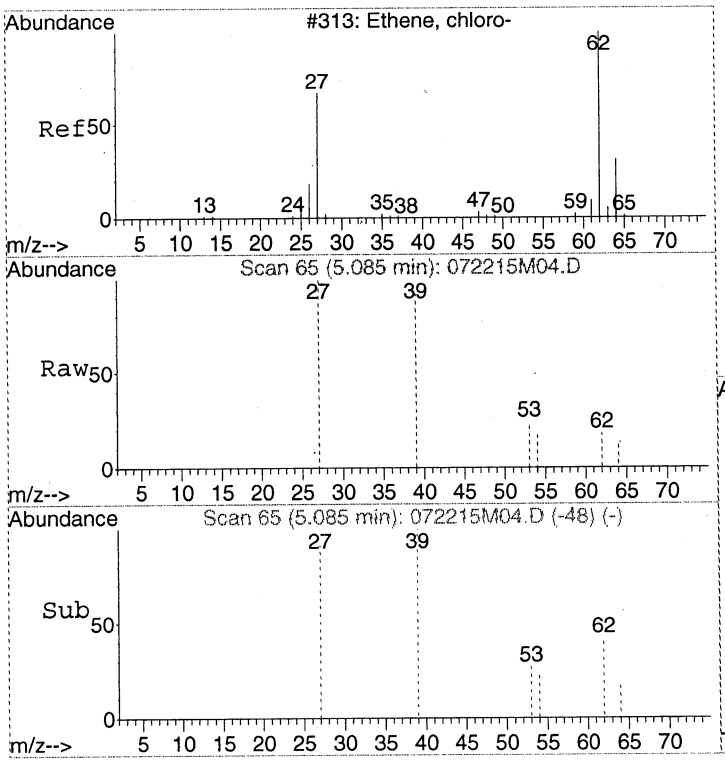


#1
BROMOCHLOROMETHANE
Concen: 341.00 pptv
RT: 15.24 min Scan# 1392
Delta R.T. 0.00 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion: 49 Resp: 86875

Ion	Ratio	Lower	Upper
49	100		
130	72.4	55.8	95.8
128	56.1	38.6	78.6

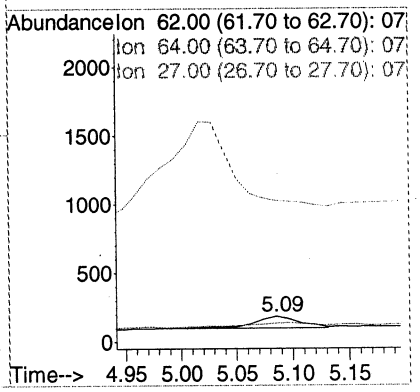


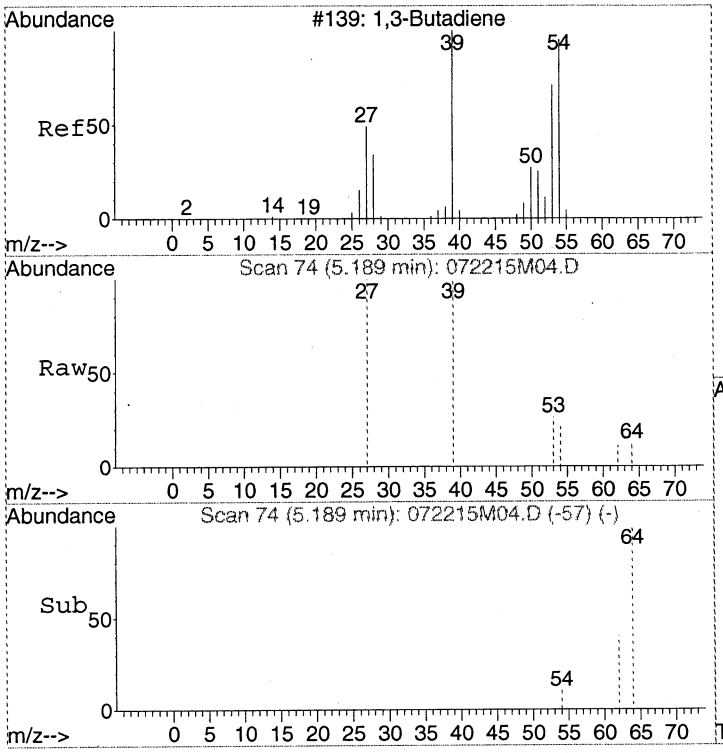


#2
Vinyl chloride
Concen: Below Cal
RT: 5.09 min Scan# 65
Delta R.T. 0.00 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion: 62 Resp: 245

Ion	Ratio	Lower	Upper
62	100		
64	38.8	11.7	51.7
27	0.0	47.6	87.6#

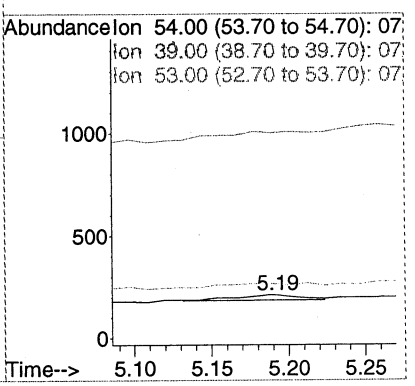


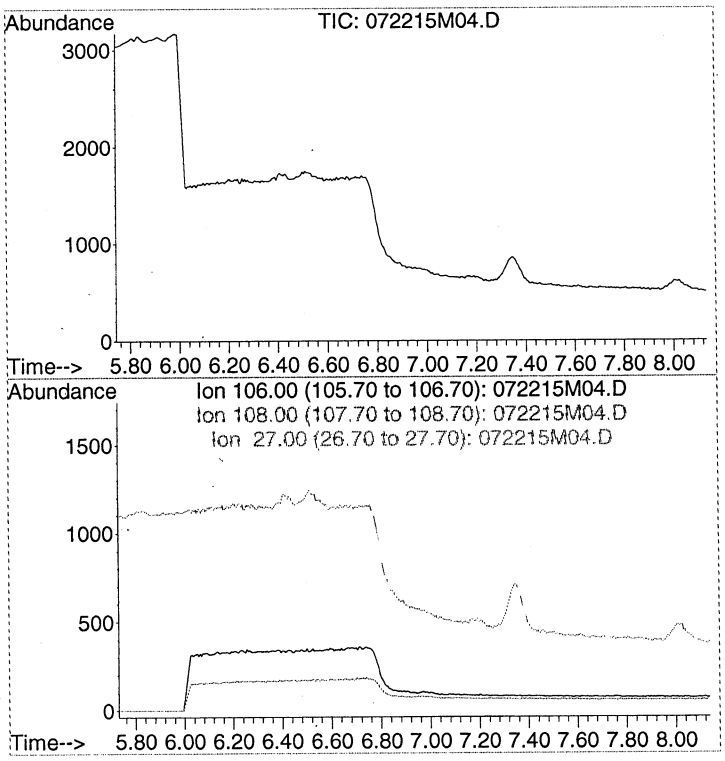


#3
1,3-Butadiene
Concen: Below Cal
RT: 5.19 min Scan# 74
Delta R.T. 0.00 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion: 54 Resp: 81

Ion	Ratio	Lower	Upper
54	100		
39	0.0	83.1	123.1#
53	59.3	46.9	86.9



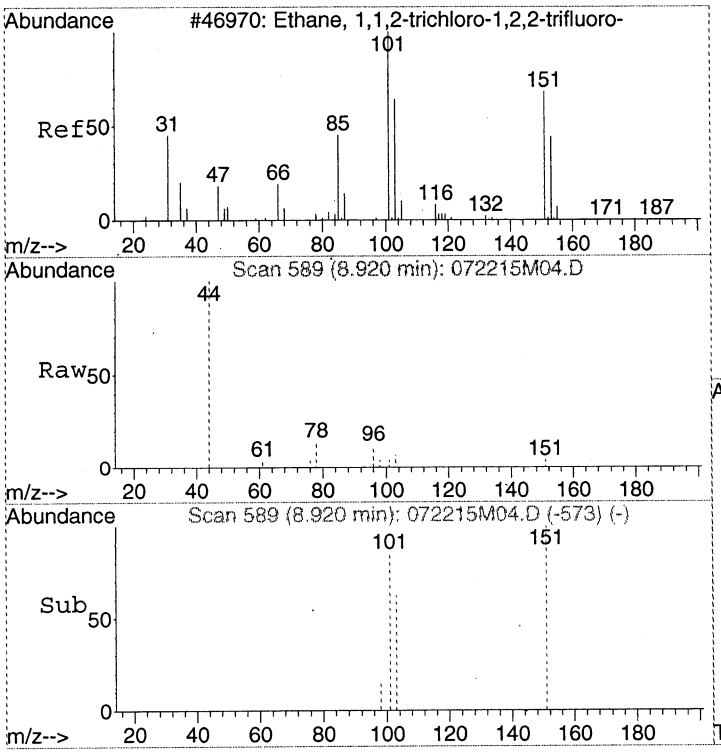


#4
Bromoethene
Concen: N.D.
Expected RT: 6.93 min

Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion: 106

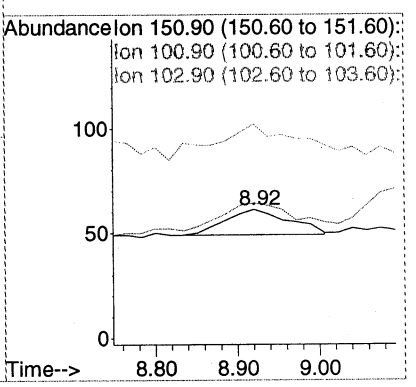
Sig	Exp Ratio
106	100
108	95.1
27	108.7

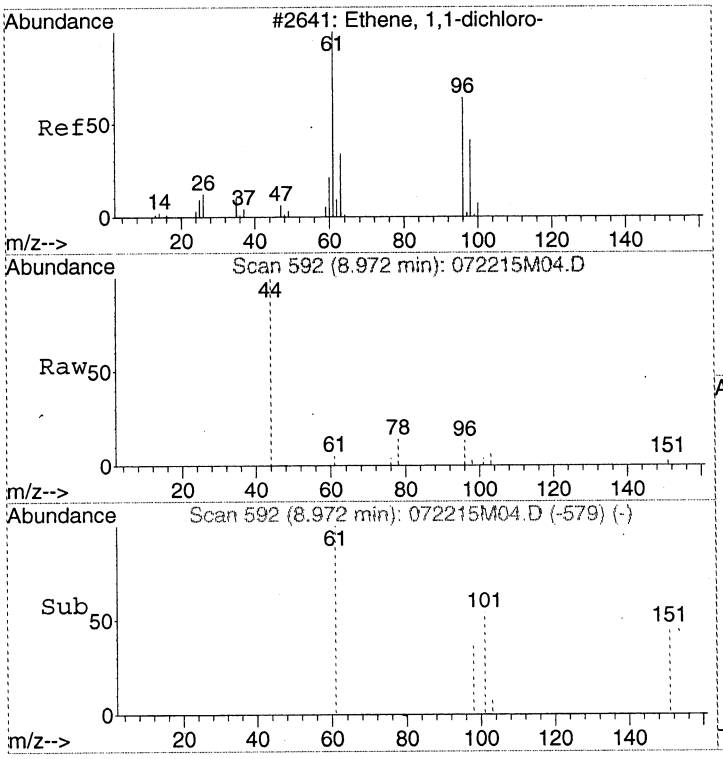


#5
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: Below Cal
RT: 8.92 min Scan# 589
Delta R.T. 0.02 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion:151 Resp: 65

Ion	Ratio	Lower	Upper
151	100		
101	127.7	91.3	131.3
103	104.6	51.4	91.4#

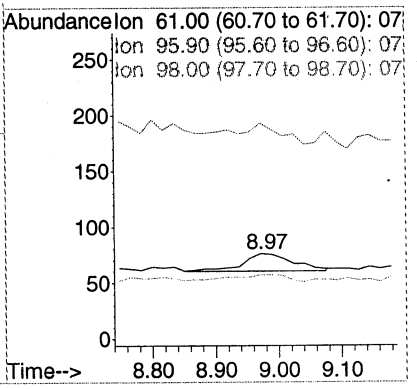


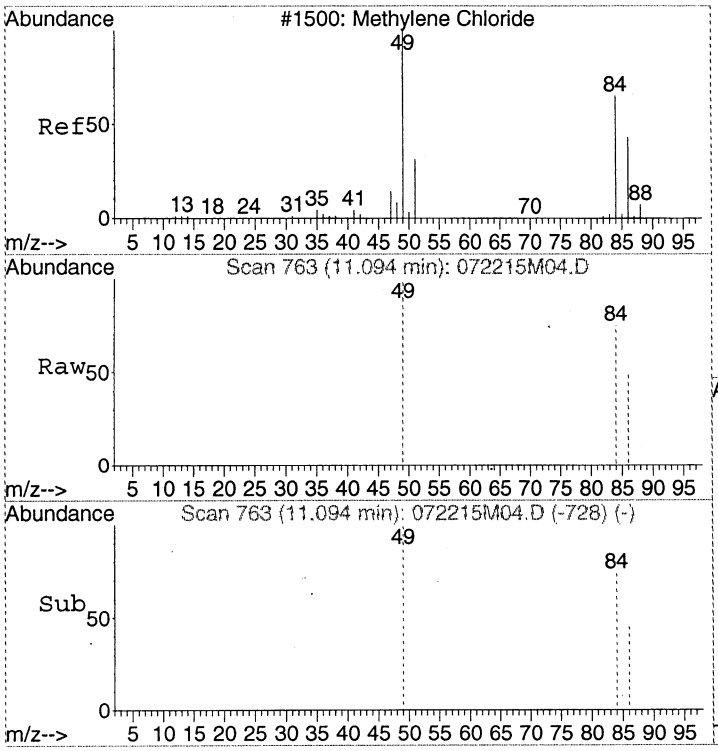


#6
1,1-Dichloroethene
Concen: Below Cal
RT: 8.97 min Scan# 592
Delta R.T. 0.02 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion: 61 Resp: 89

Ion	Ratio	Lower	Upper
61	100		
96	68.5	41.6	81.6
98	21.3	19.1	59.1

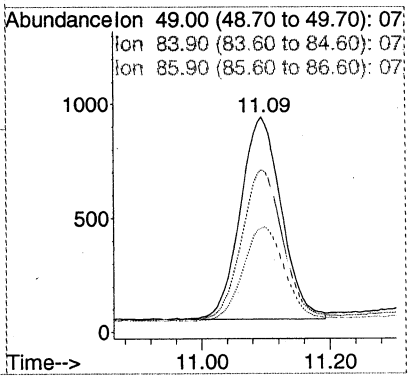


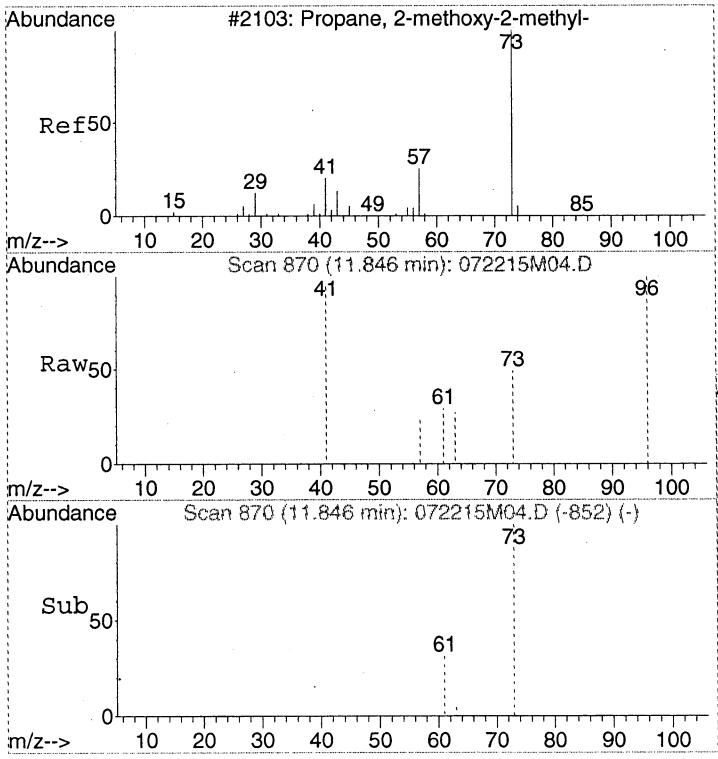


#7
Dichloromethane
Concen: Below Cal
RT: 11.09 min Scan# 763
Delta R.T. 0.01 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion: 49 Resp: 3939

Ion	Ratio	Lower	Upper
49	100		
84	73.8	56.8	96.8
86	47.2	29.2	69.2

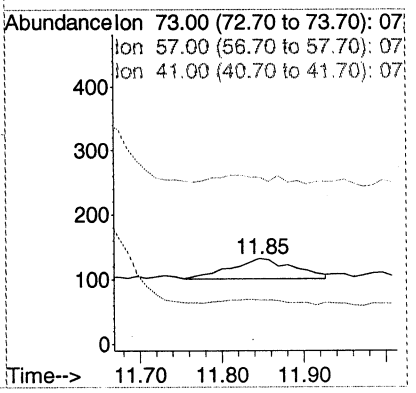


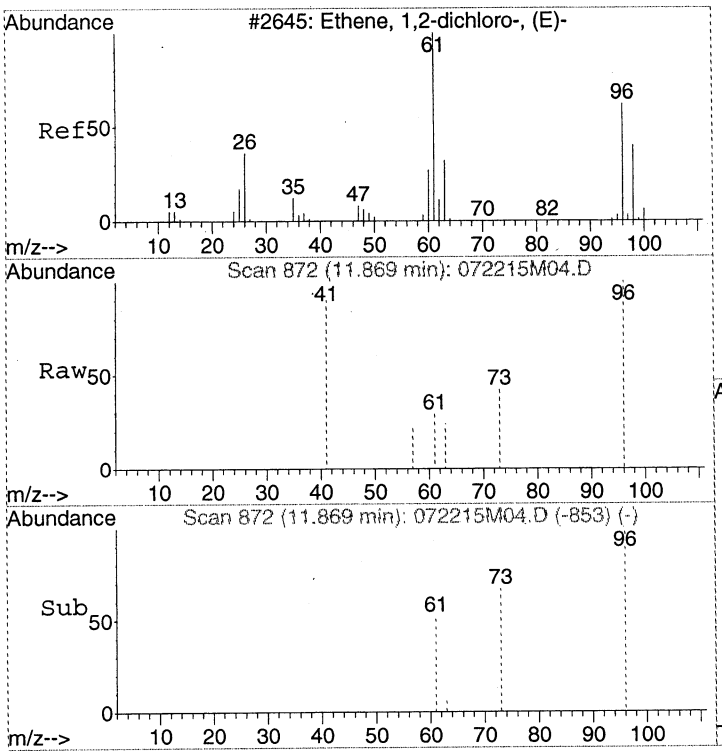


#8
tert-Butyl methyl ether (MTBE)
Concen: Below Cal
RT: 11.85 min Scan# 870
Delta R.T. 0.01 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion: 73 Resp: 162

Ion	Ratio	Lower	Upper
73	100		
57	19.1	1.7	41.7
41	0.0	2.1	42.1#

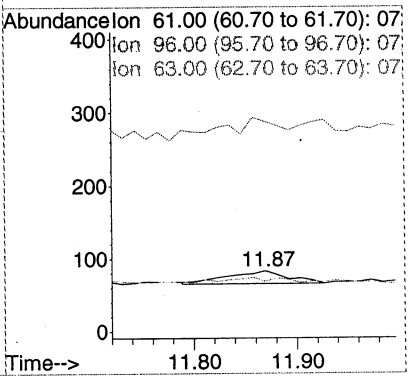


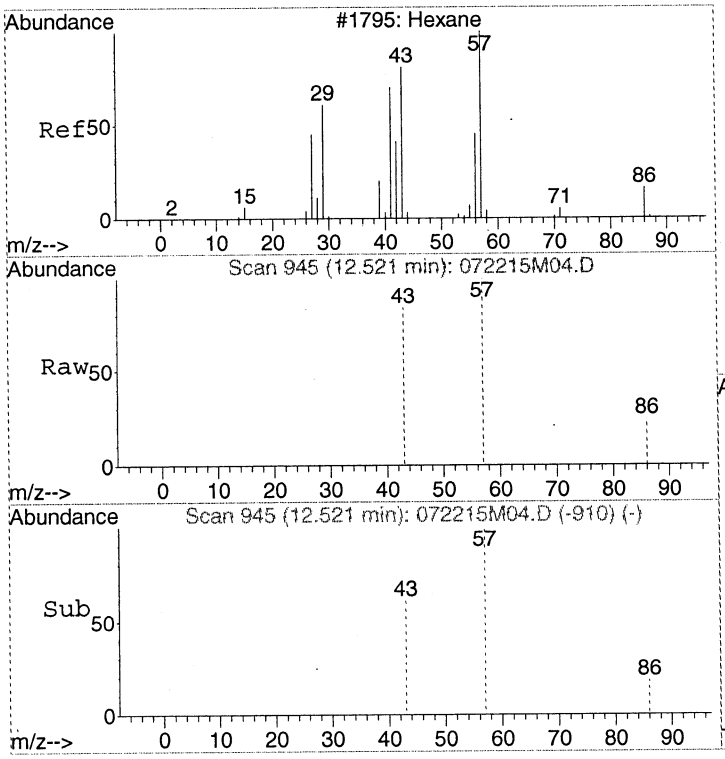


#9
trans-1,2-Dichloroethene
Concen: Below Cal
RT: 11.87 min Scan# 872
Delta R.T. 0.02 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion: 61 Resp: 67

Ion	Ratio	Lower	Upper
61	100		
96	0.0	51.3	91.3#
63	13.4	12.1	52.1

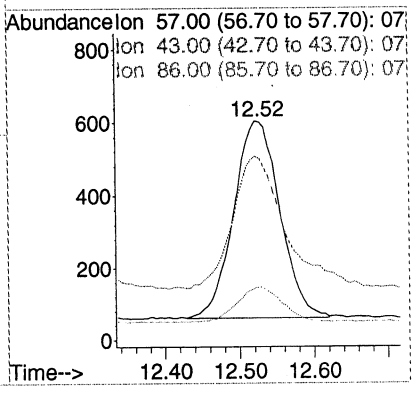


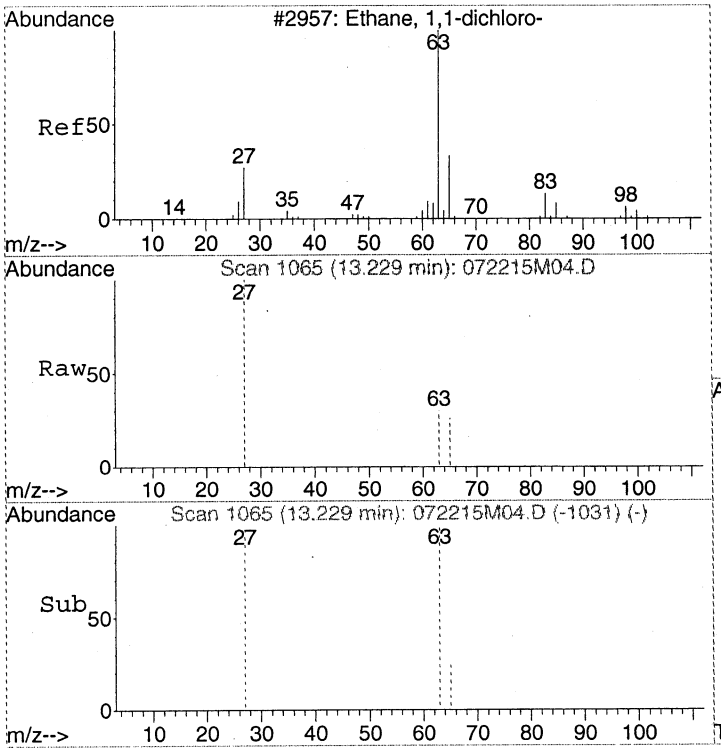


#10
Hexane
Concen: Below Cal
RT: 12.52 min Scan# 945
Delta R.T. 0.01 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion: 57 Resp: 2327

Ion	Ratio	Lower	Upper
57	100		
43	70.1	44.4	84.4
86	17.0	0.0	37.6

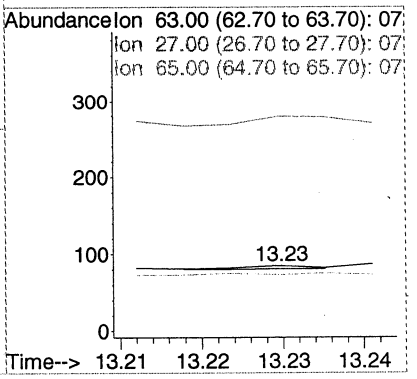


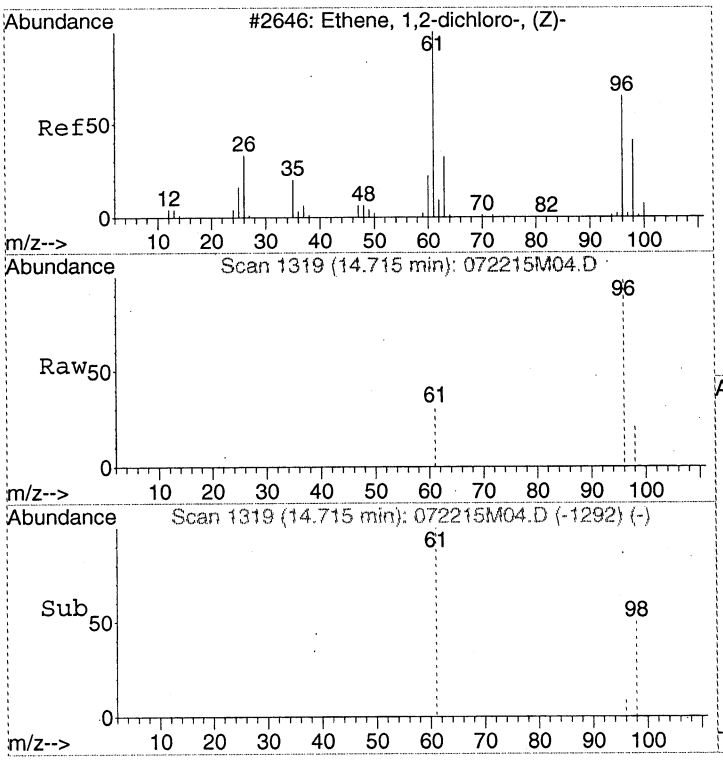


#11
1,1-Dichloroethane
Concen: Below Cal
RT: 13.23 min Scan# 1065
Delta R.T. 0.00 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion: 63 Resp: 3

Ion	Ratio	Lower	Upper
63	100		
27	600.0	18.7	58.7#
65	333.3	11.7	51.7#

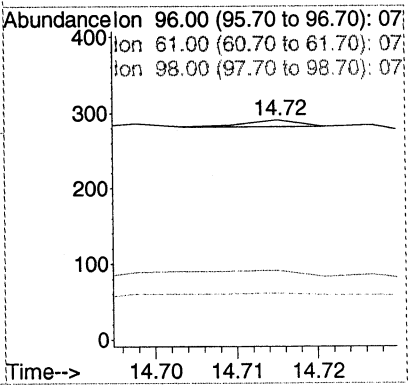


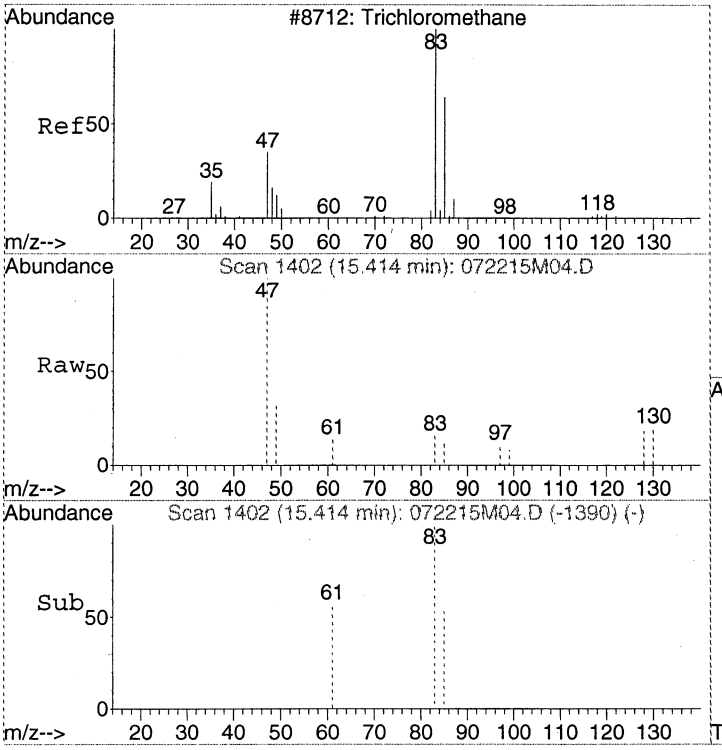


#12
cis-1,2-Dichloroethene
Concen: Below Cal
RT: 14.72 min Scan# 1319
Delta R.T. 0.01 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion: 96 Resp: 4

Ion	Ratio	Lower	Upper
96	100		
61	575.0	109.2	149.2#
98	0.0	44.3	84.3#

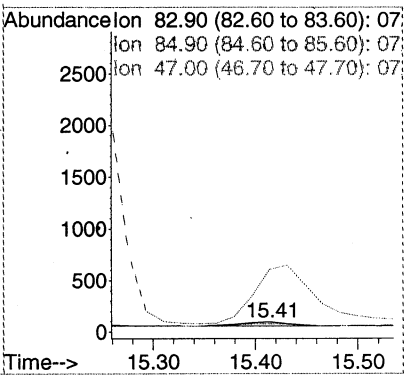


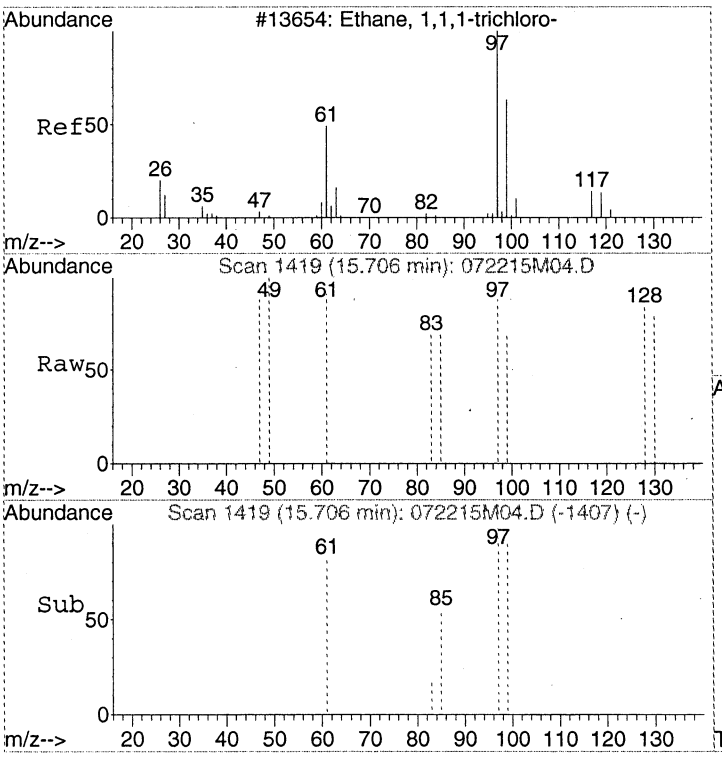


#13
Chloroform
Concen: Below Cal
RT: 15.41 min Scan# 1402
Delta R.T. 0.00 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion: 83 Resp: 139

Ion	Ratio	Lower	Upper
83	100		
85	68.3	44.7	84.7
47	1733.1	5.4	45.4#

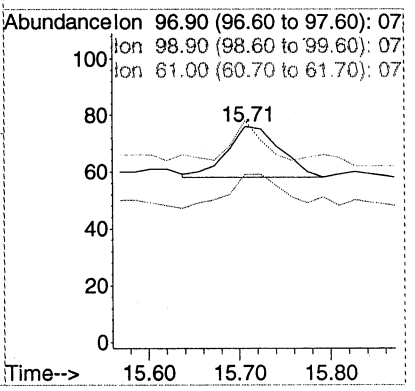


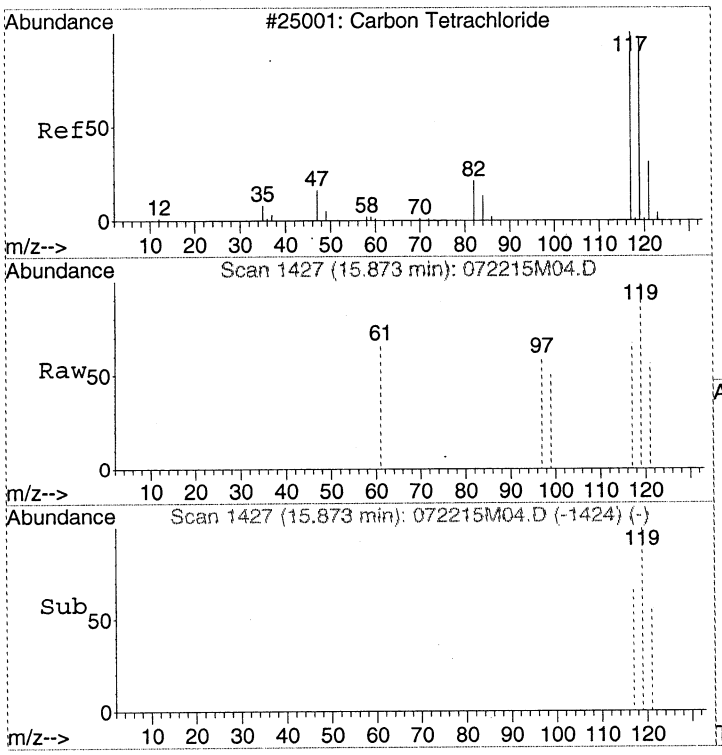


#14
1,1,1-Trichloroethane
Concen: Below Cal
RT: 15.71 min Scan# 1419
Delta R.T. 0.00 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion: 97 Resp: 73

Ion	Ratio	Lower	Upper
97	100		
99	68.5	44.6	84.6
61	43.8	18.6	58.6

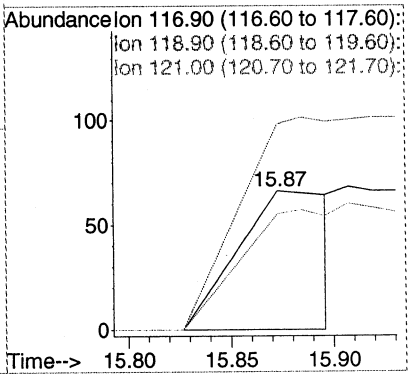


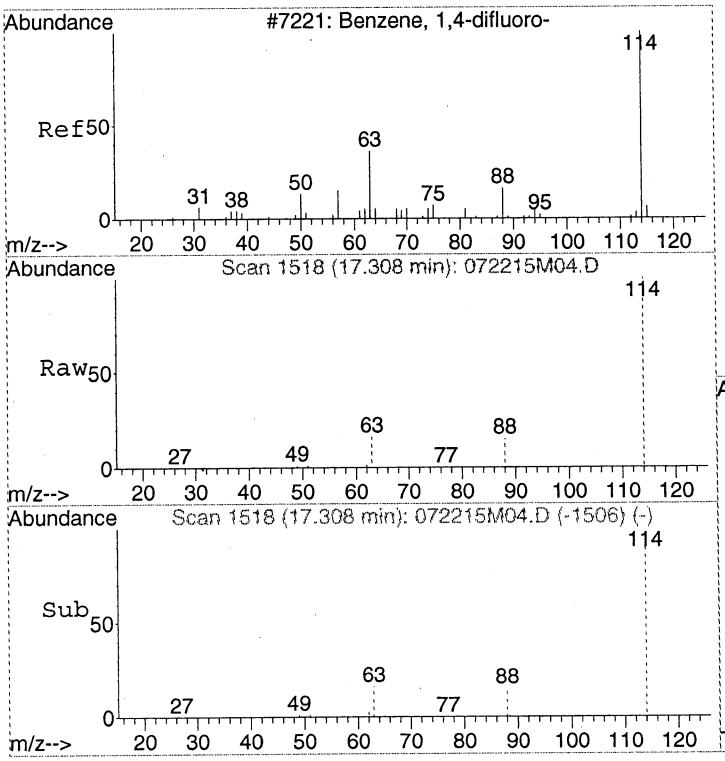


#15
Carbon tetrachloride
Concen: Below Cal
RT: 15.87 min Scan# 1427
Delta R.T. -0.12 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion:117 Resp: 269

Ion	Ratio	Lower	Upper
117	100		
119	152.8	75.8	115.8#
121	85.1	10.6	50.6#

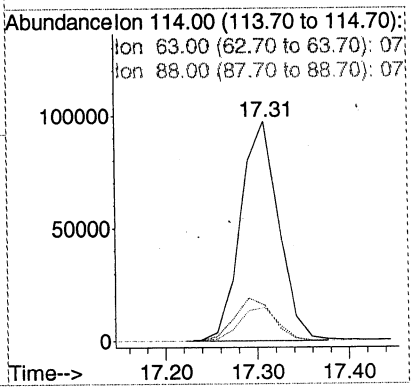


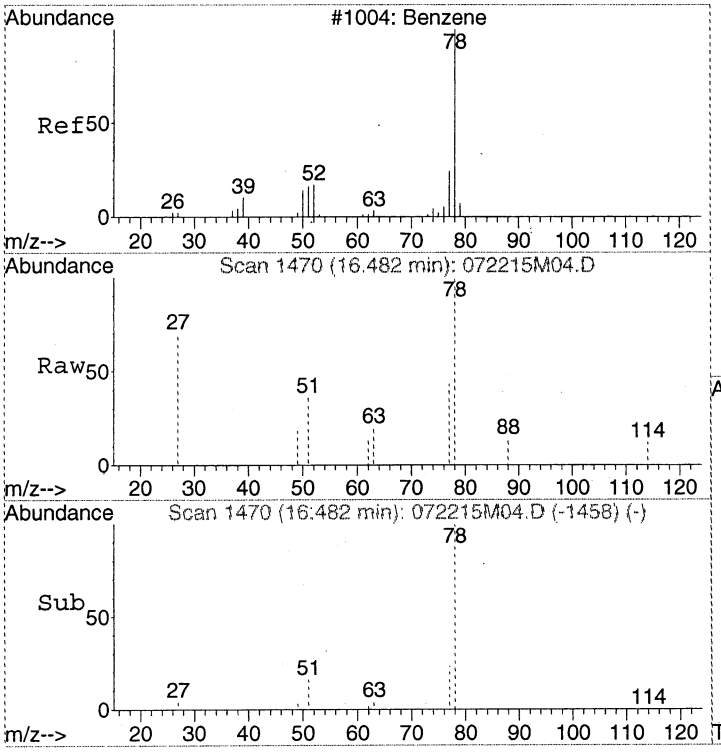


#16
1,4-DIFLUOROBENZENE
Concen: 375.00 pptv
RT: 17.31 min Scan# 1518
Delta R.T. 0.00 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion:114 Resp: 279719

Ion	Ratio	Lower	Upper
114	100		
63	19.7	0.0	38.9
88	15.6	0.0	35.4

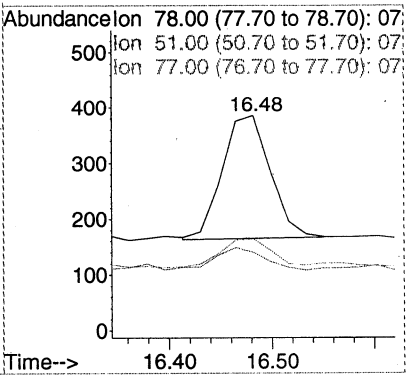


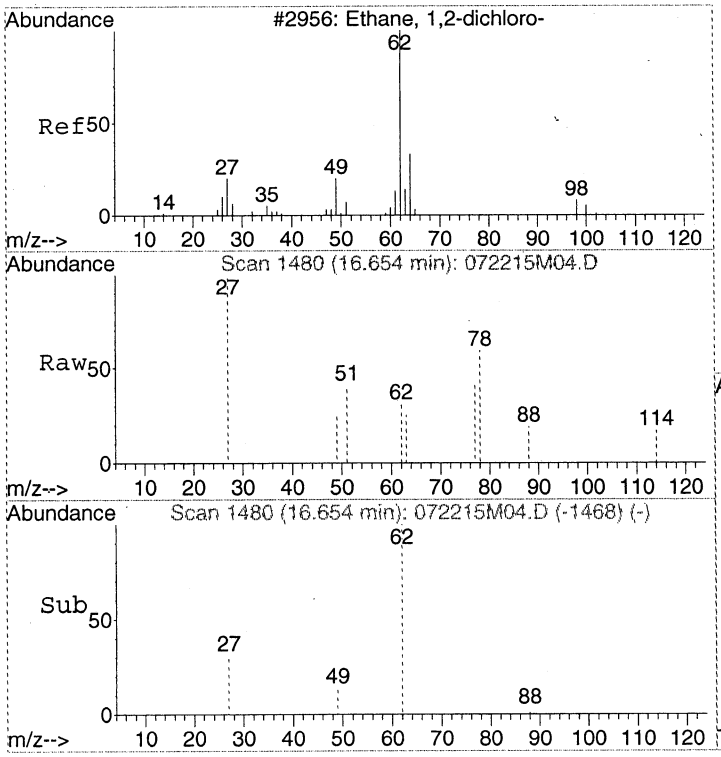


#17
Benzene
Concen: Below Cal
RT: 16.48 min Scan# 1470
Delta R.T. 0.00 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion: 78 Resp: 719

Ion	Ratio	Lower	Upper
78	100		
51	18.8	0.0	37.6
77	24.9	3.4	43.4

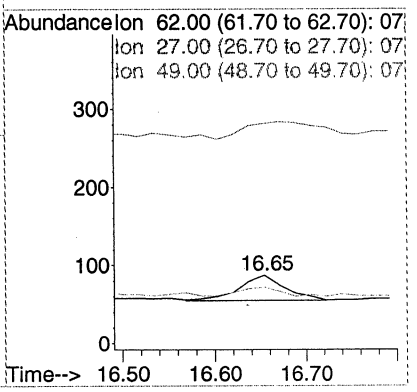


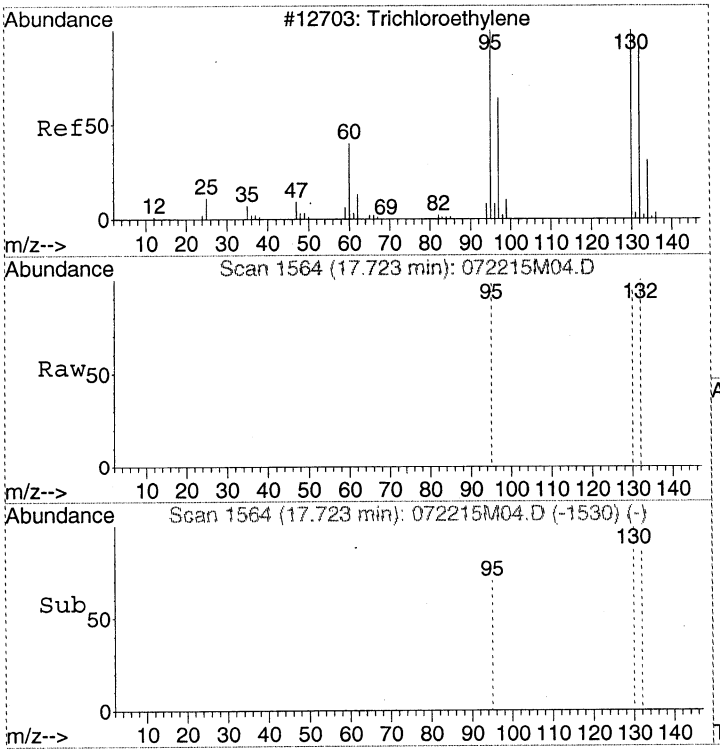


#18
1,2-Dichloroethane
Concen: Below Cal
RT: 16.65 min Scan# 1480
Delta R.T. 0.00 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion: 62 Resp: 109

Ion	Ratio	Lower	Upper
62	100		
27	123.9	26.2	66.2#
49	31.2	7.3	47.3

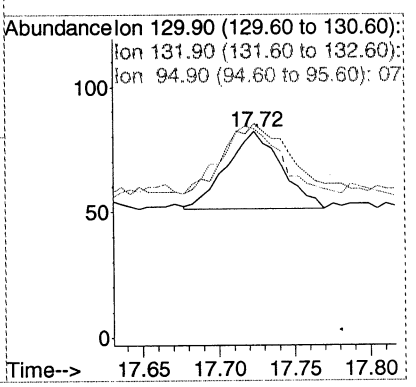


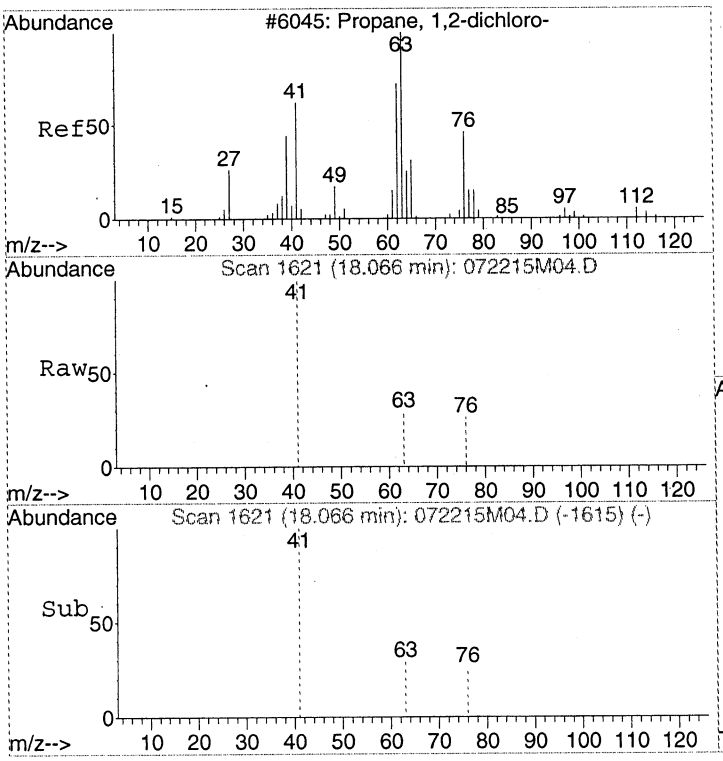


#19
Trichloroethene
Concen: Below Cal
RT: 17.72 min Scan# 1564
Delta R.T. 0.00 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion:130 Resp: 78

Ion	Ratio	Lower	Upper
130	100		
132	103.8	76.7	116.7
95	98.7	74.7	114.7

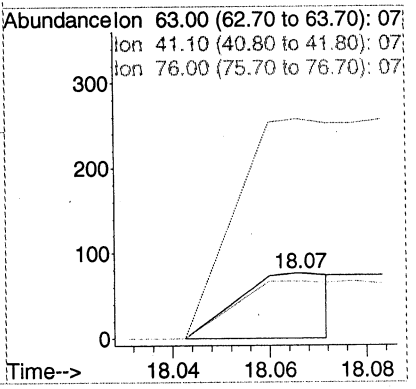


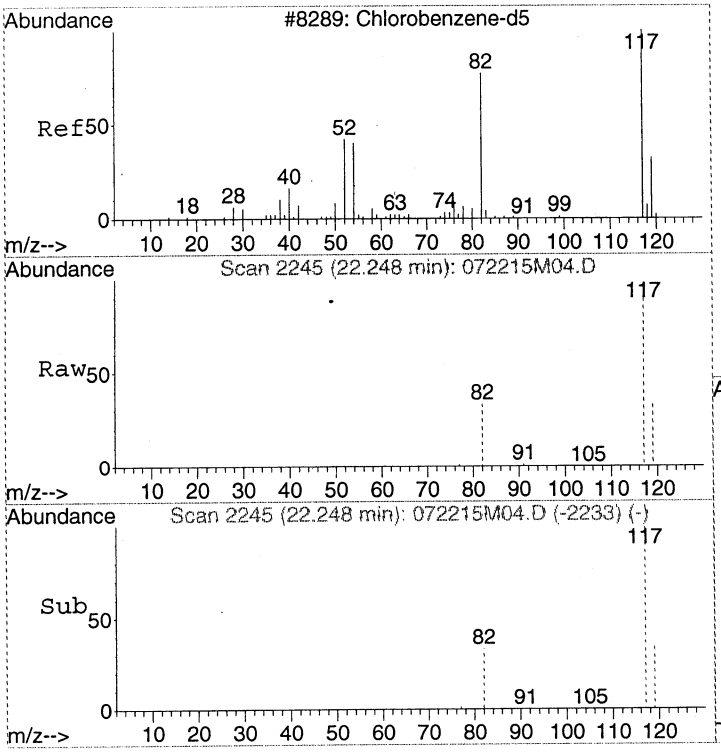


#20
1,2-Dichloropropane
Concen: Below Cal
RT: 18.07 min Scan# 1621
Delta R.T. -0.15 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion: 63 Resp: 129

Ion	Ratio	Lower	Upper
63	100		
41	344.2	38.9	78.9#
76	89.1	23.7	63.7#

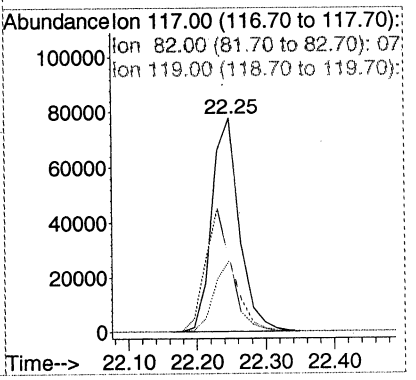


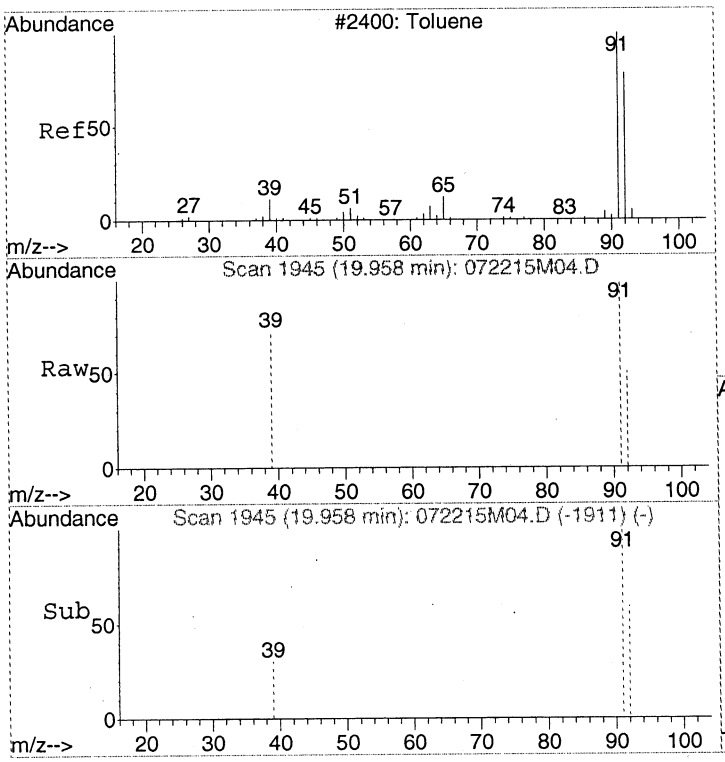


#21
CHLOROBENZENE-d5
Concen: 341.00 pptv
RT: 22.25 min Scan# 2245
Delta R.T. 0.00 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion:117 Resp: 215486

Ion	Ratio	Lower	Upper
117	100		
82	54.4	33.2	73.2
119	32.2	12.1	52.1

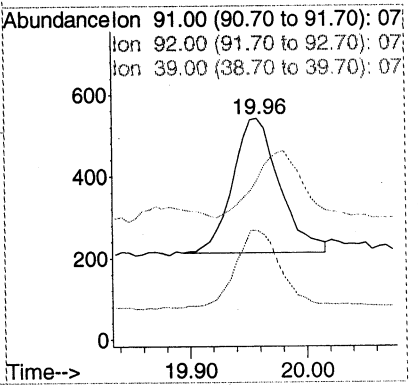


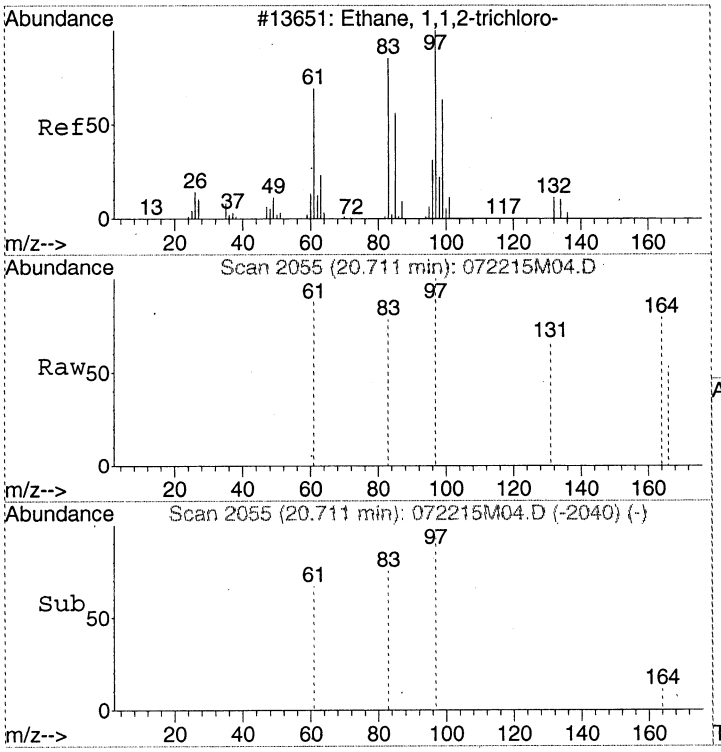


#22
Toluene
Concen: Below Cal
RT: 19.96 min Scan# 1945
Delta R.T. 0.00 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion: 91 Resp: 910

Ion	Ratio	Lower	Upper
91	100		
92	53.1	39.7	79.7
39	0.0	0.0	30.4

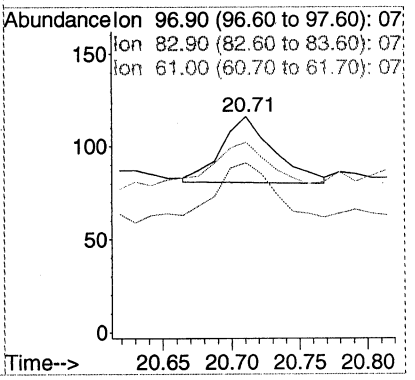


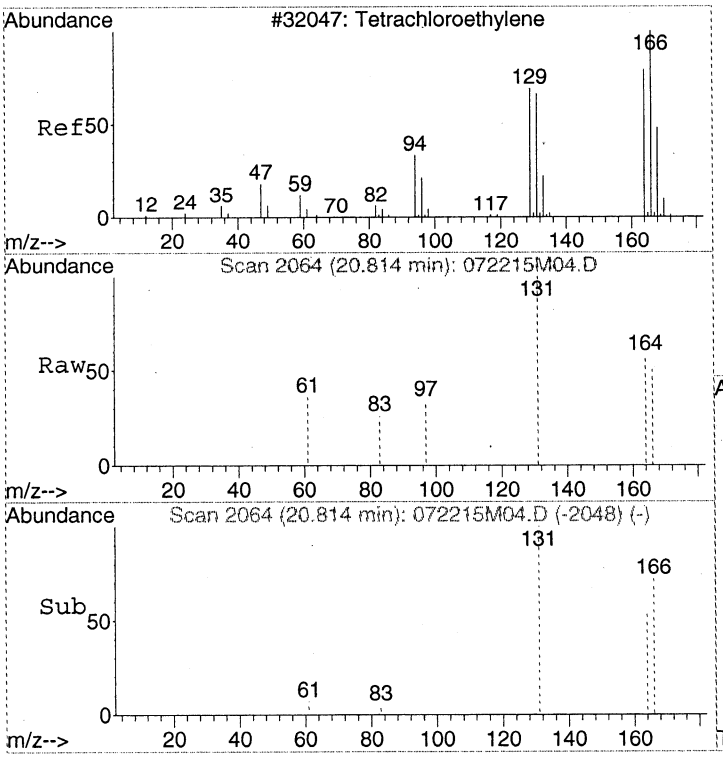


#23
1,1,2-Trichloroethane
Concen: Below Cal
RT: 20.71 min Scan# 2055
Delta R.T. -0.02 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion: 97 Resp: 95

Ion	Ratio	Lower	Upper
97	100		
83	88.4	63.6	103.6
61	97.9	41.3	81.3#

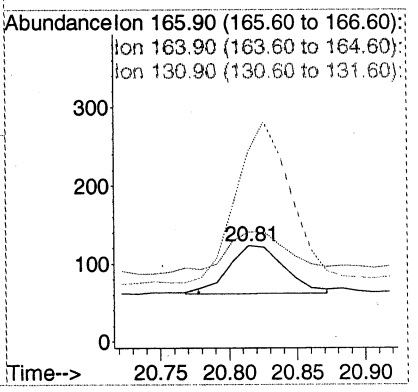


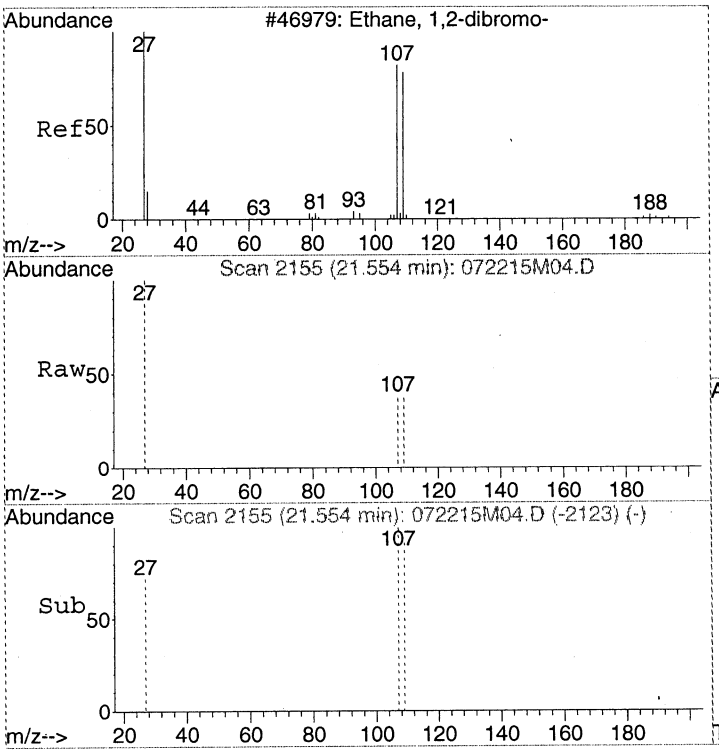


#24
Tetrachloroethene
Concen: Below Cal
RT: 20.81 min Scan# 2064
Delta R.T. -0.01 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion:166 Resp: 178

Ion	Ratio	Lower	Upper
166	100		
164	82.6	58.3	98.3
131	329.2	47.2	87.2#

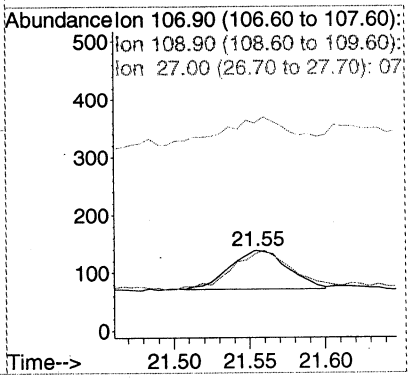


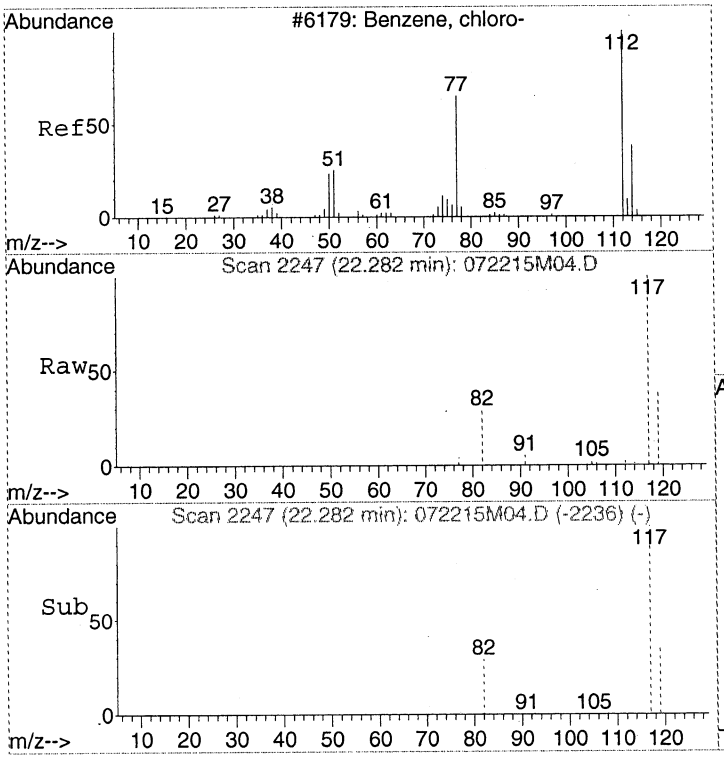


#25
1,2-Dibromoethane (EDB)
Concen: Below Cal
RT: 21.55 min Scan# 2155
Delta R.T. -0.01 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion:107 Resp: 175

Ion	Ratio	Lower	Upper
107	100		
109	106.9	74.4	114.4
27	41.1	44.7	84.7#

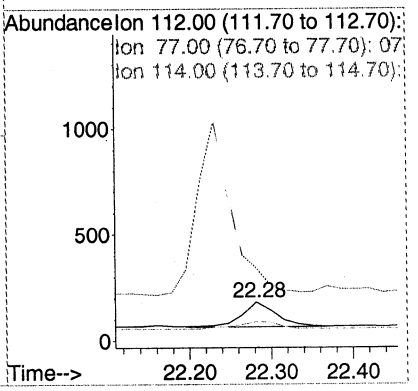


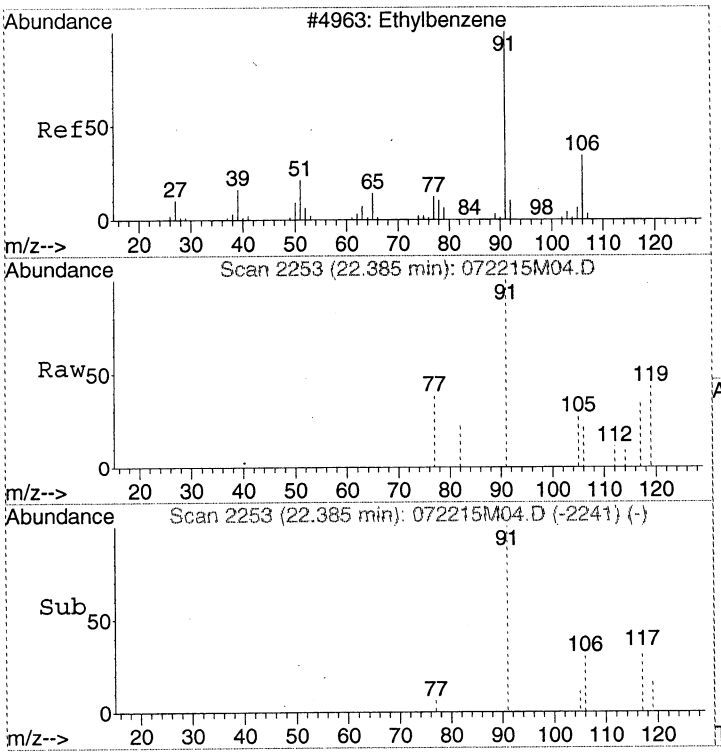


#26
Chlorobenzene
Concen: Below Cal
RT: 22.28 min Scan# 2247
Delta R.T. -0.02 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion:112 Resp: 337

Ion	Ratio	Lower	Upper
112	100		
77	0.0	38.8	78.8#
114	38.0	12.2	52.2

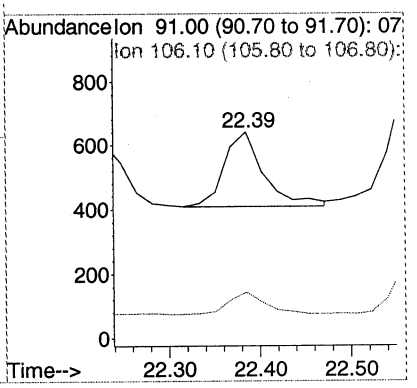


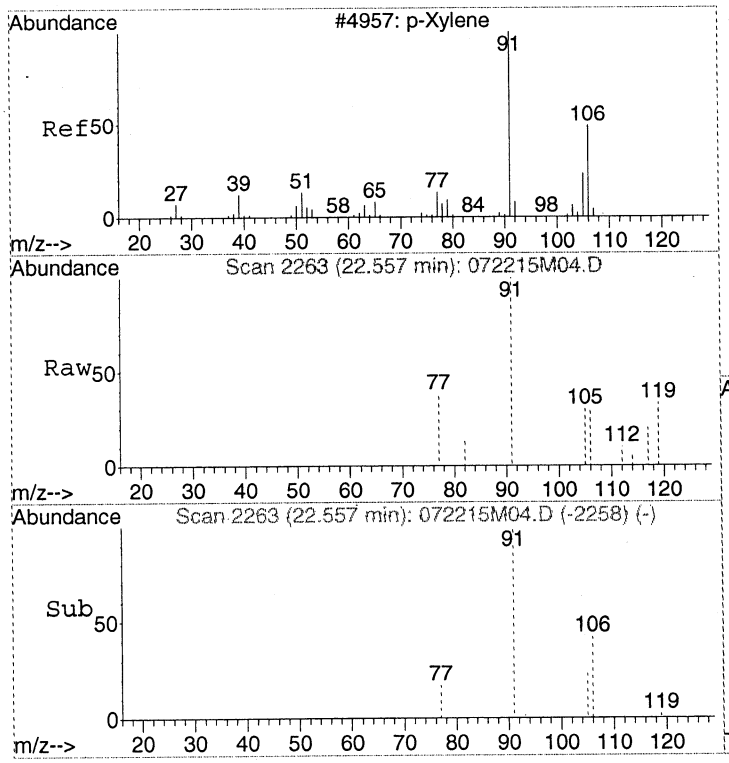


#27
Ethylbenzene
Concen: Below Cal
RT: 22.39 min Scan# 2253
Delta R.T. 0.00 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion: 91 Resp: 700

Ion	Ratio	Lower	Upper
91	100		
106	27.0	12.6	52.6

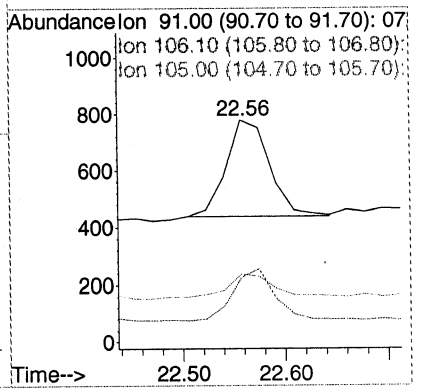


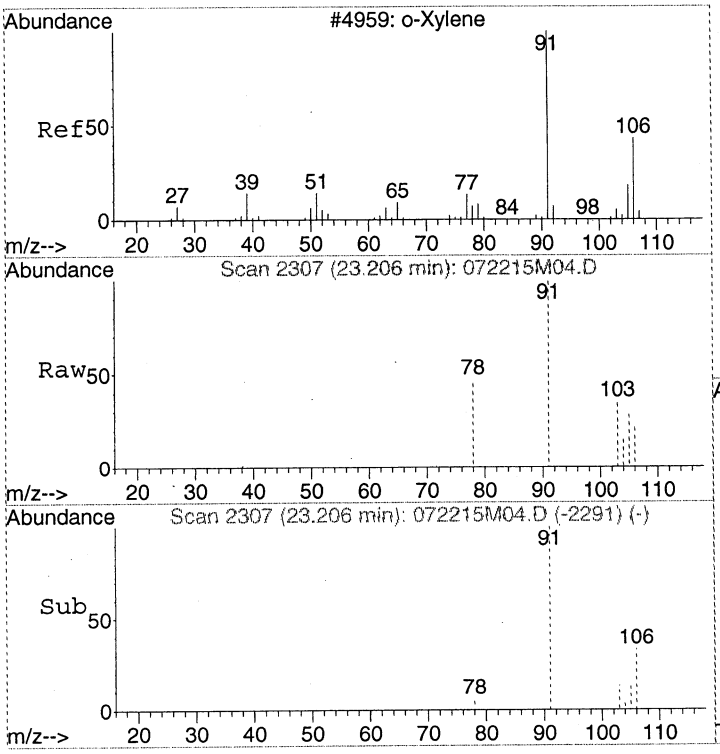


#28
m&p-Xylene
Concen: Below Cal
RT: 22.56 min Scan# 2263
Delta R.T. -0.02 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion: 91 Resp: 991

Ion	Ratio	Lower	Upper
91	100		
106	51.3	30.9	70.9
105	22.1	1.9	41.9

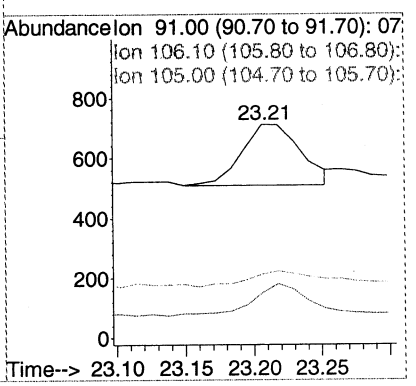


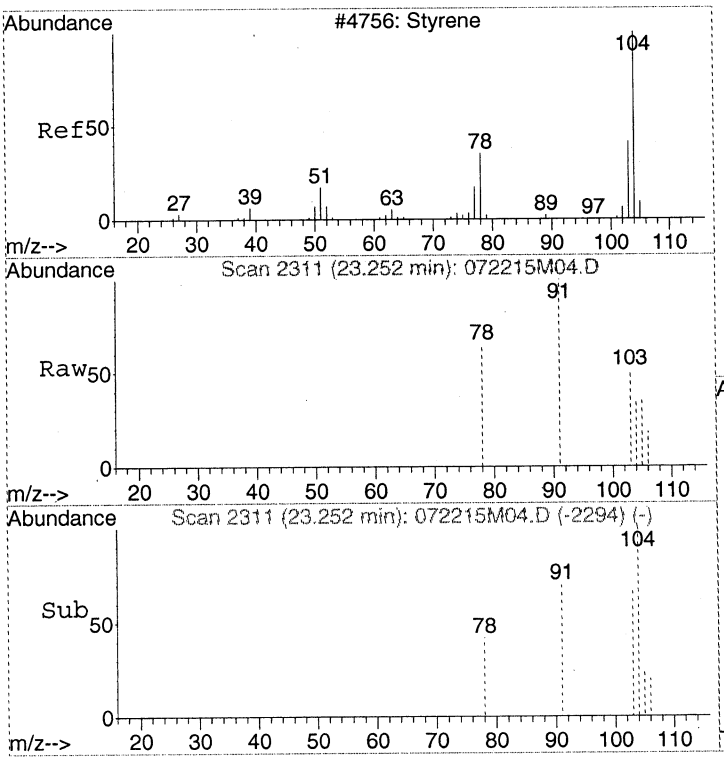


#29
o-Xylene
Concen: Below Cal
RT: 23.21 min Scan# 2307
Delta R.T. -0.01 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion: 91 Resp: 607

Ion	Ratio	Lower	Upper
91	100		
106	52.1	28.5	68.5
105	39.2	4.6	44.6

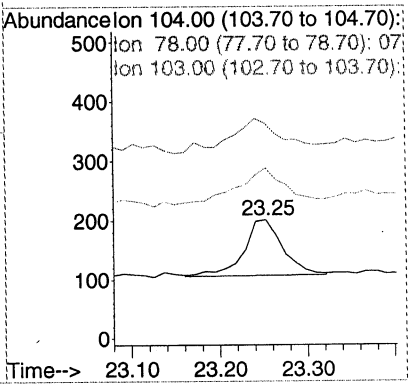


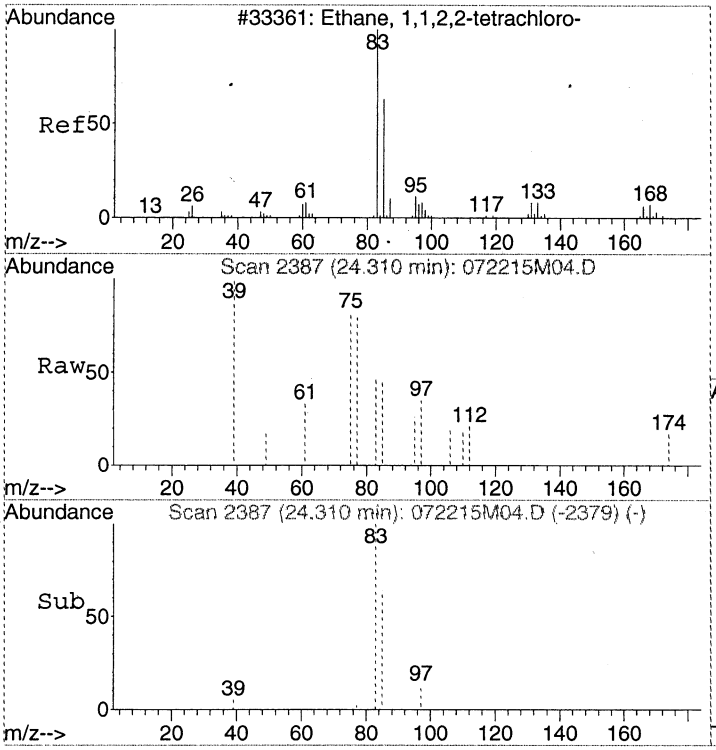


#30
Styrene
Concen: Below Cal
RT: 23.25 min Scan# 2311
Delta R.T. 0.00 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion:104 Resp: 291

Ion	Ratio	Lower	Upper
104	100		
78	53.3	31.3	71.3
103	80.8	33.6	73.6#

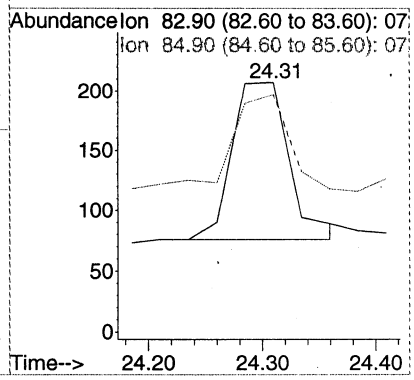


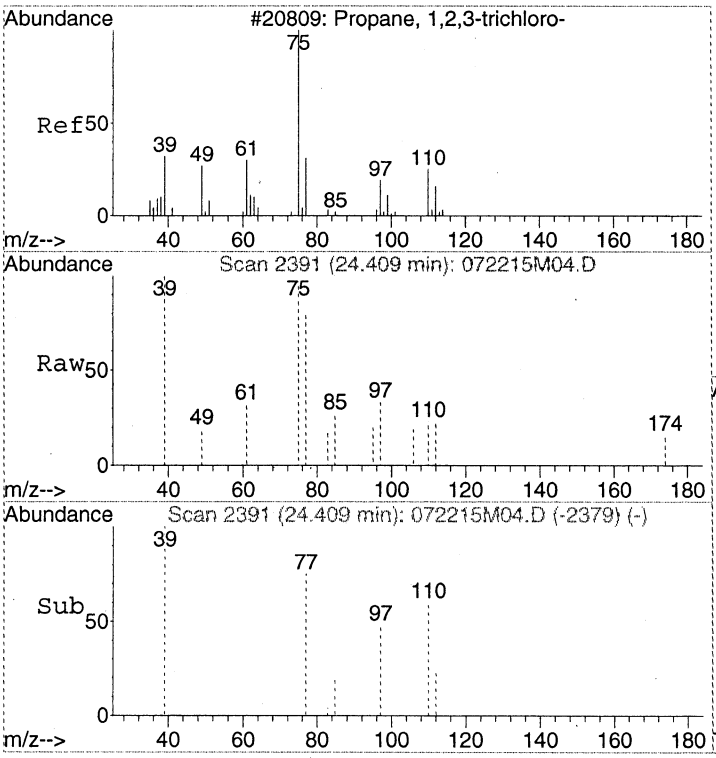


#31
1,1,2,2-Tetrachloroethane
Concen: Below Cal
RT: 24.31 min Scan# 2387
Delta R.T. 0.00 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion: 83 Resp: 456

Ion	Ratio	Lower	Upper
83	100		
85	56.1	44.1	84.1

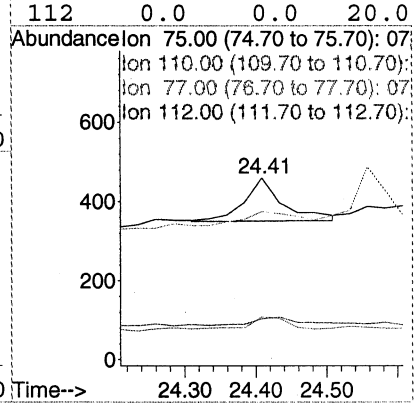


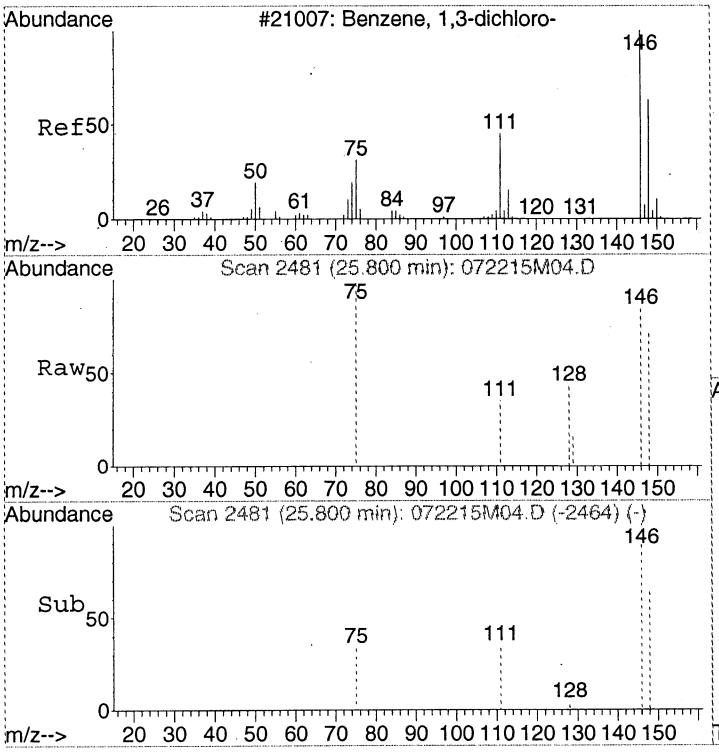


#32
1,2,3-Trichloropropane
Concen: Below Cal
RT: 24.41 min Scan# 2391
Delta R.T. 0.00 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion: 75 Resp: 423

Ion	Ratio	Lower	Upper
75	100		
110	24.3	0.0	20.0#
77	47.5	11.9	51.9
112	0.0	0.0	20.0

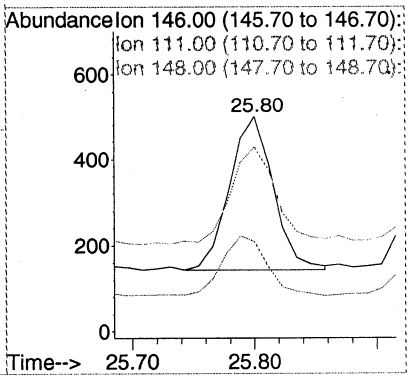


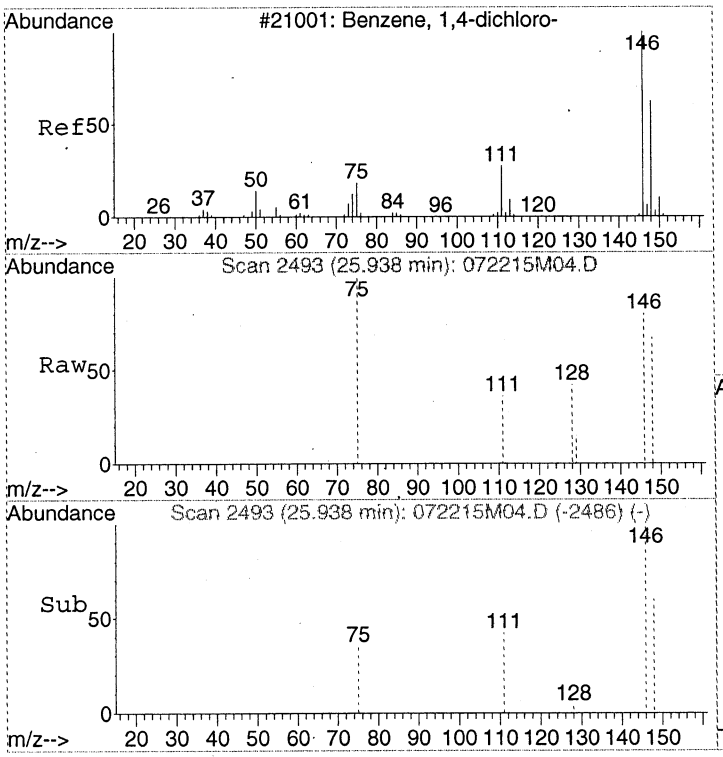


#33
1,3-Dichlorobenzene
Concen: Below Cal
RT: 25.80 min Scan# 2481
Delta R.T. 0.00 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion:146 Resp: 889

Ion	Ratio	Lower	Upper
146	100		
111	40.5	17.9	57.9
148	68.6	43.9	83.9

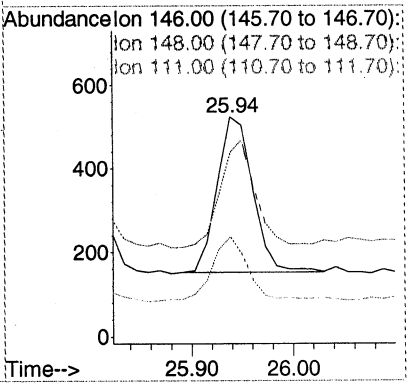


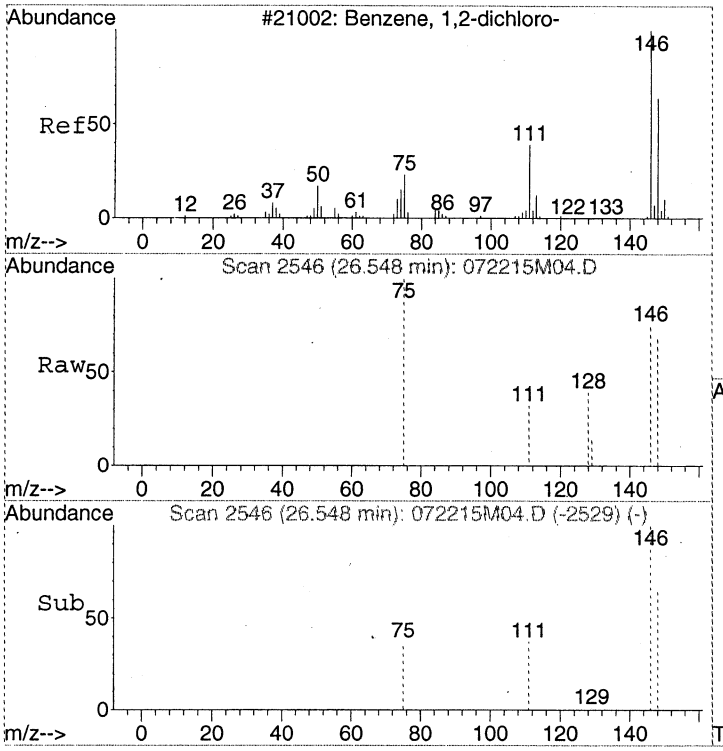


#34
1,4-Dichlorobenzene
Concen: Below Cal
RT: 25.94 min Scan# 2493
Delta R.T. -0.01 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion:146 Resp: 906

Ion	Ratio	Lower	Upper
146	100		
148	68.5	44.0	84.0
111	37.7	16.6	56.6

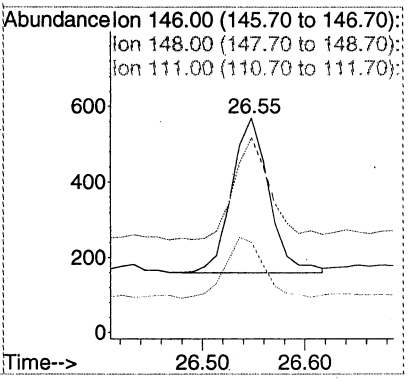


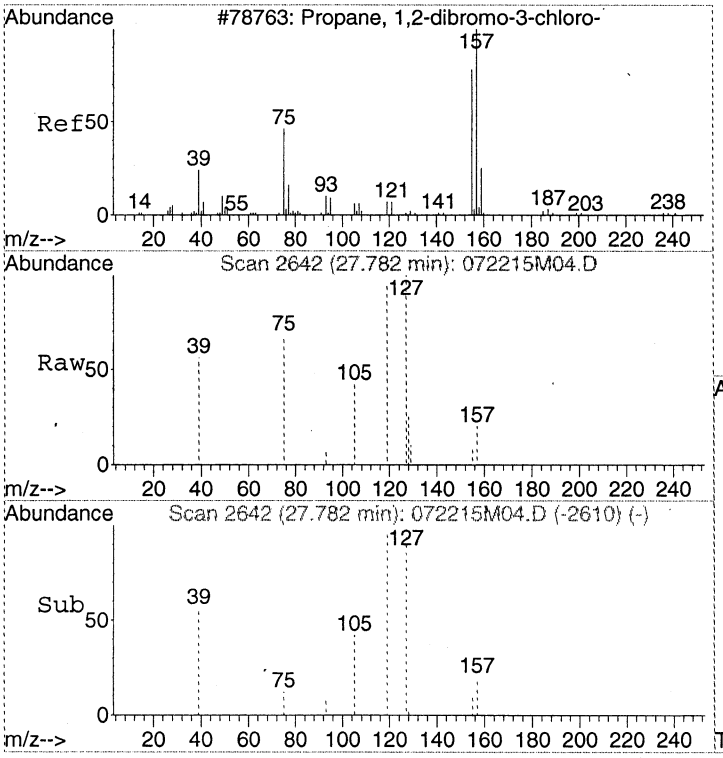


#35
1,2-Dichlorobenzene
Concen: Below Cal
RT: 26.55 min Scan# 2546
Delta R.T. 0.00 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion:146 Resp: 1041

Ion	Ratio	Lower	Upper
146	100		
148	62.2	44.0	84.0
111	40.6	19.4	59.4

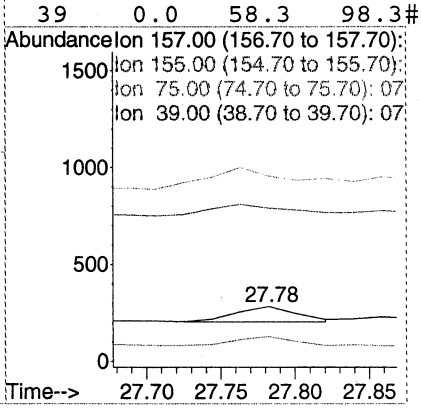


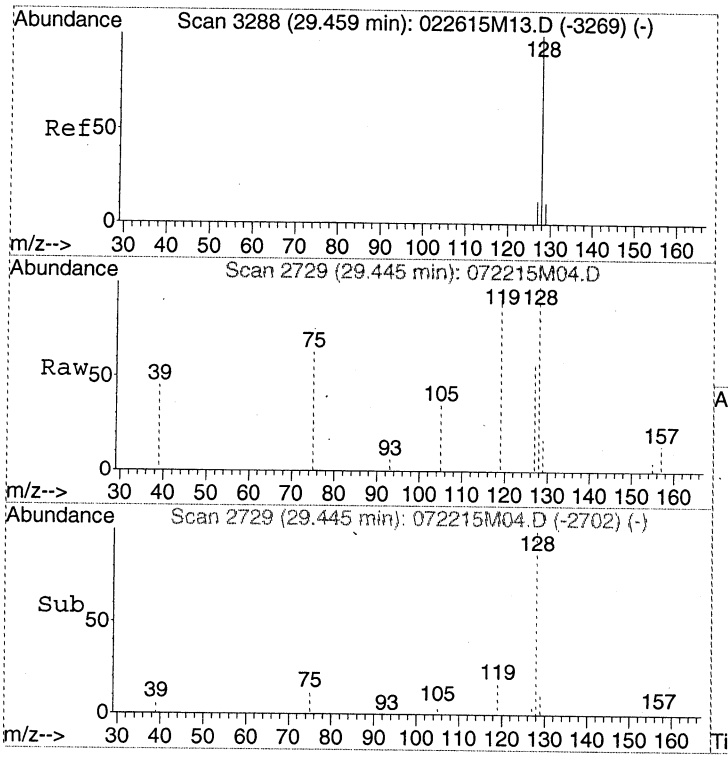


#36
1,2-Dibromo-3-chloropropane
Concen: Below Cal
RT: 27.78 min Scan# 2642
Delta R.T. -0.01 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion:157 Resp: 225

Ion	Ratio	Lower	Upper
157	100		
155	60.4	57.5	97.5
75	212.4	67.4	107.4#
39	0.0	58.3	98.3#

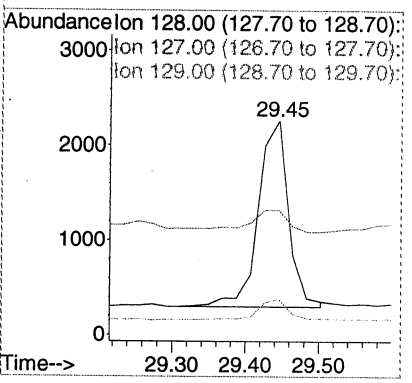




#37
Naphthalene
Concen: Below Cal
RT: 29.45 min Scan# 2729
Delta R.T. 0.01 min
Lab File: 072215M04.D
Acq: 22 Jul 2015 1:12 pm

Tgt Ion:128 Resp: 5618

Ion	Ratio	Lower	Upper
128	100		
127	12.7	0.0	32.3
129	10.2	0.0	30.9



Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\072215MAA\
Data File : 072215M06.D
Acq On : 22 Jul 2015 3:28 pm
InstName : AG5973M
Operator : LLH
Sample : CAN #116
Misc : 400ml RECERTIFICATION
ALS Vial : 4 Sample Multiplier: 1

clean

Quant Time: Jul 23 12:41:54 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\072115SIM+ADDLMAA.M
Quant Title : TO15SIM
QLast Update : Thu Jul 23 12:20:05 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.24	49	81107	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.30	114	252502	375.00 pptv	-0.01
21) CHLOROBENZENE-d5	22.25	117	187218	341.00 pptv	0.00

Target Compounds					Qvalue
2) Vinyl chloride	5.09	62	114	N.D.	
3) 1,3-Butadiene	5.20	54	52	N.D.	
4) Bromoethene	0.00	106	0	N.D.	
5) 1,1,2-Trichloro-1,2,2-trif	8.90	151	19	N.D.	
6) 1,1-Dichloroethene	8.97	61	21	N.D.	
7) Dichloromethane	11.09	49	3590	N.D.	
8) tert-Butyl methyl ether (M	11.83	73	20	N.D.	
9) trans-1,2-Dichloroethene	11.85	61	3	N.D.	
10) Hexane	12.50	57	24	N.D.	
11) 1,1-Dichloroethane	13.21	63	6	N.D.	
12) cis-1,2-Dichloroethene	14.71	96	31	N.D.	
13) Chloroform	15.40	83	69	N.D.	
14) 1,1,1-Trichloroethane	15.69	97	74	N.D.	
15) Carbon tetrachloride	15.89	117	265	N.D.	
17) Benzene	16.47	78	311	N.D.	
18) 1,2-Dichloroethane	16.64	62	49	N.D.	
19) Trichloroethene	17.67	130	2	N.D.	
20) 1,2-Dichloropropane	18.06	63	98	N.D.	
22) Toluene	19.96	91	179	N.D.	
23) 1,1,2-Trichloroethane	20.72	97	59	N.D.	
24) Tetrachloroethene	20.82	166	74	N.D.	
25) 1,2-Dibromoethane (EDB)	21.55	107	103	N.D.	
26) Chlorobenzene	22.28	112	152	N.D.	
27) Ethylbenzene	22.39	91	341	N.D.	
28) m&p-Xylene	22.56	91	538	N.D.	
29) o-Xylene	23.22	91	319	N.D.	
30) Styrene	23.24	104	181	N.D.	
31) 1,1,2,2-Tetrachloroethane	24.28	83	298	N.D.	
32) 1,2,3-Trichloropropane	24.41	75	412	N.D.	
33) 1,3-Dichlorobenzene	25.80	146	561	N.D.	
34) 1,4-Dichlorobenzene	25.94	146	526	N.D.	
35) 1,2-Dichlorobenzene	26.55	146	684	N.D.	
36) 1,2-Dibromo-3-chloropropan	27.54	157	873	N.D.	
37) Naphthalene	29.43	128	4196	N.D.	

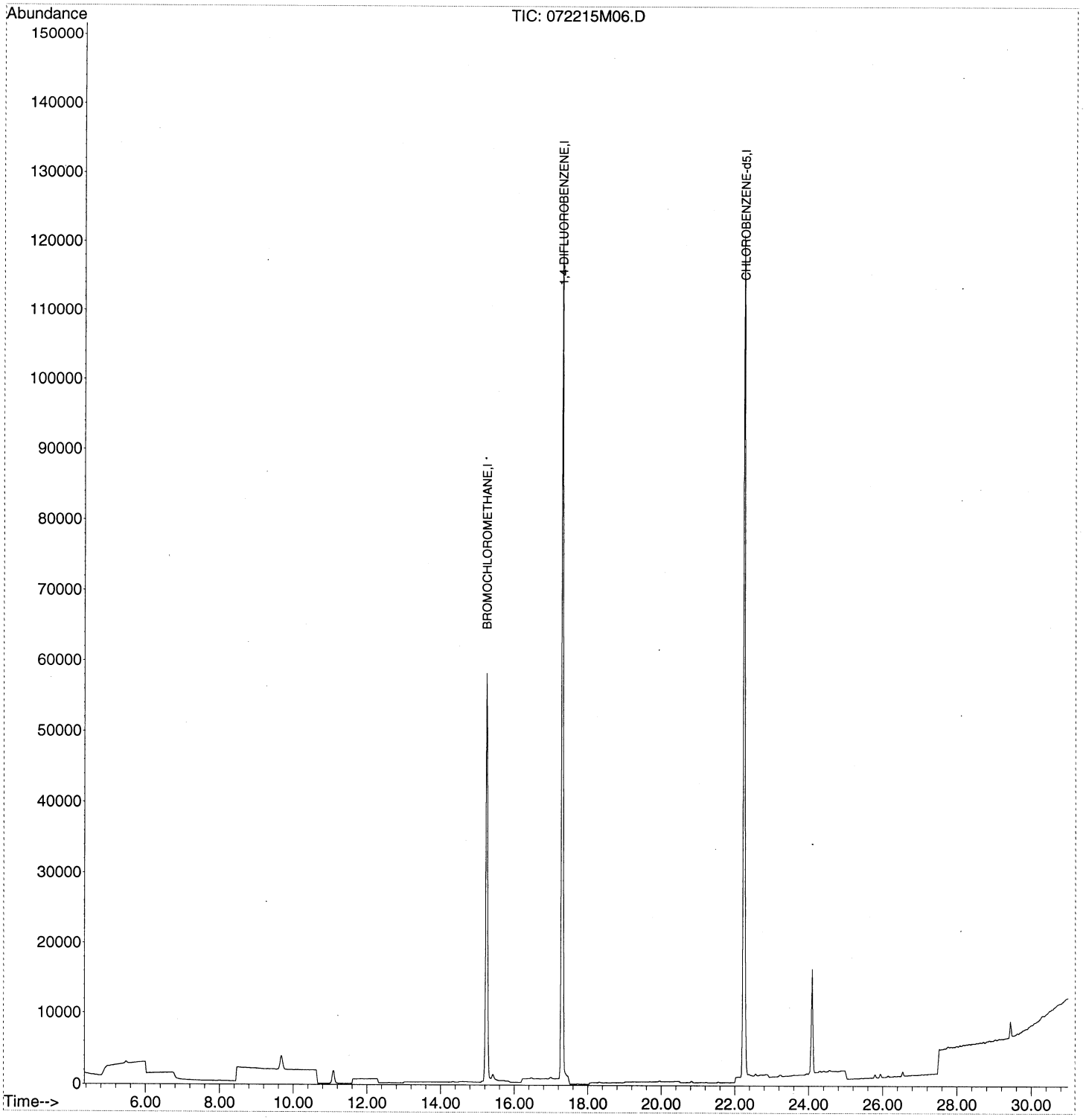
(#) = qualifier out of range (m) = manual integration (+) = signals summed

00245

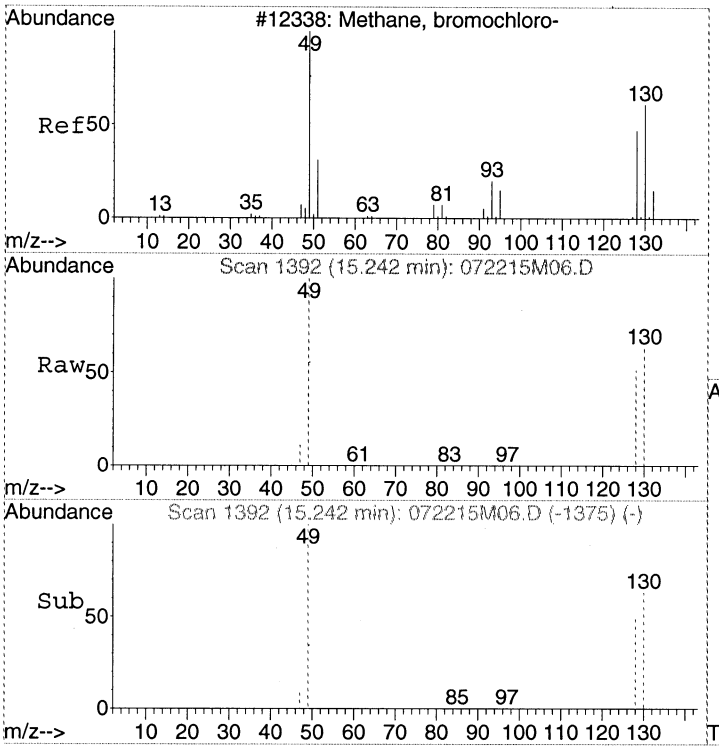
Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\072215MAA\
Data File : 072215M06.D
Acq On : 22 Jul 2015 3:28 pm
InstName : AG5973M
Operator : LLH
Sample : CAN #116
Misc : 400ml RECERTIFICATION
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 23 12:41:54 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\072115SIM+ADDLMAA.M
Quant Title : TO15SIM
QLast Update : Thu Jul 23 12:20:05 2015
Response via : Initial Calibration



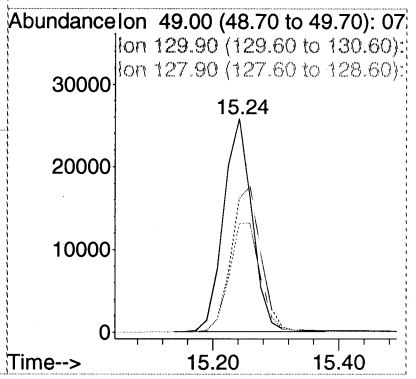
00246

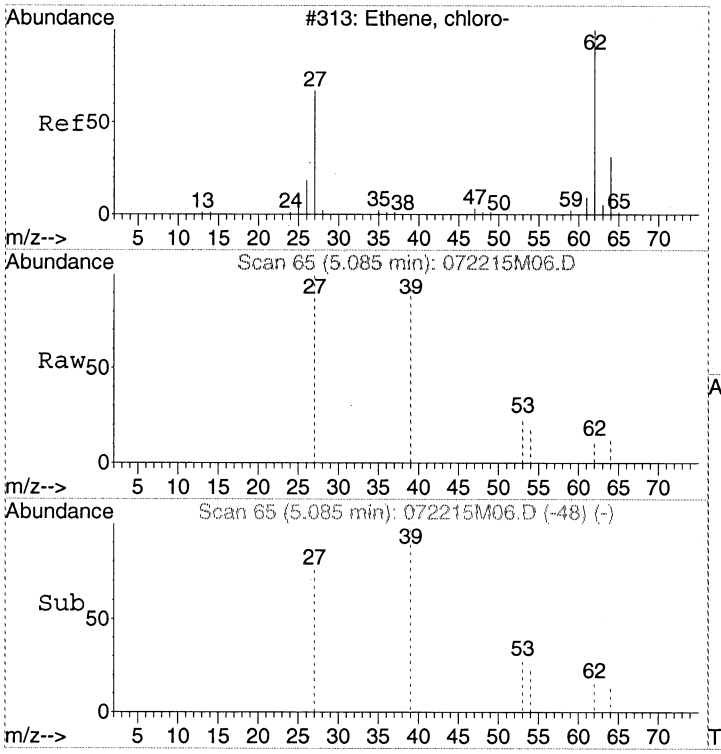


#1
BROMOCHLOROMETHANE
Concen: 341.00 pptv
RT: 15.24 min Scan# 1392
Delta R.T. -0.00 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion: 49 Resp: 81107

Ion	Ratio	Lower	Upper
49	100		
130	71.1	55.8	95.8
128	55.1	38.6	78.6

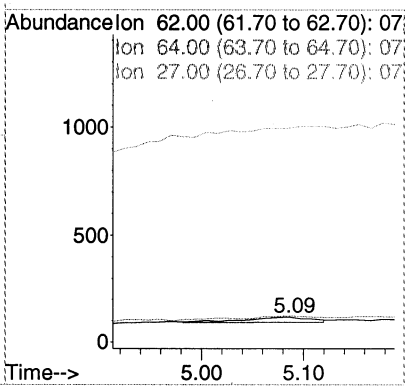


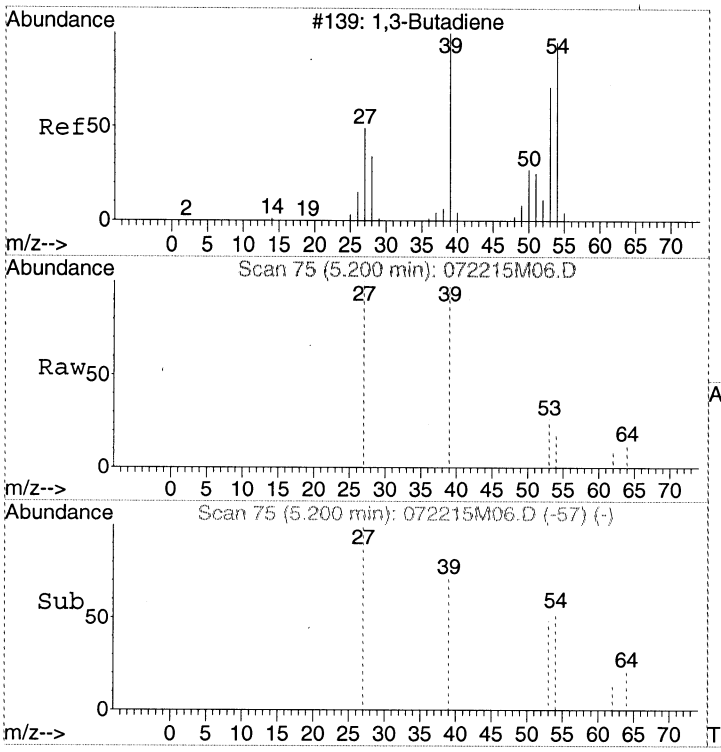


#2
Vinyl chloride
Concen: Below Cal
RT: 5.09 min Scan# 65
Delta R.T. -0.00 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion: 62 Resp: 114

Ion	Ratio	Lower	Upper
62	100		
64	50.0	11.7	51.7
27	0.0	47.6	87.6#

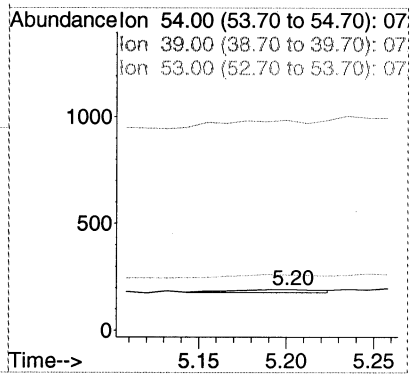


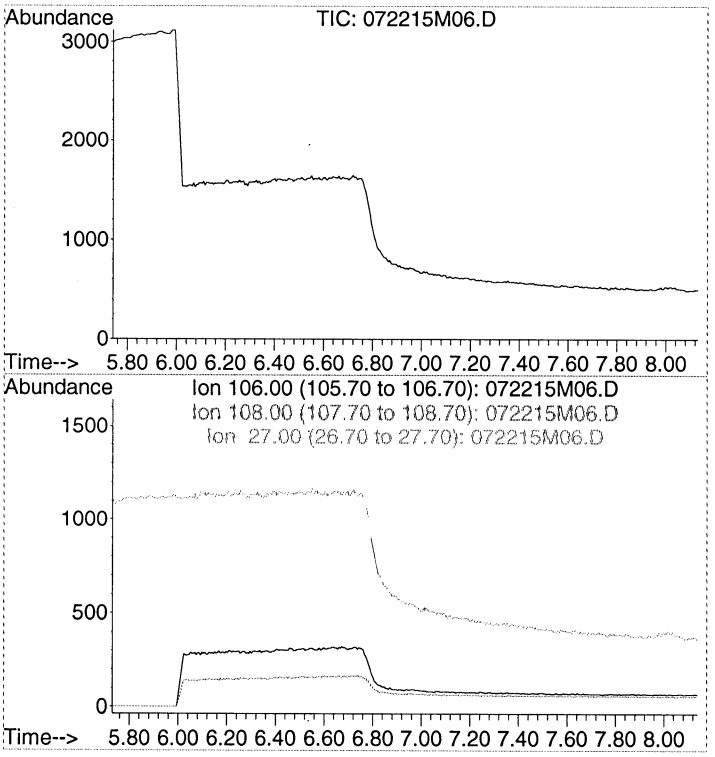


#3
1,3-Butadiene
Concen: Below Cal
RT: 5.20 min Scan# 75
Delta R.T. 0.01 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion: 54 Resp: 52

Ion	Ratio	Lower	Upper
54	100		
39	261.5	83.1	123.1#
53	86.5	46.9	86.9



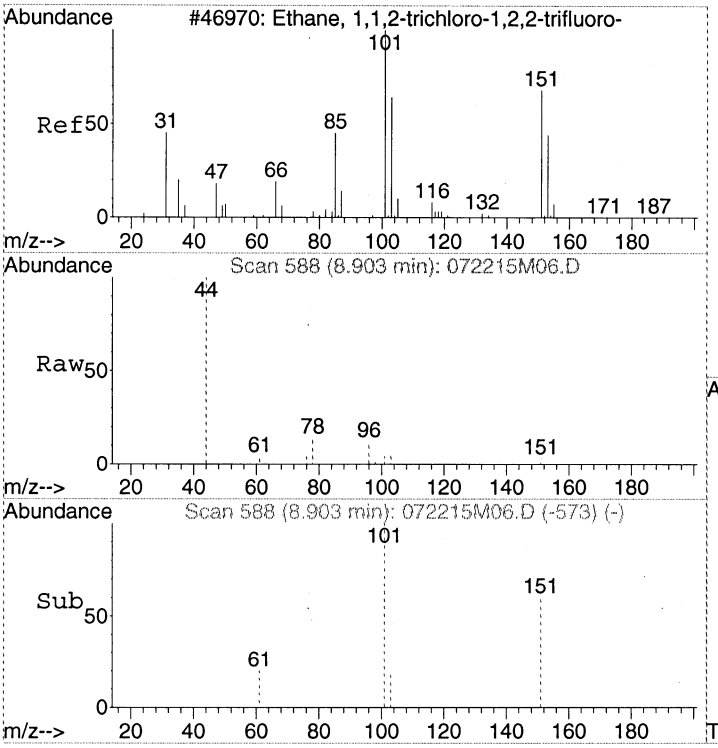


#4
Bromoethene
Concen: N.D.
Expected RT: 6.93 min

Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion: 106

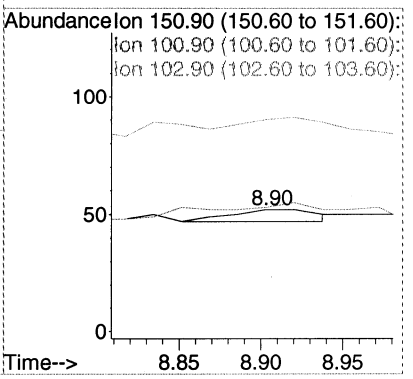
Sig	Exp Ratio
106	100
108	95.1
27	108.7

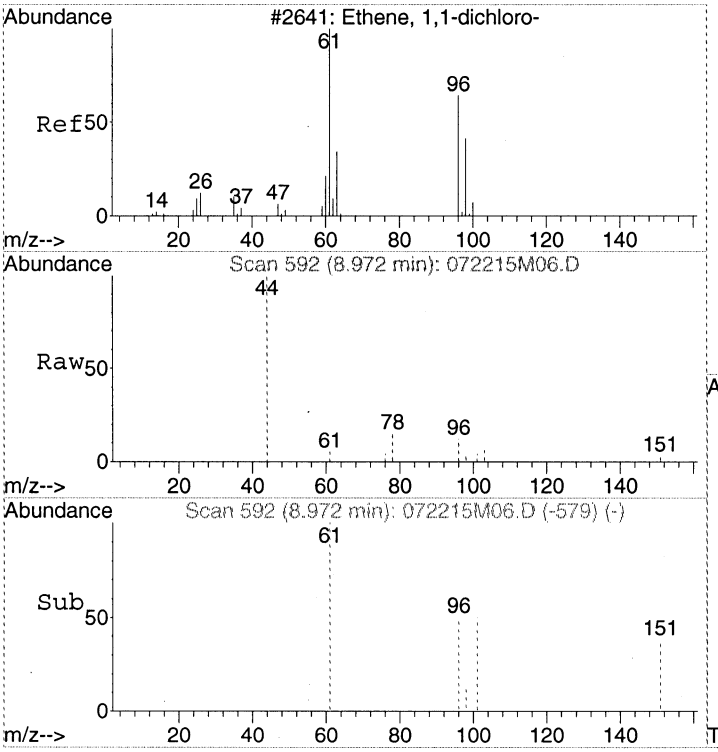


#5
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: Below Cal
RT: 8.90 min Scan# 588
Delta R.T. -0.00 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion:151 Resp: 19

Ion	Ratio	Lower	Upper
151	100		
101	63.2	91.3	131.3#
103	136.8	51.4	91.4#

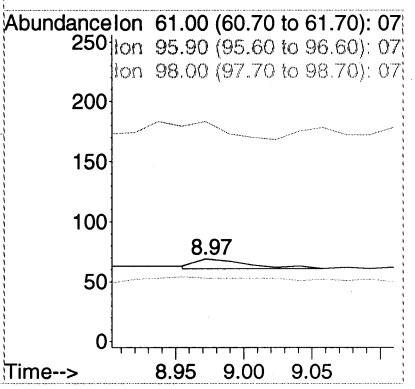


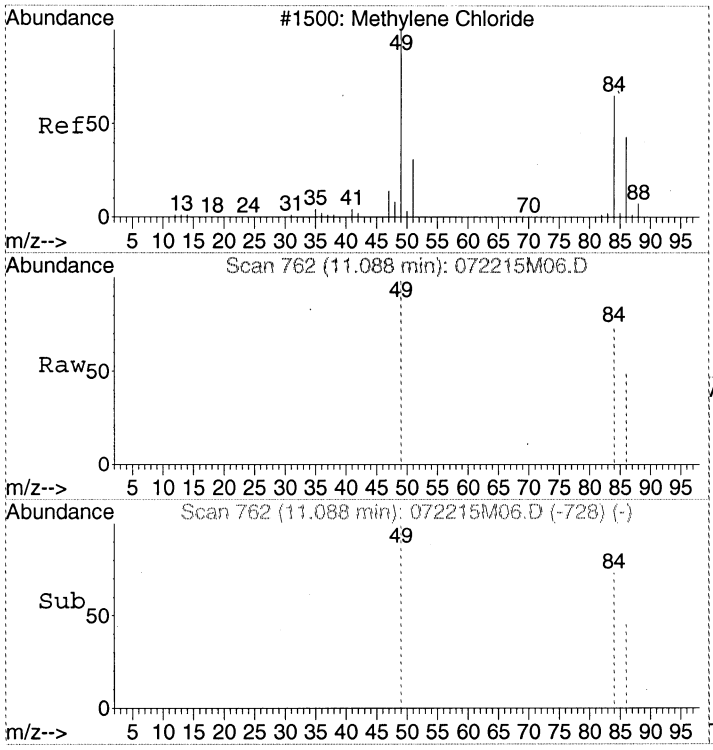


#6
1,1-Dichloroethene
Concen: Below Cal
RT: 8.97 min Scan# 592
Delta R.T. 0.02 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion: 61 Resp: 21

Ion	Ratio	Lower	Upper
61	100		
96	0.0	41.6	81.6#
98	0.0	19.1	59.1#

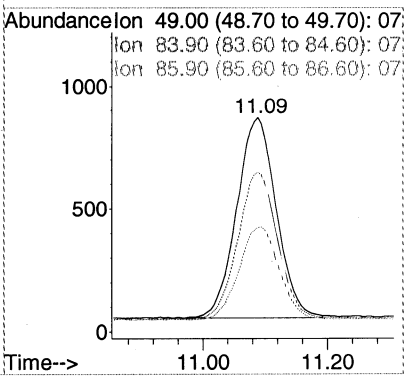


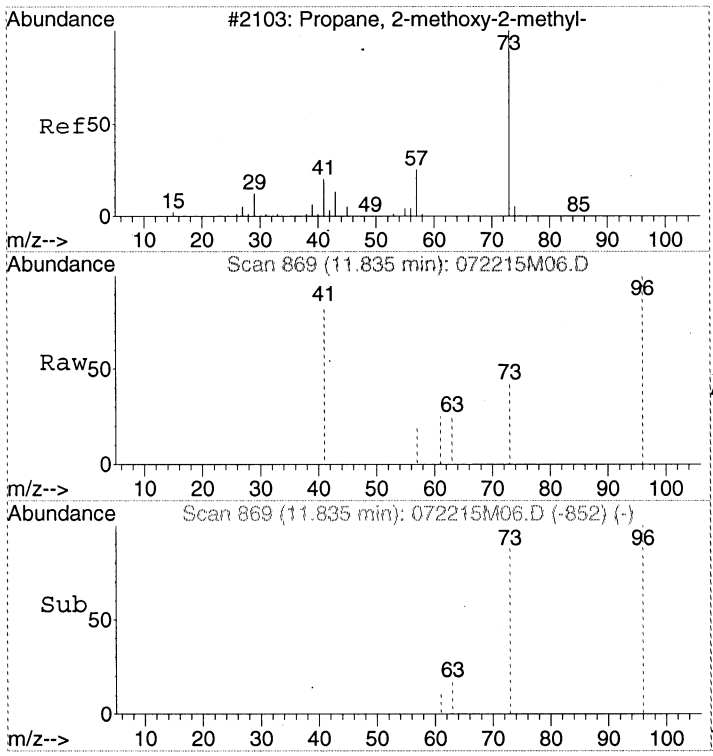


#7
Dichloromethane
Concen: Below Cal
RT: 11.09 min Scan# 762
Delta R.T. -0.00 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion: 49 Resp: 3590

Ion	Ratio	Lower	Upper
49	100		
84	73.5	56.8	96.8
86	47.0	29.2	69.2

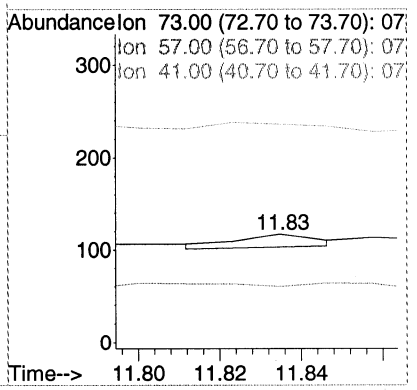


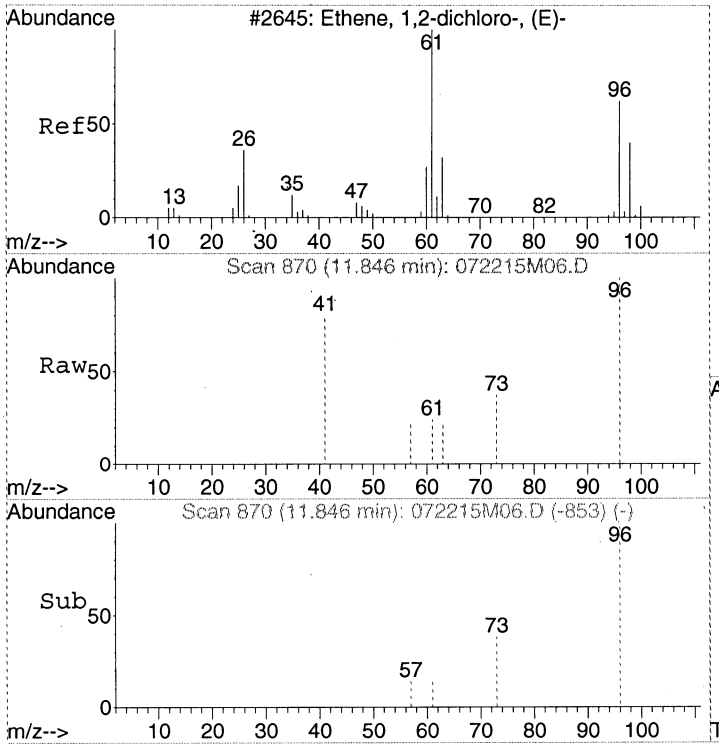


#8
tert-Butyl methyl ether (MTBE)
Concen: Below Cal
RT: 11.83 min Scan# 869
Delta R.T. -0.00 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion: 73 Resp: 20

Ion	Ratio	Lower	Upper
73	100		
57	45.0	1.7	41.7#
41	0.0	2.1	42.1#

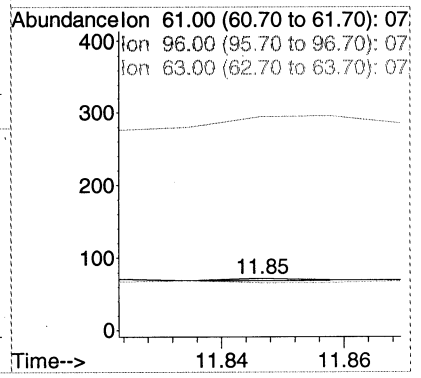


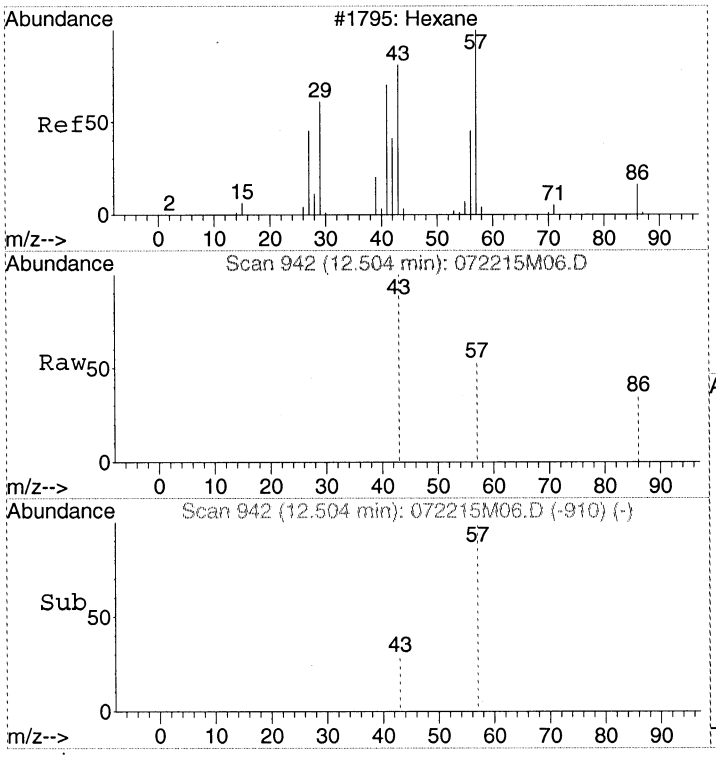


#9
trans-1,2-Dichloroethene
Concen: Below Cal
RT: 11.85 min Scan# 870
Delta R.T. -0.00 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion: 61 Resp: 3

Ion	Ratio	Lower	Upper
61	100		
96	0.0	51.3	91.3#
63	166.7	12.1	52.1#

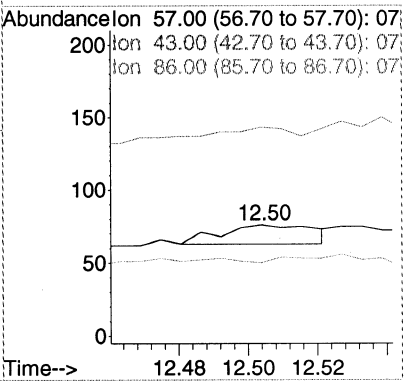


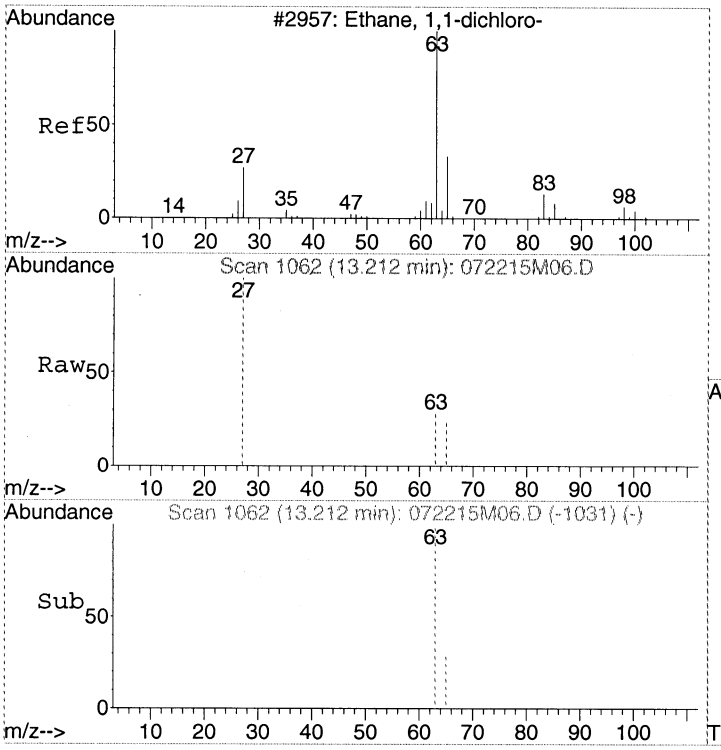


#10
Hexane
Concen: Below Cal
RT: 12.50 min Scan# 942
Delta R.T. -0.01 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion: 57 Resp: 24

Ion	Ratio	Lower	Upper
57	100		
43	87.5	44.4	84.4#
86	8.3	0.0	37.6

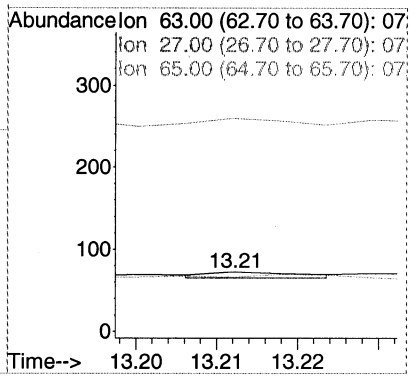


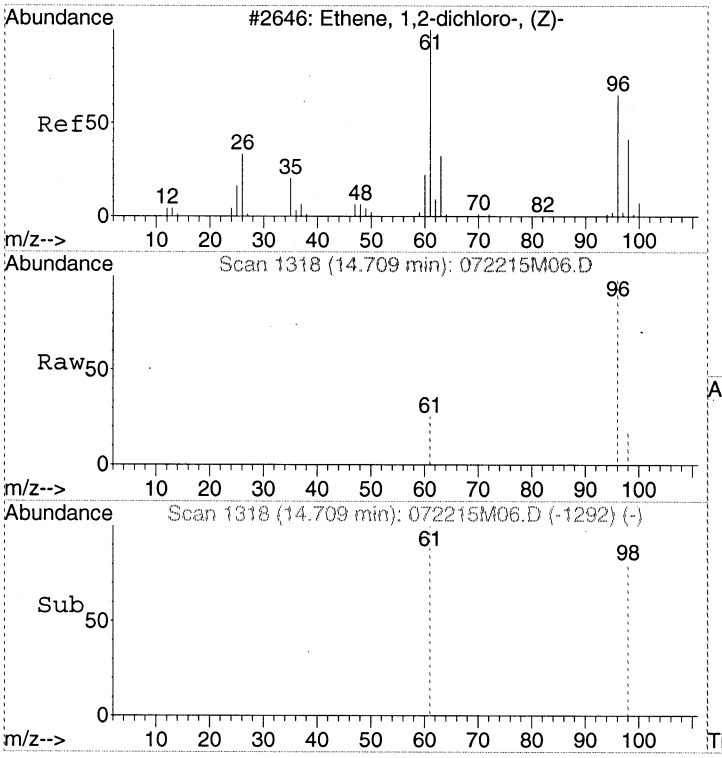


#11
1,1-Dichloroethane
Concen: Below Cal
RT: 13.21 min Scan# 1062
Delta R.T. -0.02 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion: 63 Resp: 6

Ion	Ratio	Lower	Upper
63	100		
27	133.3	18.7	58.7#
65	50.0	11.7	51.7

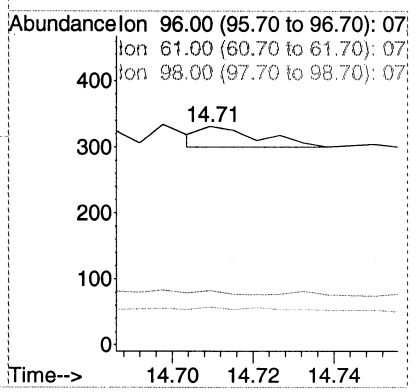


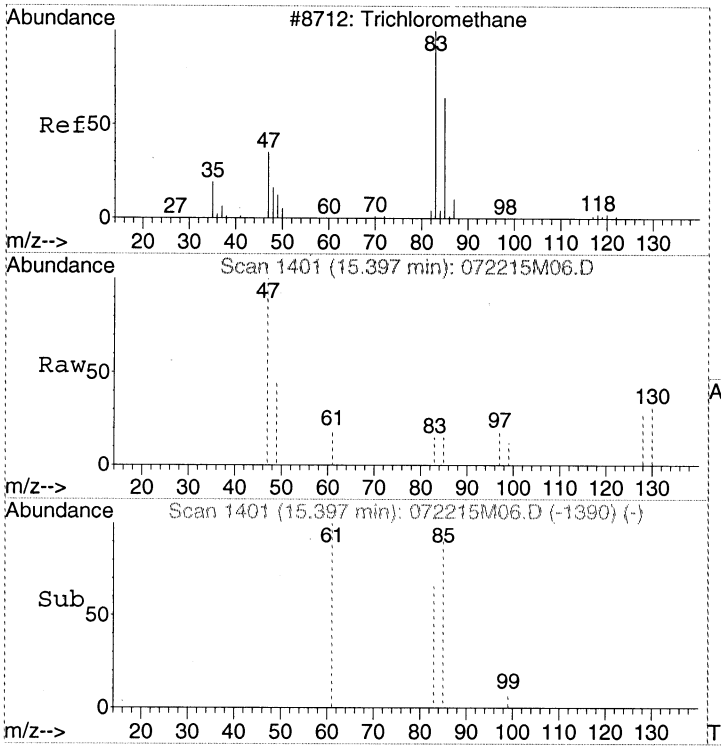


#12
cis-1,2-Dichloroethene
Concen: Below Cal
RT: 14.71 min Scan# 1318
Delta R.T. -0.00 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion: 96 Resp: 31

Ion	Ratio	Lower	Upper
96	100		
61	0.0	109.2	149.2#
98	3.2	44.3	84.3#

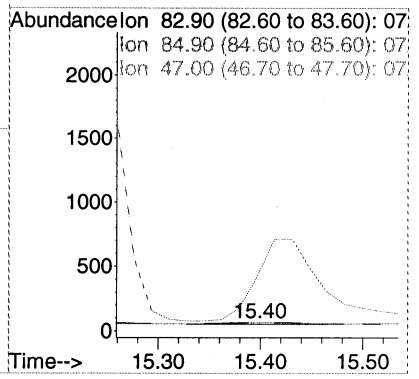


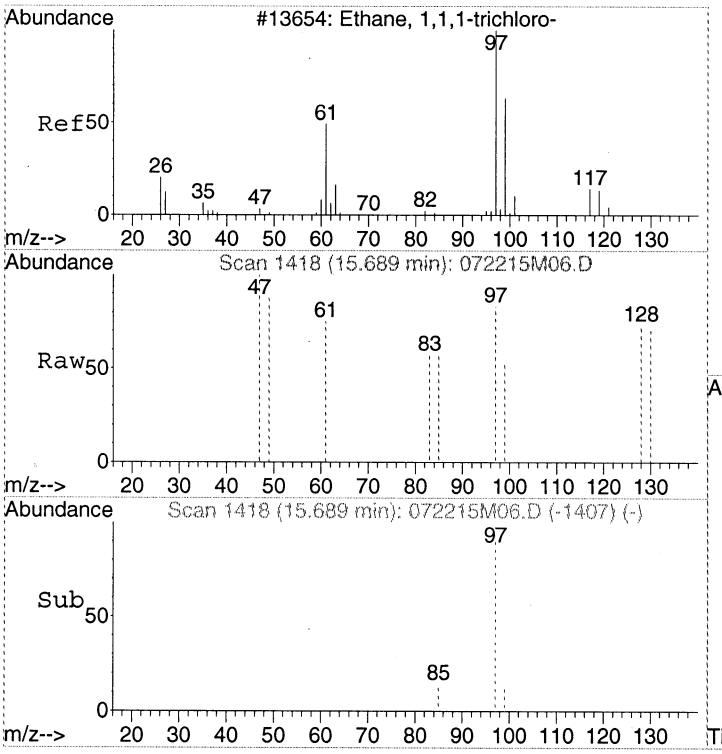


#13
Chloroform
Concen: Below Cal
RT: 15.40 min Scan# 1401
Delta R.T. -0.02 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion: 83 Resp: 69

Ion	Ratio	Lower	Upper
83	100		
85	56.5	44.7	84.7
47	4150.7	5.4	45.4#

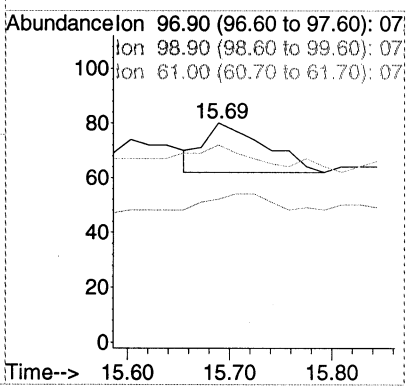


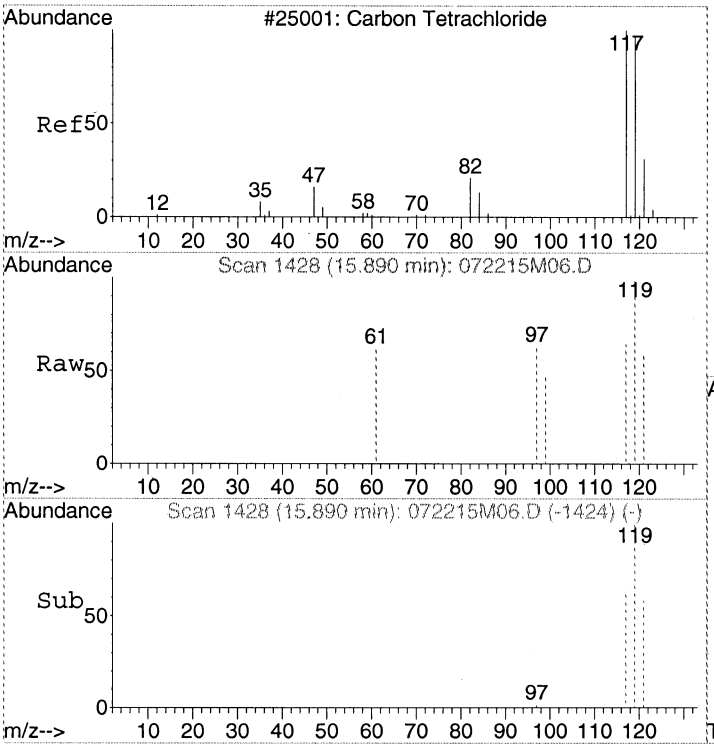


#14
1,1,1-Trichloroethane
Concen: Below Cal
RT: 15.69 min Scan# 1418
Delta R.T. -0.02 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion: 97 Resp: 74

Ion	Ratio	Lower	Upper
97	100		
99	35.1	44.6	84.6#
61	37.8	18.6	58.6

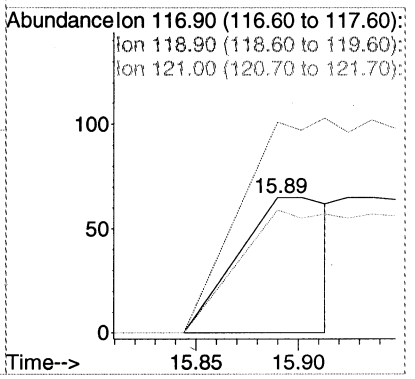


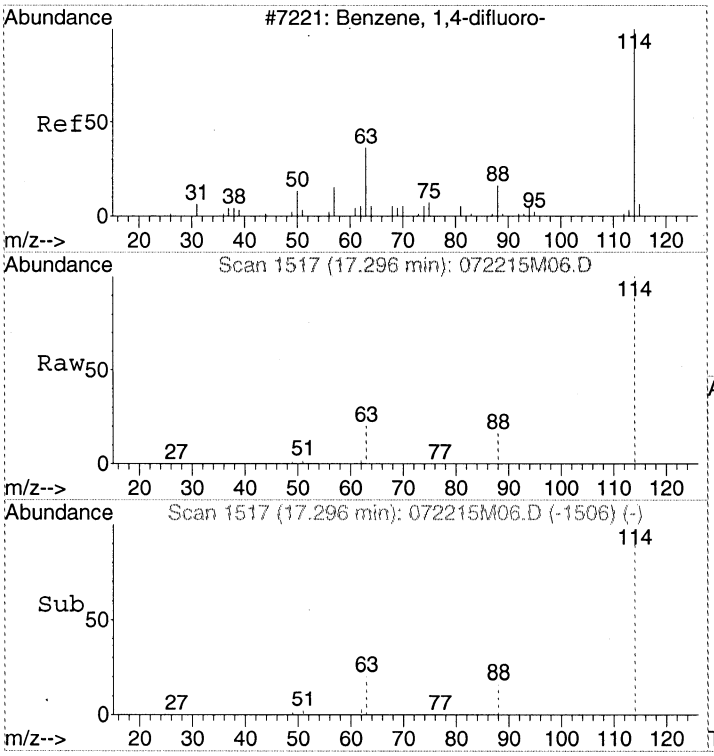


#15
Carbon tetrachloride
Concen: Below Cal
RT: 15.89 min Scan# 1428
Delta R.T. -0.10 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion:117 Resp: 265

Ion	Ratio	Lower	Upper
117	100		
119	0.0	75.8	115.8#
121	74.0	10.6	50.6#

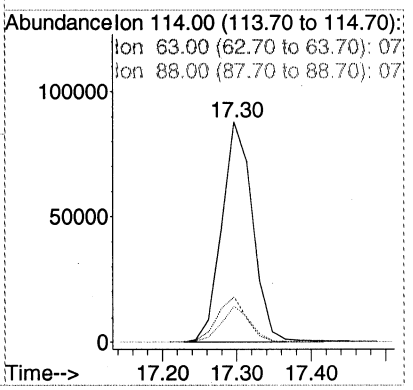


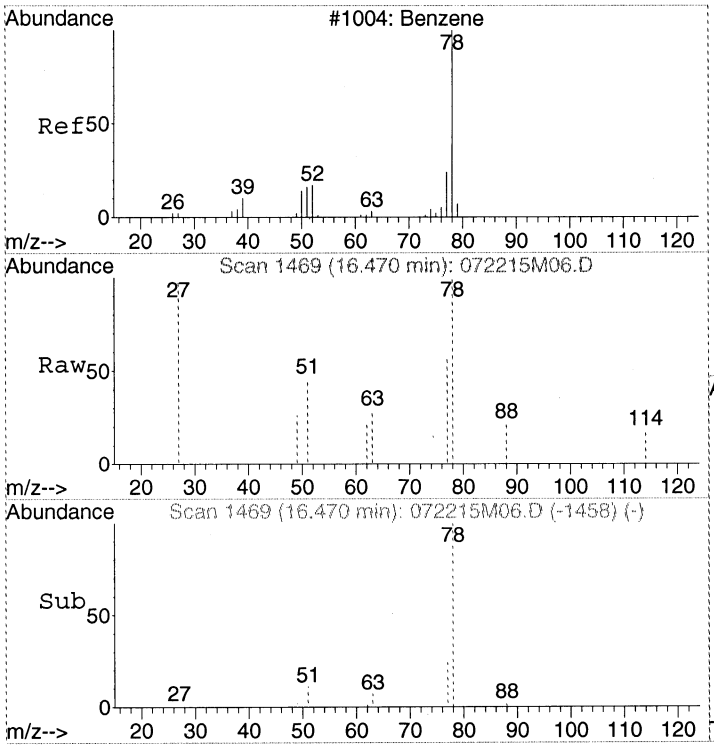


#16
1,4-DIFLUOROBENZENE
Concen: 375.00 pptv
RT: 17.30 min Scan# 1517
Delta R.T. -0.01 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion:114 Resp: 252502

Ion	Ratio	Lower	Upper
114	100		
63	19.7	0.0	38.9
88	15.6	0.0	35.4

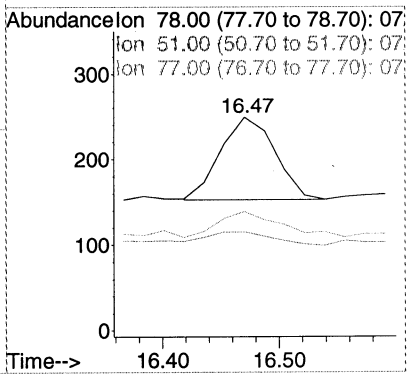


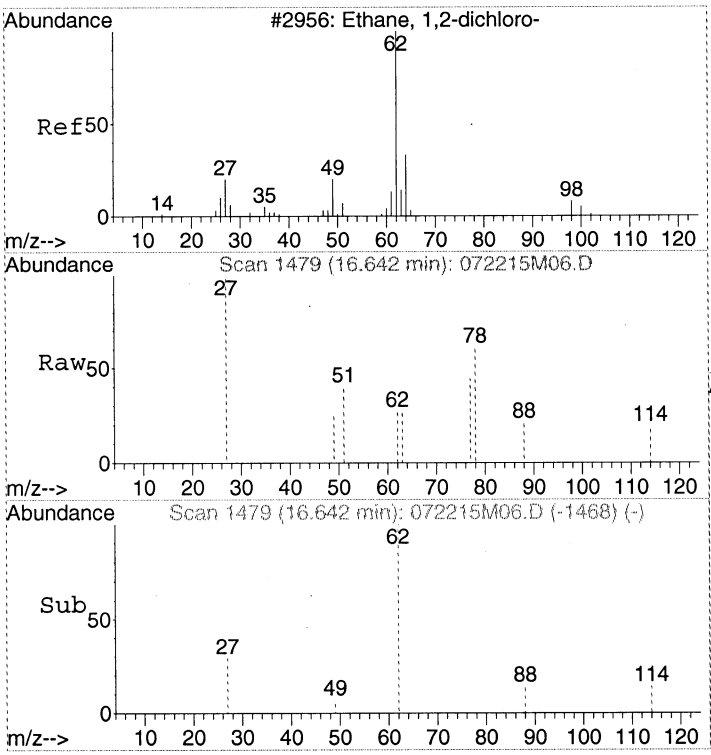


#17
Benzene
Concen: Below Cal
RT: 16.47 min Scan# 1469
Delta R.T. -0.01 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion: 78 Resp: 311

Ion	Ratio	Lower	Upper
78	100		
51	20.3	0.0	37.6
77	34.7	3.4	43.4

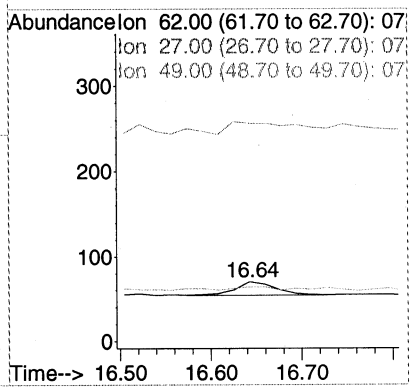


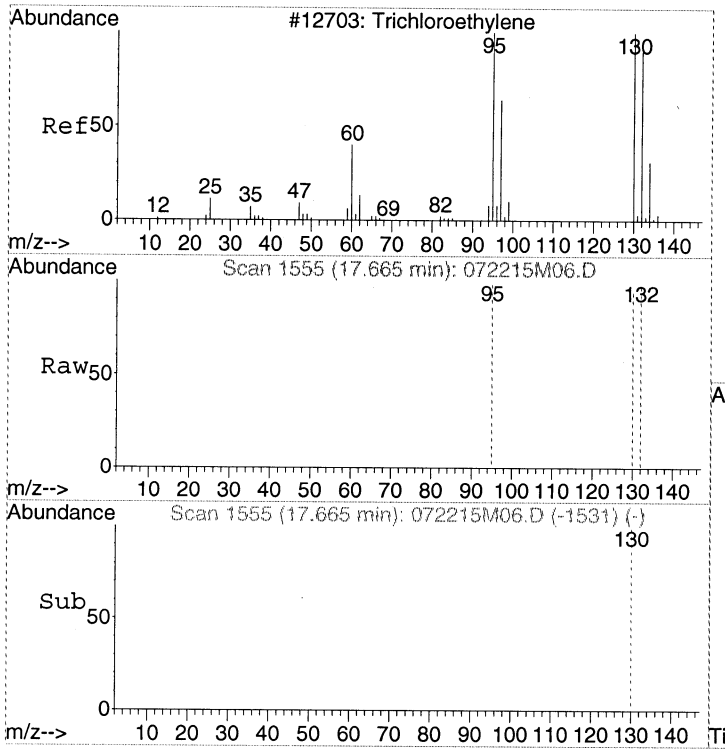


#18
1,2-Dichloroethane
Concen: Below Cal
RT: 16.64 min Scan# 1479
Delta R.T. -0.01 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion: 62 Resp: 49

Ion	Ratio	Lower	Upper
62	100		
27	163.3	26.2	66.2#
49	24.5	7.3	47.3

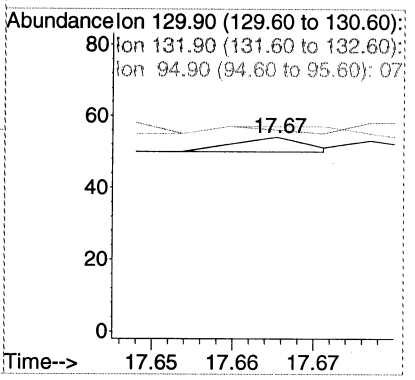


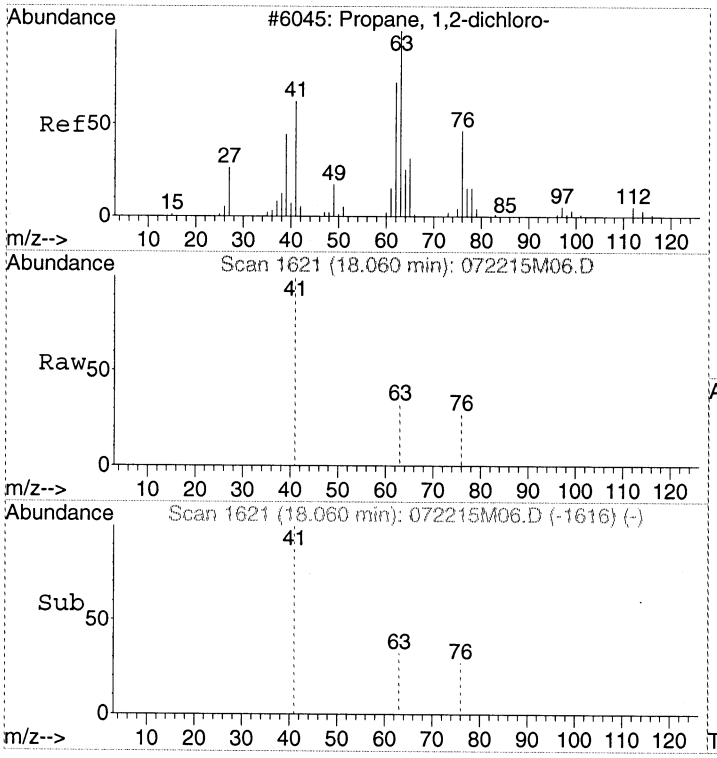


#19
Trichloroethene
Concen: Below Cal
RT: 17.67 min Scan# 1555
Delta R.T. -0.06 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion:130 Resp: 2

Ion	Ratio	Lower	Upper
130	100		
132	100.0	76.7	116.7
95	100.0	74.7	114.7

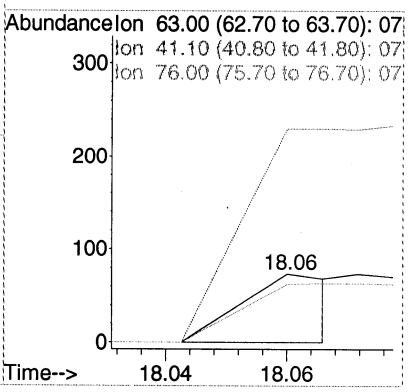


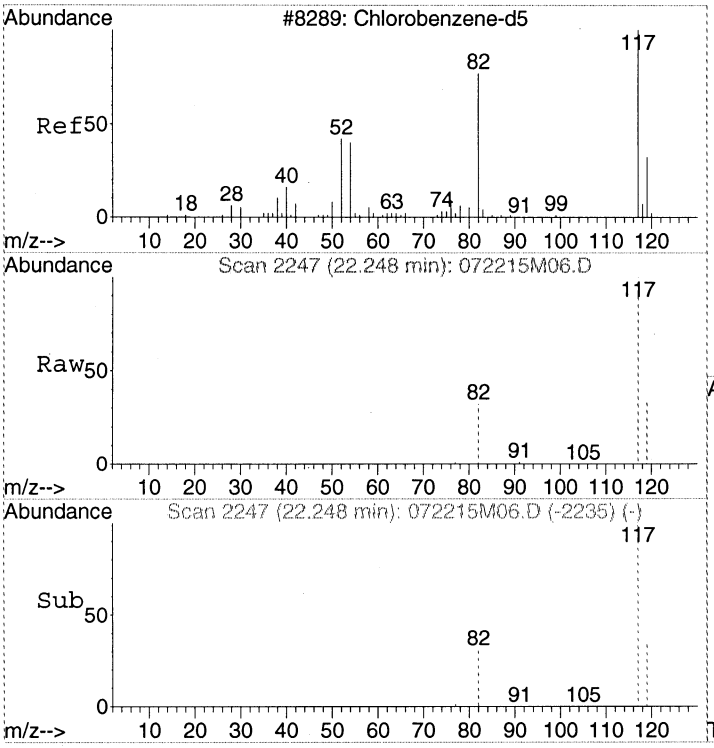


#20
1,2-Dichloropropane
Concen: Below Cal
RT: 18.06 min Scan# 1621
Delta R.T. -0.16 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion: 63 Resp: 98

Ion	Ratio	Lower	Upper
63	100		
41	408.2	38.9	78.9#
76	154.1	23.7	63.7#

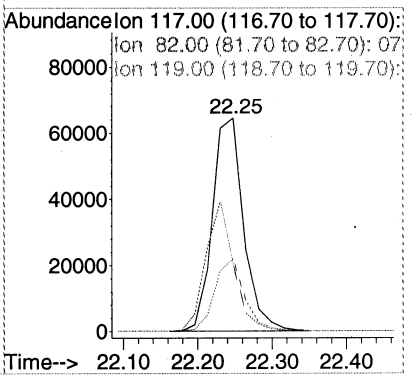


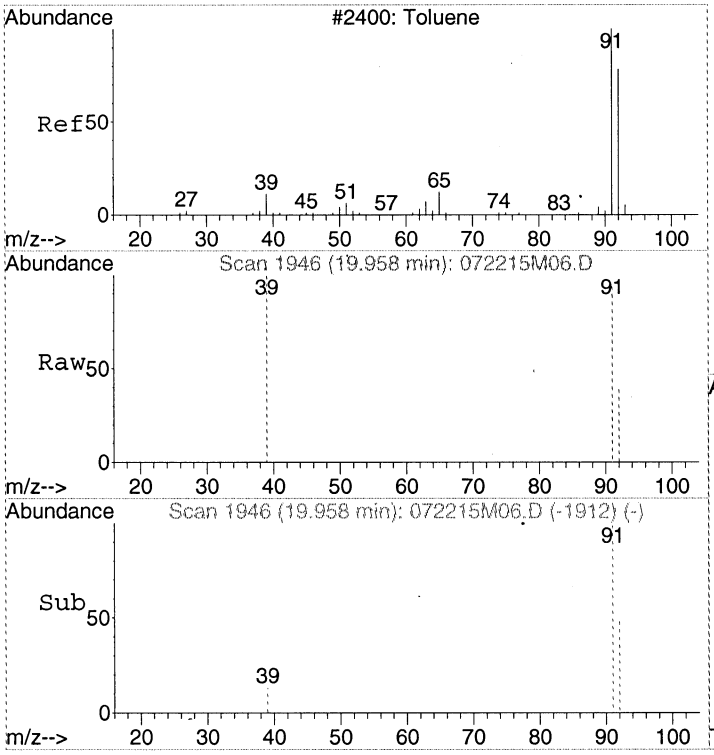


#21
CHLOROBENZENE-d5
Concen: 341.00 pptv
RT: 22.25 min Scan# 2247
Delta R.T. 0.00 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion:117 Resp: 187218

Ion	Ratio	Lower	Upper
117	100		
82	54.7	33.2	73.2
119	32.2	12.1	52.1

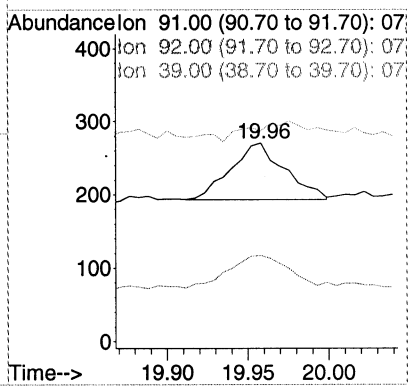


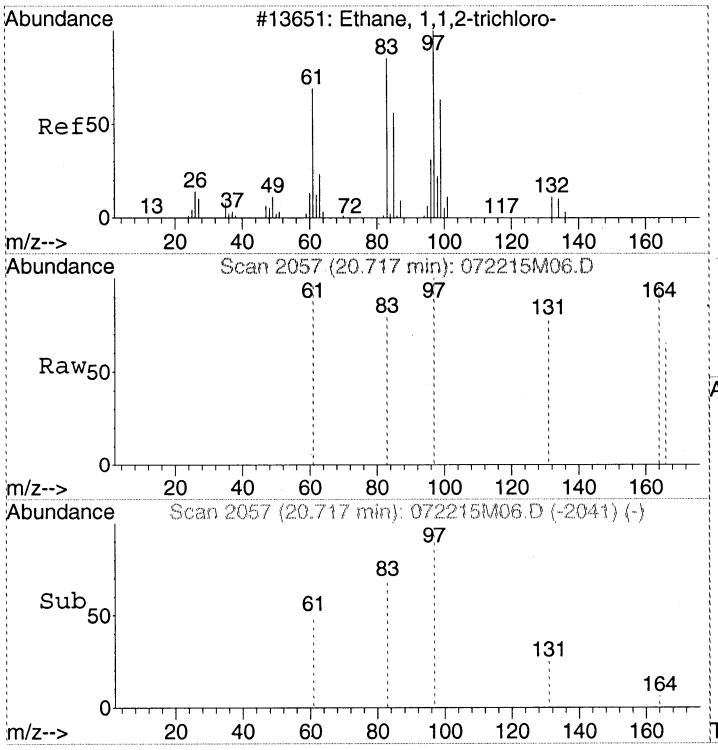


#22
Toluene
Concen: Below Cal
RT: 19.96 min Scan# 1946
Delta R.T. 0.00 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion: 91 Resp: 179

Ion	Ratio	Lower	Upper
91	100		
92	63.1	39.7	79.7
39	12.8	0.0	30.4

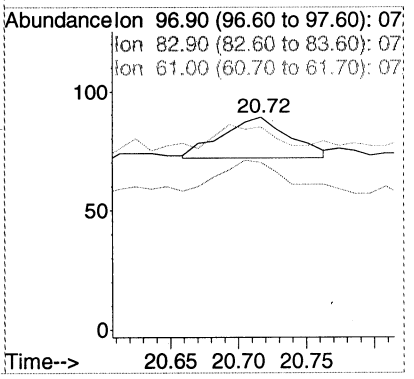


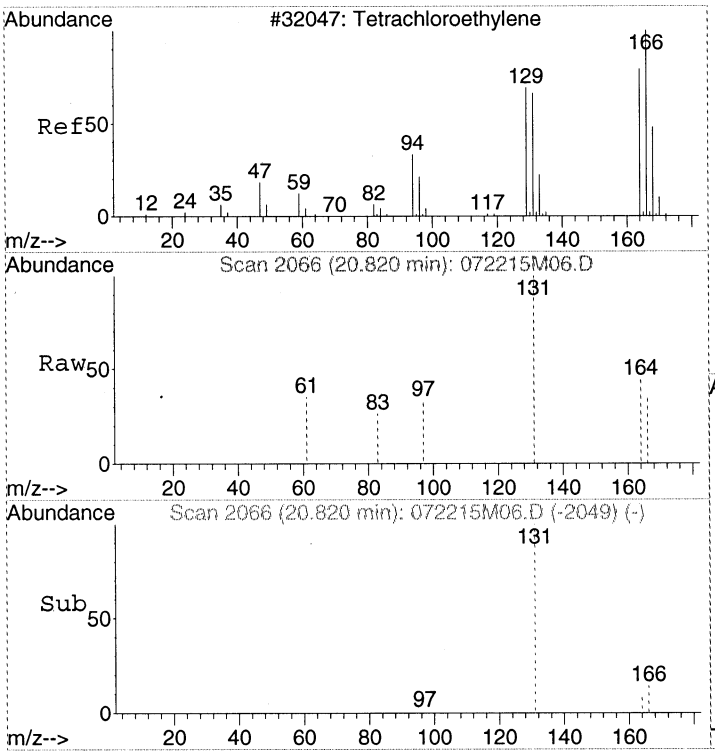


#23
1,1,2-Trichloroethane
Concen: Below Cal
RT: 20.72 min Scan# 2057
Delta R.T. -0.02 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion: 97 Resp: 59

Ion	Ratio	Lower	Upper
97	100		
83	62.7	63.6	103.6#
61	0.0	41.3	81.3#

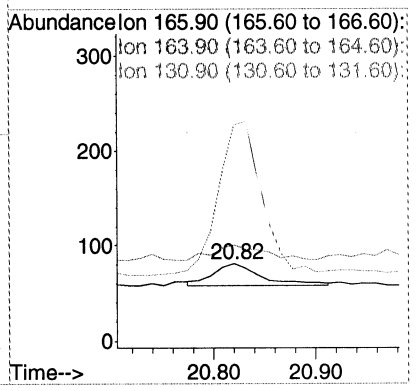


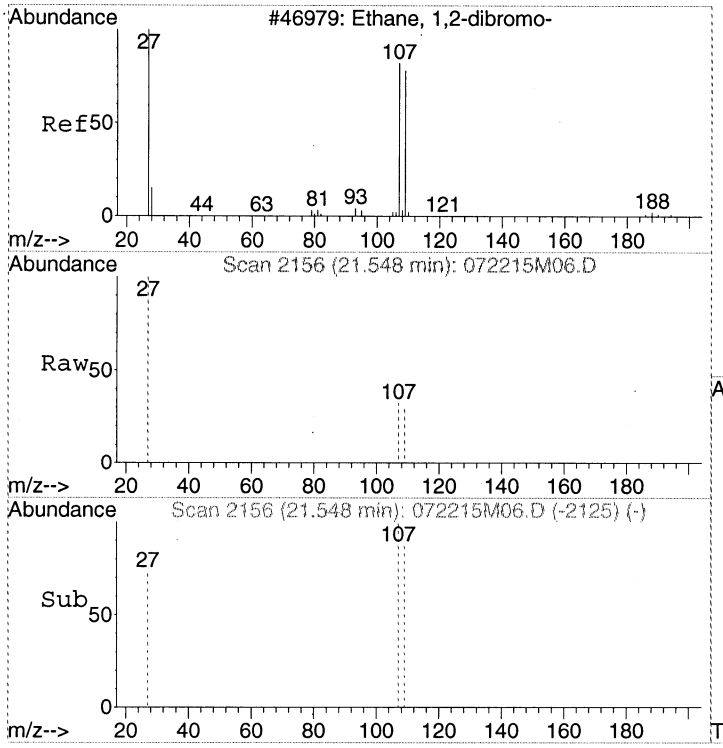


#24
Tetrachloroethene
Concen: Below Cal
RT: 20.82 min Scan# 2066
Delta R.T. -0.01 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion:166 Resp: 74

Ion	Ratio	Lower	Upper
166	100		
164	70.3	58.3	98.3
131	652.7	47.2	87.2#

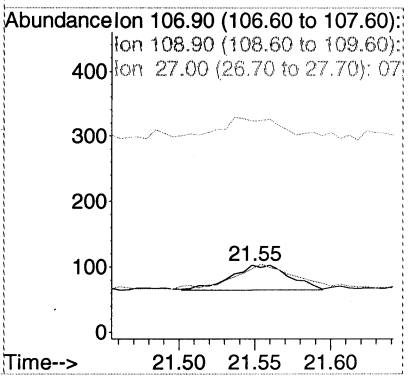


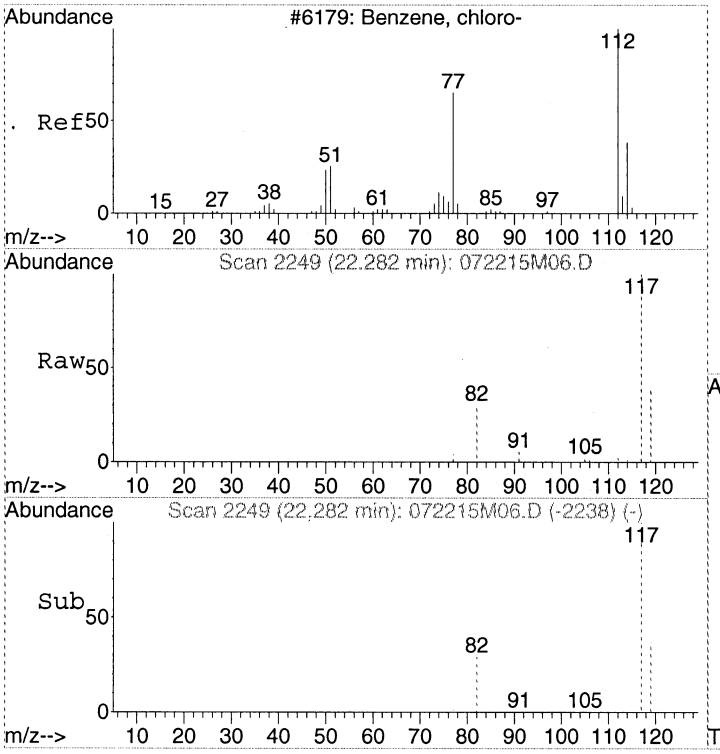


#25
1,2-Dibromoethane (EDB)
Concen: Below Cal
RT: 21.55 min Scan# 2156
Delta R.T. -0.02 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion:107 Resp: 103

Ion	Ratio	Lower	Upper
107	100		
109	87.4	74.4	114.4
27	41.7	44.7	84.7#

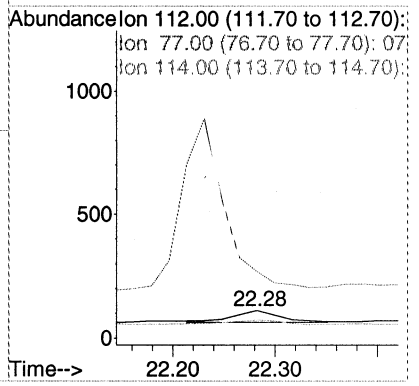


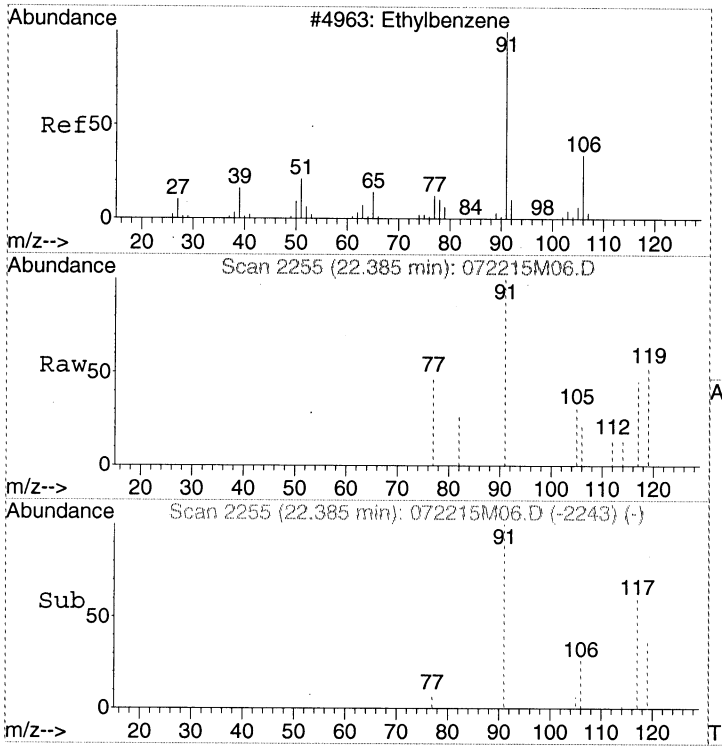


#26
Chlorobenzene
Concen: Below Cal
RT: 22.28 min Scan# 2249
Delta R.T. -0.02 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion:112 Resp: 152

Ion	Ratio	Lower	Upper
112	100		
77	0.0	38.8	78.8#
114	55.9	12.2	52.2#

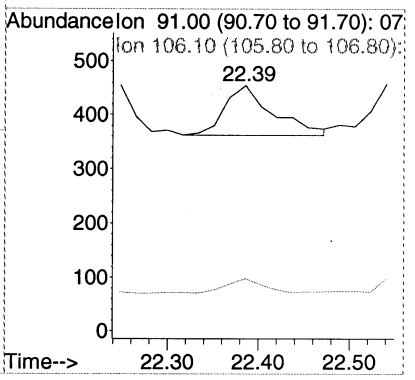


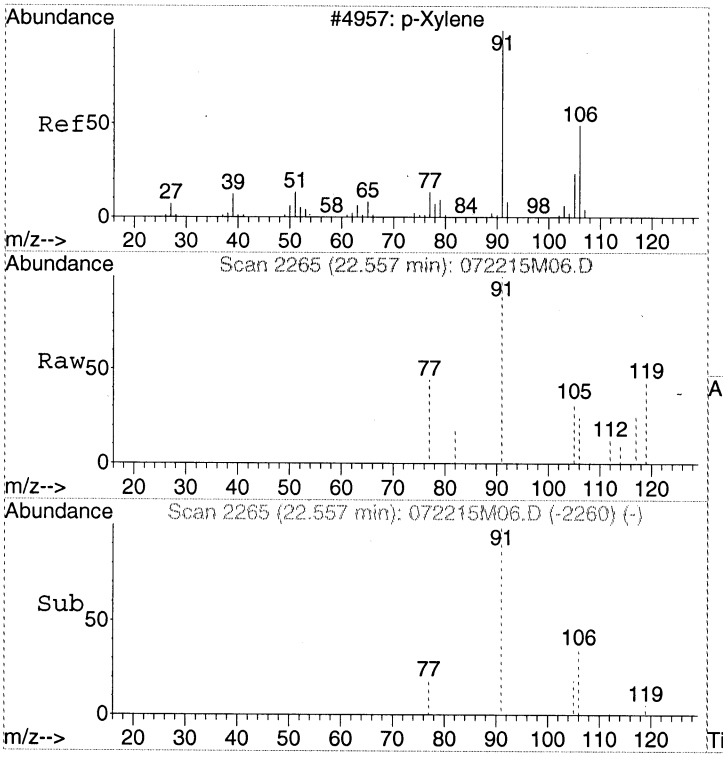


#27
Ethylbenzene
Concen: Below Cal
RT: 22.39 min Scan# 2255
Delta R.T. 0.00 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion: 91 Resp: 341

Ion	Ratio	Lower	Upper
91	100		
106	22.6	12.6	52.6

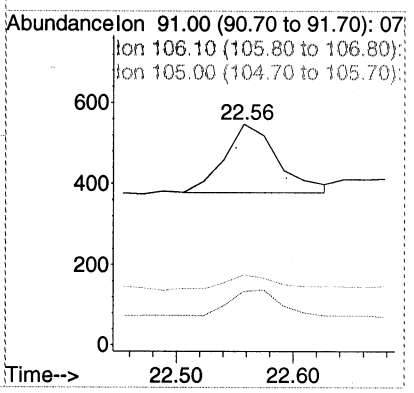


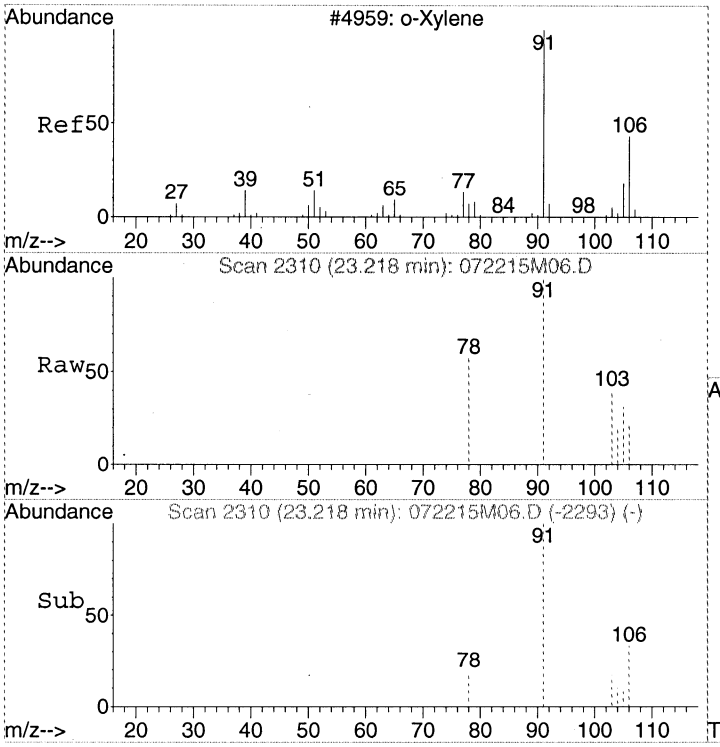


#28
m&p-Xylene
Concen: Below Cal
RT: 22.56 min Scan# 2265
Delta R.T. -0.02 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion: 91 Resp: 538

Ion	Ratio	Lower	Upper
91	100		
106	37.0	30.9	70.9
105	20.8	1.9	41.9

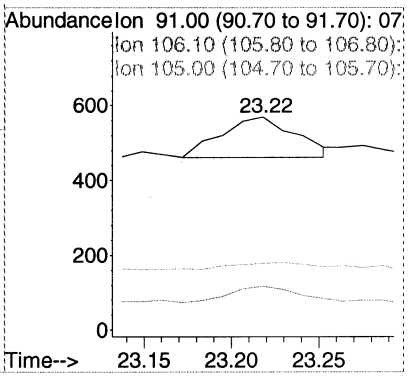


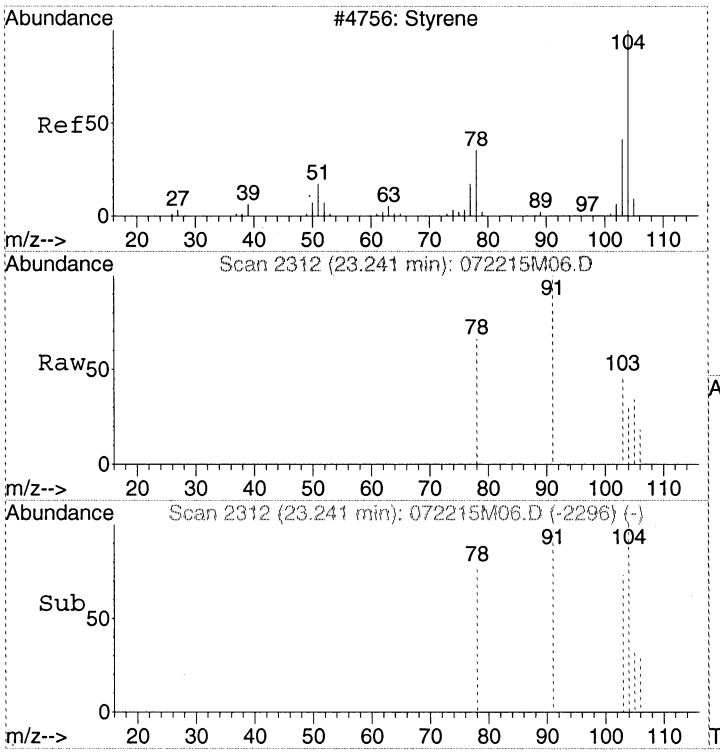


#29
o-Xylene
Concen: Below Cal
RT: 23.22 min Scan# 2310
Delta R.T. 0.00 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion: 91 Resp: 319

Ion	Ratio	Lower	Upper
91	100		
106	36.4	28.5	68.5
105	20.7	4.6	44.6

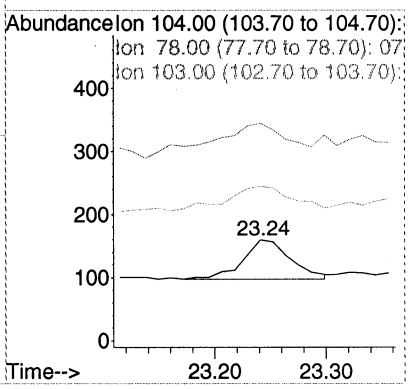


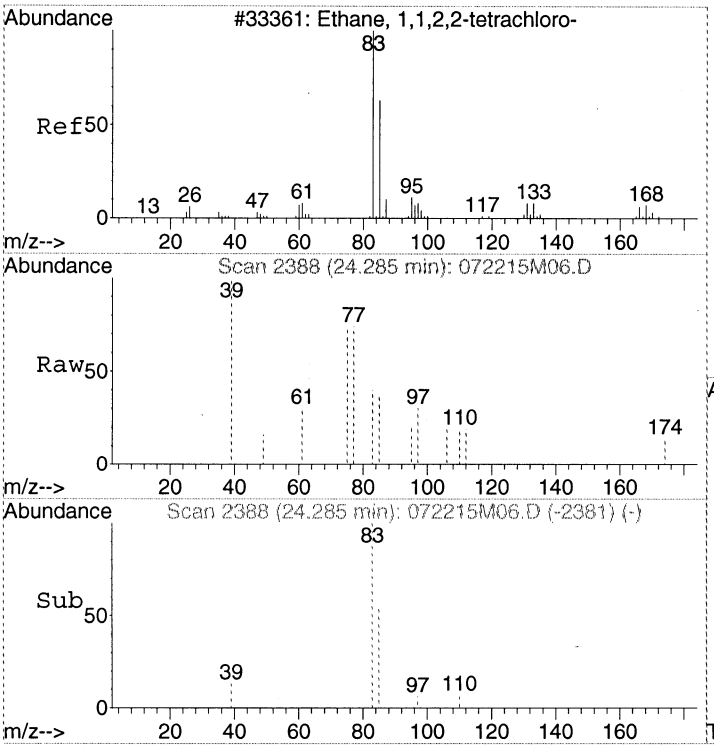


#30
Styrene
Concen: Below Cal
RT: 23.24 min Scan# 2312
Delta R.T. -0.01 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion:104 Resp: 181

Ion	Ratio	Lower	Upper
104	100		
78	80.7	31.3	71.3#
103	63.5	33.6	73.6

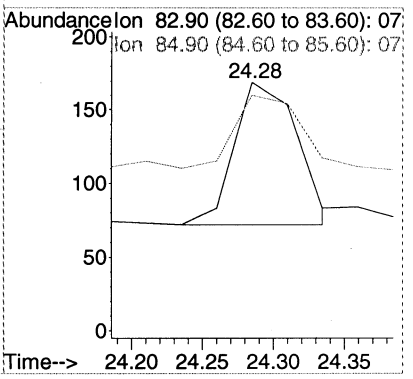


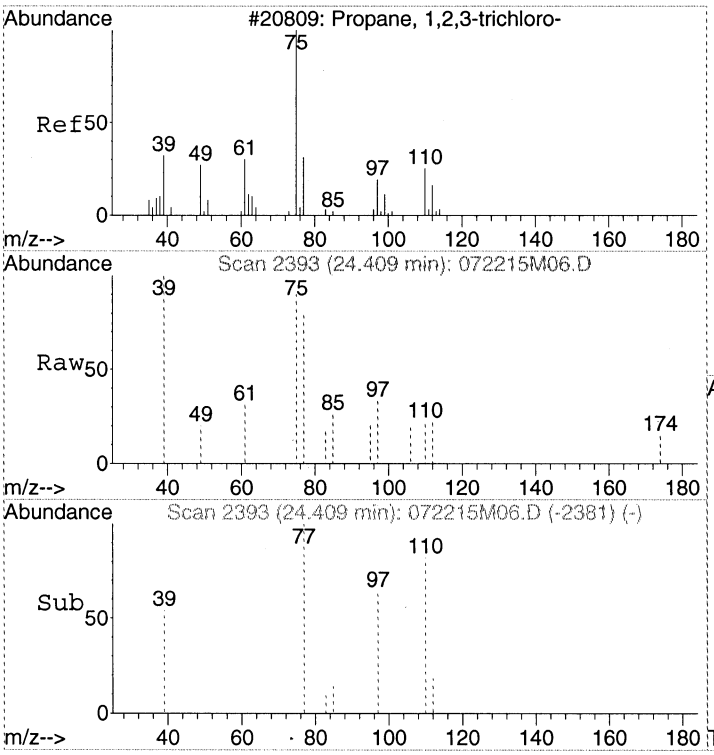


#31
1,1,2,2-Tetrachloroethane
Concen: Below Cal
RT: 24.28 min Scan# 2388
Delta R.T. -0.02 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion: 83 Resp: 298

Ion	Ratio	Lower	Upper
83	100		
85	60.4	44.1	84.1

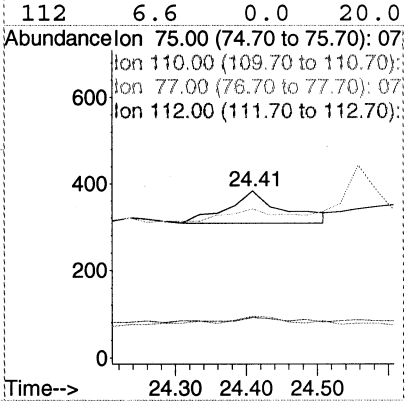


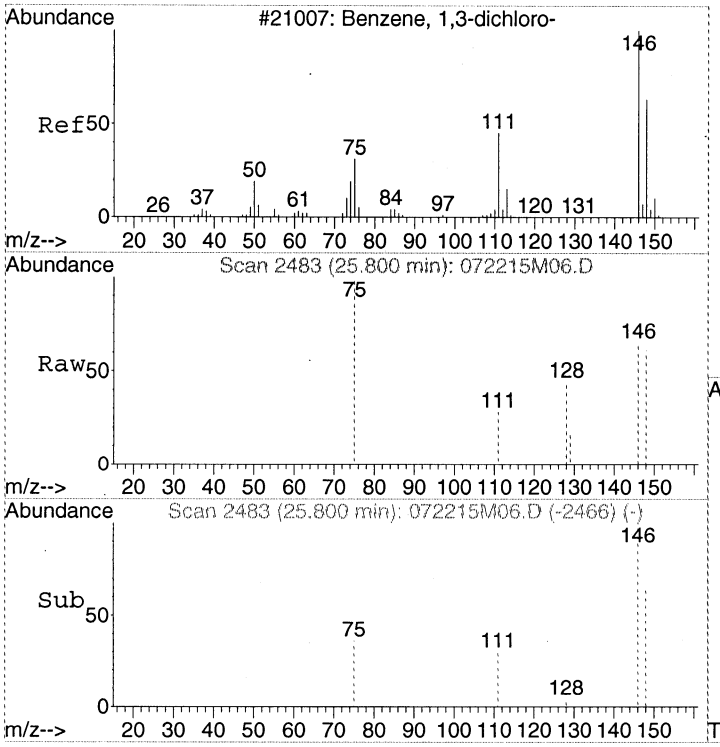


#32
1,2,3-Trichloropropane
Concen: Below Cal
RT: 24.41 min Scan# 2393
Delta R.T. 0.00 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion: 75 Resp: 412

Ion	Ratio	Lower	Upper
75	100		
110	28.2	0.0	20.0#
77	39.8	11.9	51.9
112	6.6	0.0	20.0

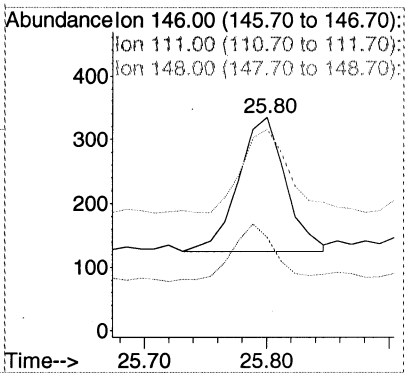


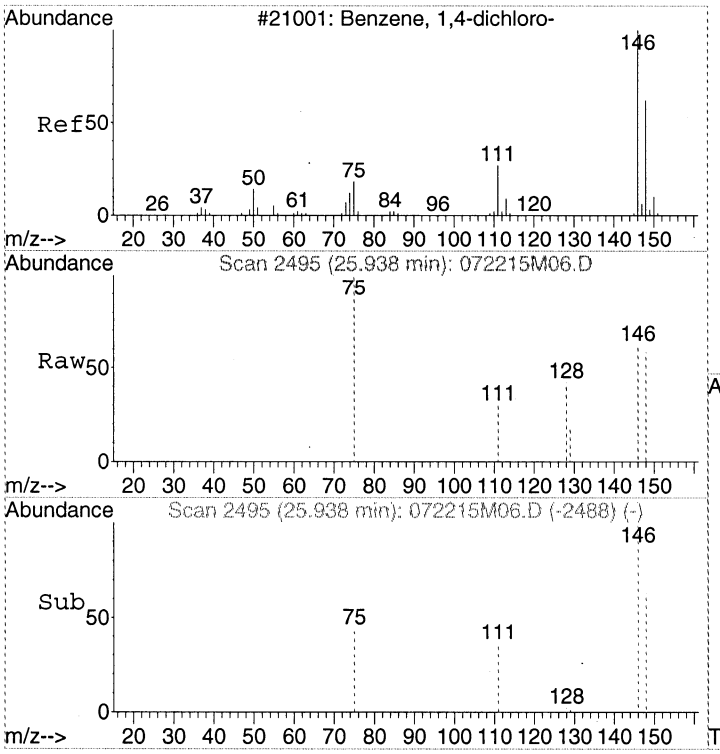


#33
1,3-Dichlorobenzene
Concen: Below Cal
RT: 25.80 min Scan# 2483
Delta R.T. 0.00 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion:146 Resp: 561

Ion	Ratio	Lower	Upper
146	100		
111	39.4	17.9	57.9
148	61.9	43.9	83.9

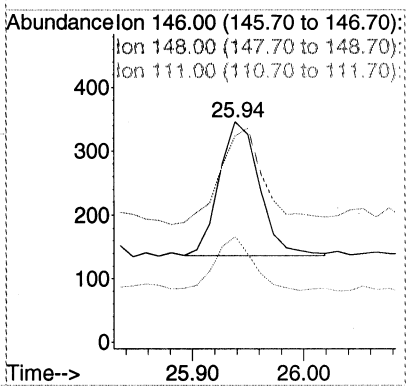


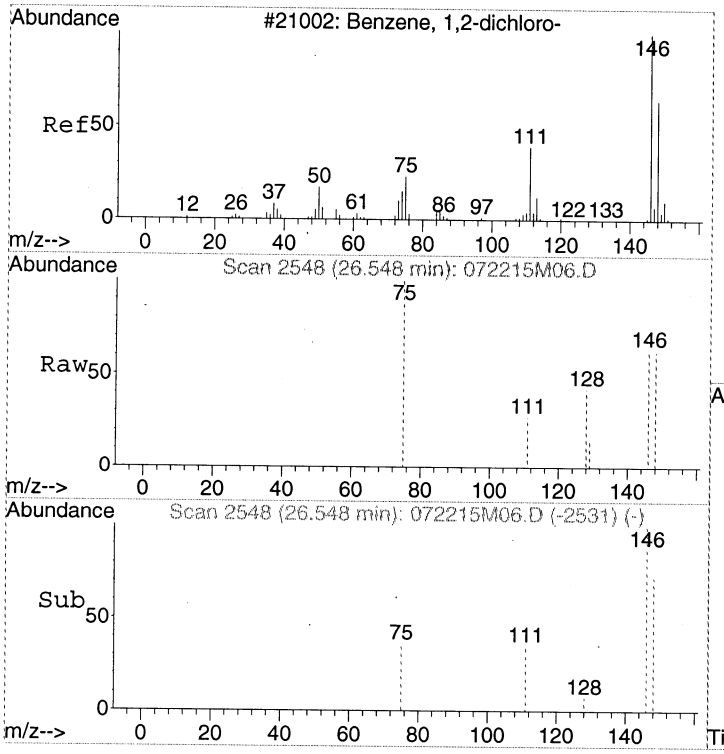


#34
1,4-Dichlorobenzene
Concen: Below Cal
RT: 25.94 min Scan# 2495
Delta R.T. -0.01 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion:146 Resp: 526

Ion	Ratio	Lower	Upper
146	100		
148	73.6	44.0	84.0
111	39.0	16.6	56.6

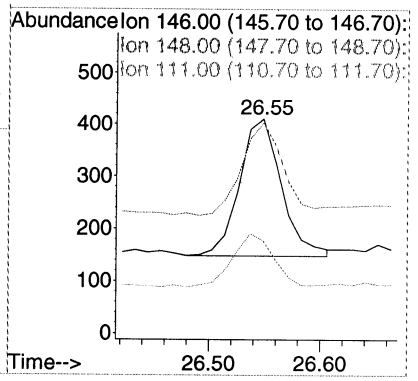


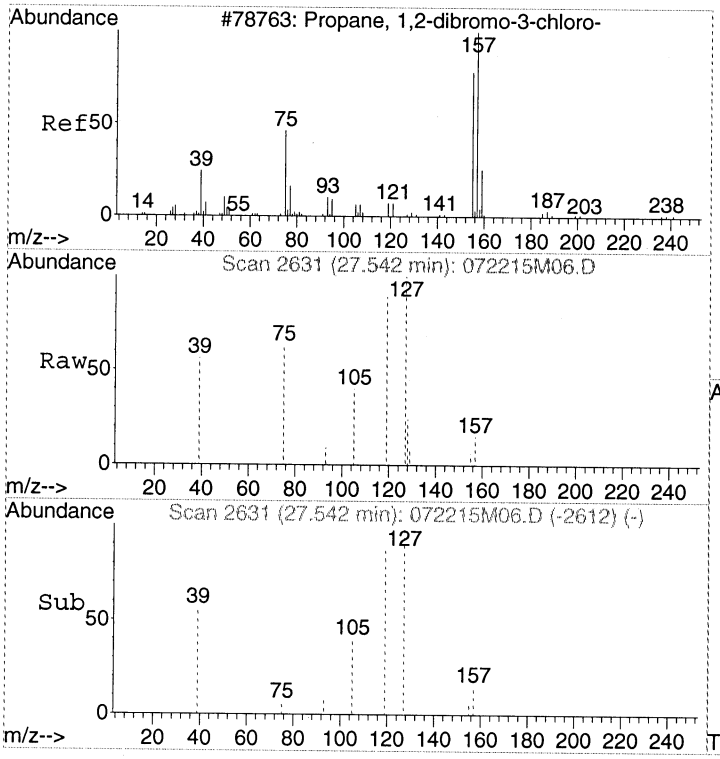


#35
1,2-Dichlorobenzene
Concen: Below Cal
RT: 26.55 min Scan# 2548
Delta R.T. 0.00 min
Lab File: 072215M06.D.
Acq: 22 Jul 2015 3:28 pm

Tgt Ion:146 Resp: 684

Ion	Ratio	Lower	Upper
146	100		
148	67.1	44.0	84.0
111	38.3	19.4	59.4

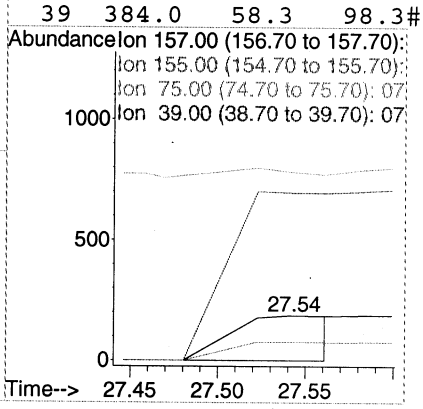


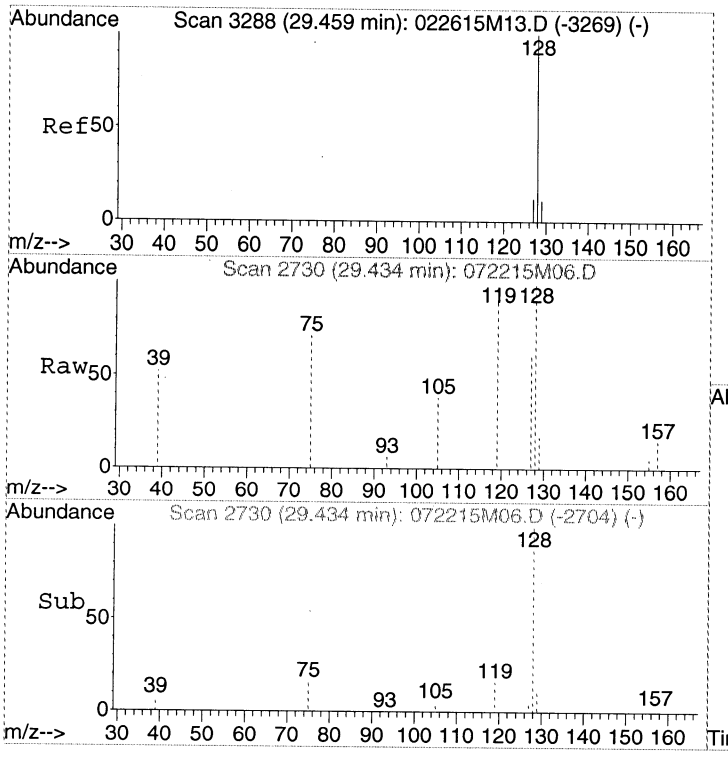


#36
1,2-Dibromo-3-chloropropane
Concen: Below Cal
RT: 27.54 min Scan# 2631
Delta R.T. -0.25 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion:157 Resp: 873

Ion	Ratio	Lower	Upper
157	100		
155	41.5	57.5	97.5#
75	14.1	67.4	107.4#
39	384.0	58.3	98.3#

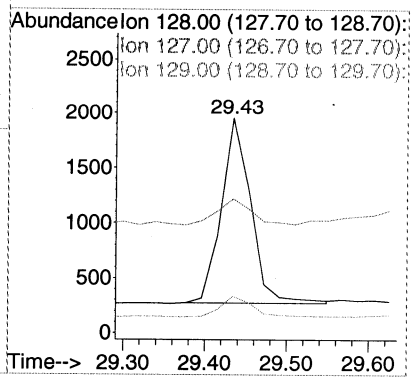




#37
Naphthalene
Concen: Below Cal
RT: 29.43 min Scan# 2730
Delta R.T. 0.00 min
Lab File: 072215M06.D
Acq: 22 Jul 2015 3:28 pm

Tgt Ion:128 Resp: 4196

Ion	Ratio	Lower	Upper
128	100		
127	16.2	0.0	32.3
129	12.5	0.0	30.9



Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\072215MAA\
Data File : 072215M07.D
Acq On : 22 Jul 2015 4:21 pm
InstName : AG5973M
Operator : LLH
Sample : CAN #123
Misc : 400ml RECERTIFICATION
ALS Vial : 5 Sample Multiplier: 1

clean

Quant Time: Jul 23 12:41:55 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\072115SIM+ADDLMAA.M
Quant Title : TO15SIM
QLast Update : Thu Jul 23 12:20:05 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.25	49	79695	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.30	114	246143	375.00 pptv	-0.01
21) CHLOROBENZENE-d5	22.23	117	183928	341.00 pptv	-0.02

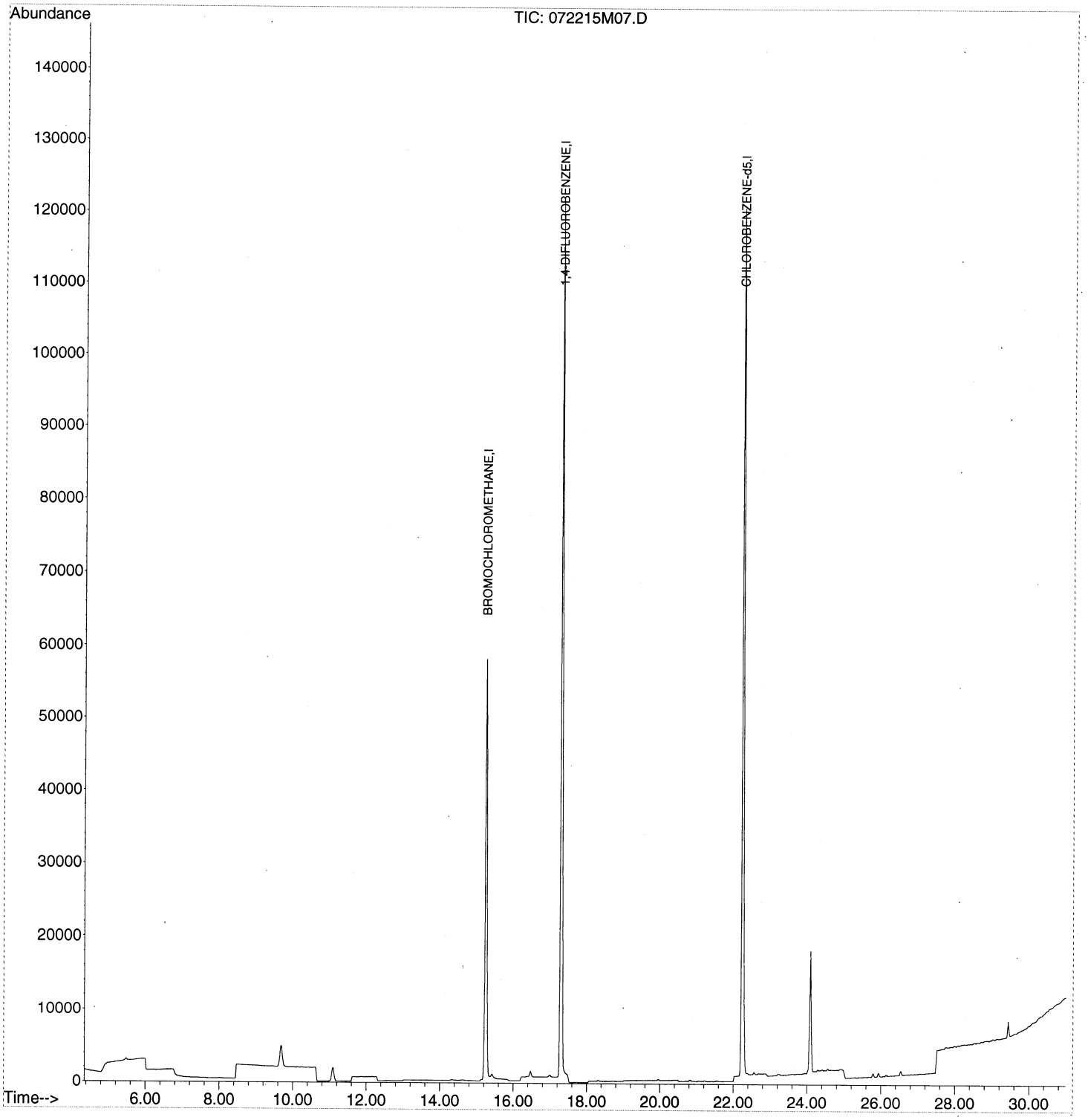
Target Compounds					Qvalue
2) Vinyl chloride	5.09	62	35	N.D.	
3) 1,3-Butadiene	5.18	54	39	N.D.	
4) Bromoethene	0.00	106	0	N.D.	
5) 1,1,2-Trichloro-1,2,2-trif	8.90	151	7	N.D.	
6) 1,1-Dichloroethene	8.97	61	7	N.D.	
7) Dichloromethane	11.09	49	3605	N.D.	
8) tert-Butyl methyl ether (M	11.82	73	44	N.D.	
9) trans-1,2-Dichloroethene	11.86	61	13	N.D.	
10) Hexane	12.52	57	46	N.D.	
11) 1,1-Dichloroethane	13.22	63	7	N.D.	
12) cis-1,2-Dichloroethene	14.71	96	14	N.D.	
13) Chloroform	15.40	83	54	N.D.	
14) 1,1,1-Trichloroethane	15.71	97	44	N.D.	
15) Carbon tetrachloride	15.89	117	254	N.D.	
17) Benzene	16.47	78	1547	N.D.	
18) 1,2-Dichloroethane	16.64	62	42	N.D.	
19) Trichloroethene	17.72	130	38	N.D.	
20) 1,2-Dichloropropane	18.07	63	150	N.D.	
22) Toluene	19.96	91	276	N.D.	
23) 1,1,2-Trichloroethane	20.71	97	44	N.D.	
24) Tetrachloroethene	20.81	166	54	N.D.	
25) 1,2-Dibromoethane (EDB)	21.55	107	45	N.D.	
26) Chlorobenzene	22.28	112	133	N.D.	
27) Ethylbenzene	22.39	91	257	N.D.	
28) m&p-Xylene	22.56	91	567	N.D.	
29) o-Xylene	23.21	91	304	N.D.	
30) Styrene	23.24	104	211	N.D.	
31) 1,1,2,2-Tetrachloroethane	24.28	83	302	N.D.	
32) 1,2,3-Trichloropropane	24.41	75	231	N.D.	
33) 1,3-Dichlorobenzene	25.79	146	523	N.D.	
34) 1,4-Dichlorobenzene	25.94	146	557	N.D.	
35) 1,2-Dichlorobenzene	26.55	146	672	N.D.	
36) 1,2-Dibromo-3-chloropropan	27.54	157	1225	N.D.	
37) Naphthalene	29.43	128	4117	N.D.	

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

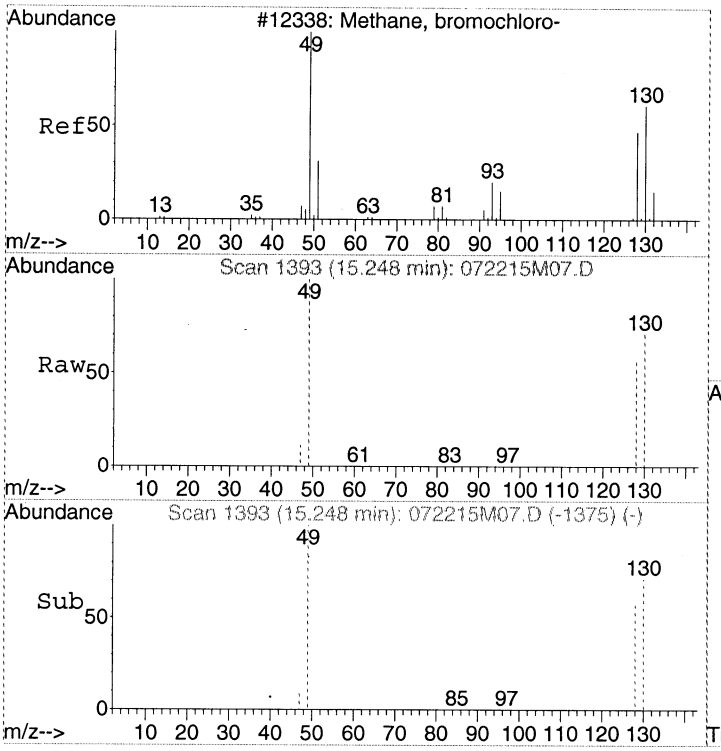
Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\072215MAA\
Data File : 072215M07.D
Acq On : 22 Jul 2015 4:21 pm
InstName : AG5973M
Operator : LLH
Sample : CAN #123
Misc : 400ml RECERTIFICATION
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 23 12:41:55 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\072115SIM+ADDLMAA.M
Quant Title : TO15SIM
QLast Update : Thu Jul 23 12:20:05 2015
Response via : Initial Calibration



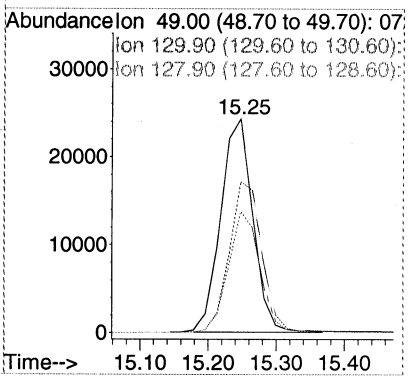
00267

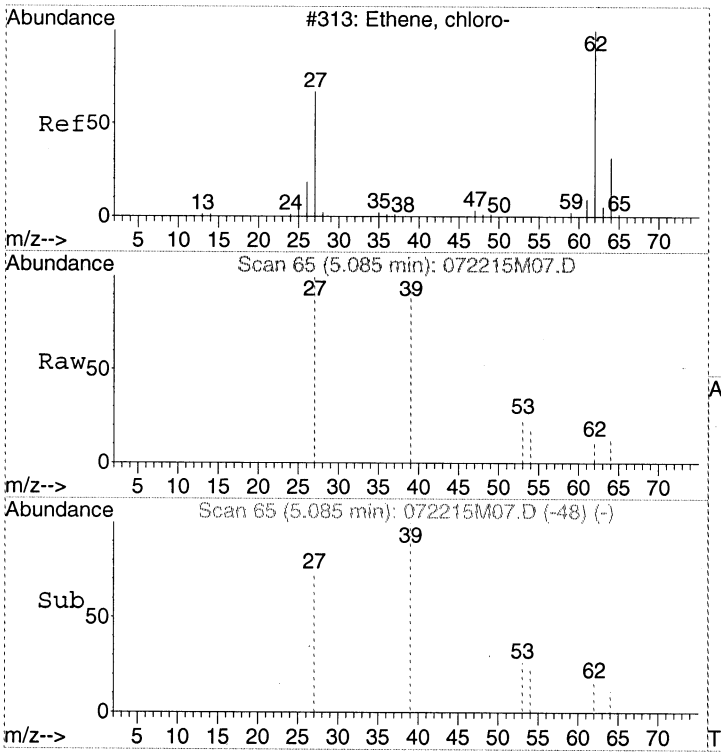


#1
BROMOCHLOROMETHANE
Concen: 341.00 pptv
RT: 15.25 min Scan# 1393
Delta R.T. 0.01 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion: 49 Resp: 79695

Ion	Ratio	Lower	Upper
49	100		
130	71.0	55.8	95.8
128	55.3	38.6	78.6

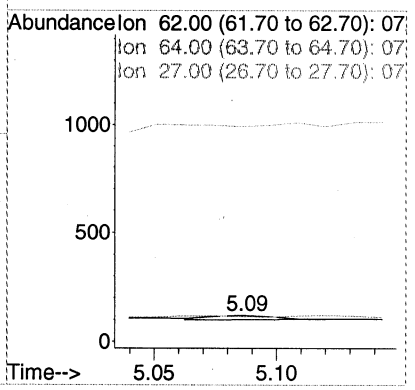


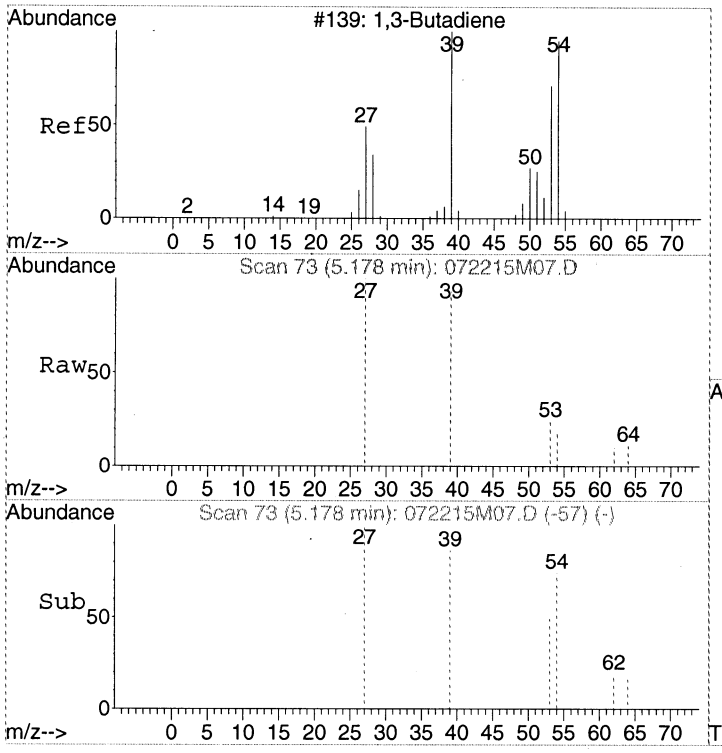


#2
Vinyl chloride
Concen: Below Cal
RT: 5.09 min Scan# 65
Delta R.T. 0.00 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion: 62 Resp: 35

Ion	Ratio	Lower	Upper
62	100		
64	0.0	11.7	51.7#
27	0.0	47.6	87.6#

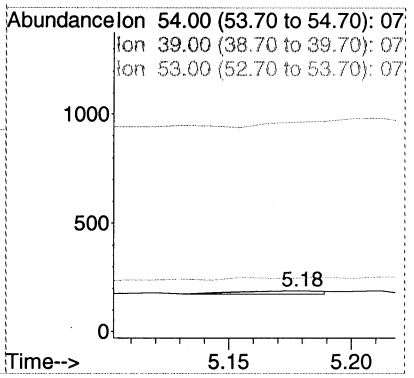


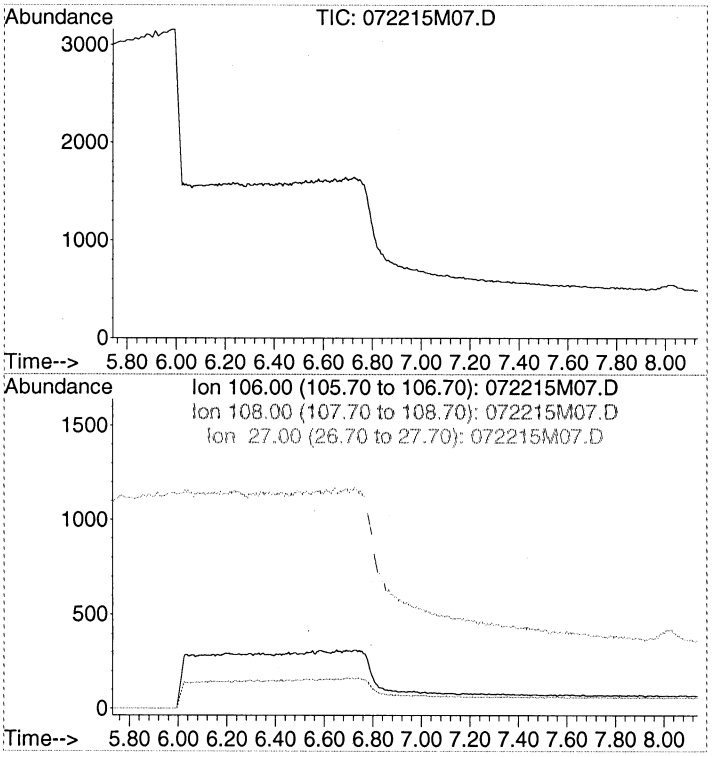


#3
1,3-Butadiene
Concen: Below Cal
RT: 5.18 min Scan# 73
Delta R.T. -0.01 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion: 54 Resp: 39

Ion	Ratio	Lower	Upper
54	100		
39	0.0	83.1	123.1#
53	28.2	46.9	86.9#



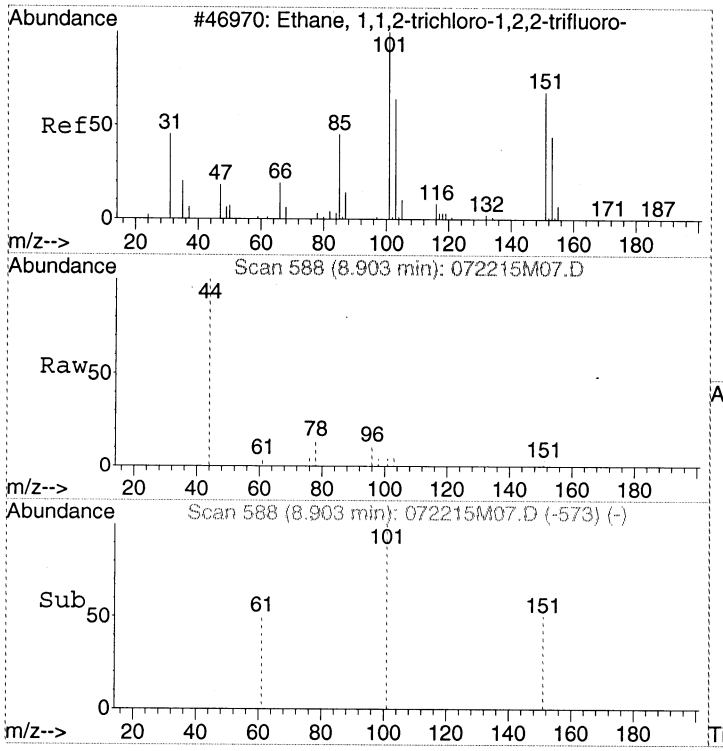


#4
Bromoethene
Concen: N.D.
Expected RT: 6.93 min

Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion: 106

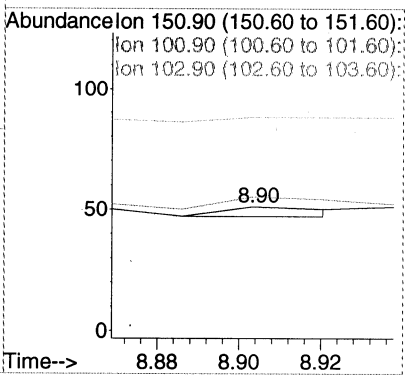
Sig	Exp Ratio
106	100
108	95.1
27	108.7

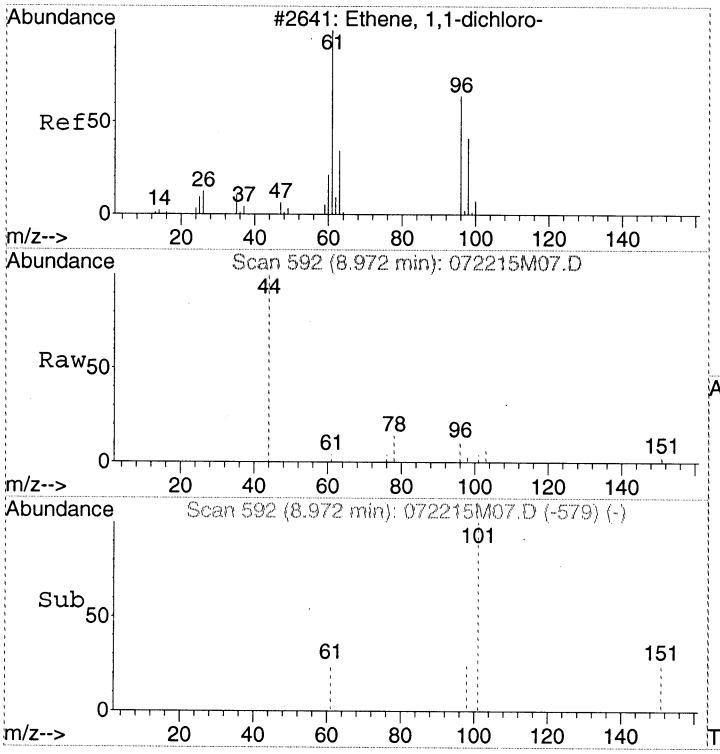


#5
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: Below Cal
RT: 8.90 min Scan# 588
Delta R.T. 0.00 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion:151 Resp: 7

Ion	Ratio	Lower	Upper
151	100		
101	157.1	91.3	131.3#
103	28.6	51.4	91.4#

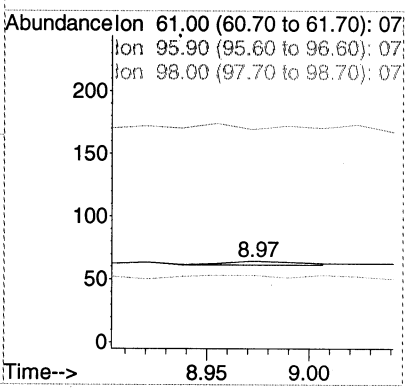


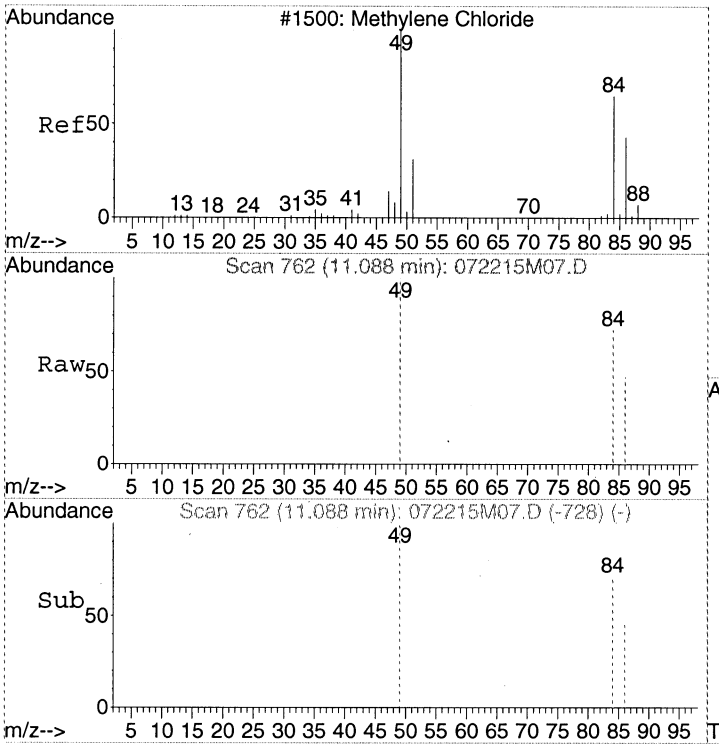


#6
1,1-Dichloroethene
Concen: Below Cal
RT: 8.97 min Scan# 592
Delta R.T. 0.02 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion: 61 Resp: 7

Ion	Ratio	Lower	Upper
61	100		
96	142.9	41.6	81.6#
98	128.6	19.1	59.1#

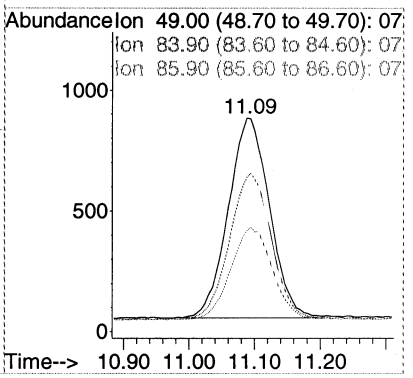


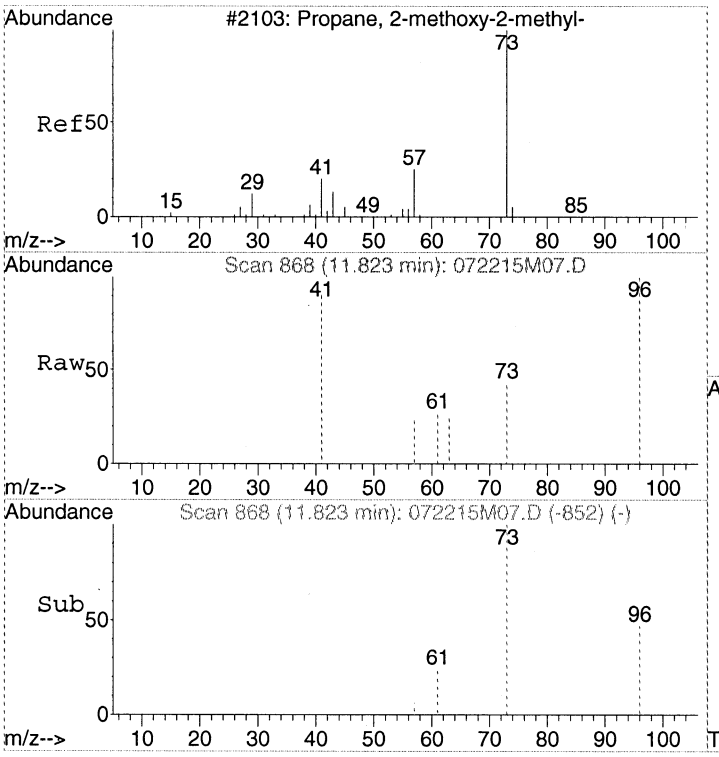


#7
Dichloromethane
Concen: Below Cal
RT: 11.09 min Scan# 762
Delta R.T. 0.00 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion: 49 Resp: 3605

Ion	Ratio	Lower	Upper
49	100		
84	72.1	56.8	96.8
86	46.9	29.2	69.2

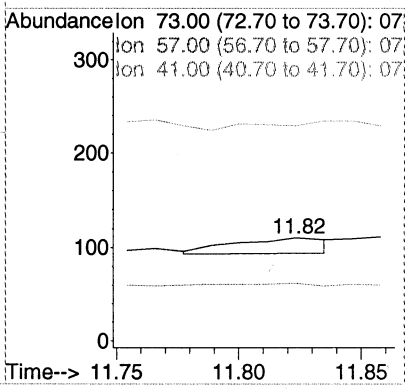


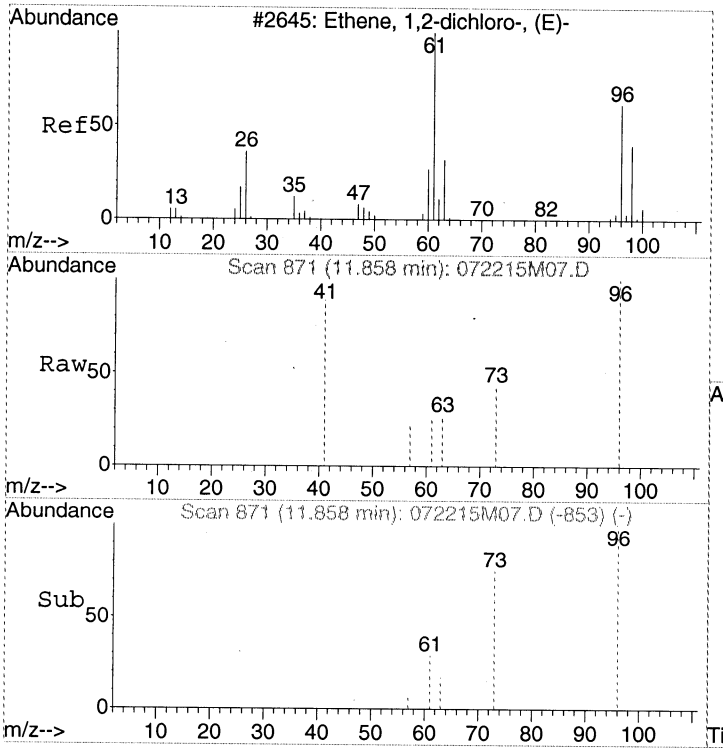


#8
tert-Butyl methyl ether (MTBE)
Concen: Below Cal
RT: 11.82 min Scan# 868
Delta R.T. -0.01 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion: 73 Resp: 44

Ion	Ratio	Lower	Upper
73	100		
57	6.8	1.7	41.7
41	0.0	2.1	42.1#

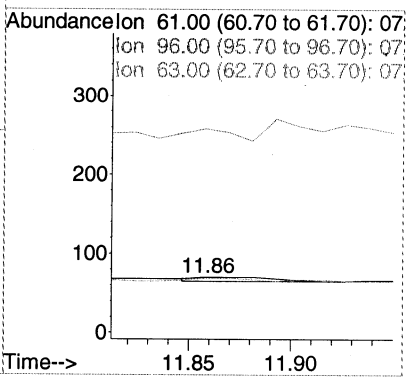


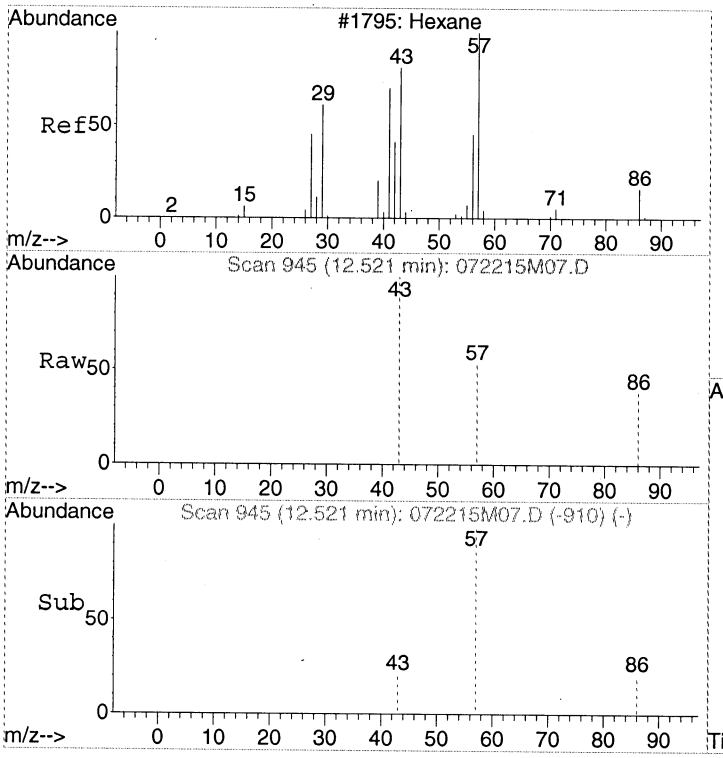


#9
trans-1,2-Dichloroethene
Concen: Below Cal
RT: 11.86 min Scan# 871
Delta R.T. 0.01 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion: 61 Resp: 13

Ion	Ratio	Lower	Upper
61	100		
96	200.0	51.3	91.3#
63	61.5	12.1	52.1#

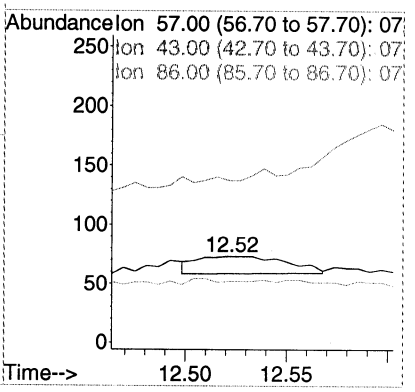


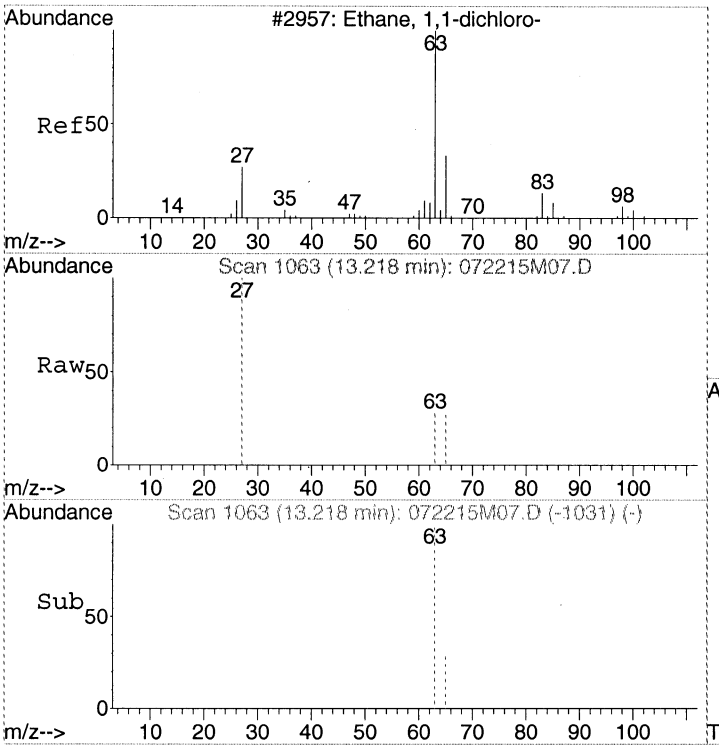


#10
Hexane
Concen: Below Cal
RT: 12.52 min Scan# 945
Delta R.T. 0.01 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion: 57 Resp: 46

Ion	Ratio	Lower	Upper
57	100		
43	13.0	44.4	84.4#
86	4.3	0.0	37.6

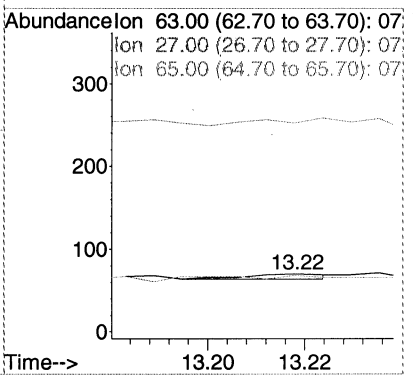


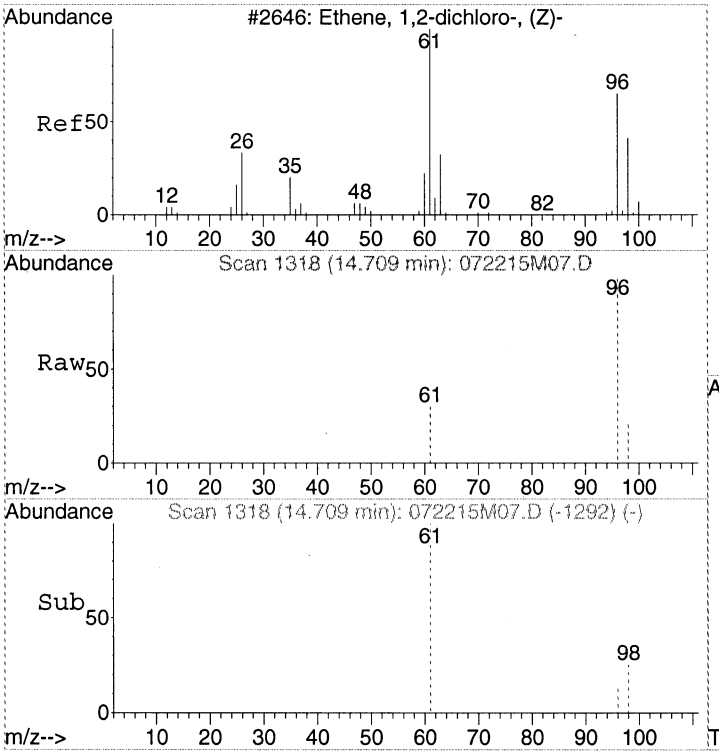


#11
1,1-Dichloroethane
Concen: Below Cal
RT: 13.22 min Scan# 1063
Delta R.T. -0.01 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion: 63 Resp: 7

Ion	Ratio	Lower	Upper
63	100		
27	71.4	18.7	58.7#
65	42.9	11.7	51.7

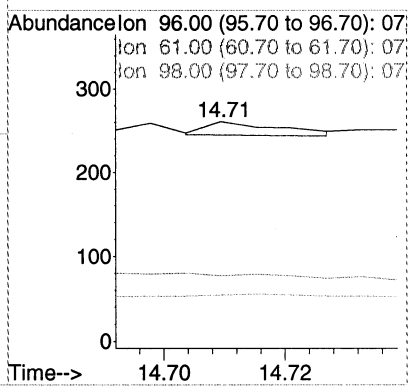


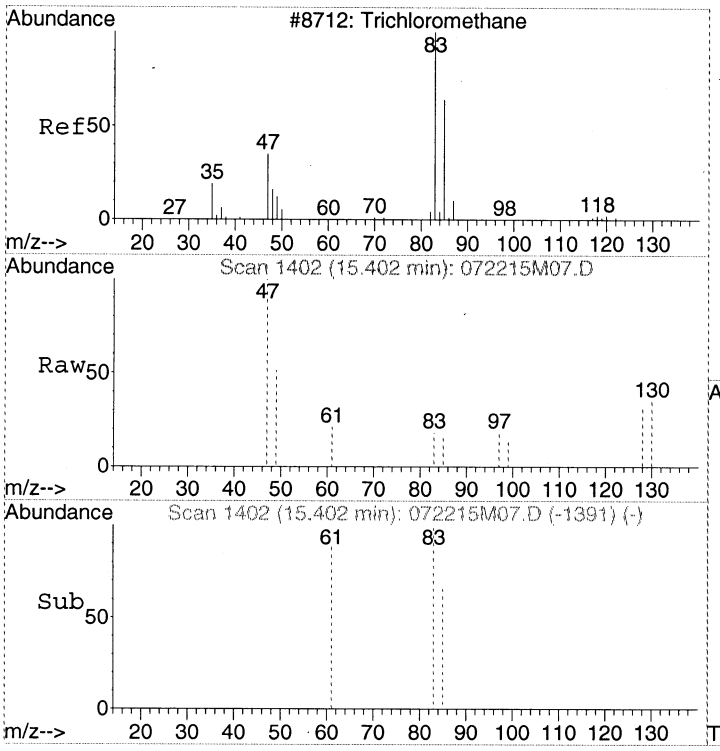


#12
cis-1,2-Dichloroethene
Concen: Below Cal
RT: 14.71 min Scan# 1318
Delta R.T. 0.00 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion: 96 Resp: 14

Ion	Ratio	Lower	Upper
96	100		
61	0.0	109.2	149.2#
98	78.6	44.3	84.3

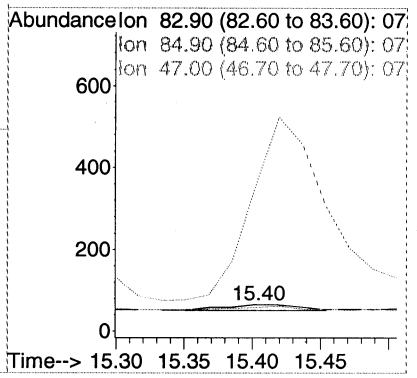


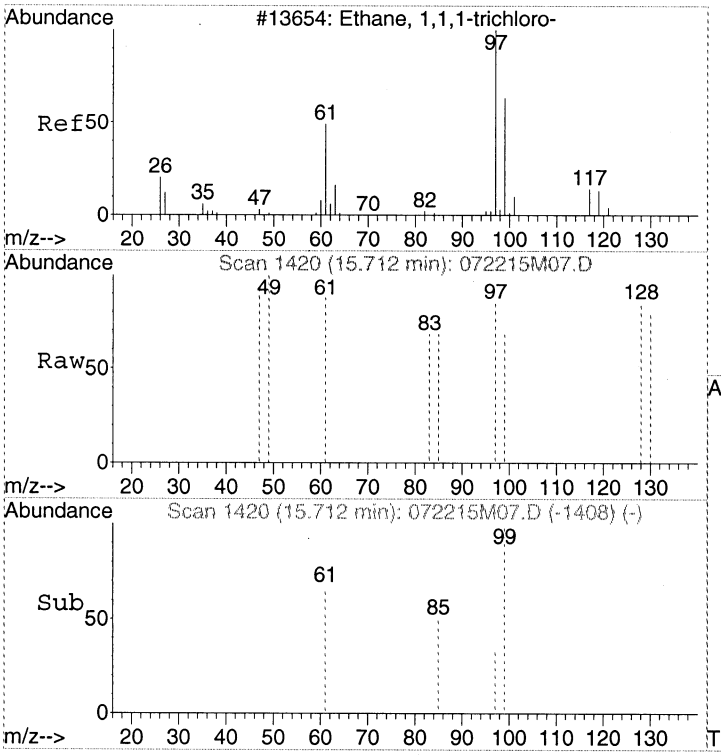


#13
Chloroform
Concen: Below Cal
RT: 15.40 min Scan# 1402
Delta R.T. -0.01 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion: 83 Resp: 54

Ion	Ratio	Lower	Upper
83	100		
85	59.3	44.7	84.7
47	3400.0	5.4	45.4#

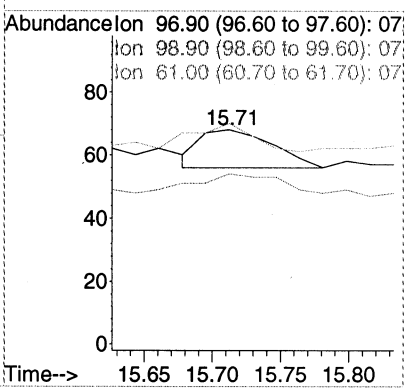


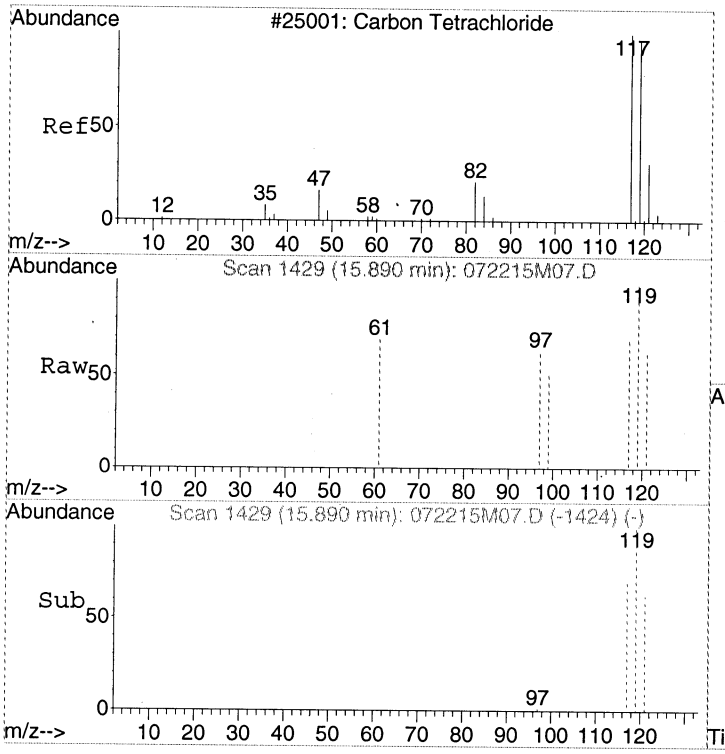


#14
1,1,1-Trichloroethane
Concen: Below Cal
RT: 15.71 min Scan# 1420
Delta R.T. 0.01 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion: 97 Resp: 44

Ion	Ratio	Lower	Upper
97	100		
99	75.0	44.6	84.6
61	63.6	18.6	58.6#

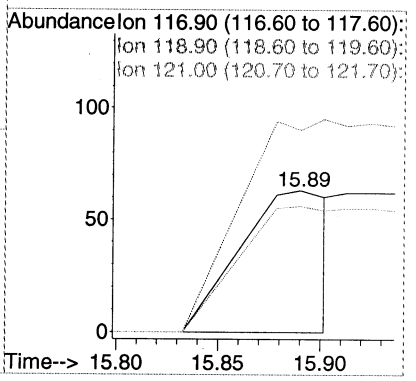


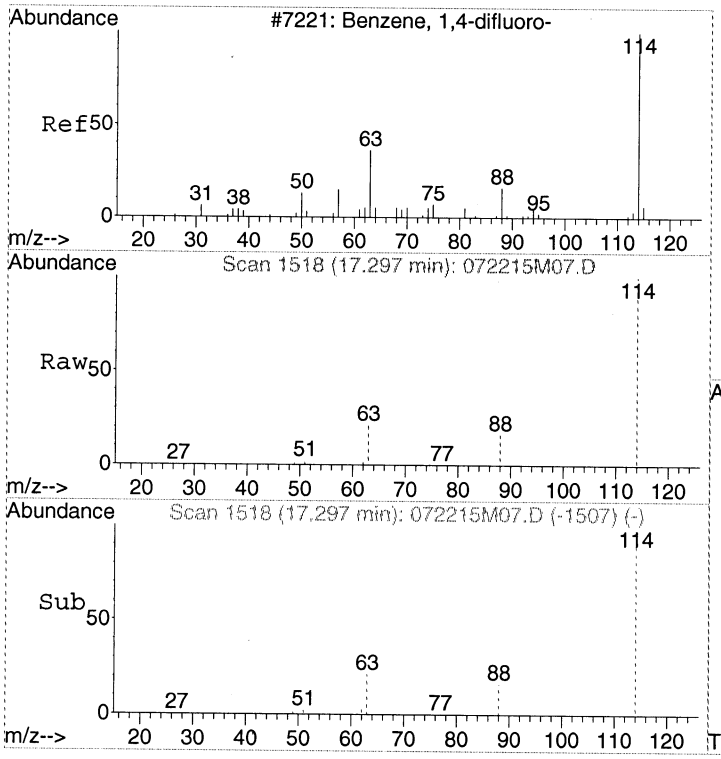


#15
Carbon tetrachloride
Concen: Below Cal
RT: 15.89 min Scan# 1429
Delta R.T. -0.10 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion:117 Resp: 254

Ion	Ratio	Lower	Upper
117	100		
119	124.8	75.8	115.8#
121	89.4	10.6	50.6#

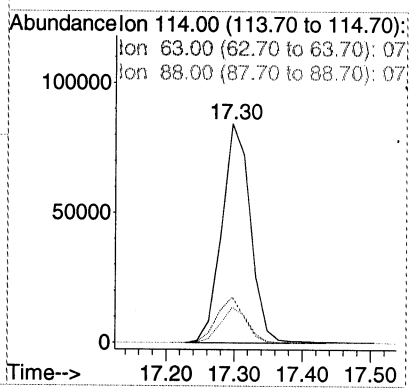


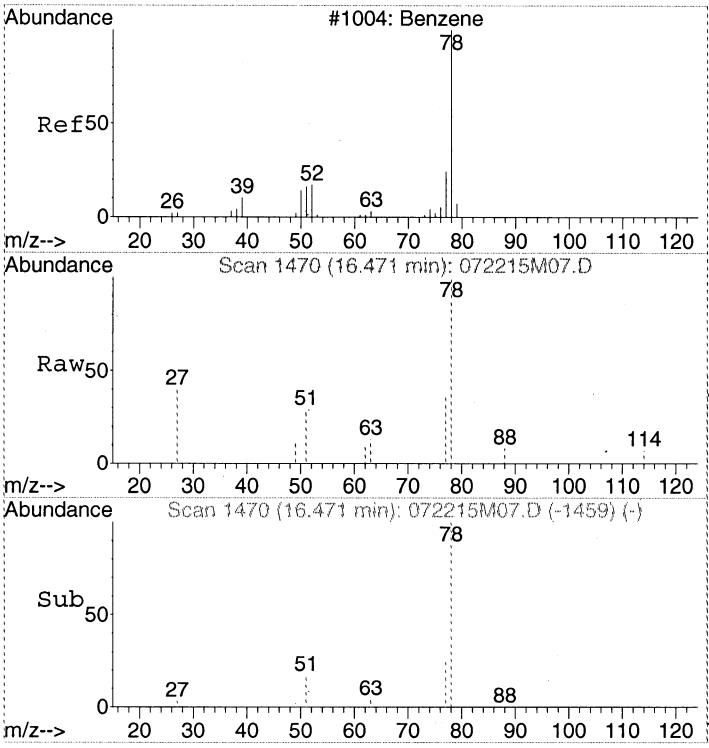


#16
1,4-DIFLUOROBENZENE
Concen: 375.00 pptv
RT: 17.30 min Scan# 1518
Delta R.T. -0.01 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion:114 Resp: 246143

Ion	Ratio	Lower	Upper
114	100		
63	19.8	0.0	38.9
88	15.7	0.0	35.4

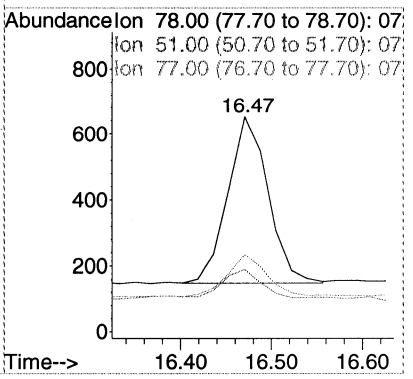


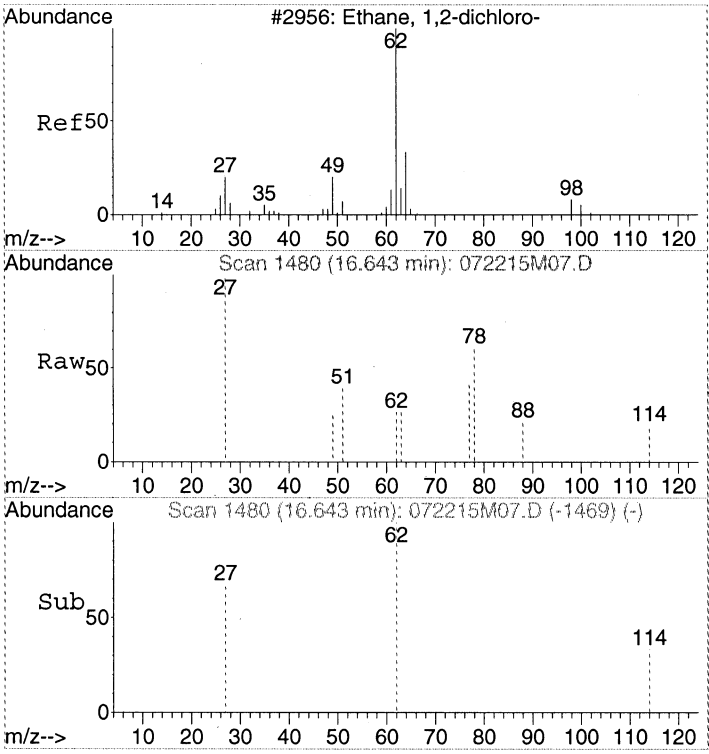


#17
Benzene
Concen: Below Cal
RT: 16.47 min Scan# 1470
Delta R.T. -0.01 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion: 78 Resp: 1547

Ion	Ratio	Lower	Upper
78	100		
51	16.2	0.0	37.6
77	25.5	3.4	43.4

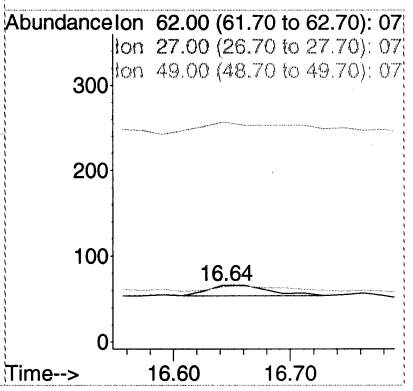


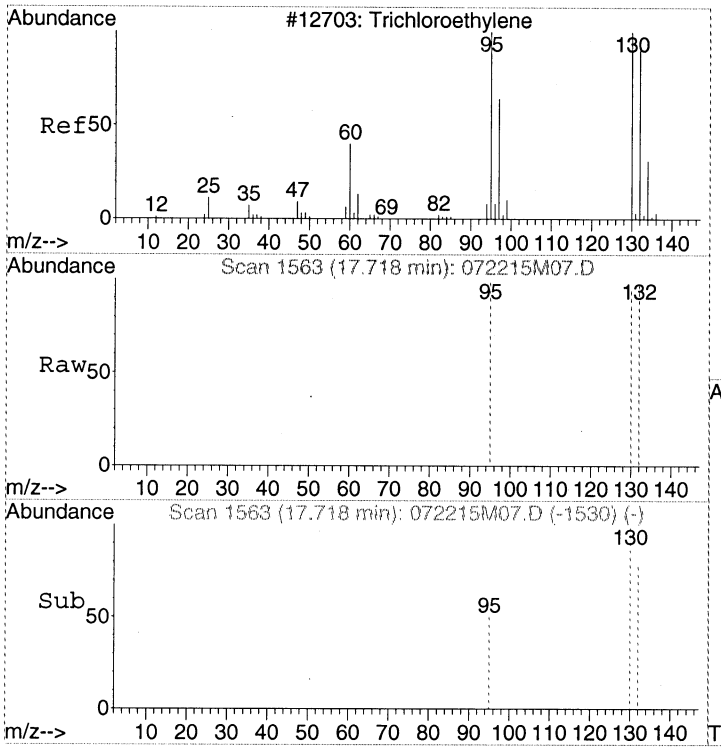


#18
1,2-Dichloroethane
Concen: Below Cal
RT: 16.64 min Scan# 1480
Delta R.T. -0.01 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion: 62 Resp: 42

Ion	Ratio	Lower	Upper
62	100		
27	97.6	26.2	66.2#
49	57.1	7.3	47.3#

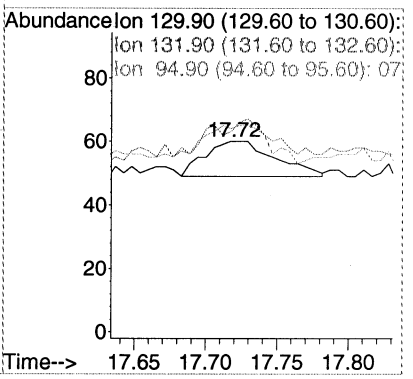


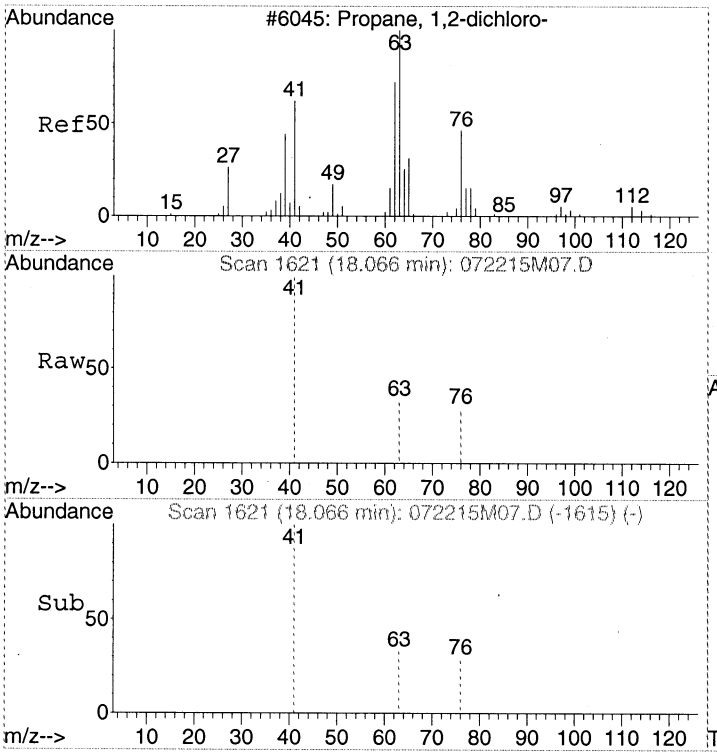


#19
Trichloroethene
Concen: Below Cal
RT: 17.72 min Scan# 1563
Delta R.T. -0.01 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion:130 Resp: 38

Ion	Ratio	Lower	Upper
130	100		
132	26.3	76.7	116.7#
95	39.5	74.7	114.7#

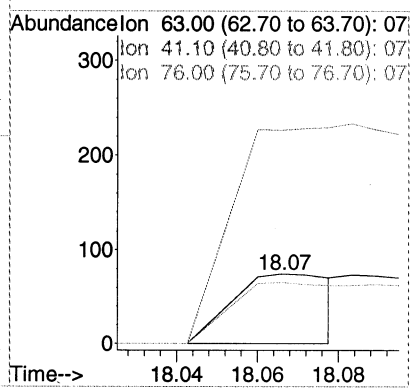


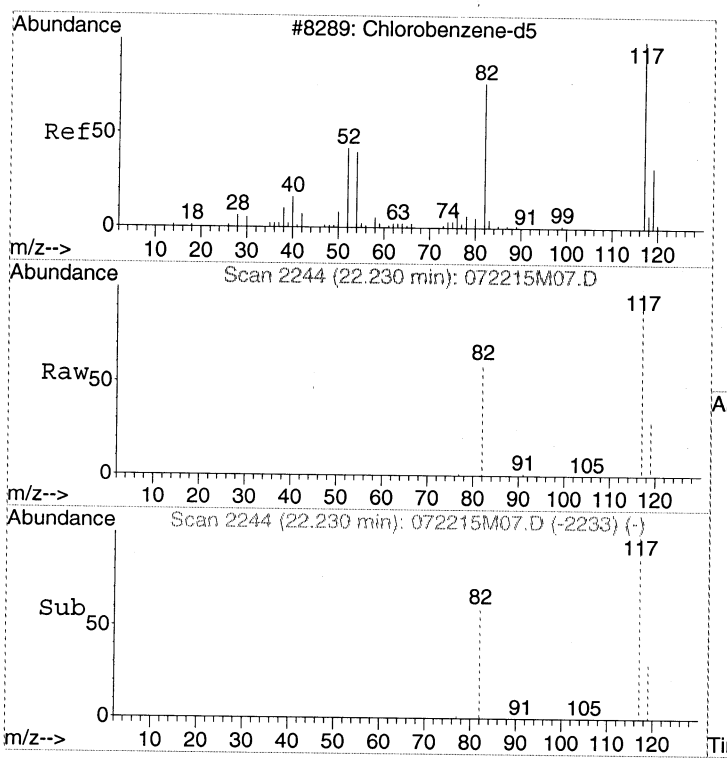


#20
1,2-Dichloropropane
Concen: Below Cal
RT: 18.07 min Scan# 1621
Delta R.T. -0.15 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion: 63 Resp: 150

Ion	Ratio	Lower	Upper
63	100		
41	210.7	38.9	78.9#
76	88.7	23.7	63.7#

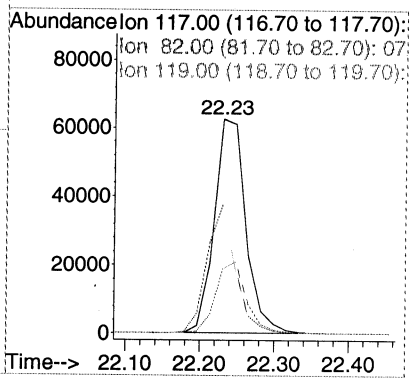


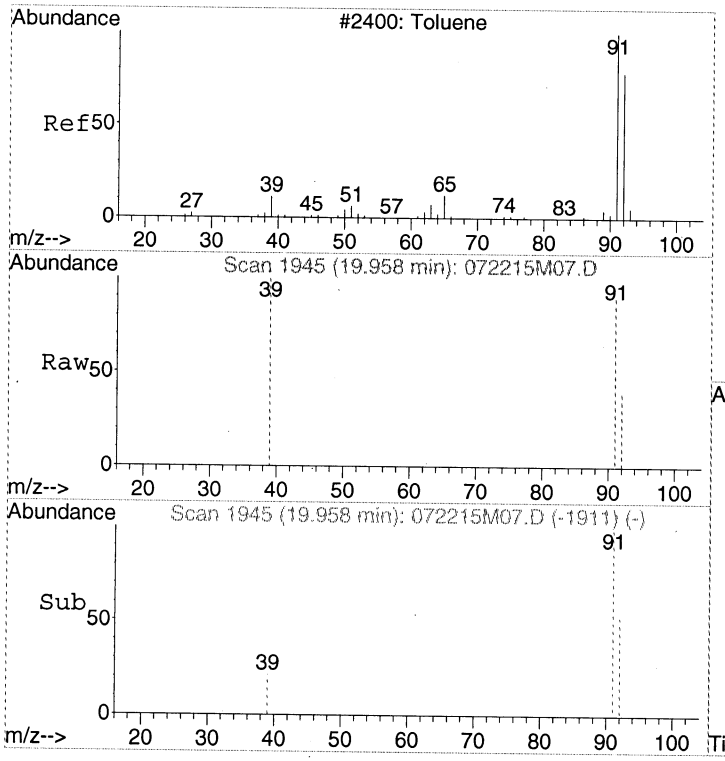


#21
CHLOROBENZENE-d5
Concen: 341.00 pptv
RT: 22.23 min Scan# 2244
Delta R.T. -0.02 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion:117 Resp: 183928

Ion	Ratio	Lower	Upper
117	100		
82	54.7	33.2	73.2
119	32.1	12.1	52.1

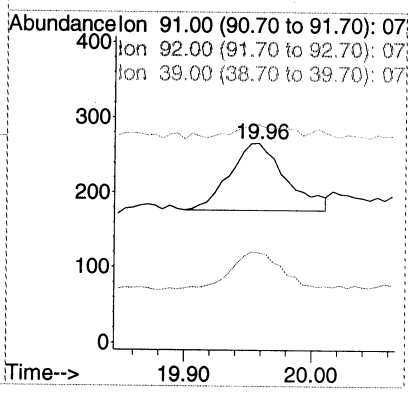


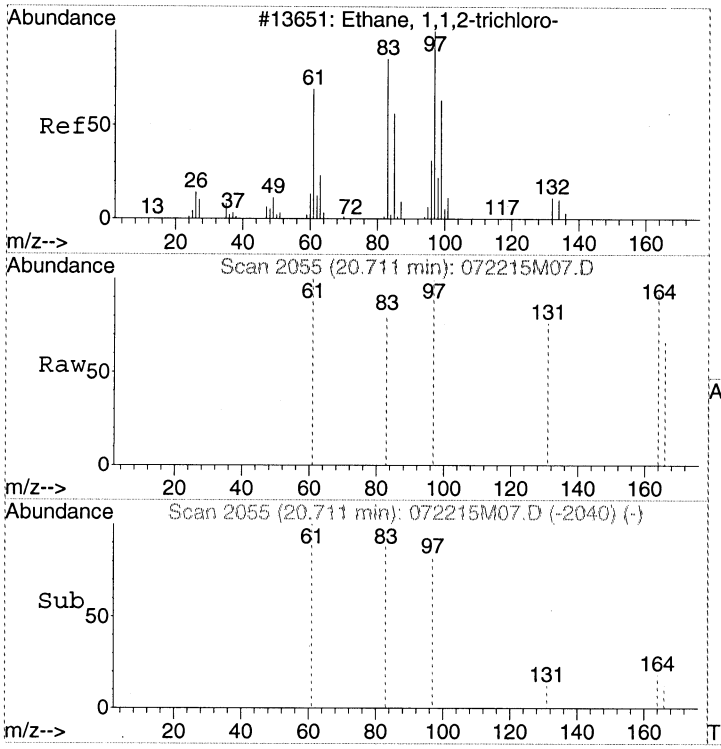


#22
Toluene
Concen: Below Cal
RT: 19.96 min Scan# 1945
Delta R.T. 0.00 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion: 91 Resp: 276

Ion	Ratio	Lower	Upper
91	100		
92	48.2	39.7	79.7
39	7.2	0.0	30.4

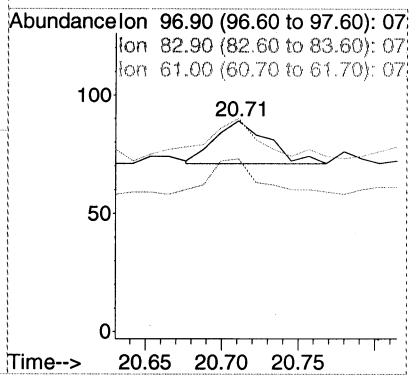


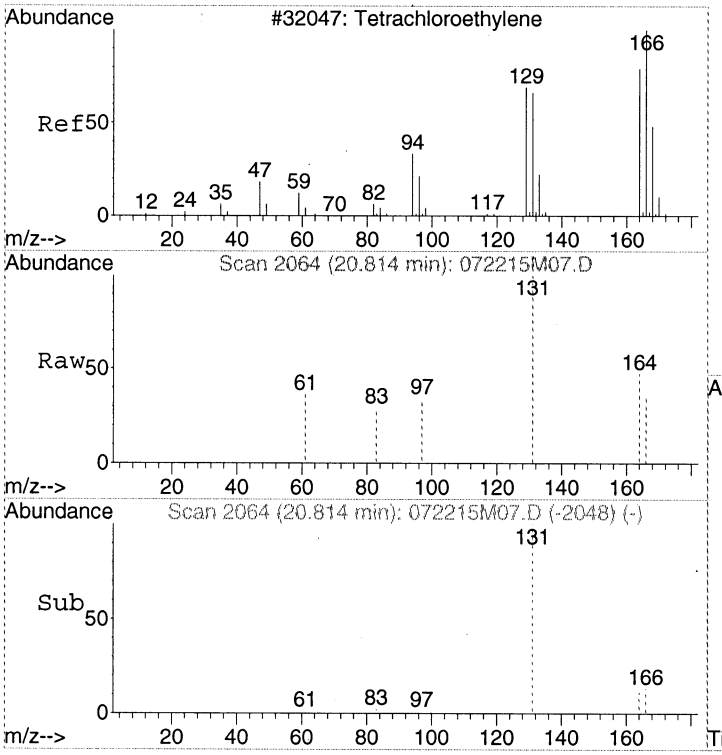


#23
1,1,2-Trichloroethane
Concen: Below Cal
RT: 20.71 min Scan# 2055
Delta R.T. -0.02 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion: 97 Resp: 44

Ion	Ratio	Lower	Upper
97	100		
83	84.1	63.6	103.6
61	109.1	41.3	81.3#

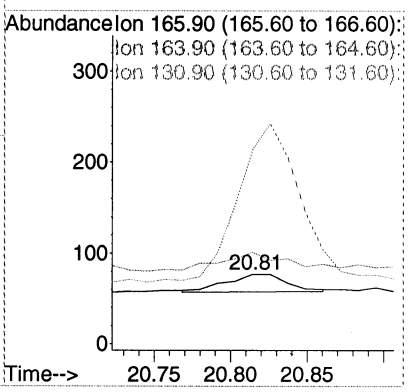


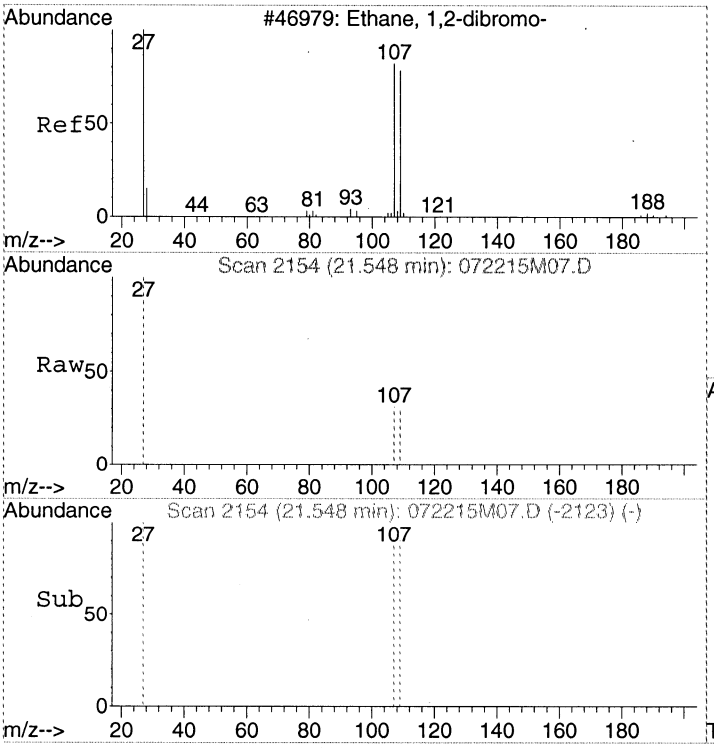


#24
Tetrachloroethene
Concen: Below Cal
RT: 20.81 min Scan# 2064
Delta R.T. -0.01 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion:166 Resp: 54

Ion	Ratio	Lower	Upper
166	100		
164	125.9	58.3	98.3#
131	885.2	47.2	87.2#

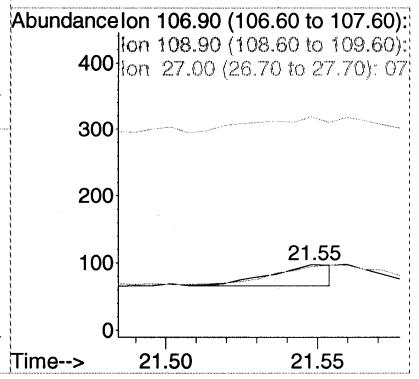


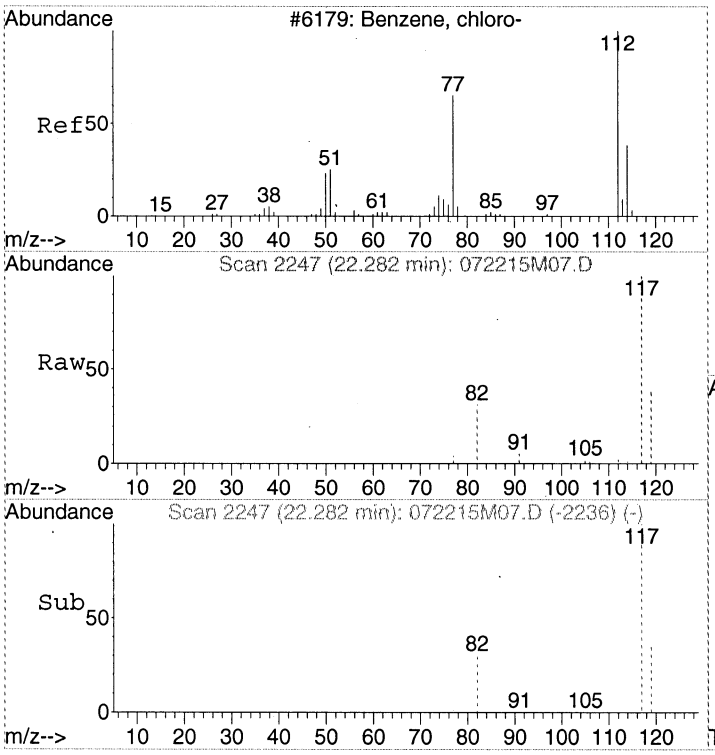


#25
1,2-Dibromoethane (EDB)
Concen: Below Cal
RT: 21.55 min Scan# 2154
Delta R.T. -0.02 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion:107 Resp: 45

Ion	Ratio	Lower	Upper
107	100		
109	182.2	74.4	114.4#
27	6.7	44.7	84.7#

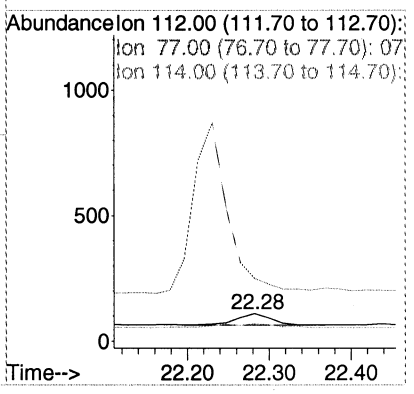


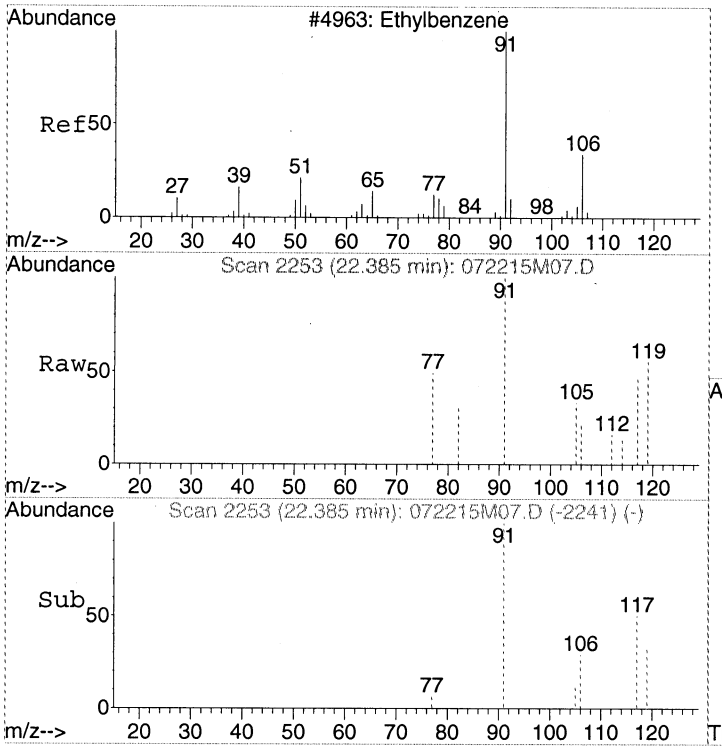


#26
Chlorobenzene
Concen: Below Cal
RT: 22.28 min Scan# 2247
Delta R.T. -0.02 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion:112 Resp: 133

Ion	Ratio	Lower	Upper
112	100		
77	0.0	38.8	78.8#
114	30.8	12.2	52.2

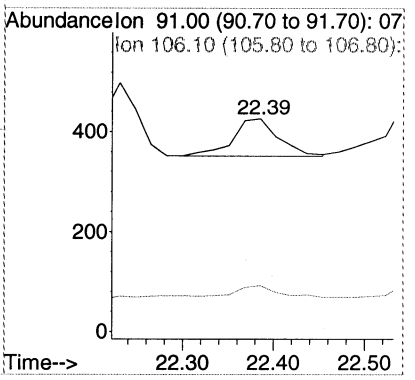


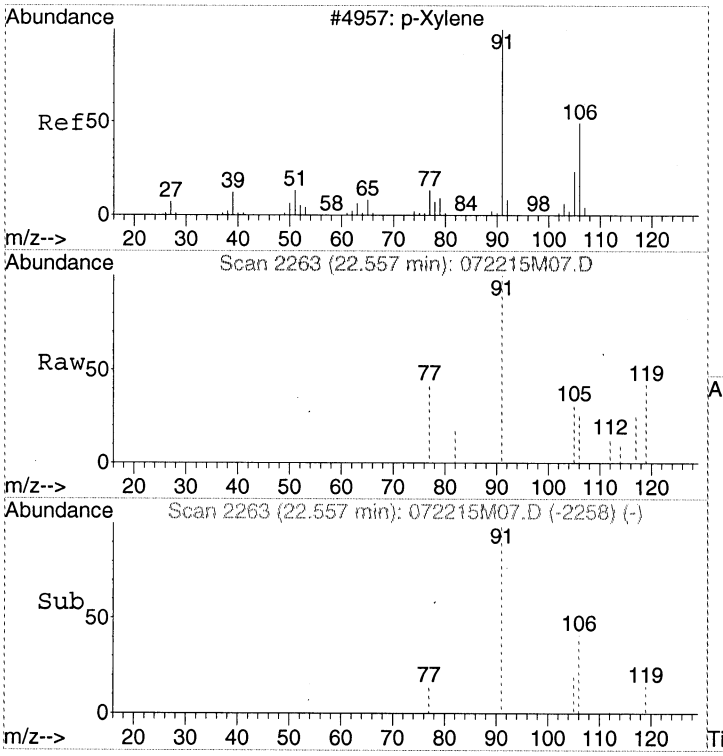


#27
Ethylbenzene
Concen: Below Cal
RT: 22.39 min Scan# 2253
Delta R.T. 0.00 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion: 91 Resp: 257

Ion	Ratio	Lower	Upper
91	100		
106	29.6	12.6	52.6

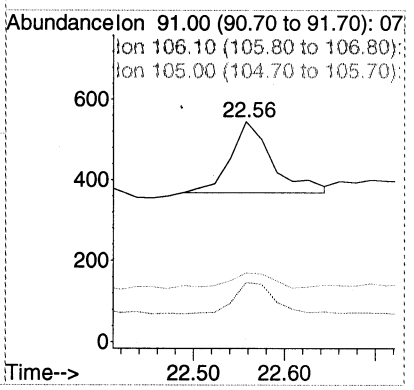


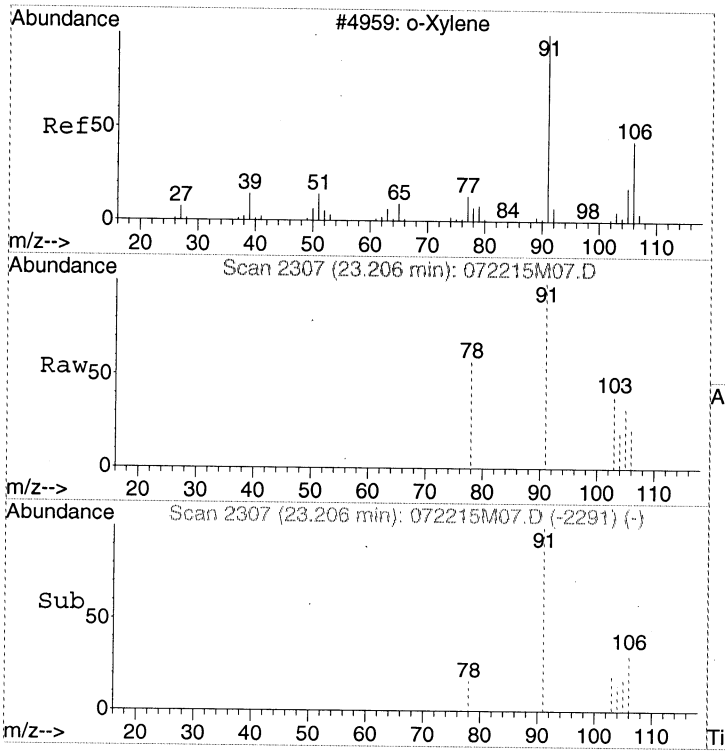


#28
m&p-Xylene
Concen: Below Cal
RT: 22.56 min Scan# 2263
Delta R.T. -0.02 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion: 91 Resp: 567

Ion	Ratio	Lower	Upper
91	100		
106	42.5	30.9	70.9
105	20.6	1.9	41.9

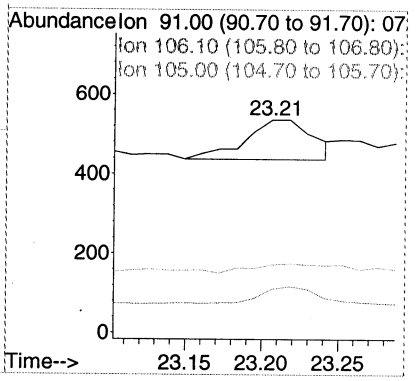


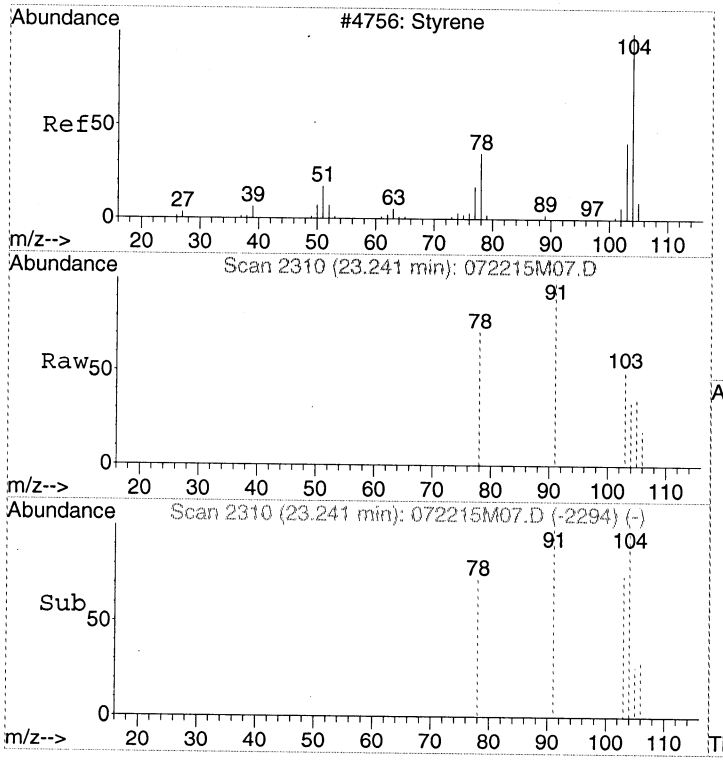


#29
o-Xylene
Concen: Below Cal
RT: 23.21 min Scan# 2307
Delta R.T. -0.01 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion: 91 Resp: 304

Ion	Ratio	Lower	Upper
91	100		
106	39.8	28.5	68.5
105	25.3	4.6	44.6

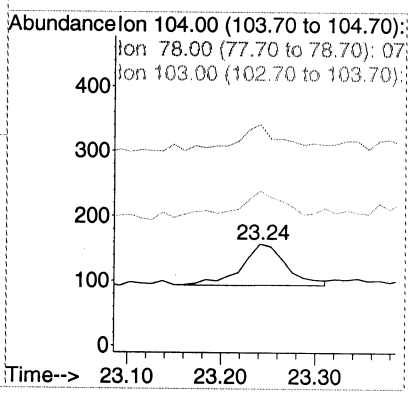


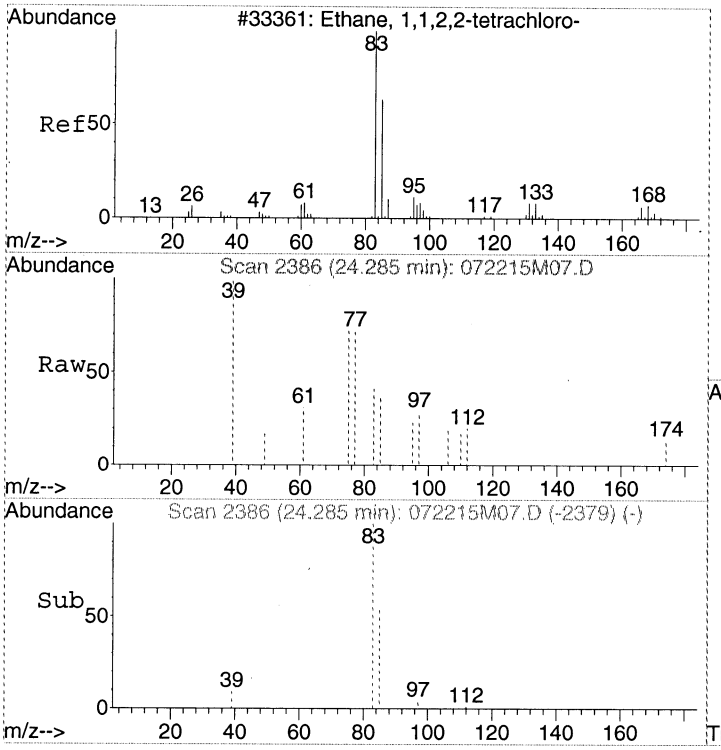


#30
Styrene
Concen: Below Cal
RT: 23.24 min Scan# 2310
Delta R.T. -0.01 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion:104 Resp: 211

Ion	Ratio	Lower	Upper
104	100		
78	43.1	31.3	71.3
103	47.4	33.6	73.6

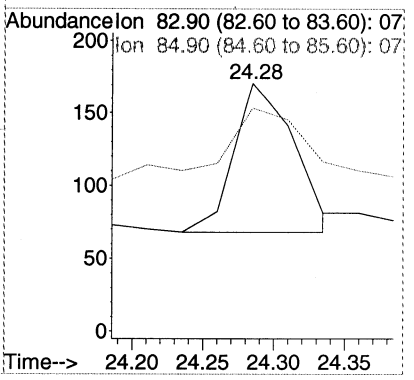


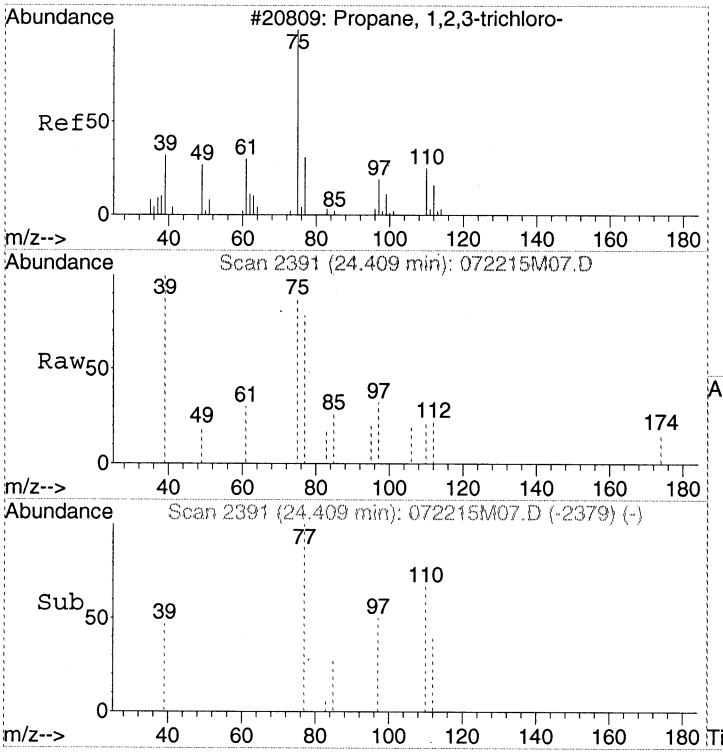


#31
1,1,2,2-Tetrachloroethane
Concen: Below Cal
RT: 24.28 min Scan# 2386
Delta R.T. -0.02 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion: 83 Resp: 302

Ion	Ratio	Lower	Upper
83	100		
85	55.3	44.1	84.1

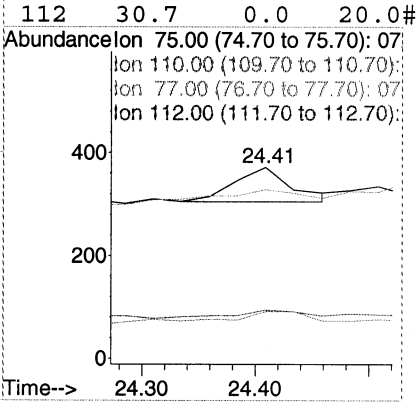


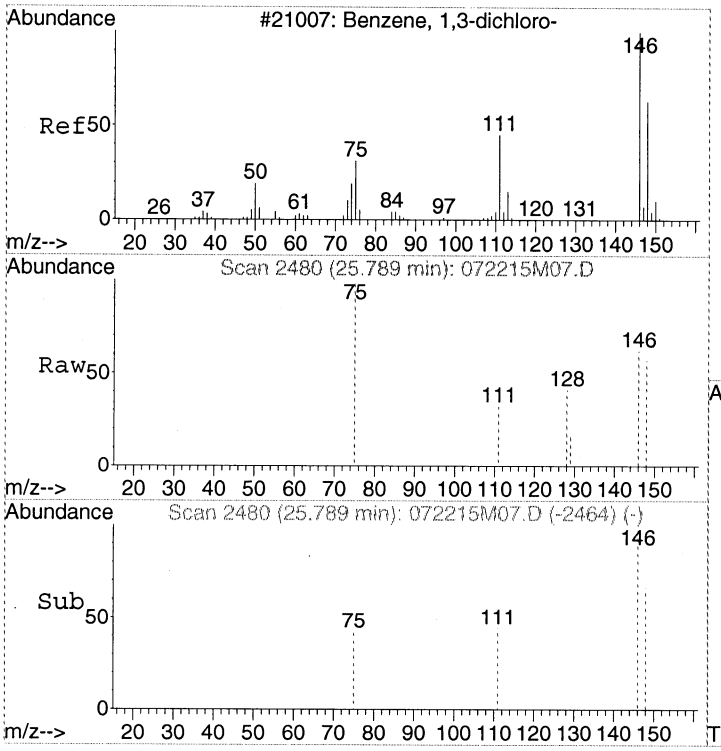


#32
1,2,3-Trichloropropane
Concen: Below Cal
RT: 24.41 min Scan# 2391
Delta R.T. 0.00 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion: 75 Resp: 231

Ion	Ratio	Lower	Upper
75	100		
110	0.0	0.0	20.0
77	80.1	11.9	51.9#
112	30.7	0.0	20.0#

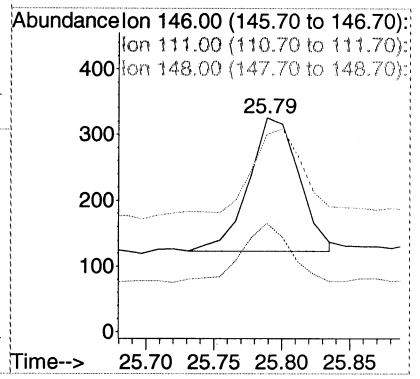


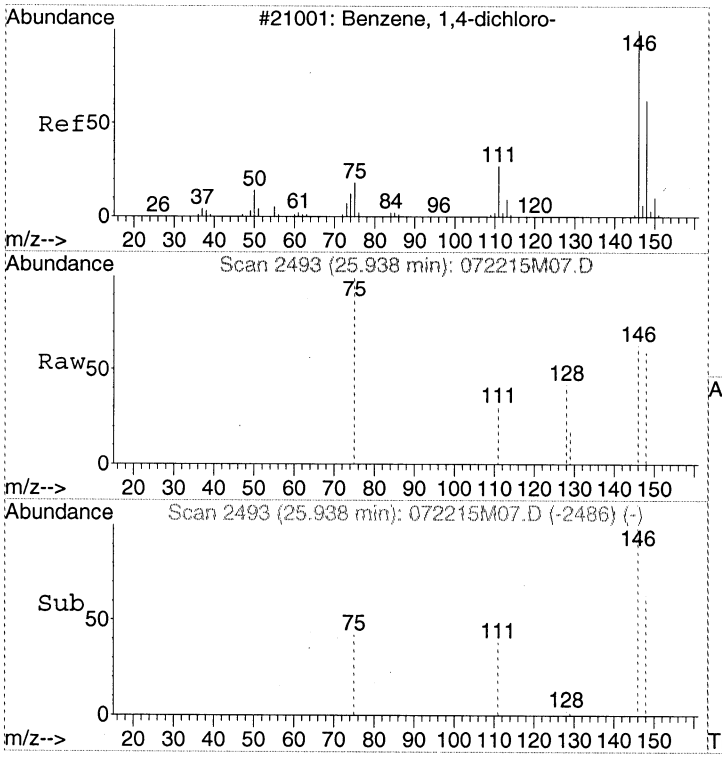


#33
1,3-Dichlorobenzene
Concen: Below Cal
RT: 25.79 min Scan# 2480
Delta R.T. -0.01 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion:146 Resp: 523

Ion	Ratio	Lower	Upper
146	100		
111	39.8	17.9	57.9
148	60.0	43.9	83.9

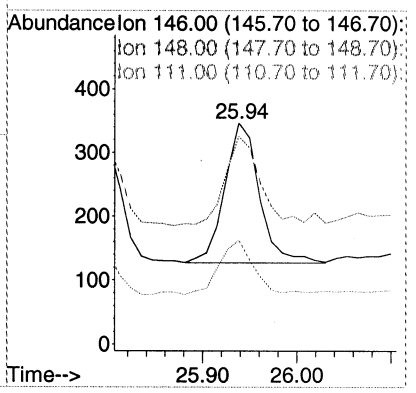


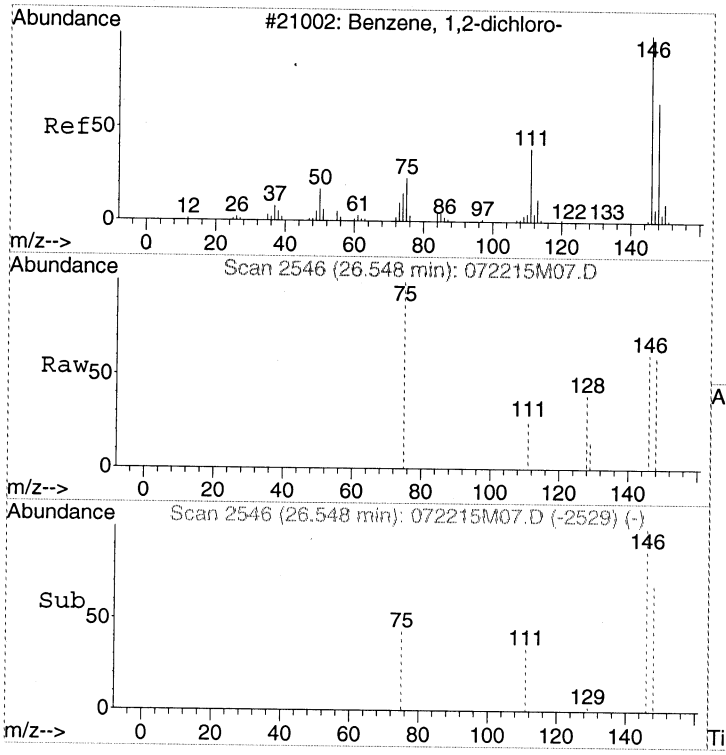


#34
1,4-Dichlorobenzene
Concen: Below Cal
RT: 25.94 min Scan# 2493
Delta R.T. -0.01 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion:146 Resp: 557

Ion	Ratio	Lower	Upper
146	100		
148	65.4	44.0	84.0
111	37.9	16.6	56.6

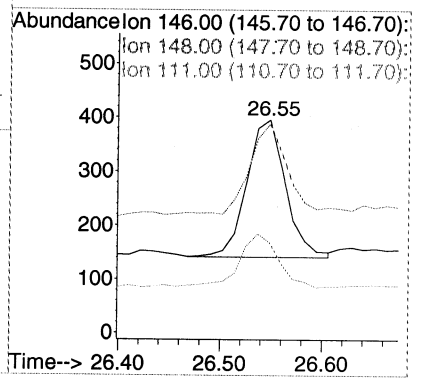


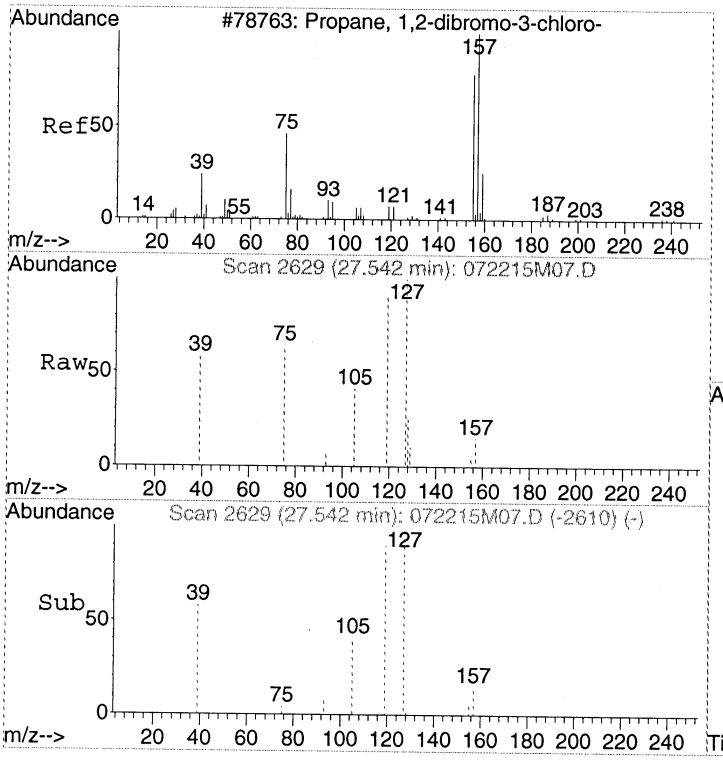


#35
1,2-Dichlorobenzene
Concen: Below Cal
RT: 26.55 min Scan# 2546
Delta R.T. 0.00 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion:146 Resp: 672

Ion	Ratio	Lower	Upper
146	100		
148	63.2	44.0	84.0
111	39.0	19.4	59.4

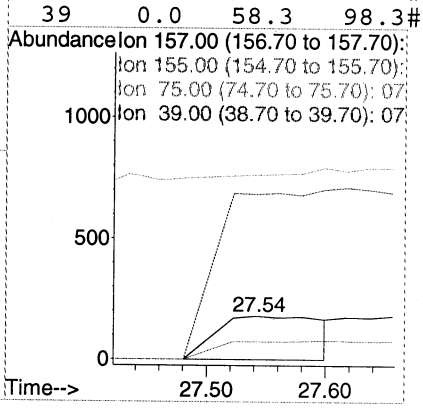


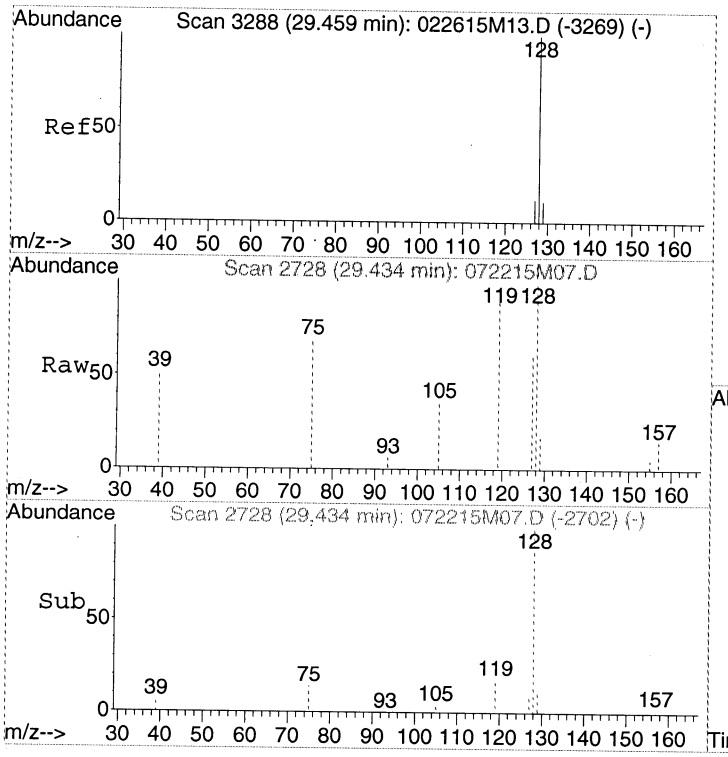


#36
1,2-Dibromo-3-chloropropane
Concen: Below Cal
RT: 27.54 min Scan# 2629
Delta R.T. -0.25 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion:157 Resp: 1225

Ion	Ratio	Lower	Upper
157	100		
155	28.6	57.5	97.5#
75	0.0	67.4	107.4#
39	0.0	58.3	98.3#

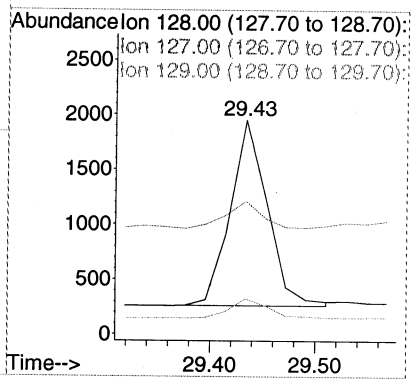




#37
Naphthalene
Concen: Below Cal
RT: 29.43 min Scan# 2728
Delta R.T. 0.00 min
Lab File: 072215M07.D
Acq: 22 Jul 2015 4:21 pm

Tgt Ion:128 Resp: 4117

Ion	Ratio	Lower	Upper
128	100		
127	14.5	0.0	32.3
129	11.5	0.0	30.9



Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\072215MAA\
Data File : 072215M08.D
Acq On : 22 Jul 2015 5:13 pm
InstName : AG5973M
Operator : LLH
Sample : CAN #134
Misc : 400ml RECERTIFICATION
ALS Vial : 6 Sample Multiplier: 1

clean

Quant Time: Jul 23 12:41:56 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\072115SIM+ADDLMAA.M
Quant Title : TO15SIM
QLast Update : Thu Jul 23 12:20:05 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.25	49	78580	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.30	114	241301	375.00 pptv	-0.01
21) CHLOROBENZENE-d5	22.23	117	171663	341.00 pptv	-0.02

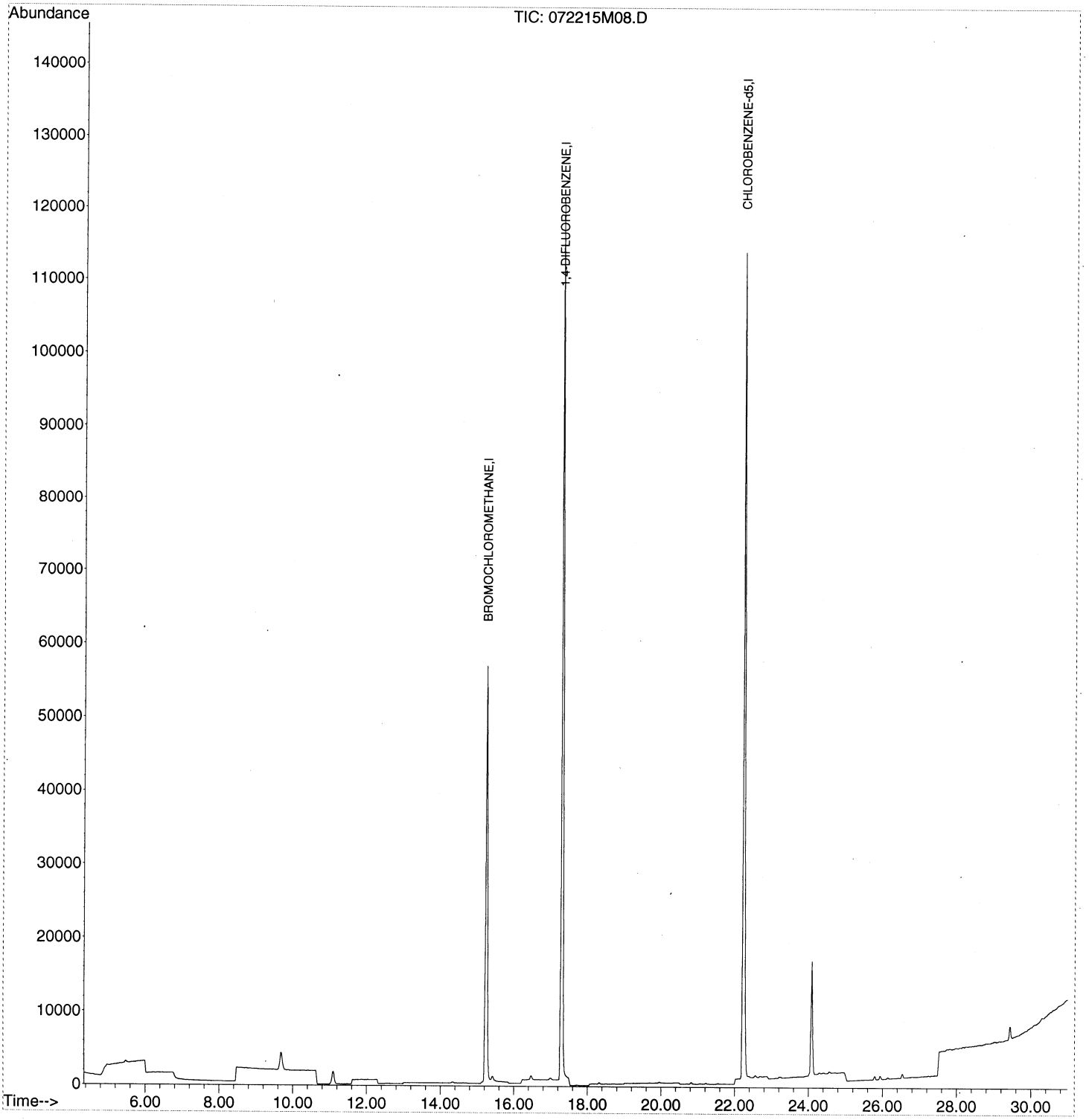
Target Compounds					Qvalue
2) Vinyl chloride	5.09	62	133	N.D.	
3) 1,3-Butadiene	5.19	54	77	N.D.	
4) Bromoethene	6.86	106	19	N.D.	
5) 1,1,2-Trichloro-1,2,2-trif	8.94	151	34	N.D.	
6) 1,1-Dichloroethene	8.94	61	17	N.D.	
7) Dichloromethane	11.09	49	3442	N.D.	
8) tert-Butyl methyl ether (M	11.83	73	51	N.D.	
9) trans-1,2-Dichloroethene	11.86	61	29	N.D.	
10) Hexane	12.51	57	35	N.D.	
11) 1,1-Dichloroethane	13.24	63	10	N.D.	
12) cis-1,2-Dichloroethene	14.72	96	23	N.D.	
13) Chloroform	15.40	83	45	N.D.	
14) 1,1,1-Trichloroethane	15.71	97	63	N.D.	
15) Carbon tetrachloride	15.90	117	297	N.D.	
17) Benzene	16.47	78	1190	N.D.	
18) 1,2-Dichloroethane	16.66	62	49	N.D.	
19) Trichloroethene	17.72	130	25	N.D.	
20) 1,2-Dichloropropane	18.06	63	95	N.D.	
22) Toluene	19.95	91	223	N.D.	
23) 1,1,2-Trichloroethane	20.71	97	63	N.D.	
24) Tetrachloroethene	20.81	166	61	N.D.	
25) 1,2-Dibromoethane (EDB)	21.55	107	93	N.D.	
26) Chlorobenzene	22.28	112	108	N.D.	
27) Ethylbenzene	22.39	91	263	N.D.	
28) m&p-Xylene	22.56	91	536	N.D.	
29) o-Xylene	23.21	91	319	N.D.	
30) Styrene	23.24	104	162	N.D.	
31) 1,1,2,2-Tetrachloroethane	24.28	83	301	N.D.	
32) 1,2,3-Trichloropropane	24.41	75	283	N.D.	
33) 1,3-Dichlorobenzene	25.80	146	470	N.D.	
34) 1,4-Dichlorobenzene	25.94	146	513	N.D.	
35) 1,2-Dichlorobenzene	26.55	146	647	N.D.	
36) 1,2-Dibromo-3-chloropropan	27.55	157	1227	N.D.	
37) Naphthalene	29.45	128	3938	N.D.	

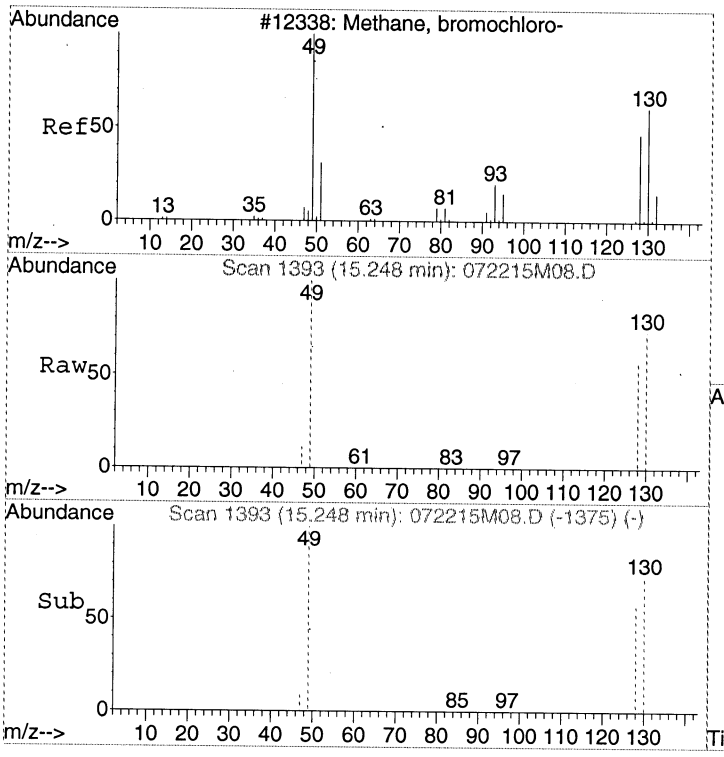
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\072215MAA\
Data File : 072215M08.D
Acq On : 22 Jul 2015 5:13 pm
InstName : AG5973M
Operator : LLH
Sample : CAN #134
Misc : 400ml RECERTIFICATION
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 23 12:41:56 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\072115SIM+ADDLMAA.M
Quant Title : TO15SIM
QLast Update : Thu Jul 23 12:20:05 2015
Response via : Initial Calibration

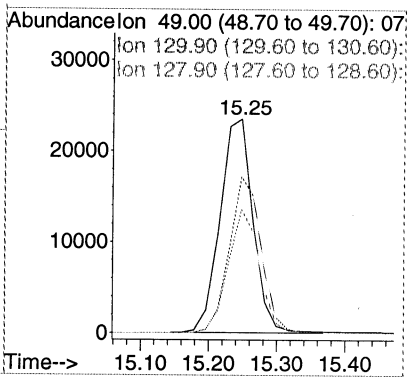


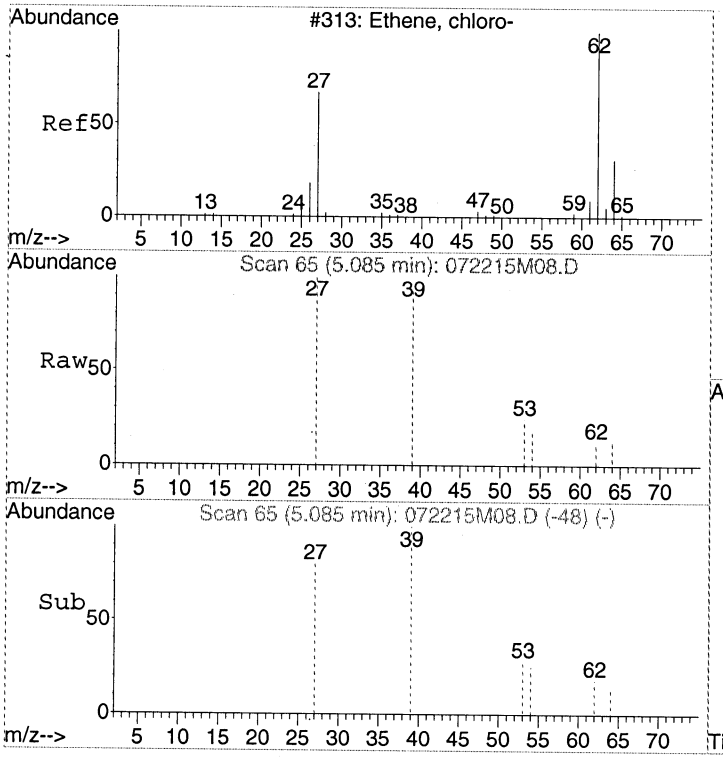


#1
BROMOCHLOROMETHANE
Concen: 341.00 pptv
RT: 15.25 min Scan# 1393
Delta R.T. 0.01 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion: 49 Resp: 78580

Ion	Ratio	Lower	Upper
49	100		
130	70.3	55.8	95.8
128	54.6	38.6	78.6

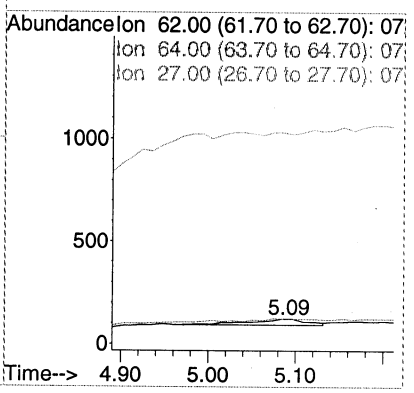


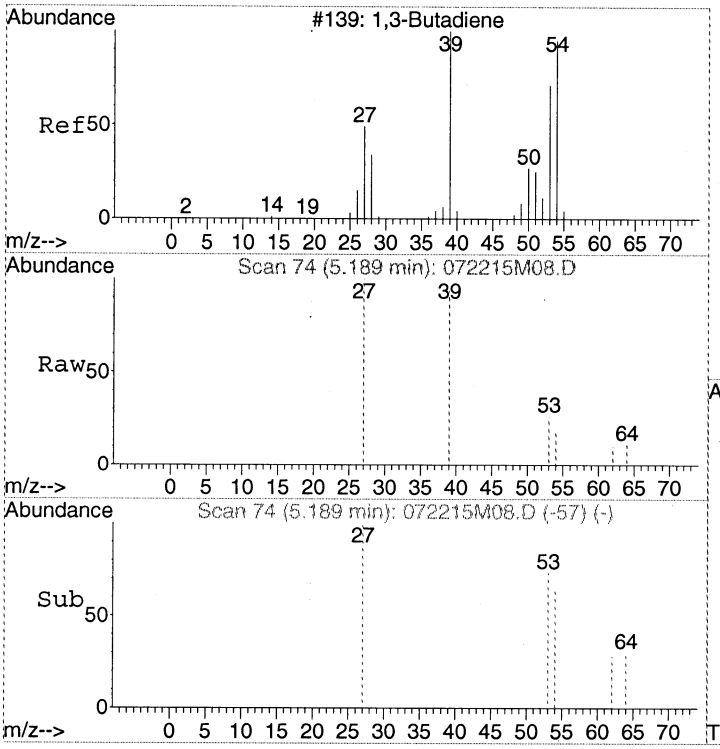


#2
Vinyl chloride
Concen: Below Cal
RT: 5.09 min Scan# 65
Delta R.T. 0.00 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion: 62 Resp: 133

Ion	Ratio	Lower	Upper
62	100		
64	24.1	11.7	51.7
27	0.0	47.6	87.6#

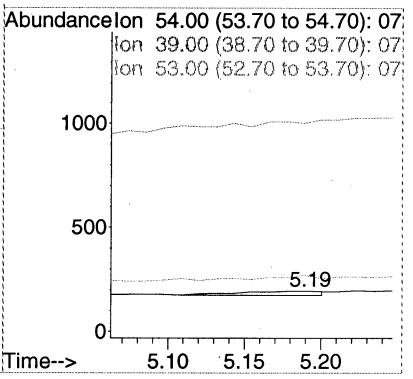


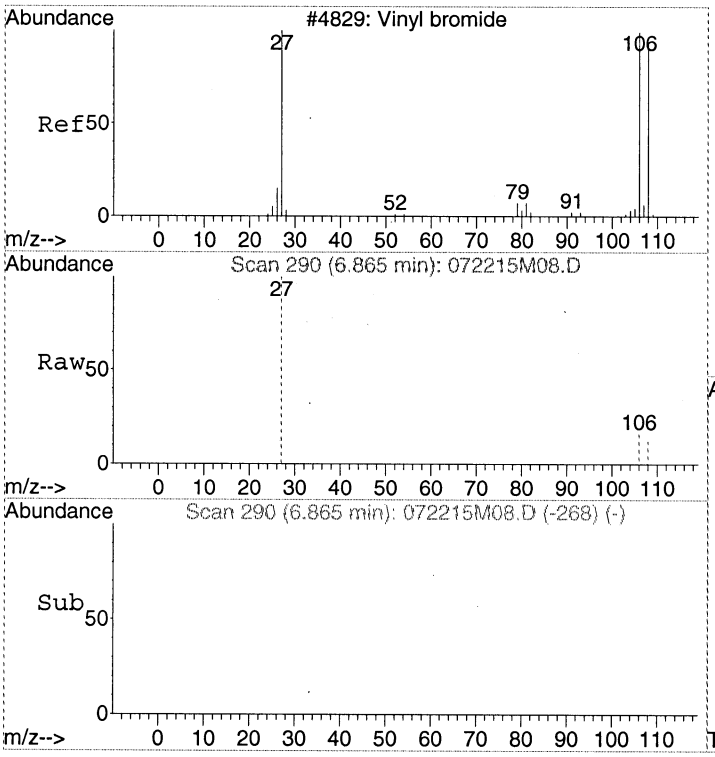


#3
1,3-Butadiene
Concen: Below Cal
RT: 5.19 min Scan# 74
Delta R.T. 0.00 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion: 54 Resp: 77

Ion	Ratio	Lower	Upper
54	100		
39	66.2	83.1	123.1#
53	40.3	46.9	86.9#

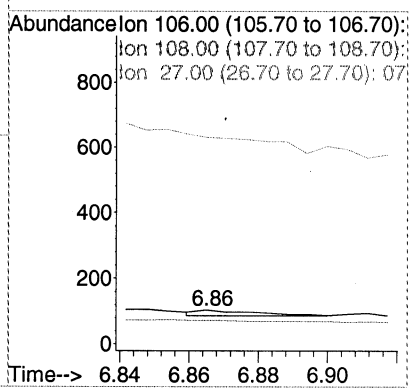


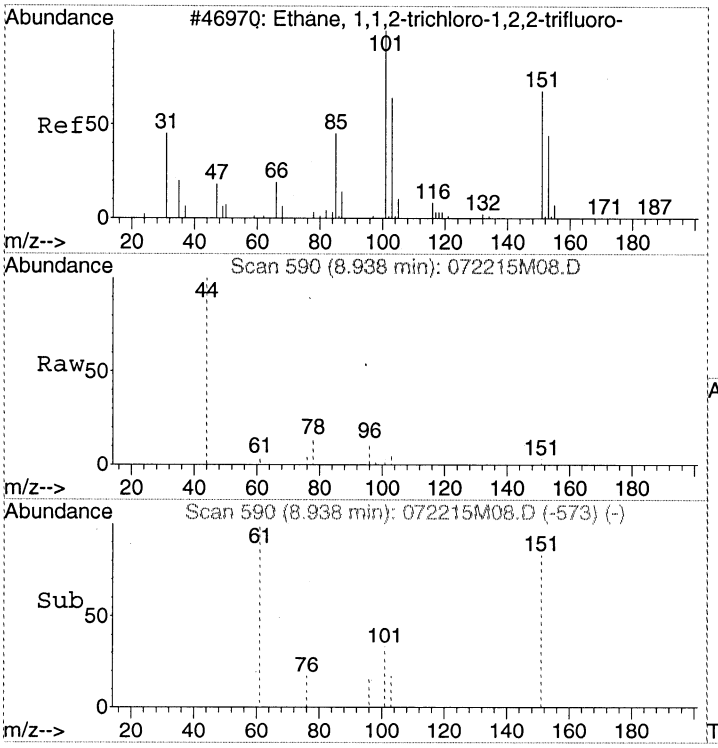


#4
Bromoethene
Concen: Below Cal
RT: 6.86 min Scan# 290
Delta R.T. -0.07 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion:106 Resp: 19

Ion	Ratio	Lower	Upper
106	100		
108	0.0	0.0	215.1
27	0.0	88.7	128.7#

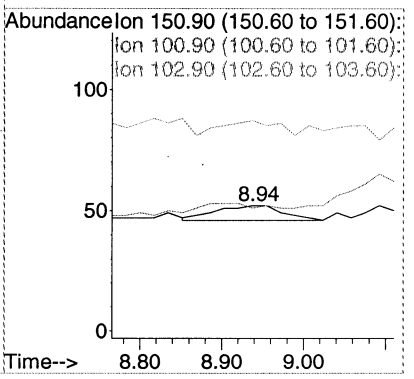


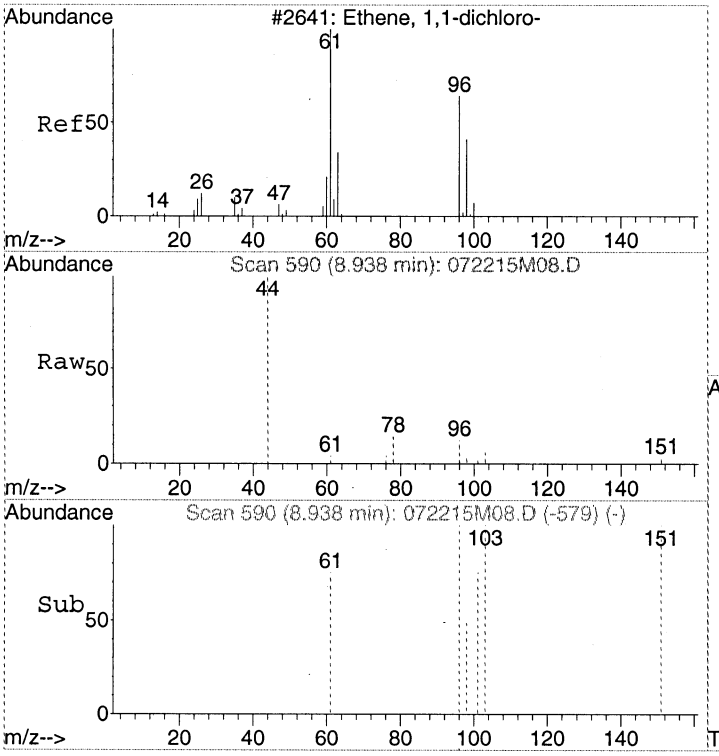


#5
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: Below Cal
RT: 8.94 min Scan# 590
Delta R.T. 0.03 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion:151 Resp: 34

Ion	Ratio	Lower	Upper
151	100		
101	0.0	91.3	131.3#
103	94.1	51.4	91.4#

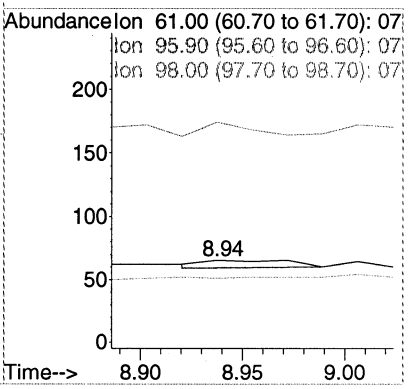


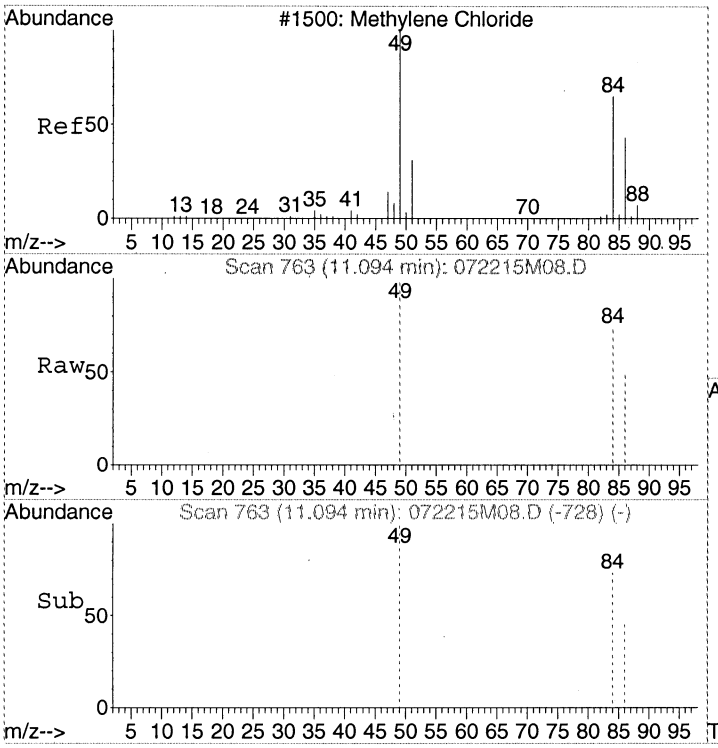


#6
1,1-Dichloroethene
Concen: Below Cal
RT: 8.94 min Scan# 590
Delta R.T. -0.02 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion: 61 Resp: 17

Ion	Ratio	Lower	Upper
61	100		
96	176.5	41.6	81.6#
98	23.5	19.1	59.1

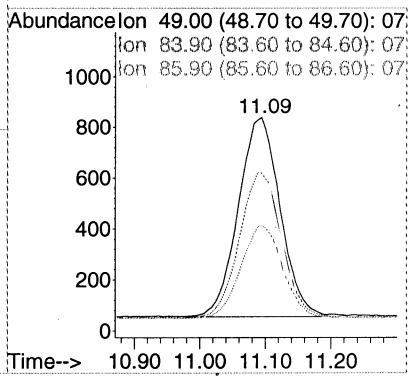


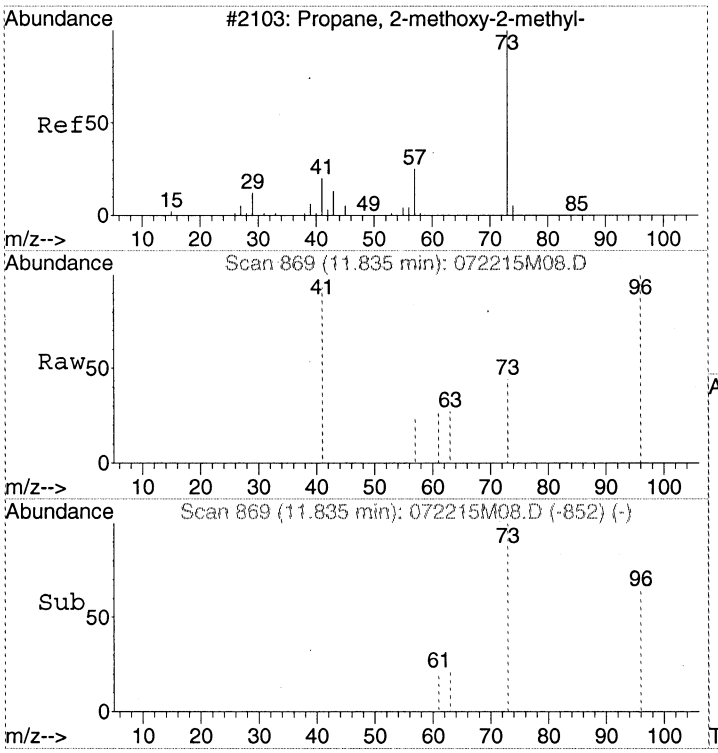


#7
Dichloromethane
Concen: Below Cal
RT: 11.09 min Scan# 763
Delta R.T. 0.01 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion: 49 Resp: 3442

Ion	Ratio	Lower	Upper
49	100		
84	74.5	56.8	96.8
86	47.2	29.2	69.2

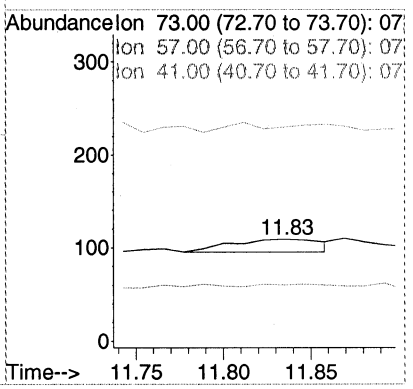




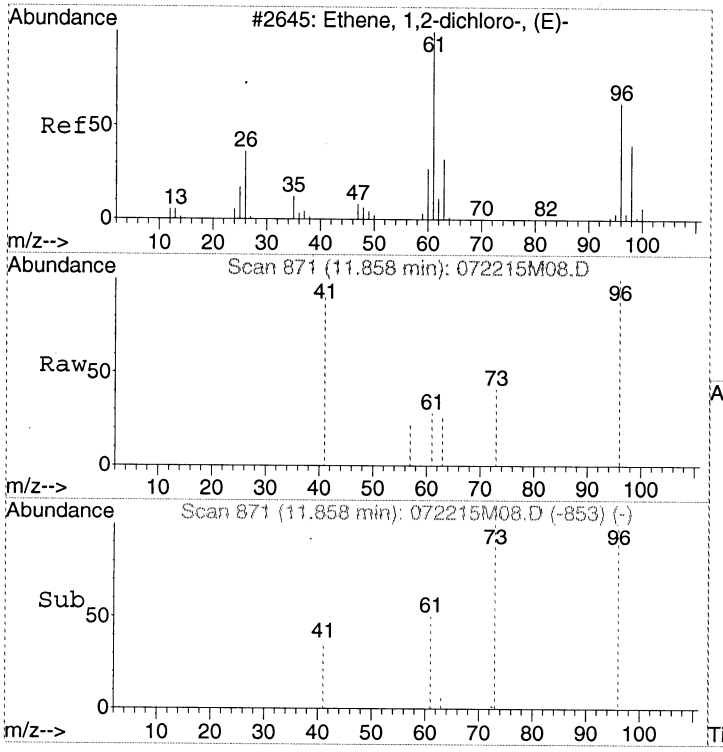
#8
tert-Butyl methyl ether (MTBE)
Concen: Below Cal
RT: 11.83 min Scan# 869
Delta R.T. 0.00 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion: 73 Resp: 51

Ion	Ratio	Lower	Upper
73	100		
57	0.0	1.7	41.7#
41	0.0	2.1	42.1#



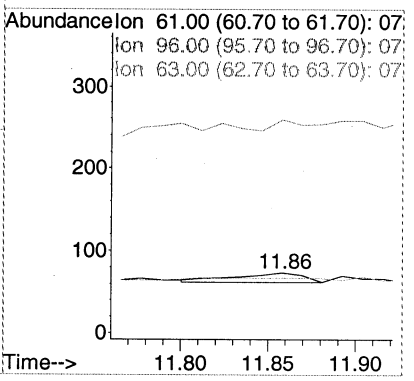
00292

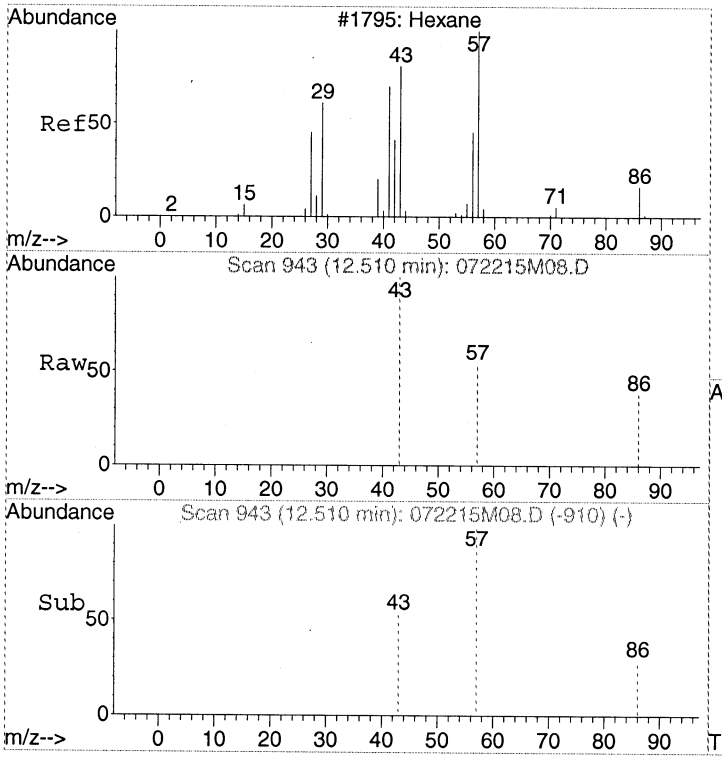


#9
trans-1,2-Dichloroethene
Concen: Below Cal
RT: 11.86 min Scan# 871
Delta R.T. 0.01 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion: 61 Resp: 29

Ion	Ratio	Lower	Upper
61	100		
96	48.3	51.3	91.3#
63	20.7	12.1	52.1

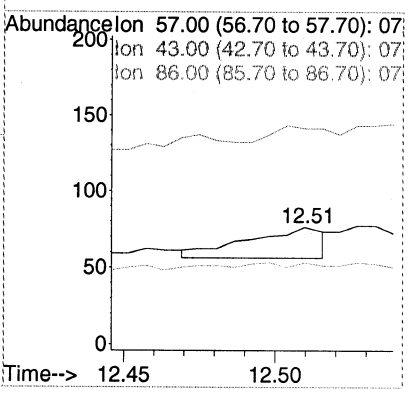


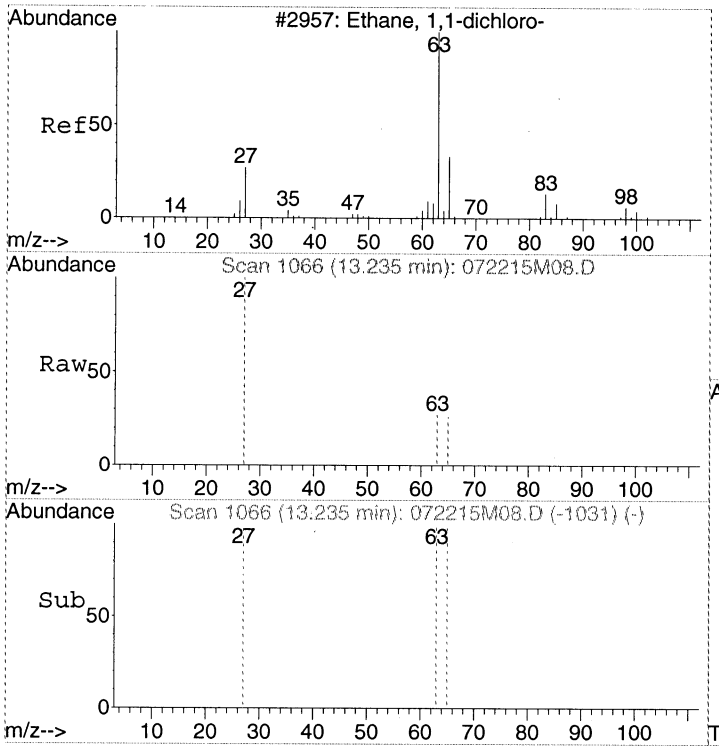


#10
Hexane
Concen: Below Cal
RT: 12.51 min Scan# 943
Delta R.T. -0.01 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion: 57 Resp: 35

Ion	Ratio	Lower	Upper
57	100		
43	42.9	44.4	84.4#
86	2.9	0.0	37.6

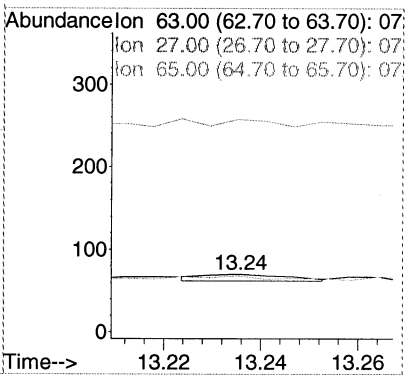


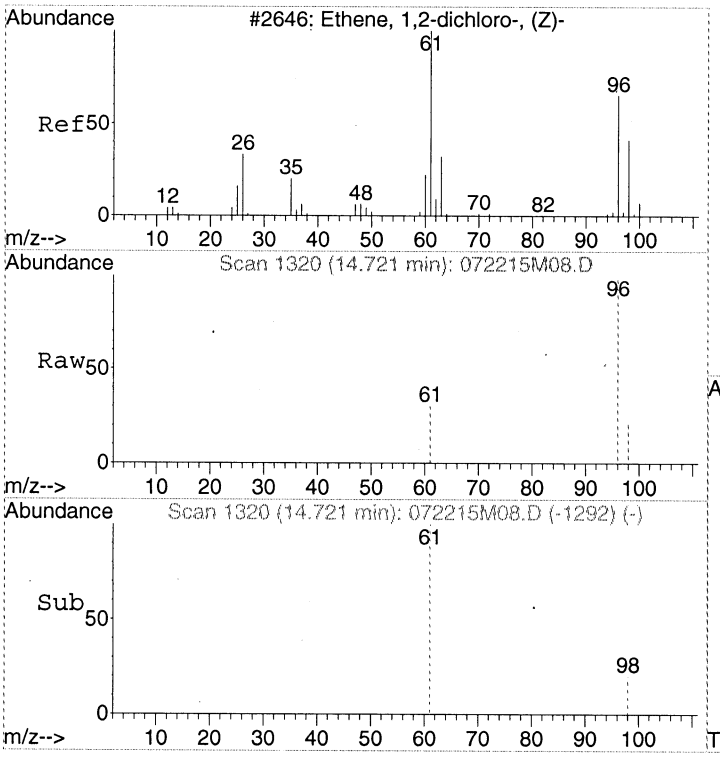


#11
1,1-Dichloroethane
Concen: Below Cal
RT: 13.24 min Scan# 1066
Delta R.T. 0.01 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion: 63 Resp: 10

Ion	Ratio	Lower	Upper
63	100		
27	70.0	18.7	58.7#
65	50.0	11.7	51.7

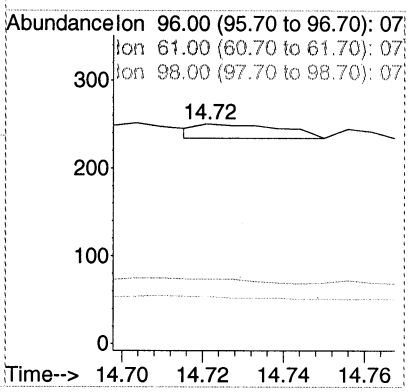


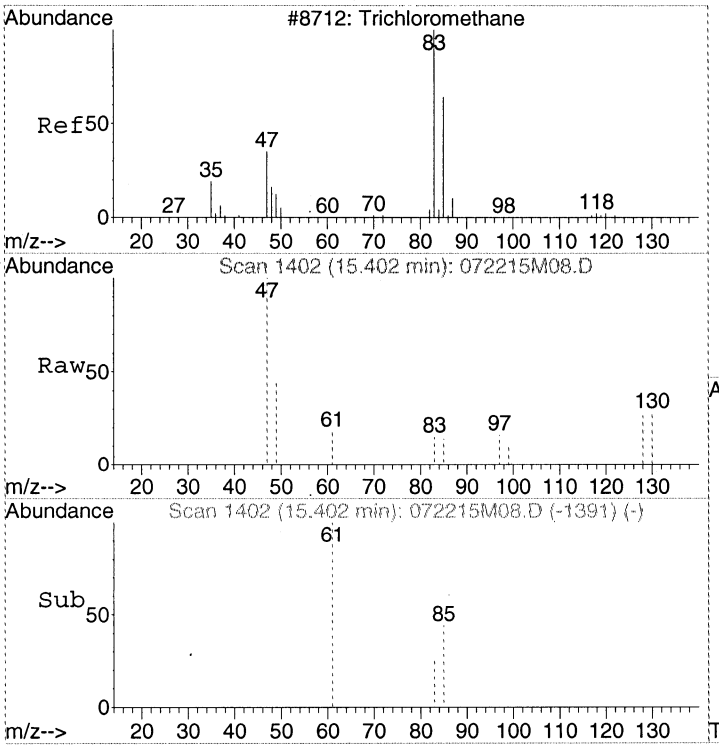


#12
cis-1,2-Dichloroethene
Concen: Below Cal
RT: 14.72 min Scan# 1320
Delta R.T. 0.01 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion: 96 Resp: 23

Ion	Ratio	Lower	Upper
96	100		
61	8.7	109.2	149.2#
98	26.1	44.3	84.3#

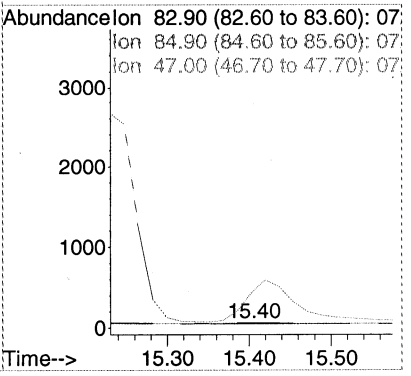


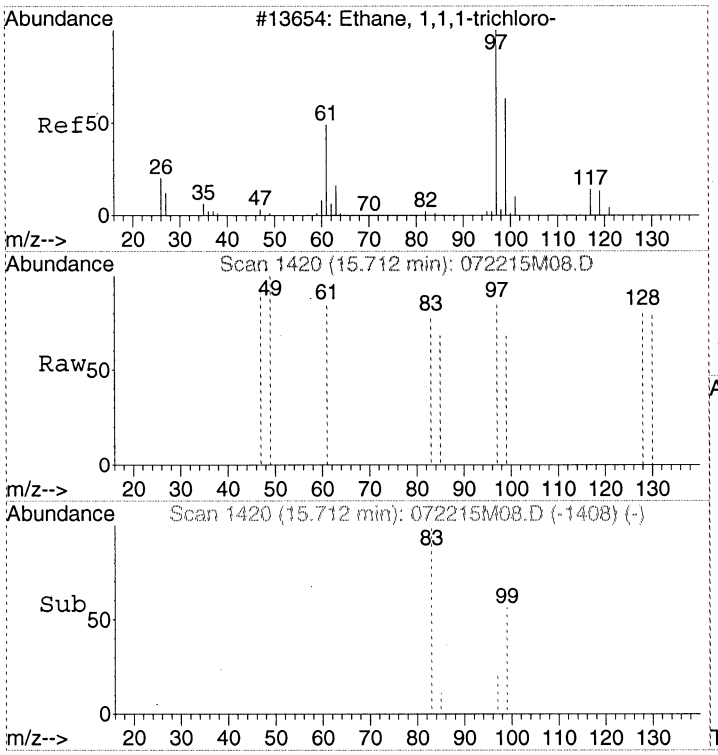


#13
Chloroform
Concen: Below Cal
RT: 15.40 min Scan# 1402
Delta R.T. -0.01 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion: 83 Resp: 45

Ion	Ratio	Lower	Upper
83	100		
85	64.4	44.7	84.7
47	4717.8	5.4	45.4#

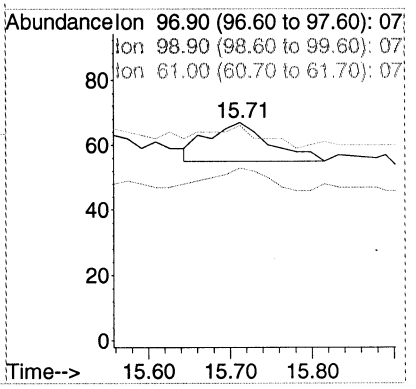


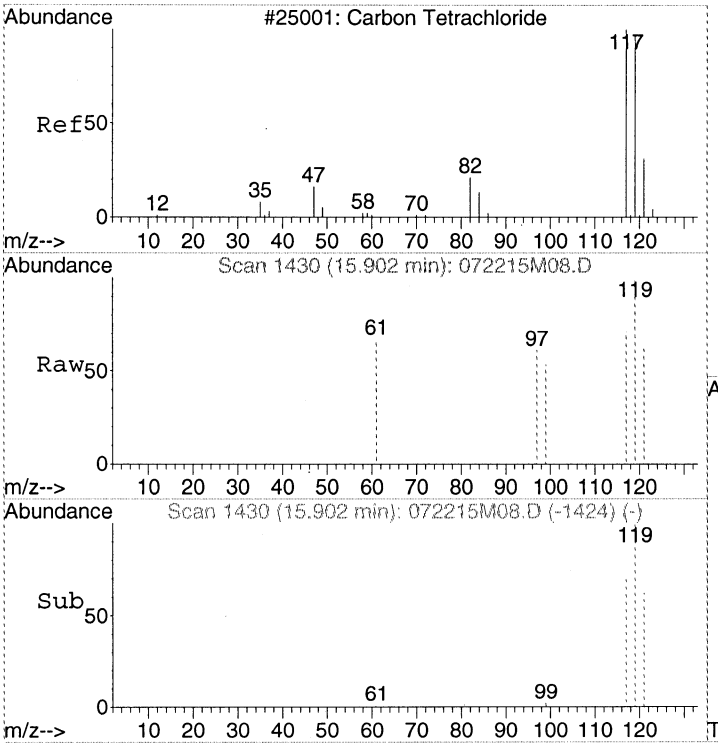


#14
1,1,1-Trichloroethane
Concen: Below Cal
RT: 15.71 min Scan# 1420
Delta R.T. 0.01 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion: 97 Resp: 63

Ion	Ratio	Lower	Upper
97	100		
99	52.4	44.6	84.6
61	6.3	18.6	58.6#

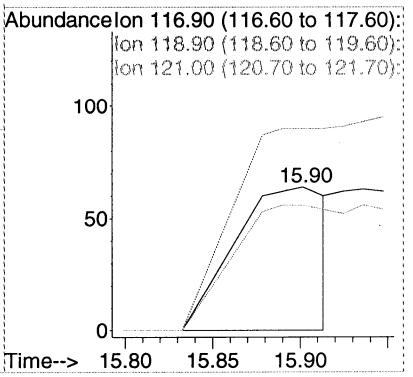


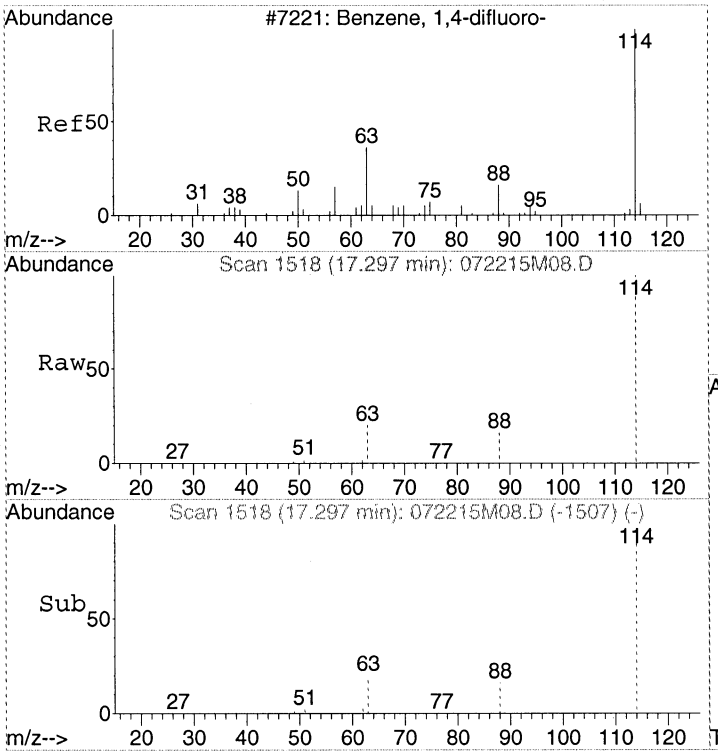


#15
Carbon tetrachloride
Concen: Below Cal
RT: 15.90 min Scan# 1430
Delta R.T. -0.09 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion:117 Resp: 297

Ion	Ratio	Lower	Upper
117	100		
119	61.3	75.8	115.8#
121	100.7	10.6	50.6#

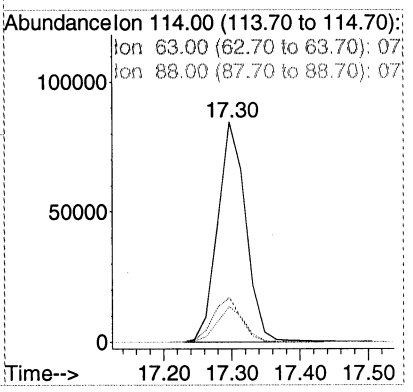




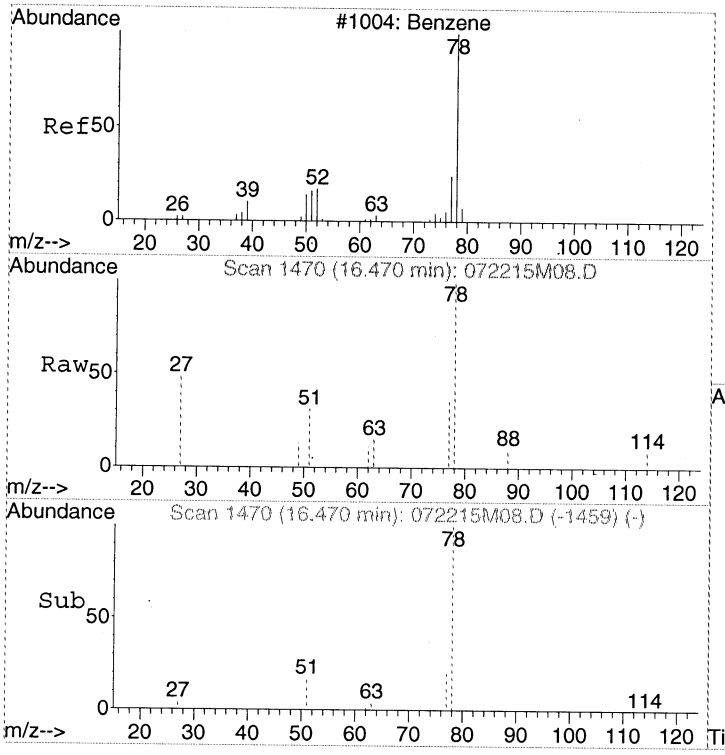
#16
1,4-DIFLUOROBENZENE
Concen: 375.00 pptv
RT: 17.30 min Scan# 1518
Delta R.T. -0.01 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion:114 Resp: 241301

Ion	Ratio	Lower	Upper
114	100		
63	20.0	0.0	38.9
88	15.7	0.0	35.4



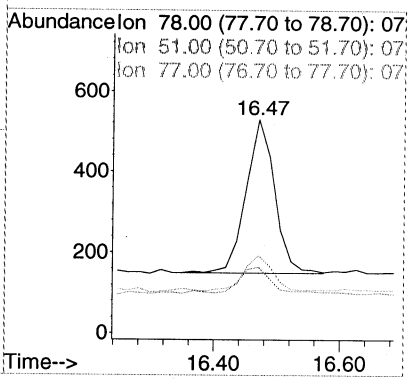
00296

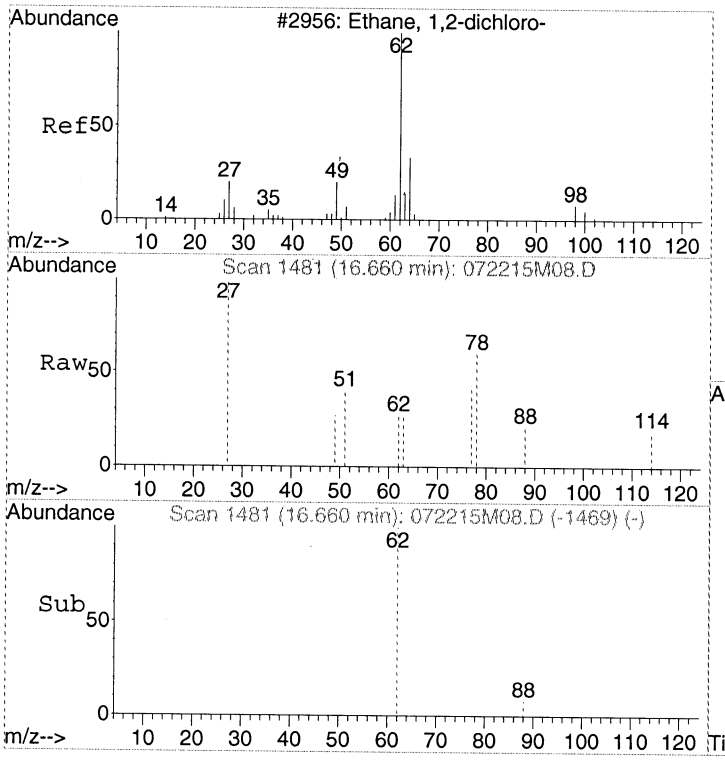


#17
Benzene
Concen: Below Cal
RT: 16.47 min Scan# 1470
Delta R.T. -0.01 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion: 78 Resp: 1190

Ion	Ratio	Lower	Upper
78	100		
51	17.7	0.0	37.6
77	24.0	3.4	43.4

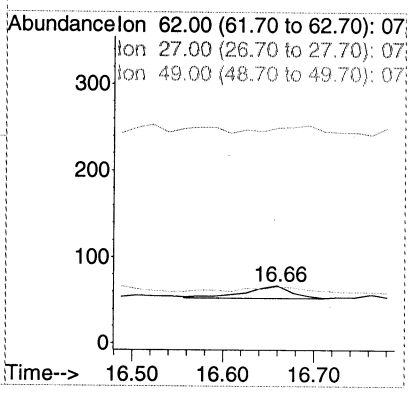


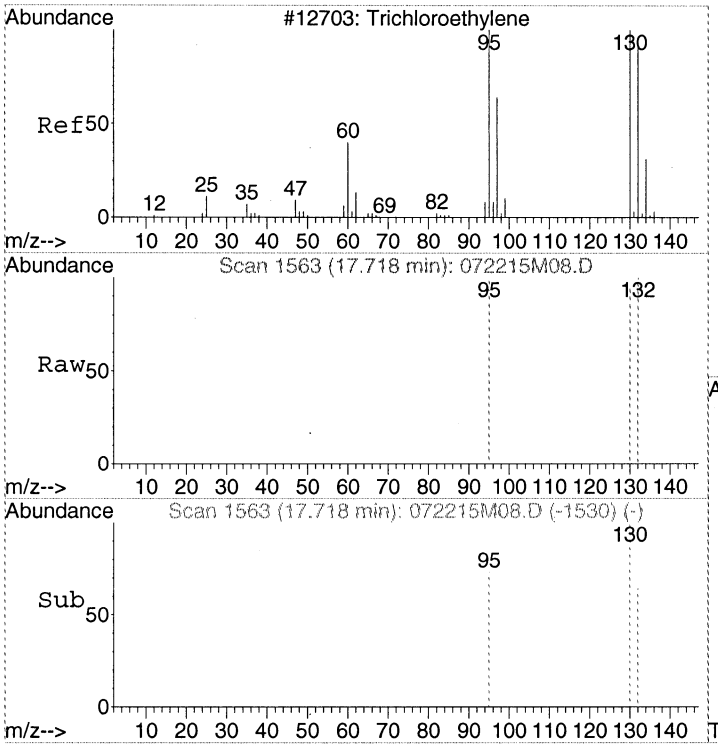


#18
1,2-Dichloroethane
Concen: Below Cal
RT: 16.66 min Scan# 1481
Delta R.T. 0.01 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion: 62 Resp: 49

Ion	Ratio	Lower	Upper
62	100		
27	0.0	26.2	66.2#
49	44.9	7.3	47.3

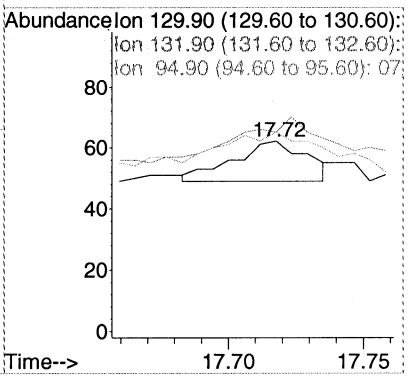


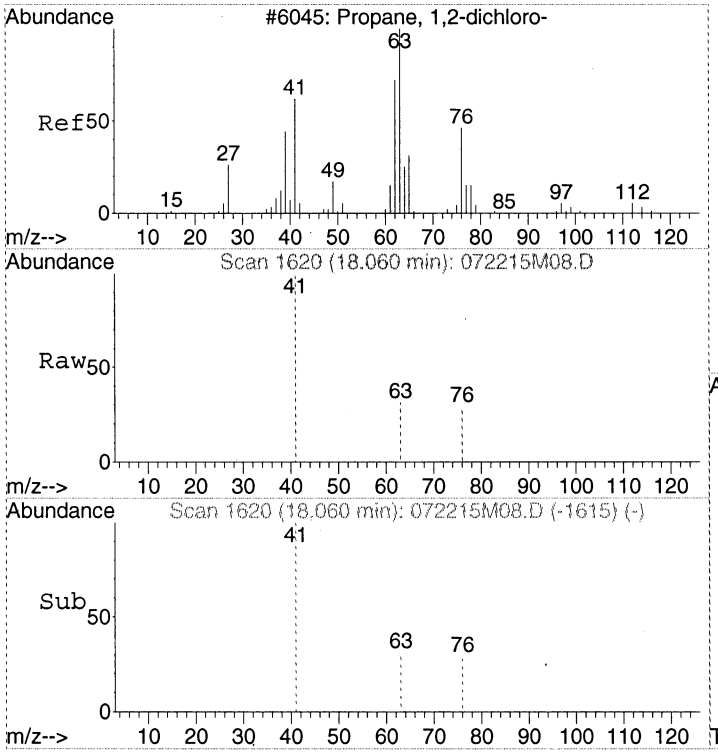


#19
Trichloroethene
Concen: Below Cal
RT: 17.72 min Scan# 1563
Delta R.T. -0.01 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion:130 Resp: 25

Ion	Ratio	Lower	Upper
130	100		
132	60.0	76.7	116.7#
95	140.0	74.7	114.7#

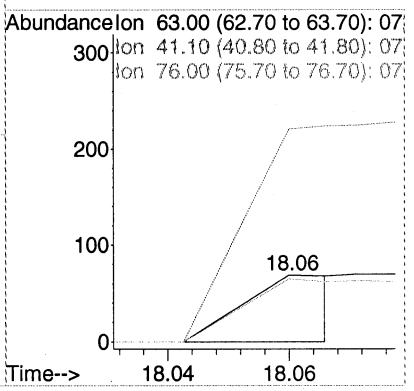


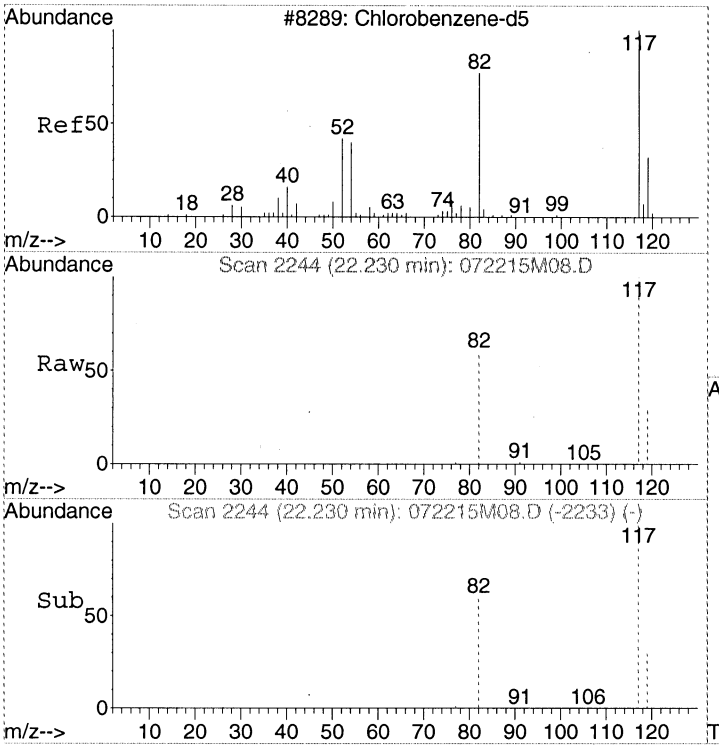


#20
1,2-Dichloropropane
Concen: Below Cal
RT: 18.06 min Scan# 1620
Delta R.T. -0.16 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion: 63 Resp: 95

Ion	Ratio	Lower	Upper
63	100		
41	0.0	38.9	78.9#
76	92.6	23.7	63.7#

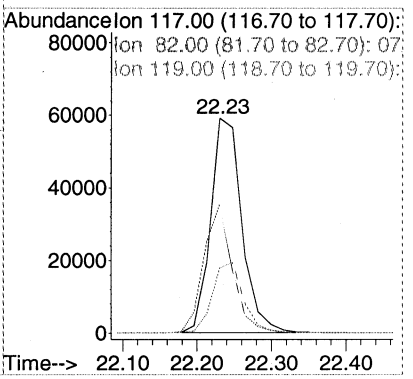


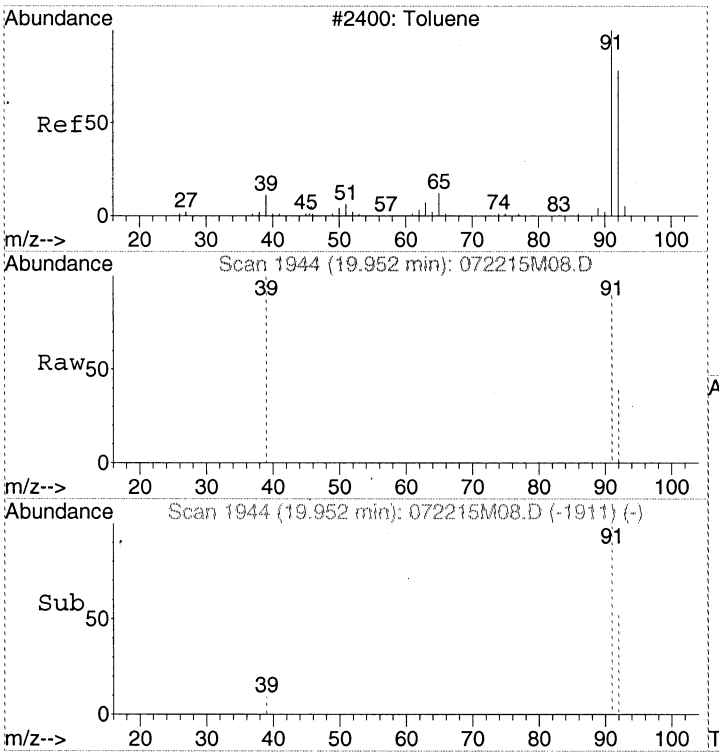


#21
CHLOROBENZENE-d5
Concen: 341.00 pptv
RT: 22.23 min Scan# 2244
Delta R.T. -0.02 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion:117 Resp: 171663

Ion	Ratio	Lower	Upper
117	100		
82	55.0	33.2	73.2
119	32.2	12.1	52.1

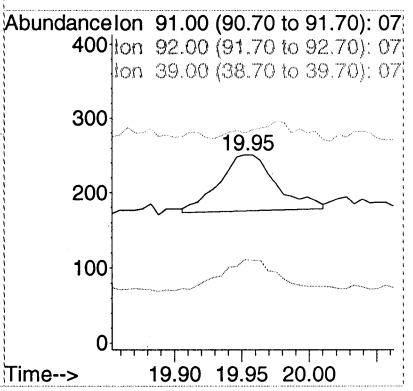


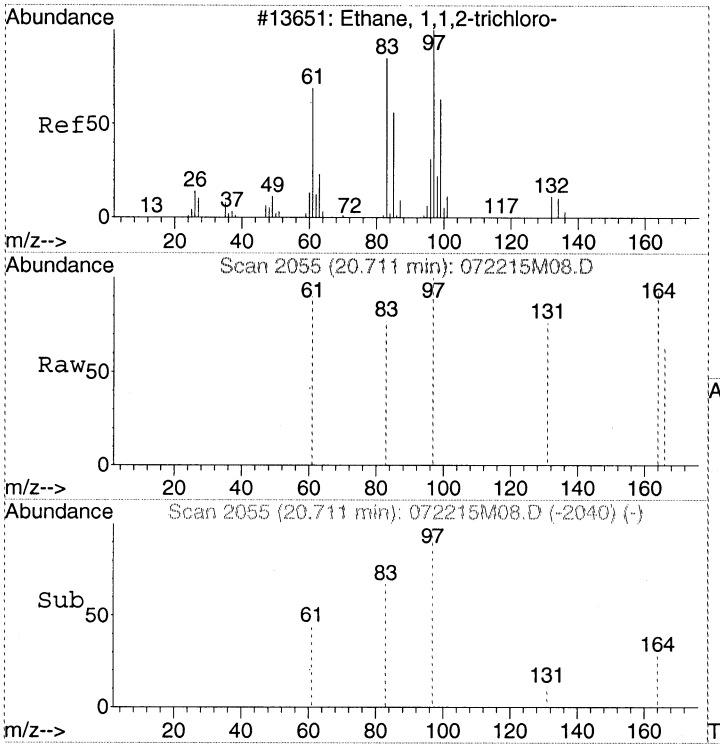


#22
Toluene
Concen: Below Cal
RT: 19.95 min Scan# 1944
Delta R.T. -0.01 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion: 91 Resp: 223

Ion	Ratio	Lower	Upper
91	100		
92	55.2	39.7	79.7
39	4.9	0.0	30.4

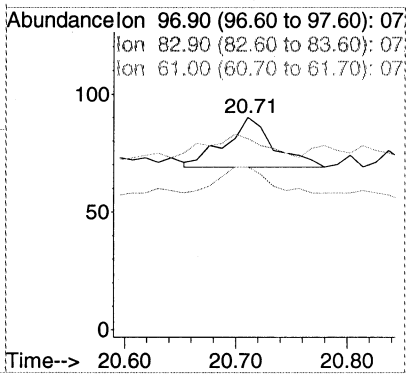


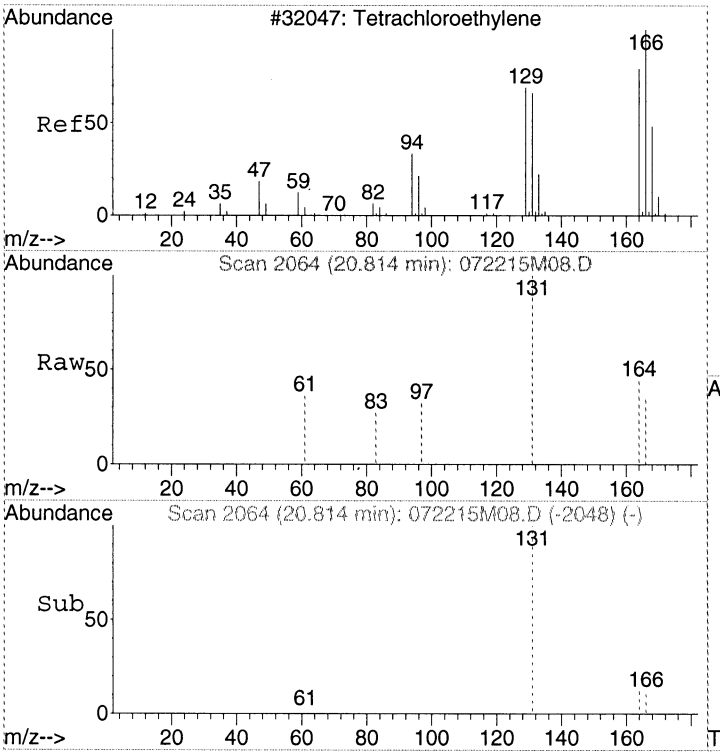


#23
1,1,2-Trichloroethane
Concen: Below Cal
RT: 20.71 min Scan# 2055
Delta R.T. -0.02 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion: 97 Resp: 63

Ion	Ratio	Lower	Upper
97	100		
83	49.2	63.6	103.6#
61	38.1	41.3	81.3#

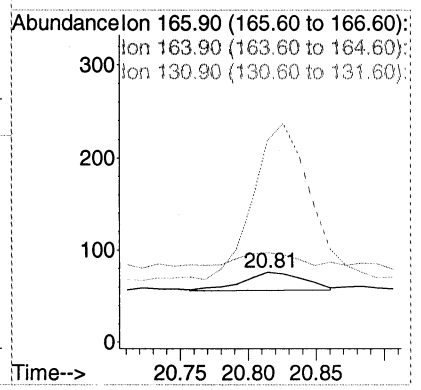




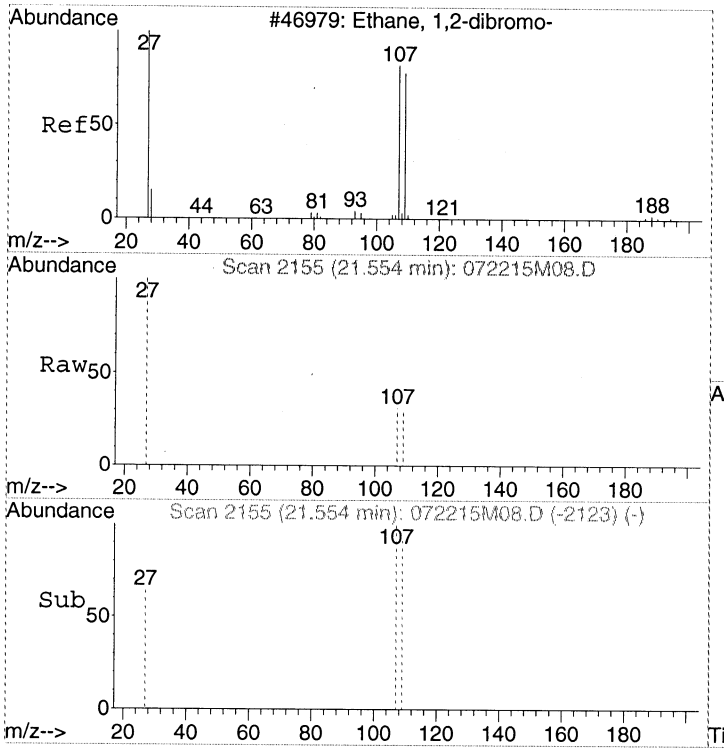
#24
Tetrachloroethene
Concen: Below Cal
RT: 20.81 min Scan# 2064
Delta R.T. -0.01 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion:166 Resp: 61

Ion	Ratio	Lower	Upper
166	100		
164	75.4	58.3	98.3
131	816.4	47.2	87.2#



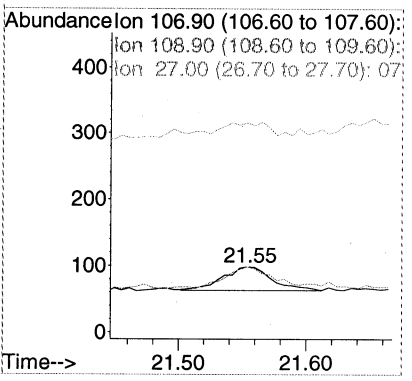
00300

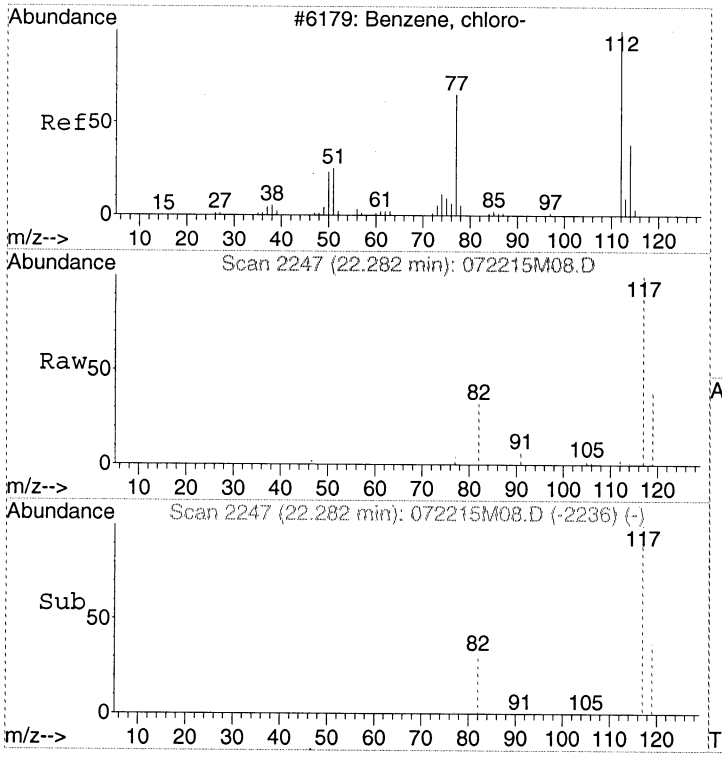


#25
1,2-Dibromoethane (EDB)
Concen: Below Cal
RT: 21.55 min Scan# 2155
Delta R.T. -0.01 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion:107 Resp: 93

Ion	Ratio	Lower	Upper
107	100		
109	96.8	74.4	114.4
27	30.1	44.7	84.7#

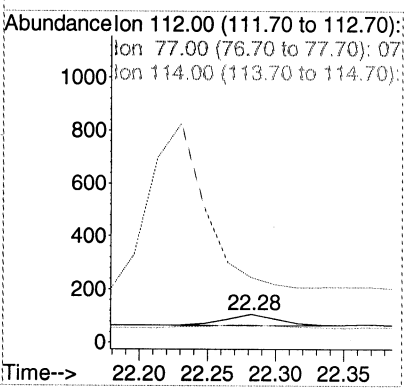


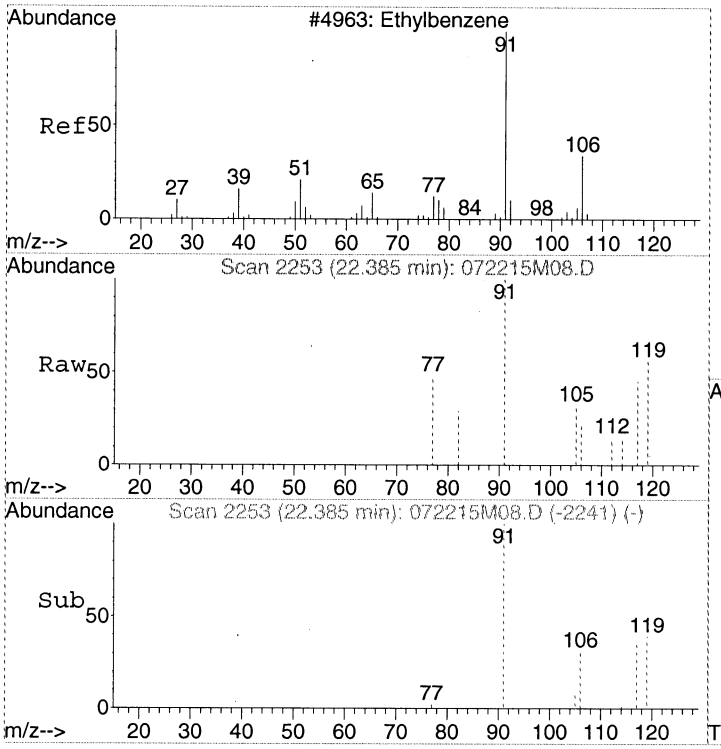


#26
Chlorobenzene
Concen: Below Cal
RT: 22.28 min Scan# 2247
Delta R.T. -0.02 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion:112 Resp: 108

Ion	Ratio	Lower	Upper
112	100		
77	0.0	38.8	78.8#
114	56.5	12.2	52.2#

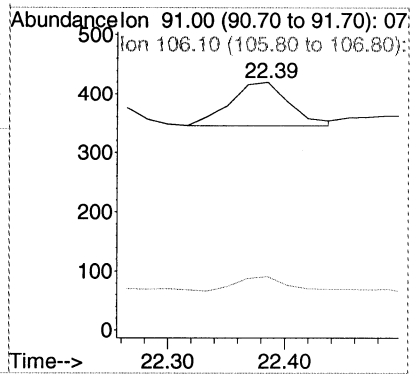


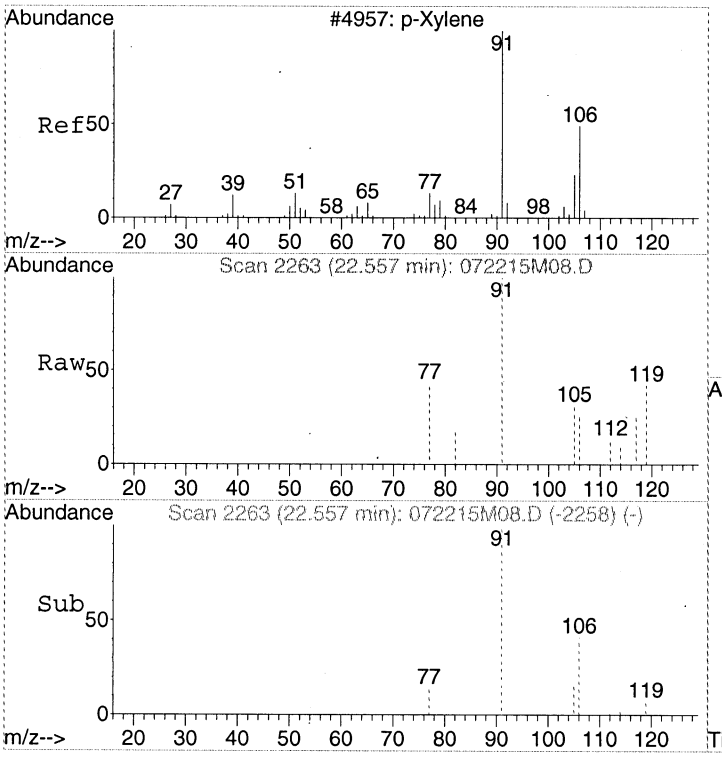


#27
Ethylbenzene
Concen: Below Cal
RT: 22.39 min Scan# 2253
Delta R.T. 0.00 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion: 91 Resp: 263

Ion	Ratio	Lower	Upper
91	100		
106	28.1	12.6	52.6

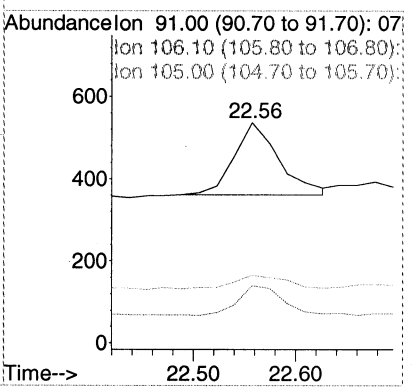


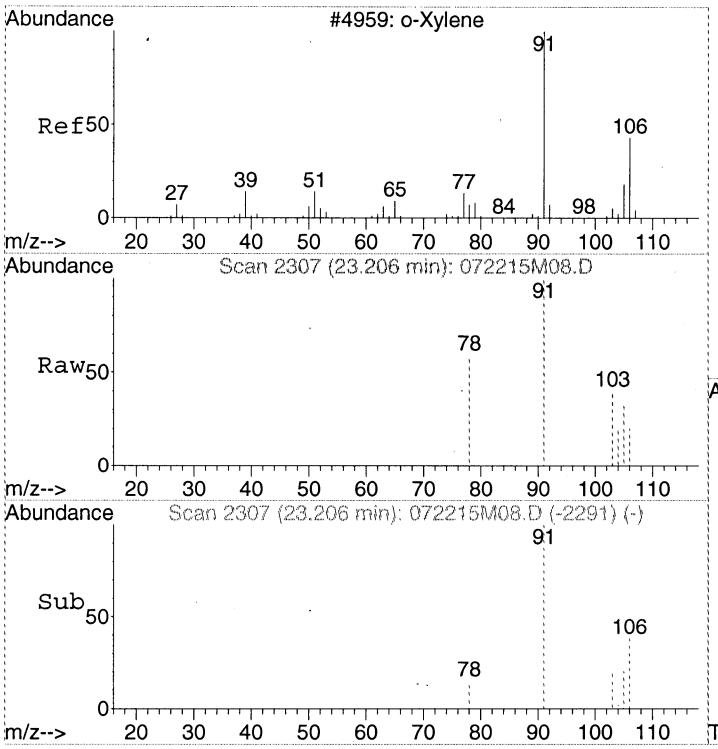


#28
m&p-Xylene
Concen: Below Cal
RT: 22.56 min Scan# 2263
Delta R.T. -0.02 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion: 91 Resp: 536

Ion	Ratio	Lower	Upper
91	100		
106	42.7	30.9	70.9
105	22.0	1.9	41.9

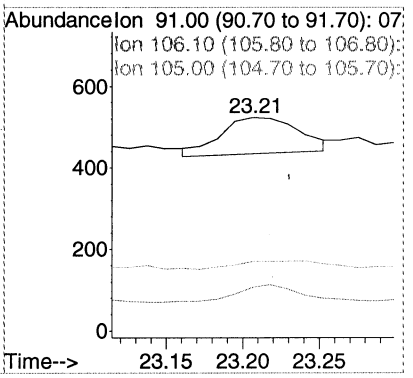


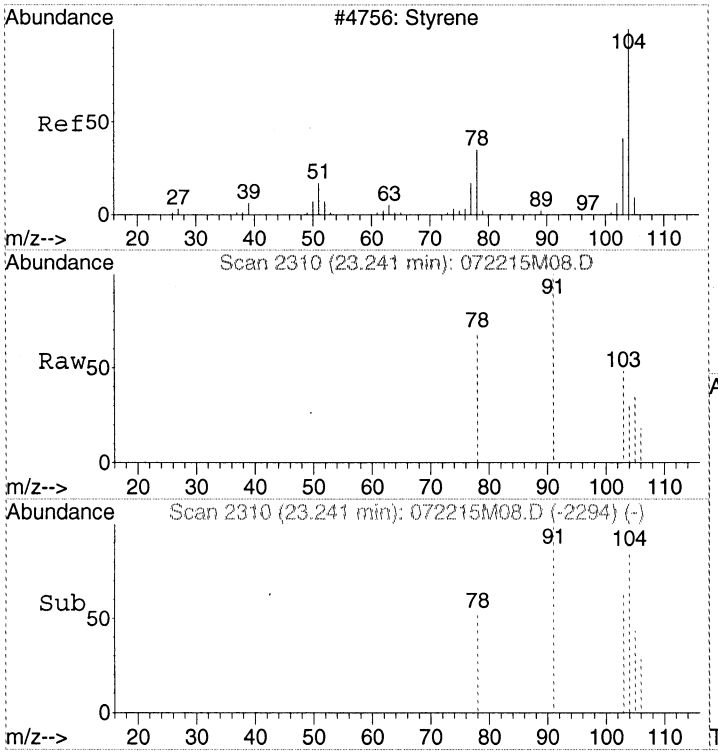


#29
o-Xylene
Concen: Below Cal
RT: 23.21 min Scan# 2307
Delta R.T. -0.01 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion: 91 Resp: 319

Ion	Ratio	Lower	Upper
91	100		
106	40.1	28.5	68.5
105	0.0	4.6	44.6#

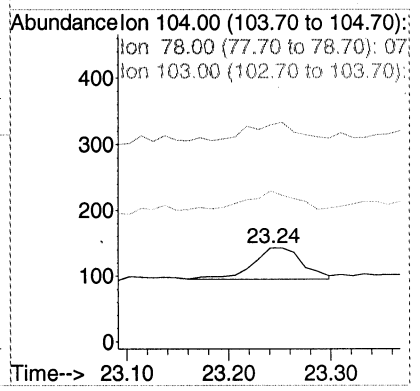


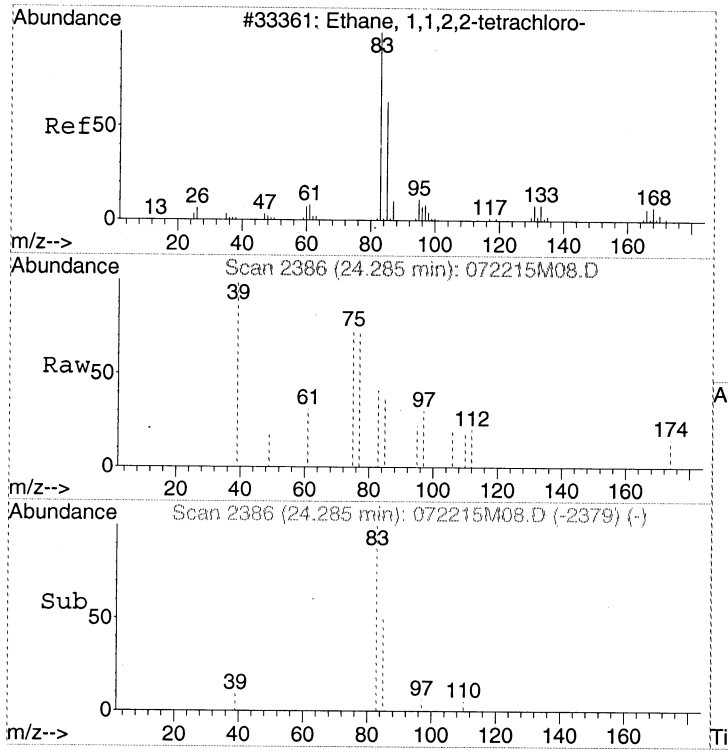


#30
Styrene
Concen: Below Cal
RT: 23.24 min Scan# 2310
Delta R.T. -0.01 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion:104 Resp: 162

Ion	Ratio	Lower	Upper
104	100		
78	29.6	31.3	71.3#
103	62.3	33.6	73.6

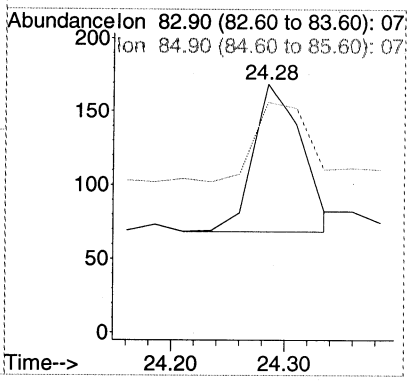


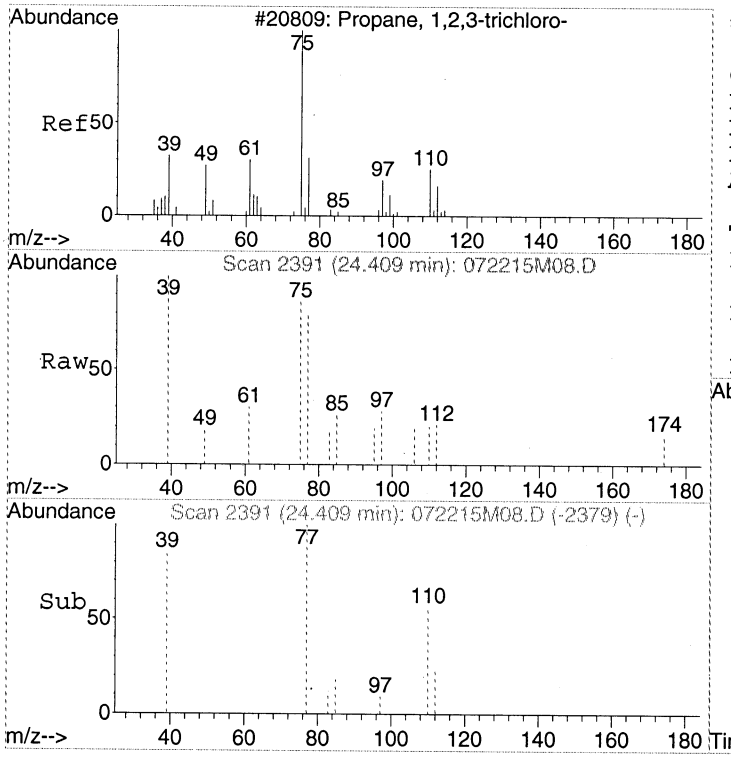


#31
1,1,2,2-Tetrachloroethane
Concen: Below Cal
RT: 24.28 min Scan# 2386
Delta R.T. -0.02 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion: 83 Resp: 301

Ion	Ratio	Lower	Upper
83	100		
85	57.8	44.1	84.1

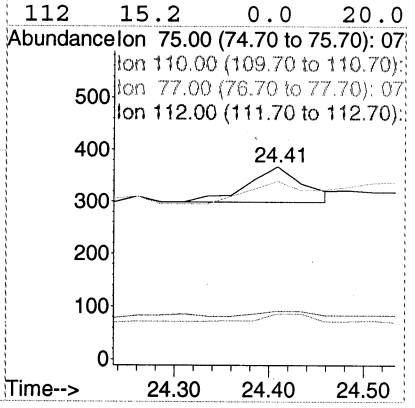


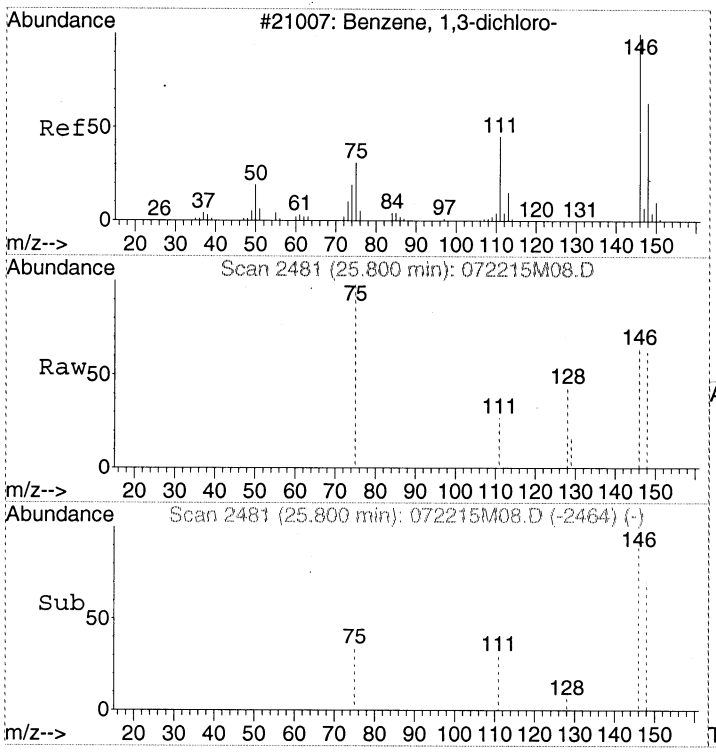


#32
1,2,3-Trichloropropane
Concen: Below Cal
RT: 24.41 min Scan# 2391
Delta R.T. 0.00 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion: 75 Resp: 283

Ion	Ratio	Lower	Upper
75	100		
110	22.3	0.0	20.0#
77	59.4	11.9	51.9#
112	15.2	0.0	20.0

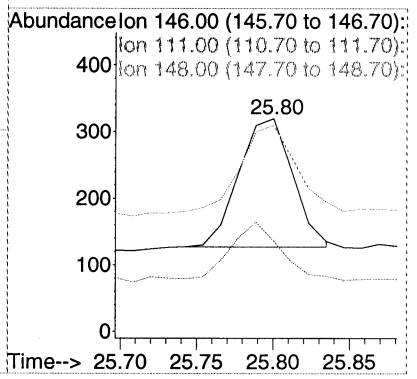


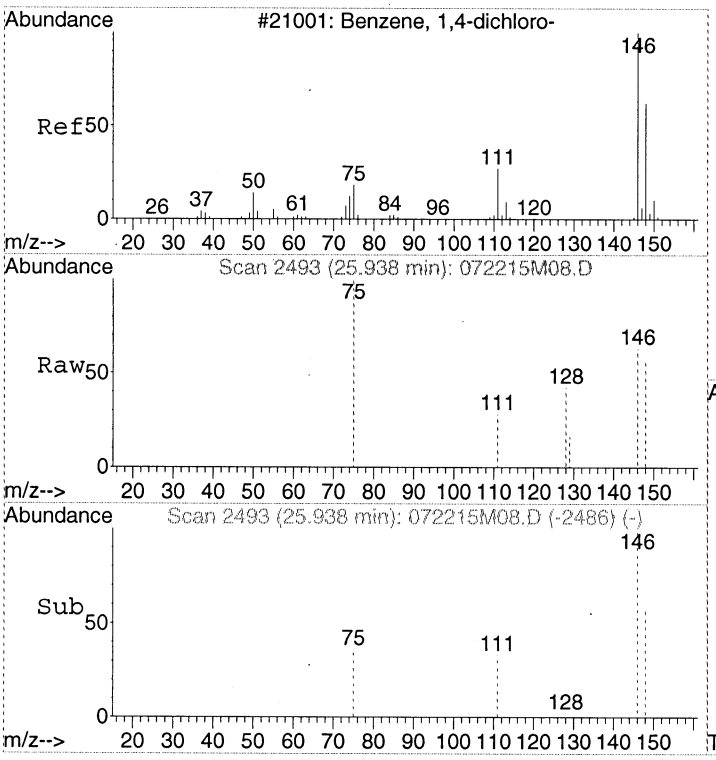


#33
1,3-Dichlorobenzene
Concen: Below Cal
RT: 25.80 min Scan# 2481
Delta R.T. 0.00 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion:146 Resp: 470

Ion	Ratio	Lower	Upper
146	100		
111	40.2	17.9	57.9
148	78.9	43.9	83.9

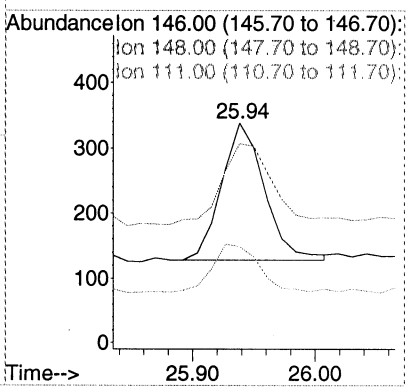


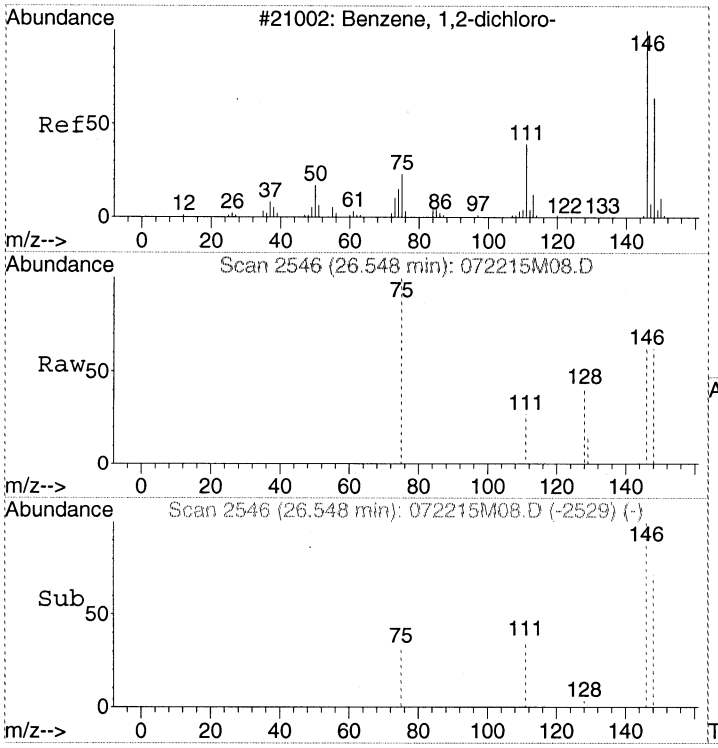


#34
1,4-Dichlorobenzene
Concen: Below Cal
RT: 25.94 min Scan# 2493
Delta R.T. -0.01 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion:146 Resp: 513

Ion	Ratio	Lower	Upper
146	100		
148	69.4	44.0	84.0
111	38.0	16.6	56.6

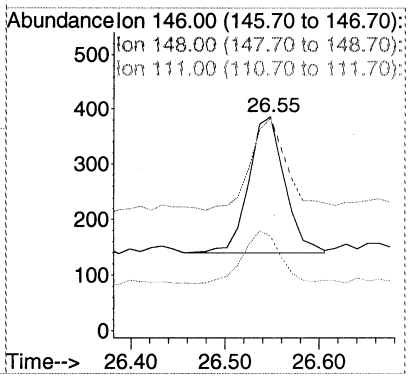


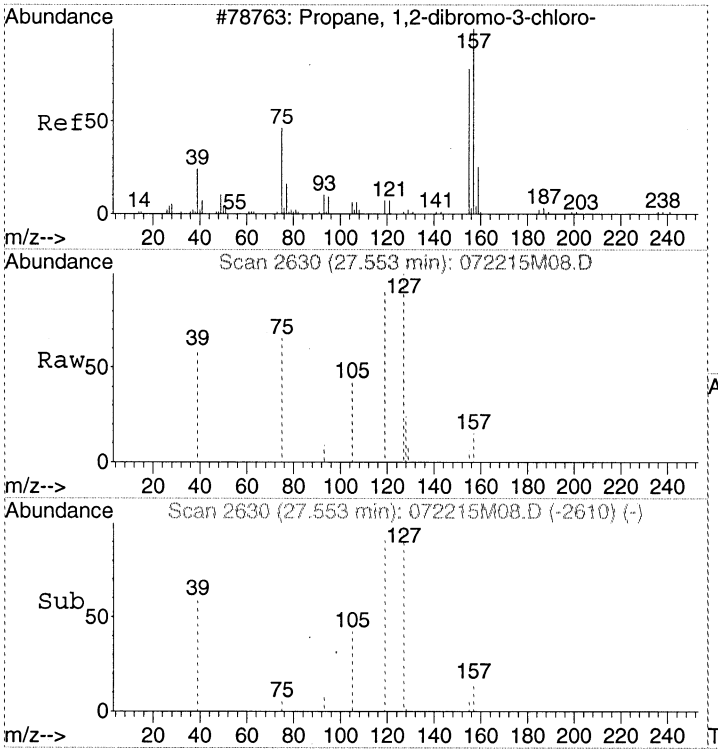


#35
1,2-Dichlorobenzene
Concen: Below Cal
RT: 26.55 min Scan# 2546
Delta R.T. 0.00 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion:146 Resp: 647

Ion	Ratio	Lower	Upper
146	100		
148	65.5	44.0	84.0
111	40.2	19.4	59.4

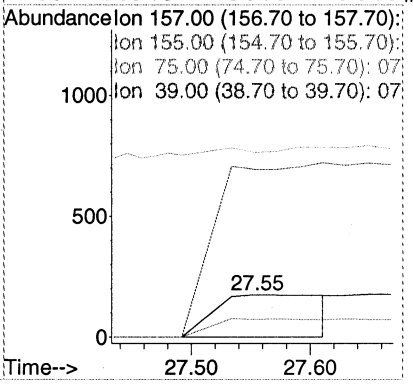


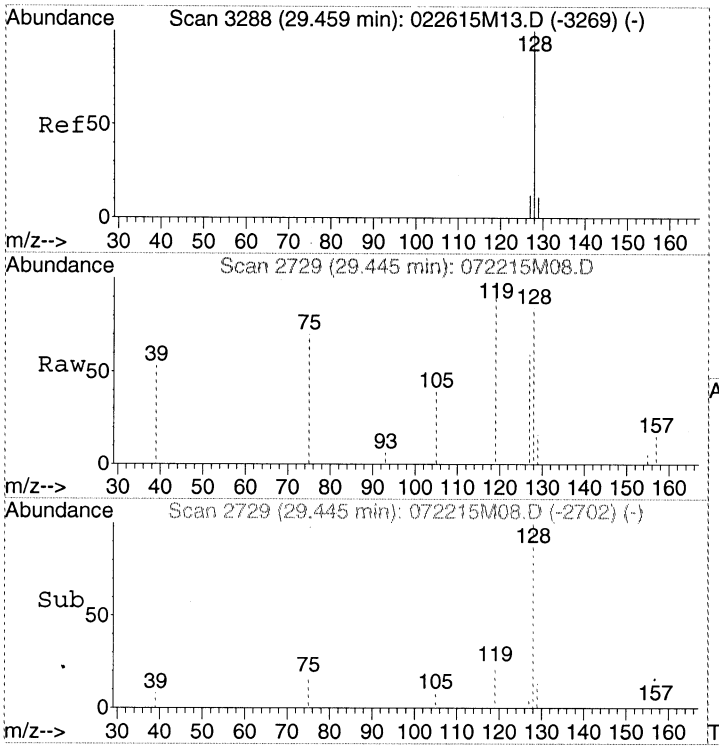


#36
1,2-Dibromo-3-chloropropane
Concen: Below Cal
RT: 27.55 min Scan# 2630
Delta R.T. -0.24 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion:157 Resp: 1227

Ion	Ratio	Lower	Upper
157	100		
155	22.3	57.5	97.5#
75	6.3	67.4	107.4#
39	209.9	58.3	98.3#

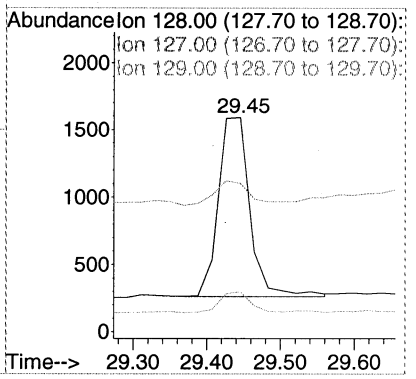




#37
Naphthalene
Concen: Below Cal
RT: 29.45 min Scan# 2729
Delta R.T. 0.01 min
Lab File: 072215M08.D
Acq: 22 Jul 2015 5:13 pm

Tgt Ion:128 Resp: 3938

Ion	Ratio	Lower	Upper
128	100		
127	15.3	0.0	32.3
129	11.4	0.0	30.9



Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\072215MAA\
Data File : 072215M09.D
Acq On : 22 Jul 2015 6:06 pm
InstName : AG5973M
Operator : LLH
Sample : CAN #122
Misc : 400ml RECERTIFICATION
ALS Vial : 7 Sample Multiplier: 1

clean

Quant Time: Jul 23 12:41:57 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\072115SIM+ADDLMAA.M
Quant Title : TO15SIM
QLast Update : Thu Jul 23 12:20:05 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.24	49	73290	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.31	114	221520	375.00 pptv	0.00
21) CHLOROBENZENE-d5	22.23	117	157861	341.00 pptv	-0.02

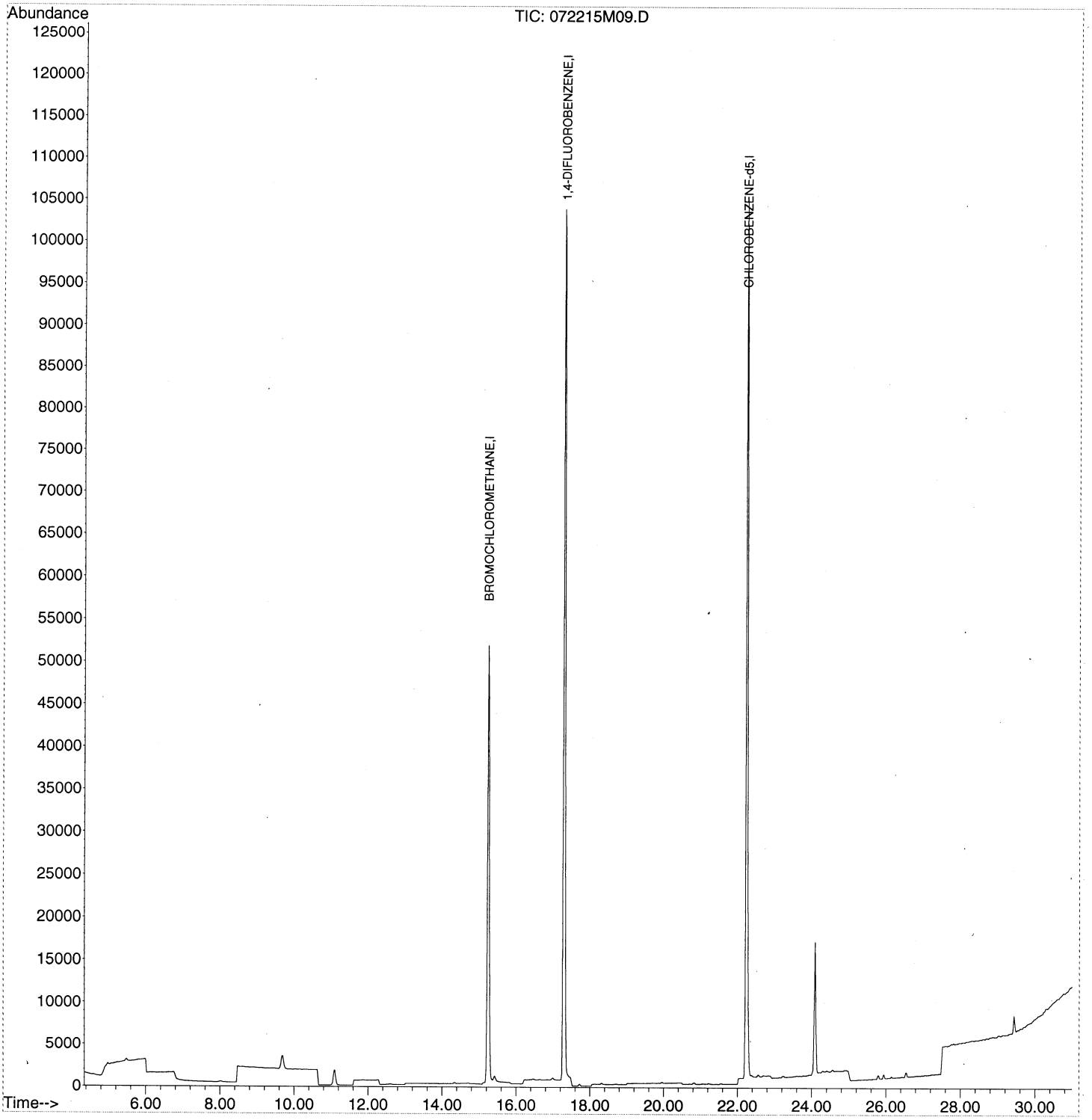
Target Compounds					Qvalue
2) Vinyl chloride	5.07	62	67	N.D.	
3) 1,3-Butadiene	5.18	54	10	N.D.	
4) Bromoethene	0.00	106	0	N.D.	
5) 1,1,2-Trichloro-1,2,2-trif	8.92	151	15	N.D.	
6) 1,1-Dichloroethene	8.95	61	28	N.D.	
7) Dichloromethane	11.09	49	3510	N.D.	
8) tert-Butyl methyl ether (M	11.85	73	26	N.D.	
9) trans-1,2-Dichloroethene	11.86	61	13	N.D.	
10) Hexane	12.53	57	85	N.D.	
11) 1,1-Dichloroethane	13.24	63	3	N.D.	
12) cis-1,2-Dichloroethene	14.72	96	55	N.D.	
13) Chloroform	15.40	83	73	N.D.	
14) 1,1,1-Trichloroethane	15.71	97	35	N.D.	
15) Carbon tetrachloride	15.88	117	255	N.D.	
17) Benzene	16.46	78	321	N.D.	
18) 1,2-Dichloroethane	16.65	62	90	N.D.	
19) Trichloroethene	17.72	130	190	N.D.	
20) 1,2-Dichloropropane	18.07	63	121	N.D.	
22) Toluene	19.95	91	175	N.D.	
23) 1,1,2-Trichloroethane	20.70	97	50	N.D.	
24) Tetrachloroethene	20.81	166	61	N.D.	
25) 1,2-Dibromoethane (EDB)	21.55	107	87	N.D.	
26) Chlorobenzene	22.28	112	109	N.D.	
27) Ethylbenzene	22.37	91	251	N.D.	
28) m&p-Xylene	22.56	91	483	N.D.	
29) o-Xylene	23.21	91	245	N.D.	
30) Styrene	23.24	104	184	N.D.	
31) 1,1,2,2-Tetrachloroethane	24.28	83	354	N.D.	
32) 1,2,3-Trichloropropane	24.41	75	179	N.D.	
33) 1,3-Dichlorobenzene	25.79	146	467	N.D.	
34) 1,4-Dichlorobenzene	25.94	146	472	N.D.	
35) 1,2-Dichlorobenzene	26.55	146	560	N.D.	
36) 1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.	
37) Naphthalene	29.43	128	3794	N.D.	

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

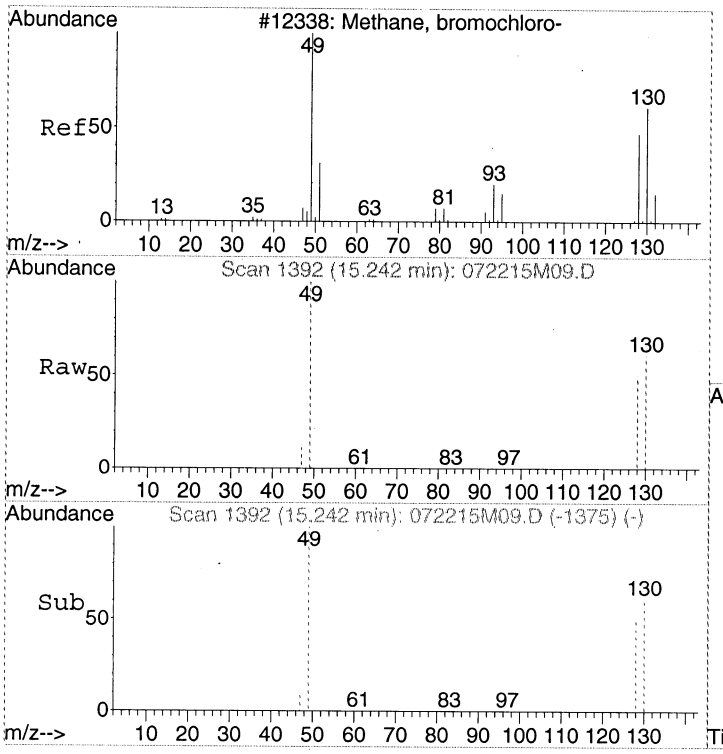
Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\072215MAA\
Data File : 072215M09.D
Acq On : 22 Jul 2015 6:06 pm
InstName : AG5973M
Operator : LLH
Sample : CAN #122
Misc : 400ml RECERTIFICATION
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 23 12:41:57 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\072115SIM+ADDLMAA.M
Quant Title : TO15SIM
QLast Update : Thu Jul 23 12:20:05 2015
Response via : Initial Calibration



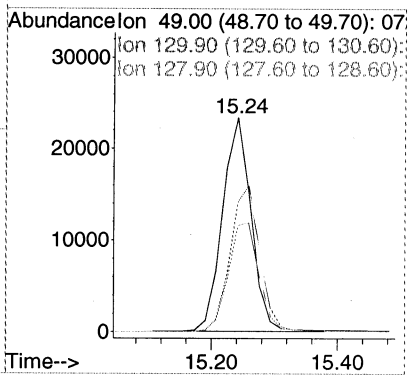
00309

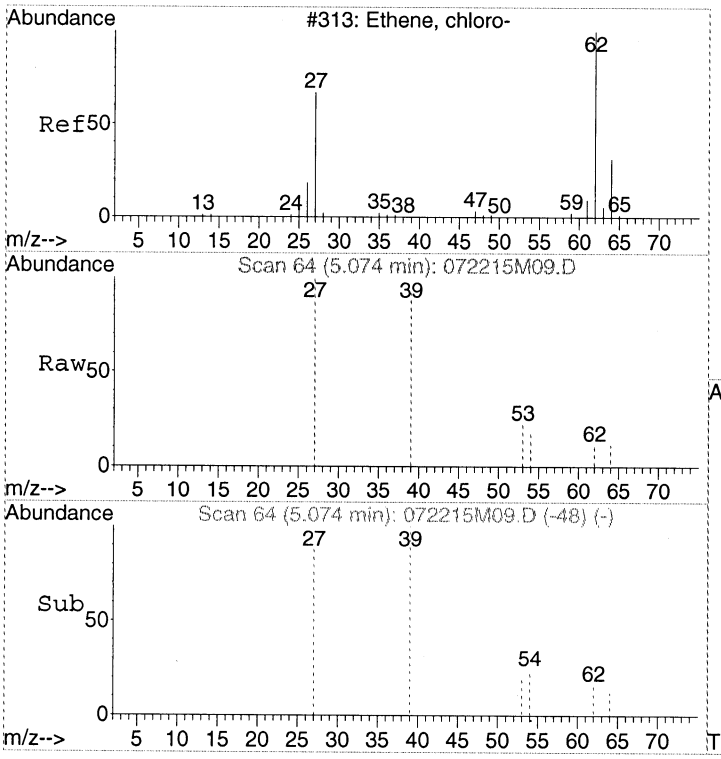


#1
BROMOCHLOROMETHANE
Concen: 341.00 pptv
RT: 15.24 min Scan# 1392
Delta R.T. 0.00 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 49 Resp: 73290

Ion	Ratio	Lower	Upper
49	100		
130	70.2	55.8	95.8
128	54.3	38.6	78.6

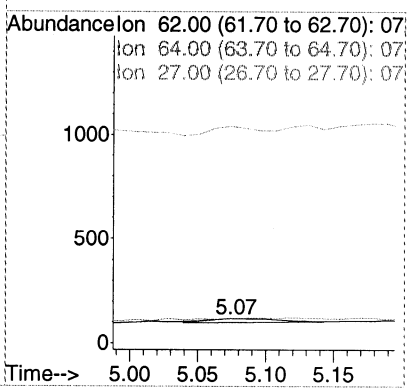


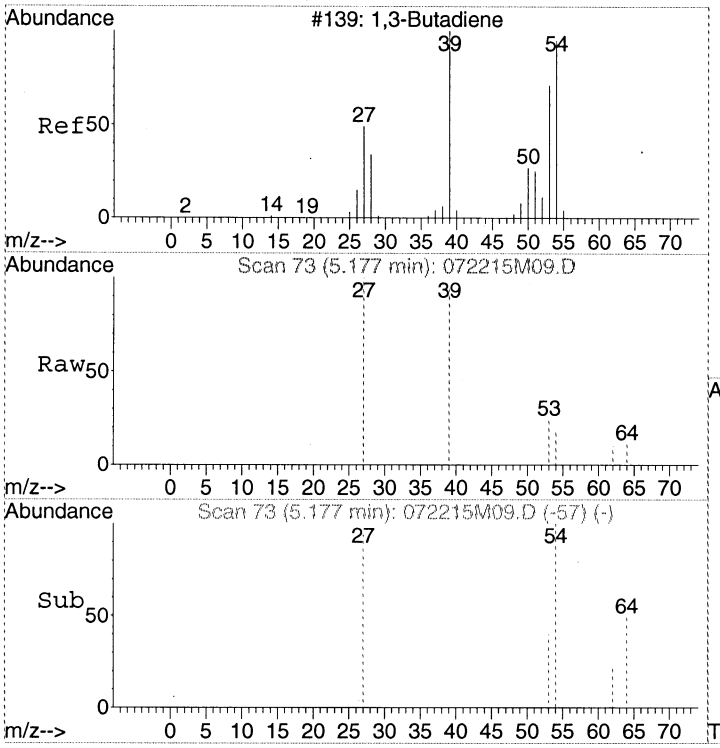


#2
Vinyl chloride
Concen: Below Cal
RT: 5.07 min Scan# 64
Delta R.T. -0.01 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 62 Resp: 67

Ion	Ratio	Lower	Upper
62	100		
64	0.0	11.7	51.7#
27	171.6	47.6	87.6#

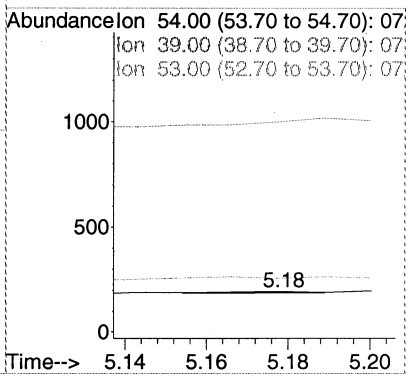


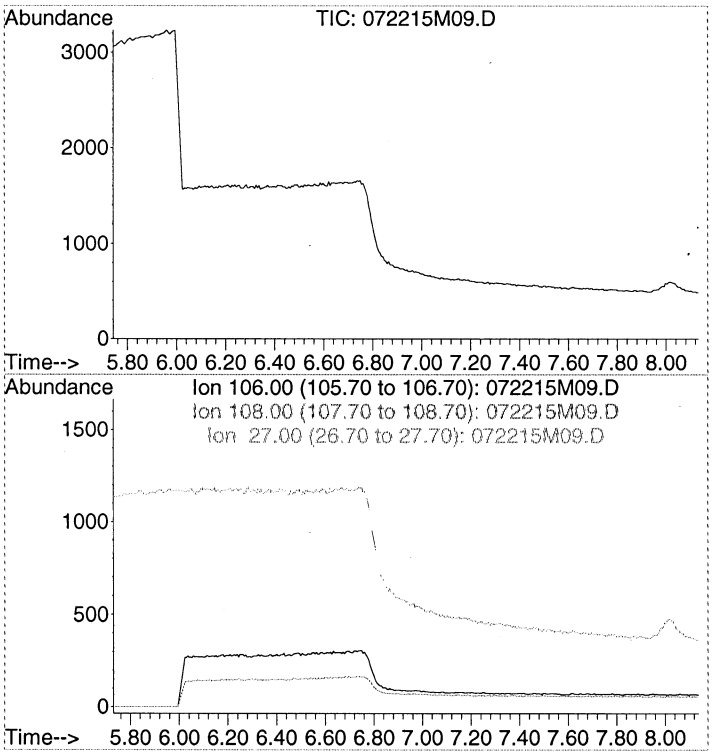


#3
1,3-Butadiene
Concen: Below Cal
RT: 5.18 min Scan# 73
Delta R.T. -0.01 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 54 Resp: 10

Ion	Ratio	Lower	Upper
54	100		
39	810.0	83.1	123.1#
53	0.0	46.9	86.9#



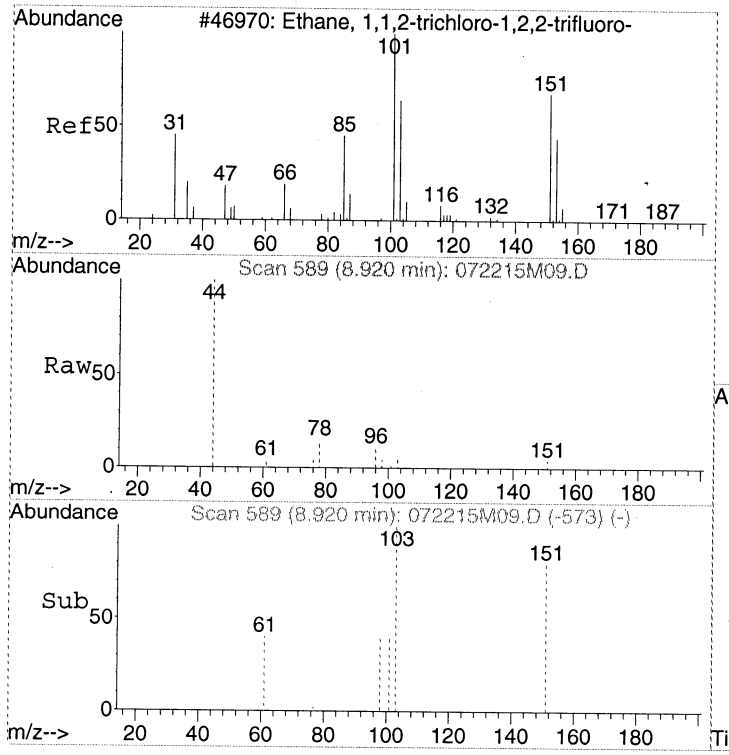


#4
Bromoethene
Concen: N.D.
Expected RT: 6.93 min

Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 106

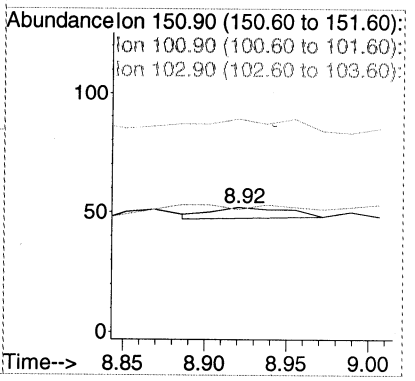
Sig	Exp Ratio
106	100
108	95.1
27	108.7

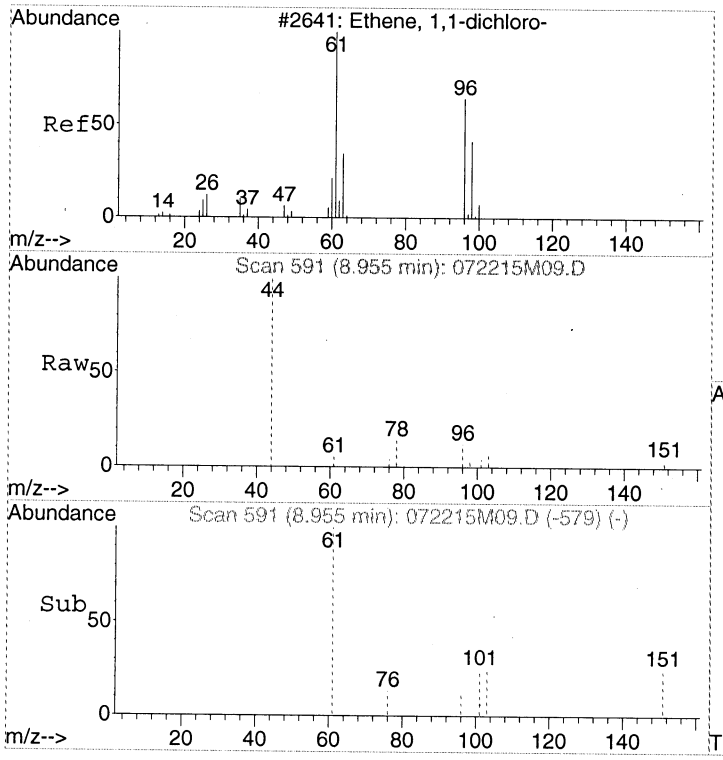


#5
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: Below Cal
RT: 8.92 min Scan# 589
Delta R.T. 0.02 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion:151 Resp: 15

Ion	Ratio	Lower	Upper
151	100		
101	20.0	91.3	131.3#
103	180.0	51.4	91.4#

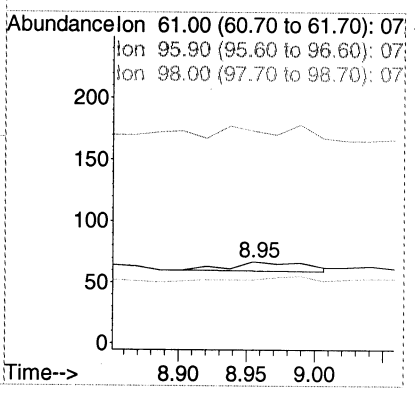


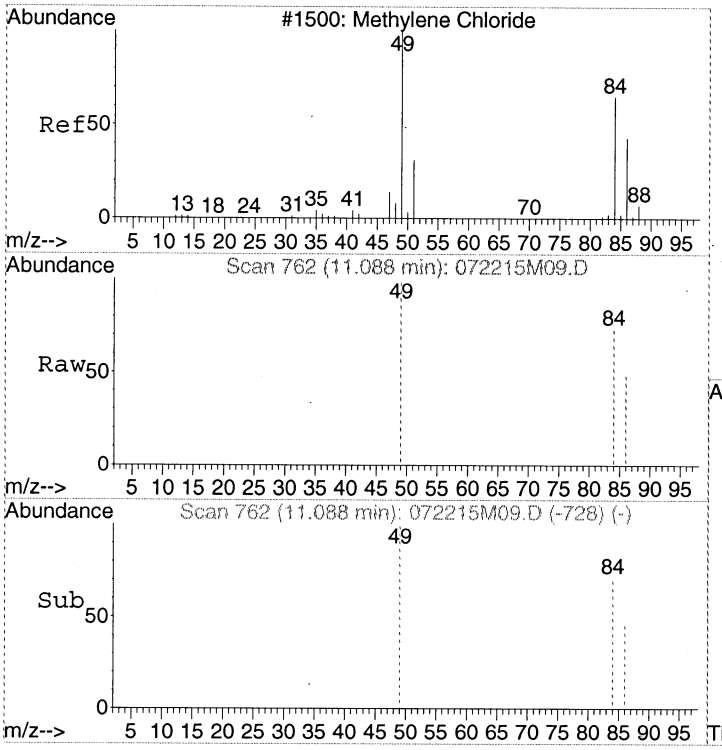


#6
1,1-Dichloroethene
Concen: Below Cal
RT: 8.95 min Scan# 591
Delta R.T. 0.00 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 61 Resp: 28

Ion	Ratio	Lower	Upper
61	100		
96	103.6	41.6	81.6#
98	0.0	19.1	59.1#

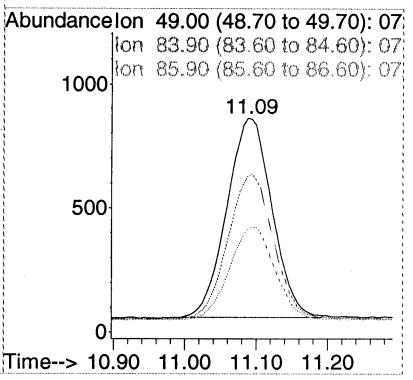


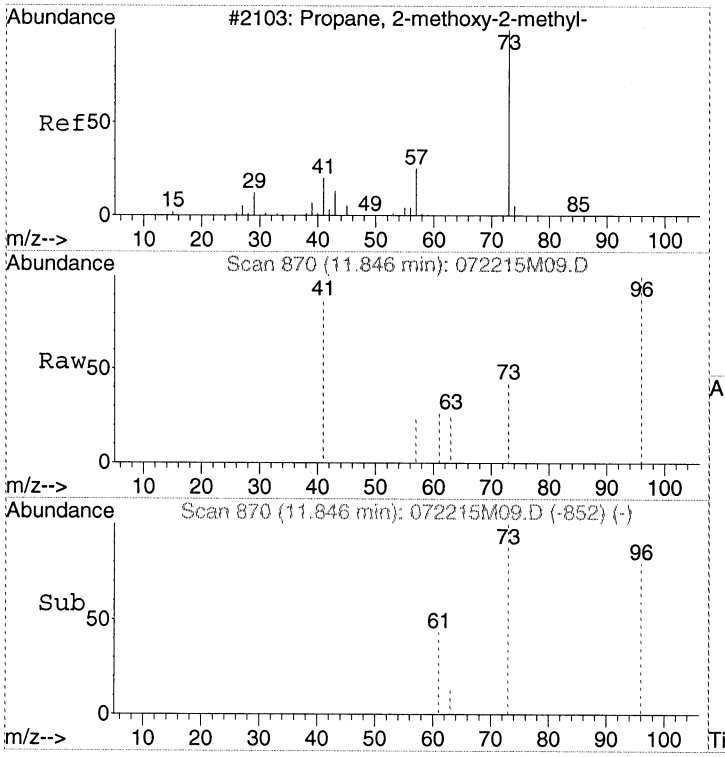


#7
Dichloromethane
Concen: Below Cal
RT: 11.09 min Scan# 762
Delta R.T. 0.00 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 49 Resp: 3510

Ion	Ratio	Lower	Upper
49	100		
84	72.5	56.8	96.8
86	46.2	29.2	69.2

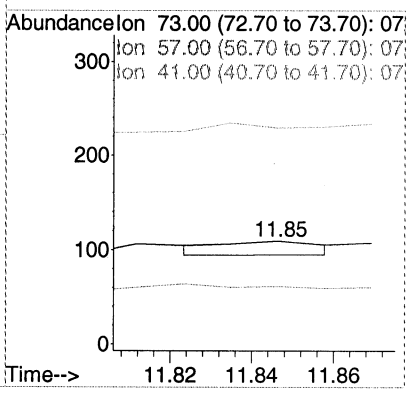


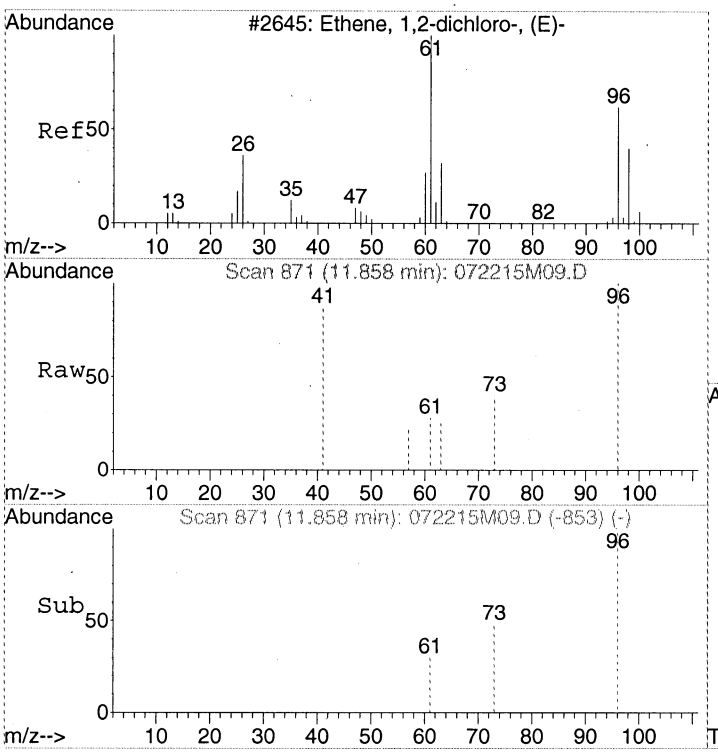


#8
tert-Butyl methyl ether (MTBE)
Concen: Below Cal
RT: 11.85 min Scan# 870
Delta R.T. 0.01 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 73 Resp: 26

Ion	Ratio	Lower	Upper
73	100		
57	0.0	1.7	41.7#
41	0.0	2.1	42.1#

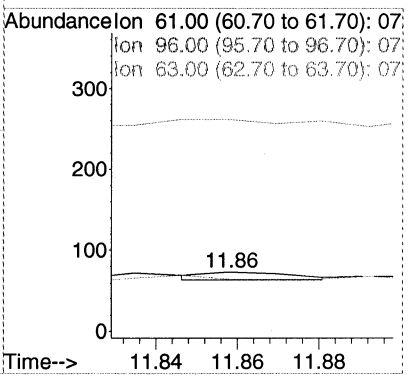


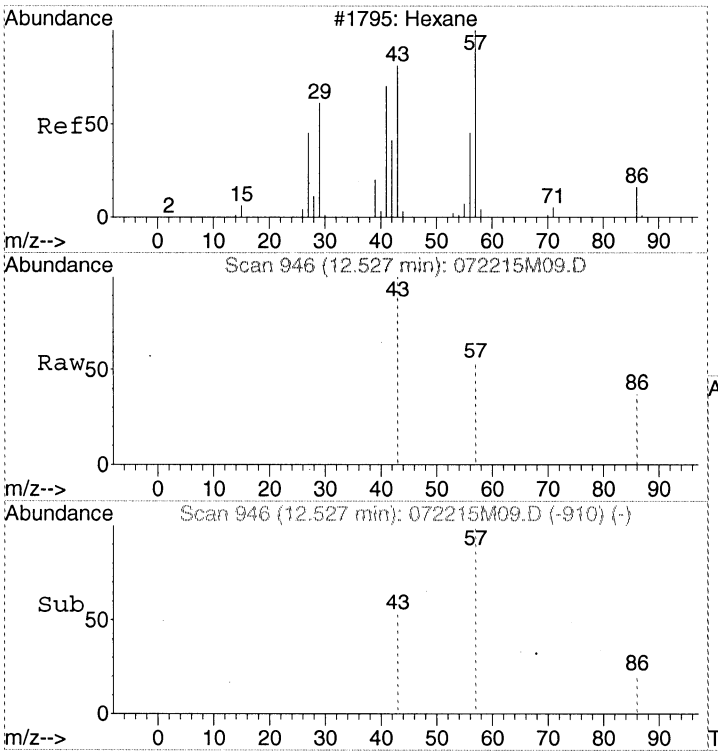


#9
trans-1,2-Dichloroethene
Concen: Below Cal
RT: 11.86 min Scan# 871
Delta R.T. 0.01 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 61 Resp: 13

Ion	Ratio	Lower	Upper
61	100		
96	630.8	51.3	91.3#
63	23.1	12.1	52.1

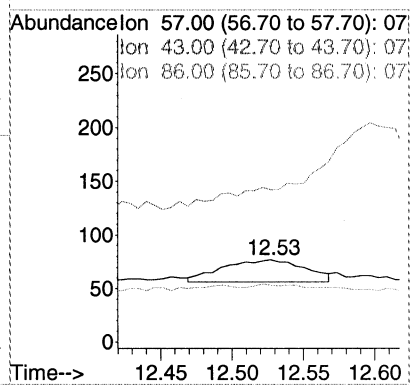


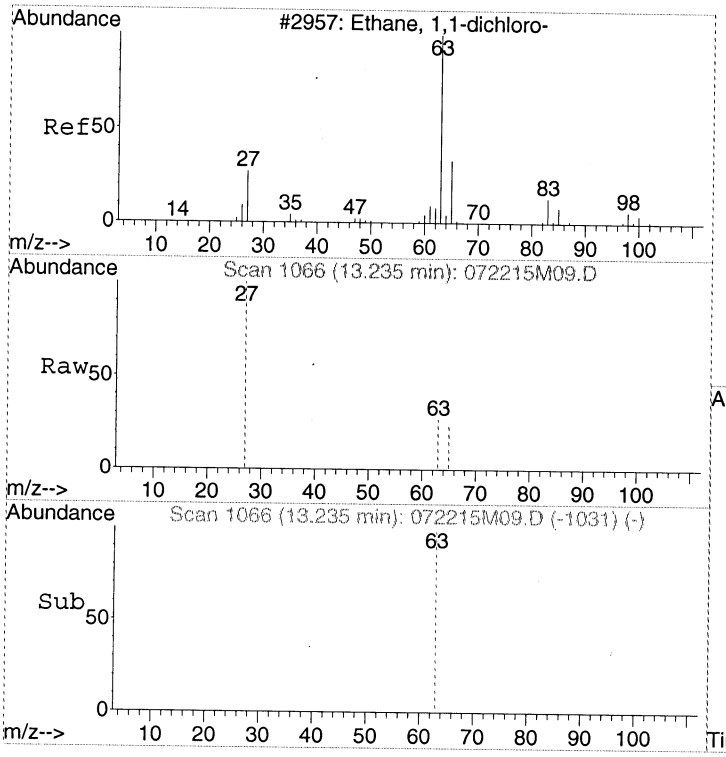


#10
Hexane
Concen: Below Cal
RT: 12.53 min Scan# 946
Delta R.T. 0.01 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 57 Resp: 85

Ion	Ratio	Lower	Upper
57	100		
43	25.9	44.4	84.4#
86	2.4	0.0	37.6

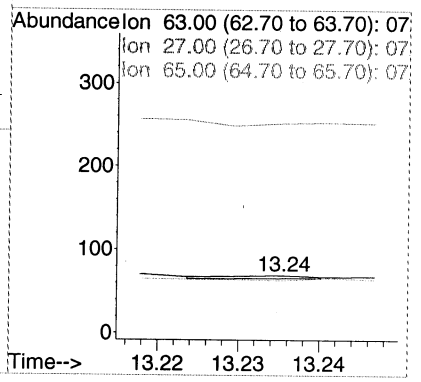


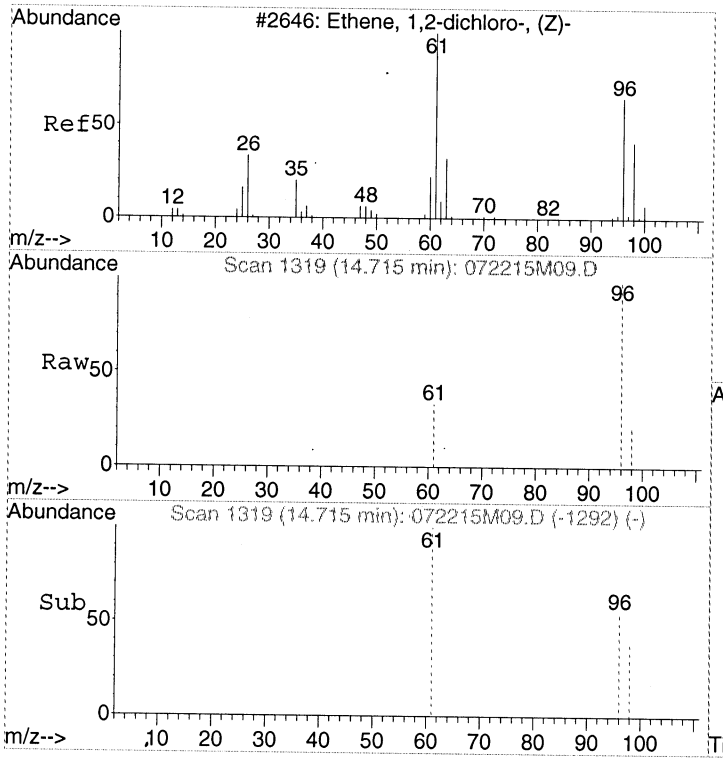


#11
1,1-Dichloroethane
Concen: Below Cal
RT: 13.24 min Scan# 1066
Delta R.T. 0.01 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 63 Resp: 3

Ion	Ratio	Lower	Upper
63	100		
27	200.0	18.7	58.7#
65	0.0	11.7	51.7#

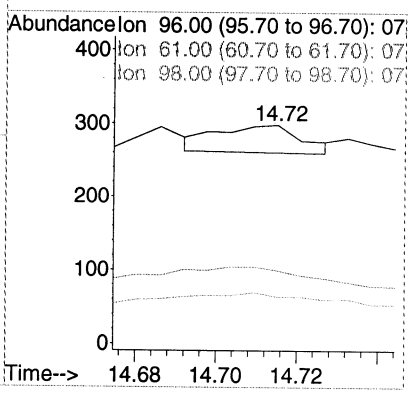


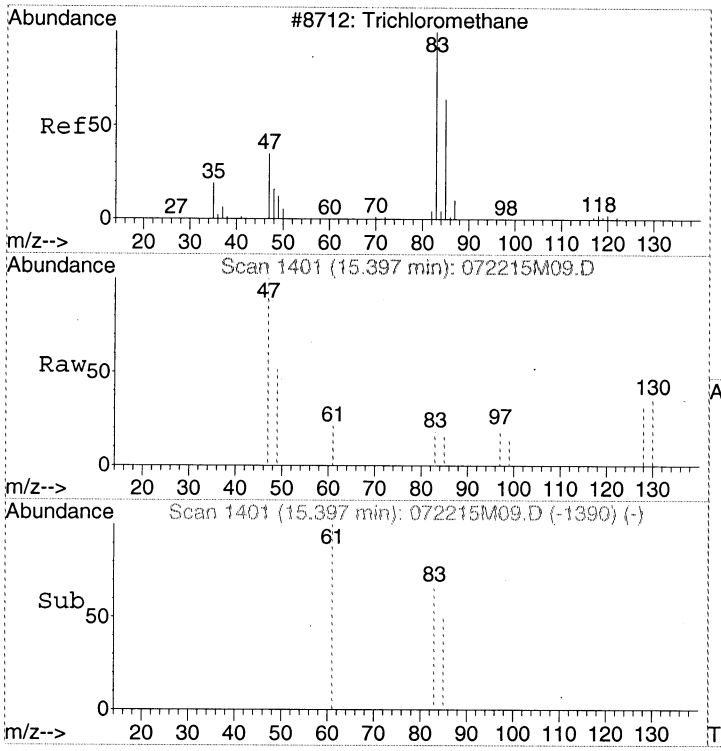


#12
cis-1,2-Dichloroethene
Concen: Below Cal
RT: 14.72 min Scan# 1319
Delta R.T. 0.01 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 96 Resp: 55

Ion	Ratio	Lower	Upper
96	100		
61	183.6	109.2	149.2#
98	87.3	44.3	84.3#

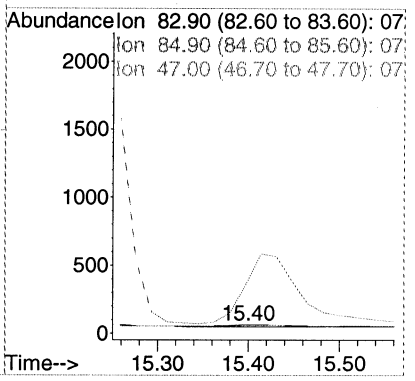


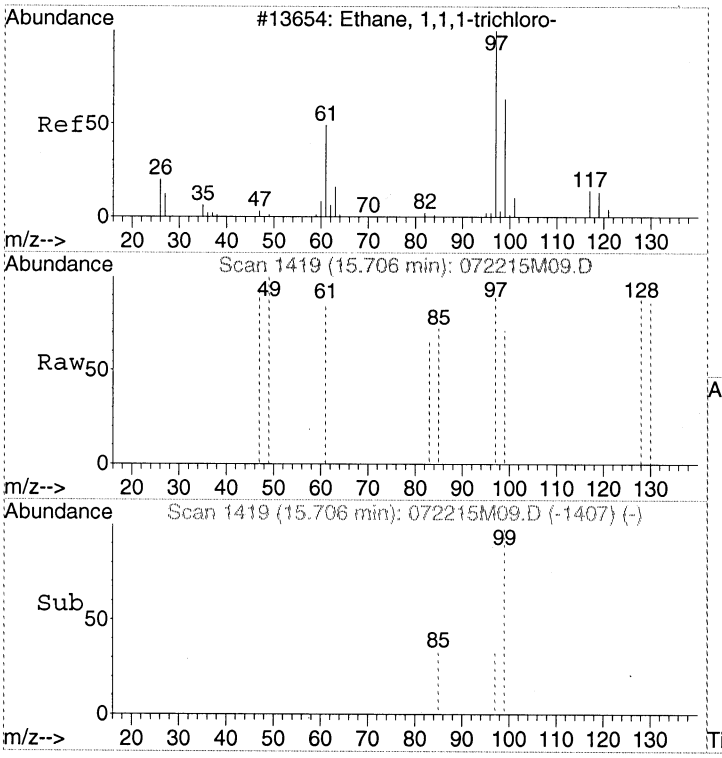


#13
Chloroform
Concen: Below Cal
RT: 15.40 min Scan# 1401
Delta R.T. -0.02 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 83 Resp: 73

Ion	Ratio	Lower	Upper
83	100		
85	35.6	44.7	84.7#
47	2967.1	5.4	45.4#

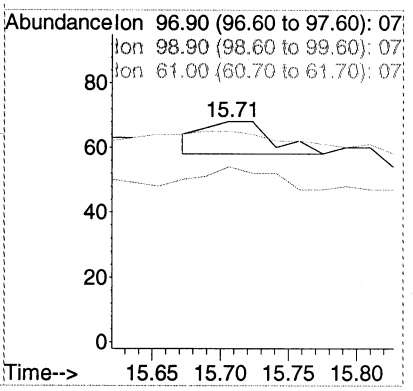


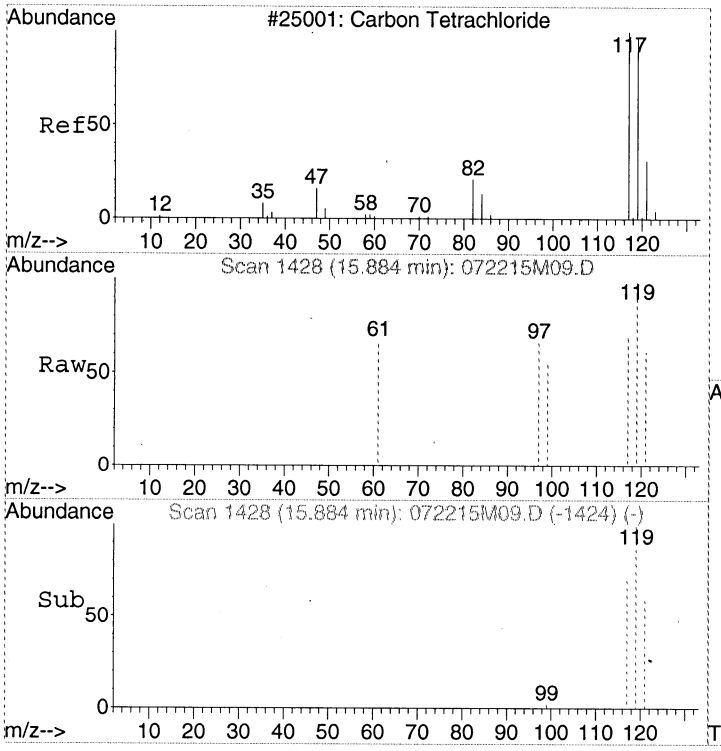


#14
1,1,1-Trichloroethane
Concen: Below Cal
RT: 15.71 min Scan# 1419
Delta R.T. 0.00 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 97 Resp: 35

Ion	Ratio	Lower	Upper
97	100		
99	71.4	44.6	84.6
61	88.6	18.6	58.6#

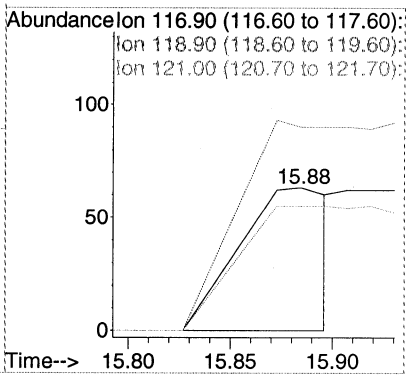


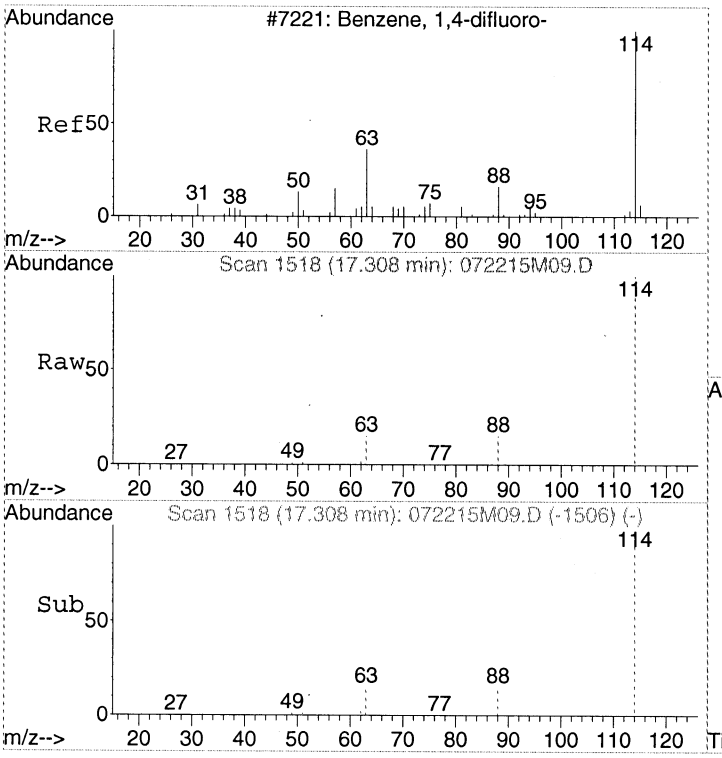


#15
Carbon tetrachloride
Concen: Below Cal
RT: 15.88 min Scan# 1428
Delta R.T. -0.10 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion:117 Resp: 255

Ion	Ratio	Lower	Upper
117	100		
119	123.5	75.8	115.8#
121	103.5	10.6	50.6#

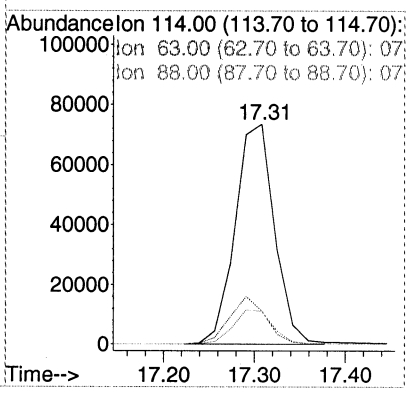


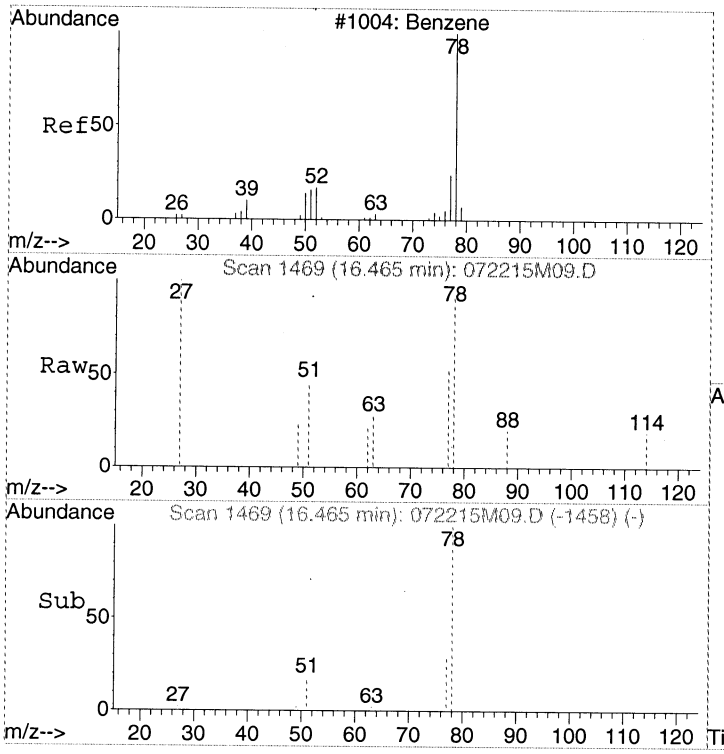


#16
1,4-DIFLUOROBENZENE
Concen: 375.00 pptv
RT: 17.31 min Scan# 1518
Delta R.T. 0.00 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion:114 Resp: 221520

Ion	Ratio	Lower	Upper
114	100		
63	20.1	0.0	38.9
88	15.8	0.0	35.4

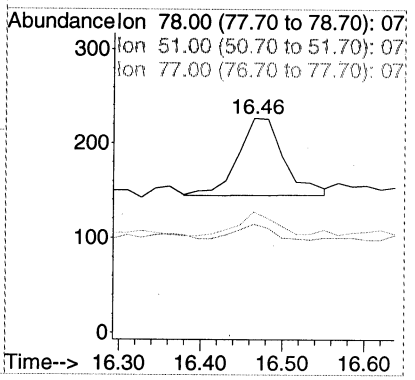


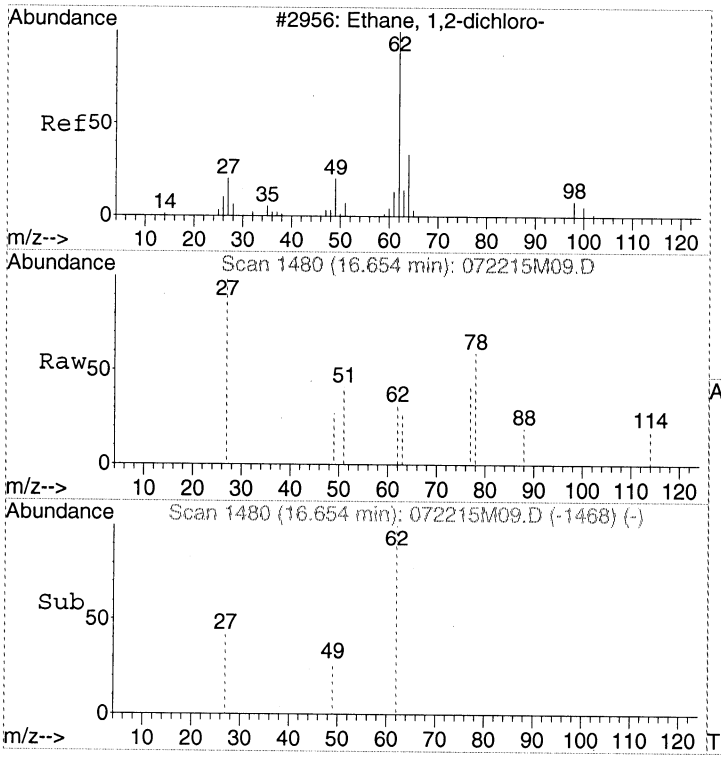


#17
Benzene
Concen: Below Cal
RT: 16.46 min Scan# 1469
Delta R.T. -0.02 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 78 Resp: 321

Ion	Ratio	Lower	Upper
78	100		
51	14.6	0.0	37.6
77	23.7	3.4	43.4

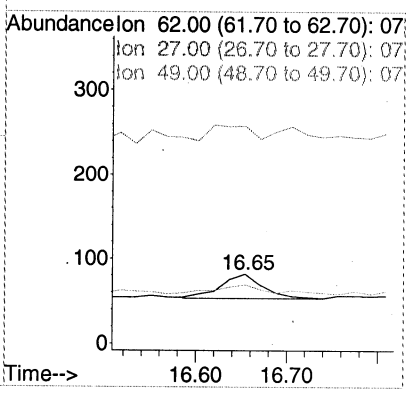


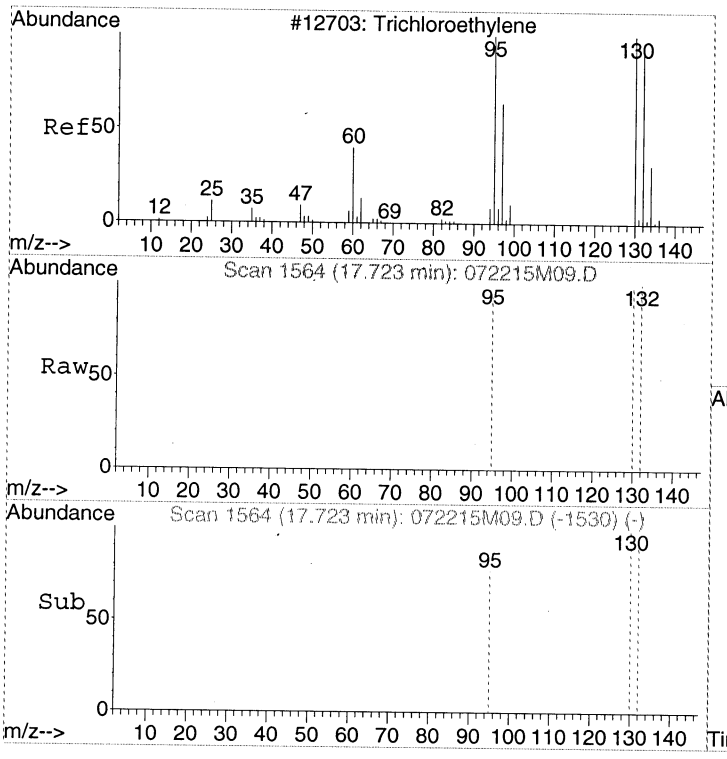


#18
1,2-Dichloroethane
Concen: Below Cal
RT: 16.65 min Scan# 1480
Delta R.T. 0.00 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 62 Resp: 90

Ion	Ratio	Lower	Upper
62	100		
27	0.0	26.2	66.2#
49	38.9	7.3	47.3

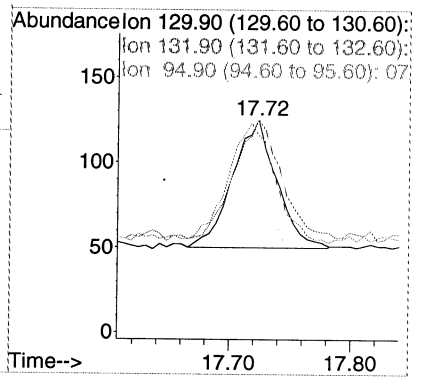


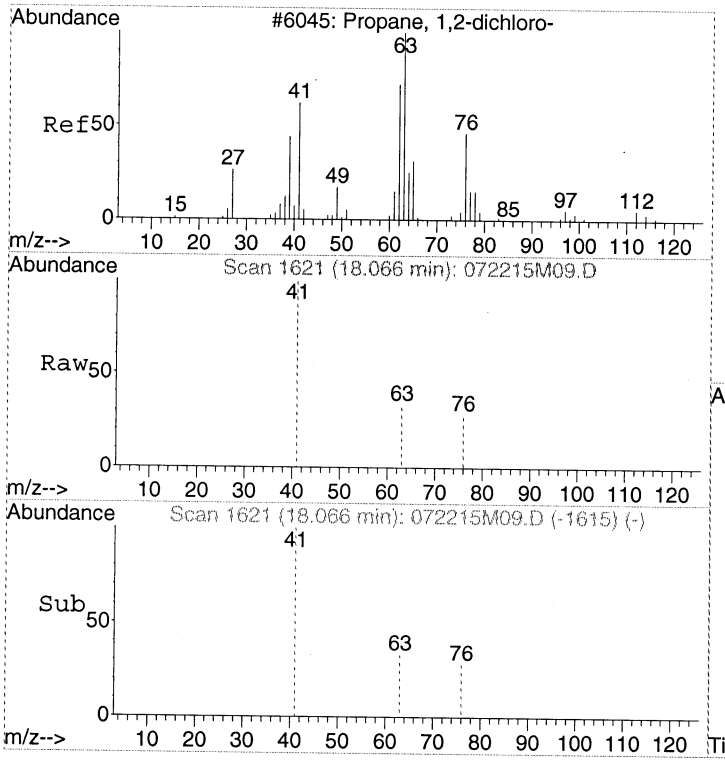


#19
Trichloroethene
Concen: Below Cal
RT: 17.72 min Scan# 1564
Delta R.T. 0.00 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion:130 Resp: 190

Ion	Ratio	Lower	Upper
130	100		
132	100.0	76.7	116.7
95	100.5	74.7	114.7

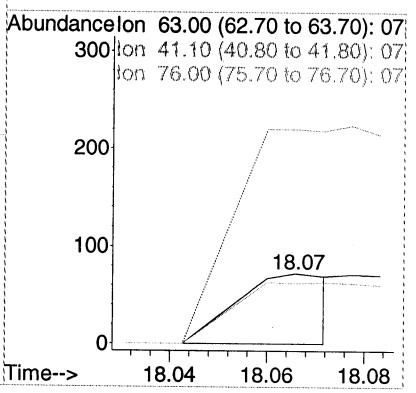


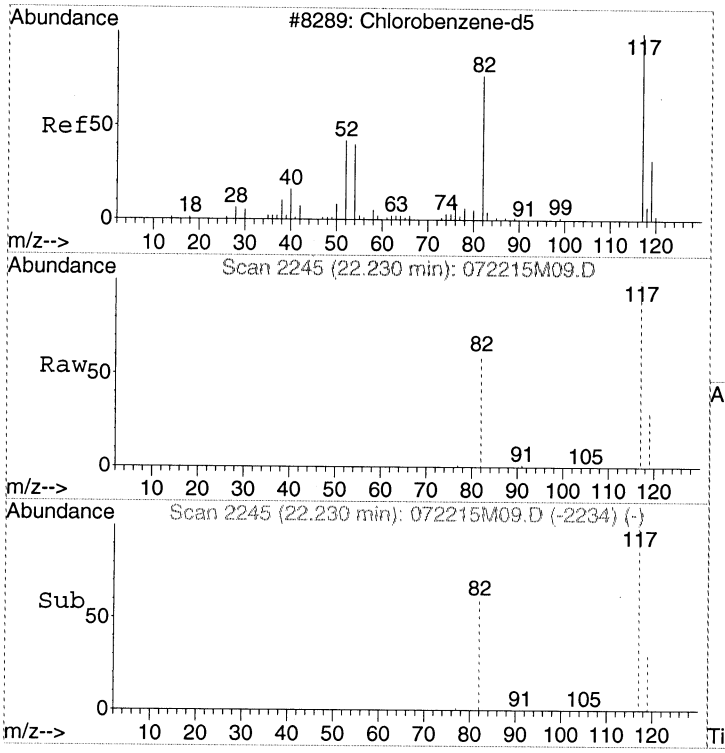


#20
1,2-Dichloropropane
Concen: Below Cal
RT: 18.07 min Scan# 1621
Delta R.T. -0.15 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 63 Resp: 121

Ion	Ratio	Lower	Upper
63	100		
41	315.7	38.9	78.9#
76	71.9	23.7	63.7#

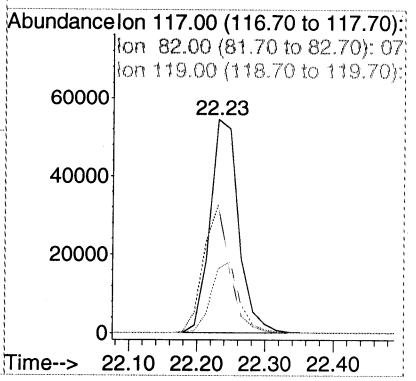


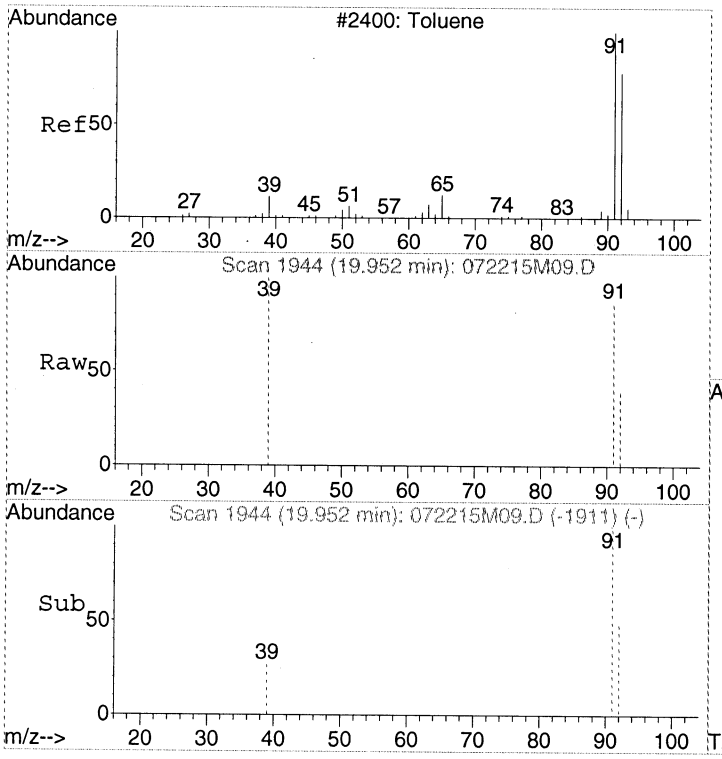


#21
CHLOROBENZENE-d5
Concen: 341.00 pptv
RT: 22.23 min Scan# 2245
Delta R.T. -0.02 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion:117 Resp: 157861

Ion	Ratio	Lower	Upper
117	100		
82	55.0	33.2	73.2
119	32.3	12.1	52.1

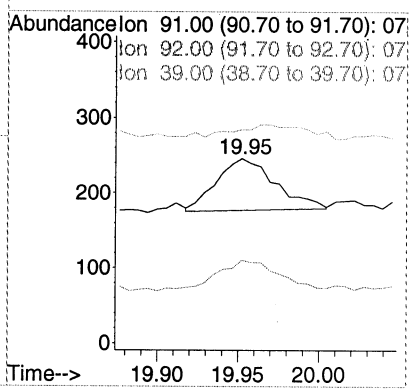


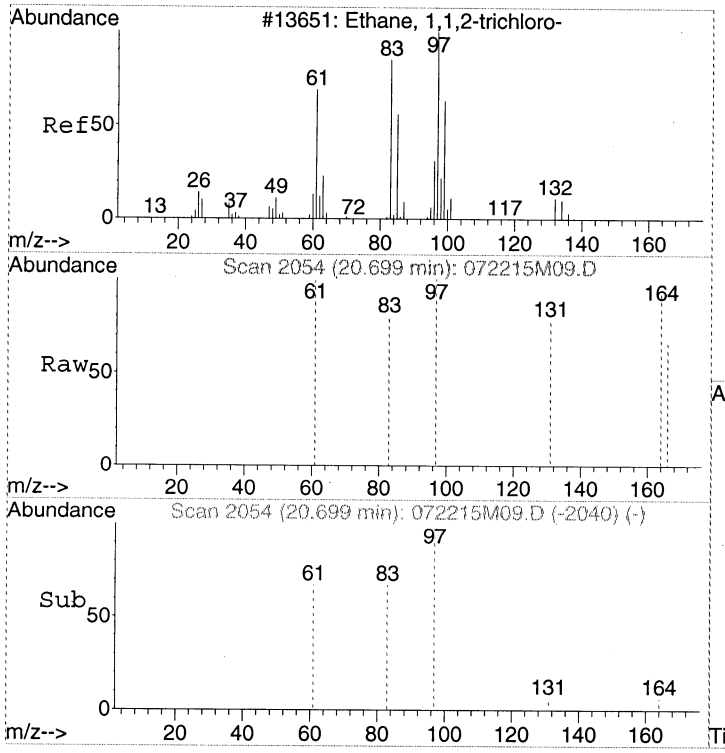


#22
Toluene
Concen: Below Cal
RT: 19.95 min Scan# 1944
Delta R.T. -0.01 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 91 Resp: 175

Ion	Ratio	Lower	Upper
91	100		
92	64.6	39.7	79.7
39	3.4	0.0	30.4

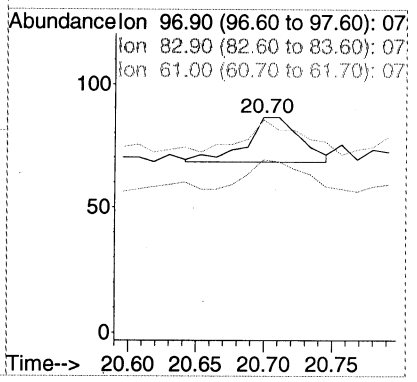


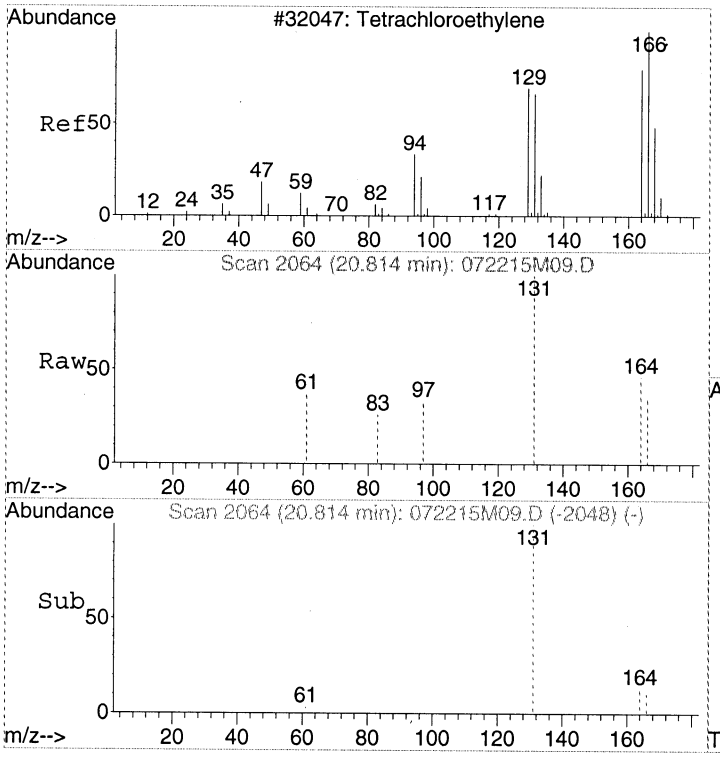


#23
1,1,2-Trichloroethane
Concen: Below Cal
RT: 20.70 min Scan# 2054
Delta R.T. -0.03 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 97 Resp: 50

Ion	Ratio	Lower	Upper
97	100		
83	88.0	63.6	103.6
61	82.0	41.3	81.3#

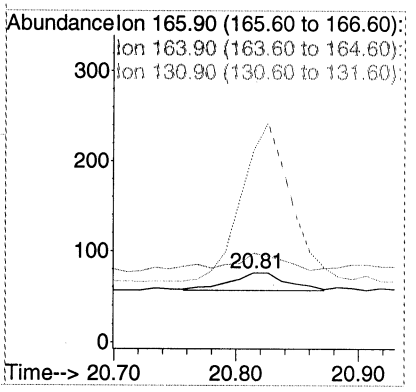


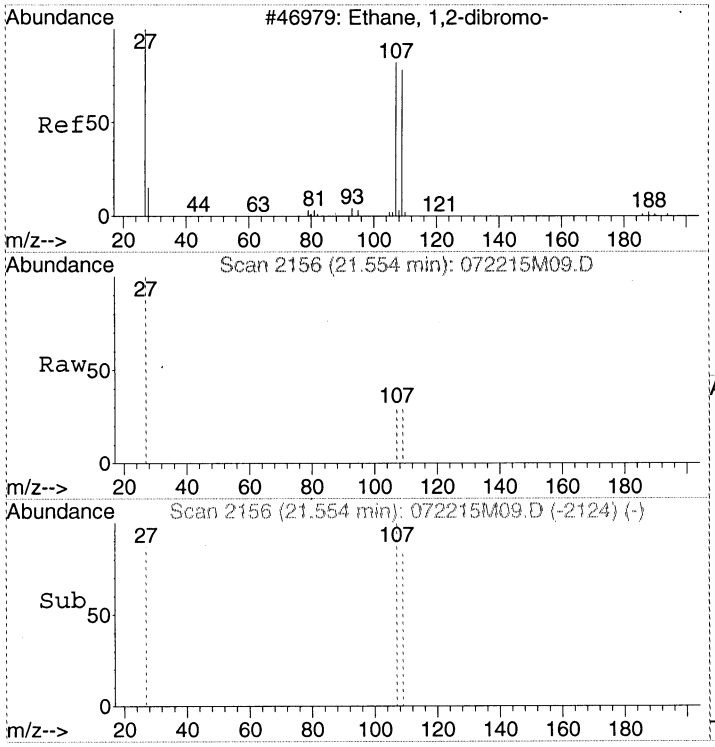


#24
Tetrachloroethene
Concen: Below Cal
RT: 20.81 min Scan# 2064
Delta R.T. -0.01 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion:166 Resp: 61

Ion	Ratio	Lower	Upper
166	100		
164	72.1	58.3	98.3
131	801.6	47.2	87.2#

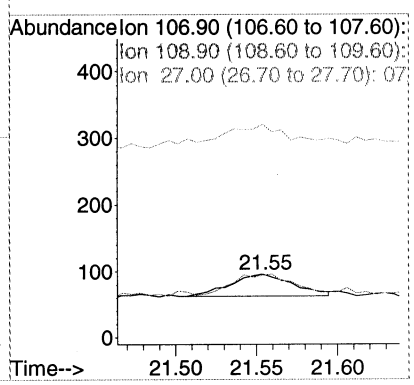


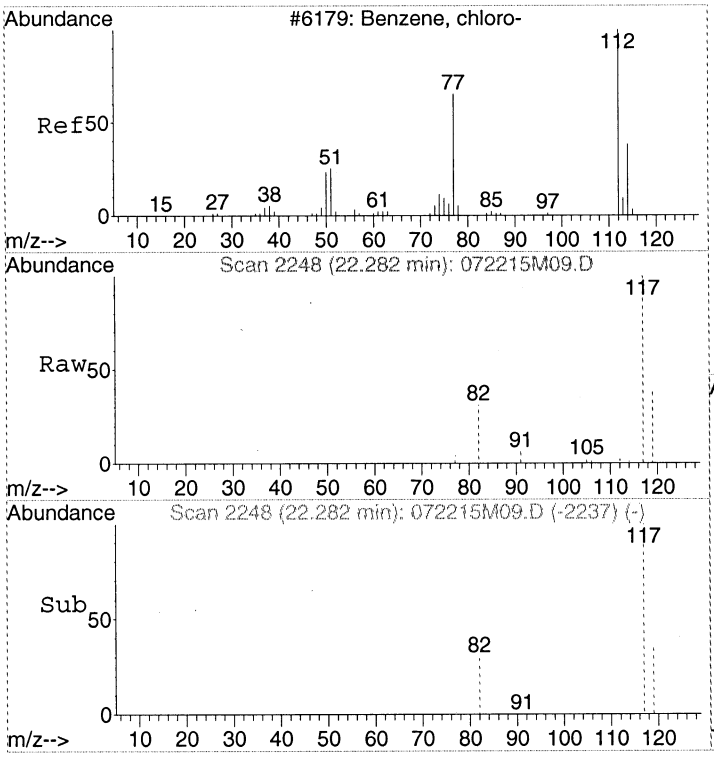


#25
1,2-Dibromoethane (EDB)
Concen: Below Cal
RT: 21.55 min Scan# 2156
Delta R.T. -0.01 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion:107 Resp: 87

Ion	Ratio	Lower	Upper
107	100		
109	47.1	74.4	114.4#
27	41.4	44.7	84.7#

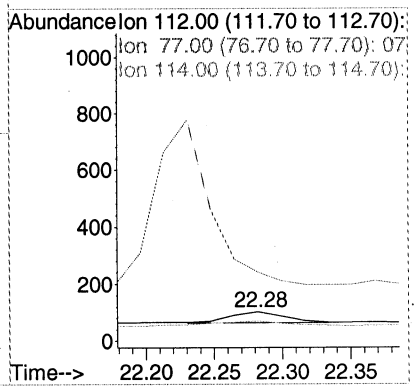


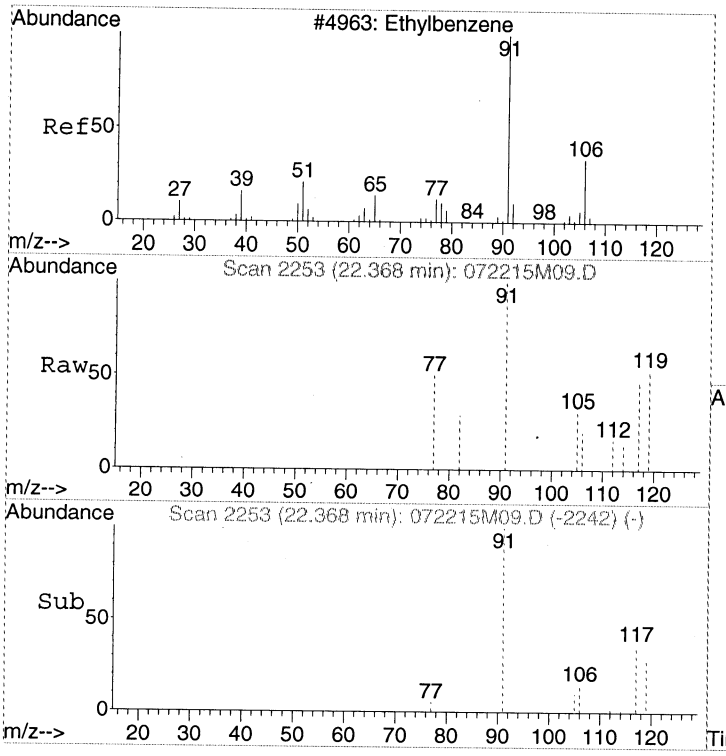


#26
Chlorobenzene
Concen: Below Cal
RT: 22.28 min Scan# 2248
Delta R.T. -0.02 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion:112 Resp: 109

Ion	Ratio	Lower	Upper
112	100		
77	0.0	38.8	78.8#
114	70.6	12.2	52.2#

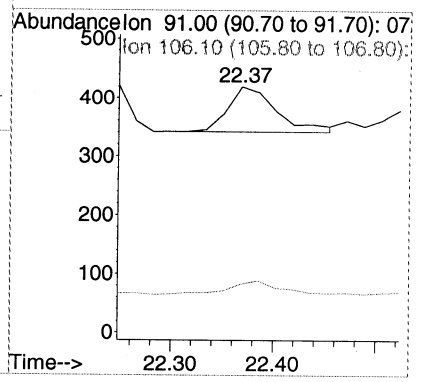


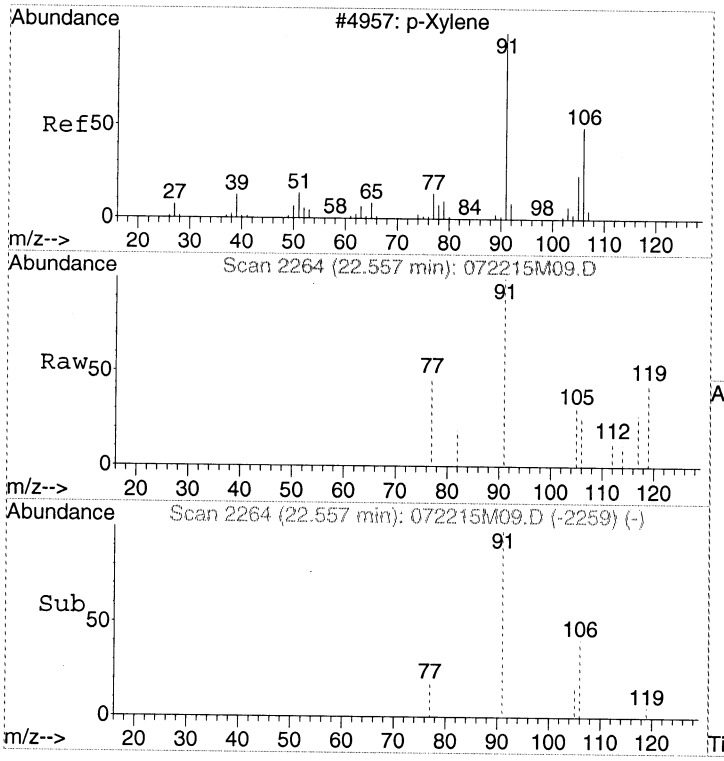


#27
Ethylbenzene
Concen: Below Cal
RT: 22.37 min Scan# 2253
Delta R.T. -0.02 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 91 Resp: 251

Ion	Ratio	Lower	Upper
91	100		
106	36.7	12.6	52.6

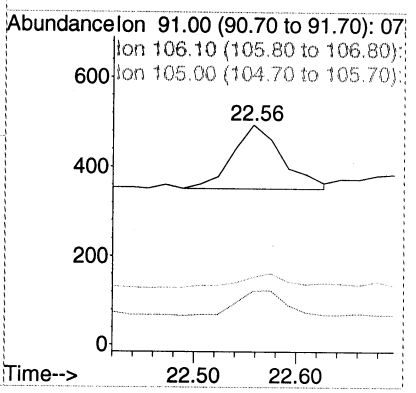


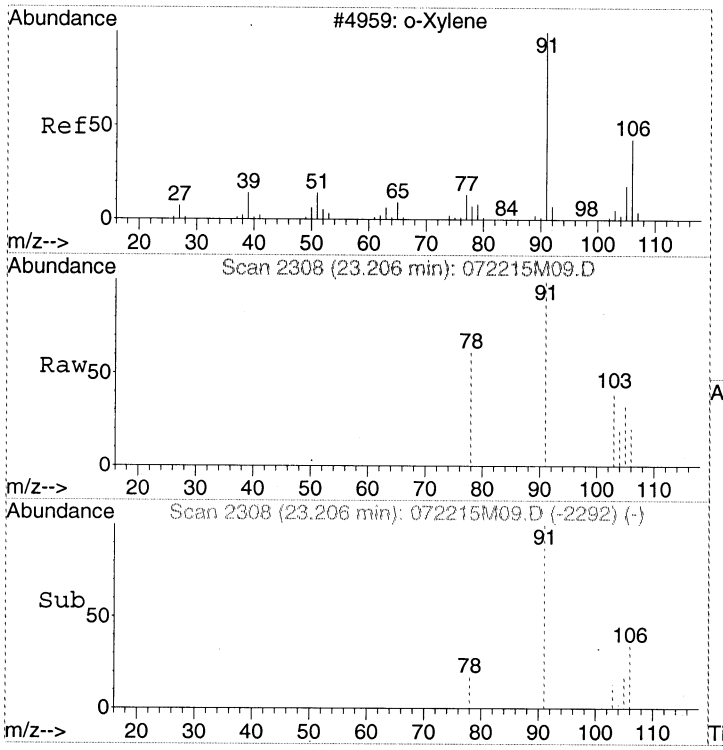


#28
m&p-Xylene
Concen: Below Cal
RT: 22.56 min Scan# 2264
Delta R.T. -0.02 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 91 Resp: 483

Ion	Ratio	Lower	Upper
91	100		
106	34.6	30.9	70.9
105	19.0	1.9	41.9

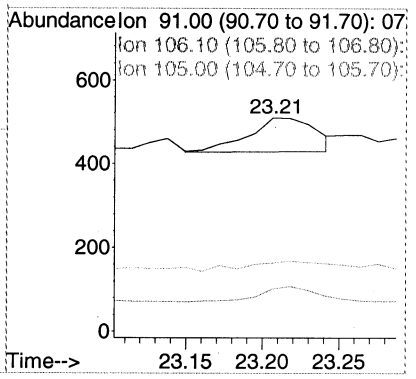


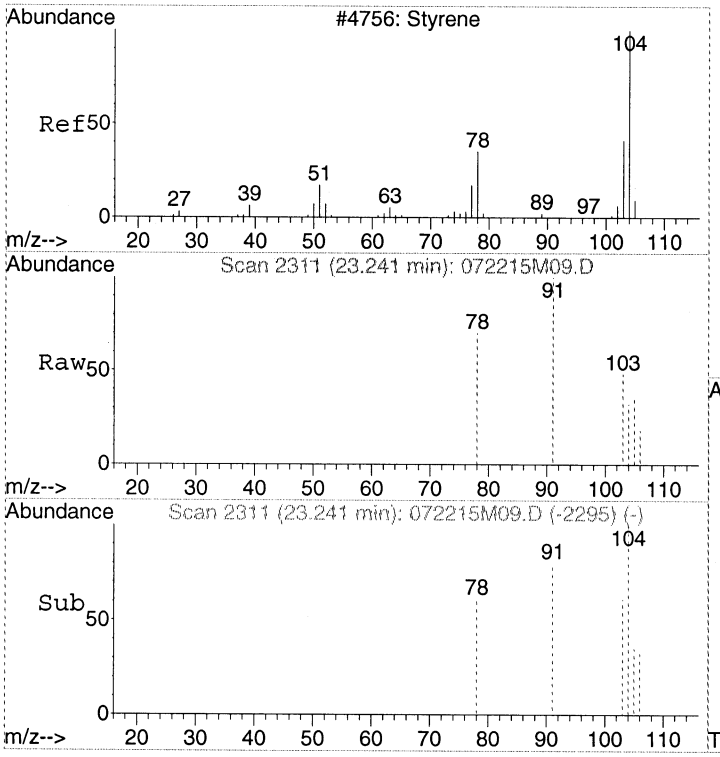


#29
o-Xylene
Concen: Below Cal
RT: 23.21 min Scan# 2308
Delta R.T. -0.01 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 91 Resp: 245

Ion	Ratio	Lower	Upper
91	100		
106	42.4	28.5	68.5
105	42.4	4.6	44.6

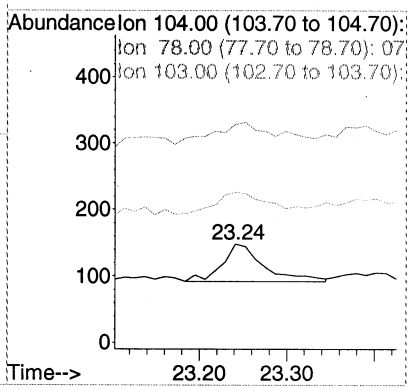


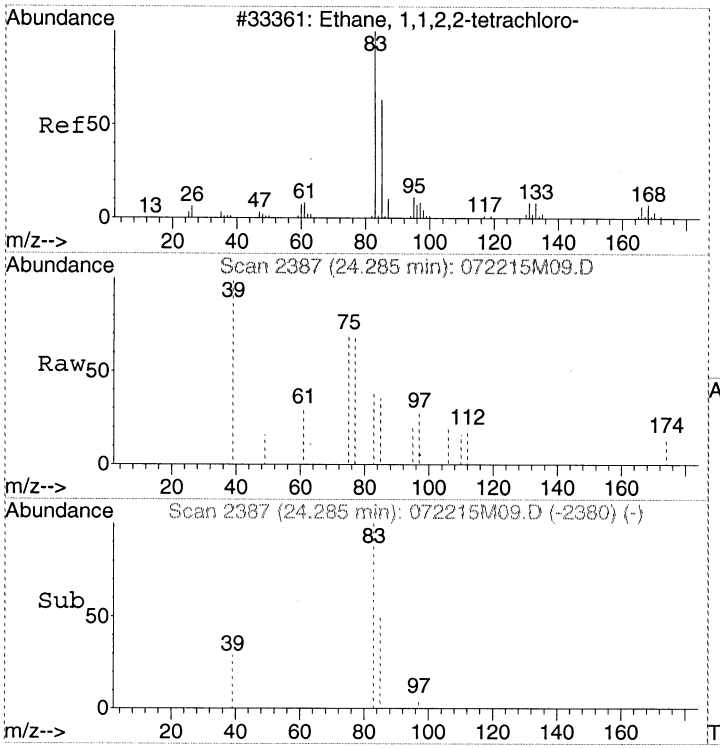


#30
Styrene
Concen: Below Cal
RT: 23.24 min Scan# 2311
Delta R.T. -0.01 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion:104 Resp: 184

Ion	Ratio	Lower	Upper
104	100		
78	70.1	31.3	71.3
103	72.8	33.6	73.6

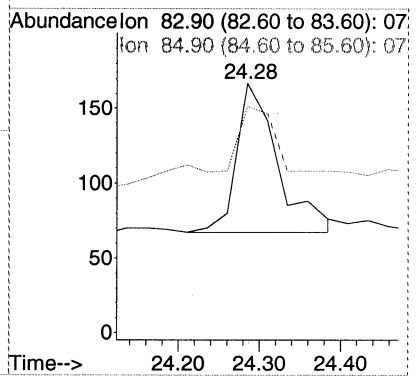


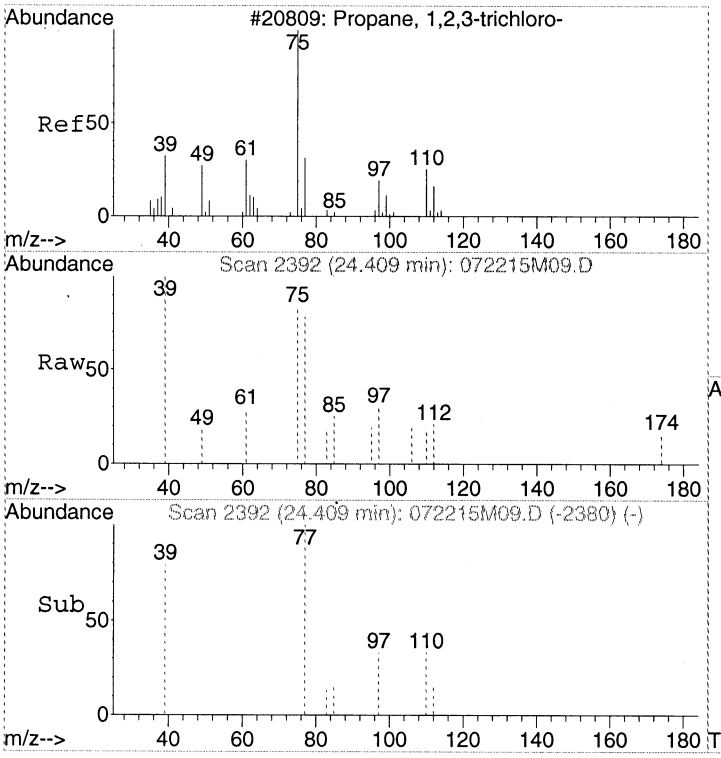


#31
1,1,2,2-Tetrachloroethane
Concen: Below Cal
RT: 24.28 min Scan# 2387
Delta R.T. -0.02 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 83 Resp: 354

Ion	Ratio	Lower	Upper
83	100		
85	38.1	44.1	84.1#

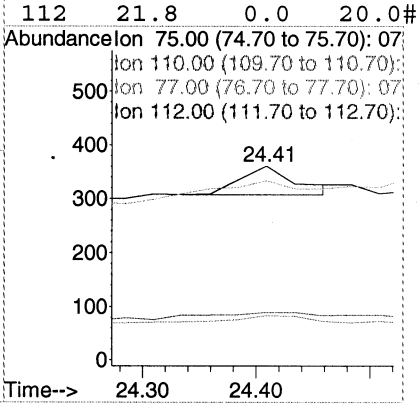


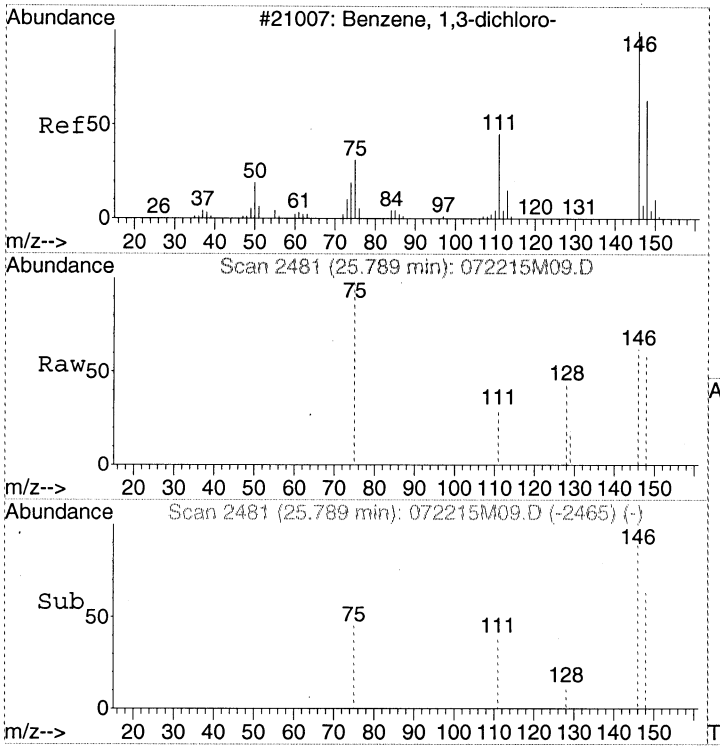


#32
1,2,3-Trichloropropane
Concen: Below Cal
RT: 24.41 min Scan# 2392
Delta R.T. 0.00 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 75 Resp: 179

Ion	Ratio	Lower	Upper
75	100		
110	44.7	0.0	20.0#
77	129.6	11.9	51.9#
112	21.8	0.0	20.0#

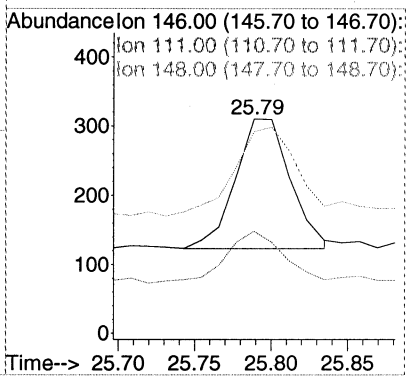


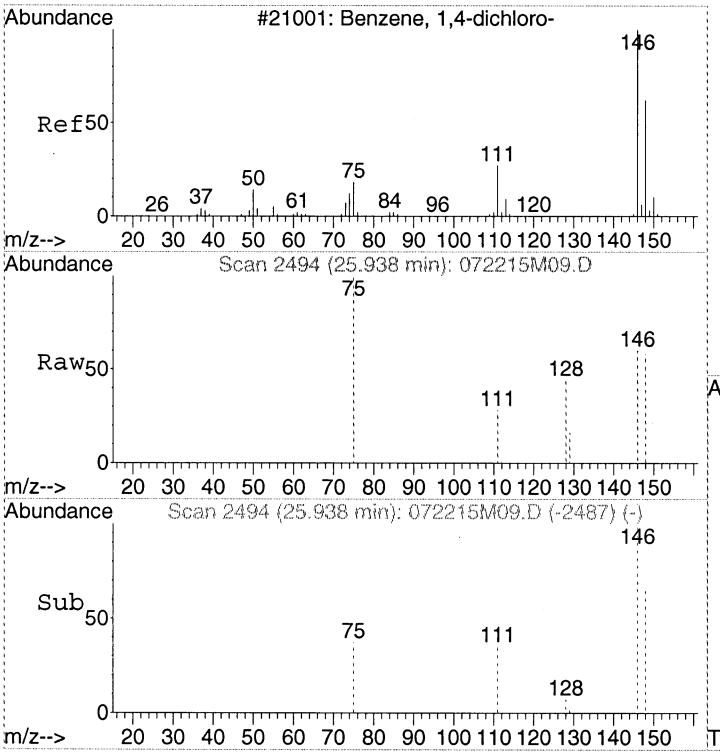


#33
1,3-Dichlorobenzene
Concen: Below Cal
RT: 25.79 min Scan# 2481
Delta R.T. -0.01 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion:146 Resp: 467

Ion	Ratio	Lower	Upper
146	100		
111	42.6	17.9	57.9
148	76.9	43.9	83.9

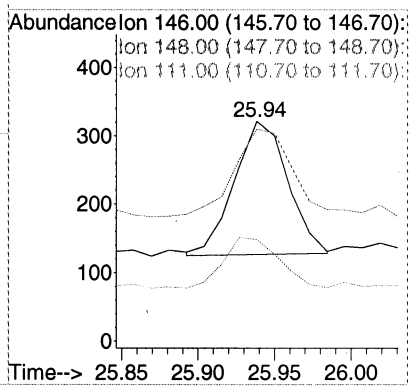


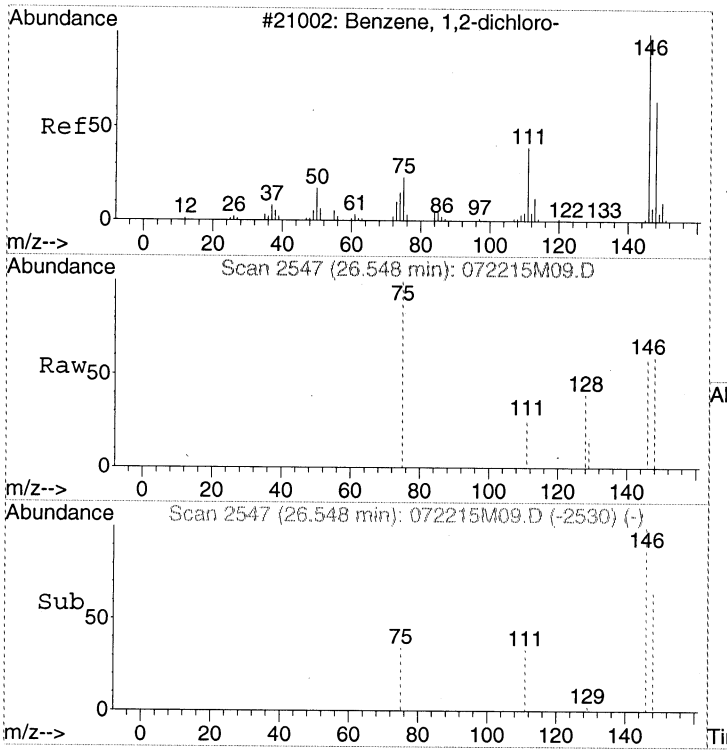


#34
1,4-Dichlorobenzene
Concen: Below Cal
RT: 25.94 min Scan# 2494
Delta R.T. -0.01 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion:146 Resp: 472

Ion	Ratio	Lower	Upper
146	100		
148	73.9	44.0	84.0
111	39.4	16.6	56.6

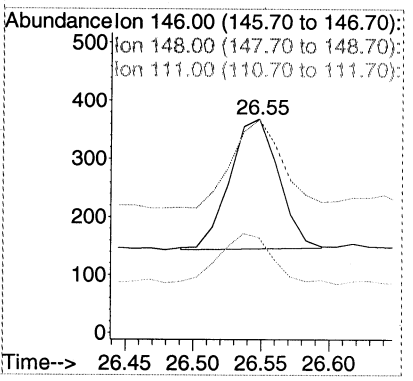


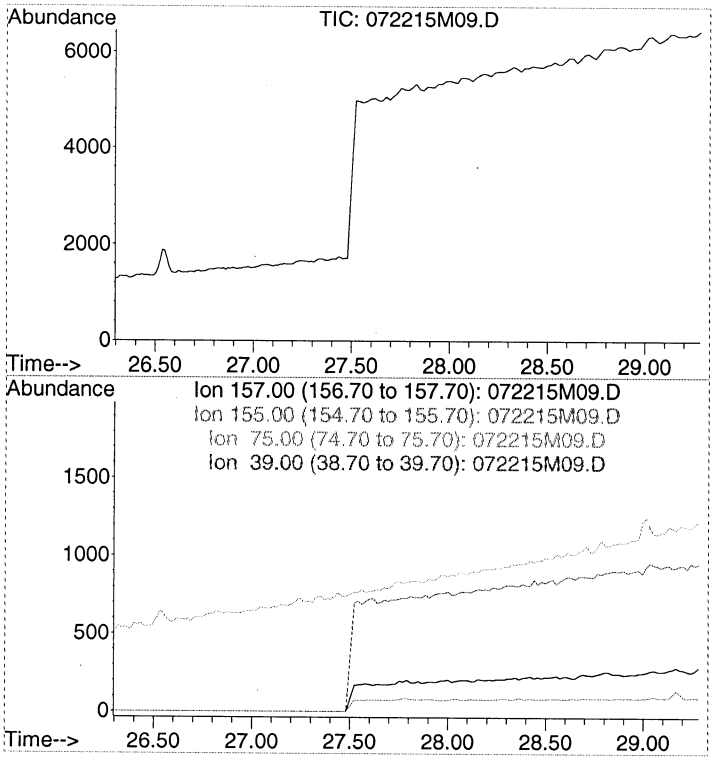


#35
1,2-Dichlorobenzene
Concen: Below Cal
RT: 26.55 min Scan# 2547
Delta R.T. 0.00 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion:146 Resp: 560

Ion	Ratio	Lower	Upper
146	100		
148	70.0	44.0	84.0
111	43.2	19.4	59.4



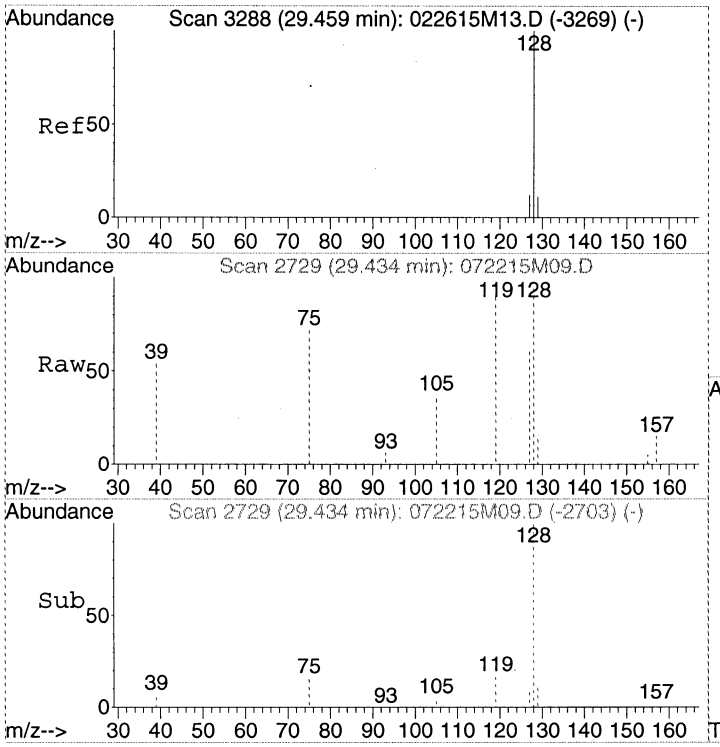


#36
1,2-Dibromo-3-chloropropane
Concen: N.D.
Expected RT: 27.79 min

Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion: 157

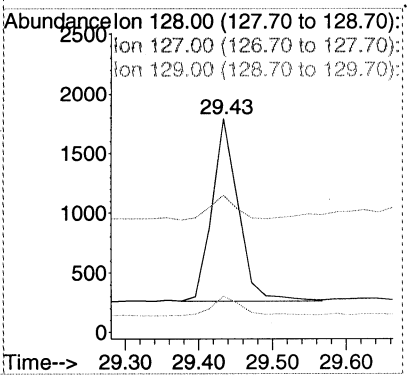
Sig	Exp Ratio
157	100
155	77.5
75	87.4
39	78.3



#37
Naphthalene
Concen: Below Cal
RT: 29.43 min Scan# 2729
Delta R.T. 0.00 min
Lab File: 072215M09.D
Acq: 22 Jul 2015 6:06 pm

Tgt Ion:128 Resp: 3794

Ion	Ratio	Lower	Upper
128	100		
127	13.9	0.0	32.3
129	11.3	0.0	30.9



SDG: 15224C

Instrument: AG5973M

Analysis Date: 08/12/15

NOT USED

SAMPLE DATA

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	**TO15-SIM**	**Analyst Initial**	**LLH**	**Reviewer Initial**	[illegible]	**Batch Sequence**	**B15H054 S15H046**
Instrument ID	**AG5973M**	**Date Analyzed**	**08/12/15**	**Date**	8/14/15	**Chemstation Last Update**	**Aug 11 14:59:20 2015**
Cases	**R15S082**			**SDGs**	**15224C / Can Certification**		

Review each item listed below. As problems are discovered list them in the non-conformance section of the form and provide and explanation in the discussion part of the table.

NA	A	PR	Item Description
	X	✓	Runlog (Present, legible, peer reviewed)
	X	✓	Tune/ Degradation Standard
	X	✓	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
	X	✓	Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation.
	X	✓	QLS (level, frequency, and recovery) (include Chemstation summary)
	X	✓	Method / Extraction / Storage Blanks (frequency and contamination levels)
X			Surrogate Recoveries
	X	✓	IS Areas (SOP criteria met)
	X	✓	LCS/SCV (level, frequency, and recovery) (include Chemstation summary)
	X	✓	DUPLICATE
	X	✓	Samples (within calibration range, results calculated correctly)
X			Manual Integration Verified
X			Standard Prep Log (all pages present, legible, peer reviewed, legible)
X			Sample Prep/Extraction (all pages present, legible, peer reviewed)
X			Others: **SIM + 112TCA, 1122PCA**

NA = not applicable A = Analyst check PR = Peer Review Check

Non-conformance Report

QC	File ID	Result	QC Limit	High Bias	Low Bias	Flag ND	Flag Hits	Discussion
ICAL								OK
SCV2	081115M10	134	70 - 130 %			X	X	Vinyl chloride
"	"	136	"			X	X	1,1-Dichloroethane
								Daily QC = OK

Clean Canister: 6L: 400 mL:

C:\Documents and Settings\INS_AG5973M\Desktop\daily review_TO-15SIM.doc

PREPARATION BENCH SHEET

B15H054

EPA Region 9 Laboratory

'inted: 8/13/2015 11:51:01AM

Project: R15S82 - MEW 2015 Sewer Pathway Investigation

Matrix: Air **Analysis:TO15 SIM** **Prepared using: Air - - General Air prep** **(No Surrogate)**

Lab Number	SampleName	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Prepared By	Extraction Comments
1508028-12 A	861Leong-OUT	08/12/15 15:20	60	400					LLH	Can 122
1508028-13 A	[redacted]Fairchild-OUT	08/12/15 15:20	60	400					LLH	Can 123
1508028-14 A	600National-Trench1	08/12/15 15:20	60	400					LLH	Can 134
1508028-15 A	600National-OUT	08/12/15 15:20	60	400					LLH	Can 116
B15H054-BLK1	Blank	08/12/15 10:08	400	400					LLH	
B15H054-BS1	LCS	08/12/15 10:08	400	400	1532067		250000		LLH	

NOT USED - too dilute

From B1G0038 on 7/18/2011 by EIB

Reagents

Reagent #	Description

Preparation Reviewed By — 8/14/15 Date

ANALYSIS SEQUENCE

S15H046

Instrument: AG5973M

Calibration ID: 1508012

Printed: 8/13/2015 11:51:15AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
S15H046-TUN1	QC		1		1410063			
S15H046-CCV1	QC		2		1532064			
B15H054-BS1	QC		3					
S15H046-CRL1	QC		4		1532062			
B15H054-BLK1	QC		5			1530038		
1508028-12	TO15 SIM	A	6			1530038	California Site Cleanup Section 3	16 analytes
1508028-13	TO15 SIM	A	7			1530038	California Site Cleanup Section 3	16 analytes
1508028-14	TO15 SIM	A	8			1530038	California Site Cleanup Section 3	16 analytes
1508028-15	TO15 SIM	A	9			1530038	California Site Cleanup Section 3	16 analytes

Samples Loaded By Date

Data Processed By Date

----------SEQUENCE TABLE ----------

Sequence Name: C:\Smart\2015\081215SMAA.SEQ
Date: 08-13-2015
Time: 09:19:58
Int. Std Volume: 40 cc

Sample Name	Inlet #	Auto Samp Pos	Cal Vol.	Std Vol.	Method	Time
BFB	1	1	50	40	C:\Smart\TO15.CTD	12:00
CCV1 250pptv SIM+	1	1	250		C:\Smart\TO15.CTD	12:00
CRL1 50pptv SIM+	1	1	50		C:\Smart\TO15.CTD	12:00
BLANK	1	2	400		C:\Smart\TO15.CTD	12:00
CAN #109	1	3	400		C:\Smart\TO15.CTD	12:00
CAN #111	1	4	400		C:\Smart\TO15.CTD	12:00
CAN #114	1	5	400		C:\Smart\TO15.CTD	12:00
CAN #126	1	6	400		C:\Smart\TO15.CTD	12:00
1508028-12	1	7	60		C:\Smart\TO15.CTD	12:00
1508028-13	1	8	60		C:\Smart\TO15.CTD	12:00
1508028-14	1	9	60		C:\Smart\TO15.CTD	12:00
1508028-15	1	10	60		C:\Smart\TO15.CTD	12:00
CAN #415	1	11	400		C:\Smart\TO15.CTD	12:00
CAN #770	1	12	400		C:\Smart\TO15.CTD	12:00
CAN #1194	1	13	400		C:\Smart\TO15.CTD	12:00
CAN #1187	1	14	400		C:\Smart\TO15.CTD	12:00
CAN #5019	1	15	400		C:\Smart\TO15.CTD	12:00
CAN #5720	1	16	400		C:\Smart\TO15.CTD	12:00
CAN #6 H	1	3	400		C:\Smart\TO15.CTD	12:00
CAN #7 H	1	4	400		C:\Smart\TO15.CTD	12:00

Injection Log

Directory: C:\MSDChem\1\2015\Data\081215MAA

Line	Vial	FileName	Multiplier	SampleName		Misc Info	Injected
1	1	081215M01.D	1.	S15H046-TUN1		BFB 1410063	12 Aug 2015 10:08
2	1	081215M02.D	1.	S15H046-CCV1@B15H054-BS1		250pptv 1532064@1532067 SIM	12 Aug 2015 10:59
3	1	081215M03.D	1.	S15H046-CRL1		50pptv 1532062 SIM	12 Aug 2015 11:45
4	2	081215M04.D	1.	B15H054-BLK1		400ml BLANK CAN #40	12 Aug 2015 13:23
5	3	081215M05.D	1.	CAN #109		400ml RECERTIFICATION	12 Aug 2015 14:17
6	4	081215M06.D	1.	CAN #111		400ml RECERTIFICATION	12 Aug 2015 15:11
7	5	081215M07.D	1.	CAN #114		400ml RECERTIFICATION	12 Aug 2015 16:05
8	6	081215M08.D	1.	CAN #126		400ml RECERTIFICATION	12 Aug 2015 16:52
9	7	081215M09.D	1.48	1508028-12	RF boone	60ml 861Leung-OUT	12 Aug 2015 17:39
10	8	081215M10.D	1.49	1508028-13		60ml [redacted]Fairchild-OUT	12 Aug 2015 18:26
11	9	081215M11.D	1.49	1508028-14		60ml 600National-Trench1	12 Aug 2015 19:13
12	10	081215M12.D	1.48	1508028-15		60ml 600National-OUT	12 Aug 2015 20:00
13	11	081215M13.D	1.	CAN #415	re-clean	400ml RECERTIFICATION	12 Aug 2015 20:53
14	12	081215M14.D	1.	CAN #770		400ml RECERTIFICATION	12 Aug 2015 21:47
15	13	081215M15.D	1.	CAN #1194	re-clean	400ml RECERTIFICATION	12 Aug 2015 22:41
16	14	081215M16.D	1.	CAN #1187		400ml RECERTIFICATION	12 Aug 2015 23:35
17	15	081215M17.D	1.	CAN #5019	re-clean	400ml RECERTIFICATION	13 Aug 2015 00:28
18	16	081215M18.D	1.	CAN #5720		400ml RECERTIFICATION	13 Aug 2015 01:22
19	3	081215M19.D	1.	CAN #6 H	need to run by scan	400ml RECERTIFICATION	13 Aug 2015 02:16
20	4	081215M20.D	1.	CAN #7 H		400ml RECERTIFICATION	13 Aug 2015 03:09

[illegible]

00333

GC/MS QA-QC Check Report

Tune File : C:\MSDCHEM\1\2015\DATA\081215MAA\081215M01.D
Tune Time : 12 Aug 2015 10:08 am

Daily Calibration File : C:\MSDCHEM\1\2015\DATA\081215MAA\081215M02.D

File	Sample	Surrogate Recovery %		Internal Standard Responses
		126290	277285	268907
081215M02.D				
	S15H046-CCV1	126290	277285	268907
081215M03.D				
	S15H046-CRL1	122906	260574	256855
081215M04.D				
	B15H054-BLK1	121343	240662	245329
081215M05.D				
	CAN #109	119799	230302	236418
081215M06.D				
	CAN #111	120672	232408	234655
081215M07.D				
	CAN #114	114182	209792	208828
081215M08.D				
	CAN #126	114352	199925	199014
081215M09.D				
	1508028-12	119901	218165	222065
081215M10.D				
	1508028-13	118700	213932	215160
081215M11.D				
	1508028-14	119894	212601	216565
081215M12.D				
	1508028-15	118260	212416	215008
081215M13.D				
	CAN #415	117851	204724	210222
081215M14.D				
	CAN #770	115759	197396	201108
081215M15.D				
	CAN #1194	114051	195904	196159
081215M16.D				
	CAN #1187	114782	195880	198567
081215M17.D				
	CAN #5019	114019	190847	194665
081215M18.D				
	CAN #5720	112044	184850	190379
081215M19.D				
	CAN #6 H	110490	183187	182260
081215M20.D				
	CAN #7 H	112273	189721	195433

(fails) - fails 24hr time check * - fails criteria

Created: Thu Aug 13 11:38:49 2015 AG5973M

Response Factor Report AG5973M

Method Path : C:\MSDCHEM\1\2015\METHOD\
Method File : 081115SMAA.M
Title : TO15SIM
Last Update : Tue Aug 11 14:59:20 2015
Response Via : Initial Calibration

Calibration Files
50 =081115M02.D 150 =081115M03.D 250 =081115M04.D
350 =081115M05.D 500 =081115M06.D

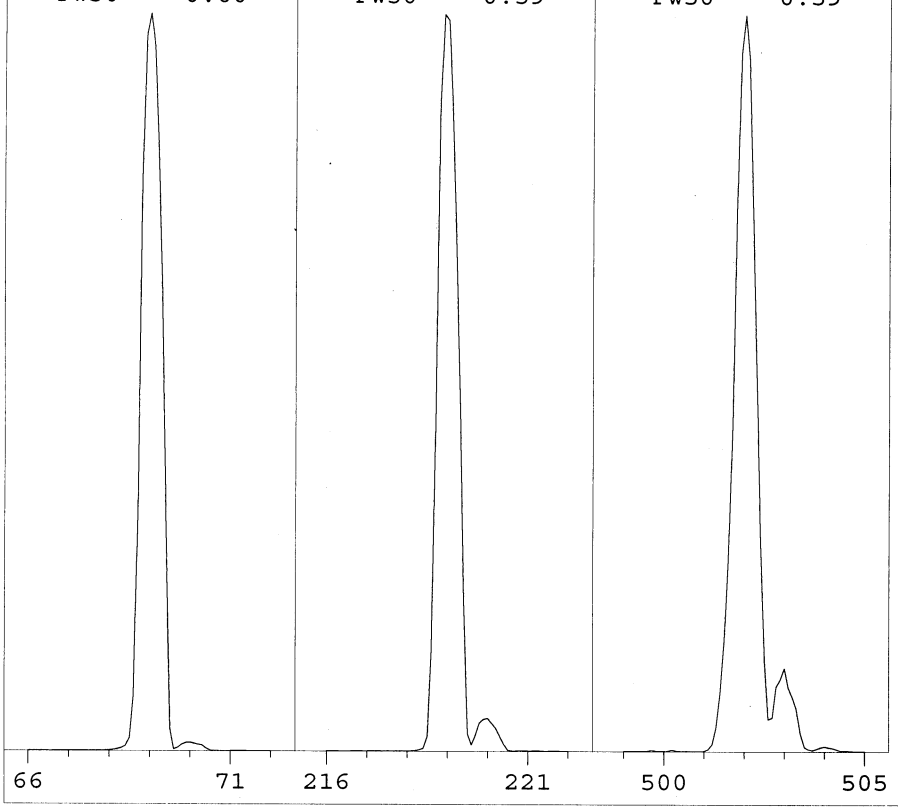
		Compound	50	150	250	350	500	Avg	%RSD
1)	I	BROMOCHLOROMETHANE	----------ISTD----------						
2)	T	Vinyl chloride	0.958	0.875	0.850	0.859	0.837	0.876	5.46
3)	T	1,3-Butadiene	0.684	0.614	0.602	0.620	0.616	0.627	5.21
4)	T	Bromoethene	0.921	0.812	0.805	0.819	0.824	0.836	5.73
5)	T	1,1,2-Trichloro-1,2	2.324	2.101	2.051	2.026	1.969	2.094	6.54
6)	T	1,1-Dichloroethene	1.308	1.158	1.155	1.186	1.208	1.203	5.19
7)	T	Dichloromethane	1.548	1.251	1.195	1.177	1.142	1.263	13.01
8)	T	tert-Butyl methyl e	1.495	1.404	1.480	1.584	1.712	1.535	7.67
9)	T	trans-1,2-Dichloroe	1.351	1.272	1.315	1.374	1.421	1.347	4.21
10)	T	Hexane	0.727	0.677	0.715	0.766	0.838	0.745	8.23
11)	T	1,1-Dichloroethane	1.788	1.627	1.606	1.606	1.583	1.642	5.05
12)	T	cis-1,2-Dichloroeth	0.763	0.679	0.672	0.686	0.704	0.701	5.23
13)	T	Chloroform	2.483	2.288	2.253	2.230	2.184	2.288	5.04
14)	T	1,1,1-Trichloroetha	2.545	2.382	2.370	2.388	2.362	2.409	3.17
15)	T	Carbon tetrachlorid	2.211	2.455	2.413	2.442	2.107	2.325	6.76
16)	I	1,4-DIFLUOROBENZENE	----------ISTD----------						
17)	T	Benzene	1.437	1.469	1.557	1.652	1.677	1.558	6.85
18)	T	1,2-Dichloroethane	0.791	0.774	0.765	0.775	0.752	0.771	1.87
19)	T	Trichloroethene	0.621	0.595	0.598	0.618	0.620	0.610	2.08
20)	T	1,2-Dichloropropane	0.541	0.529	0.532	0.547	0.543	0.538	1.44
21)	I	CHLOROBENZENE-d5	----------ISTD----------						
22)	T	Toluene	1.100	1.077	1.140	1.271	1.356	1.189	10.07
23)	T	1,1,2-Trichloroetha	0.657	0.626	0.619	0.643	0.630	0.635	2.36
24)	T	Tetrachloroethene	0.852	0.817	0.814	0.861	0.861	0.841	2.81
25)	T	1,2-Dibromoethane (	0.698	0.672	0.673	0.715	0.714	0.694	3.04
26)	T	Chlorobenzene	1.124	1.081	1.086	1.154	1.168	1.123	3.47
27)	T	Ethylbenzene	1.228	1.235	1.321	1.499	1.623	1.381	12.59
28)	T	m&p-Xylene	0.898	0.975	1.102	1.311	1.453	1.148	20.19
29)	T	o-Xylene	0.958	0.962	1.042	1.186	1.299	1.089	13.69
30)	T	Styrene	0.525	0.554	0.623	0.721	0.796	0.644	17.67
31)	T	1,1,2,2-Tetrachloro	1.270	1.199	1.178	1.227	1.196	1.214	2.97
32)	T	1,3-Dichlorobenzene	0.950	0.880	0.907	0.957	0.961	0.931	3.83
33)	T	1,4-Dichlorobenzene	0.793	0.747	0.756	0.827	0.835	0.792	5.08
34)	T	1,2-Dichlorobenzene	0.969	0.895	0.905	0.971	0.968	0.941	4.05

(#) = Out of Range

Wed Aug 12 09:48:07 2015
C:\MSDCHEM\1\5973N\BFB081215.U

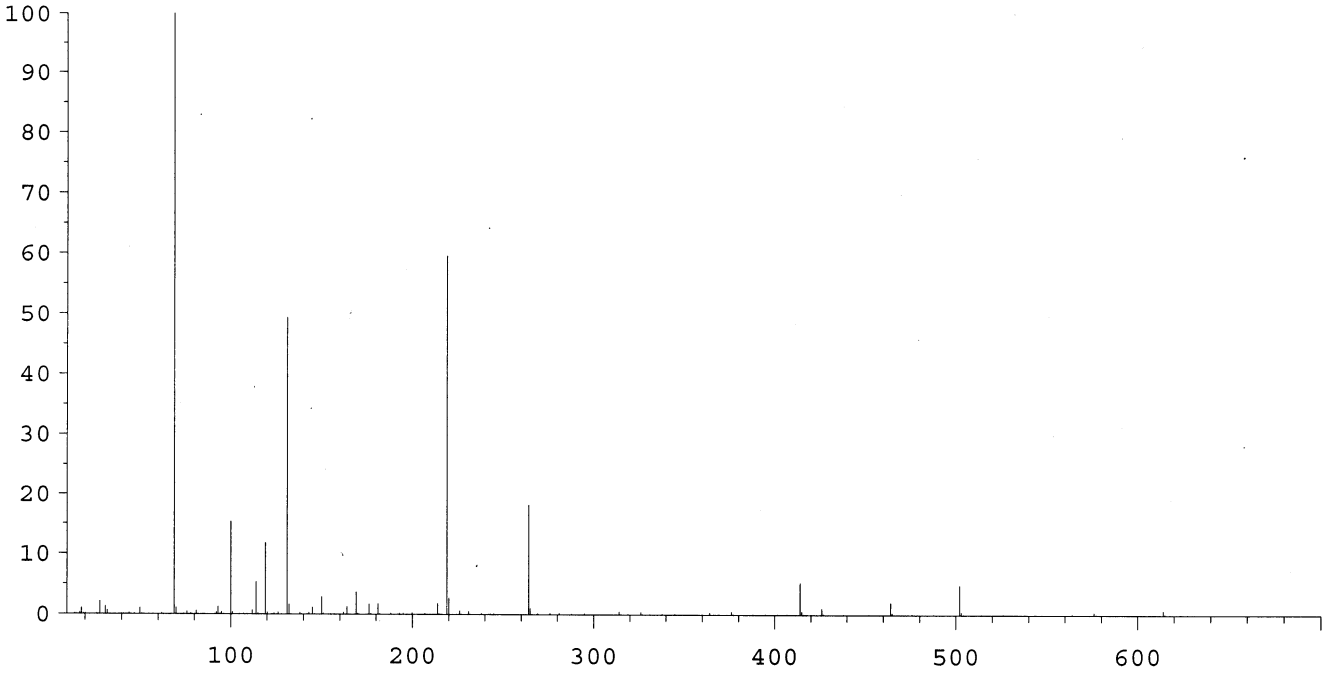
Instrument: AG5973M

Mass	69.00	Mass	218.90	Mass	502.00
Ab	578240	Ab	348940	Ab	27858
Pw50	0.60	Pw50	0.59	Pw50	0.59



Ion Pol	POS	MassGain	317
		MassOffs	-10
Emission	34.6	AmuGain	2353
ElEnrgy	69.9	AmuOffs	125
Filament	1	Wid219	-0.025
		DC Pol	POS
Repeller	30.46		
IonFcus	90.2	HEDEnab	ON
EntLens	11.5	EMVolts	1247
EntOffs	20.33		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Zones:			
MS Source	230	TurboSpd	100
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
160 peaks Base: 69.00 Abundance: 522816



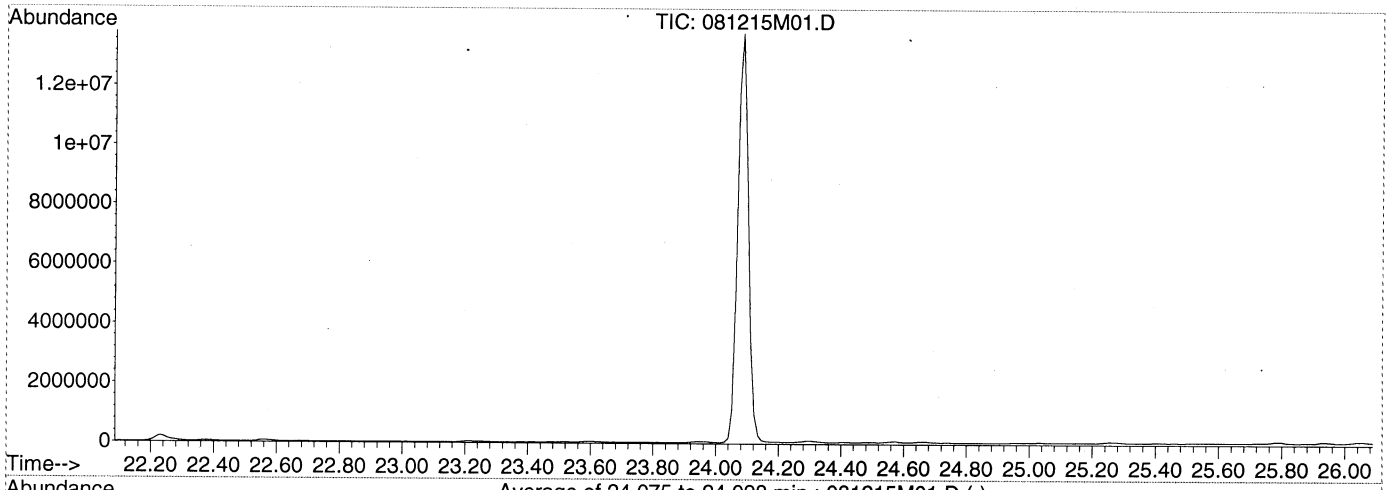
Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	522816	100.00	70.00	5596	1.07
219.00	311488	59.58	220.00	13762	4.42
502.00	25264	4.83	503.00	2286	9.05

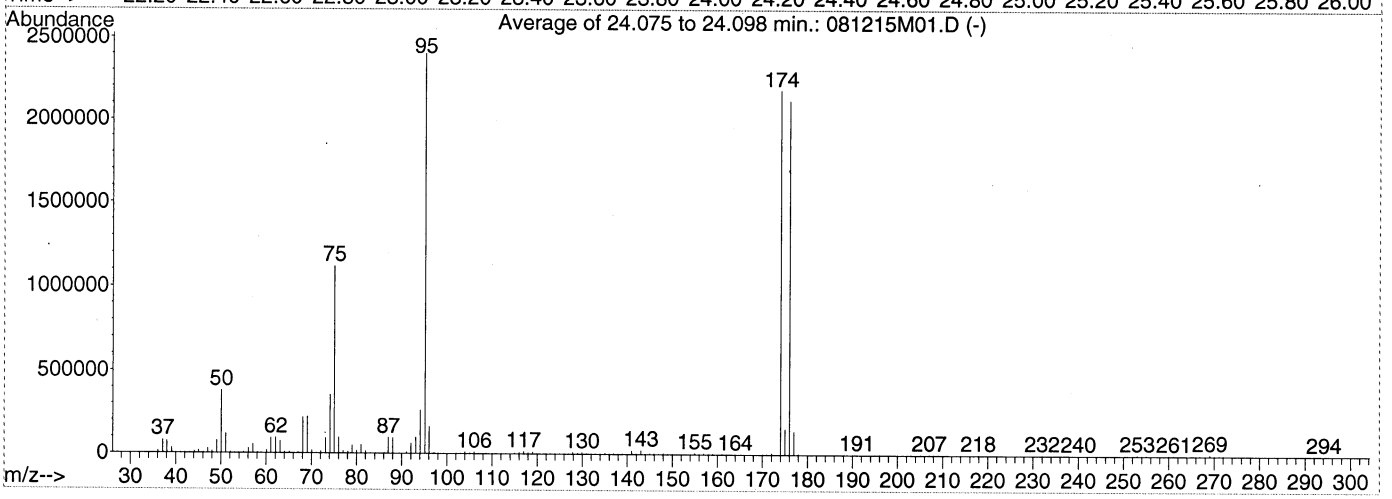
BFB

Data Path : C:\MSDChem\1\2015\Data\081215MAA\
Data File : 081215M01.D
Acq On : 12 Aug 2015 10:08 am
InstName : AG5973M
Operator : LLH
Sample : S15H046-TUN1
Misc : BFB 1410063
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\MSDCHEM\1\2015\METHOD\081115BFB.M
Title : TO15
Last Update : Mon Apr 06 12:32:18 2015





AutoFind: Scans 1668, 1669, 1670; Background Corrected with Scan 1659

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	15.7	377894	PASS
75	95	30	66	46.6	1119153	PASS
95	95	100	100	100.0	2402304	PASS
96	95	5	9	6.8	162231	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	90.7	2179072	PASS
175	174	4	9	7.0	151493	PASS
176	174	93	101	97.1	2115584	PASS
177	176	5	9	6.5	138010	PASS

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\2015\Data\081215MAA\
Data File : 081215M02.D
Acq On : 12 Aug 2015 10:59 am
InstName : AG5973M
Operator : LLH
Sample : S15H046-CCV1@B15H054-BS1
Misc : 250pptv 1532064@1532067 SIM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 12:55:10 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081115SMAA.M
Quant Title : TO15SIM
QLast Update : Tue Aug 11 14:59:20 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	BROMOCHLOROMETHANE	1.000	1.000	0.0	94	0.00
2	T	Vinyl chloride	0.876	0.821	6.3	90	0.00
3	T	1,3-Butadiene	0.627	0.595	5.1	92	-0.01
4	T	Bromoethene	0.836	0.806	3.6	94	0.00
5	T	1,1,2-Trichloro-1,2,2-trifl	2.094	1.947	7.0	89	0.00
6	T	1,1-Dichloroethene	1.203	1.182	1.7	96	0.00
7	T	Dichloromethane	1.263	1.148	9.1	90	0.00
8	T	tert-Butyl methyl ether (MT	1.535	1.558	-1.5	98	-0.01
9	T	trans-1,2-Dichloroethene	1.347	1.305	3.1	93	-0.01
10	T	Hexane	0.745	0.749	-0.5	98	0.00
11	T	1,1-Dichloroethane	1.642	1.561	4.9	91	0.00
12	T	cis-1,2-Dichloroethene	0.701	0.696	0.7	97	0.00
13	T	Chloroform	2.288	2.161	5.6	90	0.01
14	T	1,1,1-Trichloroethane	2.409	2.316	3.9	91	0.00
15	T	Carbon tetrachloride	2.325	2.433	-4.6	94	0.00
16	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	101	0.00
17	T	Benzene	1.558	1.424	8.6	92	0.00
18	T	1,2-Dichloroethane	0.771	0.684	11.3	90	0.00
19	T	Trichloroethene	0.610	0.561	8.0	95	0.00
20	T	1,2-Dichloropropane	0.538	0.488	9.3	92	0.00
21	I	CHLOROBENZENE-d5	1.000	1.000	0.0	98	-0.02
22	T	Toluene	1.189	1.121	5.7	97	0.00
23	T	1,1,2-Trichloroethane	0.635	0.567	10.7	90	0.00
24	T	Tetrachloroethene	0.841	0.773	8.1	93	0.00
25	T	1,2-Dibromoethane (EDB)	0.694	0.634	8.6	93	0.00
26	T	Chlorobenzene	1.123	1.044	7.0	94	0.00
27	T	Ethylbenzene	1.381	1.312	5.0	98	-0.02
28	T	m&p-Xylene	1.148	1.089	5.1	97	0.00
29	T	o-Xylene	1.089	1.033	5.1	97	0.00
30	T	Styrene	0.644	0.599	7.0	94	0.00
31	T	1,1,2,2-Tetrachloroethane	1.214	1.082	10.9	90	0.00
32	T	1,3-Dichlorobenzene	0.931	0.850	8.7	92	0.00
33	T	1,4-Dichlorobenzene	0.792	0.732	7.6	95	0.00
34	T	1,2-Dichlorobenzene	0.941	0.857	8.9	93	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2015\Data\081215MAA\
Data File : 081215M02.D
Acq On : 12 Aug 2015 10:59 am
InstName : AG5973M
Operator : LLH
Sample : S15H046-CCV1@B15H054-BS1
Misc : 250pptv 1532064@1532067 SIM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 12:55:10 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081115SMAA.M
Quant Title : TO15SIM
QLast Update : Tue Aug 11 14:59:20 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.24	49	126290	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.30	114	277285	375.00 pptv	0.00
21) CHLOROBENZENE-d5	22.23	117	268907	341.00 pptv	-0.02

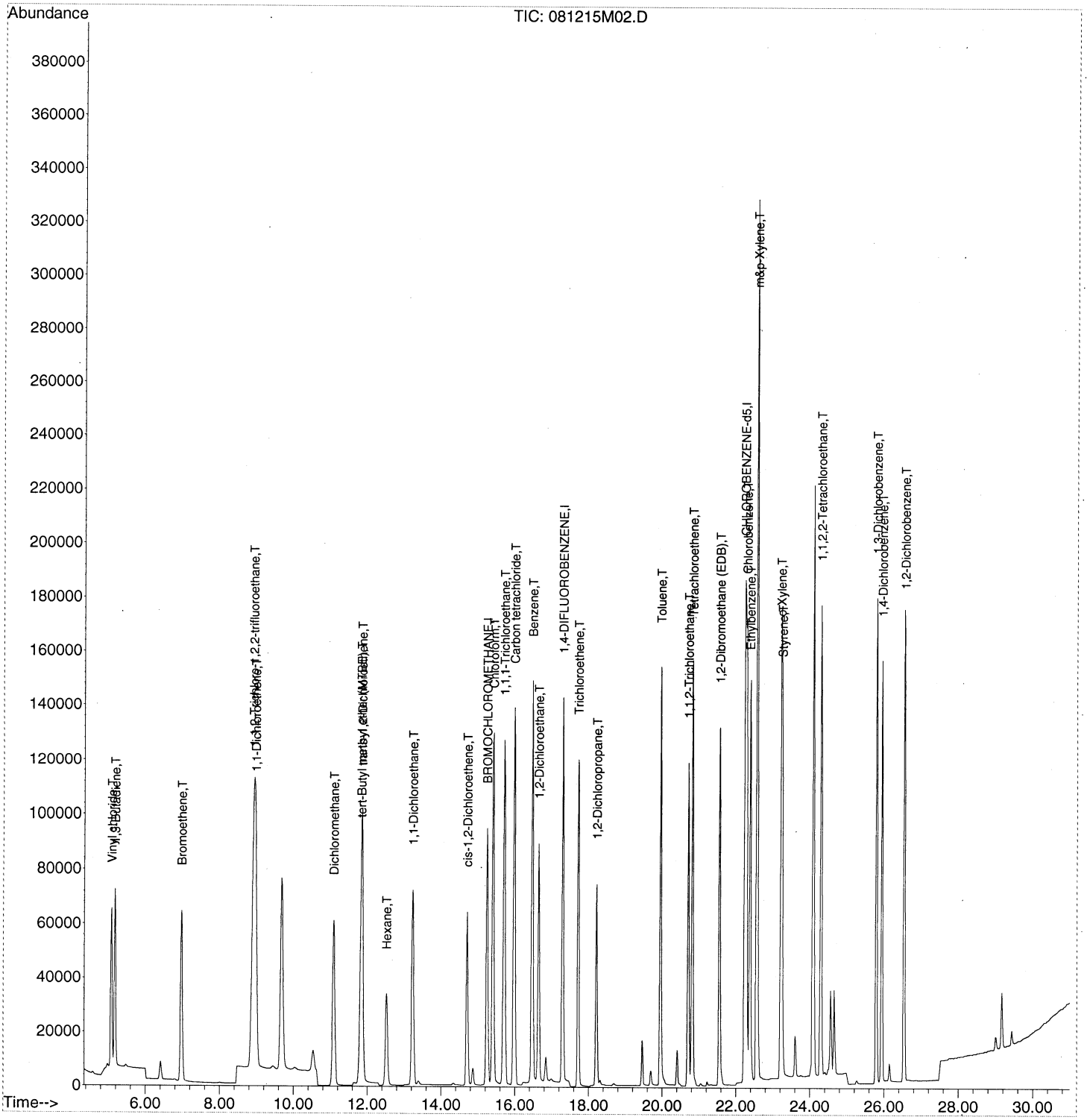
Target Compounds					Qvalue
2) Vinyl chloride	5.09	62	91240	281.34 pptv	99
3) 1,3-Butadiene	5.18	54	60615	260.95 pptv	100
4) Bromoethene	6.98	106	82126	265.22 pptv	100
5) 1,1,2-Trichloro-1,2,2-trif	8.92	151	198298	255.67 pptv	100
6) 1,1-Dichloroethene	8.97	61	120352	270.15 pptv	100
7) Dichloromethane	11.09	49	116961	250.14 pptv	100
8) tert-Butyl methyl ether (M	11.83	73	158643	279.03 pptv	98
9) trans-1,2-Dichloroethene	11.85	61	120827	242.29 pptv	100
10) Hexane	12.52	57	76297	276.68 pptv	99
11) 1,1-Dichloroethane	13.23	63	173475	285.30 pptv	100
12) cis-1,2-Dichloroethene	14.70	96	70847	272.94 pptv	99
13) Chloroform	15.41	83	220077	259.77 pptv	97
14) 1,1,1-Trichloroethane	15.71	97	214406	240.28 pptv	100
15) Carbon tetrachloride	15.98	117	247748	287.67 pptv	98
17) Benzene	16.47	78	289641	251.34 pptv	100
18) 1,2-Dichloroethane	16.64	62	139161	244.06 pptv	99
19) Trichloroethene	17.72	130	114112	252.90 pptv	100
20) 1,2-Dichloropropane	18.22	63	99152	249.03 pptv	99
22) Toluene	19.95	91	243145	259.39 pptv	100
23) 1,1,2-Trichloroethane	20.71	97	123026	245.71 pptv	100
24) Tetrachloroethene	20.82	166	167575	252.70 pptv	100
25) 1,2-Dibromoethane (EDB)	21.55	107	137597	251.29 pptv	100
26) Chlorobenzene	22.28	112	226501	255.86 pptv	100
27) Ethylbenzene	22.37	91	284621	261.34 pptv	100
28) m&p-Xylene	22.56	91	472414	521.98 pptv	99
29) o-Xylene	23.21	91	223914	260.64 pptv	99
30) Styrene	23.24	104	129902	255.88 pptv	99
31) 1,1,2,2-Tetrachloroethane	24.28	83	234553	244.99 pptv	100
32) 1,3-Dichlorobenzene	25.79	146	184354	251.11 pptv	99
33) 1,4-Dichlorobenzene	25.94	146	158800	254.35 pptv	100
34) 1,2-Dichlorobenzene	26.55	146	185763	250.24 pptv	100

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

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2015\Data\081215MAA\
Data File : 081215M02.D
Acq On : 12 Aug 2015 10:59 am
InstName : AG5973M
Operator : LLH
Sample : S15H046-CCV1@B15H054-BS1
Misc : 250pptv 1532064@1532067 SIM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 12:55:10 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081115SMAA.M
Quant Title : TO15SIM
QLast Update : Tue Aug 11 14:59:20 2015
Response via : Initial Calibration



00341

LCS REPORT

Instrument Name: AG5973M
Sample Name: S15H046-CCV1@B15H054-BS1
Misc Info: 250pptv 1532064@1532067 SIM
Date Acquired: 8/12/2015 10:59
QLast Update: Tue Aug 11 14:59:20 2015
Operator: LLH

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	BROMOCHLOROMETHANE	15.24	341.00	341.00	100%	70.0	130.0	pass
2)	Vinyl chloride	5.09	300.00	281.34	94%	74.0	128.0	pass
3)	1,3-Butadiene	5.18	275.00	260.95	95%	71.0	127.0	pass
4)	Bromoethene	6.98	275.00	265.22	96%	67.0	125.0	pass
5)	1,1,2-Trichloro-1,2,2-trifluoroethane	8.92	275.00	255.67	93%	78.0	123.0	pass
6)	1,1-Dichloroethene	8.97	275.00	270.15	98%	77.0	129.0	pass
7)	Dichloromethane	11.09	275.00	250.14	91%	76.0	117.0	pass
8)	tert-Butyl methyl ether (MTBE)	11.83	275.00	279.03	101%	63.0	111.0	pass
9)	trans-1,2-Dichloroethene	11.85	250.00	242.29	97%	61.0	108.0	pass
10)	Hexane	12.52	275.00	276.68	101%	66.0	115.0	pass
11)	1,1-Dichloroethane	13.23	300.00	285.30	95%	76.0	133.0	pass
12)	cis-1,2-Dichloroethene	14.70	275.00	272.94	99%	64.0	142.0	pass
13)	Chloroform	15.41	275.00	259.77	94%	63.0	123.0	pass
14)	1,1,1-Trichloroethane	15.71	250.00	240.28	96%	65.0	121.0	pass
15)	Carbon tetrachloride	15.98	275.00	287.67	105%	69.0	121.0	pass
16)	1,4-DIFLUOROBENZENE	17.30	375.00	375.00	100%	70.0	130.0	pass
17)	Benzene	16.47	275.00	251.34	91%	65.0	123.0	pass
18)	1,2-Dichloroethane	16.64	275.00	244.06	89%	75.0	123.0	pass
19)	Trichloroethene	17.72	275.00	252.90	92%	57.0	144.0	pass
20)	1,2-Dichloropropane	18.22	275.00	249.03	91%	63.0	125.0	pass
21)	CHLOROBENZENE-d5	22.23	341.00	341.00	100%	70.0	130.0	pass
22)	Toluene	19.95	275.00	259.39	94%	68.0	119.0	pass
23)	1,1,2-Trichloroethane	20.71	275.00	245.71	89%	70.0	130.0	pass
24)	Tetrachloroethene	20.82	275.00	252.70	92%	67.0	123.0	pass
25)	1,2-Dibromoethane (EDB)	21.55	275.00	251.29	91%	67.0	111.0	pass
26)	Chlorobenzene	22.28	275.00	255.86	93%	57.0	126.0	pass
27)	Ethylbenzene	22.37	275.00	261.34	95%	70.0	130.0	pass
28)	m&p-Xylene	22.56	550.00	521.98	95%	51.0	121.0	pass
29)	o-Xylene	23.21	275.00	260.64	95%	57.0	118.0	pass
30)	Styrene	23.24	275.00	255.88	93%	57.0	128.0	pass
31)	1,1,2,2-Tetrachloroethane	24.28	275.00	244.99	89%	70.0	130.0	pass
32)	1,3-Dichlorobenzene	25.79	275.00	251.11	91%	70.0	130.0	pass
33)	1,4-Dichlorobenzene	25.94	275.00	254.35	92%	61.0	131.0	pass
34)	1,2-Dichlorobenzene	26.55	275.00	250.24	91%	43.0	124.0	pass

LLH 8/12/15

QLS REPORT

Instrument Name: AG5973M
Sample Name: S15H046-CRL1
Misc Info: 50pptv 1532062 SIM
Date Acquired: 8/12/2015 11:45
QLast Update: Tue Aug 11 14:59:20 2015
Operator: LLH

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	BROMOCHLOROMETHANE	15.24	341.00	341.00	100%	70.0	130.0	pass
2)	Vinyl chloride	5.09	60.00	60.83	101%	74.0	128.0	pass
3)	1,3-Butadiene	5.18	55.00	55.40	101%	71.0	127.0	pass
4)	Bromoethene	6.98	55.00	54.26	99%	67.0	125.0	pass
5)	1,1,2-Trichloro-1,2,2-trifluoroethane	8.92	55.00	53.11	97%	78.0	123.0	pass
6)	1,1-Dichloroethene	8.97	55.00	55.35	101%	77.0	129.0	pass
7)	Dichloromethane	11.09	55.00	60.26	110%	76.0	117.0	pass
8)	tert-Butyl methyl ether (MTBE)	11.83	55.00	49.21	89%	63.0	111.0	pass
9)	trans-1,2-Dichloroethene	11.86	50.00	46.32	93%	61.0	108.0	pass
10)	Hexane	12.52	55.00	50.49	92%	66.0	115.0	pass
11)	1,1-Dichloroethane	13.23	60.00	58.98	98%	76.0	133.0	pass
12)	cis-1,2-Dichloroethene	14.71	55.00	54.55	99%	64.0	142.0	pass
13)	Chloroform	15.41	55.00	53.26	97%	63.0	123.0	pass
14)	1,1,1-Trichloroethane	15.71	50.00	48.35	97%	65.0	121.0	pass
15)	Carbon tetrachloride	15.98	55.00	49.10	89%	69.0	121.0	pass
16)	1,4-DIFLUOROBENZENE	17.31	375.00	375.00	100%	70.0	130.0	pass
17)	Benzene	16.46	55.00	45.85	83%	65.0	123.0	pass
18)	1,2-Dichloroethane	16.65	55.00	51.03	93%	75.0	123.0	pass
19)	Trichloroethene	17.72	55.00	50.06	91%	57.0	144.0	pass
20)	1,2-Dichloropropane	18.22	55.00	49.87	91%	63.0	125.0	pass
21)	CHLOROBENZENE-d5	22.23	341.00	341.00	100%	70.0	130.0	pass
22)	Toluene	19.95	55.00	45.60	83%	68.0	119.0	pass
23)	1,1,2-Trichloroethane	20.71	55.00	49.22	89%	70.0	130.0	pass
24)	Tetrachloroethene	20.81	55.00	48.34	88%	67.0	123.0	pass
25)	1,2-Dibromoethane (EDB)	21.55	55.00	48.29	88%	67.0	111.0	pass
26)	Chlorobenzene	22.28	55.00	48.07	87%	57.0	126.0	pass
27)	Ethylbenzene	22.37	55.00	42.99	78%	70.0	130.0	pass
28)	m&p-Xylene	22.56	110.00	74.54	68%	51.0	121.0	pass
29)	o-Xylene	23.21	55.00	42.62	77%	57.0	118.0	pass
30)	Styrene	23.24	55.00	38.60	70%	57.0	128.0	pass
31)	1,1,2,2-Tetrachloroethane	24.28	55.00	48.25	88%	70.0	130.0	pass
32)	1,3-Dichlorobenzene	25.79	55.00	47.38	86%	70.0	130.0	pass
33)	1,4-Dichlorobenzene	25.94	55.00	47.10	86%	61.0	131.0	pass
34)	1,2-Dichlorobenzene	26.54	55.00	48.69	89%	43.0	124.0	pass

LLH 8/12/15

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2015\Data\081215MAA\
Data File : 081215M03.D
Acq On : 12 Aug 2015 11:45 am
InstName : AG5973M
Operator : LLH
Sample : S15H046-CRL1
Misc : 50pptv 1532062 SIM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 12:56:05 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081115SMAA.M
Quant Title : TO15SIM
QLast Update : Tue Aug 11 14:59:20 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.24	49	122906	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.31	114	260574	375.00 pptv	0.01
21) CHLOROBENZENE-d5	22.23	117	256855	341.00 pptv	-0.02

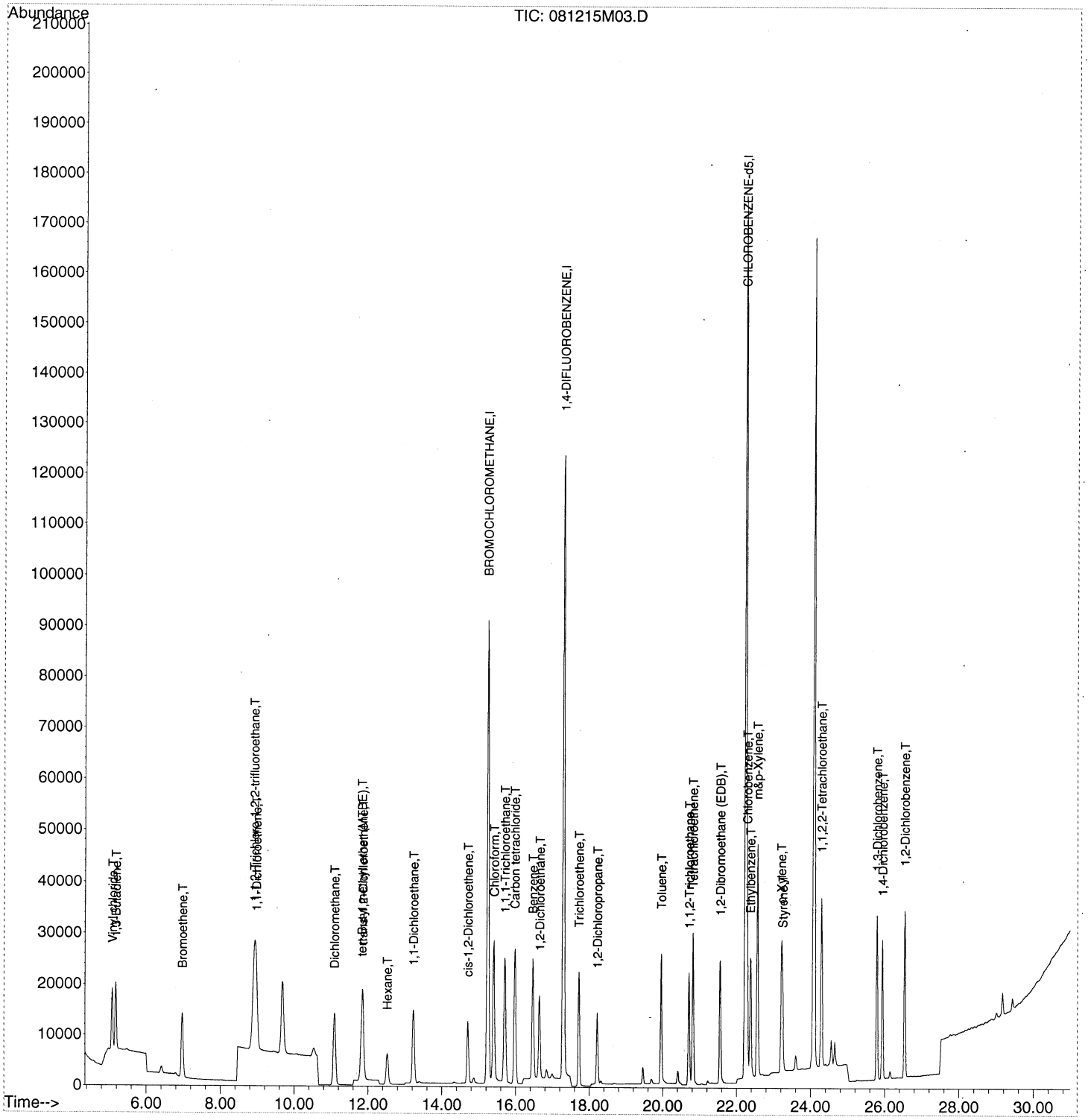
Target Compounds					Qvalue
2) Vinyl chloride	5.09	62	19199	60.83 pptv	100
3) 1,3-Butadiene	5.18	54	12523	55.40 pptv	99
4) Bromoethene	6.98	106	16351	54.26 pptv	97
5) 1,1,2-Trichloro-1,2,2-trif	8.92	151	40087	53.11 pptv	99
6) 1,1-Dichloroethene	8.97	61	23999	55.35 pptv	99
7) Dichloromethane	11.09	49	27422	60.26 pptv	99
8) tert-Butyl methyl ether (M	11.83	73	27228	49.21 pptv	100
9) trans-1,2-Dichloroethene	11.86	61	22479	46.32 pptv	98
10) Hexane	12.52	57	13549	50.49 pptv	98
11) 1,1-Dichloroethane	13.23	63	34901	58.98 pptv	99
12) cis-1,2-Dichloroethene	14.71	96	13780	54.55 pptv	100
13) Chloroform	15.41	83	43911	53.26 pptv	89
14) 1,1,1-Trichloroethane	15.71	97	41991	48.35 pptv	100
15) Carbon tetrachloride	15.98	117	41154	49.10 pptv	98
17) Benzene	16.46	78	49647	45.85 pptv	100
18) 1,2-Dichloroethane	16.65	62	27343	51.03 pptv	100
19) Trichloroethene	17.72	130	21228	50.06 pptv	100
20) 1,2-Dichloropropane	18.22	63	18660	49.87 pptv	100
22) Toluene	19.95	91	40826	45.60 pptv	99
23) 1,1,2-Trichloroethane	20.71	97	23540	49.22 pptv	99
24) Tetrachloroethene	20.81	166	30619	48.34 pptv	98
25) 1,2-Dibromoethane (EDB)	21.55	107	25255	48.29 pptv	99
26) Chlorobenzene	22.28	112	40650	48.07 pptv	95
27) Ethylbenzene	22.37	91	44724	42.99 pptv	100
28) m&p-Xylene	22.56	91	64438	74.54 pptv	100
29) o-Xylene	23.21	91	34970	42.62 pptv	99
30) Styrene	23.24	104	18718	38.60 pptv	94
31) 1,1,2,2-Tetrachloroethane	24.28	83	44121	48.25 pptv	100
32) 1,3-Dichlorobenzene	25.79	146	33226	47.38 pptv	100
33) 1,4-Dichlorobenzene	25.94	146	28087	47.10 pptv	100
34) 1,2-Dichlorobenzene	26.54	146	34525	48.69 pptv	99

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

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2015\Data\081215MAA\
Data File : 081215M03.D
Acq On : 12 Aug 2015 11:45 am
InstName : AG5973M
Operator : LLH
Sample : S15H046-CRL1
Misc : 50pptv 1532062 SIM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 12:56:05 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081115SMAA.M
Quant Title : TO15SIM
QLast Update : Tue Aug 11 14:59:20 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081215MAA\
Data File : 081215M04.D
Acq On : 12 Aug 2015 1:23 pm
InstName : AG5973M
Operator : LLH
Sample : B15H054-BLK1
Misc : 400ml BLANK CAN #40
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 15:08:45 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081115SMAA.M
Quant Title : TO15SIM
QLast Update : Tue Aug 11 14:59:20 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.23	49	121343	341.00 pptv	-0.02
16) 1,4-DIFLUOROBENZENE	17.30	114	240662	375.00 pptv	0.00
21) CHLOROBENZENE-d5	22.23	117	245329	341.00 pptv	-0.02

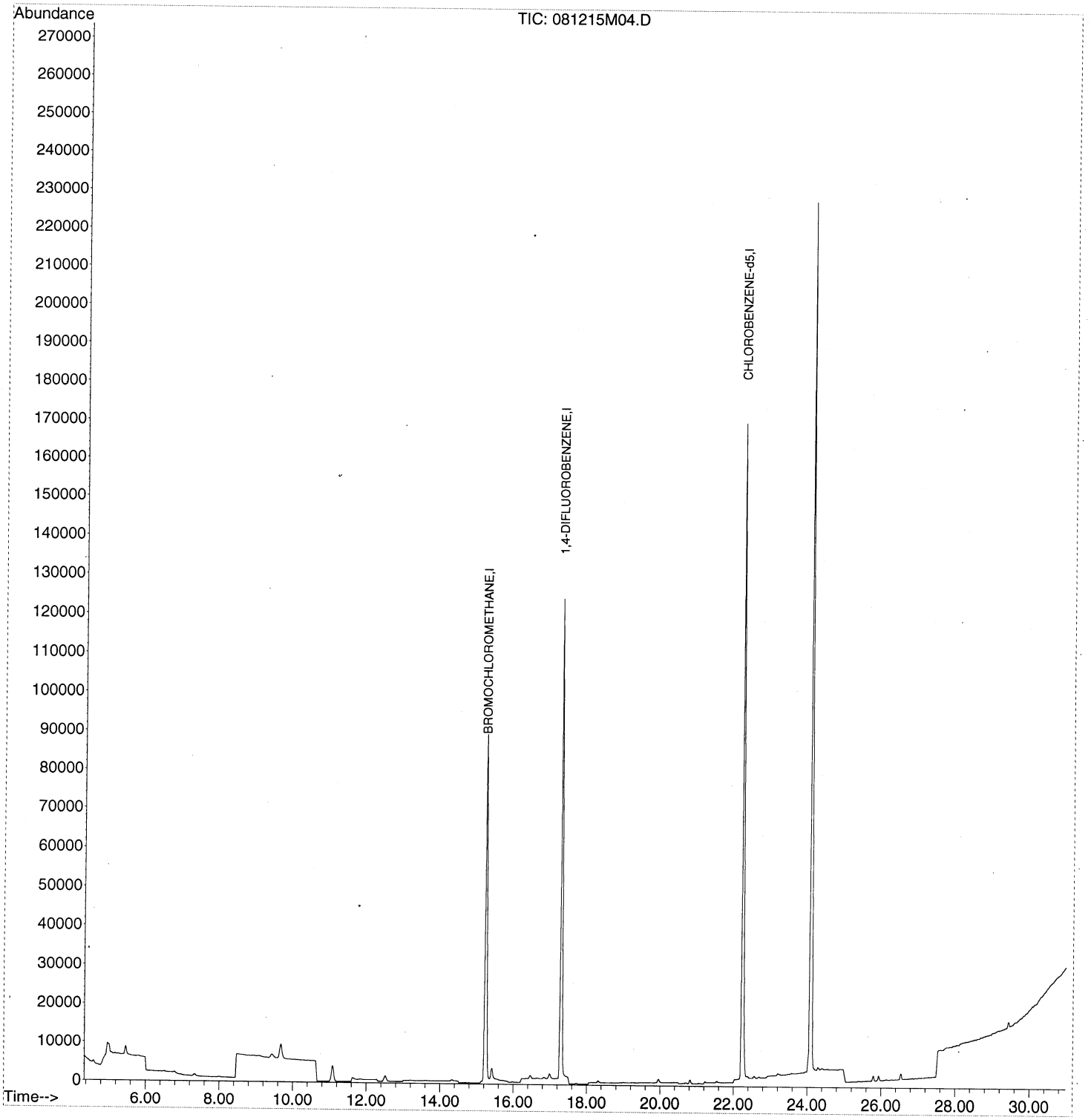
Target Compounds					Qvalue
2) Vinyl chloride	5.07	62	591	N.D.	
3) 1,3-Butadiene	5.18	54	73	N.D.	
4) Bromoethene	6.96	106	29	N.D.	
5) 1,1,2-Trichloro-1,2,2-trif	8.90	151	313	N.D.	
6) 1,1-Dichloroethene	8.95	61	184	N.D.	
7) Dichloromethane	11.08	49	7492	N.D.	
8) tert-Butyl methyl ether (M	11.82	73	170	N.D.	
9) trans-1,2-Dichloroethene	11.83	61	55	N.D.	
10) Hexane	12.52	57	2960	N.D.	
11) 1,1-Dichloroethane	13.22	63	187	N.D.	
12) cis-1,2-Dichloroethene	14.71	96	14	N.D.	
13) Chloroform	15.40	83	356	N.D.	
14) 1,1,1-Trichloroethane	15.71	97	284	N.D.	
15) Carbon tetrachloride	15.98	117	335	N.D.	
17) Benzene	16.47	78	1800	N.D.	
18) 1,2-Dichloroethane	16.64	62	228	N.D.	
19) Trichloroethene	17.71	130	204	N.D.	
20) 1,2-Dichloropropane	18.07	63	175	N.D.	
22) Toluene	19.95	91	1256	N.D.	
23) 1,1,2-Trichloroethane	20.71	97	255	N.D.	
24) Tetrachloroethene	20.81	166	364	N.D.	
25) 1,2-Dibromoethane (EDB)	21.55	107	335	N.D.	
26) Chlorobenzene	22.28	112	687	N.D.	
27) Ethylbenzene	22.37	91	649	N.D.	
28) m&p-Xylene	22.56	91	802	N.D.	
29) o-Xylene	23.21	91	740	N.D.	
30) Styrene	23.24	104	376	N.D.	
31) 1,1,2,2-Tetrachloroethane	24.28	83	951	N.D.	
32) 1,3-Dichlorobenzene	25.79	146	1316	N.D.	
33) 1,4-Dichlorobenzene	25.94	146	1306	N.D.	
34) 1,2-Dichlorobenzene	26.54	146	1587	N.D.	

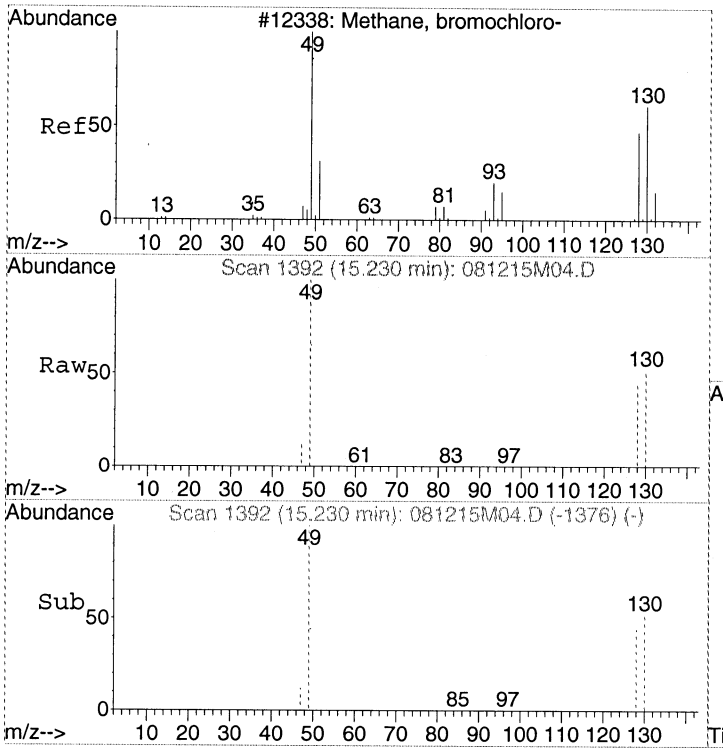
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081215MAA\
Data File : 081215M04.D
Acq On : 12 Aug 2015 1:23 pm
InstName : AG5973M
Operator : LLH
Sample : B15H054-BLK1
Misc : 400ml BLANK CAN #40
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 15:08:45 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081115SMAA.M
Quant Title : TO15SIM
QLast Update : Tue Aug 11 14:59:20 2015
Response via : Initial Calibration

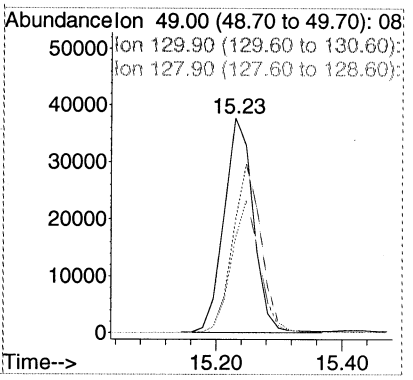


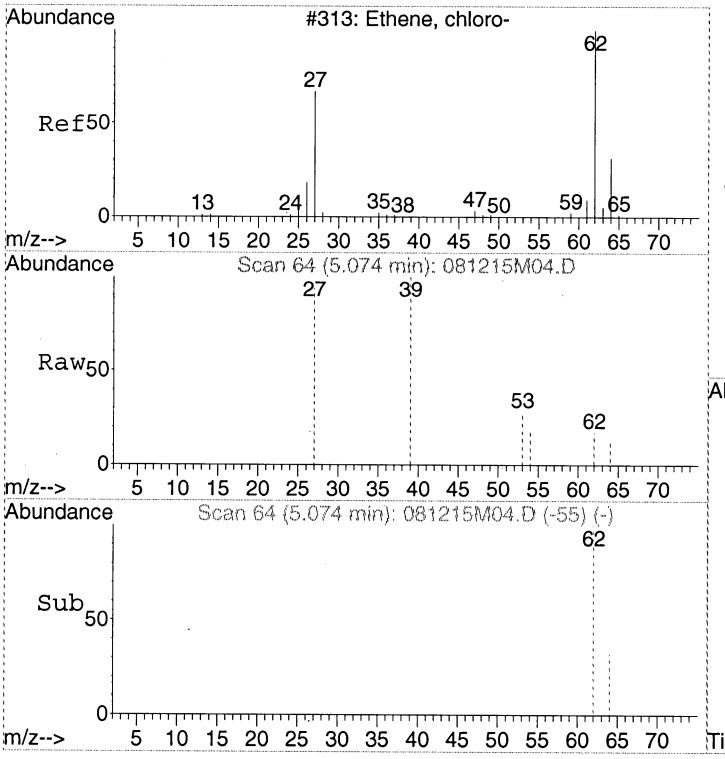


#1
BROMOCHLOROMETHANE
Concen: 341.00 pptv
RT: 15.23 min Scan# 1392
Delta R.T. -0.02 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion: 49 Resp: 121343

Ion	Ratio	Lower	Upper
49	100		
130	76.0	56.6	96.6
128	59.0	39.9	79.9

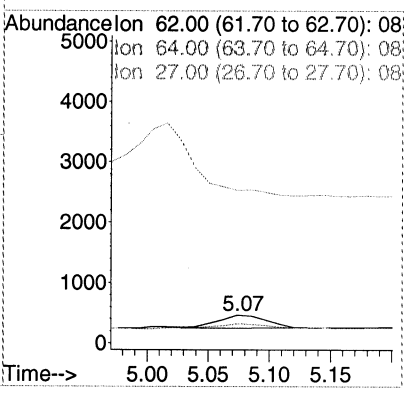


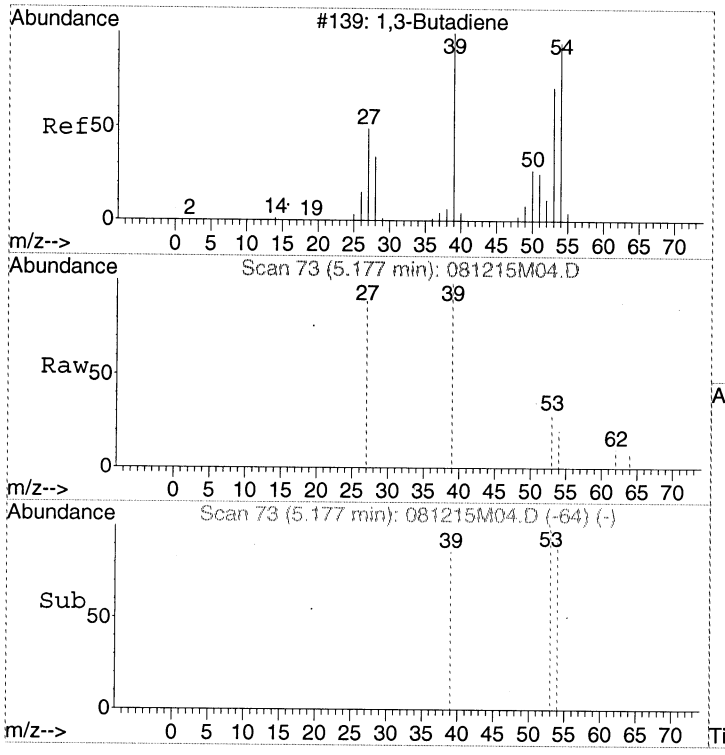


#2
Vinyl chloride
Concen: Below Cal
RT: 5.07 min Scan# 64
Delta R.T. -0.01 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion: 62 Resp: 591

Ion	Ratio	Lower	Upper
62	100		
64	48.1	12.0	52.0
27	0.0	24.7	64.7#

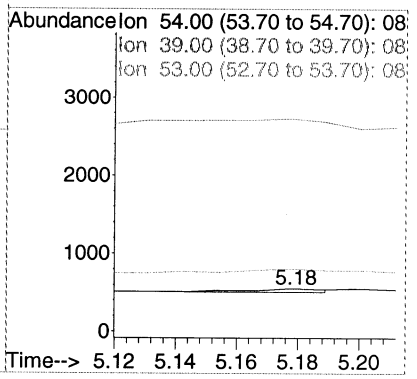


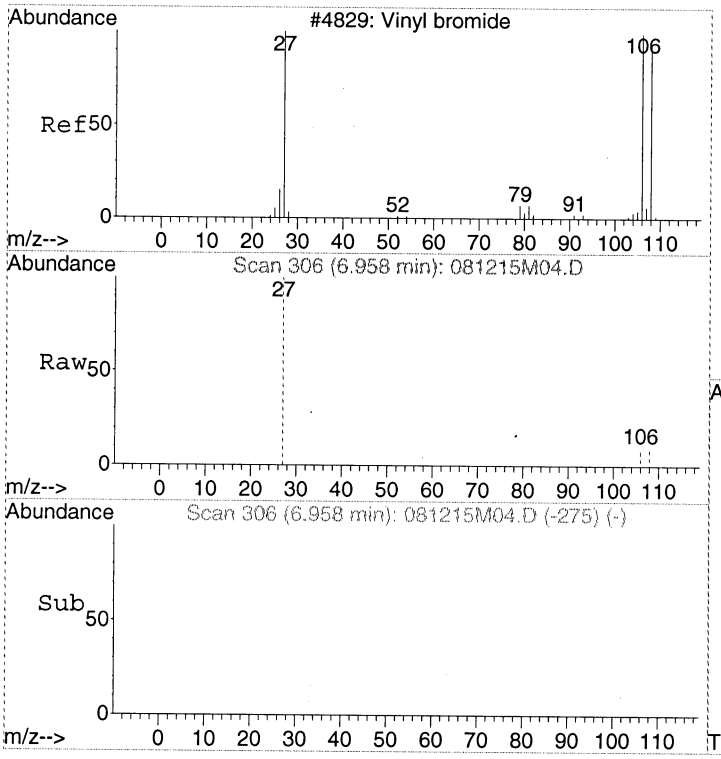


#3
1,3-Butadiene
Concen: Below Cal
RT: 5.18 min Scan# 73
Delta R.T. -0.01 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion: 54 Resp: 73

Ion	Ratio	Lower	Upper
54	100		
39	209.6	72.5	112.5#
53	331.5	48.6	88.6#

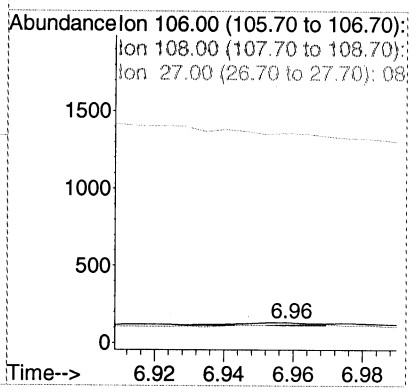


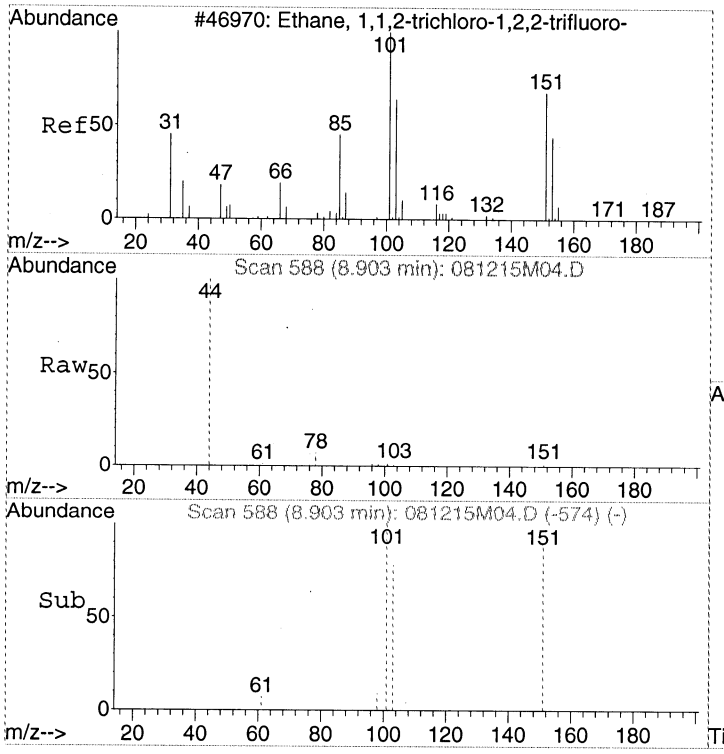


#4
Bromoethene
Concen: Below Cal
RT: 6.96 min Scan# 306
Delta R.T. -0.02 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion:106 Resp: 29

Ion	Ratio	Lower	Upper
106	100		
108	124.1	0.0	214.7
27	0.0	67.2	107.2#

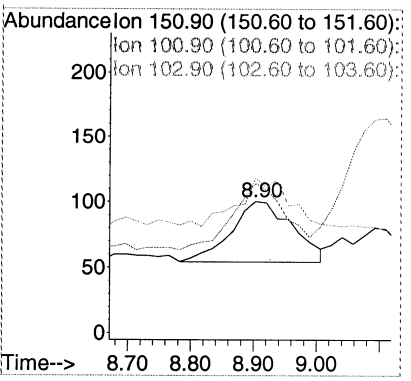


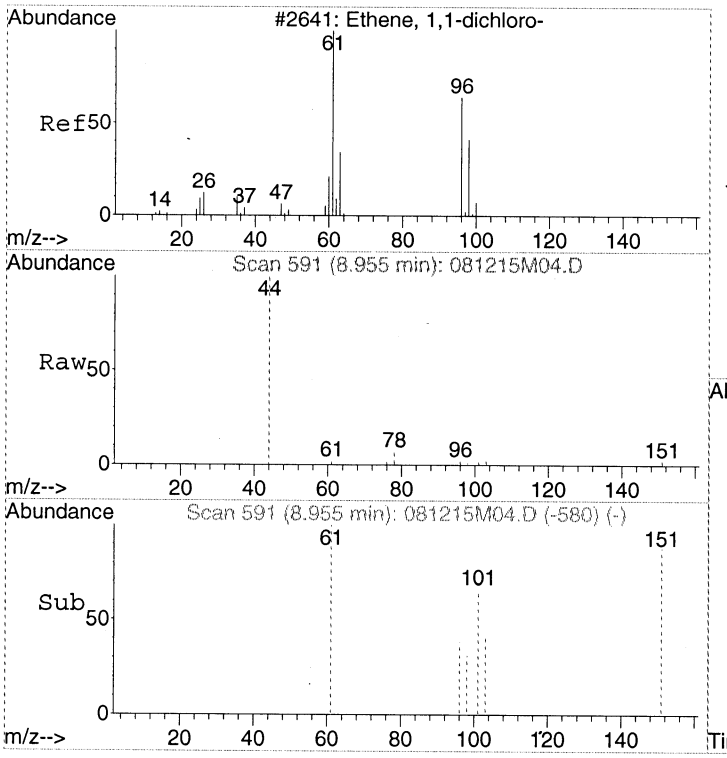


#5
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: Below Cal
RT: 8.90 min Scan# 588
Delta R.T. -0.02 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion:151 Resp: 313

Ion	Ratio	Lower	Upper
151	100		
101	94.9	95.3	135.3#
103	65.2	53.9	93.9

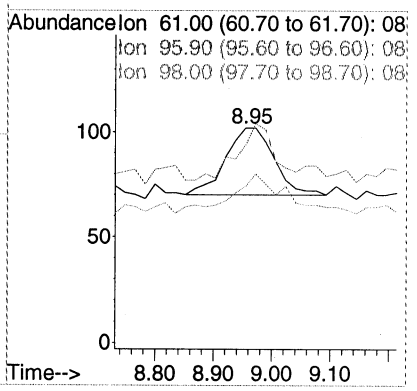


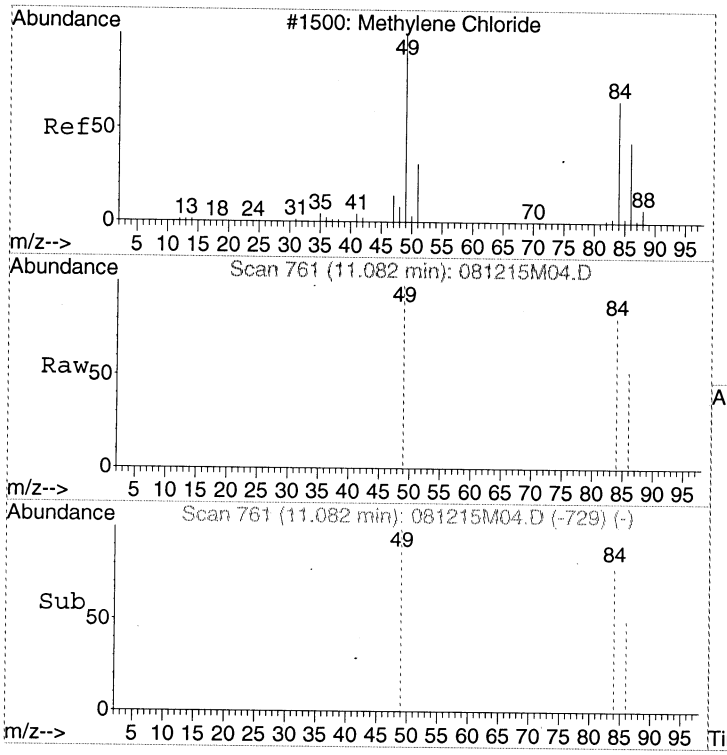


#6
1,1-Dichloroethene
Concen: Below Cal
RT: 8.95 min Scan# 591
Delta R.T. -0.02 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion: 61 Resp: 184

Ion	Ratio	Lower	Upper
61	100		
96	56.0	41.4	81.4
98	30.4	18.8	58.8

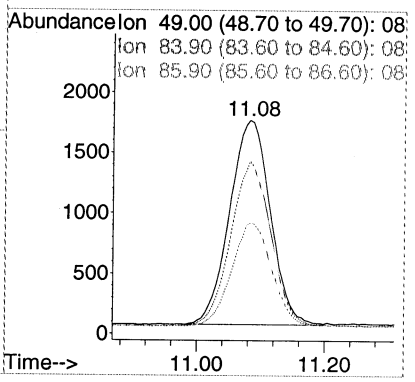


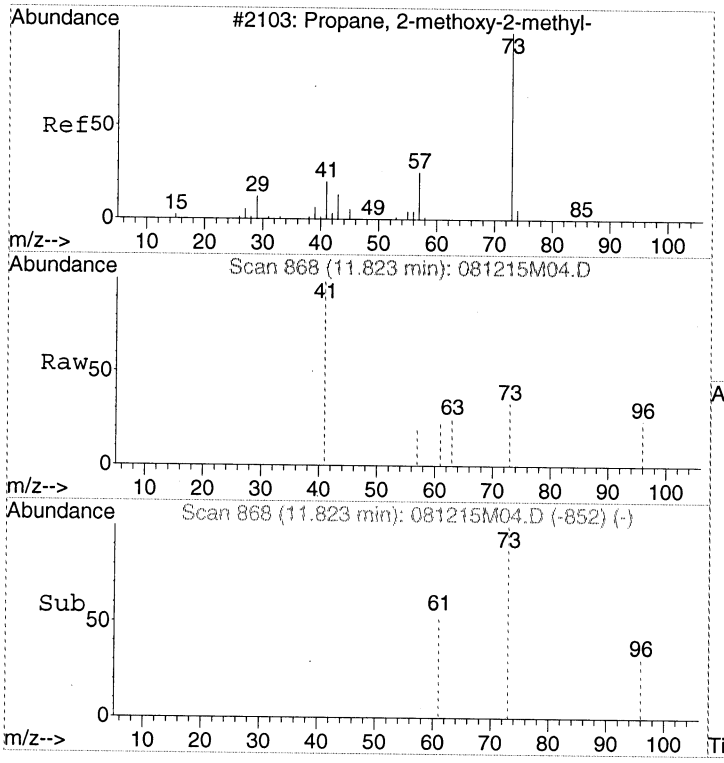


#7
Dichloromethane
Concen: Below Cal
RT: 11.08 min Scan# 761
Delta R.T. -0.01 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion: 49 Resp: 7492

Ion	Ratio	Lower	Upper
49	100		
84	78.2	59.9	99.9
86	50.8	31.1	71.1

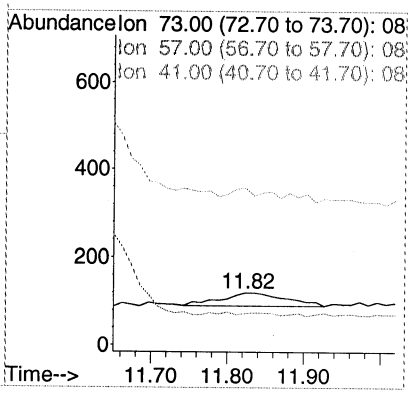


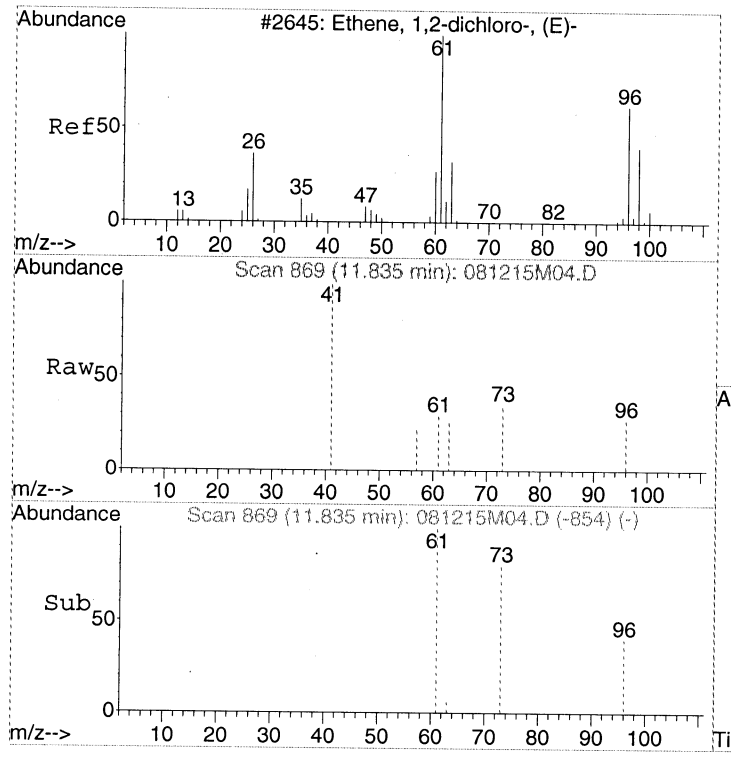


#8
tert-Butyl methyl ether (MTBE)
Concen: Below Cal
RT: 11.82 min Scan# 868
Delta R.T. -0.02 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion: 73 Resp: 170

Ion	Ratio	Lower	Upper
73	100		
57	7.6	3.0	43.0
41	19.4	19.2	59.2

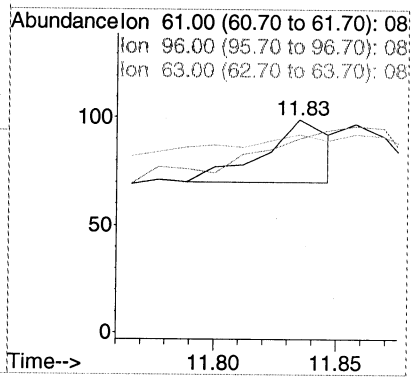


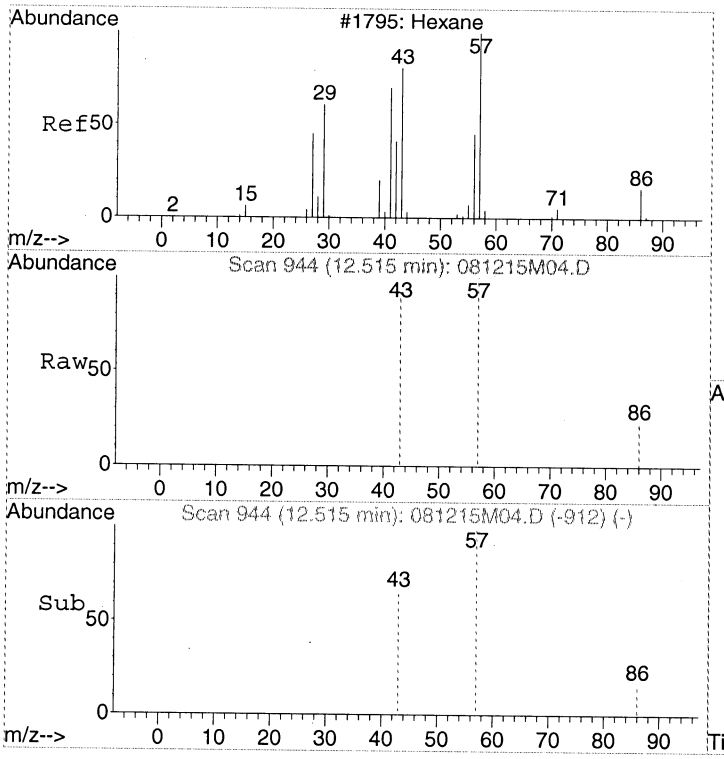


#9
trans-1,2-Dichloroethene
Concen: Below Cal
RT: 11.83 min Scan# 869
Delta R.T. -0.03 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion: 61 Resp: 55

Ion	Ratio	Lower	Upper
61	100		
96	0.0	50.8	90.8#
63	38.2	12.1	52.1

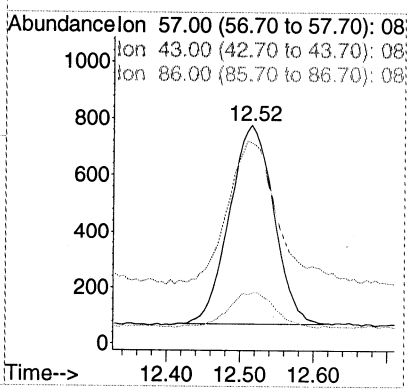


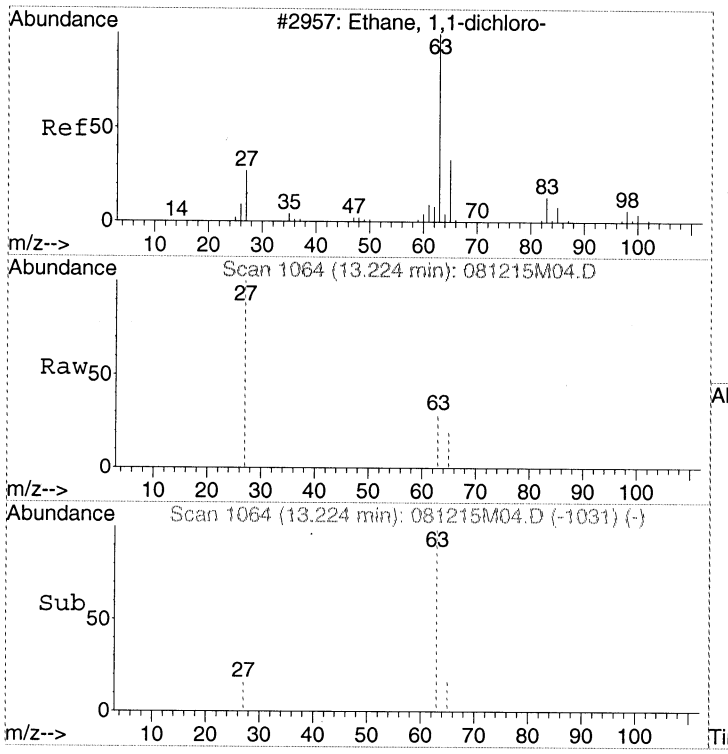


#10
Hexane
Concen: Below Cal
RT: 12.52 min Scan# 944
Delta R.T. -0.01 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion: 57 Resp: 2960

Ion	Ratio	Lower	Upper
57	100		
43	74.8	51.5	91.5
86	7.4	0.0	37.2

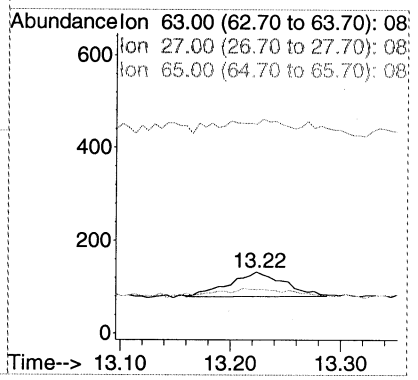


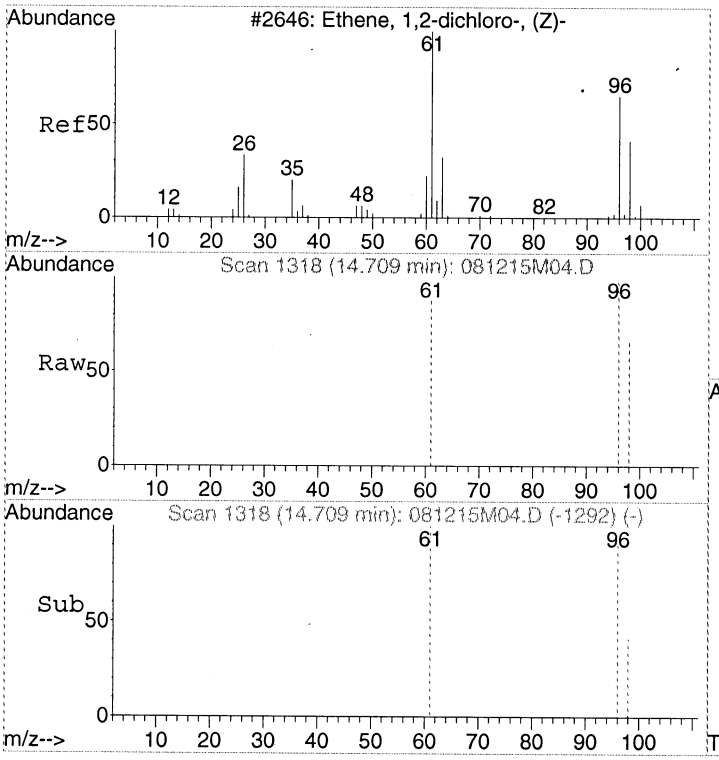


#11
1,1-Dichloroethane
Concen: Below Cal
RT: 13.22 min Scan# 1064
Delta R.T. -0.01 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion: 63 Resp: 187

Ion	Ratio	Lower	Upper
63	100		
27	12.8	10.5	50.5
65	11.2	11.5	51.5#

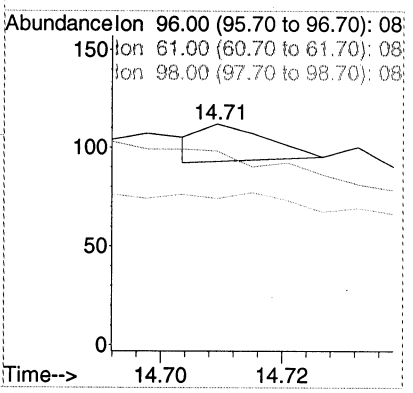


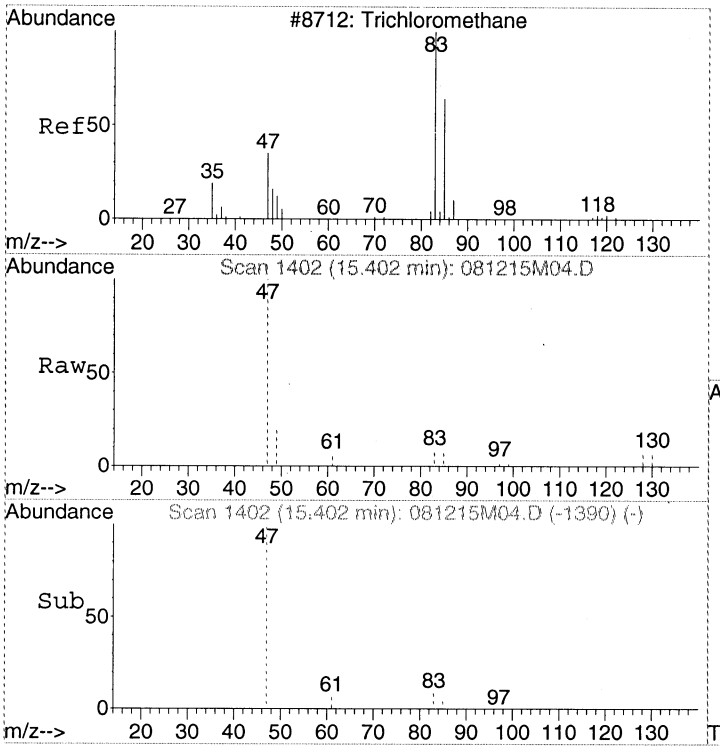


#12
cis-1,2-Dichloroethene
Concen: Below Cal
RT: 14.71 min Scan# 1318
Delta R.T. 0.00 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion: 96 Resp: 14

Ion	Ratio	Lower	Upper
96	100		
61	0.0	109.9	149.9#
98	0.0	44.2	84.2#

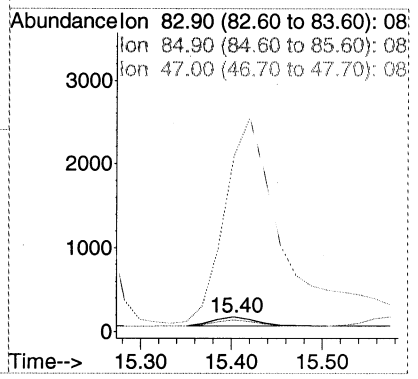


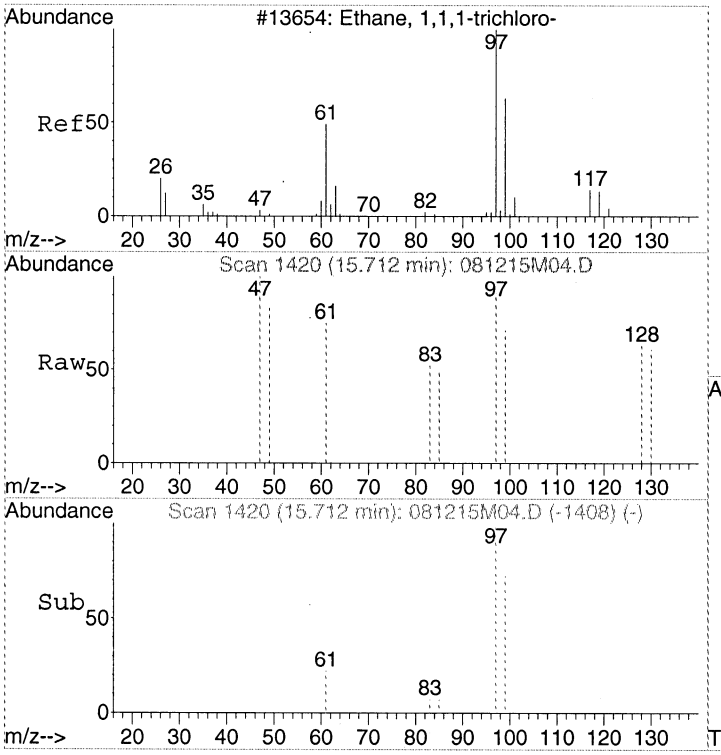


#13
Chloroform
Concen: Below Cal
RT: 15.40 min Scan# 1402
Delta R.T. 0.00 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion: 83 Resp: 356

Ion	Ratio	Lower	Upper
83	100		
85	74.2	44.4	84.4
47	3009.8	6.1	46.1#

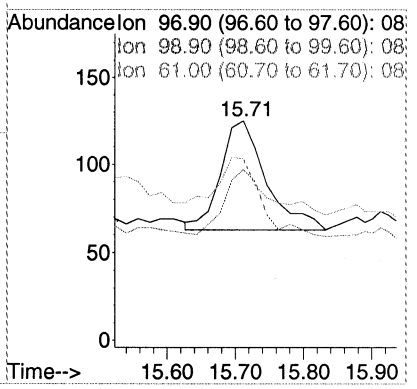


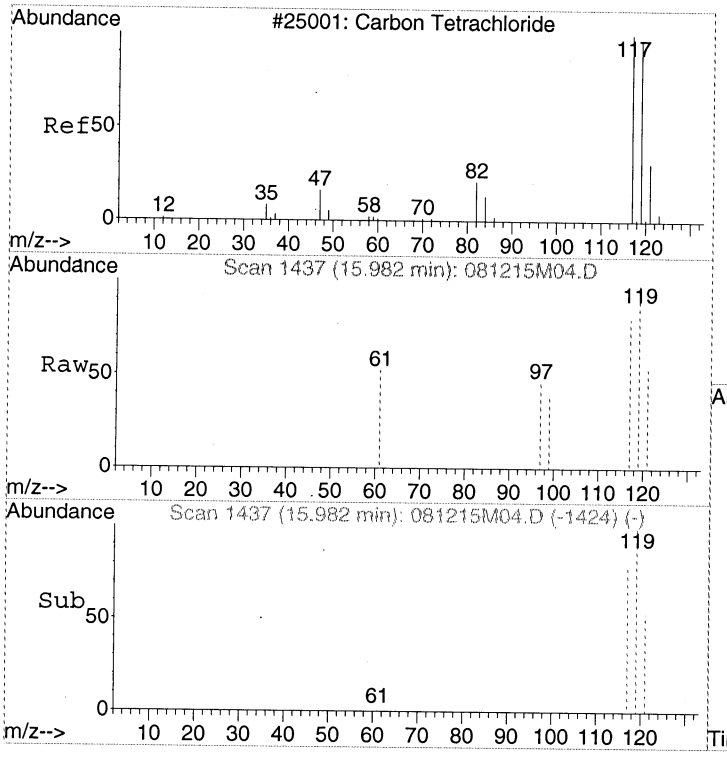


#14
1,1,1-Trichloroethane
Concen: Below Cal
RT: 15.71 min Scan# 1420
Delta R.T. 0.00 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion: 97 Resp: 284

Ion	Ratio	Lower	Upper
97	100		
99	48.6	44.2	84.2
61	39.4	23.6	63.6

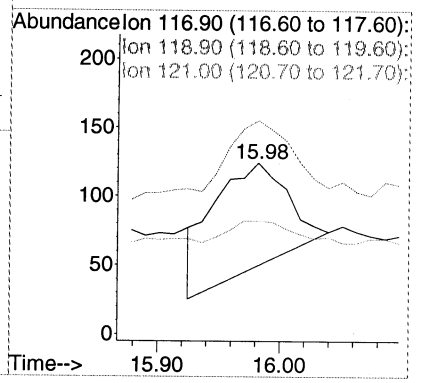


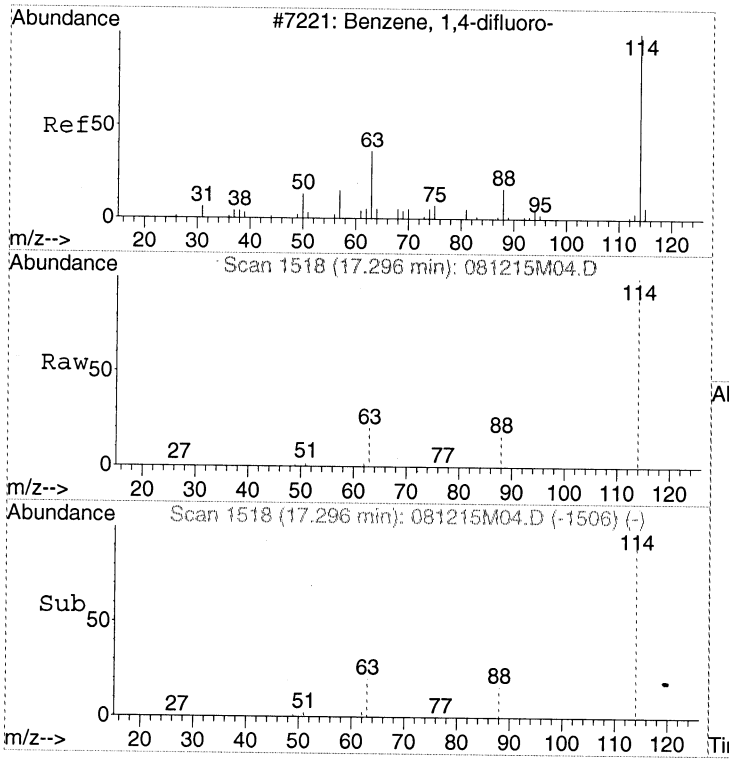


#15
Carbon tetrachloride
Concen: Below Cal
RT: 15.98 min Scan# 1437
Delta R.T. 0.00 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion:117 Resp: 335

Ion	Ratio	Lower	Upper
117	100		
119	53.4	76.1	116.1#
121	0.0	6.4	46.4#

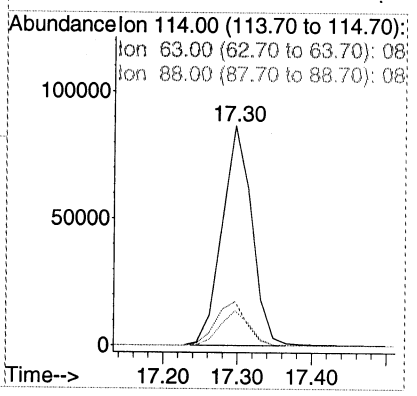


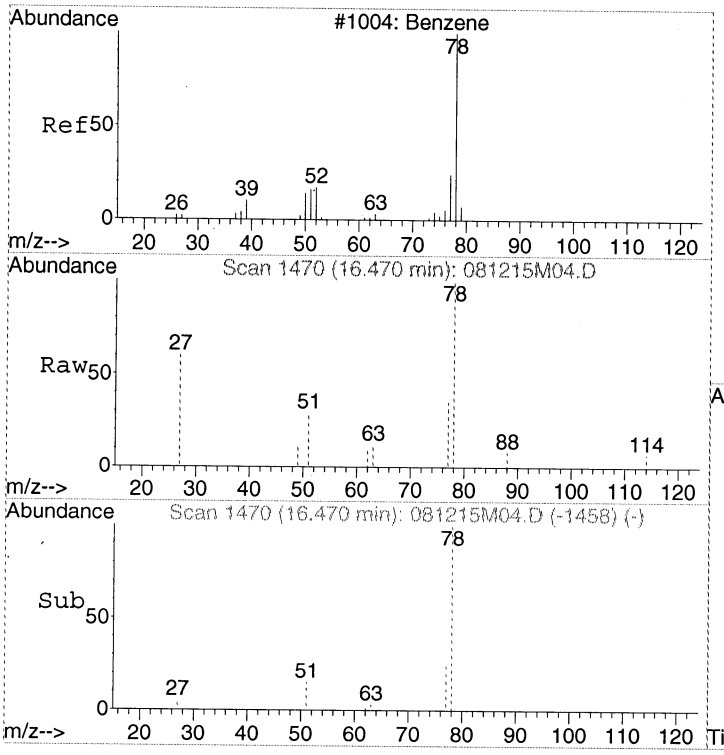


#16
1,4-DIFLUOROBENZENE
Concen: 375.00 pptv
RT: 17.30 min Scan# 1518
Delta R.T. 0.00 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion:114 Resp: 240662

Ion	Ratio	Lower	Upper
114	100		
63	20.7	0.6	40.6
88	15.8	0.0	35.8

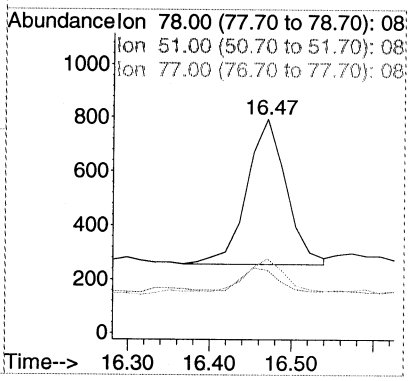


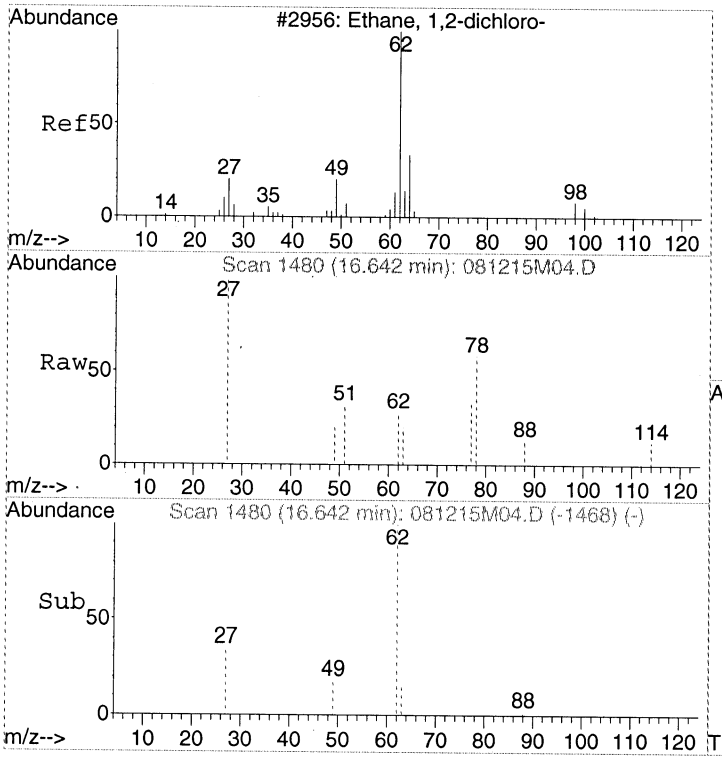


#17
Benzene
Concen: Below Cal
RT: 16.47 min Scan# 1470
Delta R.T. 0.00 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion: 78 Resp: 1800

Ion	Ratio	Lower	Upper
78	100		
51	15.7	0.0	38.2
77	26.2	4.3	44.3

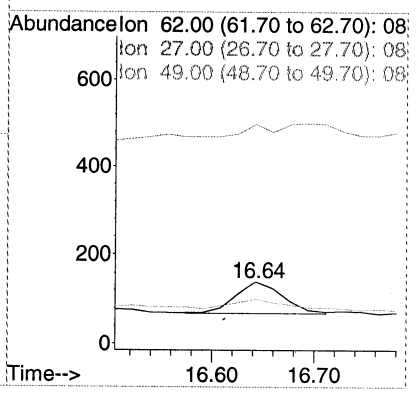


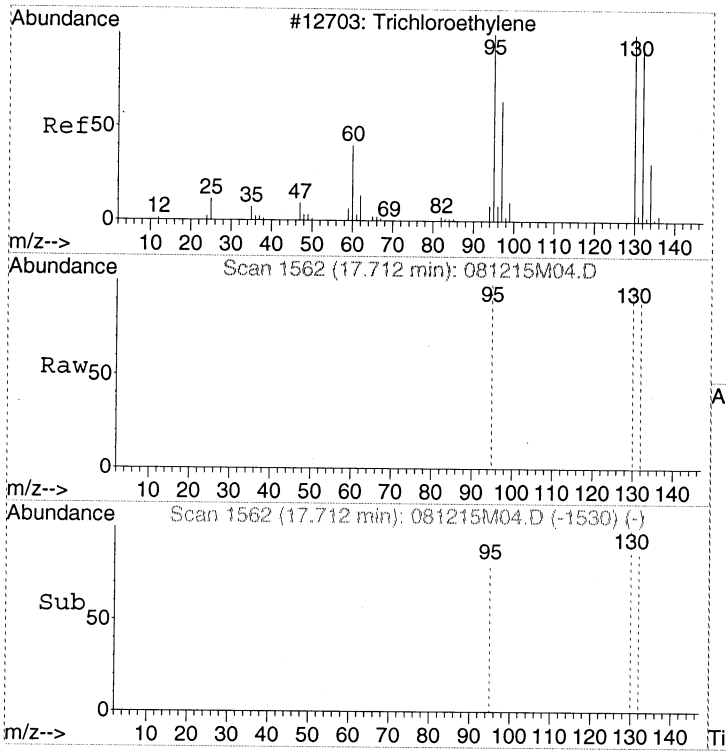


#18
1,2-Dichloroethane
Concen: Below Cal
RT: 16.64 min Scan# 1480
Delta R.T. 0.00 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion: 62 Resp: 228

Ion	Ratio	Lower	Upper
62	100		
27	24.6	16.3	56.3
49	44.3	5.6	45.6

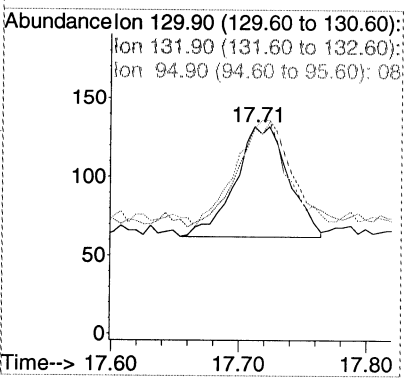


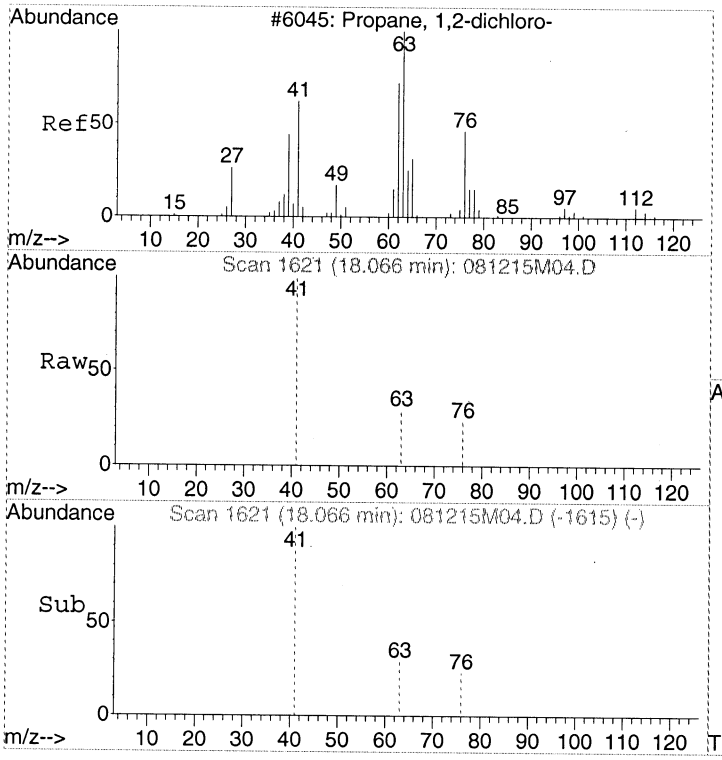


#19
Trichloroethene
Concen: Below Cal
RT: 17.71 min Scan# 1562
Delta R.T. -0.01 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion:130 Resp: 204

Ion	Ratio	Lower	Upper
130	100		
132	101.5	76.4	116.4
95	94.6	77.3	117.3

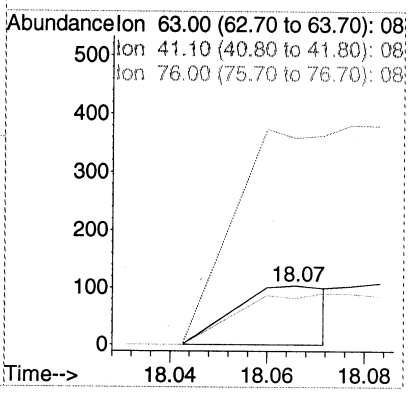


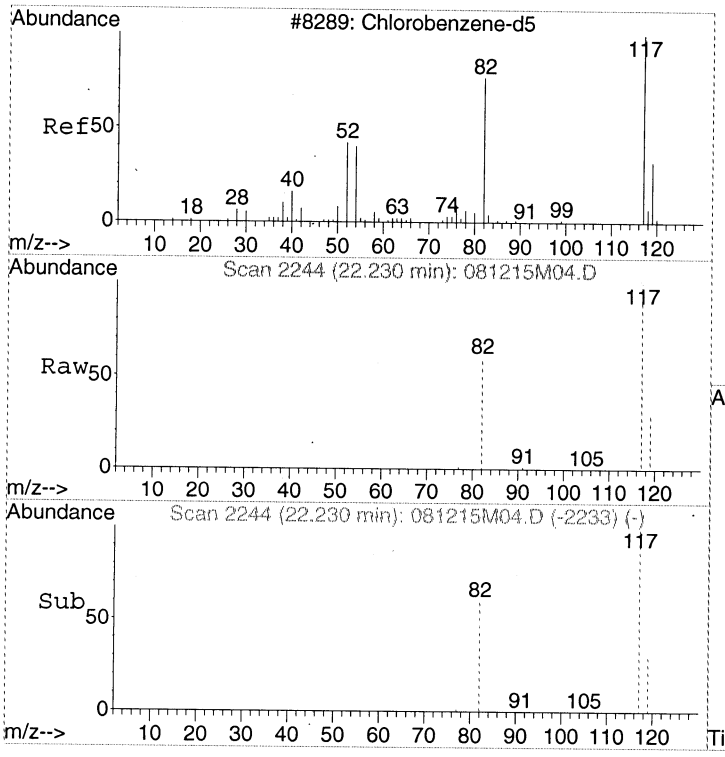


#20
1,2-Dichloropropane
Concen: Below Cal
RT: 18.07 min Scan# 1621
Delta R.T. -0.15 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion: 63 Resp: 175

Ion	Ratio	Lower	Upper
63	100		
41	290.9	44.5	84.5#
76	66.3	30.3	70.3

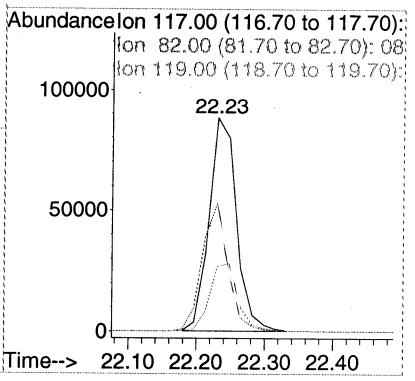


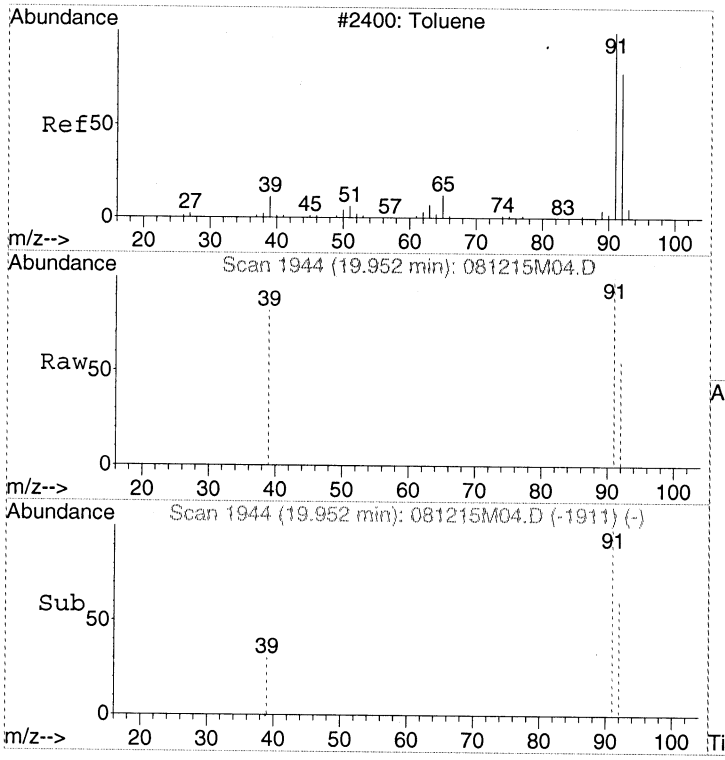


#21
CHLOROBENZENE-d5
Concen: 341.00 pptv
RT: 22.23 min Scan# 2244
Delta R.T. -0.02 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion:117 Resp: 245329

Ion	Ratio	Lower	Upper
117	100		
82	56.3	36.0	76.0
119	32.1	12.1	52.1

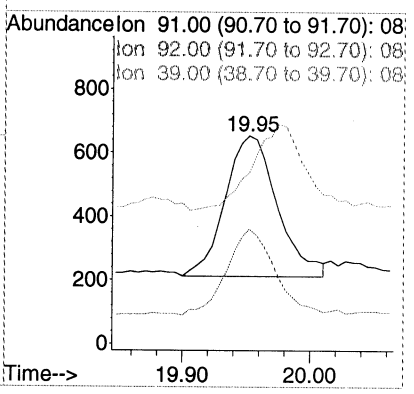


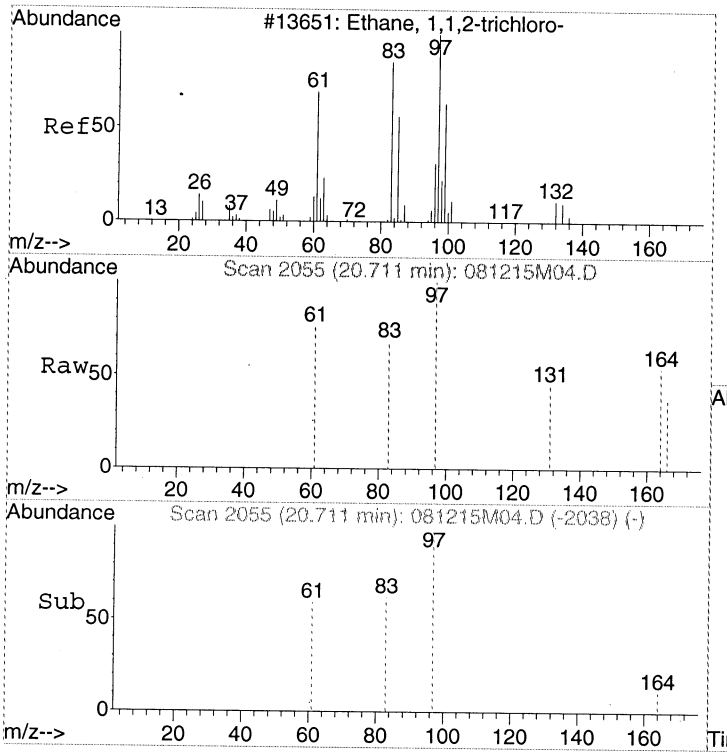


#22
Toluene
Concen: Below Cal
RT: 19.95 min Scan# 1944
Delta R.T. -0.01 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion: 91 Resp: 1256

Ion	Ratio	Lower	Upper
91	100		
92	56.1	37.9	77.9
39	0.0	0.0	29.3

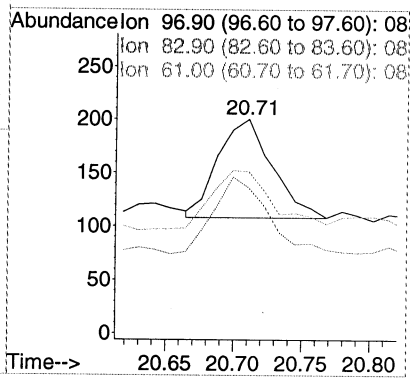


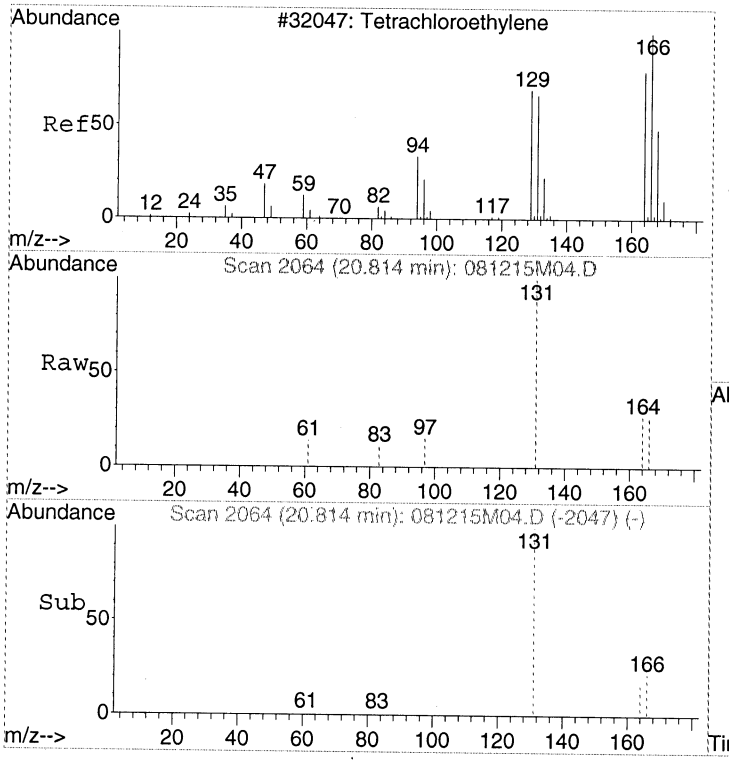


#23
1,1,2-Trichloroethane
Concen: Below Cal
RT: 20.71 min Scan# 2055
Delta R.T. 0.00 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion: 97 Resp: 255

Ion	Ratio	Lower	Upper
97	100		
83	79.6	63.7	103.7
61	59.2	47.7	87.7

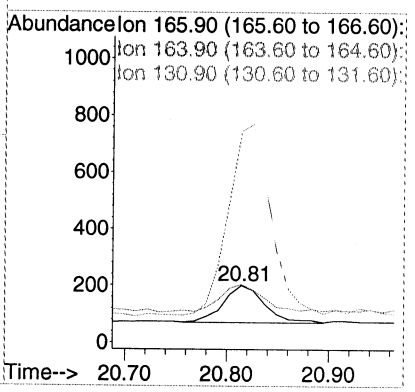


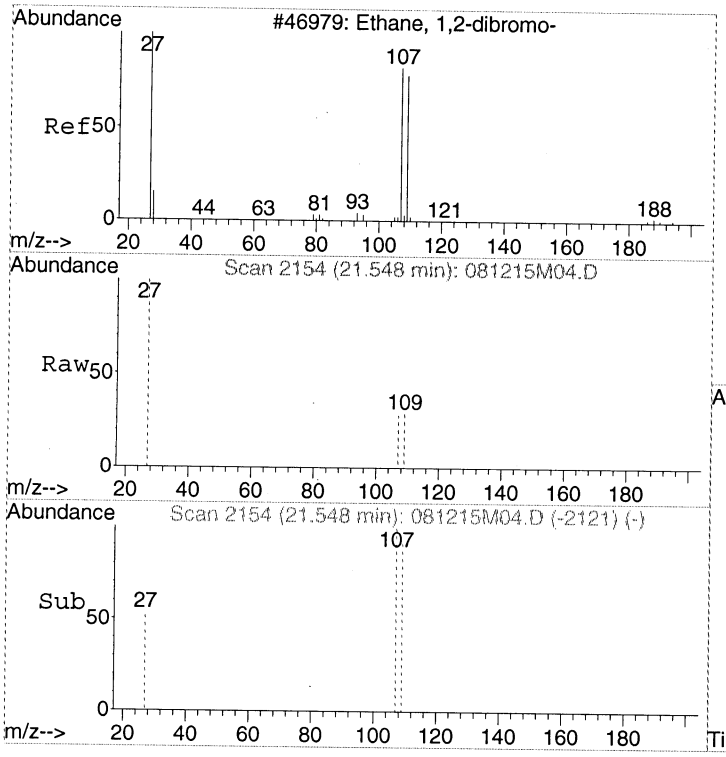


#24
Tetrachloroethene
Concen: Below Cal
RT: 20.81 min Scan# 2064
Delta R.T. 0.00 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion:166 Resp: 364

Ion	Ratio	Lower	Upper
166	100		
164	81.3	58.4	98.4
131	536.8	49.4	89.4#

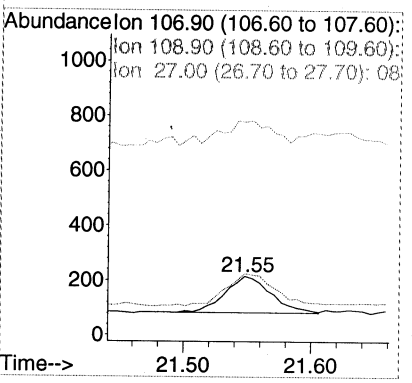


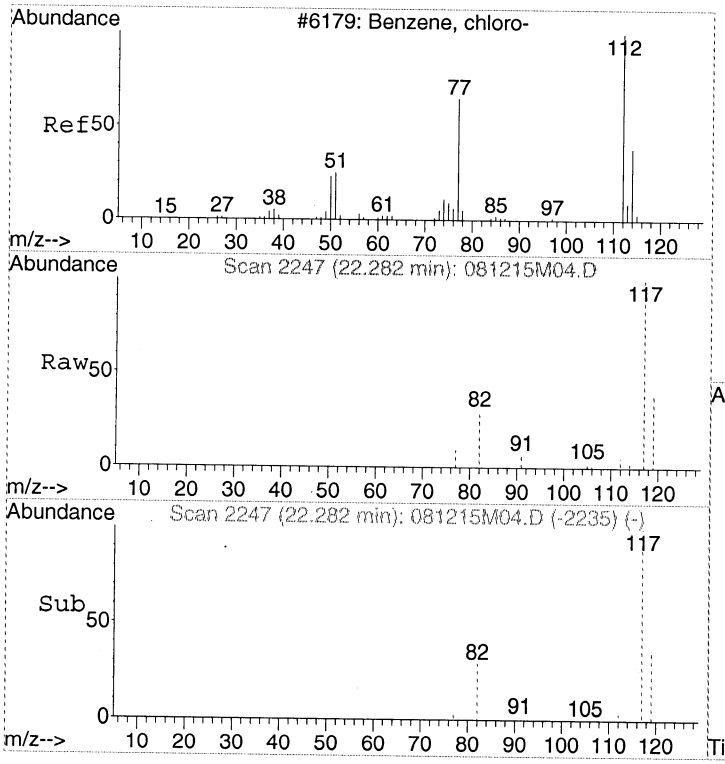


#25
1,2-Dibromoethane (EDB)
Concen: Below Cal
RT: 21.55 min Scan# 2154
Delta R.T. -0.01 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion:107 Resp: 335

Ion	Ratio	Lower	Upper
107	100		
109	78.8	73.9	113.9
27	46.0	37.8	77.8

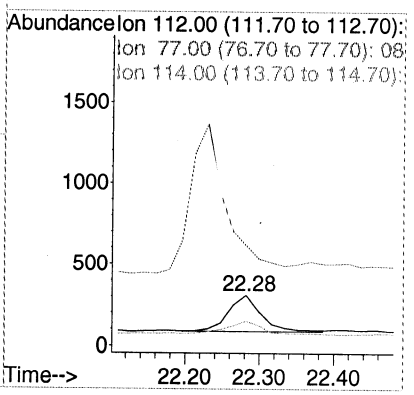


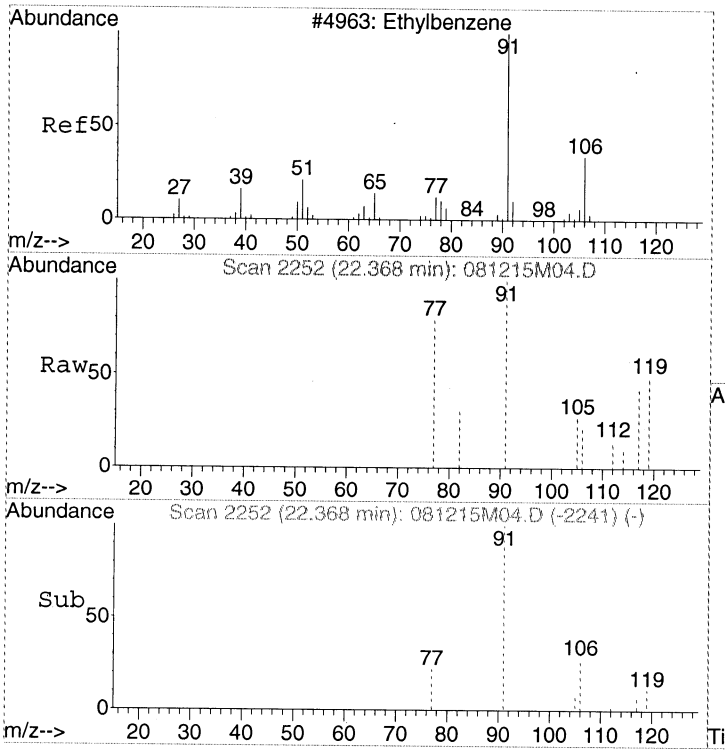


#26
Chlorobenzene
Concen: Below Cal
RT: 22.28 min Scan# 2247
Delta R.T. 0.00 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion:112 Resp: 687

Ion	Ratio	Lower	Upper
112	100		
77	0.0	40.4	80.4#
114	36.2	12.0	52.0

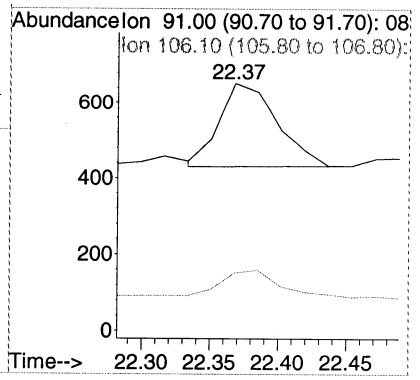


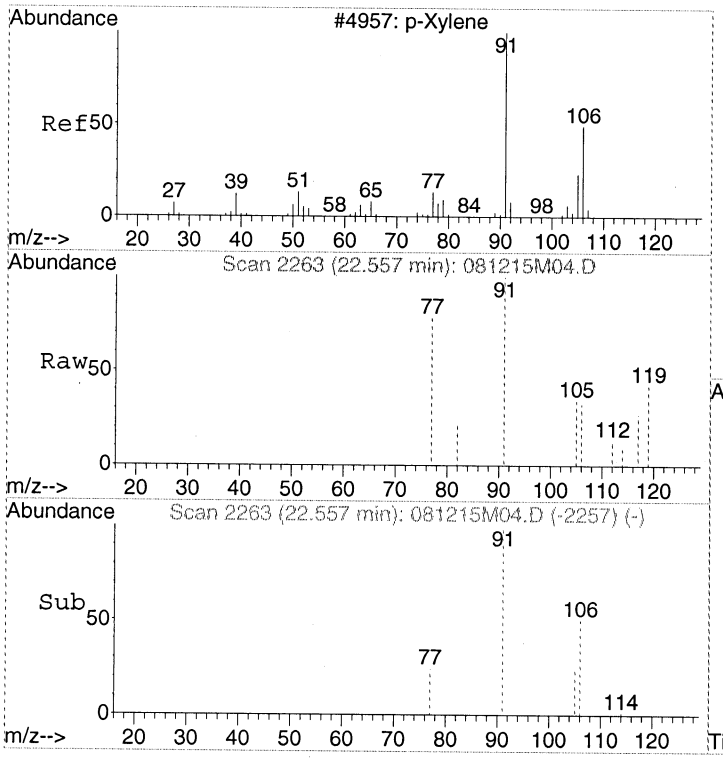


#27
Ethylbenzene
Concen: Below Cal
RT: 22.37 min Scan# 2252
Delta R.T. -0.02 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion: 91 Resp: 649

Ion	Ratio	Lower	Upper
91	100		
106	32.8	11.2	51.2

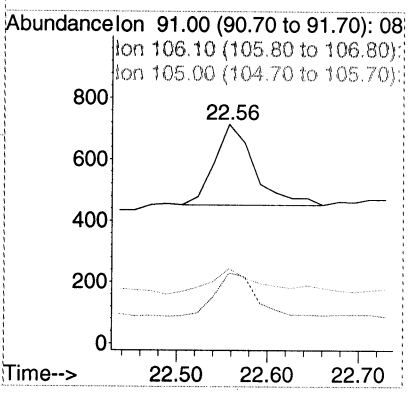


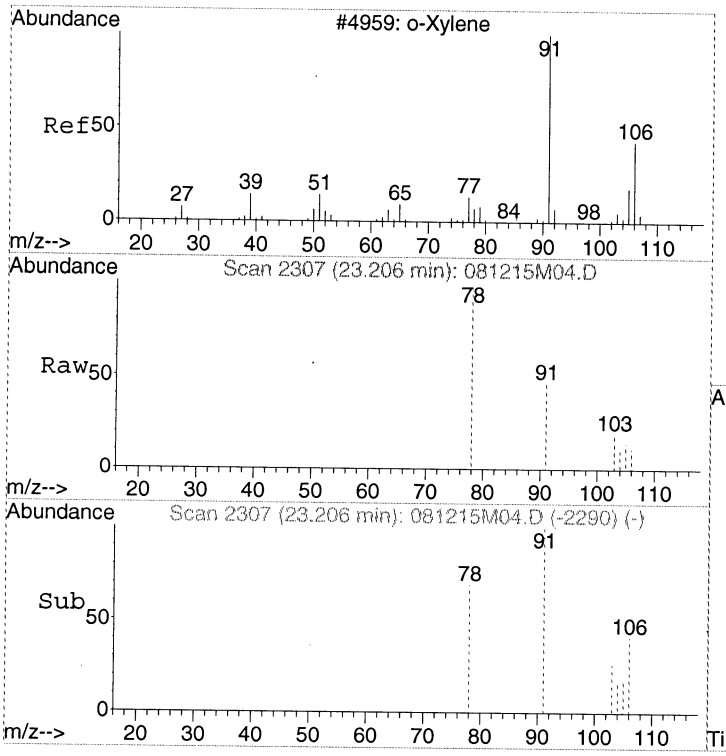


#28
m&p-Xylene
Concen: Below Cal
RT: 22.56 min Scan# 2263
Delta R.T. 0.00 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion: 91 Resp: 802

Ion	Ratio	Lower	Upper
91	100		
106	53.7	29.0	69.0
105	37.4	4.3	44.3

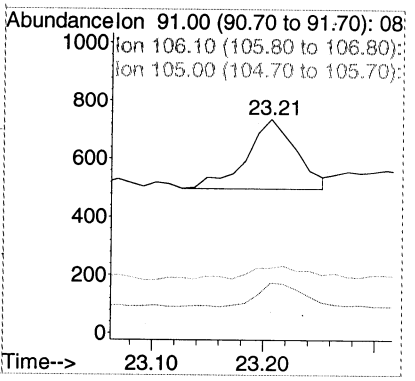


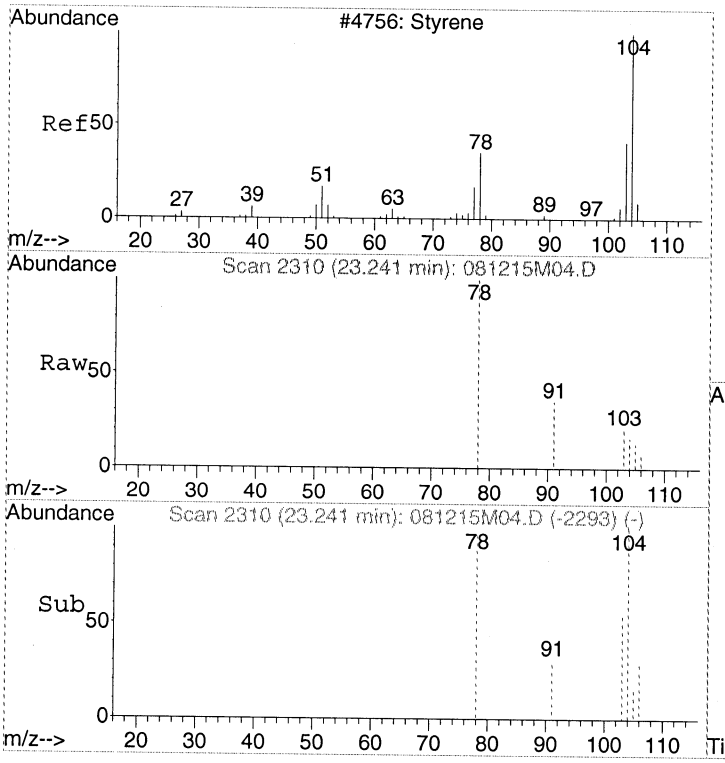


#29
o-Xylene
Concen: Below Cal
RT: 23.21 min Scan# 2307
Delta R.T. 0.00 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion: 91 Resp: 740

Ion	Ratio	Lower	Upper
91	100		
106	32.4	25.6	65.6
105	21.5	6.0	46.0

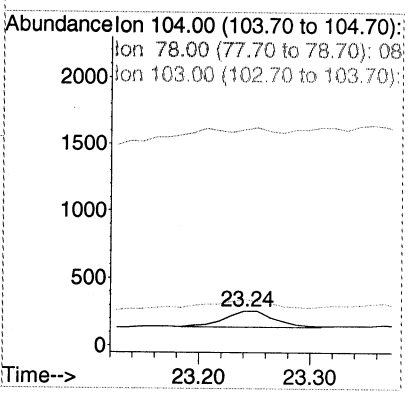


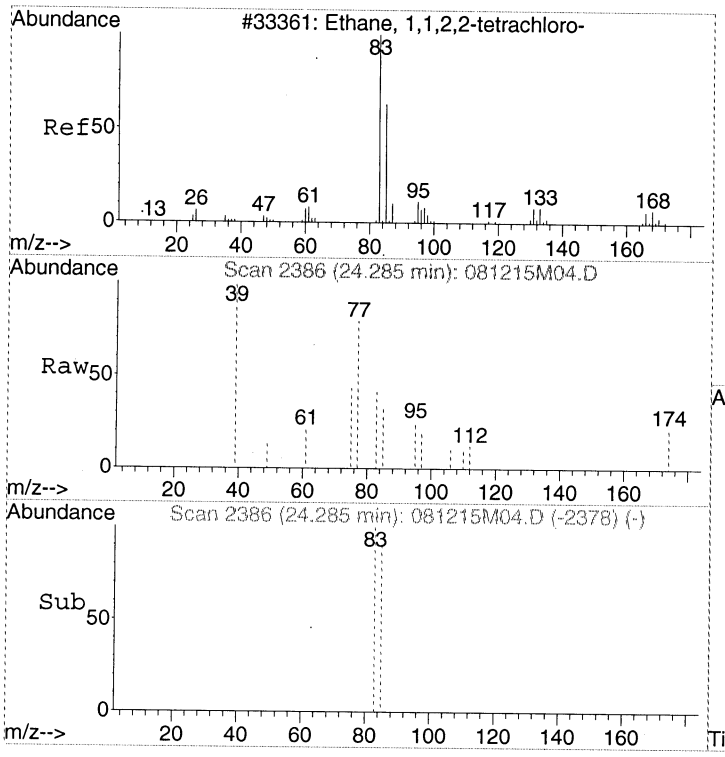


#30
Styrene
Concen: Below Cal
RT: 23.24 min Scan# 2310
Delta R.T. 0.00 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion:104 Resp: 376

Ion	Ratio	Lower	Upper
104	100		
78	22.1	37.4	77.4#
103	51.3	36.8	76.8

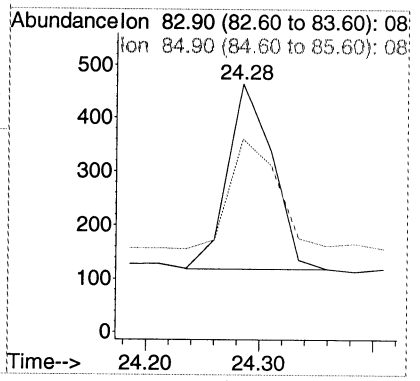


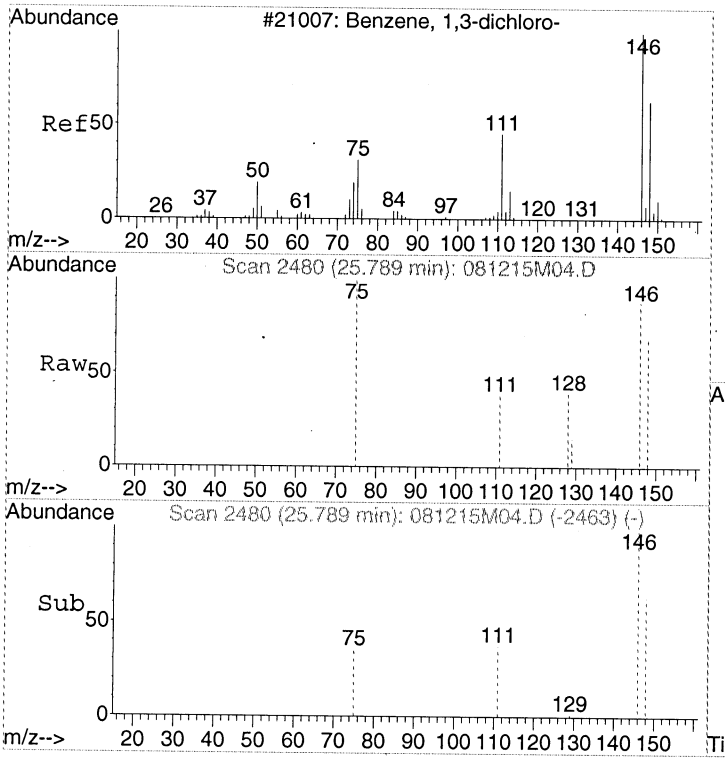


#31
1,1,2,2-Tetrachloroethane
Concen: Below Cal
RT: 24.28 min Scan# 2386
Delta R.T. 0.00 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion: 83 Resp: 951

Ion	Ratio	Lower	Upper
83	100		
85	63.3	43.7	83.7

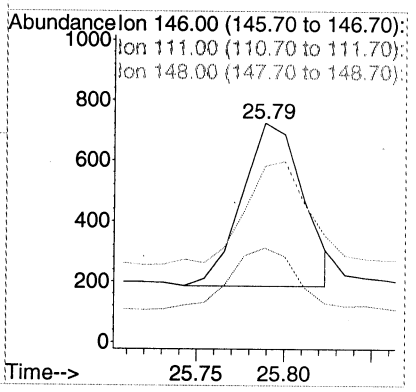


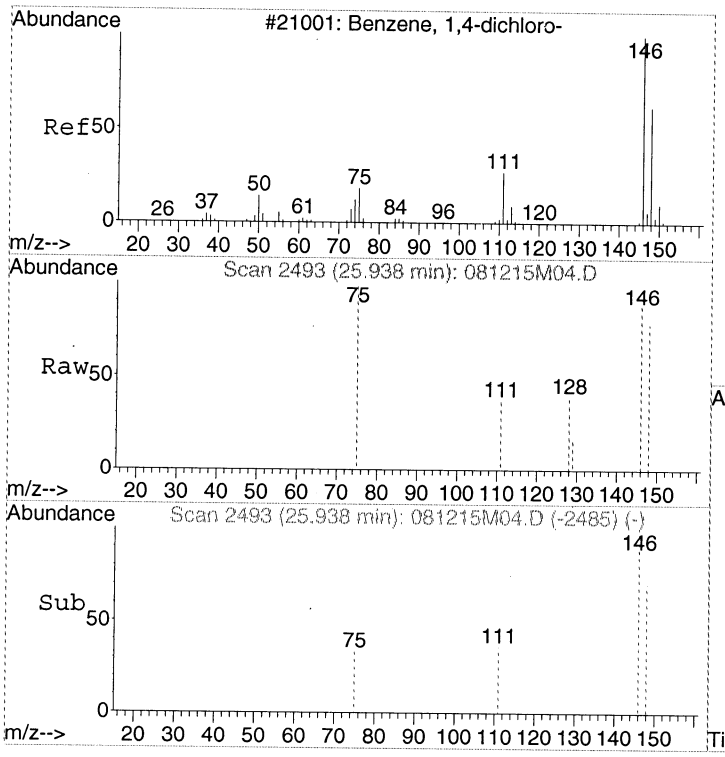


#32
1,3-Dichlorobenzene
Concen: Below Cal
RT: 25.79 min Scan# 2480
Delta R.T. 0.00 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion:146 Resp: 1316

Ion	Ratio	Lower	Upper
146	100		
111	41.4	19.2	59.2
148	61.2	44.0	84.0

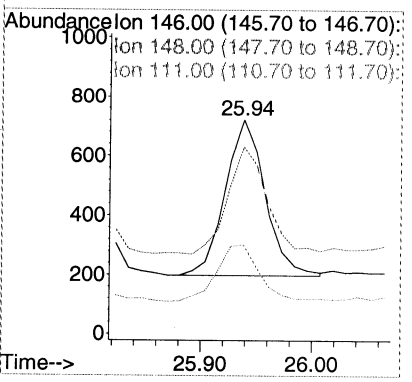


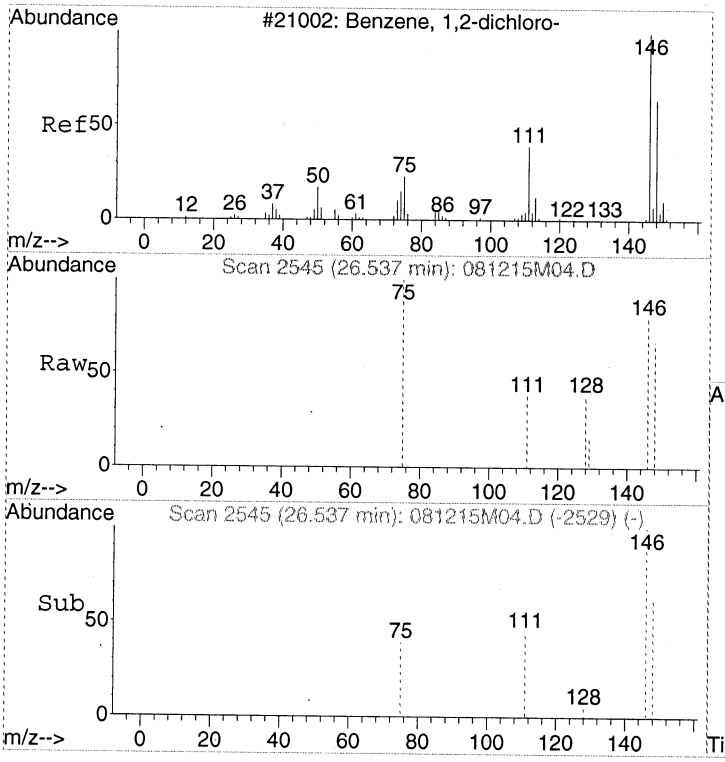


#33
1,4-Dichlorobenzene
Concen: Below Cal
RT: 25.94 min Scan# 2493
Delta R.T. 0.00 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion:146 Resp: 1306

Ion	Ratio	Lower	Upper
146	100		
148	68.1	43.9	83.9
111	39.9	17.2	57.2

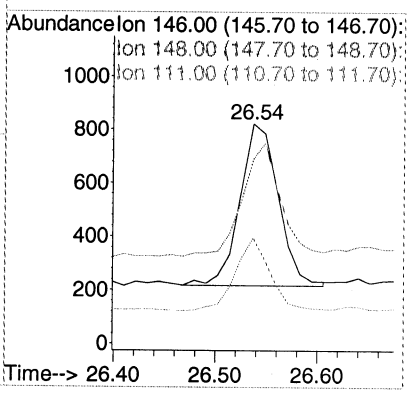




#34
1,2-Dichlorobenzene
Concen: Below Cal
RT: 26.54 min Scan# 2545
Delta R.T. -0.01 min
Lab File: 081215M04.D
Acq: 12 Aug 2015 1:23 pm

Tgt Ion:146 Resp: 1587

Ion	Ratio	Lower	Upper
146	100		
148	62.6	43.6	83.6
111	41.1	20.6	60.6



Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081215MAA\
Data File : 081215M09.D
Acq On : 12 Aug 2015 5:39 pm
InstName : AG5973M
Operator : LLH
Sample : 1508028-012
Misc : 60ml 861Leung-OUT
ALS Vial : 7 Sample Multiplier: 1.48

RR @ 600ml too dilute

NU

Quant Time: Aug 13 10:41:15 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081115SMAA.M
Quant Title : TO15SIM
QLast Update : Tue Aug 11 14:59:20 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.23	49	119901	341.00 pptv	-0.02
16) 1,4-DIFLUOROBENZENE	17.30	114	218165	375.00 pptv	0.00
21) CHLOROBENZENE-d5	22.23	117	222065	341.00 pptv	-0.02

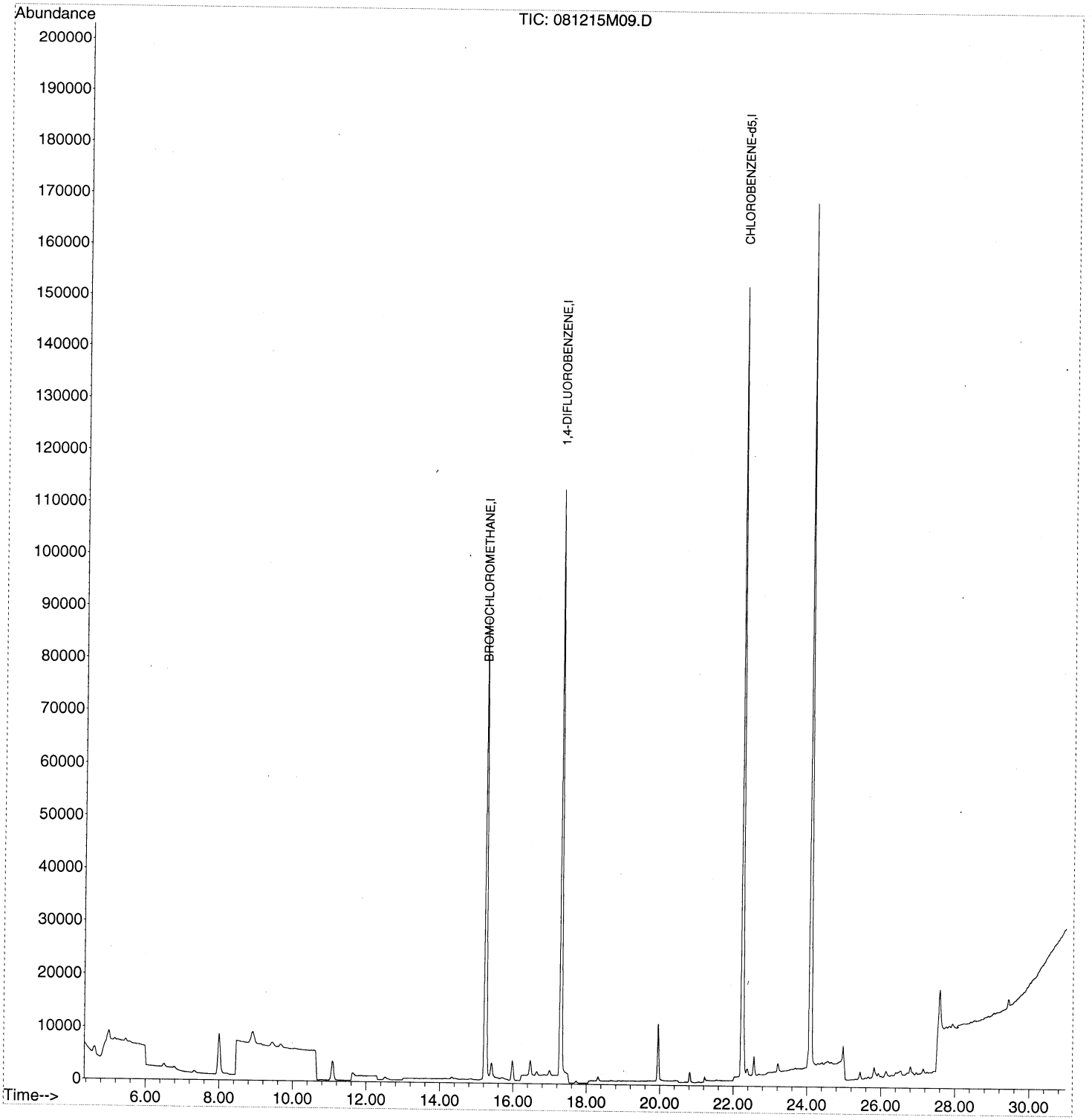
Target Compounds					Qvalue
2) Vinyl chloride	5.07	62	102	N.D.	
3) 1,3-Butadiene	5.17	54	446	N.D.	
4) Bromoethene	6.96	106	17	N.D.	
5) 1,1,2-Trichloro-1,2,2-trif	8.92	151	4895	N.D.	
6) 1,1-Dichloroethene	8.99	61	23	N.D.	
7) Dichloromethane	11.08	49	7159	N.D.	
8) tert-Butyl methyl ether (M	11.83	73	22	N.D.	
9) trans-1,2-Dichloroethene	11.83	61	106	N.D.	
10) Hexane	12.51	57	1068	N.D.	
11) 1,1-Dichloroethane	13.22	63	13	N.D.	
12) cis-1,2-Dichloroethene	14.72	96	16	N.D.	
13) Chloroform	15.40	83	2304	N.D.	
14) 1,1,1-Trichloroethane	15.71	97	305	N.D.	
15) Carbon tetrachloride	15.98	117	5699	N.D.	
17) Benzene	16.47	78	6023	N.D.	
18) 1,2-Dichloroethane	16.64	62	1100	N.D.	
19) Trichloroethene	17.72	130	345	N.D.	
20) 1,2-Dichloropropane	18.07	63	180	N.D.	
22) Toluene	19.95	91	17585	N.D.	
23) 1,1,2-Trichloroethane	0.00	97	0	N.D.	
24) Tetrachloroethene	20.81	166	1526	N.D.	
25) 1,2-Dibromoethane (EDB)	21.55	107	117	N.D.	
26) Chlorobenzene	22.28	112	316	N.D.	
27) Ethylbenzene	22.37	91	2274	N.D.	
28) m&p-Xylene	22.56	91	5134	N.D.	
29) o-Xylene	23.21	91	2251	N.D.	
30) Styrene	23.24	104	471	N.D.	
31) 1,1,2,2-Tetrachloroethane	24.28	83	395	N.D.	
32) 1,3-Dichlorobenzene	25.80	146	597	N.D.	
33) 1,4-Dichlorobenzene	25.94	146	739	N.D.	
34) 1,2-Dichlorobenzene	26.54	146	674	N.D.	

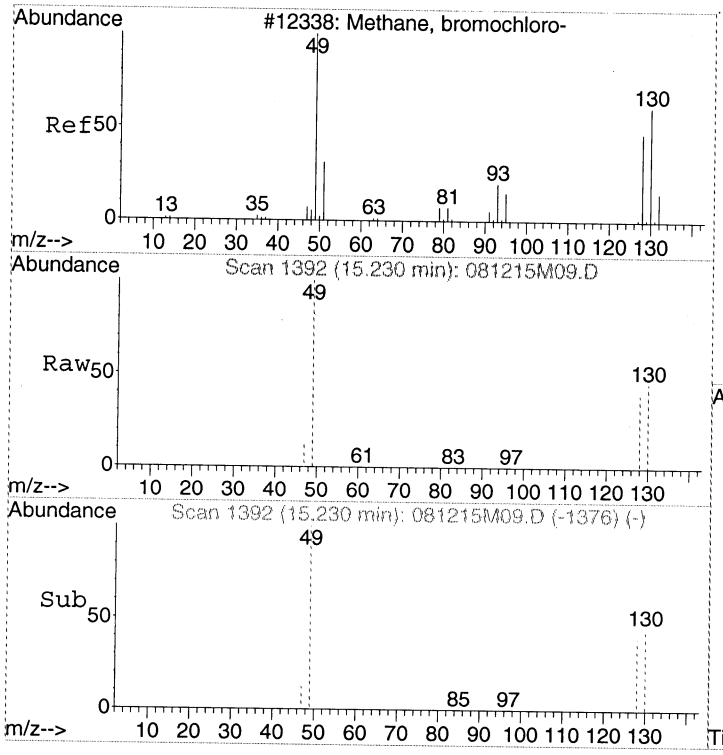
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081215MAA\
Data File : 081215M09.D
Acq On : 12 Aug 2015 5:39 pm
InstName : AG5973M
Operator : LLH
Sample : 1508028-012
Misc : 60ml 861Leung-OUT
ALS Vial : 7 Sample Multiplier: 1.48

Quant Time: Aug 13 10:41:15 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081115SMAA.M
Quant Title : TO15SIM
QLast Update : Tue Aug 11 14:59:20 2015
Response via : Initial Calibration

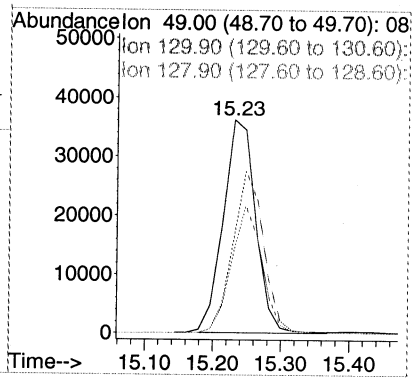


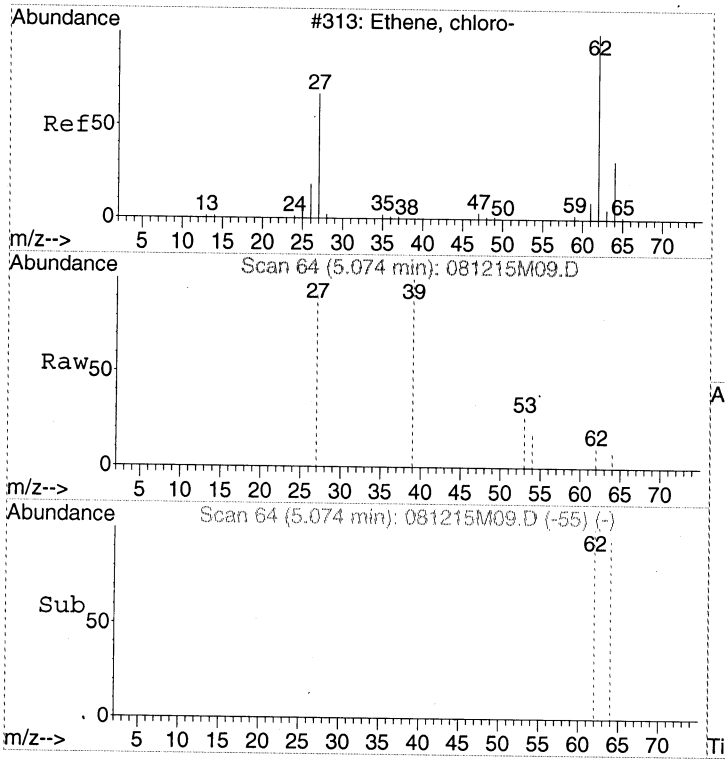


#1
BROMOCHLOROMETHANE
Concen: 341.00 pptv
RT: 15.23 min Scan# 1392
Delta R.T. -0.02 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion: 49 Resp: 119901

Ion	Ratio	Lower	Upper
49	100		
130	72.6	56.6	96.6
128	56.4	39.9	79.9

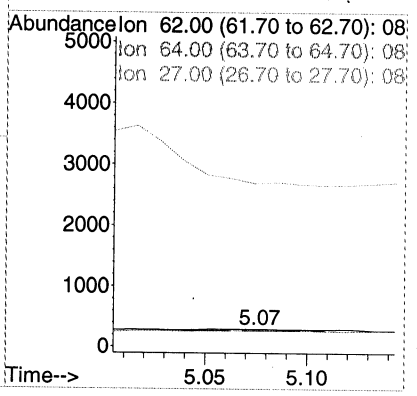


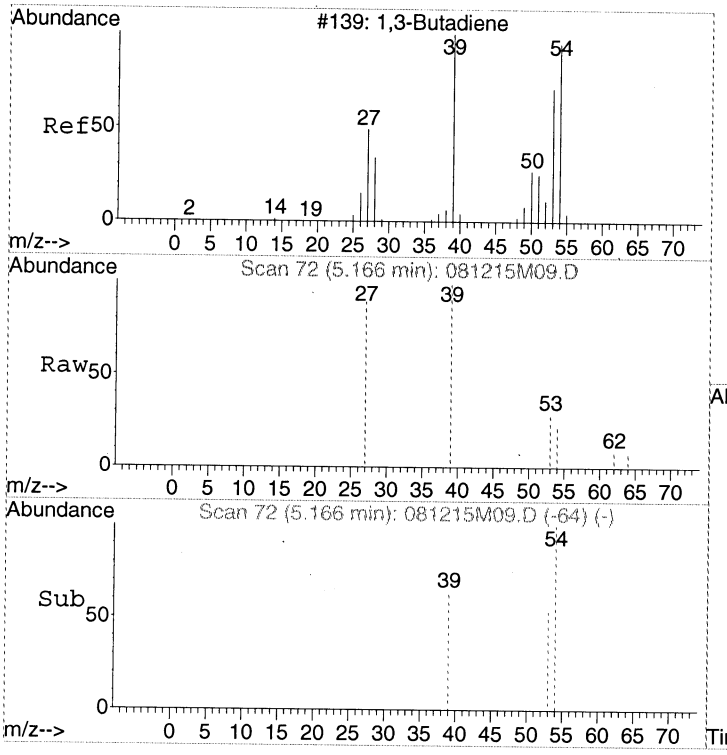


#2
Vinyl chloride
Concen: Below Cal
RT: 5.07 min Scan# 64
Delta R.T. -0.01 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion: 62 Resp: 102

Ion	Ratio	Lower	Upper
62	100		
64	72.5	12.0	52.0#
27	0.0	24.7	64.7#

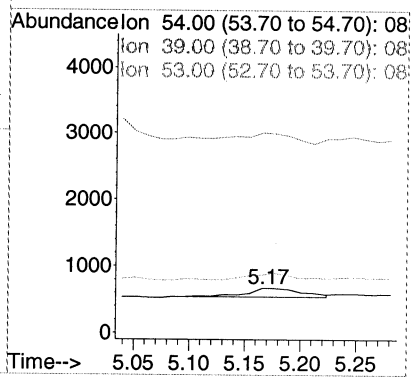


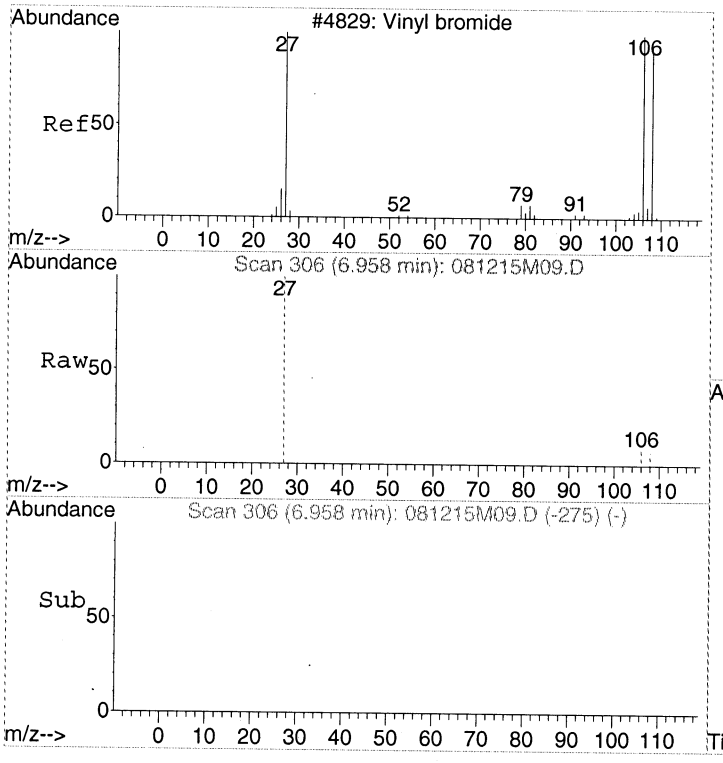


#3
1,3-Butadiene
Concen: Below Cal
RT: 5.17 min Scan# 72
Delta R.T. -0.02 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion: 54 Resp: 446

Ion	Ratio	Lower	Upper
54	100		
39	75.6	72.5	112.5
53	55.6	48.6	88.6

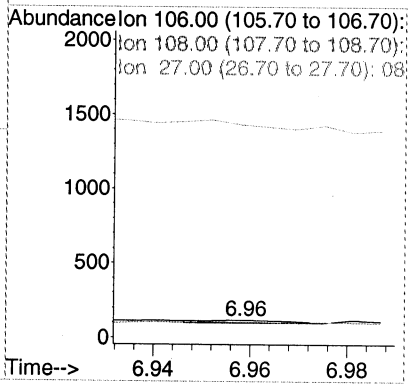


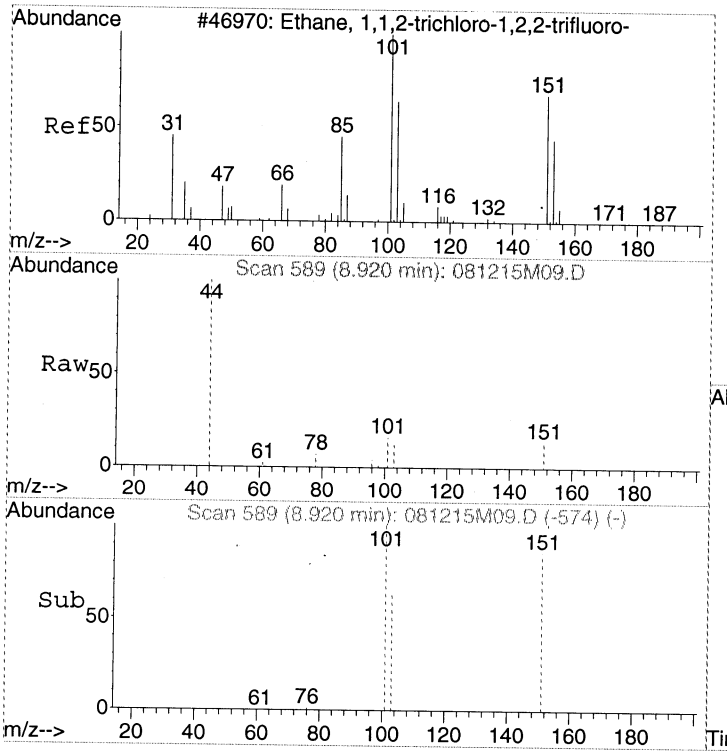


#4
Bromoethene
Concen: Below Cal
RT: 6.96 min Scan# 306
Delta R.T. -0.02 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion:106 Resp: 17

Ion	Ratio	Lower	Upper
106	100		
108	0.0	0.0	214.7
27	0.0	67.2	107.2#

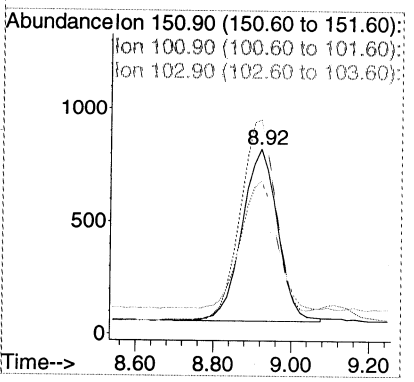


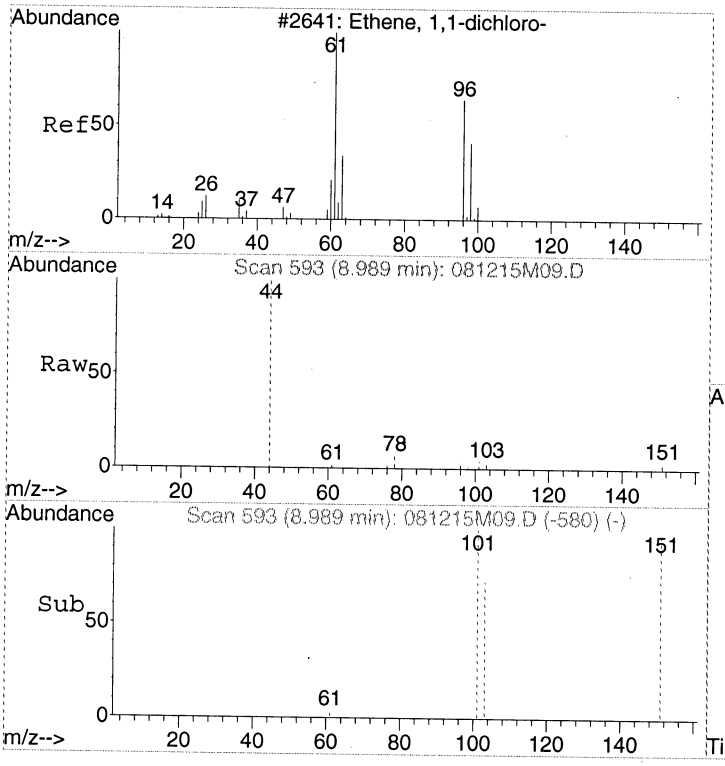


#5
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: Below Cal
RT: 8.92 min Scan# 589
Delta R.T. 0.00 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion:151 Resp: 4895

Ion	Ratio	Lower	Upper
151	100		
101	117.5	95.3	135.3
103	74.9	53.9	93.9

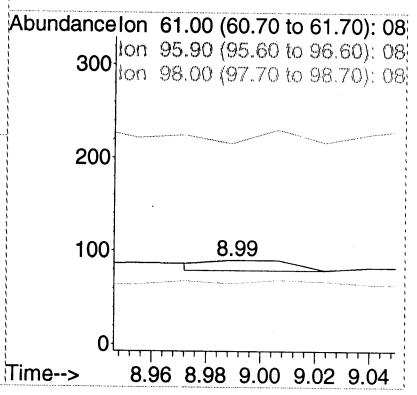


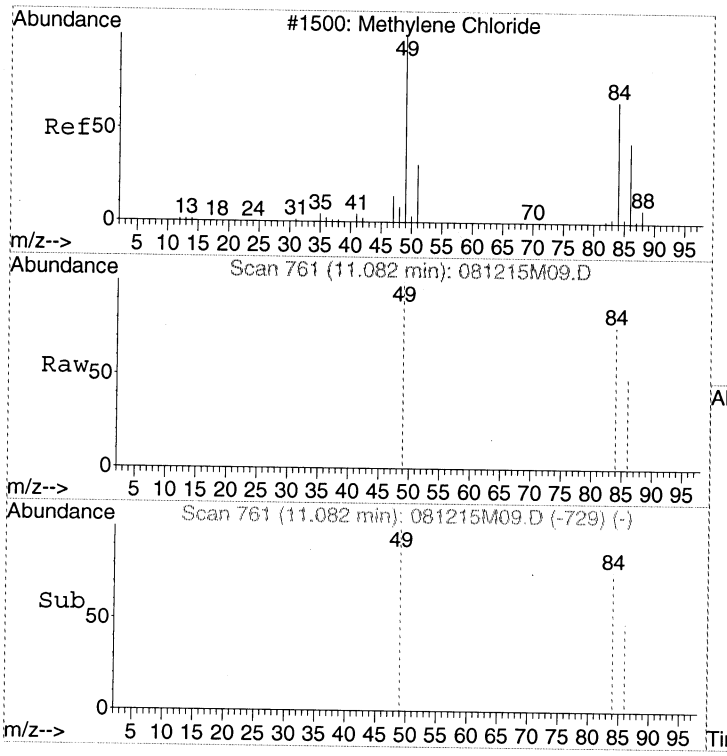


#6
1,1-Dichloroethene
Concen: Below Cal
RT: 8.99 min Scan# 593
Delta R.T. 0.02 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion: 61 Resp: 23

Ion	Ratio	Lower	Upper
61	100		
96	104.3	41.4	81.4#
98	143.5	18.8	58.8#

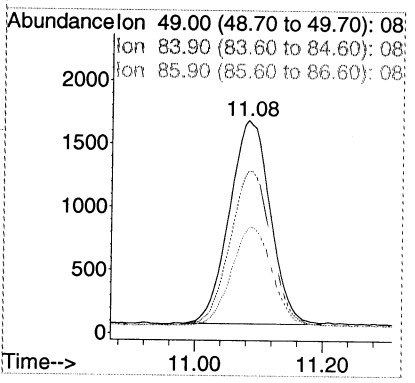


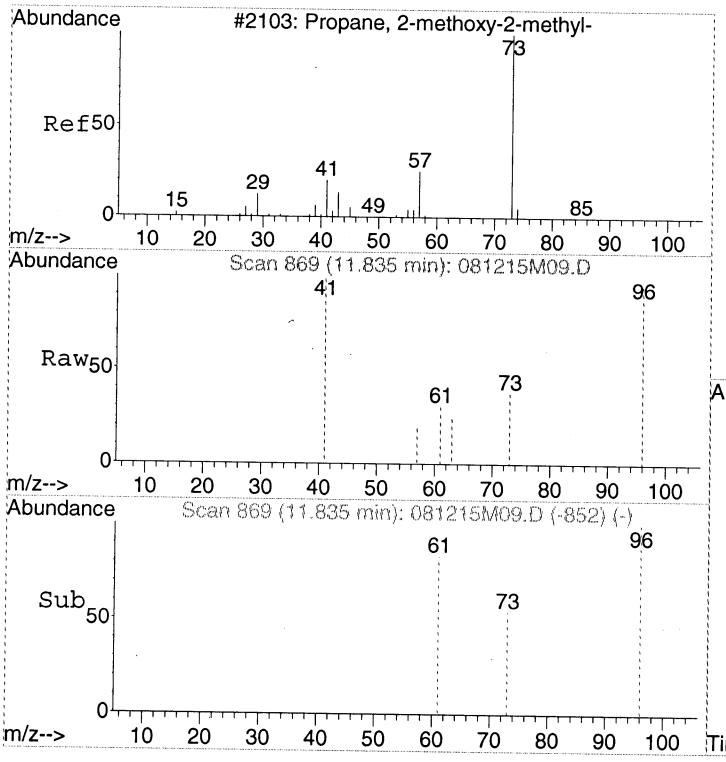


#7
Dichloromethane
Concen: Below Cal
RT: 11.08 min Scan# 761
Delta R.T. -0.01 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion: 49 Resp: 7159

Ion	Ratio	Lower	Upper
49	100		
84	75.8	59.9	99.9
86	48.2	31.1	71.1

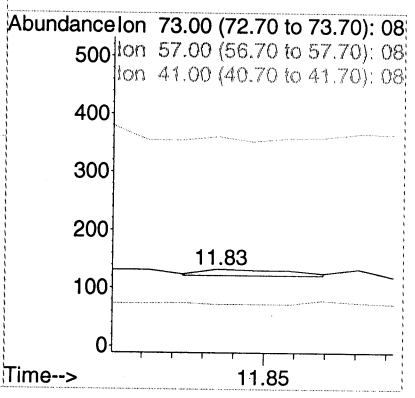


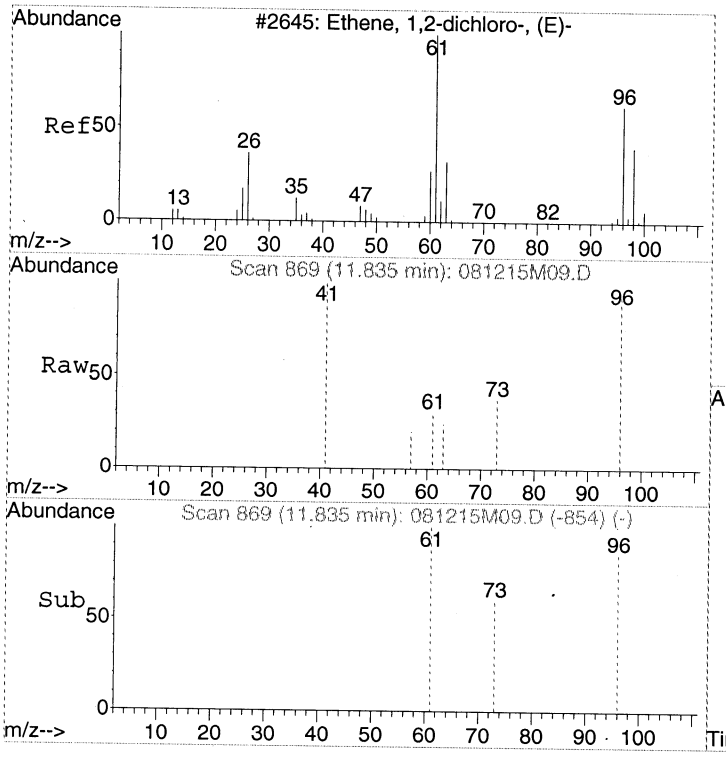


#8
tert-Butyl methyl ether (MTBE)
Concen: Below Cal
RT: 11.83 min Scan# 869
Delta R.T. -0.01 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion: 73 Resp: 22

Ion	Ratio	Lower	Upper
73	100		
57	0.0	3.0	43.0#
41	0.0	19.2	59.2#

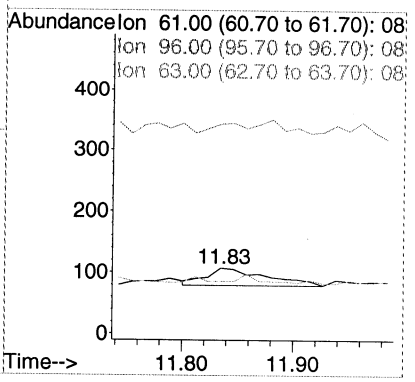


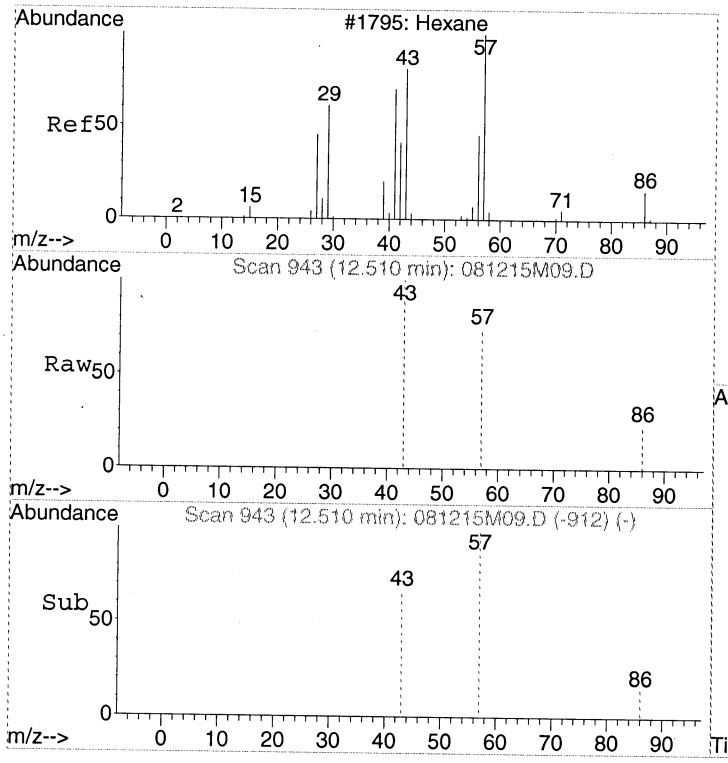


#9
trans-1,2-Dichloroethene
Concen: Below Cal
RT: 11.83 min Scan# 869
Delta R.T. -0.03 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion: 61 Resp: 106

Ion	Ratio	Lower	Upper
61	100		
96	0.0	50.8	90.8#
63	0.0	12.1	52.1#

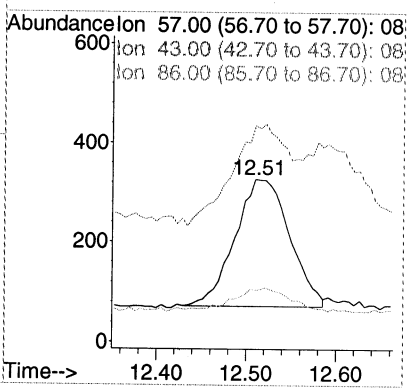


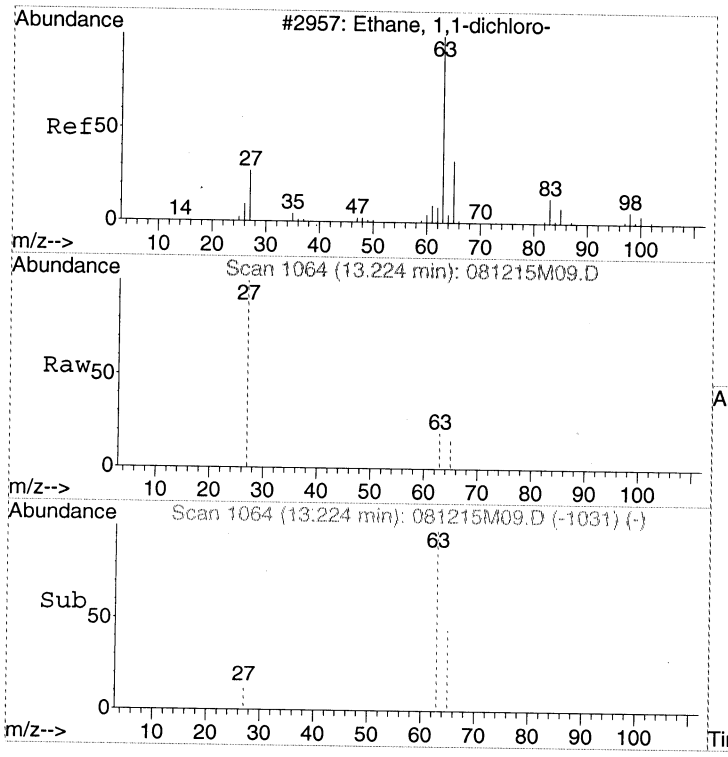


#10
Hexane
Concen: Below Cal
RT: 12.51 min Scan# 943
Delta R.T. -0.02 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion: 57 Resp: 1068

Ion	Ratio	Lower	Upper
57	100		
43	80.3	51.5	91.5
86	4.9	0.0	37.2

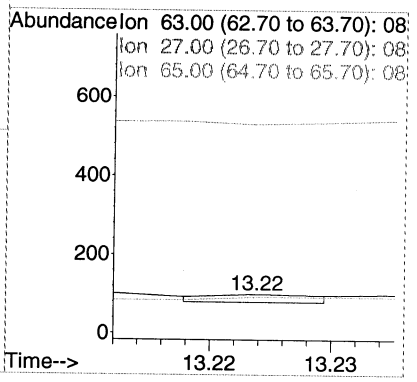


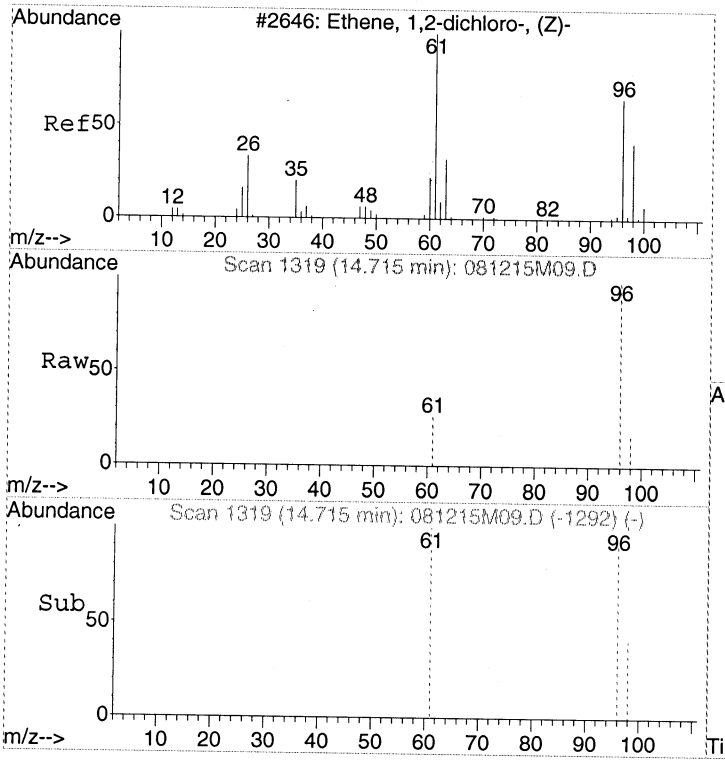


#11
1,1-Dichloroethane
Concen: Below Cal
RT: 13.22 min Scan# 1064
Delta R.T. -0.01 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion: 63 Resp: 13

Ion	Ratio	Lower	Upper
63	100		
27	161.5	10.5	50.5#
65	138.5	11.5	51.5#

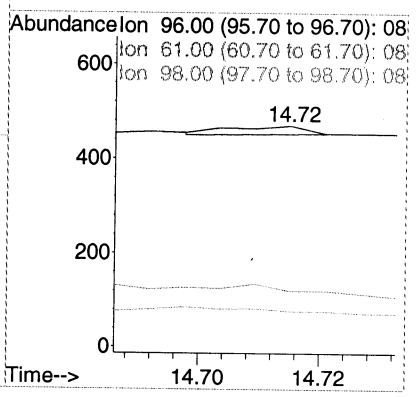


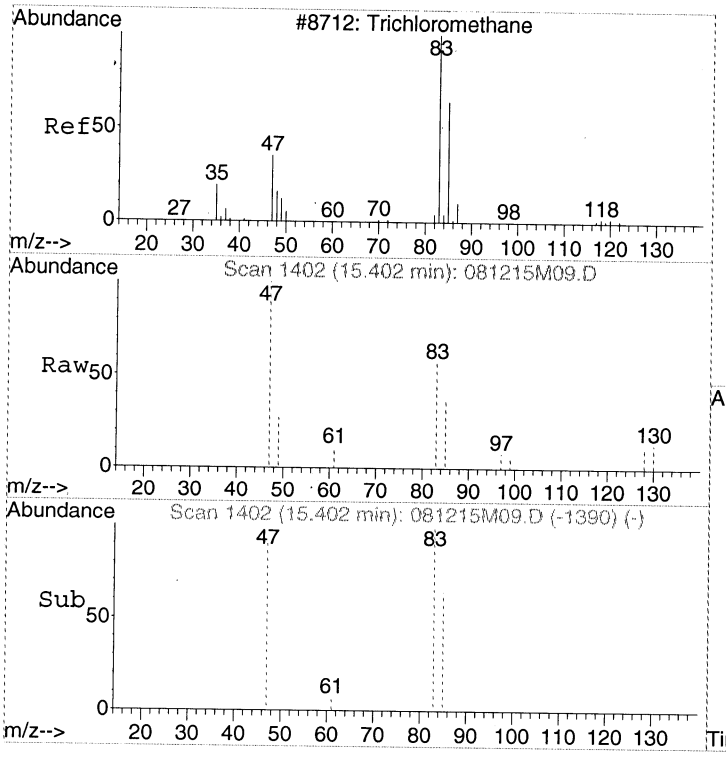


#12
cis-1,2-Dichloroethene
Concen: Below Cal
RT: 14.72 min Scan# 1319
Delta R.T. 0.01 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion: 96 Resp: 16

Ion	Ratio	Lower	Upper
96	100		
61	168.8	109.9	149.9#
98	0.0	44.2	84.2#

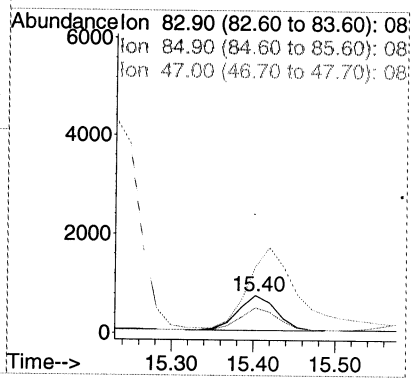


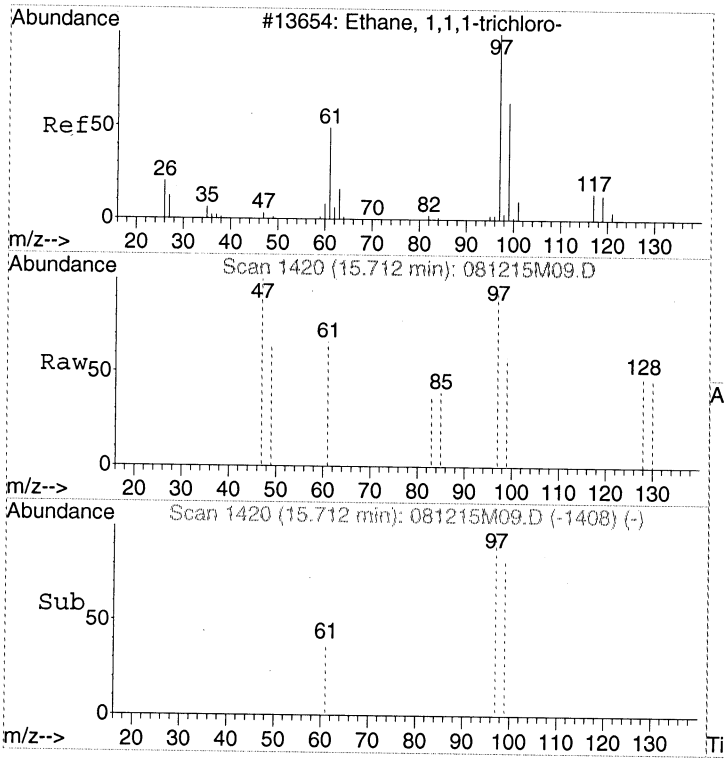


#13
Chloroform
Concen: Below Cal
RT: 15.40 min Scan# 1402
Delta R.T. 0.00 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion: 83 Resp: 2304

Ion	Ratio	Lower	Upper
83	100		
85	62.7	44.4	84.4
47	300.6	6.1	46.1#

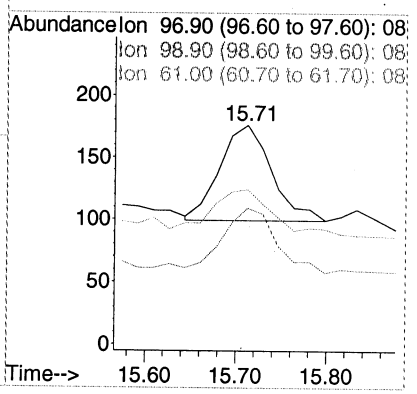


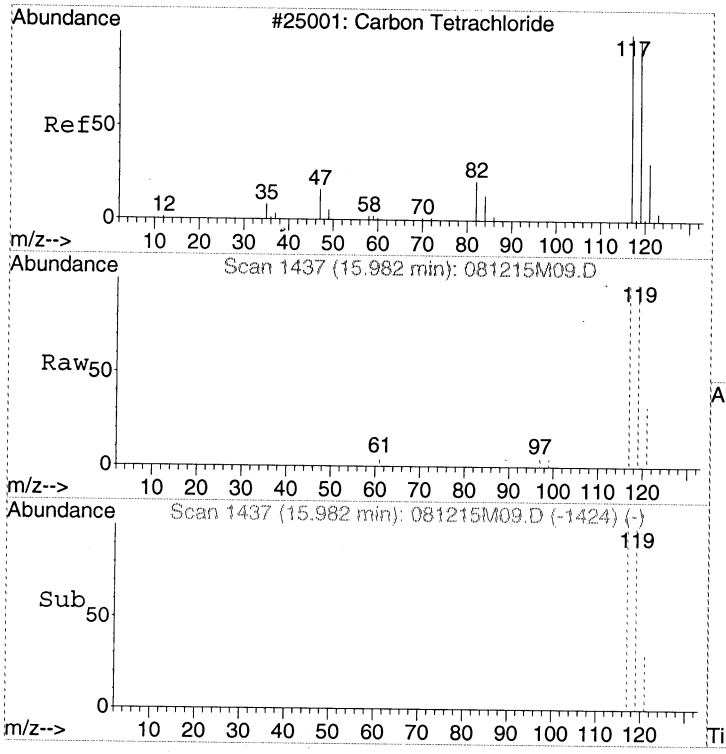


#14
1,1,1-Trichloroethane
Concen: Below Cal
RT: 15.71 min Scan# 1420
Delta R.T. 0.00 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion: 97 Resp: 305

Ion	Ratio	Lower	Upper
97	100		
99	69.8	44.2	84.2
61	47.9	23.6	63.6

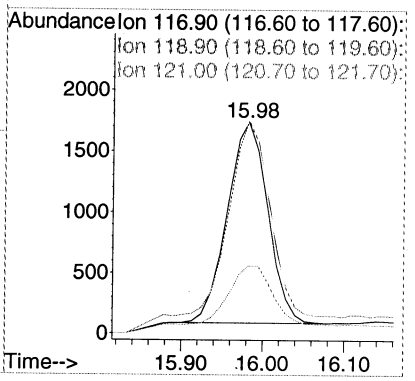


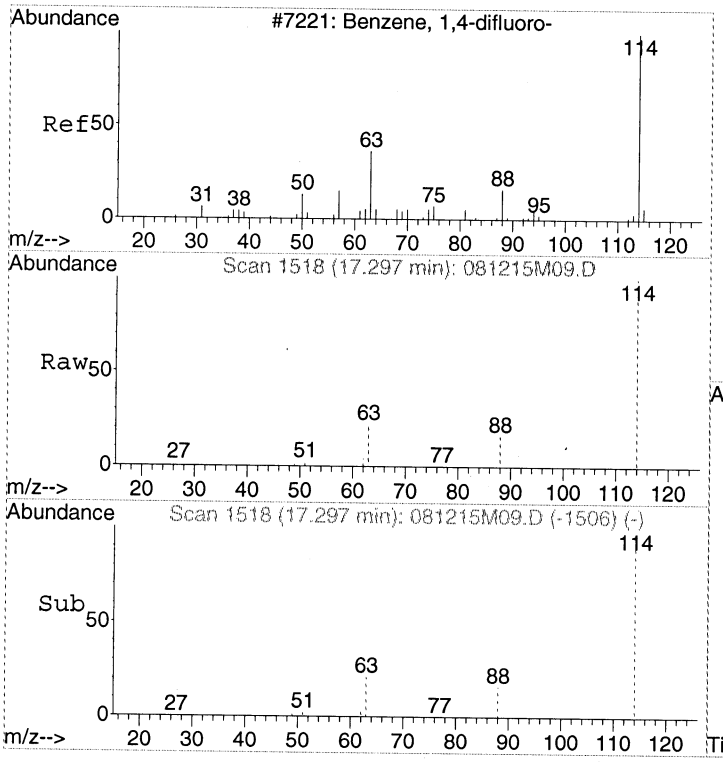


#15
Carbon tetrachloride
Concen: Below Cal
RT: 15.98 min Scan# 1437
Delta R.T. 0.00 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion:117 Resp: 5699

Ion	Ratio	Lower	Upper
117	100		
119	108.0	76.1	116.1
121	34.9	6.4	46.4

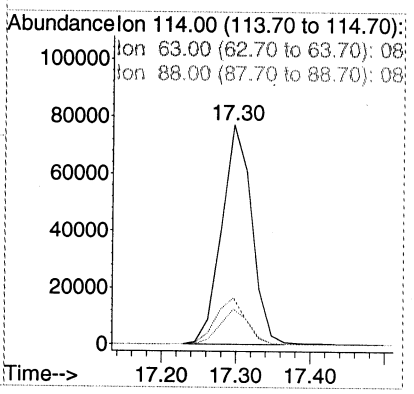


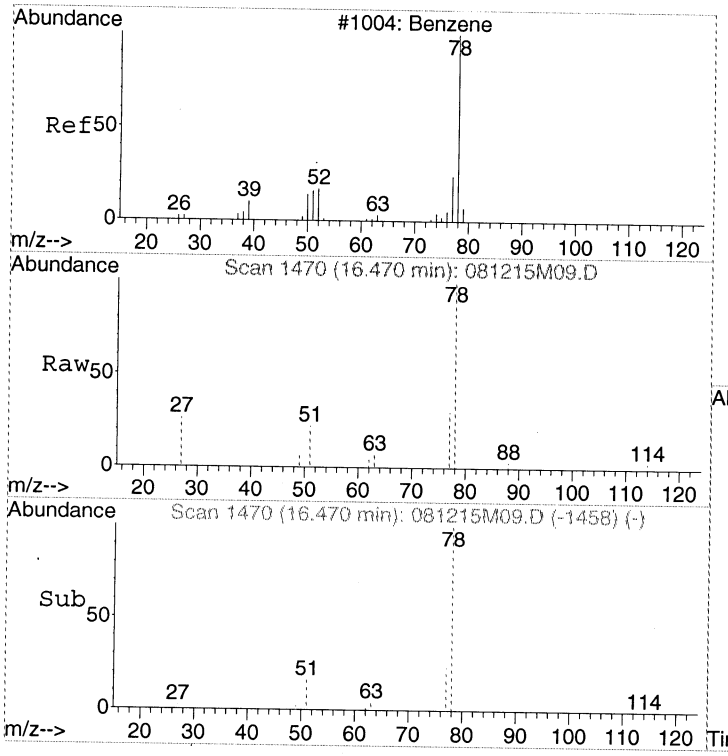


#16
1,4-DIFLUOROBENZENE
Concen: 375.00 pptv
RT: 17.30 min Scan# 1518
Delta R.T. 0.00 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion:114 Resp: 218165

Ion	Ratio	Lower	Upper
114	100		
63	21.4	0.6	40.6
88	15.9	0.0	35.8

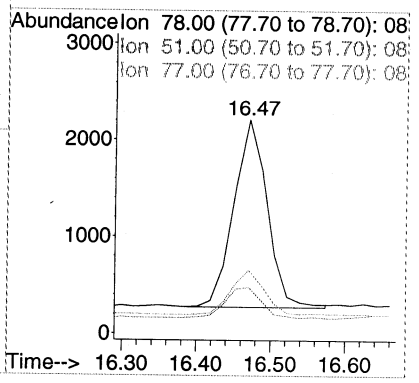


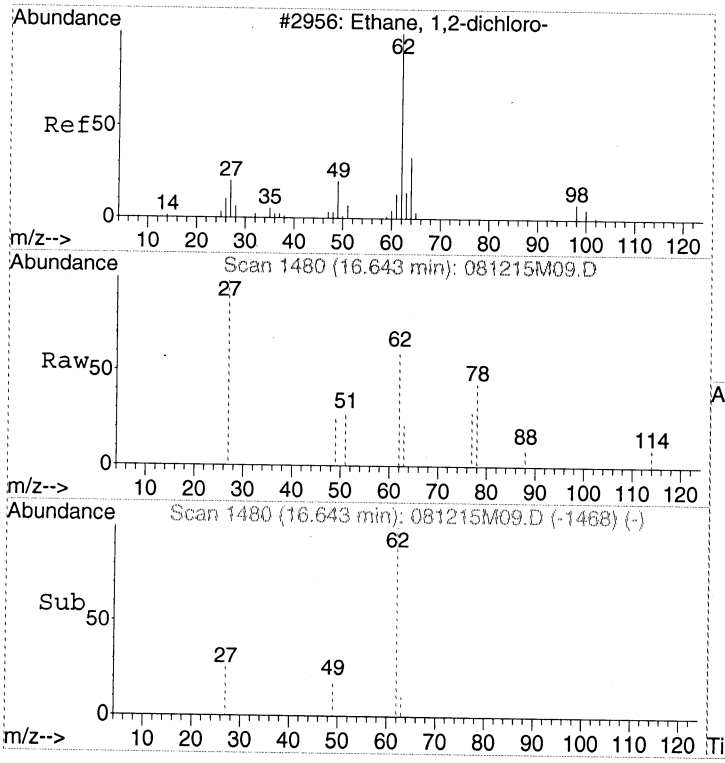


#17
Benzene
Concen: Below Cal
RT: 16.47 min Scan# 1470
Delta R.T. 0.00 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion: 78 Resp: 6023

Ion	Ratio	Lower	Upper
78	100		
51	18.1	0.0	38.2
77	23.7	4.3	44.3

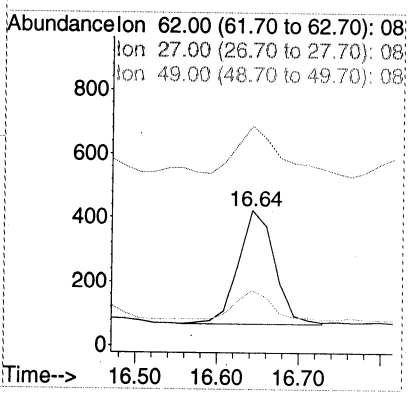


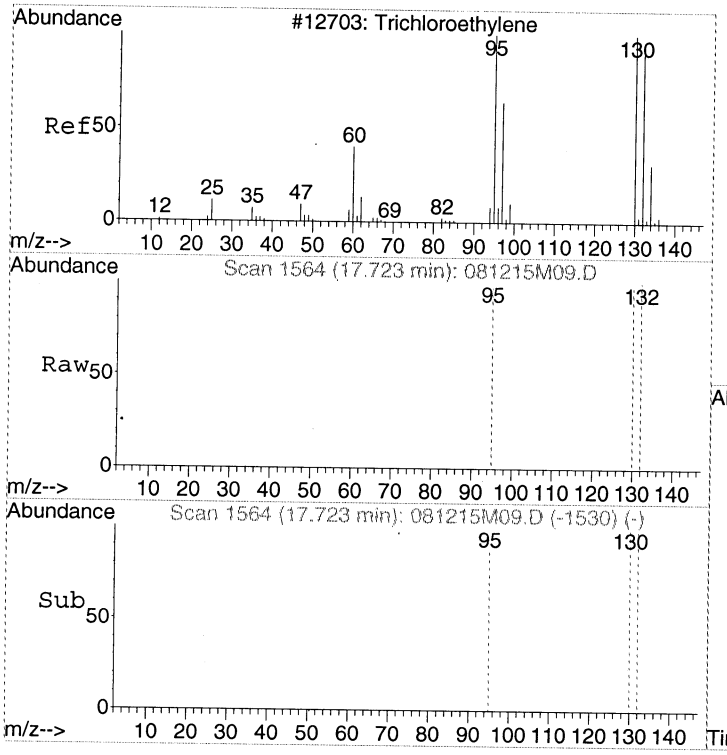


#18
1,2-Dichloroethane
Concen: Below Cal
RT: 16.64 min Scan# 1480
Delta R.T. 0.00 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion: 62 Resp: 1100

Ion	Ratio	Lower	Upper
62	100		
27	55.8	16.3	56.3
49	25.1	5.6	45.6

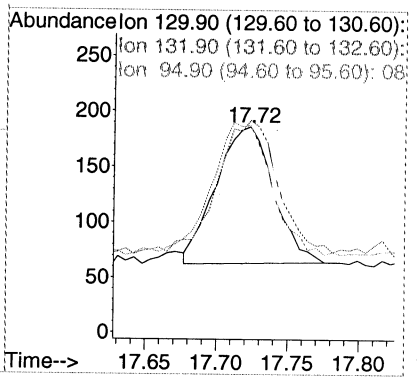


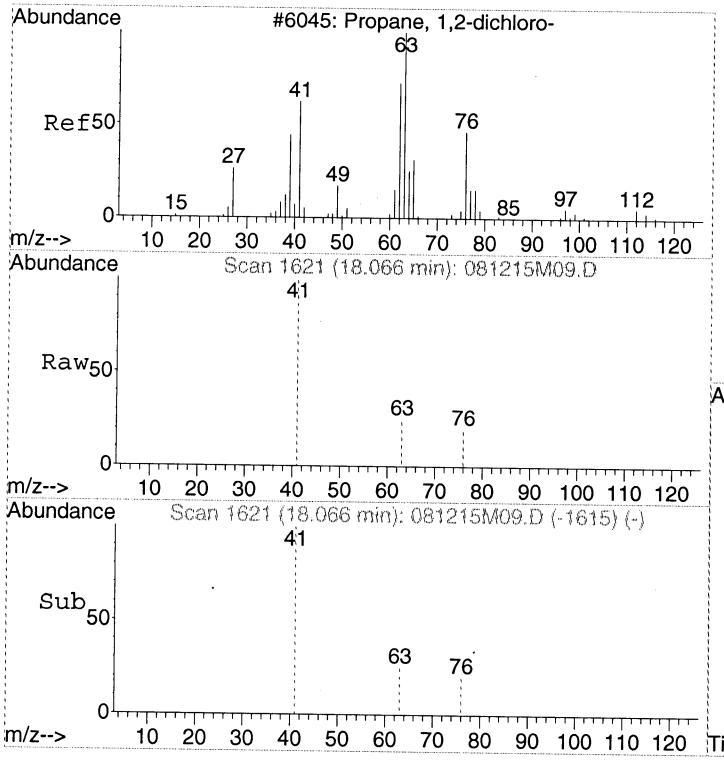


#19
Trichloroethene
Concen: Below Cal
RT: 17.72 min Scan# 1564
Delta R.T. 0.00 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion:130 Resp: 345

Ion	Ratio	Lower	Upper
130	100		
132	95.9	76.4	116.4
95	98.8	77.3	117.3

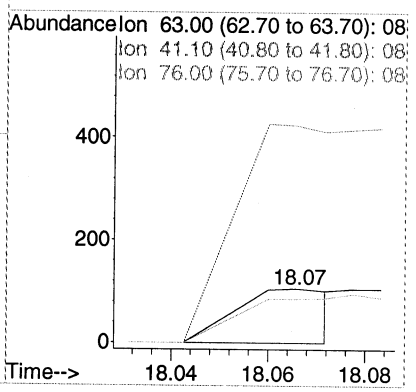


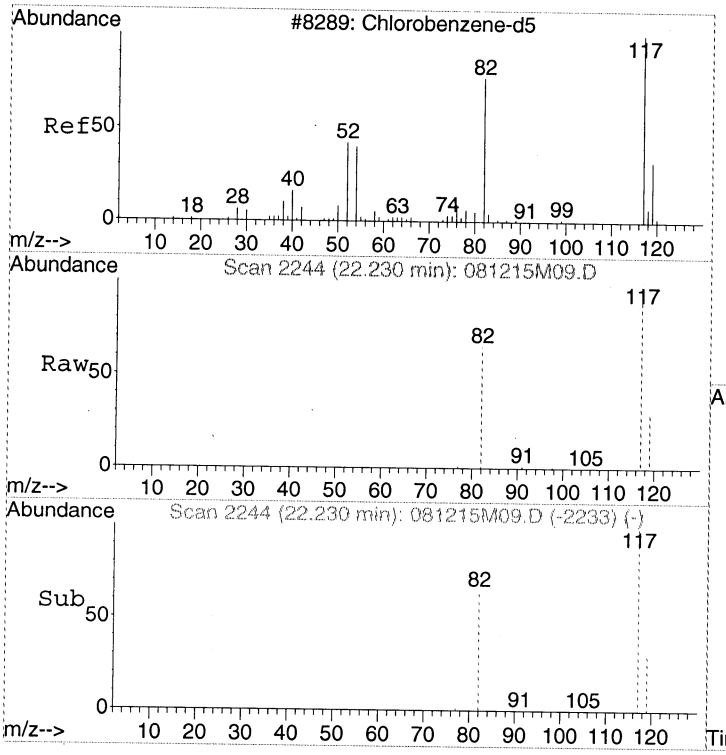


#20
1,2-Dichloropropane
Concen: Below Cal
RT: 18.07 min Scan# 1621
Delta R.T. -0.15 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion: 63 Resp: 180

Ion	Ratio	Lower	Upper
63	100		
41	406.1	44.5	84.5#
76	0.0	30.3	70.3#

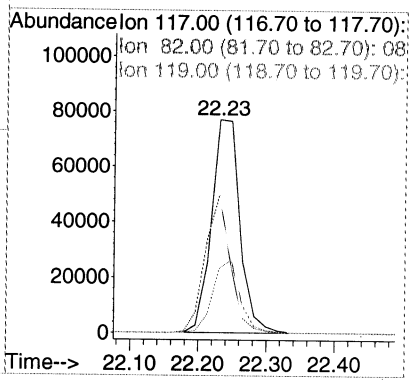


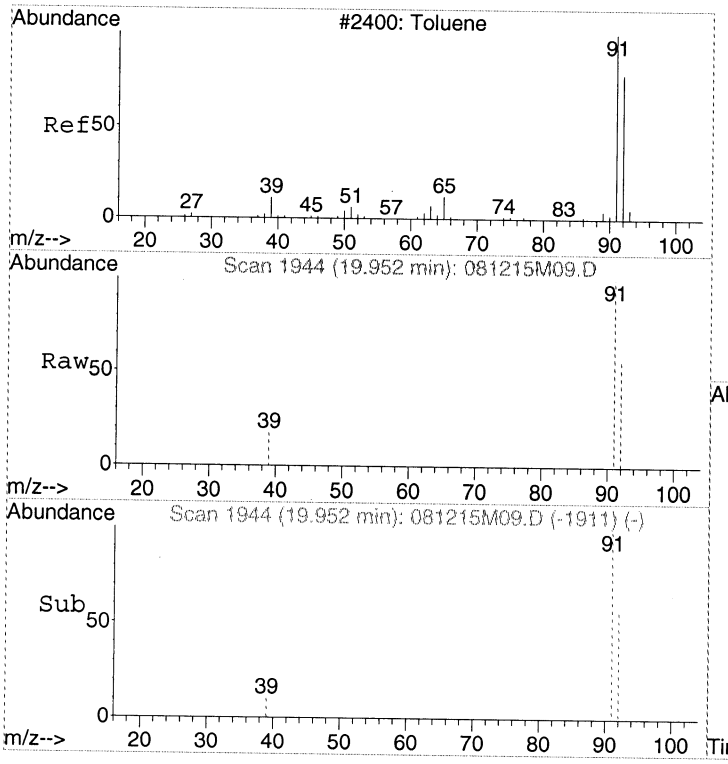


#21
CHLOROBENZENE-d5
Concen: 341.00 pptv
RT: 22.23 min Scan# 2244
Delta R.T. -0.02 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion:117 Resp: 222065

Ion	Ratio	Lower	Upper
117	100		
82	57.2	36.0	76.0
119	32.1	12.1	52.1

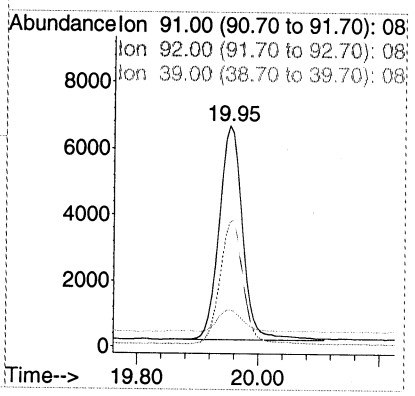


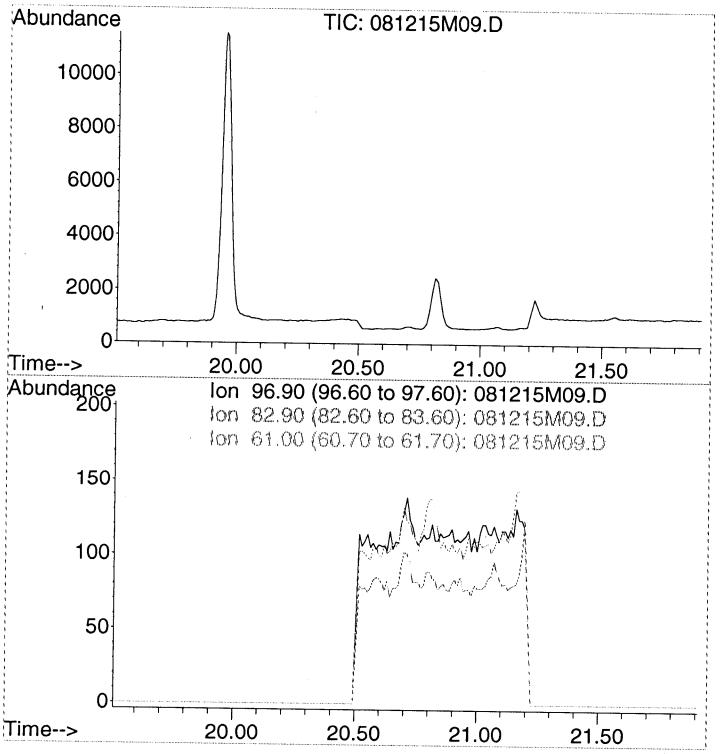


#22
Toluene
Concen: Below Cal
RT: 19.95 min Scan# 1944
Delta R.T. -0.01 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion: 91 Resp: 17585

Ion	Ratio	Lower	Upper
91	100		
92	56.4	37.9	77.9
39	10.6	0.0	29.3



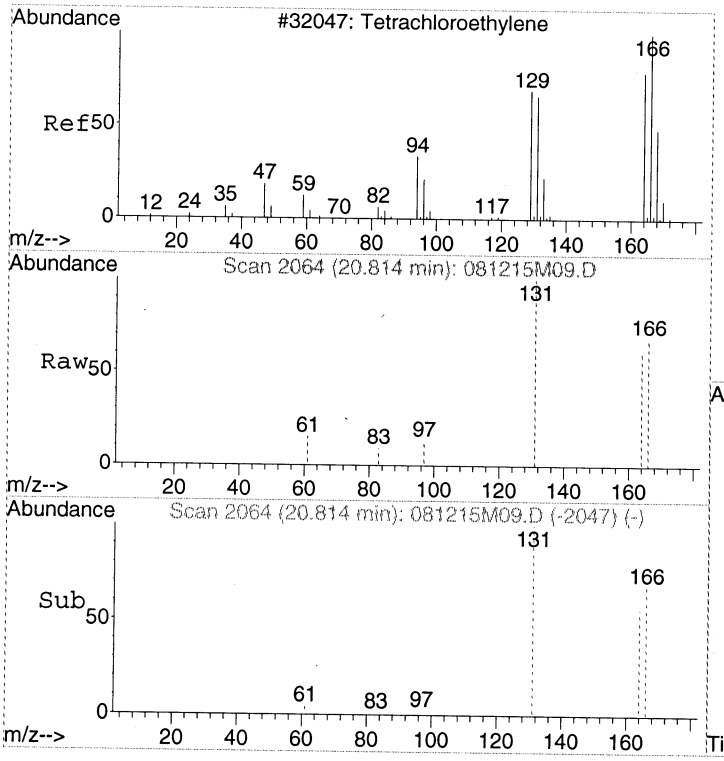


#23
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 20.71 min

Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion: 97

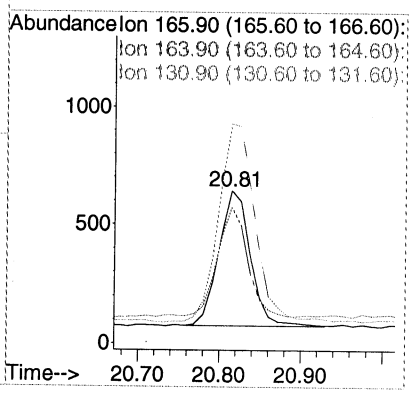
Sig	Exp Ratio
97	100
83	83.7
61	67.7

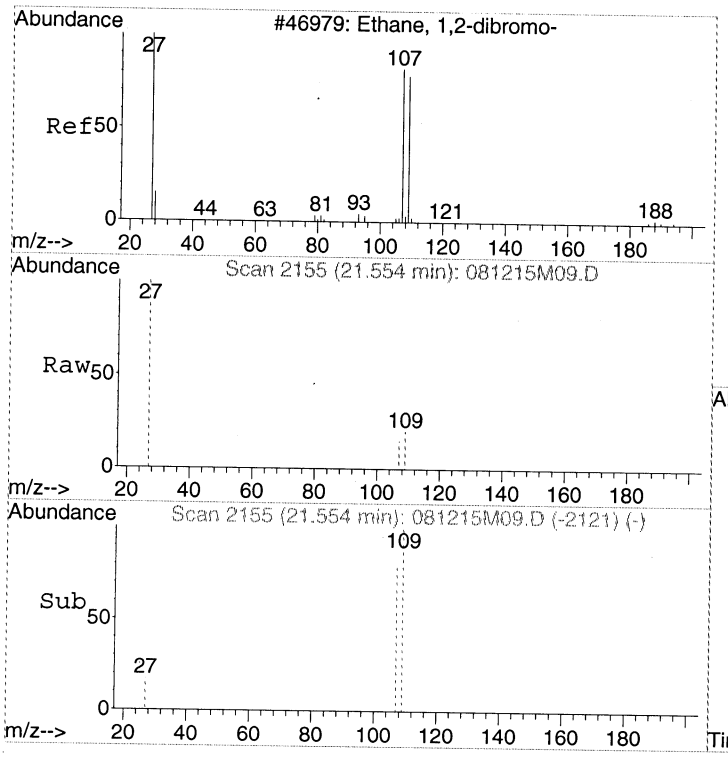


#24
Tetrachloroethene
Concen: Below Cal
RT: 20.81 min Scan# 2064
Delta R.T. 0.00 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion:166 Resp: 1526

Ion	Ratio	Lower	Upper
166	100		
164	76.3	58.4	98.4
131	169.1	49.4	89.4#

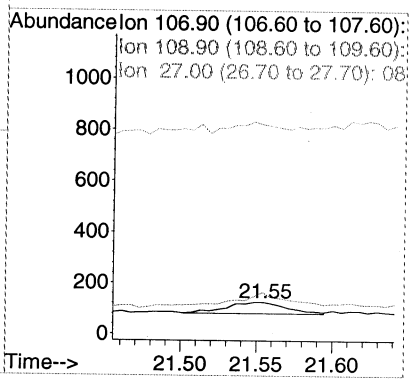


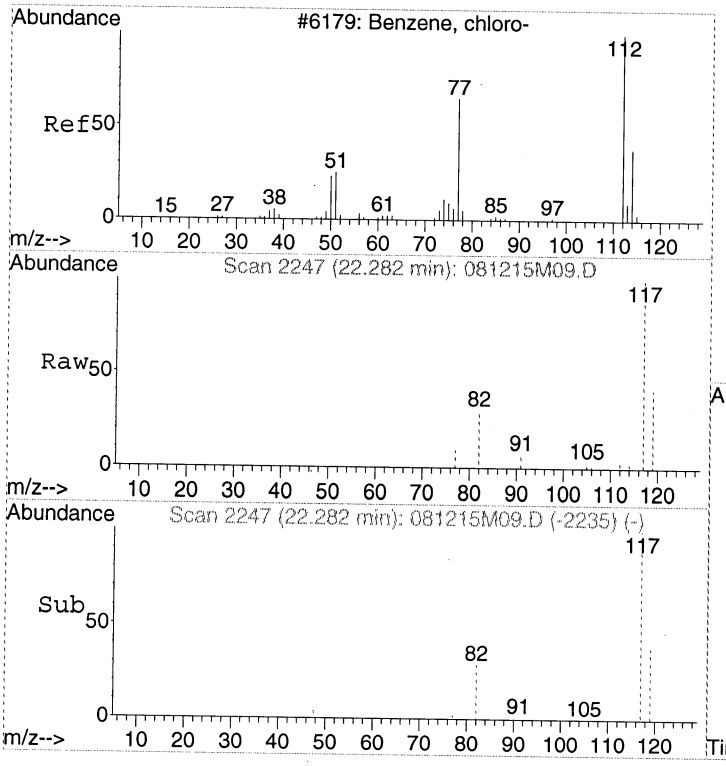


#25
1,2-Dibromoethane (EDB)
Concen: Below Cal
RT: 21.55 min Scan# 2155
Delta R.T. 0.00 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion:107 Resp: 117

Ion	Ratio	Lower	Upper
107	100		
109	73.5	73.9	113.9#
27	77.8	37.8	77.8

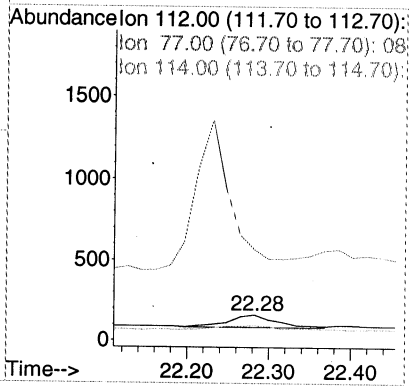


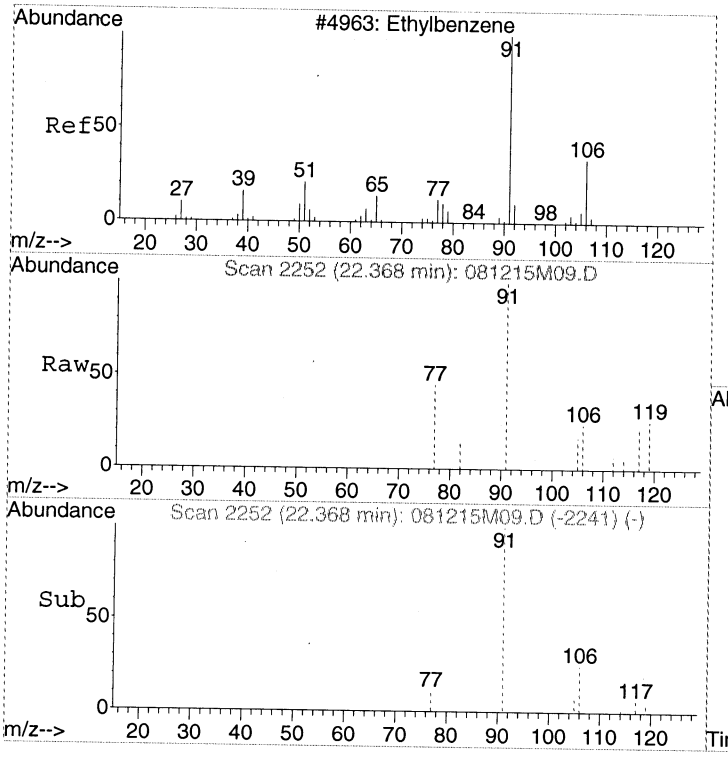


#26
Chlorobenzene
Concen: Below Cal
RT: 22.28 min Scan# 2247
Delta R.T. 0.00 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion:112 Resp: 316

Ion	Ratio	Lower	Upper
112	100		
77	0.0	40.4	80.4#
114	36.7	12.0	52.0

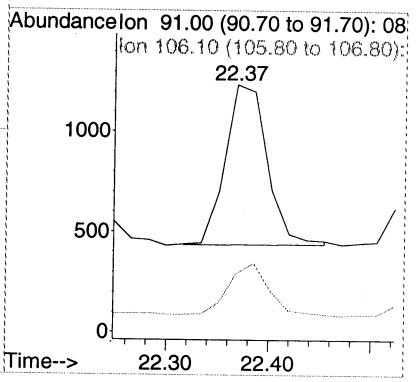


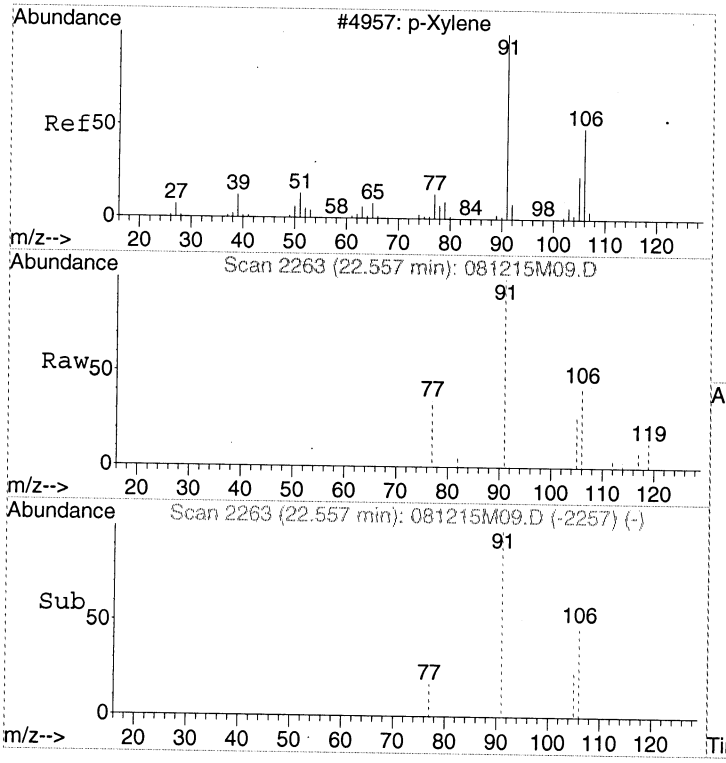


#27
Ethylbenzene
Concen: Below Cal
RT: 22.37 min Scan# 2252
Delta R.T. -0.02 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion: 91 Resp: 2274

Ion	Ratio	Lower	Upper
91	100		
106	30.4	11.2	51.2

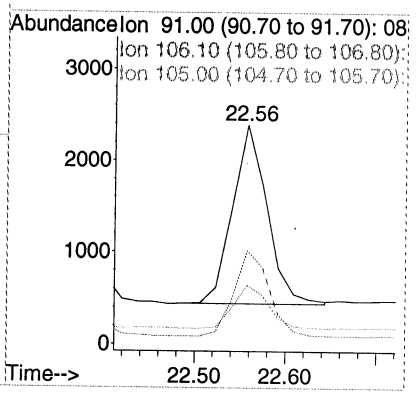


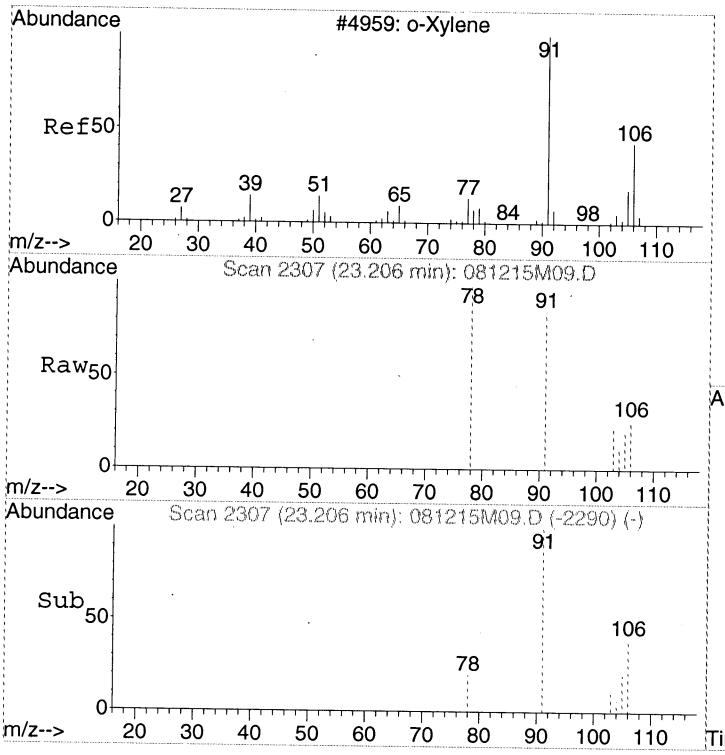


#28
m&p-Xylene
Concen: Below Cal
RT: 22.56 min Scan# 2263
Delta R.T. 0.00 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion: 91 Resp: 5134

Ion	Ratio	Lower	Upper
91	100		
106	48.4	29.0	69.0
105	24.3	4.3	44.3

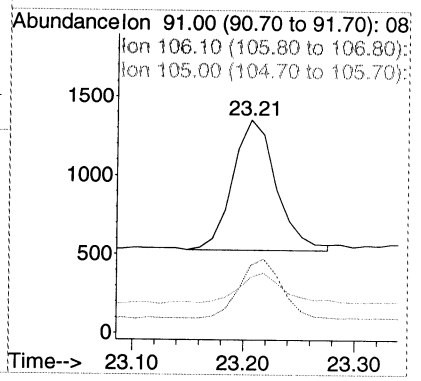


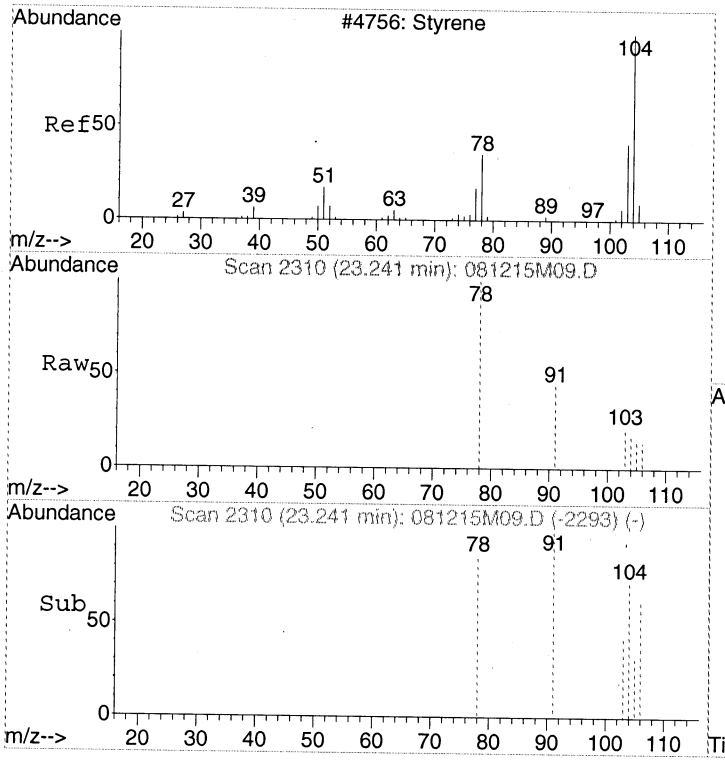


#29
o-Xylene
Concen: Below Cal
RT: 23.21 min Scan# 2307
Delta R.T. 0.00 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion: 91 Resp: 2251

Ion	Ratio	Lower	Upper
91	100		
106	44.8	25.6	65.6
105	23.8	6.0	46.0

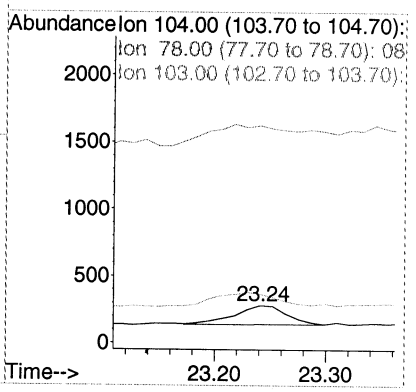


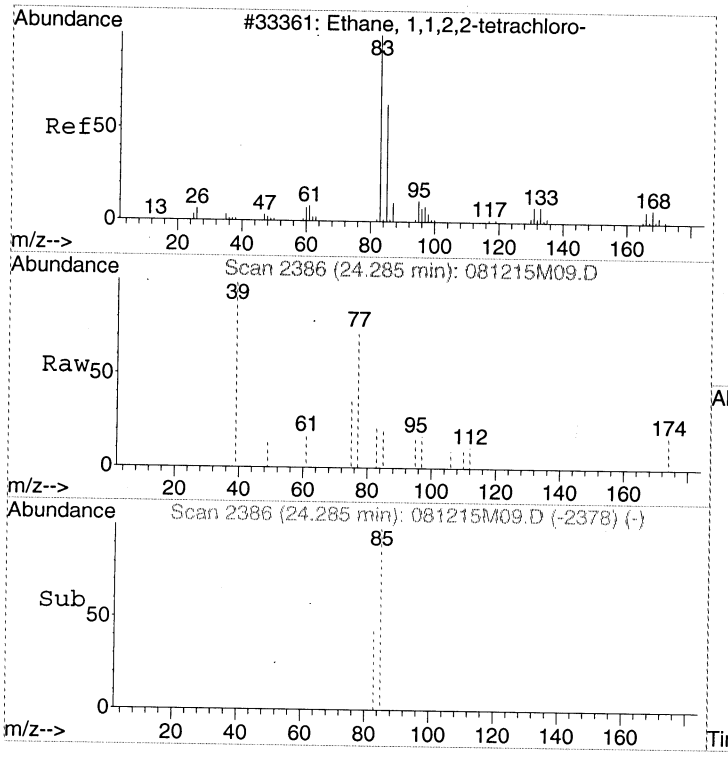


#30
Styrene
Concen: Below Cal
RT: 23.24 min Scan# 2310
Delta R.T. 0.00 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion:104 Resp: 471

Ion	Ratio	Lower	Upper
104	100		
78	0.0	37.4	77.4#
103	93.4	36.8	76.8#

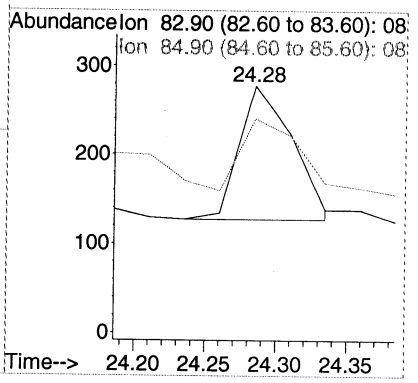


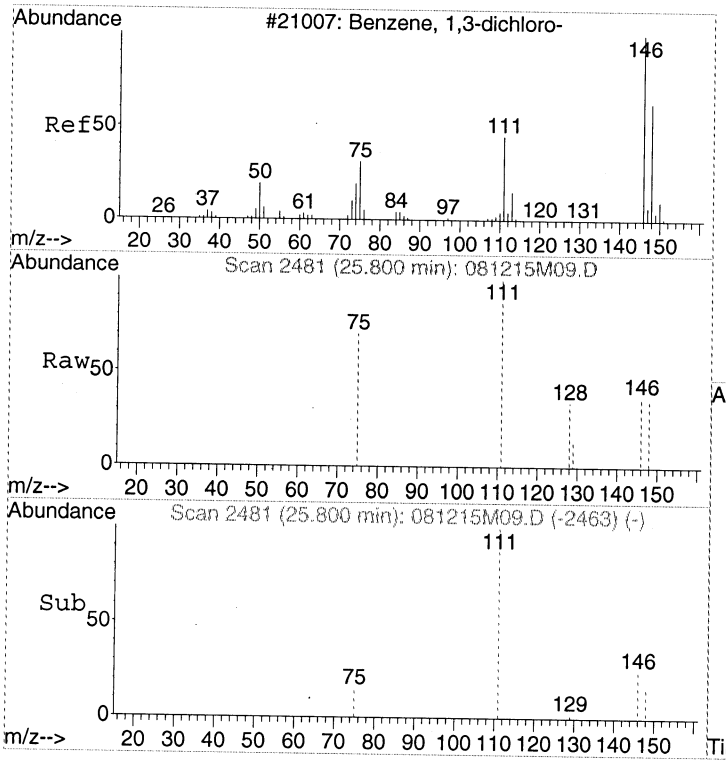


#31
1,1,2,2-Tetrachloroethane
Concen: Below Cal
RT: 24.28 min Scan# 2386
Delta R.T. 0.00 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion: 83 Resp: 395

Ion	Ratio	Lower	Upper
83	100		
85	58.5	43.7	83.7

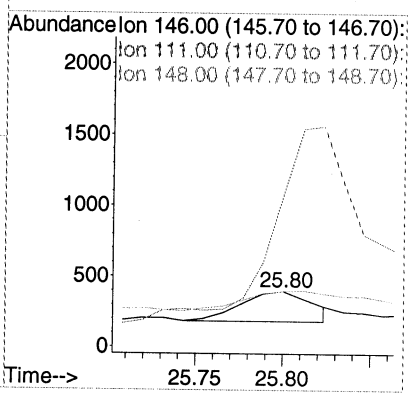


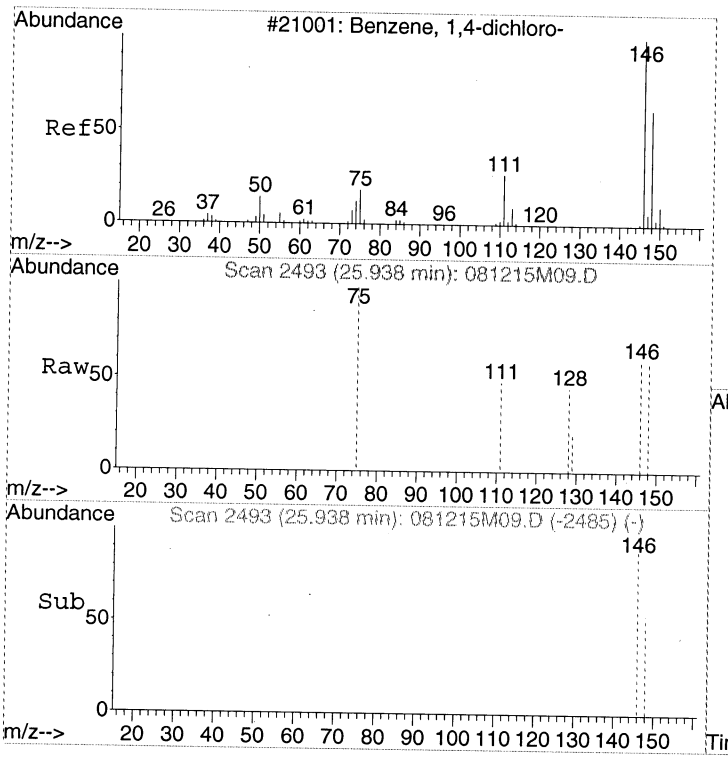


#32
1,3-Dichlorobenzene
Concen: Below Cal
RT: 25.80 min Scan# 2481
Delta R.T. 0.01 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion:146 Resp: 597

Ion	Ratio	Lower	Upper
146	100		
111	0.0	19.2	59.2#
148	78.1	44.0	84.0

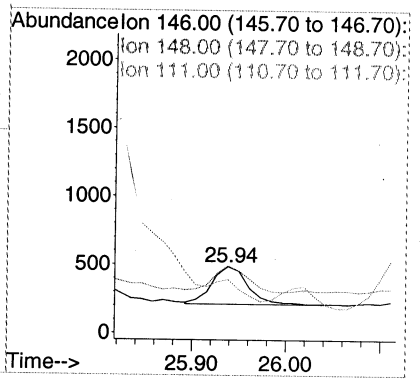


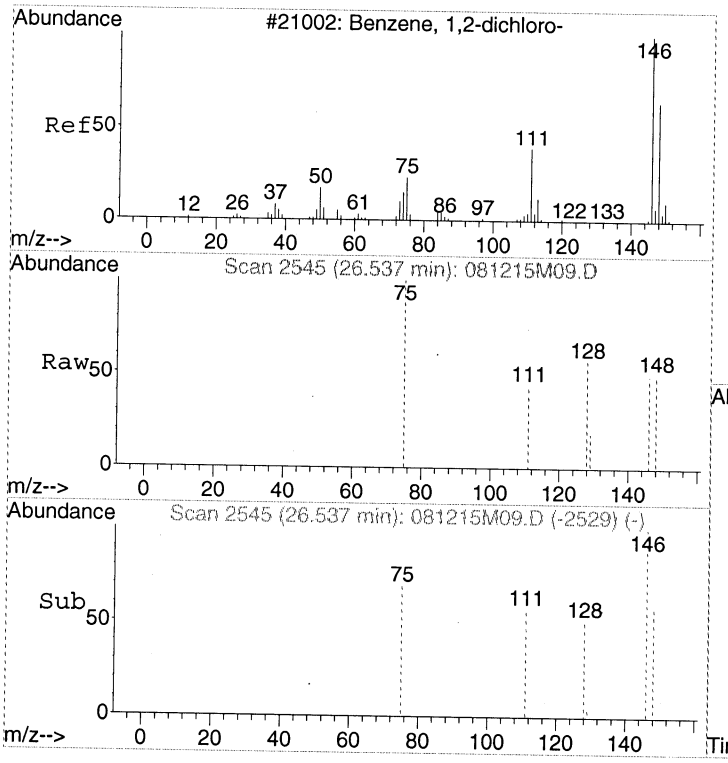


#33
1,4-Dichlorobenzene
Concen: Below Cal
RT: 25.94 min Scan# 2493
Delta R.T. 0.00 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion:146 Resp: 739

Ion	Ratio	Lower	Upper
146	100		
148	65.0	43.9	83.9
111	40.2	17.2	57.2

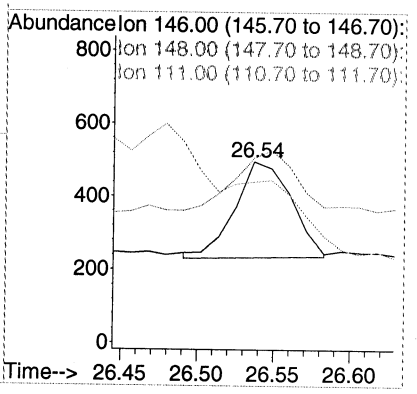




#34
1,2-Dichlorobenzene
Concen: Below Cal
RT: 26.54 min Scan# 2545
Delta R.T. -0.01 min
Lab File: 081215M09.D
Acq: 12 Aug 2015 5:39 pm

Tgt Ion:146 Resp: 674

Ion	Ratio	Lower	Upper
146	100		
148	70.8	43.6	83.6
111	0.0	20.6	60.6#



Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081215MAA\
Data File : 081215M10.D
Acq On : 12 Aug 2015 6:26 pm
InstName : AG5973M
Operator : LLH
Sample : 1508028-013
Misc : 60ml [redacted] Fairchild-OUT
ALS Vial : 8 Sample Multiplier: 1.49

RR boome too dilute

NW

Quant Time: Aug 13 10:41:27 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081115SMAA.M
Quant Title : TO15SIM
QLast Update : Tue Aug 11 14:59:20 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.25	49	118700	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.30	114	213932	375.00 pptv	0.00
21) CHLOROBENZENE-d5	22.25	117	215160	341.00 pptv	0.00

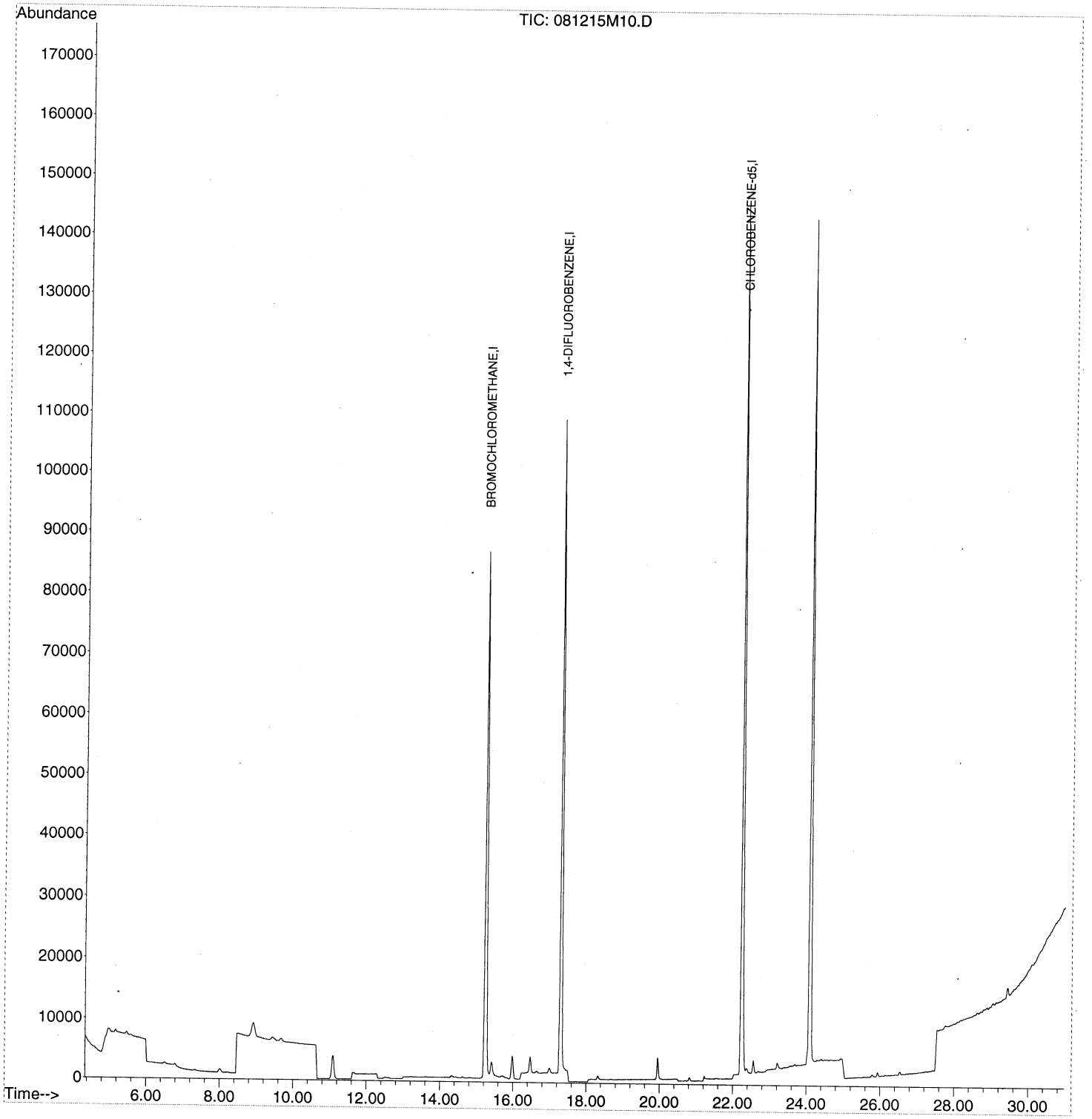
Target Compounds					Qvalue
2) Vinyl chloride	5.09	62	96	N.D.	
3) 1,3-Butadiene	5.18	54	563	N.D.	
4) Bromoethene	6.95	106	12	N.D.	
5) 1,1,2-Trichloro-1,2,2-trif	8.92	151	4984	N.D.	
6) 1,1-Dichloroethene	8.97	61	43	N.D.	
7) Dichloromethane	11.09	49	7618	N.D.	
8) tert-Butyl methyl ether (M	11.86	73	19	N.D.	
9) trans-1,2-Dichloroethene	11.83	61	12	N.D.	
10) Hexane	12.50	57	177	N.D.	
11) 1,1-Dichloroethane	13.22	63	6	N.D.	
12) cis-1,2-Dichloroethene	14.70	96	22	N.D.	
13) Chloroform	15.40	83	1033	N.D.	
14) 1,1,1-Trichloroethane	15.71	97	302	N.D.	
15) Carbon tetrachloride	15.98	117	6258	N.D.	
17) Benzene	16.47	78	5609	N.D.	
18) 1,2-Dichloroethane	16.64	62	506	N.D.	
19) Trichloroethene	17.73	130	32	N.D.	
20) 1,2-Dichloropropane	18.06	63	147	N.D.	
22) Toluene	19.95	91	5691	N.D.	
23) 1,1,2-Trichloroethane	20.71	97	146	N.D.	
24) Tetrachloroethene	20.83	166	171	N.D.	
25) 1,2-Dibromoethane (EDB)	21.55	107	110	N.D.	
26) Chlorobenzene	22.28	112	214	N.D.	
27) Ethylbenzene	22.37	91	1263	N.D.	
28) m&p-Xylene	22.56	91	3152	N.D.	
29) o-Xylene	23.21	91	1391	N.D.	
30) Styrene	23.24	104	294	N.D.	
31) 1,1,2,2-Tetrachloroethane	24.28	83	412	N.D.	
32) 1,3-Dichlorobenzene	25.80	146	415	N.D.	
33) 1,4-Dichlorobenzene	25.94	146	650	N.D.	
34) 1,2-Dichlorobenzene	26.55	146	590	N.D.	

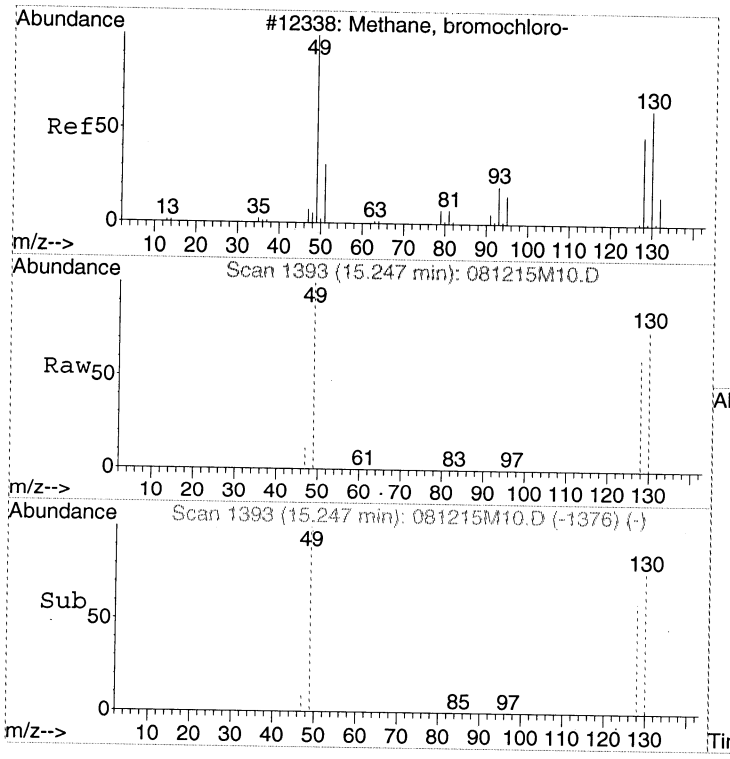
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081215MAA\
Data File : 081215M10.D
Acq On : 12 Aug 2015 6:26 pm
InstName : AG5973M
Operator : LLH
Sample : 1508028-013
Misc : 60ml [redacted]Fairchild-OUT
ALS Vial : 8 Sample Multiplier: 1.49

Quant Time: Aug 13 10:41:27 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081115SMAA.M
Quant Title : TO15SIM
QLast Update : Tue Aug 11 14:59:20 2015
Response via : Initial Calibration

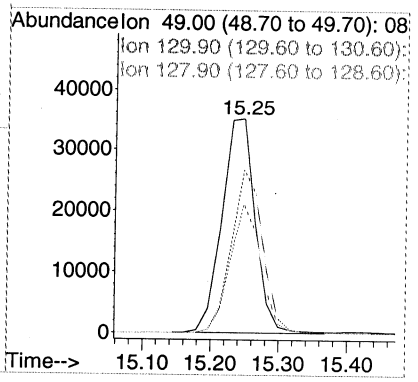


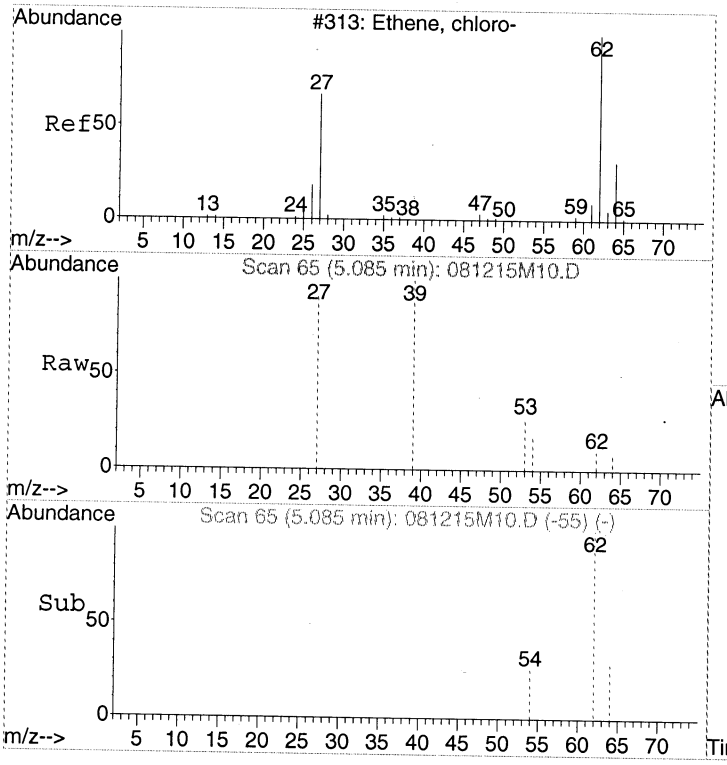


#1
BROMOCHLOROMETHANE
Concen: 341.00 pptv
RT: 15.25 min Scan# 1393
Delta R.T. 0.00 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion: 49 Resp: 118700

Ion	Ratio	Lower	Upper
49	100		
130	72.1	56.6	96.6
128	56.0	39.9	79.9

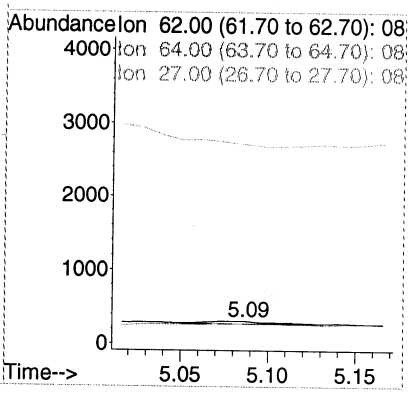


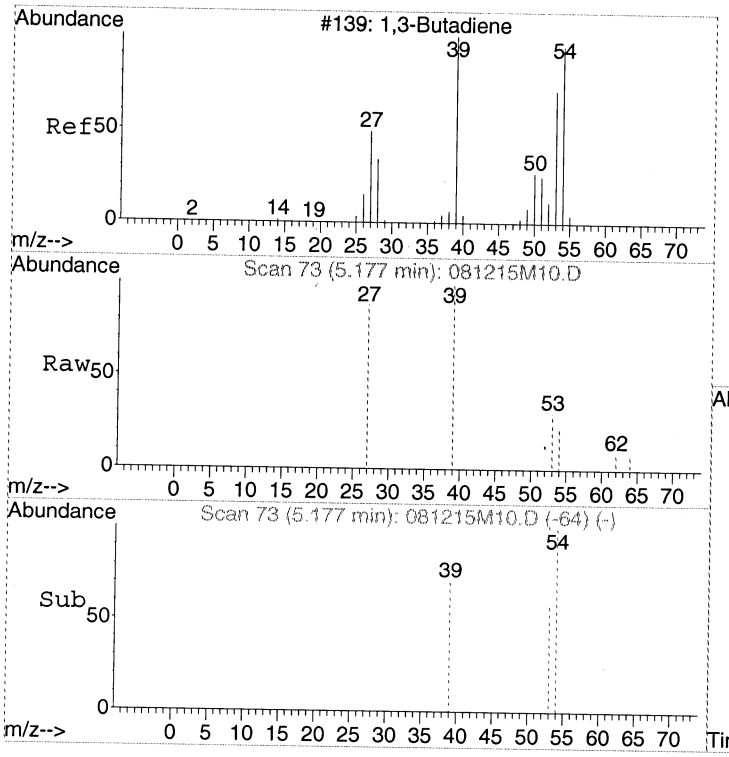


#2
Vinyl chloride
Concen: Below Cal
RT: 5.09 min Scan# 65
Delta R.T. 0.00 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion: 62 Resp: 96

Ion	Ratio	Lower	Upper
62	100		
64	72.9	12.0	52.0#
27	0.0	24.7	64.7#

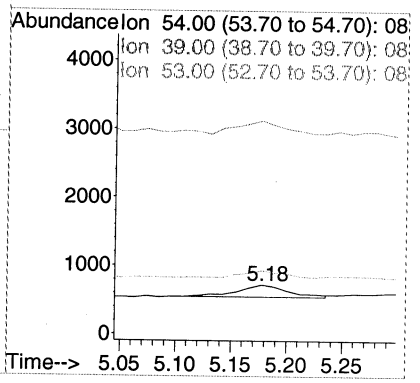


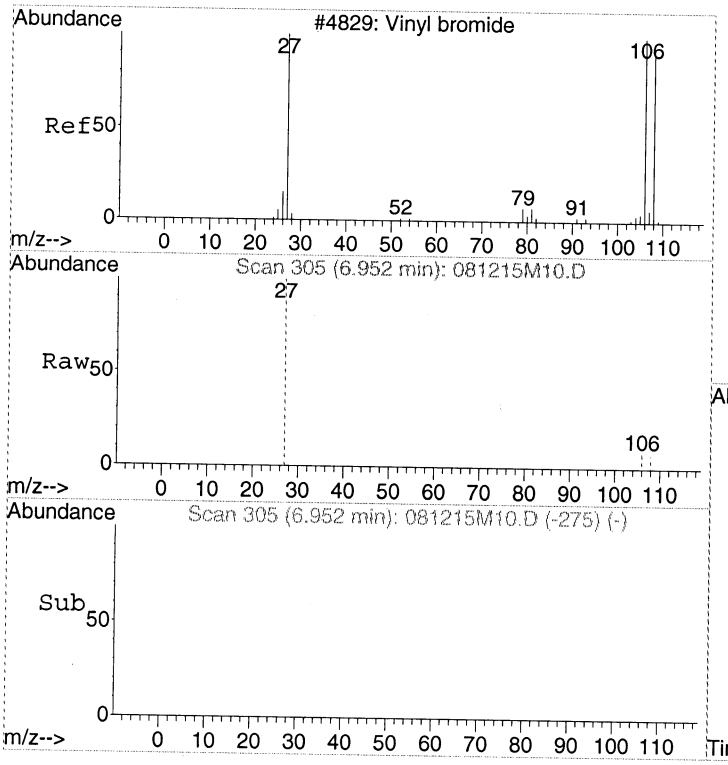


#3
1,3-Butadiene
Concen: Below Cal
RT: 5.18 min Scan# 73
Delta R.T. -0.01 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion: 54 Resp: 563

Ion	Ratio	Lower	Upper
54	100		
39	105.2	72.5	112.5
53	40.1	48.6	88.6#

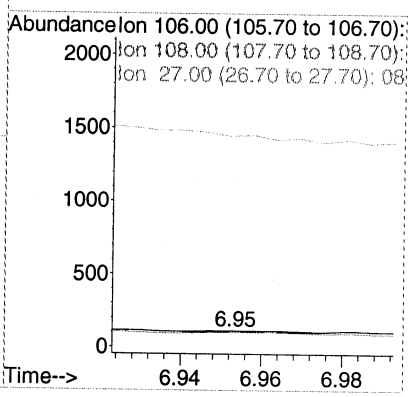


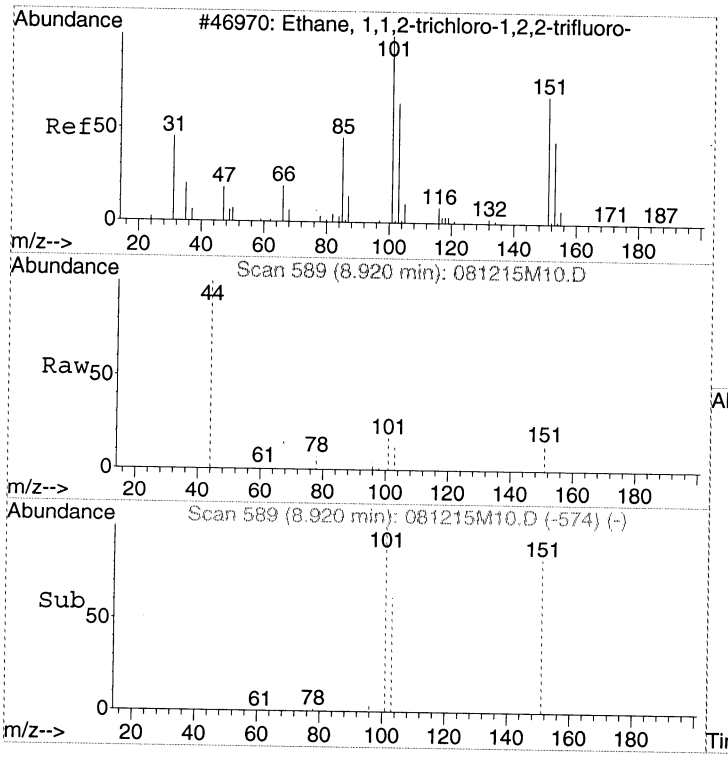


#4
Bromoethene
Concen: Below Cal
RT: 6.95 min Scan# 305
Delta R.T. -0.02 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion:106 Resp: 12

Ion	Ratio	Lower	Upper
106	100		
108	141.7	0.0	214.7
27	0.0	67.2	107.2#

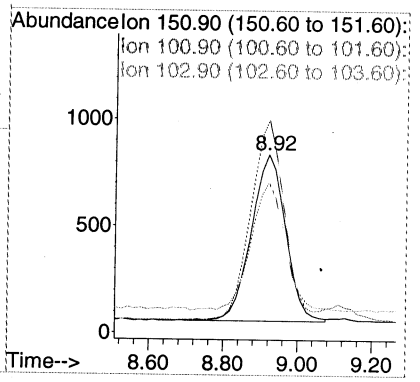


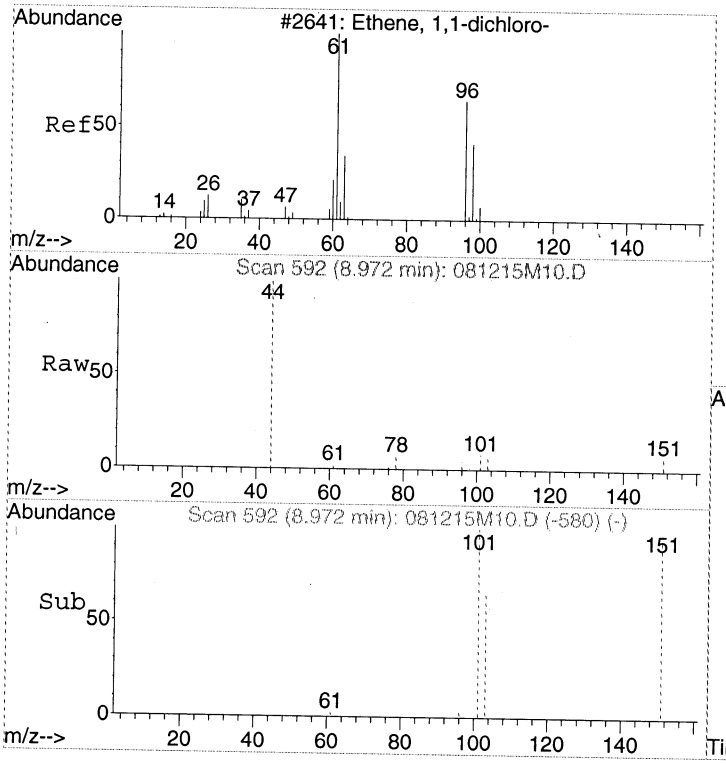


#5
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: Below Cal
RT: 8.92 min Scan# 589
Delta R.T. 0.00 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion:151 Resp: 4984

Ion	Ratio	Lower	Upper
151	100		
101	117.6	95.3	135.3
103	75.4	53.9	93.9

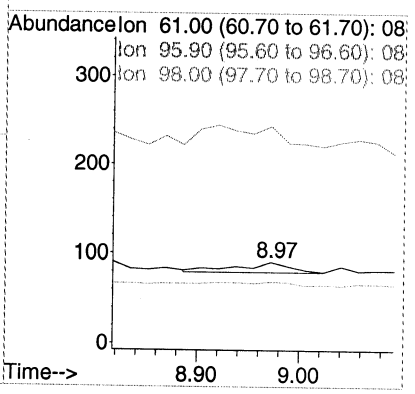


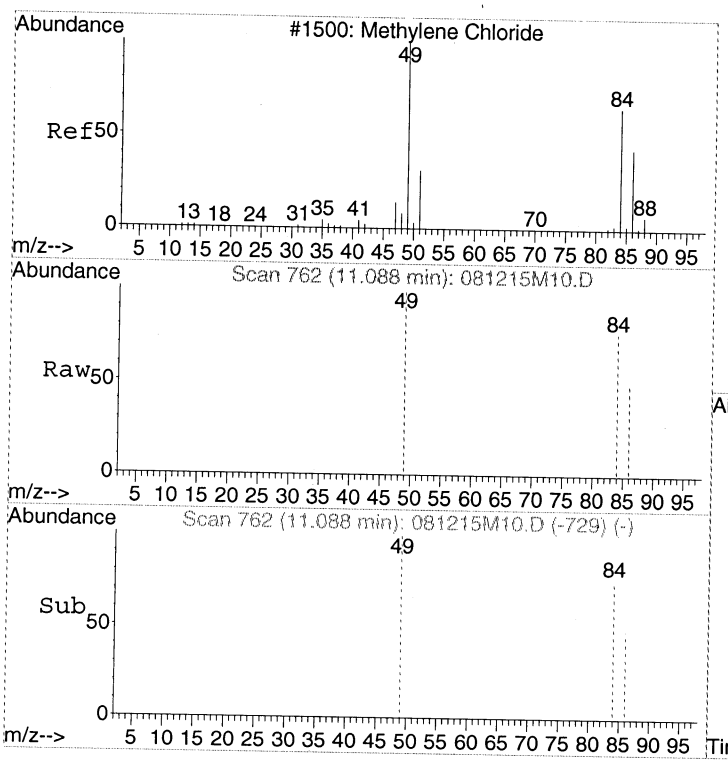


#6
1,1-Dichloroethene
Concen: Below Cal
RT: 8.97 min Scan# 592
Delta R.T. 0.00 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion: 61 Resp: 43

Ion	Ratio	Lower	Upper
61	100		
96	104.7	41.4	81.4#
98	16.3	18.8	58.8#

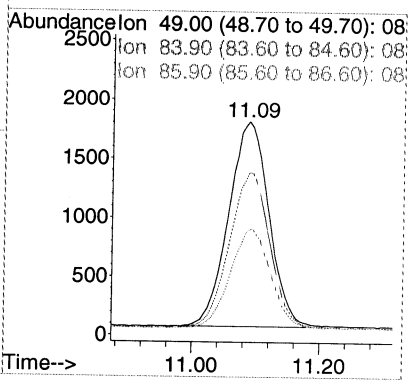


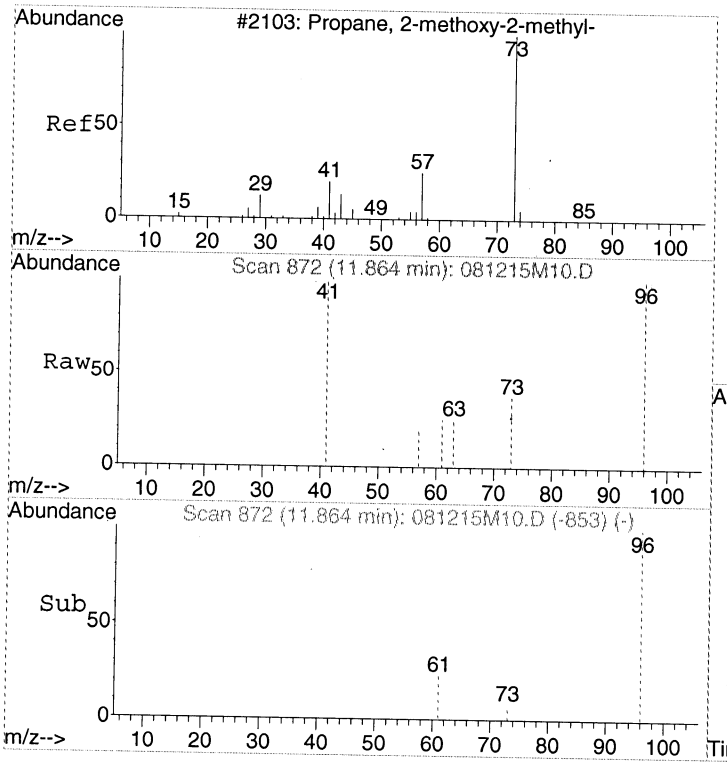


#7
Dichloromethane
Concen: Below Cal
RT: 11.09 min Scan# 762
Delta R.T. -0.01 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion: 49 Resp: 7618

Ion	Ratio	Lower	Upper
49	100		
84	76.0	59.9	99.9
86	48.5	31.1	71.1

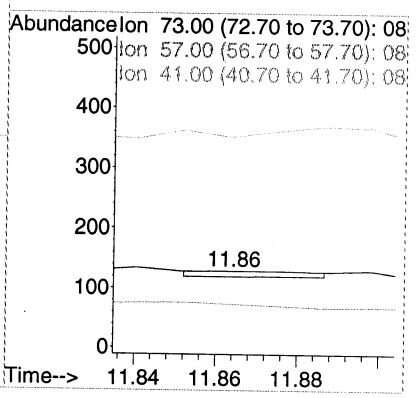


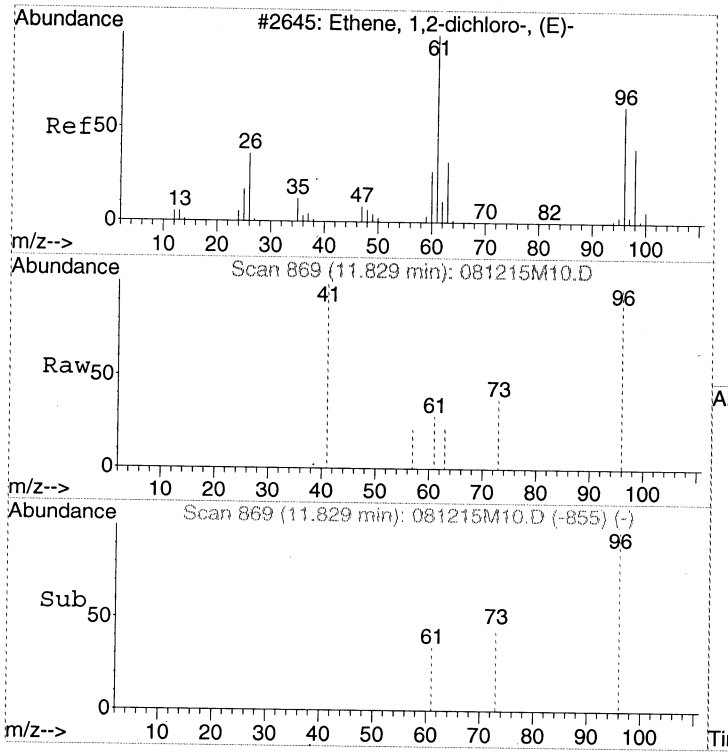


#8
tert-Butyl methyl ether (MTBE)
Concen: Below Cal
RT: 11.86 min Scan# 872
Delta R.T. 0.02 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion: 73 Resp: 19

Ion	Ratio	Lower	Upper
73	100		
57	163.2	3.0	43.0#
41	63.2	19.2	59.2#

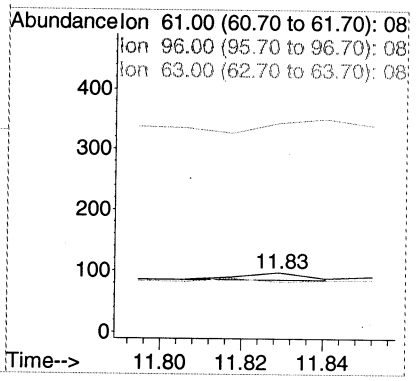


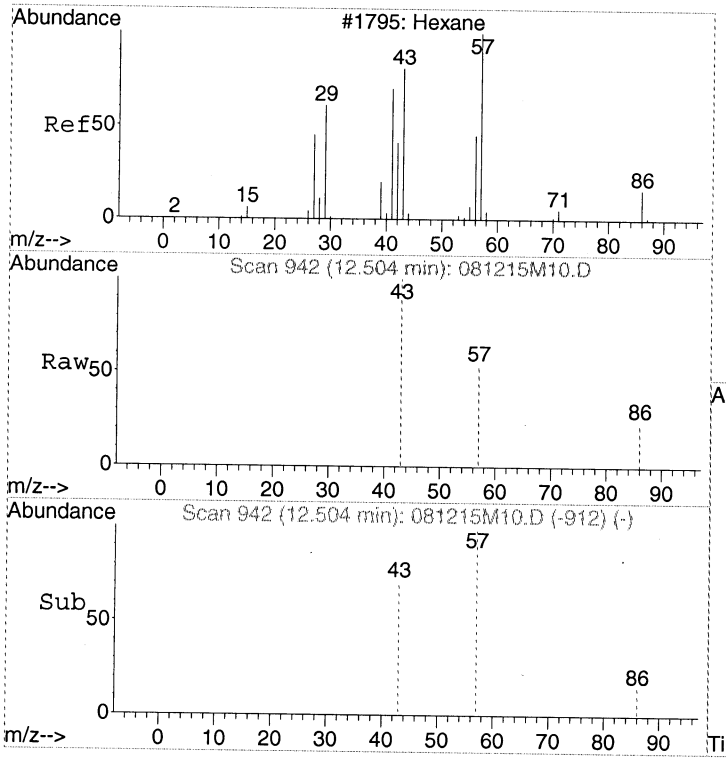


#9
trans-1,2-Dichloroethene
Concen: Below Cal
RT: 11.83 min Scan# 869
Delta R.T. -0.03 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion: 61 Resp: 12

Ion	Ratio	Lower	Upper
61	100		
96	308.3	50.8	90.8#
63	0.0	12.1	52.1#

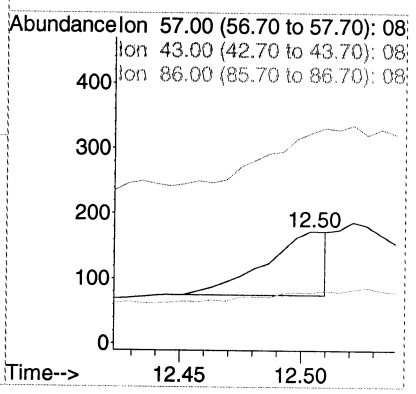


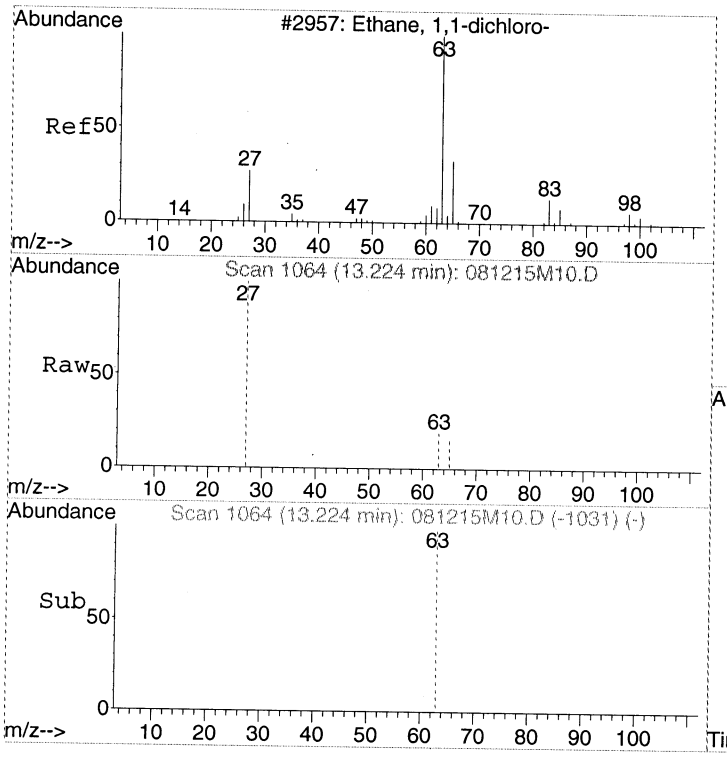


#10
Hexane
Concen: Below Cal
RT: 12.50 min Scan# 942
Delta R.T. -0.02 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion: 57 Resp: 177

Ion	Ratio	Lower	Upper
57	100		
43	0.0	51.5	91.5#
86	10.7	0.0	37.2

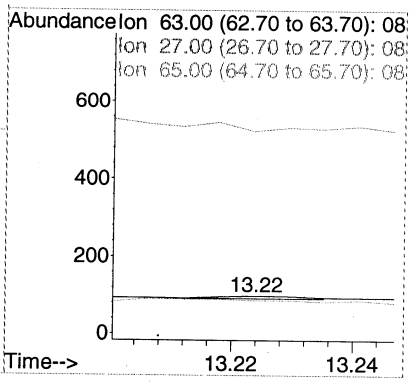


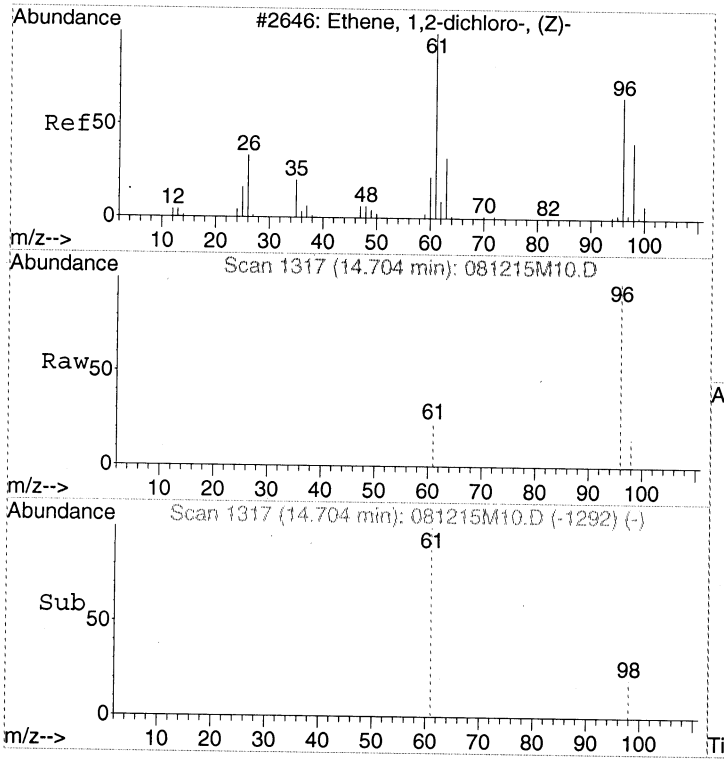


#11
1,1-Dichloroethane
Concen: Below Cal
RT: 13.22 min Scan# 1064
Delta R.T. -0.01 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion: 63 Resp: 6

Ion	Ratio	Lower	Upper
63	100		
27	183.3	10.5	50.5#
65	0.0	11.5	51.5#

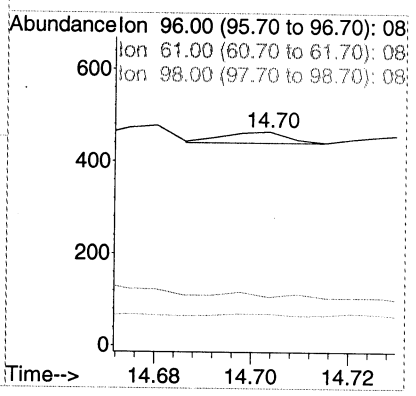


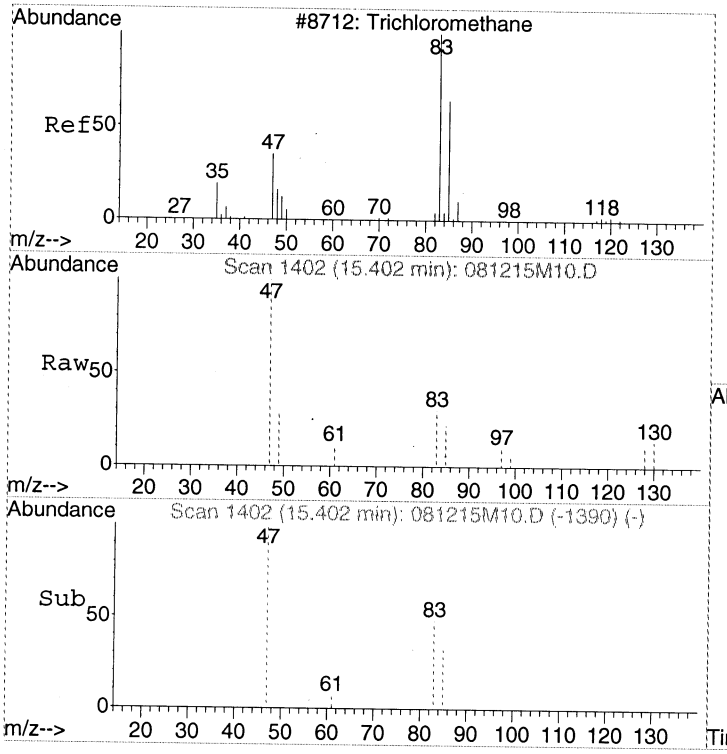


#12
cis-1,2-Dichloroethene
Concen: Below Cal
RT: 14.70 min Scan# 1317
Delta R.T. -0.01 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion: 96 Resp: 22

Ion	Ratio	Lower	Upper
96	100		
61	45.5	109.9	149.9#
98	18.2	44.2	84.2#

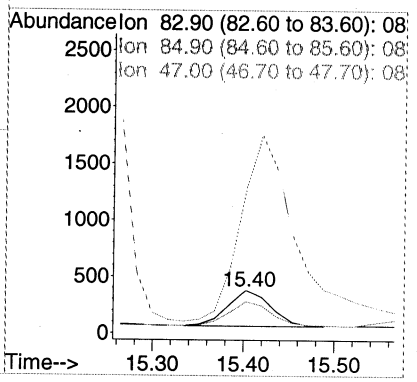


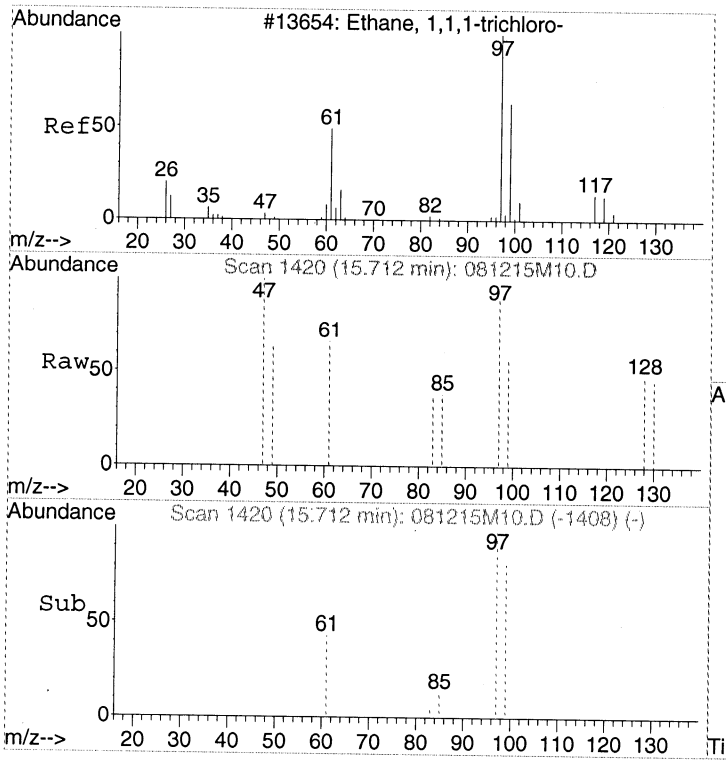


#13
Chloroform
Concen: Below Cal
RT: 15.40 min Scan# 1402
Delta R.T. 0.00 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion: 83 Resp: 1033

Ion	Ratio	Lower	Upper
83	100		
85	69.5	44.4	84.4
47	675.3	6.1	46.1#

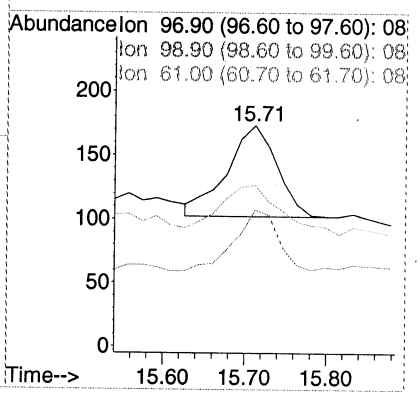


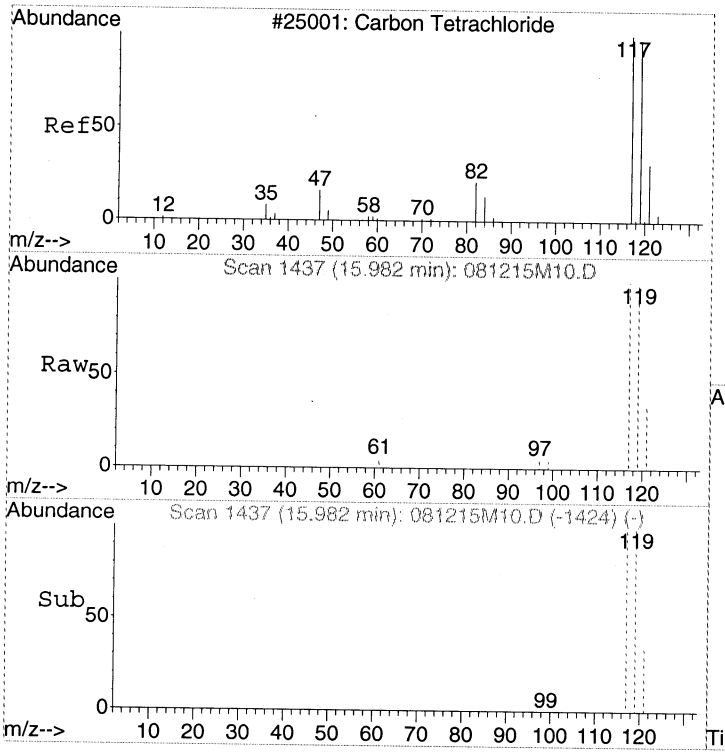


#14
1,1,1-Trichloroethane
Concen: Below Cal
RT: 15.71 min Scan# 1420
Delta R.T. 0.00 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion: 97 Resp: 302

Ion	Ratio	Lower	Upper
97	100		
99	59.3	44.2	84.2
61	66.9	23.6	63.6#

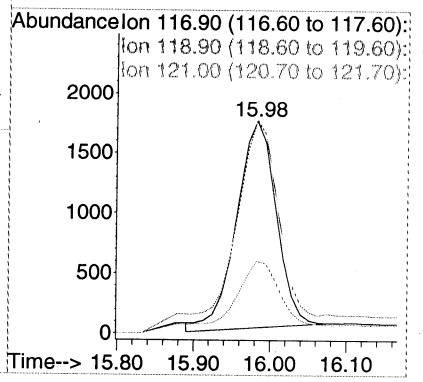


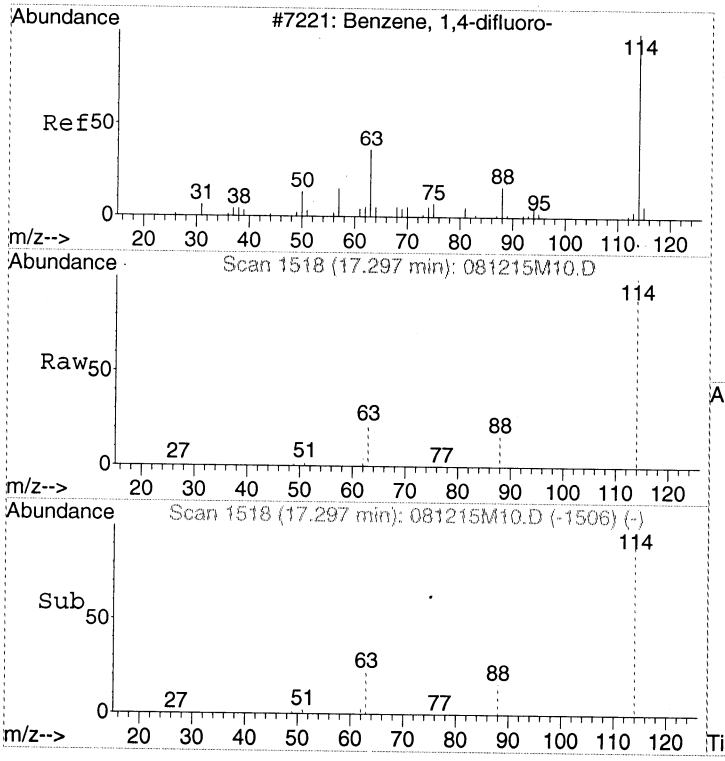


#15
Carbon tetrachloride
Concen: Below Cal
RT: 15.98 min Scan# 1437
Delta R.T. 0.00 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion:117 Resp: 6258

Ion	Ratio	Lower	Upper
117	100		
119	100.0	76.1	116.1
121	33.9	6.4	46.4

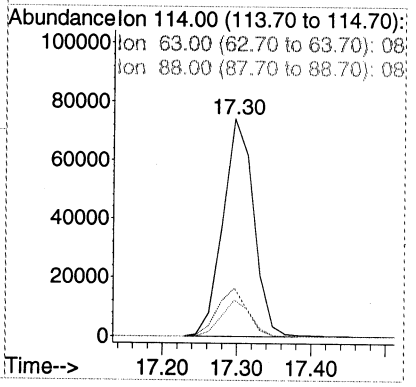


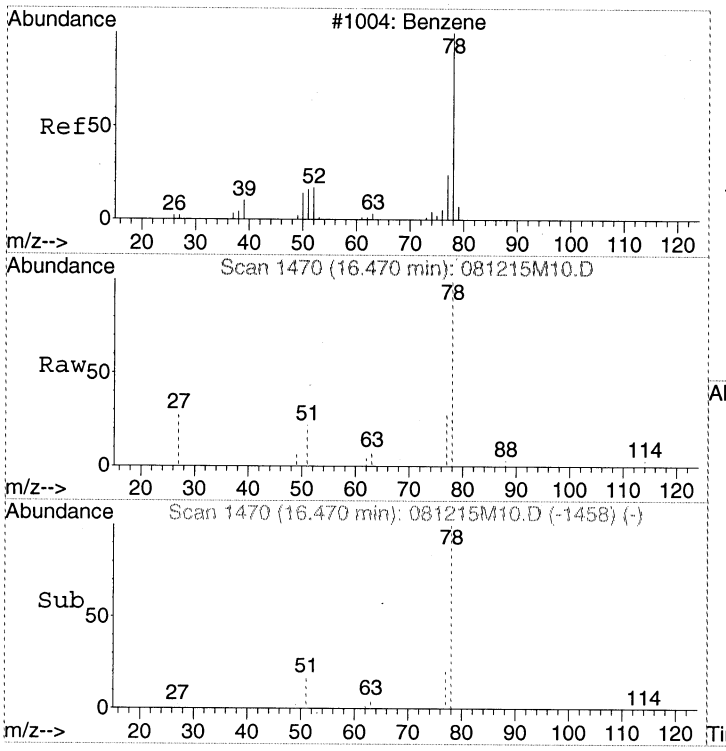


#16
1,4-DIFLUOROBENZENE
Concen: 375.00 pptv
RT: 17.30 min Scan# 1518
Delta R.T. 0.00 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion:114 Resp: 213932

Ion	Ratio	Lower	Upper
114	100		
63	21.4	0.6	40.6
88	16.0	0.0	35.8

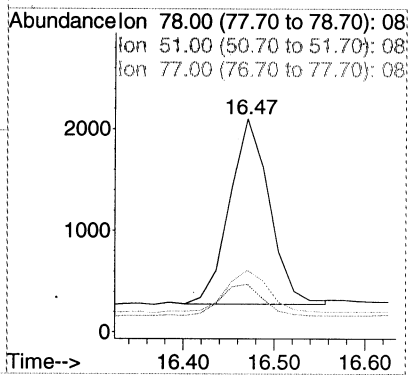


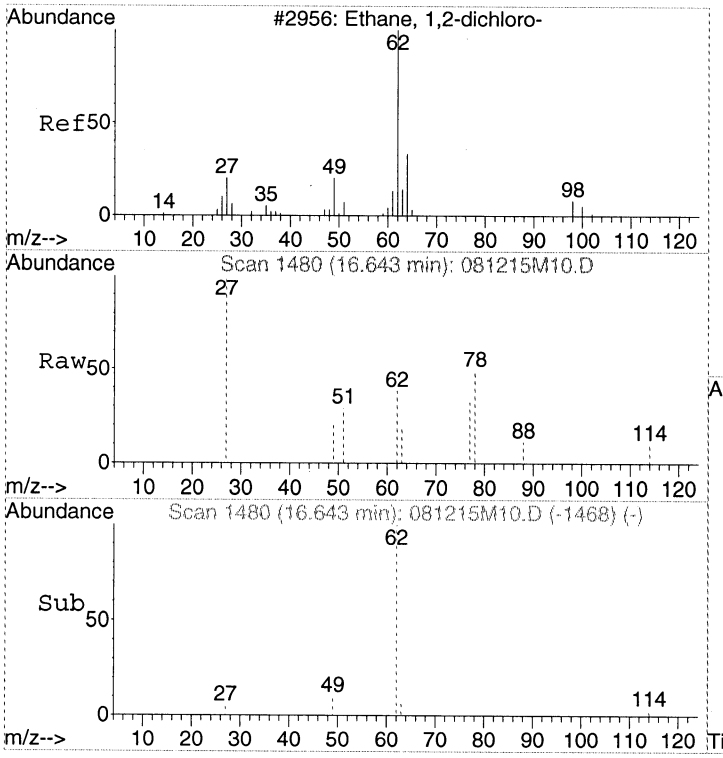


#17
Benzene
Concen: Below Cal
RT: 16.47 min Scan# 1470
Delta R.T. 0.00 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion: 78 Resp: 5609

Ion	Ratio	Lower	Upper
78	100		
51	18.5	0.0	38.2
77	23.9	4.3	44.3

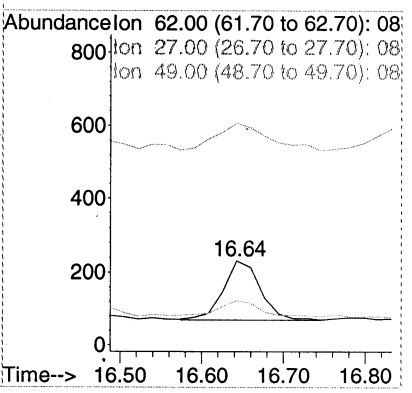


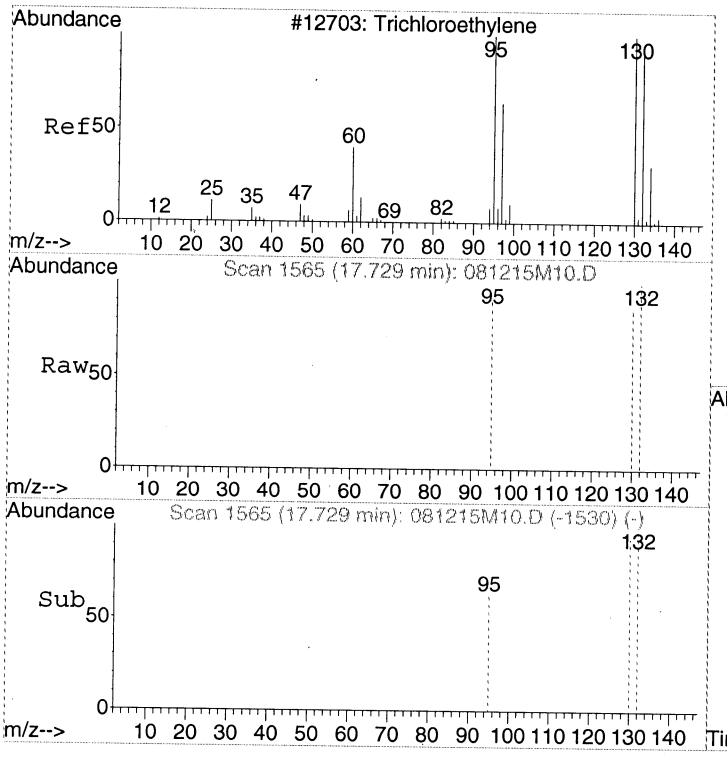


#18
1,2-Dichloroethane
Concen: Below Cal
RT: 16.64 min Scan# 1480
Delta R.T. 0.00 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion: 62 Resp: 506

Ion	Ratio	Lower	Upper
62	100		
27	59.3	16.3	56.3#
49	27.5	5.6	45.6

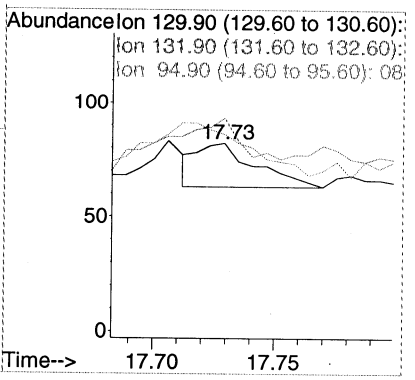


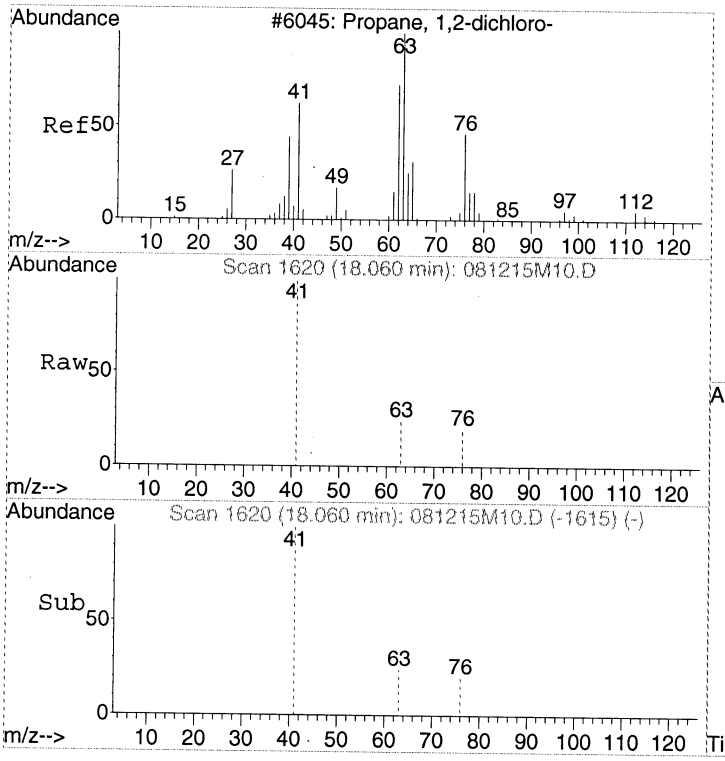


#19
Trichloroethene
Concen: Below Cal
RT: 17.73 min Scan# 1565
Delta R.T. 0.01 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion:130 Resp: 32

Ion	Ratio	Lower	Upper
130	100		
132	153.1	76.4	116.4#
95	0.0	77.3	117.3#

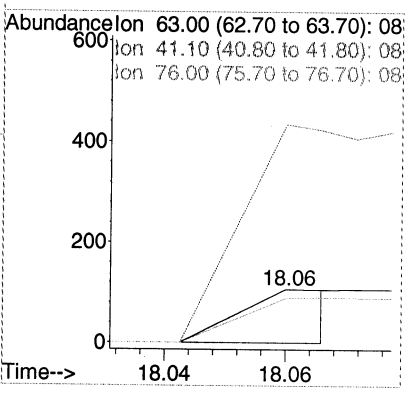


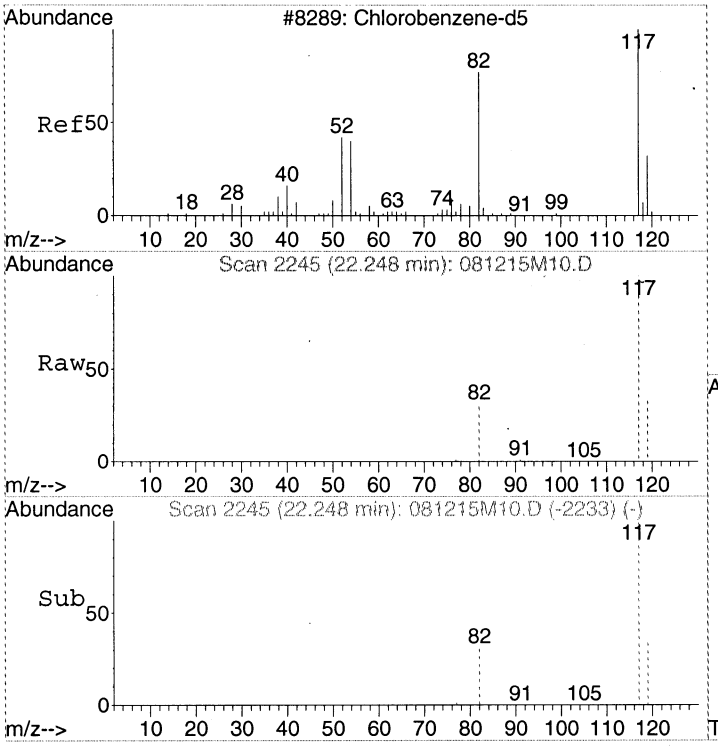


#20
1,2-Dichloropropane
Concen: Below Cal
RT: 18.06 min Scan# 1620
Delta R.T. -0.16 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion: 63 Resp: 147

Ion	Ratio	Lower	Upper
63	100		
41	498.6	44.5	84.5#
76	105.4	30.3	70.3#

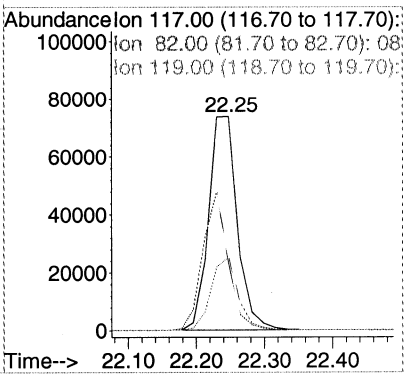


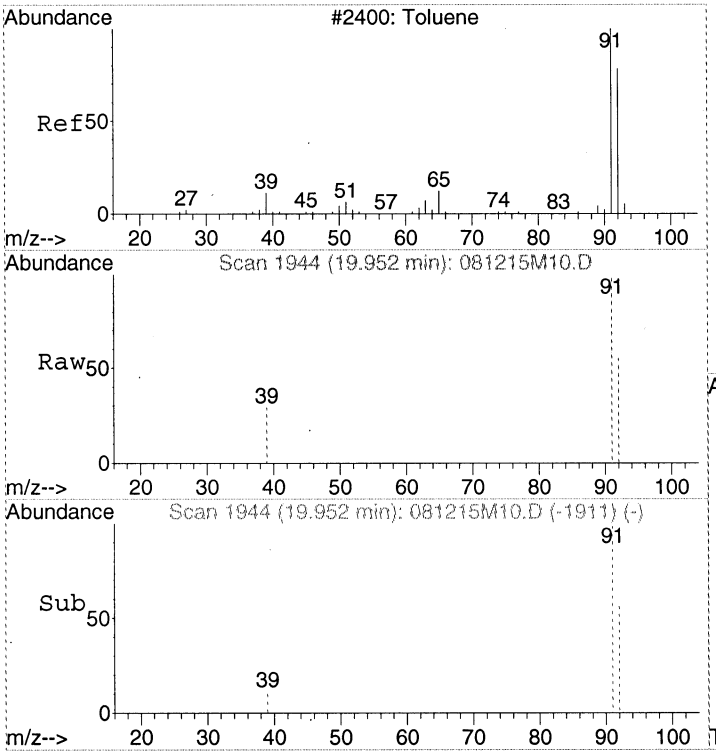


#21
CHLOROBENZENE-d5
Concen: 341.00 pptv
RT: 22.25 min Scan# 2245
Delta R.T. 0.00 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion:117 Resp: 215160

Ion	Ratio	Lower	Upper
117	100		
82	57.3	36.0	76.0
119	32.1	12.1	52.1

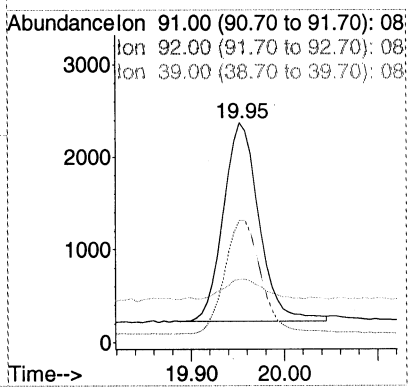


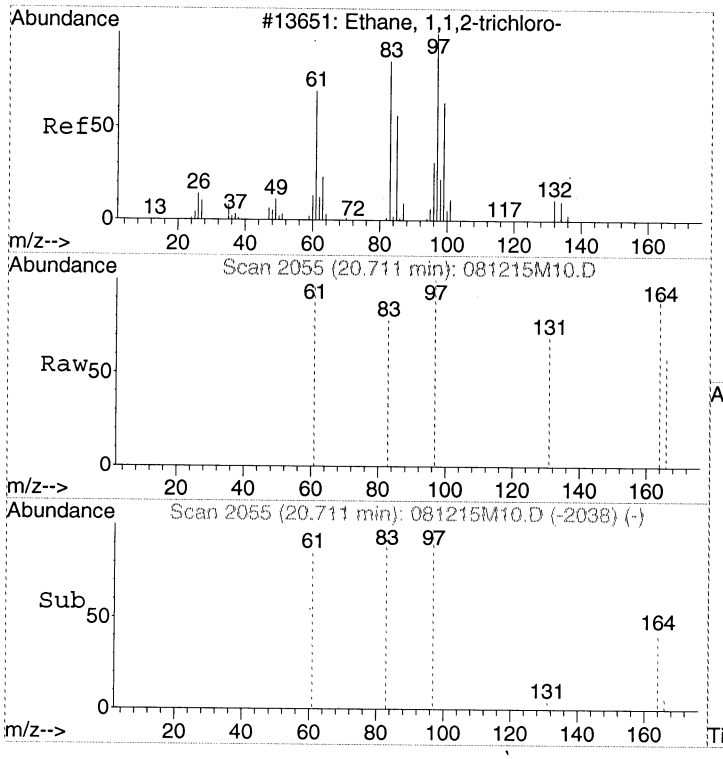


#22
Toluene
Concen: Below Cal
RT: 19.95 min Scan# 1944
Delta R.T. -0.01 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion: 91 Resp: 5691

Ion	Ratio	Lower	Upper
91	100		
92	57.2	37.9	77.9
39	12.6	0.0	29.3

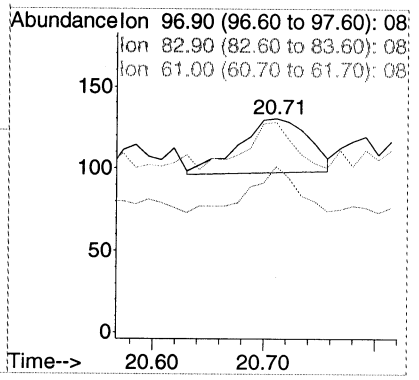


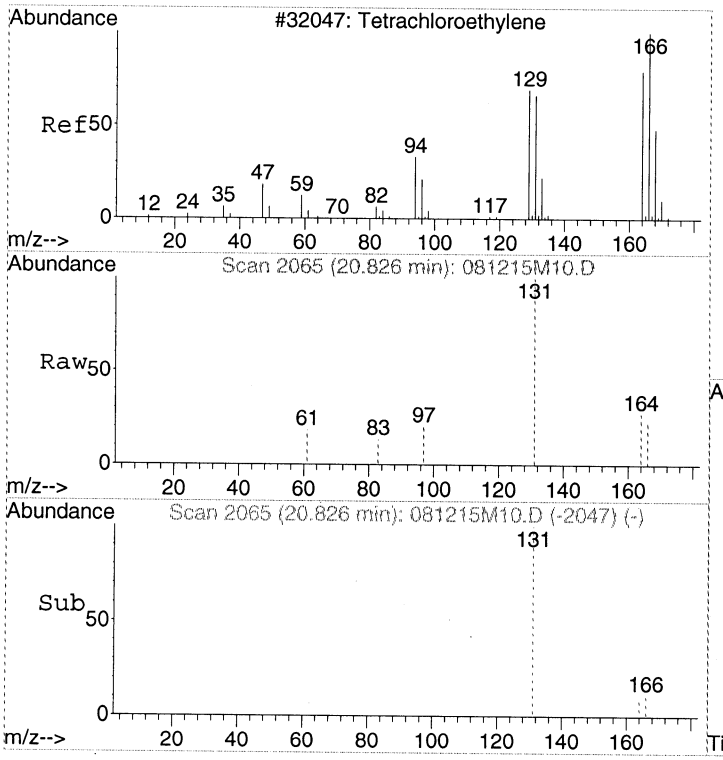


#23
1,1,2-Trichloroethane
Concen: Below Cal
RT: 20.71 min Scan# 2055
Delta R.T. 0.00 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion: 97 Resp: 146

Ion	Ratio	Lower	Upper
97	100		
83	46.6	63.7	103.7#
61	58.9	47.7	87.7

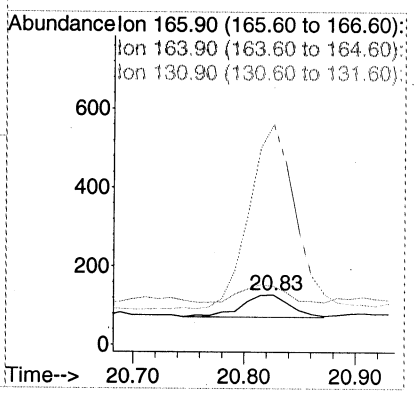


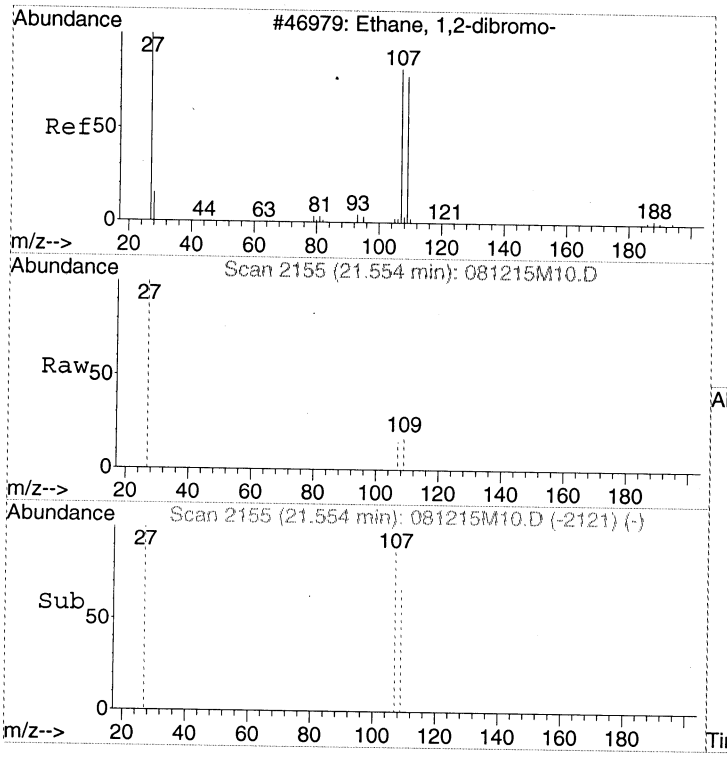


#24
Tetrachloroethene
Concen: Below Cal
RT: 20.83 min Scan# 2065
Delta R.T. 0.01 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion:166 Resp: 171

Ion	Ratio	Lower	Upper
166	100		
164	70.8	58.4	98.4
131	801.2	49.4	89.4#

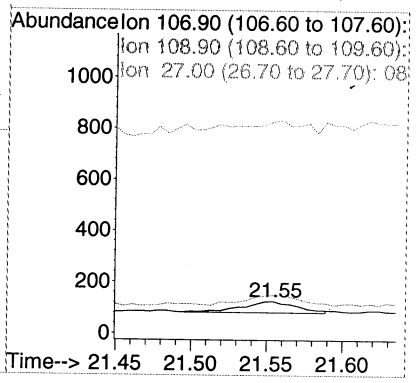


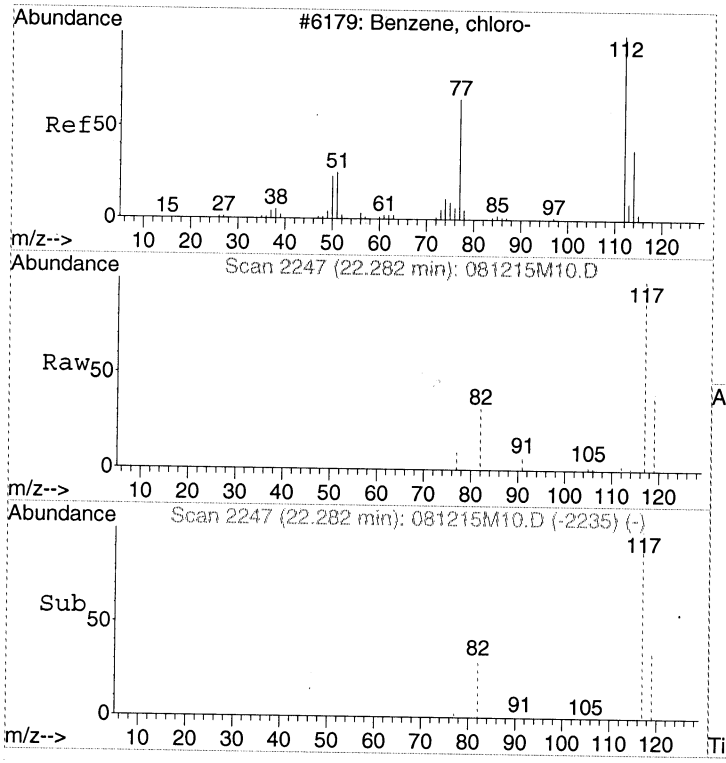


#25
1,2-Dibromoethane (EDB)
Concen: Below Cal
RT: 21.55 min Scan# 2155
Delta R.T. 0.00 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion:107 Resp: 110

Ion	Ratio	Lower	Upper
107	100		
109	92.7	73.9	113.9
27	23.6	37.8	77.8#

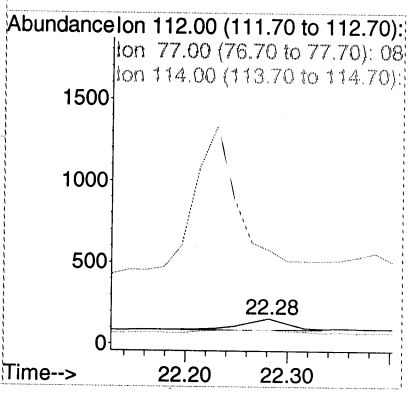


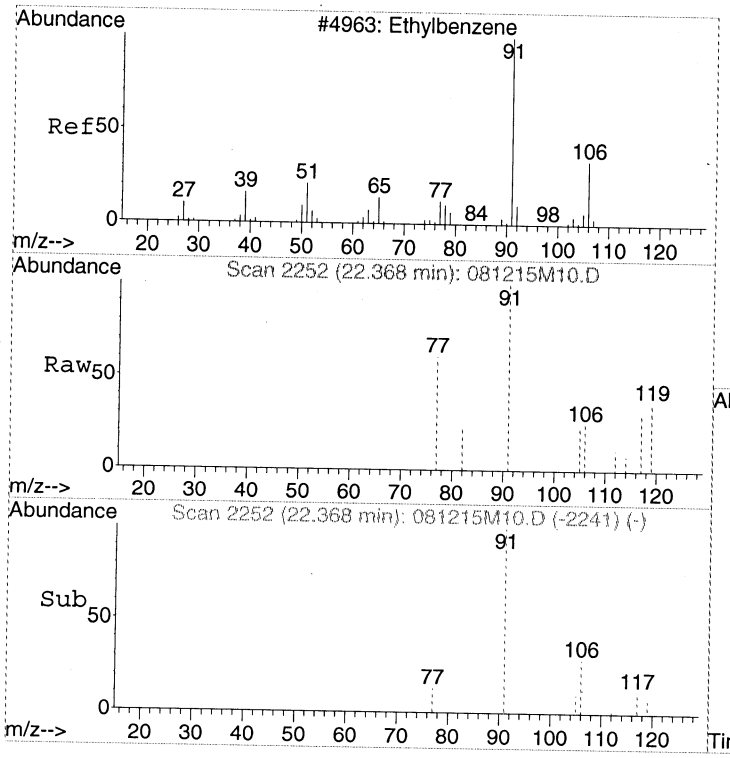


#26
Chlorobenzene
Concen: Below Cal
RT: 22.28 min Scan# 2247
Delta R.T. 0.00 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion:112 Resp: 214

Ion	Ratio	Lower	Upper
112	100		
77	0.0	40.4	80.4#
114	54.7	12.0	52.0#

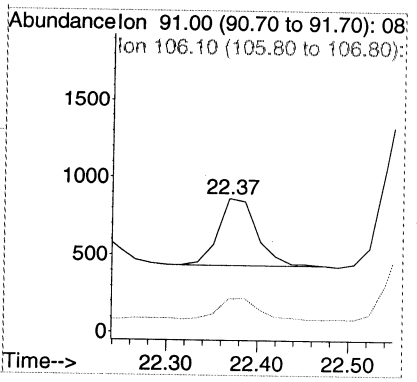


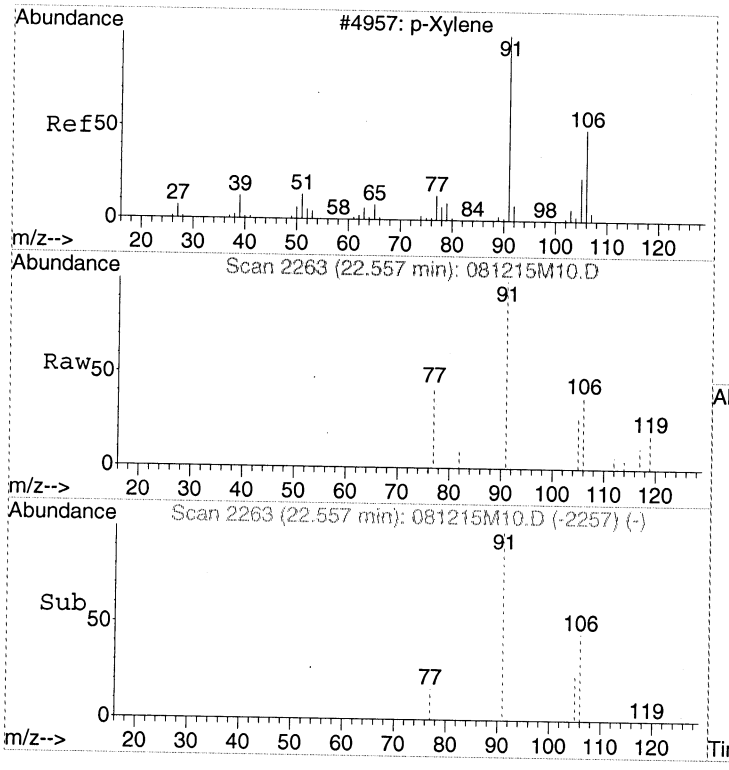


#27
Ethylbenzene
Concen: Below Cal
RT: 22.37 min Scan# 2252
Delta R.T. -0.02 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion: 91 Resp: 1263

Ion	Ratio	Lower	Upper
91	100		
106	33.1	11.2	51.2

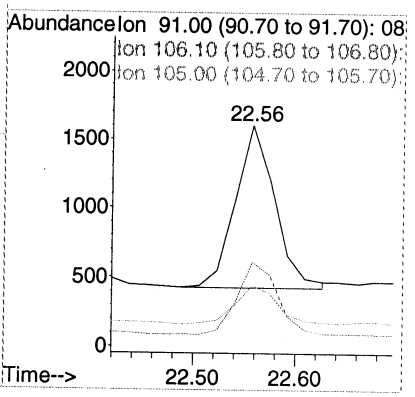


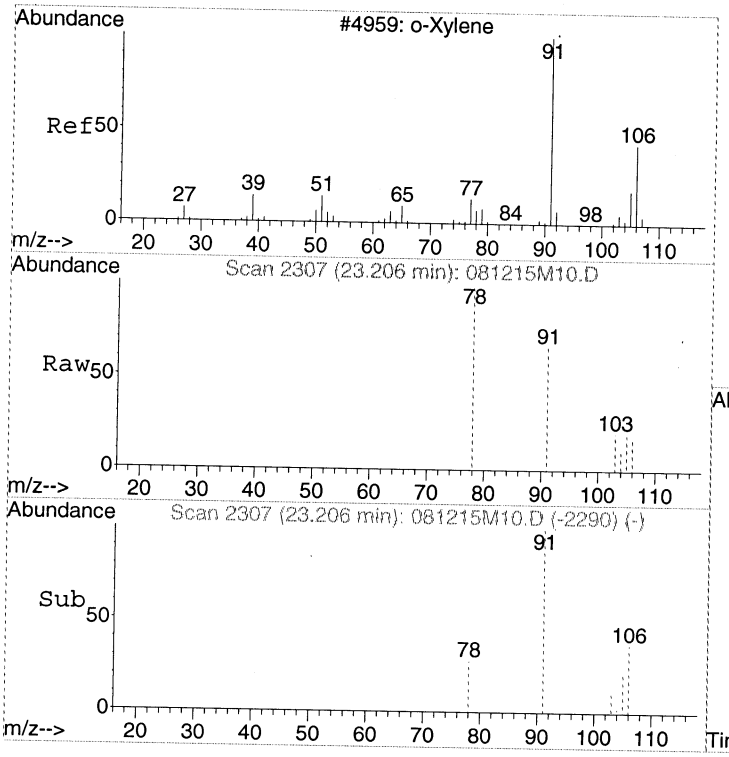


#28
m&p-Xylene
Concen: Below Cal
RT: 22.56 min Scan# 2263
Delta R.T. 0.00 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion: 91 Resp: 3152

Ion	Ratio	Lower	Upper
91	100		
106	46.4	29.0	69.0
105	26.9	4.3	44.3

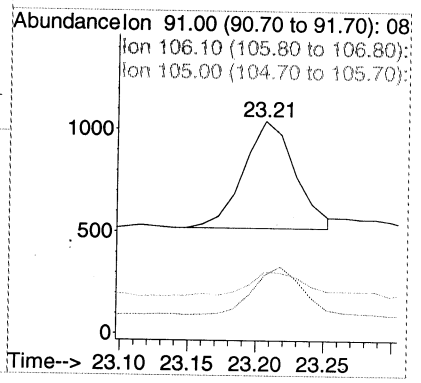


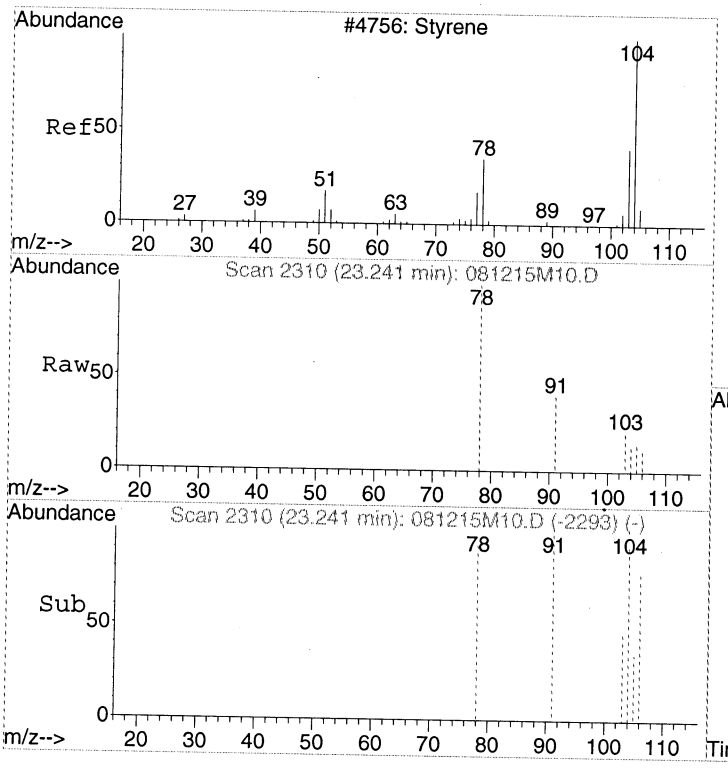


#29
o-Xylene
Concen: Below Cal
RT: 23.21 min Scan# 2307
Delta R.T. 0.00 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion: 91 Resp: 1391

Ion	Ratio	Lower	Upper
91	100		
106	46.6	25.6	65.6
105	23.9	6.0	46.0

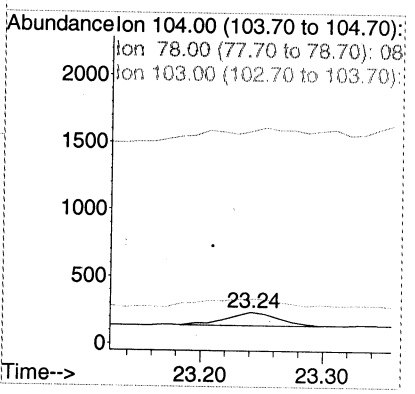


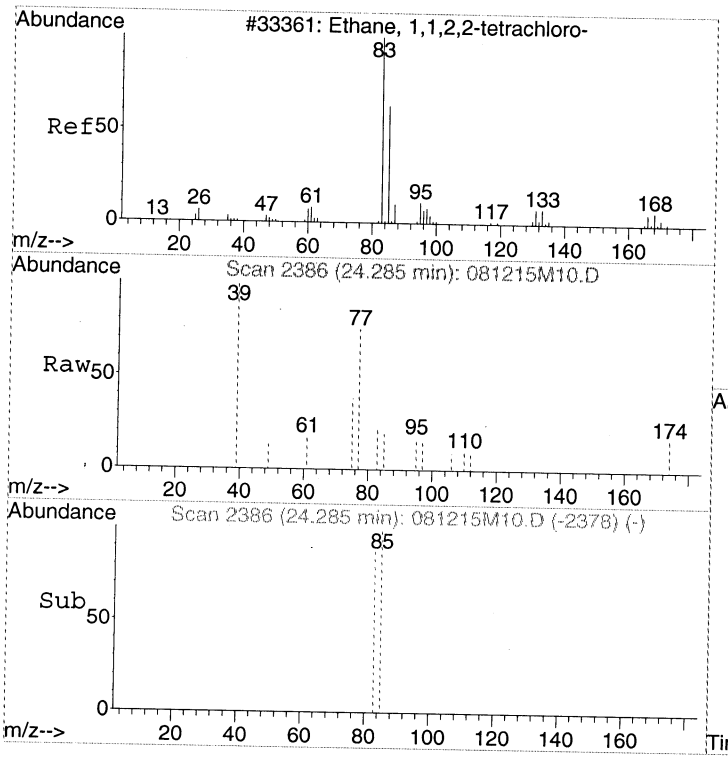


#30
Styrene
Concen: Below Cal
RT: 23.24 min Scan# 2310
Delta R.T. 0.00 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion:104 Resp: 294

Ion	Ratio	Lower	Upper
104	100		
78	52.4	37.4	77.4
103	100.0	36.8	76.8#

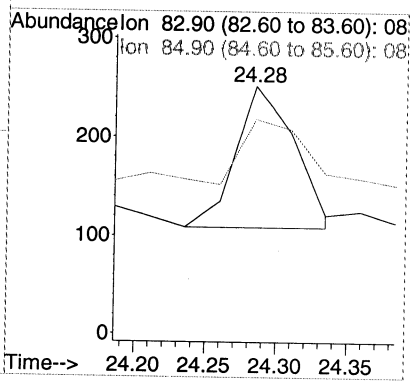


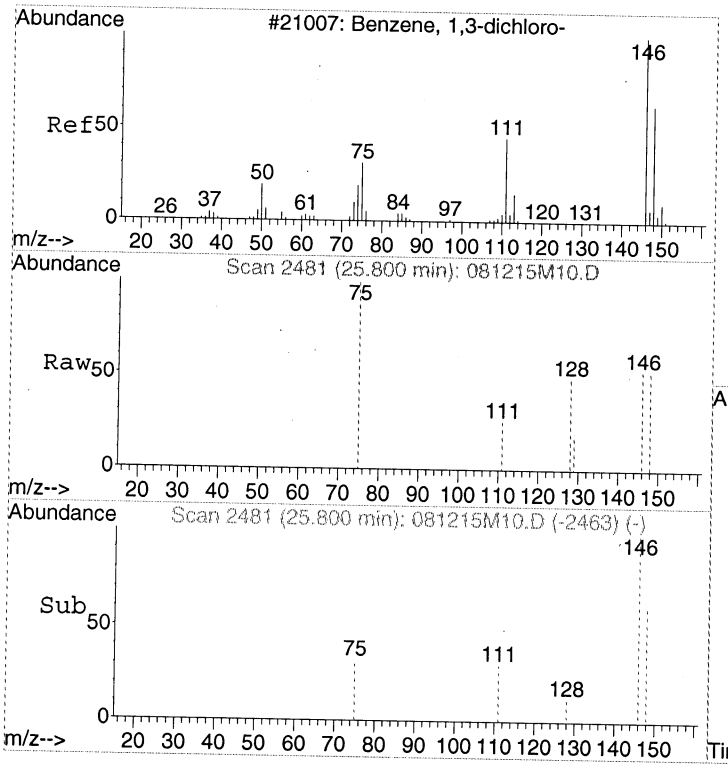


#31
1,1,2,2-Tetrachloroethane
Concen: Below Cal
RT: 24.28 min Scan# 2386
Delta R.T. 0.00 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion: 83 Resp: 412

Ion	Ratio	Lower	Upper
83	100		
85	51.7	43.7	83.7

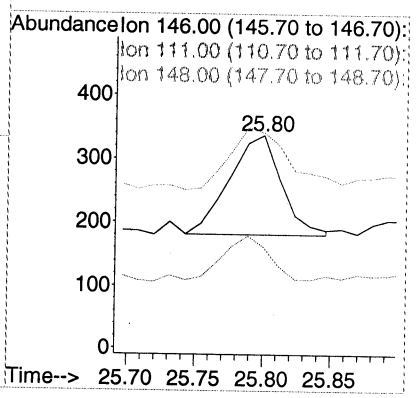


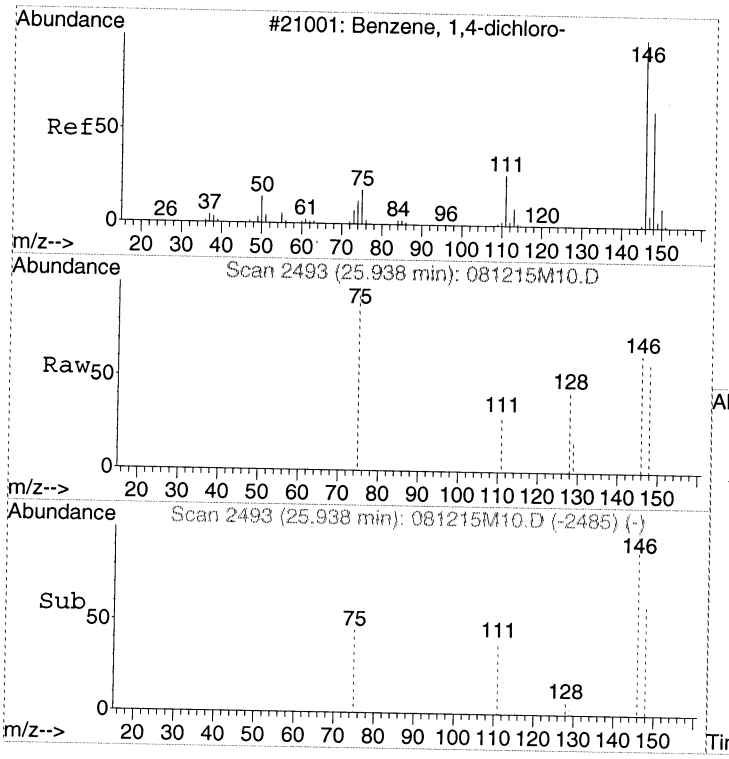


#32
1,3-Dichlorobenzene
Concen: Below Cal
RT: 25.80 min Scan# 2481
Delta R.T. 0.01 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion:146 Resp: 415

Ion	Ratio	Lower	Upper
146	100		
111	39.5	19.2	59.2
148	72.3	44.0	84.0

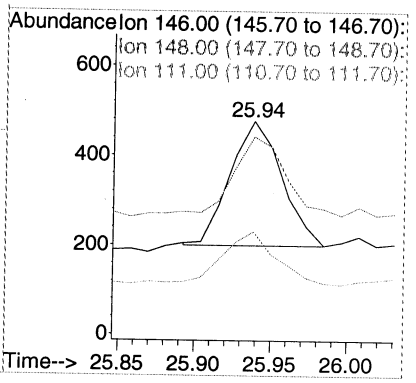


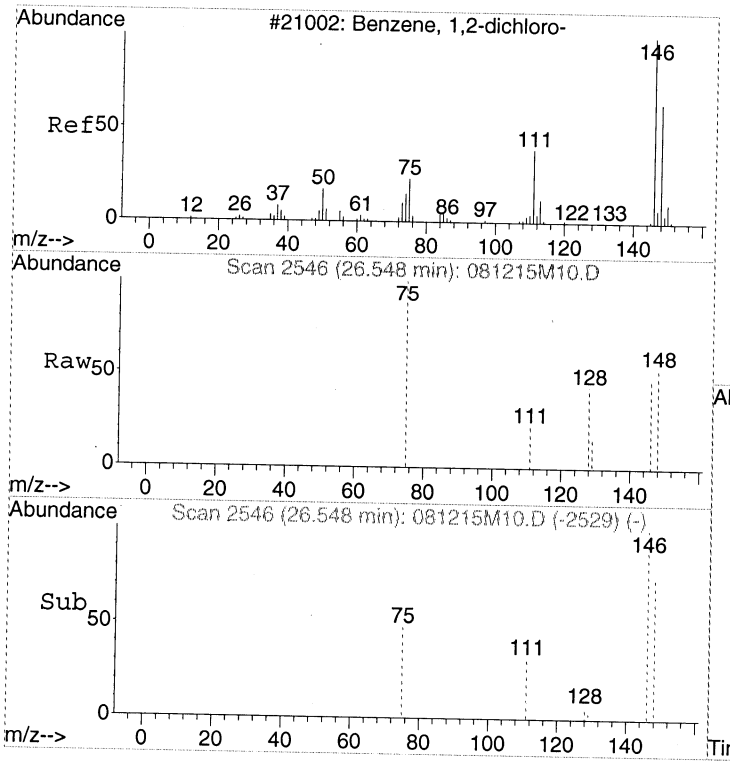


#33
1,4-Dichlorobenzene
Concen: Below Cal
RT: 25.94 min Scan# 2493
Delta R.T. 0.00 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion:146 Resp: 650

Ion	Ratio	Lower	Upper
146	100		
148	61.5	43.9	83.9
111	44.2	17.2	57.2

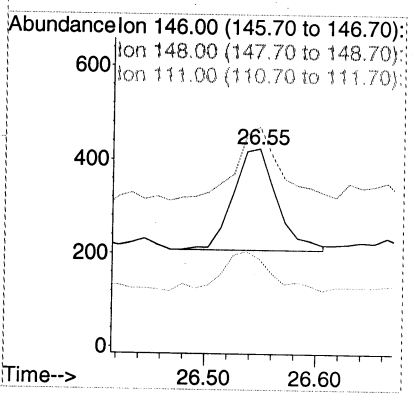




#34
1,2-Dichlorobenzene
Concen: Below Cal
RT: 26.55 min Scan# 2546
Delta R.T. 0.00 min
Lab File: 081215M10.D
Acq: 12 Aug 2015 6:26 pm

Tgt Ion:146 Resp: 590

Ion	Ratio	Lower	Upper
146	100		
148	81.9	43.6	83.6
111	36.1	20.6	60.6



Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2015\Data\081215MAA\
Data File : 081215M11.D
Acq On : 12 Aug 2015 7:13 pm
InstName : AG5973M
Operator : LLH
Sample : 1508028-14
Misc : 60ml 600National-Trench1
ALS Vial : 9 Sample Multiplier: 1.49

RR 600ml too dilute

NU

Quant Time: Aug 13 10:41:39 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081115SMAA.M
Quant Title : TO15SIM
QLast Update : Tue Aug 11 14:59:20 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.24	49	119894	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.30	114	212601	375.00 pptv	0.00
21) CHLOROBENZENE-d5	22.23	117	216565	341.00 pptv	-0.02

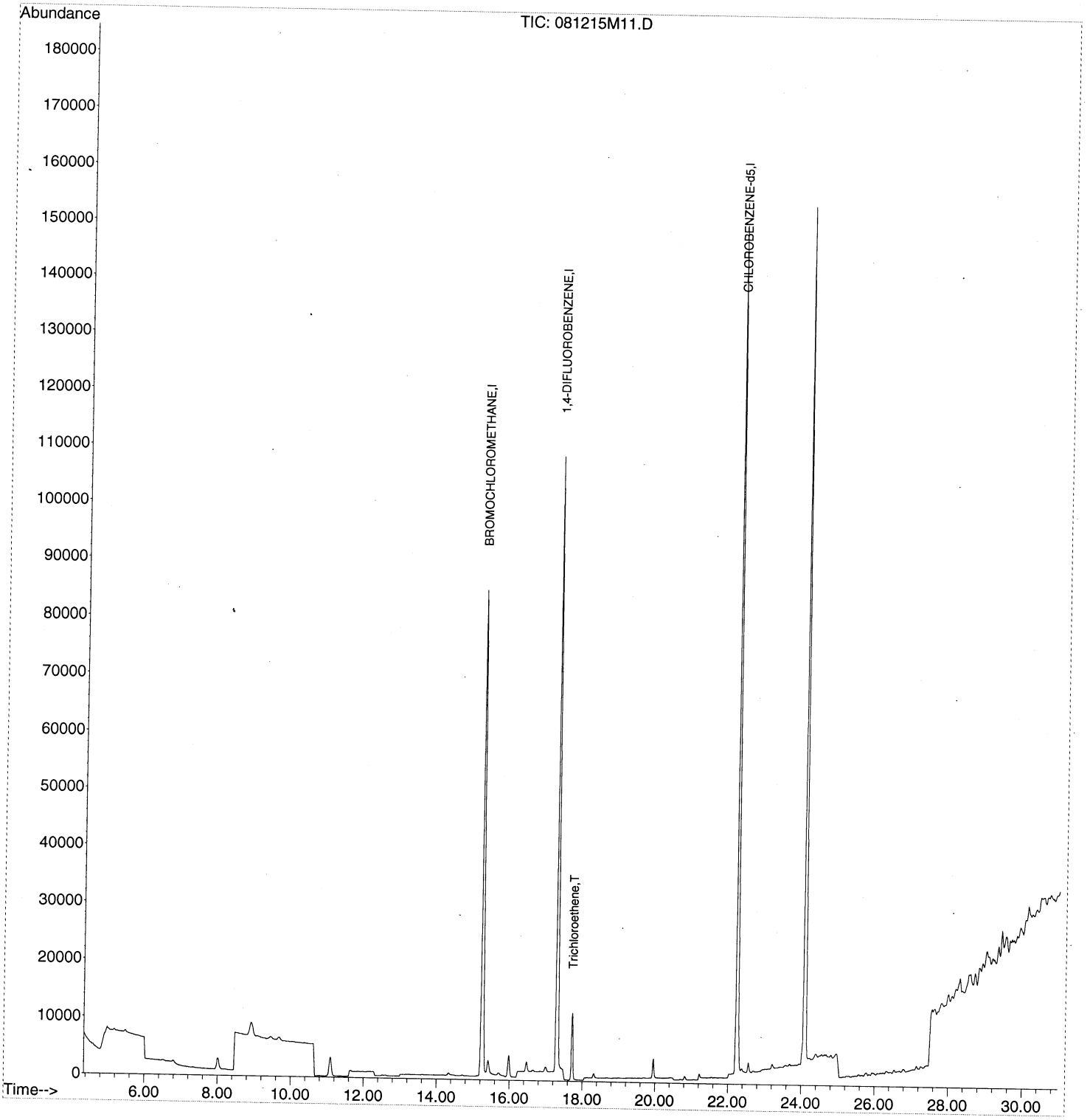
Target Compounds					Qvalue
2) Vinyl chloride	5.09	62	75	N.D.	
3) 1,3-Butadiene	5.19	54	206	N.D.	
4) Bromoethene	7.00	106	13	N.D.	
5) 1,1,2-Trichloro-1,2,2-trif	8.92	151	5122	N.D.	
6) 1,1-Dichloroethene	8.92	61	27	N.D.	
7) Dichloromethane	11.09	49	6384	N.D.	
8) tert-Butyl methyl ether (M	11.82	73	10	N.D.	
9) trans-1,2-Dichloroethene	11.86	61	39	N.D.	
10) Hexane	12.52	57	304	N.D.	
11) 1,1-Dichloroethane	13.21	63	26	N.D.	
12) cis-1,2-Dichloroethene	14.70	96	54	N.D.	
13) Chloroform	15.41	83	1085	N.D.	
14) 1,1,1-Trichloroethane	15.71	97	607	N.D.	
15) Carbon tetrachloride	15.98	117	5631	N.D.	
17) Benzene	16.47	78	3627	N.D.	
18) 1,2-Dichloroethane	16.64	62	474	N.D.	
19) Trichloroethene	17.72	130	11136	32.19 pptv	99
20) 1,2-Dichloropropane	18.06	63	140	N.D.	
22) Toluene	19.95	91	5281	N.D.	
23) 1,1,2-Trichloroethane	0.00	97	0	N.D.	
24) Tetrachloroethene	20.81	166	234	N.D.	
25) 1,2-Dibromoethane (EDB)	21.56	107	106	N.D.	
26) Chlorobenzene	22.28	112	230	N.D.	
27) Ethylbenzene	22.37	91	1129	N.D.	
28) m&p-Xylene	22.56	91	2388	N.D.	
29) o-Xylene	23.21	91	1322	N.D.	
30) Styrene	23.24	104	264	N.D.	
31) 1,1,2,2-Tetrachloroethane	24.28	83	228	N.D.	
32) 1,3-Dichlorobenzene	25.80	146	451	N.D.	
33) 1,4-Dichlorobenzene	25.94	146	457	N.D.	
34) 1,2-Dichlorobenzene	26.54	146	577	N.D.	

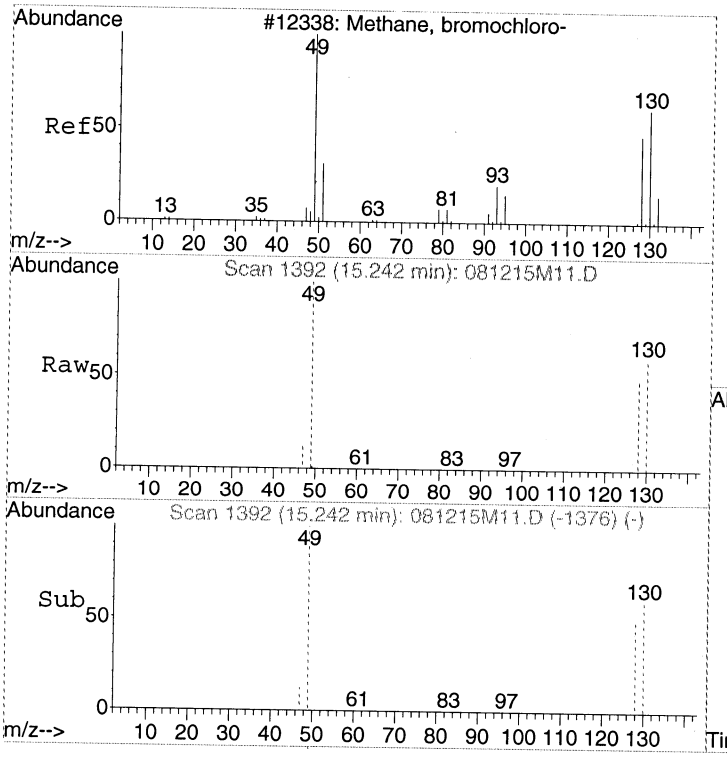
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2015\Data\081215MAA\
Data File : 081215M11.D
Acq On : 12 Aug 2015 7:13 pm
InstName : AG5973M
Operator : LLH
Sample : 1508028-14
Misc : 60ml 600National-Trench1
ALS Vial : 9 Sample Multiplier: 1.49

Quant Time: Aug 13 10:41:39 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081115SMAA.M
Quant Title : TO15SIM
QLast Update : Tue Aug 11 14:59:20 2015
Response via : Initial Calibration

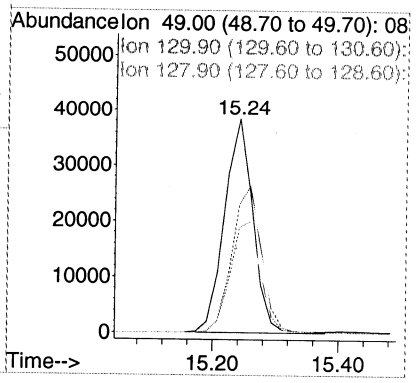


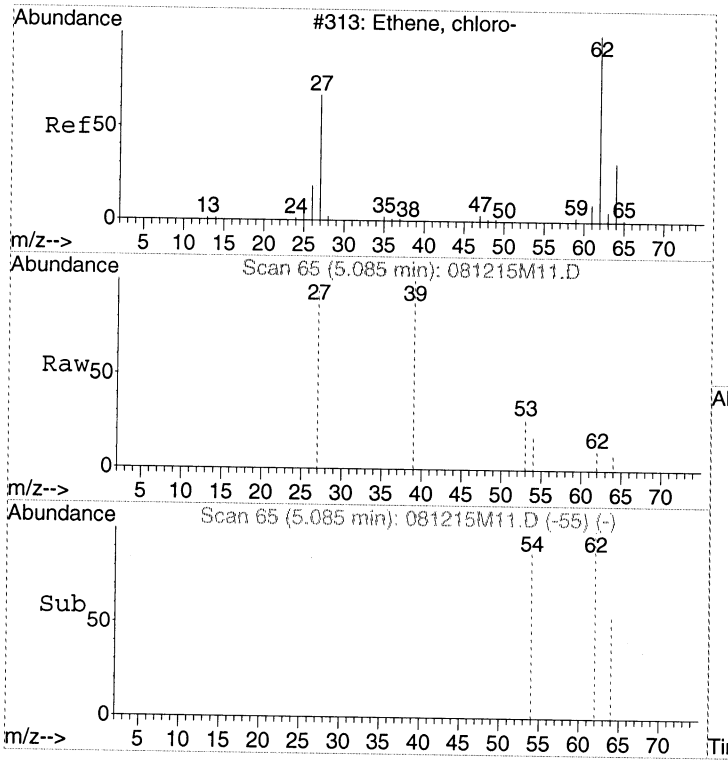


#1
BROMOCHLOROMETHANE
Concen: 341.00 pptv
RT: 15.24 min Scan# 1392
Delta R.T. -0.01 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion: 49 Resp: 119894

Ion	Ratio	Lower	Upper
49	100		
130	71.1	56.6	96.6
128	55.0	39.9	79.9

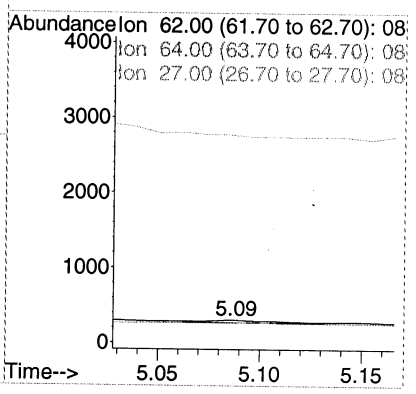


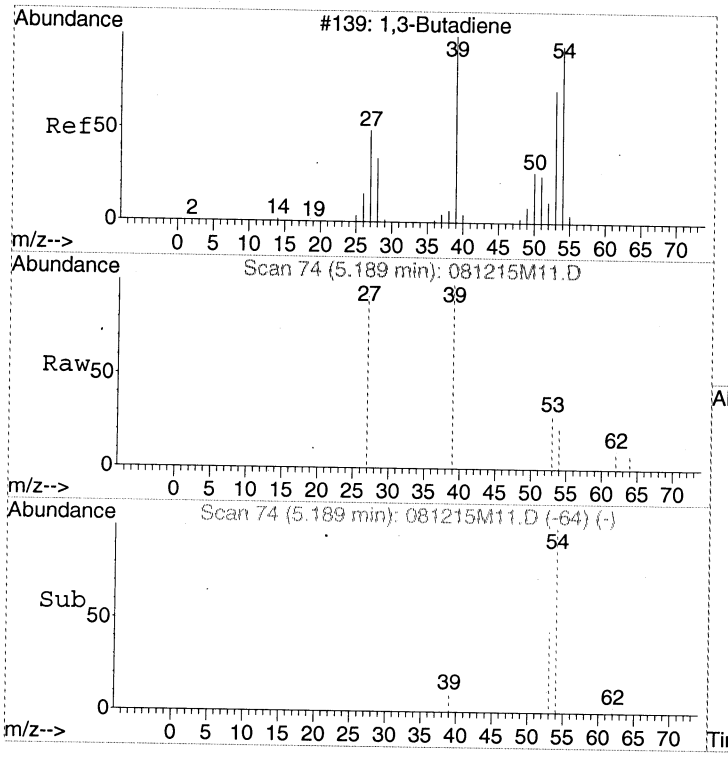


#2
Vinyl chloride
Concen: Below Cal
RT: 5.09 min Scan# 65
Delta R.T. 0.00 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion: 62 Resp: 75

Ion	Ratio	Lower	Upper
62	100		
64	21.3	12.0	52.0
27	0.0	24.7	64.7#

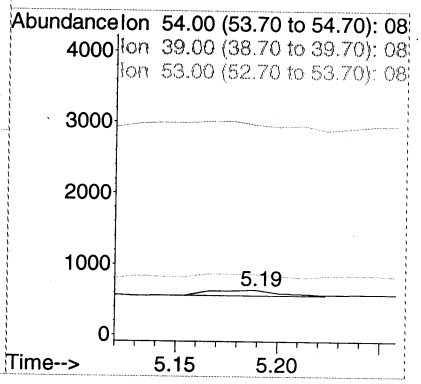


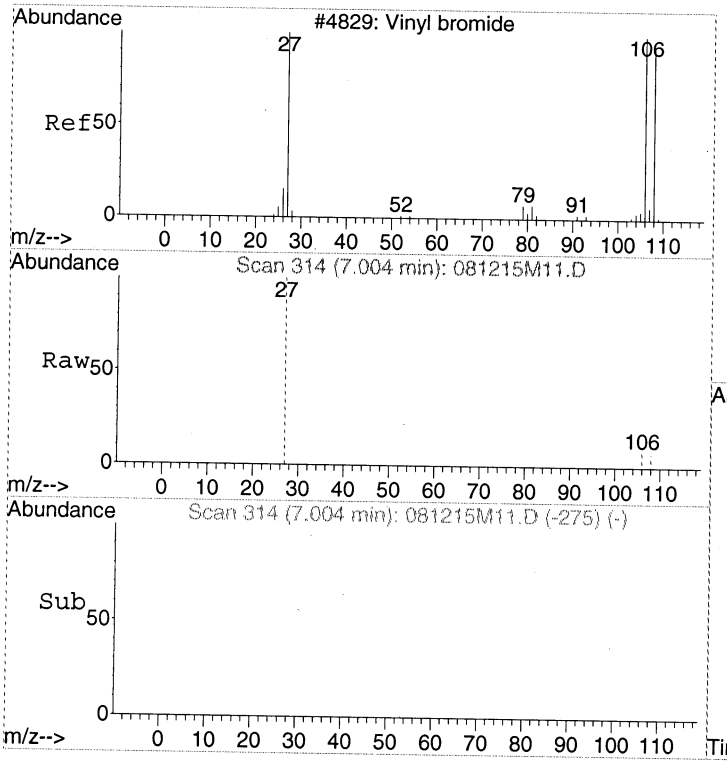


#3
1,3-Butadiene
Concen: Below Cal
RT: 5.19 min Scan# 74
Delta R.T. 0.00 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion: 54 Resp: 206

Ion	Ratio	Lower	Upper
54	100		
39	158.3	72.5	112.5#
53	68.0	48.6	88.6

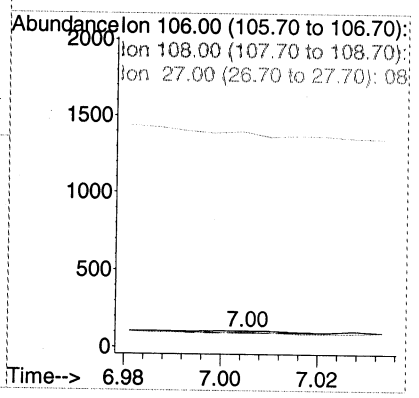


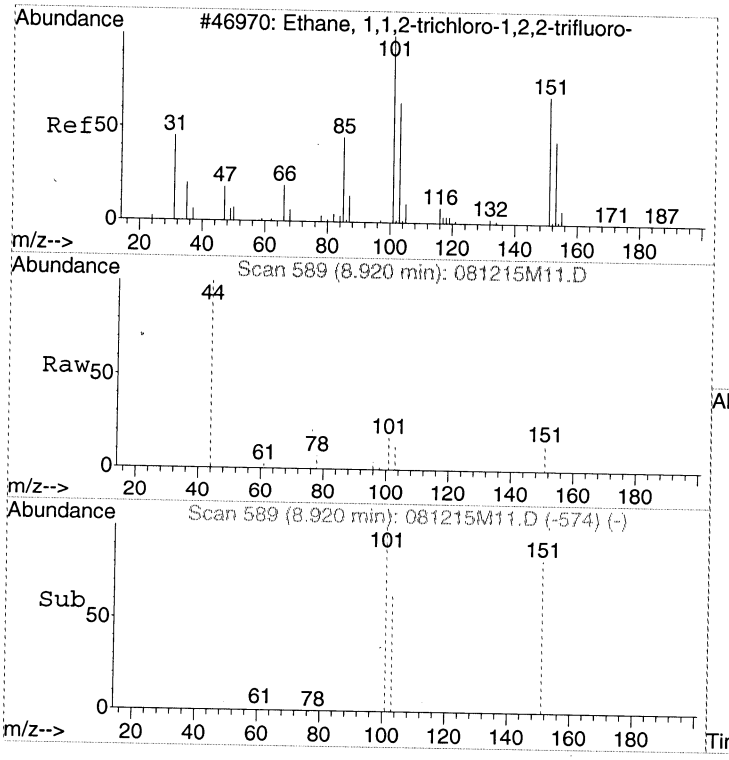


#4
Bromoethene
Concen: Below Cal
RT: 7.00 min Scan# 314
Delta R.T. 0.03 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion:106 Resp: 13

Ion	Ratio	Lower	Upper
106	100		
108	61.5	0.0	214.7
27	0.0	67.2	107.2#

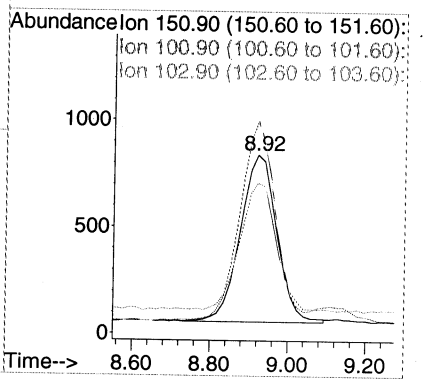


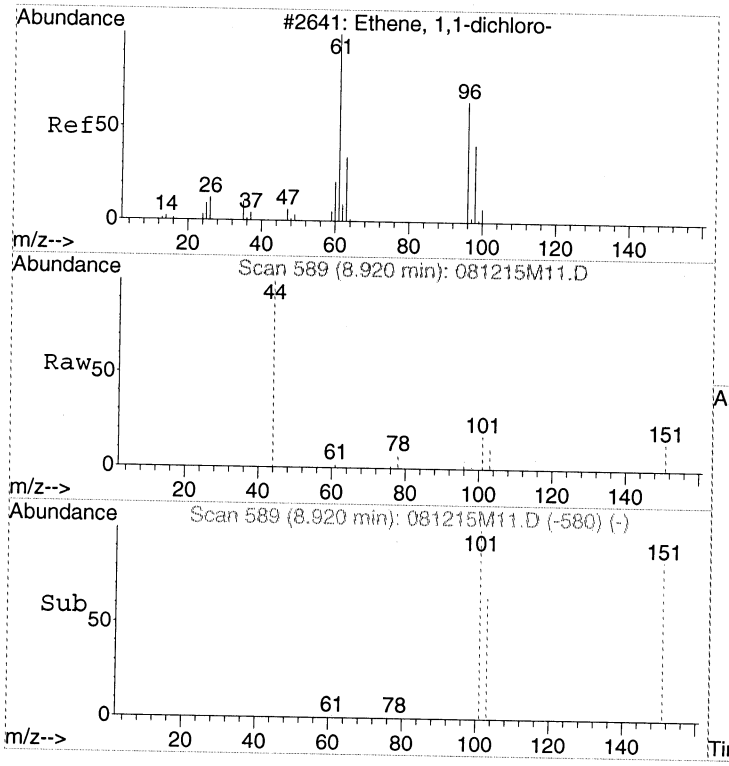


#5
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: Below Cal
RT: 8.92 min Scan# 589
Delta R.T. 0.00 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion:151 Resp: 5122

Ion	Ratio	Lower	Upper
151	100		
101	114.9	95.3	135.3
103	75.0	53.9	93.9

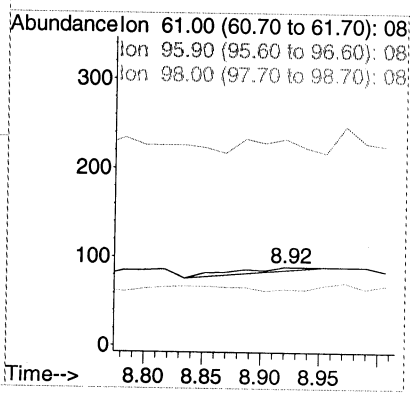


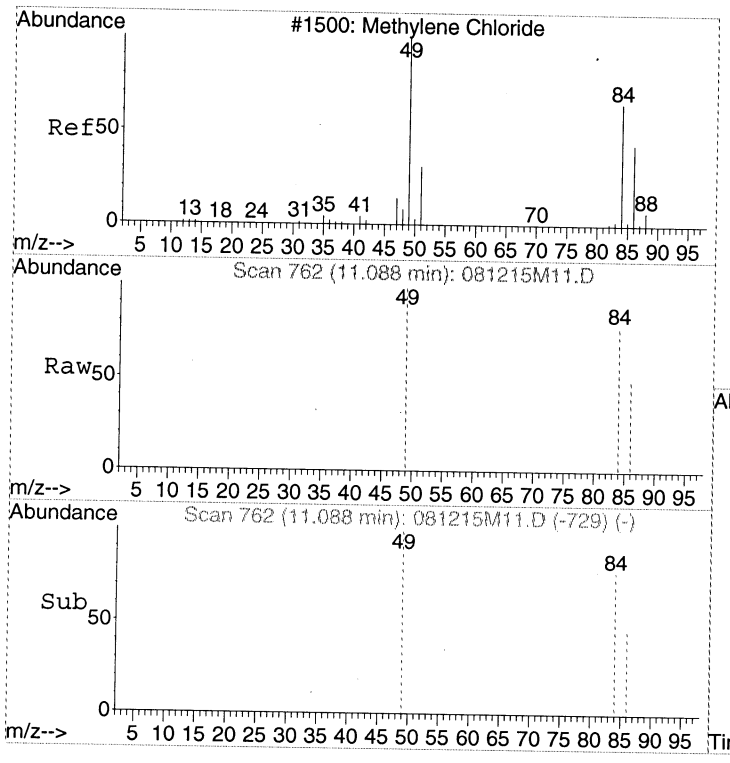


#6
1,1-Dichloroethene
Concen: Below Cal
RT: 8.92 min Scan# 589
Delta R.T. -0.05 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion: 61 Resp: 27

Ion	Ratio	Lower	Upper
61	100		
96	0.0	41.4	81.4#
98	0.0	18.8	58.8#

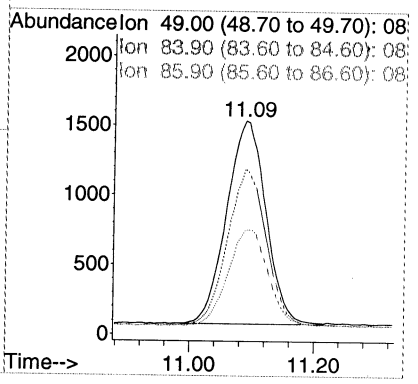


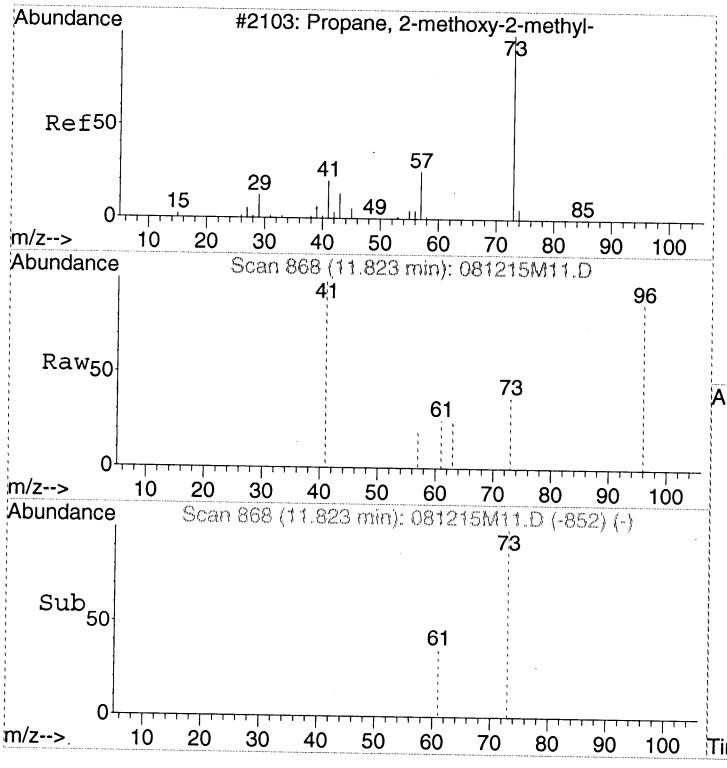


#7
Dichloromethane
Concen: Below Cal
RT: 11.09 min Scan# 762
Delta R.T. -0.01 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion: 49 Resp: 6384

Ion	Ratio	Lower	Upper
49	100		
84	75.3	59.9	99.9
86	48.4	31.1	71.1

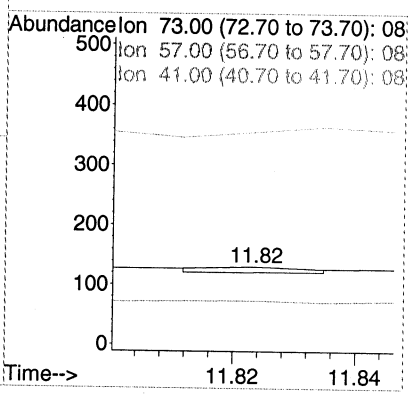


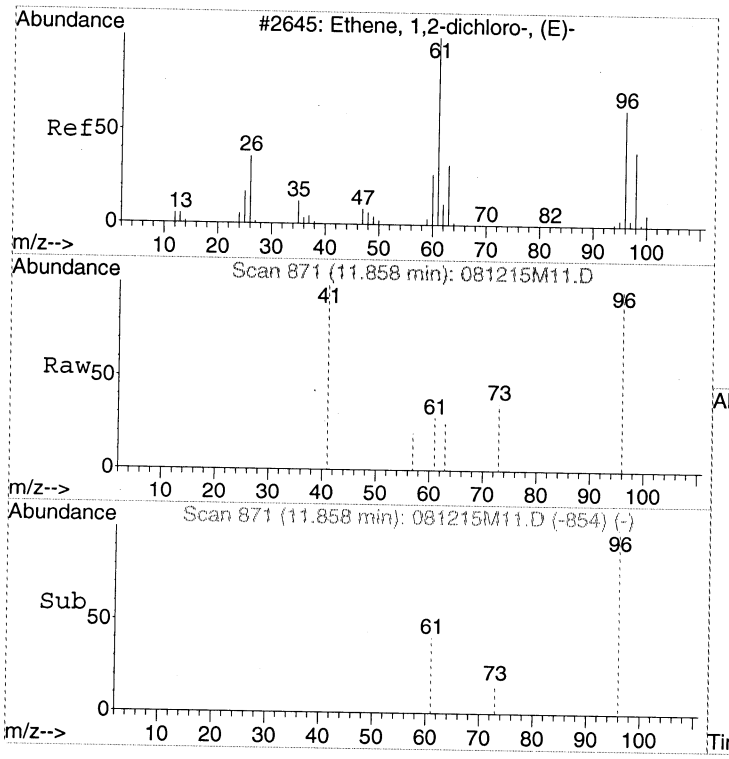


#8
tert-Butyl methyl ether (MTBE)
Concen: Below Cal
RT: 11.82 min Scan# 868
Delta R.T. -0.02 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion: 73 Resp: 10

Ion	Ratio	Lower	Upper
73	100		
57	0.0	3.0	43.0#
41	330.0	19.2	59.2#

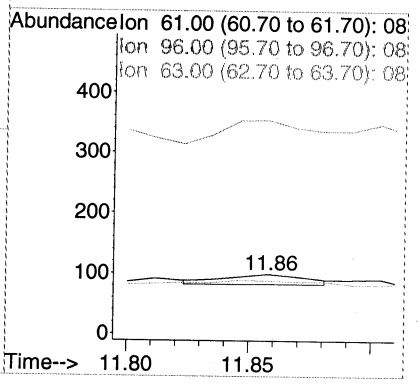


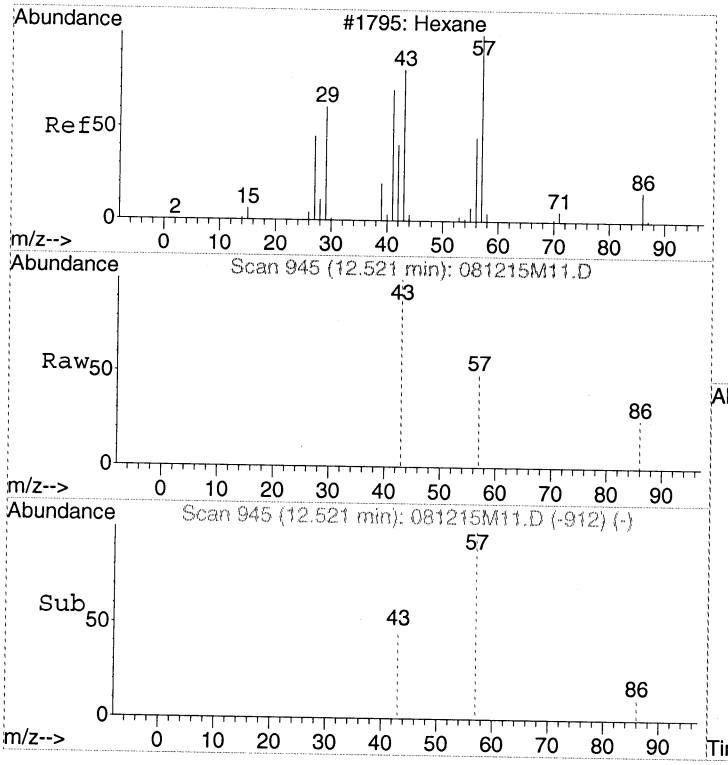


#9
trans-1,2-Dichloroethene
Concen: Below Cal
RT: 11.86 min Scan# 871
Delta R.T. -0.01 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion: 61 Resp: 39

Ion	Ratio	Lower	Upper
61	100		
96	251.3	50.8	90.8#
63	120.5	12.1	52.1#

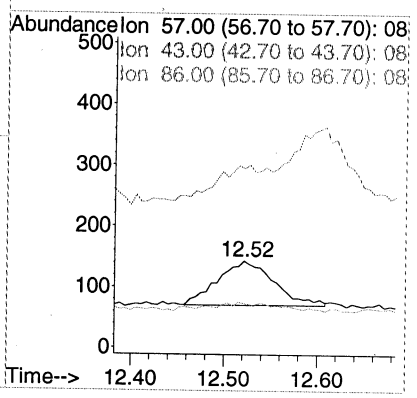


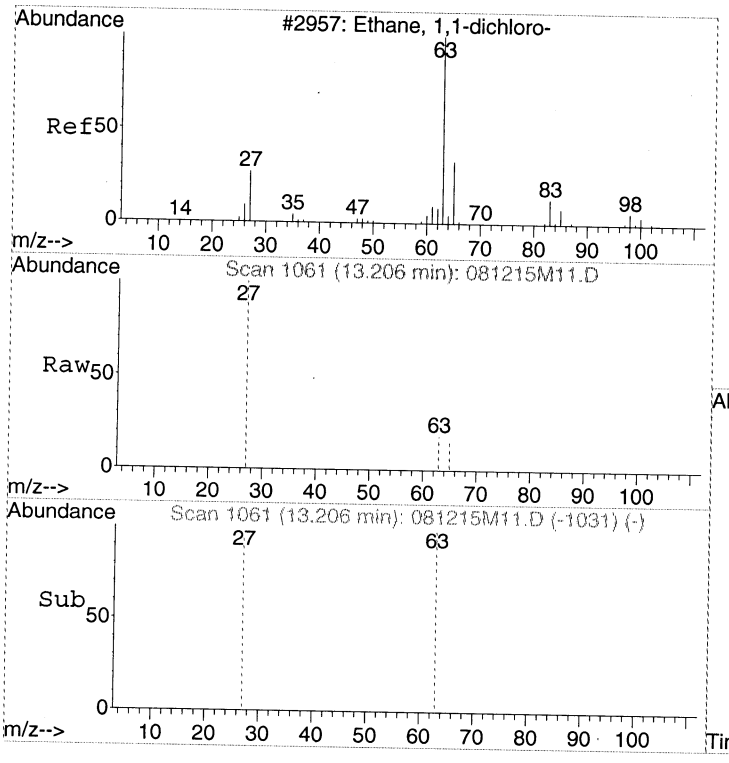


#10
Hexane
Concen: Below Cal
RT: 12.52 min Scan# 945
Delta R.T. -0.01 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion: 57 Resp: 304

Ion	Ratio	Lower	Upper
57	100		
43	27.6	51.5	91.5#
86	4.3	0.0	37.2

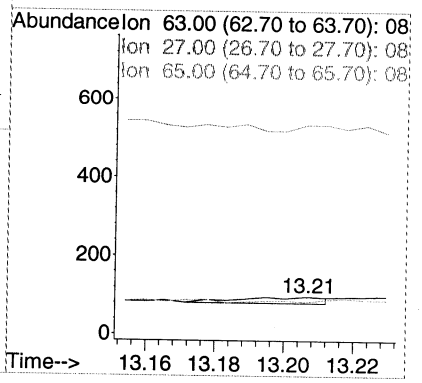


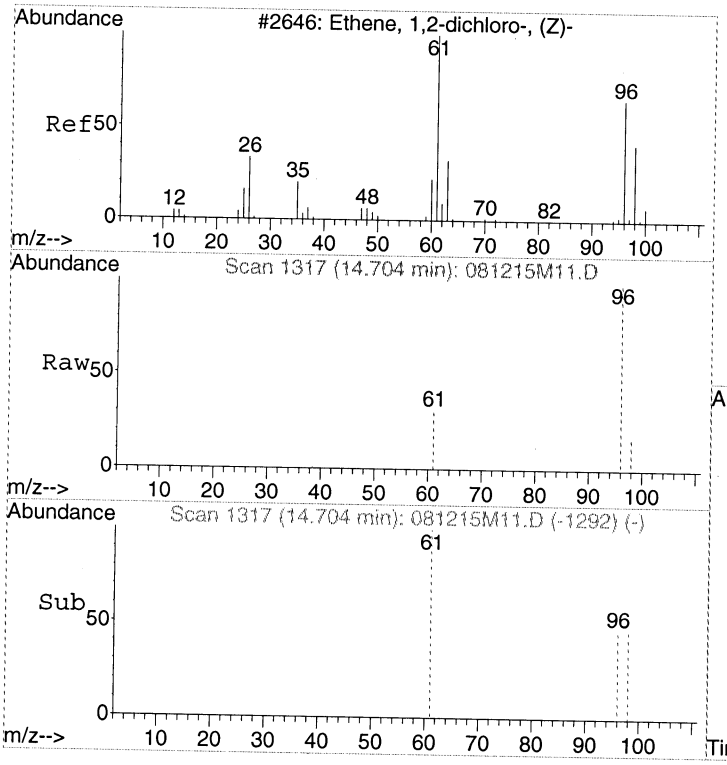


#11
1,1-Dichloroethane
Concen: Below Cal
RT: 13.21 min Scan# 1061
Delta R.T. -0.02 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion: 63 Resp: 26

Ion	Ratio	Lower	Upper
63	100		
27	50.0	10.5	50.5
65	19.2	11.5	51.5

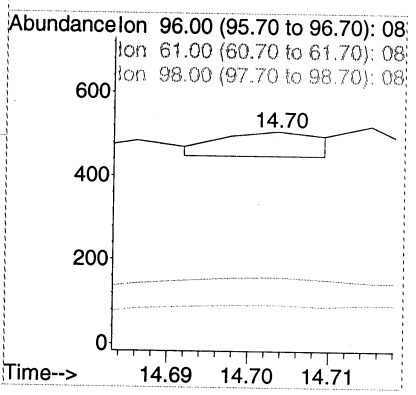


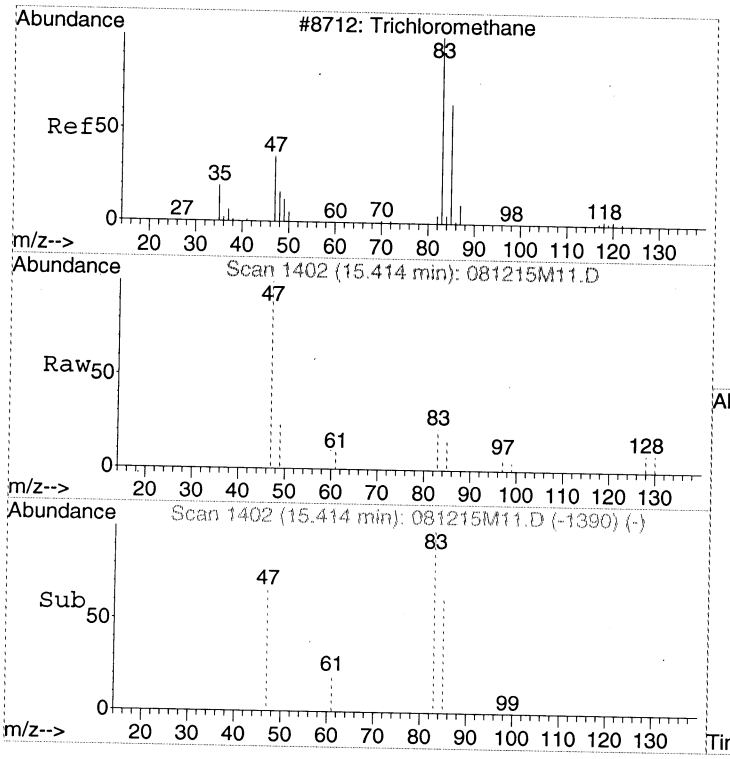


#12
cis-1,2-Dichloroethene
Concen: Below Cal
RT: 14.70 min Scan# 1317
Delta R.T. -0.01 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion: 96 Resp: 54

Ion	Ratio	Lower	Upper
96	100		
61	370.4	109.9	149.9#
98	75.9	44.2	84.2

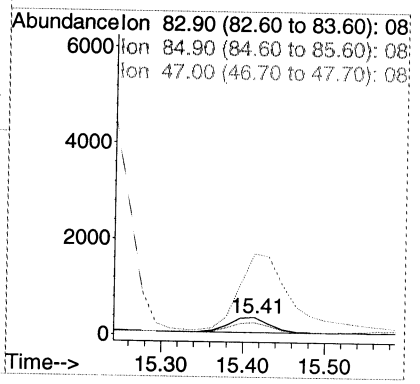


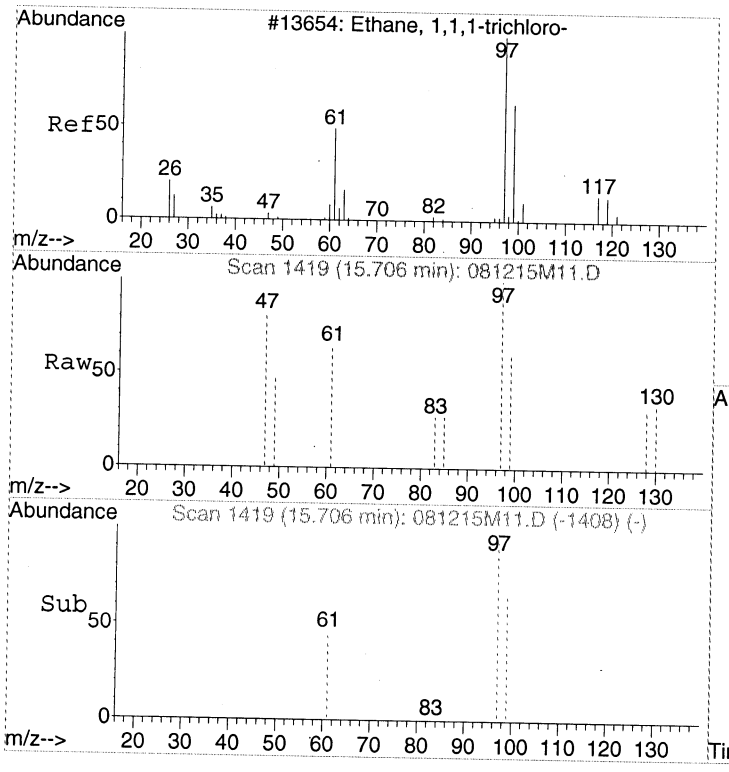


#13
Chloroform
Concen: Below Cal
RT: 15.41 min Scan# 1402
Delta R.T. 0.01 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion: 83 Resp: 1085

Ion	Ratio	Lower	Upper
83	100		
85	64.7	44.4	84.4
47	633.2	6.1	46.1#

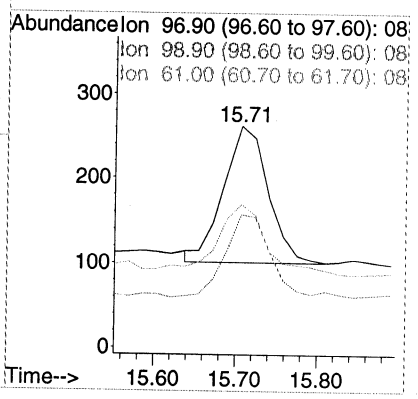


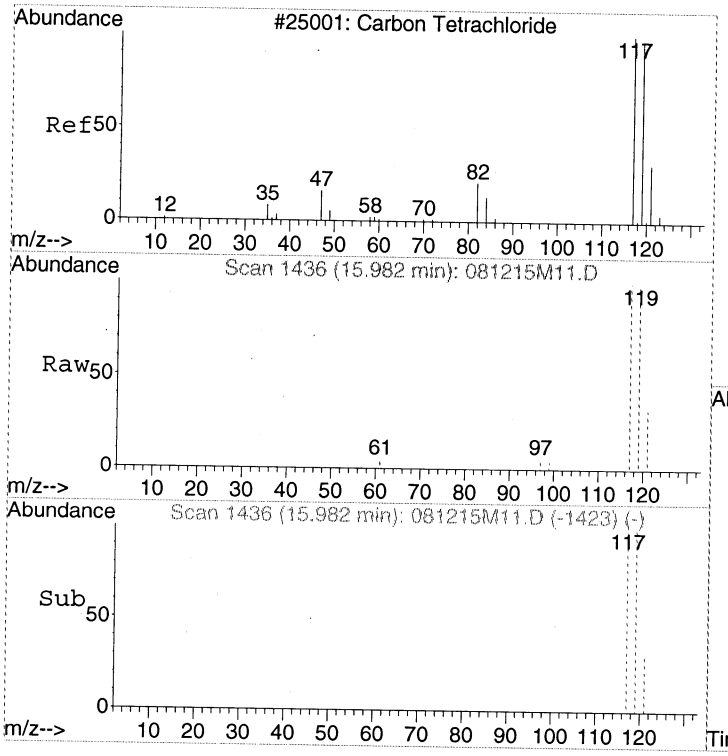


#14
1,1,1-Trichloroethane
Concen: Below Cal
RT: 15.71 min Scan# 1419
Delta R.T. -0.01 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion: 97 Resp: 607

Ion	Ratio	Lower	Upper
97	100		
99	62.3	44.2	84.2
61	57.0	23.6	63.6

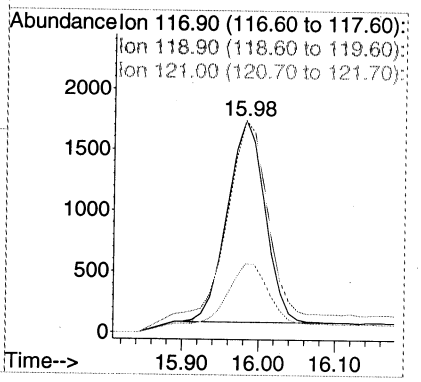


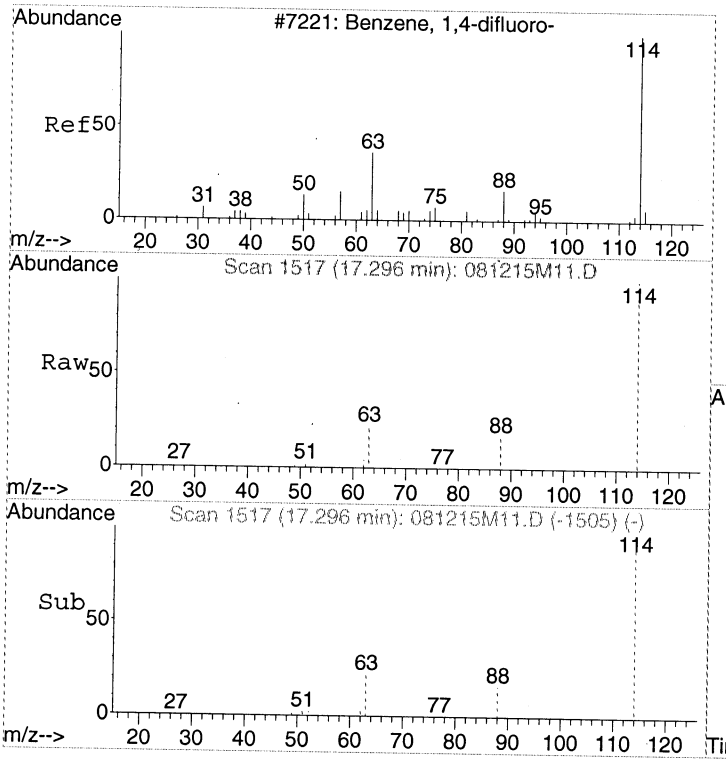


#15
Carbon tetrachloride
Concen: Below Cal
RT: 15.98 min Scan# 1436
Delta R.T. 0.00 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion:117 Resp: 5631

Ion	Ratio	Lower	Upper
117	100		
119	96.8	76.1	116.1
121	30.6	6.4	46.4

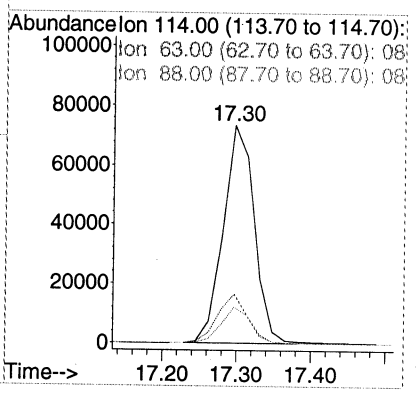


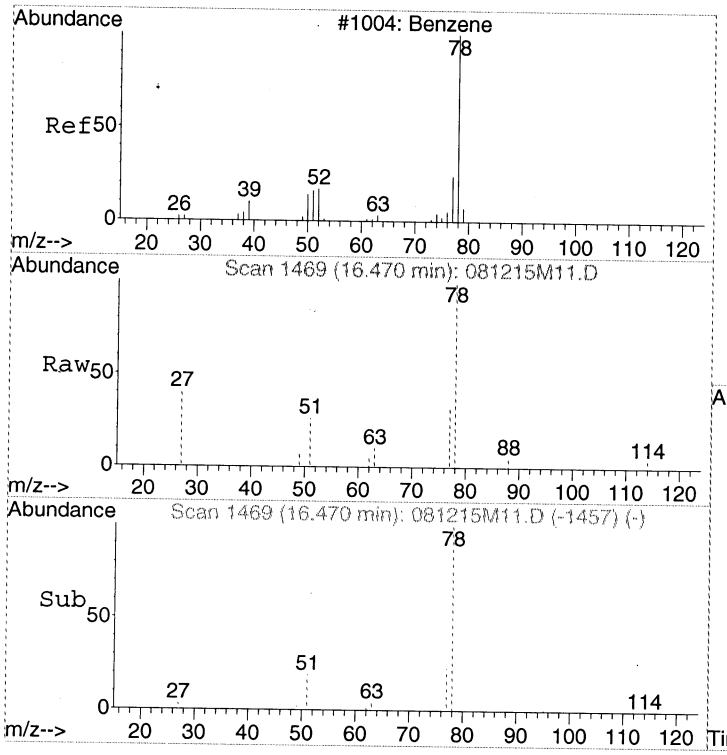


#16
1,4-DIFLUOROBENZENE
Concen: 375.00 pptv
RT: 17.30 min Scan# 1517
Delta R.T. 0.00 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion:114 Resp: 212601

Ion	Ratio	Lower	Upper
114	100		
63	21.4	0.6	40.6
88	16.0	0.0	35.8

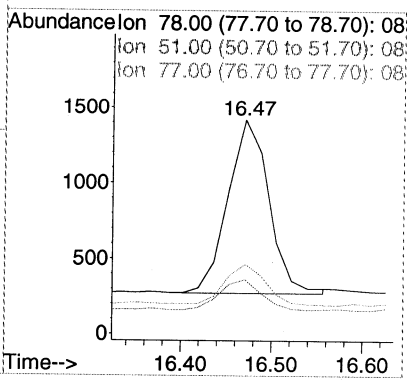


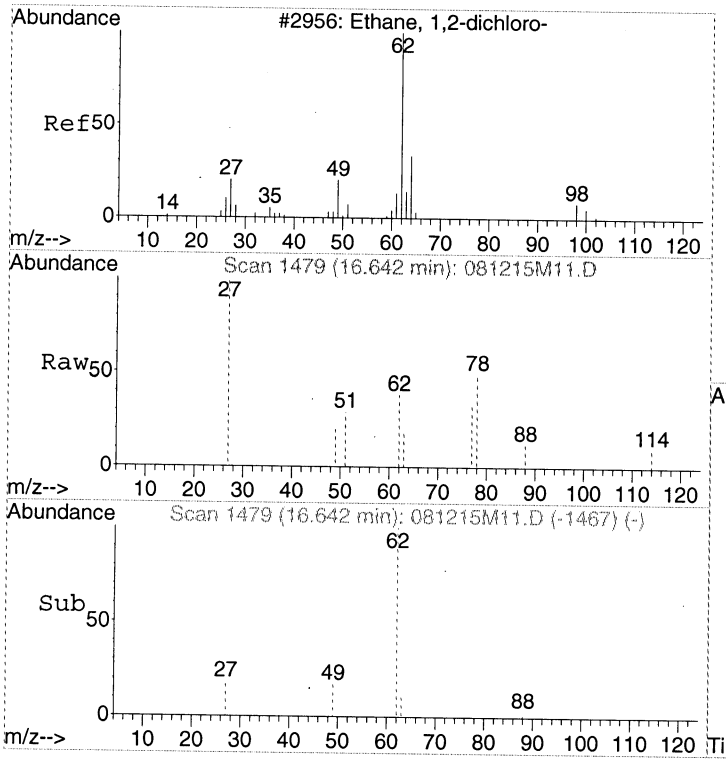


#17
Benzene
Concen: Below Cal
RT: 16.47 min Scan# 1469
Delta R.T. 0.00 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion: 78 Resp: 3627

Ion	Ratio	Lower	Upper
78	100		
51	18.2	0.0	38.2
77	23.0	4.3	44.3

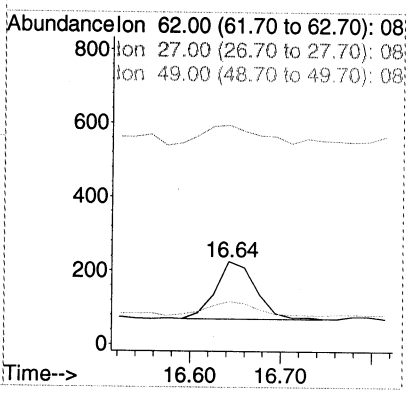


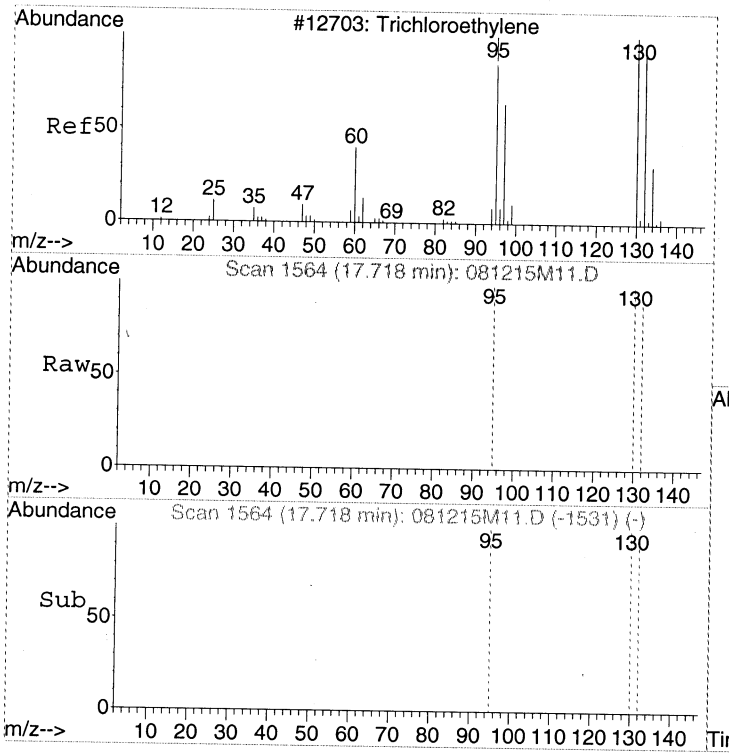


#18
1,2-Dichloroethane
Concen: Below Cal
RT: 16.64 min Scan# 1479
Delta R.T. 0.00 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion: 62 Resp: 474

Ion	Ratio	Lower	Upper
62	100		
27	50.6	16.3	56.3
49	30.6	5.6	45.6

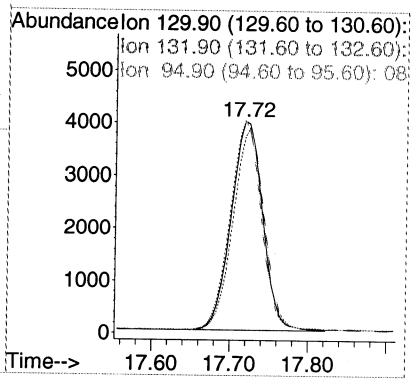


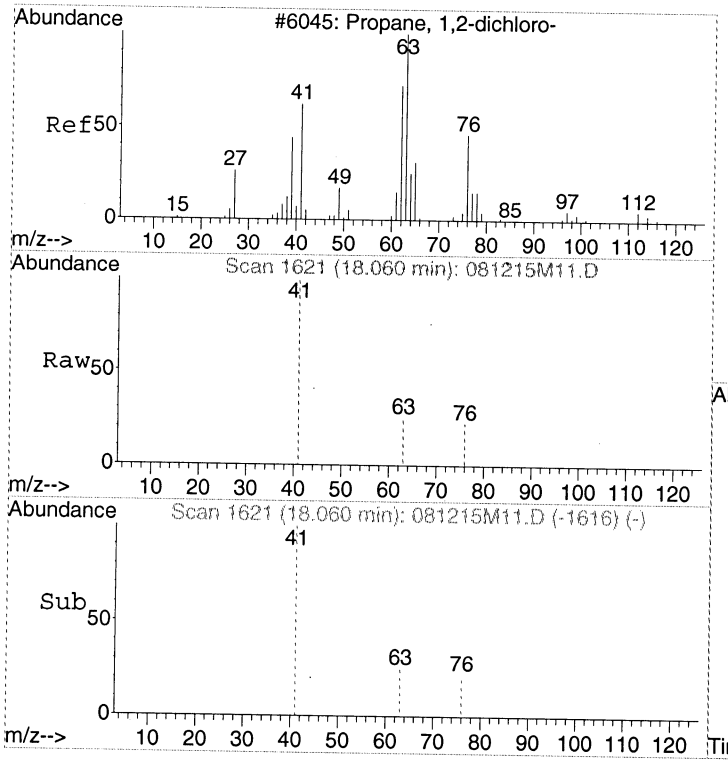


#19
Trichloroethene
Concen: 32.19 pptv
RT: 17.72 min Scan# 1564
Delta R.T. -0.01 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion:130 Resp: 11136

Ion	Ratio	Lower	Upper
130	100		
132	95.2	76.4	116.4
95	98.3	77.3	117.3

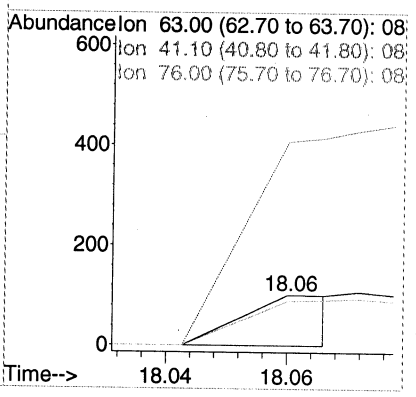


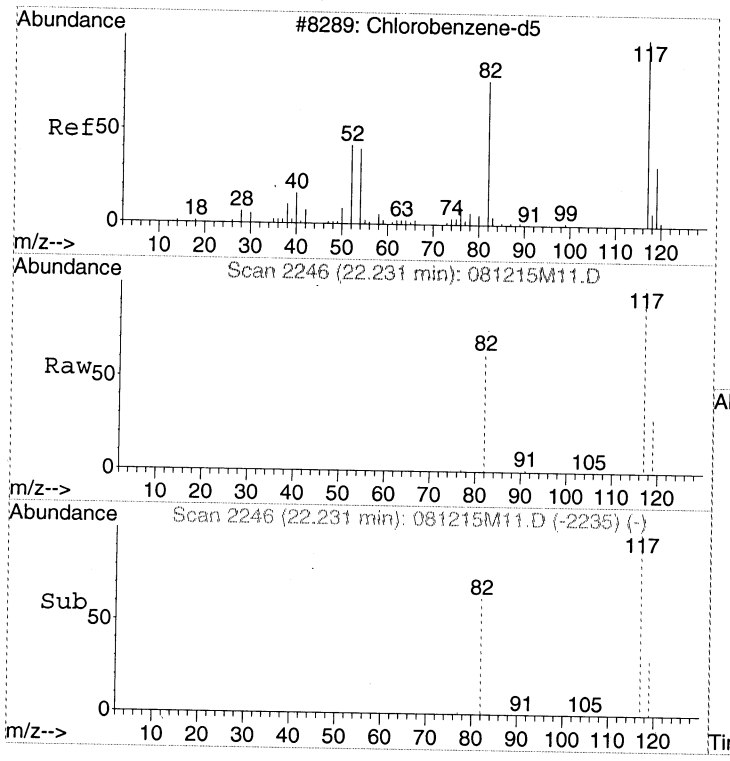


#20
1,2-Dichloropropane
Concen: Below Cal
RT: 18.06 min Scan# 1621
Delta R.T. -0.16 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion: 63 Resp: 140

Ion	Ratio	Lower	Upper
63	100		
41	0.0	44.5	84.5#
76	135.7	30.3	70.3#

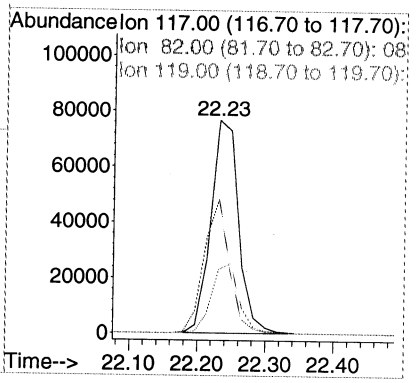


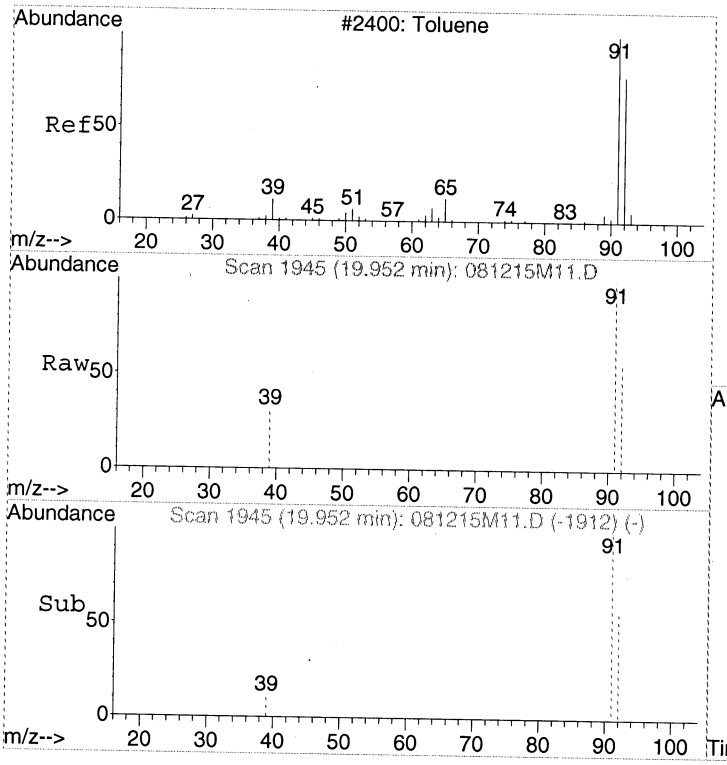


#21
CHLOROBENZENE-d5
Concen: 341.00 pptv
RT: 22.23 min Scan# 2246
Delta R.T. -0.02 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion:117 Resp: 216565

Ion	Ratio	Lower	Upper
117	100		
82	57.5	36.0	76.0
119	32.1	12.1	52.1

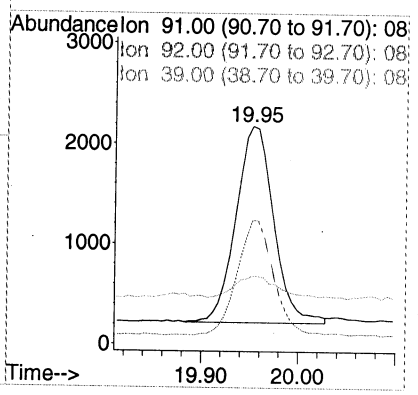


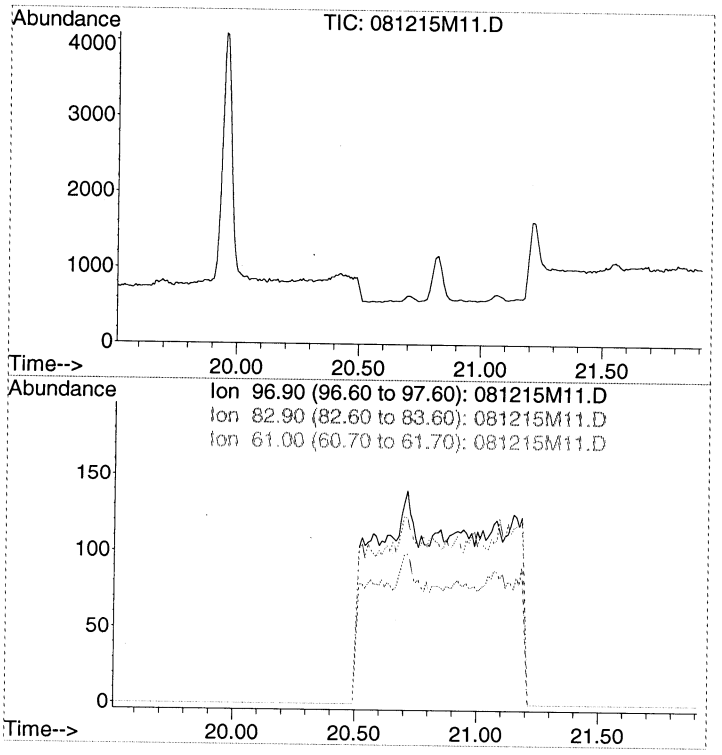


#22
Toluene
Concen: Below Cal
RT: 19.95 min Scan# 1945
Delta R.T. -0.01 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion: 91 Resp: 5281

Ion	Ratio	Lower	Upper
91	100		
92	55.8	37.9	77.9
39	12.3	0.0	29.3



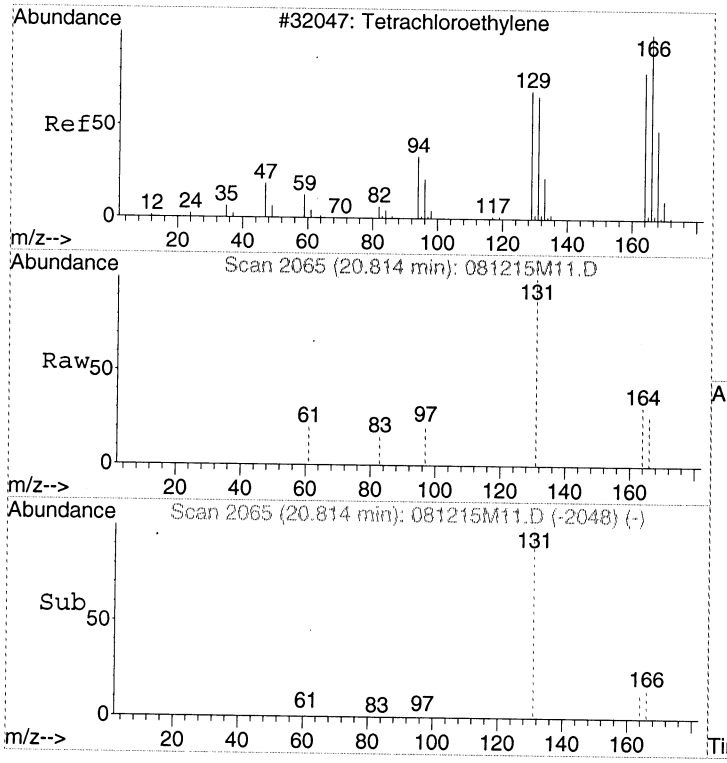


#23
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 20.71 min

Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion: 97

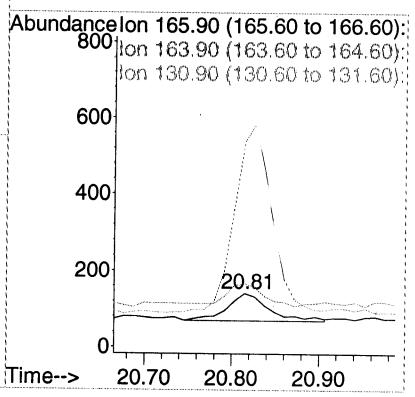
Sig	Exp Ratio
97	100
83	83.7
61	67.7

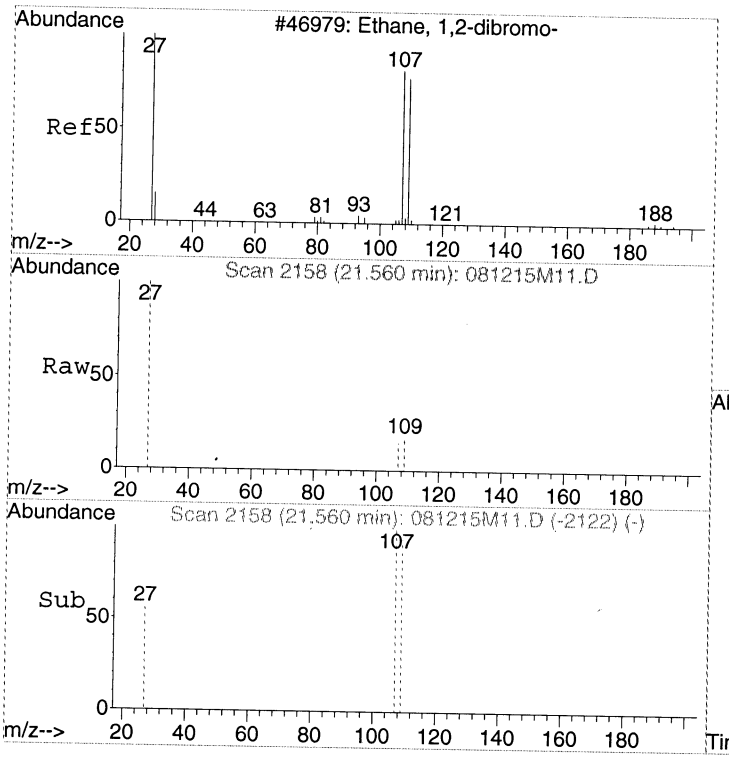


#24
Tetrachloroethene
Concen: Below Cal
RT: 20.81 min Scan# 2065
Delta R.T. 0.00 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion:166 Resp: 234

Ion	Ratio	Lower	Upper
166	100		
164	69.7	58.4	98.4
131	623.9	49.4	89.4#

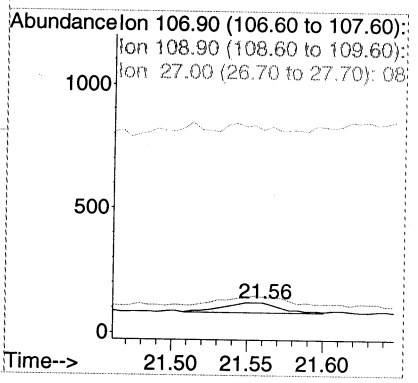


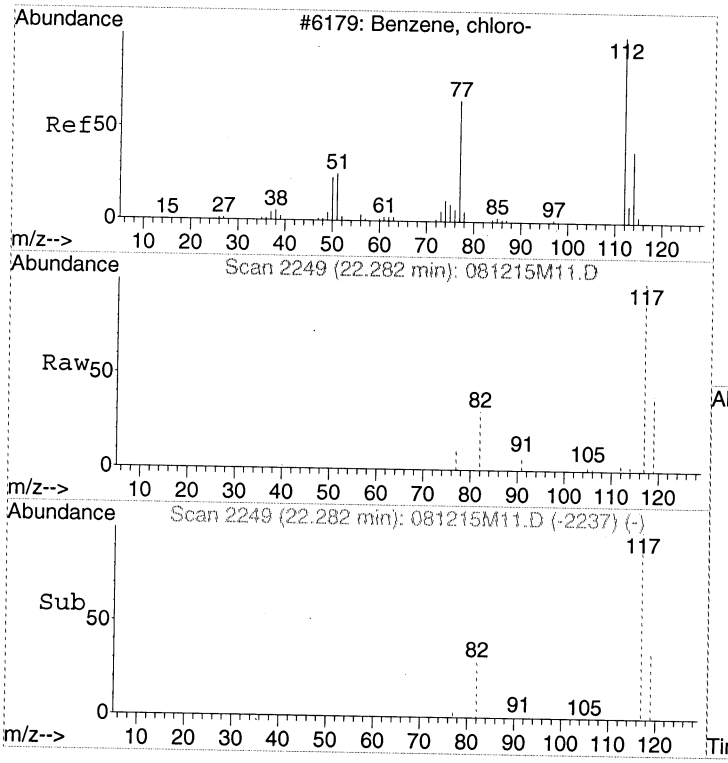


#25
1,2-Dibromoethane (EDB)
Concen: Below Cal
RT: 21.56 min Scan# 2158
Delta R.T. 0.01 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion:107 Resp: 106

Ion	Ratio	Lower	Upper
107	100		
109	73.6	73.9	113.9#
27	38.7	37.8	77.8

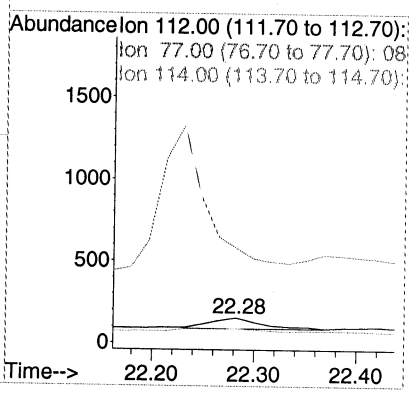


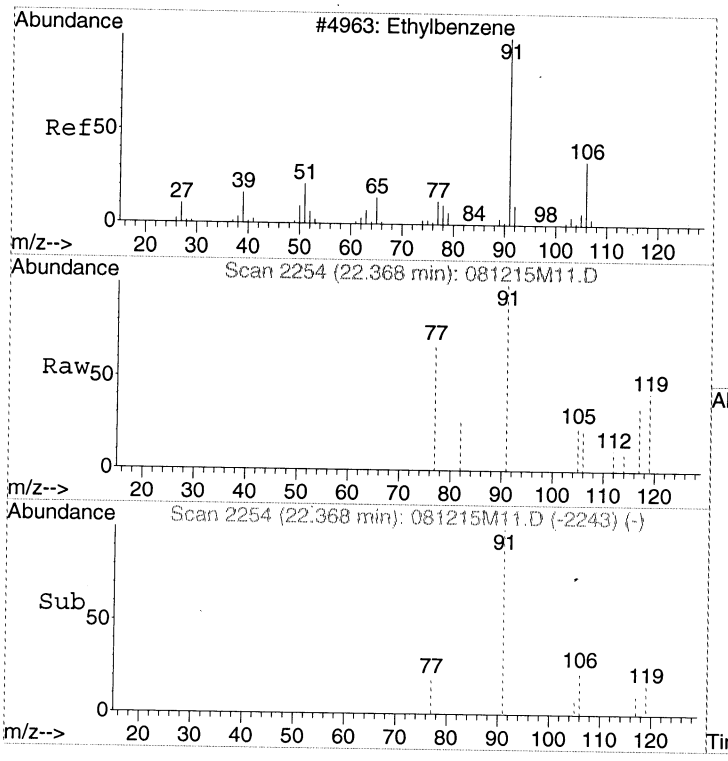


#26
Chlorobenzene
Concen: Below Cal
RT: 22.28 min Scan# 2249
Delta R.T. 0.00 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion:112 Resp: 230

Ion	Ratio	Lower	Upper
112	100		
77	0.0	40.4	80.4#
114	0.0	12.0	52.0#

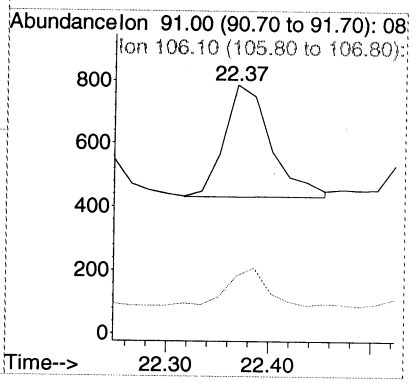


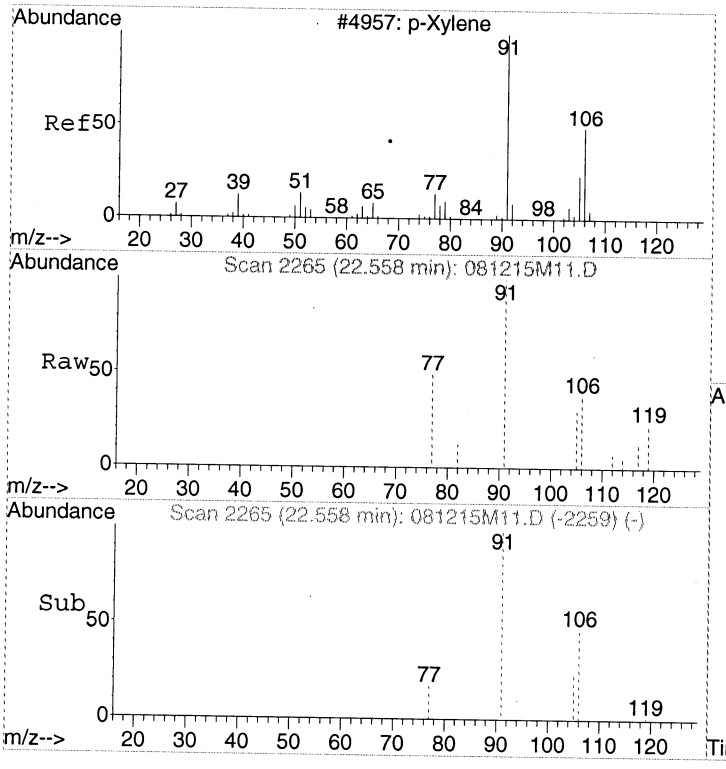


#27
Ethylbenzene
Concen: Below Cal
RT: 22.37 min Scan# 2254
Delta R.T. -0.02 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion: 91 Resp: 1129

Ion	Ratio	Lower	Upper
91	100		
106	26.8	11.2	51.2

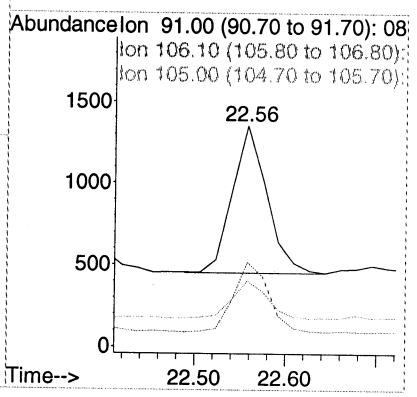


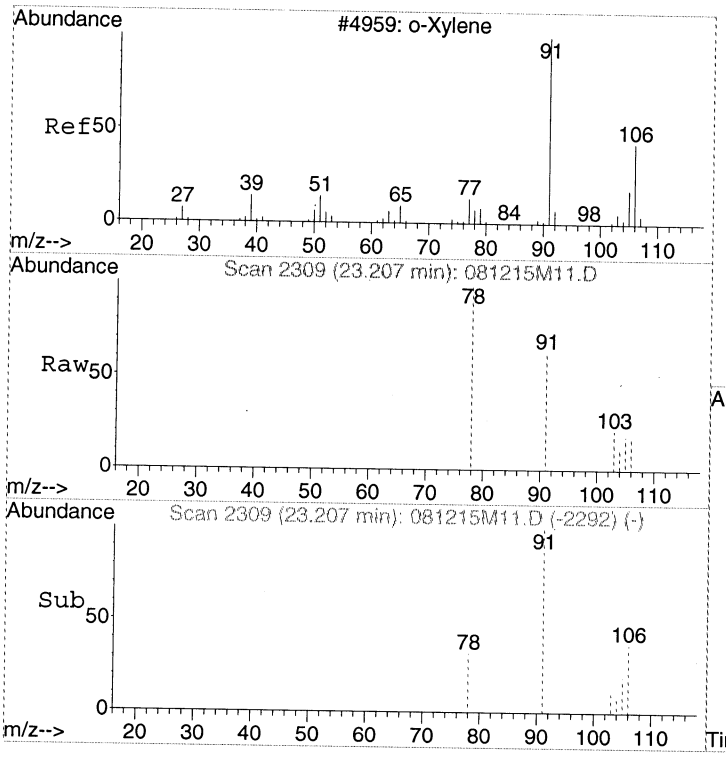


#28
m&p-Xylene
Concen: Below Cal
RT: 22.56 min Scan# 2265
Delta R.T. 0.00 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion: 91 Resp: 2388

Ion	Ratio	Lower	Upper
91	100		
106	47.7	29.0	69.0
105	26.1	4.3	44.3

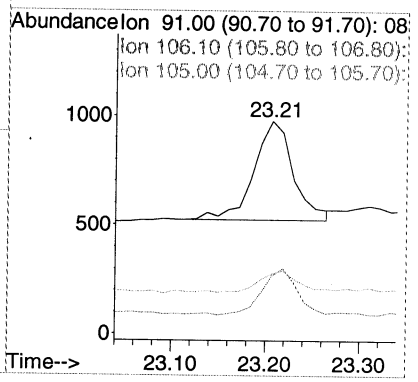


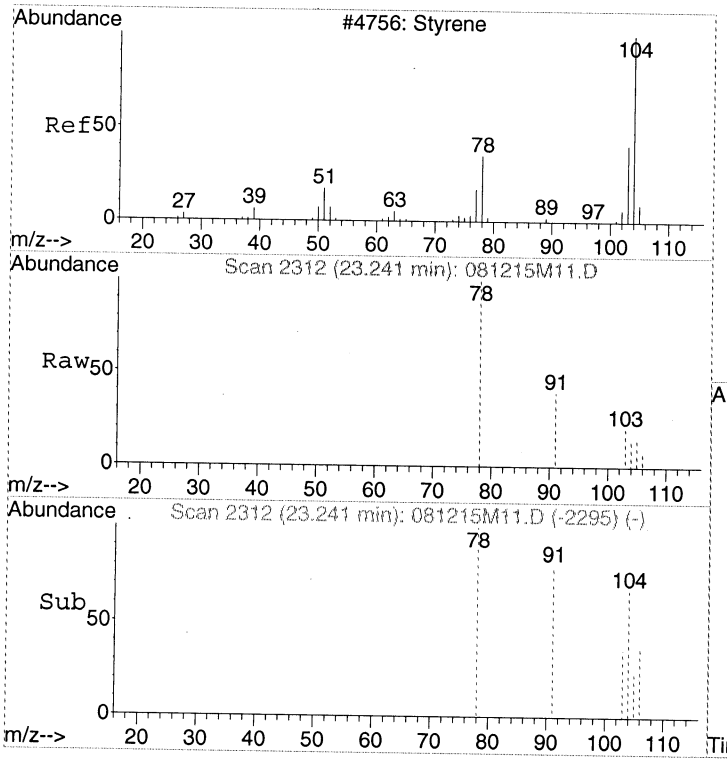


#29
o-Xylene
Concen: Below Cal
RT: 23.21 min Scan# 2309
Delta R.T. 0.00 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion: 91 Resp: 1322

Ion	Ratio	Lower	Upper
91	100		
106	42.1	25.6	65.6
105	23.1	6.0	46.0

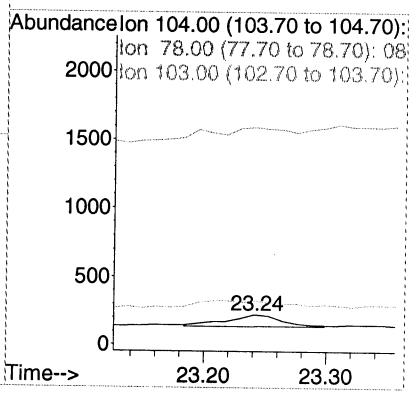


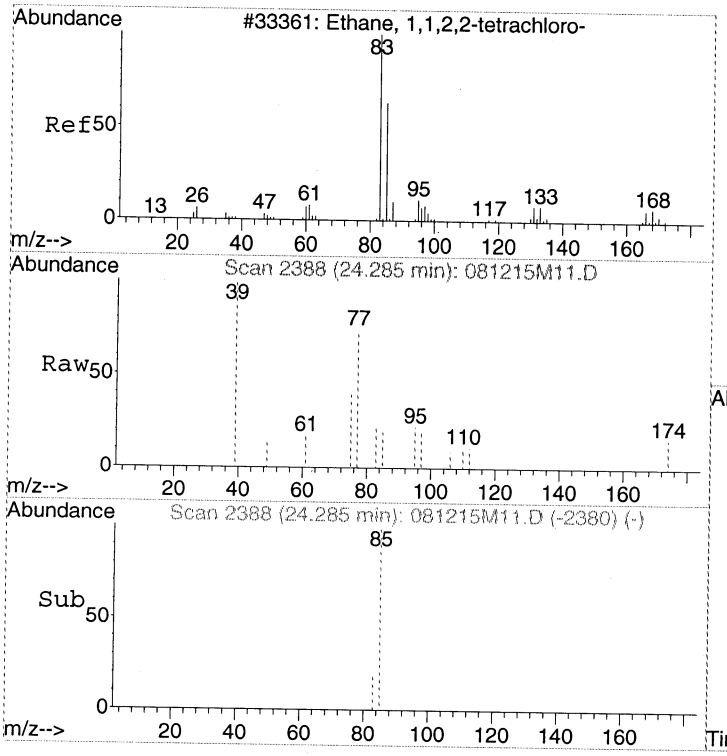


#30
Styrene
Concen: Below Cal
RT: 23.24 min Scan# 2312
Delta R.T. 0.00 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion:104 Resp: 264

Ion	Ratio	Lower	Upper
104	100		
78	68.9	37.4	77.4
103	0.0	36.8	76.8#

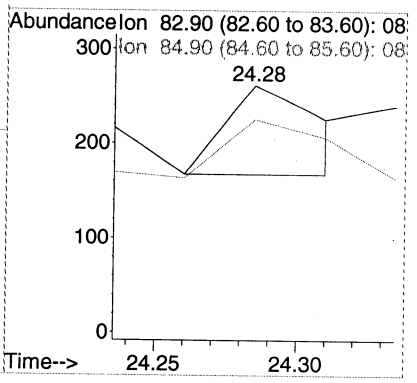


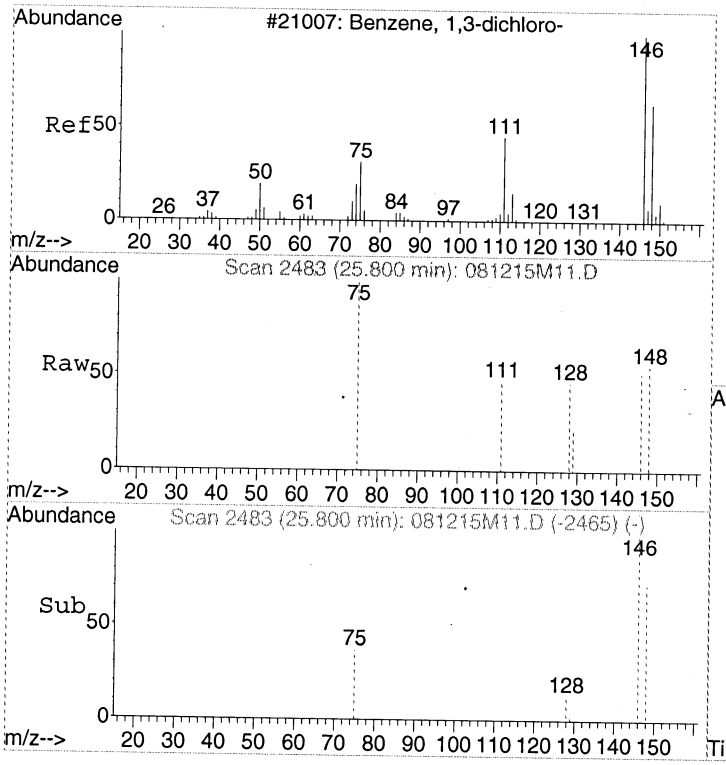


#31
1,1,2,2-Tetrachloroethane
Concen: Below Cal
RT: 24.28 min Scan# 2388
Delta R.T. 0.00 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion: 83 Resp: 228

Ion	Ratio	Lower	Upper
83	100		
85	119.3	43.7	83.7#

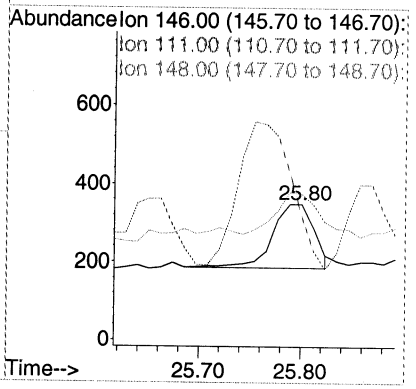


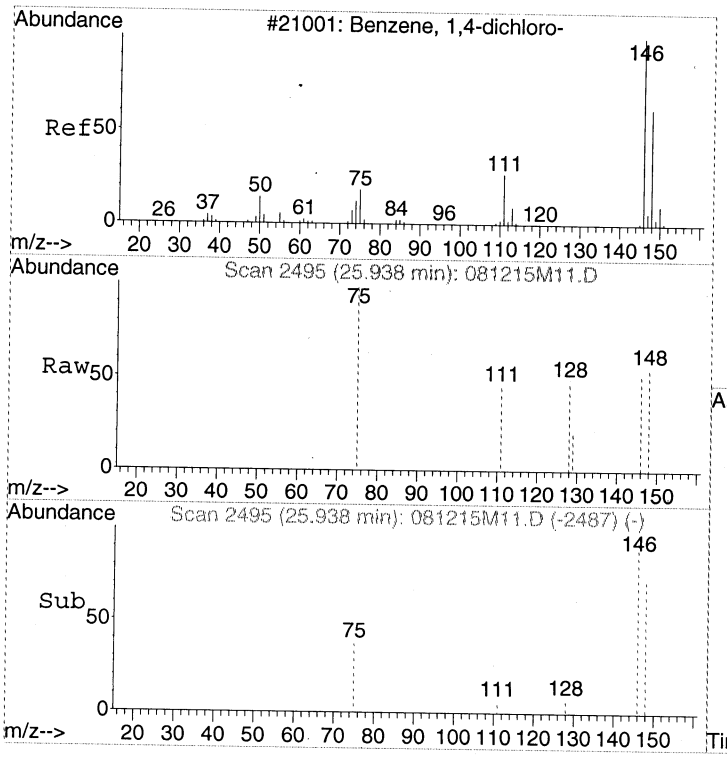


#32
1,3-Dichlorobenzene
Concen: Below Cal
RT: 25.80 min Scan# 2483
Delta R.T. 0.01 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion:146 Resp: 451

Ion	Ratio	Lower	Upper
146	100		
111	0.0	19.2	59.2#
148	66.3	44.0	84.0

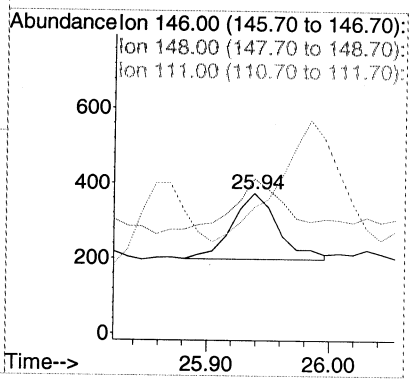


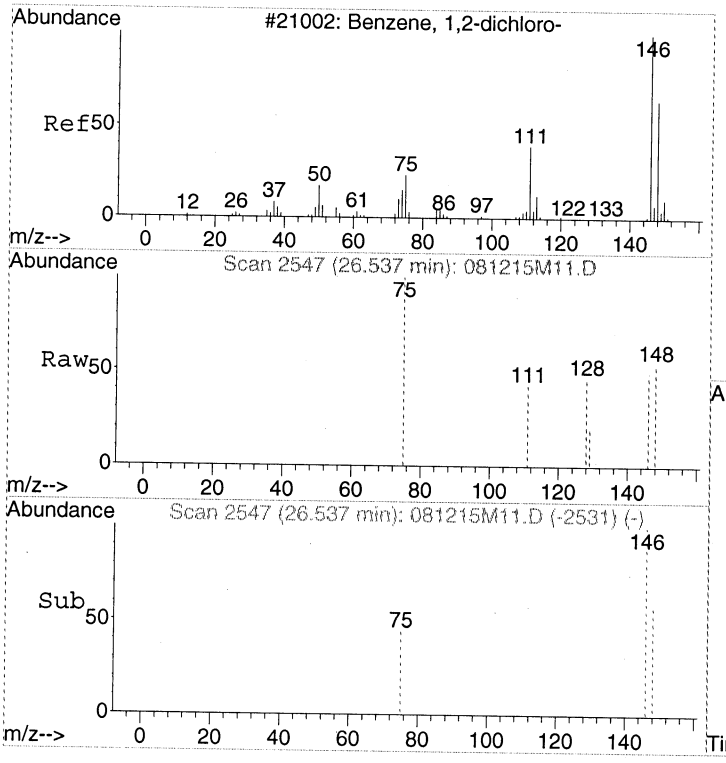


#33
1,4-Dichlorobenzene
Concen: Below Cal
RT: 25.94 min Scan# 2495
Delta R.T. 0.00 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion:146 Resp: 457

Ion	Ratio	Lower	Upper
146	100		
148	99.3	43.9	83.9#
111	0.0	17.2	57.2#

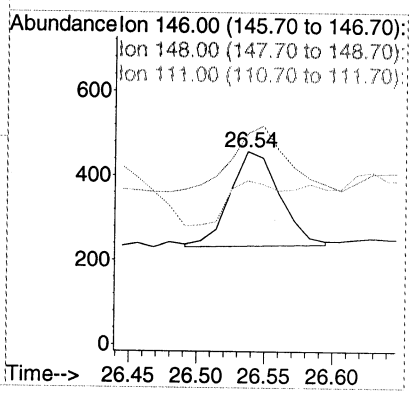




#34
1,2-Dichlorobenzene
Concen: Below Cal
RT: 26.54 min Scan# 2547
Delta R.T. -0.01 min
Lab File: 081215M11.D
Acq: 12 Aug 2015 7:13 pm

Tgt Ion:146 Resp: 577

Ion	Ratio	Lower	Upper
146	100		
148	88.6	43.6	83.6#
111	47.3	20.6	60.6



Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081215MAA\
Data File : 081215M12.D
Acq On : 12 Aug 2015 8:00 pm
InstName : AG5973M
Operator : LLH
Sample : 1508028-015
Misc : 60ml 600National-OUT
ALS Vial : 10 Sample Multiplier: 1.48

RL became too dilute
NW

Quant Time: Aug 13 10:41:51 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081115SMAA.M
Quant Title : TO15SIM
QLast Update : Tue Aug 11 14:59:20 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.25	49	118260	341.00 pptv	0.00
16) 1,4-DIFLUOROBENZENE	17.30	114	212416	375.00 pptv	0.00
21) CHLOROBENZENE-d5	22.23	117	215008	341.00 pptv	-0.02

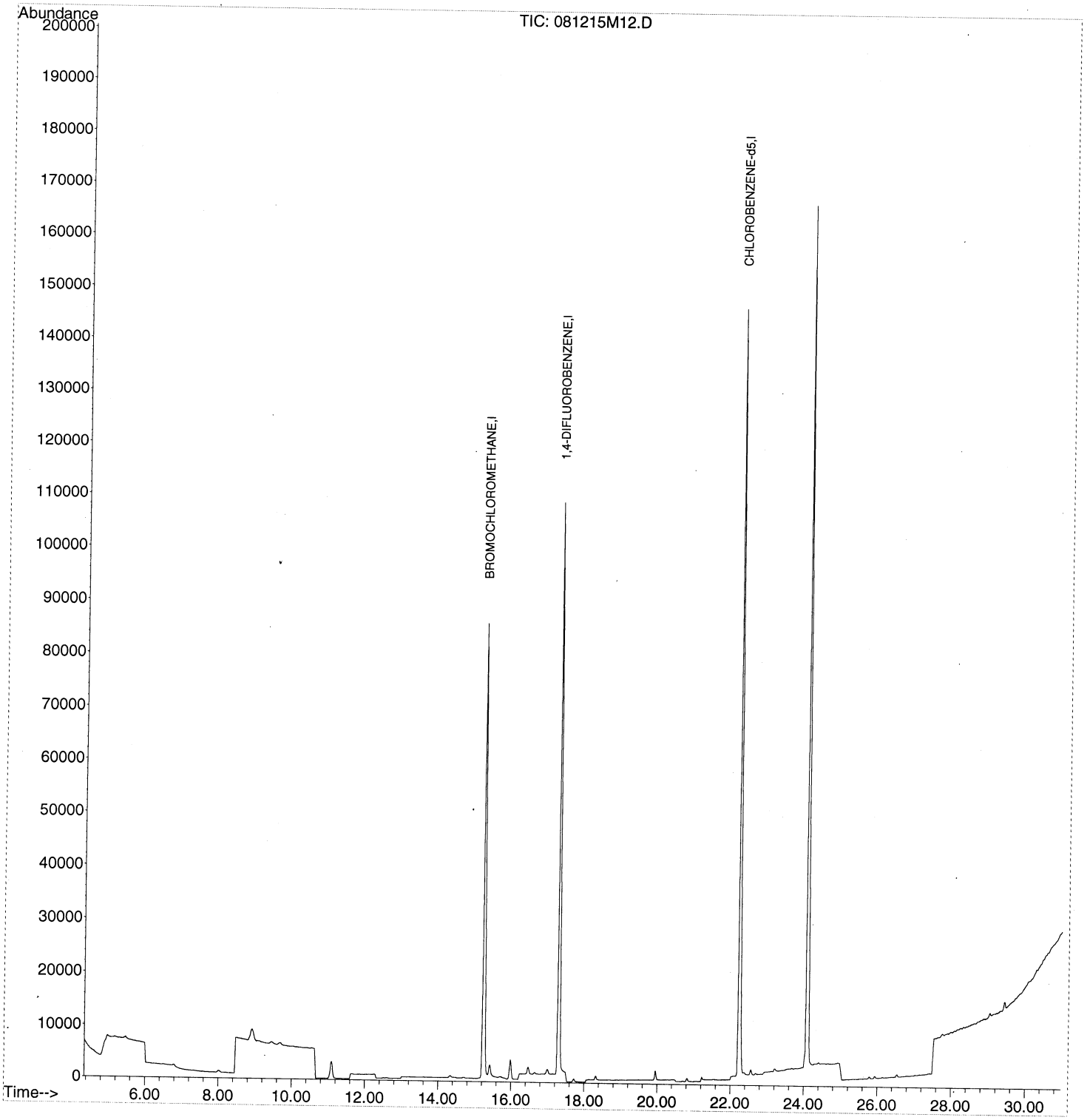
Target Compounds					Qvalue
2) Vinyl chloride	5.07	62	59	N.D.	
3) 1,3-Butadiene	5.18	54	213	N.D.	
4) Bromoethene	7.10	106	10	N.D.	
5) 1,1,2-Trichloro-1,2,2-trif	8.92	151	4610	N.D.	
6) 1,1-Dichloroethene	8.95	61	46	N.D.	
7) Dichloromethane	11.09	49	6379	N.D.	
8) tert-Butyl methyl ether (M	11.85	73	37	N.D.	
9) trans-1,2-Dichloroethene	11.85	61	16	N.D.	
10) Hexane	12.53	57	138	N.D.	
11) 1,1-Dichloroethane	13.24	63	11	N.D.	
12) cis-1,2-Dichloroethene	14.71	96	136	N.D.	
13) Chloroform	15.40	83	1060	N.D.	
14) 1,1,1-Trichloroethane	15.69	97	273	N.D.	
15) Carbon tetrachloride	15.98	117	6026	N.D.	
17) Benzene	16.47	78	2790	N.D.	
18) 1,2-Dichloroethane	16.64	62	460	N.D.	
19) Trichloroethene	17.72	130	563	N.D.	
20) 1,2-Dichloropropane	18.06	63	72	N.D.	
22) Toluene	19.95	91	2807	N.D.	
23) 1,1,2-Trichloroethane	0.00	97	0	N.D.	
24) Tetrachloroethene	20.81	166	148	N.D.	
25) 1,2-Dibromoethane (EDB)	21.55	107	103	N.D.	
26) Chlorobenzene	22.28	112	226	N.D.	
27) Ethylbenzene	22.37	91	603	N.D.	
28) m&p-Xylene	22.56	91	1516	N.D.	
29) o-Xylene	23.21	91	755	N.D.	
30) Styrene	23.19	104	25	N.D.	
31) 1,1,2,2-Tetrachloroethane	24.28	83	325	N.D.	
32) 1,3-Dichlorobenzene	25.79	146	377	N.D.	
33) 1,4-Dichlorobenzene	25.94	146	494	N.D.	
34) 1,2-Dichlorobenzene	26.54	146	519	N.D.	

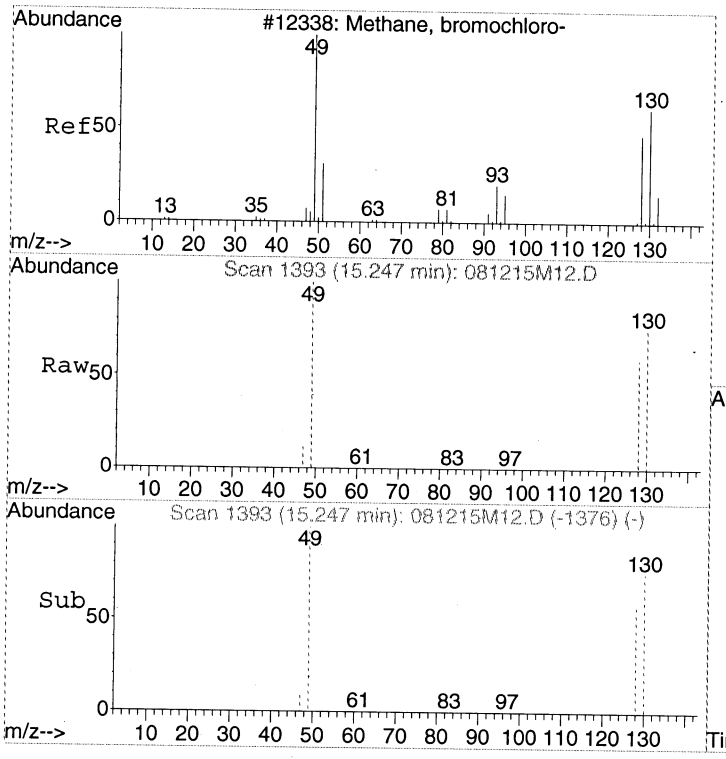
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2015\DATA\081215MAA\
Data File : 081215M12.D
Acq On : 12 Aug 2015 8:00 pm
InstName : AG5973M
Operator : LLH
Sample : 1508028-015
Misc : 60ml 600National-OUT
ALS Vial : 10 Sample Multiplier: 1.48

Quant Time: Aug 13 10:41:51 2015
Quant Method : C:\MSDCHEM\1\2015\METHOD\081115SMAA.M
Quant Title : TO15SIM
QLast Update : Tue Aug 11 14:59:20 2015
Response via : Initial Calibration

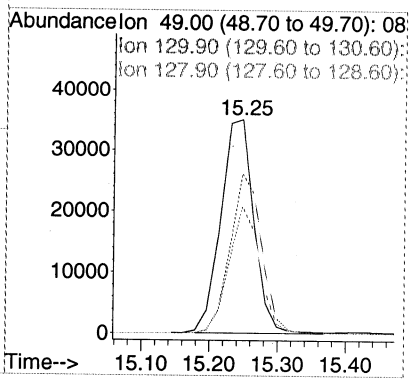


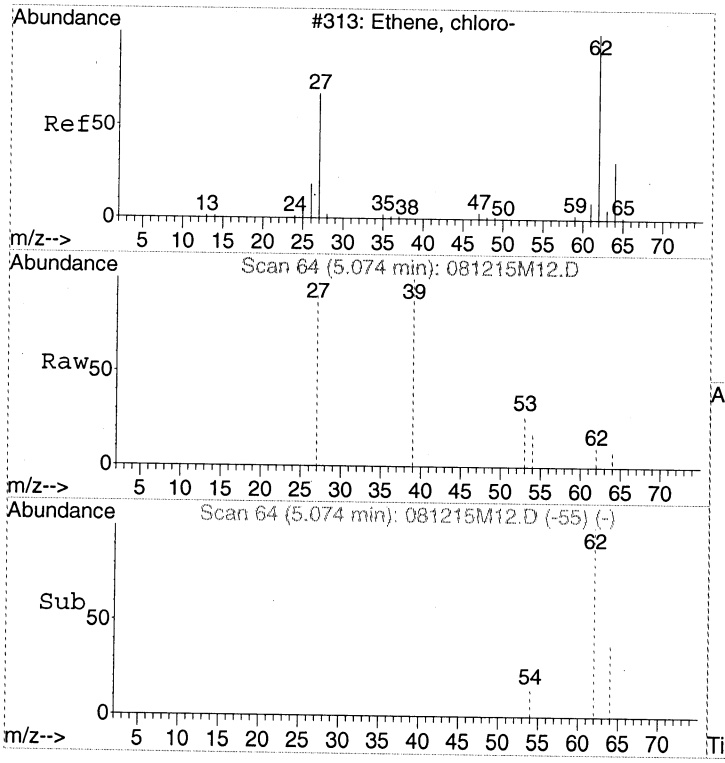


#1
BROMOCHLOROMETHANE
Concen: 341.00 pptv
RT: 15.25 min Scan# 1393
Delta R.T. -0.00 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion: 49 Resp: 118260

Ion	Ratio	Lower	Upper
49	100		
130	71.2	56.6	96.6
128	55.5	39.9	79.9

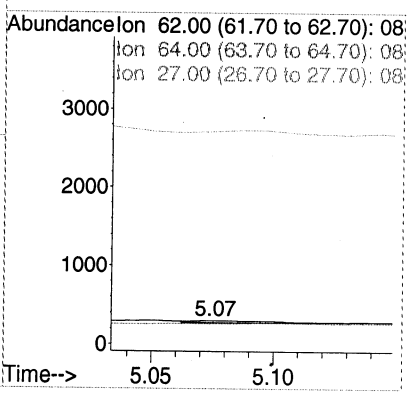




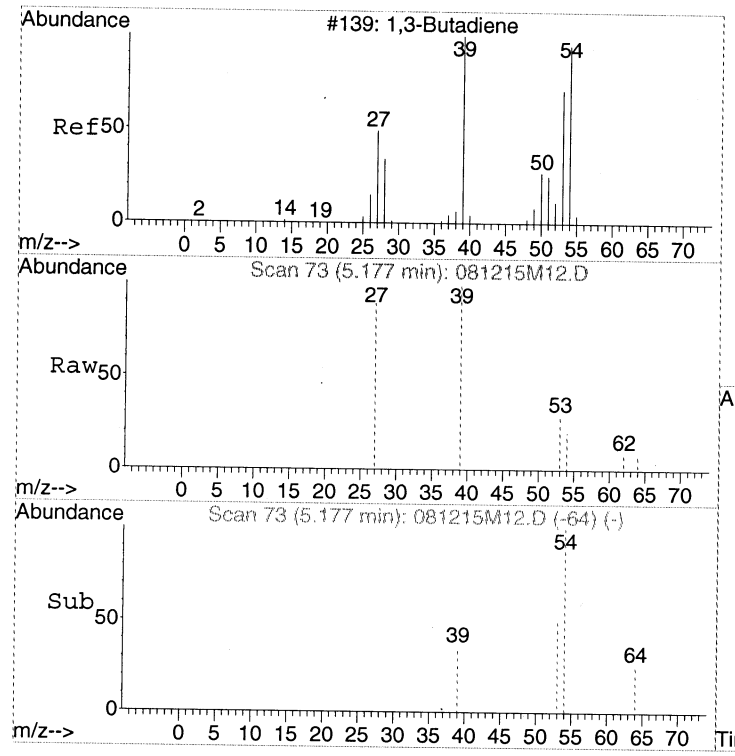
#2
Vinyl chloride
Concen: Below Cal
RT: 5.07 min Scan# 64
Delta R.T. -0.01 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion: 62 Resp: 59

Ion	Ratio	Lower	Upper
62	100		
64	0.0	12.0	52.0#
27	0.0	24.7	64.7#



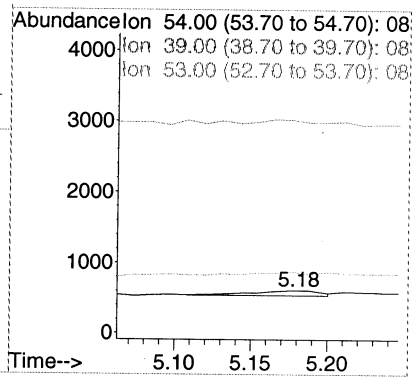
00424

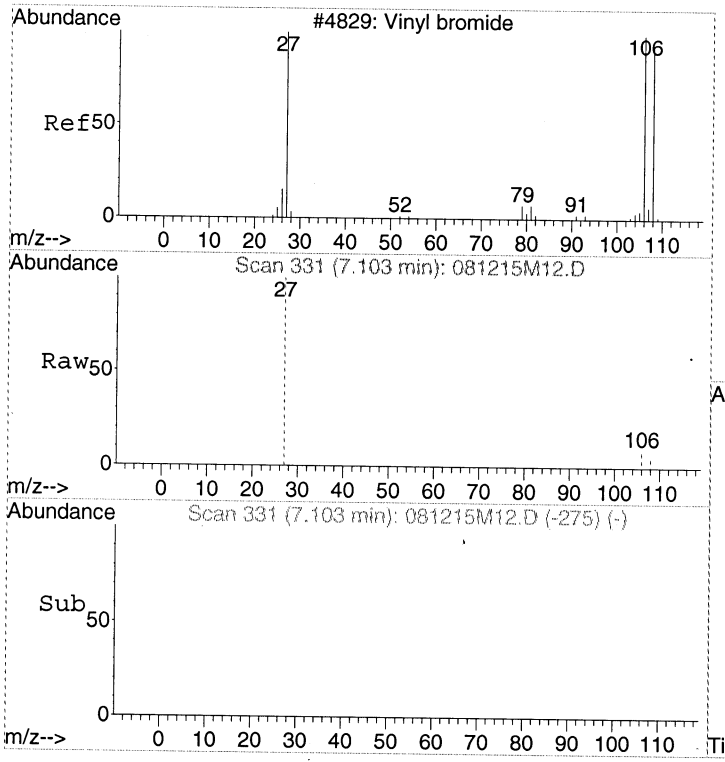


#3
1,3-Butadiene
Concen: Below Cal
RT: 5.18 min Scan# 73
Delta R.T. -0.01 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion: 54 Resp: 213

Ion	Ratio	Lower	Upper
54	100		
39	47.9	72.5	112.5#
53	59.2	48.6	88.6

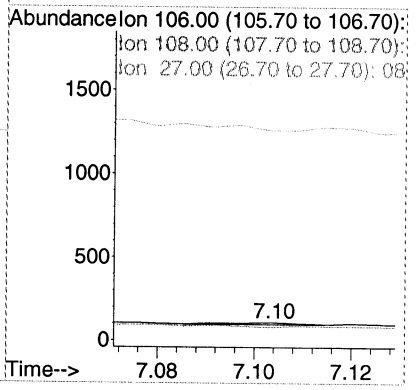


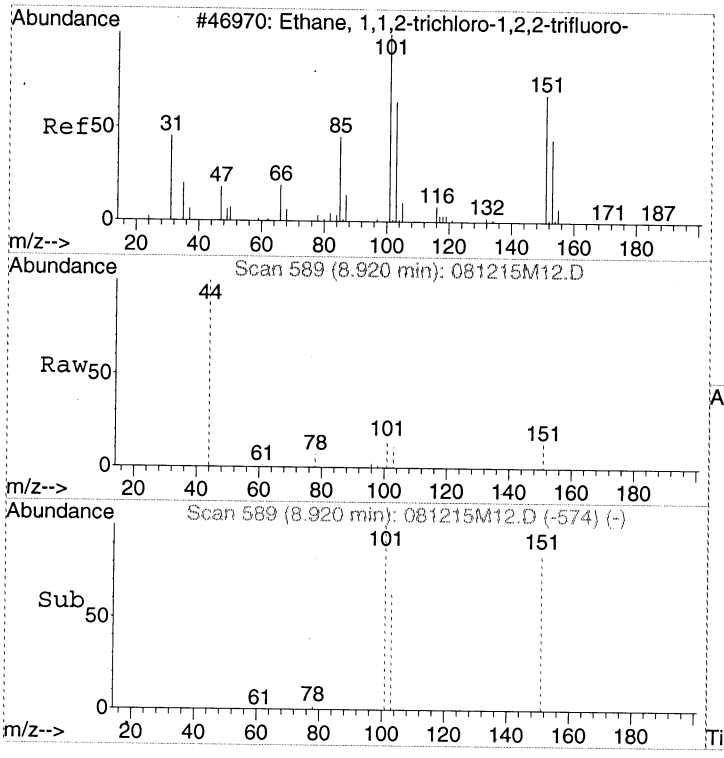


#4
Bromoethene
Concen: Below Cal
RT: 7.10 min Scan# 331
Delta R.T. 0.13 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion:106 Resp: 10

Ion	Ratio	Lower	Upper
106	100		
108	0.0	0.0	214.7
27	0.0	67.2	107.2#

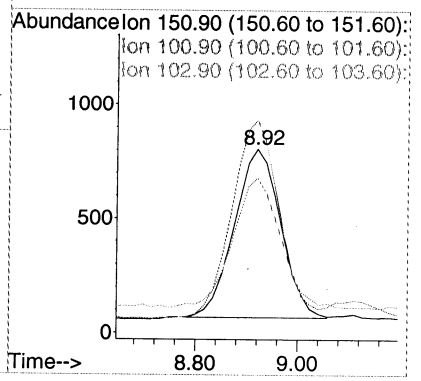


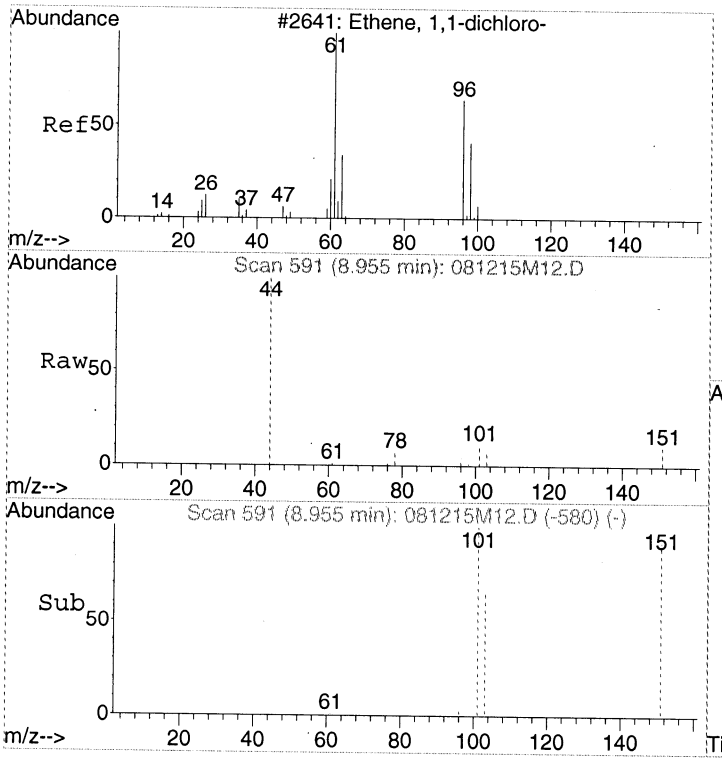


#5
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: Below Cal
RT: 8.92 min Scan# 589
Delta R.T. -0.00 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion:151 Resp: 4610

Ion	Ratio	Lower	Upper
151	100		
101	122.8	95.3	135.3
103	80.2	53.9	93.9

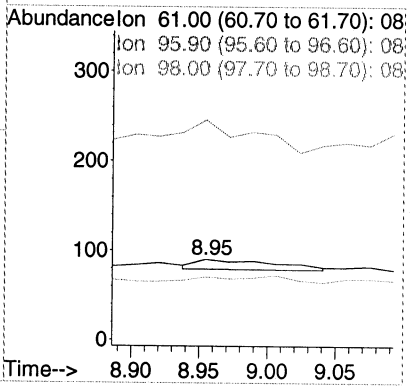


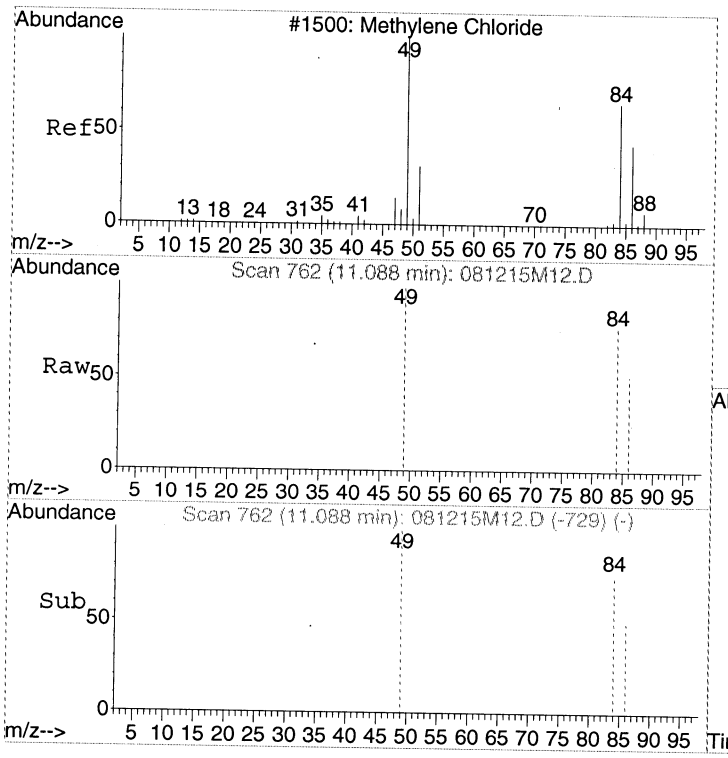


#6
1,1-Dichloroethene
Concen: Below Cal
RT: 8.95 min Scan# 591
Delta R.T. -0.02 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion: 61 Resp: 46

Ion	Ratio	Lower	Upper
61	100		
96	73.9	41.4	81.4
98	19.6	18.8	58.8

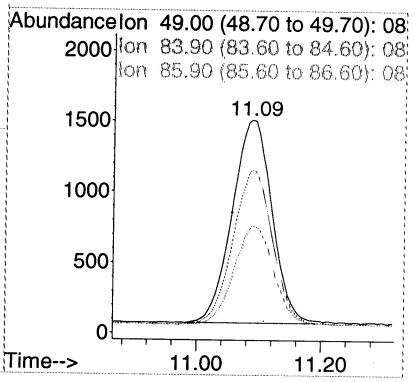


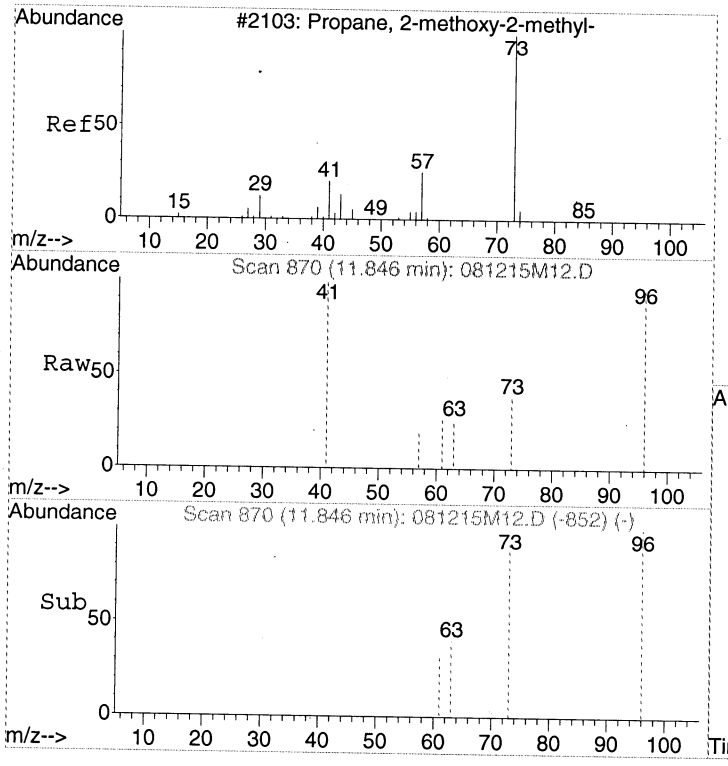


#7
Dichloromethane
Concen: Below Cal
RT: 11.09 min Scan# 762
Delta R.T. -0.01 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion: 49 Resp: 6379

Ion	Ratio	Lower	Upper
49	100		
84	75.6	59.9	99.9
86	48.2	31.1	71.1

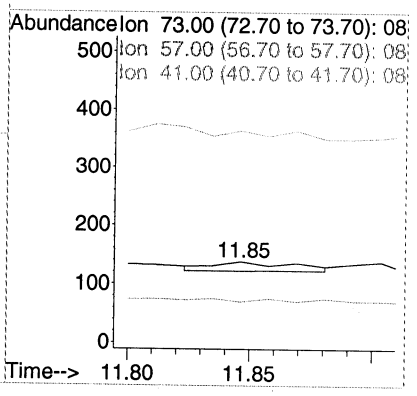


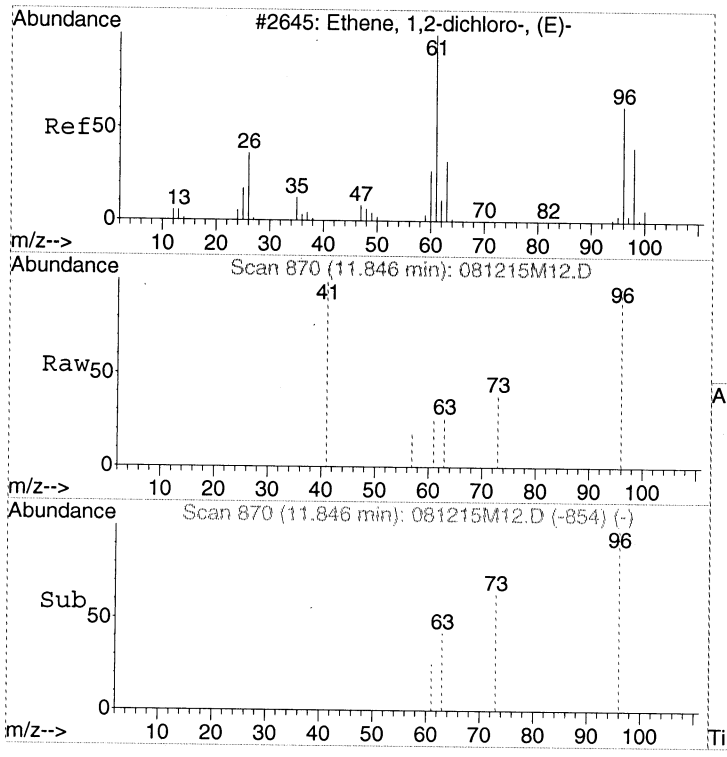


#8
tert-Butyl methyl ether (MTBE)
Concen: Below Cal
RT: 11.85 min Scan# 870
Delta R.T. 0.01 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion: 73 Resp: 37

Ion	Ratio	Lower	Upper
73	100		
57	13.5	3.0	43.0
41	0.0	19.2	59.2#

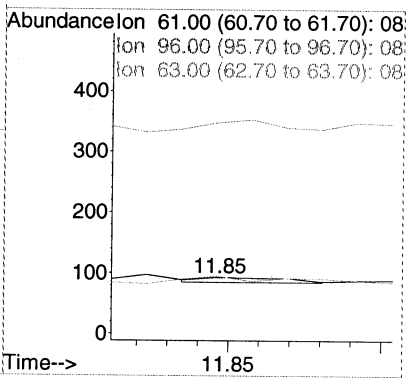


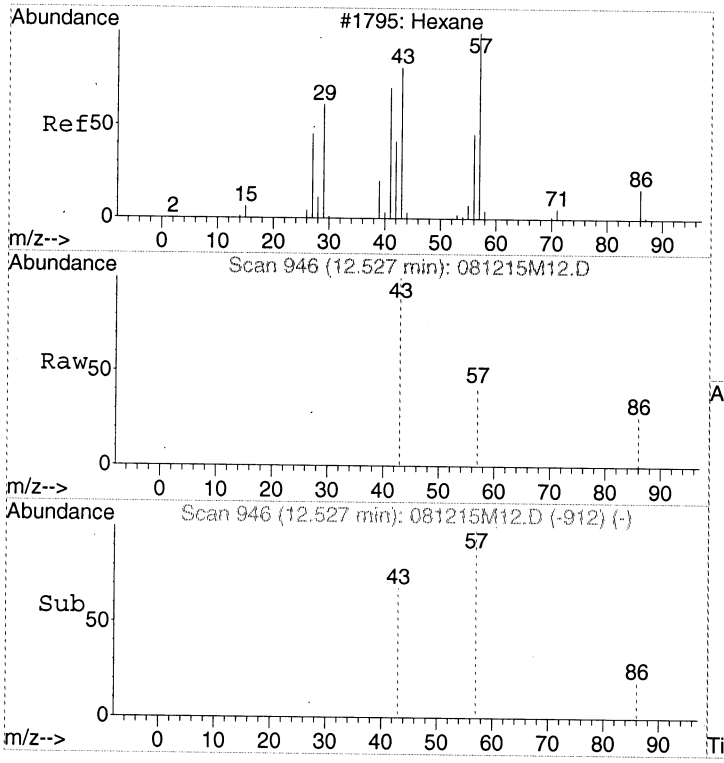


#9
trans-1,2-Dichloroethene
Concen: Below Cal
RT: 11.85 min Scan# 870
Delta R.T. -0.02 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion: 61 Resp: 16

Ion	Ratio	Lower	Upper
61	100		
96	387.5	50.8	90.8#
63	112.5	12.1	52.1#

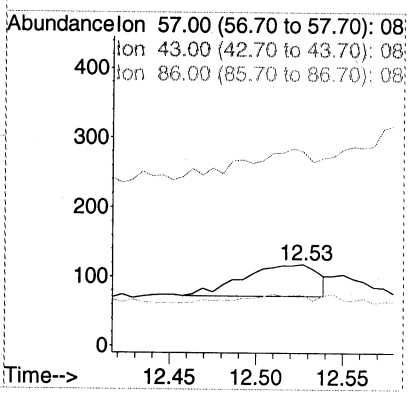


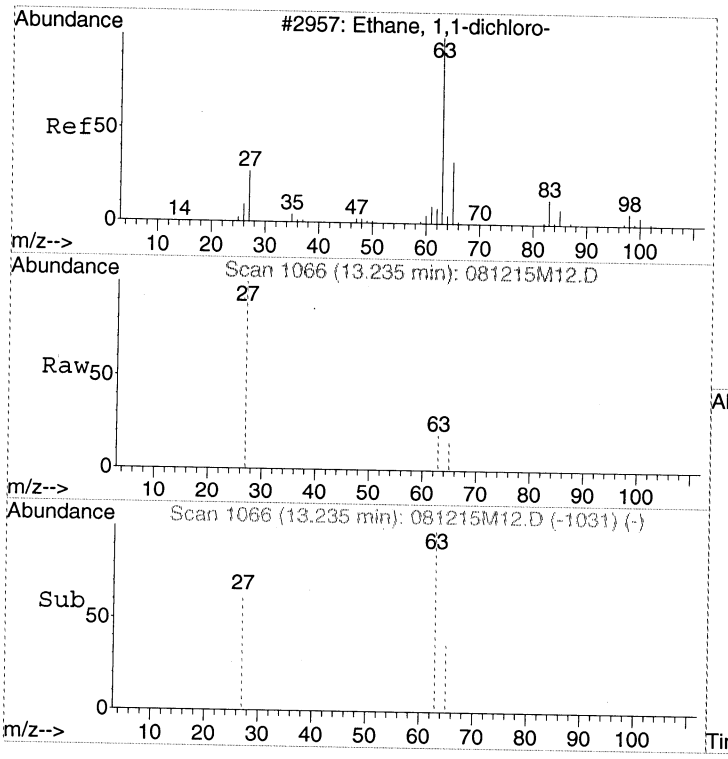


#10
Hexane
Concen: Below Cal
RT: 12.53 min Scan# 946
Delta R.T. 0.00 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion: 57 Resp: 138

Ion	Ratio	Lower	Upper
57	100		
43	18.1	51.5	91.5#
86	6.5	0.0	37.2

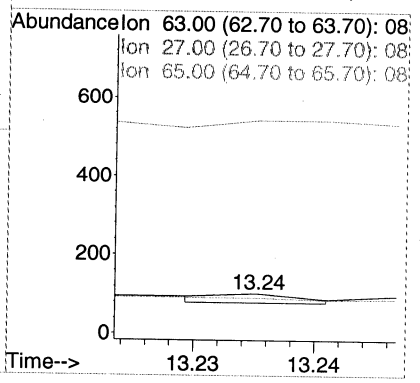


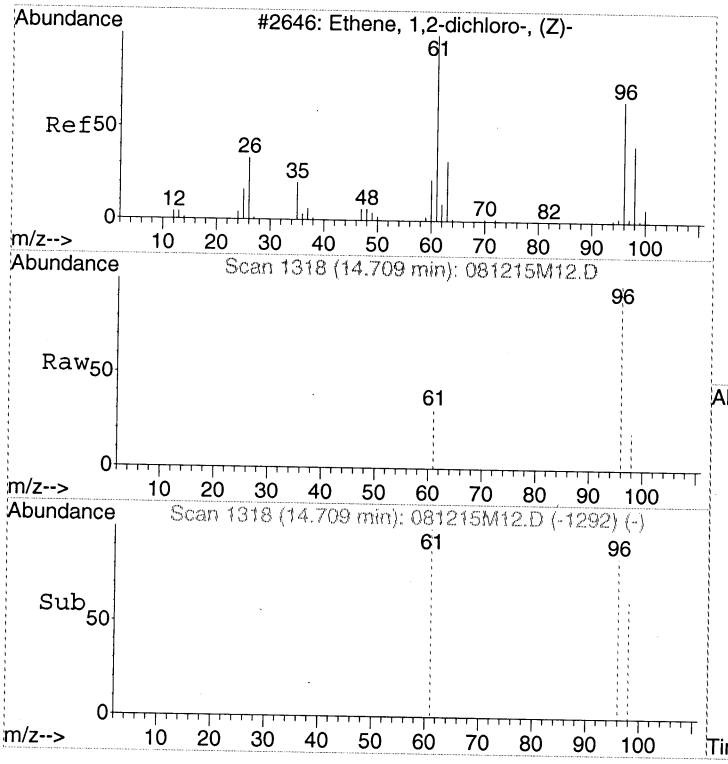


#11
1,1-Dichloroethane
Concen: Below Cal
RT: 13.24 min Scan# 1066
Delta R.T. 0.01 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion: 63 Resp: 11

Ion	Ratio	Lower	Upper
63	100		
27	0.0	10.5	50.5#
65	163.6	11.5	51.5#

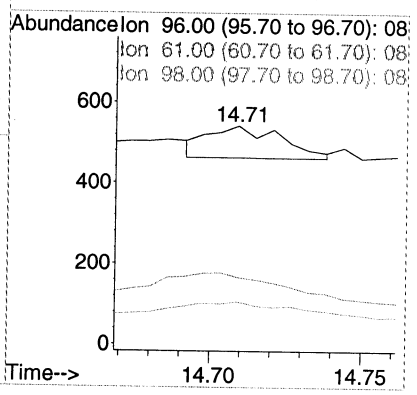


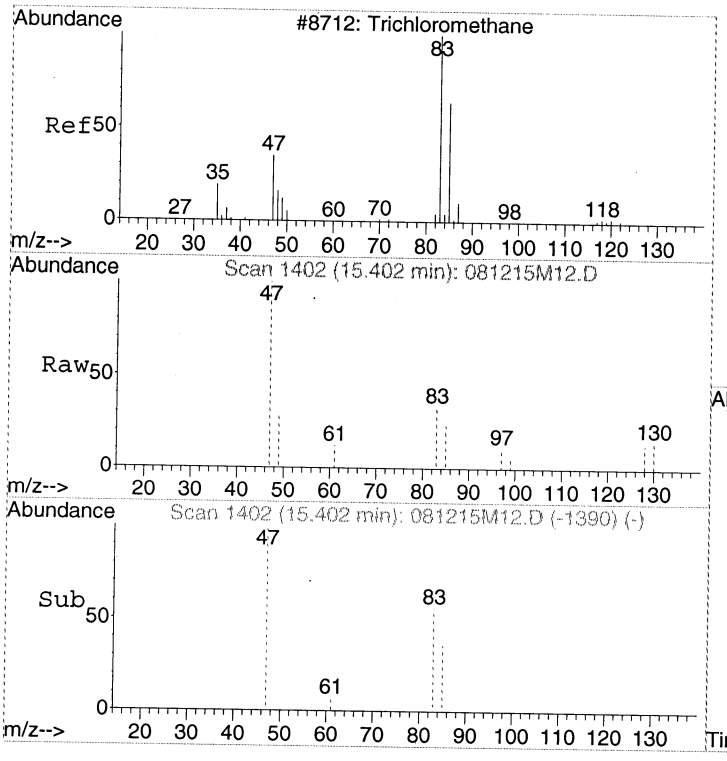


#12
cis-1,2-Dichloroethene
Concen: Below Cal
RT: 14.71 min Scan# 1318
Delta R.T. -0.00 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion: 96 Resp: 136

Ion	Ratio	Lower	Upper
96	100		
61	166.9	109.9	149.9#
98	64.0	44.2	84.2

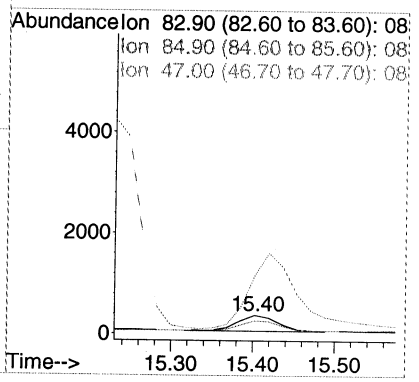


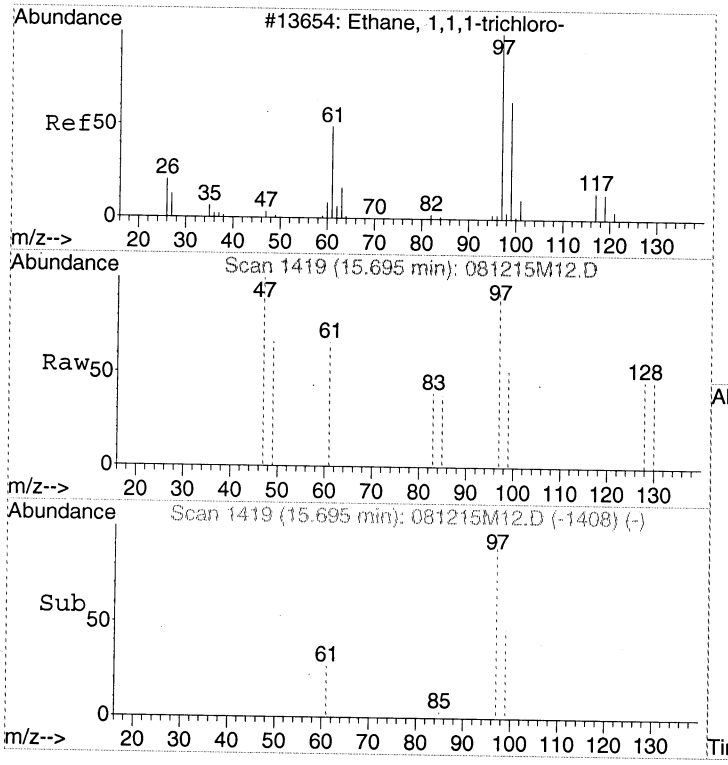


#13
Chloroform
Concen: Below Cal
RT: 15.40 min Scan# 1402
Delta R.T. 0.00 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion: 83 Resp: 1060

Ion	Ratio	Lower	Upper
83	100		
85	63.9	44.4	84.4
47	597.2	6.1	46.1#

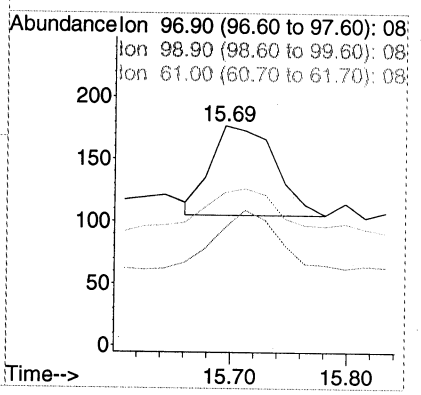


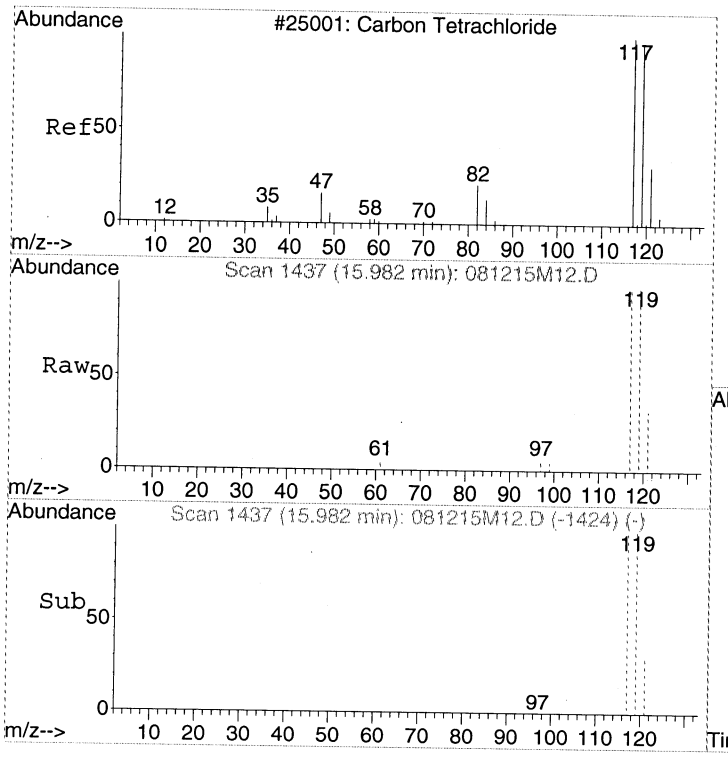


#14
1,1,1-Trichloroethane
Concen: Below Cal
RT: 15.69 min Scan# 1419
Delta R.T. -0.02 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion: 97 Resp: 273

Ion	Ratio	Lower	Upper
97	100		
99	66.7	44.2	84.2
61	57.9	23.6	63.6

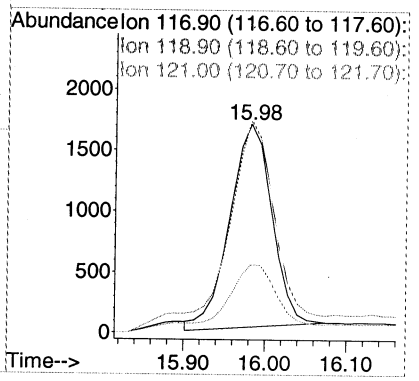


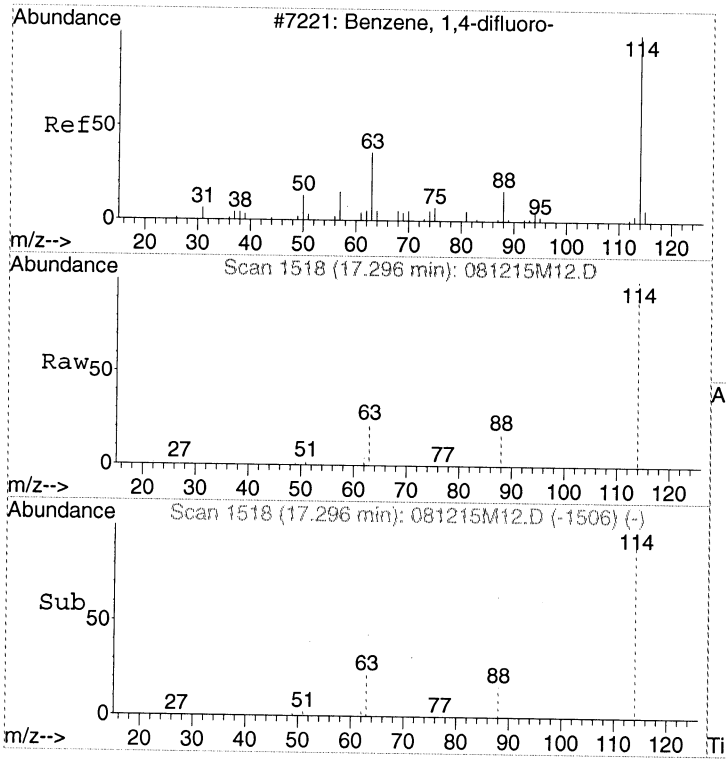


#15
Carbon tetrachloride
Concen: Below Cal
RT: 15.98 min Scan# 1437
Delta R.T. -0.00 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion:117 Resp: 6026

Ion	Ratio	Lower	Upper
117	100		
119	91.3	76.1	116.1
121	33.3	6.4	46.4

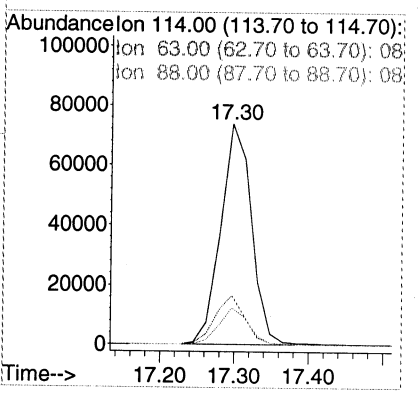


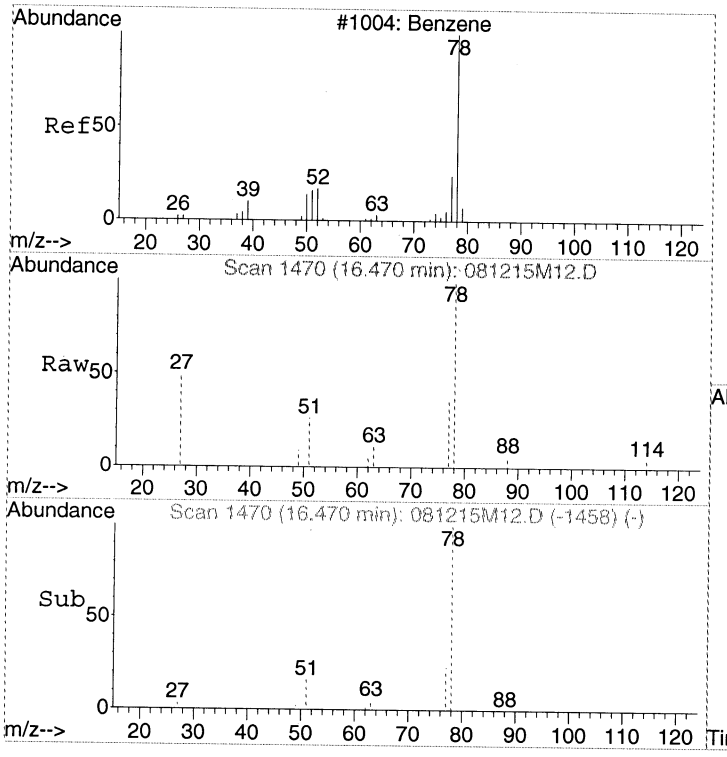


#16
1,4-DIFLUOROBENZENE
Concen: 375.00 pptv
RT: 17.30 min Scan# 1518
Delta R.T. -0.00 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion:114 Resp: 212416

Ion	Ratio	Lower	Upper
114	100		
63	21.5	0.6	40.6
88	16.0	0.0	35.8

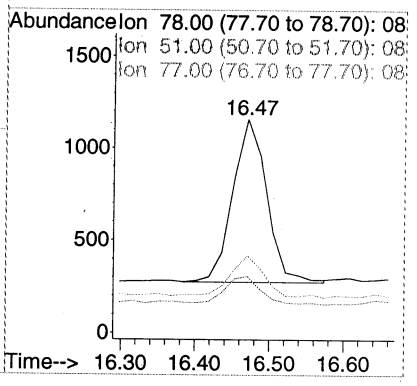


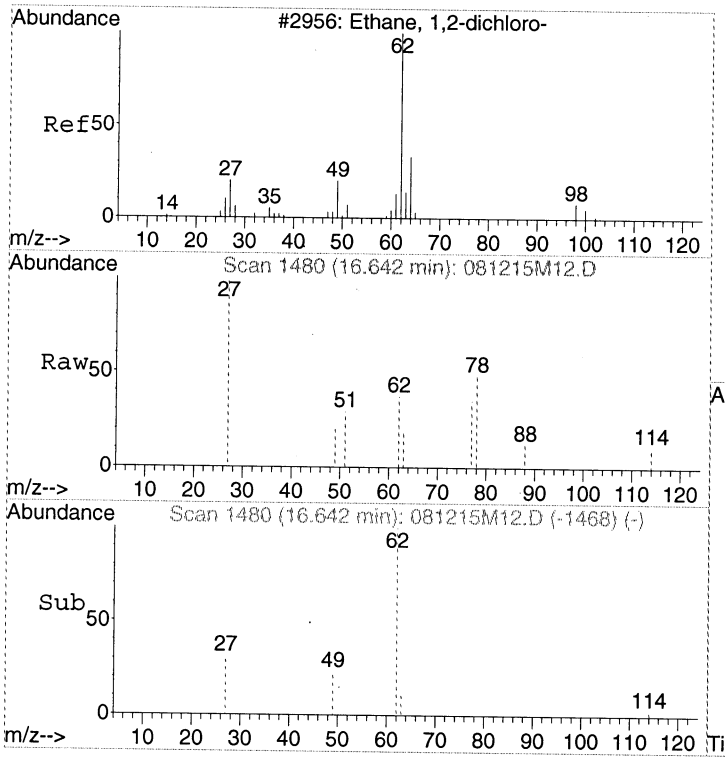


#17
Benzene
Concen: Below Cal
RT: 16.47 min Scan# 1470
Delta R.T. -0.00 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion: 78 Resp: 2790

Ion	Ratio	Lower	Upper
78	100		
51	16.7	0.0	38.2
77	23.7	4.3	44.3

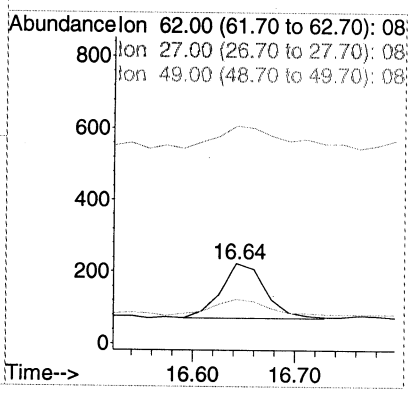


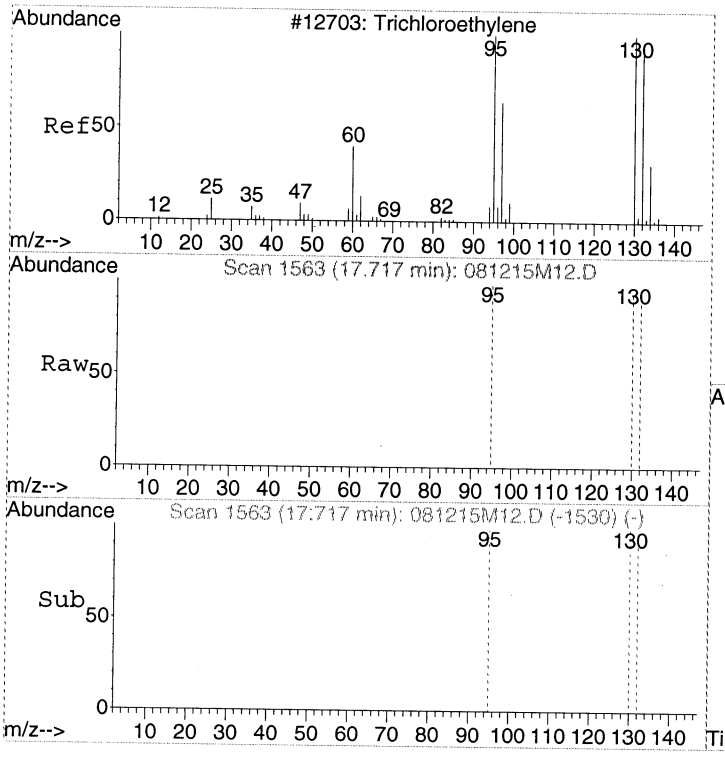


#18
1,2-Dichloroethane
Concen: Below Cal
RT: 16.64 min Scan# 1480
Delta R.T. -0.00 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion: 62 Resp: 460

Ion	Ratio	Lower	Upper
62	100		
27	64.3	16.3	56.3#
49	41.5	5.6	45.6

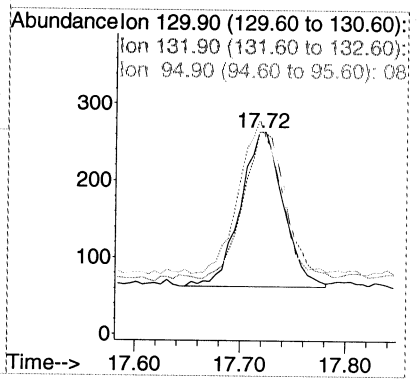


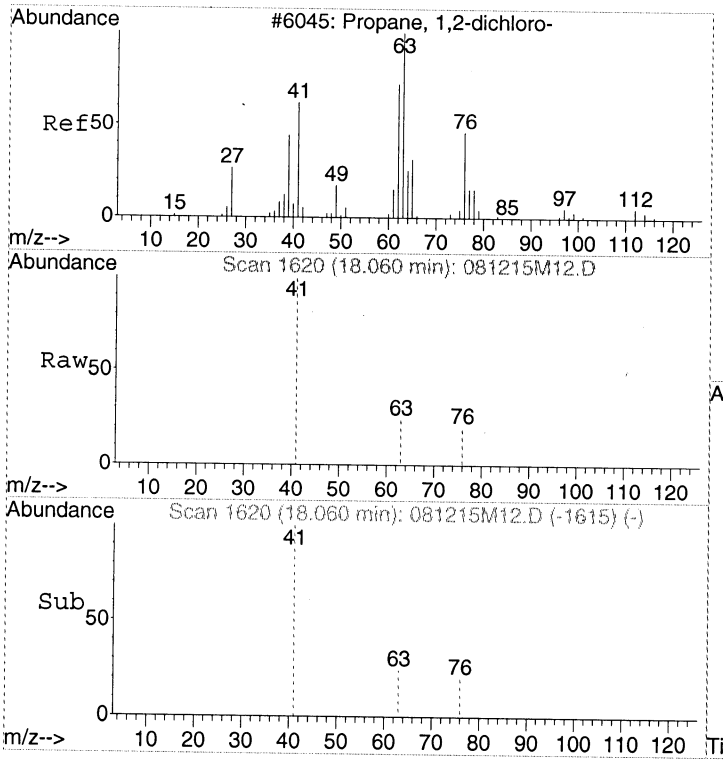


#19
Trichloroethene
Concen: Below Cal
RT: 17.72 min Scan# 1563
Delta R.T. -0.01 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion:130 Resp: 563

Ion	Ratio	Lower	Upper
130	100		
132	95.0	76.4	116.4
95	94.5	77.3	117.3

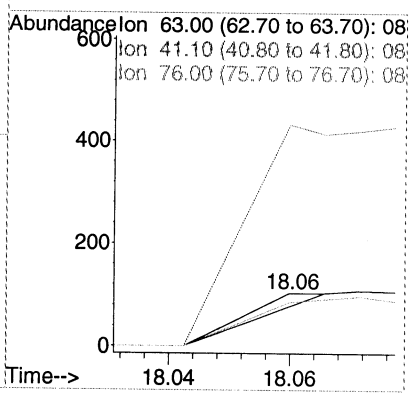


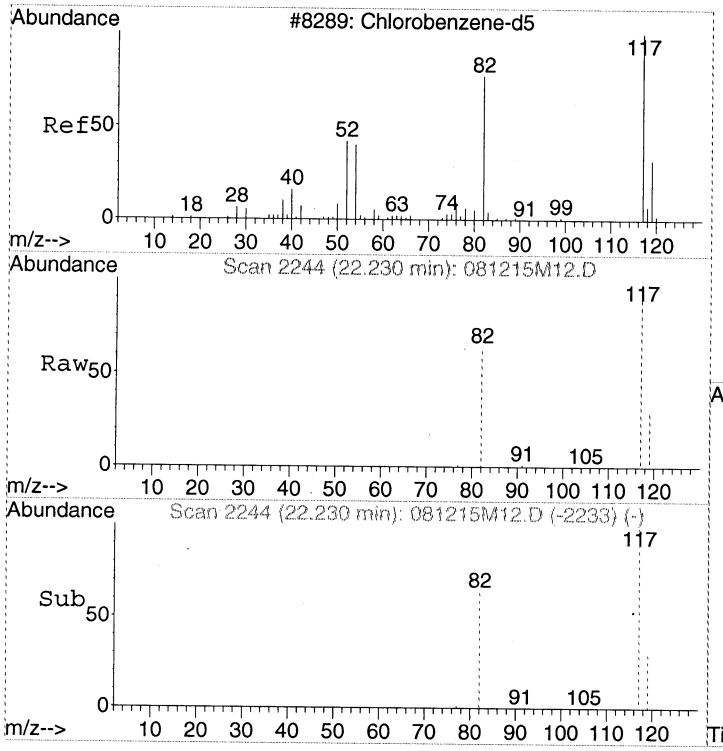


#20
1,2-Dichloropropane
Concen: Below Cal
RT: 18.06 min Scan# 1620
Delta R.T. -0.16 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion: 63 Resp: 72

Ion	Ratio	Lower	Upper
63	100		
41	816.7	44.5	84.5#
76	262.5	30.3	70.3#

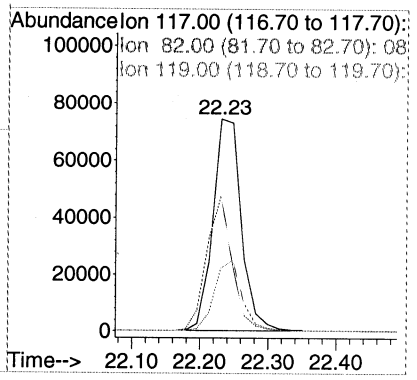


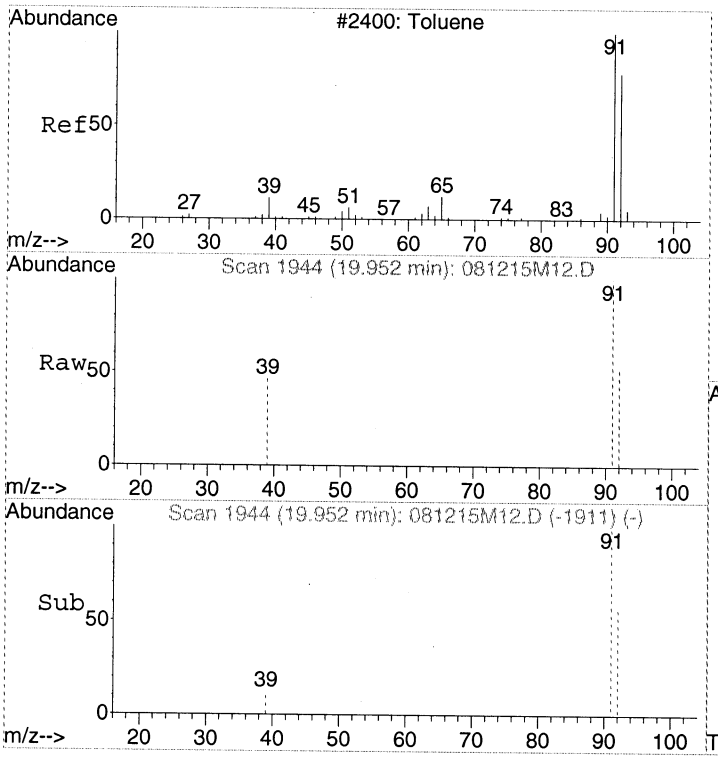


#21
CHLOROBENZENE-d5
Concen: 341.00 pptv
RT: 22.23 min Scan# 2244
Delta R.T. -0.02 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion:117 Resp: 215008

Ion	Ratio	Lower	Upper
117	100		
82	57.4	36.0	76.0
119	32.1	12.1	52.1

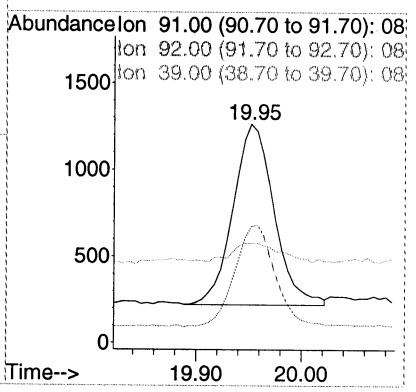


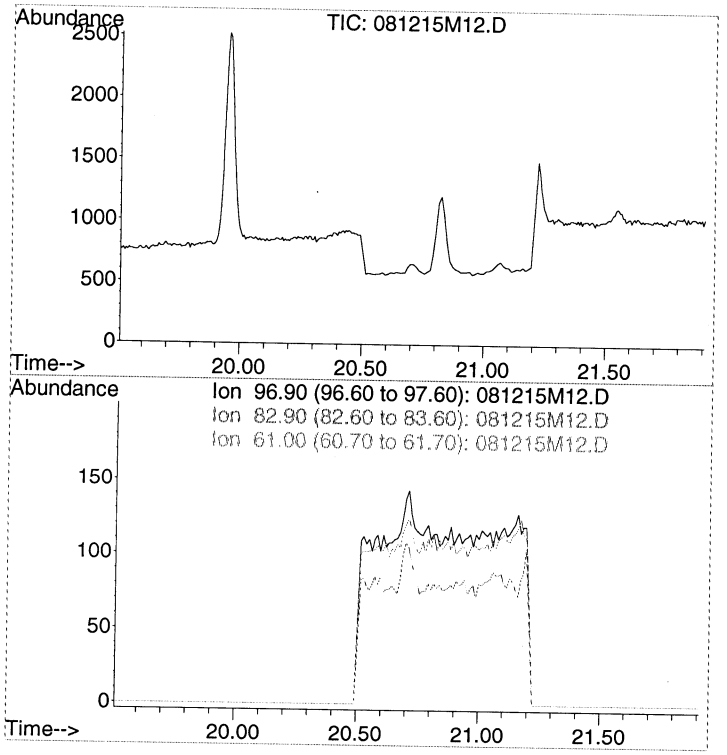


#22
Toluene
Concen: Below Cal
RT: 19.95 min Scan# 1944
Delta R.T. -0.01 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion: 91 Resp: 2807

Ion	Ratio	Lower	Upper
91	100		
92	56.2	37.9	77.9
39	12.3	0.0	29.3



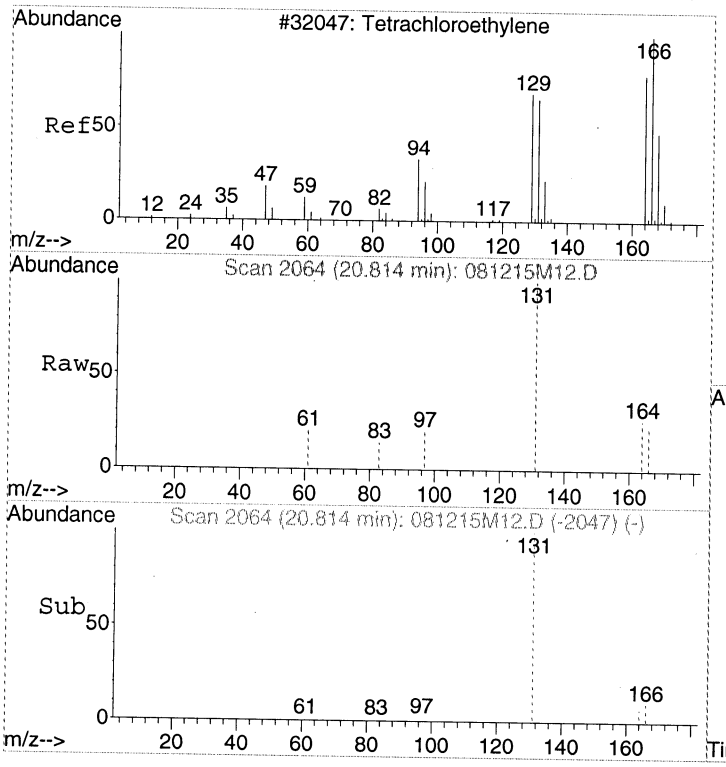


#23
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 20.71 min

Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion: 97

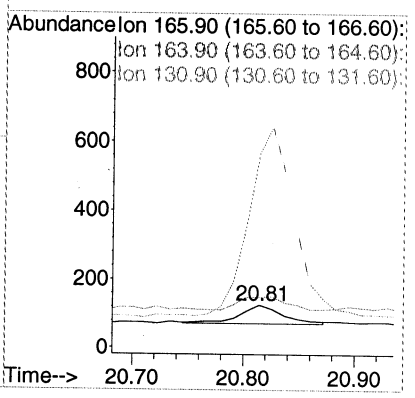
Sig	Exp Ratio
97	100
83	83.7
61	67.7

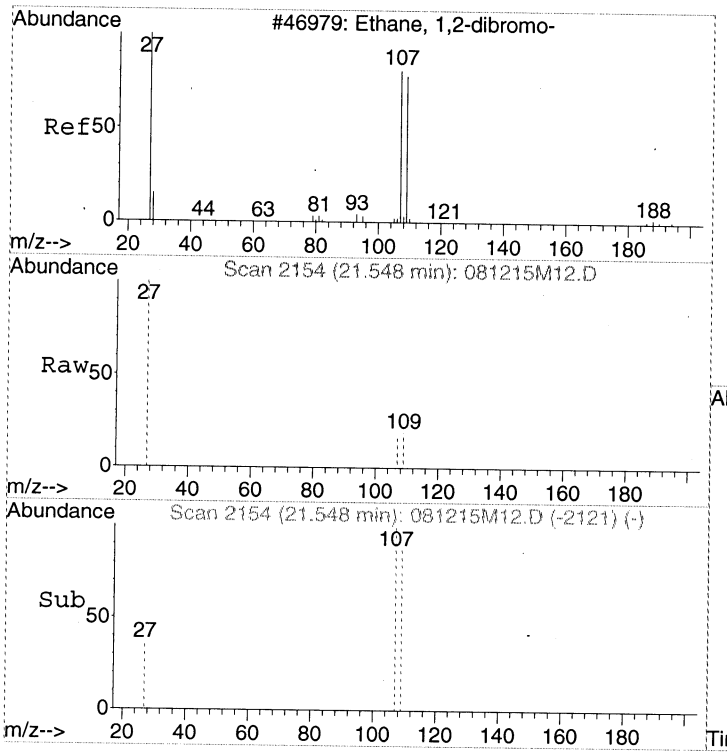


#24
Tetrachloroethene
Concen: Below Cal
RT: 20.81 min Scan# 2064
Delta R.T. 0.00 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion:166 Resp: 148

Ion	Ratio	Lower	Upper
166	100		
164	81.1	58.4	98.4
131	1054.7	49.4	89.4#

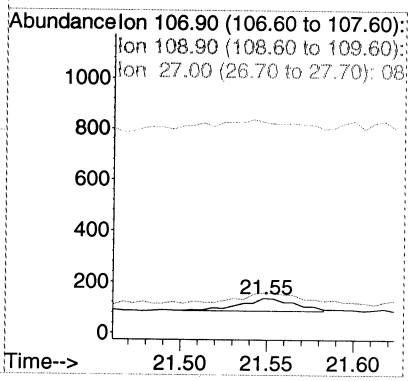


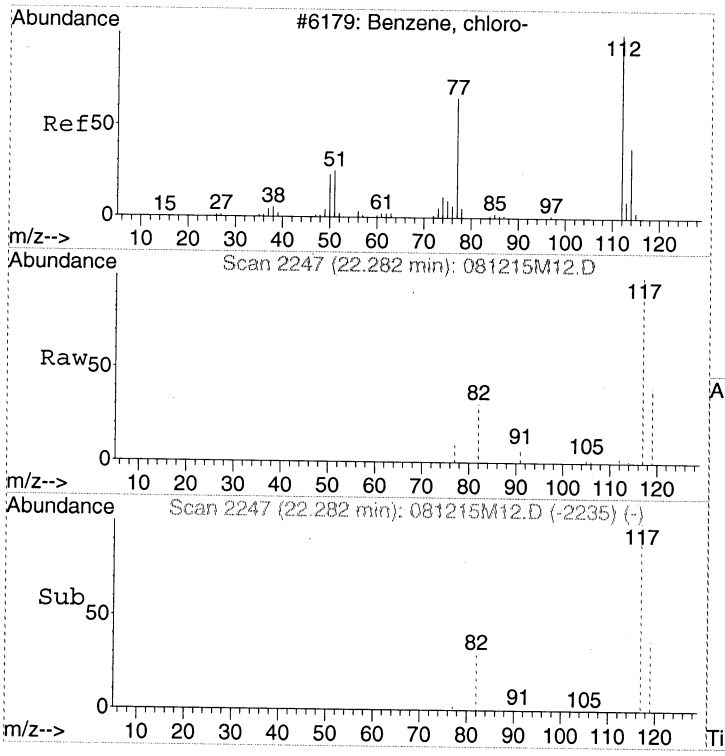


#25
1,2-Dibromoethane (EDB)
Concen: Below Cal
RT: 21.55 min Scan# 2154
Delta R.T. -0.01 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion:107 Resp: 103

Ion	Ratio	Lower	Upper
107	100		
109	101.9	73.9	113.9
27	8.7	37.8	77.8#

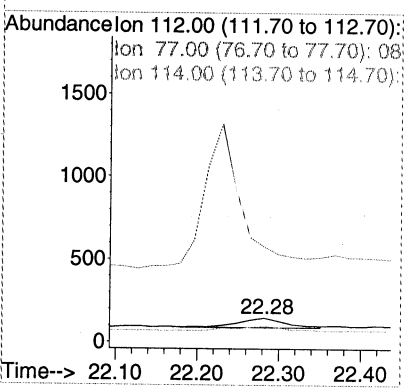


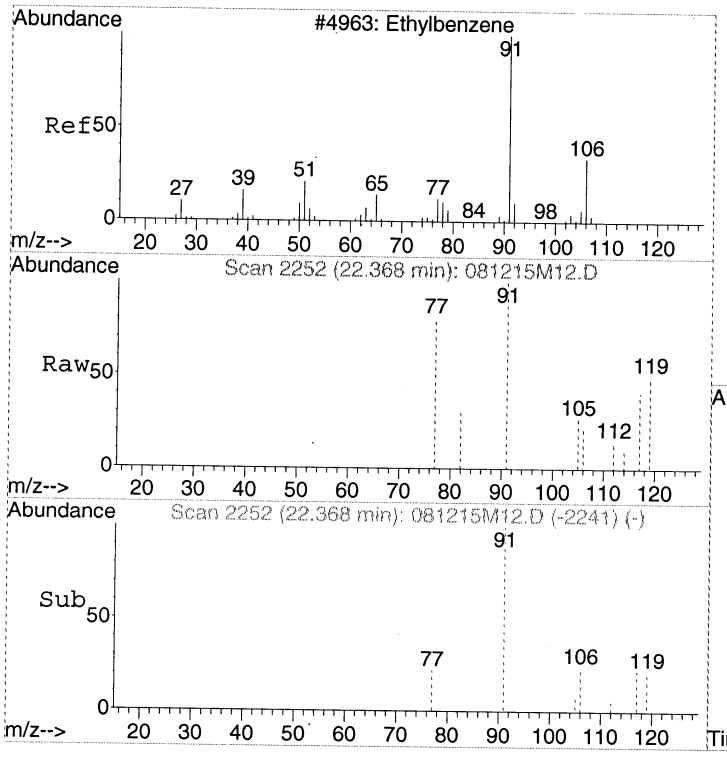


#26
Chlorobenzene
Concen: Below Cal
RT: 22.28 min Scan# 2247
Delta R.T. -0.00 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion:112 Resp: 226

Ion	Ratio	Lower	Upper
112	100		
77	0.0	40.4	80.4#
114	64.2	12.0	52.0#

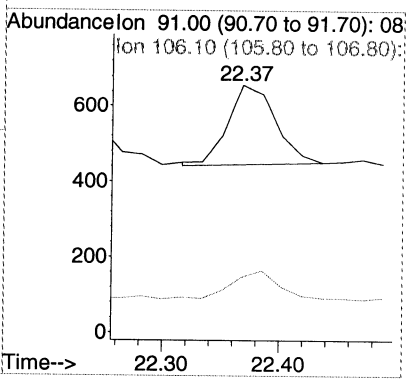


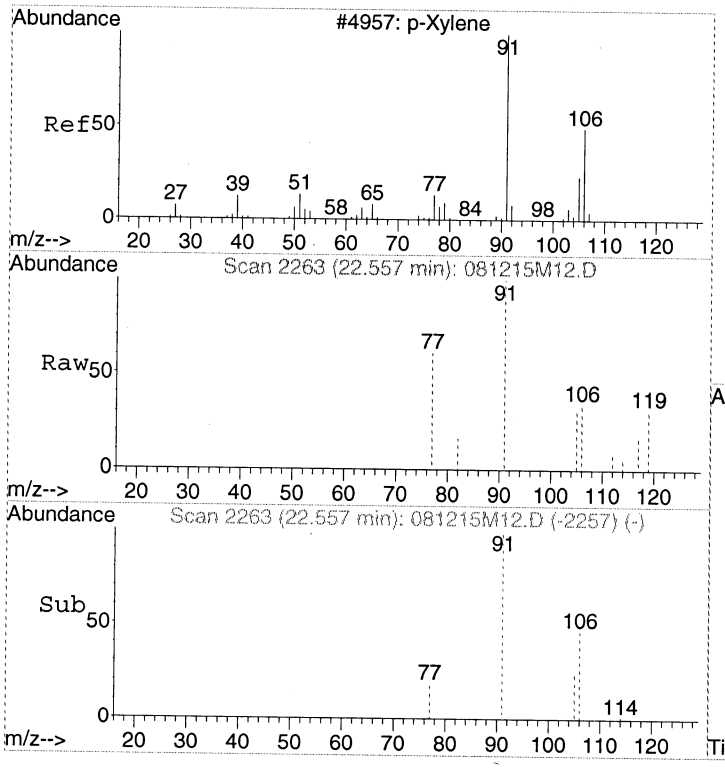


#27
Ethylbenzene
Concen: Below Cal
RT: 22.37 min Scan# 2252
Delta R.T. -0.02 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion: 91 Resp: 603

Ion	Ratio	Lower	Upper
91	100		
106	34.3	11.2	51.2

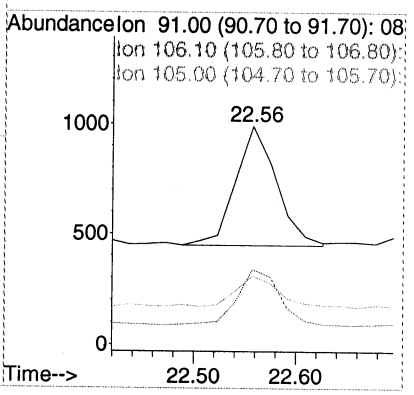


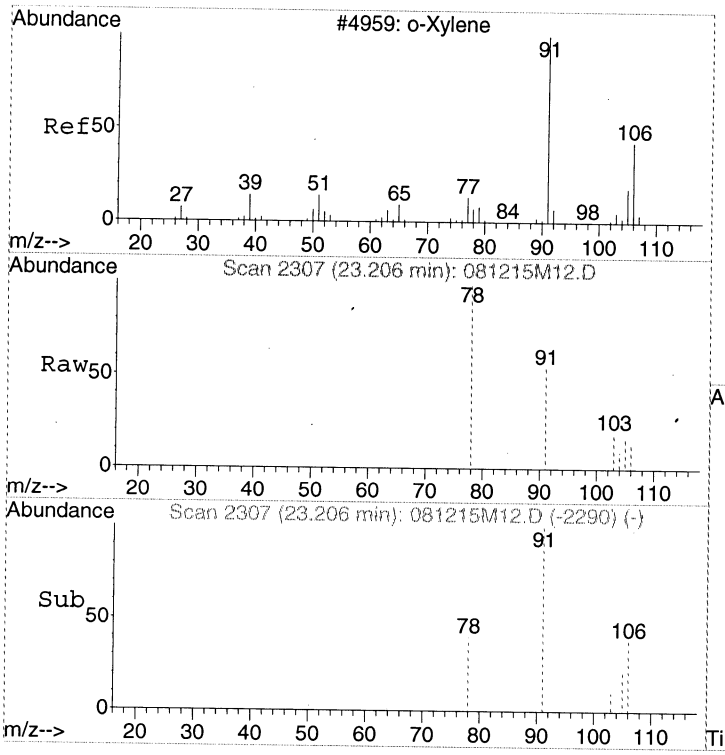


#28
m&p-Xylene
Concen: Below Cal
RT: 22.56 min Scan# 2263
Delta R.T. -0.00 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion: 91 Resp: 1516

Ion	Ratio	Lower	Upper
91	100		
106	45.0	29.0	69.0
105	28.3	4.3	44.3

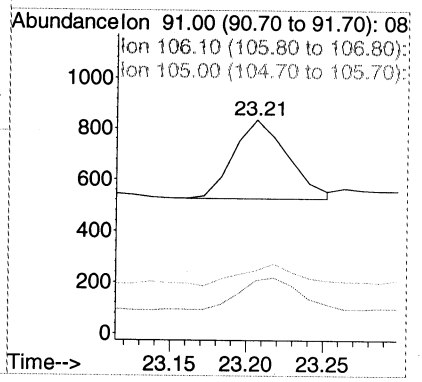


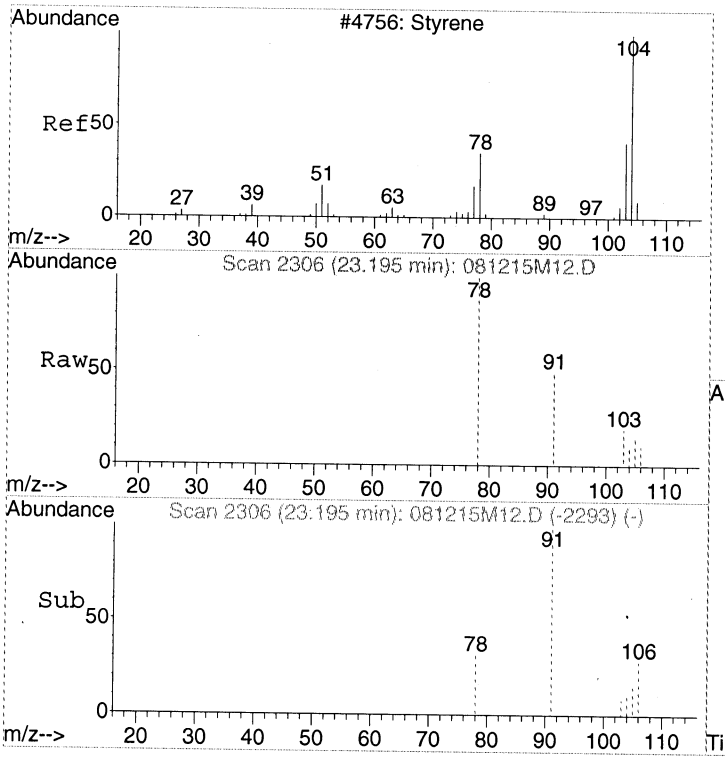


#29
o-Xylene
Concen: Below Cal
RT: 23.21 min Scan# 2307
Delta R.T. -0.00 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion: 91 Resp: 755

Ion	Ratio	Lower	Upper
91	100		
106	44.8	25.6	65.6
105	34.0	6.0	46.0

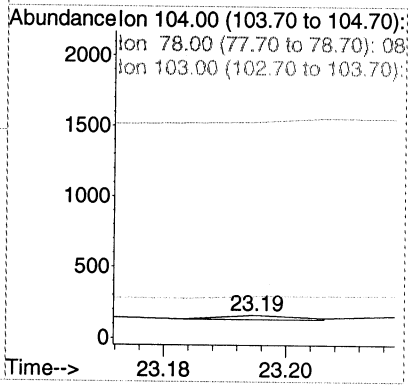




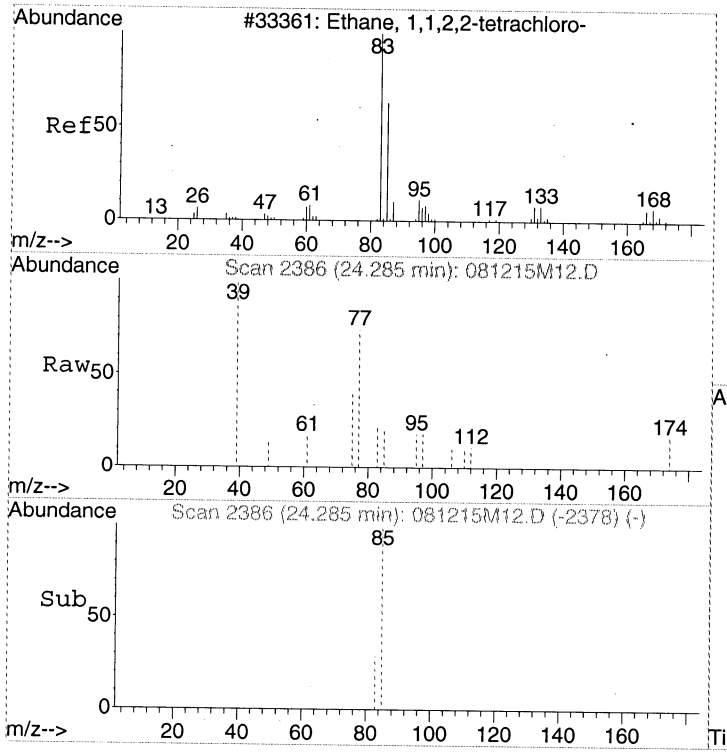
#30
Styrene
Concen: Below Cal
RT: 23.19 min Scan# 2306
Delta R.T. -0.05 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion:104 Resp: 25

Ion	Ratio	Lower	Upper
104	100		
78	708.0	37.4	77.4#
103	0.0	36.8	76.8#



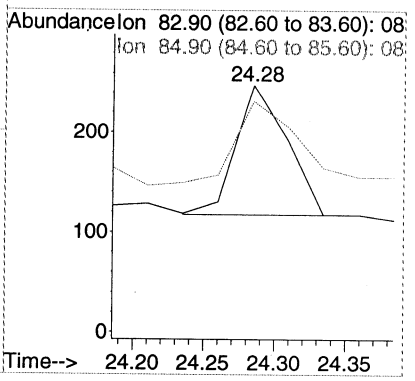
00438

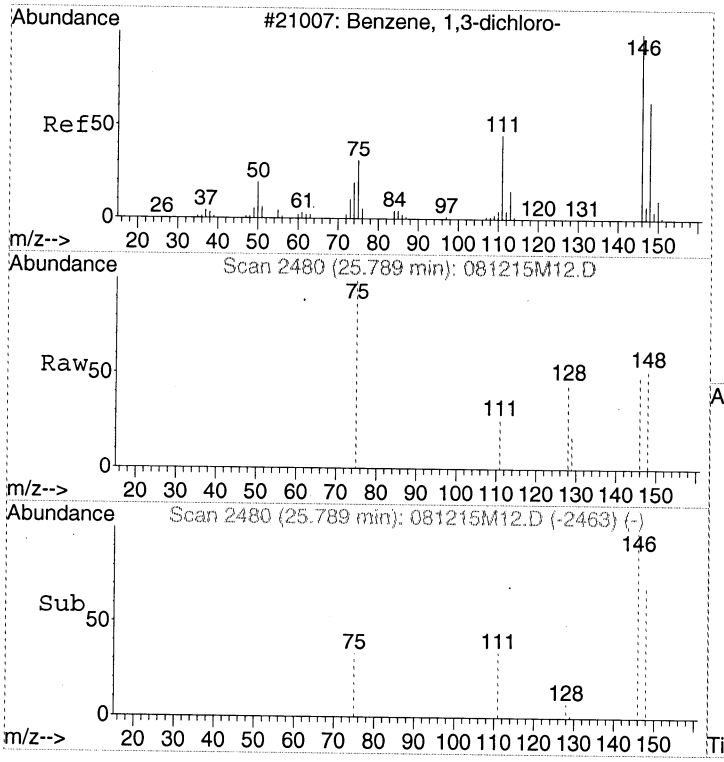


#31
1,1,2,2-Tetrachloroethane
Concen: Below Cal
RT: 24.28 min Scan# 2386
Delta R.T. -0.00 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion: 83 Resp: 325

Ion	Ratio	Lower	Upper
83	100		
85	84.6	43.7	83.7#

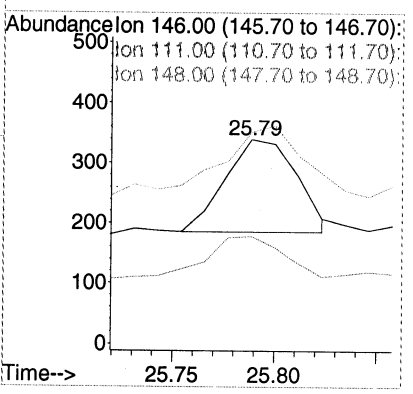


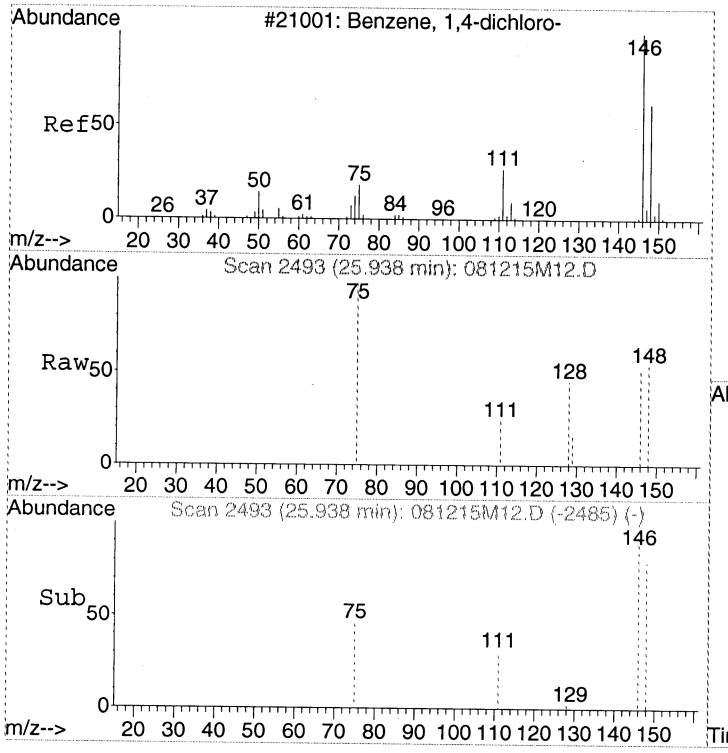


#32
1,3-Dichlorobenzene
Concen: Below Cal
RT: 25.79 min Scan# 2480
Delta R.T. 0.00 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion:146 Resp: 377

Ion	Ratio	Lower	Upper
146	100		
111	51.7	19.2	59.2
148	68.7	44.0	84.0

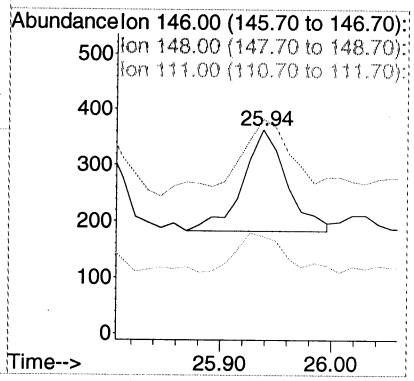


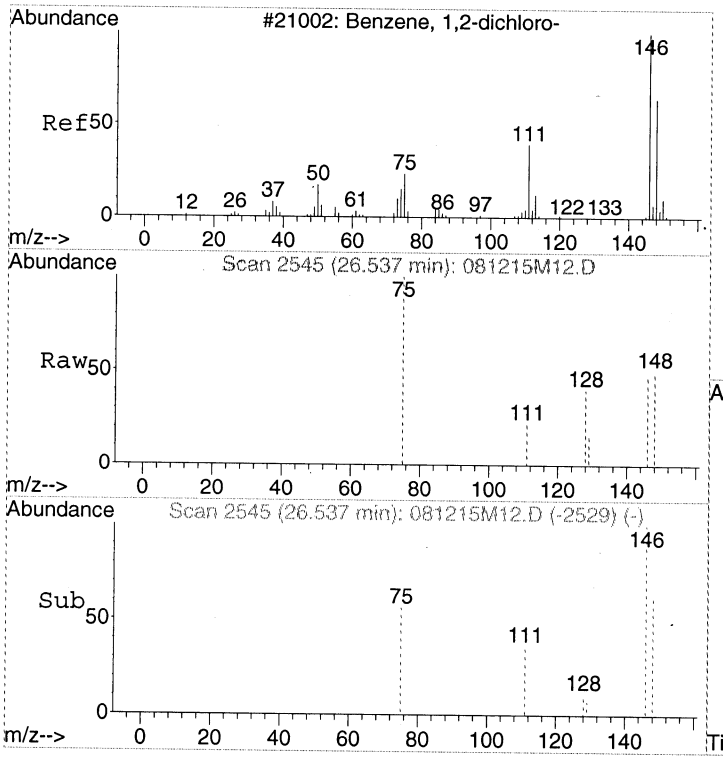


#33
1,4-Dichlorobenzene
Concen: Below Cal
RT: 25.94 min Scan# 2493
Delta R.T. -0.00 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

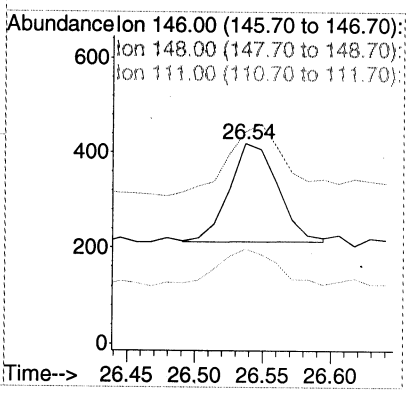
Tgt Ion:146 Resp: 494

Ion	Ratio	Lower	Upper
146	100		
148	65.2	43.9	83.9
111	39.5	17.2	57.2





#34
1,2-Dichlorobenzene
Concen: Below Cal
RT: 26.54 min Scan# 2545
Delta R.T. -0.01 min
Lab File: 081215M12.D
Acq: 12 Aug 2015 8:00 pm

Tgt Ion:146 Resp: 519

Ion	Ratio	Lower	Upper
146	100		
148	90.9	43.6	83.6#
111	40.5	20.6	60.6