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United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street Building 201
Richmond, CA 94804

Date: **10/14/2020**

Subject: **Analytical Testing Results - Project R20S18**
WorkOrder **2009036**

From: **Peter Husby, Director**
EPA Region 9 Laboratory
EMD-3-1

To: **Alana Lee**
California Site Cleanup Section 3
SFD-7-3

Attached are the results from the analysis of samples from the **MEW OU1 FY2020 Vapor Intrusion Investigation** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Audrey Johnson at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Analyses included in this report:

Volatile Organic Compounds by GC/MS

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Alana Lee	**California Site Cleanup Section 3**	**WorkOrder: 2009036**
Project Number: R20S18	**75 Hawthorne Street**	**Reported:** 10/14/20 13:25
Project: MEW OU1 FY2020 Vapor Intrusion Investigation	**San Francisco CA, 94105**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
F6-010-3ft-6d-R	2009036-01	Radiello 130	09/24/20 16:40	09/30/20 08:38
F6-008-3ft-6d-R	2009036-02	Radiello 130	09/24/20 16:46	09/30/20 08:38
F6-006-3ft-3d-R	2009036-03	Radiello 130	09/24/20 16:54	09/30/20 08:38

United States Environmental Protection Agency
Region 9 Laboratory
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Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Alana Lee	**California Site Cleanup Section 3**	**WorkOrder: 2009036**
Project Number: R20S18	**75 Hawthorne Street**	**Reported:** 10/14/20 13:25
Project: MEW OU1 FY2020 Vapor Intrusion Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 2009036-01									**Radiello 130 - Sampled: 09/24/20 16:40**
Sample ID: F6-010-3ft-6d-R									
						Volatile Organic Compounds Collected on Passive Air Sampling Devices			
1,1-Dichloroethene		3.6		0.16	ug/m³ Air	B20J004	10/05/20	10/05/20	Radiello D1
trans-1,2-Dichloroethene		6.7		0.19	"	"	"	"	Radiello D1
1,1-Dichloroethane		3.7		0.19	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		77		0.19	"	"	"	"	Radiello D1
Chloroform		41		0.16	"	"	"	"	Radiello D1
Trichloroethene	RE1	390		1.7	"	"	"	10/06/20	Radiello D1
Tetrachloroethene		19		0.20	"	"	"	10/05/20	Radiello D1
Surrogate: Toluene-d8			87 %	*86-118%*		"	"	"	
Lab ID: 2009036-02									**Radiello 130 - Sampled: 09/24/20 16:46**
Sample ID: F6-008-3ft-6d-R									
						Volatile Organic Compounds Collected on Passive Air Sampling Devices			
1,1-Dichloroethene		4.5		0.16	ug/m³ Air	B20J004	10/05/20	10/06/20	Radiello D1
trans-1,2-Dichloroethene		7.3		0.19	"	"	"	"	Radiello D1
1,1-Dichloroethane		4.9		0.19	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		81		0.19	"	"	"	"	Radiello D1
Chloroform		43		0.16	"	"	"	"	Radiello D1
Trichloroethene	RE1	390		1.7	"	"	"	10/06/20	Radiello D1
Tetrachloroethene		18		0.20	"	"	"	10/06/20	Radiello D1
Surrogate: Toluene-d8			88 %	*86-118%*		"	"	"	
Lab ID: 2009036-03									**Radiello 130 - Sampled: 09/24/20 16:54**
Sample ID: F6-006-3ft-3d-R									
						Volatile Organic Compounds Collected on Passive Air Sampling Devices			
1,1-Dichloroethene		4.9		0.31	ug/m³ Air	B20J004	10/05/20	10/06/20	Radiello D1
trans-1,2-Dichloroethene		10		0.38	"	"	"	"	Radiello D1
1,1-Dichloroethane		4.5		0.37	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		130		0.38	"	"	"	"	Radiello D1
Chloroform		34		0.31	"	"	"	"	Radiello D1
Trichloroethene	RE1	830		3.4	"	"	"	10/06/20	Radiello D1
Tetrachloroethene		35		0.40	"	"	"	10/06/20	Radiello D1
Surrogate: Toluene-d8			87 %	*86-118%*		"	"	"	

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Project Manager: Alana Lee	**California Site Cleanup Section 3**	**WorkOrder: 2009036**
Project Number: R20S18	**75 Hawthorne Street**	**Reported:** 10/14/20 13:25
Project: MEW OU1 FY2020 Vapor Intrusion Investigation	**San Francisco CA, 94105**	

Volatile Organic Compounds Collected on Passive Air Sampling Devices - Quality Control

EPA Region 9 Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B20J004 - Passive Air Sampler										
Blank (B20J004-BLK1)				Prepared & Analyzed: 10/05/20						
1,1-Dichloroethene	ND	0.13	ug/m³ Air							U
trans-1,2-Dichloroethene	ND	0.16	ug/m³ Air							U
1,1-Dichloroethane	ND	0.16	ug/m³ Air							U
cis-1,2-Dichloroethene	ND	0.16	ug/m³ Air							U
Chloroform	ND	0.13	ug/m³ Air							U
Trichloroethene	ND	0.14	ug/m³ Air							U
Tetrachloroethene	ND	0.17	ug/m³ Air							U
Surrogate: Toluene-d8	*882*		ug/m³ Air	*992*		*89*	*86-118*			
LCS (B20J004-BS1)				Prepared & Analyzed: 10/05/20						
1,1-Dichloroethene	11.1	0.13	ug/m³ Air	13.1		85	22-143			
trans-1,2-Dichloroethene	14.1	0.16	ug/m³ Air	16.0		88	35-133			
1,1-Dichloroethane	14.3	0.16	ug/m³ Air	15.7		91	43-140			
cis-1,2-Dichloroethene	14.6	0.16	ug/m³ Air	16.0		91	49-134			
Chloroform	11.9	0.13	ug/m³ Air	13.2		90	56-132			
Trichloroethene	12.8	0.14	ug/m³ Air	14.4		89	69-124			
Tetrachloroethene	14.5	0.17	ug/m³ Air	16.8		86	69-124			
Surrogate: Toluene-d8	*896*		ug/m³ Air	*992*		*90*	*86-118*			
LCS Dup (B20J004-BSD1)				Prepared & Analyzed: 10/05/20						
1,1-Dichloroethene	12.4	0.13	ug/m³ Air	13.1		95	22-143	11	62	
trans-1,2-Dichloroethene	15.7	0.16	ug/m³ Air	16.0		98	35-133	11	53	
1,1-Dichloroethane	15.9	0.16	ug/m³ Air	15.7		101	43-140	10	44	
cis-1,2-Dichloroethene	16.2	0.16	ug/m³ Air	16.0		101	49-134	10	39	
Chloroform	13.0	0.13	ug/m³ Air	13.2		98	56-132	9	41	
Trichloroethene	13.5	0.14	ug/m³ Air	14.4		94	69-124	5	20	
Tetrachloroethene	14.7	0.17	ug/m³ Air	16.8		88	69-124	2	20	
Ethylbenzene	13.3	0.15	ug/m³ Air	14.6		91	70-130	3	23	
Surrogate: Toluene-d8	*905*		ug/m³ Air	*992*		*91*	*86-118*			

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Project Manager: Alana Lee	**California Site Cleanup Section 3**	**WorkOrder: 2009036**
Project Number: R20S18	**75 Hawthorne Street**	**Reported:** 10/14/20 13:25
Project: MEW OU1 FY2020 Vapor Intrusion Investigation	**San Francisco CA, 94105**	

Volatile Organic Compounds Collected on Passive Air Sampling Devices - Quality Control

EPA Region 9 Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch S20J006 - B20J004										
Instrument Blank (S20J006-IBL1)				Prepared & Analyzed: 10/05/20						
1,1-Dichloroethene	ND	0.0	ug/L							U
trans-1,2-Dichloroethene	ND	0.0	ug/L							U
1,1-Dichloroethane	ND	0.0	ug/L							U
cis-1,2-Dichloroethene	ND	0.0	ug/L							U
Chloroform	ND	0.0	ug/L							U
Trichloroethene	ND	0.0	ug/L							U
Tetrachloroethene	ND	0.0	ug/L							U
Ethylbenzene	ND	0.0	ug/L							U
Surrogate: Toluene-d8	*4370*		ug/L	*200000*		*2*	*86-118*			
Batch S20J009 - B20J004										
Instrument Blank (S20J009-IBL1)				Prepared & Analyzed: 10/06/20						
1,1-Dichloroethene	ND	0.0	ug/L							U
trans-1,2-Dichloroethene	ND	0.0	ug/L							U
1,1-Dichloroethane	ND	0.0	ug/L							U
cis-1,2-Dichloroethene	ND	0.0	ug/L							U
Chloroform	ND	0.0	ug/L							U
Trichloroethene	ND	0.0	ug/L							U
Tetrachloroethene	ND	0.0	ug/L							U
Surrogate: Toluene-d8	*4350*		ug/L	*200000*		*2*	*86-118*			
Instrument Blank (S20J009-IBL2)				Prepared & Analyzed: 10/06/20						
1,1-Dichloroethene	ND	0.0	ug/L							U
trans-1,2-Dichloroethene	ND	0.0	ug/L							U
1,1-Dichloroethane	ND	0.0	ug/L							U
cis-1,2-Dichloroethene	ND	0.0	ug/L							U
Chloroform	ND	0.0	ug/L							U
Trichloroethene	ND	0.0	ug/L							U
Tetrachloroethene	ND	0.0	ug/L							U
Surrogate: Toluene-d8	*0.00*		ug/L				*86-118*			*U*

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Project Manager: Alana Lee	**California Site Cleanup Section 3**	**WorkOrder: 2009036**
Project Number: R20S18	**75 Hawthorne Street**	**Reported:** 10/14/20 13:25
Project: MEW OU1 FY2020 Vapor Intrusion Investigation	**San Francisco CA, 94105**	

Qualifiers and Comments

J	The reported result for this analyte should be considered an estimated value.
C1	The reported concentration for this analyte is below the quantitation limit.
U	Not Detected
NR	Not Reported
RE1, RE2, etc:	Result is from a sample re-analysis.

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Project: MEW OU1 FY2020 Vapor Intrusion Investigation	**San Francisco CA, 94105**	

F6-010-3ft-6d-R end date on COC 9/24/20, container end date is 9/28/20.
Logged in per COC. HK 9/30/2020 / TD 10/01/20

WORK ORDER

Printed: 10/5/2020 10:07:53AM

2009036

EPA Region 9 Laboratory

Client: **California Site Cleanup Section 3**
Project: **MEW OU1 FY2020 Vapor Intrusion Investigation**
Project Number: **R20S18**

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
Modified COVID-19	Modified COVID-19	5	No	Yes	No	No	No	

Date Due:	10/14/20 17:00 (14 day TAT)	SDG:	20274B
Received By:	Tatyana Dadiomov	Date Received:	09/30/20 08:38
Logged In By:	Holly Keuth	Date Logged In:	09/30/20 13:27

Analysis	Hold Time Expires	Comments
2009036-01 F6-010-3ft-6d-R [Radiello 130] Sampled 09/24/20 16:40 (GMT-08:00) Pacific Time (US &		**L395A 10-day TAT**
VOCs, Passive Samplers	03/23/21	check COC for requested analytes
2009036-02 F6-008-3ft-6d-R [Radiello 130] Sampled 09/24/20 16:46 (GMT-08:00) Pacific Time (US &		**L396A 10-day TAT**
VOCs, Passive Samplers	03/23/21	check COC for requested analytes
2009036-03 F6-006-3ft-6d-R [Radiello 130] Sampled 09/24/20 16:54 (GMT-08:00) Pacific Time (US &		**L975I 10-day TAT**
VOCs, Passive Samplers	03/23/21	check COC for requested analytes

Reviewed By

Date

U.S. Environmental Protection Agency

CHAIN OF CUSTODY RECORD

EPA REGION 9
75 Hawthorne Street
San Francisco, California 94105

Project / Case Number: R20S18
MEW (M6) OU1

FY20 MEW OU1 Vapor Intrusion and Sewer Pathway

EPA Project Manager contact:
Alana Lee, 415-972-3141 Lee.Alana@epa.gov

Laboratory: EPA
R9 Richmond

Samplers: Ray Chavira / Michael Schulman

Analysis: TCE, cis & trans 1,2-DCE, PCE, 1,1-DCE, 1,1-DCA, chloroform
(10 d TATrequested)

Start Date End Date	Start Time/ End/Time	Matrix	Comp	Grab	EPA ID Number	Unique ID	RAD130 - # Containers	AVG (beg / end) Temp - F	AVG (beg / end) Temp - F	TCE Screen -µg/m³	
09/18/2020 09/24/2020	17:10 16:40	AIR	X		F6-010-3ft-6d-R	L395A	1	65	65	100-1300	B-1094562
09/18/2020 09/24/2020	17:00 16:46	AIR	X		F6-008-3ft-6d-R	L396A	1	65	65	50-800	B-1094277
09/21/2020 09/24/2020	15:08 16:54	AIR	X		F6-006-3ft-3d-R	L975I	1	65	65	100-1000	B-1094889 / 1093150-D

Relinquished by: *(Signature)* Date/Time

Received by: *(Signature)* Date/Time

Relinquished by: *(Signature)* Date/Time

Received for Laboratory by: *(Signature)* Date/Time
Hadlemus 8:38 9-30-20

Temp

Seals Intact? (Y/N)

Conditions / Remarks

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Cooler/Box/Env 1 of 1

1337 South 46th Street
Richmond, CA 94804

U.S. Environmental Protection Agency
Region 9 Richmond Laboratory

Sample Receipt Checklist

Note in WO memo any items outside acceptable limits.

Project No: R20518 Work Order No(s): 2009036 Date: 9/30/20 by HK

CUSTODY SEALS Are Intact? ☐ Yes ☐ No ☒ N/A-none

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

TEMPERATURE 5 °C

Within Acceptable Range? (If preservation is "store cool at 4°C," use 0-6°C for acceptable range.) ☒ Yes ☐ No ☐ Ambient OK

Measured by: ☒ IR thermometer ☐ Probe thermometer inserted in provided temp. blank

☐ Provided Temp Blank was not used because

Check if applies: ☐ No ice present ☐ Insufficient/Melted Ice ☐ Tissue Received Frozen

☐ Still cooling (sampled today & iced) ☐ Delivery Delay ☐ Previously Frozen

SAMPLE CONTAINERS Are Intact? ☒ Yes ☐ No

Check if applies and identify sample IDs in comments:

☐ Bottle/Jar/Vial broken ☐ Cap broken or loose ☐ Insufficient sample amount

☐ Other

CHAIN OF CUSTODY

COC forms are present? ☒ Yes ☐ No

COC forms are consistent with sample labels? ☐ Yes ☒ No ☐ N/A-no COC form

Check if applies: ☒ Missing "relinquished by" signature

TAT and analyses match TDF or scheduling? ☒ Yes ☐ No

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

Samples are received within hold times? ☒ Yes ☐ No ☐ N/A-no hold times

Check if applies: ☐ Expires soon; notify analyst ☐ Expired

All shipping and sample containers are accounted for? ☒ Yes ☐ No

PRESERVATION / FILTRATION

Samples were filtered in field? ☐ Yes ☐ No ☒ N/A

Filtration is correctly identified on samples? ☐ Yes ☐ No ☒ N/A

Check if applies: ☐ Analyst to filter

Check if applies: ☐ Notify analyst to check for methyl mercury analysis and low-level mercury analysis by 1631

Samples were preserved in field? ☐ Yes ☐ No ☒ N/A

Check if applies: ☐ Analyst to preserve ☐ Sample Receiving to preserve (see page 2)

Preservation is correctly identified on samples? ☐ Yes ☐ No ☒ N/A

Field-preserved samples (excluding VOA vials for VOC analyses) have correct pH? ☐ Yes ☐ No ☒ N/A

Check if verified:

☐ Sulfide: pH >9 NaOH/Zinc acetate

☐ Cyanide: pH >12 NaOH

☐ Metals: pH <2 HNO_3

☐ Ferrous Iron: pH <2 HCl

☐ TOC/DOC: pH <2 H_2SO_4/H_3PO_4 (not HCl)

☐ Ammonia / Nitrate/Nitrite / TKN / Phosphorus: pH <2 H2SO4

☐ Other:

FOLLOW-UP / COMMENTS / UNUSUAL CHARACTERISTICS OBSERVED (for example, sample is pink):

Samples disinfected using 2% bleach.
F6-010-3ft-6tR end date on COC 9-24-2020, container end date is 9-28-2020. Logged in per ~~container~~. COC TD 10-01-20

FORM #: Q016
REV #: 2
REV. DATE: 07/29/19

Exposure Time in Minutes

	Sample number	Retrieved Date (XX/XX/XXXX)	Retrieved Time	Deployed Date	Deployed Time	Minutes	Start temp C	End temp C	Avg temp K	Plate #
1	F6-010-3ft-6d-R	9/24/2020	16:40	9/18/2020	17:10	8610	18.33	18.33	291.33	L395A
2	F6-008-3ft-6d-R	9/24/2020	16:46	9/18/2020	17:00	8626	18.33	18.33	291.33	L396A
3	F6-006-3ft-3d-R	9/24/2020	16:54	9/21/2020	15:08	4426	18.33	18.33	291.33	L975I

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BATCH

Calibration

2007003

Calibration Date: 07/06/2020

Instrument: AG5975CV

Calibration Analyses:

VOCs, Passive Samplers

Response Factor Report AG5975C

Method Path : C:\MSDCHEM\1\RAVIOLI METHODS\2020\
Method File : 070620.M
Title : Volatile Organic Analysis - Passive samplers
Last Update : Mon Jul 06 15:14:02 2020
Response Via : Initial Calibration

Calibration Files
25 =07062003.D 10 =07062004.D 5 =07062005.D 1 =07062006.D .15 =07062007.D .05 =07062008.D

		Compound	25	10	5	1	.15	.05	Avg	%RSD
1)	I	2-Fluorotoluene	----------ISTD----------							
2)	T	1,1-Dichloroet...	0.164	0.121	0.121	0.143	0.105	0.122	0.129	16.07
3)	T	trans-1,2-Dich...	0.173	0.147	0.139	0.171	0.141	0.147	0.153	9.88
4)	T	1,1-Dichloroet...	0.214	0.184	0.177	0.218	0.182	0.199	0.195	8.90
5)	T	cis-1,2-Dichlo...	0.209	0.187	0.179	0.217	0.184	0.201	0.196	7.66
6)	T	Chloroform	0.245	0.224	0.214	0.257	0.229	0.240	0.235	6.60
7)	T	1,1,1-Trichlor...	0.256	0.245	0.233	0.278	0.258	0.261	0.255	5.91
8)	T	Carbon tetrach...	0.244	0.237	0.227	0.259	0.245	0.244	0.243	4.39
9)	T	Benzene	0.643	0.629	0.610	0.717	0.707		0.661	7.28
10)	T	1,2-Dichloroet...	0.198	0.191	0.186	0.228	0.205	0.205	0.202	7.20
11)	T	Trichloroethene	0.210	0.205	0.202	0.225	0.222	0.216	0.213	4.42
12)	S	Toluene-d8	0.822	0.826	0.841	0.842	0.860	0.866	0.843	2.08
13)	T	Toluene	0.923	0.946	0.979	1.010	1.045	1.080	0.997	5.97
14)	T	1,1,2-Trichlor...	0.216	0.212	0.213	0.220	0.223	0.236	0.220	3.98
15)	T	Tetrachloroethene	0.303	0.305	0.316	0.307	0.317	0.343	0.315	4.67
16)	T	Chlorobenzene	0.776	0.801	0.833	0.773	0.821	0.874	0.813	4.72
17)	T	1,1,1,2-Tetrac...	0.265	0.271	0.281	0.263	0.280	0.287	0.275	3.52
18)	T	Ethylbenzene	1.203	1.260	1.351	1.257	1.358	1.447	1.313	6.79
19)	T	m&p-Xylene	0.919	0.965	1.040	0.973	1.069	1.129	1.016	7.66
[illegible])	T	o-Xylene	1.035	1.070	1.147	1.039	1.209	1.350	1.142	10.75
[illegible])	T	1,1,2,2-Tetrac...	0.461	0.477	0.503	0.441	0.486	0.508	0.479	5.31
[illegible])	T	1,3,5-Trimethy...	1.178	1.251	1.358	1.180	1.481	1.878	1.388	19.22
[illegible])	T	1,2,4-Trimethy...	1.192	1.275	1.368	1.142	1.324	1.528	1.305	10.51
[illegible])	T	Naphthalene	2.084	2.347	2.446	1.961	2.405	2.584	2.305	10.21
[illegible])		2-Fluorotoluen...			0.631				0.631	0.00
[illegible])		1,1-Dichloroet...			0.079				0.079	0.00
[illegible])		trans-1,2-Dich...			0.027				0.027	0.00
[illegible])		1,1-Dichloroet...			0.127				0.127	0.00
[illegible])		cis-1,2-Dichlo...			0.144				0.144	0.00
[illegible])		Chloroform SCAN			0.149				0.149	0.00
[illegible])		1,1,1-Trichlor...			0.153				0.153	0.00
[illegible])		Carbon tetrach...			0.144				0.144	0.00
[illegible])		Benzene SCAN			0.412				0.412	0.00
[illegible])		1,2-Dichloroet...			0.123				0.123	0.00
[illegible])		Trichloroethen...			0.134				0.134	0.00
[illegible])		Toluene-d8 SCAN			0.556				0.556	0.00
[illegible])		Toluene SCAN			0.656				0.656	0.00
[illegible])		1,1,2-Trichlor...			0.148				0.148	0.00
[illegible])		Tetrachloroeth...			0.214				0.214	0.00
[illegible])		Chlorobenzene ...			0.546				0.546	0.00
[illegible])		1,1,1,2-Tetrac...			0.172				0.172	0.00
[illegible])		Ethylbenzene SCAN			1.370				1.370	0.00

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Response Factor Report AG5975C

Method Path : C:\MSDCHEM\1\RAVIOLI METHODS\2020\
Method File : 070620.M

43)	m&p-Xylene SCAN	1.370	1.370	0.00
44)	o-Xylene SCAN	0.741	0.741	0.00
45)	1,1,2,2-Tetrac...	0.346	0.346	0.00
46)	1,3,5-Trimethy...	0.828	0.828	0.00
47)	1,2,4-Trimethy...	0.846	0.846	0.00
48)	Naphthalene SCAN	1.508	1.508	0.00

(#) = Out of Range

Method Path : C:\MSDCHEM\1\RAVIOLI METHODS\2020\
Method File : 070620.M
Title : Volatile Organic Analysis - Passive samplers
Last Update : Mon Jul 06 15:55:07 2020
Response Via : Initial Calibration

Total Cpnds : 48

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	2-Fluorotoluene	-109	10.991	1.000	A	1	A	B
2	T	1,1-Dichloroethene	-61	3.097	0.282	A	1	A	B
3	T	trans-1,2-Dichloroethene	-61	4.283	0.390	A	1	A	B
4	T	1,1-Dichloroethane	-63	5.039	0.458	A	1	A	B
5	T	cis-1,2-Dichloroethene	-61	6.061	0.551	A	1	A	B
6	T	Chloroform	-83	6.639	0.604	A	1	A	B
7	T	1,1,1-Trichloroethane	-97	6.895	0.627	A	2	A	B
8	T	Carbon tetrachloride	-117	7.175	0.653	A	1	A	B
9	T	Benzene	-78	7.503	0.683	A	1	A	B
10	T	1,2-Dichloroethane	-62	7.540	0.686	A	1	A	B
11	T	Trichloroethene	-130	8.575	0.780	A	3	A	B
12	S	Toluene-d8	-98	10.498	0.955	A	1	A	B
13	T	Toluene	-91	10.592	0.964	A	1	A	B
14	T	1,1,2-Trichloroethane	-97	11.243	1.023	A	1	A	B
15	T	Tetrachloroethene	-166	11.453	1.042	A	1	A	B
16	T	Chlorobenzene	-112	12.781	1.163	A	1	A	B
17	T	1,1,1,2-Tetrachloroethane	-131	12.940	1.177	A	1	A	B
18	T	Ethylbenzene	-91	12.996	1.182	A	2	A	B
19	T	m&p-Xylene	-91	13.186	1.200	A	2	A	B
20	T	o-Xylene	-91	13.798	1.255	A	1	A	B
21	T	1,1,2,2-Tetrachloroethane	-83	14.899	1.356	A	1	A	B
22	T	1,3,5-Trimethylbenzene	-105	15.369	1.398	A	1	A	B
23	T	1,2,4-Trimethylbenzene	-105	15.921	1.449	A	1	A	B
24	T	Naphthalene	-128	17.914	1.630	A	1	A	B
25		2-Fluorotoluene SCAN	109	10.990	1.000	A	1	A	B
26		1,1-Dichloroethene SCAN	61	3.096	0.282	A	2	A	B
27		trans-1,2-Dichloroethene SCAN	61	4.301	0.391	A	2	A	B
28		1,1-Dichloroethane SCAN	63	5.038	0.458	A	2	A	B
29		cis-1,2-Dichloroethene SCAN	61	6.066	0.552	A	3	A	B
30		Chloroform SCAN	83	6.638	0.604	A	2	A	B
31		1,1,1-Trichloroethane SCAN	97	6.906	0.628	A	2	A	B
32		Carbon tetrachloride SCAN	117	7.173	0.653	A	3	A	B
33		Benzene SCAN	78	7.502	0.683	A	3	A	B
34		1,2-Dichloroethane SCAN	62	7.550	0.687	A	2	A	B
35		Trichloroethene SCAN	130	8.579	0.781	A	3	A	B
36		Toluene-d8 SCAN	98	10.496	0.955	A	1	A	B
37		Toluene SCAN	91	10.601	0.965	A	2	A	B
38		1,1,2-Trichloroethane SCAN	97	11.252	1.024	A	3	A	B
39		Tetrachloroethene SCAN	166	11.451	1.042	A	3	A	B
40		Chlorobenzene SCAN	112	12.788	1.163	A	3	A	B
41		1,1,1,2-Tetrachloroethane SCAN	131	12.939	1.177	A	3	A	B
42		Ethylbenzene SCAN	91	13.193	1.200	A	2	A	B
43		m&p-Xylene SCAN	91	13.193	1.200	A	3	A	B
44		o-Xylene SCAN	91	13.805	1.256	A	2	A	B
45		1,1,2,2-Tetrachloroethane SCAN	83	14.901	1.356	A	2	A	B
46		1,3,5-Trimethylbenzene SCAN	105	15.368	1.398	A	2	A	B
47		1,2,4-Trimethylbenzene SCAN	105	15.919	1.448	A	3	A	B
48		Naphthalene SCAN	128	17.916	1.630	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

070620.M Tue Jul 07 11:25:29 2020

CHEMSTATION AREA COUNT REPORT

AG5975C
S20G004-SCV1
2004028 5 mg/L
7/6/2020
Mon Jul 06 15:14:02 2020
TD

#	Name	L1	L2	L3	L4	L5	L6
1)	2-Fluorotoluene	162110	183409	197351	191470	222341	223213
2)	1,1-Dichloroethene	132651	44314	23936	5473	698	273
3)	trans-1,2-Dichloroethene	140566	53916	27517	6548	938	329
4)	1,1-Dichloroethane	173186	67526	34880	8337	1211	444
5)	cis-1,2-Dichloroethene	169532	68717	35362	8298	1227	449
6)	Chloroform	198421	82199	42303	9851	1525	536
7)	1,1,1-Trichloroethane	207653	90017	46014	10641	1723	582
8)	Carbon tetrachloride	197568	86838	44785	9930	1634	545
9)	Benzene	520895	230626	120434	27466	4718	1630
10)	1,2-Dichloroethane	160783	69981	36785	8717	1369	458
11)	Trichloroethene	170204	75121	39853	8621	1484	483
12)	Toluene-d8	665878	303097	165947	32242	5736	1932
13)	Toluene	747871	347077	193174	38683	6970	2410
14)	1,1,2-Trichloroethane	175148	77666	42079	8421	1488	526
15)	Tetrachloroethene	245551	111991	62352	11748	2116	765
16)	Chlorobenzene	628976	293882	164469	29587	5479	1951
17)	1,1,1,2-Tetrachloroethane	214643	99302	55478	10085	1868	641
18)	Ethylbenzene	974839	462068	266556	48130	9057	3231
19)	m&p-Xylene	1489129	707889	410633	74516	14266	5042
20)	o-Xylene	838771	392547	226344	39773	8066	3014
21)	1,1,2,2-Tetrachloroethane	373783	174920	99187	16877	3240	1134
22)	1,3,5-Trimethylbenzene	954508	458877	268024	45189	9880	4191
23)	1,2,4-Trimethylbenzene	966329	467778	269997	43747	8829	3410
24)	Naphthalene	1689127	860839	482753	75107	16045	5768

CHEMSTATION CONCENTRATION REPORT

AG5975C
S20G004-SCV1
2004028 5 mg/L
7/6/2020
Mon Jul 06 15:14:02 2020
TD

#	Name	L1	L2	L3	L4	L5	L6
1)	2-Fluorotoluene	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00
2)	1,1-Dichloroethene	25000.00	10000.00	5000.00	1000.00	150.00	50.00
3)	trans-1,2-Dichloroethene	25000.00	10000.00	5000.00	1000.00	150.00	50.00
4)	1,1-Dichloroethane	25000.00	10000.00	5000.00	1000.00	150.00	50.00
5)	cis-1,2-Dichloroethene	25000.00	10000.00	5000.00	1000.00	150.00	50.00
6)	Chloroform	25000.00	10000.00	5000.00	1000.00	150.00	50.00
7)	1,1,1-Trichloroethane	25000.00	10000.00	5000.00	1000.00	150.00	50.00
8)	Carbon tetrachloride	25000.00	10000.00	5000.00	1000.00	150.00	50.00
9)	Benzene	25000.00	10000.00	5000.00	1000.00	150.00	1.00
10)	1,2-Dichloroethane	25000.00	10000.00	5000.00	1000.00	150.00	50.00
11)	Trichloroethene	25000.00	10000.00	5000.00	1000.00	150.00	50.00
12)	Toluene-d8	25000.00	10000.00	5000.00	1000.00	150.00	50.00
13)	Toluene	25000.00	10000.00	5000.00	1000.00	150.00	50.00
14)	1,1,2-Trichloroethane	25000.00	10000.00	5000.00	1000.00	150.00	50.00
15)	Tetrachloroethene	25000.00	10000.00	5000.00	1000.00	150.00	50.00
16)	Chlorobenzene	25000.00	10000.00	5000.00	1000.00	150.00	50.00
17)	1,1,1,2-Tetrachloroethane	25000.00	10000.00	5000.00	1000.00	150.00	50.00
18)	Ethylbenzene	25000.00	10000.00	5000.00	1000.00	150.00	50.00
19)	m&p-Xylene	50000.00	20000.00	10000.00	2000.00	300.00	100.00
20)	o-Xylene	25000.00	10000.00	5000.00	1000.00	150.00	50.00
21)	1,1,2,2-Tetrachloroethane	25000.00	10000.00	5000.00	1000.00	150.00	50.00
22)	1,3,5-Trimethylbenzene	25000.00	10000.00	5000.00	1000.00	150.00	50.00
23)	1,2,4-Trimethylbenzene	25000.00	10000.00	5000.00	1000.00	150.00	50.00
24)	Naphthalene	25000.00	10000.00	5000.00	1000.00	150.00	50.00

SCV REPORT

Instrument Name: AG5975C
Sample Name: S20G004-SCV1
Misc Info: 2004028 5 mg/L
Date Acquired: 7/6/2020
QLast Update: Mon Jul 06 15:14:02 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.991	5000	5000.00	100%	70	130	pass
2)	1,1-Dichloroethene	3.097	5000	5635.30	113%	70	130	pass
3)	trans-1,2-Dichloroethene	4.283	5000	5236.03	105%	70	130	pass
4)	1,1-Dichloroethane	5.039	5000	5051.53	101%	70	130	pass
5)	cis-1,2-Dichloroethene	6.061	5000	5085.65	102%	70	130	pass
6)	Chloroform	6.639	5000	5076.15	102%	70	130	pass
7)	1,1,1-Trichloroethane	6.895	5000	5072.73	101%	70	130	pass
8)	Carbon tetrachloride	7.175	5000	5169.07	103%	70	130	pass
9)	Benzene	7.503	5000	5027.63	101%	70	130	pass
10)	1,2-Dichloroethane	7.540	5000	5073.86	101%	70	130	pass
11)	Trichloroethene	8.575	5000	5167.82	103%	70	130	pass
12)	Toluene-d8	10.498	5000	5033.76	101%	70	130	pass
13)	Toluene	10.592	5000	5069.84	101%	70	130	pass
14)	1,1,2-Trichloroethane	11.243	5000	5061.77	101%	70	130	pass
15)	Tetrachloroethene	11.453	5000	5115.80	102%	70	130	pass
16)	Chlorobenzene	12.781	5000	5096.91	102%	70	130	pass
17)	1,1,1,2-Tetrachloroethane	12.940	5000	5100.23	102%	70	130	pass
18)	Ethylbenzene	12.996	5000	4996.31	100%	70	130	pass
19)	m&p-Xylene	13.186	10000	9835.72	98%	70	130	pass
20)	o-Xylene	13.798	5000	4820.46	96%	70	130	pass
21)	1,1,2,2-Tetrachloroethane	14.899	5000	4984.63	100%	70	130	pass
22)	1,3,5-Trimethylbenzene	15.369	5000	4526.40	91%	70	130	pass
23)	1,2,4-Trimethylbenzene	15.921	5000	4779.51	96%	70	130	pass
24)	Naphthalene	17.914	5000	4656.31	93%	70	130	pass

SEQUENCE

S20H039

Sequence Date: 08/19/2020

Instrument: AG5975CV

Sequence Analyses:

VOCs, Passive Samplers

ANALYST / REVIEWER - DATA REVIEW CHECKLIST

BATCH #:	ICAL	SEQUENCE #:	S20H039 08/20/20
BATCH #:		ANALYSIS:	VOA Passive Air.

	CHECKLIST ITEM	N/A	ANALYST Y/N	REVIEWER Y/N	IDENTIFY OUTLIERS / COMMENTS
DOCUMENTATION	ANALYST: Bench sheet(s) attached? REVIEWER: Bench sheet(s) reviewed?	✔			
	ANALYST: Sequence log(s) attached? REVIEWER: Sequence log(s) reviewed?		Y	Y	
	ANALYST: Every run has a PDF in LIMS? REVIEWER: Every PDF reviewed?		Y	Y	
INITIAL CALIBRATION	Date of Initial Calibration used: If applicable, note date of "Last Update" in Comments.	Fri Aug 21 08:33:54 2020			
	Initial Calibration ID (LIMS number):	2008017			
	ICAL within QC criteria?		Y	Y	
	SCV within QC criteria?		Y	Y	
INSTRUMENT / QC CHECKS	Tune or degradation checks within QC criteria?		Y	Y	
	CCV(s) within QC criteria?	✔			
	QLS(s) within QC criteria?	✔			
	CB(s) or storage blank(s) within QC criteria?	✔			
	Other instrument checks within QC criteria? Specify if applicable.	✔			
BATCH QCs	Method blanks < 1/2 QL?	✔			
	LCS(s) or SRM(s) within QC criteria?	✔			
	MSs/MSDs and/or DUPs within QC criteria?	✔			
	Other method-specific QCs within QC criteria? Specify if applicable.	✔			

ANALYST / REVIEWER - DATA REVIEW CHECKLIST

BATCH #:	ICAL	SEQUENCE #:	S20H039 08/20/20
BATCH #:		ANALYSIS:	VOA Passive Air.

	CHECKLIST ITEM	N/A	ANALYST Y/N	REVIEWER Y/N	IDENTIFY OUTLIERS / COMMENTS
IS / SS	Internal standards within QC criteria?	☐	Y	Y	
	Surrogates within QC criteria?	☑			
SAMPLE DATA	Were samples prepared & analyzed within holding time?	☑			
	If samples need to be re-run, were RE(s) made in LIMS?	☑			
	Do any samples need to be re-digested or re-extracted?	☑			
	Were all data qualifiers appropriately applied?	☑			
	Are problems, anomalies, discrepancies documented in LIMS? Specify if applicable.	☑			
MANUAL INT	Were manual integrations performed and documented? Specify if applicable.	☐	Y	Y	

APPROVALS	ANALYST INITIALS & DATE:	TD 08/21/20
	REVIEWED BY:	Rajabi, Ziyad Digitally signed by Rajabi, Ziyad Date: 2020.10.02 15:55:42 -07'00' SIGN HERE

COMMENTS

Custom analyte list.

Injection Log

Operator: TD
Directory: C:\msdchem\1\Ravioli Data\2020\082020\

Vial	File Name	Mult	Sample Info	Misc Info	Date Acquired
1	08202001.D	1	S20H039-IBL1		20 Aug 2020 14:53
2	08202002.D	1	S20H039-TUN1	BFB 2016028	20 Aug 2020 15:15
3	08202003.D	1	S20H039-CAL1	2030068 25 mg/L	20 Aug 2020 15:25
4	08202004.D	1	S20H039-CAL2	2030069 10 mg/L	20 Aug 2020 15:49
5	08202005.D	1	S20H039-CAL3	2030070 5 mg/L	20 Aug 2020 16:13
6	08202006.D	1	S20H039-CAL4	2030071 1 mg/L	20 Aug 2020 16:37
7	08202007.D	1	S20H039-CAL5	2030072 0.15 mg/L	20 Aug 2020 17:01
8	08202008.D	1	S20H039-CAL6	2030073 0.05 mg/L	20 Aug 2020 17:25
9	08202009.D	1	S20H039-SCV1	2030074 5 mg/L	20 Aug 2020 17:49

GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\Ravioli Data\2020\082020\08202002.D
Tune Time : 20 Aug 2020 15:15

Daily Calibration File : C:\msdchem\1\Ravioli Data\2020\082020\08202005.D

File	Sample	Surrogate Recovery %	Internal Standard Responses
			673233
08202003.D			
	S20H039-CA	402*	648237
08202004.D			
	S20H039-CA	248*	658265
08202005.D			
	S20H039-CA	95	673233
08202006.D			
	S20H039-CA	22*	620555
08202007.D			
	S20H039-CA	3*	687675
08202008.D			
	S20H039-CA	1*	604968
08202009.D			
	S20H039-SC	87	757040

(fails) - fails 12hr time check * - fails criteria

Created: Fri Aug 21 08:36:04 2020 AG5975C

Analysis Sequence

S20H039

Project:
Analysis:

Instrument: AG5975CV **Calibration ID:** 2007003 Printed: 08/21/2020 9:17 am

Lab Number	Sample Name	Order	Analyzed Date	STD ID	ISTD ID	Sequenced By	File ID	Comments
S20H039-IBL1	Instrument Blank	1	8/20/20 14:53		2030067	TD	08202001.D	
S20H039-TUN1	BFB	2	8/20/20 15:15	2016028		TD	08202002.D	
S20H039-CAL1	Cal Standard	3	8/20/20 15:25	2030068		TD	08202003.D	
S20H039-CAL2	Cal Standard	4	8/20/20 15:49	2030069		TD	08202004.D	
S20H039-CAL3	Cal Standard	5	8/20/20 16:13	2030070		TD	08202005.D	
S20H039-CAL4	Cal Standard	6	8/20/20 16:37	2030071		TD	08202006.D	
S20H039-CAL5	Cal Standard	7	8/20/20 17:01	2030072		TD	08202007.D	
S20H039-CAL6	Cal Standard	8	8/20/20 17:25	2030073		TD	08202008.D	
S20H039-SCV1	Secondary Cal Check	9	8/20/20 17:49	2030074		TD	08202009.D	

Sequence Comments

Reagents

Reagent #	Description

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SEQUENCE DATA

S20H039

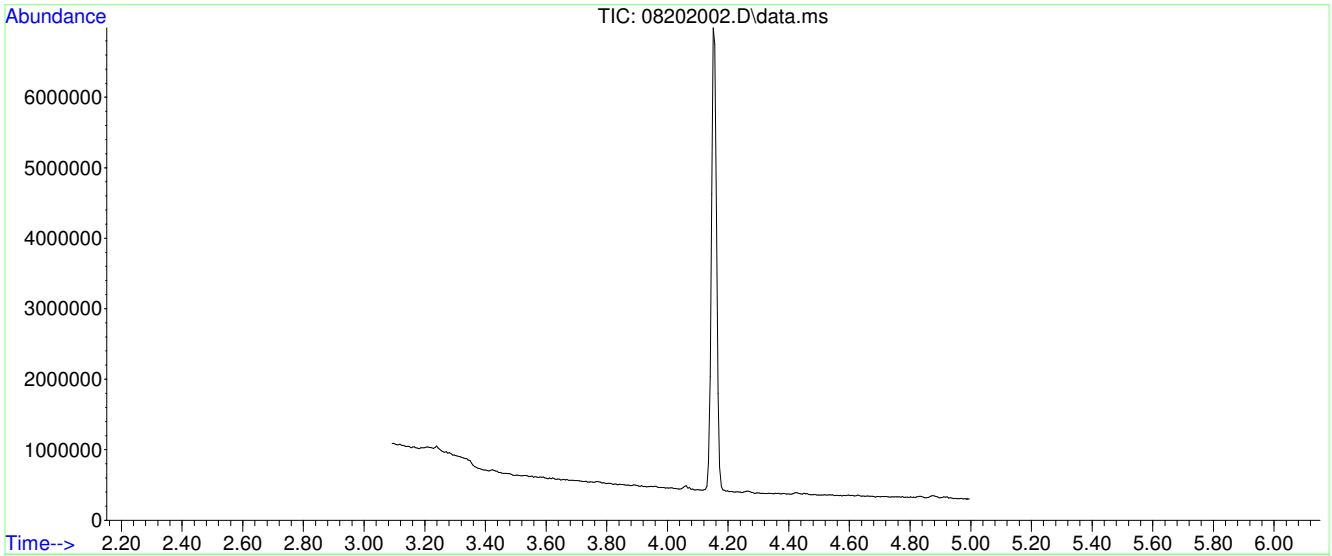
S20H039-TUN1

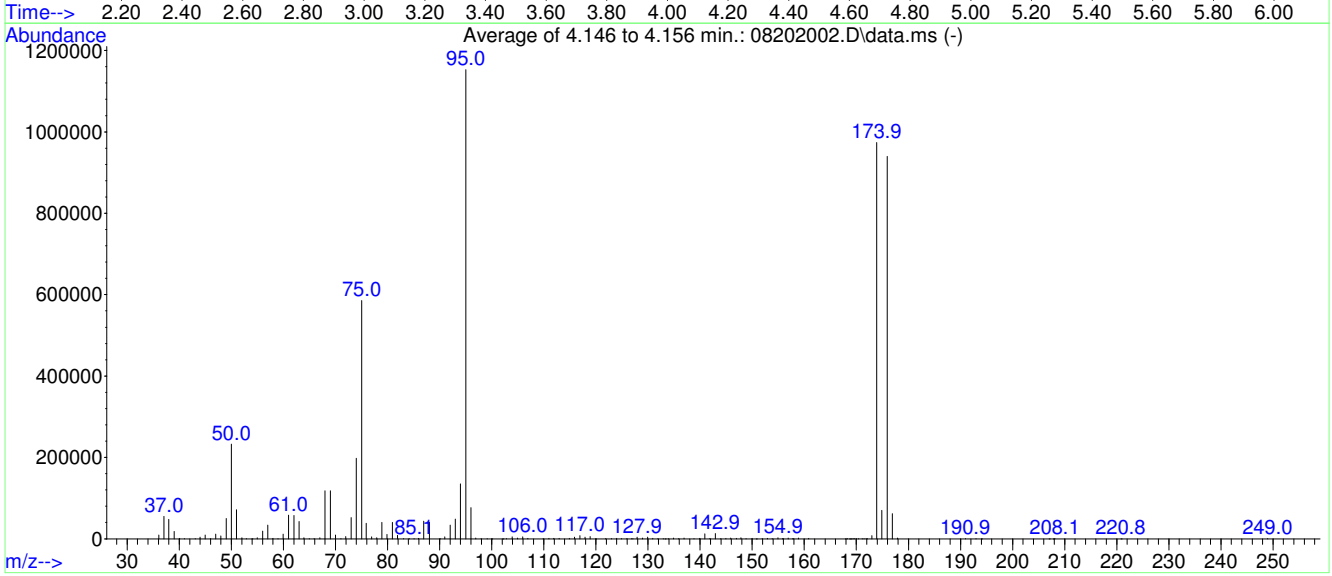
Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\082020\
Data File : 08202002.D
Acq On : 20 Aug 2020 15:15
Operator : TD
Sample : S20H039-TUN1
Misc : BFB 2016028
ALS Vial : 2 Sample Multiplier: 1
InstName : AG5975C

Integration File: Ravioli.P

Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\082020.M
Title : Volatile Organic Analysis - Passive samplers
Last Update : Fri Aug 21 08:33:54 2020





AutoFind: Scans 202, 203, 204; Background Corrected with Scan 195

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.2	232911	PASS
75	95	30	60	50.8	585813	PASS
95	95	100	100	100.0	1152511	PASS
96	95	5	9	6.6	76331	PASS
173	174	0.00	2	0.8	7673	PASS
174	95	50	120	84.5	973973	PASS
175	174	5	9	7.1	69584	PASS
176	174	95	101	96.5	939968	PASS
177	176	5	9	6.6	61843	PASS

Average of 4.146 to 4.156 min.: 08202002.D\data.ms
S20H039-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	9517	48.00	7027	58.95	258	70.00	9635
37.05	55357	49.00	49627	59.95	11406	71.05	479
38.00	47609	50.00	232911	61.00	58325	71.95	5719
39.00	17974	51.00	71652	62.00	57442	73.00	52114
40.05	890	52.00	2929	63.00	42288	74.00	197568
41.00	84	52.90	204	63.95	2952	75.00	585813
43.05	591	53.95	10	64.95	191	75.90	38507
44.00	4051	55.00	2848	65.90	492	76.95	4767
45.00	9535	56.00	18994	67.00	2390	77.90	2523
46.00	462	57.00	33861	68.00	117707	78.90	40464
47.00	11581	58.00	1082	69.00	118007	79.90	11132

Average of 4.146 to 4.156 min.: 08202002.D\data.ms
S20H039-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
80.90	40713	93.00	48144	104.95	1649	118.90	5720
81.90	8793	94.00	134819	105.95	4521	119.95	21
83.05	732	95.00	1.15251e+006	106.90	1216	121.85	370
84.15	72	96.00	76331	109.85	717	123.00	437
85.10	149	96.95	2145	110.95	1170	123.95	770
85.95	1075	97.95	88	111.90	907	124.90	464
86.95	43055	99.15	133	112.95	1255	125.95	523
88.00	40048	100.00	55	114.90	1351	126.85	416
90.10	85	102.10	50	115.90	4431	127.10	156
90.95	4717	102.85	287	116.95	7983	127.90	4060
92.00	33882	103.90	4876	117.90	4202	128.95	1897

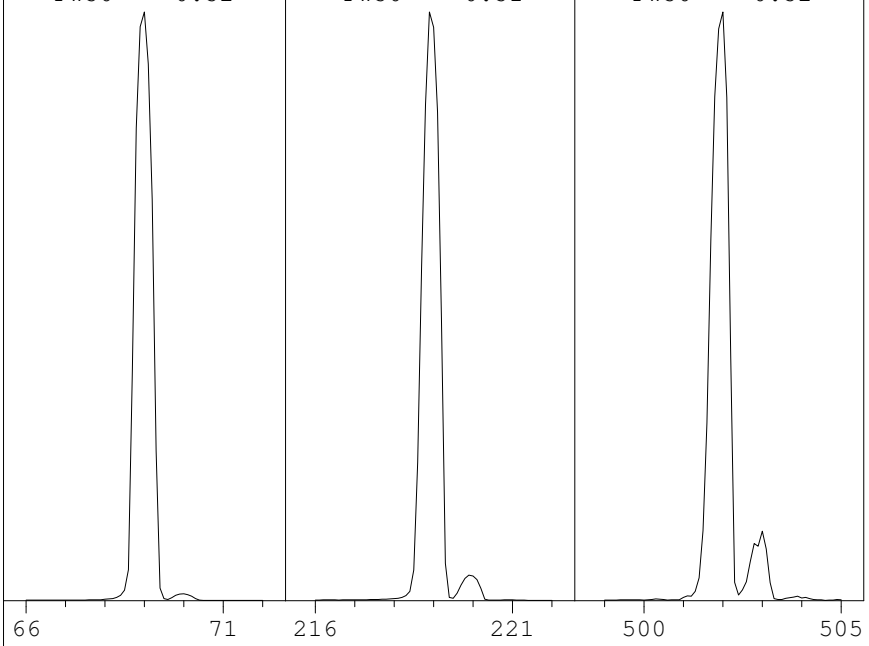
Average of 4.146 to 4.156 min.: 08202002.D\data.ms
S20H039-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
129.90	3885	140.90	12033	151.95	504	167.90	54
130.90	1497	141.90	1518	152.90	1027	168.30	122
131.90	167	142.90	12793	153.85	746	168.70	55
132.95	387	143.95	599	154.95	2637	169.00	53
133.30	58	144.95	1003	155.80	268	169.40	92
133.90	272	145.90	1611	156.00	223	169.65	299
134.90	2299	146.95	768	156.90	1924	170.00	126
135.85	523	147.85	2552	157.80	64	170.45	178
136.90	2136	148.85	764	157.95	190	171.15	456
138.85	513	149.95	1250	158.85	1548	171.50	129
139.90	1010	150.80	58	160.85	1010	171.90	508

Average of 4.146 to 4.156 min.: 08202002.D\data.ms
S20H039-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
172.10	525	207.80	62				
173.00	7673	208.10	189				
173.90	973973	220.80	62				
174.90	69584	249.00	155				
175.90	939968						
176.90	61843						
177.90	1588						
190.95	360						
192.95	216						
194.00	56						
207.00	38						

Mass	69.00	Mass	218.90	Mass	502.00
Ab	575143	Ab	388856	Ab	13189
Pw50	0.52	Pw50	0.51	Pw50	0.52

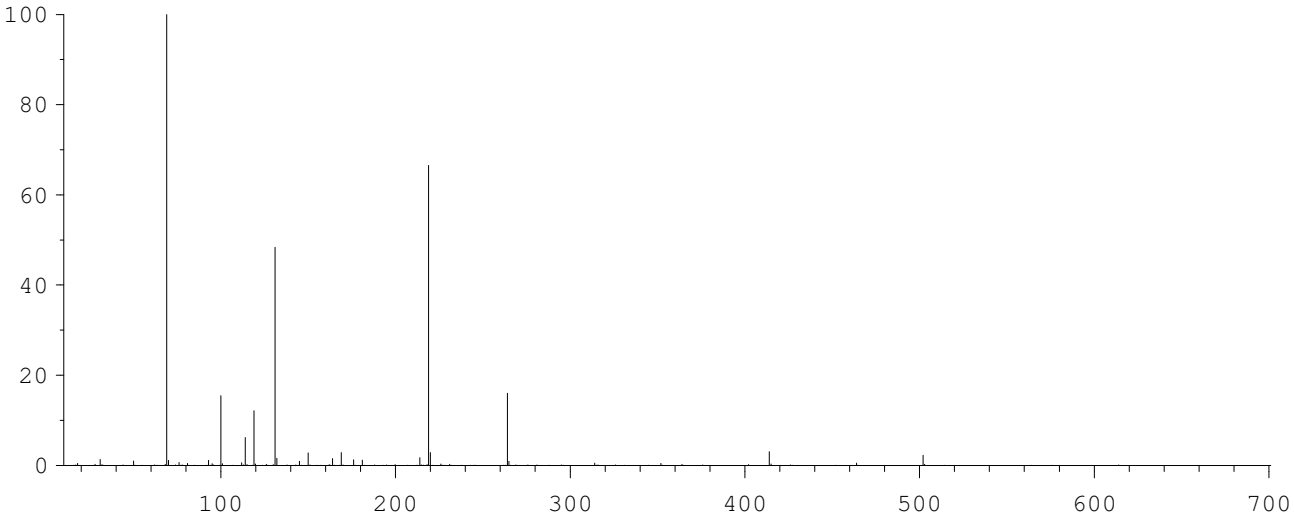


Ion Pol	Pos	MassGain	-1191
		MassOffs	-38
Emission	34.6	AmuGain	978
EIEnrgy	69.9	AmuOffs	127.94
Filament	1	Wid219	-0.003
		DC Pol	Pos
Repeller	29.79		
IonFcus	69.3	HEDEnab	On
EntLens	0.0	EMVolts	1329
EntOffs	Var		
		Samples	8
PFTBA	Open	Averages	3
		Stepsize	0.10

Temperatures and Pressures:

MS Source	230	Turbo Speed	100
MS Quad	150	HiVac	0.00e00

Scan: 10.00 - 701.00 Samples: 8 Thresh: 100 Step: 0.10
125 peaks Base: 69.00 Abundance: 551040



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	551040	100.00	70.00	6195	1.12
219.00	366720	66.55	220.00	15616	4.26
502.00	12288	2.23	503.00	1319	10.73

Air/Water Check: H20~0.43% N2~0.28% O2~0.15% CO2~0.09% N2/H2O~64.78%

Column(1) Flow: 1 Column(2): -1.79769e+308 ml/min. Interface Temp: 300

Ramp Criteria:
Ion Focus Maximum 90 volts using ion 502; EM Gain 51766
Repeller Maximum 30 volts using ion 219; Gain Factor 0.52

MassGain Values(Samples): -1179(3) -1177(2) -1157(1) -1126(0) -1040(FS)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset:	127.9	127.9	127.9	127.9	127.9	127.9	127.9
Entrance Lens Offset:	16.8	14.1	14.3	15.6	16.1	16.8	16.8
Target Abund(%):	1.0	100.0	45.0	55.0	2.5	2.0	
Actual Tune Abund(%):	1.0	100.0	48.4	66.6	3.0	2.2	

S20H039-CAL1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\082020\
Data File : 08202003.D
Acq On : 20 Aug 2020 15:25
InstName : AG5975C
Operator : TD
Sample : S20H039-CAL1
Misc : 2030068 25 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 08:30:58 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\082020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:30:13 2020
Response via : Initial Calibration

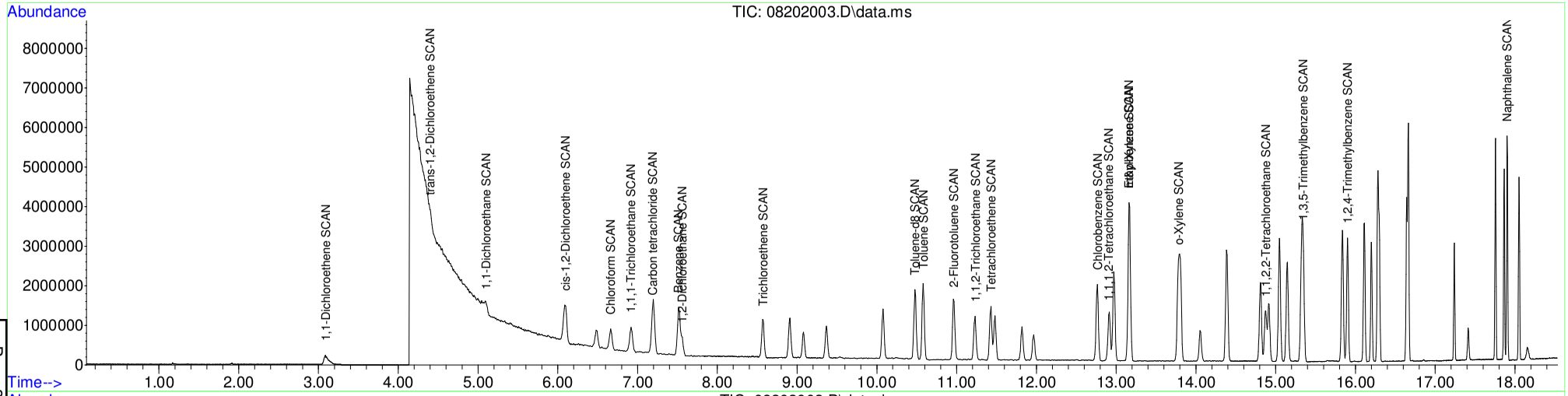
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	648237	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	2550057	20095.11 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 401.90%#		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.086	61	574530	20159.30 ug/L	84
3] trans-1,2-Dichloroethene	4.396	61	656585	21954.29 ug/L	99
4] 1,1-Dichloroethane	5.099	63	803642	21586.82 ug/L	99
5] cis-1,2-Dichloroethene	6.094	61	844386	21487.23 ug/L	99
6] Chloroform	6.664	83	899977	22375.19 ug/L	99
7] 1,1,1-Trichloroethane	6.919	97	968878	22180.47 ug/L	99
8] Carbon tetrachloride	7.187	117	914170	22235.33 ug/L	99
9] Benzene	7.515	78	2304166	20920.52 ug/L	99
10] 1,2-Dichloroethane	7.552	62	846849	21538.88 ug/L	98
11] Trichloroethene	8.569	130	695334	20968.15 ug/L	93
13] Toluene	10.571	91	3008786	18597.43 ug/L	99
14] 1,1,2-Trichloroethane	11.222	97	733249	20799.65 ug/L	97
15] Tetrachloroethene	11.432	166	940662	20090.91 ug/L	99
16] Chlorobenzene	12.757	112	2268821	19585.13 ug/L	93
17] 1,1,1,2-Tetrachloroethane	12.908	131	836326	20147.92 ug/L	99
18] Ethylbenzene	12.972	91	3692757	18751.96 ug/L	98
19] m&p-Xylene	13.162	91	5704874	37066.22 ug/L	98
20] o-Xylene	13.774	91	3130122	19035.81 ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.873	83	1420481	19491.87 ug/L	100
22] 1,3,5-Trimethylbenzene	15.345	105	3358352	19188.41 ug/L	97
23] 1,2,4-Trimethylbenzene	15.901	105	3395311	18676.82 ug/L	97
24] Naphthalene	17.903	128	5320470	18517.34 ug/L	100
25) 2-Fluorotoluene SCAN	10.969	109	312945	4952.35 ug/L	87
26) 1,1-Dichloroethene SCAN	3.085	61	311746	23230.08 ug/L	87
27) trans-1,2-Dichloroethe...	4.394	61	351983	21195.80 ug/L #	62
28) 1,1-Dichloroethane SCAN	5.104	63	450335	23432.33 ug/L	97
29) cis-1,2-Dichloroethene...	6.093	61	461049	22391.00 ug/L #	77
30) Chloroform SCAN	6.662	83	492825	22066.51 ug/L	94
31) 1,1,1-Trichloroethane ...	6.918	97	499412	24538.45 ug/L	91
32) Carbon tetrachloride SCAN	7.186	117	453188	21347.00 ug/L	92
33) Benzene SCAN	7.514	78	1250753	22320.05 ug/L	96
34) 1,2-Dichloroethane SCAN	7.563	62	455179	21997.91 ug/L	96
35) Trichloroethene SCAN	8.574	130	336981	21882.74 ug/L	86
36) Toluene-d8 SCAN	10.475	98	1338484	21658.66 ug/L	95
37) Toluene SCAN	10.580	91	1546218	19537.05 ug/L	99
38) 1,1,2-Trichloroethane ...	11.231	97	383748	21602.31 ug/L	93
39) Tetrachloroethene SCAN	11.430	166	422055	22197.27 ug/L	95
40) Chlorobenzene SCAN	12.764	112	1101434	20366.73 ug/L	92
41) 1,1,1,2-Tetrachloroeth...	12.907	131	399709	19971.60 ug/L	95
42) Ethylbenzene SCAN	13.161	91	2927134	20301.32 ug/L	92
43) m&p-Xylene SCAN	13.161	91	2927134	20301.32 ug/L	92
44) o-Xylene SCAN	13.781	91	1599160	20720.30 ug/L	96
45) 1,1,2,2-Tetrachloroeth...	14.875	83	787765	20932.68 ug/L	98
46) 1,3,5-Trimethylbenzene...	15.343	105	1669431	20524.56 ug/L	98
47) 1,2,4-Trimethylbenzene...	15.899	105	1675093	20126.80 ug/L	96
48) Naphthalene SCAN	17.901	128	2499778	19849.60 ug/L	99

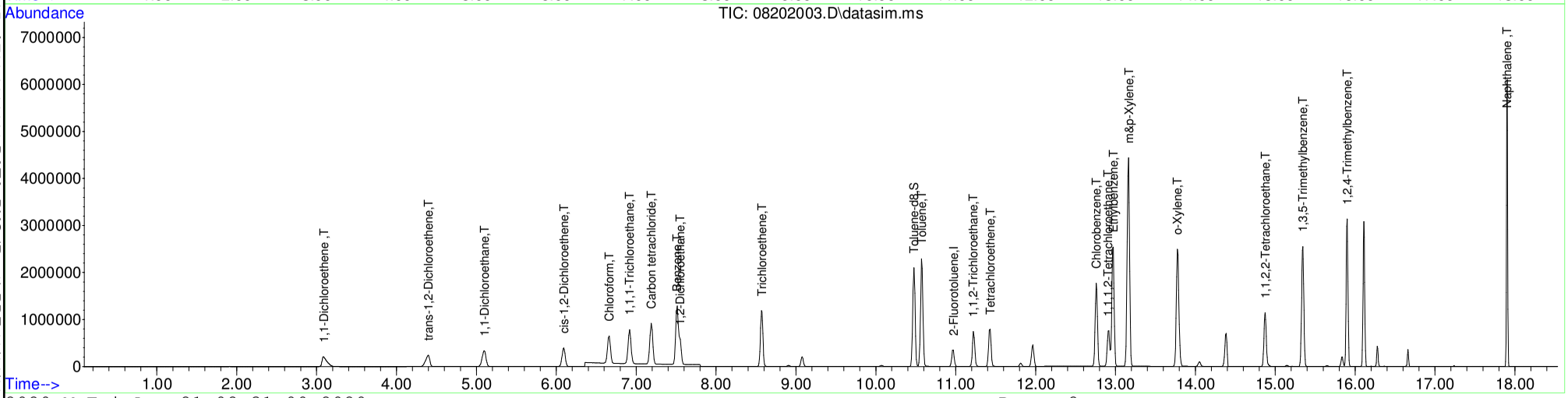
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\082020\
Data File : 08202003.D
Acq On : 20 Aug 2020 15:25
InstName : AG5975C
Operator : TD
Sample : S20H039-CAL1
Misc : 2030068 25 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 08:30:58 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\082020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:30:13 2020
Response via : Initial Calibration





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S20H039-CAL2

Data Path : C:\msdchem\1\Ravioli Data\2020\082020\
Data File : 08202004.D
Acq On : 20 Aug 2020 15:49
InstName : AG5975C
Operator : TD
Sample : S20H039-CAL2
Misc : 2030069 10 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 21 08:31:02 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\082020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:30:13 2020
Response via : Initial Calibration

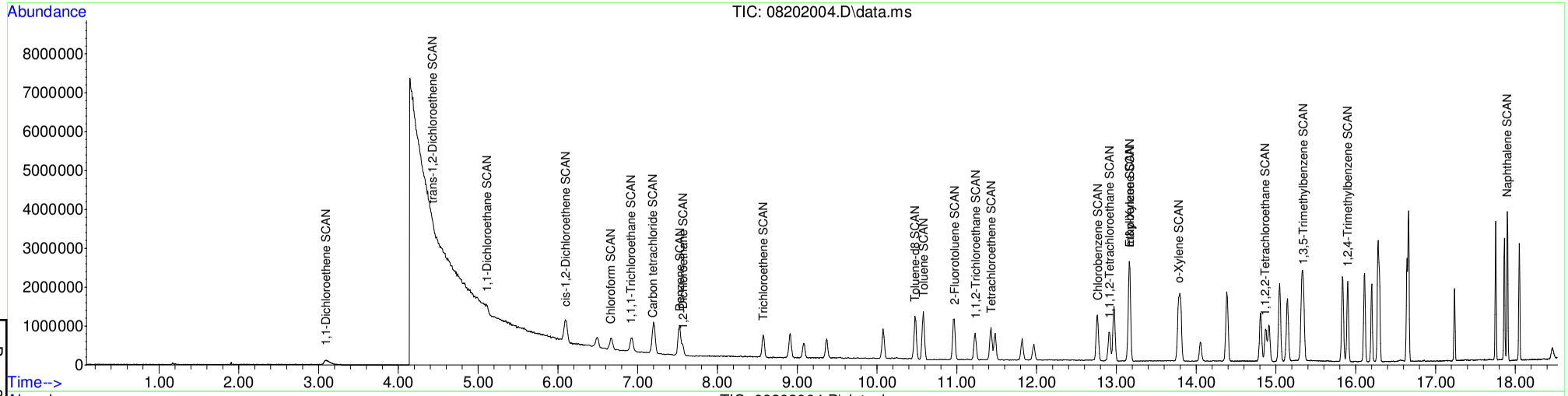
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	658265	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	1598935	12408.08 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 248.16%#		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.089	61	337762	11670.96 ug/L	85
3] trans-1,2-Dichloroethene	4.415	61	385140	12681.78 ug/L	99
4] 1,1-Dichloroethane	5.112	63	475966	12590.27 ug/L	99
5] cis-1,2-Dichloroethene	6.101	61	502402	12589.94 ug/L	99
6] Chloroform	6.664	83	526532	12891.19 ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	573090	12919.85 ug/L	100
8] Carbon tetrachloride	7.187	117	543134	13009.38 ug/L	100
9] Benzene	7.515	78	1390859	12435.83 ug/L	100
10] 1,2-Dichloroethane	7.551	62	505651	12664.88 ug/L	98
11] Trichloroethene	8.575	130	423697	12582.16 ug/L	93
13] Toluene	10.571	91	1898928	11558.54 ug/L	100
14] 1,1,2-Trichloroethane	11.222	97	449618	12559.76 ug/L	97
15] Tetrachloroethene	11.432	166	593500	12483.03 ug/L	99
16] Chlorobenzene	12.757	112	1444139	12276.32 ug/L	93
17] 1,1,1,2-Tetrachloroethane	12.908	131	527138	12505.81 ug/L	100
18] Ethylbenzene	12.964	91	2370804	11855.63 ug/L	98
19] m&p-Xylene	13.162	91	3652536	23370.06 ug/L	97
20] o-Xylene	13.774	91	2010115	12038.27 ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.873	83	905676	12238.38 ug/L	100
22] 1,3,5-Trimethylbenzene	15.340	105	2186063	12300.10 ug/L	96
23] 1,2,4-Trimethylbenzene	15.901	105	2217101	12009.97 ug/L	97
24] Naphthalene	17.902	128	3552389	12175.37 ug/L	100
25) 2-Fluorotoluene SCAN	10.969	109	328600	5120.88 ug/L	93
26) 1,1-Dichloroethene SCAN	3.095	61	187881	13786.87 ug/L	86
27) trans-1,2-Dichloroethe...	4.421	61	211940	12568.23 ug/L #	60
28) 1,1-Dichloroethane SCAN	5.111	63	259075	13275.12 ug/L	97
29) cis-1,2-Dichloroethene...	6.099	61	277801	13285.97 ug/L #	78
30) Chloroform SCAN	6.662	83	277868	12252.16 ug/L	95
31) 1,1,1-Trichloroethane ...	6.918	97	298757	14455.71 ug/L	91
32) Carbon tetrachloride SCAN	7.185	117	255165	11836.21 ug/L	93
33) Benzene SCAN	7.526	78	760706	13368.21 ug/L	96
34) 1,2-Dichloroethane SCAN	7.562	62	279288	13291.82 ug/L	97
35) Trichloroethene SCAN	8.573	130	204333	13066.76 ug/L	85
36) Toluene-d8 SCAN	10.475	98	838595	13362.99 ug/L	98
37) Toluene SCAN	10.580	91	1003500	12486.44 ug/L	99
38) 1,1,2-Trichloroethane ...	11.231	97	237513	13166.63 ug/L	94
39) Tetrachloroethene SCAN	11.430	166	264331	13690.26 ug/L	97
40) Chlorobenzene SCAN	12.764	112	706230	12860.03 ug/L	91
41) 1,1,1,2-Tetrachloroeth...	12.915	131	248709	12237.52 ug/L	96
42) Ethylbenzene SCAN	13.161	91	1857232	12684.72 ug/L	91
43) m&p-Xylene SCAN	13.161	91	1857232	12684.72 ug/L	92
44) o-Xylene SCAN	13.781	91	1011769	12909.77 ug/L	96
45) 1,1,2,2-Tetrachloroeth...	14.868	83	500490	13096.54 ug/L	98
46) 1,3,5-Trimethylbenzene...	15.343	105	1082480	13105.64 ug/L	98
47) 1,2,4-Trimethylbenzene...	15.899	105	1083179	12816.49 ug/L	96
48) Naphthalene SCAN	17.901	128	1640425	12827.44 ug/L	99

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\082020\
Data File : 08202004.D
Acq On : 20 Aug 2020 15:49
InstName : AG5975C
Operator : TD
Sample : S20H039-CAL2
Misc : 2030069 10 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 21 08:31:02 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\082020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:30:13 2020
Response via : Initial Calibration



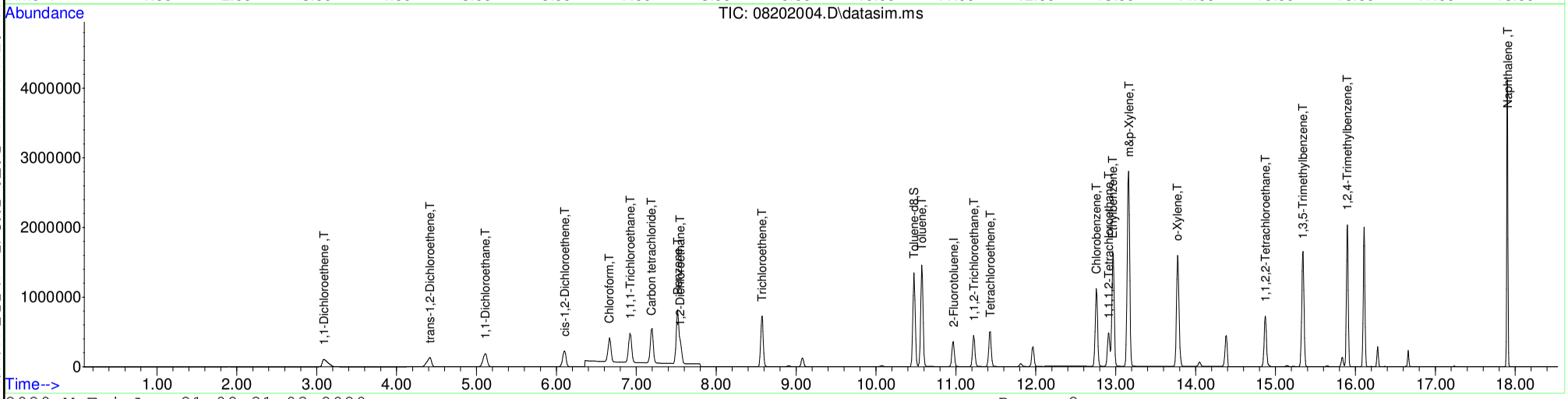


Table of Contents

S20H039-CAL3

Data Path : C:\msdchem\1\Ravioli Data\2020\082020\
Data File : 08202005.D
Acq On : 20 Aug 2020 16:13
InstName : AG5975C
Operator : TD
Sample : S20H039-CAL3
Misc : 2030070 5 mg/L
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 21 08:31:05 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\082020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:30:13 2020
Response via : Initial Calibration

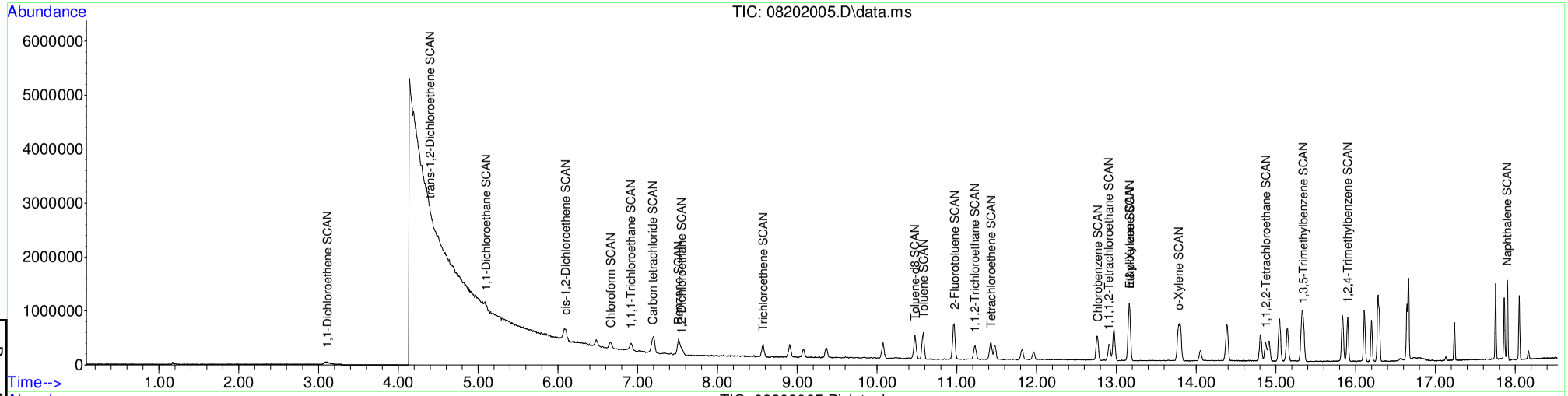
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	673233	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	629076	4773.23	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 95.46%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.090	61	126761	4282.69	ug/L	84
3] trans-1,2-Dichloroethene	4.396	61	145387	4680.82	ug/L	99
4] 1,1-Dichloroethane	5.099	63	180029	4656.26	ug/L	98
5] cis-1,2-Dichloroethene	6.094	61	190553	4669.00	ug/L	99
6] Chloroform	6.664	83	196458	4702.98	ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	214003	4717.26	ug/L	99
8] Carbon tetrachloride	7.187	117	202678	4746.70	ug/L	100
9] Benzene	7.515	78	523170	4573.72	ug/L	99
10] 1,2-Dichloroethane	7.552	62	191144	4681.08	ug/L	98
11] Trichloroethene	8.569	130	161743	4696.35	ug/L	94
13] Toluene	10.571	91	755646	4497.26	ug/L	100
14] 1,1,2-Trichloroethane	11.222	97	172328	4706.83	ug/L	98
15] Tetrachloroethene	11.421	166	232804	4787.68	ug/L	100
16] Chlorobenzene	12.757	112	577532	4800.33	ug/L	93
17] 1,1,1,2-Tetrachloroethane	12.908	131	207134	4804.79	ug/L	100
18] Ethylbenzene	12.964	91	957968	4683.98	ug/L	98
19] m&p-Xylene	13.162	91	1468448	9186.69	ug/L	97
20] o-Xylene	13.774	91	804751	4712.38	ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.873	83	361853	4781.00	ug/L	100
22] 1,3,5-Trimethylbenzene	15.345	105	875077	4814.24	ug/L	96
23] 1,2,4-Trimethylbenzene	15.896	105	885300	4689.02	ug/L	97
24] Naphthalene	17.903	128	1447043	4849.29	ug/L	100
25) 2-Fluorotoluene SCAN	10.969	109	328139	5000.00	ug/L	97
26) 1,1-Dichloroethene SCAN	3.107	61	69687	5000.00	ug/L #	30
27) trans-1,2-Dichloroethe...	4.401	61	86233	5000.00	ug/L #	58
28) 1,1-Dichloroethane SCAN	5.104	63	99798	5000.00	ug/L	97
29) cis-1,2-Dichloroethene...	6.093	61	106924	5000.00	ug/L #	75
30) Chloroform SCAN	6.662	83	115974	5000.00	ug/L	93
31) 1,1,1-Trichloroethane ...	6.918	97	105685	5000.00	ug/L	90
32) Carbon tetrachloride SCAN	7.185	117	110241	5000.00	ug/L	87
33) Benzene SCAN	7.514	78	290990	5000.00	ug/L	97
34) 1,2-Dichloroethane SCAN	7.550	62	107449	5000.00	ug/L	97
35) Trichloroethene SCAN	8.568	130	79966	5000.00	ug/L	91
36) Toluene-d8 SCAN	10.475	98	320910	5000.00	ug/L	95
37) Toluene SCAN	10.580	91	410973	5000.00	ug/L	97
38) 1,1,2-Trichloroethane ...	11.221	97	92246	5000.00	ug/L	92
39) Tetrachloroethene SCAN	11.430	166	98735	5000.00	ug/L	95
40) Chlorobenzene SCAN	12.764	112	280827	5000.00	ug/L	92
41) 1,1,1,2-Tetrachloroeth...	12.907	131	103928	5000.00	ug/L	93
42) Ethylbenzene SCAN	13.161	91	748721	5000.00	ug/L	91
43) m&p-Xylene SCAN	13.161	91	748721	5000.00	ug/L	92
44) o-Xylene SCAN	13.781	91	400772	5000.00	ug/L	98
45) 1,1,2,2-Tetrachloroeth...	14.872	83	195422	5000.00	ug/L	99
46) 1,3,5-Trimethylbenzene...	15.343	105	422373	5000.00	ug/L	98
47) 1,2,4-Trimethylbenzene...	15.899	105	432181	5000.00	ug/L	96
48) Naphthalene SCAN	17.901	128	653960	5000.00	ug/L	99

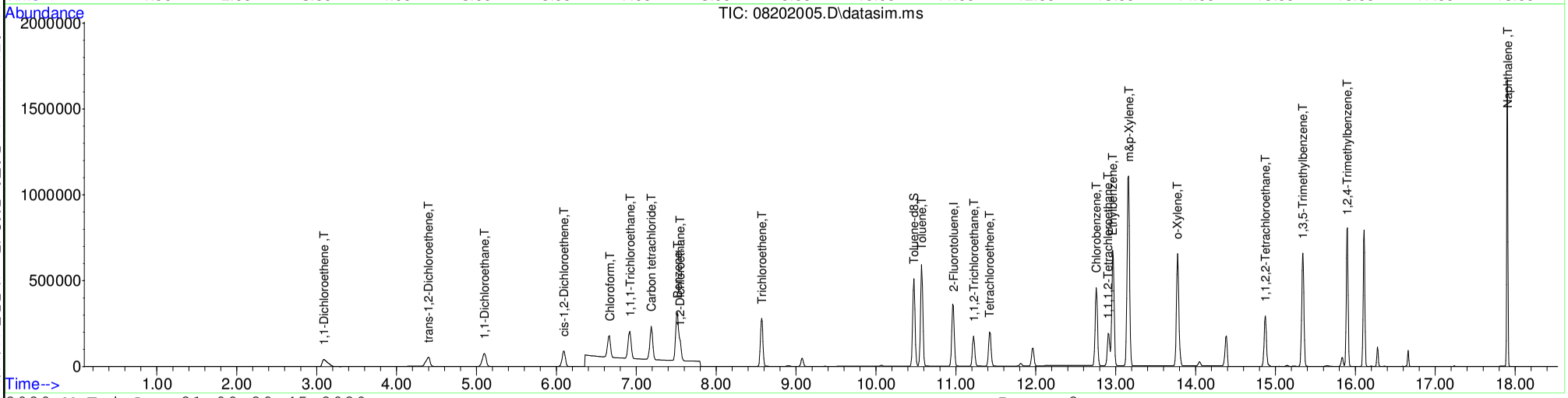
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\082020\
Data File : 08202005.D
Acq On : 20 Aug 2020 16:13
InstName : AG5975C
Operator : TD
Sample : S20H039-CAL3
Misc : 2030070 5 mg/L
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 21 08:31:05 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\082020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:30:13 2020
Response via : Initial Calibration





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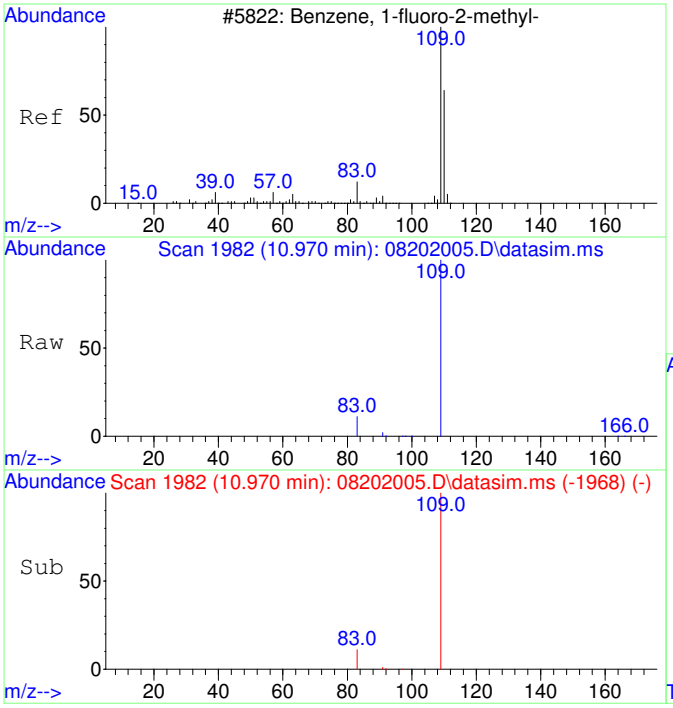
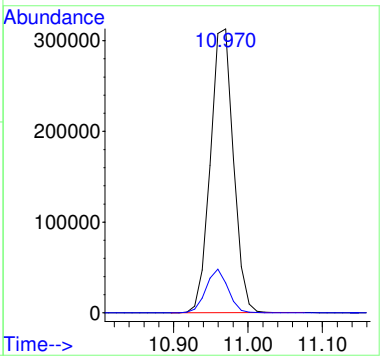
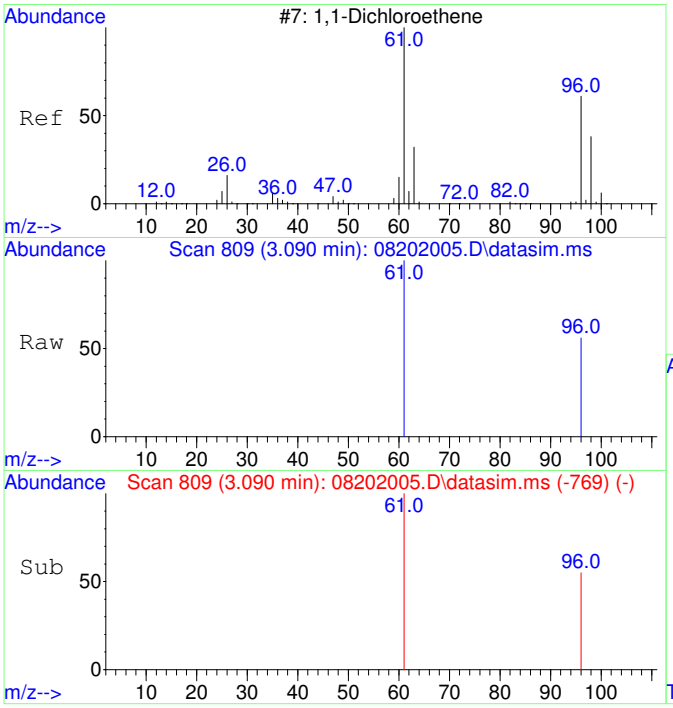


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:109 Resp: 673233

Ion	Ratio	Lower	Upper
109	100		
83	14.5	0.0	42.3

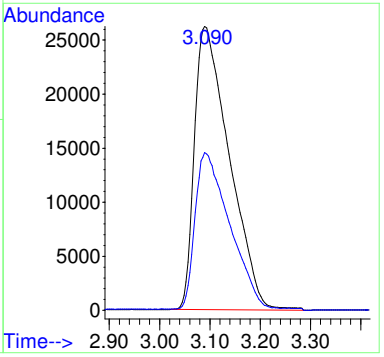


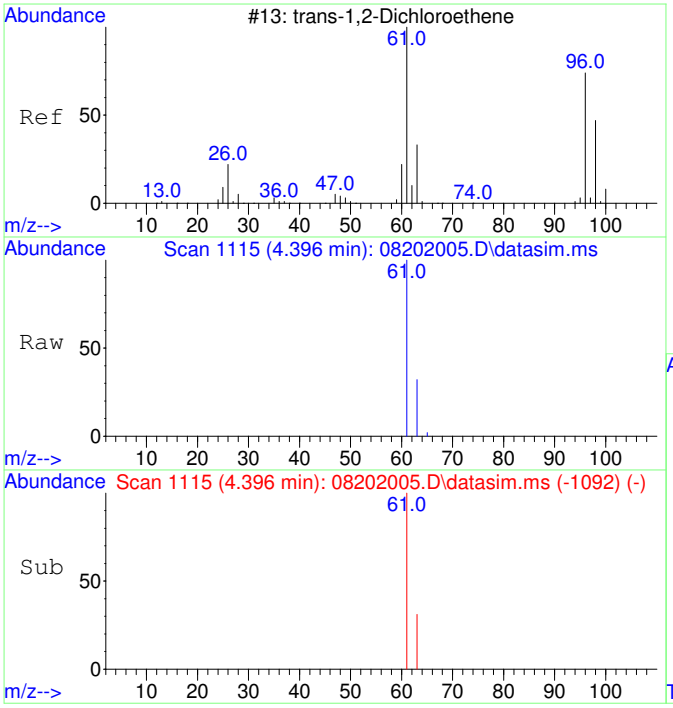


#2
1,1-Dichloroethene
Concen: 4282.69 ug/L
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 61 Resp: 126761

Ion	Ratio	Lower	Upper
61	100		
96	54.2	37.2	97.2

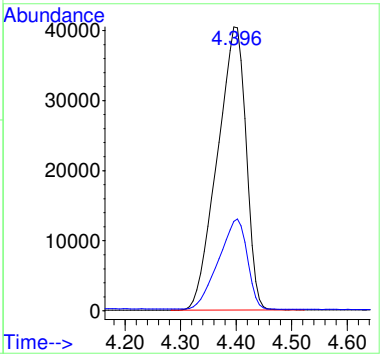


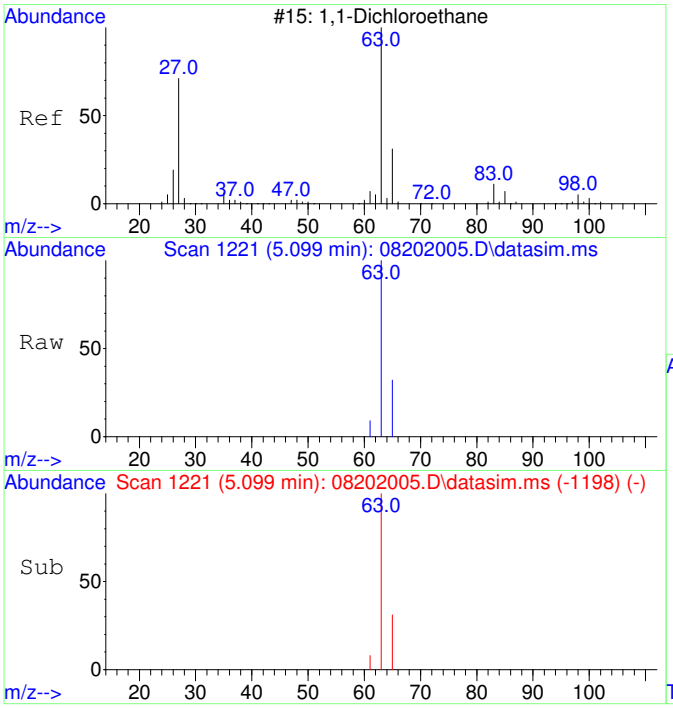


#3
trans-1,2-Dichloroethene
Concen: 4680.82 ug/L
RT: 4.396 min Scan# 1115
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 61 Resp: 145387

Ion	Ratio	Lower	Upper
61	100		
63	31.6	2.4	62.4

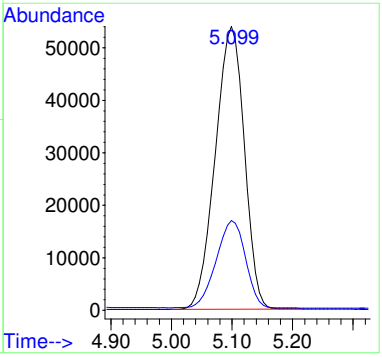


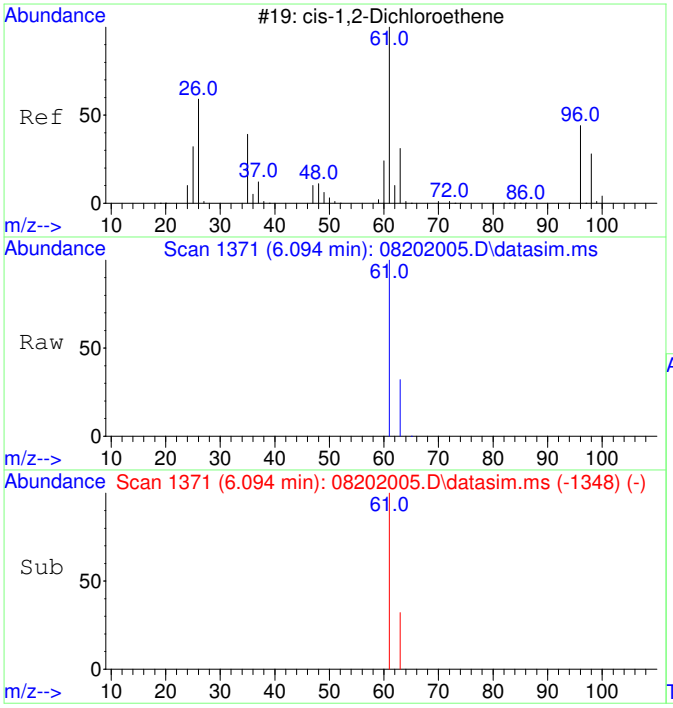


#4
1,1-Dichloroethane
Concen: 4656.26 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 63 Resp: 180029

Ion	Ratio	Lower	Upper
63	100		
65	30.9	1.8	61.8

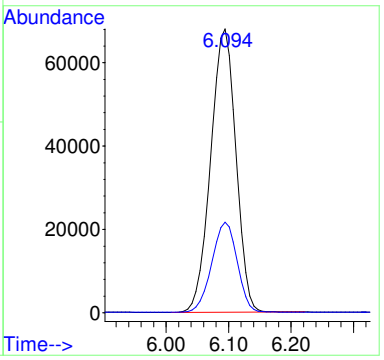


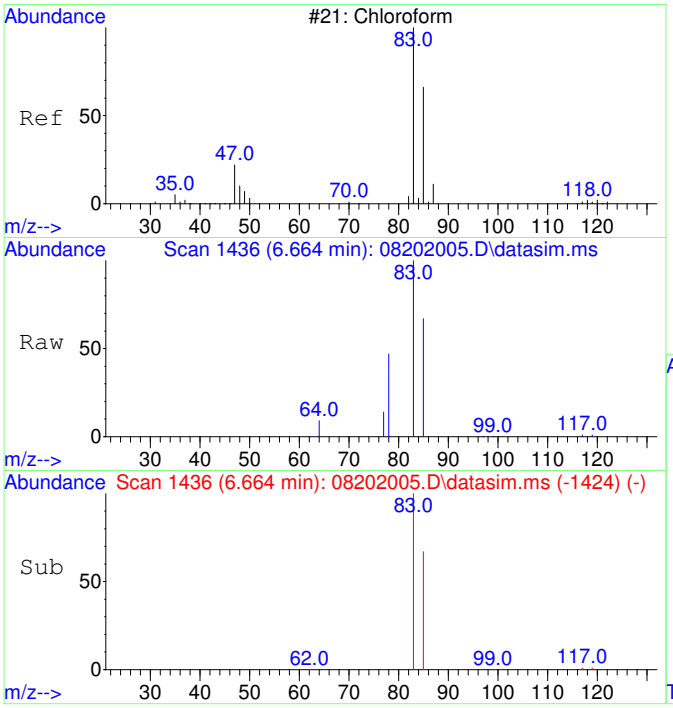


#5
cis-1,2-Dichloroethene
Concen: 4669.00 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 61 Resp: 190553

Ion	Ratio	Lower	Upper
61	100		
63	31.9	2.5	62.5

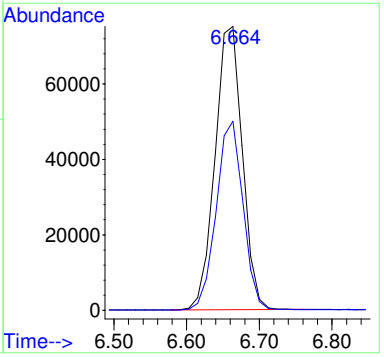


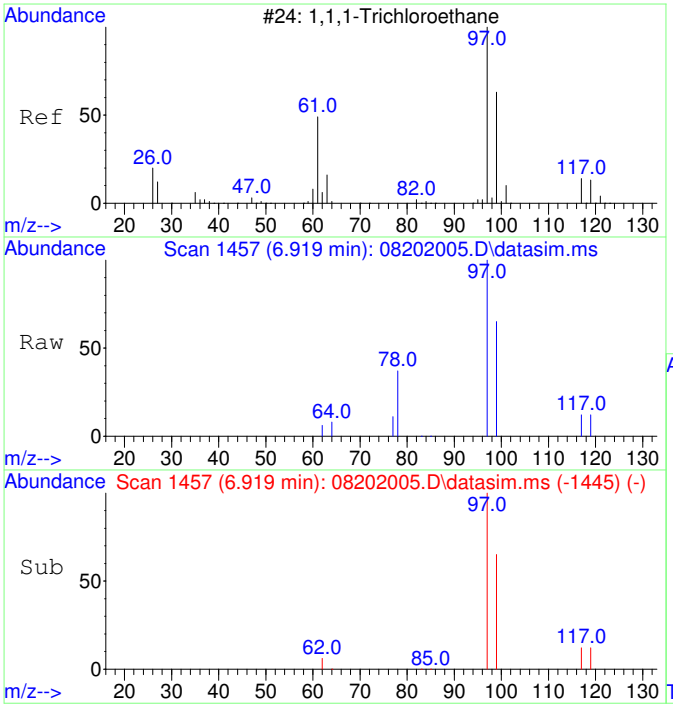


#6
Chloroform
Concen: 4702.98 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 83 Resp: 196458

Ion	Ratio	Lower	Upper
83	100		
85	65.0	35.1	95.1

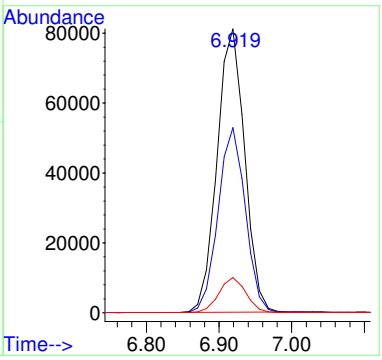


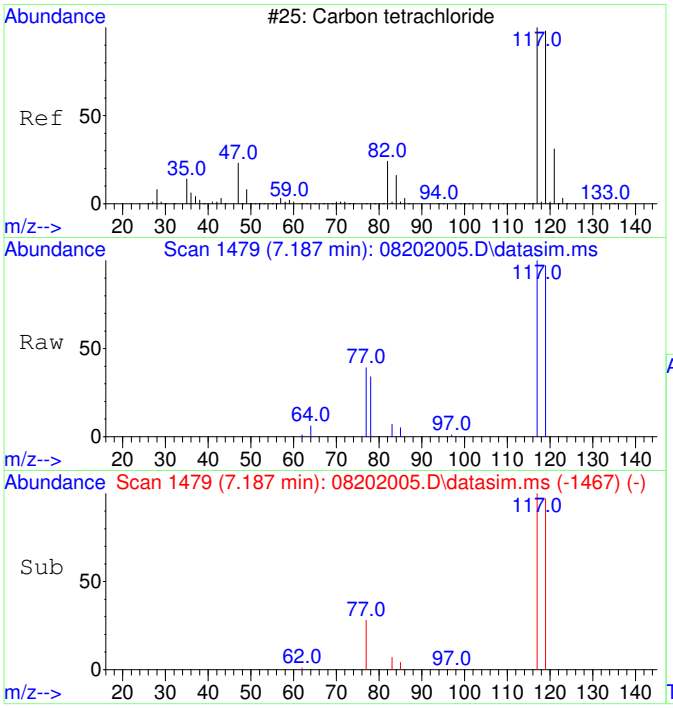


#7
1,1,1-Trichloroethane
Concen: 4717.26 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 97 Resp: 214003

Ion	Ratio	Lower	Upper
97	100		
99	64.3	34.6	94.6
117	12.1	0.0	43.2

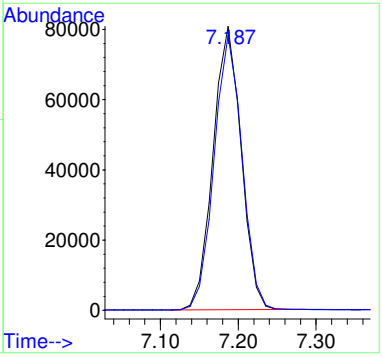


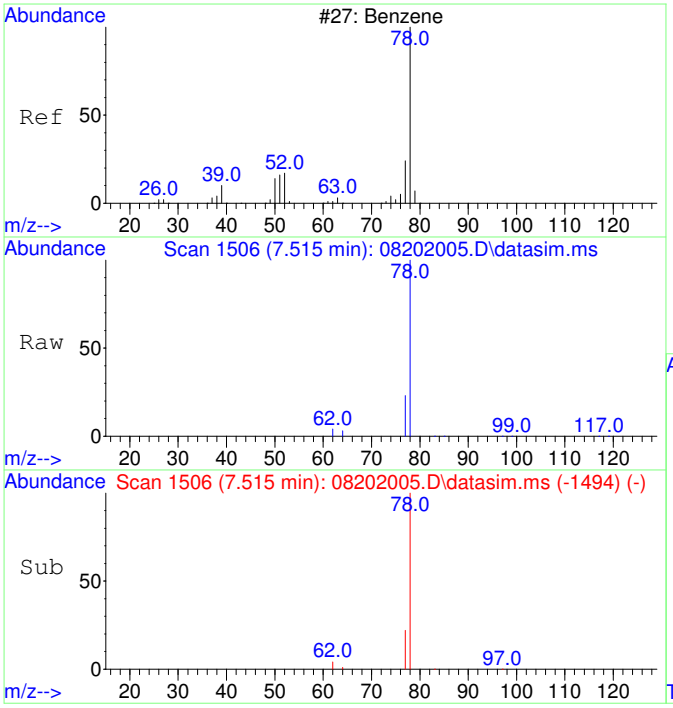


#8
Carbon tetrachloride
Concen: 4746.70 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:117 Resp: 202678

Ion	Ratio	Lower	Upper
117	100		
119	96.0	66.4	126.4

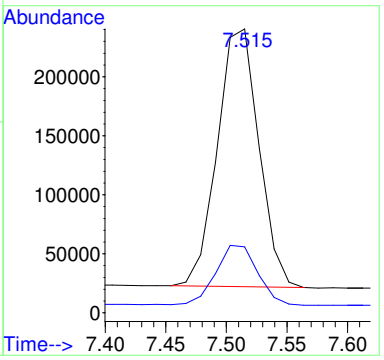


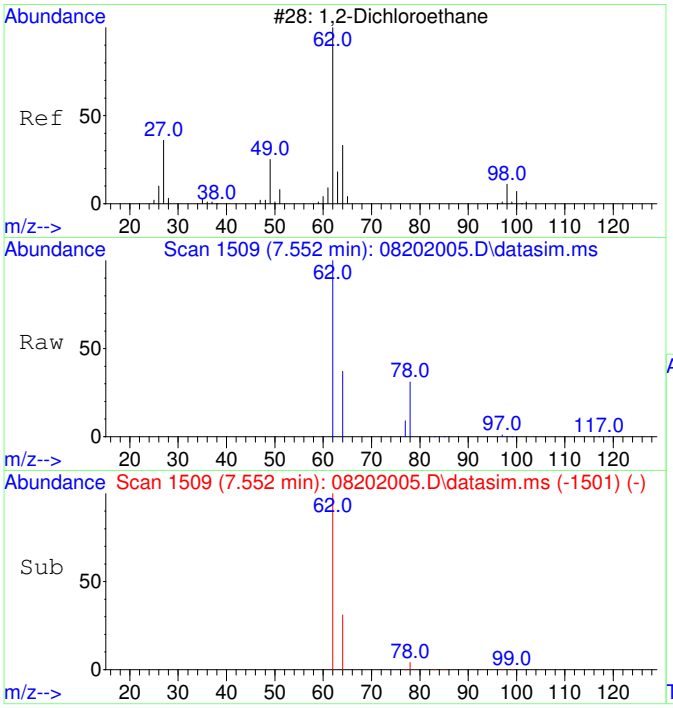


#9
Benzene
Concen: 4573.72 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 78 Resp: 523170

Ion	Ratio	Lower	Upper
78	100		
77	23.9	0.0	53.2

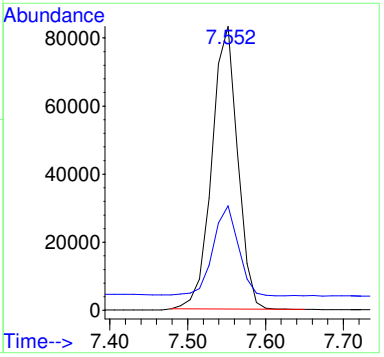


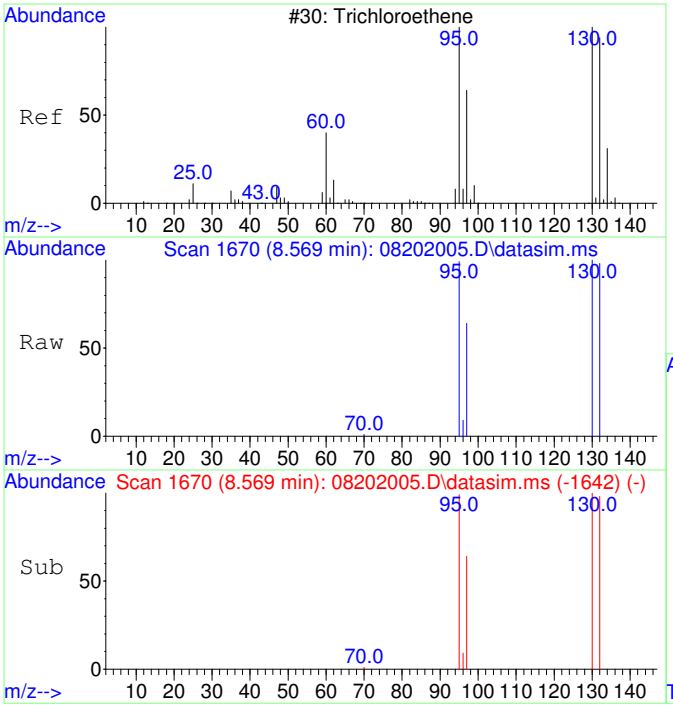


#10
1,2-Dichloroethane
Concen: 4681.08 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 62 Resp: 191144

Ion	Ratio	Lower	Upper
62	100		
64	31.3	2.3	62.3

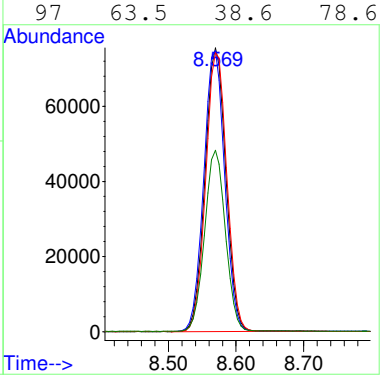


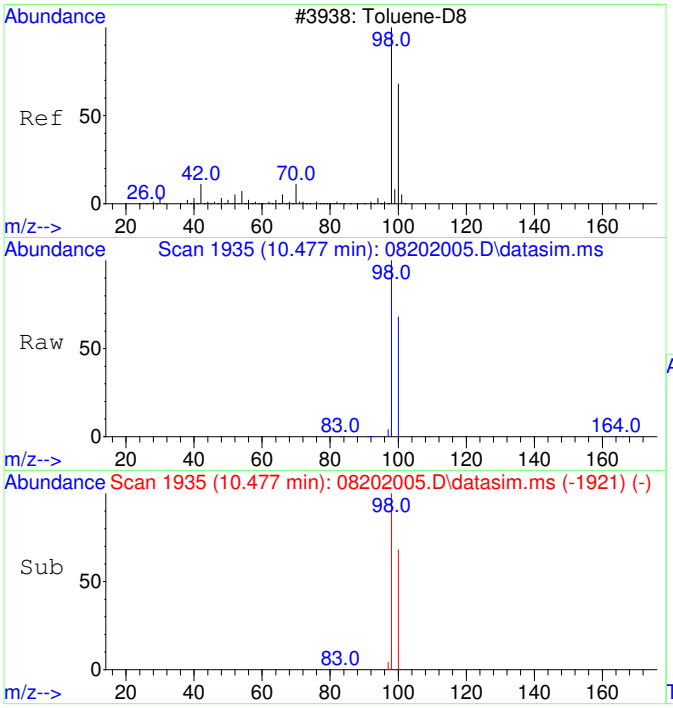


#11
Trichloroethene
Concen: 4696.35 ug/L
RT: 8.569 min Scan# 1670
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:130 Resp: 161743

Ion	Ratio	Lower	Upper
130	100		
95	99.3	60.7	120.7
132	99.4	76.0	116.0
97	63.5	38.6	78.6

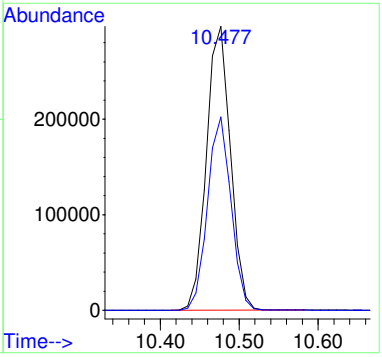


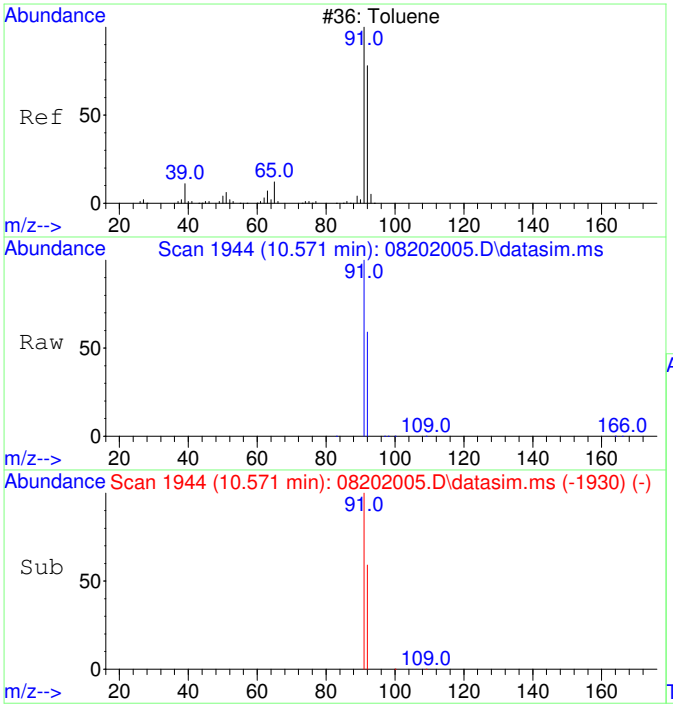


#12
Toluene-d8
Concen: 4773.23 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 98 Resp: 629076

Ion	Ratio	Lower	Upper
98	100		
100	66.4	37.1	97.1

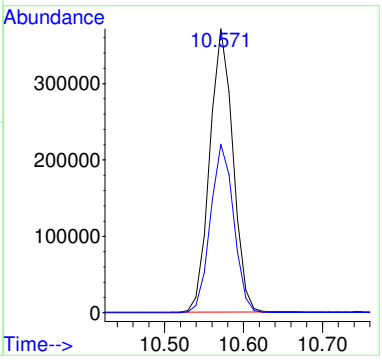


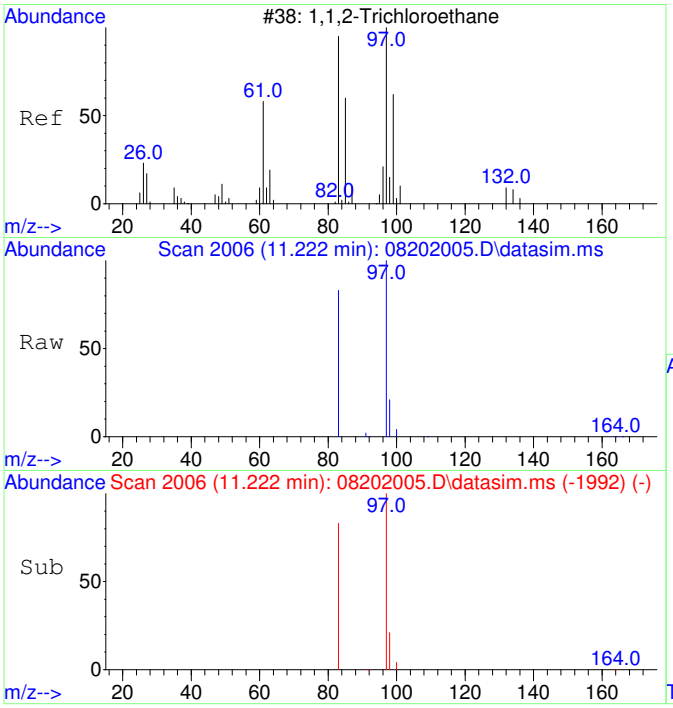


#13
Toluene
Concen: 4497.26 ug/L
RT: 10.571 min Scan# 1944
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 91 Resp: 755646

Ion	Ratio	Lower	Upper
91	100		
92	59.7	29.9	89.9

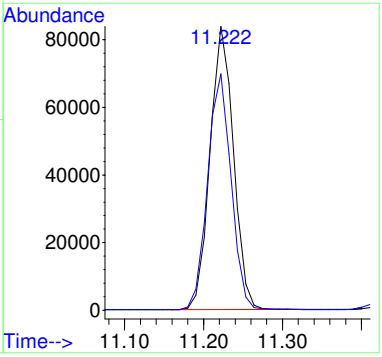


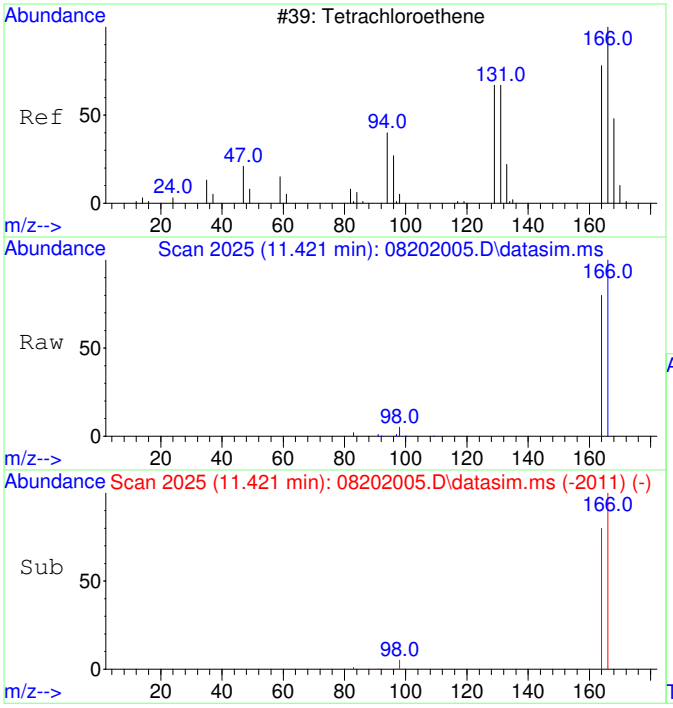


#14
1,1,2-Trichloroethane
Concen: 4706.83 ug/L
RT: 11.222 min Scan# 2006
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 97 Resp: 172328

Ion	Ratio	Lower	Upper
97	100		
83	83.4	51.2	111.2

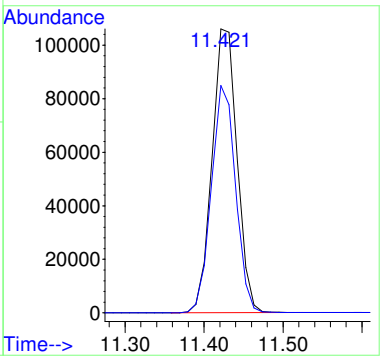


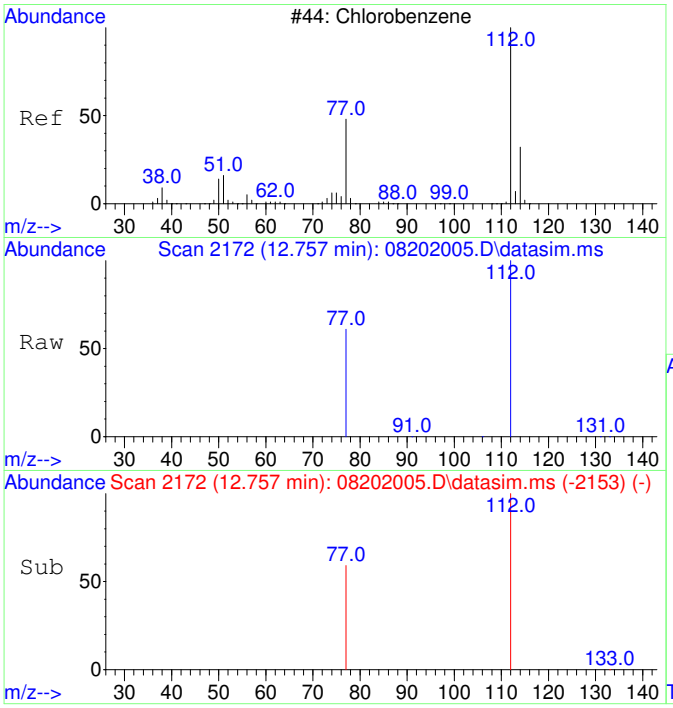


#15
Tetrachloroethene
Concen: 4787.68 ug/L
RT: 11.421 min Scan# 2025
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:166 Resp: 232804

Ion	Ratio	Lower	Upper
166	100		
164	77.7	47.8	107.8

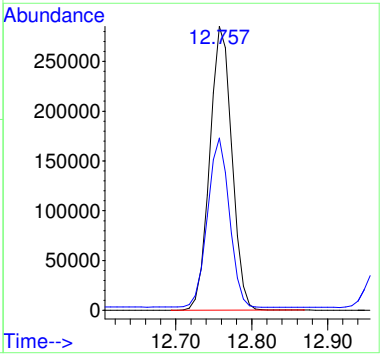


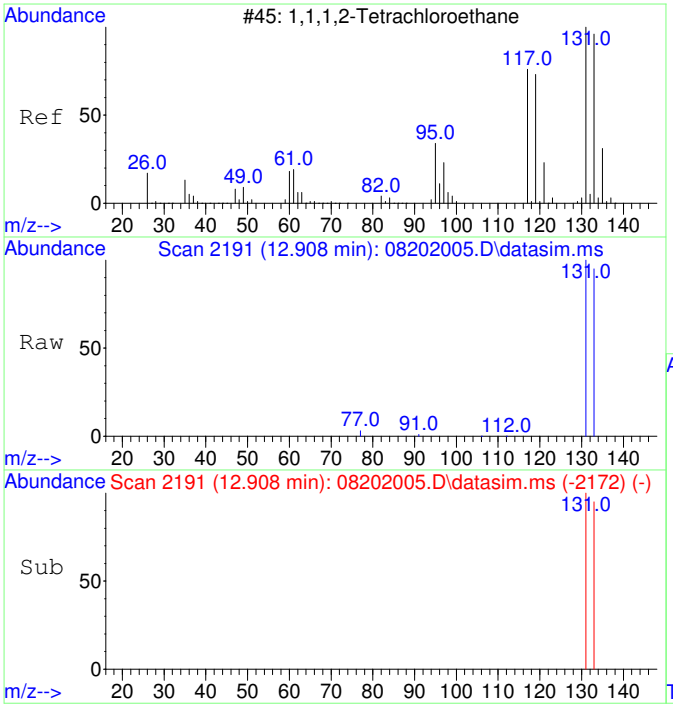


#16
Chlorobenzene
Concen: 4800.33 ug/L
RT: 12.757 min Scan# 2172
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:112 Resp: 577532

Ion	Ratio	Lower	Upper
112	100		
77	58.8	23.6	83.6

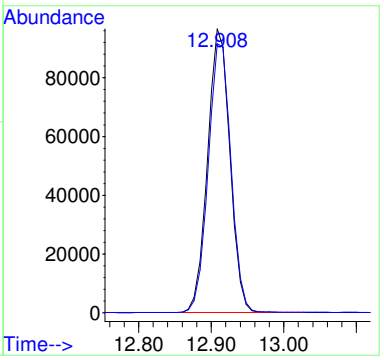


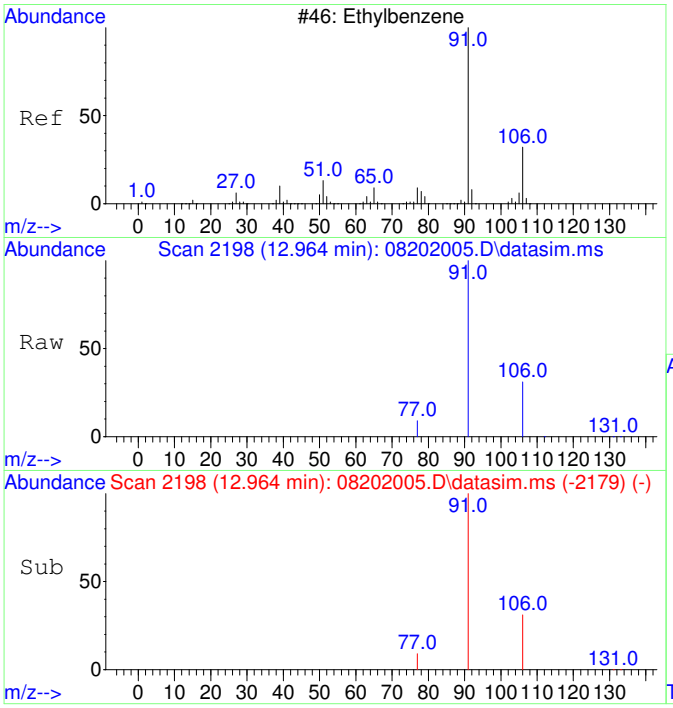


#17
1,1,1,2-Tetrachloroethane
Concen: 4804.79 ug/L
RT: 12.908 min Scan# 2191
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:131 Resp: 207134

Ion	Ratio	Lower	Upper
131	100		
133	96.4	66.3	126.3

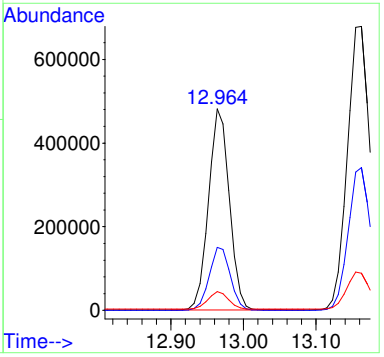


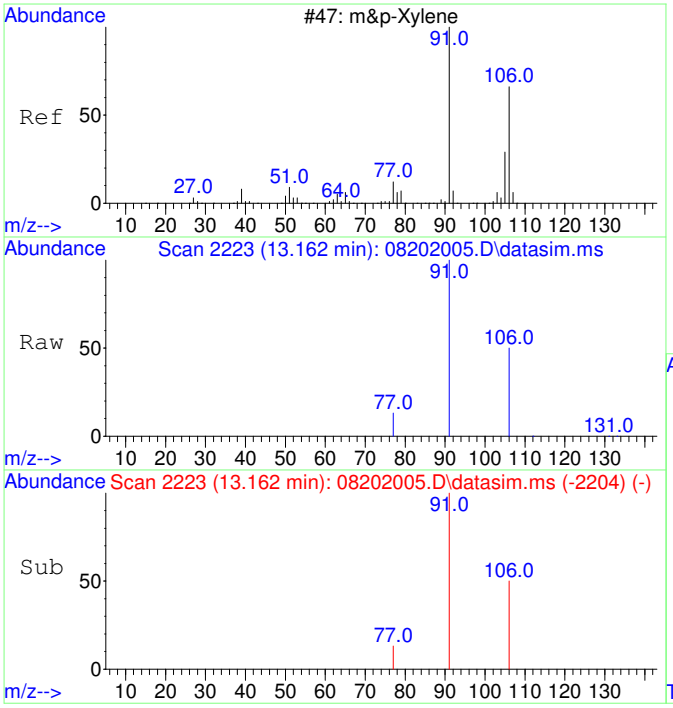


#18
Ethylbenzene
Concen: 4683.98 ug/L
RT: 12.964 min Scan# 2198
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 91 Resp: 957968

Ion	Ratio	Lower	Upper
91	100		
106	31.6	3.0	63.0
77	8.6	0.0	38.2

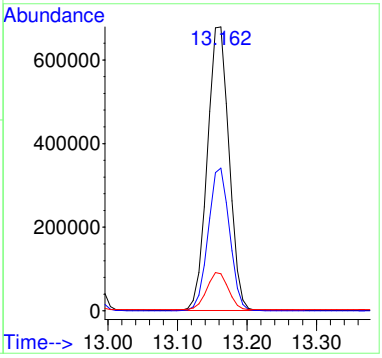


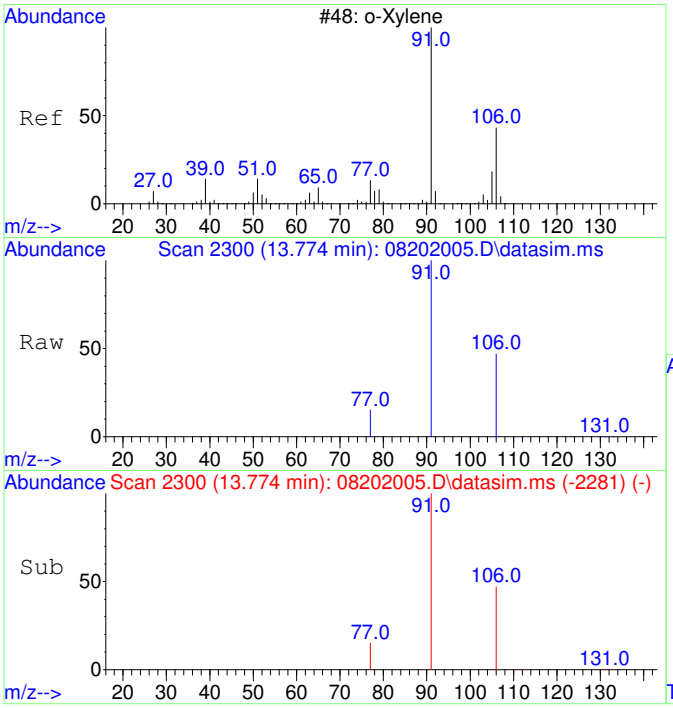


#19
m&p-Xylene
Concen: 9186.69 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 91 Resp: 1468448

Ion	Ratio	Lower	Upper
91	100		
106	49.5	22.2	82.2
77	13.0	0.0	42.4

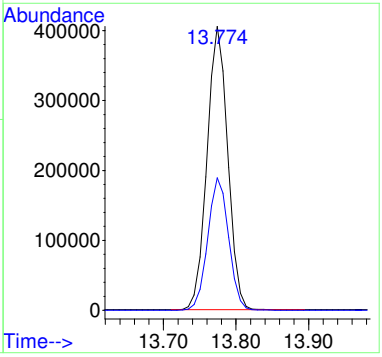


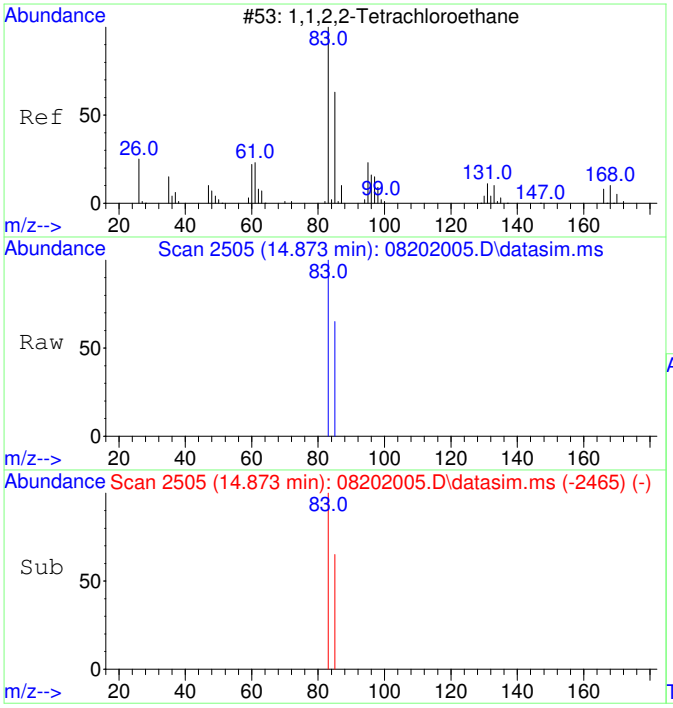


#20
o-Xylene
Concen: 4712.38 ug/L
RT: 13.774 min Scan# 2300
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 91 Resp: 804751

Ion	Ratio	Lower	Upper
91	100		
106	47.0	19.2	79.2

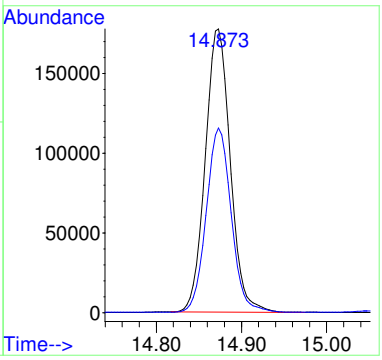


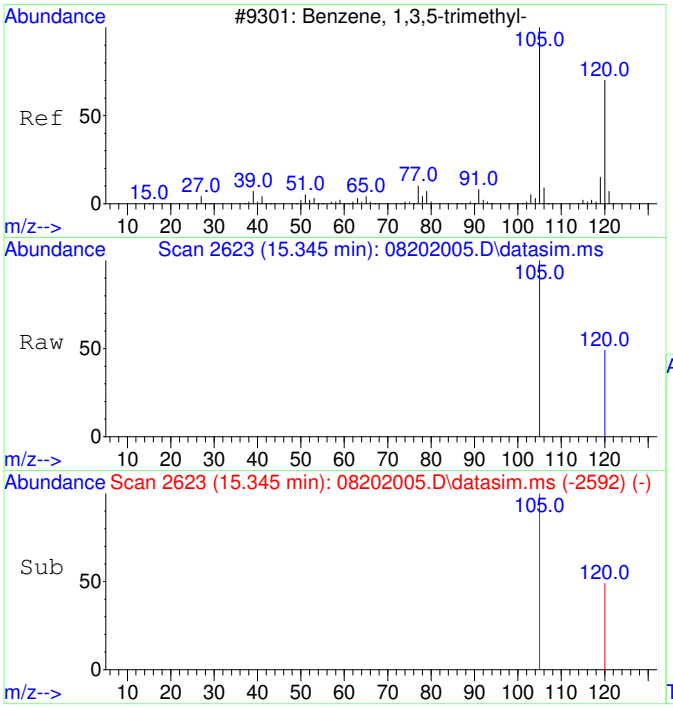


#21
1,1,2,2-Tetrachloroethane
Concen: 4781.00 ug/L
RT: 14.873 min Scan# 2505
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 83 Resp: 361853

Ion	Ratio	Lower	Upper
83	100		
85	64.8	34.8	94.8

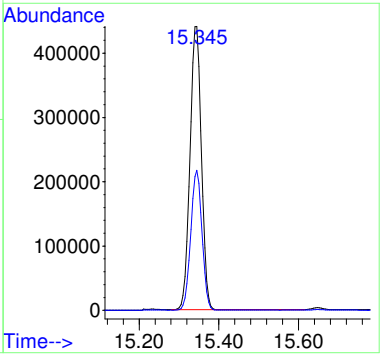


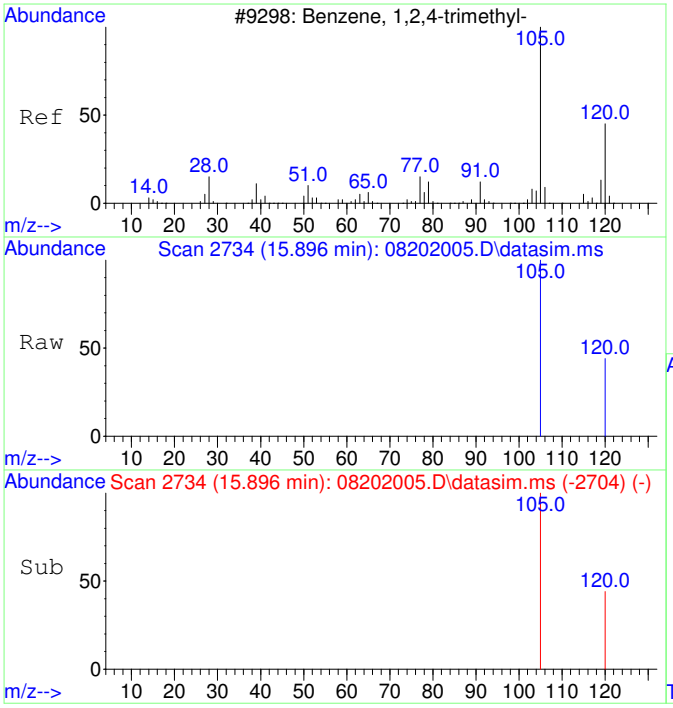


#22
1,3,5-Trimethylbenzene
Concen: 4814.24 ug/L
RT: 15.345 min Scan# 2623
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:105 Resp: 875077

Ion	Ratio	Lower	Upper
105	100		
120	48.6	21.1	81.1

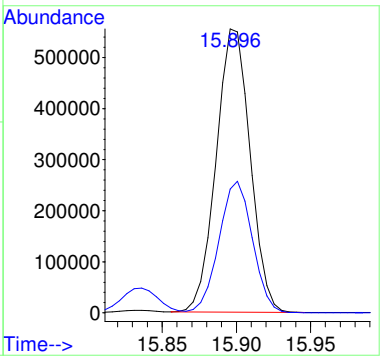


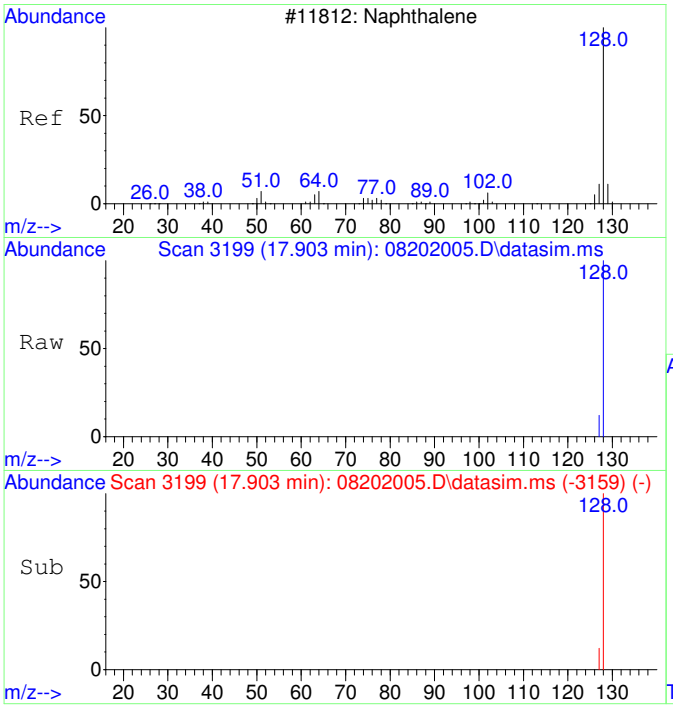


#23
1,2,4-Trimethylbenzene
Concen: 4689.02 ug/L
RT: 15.896 min Scan# 2734
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:105 Resp: 885300

Ion	Ratio	Lower	Upper
105	100		
120	44.9	17.2	77.2

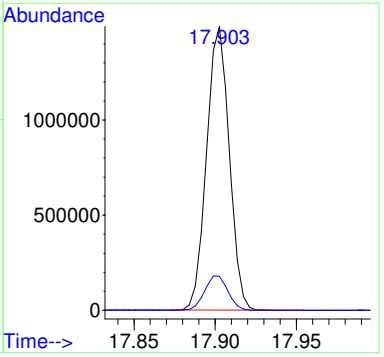


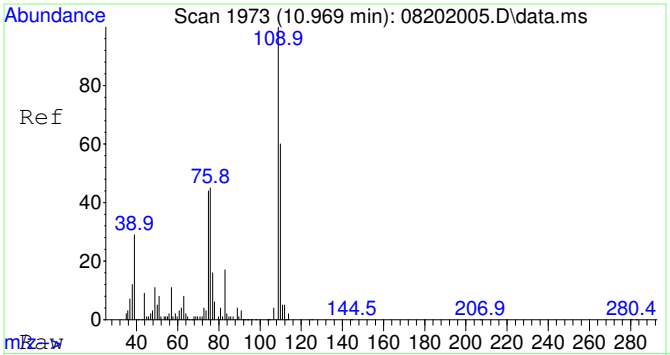


#24
Naphthalene
Concen: 4849.29 ug/L
RT: 17.903 min Scan# 3199
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:128 Resp: 1447043

Ion	Ratio	Lower	Upper
128	100		
127	12.4	0.0	42.5

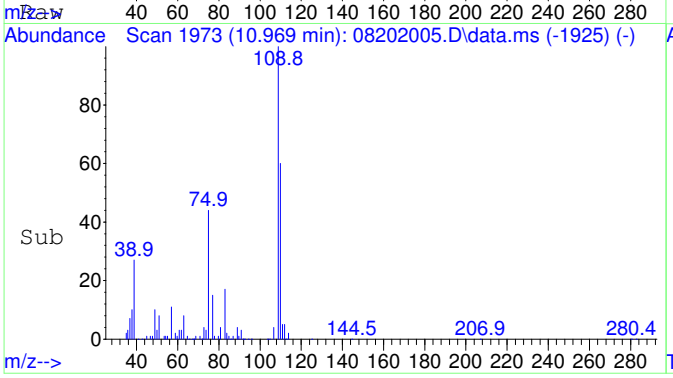


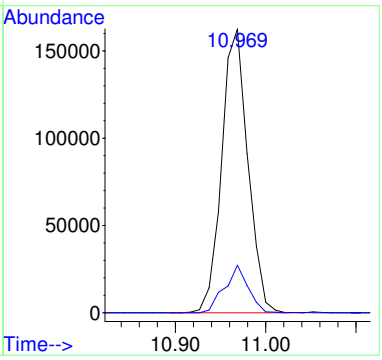


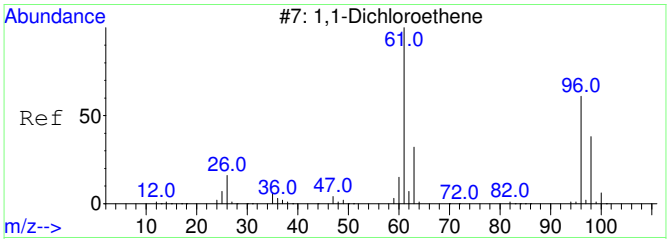
#25
2-Fluorotoluene SCAN
Concen: 5000.00 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:109 Resp: 328139

Ion	Ratio	Lower	Upper
109	100		
83	15.1	0.0	43.8



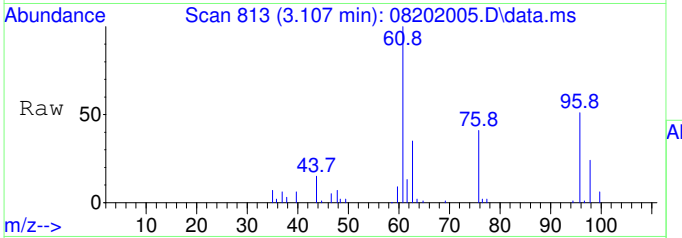


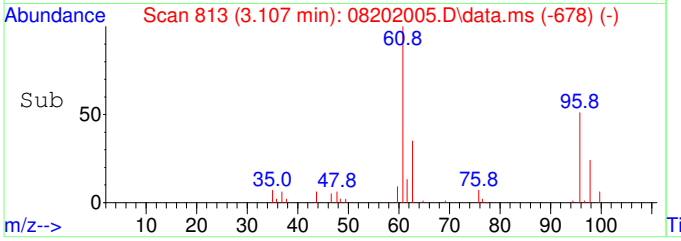


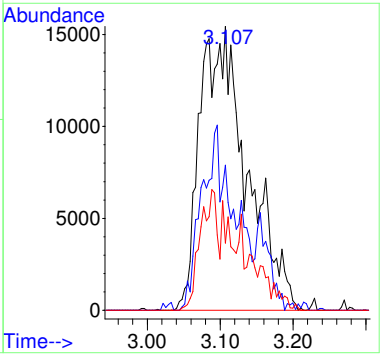
#26
1,1-Dichloroethene SCAN
Concen: 5000.00 ug/L
RT: 3.107 min Scan# 813
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

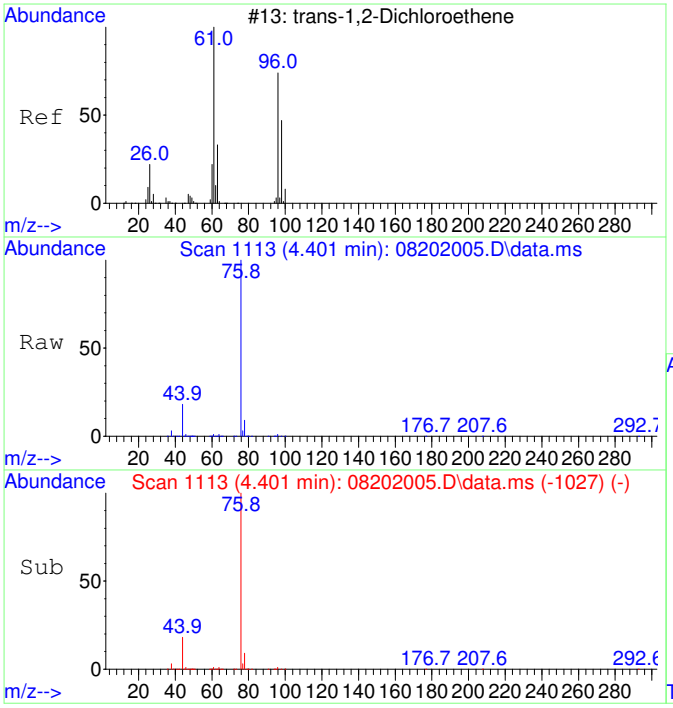
Tgt Ion: 61 Resp: 69687

Ion	Ratio	Lower	Upper
61	100		
96	0.0	33.1	93.1#
98	8.0	11.2	71.2#





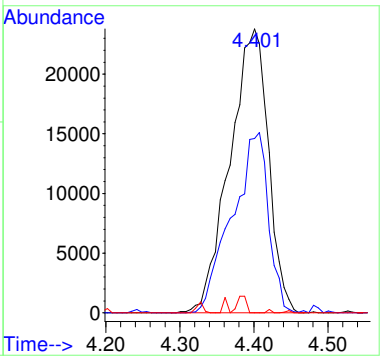


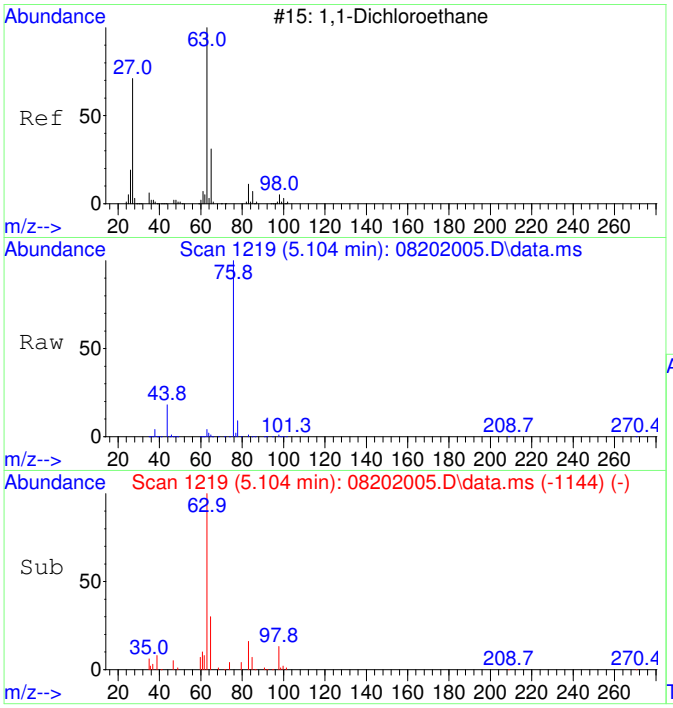


#27
trans-1,2-Dichloroethene SCAN
Concen: 5000.00 ug/L
RT: 4.401 min Scan# 1113
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 61 Resp: 86233

Ion	Ratio	Lower	Upper
61	100		
96	59.5	49.0	109.0
97	0.1	20.5	80.5#

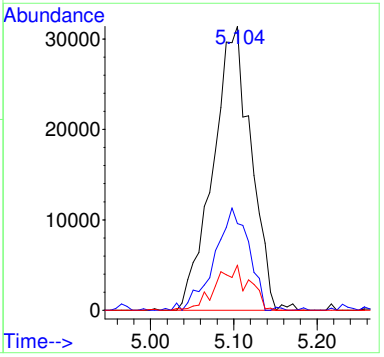


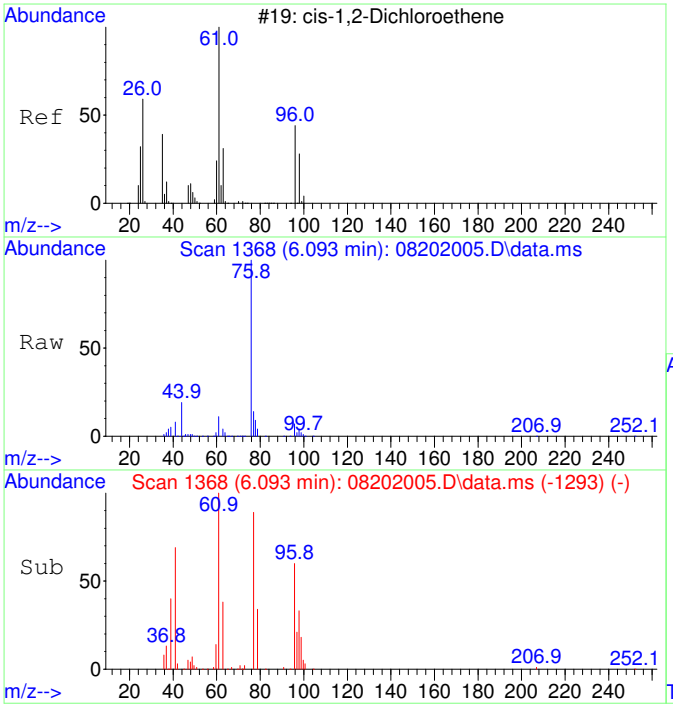


#28
1,1-Dichloroethane SCAN
Concen: 5000.00 ug/L
RT: 5.104 min Scan# 1219
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 63 Resp: 99798

Ion	Ratio	Lower	Upper
63	100		
65	32.7	1.3	61.3
83	14.0	0.0	45.9

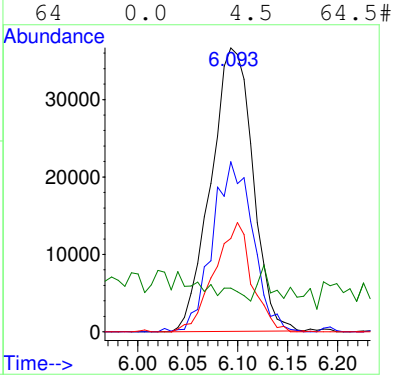


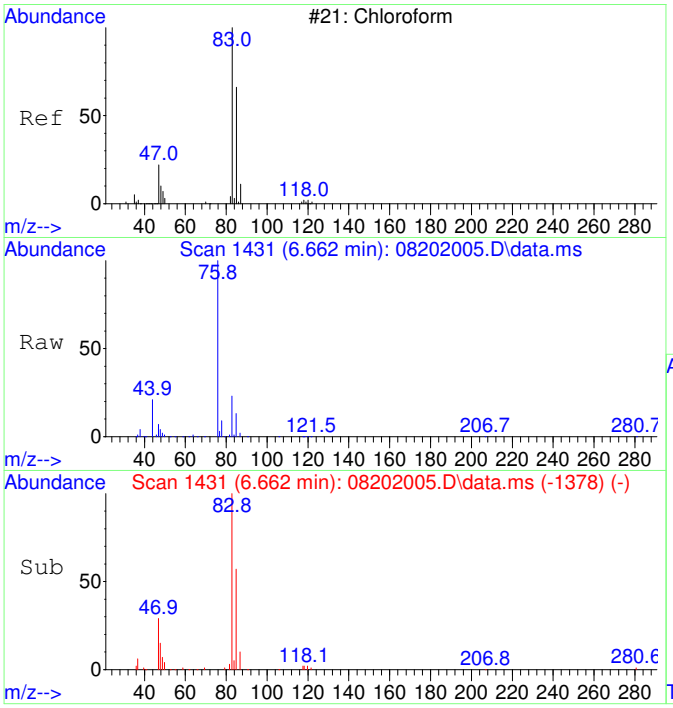


#29
cis-1,2-Dichloroethene SCAN
Concen: 5000.00 ug/L
RT: 6.093 min Scan# 1368
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 61 Resp: 106924

Ion	Ratio	Lower	Upper
61	100		
96	57.4	39.9	99.9
98	34.6	13.5	73.5
64	0.0	4.5	64.5#

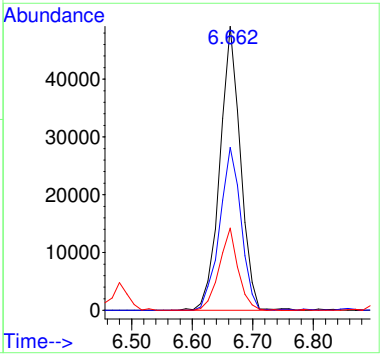


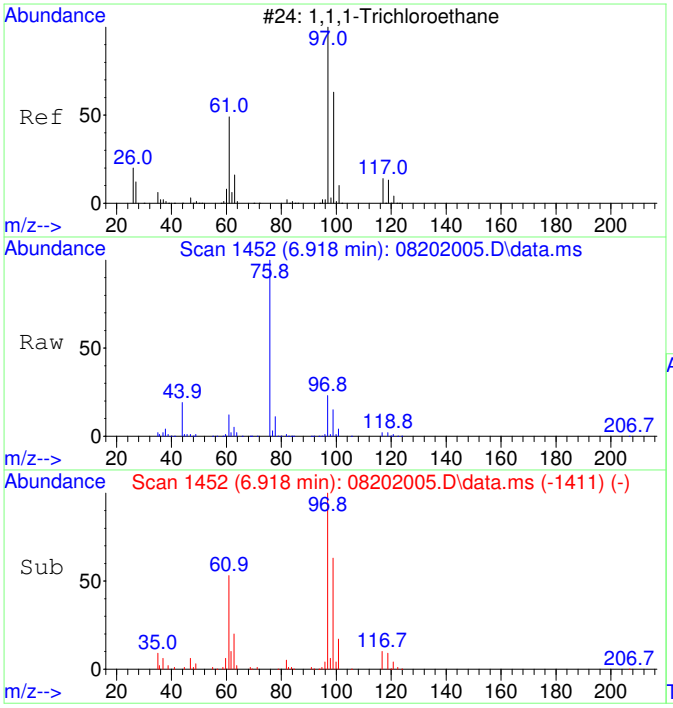


#30
Chloroform SCAN
Concen: 5000.00 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 83 Resp: 115974

Ion	Ratio	Lower	Upper
83	100		
85	59.6	34.6	94.6
47	26.8	0.0	53.4

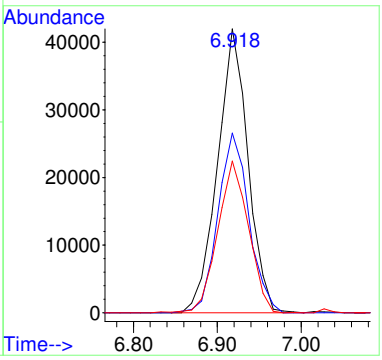


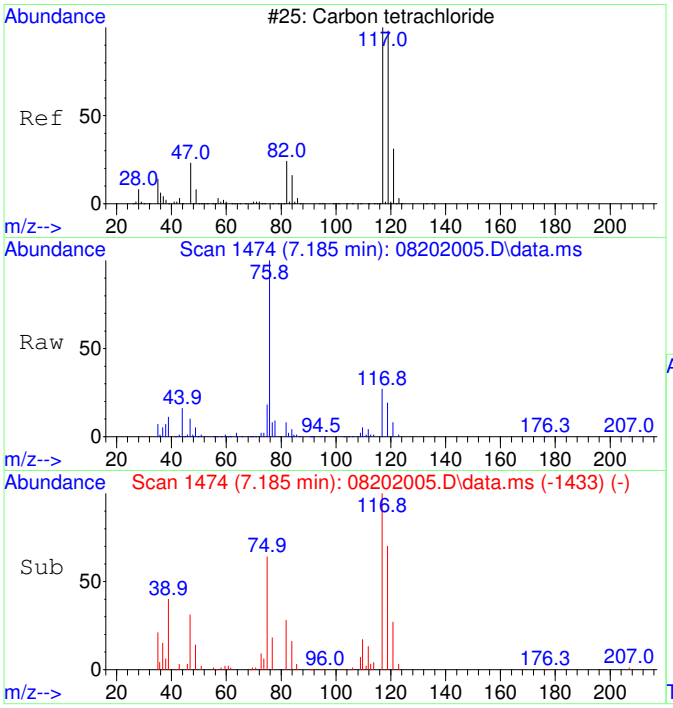


#31
1,1,1-Trichloroethane SCAN
Concen: 5000.00 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 97 Resp: 105685

Ion	Ratio	Lower	Upper
97	100		
99	64.5	43.6	103.6
61	54.2	18.0	78.0

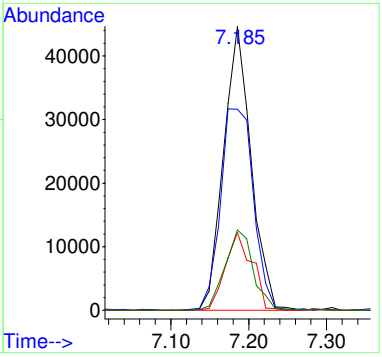


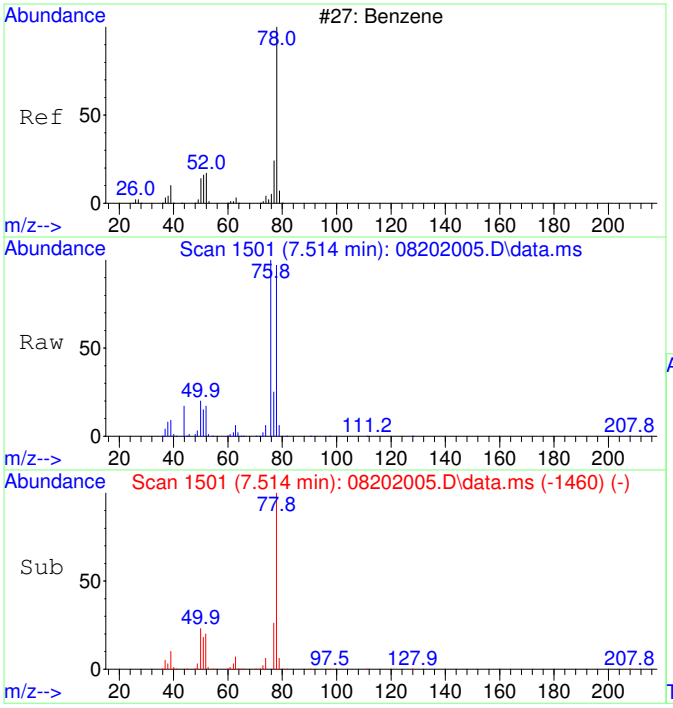


#32
Carbon tetrachloride SCAN
Concen: 5000.00 ug/L
RT: 7.185 min Scan# 1474
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:117 Resp: 110241

Ion	Ratio	Lower	Upper
117	100		
119	85.3	75.5	135.5
121	26.6	0.0	58.8
82	29.0	0.0	59.2

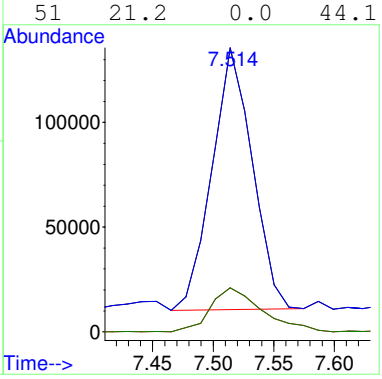


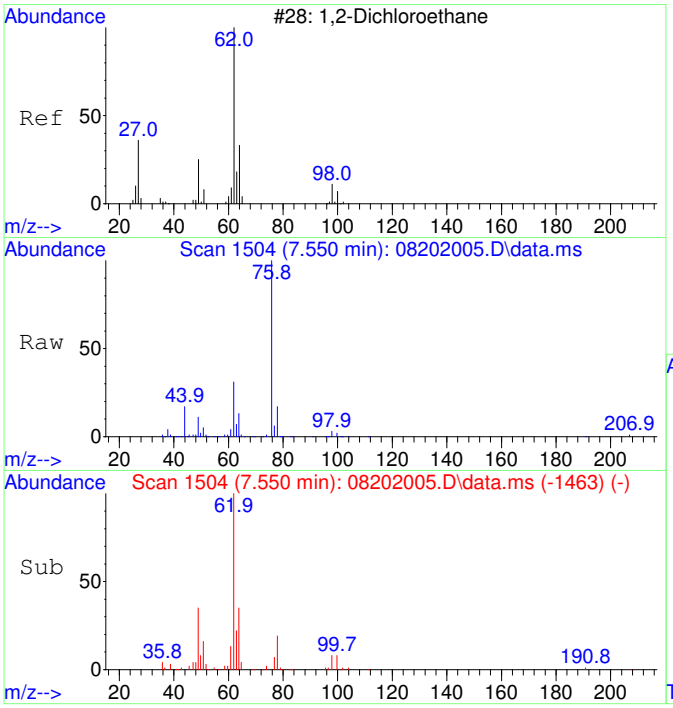


#33
Benzene SCAN
Concen: 5000.00 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 78 Resp: 290990

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	21.2	0.0	47.9
51	21.2	0.0	44.1

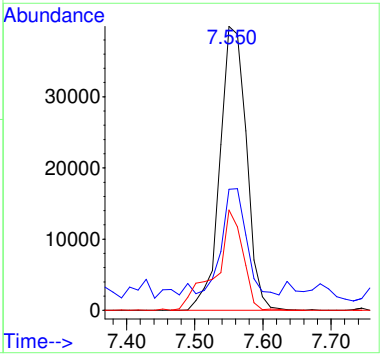


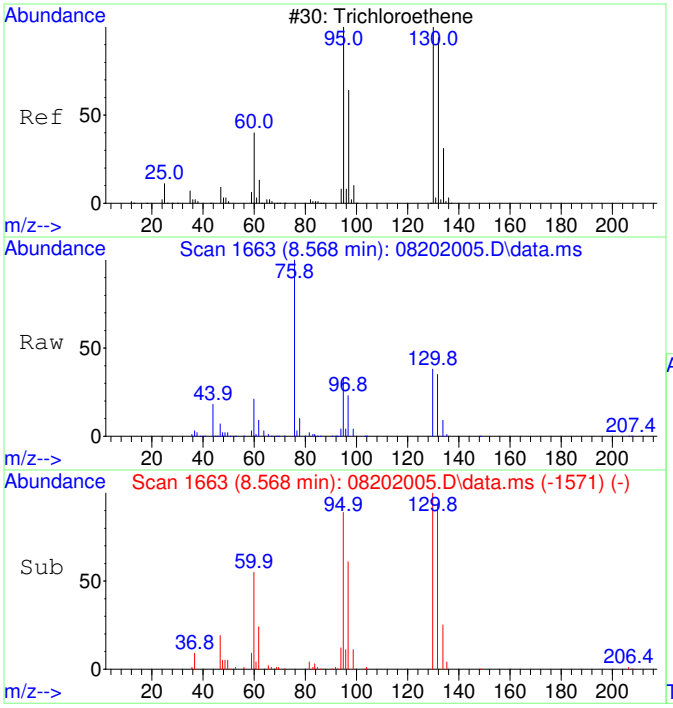


#34
1,2-Dichloroethane SCAN
Concen: 5000.00 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 62 Resp: 107449

Ion	Ratio	Lower	Upper
62	100		
64	33.6	5.2	65.2
49	36.2	3.9	63.9

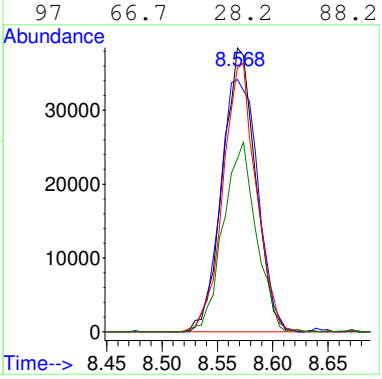


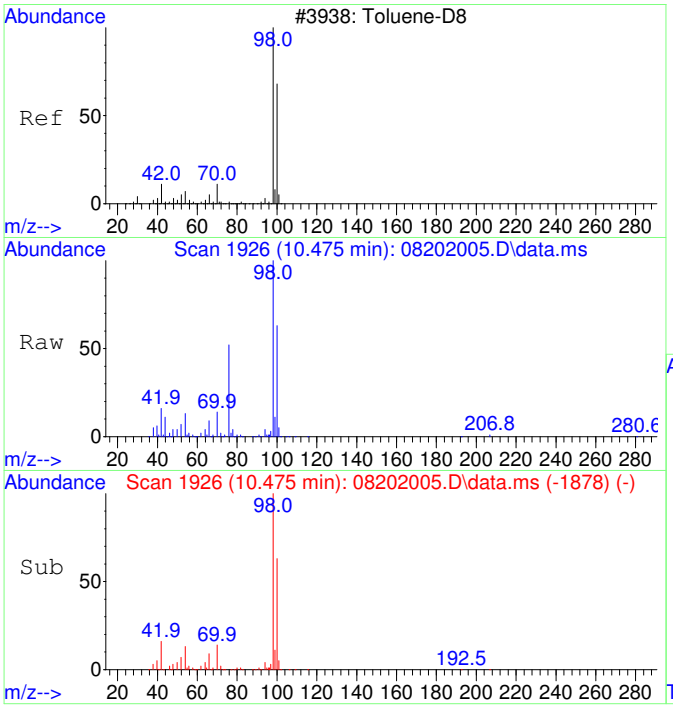


#35
Trichloroethene SCAN
Concen: 5000.00 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:130 Resp: 79966

Ion	Ratio	Lower	Upper
130	100		
95	100.5	60.5	120.5
132	94.5	59.6	119.6
97	66.7	28.2	88.2

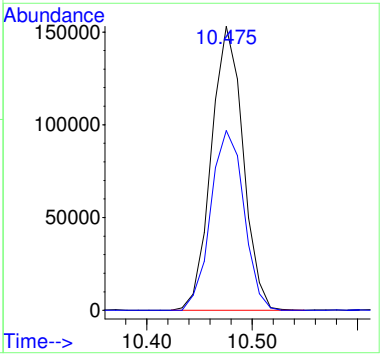


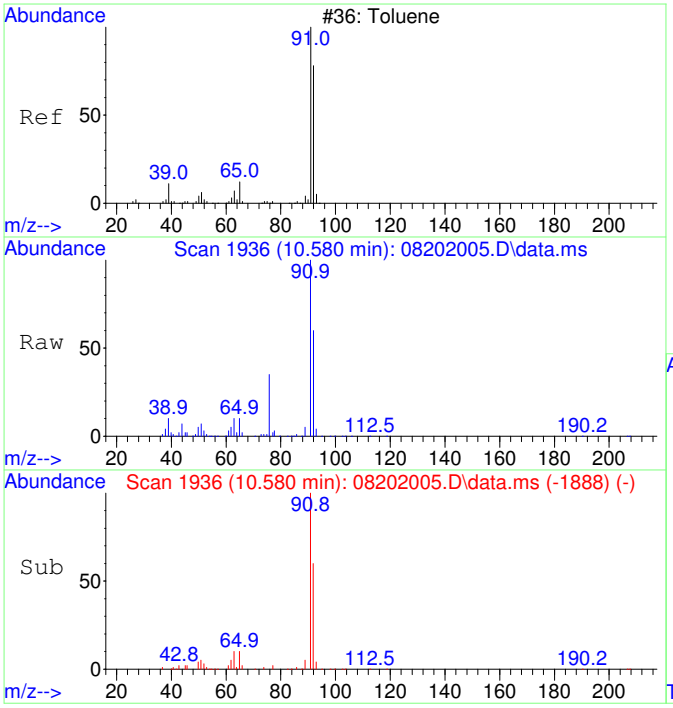


#36
Toluene-d8 SCAN
Concen: 5000.00 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 98 Resp: 320910

Ion	Ratio	Lower	Upper
98	100		
100	66.2	40.0	100.0

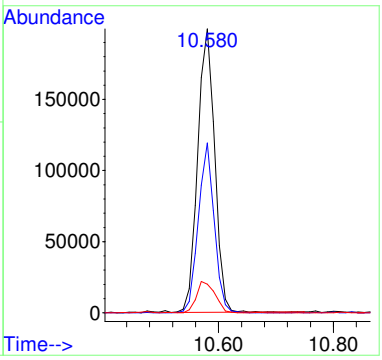


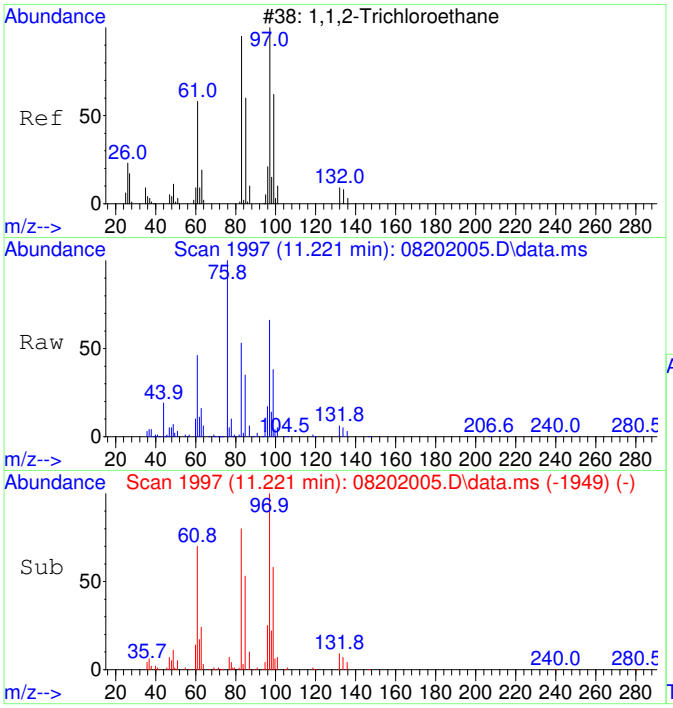


#37
Toluene SCAN
Concen: 5000.00 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 91 Resp: 410973

Ion	Ratio	Lower	Upper
91	100		
92	56.0	28.3	88.3
65	11.9	0.0	41.0

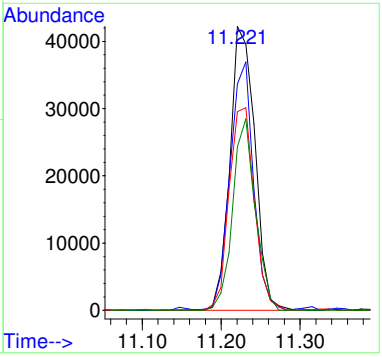


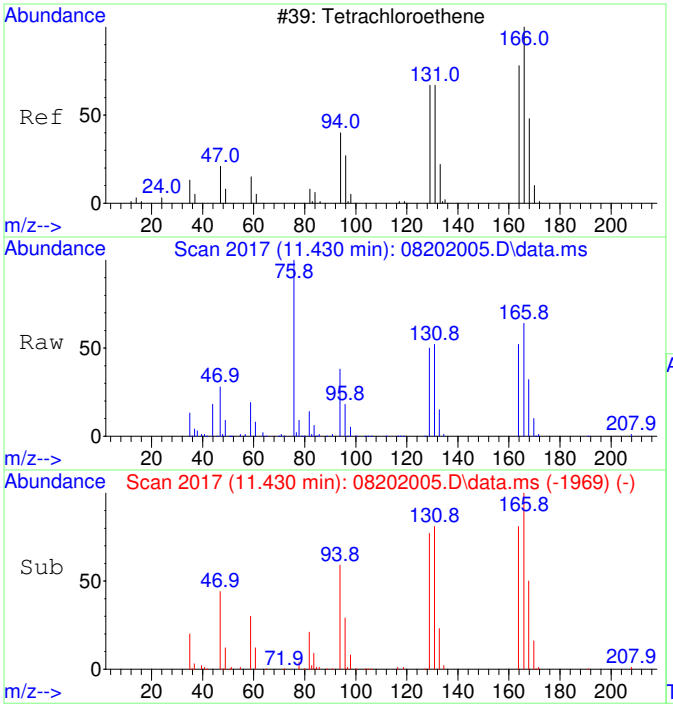


#38
1,1,2-Trichloroethane SCAN
Concen: 5000.00 ug/L
RT: 11.221 min Scan# 1997
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 97 Resp: 92246

Ion	Ratio	Lower	Upper
97	100		
83	82.6	57.7	117.7
61	72.3	32.1	92.1
99	61.4	36.7	96.7

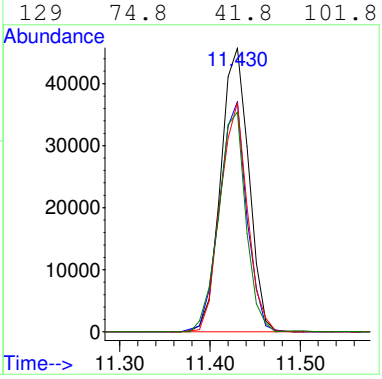


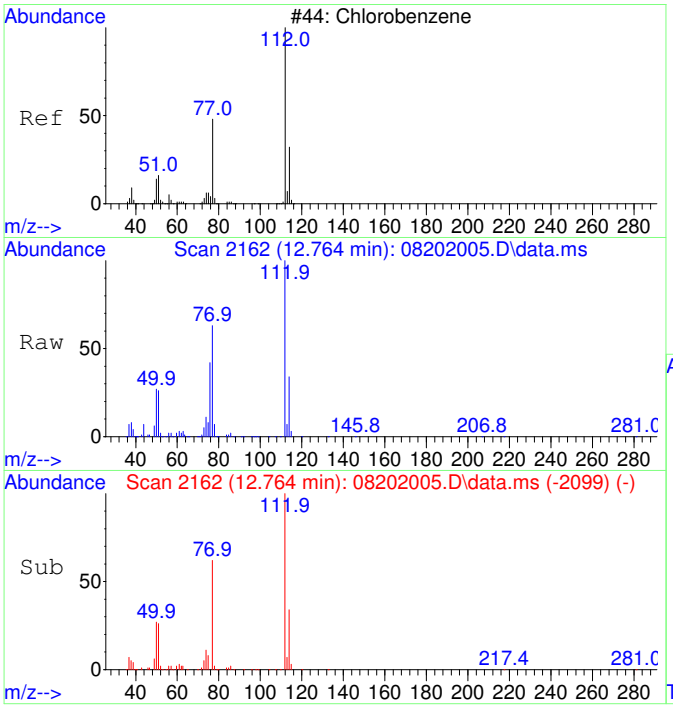


#39
Tetrachloroethene SCAN
Concen: 5000.00 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:166 Resp: 98735

Ion	Ratio	Lower	Upper
166	100		
164	79.1	50.9	110.9
131	78.0	38.7	98.7
129	74.8	41.8	101.8

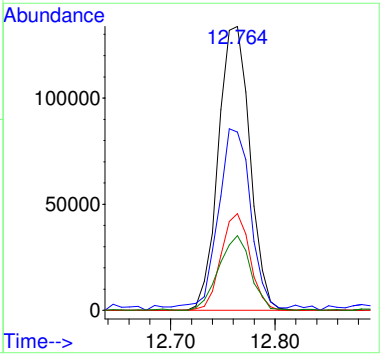


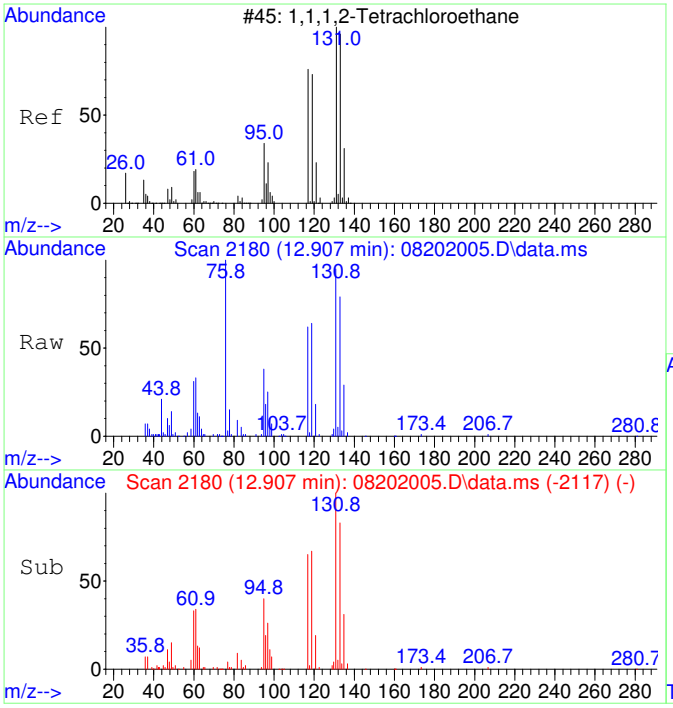


#40
Chlorobenzene SCAN
Concen: 5000.00 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:112 Resp: 280827

Ion	Ratio	Lower	Upper
112	100		
77	65.3	28.2	88.2
114	31.4	2.3	62.3
51	26.6	0.0	50.1

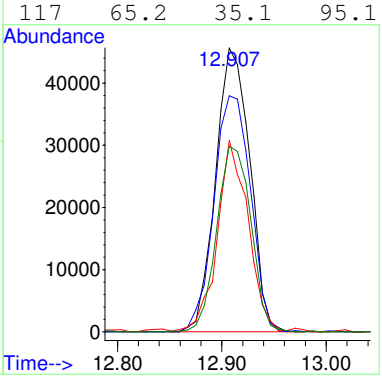


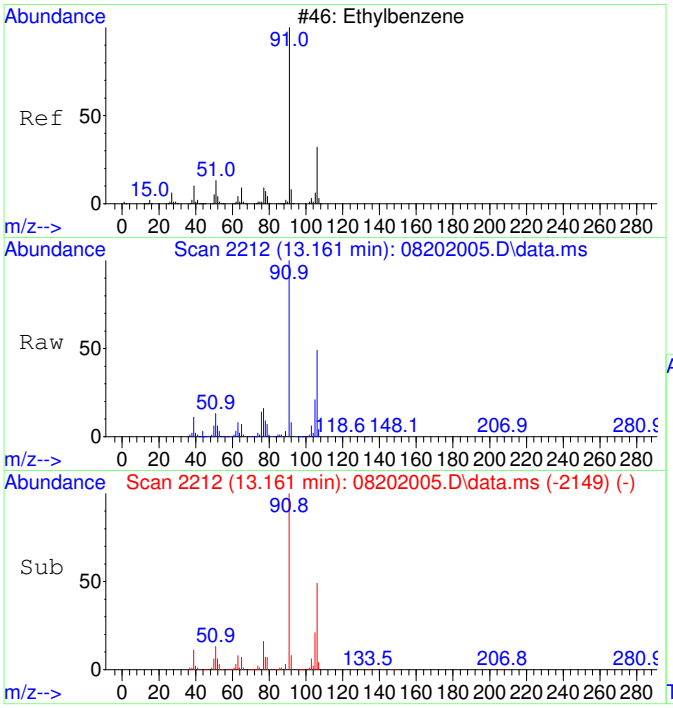


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 5000.00 ug/L
RT: 12.907 min Scan# 2180
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:131 Resp: 103928

Ion	Ratio	Lower	Upper
131	100		
133	88.7	66.9	126.9
119	59.8	40.4	100.4
117	65.2	35.1	95.1

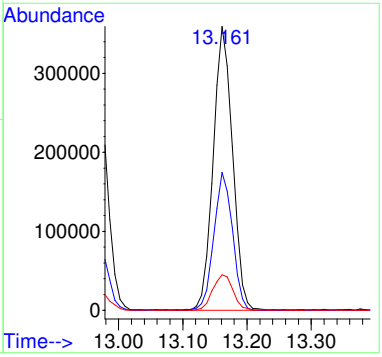


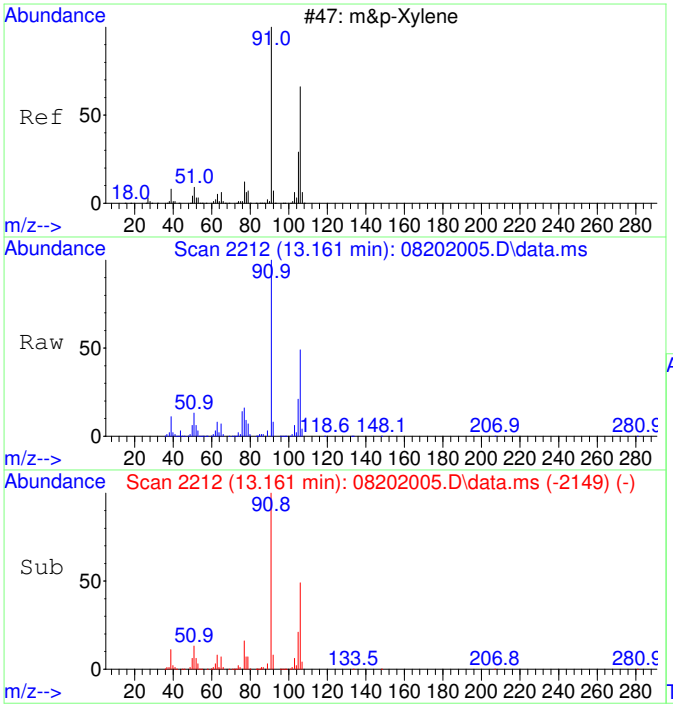


#42
Ethylbenzene SCAN
Concen: 5000.00 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 91 Resp: 748721

Ion	Ratio	Lower	Upper
91	100		
106	46.7	23.1	83.1
51	13.1	0.0	40.1

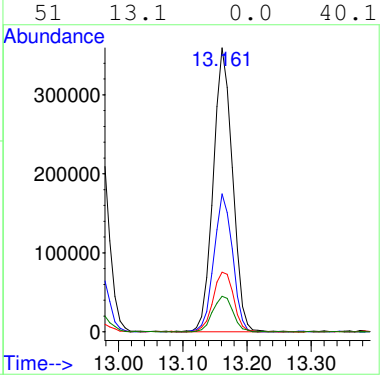


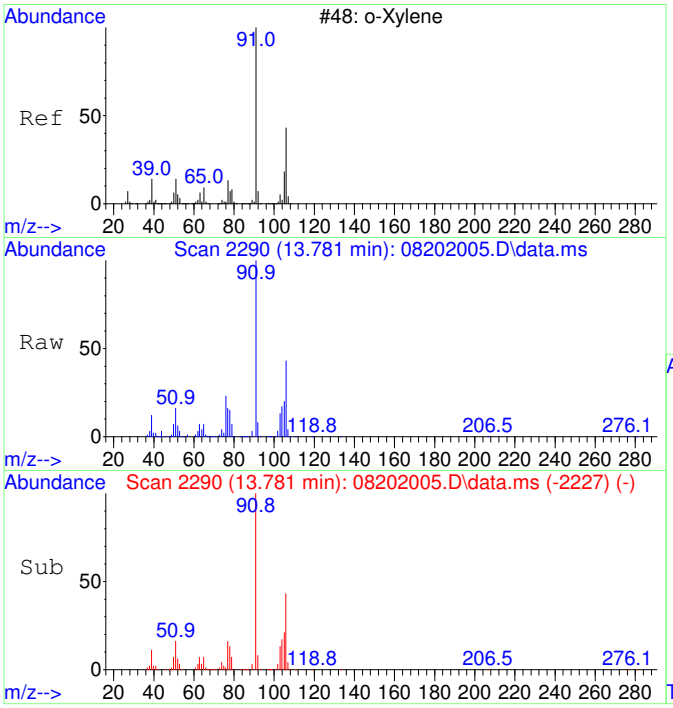


#43
m&p-Xylene SCAN
Concen: 5000.00 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 91 Resp: 748721

Ion	Ratio	Lower	Upper
91	100		
106	46.7	23.1	83.1
105	22.5	0.0	54.7
51	13.1	0.0	40.1

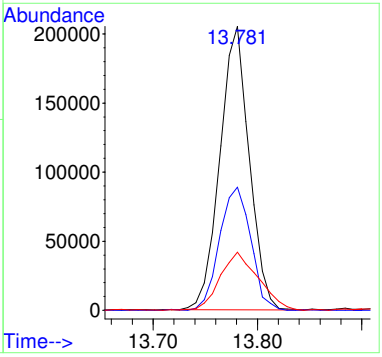


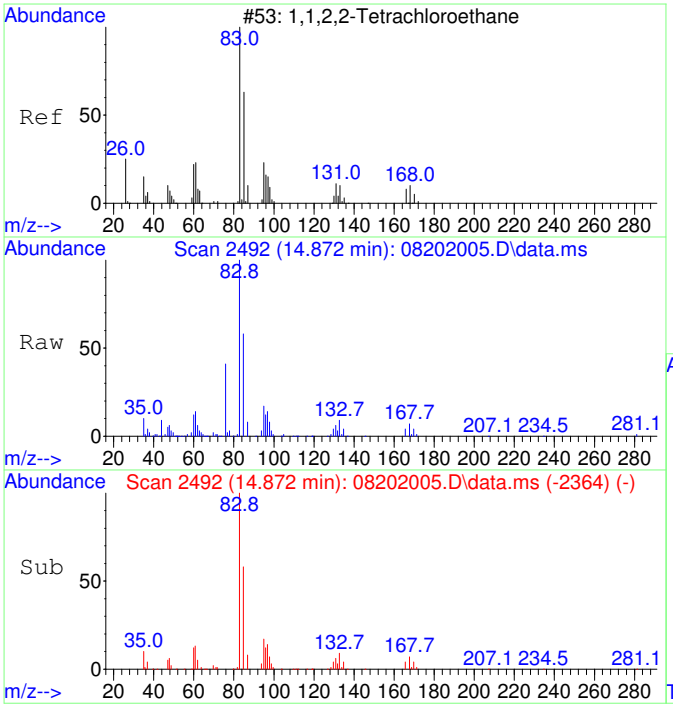


#44
o-Xylene SCAN
Concen: 5000.00 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 91 Resp: 400772

Ion	Ratio	Lower	Upper
91	100		
106	46.3	18.0	78.0
105	26.7	0.0	56.6

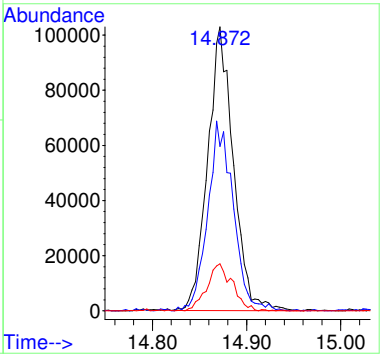


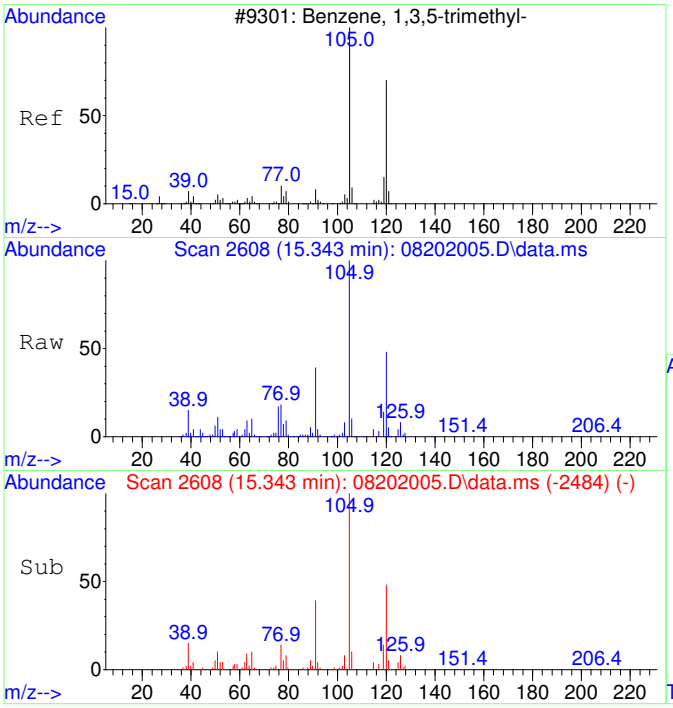


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 5000.00 ug/L
RT: 14.872 min Scan# 2492
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 83 Resp: 195422

Ion	Ratio	Lower	Upper
83	100		
85	66.2	35.9	95.9
95	16.2	0.0	47.4

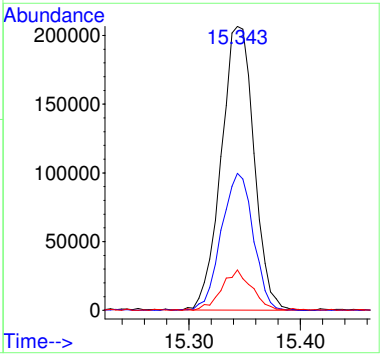


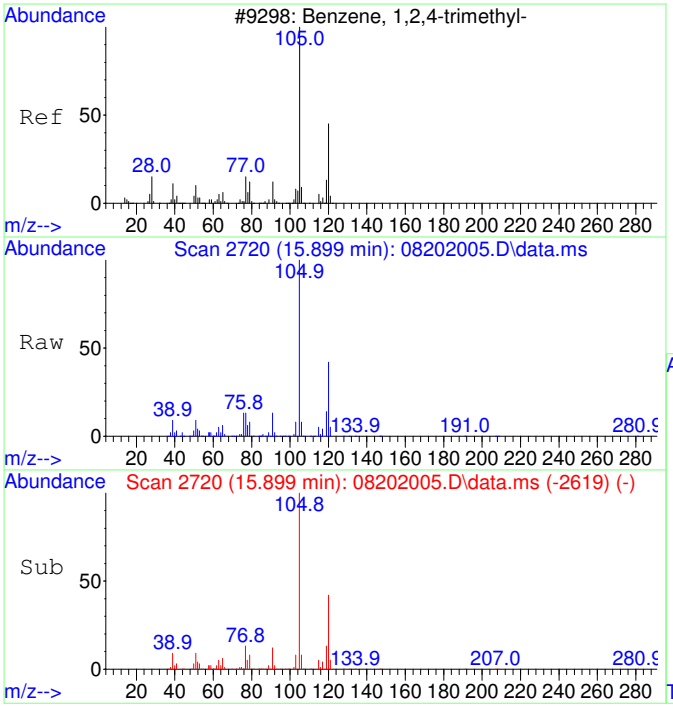


#46
1,3,5-Trimethylbenzene SCAN
Concen: 5000.00 ug/L
RT: 15.343 min Scan# 2608
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:105 Resp: 422373

Ion	Ratio	Lower	Upper
105	100		
120	46.9	18.3	78.3
119	12.9	0.0	43.1

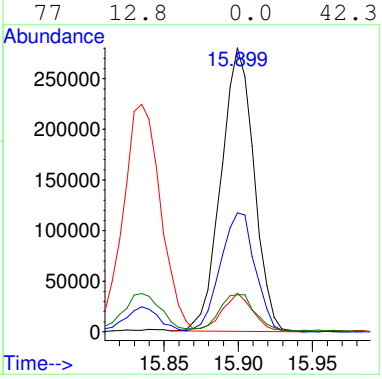


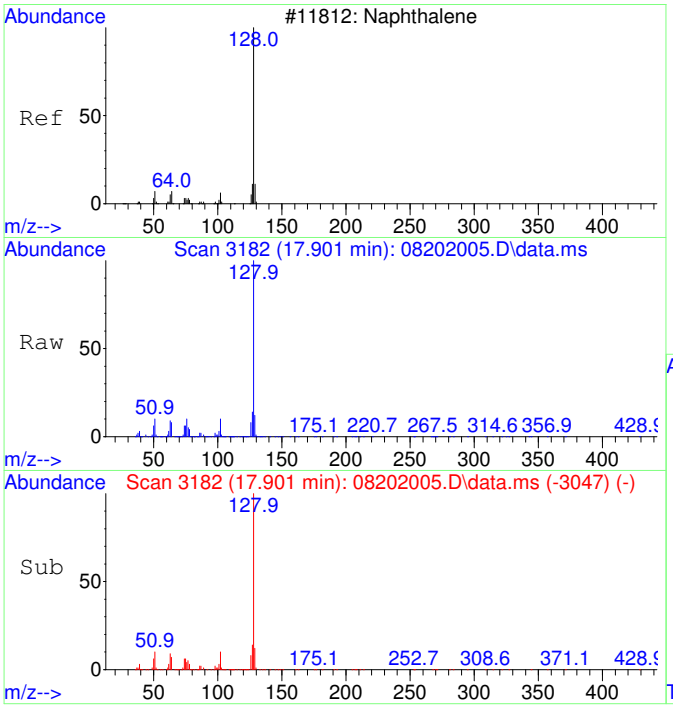


#47
1,2,4-Trimethylbenzene SCAN
Concen: 5000.00 ug/L
RT: 15.899 min Scan# 2720
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:105 Resp: 432181

Ion	Ratio	Lower	Upper
105	100		
120	43.9	16.9	76.9
119	10.9	0.0	41.9
77	12.8	0.0	42.3

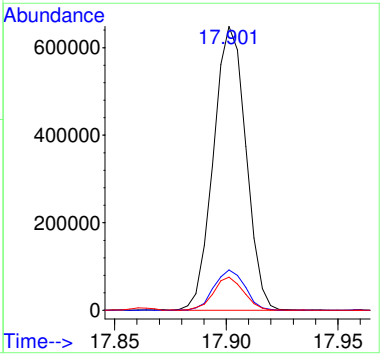




#48
Naphthalene SCAN
Concen: 5000.00 ug/L
RT: 17.901 min Scan# 3182
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:128 Resp: 653960

Ion	Ratio	Lower	Upper
128	100		
127	13.7	0.0	44.0
129	10.9	0.0	40.8



S20H039-CAL4

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\082020\
Data File : 08202006.D
Acq On : 20 Aug 2020 16:37
InstName : AG5975C
Operator : TD
Sample : S20H039-CAL4
Misc : 2030071 1 mg/L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 21 08:31:08 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\082020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:30:13 2020
Response via : Initial Calibration

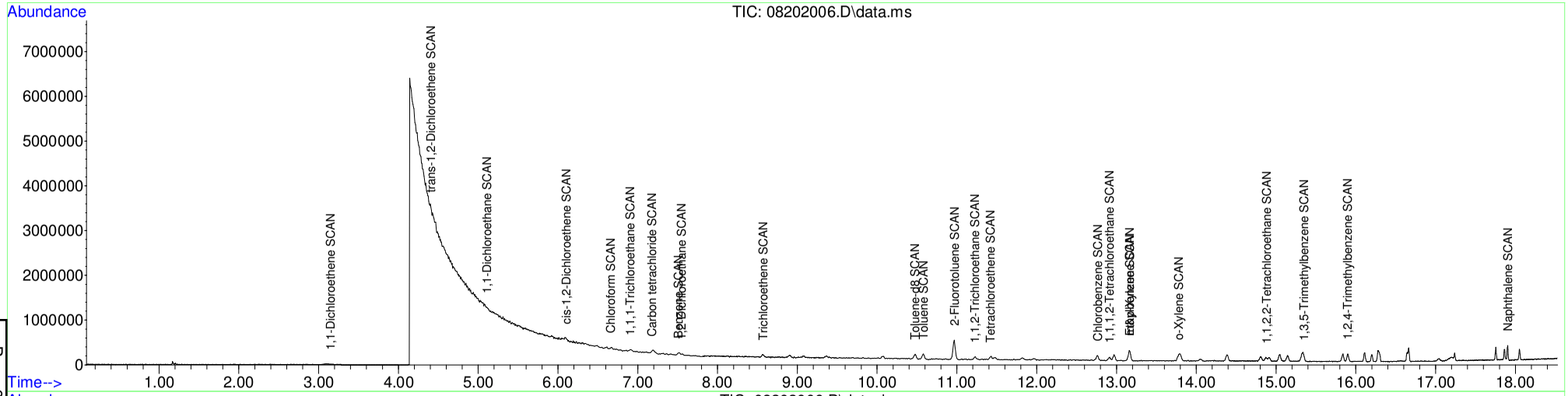
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.959	109	620555	5000.00	ug/L	-0.01
System Monitoring Compounds						
12) Toluene-d8	10.477	98	134499	1107.17	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 22.14%#			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.089	61	27036	990.97	ug/L	83
3] trans-1,2-Dichloroethene	4.402	61	30539	1066.69	ug/L	99
4] 1,1-Dichloroethane	5.099	63	38542	1081.47	ug/L	99
5] cis-1,2-Dichloroethene	6.094	61	41004	1089.98	ug/L	99
6] Chloroform	6.664	83	41060	1066.37	ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	44677	1068.41	ug/L	99
8] Carbon tetrachloride	7.187	117	42146	1070.84	ug/L	99
9] Benzene	7.515	78	112745	1069.32	ug/L	95
10] 1,2-Dichloroethane	7.552	62	41424	1100.58	ug/L	98
11] Trichloroethene	8.569	130	34670	1092.13	ug/L	94
13] Toluene	10.571	91	167580	1082.02	ug/L	99
14] 1,1,2-Trichloroethane	11.222	97	36313	1076.02	ug/L	97
15] Tetrachloroethene	11.421	166	48775	1088.22	ug/L	100
16] Chlorobenzene	12.757	112	121629	1096.77	ug/L	92
17] 1,1,1,2-Tetrachloroethane	12.908	131	43449	1093.42	ug/L	99
18] Ethylbenzene	12.964	91	207872	1102.67	ug/L	97
19] m&p-Xylene	13.162	91	320098	2172.54	ug/L	96
20] o-Xylene	13.774	91	169989	1079.90	ug/L	96
21] 1,1,2,2-Tetrachloroethane	14.873	83	76025	1089.75	ug/L	99
22] 1,3,5-Trimethylbenzene	15.340	105	182134	1087.07	ug/L	96
23] 1,2,4-Trimethylbenzene	15.896	105	184398	1059.58	ug/L	96
24] Naphthalene	17.900	128	301171	1094.95	ug/L	100
25) 2-Fluorotoluene SCAN	10.969	109	306378	5064.71	ug/L	99
26) 1,1-Dichloroethene SCAN	3.148	61	1349	105.01	ug/L	73
27) trans-1,2-Dichloroethe...	4.408	61	18304	1151.40	ug/L #	25
28) 1,1-Dichloroethane SCAN	5.111	63	19854	1079.15	ug/L	85
29) cis-1,2-Dichloroethene...	6.106	61	25480	1292.65	ug/L #	35
30) Chloroform SCAN	6.662	83	23662	1106.74	ug/L	91
31) 1,1,1-Trichloroethane ...	6.906	97	25181	1292.45	ug/L	79
32) Carbon tetrachloride SCAN	7.173	117	20098	988.93	ug/L	88
33) Benzene SCAN	7.514	78	64447	1201.38	ug/L	96
34) 1,2-Dichloroethane SCAN	7.550	62	26922	1359.13	ug/L #	40
35) Trichloroethene SCAN	8.573	130	17410	1181.00	ug/L	86
36) Toluene-d8 SCAN	10.475	98	71562	1209.63	ug/L	99
37) Toluene SCAN	10.580	91	96865	1278.52	ug/L	96
38) 1,1,2-Trichloroethane ...	11.220	97	23045	1355.14	ug/L	87
39) Tetrachloroethene SCAN	11.420	166	21523	1182.46	ug/L	95
40) Chlorobenzene SCAN	12.764	112	61825	1194.21	ug/L	81
41) 1,1,1,2-Tetrachloroeth...	12.907	131	20506	1070.30	ug/L	93
42) Ethylbenzene SCAN	13.161	91	169926	1231.10	ug/L	90
43) m&p-Xylene SCAN	13.161	91	169926	1231.10	ug/L	91
44) o-Xylene SCAN	13.781	91	84347	1141.64	ug/L	97
45) 1,1,2,2-Tetrachloroeth...	14.879	83	43868	1217.67	ug/L #	28
46) 1,3,5-Trimethylbenzene...	15.348	105	88623	1138.17	ug/L	99
47) 1,2,4-Trimethylbenzene...	15.899	105	89148	1118.93	ug/L	93
48) Naphthalene SCAN	17.902	128	131675	1092.21	ug/L	96

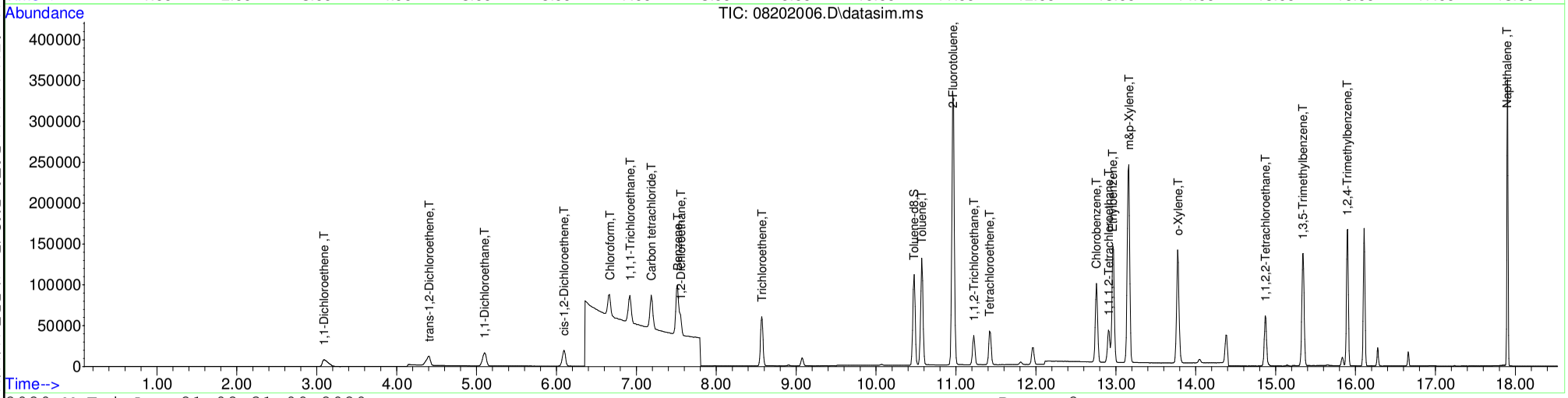
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\082020\
Data File : 08202006.D
Acq On : 20 Aug 2020 16:37
InstName : AG5975C
Operator : TD
Sample : S20H039-CAL4
Misc : 2030071 1 mg/L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 21 08:31:08 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\082020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:30:13 2020
Response via : Initial Calibration





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S20H039-CAL5

Quantitation Report (Not Reviewed)

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\082020\
Data File : 08202007.D
Acq On : 20 Aug 2020 17:01
InstName : AG5975C
Operator : TD
Sample : S20H039-CAL5
Misc : 2030072 0.15 mg/L
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 21 08:31:11 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\082020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:30:13 2020
Response via : Initial Calibration

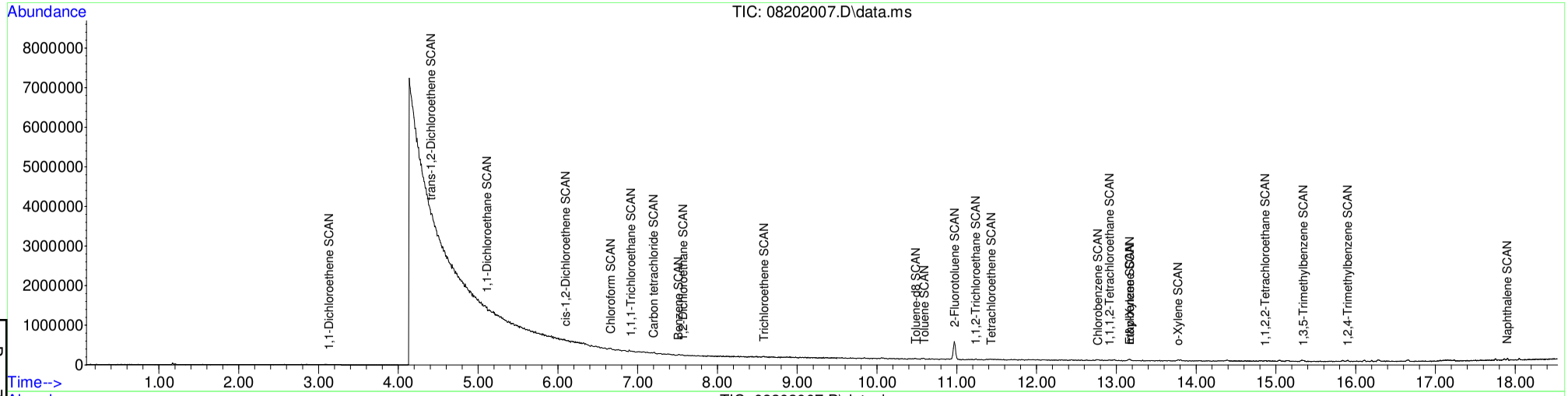
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	687675	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	18291	135.87 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery =	2.72%#	
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	4736	156.65 ug/L	87
3] trans-1,2-Dichloroethene	4.396	61	4743	149.50 ug/L	88
4] 1,1-Dichloroethane	5.099	63	6017	152.35 ug/L	86
5] cis-1,2-Dichloroethene	6.094	61	6181	148.27 ug/L	99
6] Chloroform	6.664	83	6101	142.98 ug/L	95
7] 1,1,1-Trichloroethane	6.919	97	6374	137.55 ug/L	98
8] Carbon tetrachloride	7.187	117	5978	137.06 ug/L	98
9] Benzene	7.515	78	16396	140.33 ug/L	75
10] 1,2-Dichloroethane	7.552	62	6015	144.21 ug/L	80
11] Trichloroethene	8.575	130	4884	138.83 ug/L	93
13] Toluene	10.582	91	24264	141.38 ug/L	98
14] 1,1,2-Trichloroethane	11.232	97	5063	135.38 ug/L	97
15] Tetrachloroethene	11.432	166	6650	133.89 ug/L	99
16] Chlorobenzene	12.765	112	16465	133.98 ug/L	91
17] 1,1,1,2-Tetrachloroethane	12.908	131	5876	133.44 ug/L	98
18] Ethylbenzene	12.972	91	29078	139.19 ug/L	97
19] m&p-Xylene	13.163	91	45947	281.41 ug/L	95
20] o-Xylene	13.774	91	23631	135.47 ug/L	96
21] 1,1,2,2-Tetrachloroethane	14.873	83	10329	133.61 ug/L	99
22] 1,3,5-Trimethylbenzene	15.344	105	24949	134.37 ug/L	97
23] 1,2,4-Trimethylbenzene	15.900	105	26485	137.33 ug/L	94
24] Naphthalene	17.903	128	41384	135.77 ug/L	100
25) 2-Fluorotoluene SCAN	10.969	109	332955	4966.84 ug/L	95
26) 1,1-Dichloroethene SCAN	3.126	61	434	30.49 ug/L	72
27) trans-1,2-Dichloroethe...	4.408	61	395	22.42 ug/L #	55
28) 1,1-Dichloroethane SCAN	5.111	63	2230	109.38 ug/L #	53
29) cis-1,2-Dichloroethene...	6.100	61	1391	63.68 ug/L #	33
30) Chloroform SCAN	6.663	83	4055	171.15 ug/L #	39
31) 1,1,1-Trichloroethane ...	6.918	97	4929	228.30 ug/L	78
32) Carbon tetrachloride SCAN	7.198	117	2800	124.33 ug/L #	65
33) Benzene SCAN	7.514	78	18871	317.45 ug/L	97
34) 1,2-Dichloroethane SCAN	7.563	62	3207	146.10 ug/L #	65
35) Trichloroethene SCAN	8.584	130	3166	193.80 ug/L	87
36) Toluene-d8 SCAN	10.486	98	12748	194.45 ug/L	64
37) Toluene SCAN	10.591	91	14371	171.17 ug/L	97
38) 1,1,2-Trichloroethane ...	11.231	97	4083	216.66 ug/L #	56
39) Tetrachloroethene SCAN	11.431	166	2646	131.18 ug/L #	67
40) Chlorobenzene SCAN	12.764	112	9698	169.04 ug/L #	35
41) 1,1,1,2-Tetrachloroeth...	12.915	131	3761	177.14 ug/L	95
42) Ethylbenzene SCAN	13.169	91	24198	158.20 ug/L	91
43) m&p-Xylene SCAN	13.169	91	24198	158.20 ug/L	93
44) o-Xylene SCAN	13.773	91	15595	190.48 ug/L	94
45) 1,1,2,2-Tetrachloroeth...	14.864	83	7082	177.39 ug/L #	39
46) 1,3,5-Trimethylbenzene...	15.337	105	14674	170.06 ug/L	95
47) 1,2,4-Trimethylbenzene...	15.898	105	13939	157.88 ug/L	82
48) Naphthalene SCAN	17.901	128	18555	138.89 ug/L	98

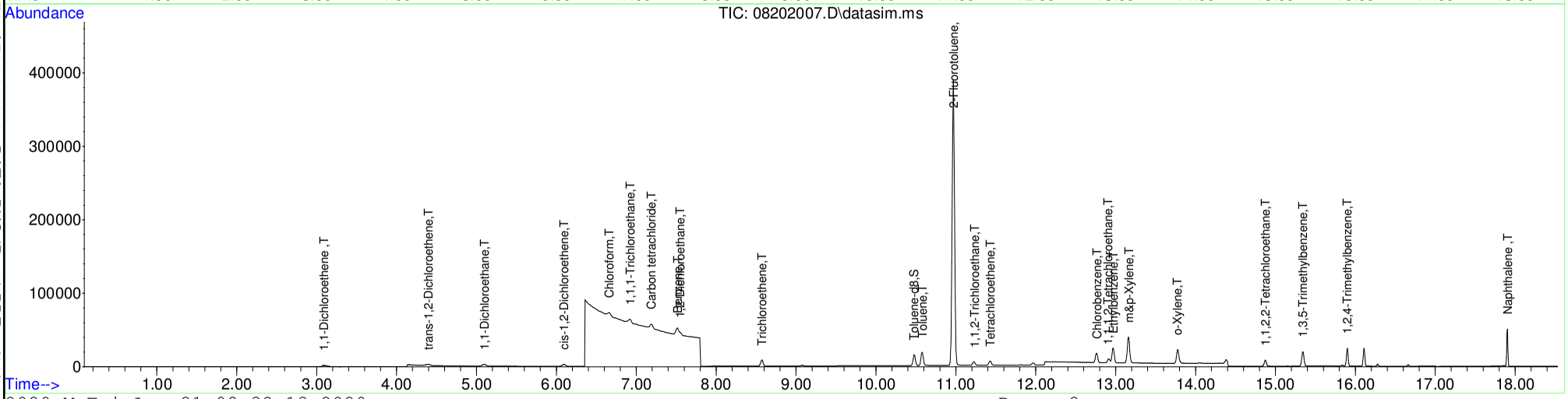
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\082020\
Data File : 08202007.D
Acq On : 20 Aug 2020 17:01
InstName : AG5975C
Operator : TD
Sample : S20H039-CAL5
Misc : 2030072 0.15 mg/L
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 21 08:31:11 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\082020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:30:13 2020
Response via : Initial Calibration





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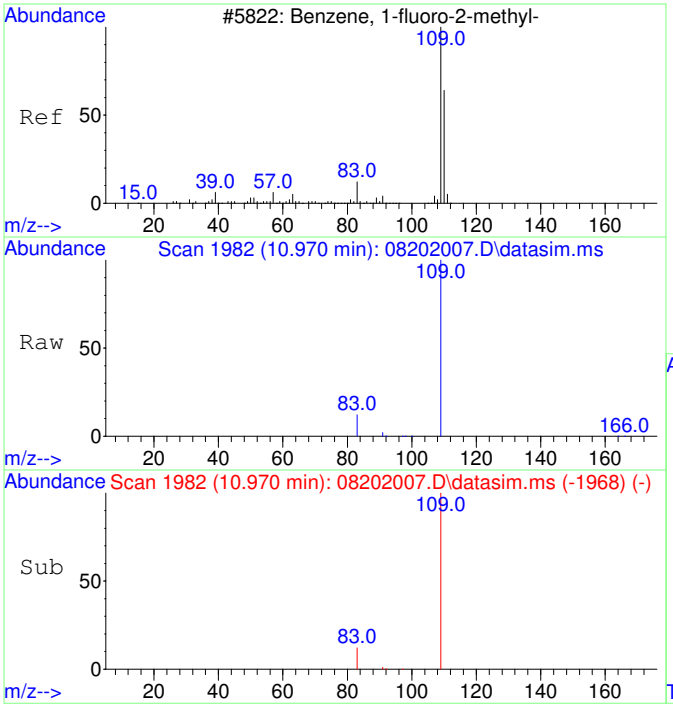
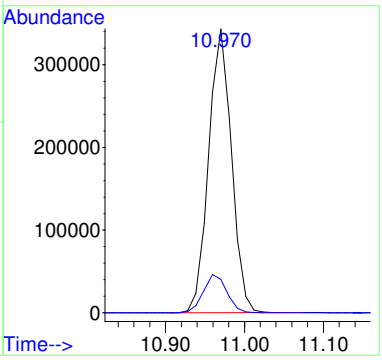
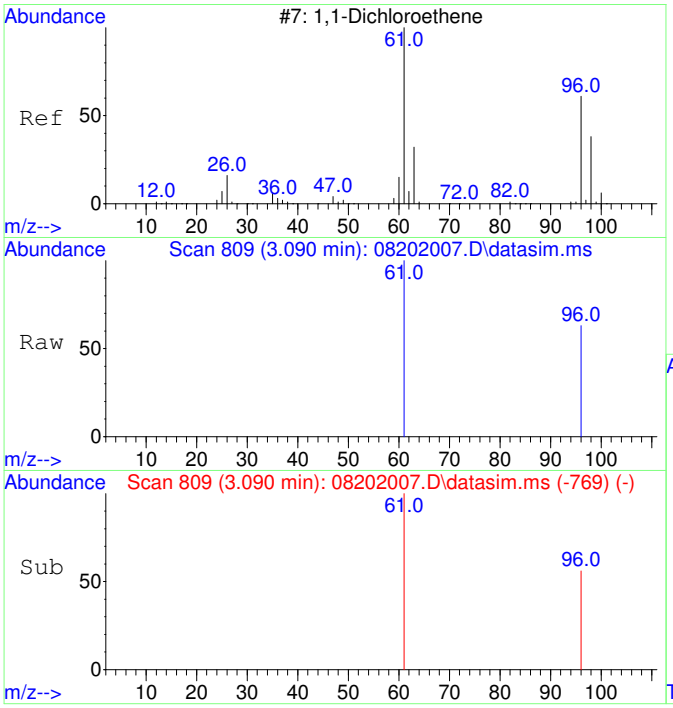


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:109 Resp: 687675

Ion	Ratio	Lower	Upper
109	100		
83	13.7	0.0	42.3

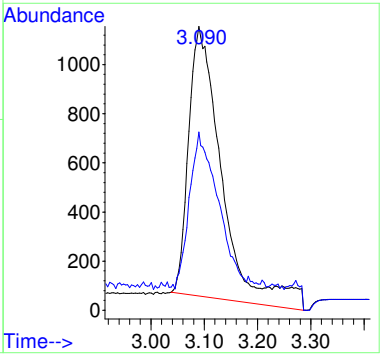




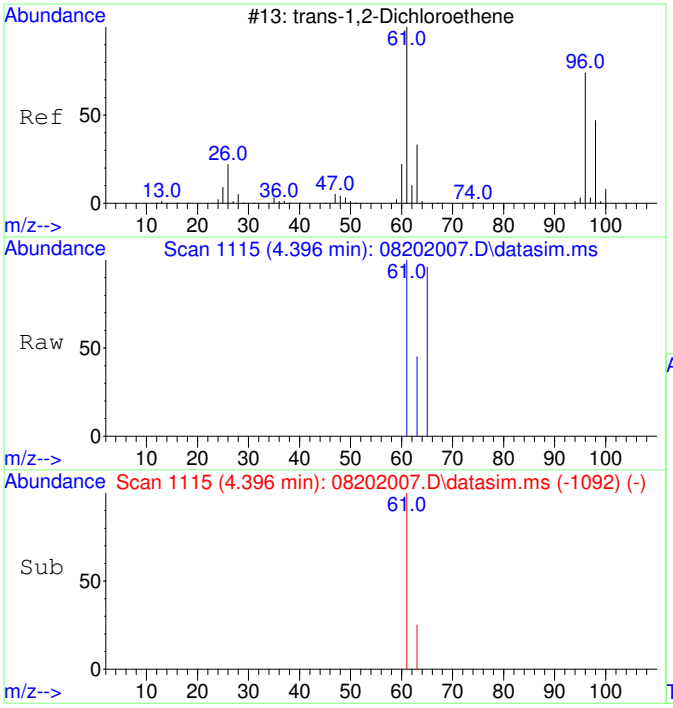
#2
1,1-Dichloroethene
Concen: 156.65 ug/L
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 61 Resp: 4736

Ion	Ratio	Lower	Upper
61	100		
96	56.8	37.2	97.2



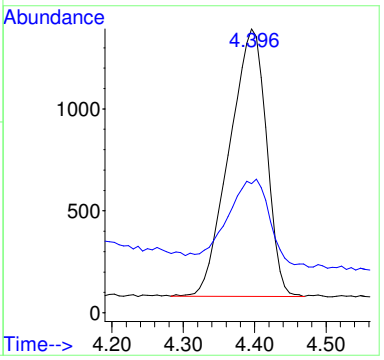
Before MI:
IMPROPER
BASELINE

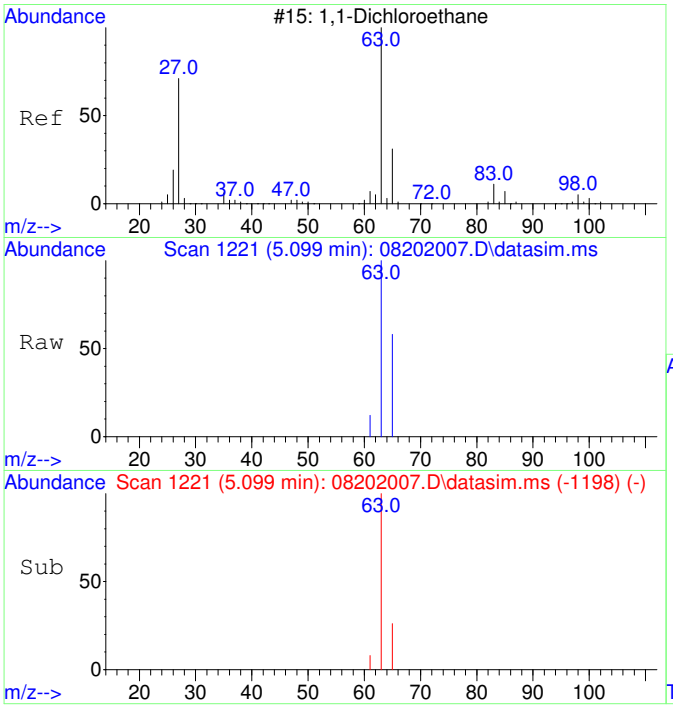


#3
trans-1,2-Dichloroethene
Concen: 149.50 ug/L
RT: 4.396 min Scan# 1115
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 61 Resp: 4743

Ion	Ratio	Lower	Upper
61	100		
63	39.2	2.4	62.4

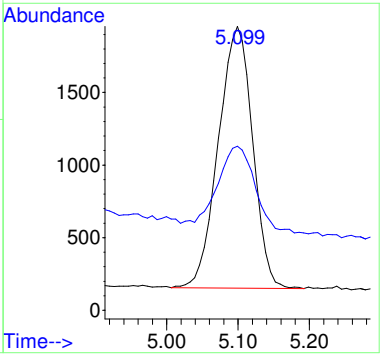


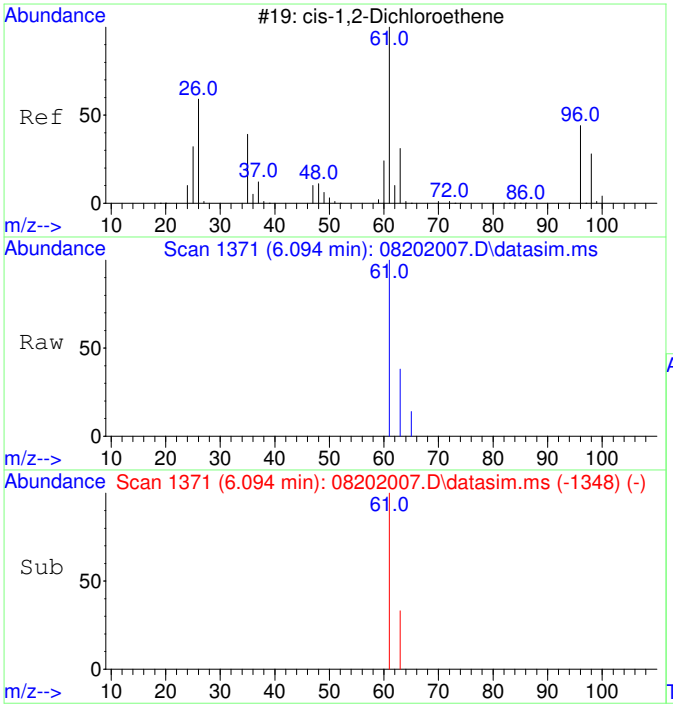


#4
1,1-Dichloroethane
Concen: 152.35 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 63 Resp: 6017

Ion	Ratio	Lower	Upper
63	100		
65	39.7	1.8	61.8

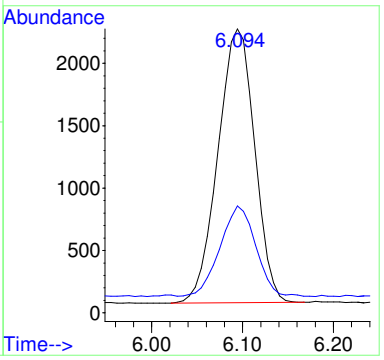


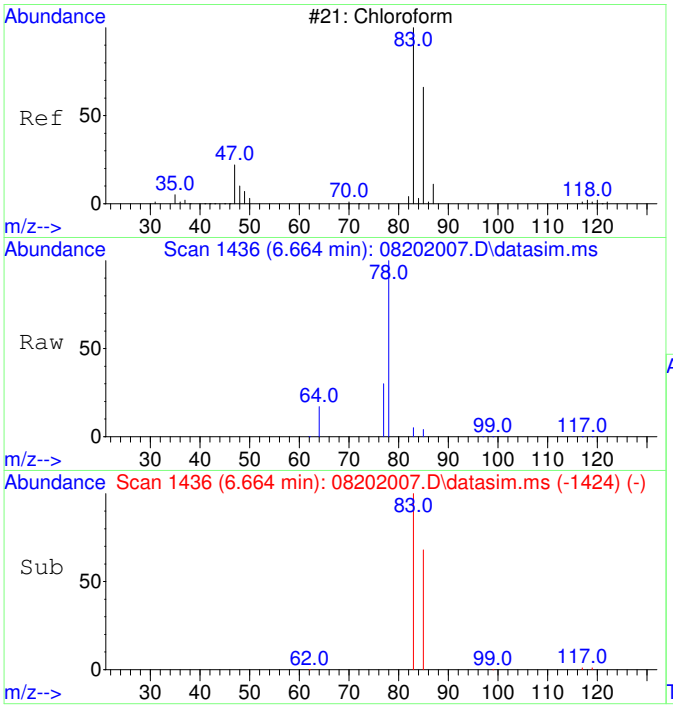


#5
cis-1,2-Dichloroethene
Concen: 148.27 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 61 Resp: 6181

Ion	Ratio	Lower	Upper
61	100		
63	32.0	2.5	62.5

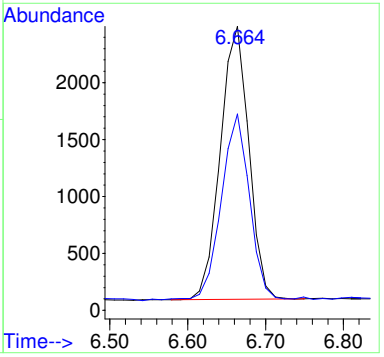


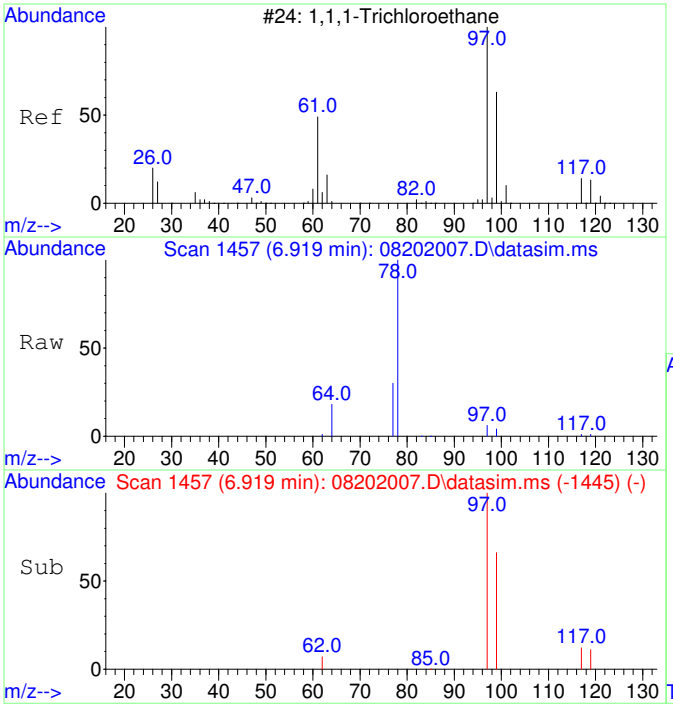


#6
Chloroform
Concen: 142.98 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 83 Resp: 6101

Ion	Ratio	Lower	Upper
83	100		
85	69.0	35.1	95.1

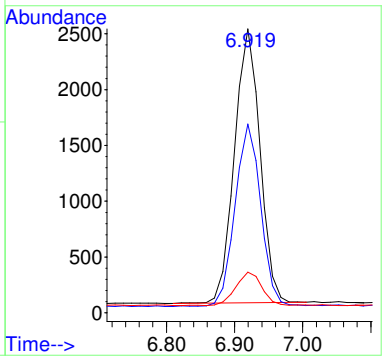


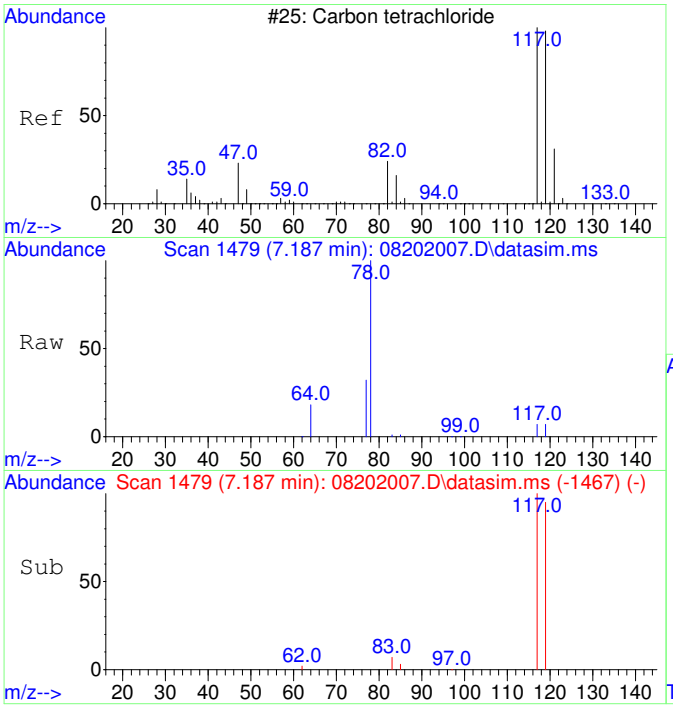


#7
1,1,1-Trichloroethane
Concen: 137.55 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 97 Resp: 6374

Ion	Ratio	Lower	Upper
97	100		
99	66.5	34.6	94.6
117	12.8	0.0	43.2

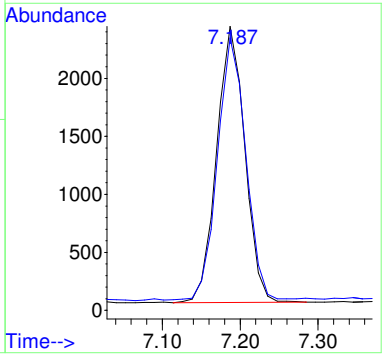


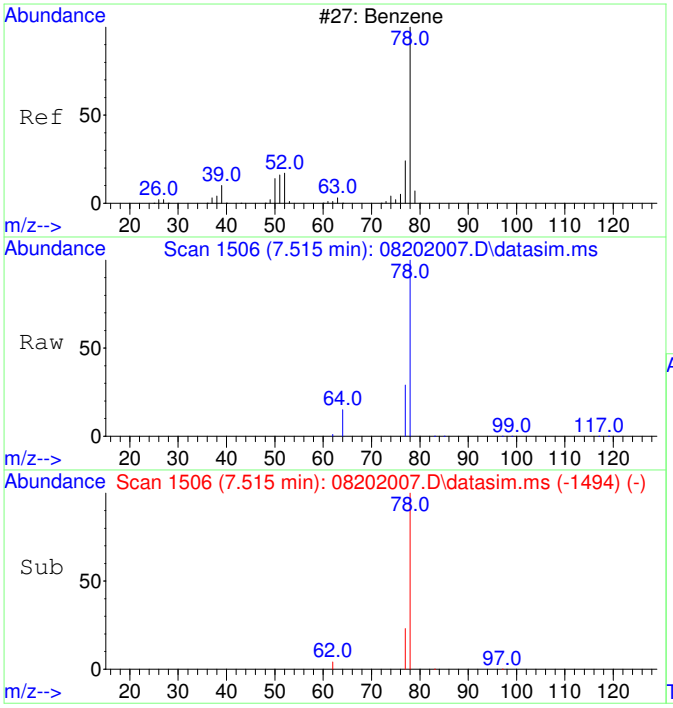


#8
Carbon tetrachloride
Concen: 137.06 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:117 Resp: 5978

Ion	Ratio	Lower	Upper
117	100		
119	94.6	66.4	126.4

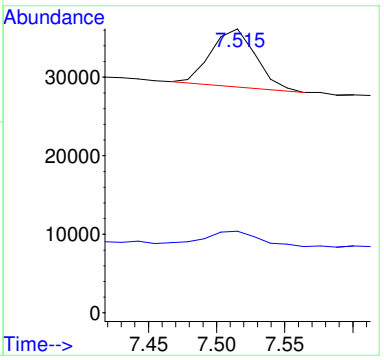


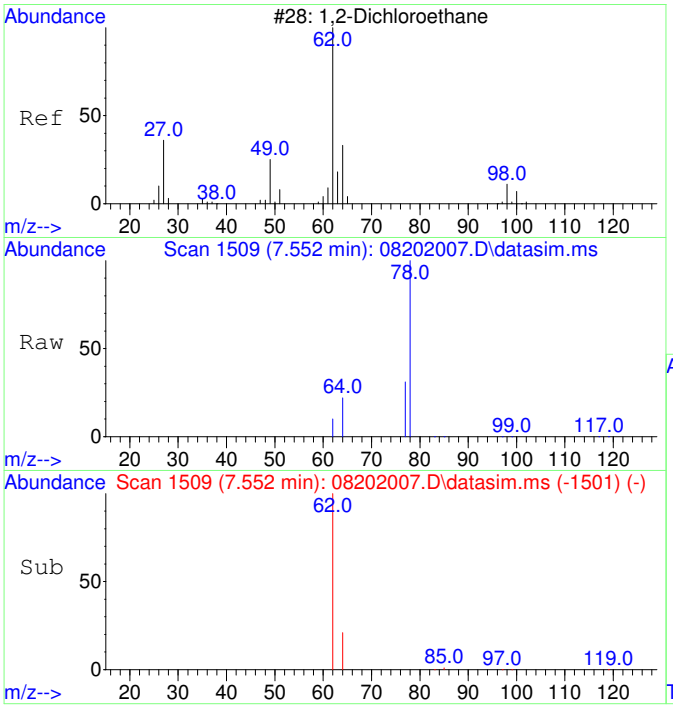


#9
Benzene
Concen: 140.33 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 78 Resp: 16396

Ion	Ratio	Lower	Upper
78	100		
77	35.6	0.0	53.2

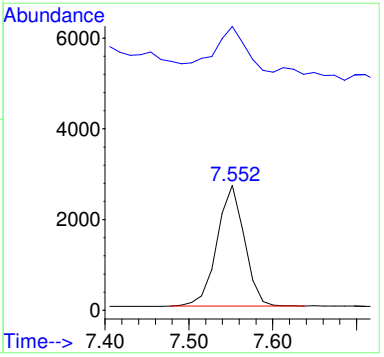


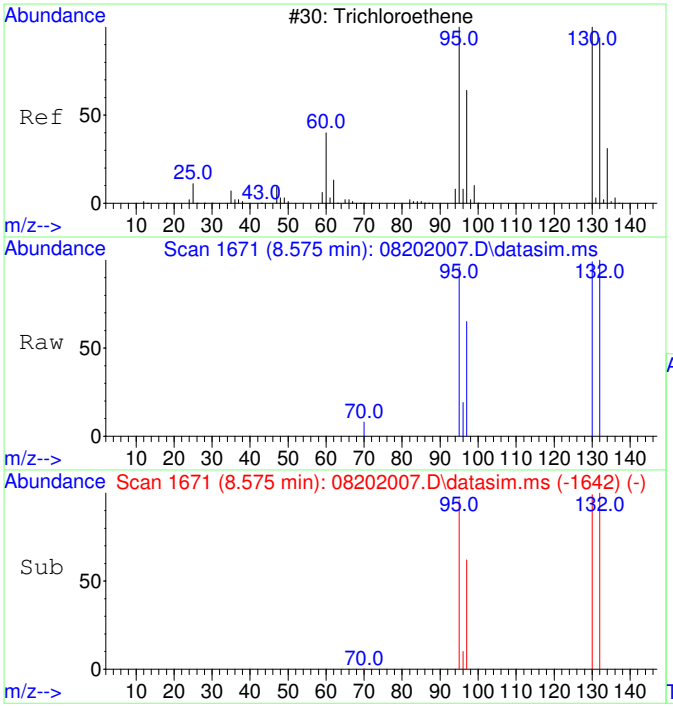


#10
1,2-Dichloroethane
Concen: 144.21 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 62 Resp: 6015

Ion	Ratio	Lower	Upper
62	100		
64	43.6	2.3	62.3

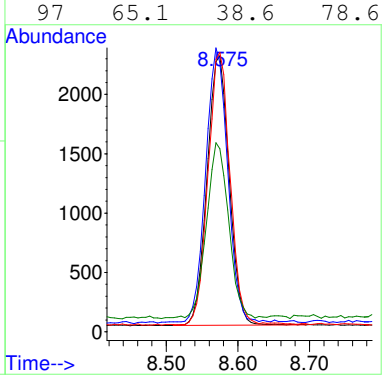


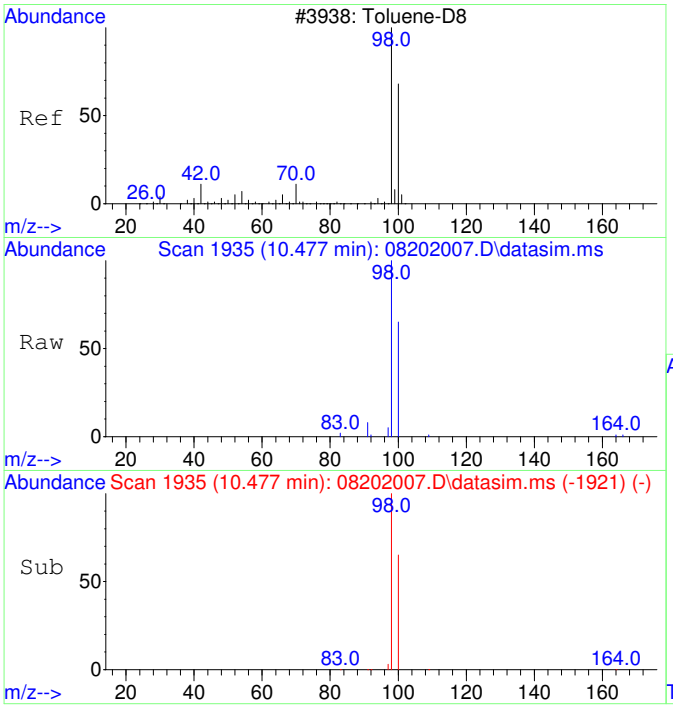


#11
Trichloroethene
Concen: 138.83 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:130 Resp: 4884

Ion	Ratio	Lower	Upper
130	100		
95	100.8	60.7	120.7
132	98.9	76.0	116.0
97	65.1	38.6	78.6

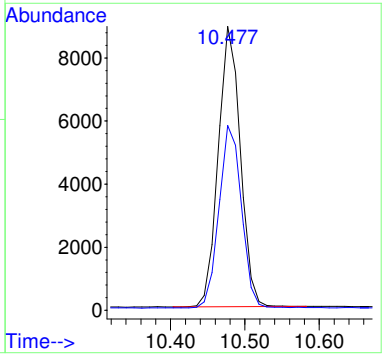


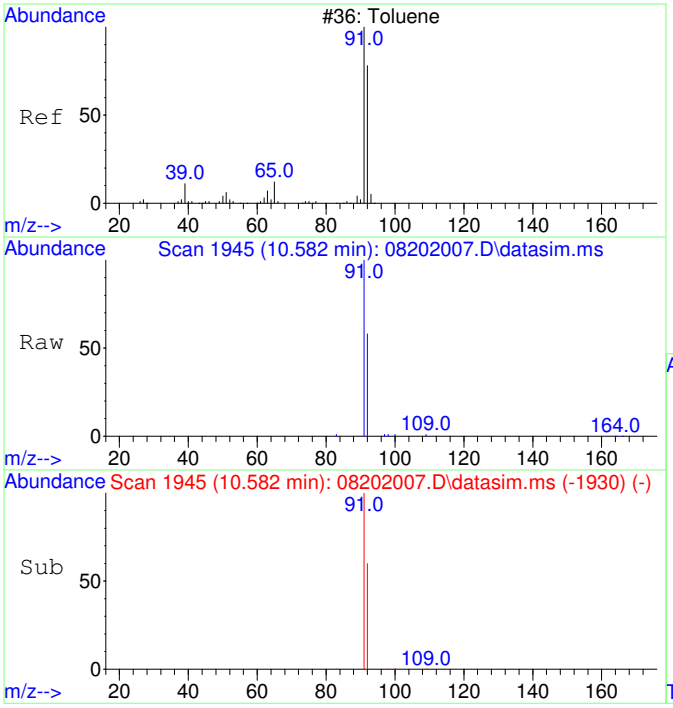


#12
Toluene-d8
Concen: 135.87 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 98 Resp: 18291

Ion	Ratio	Lower	Upper
98	100		
100	65.9	37.1	97.1

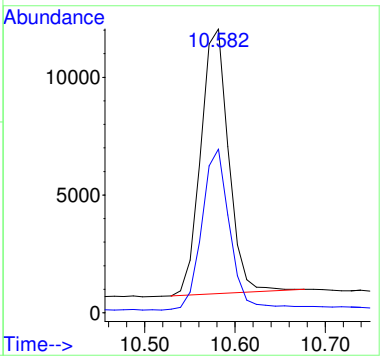


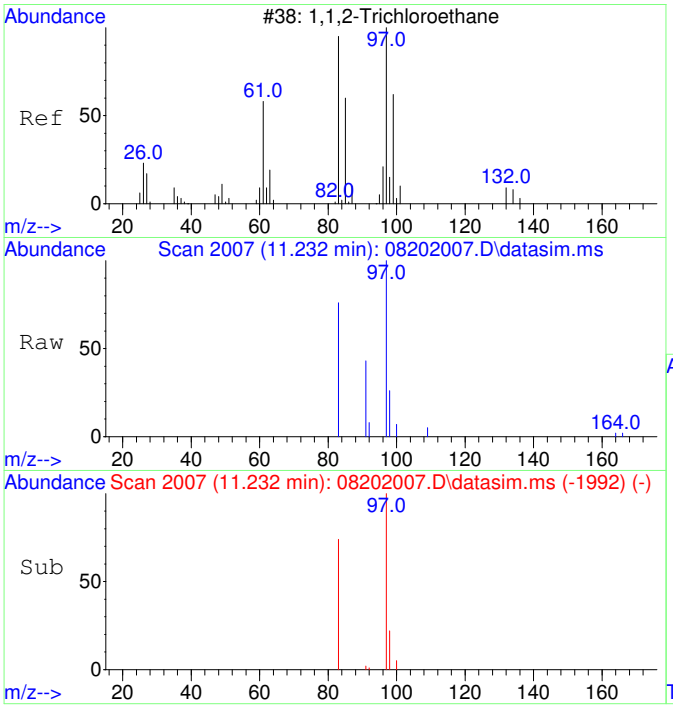


#13
Toluene
Concen: 141.38 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 24264

Ion	Ratio	Lower	Upper
91	100		
92	61.5	29.9	89.9

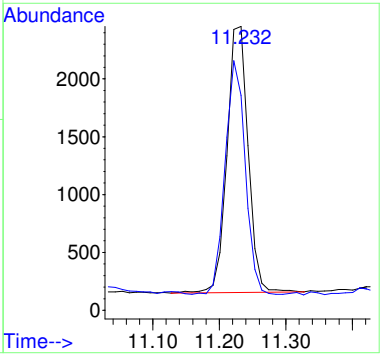


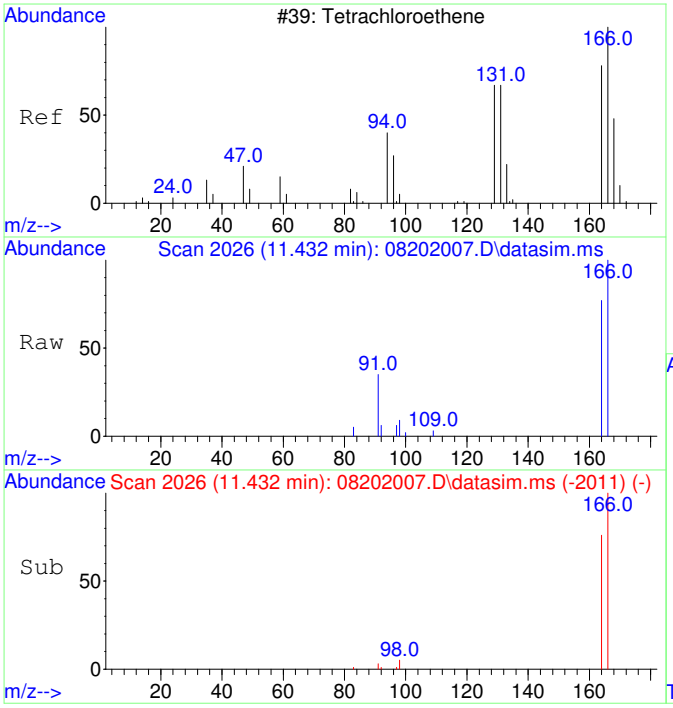


#14
1,1,2-Trichloroethane
Concen: 135.38 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 97 Resp: 5063

Ion	Ratio	Lower	Upper
97	100		
83	83.5	51.2	111.2

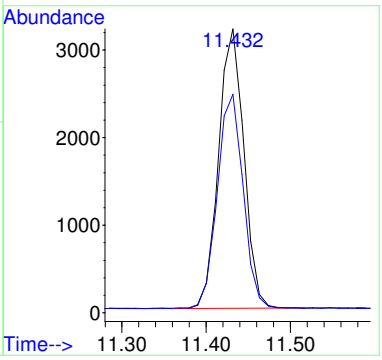


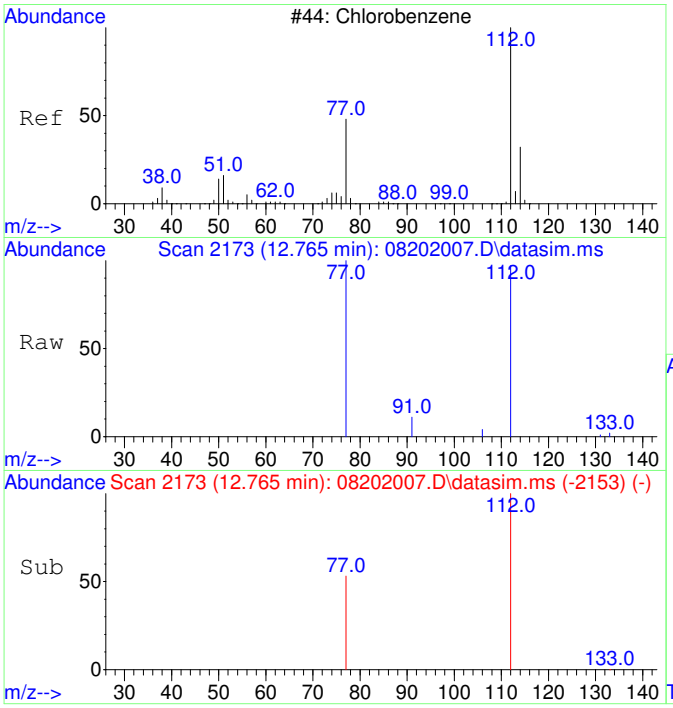


#15
Tetrachloroethene
Concen: 133.89 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:166 Resp: 6650

Ion	Ratio	Lower	Upper
166	100		
164	78.5	47.8	107.8

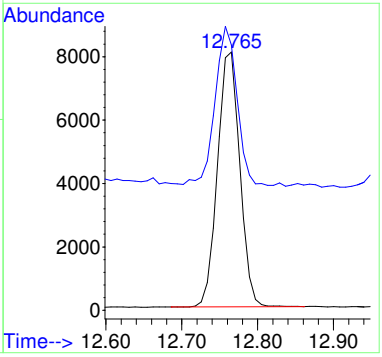


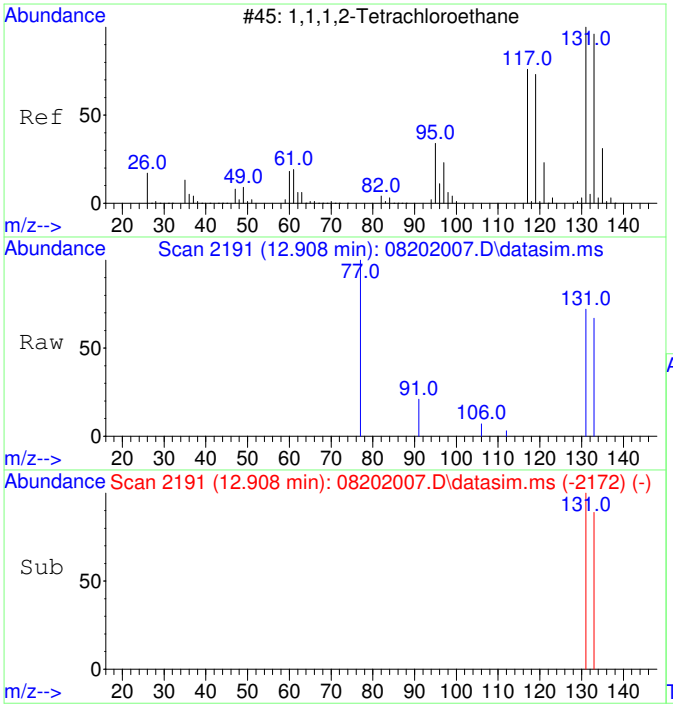


#16
Chlorobenzene
Concen: 133.98 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. 0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:112 Resp: 16465

Ion	Ratio	Lower	Upper
112	100		
77	60.1	23.6	83.6

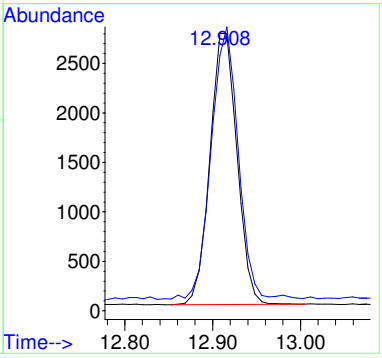


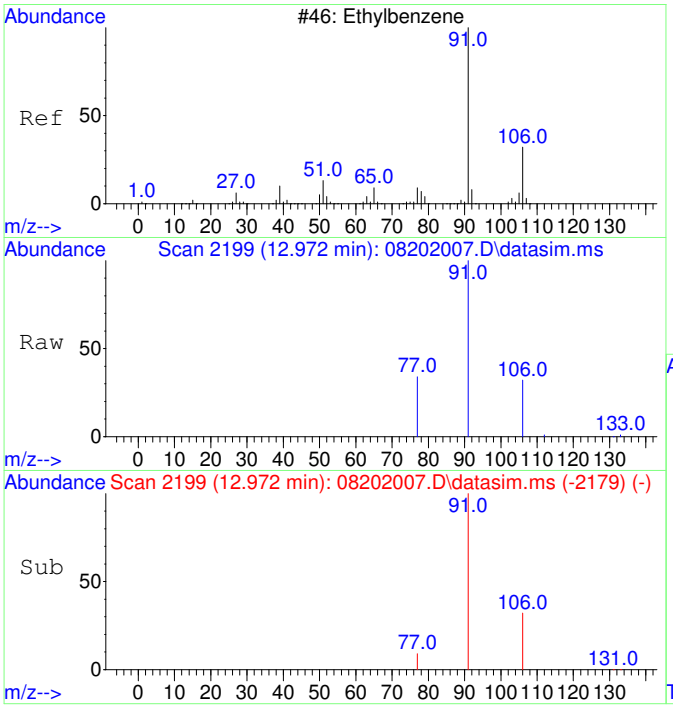


#17
1,1,1,2-Tetrachloroethane
Concen: 133.44 ug/L
RT: 12.908 min Scan# 2191
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:131 Resp: 5876

Ion	Ratio	Lower	Upper
131	100		
133	97.8	66.3	126.3

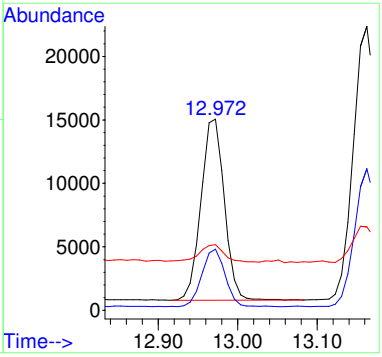


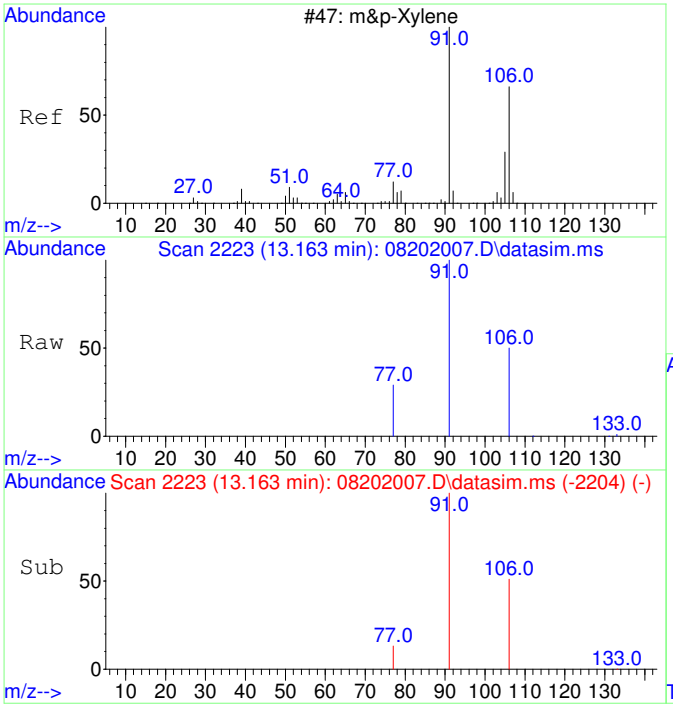


#18
Ethylbenzene
Concen: 139.19 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 29078

Ion	Ratio	Lower	Upper
91	100		
106	31.6	3.0	63.0
77	10.1	0.0	38.2

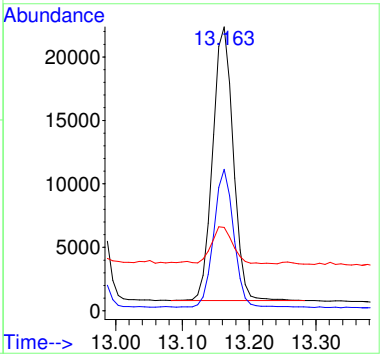


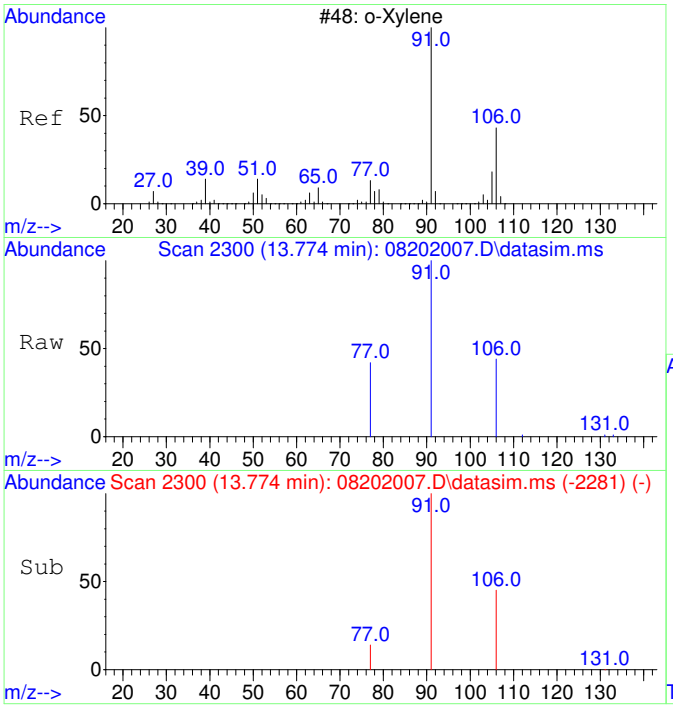


#19
m&p-Xylene
Concen: 281.41 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 45947

Ion	Ratio	Lower	Upper
91	100		
106	48.7	22.2	82.2
77	14.0	0.0	42.4

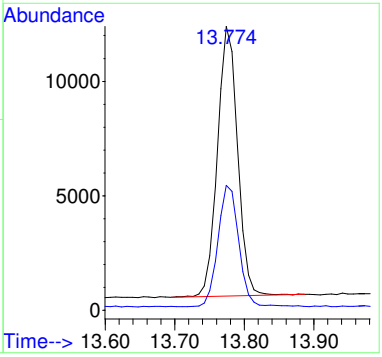


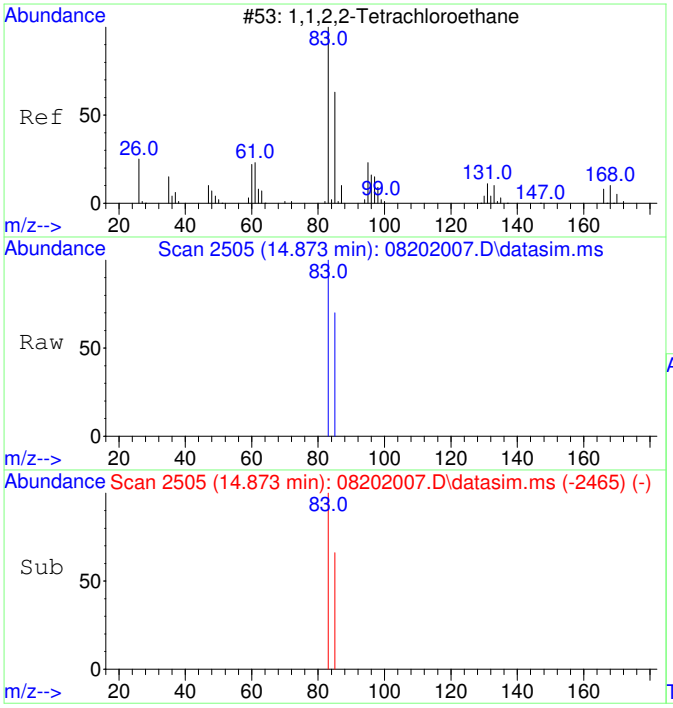


#20
o-Xylene
Concen: 135.47 ug/L
RT: 13.774 min Scan# 2300
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 23631

Ion	Ratio	Lower	Upper
91	100		
106	46.7	19.2	79.2

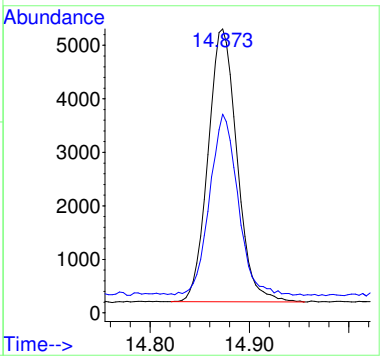


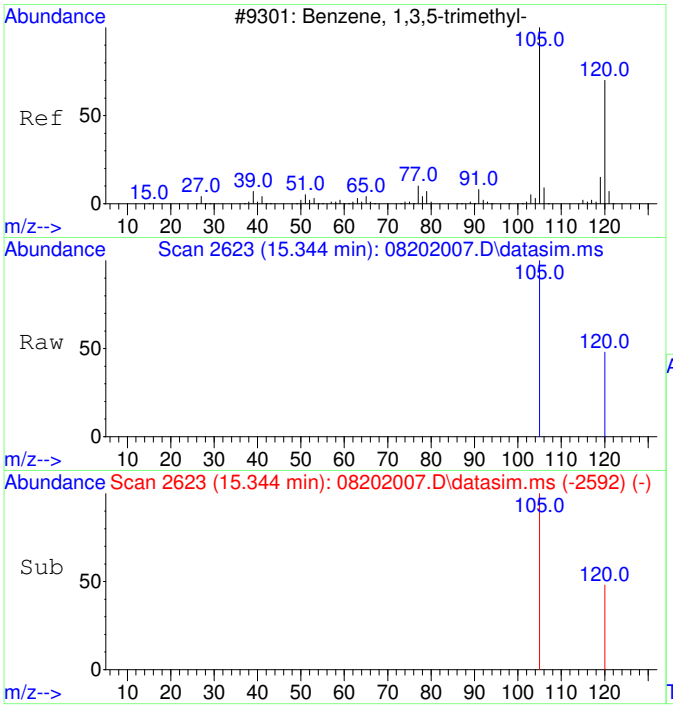


#21
1,1,2,2-Tetrachloroethane
Concen: 133.61 ug/L
RT: 14.873 min Scan# 2505
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 83 Resp: 10329

Ion	Ratio	Lower	Upper
83	100		
85	64.3	34.8	94.8

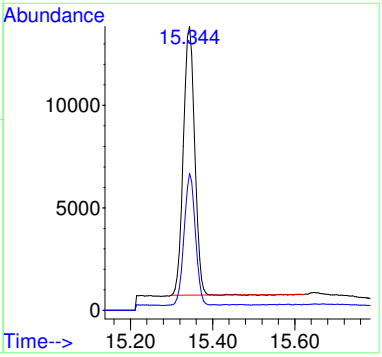


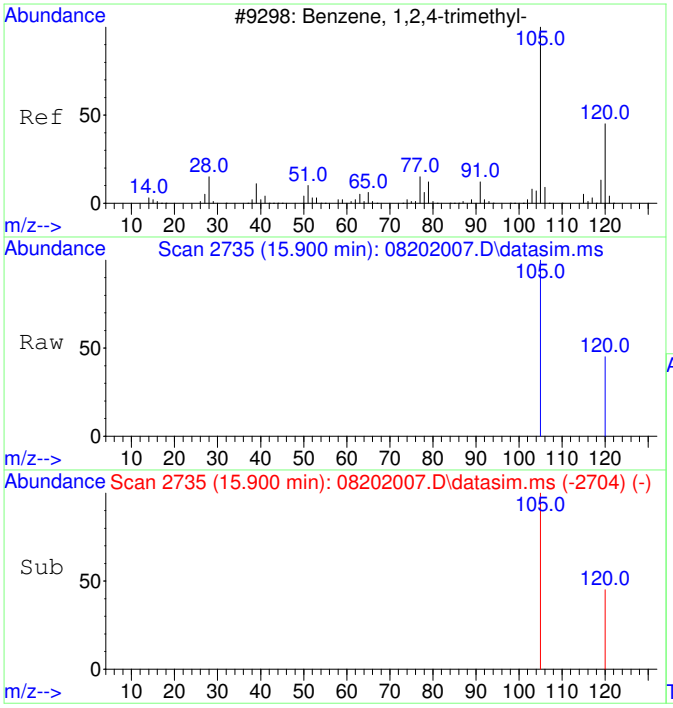


#22
1,3,5-Trimethylbenzene
Concen: 134.37 ug/L
RT: 15.344 min Scan# 2623
Delta R.T. -0.001 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:105 Resp: 24949

Ion	Ratio	Lower	Upper
105	100		
120	48.8	21.1	81.1

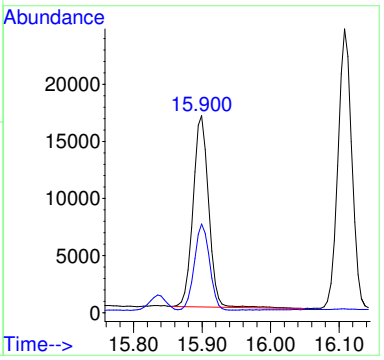


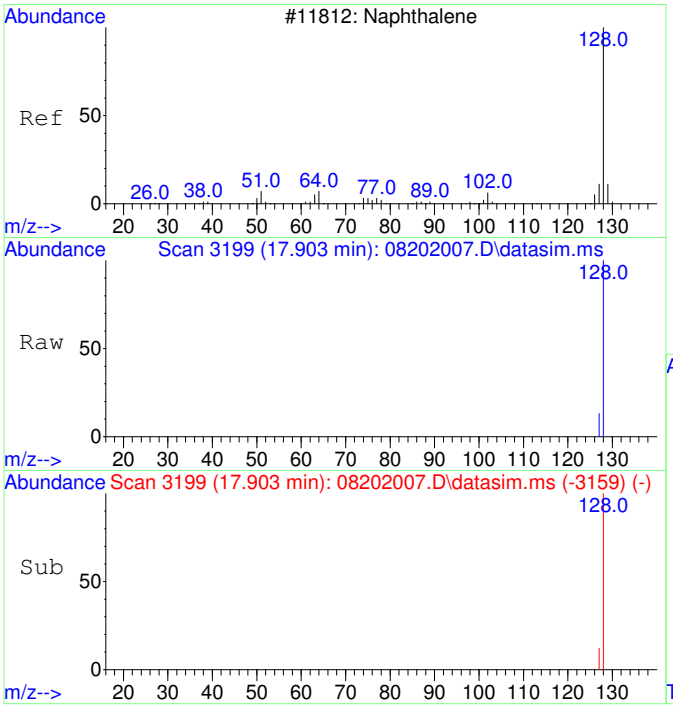


#23
1,2,4-Trimethylbenzene
Concen: 137.33 ug/L
RT: 15.900 min Scan# 2735
Delta R.T. 0.004 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:105 Resp: 26485

Ion	Ratio	Lower	Upper
105	100		
120	43.4	17.2	77.2

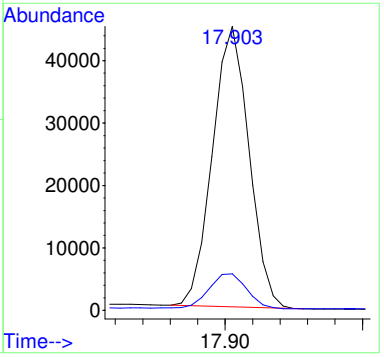


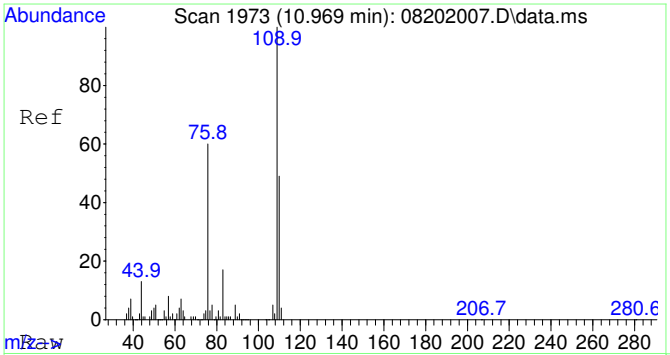


#24
Naphthalene
Concen: 135.77 ug/L
RT: 17.903 min Scan# 3199
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:128 Resp: 41384

Ion	Ratio	Lower	Upper
128	100		
127	12.6	0.0	42.5

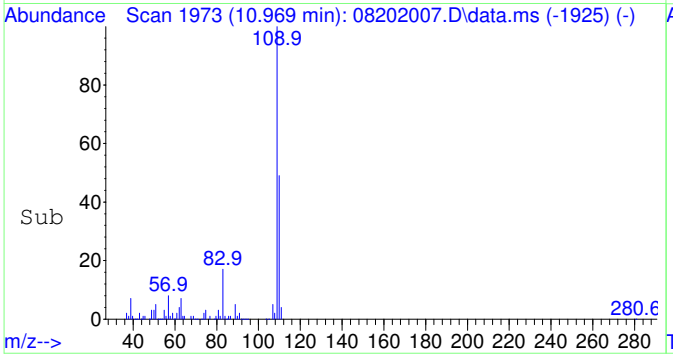


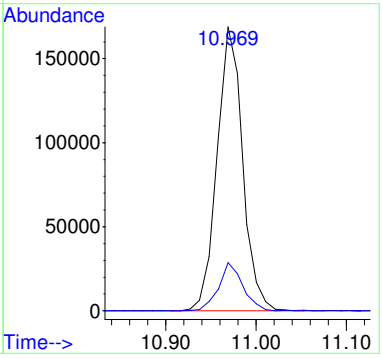


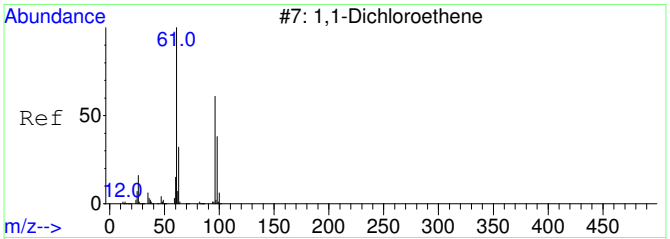
#25
2-Fluorotoluene SCAN
Concen: 4966.84 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:109 Resp: 332955

Ion	Ratio	Lower	Upper
109	100		
83	15.9	0.0	43.8



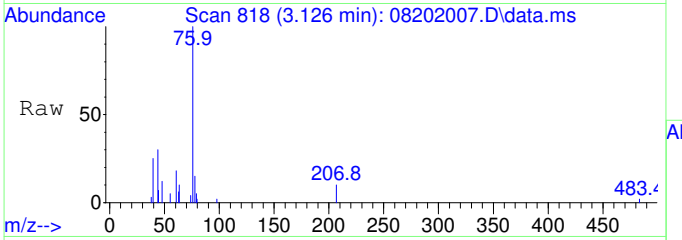


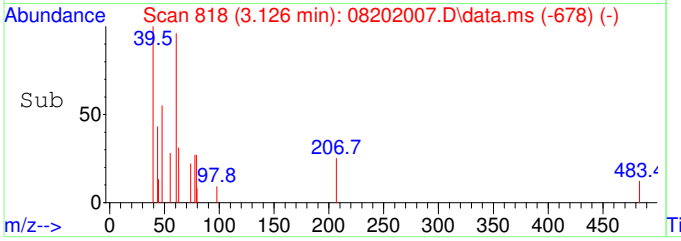


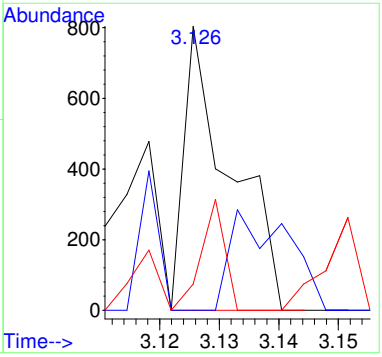
#26
1,1-Dichloroethene SCAN
Concen: 30.49 ug/L
RT: 3.126 min Scan# 818
Delta R.T. 0.019 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

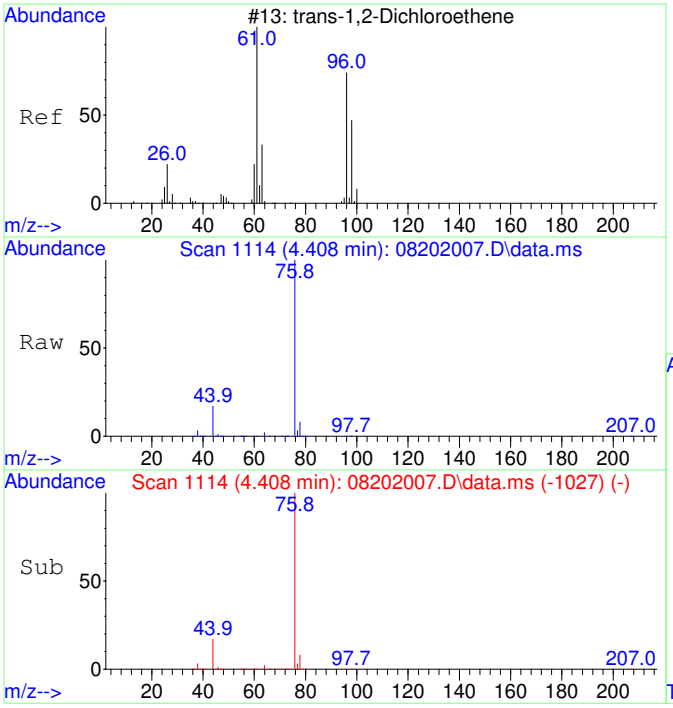
Tgt Ion: 61 Resp: 434

Ion	Ratio	Lower	Upper
61	100		
96	44.0	33.1	93.1
98	19.8	11.2	71.2





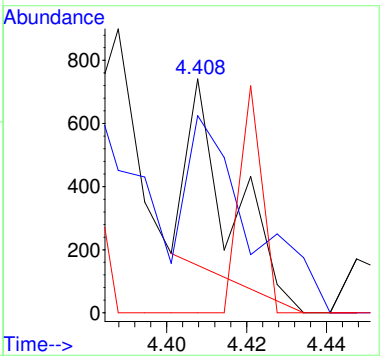


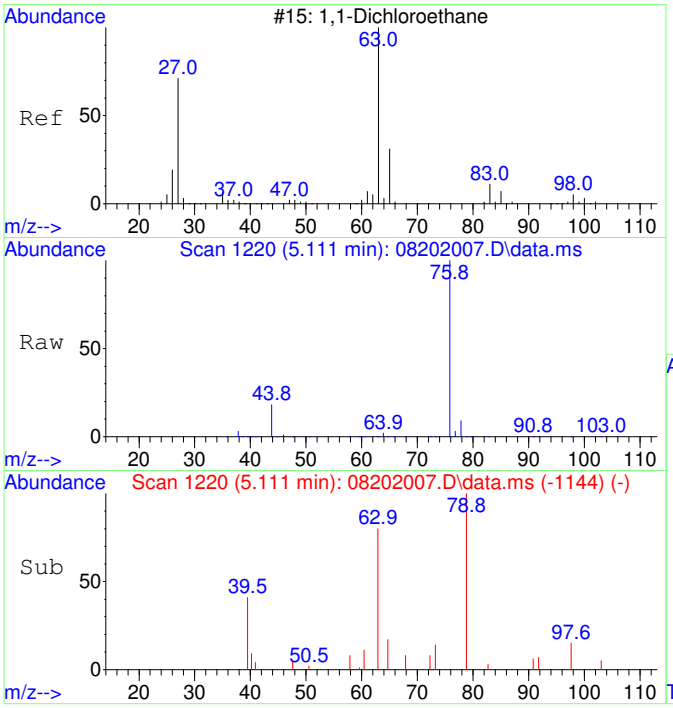


#27
trans-1,2-Dichloroethene SCAN
Concen: 22.42 ug/L
RT: 4.408 min Scan# 1114
Delta R.T. 0.007 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 61 Resp: 395

Ion	Ratio	Lower	Upper
61	100		
96	126.6	49.0	109.0#
97	72.4	20.5	80.5

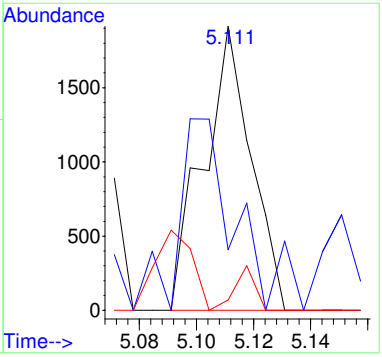


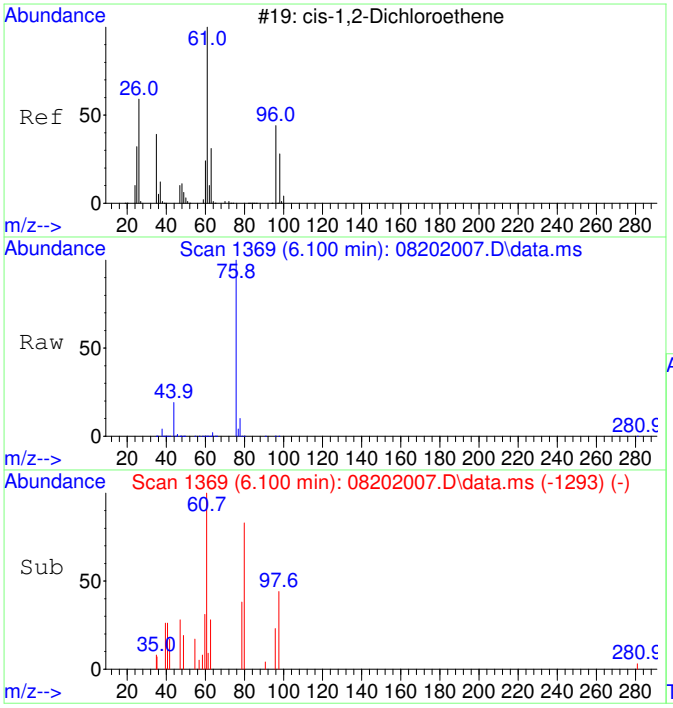


#28
1,1-Dichloroethane SCAN
Concen: 109.38 ug/L
RT: 5.111 min Scan# 1220
Delta R.T. 0.007 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 63 Resp: 2230

Ion	Ratio	Lower	Upper
63	100		
65	0.0	1.3	61.3#
83	4.1	0.0	45.9

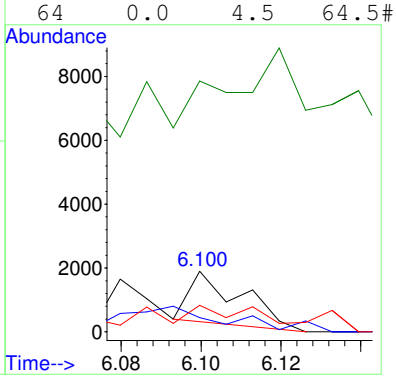


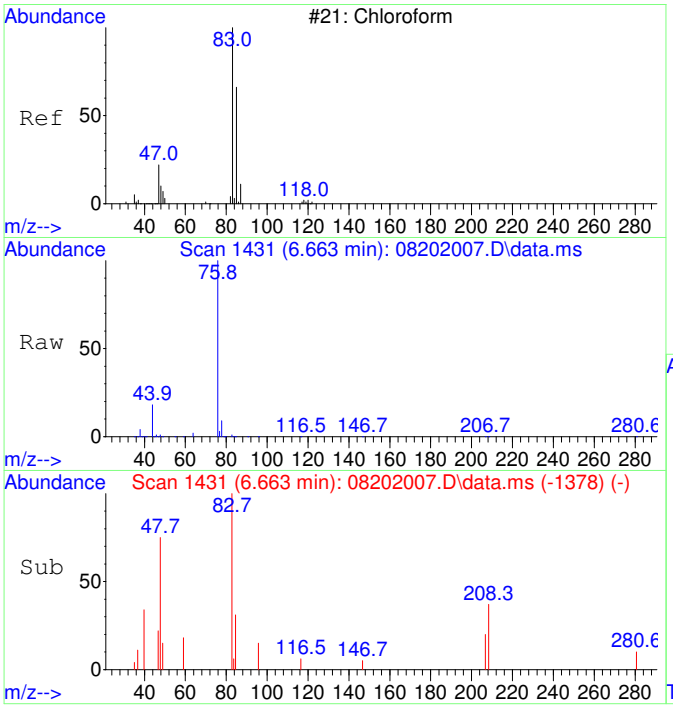


#29
cis-1,2-Dichloroethene SCAN
Concen: 63.68 ug/L
RT: 6.100 min Scan# 1369
Delta R.T. 0.007 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 61 Resp: 1391

Ion	Ratio	Lower	Upper
61	100		
96	143.3	39.9	99.9#
98	66.9	13.5	73.5
64	0.0	4.5	64.5#

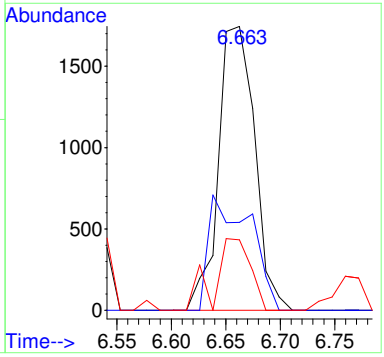


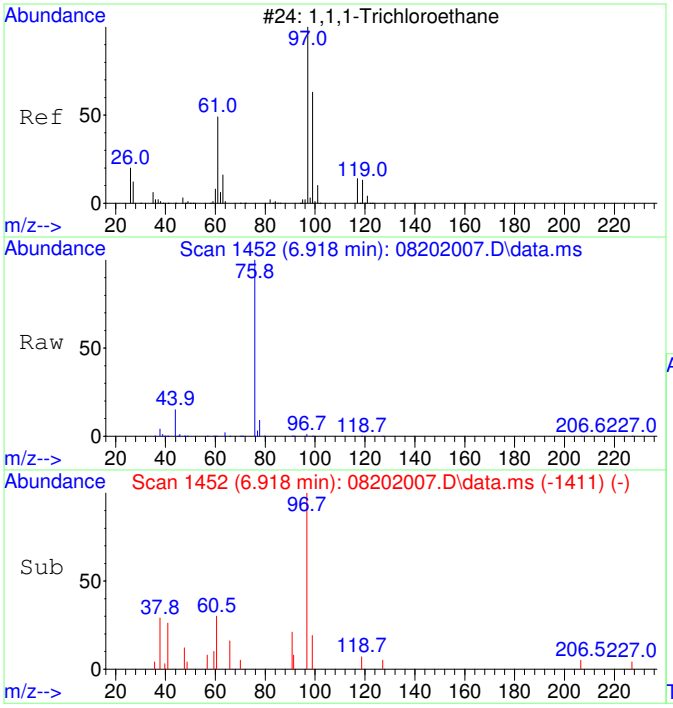


#30
Chloroform SCAN
Concen: 171.15 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 83 Resp: 4055

Ion	Ratio	Lower	Upper
83	100		
85	0.0	34.6	94.6#
47	25.2	0.0	53.4

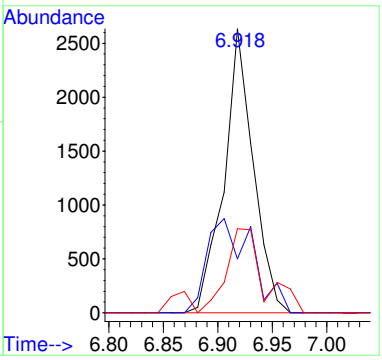


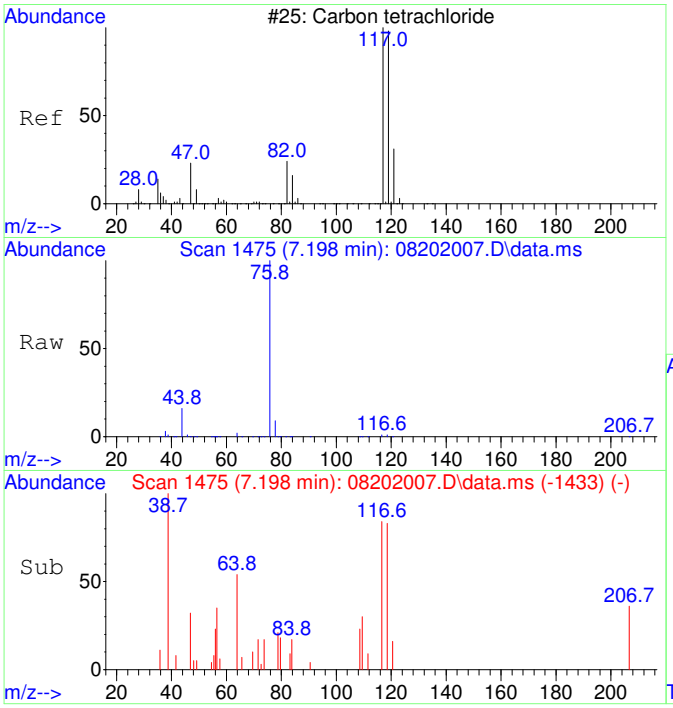


#31
1,1,1-Trichloroethane SCAN
Concen: 228.30 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 97 Resp: 4929

Ion	Ratio	Lower	Upper
97	100		
99	51.1	43.6	103.6
61	37.8	18.0	78.0

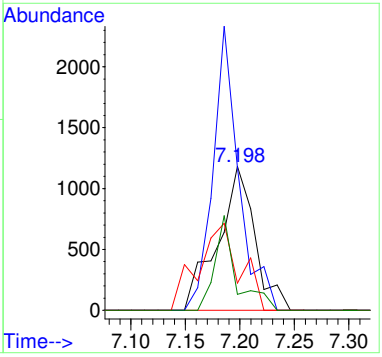


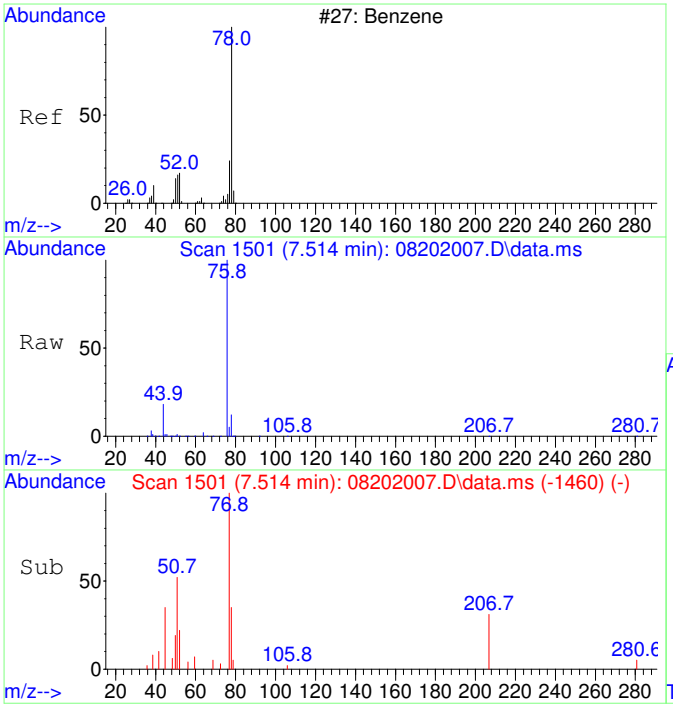


#32
Carbon tetrachloride SCAN
Concen: 124.33 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:117 Resp: 2800

Ion	Ratio	Lower	Upper
117	100		
119	137.3	75.5	135.5#
121	67.3	0.0	58.8#
82	37.5	0.0	59.2

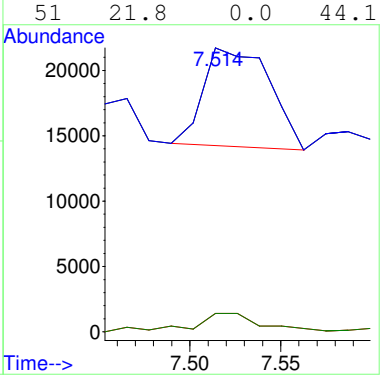


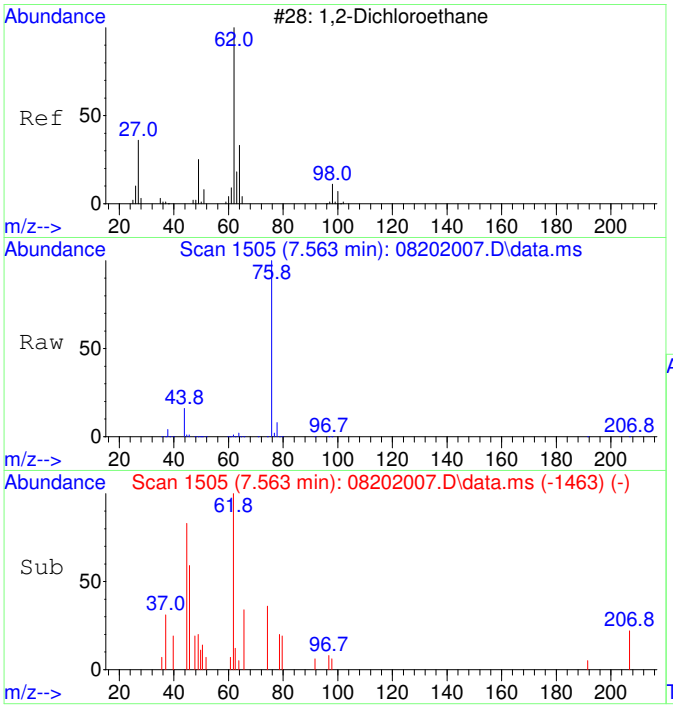


#33
Benzene SCAN
Concen: 317.45 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 78 Resp: 18871

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	21.8	0.0	47.9
51	21.8	0.0	44.1

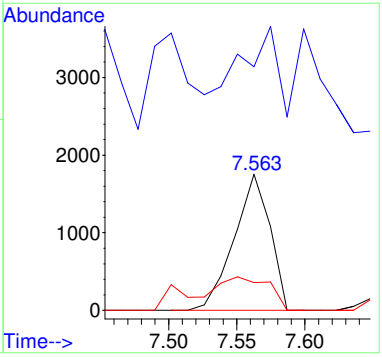


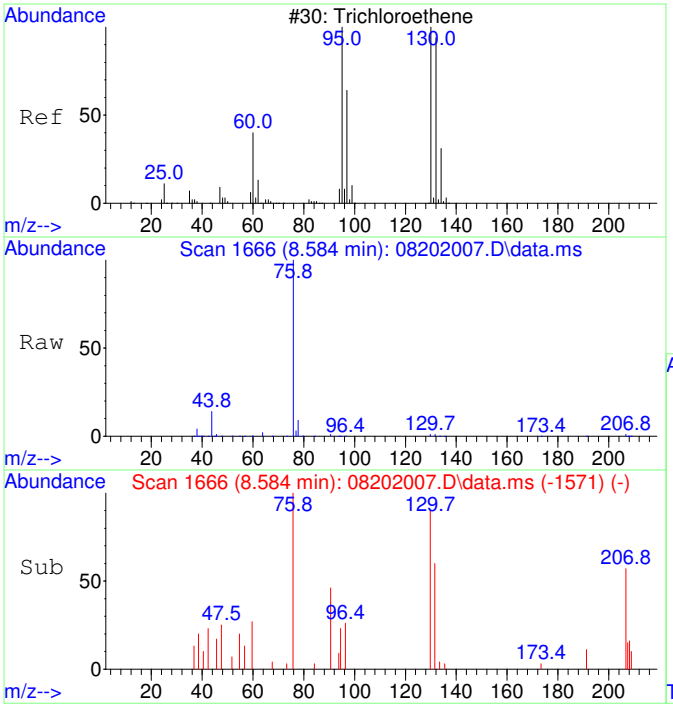


#34
1,2-Dichloroethane SCAN
Concen: 146.10 ug/L
RT: 7.563 min Scan# 1505
Delta R.T. 0.012 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 62 Resp: 3207

Ion	Ratio	Lower	Upper
62	100		
64	42.1	5.2	65.2
49	0.0	3.9	63.9#

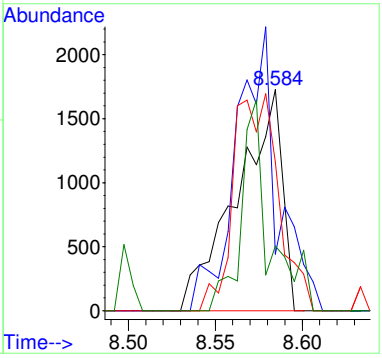


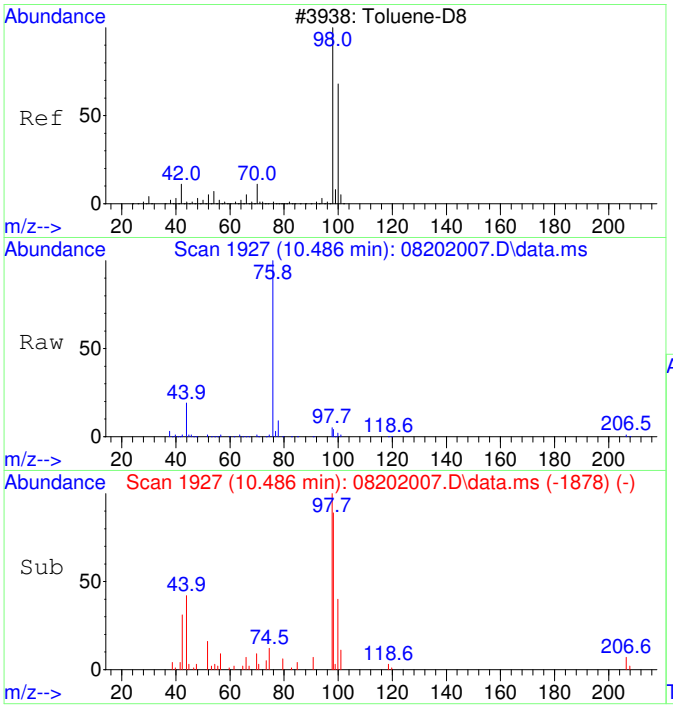


#35
Trichloroethene SCAN
Concen: 193.80 ug/L
RT: 8.584 min Scan# 1666
Delta R.T. 0.016 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:130 Resp: 3166

Ion	Ratio	Lower	Upper
130	100		
95	116.2	60.5	120.5
132	96.6	59.6	119.6
97	58.8	28.2	88.2

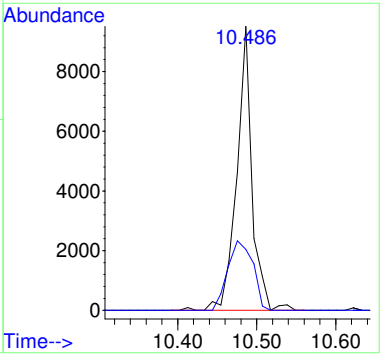


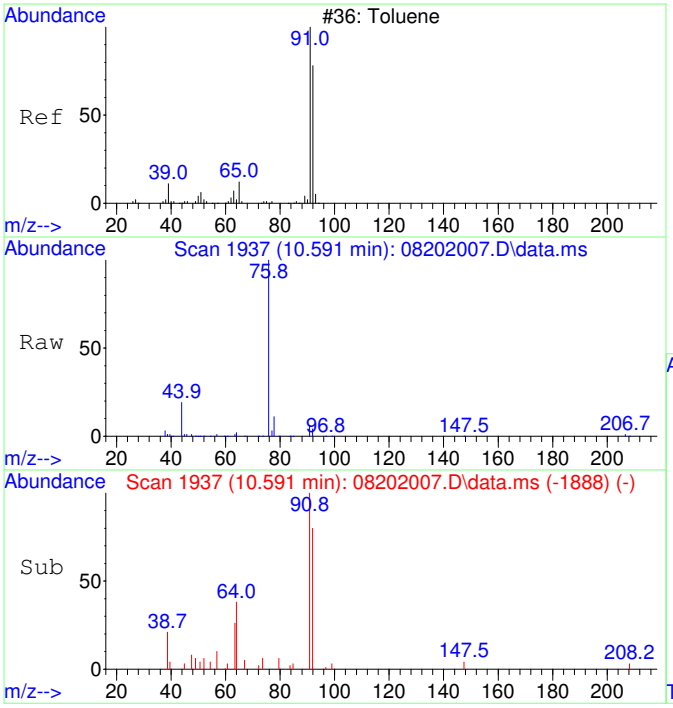


#36
Toluene-d8 SCAN
Concen: 194.45 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 98 Resp: 12748

Ion	Ratio	Lower	Upper
98	100		
100	40.3	40.0	100.0

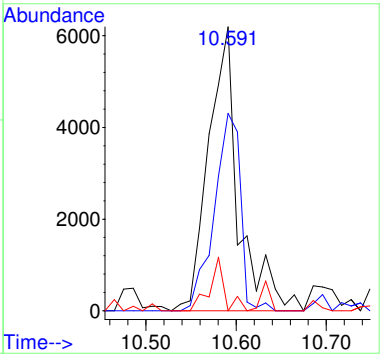


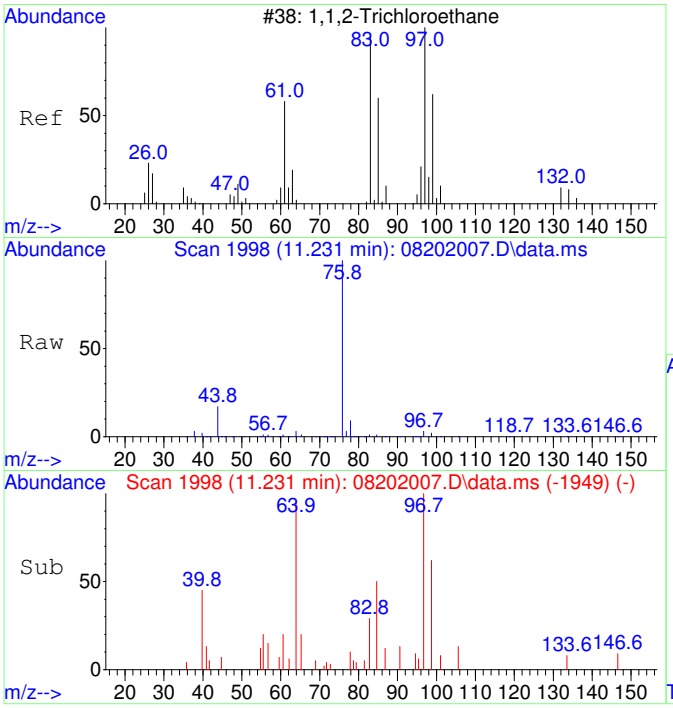


#37
Toluene SCAN
Concen: 171.17 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 14371

Ion	Ratio	Lower	Upper
91	100		
92	60.5	28.3	88.3
65	9.4	0.0	41.0

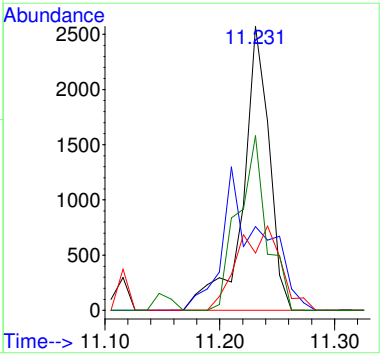


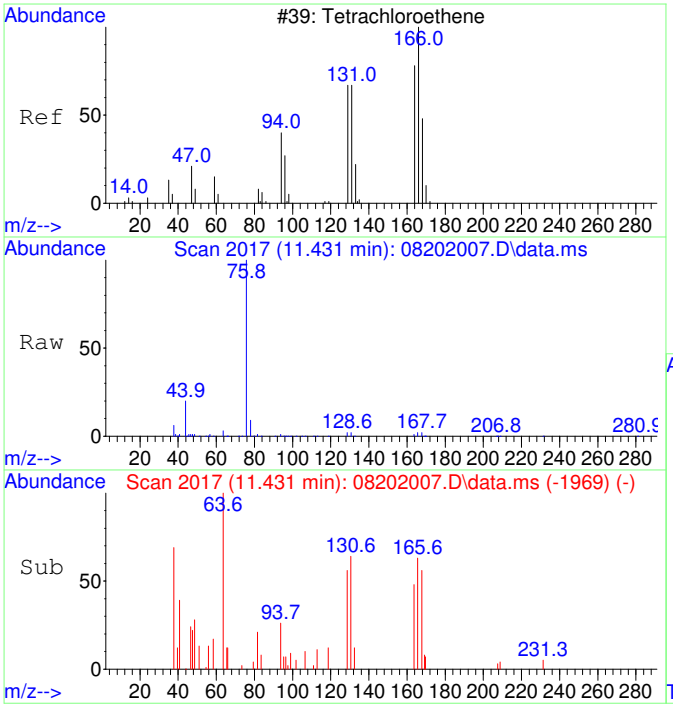


#38
1,1,2-Trichloroethane SCAN
Concen: 216.66 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 97 Resp: 4083

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	48.2	32.1	92.1
99	67.8	36.7	96.7

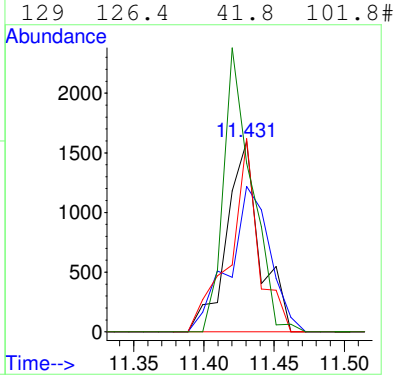


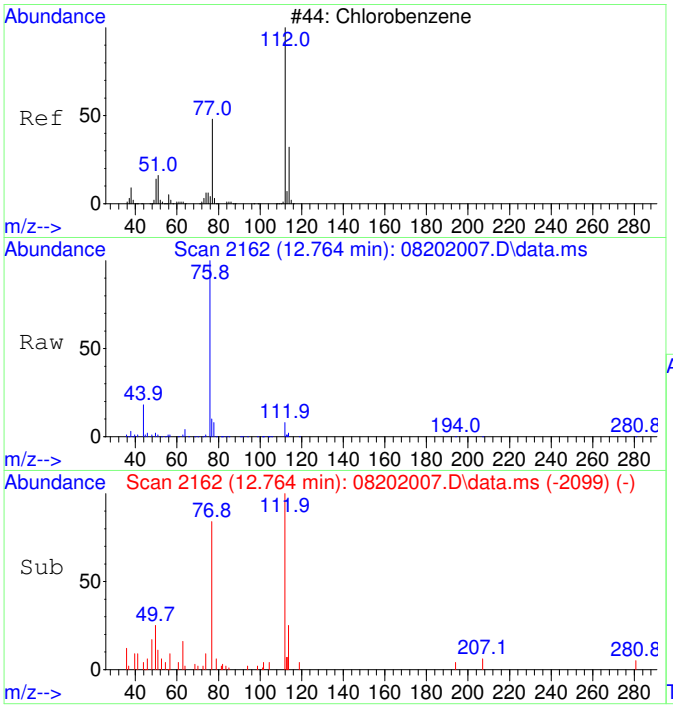


#39
Tetrachloroethene SCAN
Concen: 131.18 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:166 Resp: 2646

Ion	Ratio	Lower	Upper
166	100		
164	93.8	50.9	110.9
131	86.4	38.7	98.7
129	126.4	41.8	101.8#

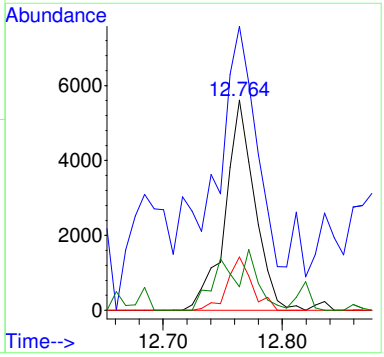


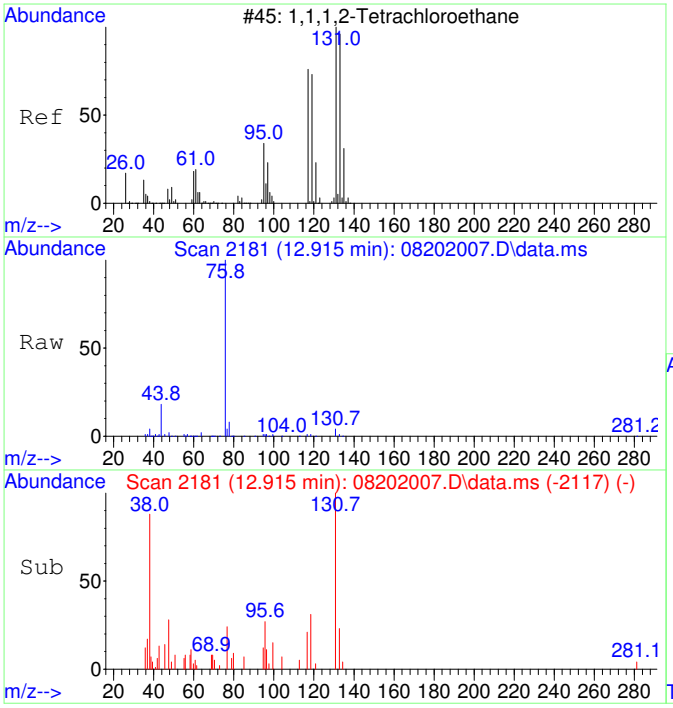


#40
Chlorobenzene SCAN
Concen: 169.04 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:112 Resp: 9698

Ion	Ratio	Lower	Upper
112	100		
77	136.8	28.2	88.2#
114	21.1	2.3	62.3
51	12.2	0.0	50.1

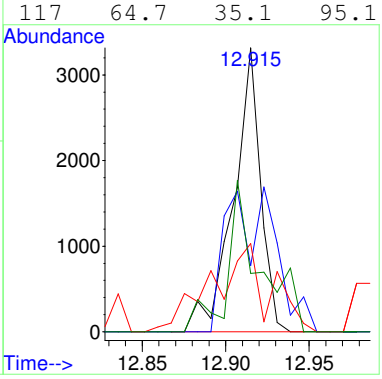


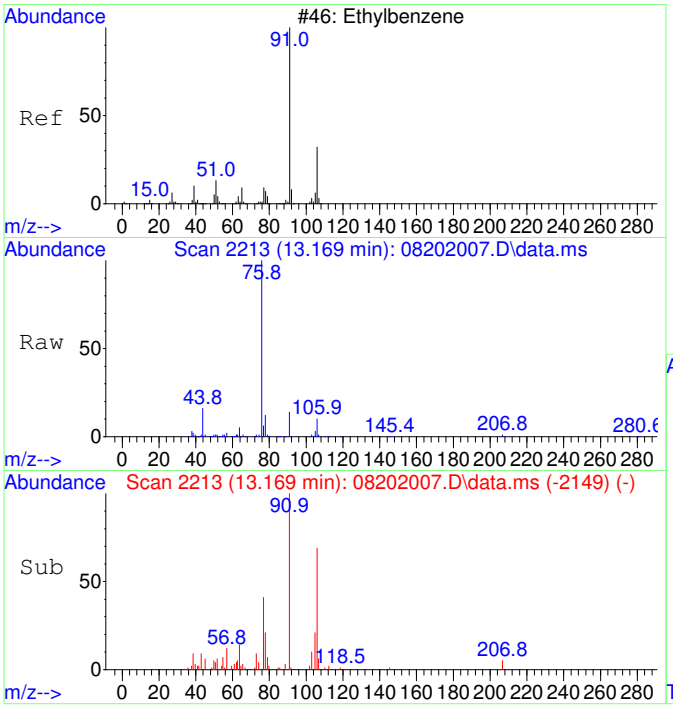


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 177.14 ug/L
RT: 12.915 min Scan# 2181
Delta R.T. 0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:131 Resp: 3761

Ion	Ratio	Lower	Upper
131	100		
133	89.9	66.9	126.9
119	65.7	40.4	100.4
117	64.7	35.1	95.1

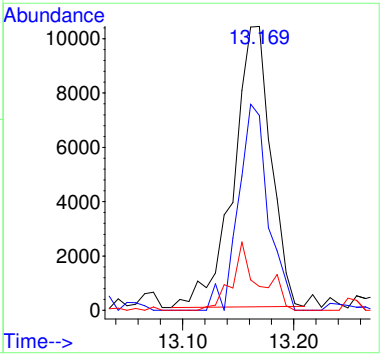


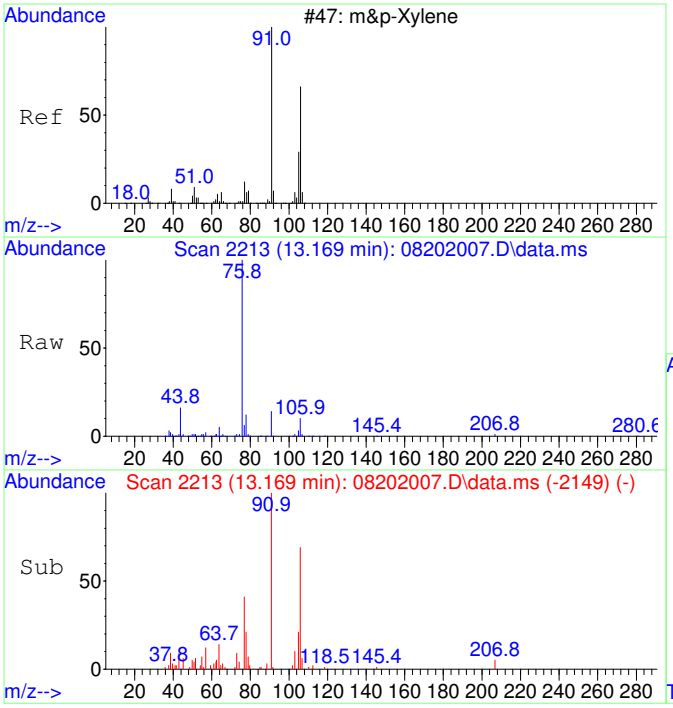


#42
Ethylbenzene SCAN
Concen: 158.20 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 24198

Ion	Ratio	Lower	Upper
91	100		
106	58.4	23.1	83.1
51	17.6	0.0	40.1

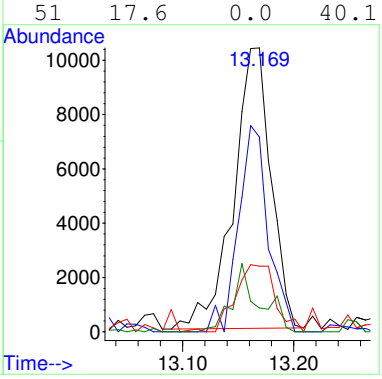


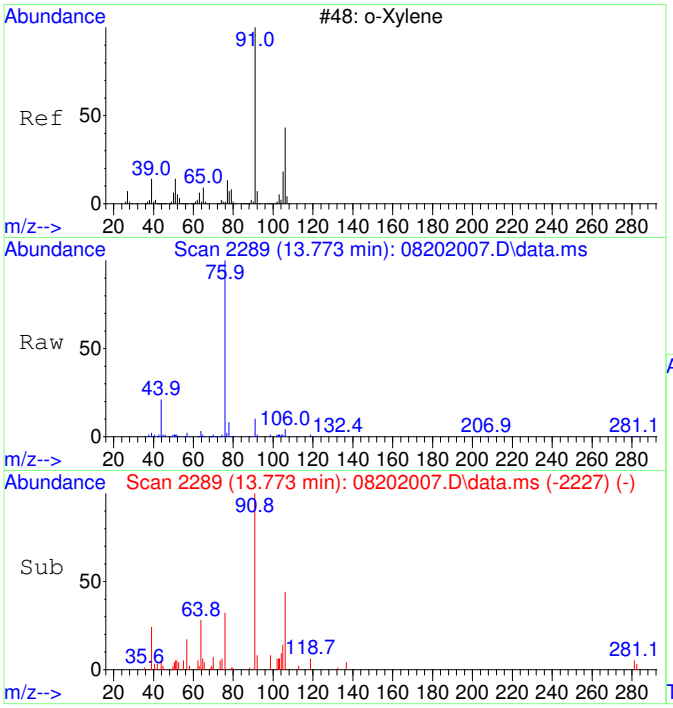


#43
m&p-Xylene SCAN
Concen: 158.20 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 24198

Ion	Ratio	Lower	Upper
91	100		
106	58.4	23.1	83.1
105	25.1	0.0	54.7
51	17.6	0.0	40.1

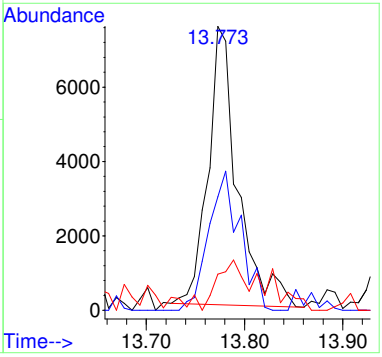


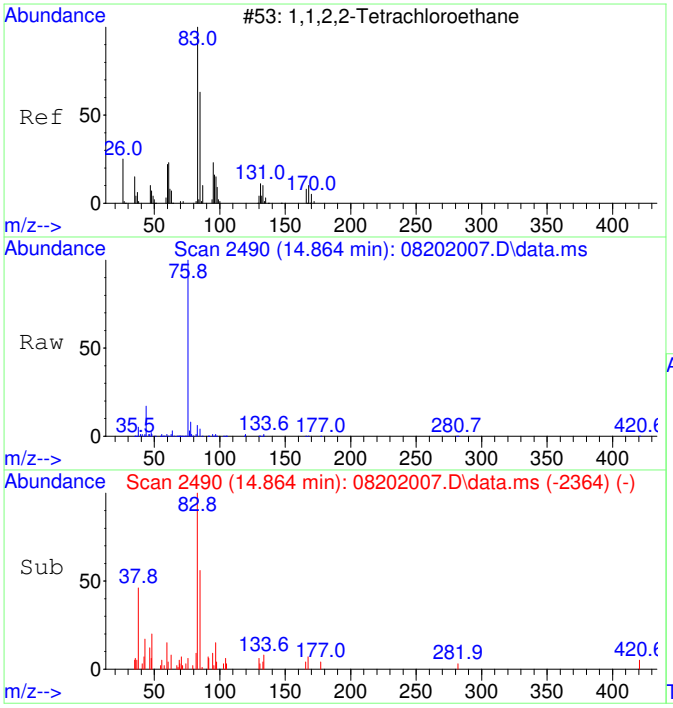


#44
o-Xylene SCAN
Concen: 190.48 ug/L
RT: 13.773 min Scan# 2289
Delta R.T. -0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 15595

Ion	Ratio	Lower	Upper
91	100		
106	53.8	18.0	78.0
105	27.5	0.0	56.6

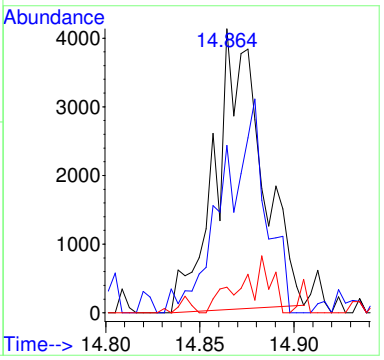


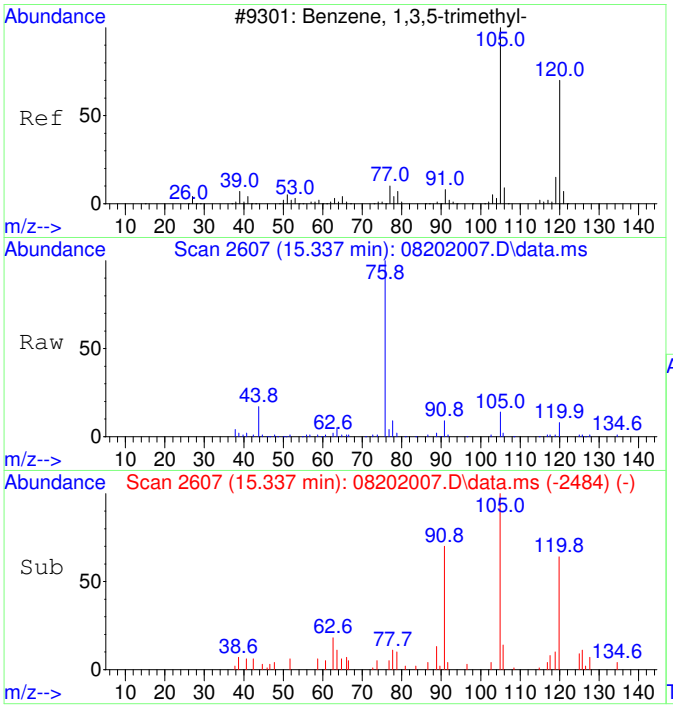


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 177.39 ug/L
RT: 14.864 min Scan# 2490
Delta R.T. -0.007 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 83 Resp: 7082

Ion	Ratio	Lower	Upper
83	100		
85	10.5	35.9	95.9#
95	5.2	0.0	47.4

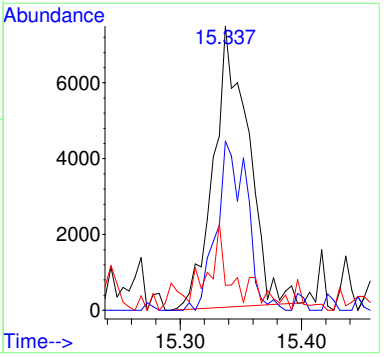


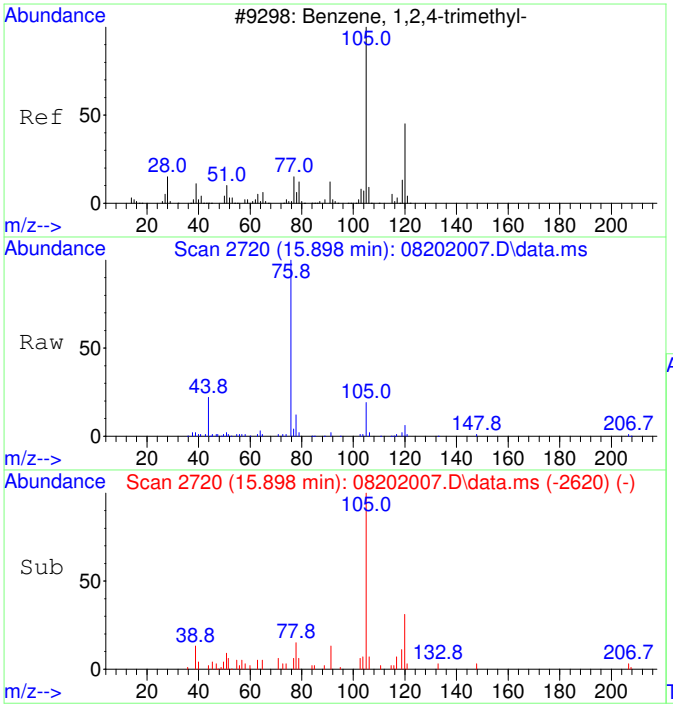


#46
1,3,5-Trimethylbenzene SCAN
Concen: 170.06 ug/L
RT: 15.337 min Scan# 2607
Delta R.T. -0.006 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:105 Resp: 14674

Ion	Ratio	Lower	Upper
105	100		
120	52.5	18.3	78.3
119	12.8	0.0	43.1

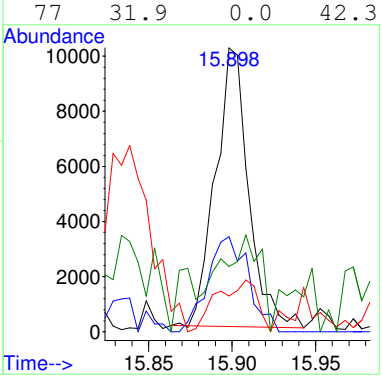


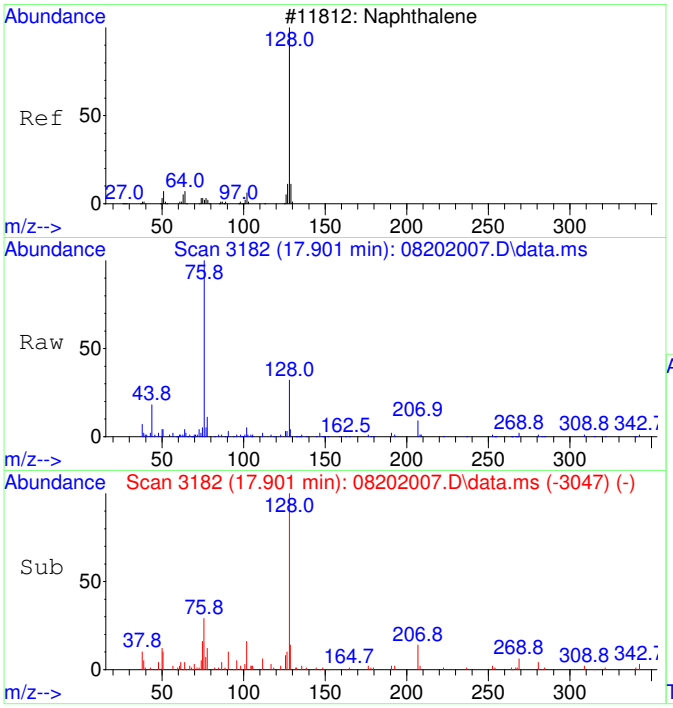


#47
1,2,4-Trimethylbenzene SCAN
Concen: 157.88 ug/L
RT: 15.898 min Scan# 2720
Delta R.T. -0.001 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:105 Resp: 13939

Ion	Ratio	Lower	Upper
105	100		
120	41.8	16.9	76.9
119	22.6	0.0	41.9
77	31.9	0.0	42.3

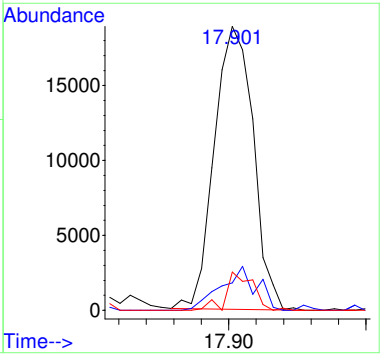




#48
Naphthalene SCAN
Concen: 138.89 ug/L
RT: 17.901 min Scan# 3182
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:128 Resp: 18555

Ion	Ratio	Lower	Upper
128	100		
127	14.1	0.0	44.0
129	9.5	0.0	40.8



Quantitation Report (QT Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\082020\
Data File : 08202007.D
Acq On : 20 Aug 2020 17:01
InstName : AG5975C
Operator : TD
Sample : S20H039-CAL5
Misc : 2030072 0.15 mg/L
ALS Vial : 7 Sample Multiplier: 1

M.I. Performed By:
TD at 8:44 am, Aug 21, 2020

M.I. Approved By:
ZR at 3:53 pm, Oct 02, 2020

Quant Time: Aug 21 08:31:11 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\082020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:30:13 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	687675	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	18291	135.87	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 2.72%#			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.090	61	4078m	134.88	ug/L	
3] trans-1,2-Dichloroethene	4.396	61	4743	149.50	ug/L	88
4] 1,1-Dichloroethane	5.099	63	6017	152.35	ug/L	86
5] cis-1,2-Dichloroethene	6.094	61	6181	148.27	ug/L	99
6] Chloroform	6.664	83	6101	142.98	ug/L	95
7] 1,1,1-Trichloroethane	6.919	97	6374	137.55	ug/L	98
8] Carbon tetrachloride	7.187	117	5978	137.06	ug/L	98
9] Benzene	7.515	78	16396	140.33	ug/L	75
10] 1,2-Dichloroethane	7.552	62	6015	144.21	ug/L	80
11] Trichloroethene	8.575	130	4884	138.83	ug/L	93
13] Toluene	10.582	91	24264	141.38	ug/L	98
14] 1,1,2-Trichloroethane	11.232	97	5063	135.38	ug/L	97
15] Tetrachloroethene	11.432	166	6650	133.89	ug/L	99
16] Chlorobenzene	12.765	112	16465	133.98	ug/L	91
17] 1,1,1,2-Tetrachloroethane	12.908	131	5876	133.44	ug/L	98
18] Ethylbenzene	12.972	91	29078	139.19	ug/L	97
19] m&p-Xylene	13.163	91	45947	281.41	ug/L	95
20] o-Xylene	13.774	91	23631	135.47	ug/L	96
21] 1,1,2,2-Tetrachloroethane	14.873	83	10329	133.61	ug/L	99
22] 1,3,5-Trimethylbenzene	15.344	105	24949	134.37	ug/L	97
23] 1,2,4-Trimethylbenzene	15.900	105	26485	137.33	ug/L	94
24] Naphthalene	17.903	128	41384	135.77	ug/L	100
25) 2-Fluorotoluene SCAN	10.969	109	332955	4966.84	ug/L	95
26) 1,1-Dichloroethene SCAN	3.126	61	434	30.49	ug/L	72
27) trans-1,2-Dichloroethe...	4.408	61	395	22.42	ug/L #	55
28) 1,1-Dichloroethane SCAN	5.111	63	2230	109.38	ug/L #	53
29) cis-1,2-Dichloroethene...	6.100	61	1391	63.68	ug/L #	33
30) Chloroform SCAN	6.663	83	4055	171.15	ug/L #	39
31) 1,1,1-Trichloroethane ...	6.918	97	4929	228.30	ug/L	78
32) Carbon tetrachloride SCAN	7.198	117	2800	124.33	ug/L #	65
33) Benzene SCAN	7.514	78	18871	317.45	ug/L	97
34) 1,2-Dichloroethane SCAN	7.563	62	3207	146.10	ug/L #	65
35) Trichloroethene SCAN	8.584	130	3166	193.80	ug/L	87
36) Toluene-d8 SCAN	10.486	98	12748	194.45	ug/L	64
37) Toluene SCAN	10.591	91	14371	171.17	ug/L	97
38) 1,1,2-Trichloroethane ...	11.231	97	4083	216.66	ug/L #	56
39) Tetrachloroethene SCAN	11.431	166	2646	131.18	ug/L #	67
40) Chlorobenzene SCAN	12.764	112	9698	169.04	ug/L #	35
41) 1,1,1,2-Tetrachloroeth...	12.915	131	3761	177.14	ug/L	95
42) Ethylbenzene SCAN	13.169	91	24198	158.20	ug/L	91
43) m&p-Xylene SCAN	13.169	91	24198	158.20	ug/L	93
44) o-Xylene SCAN	13.773	91	15595	190.48	ug/L	94
45) 1,1,2,2-Tetrachloroeth...	14.864	83	7082	177.39	ug/L #	39
46) 1,3,5-Trimethylbenzene...	15.337	105	14674	170.06	ug/L	95
47) 1,2,4-Trimethylbenzene...	15.898	105	13939	157.88	ug/L	82
48) Naphthalene SCAN	17.901	128	18555	138.89	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\082020\
Data File : 08202007.D
Acq On : 20 Aug 2020 17:01
InstName : AG5975C
Operator : TD
Sample : S20H039-CAL5
Misc : 2030072 0.15 mg/L
ALS Vial : 7 Sample Multiplier: 1

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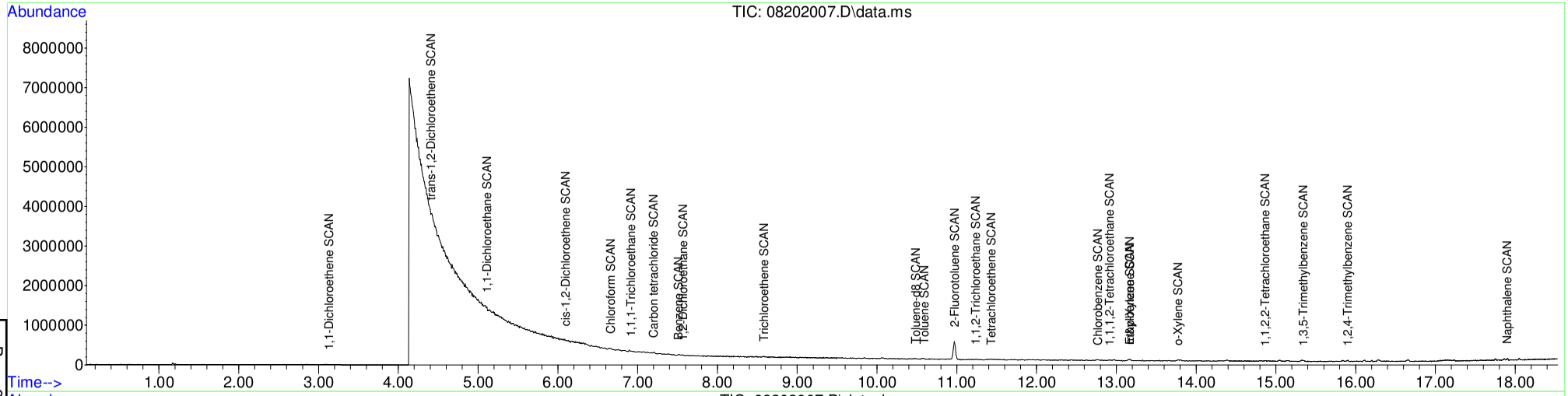
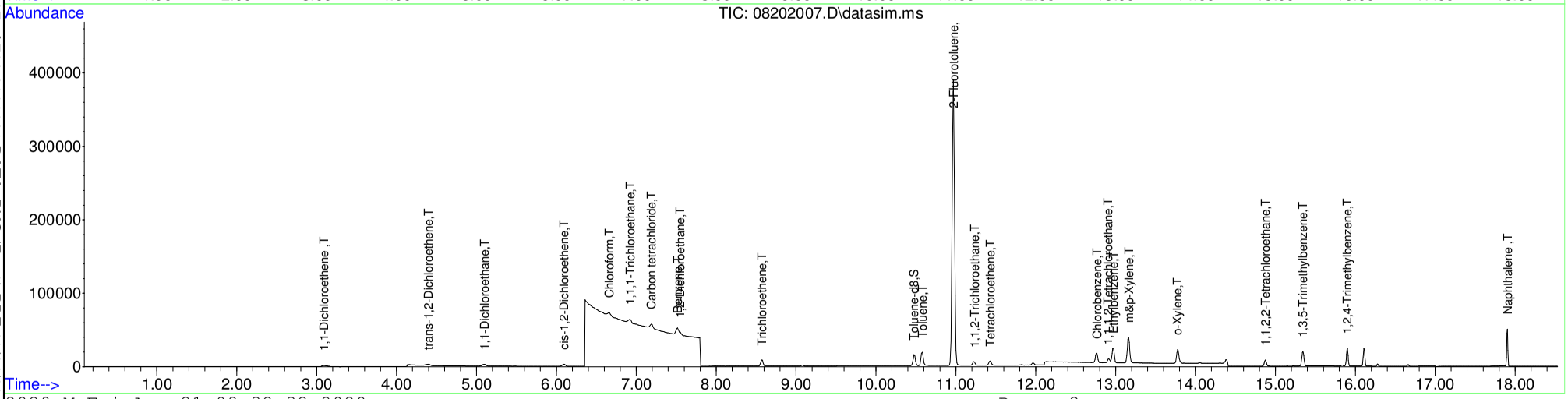
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\082020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:30:13 2020
Response via : Initial Calibration





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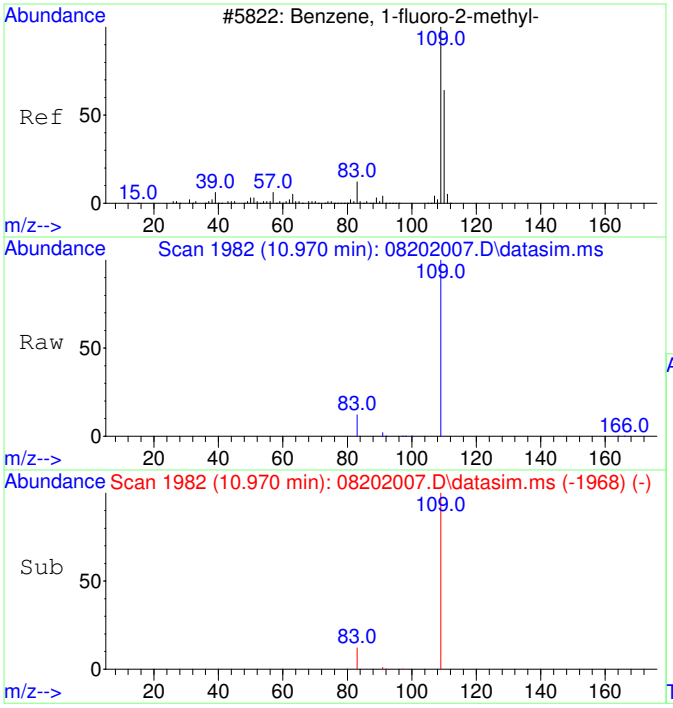
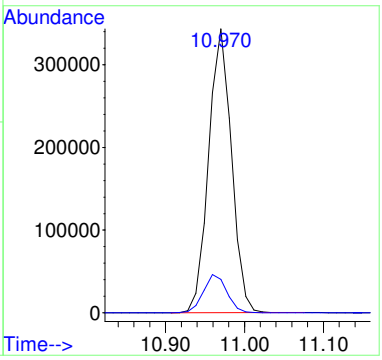
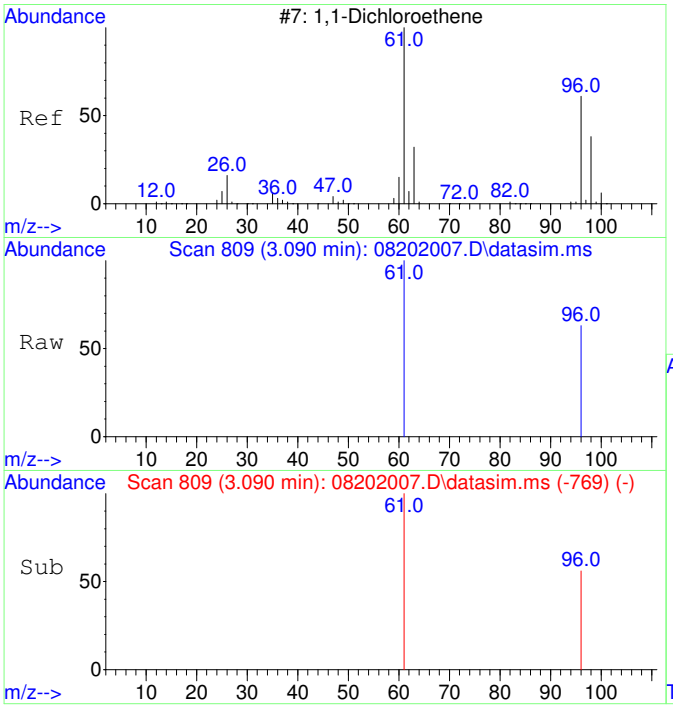


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:109 Resp: 687675

Ion	Ratio	Lower	Upper
109	100		
83	13.7	0.0	42.3

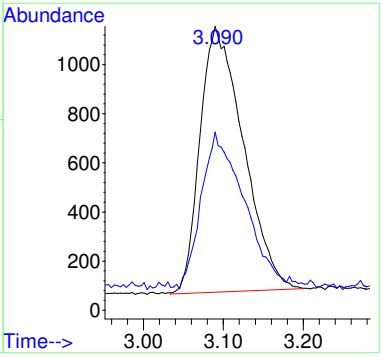


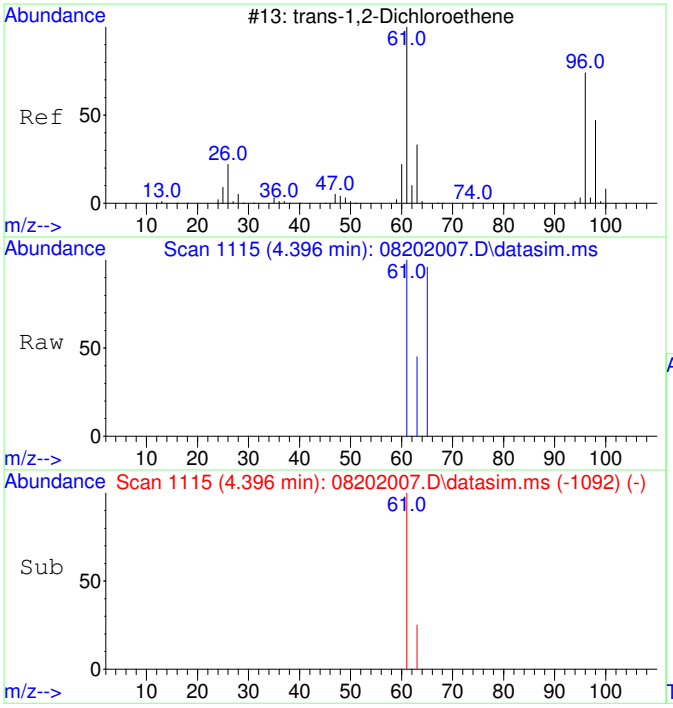


#2
1,1-Dichloroethene
Concen: 134.88 ug/L m
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 61 Resp: 4078

Ion	Ratio	Lower	Upper
61	100		
96	66.0	37.2	97.2

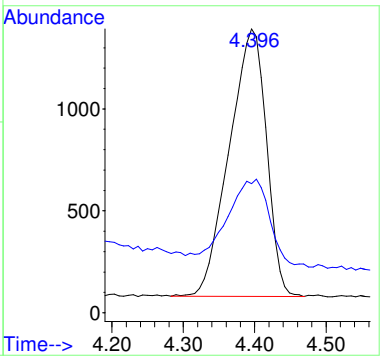


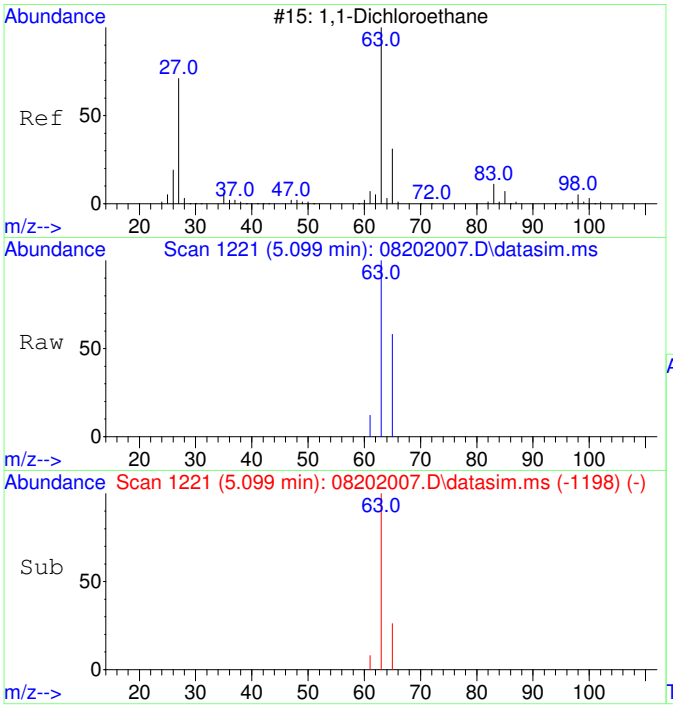


#3
trans-1,2-Dichloroethene
Concen: 149.50 ug/L
RT: 4.396 min Scan# 1115
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 61 Resp: 4743

Ion	Ratio	Lower	Upper
61	100		
63	39.2	2.4	62.4

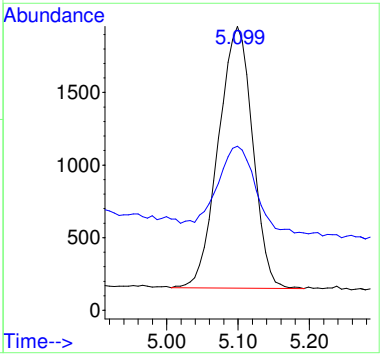


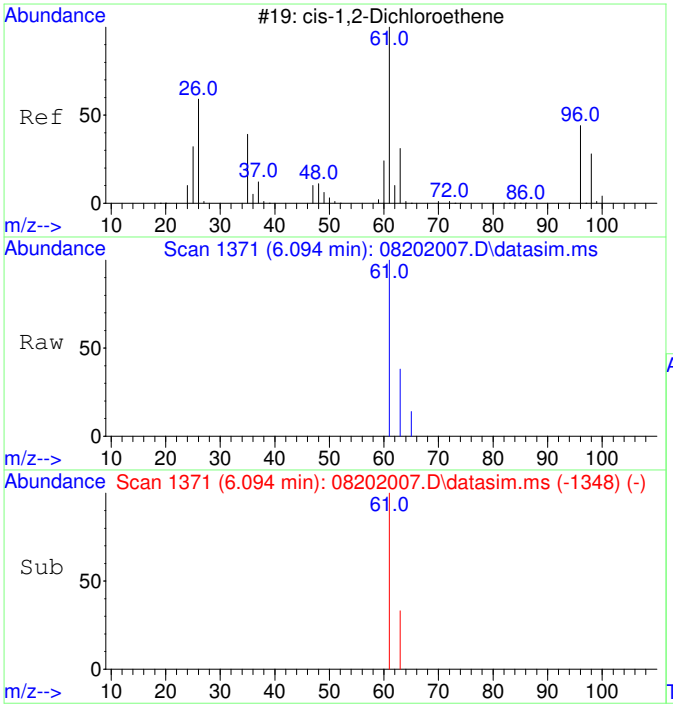


#4
1,1-Dichloroethane
Concen: 152.35 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 63 Resp: 6017

Ion	Ratio	Lower	Upper
63	100		
65	39.7	1.8	61.8

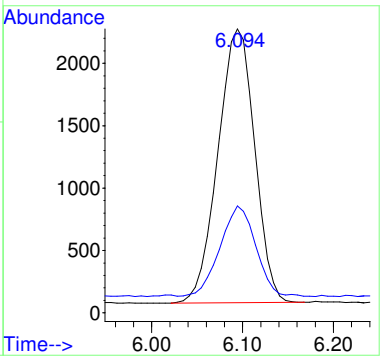


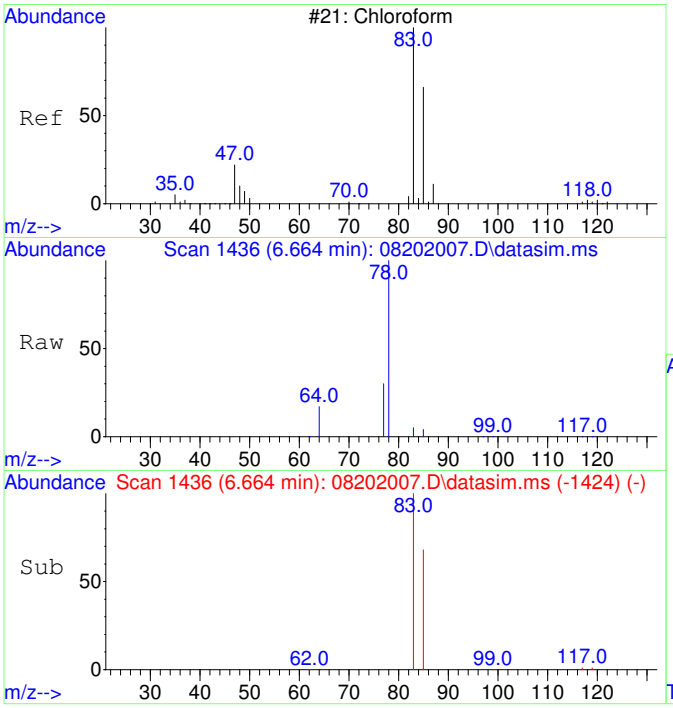


#5
cis-1,2-Dichloroethene
Concen: 148.27 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 61 Resp: 6181

Ion	Ratio	Lower	Upper
61	100		
63	32.0	2.5	62.5

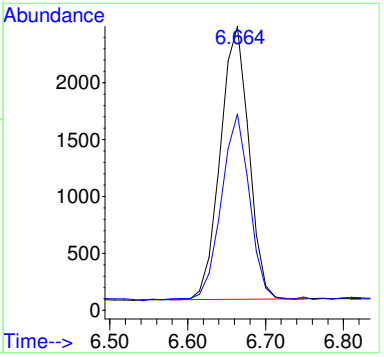


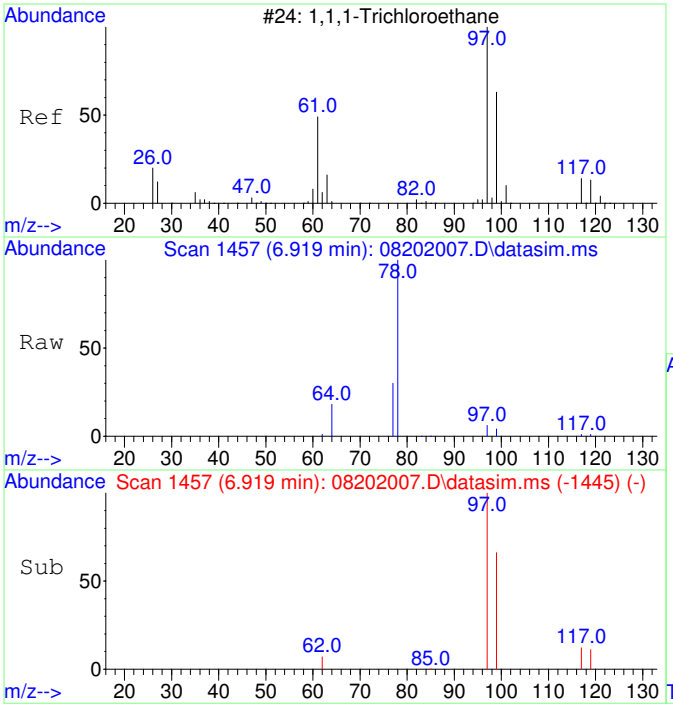


#6
Chloroform
Concen: 142.98 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 83 Resp: 6101

Ion	Ratio	Lower	Upper
83	100		
85	69.0	35.1	95.1

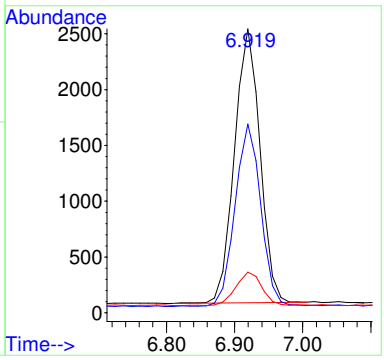


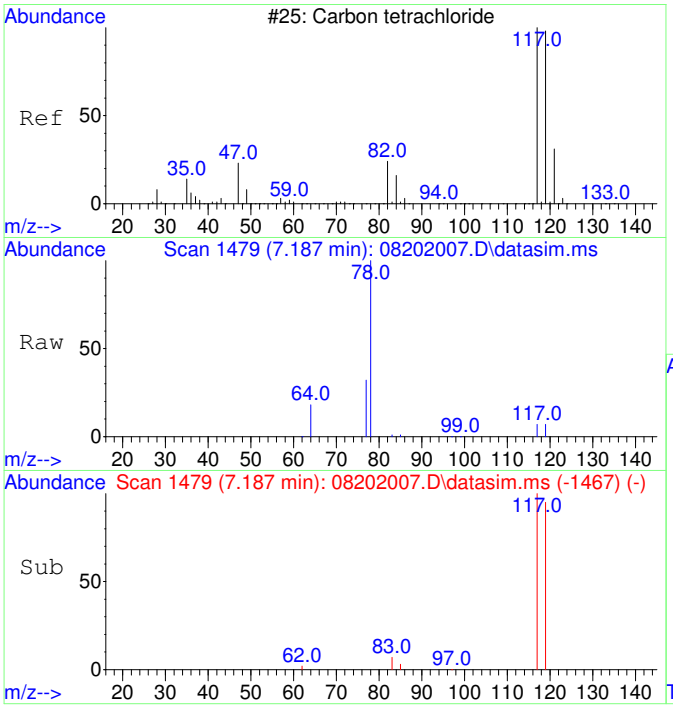


#7
1,1,1-Trichloroethane
Concen: 137.55 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 97 Resp: 6374

Ion	Ratio	Lower	Upper
97	100		
99	66.5	34.6	94.6
117	12.8	0.0	43.2

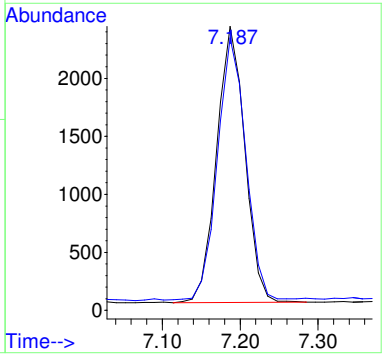


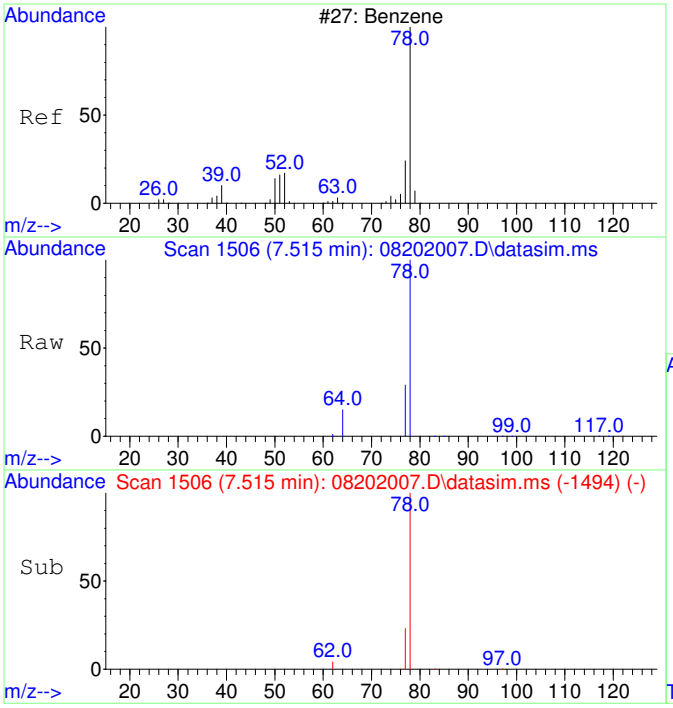


#8
Carbon tetrachloride
Concen: 137.06 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:117 Resp: 5978

Ion	Ratio	Lower	Upper
117	100		
119	94.6	66.4	126.4

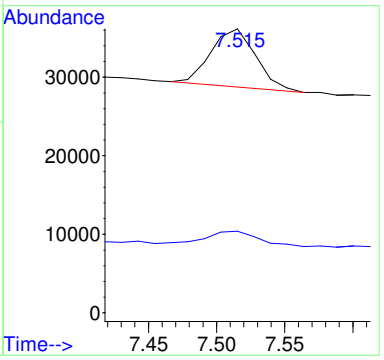


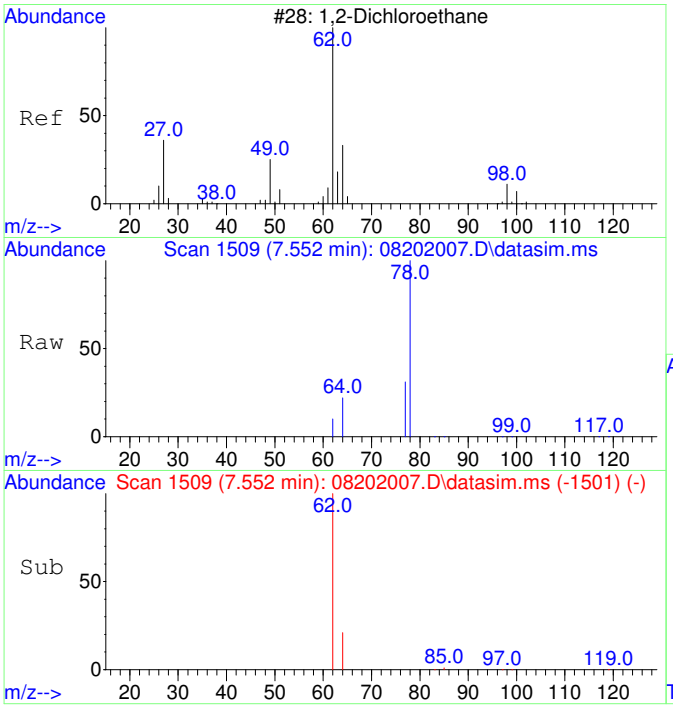


#9
Benzene
Concen: 140.33 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 78 Resp: 16396

Ion	Ratio	Lower	Upper
78	100		
77	35.6	0.0	53.2

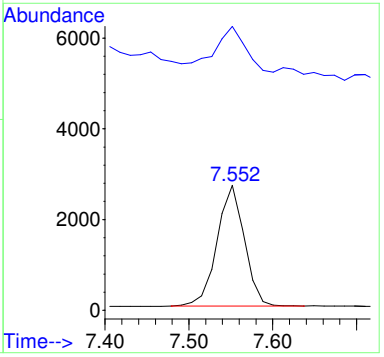


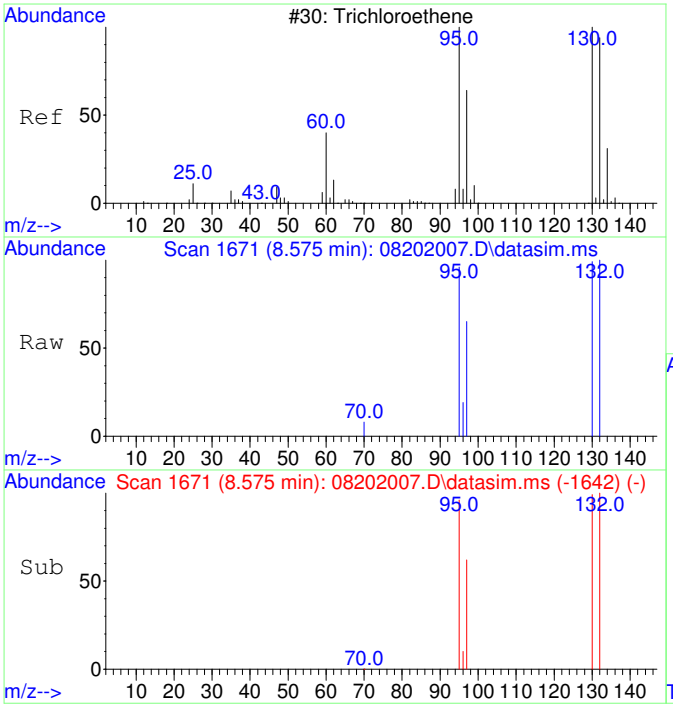


#10
1,2-Dichloroethane
Concen: 144.21 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 62 Resp: 6015

Ion	Ratio	Lower	Upper
62	100		
64	43.6	2.3	62.3

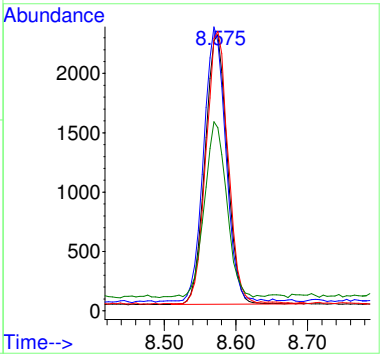


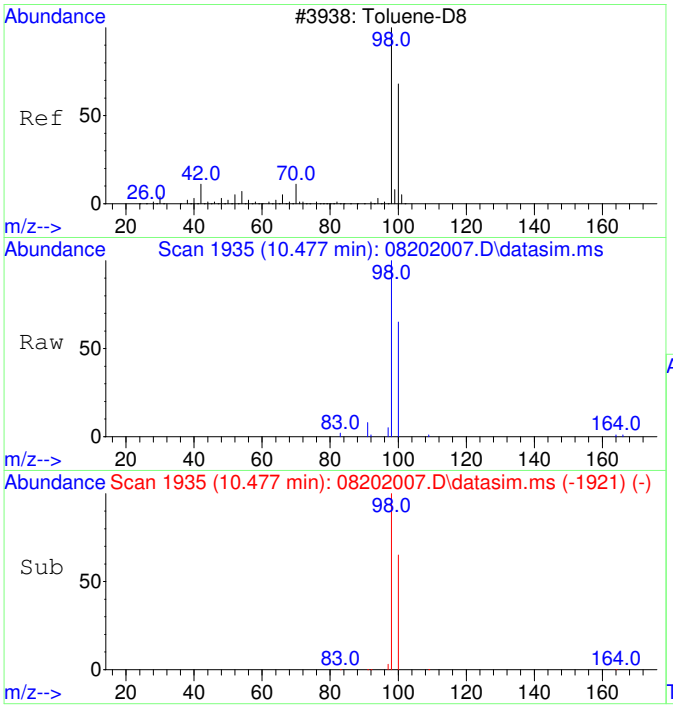


#11
Trichloroethene
Concen: 138.83 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:130 Resp: 4884

Ion	Ratio	Lower	Upper
130	100		
95	100.8	60.7	120.7
132	98.9	76.0	116.0
97	65.1	38.6	78.6

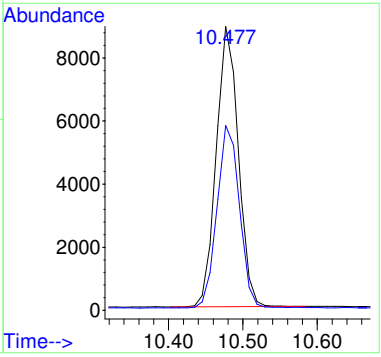


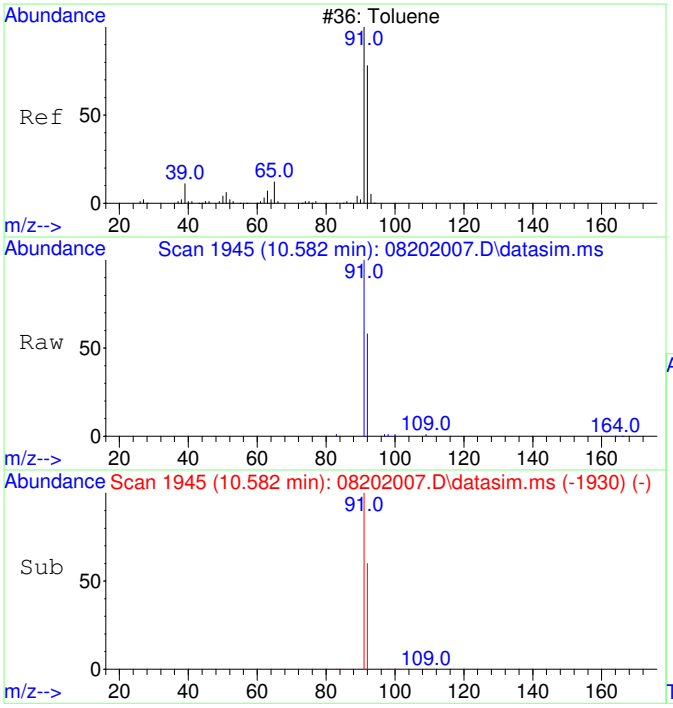


#12
Toluene-d8
Concen: 135.87 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 98 Resp: 18291

Ion	Ratio	Lower	Upper
98	100		
100	65.9	37.1	97.1

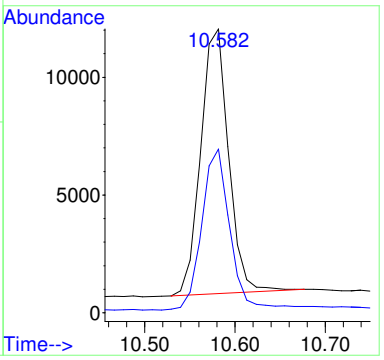


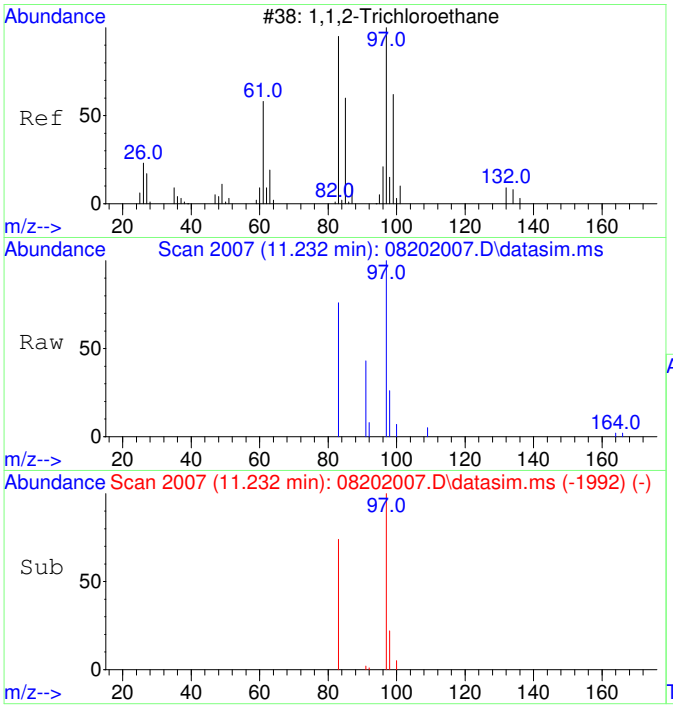


#13
Toluene
Concen: 141.38 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 24264

Ion	Ratio	Lower	Upper
91	100		
92	61.5	29.9	89.9

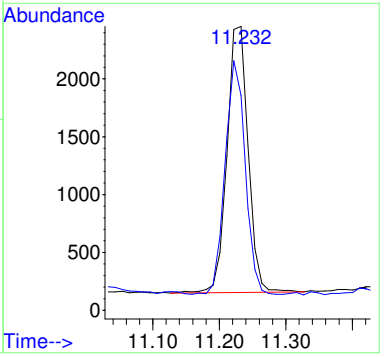


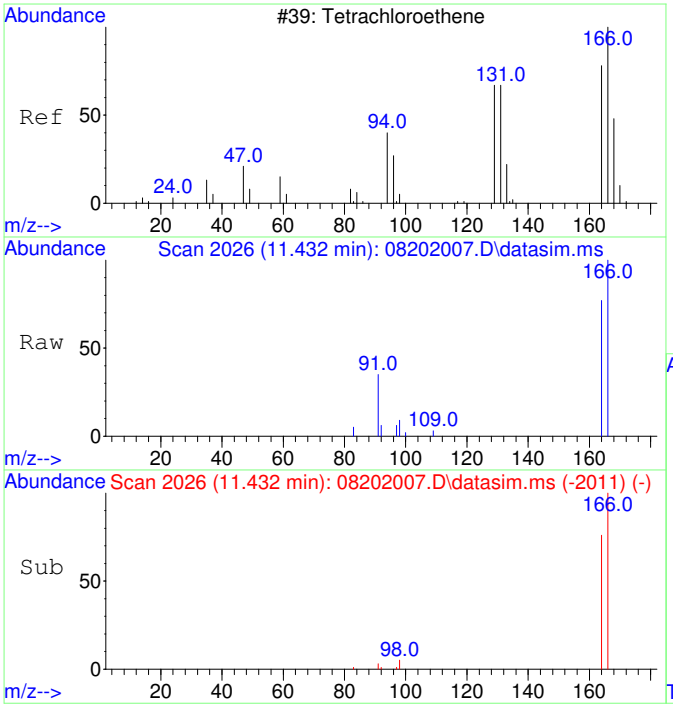


#14
1,1,2-Trichloroethane
Concen: 135.38 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 97 Resp: 5063

Ion	Ratio	Lower	Upper
97	100		
83	83.5	51.2	111.2

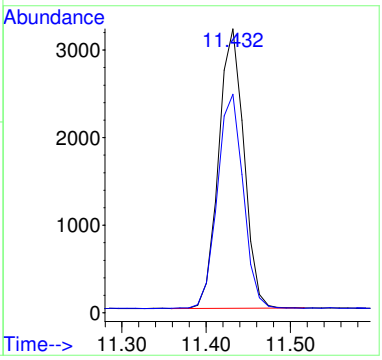


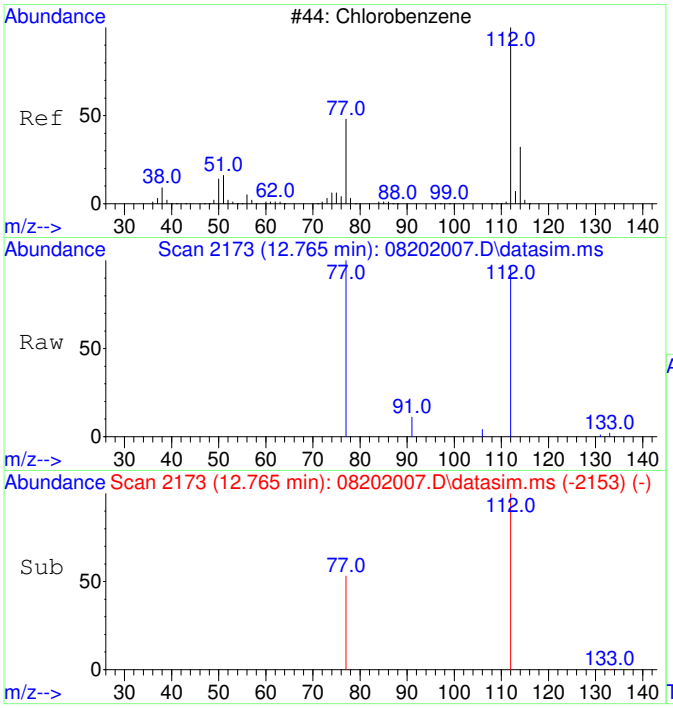


#15
Tetrachloroethene
Concen: 133.89 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:166 Resp: 6650

Ion	Ratio	Lower	Upper
166	100		
164	78.5	47.8	107.8

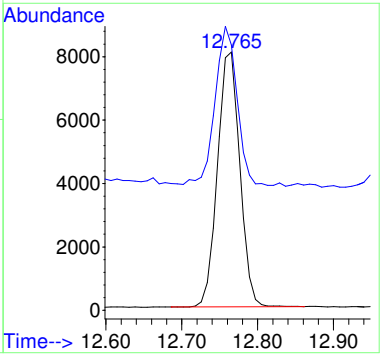


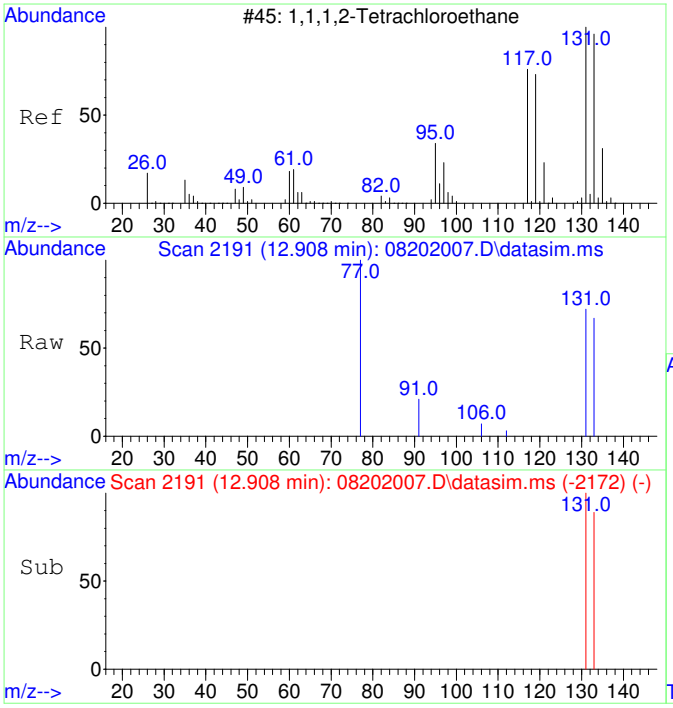


#16
Chlorobenzene
Concen: 133.98 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. 0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:112 Resp: 16465

Ion	Ratio	Lower	Upper
112	100		
77	60.1	23.6	83.6

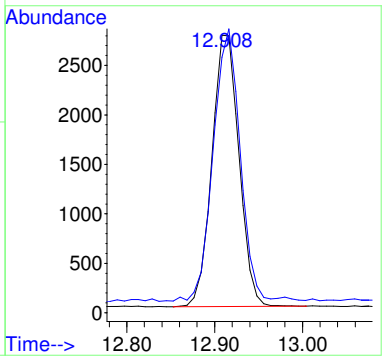


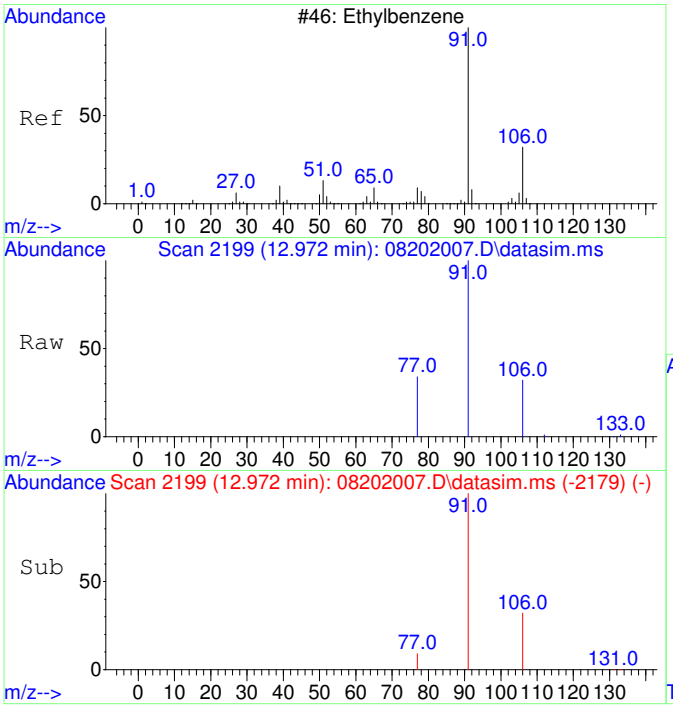


#17
1,1,1,2-Tetrachloroethane
Concen: 133.44 ug/L
RT: 12.908 min Scan# 2191
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:131 Resp: 5876

Ion	Ratio	Lower	Upper
131	100		
133	97.8	66.3	126.3

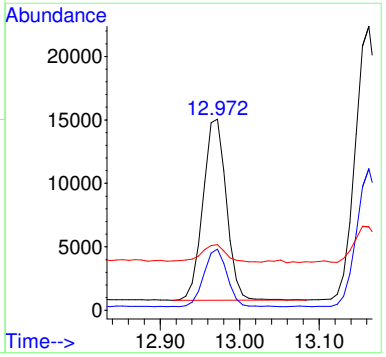


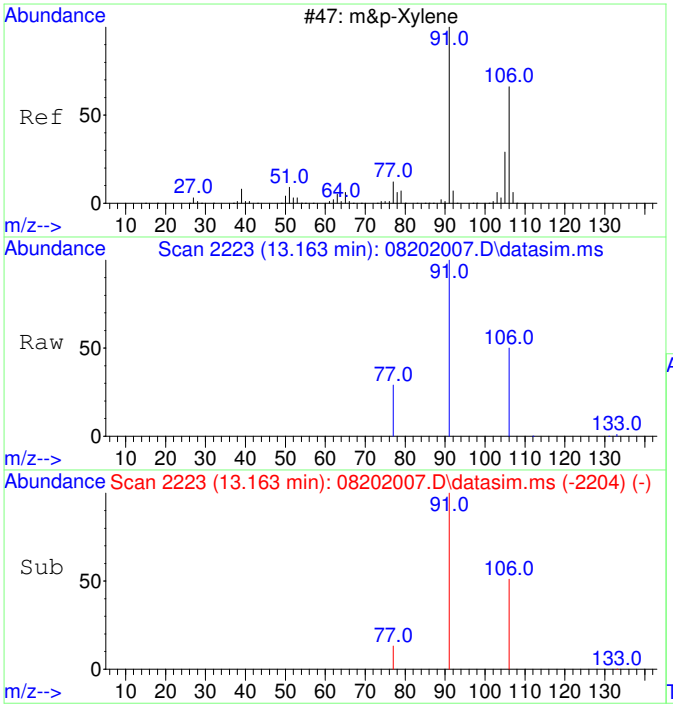


#18
Ethylbenzene
Concen: 139.19 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 29078

Ion	Ratio	Lower	Upper
91	100		
106	31.6	3.0	63.0
77	10.1	0.0	38.2

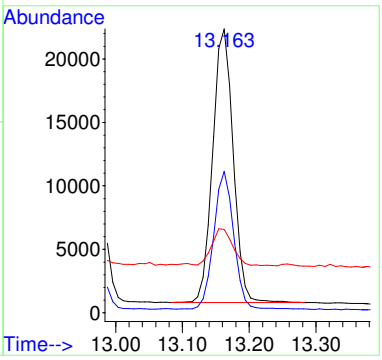


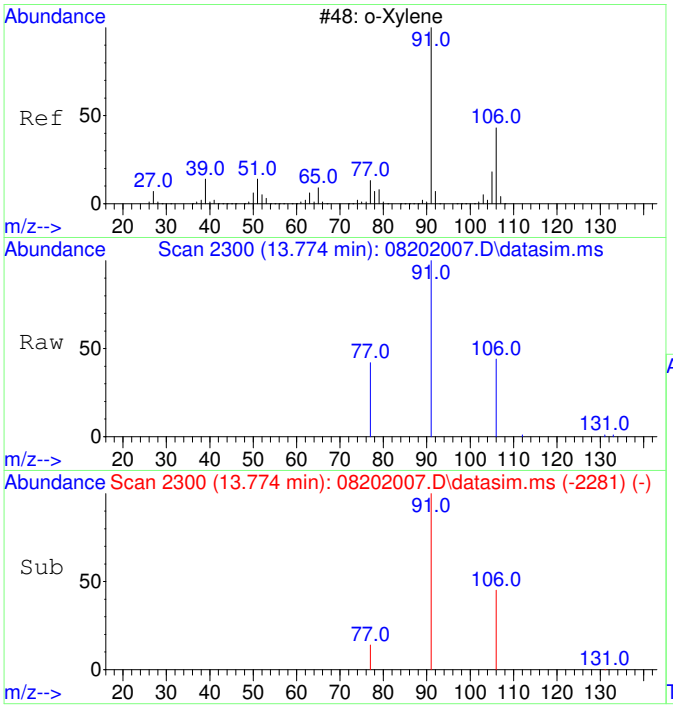


#19
m&p-Xylene
Concen: 281.41 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 45947

Ion	Ratio	Lower	Upper
91	100		
106	48.7	22.2	82.2
77	14.0	0.0	42.4

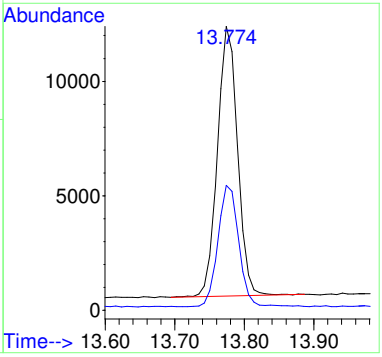


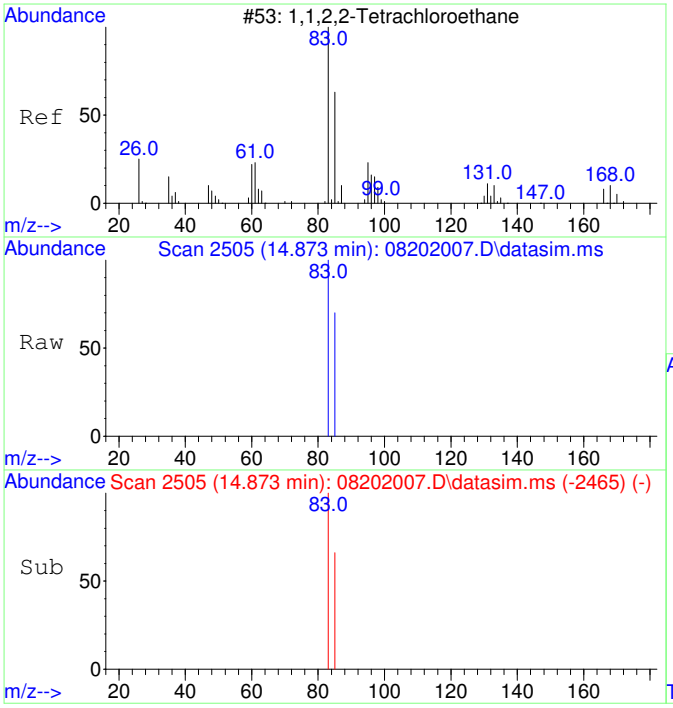


#20
o-Xylene
Concen: 135.47 ug/L
RT: 13.774 min Scan# 2300
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 23631

Ion	Ratio	Lower	Upper
91	100		
106	46.7	19.2	79.2

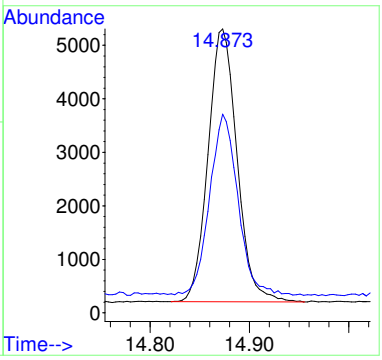


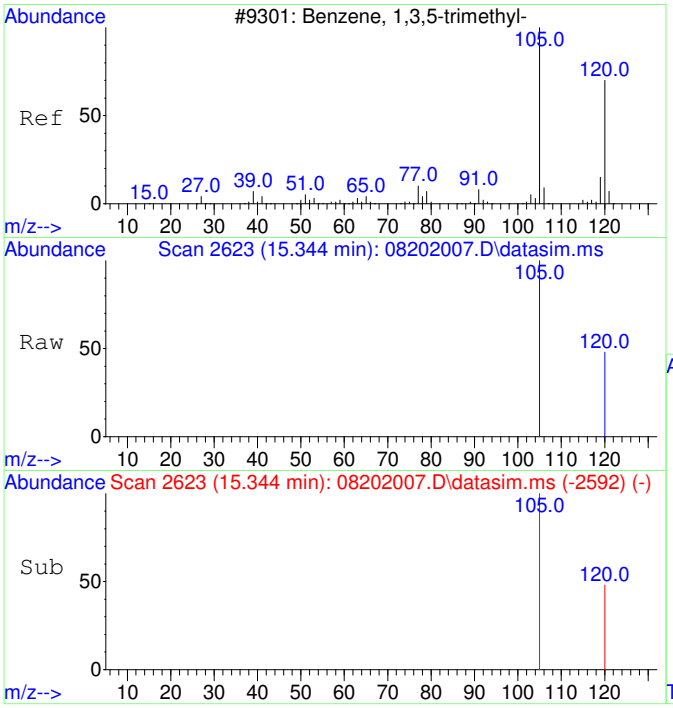


#21
1,1,2,2-Tetrachloroethane
Concen: 133.61 ug/L
RT: 14.873 min Scan# 2505
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 83 Resp: 10329

Ion	Ratio	Lower	Upper
83	100		
85	64.3	34.8	94.8

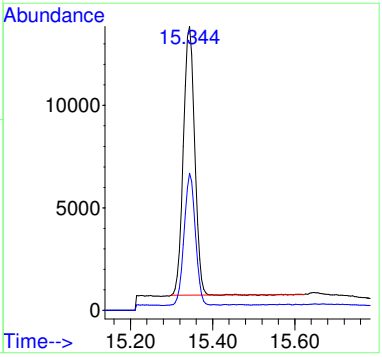


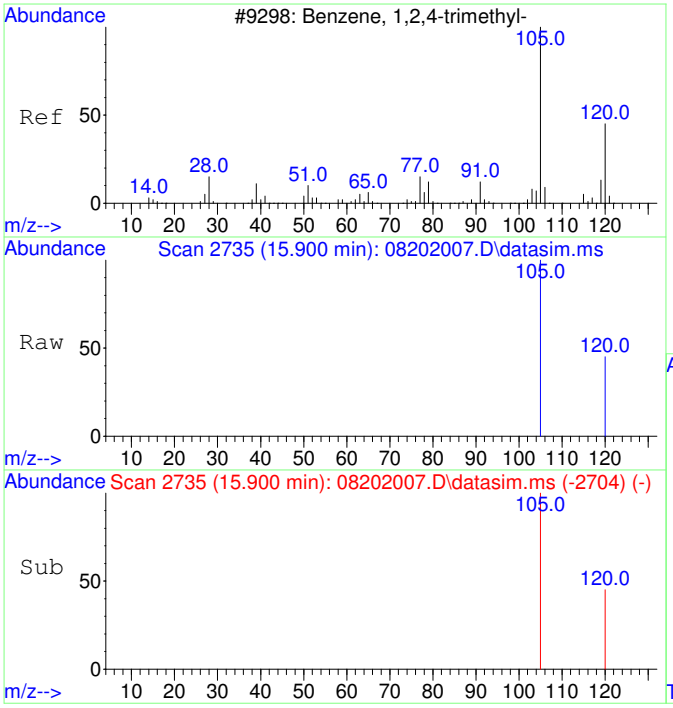


#22
1,3,5-Trimethylbenzene
Concen: 134.37 ug/L
RT: 15.344 min Scan# 2623
Delta R.T. -0.001 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:105 Resp: 24949

Ion	Ratio	Lower	Upper
105	100		
120	48.8	21.1	81.1

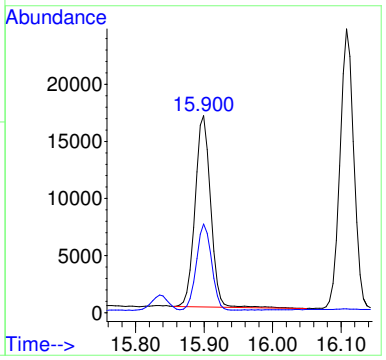


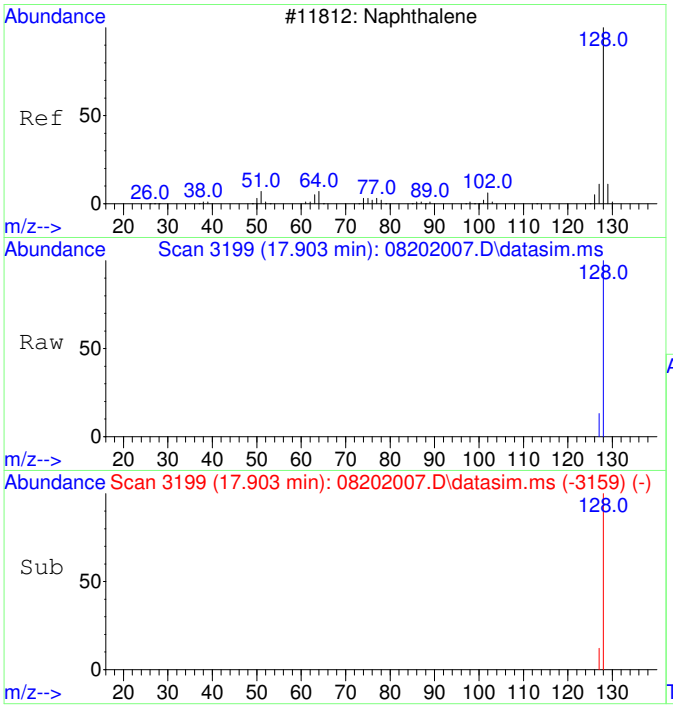


#23
1,2,4-Trimethylbenzene
Concen: 137.33 ug/L
RT: 15.900 min Scan# 2735
Delta R.T. 0.004 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:105 Resp: 26485

Ion	Ratio	Lower	Upper
105	100		
120	43.4	17.2	77.2

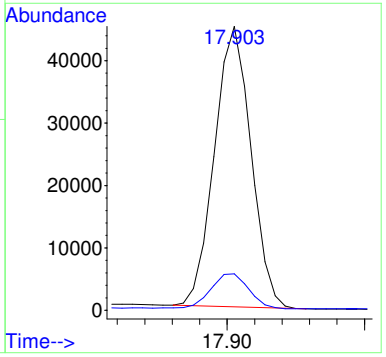


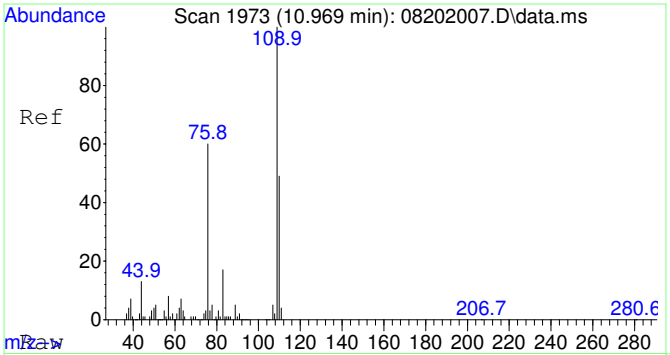


#24
Naphthalene
Concen: 135.77 ug/L
RT: 17.903 min Scan# 3199
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:128 Resp: 41384

Ion	Ratio	Lower	Upper
128	100		
127	12.6	0.0	42.5

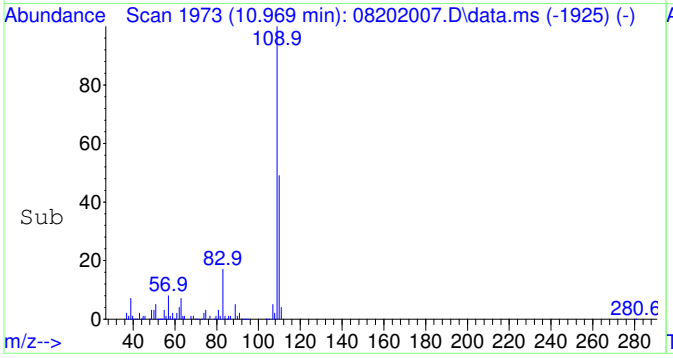


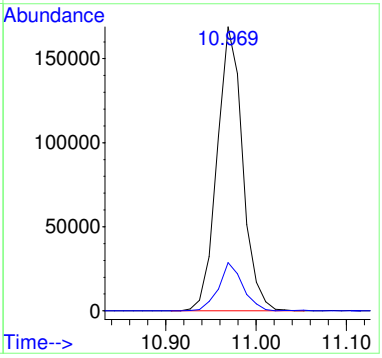


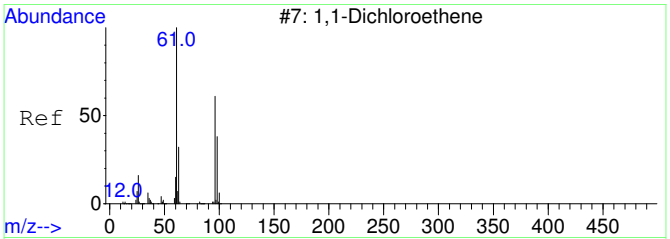
#25
2-Fluorotoluene SCAN
Concen: 4966.84 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:109 Resp: 332955

Ion	Ratio	Lower	Upper
109	100		
83	15.9	0.0	43.8



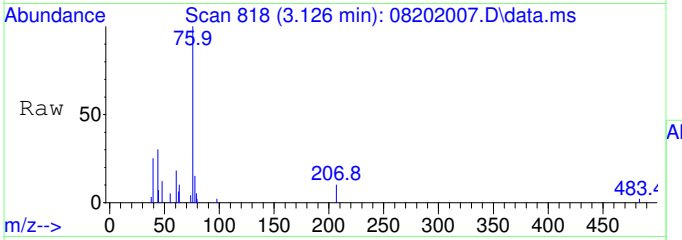


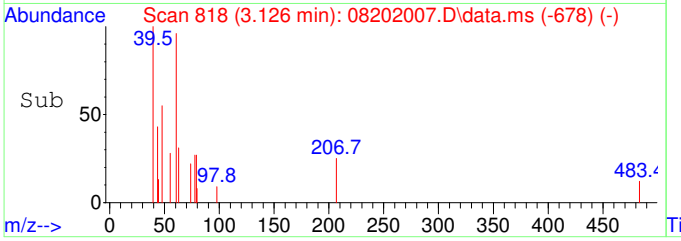


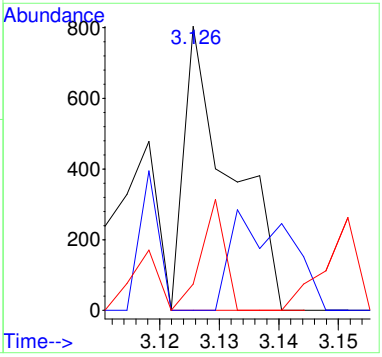
#26
1,1-Dichloroethene SCAN
Concen: 30.49 ug/L
RT: 3.126 min Scan# 818
Delta R.T. 0.019 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

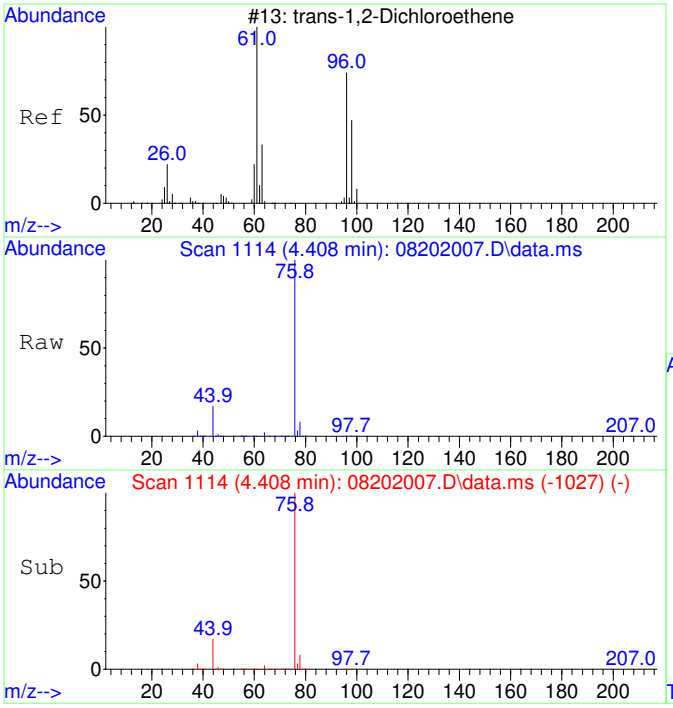
Tgt Ion: 61 Resp: 434

Ion	Ratio	Lower	Upper
61	100		
96	44.0	33.1	93.1
98	19.8	11.2	71.2





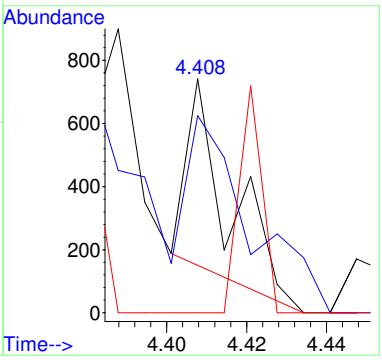


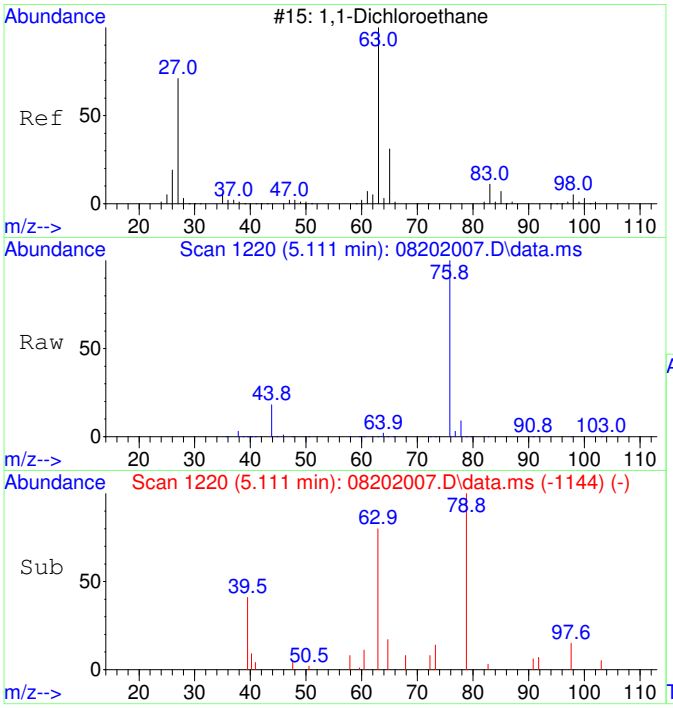


#27
trans-1,2-Dichloroethene SCAN
Concen: 22.42 ug/L
RT: 4.408 min Scan# 1114
Delta R.T. 0.007 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 61 Resp: 395

Ion	Ratio	Lower	Upper
61	100		
96	126.6	49.0	109.0#
97	72.4	20.5	80.5

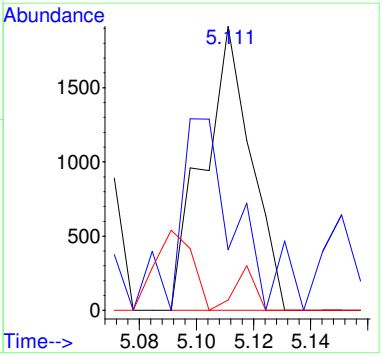


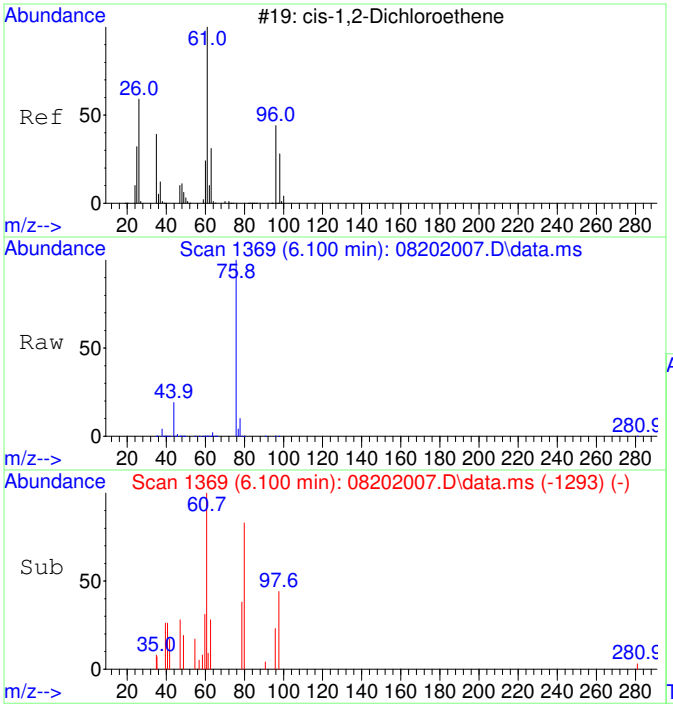


#28
1,1-Dichloroethane SCAN
Concen: 109.38 ug/L
RT: 5.111 min Scan# 1220
Delta R.T. 0.007 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 63 Resp: 2230

Ion	Ratio	Lower	Upper
63	100		
65	0.0	1.3	61.3#
83	4.1	0.0	45.9

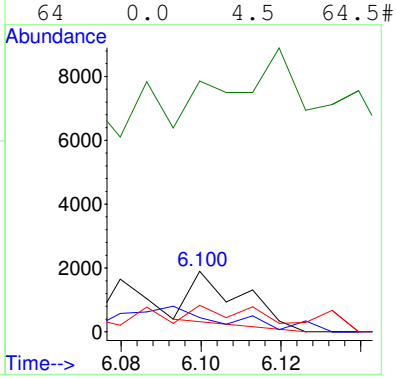


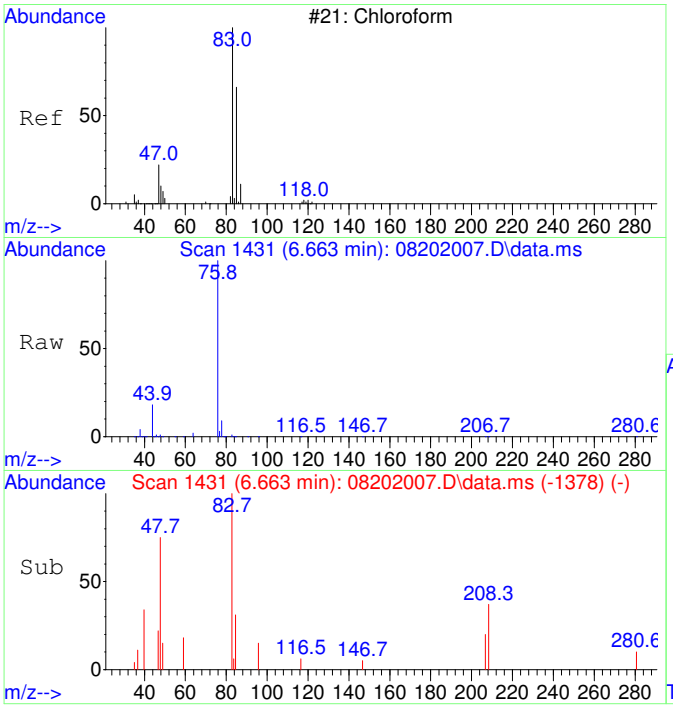


#29
cis-1,2-Dichloroethene SCAN
Concen: 63.68 ug/L
RT: 6.100 min Scan# 1369
Delta R.T. 0.007 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 61 Resp: 1391

Ion	Ratio	Lower	Upper
61	100		
96	143.3	39.9	99.9#
98	66.9	13.5	73.5
64	0.0	4.5	64.5#

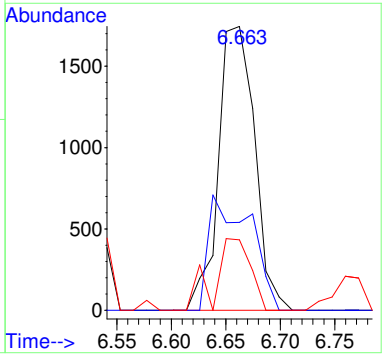


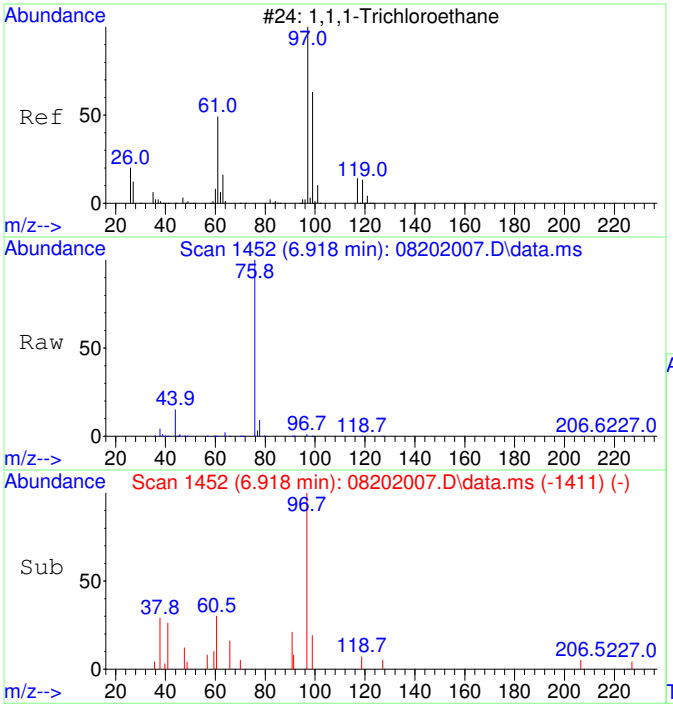


#30
Chloroform SCAN
Concen: 171.15 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 83 Resp: 4055

Ion	Ratio	Lower	Upper
83	100		
85	0.0	34.6	94.6#
47	25.2	0.0	53.4

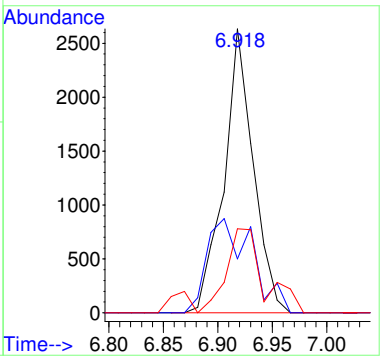


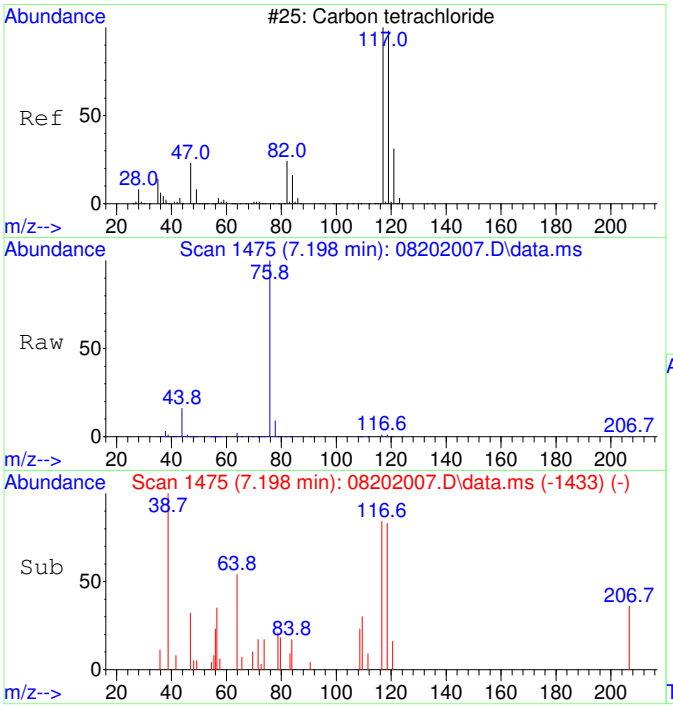


#31
1,1,1-Trichloroethane SCAN
Concen: 228.30 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 97 Resp: 4929

Ion	Ratio	Lower	Upper
97	100		
99	51.1	43.6	103.6
61	37.8	18.0	78.0

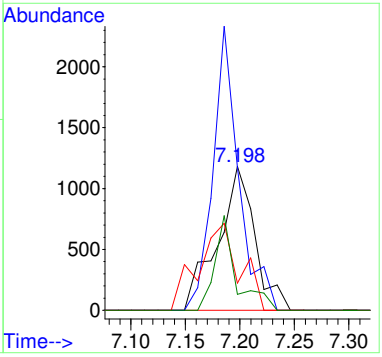


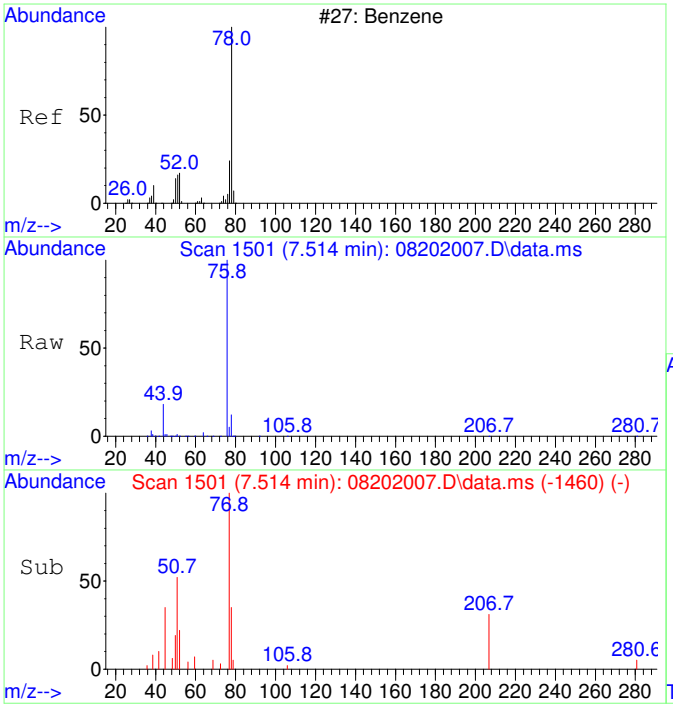


#32
Carbon tetrachloride SCAN
Concen: 124.33 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:117 Resp: 2800

Ion	Ratio	Lower	Upper
117	100		
119	137.3	75.5	135.5#
121	67.3	0.0	58.8#
82	37.5	0.0	59.2

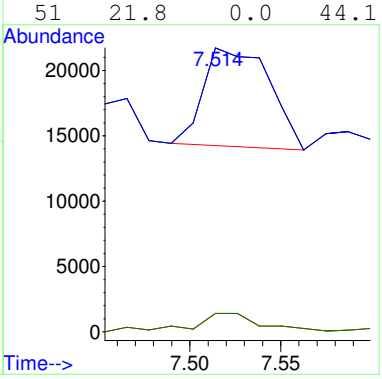


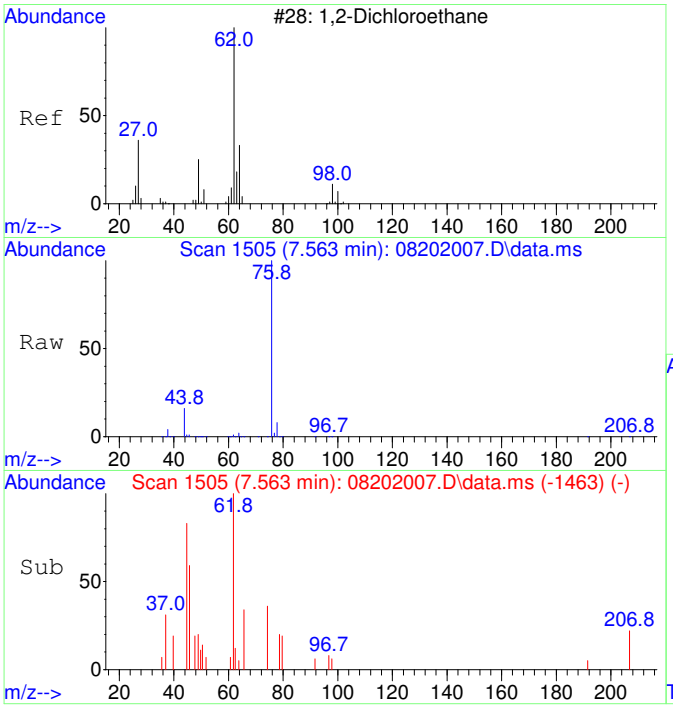


#33
Benzene SCAN
Concen: 317.45 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 78 Resp: 18871

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	21.8	0.0	47.9
51	21.8	0.0	44.1

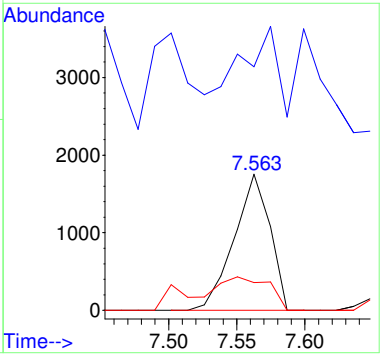


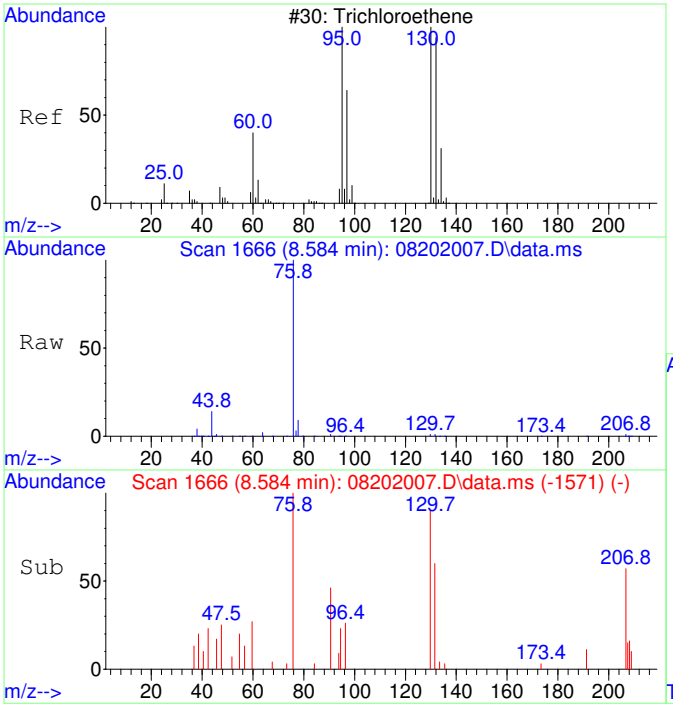


#34
1,2-Dichloroethane SCAN
Concen: 146.10 ug/L
RT: 7.563 min Scan# 1505
Delta R.T. 0.012 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 62 Resp: 3207

Ion	Ratio	Lower	Upper
62	100		
64	42.1	5.2	65.2
49	0.0	3.9	63.9#

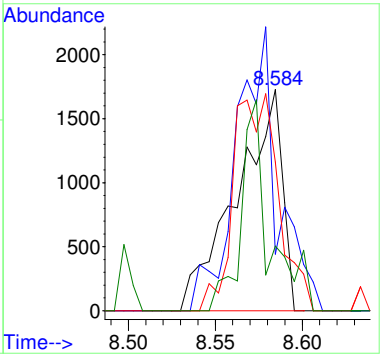


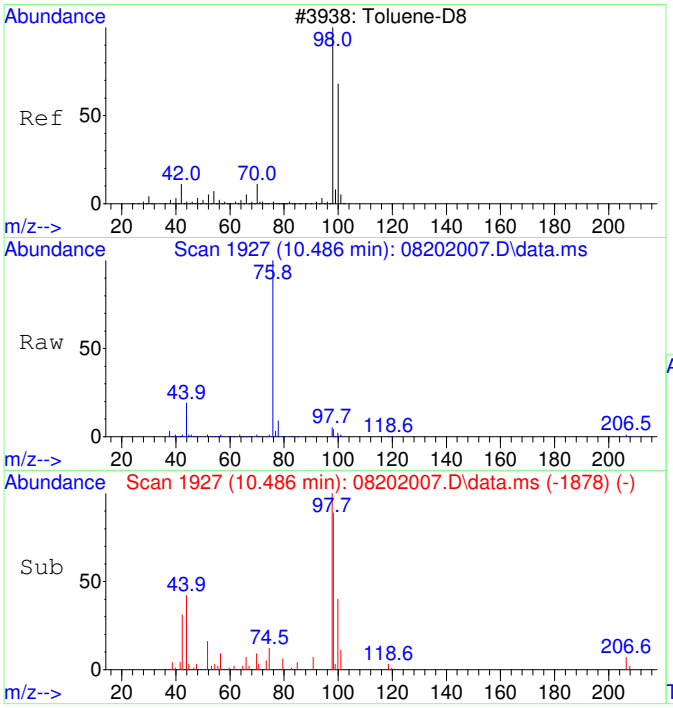


#35
Trichloroethene SCAN
Concen: 193.80 ug/L
RT: 8.584 min Scan# 1666
Delta R.T. 0.016 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:130 Resp: 3166

Ion	Ratio	Lower	Upper
130	100		
95	116.2	60.5	120.5
132	96.6	59.6	119.6
97	58.8	28.2	88.2

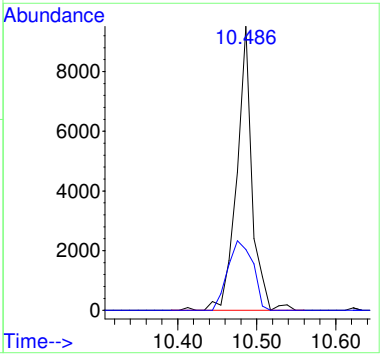


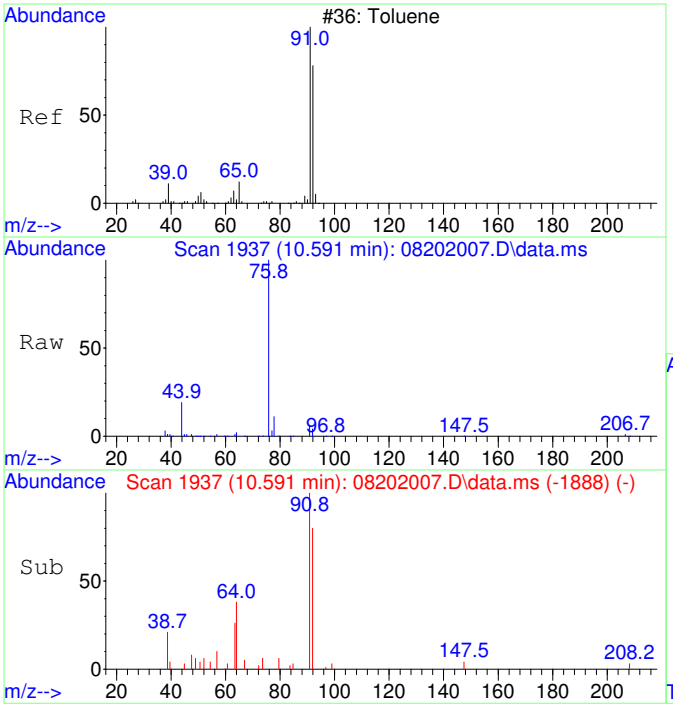


#36
Toluene-d8 SCAN
Concen: 194.45 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 98 Resp: 12748

Ion	Ratio	Lower	Upper
98	100		
100	40.3	40.0	100.0

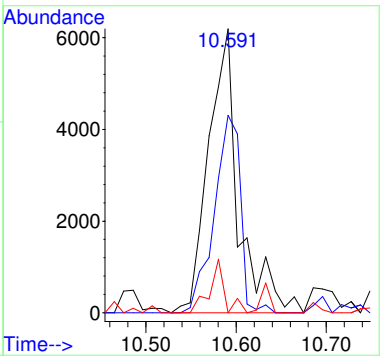


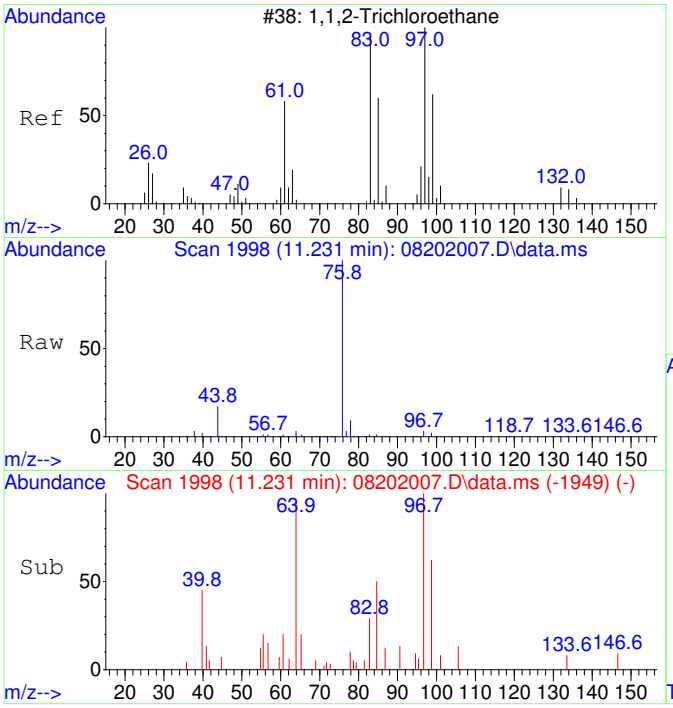


#37
Toluene SCAN
Concen: 171.17 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 14371

Ion	Ratio	Lower	Upper
91	100		
92	60.5	28.3	88.3
65	9.4	0.0	41.0

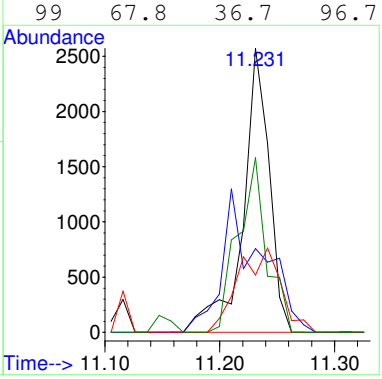


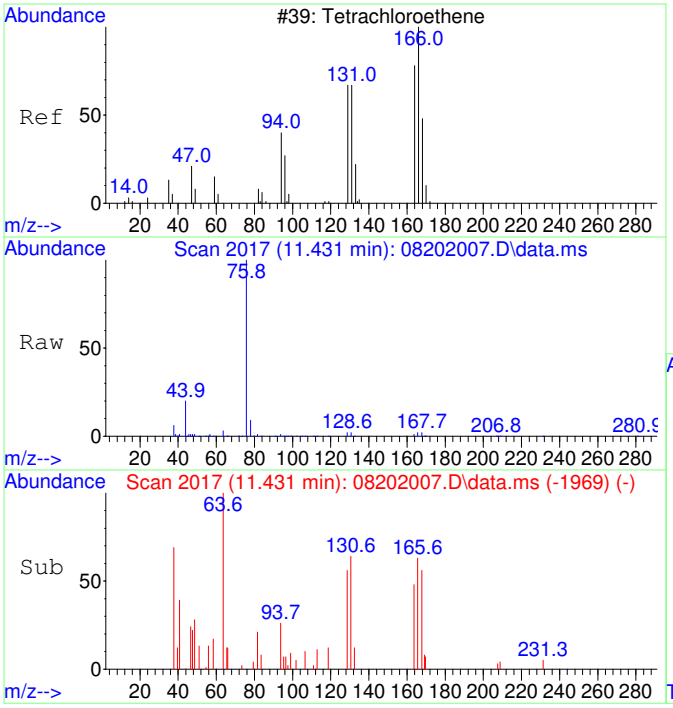


#38
1,1,2-Trichloroethane SCAN
Concen: 216.66 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 97 Resp: 4083

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	48.2	32.1	92.1
99	67.8	36.7	96.7

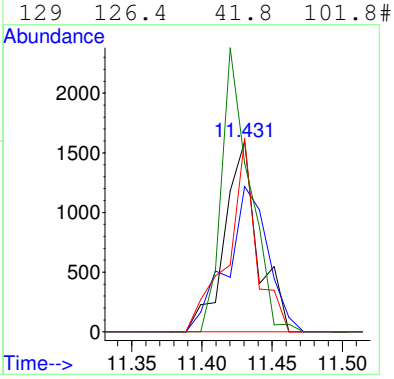


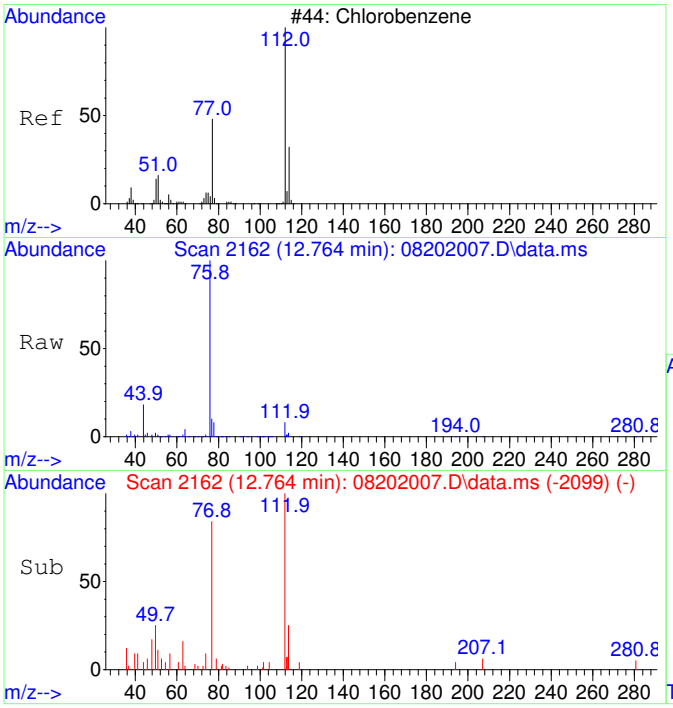


#39
Tetrachloroethene SCAN
Concen: 131.18 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:166 Resp: 2646

Ion	Ratio	Lower	Upper
166	100		
164	93.8	50.9	110.9
131	86.4	38.7	98.7
129	126.4	41.8	101.8#

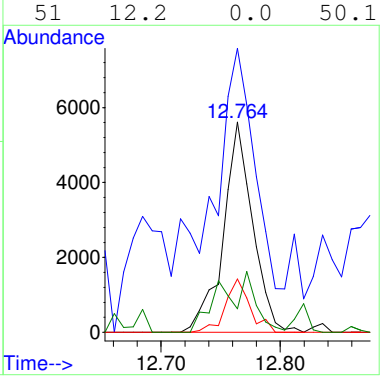


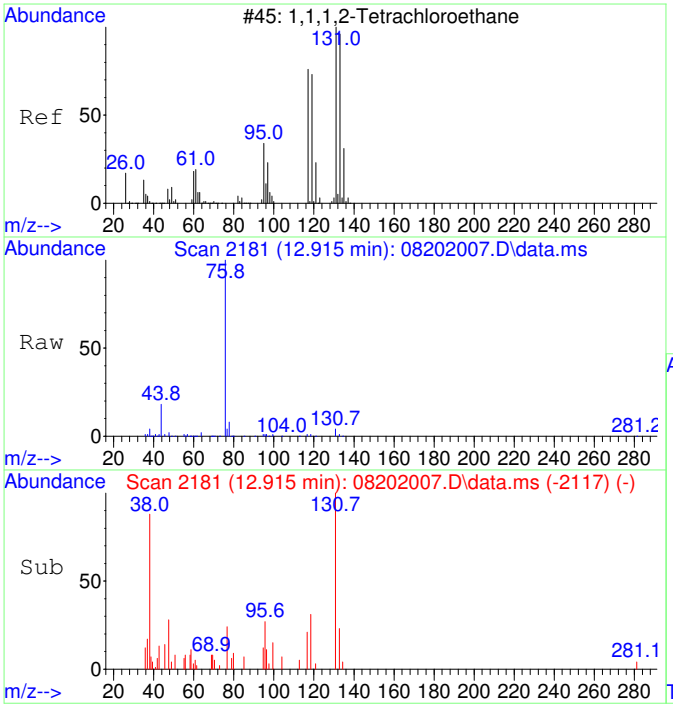


#40
Chlorobenzene SCAN
Concen: 169.04 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:112 Resp: 9698

Ion	Ratio	Lower	Upper
112	100		
77	136.8	28.2	88.2#
114	21.1	2.3	62.3
51	12.2	0.0	50.1

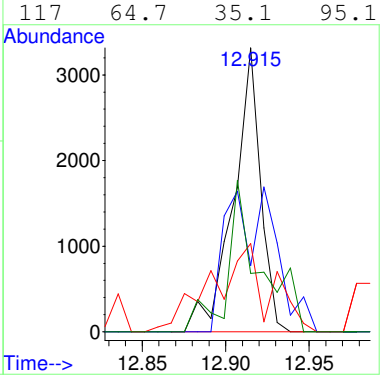


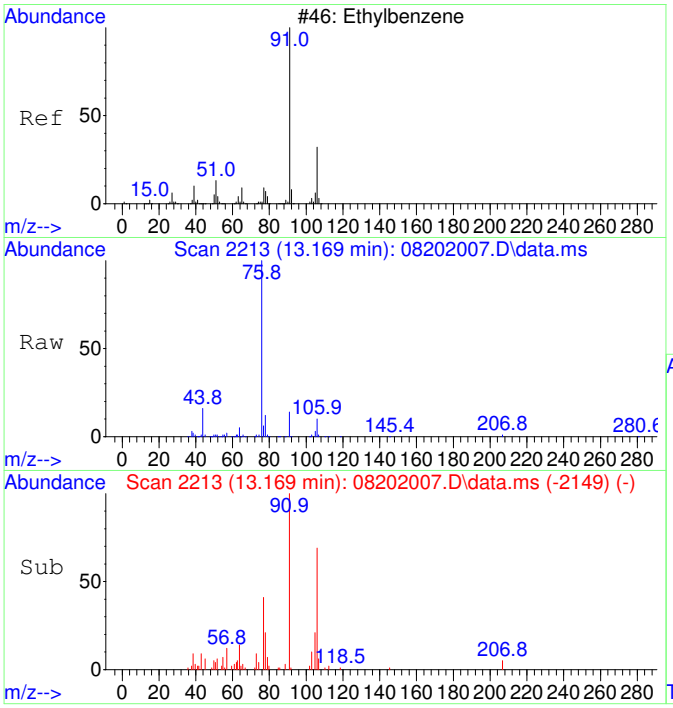


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 177.14 ug/L
RT: 12.915 min Scan# 2181
Delta R.T. 0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:131 Resp: 3761

Ion	Ratio	Lower	Upper
131	100		
133	89.9	66.9	126.9
119	65.7	40.4	100.4
117	64.7	35.1	95.1

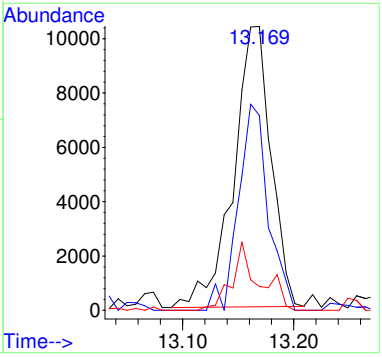


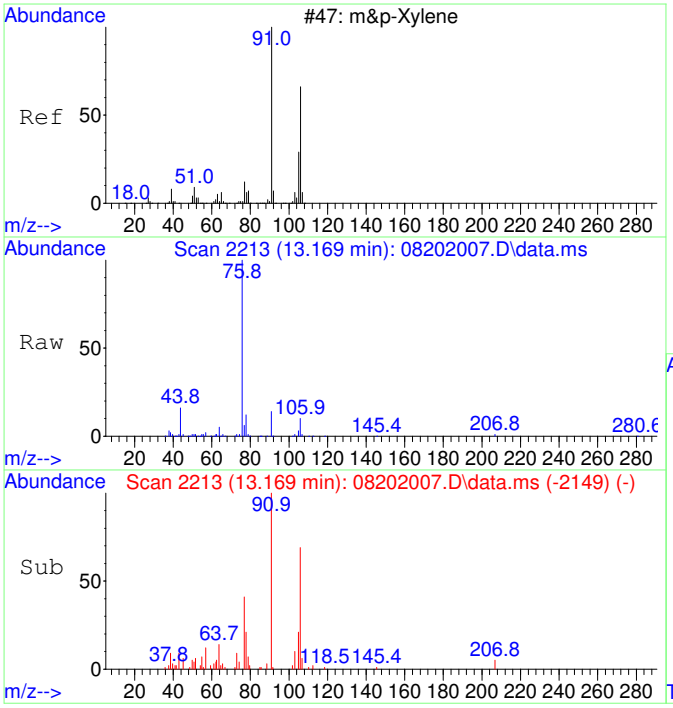


#42
Ethylbenzene SCAN
Concen: 158.20 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 24198

Ion	Ratio	Lower	Upper
91	100		
106	58.4	23.1	83.1
51	17.6	0.0	40.1

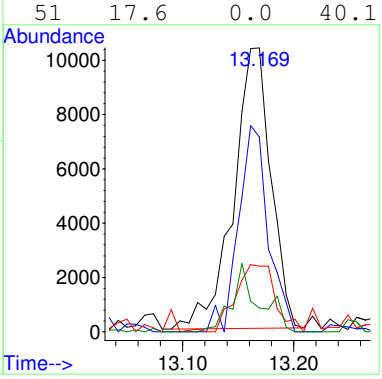


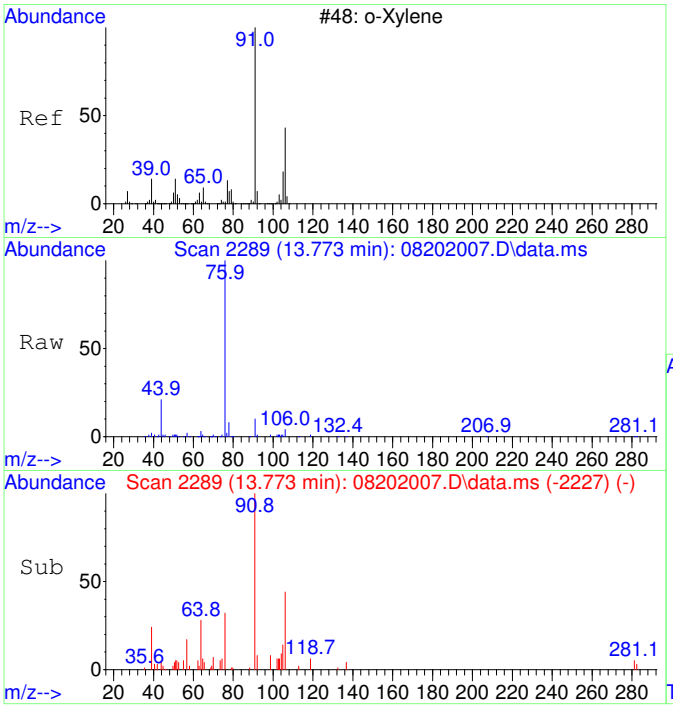


#43
m&p-Xylene SCAN
Concen: 158.20 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 24198

Ion	Ratio	Lower	Upper
91	100		
106	58.4	23.1	83.1
105	25.1	0.0	54.7
51	17.6	0.0	40.1

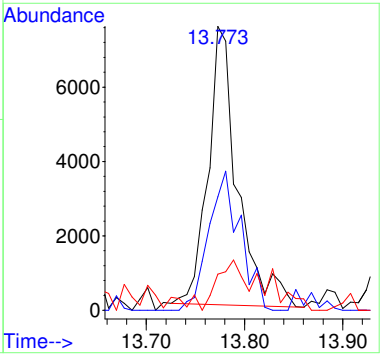


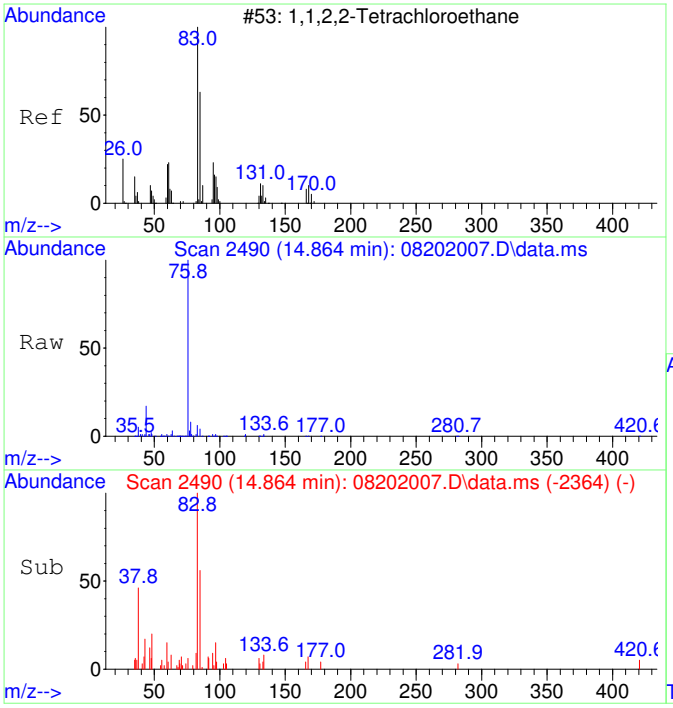


#44
o-Xylene SCAN
Concen: 190.48 ug/L
RT: 13.773 min Scan# 2289
Delta R.T. -0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 15595

Ion	Ratio	Lower	Upper
91	100		
106	53.8	18.0	78.0
105	27.5	0.0	56.6

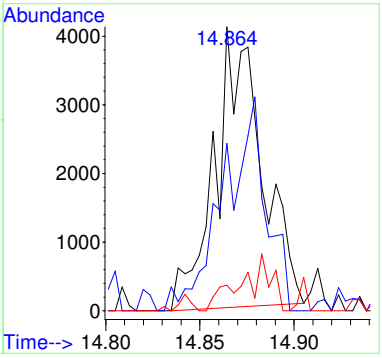


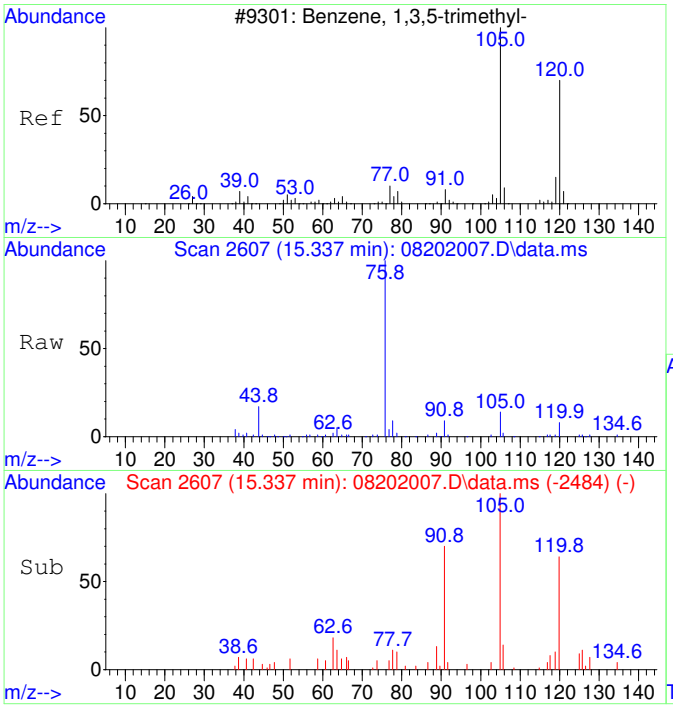


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 177.39 ug/L
RT: 14.864 min Scan# 2490
Delta R.T. -0.007 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 83 Resp: 7082

Ion	Ratio	Lower	Upper
83	100		
85	10.5	35.9	95.9#
95	5.2	0.0	47.4

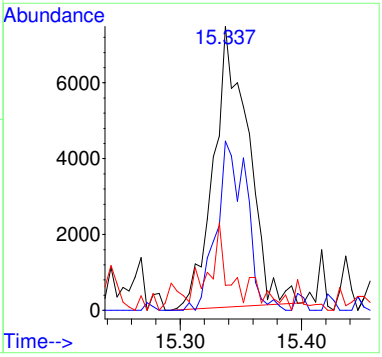


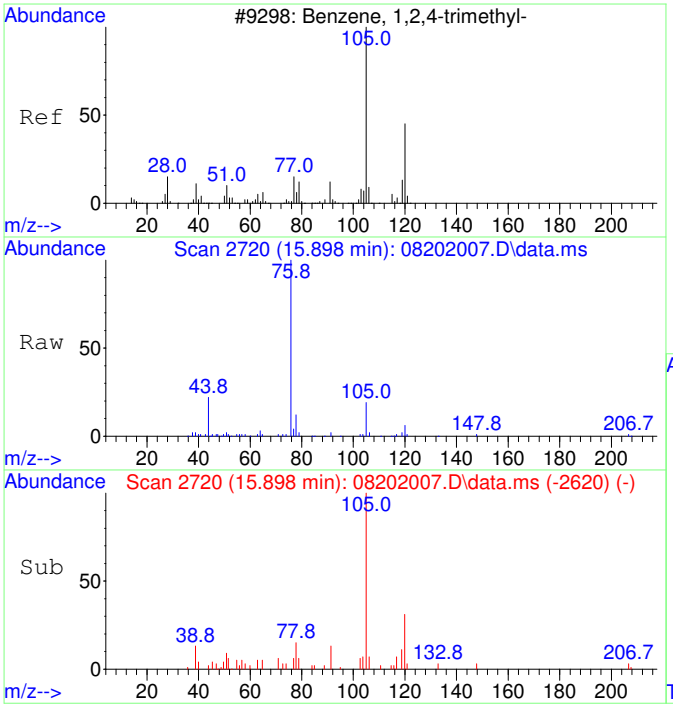


#46
1,3,5-Trimethylbenzene SCAN
Concen: 170.06 ug/L
RT: 15.337 min Scan# 2607
Delta R.T. -0.006 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:105 Resp: 14674

Ion	Ratio	Lower	Upper
105	100		
120	52.5	18.3	78.3
119	12.8	0.0	43.1

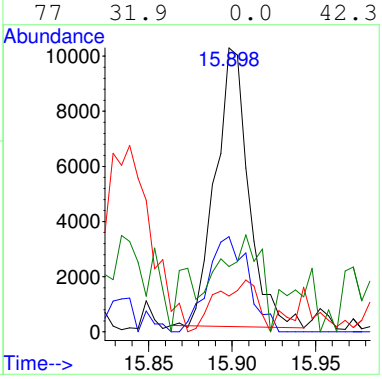


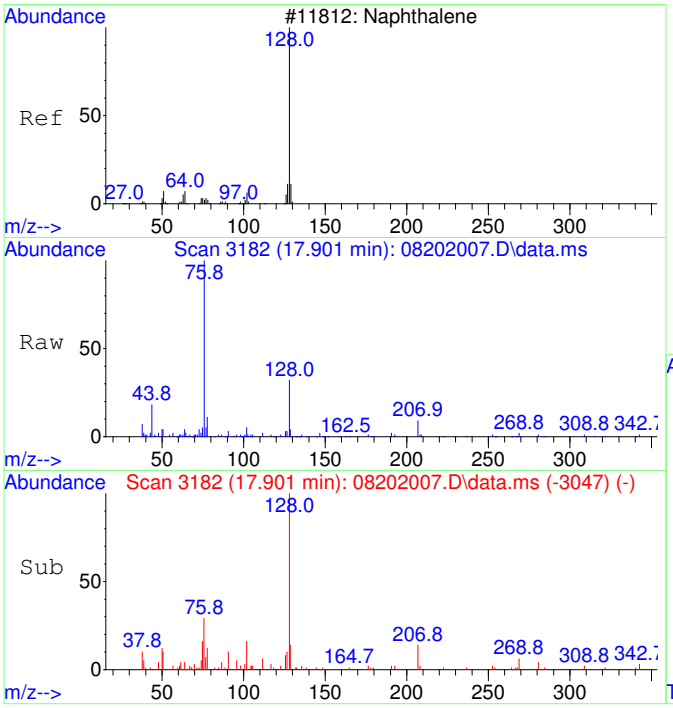


#47
1,2,4-Trimethylbenzene SCAN
Concen: 157.88 ug/L
RT: 15.898 min Scan# 2720
Delta R.T. -0.001 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:105 Resp: 13939

Ion	Ratio	Lower	Upper
105	100		
120	41.8	16.9	76.9
119	22.6	0.0	41.9
77	31.9	0.0	42.3

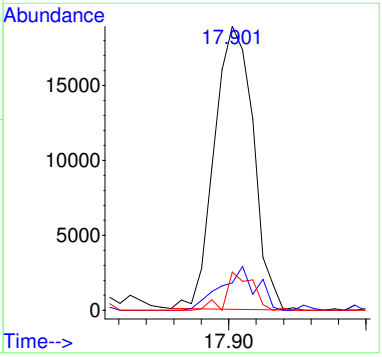




#48
Naphthalene SCAN
Concen: 138.89 ug/L
RT: 17.901 min Scan# 3182
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:128 Resp: 18555

Ion	Ratio	Lower	Upper
128	100		
127	14.1	0.0	44.0
129	9.5	0.0	40.8



S20H039-CAL6

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\082020\
Data File : 08202008.D
Acq On : 20 Aug 2020 17:25
InstName : AG5975C
Operator : TD
Sample : S20H039-CAL6
Misc : 2030073 0.05 mg/L
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 21 08:31:14 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\082020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:30:13 2020
Response via : Initial Calibration

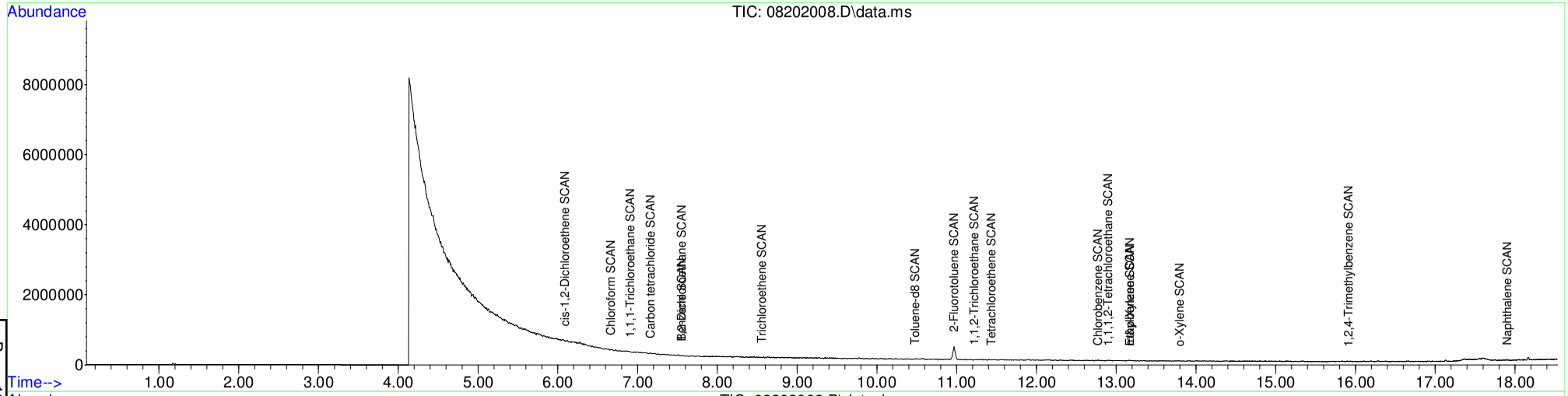
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	604968	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	5849	49.39	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 0.99%#			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.086	61	1509	56.74	ug/L	85
3] trans-1,2-Dichloroethene	4.362	61	1192	42.71	ug/L	71
4] 1,1-Dichloroethane	5.079	63	1475	42.45	ug/L #	20
5] cis-1,2-Dichloroethene	6.081	61	1594	43.46	ug/L	95
6] Chloroform	6.652	83	1606	42.78	ug/L	100
7] 1,1,1-Trichloroethane	6.907	97	1818	44.60	ug/L	97
8] Carbon tetrachloride	7.175	117	1680	43.79	ug/L	90
9] Benzene	7.503	78	3813	37.10	ug/L #	1
10] 1,2-Dichloroethane	7.540	62	1603	43.69	ug/L #	1
11] Trichloroethene	8.569	130	1464	47.31	ug/L	94
13] Toluene	10.571	91	8880	58.81	ug/L	91
14] 1,1,2-Trichloroethane	11.222	97	1632	49.61	ug/L	93
15] Tetrachloroethene	11.432	166	2206	50.49	ug/L	99
16] Chlorobenzene	12.757	112	5616	51.95	ug/L	87
17] 1,1,1,2-Tetrachloroethane	12.908	131	1936	49.98	ug/L	97
18] Ethylbenzene	12.964	91	10080	54.85	ug/L	96
19] m&p-Xylene	13.162	91	16478	114.72	ug/L	94
20] o-Xylene	13.774	91	8511	55.46	ug/L	98
21] 1,1,2,2-Tetrachloroethane	14.873	83	3604	52.99	ug/L	98
22] 1,3,5-Trimethylbenzene	15.340	105	8630	52.84	ug/L	95
23] 1,2,4-Trimethylbenzene	15.896	105	9662	56.95	ug/L	92
24] Naphthalene	17.903	128	14370	53.59	ug/L	98
25) 2-Fluorotoluene SCAN	10.969	109	276390	4686.70	ug/L	97
29) cis-1,2-Dichloroethene...	6.086	61	446	23.21	ug/L #	77
30) Chloroform SCAN	6.662	83	1146	54.98	ug/L #	27
31) 1,1,1-Trichloroethane ...	6.906	97	1606	84.55	ug/L #	25
32) Carbon tetrachloride SCAN	7.161	117	1077	54.36	ug/L #	15
33) Benzene SCAN	7.550	78	16747	320.23	ug/L	92
34) 1,2-Dichloroethane SCAN	7.550	62	733	37.96	ug/L #	26
35) Trichloroethene SCAN	8.557	130	438	30.48	ug/L #	11
36) Toluene-d8 SCAN	10.475	98	3315	57.48	ug/L	99
38) 1,1,2-Trichloroethane ...	11.221	97	839	50.61	ug/L #	13
39) Tetrachloroethene SCAN	11.430	166	1089	61.37	ug/L #	37
40) Chlorobenzene SCAN	12.772	112	2260	44.78	ug/L #	1
41) 1,1,1,2-Tetrachloroeth...	12.891	131	1738	93.05	ug/L #	34
42) Ethylbenzene SCAN	13.169	91	10146	75.40	ug/L	70
43) m&p-Xylene SCAN	13.169	91	10146	75.40	ug/L #	65
44) o-Xylene SCAN	13.797	91	6861	95.26	ug/L #	51
47) 1,2,4-Trimethylbenzene...	15.909	105	4918	63.32	ug/L #	42
48) Naphthalene SCAN	17.901	128	6734	57.30	ug/L	67

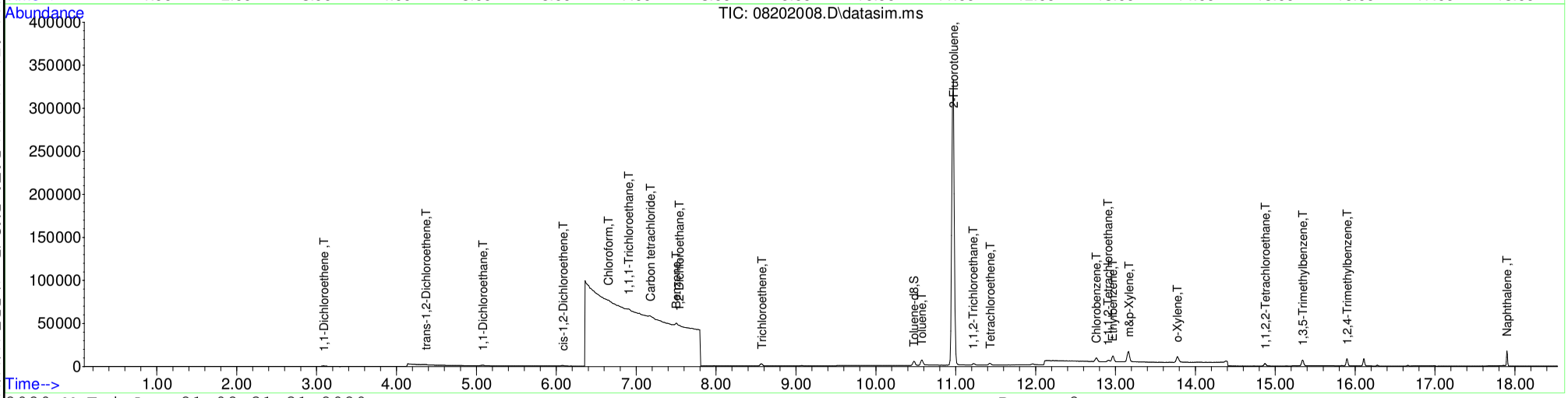
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\082020\
Data File : 08202008.D
Acq On : 20 Aug 2020 17:25
InstName : AG5975C
Operator : TD
Sample : S20H039-CAL6
Misc : 2030073 0.05 mg/L
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 21 08:31:14 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\082020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:30:13 2020
Response via : Initial Calibration





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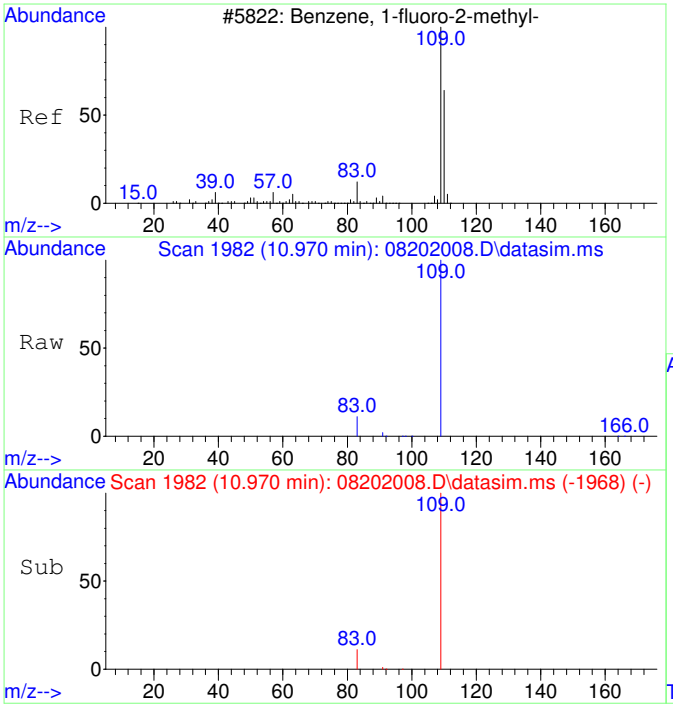
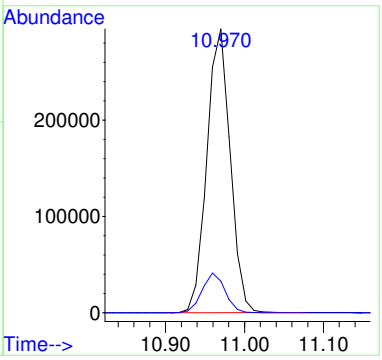
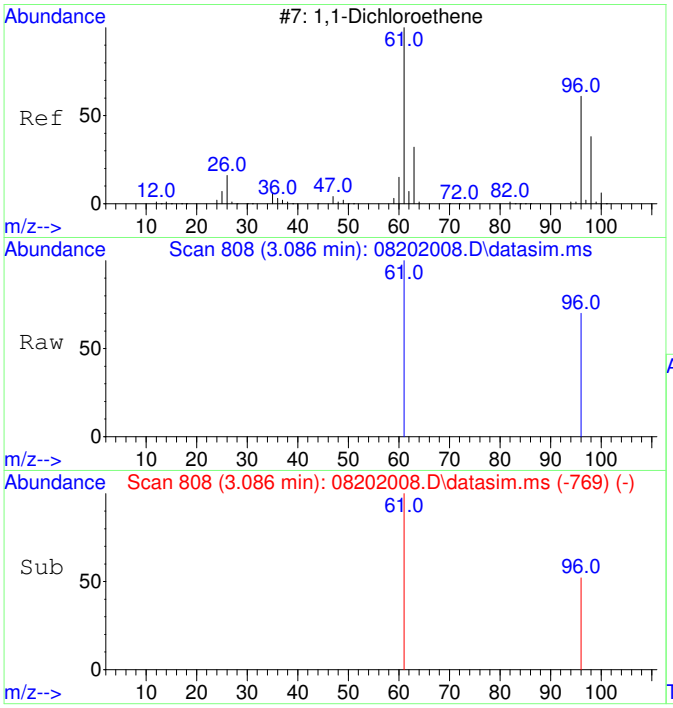


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:109 Resp: 604968

Ion	Ratio	Lower	Upper
109	100		
83	13.7	0.0	42.3

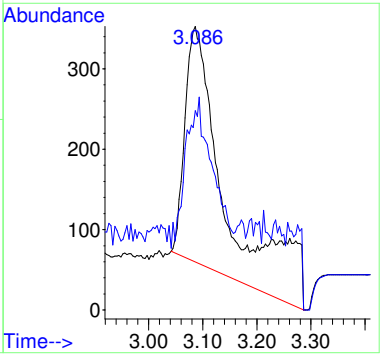




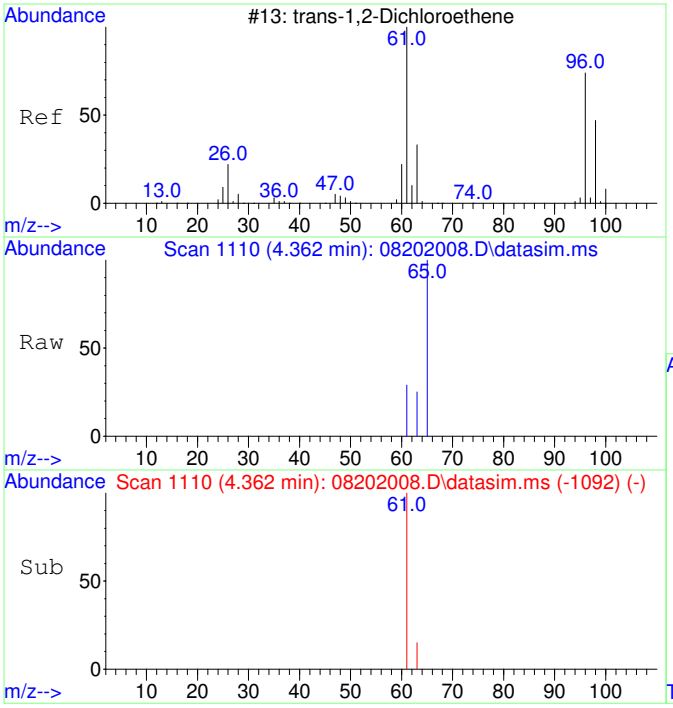
#2
1,1-Dichloroethene
Concen: 56.74 ug/L
RT: 3.086 min Scan# 808
Delta R.T. -0.004 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 61 Resp: 1509

Ion	Ratio	Lower	Upper
61	100		
96	55.2	37.2	97.2



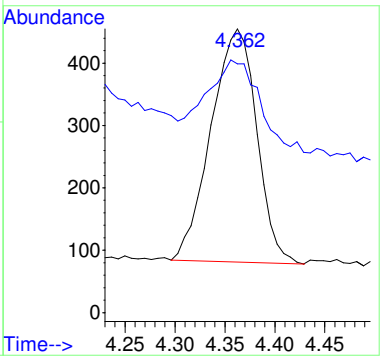
Before MI:
IMPROPER
BASELINE

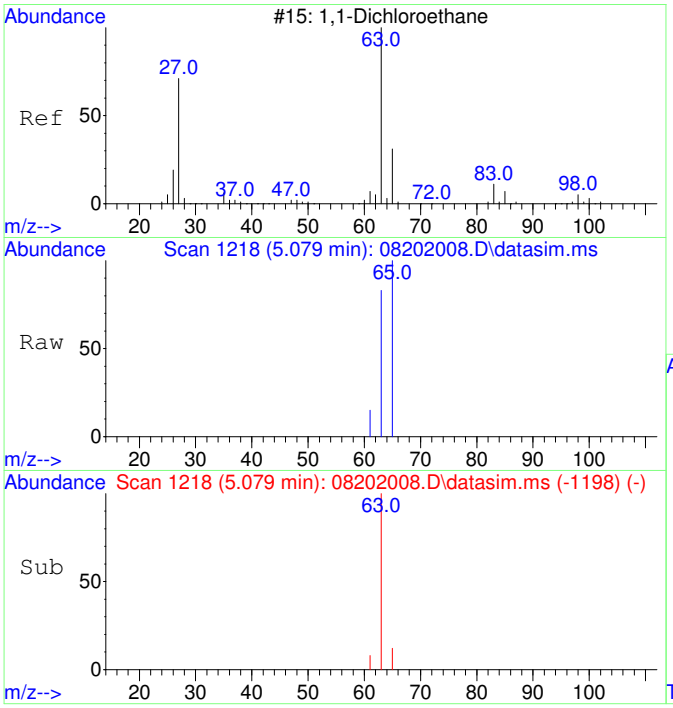


#3
trans-1,2-Dichloroethene
Concen: 42.71 ug/L
RT: 4.362 min Scan# 1110
Delta R.T. -0.033 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 61 Resp: 1192

Ion	Ratio	Lower	Upper
61	100		
63	48.7	2.4	62.4

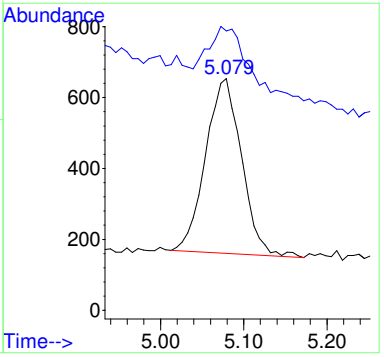


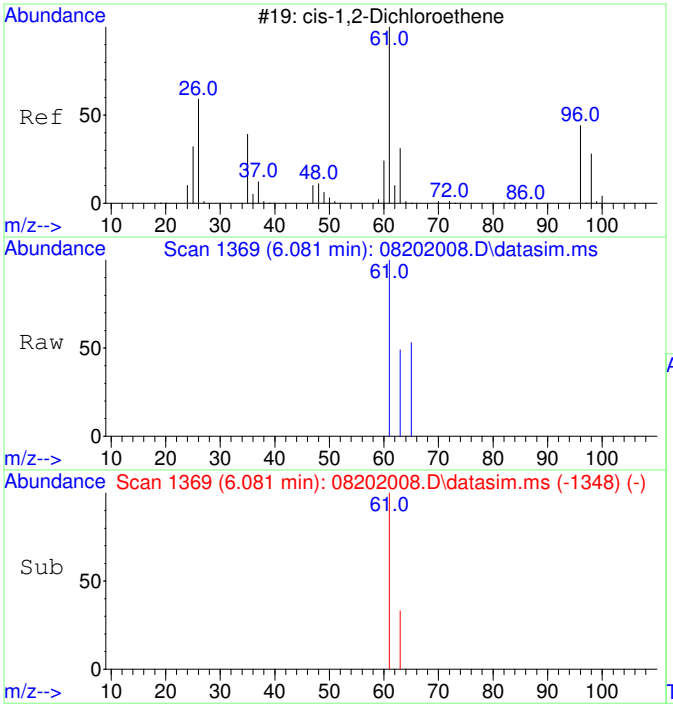


#4
1,1-Dichloroethane
Concen: 42.45 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.020 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 63 Resp: 1475

Ion	Ratio	Lower	Upper
63	100		
65	76.1	1.8	61.8#

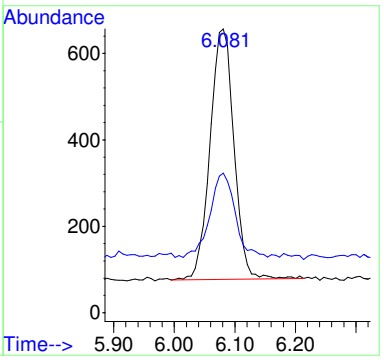


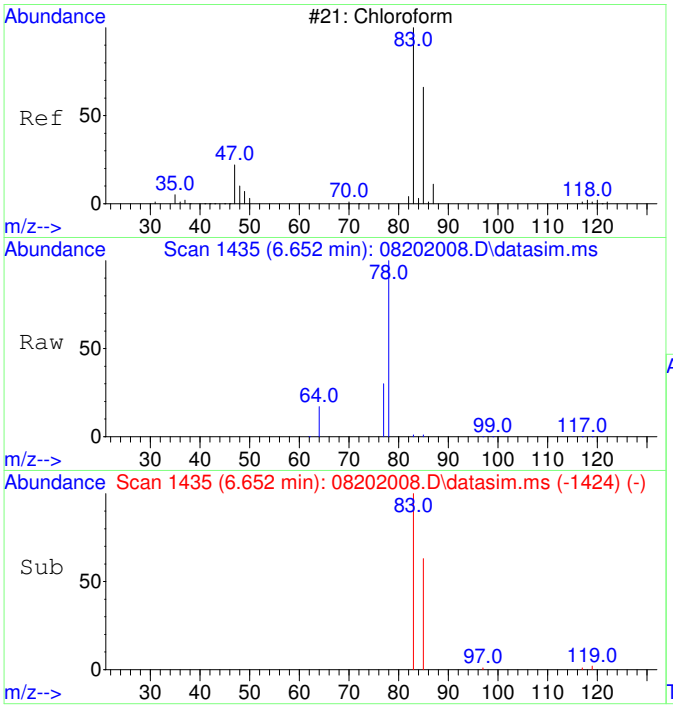


#5
cis-1,2-Dichloroethene
Concen: 43.46 ug/L
RT: 6.081 min Scan# 1369
Delta R.T. -0.013 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 61 Resp: 1594

Ion	Ratio	Lower	Upper
61	100		
63	35.1	2.5	62.5

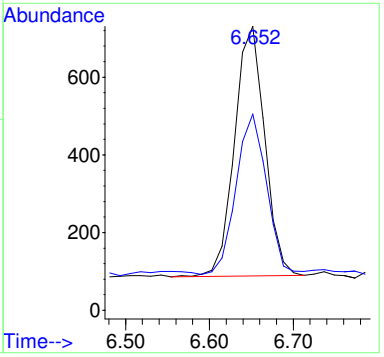


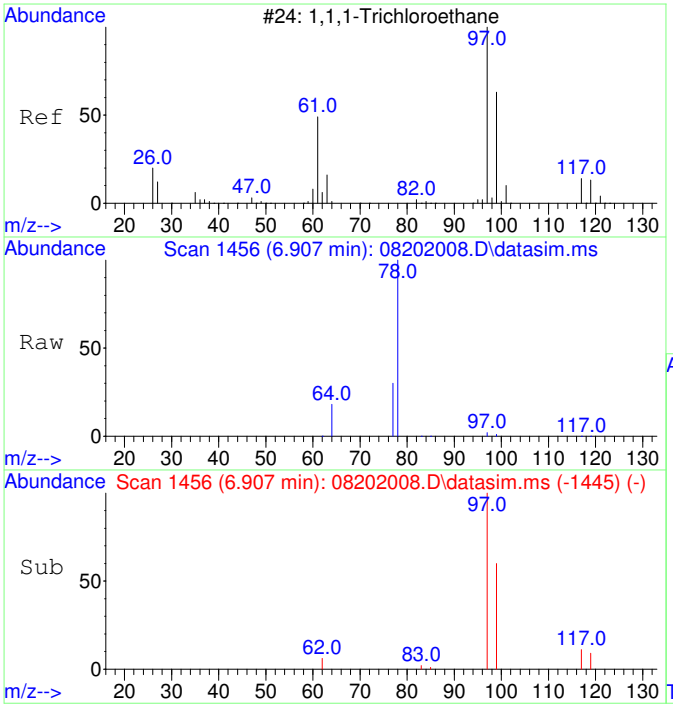


#6
Chloroform
Concen: 42.78 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 83 Resp: 1606

Ion	Ratio	Lower	Upper
83	100		
85	64.9	35.1	95.1

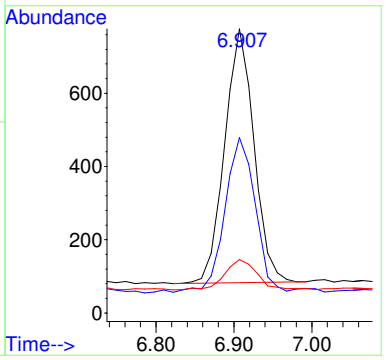


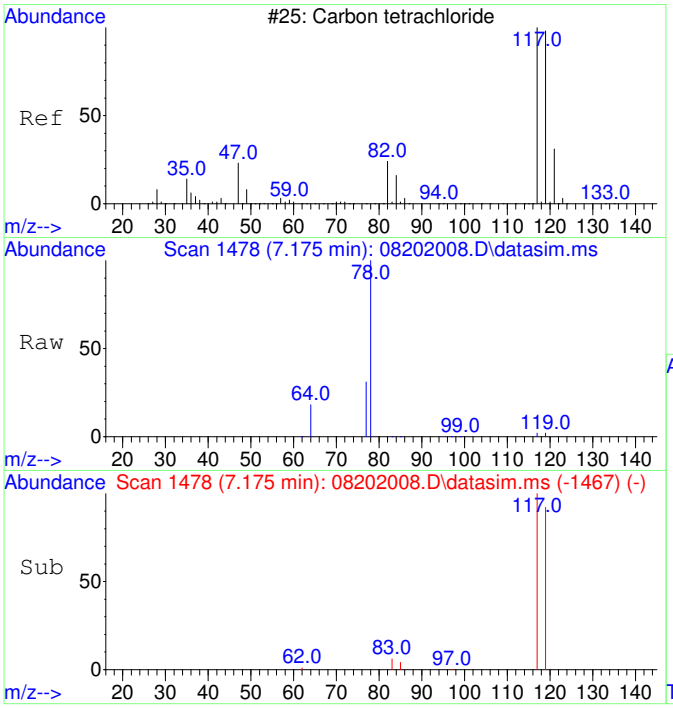


#7
1,1,1-Trichloroethane
Concen: 44.60 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 97 Resp: 1818

Ion	Ratio	Lower	Upper
97	100		
99	61.9	34.6	94.6
117	13.4	0.0	43.2

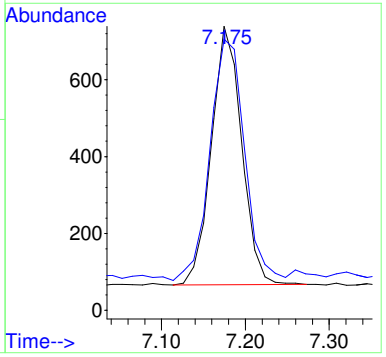


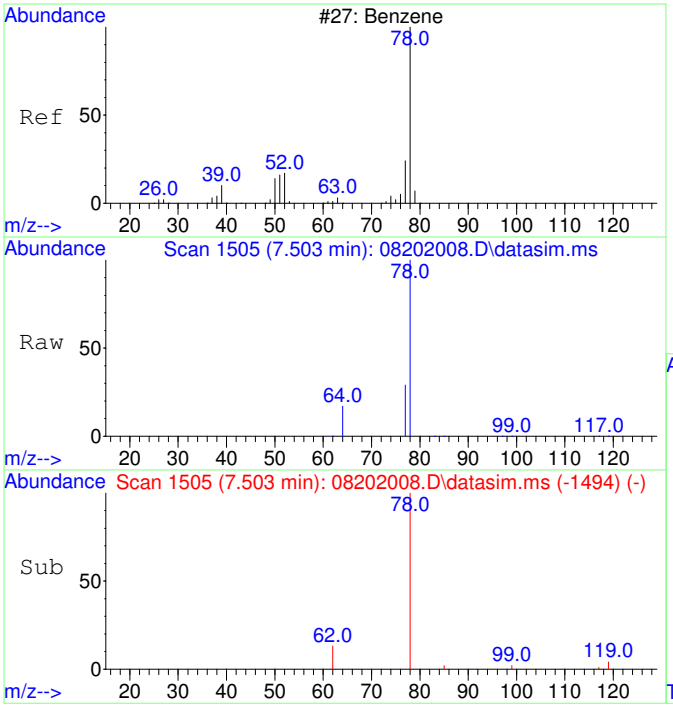


#8
Carbon tetrachloride
Concen: 43.79 ug/L
RT: 7.175 min Scan# 1478
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:117 Resp: 1680

Ion	Ratio	Lower	Upper
117	100		
119	105.9	66.4	126.4

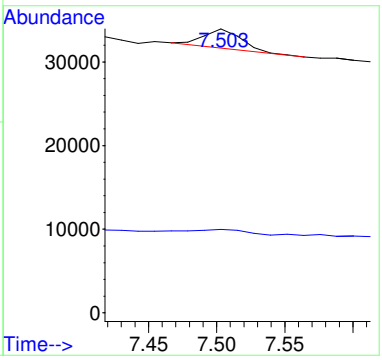


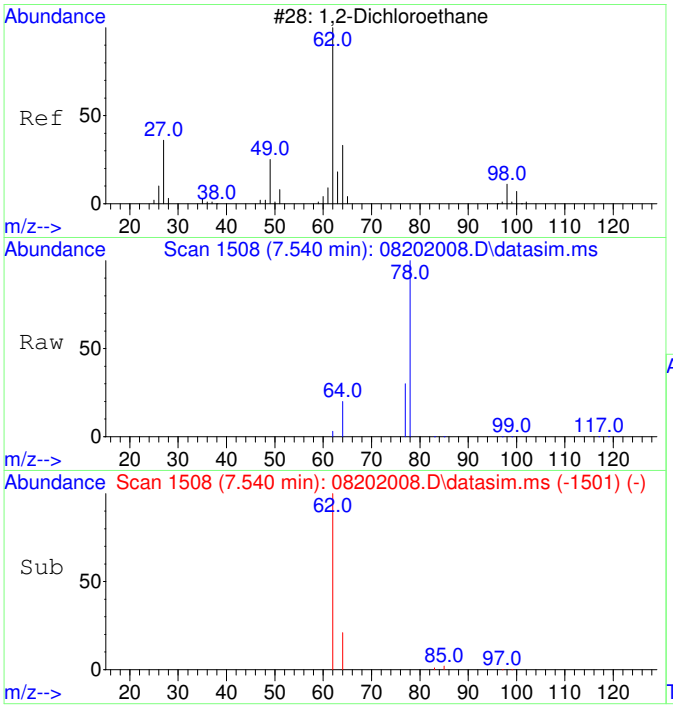


#9
Benzene
Concen: 37.10 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 78 Resp: 3813

Ion	Ratio	Lower	Upper
78	100		
77	99.1	0.0	53.2#

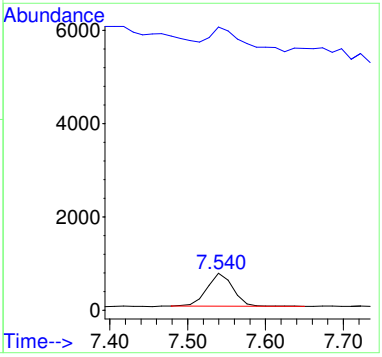


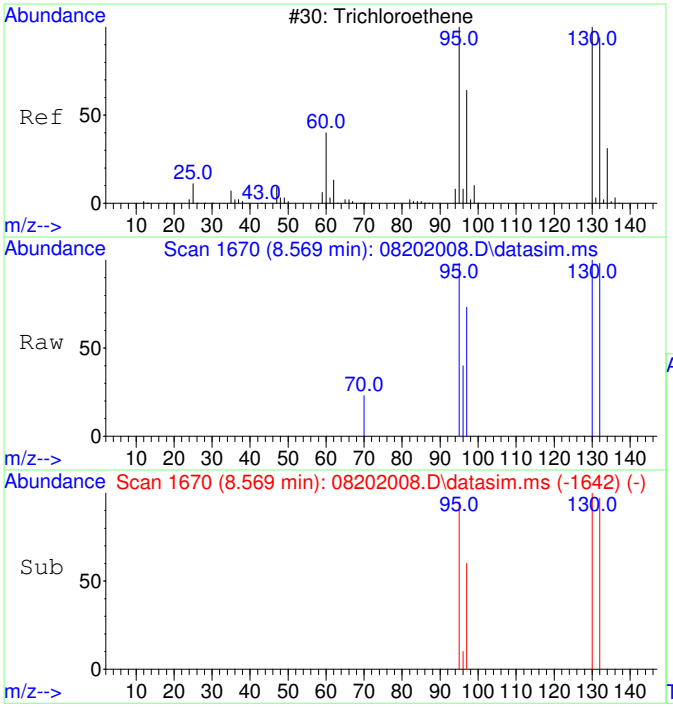


#10
1,2-Dichloroethane
Concen: 43.69 ug/L
RT: 7.540 min Scan# 1508
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 62 Resp: 1603

Ion	Ratio	Lower	Upper
62	100		
64	90.9	2.3	62.3#

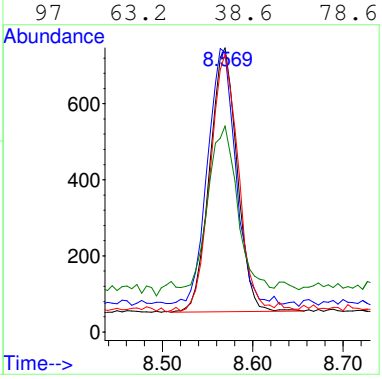


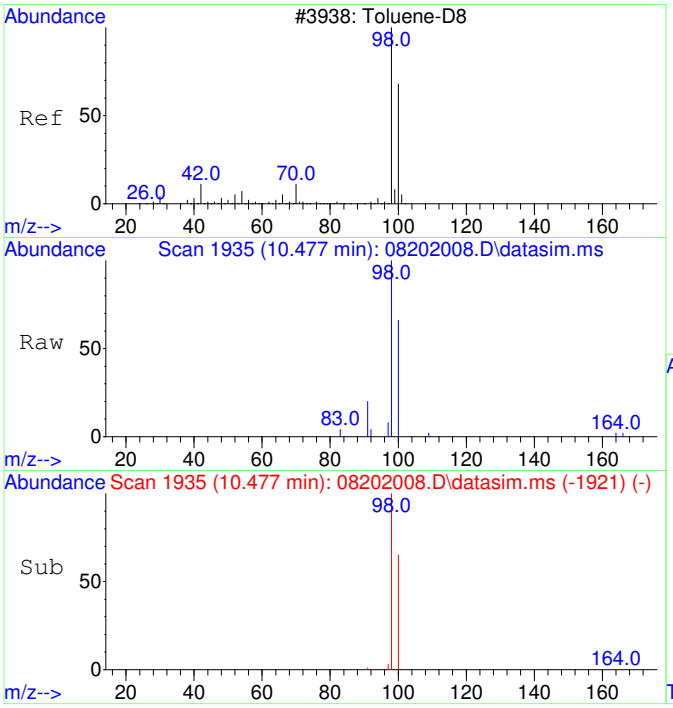


#11
Trichloroethene
Concen: 47.31 ug/L
RT: 8.569 min Scan# 1670
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:130 Resp: 1464

Ion	Ratio	Lower	Upper
130	100		
95	98.6	60.7	120.7
132	100.6	76.0	116.0
97	63.2	38.6	78.6

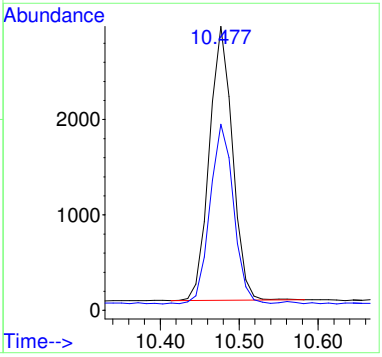


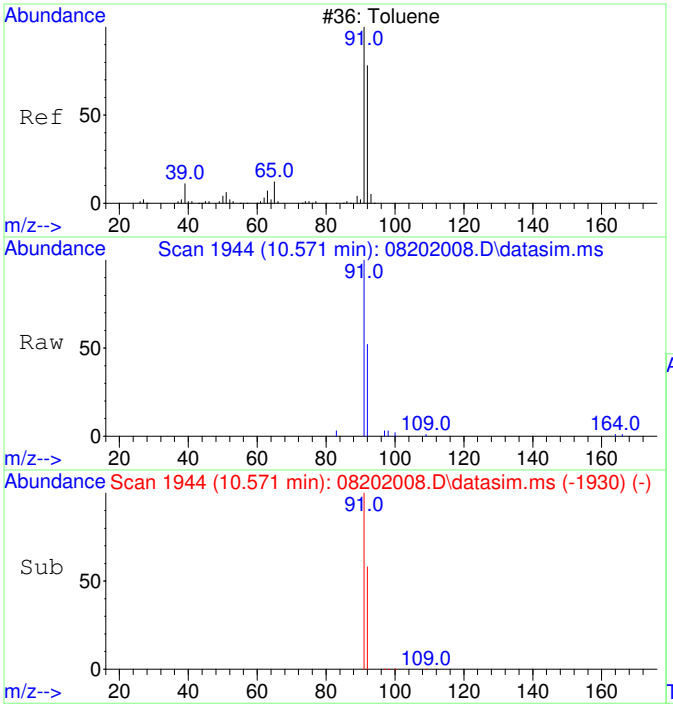


#12
Toluene-d8
Concen: 49.39 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 98 Resp: 5849

Ion	Ratio	Lower	Upper
98	100		
100	66.4	37.1	97.1

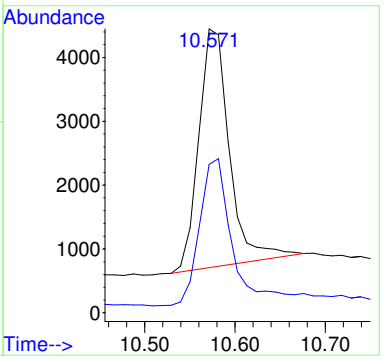


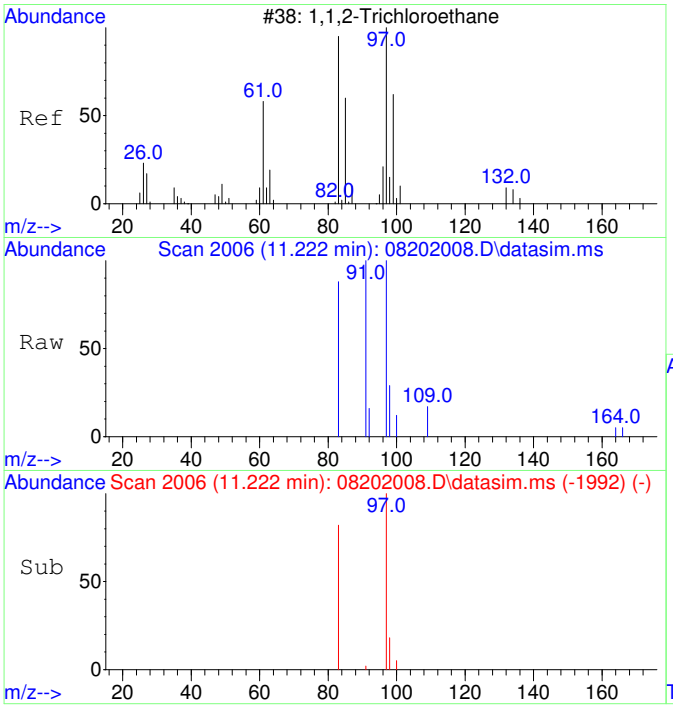


#13
Toluene
Concen: 58.81 ug/L
RT: 10.571 min Scan# 1944
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 8880

Ion	Ratio	Lower	Upper
91	100		
92	66.5	29.9	89.9

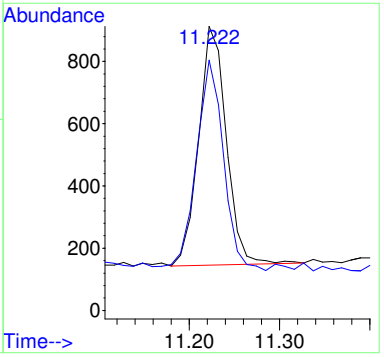


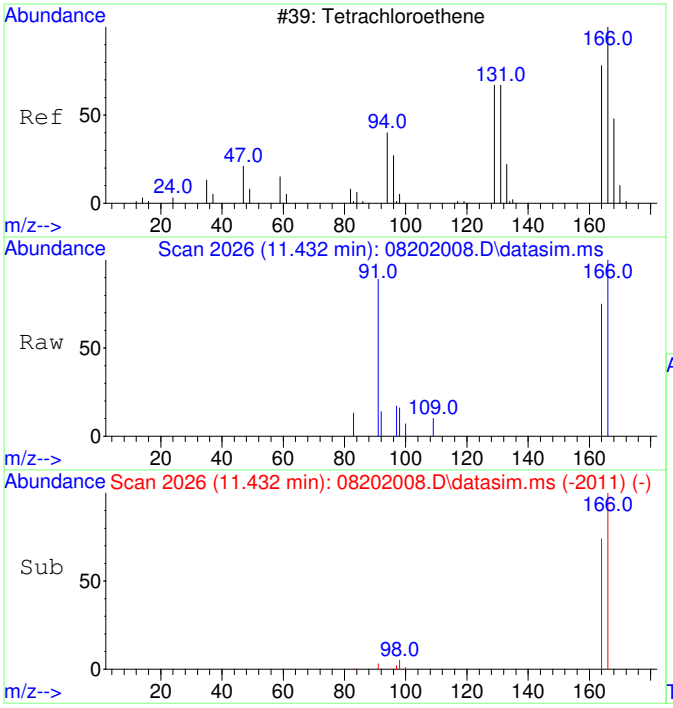


#14
1,1,2-Trichloroethane
Concen: 49.61 ug/L
RT: 11.222 min Scan# 2006
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 97 Resp: 1632

Ion	Ratio	Lower	Upper
97	100		
83	87.4	51.2	111.2

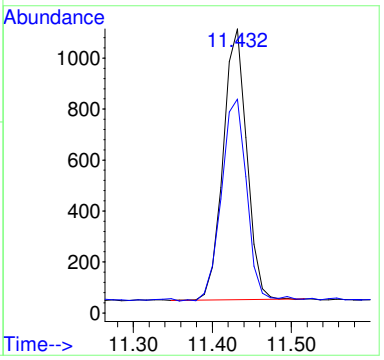


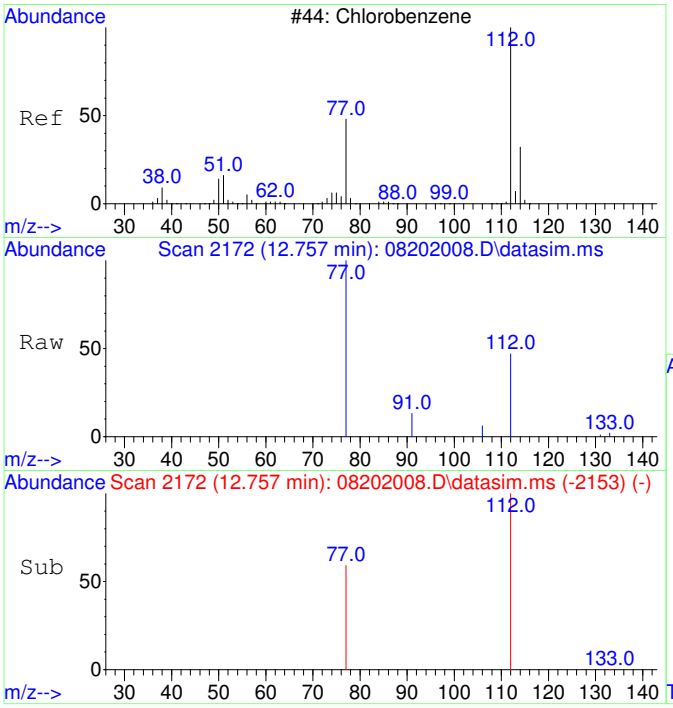


#15
Tetrachloroethene
Concen: 50.49 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.011 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:166 Resp: 2206

Ion	Ratio	Lower	Upper
166	100		
164	78.9	47.8	107.8

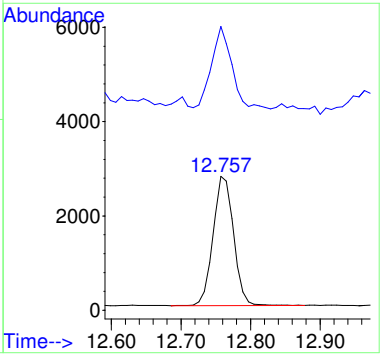


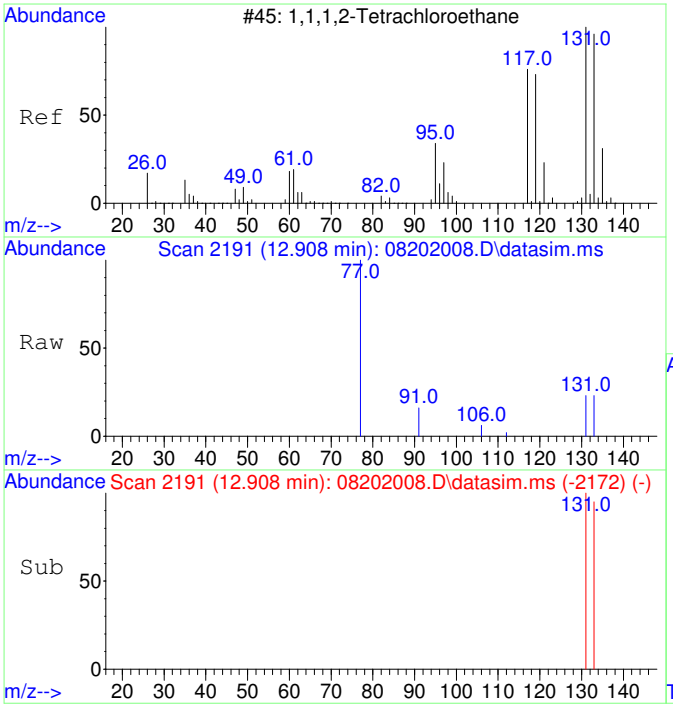


#16
Chlorobenzene
Concen: 51.95 ug/L
RT: 12.757 min Scan# 2172
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:112 Resp: 5616

Ion	Ratio	Lower	Upper
112	100		
77	63.2	23.6	83.6

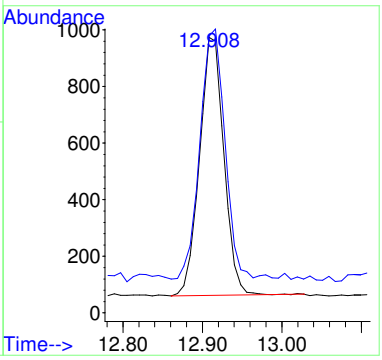


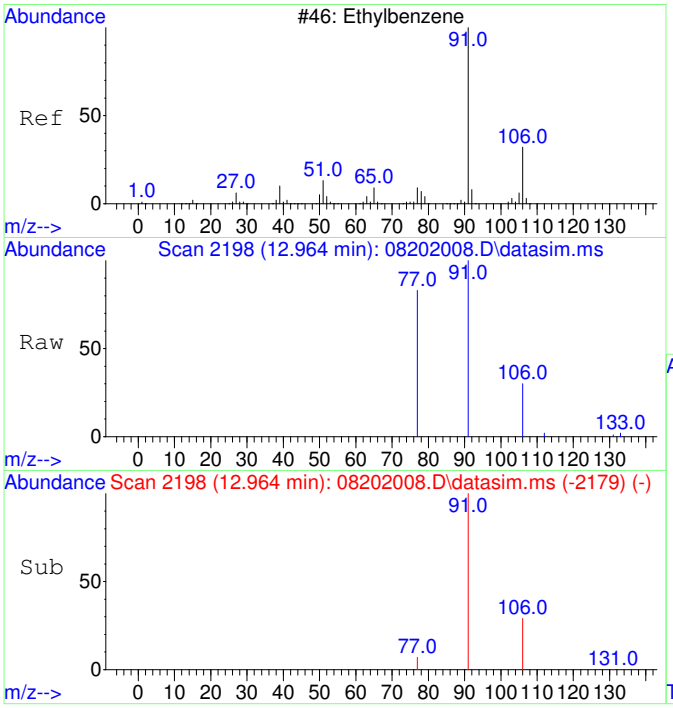


#17
1,1,1,2-Tetrachloroethane
Concen: 49.98 ug/L
RT: 12.908 min Scan# 2191
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:131 Resp: 1936

Ion	Ratio	Lower	Upper
131	100		
133	99.2	66.3	126.3

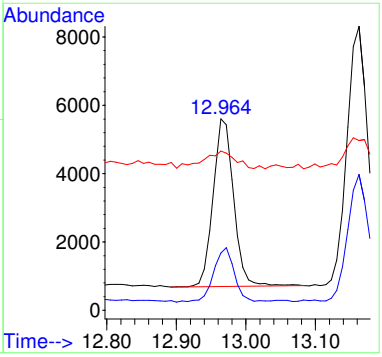


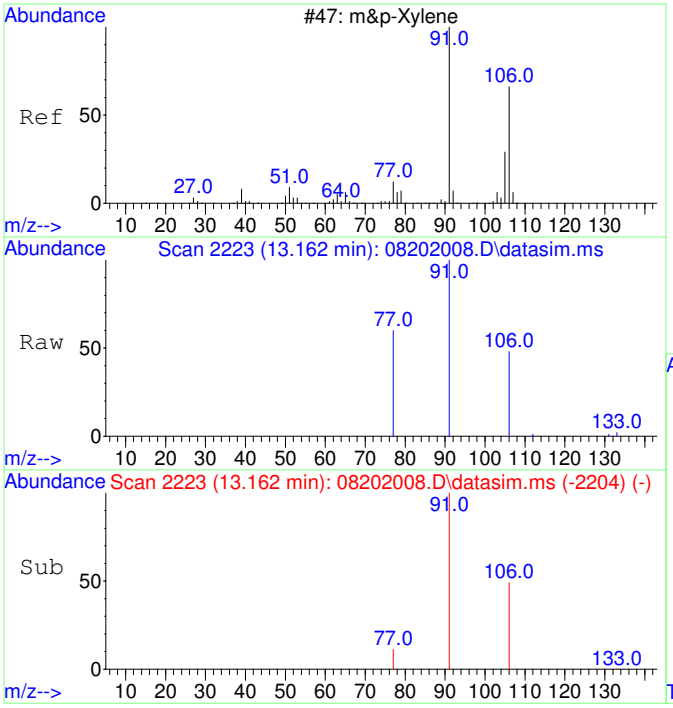


#18
Ethylbenzene
Concen: 54.85 ug/L
RT: 12.964 min Scan# 2198
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 10080

Ion	Ratio	Lower	Upper
91	100		
106	32.7	3.0	63.0
77	15.3	0.0	38.2

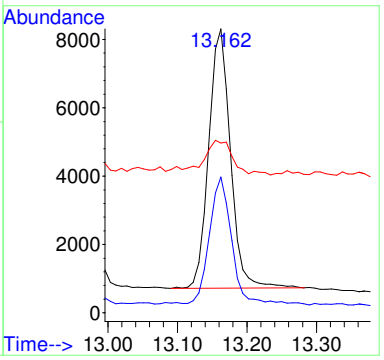


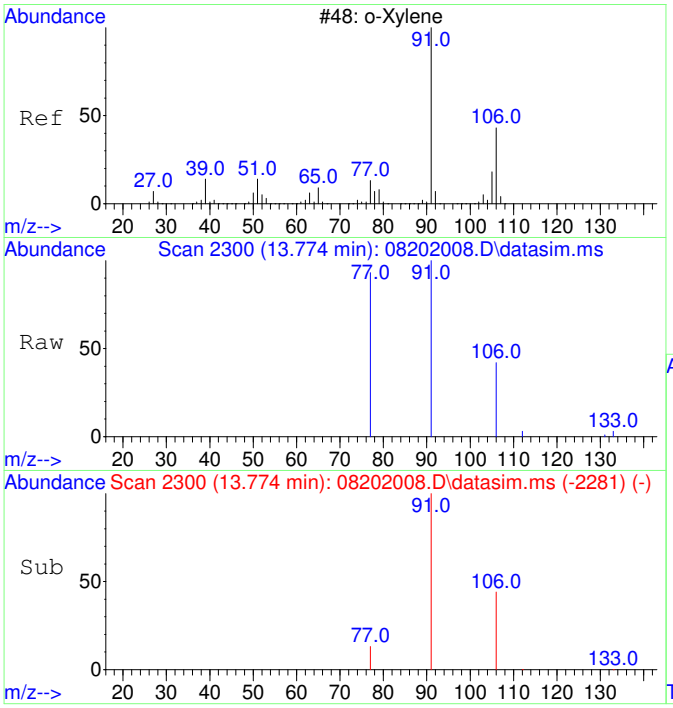


#19
m&p-Xylene
Concen: 114.72 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 16478

Ion	Ratio	Lower	Upper
91	100		
106	48.8	22.2	82.2
77	17.4	0.0	42.4

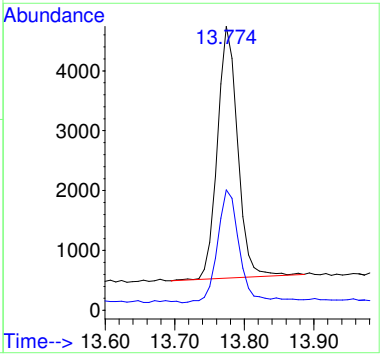


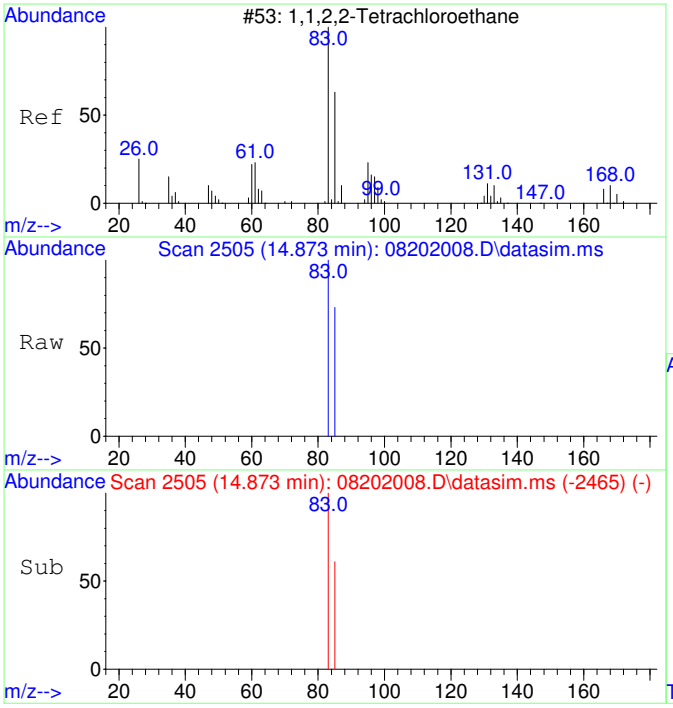


#20
o-Xylene
Concen: 55.46 ug/L
RT: 13.774 min Scan# 2300
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 8511

Ion	Ratio	Lower	Upper
91	100		
106	47.6	19.2	79.2

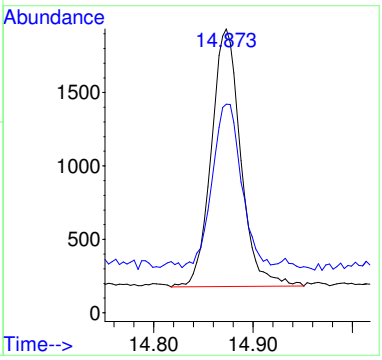


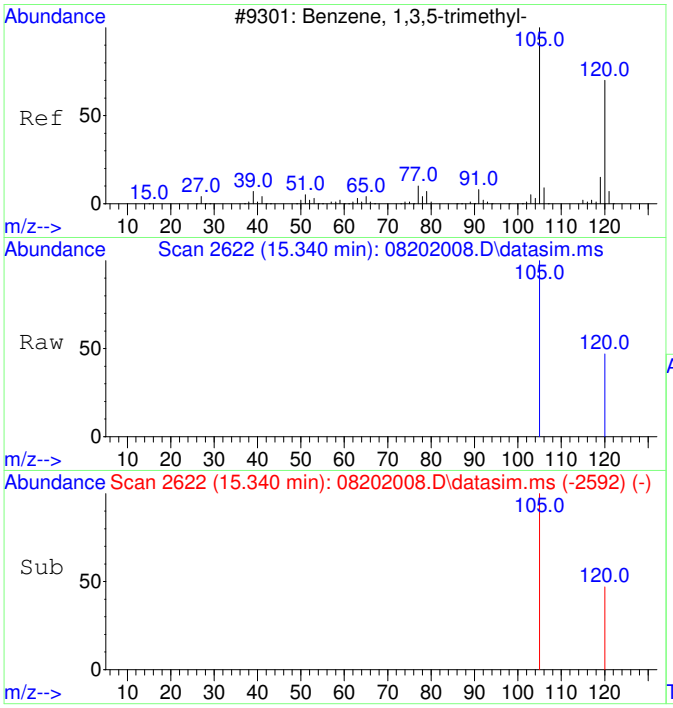


#21
1,1,2,2-Tetrachloroethane
Concen: 52.99 ug/L
RT: 14.873 min Scan# 2505
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 83 Resp: 3604

Ion	Ratio	Lower	Upper
83	100		
85	63.3	34.8	94.8

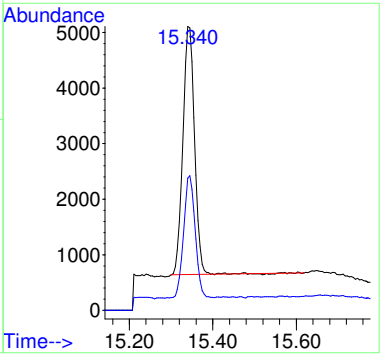


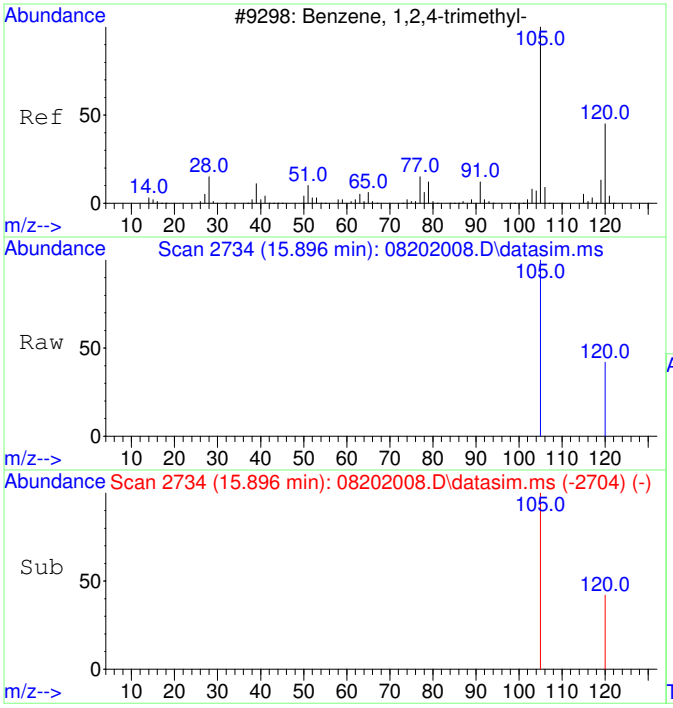


#22
1,3,5-Trimethylbenzene
Concen: 52.84 ug/L
RT: 15.340 min Scan# 2622
Delta R.T. -0.005 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:105 Resp: 8630

Ion	Ratio	Lower	Upper
105	100		
120	47.6	21.1	81.1

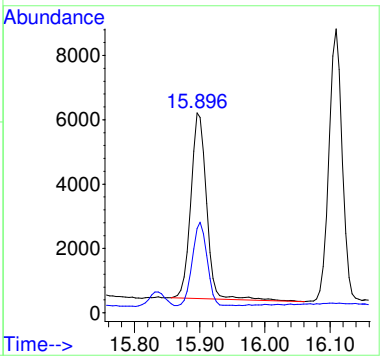


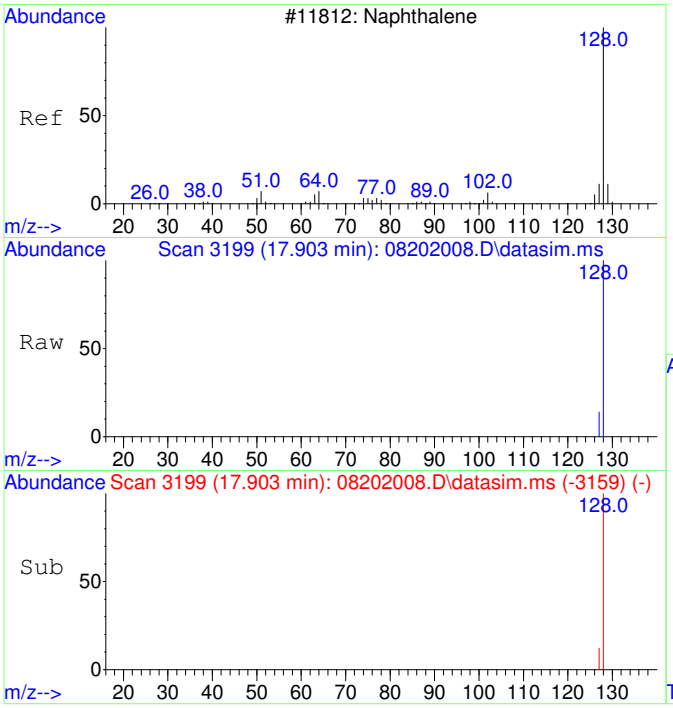


#23
1,2,4-Trimethylbenzene
Concen: 56.95 ug/L
RT: 15.896 min Scan# 2734
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:105 Resp: 9662

Ion	Ratio	Lower	Upper
105	100		
120	41.8	17.2	77.2

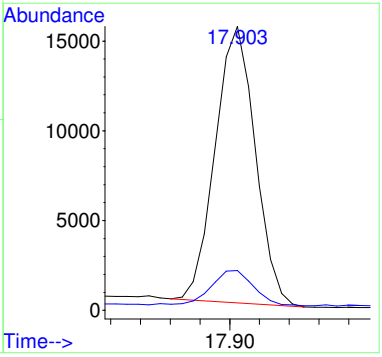


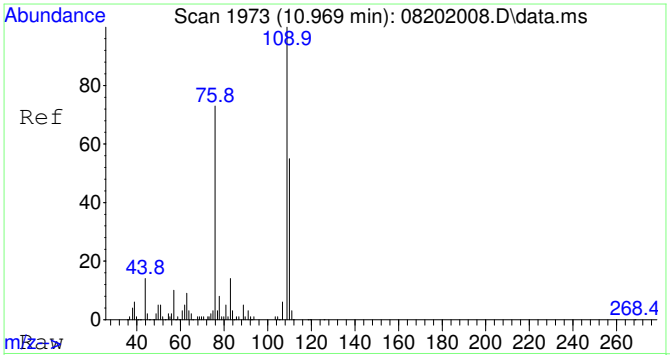


#24
Naphthalene
Concen: 53.59 ug/L
RT: 17.903 min Scan# 3199
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:128 Resp: 14370

Ion	Ratio	Lower	Upper
128	100		
127	13.4	0.0	42.5

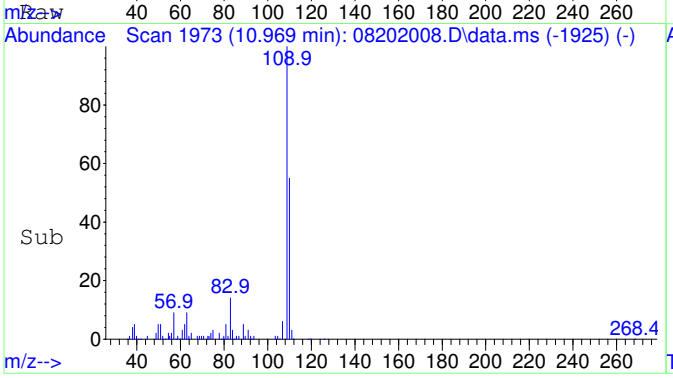


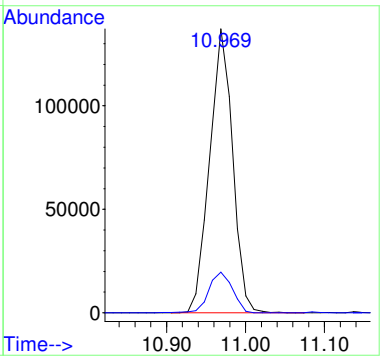


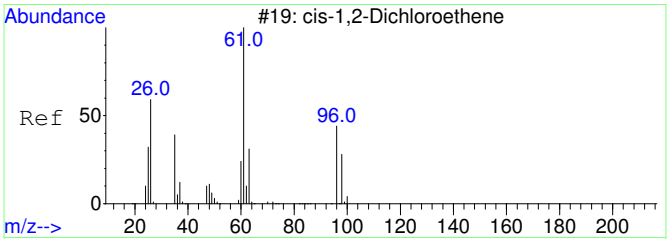
#25
2-Fluorotoluene SCAN
Concen: 4686.70 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:109 Resp: 276390

Ion	Ratio	Lower	Upper
109	100		
83	14.8	0.0	43.8



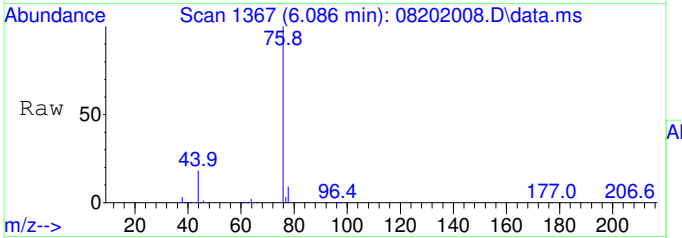


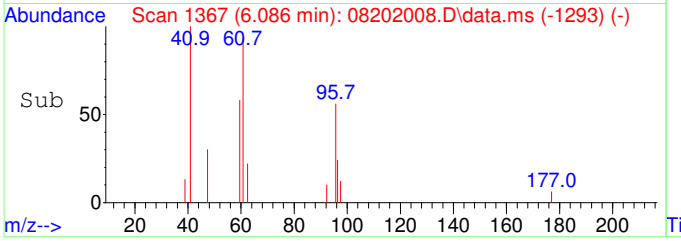


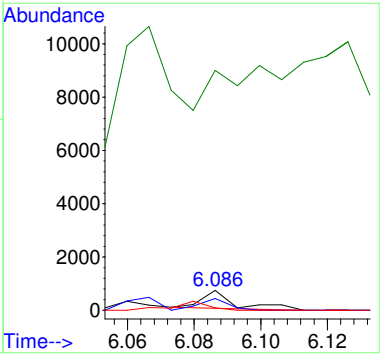
#29
cis-1,2-Dichloroethene SCAN
Concen: 23.21 ug/L
RT: 6.086 min Scan# 1367
Delta R.T. -0.007 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

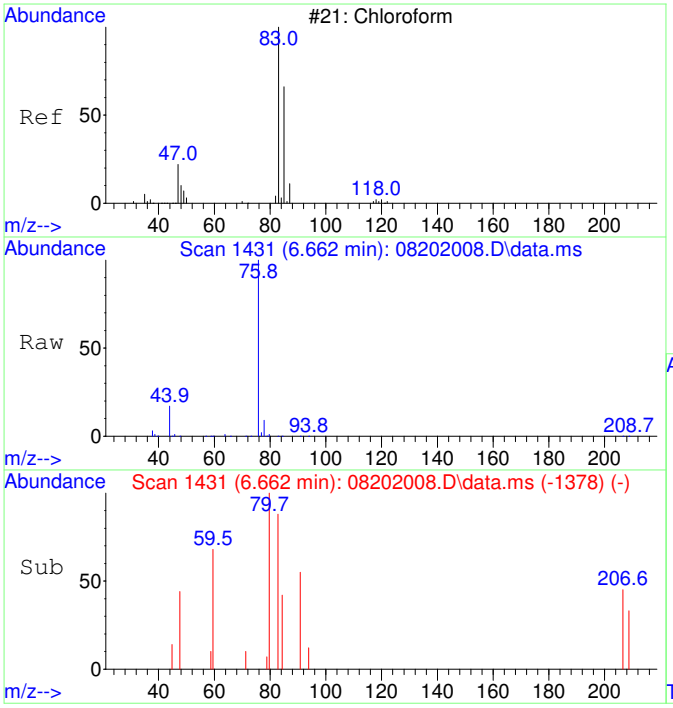
Tgt Ion: 61 Resp: 446

Ion	Ratio	Lower	Upper
61	100		
96	63.0	39.9	99.9
98	55.2	13.5	73.5
64	0.0	4.5	64.5#





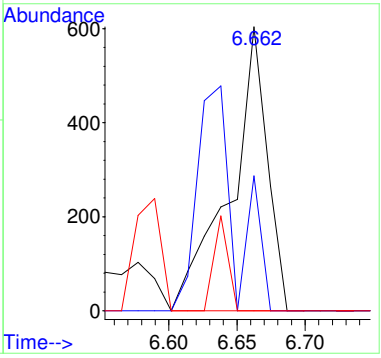


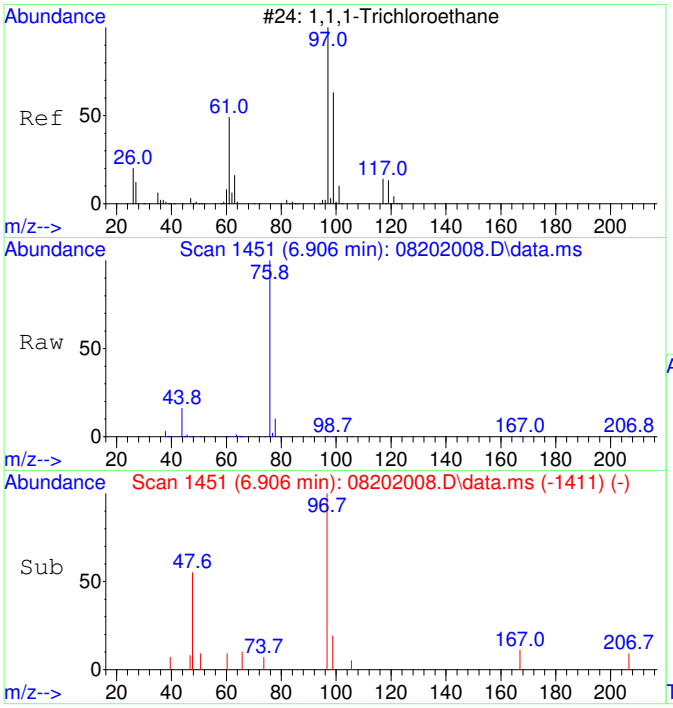


#30
Chloroform SCAN
Concen: 54.98 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 83 Resp: 1146

Ion	Ratio	Lower	Upper
83	100		
85	0.0	34.6	94.6#
47	0.0	0.0	53.4

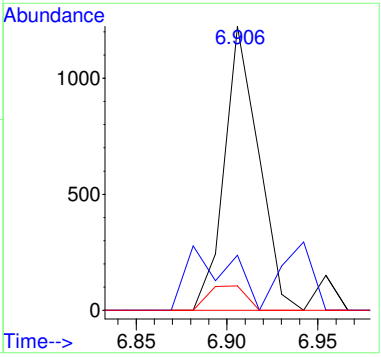


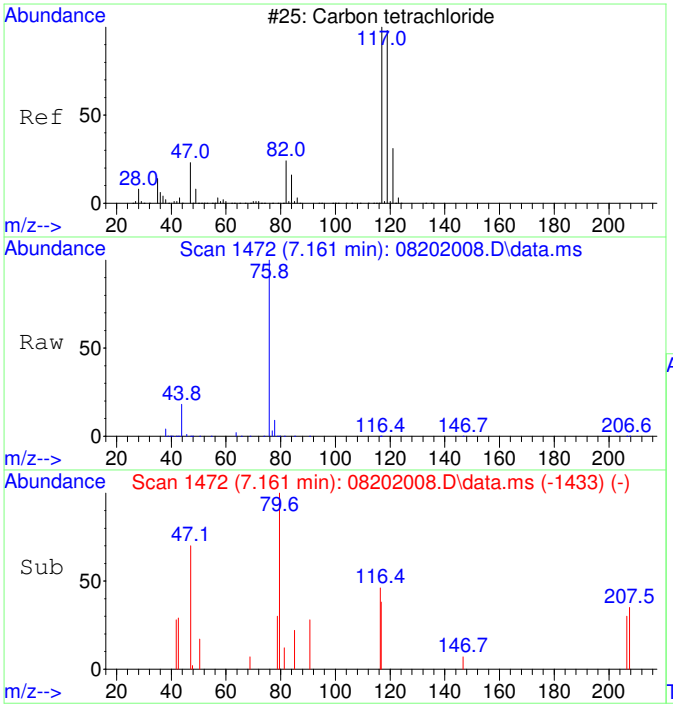


#31
1,1,1-Trichloroethane SCAN
Concen: 84.55 ug/L
RT: 6.906 min Scan# 1451
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 97 Resp: 1606

Ion	Ratio	Lower	Upper
97	100		
99	0.0	43.6	103.6#
61	9.5	18.0	78.0#

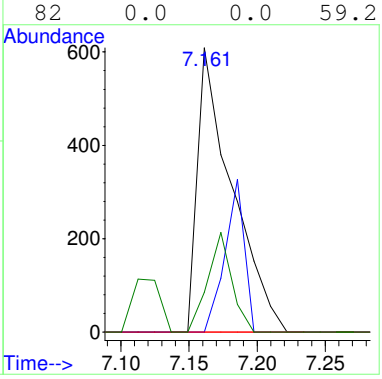


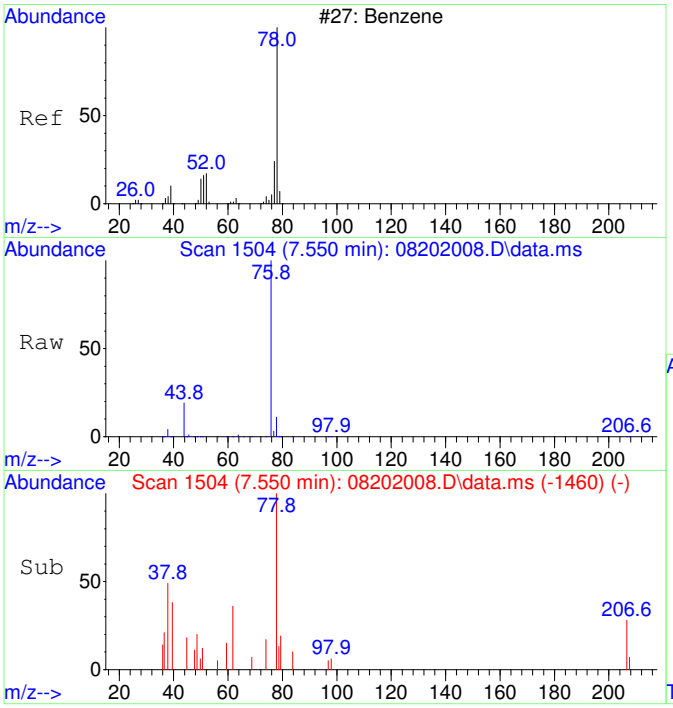


#32
Carbon tetrachloride SCAN
Concen: 54.36 ug/L
RT: 7.161 min Scan# 1472
Delta R.T. -0.024 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:117 Resp: 1077

Ion	Ratio	Lower	Upper
117	100		
119	0.0	75.5	135.5#
121	0.0	0.0	58.8
82	0.0	0.0	59.2

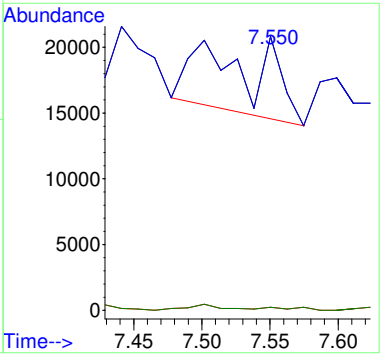


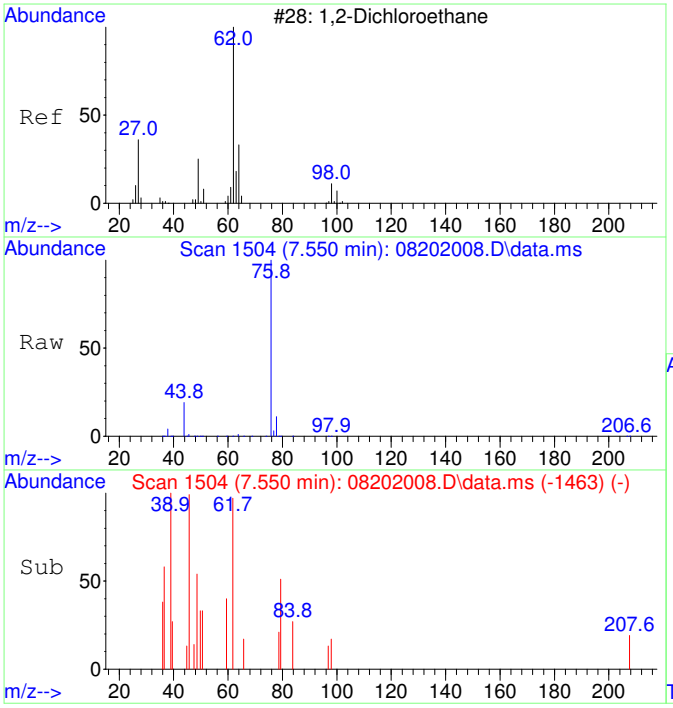


#33
Benzene SCAN
Concen: 320.23 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. 0.037 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 78 Resp: 16747

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	1.6	0.0	47.9
51	1.6	0.0	44.1

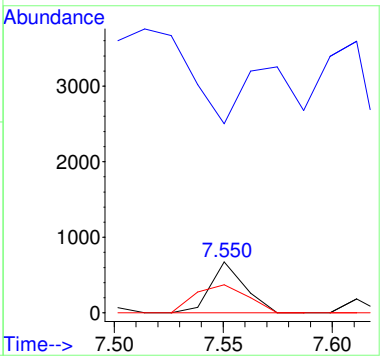


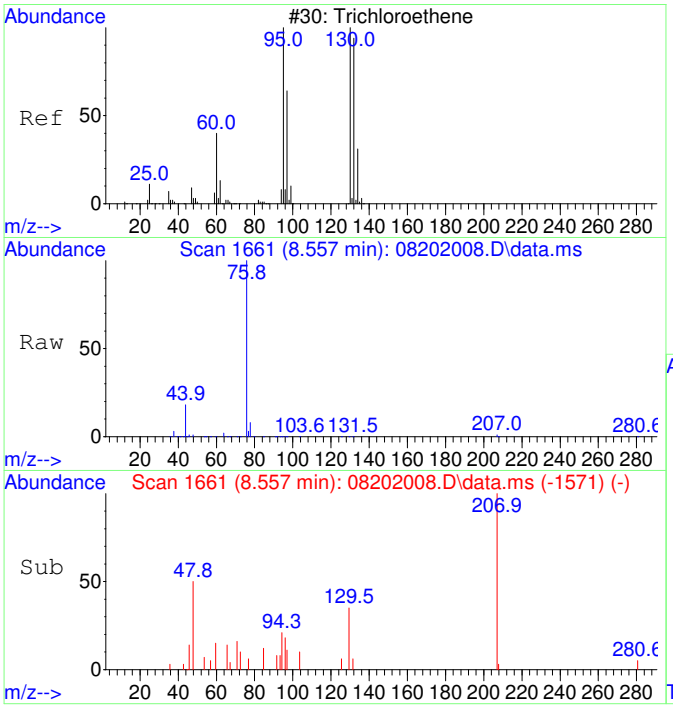


#34
1,2-Dichloroethane SCAN
Concen: 37.96 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 62 Resp: 733

Ion	Ratio	Lower	Upper
62	100		
64	0.0	5.2	65.2#
49	84.6	3.9	63.9#

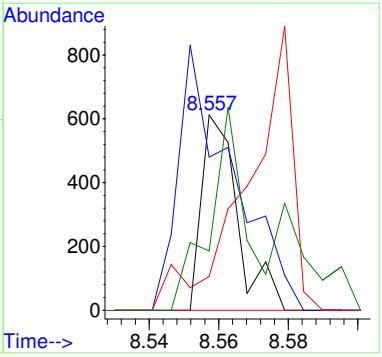


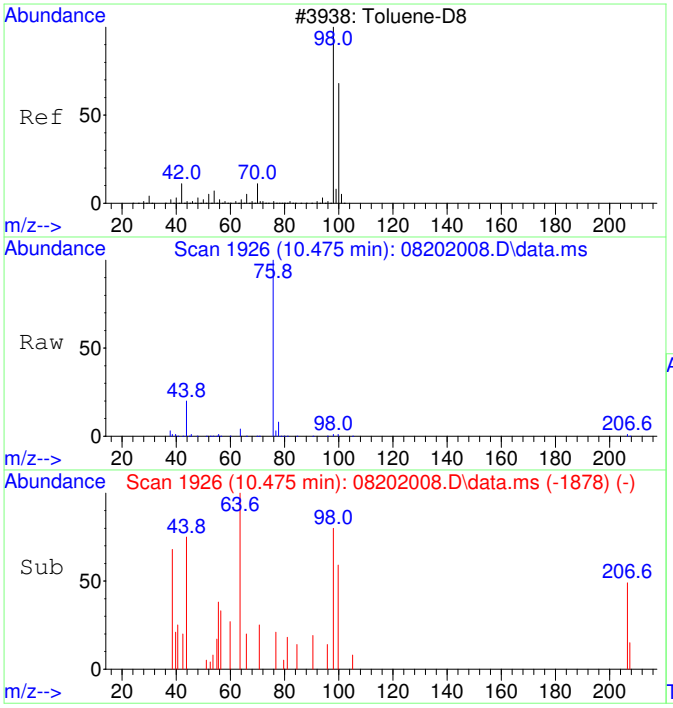


#35
Trichloroethene SCAN
Concen: 30.48 ug/L
RT: 8.557 min Scan# 1661
Delta R.T. -0.011 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:130 Resp: 438

Ion	Ratio	Lower	Upper
130	100		
95	204.1	60.5	120.5#
132	0.0	59.6	119.6#
97	81.1	28.2	88.2

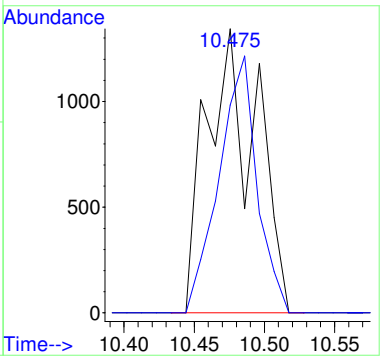


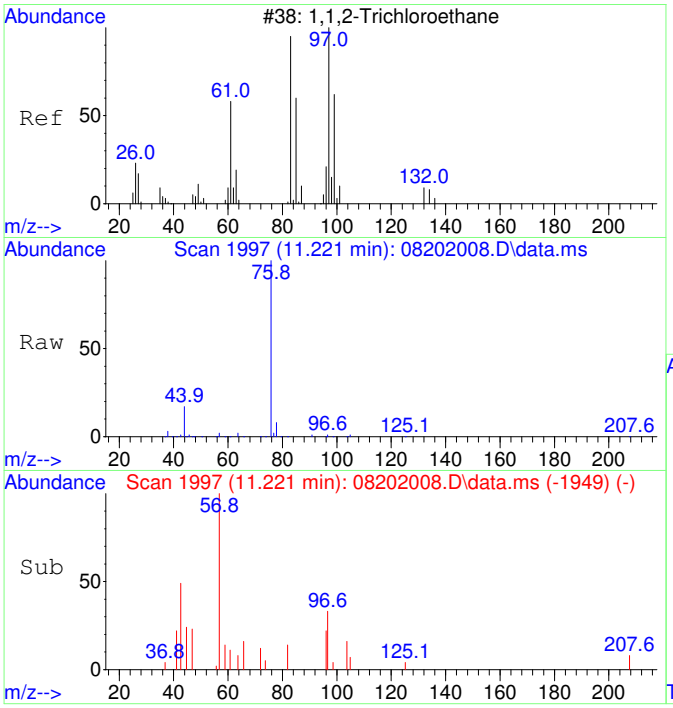


#36
Toluene-d8 SCAN
Concen: 57.48 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 98 Resp: 3315

Ion	Ratio	Lower	Upper
98	100		
100	69.2	40.0	100.0

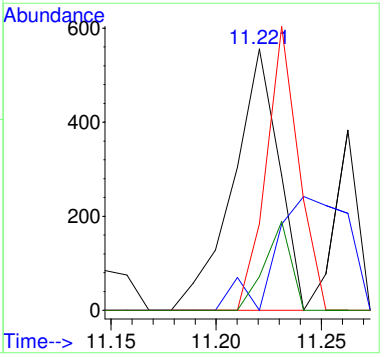


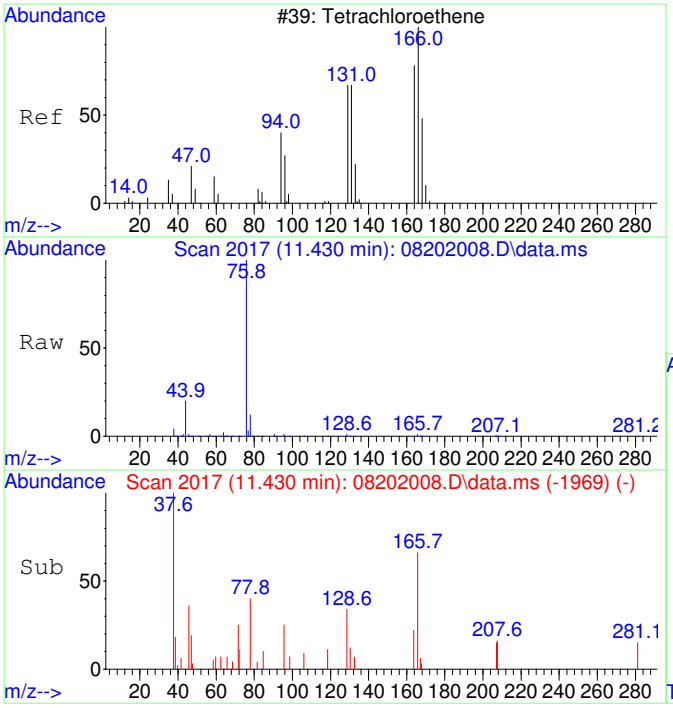


#38
1,1,2-Trichloroethane SCAN
Concen: 50.61 ug/L
RT: 11.221 min Scan# 1997
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 97 Resp: 839

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	0.0	32.1	92.1#
99	0.0	36.7	96.7#

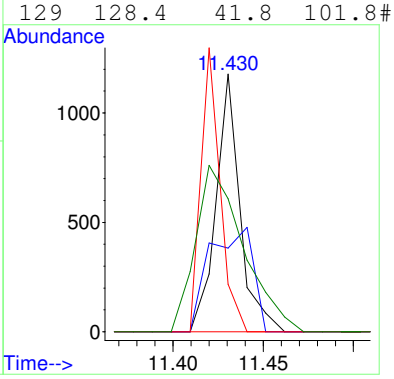


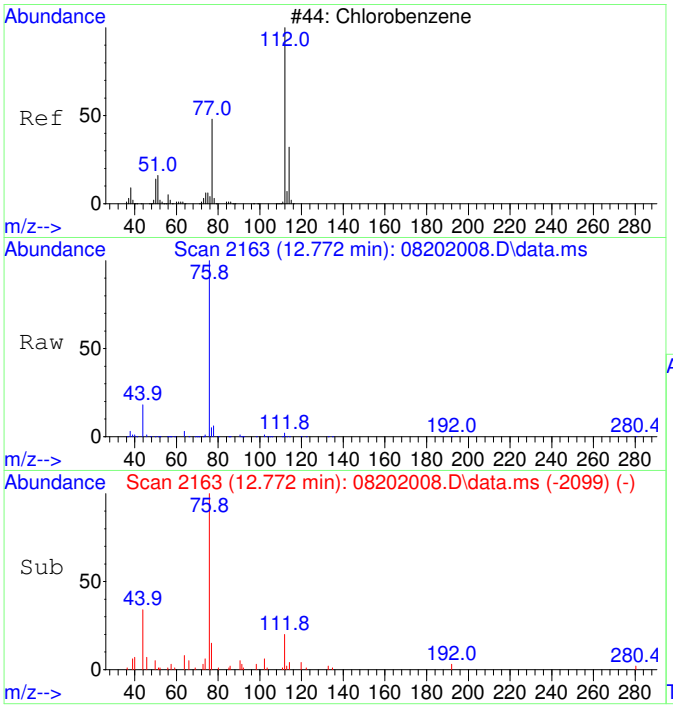


#39
Tetrachloroethene SCAN
Concen: 61.37 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:166 Resp: 1089

Ion	Ratio	Lower	Upper
166	100		
164	0.0	50.9	110.9#
131	87.6	38.7	98.7
129	128.4	41.8	101.8#

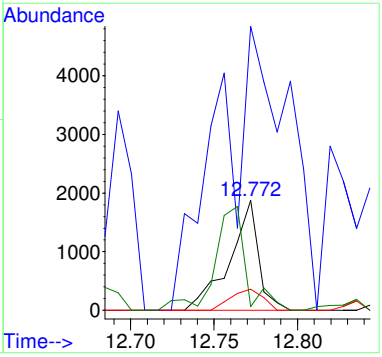


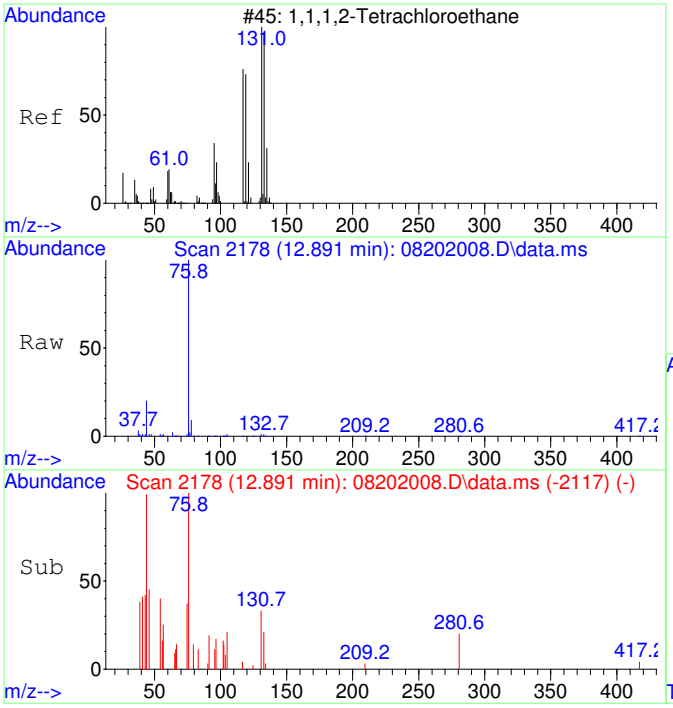


#40
Chlorobenzene SCAN
Concen: 44.78 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.008 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:112 Resp: 2260

Ion	Ratio	Lower	Upper
112	100		
77	292.5	28.2	88.2#
114	21.3	2.3	62.3
51	101.9	0.0	50.1#

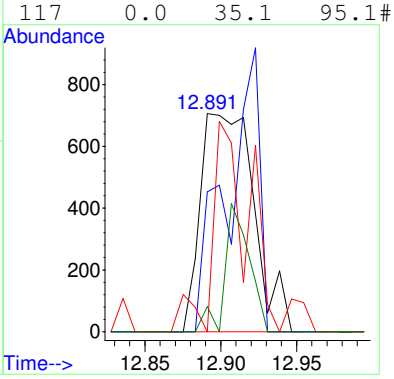


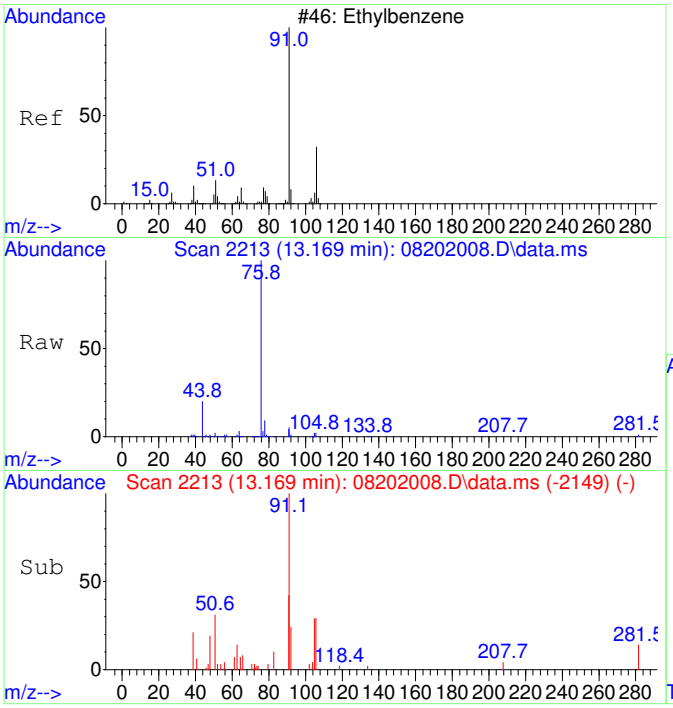


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 93.05 ug/L
RT: 12.891 min Scan# 2178
Delta R.T. -0.016 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:131 Resp: 1738

Ion	Ratio	Lower	Upper
131	100		
133	0.0	66.9	126.9#
119	64.3	40.4	100.4
117	0.0	35.1	95.1#

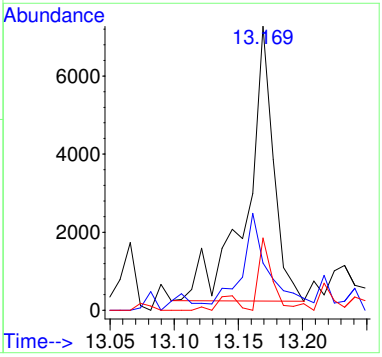


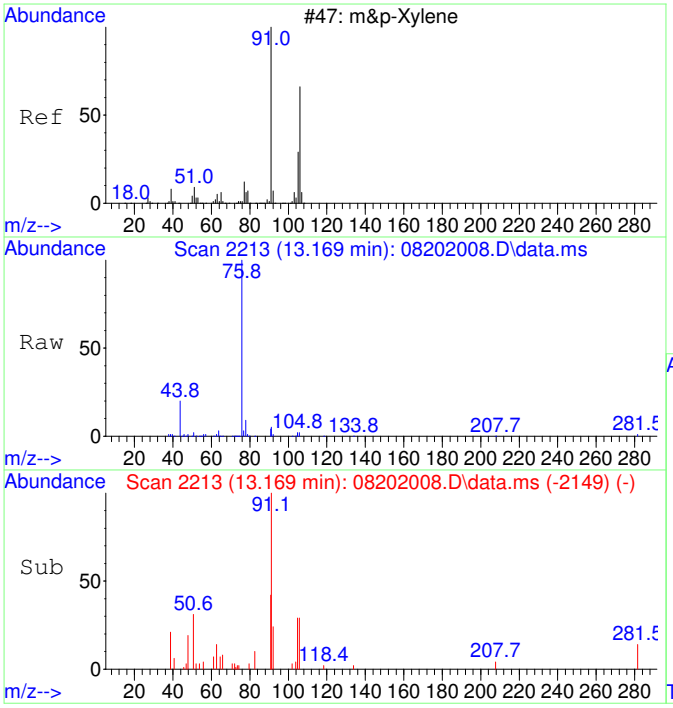


#42
Ethylbenzene SCAN
Concen: 75.40 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 10146

Ion	Ratio	Lower	Upper
91	100		
106	28.8	23.1	83.1
51	12.0	0.0	40.1

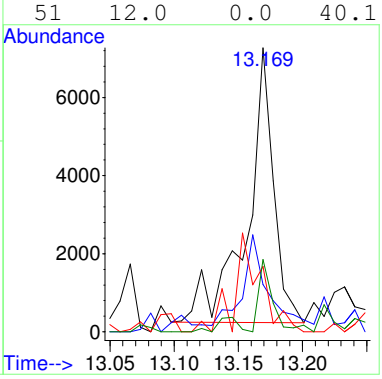


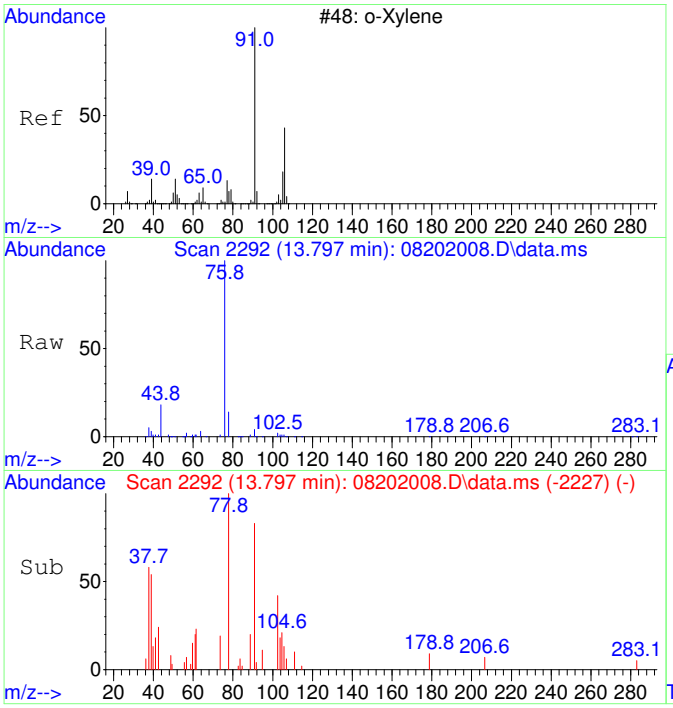


#43
m&p-Xylene SCAN
Concen: 75.40 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 10146

Ion	Ratio	Lower	Upper
91	100		
106	28.8	23.1	83.1
105	0.0	0.0	54.7
51	12.0	0.0	40.1

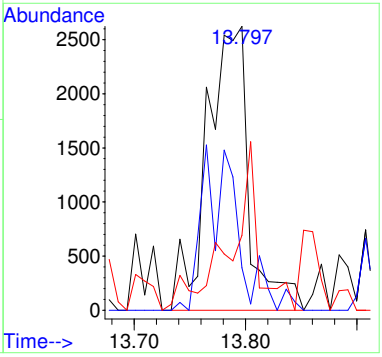


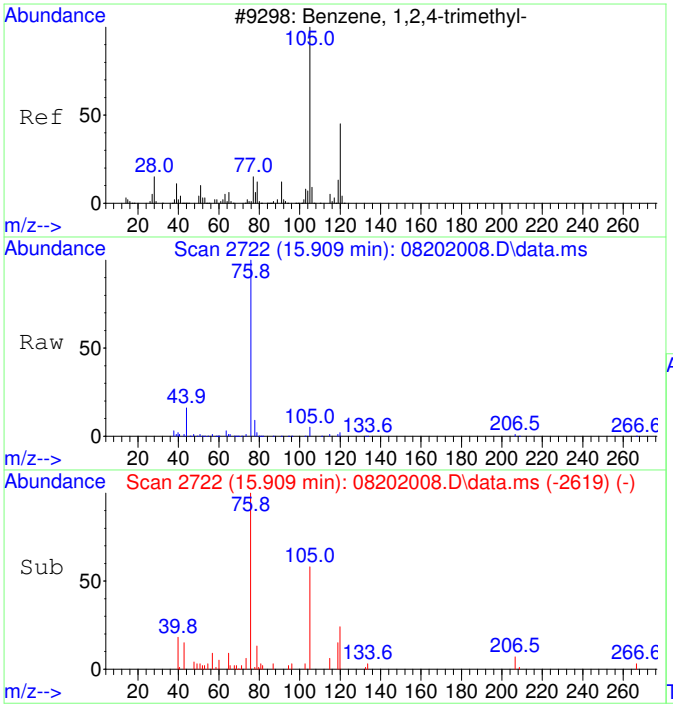


#44
o-Xylene SCAN
Concen: 95.26 ug/L
RT: 13.797 min Scan# 2292
Delta R.T. 0.016 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 6861

Ion	Ratio	Lower	Upper
91	100		
106	0.0	18.0	78.0#
105	21.3	0.0	56.6

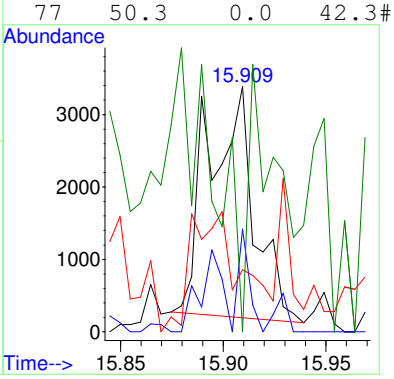


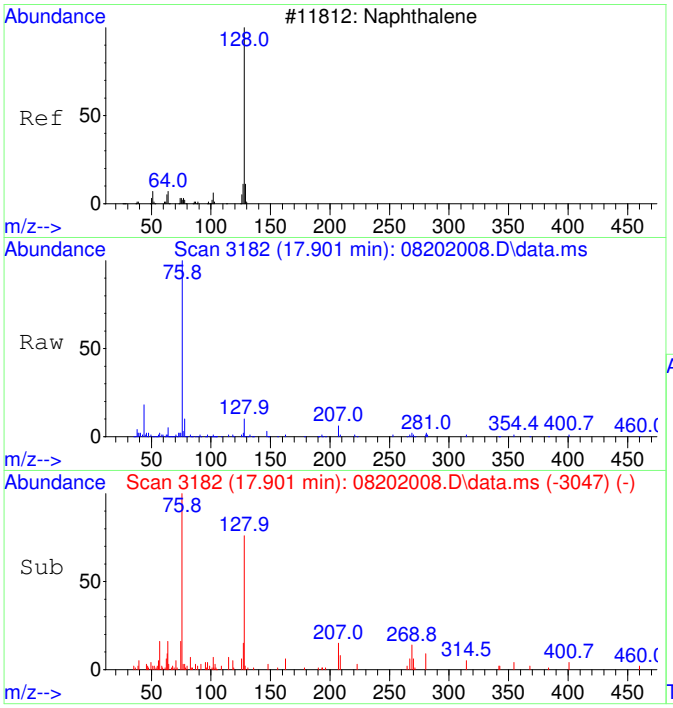


#47
1,2,4-Trimethylbenzene SCAN
Concen: 63.32 ug/L
RT: 15.909 min Scan# 2722
Delta R.T. 0.010 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:105 Resp: 4918

Ion	Ratio	Lower	Upper
105	100		
120	10.8	16.9	76.9#
119	0.0	0.0	41.9
77	50.3	0.0	42.3#

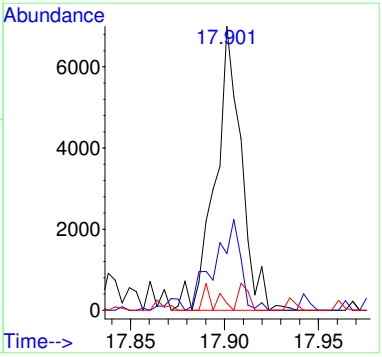




#48
Naphthalene SCAN
Concen: 57.30 ug/L
RT: 17.901 min Scan# 3182
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:128 Resp: 6734

Ion	Ratio	Lower	Upper
128	100		
127	32.0	0.0	44.0
129	3.8	0.0	40.8



Quantitation Report (QT Reviewed)

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Data Path : C:\msdchem\1\Ravioli Data\2020\082020\
Data File : 08202008.D
Acq On : 20 Aug 2020 17:25
InstName : AG5975C
Operator : TD
Sample : S20H039-CAL6
Misc : 2030073 0.05 mg/L
ALS Vial : 8 Sample Multiplier: 1

M.I. Performed By:
TD at 8:45 am, Aug 21, 2020

M.I. Approved By:
ZR at 3:53 pm, Oct 02, 2020

Quant Time: Aug 21 08:31:14 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\082020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:30:13 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	604968	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	5849	49.39	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 0.99%#			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.086	61	970m	36.47	ug/L	
3] trans-1,2-Dichloroethene	4.362	61	1192	42.71	ug/L	71
4] 1,1-Dichloroethane	5.079	63	1475	42.45	ug/L #	20
5] cis-1,2-Dichloroethene	6.081	61	1594	43.46	ug/L	95
6] Chloroform	6.652	83	1606	42.78	ug/L	100
7] 1,1,1-Trichloroethane	6.907	97	1818	44.60	ug/L	97
8] Carbon tetrachloride	7.175	117	1680	43.79	ug/L	90
9] Benzene	7.503	78	3813	37.10	ug/L #	1
10] 1,2-Dichloroethane	7.540	62	1603	43.69	ug/L #	1
11] Trichloroethene	8.569	130	1464	47.31	ug/L	94
13] Toluene	10.571	91	8880	58.81	ug/L	91
14] 1,1,2-Trichloroethane	11.222	97	1632	49.61	ug/L	93
15] Tetrachloroethene	11.432	166	2206	50.49	ug/L	99
16] Chlorobenzene	12.757	112	5616	51.95	ug/L	87
17] 1,1,1,2-Tetrachloroethane	12.908	131	1936	49.98	ug/L	97
18] Ethylbenzene	12.964	91	10080	54.85	ug/L	96
19] m&p-Xylene	13.162	91	16478	114.72	ug/L	94
20] o-Xylene	13.774	91	8511	55.46	ug/L	98
21] 1,1,2,2-Tetrachloroethane	14.873	83	3604	52.99	ug/L	98
22] 1,3,5-Trimethylbenzene	15.340	105	8630	52.84	ug/L	95
23] 1,2,4-Trimethylbenzene	15.896	105	9662	56.95	ug/L	92
24] Naphthalene	17.903	128	14370	53.59	ug/L	98
25) 2-Fluorotoluene SCAN	10.969	109	276390	4686.70	ug/L	97
29) cis-1,2-Dichloroethene...	6.086	61	446	23.21	ug/L #	77
30) Chloroform SCAN	6.662	83	1146	54.98	ug/L #	27
31) 1,1,1-Trichloroethane ...	6.906	97	1606	84.55	ug/L #	25
32) Carbon tetrachloride SCAN	7.161	117	1077	54.36	ug/L #	15
33) Benzene SCAN	7.550	78	16747	320.23	ug/L	92
34) 1,2-Dichloroethane SCAN	7.550	62	733	37.96	ug/L #	26
35) Trichloroethene SCAN	8.557	130	438	30.48	ug/L #	11
36) Toluene-d8 SCAN	10.475	98	3315	57.48	ug/L	99
38) 1,1,2-Trichloroethane ...	11.221	97	839	50.61	ug/L #	13
39) Tetrachloroethene SCAN	11.430	166	1089	61.37	ug/L #	37
40) Chlorobenzene SCAN	12.772	112	2260	44.78	ug/L #	1
41) 1,1,1,2-Tetrachloroeth...	12.891	131	1738	93.05	ug/L #	34
42) Ethylbenzene SCAN	13.169	91	10146	75.40	ug/L	70
43) m&p-Xylene SCAN	13.169	91	10146	75.40	ug/L #	65
44) o-Xylene SCAN	13.797	91	6861	95.26	ug/L #	51
47) 1,2,4-Trimethylbenzene...	15.909	105	4918	63.32	ug/L #	42
48) Naphthalene SCAN	17.901	128	6734	57.30	ug/L	67

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\082020\
Data File : 08202008.D
Acq On : 20 Aug 2020 17:25
InstName : AG5975C
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Sample : S20H039-CAL6
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ALS Vial : 8 Sample Multiplier: 1

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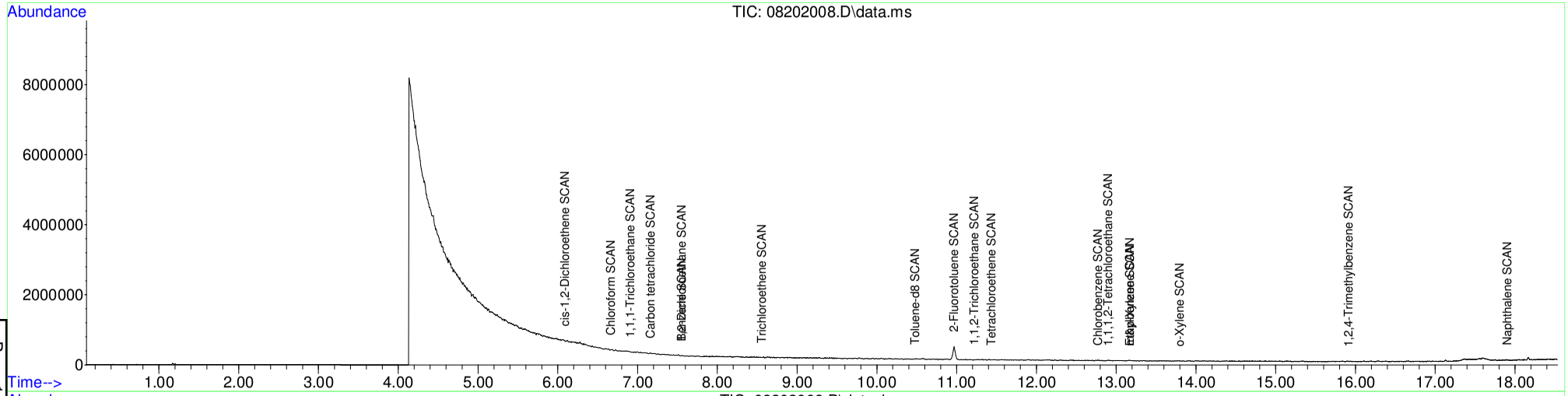
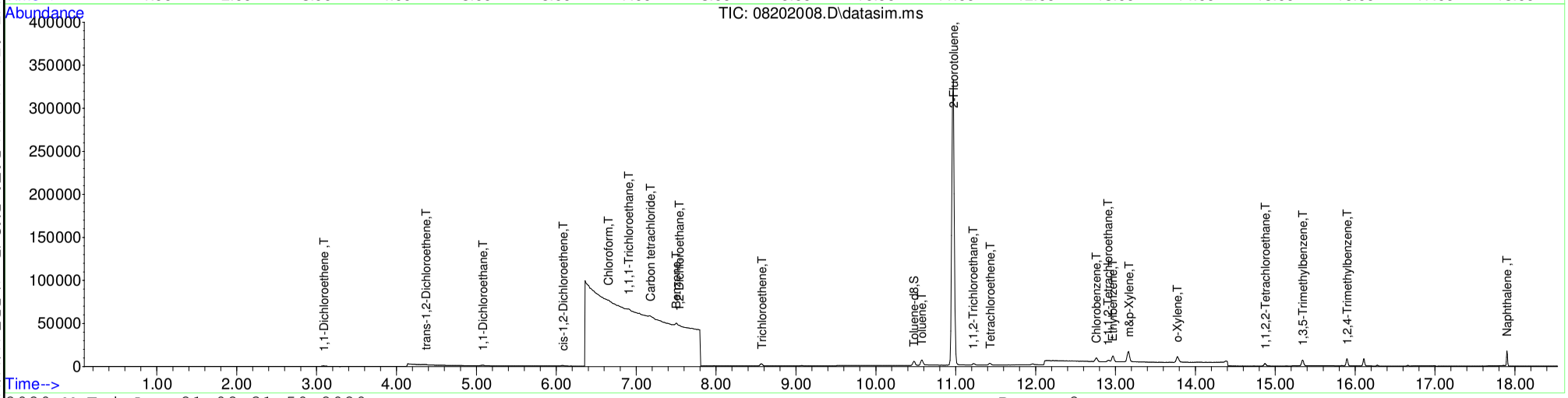
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\082020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:30:13 2020
Response via : Initial Calibration





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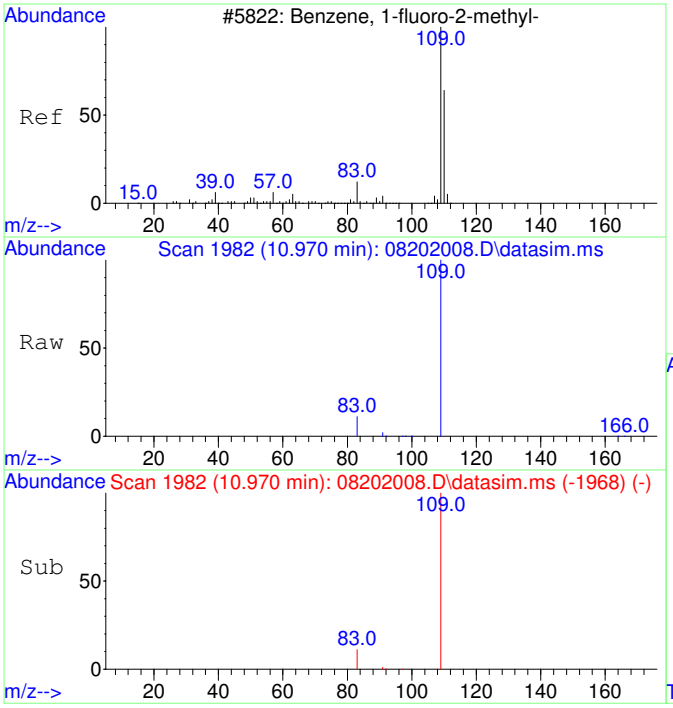
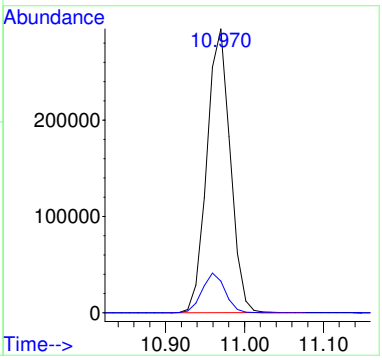
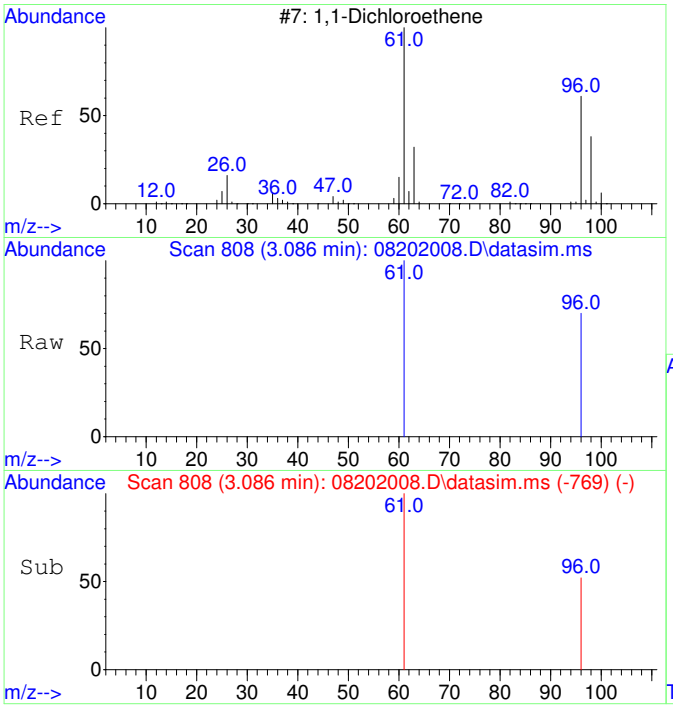


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:109 Resp: 604968

Ion	Ratio	Lower	Upper
109	100		
83	13.7	0.0	42.3

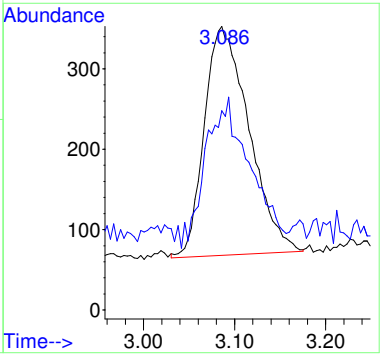


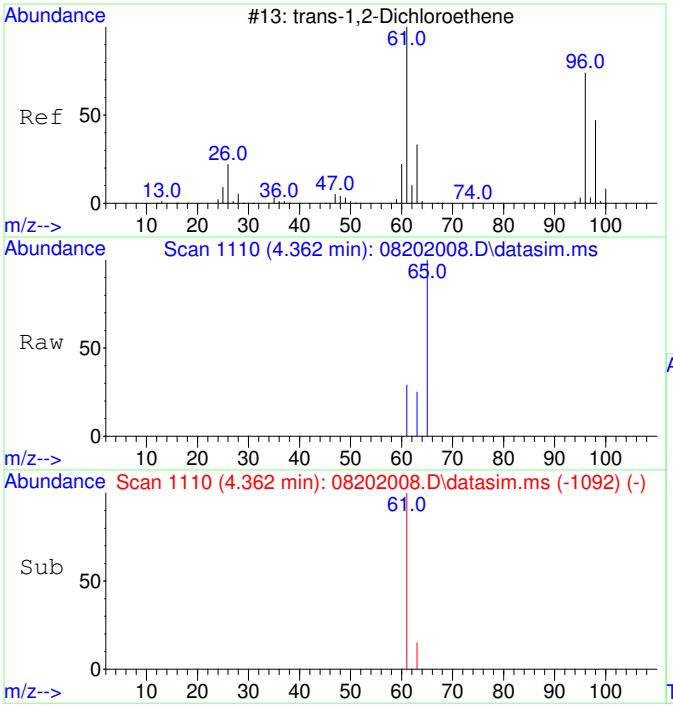


#2
1,1-Dichloroethene
Concen: 36.47 ug/L m
RT: 3.086 min Scan# 808
Delta R.T. -0.004 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 61 Resp: 970

Ion	Ratio	Lower	Upper
61	100		
96	85.9	37.2	97.2

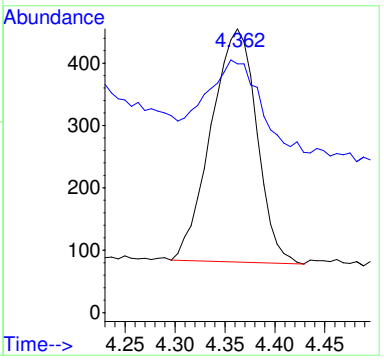


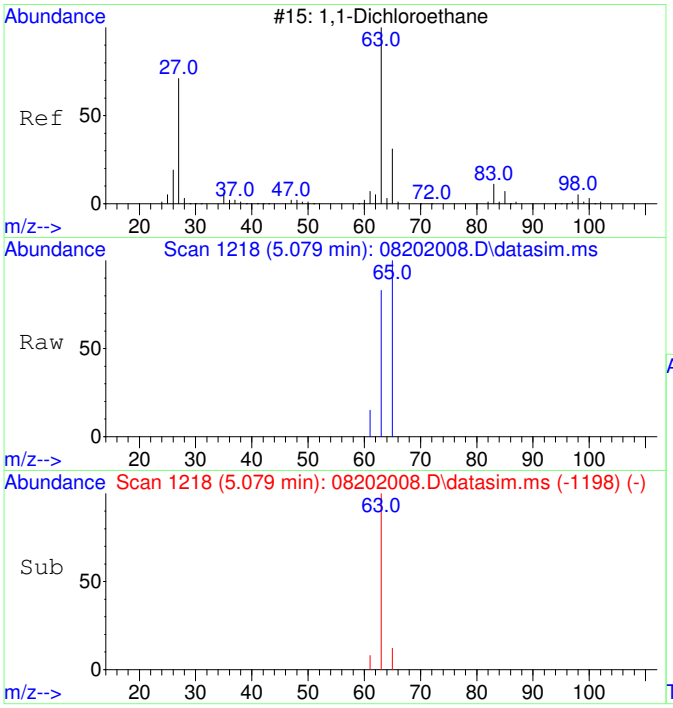


#3
trans-1,2-Dichloroethene
Concen: 42.71 ug/L
RT: 4.362 min Scan# 1110
Delta R.T. -0.033 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 61 Resp: 1192

Ion	Ratio	Lower	Upper
61	100		
63	48.7	2.4	62.4

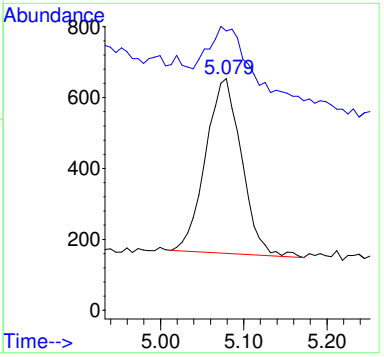


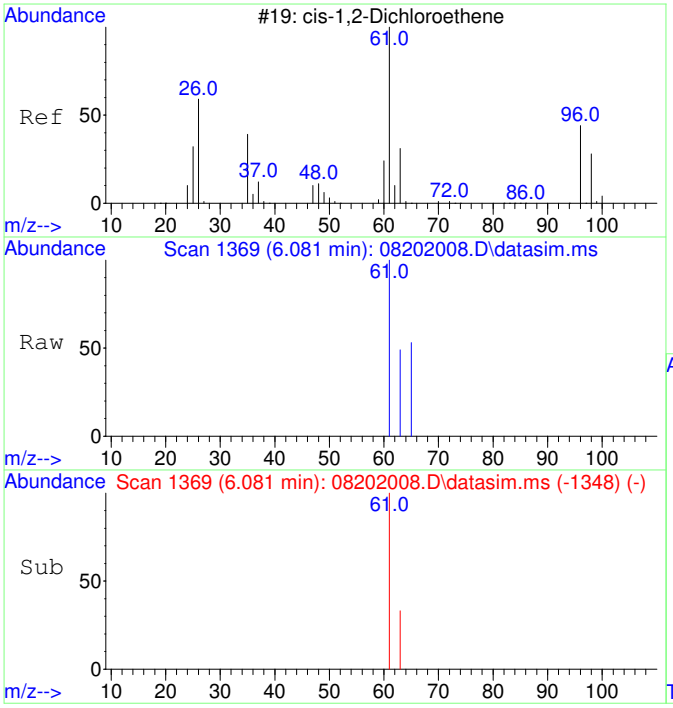


#4
1,1-Dichloroethane
Concen: 42.45 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.020 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 63 Resp: 1475

Ion	Ratio	Lower	Upper
63	100		
65	76.1	1.8	61.8#

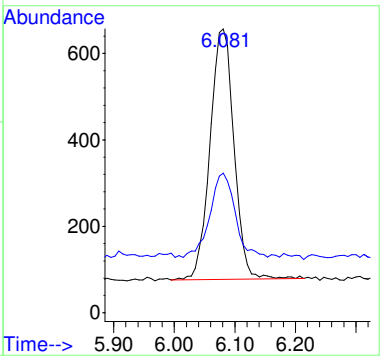


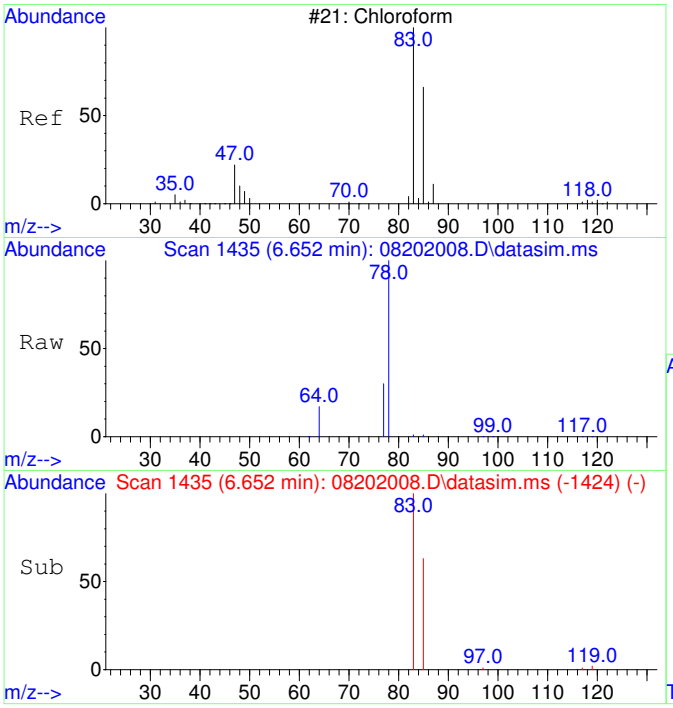


#5
cis-1,2-Dichloroethene
Concen: 43.46 ug/L
RT: 6.081 min Scan# 1369
Delta R.T. -0.013 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 61 Resp: 1594

Ion	Ratio	Lower	Upper
61	100		
63	35.1	2.5	62.5

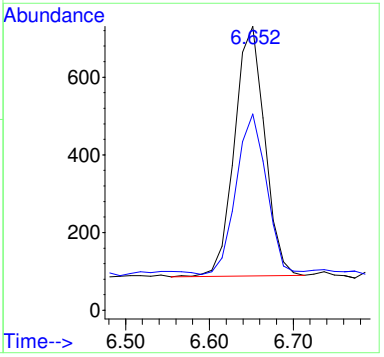


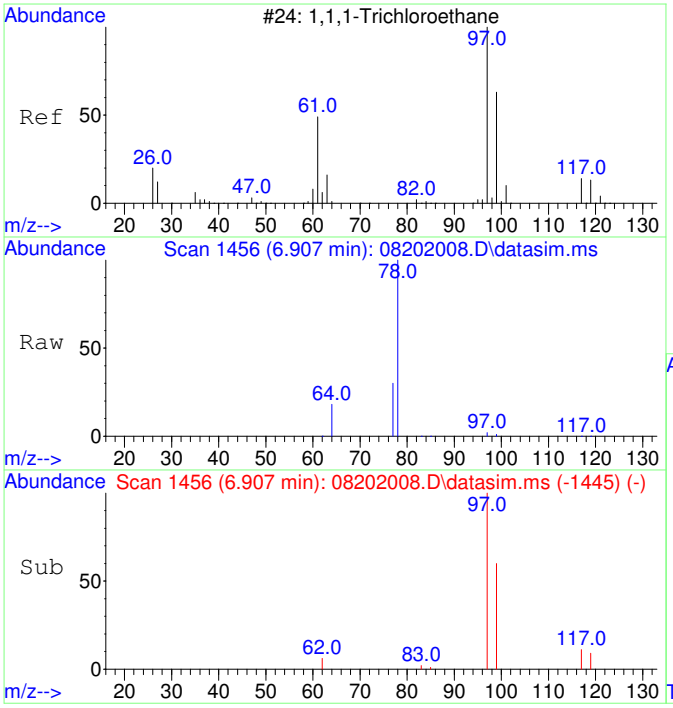


#6
Chloroform
Concen: 42.78 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 83 Resp: 1606

Ion	Ratio	Lower	Upper
83	100		
85	64.9	35.1	95.1

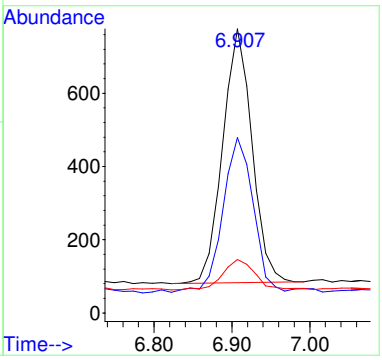


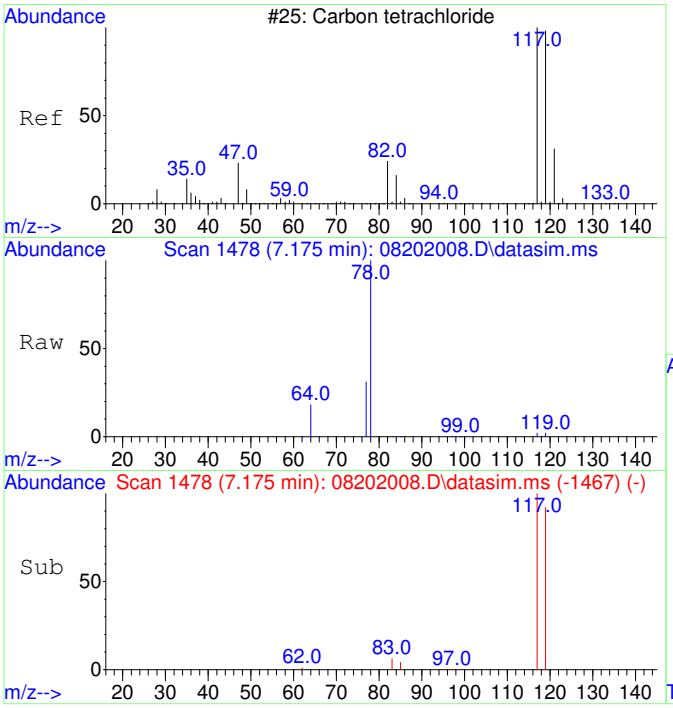


#7
1,1,1-Trichloroethane
Concen: 44.60 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 97 Resp: 1818

Ion	Ratio	Lower	Upper
97	100		
99	61.9	34.6	94.6
117	13.4	0.0	43.2

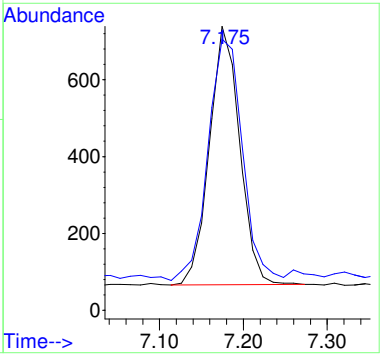


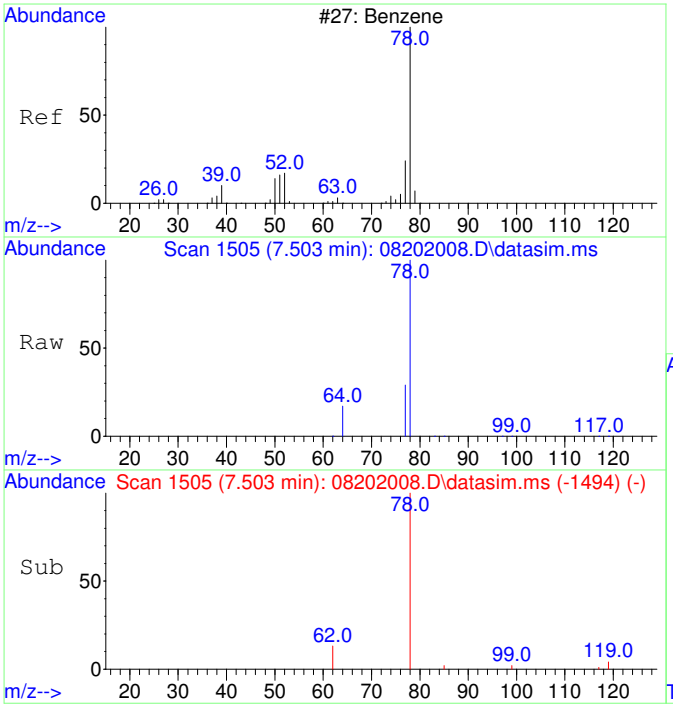


#8
Carbon tetrachloride
Concen: 43.79 ug/L
RT: 7.175 min Scan# 1478
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:117 Resp: 1680

Ion	Ratio	Lower	Upper
117	100		
119	105.9	66.4	126.4

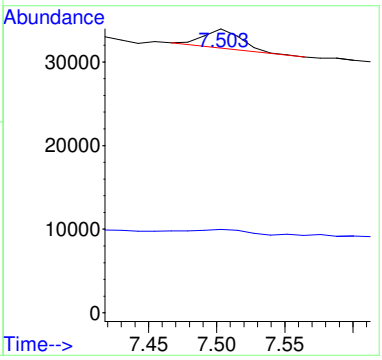


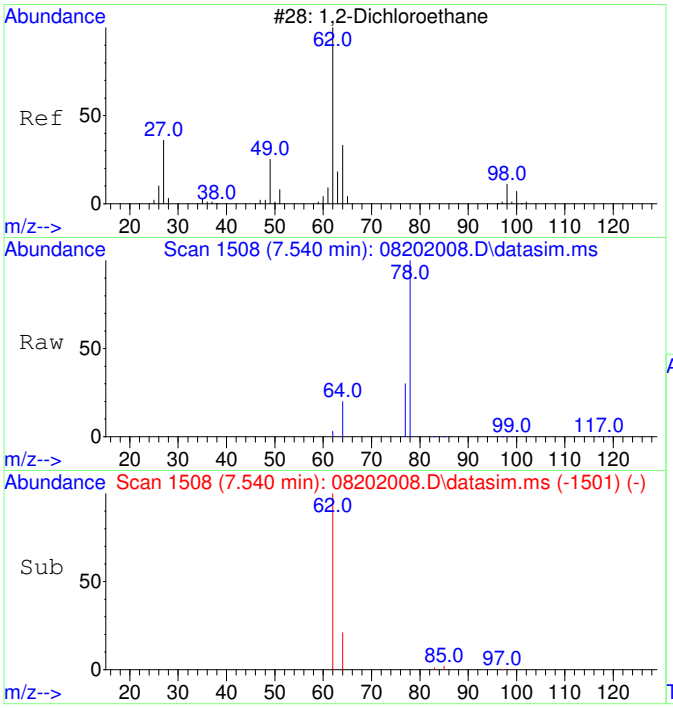


#9
Benzene
Concen: 37.10 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 78 Resp: 3813

Ion	Ratio	Lower	Upper
78	100		
77	99.1	0.0	53.2#

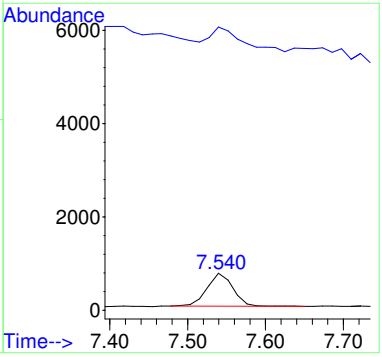


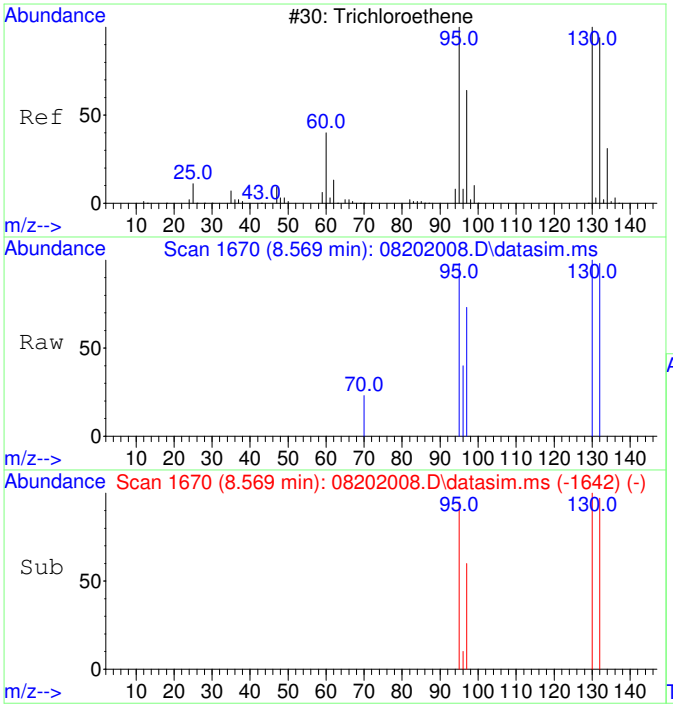


#10
1,2-Dichloroethane
Concen: 43.69 ug/L
RT: 7.540 min Scan# 1508
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 62 Resp: 1603

Ion	Ratio	Lower	Upper
62	100		
64	90.9	2.3	62.3#

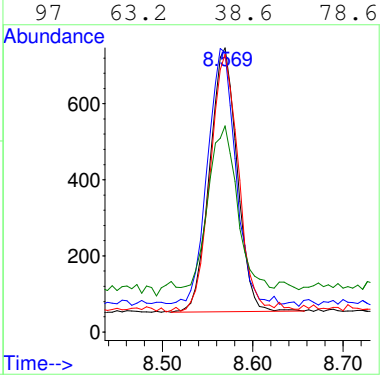


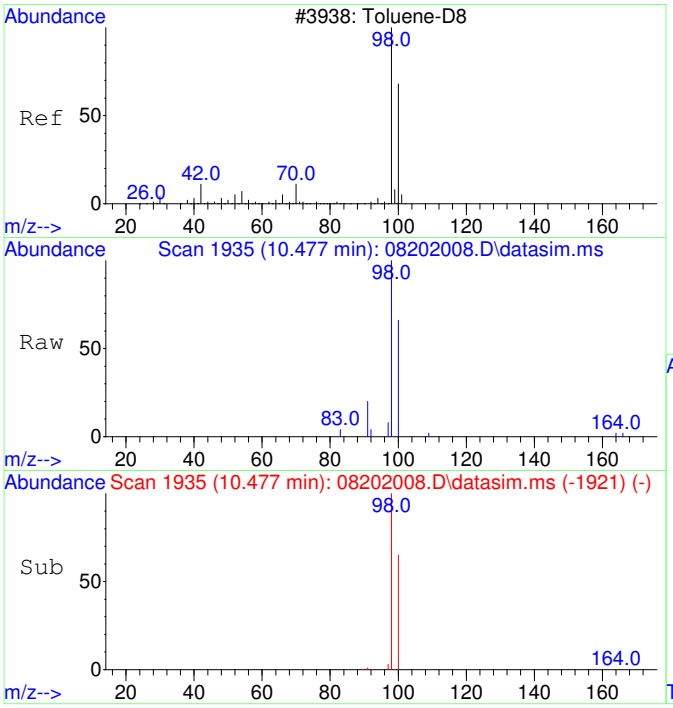


#11
Trichloroethene
Concen: 47.31 ug/L
RT: 8.569 min Scan# 1670
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:130 Resp: 1464

Ion	Ratio	Lower	Upper
130	100		
95	98.6	60.7	120.7
132	100.6	76.0	116.0
97	63.2	38.6	78.6

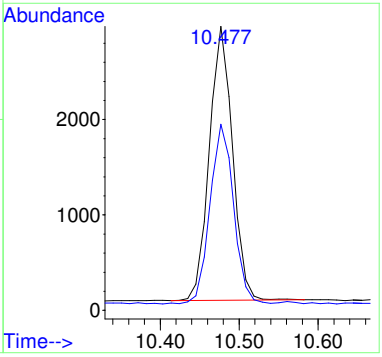


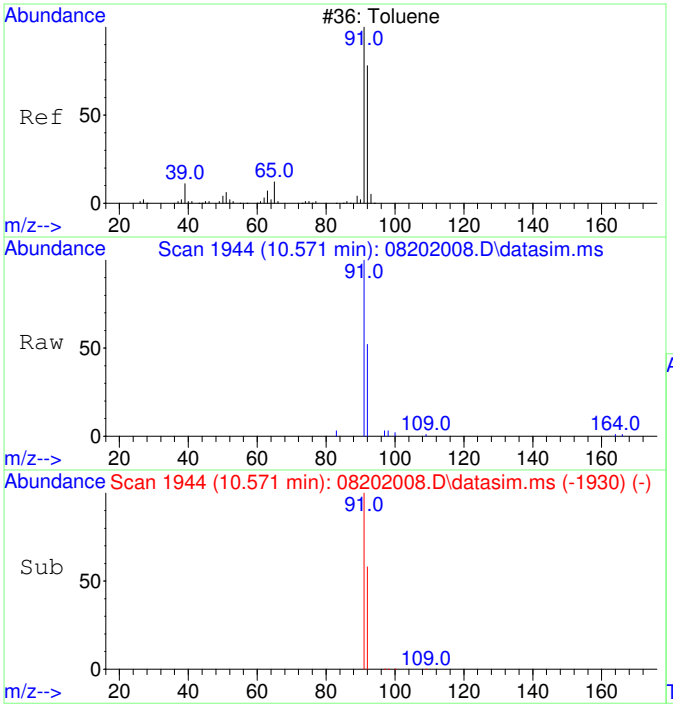


#12
Toluene-d8
Concen: 49.39 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 98 Resp: 5849

Ion	Ratio	Lower	Upper
98	100		
100	66.4	37.1	97.1

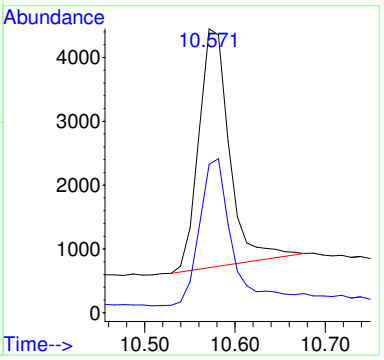


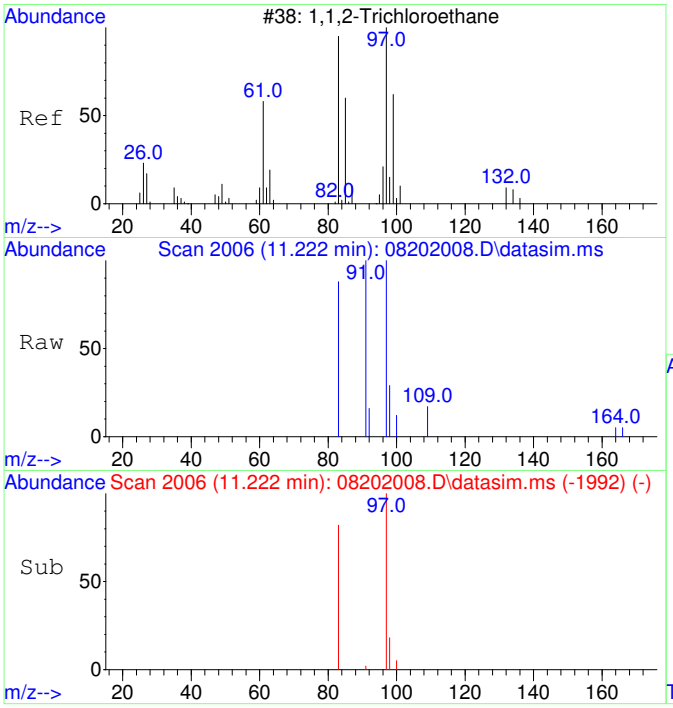


#13
Toluene
Concen: 58.81 ug/L
RT: 10.571 min Scan# 1944
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 8880

Ion	Ratio	Lower	Upper
91	100		
92	66.5	29.9	89.9

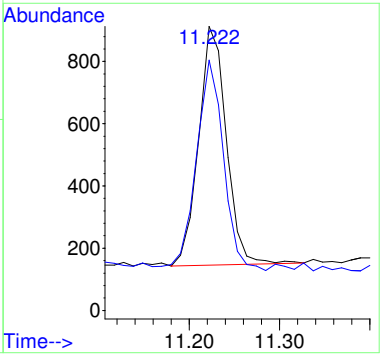


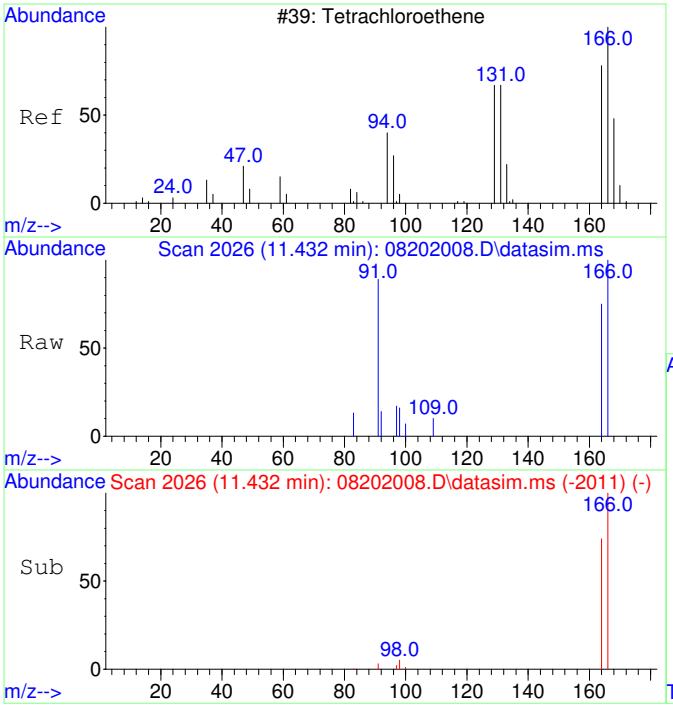


#14
1,1,2-Trichloroethane
Concen: 49.61 ug/L
RT: 11.222 min Scan# 2006
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 97 Resp: 1632

Ion	Ratio	Lower	Upper
97	100		
83	87.4	51.2	111.2

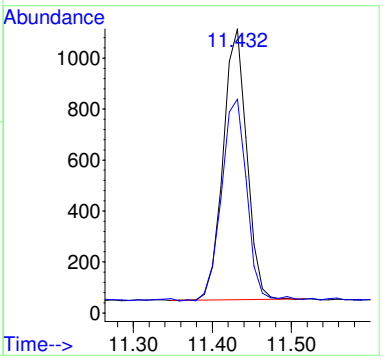


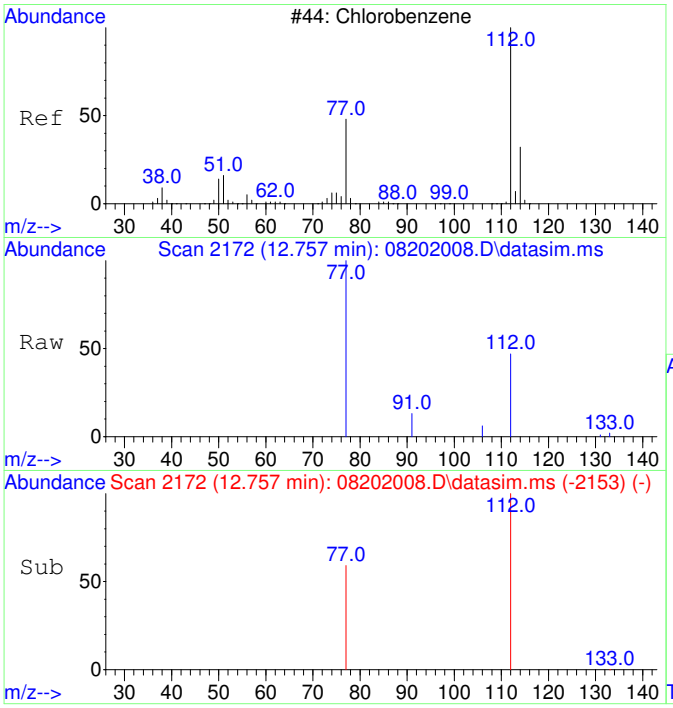


#15
Tetrachloroethene
Concen: 50.49 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.011 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:166 Resp: 2206

Ion	Ratio	Lower	Upper
166	100		
164	78.9	47.8	107.8

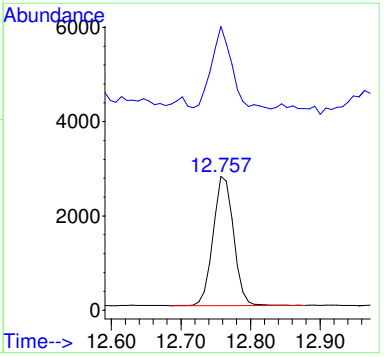


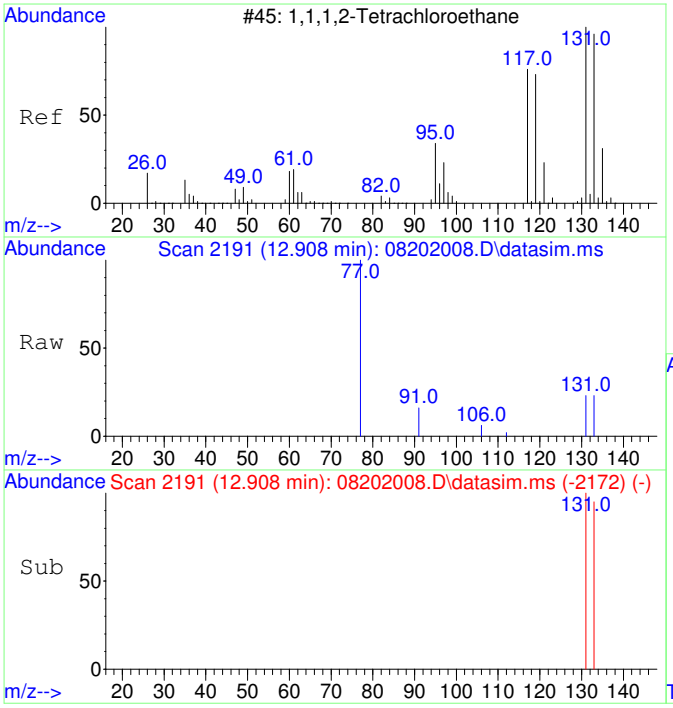


#16
Chlorobenzene
Concen: 51.95 ug/L
RT: 12.757 min Scan# 2172
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:112 Resp: 5616

Ion	Ratio	Lower	Upper
112	100		
77	63.2	23.6	83.6

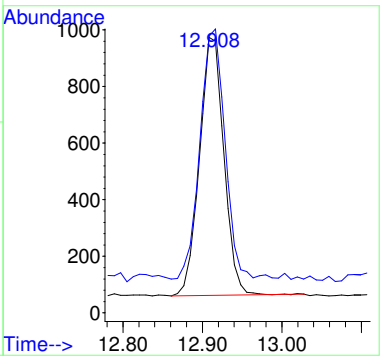


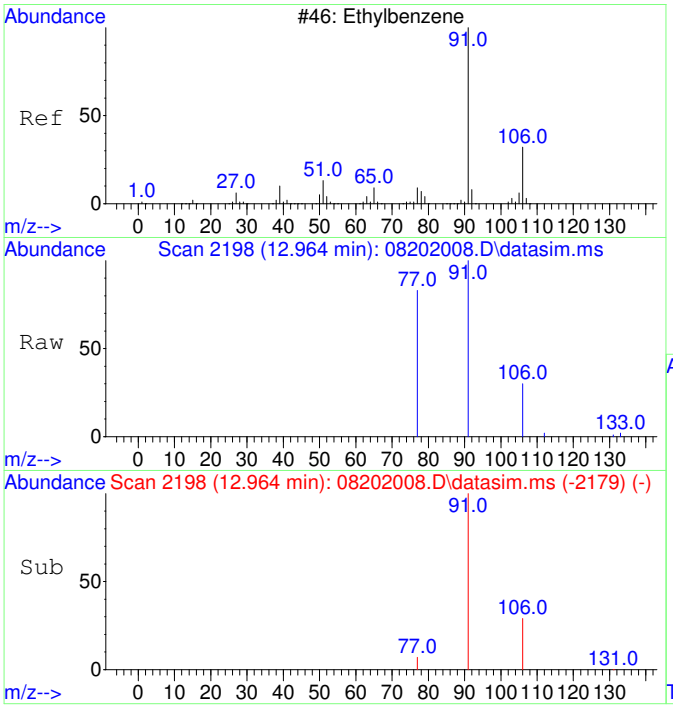


#17
1,1,1,2-Tetrachloroethane
Concen: 49.98 ug/L
RT: 12.908 min Scan# 2191
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:131 Resp: 1936

Ion	Ratio	Lower	Upper
131	100		
133	99.2	66.3	126.3

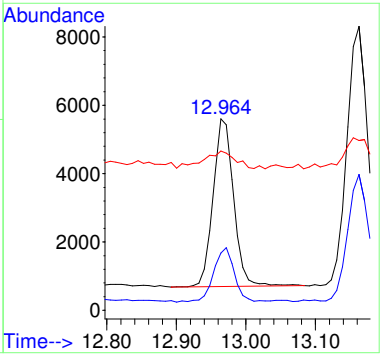


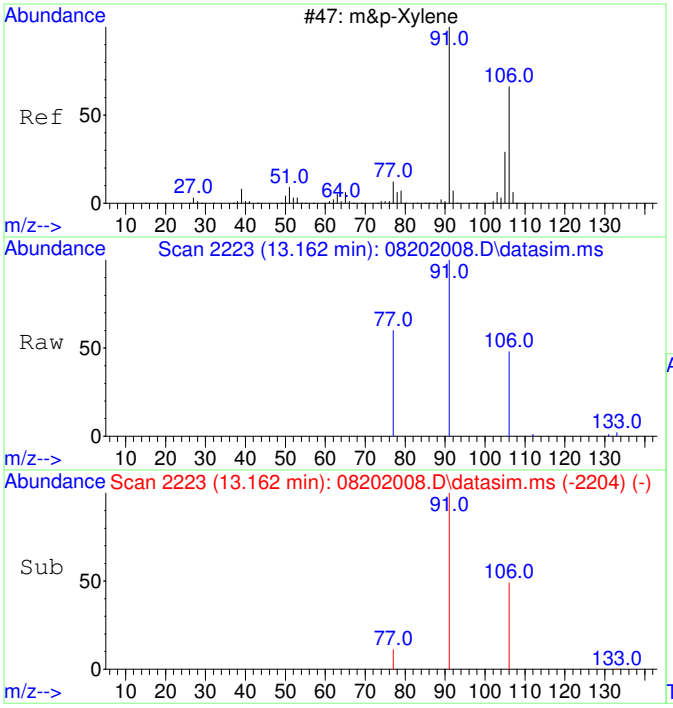


#18
Ethylbenzene
Concen: 54.85 ug/L
RT: 12.964 min Scan# 2198
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 10080

Ion	Ratio	Lower	Upper
91	100		
106	32.7	3.0	63.0
77	15.3	0.0	38.2

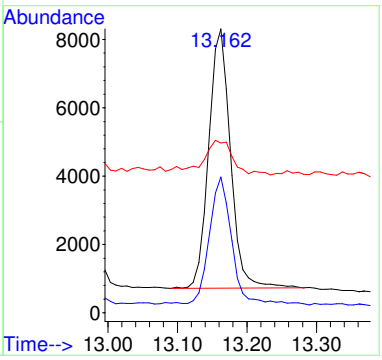


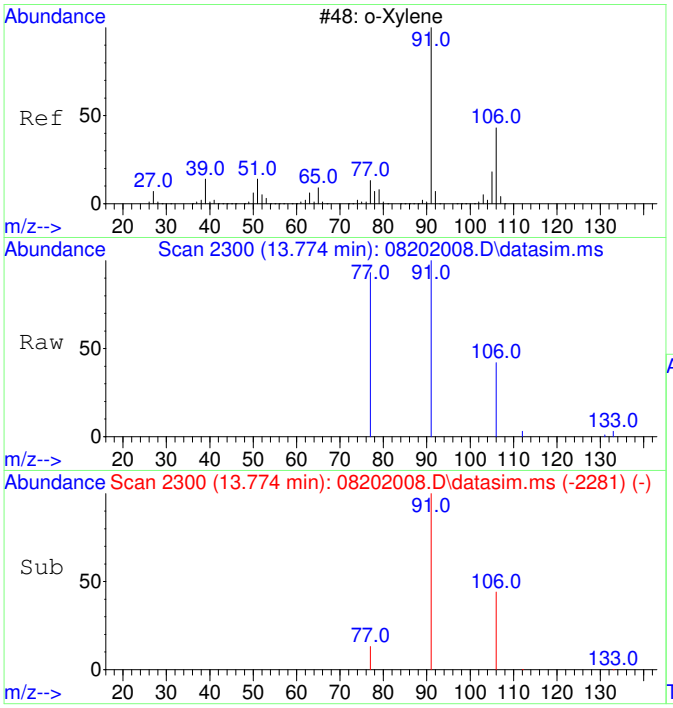


#19
m&p-Xylene
Concen: 114.72 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 16478

Ion	Ratio	Lower	Upper
91	100		
106	48.8	22.2	82.2
77	17.4	0.0	42.4

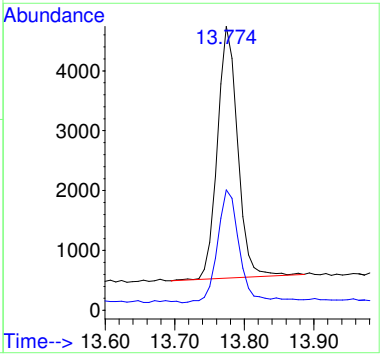


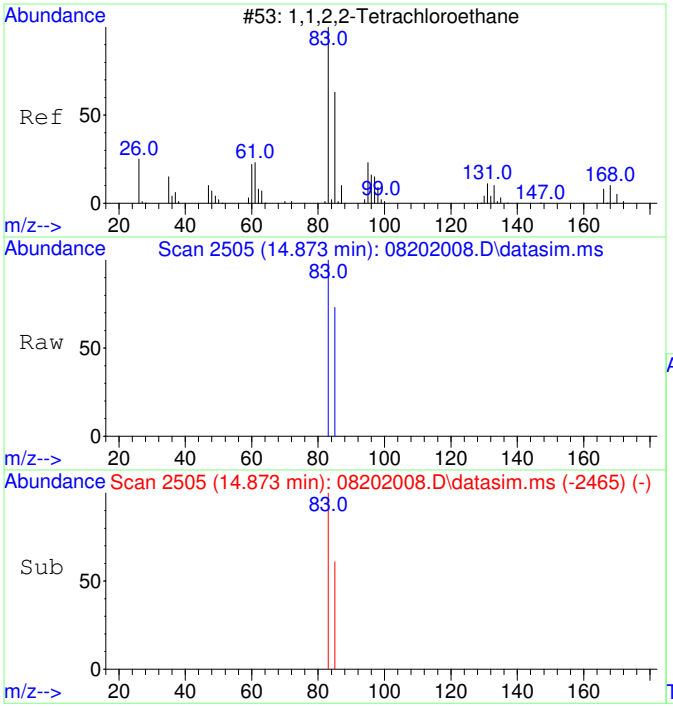


#20
o-Xylene
Concen: 55.46 ug/L
RT: 13.774 min Scan# 2300
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 8511

Ion	Ratio	Lower	Upper
91	100		
106	47.6	19.2	79.2

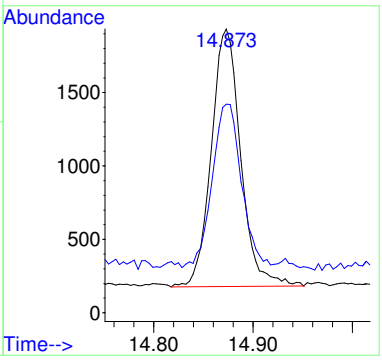


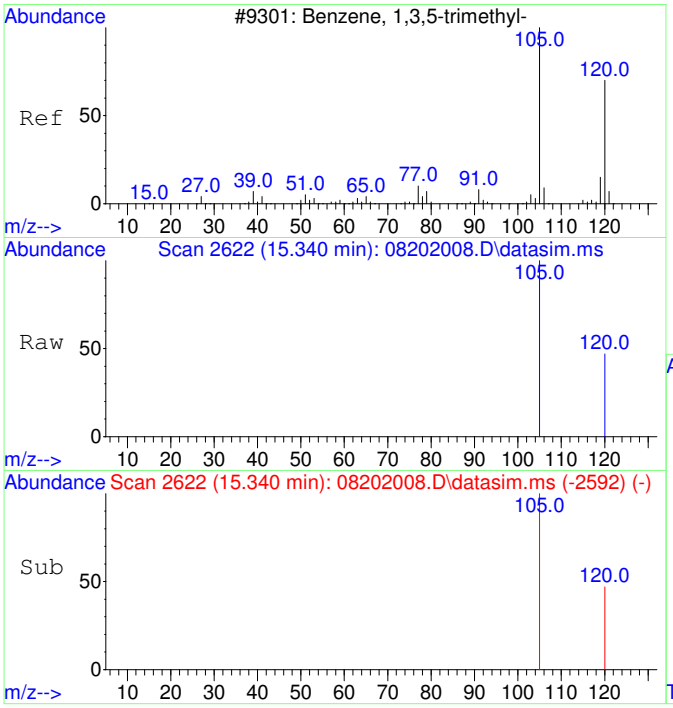


#21
1,1,2,2-Tetrachloroethane
Concen: 52.99 ug/L
RT: 14.873 min Scan# 2505
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 83 Resp: 3604

Ion	Ratio	Lower	Upper
83	100		
85	63.3	34.8	94.8

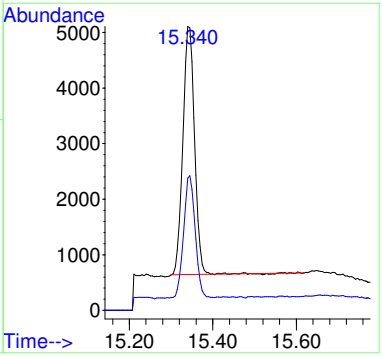


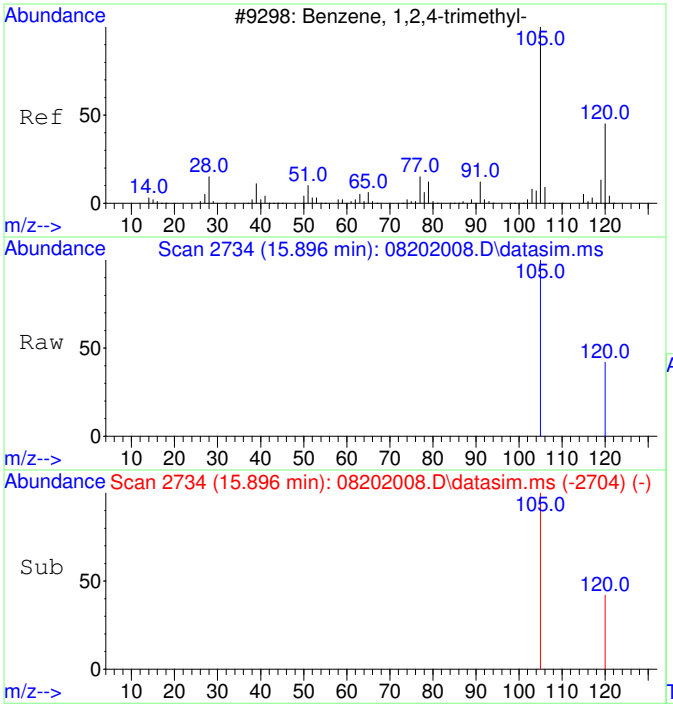


#22
1,3,5-Trimethylbenzene
Concen: 52.84 ug/L
RT: 15.340 min Scan# 2622
Delta R.T. -0.005 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:105 Resp: 8630

Ion	Ratio	Lower	Upper
105	100		
120	47.6	21.1	81.1

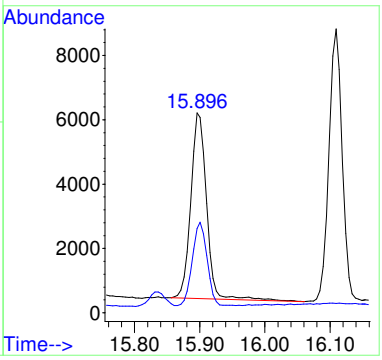


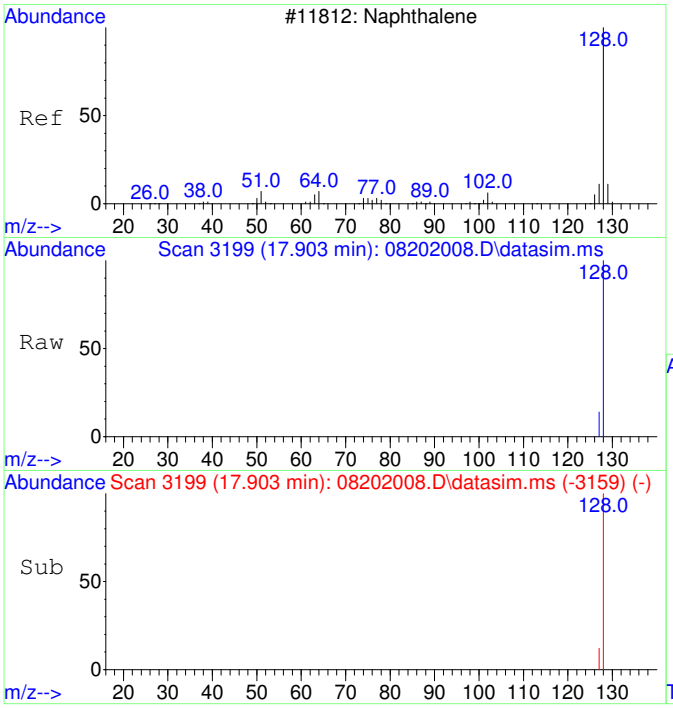


#23
1,2,4-Trimethylbenzene
Concen: 56.95 ug/L
RT: 15.896 min Scan# 2734
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:105 Resp: 9662

Ion	Ratio	Lower	Upper
105	100		
120	41.8	17.2	77.2

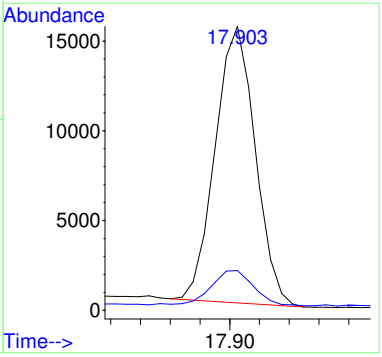


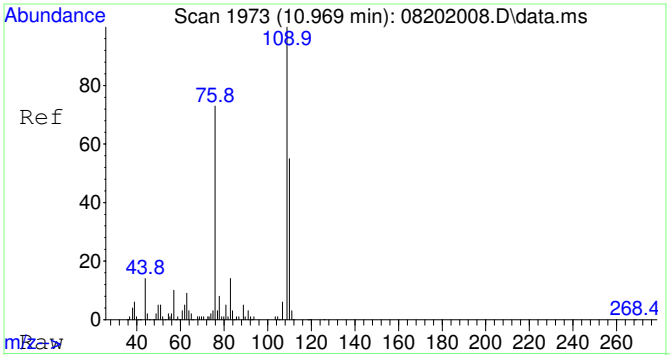


#24
Naphthalene
Concen: 53.59 ug/L
RT: 17.903 min Scan# 3199
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:128 Resp: 14370

Ion	Ratio	Lower	Upper
128	100		
127	13.4	0.0	42.5

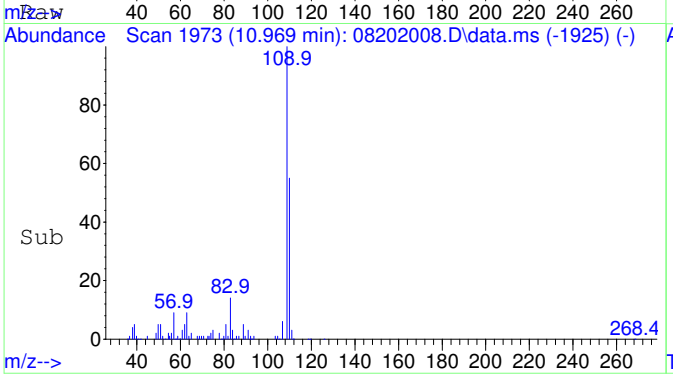


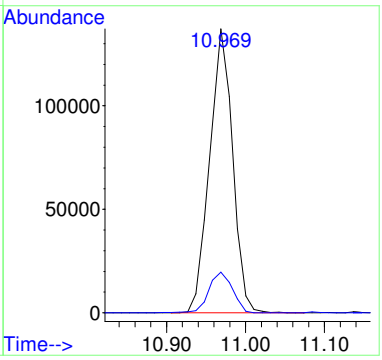


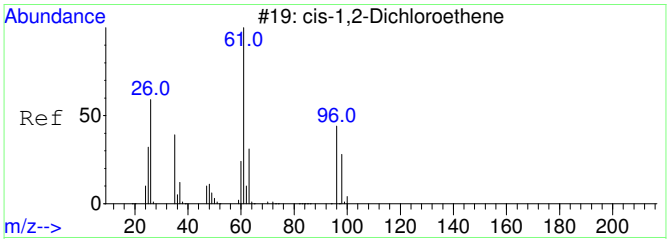
#25
2-Fluorotoluene SCAN
Concen: 4686.70 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:109 Resp: 276390

Ion	Ratio	Lower	Upper
109	100		
83	14.8	0.0	43.8



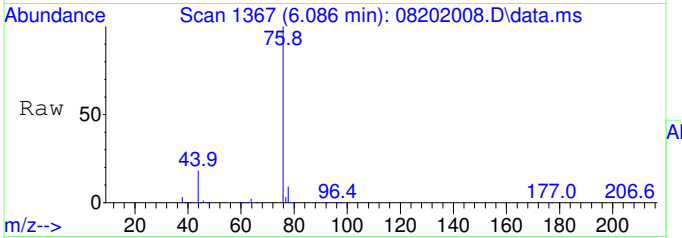


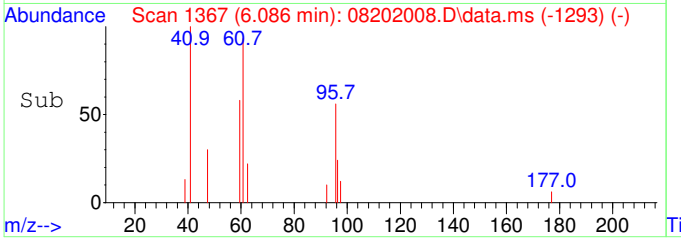


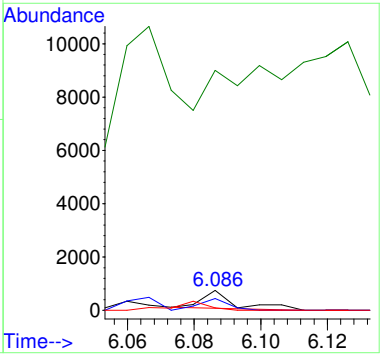
#29
cis-1,2-Dichloroethene SCAN
Concen: 23.21 ug/L
RT: 6.086 min Scan# 1367
Delta R.T. -0.007 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

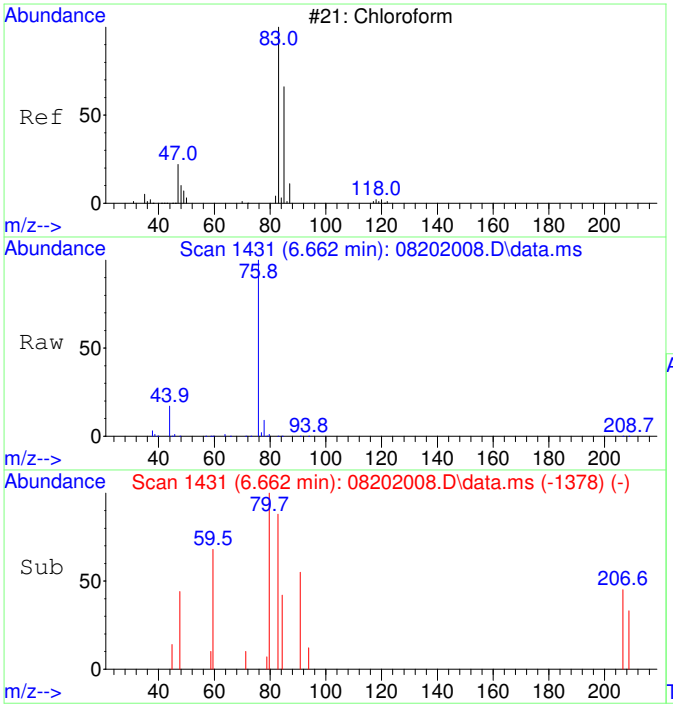
Tgt Ion: 61 Resp: 446

Ion	Ratio	Lower	Upper
61	100		
96	63.0	39.9	99.9
98	55.2	13.5	73.5
64	0.0	4.5	64.5#





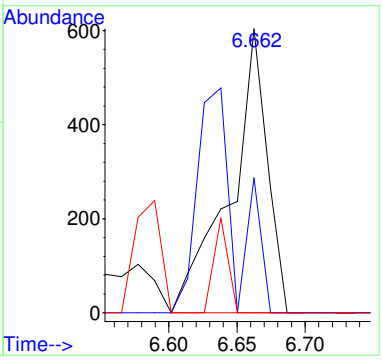


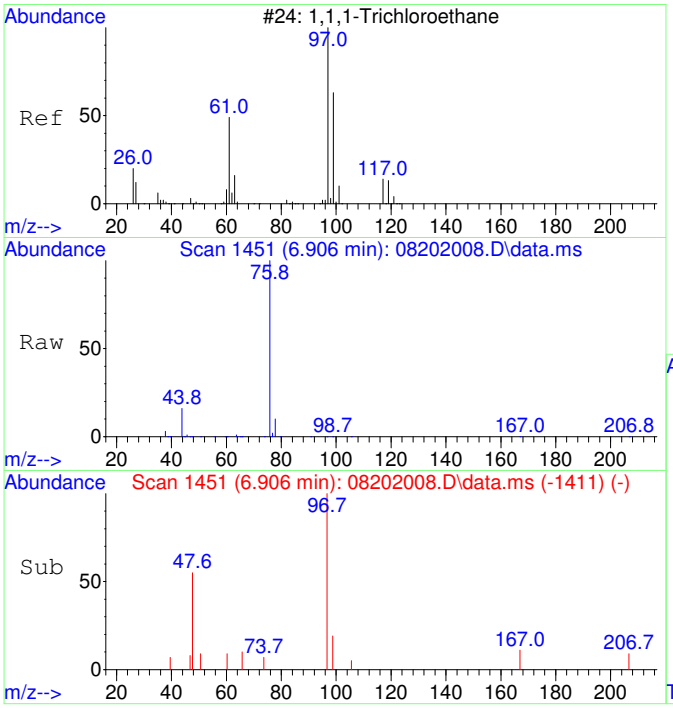


#30
Chloroform SCAN
Concen: 54.98 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 83 Resp: 1146

Ion	Ratio	Lower	Upper
83	100		
85	0.0	34.6	94.6#
47	0.0	0.0	53.4

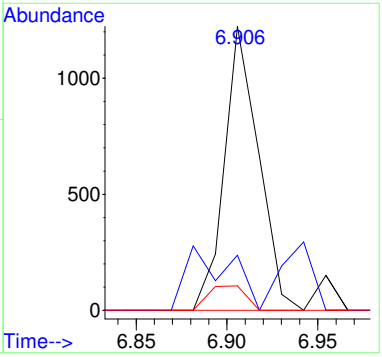


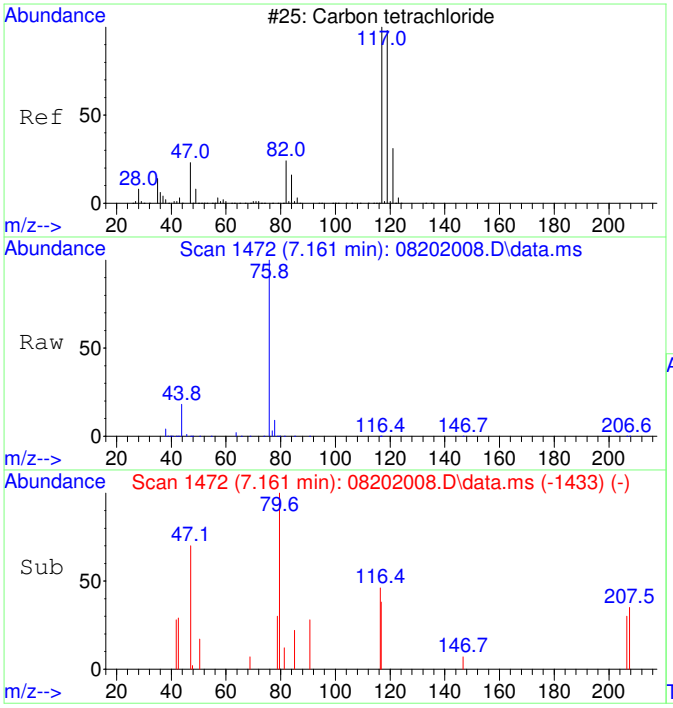


#31
1,1,1-Trichloroethane SCAN
Concen: 84.55 ug/L
RT: 6.906 min Scan# 1451
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 97 Resp: 1606

Ion	Ratio	Lower	Upper
97	100		
99	0.0	43.6	103.6#
61	9.5	18.0	78.0#

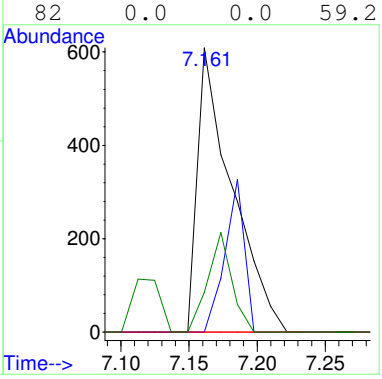


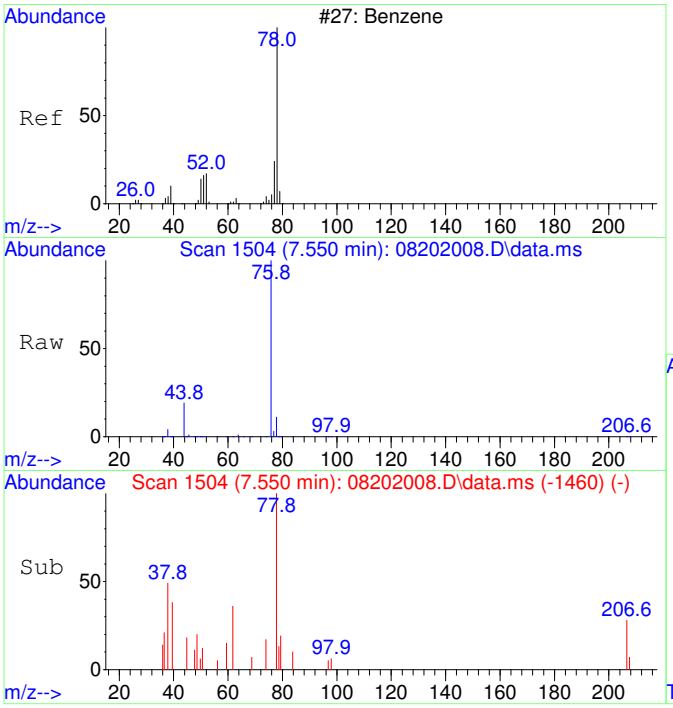


#32
Carbon tetrachloride SCAN
Concen: 54.36 ug/L
RT: 7.161 min Scan# 1472
Delta R.T. -0.024 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:117 Resp: 1077

Ion	Ratio	Lower	Upper
117	100		
119	0.0	75.5	135.5#
121	0.0	0.0	58.8
82	0.0	0.0	59.2

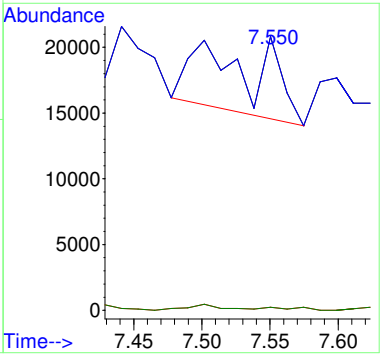


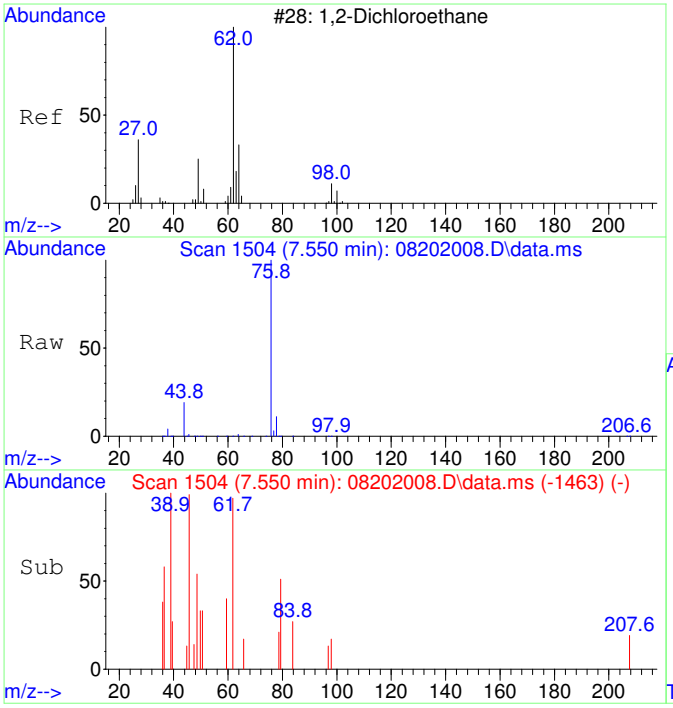


#33
Benzene SCAN
Concen: 320.23 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. 0.037 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 78 Resp: 16747

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	1.6	0.0	47.9
51	1.6	0.0	44.1

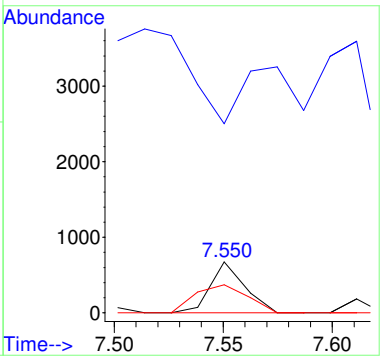


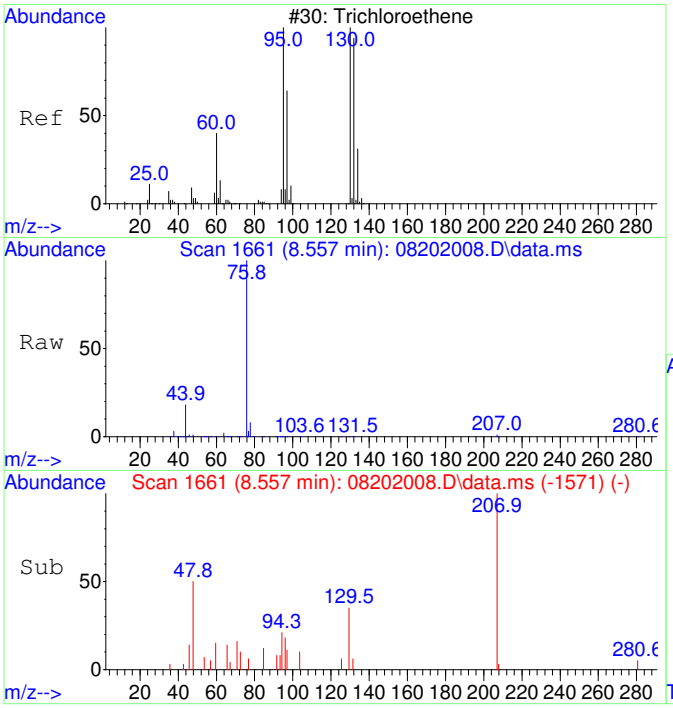


#34
1,2-Dichloroethane SCAN
Concen: 37.96 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 62 Resp: 733

Ion	Ratio	Lower	Upper
62	100		
64	0.0	5.2	65.2#
49	84.6	3.9	63.9#

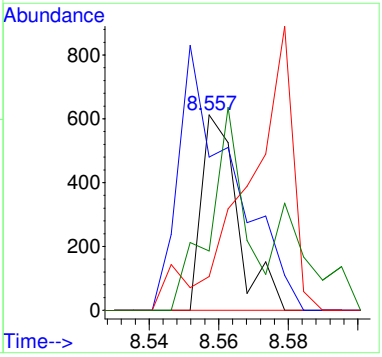


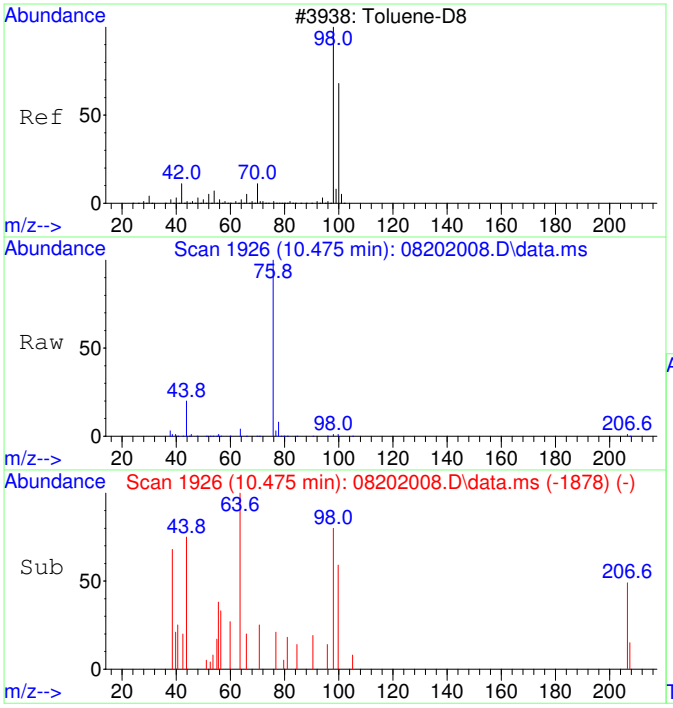


#35
Trichloroethene SCAN
Concen: 30.48 ug/L
RT: 8.557 min Scan# 1661
Delta R.T. -0.011 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:130 Resp: 438

Ion	Ratio	Lower	Upper
130	100		
95	204.1	60.5	120.5#
132	0.0	59.6	119.6#
97	81.1	28.2	88.2

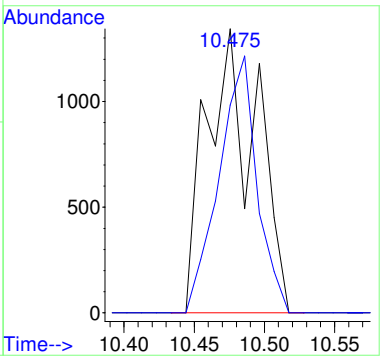


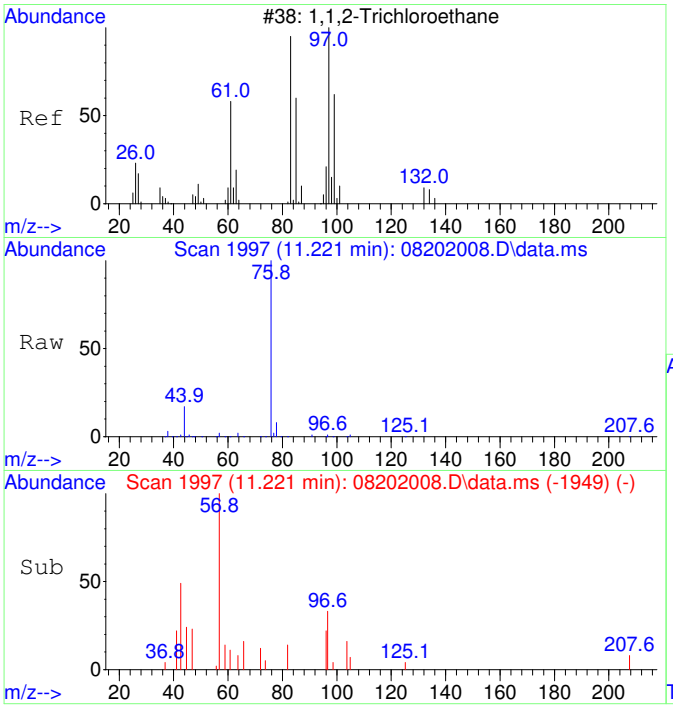


#36
Toluene-d8 SCAN
Concen: 57.48 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 98 Resp: 3315

Ion	Ratio	Lower	Upper
98	100		
100	69.2	40.0	100.0

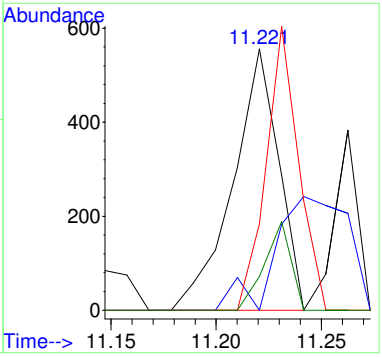


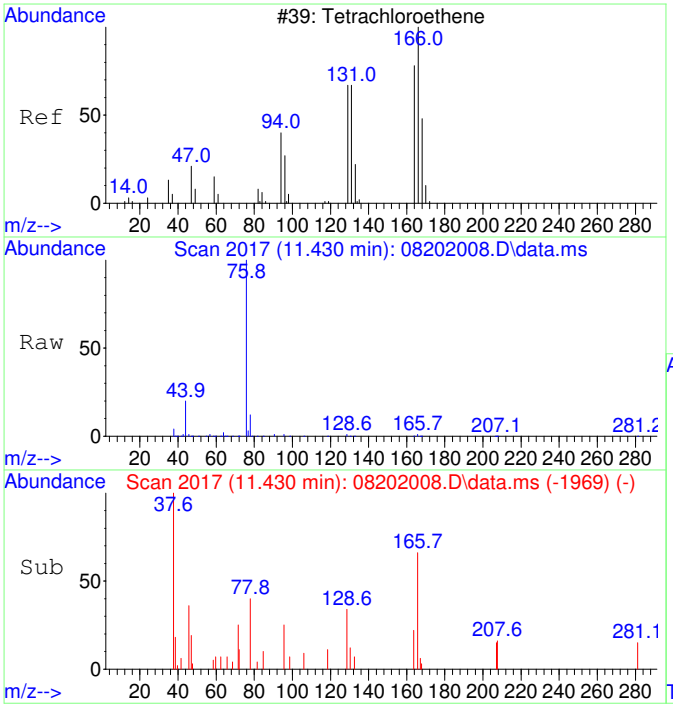


#38
1,1,2-Trichloroethane SCAN
Concen: 50.61 ug/L
RT: 11.221 min Scan# 1997
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 97 Resp: 839

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	0.0	32.1	92.1#
99	0.0	36.7	96.7#

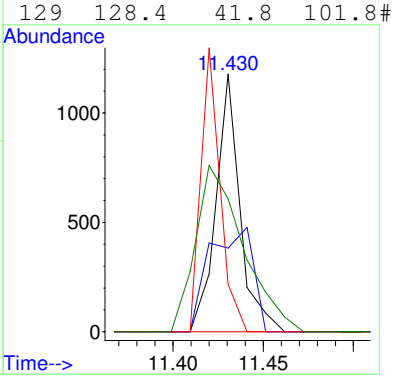


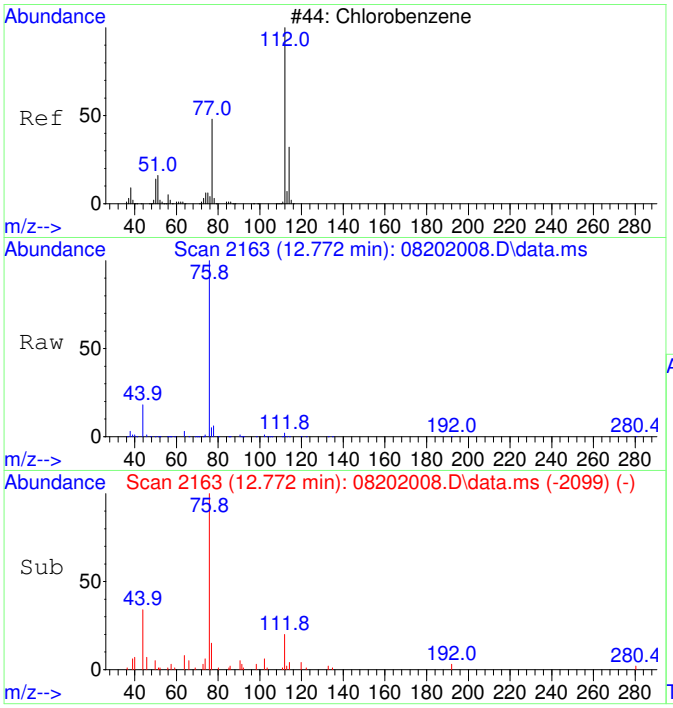


#39
Tetrachloroethene SCAN
Concen: 61.37 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:166 Resp: 1089

Ion	Ratio	Lower	Upper
166	100		
164	0.0	50.9	110.9#
131	87.6	38.7	98.7
129	128.4	41.8	101.8#

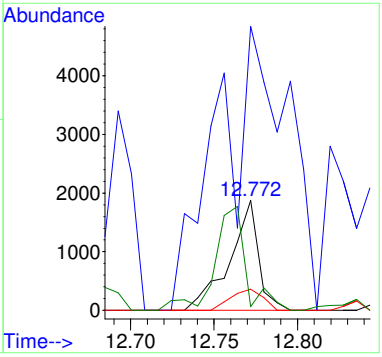


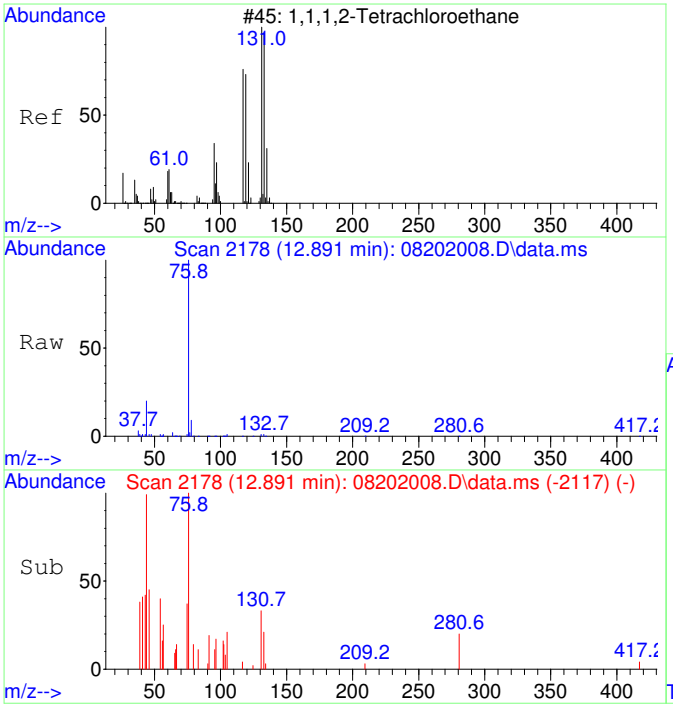


#40
Chlorobenzene SCAN
Concen: 44.78 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.008 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:112 Resp: 2260

Ion	Ratio	Lower	Upper
112	100		
77	292.5	28.2	88.2#
114	21.3	2.3	62.3
51	101.9	0.0	50.1#

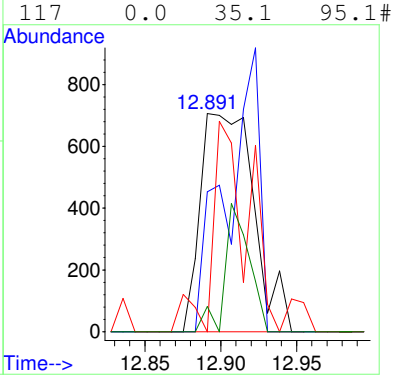


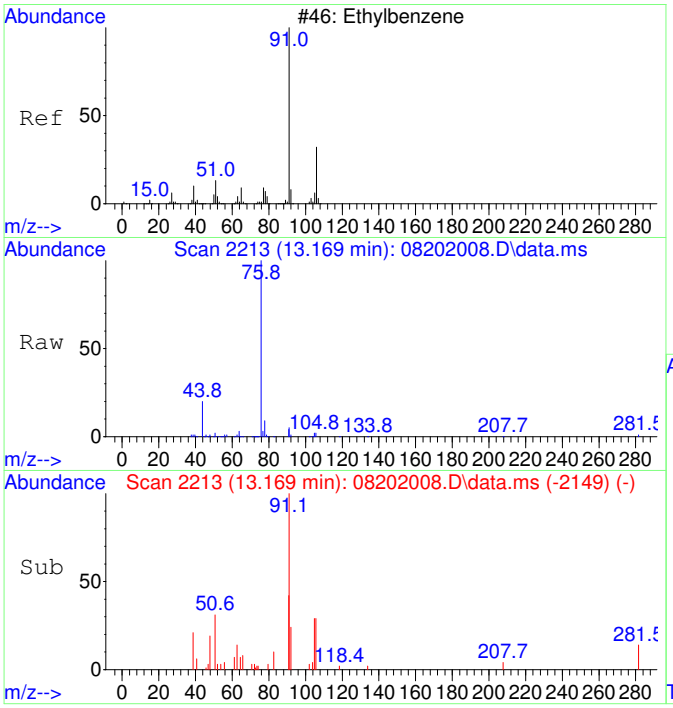


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 93.05 ug/L
RT: 12.891 min Scan# 2178
Delta R.T. -0.016 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:131 Resp: 1738

Ion	Ratio	Lower	Upper
131	100		
133	0.0	66.9	126.9#
119	64.3	40.4	100.4
117	0.0	35.1	95.1#

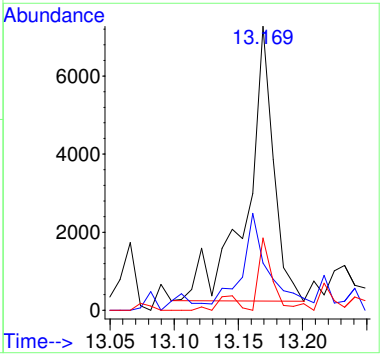


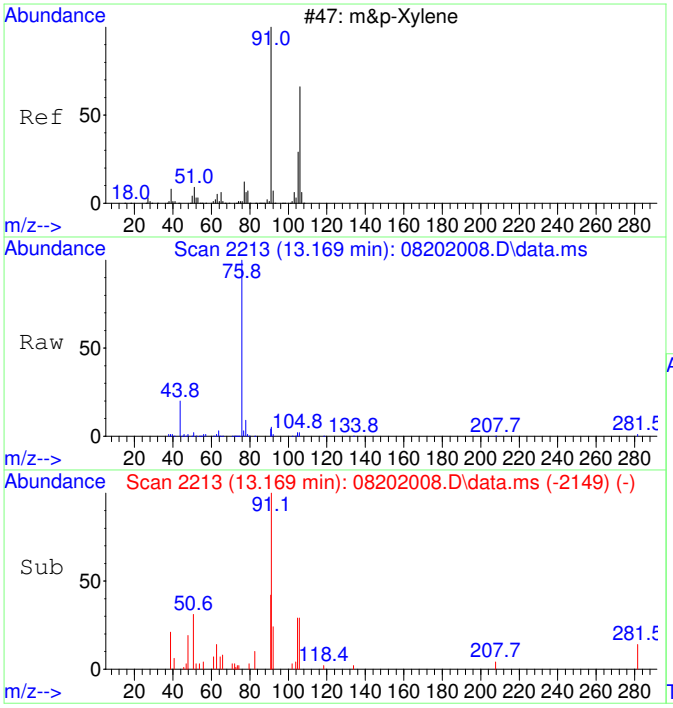


#42
Ethylbenzene SCAN
Concen: 75.40 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 10146

Ion	Ratio	Lower	Upper
91	100		
106	28.8	23.1	83.1
51	12.0	0.0	40.1

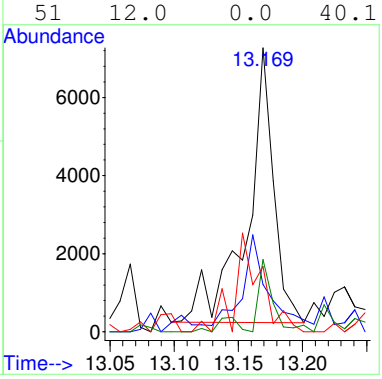


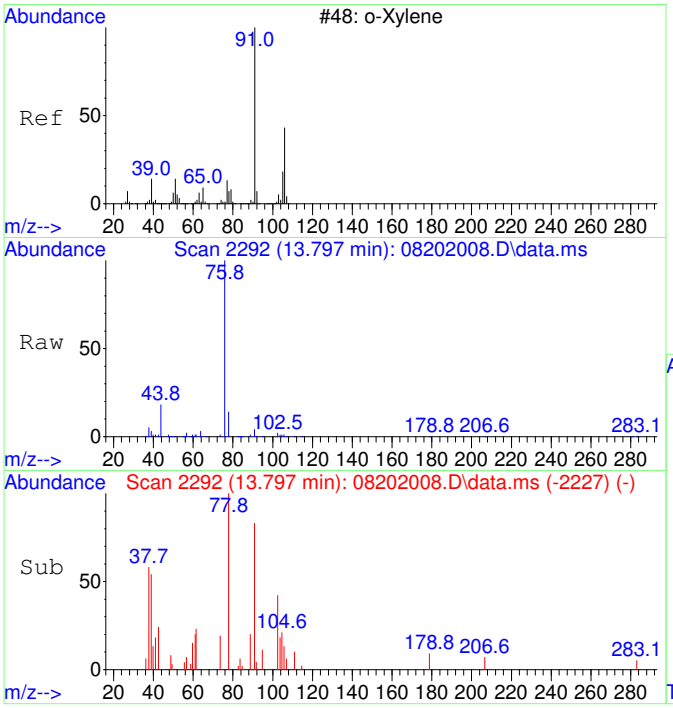


#43
m&p-Xylene SCAN
Concen: 75.40 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 10146

Ion	Ratio	Lower	Upper
91	100		
106	28.8	23.1	83.1
105	0.0	0.0	54.7
51	12.0	0.0	40.1

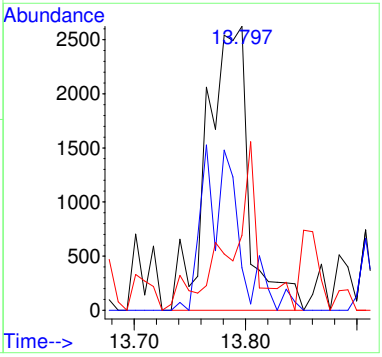


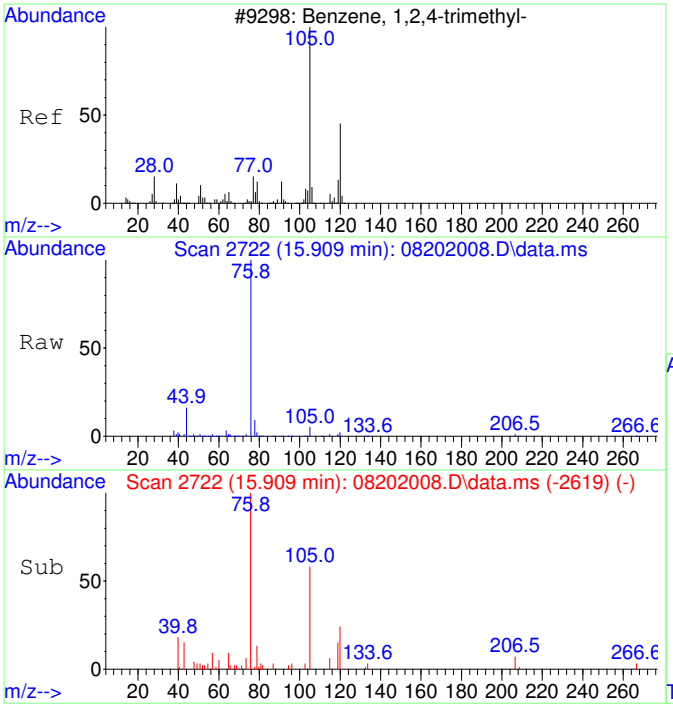


#44
o-Xylene SCAN
Concen: 95.26 ug/L
RT: 13.797 min Scan# 2292
Delta R.T. 0.016 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 6861

Ion	Ratio	Lower	Upper
91	100		
106	0.0	18.0	78.0#
105	21.3	0.0	56.6

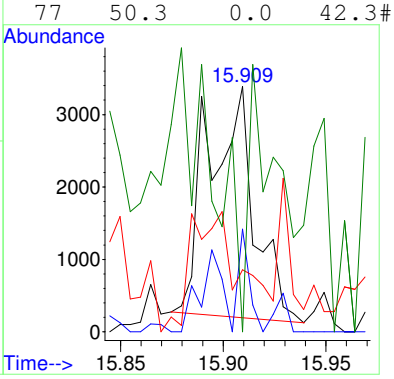


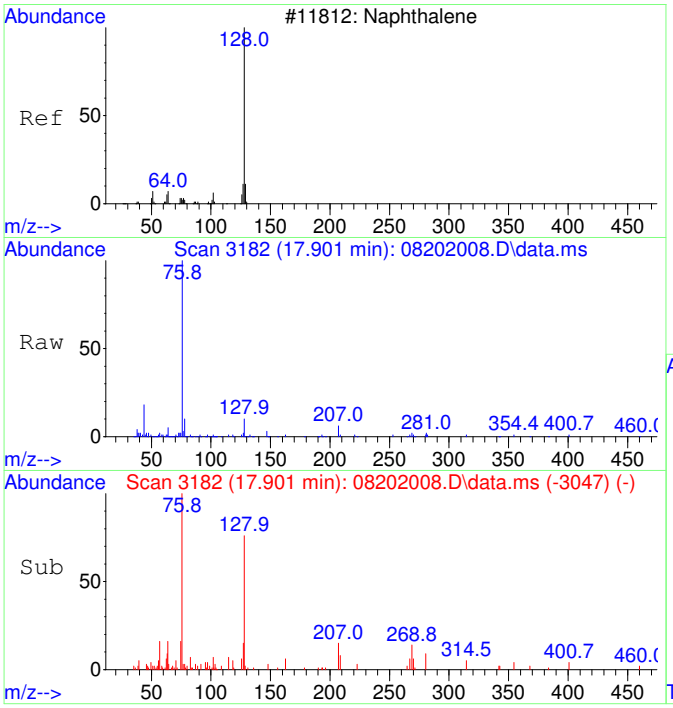


#47
1,2,4-Trimethylbenzene SCAN
Concen: 63.32 ug/L
RT: 15.909 min Scan# 2722
Delta R.T. 0.010 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:105 Resp: 4918

Ion	Ratio	Lower	Upper
105	100		
120	10.8	16.9	76.9#
119	0.0	0.0	41.9
77	50.3	0.0	42.3#

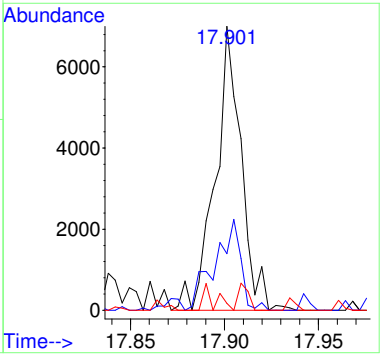




#48
Naphthalene SCAN
Concen: 57.30 ug/L
RT: 17.901 min Scan# 3182
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:128 Resp: 6734

Ion	Ratio	Lower	Upper
128	100		
127	32.0	0.0	44.0
129	3.8	0.0	40.8



S20H039-SCV1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\082020\
Data File : 08202009.D
Acq On : 20 Aug 2020 17:49
InstName : AG5975C
Operator : TD
Sample : S20H039-SCV1
Misc : 2030074 5 mg/L
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 21 08:34:36 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\082020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

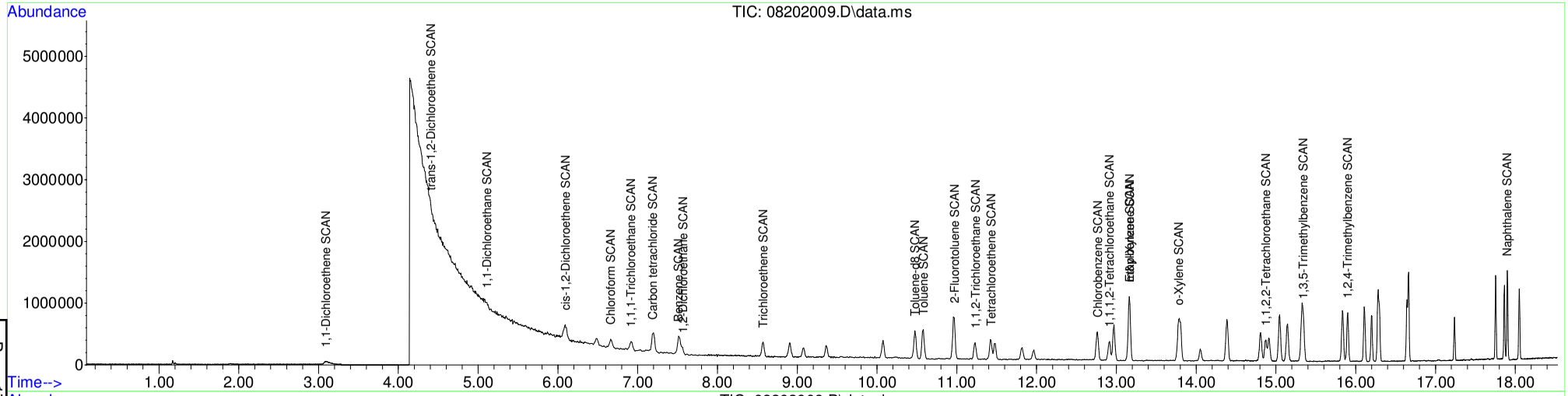
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.959	109	757040	5000.00 ug/L	-0.01
System Monitoring Compounds					
12) Toluene-d8	10.477	98	641391	4327.91 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.56%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.089	61	141995	4697.18 ug/L	84
3] trans-1,2-Dichloroethene	4.409	61	156435	4478.96 ug/L	98
4] 1,1-Dichloroethane	5.105	63	188877	4344.30 ug/L	99
5] cis-1,2-Dichloroethene	6.094	61	200211	4362.57 ug/L	99
6] Chloroform	6.664	83	206722	4400.85 ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	222492	4361.45 ug/L	99
8] Carbon tetrachloride	7.187	117	210347	4380.95 ug/L	100
9] Benzene	7.515	78	543380	4224.52 ug/L	99
10] 1,2-Dichloroethane	7.552	62	201688	4392.50 ug/L	98
11] Trichloroethene	8.569	130	168424	4348.96 ug/L	93
13] Toluene	10.571	91	766745	4058.14 ug/L	99
14] 1,1,2-Trichloroethane	11.222	97	175664	4266.80 ug/L	97
15] Tetrachloroethene	11.421	166	233305	4266.83 ug/L	100
16] Chlorobenzene	12.757	112	577755	4270.56 ug/L	93
17] 1,1,1,2-Tetrachloroethane	12.908	131	208187	4294.60 ug/L	100
18] Ethylbenzene	12.964	91	952897	4143.40 ug/L	98
19] m&p-Xylene	13.162	91	1459415	8119.44 ug/L	97
20] o-Xylene	13.774	91	798994	4160.72 ug/L	96
21] 1,1,2,2-Tetrachloroethane	14.873	83	358838	4216.30 ug/L	100
22] 1,3,5-Trimethylbenzene	15.340	105	853826	4177.31 ug/L	97
23] 1,2,4-Trimethylbenzene	15.896	105	851500	4010.73 ug/L	96
24] Naphthalene	17.902	128	1385206	4128.17 ug/L	100
25) 2-Fluorotoluene SCAN	10.969	109	369181	5002.63 ug/L	96
26) 1,1-Dichloroethene SCAN	3.095	61	79153	5050.47 ug/L #	26
27) trans-1,2-Dichloroethe...	4.408	61	82682	4263.38 ug/L	86
28) 1,1-Dichloroethane SCAN	5.111	63	103619	4616.73 ug/L	95
29) cis-1,2-Dichloroethene...	6.093	61	108450	4509.94 ug/L #	76
30) Chloroform SCAN	6.662	83	116757	4476.50 ug/L	95
31) 1,1,1-Trichloroethane ...	6.918	97	110368	4643.51 ug/L	93
32) Carbon tetrachloride SCAN	7.185	117	106486	4295.03 ug/L	86
33) Benzene SCAN	7.514	78	297664	4548.46 ug/L	96
34) 1,2-Dichloroethane SCAN	7.562	62	107394	4444.21 ug/L	98
35) Trichloroethene SCAN	8.568	130	79510	4421.13 ug/L	85
36) Toluene-d8 SCAN	10.475	98	338745	4693.60 ug/L	93
37) Toluene SCAN	10.580	91	401544	4344.47 ug/L	99
38) 1,1,2-Trichloroethane ...	11.231	97	88219	4252.37 ug/L	89
39) Tetrachloroethene SCAN	11.430	166	104871	4722.81 ug/L	94
40) Chlorobenzene SCAN	12.764	112	279082	4418.85 ug/L	91
41) 1,1,1,2-Tetrachloroeth...	12.915	131	96758	4139.72 ug/L	95
42) Ethylbenzene SCAN	13.161	91	746698	4434.47 ug/L	90
43) m&p-Xylene SCAN	13.161	91	746698	4434.47 ug/L	91
44) o-Xylene SCAN	13.781	91	405263	4496.31 ug/L	96
45) 1,1,2,2-Tetrachloroeth...	14.875	83	198460	4515.61 ug/L	95
46) 1,3,5-Trimethylbenzene...	15.343	105	412807	4345.78 ug/L	99
47) 1,2,4-Trimethylbenzene...	15.899	105	420213	4323.35 ug/L	94
48) Naphthalene SCAN	17.901	128	615008	4181.64 ug/L	99

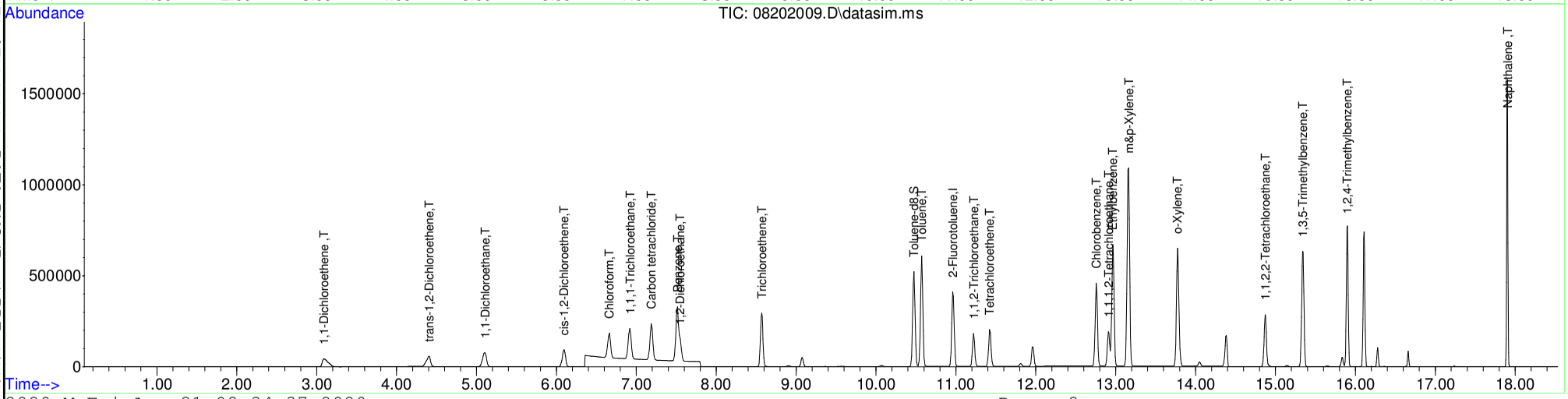
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\082020\
Data File : 08202009.D
Acq On : 20 Aug 2020 17:49
InstName : AG5975C
Operator : TD
Sample : S20H039-SCV1
Misc : 2030074 5 mg/L
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 21 08:34:36 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\082020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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Calibration

2008017

Calibration Date: 08/20/2020

Instrument: AG5975CV

Calibration Analyses:

VOCs, Passive Samplers

Response Factor Report AG5975C

Method Path : C:\MSDCHEM\1\RAVIOLI METHODS\2020\
Method File : 082020.M
Title : Volatile Organic Analysis - Passive samplers
Last Update : Fri Aug 21 08:33:54 2020
Response Via : Initial Calibration

Calibration Files
25 =08202003.D 10 =08202004.D 5 =08202005.D 1 =08202006.D .15 =08202007.D .05 =08202008.D

		Compound	25	10	5	1	.15	.05	Avg	%RSD
1)	I	2-Fluorotoluene	----------ISTD----------							
2)	T	1,1-Dichloroet...	0.177	0.257	0.188	0.218	0.198	0.160	0.200	16.98
3)	T	trans-1,2-Dich...	0.203	0.293	0.216	0.246	0.230	0.197	0.231	15.27
4)	T	1,1-Dichloroet...	0.248	0.362	0.267	0.311	0.292	0.244	0.287	15.50
5)	T	cis-1,2-Dichlo...	0.261	0.382	0.283	0.330	0.300	0.263	0.303	15.27
6)	T	Chloroform	0.278	0.400	0.292	0.331	0.296	0.265	0.310	15.85
7)	T	1,1,1-Trichlor...	0.299	0.435	0.318	0.360	0.309	0.301	0.337	15.77
8)	T	Carbon tetrach...	0.282	0.413	0.301	0.340	0.290	0.278	0.317	16.33
9)	T	Benzene	0.711	1.056	0.777	0.908	0.795		0.850	15.98
10)	T	1,2-Dichloroet...	0.261	0.384	0.284	0.334	0.292	0.265	0.303	15.61
11)	T	Trichloroethene	0.215	0.322	0.240	0.279	0.237	0.242	0.256	15.05
12)	S	Toluene-d8	0.787	1.215	0.934	1.084	0.887	0.967	0.979	15.43
13)	T	Toluene	0.928	1.442	1.122	1.350	1.176	1.468	1.248	16.80
14)	T	1,1,2-Trichlor...	0.226	0.342	0.256	0.293	0.245	0.270	0.272	15.00
15)	T	Tetrachloroethene	0.290	0.451	0.346	0.393	0.322	0.365	0.361	15.58
16)	T	Chlorobenzene	0.700	1.097	0.858	0.980	0.798	0.928	0.894	15.66
17)	T	1,1,1,2-Tetrac...	0.258	0.400	0.308	0.350	0.285	0.320	0.320	15.68
18)	T	Ethylbenzene	1.139	1.801	1.423	1.675	1.409	1.666	1.519	15.88
19)	T	m&p-Xylene	0.880	1.387	1.091	1.290	1.114	1.362	1.187	16.42
[illegible])	T	o-Xylene	0.966	1.527	1.195	1.370	1.145	1.407	1.268	16.09
[illegible])	T	1,1,2,2-Tetrac...	0.438	0.688	0.537	0.613	0.501	0.596	0.562	15.76
[illegible])	T	1,3,5-Trimethy...	1.036	1.660	1.300	1.468	1.209	1.427	1.350	16.12
[illegible])	T	1,2,4-Trimethy...	1.048	1.684	1.315	1.486	1.284	1.597	1.402	16.63
[illegible])	T	Naphthalene	1.642	2.698	2.149	2.427	2.006	2.375	2.216	16.65
[illegible])		2-Fluorotoluen...			0.487				0.487	0.00
[illegible])		1,1-Dichloroet...			0.104				0.104	0.00
[illegible])		trans-1,2-Dich...			0.128				0.128	0.00
[illegible])		1,1-Dichloroet...			0.148				0.148	0.00
[illegible])		cis-1,2-Dichlo...			0.159				0.159	0.00
[illegible])		Chloroform SCAN			0.172				0.172	0.00
[illegible])		1,1,1-Trichlor...			0.157				0.157	0.00
[illegible])		Carbon tetrach...			0.164				0.164	0.00
[illegible])		Benzene SCAN			0.432				0.432	0.00
[illegible])		1,2-Dichloroet...			0.160				0.160	0.00
[illegible])		Trichloroethen...			0.119				0.119	0.00
[illegible])		Toluene-d8 SCAN			0.477				0.477	0.00
[illegible])		Toluene SCAN			0.610				0.610	0.00
[illegible])		1,1,2-Trichlor...			0.137				0.137	0.00
[illegible])		Tetrachloroeth...			0.147				0.147	0.00
[illegible])		Chlorobenzene ...			0.417				0.417	0.00
[illegible])		1,1,1,2-Tetrac...			0.154				0.154	0.00
[illegible])		Ethylbenzene SCAN			1.112				1.112	0.00

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Response Factor Report AG5975C

Method Path : C:\MSDCHEM\1\RAVIOLI METHODS\2020\
Method File : 082020.M

43)	m&p-Xylene SCAN	1.112	1.112	0.00
44)	o-Xylene SCAN	0.595	0.595	0.00
45)	1,1,2,2-Tetrac...	0.290	0.290	0.00
46)	1,3,5-Trimethy...	0.627	0.627	0.00
47)	1,2,4-Trimethy...	0.642	0.642	0.00
48)	Naphthalene SCAN	0.971	0.971	0.00

(#) = Out of Range

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Table of Contents

Method Path : C:\MSDCHEM\1\RAVIOLI METHODS\2020\
Method File : 082020.M
Title : Volatile Organic Analysis - Passive samplers
Last Update : Fri Aug 21 08:33:54 2020
Response Via : Initial Calibration

Total Cpnds : 48

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	2-Fluorotoluene	-109	10.970	1.000	A	1	A	B
2	T	1,1-Dichloroethene	-61	3.090	0.282	A	1	A	B
3	T	trans-1,2-Dichloroethene	-61	4.396	0.401	A	1	A	B
4	T	1,1-Dichloroethane	-63	5.099	0.465	A	1	A	B
5	T	cis-1,2-Dichloroethene	-61	6.094	0.556	A	1	A	B
6	T	Chloroform	-83	6.664	0.607	A	1	A	B
7	T	1,1,1-Trichloroethane	-97	6.919	0.631	A	2	A	B
8	T	Carbon tetrachloride	-117	7.187	0.655	A	1	A	B
9	T	Benzene	-78	7.515	0.685	A	1	A	B
10	T	1,2-Dichloroethane	-62	7.552	0.688	A	1	A	B
11	T	Trichloroethene	-130	8.569	0.781	A	3	A	B
12	S	Toluene-d8	-98	10.477	0.955	A	1	A	B
13	T	Toluene	-91	10.571	0.964	A	1	A	B
14	T	1,1,2-Trichloroethane	-97	11.222	1.023	A	1	A	B
15	T	Tetrachloroethene	-166	11.421	1.041	A	1	A	B
16	T	Chlorobenzene	-112	12.757	1.163	A	1	A	B
17	T	1,1,1,2-Tetrachloroethane	-131	12.908	1.177	A	1	A	B
18	T	Ethylbenzene	-91	12.964	1.182	A	2	A	B
19	T	m&p-Xylene	-91	13.162	1.200	A	2	A	B
20	T	o-Xylene	-91	13.774	1.256	A	1	A	B
21	T	1,1,2,2-Tetrachloroethane	-83	14.873	1.356	A	1	A	B
22	T	1,3,5-Trimethylbenzene	-105	15.345	1.399	A	1	A	B
23	T	1,2,4-Trimethylbenzene	-105	15.896	1.449	A	1	A	B
24	T	Naphthalene	-128	17.903	1.632	A	1	A	B
25		2-Fluorotoluene SCAN	109	10.969	1.000	A	1	A	B
26		1,1-Dichloroethene SCAN	61	3.107	0.283	A	2	A	B
27		trans-1,2-Dichloroethene SCAN	61	4.401	0.401	A	2	A	B
28		1,1-Dichloroethane SCAN	63	5.104	0.465	A	2	A	B
29		cis-1,2-Dichloroethene SCAN	61	6.093	0.555	A	3	A	B
30		Chloroform SCAN	83	6.662	0.607	A	2	A	B
31		1,1,1-Trichloroethane SCAN	97	6.918	0.631	A	2	A	B
32		Carbon tetrachloride SCAN	117	7.185	0.655	A	3	A	B
33		Benzene SCAN	78	7.514	0.685	A	3	A	B
34		1,2-Dichloroethane SCAN	62	7.550	0.688	A	2	A	B
35		Trichloroethene SCAN	130	8.568	0.781	A	3	A	B
36		Toluene-d8 SCAN	98	10.475	0.955	A	1	A	B
37		Toluene SCAN	91	10.580	0.964	A	2	A	B
38		1,1,2-Trichloroethane SCAN	97	11.221	1.023	A	3	A	B
39		Tetrachloroethene SCAN	166	11.430	1.042	A	3	A	B
40		Chlorobenzene SCAN	112	12.764	1.164	A	3	A	B
41		1,1,1,2-Tetrachloroethane SCAN	131	12.907	1.177	A	3	A	B
42		Ethylbenzene SCAN	91	13.161	1.200	A	2	A	B
43		m&p-Xylene SCAN	91	13.161	1.200	A	3	A	B
44		o-Xylene SCAN	91	13.781	1.256	A	2	A	B
45		1,1,2,2-Tetrachloroethane SCAN	83	14.872	1.356	A	2	A	B
46		1,3,5-Trimethylbenzene SCAN	105	15.343	1.399	A	2	A	B
47		1,2,4-Trimethylbenzene SCAN	105	15.899	1.449	A	3	A	B
48		Naphthalene SCAN	128	17.901	1.632	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

082020.M Fri Aug 21 09:05:10 2020

CHEMSTATION AREA COUNT REPORT

AG5975C
S20H039-SCV1
2030074 5 mg/L
8/20/2020
Fri Aug 21 08:33:54 2020
TD

#	Name	L1	L2	L3	L4	L5	L6
1)	2-Fluorotoluene	648237	658265	673233	620555	687675	604968
2)	1,1-Dichloroethene	574530	337762	126761	27036	4078	970
3)	trans-1,2-Dichloroethene	656585	385140	145387	30539	4743	1192
4)	1,1-Dichloroethane	803642	475966	180029	38542	6017	1475
5)	cis-1,2-Dichloroethene	844386	502402	190553	41004	6181	1594
6)	Chloroform	899977	526532	196458	41060	6101	1606
7)	1,1,1-Trichloroethane	968878	573090	214003	44677	6374	1818
8)	Carbon tetrachloride	914170	543134	202678	42146	5978	1680
9)	Benzene	2304166	1390859	523170	112745	16396	3813
10)	1,2-Dichloroethane	846849	505651	191144	41424	6015	1603
11)	Trichloroethene	695334	423697	161743	34670	4884	1464
12)	Toluene-d8	2550057	1598935	629076	134499	18291	5849
13)	Toluene	3008786	1898928	755646	167580	24264	8880
14)	1,1,2-Trichloroethane	733249	449618	172328	36313	5063	1632
15)	Tetrachloroethene	940662	593500	232804	48775	6650	2206
16)	Chlorobenzene	2268821	1444139	577532	121629	16465	5616
17)	1,1,1,2-Tetrachloroethane	836326	527138	207134	43449	5876	1936
18)	Ethylbenzene	3692757	2370804	957968	207872	29078	10080
19)	m&p-Xylene	5704874	3652536	1468448	320098	45947	16478
20)	o-Xylene	3130122	2010115	804751	169989	23631	8511
21)	1,1,2,2-Tetrachloroethane	1420481	905676	361853	76025	10329	3604
22)	1,3,5-Trimethylbenzene	3358352	2186063	875077	182134	24949	8630
23)	1,2,4-Trimethylbenzene	3395311	2217101	885300	184398	26485	9662
24)	Naphthalene	5320470	3552389	1447043	301171	41384	14370

CHEMSTATION CONCENTRATION REPORT

AG5975C
S20H039-SCV1
2030074 5 mg/L
8/20/2020
Fri Aug 21 08:33:54 2020
TD

#	Name	L1	L2	L3	L4	L5	L6
1)	2-Fluorotoluene	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00
2)	1,1-Dichloroethene	25000.00	10000.00	5000.00	1000.00	150.00	50.00
3)	trans-1,2-Dichloroethene	25000.00	10000.00	5000.00	1000.00	150.00	50.00
4)	1,1-Dichloroethane	25000.00	10000.00	5000.00	1000.00	150.00	50.00
5)	cis-1,2-Dichloroethene	25000.00	10000.00	5000.00	1000.00	150.00	50.00
6)	Chloroform	25000.00	10000.00	5000.00	1000.00	150.00	50.00
7)	1,1,1-Trichloroethane	25000.00	10000.00	5000.00	1000.00	150.00	50.00
8)	Carbon tetrachloride	25000.00	10000.00	5000.00	1000.00	150.00	50.00
9)	Benzene	25000.00	10000.00	5000.00	1000.00	150.00	1.00
10)	1,2-Dichloroethane	25000.00	10000.00	5000.00	1000.00	150.00	50.00
11)	Trichloroethene	25000.00	10000.00	5000.00	1000.00	150.00	50.00
12)	Toluene-d8	25000.00	10000.00	5000.00	1000.00	150.00	50.00
13)	Toluene	25000.00	10000.00	5000.00	1000.00	150.00	50.00
14)	1,1,2-Trichloroethane	25000.00	10000.00	5000.00	1000.00	150.00	50.00
15)	Tetrachloroethene	25000.00	10000.00	5000.00	1000.00	150.00	50.00
16)	Chlorobenzene	25000.00	10000.00	5000.00	1000.00	150.00	50.00
17)	1,1,1,2-Tetrachloroethane	25000.00	10000.00	5000.00	1000.00	150.00	50.00
18)	Ethylbenzene	25000.00	10000.00	5000.00	1000.00	150.00	50.00
19)	m&p-Xylene	50000.00	20000.00	10000.00	2000.00	300.00	100.00
20)	o-Xylene	25000.00	10000.00	5000.00	1000.00	150.00	50.00
21)	1,1,2,2-Tetrachloroethane	25000.00	10000.00	5000.00	1000.00	150.00	50.00
22)	1,3,5-Trimethylbenzene	25000.00	10000.00	5000.00	1000.00	150.00	50.00
23)	1,2,4-Trimethylbenzene	25000.00	10000.00	5000.00	1000.00	150.00	50.00
24)	Naphthalene	25000.00	10000.00	5000.00	1000.00	150.00	50.00

SCV REPORT

Instrument Name: AG5975C
Sample Name: S20H039-SCV1
Misc Info: 2030074 5 mg/L
Date Acquired: 8/20/2020
QLast Update: Fri Aug 21 08:33:54 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.970	5000	5000.00	100%	70	130	pass
2)	1,1-Dichloroethene	3.090	5000	4697.18	94%	70	130	pass
3)	trans-1,2-Dichloroethene	4.396	5000	4478.96	90%	70	130	pass
4)	1,1-Dichloroethane	5.099	5000	4344.30	87%	70	130	pass
5)	cis-1,2-Dichloroethene	6.094	5000	4362.57	87%	70	130	pass
6)	Chloroform	6.664	5000	4400.85	88%	70	130	pass
7)	1,1,1-Trichloroethane	6.919	5000	4361.45	87%	70	130	pass
8)	Carbon tetrachloride	7.187	5000	4380.95	88%	70	130	pass
9)	Benzene	7.515	5000	4224.52	84%	70	130	pass
10)	1,2-Dichloroethane	7.552	5000	4392.50	88%	70	130	pass
11)	Trichloroethene	8.569	5000	4348.96	87%	70	130	pass
12)	Toluene-d8	10.477	5000	4327.91	87%	70	130	pass
13)	Toluene	10.571	5000	4058.14	81%	70	130	pass
14)	1,1,2-Trichloroethane	11.222	5000	4266.80	85%	70	130	pass
15)	Tetrachloroethene	11.421	5000	4266.83	85%	70	130	pass
16)	Chlorobenzene	12.757	5000	4270.56	85%	70	130	pass
17)	1,1,1,2-Tetrachloroethane	12.908	5000	4294.60	86%	70	130	pass
18)	Ethylbenzene	12.964	5000	4143.40	83%	70	130	pass
19)	m&p-Xylene	13.162	10000	8119.44	81%	70	130	pass
20)	o-Xylene	13.774	5000	4160.72	83%	70	130	pass
21)	1,1,2,2-Tetrachloroethane	14.873	5000	4216.30	84%	70	130	pass
22)	1,3,5-Trimethylbenzene	15.345	5000	4177.31	84%	70	130	pass
23)	1,2,4-Trimethylbenzene	15.896	5000	4010.73	80%	70	130	pass
24)	Naphthalene	17.903	5000	4128.17	83%	70	130	pass

SEQUENCE

S20J006

Sequence Date: 10/05/2020

Instrument: AG5975CV

Sequence Analyses:

VOCs, Passive Samplers

ANALYST / REVIEWER - DATA REVIEW CHECKLIST

BATCH #:	B20J004	SEQUENCE #:	S20J006 10/05/20
BATCH #:		ANALYSIS:	VOA Passive Air.

	CHECKLIST ITEM	N/A	ANALYST Y/N	REVIEWER Y/N	IDENTIFY OUTLIERS / COMMENTS
DOCUMENTATION	ANALYST: Bench sheet(s) attached? REVIEWER: Bench sheet(s) reviewed?	☐	Y	Y	
	ANALYST: Sequence log(s) attached? REVIEWER: Sequence log(s) reviewed?	☐	Y	Y	
	ANALYST: Every run has a PDF in LIMS? REVIEWER: Every PDF reviewed?	☐	Y	Y	
INITIAL CALIBRATION	Date of Initial Calibration used: If applicable, note date of "Last Update" in Comments.	Fri Aug 21 08:33:54 2020			
	Initial Calibration ID (LIMS number):	2008017			
	ICAL within QC criteria?	✔			
	SCV within QC criteria?	✔			
INSTRUMENT / QC CHECKS	Tune or degradation checks within QC criteria?	☐	Y	Y	
	CCV(s) within QC criteria?	☐	Y	Y	
	QLS(s) within QC criteria?	☐	Y	Y	
	CB(s) or storage blank(s) within QC criteria?	✔			
	Other instrument checks within QC criteria? Specify if applicable.	✔			
BATCH QCs	Method blanks < 1/2 QL?	☐	Y	Y	
	LCS(s) or SRM(s) within QC criteria?	☐	Y	Y	
	MSs/MSDs and/or DUPs within QC criteria?	✔			
	Other method-specific QCs within QC criteria? Specify if applicable.	✔			

ANALYST / REVIEWER - DATA REVIEW CHECKLIST

BATCH #:	B20J004	SEQUENCE #:	S20J006 10/05/20
BATCH #:		ANALYSIS:	VOA Passive Air.

	CHECKLIST ITEM	N/A	ANALYST Y/N	REVIEWER Y/N	IDENTIFY OUTLIERS / COMMENTS
IS / SS	Internal standards within QC criteria?	☐	Y	Y	
	Surrogates within QC criteria?	☐	Y	Y	
SAMPLE DATA	Were samples prepared & analyzed within holding time?	☐	Y	Y	
	If samples need to be re-run, were RE(s) made in LIMS?	☐	Y	Y	
	Do any samples need to be re-digested or re-extracted?	✔			
	Were all data qualifiers appropriately applied?	✔			
	Are problems, anomalies, discrepancies documented in LIMS? Specify if applicable.	✔			
MANUAL INT	Were manual integrations performed and documented? Specify if applicable.	☐	Y	Y	

APPROVALS	ANALYST INITIALS & DATE:	TD 10/06/20
	REVIEWED BY:	Rajabi, Ziyad Digitally signed by Rajabi, Ziyad Date: 2020.10.07 15:59:13 -07'00' SIGN HERE

COMMENTS

Custom analyte list.

Injection Log

Operator: TD
Directory: C:\msdchem\1\Ravioli Data\2020\100520\

Vial	File Name	Mult	Sample Info	Misc Info	Date Acquired
1	10052001.D	1	S20J006-IBL1		5 Oct 2020 9:22
2	10052002.D	1	S20J006-TUN1	BFB 2040028	5 Oct 2020 9:44
3	10052003.D	1	S20J006-CCV1	2030070 5 mg/L	5 Oct 2020 9:53
4	10052004.D	1	S20J006-CRL1	2030073 0.05 mg/L	5 Oct 2020 10:17
5	10052005.D	1	B20J004-BLK1		5 Oct 2020 10:41
6	10052006.D	1	B20J004-BS1		5 Oct 2020 11:51
7	10052007.D	1	B20J004-BSD1		5 Oct 2020 12:15
8	10052008.D	1	B20J004-MRL1		5 Oct 2020 12:39
9	10052009.D	1	2009034-05		5 Oct 2020 13:02
10	10052010.D	1	2009035-01		5 Oct 2020 13:26
11	10052011.D	1	2009035-02		5 Oct 2020 13:49
12	10052012.D	1	2009035-03		5 Oct 2020 14:13
13	10052013.D	1	2009035-04		5 Oct 2020 14:37
14	10052014.D	1	2009035-05		5 Oct 2020 15:00
15	10052015.D	1	2009035-06		5 Oct 2020 15:24
16	10052016.D	1	2009035-07		5 Oct 2020 15:48
17	10052017.D	1	2009035-08		5 Oct 2020 16:11
18	10052018.D	1	2009035-09		5 Oct 2020 16:35
19	10052019.D	1	2009036-01		5 Oct 2020 16:58

GC/MS QA-QC Check Report

Table of Contents

Tune File : C:\msdchem\1\Ravioli Data\2020\100520\10052002.D
Tune Time : 5 Oct 2020 9:44

Daily Calibration File : C:\msdchem\1\Ravioli Data\2020\100520\10052003.D

File	Sample	Surrogate Recovery %	Internal Standard Responses
			440993
10052003.D	S20J006-CC	97	440993
10052004.D	S20J006-CR	1*	622858
10052005.D	B20J004-BL	89	609211
10052006.D	B20J004-BS	90	556900
10052007.D	B20J004-BSD	91	507262
10052008.D	B20J004-MR	89	530253
10052009.D	2009034-05	89	563014
10052010.D	2009035-01	89	634108
10052011.D	2009035-02	89	581825
10052012.D	2009035-03	88	611922
10052013.D	2009035-04	89	636683
10052014.D	2009035-05	89	544730
10052015.D	2009035-06	88	504388
10052016.D	2009035-07	89	518434
10052017.D	2009035-08	89	523052
10052018.D	2009035-09	89	505336
10052019.D	2009036-01	87	528258

(fails) - fails 12hr time check * - fails criteria

Created: Tue Oct 06 06:17:27 2020 AG5975C

Analysis Sequence

S20J006

Project: R20S18
Analysis: VOCs, Passive Samplers

Instrument: AG5975CV **Calibration ID:** 2008017 Printed: 10/06/2020 12:19 pm

Lab Number	Sample Name	Order	Analyzed Date	STD ID	ISTD ID	Sequenced By	File ID	Comments
S20J006-IBL1	Instrument Blank	1	10/5/20 9:22		2030067	TD	10052001.D	
S20J006-TUN1	BFB	2	10/5/20 9:44	2040028		TD	10052002.D	
S20J006-CCV1	Calibration Check	3	10/5/20 9:53	2030070		TD	10052003.D	
S20J006-CRL1	Instrument RL Check	4	10/5/20 10:17	2030073		TD	10052004.D	
B20J004-BLK1	Blank	5	10/5/20 10:41			TD	10052005.D	
B20J004-BS1	LCS	6	10/5/20 11:51			TD	10052006.D	
B20J004-BSD1	LCS Dup	7	10/5/20 12:15			TD	10052007.D	
B20J004-MRL1	MRL Check	8	10/5/20 12:39			TD	10052008.D	
2009034-05 A	6Sixty-A8-SC-1ft-3d-R	9	10/5/20 13:02			TD	10052009.D	
2009035-01 A	Waverly-C7-RR1-ShrDrn-PP-4d	10	10/5/20 13:26			TD	10052010.D	
2009035-02 A	Waverly-C7-K2-Counter-BZ-4d	11	10/5/20 13:49			TD	10052011.D	
2009035-03 A	Waverly-C7-RR3-BZ-4d	12	10/5/20 14:13			TD	10052012.D	
2009035-04 A	Waverly-C7-Balc2-OUT-6d	13	10/5/20 14:37			TD	10052013.D	
2009035-05 A	Waverly-SF3-K1-Counter-BZ-6d	14	10/5/20 15:00			TD	10052014.D	
2009035-06 A	Waverly-SF3-K1-CounterD-BZ-6d	15	10/5/20 15:24			TD	10052015.D	
2009035-07 A	Waverly-SF3-LNDRY2-BZ-6d	16	10/5/20 15:48			TD	10052016.D	
2009035-08 A	Waverly-SF3-RR2--BZ-6d	17	10/5/20 16:11			TD	10052017.D	
2009035-09 A	Waverly-SF3-RR1-BZ-6d	18	10/5/20 16:35			TD	10052018.D	
2009036-01 A	F6-010-3ft-6d-R	19	10/5/20 16:58			TD	10052019.D	

Sequence Comments

Analysis Sequence

S20J006

(Continued)

Project: R20S18
Analysis: VOCs, Passive Samplers

Instrument: AG5975CV **Calibration ID:** 2008017 Printed: 10/06/2020 12:19 pm

Lab Number	Sample Name	Order	Analyzed Date	STD ID	ISTD ID	Sequenced By	File ID	Comments

Reagents

Reagent #	Description

SEQUENCE DATA

S20J006

S20J006-IBL1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052001.D
Acq On : 5 Oct 2020 9:22
InstName : AG5975C
Operator : TD
Sample : S20J006-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 05 09:41:42 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

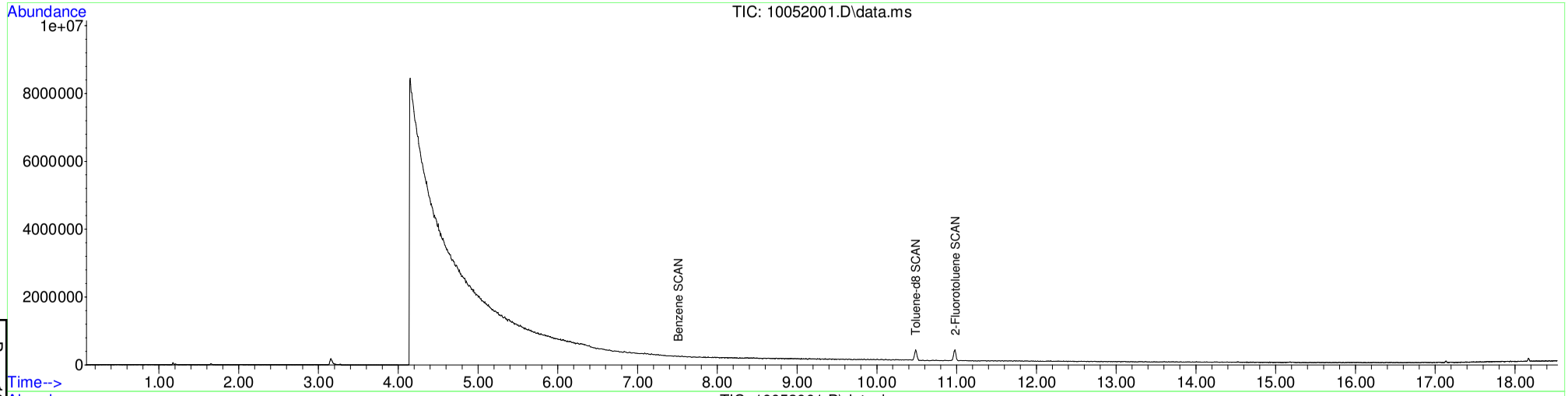
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	500190	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.487	98	427559	4366.52	ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 87.33%			
Target Compounds						Qvalue
9] Benzene	7.503	78	2995	35.24	ug/L #	1
25) 2-Fluorotoluene SCAN	10.979	109	249043	5107.60	ug/L	99
33) Benzene SCAN	7.514	78	9245	213.81	ug/L	95
36) Toluene-d8 SCAN	10.486	98	235869	4946.39	ug/L	92

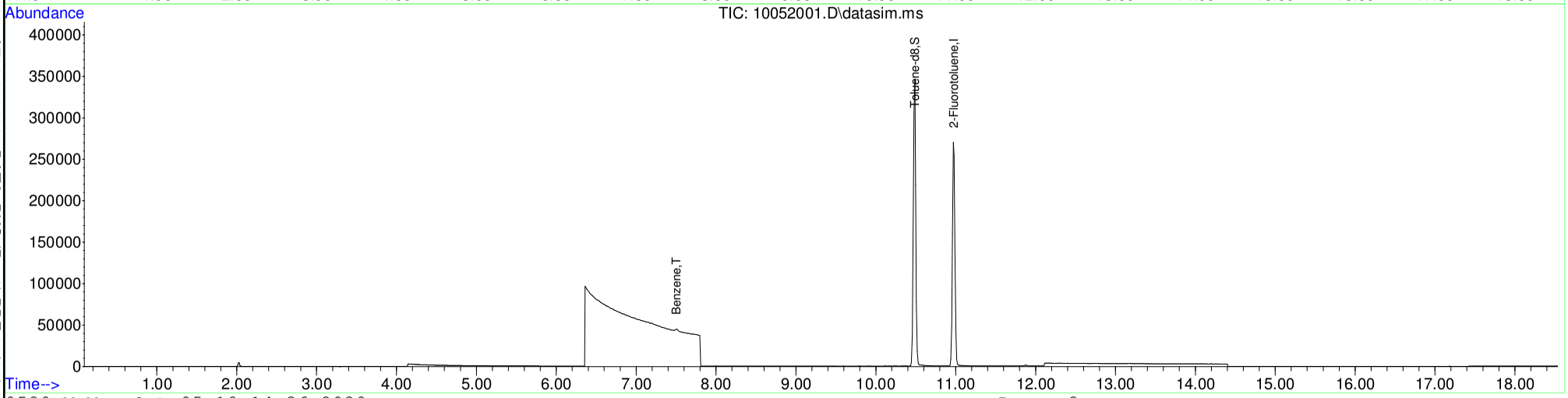
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052001.D
Acq On : 5 Oct 2020 9:22
InstName : AG5975C
Operator : TD
Sample : S20J006-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 05 09:41:42 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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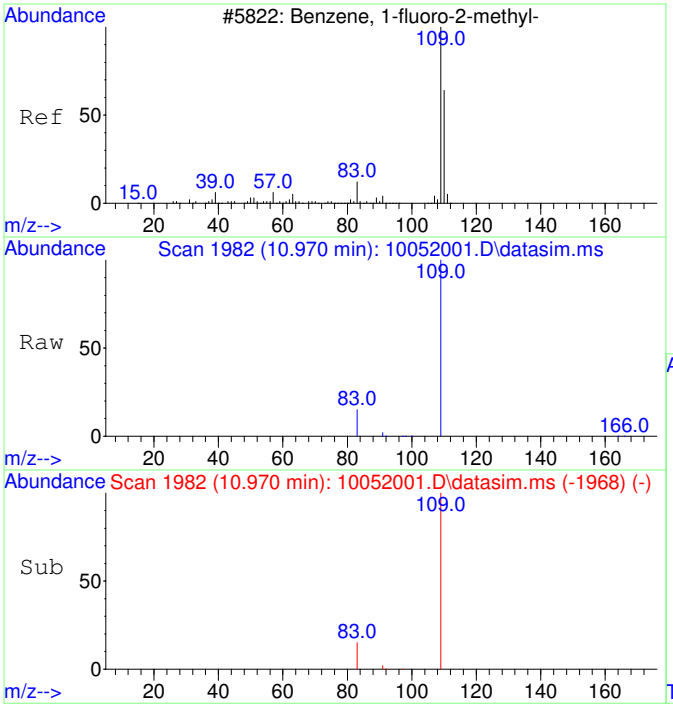
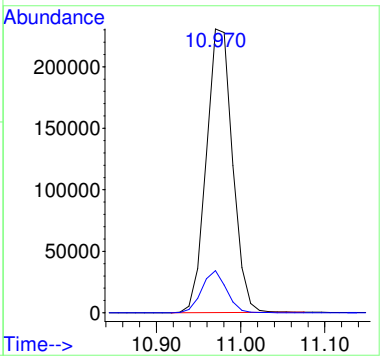
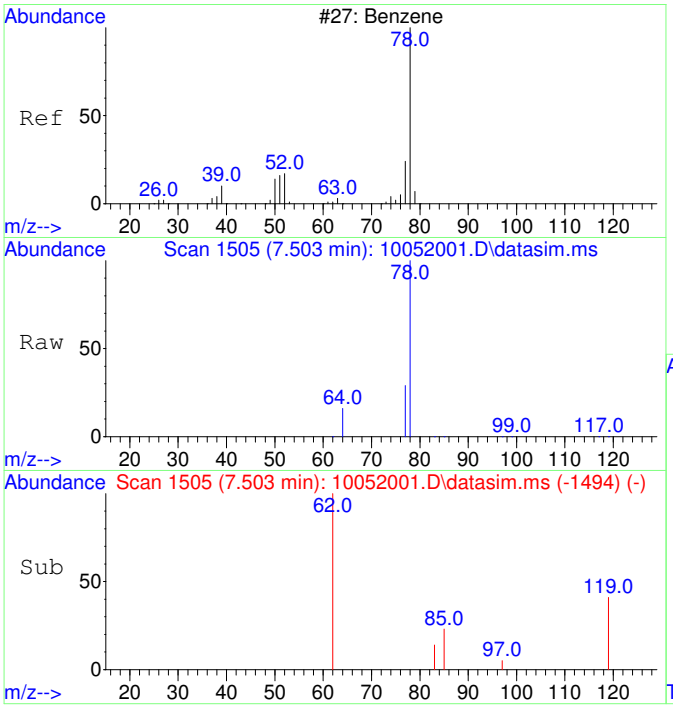


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 10052001.D
Acq: 5 Oct 2020 9:22

Tgt Ion:109 Resp: 500190

Ion	Ratio	Lower	Upper
109	100		
83	13.9	0.0	42.3

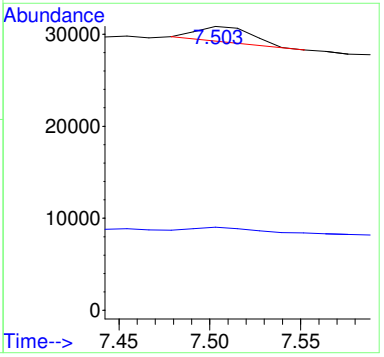


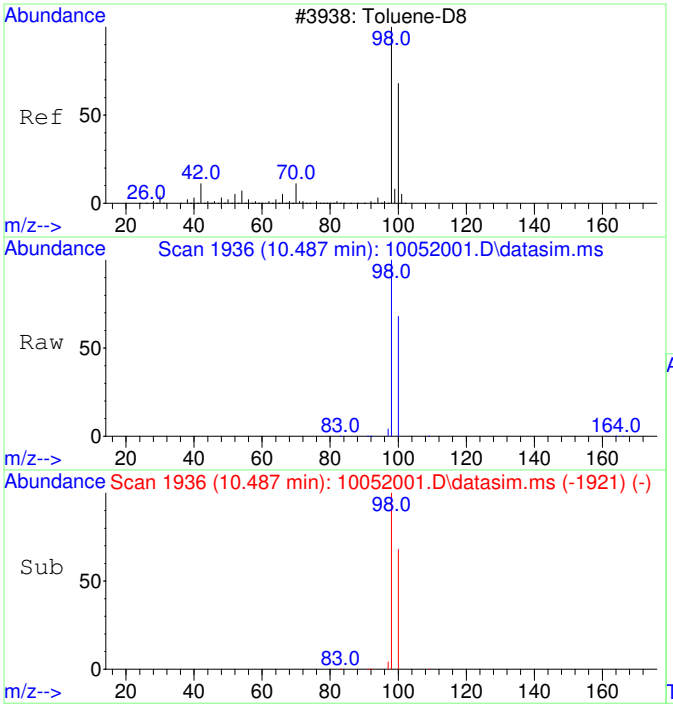


#9
Benzene
Concen: 35.24 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 10052001.D
Acq: 5 Oct 2020 9:22

Tgt Ion: 78 Resp: 2995

Ion	Ratio	Lower	Upper
78	100		
77	116.1	0.0	53.2#

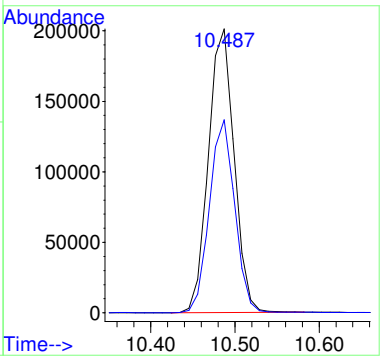


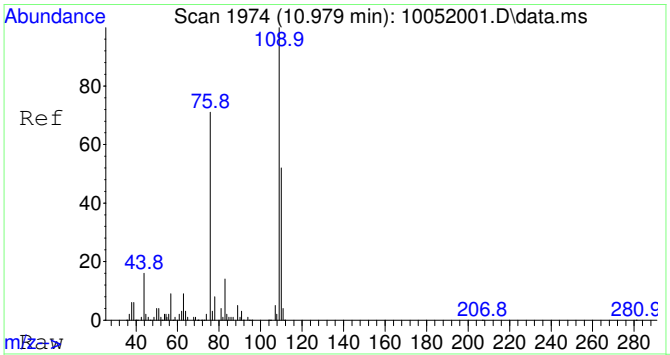


#12
Toluene-d8
Concen: 4366.52 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.010 min
Lab File: 10052001.D
Acq: 5 Oct 2020 9:22

Tgt Ion: 98 Resp: 427559

Ion	Ratio	Lower	Upper
98	100		
100	66.5	37.1	97.1

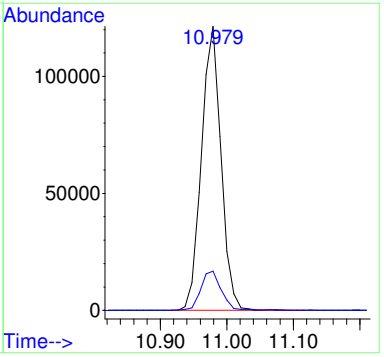


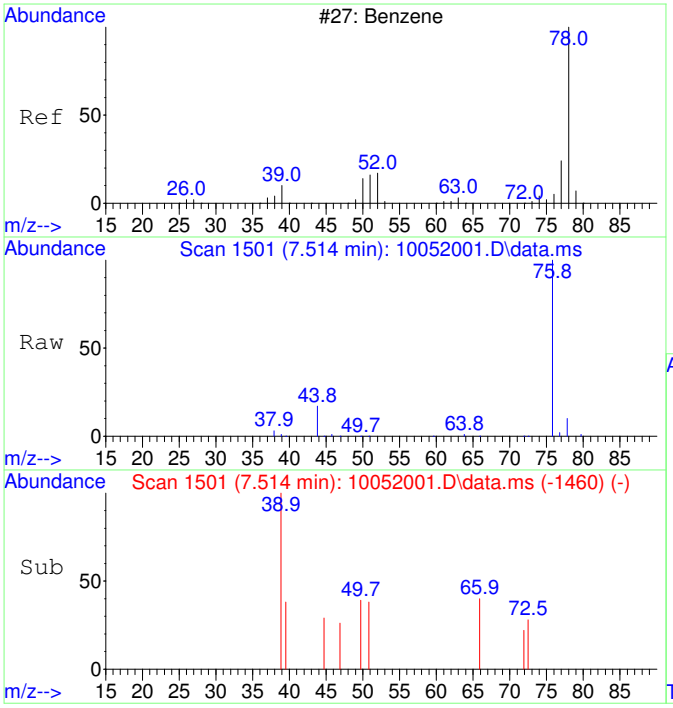


#25
2-Fluorotoluene SCAN
Concen: 5107.60 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.010 min
Lab File: 10052001.D
Acq: 5 Oct 2020 9:22

Tgt Ion:109 Resp: 249043

Ion	Ratio	Lower	Upper
109	100		
83	14.3	0.0	43.8

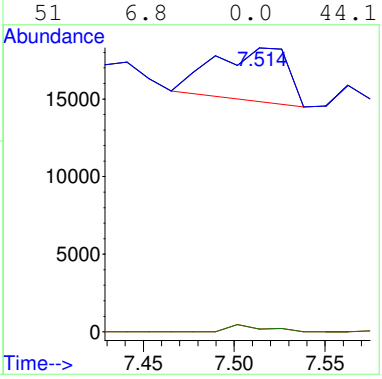


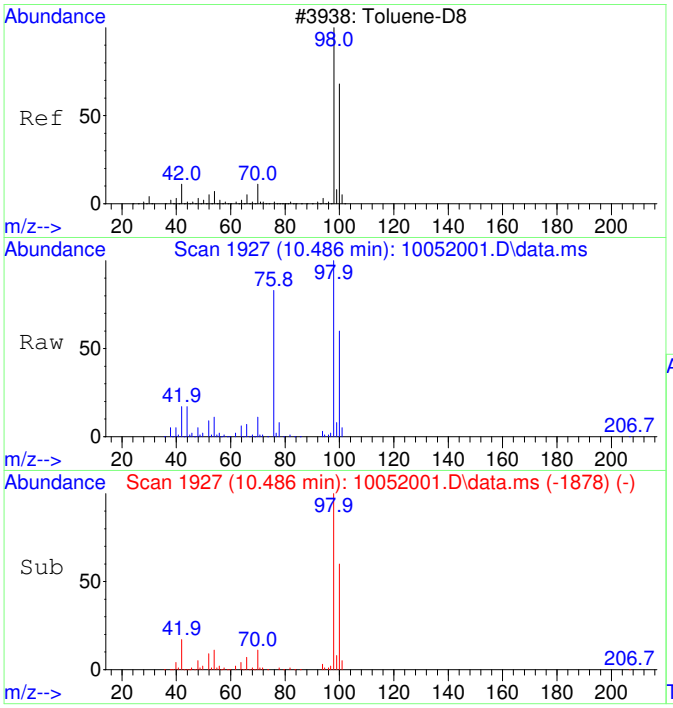


#33
Benzene SCAN
Concen: 213.81 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. -0.000 min
Lab File: 10052001.D
Acq: 5 Oct 2020 9:22

Tgt Ion: 78 Resp: 9245

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	6.8	0.0	47.9
51	6.8	0.0	44.1

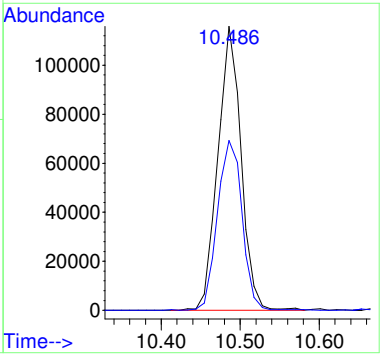




#36
Toluene-d8 SCAN
Concen: 4946.39 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.010 min
Lab File: 10052001.D
Acq: 5 Oct 2020 9:22

Tgt Ion: 98 Resp: 235869

Ion	Ratio	Lower	Upper
98	100		
100	63.6	40.0	100.0



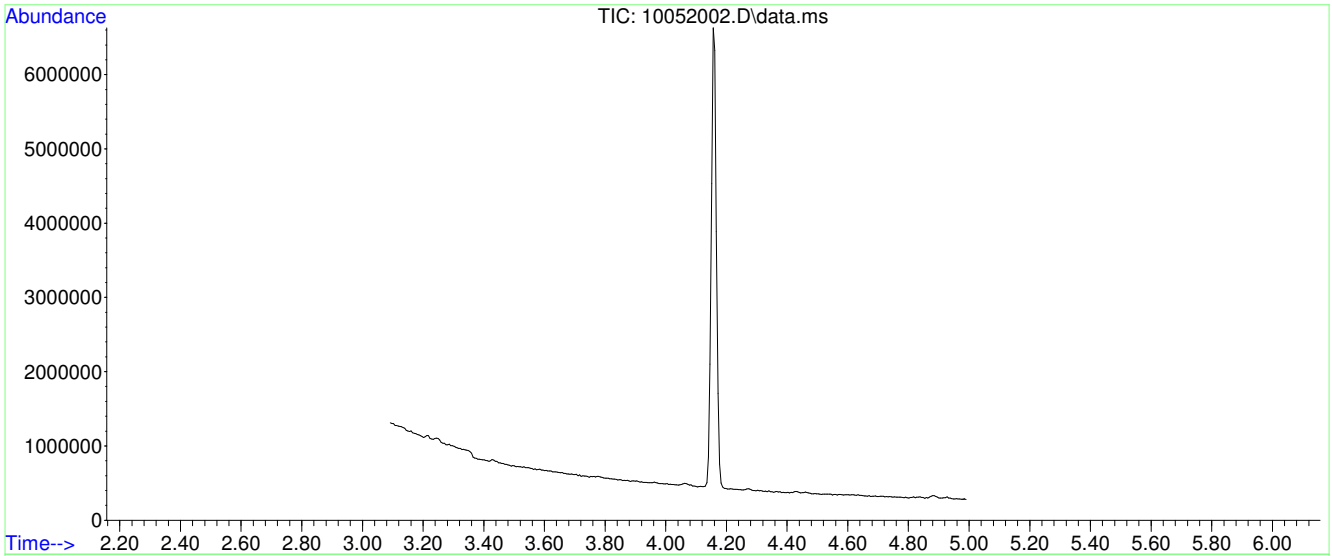
S20J006-TUN1

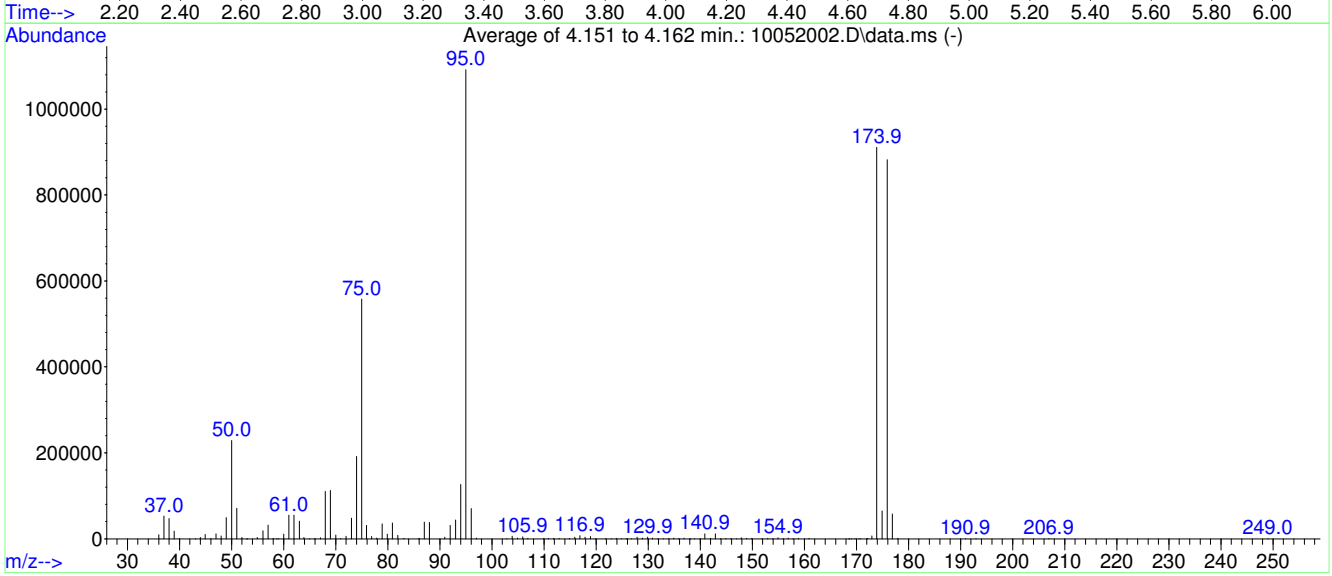
Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052002.D
Acq On : 5 Oct 2020 9:44
Operator : TD
Sample : S20J006-TUN1
Misc : BFB 2040028
ALS Vial : 2 Sample Multiplier: 1
InstName : AG5975C

Integration File: Ravioli.P

Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Title : Volatile Organic Analysis - Passive samplers
Last Update : Fri Aug 21 08:33:54 2020





AutoFind: Scans 203, 204, 205; Background Corrected with Scan 197

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.0	228693	PASS
75	95	30	60	51.1	557674	PASS
95	95	100	100	100.0	1091435	PASS
96	95	5	9	6.5	70696	PASS
173	174	0.00	2	0.7	6768	PASS
174	95	50	120	83.5	910805	PASS
175	174	5	9	7.1	65109	PASS
176	174	95	101	96.8	882069	PASS
177	176	5	9	6.5	57696	PASS

Average of 4.151 to 4.162 min.: 10052002.D\data.ms
S20J006-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	9738	49.00	49440	60.00	10586	70.95	441
37.00	53141	50.00	228693	61.00	55261	72.00	6320
38.00	47004	51.00	70851	62.00	54829	73.00	47874
39.00	17816	52.00	3020	63.00	41256	74.00	191637
40.00	715	52.90	61	63.90	3385	75.00	557674
43.05	390	54.95	3347	65.00	535	75.90	31125
44.00	3483	56.00	18291	65.90	21	76.90	5292
44.95	9888	57.00	31659	67.05	2779	77.90	1715
46.00	181	58.00	1431	68.00	110504	78.90	34815
47.00	11545	58.70	69	69.00	112251	79.90	11032
48.00	6386	59.00	290	70.00	8451	80.90	37040

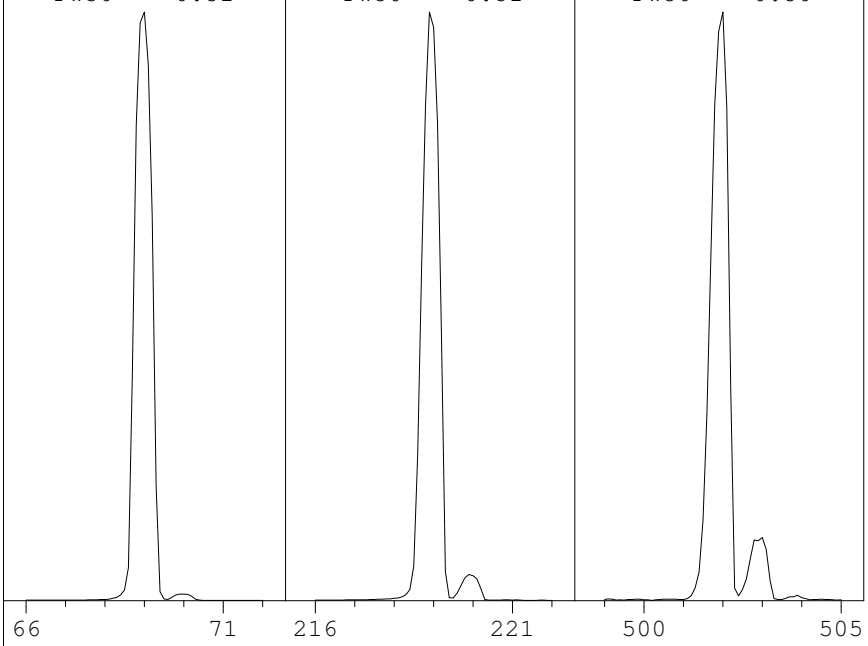
Average of 4.151 to 4.162 min.: 10052002.D\data.ms
S20J006-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
81.90	8007	96.00	70696	114.85	1013	126.05	247
83.05	914	97.00	1866	115.90	3975	126.80	423
85.90	524	102.85	428	116.90	7205	127.90	3833
86.10	376	103.90	5636	117.90	4286	128.90	1584
87.00	39189	104.90	1697	118.90	5593	129.90	3934
88.00	38576	105.90	4819	119.85	217	130.85	1540
90.95	4016	106.90	1034	121.80	98	131.85	222
92.00	31320	109.90	612	122.90	380	132.95	169
93.00	44077	110.85	922	123.90	777	133.95	409
94.00	126453	111.85	793	124.85	302	134.95	2000
95.00	1.09144e+006	112.90	1132	125.80	203	135.85	419

Average of 4.151 to 4.162 min.: 10052002.D\data.ms
S20J006-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
136.90	1725	147.90	2408	160.90	1294	175.90	882069
138.00	60	148.90	995	168.50	53	176.90	57696
138.90	338	149.90	1157	169.10	139	177.95	1396
139.95	607	151.85	438	169.70	269	190.95	234
140.90	11567	152.95	853	170.50	119	192.95	165
141.95	1312	153.95	641	170.85	324	206.95	336
142.90	11442	154.90	2778	172.00	266	249.00	93
143.90	566	155.90	347	172.15	949		
144.90	1004	156.90	1813	172.95	6768		
145.90	1419	157.80	211	173.90	910805		
146.95	422	158.85	1133	174.90	65109		

Mass	69.00	Mass	218.90	Mass	502.00
Ab	628613	Ab	396872	Ab	11324
Pw50	0.51	Pw50	0.51	Pw50	0.50

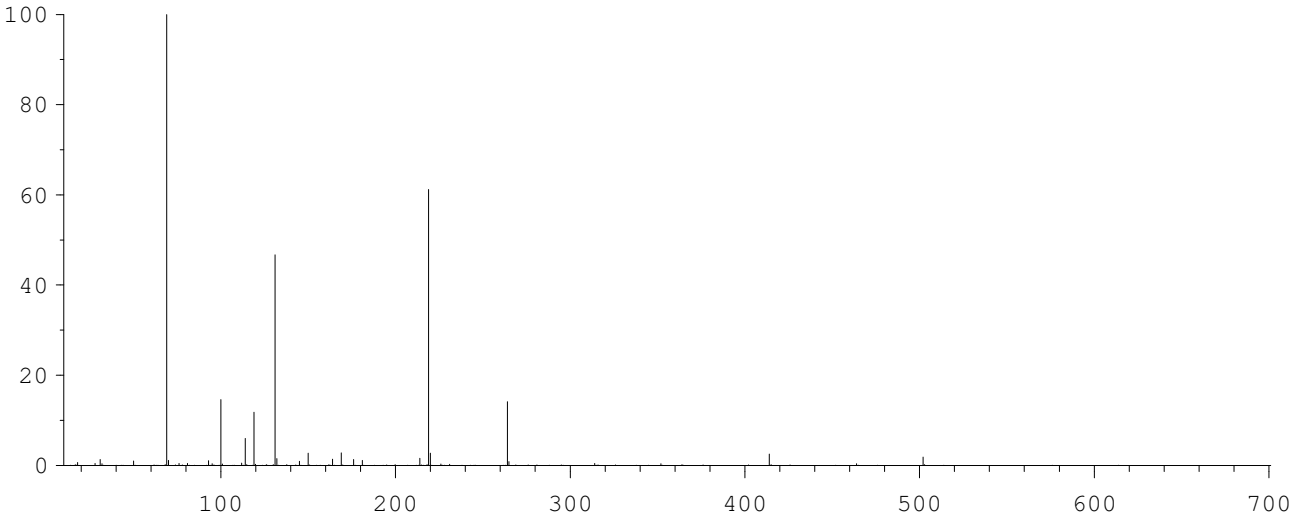


Ion Pol	Pos	MassGain	-1190
		MassOffs	-39
Emission	34.6	AmuGain	978
EIEnrgy	69.9	AmuOffs	127.94
Filament	1	Wid219	-0.003
		DC Pol	Pos
Repeller	29.79		
IonFcus	69.3	HEDEnab	On
EntLens	0.0	EMVolts	1329
EntOffs	Var		
		Samples	8
PFTBA	Open	Averages	3
		Stepsize	0.10

Temperatures and Pressures:

MS Source	230	Turbo Speed	100
MS Quad	150	HiVac	0.00e00

Scan: 10.00 - 701.00 Samples: 8 Thresh: 100 Step: 0.10
123 peaks Base: 69.00 Abundance: 603520



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	603520	100.00	70.00	6480	1.07
219.00	369216	61.18	220.00	16130	4.37
502.00	11095	1.84	503.00	1062	9.57

Air/Water Check: H20~0.61% N2~0.42% O2~0.36% CO2~0.05% N2/H2O~67.99%

Column(1) Flow: 1 Column(2): -1.79769e+308 ml/min. Interface Temp: 300

Ramp Criteria:
Ion Focus Maximum 90 volts using ion 502; EM Gain 49326
Repeller Maximum 30 volts using ion 219; Gain Factor 0.49

MassGain Values(Samples): -1178(3) -1176(2) -1156(1) -1125(0) -1039(FS)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset:	127.9	127.9	127.9	127.9	127.9	127.9	127.9
Entrance Lens Offset:	16.8	14.1	14.3	15.6	16.1	16.8	16.8
Target Abund(%):	1.0	100.0	45.0	55.0	2.5	2.0	
Actual Tune Abund(%):	1.0	100.0	46.7	61.2	2.5	1.8	

S20J006-CCV1

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052003.D
Acq On : 5 Oct 2020 9:53
InstName : AG5975C
Operator : TD
Sample : S20J006-CCV1
Misc : 2030070 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 05 10:12:39 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.03min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	2-Fluorotoluene	1.000	1.000	0.0	66	0.00
2	T	1,1-Dichloroethene	0.200	0.231	-15.5	80	0.00
3	T	trans-1,2-Dichloroethene	0.231	0.249	-7.8	76	-0.02
4	T	1,1-Dichloroethane	0.287	0.307	-7.0	75	0.00
5	T	cis-1,2-Dichloroethene	0.303	0.317	-4.6	73	0.00
6	T	Chloroform	0.310	0.310	0.0	70	0.00
7	T	1,1,1-Trichloroethane	0.337	0.330	2.1	68	0.00
8	T	Carbon tetrachloride	0.317	0.307	3.2	67	0.00
9	T	Benzene	0.850	0.809	4.8	68	0.00
10	T	1,2-Dichloroethane	0.303	0.304	-0.3	70	0.00
11	T	Trichloroethene	0.256	0.246	3.9	67	0.00
12	S	Toluene-d8	0.979	0.950	3.0	67	0.01
13	T	Toluene	1.248	1.141	8.6	67	0.01
14	T	1,1,2-Trichloroethane	0.272	0.262	3.7	67	0.01
15	T	Tetrachloroethene	0.361	0.336	6.9	64	0.01
16	T	Chlorobenzene	0.894	0.842	5.8	64	0.00
17	T	1,1,1,2-Tetrachloroethane	0.320	0.302	5.6	64	0.00
18	T	Ethylbenzene	1.519	1.380	9.2	64	0.02
19	T	m&p-Xylene	1.187	1.051	11.5	63	0.00
20	T	o-Xylene	1.268	1.133	10.6	62	0.00
21	T	1,1,2,2-Tetrachloroethane	0.562	0.521	7.3	64	0.00
22	T	1,3,5-Trimethylbenzene	1.350	1.217	9.9	61	0.00
23	T	1,2,4-Trimethylbenzene	1.402	1.224	12.7	61	0.00
24	T	Naphthalene	2.216	2.083	6.0	63	0.00
25		2-Fluorotoluene SCAN	0.487	0.517	-6.2	69	0.01
26		1,1-Dichloroethene SCAN	0.104	0.134	-28.8	85	0.00
27		trans-1,2-Dichloroethene SC	0.128	0.143	-11.7	73	-0.02
28		1,1-Dichloroethane SCAN	0.148	0.183	-23.6	81	-0.02
29		cis-1,2-Dichloroethene SCAN	0.159	0.191	-20.1	79	0.00
30		Chloroform SCAN	0.172	0.168	2.3	64	0.00
31		1,1,1-Trichloroethane SCAN	0.157	0.167	-6.4	70	0.00
32		Carbon tetrachloride SCAN	0.164	0.147	10.4	59	0.00
33		Benzene SCAN	0.432	0.485	-12.3	73	0.00
34		1,2-Dichloroethane SCAN	0.160	0.176	-10.0	72	0.01
35		Trichloroethene SCAN	0.119	0.120	-0.8	66	0.01
36		Toluene-d8 SCAN	0.477	0.492	-3.1	68	0.01
37		Toluene SCAN	0.610	0.612	-0.3	66	0.01
38		1,1,2-Trichloroethane SCAN	0.137	0.134	2.2	64	0.01
39		Tetrachloroethene SCAN	0.147	0.154	-4.8	69	0.01
40		Chlorobenzene SCAN	0.417	0.413	1.0	65	0.00
41		1,1,1,2-Tetrachloroethane S	0.154	0.142	7.8	60	0.00
42		Ethylbenzene SCAN	1.112	1.083	2.6	64	0.00
43		m&p-Xylene SCAN	1.112	1.083	2.6	64	0.00
44		o-Xylene SCAN	0.595	0.601	-1.0	66	0.00
45		1,1,2,2-Tetrachloroethane S	0.290	0.296	-2.1	67	0.00
46		1,3,5-Trimethylbenzene SCAN	0.627	0.589	6.1	62	0.00
47		1,2,4-Trimethylbenzene SCAN	0.642	0.604	5.9	62	0.00
48		Naphthalene SCAN	0.971	0.955	1.6	64	0.00

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052003.D
Acq On : 5 Oct 2020 9:53
InstName : AG5975C
Operator : TD
Sample : S20J006-CCV1
Misc : 2030070 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 05 10:12:39 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

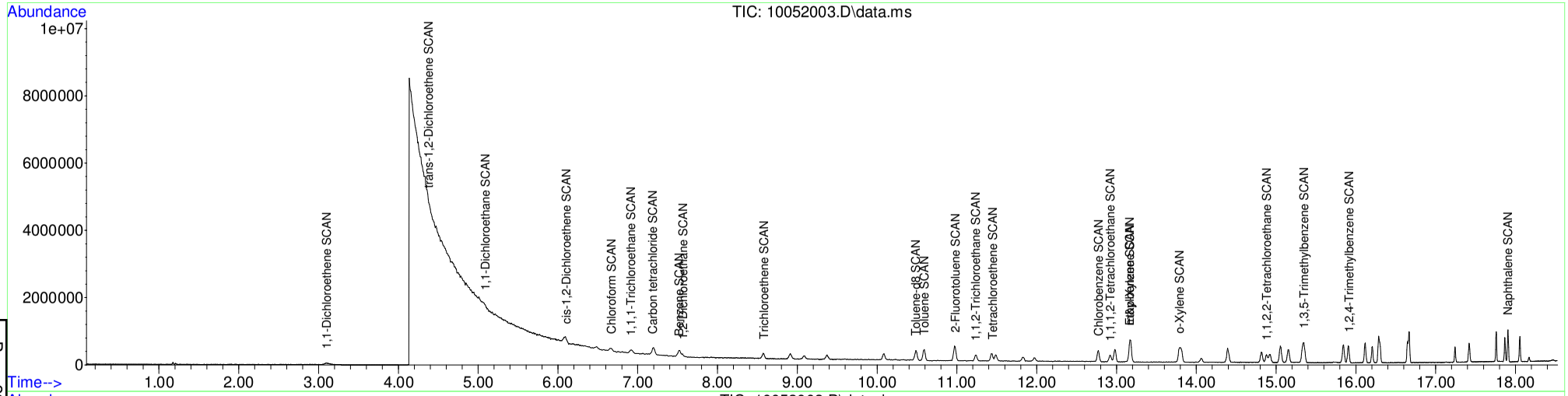
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	440993	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	418730	4850.39 ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 97.01%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.097	61	101901	5786.69 ug/L	82
3] trans-1,2-Dichloroethene	4.376	61	109948	5404.03 ug/L	98
4] 1,1-Dichloroethane	5.092	63	135168	5337.06 ug/L	98
5] cis-1,2-Dichloroethene	6.094	61	139765	5228.05 ug/L	99
6] Chloroform	6.664	83	136895	5002.94 ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	145712	4903.42 ug/L	99
8] Carbon tetrachloride	7.187	117	135264	4836.16 ug/L	99
9] Benzene	7.515	78	356785	4761.76 ug/L	97
10] 1,2-Dichloroethane	7.552	62	134175	5016.39 ug/L	99
11] Trichloroethene	8.575	130	108671	4817.06 ug/L	93
13] Toluene	10.582	91	503230	4572.25 ug/L	100
14] 1,1,2-Trichloroethane	11.232	97	115453	4814.06 ug/L	96
15] Tetrachloroethene	11.432	166	148046	4647.99 ug/L	100
16] Chlorobenzene	12.765	112	371358	4712.17 ug/L	92
17] 1,1,1,2-Tetrachloroethane	12.916	131	133233	4718.11 ug/L	99
18] Ethylbenzene	12.980	91	608564	4542.60 ug/L	98
19] m&p-Xylene	13.170	91	926754	8851.13 ug/L	96
20] o-Xylene	13.782	91	499822	4468.15 ug/L	96
21] 1,1,2,2-Tetrachloroethane	14.880	83	229813	4635.48 ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	536545	4506.31 ug/L	96
23] 1,2,4-Trimethylbenzene	15.906	105	539991	4366.29 ug/L	96
24] Naphthalene	17.904	128	918717	4700.16 ug/L	100
25) 2-Fluorotoluene SCAN	10.979	109	227928	5302.05 ug/L	96
26) 1,1-Dichloroethene SCAN	3.103	61	59174	6481.61 ug/L	74
27) trans-1,2-Dichloroethe...	4.381	61	63244	5598.21 ug/L	80
28) 1,1-Dichloroethane SCAN	5.085	63	80873	6185.65 ug/L	93
29) cis-1,2-Dichloroethene...	6.100	61	84357	6022.12 ug/L #	45
30) Chloroform SCAN	6.663	83	74144	4879.99 ug/L	93
31) 1,1,1-Trichloroethane ...	6.918	97	73717	5324.24 ug/L	92
32) Carbon tetrachloride SCAN	7.186	117	64925	4495.44 ug/L	92
33) Benzene SCAN	7.514	78	213765	5607.41 ug/L	96
34) 1,2-Dichloroethane SCAN	7.563	62	77693	5519.29 ug/L	99
35) Trichloroethene SCAN	8.579	130	52892	5048.80 ug/L	85
36) Toluene-d8 SCAN	10.486	98	216823	5157.34 ug/L	93
37) Toluene SCAN	10.591	91	270099	5016.65 ug/L	99
38) 1,1,2-Trichloroethane ...	11.231	97	59196	4898.34 ug/L	88
39) Tetrachloroethene SCAN	11.441	166	68058	5261.53 ug/L	94
40) Chlorobenzene SCAN	12.772	112	181935	4945.17 ug/L	89
41) 1,1,1,2-Tetrachloroeth...	12.915	131	62404	4583.36 ug/L	99
42) Ethylbenzene SCAN	13.169	91	477602	4869.11 ug/L	91
43) m&p-Xylene SCAN	13.169	91	477602	4869.11 ug/L	92
44) o-Xylene SCAN	13.789	91	264890	5045.12 ug/L	94
45) 1,1,2,2-Tetrachloroeth...	14.879	83	130678	5104.26 ug/L	98
46) 1,3,5-Trimethylbenzene...	15.348	105	259855	4696.11 ug/L	100
47) 1,2,4-Trimethylbenzene...	15.909	105	266147	4700.67 ug/L	95
48) Naphthalene SCAN	17.906	128	421091	4915.06 ug/L	99

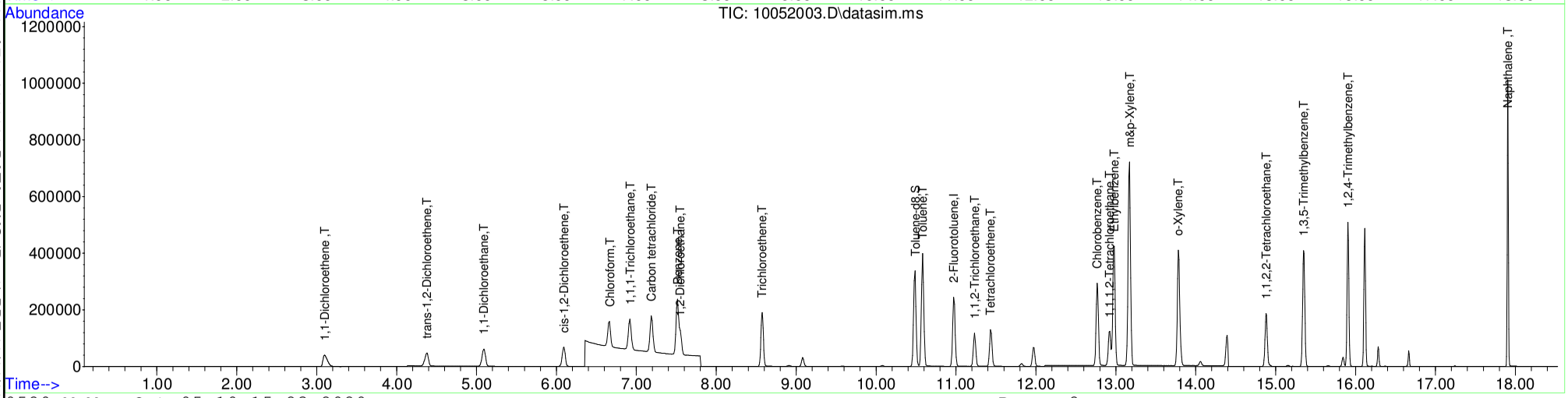
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052003.D
Acq On : 5 Oct 2020 9:53
InstName : AG5975C
Operator : TD
Sample : S20J006-CCV1
Misc : 2030070 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 05 10:12:39 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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S20J006-CRL1

QLS REPORT

Instrument Name: AG5975C
Sample Name: S20J006-CRL1
Misc Info: 2030073 0.05 mg/L
Date Acquired: 10/5/20 10:17
QLast Update: Fri Aug 21 08:33:54 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.970	5000.0	5000.00	100%	60	140	pass
2)	1,1-Dichloroethene	3.090	50.0	48.21	96%	60	140	pass
3)	trans-1,2-Dichloroethene	4.396	50.0	50.46	101%	60	140	pass
4)	1,1-Dichloroethane	5.099	50.0	49.62	99%	60	140	pass
5)	cis-1,2-Dichloroethene	6.094	50.0	50.11	100%	60	140	pass
6)	Chloroform	6.664	50.0	47.30	95%	60	140	pass
7)	1,1,1-Trichloroethane	6.919	50.0	46.36	93%	60	140	pass
8)	Carbon tetrachloride	7.187	50.0	46.32	93%	60	140	pass
10)	1,2-Dichloroethane	7.552	50.0	49.66	99%	60	140	pass
11)	Trichloroethene	8.569	50.0	47.86	96%	60	140	pass
12)	Toluene-d8	10.477	50.0	49.63	99%	60	140	pass
13)	Toluene	10.571	50.0	51.10	102%	60	140	pass
14)	1,1,2-Trichloroethane	11.222	50.0	48.71	97%	60	140	pass
15)	Tetrachloroethene	11.421	50.0	49.81	100%	60	140	pass
16)	Chlorobenzene	12.757	50.0	52.51	105%	60	140	pass
17)	1,1,1,2-Tetrachloroethane	12.908	50.0	50.75	101%	60	140	pass
18)	Ethylbenzene	12.964	50.0	53.40	107%	60	140	pass
19)	m&p-Xylene	13.162	100.0	106.01	106%	60	140	pass
20)	o-Xylene	13.774	50.0	51.93	104%	60	140	pass
21)	1,1,2,2-Tetrachloroethane	14.873	50.0	53.05	106%	60	140	pass
22)	1,3,5-Trimethylbenzene	15.345	50.0	54.53	109%	60	140	pass
23)	1,2,4-Trimethylbenzene	15.896	50.0	55.00	110%	60	140	pass
24)	Naphthalene	17.903	50.0	54.63	109%	60	140	pass

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052004.D
Acq On : 5 Oct 2020 10:17
InstName : AG5975C
Operator : TD
Sample : S20J006-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 05 10:36:11 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

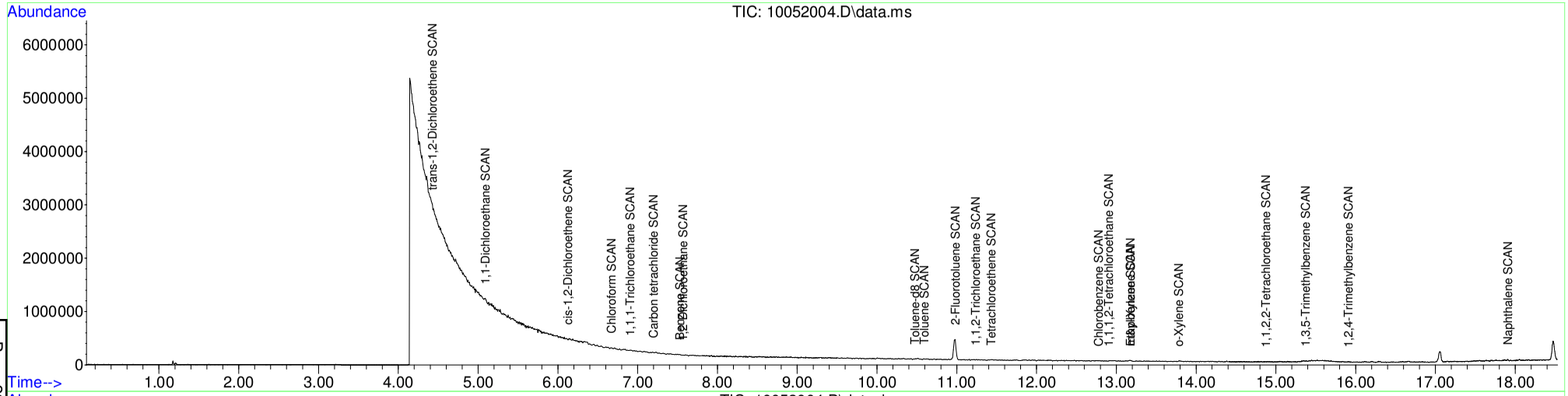
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	622858	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	6051	49.63 ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 0.99%#		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.097	61	1650	66.34 ug/L #	45
3] trans-1,2-Dichloroethene	4.416	61	1450	50.46 ug/L	75
4] 1,1-Dichloroethane	5.112	63	1775	49.62 ug/L	89
5] cis-1,2-Dichloroethene	6.101	61	1892	50.11 ug/L	100
6] Chloroform	6.664	83	1828	47.30 ug/L	98
7] 1,1,1-Trichloroethane	6.931	97	1946	46.36 ug/L	99
8] Carbon tetrachloride	7.199	117	1830	46.32 ug/L	99
9] Benzene	7.515	78	5979	56.50 ug/L	62
10] 1,2-Dichloroethane	7.552	62	1876	49.66 ug/L #	1
11] Trichloroethene	8.580	130	1525	47.86 ug/L	94
13] Toluene	10.582	91	7943	51.10 ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	1650	48.71 ug/L	98
15] Tetrachloroethene	11.432	166	2241	49.81 ug/L	98
16] Chlorobenzene	12.773	112	5845	52.51 ug/L	90
17] 1,1,1,2-Tetrachloroethane	12.916	131	2024	50.75 ug/L	98
18] Ethylbenzene	12.980	91	10105	53.40 ug/L	94
19] m&p-Xylene	13.170	91	15677	106.01 ug/L	94
20] o-Xylene	13.782	91	8205	51.93 ug/L	95
21] 1,1,2,2-Tetrachloroethane	14.880	83	3715	53.05 ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	9170	54.53 ug/L	97
23] 1,2,4-Trimethylbenzene	15.906	105	9608	55.00 ug/L	94
24] Naphthalene	17.906	128	15081	54.63 ug/L	97
25) 2-Fluorotoluene SCAN	10.979	109	311239	5126.05 ug/L	95
27) trans-1,2-Dichloroethe...	4.428	61	320	20.06 ug/L #	51
28) 1,1-Dichloroethane SCAN	5.091	63	418	22.64 ug/L #	1
29) cis-1,2-Dichloroethene...	6.119	61	484	24.46 ug/L #	37
30) Chloroform SCAN	6.675	83	714	33.27 ug/L #	83
31) 1,1,1-Trichloroethane ...	6.906	97	730	37.33 ug/L #	19
32) Carbon tetrachloride SCAN	7.198	117	795	38.97 ug/L #	66
33) Benzene SCAN	7.526	78	7705	143.10 ug/L	94
34) 1,2-Dichloroethane SCAN	7.563	62	1641	82.54 ug/L #	44
36) Toluene-d8 SCAN	10.475	98	3179	53.54 ug/L #	15
37) Toluene SCAN	10.591	91	6327	83.20 ug/L #	43
38) 1,1,2-Trichloroethane ...	11.231	97	512	30.00 ug/L #	1
39) Tetrachloroethene SCAN	11.430	166	1437	78.66 ug/L #	42
40) Chlorobenzene SCAN	12.772	112	3003	57.79 ug/L #	1
41) 1,1,1,2-Tetrachloroeth...	12.899	131	454	23.61 ug/L #	21
42) Ethylbenzene SCAN	13.177	91	9119	65.82 ug/L	88
43) m&p-Xylene SCAN	13.177	91	9119	65.82 ug/L	89
44) o-Xylene SCAN	13.781	91	4747	64.01 ug/L	91
45) 1,1,2,2-Tetrachloroeth...	14.875	83	1578	43.64 ug/L #	31
46) 1,3,5-Trimethylbenzene...	15.368	105	4990	63.85 ug/L #	39
47) 1,2,4-Trimethylbenzene...	15.909	105	5070	63.40 ug/L	85
48) Naphthalene SCAN	17.905	128	7300	60.33 ug/L	87

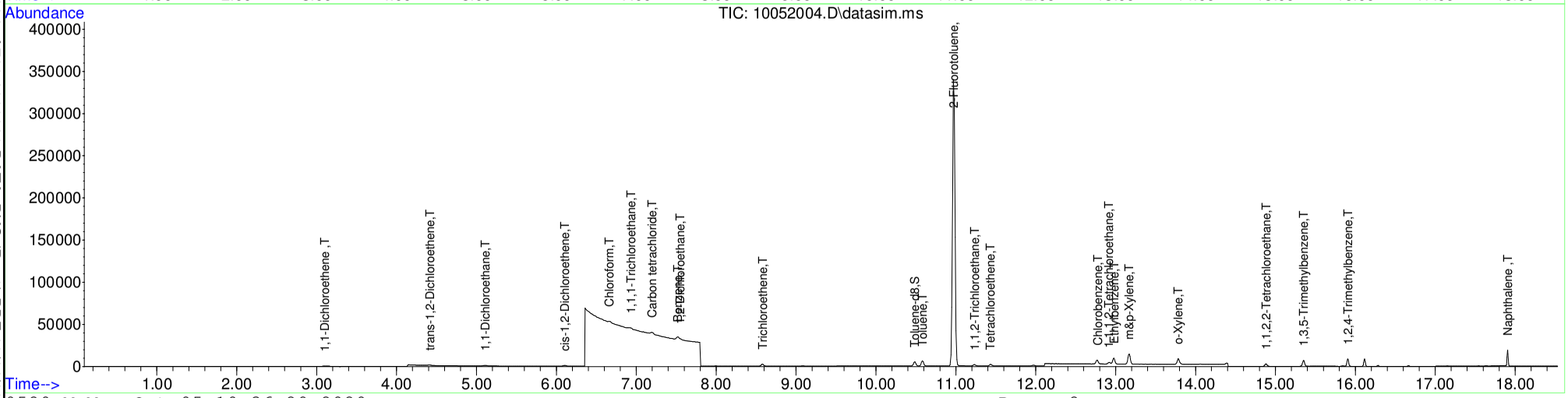
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052004.D
Acq On : 5 Oct 2020 10:17
InstName : AG5975C
Operator : TD
Sample : S20J006-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 05 10:36:11 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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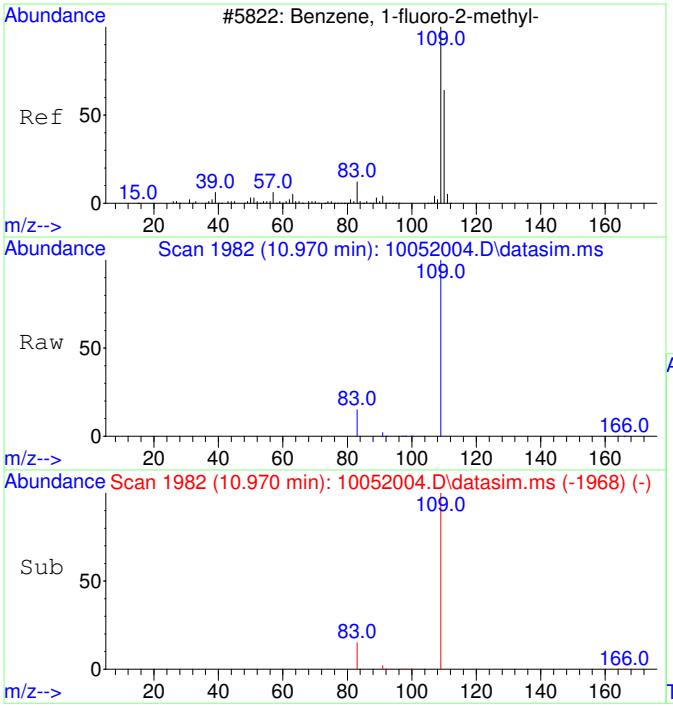
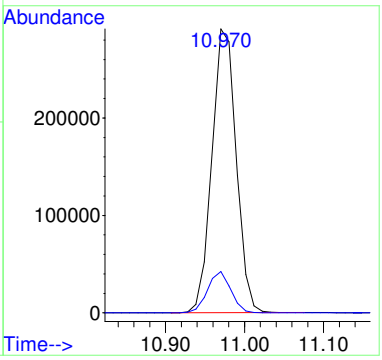
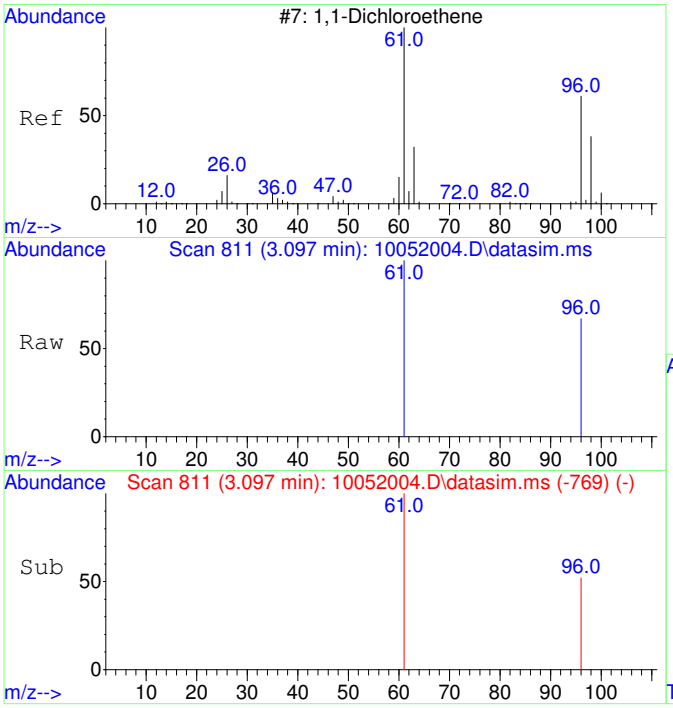


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:109 Resp: 622858

Ion	Ratio	Lower	Upper
109	100		
83	13.9	0.0	42.3

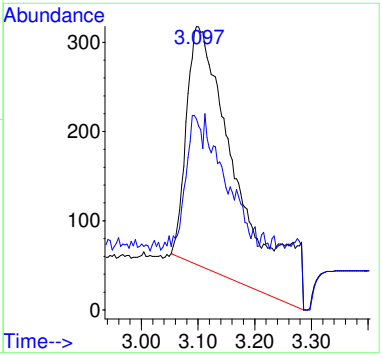




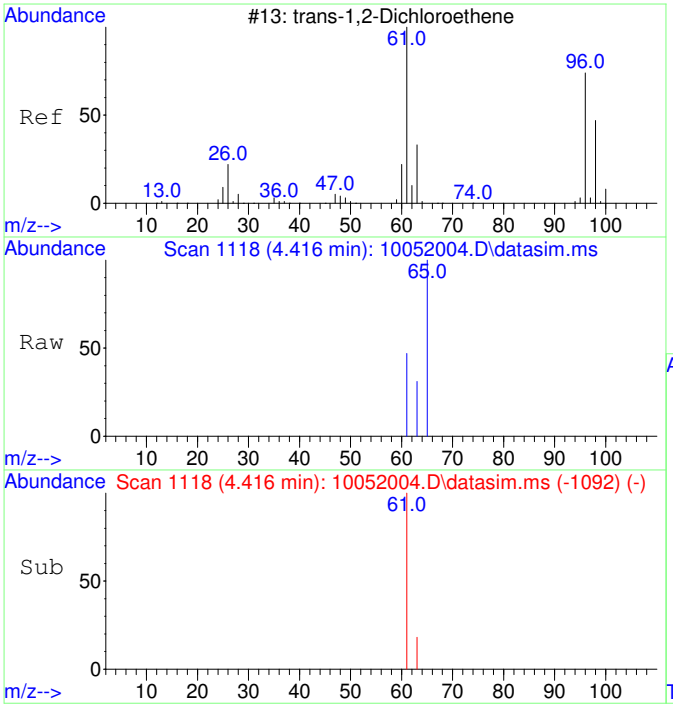
#2
1,1-Dichloroethene
Concen: 66.34 ug/L
RT: 3.097 min Scan# 811
Delta R.T. 0.007 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 61 Resp: 1650

Ion	Ratio	Lower	Upper
61	100		
96	23.2	37.2	97.2#



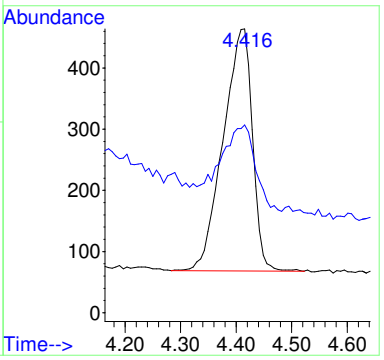
Before MI:
IMPROPER
BASELINE

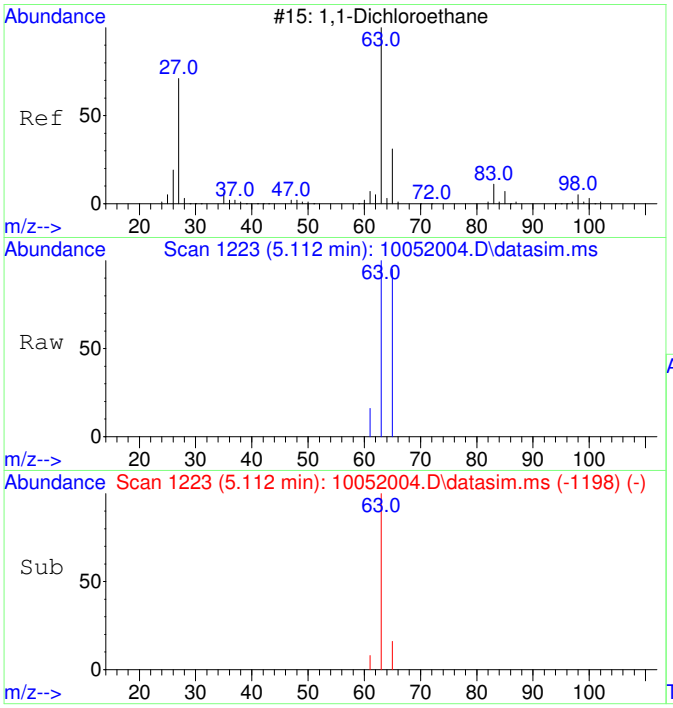


#3
trans-1,2-Dichloroethene
Concen: 50.46 ug/L
RT: 4.416 min Scan# 1118
Delta R.T. 0.020 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 61 Resp: 1450

Ion	Ratio	Lower	Upper
61	100		
63	46.5	2.4	62.4

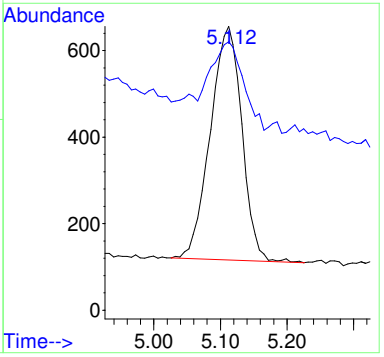


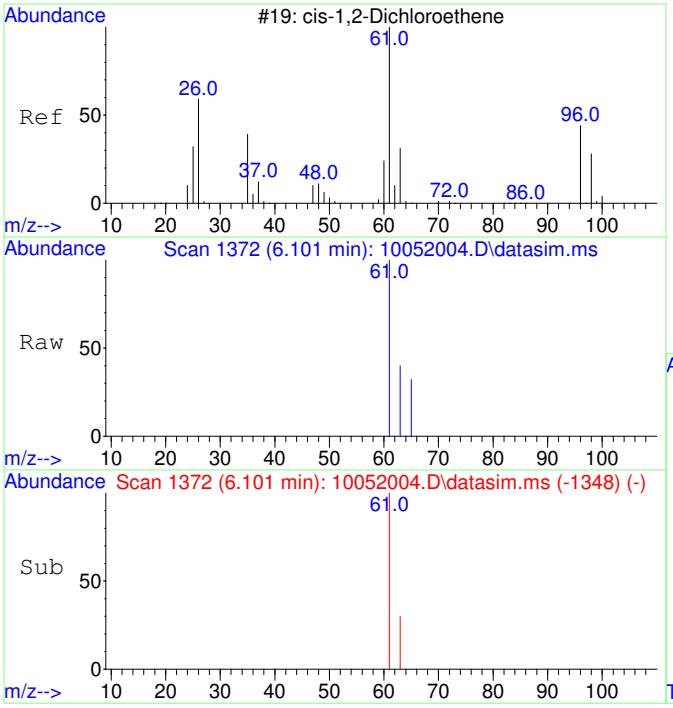


#4
1,1-Dichloroethane
Concen: 49.62 ug/L
RT: 5.112 min Scan# 1223
Delta R.T. 0.013 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 63 Resp: 1775

Ion	Ratio	Lower	Upper
63	100		
65	37.7	1.8	61.8

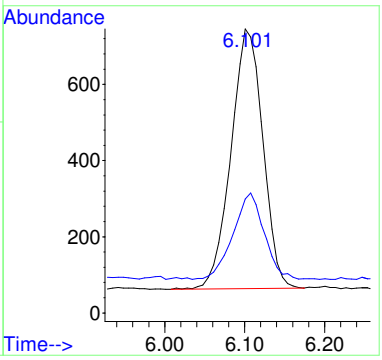


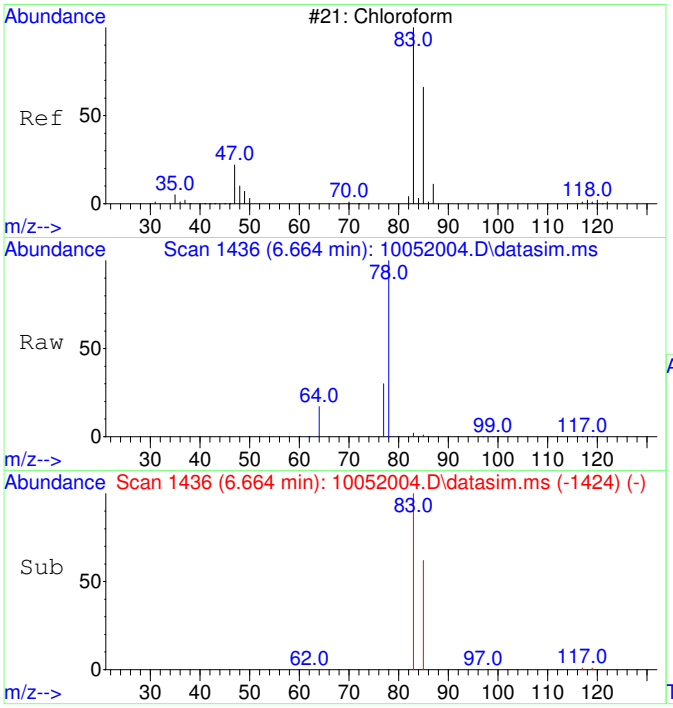


#5
cis-1,2-Dichloroethene
Concen: 50.11 ug/L
RT: 6.101 min Scan# 1372
Delta R.T. 0.007 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 61 Resp: 1892

Ion	Ratio	Lower	Upper
61	100		
63	32.7	2.5	62.5

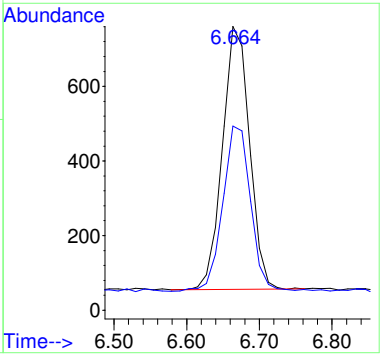


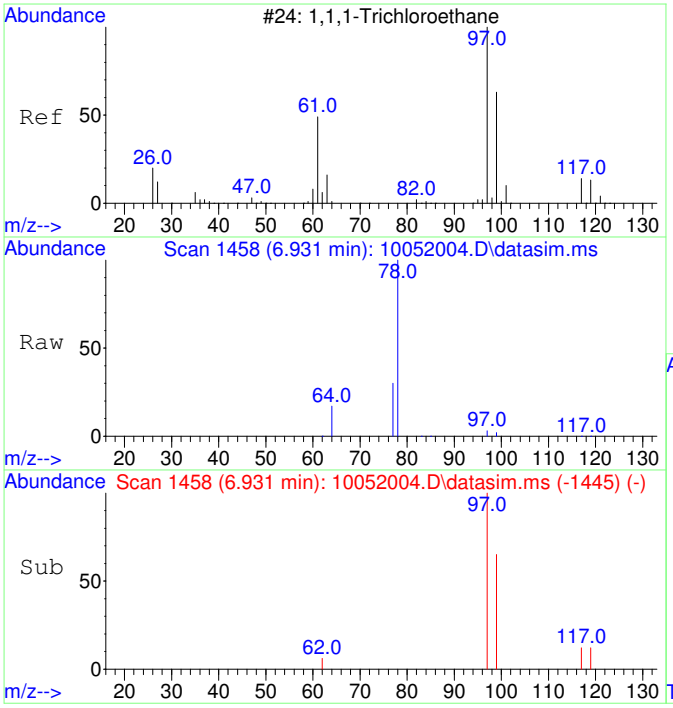


#6
Chloroform
Concen: 47.30 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 83 Resp: 1828

Ion	Ratio	Lower	Upper
83	100		
85	63.8	35.1	95.1

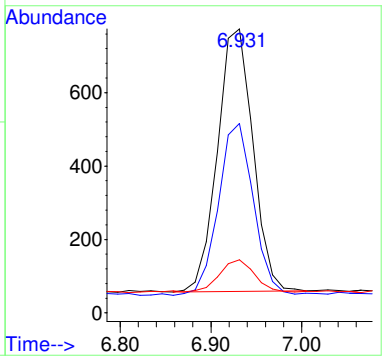


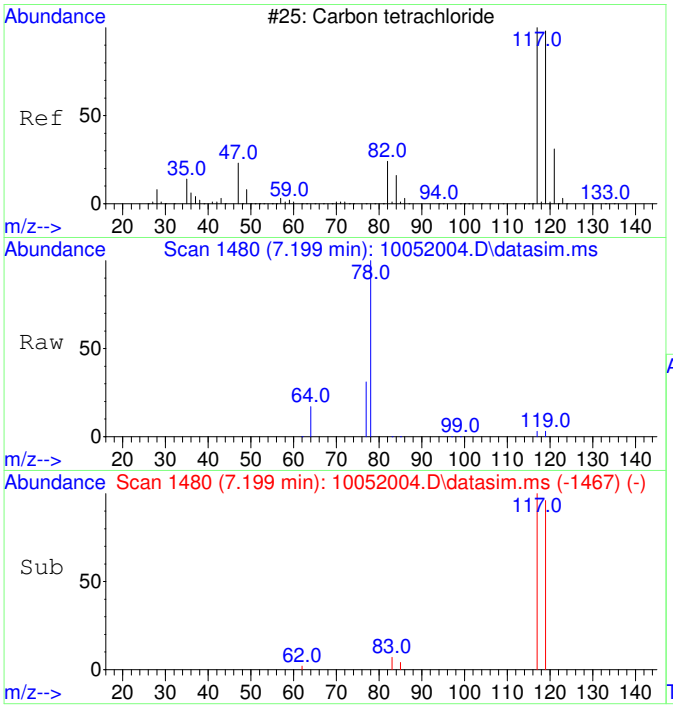


#7
1,1,1-Trichloroethane
Concen: 46.36 ug/L
RT: 6.931 min Scan# 1458
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 97 Resp: 1946

Ion	Ratio	Lower	Upper
97	100		
99	63.7	34.6	94.6
117	13.3	0.0	43.2

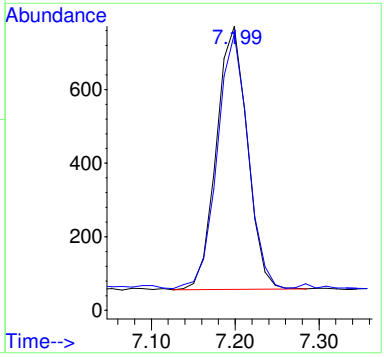


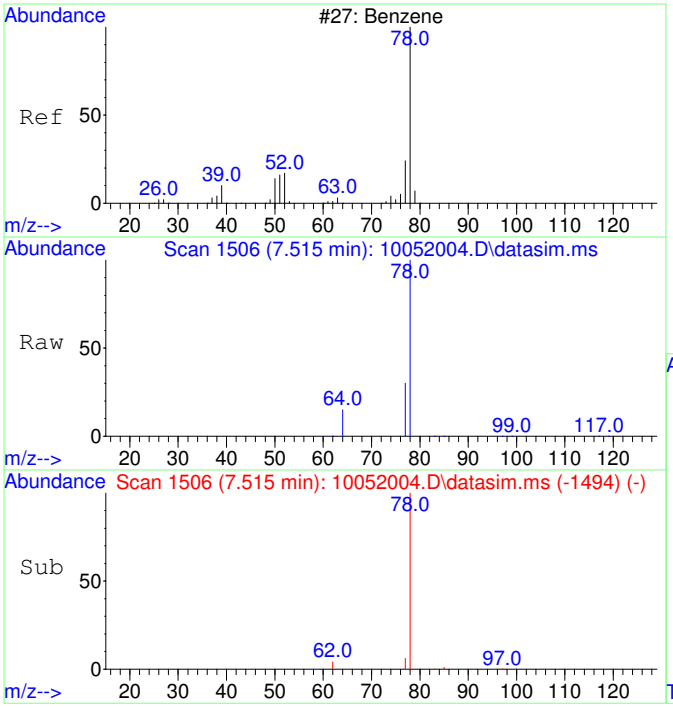


#8
Carbon tetrachloride
Concen: 46.32 ug/L
RT: 7.199 min Scan# 1480
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:117 Resp: 1830

Ion	Ratio	Lower	Upper
117	100		
119	95.8	66.4	126.4

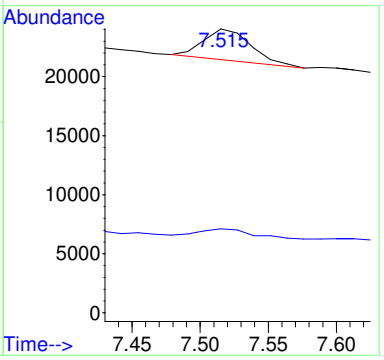


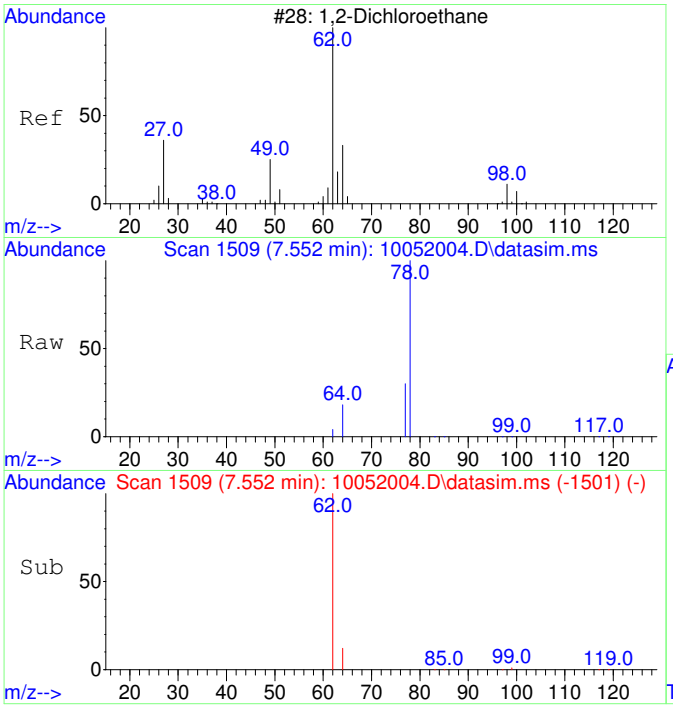


#9
Benzene
Concen: 56.50 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 78 Resp: 5979

Ion	Ratio	Lower	Upper
78	100		
77	41.6	0.0	53.2

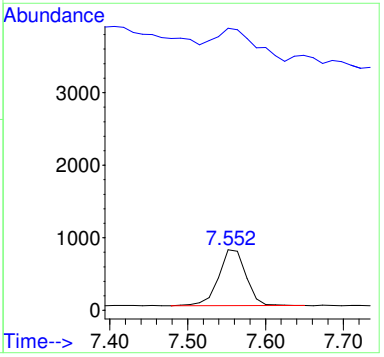


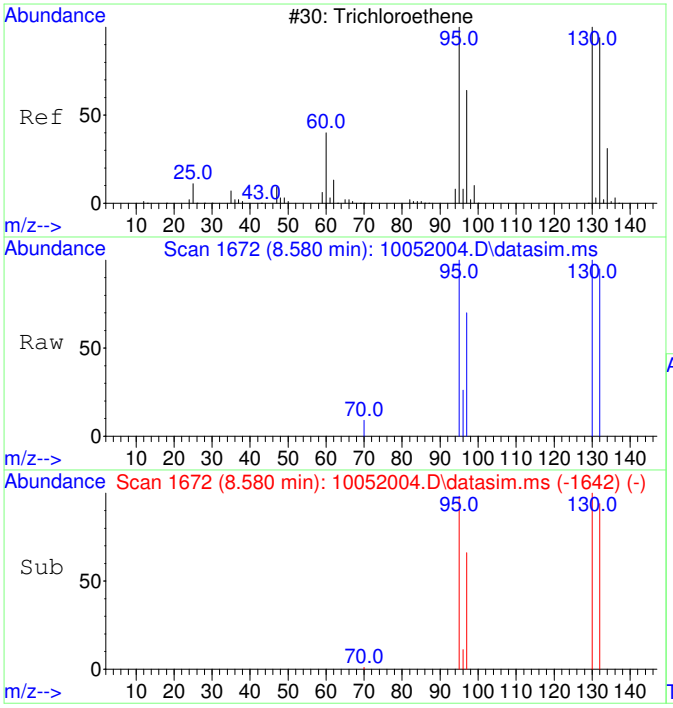


#10
1,2-Dichloroethane
Concen: 49.66 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. -0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 62 Resp: 1876

Ion	Ratio	Lower	Upper
62	100		
64	89.3	2.3	62.3#

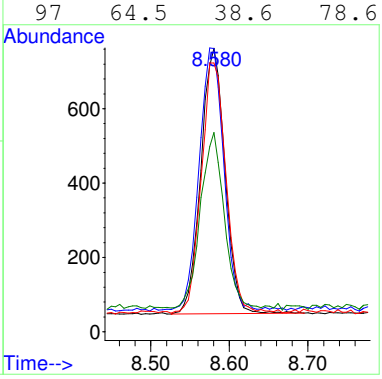


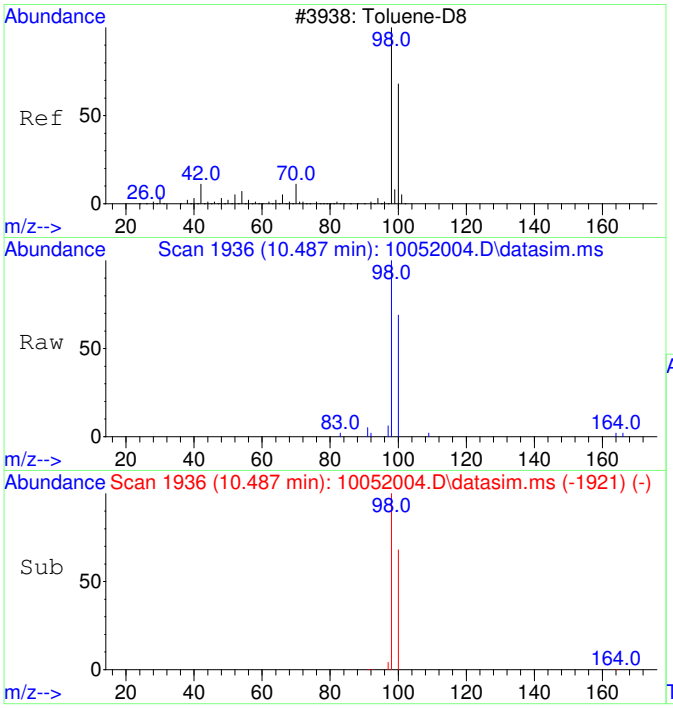


#11
Trichloroethene
Concen: 47.86 ug/L
RT: 8.580 min Scan# 1672
Delta R.T. 0.011 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:130 Resp: 1525

Ion	Ratio	Lower	Upper
130	100		
95	99.7	60.7	120.7
132	97.0	76.0	116.0
97	64.5	38.6	78.6

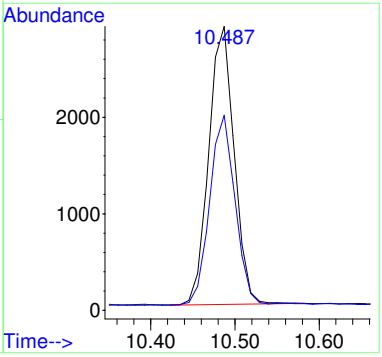


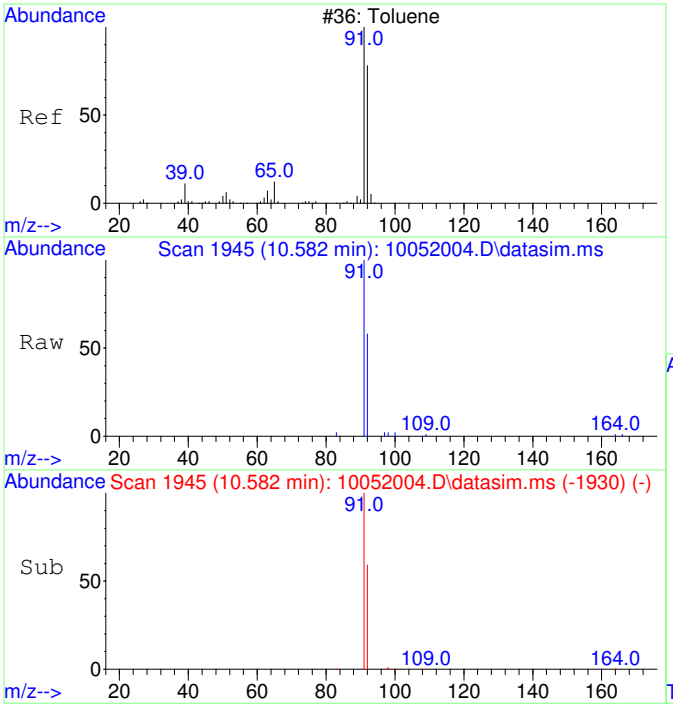


#12
Toluene-d8
Concen: 49.63 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 98 Resp: 6051

Ion	Ratio	Lower	Upper
98	100		
100	67.1	37.1	97.1

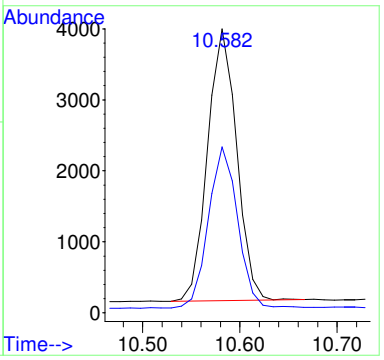


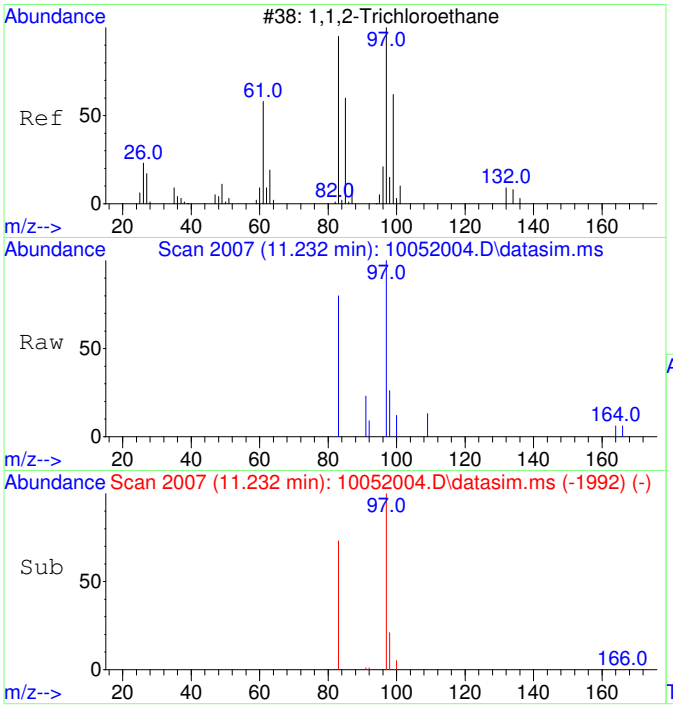


#13
Toluene
Concen: 51.10 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 7943

Ion	Ratio	Lower	Upper
91	100		
92	59.3	29.9	89.9

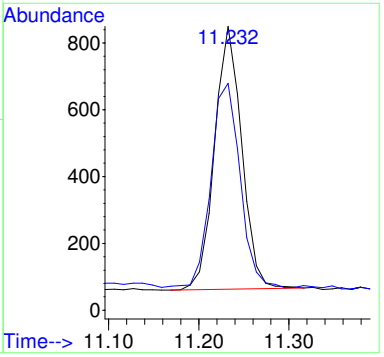


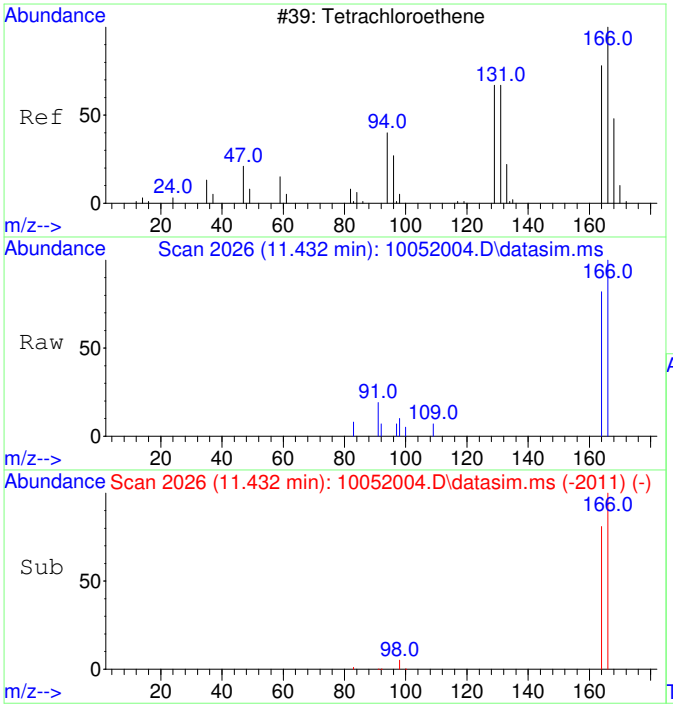


#14
1,1,2-Trichloroethane
Concen: 48.71 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 97 Resp: 1650

Ion	Ratio	Lower	Upper
97	100		
83	82.7	51.2	111.2

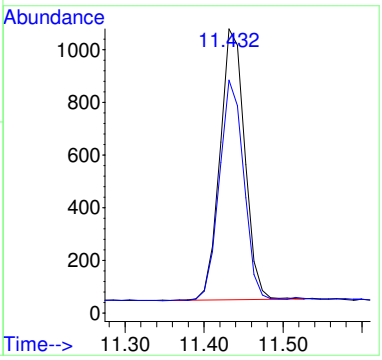


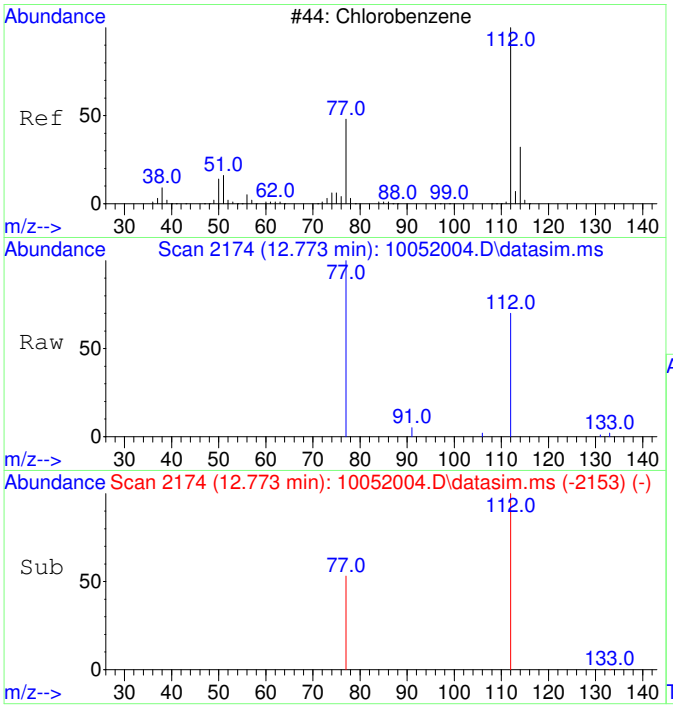


#15
Tetrachloroethene
Concen: 49.81 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:166 Resp: 2241

Ion	Ratio	Lower	Upper
166	100		
164	79.7	47.8	107.8

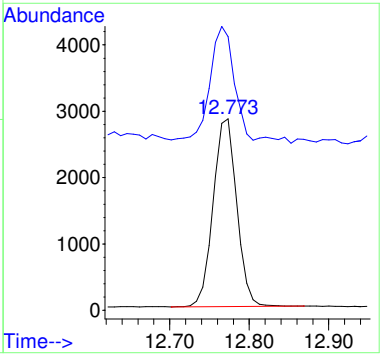


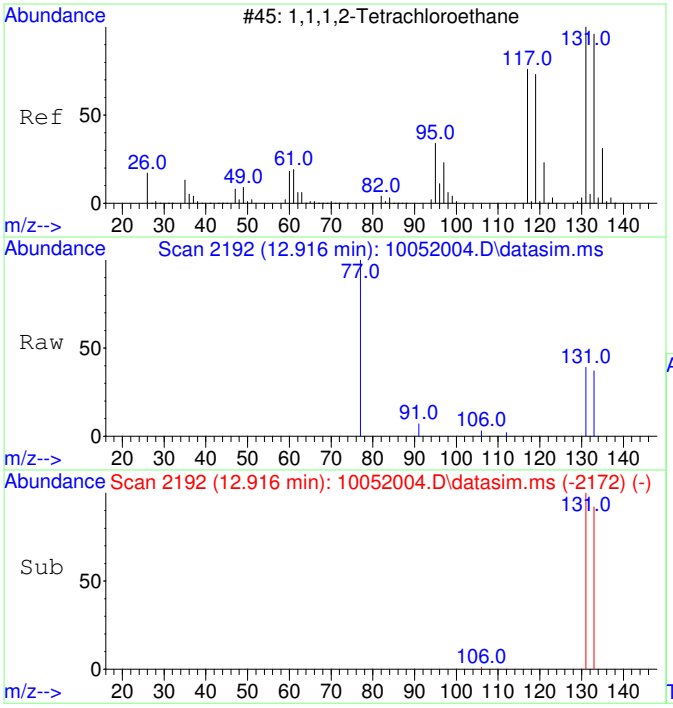


#16
Chlorobenzene
Concen: 52.51 ug/L
RT: 12.773 min Scan# 2174
Delta R.T. 0.016 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:112 Resp: 5845

Ion	Ratio	Lower	Upper
112	100		
77	60.8	23.6	83.6

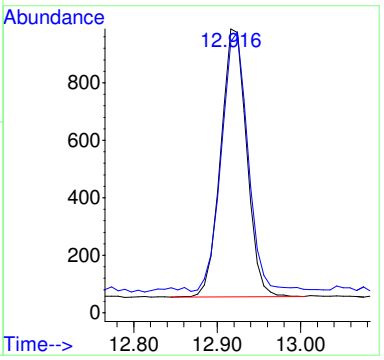


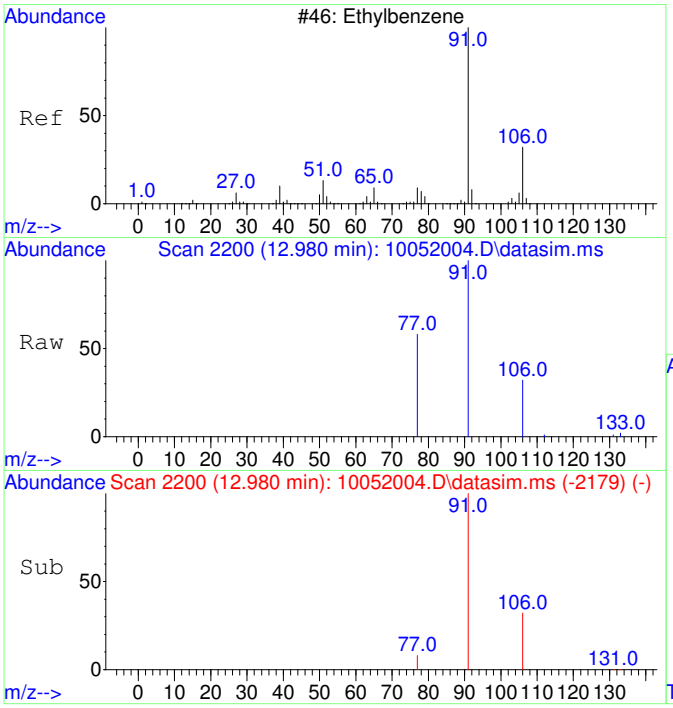


#17
1,1,1,2-Tetrachloroethane
Concen: 50.75 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.008 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:131 Resp: 2024

Ion	Ratio	Lower	Upper
131	100		
133	98.1	66.3	126.3

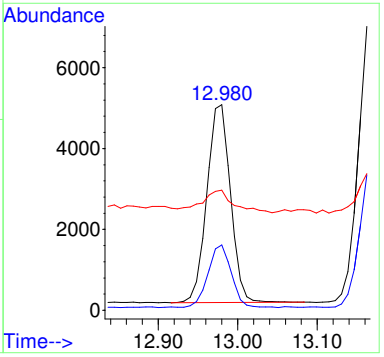


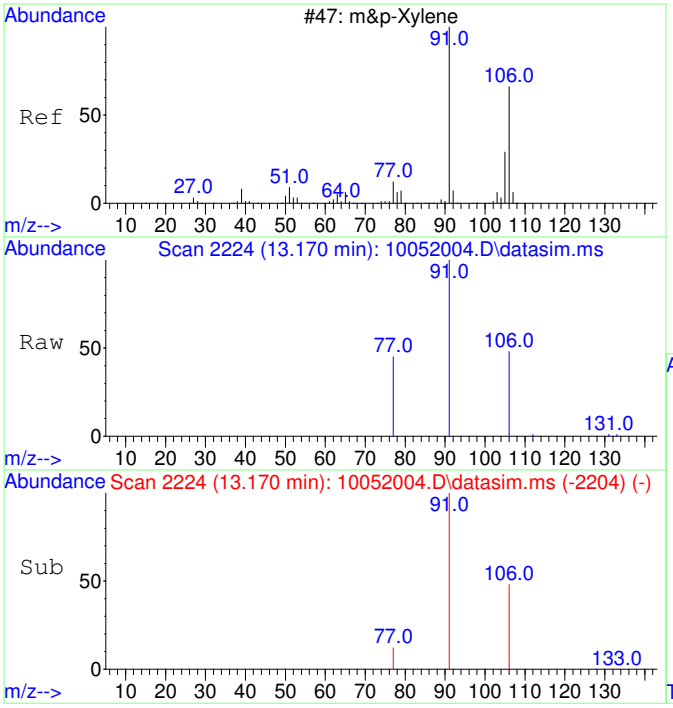


#18
Ethylbenzene
Concen: 53.40 ug/L
RT: 12.980 min Scan# 2200
Delta R.T. 0.016 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 10105

Ion	Ratio	Lower	Upper
91	100		
106	31.5	3.0	63.0
77	15.1	0.0	38.2

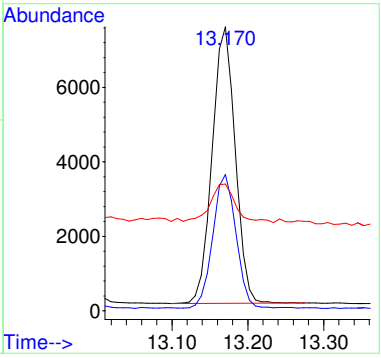


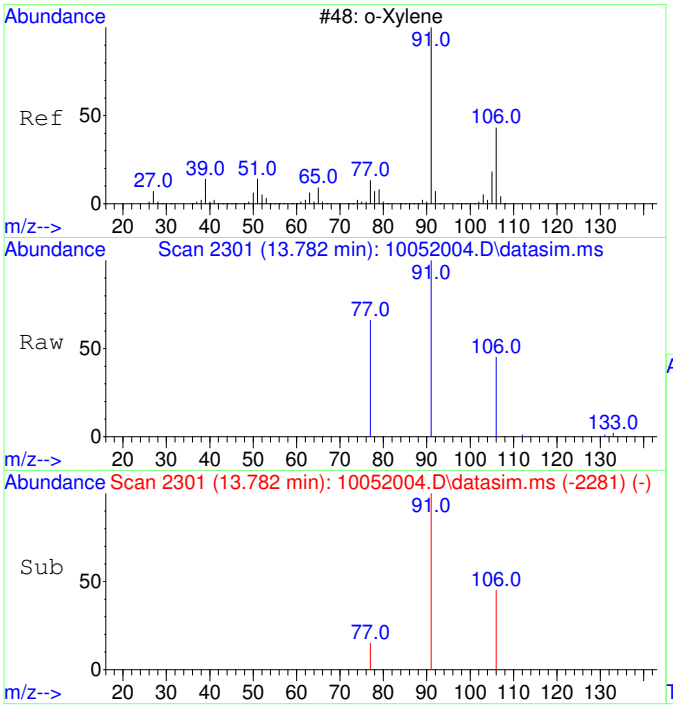


#19
m&p-Xylene
Concen: 106.01 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.008 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 15677

Ion	Ratio	Lower	Upper
91	100		
106	48.3	22.2	82.2
77	15.3	0.0	42.4

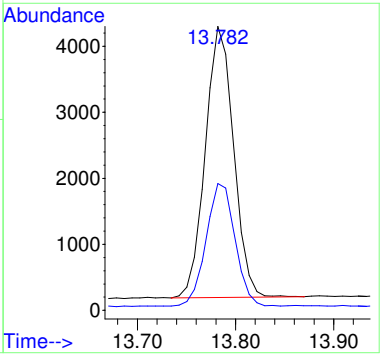


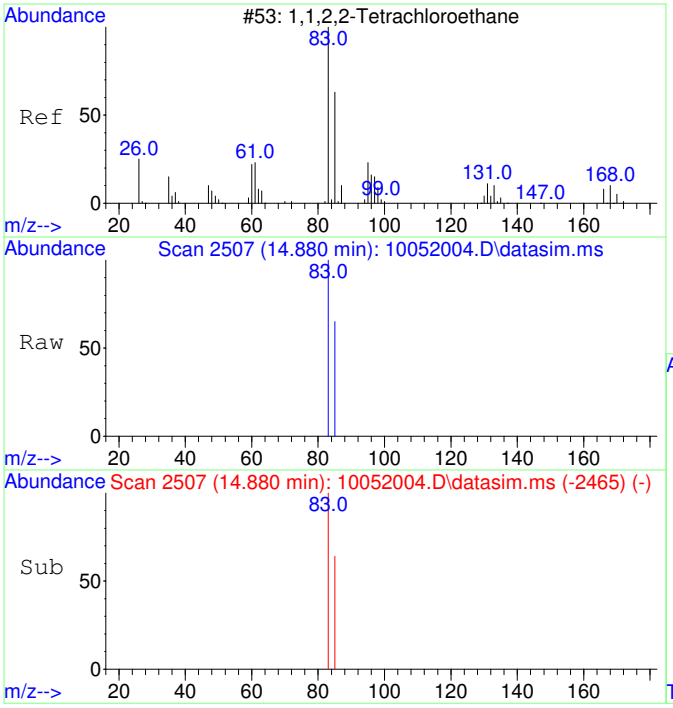


#20
o-Xylene
Concen: 51.93 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 8205

Ion	Ratio	Lower	Upper
91	100		
106	46.0	19.2	79.2

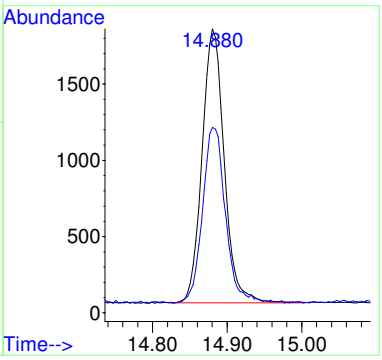


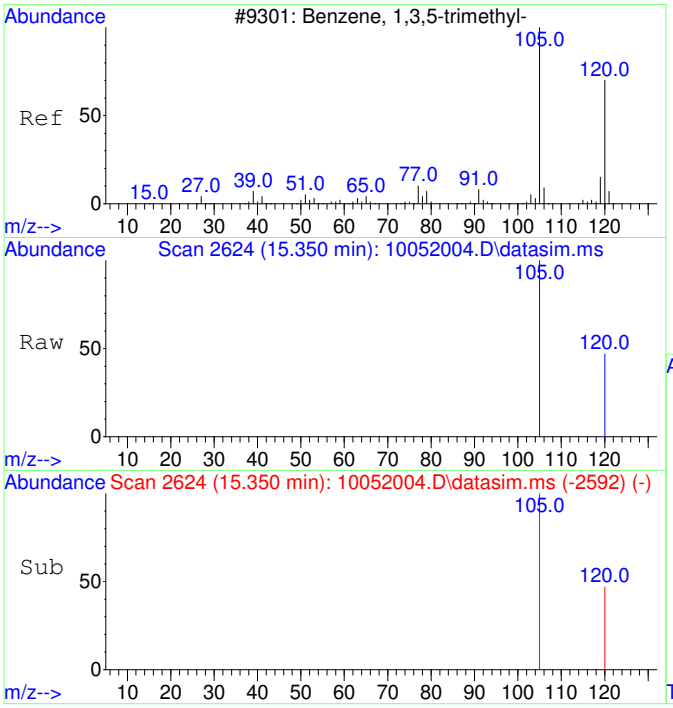


#21
1,1,2,2-Tetrachloroethane
Concen: 53.05 ug/L
RT: 14.880 min Scan# 2507
Delta R.T. 0.007 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 83 Resp: 3715

Ion	Ratio	Lower	Upper
83	100		
85	65.2	34.8	94.8

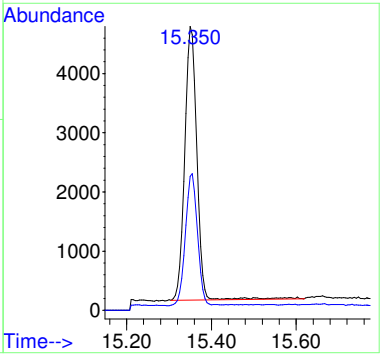


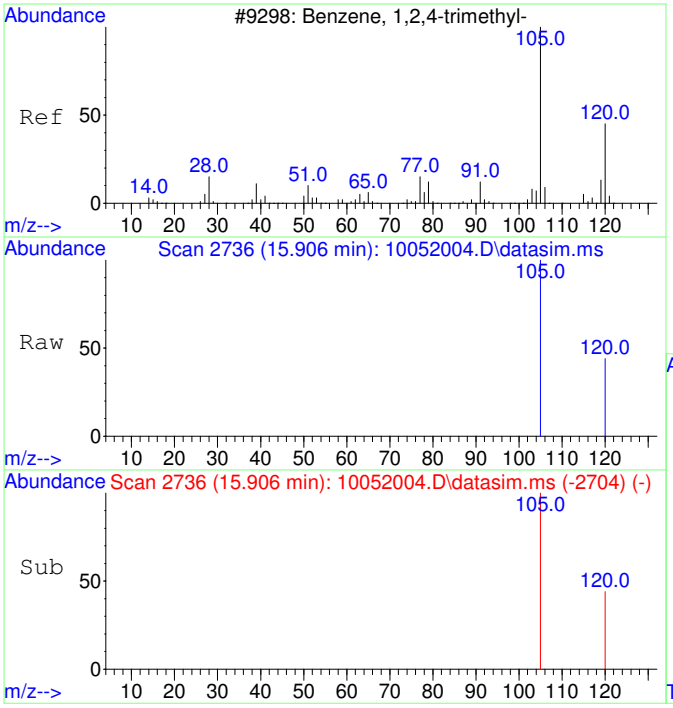


#22
1,3,5-Trimethylbenzene
Concen: 54.53 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.005 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:105 Resp: 9170

Ion	Ratio	Lower	Upper
105	100		
120	48.8	21.1	81.1

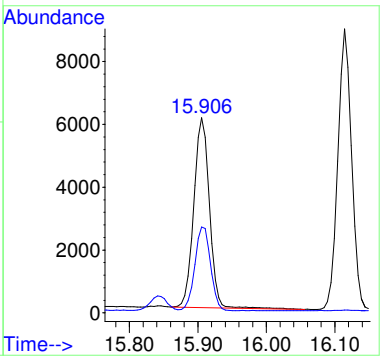


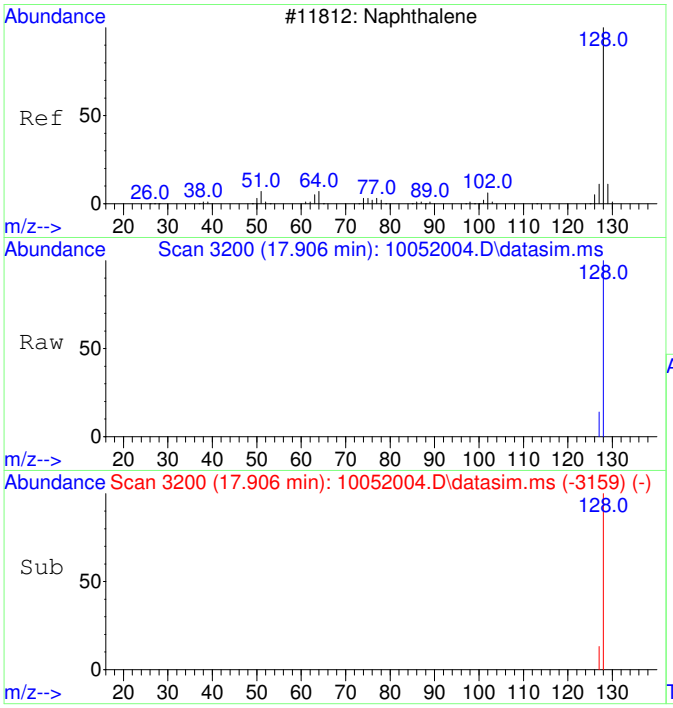


#23
1,2,4-Trimethylbenzene
Concen: 55.00 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:105 Resp: 9608

Ion	Ratio	Lower	Upper
105	100		
120	43.3	17.2	77.2

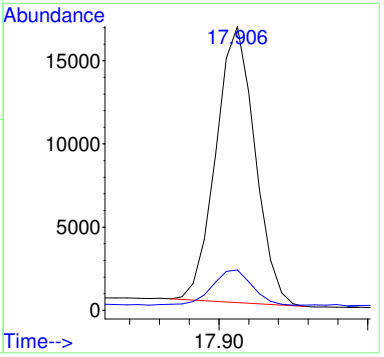


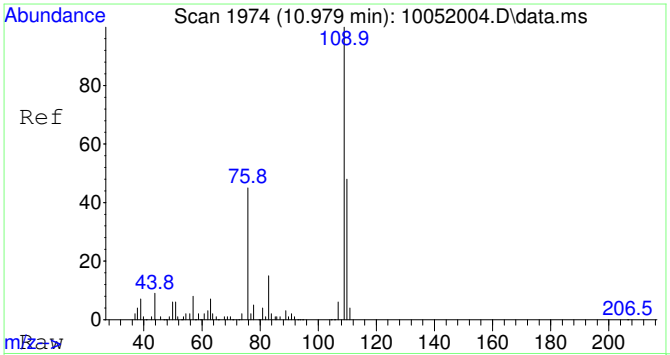


#24
Naphthalene
Concen: 54.63 ug/L
RT: 17.906 min Scan# 3200
Delta R.T. 0.004 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:128 Resp: 15081

Ion	Ratio	Lower	Upper
128	100		
127	13.8	0.0	42.5

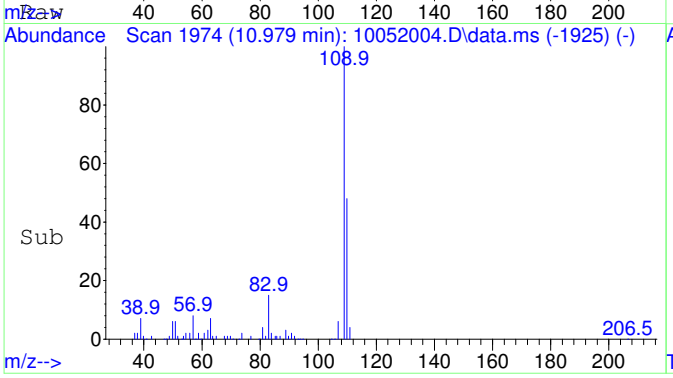


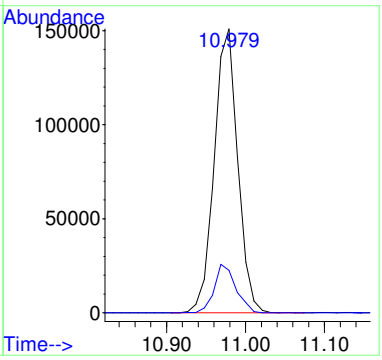


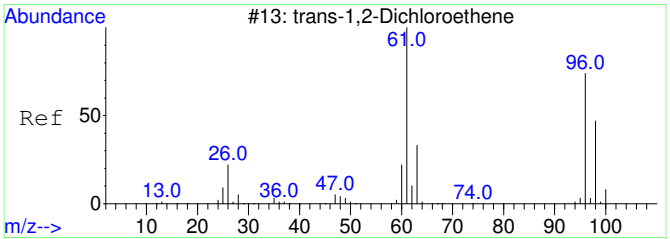
#25
2-Fluorotoluene SCAN
Concen: 5126.05 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:109 Resp: 311239

Ion	Ratio	Lower	Upper
109	100		
83	15.7	0.0	43.8



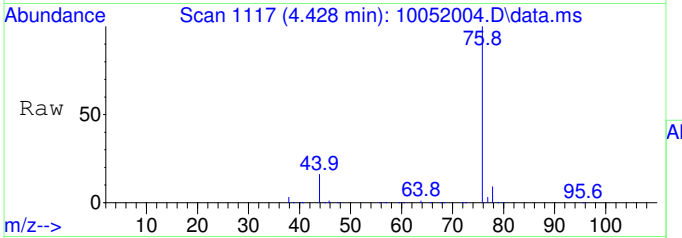


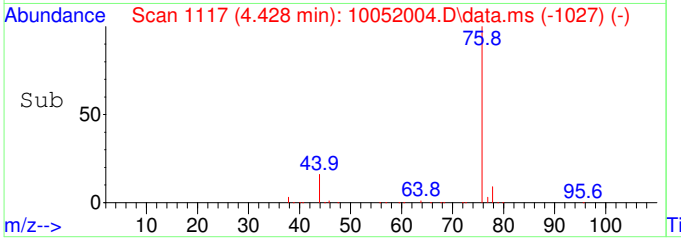


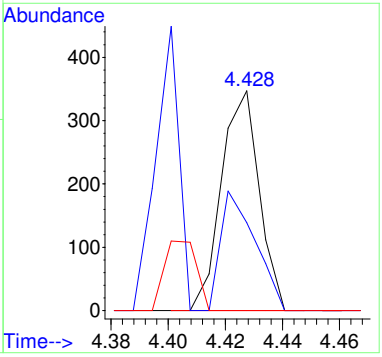
#27
trans-1,2-Dichloroethene SCAN
Concen: 20.06 ug/L
RT: 4.428 min Scan# 1117
Delta R.T. 0.027 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

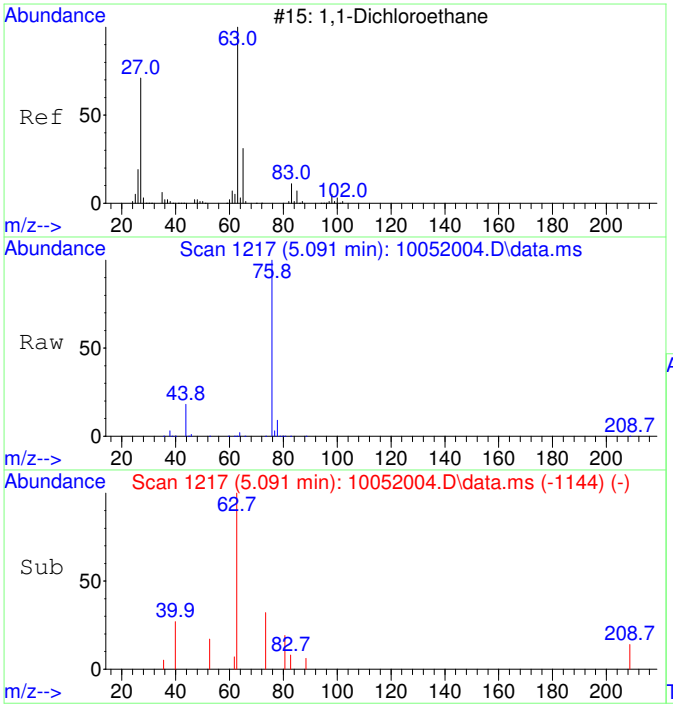
Tgt Ion: 61 Resp: 320

Ion	Ratio	Lower	Upper
61	100		
96	50.0	49.0	109.0
98	0.0	20.5	80.5#





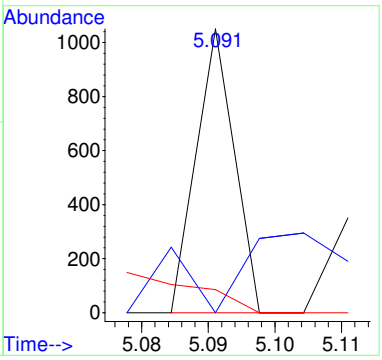


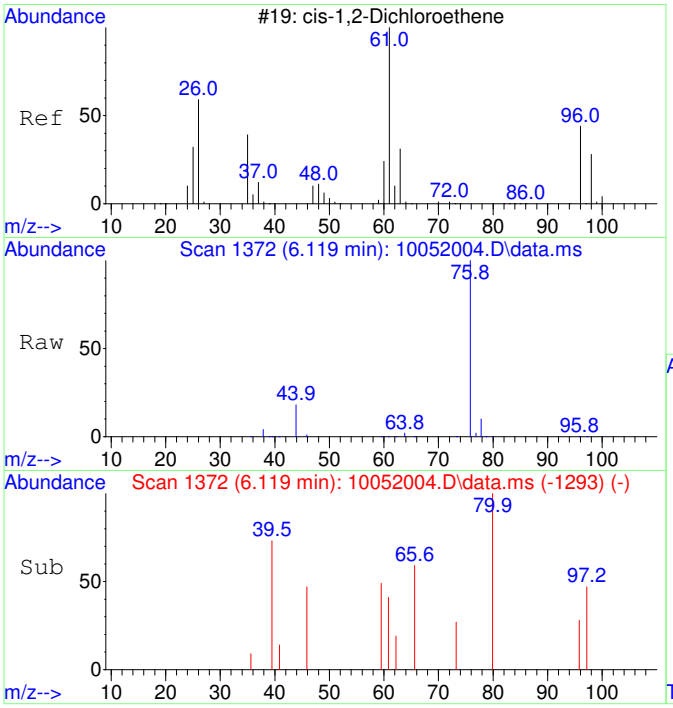


#28
1,1-Dichloroethane SCAN
Concen: 22.64 ug/L
RT: 5.091 min Scan# 1217
Delta R.T. -0.013 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 63 Resp: 418

Ion	Ratio	Lower	Upper
63	100		
65	163.4	1.3	61.3#
83	0.0	0.0	45.9

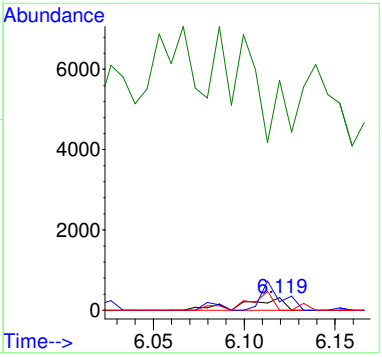


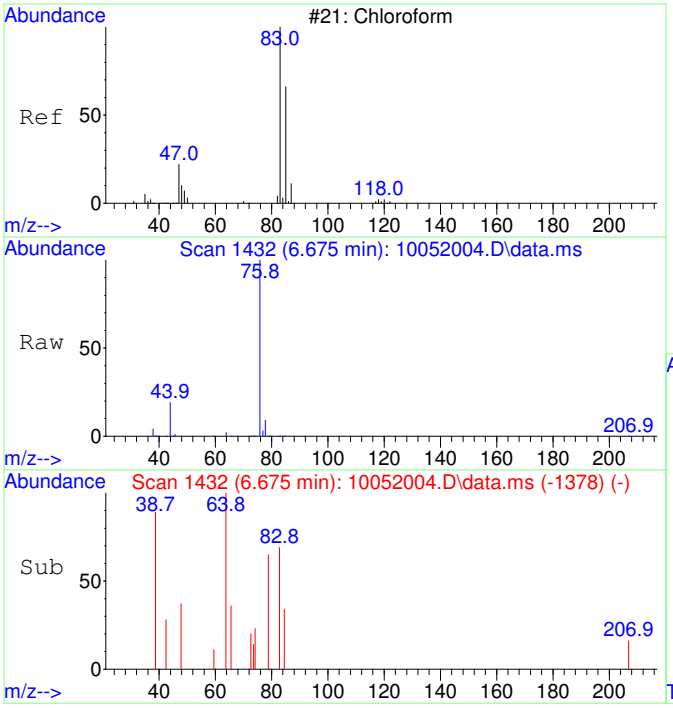


#29
cis-1,2-Dichloroethene SCAN
Concen: 24.46 ug/L
RT: 6.119 min Scan# 1372
Delta R.T. 0.027 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 61 Resp: 484

Ion	Ratio	Lower	Upper
61	100		
96	115.5	39.9	99.9#
98	94.0	13.5	73.5#
64	0.0	4.5	64.5#

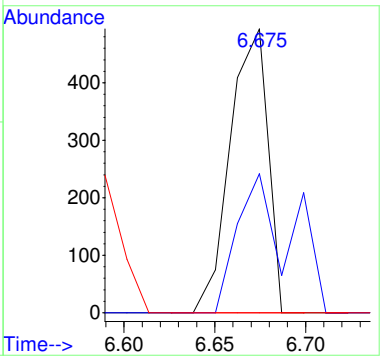


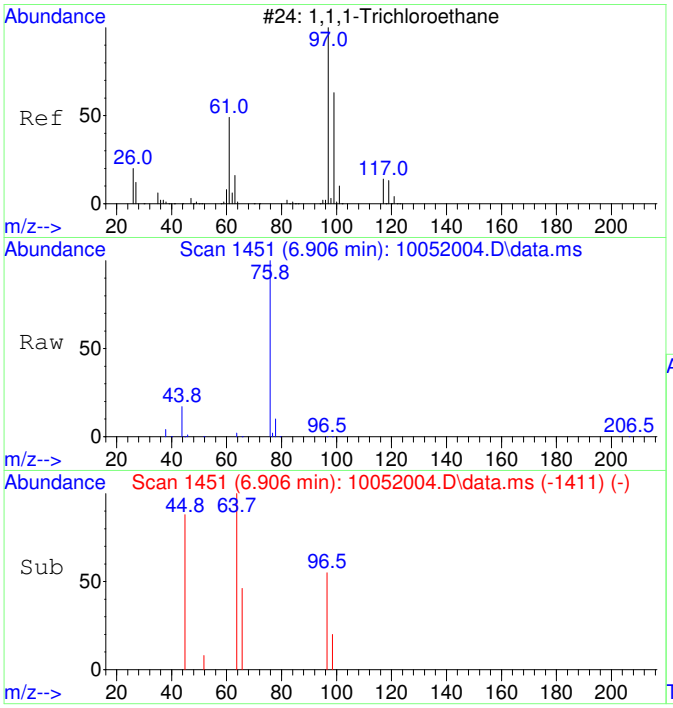


#30
Chloroform SCAN
Concen: 33.27 ug/L
RT: 6.675 min Scan# 1432
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 83 Resp: 714

Ion	Ratio	Lower	Upper
83	100		
85	68.6	34.6	94.6
47	0.0	0.0	53.4

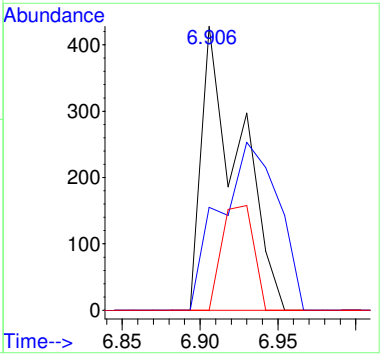


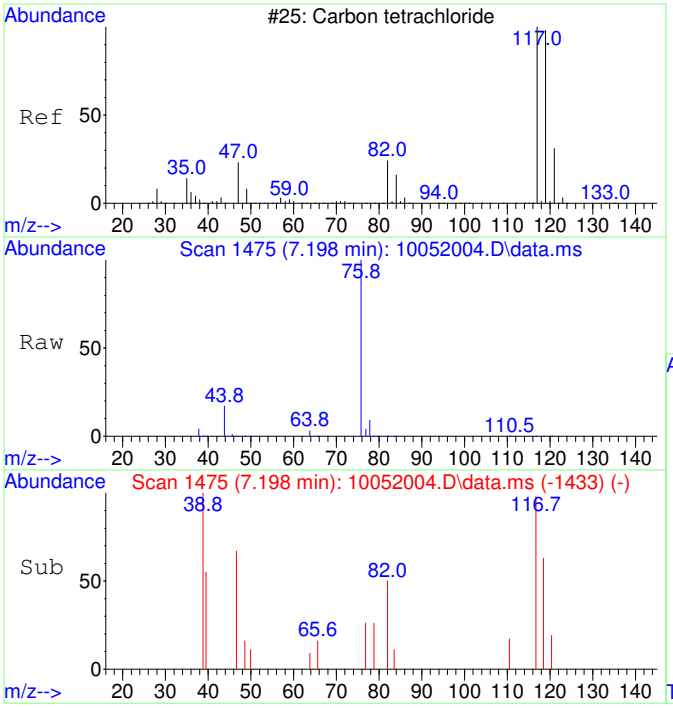


#31
1,1,1-Trichloroethane SCAN
Concen: 37.33 ug/L
RT: 6.906 min Scan# 1451
Delta R.T. -0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 97 Resp: 730

Ion	Ratio	Lower	Upper
97	100		
99	0.0	43.6	103.6#
61	0.0	18.0	78.0#

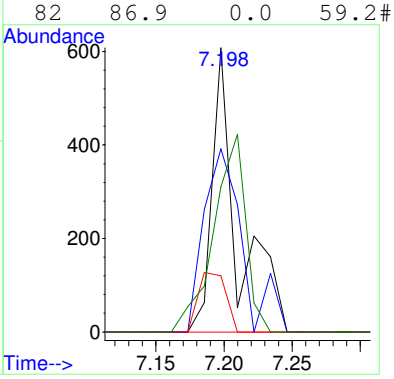


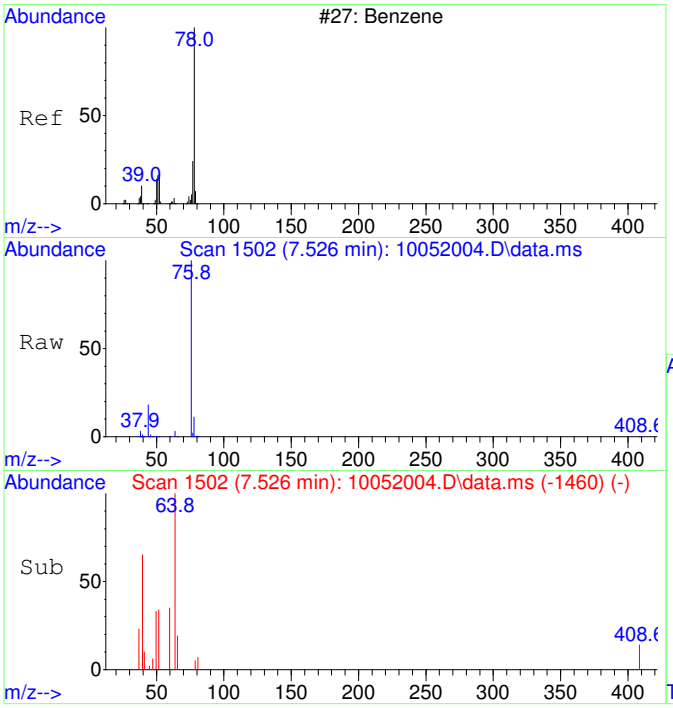


#32
Carbon tetrachloride SCAN
Concen: 38.97 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:117 Resp: 795

Ion	Ratio	Lower	Upper
117	100		
119	96.6	75.5	135.5
121	0.0	0.0	58.8
82	86.9	0.0	59.2#

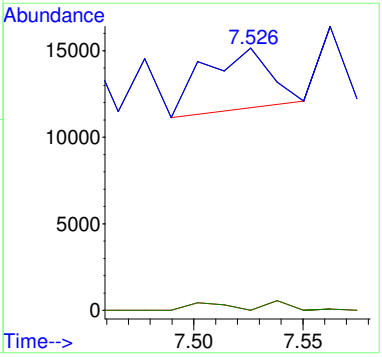


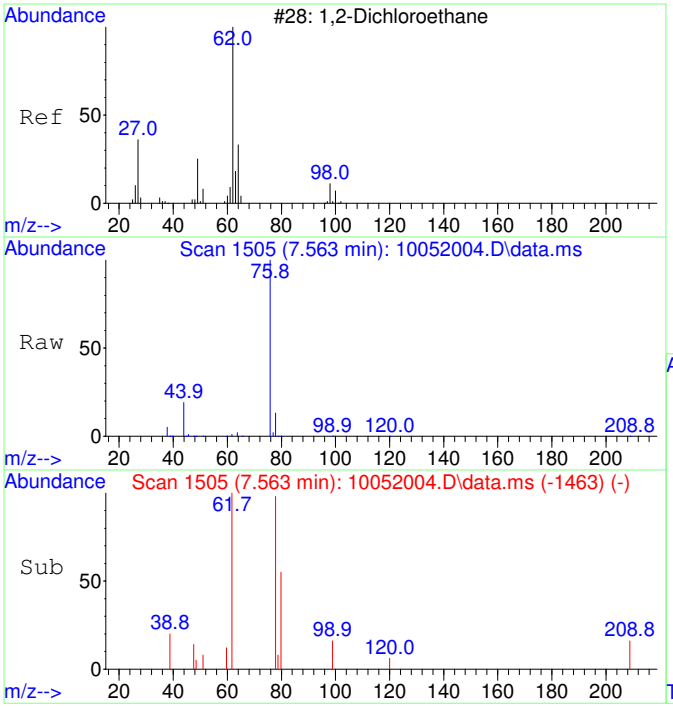


#33
Benzene SCAN
Concen: 143.10 ug/L
RT: 7.526 min Scan# 1502
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 78 Resp: 7705

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	6.0	0.0	47.9
51	6.0	0.0	44.1

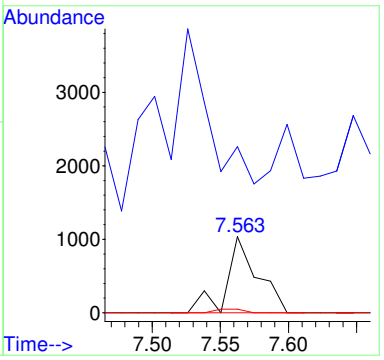


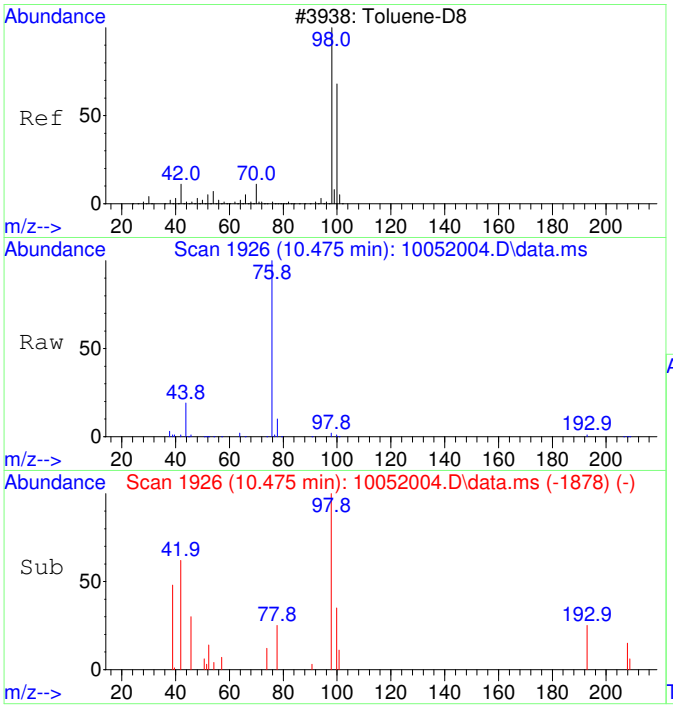


#34
1,2-Dichloroethane SCAN
Concen: 82.54 ug/L
RT: 7.563 min Scan# 1505
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 62 Resp: 1641

Ion	Ratio	Lower	Upper
62	100		
64	0.0	5.2	65.2#
49	4.5	3.9	63.9

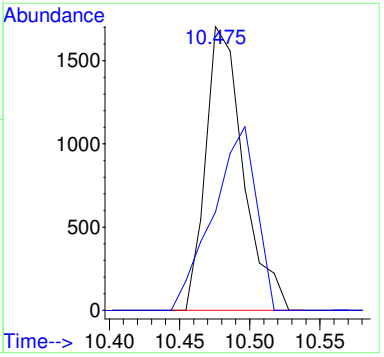


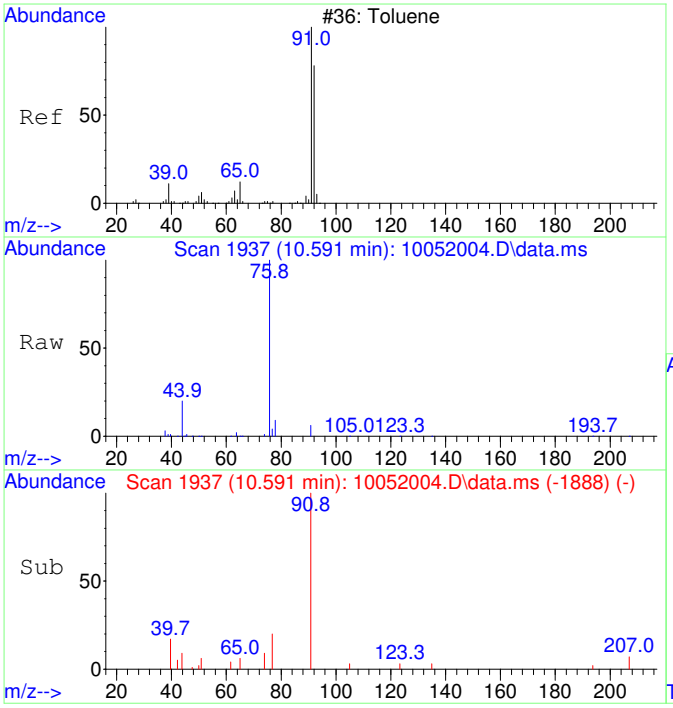


#36
Toluene-d8 SCAN
Concen: 53.54 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. -0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 98 Resp: 3179

Ion	Ratio	Lower	Upper
98	100		
100	0.0	40.0	100.0#

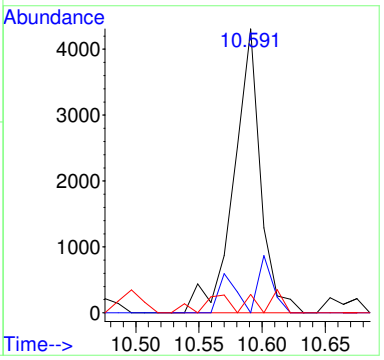


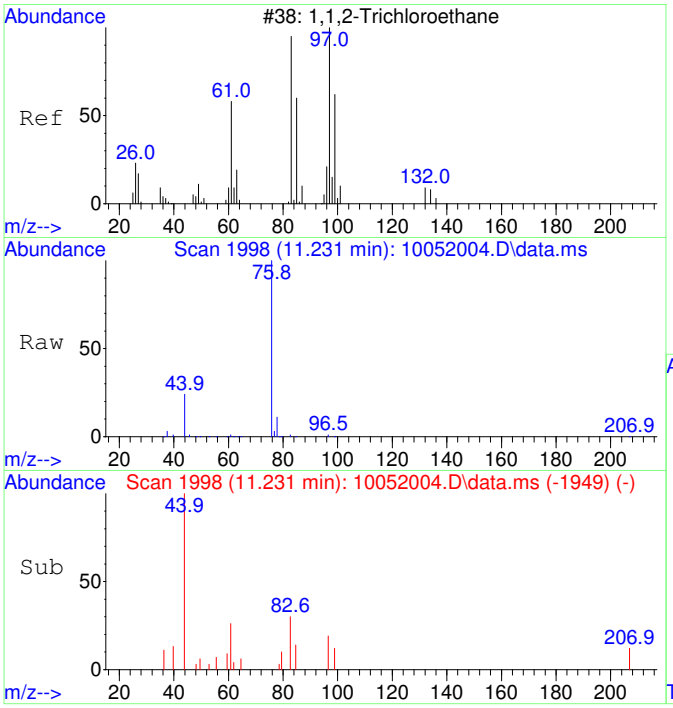


#37
Toluene SCAN
Concen: 83.20 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 6327

Ion	Ratio	Lower	Upper
91	100		
92	11.0	28.3	88.3#
65	2.8	0.0	41.0

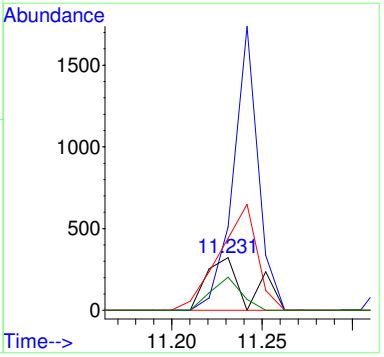


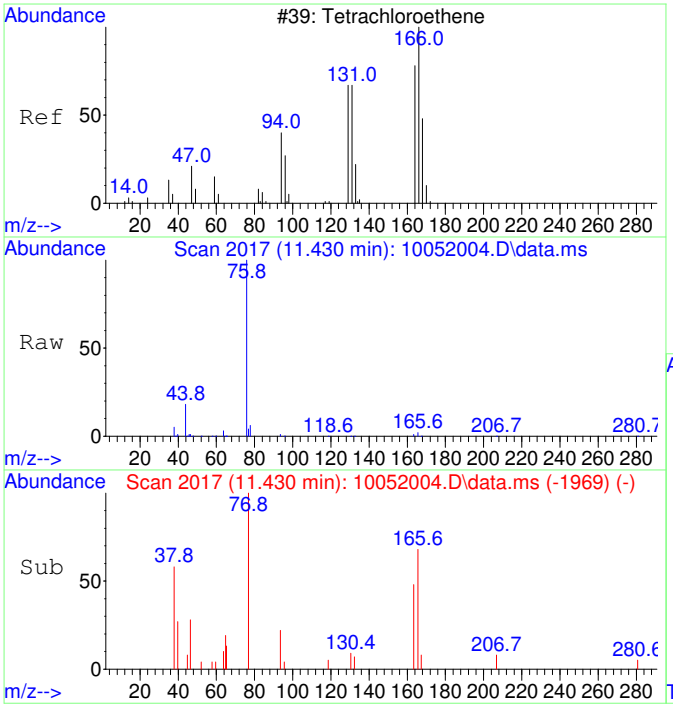


#38
1,1,2-Trichloroethane SCAN
Concen: 30.00 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 97 Resp: 512

Ion	Ratio	Lower	Upper
97	100		
83	327.1	57.7	117.7#
61	185.0	32.1	92.1#
99	46.3	36.7	96.7

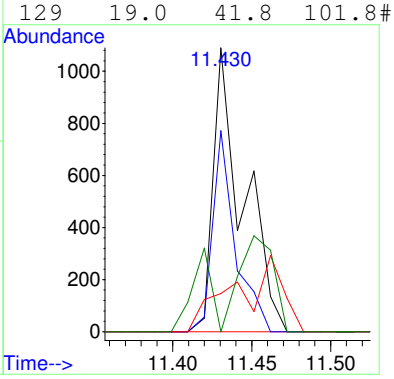


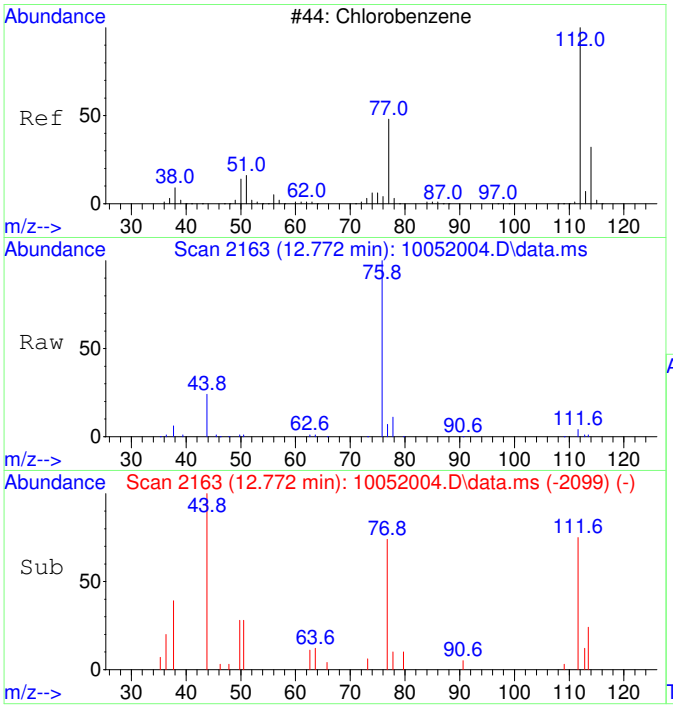


#39
Tetrachloroethene SCAN
Concen: 78.66 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. -0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:166 Resp: 1437

Ion	Ratio	Lower	Upper
166	100		
164	53.3	50.9	110.9
131	0.0	38.7	98.7#
129	19.0	41.8	101.8#

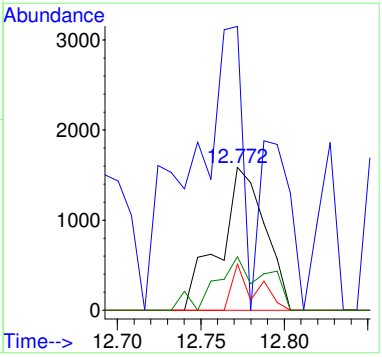


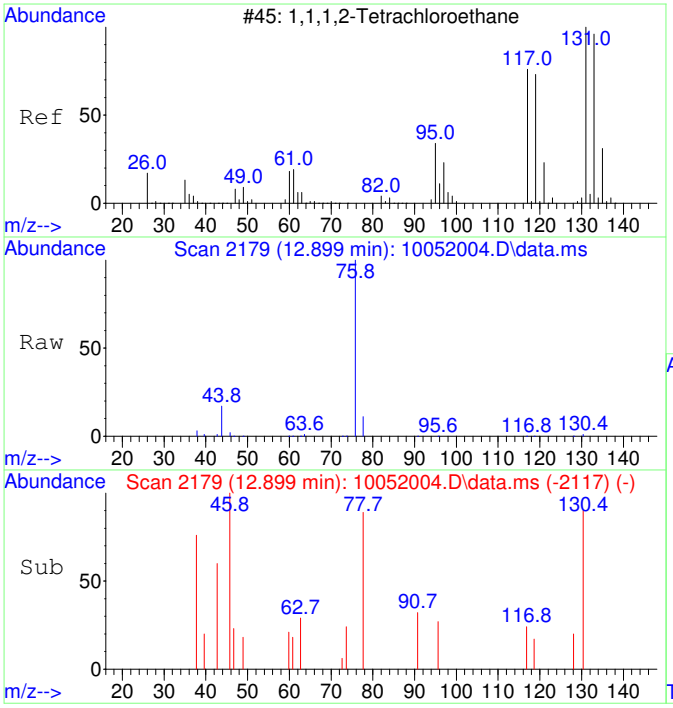


#40
Chlorobenzene SCAN
Concen: 57.79 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.008 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:112 Resp: 3003

Ion	Ratio	Lower	Upper
112	100		
77	223.3	28.2	88.2#
114	16.5	2.3	62.3
51	41.4	0.0	50.1

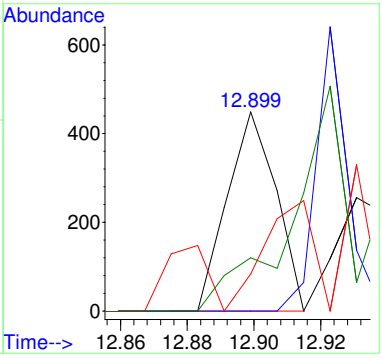


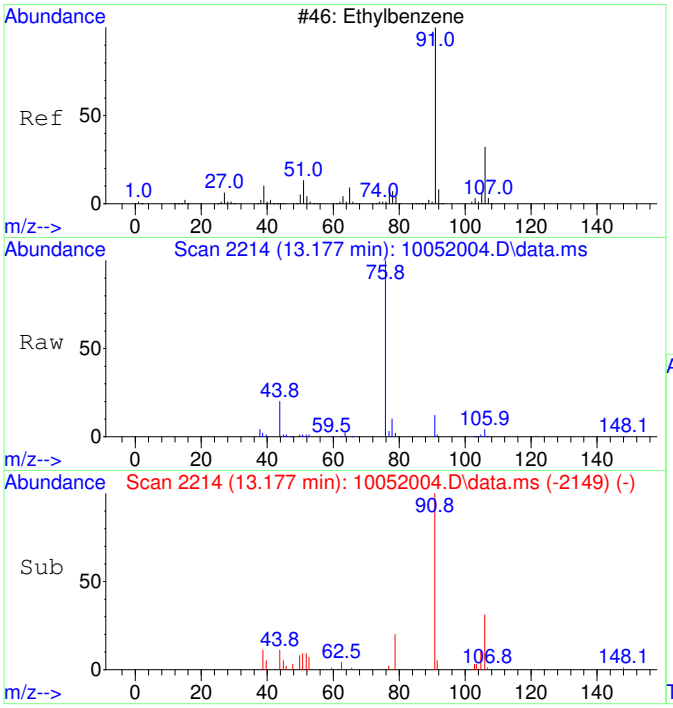


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 23.61 ug/L
RT: 12.899 min Scan# 2179
Delta R.T. -0.008 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:131 Resp: 454

Ion	Ratio	Lower	Upper
131	100		
133	0.0	66.9	126.9#
119	29.1	40.4	100.4#
117	0.0	35.1	95.1#

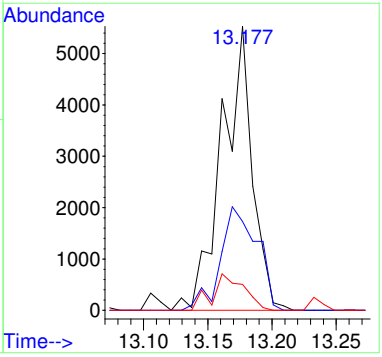


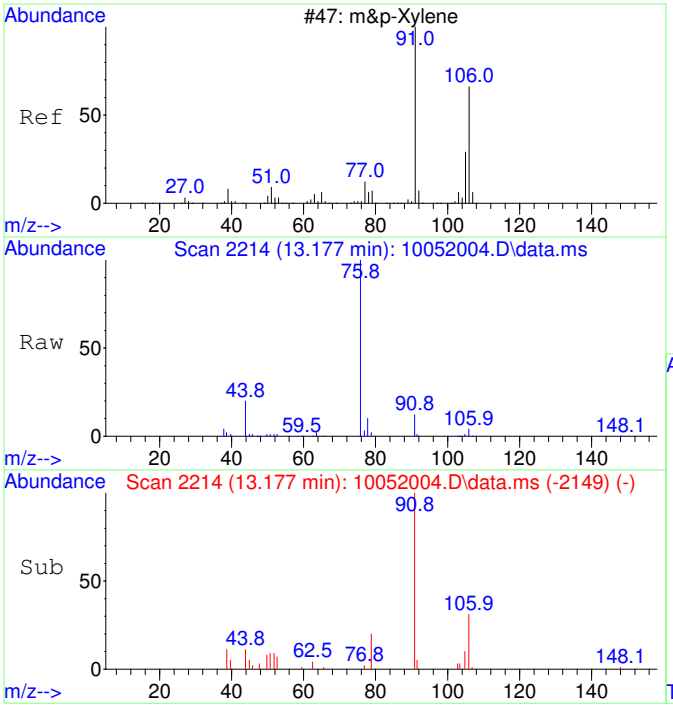


#42
Ethylbenzene SCAN
Concen: 65.82 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 9119

Ion	Ratio	Lower	Upper
91	100		
106	43.9	23.1	83.1
51	13.3	0.0	40.1

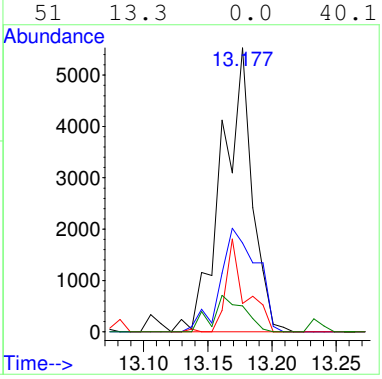


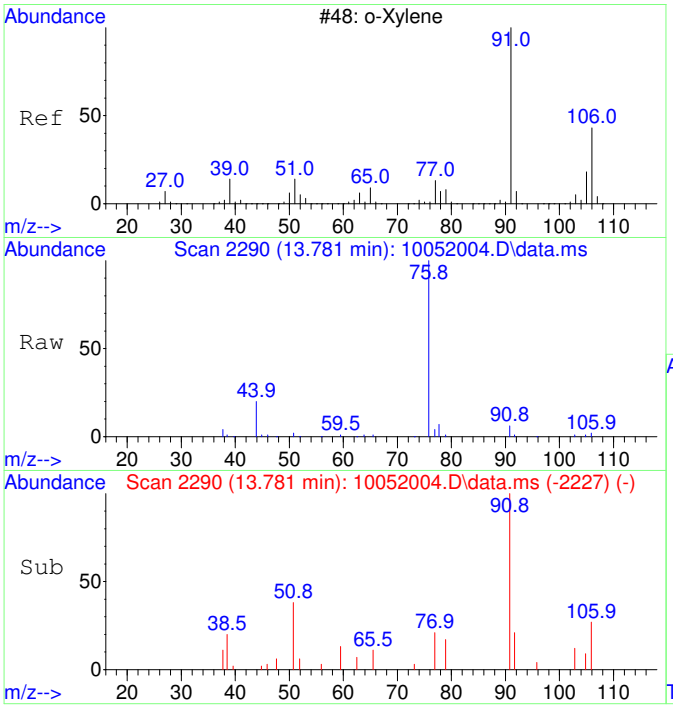


#43
m&p-Xylene SCAN
Concen: 65.82 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 9119

Ion	Ratio	Lower	Upper
91	100		
106	43.9	23.1	83.1
105	21.2	0.0	54.7
51	13.3	0.0	40.1

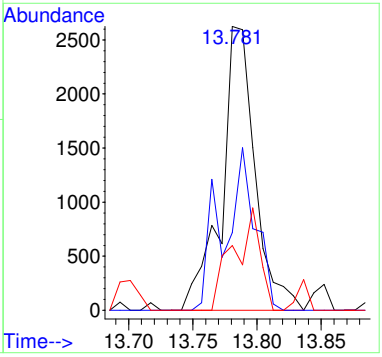


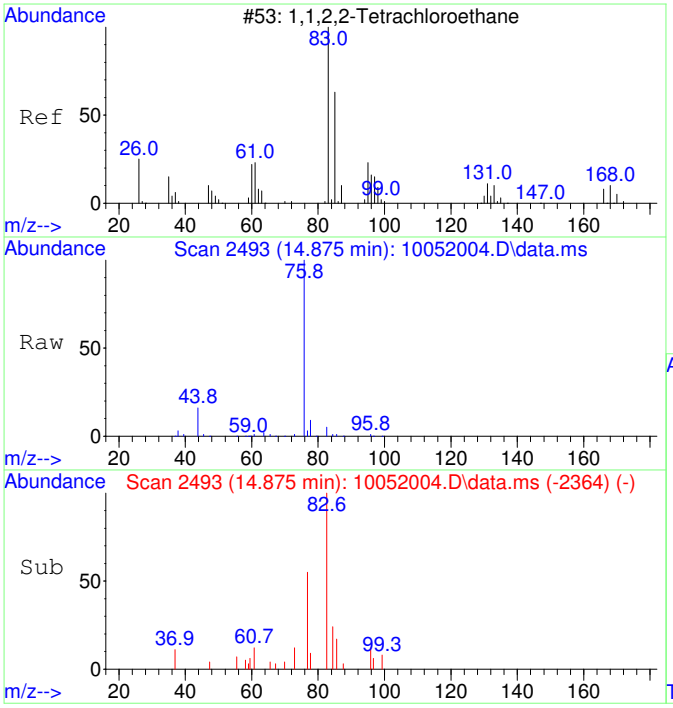


#44
o-Xylene SCAN
Concen: 64.01 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. 0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 4747

Ion	Ratio	Lower	Upper
91	100		
106	55.5	18.0	78.0
105	28.8	0.0	56.6

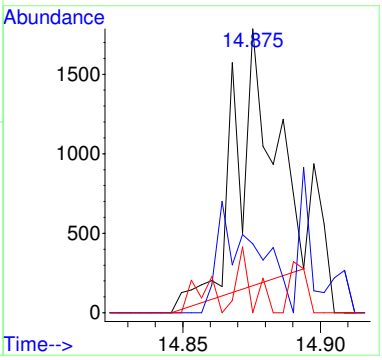


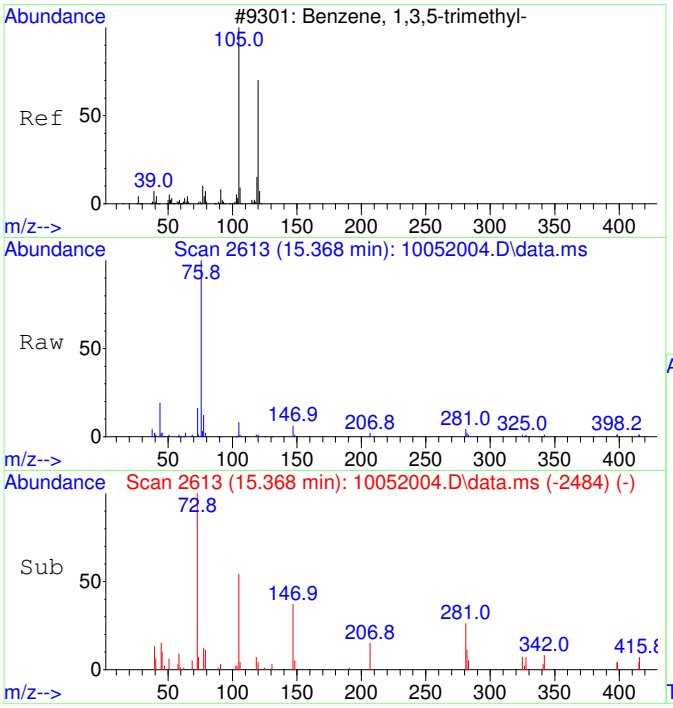


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 43.64 ug/L
RT: 14.875 min Scan# 2493
Delta R.T. 0.004 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 83 Resp: 1578

Ion	Ratio	Lower	Upper
83	100		
85	0.0	35.9	95.9#
95	10.0	0.0	47.4

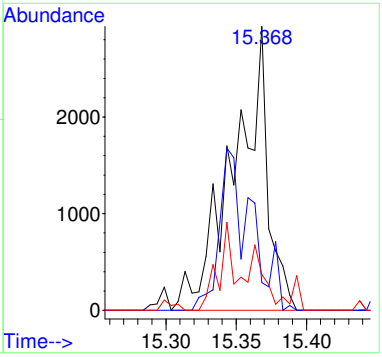


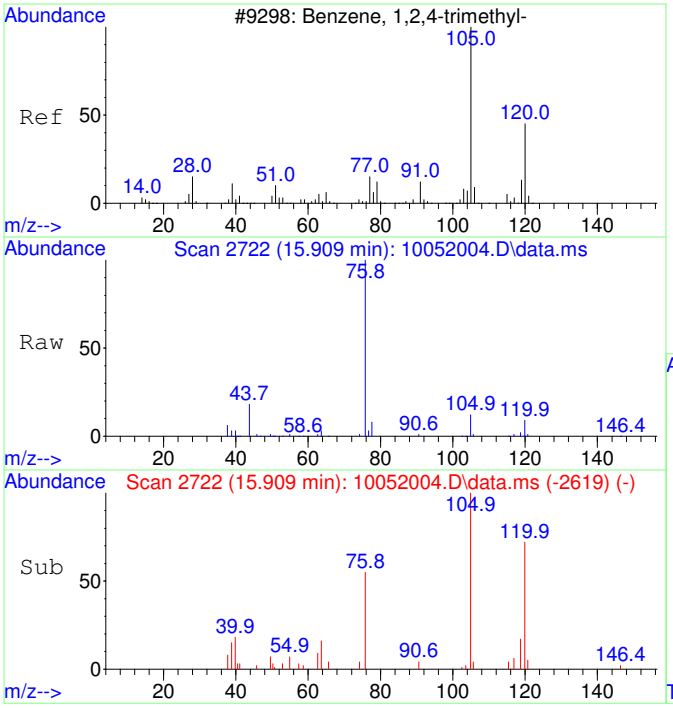


#46
1,3,5-Trimethylbenzene SCAN
Concen: 63.85 ug/L
RT: 15.368 min Scan# 2613
Delta R.T. 0.025 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:105 Resp: 4990

Ion	Ratio	Lower	Upper
105	100		
120	0.0	18.3	78.3#
119	4.0	0.0	43.1

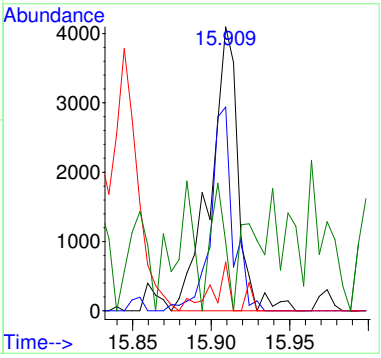


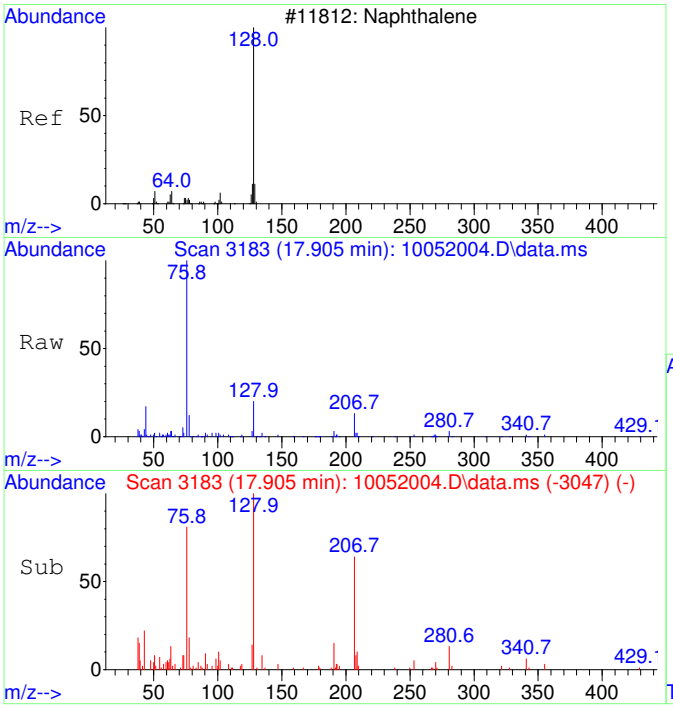


#47
1,2,4-Trimethylbenzene SCAN
Concen: 63.40 ug/L
RT: 15.909 min Scan# 2722
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:105 Resp: 5070

Ion	Ratio	Lower	Upper
105	100		
120	56.7	16.9	76.9
119	9.6	0.0	41.9
77	23.1	0.0	42.3

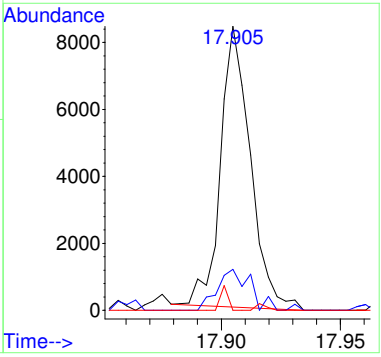




#48
Naphthalene SCAN
Concen: 60.33 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.004 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:128 Resp: 7300

Ion	Ratio	Lower	Upper
128	100		
127	16.2	0.0	44.0
129	2.2	0.0	40.8



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052004.D
Acq On : 5 Oct 2020 10:17
InstName : AG5975C
Operator : TD
Sample : S20J006-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

M.I. Performed By:
TD at 10:47 am, Oct 05, 2020

M.I. Approved By:
ZR at 3:55 pm, Oct 07, 2020

Quant Time: Oct 05 10:36:11 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

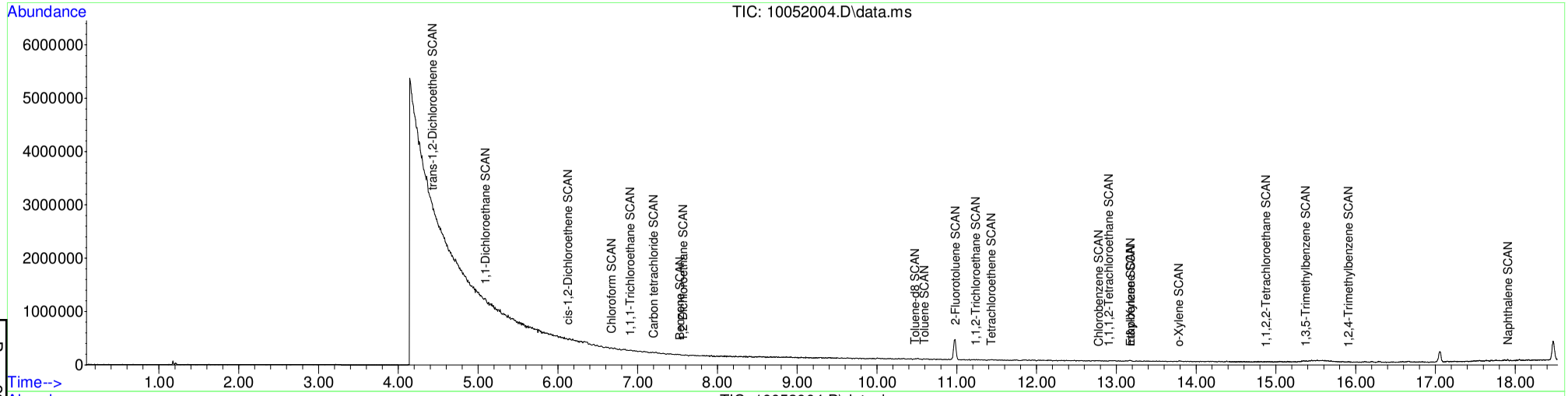
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	622858	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	6051	49.63 ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 0.99%#		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.097	61	1199m	48.21 ug/L	
3] trans-1,2-Dichloroethene	4.416	61	1450	50.46 ug/L	75
4] 1,1-Dichloroethane	5.112	63	1775	49.62 ug/L	89
5] cis-1,2-Dichloroethene	6.101	61	1892	50.11 ug/L	100
6] Chloroform	6.664	83	1828	47.30 ug/L	98
7] 1,1,1-Trichloroethane	6.931	97	1946	46.36 ug/L	99
8] Carbon tetrachloride	7.199	117	1830	46.32 ug/L	99
9] Benzene	7.515	78	5979	56.50 ug/L	62
10] 1,2-Dichloroethane	7.552	62	1876	49.66 ug/L #	1
11] Trichloroethene	8.580	130	1525	47.86 ug/L	94
13] Toluene	10.582	91	7943	51.10 ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	1650	48.71 ug/L	98
15] Tetrachloroethene	11.432	166	2241	49.81 ug/L	98
16] Chlorobenzene	12.773	112	5845	52.51 ug/L	90
17] 1,1,1,2-Tetrachloroethane	12.916	131	2024	50.75 ug/L	98
18] Ethylbenzene	12.980	91	10105	53.40 ug/L	94
19] m&p-Xylene	13.170	91	15677	106.01 ug/L	94
20] o-Xylene	13.782	91	8205	51.93 ug/L	95
21] 1,1,2,2-Tetrachloroethane	14.880	83	3715	53.05 ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	9170	54.53 ug/L	97
23] 1,2,4-Trimethylbenzene	15.906	105	9608	55.00 ug/L	94
24] Naphthalene	17.906	128	15081	54.63 ug/L	97
25) 2-Fluorotoluene SCAN	10.979	109	311239	5126.05 ug/L	95
27) trans-1,2-Dichloroethe...	4.428	61	320	20.06 ug/L #	51
28) 1,1-Dichloroethane SCAN	5.091	63	418	22.64 ug/L #	1
29) cis-1,2-Dichloroethene...	6.119	61	484	24.46 ug/L #	37
30) Chloroform SCAN	6.675	83	714	33.27 ug/L #	83
31) 1,1,1-Trichloroethane ...	6.906	97	730	37.33 ug/L #	19
32) Carbon tetrachloride SCAN	7.198	117	795	38.97 ug/L #	66
33) Benzene SCAN	7.526	78	7705	143.10 ug/L	94
34) 1,2-Dichloroethane SCAN	7.563	62	1641	82.54 ug/L #	44
36) Toluene-d8 SCAN	10.475	98	3179	53.54 ug/L #	15
37) Toluene SCAN	10.591	91	6327	83.20 ug/L #	43
38) 1,1,2-Trichloroethane ...	11.231	97	512	30.00 ug/L #	1
39) Tetrachloroethene SCAN	11.430	166	1437	78.66 ug/L #	42
40) Chlorobenzene SCAN	12.772	112	3003	57.79 ug/L #	1
41) 1,1,1,2-Tetrachloroeth...	12.899	131	454	23.61 ug/L #	21
42) Ethylbenzene SCAN	13.177	91	9119	65.82 ug/L	88
43) m&p-Xylene SCAN	13.177	91	9119	65.82 ug/L	89
44) o-Xylene SCAN	13.781	91	4747	64.01 ug/L	91
45) 1,1,2,2-Tetrachloroeth...	14.875	83	1578	43.64 ug/L #	31
46) 1,3,5-Trimethylbenzene...	15.368	105	4990	63.85 ug/L #	39
47) 1,2,4-Trimethylbenzene...	15.909	105	5070	63.40 ug/L	85
48) Naphthalene SCAN	17.905	128	7300	60.33 ug/L	87

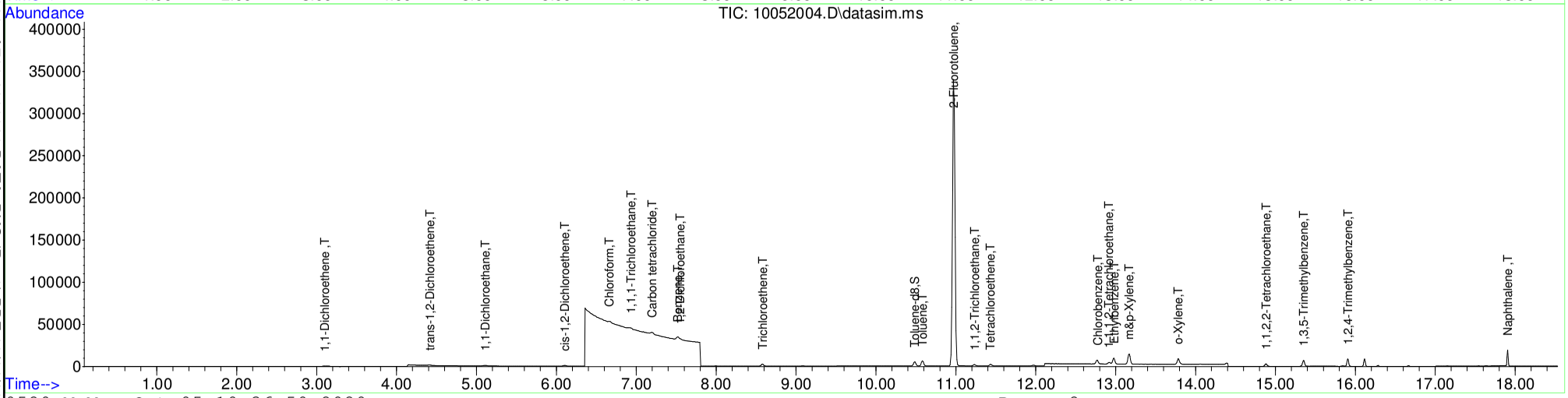
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052004.D
Acq On : 5 Oct 2020 10:17
InstName : AG5975C
Operator : TD
Sample : S20J006-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 05 10:36:11 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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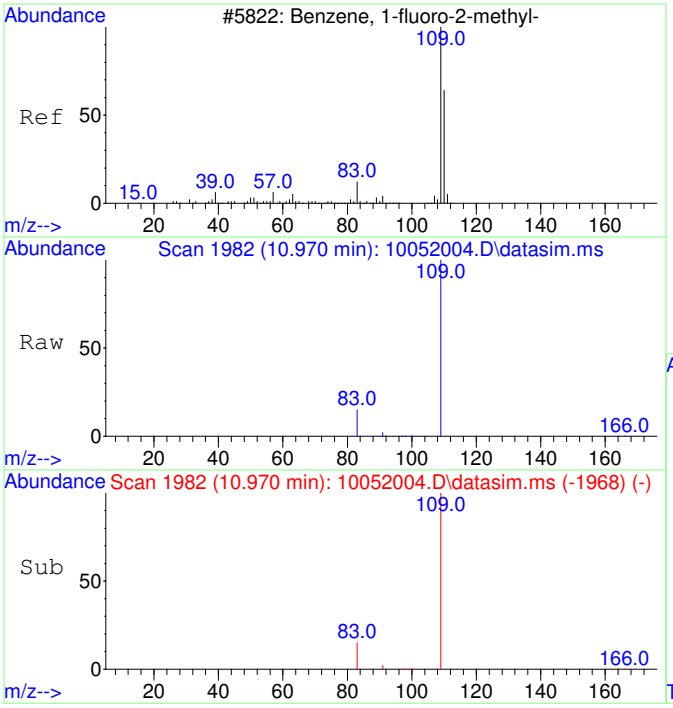
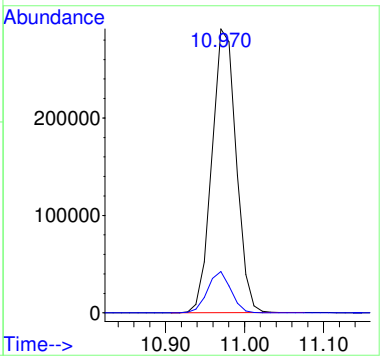
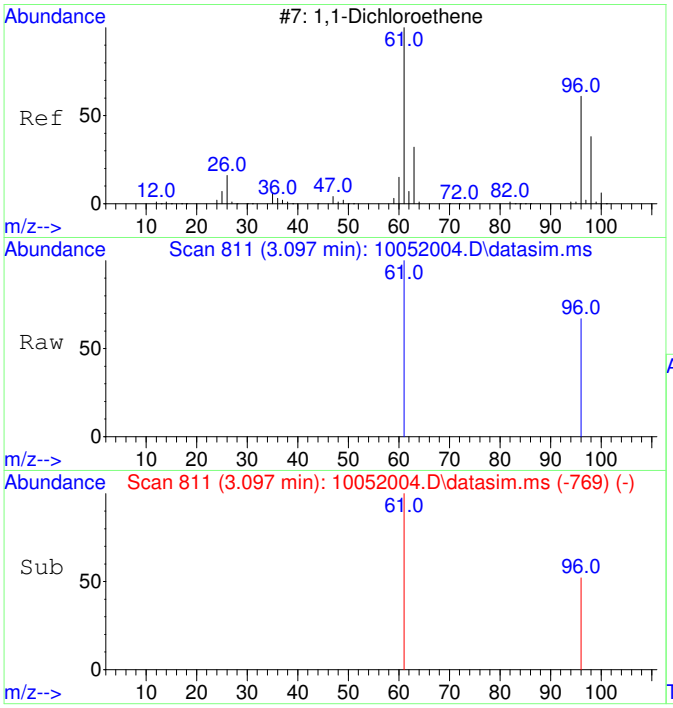


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:109 Resp: 622858

Ion	Ratio	Lower	Upper
109	100		
83	13.9	0.0	42.3

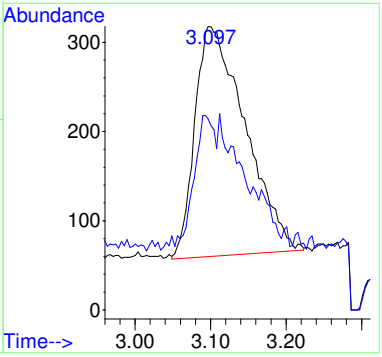


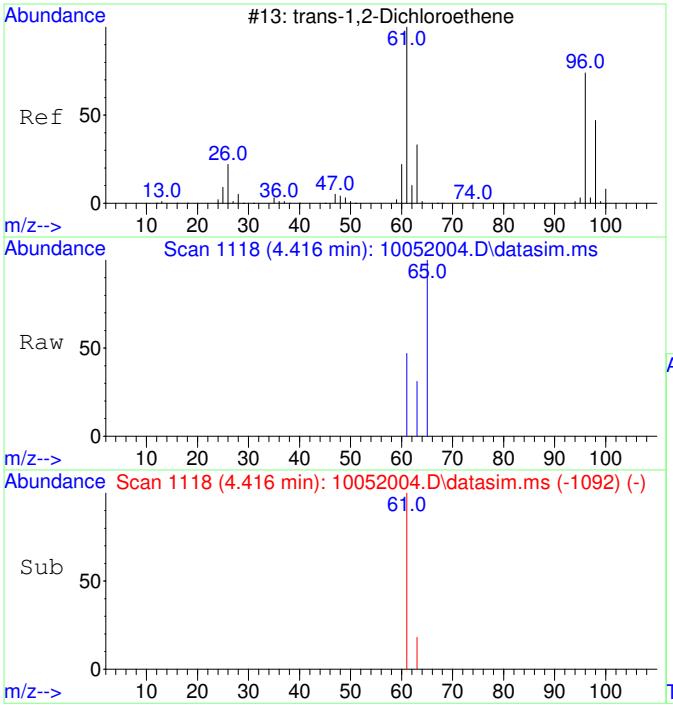


#2
1,1-Dichloroethene
Concen: 48.21 ug/L m
RT: 3.097 min Scan# 811
Delta R.T. 0.007 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 61 Resp: 1199

Ion	Ratio	Lower	Upper
61	100		
96	31.9	37.2	97.2#

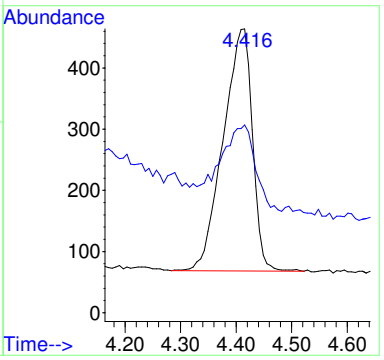


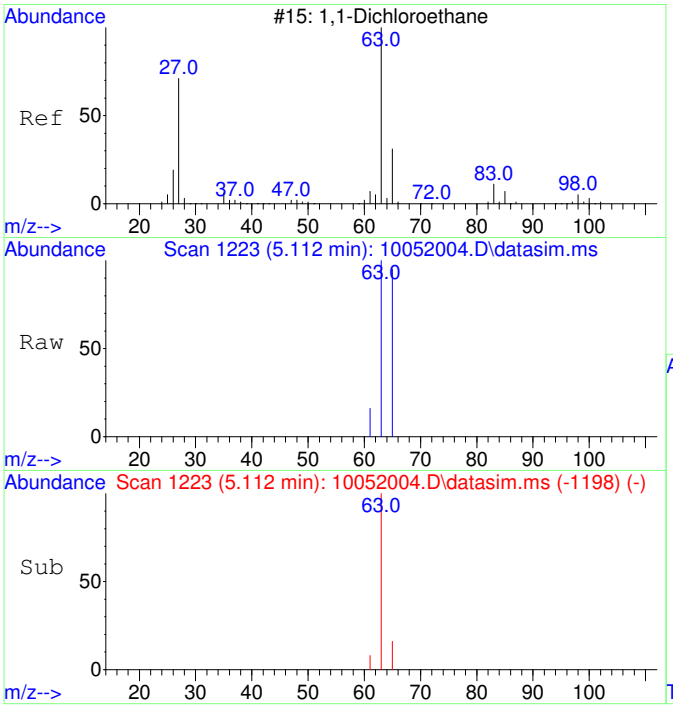


#3
trans-1,2-Dichloroethene
Concen: 50.46 ug/L
RT: 4.416 min Scan# 1118
Delta R.T. 0.020 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 61 Resp: 1450

Ion	Ratio	Lower	Upper
61	100		
63	46.5	2.4	62.4

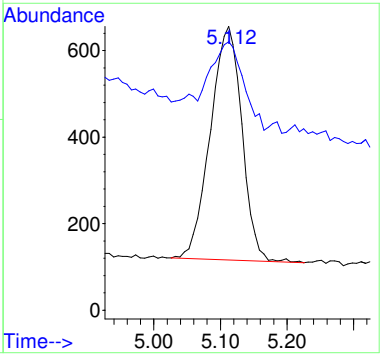


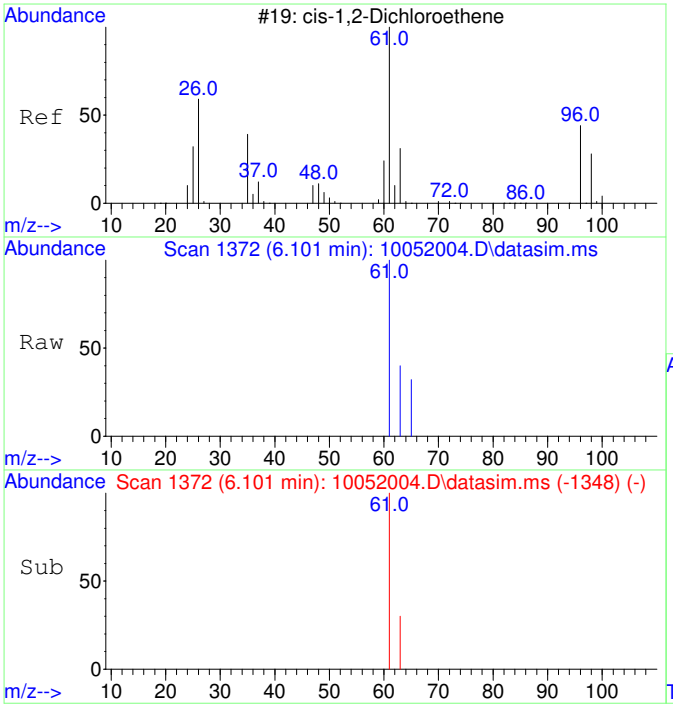


#4
1,1-Dichloroethane
Concen: 49.62 ug/L
RT: 5.112 min Scan# 1223
Delta R.T. 0.013 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 63 Resp: 1775

Ion	Ratio	Lower	Upper
63	100		
65	37.7	1.8	61.8

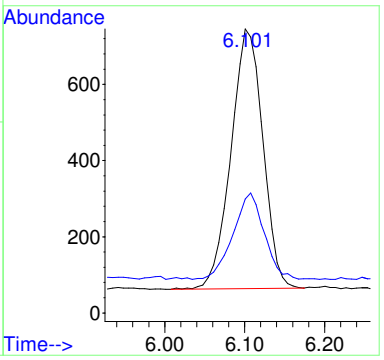


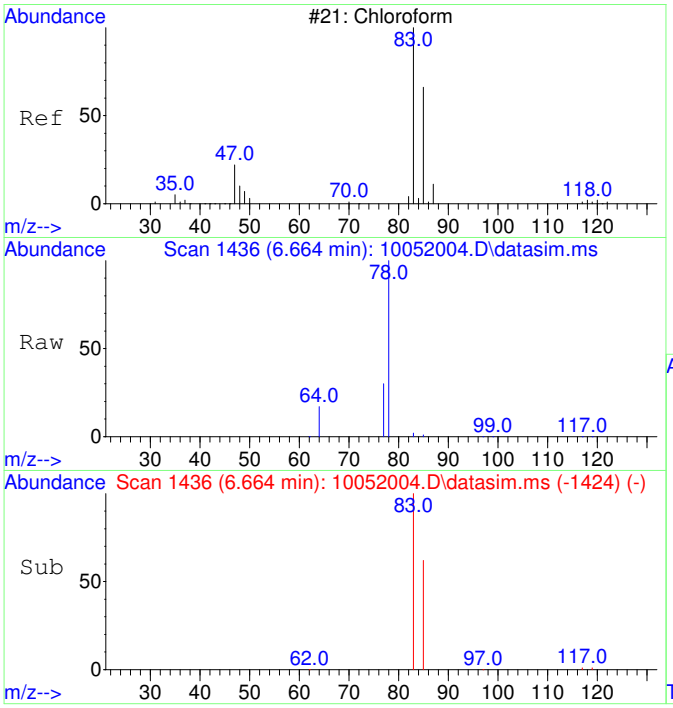


#5
cis-1,2-Dichloroethene
Concen: 50.11 ug/L
RT: 6.101 min Scan# 1372
Delta R.T. 0.007 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 61 Resp: 1892

Ion	Ratio	Lower	Upper
61	100		
63	32.7	2.5	62.5

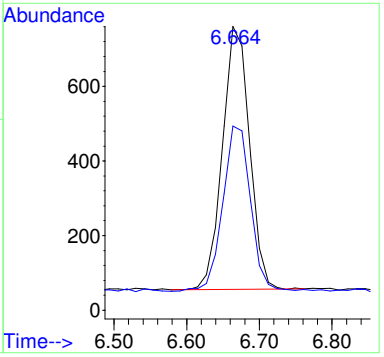


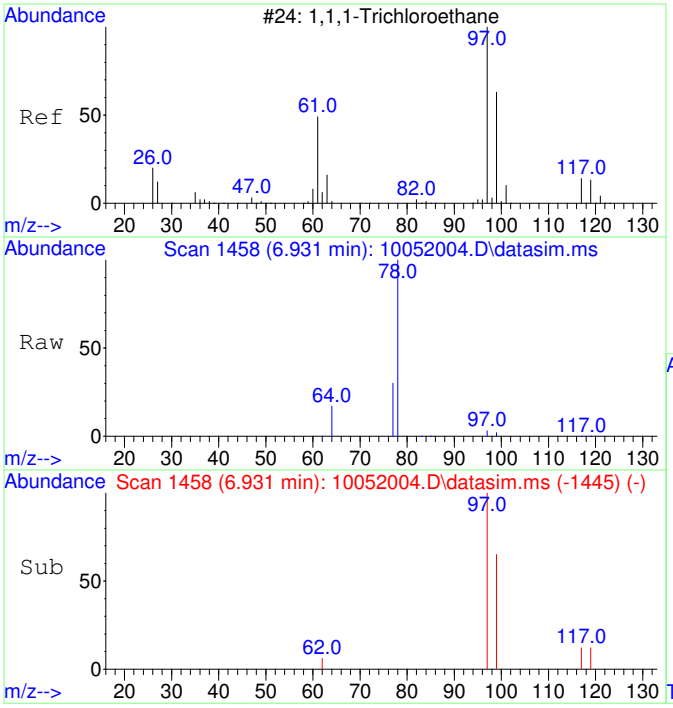


#6
Chloroform
Concen: 47.30 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 83 Resp: 1828

Ion	Ratio	Lower	Upper
83	100		
85	63.8	35.1	95.1

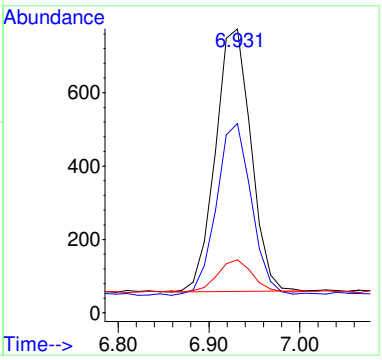


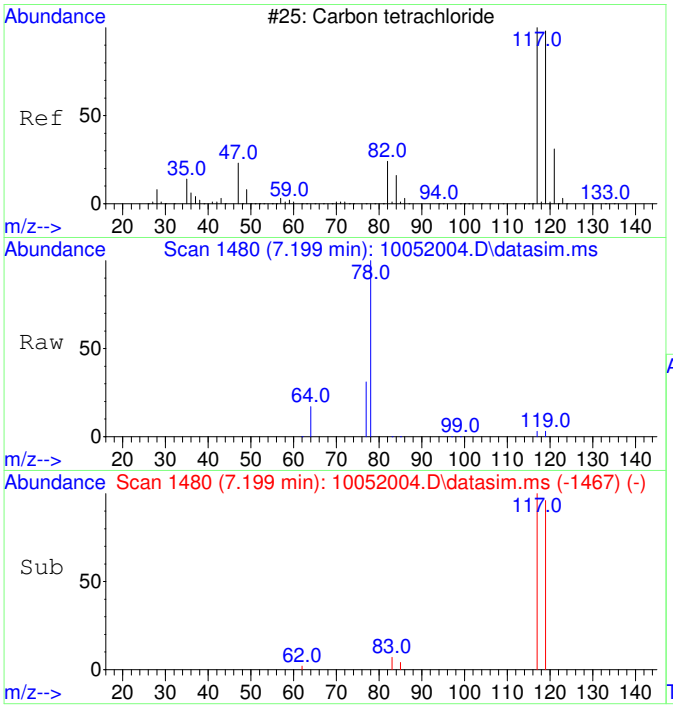


#7
1,1,1-Trichloroethane
Concen: 46.36 ug/L
RT: 6.931 min Scan# 1458
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 97 Resp: 1946

Ion	Ratio	Lower	Upper
97	100		
99	63.7	34.6	94.6
117	13.3	0.0	43.2

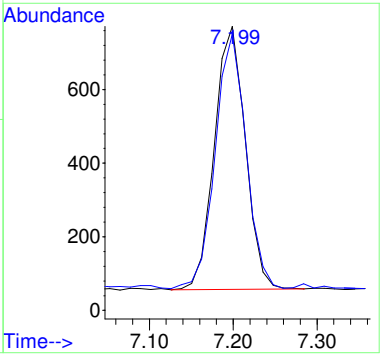


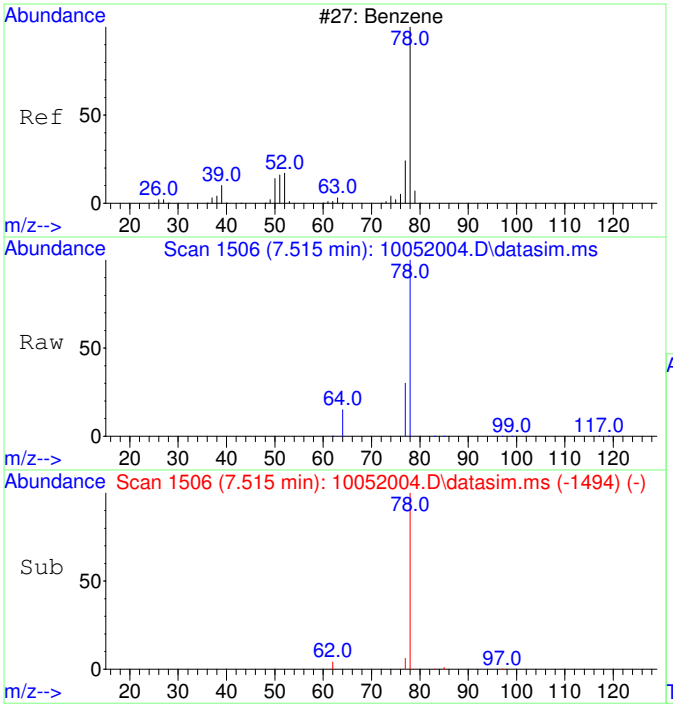


#8
Carbon tetrachloride
Concen: 46.32 ug/L
RT: 7.199 min Scan# 1480
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:117 Resp: 1830

Ion	Ratio	Lower	Upper
117	100		
119	95.8	66.4	126.4

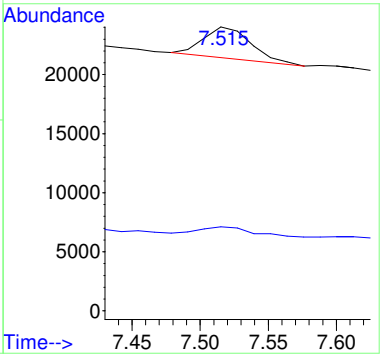


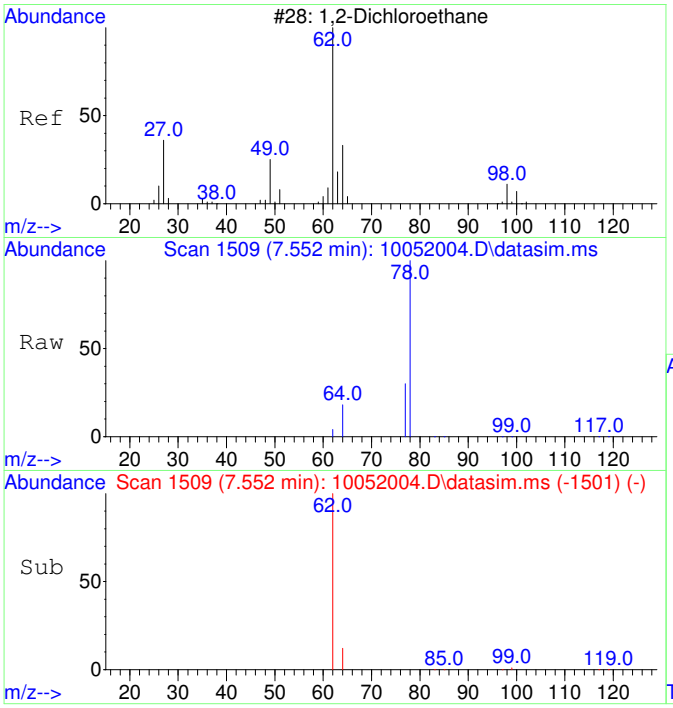


#9
Benzene
Concen: 56.50 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 78 Resp: 5979

Ion	Ratio	Lower	Upper
78	100		
77	41.6	0.0	53.2

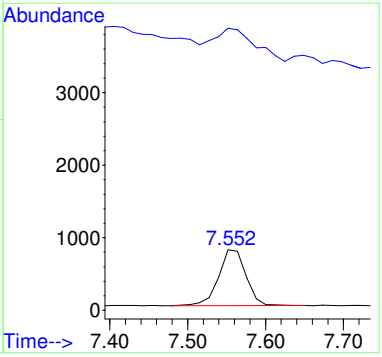


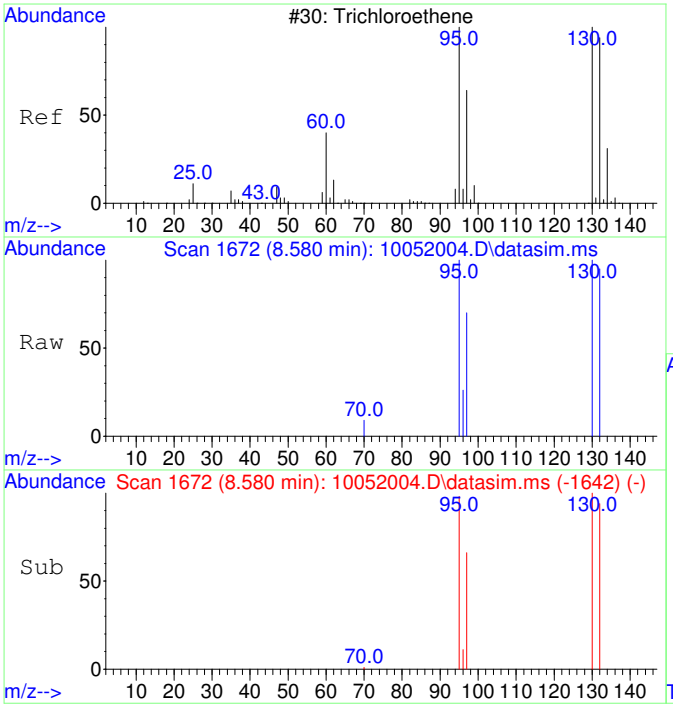


#10
1,2-Dichloroethane
Concen: 49.66 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. -0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 62 Resp: 1876

Ion	Ratio	Lower	Upper
62	100		
64	89.3	2.3	62.3#

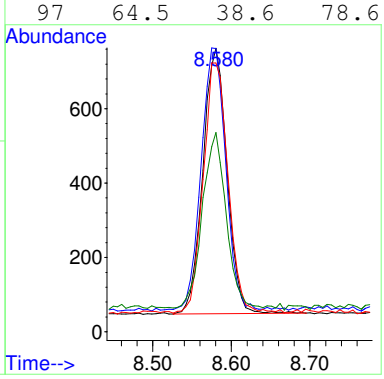


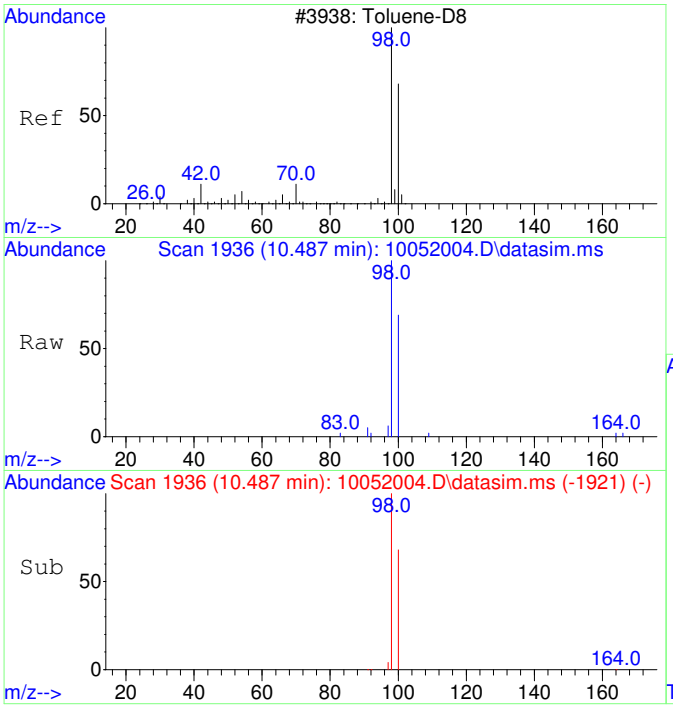


#11
Trichloroethene
Concen: 47.86 ug/L
RT: 8.580 min Scan# 1672
Delta R.T. 0.011 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:130 Resp: 1525

Ion	Ratio	Lower	Upper
130	100		
95	99.7	60.7	120.7
132	97.0	76.0	116.0
97	64.5	38.6	78.6

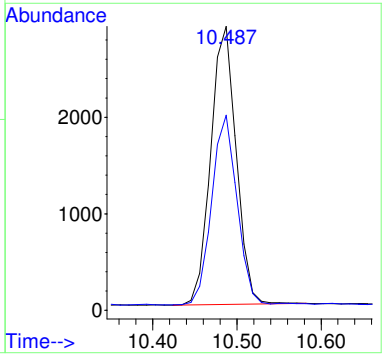


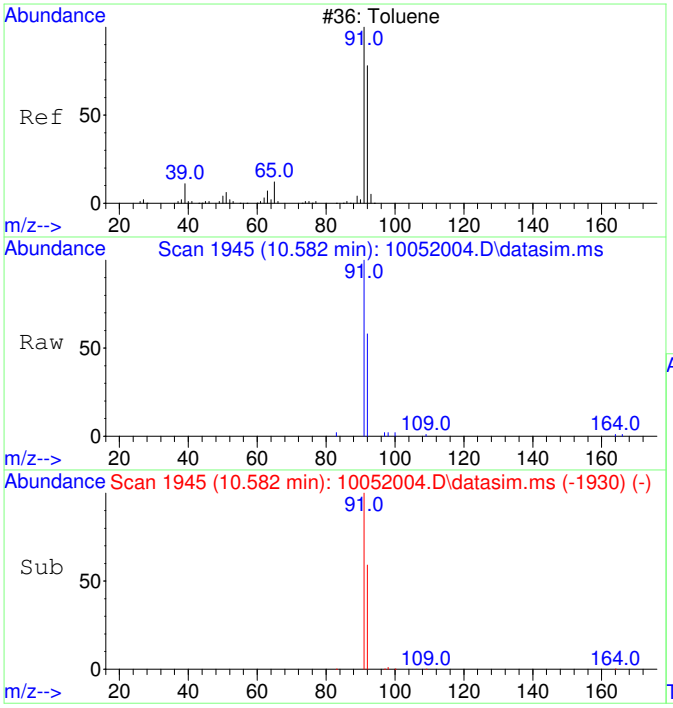


#12
Toluene-d8
Concen: 49.63 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 98 Resp: 6051

Ion	Ratio	Lower	Upper
98	100		
100	67.1	37.1	97.1

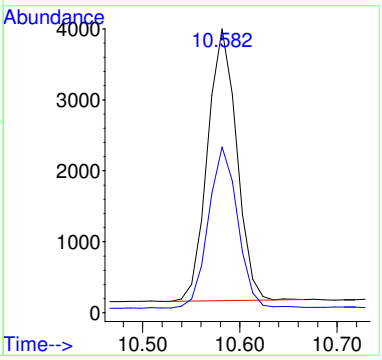


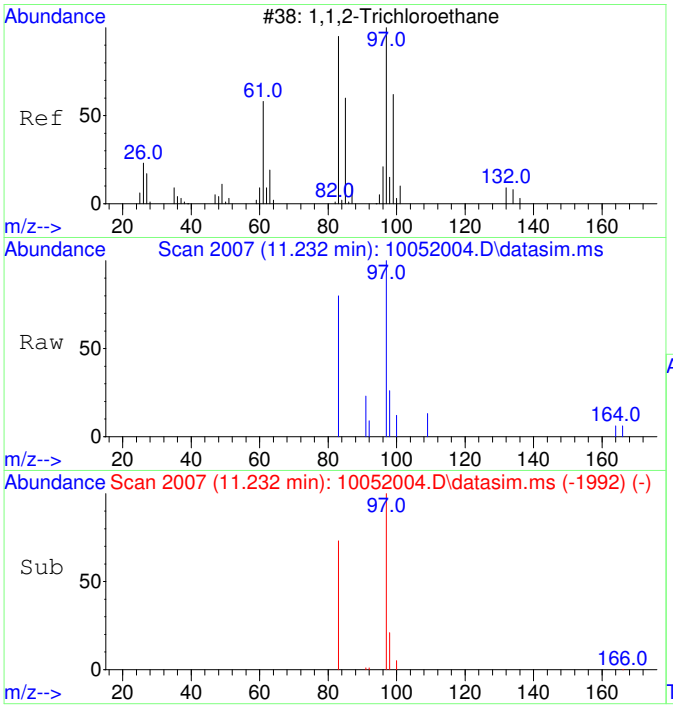


#13
Toluene
Concen: 51.10 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 7943

Ion	Ratio	Lower	Upper
91	100		
92	59.3	29.9	89.9

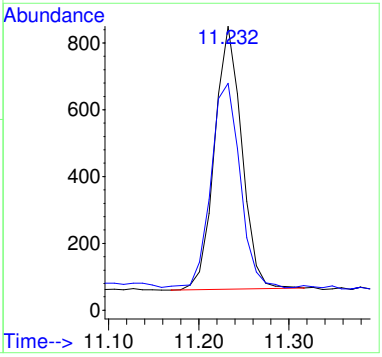


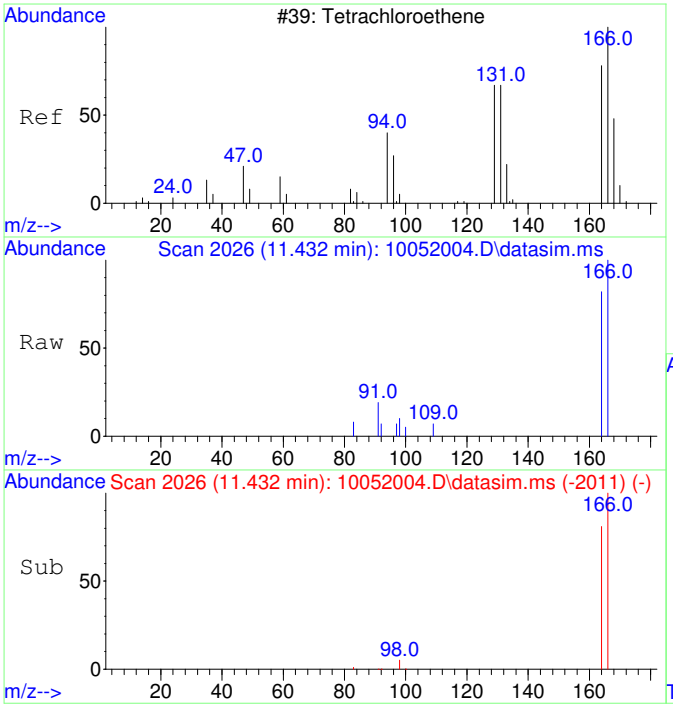


#14
1,1,2-Trichloroethane
Concen: 48.71 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 97 Resp: 1650

Ion	Ratio	Lower	Upper
97	100		
83	82.7	51.2	111.2

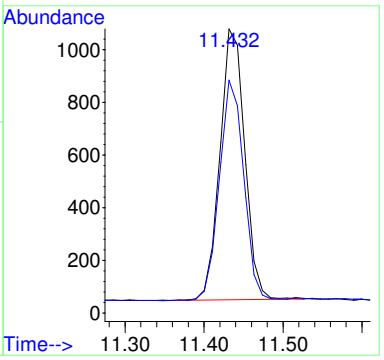


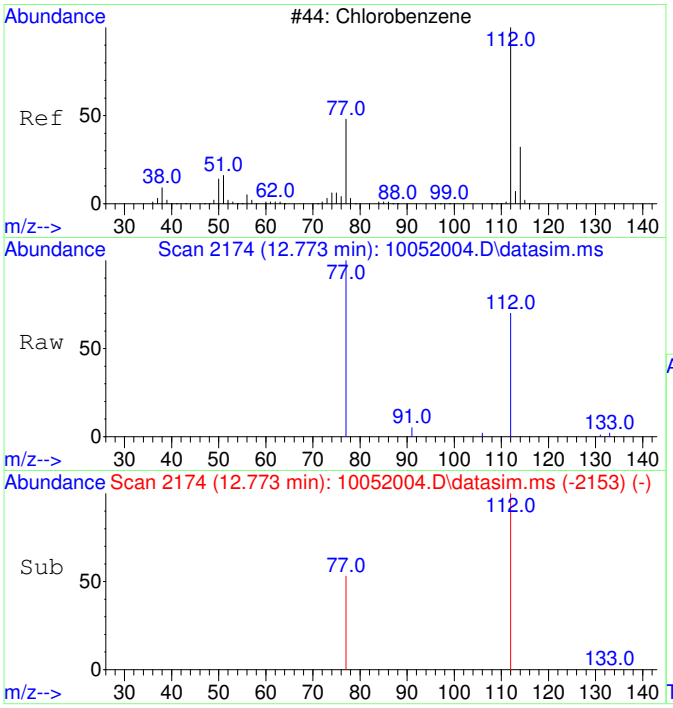


#15
Tetrachloroethene
Concen: 49.81 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:166 Resp: 2241

Ion	Ratio	Lower	Upper
166	100		
164	79.7	47.8	107.8

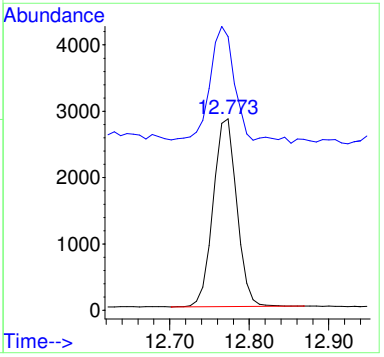


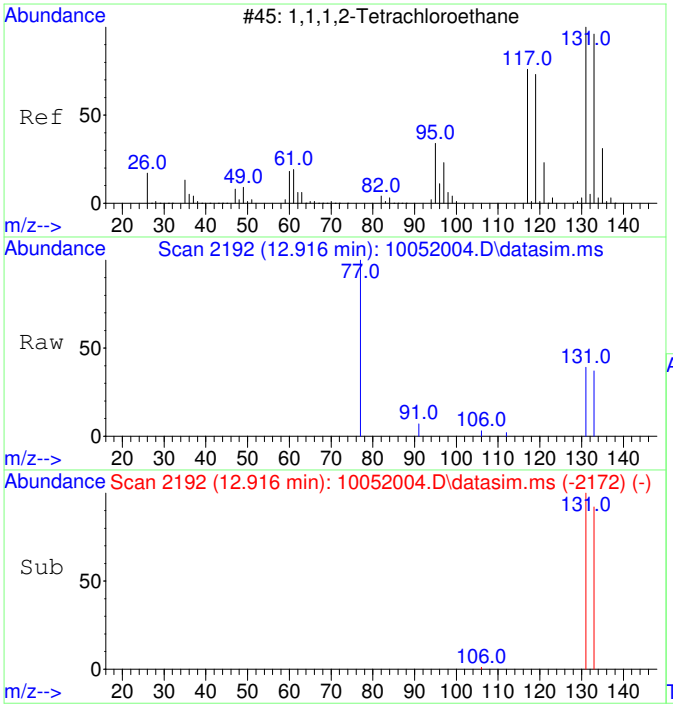


#16
Chlorobenzene
Concen: 52.51 ug/L
RT: 12.773 min Scan# 2174
Delta R.T. 0.016 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:112 Resp: 5845

Ion	Ratio	Lower	Upper
112	100		
77	60.8	23.6	83.6

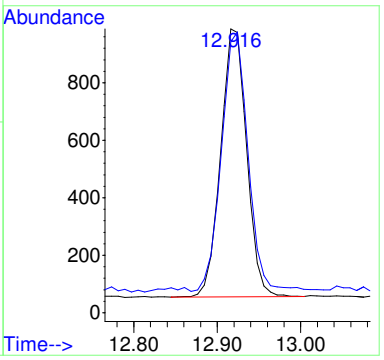


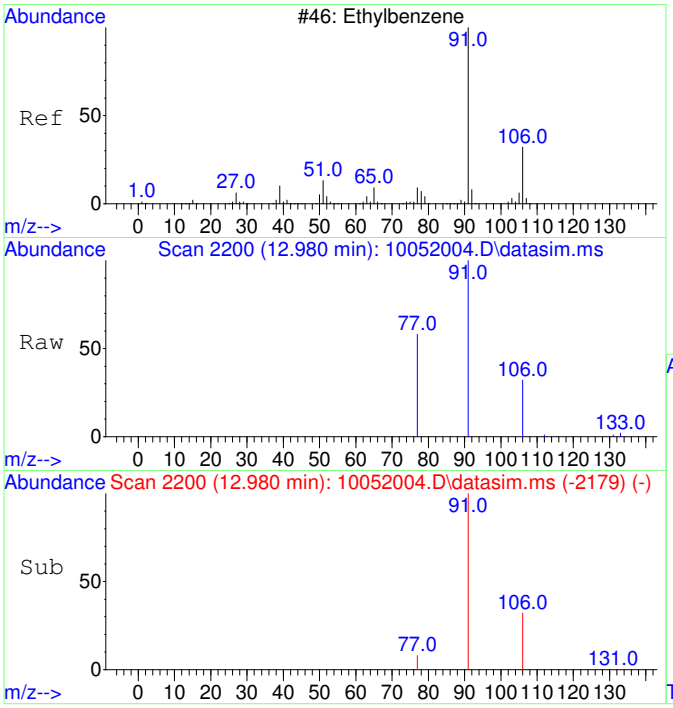


#17
1,1,1,2-Tetrachloroethane
Concen: 50.75 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.008 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:131 Resp: 2024

Ion	Ratio	Lower	Upper
131	100		
133	98.1	66.3	126.3

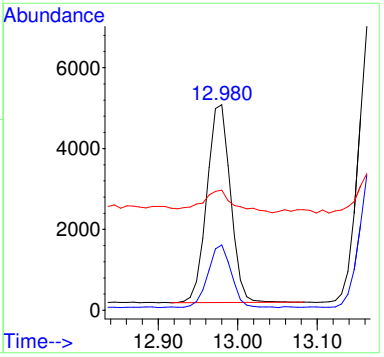


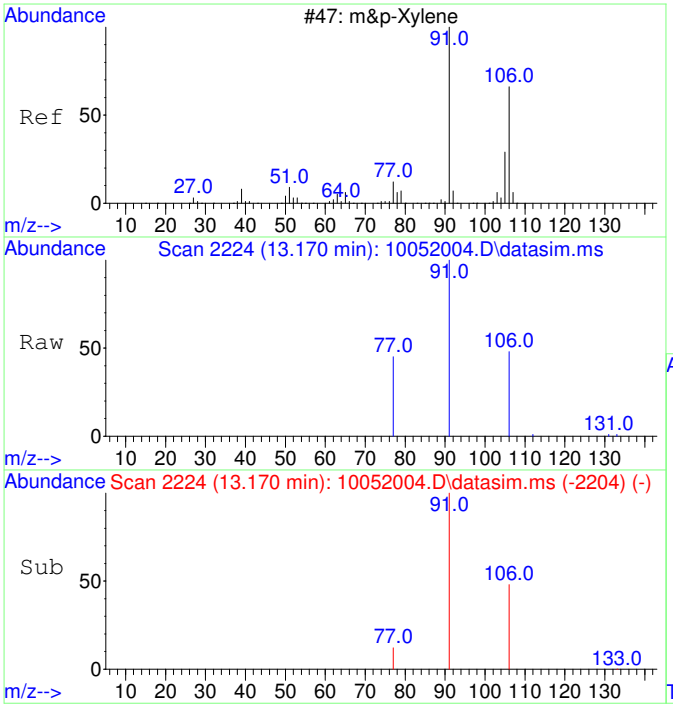


#18
Ethylbenzene
Concen: 53.40 ug/L
RT: 12.980 min Scan# 2200
Delta R.T. 0.016 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 10105

Ion	Ratio	Lower	Upper
91	100		
106	31.5	3.0	63.0
77	15.1	0.0	38.2

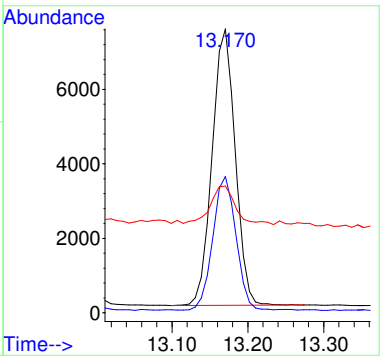


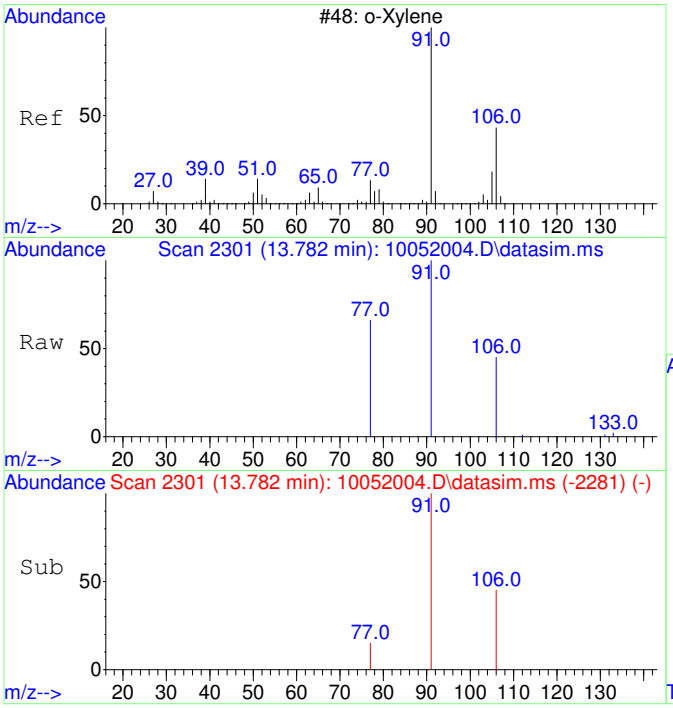


#19
m&p-Xylene
Concen: 106.01 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.008 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 15677

Ion	Ratio	Lower	Upper
91	100		
106	48.3	22.2	82.2
77	15.3	0.0	42.4

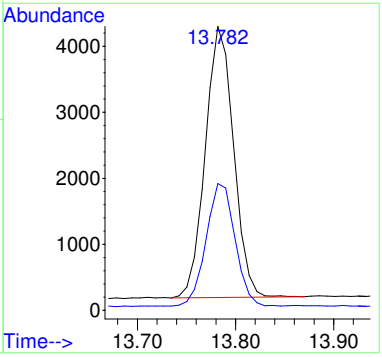


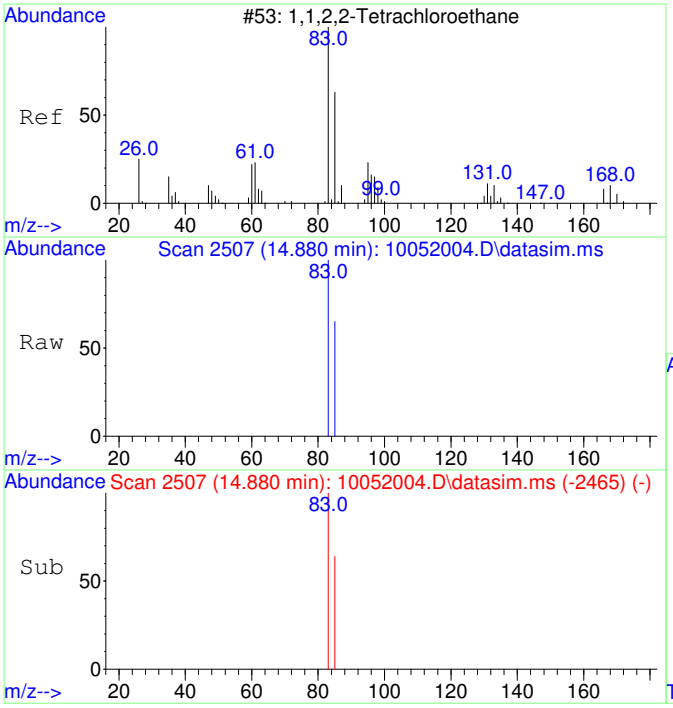


#20
o-Xylene
Concen: 51.93 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 8205

Ion	Ratio	Lower	Upper
91	100		
106	46.0	19.2	79.2

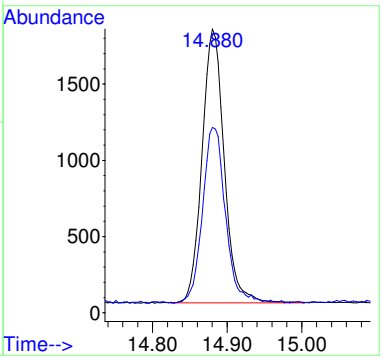


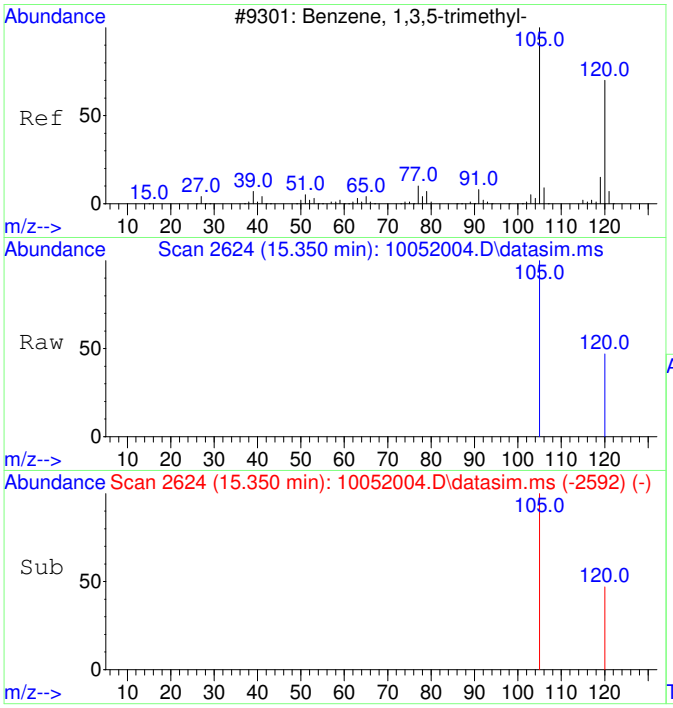


#21
1,1,2,2-Tetrachloroethane
Concen: 53.05 ug/L
RT: 14.880 min Scan# 2507
Delta R.T. 0.007 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 83 Resp: 3715

Ion	Ratio	Lower	Upper
83	100		
85	65.2	34.8	94.8

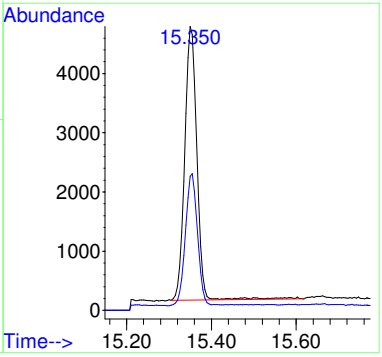


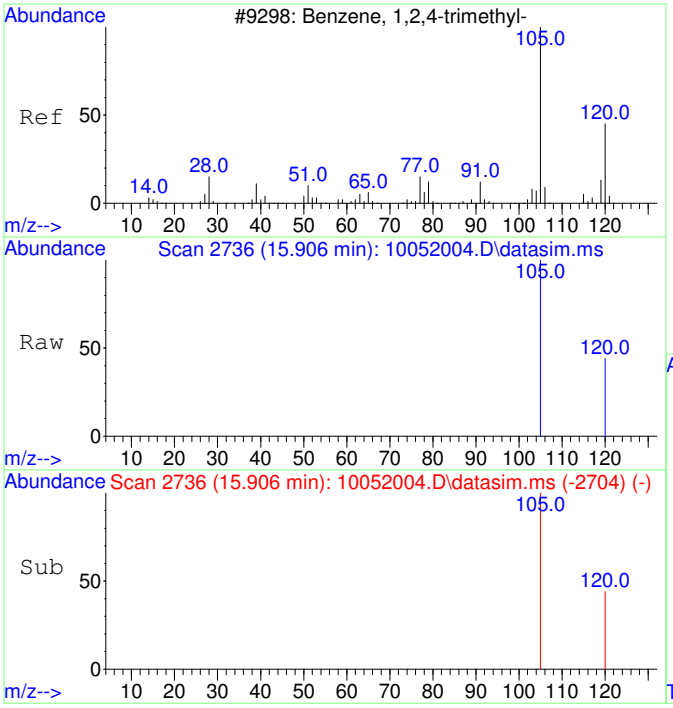


#22
1,3,5-Trimethylbenzene
Concen: 54.53 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.005 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:105 Resp: 9170

Ion	Ratio	Lower	Upper
105	100		
120	48.8	21.1	81.1

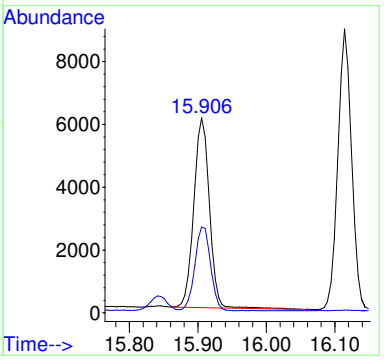


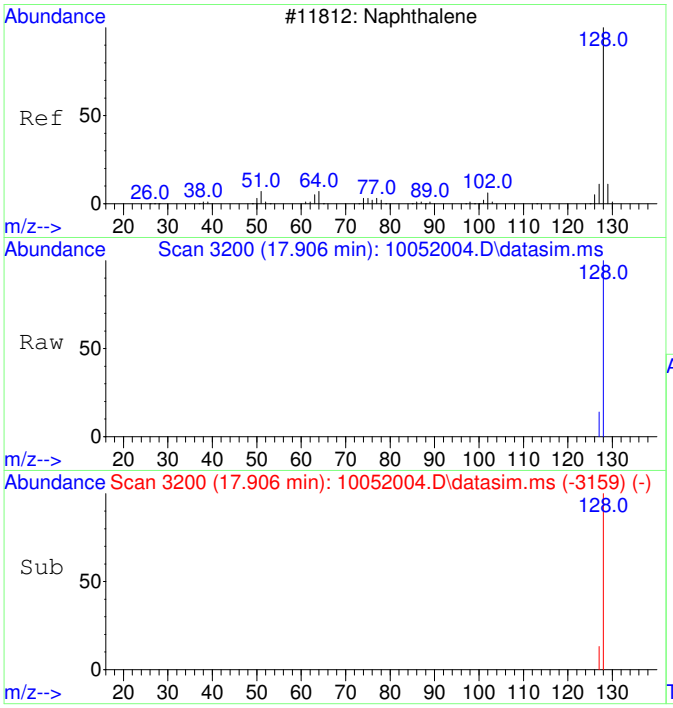


#23
1,2,4-Trimethylbenzene
Concen: 55.00 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:105 Resp: 9608

Ion	Ratio	Lower	Upper
105	100		
120	43.3	17.2	77.2

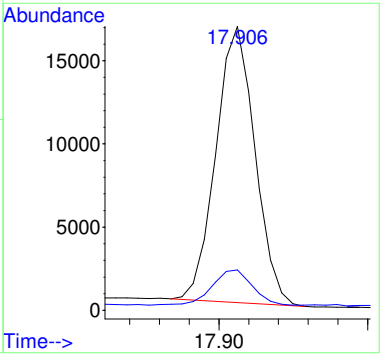


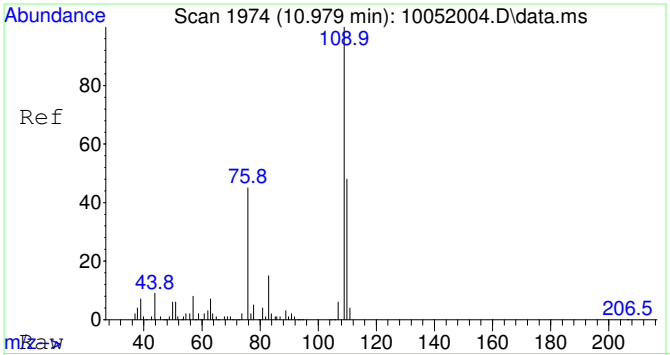


#24
Naphthalene
Concen: 54.63 ug/L
RT: 17.906 min Scan# 3200
Delta R.T. 0.004 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:128 Resp: 15081

Ion	Ratio	Lower	Upper
128	100		
127	13.8	0.0	42.5

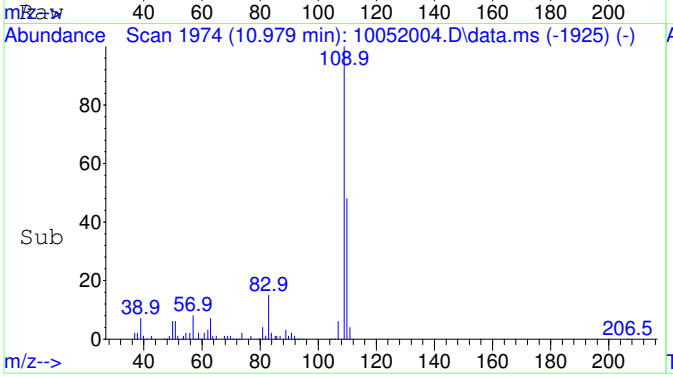


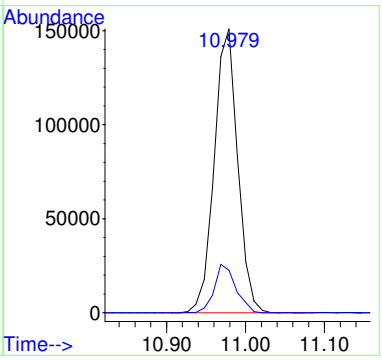


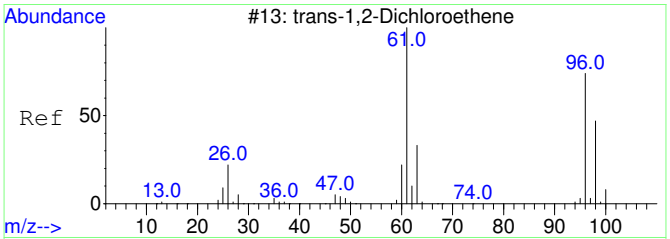
#25
2-Fluorotoluene SCAN
Concen: 5126.05 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:109 Resp: 311239

Ion	Ratio	Lower	Upper
109	100		
83	15.7	0.0	43.8



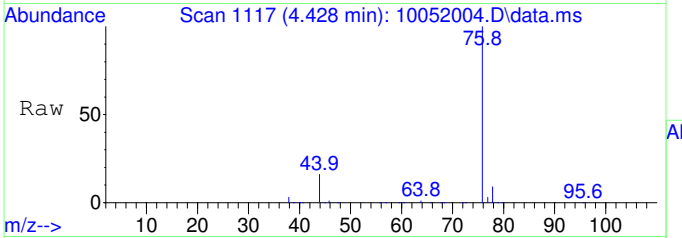


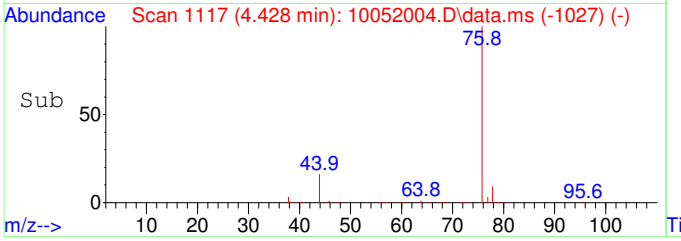


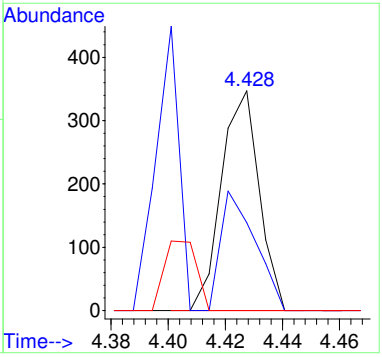
#27
trans-1,2-Dichloroethene SCAN
Concen: 20.06 ug/L
RT: 4.428 min Scan# 1117
Delta R.T. 0.027 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

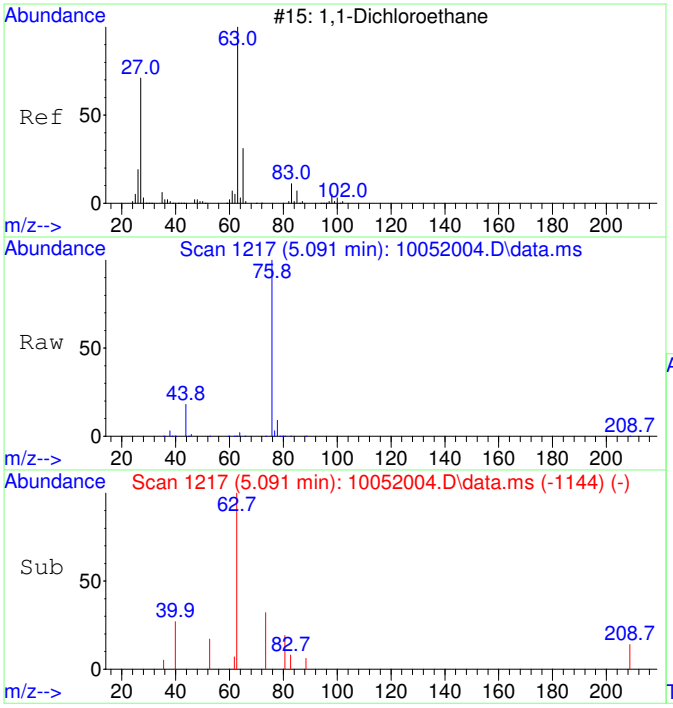
Tgt Ion: 61 Resp: 320

Ion	Ratio	Lower	Upper
61	100		
96	50.0	49.0	109.0
98	0.0	20.5	80.5#





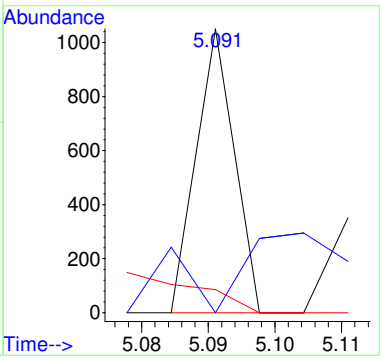


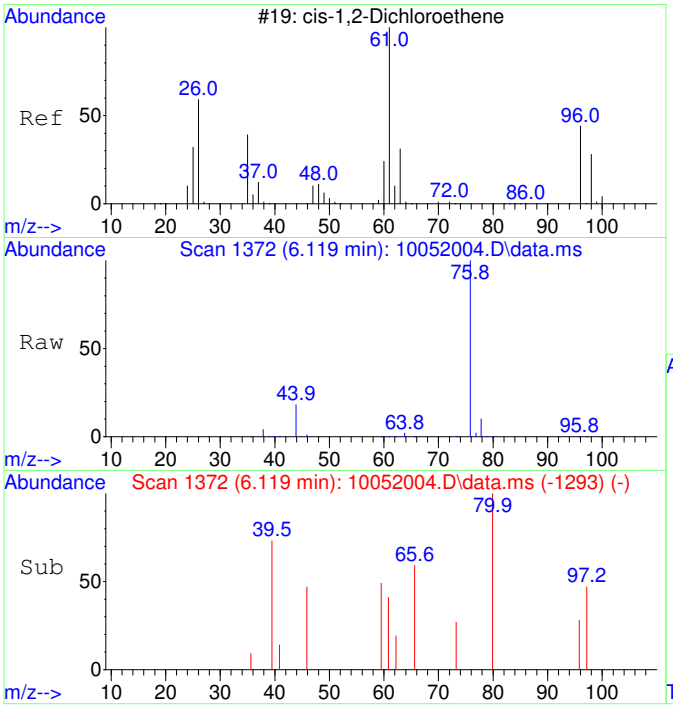


#28
1,1-Dichloroethane SCAN
Concen: 22.64 ug/L
RT: 5.091 min Scan# 1217
Delta R.T. -0.013 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 63 Resp: 418

Ion	Ratio	Lower	Upper
63	100		
65	163.4	1.3	61.3#
83	0.0	0.0	45.9

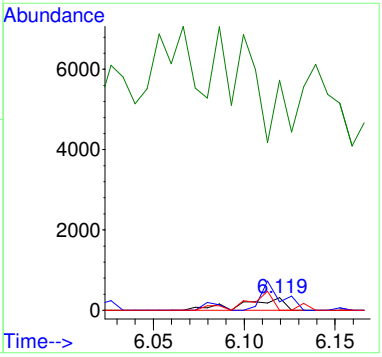


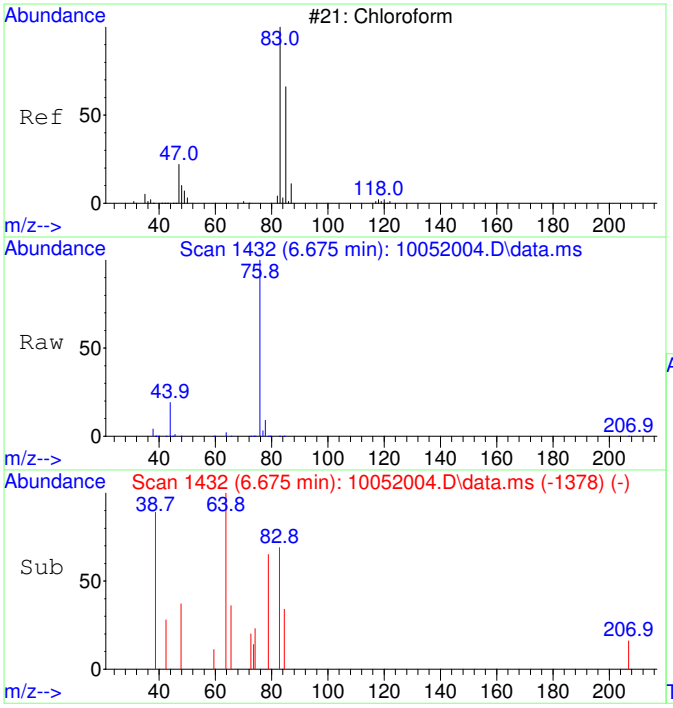


#29
cis-1,2-Dichloroethene SCAN
Concen: 24.46 ug/L
RT: 6.119 min Scan# 1372
Delta R.T. 0.027 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 61 Resp: 484

Ion	Ratio	Lower	Upper
61	100		
96	115.5	39.9	99.9#
98	94.0	13.5	73.5#
64	0.0	4.5	64.5#

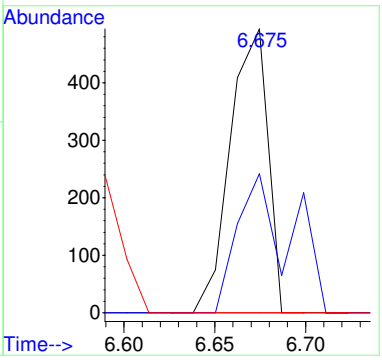


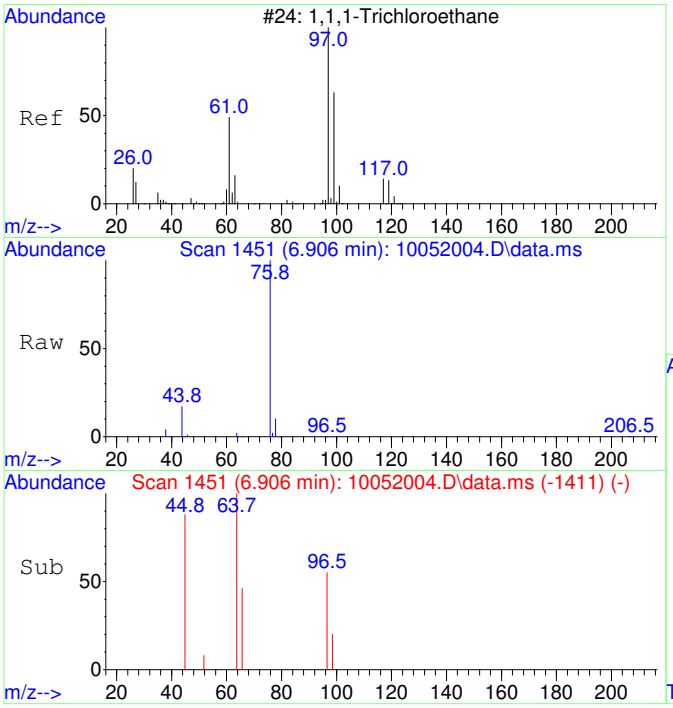


#30
Chloroform SCAN
Concen: 33.27 ug/L
RT: 6.675 min Scan# 1432
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 83 Resp: 714

Ion	Ratio	Lower	Upper
83	100		
85	68.6	34.6	94.6
47	0.0	0.0	53.4

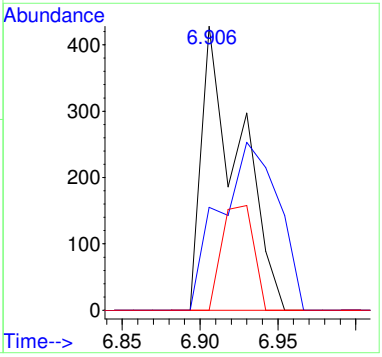


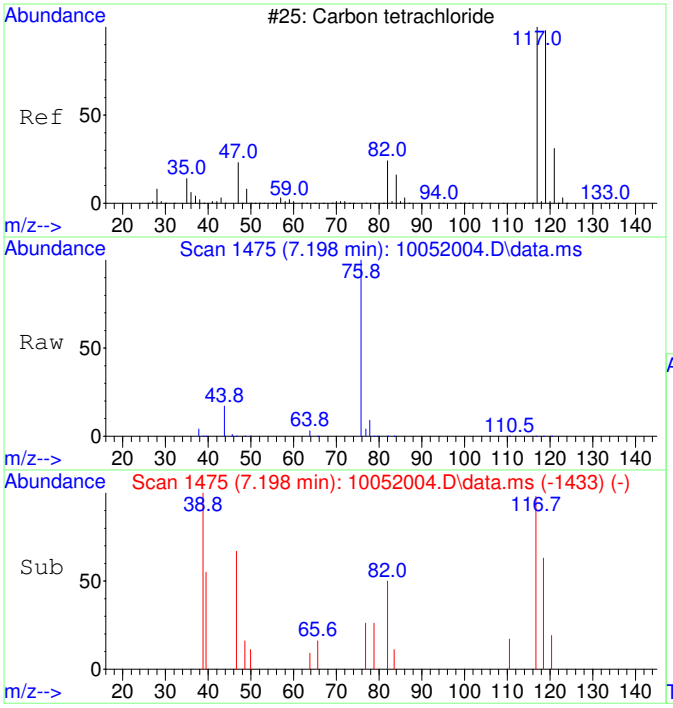


#31
1,1,1-Trichloroethane SCAN
Concen: 37.33 ug/L
RT: 6.906 min Scan# 1451
Delta R.T. -0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 97 Resp: 730

Ion	Ratio	Lower	Upper
97	100		
99	0.0	43.6	103.6#
61	0.0	18.0	78.0#

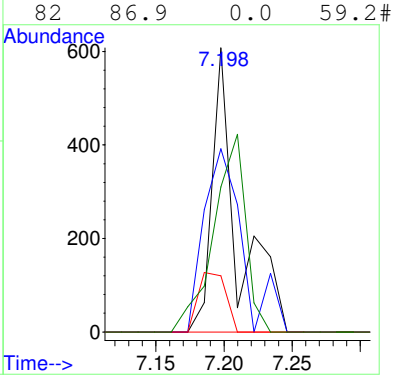


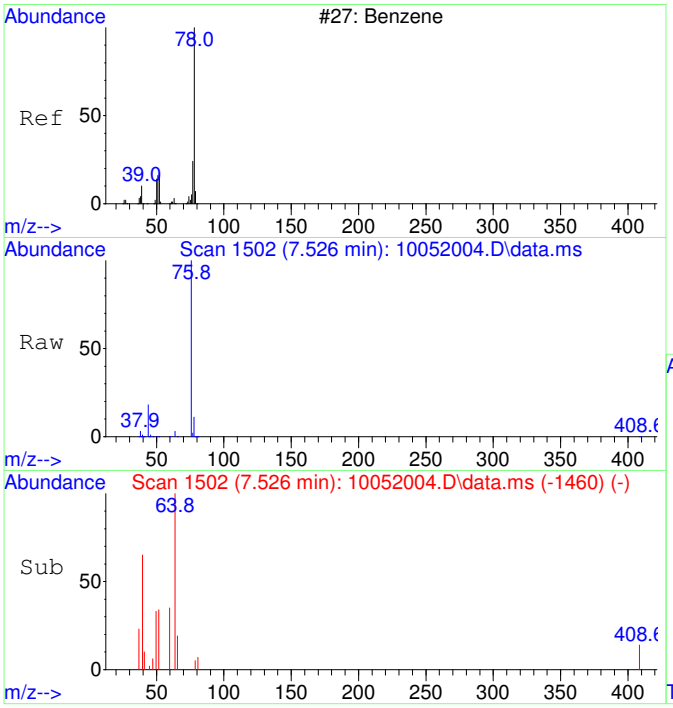


#32
Carbon tetrachloride SCAN
Concen: 38.97 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:117 Resp: 795

Ion	Ratio	Lower	Upper
117	100		
119	96.6	75.5	135.5
121	0.0	0.0	58.8
82	86.9	0.0	59.2#

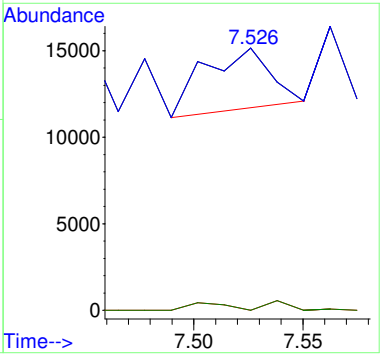


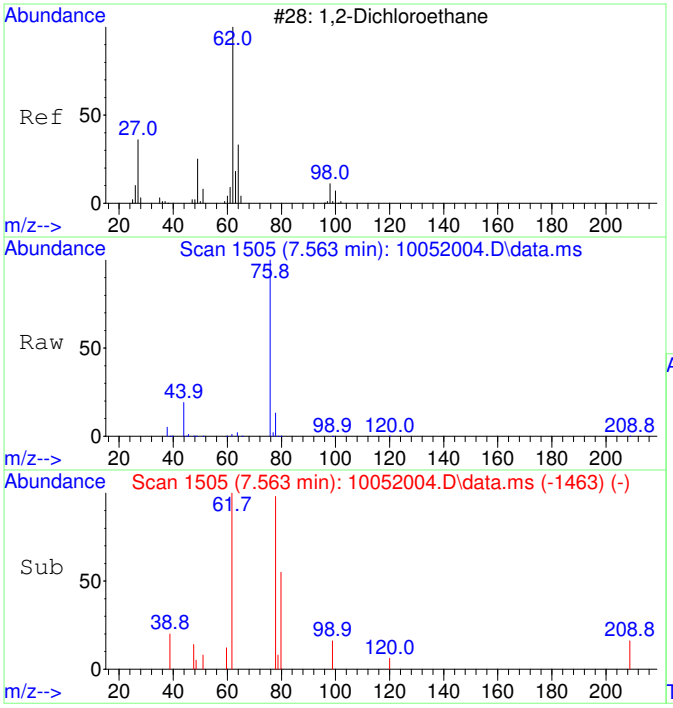


#33
Benzene SCAN
Concen: 143.10 ug/L
RT: 7.526 min Scan# 1502
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 78 Resp: 7705

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	6.0	0.0	47.9
51	6.0	0.0	44.1

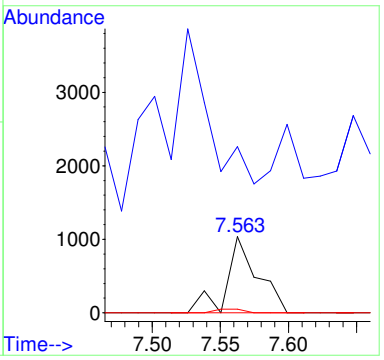


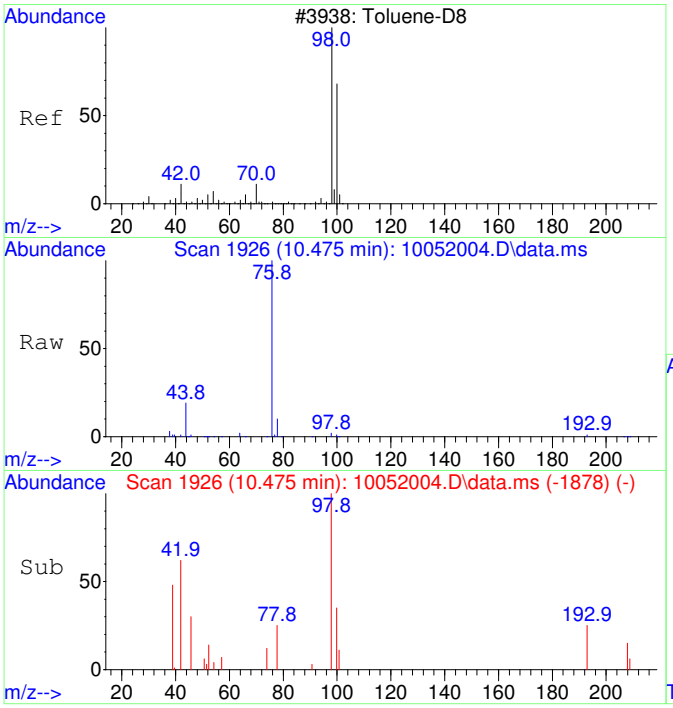


#34
1,2-Dichloroethane SCAN
Concen: 82.54 ug/L
RT: 7.563 min Scan# 1505
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 62 Resp: 1641

Ion	Ratio	Lower	Upper
62	100		
64	0.0	5.2	65.2#
49	4.5	3.9	63.9

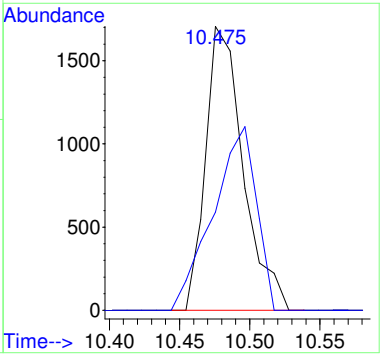


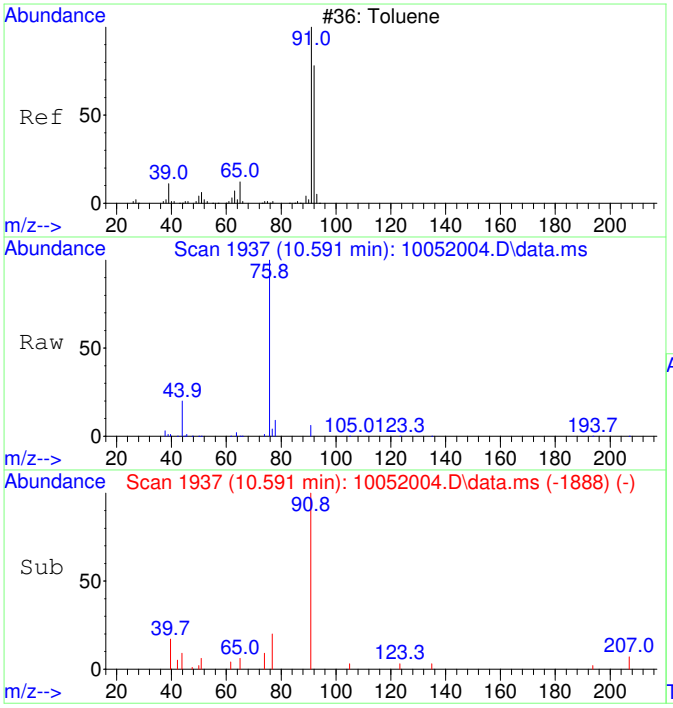


#36
Toluene-d8 SCAN
Concen: 53.54 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. -0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 98 Resp: 3179

Ion	Ratio	Lower	Upper
98	100		
100	0.0	40.0	100.0#

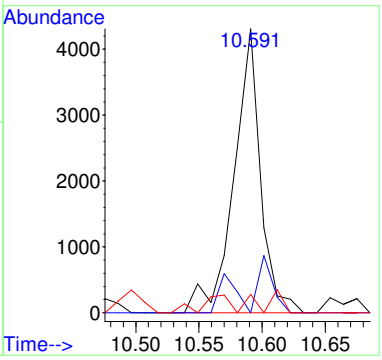


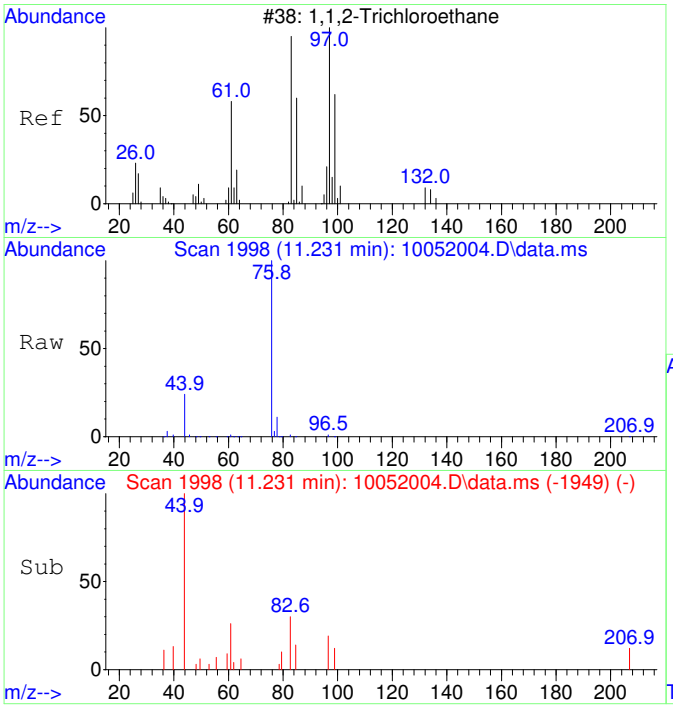


#37
Toluene SCAN
Concen: 83.20 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 6327

Ion	Ratio	Lower	Upper
91	100		
92	11.0	28.3	88.3#
65	2.8	0.0	41.0

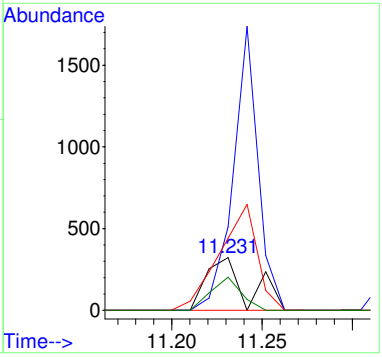


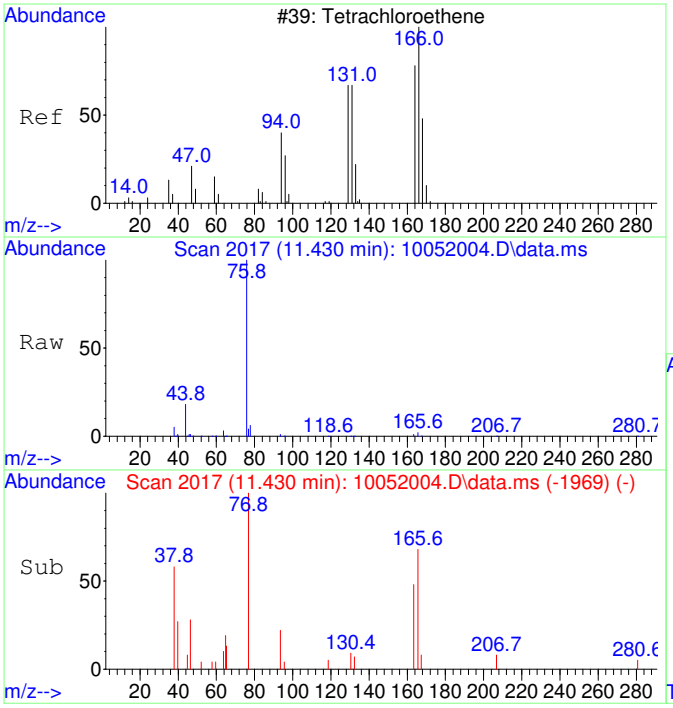


#38
1,1,2-Trichloroethane SCAN
Concen: 30.00 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 97 Resp: 512

Ion	Ratio	Lower	Upper
97	100		
83	327.1	57.7	117.7#
61	185.0	32.1	92.1#
99	46.3	36.7	96.7

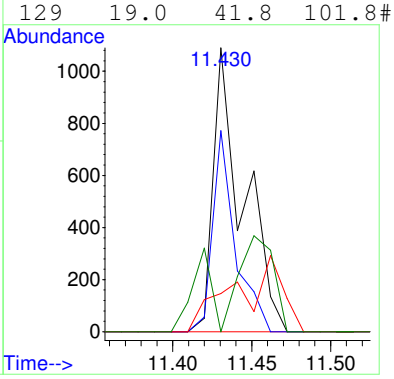


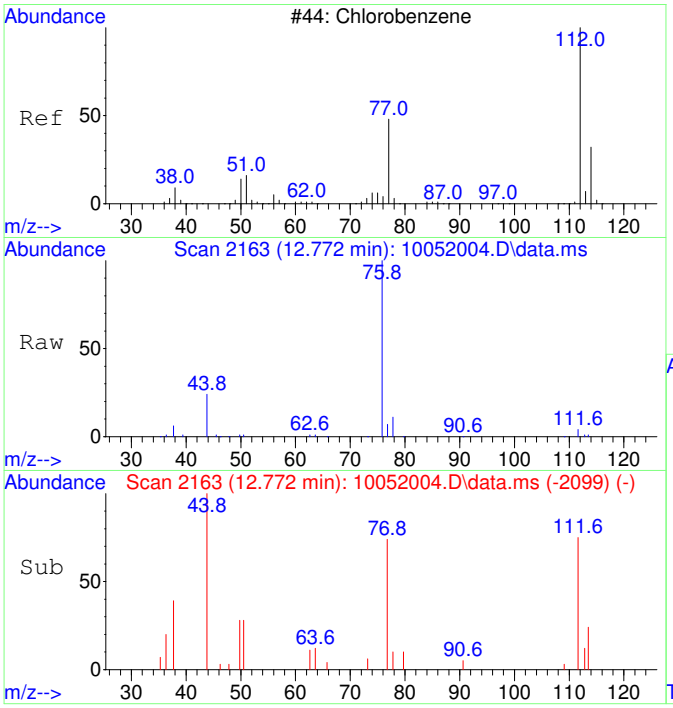


#39
Tetrachloroethene SCAN
Concen: 78.66 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. -0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:166 Resp: 1437

Ion	Ratio	Lower	Upper
166	100		
164	53.3	50.9	110.9
131	0.0	38.7	98.7#
129	19.0	41.8	101.8#

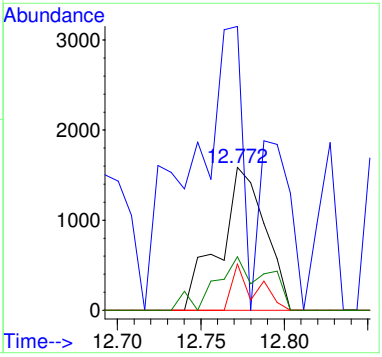


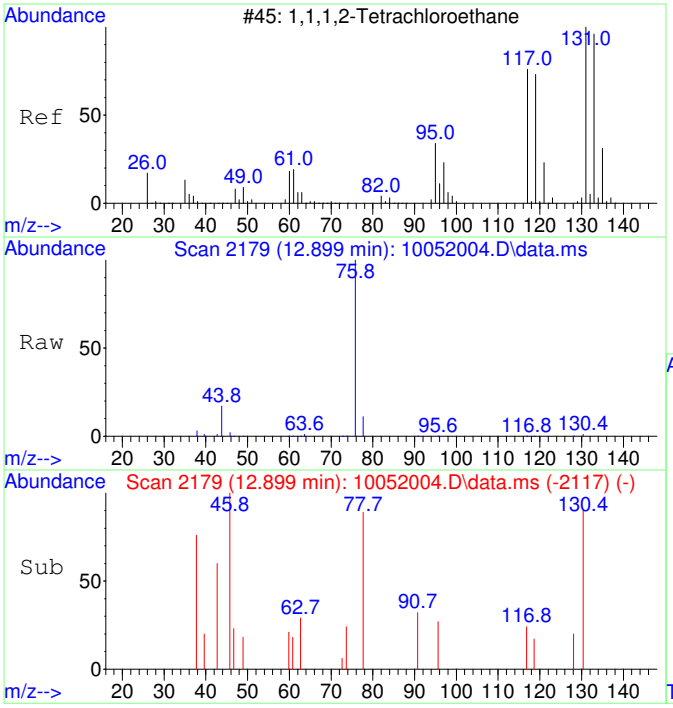


#40
Chlorobenzene SCAN
Concen: 57.79 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.008 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:112 Resp: 3003

Ion	Ratio	Lower	Upper
112	100		
77	223.3	28.2	88.2#
114	16.5	2.3	62.3
51	41.4	0.0	50.1

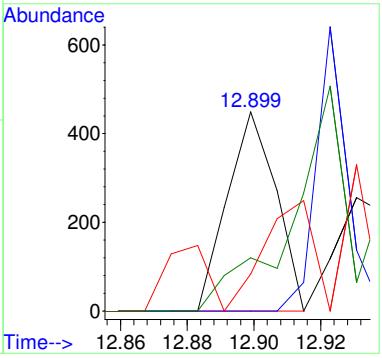


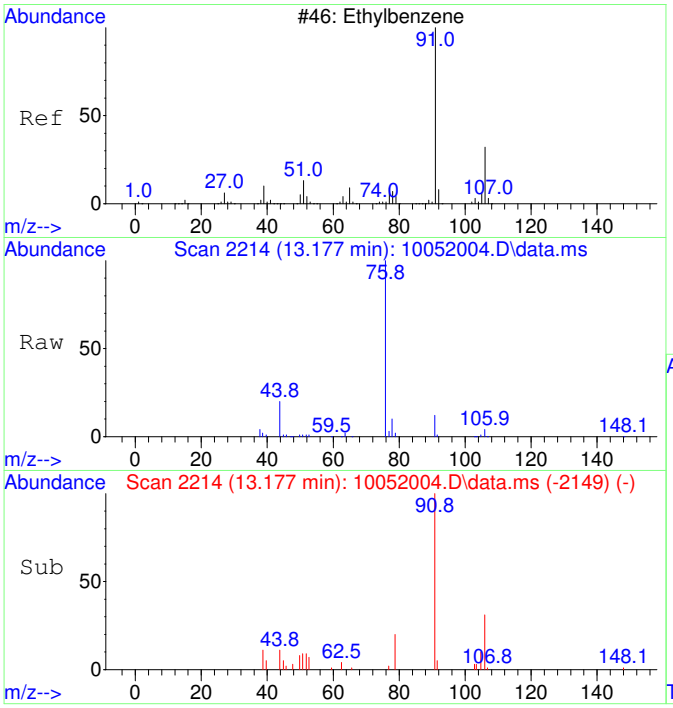


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 23.61 ug/L
RT: 12.899 min Scan# 2179
Delta R.T. -0.008 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:131 Resp: 454

Ion	Ratio	Lower	Upper
131	100		
133	0.0	66.9	126.9#
119	29.1	40.4	100.4#
117	0.0	35.1	95.1#

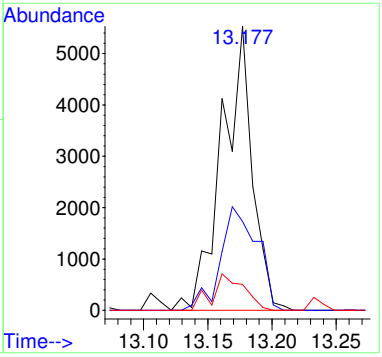


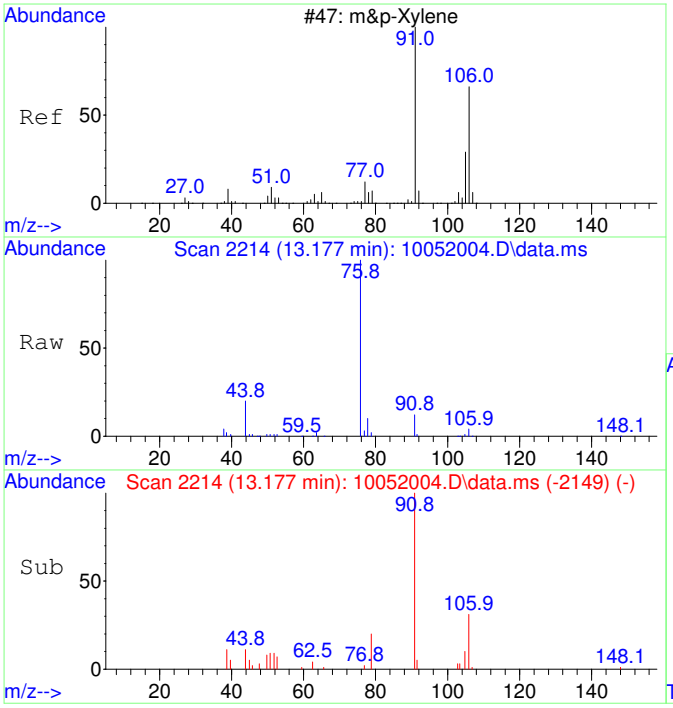


#42
Ethylbenzene SCAN
Concen: 65.82 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 9119

Ion	Ratio	Lower	Upper
91	100		
106	43.9	23.1	83.1
51	13.3	0.0	40.1

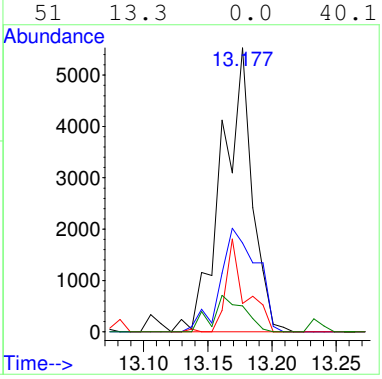


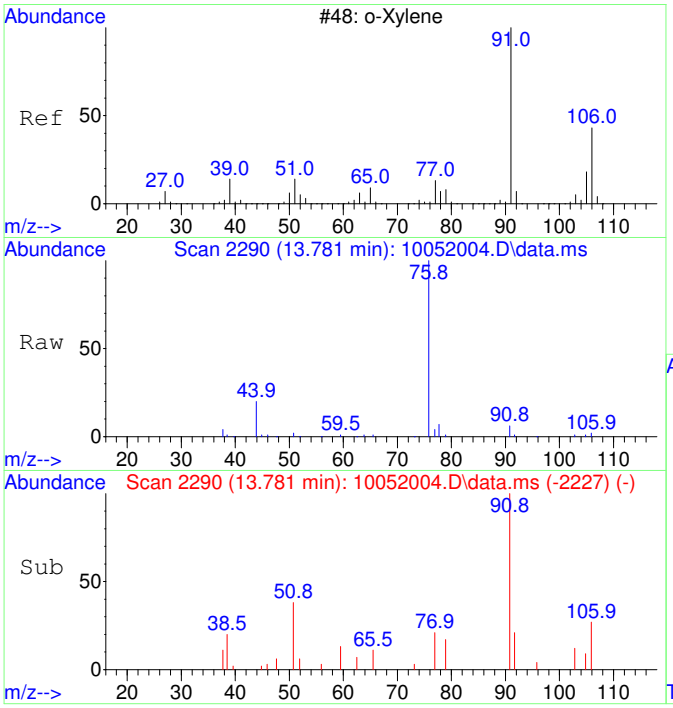


#43
m&p-Xylene SCAN
Concen: 65.82 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 9119

Ion	Ratio	Lower	Upper
91	100		
106	43.9	23.1	83.1
105	21.2	0.0	54.7
51	13.3	0.0	40.1

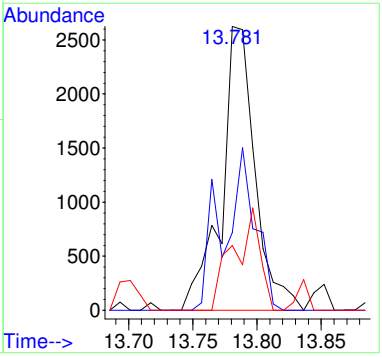


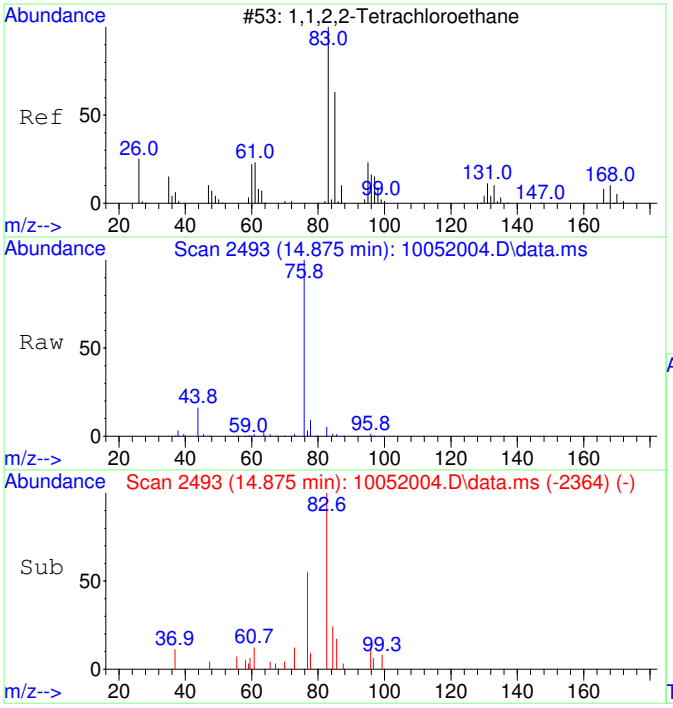


#44
o-Xylene SCAN
Concen: 64.01 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. 0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 4747

Ion	Ratio	Lower	Upper
91	100		
106	55.5	18.0	78.0
105	28.8	0.0	56.6

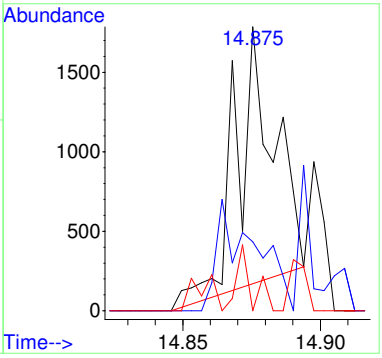


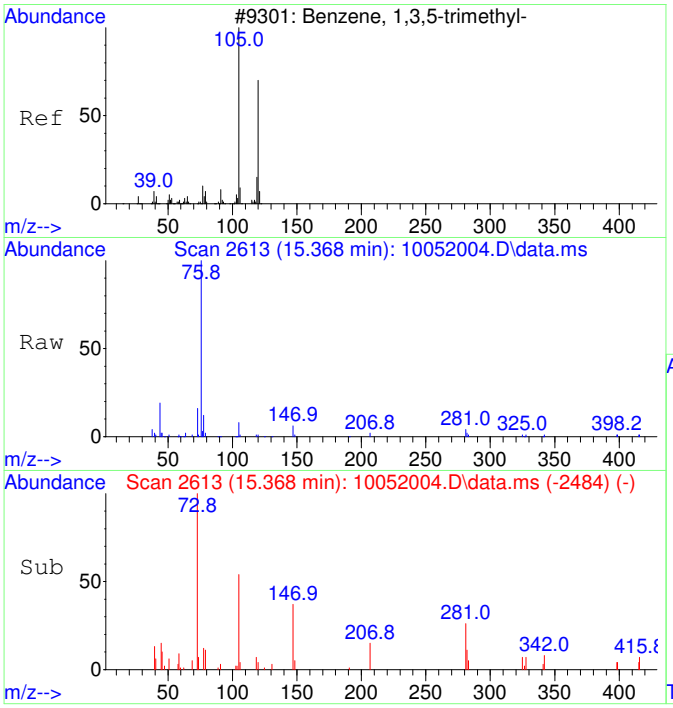


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 43.64 ug/L
RT: 14.875 min Scan# 2493
Delta R.T. 0.004 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 83 Resp: 1578

Ion	Ratio	Lower	Upper
83	100		
85	0.0	35.9	95.9#
95	10.0	0.0	47.4

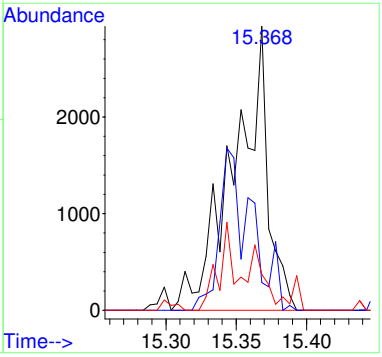


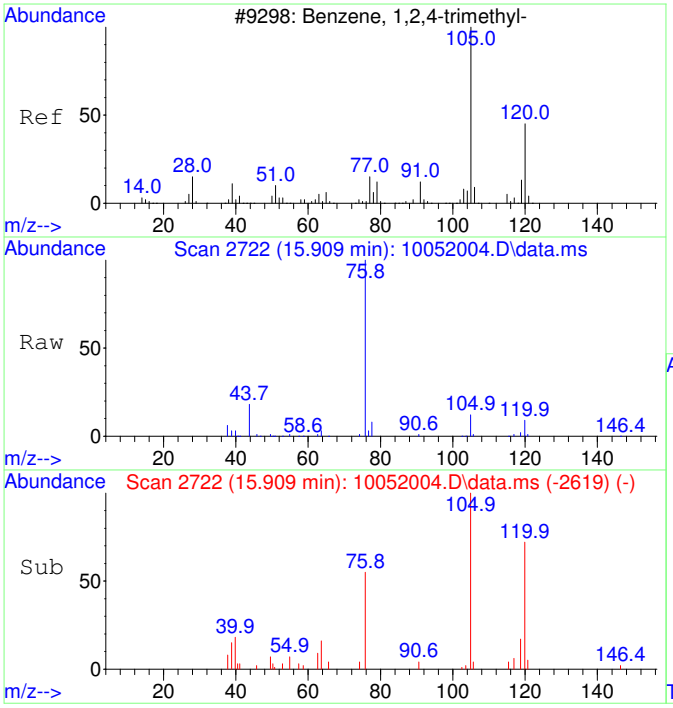


#46
1,3,5-Trimethylbenzene SCAN
Concen: 63.85 ug/L
RT: 15.368 min Scan# 2613
Delta R.T. 0.025 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:105 Resp: 4990

Ion	Ratio	Lower	Upper
105	100		
120	0.0	18.3	78.3#
119	4.0	0.0	43.1

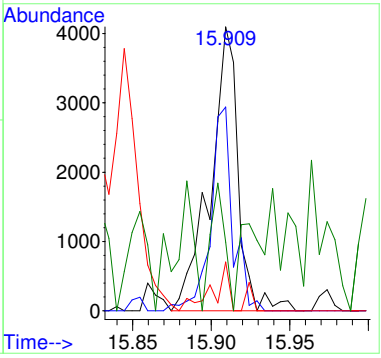


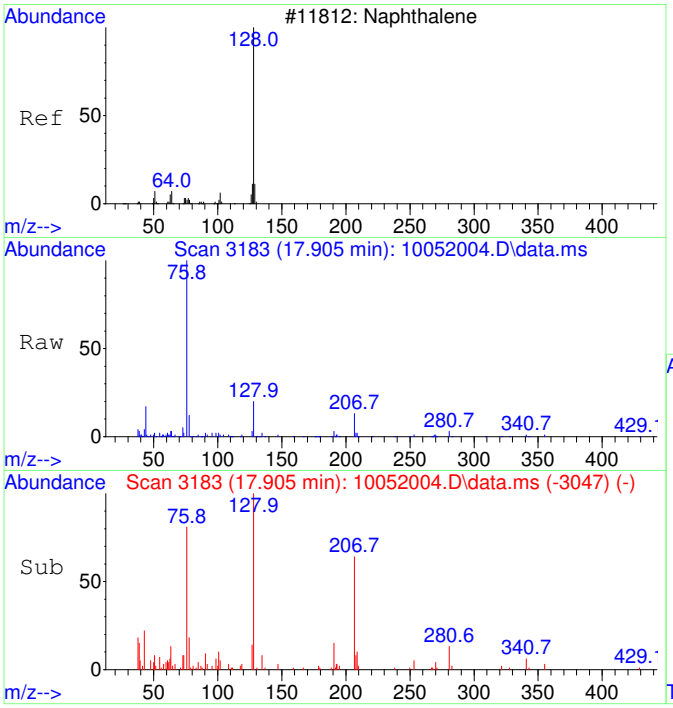


#47
1,2,4-Trimethylbenzene SCAN
Concen: 63.40 ug/L
RT: 15.909 min Scan# 2722
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:105 Resp: 5070

Ion	Ratio	Lower	Upper
105	100		
120	56.7	16.9	76.9
119	9.6	0.0	41.9
77	23.1	0.0	42.3

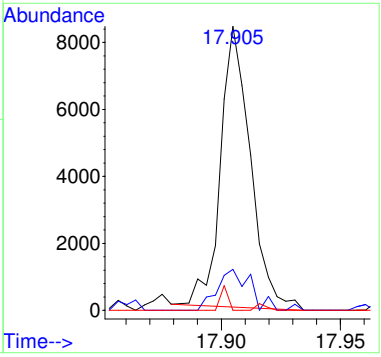




#48
Naphthalene SCAN
Concen: 60.33 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.004 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:128 Resp: 7300

Ion	Ratio	Lower	Upper
128	100		
127	16.2	0.0	44.0
129	2.2	0.0	40.8



B20J004-BLK1

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052005.D
Acq On : 5 Oct 2020 10:41
InstName : AG5975C
Operator : TD
Sample : B20J004-BLK1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 05 10:59:44 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

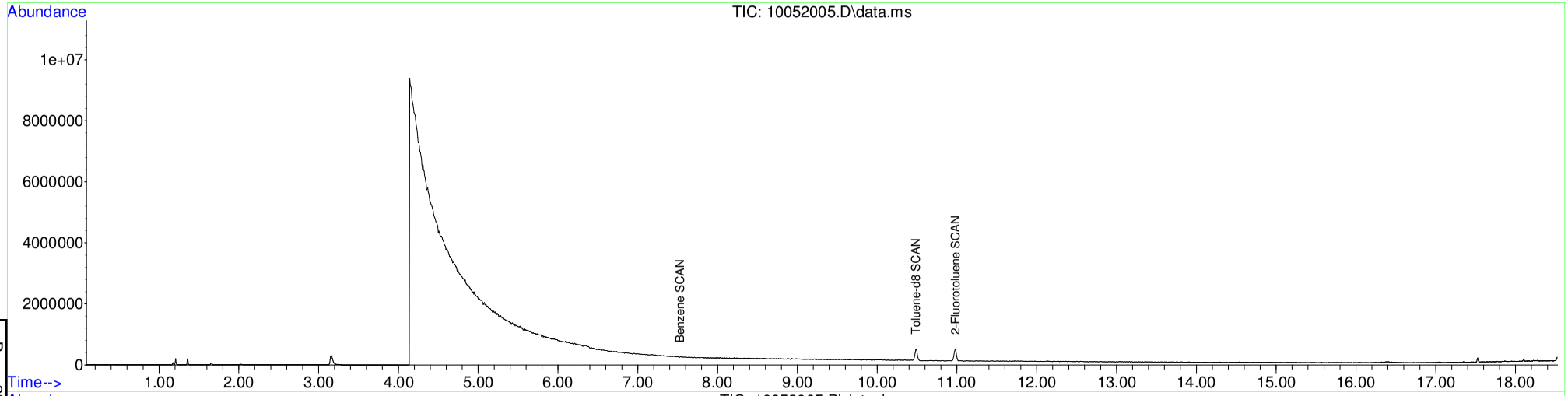
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.981	109	609211	5000.00	ug/L	0.01
System Monitoring Compounds						
12) Toluene-d8	10.487	98	529940	4443.58	ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 88.87%			
Target Compounds						Qvalue
9] Benzene	7.515	78	5587	53.98	ug/L #	1
25) 2-Fluorotoluene SCAN	10.979	109	309912	5218.53	ug/L	97
33) Benzene SCAN	7.526	78	8032	152.52	ug/L #	91
36) Toluene-d8 SCAN	10.486	98	282414	4862.62	ug/L	95

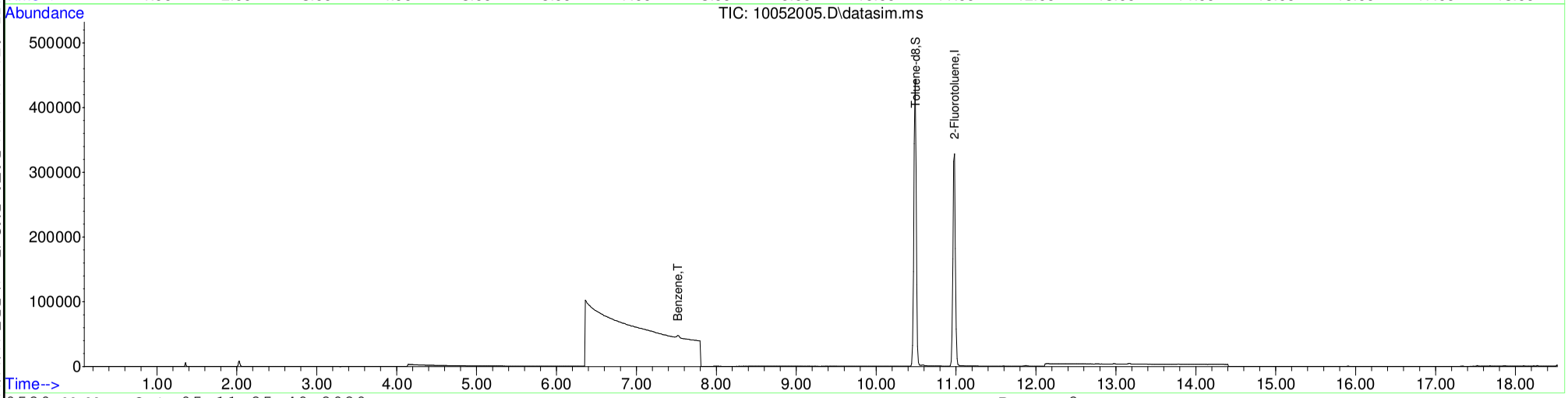
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052005.D
Acq On : 5 Oct 2020 10:41
InstName : AG5975C
Operator : TD
Sample : B20J004-BLK1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 05 10:59:44 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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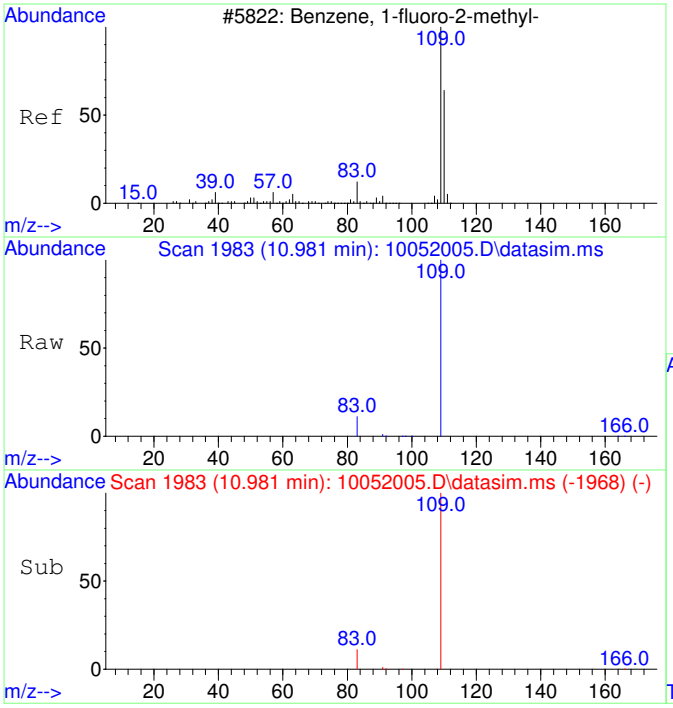
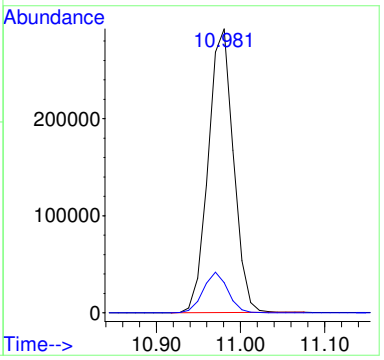
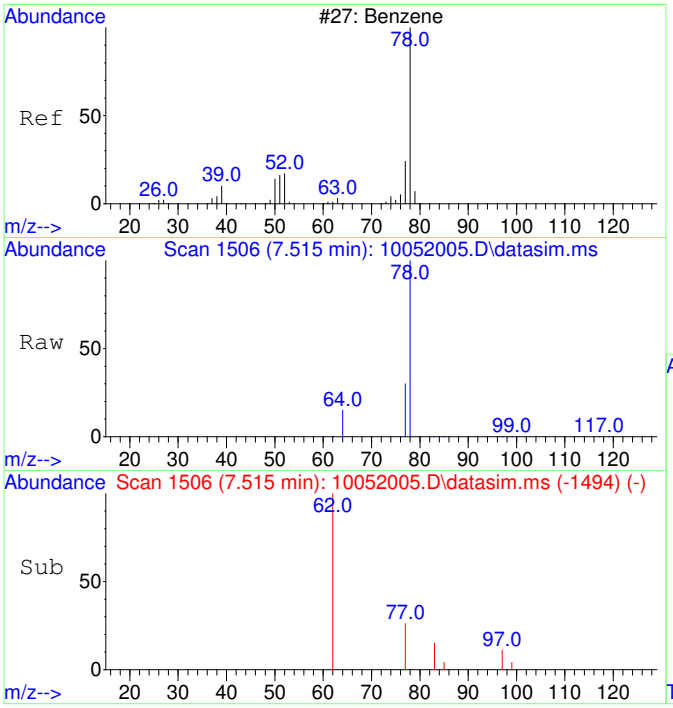


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.981 min Scan# 1983
Delta R.T. 0.011 min
Lab File: 10052005.D
Acq: 5 Oct 2020 10:41

Tgt Ion:109 Resp: 609211

Ion	Ratio	Lower	Upper
109	100		
83	13.9	0.0	42.3

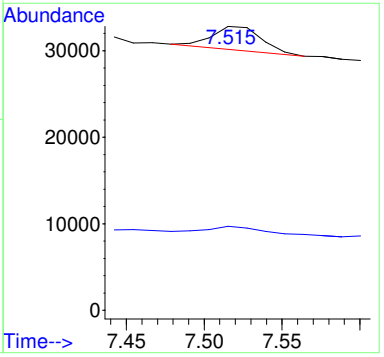


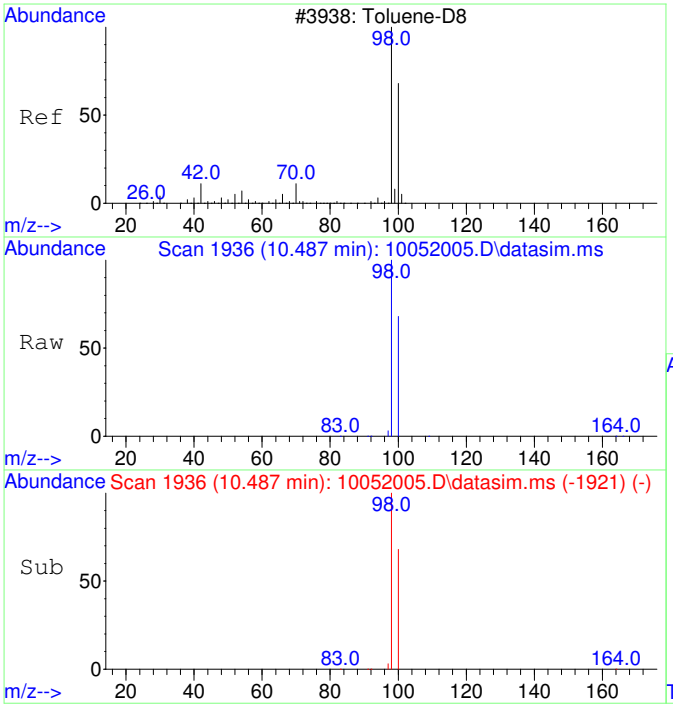


#9
Benzene
Concen: 53.98 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 10052005.D
Acq: 5 Oct 2020 10:41

Tgt Ion: 78 Resp: 5587

Ion	Ratio	Lower	Upper
78	100		
77	74.7	0.0	53.2#

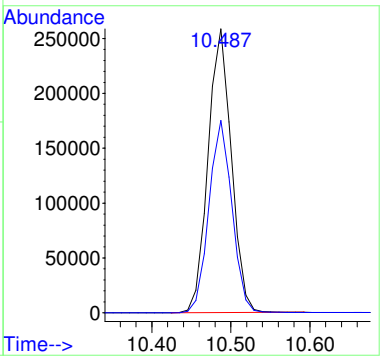


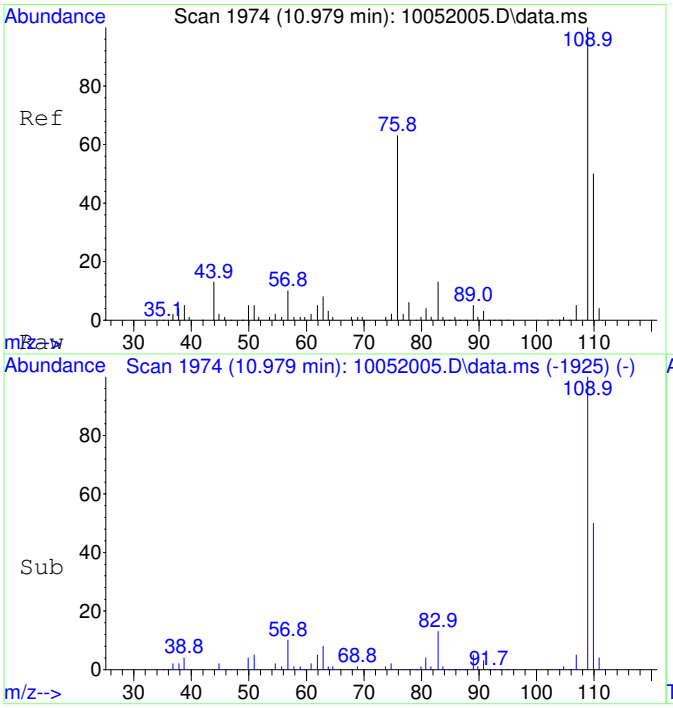


#12
Toluene-d8
Concen: 4443.58 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.011 min
Lab File: 10052005.D
Acq: 5 Oct 2020 10:41

Tgt Ion: 98 Resp: 529940

Ion	Ratio	Lower	Upper
98	100		
100	66.8	37.1	97.1

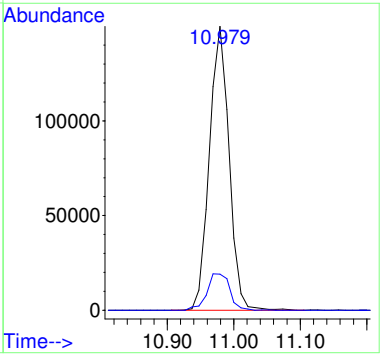


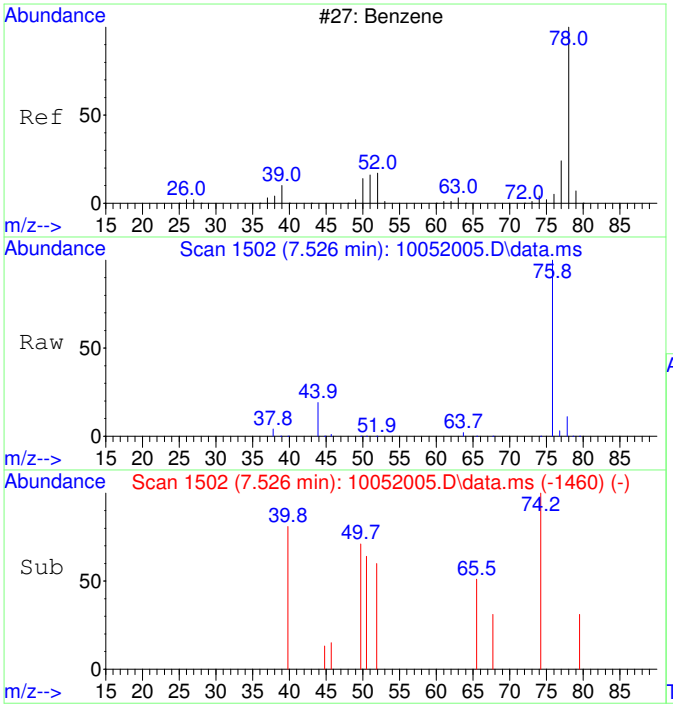


#25
2-Fluorotoluene SCAN
Concen: 5218.53 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.011 min
Lab File: 10052005.D
Acq: 5 Oct 2020 10:41

Tgt Ion:109 Resp: 309912

Ion	Ratio	Lower	Upper
109	100		
83	14.9	0.0	43.8

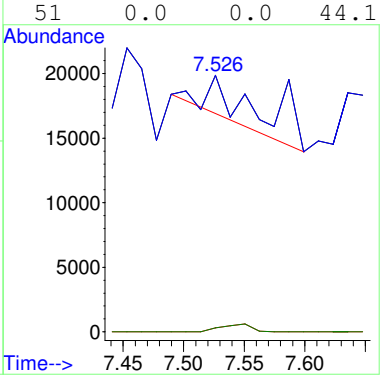


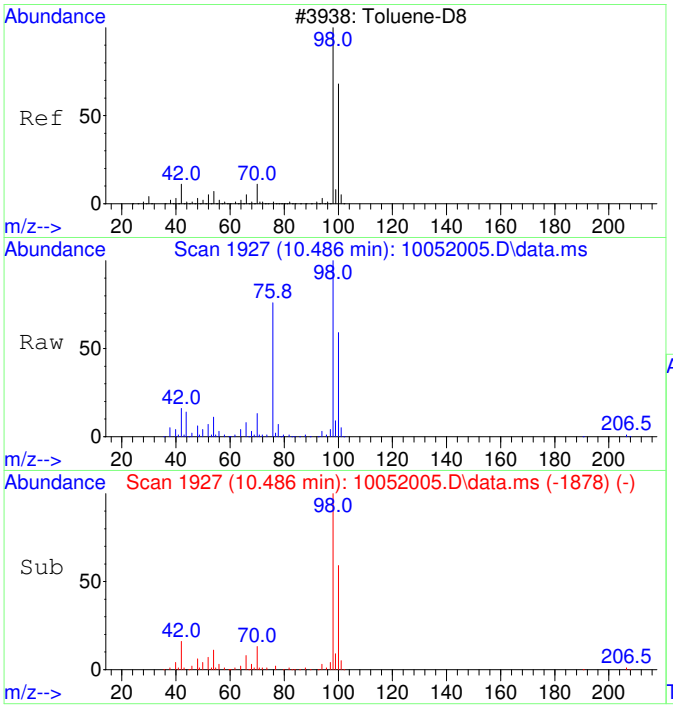


#33
Benzene SCAN
Concen: 152.52 ug/L
RT: 7.526 min Scan# 1502
Delta R.T. 0.012 min
Lab File: 10052005.D
Acq: 5 Oct 2020 10:41

Tgt Ion: 78 Resp: 8032

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	0.0	0.0	47.9
51	0.0	0.0	44.1

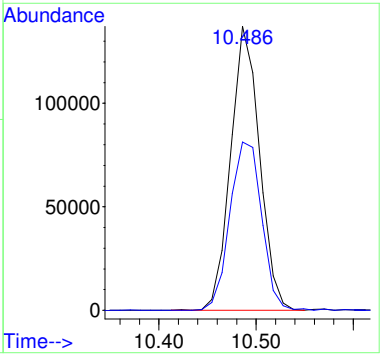




#36
Toluene-d8 SCAN
Concen: 4862.62 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.011 min
Lab File: 10052005.D
Acq: 5 Oct 2020 10:41

Tgt Ion: 98 Resp: 282414

Ion	Ratio	Lower	Upper
98	100		
100	65.6	40.0	100.0



B20J004-BS1

Blanks Spike or Blank Spike Duplicate

Instrument Name: AG5975C
Sample Name: B20J004-BS1
Misc Info: 0
Date Acquired: 10/5/2020
QLast Update: Fri Aug 21 08:33:54 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.970	5000	5000.00	100%	70	130	pass
2)	**1,1-Dichloroethene**	**3.090**	**5000**	**4267.17**	**85%**	**22**	**143**	**pass**
3)	**trans-1,2-Dichloroethene**	**4.396**	**5000**	**4393.26**	**88%**	**35**	**133**	**pass**
4)	**1,1-Dichloroethane**	**5.099**	**5000**	**4542.40**	**91%**	**43**	**140**	**pass**
5)	**cis-1,2-Dichloroethene**	**6.094**	**5000**	**4574.12**	**91%**	**49**	**134**	**pass**
6)	**Chloroform**	**6.664**	**5000**	**4490.23**	**90%**	**56**	**132**	**pass**
7)	**1,1,1-Trichloroethane**	**6.919**	**5000**	**4500.81**	**90%**	**58**	**131**	pass
8)	Carbon tetrachloride	7.187	5000	4446.34	89%	60	126	pass
9)	Benzene	7.515	5000	4277.49	86%	63	121	pass
10)	1,2-Dichloroethane	7.552	5000	4582.80	92%	57	128	pass
11)	**Trichloroethene**	**8.569**	**5000**	**4445.12**	**89%**	**69**	**124**	**pass**
12)	Toluene-d8	10.477	5000	4515.03	90%	70	130	pass
13)	Toluene	10.571	5000	4164.54	83%	77	111	pass
14)	1,1,2-Trichloroethane	11.222	5000	4454.23	89%	76	115	pass
15)	**Tetrachloroethene**	**11.421**	**5000**	**4314.54**	**86%**	**69**	**124**	**pass**
16)	Chlorobenzene	12.757	5000	4022.51	80%	64	122	pass
17)	1,1,1,2-Tetrachloroethane	12.908	5000	4510.77	90%	68	130	**pass**
18)	Ethylbenzene	12.964	5000	4420.17	88%	70	130	pass
19)	m&p-Xylene	13.162	10000	8302.55	83%	66	129	pass
20)	o-Xylene	13.774	5000	3931.27	79%	63	121	pass
21)	1,1,2,2-Tetrachloroethane	14.873	5000	4131.06	83%	55	132	pass
22)	1,3,5-Trimethylbenzene	15.345	5000	4346.16	87%	61	140	pass
23)	1,2,4-Trimethylbenzene	15.896	5000	3964.30	79%	54	143	pass
25)	2-Fluorotoluene SCAN	10.969	5000	5133.15	103%	20	110	pass
27)	trans-1,2-Dichloroethene SCAN	4.401	5000	4609.63	92%	83	110	pass
29)	cis-1,2-Dichloroethene SCAN	6.093	5000	5074.91	101%	58	118	pass
31)	1,1,1-Trichloroethane SCAN	6.918	5000	4758.25	95%	59	119	pass
33)	Benzene SCAN	7.514	5000	4848.00	97%	69	129	pass
35)	Trichloroethene SCAN	8.568	5000	4875.88	98%	69	129	pass
37)	Toluene SCAN	10.580	5000	4532.75	91%	66	126	pass
39)	Tetrachloroethene SCAN	11.430	5000	4898.57	98%	59	119	pass
41)	1,1,1,2-Tetrachloroethane SCAN	12.907	5000	4485.54	90%	62	122	pass
43)	m&p-Xylene SCAN	13.161	5000	4627.46	93%	68	128	pass
45)	1,1,2,2-Tetrachloroethane SCAN	14.872	5000	4604.57	92%	63	123	pass
47)	1,2,4-Trimethylbenzene SCAN	15.899	5000	4273.69	85%	20	110	pass

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052006.D
Acq On : 5 Oct 2020 11:51
InstName : AG5975C
Operator : TD
Sample : B20J004-BS1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 05 12:10:32 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

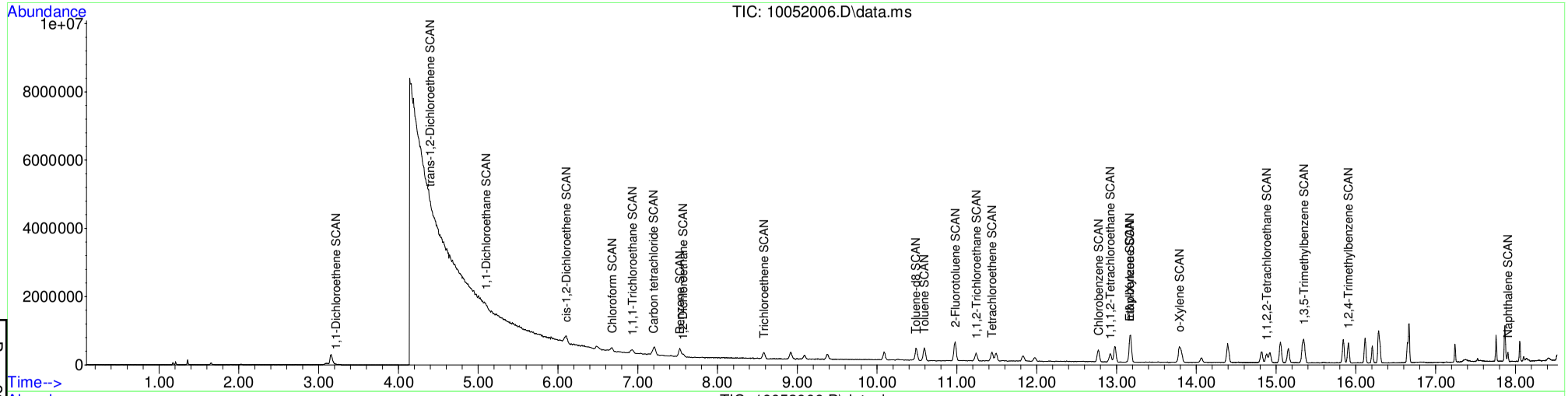
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.980	109	556900	5000.00 ug/L	0.01
System Monitoring Compounds					
12) Toluene-d8	10.487	98	492225	4515.03 ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 90.30%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.097	61	94893	4267.17 ug/L	82
3] trans-1,2-Dichloroethene	4.402	61	112876	4393.26 ug/L	98
4] 1,1-Dichloroethane	5.105	63	145279	4542.40 ug/L	98
5] cis-1,2-Dichloroethene	6.101	61	154423	4574.12 ug/L	99
6] Chloroform	6.664	83	155159	4490.23 ug/L	100
7] 1,1,1-Trichloroethane	6.931	97	168901	4500.81 ug/L	99
8] Carbon tetrachloride	7.199	117	157047	4446.34 ug/L	100
9] Benzene	7.515	78	404738	4277.49 ug/L	98
10] 1,2-Dichloroethane	7.564	62	154795	4582.80 ug/L	97
11] Trichloroethene	8.580	130	126637	4445.12 ug/L	93
13] Toluene	10.582	91	578827	4164.54 ug/L	100
14] 1,1,2-Trichloroethane	11.232	97	134900	4454.23 ug/L	97
15] Tetrachloroethene	11.442	166	173545	4314.54 ug/L	100
16] Chlorobenzene	12.773	112	400326	4022.51 ug/L	92
17] 1,1,1,2-Tetrachloroethane	12.924	131	160857	4510.77 ug/L	100
18] Ethylbenzene	12.980	91	747801	4420.17 ug/L	98
19] m&p-Xylene	13.170	91	1097799	8302.55 ug/L	96
20] o-Xylene	13.782	91	555349	3931.27 ug/L	96
21] 1,1,2,2-Tetrachloroethane	14.880	83	258635	4131.06 ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	653486	4346.16 ug/L	96
23] 1,2,4-Trimethylbenzene	15.906	105	619137	3964.30 ug/L	96
24] Naphthalene	17.907	128	245584	994.91 ug/L	97
25) 2-Fluorotoluene SCAN	10.979	109	278666	5133.15 ug/L	97
26) 1,1-Dichloroethene SCAN	3.214	61	284	24.63 ug/L	78
27) trans-1,2-Dichloroethe...	4.394	61	65763	4609.63 ug/L	78
28) 1,1-Dichloroethane SCAN	5.098	63	81272	4922.40 ug/L	95
29) cis-1,2-Dichloroethene...	6.106	61	89773	5074.91 ug/L #	77
30) Chloroform SCAN	6.674	83	80458	4193.40 ug/L	91
31) 1,1,1-Trichloroethane ...	6.930	97	83196	4758.25 ug/L	92
32) Carbon tetrachloride SCAN	7.197	117	74609	4090.78 ug/L	94
33) Benzene SCAN	7.526	78	233390	4848.00 ug/L	95
34) 1,2-Dichloroethane SCAN	7.562	62	91896	5169.55 ug/L	96
35) Trichloroethene SCAN	8.584	130	64506	4875.88 ug/L	91
36) Toluene-d8 SCAN	10.486	98	254623	4795.93 ug/L	95
37) Toluene SCAN	10.591	91	308189	4532.75 ug/L	98
38) 1,1,2-Trichloroethane ...	11.241	97	70943	4648.58 ug/L	87
39) Tetrachloroethene SCAN	11.441	166	80017	4898.57 ug/L	96
40) Chlorobenzene SCAN	12.772	112	195308	4203.77 ug/L	83
41) 1,1,1,2-Tetrachloroeth...	12.923	131	77124	4485.54 ug/L	95
42) Ethylbenzene SCAN	13.169	91	573198	4627.46 ug/L	90
43) m&p-Xylene SCAN	13.169	91	573198	4627.46 ug/L	91
44) o-Xylene SCAN	13.789	91	279485	4215.21 ug/L	97
45) 1,1,2,2-Tetrachloroeth...	14.879	83	148869	4604.57 ug/L	97
46) 1,3,5-Trimethylbenzene...	15.348	105	329808	4719.80 ug/L	97
47) 1,2,4-Trimethylbenzene...	15.909	105	305570	4273.69 ug/L	97
48) Naphthalene SCAN	17.906	128	110476	1021.12 ug/L	97

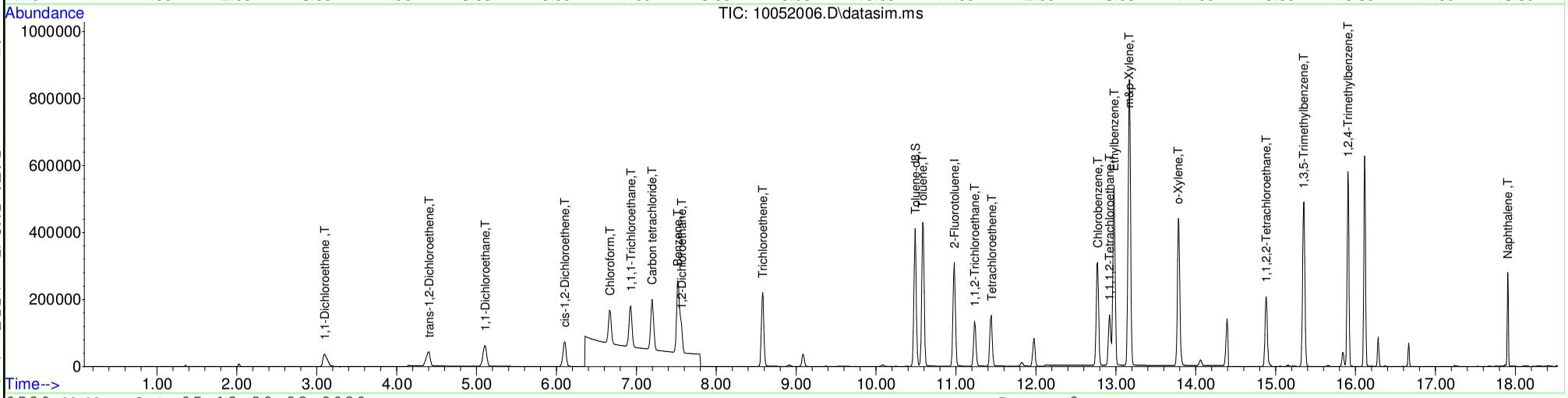
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052006.D
Acq On : 5 Oct 2020 11:51
InstName : AG5975C
Operator : TD
Sample : B20J004-BS1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 05 12:10:32 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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B20J004-BSD1

Blanks Spike or Blank Spike Duplicate

Instrument Name: AG5975C
Sample Name: B20J004-BSD1
Misc Info: 0
Date Acquired: 10/5/2020
QLast Update: Fri Aug 21 08:33:54 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.970	5000	5000.00	100%	70	130	pass
2)	**1,1-Dichloroethene**	**3.090**	**5000**	**4766.29**	**95%**	**22**	**143**	**pass**
3)	**trans-1,2-Dichloroethene**	**4.396**	**5000**	**4894.86**	**98%**	**35**	**133**	**pass**
4)	**1,1-Dichloroethane**	**5.099**	**5000**	**5043.84**	**101%**	**43**	**140**	**pass**
5)	**cis-1,2-Dichloroethene**	**6.094**	**5000**	**5052.91**	**101%**	**49**	**134**	**pass**
6)	**Chloroform**	**6.664**	**5000**	**4901.63**	**98%**	**56**	**132**	**pass**
7)	**1,1,1-Trichloroethane**	**6.919**	**5000**	**4848.00**	**97%**	**58**	**131**	pass
8)	Carbon tetrachloride	7.187	5000	4739.76	95%	60	126	pass
9)	Benzene	7.515	5000	4536.44	91%	63	121	pass
10)	1,2-Dichloroethane	7.552	5000	4977.49	100%	57	128	pass
11)	**Trichloroethene**	**8.569**	**5000**	**4692.78**	**94%**	**69**	**124**	**pass**
12)	Toluene-d8	10.477	5000	4561.13	91%	70	130	pass
13)	Toluene	10.571	5000	4251.66	85%	77	111	pass
14)	1,1,2-Trichloroethane	11.222	5000	4612.75	92%	76	115	pass
15)	**Tetrachloroethene**	**11.421**	**5000**	**4381.73**	**88%**	**69**	**124**	**pass**
16)	Chlorobenzene	12.757	5000	3983.97	80%	64	122	pass
17)	1,1,1,2-Tetrachloroethane	12.908	5000	4588.16	92%	68	130	**pass**
18)	Ethylbenzene	12.964	5000	4427.27	89%	70	130	pass
19)	m&p-Xylene	13.162	10000	8240.34	82%	66	129	pass
20)	o-Xylene	13.774	5000	3828.79	77%	63	121	pass
21)	1,1,2,2-Tetrachloroethane	14.873	5000	4129.57	83%	55	132	pass
22)	1,3,5-Trimethylbenzene	15.345	5000	4267.98	85%	61	140	pass
23)	1,2,4-Trimethylbenzene	15.896	5000	3832.03	77%	54	143	pass
25)	2-Fluorotoluene SCAN	10.969	5000	5159.15	103%	20	110	pass
27)	trans-1,2-Dichloroethene SCAN	4.401	5000	5356.82	107%	83	110	pass
29)	cis-1,2-Dichloroethene SCAN	6.093	5000	5730.27	115%	58	118	pass
31)	1,1,1-Trichloroethane SCAN	6.918	5000	5238.62	105%	59	119	pass
33)	Benzene SCAN	7.514	5000	4923.59	98%	69	129	pass
35)	Trichloroethene SCAN	8.568	5000	5271.68	105%	69	129	pass
37)	Toluene SCAN	10.580	5000	4654.90	93%	66	126	pass
39)	Tetrachloroethene SCAN	11.430	5000	4654.67	93%	59	119	pass
41)	1,1,1,2-Tetrachloroethane SCAN	12.907	5000	4324.98	86%	62	122	pass
43)	m&p-Xylene SCAN	13.161	5000	4545.64	91%	68	128	pass
45)	1,1,2,2-Tetrachloroethane SCAN	14.872	5000	4537.17	91%	63	123	pass
47)	1,2,4-Trimethylbenzene SCAN	15.899	5000	4087.63	82%	20	110	pass

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052007.D
Acq On : 5 Oct 2020 12:15
InstName : AG5975C
Operator : TD
Sample : B20J004-BSD1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 05 12:34:13 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

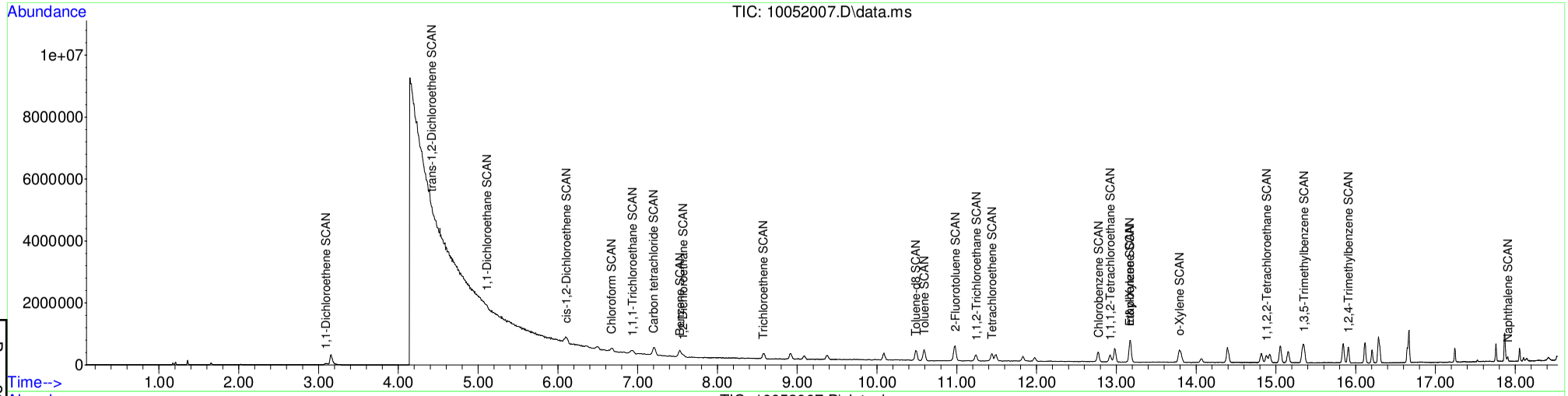
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.980	109	507262	5000.00	ug/L	0.01
System Monitoring Compounds						
12) Toluene-d8	10.487	98	452929	4561.13	ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 91.22%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.093	61	96545	4766.29	ug/L	82
3] trans-1,2-Dichloroethene	4.409	61	114554	4894.86	ug/L	98
4] 1,1-Dichloroethane	5.112	63	146938	5043.84	ug/L	99
5] cis-1,2-Dichloroethene	6.107	61	155382	5052.91	ug/L	99
6] Chloroform	6.676	83	154278	4901.63	ug/L	99
7] 1,1,1-Trichloroethane	6.931	97	165714	4848.00	ug/L	99
8] Carbon tetrachloride	7.199	117	152489	4739.76	ug/L	100
9] Benzene	7.527	78	390980	4536.44	ug/L	98
10] 1,2-Dichloroethane	7.564	62	153141	4977.49	ug/L	99
11] Trichloroethene	8.580	130	121776	4692.78	ug/L	93
13] Toluene	10.582	91	538264	4251.66	ug/L	100
14] 1,1,2-Trichloroethane	11.232	97	127249	4612.75	ug/L	96
15] Tetrachloroethene	11.442	166	160538	4381.73	ug/L	100
16] Chlorobenzene	12.773	112	361151	3983.97	ug/L	92
17] 1,1,1,2-Tetrachloroethane	12.924	131	149033	4588.16	ug/L	100
18] Ethylbenzene	12.980	91	682242	4427.27	ug/L	98
19] m&p-Xylene	13.170	91	992457	8240.34	ug/L	96
20] o-Xylene	13.782	91	492663	3828.79	ug/L	96
21] 1,1,2,2-Tetrachloroethane	14.880	83	235497	4129.57	ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	584532	4267.98	ug/L	96
23] 1,2,4-Trimethylbenzene	15.906	105	545135	3832.03	ug/L	96
24] Naphthalene	17.906	128	137880	613.24	ug/L	95
25) 2-Fluorotoluene SCAN	10.979	109	255113	5159.15	ug/L	94
26) 1,1-Dichloroethene SCAN	3.092	61	57805	5504.49	ug/L #	47
27) trans-1,2-Dichloroethe...	4.414	61	69611	5356.82	ug/L	79
28) 1,1-Dichloroethane SCAN	5.111	63	85830	5707.16	ug/L	93
29) cis-1,2-Dichloroethene...	6.106	61	92331	5730.27	ug/L	75
30) Chloroform SCAN	6.675	83	86753	4963.94	ug/L	92
31) 1,1,1-Trichloroethane ...	6.930	97	83431	5238.62	ug/L	88
32) Carbon tetrachloride SCAN	7.198	117	79282	4772.37	ug/L	90
33) Benzene SCAN	7.526	78	215902	4923.59	ug/L	95
34) 1,2-Dichloroethane SCAN	7.563	62	85881	5303.93	ug/L	89
35) Trichloroethene SCAN	8.573	130	63526	5271.68	ug/L	90
36) Toluene-d8 SCAN	10.486	98	234934	4858.09	ug/L	96
37) Toluene SCAN	10.591	91	288284	4654.90	ug/L	97
38) 1,1,2-Trichloroethane ...	11.242	97	67104	4827.30	ug/L	90
39) Tetrachloroethene SCAN	11.441	166	69256	4654.67	ug/L	95
40) Chlorobenzene SCAN	12.772	112	170919	4038.82	ug/L	84
41) 1,1,1,2-Tetrachloroeth...	12.923	131	67735	4324.98	ug/L	97
42) Ethylbenzene SCAN	13.169	91	512876	4545.64	ug/L	92
43) m&p-Xylene SCAN	13.169	91	512876	4545.64	ug/L	93
44) o-Xylene SCAN	13.789	91	255328	4227.70	ug/L	93
45) 1,1,2,2-Tetrachloroeth...	14.883	83	133615	4537.17	ug/L	99
46) 1,3,5-Trimethylbenzene...	15.353	105	280010	4399.27	ug/L	98
47) 1,2,4-Trimethylbenzene...	15.909	105	266216	4087.63	ug/L	96
48) Naphthalene SCAN	17.905	128	59723	606.03	ug/L	97

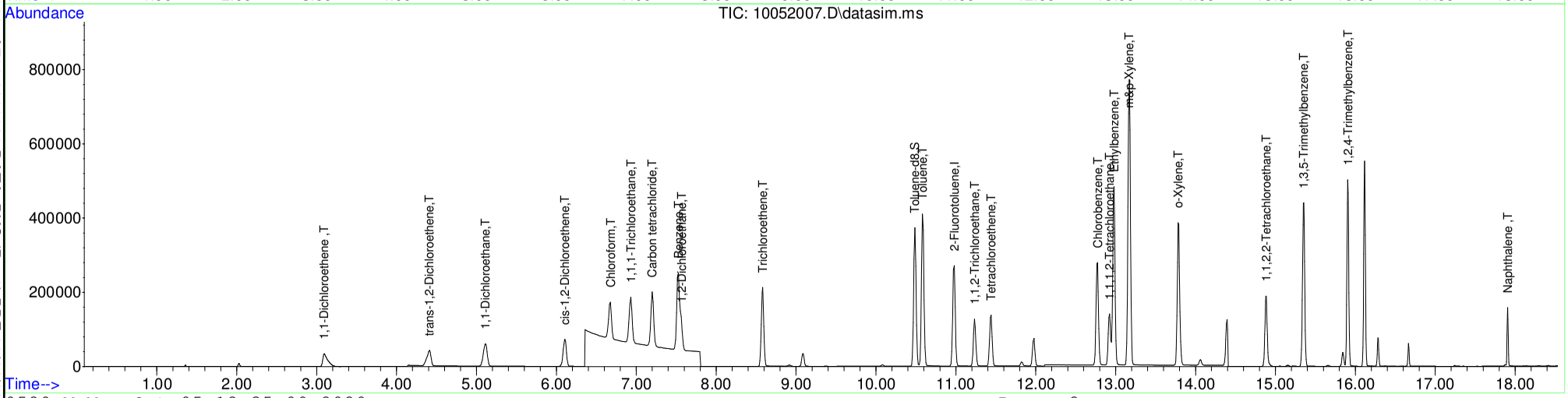
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052007.D
Acq On : 5 Oct 2020 12:15
InstName : AG5975C
Operator : TD
Sample : B20J004-BSD1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 05 12:34:13 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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B20J004-MRL1

Quantitation Report (Not Reviewed)

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Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052008.D
Acq On : 5 Oct 2020 12:39
InstName : AG5975C
Operator : TD
Sample : B20J004-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 05 12:57:47 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

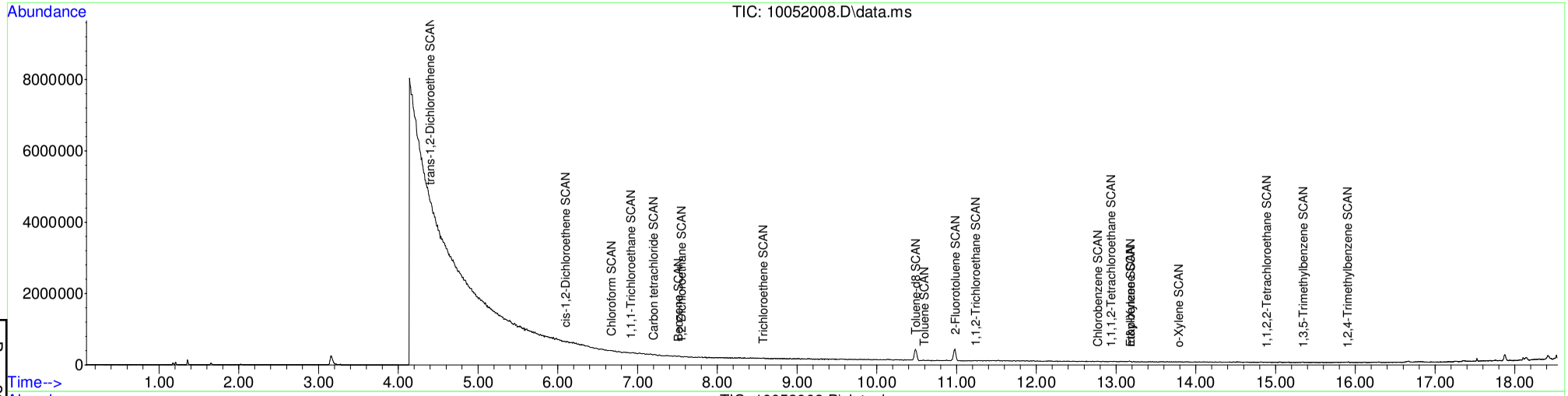
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	530253	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	463791	4468.00 ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 89.36%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.093	61	1423	67.21 ug/L #	45
3] trans-1,2-Dichloroethene	4.395	61	1168	47.74 ug/L	73
4] 1,1-Dichloroethane	5.099	63	1460	47.94 ug/L	80
5] cis-1,2-Dichloroethene	6.094	61	1586	49.34 ug/L	97
6] Chloroform	6.664	83	1731	52.61 ug/L	98
7] 1,1,1-Trichloroethane	6.919	97	1732	48.47 ug/L	100
8] Carbon tetrachloride	7.187	117	1613	47.96 ug/L	98
9] Benzene	7.515	78	9493	105.37 ug/L	61
10] 1,2-Dichloroethane	7.552	62	1664	51.74 ug/L #	29
11] Trichloroethene	8.575	130	1396	51.46 ug/L	91
13] Toluene	10.582	91	8176	61.78 ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	1437	49.83 ug/L	89
15] Tetrachloroethene	11.442	166	1929	50.37 ug/L	95
16] Chlorobenzene	12.773	112	4687	49.46 ug/L	87
17] 1,1,1,2-Tetrachloroethane	12.924	131	1761	51.86 ug/L	95
18] Ethylbenzene	12.980	91	9701	60.22 ug/L	94
19] m&p-Xylene	13.170	91	15752	125.12 ug/L	95
20] o-Xylene	13.782	91	7011	52.12 ug/L	95
21] 1,1,2,2-Tetrachloroethane	14.880	83	2983	50.04 ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	8046	56.20 ug/L	95
23] 1,2,4-Trimethylbenzene	15.906	105	8880	59.72 ug/L	91
25) 2-Fluorotoluene SCAN	10.979	109	252437	4883.68 ug/L	96
27) trans-1,2-Dichloroethe...	4.394	61	500	36.81 ug/L #	43
29) cis-1,2-Dichloroethene...	6.099	61	337	20.01 ug/L #	29
30) Chloroform SCAN	6.674	83	963	52.71 ug/L #	32
31) 1,1,1-Trichloroethane ...	6.918	97	522	31.36 ug/L	86
32) Carbon tetrachloride SCAN	7.197	117	485	27.93 ug/L #	14
33) Benzene SCAN	7.514	78	17033	371.59 ug/L	95
34) 1,2-Dichloroethane SCAN	7.550	62	642	37.93 ug/L #	1
35) Trichloroethene SCAN	8.573	130	304	24.13 ug/L #	1
36) Toluene-d8 SCAN	10.486	98	239965	4746.97 ug/L	94
37) Toluene SCAN	10.591	91	4271	65.97 ug/L	94
38) 1,1,2-Trichloroethane ...	11.241	97	1170	80.52 ug/L	79
40) Chlorobenzene SCAN	12.772	112	1717	38.81 ug/L #	51
41) 1,1,1,2-Tetrachloroeth...	12.931	131	498	30.42 ug/L #	14
42) Ethylbenzene SCAN	13.177	91	8254	69.98 ug/L	86
43) m&p-Xylene SCAN	13.177	91	8254	69.98 ug/L	85
44) o-Xylene SCAN	13.781	91	4564	72.29 ug/L	78
45) 1,1,2,2-Tetrachloroeth...	14.886	83	2438	79.20 ug/L #	42
46) 1,3,5-Trimethylbenzene...	15.343	105	4736	71.18 ug/L	88
47) 1,2,4-Trimethylbenzene...	15.904	105	4779	70.20 ug/L #	77

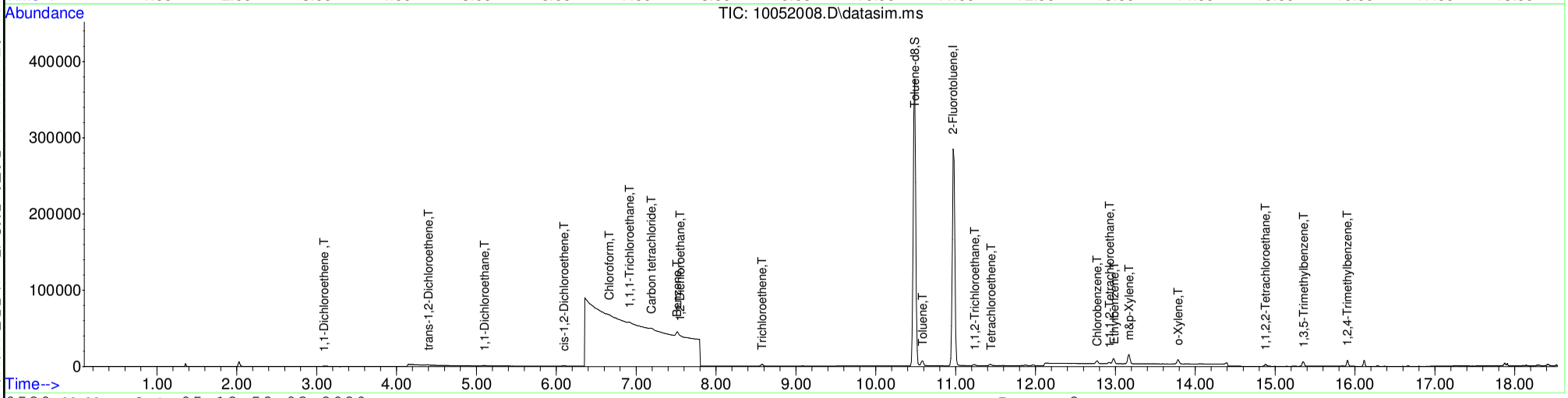
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052008.D
Acq On : 5 Oct 2020 12:39
InstName : AG5975C
Operator : TD
Sample : B20J004-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 05 12:57:47 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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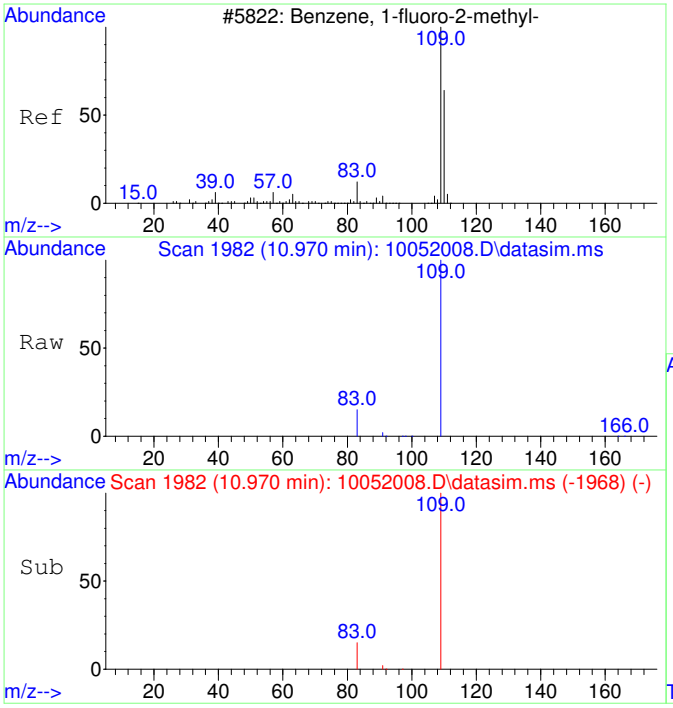
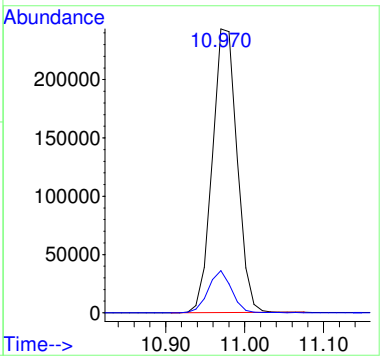
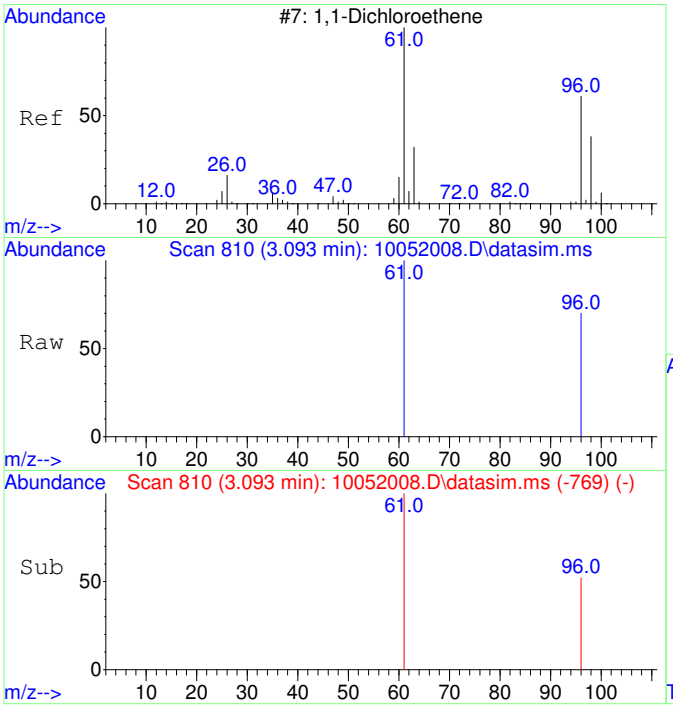


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:109 Resp: 530253

Ion	Ratio	Lower	Upper
109	100		
83	13.9	0.0	42.3

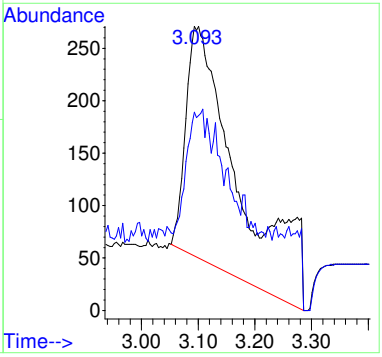




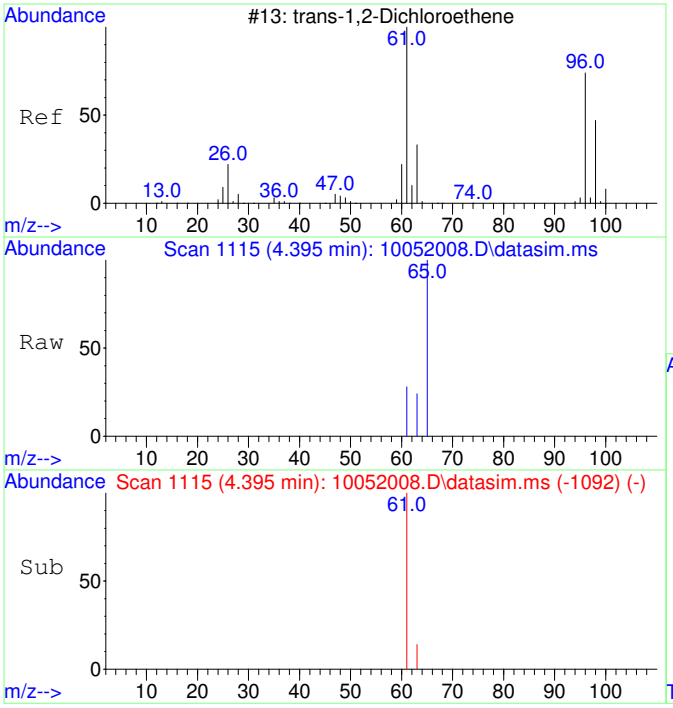
#2
1,1-Dichloroethene
Concen: 67.21 ug/L
RT: 3.093 min Scan# 810
Delta R.T. 0.003 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 61 Resp: 1423

Ion	Ratio	Lower	Upper
61	100		
96	23.3	37.2	97.2#



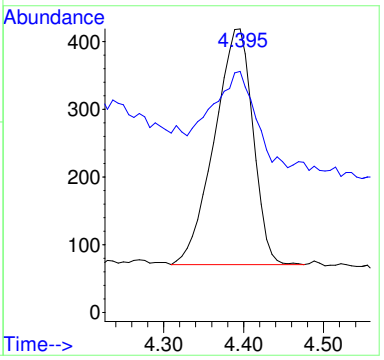
Before MI:
IMPROPER
BASELINE

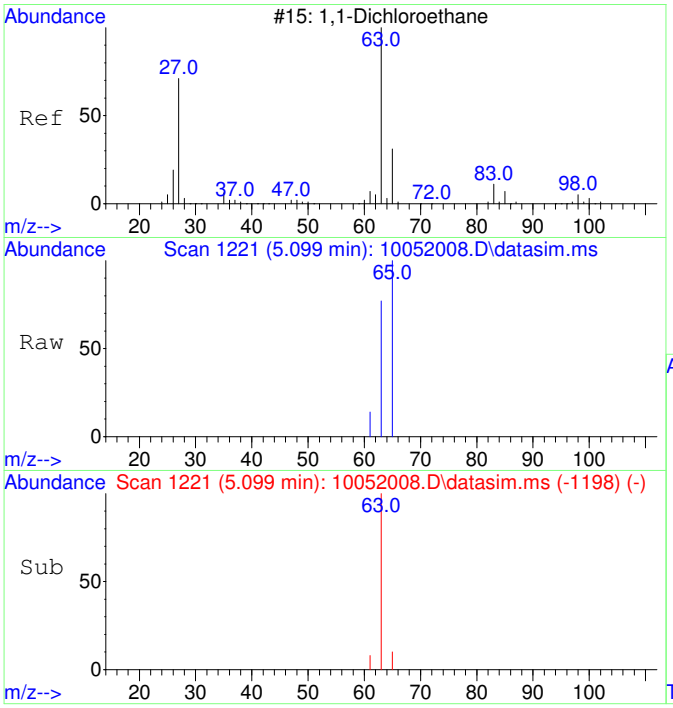


#3
trans-1,2-Dichloroethene
Concen: 47.74 ug/L
RT: 4.395 min Scan# 1115
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 61 Resp: 1168

Ion	Ratio	Lower	Upper
61	100		
63	47.6	2.4	62.4

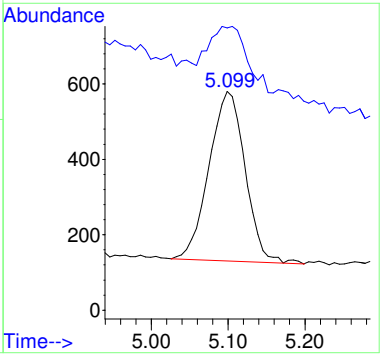


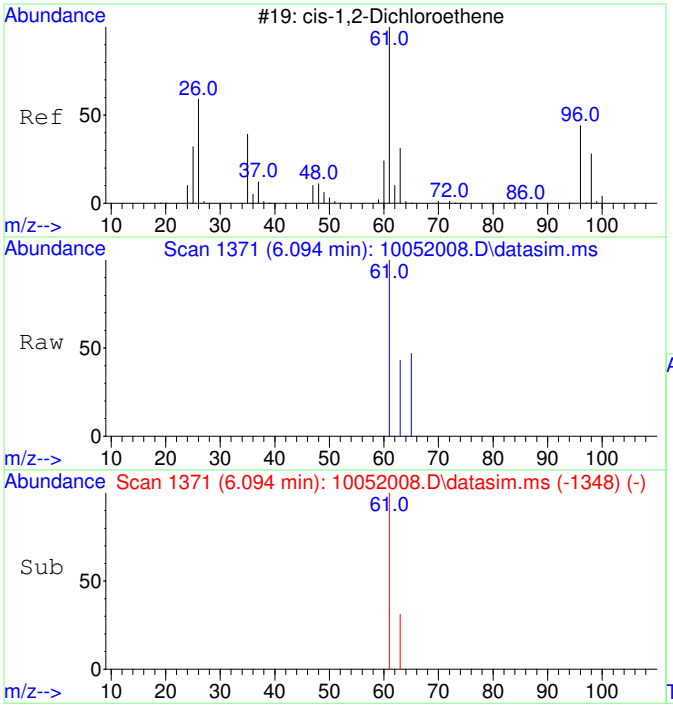


#4
1,1-Dichloroethane
Concen: 47.94 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 63 Resp: 1460

Ion	Ratio	Lower	Upper
63	100		
65	42.7	1.8	61.8

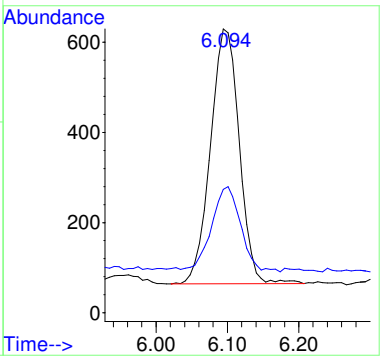


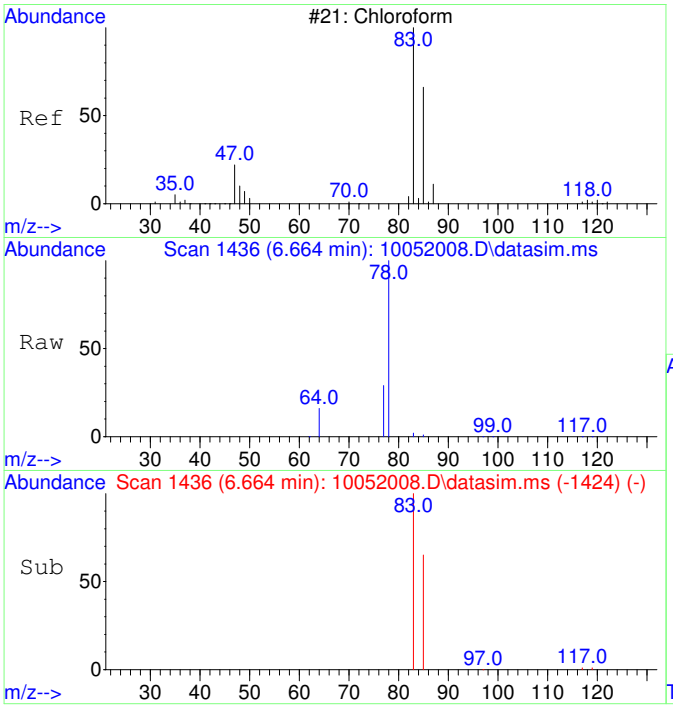


#5
cis-1,2-Dichloroethene
Concen: 49.34 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 61 Resp: 1586

Ion	Ratio	Lower	Upper
61	100		
63	34.0	2.5	62.5

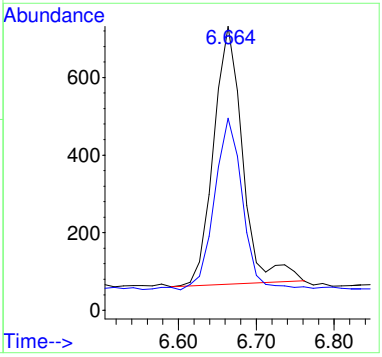


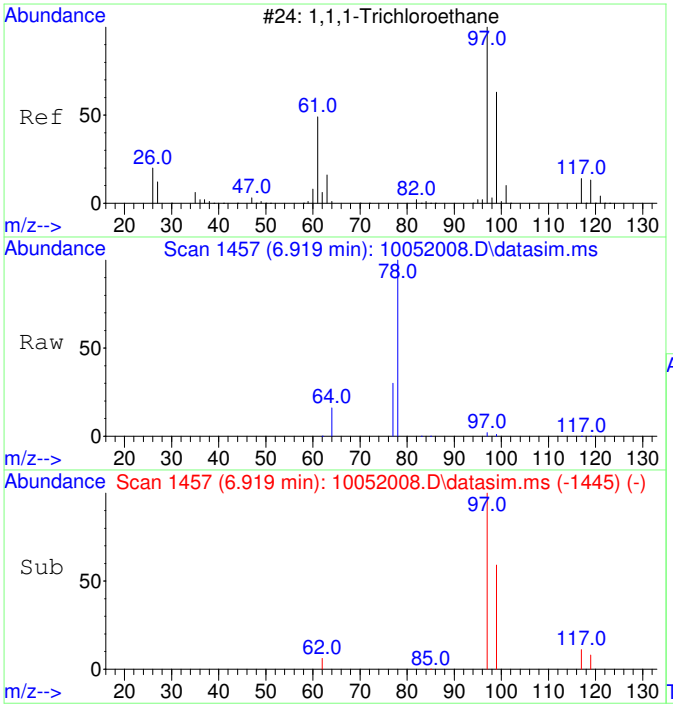


#6
Chloroform
Concen: 52.61 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 83 Resp: 1731

Ion	Ratio	Lower	Upper
83	100		
85	63.8	35.1	95.1

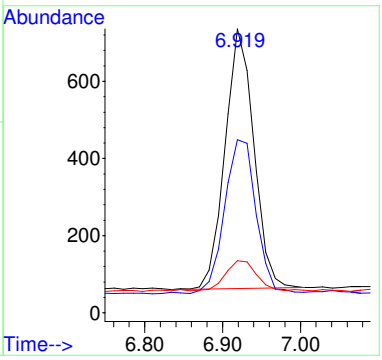


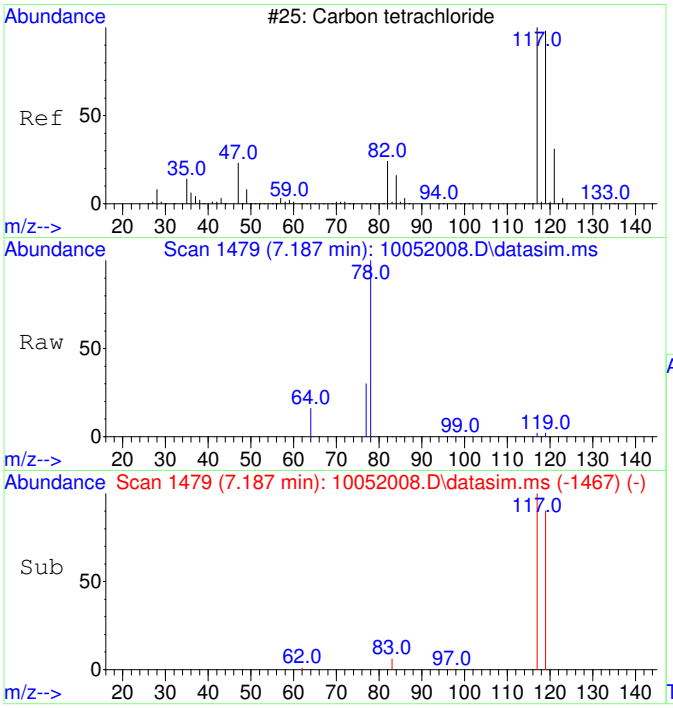


#7
1,1,1-Trichloroethane
Concen: 48.47 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 97 Resp: 1732

Ion	Ratio	Lower	Upper
97	100		
99	64.4	34.6	94.6
117	12.6	0.0	43.2

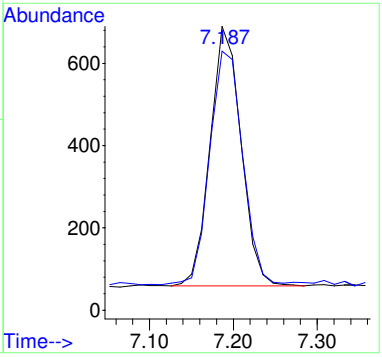


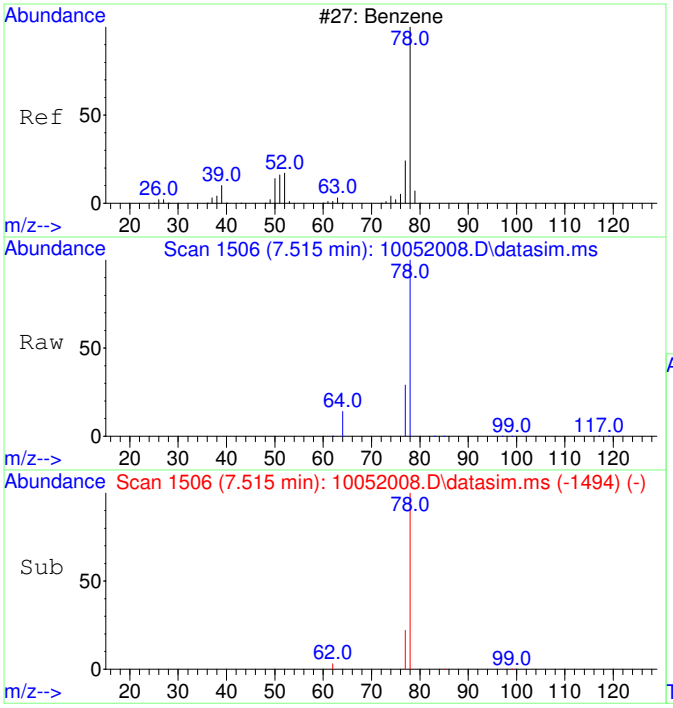


#8
Carbon tetrachloride
Concen: 47.96 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:117 Resp: 1613

Ion	Ratio	Lower	Upper
117	100		
119	94.4	66.4	126.4

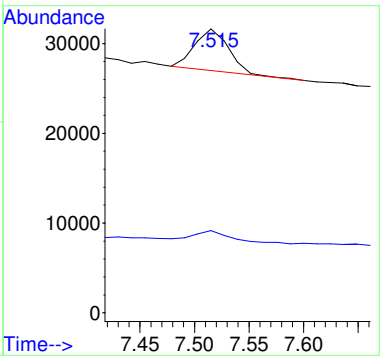


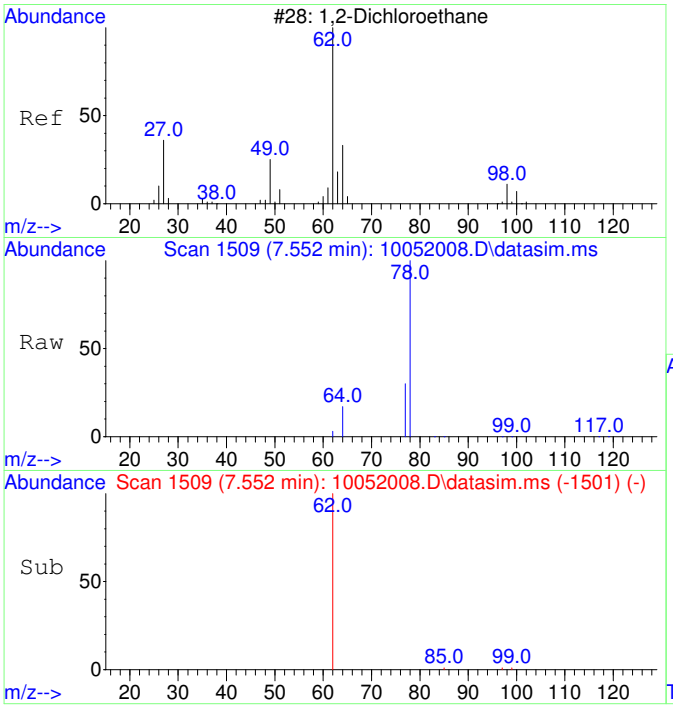


#9
Benzene
Concen: 105.37 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 78 Resp: 9493

Ion	Ratio	Lower	Upper
78	100		
77	42.0	0.0	53.2

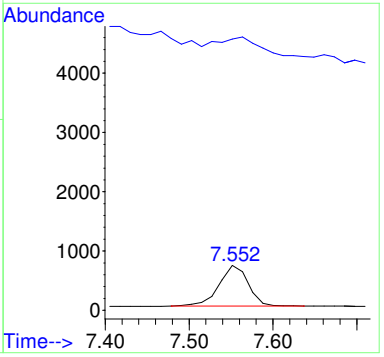


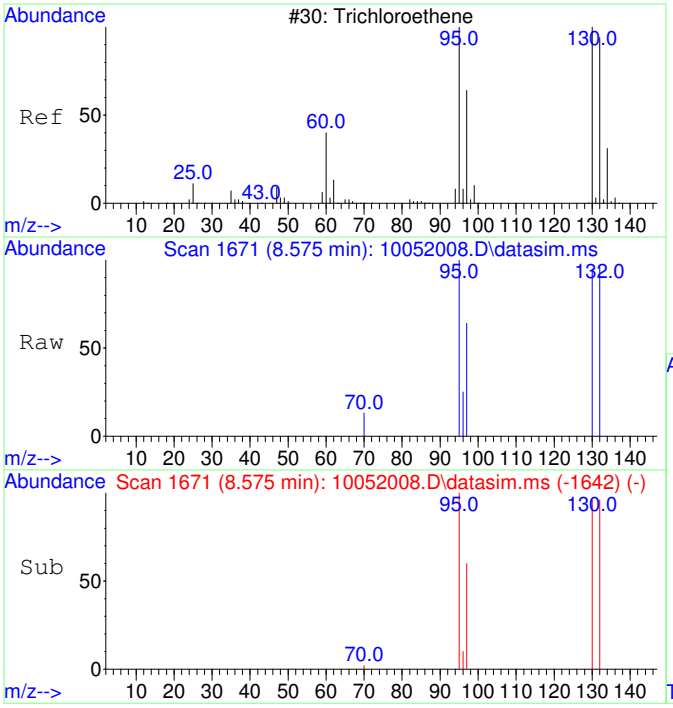


#10
1,2-Dichloroethane
Concen: 51.74 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 62 Resp: 1664

Ion	Ratio	Lower	Upper
62	100		
64	72.2	2.3	62.3#

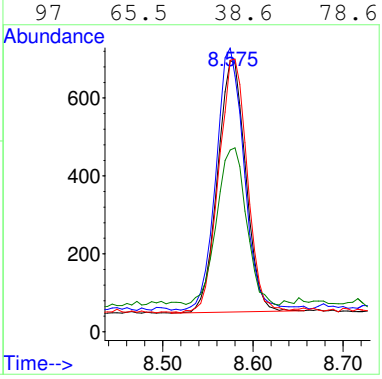


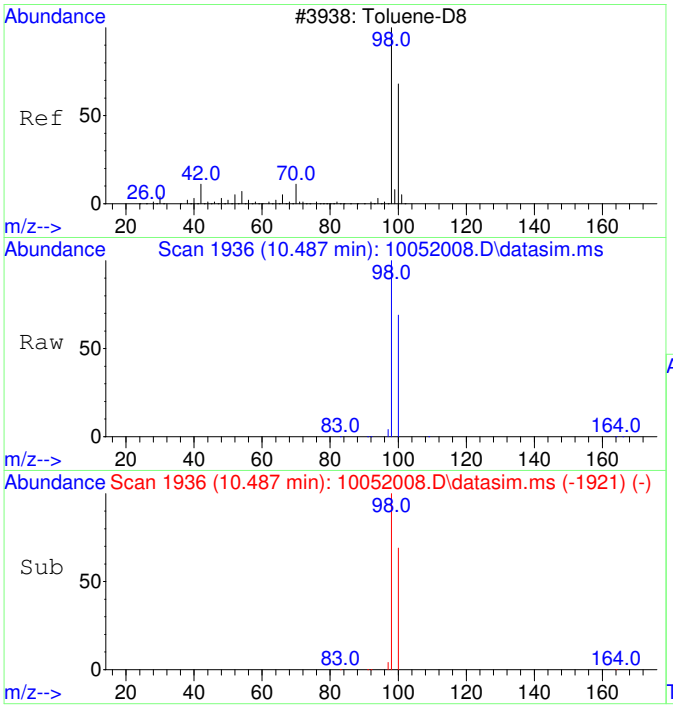


#11
Trichloroethene
Concen: 51.46 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:130 Resp: 1396

Ion	Ratio	Lower	Upper
130	100		
95	103.4	60.7	120.7
132	101.1	76.0	116.0
97	65.5	38.6	78.6

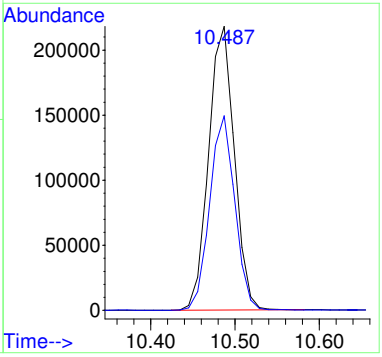


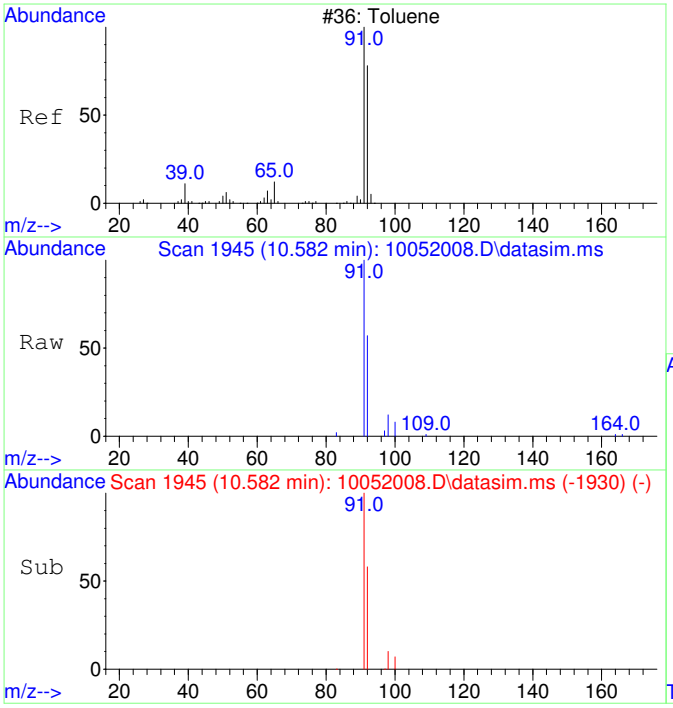


#12
Toluene-d8
Concen: 4468.00 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 98 Resp: 463791

Ion	Ratio	Lower	Upper
98	100		
100	66.7	37.1	97.1

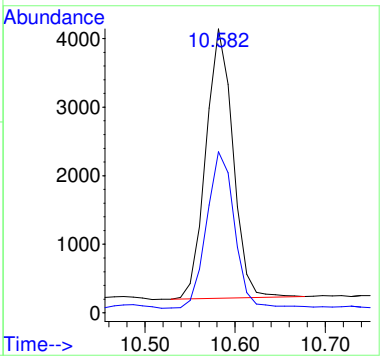


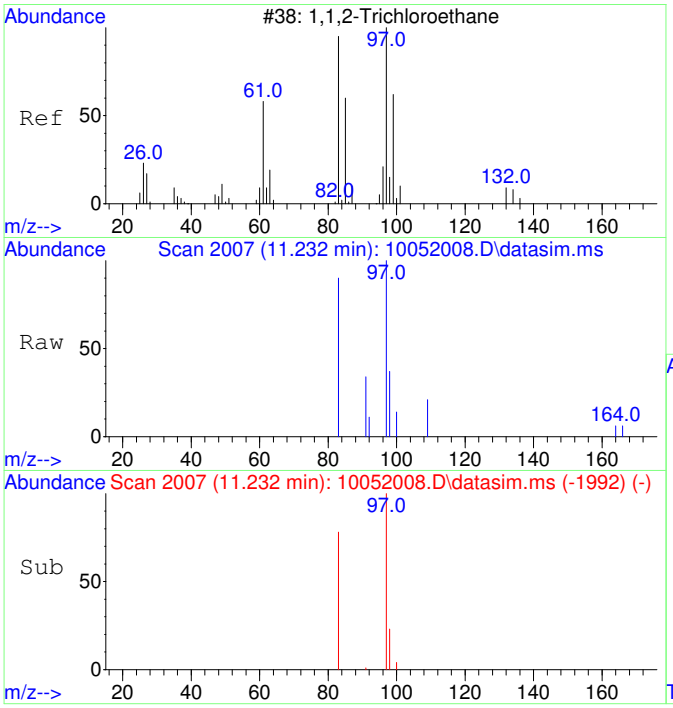


#13
Toluene
Concen: 61.78 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 8176

Ion	Ratio	Lower	Upper
91	100		
92	60.3	29.9	89.9

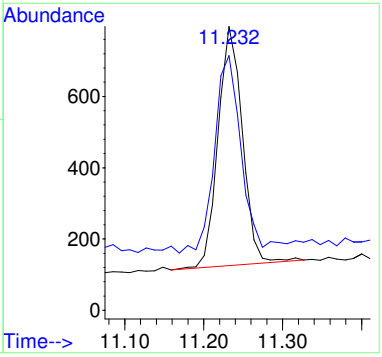


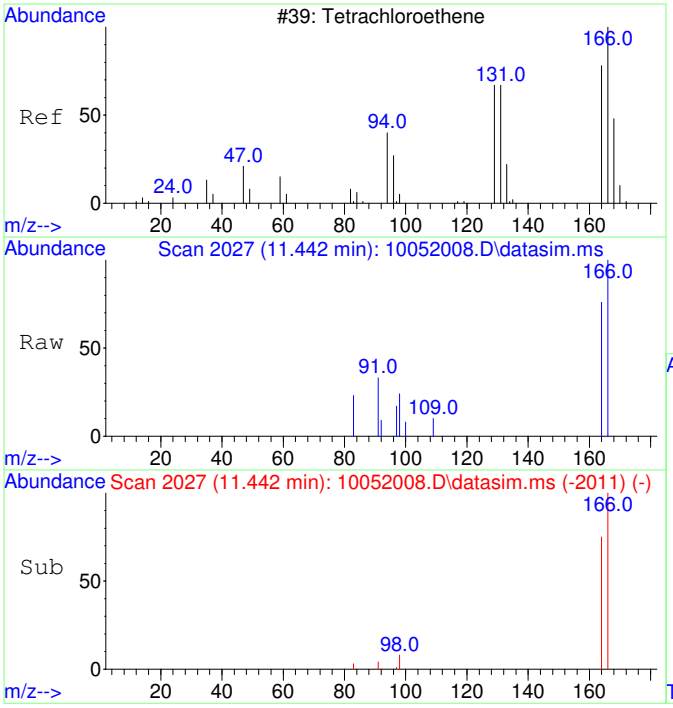


#14
1,1,2-Trichloroethane
Concen: 49.83 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 97 Resp: 1437

Ion	Ratio	Lower	Upper
97	100		
83	91.0	51.2	111.2

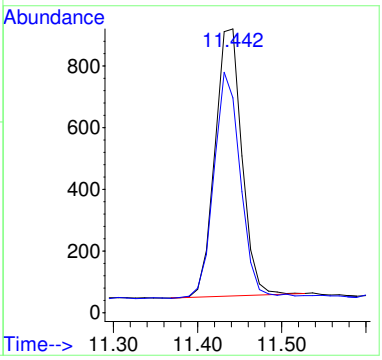


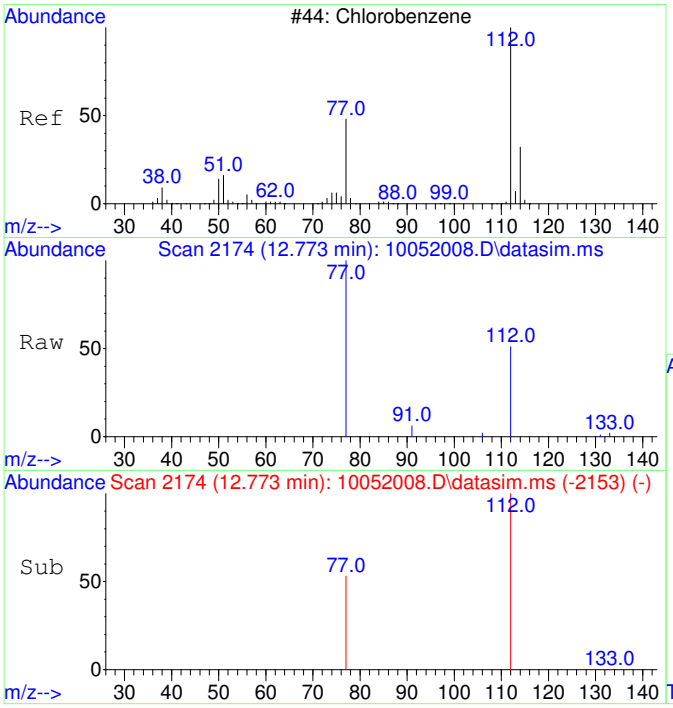


#15
Tetrachloroethene
Concen: 50.37 ug/L
RT: 11.442 min Scan# 2027
Delta R.T. 0.021 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:166 Resp: 1929

Ion	Ratio	Lower	Upper
166	100		
164	82.0	47.8	107.8

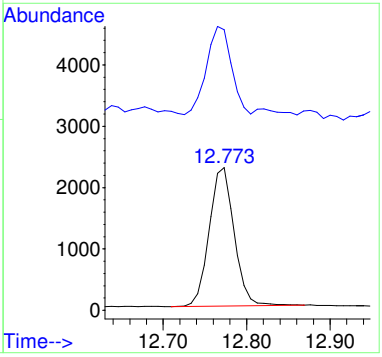


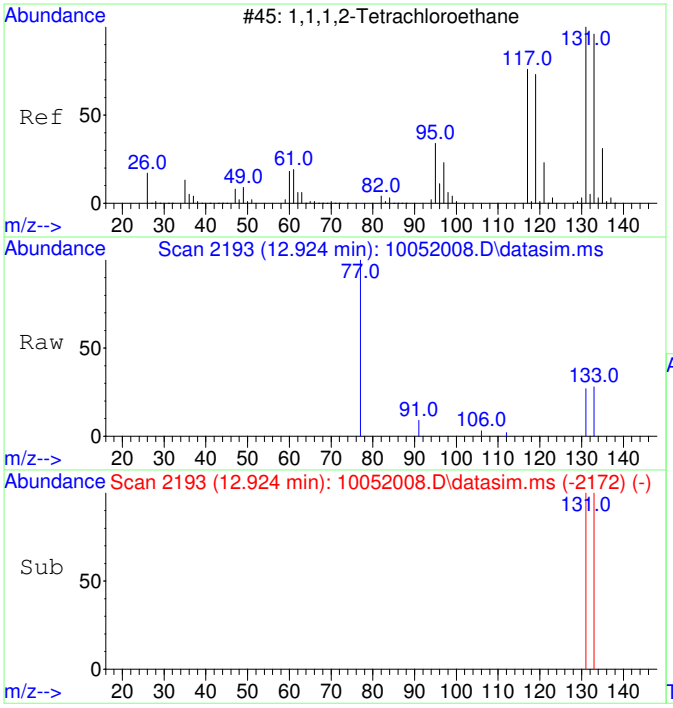


#16
Chlorobenzene
Concen: 49.46 ug/L
RT: 12.773 min Scan# 2174
Delta R.T. 0.016 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:112 Resp: 4687

Ion	Ratio	Lower	Upper
112	100		
77	63.1	23.6	83.6

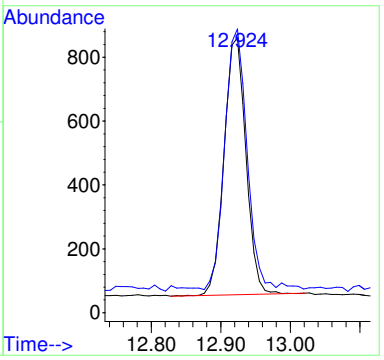


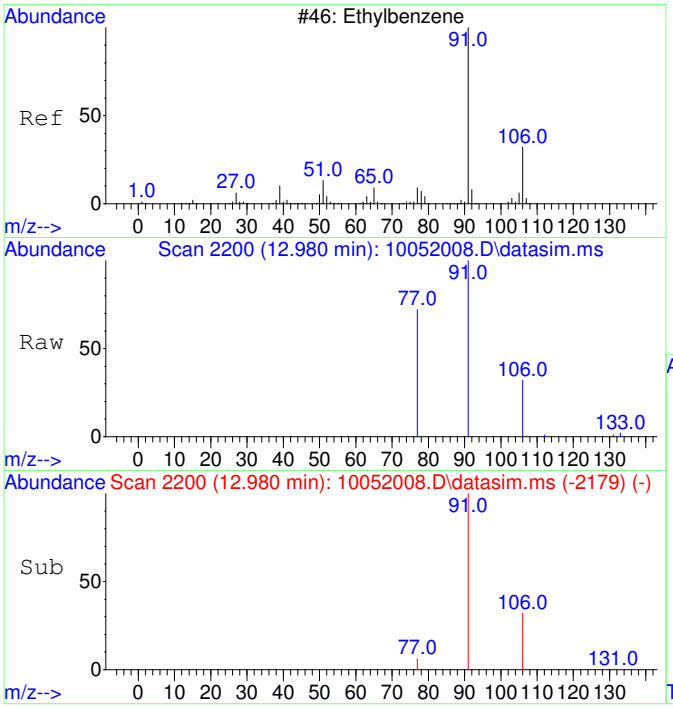


#17
1,1,1,2-Tetrachloroethane
Concen: 51.86 ug/L
RT: 12.924 min Scan# 2193
Delta R.T. 0.016 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:131 Resp: 1761

Ion	Ratio	Lower	Upper
131	100		
133	101.3	66.3	126.3

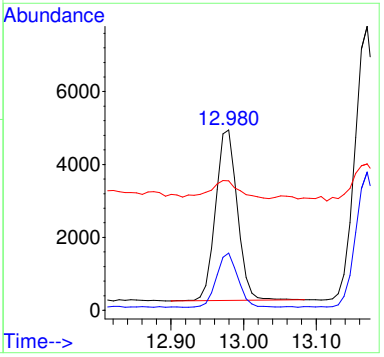


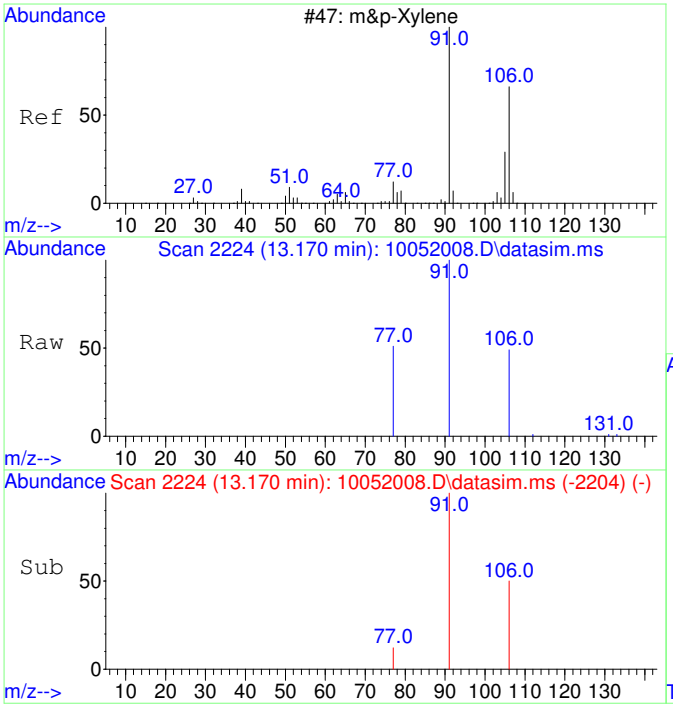


#18
Ethylbenzene
Concen: 60.22 ug/L
RT: 12.980 min Scan# 2200
Delta R.T. 0.016 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 9701

Ion	Ratio	Lower	Upper
91	100		
106	31.2	3.0	63.0
77	14.3	0.0	38.2

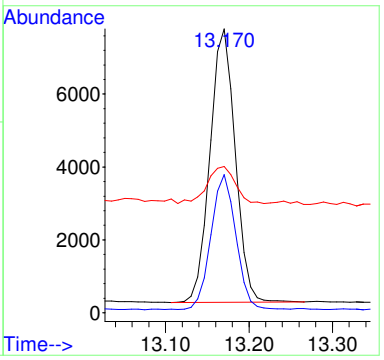


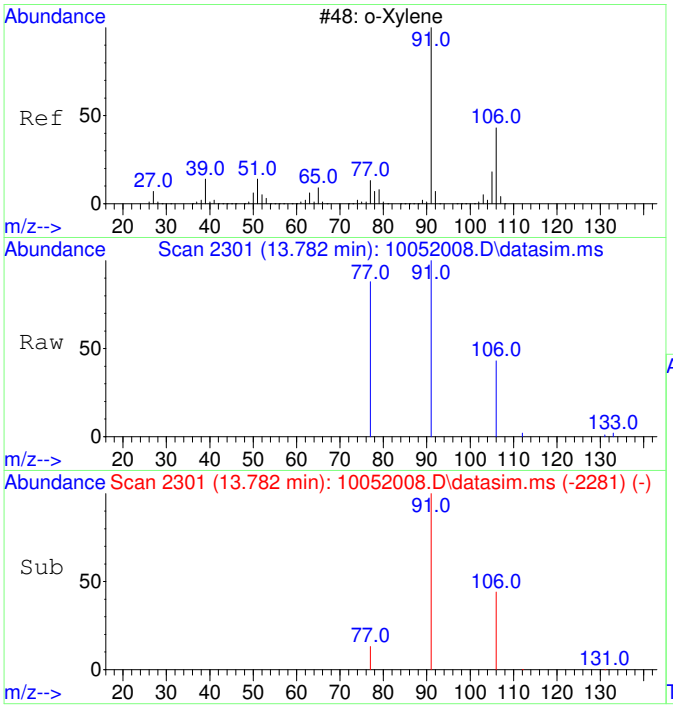


#19
m&p-Xylene
Concen: 125.12 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.008 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 15752

Ion	Ratio	Lower	Upper
91	100		
106	48.6	22.2	82.2
77	14.8	0.0	42.4

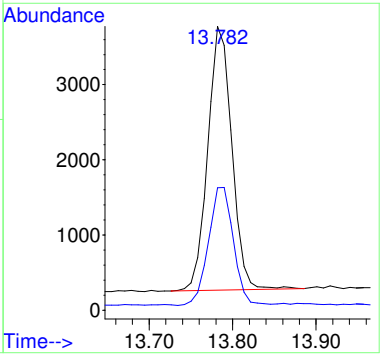


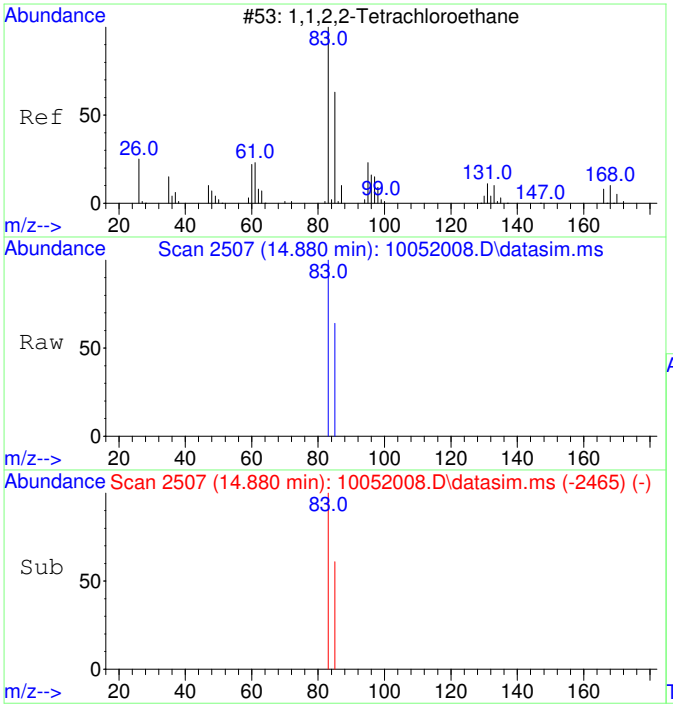


#20
o-Xylene
Concen: 52.12 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 7011

Ion	Ratio	Lower	Upper
91	100		
106	45.8	19.2	79.2

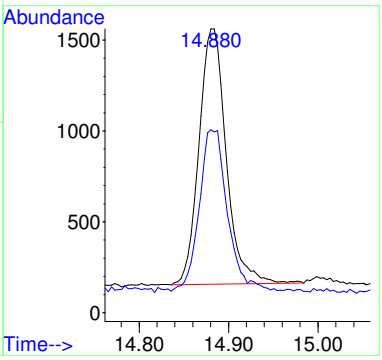


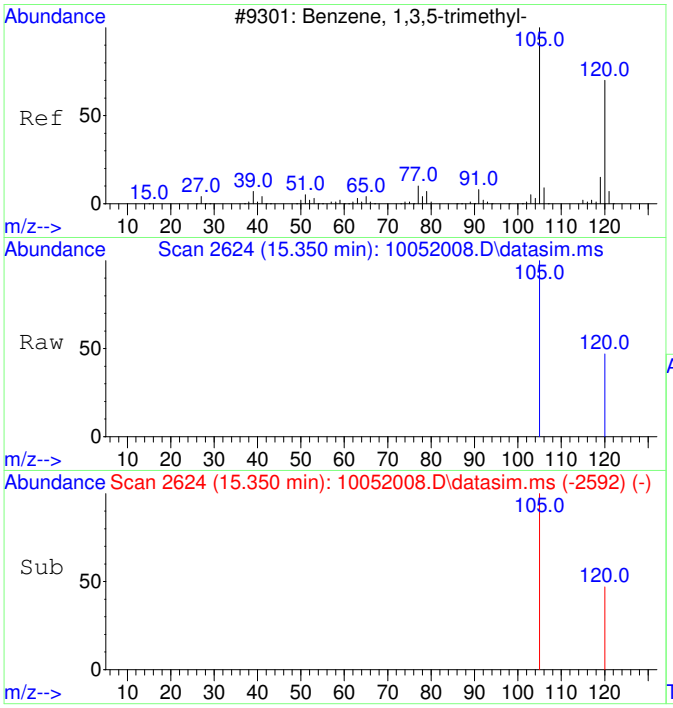


#21
1,1,2,2-Tetrachloroethane
Concen: 50.04 ug/L
RT: 14.880 min Scan# 2507
Delta R.T. 0.007 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 83 Resp: 2983

Ion	Ratio	Lower	Upper
83	100		
85	64.8	34.8	94.8

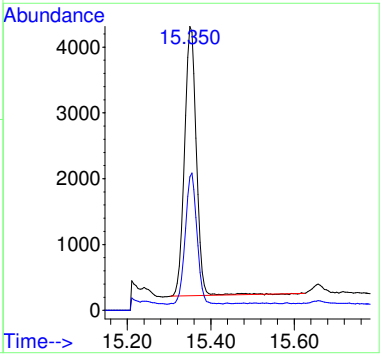


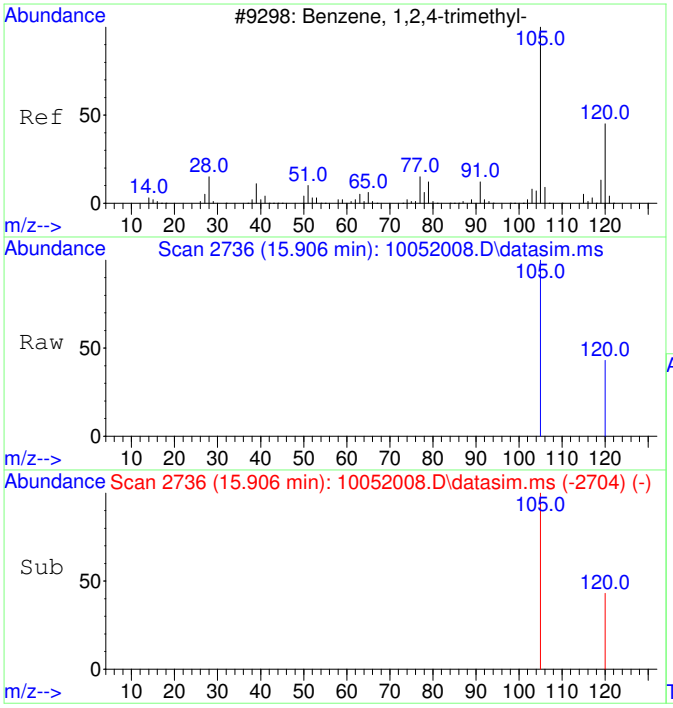


#22
1,3,5-Trimethylbenzene
Concen: 56.20 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.005 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:105 Resp: 8046

Ion	Ratio	Lower	Upper
105	100		
120	47.7	21.1	81.1

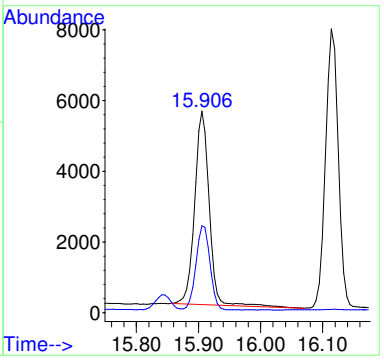


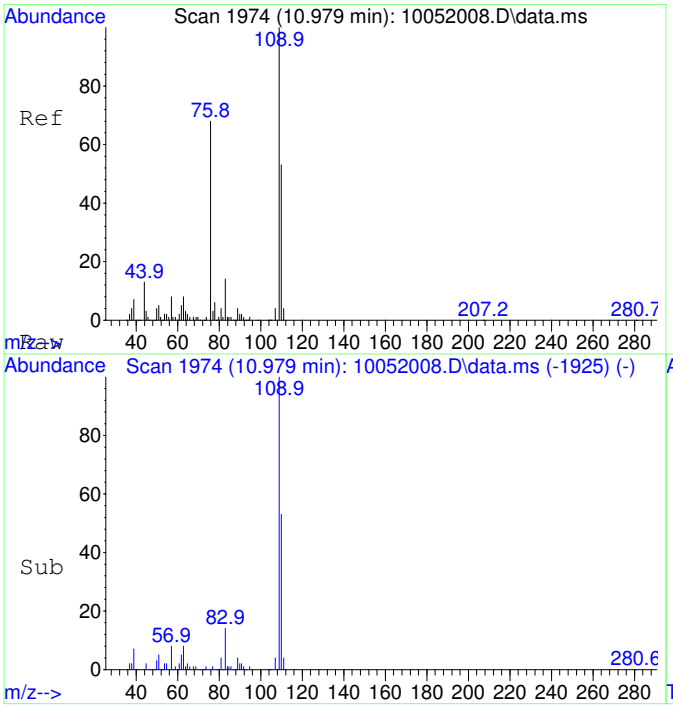


#23
1,2,4-Trimethylbenzene
Concen: 59.72 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:105 Resp: 8880

Ion	Ratio	Lower	Upper
105	100		
120	41.2	17.2	77.2

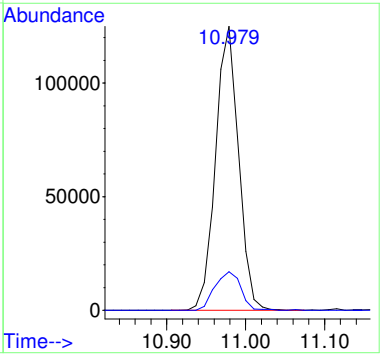


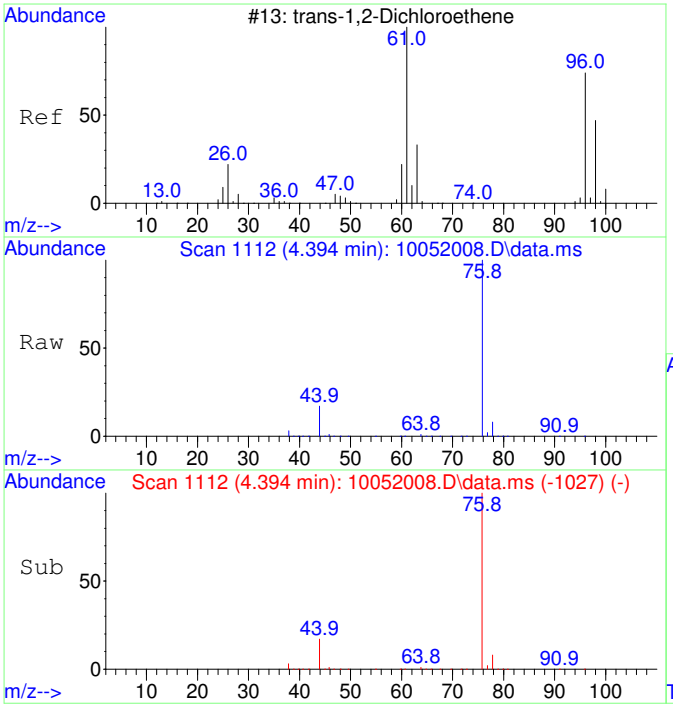


#25
2-Fluorotoluene SCAN
Concen: 4883.68 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:109 Resp: 252437

Ion	Ratio	Lower	Upper
109	100		
83	15.3	0.0	43.8

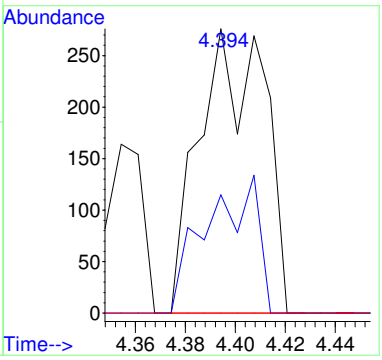


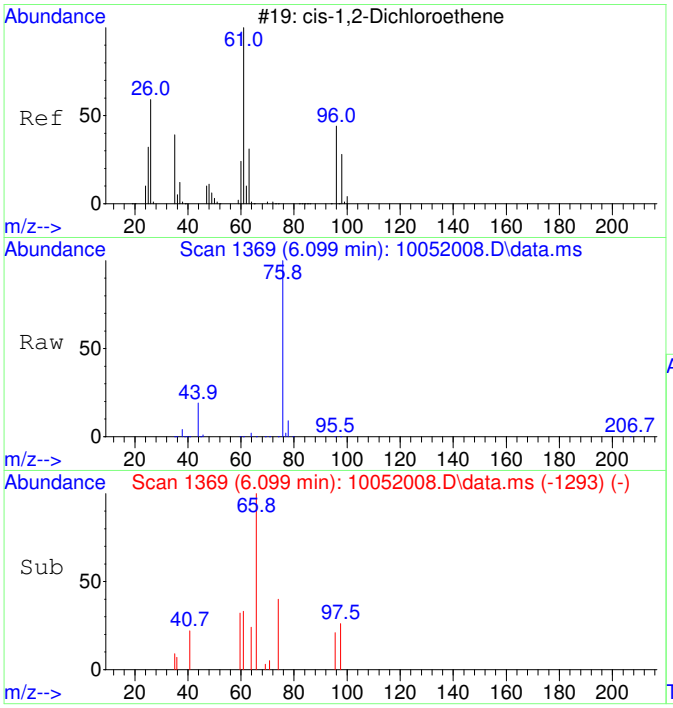


#27
trans-1,2-Dichloroethene SCAN
Concen: 36.81 ug/L
RT: 4.394 min Scan# 1112
Delta R.T. -0.007 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 61 Resp: 500

Ion	Ratio	Lower	Upper
61	100		
96	38.2	49.0	109.0#
98	0.0	20.5	80.5#

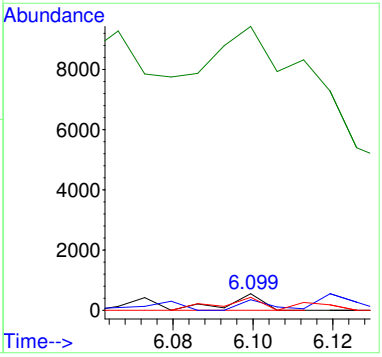


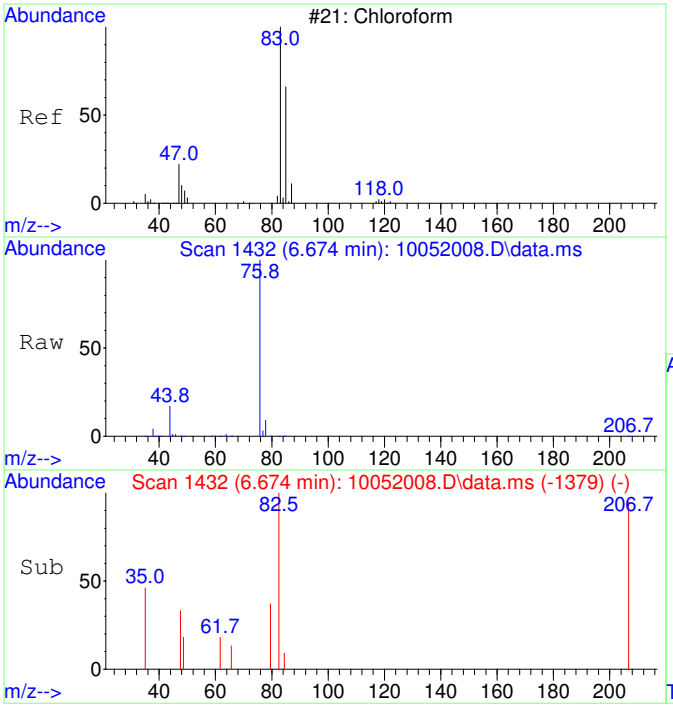


#29
cis-1,2-Dichloroethene SCAN
Concen: 20.01 ug/L
RT: 6.099 min Scan# 1369
Delta R.T. 0.006 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 61 Resp: 337

Ion	Ratio	Lower	Upper
61	100		
96	52.2	39.9	99.9
98	145.1	13.5	73.5#
64	0.0	4.5	64.5#

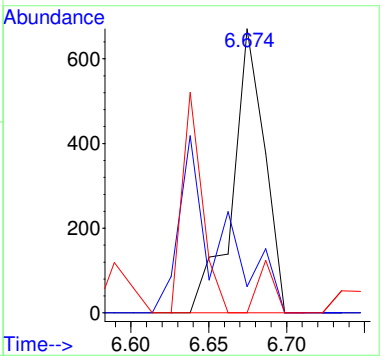


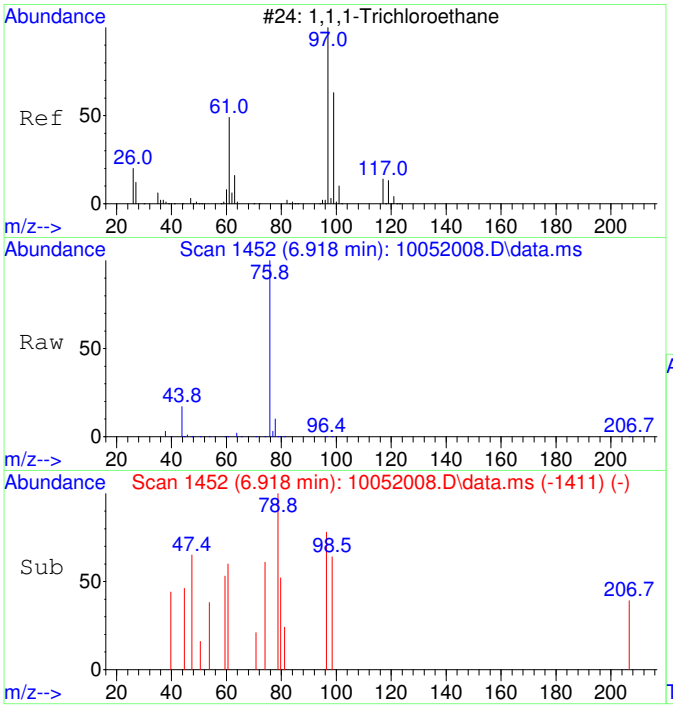


#30
Chloroform SCAN
Concen: 52.71 ug/L
RT: 6.674 min Scan# 1432
Delta R.T. 0.012 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 83 Resp: 963

Ion	Ratio	Lower	Upper
83	100		
85	0.0	34.6	94.6#
47	9.3	0.0	53.4

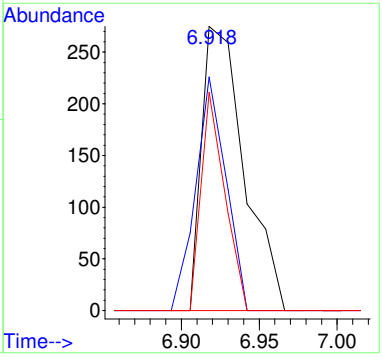


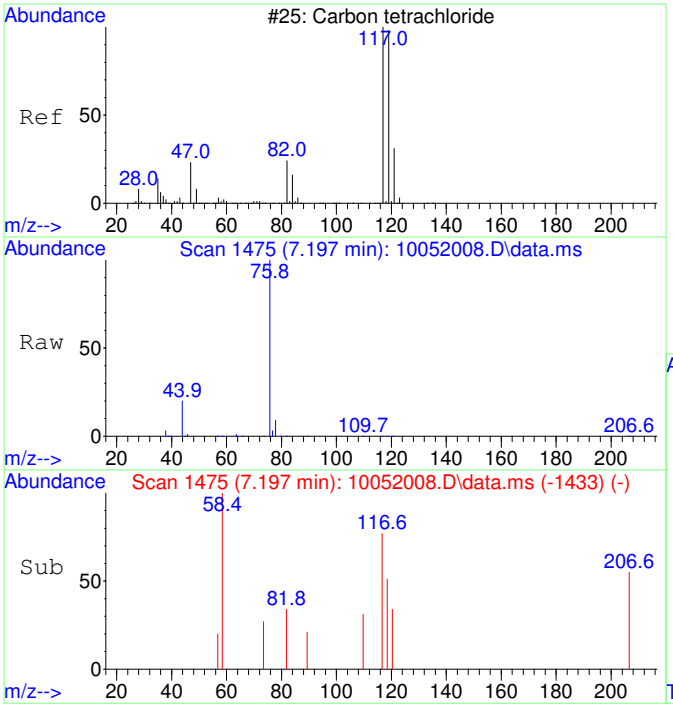


#31
1,1,1-Trichloroethane SCAN
Concen: 31.36 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 97 Resp: 522

Ion	Ratio	Lower	Upper
97	100		
99	58.4	43.6	103.6
61	42.7	18.0	78.0

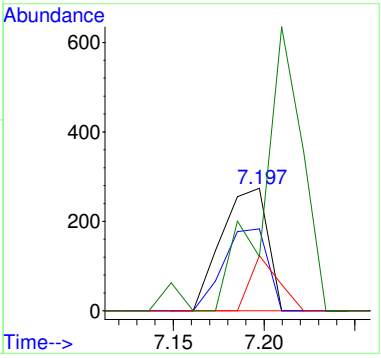


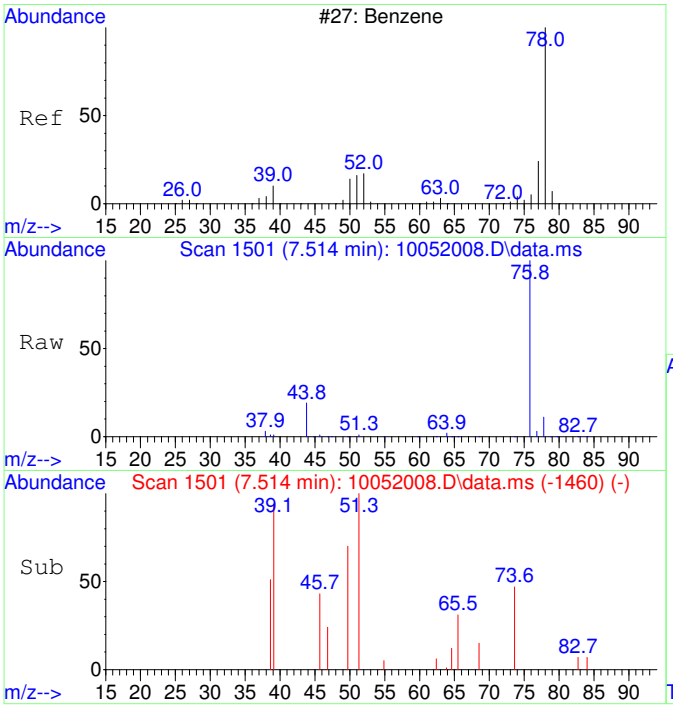


#32
Carbon tetrachloride SCAN
Concen: 27.93 ug/L
RT: 7.197 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:117 Resp: 485

Ion	Ratio	Lower	Upper
117	100		
119	64.3	75.5	135.5#
121	27.4	0.0	58.8
82	207.0	0.0	59.2#

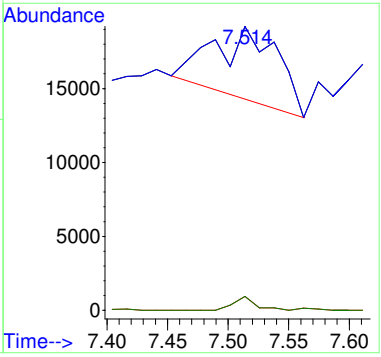


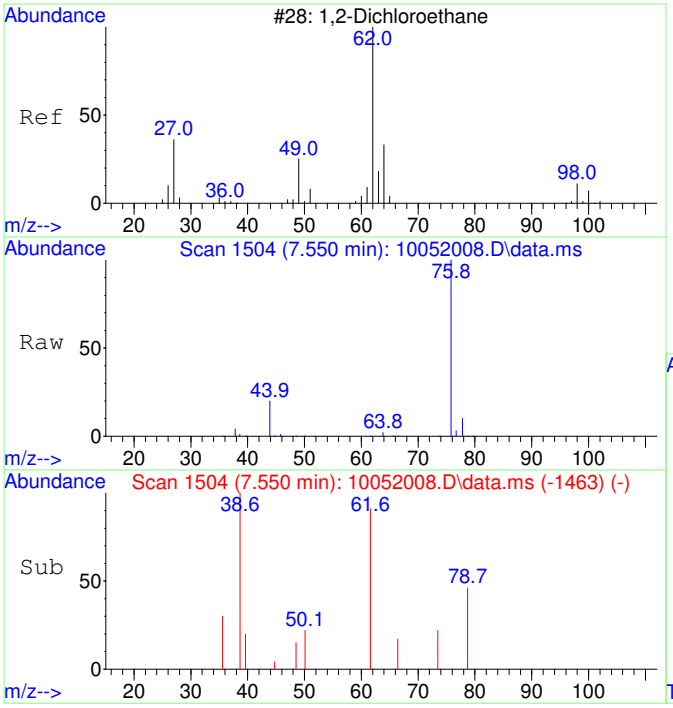


#33
Benzene SCAN
Concen: 371.59 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 78 Resp: 17033

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	6.9	0.0	47.9
51	6.9	0.0	44.1

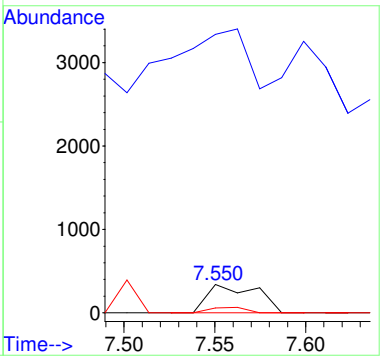


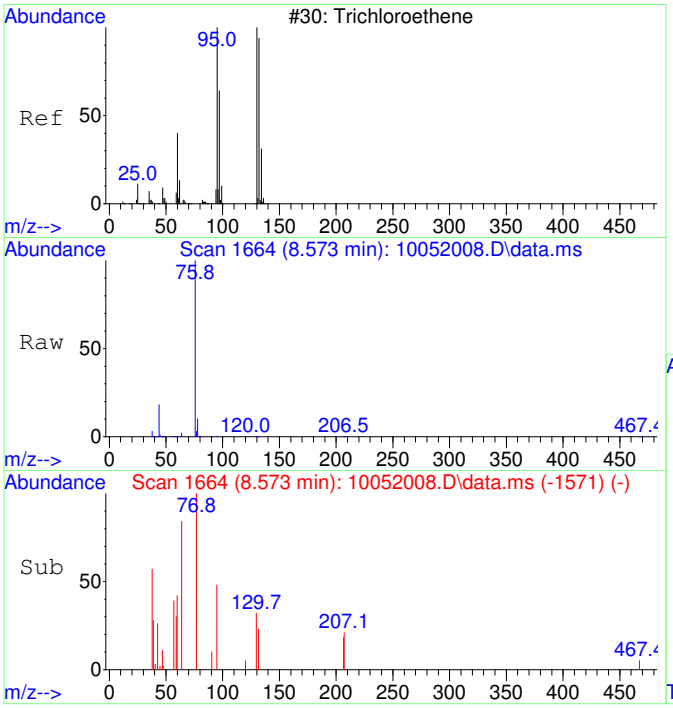


#34
1,2-Dichloroethane SCAN
Concen: 37.93 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 62 Resp: 642

Ion	Ratio	Lower	Upper
62	100		
64	797.2	5.2	65.2#
49	14.2	3.9	63.9

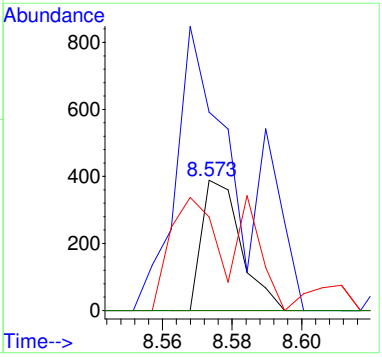


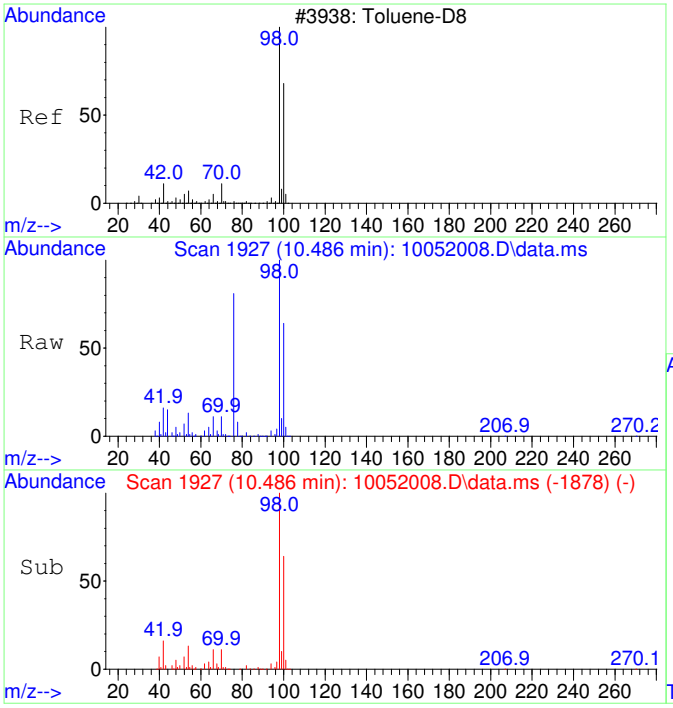


#35
Trichloroethene SCAN
Concen: 24.13 ug/L
RT: 8.573 min Scan# 1664
Delta R.T. 0.005 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:130 Resp: 304

Ion	Ratio	Lower	Upper
130	100		
95	352.0	60.5	120.5#
132	152.3	59.6	119.6#
97	0.0	28.2	88.2#

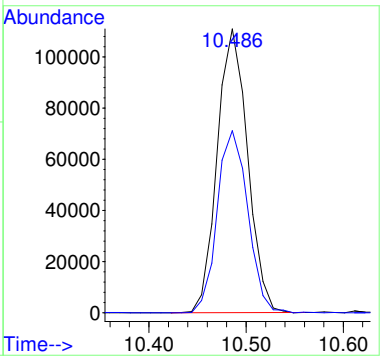


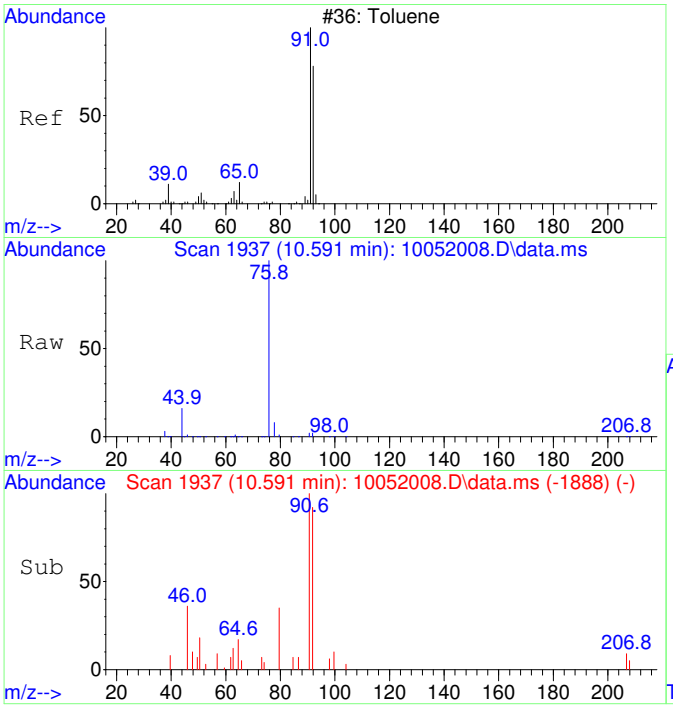


#36
Toluene-d8 SCAN
Concen: 4746.97 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 98 Resp: 239965

Ion	Ratio	Lower	Upper
98	100		
100	64.8	40.0	100.0

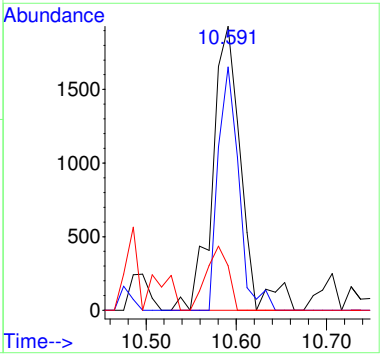


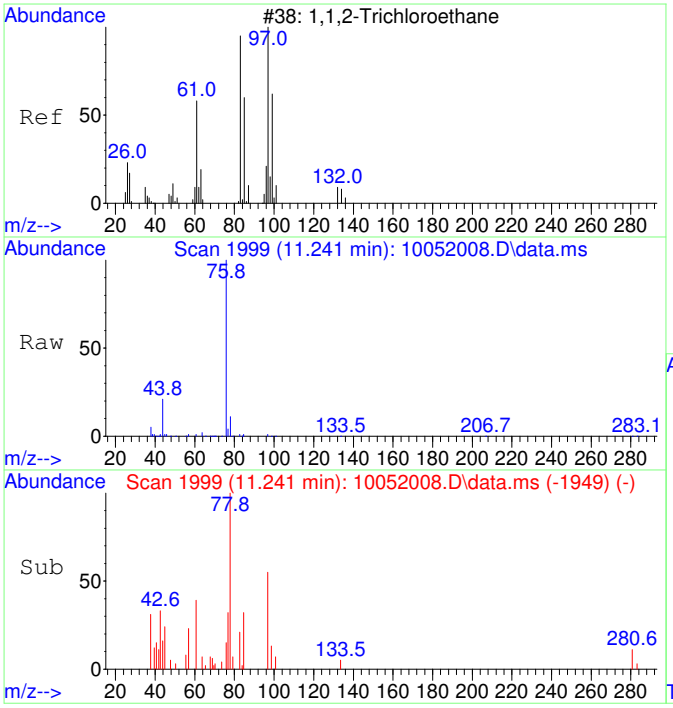


#37
Toluene SCAN
Concen: 65.97 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 4271

Ion	Ratio	Lower	Upper
91	100		
92	61.4	28.3	88.3
65	17.3	0.0	41.0

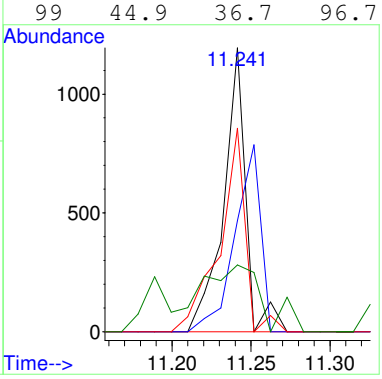


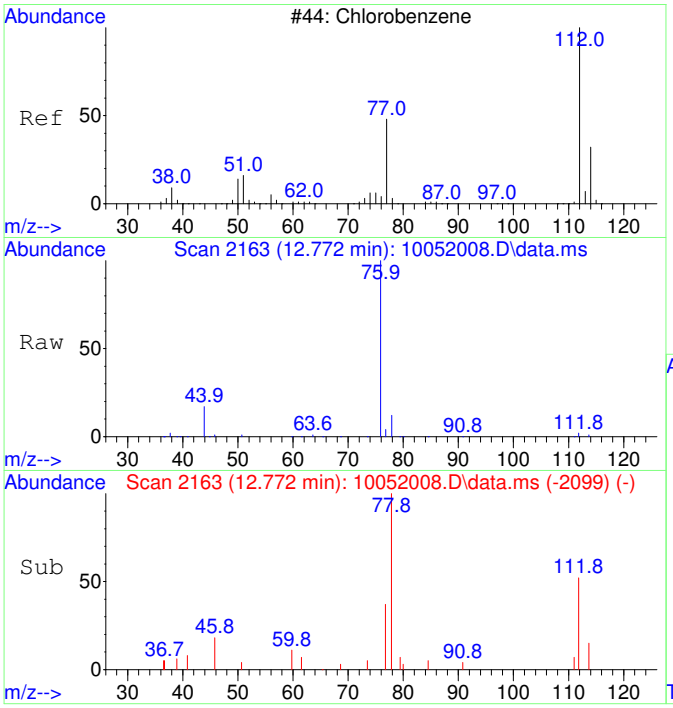


#38
1,1,2-Trichloroethane SCAN
Concen: 80.52 ug/L
RT: 11.241 min Scan# 1999
Delta R.T. 0.021 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 97 Resp: 1170

Ion	Ratio	Lower	Upper
97	100		
83	75.8	57.7	117.7
61	82.9	32.1	92.1
99	44.9	36.7	96.7

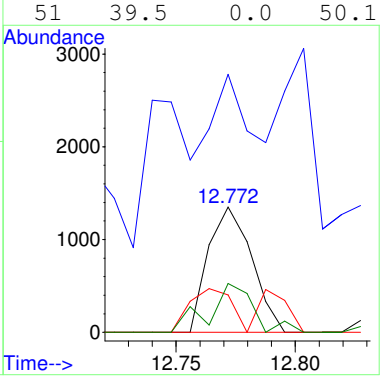


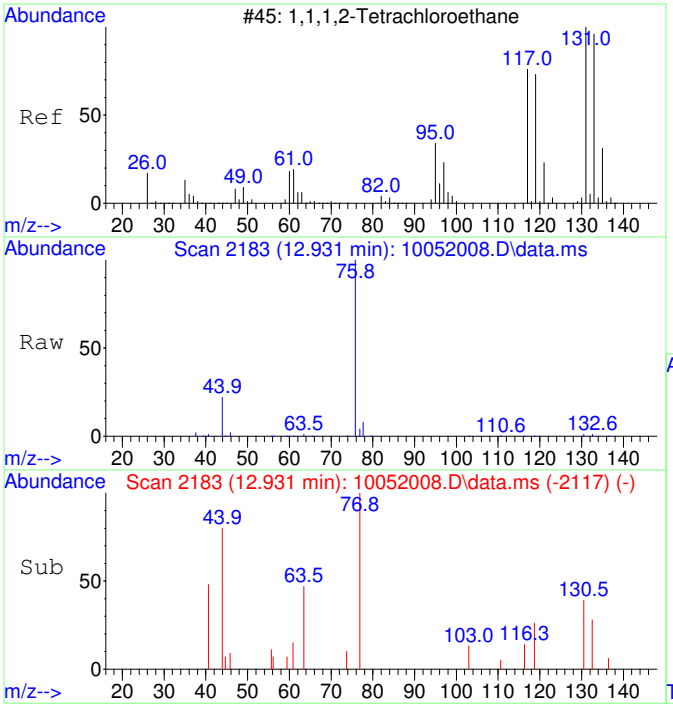


#40
Chlorobenzene SCAN
Concen: 38.81 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.008 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:112 Resp: 1717

Ion	Ratio	Lower	Upper
112	100		
77	0.0	28.2	88.2#
114	33.5	2.3	62.3
51	39.5	0.0	50.1

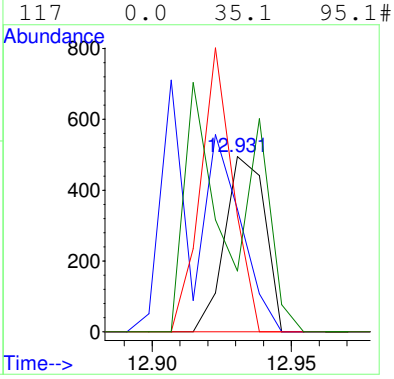


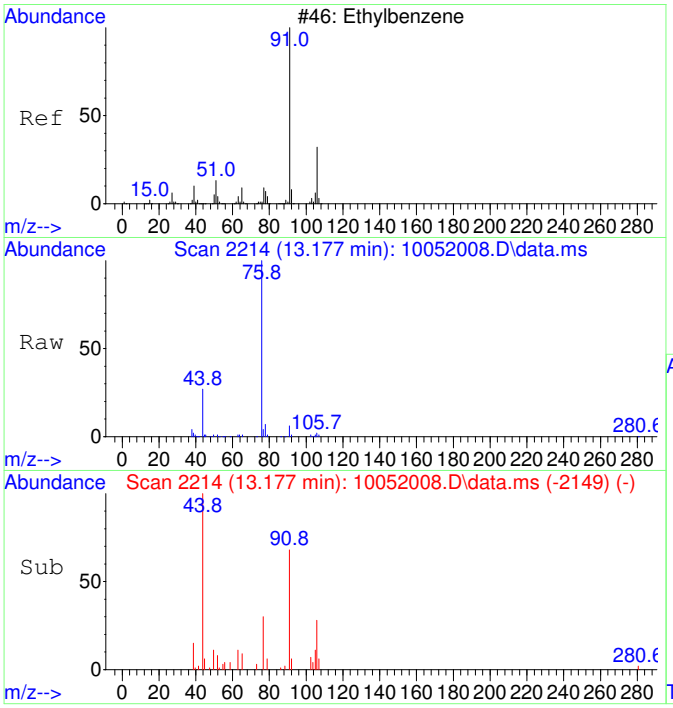


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 30.42 ug/L
RT: 12.931 min Scan# 2183
Delta R.T. 0.024 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:131 Resp: 498

Ion	Ratio	Lower	Upper
131	100		
133	0.0	66.9	126.9#
119	130.5	40.4	100.4#
117	0.0	35.1	95.1#

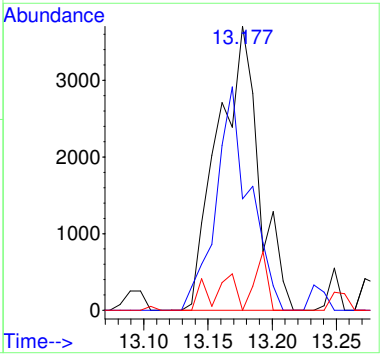


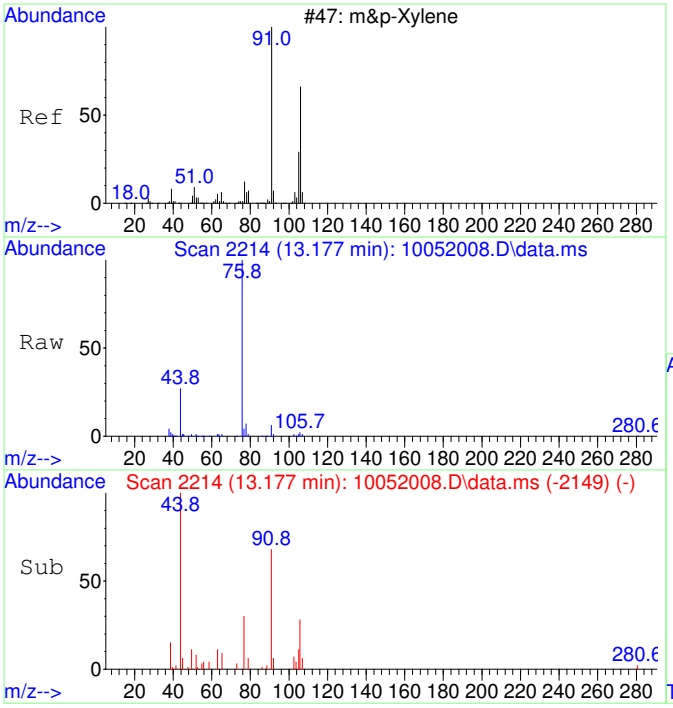


#42
Ethylbenzene SCAN
Concen: 69.98 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 8254

Ion	Ratio	Lower	Upper
91	100		
106	64.1	23.1	83.1
51	7.5	0.0	40.1

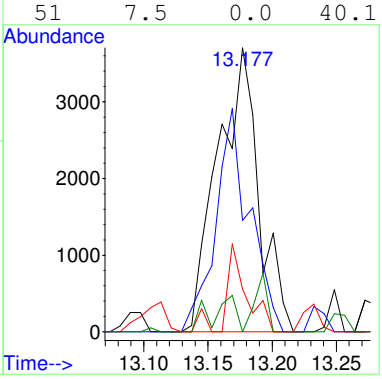


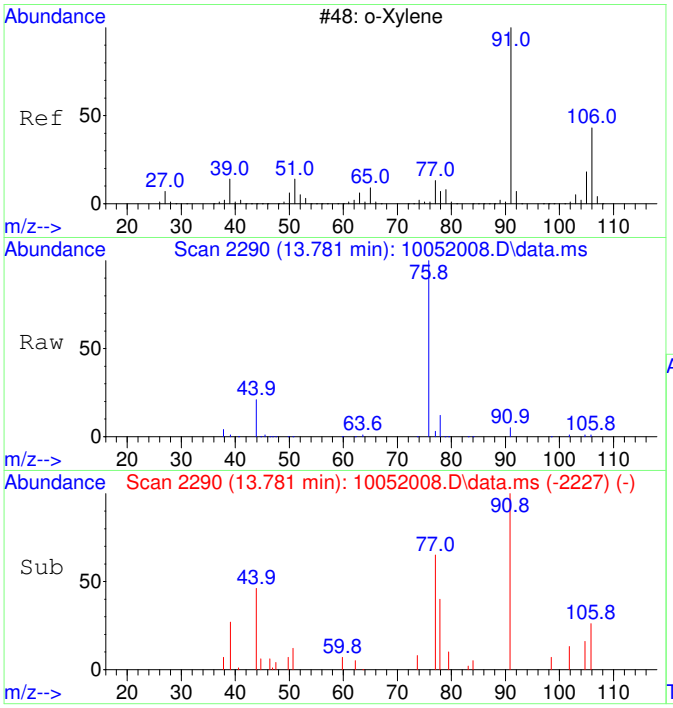


#43
m&p-Xylene SCAN
Concen: 69.98 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 8254

Ion	Ratio	Lower	Upper
91	100		
106	64.1	23.1	83.1
105	15.4	0.0	54.7
51	7.5	0.0	40.1

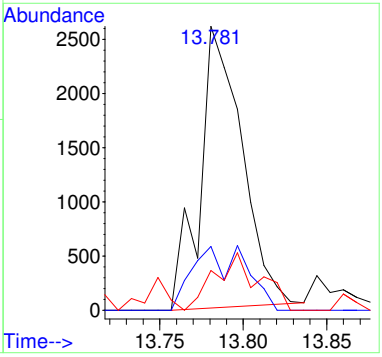


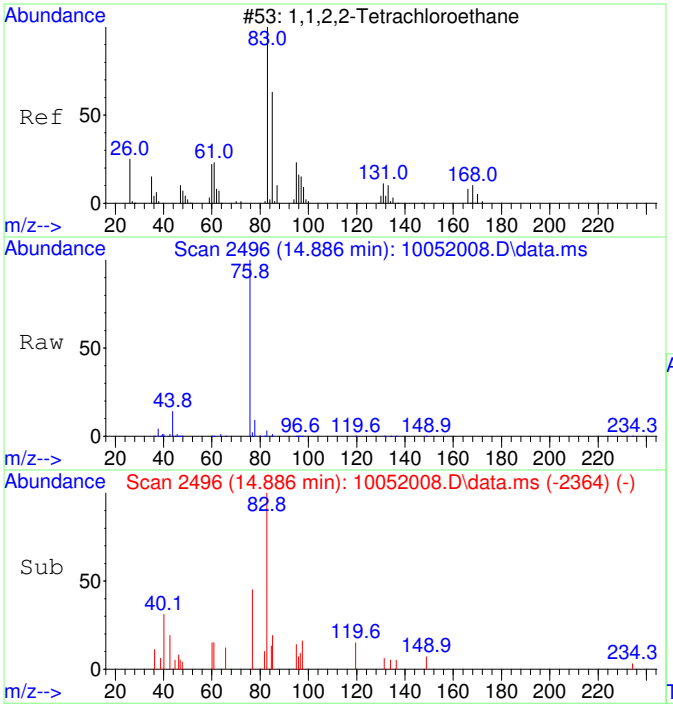


#44
o-Xylene SCAN
Concen: 72.29 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 4564

Ion	Ratio	Lower	Upper
91	100		
106	28.4	18.0	78.0
105	21.6	0.0	56.6

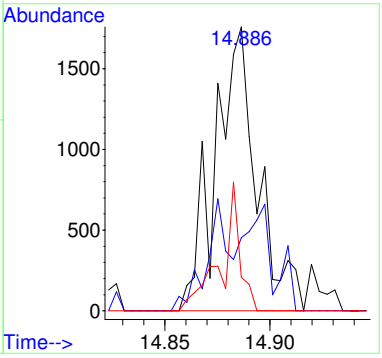


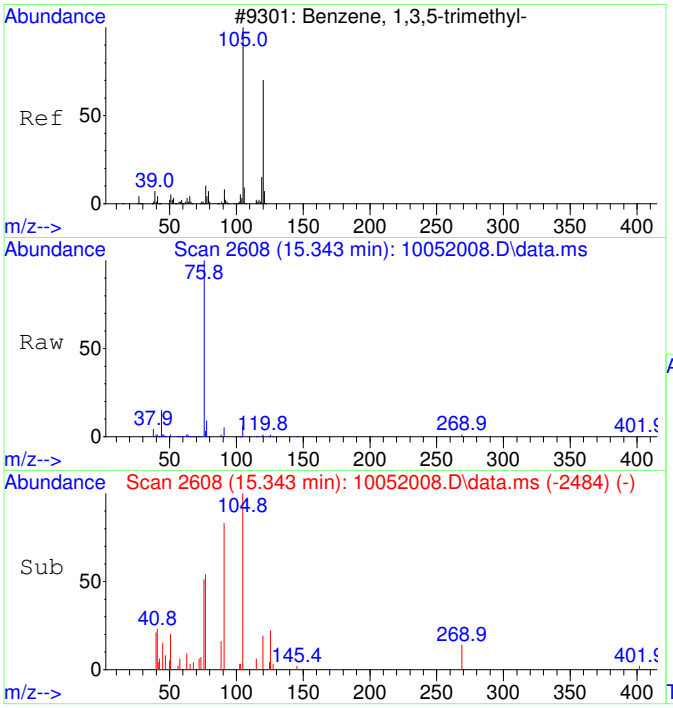


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 79.20 ug/L
RT: 14.886 min Scan# 2496
Delta R.T. 0.015 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 83 Resp: 2438

Ion	Ratio	Lower	Upper
83	100		
85	8.7	35.9	95.9#
95	20.1	0.0	47.4

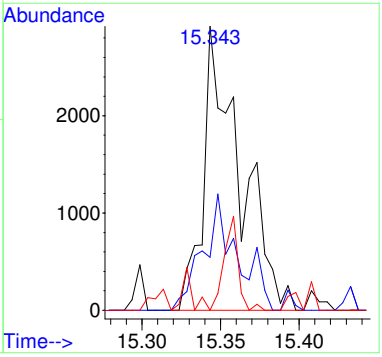


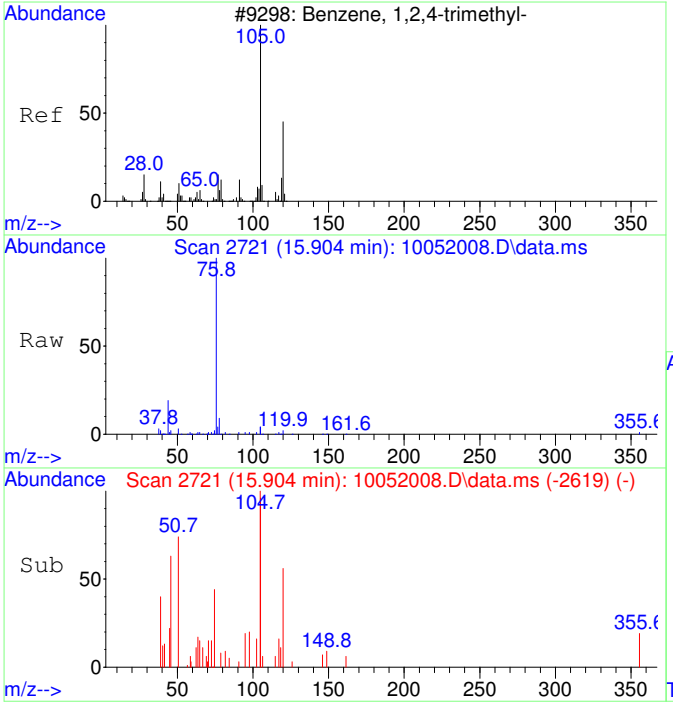


#46
1,3,5-Trimethylbenzene SCAN
Concen: 71.18 ug/L
RT: 15.343 min Scan# 2608
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:105 Resp: 4736

Ion	Ratio	Lower	Upper
105	100		
120	38.2	18.3	78.3
119	12.6	0.0	43.1

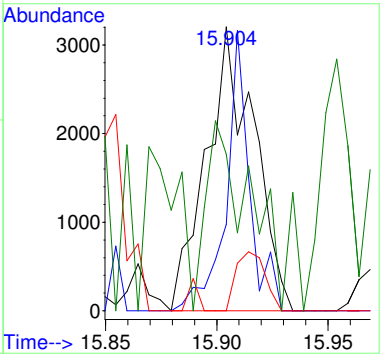




#47
1,2,4-Trimethylbenzene SCAN
Concen: 70.20 ug/L
RT: 15.904 min Scan# 2721
Delta R.T. 0.005 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:105 Resp: 4779

Ion	Ratio	Lower	Upper
105	100		
120	48.0	16.9	76.9
119	12.7	0.0	41.9
77	61.3	0.0	42.3#



Quantitation Report (QT Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052008.D
Acq On : 5 Oct 2020 12:39
InstName : AG5975C
Operator : TD
Sample : B20J004-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

M.I. Performed By:
TD at 2:39 pm, Oct 05, 2020

M.I. Approved By:
ZR at 3:56 pm, Oct 07, 2020

Quant Time: Oct 05 12:57:47 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

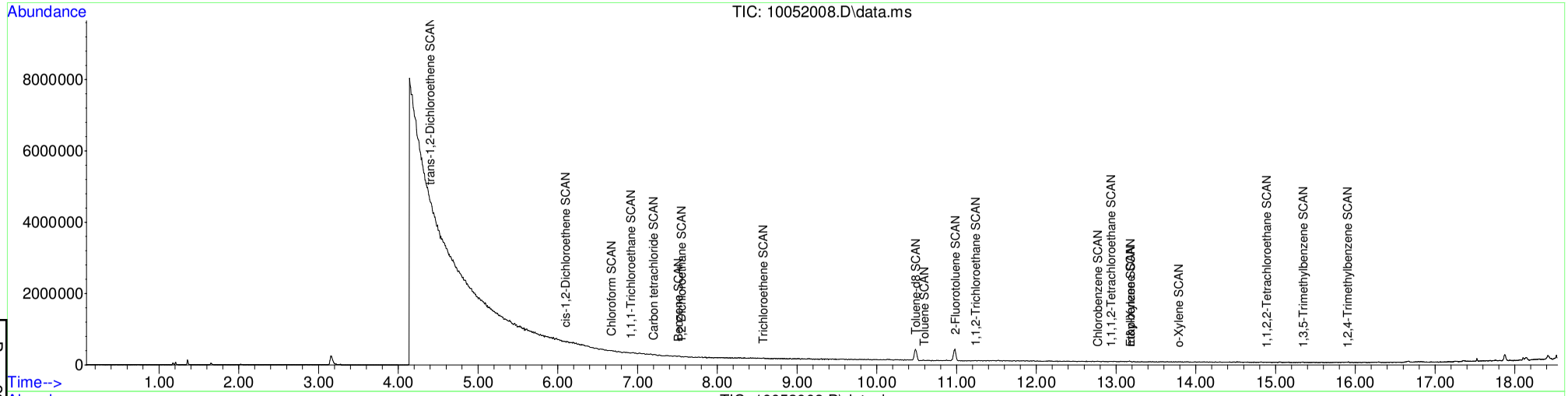
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	530253	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.487	98	463791	4468.00	ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 89.36%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.093	61	909m	42.93	ug/L	
3] trans-1,2-Dichloroethene	4.395	61	1168	47.74	ug/L	73
4] 1,1-Dichloroethane	5.099	63	1460	47.94	ug/L	80
5] cis-1,2-Dichloroethene	6.094	61	1586	49.34	ug/L	97
6] Chloroform	6.664	83	1731	52.61	ug/L	98
7] 1,1,1-Trichloroethane	6.919	97	1732	48.47	ug/L	100
8] Carbon tetrachloride	7.187	117	1613	47.96	ug/L	98
9] Benzene	7.515	78	9493	105.37	ug/L	61
10] 1,2-Dichloroethane	7.552	62	1664	51.74	ug/L #	29
11] Trichloroethene	8.575	130	1396	51.46	ug/L	91
13] Toluene	10.582	91	8176	61.78	ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	1437	49.83	ug/L	89
15] Tetrachloroethene	11.442	166	1929	50.37	ug/L	95
16] Chlorobenzene	12.773	112	4687	49.46	ug/L	87
17] 1,1,1,2-Tetrachloroethane	12.924	131	1761	51.86	ug/L	95
18] Ethylbenzene	12.980	91	9701	60.22	ug/L	94
19] m&p-Xylene	13.170	91	15752	125.12	ug/L	95
20] o-Xylene	13.782	91	7011	52.12	ug/L	95
21] 1,1,2,2-Tetrachloroethane	14.880	83	2983	50.04	ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	8046	56.20	ug/L	95
23] 1,2,4-Trimethylbenzene	15.906	105	8880	59.72	ug/L	91
25) 2-Fluorotoluene SCAN	10.979	109	252437	4883.68	ug/L	96
27) trans-1,2-Dichloroethe...	4.394	61	500	36.81	ug/L #	43
29) cis-1,2-Dichloroethene...	6.099	61	337	20.01	ug/L #	29
30) Chloroform SCAN	6.674	83	963	52.71	ug/L #	32
31) 1,1,1-Trichloroethane ...	6.918	97	522	31.36	ug/L	86
32) Carbon tetrachloride SCAN	7.197	117	485	27.93	ug/L #	14
33) Benzene SCAN	7.514	78	17033	371.59	ug/L	95
34) 1,2-Dichloroethane SCAN	7.550	62	642	37.93	ug/L #	1
35) Trichloroethene SCAN	8.573	130	304	24.13	ug/L #	1
36) Toluene-d8 SCAN	10.486	98	239965	4746.97	ug/L	94
37) Toluene SCAN	10.591	91	4271	65.97	ug/L	94
38) 1,1,2-Trichloroethane ...	11.241	97	1170	80.52	ug/L	79
40) Chlorobenzene SCAN	12.772	112	1717	38.81	ug/L #	51
41) 1,1,1,2-Tetrachloroeth...	12.931	131	498	30.42	ug/L #	14
42) Ethylbenzene SCAN	13.177	91	8254	69.98	ug/L	86
43) m&p-Xylene SCAN	13.177	91	8254	69.98	ug/L	85
44) o-Xylene SCAN	13.781	91	4564	72.29	ug/L	78
45) 1,1,2,2-Tetrachloroeth...	14.886	83	2438	79.20	ug/L #	42
46) 1,3,5-Trimethylbenzene...	15.343	105	4736	71.18	ug/L	88
47) 1,2,4-Trimethylbenzene...	15.904	105	4779	70.20	ug/L #	77

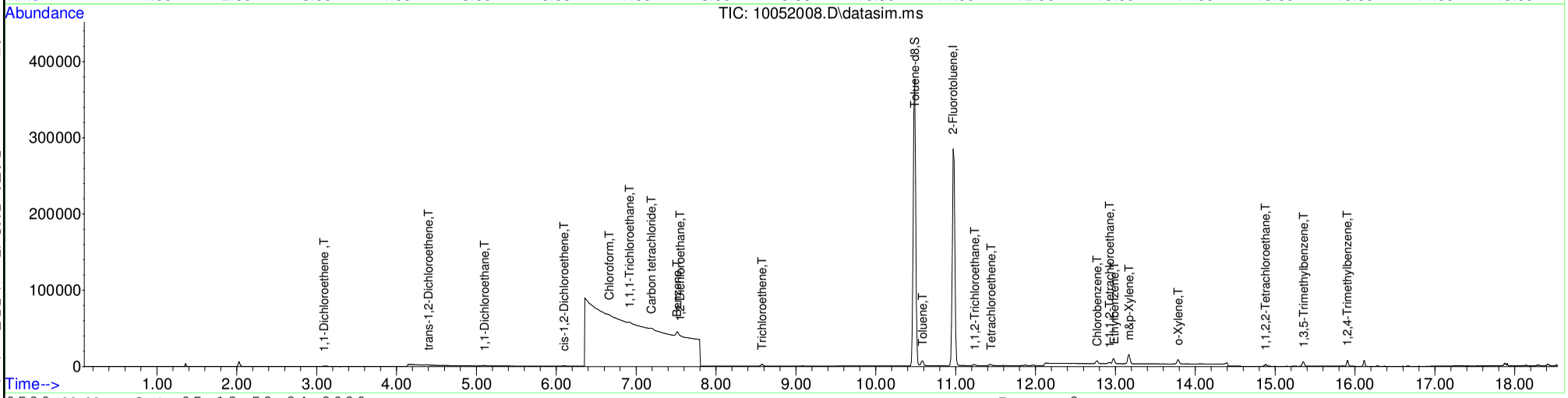
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052008.D
Acq On : 5 Oct 2020 12:39
InstName : AG5975C
Operator : TD
Sample : B20J004-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 05 12:57:47 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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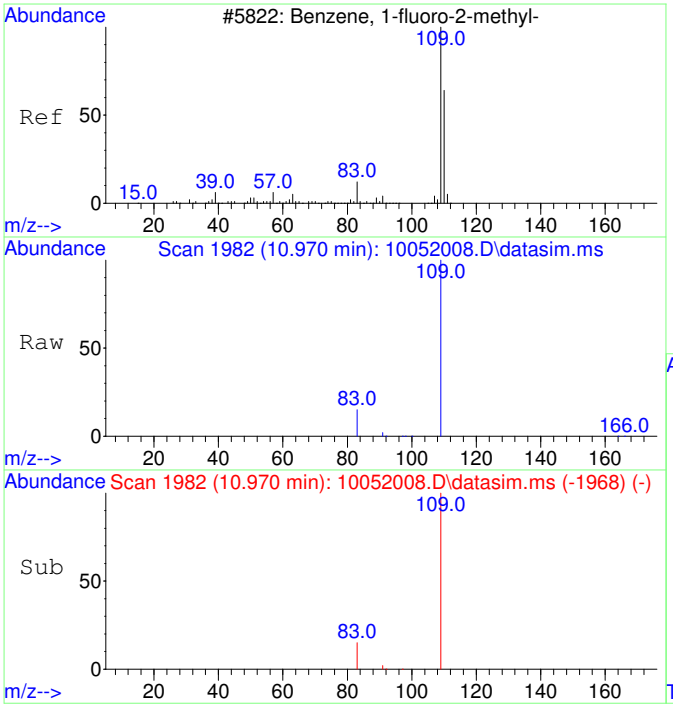
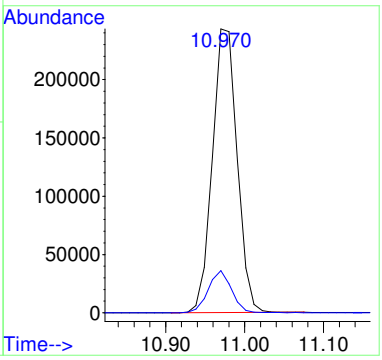
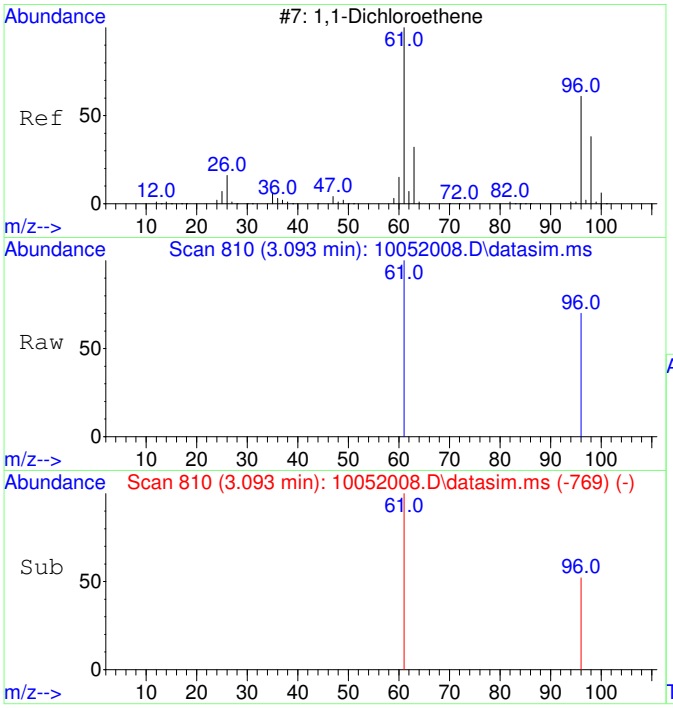


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:109 Resp: 530253

Ion	Ratio	Lower	Upper
109	100		
83	13.9	0.0	42.3

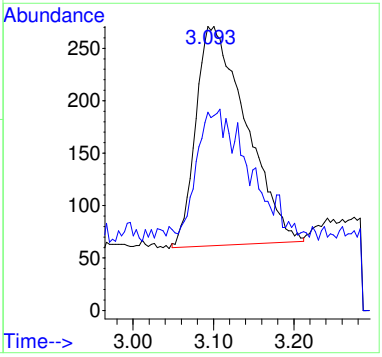


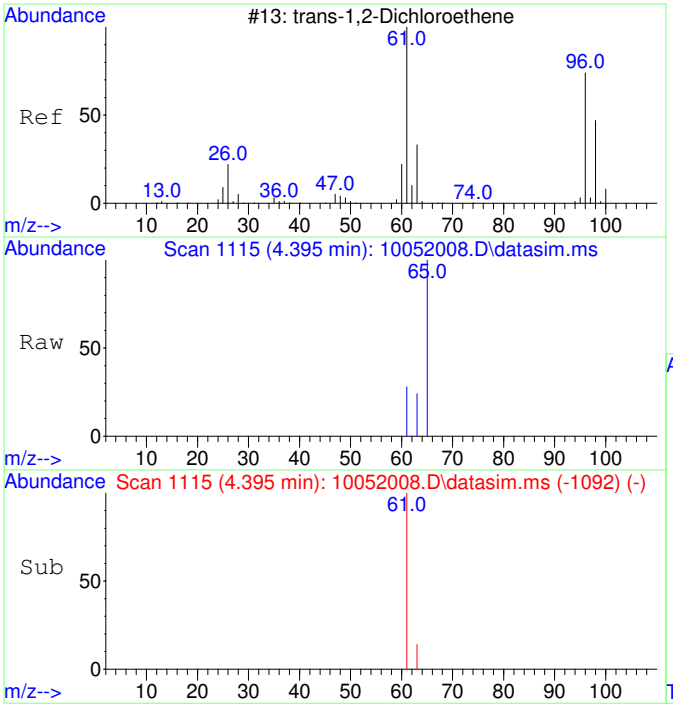


#2
1,1-Dichloroethene
Concen: 42.93 ug/L m
RT: 3.093 min Scan# 810
Delta R.T. 0.003 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 61 Resp: 909

Ion	Ratio	Lower	Upper
61	100		
96	36.4	37.2	97.2#

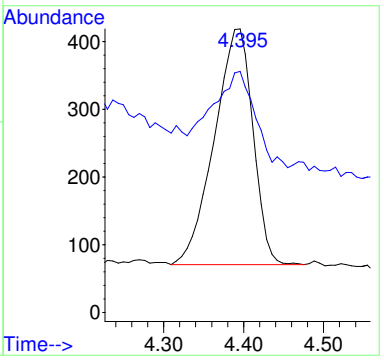


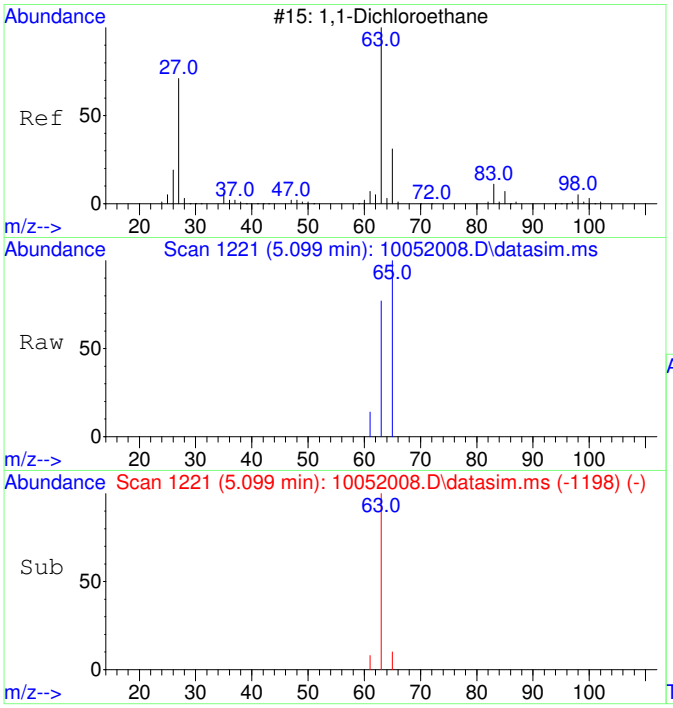


#3
trans-1,2-Dichloroethene
Concen: 47.74 ug/L
RT: 4.395 min Scan# 1115
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 61 Resp: 1168

Ion	Ratio	Lower	Upper
61	100		
63	47.6	2.4	62.4

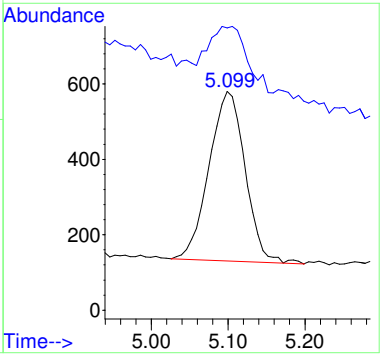


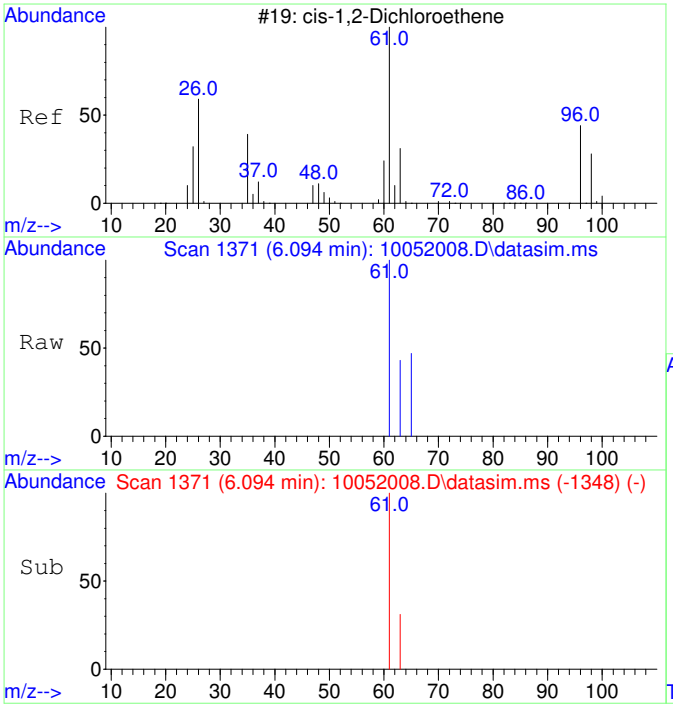


#4
1,1-Dichloroethane
Concen: 47.94 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 63 Resp: 1460

Ion	Ratio	Lower	Upper
63	100		
65	42.7	1.8	61.8

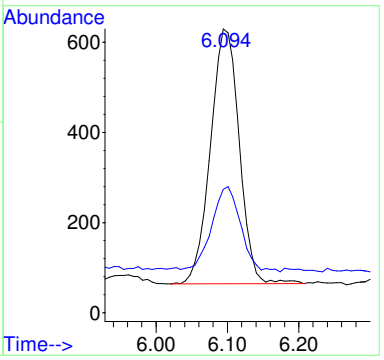


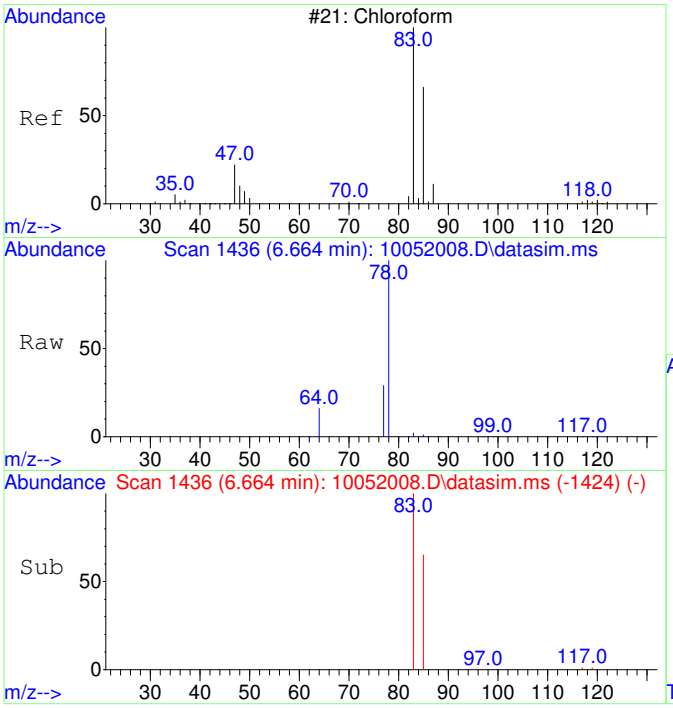


#5
cis-1,2-Dichloroethene
Concen: 49.34 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 61 Resp: 1586

Ion	Ratio	Lower	Upper
61	100		
63	34.0	2.5	62.5

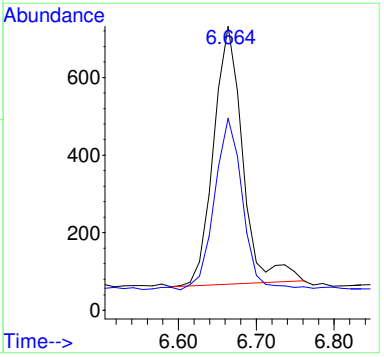


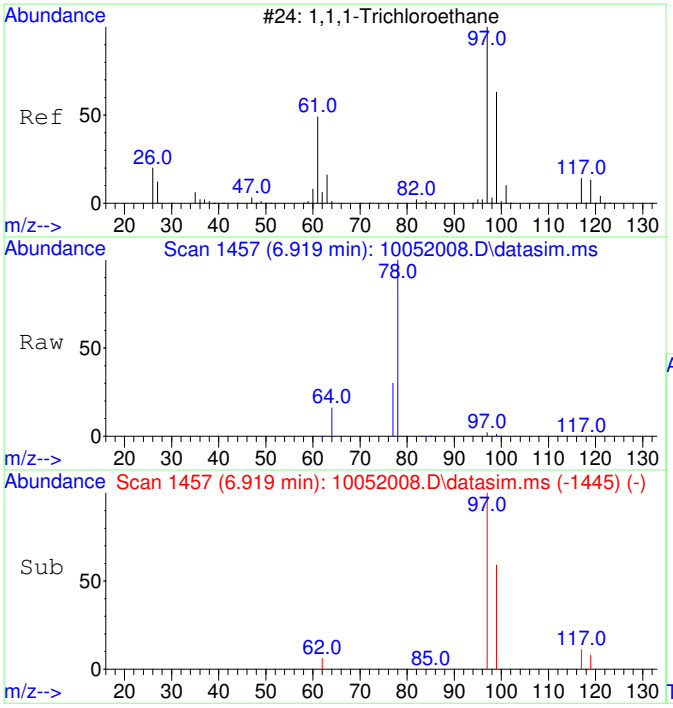


#6
Chloroform
Concen: 52.61 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 83 Resp: 1731

Ion	Ratio	Lower	Upper
83	100		
85	63.8	35.1	95.1

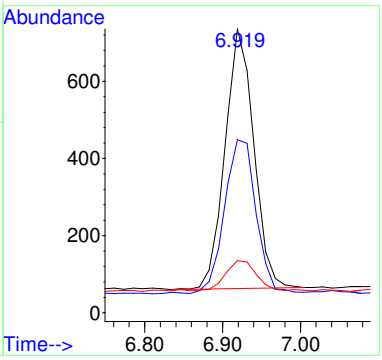


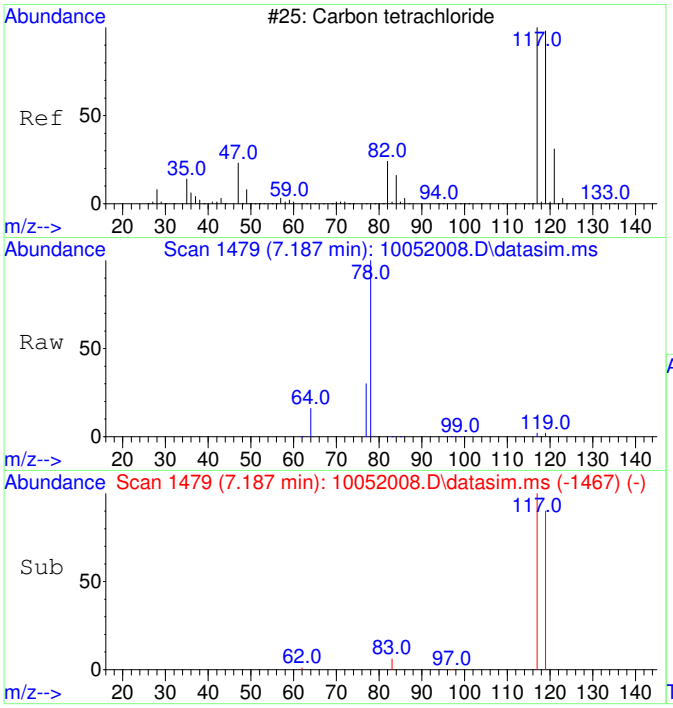


#7
1,1,1-Trichloroethane
Concen: 48.47 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 97 Resp: 1732

Ion	Ratio	Lower	Upper
97	100		
99	64.4	34.6	94.6
117	12.6	0.0	43.2

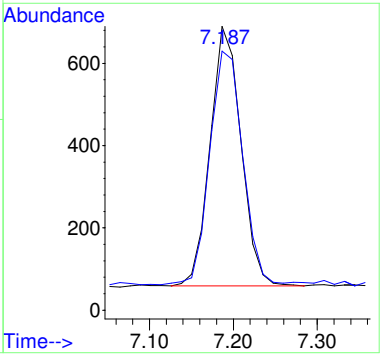


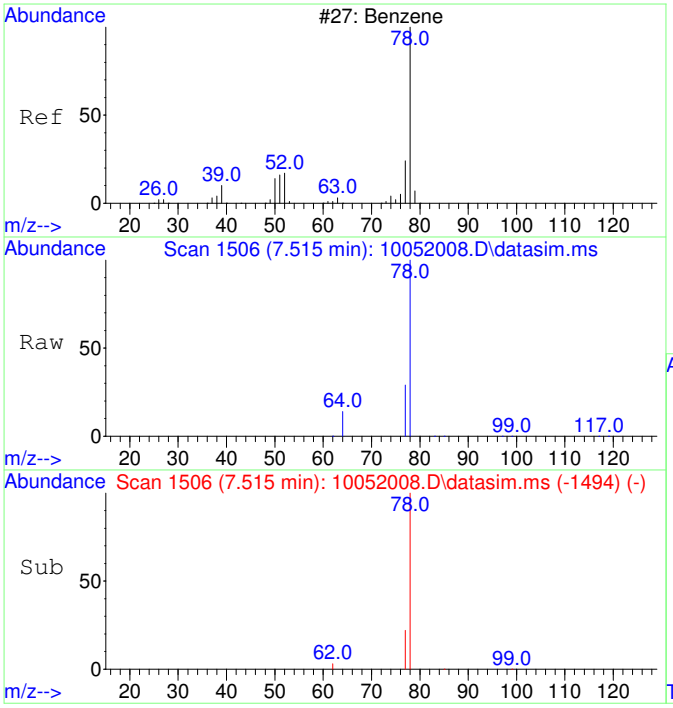


#8
Carbon tetrachloride
Concen: 47.96 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:117 Resp: 1613

Ion	Ratio	Lower	Upper
117	100		
119	94.4	66.4	126.4

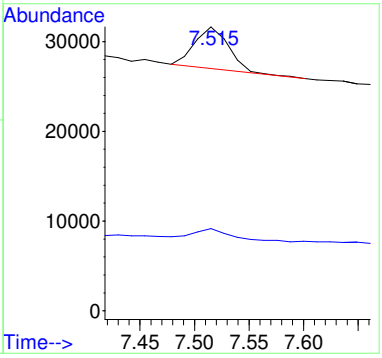


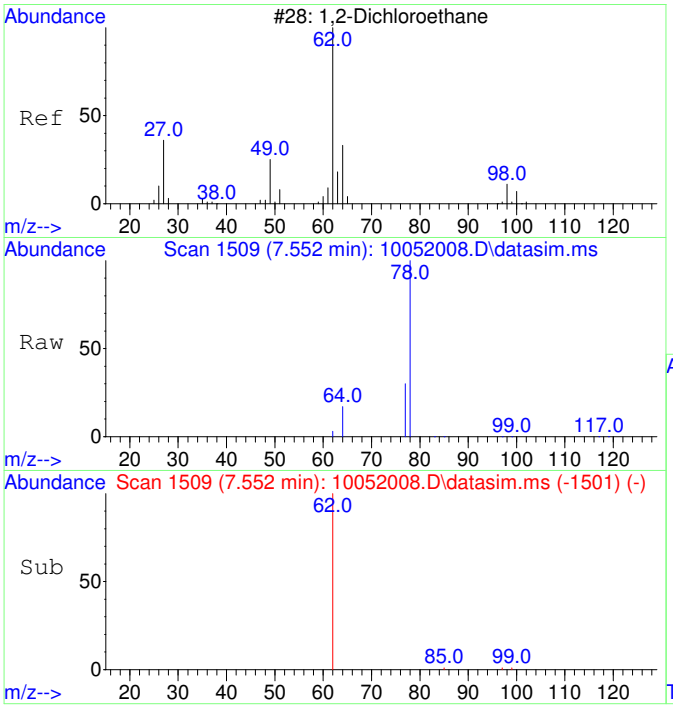


#9
Benzene
Concen: 105.37 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 78 Resp: 9493

Ion	Ratio	Lower	Upper
78	100		
77	42.0	0.0	53.2

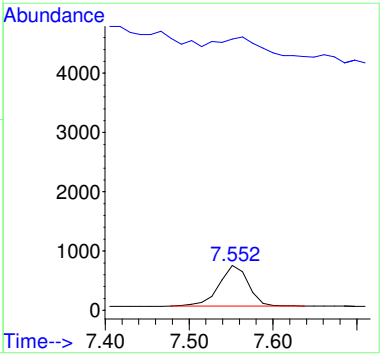


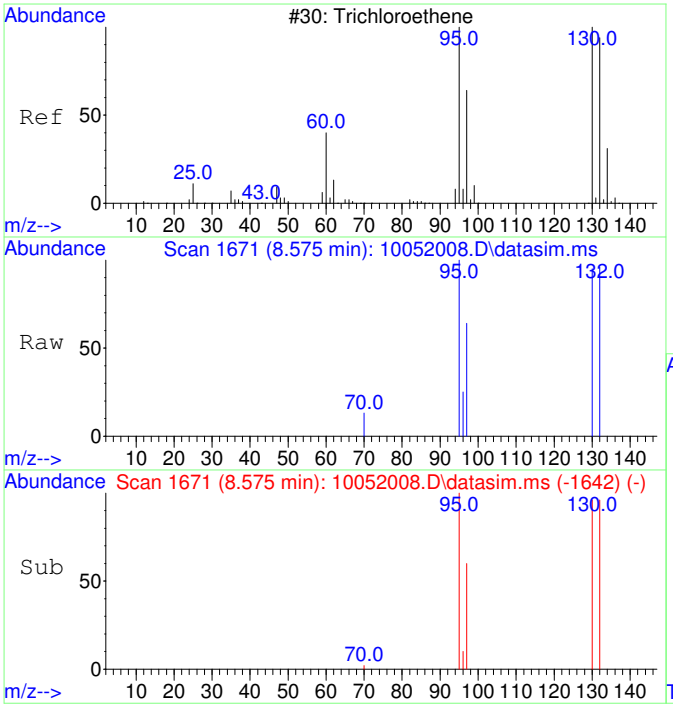


#10
1,2-Dichloroethane
Concen: 51.74 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 62 Resp: 1664

Ion	Ratio	Lower	Upper
62	100		
64	72.2	2.3	62.3#

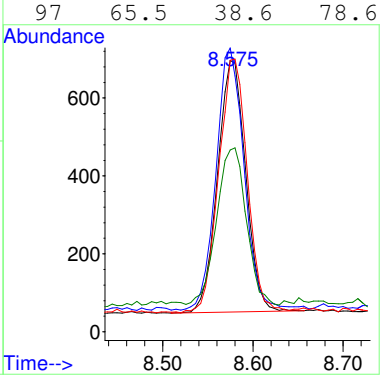


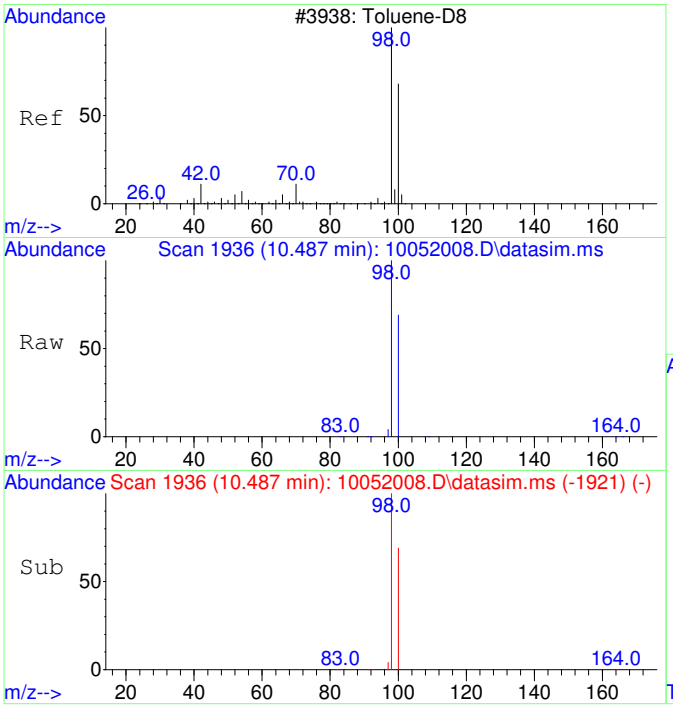


#11
Trichloroethene
Concen: 51.46 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:130 Resp: 1396

Ion	Ratio	Lower	Upper
130	100		
95	103.4	60.7	120.7
132	101.1	76.0	116.0
97	65.5	38.6	78.6

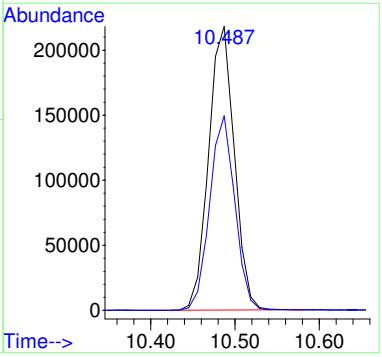


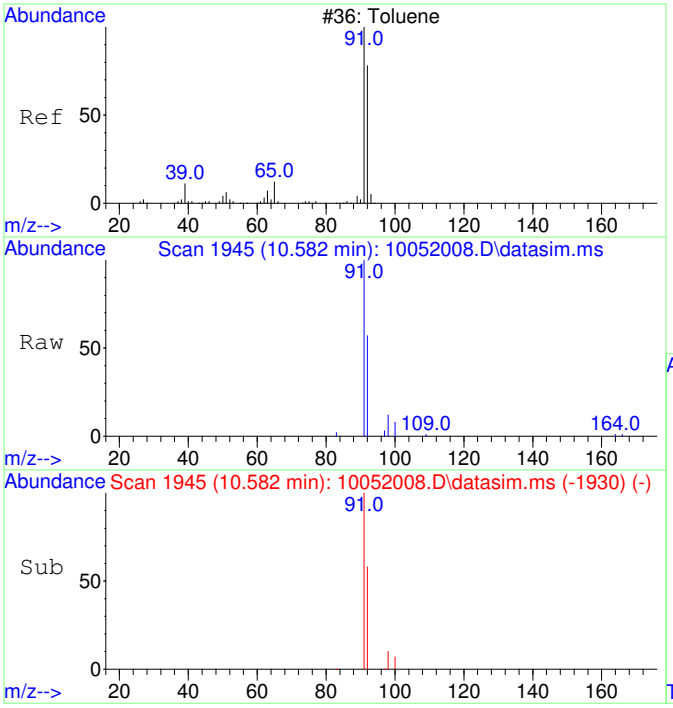


#12
Toluene-d8
Concen: 4468.00 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 98 Resp: 463791

Ion	Ratio	Lower	Upper
98	100		
100	66.7	37.1	97.1

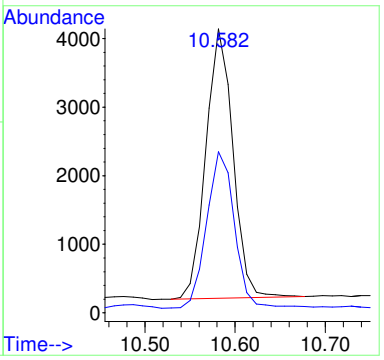


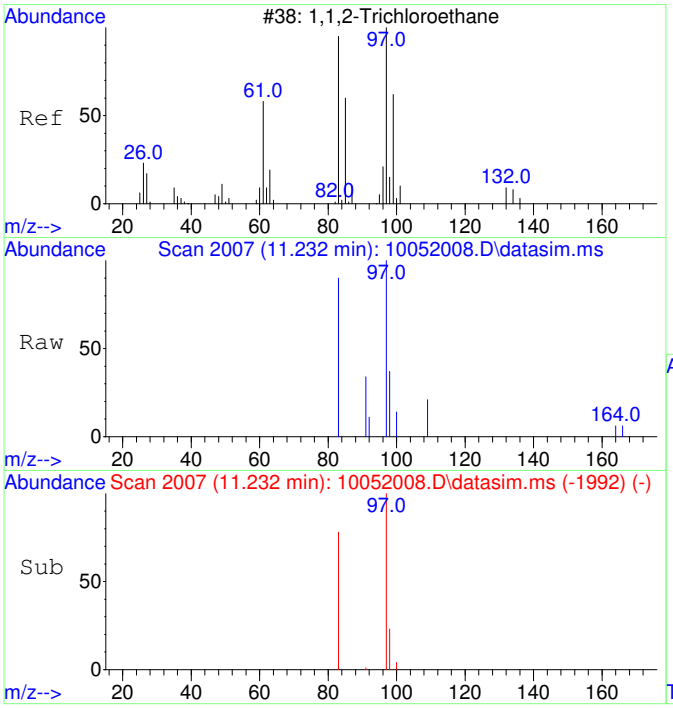


#13
Toluene
Concen: 61.78 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 8176

Ion	Ratio	Lower	Upper
91	100		
92	60.3	29.9	89.9

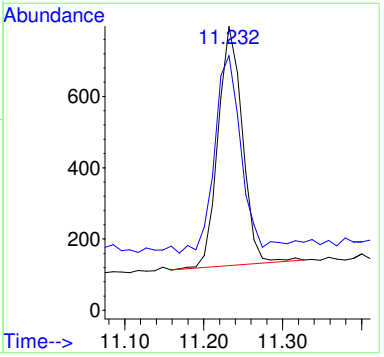


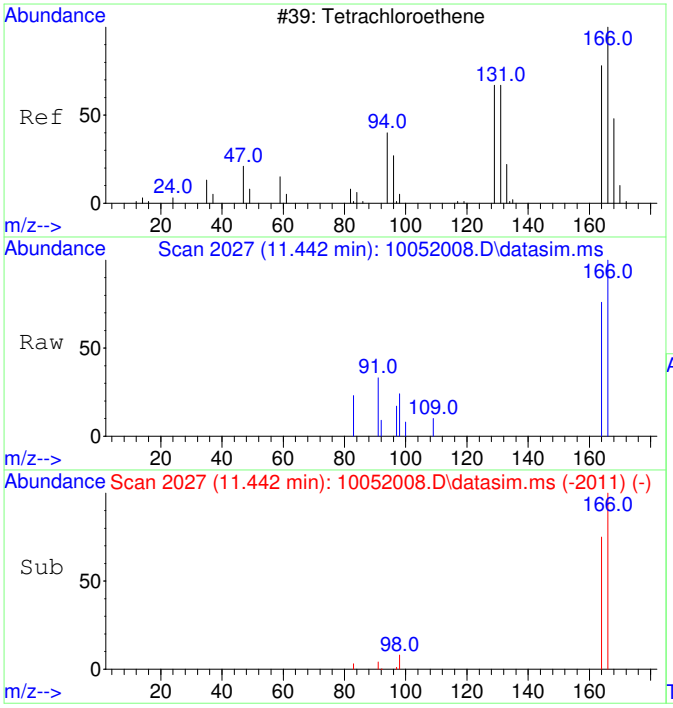


#14
1,1,2-Trichloroethane
Concen: 49.83 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 97 Resp: 1437

Ion	Ratio	Lower	Upper
97	100		
83	91.0	51.2	111.2

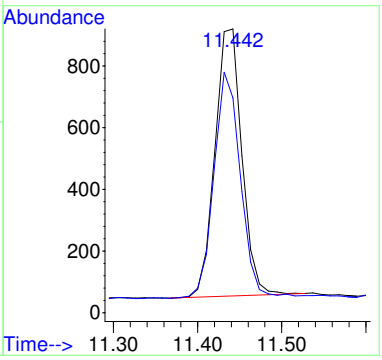


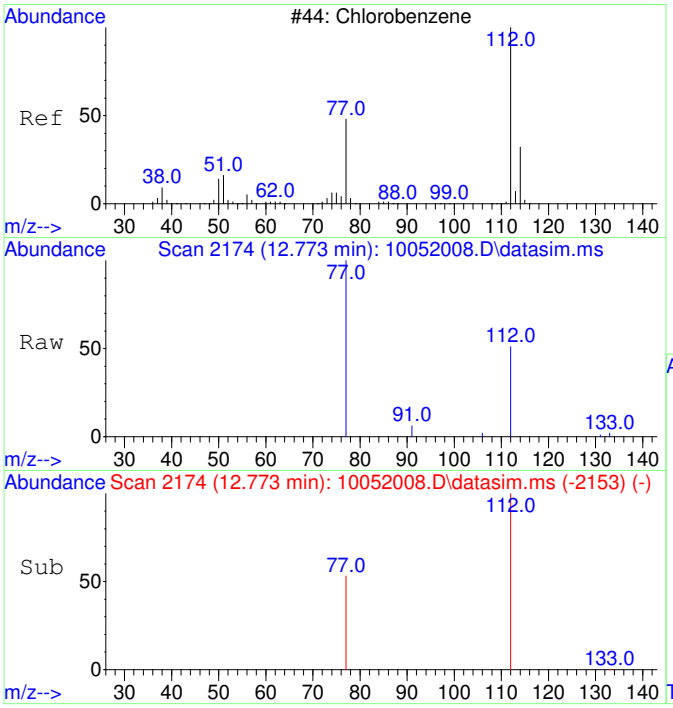


#15
Tetrachloroethene
Concen: 50.37 ug/L
RT: 11.442 min Scan# 2027
Delta R.T. 0.021 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:166 Resp: 1929

Ion	Ratio	Lower	Upper
166	100		
164	82.0	47.8	107.8

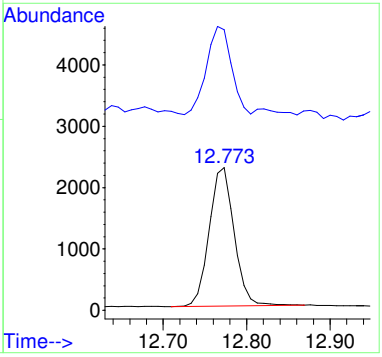


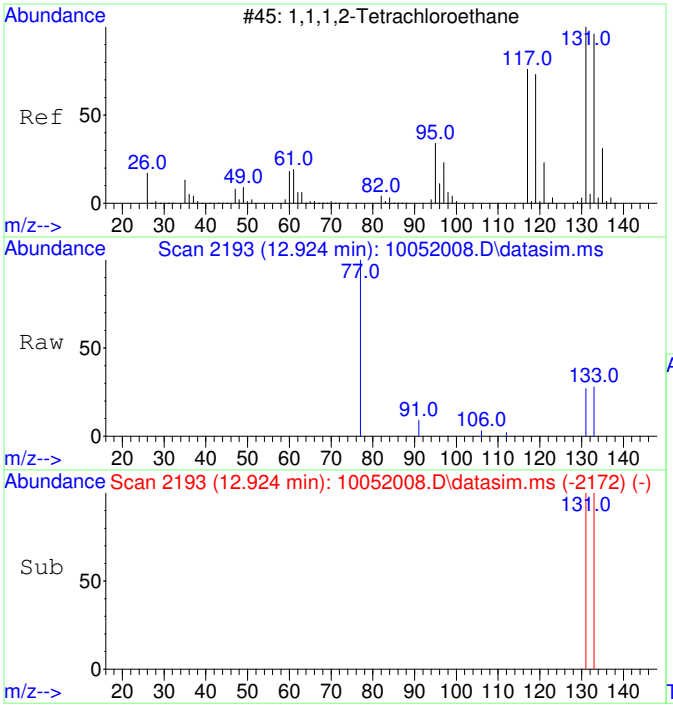


#16
Chlorobenzene
Concen: 49.46 ug/L
RT: 12.773 min Scan# 2174
Delta R.T. 0.016 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:112 Resp: 4687

Ion	Ratio	Lower	Upper
112	100		
77	63.1	23.6	83.6

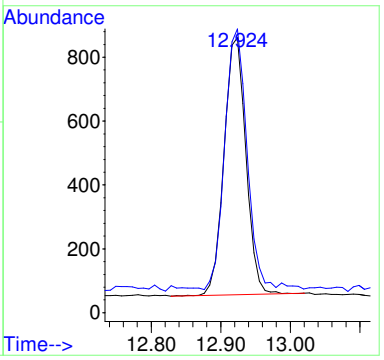


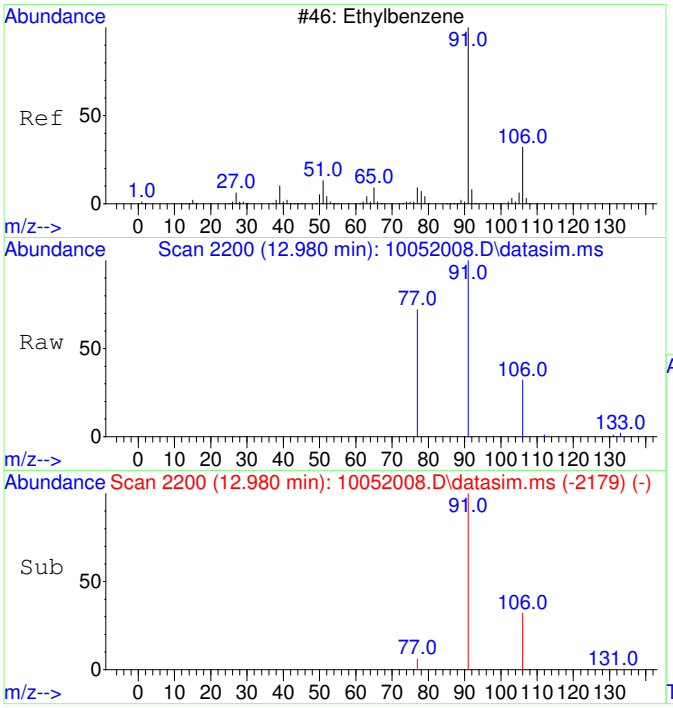


#17
1,1,1,2-Tetrachloroethane
Concen: 51.86 ug/L
RT: 12.924 min Scan# 2193
Delta R.T. 0.016 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:131 Resp: 1761

Ion	Ratio	Lower	Upper
131	100		
133	101.3	66.3	126.3

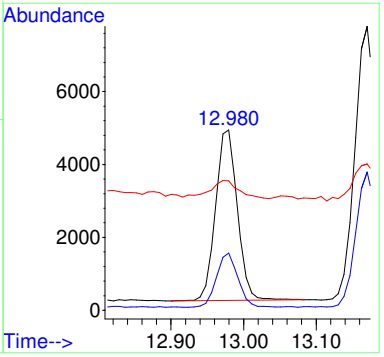


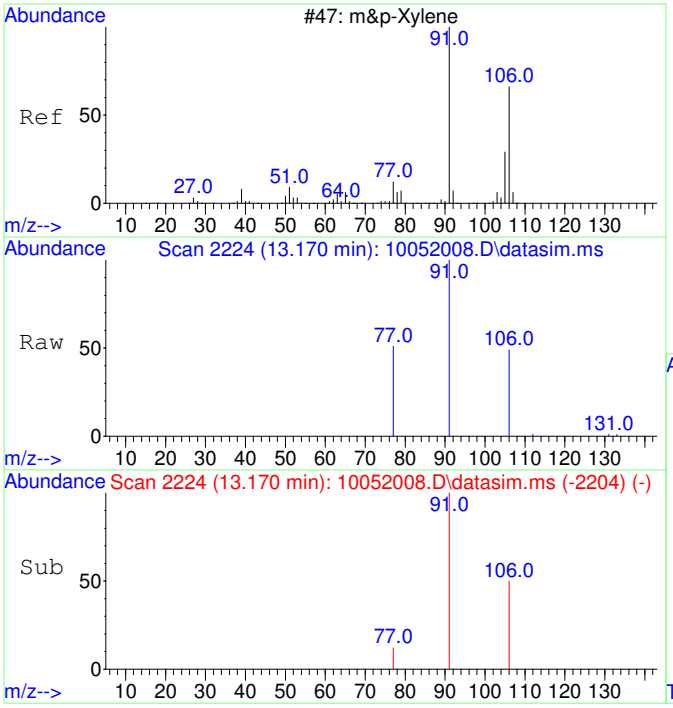


#18
Ethylbenzene
Concen: 60.22 ug/L
RT: 12.980 min Scan# 2200
Delta R.T. 0.016 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 9701

Ion	Ratio	Lower	Upper
91	100		
106	31.2	3.0	63.0
77	14.3	0.0	38.2

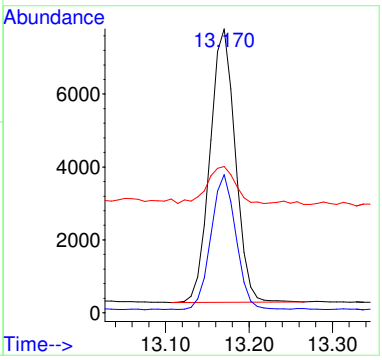


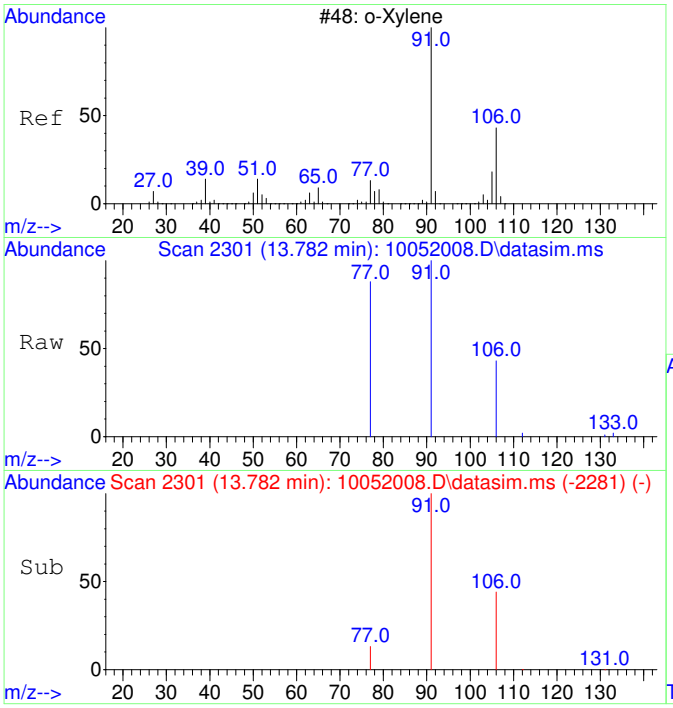


#19
m&p-Xylene
Concen: 125.12 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.008 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 15752

Ion	Ratio	Lower	Upper
91	100		
106	48.6	22.2	82.2
77	14.8	0.0	42.4

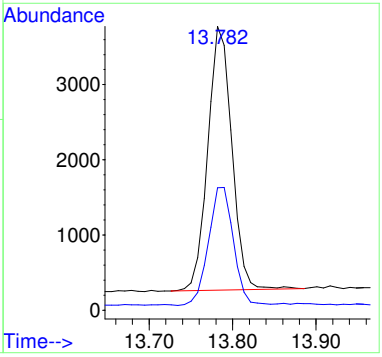


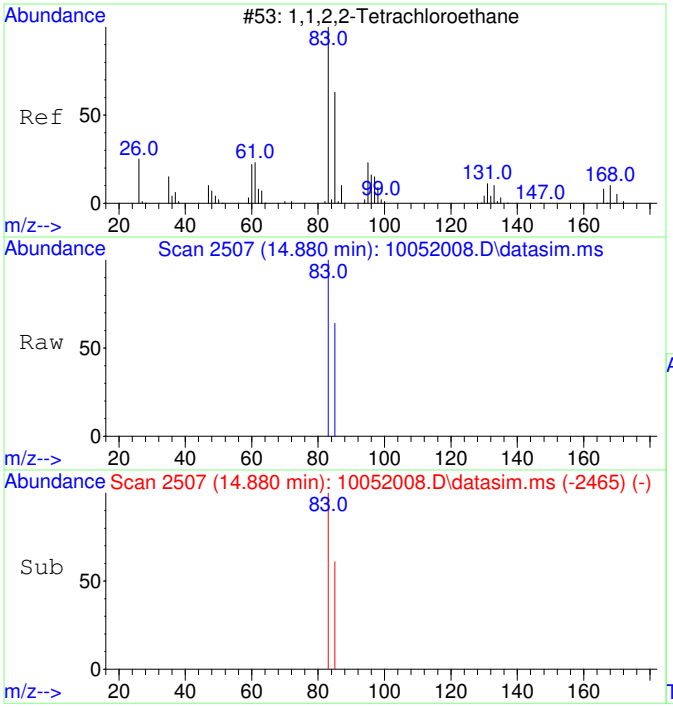


#20
o-Xylene
Concen: 52.12 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 7011

Ion	Ratio	Lower	Upper
91	100		
106	45.8	19.2	79.2

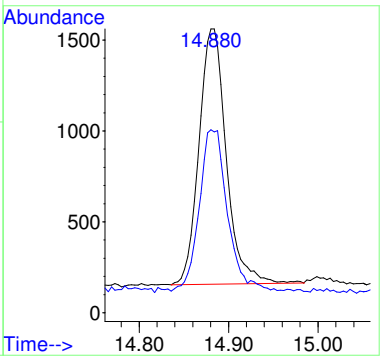


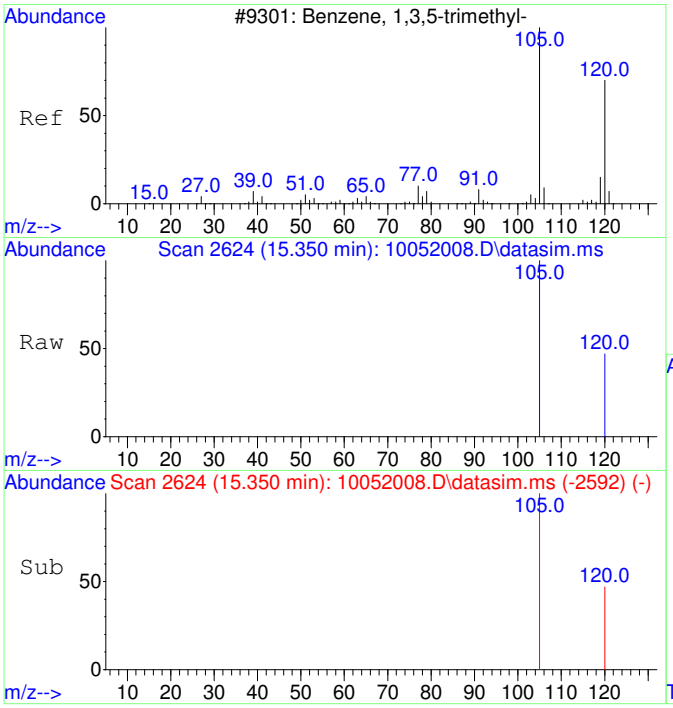


#21
1,1,2,2-Tetrachloroethane
Concen: 50.04 ug/L
RT: 14.880 min Scan# 2507
Delta R.T. 0.007 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 83 Resp: 2983

Ion	Ratio	Lower	Upper
83	100		
85	64.8	34.8	94.8

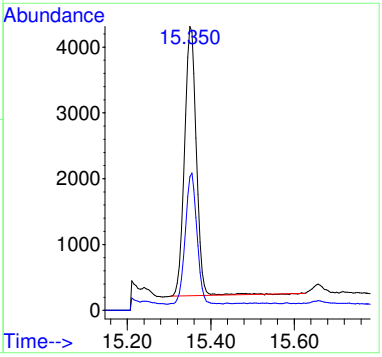


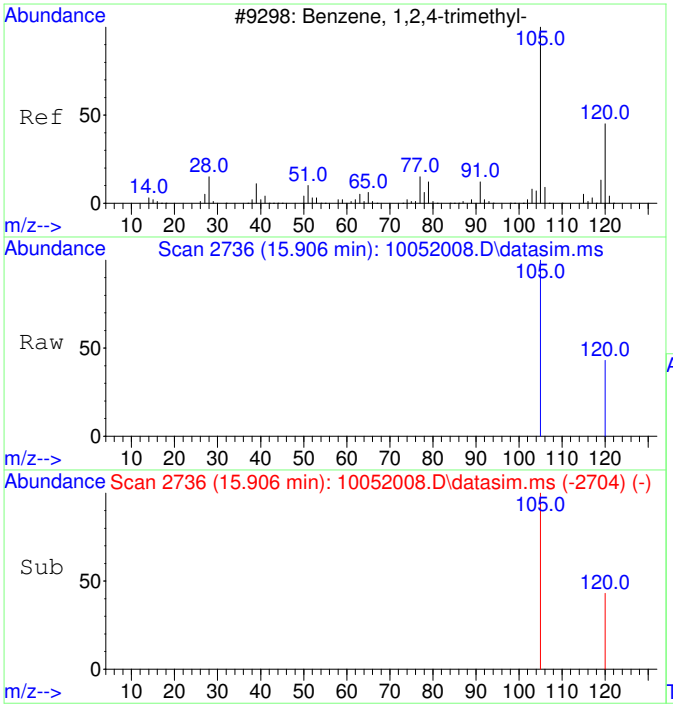


#22
1,3,5-Trimethylbenzene
Concen: 56.20 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.005 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:105 Resp: 8046

Ion	Ratio	Lower	Upper
105	100		
120	47.7	21.1	81.1

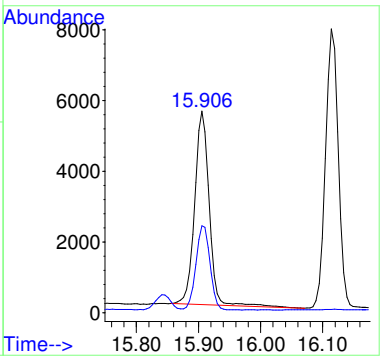


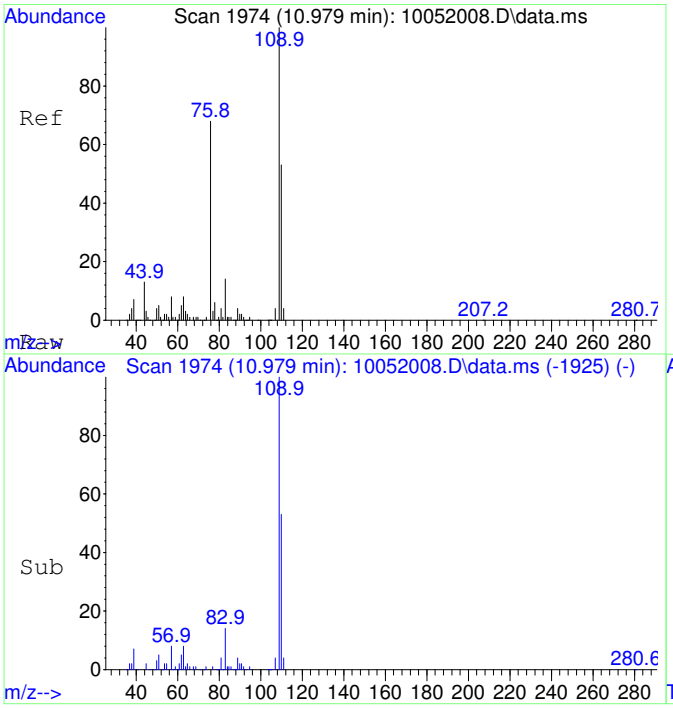


#23
1,2,4-Trimethylbenzene
Concen: 59.72 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:105 Resp: 8880

Ion	Ratio	Lower	Upper
105	100		
120	41.2	17.2	77.2

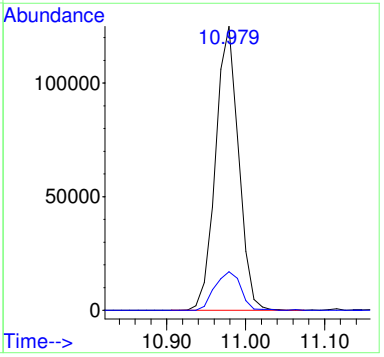


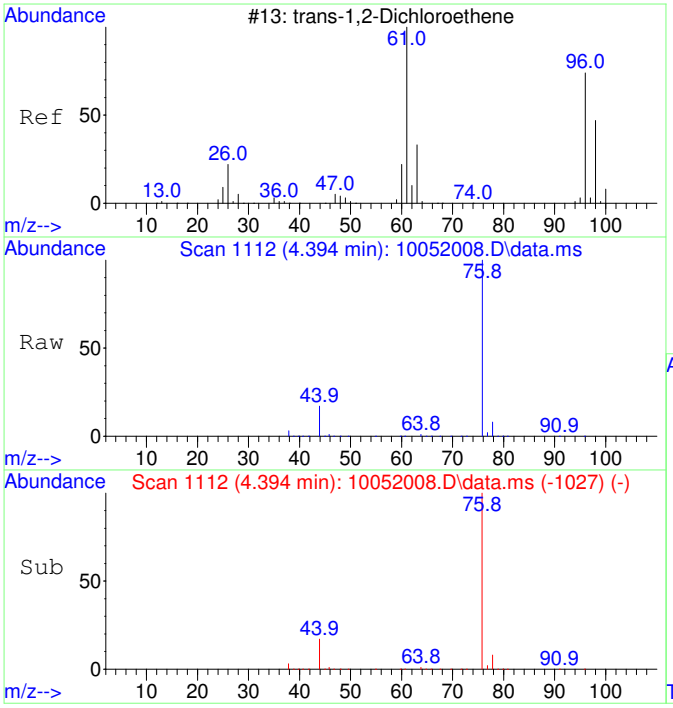


#25
2-Fluorotoluene SCAN
Concen: 4883.68 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:109 Resp: 252437

Ion	Ratio	Lower	Upper
109	100		
83	15.3	0.0	43.8

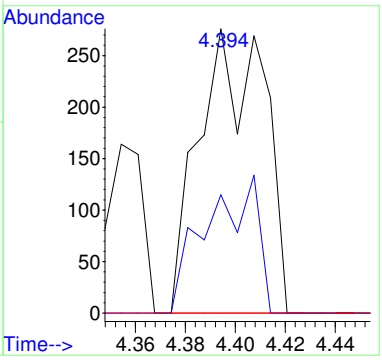


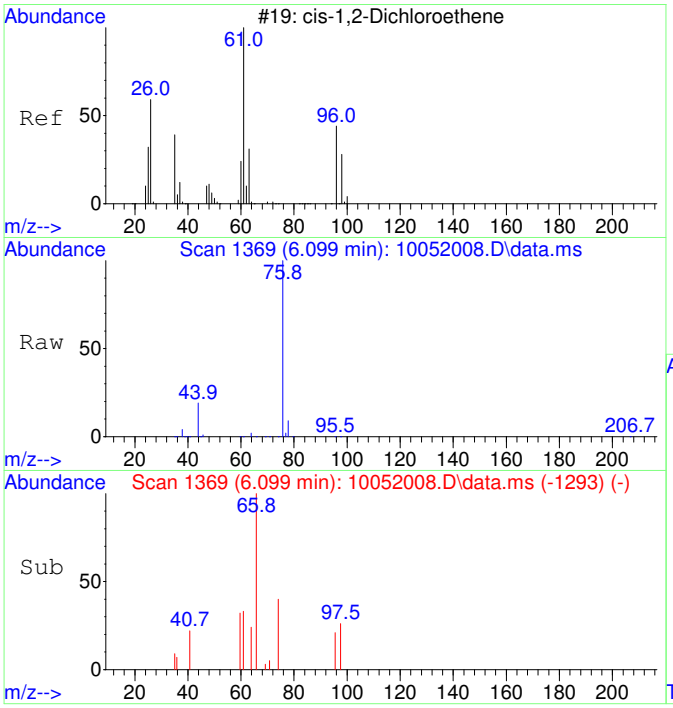


#27
trans-1,2-Dichloroethene SCAN
Concen: 36.81 ug/L
RT: 4.394 min Scan# 1112
Delta R.T. -0.007 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 61 Resp: 500

Ion	Ratio	Lower	Upper
61	100		
96	38.2	49.0	109.0#
98	0.0	20.5	80.5#

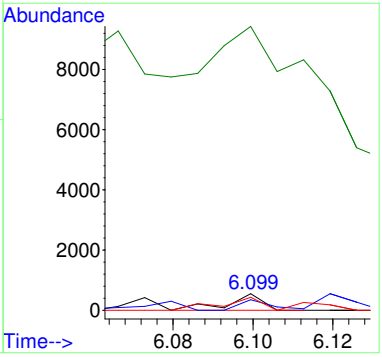


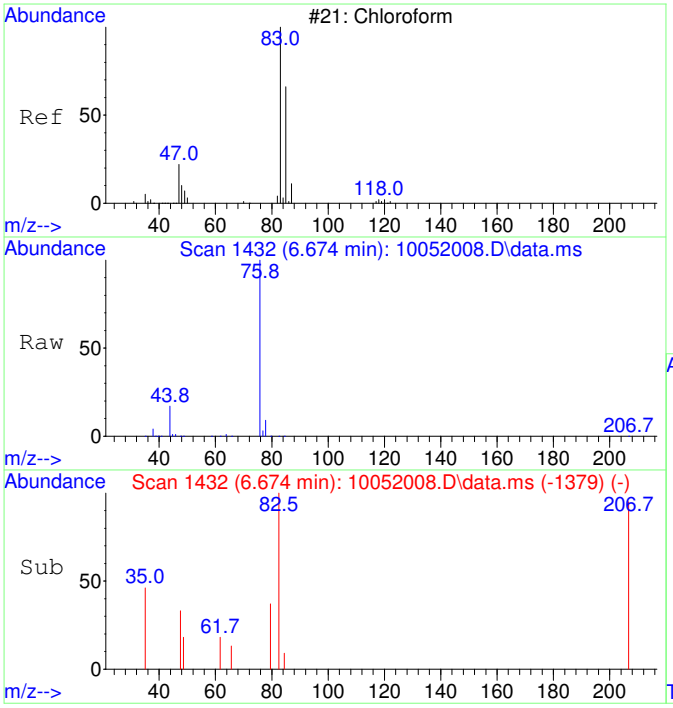


#29
cis-1,2-Dichloroethene SCAN
Concen: 20.01 ug/L
RT: 6.099 min Scan# 1369
Delta R.T. 0.006 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 61 Resp: 337

Ion	Ratio	Lower	Upper
61	100		
96	52.2	39.9	99.9
98	145.1	13.5	73.5#
64	0.0	4.5	64.5#

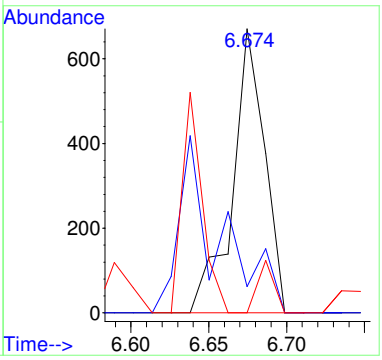


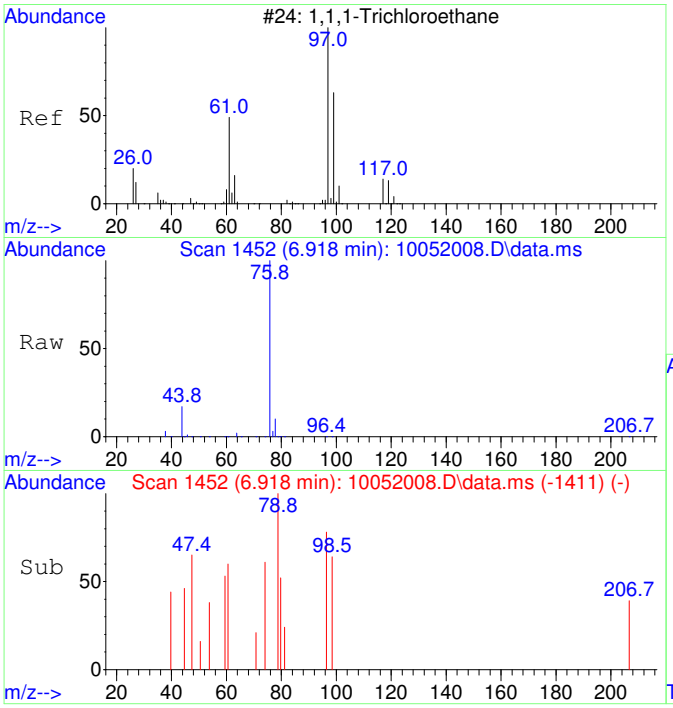


#30
Chloroform SCAN
Concen: 52.71 ug/L
RT: 6.674 min Scan# 1432
Delta R.T. 0.012 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 83 Resp: 963

Ion	Ratio	Lower	Upper
83	100		
85	0.0	34.6	94.6#
47	9.3	0.0	53.4

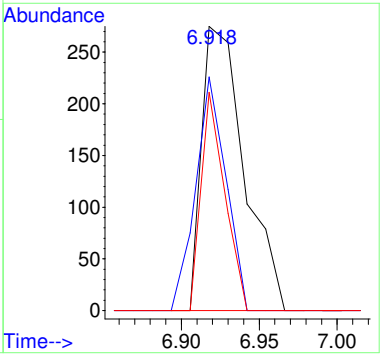


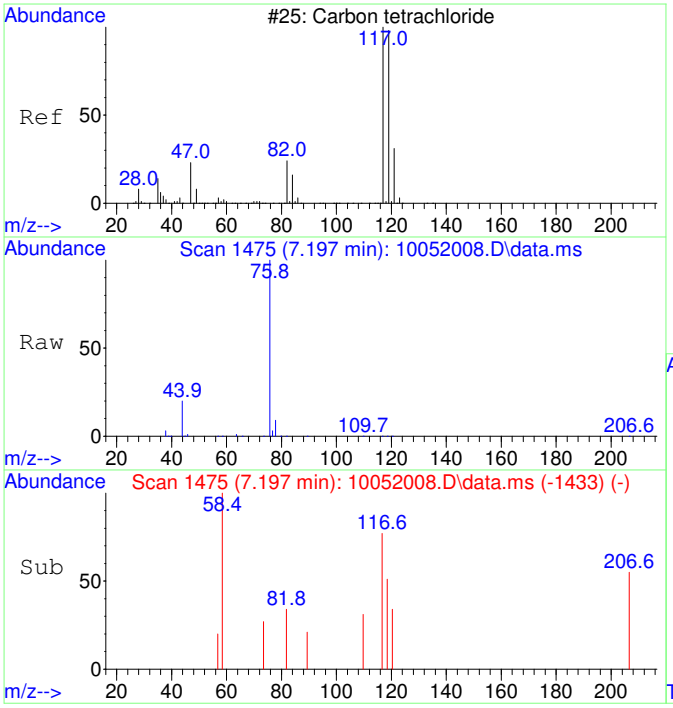


#31
1,1,1-Trichloroethane SCAN
Concen: 31.36 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 97 Resp: 522

Ion	Ratio	Lower	Upper
97	100		
99	58.4	43.6	103.6
61	42.7	18.0	78.0

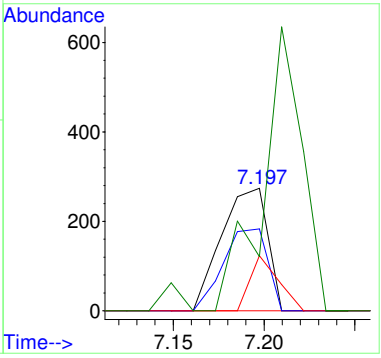


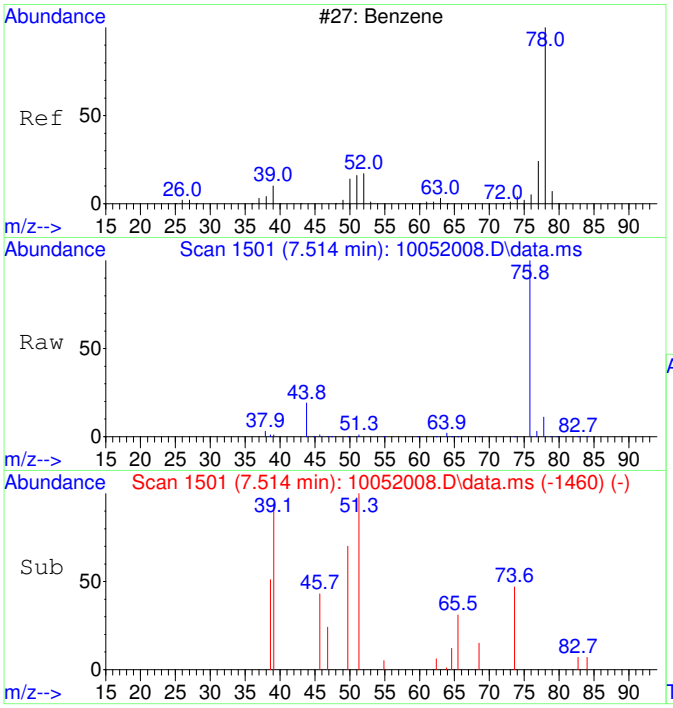


#32
Carbon tetrachloride SCAN
Concen: 27.93 ug/L
RT: 7.197 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:117 Resp: 485

Ion	Ratio	Lower	Upper
117	100		
119	64.3	75.5	135.5#
121	27.4	0.0	58.8
82	207.0	0.0	59.2#

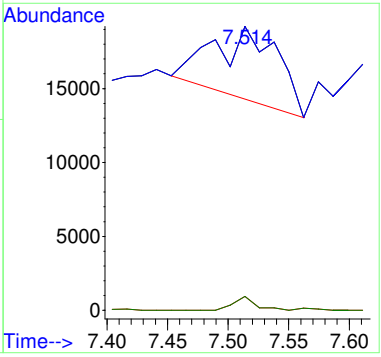


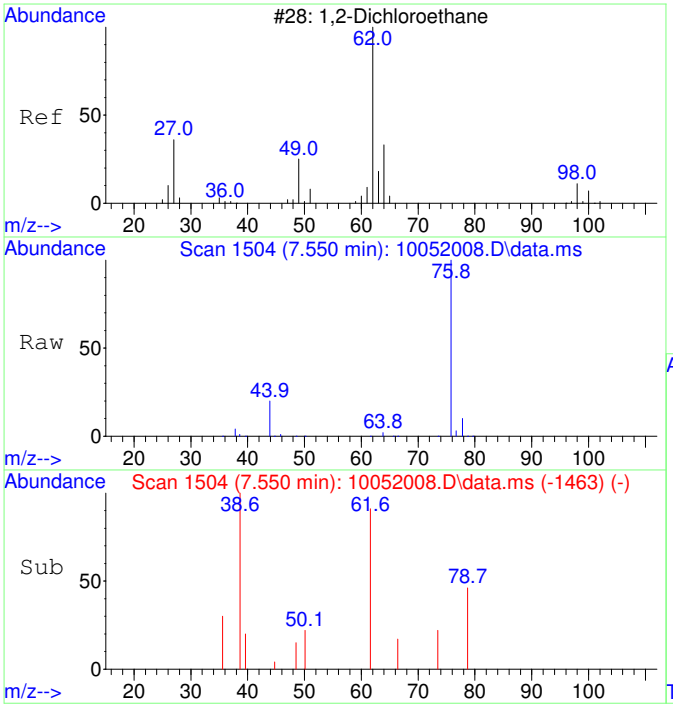


#33
Benzene SCAN
Concen: 371.59 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 78 Resp: 17033

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	6.9	0.0	47.9
51	6.9	0.0	44.1

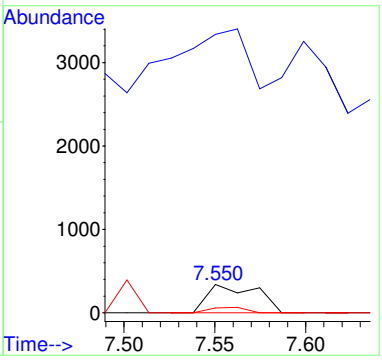


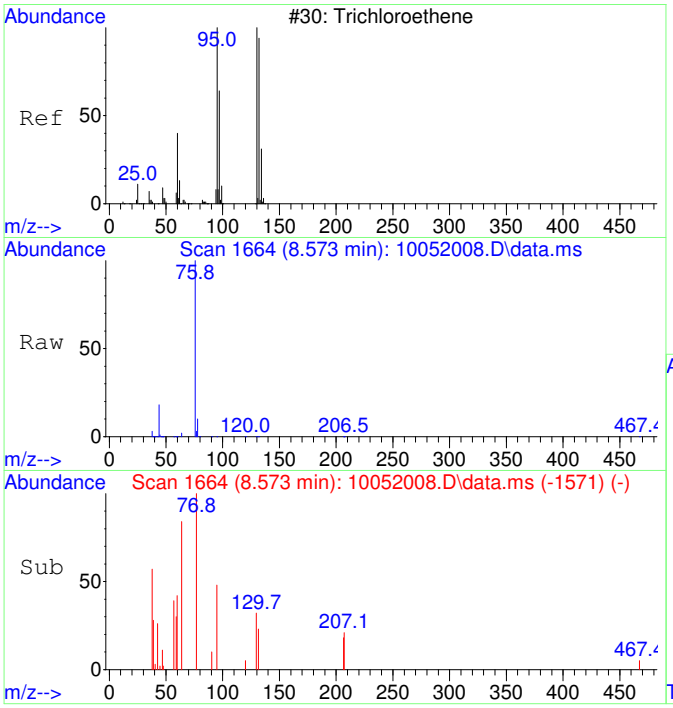


#34
1,2-Dichloroethane SCAN
Concen: 37.93 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 62 Resp: 642

Ion	Ratio	Lower	Upper
62	100		
64	797.2	5.2	65.2#
49	14.2	3.9	63.9

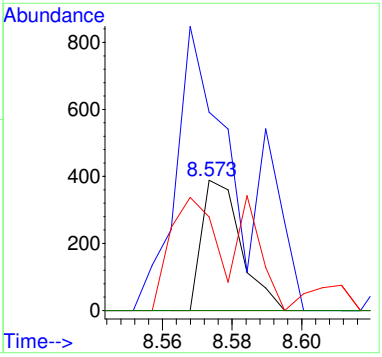


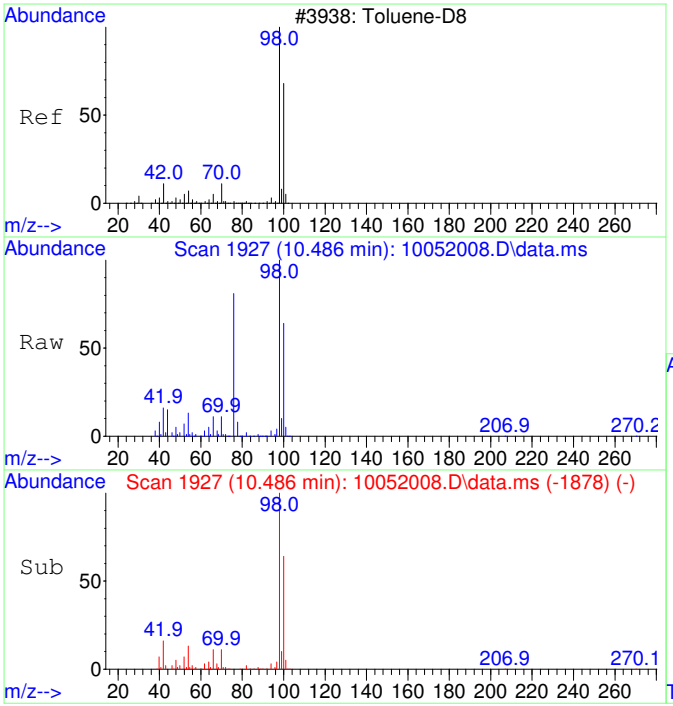


#35
Trichloroethene SCAN
Concen: 24.13 ug/L
RT: 8.573 min Scan# 1664
Delta R.T. 0.005 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:130 Resp: 304

Ion	Ratio	Lower	Upper
130	100		
95	352.0	60.5	120.5#
132	152.3	59.6	119.6#
97	0.0	28.2	88.2#

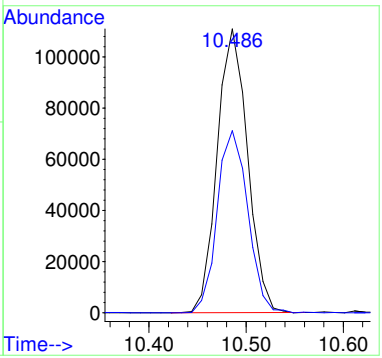


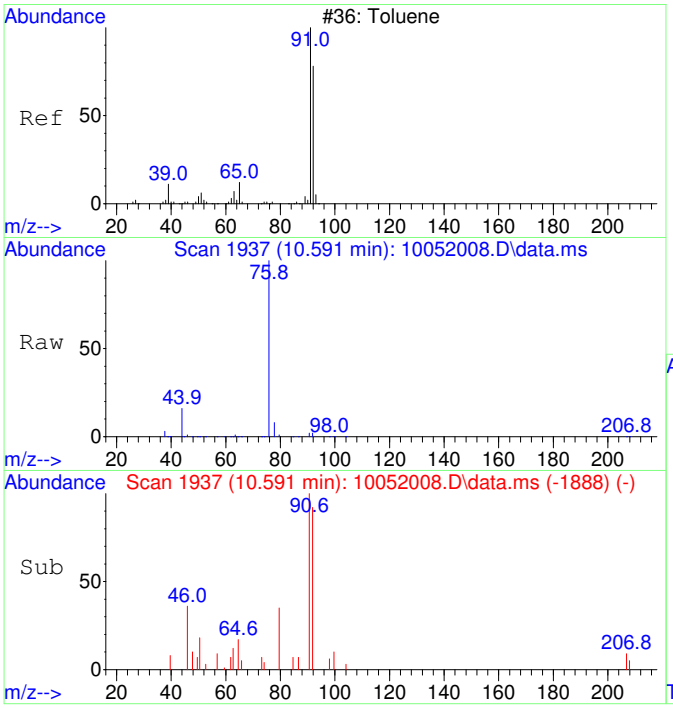


#36
Toluene-d8 SCAN
Concen: 4746.97 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 98 Resp: 239965

Ion	Ratio	Lower	Upper
98	100		
100	64.8	40.0	100.0

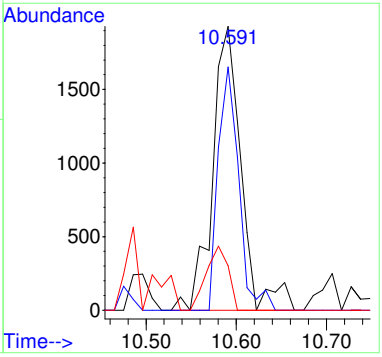


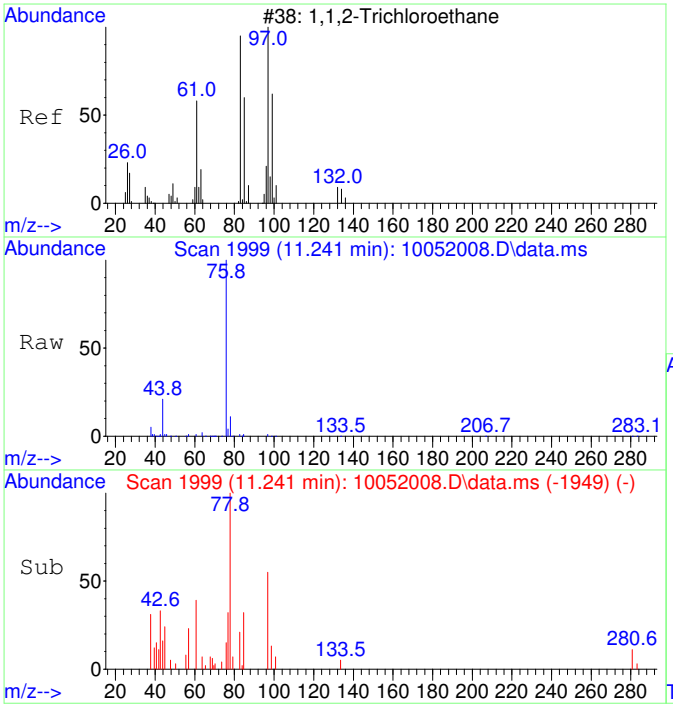


#37
Toluene SCAN
Concen: 65.97 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 4271

Ion	Ratio	Lower	Upper
91	100		
92	61.4	28.3	88.3
65	17.3	0.0	41.0

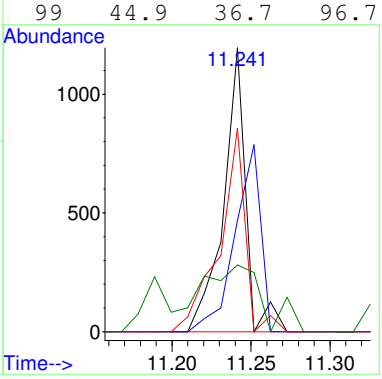


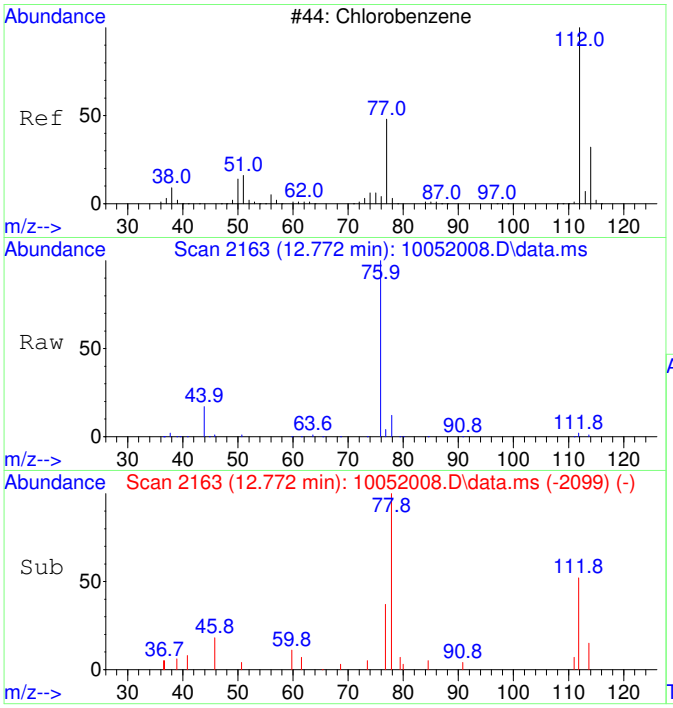


#38
1,1,2-Trichloroethane SCAN
Concen: 80.52 ug/L
RT: 11.241 min Scan# 1999
Delta R.T. 0.021 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 97 Resp: 1170

Ion	Ratio	Lower	Upper
97	100		
83	75.8	57.7	117.7
61	82.9	32.1	92.1
99	44.9	36.7	96.7

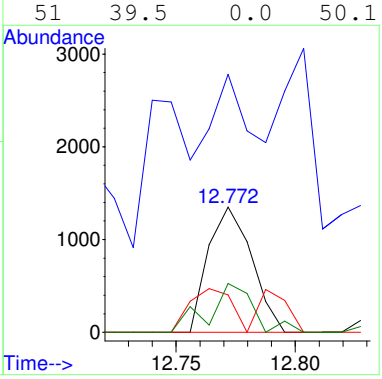


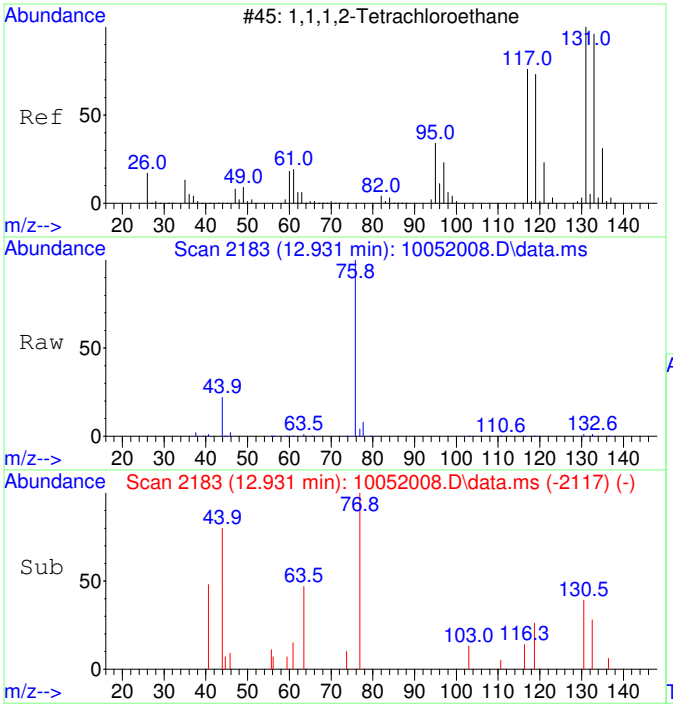


#40
Chlorobenzene SCAN
Concen: 38.81 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.008 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:112 Resp: 1717

Ion	Ratio	Lower	Upper
112	100		
77	0.0	28.2	88.2#
114	33.5	2.3	62.3
51	39.5	0.0	50.1

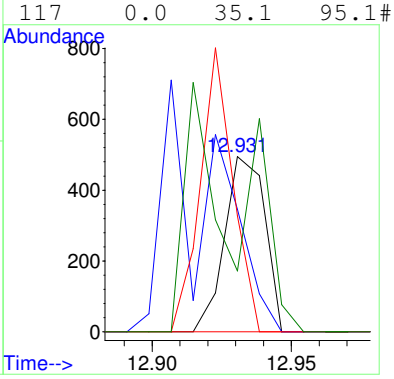


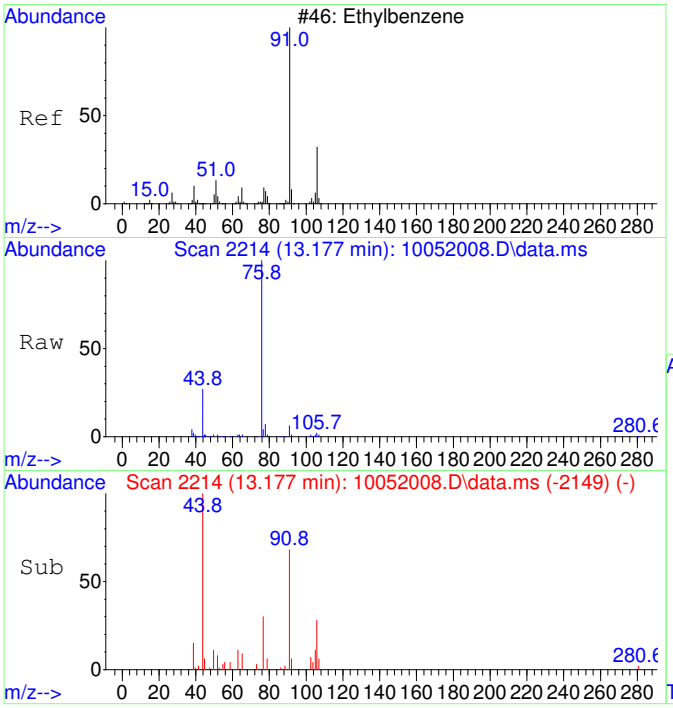


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 30.42 ug/L
RT: 12.931 min Scan# 2183
Delta R.T. 0.024 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:131 Resp: 498

Ion	Ratio	Lower	Upper
131	100		
133	0.0	66.9	126.9#
119	130.5	40.4	100.4#
117	0.0	35.1	95.1#

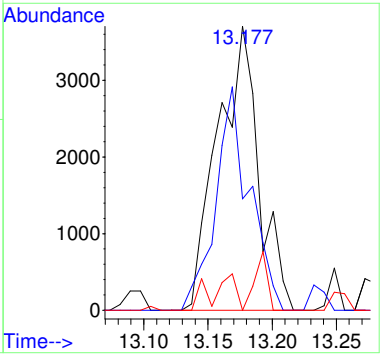


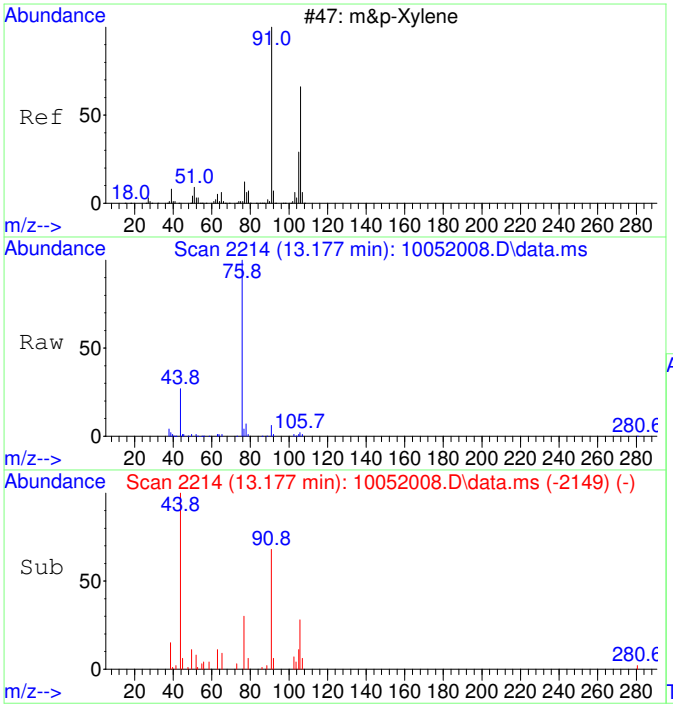


#42
Ethylbenzene SCAN
Concen: 69.98 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 8254

Ion	Ratio	Lower	Upper
91	100		
106	64.1	23.1	83.1
51	7.5	0.0	40.1

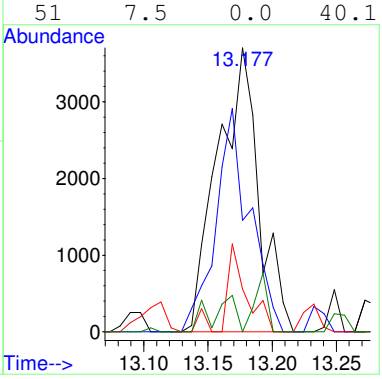


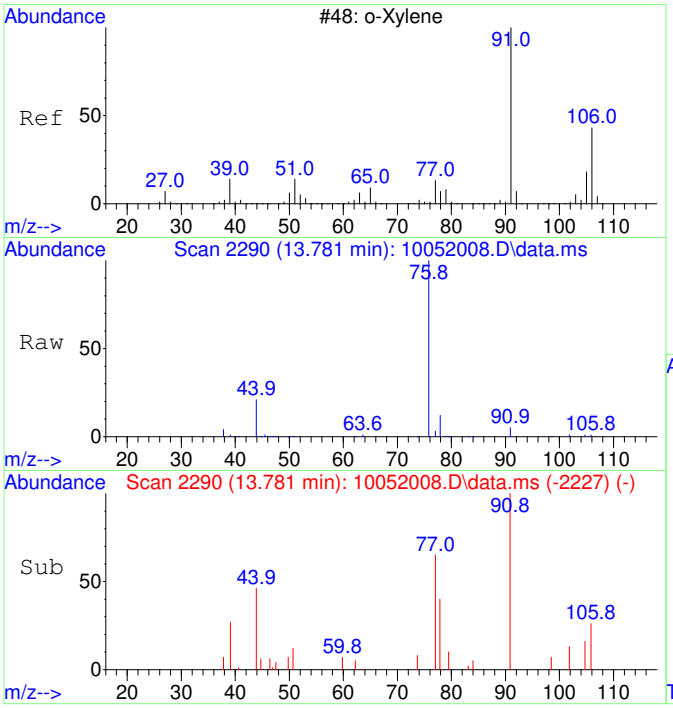


#43
m&p-Xylene SCAN
Concen: 69.98 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 8254

Ion	Ratio	Lower	Upper
91	100		
106	64.1	23.1	83.1
105	15.4	0.0	54.7
51	7.5	0.0	40.1

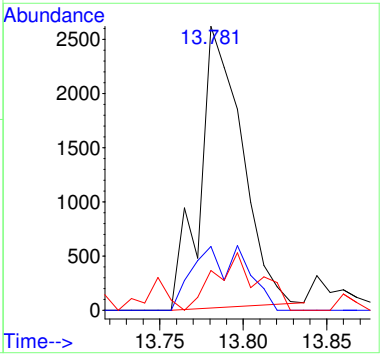


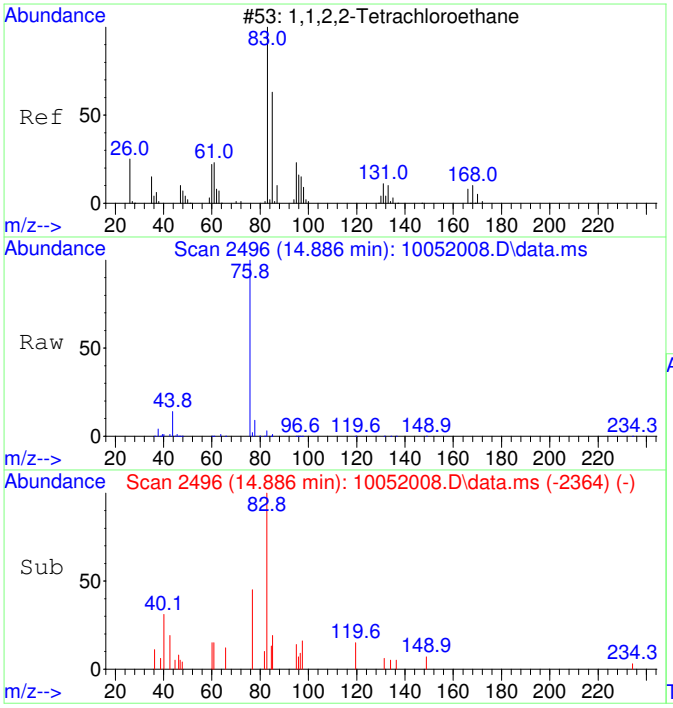


#44
o-Xylene SCAN
Concen: 72.29 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 4564

Ion	Ratio	Lower	Upper
91	100		
106	28.4	18.0	78.0
105	21.6	0.0	56.6

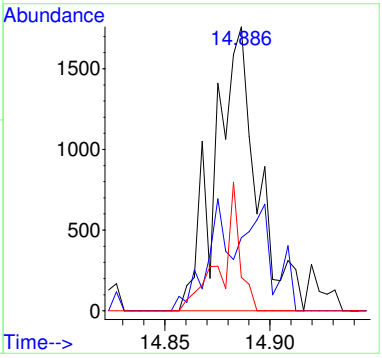


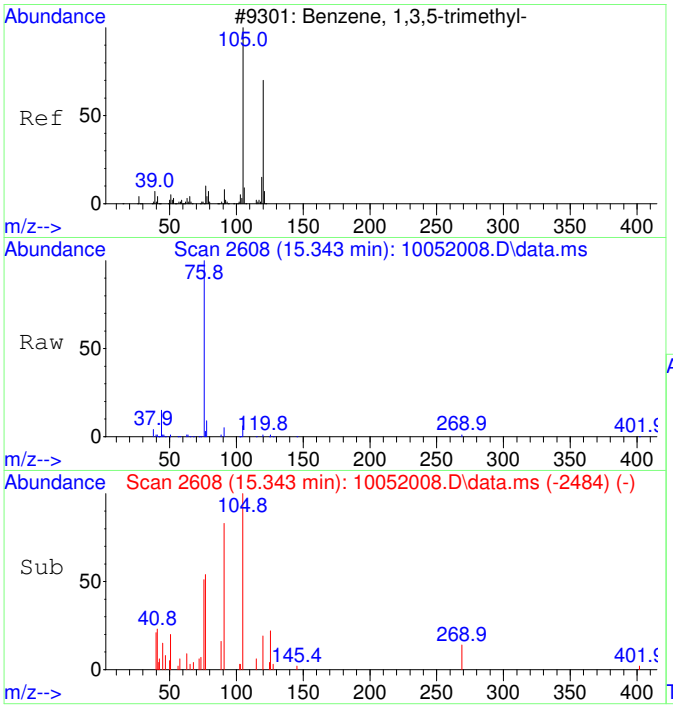


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 79.20 ug/L
RT: 14.886 min Scan# 2496
Delta R.T. 0.015 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 83 Resp: 2438

Ion	Ratio	Lower	Upper
83	100		
85	8.7	35.9	95.9#
95	20.1	0.0	47.4

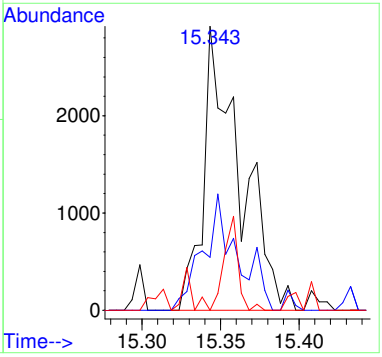


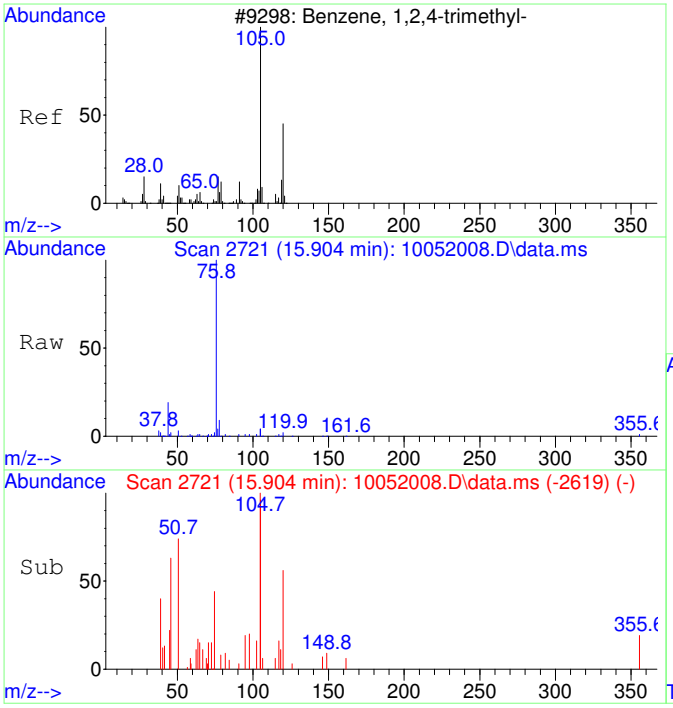


#46
1,3,5-Trimethylbenzene SCAN
Concen: 71.18 ug/L
RT: 15.343 min Scan# 2608
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:105 Resp: 4736

Ion	Ratio	Lower	Upper
105	100		
120	38.2	18.3	78.3
119	12.6	0.0	43.1

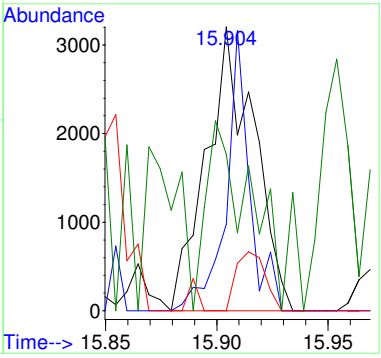




#47
1,2,4-Trimethylbenzene SCAN
Concen: 70.20 ug/L
RT: 15.904 min Scan# 2721
Delta R.T. 0.005 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:105 Resp: 4779

Ion	Ratio	Lower	Upper
105	100		
120	48.0	16.9	76.9
119	12.7	0.0	41.9
77	61.3	0.0	42.3#



2009036-01

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052019.D
Acq On : 5 Oct 2020 16:58
InstName : AG5975C
Operator : TD
Sample : 2009036-01
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 06 06:14:33 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

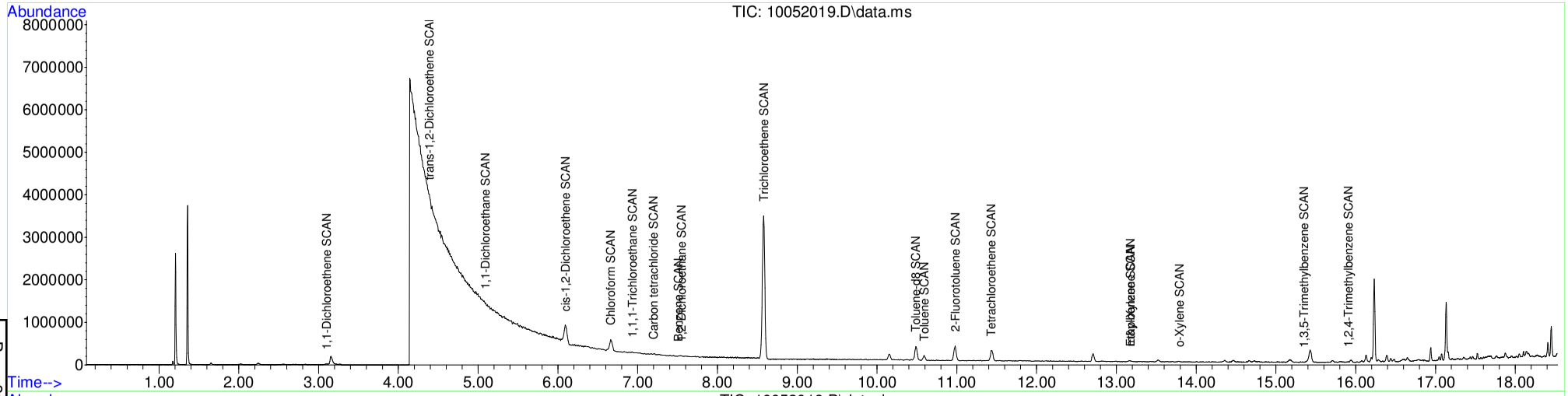
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.980	109	528258	5000.00 ug/L	0.01
System Monitoring Compounds					
12) Toluene-d8	10.487	98	450162	4353.08 ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 87.06%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.097	61	23857	1130.97 ug/L	83
3] trans-1,2-Dichloroethene	4.382	61	42204	1731.69 ug/L	100
4] 1,1-Dichloroethane	5.092	63	29727	979.86 ug/L	98
5] cis-1,2-Dichloroethene	6.094	61	639561	19971.43 ug/L	99
6] Chloroform	6.664	83	422182	12880.20 ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	27679	777.57 ug/L	99
8] Carbon tetrachloride	7.187	117	12876	384.31 ug/L	100
9] Benzene	7.515	78	15270	170.13 ug/L	67
10] 1,2-Dichloroethane	7.552	62	846	26.40 ug/L #	1
11] Trichloroethene	8.580	130	2373387	87825.98 ug/L **OC**	92
13] Toluene	10.582	91	163774	1242.21 ug/L	99
15] Tetrachloroethene	11.442	166	178210	4670.74 ug/L	100
18] Ethylbenzene	12.980	91	8172	50.92 ug/L	93
19] m&p-Xylene	13.170	91	32849	261.90 ug/L	94
20] o-Xylene	13.782	91	18336	136.84 ug/L	96
22] 1,3,5-Trimethylbenzene	15.350	105	3289	23.06 ug/L	92
23] 1,2,4-Trimethylbenzene	15.906	105	8766	59.17 ug/L	95
25) 2-Fluorotoluene SCAN	10.979	109	263671	5120.28 ug/L	97
26) 1,1-Dichloroethene SCAN	3.099	61	988	90.34 ug/L #	1
27) trans-1,2-Dichloroethe...	4.388	61	24272	1793.58 ug/L	81
28) 1,1-Dichloroethane SCAN	5.091	63	17120	1093.13 ug/L	86
29) cis-1,2-Dichloroethene...	6.099	61	368744	21975.52 ug/L #	82
30) Chloroform SCAN	6.662	83	228151	12535.77 ug/L	92
31) 1,1,1-Trichloroethane ...	6.930	97	13507	814.39 ug/L #	42
32) Carbon tetrachloride SCAN	7.198	117	6717	388.26 ug/L	91
33) Benzene SCAN	7.514	78	19855	434.79 ug/L	96
34) 1,2-Dichloroethane SCAN	7.550	62	895	53.08 ug/L #	40
35) Trichloroethene SCAN	8.579	130	1175052	93635.61 ug/L	85
36) Toluene-d8 SCAN	10.486	98	240872	4782.91 ug/L	91
37) Toluene SCAN	10.591	91	91548	1419.47 ug/L	94
39) Tetrachloroethene SCAN	11.430	166	79099	5104.92 ug/L	92
42) Ethylbenzene SCAN	13.177	91	17768	151.22 ug/L	94
43) m&p-Xylene SCAN	13.177	91	17768	151.22 ug/L #	82
44) o-Xylene SCAN	13.789	91	9529	151.51 ug/L	90
46) 1,3,5-Trimethylbenzene...	15.353	105	2451	36.98 ug/L #	48
47) 1,2,4-Trimethylbenzene...	15.909	105	4976	73.37 ug/L #	72

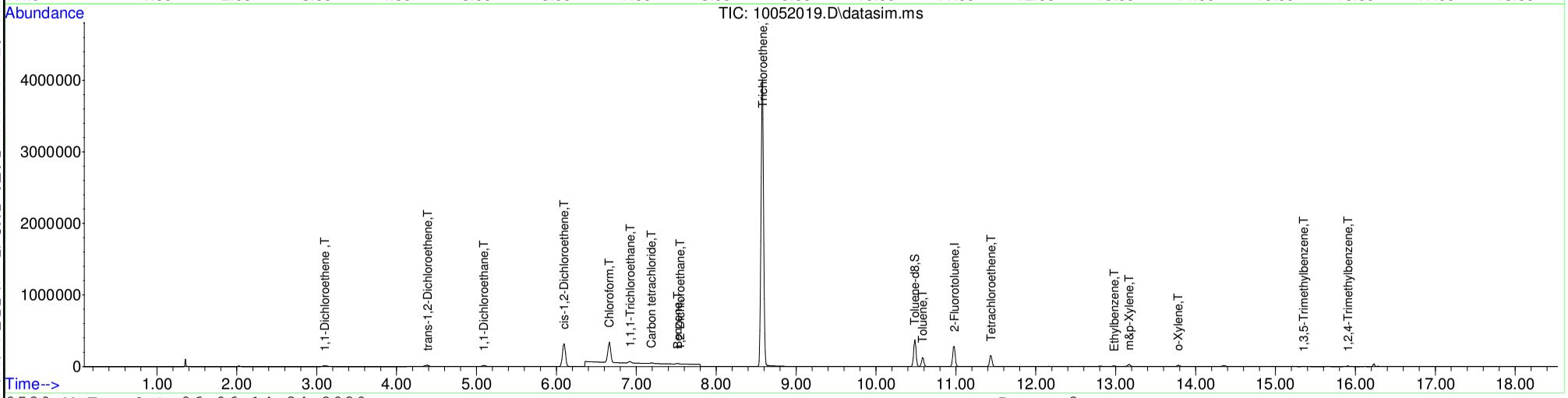
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052019.D
Acq On : 5 Oct 2020 16:58
InstName : AG5975C
Operator : TD
Sample : 2009036-01
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 06 06:14:33 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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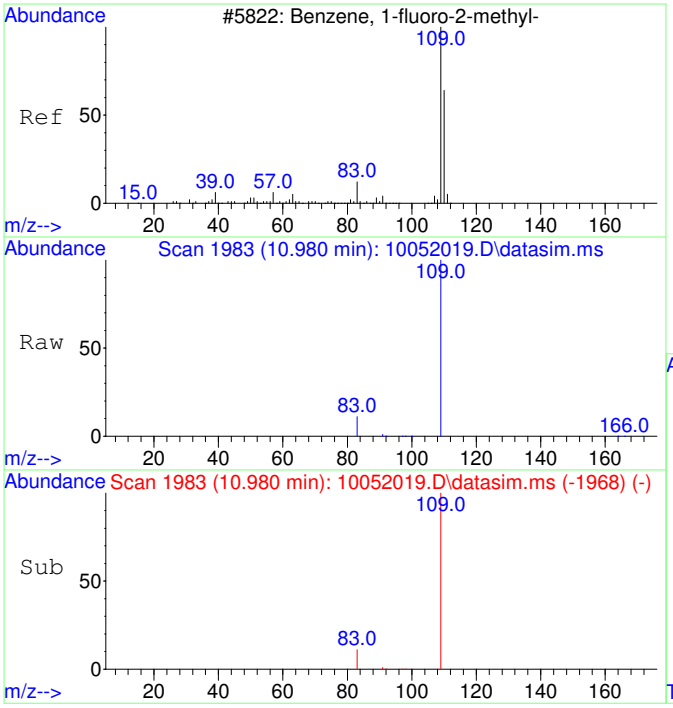
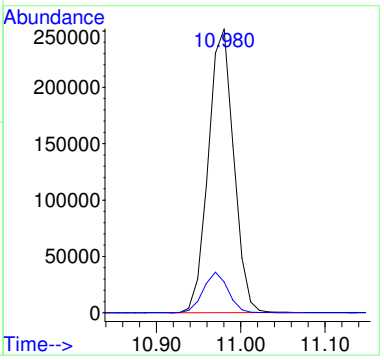
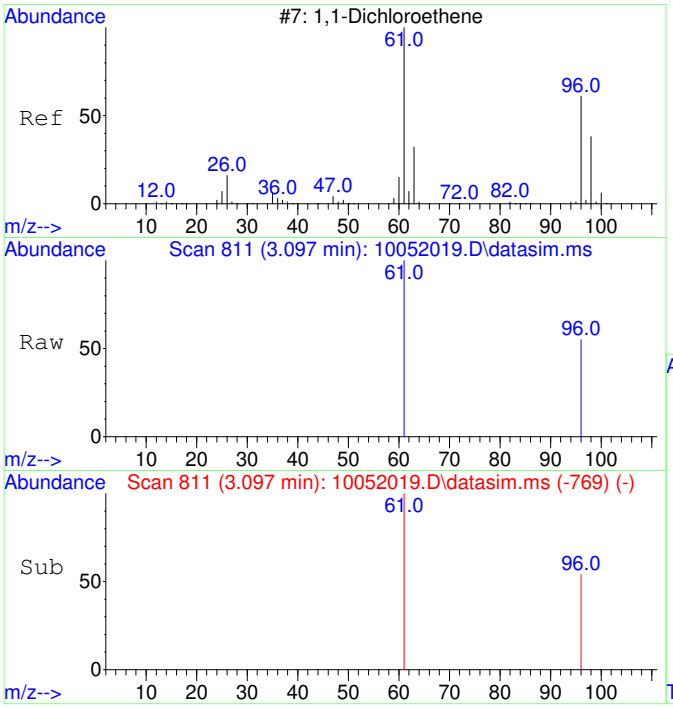


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.980 min Scan# 1983
Delta R.T. 0.010 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion:109 Resp: 528258

Ion	Ratio	Lower	Upper
109	100		
83	13.9	0.0	42.3

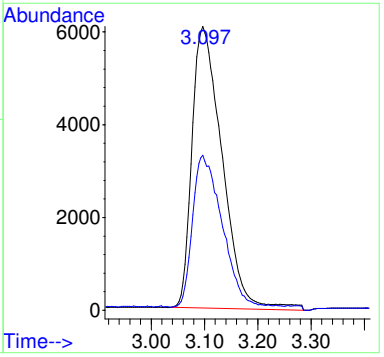


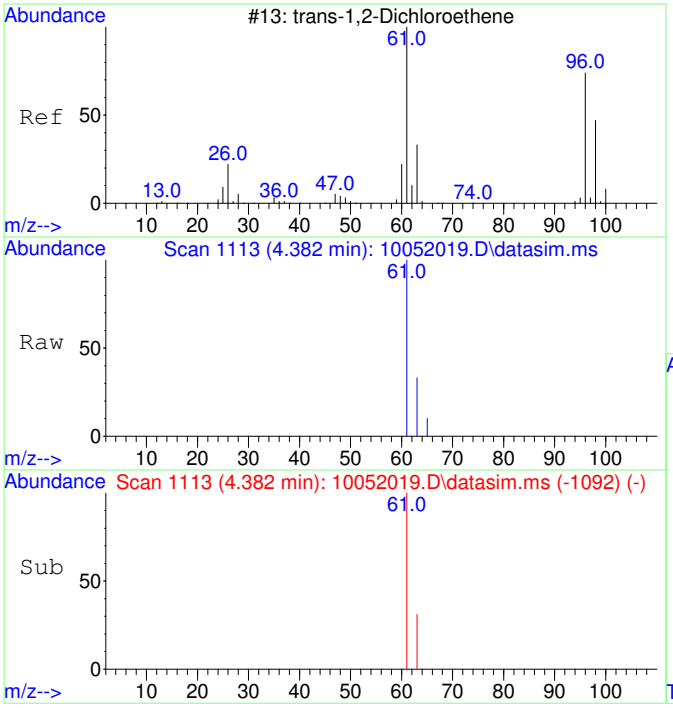


#2
1,1-Dichloroethene
Concen: 1130.97 ug/L
RT: 3.097 min Scan# 811
Delta R.T. 0.007 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 61 Resp: 23857

Ion	Ratio	Lower	Upper
61	100		
96	53.9	37.2	97.2

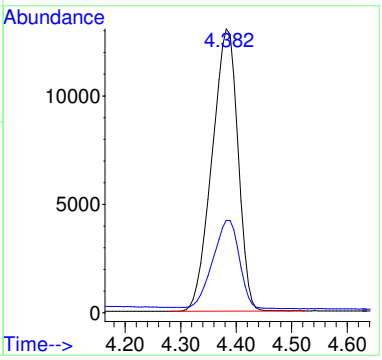


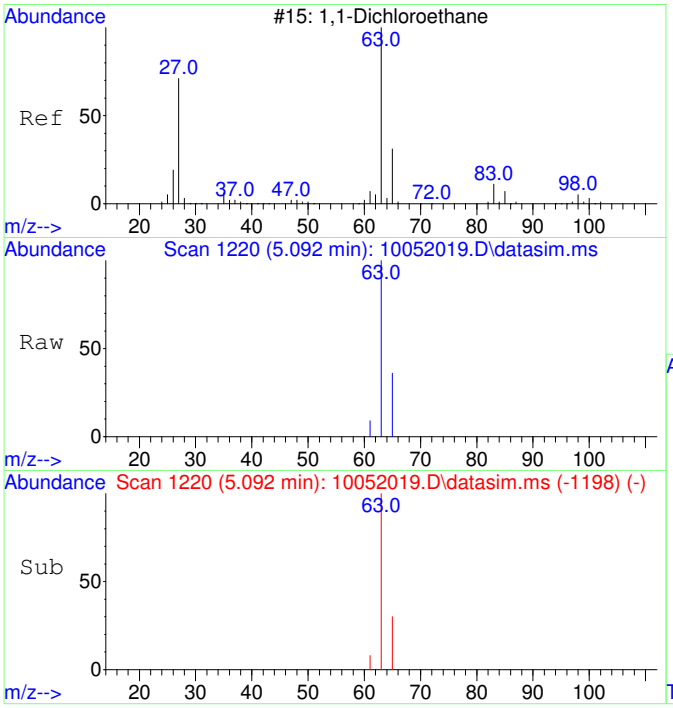


#3
trans-1,2-Dichloroethene
Concen: 1731.69 ug/L
RT: 4.382 min Scan# 1113
Delta R.T. -0.013 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 61 Resp: 42204

Ion	Ratio	Lower	Upper
61	100		
63	32.1	2.4	62.4

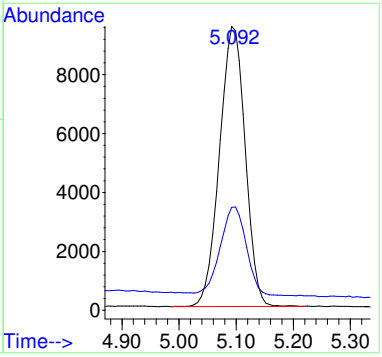


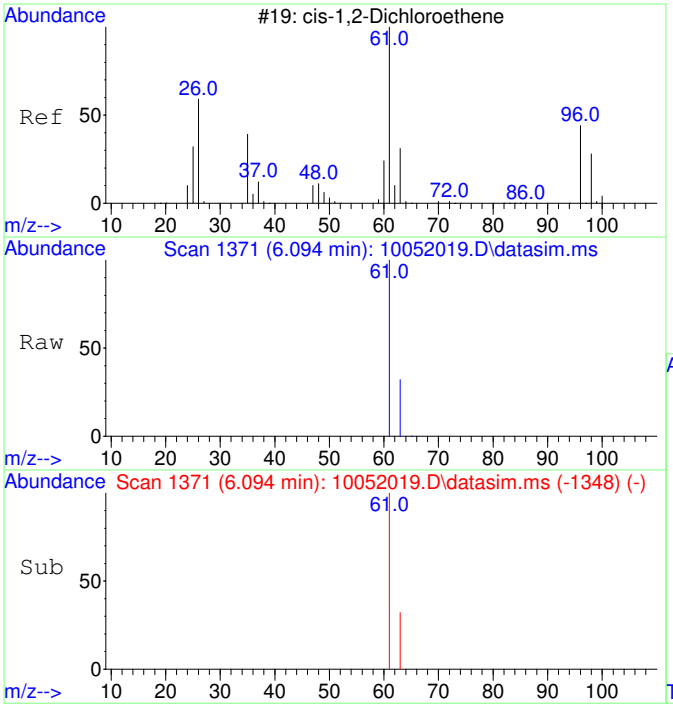


#4
1,1-Dichloroethane
Concen: 979.86 ug/L
RT: 5.092 min Scan# 1220
Delta R.T. -0.007 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 63 Resp: 29727

Ion	Ratio	Lower	Upper
63	100		
65	32.9	1.8	61.8

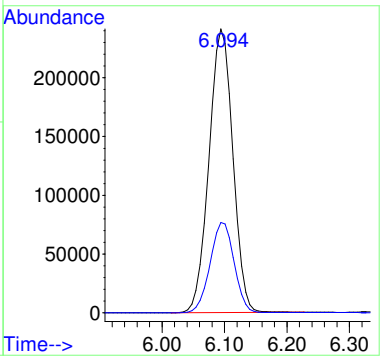


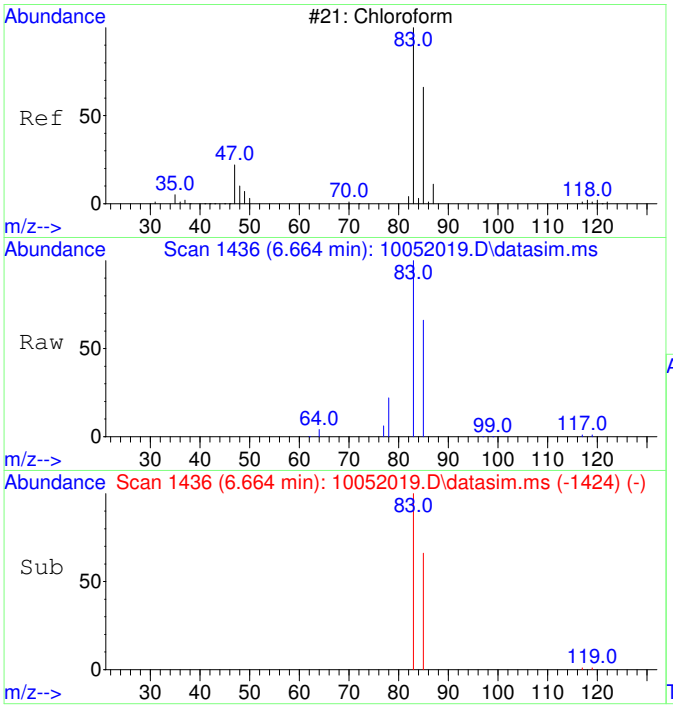


#5
cis-1,2-Dichloroethene
Concen: 19971.43 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. -0.000 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 61 Resp: 639561

Ion	Ratio	Lower	Upper
61	100		
63	32.0	2.5	62.5

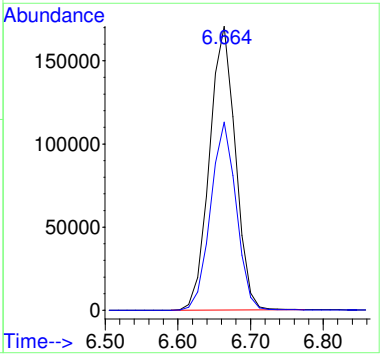


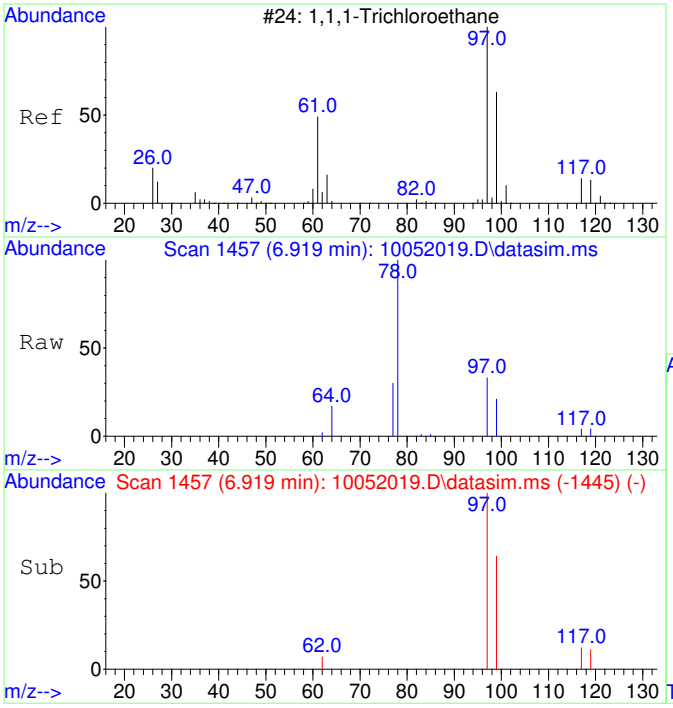


#6
Chloroform
Concen: 12880.20 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 83 Resp: 422182

Ion	Ratio	Lower	Upper
83	100		
85	65.3	35.1	95.1

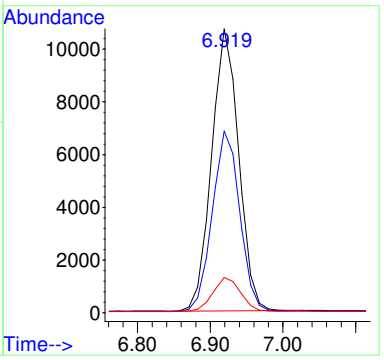


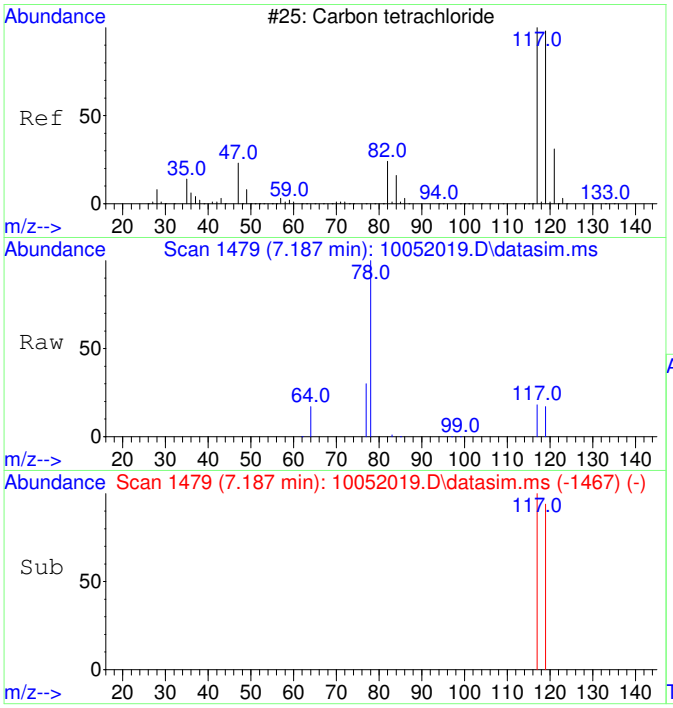


#7
1,1,1-Trichloroethane
Concen: 777.57 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 97 Resp: 27679

Ion	Ratio	Lower	Upper
97	100		
99	64.8	34.6	94.6
117	12.1	0.0	43.2

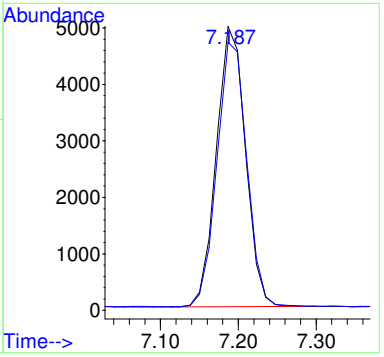


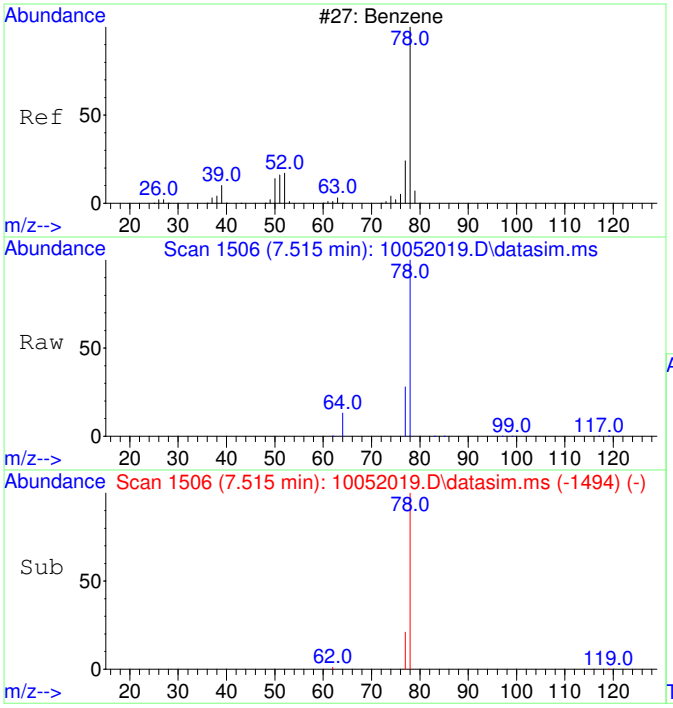


#8
Carbon tetrachloride
Concen: 384.31 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion:117 Resp: 12876

Ion	Ratio	Lower	Upper
117	100		
119	96.3	66.4	126.4

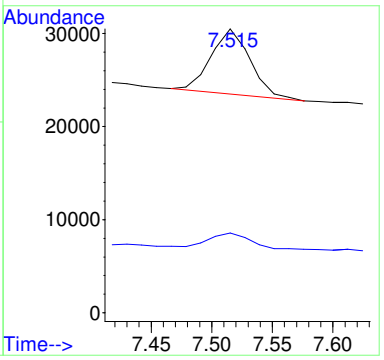


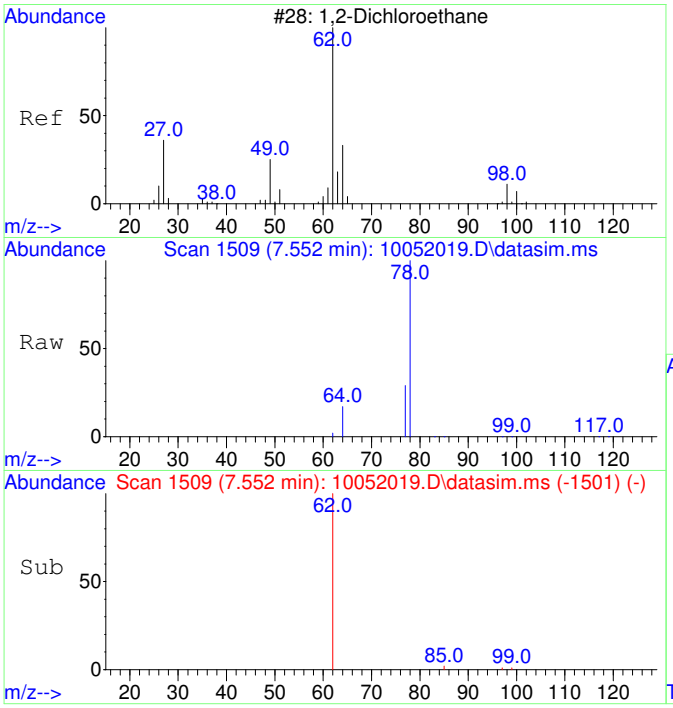


#9
Benzene
Concen: 170.13 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. -0.000 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 78 Resp: 15270

Ion	Ratio	Lower	Upper
78	100		
77	39.1	0.0	53.2

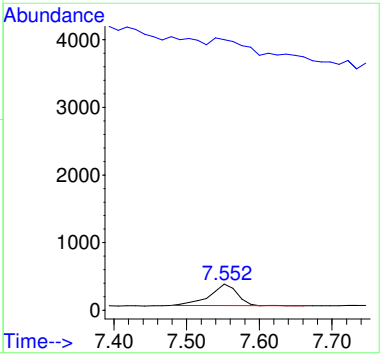


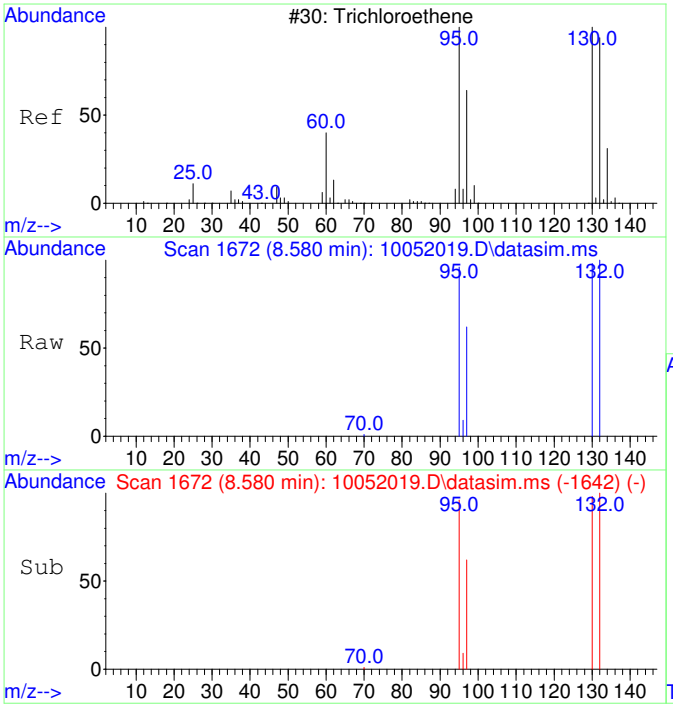


#10
1,2-Dichloroethane
Concen: 26.40 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. -0.000 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 62 Resp: 846

Ion	Ratio	Lower	Upper
62	100		
64	105.8	2.3	62.3#

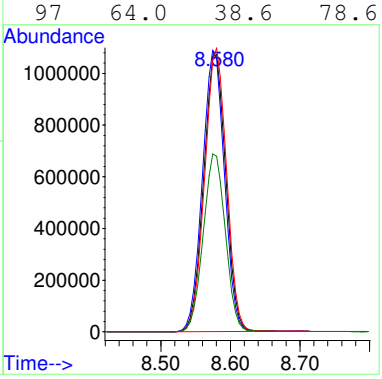


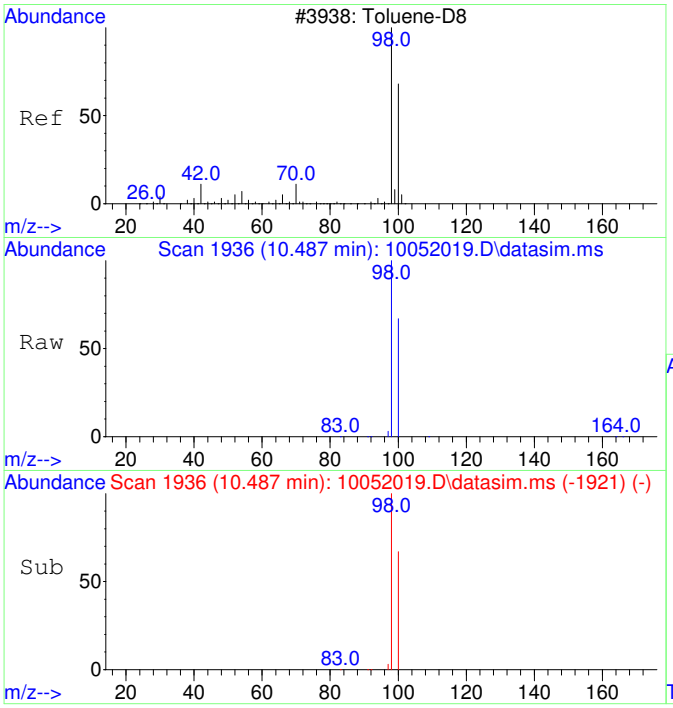


#11
Trichloroethene
Concen: 87825.98 ug/L
RT: 8.580 min Scan# 1672
Delta R.T. 0.011 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion:130 Resp: 2373387

Ion	Ratio	Lower	Upper
130	100		
95	100.7	60.7	120.7
132	100.9	76.0	116.0
97	64.0	38.6	78.6

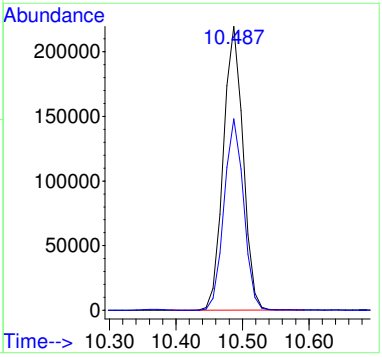


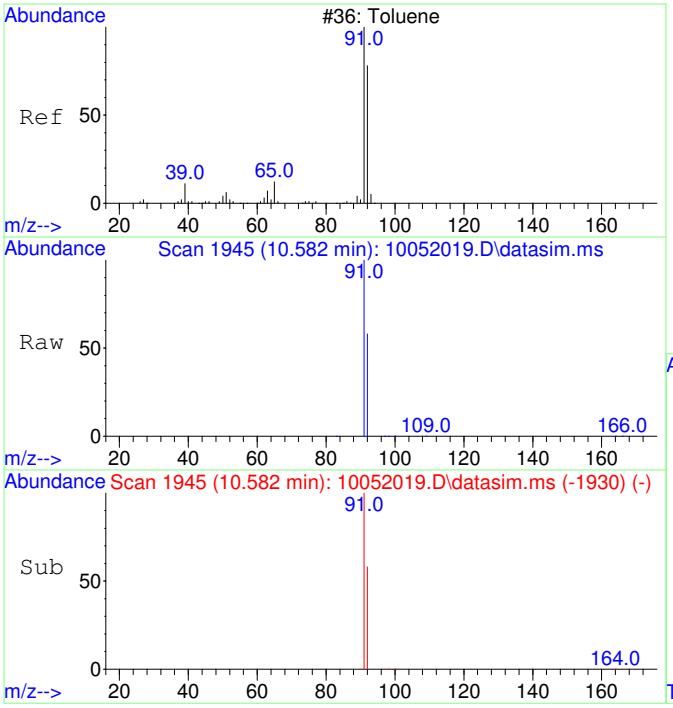


#12
Toluene-d8
Concen: 4353.08 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.010 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 98 Resp: 450162

Ion	Ratio	Lower	Upper
98	100		
100	66.7	37.1	97.1

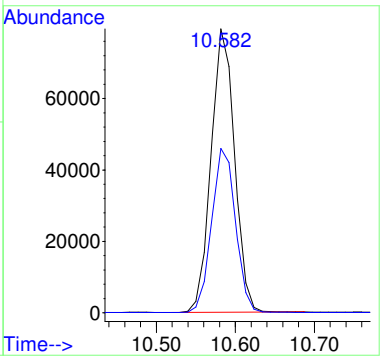


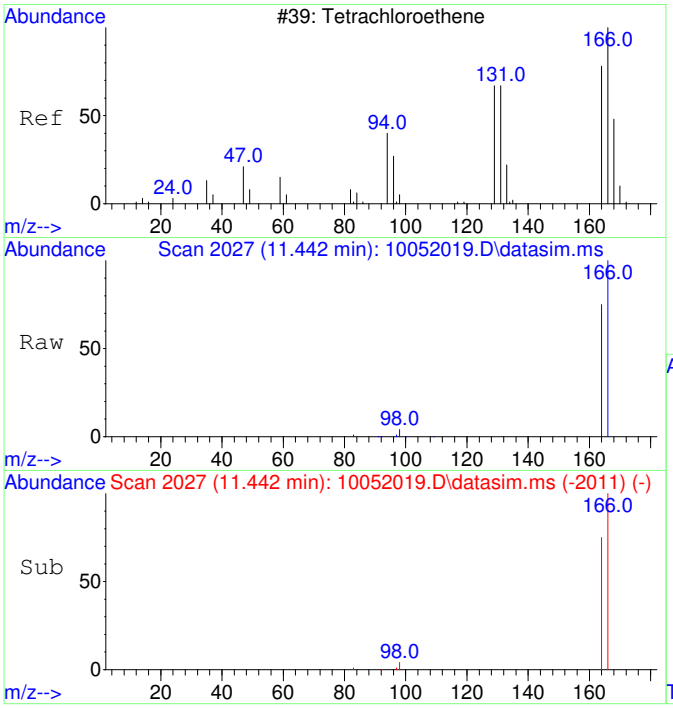


#13
Toluene
Concen: 1242.21 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.010 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 91 Resp: 163774

Ion	Ratio	Lower	Upper
91	100		
92	58.9	29.9	89.9

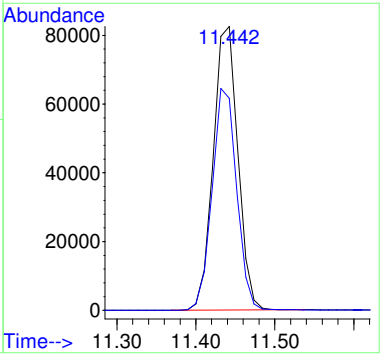


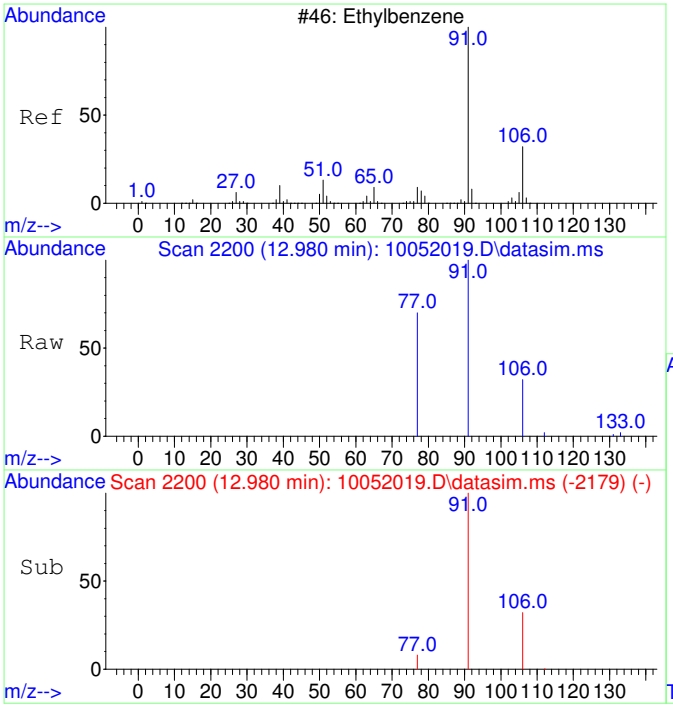


#15
Tetrachloroethene
Concen: 4670.74 ug/L
RT: 11.442 min Scan# 2027
Delta R.T. 0.021 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion:166 Resp: 178210

Ion	Ratio	Lower	Upper
166	100		
164	77.7	47.8	107.8

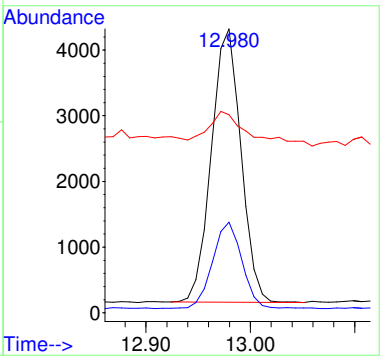


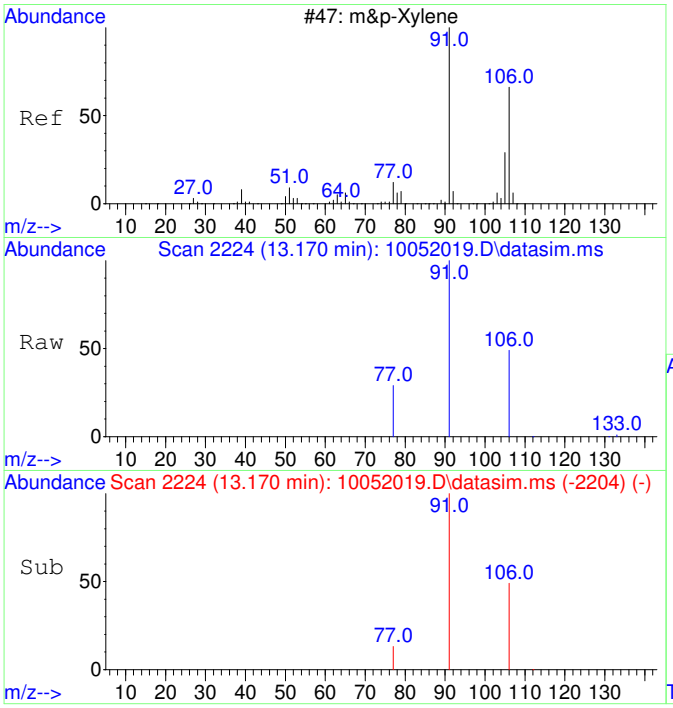


#18
Ethylbenzene
Concen: 50.92 ug/L
RT: 12.980 min Scan# 2200
Delta R.T. 0.016 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 91 Resp: 8172

Ion	Ratio	Lower	Upper
91	100		
106	31.5	3.0	63.0
77	17.3	0.0	38.2

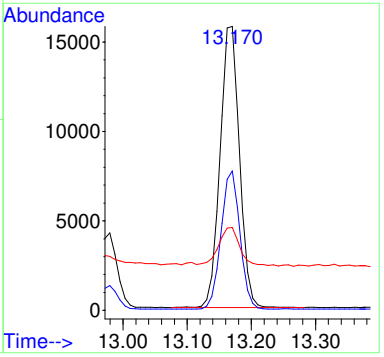


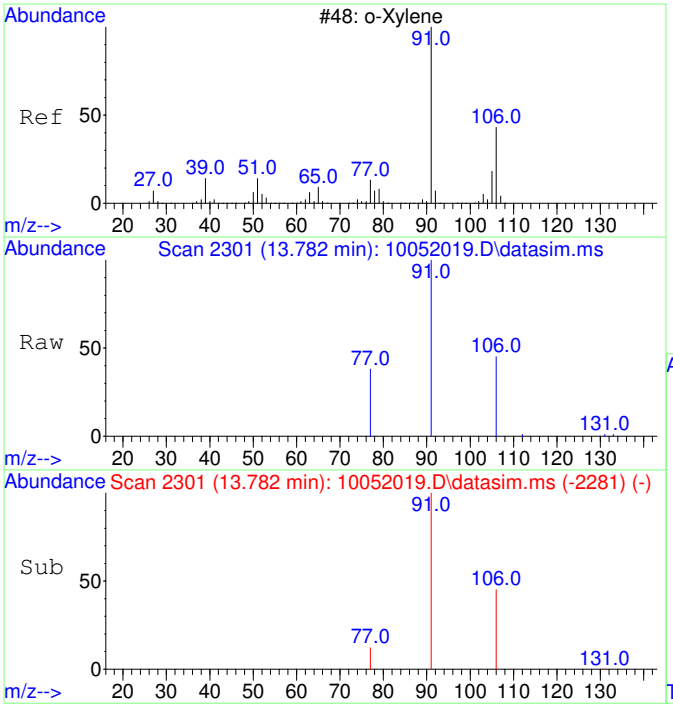


#19
m&p-Xylene
Concen: 261.90 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.008 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 91 Resp: 32849

Ion	Ratio	Lower	Upper
91	100		
106	47.8	22.2	82.2
77	15.3	0.0	42.4

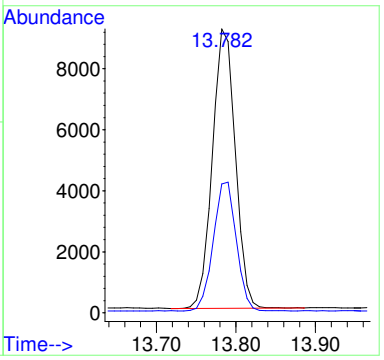


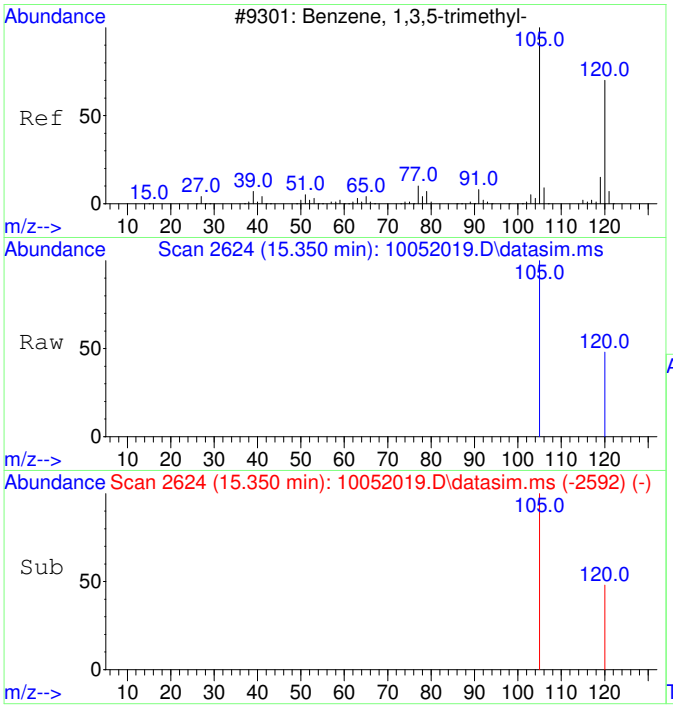


#20
o-Xylene
Concen: 136.84 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 91 Resp: 18336

Ion	Ratio	Lower	Upper
91	100		
106	46.3	19.2	79.2

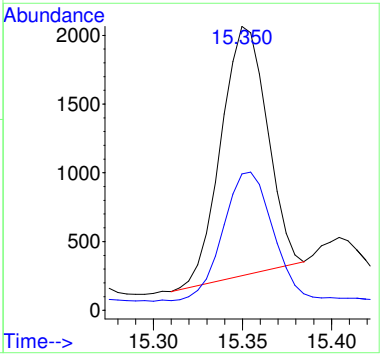


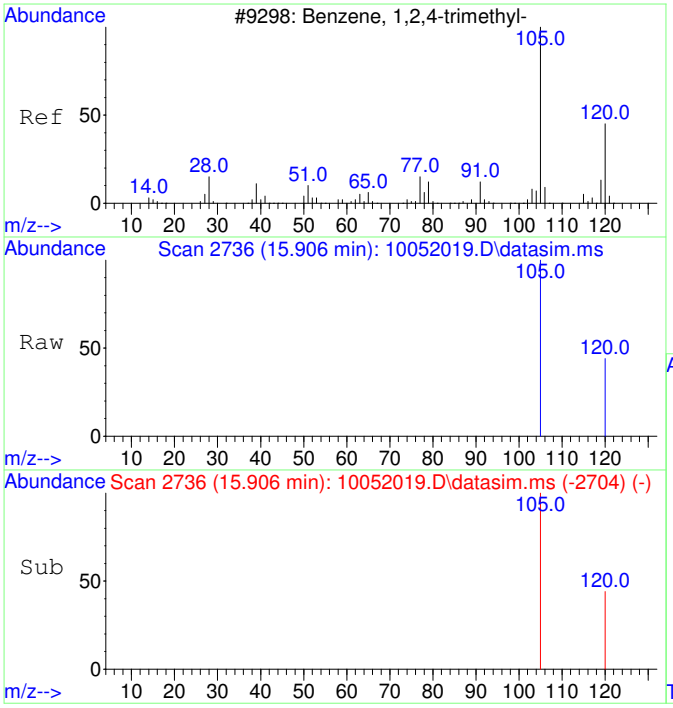


#22
1,3,5-Trimethylbenzene
Concen: 23.06 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.005 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion:105 Resp: 3289

Ion	Ratio	Lower	Upper
105	100		
120	56.4	21.1	81.1

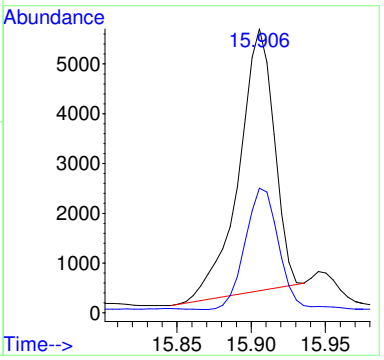


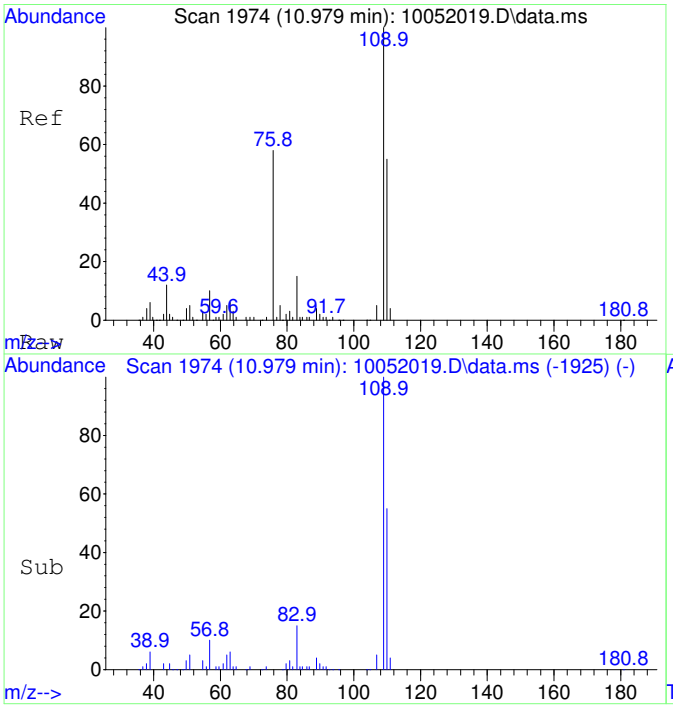


#23
1,2,4-Trimethylbenzene
Concen: 59.17 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.010 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion:105 Resp: 8766

Ion	Ratio	Lower	Upper
105	100		
120	43.9	17.2	77.2

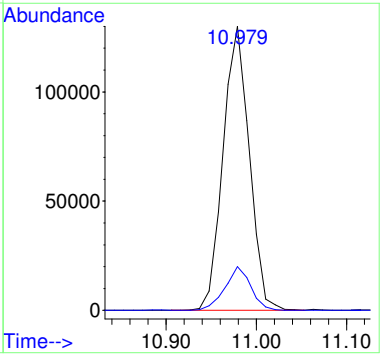


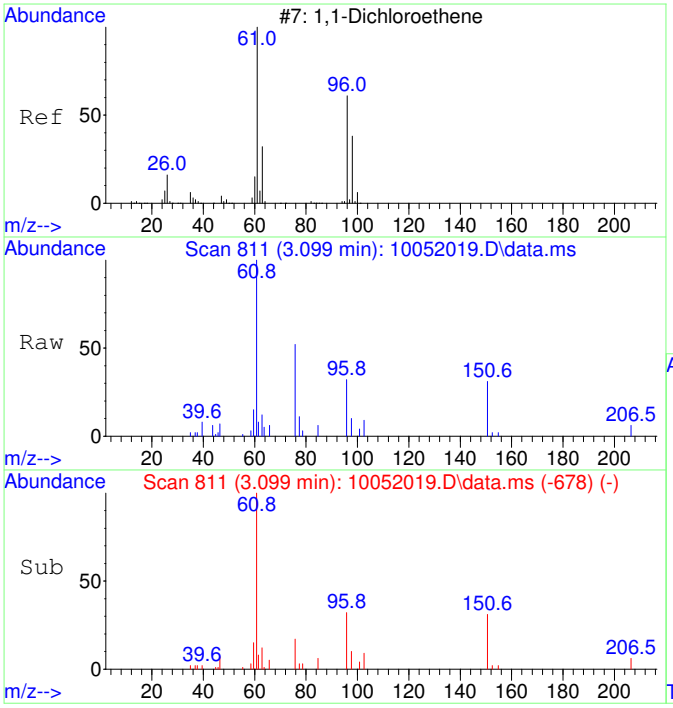


#25
2-Fluorotoluene SCAN
Concen: 5120.28 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.010 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion:109 Resp: 263671

Ion	Ratio	Lower	Upper
109	100		
83	15.1	0.0	43.8

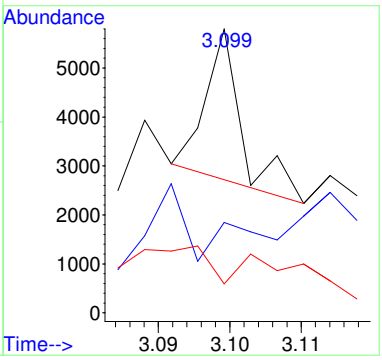


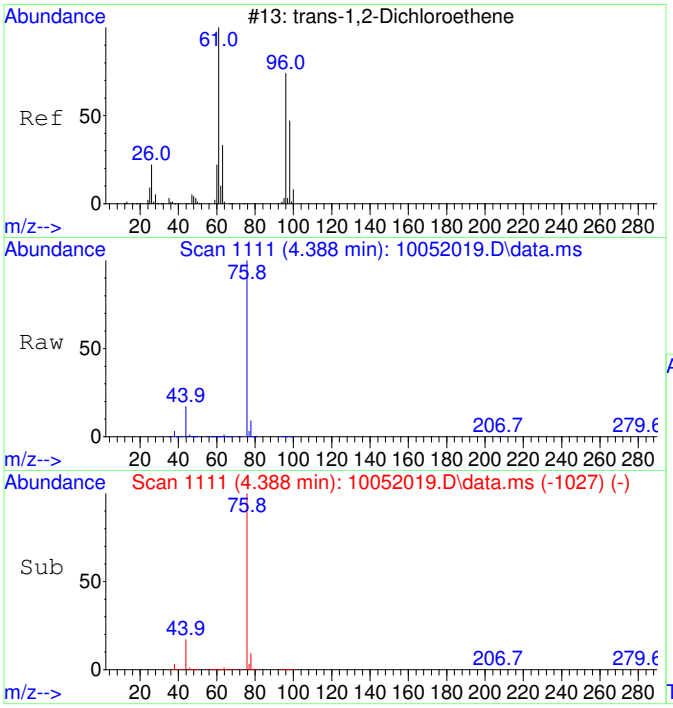


#26
1,1-Dichloroethene SCAN
Concen: 90.34 ug/L
RT: 3.099 min Scan# 811
Delta R.T. -0.008 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 61 Resp: 988

Ion	Ratio	Lower	Upper
61	100		
96	136.3	33.1	93.1#
98	163.6	11.2	71.2#

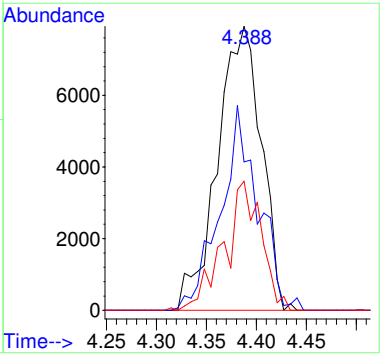


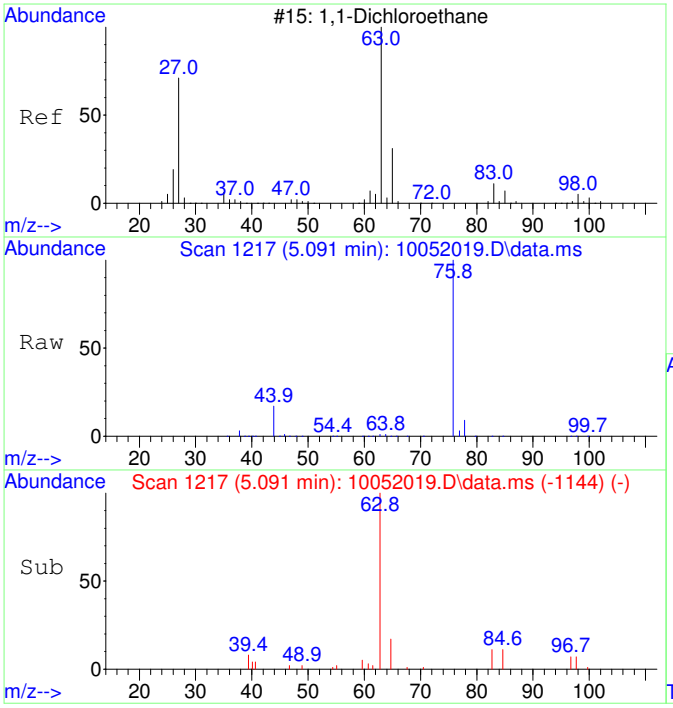


#27
trans-1,2-Dichloroethene SCAN
Concen: 1793.58 ug/L
RT: 4.388 min Scan# 1111
Delta R.T. -0.013 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 61 Resp: 24272

Ion	Ratio	Lower	Upper
61	100		
96	61.7	49.0	109.0
98	38.4	20.5	80.5

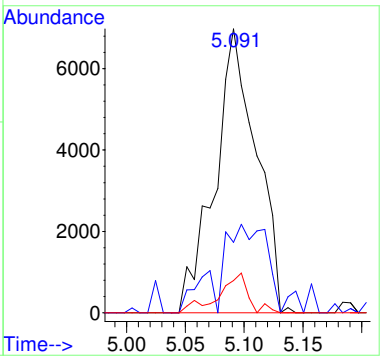


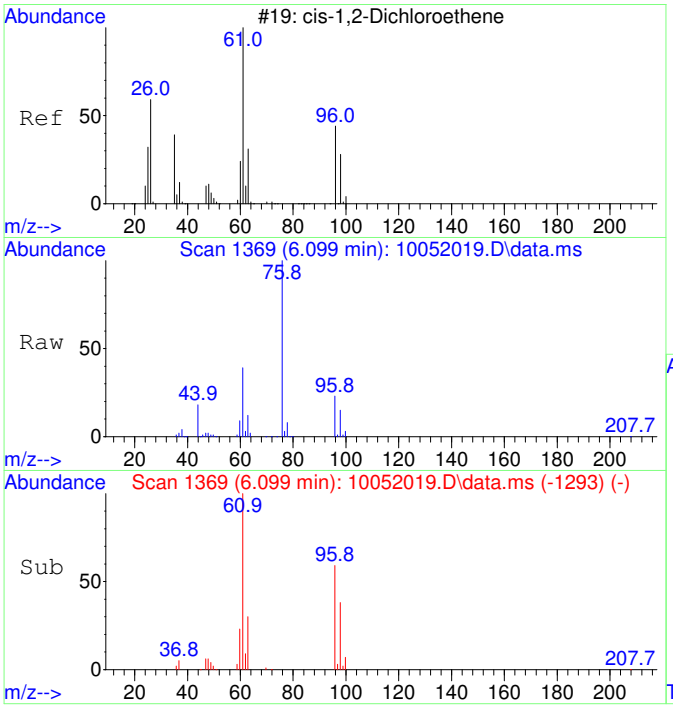


#28
1,1-Dichloroethane SCAN
Concen: 1093.13 ug/L
RT: 5.091 min Scan# 1217
Delta R.T. -0.013 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 63 Resp: 17120

Ion	Ratio	Lower	Upper
63	100		
65	26.3	1.3	61.3
83	6.3	0.0	45.9

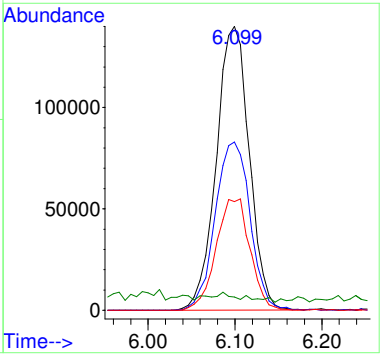


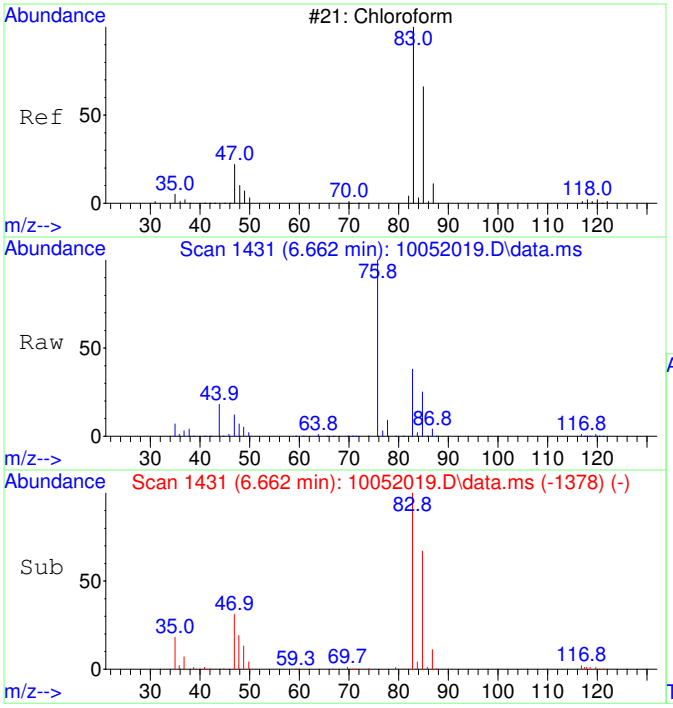


#29
cis-1,2-Dichloroethene SCAN
Concen: 21975.52 ug/L
RT: 6.099 min Scan# 1369
Delta R.T. 0.007 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 61 Resp: 368744

Ion	Ratio	Lower	Upper
61	100		
96	62.7	39.9	99.9
98	40.5	13.5	73.5
64	2.7	4.5	64.5#

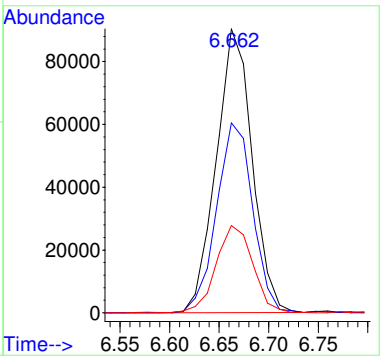


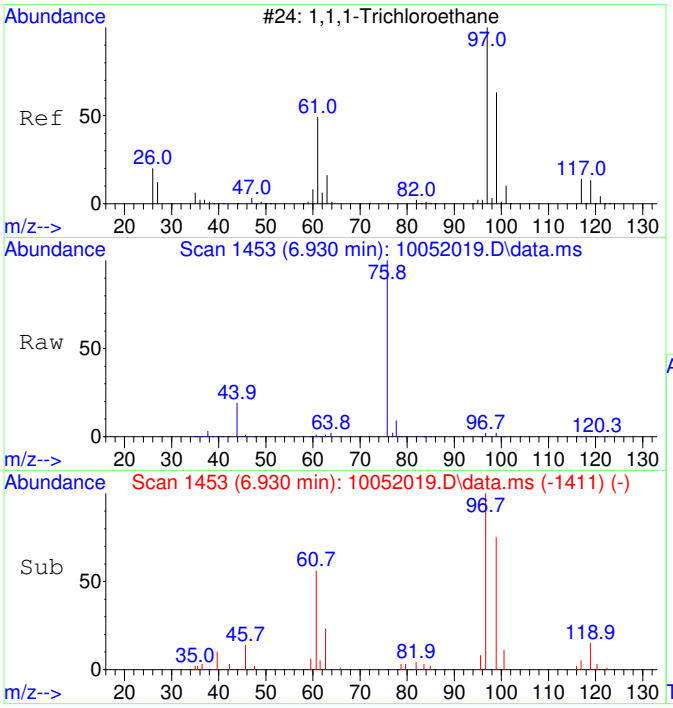


#30
Chloroform SCAN
Concen: 12535.77 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. -0.000 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 83 Resp: 228151

Ion	Ratio	Lower	Upper
83	100		
85	68.2	34.6	94.6
47	31.6	0.0	53.4

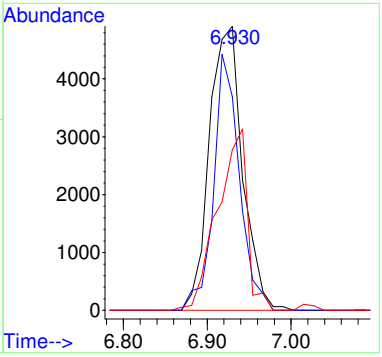


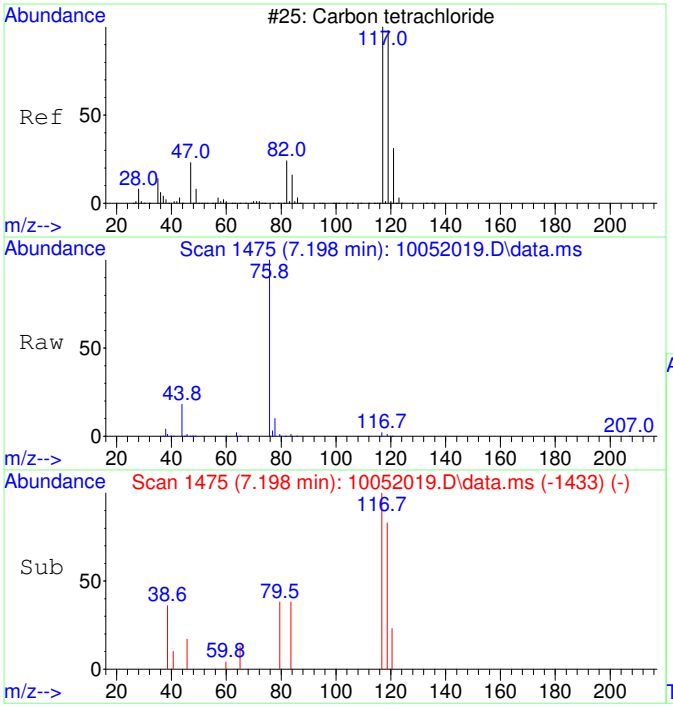


#31
1,1,1-Trichloroethane SCAN
Concen: 814.39 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. 0.012 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 97 Resp: 13507

Ion	Ratio	Lower	Upper
97	100		
99	0.0	43.6	103.6#
61	57.4	18.0	78.0

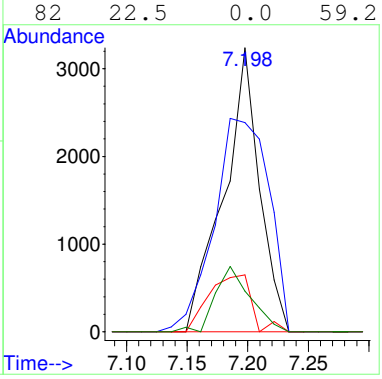


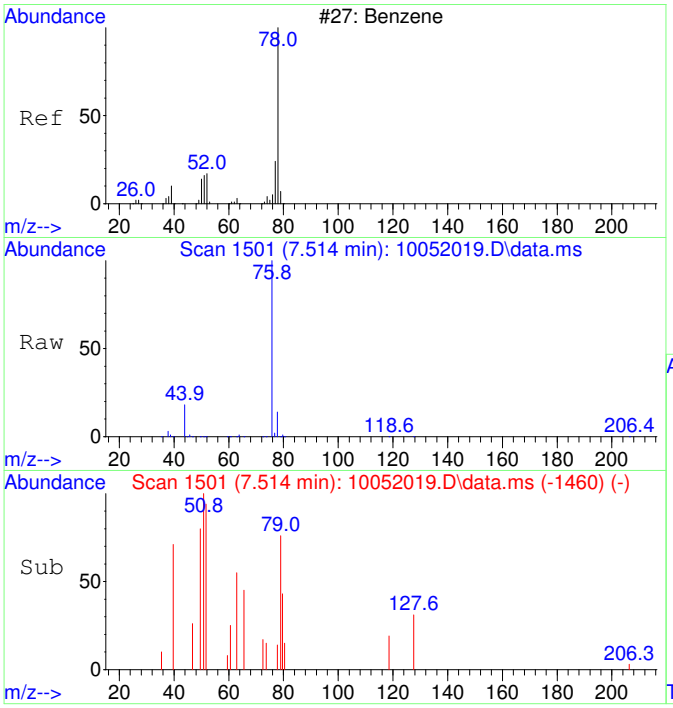


#32
Carbon tetrachloride SCAN
Concen: 388.26 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion:117 Resp: 6717

Ion	Ratio	Lower	Upper
117	100		
119	114.2	75.5	135.5
121	24.0	0.0	58.8
82	22.5	0.0	59.2

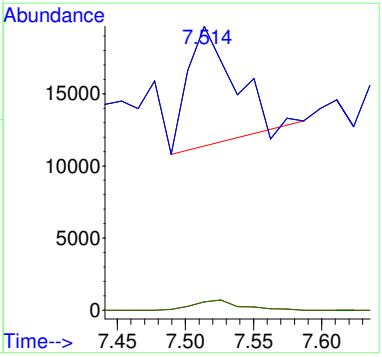


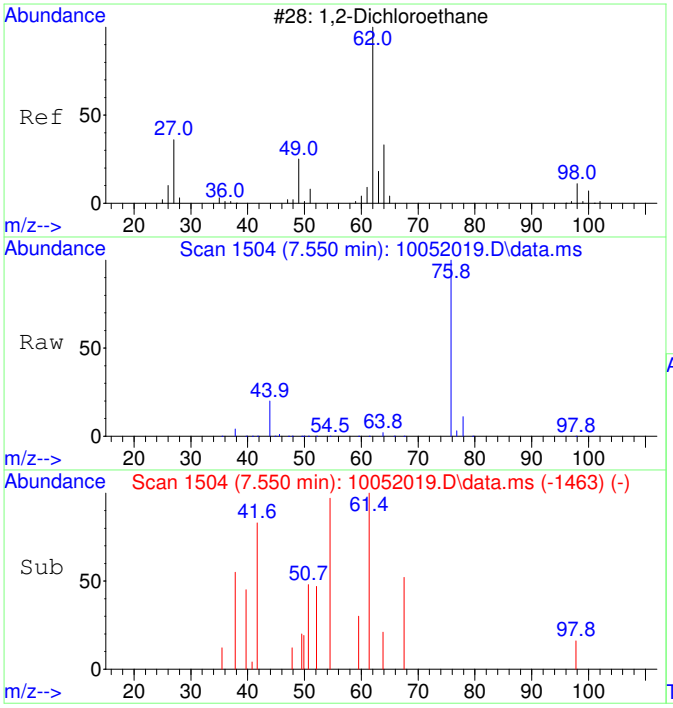


#33
Benzene SCAN
Concen: 434.79 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. -0.000 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 78 Resp: 19855

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	8.5	0.0	47.9
51	8.5	0.0	44.1

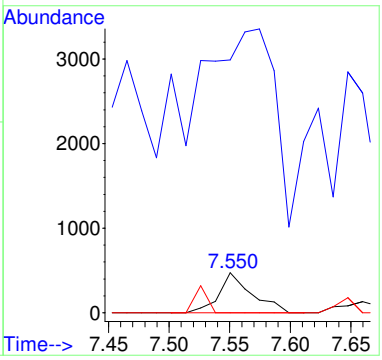


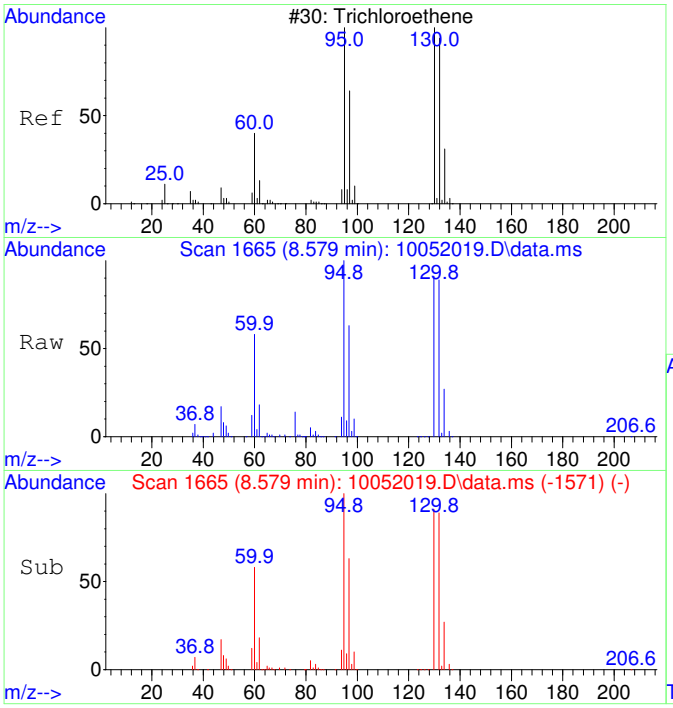


#34
1,2-Dichloroethane SCAN
Concen: 53.08 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. -0.000 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 62 Resp: 895

Ion	Ratio	Lower	Upper
62	100		
64	0.0	5.2	65.2#
49	0.0	3.9	63.9#

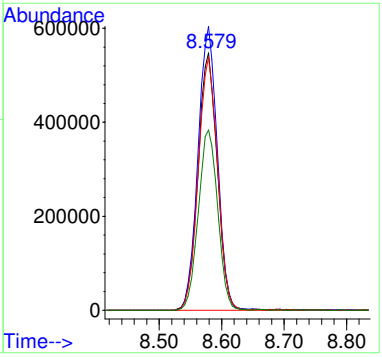


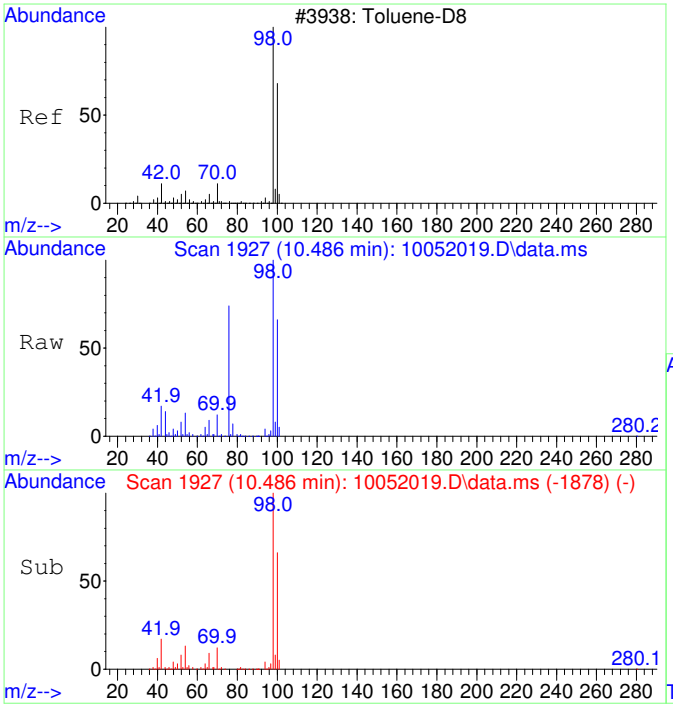


#35
Trichloroethene SCAN
Concen: 93635.61 ug/L
RT: 8.579 min Scan# 1665
Delta R.T. 0.011 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion:130 Resp: 1175052

Ion	Ratio	Lower	Upper
130	100		
95	110.3	60.5	120.5
132	97.7	59.6	119.6
97	70.2	28.2	88.2

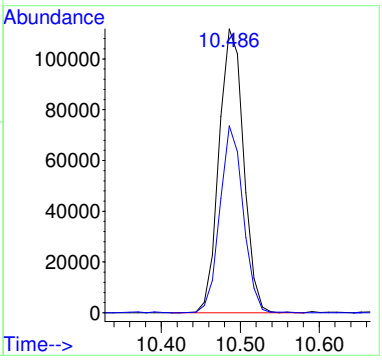


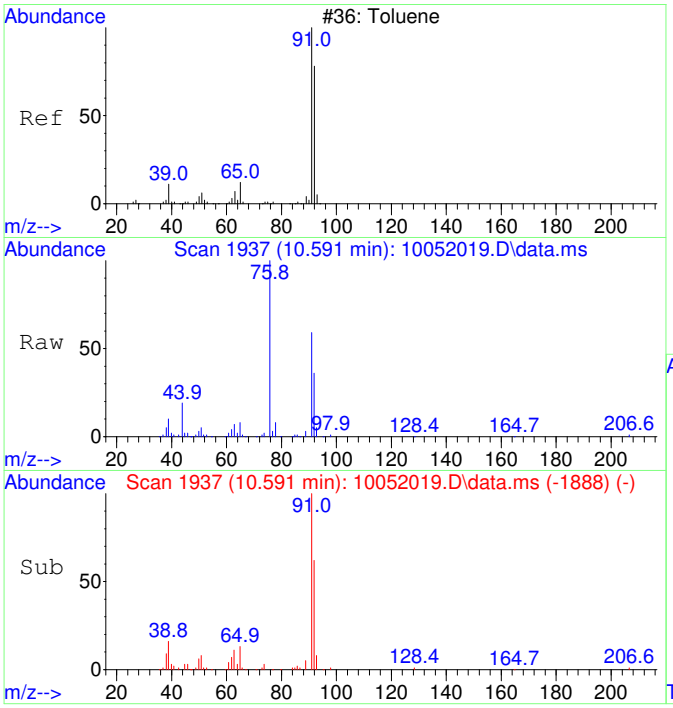


#36
Toluene-d8 SCAN
Concen: 4782.91 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.010 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 98 Resp: 240872

Ion	Ratio	Lower	Upper
98	100		
100	62.7	40.0	100.0

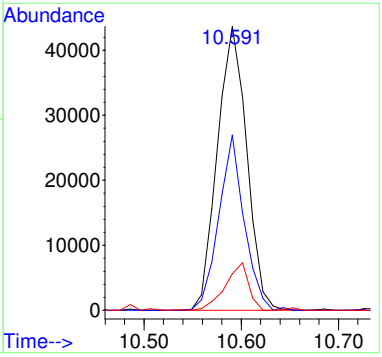


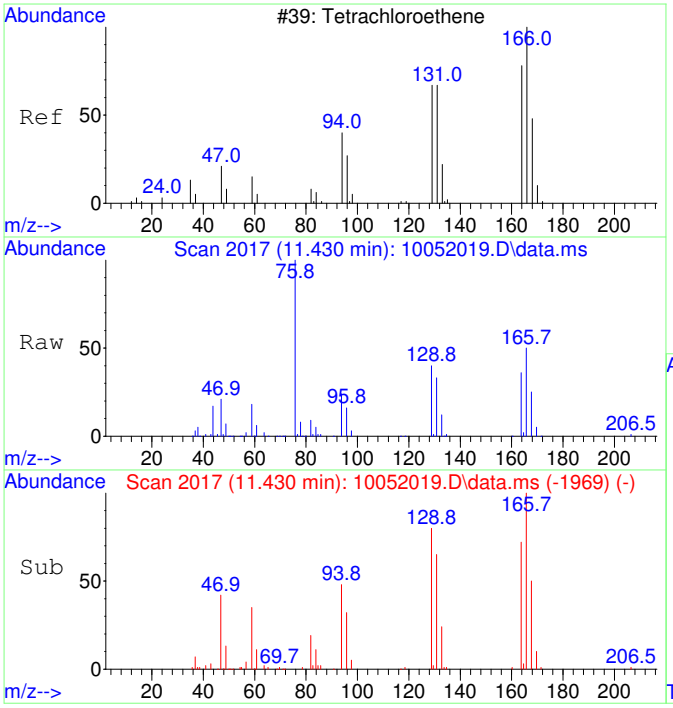


#37
Toluene SCAN
Concen: 1419.47 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.010 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 91 Resp: 91548

Ion	Ratio	Lower	Upper
91	100		
92	53.4	28.3	88.3
65	13.3	0.0	41.0

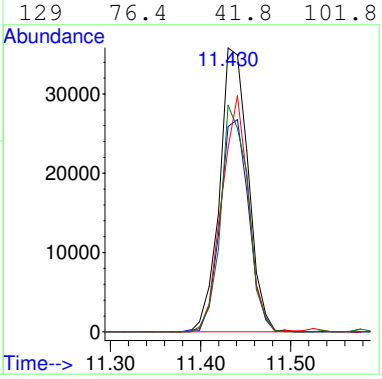


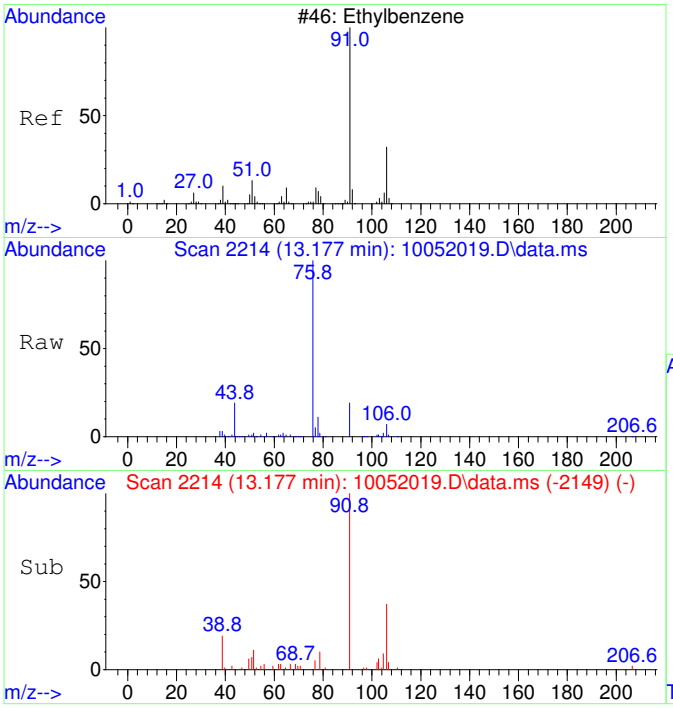


#39
Tetrachloroethene SCAN
Concen: 5104.92 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. -0.000 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion:166 Resp: 79099

Ion	Ratio	Lower	Upper
166	100		
164	75.0	50.9	110.9
131	77.6	38.7	98.7
129	76.4	41.8	101.8

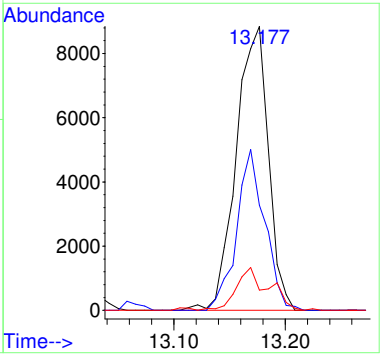


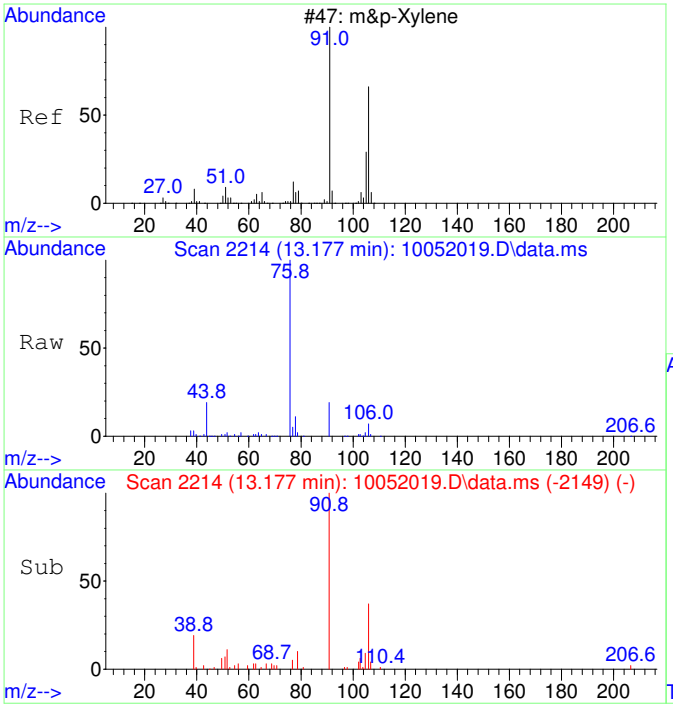


#42
Ethylbenzene SCAN
Concen: 151.22 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 91 Resp: 17768

Ion	Ratio	Lower	Upper
91	100		
106	49.6	23.1	83.1
51	15.1	0.0	40.1

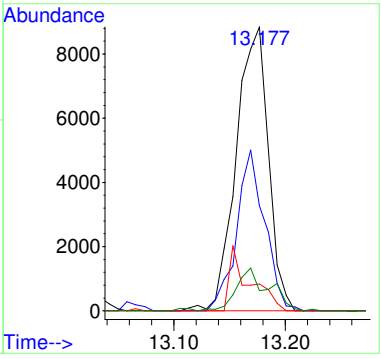


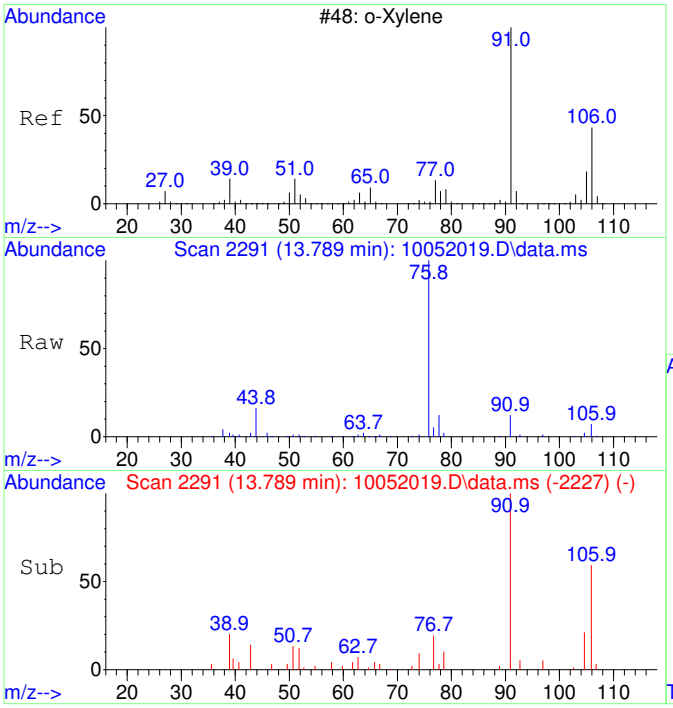


#43
m&p-Xylene SCAN
Concen: 151.22 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 91 Resp: 17768

Ion	Ratio	Lower	Upper
91	100		
106	49.6	23.1	83.1
105	0.0	0.0	54.7
51	15.1	0.0	40.1

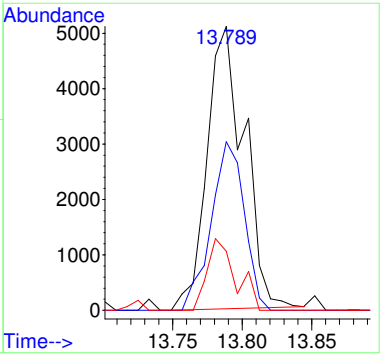


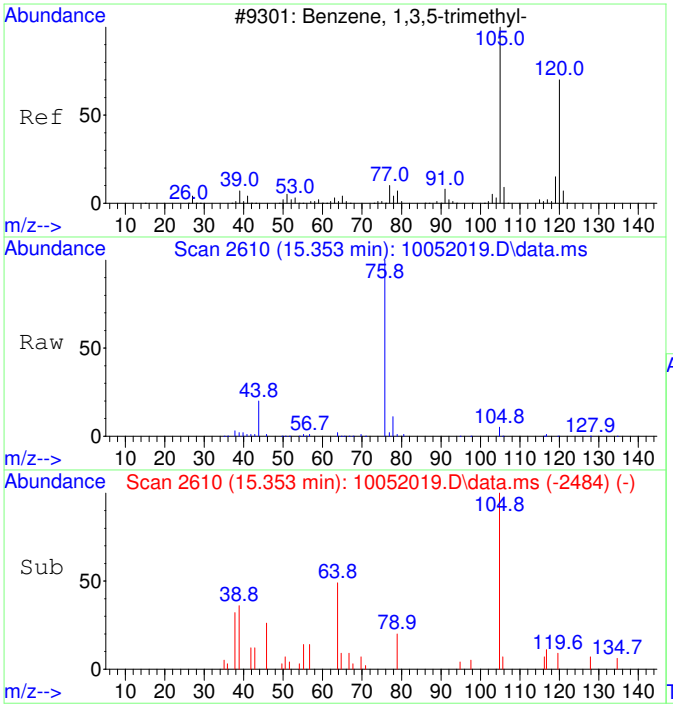


#44
o-Xylene SCAN
Concen: 151.51 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.008 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion: 91 Resp: 9529

Ion	Ratio	Lower	Upper
91	100		
106	52.9	18.0	78.0
105	19.4	0.0	56.6

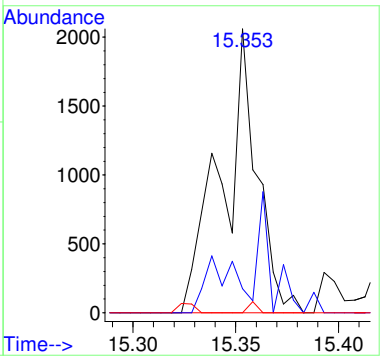


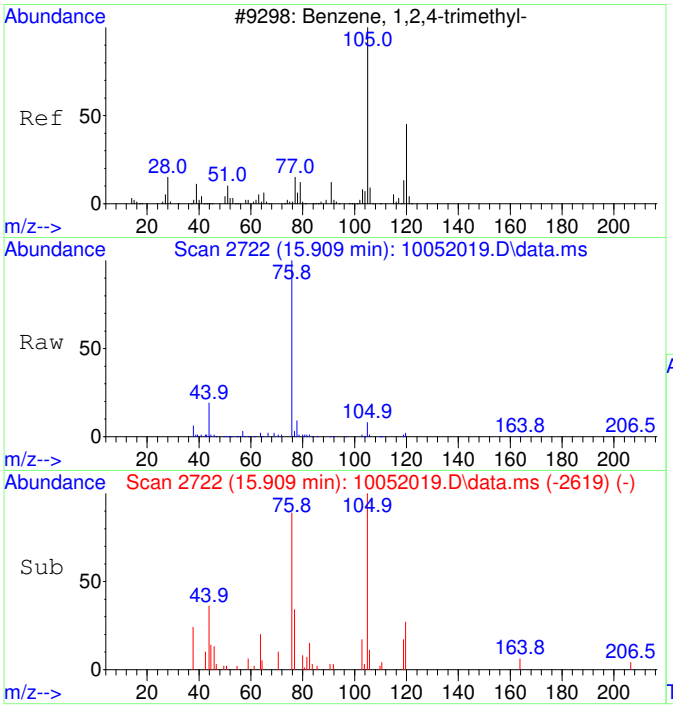


#46
1,3,5-Trimethylbenzene SCAN
Concen: 36.98 ug/L
RT: 15.353 min Scan# 2610
Delta R.T. 0.010 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion:105 Resp: 2451

Ion	Ratio	Lower	Upper
105	100		
120	9.6	18.3	78.3#
119	0.0	0.0	43.1

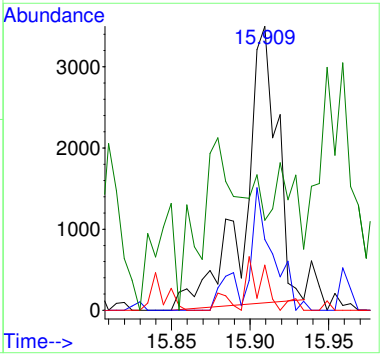




#47
1,2,4-Trimethylbenzene SCAN
Concen: 73.37 ug/L
RT: 15.909 min Scan# 2722
Delta R.T. 0.010 min
Lab File: 10052019.D
Acq: 5 Oct 2020 16:58

Tgt Ion:105 Resp: 4976

Ion	Ratio	Lower	Upper
105	100		
120	25.6	16.9	76.9
119	9.0	0.0	41.9
77	0.0	0.0	42.3



SEQUENCE

S20J009

Sequence Date: 10/06/2020

Instrument: AG5975CV

Sequence Analyses:

VOCs, Passive Samplers

ANALYST / REVIEWER - DATA REVIEW CHECKLIST

BATCH #:	B20J004	SEQUENCE #:	S20J009 10/06/20
BATCH #:		ANALYSIS:	VOA Passive Air.

	CHECKLIST ITEM	N/A	ANALYST Y/N	REVIEWER Y/N	IDENTIFY OUTLIERS / COMMENTS
DOCUMENTATION	ANALYST: Bench sheet(s) attached? REVIEWER: Bench sheet(s) reviewed?	✔			
	ANALYST: Sequence log(s) attached? REVIEWER: Sequence log(s) reviewed?		Y	Y	
	ANALYST: Every run has a PDF in LIMS? REVIEWER: Every PDF reviewed?		Y	Y	
INITIAL CALIBRATION	Date of Initial Calibration used: If applicable, note date of "Last Update" in Comments.	Fri Aug 21 08:33:54 2020			
	Initial Calibration ID (LIMS number):	2008017			
	ICAL within QC criteria?	✔			
	SCV within QC criteria?	✔			
INSTRUMENT / QC CHECKS	Tune or degradation checks within QC criteria?		Y	Y	
	CCV(s) within QC criteria?		Y	Y	
	QLS(s) within QC criteria?		Y	Y	
	CB(s) or storage blank(s) within QC criteria?	✔			
	Other instrument checks within QC criteria? Specify if applicable.	✔			
BATCH QCs	Method blanks < 1/2 QL?	✔			
	LCS(s) or SRM(s) within QC criteria?	✔			
	MSs/MSDs and/or DUPs within QC criteria?	✔			
	Other method-specific QCs within QC criteria? Specify if applicable.	✔			

ANALYST / REVIEWER - DATA REVIEW CHECKLIST

BATCH #:	B20J004	SEQUENCE #:	S20J009 10/06/20
BATCH #:		ANALYSIS:	VOA Passive Air.

	CHECKLIST ITEM	N/A	ANALYST Y/N	REVIEWER Y/N	IDENTIFY OUTLIERS / COMMENTS
IS / SS	Internal standards within QC criteria?	☐	Y	Y	
	Surrogates within QC criteria?	☐	Y	Y	
SAMPLE DATA	Were samples prepared & analyzed within holding time?	☐	Y	Y	
	If samples need to be re-run, were RE(s) made in LIMS?	☐	Y	Y	
	Do any samples need to be re-digested or re-extracted?	✔			
	Were all data qualifiers appropriately applied?	✔			
	Are problems, anomalies, discrepancies documented in LIMS? Specify if applicable.	✔			
MANUAL INT	Were manual integrations performed and documented? Specify if applicable.	☐	Y	Y	

APPROVALS	ANALYST INITIALS & DATE:	TD 10/06/20
	REVIEWED BY:	Rajabi, Ziyad Digitally signed by Rajabi, Ziyad Date: 2020.10.07 16:06:01 -07'00' SIGN HERE

COMMENTS

Custom analyte list.

Injection Log

Operator: TD
Directory: C:\msdchem\1\Ravioli Data\2020\100620\

Vial	File Name	Mult	Sample Info	Misc Info	Date Acquired
1	10062001.D	1	S20J009-IBL1		6 Oct 2020 8:28
2	10062002.D	1	S20J009-TUN1	BFB 2040028	6 Oct 2020 8:49
3	10062003.D	1	S20J009-CCV1	2030070 5 mg/L	6 Oct 2020 8:59
4	10062004.D	1	S20J009-CRL1	2030073 0.05 mg/L	6 Oct 2020 9:23
5	10062005.D	1	2009036-02		6 Oct 2020 9:46
6	10062006.D	1	2009036-03		6 Oct 2020 10:10
7	10062007.D	1	S20J009-IBL2		6 Oct 2020 10:44
8	10062008.D	10	2009036-01RE1	10X DL; 90-10	6 Oct 2020 11:07
9	10062009.D	10	2009036-02RE1	10X DL; 90-10	6 Oct 2020 11:31
10	10062010.D	10	2009036-03RE1	10X DL; 90-10	6 Oct 2020 11:54

GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\Ravioli Data\2020\100620\10062002.D
Tune Time : 6 Oct 2020 8:49

Daily Calibration File : C:\msdchem\1\Ravioli Data\2020\100620\10062003.D

447660

File	Sample	Surrogate Recovery %	Internal Standard Responses	
10062003.D				
	S20J009-CC	97	447660	
10062004.D				
	S20J009-CR	1*	488006	
10062005.D				
	2009036-02	88	466211	
10062006.D				
	2009036-03	87	592390	
10062007.D				
	S20J009-IBL2	86	564468	
10062008.D				
	2009036-01RE1	86	524615	10X DL
10062009.D				
	2009036-02RE1	86	535493	10X DL
10062010.D				
	2009036-03RE1	87	487362	10X DL

(fails) - fails 12hr time check * - fails criteria

Created: Tue Oct 06 12:26:40 2020 AG5975C

SEQUENCE DATA

S20J009

S20J009-IBL1

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062001.D
Acq On : 6 Oct 2020 8:28
InstName : AG5975C
Operator : TD
Sample : S20J009-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 06 08:56:54 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

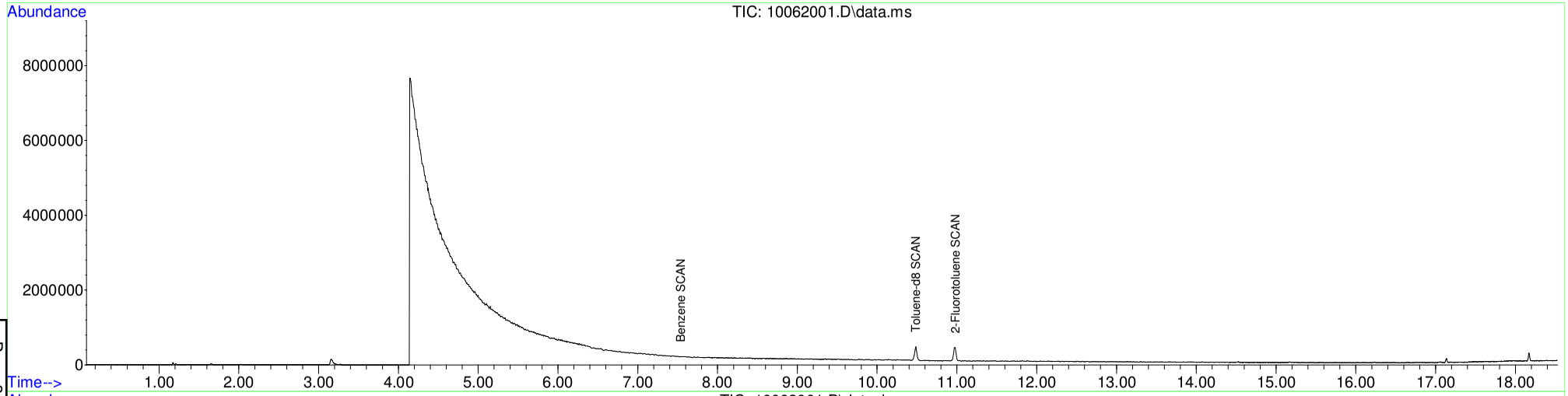
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	608843	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	518919	4353.80	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 87.08%			
Target Compounds						Qvalue
9] Benzene	7.503	78	4554	44.02	ug/L #	1
25) 2-Fluorotoluene SCAN	10.979	109	304964	5138.32	ug/L	100
33) Benzene SCAN	7.538	78	26469	502.91	ug/L #	91
36) Toluene-d8 SCAN	10.486	98	275460	4745.76	ug/L	93

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062001.D
Acq On : 6 Oct 2020 8:28
InstName : AG5975C
Operator : TD
Sample : S20J009-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 06 08:56:54 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration



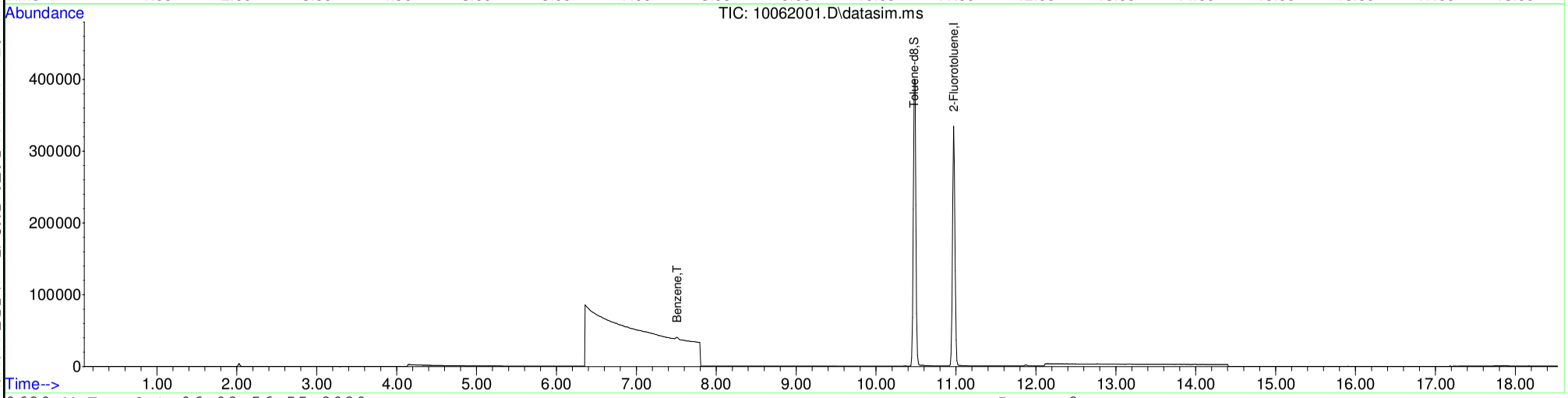


Table of Contents

S20J009-TUN1

Table of Contents

```
Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062002.D
Acq On    :  6 Oct 2020   8:49
Operator  : TD
Sample    : S20J009-TUN1
Misc      : BFB   2040028
ALS Vial  : 2   Sample Multiplier: 1
InstName  : AG5975C

Integration File: Ravioli.P

Method    : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Title     : Volatile Organic Analysis  -  Passive samplers
Last Update  : Fri Aug 21 08:33:54 2020
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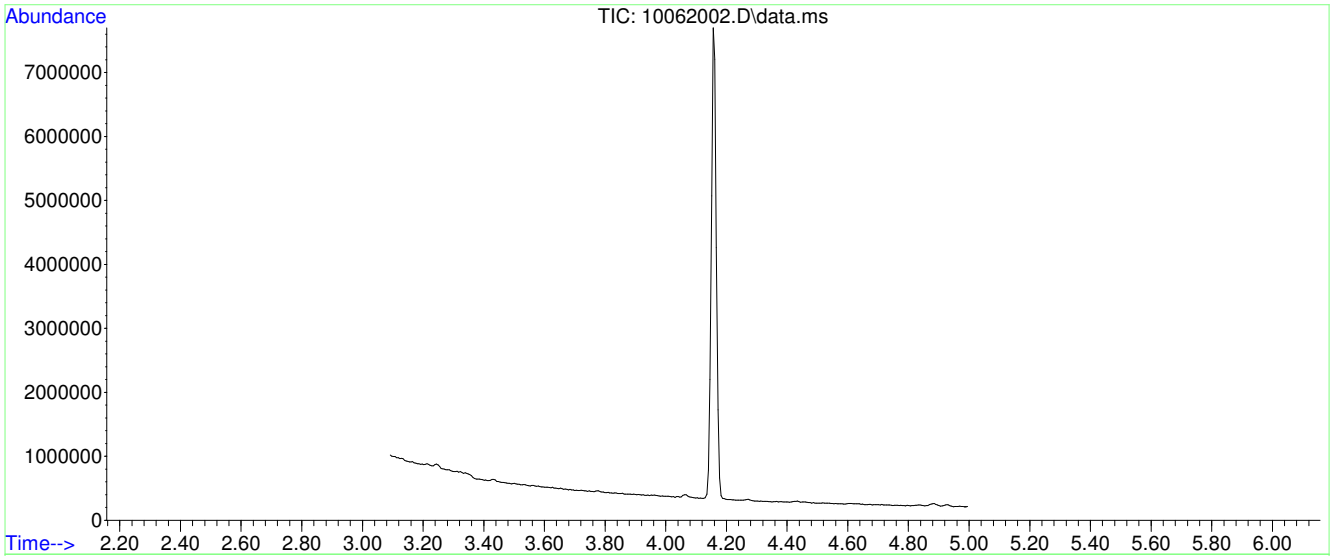
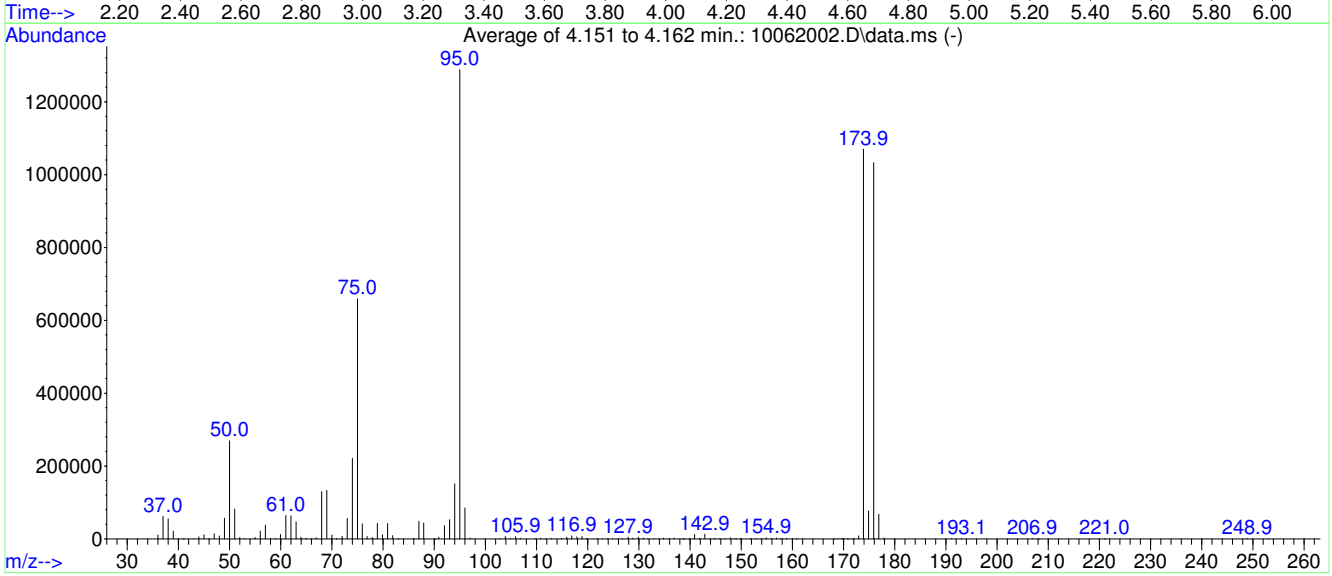




AutoFind: Scans 203, 204, 205; Background Corrected with Scan 197

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.9	269120	PASS
75	95	30	60	51.2	659182	PASS
95	95	100	100	100.0	1287765	PASS
96	95	5	9	6.6	84373	PASS
173	174	0.00	2	0.8	8121	PASS
174	95	50	120	83.1	1069504	PASS
175	174	5	9	7.2	76619	PASS
176	174	95	101	96.6	1032896	PASS
177	176	5	9	6.6	67672	PASS

Average of 4.151 to 4.162 min.: 10062002.D\data.ms
S20J009-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	10678	48.00	8048	59.95	12091	70.00	9988
37.00	61277	49.00	56565	61.00	63715	70.90	116
38.00	55243	50.00	269120	62.00	63208	71.05	337
39.00	21110	51.00	81784	63.00	46803	72.00	6871
39.95	671	52.00	3535	63.95	4891	73.00	55880
40.95	35	52.95	118	64.90	134	74.00	220992
43.10	578	55.00	3485	65.10	288	75.00	659182
44.00	5427	56.00	21387	66.00	103	75.95	40640
45.00	10946	57.00	37681	66.95	3138	76.90	6213
46.00	898	58.05	1500	68.00	129211	77.90	3456
47.00	13923	59.05	299	69.00	132437	78.90	42624

Average of 4.151 to 4.162 min.: 10062002.D\data.ms
S20J009-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
79.90	11287	94.00	150499	111.85	702	124.90	347
80.90	41835	95.00	1.28777e+006	112.90	1216	125.95	484
81.90	9063	96.00	84373	114.90	1193	126.85	427
83.00	977	97.00	2286	115.90	4552	127.90	4485
86.00	1251	102.90	675	116.90	8304	128.85	2394
87.00	48368	103.90	6289	117.90	5045	129.90	4335
87.95	43584	104.90	1709	118.90	6602	130.90	1748
90.10	52	105.90	5723	119.80	238	131.80	127
90.90	4849	106.85	1257	121.85	227	132.95	302
92.00	36371	109.85	850	122.85	405	133.95	429
93.00	52096	110.85	1219	123.90	676	134.85	2405

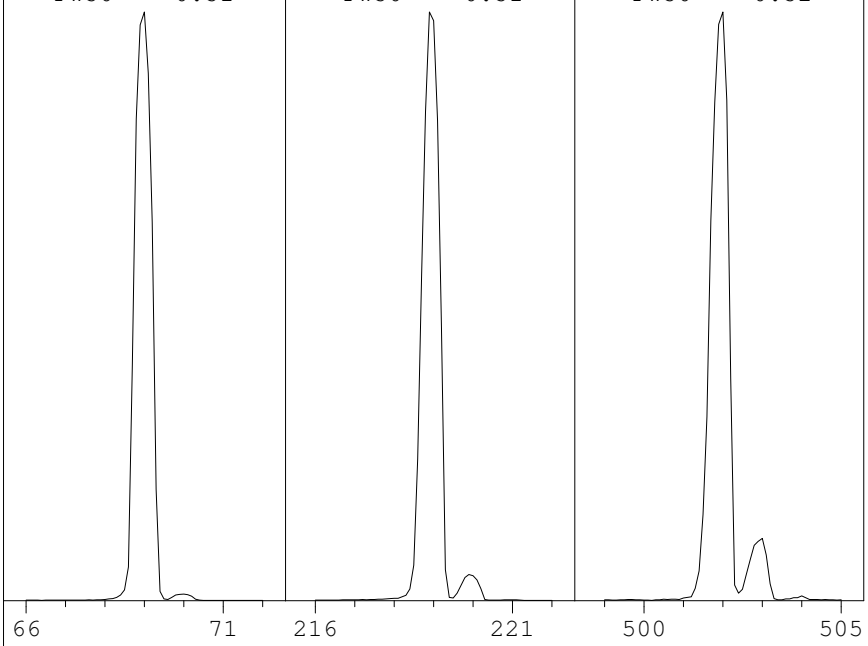
Average of 4.151 to 4.162 min.: 10062002.D\data.ms
S20J009-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
135.90	398	146.90	580	157.80	65	171.10	239
136.90	2118	147.90	2878	158.00	205	171.80	363
138.60	63	148.80	671	158.90	1412	172.05	767
138.95	288	149.10	153	160.00	83	172.95	8121
139.85	799	149.90	1333	160.90	1338	173.90	1.0695e+006
140.90	12045	151.85	476	168.25	130	174.90	76619
141.85	1626	152.85	830	168.90	99	175.90	1.0329e+006
142.90	13112	153.90	676	169.60	64	176.90	67672
143.90	781	154.90	2945	169.85	192	177.90	2035
144.85	993	155.95	361	170.10	115	191.05	218
145.85	1603	156.90	2044	170.80	110	193.05	220

Average of 4.151 to 4.162 min.: 10062002.D\data.ms
S20J009-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
206.90	325						
208.10	50						
221.00	31						
248.90	149						
253.10	65						

Mass	69.00	Mass	218.90	Mass	502.00
Ab	509983	Ab	310821	Ab	8697
Pw50	0.51	Pw50	0.51	Pw50	0.52

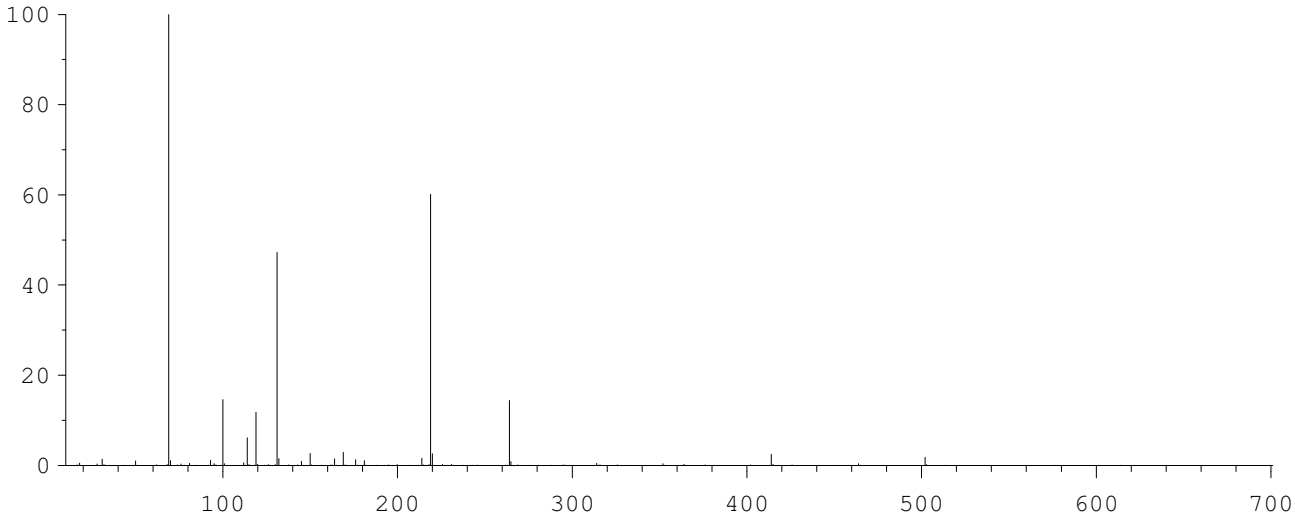


Ion Pol	Pos	MassGain	-1190
		MassOffs	-39
Emission	34.6	AmuGain	978
EIEnrgy	69.9	AmuOffs	127.94
Filament	1	Wid219	-0.003
		DC Pol	Pos
Repeller	29.79		
IonFcus	69.3	HEDEnab	On
EntLens	0.0	EMVolts	1329
EntOffs	Var		
		Samples	8
PFTBA	Open	Averages	3
		Stepsize	0.10

Temperatures and Pressures:

MS Source	230	Turbo Speed	100
MS Quad	150	HiVac	0.00e00

Scan: 10.00 - 701.00 Samples: 8 Thresh: 100 Step: 0.10
112 peaks Base: 69.00 Abundance: 478400



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	478400	100.00	70.00	5077	1.06
219.00	287744	60.15	220.00	12241	4.25
502.00	8378	1.75	503.00	772	9.21

Air/Water Check: H20~0.54% N2~0.32% O2~0.20% CO2~0.03% N2/H2O~58.83%

Column(1) Flow: 1 Column(2): -1.79769e+308 ml/min. Interface Temp: 300

Ramp Criteria:
Ion Focus Maximum 90 volts using ion 502; EM Gain 51965
Repeller Maximum 30 volts using ion 219; Gain Factor 0.52

MassGain Values(Samples): -1178(3) -1176(2) -1156(1) -1125(0) -1039(FS)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset:	127.9	127.9	127.9	127.9	127.9	127.9	127.9
Entrance Lens Offset:	16.8	14.1	14.3	15.6	16.1	16.8	16.8
Target Abund(%):	1.0	100.0	45.0	55.0	2.5	2.0	
Actual Tune Abund(%):	1.0	100.0	47.2	60.1	2.4	1.8	

S20J009-CCV1

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062003.D
Acq On : 6 Oct 2020 8:59
InstName : AG5975C
Operator : TD
Sample : S20J009-CCV1
Misc : 2030070 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 06 09:18:04 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.03min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	2-Fluorotoluene	1.000	1.000	0.0	66	0.01
2	T	1,1-Dichloroethene	0.200	0.213	-6.5	75	0.00
3	T	trans-1,2-Dichloroethene	0.231	0.235	-1.7	73	-0.02
4	T	1,1-Dichloroethane	0.287	0.291	-1.4	72	0.00
5	T	cis-1,2-Dichloroethene	0.303	0.304	-0.3	71	0.00
6	T	Chloroform	0.310	0.300	3.2	68	0.00
7	T	1,1,1-Trichloroethane	0.337	0.325	3.6	68	0.00
8	T	Carbon tetrachloride	0.317	0.302	4.7	67	0.00
9	T	Benzene	0.850	0.809	4.8	69	0.00
10	T	1,2-Dichloroethane	0.303	0.298	1.7	70	0.00
11	T	Trichloroethene	0.256	0.244	4.7	68	0.00
12	S	Toluene-d8	0.979	0.954	2.6	68	0.01
13	T	Toluene	1.248	1.145	8.3	68	0.01
14	T	1,1,2-Trichloroethane	0.272	0.261	4.0	68	0.01
15	T	Tetrachloroethene	0.361	0.334	7.5	64	0.02
16	T	Chlorobenzene	0.894	0.837	6.4	65	0.02
17	T	1,1,1,2-Tetrachloroethane	0.320	0.299	6.6	65	0.02
18	T	Ethylbenzene	1.519	1.377	9.3	64	0.02
19	T	m&p-Xylene	1.187	1.043	12.1	64	0.00
20	T	o-Xylene	1.268	1.123	11.4	62	0.00
21	T	1,1,2,2-Tetrachloroethane	0.562	0.514	8.5	64	0.00
22	T	1,3,5-Trimethylbenzene	1.350	1.179	12.7	60	0.00
23	T	1,2,4-Trimethylbenzene	1.402	1.180	15.8	60	0.00
24	T	Naphthalene	2.216	1.829	17.5	57	0.00
25		2-Fluorotoluene SCAN	0.487	0.497	-2.1	68	0.01
26		1,1-Dichloroethene SCAN	0.104	0.127	-22.1	82	0.00
27		trans-1,2-Dichloroethene SC	0.128	0.132	-3.1	68	-0.02
28		1,1-Dichloroethane SCAN	0.148	0.177	-19.6	79	-0.02
29		cis-1,2-Dichloroethene SCAN	0.159	0.171	-7.5	72	0.00
30		Chloroform SCAN	0.172	0.165	4.1	64	0.00
31		1,1,1-Trichloroethane SCAN	0.157	0.173	-10.2	73	0.00
32		Carbon tetrachloride SCAN	0.164	0.152	7.3	62	0.00
33		Benzene SCAN	0.432	0.458	-6.0	70	0.00
34		1,2-Dichloroethane SCAN	0.160	0.169	-5.6	71	0.01
35		Trichloroethene SCAN	0.119	0.119	0.0	67	0.01
36		Toluene-d8 SCAN	0.477	0.487	-2.1	68	0.01
37		Toluene SCAN	0.610	0.613	-0.5	67	0.01
38		1,1,2-Trichloroethane SCAN	0.137	0.134	2.2	65	0.02
39		Tetrachloroethene SCAN	0.147	0.157	-6.8	71	0.01
40		Chlorobenzene SCAN	0.417	0.419	-0.5	67	0.00
41		1,1,1,2-Tetrachloroethane S	0.154	0.137	11.0	59	0.02
42		Ethylbenzene SCAN	1.112	1.084	2.5	65	0.00
43		m&p-Xylene SCAN	1.112	1.084	2.5	65	0.00
44		o-Xylene SCAN	0.595	0.566	4.9	63	0.00
45		1,1,2,2-Tetrachloroethane S	0.290	0.290	0.0	66	0.00
46		1,3,5-Trimethylbenzene SCAN	0.627	0.580	7.5	62	0.00
47		1,2,4-Trimethylbenzene SCAN	0.642	0.582	9.3	60	0.00
48		Naphthalene SCAN	0.971	0.833	14.2	57	0.00

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062003.D
Acq On : 6 Oct 2020 8:59
InstName : AG5975C
Operator : TD
Sample : S20J009-CCV1
Misc : 2030070 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 06 09:18:04 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

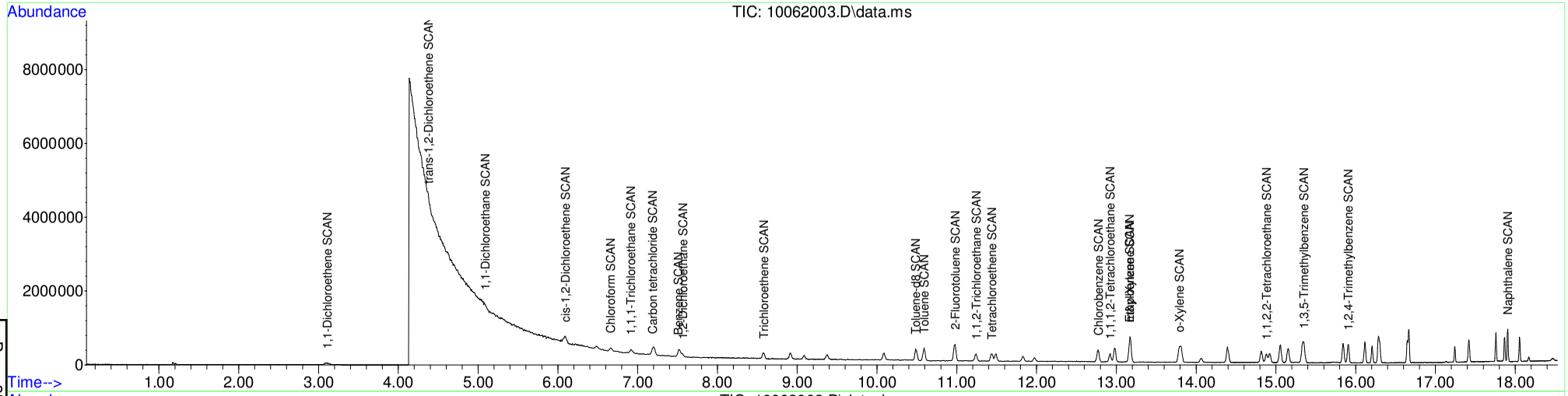
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.980	109	447660	5000.00 ug/L	0.01
System Monitoring Compounds					
12) Toluene-d8	10.487	98	427116	4873.85 ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 97.48%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.093	61	95355	5334.31 ug/L	82
3] trans-1,2-Dichloroethene	4.376	61	105408	5103.73 ug/L	98
4] 1,1-Dichloroethane	5.092	63	130254	5066.44 ug/L	98
5] cis-1,2-Dichloroethene	6.094	61	135959	5009.94 ug/L	99
6] Chloroform	6.664	83	134339	4836.41 ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	145382	4819.45 ug/L	99
8] Carbon tetrachloride	7.187	117	135110	4758.72 ug/L	100
9] Benzene	7.515	78	362375	4764.34 ug/L	99
10] 1,2-Dichloroethane	7.552	62	133234	4907.02 ug/L	99
11] Trichloroethene	8.575	130	109422	4778.12 ug/L	93
13] Toluene	10.582	91	512527	4587.37 ug/L	100
14] 1,1,2-Trichloroethane	11.232	97	117056	4808.21 ug/L	97
15] Tetrachloroethene	11.442	166	149598	4626.76 ug/L	100
16] Chlorobenzene	12.773	112	374568	4682.12 ug/L	92
17] 1,1,1,2-Tetrachloroethane	12.924	131	133719	4664.80 ug/L	99
18] Ethylbenzene	12.980	91	616558	4533.73 ug/L	98
19] m&p-Xylene	13.170	91	933727	8784.92 ug/L	96
20] o-Xylene	13.782	91	502907	4428.77 ug/L	96
21] 1,1,2,2-Tetrachloroethane	14.880	83	230013	4570.42 ug/L	100
22] 1,3,5-Trimethylbenzene	15.348	105	527777	4366.65 ug/L	96
23] 1,2,4-Trimethylbenzene	15.904	105	528386	4208.82 ug/L	96
24] Naphthalene	17.906	128	818775	4126.47 ug/L	100
25) 2-Fluorotoluene SCAN	10.979	109	222509	5098.90 ug/L	96
26) 1,1-Dichloroethene SCAN	3.107	61	57012	6151.79 ug/L #	44
27) trans-1,2-Dichloroethe...	4.381	61	58940	5139.53 ug/L	80
28) 1,1-Dichloroethane SCAN	5.084	63	79135	5962.58 ug/L	97
29) cis-1,2-Dichloroethene...	6.093	61	76633	5389.24 ug/L #	77
30) Chloroform SCAN	6.662	83	74016	4799.01 ug/L	90
31) 1,1,1-Trichloroethane ...	6.918	97	77341	5502.80 ug/L	91
32) Carbon tetrachloride SCAN	7.185	117	67987	4637.35 ug/L	95
33) Benzene SCAN	7.514	78	204888	5294.51 ug/L	95
34) 1,2-Dichloroethane SCAN	7.563	62	75782	5303.36 ug/L	87
35) Trichloroethene SCAN	8.579	130	53200	5002.57 ug/L	84
36) Toluene-d8 SCAN	10.486	98	217981	5107.67 ug/L	98
37) Toluene SCAN	10.591	91	274482	5022.13 ug/L	95
38) 1,1,2-Trichloroethane ...	11.242	97	60133	4901.76 ug/L	86
39) Tetrachloroethene SCAN	11.441	166	70355	5358.10 ug/L	94
40) Chlorobenzene SCAN	12.772	112	187530	5021.33 ug/L	87
41) 1,1,1,2-Tetrachloroeth...	12.923	131	61383	4441.22 ug/L	94
42) Ethylbenzene SCAN	13.169	91	485439	4875.30 ug/L	92
43) m&p-Xylene SCAN	13.169	91	485439	4875.30 ug/L	92
44) o-Xylene SCAN	13.789	91	253292	4752.38 ug/L	96
45) 1,1,2,2-Tetrachloroeth...	14.879	83	129737	4992.03 ug/L	98
46) 1,3,5-Trimethylbenzene...	15.352	105	259777	4624.79 ug/L	97
47) 1,2,4-Trimethylbenzene...	15.908	105	260338	4529.59 ug/L	96
48) Naphthalene SCAN	17.905	128	372766	4286.20 ug/L	99

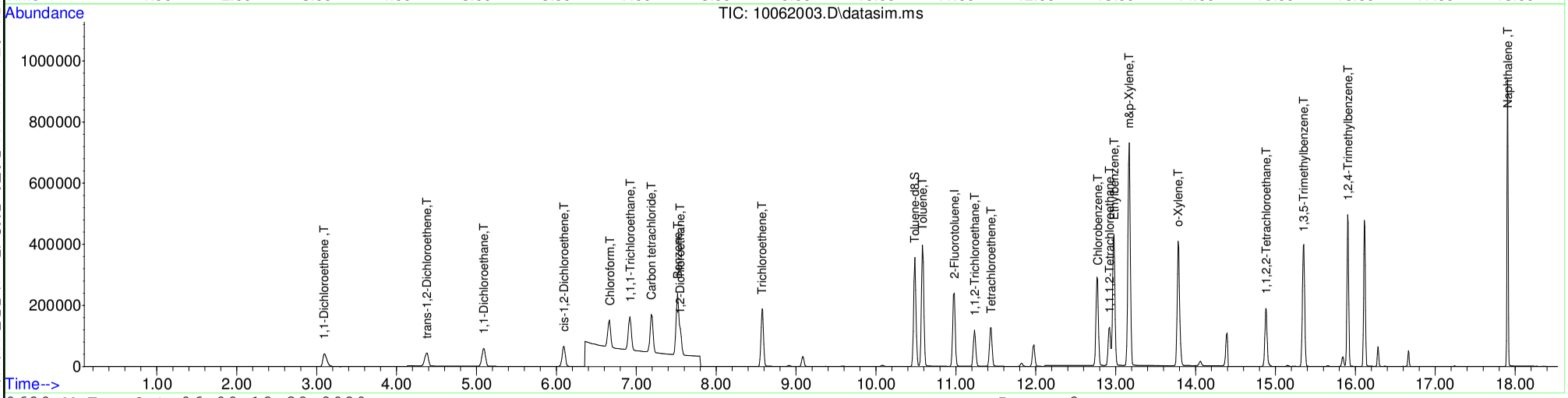
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062003.D
Acq On : 6 Oct 2020 8:59
InstName : AG5975C
Operator : TD
Sample : S20J009-CCV1
Misc : 2030070 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 06 09:18:04 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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S20J009-CRL1

QLS REPORT

Instrument Name: AG5975C
Sample Name: S20J009-CRL1
Misc Info: 2030073 0.05 mg/L
Date Acquired: 10/6/20 9:23
QLast Update: Fri Aug 21 08:33:54 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.970	5000.0	5000.00	100%	60	140	pass
2)	1,1-Dichloroethene	3.090	50.0	50.34	101%	60	140	pass
3)	trans-1,2-Dichloroethene	4.396	50.0	50.10	100%	60	140	pass
4)	1,1-Dichloroethane	5.099	50.0	50.60	101%	60	140	pass
5)	cis-1,2-Dichloroethene	6.094	50.0	49.55	99%	60	140	pass
6)	Chloroform	6.664	50.0	46.47	93%	60	140	pass
7)	1,1,1-Trichloroethane	6.919	50.0	45.07	90%	60	140	pass
8)	Carbon tetrachloride	7.187	50.0	45.14	90%	60	140	pass
10)	1,2-Dichloroethane	7.552	50.0	49.33	99%	60	140	pass
11)	Trichloroethene	8.569	50.0	47.75	95%	60	140	pass
12)	Toluene-d8	10.477	50.0	50.99	102%	60	140	pass
13)	Toluene	10.571	50.0	51.50	103%	60	140	pass
14)	1,1,2-Trichloroethane	11.222	50.0	49.62	99%	60	140	pass
15)	Tetrachloroethene	11.421	50.0	49.37	99%	60	140	pass
16)	Chlorobenzene	12.757	50.0	53.49	107%	60	140	pass
17)	1,1,1,2-Tetrachloroethane	12.908	50.0	51.17	102%	60	140	pass
18)	Ethylbenzene	12.964	50.0	54.32	109%	60	140	pass
19)	m&p-Xylene	13.162	100.0	107.92	108%	60	140	pass
20)	o-Xylene	13.774	50.0	53.34	107%	60	140	pass
21)	1,1,2,2-Tetrachloroethane	14.873	50.0	54.81	110%	60	140	pass
22)	1,3,5-Trimethylbenzene	15.345	50.0	54.58	109%	60	140	pass
23)	1,2,4-Trimethylbenzene	15.896	50.0	56.71	113%	60	140	pass
24)	Naphthalene	17.903	50.0	50.25	100%	60	140	pass

Quantitation Report (Not Reviewed)

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Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062004.D
Acq On : 6 Oct 2020 9:23
InstName : AG5975C
Operator : TD
Sample : S20J009-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 06 09:41:49 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

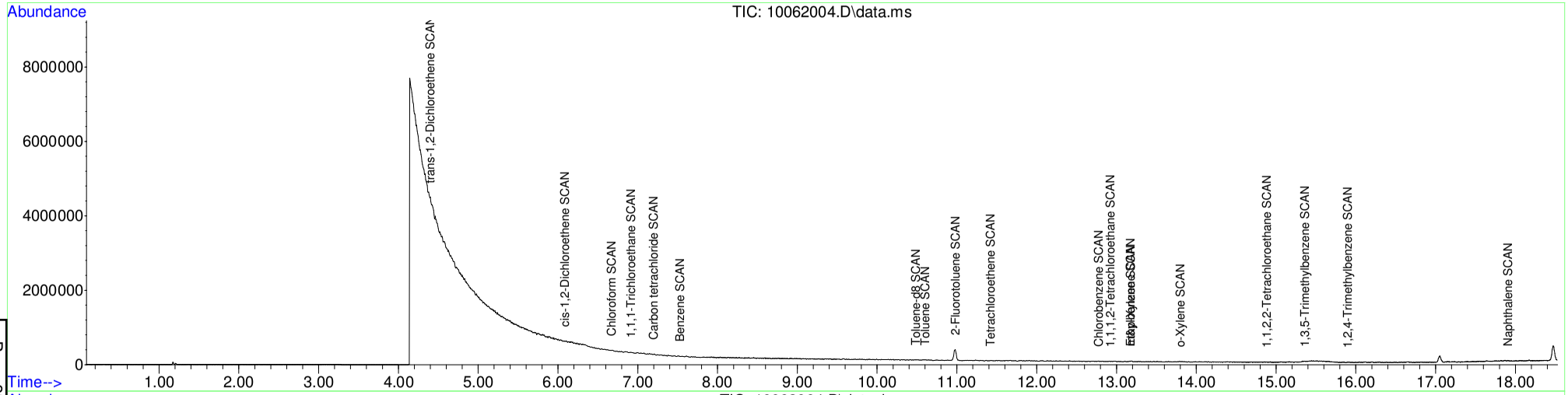
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.980	109	488006	5000.00 ug/L	0.01
System Monitoring Compounds					
12) Toluene-d8	10.487	98	4871	50.99 ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery =	1.02%#	
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.097	61	1420	72.87 ug/L	86
3] trans-1,2-Dichloroethene	4.382	61	1128	50.10 ug/L	62
4] 1,1-Dichloroethane	5.092	63	1418	50.60 ug/L #	43
5] cis-1,2-Dichloroethene	6.094	61	1466	49.55 ug/L	99
6] Chloroform	6.664	83	1407	46.47 ug/L	95
7] 1,1,1-Trichloroethane	6.919	97	1482	45.07 ug/L	98
8] Carbon tetrachloride	7.187	117	1397	45.14 ug/L	98
9] Benzene	7.503	78	5033	60.70 ug/L #	1
10] 1,2-Dichloroethane	7.552	62	1460	49.33 ug/L	71
11] Trichloroethene	8.575	130	1192	47.75 ug/L	92
13] Toluene	10.582	91	6272	51.50 ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	1317	49.62 ug/L	95
15] Tetrachloroethene	11.432	166	1740	49.37 ug/L	96
16] Chlorobenzene	12.773	112	4665	53.49 ug/L	85
17] 1,1,1,2-Tetrachloroethane	12.924	131	1599	51.17 ug/L	98
18] Ethylbenzene	12.980	91	8053	54.32 ug/L	95
19] m&p-Xylene	13.170	91	12504	107.92 ug/L	95
20] o-Xylene	13.782	91	6603	53.34 ug/L	95
21] 1,1,2,2-Tetrachloroethane	14.880	83	3007	54.81 ug/L	99
22] 1,3,5-Trimethylbenzene	15.350	105	7191	54.58 ug/L	96
23] 1,2,4-Trimethylbenzene	15.906	105	7761	56.71 ug/L	92
24] Naphthalene	17.907	128	10869	50.25 ug/L	96
25) 2-Fluorotoluene SCAN	10.979	109	244641	5142.59 ug/L	100
27) trans-1,2-Dichloroethe...	4.394	61	289	23.12 ug/L #	67
29) cis-1,2-Dichloroethene...	6.080	61	317	20.45 ug/L #	35
30) Chloroform SCAN	6.662	83	604	35.92 ug/L #	72
31) 1,1,1-Trichloroethane ...	6.918	97	452	29.50 ug/L #	19
32) Carbon tetrachloride SCAN	7.198	117	701	43.86 ug/L #	68
33) Benzene SCAN	7.526	78	11544	273.65 ug/L	93
36) Toluene-d8 SCAN	10.486	98	2687	57.76 ug/L	96
37) Toluene SCAN	10.601	91	5273	88.50 ug/L #	30
39) Tetrachloroethene SCAN	11.420	166	763	53.30 ug/L #	47
40) Chlorobenzene SCAN	12.772	112	2088	51.29 ug/L #	54
41) 1,1,1,2-Tetrachloroeth...	12.923	131	1096	72.74 ug/L #	52
42) Ethylbenzene SCAN	13.177	91	6451	59.43 ug/L	97
43) m&p-Xylene SCAN	13.177	91	6451	59.43 ug/L	95
44) o-Xylene SCAN	13.797	91	3814	65.64 ug/L	94
45) 1,1,2,2-Tetrachloroeth...	14.879	83	1686	59.51 ug/L	89
46) 1,3,5-Trimethylbenzene...	15.363	105	3834	62.61 ug/L	67
47) 1,2,4-Trimethylbenzene...	15.899	105	4895	78.13 ug/L	75
48) Naphthalene SCAN	17.906	128	4447	46.91 ug/L	90

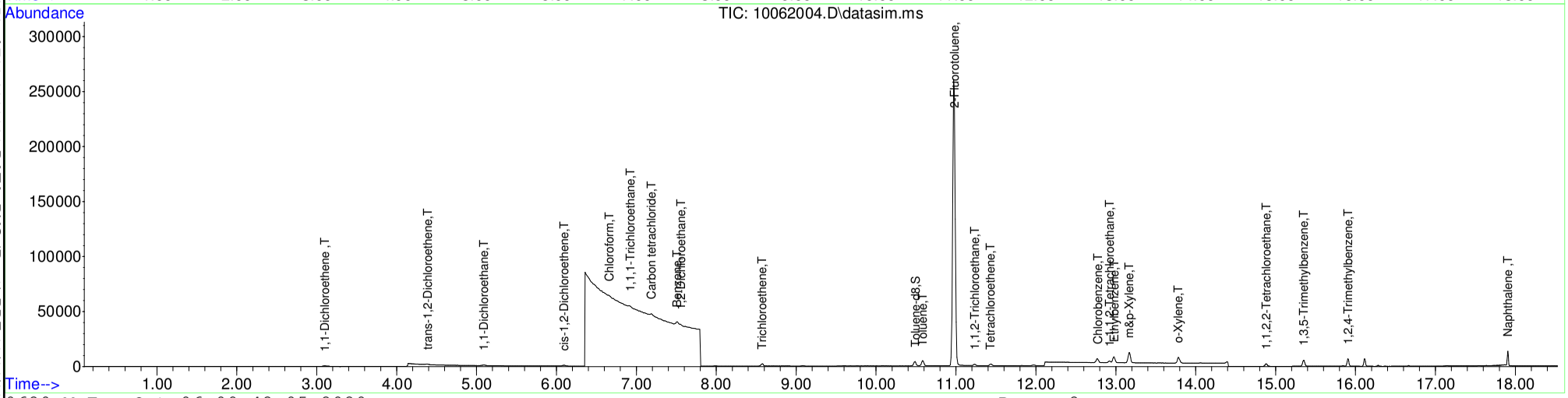
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062004.D
Acq On : 6 Oct 2020 9:23
InstName : AG5975C
Operator : TD
Sample : S20J009-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 06 09:41:49 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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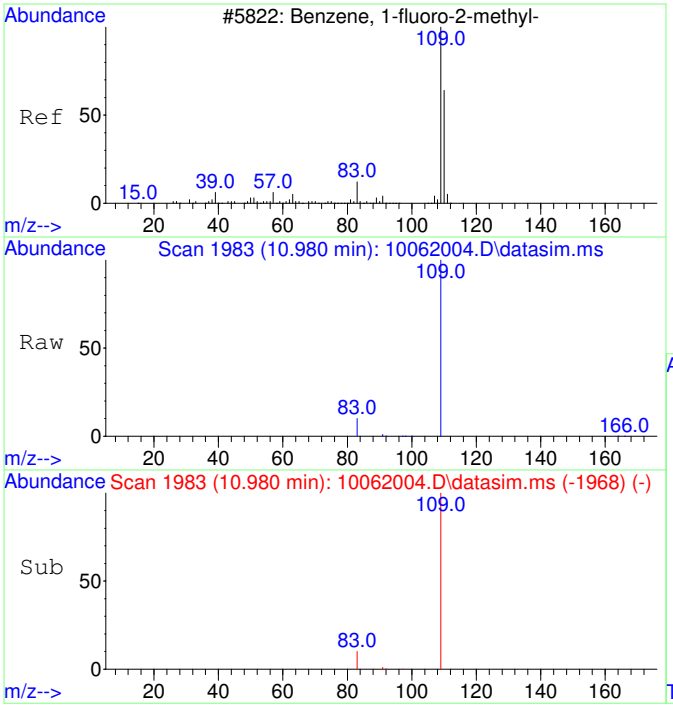
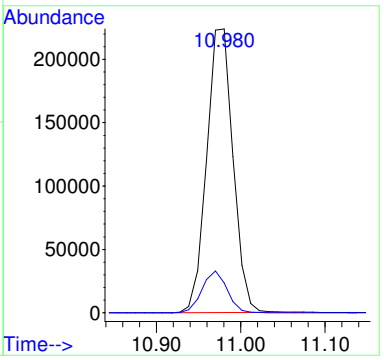
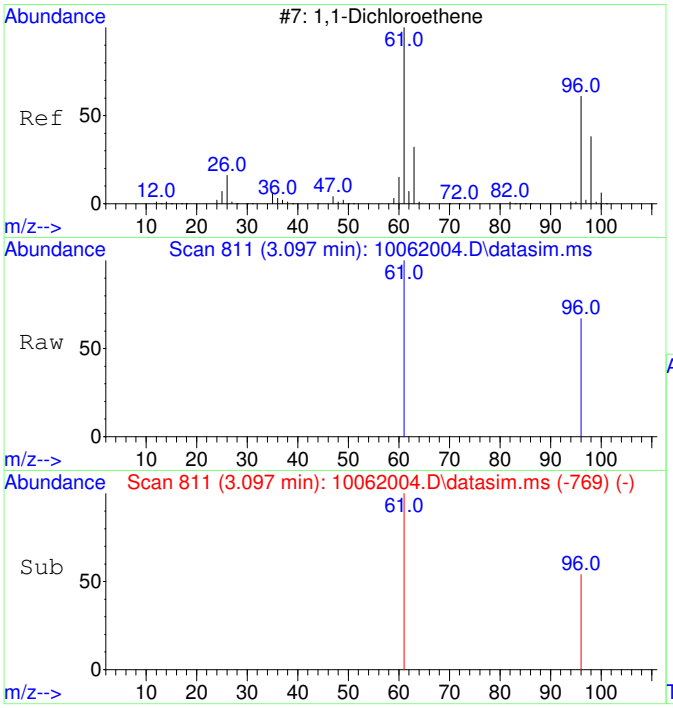


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.980 min Scan# 1983
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:109 Resp: 488006

Ion	Ratio	Lower	Upper
109	100		
83	13.9	0.0	42.3

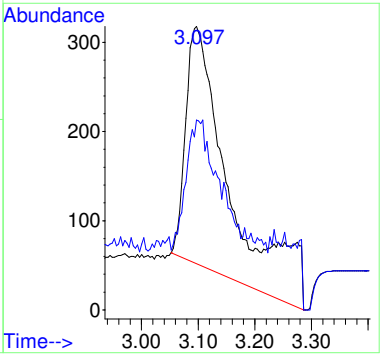




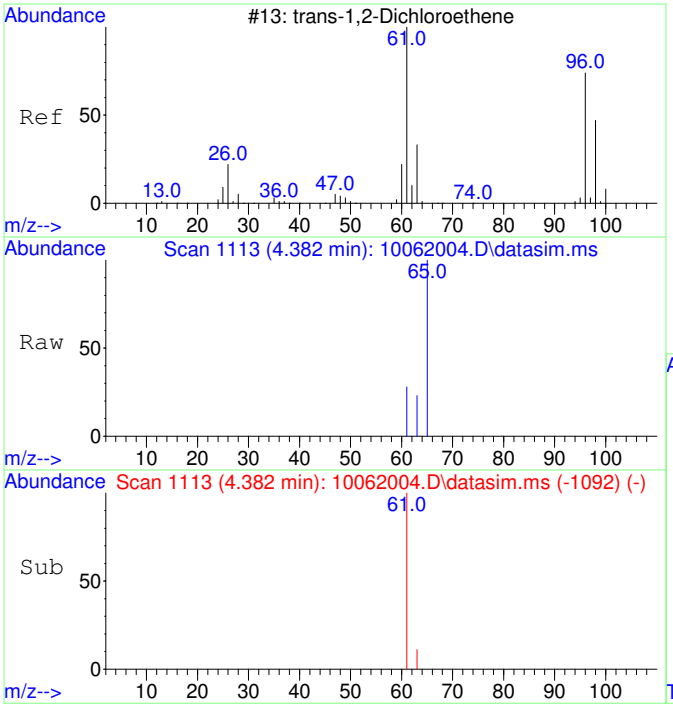
#2
1,1-Dichloroethene
Concen: 72.87 ug/L
RT: 3.097 min Scan# 811
Delta R.T. 0.007 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 61 Resp: 1420

Ion	Ratio	Lower	Upper
61	100		
96	56.1	37.2	97.2



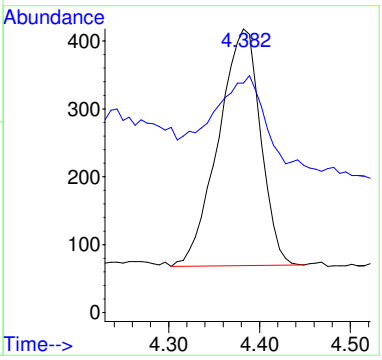
Before MI:
IMPROPER
BASELINE

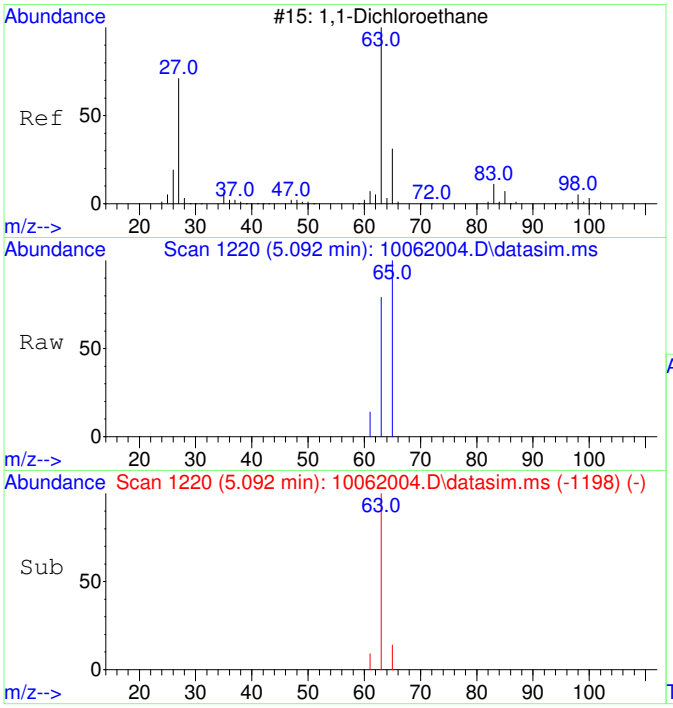


#3
trans-1,2-Dichloroethene
Concen: 50.10 ug/L
RT: 4.382 min Scan# 1113
Delta R.T. -0.013 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 61 Resp: 1128

Ion	Ratio	Lower	Upper
61	100		
63	53.5	2.4	62.4

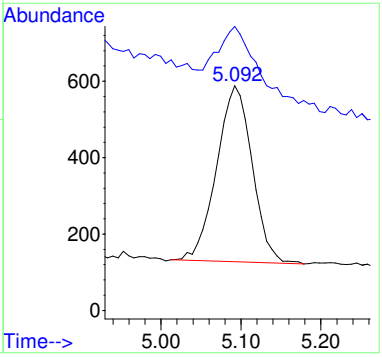


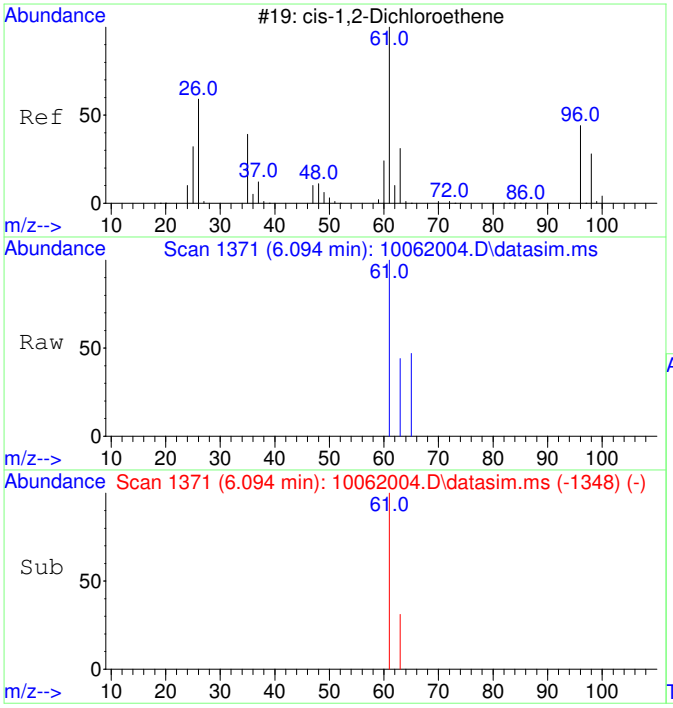


#4
1,1-Dichloroethane
Concen: 50.60 ug/L
RT: 5.092 min Scan# 1220
Delta R.T. -0.007 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 63 Resp: 1418

Ion	Ratio	Lower	Upper
63	100		
65	63.6	1.8	61.8#

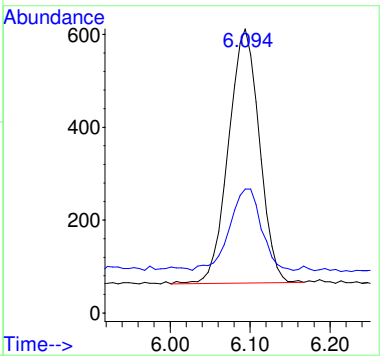


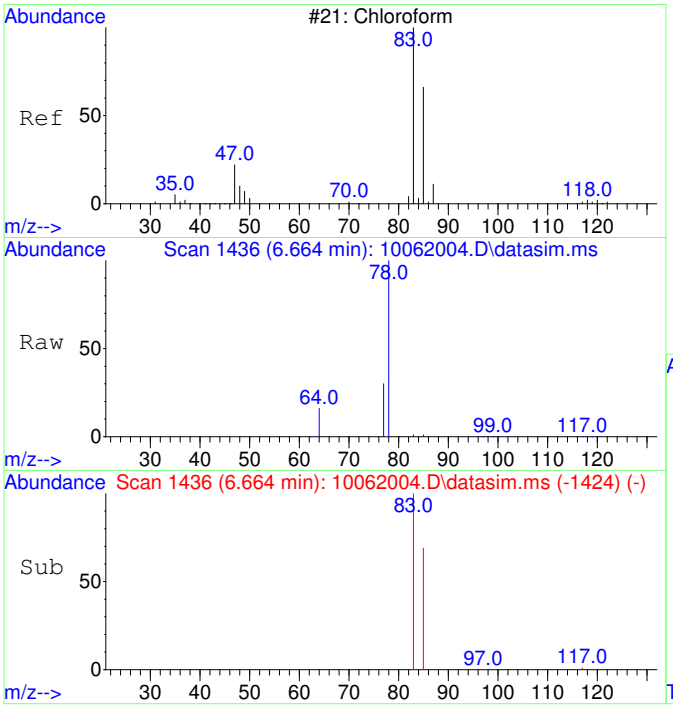


#5
cis-1,2-Dichloroethene
Concen: 49.55 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 61 Resp: 1466

Ion	Ratio	Lower	Upper
61	100		
63	32.8	2.5	62.5

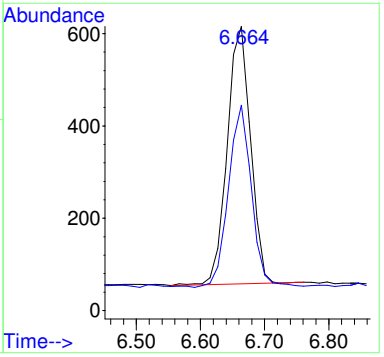


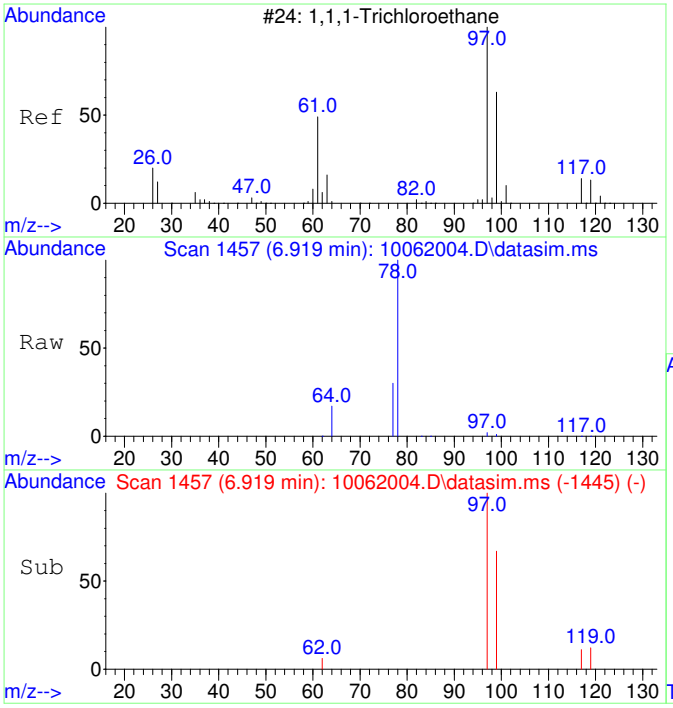


#6
Chloroform
Concen: 46.47 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 83 Resp: 1407

Ion	Ratio	Lower	Upper
83	100		
85	69.1	35.1	95.1

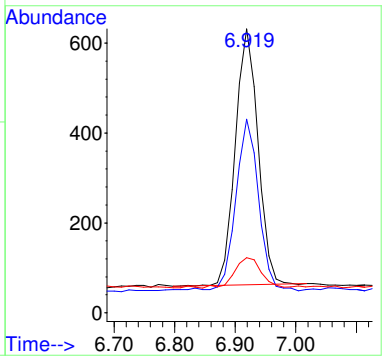


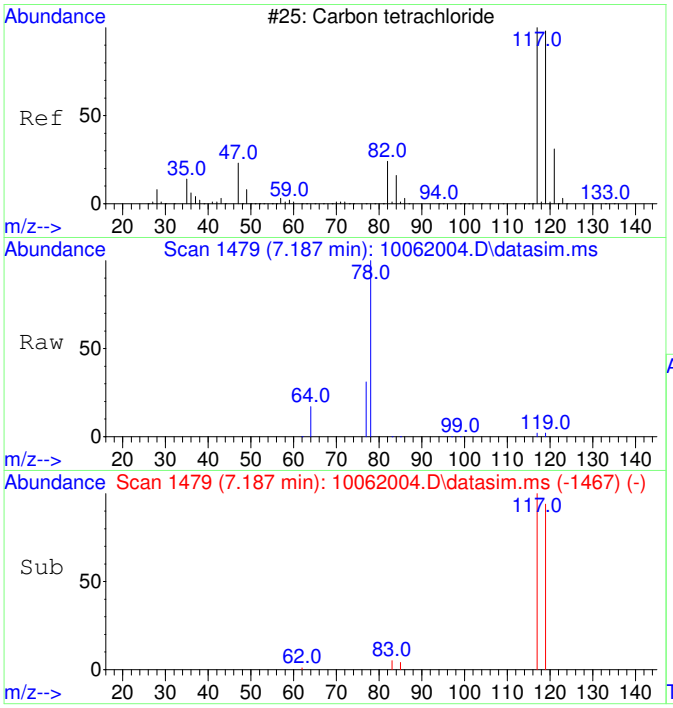


#7
1,1,1-Trichloroethane
Concen: 45.07 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 97 Resp: 1482

Ion	Ratio	Lower	Upper
97	100		
99	66.3	34.6	94.6
117	14.3	0.0	43.2

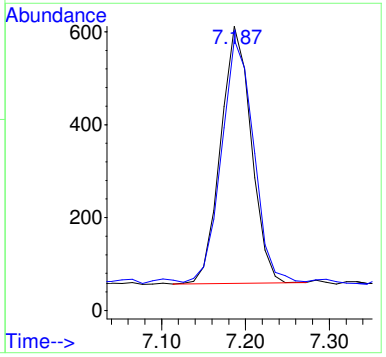


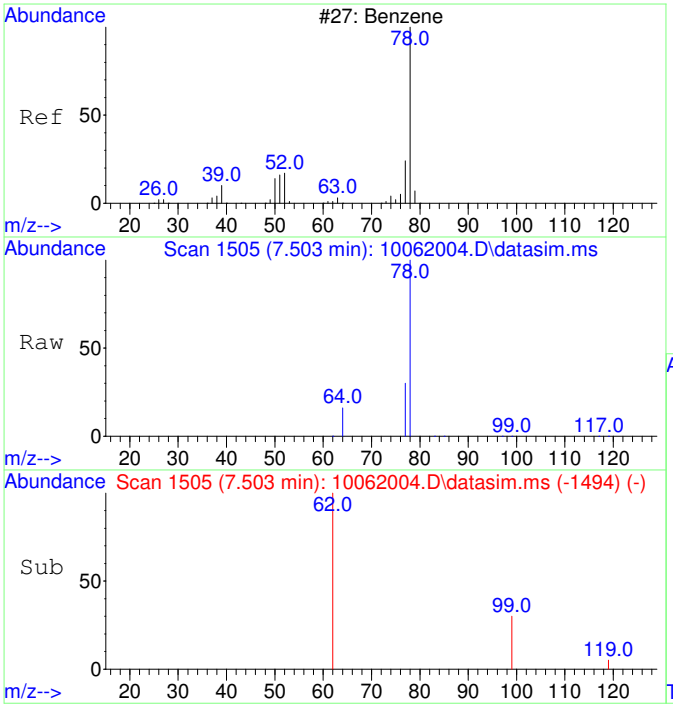


#8
Carbon tetrachloride
Concen: 45.14 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:117 Resp: 1397

Ion	Ratio	Lower	Upper
117	100		
119	98.4	66.4	126.4

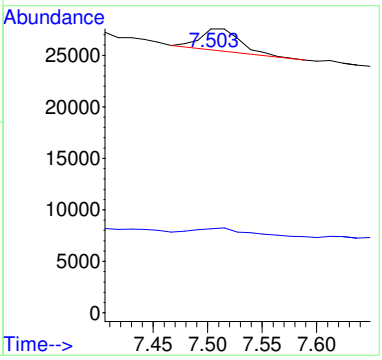


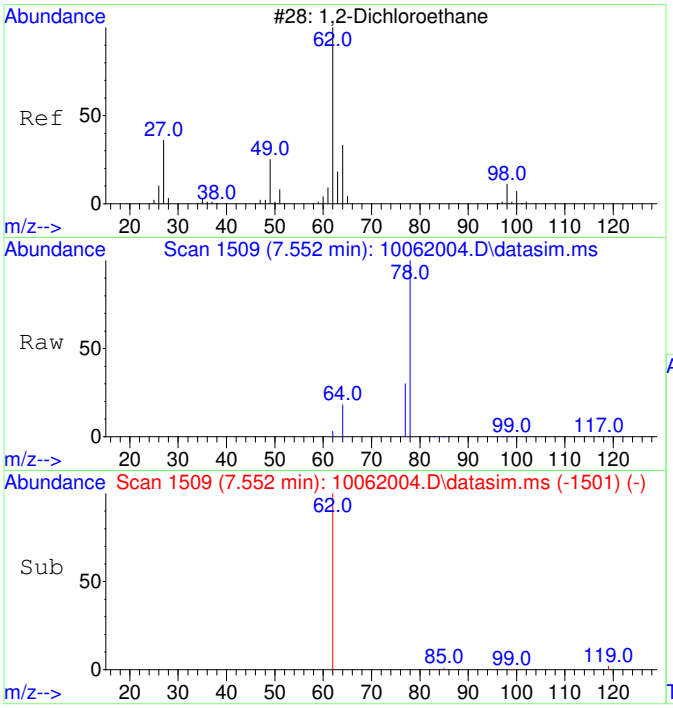


#9
Benzene
Concen: 60.70 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 78 Resp: 5033

Ion	Ratio	Lower	Upper
78	100		
77	71.5	0.0	53.2#

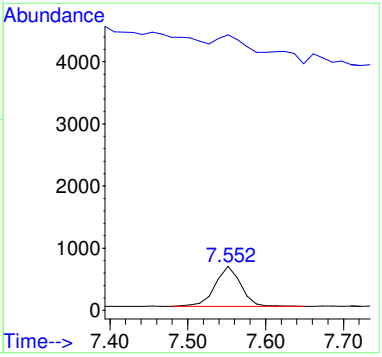


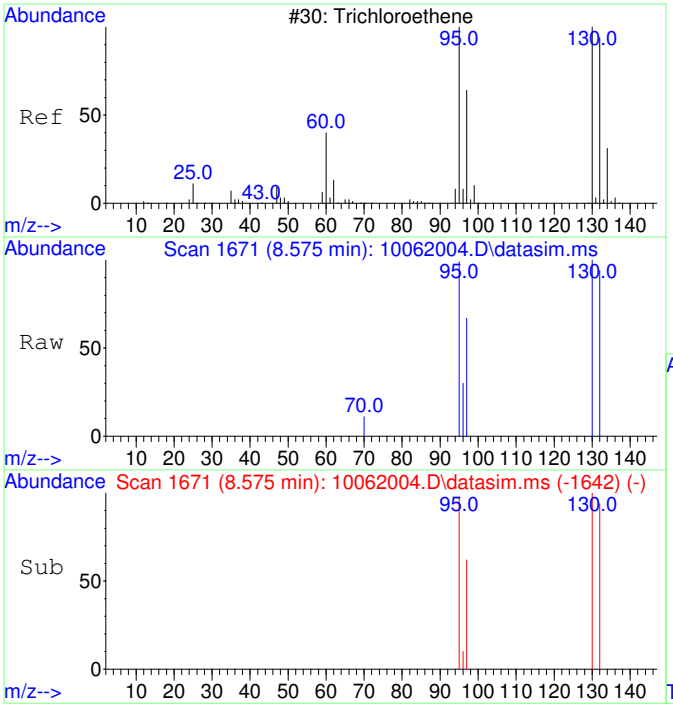


#10
1,2-Dichloroethane
Concen: 49.33 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 62 Resp: 1460

Ion	Ratio	Lower	Upper
62	100		
64	48.4	2.3	62.3

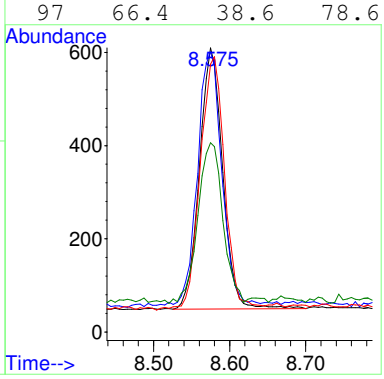


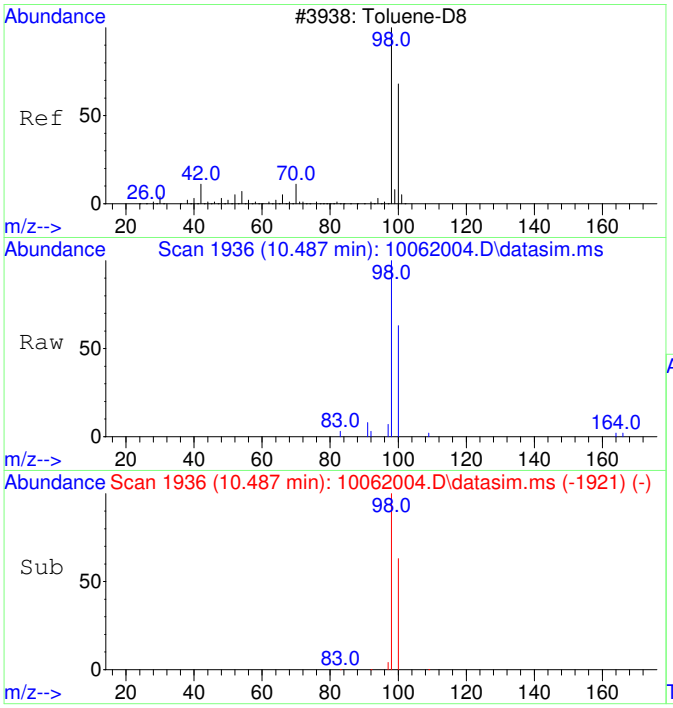


#11
Trichloroethene
Concen: 47.75 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:130 Resp: 1192

Ion	Ratio	Lower	Upper
130	100		
95	99.6	60.7	120.7
132	102.2	76.0	116.0
97	66.4	38.6	78.6

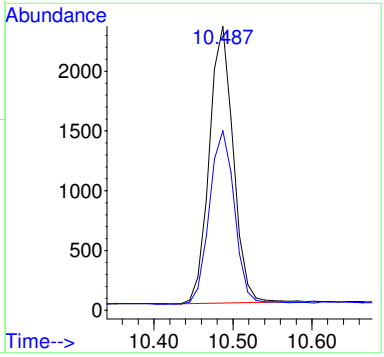


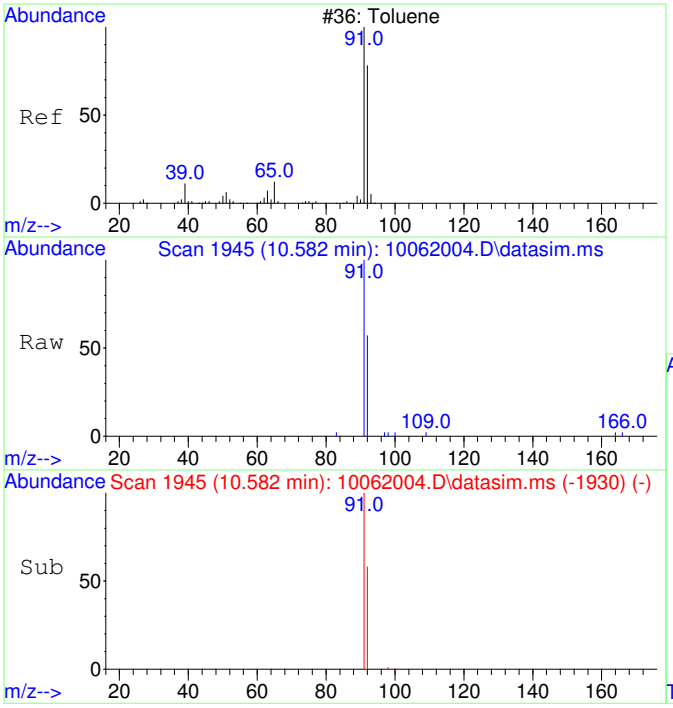


#12
Toluene-d8
Concen: 50.99 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 98 Resp: 4871

Ion	Ratio	Lower	Upper
98	100		
100	65.1	37.1	97.1

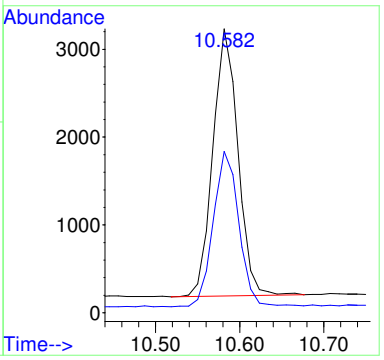


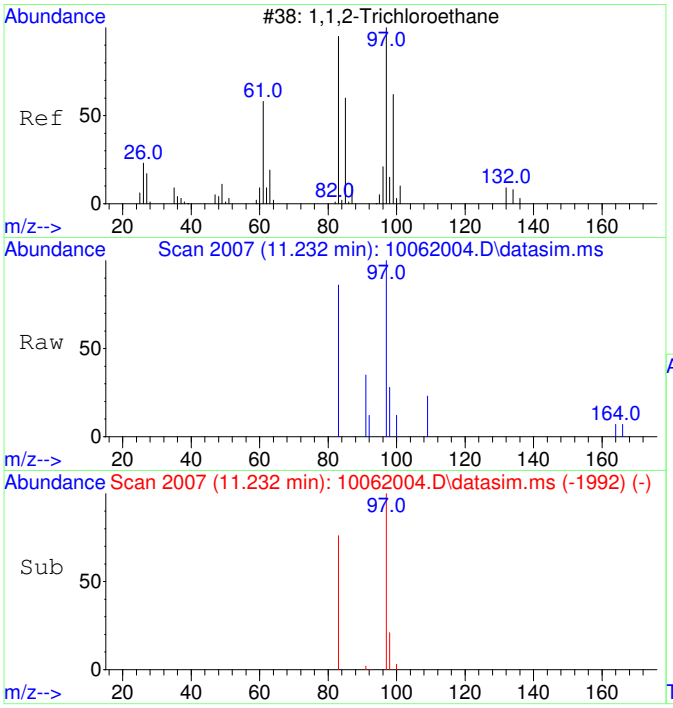


#13
Toluene
Concen: 51.50 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 6272

Ion	Ratio	Lower	Upper
91	100		
92	58.9	29.9	89.9

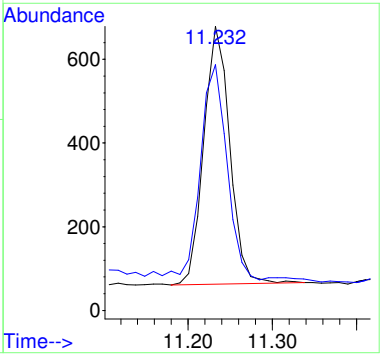


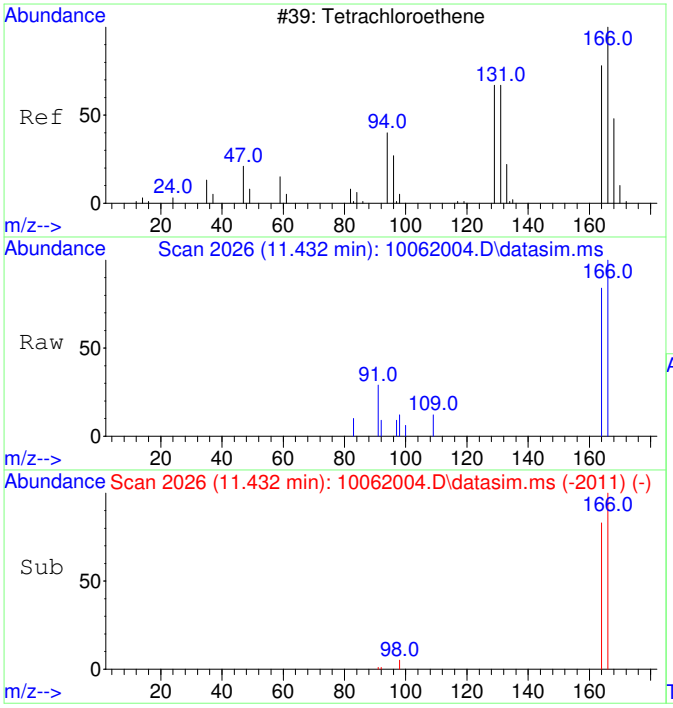


#14
1,1,2-Trichloroethane
Concen: 49.62 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 97 Resp: 1317

Ion	Ratio	Lower	Upper
97	100		
83	85.4	51.2	111.2

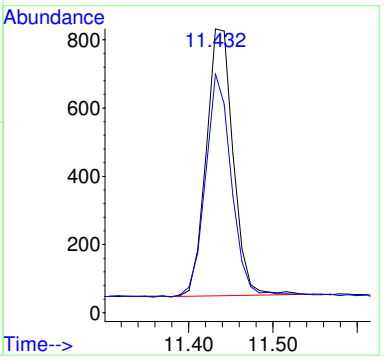


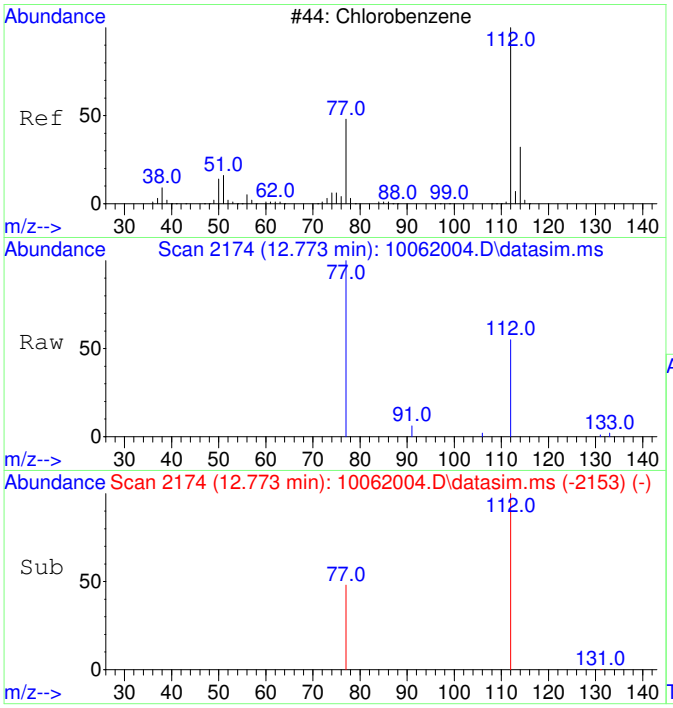


#15
Tetrachloroethene
Concen: 49.37 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:166 Resp: 1740

Ion	Ratio	Lower	Upper
166	100		
164	81.6	47.8	107.8

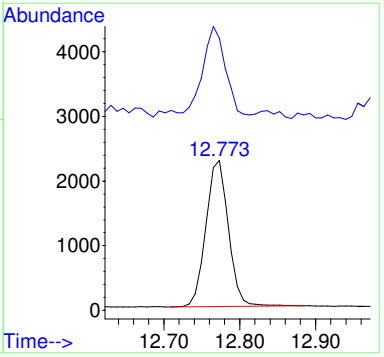


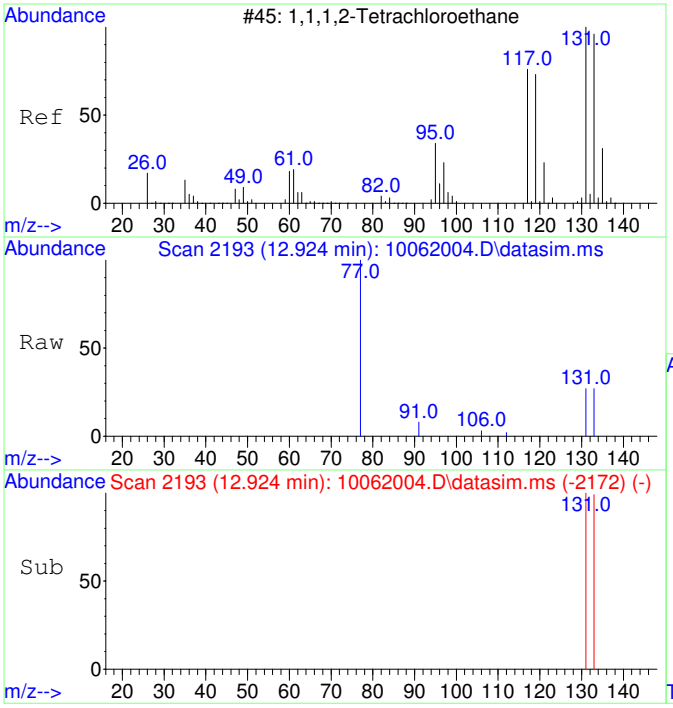


#16
Chlorobenzene
Concen: 53.49 ug/L
RT: 12.773 min Scan# 2174
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:112 Resp: 4665

Ion	Ratio	Lower	Upper
112	100		
77	64.4	23.6	83.6

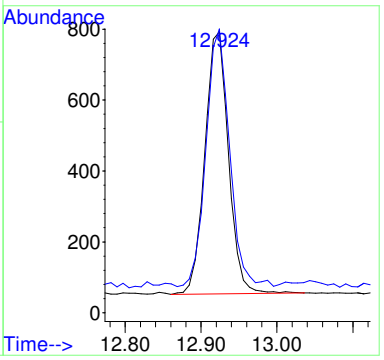


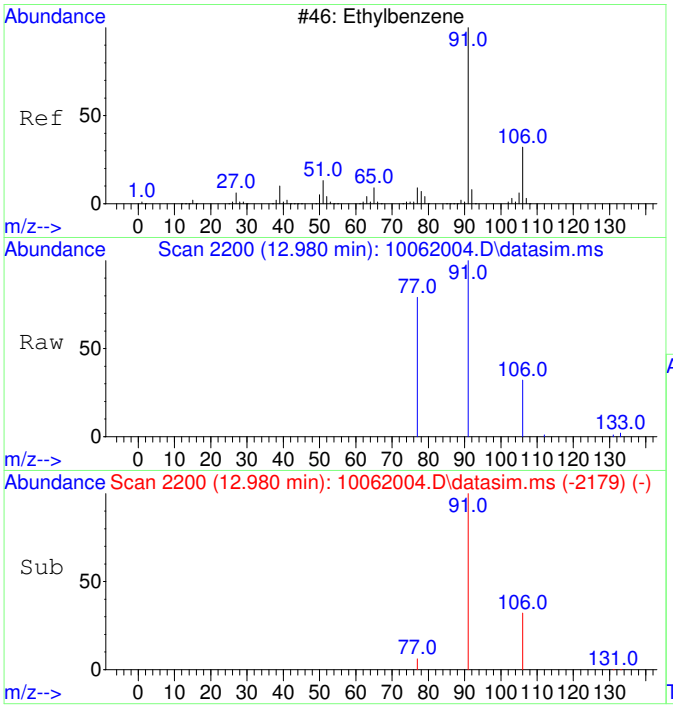


#17
1,1,1,2-Tetrachloroethane
Concen: 51.17 ug/L
RT: 12.924 min Scan# 2193
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:131 Resp: 1599

Ion	Ratio	Lower	Upper
131	100		
133	97.8	66.3	126.3

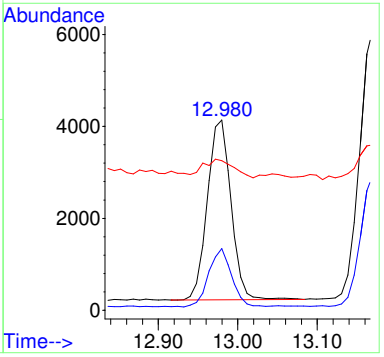


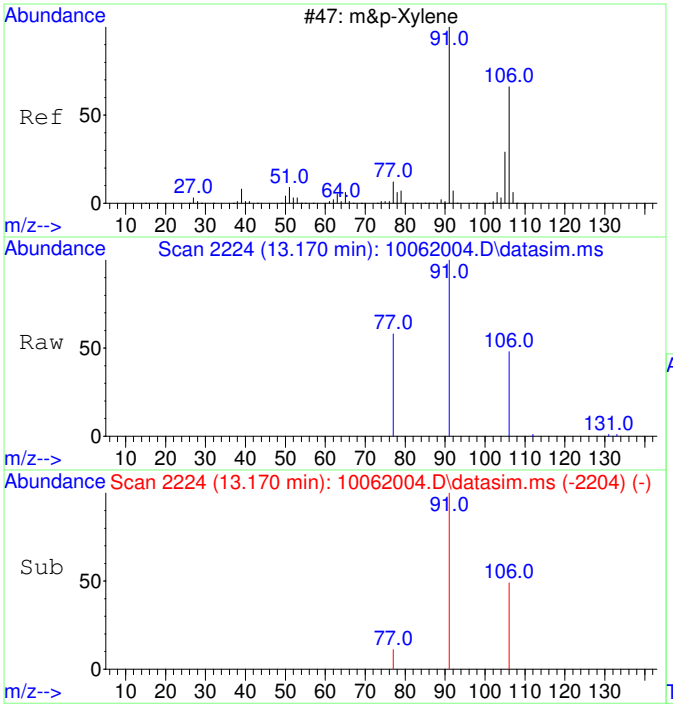


#18
Ethylbenzene
Concen: 54.32 ug/L
RT: 12.980 min Scan# 2200
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 8053

Ion	Ratio	Lower	Upper
91	100		
106	31.1	3.0	63.0
77	13.0	0.0	38.2

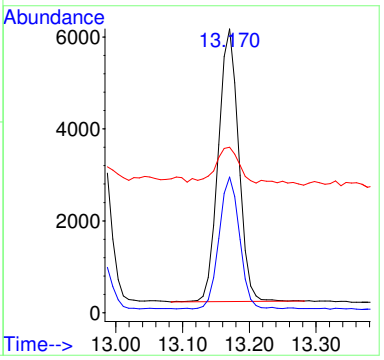


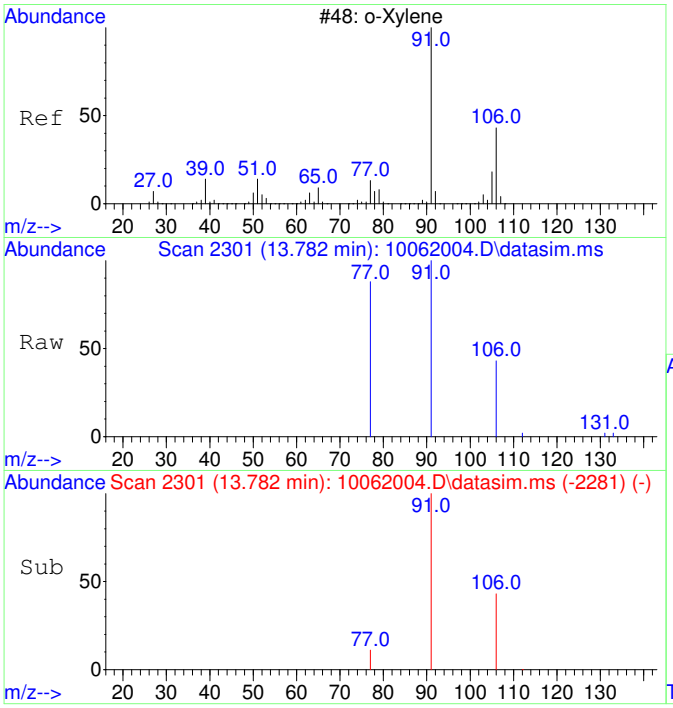


#19
m&p-Xylene
Concen: 107.92 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.008 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 12504

Ion	Ratio	Lower	Upper
91	100		
106	48.8	22.2	82.2
77	15.5	0.0	42.4

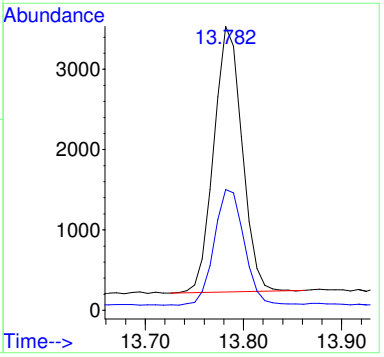


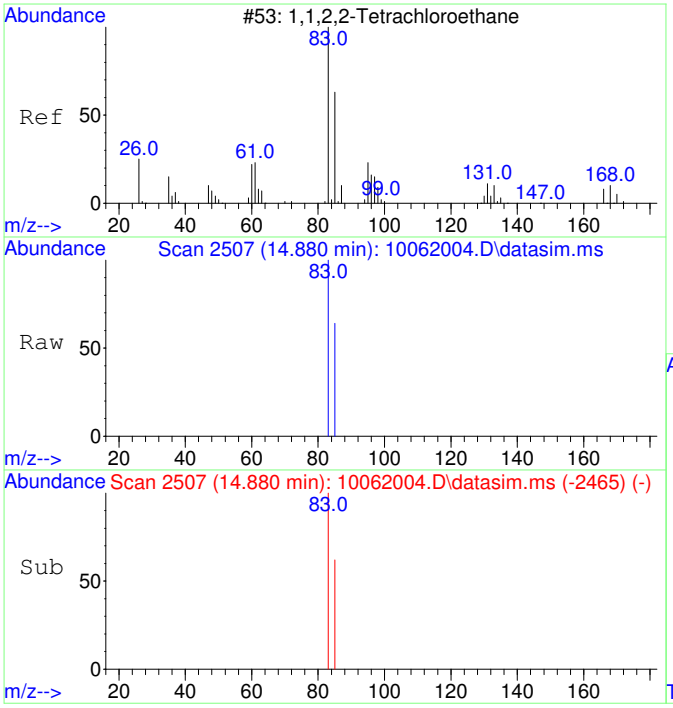


#20
o-Xylene
Concen: 53.34 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 6603

Ion	Ratio	Lower	Upper
91	100		
106	45.5	19.2	79.2

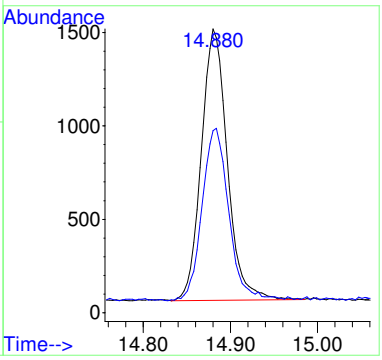


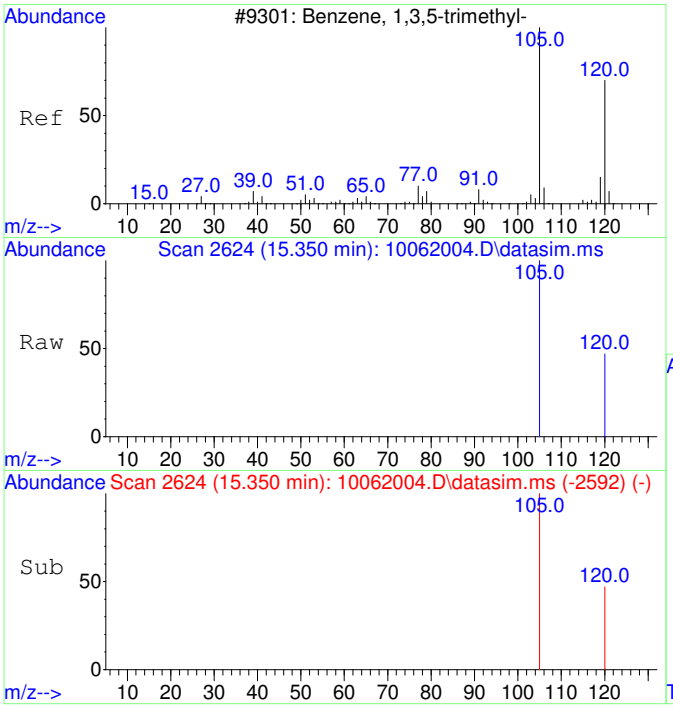


#21
1,1,2,2-Tetrachloroethane
Concen: 54.81 ug/L
RT: 14.880 min Scan# 2507
Delta R.T. 0.007 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 83 Resp: 3007

Ion	Ratio	Lower	Upper
83	100		
85	64.2	34.8	94.8

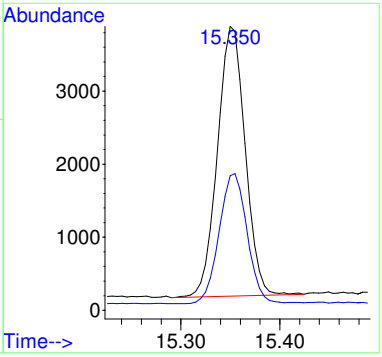


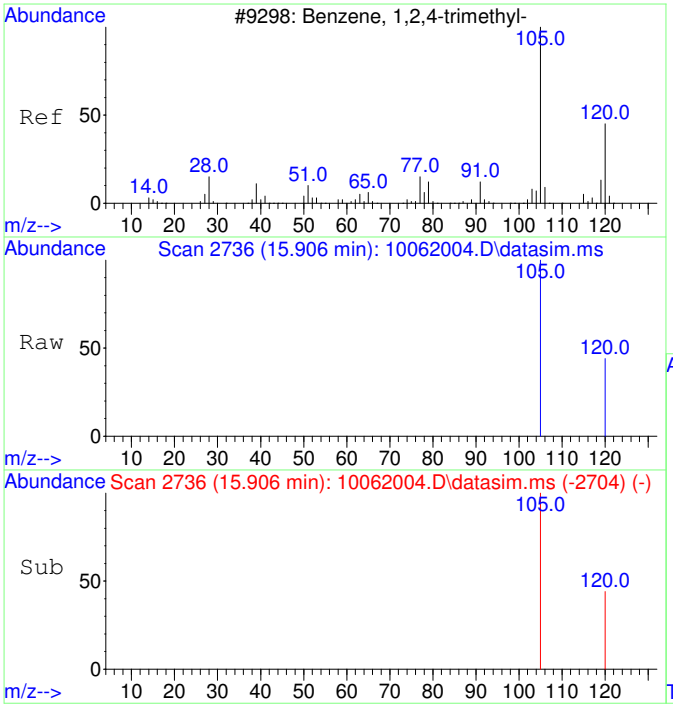


#22
1,3,5-Trimethylbenzene
Concen: 54.58 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.005 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:105 Resp: 7191

Ion	Ratio	Lower	Upper
105	100		
120	48.4	21.1	81.1

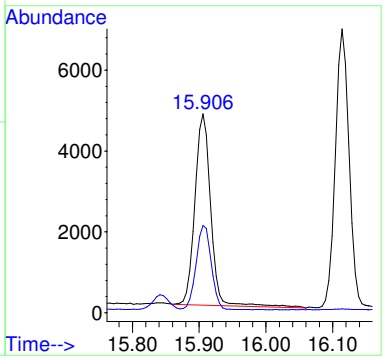


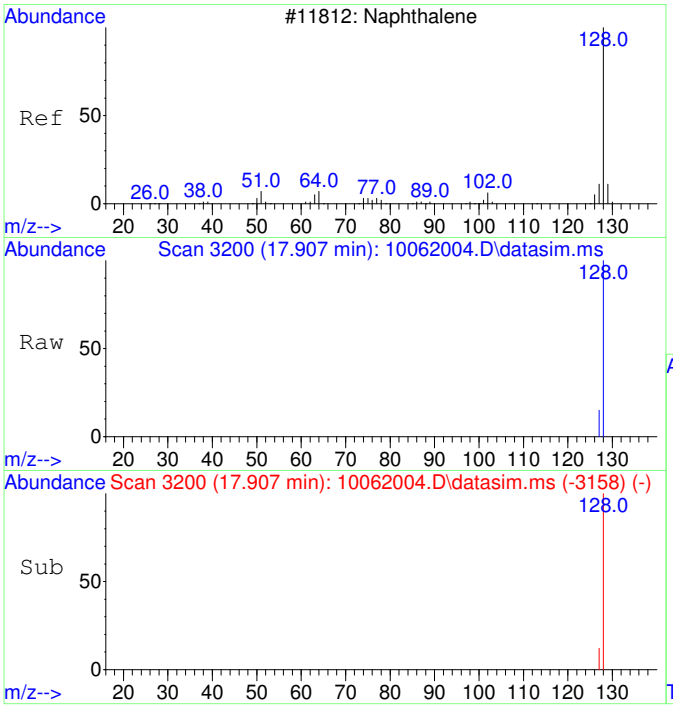


#23
1,2,4-Trimethylbenzene
Concen: 56.71 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:105 Resp: 7761

Ion	Ratio	Lower	Upper
105	100		
120	41.6	17.2	77.2

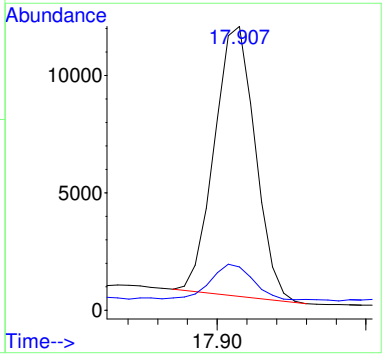


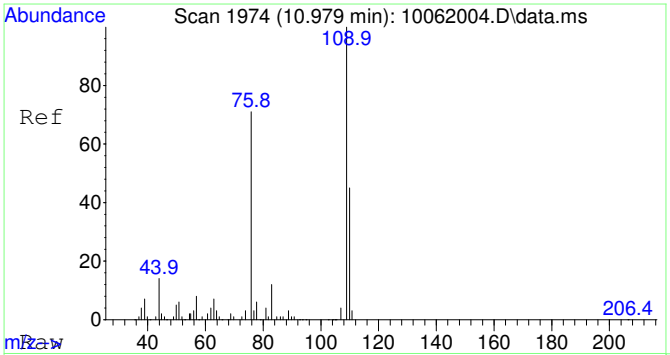


#24
Naphthalene
Concen: 50.25 ug/L
RT: 17.907 min Scan# 3200
Delta R.T. 0.005 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:128 Resp: 10869

Ion	Ratio	Lower	Upper
128	100		
127	13.9	0.0	42.5

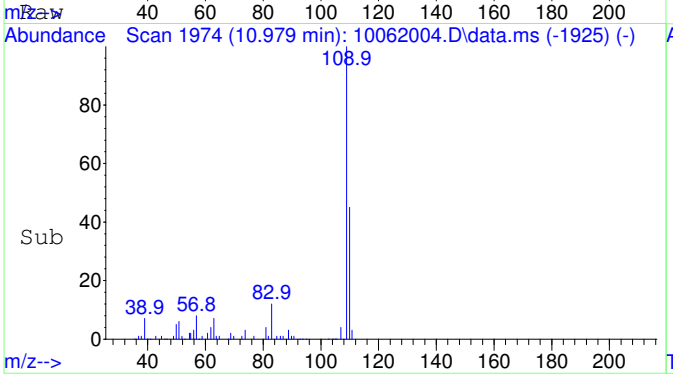


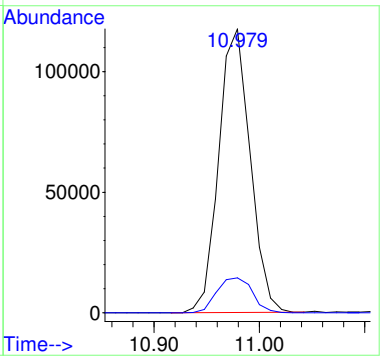


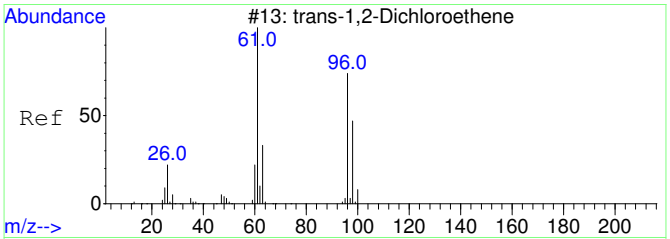
#25
2-Fluorotoluene SCAN
Concen: 5142.59 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

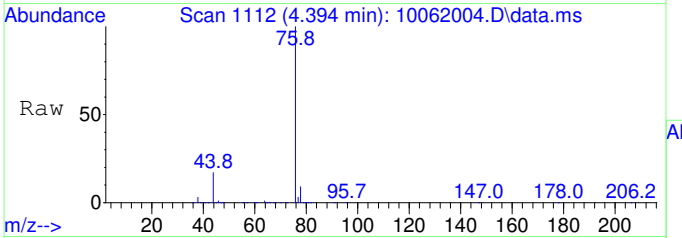
Tgt Ion:109 Resp: 244641

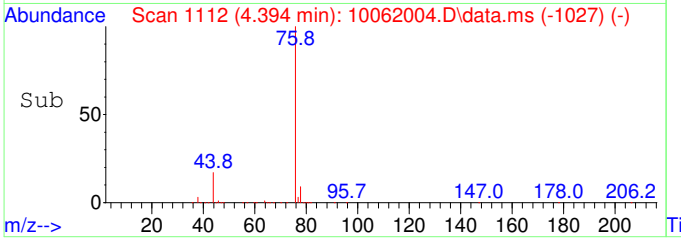
Ion	Ratio	Lower	Upper
109	100		
83	14.0	0.0	43.8







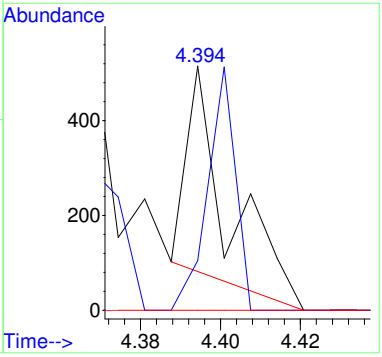


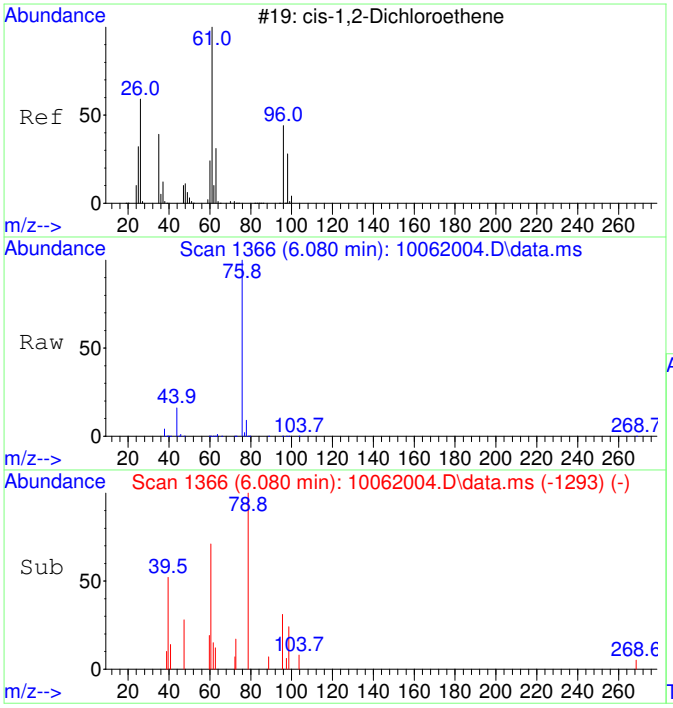


#27
trans-1,2-Dichloroethene SCAN
Concen: 23.12 ug/L
RT: 4.394 min Scan# 1112
Delta R.T. -0.007 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 61 Resp: 289

Ion	Ratio	Lower	Upper
61	100		
96	85.1	49.0	109.0
98	0.0	20.5	80.5#

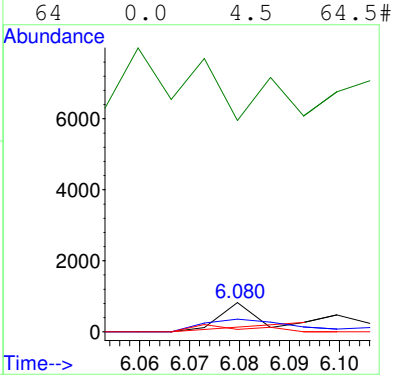


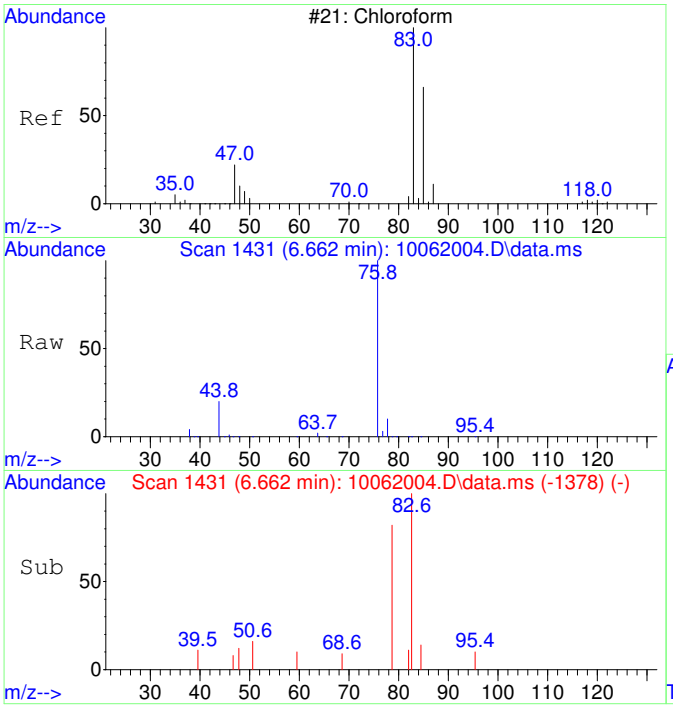


#29
cis-1,2-Dichloroethene SCAN
Concen: 20.45 ug/L
RT: 6.080 min Scan# 1366
Delta R.T. -0.013 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 61 Resp: 317

Ion	Ratio	Lower	Upper
61	100		
96	152.4	39.9	99.9#
98	50.5	13.5	73.5
64	0.0	4.5	64.5#

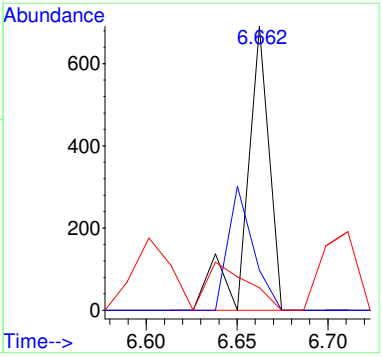


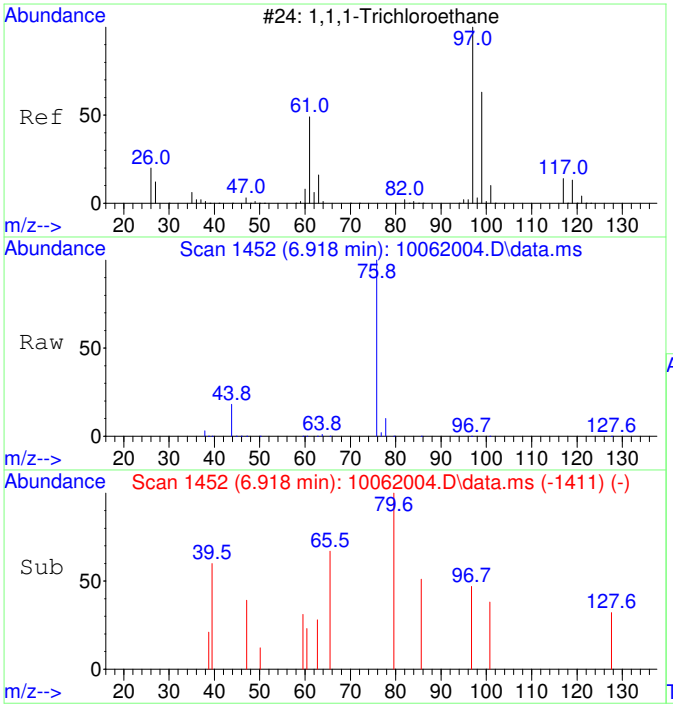


#30
Chloroform SCAN
Concen: 35.92 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 83 Resp: 604

Ion	Ratio	Lower	Upper
83	100		
85	48.2	34.6	94.6
47	0.0	0.0	53.4

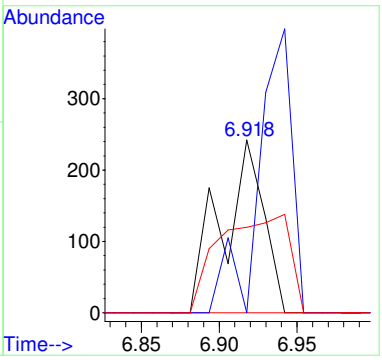


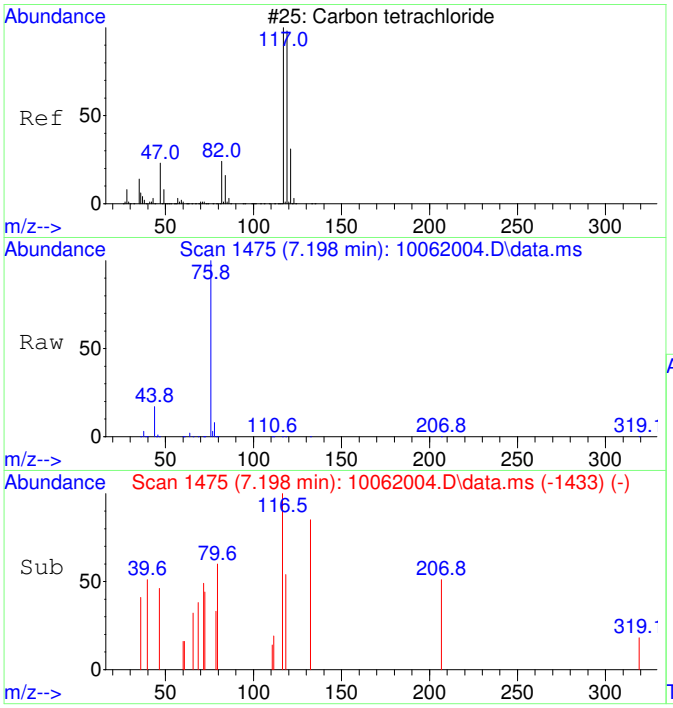


#31
1,1,1-Trichloroethane SCAN
Concen: 29.50 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 97 Resp: 452

Ion	Ratio	Lower	Upper
97	100		
99	0.0	43.6	103.6#
61	0.0	18.0	78.0#

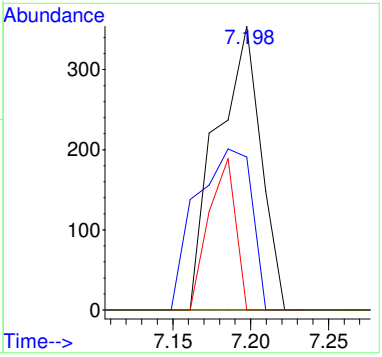


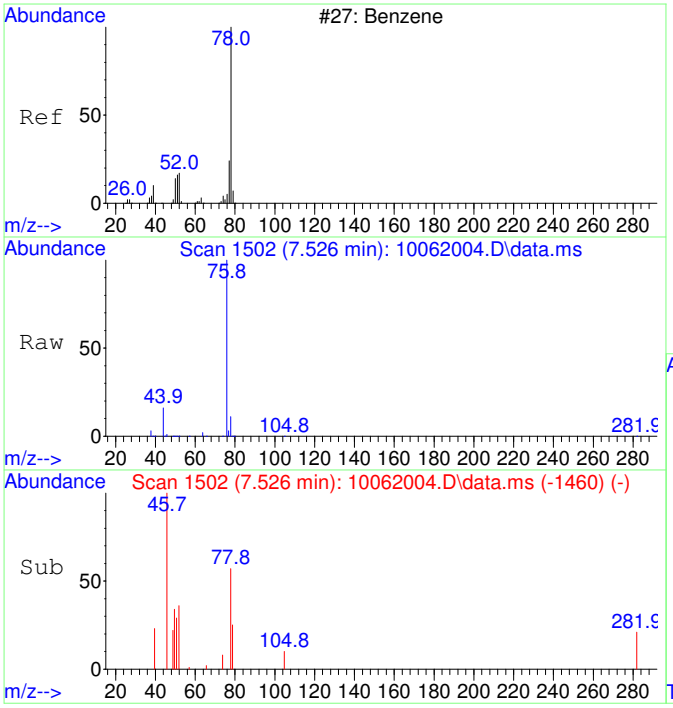


#32
Carbon tetrachloride SCAN
Concen: 43.86 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:117 Resp: 701

Ion	Ratio	Lower	Upper
117	100		
119	71.5	75.5	135.5#
121	32.5	0.0	58.8
82	0.0	0.0	59.2

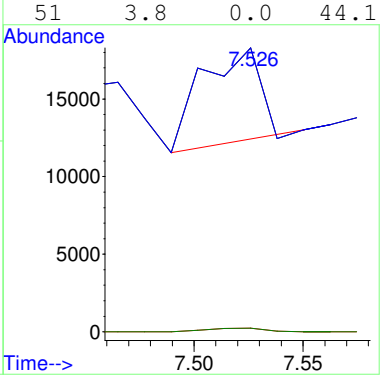


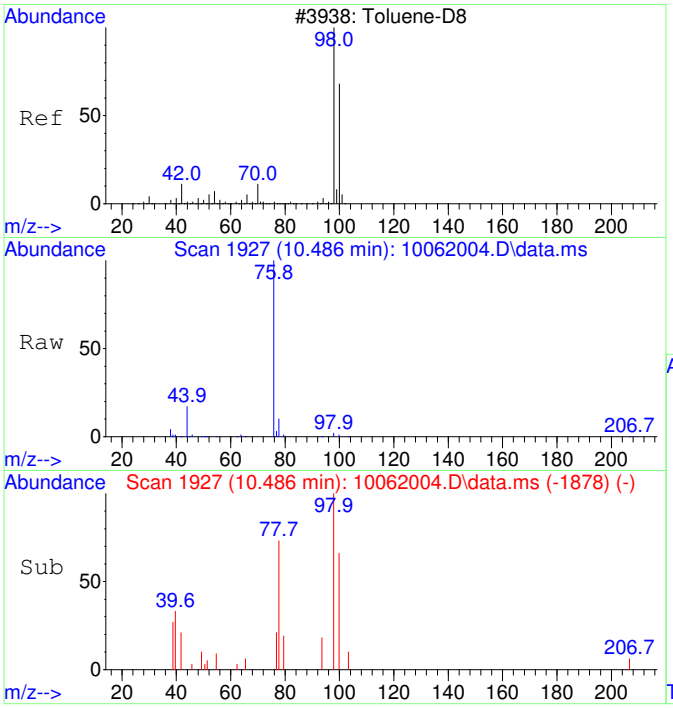


#33
Benzene SCAN
Concen: 273.65 ug/L
RT: 7.526 min Scan# 1502
Delta R.T. 0.012 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 78 Resp: 11544

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	3.8	0.0	47.9
51	3.8	0.0	44.1

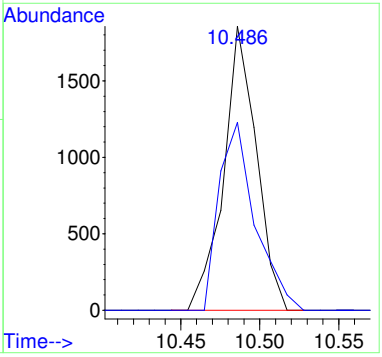


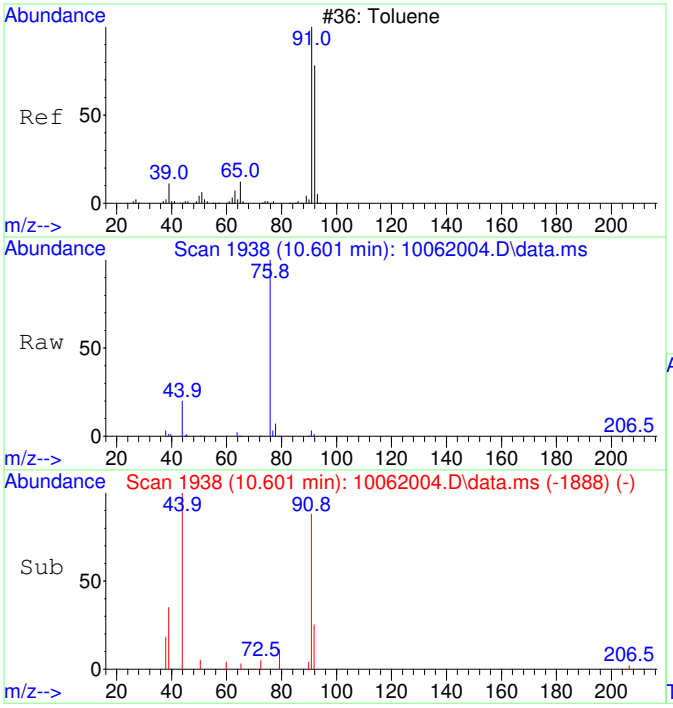


#36
Toluene-d8 SCAN
Concen: 57.76 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 98 Resp: 2687

Ion	Ratio	Lower	Upper
98	100		
100	73.1	40.0	100.0

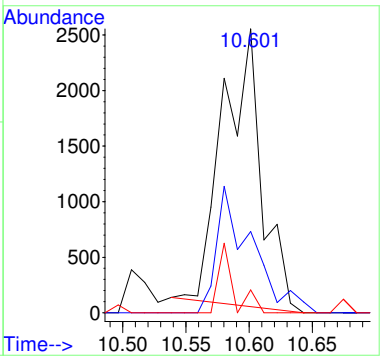


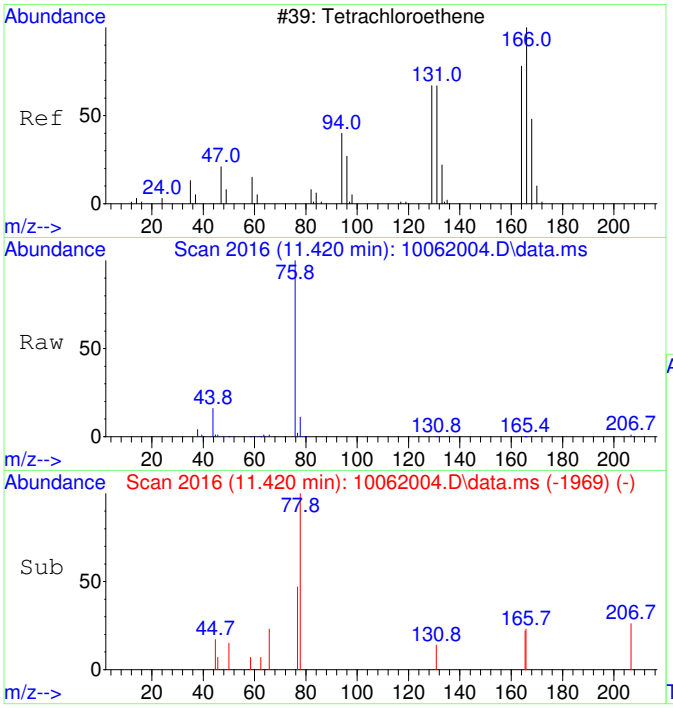


#37
Toluene SCAN
Concen: 88.50 ug/L
RT: 10.601 min Scan# 1938
Delta R.T. 0.021 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 5273

Ion	Ratio	Lower	Upper
91	100		
92	0.0	28.3	88.3#
65	0.0	0.0	41.0

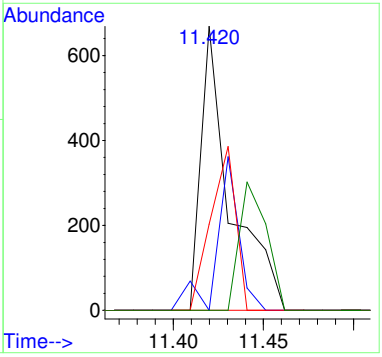


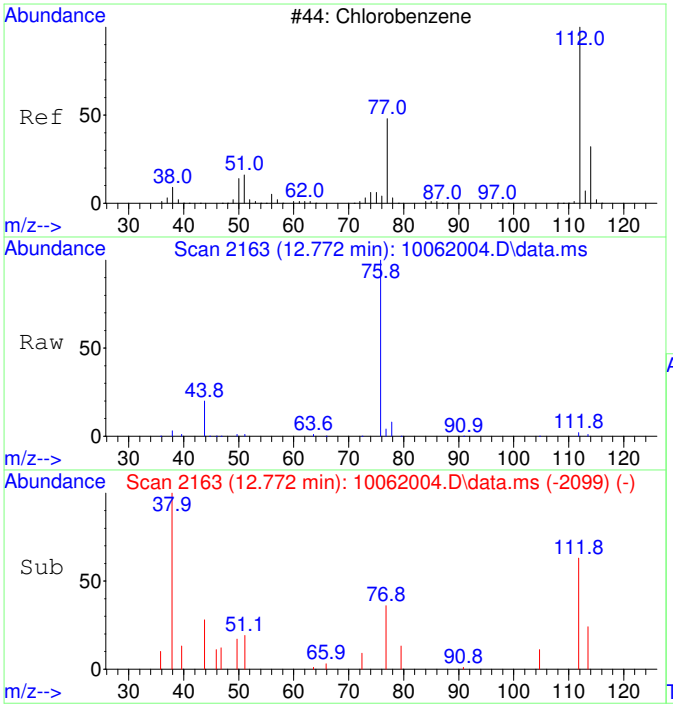


#39
Tetrachloroethene SCAN
Concen: 53.30 ug/L
RT: 11.420 min Scan# 2016
Delta R.T. -0.011 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:166 Resp: 763

Ion	Ratio	Lower	Upper
166	100		
164	40.0	50.9	110.9#
131	48.6	38.7	98.7
129	0.0	41.8	101.8#

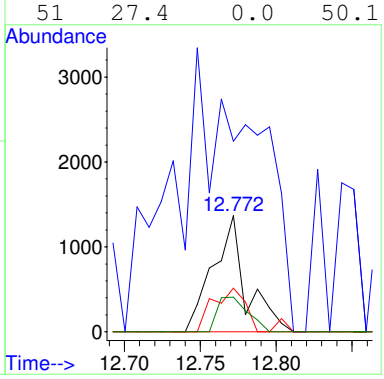


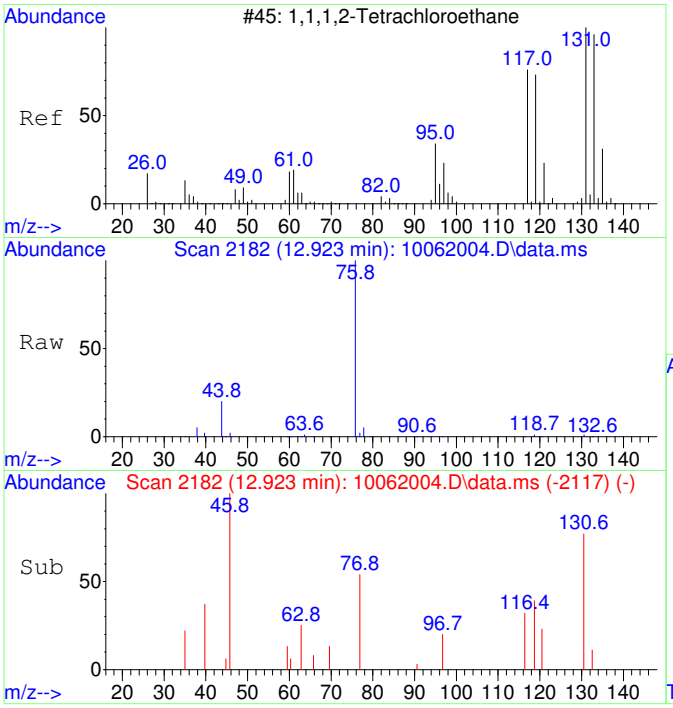


#40
Chlorobenzene SCAN
Concen: 51.29 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.008 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:112 Resp: 2088

Ion	Ratio	Lower	Upper
112	100		
77	0.0	28.2	88.2#
114	36.4	2.3	62.3
51	27.4	0.0	50.1

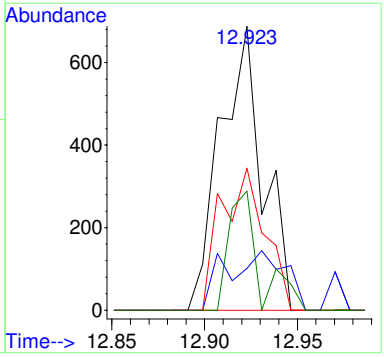


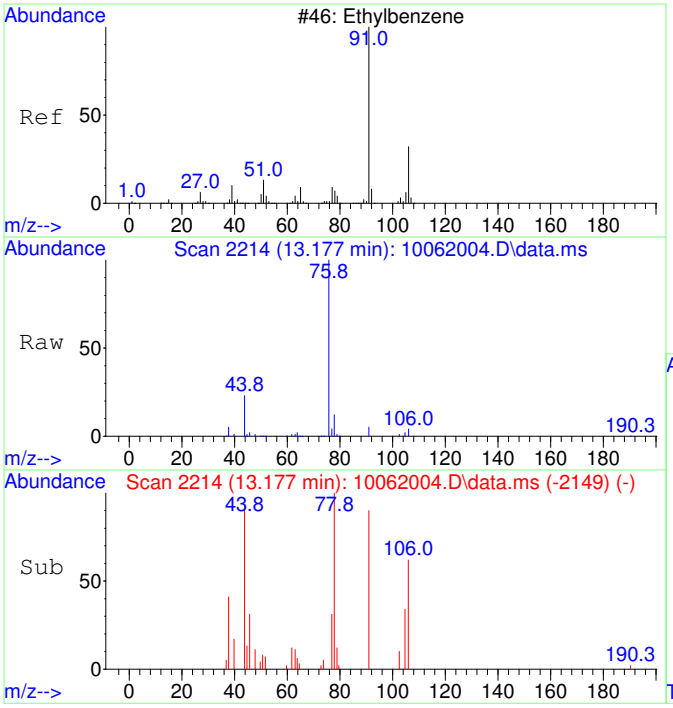


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 72.74 ug/L
RT: 12.923 min Scan# 2182
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:131 Resp: 1096

Ion	Ratio	Lower	Upper
131	100		
133	28.7	66.9	126.9#
119	51.6	40.4	100.4
117	30.4	35.1	95.1#

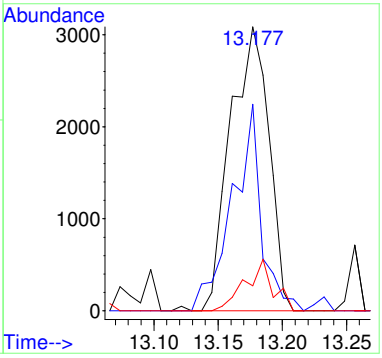


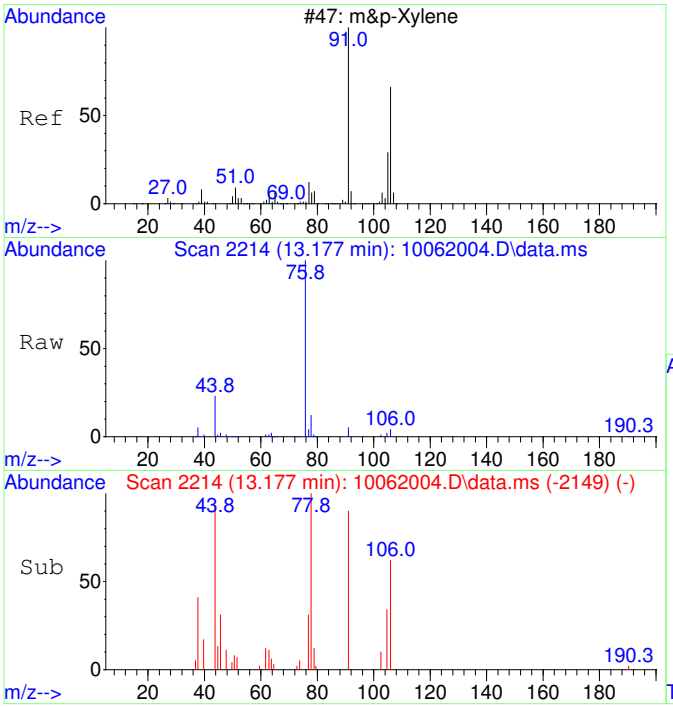


#42
Ethylbenzene SCAN
Concen: 59.43 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 6451

Ion	Ratio	Lower	Upper
91	100		
106	54.5	23.1	83.1
51	13.0	0.0	40.1

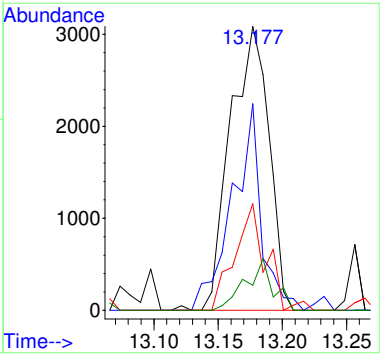


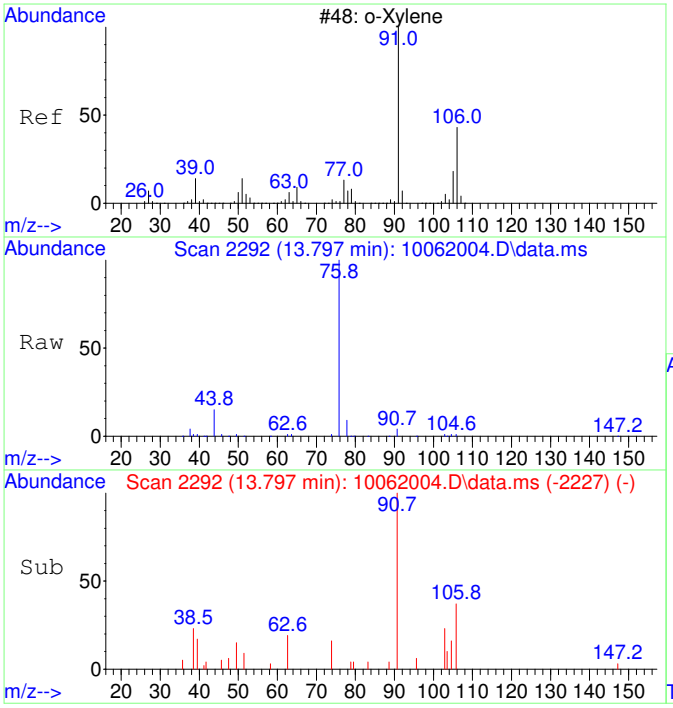


#43
m&p-Xylene SCAN
Concen: 59.43 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 6451

Ion	Ratio	Lower	Upper
91	100		
106	54.5	23.1	83.1
105	30.3	0.0	54.7
51	13.0	0.0	40.1

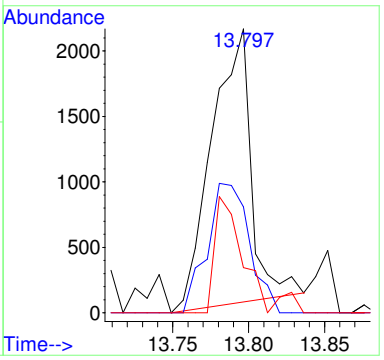


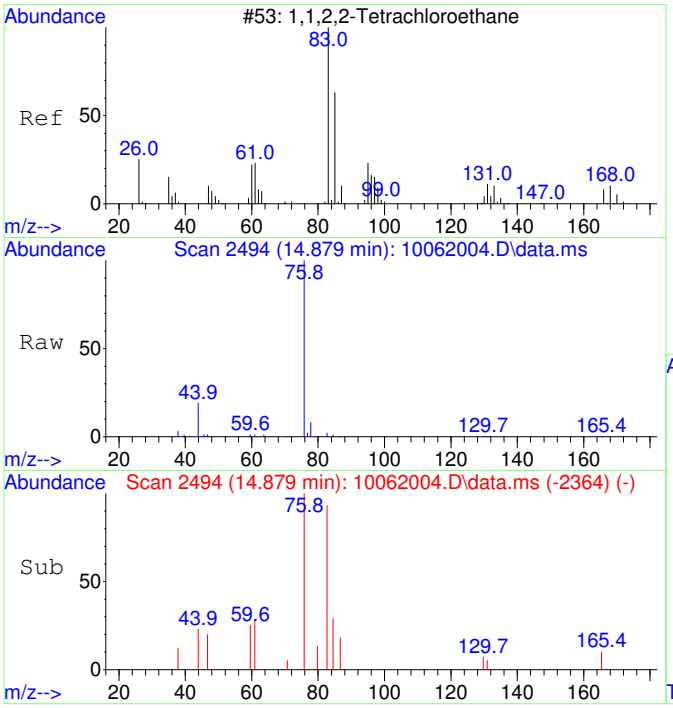


#44
o-Xylene SCAN
Concen: 65.64 ug/L
RT: 13.797 min Scan# 2292
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 3814

Ion	Ratio	Lower	Upper
91	100		
106	50.3	18.0	78.0
105	32.3	0.0	56.6

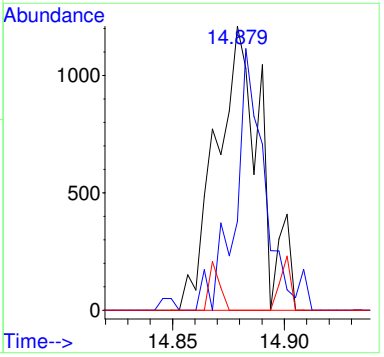


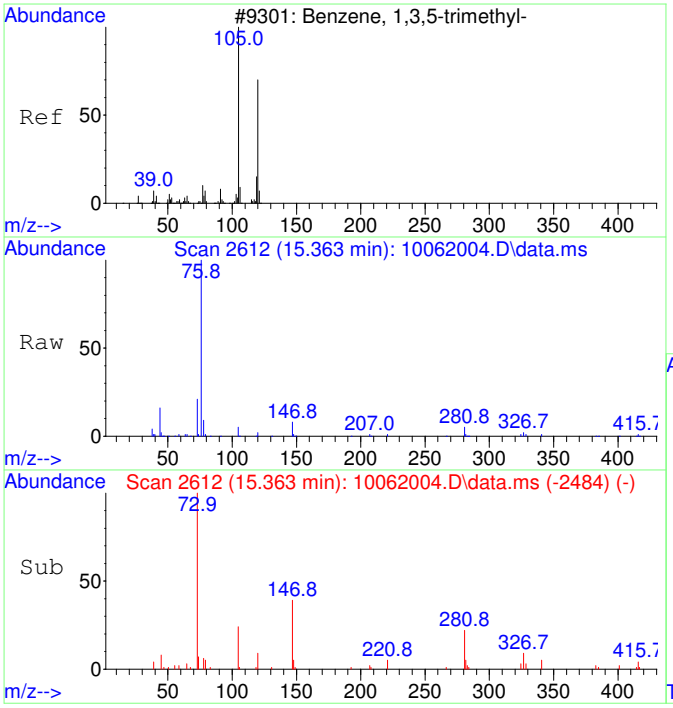


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 59.51 ug/L
RT: 14.879 min Scan# 2494
Delta R.T. 0.007 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 83 Resp: 1686

Ion	Ratio	Lower	Upper
83	100		
85	61.0	35.9	95.9
95	4.0	0.0	47.4

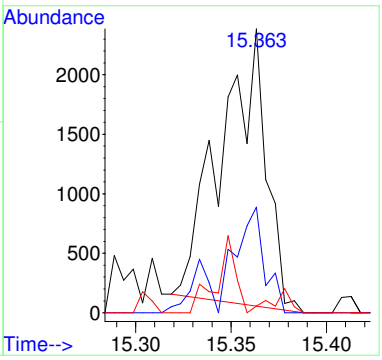


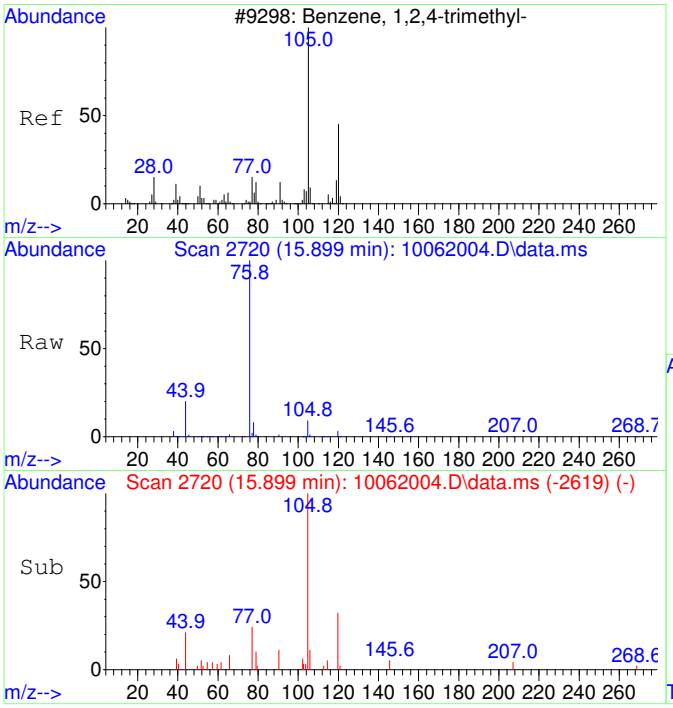


#46
1,3,5-Trimethylbenzene SCAN
Concen: 62.61 ug/L
RT: 15.363 min Scan# 2612
Delta R.T. 0.020 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:105 Resp: 3834

Ion	Ratio	Lower	Upper
105	100		
120	24.7	18.3	78.3
119	2.1	0.0	43.1

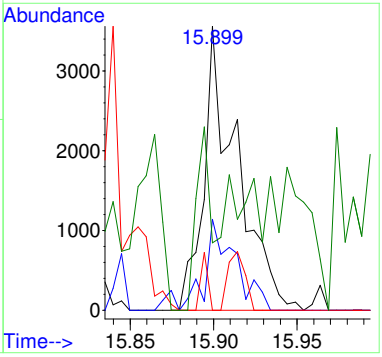


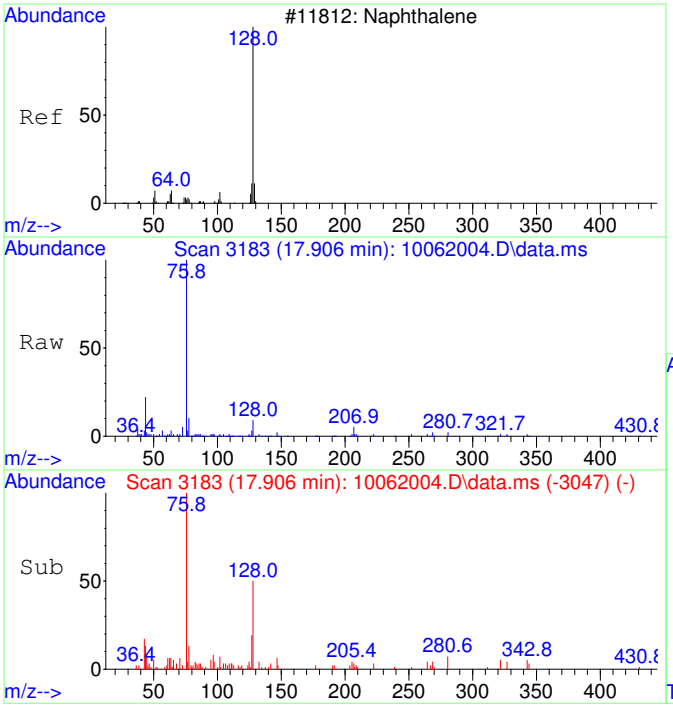


#47
1,2,4-Trimethylbenzene SCAN
Concen: 78.13 ug/L
RT: 15.899 min Scan# 2720
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:105 Resp: 4895

Ion	Ratio	Lower	Upper
105	100		
120	28.8	16.9	76.9
119	4.4	0.0	41.9
77	22.1	0.0	42.3

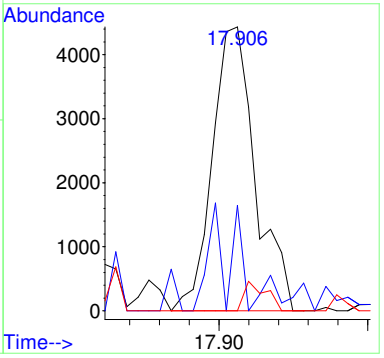




#48
Naphthalene SCAN
Concen: 46.91 ug/L
RT: 17.906 min Scan# 3183
Delta R.T. 0.005 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:128 Resp: 4447

Ion	Ratio	Lower	Upper
128	100		
127	17.0	0.0	44.0
129	5.3	0.0	40.8



Quantitation Report (QT Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062004.D
Acq On : 6 Oct 2020 9:23
InstName : AG5975C
Operator : TD
Sample : S20J009-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

M.I. Performed By:
TD at 6:15 am, Oct 08, 2020

M.I. Approved By:
ZR at 11:23 am, Oct 12, 2020

Quant Time: Oct 06 09:41:49 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

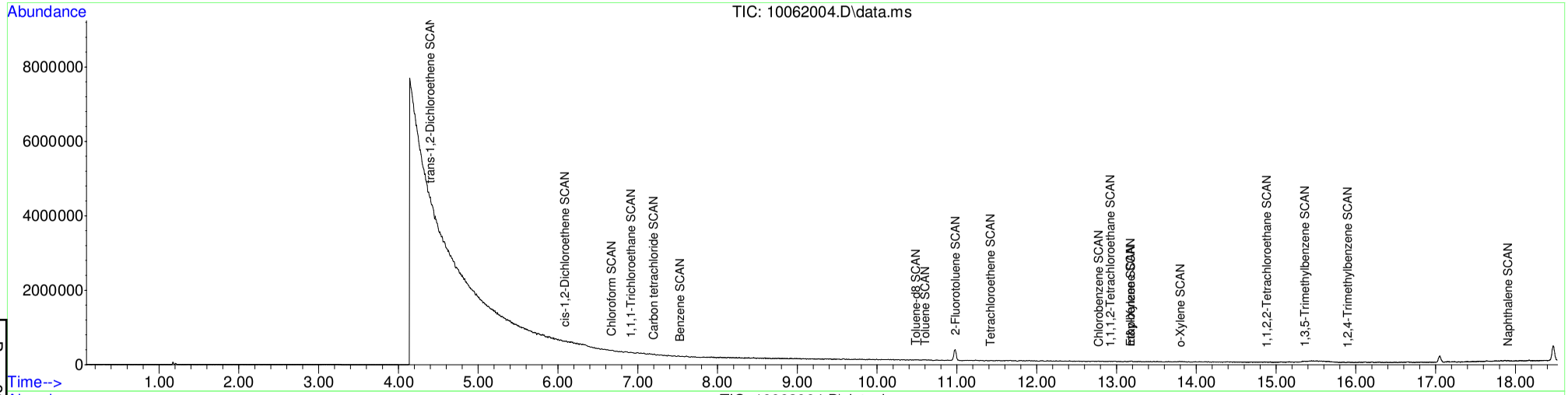
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.980	109	488006	5000.00	ug/L	0.01
System Monitoring Compounds						
12) Toluene-d8	10.487	98	4871	50.99	ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 1.02%#			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.097	61	981m	50.34	ug/L	
3] trans-1,2-Dichloroethene	4.382	61	1128	50.10	ug/L	62
4] 1,1-Dichloroethane	5.092	63	1418	50.60	ug/L #	43
5] cis-1,2-Dichloroethene	6.094	61	1466	49.55	ug/L	99
6] Chloroform	6.664	83	1407	46.47	ug/L	95
7] 1,1,1-Trichloroethane	6.919	97	1482	45.07	ug/L	98
8] Carbon tetrachloride	7.187	117	1397	45.14	ug/L	98
9] Benzene	7.503	78	5033	60.70	ug/L #	1
10] 1,2-Dichloroethane	7.552	62	1460	49.33	ug/L	71
11] Trichloroethene	8.575	130	1192	47.75	ug/L	92
13] Toluene	10.582	91	6272	51.50	ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	1317	49.62	ug/L	95
15] Tetrachloroethene	11.432	166	1740	49.37	ug/L	96
16] Chlorobenzene	12.773	112	4665	53.49	ug/L	85
17] 1,1,1,2-Tetrachloroethane	12.924	131	1599	51.17	ug/L	98
18] Ethylbenzene	12.980	91	8053	54.32	ug/L	95
19] m&p-Xylene	13.170	91	12504	107.92	ug/L	95
20] o-Xylene	13.782	91	6603	53.34	ug/L	95
21] 1,1,2,2-Tetrachloroethane	14.880	83	3007	54.81	ug/L	99
22] 1,3,5-Trimethylbenzene	15.350	105	7191	54.58	ug/L	96
23] 1,2,4-Trimethylbenzene	15.906	105	7761	56.71	ug/L	92
24] Naphthalene	17.907	128	10869	50.25	ug/L	96
25) 2-Fluorotoluene SCAN	10.979	109	244641	5142.59	ug/L	100
27) trans-1,2-Dichloroethe...	4.394	61	289	23.12	ug/L #	67
29) cis-1,2-Dichloroethene...	6.080	61	317	20.45	ug/L #	35
30) Chloroform SCAN	6.662	83	604	35.92	ug/L #	72
31) 1,1,1-Trichloroethane ...	6.918	97	452	29.50	ug/L #	19
32) Carbon tetrachloride SCAN	7.198	117	701	43.86	ug/L #	68
33) Benzene SCAN	7.526	78	11544	273.65	ug/L	93
36) Toluene-d8 SCAN	10.486	98	2687	57.76	ug/L	96
37) Toluene SCAN	10.601	91	5273	88.50	ug/L #	30
39) Tetrachloroethene SCAN	11.420	166	763	53.30	ug/L #	47
40) Chlorobenzene SCAN	12.772	112	2088	51.29	ug/L #	54
41) 1,1,1,2-Tetrachloroeth...	12.923	131	1096	72.74	ug/L #	52
42) Ethylbenzene SCAN	13.177	91	6451	59.43	ug/L	97
43) m&p-Xylene SCAN	13.177	91	6451	59.43	ug/L	95
44) o-Xylene SCAN	13.797	91	3814	65.64	ug/L	94
45) 1,1,2,2-Tetrachloroeth...	14.879	83	1686	59.51	ug/L	89
46) 1,3,5-Trimethylbenzene...	15.363	105	3834	62.61	ug/L	67
47) 1,2,4-Trimethylbenzene...	15.899	105	4895	78.13	ug/L	75
48) Naphthalene SCAN	17.906	128	4447	46.91	ug/L	90

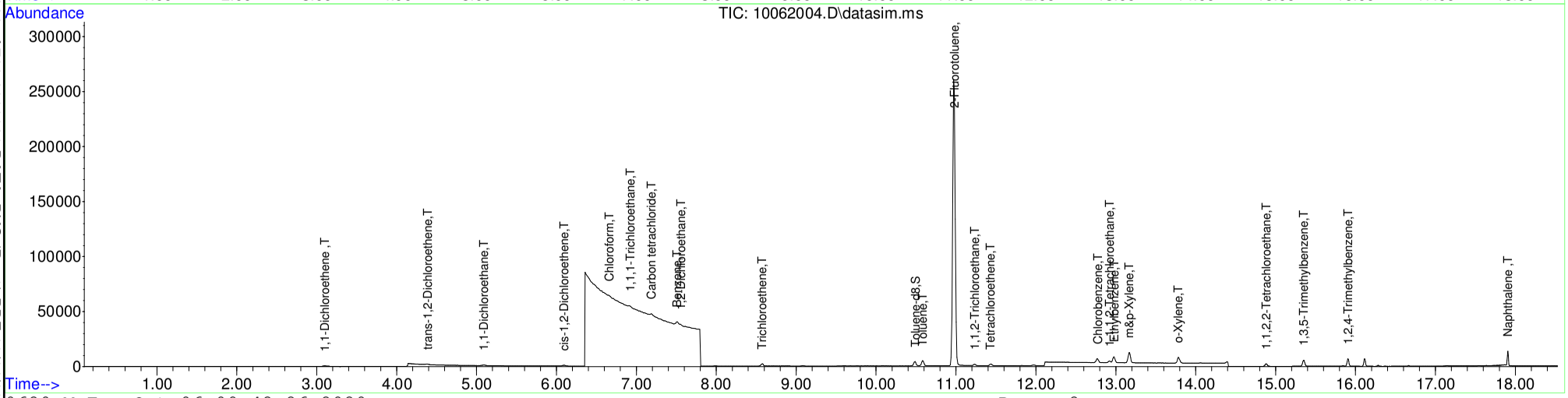
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062004.D
Acq On : 6 Oct 2020 9:23
InstName : AG5975C
Operator : TD
Sample : S20J009-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 06 09:41:49 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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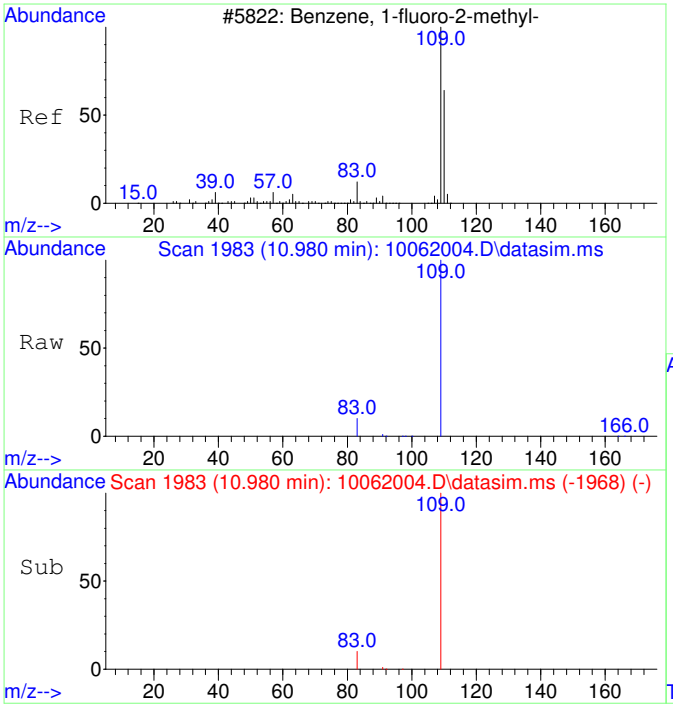
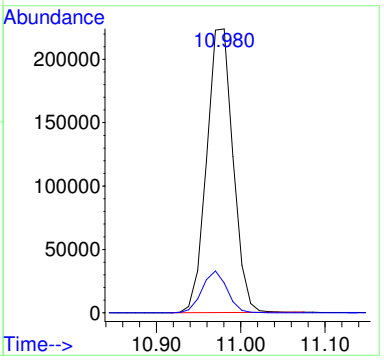
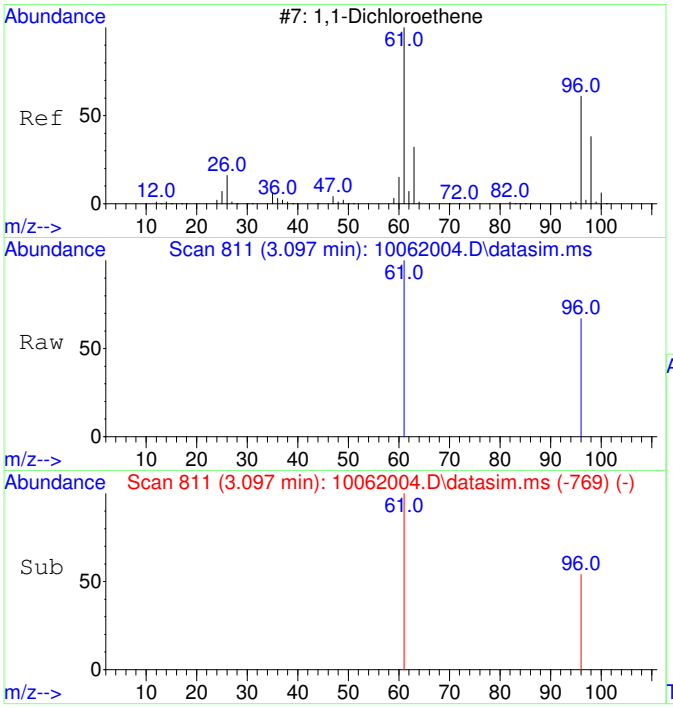


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.980 min Scan# 1983
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:109 Resp: 488006

Ion	Ratio	Lower	Upper
109	100		
83	13.9	0.0	42.3

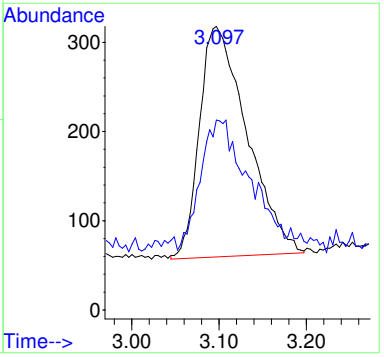


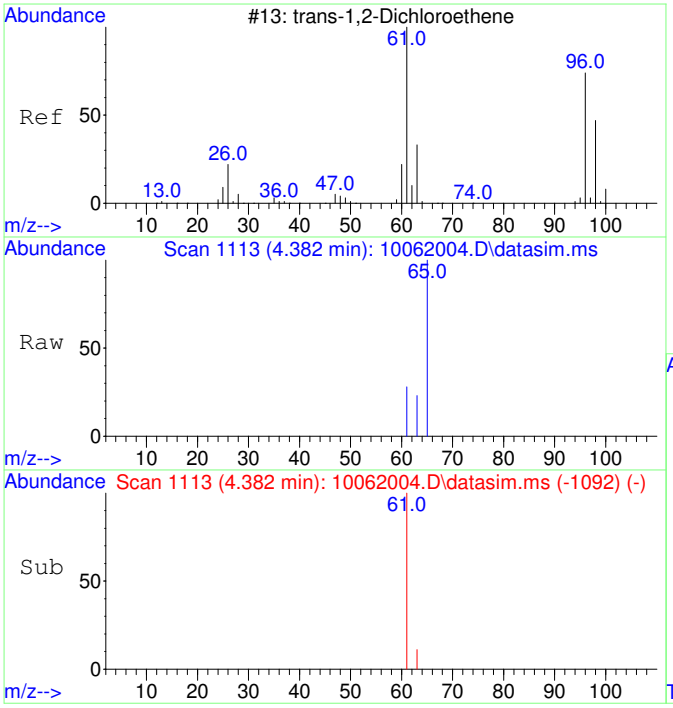


#2
1,1-Dichloroethene
Concen: 50.34 ug/L m
RT: 3.097 min Scan# 811
Delta R.T. 0.007 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 61 Resp: 981

Ion	Ratio	Lower	Upper
61	100		
96	81.2	37.2	97.2

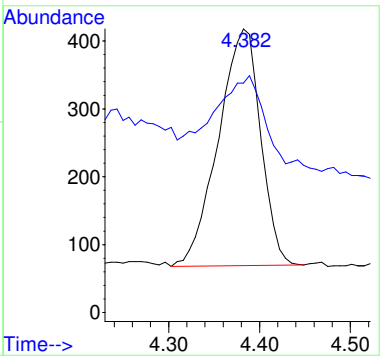


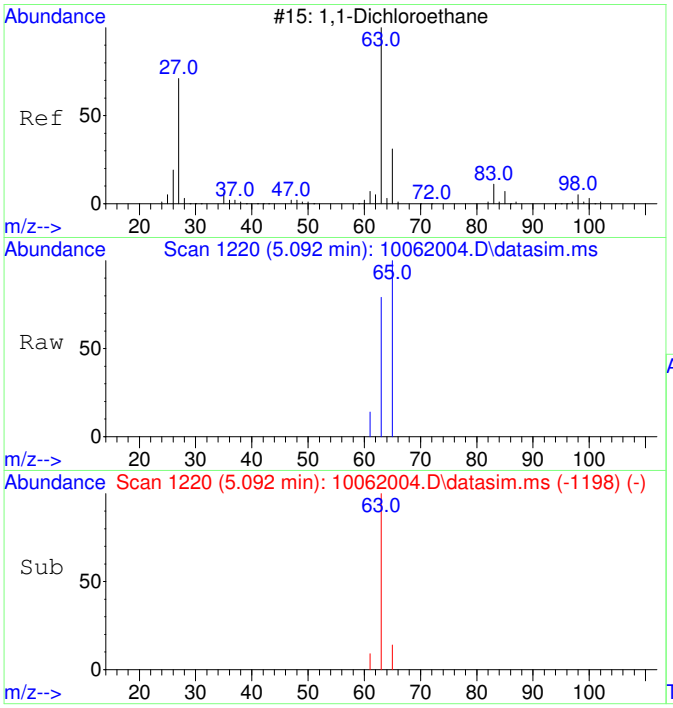


#3
trans-1,2-Dichloroethene
Concen: 50.10 ug/L
RT: 4.382 min Scan# 1113
Delta R.T. -0.013 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 61 Resp: 1128

Ion	Ratio	Lower	Upper
61	100		
63	53.5	2.4	62.4

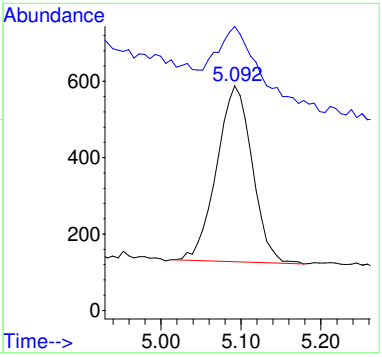


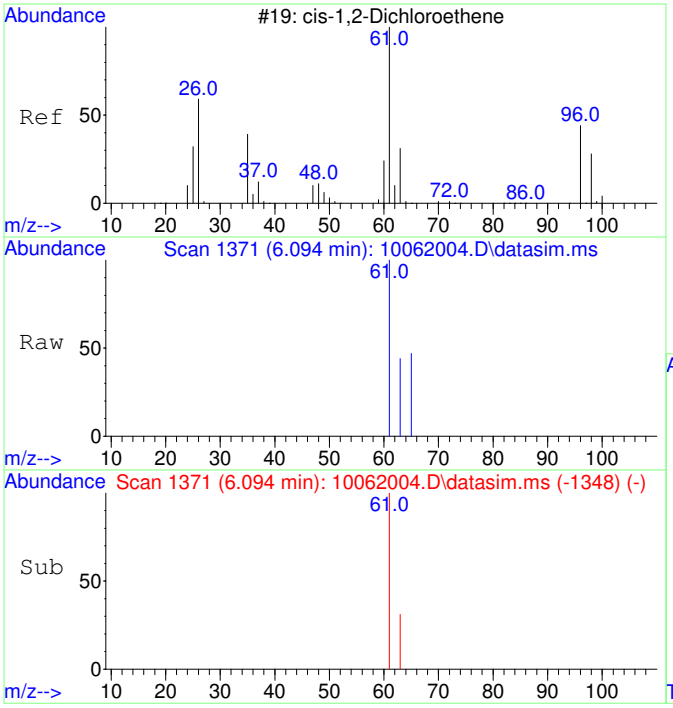


#4
1,1-Dichloroethane
Concen: 50.60 ug/L
RT: 5.092 min Scan# 1220
Delta R.T. -0.007 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 63 Resp: 1418

Ion	Ratio	Lower	Upper
63	100		
65	63.6	1.8	61.8#

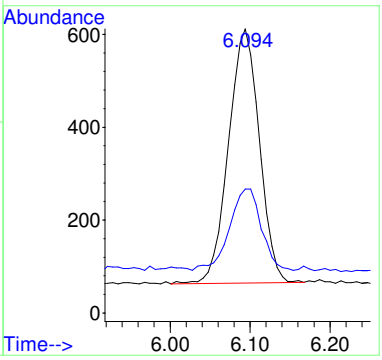


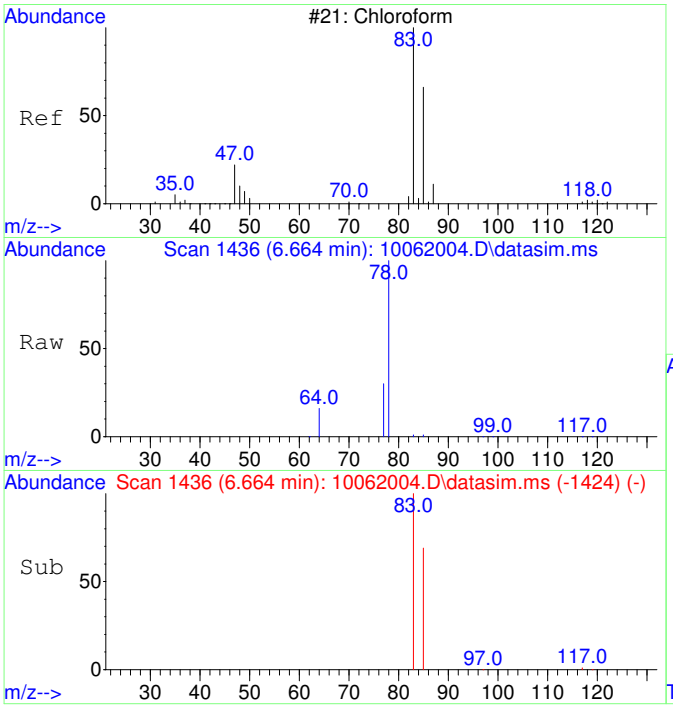


#5
cis-1,2-Dichloroethene
Concen: 49.55 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 61 Resp: 1466

Ion	Ratio	Lower	Upper
61	100		
63	32.8	2.5	62.5

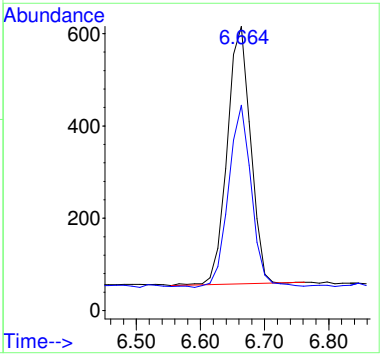


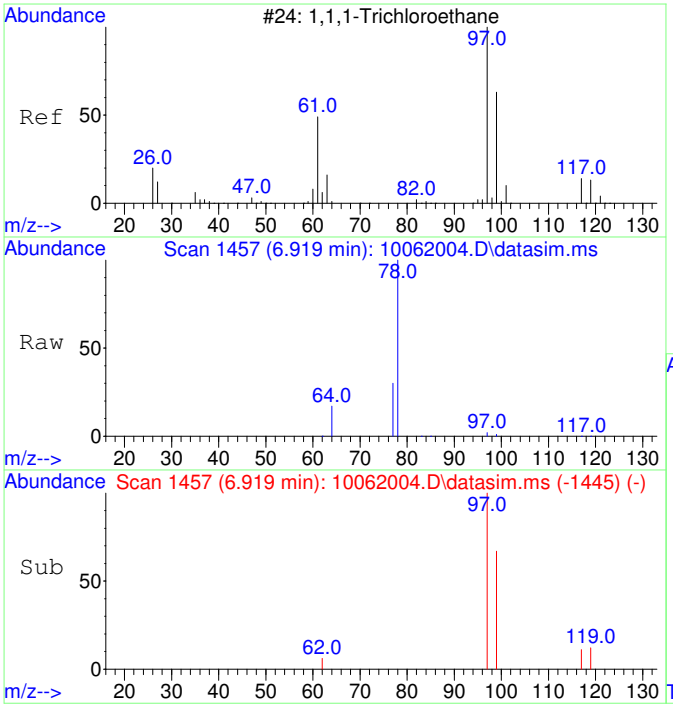


#6
Chloroform
Concen: 46.47 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 83 Resp: 1407

Ion	Ratio	Lower	Upper
83	100		
85	69.1	35.1	95.1

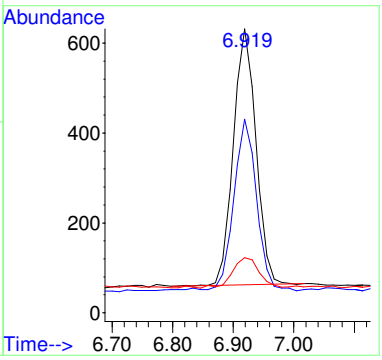


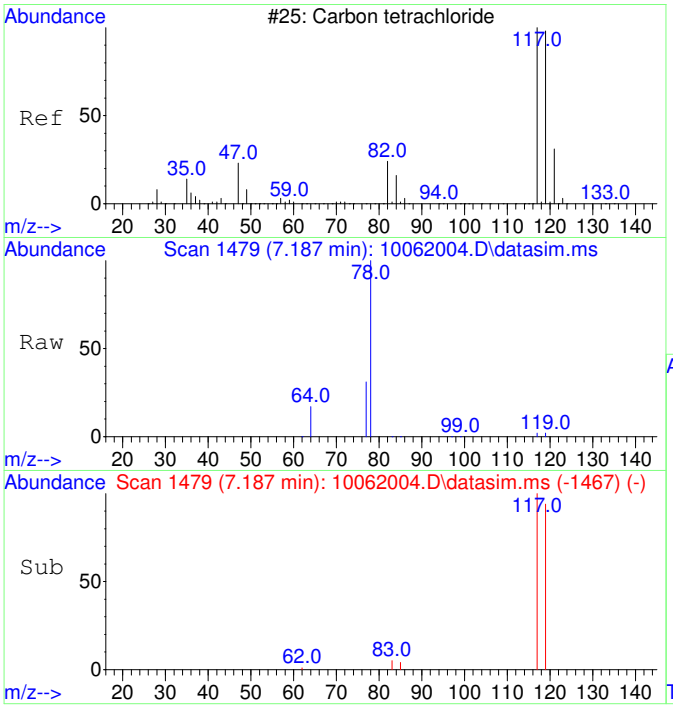


#7
1,1,1-Trichloroethane
Concen: 45.07 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 97 Resp: 1482

Ion	Ratio	Lower	Upper
97	100		
99	66.3	34.6	94.6
117	14.3	0.0	43.2

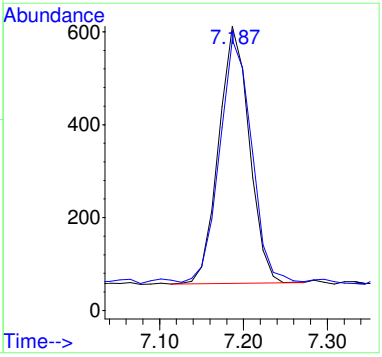


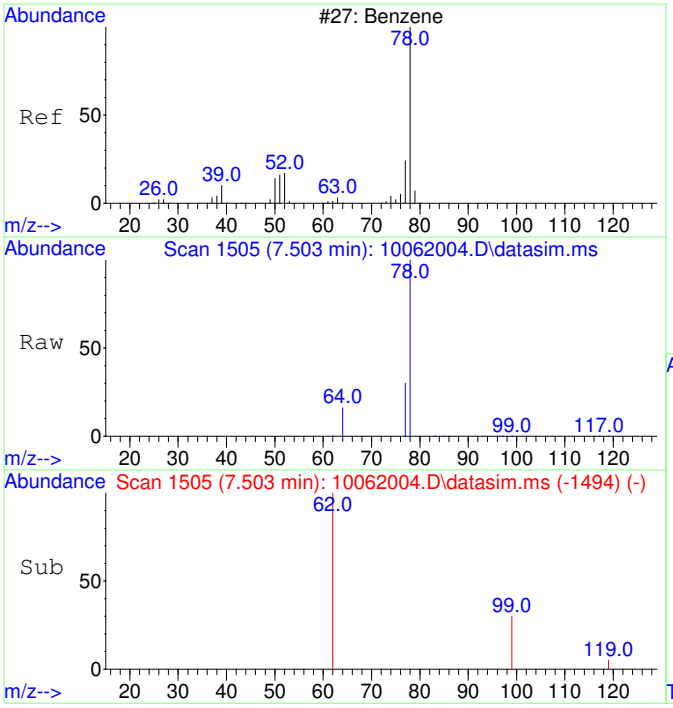


#8
Carbon tetrachloride
Concen: 45.14 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:117 Resp: 1397

Ion	Ratio	Lower	Upper
117	100		
119	98.4	66.4	126.4

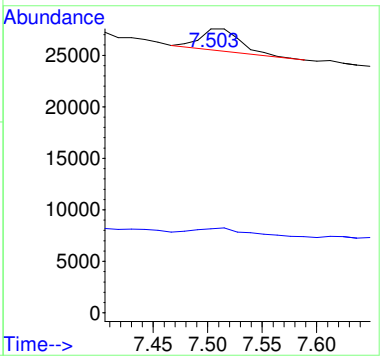


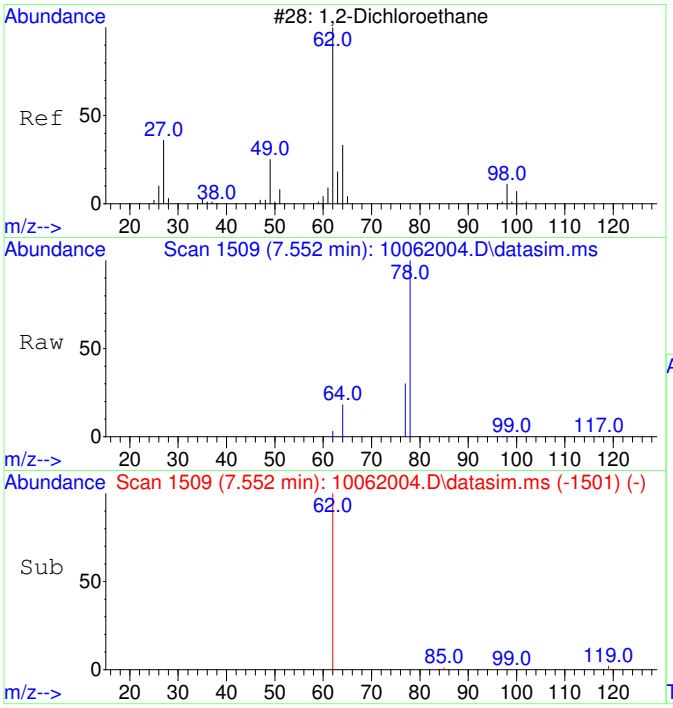


#9
Benzene
Concen: 60.70 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 78 Resp: 5033

Ion	Ratio	Lower	Upper
78	100		
77	71.5	0.0	53.2#

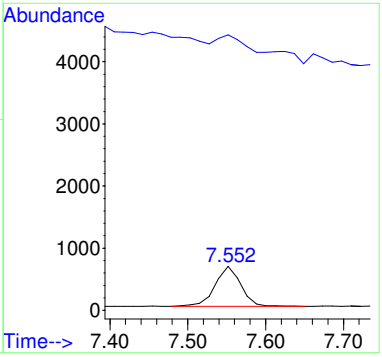


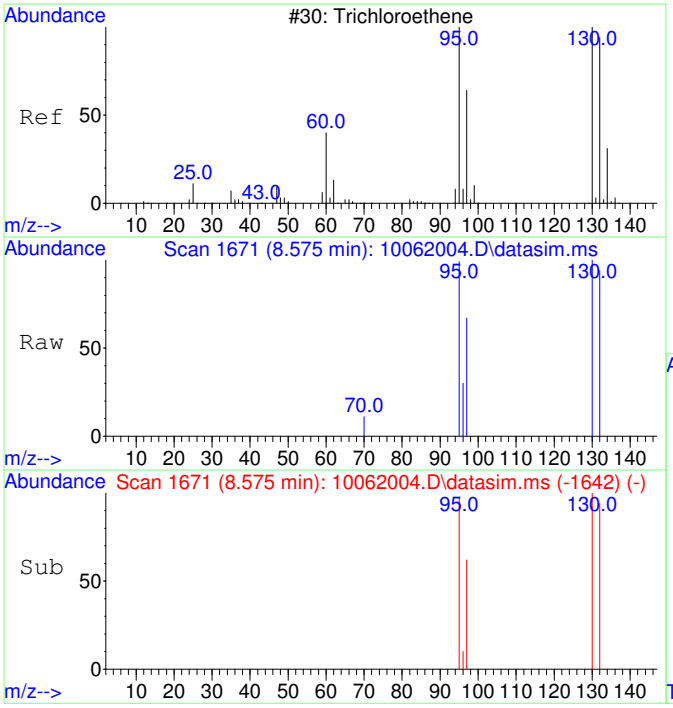


#10
1,2-Dichloroethane
Concen: 49.33 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 62 Resp: 1460

Ion	Ratio	Lower	Upper
62	100		
64	48.4	2.3	62.3

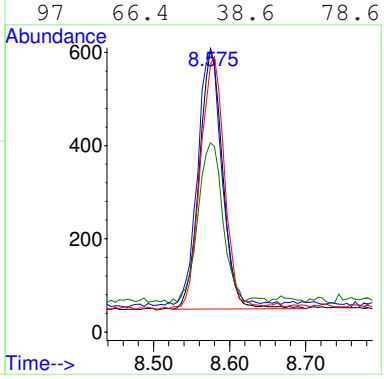


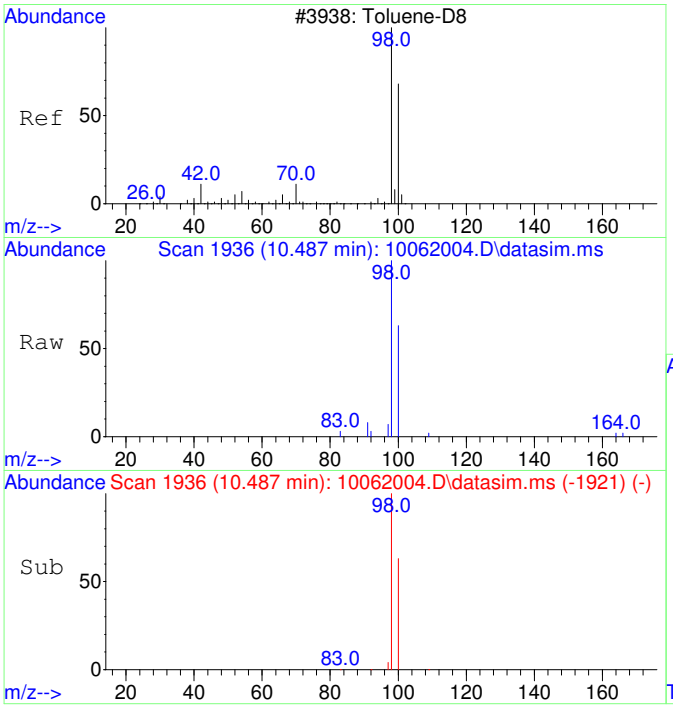


#11
Trichloroethene
Concen: 47.75 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:130 Resp: 1192

Ion	Ratio	Lower	Upper
130	100		
95	99.6	60.7	120.7
132	102.2	76.0	116.0
97	66.4	38.6	78.6

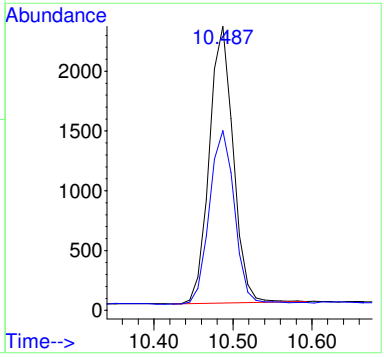


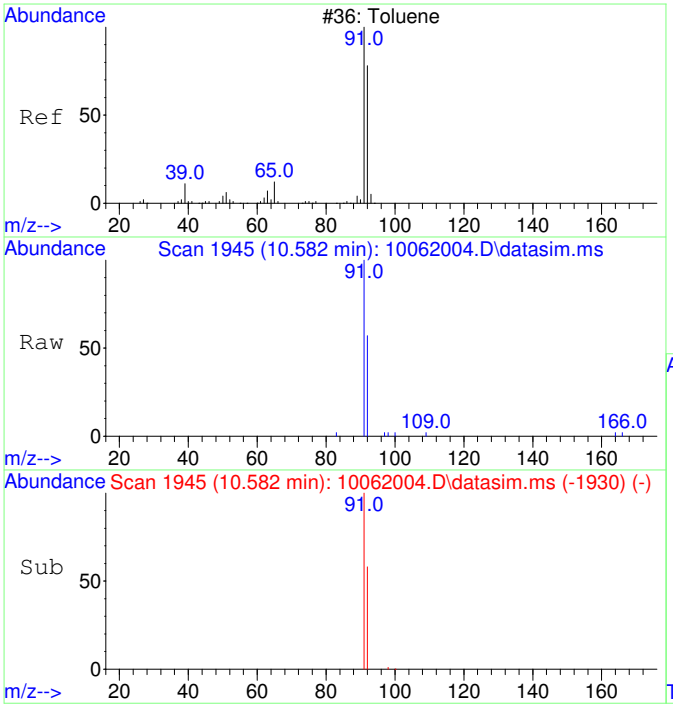


#12
Toluene-d8
Concen: 50.99 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 98 Resp: 4871

Ion	Ratio	Lower	Upper
98	100		
100	65.1	37.1	97.1

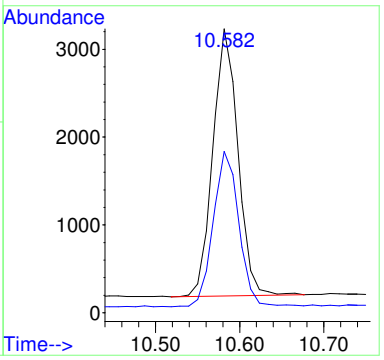


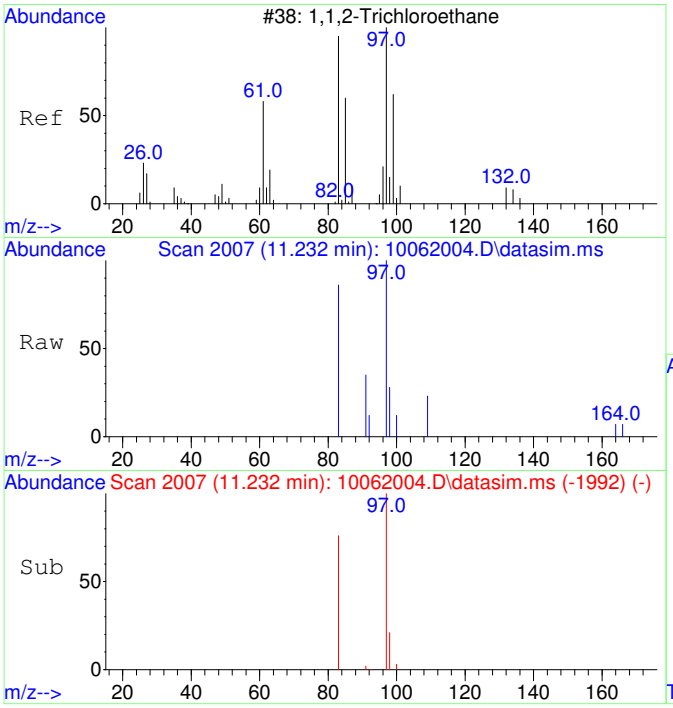


#13
Toluene
Concen: 51.50 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 6272

Ion	Ratio	Lower	Upper
91	100		
92	58.9	29.9	89.9

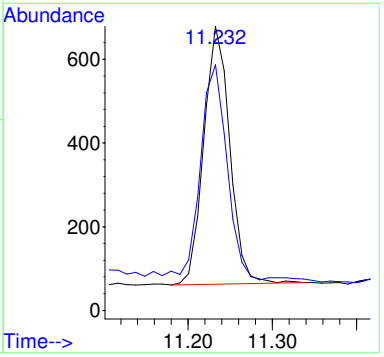


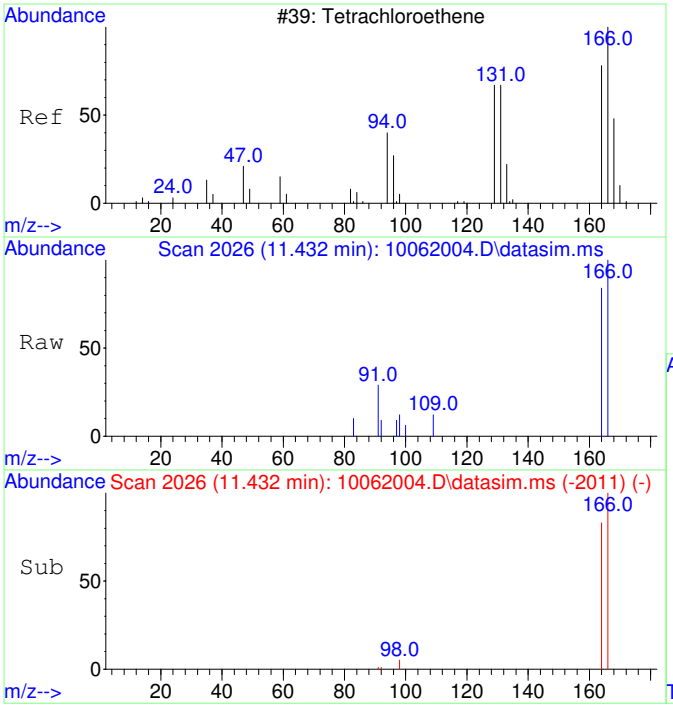


#14
1,1,2-Trichloroethane
Concen: 49.62 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 97 Resp: 1317

Ion	Ratio	Lower	Upper
97	100		
83	85.4	51.2	111.2

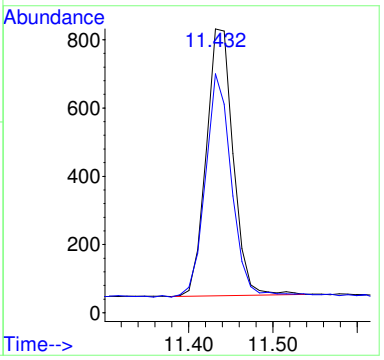


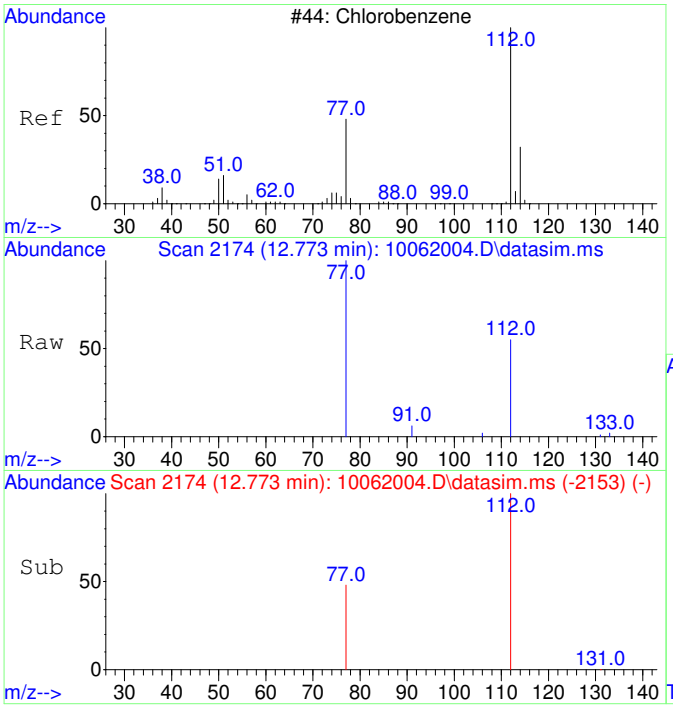


#15
Tetrachloroethene
Concen: 49.37 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:166 Resp: 1740

Ion	Ratio	Lower	Upper
166	100		
164	81.6	47.8	107.8

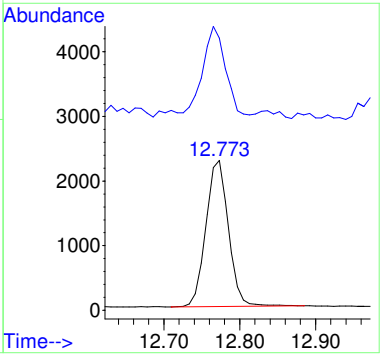


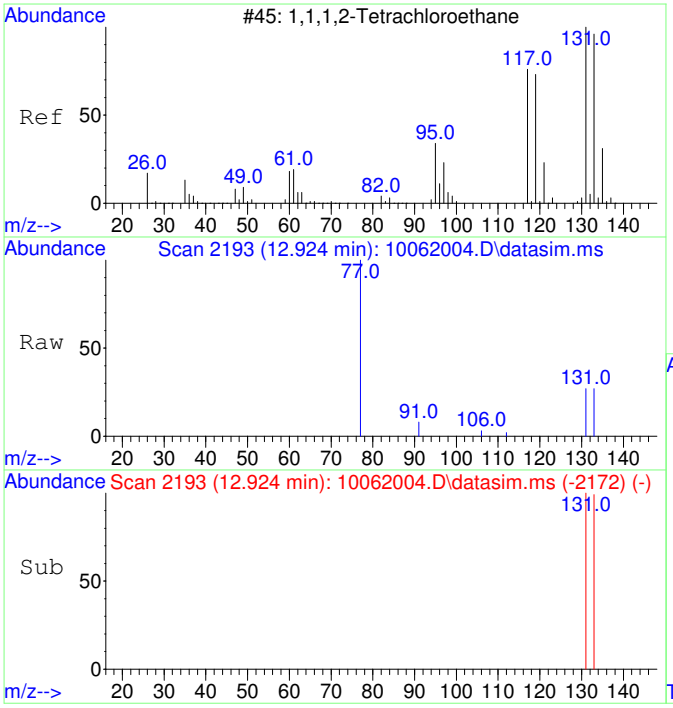


#16
Chlorobenzene
Concen: 53.49 ug/L
RT: 12.773 min Scan# 2174
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:112 Resp: 4665

Ion	Ratio	Lower	Upper
112	100		
77	64.4	23.6	83.6

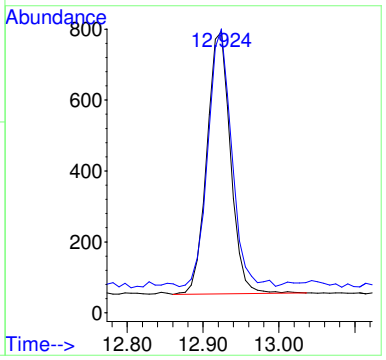


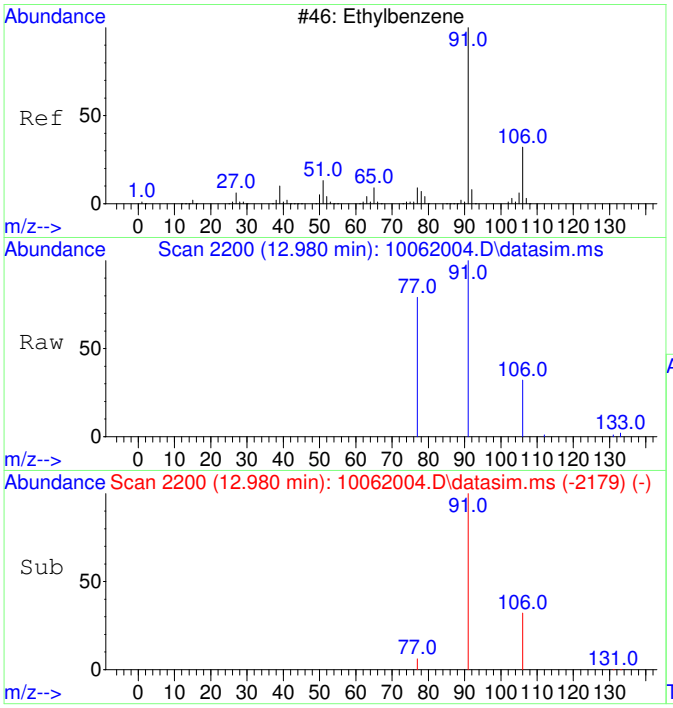


#17
1,1,1,2-Tetrachloroethane
Concen: 51.17 ug/L
RT: 12.924 min Scan# 2193
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:131 Resp: 1599

Ion	Ratio	Lower	Upper
131	100		
133	97.8	66.3	126.3

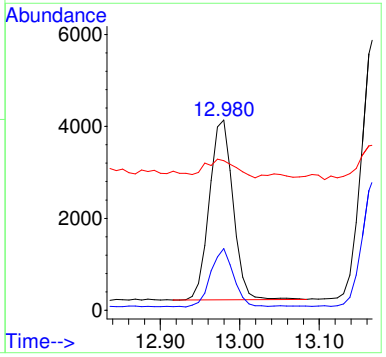


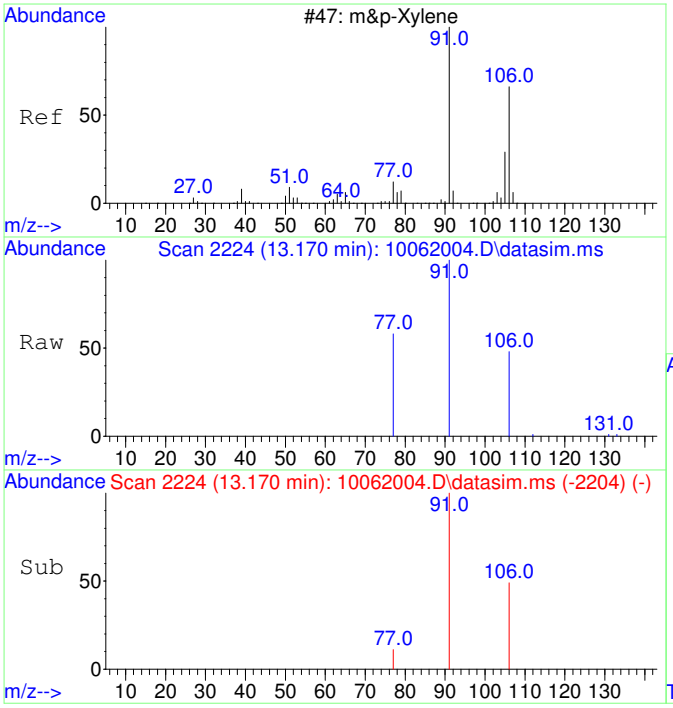


#18
Ethylbenzene
Concen: 54.32 ug/L
RT: 12.980 min Scan# 2200
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 8053

Ion	Ratio	Lower	Upper
91	100		
106	31.1	3.0	63.0
77	13.0	0.0	38.2

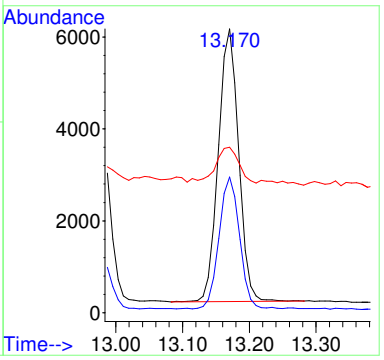


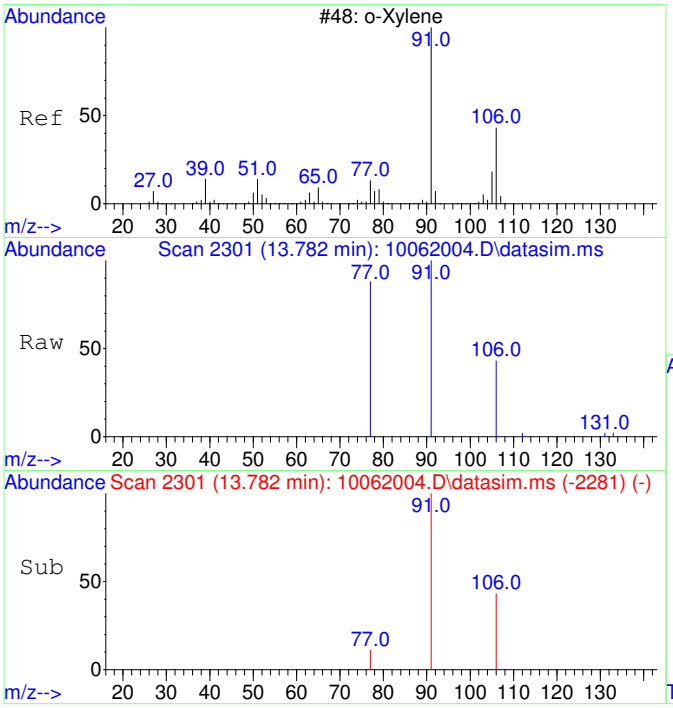


#19
m&p-Xylene
Concen: 107.92 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.008 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 12504

Ion	Ratio	Lower	Upper
91	100		
106	48.8	22.2	82.2
77	15.5	0.0	42.4

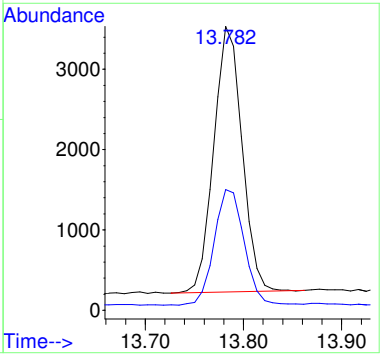


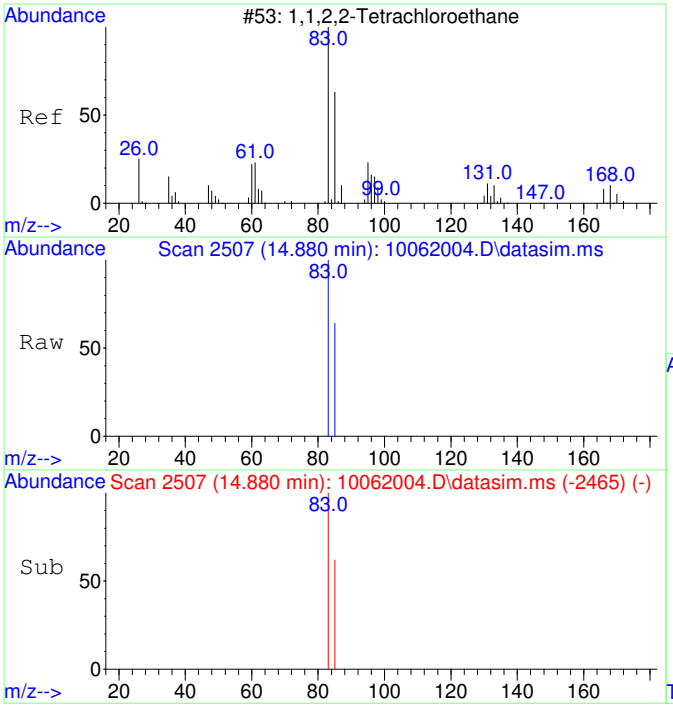


#20
o-Xylene
Concen: 53.34 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 6603

Ion	Ratio	Lower	Upper
91	100		
106	45.5	19.2	79.2

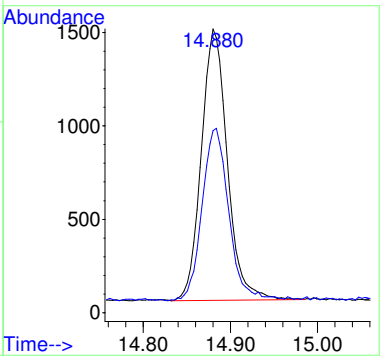


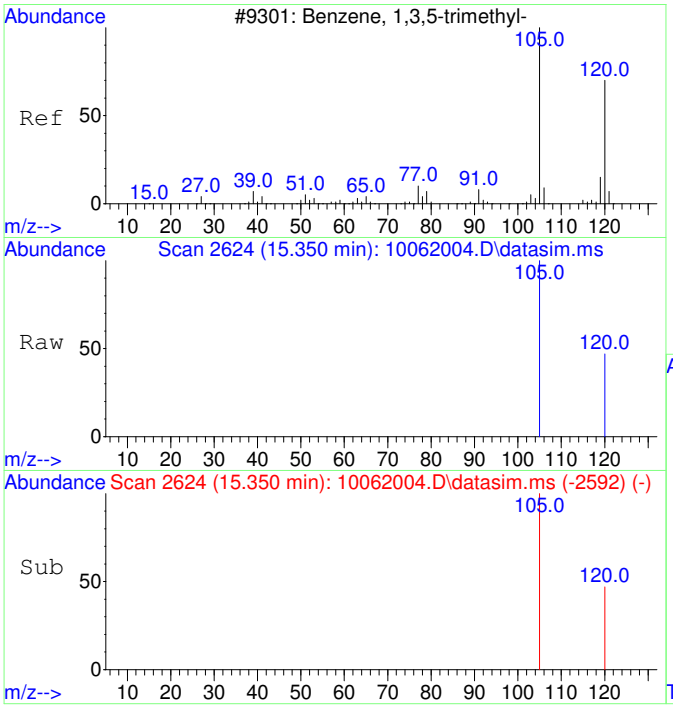


#21
1,1,2,2-Tetrachloroethane
Concen: 54.81 ug/L
RT: 14.880 min Scan# 2507
Delta R.T. 0.007 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 83 Resp: 3007

Ion	Ratio	Lower	Upper
83	100		
85	64.2	34.8	94.8

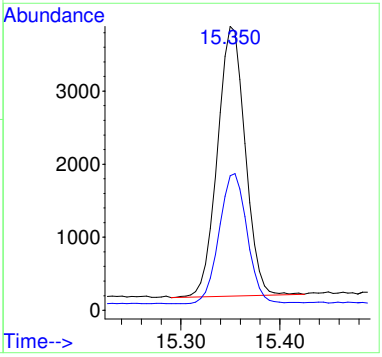


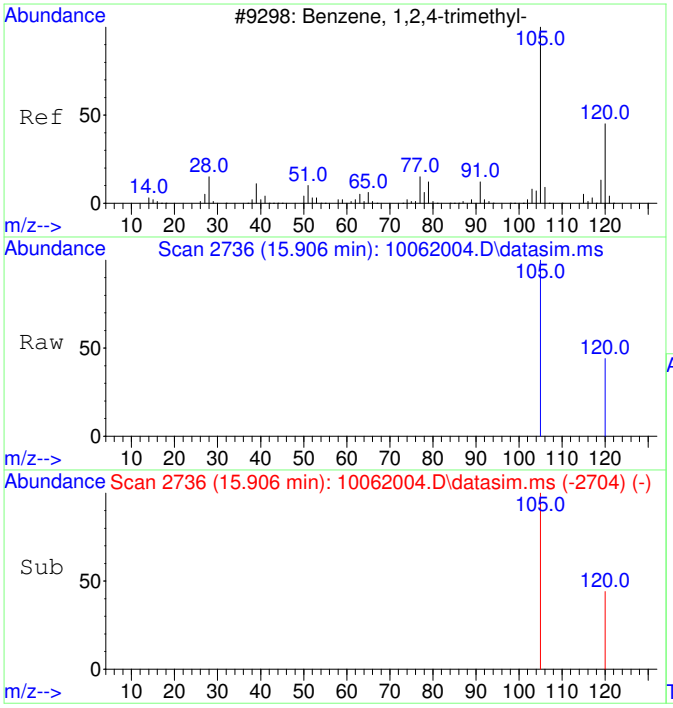


#22
1,3,5-Trimethylbenzene
Concen: 54.58 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.005 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:105 Resp: 7191

Ion	Ratio	Lower	Upper
105	100		
120	48.4	21.1	81.1

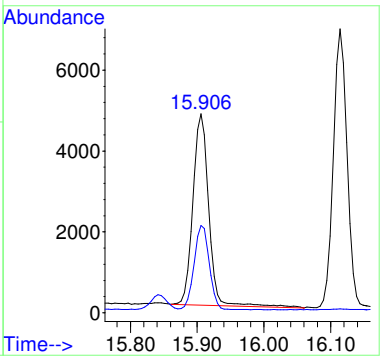


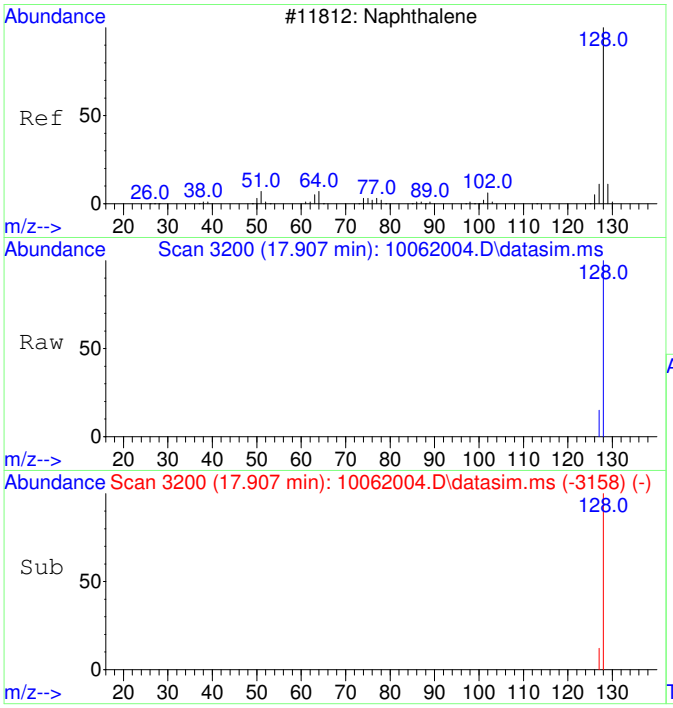


#23
1,2,4-Trimethylbenzene
Concen: 56.71 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:105 Resp: 7761

Ion	Ratio	Lower	Upper
105	100		
120	41.6	17.2	77.2

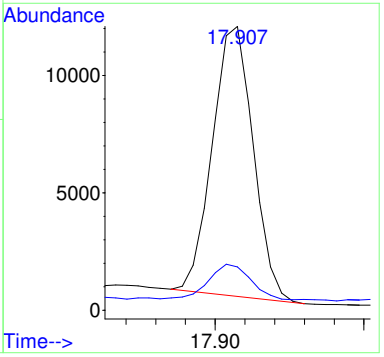


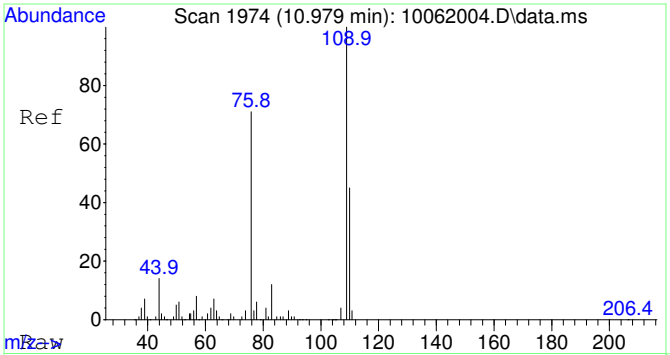


#24
Naphthalene
Concen: 50.25 ug/L
RT: 17.907 min Scan# 3200
Delta R.T. 0.005 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:128 Resp: 10869

Ion	Ratio	Lower	Upper
128	100		
127	13.9	0.0	42.5

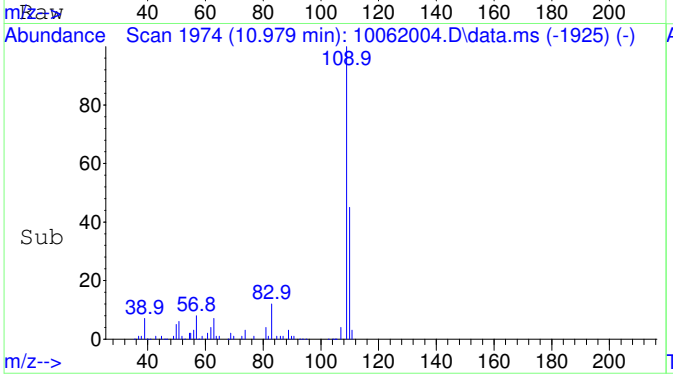


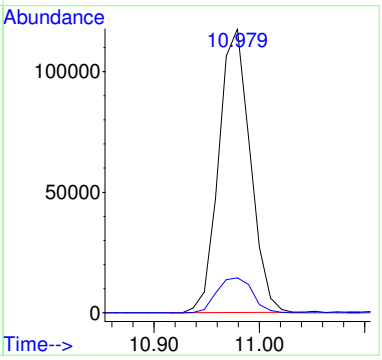


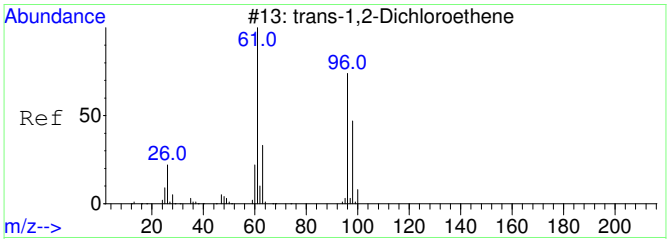
#25
2-Fluorotoluene SCAN
Concen: 5142.59 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

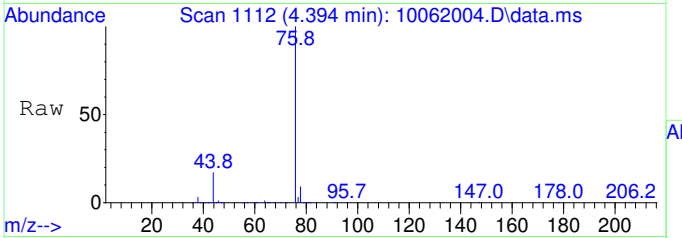
Tgt Ion:109 Resp: 244641

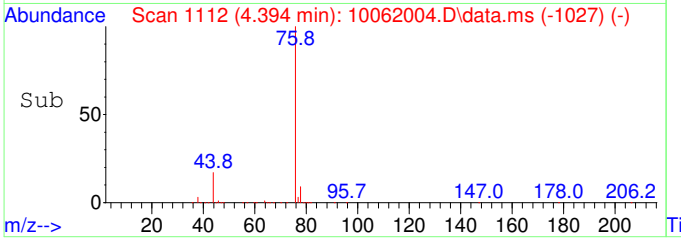
Ion	Ratio	Lower	Upper
109	100		
83	14.0	0.0	43.8







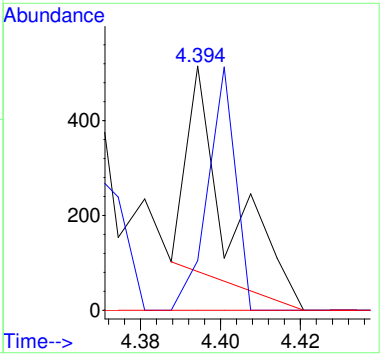


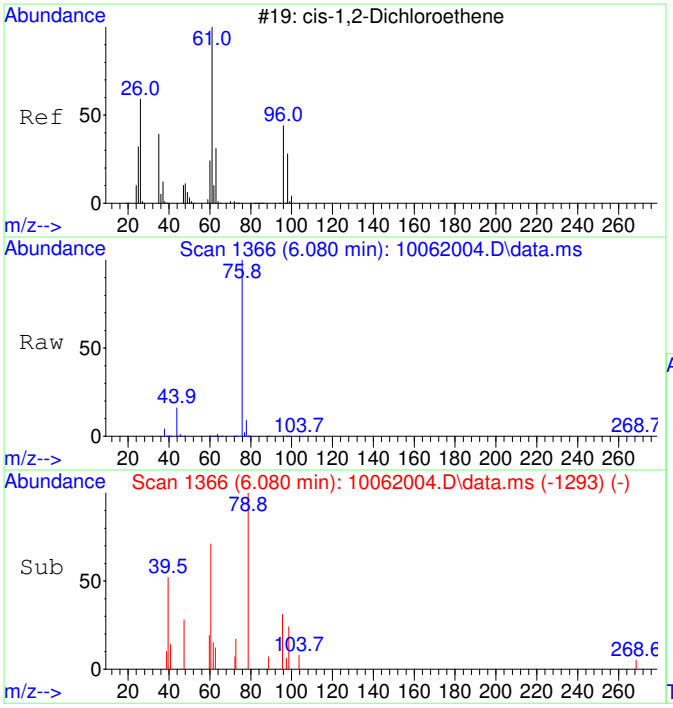


#27
trans-1,2-Dichloroethene SCAN
Concen: 23.12 ug/L
RT: 4.394 min Scan# 1112
Delta R.T. -0.007 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 61 Resp: 289

Ion	Ratio	Lower	Upper
61	100		
96	85.1	49.0	109.0
98	0.0	20.5	80.5#

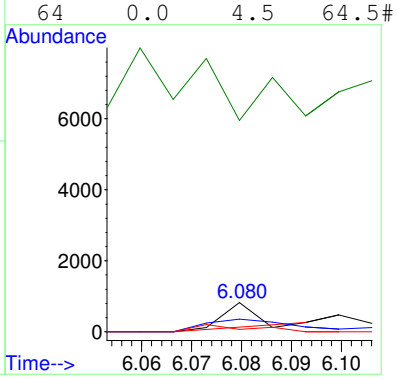


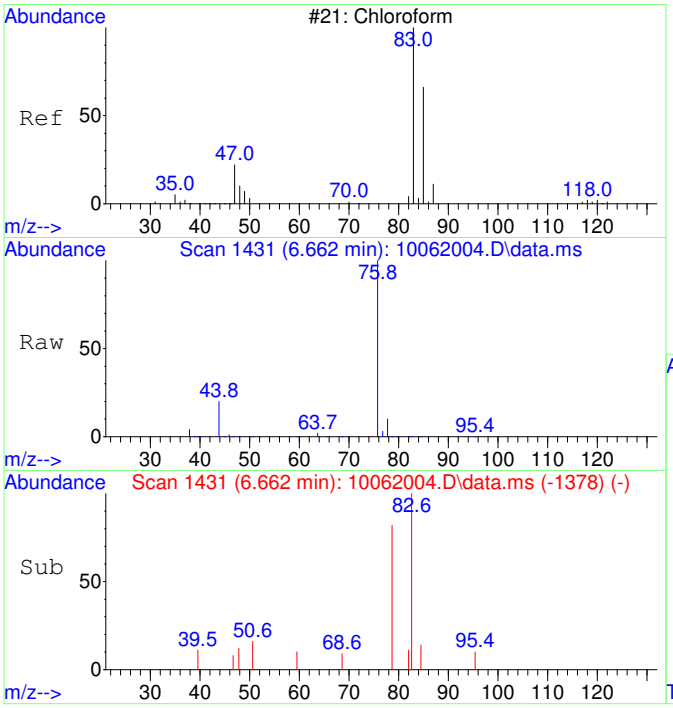


#29
cis-1,2-Dichloroethene SCAN
Concen: 20.45 ug/L
RT: 6.080 min Scan# 1366
Delta R.T. -0.013 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 61 Resp: 317

Ion	Ratio	Lower	Upper
61	100		
96	152.4	39.9	99.9#
98	50.5	13.5	73.5
64	0.0	4.5	64.5#

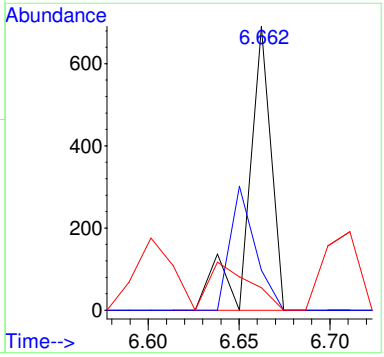


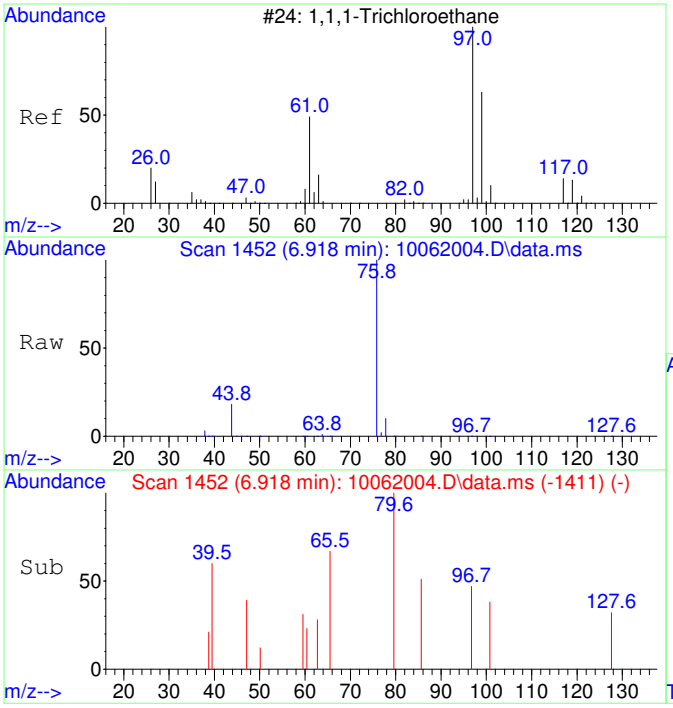


#30
Chloroform SCAN
Concen: 35.92 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 83 Resp: 604

Ion	Ratio	Lower	Upper
83	100		
85	48.2	34.6	94.6
47	0.0	0.0	53.4

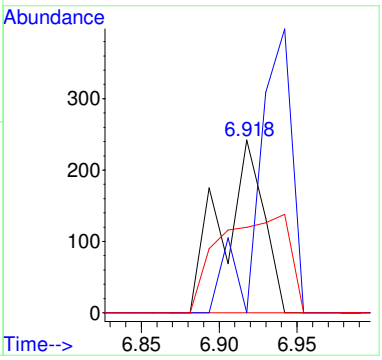


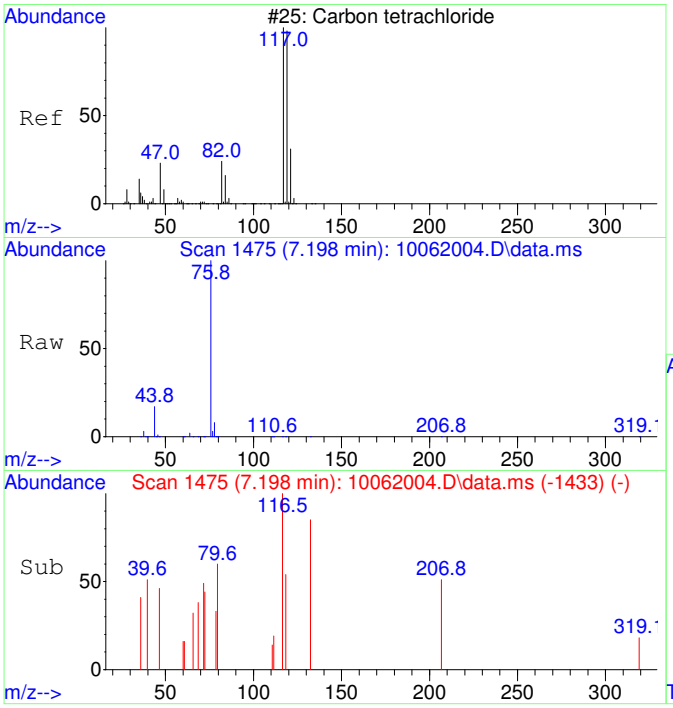


#31
1,1,1-Trichloroethane SCAN
Concen: 29.50 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 97 Resp: 452

Ion	Ratio	Lower	Upper
97	100		
99	0.0	43.6	103.6#
61	0.0	18.0	78.0#

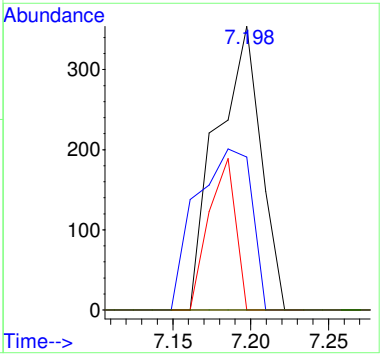


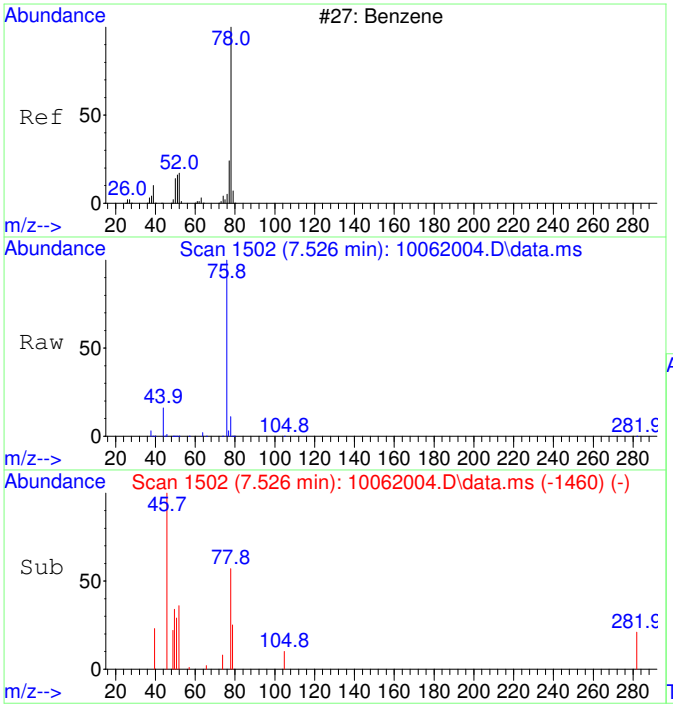


#32
Carbon tetrachloride SCAN
Concen: 43.86 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:117 Resp: 701

Ion	Ratio	Lower	Upper
117	100		
119	71.5	75.5	135.5#
121	32.5	0.0	58.8
82	0.0	0.0	59.2

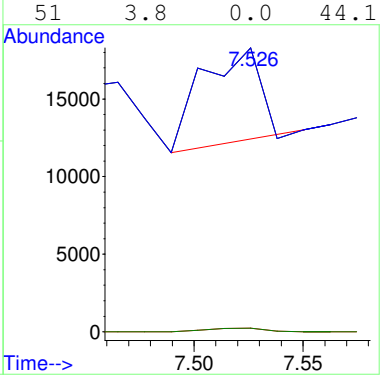


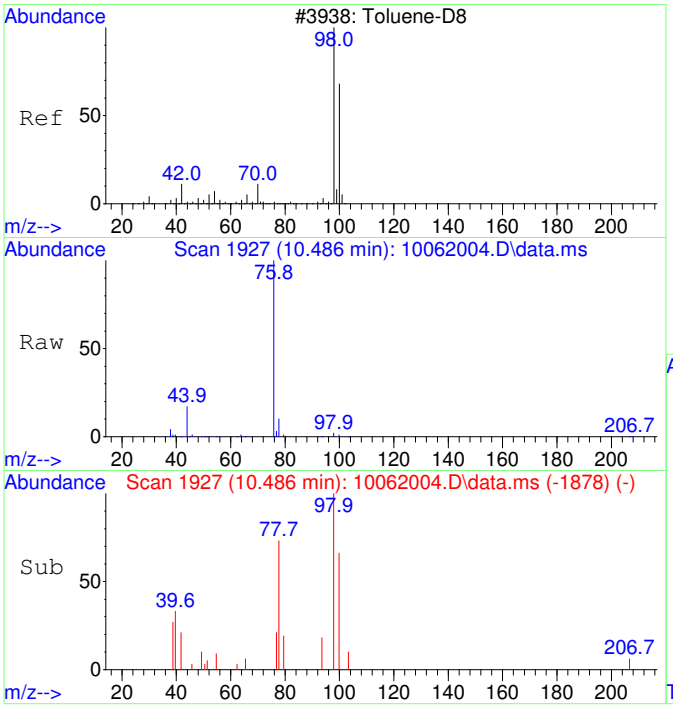


#33
Benzene SCAN
Concen: 273.65 ug/L
RT: 7.526 min Scan# 1502
Delta R.T. 0.012 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 78 Resp: 11544

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	3.8	0.0	47.9
51	3.8	0.0	44.1

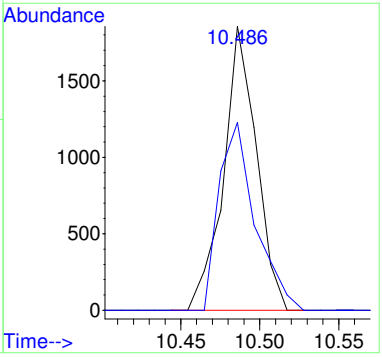


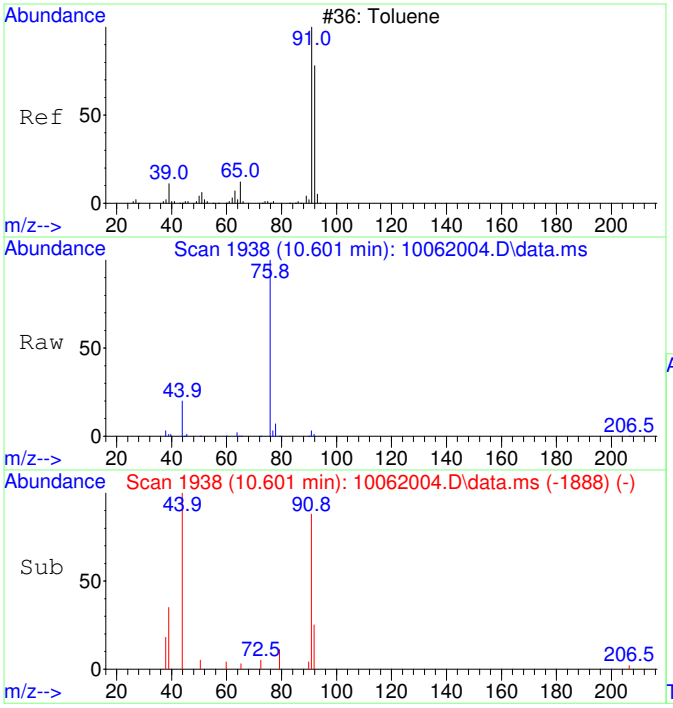


#36
Toluene-d8 SCAN
Concen: 57.76 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 98 Resp: 2687

Ion	Ratio	Lower	Upper
98	100		
100	73.1	40.0	100.0

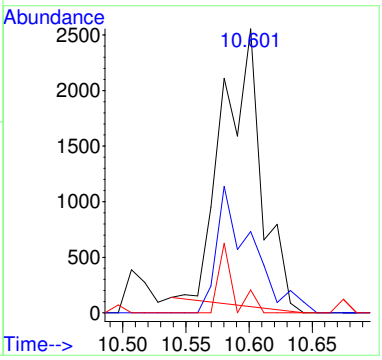


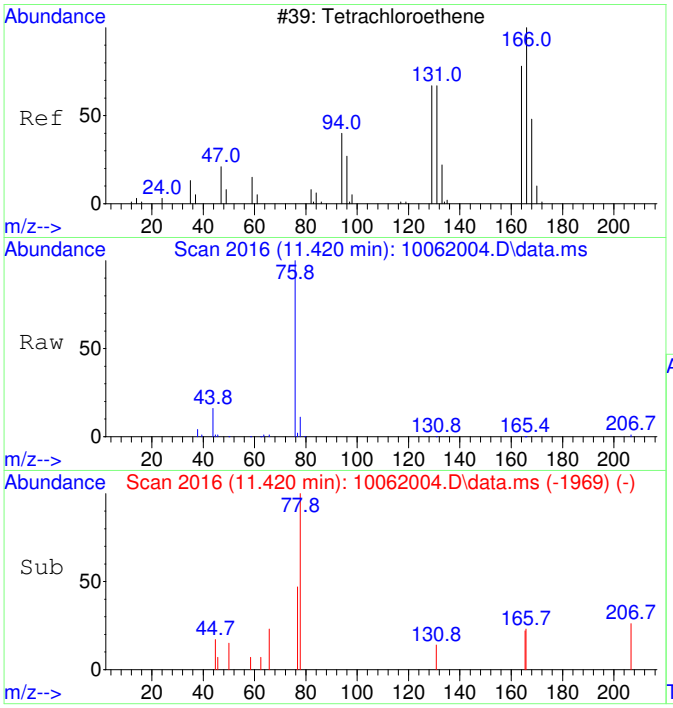


#37
Toluene SCAN
Concen: 88.50 ug/L
RT: 10.601 min Scan# 1938
Delta R.T. 0.021 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 5273

Ion	Ratio	Lower	Upper
91	100		
92	0.0	28.3	88.3#
65	0.0	0.0	41.0

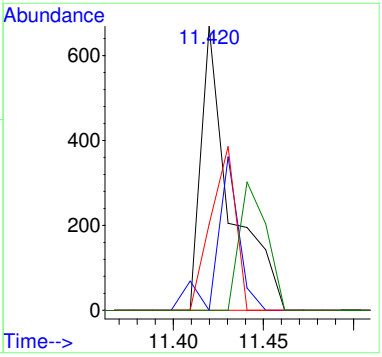


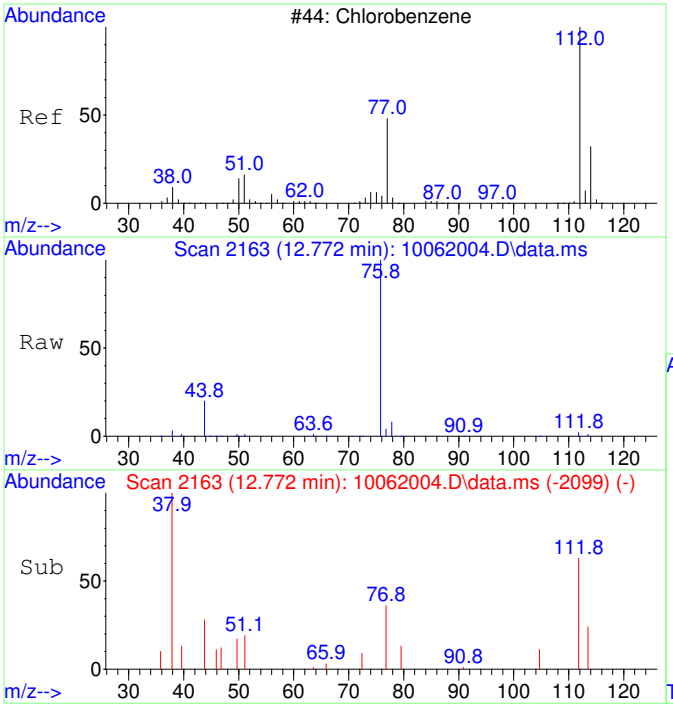


#39
Tetrachloroethene SCAN
Concen: 53.30 ug/L
RT: 11.420 min Scan# 2016
Delta R.T. -0.011 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:166 Resp: 763

Ion	Ratio	Lower	Upper
166	100		
164	40.0	50.9	110.9#
131	48.6	38.7	98.7
129	0.0	41.8	101.8#

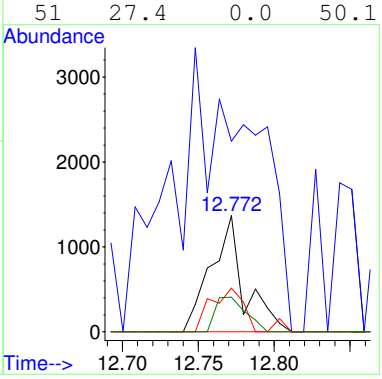


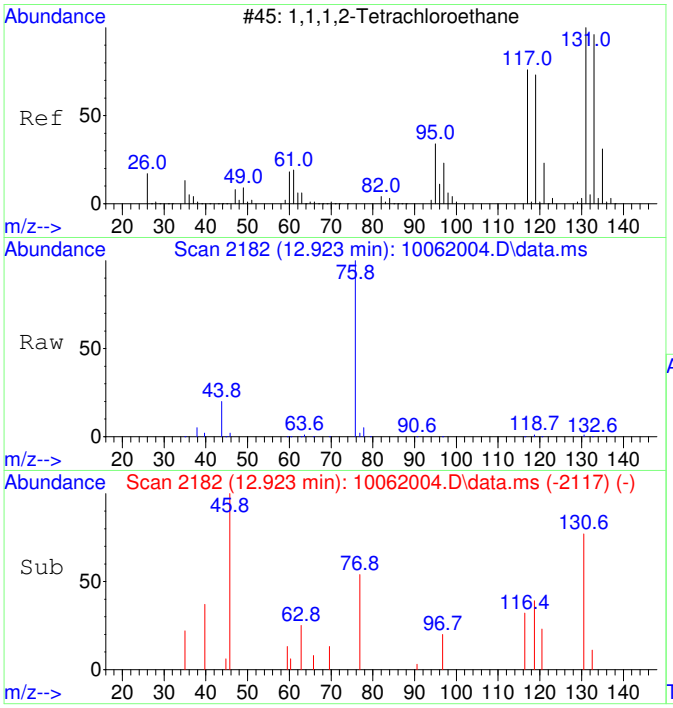


#40
Chlorobenzene SCAN
Concen: 51.29 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.008 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:112 Resp: 2088

Ion	Ratio	Lower	Upper
112	100		
77	0.0	28.2	88.2#
114	36.4	2.3	62.3
51	27.4	0.0	50.1

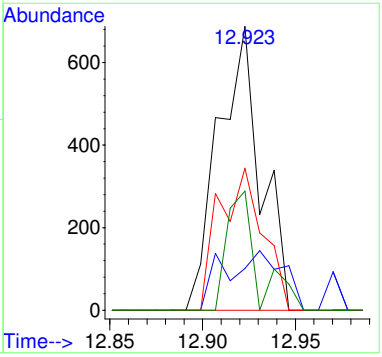


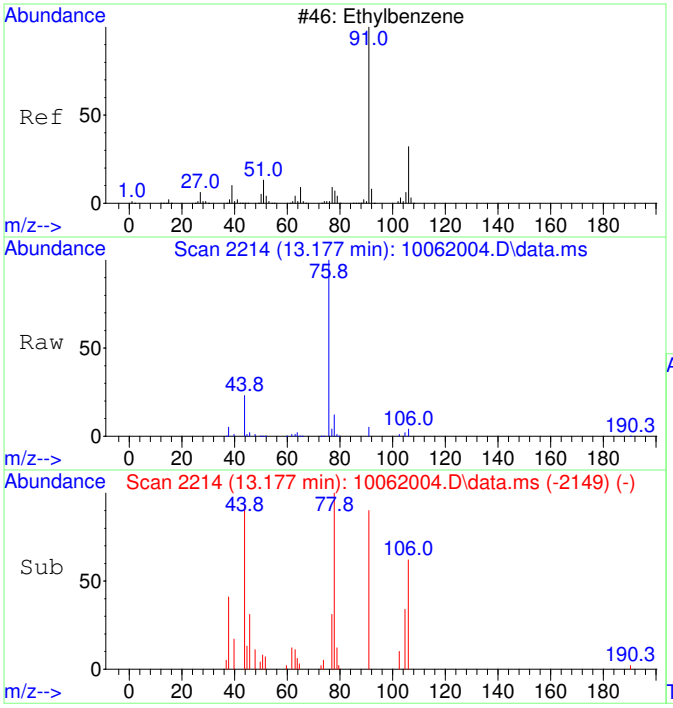


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 72.74 ug/L
RT: 12.923 min Scan# 2182
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:131 Resp: 1096

Ion	Ratio	Lower	Upper
131	100		
133	28.7	66.9	126.9#
119	51.6	40.4	100.4
117	30.4	35.1	95.1#

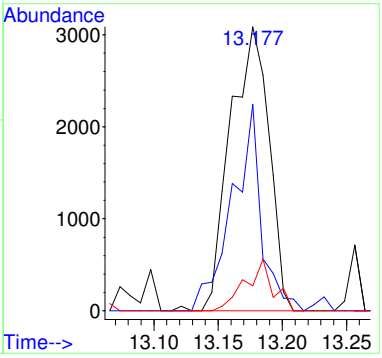


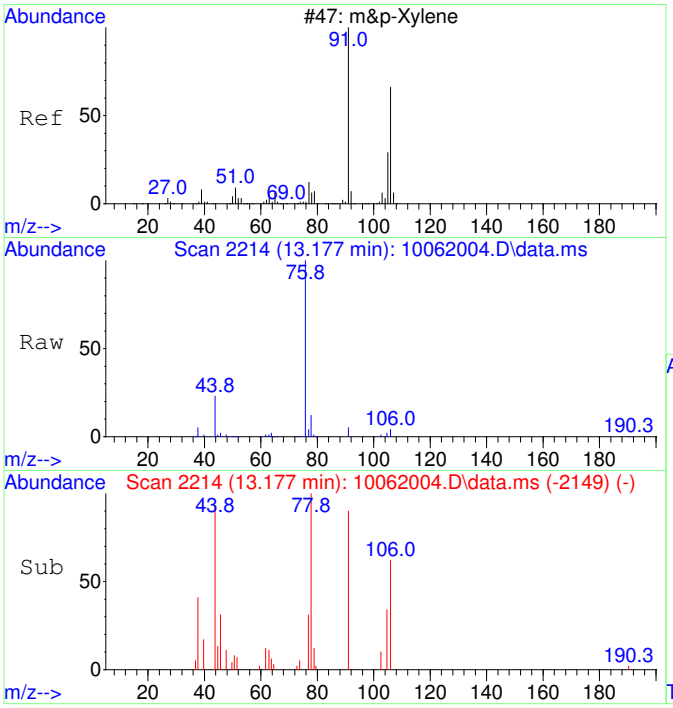


#42
Ethylbenzene SCAN
Concen: 59.43 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 6451

Ion	Ratio	Lower	Upper
91	100		
106	54.5	23.1	83.1
51	13.0	0.0	40.1

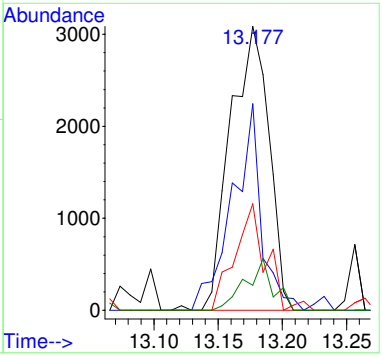


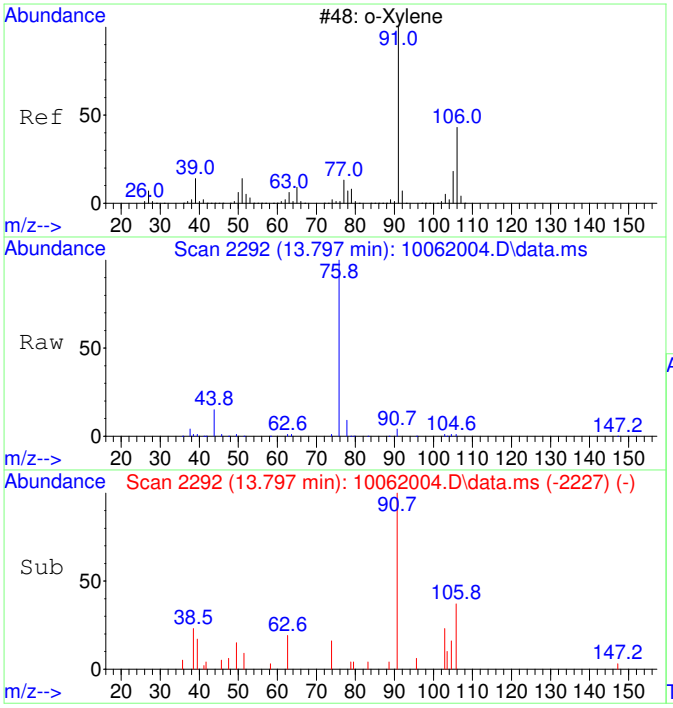


#43
m&p-Xylene SCAN
Concen: 59.43 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 6451

Ion	Ratio	Lower	Upper
91	100		
106	54.5	23.1	83.1
105	30.3	0.0	54.7
51	13.0	0.0	40.1

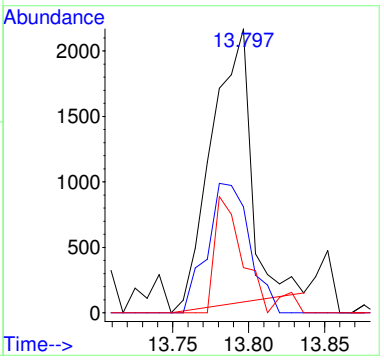


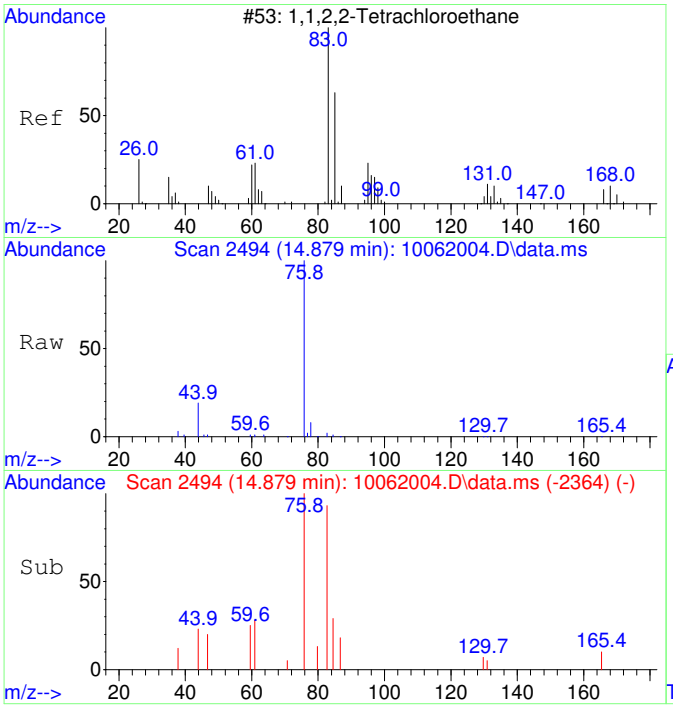


#44
o-Xylene SCAN
Concen: 65.64 ug/L
RT: 13.797 min Scan# 2292
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 3814

Ion	Ratio	Lower	Upper
91	100		
106	50.3	18.0	78.0
105	32.3	0.0	56.6

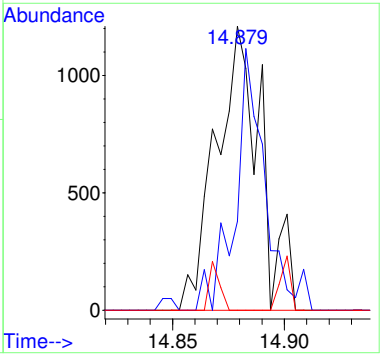


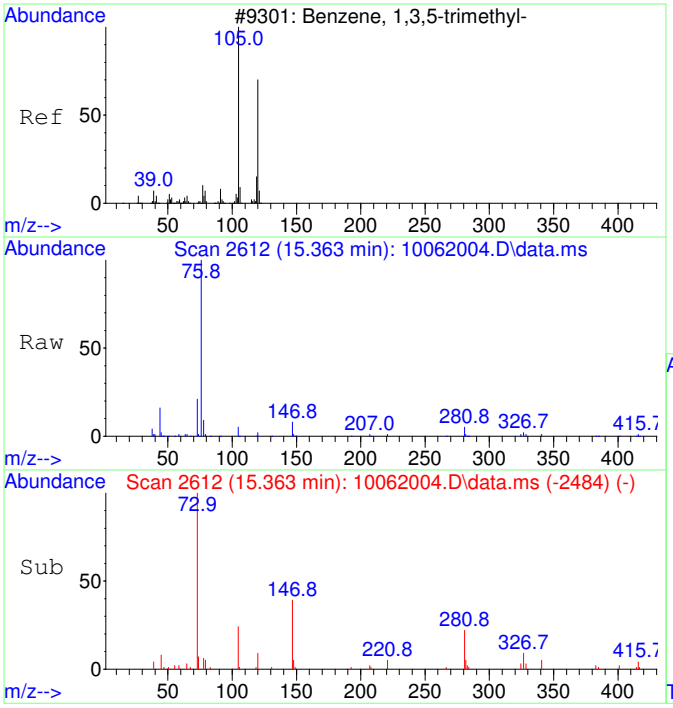


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 59.51 ug/L
RT: 14.879 min Scan# 2494
Delta R.T. 0.007 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 83 Resp: 1686

Ion	Ratio	Lower	Upper
83	100		
85	61.0	35.9	95.9
95	4.0	0.0	47.4

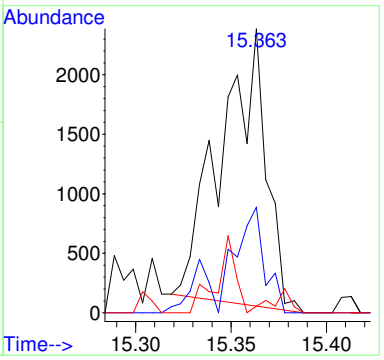


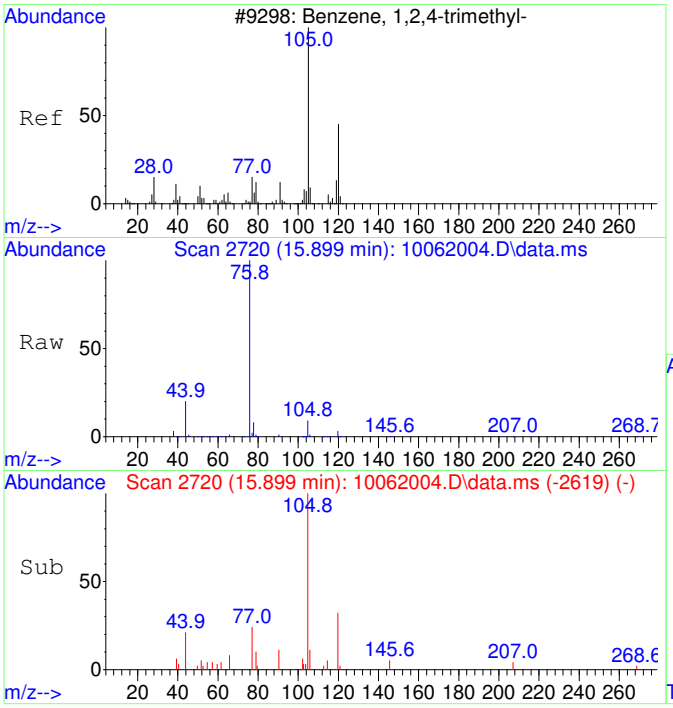


#46
1,3,5-Trimethylbenzene SCAN
Concen: 62.61 ug/L
RT: 15.363 min Scan# 2612
Delta R.T. 0.020 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:105 Resp: 3834

Ion	Ratio	Lower	Upper
105	100		
120	24.7	18.3	78.3
119	2.1	0.0	43.1

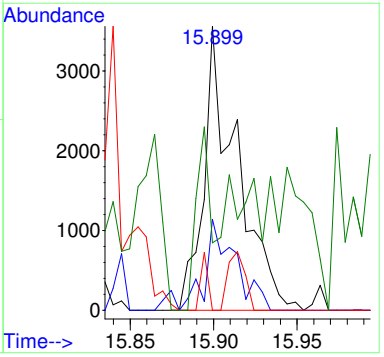


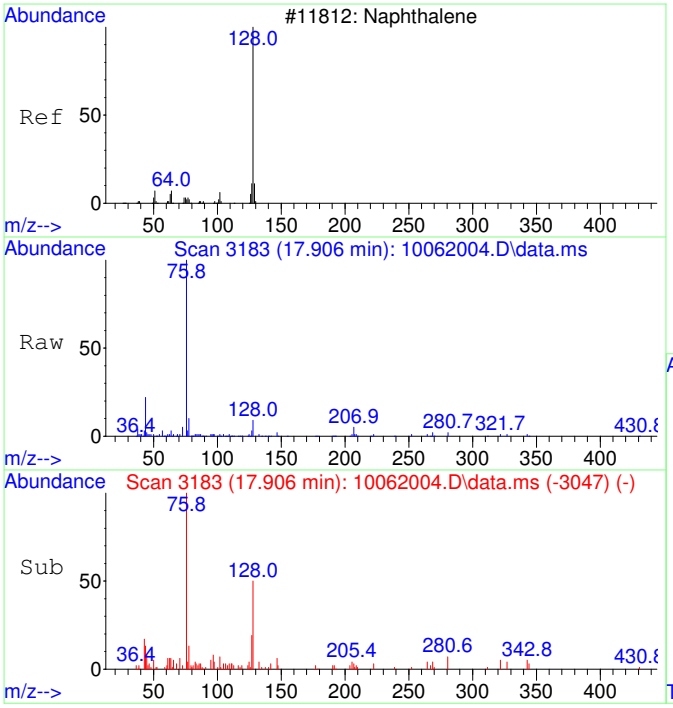


#47
1,2,4-Trimethylbenzene SCAN
Concen: 78.13 ug/L
RT: 15.899 min Scan# 2720
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:105 Resp: 4895

Ion	Ratio	Lower	Upper
105	100		
120	28.8	16.9	76.9
119	4.4	0.0	41.9
77	22.1	0.0	42.3

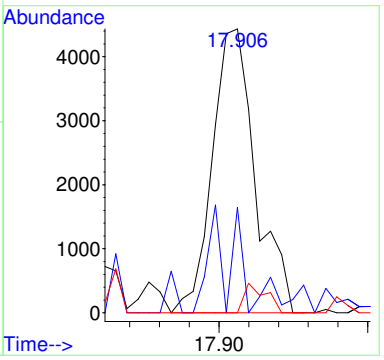




#48
Naphthalene SCAN
Concen: 46.91 ug/L
RT: 17.906 min Scan# 3183
Delta R.T. 0.005 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:128 Resp: 4447

Ion	Ratio	Lower	Upper
128	100		
127	17.0	0.0	44.0
129	5.3	0.0	40.8



2009036-02

Quantitation Report (Not Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062005.D
Acq On : 6 Oct 2020 9:46
InstName : AG5975C
Operator : TD
Sample : 2009036-02
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 06 10:05:25 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

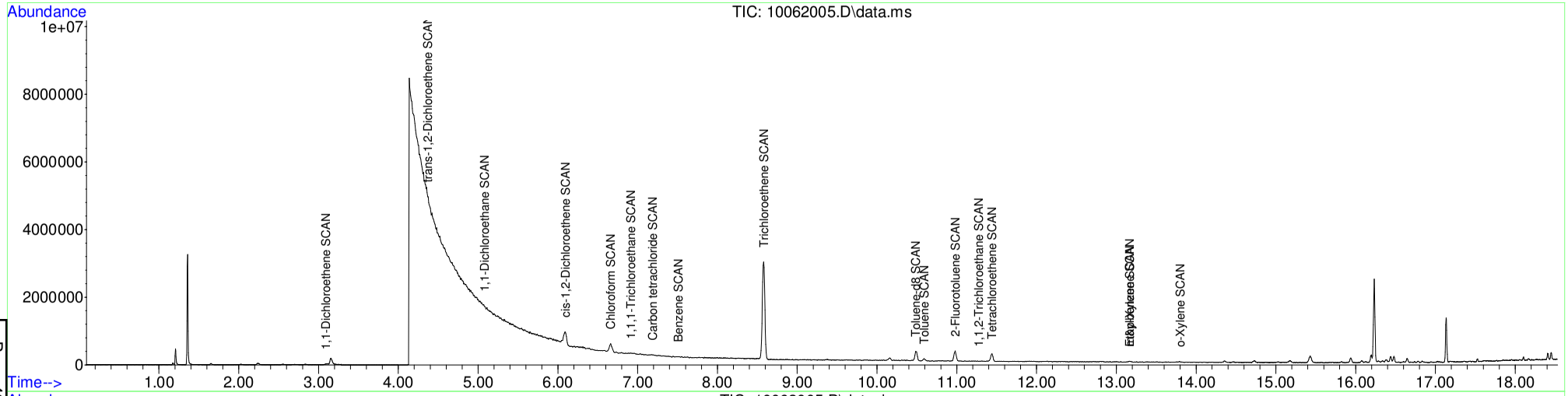
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.981	109	466211	5000.00 ug/L	0.01
System Monitoring Compounds					
12) Toluene-d8	10.487	98	399773	4380.31 ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 87.61%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	26778	1438.40 ug/L	81
3] trans-1,2-Dichloroethene	4.369	61	40578	1886.56 ug/L	100
4] 1,1-Dichloroethane	5.086	63	34356	1283.16 ug/L	96
5] cis-1,2-Dichloroethene	6.088	61	593242	20990.49 ug/L	99
6] Chloroform	6.652	83	392528	13569.29 ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	26884	855.75 ug/L	100
8] Carbon tetrachloride	7.187	117	15677	530.19 ug/L	100
9] Benzene	7.515	78	12669	159.94 ug/L	46
10] 1,2-Dichloroethane	7.552	62	806	28.50 ug/L #	42
11] Trichloroethene	8.580	130	2091276	87685.82 ug/L OC	92
13] Toluene	10.582	91	95796	823.30 ug/L	99
15] Tetrachloroethene	11.442	166	148458	4408.81 ug/L	100
18] Ethylbenzene	12.980	91	6140	43.35 ug/L	94
19] m&p-Xylene	13.170	91	24866	224.64 ug/L	94
20] o-Xylene	13.782	91	18589	157.19 ug/L	95
23] 1,2,4-Trimethylbenzene	15.906	105	4642	35.50 ug/L	100
25) 2-Fluorotoluene SCAN	10.979	109	234643	5163.01 ug/L	100
26) 1,1-Dichloroethene SCAN	3.085	61	17174	1779.40 ug/L #	50
27) trans-1,2-Dichloroethe...	4.368	61	22945	1921.18 ug/L	78
28) 1,1-Dichloroethane SCAN	5.078	63	19764	1429.90 ug/L	59
29) cis-1,2-Dichloroethene...	6.093	61	339233	22907.40 ug/L #	82
30) Chloroform SCAN	6.662	83	218983	13633.35 ug/L	93
31) 1,1,1-Trichloroethane ...	6.918	97	15401	1052.18 ug/L	82
32) Carbon tetrachloride SCAN	7.186	117	8839	578.91 ug/L	96
33) Benzene SCAN	7.514	78	5993	148.70 ug/L	98
35) Trichloroethene SCAN	8.579	130	1029657	92969.41 ug/L	84
36) Toluene-d8 SCAN	10.486	98	203077	4569.10 ug/L	98
37) Toluene SCAN	10.591	91	54687	960.78 ug/L	98
38) 1,1,2-Trichloroethane ...	11.273	97	321	25.13 ug/L #	13
39) Tetrachloroethene SCAN	11.441	166	65993	4825.91 ug/L	91
42) Ethylbenzene SCAN	13.169	91	15612	150.55 ug/L	87
43) m&p-Xylene SCAN	13.169	91	15612	150.55 ug/L	90
44) o-Xylene SCAN	13.797	91	11248	202.64 ug/L	81

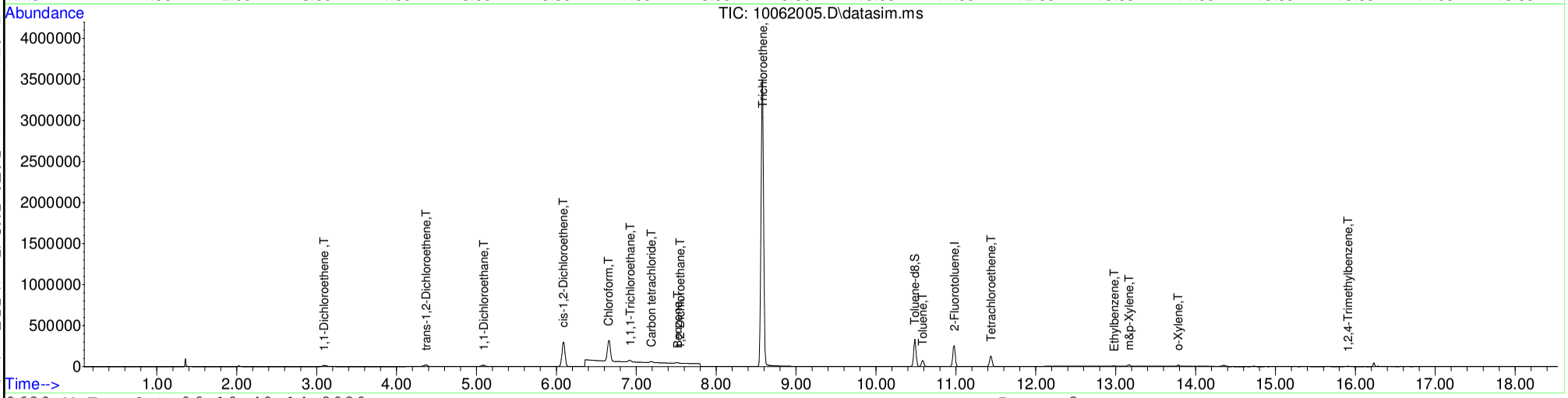
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062005.D
Acq On : 6 Oct 2020 9:46
InstName : AG5975C
Operator : TD
Sample : 2009036-02
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 06 10:05:25 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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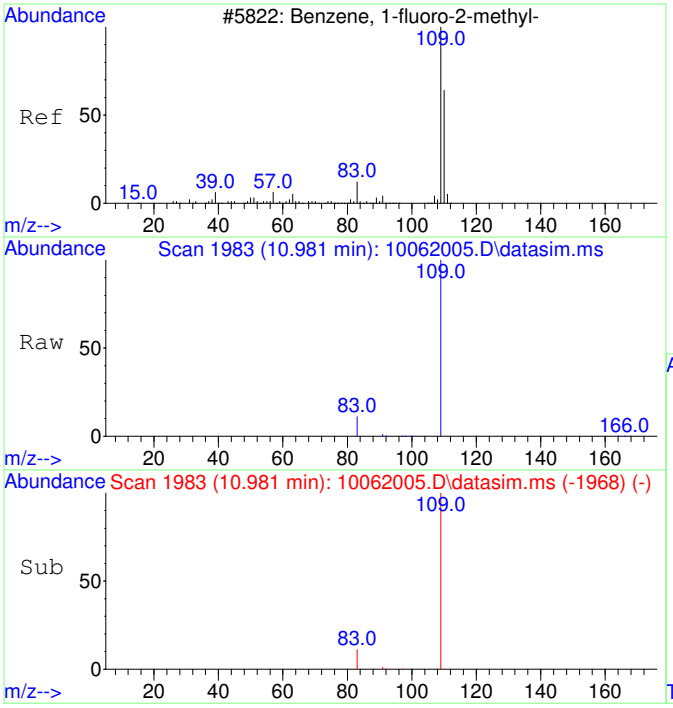
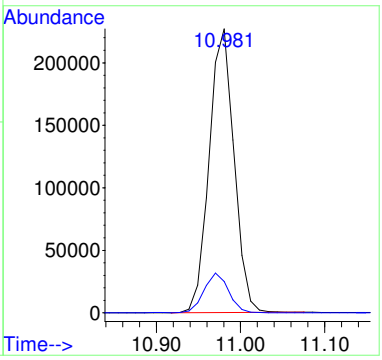
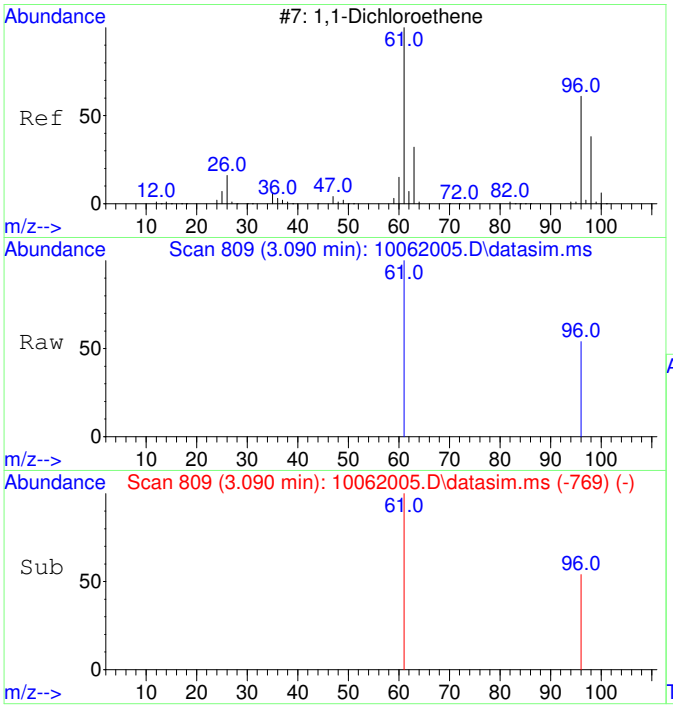


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.981 min Scan# 1983
Delta R.T. 0.011 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion:109 Resp: 466211

Ion	Ratio	Lower	Upper
109	100		
83	13.7	0.0	42.3

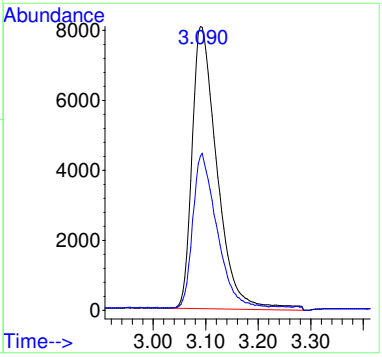


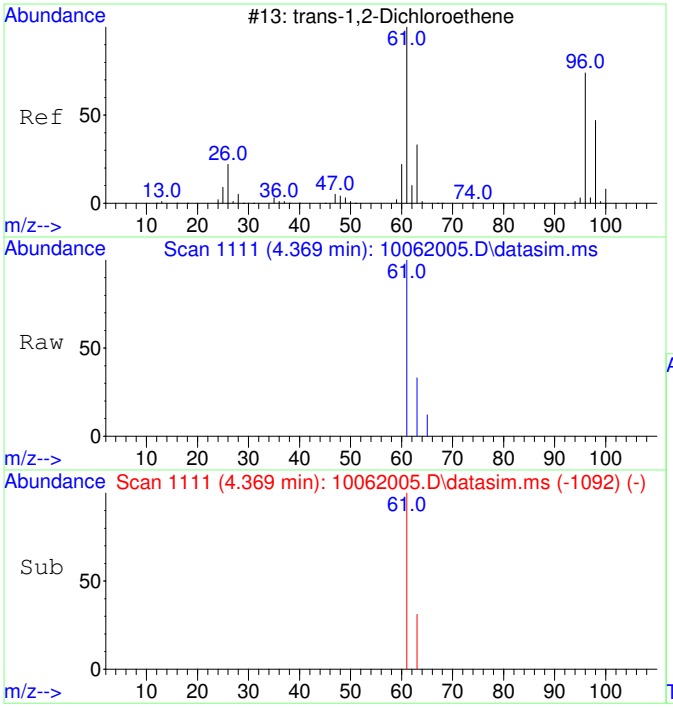


#2
1,1-Dichloroethene
Concen: 1438.40 ug/L
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 61 Resp: 26778

Ion	Ratio	Lower	Upper
61	100		
96	51.8	37.2	97.2

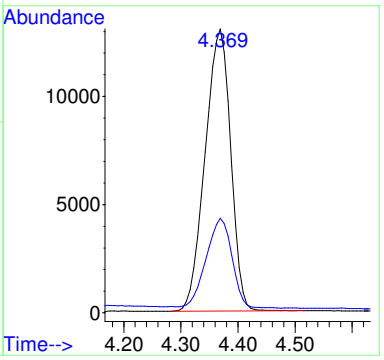


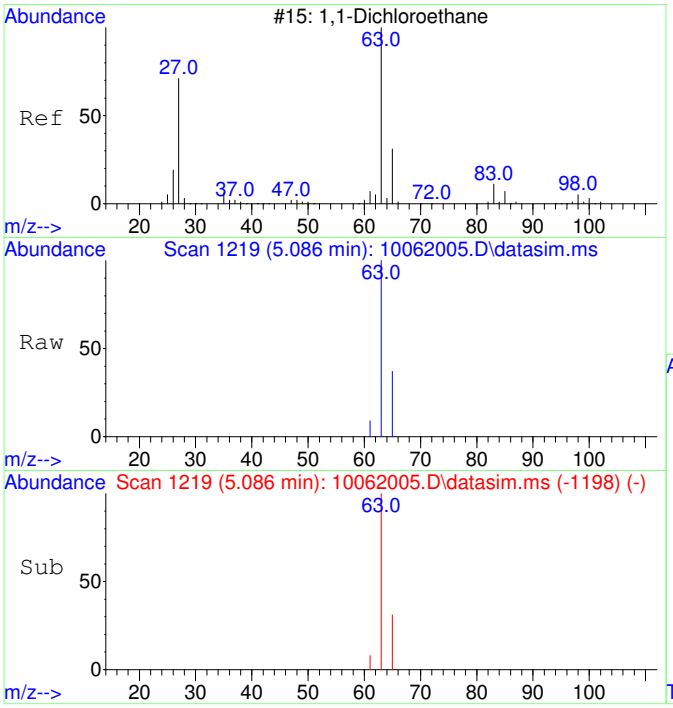


#3
trans-1,2-Dichloroethene
Concen: 1886.56 ug/L
RT: 4.369 min Scan# 1111
Delta R.T. -0.026 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 61 Resp: 40578

Ion	Ratio	Lower	Upper
61	100		
63	32.3	2.4	62.4

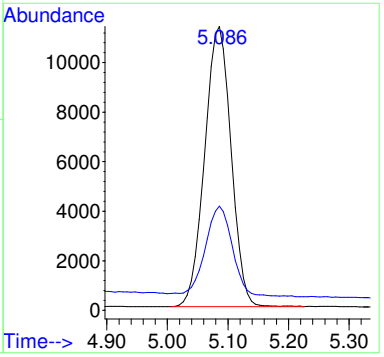


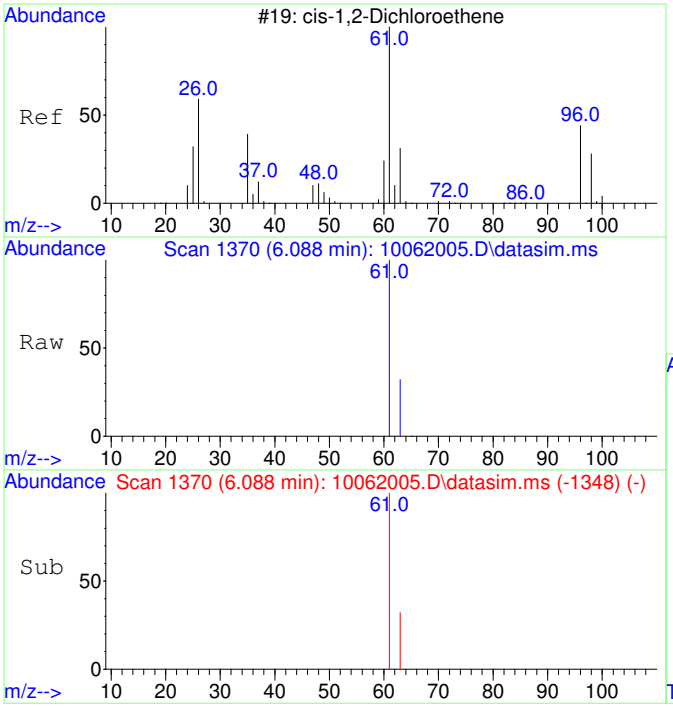


#4
1,1-Dichloroethane
Concen: 1283.16 ug/L
RT: 5.086 min Scan# 1219
Delta R.T. -0.013 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 63 Resp: 34356

Ion	Ratio	Lower	Upper
63	100		
65	34.0	1.8	61.8

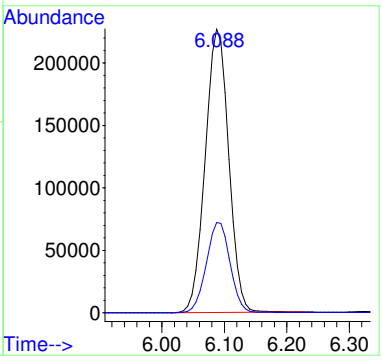


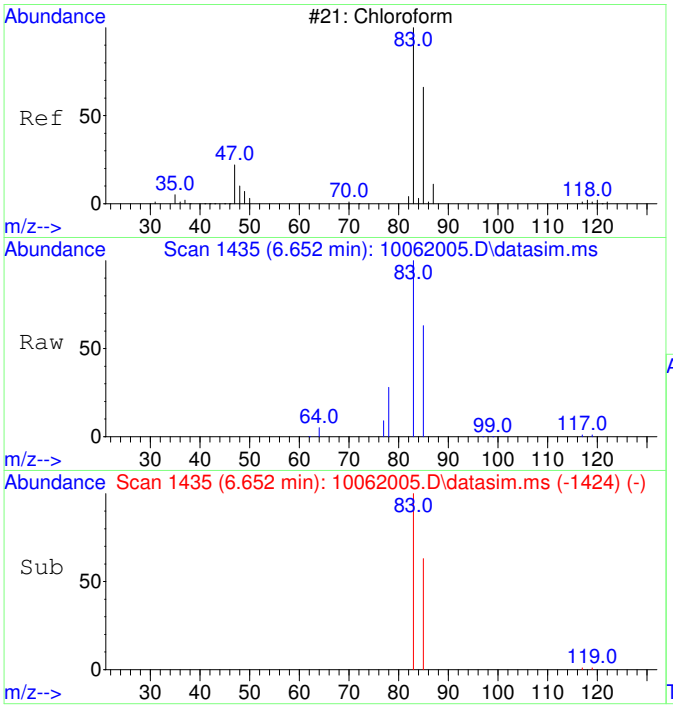


#5
cis-1,2-Dichloroethene
Concen: 20990.49 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. -0.007 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 61 Resp: 593242

Ion	Ratio	Lower	Upper
61	100		
63	32.0	2.5	62.5

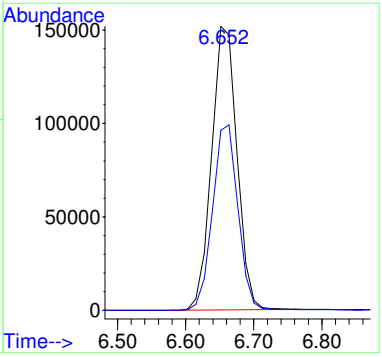


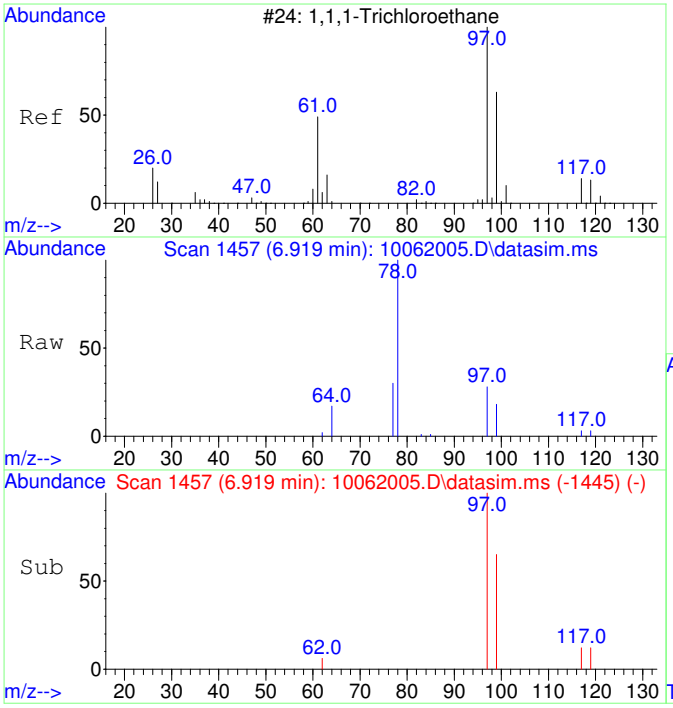


#6
Chloroform
Concen: 13569.29 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. -0.012 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 83 Resp: 392528

Ion	Ratio	Lower	Upper
83	100		
85	64.9	35.1	95.1

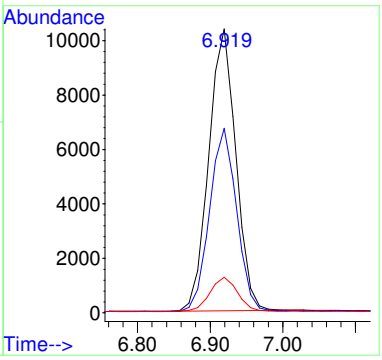


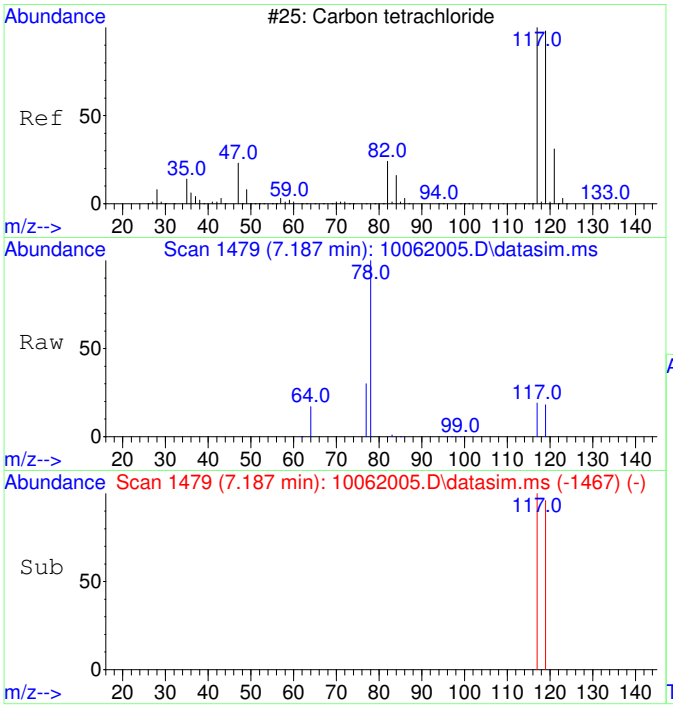


#7
1,1,1-Trichloroethane
Concen: 855.75 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 97 Resp: 26884

Ion	Ratio	Lower	Upper
97	100		
99	64.6	34.6	94.6
117	12.1	0.0	43.2

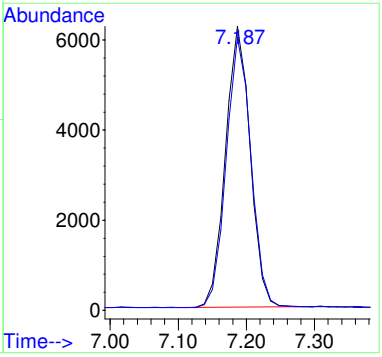


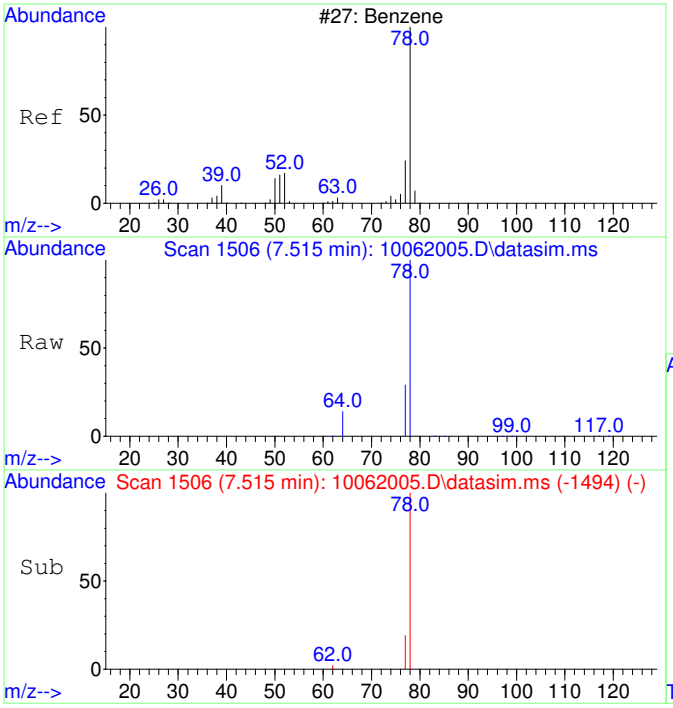


#8
Carbon tetrachloride
Concen: 530.19 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion:117 Resp: 15677

Ion	Ratio	Lower	Upper
117	100		
119	96.0	66.4	126.4

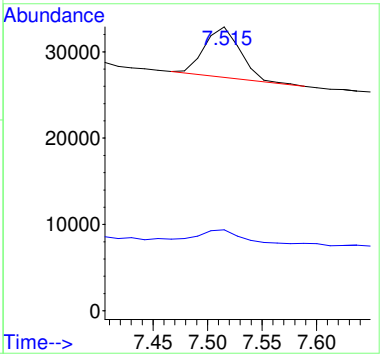


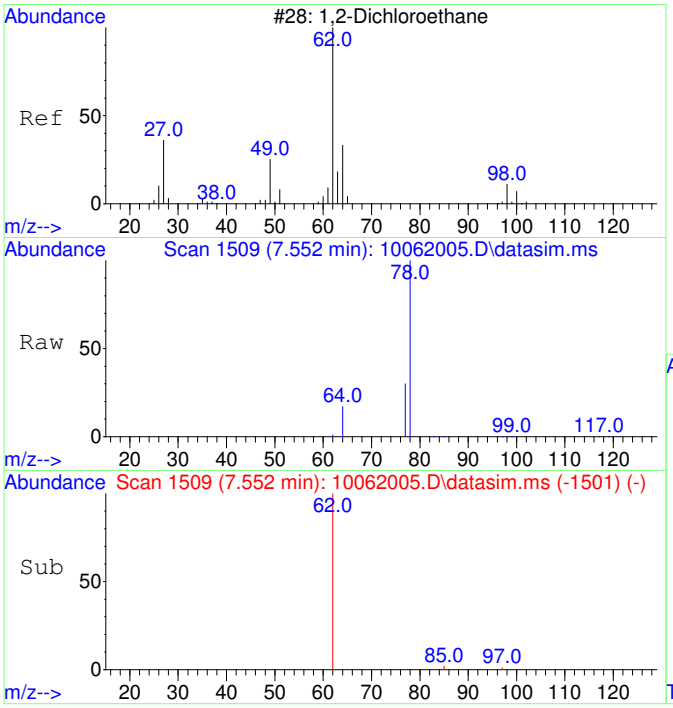


#9
Benzene
Concen: 159.94 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 78 Resp: 12669

Ion	Ratio	Lower	Upper
78	100		
77	49.3	0.0	53.2

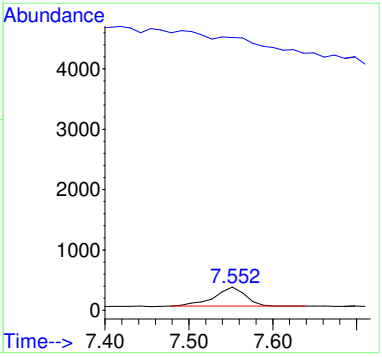


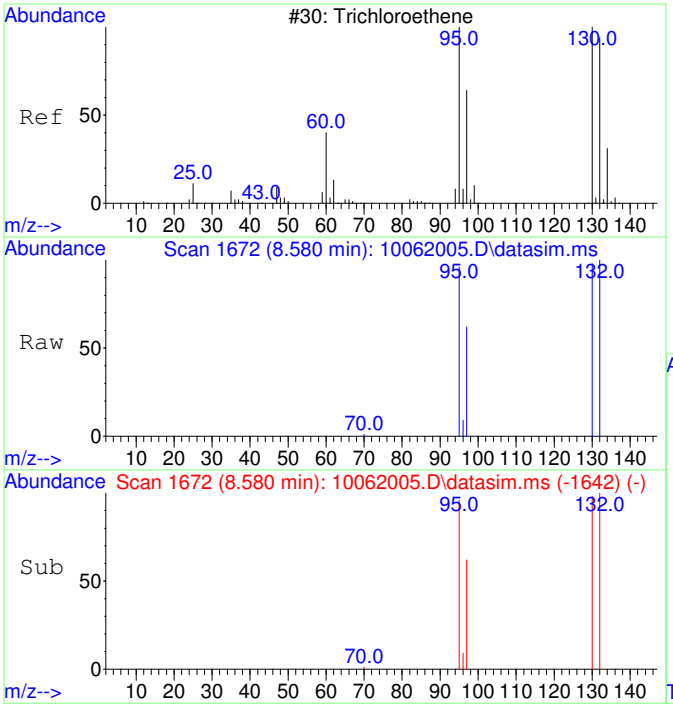


#10
1,2-Dichloroethane
Concen: 28.50 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 62 Resp: 806

Ion	Ratio	Lower	Upper
62	100		
64	0.0	2.3	62.3#

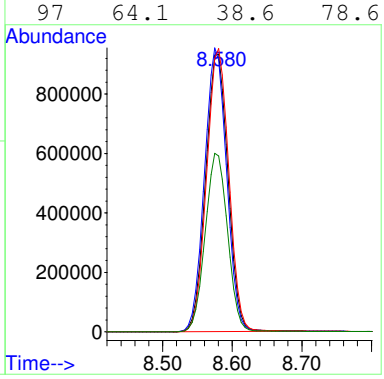


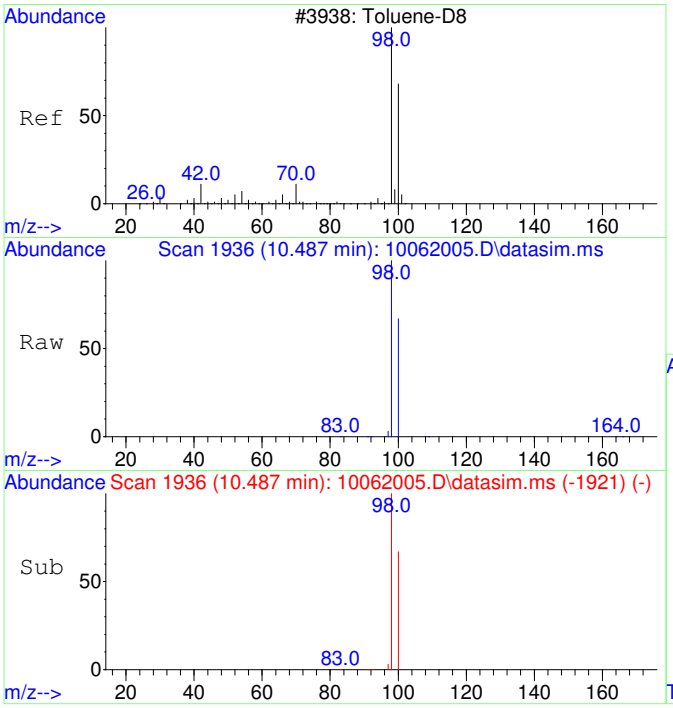


#11
Trichloroethene
Concen: 87685.82 ug/L
RT: 8.580 min Scan# 1672
Delta R.T. 0.011 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion:130 Resp: 2091276

Ion	Ratio	Lower	Upper
130	100		
95	100.8	60.7	120.7
132	100.8	76.0	116.0
97	64.1	38.6	78.6

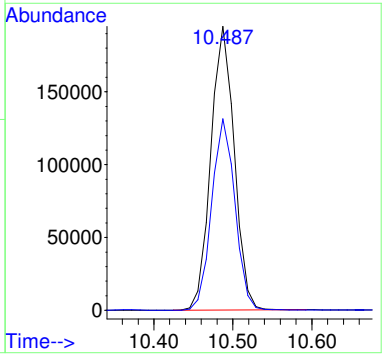


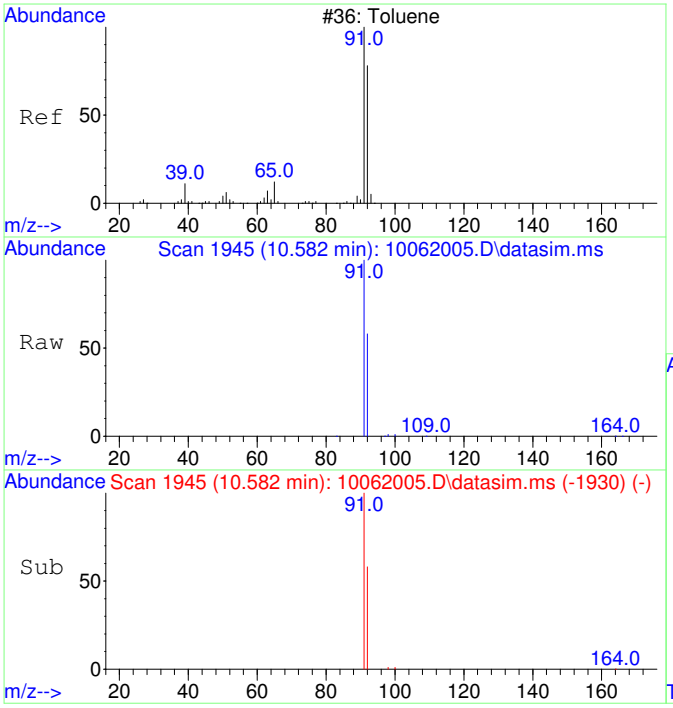


#12
Toluene-d8
Concen: 4380.31 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.011 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 98 Resp: 399773

Ion	Ratio	Lower	Upper
98	100		
100	66.8	37.1	97.1

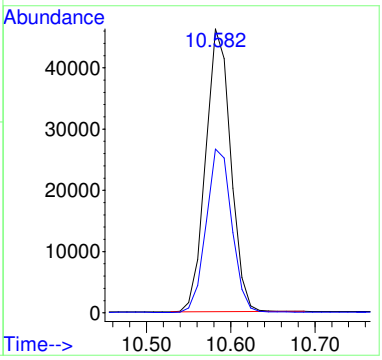


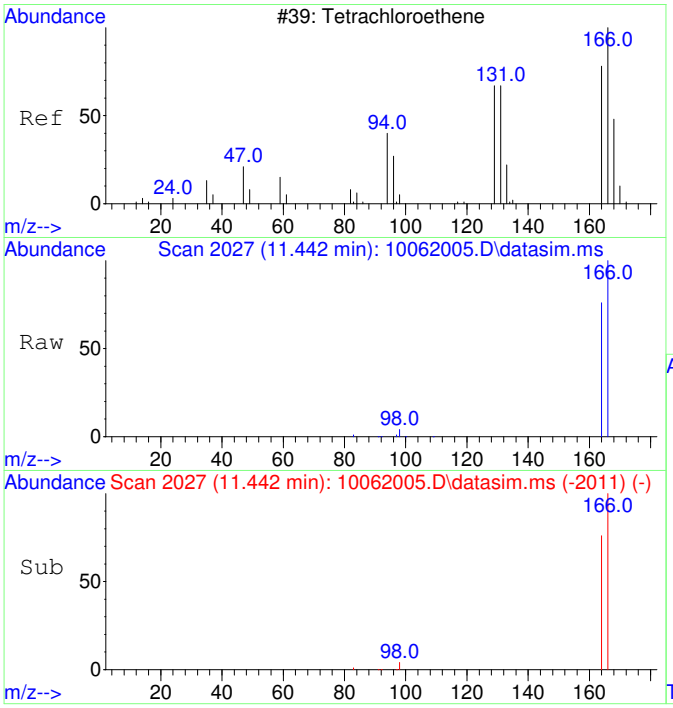


#13
Toluene
Concen: 823.30 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.011 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 91 Resp: 95796

Ion	Ratio	Lower	Upper
91	100		
92	58.9	29.9	89.9

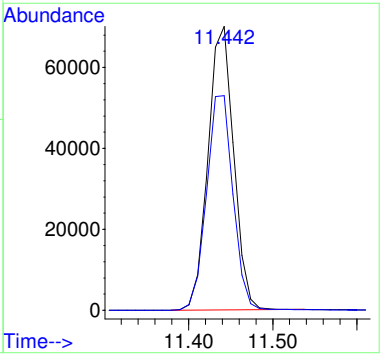


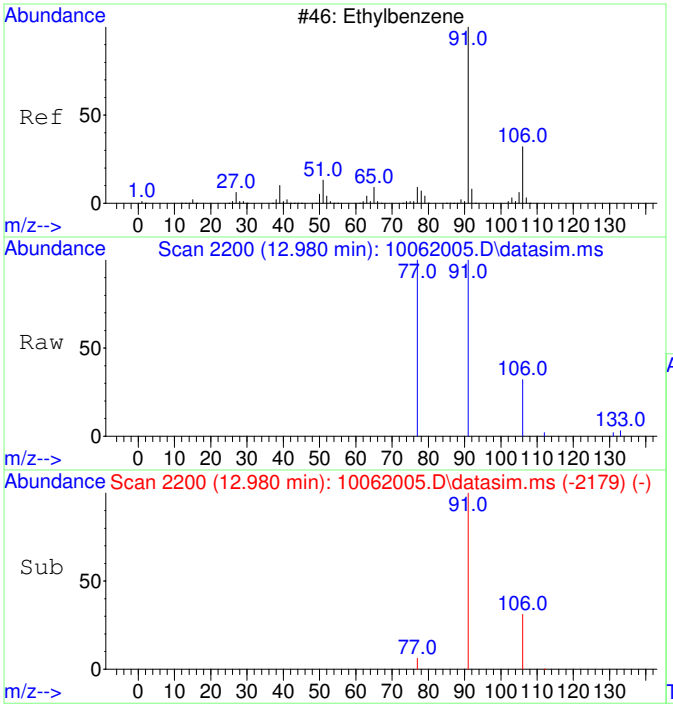


#15
Tetrachloroethene
Concen: 4408.81 ug/L
RT: 11.442 min Scan# 2027
Delta R.T. 0.021 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion:166 Resp: 148458

Ion	Ratio	Lower	Upper
166	100		
164	77.8	47.8	107.8

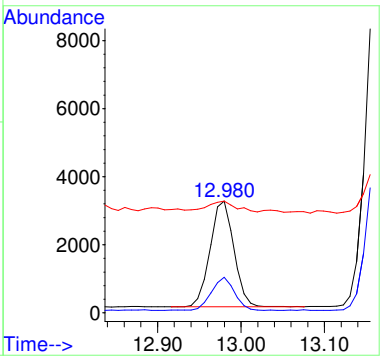


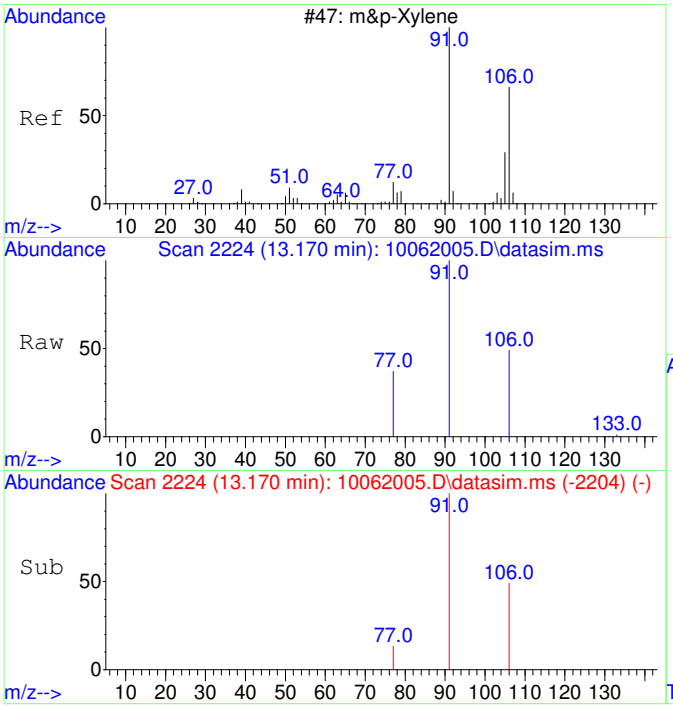


#18
Ethylbenzene
Concen: 43.35 ug/L
RT: 12.980 min Scan# 2200
Delta R.T. 0.016 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 91 Resp: 6140

Ion	Ratio	Lower	Upper
91	100		
106	30.4	3.0	63.0
77	12.7	0.0	38.2

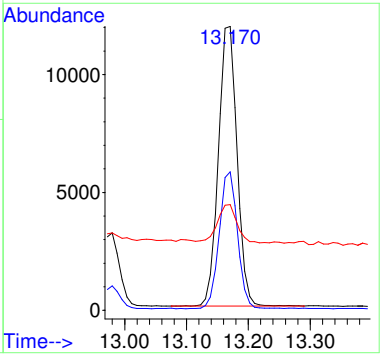


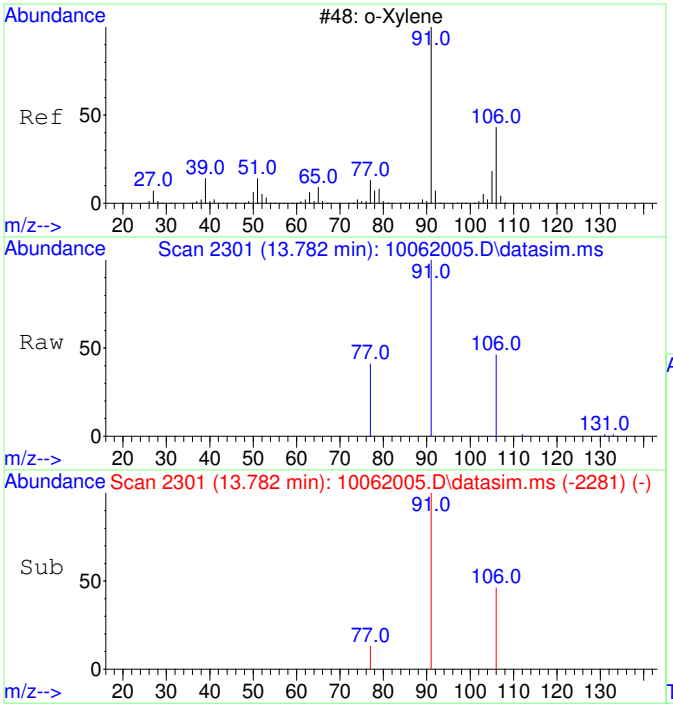


#19
m&p-Xylene
Concen: 224.64 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.008 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 91 Resp: 24866

Ion	Ratio	Lower	Upper
91	100		
106	47.7	22.2	82.2
77	14.4	0.0	42.4

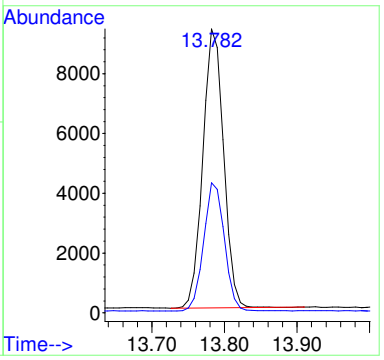


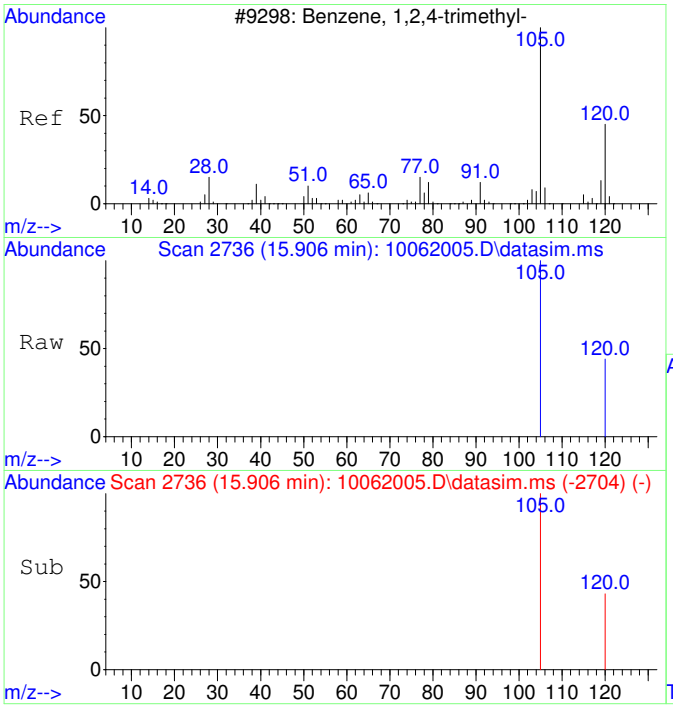


#20
o-Xylene
Concen: 157.19 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 91 Resp: 18589

Ion	Ratio	Lower	Upper
91	100		
106	45.8	19.2	79.2

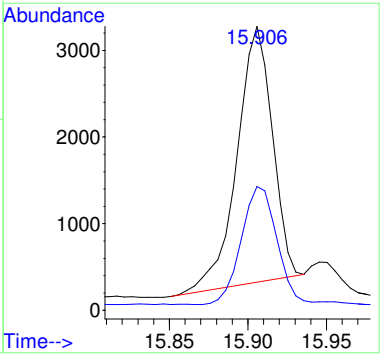


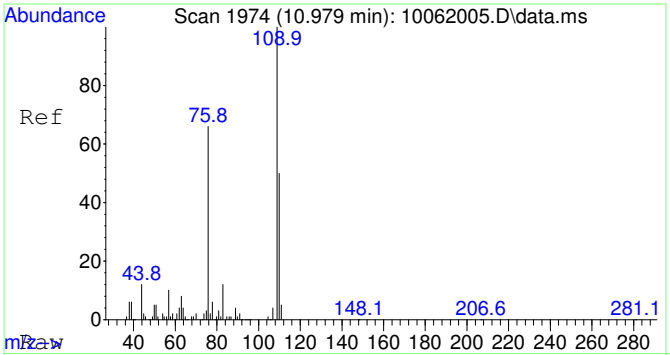


#23
1,2,4-Trimethylbenzene
Concen: 35.50 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.010 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion:105 Resp: 4642

Ion	Ratio	Lower	Upper
105	100		
120	47.4	17.2	77.2

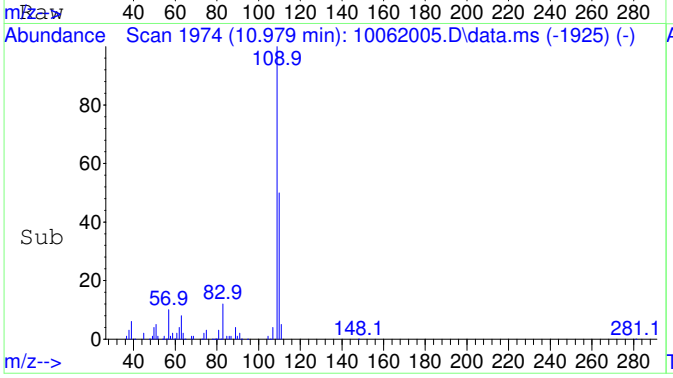


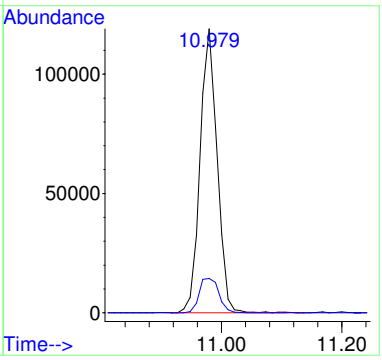


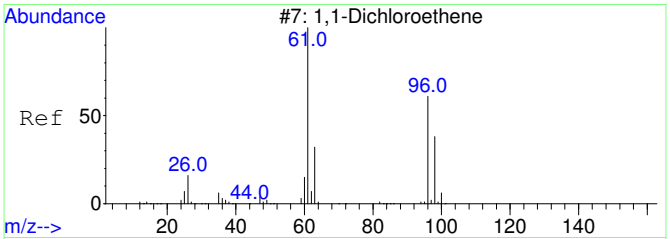
#25
2-Fluorotoluene SCAN
Concen: 5163.01 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.011 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion:109 Resp: 234643

Ion	Ratio	Lower	Upper
109	100		
83	14.0	0.0	43.8



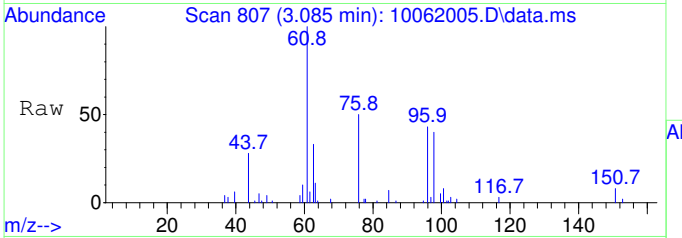


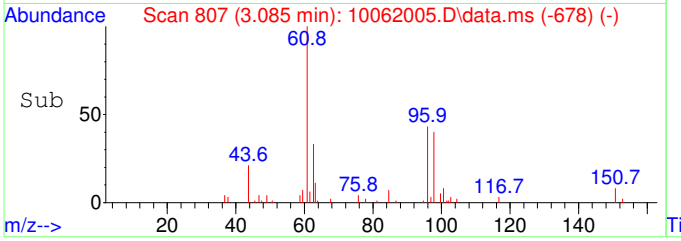


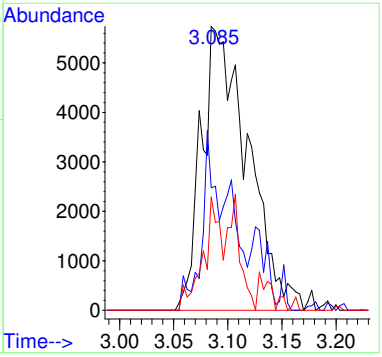
#26
1,1-Dichloroethene SCAN
Concen: 1779.40 ug/L
RT: 3.085 min Scan# 807
Delta R.T. -0.022 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

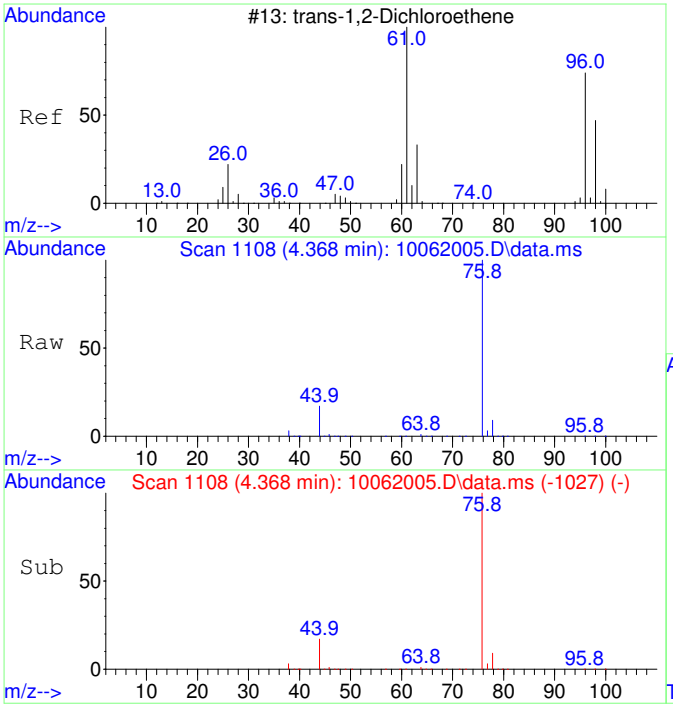
Tgt Ion: 61 Resp: 17174

Ion	Ratio	Lower	Upper
61	100		
96	25.6	33.1	93.1#
98	7.6	11.2	71.2#





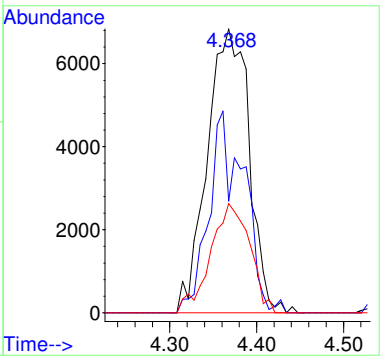


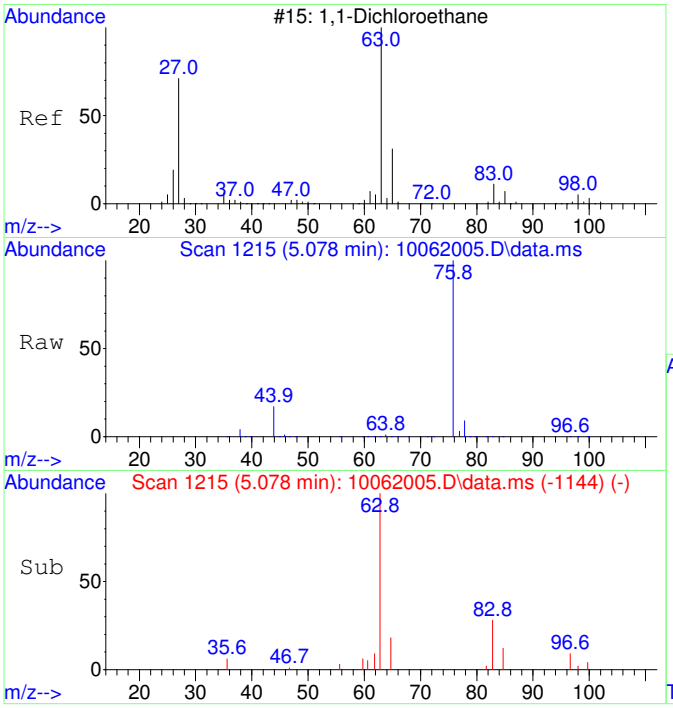


#27
trans-1,2-Dichloroethene SCAN
Concen: 1921.18 ug/L
RT: 4.368 min Scan# 1108
Delta R.T. -0.033 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 61 Resp: 22945

Ion	Ratio	Lower	Upper
61	100		
96	59.7	49.0	109.0
98	36.0	20.5	80.5

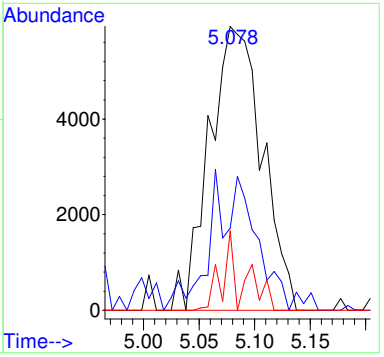


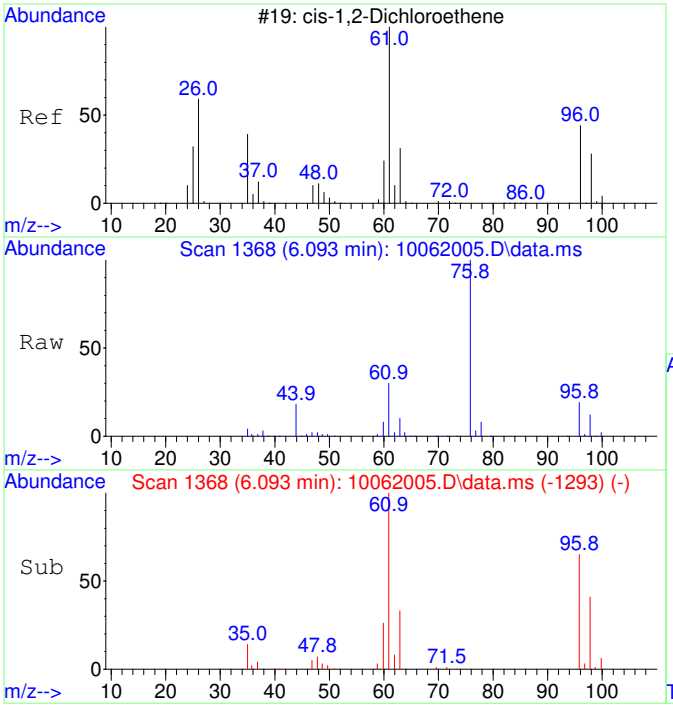


#28
1,1-Dichloroethane SCAN
Concen: 1429.90 ug/L
RT: 5.078 min Scan# 1215
Delta R.T. -0.026 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 63 Resp: 19764

Ion	Ratio	Lower	Upper
63	100		
65	6.2	1.3	61.3
83	2.5	0.0	45.9

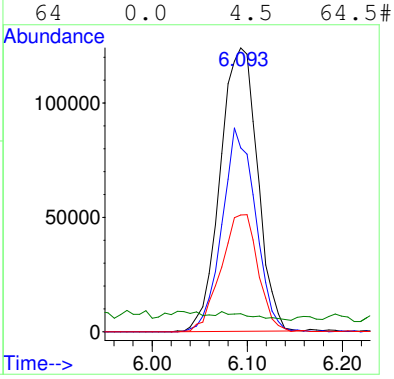


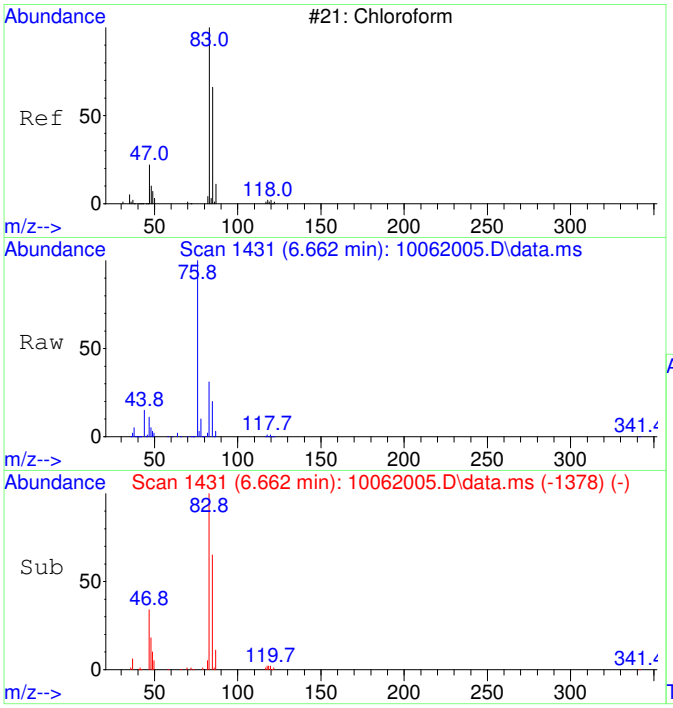


#29
cis-1,2-Dichloroethene SCAN
Concen: 22907.40 ug/L
RT: 6.093 min Scan# 1368
Delta R.T. 0.000 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 61 Resp: 339233

Ion	Ratio	Lower	Upper
61	100		
96	64.4	39.9	99.9
98	41.1	13.5	73.5
64	0.0	4.5	64.5#

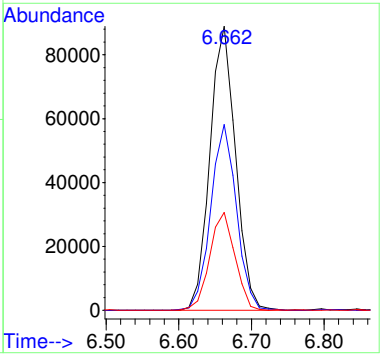


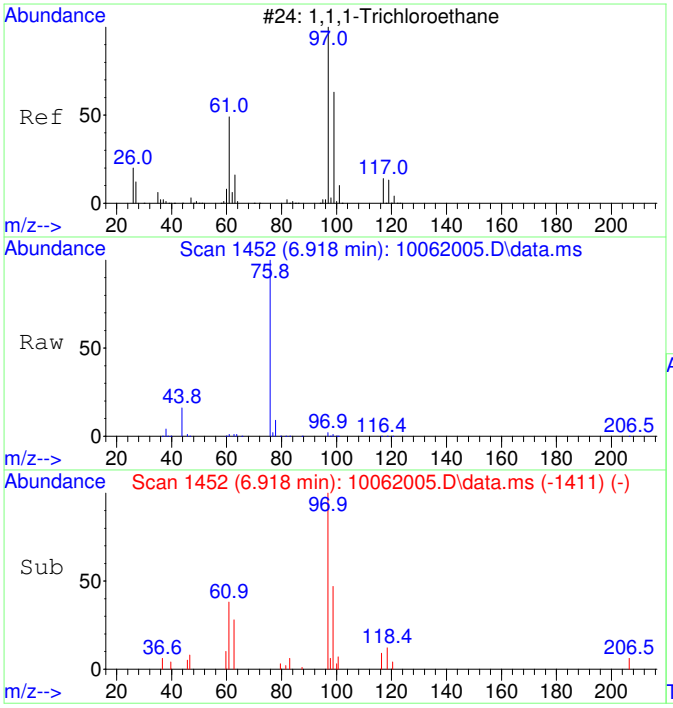


#30
Chloroform SCAN
Concen: 13633.35 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 83 Resp: 218983

Ion	Ratio	Lower	Upper
83	100		
85	65.6	34.6	94.6
47	34.0	0.0	53.4

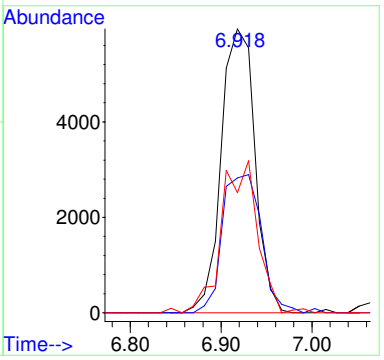


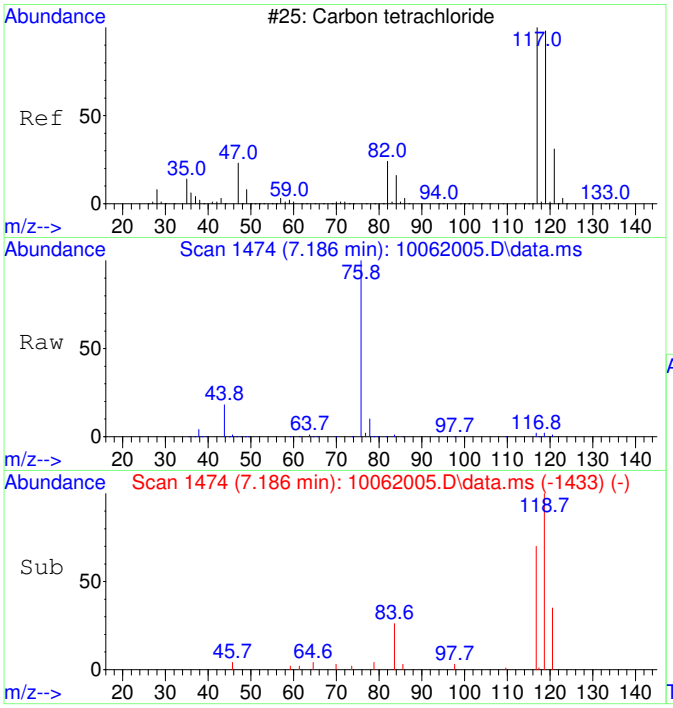


#31
1,1,1-Trichloroethane SCAN
Concen: 1052.18 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 97 Resp: 15401

Ion	Ratio	Lower	Upper
97	100		
99	56.5	43.6	103.6
61	57.5	18.0	78.0

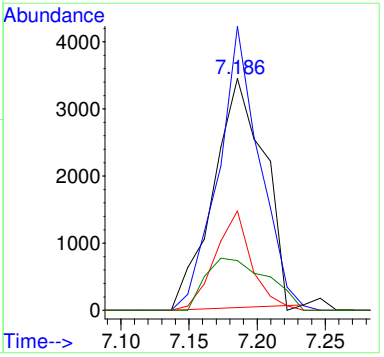


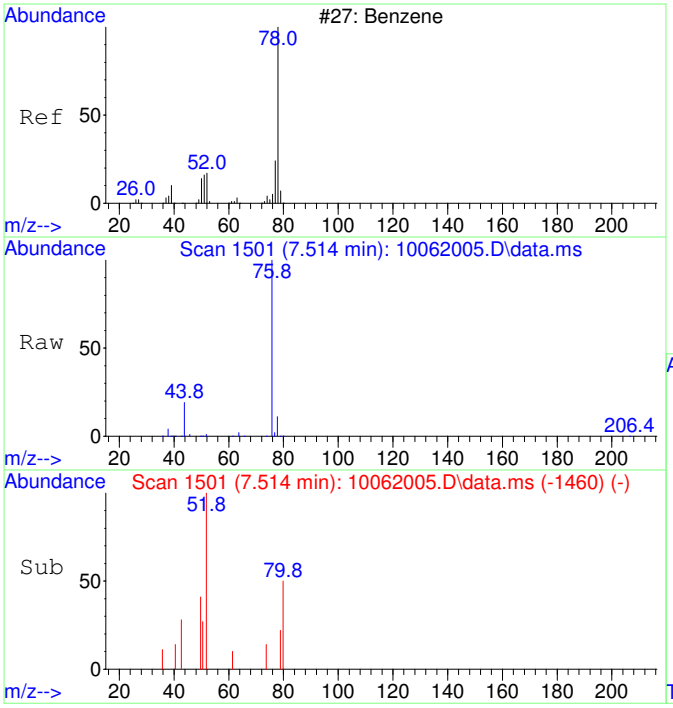


#32
Carbon tetrachloride SCAN
Concen: 578.91 ug/L
RT: 7.186 min Scan# 1474
Delta R.T. 0.000 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion:117 Resp: 8839

Ion	Ratio	Lower	Upper
117	100		
119	101.7	75.5	135.5
121	31.4	0.0	58.8
82	27.8	0.0	59.2

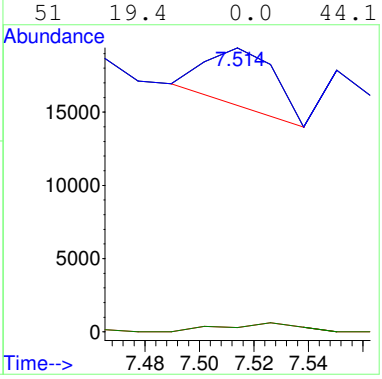


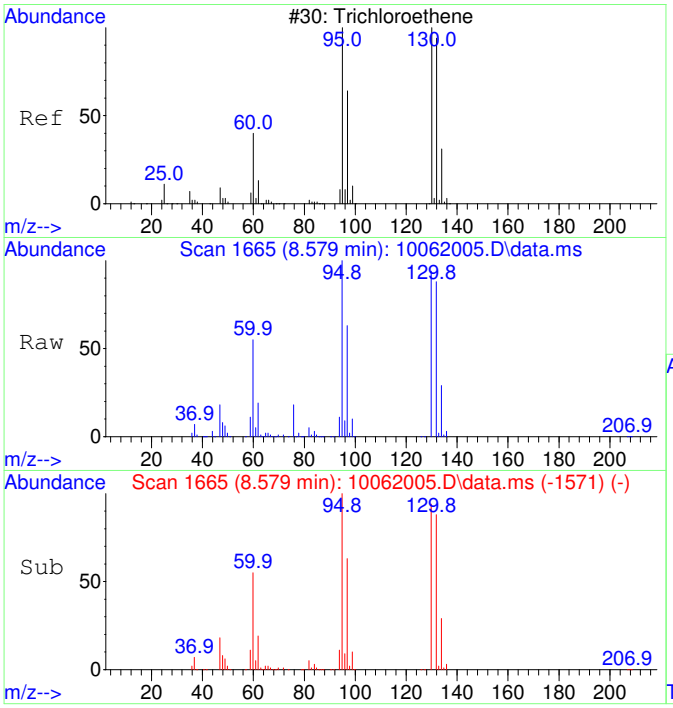


#33
Benzene SCAN
Concen: 148.70 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 78 Resp: 5993

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	19.4	0.0	47.9
51	19.4	0.0	44.1

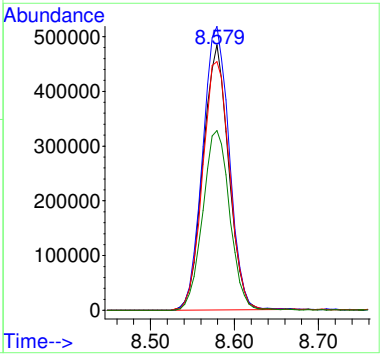


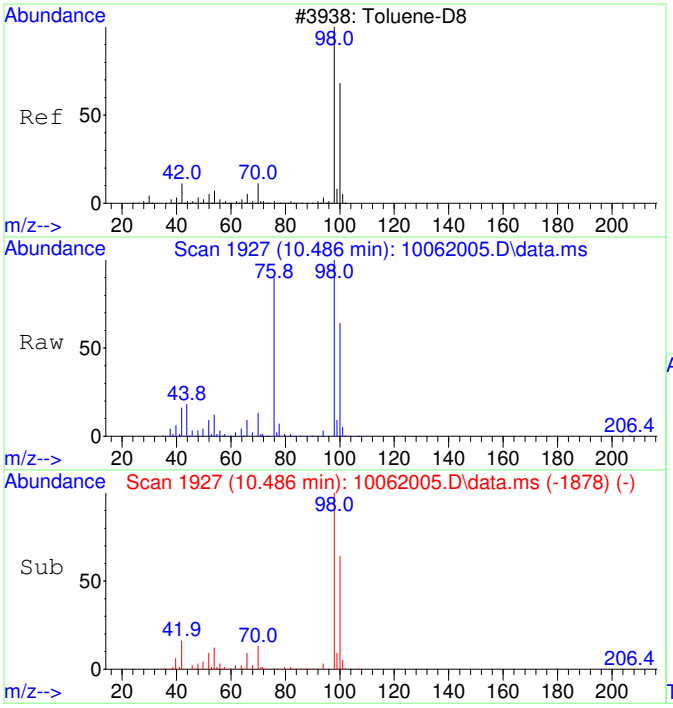


#35
Trichloroethene SCAN
Concen: 92969.41 ug/L
RT: 8.579 min Scan# 1665
Delta R.T. 0.011 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion:130 Resp: 1029657

Ion	Ratio	Lower	Upper
130	100		
95	110.9	60.5	120.5
132	98.8	59.6	119.6
97	70.5	28.2	88.2

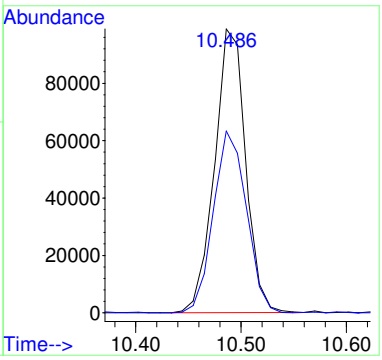


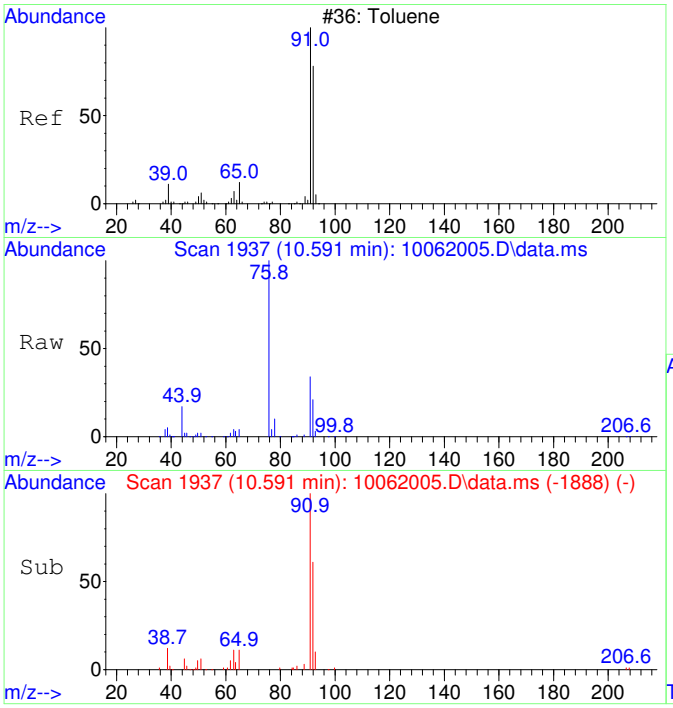


#36
Toluene-d8 SCAN
Concen: 4569.10 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.011 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 98 Resp: 203077

Ion	Ratio	Lower	Upper
98	100		
100	68.0	40.0	100.0

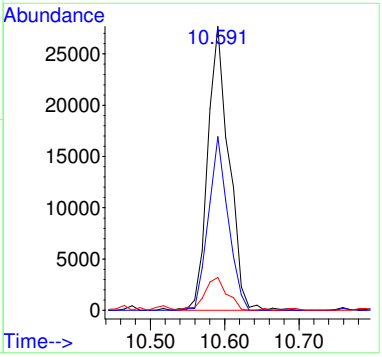


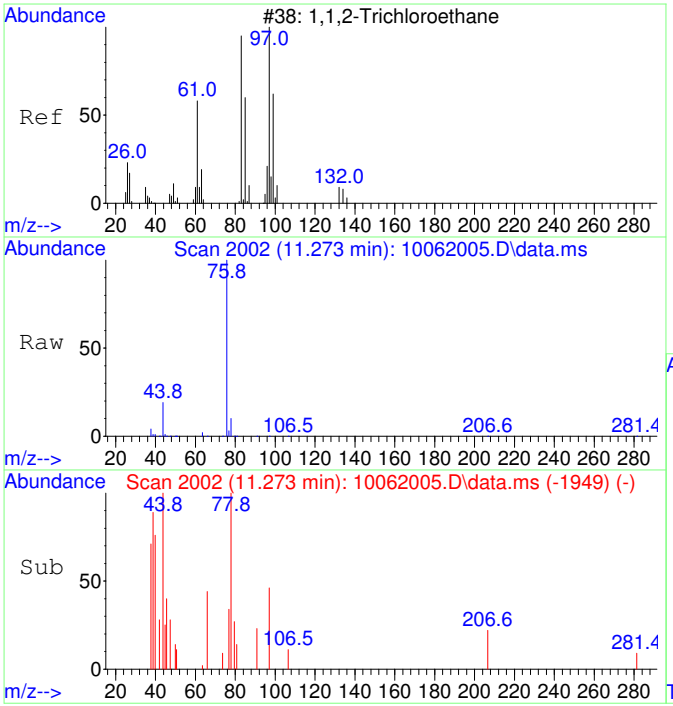


#37
Toluene SCAN
Concen: 960.78 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.011 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 91 Resp: 54687

Ion	Ratio	Lower	Upper
91	100		
92	56.8	28.3	88.3
65	12.3	0.0	41.0

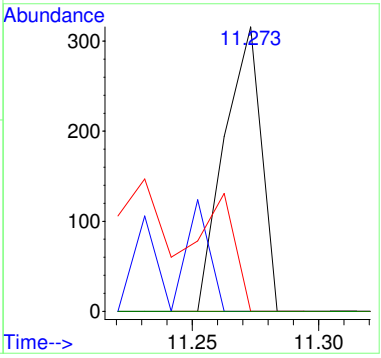


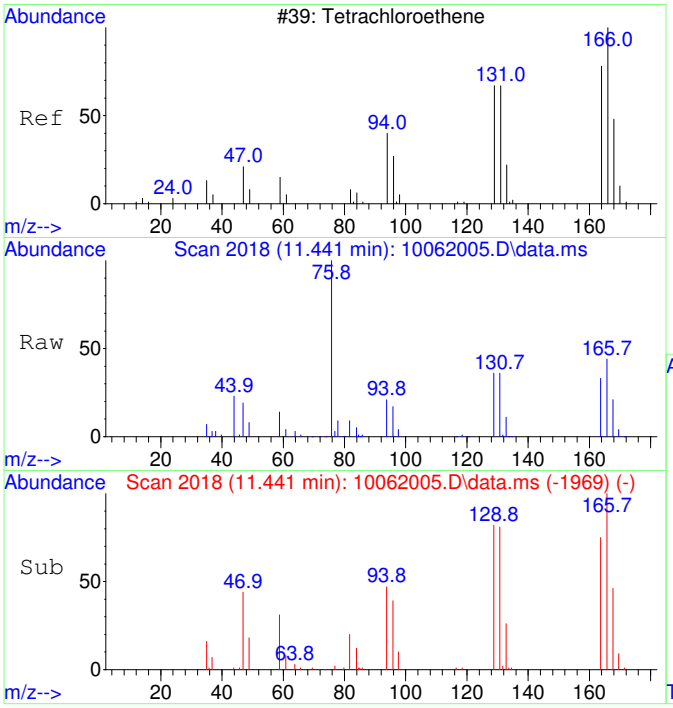


#38
1,1,2-Trichloroethane SCAN
Concen: 25.13 ug/L
RT: 11.273 min Scan# 2002
Delta R.T. 0.053 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 97 Resp: 321

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	0.0	32.1	92.1#
99	0.0	36.7	96.7#

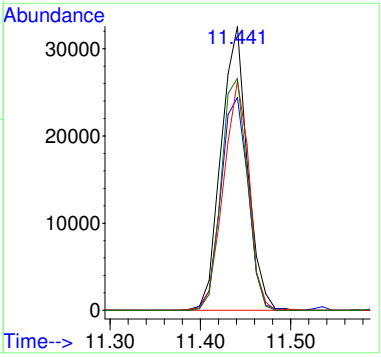


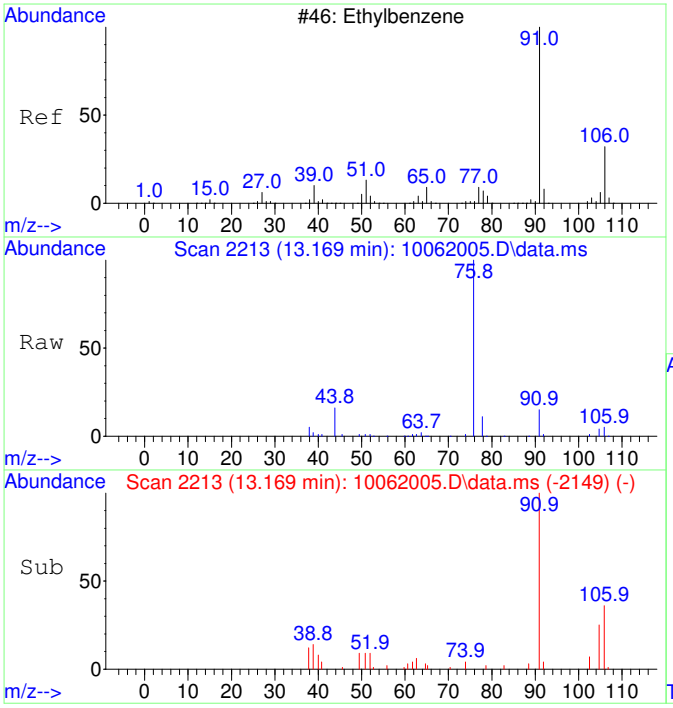


#39
Tetrachloroethene SCAN
Concen: 4825.91 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.011 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion:166 Resp: 65993

Ion	Ratio	Lower	Upper
166	100		
164	77.5	50.9	110.9
131	78.5	38.7	98.7
129	81.4	41.8	101.8

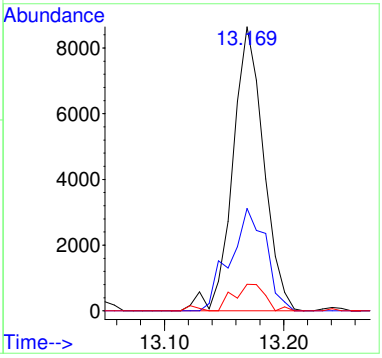


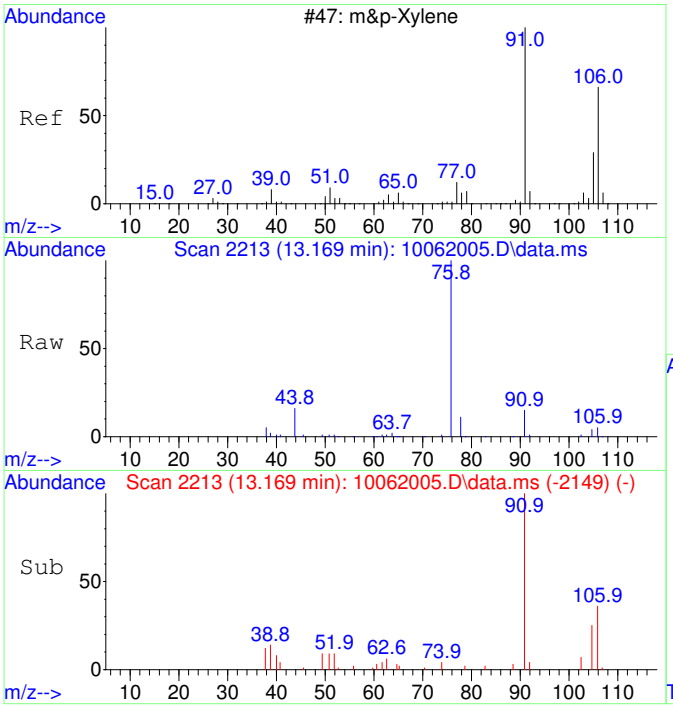


#42
Ethylbenzene SCAN
Concen: 150.55 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 91 Resp: 15612

Ion	Ratio	Lower	Upper
91	100		
106	42.0	23.1	83.1
51	9.6	0.0	40.1

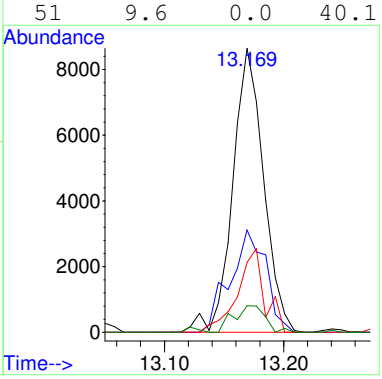


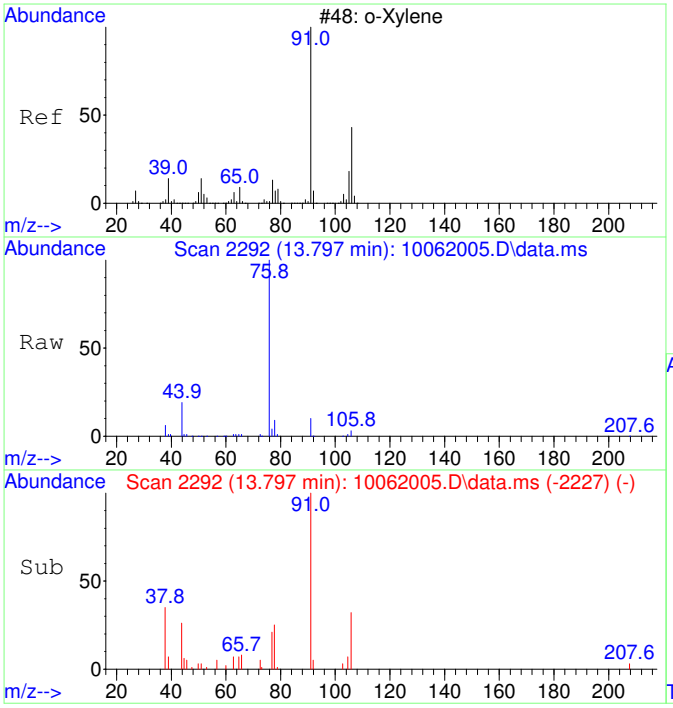


#43
m&p-Xylene SCAN
Concen: 150.55 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 91 Resp: 15612

Ion	Ratio	Lower	Upper
91	100		
106	42.0	23.1	83.1
105	26.0	0.0	54.7
51	9.6	0.0	40.1

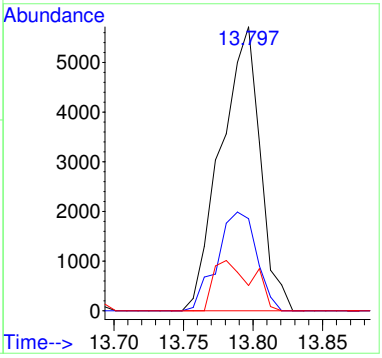




#44
o-Xylene SCAN
Concen: 202.64 ug/L
RT: 13.797 min Scan# 2292
Delta R.T. 0.016 min
Lab File: 10062005.D
Acq: 6 Oct 2020 9:46

Tgt Ion: 91 Resp: 11248

Ion	Ratio	Lower	Upper
91	100		
106	35.1	18.0	78.0
105	17.5	0.0	56.6



2009036-03

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062006.D
Acq On : 6 Oct 2020 10:10
InstName : AG5975C
Operator : TD
Sample : 2009036-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 06 10:29:07 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

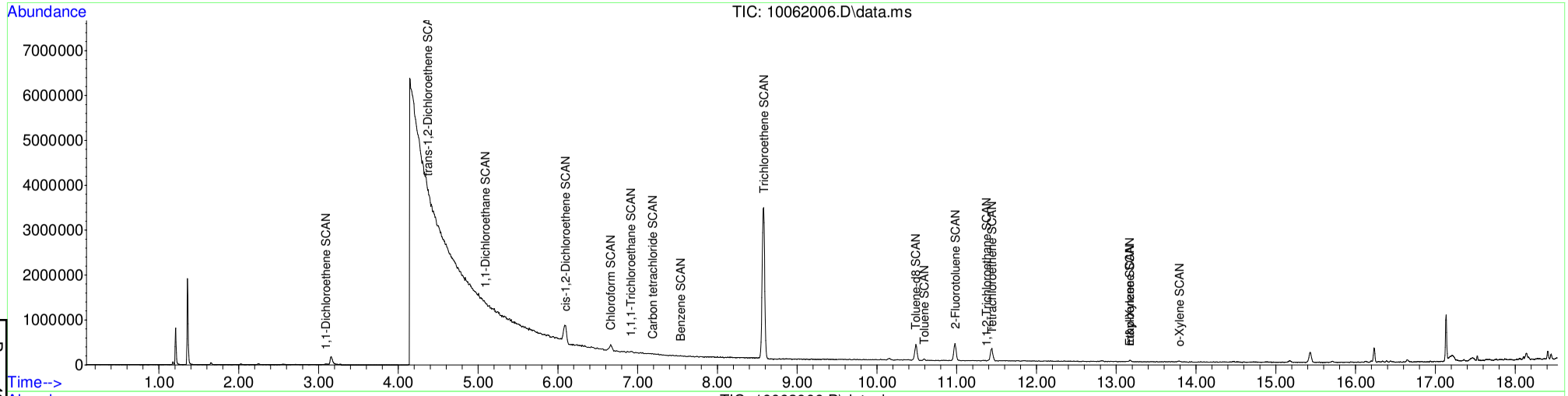
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.980	109	592390	5000.00 ug/L	0.01
System Monitoring Compounds					
12) Toluene-d8	10.487	98	501652	4325.83 ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.52%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.097	61	18729	791.75 ug/L	80
3] trans-1,2-Dichloroethene	4.369	61	37547	1373.82 ug/L	98
4] 1,1-Dichloroethane	5.086	63	20701	608.48 ug/L	95
5] cis-1,2-Dichloroethene	6.088	61	618914	17234.39 ug/L	99
6] Chloroform	6.652	83	200398	5451.99 ug/L	99
7] 1,1,1-Trichloroethane	6.919	97	22218	556.59 ug/L	99
8] Carbon tetrachloride	7.187	117	8268	220.06 ug/L	99
9] Benzene	7.515	78	5751	57.14 ug/L #	36
11] Trichloroethene	8.575	130	2399213	79170.17 ug/L **oc**	92
13] Toluene	10.582	91	39650	268.18 ug/L	99
15] Tetrachloroethene	11.442	166	187393	4379.71 ug/L	100
18] Ethylbenzene	12.980	91	6064	33.70 ug/L	93
19] m&p-Xylene	13.162	91	30959	220.11 ug/L	95
20] o-Xylene	13.782	91	29426	195.82 ug/L	95
25) 2-Fluorotoluene SCAN	10.979	109	310596	5378.56 ug/L	100
26) 1,1-Dichloroethene SCAN	3.092	61	11682	952.56 ug/L #	49
27) trans-1,2-Dichloroethe...	4.368	61	20671	1362.12 ug/L	85
28) 1,1-Dichloroethane SCAN	5.084	63	11518	655.82 ug/L	87
29) cis-1,2-Dichloroethene...	6.093	61	355639	18900.00 ug/L #	81
30) Chloroform SCAN	6.662	83	109792	5379.45 ug/L	93
31) 1,1,1-Trichloroethane ...	6.918	97	13052	701.76 ug/L	85
32) Carbon tetrachloride SCAN	7.185	117	3579	184.48 ug/L	83
33) Benzene SCAN	7.538	78	13038	254.60 ug/L	93
35) Trichloroethene SCAN	8.579	130	1185722	84256.84 ug/L	84
36) Toluene-d8 SCAN	10.486	98	256045	4533.78 ug/L	98
37) Toluene SCAN	10.591	91	21807	301.52 ug/L	96
38) 1,1,2-Trichloroethane ...	11.367	97	462	28.46 ug/L #	13
39) Tetrachloroethene SCAN	11.441	166	86806	4995.81 ug/L	96
42) Ethylbenzene SCAN	13.169	91	17726	134.53 ug/L	91
43) m&p-Xylene SCAN	13.169	91	17726	134.53 ug/L	93
44) o-Xylene SCAN	13.789	91	15714	222.80 ug/L	85

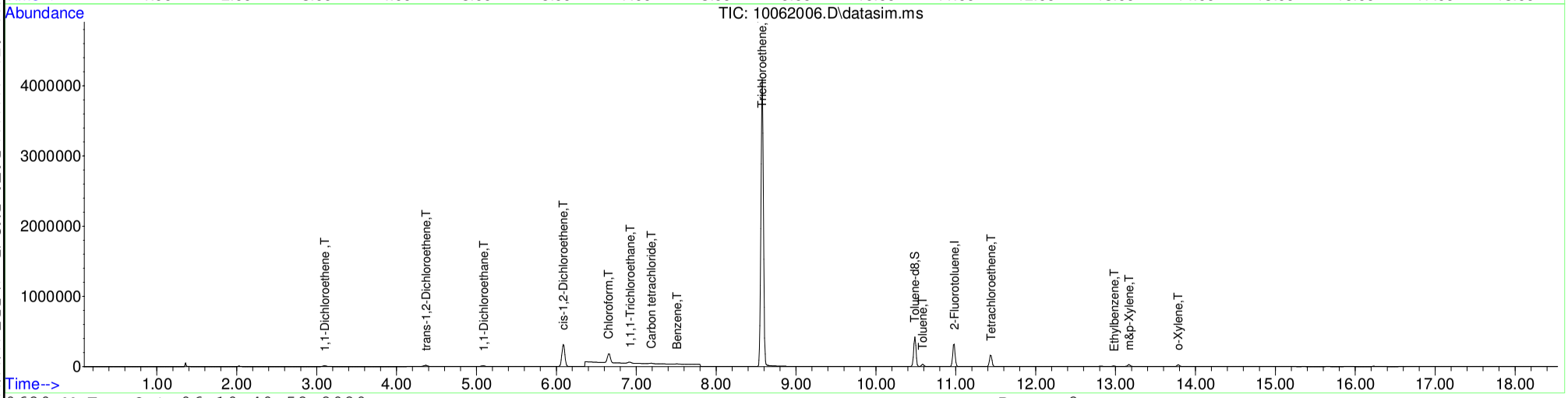
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062006.D
Acq On : 6 Oct 2020 10:10
InstName : AG5975C
Operator : TD
Sample : 2009036-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 06 10:29:07 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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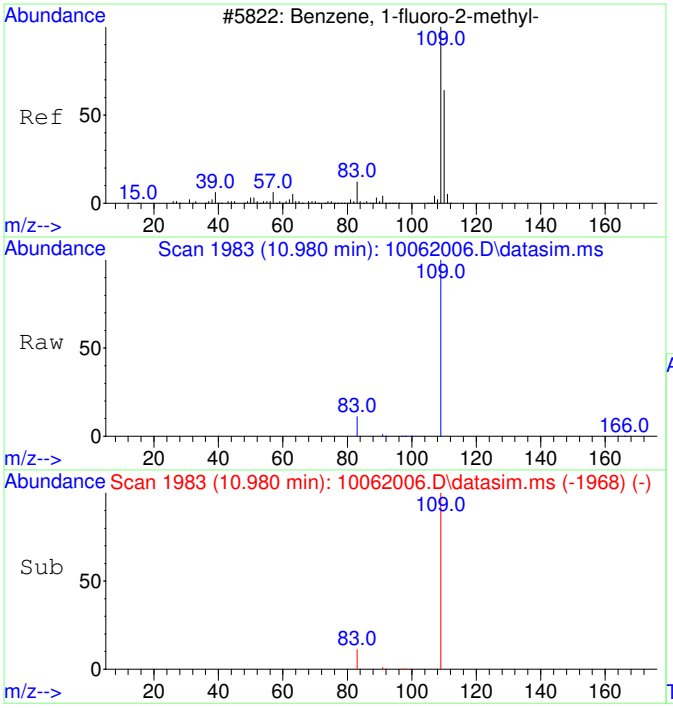
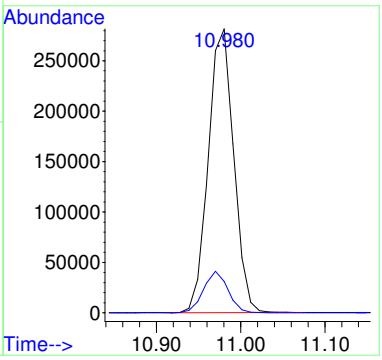
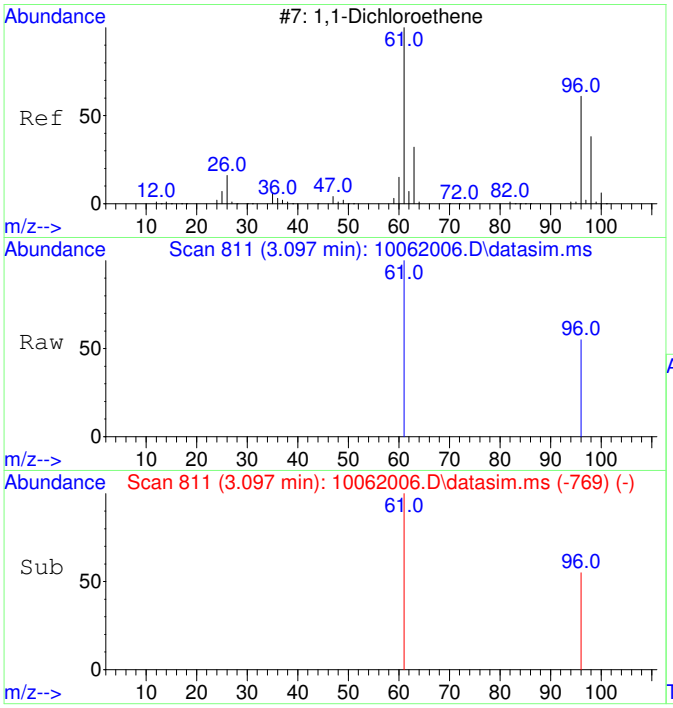


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.980 min Scan# 1983
Delta R.T. 0.010 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion:109 Resp: 592390

Ion	Ratio	Lower	Upper
109	100		
83	13.9	0.0	42.3

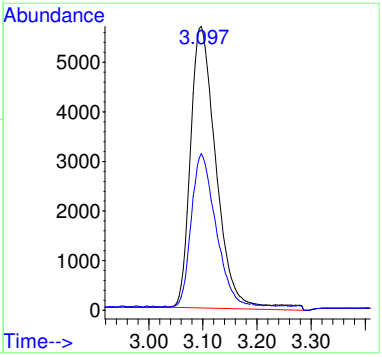


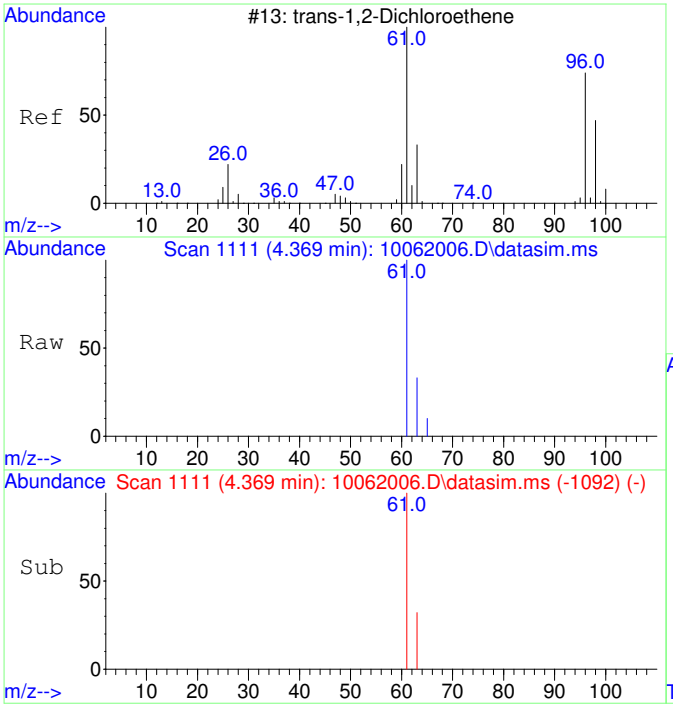


#2
1,1-Dichloroethene
Concen: 791.75 ug/L
RT: 3.097 min Scan# 811
Delta R.T. 0.007 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 61 Resp: 18729

Ion	Ratio	Lower	Upper
61	100		
96	51.5	37.2	97.2

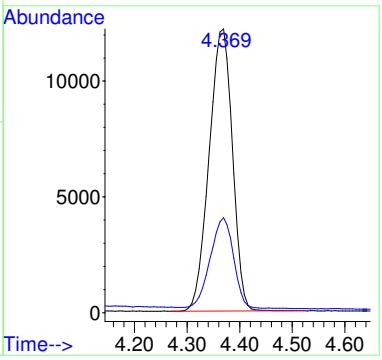


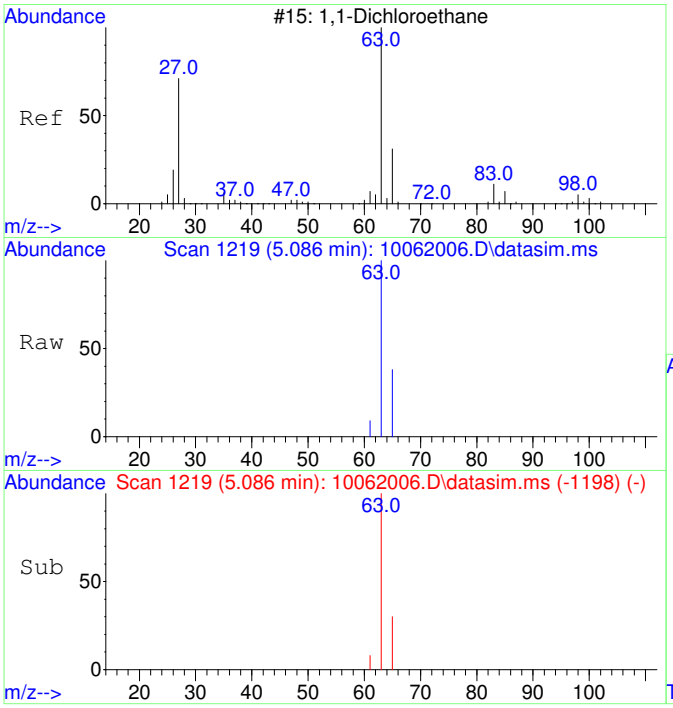


#3
trans-1,2-Dichloroethene
Concen: 1373.82 ug/L
RT: 4.369 min Scan# 1111
Delta R.T. -0.027 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 61 Resp: 37547

Ion	Ratio	Lower	Upper
61	100		
63	31.5	2.4	62.4

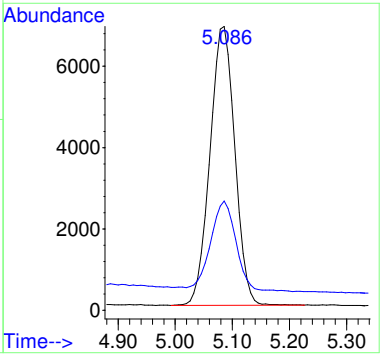


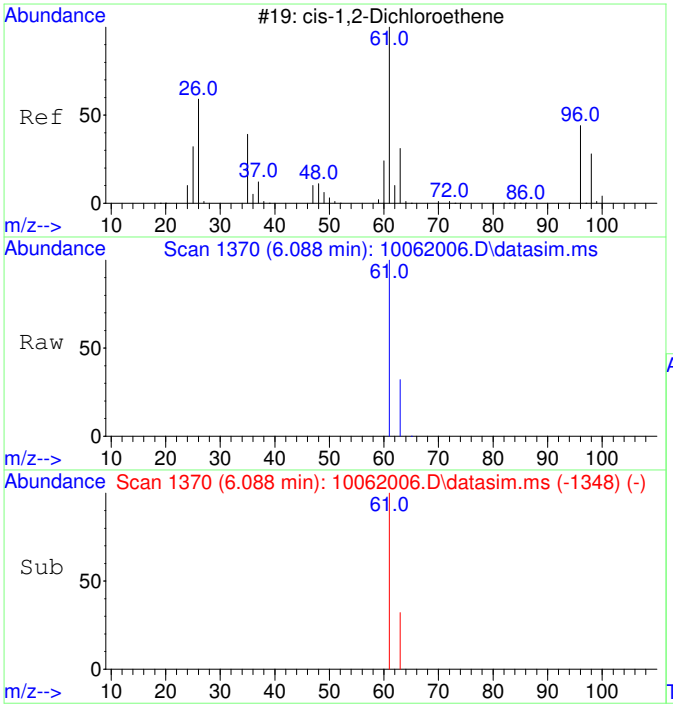


#4
1,1-Dichloroethane
Concen: 608.48 ug/L
RT: 5.086 min Scan# 1219
Delta R.T. -0.013 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 63 Resp: 20701

Ion	Ratio	Lower	Upper
63	100		
65	34.4	1.8	61.8

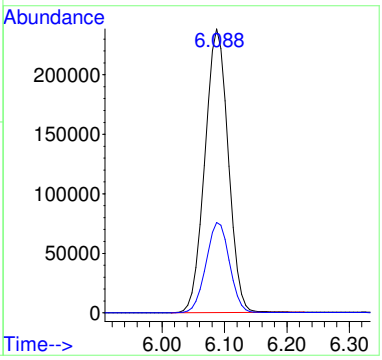


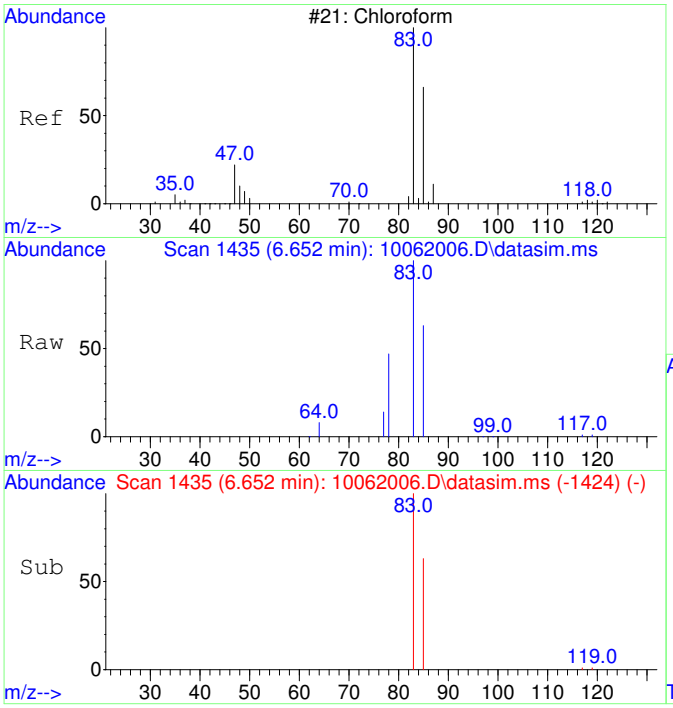


#5
cis-1,2-Dichloroethene
Concen: 17234.39 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. -0.007 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 61 Resp: 618914

Ion	Ratio	Lower	Upper
61	100		
63	32.0	2.5	62.5

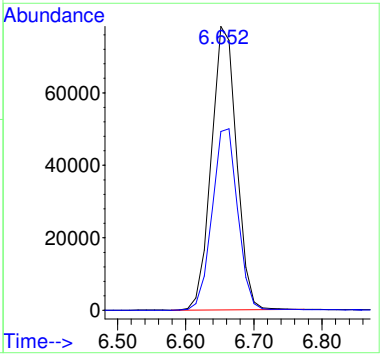


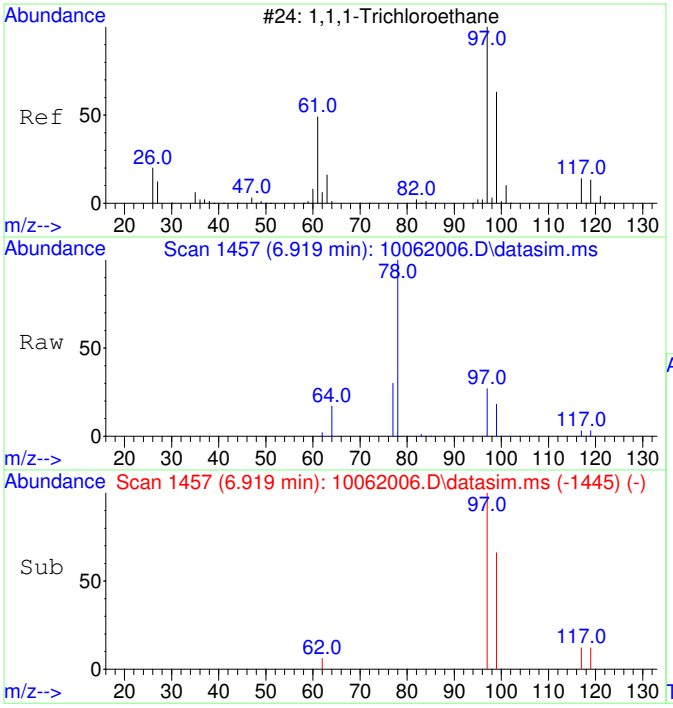


#6
Chloroform
Concen: 5451.99 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. -0.012 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 83 Resp: 200398

Ion	Ratio	Lower	Upper
83	100		
85	64.7	35.1	95.1

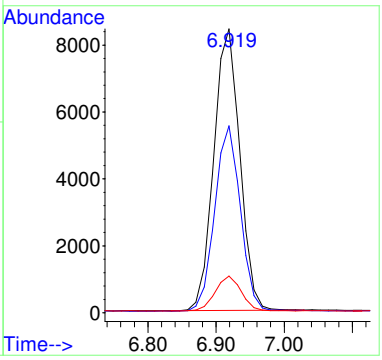


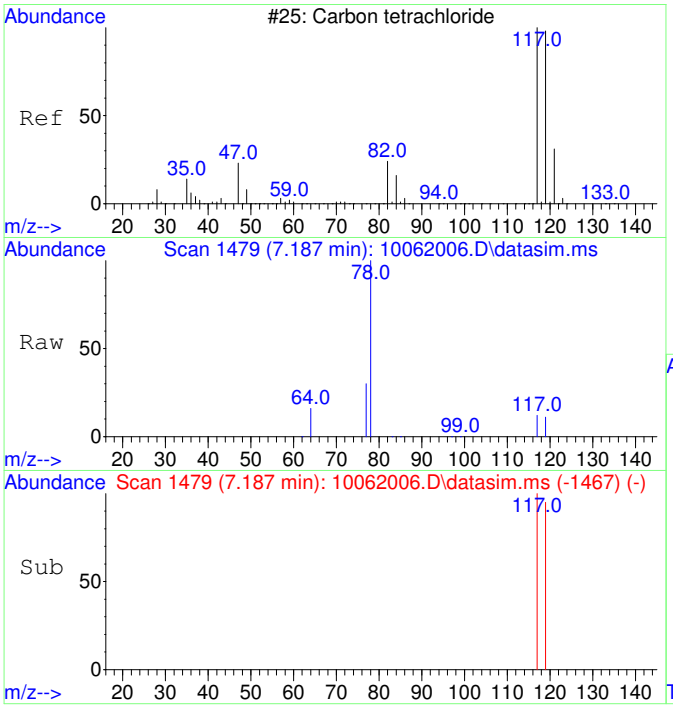


#7
1,1,1-Trichloroethane
Concen: 556.59 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 97 Resp: 22218

Ion	Ratio	Lower	Upper
97	100		
99	64.5	34.6	94.6
117	12.3	0.0	43.2

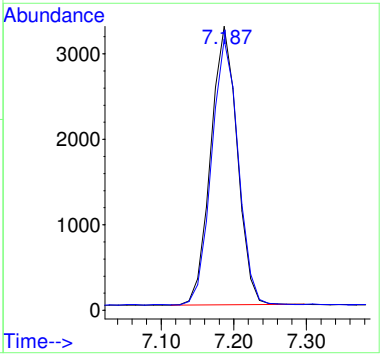


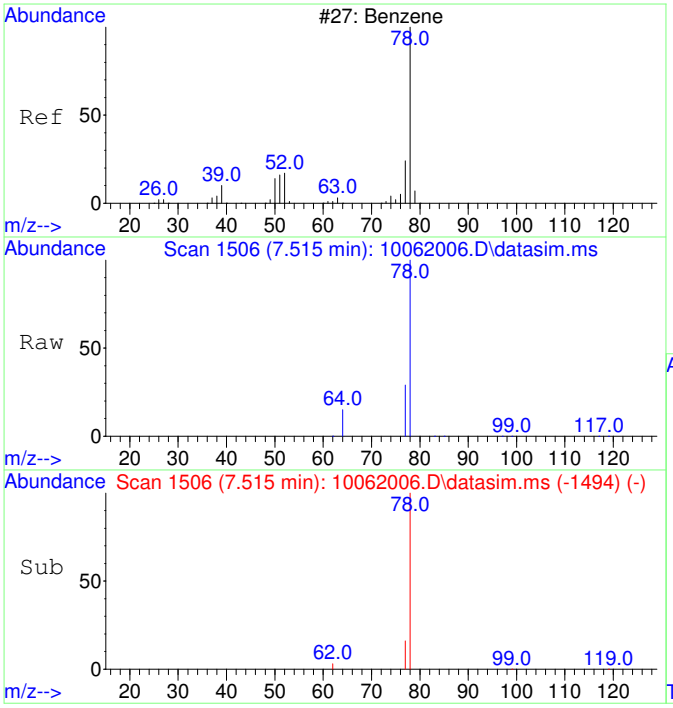


#8
Carbon tetrachloride
Concen: 220.06 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion:117 Resp: 8268

Ion	Ratio	Lower	Upper
117	100		
119	95.8	66.4	126.4

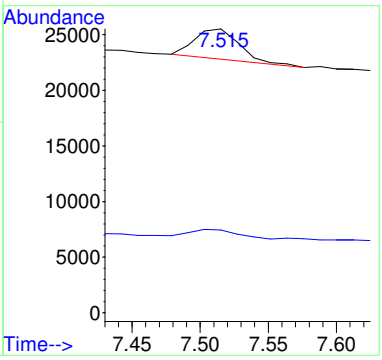


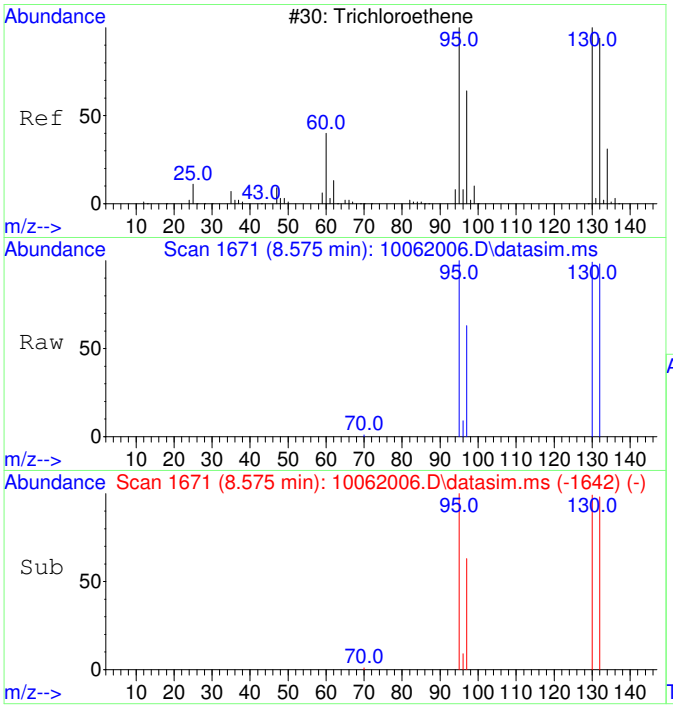


#9
Benzene
Concen: 57.14 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. -0.000 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 78 Resp: 5751

Ion	Ratio	Lower	Upper
78	100		
77	54.3	0.0	53.2#

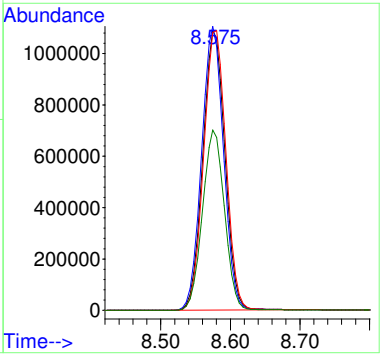


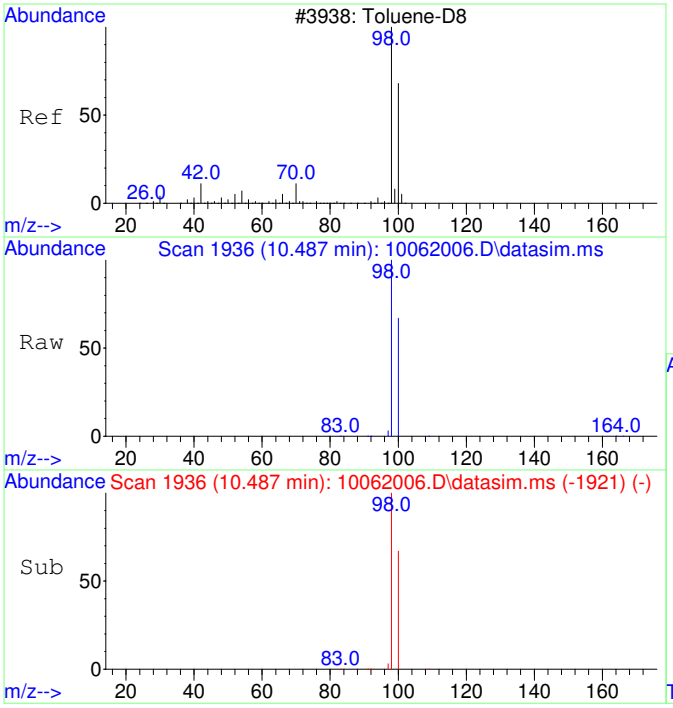


#11
Trichloroethene
Concen: 79170.17 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion:130 Resp: 2399213

Ion	Ratio	Lower	Upper
130	100		
95	100.6	60.7	120.7
132	100.8	76.0	116.0
97	64.1	38.6	78.6

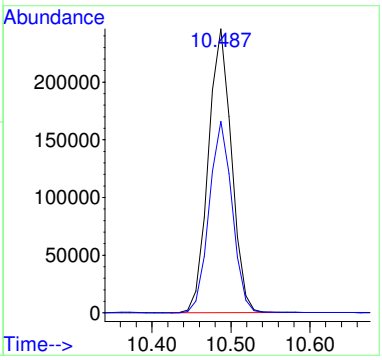


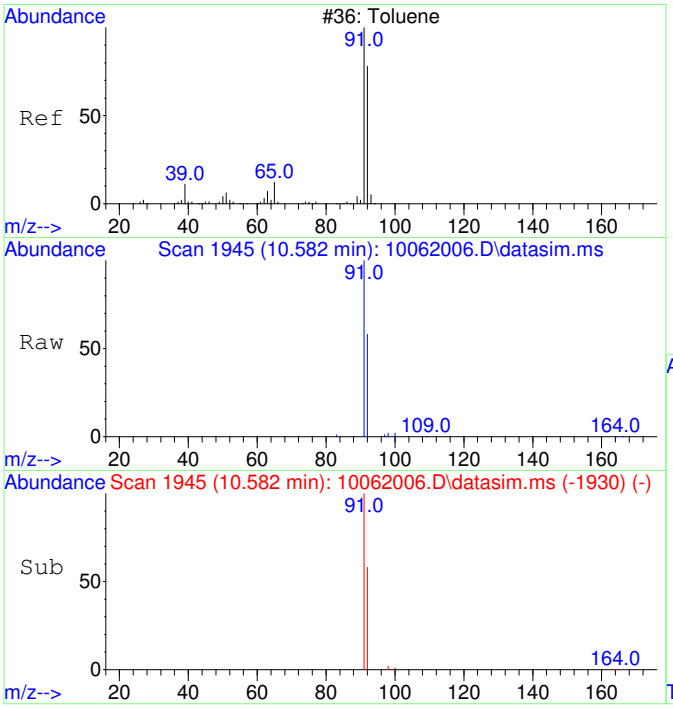


#12
Toluene-d8
Concen: 4325.83 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.010 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 98 Resp: 501652

Ion	Ratio	Lower	Upper
98	100		
100	66.7	37.1	97.1

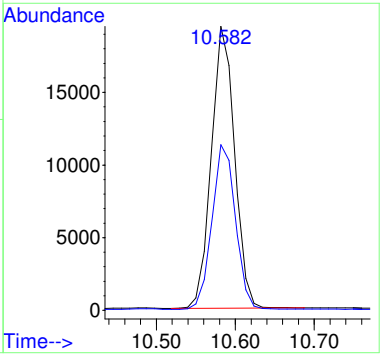


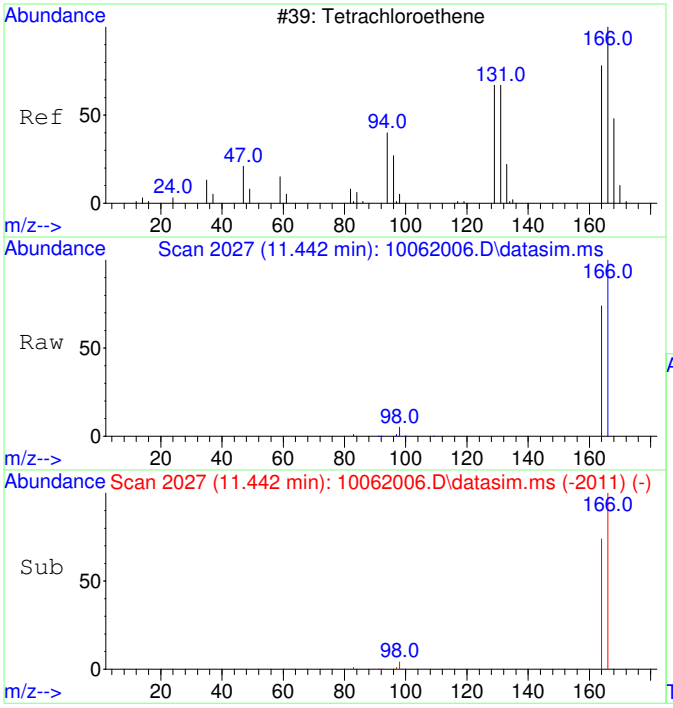


#13
Toluene
Concen: 268.18 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.010 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 91 Resp: 39650

Ion	Ratio	Lower	Upper
91	100		
92	59.0	29.9	89.9

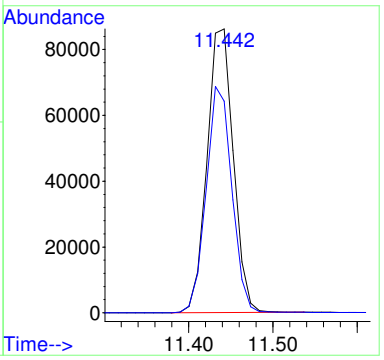


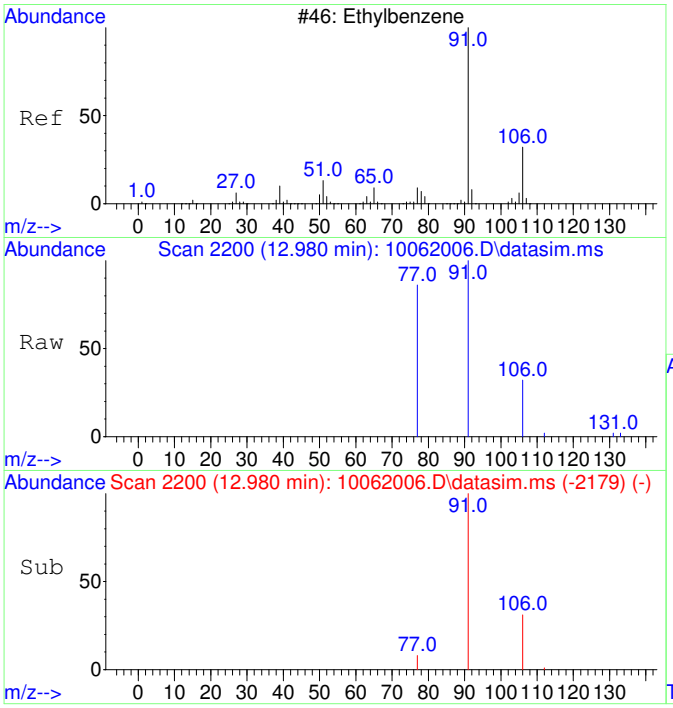


#15
Tetrachloroethene
Concen: 4379.71 ug/L
RT: 11.442 min Scan# 2027
Delta R.T. 0.021 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion:166 Resp: 187393

Ion	Ratio	Lower	Upper
166	100		
164	77.8	47.8	107.8

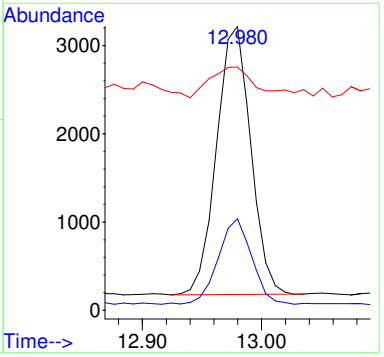


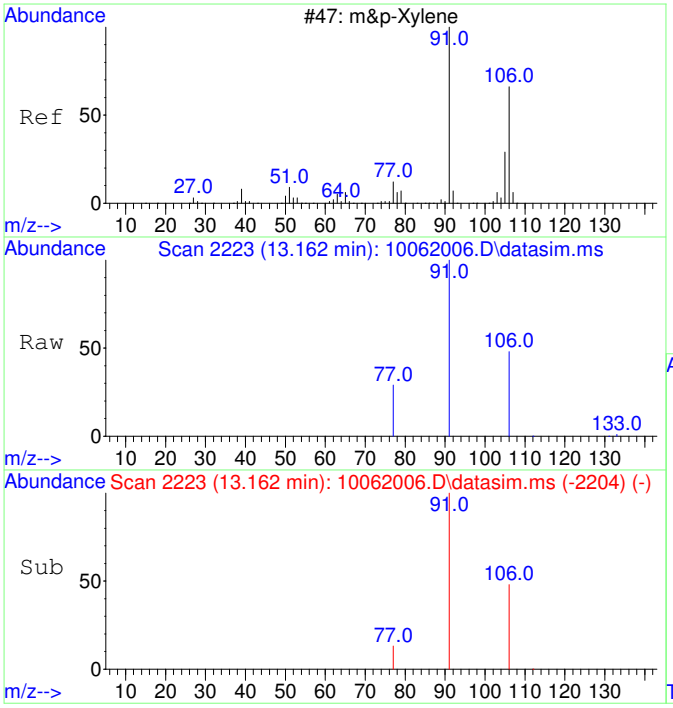


#18
Ethylbenzene
Concen: 33.70 ug/L
RT: 12.980 min Scan# 2200
Delta R.T. 0.016 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 91 Resp: 6064

Ion	Ratio	Lower	Upper
91	100		
106	30.9	3.0	63.0
77	16.2	0.0	38.2

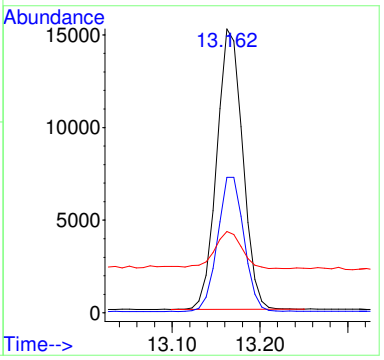


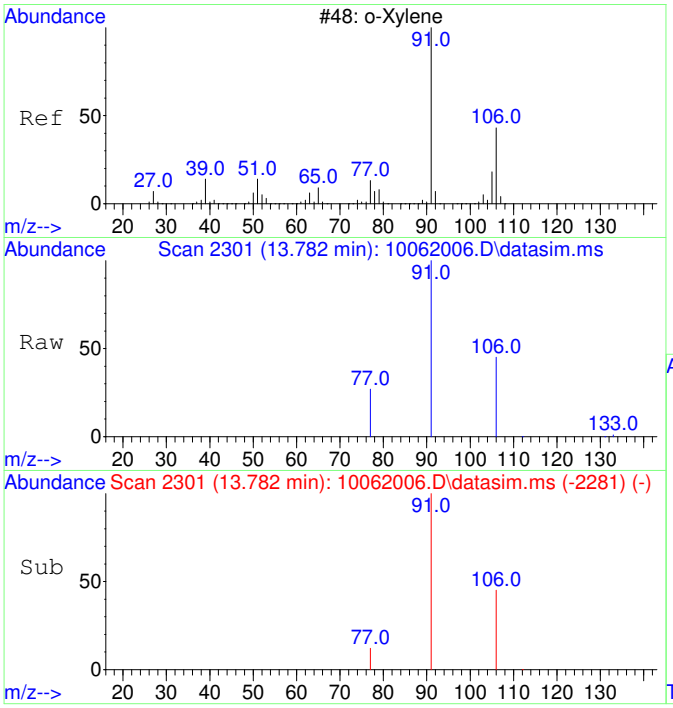


#19
m&p-Xylene
Concen: 220.11 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.000 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 91 Resp: 30959

Ion	Ratio	Lower	Upper
91	100		
106	48.8	22.2	82.2
77	13.9	0.0	42.4

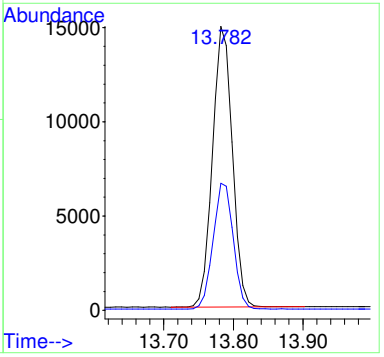


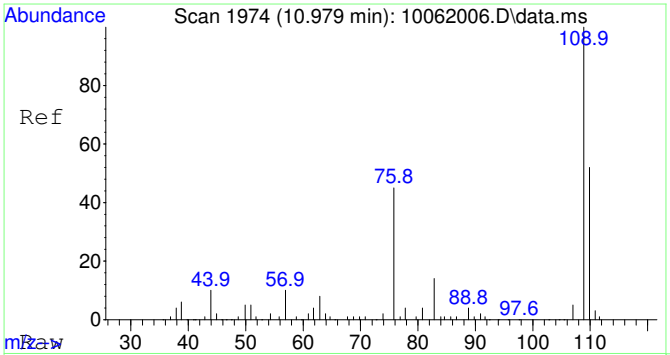


#20
o-Xylene
Concen: 195.82 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 91 Resp: 29426

Ion	Ratio	Lower	Upper
91	100		
106	45.7	19.2	79.2

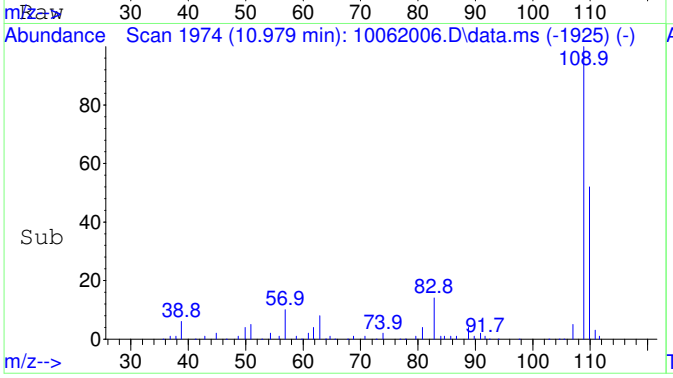


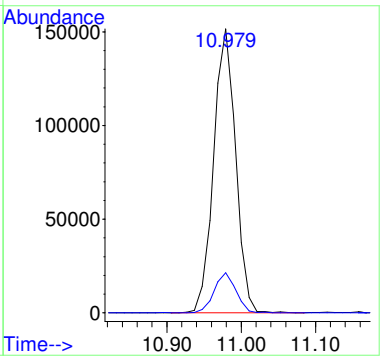


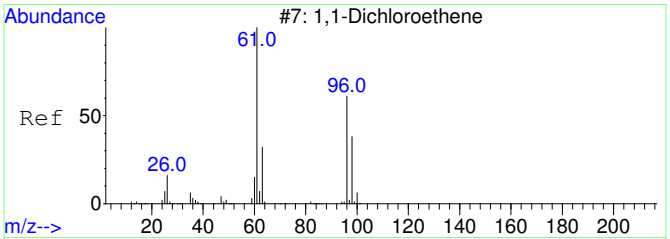
#25
2-Fluorotoluene SCAN
Concen: 5378.56 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.010 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion:109 Resp: 310596

Ion	Ratio	Lower	Upper
109	100		
83	13.9	0.0	43.8



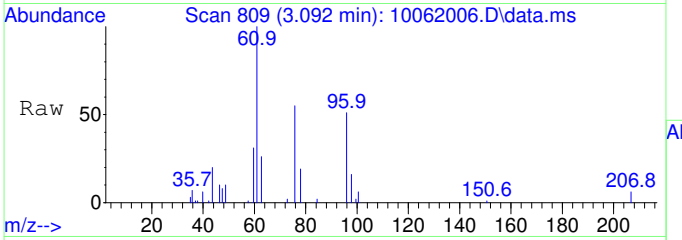


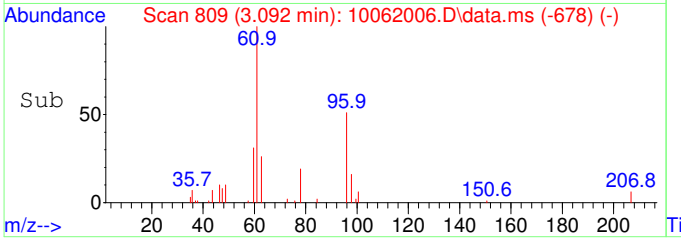


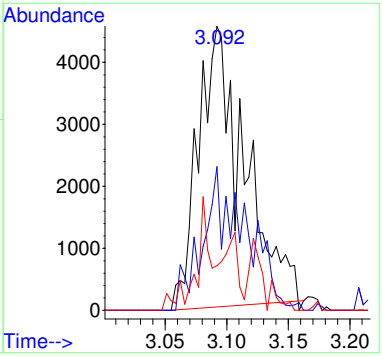
#26
1,1-Dichloroethene SCAN
Concen: 952.56 ug/L
RT: 3.092 min Scan# 809
Delta R.T. -0.015 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

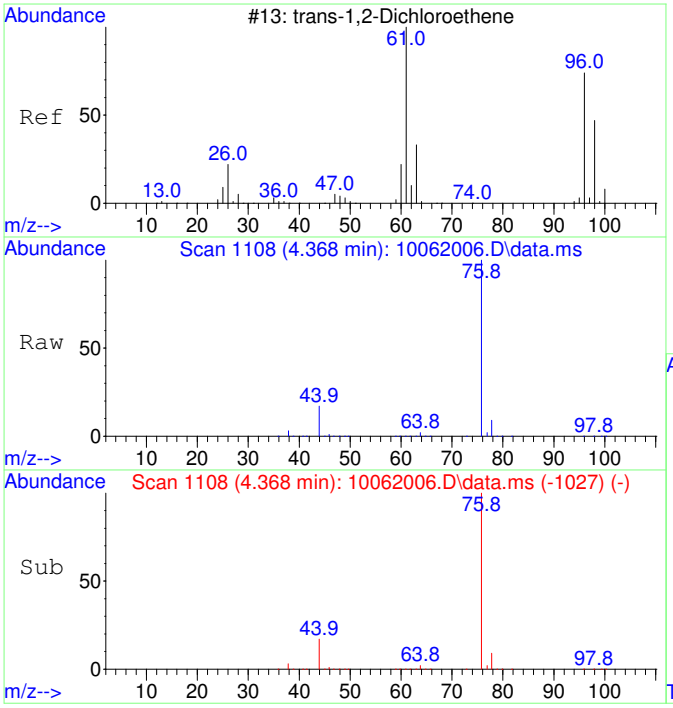
Tgt Ion: 61 Resp: 11682

Ion	Ratio	Lower	Upper
61	100		
96	27.3	33.1	93.1#
98	5.1	11.2	71.2#





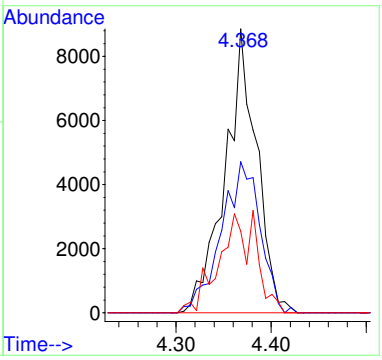


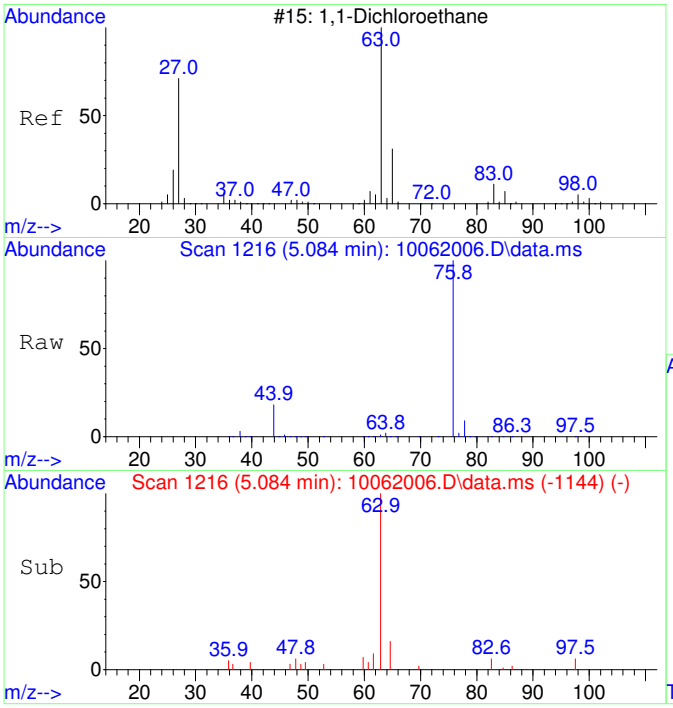


#27
trans-1,2-Dichloroethene SCAN
Concen: 1362.12 ug/L
RT: 4.368 min Scan# 1108
Delta R.T. -0.033 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 61 Resp: 20671

Ion	Ratio	Lower	Upper
61	100		
96	64.9	49.0	109.0
98	40.8	20.5	80.5

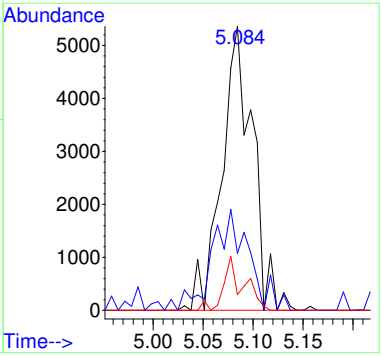


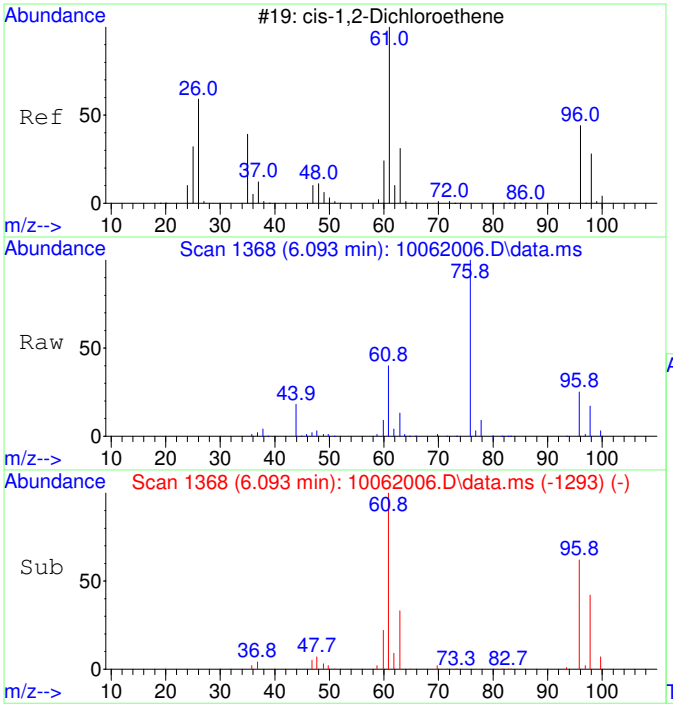


#28
1,1-Dichloroethane SCAN
Concen: 655.82 ug/L
RT: 5.084 min Scan# 1216
Delta R.T. -0.020 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 63 Resp: 11518

Ion	Ratio	Lower	Upper
63	100		
65	39.3	1.3	61.3
83	12.0	0.0	45.9

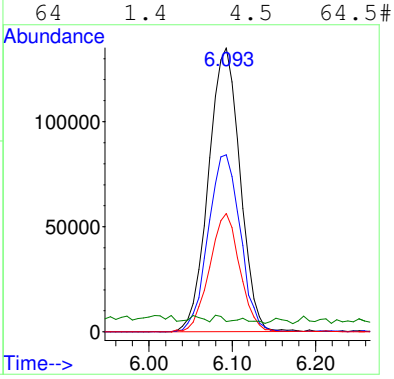


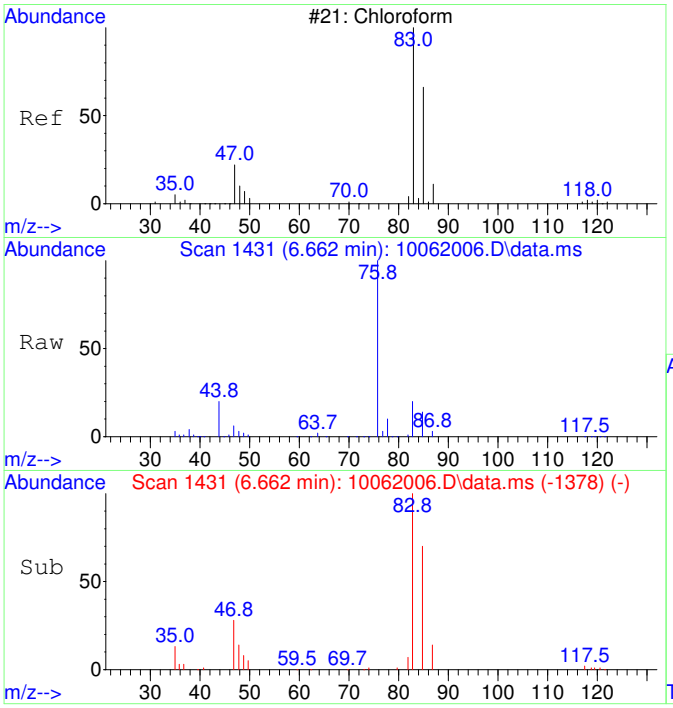


#29
cis-1,2-Dichloroethene SCAN
Concen: 18900.00 ug/L
RT: 6.093 min Scan# 1368
Delta R.T. -0.000 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 61 Resp: 355639

Ion	Ratio	Lower	Upper
61	100		
96	63.3	39.9	99.9
98	40.0	13.5	73.5
64	1.4	4.5	64.5#

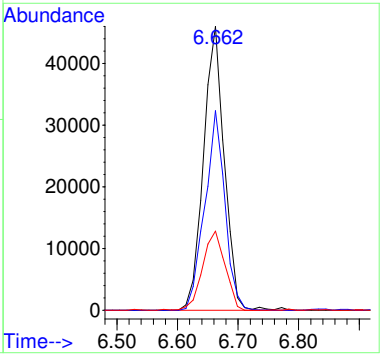


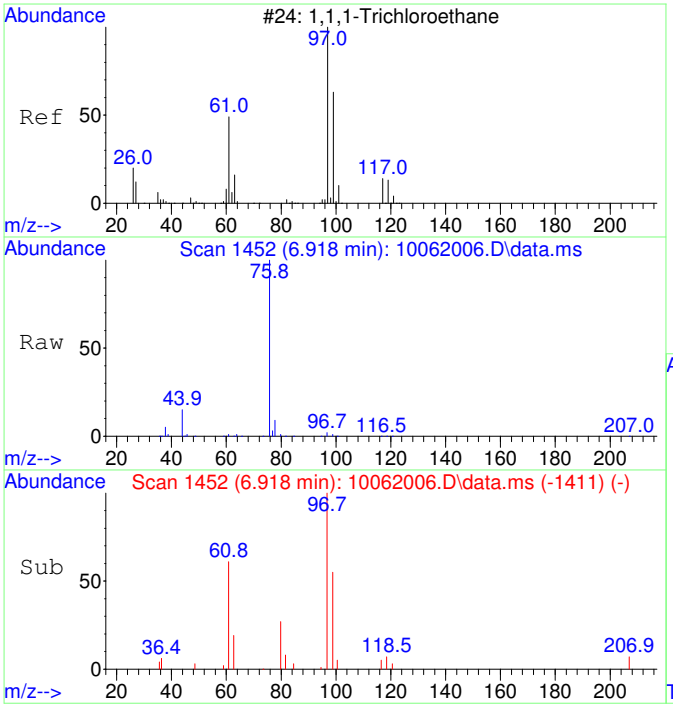


#30
Chloroform SCAN
Concen: 5379.45 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. -0.000 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 83 Resp: 109792

Ion	Ratio	Lower	Upper
83	100		
85	67.9	34.6	94.6
47	30.4	0.0	53.4

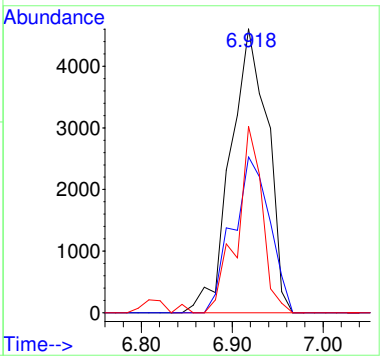


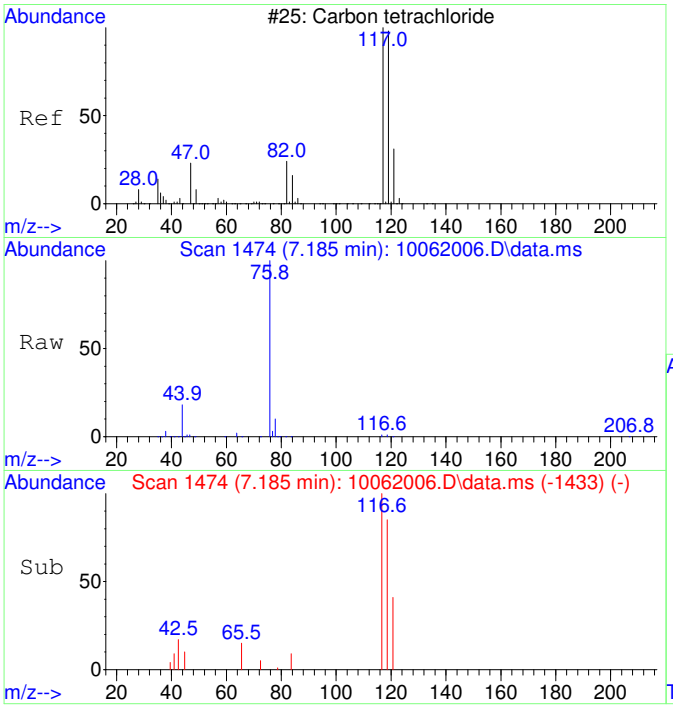


#31
1,1,1-Trichloroethane SCAN
Concen: 701.76 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. -0.000 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 97 Resp: 13052

Ion	Ratio	Lower	Upper
97	100		
99	54.9	43.6	103.6
61	44.9	18.0	78.0

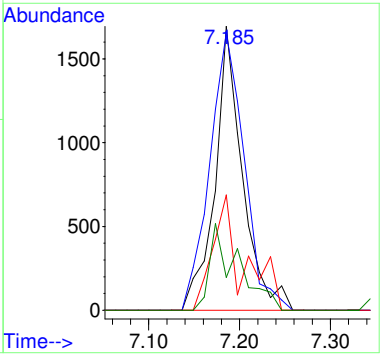


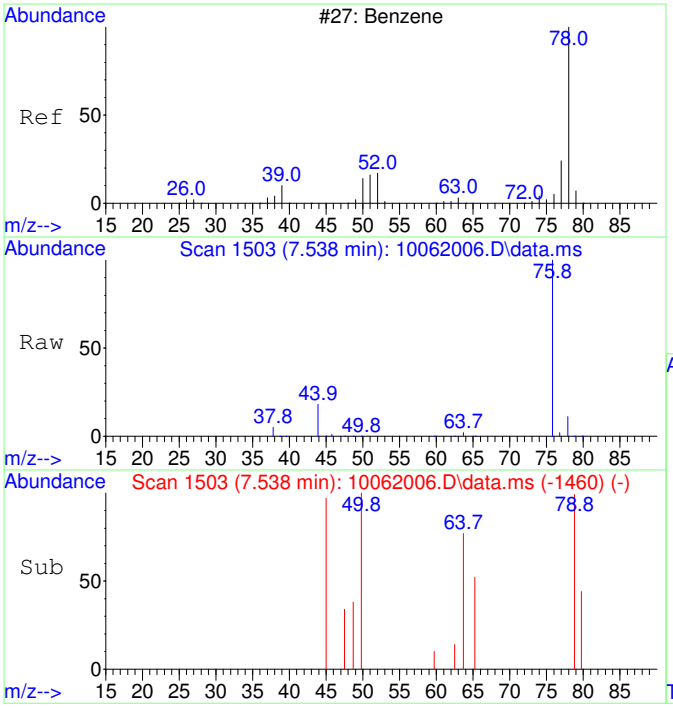


#32
Carbon tetrachloride SCAN
Concen: 184.48 ug/L
RT: 7.185 min Scan# 1474
Delta R.T. -0.000 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion:117 Resp: 3579

Ion	Ratio	Lower	Upper
117	100		
119	122.1	75.5	135.5
121	45.4	0.0	58.8
82	31.3	0.0	59.2

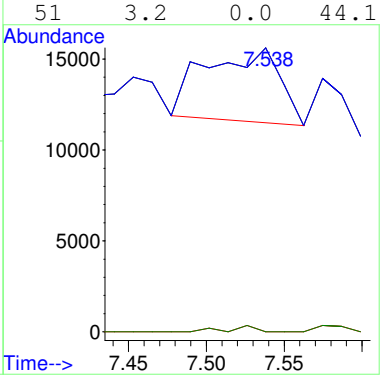


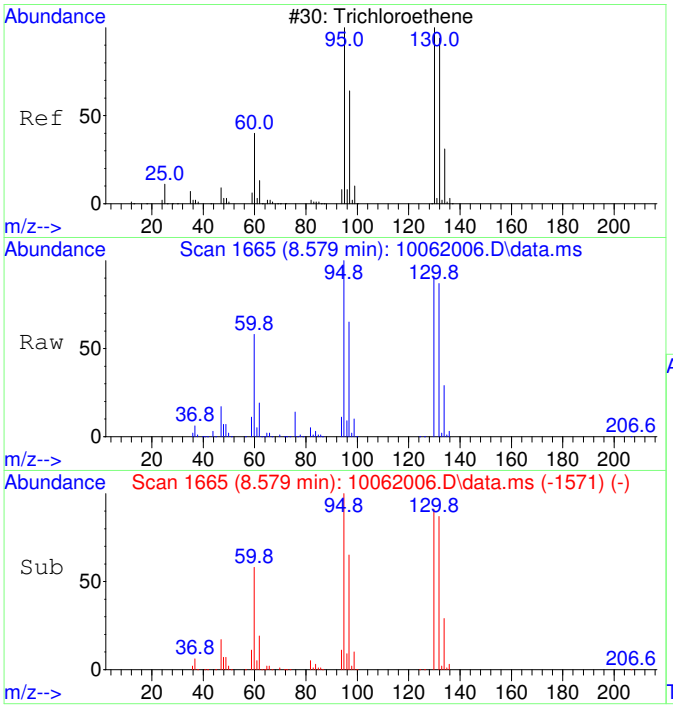


#33
Benzene SCAN
Concen: 254.60 ug/L
RT: 7.538 min Scan# 1503
Delta R.T. 0.024 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 78 Resp: 13038

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	3.2	0.0	47.9
51	3.2	0.0	44.1

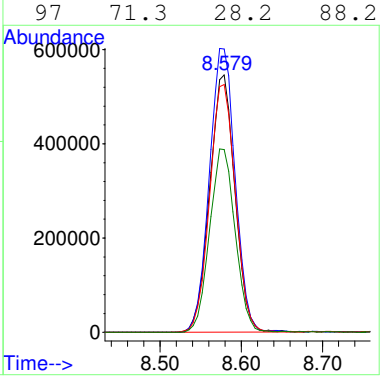


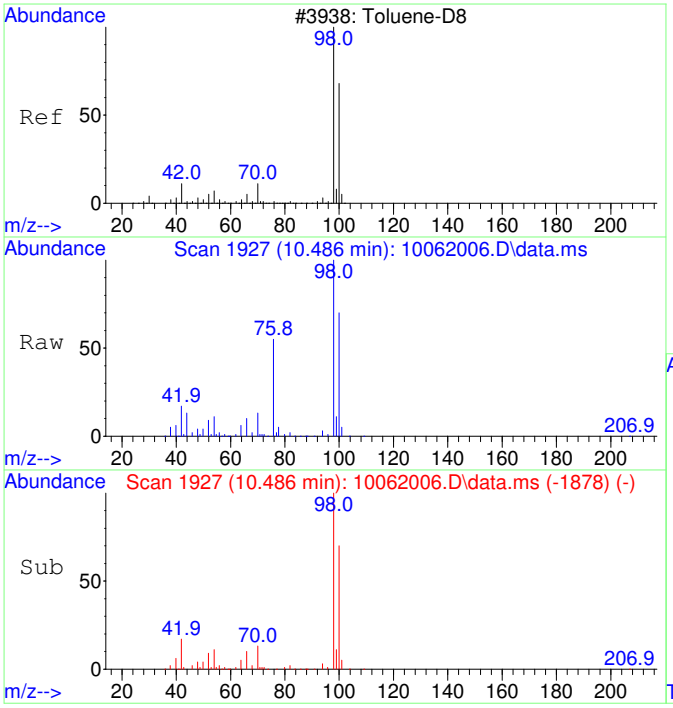


#35
Trichloroethene SCAN
Concen: 84256.84 ug/L
RT: 8.579 min Scan# 1665
Delta R.T. 0.011 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion:130 Resp: 1185722

Ion	Ratio	Lower	Upper
130	100		
95	112.4	60.5	120.5
132	97.7	59.6	119.6
97	71.3	28.2	88.2

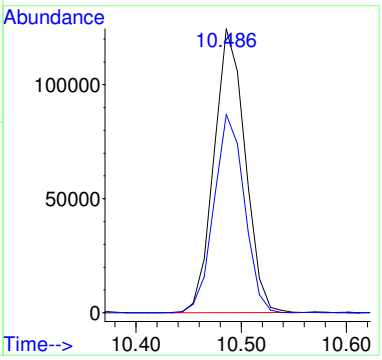


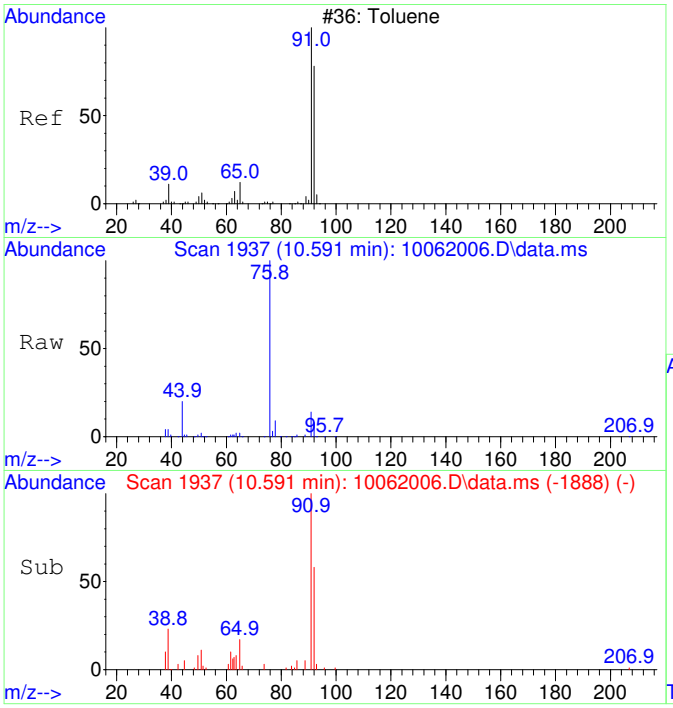


#36
Toluene-d8 SCAN
Concen: 4533.78 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.010 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 98 Resp: 256045

Ion	Ratio	Lower	Upper
98	100		
100	68.5	40.0	100.0

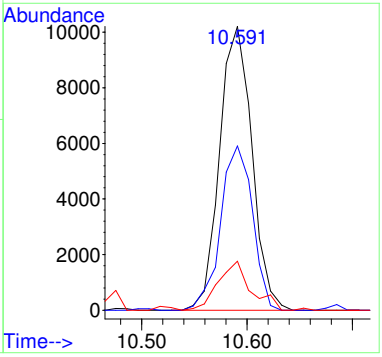


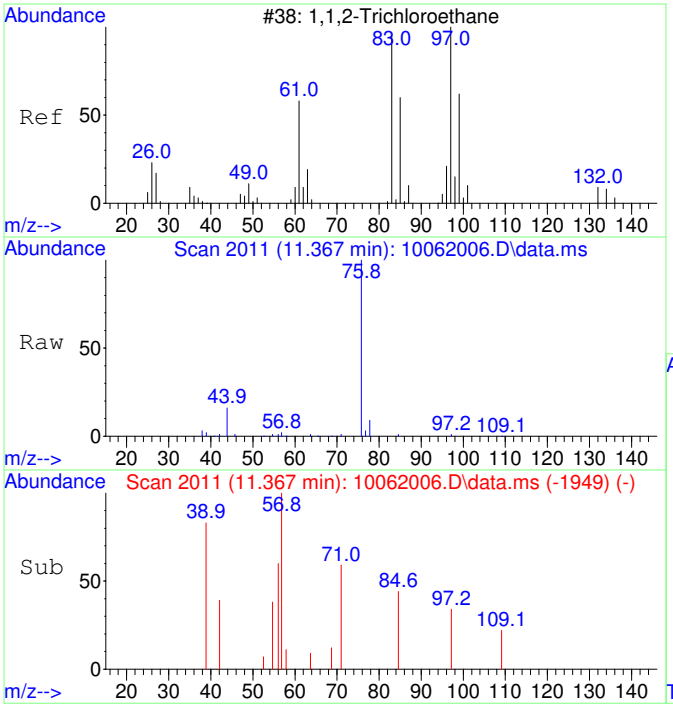


#37
Toluene SCAN
Concen: 301.52 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.010 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 91 Resp: 21807

Ion	Ratio	Lower	Upper
91	100		
92	57.3	28.3	88.3
65	17.4	0.0	41.0

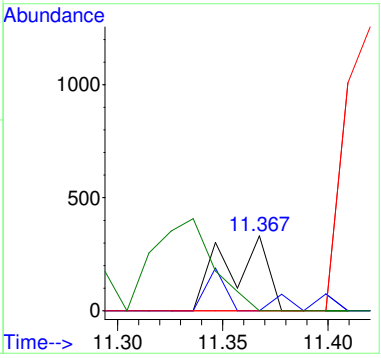


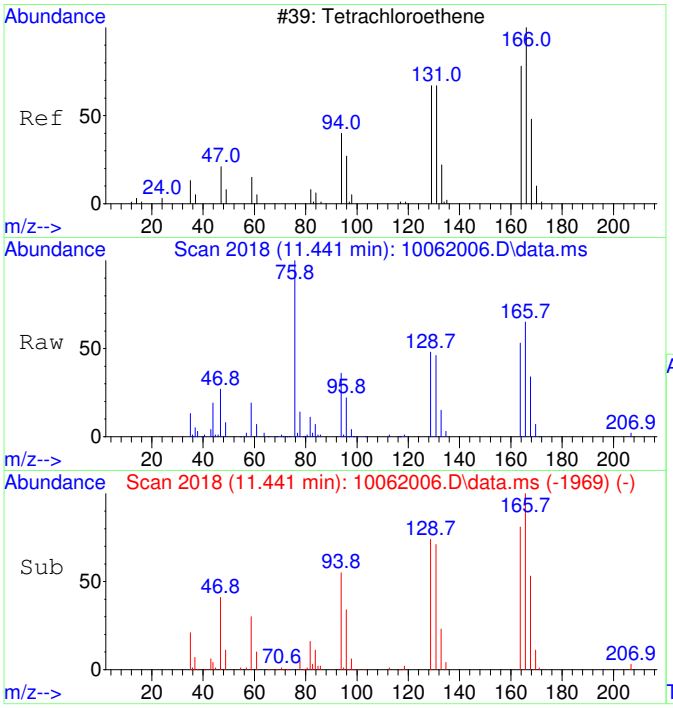


#38
1,1,2-Trichloroethane SCAN
Concen: 28.46 ug/L
RT: 11.367 min Scan# 2011
Delta R.T. 0.147 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 97 Resp: 462

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	0.0	32.1	92.1#
99	0.0	36.7	96.7#

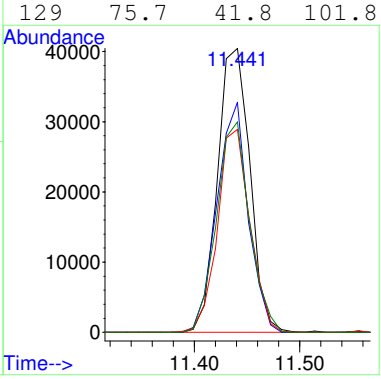


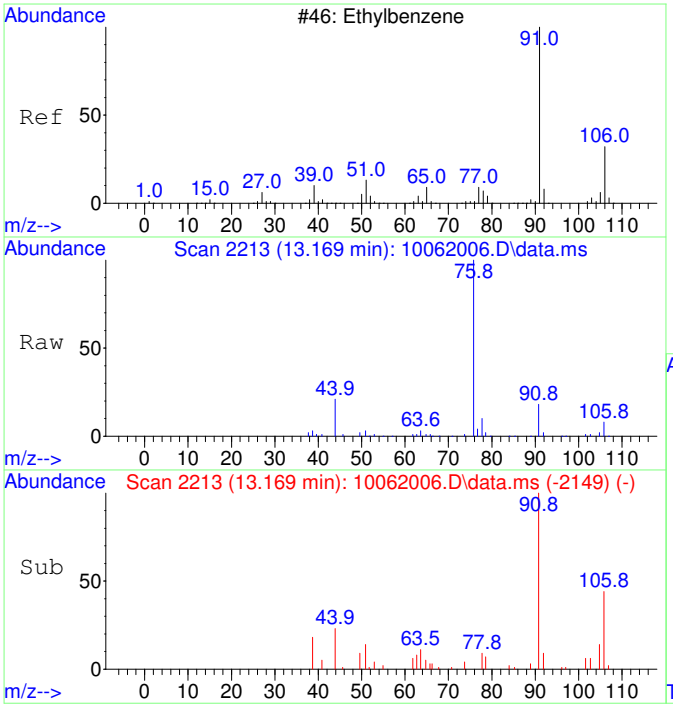


#39
Tetrachloroethene SCAN
Concen: 4995.81 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.010 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion:166 Resp: 86806

Ion	Ratio	Lower	Upper
166	100		
164	77.9	50.9	110.9
131	71.5	38.7	98.7
129	75.7	41.8	101.8

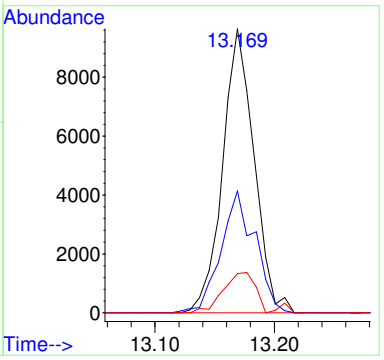


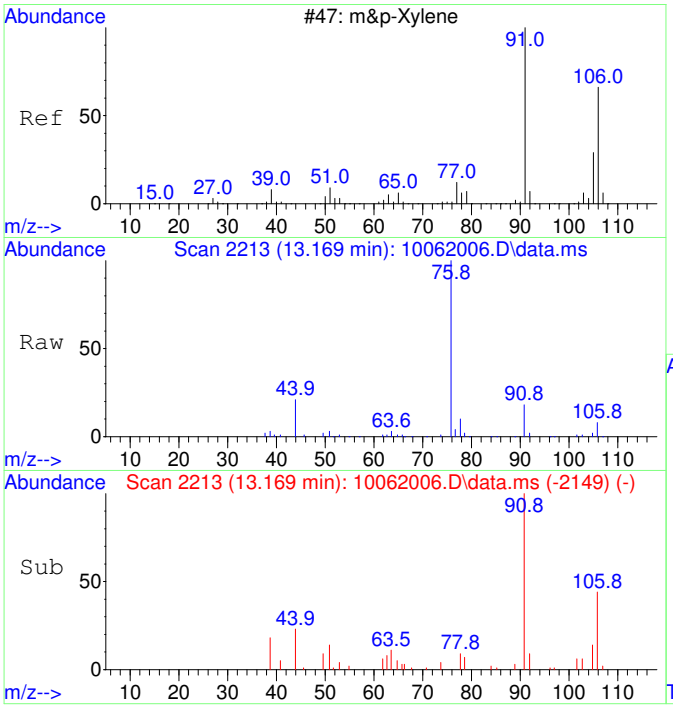


#42
Ethylbenzene SCAN
Concen: 134.53 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 91 Resp: 17726

Ion	Ratio	Lower	Upper
91	100		
106	46.5	23.1	83.1
51	13.8	0.0	40.1

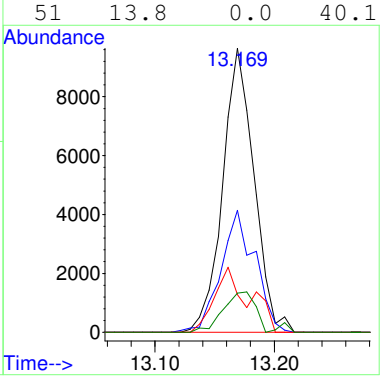


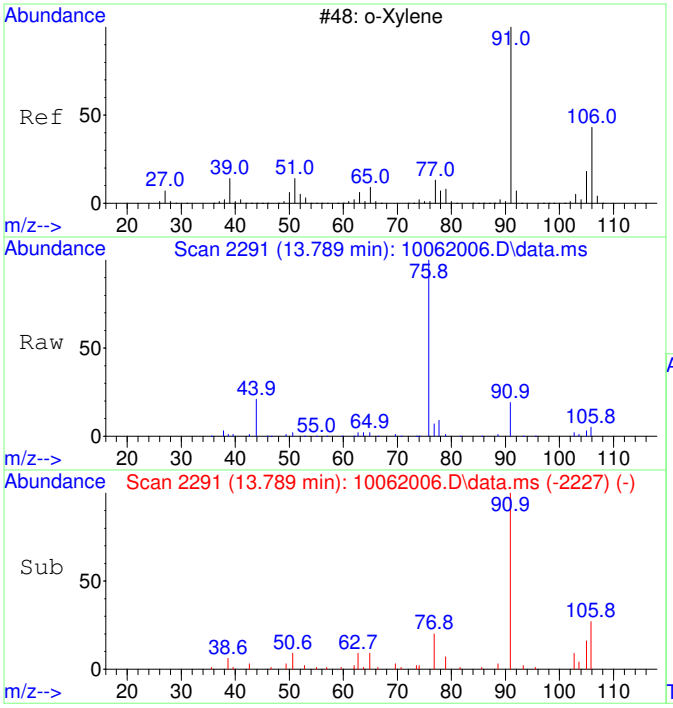


#43
m&p-Xylene SCAN
Concen: 134.53 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 91 Resp: 17726

Ion	Ratio	Lower	Upper
91	100		
106	46.5	23.1	83.1
105	25.1	0.0	54.7
51	13.8	0.0	40.1

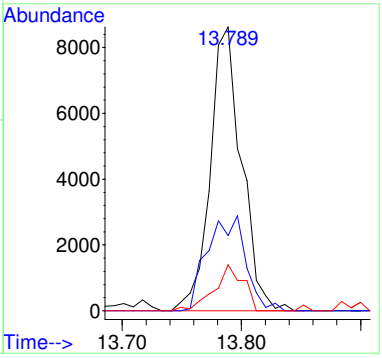




#44
o-Xylene SCAN
Concen: 222.80 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.008 min
Lab File: 10062006.D
Acq: 6 Oct 2020 10:10

Tgt Ion: 91 Resp: 15714

Ion	Ratio	Lower	Upper
91	100		
106	41.0	18.0	78.0
105	14.9	0.0	56.6



S20J009-IBL2

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062007.D
Acq On : 6 Oct 2020 10:44
InstName : AG5975C
Operator : TD
Sample : S20J009-IBL2
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 06 11:02:46 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

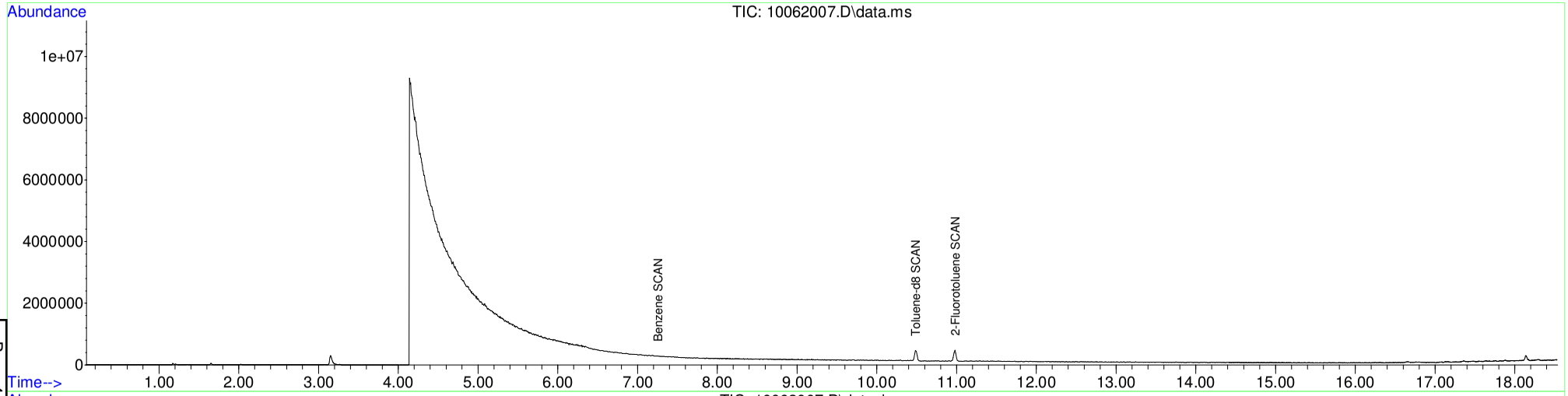
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.980	109	564468	5000.00	ug/L	0.01
System Monitoring Compounds						
12) Toluene-d8	10.487	98	477891	4324.78	ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.50%			
Target Compounds						Qvalue
9] Benzene	7.515	78	5138	53.57	ug/L #	10
25) 2-Fluorotoluene SCAN	10.979	109	277551	5044.07	ug/L	97
33) Benzene SCAN	7.258	78	9114	186.78	ug/L	92
36) Toluene-d8 SCAN	10.486	98	252376	4689.87	ug/L	94

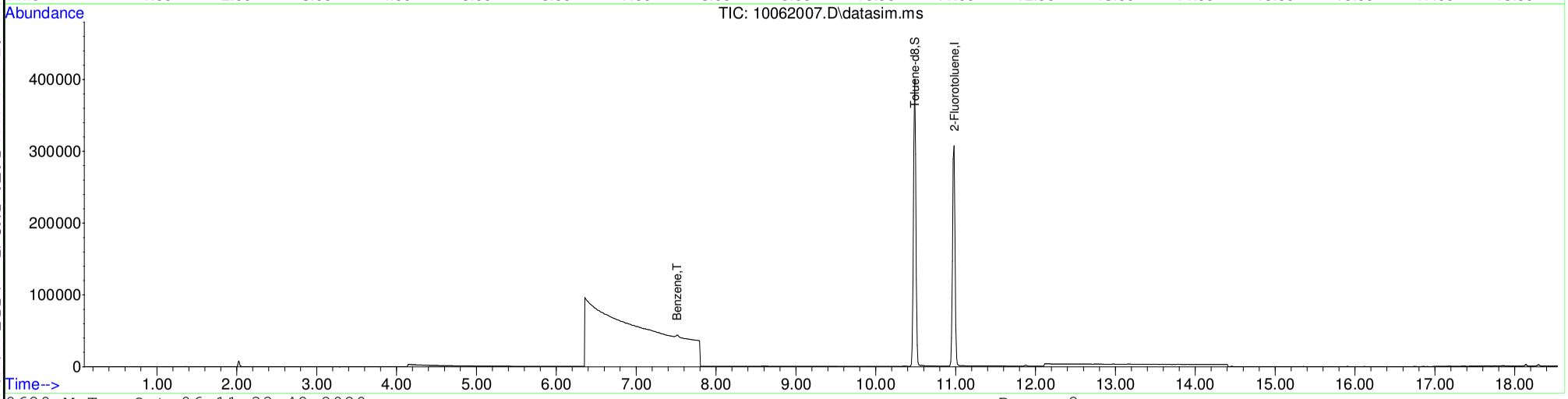
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062007.D
Acq On : 6 Oct 2020 10:44
InstName : AG5975C
Operator : TD
Sample : S20J009-IBL2
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 06 11:02:46 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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2009036-01RE1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062008.D
Acq On : 6 Oct 2020 11:07
InstName : AG5975C
Operator : TD
Sample : 2009036-01RE1
Misc : 10X DL; 90-10
ALS Vial : 8 Sample Multiplier: 10

Quant Time: Oct 06 11:26:19 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

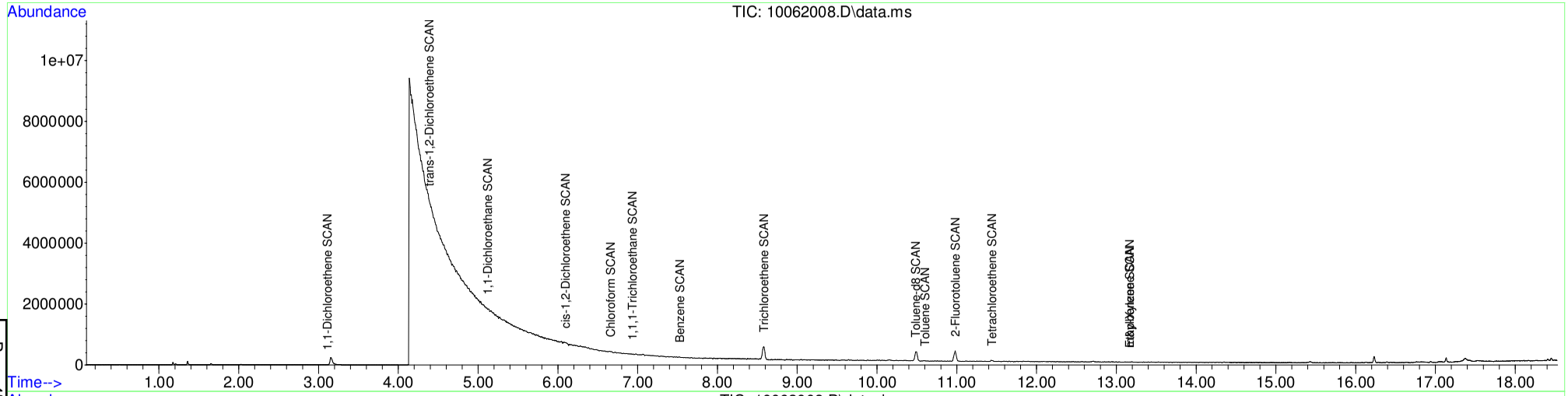
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.980	109	524615	5000.00 ug/L	0.01
System Monitoring Compounds					
12) Toluene-d8	10.487	98	443165	4315.18 ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.30%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	2581	123.21 ug/L #	40
3] trans-1,2-Dichloroethene	4.382	61	3848	158.99 ug/L	86
4] 1,1-Dichloroethane	5.092	63	2709	89.91 ug/L	69
5] cis-1,2-Dichloroethene	6.094	61	65861	2070.91 ug/L	98
6] Chloroform	6.664	83	42858	1316.62 ug/L	99
7] 1,1,1-Trichloroethane	6.919	97	2906	82.20 ug/L	99
8] Carbon tetrachloride	7.187	117	1363	40.96 ug/L	97
9] Benzene	7.515	78	5670	63.61 ug/L #	26
11] Trichloroethene	8.580	130	300106	11182.39 ug/L RPT	93
13] Toluene	10.582	91	19462	148.64 ug/L	98
15] Tetrachloroethene	11.442	166	21052	555.59 ug/L	100
19] m&p-Xylene	13.170	91	3985	31.99 ug/L	93
25) 2-Fluorotoluene SCAN	10.979	109	264281	5167.77 ug/L	97
26) 1,1-Dichloroethene SCAN	3.107	61	363	33.42 ug/L #	56
27) trans-1,2-Dichloroethe...	4.388	61	1179	87.73 ug/L #	57
28) 1,1-Dichloroethane SCAN	5.124	63	452	29.06 ug/L #	62
29) cis-1,2-Dichloroethene...	6.100	61	38331	2300.22 ug/L	84
30) Chloroform SCAN	6.662	83	25688	1421.23 ug/L	86
31) 1,1,1-Trichloroethane ...	6.930	97	1375	83.48 ug/L	87
33) Benzene SCAN	7.526	78	23582	519.99 ug/L	92
35) Trichloroethene SCAN	8.579	130	145757	11695.50 ug/L	84
36) Toluene-d8 SCAN	10.486	98	222918	4457.14 ug/L	95
37) Toluene SCAN	10.601	91	11545	180.25 ug/L #	30
39) Tetrachloroethene SCAN	11.441	166	9922	644.80 ug/L #	42
42) Ethylbenzene SCAN	13.161	91	2608	22.35 ug/L	76
43) m&p-Xylene SCAN	13.161	91	2608	22.35 ug/L #	40

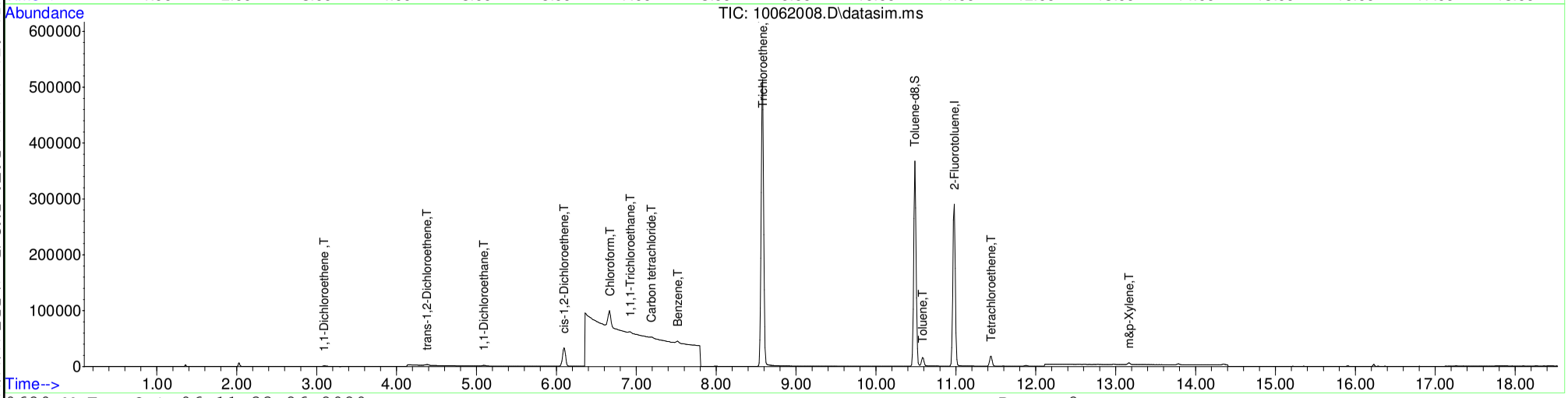
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062008.D
Acq On : 6 Oct 2020 11:07
InstName : AG5975C
Operator : TD
Sample : 2009036-01RE1
Misc : 10X DL; 90-10
ALS Vial : 8 Sample Multiplier: 10

Quant Time: Oct 06 11:26:19 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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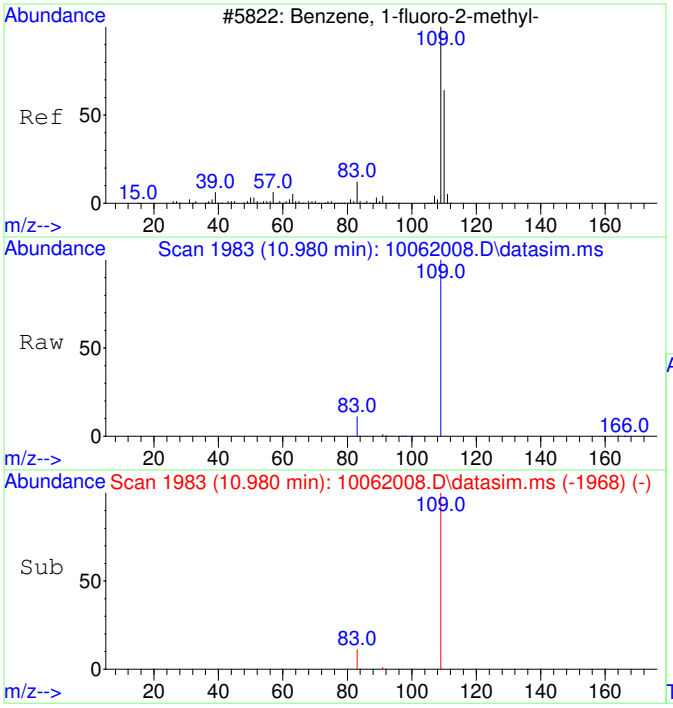
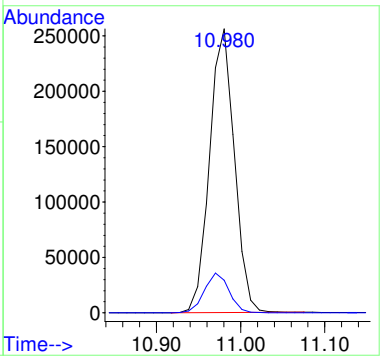
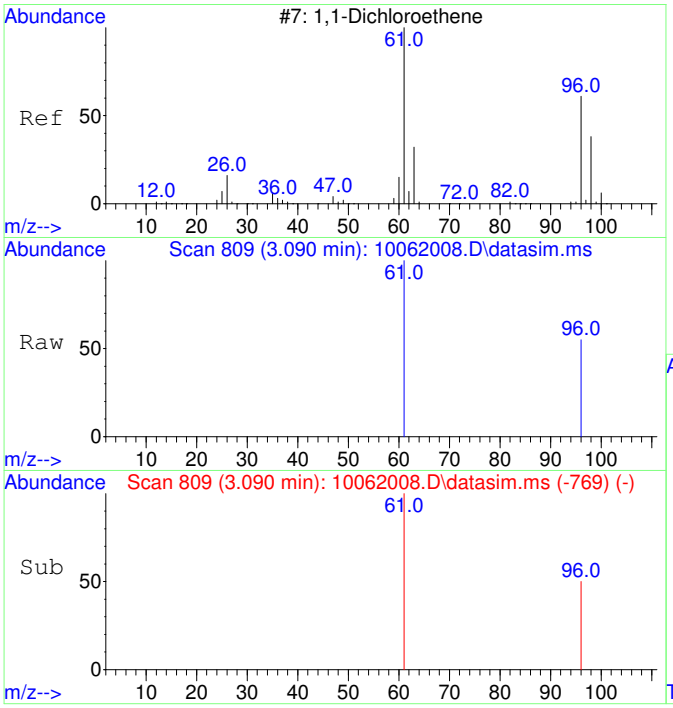


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.980 min Scan# 1983
Delta R.T. 0.010 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion:109 Resp: 524615

Ion	Ratio	Lower	Upper
109	100		
83	13.9	0.0	42.3

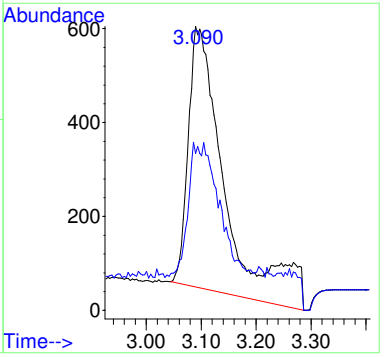


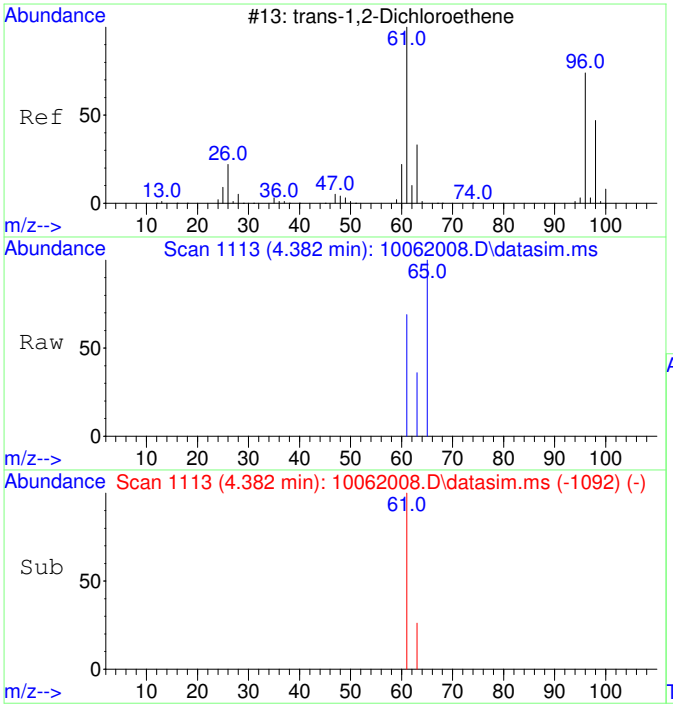


#2
1,1-Dichloroethene
Concen: 123.21 ug/L
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion: 61 Resp: 2581

Ion	Ratio	Lower	Upper
61	100		
96	19.0	37.2	97.2#

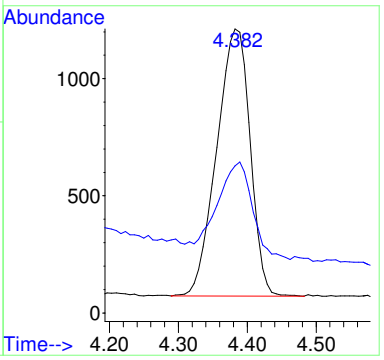


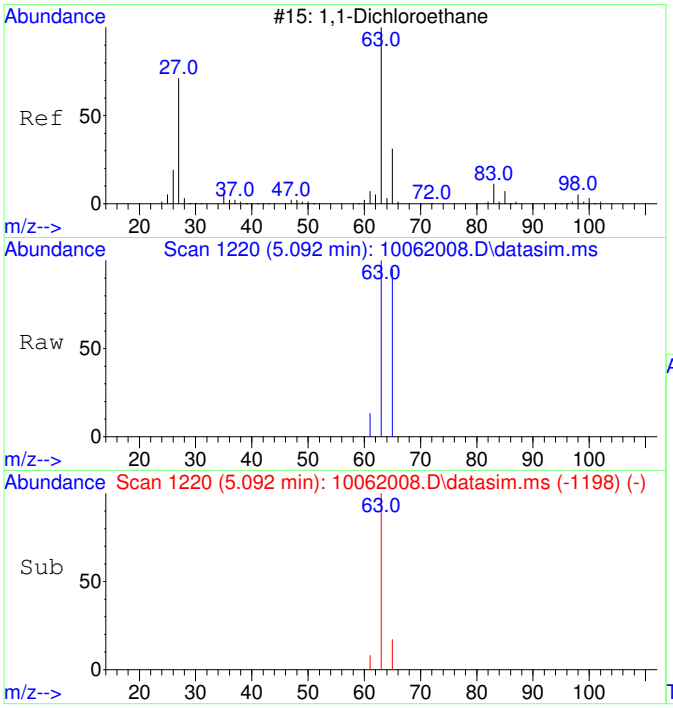


#3
trans-1,2-Dichloroethene
Concen: 158.99 ug/L
RT: 4.382 min Scan# 1113
Delta R.T. -0.013 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion: 61 Resp: 3848

Ion	Ratio	Lower	Upper
61	100		
63	40.5	2.4	62.4

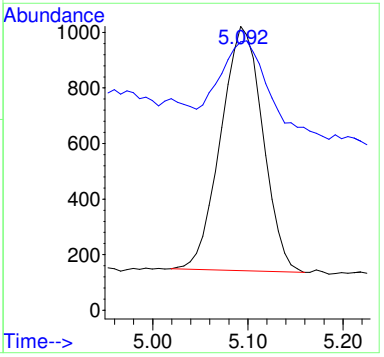


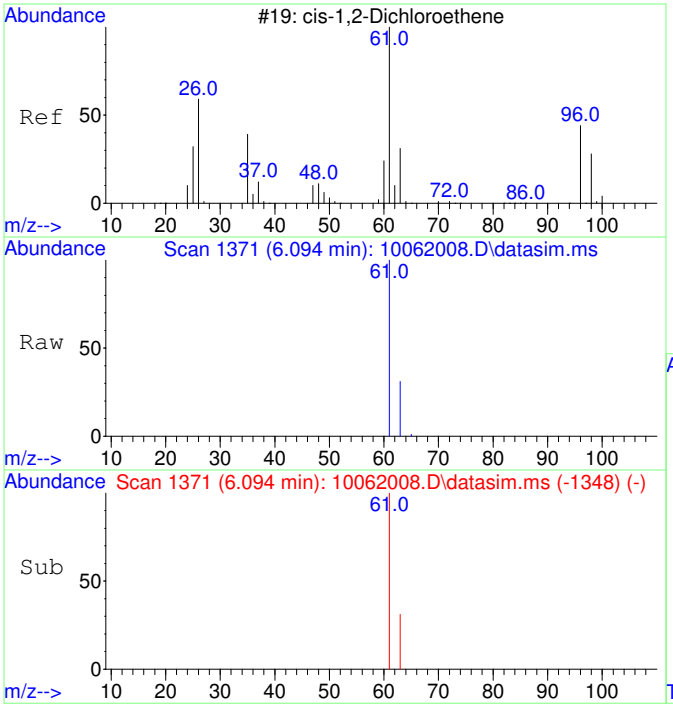


#4
1,1-Dichloroethane
Concen: 89.91 ug/L
RT: 5.092 min Scan# 1220
Delta R.T. -0.007 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion: 63 Resp: 2709

Ion	Ratio	Lower	Upper
63	100		
65	49.2	1.8	61.8

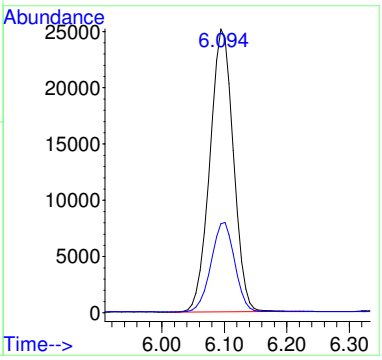


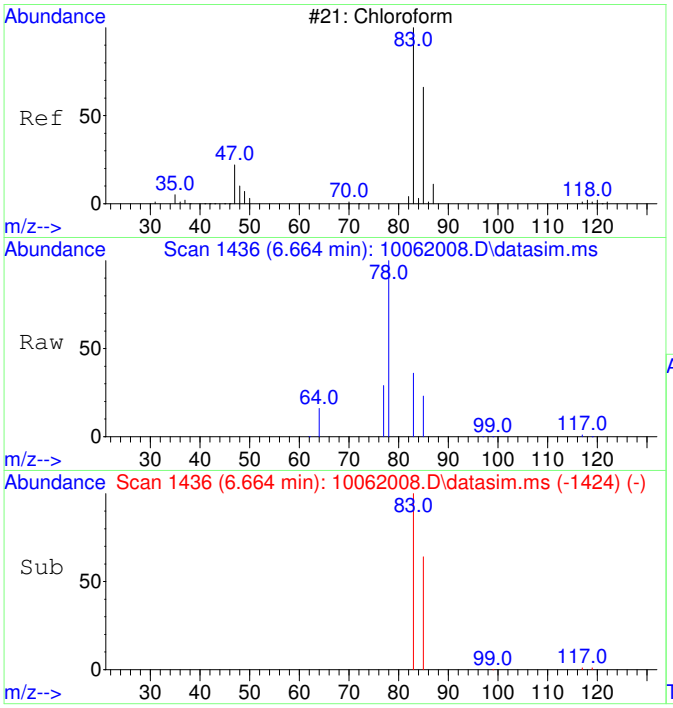


#5
cis-1,2-Dichloroethene
Concen: 2070.91 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. -0.000 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion: 61 Resp: 65861

Ion	Ratio	Lower	Upper
61	100		
63	31.6	2.5	62.5

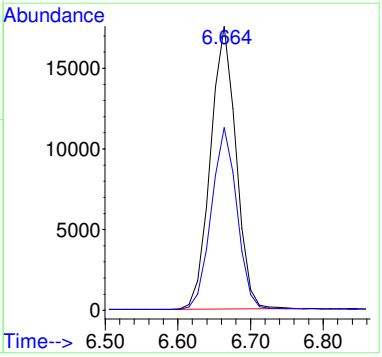


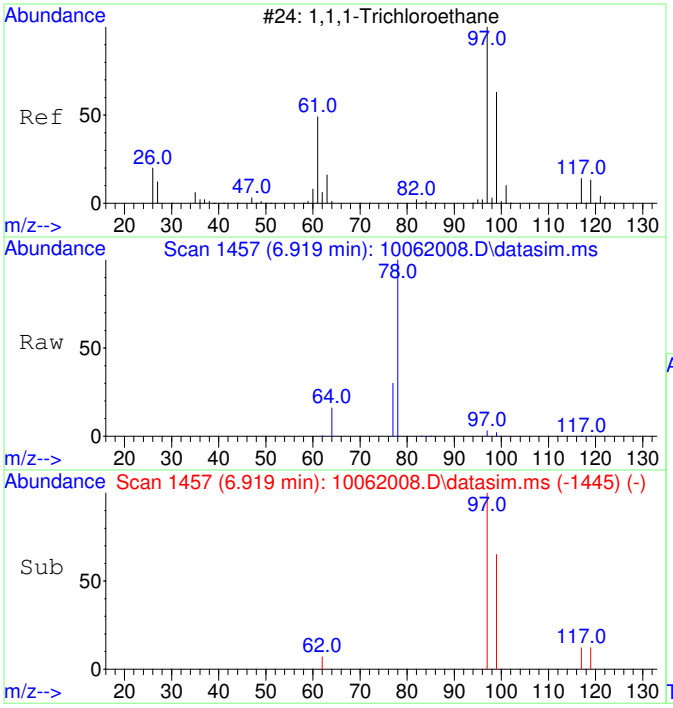


#6
Chloroform
Concen: 1316.62 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion: 83 Resp: 42858

Ion	Ratio	Lower	Upper
83	100		
85	64.1	35.1	95.1

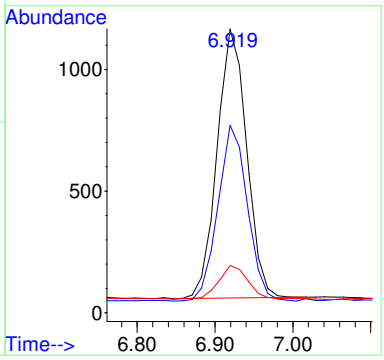


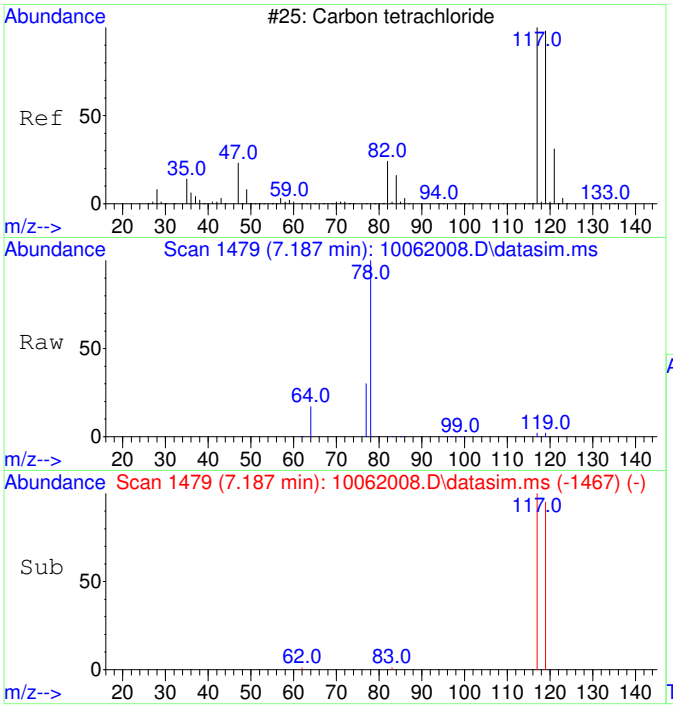


#7
1,1,1-Trichloroethane
Concen: 82.20 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion: 97 Resp: 2906

Ion	Ratio	Lower	Upper
97	100		
99	65.4	34.6	94.6
117	12.5	0.0	43.2

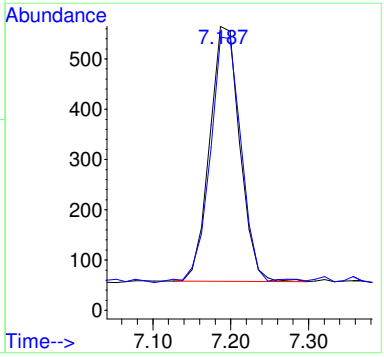


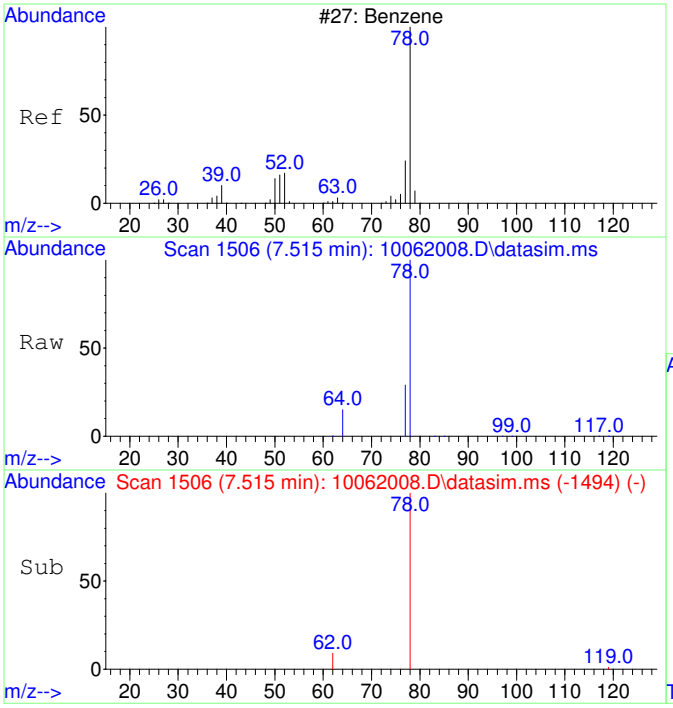


#8
Carbon tetrachloride
Concen: 40.96 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion:117 Resp: 1363

Ion	Ratio	Lower	Upper
117	100		
119	99.0	66.4	126.4

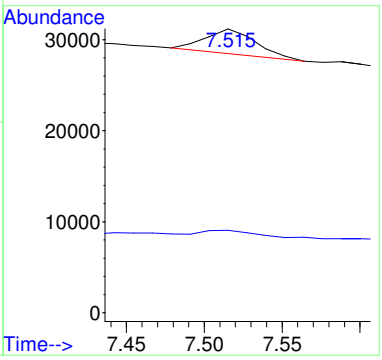


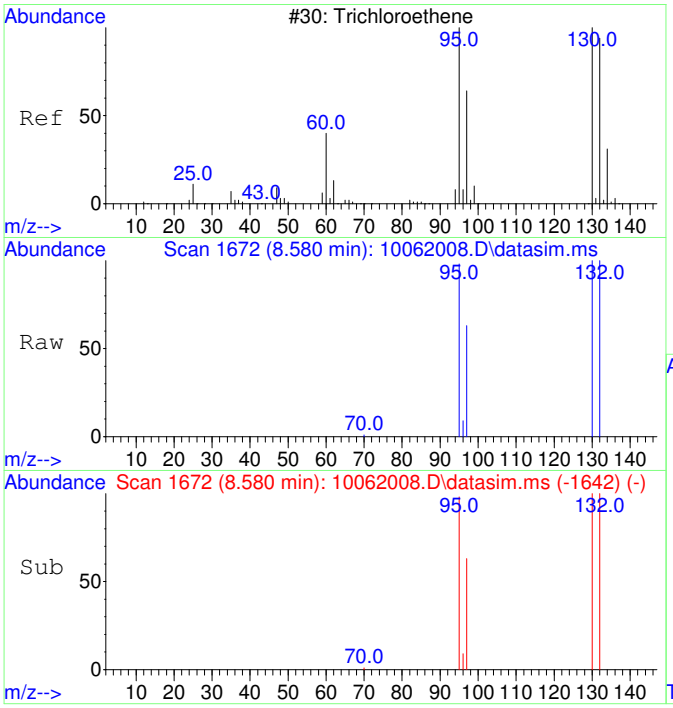


#9
Benzene
Concen: 63.61 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion: 78 Resp: 5670

Ion	Ratio	Lower	Upper
78	100		
77	59.0	0.0	53.2#

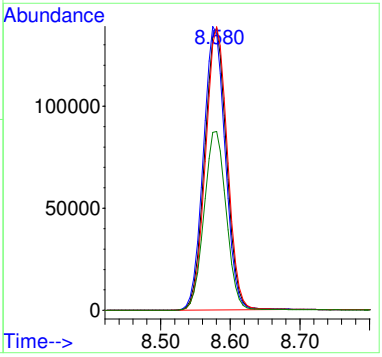


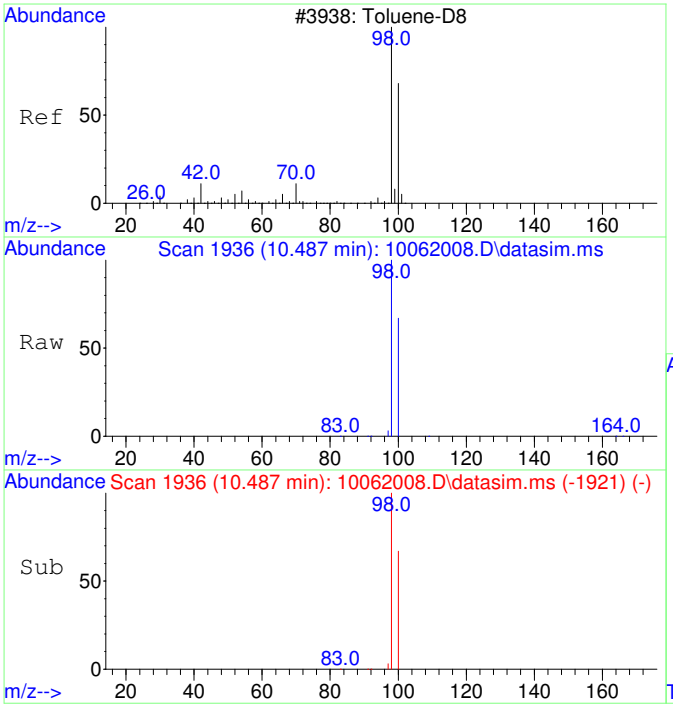


#11
Trichloroethene
Concen: 11182.39 ug/L
RT: 8.580 min Scan# 1672
Delta R.T. 0.011 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion:130 Resp: 300106

Ion	Ratio	Lower	Upper
130	100		
95	100.6	60.7	120.7
132	100.1	76.0	116.0
97	64.3	38.6	78.6

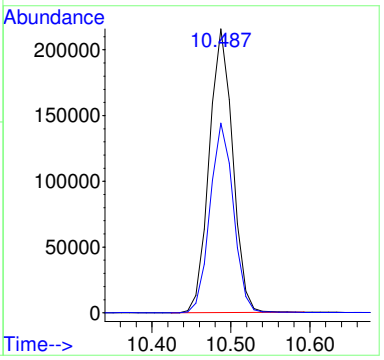


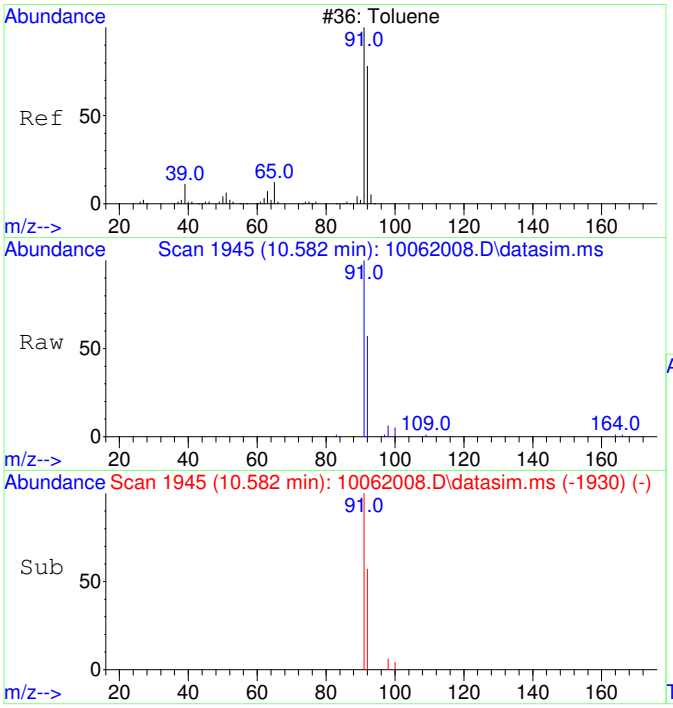


#12
Toluene-d8
Concen: 4315.18 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.010 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion: 98 Resp: 443165

Ion	Ratio	Lower	Upper
98	100		
100	66.5	37.1	97.1

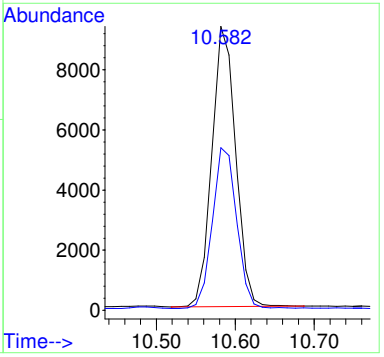


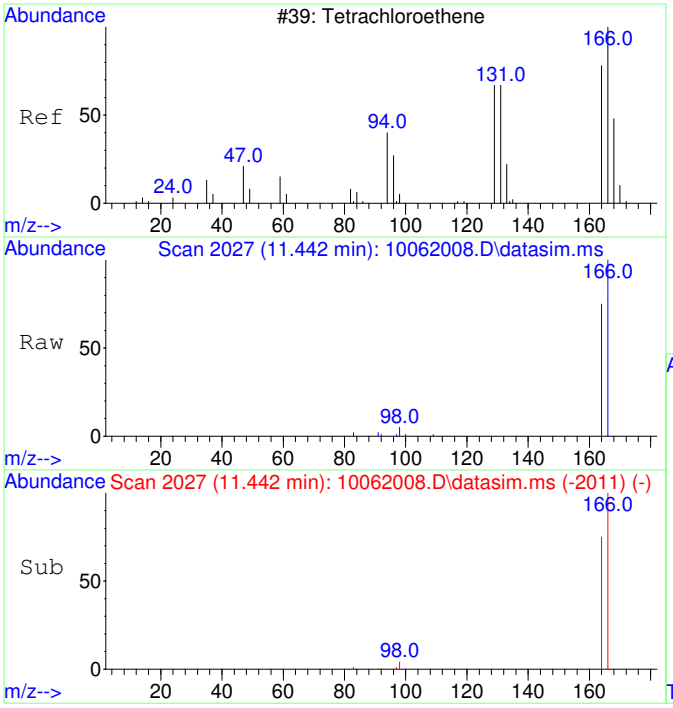


#13
Toluene
Concen: 148.64 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.010 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion: 91 Resp: 19462

Ion	Ratio	Lower	Upper
91	100		
92	58.5	29.9	89.9

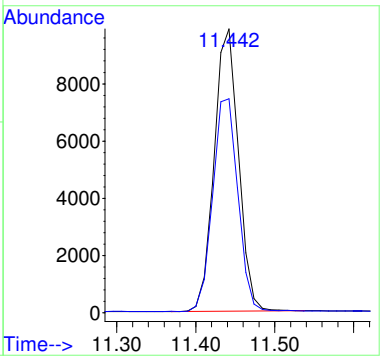


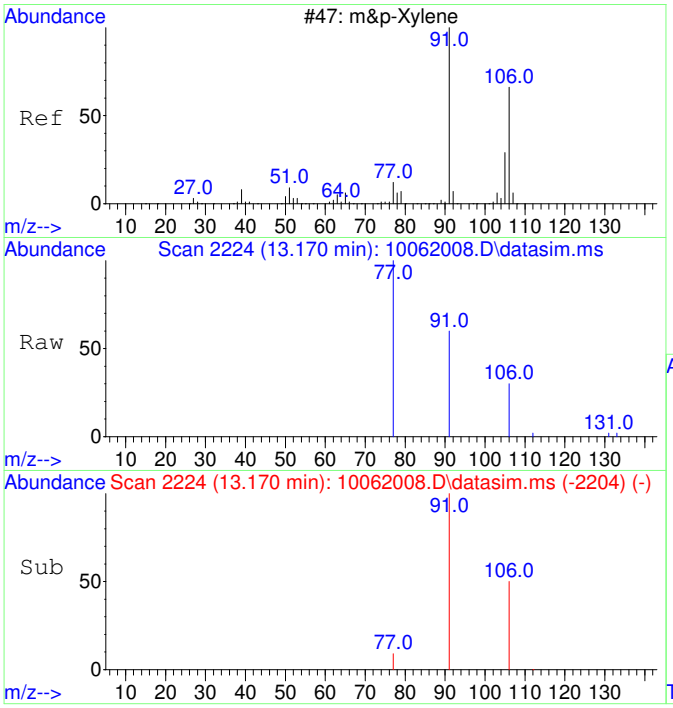


#15
Tetrachloroethene
Concen: 555.59 ug/L
RT: 11.442 min Scan# 2027
Delta R.T. 0.021 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion:166 Resp: 21052

Ion	Ratio	Lower	Upper
166	100		
164	77.9	47.8	107.8

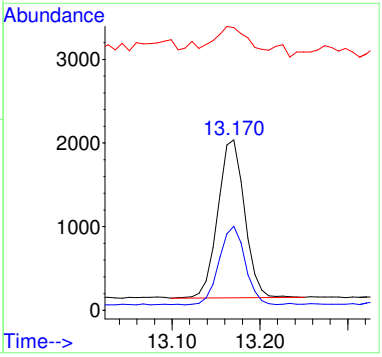


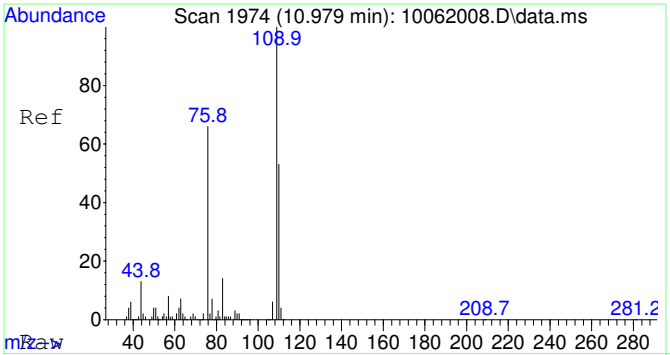


#19
m&p-Xylene
Concen: 31.99 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.008 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion: 91 Resp: 3985

Ion	Ratio	Lower	Upper
91	100		
106	48.2	22.2	82.2
77	16.9	0.0	42.4

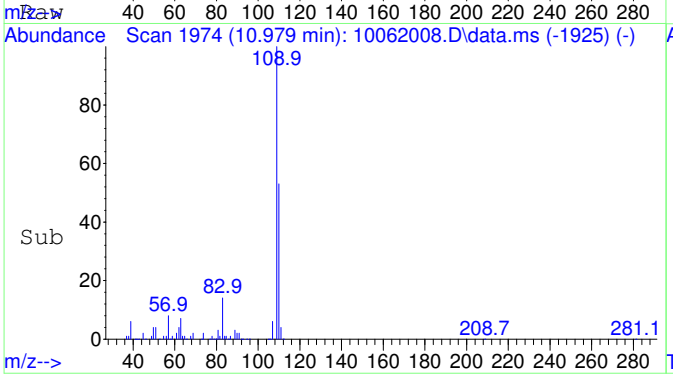


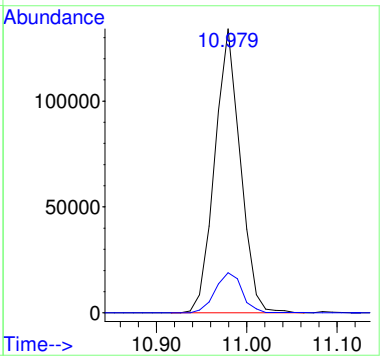


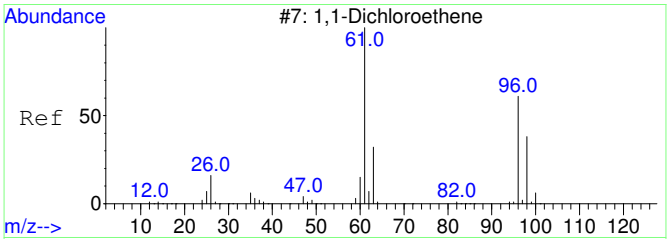
#25
2-Fluorotoluene SCAN
Concen: 5167.77 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.010 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion:109 Resp: 264281

Ion	Ratio	Lower	Upper
109	100		
83	14.9	0.0	43.8



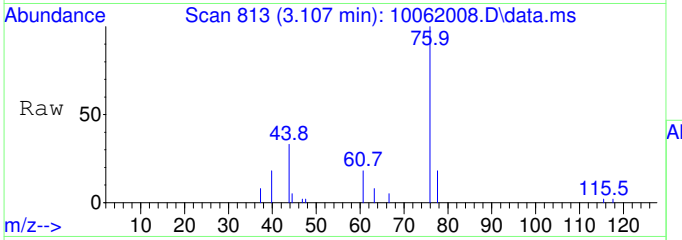


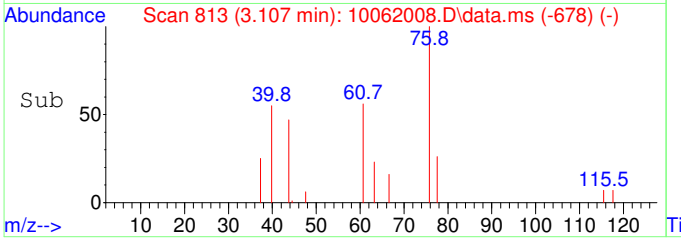


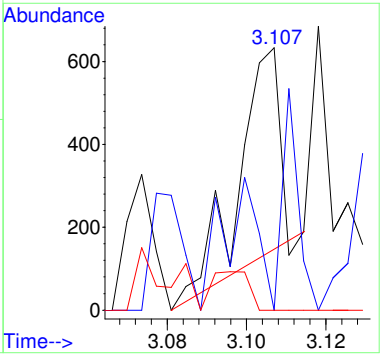
#26
1,1-Dichloroethene SCAN
Concen: 33.42 ug/L
RT: 3.107 min Scan# 813
Delta R.T. -0.000 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

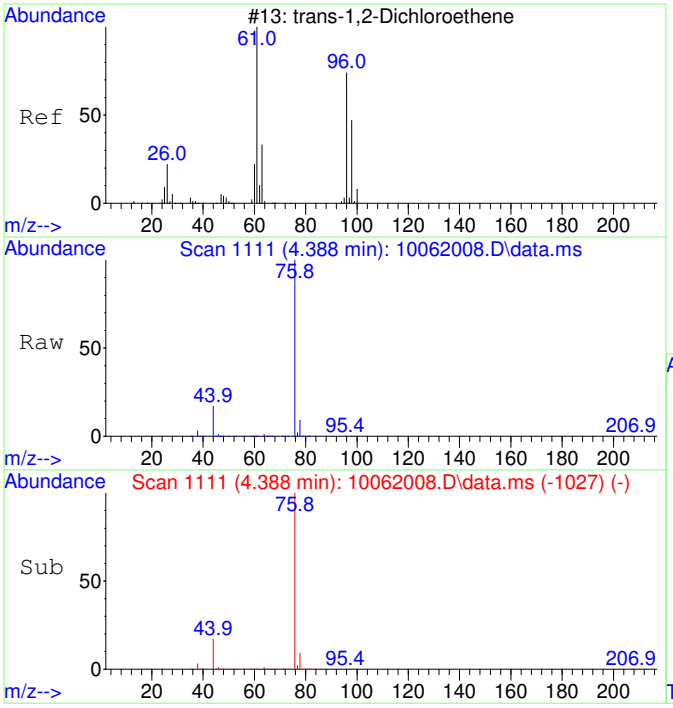
Tgt Ion: 61 Resp: 363

Ion	Ratio	Lower	Upper
61	100		
96	39.9	33.1	93.1
98	0.0	11.2	71.2#





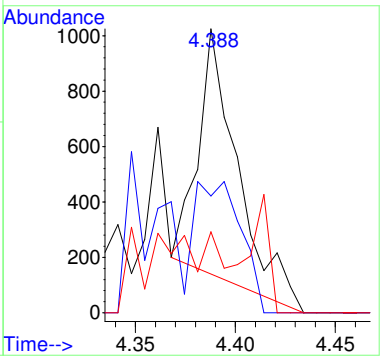


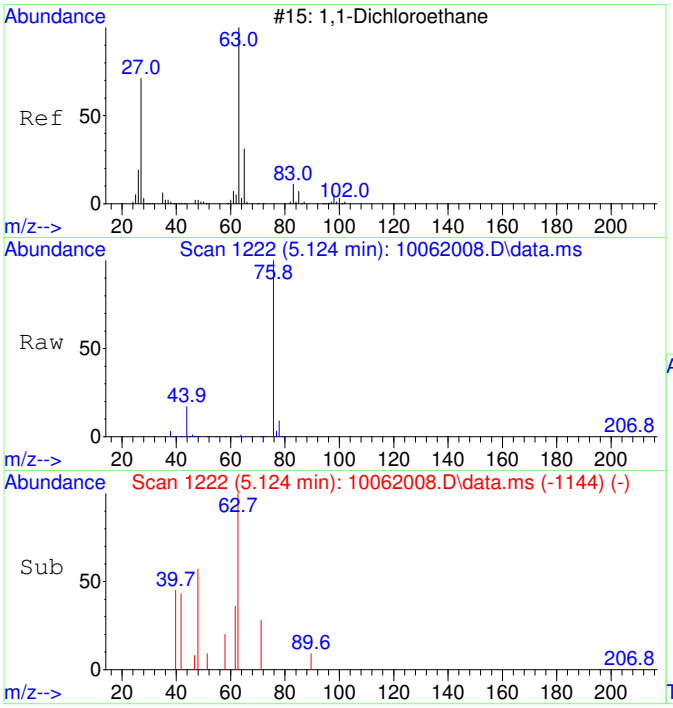


#27
trans-1,2-Dichloroethene SCAN
Concen: 87.73 ug/L
RT: 4.388 min Scan# 1111
Delta R.T. -0.013 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion: 61 Resp: 1179

Ion	Ratio	Lower	Upper
61	100		
96	58.2	49.0	109.0
98	0.0	20.5	80.5#

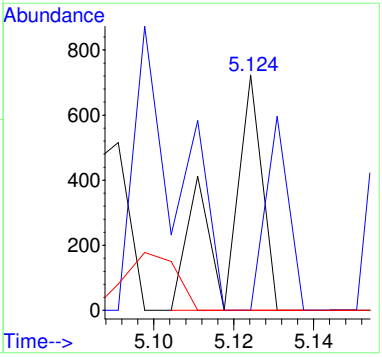


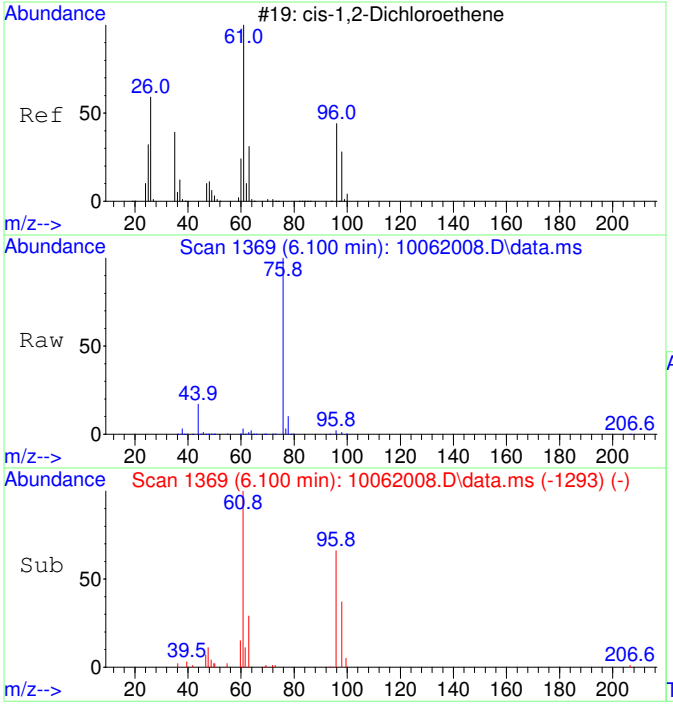


#28
1,1-Dichloroethane SCAN
Concen: 29.06 ug/L
RT: 5.124 min Scan# 1222
Delta R.T. 0.020 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion: 63 Resp: 452

Ion	Ratio	Lower	Upper
63	100		
65	52.4	1.3	61.3
83	0.0	0.0	45.9

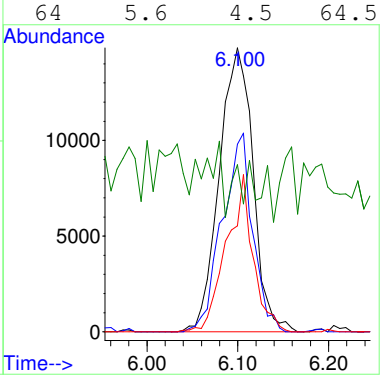


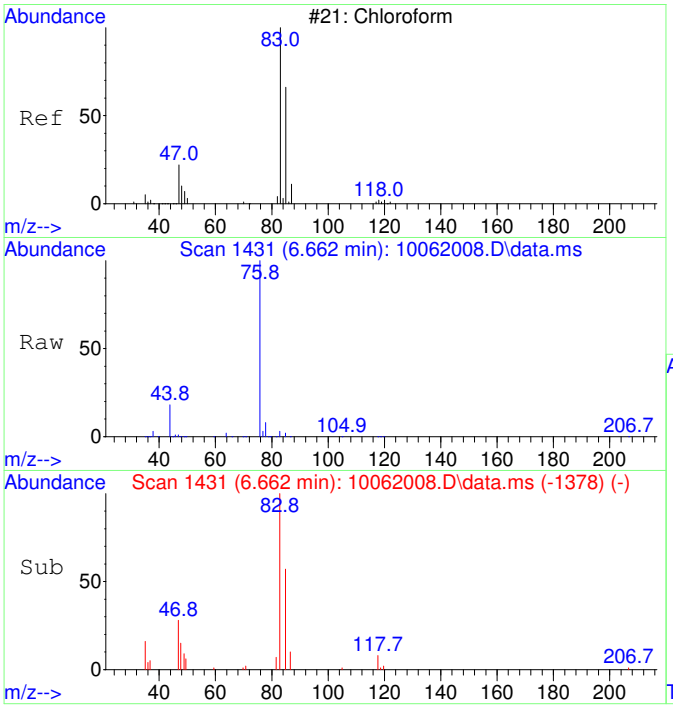


#29
cis-1,2-Dichloroethene SCAN
Concen: 2300.22 ug/L
RT: 6.100 min Scan# 1369
Delta R.T. 0.007 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion: 61 Resp: 38331

Ion	Ratio	Lower	Upper
61	100		
96	63.0	39.9	99.9
98	43.6	13.5	73.5
64	5.6	4.5	64.5

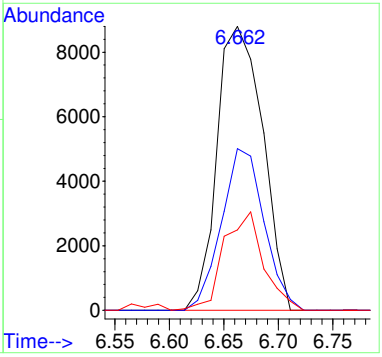


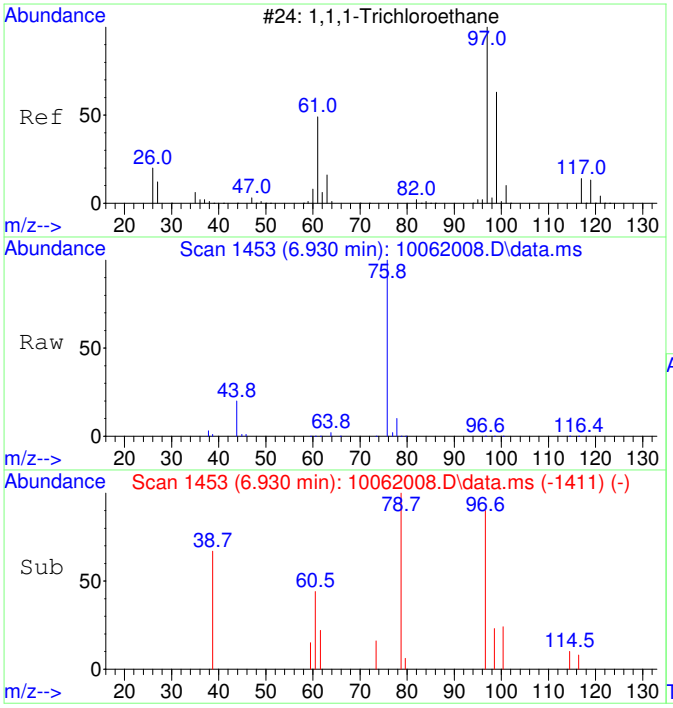


#30
Chloroform SCAN
Concen: 1421.23 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. -0.000 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion: 83 Resp: 25688

Ion	Ratio	Lower	Upper
83	100		
85	53.2	34.6	94.6
47	30.2	0.0	53.4

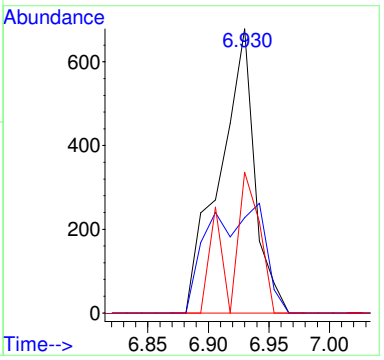


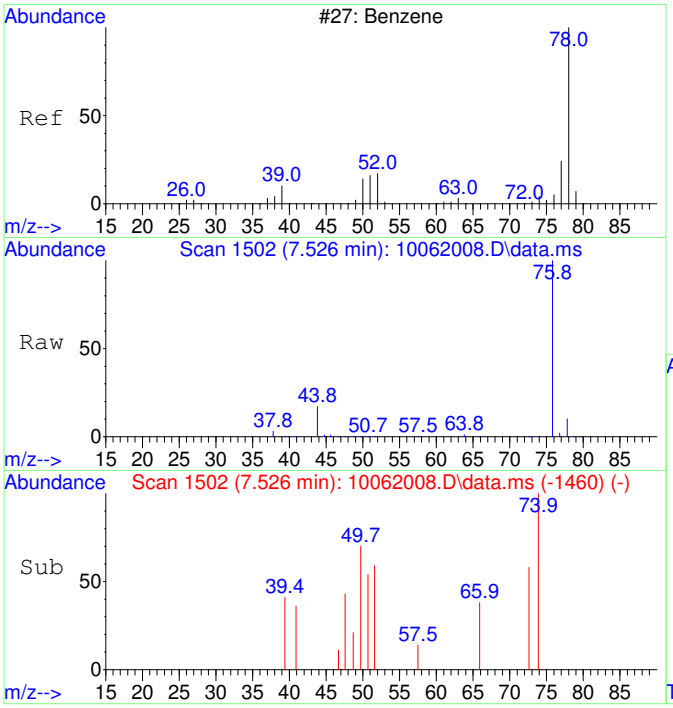


#31
1,1,1-Trichloroethane SCAN
Concen: 83.48 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. 0.012 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion: 97 Resp: 1375

Ion	Ratio	Lower	Upper
97	100		
99	60.3	43.6	103.6
61	42.8	18.0	78.0

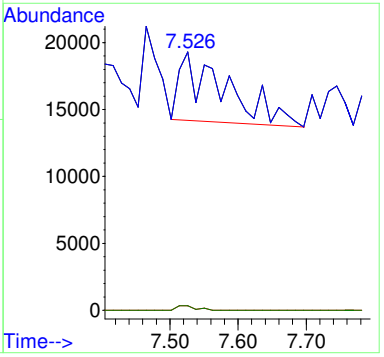


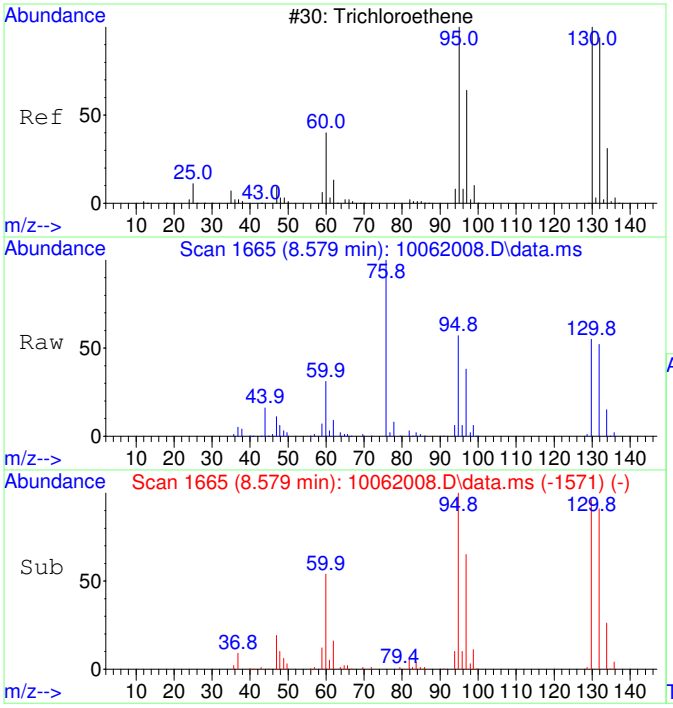


#33
Benzene SCAN
Concen: 519.99 ug/L
RT: 7.526 min Scan# 1502
Delta R.T. 0.012 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion: 78 Resp: 23582

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	2.9	0.0	47.9
51	2.9	0.0	44.1

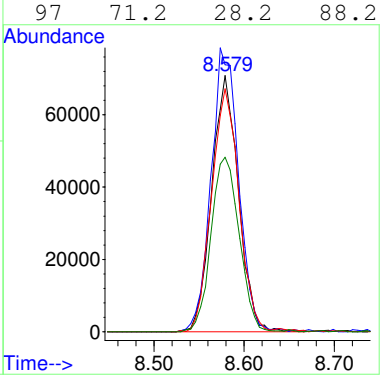


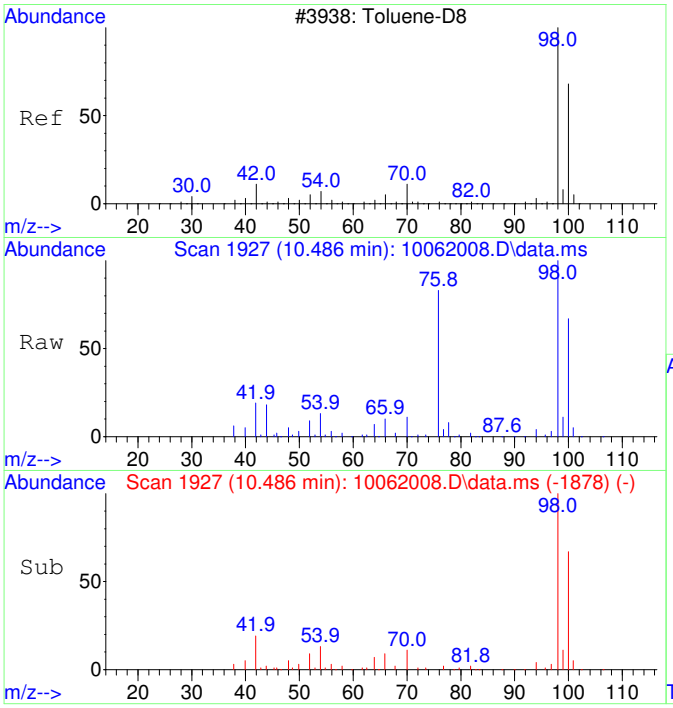


#35
Trichloroethene SCAN
Concen: 11695.50 ug/L
RT: 8.579 min Scan# 1665
Delta R.T. 0.011 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion:130 Resp: 145757

Ion	Ratio	Lower	Upper
130	100		
95	113.6	60.5	120.5
132	96.0	59.6	119.6
97	71.2	28.2	88.2

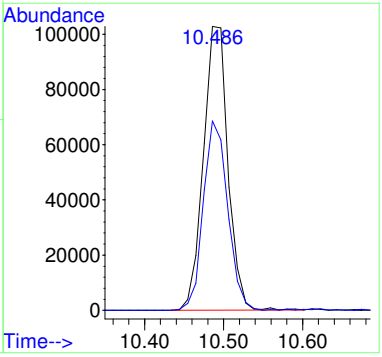


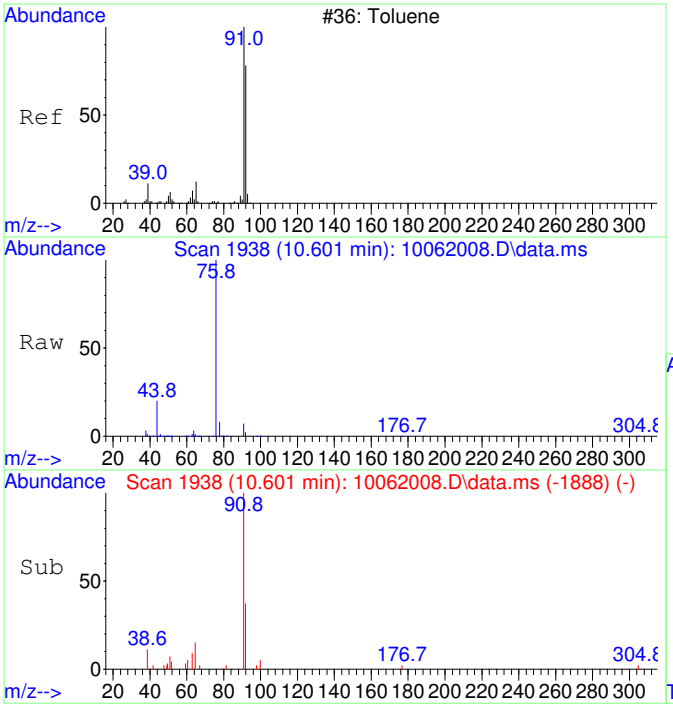


#36
Toluene-d8 SCAN
Concen: 4457.14 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.010 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion: 98 Resp: 222918

Ion	Ratio	Lower	Upper
98	100		
100	65.9	40.0	100.0

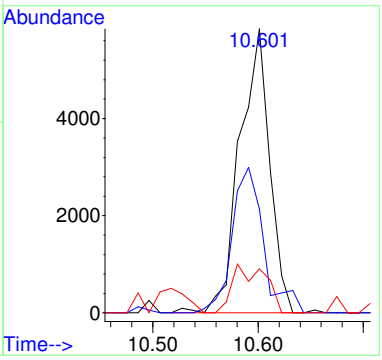


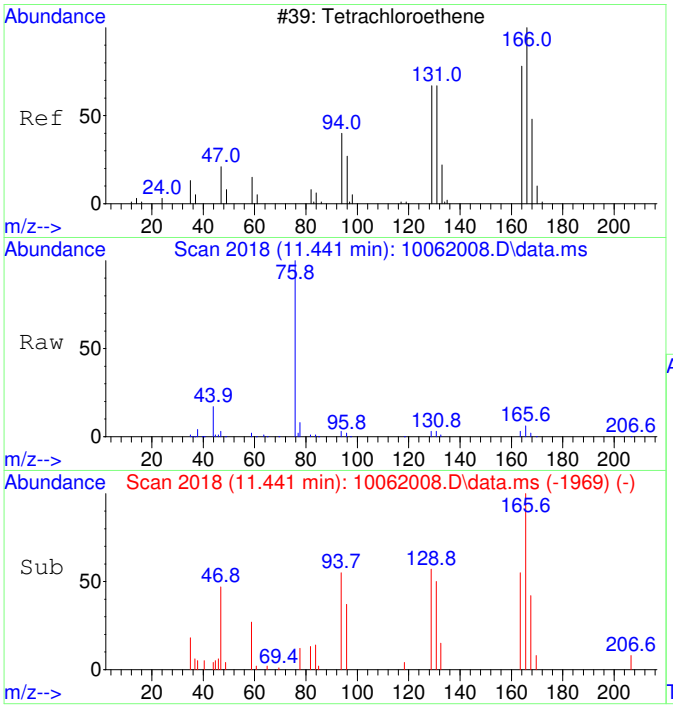


#37
Toluene SCAN
Concen: 180.25 ug/L
RT: 10.601 min Scan# 1938
Delta R.T. 0.021 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion: 91 Resp: 11545

Ion	Ratio	Lower	Upper
91	100		
92	0.0	28.3	88.3#
65	0.0	0.0	41.0

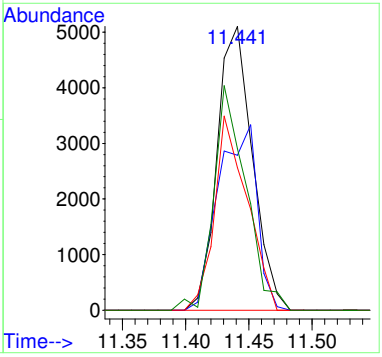


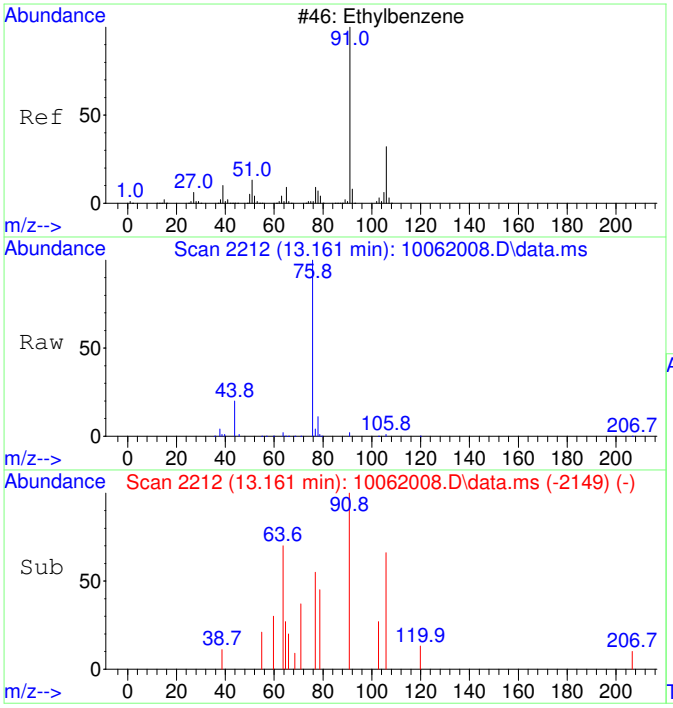


#39
Tetrachloroethene SCAN
Concen: 644.80 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.010 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion:166 Resp: 9922

Ion	Ratio	Lower	Upper
166	100		
164	72.0	50.9	110.9
131	0.0	38.7	98.7#
129	0.0	41.8	101.8#

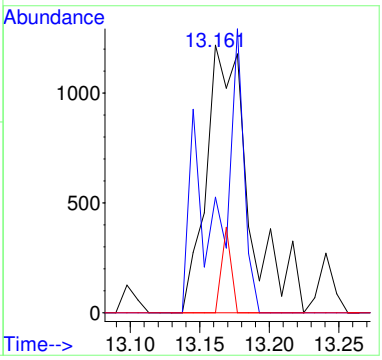


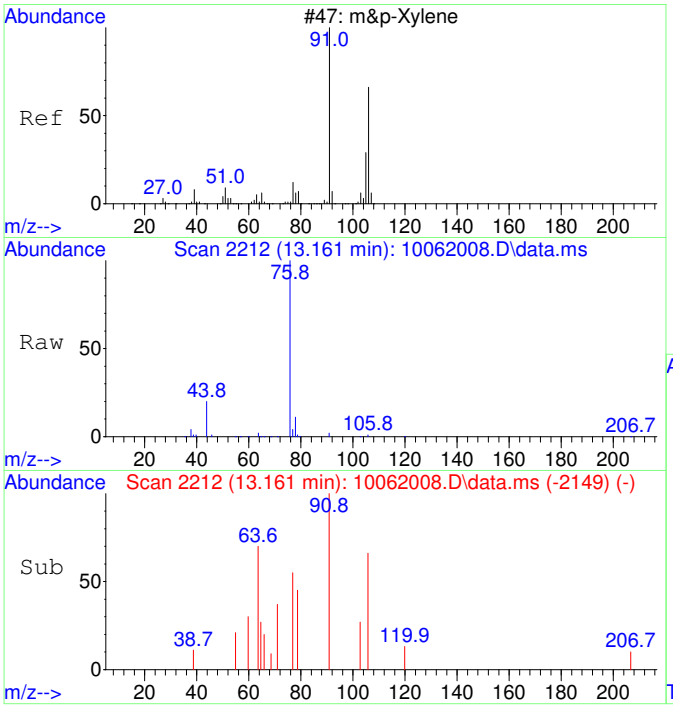


#42
Ethylbenzene SCAN
Concen: 22.35 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.000 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion: 91 Resp: 2608

Ion	Ratio	Lower	Upper
91	100		
106	34.0	23.1	83.1
51	7.1	0.0	40.1

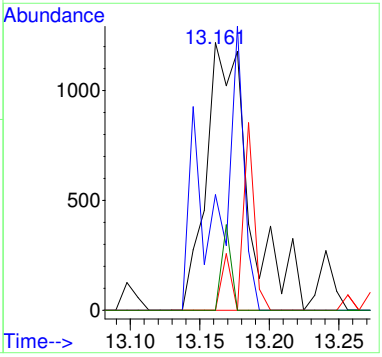




#43
m&p-Xylene SCAN
Concen: 22.35 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.000 min
Lab File: 10062008.D
Acq: 6 Oct 2020 11:07

Tgt Ion: 91 Resp: 2608

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.1	83.1#
105	0.0	0.0	54.7
51	7.1	0.0	40.1



2009036-02RE1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062009.D
Acq On : 6 Oct 2020 11:31
InstName : AG5975C
Operator : TD
Sample : 2009036-02RE1
Misc : 10X DL; 90-10
ALS Vial : 9 Sample Multiplier: 10

Quant Time: Oct 06 11:49:59 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

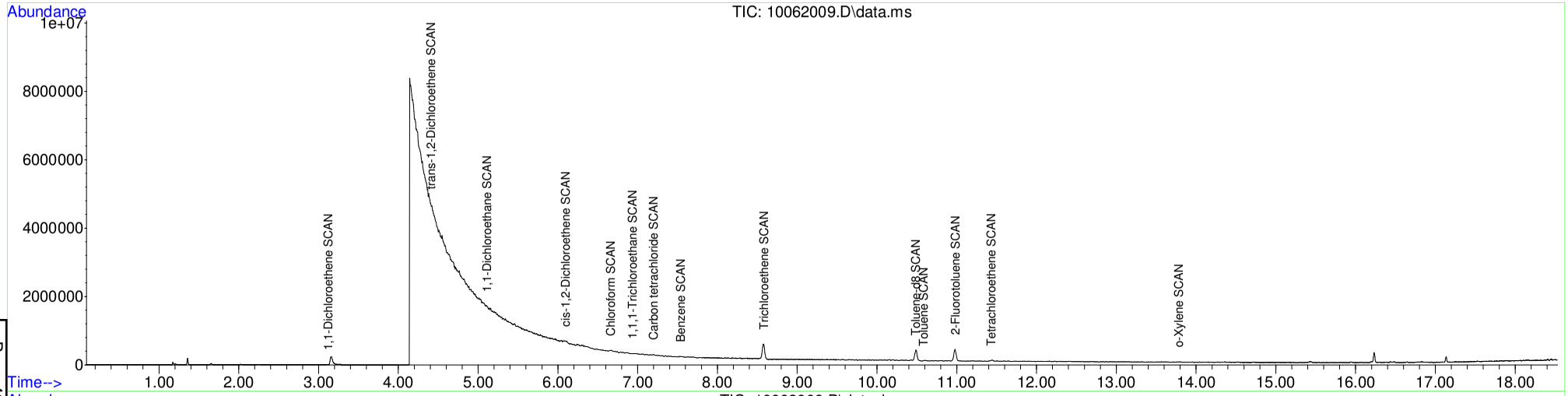
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.980	109	535493	5000.00 ug/L	0.01
System Monitoring Compounds					
12) Toluene-d8	10.487	98	451641	4308.38 ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.17%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.101	61	3351	156.71 ug/L	88
3] trans-1,2-Dichloroethene	4.389	61	4677	189.31 ug/L	93
4] 1,1-Dichloroethane	5.099	63	4006	130.26 ug/L	81
5] cis-1,2-Dichloroethene	6.094	61	76069	2343.30 ug/L	99
6] Chloroform	6.664	83	48883	1471.20 ug/L	99
7] 1,1,1-Trichloroethane	6.919	97	3416	94.67 ug/L	99
8] Carbon tetrachloride	7.187	117	1998	58.83 ug/L	99
9] Benzene	7.515	78	5392	59.26 ug/L #	1
11] Trichloroethene	8.580	130	309399	11294.46 ug/L RPT	93
13] Toluene	10.582	91	13188	98.68 ug/L	98
15] Tetrachloroethene	11.442	166	20026	517.77 ug/L	100
19] m&p-Xylene	13.170	91	3543	27.87 ug/L	92
25) 2-Fluorotoluene SCAN	10.979	109	267591	5126.20 ug/L	98
26) 1,1-Dichloroethene SCAN	3.114	61	691	62.33 ug/L #	64
27) trans-1,2-Dichloroethe...	4.408	61	393	28.65 ug/L #	39
28) 1,1-Dichloroethane SCAN	5.111	63	753	47.43 ug/L #	8
29) cis-1,2-Dichloroethene...	6.099	61	45373	2667.50 ug/L	85
30) Chloroform SCAN	6.662	83	27547	1493.12 ug/L	83
31) 1,1,1-Trichloroethane ...	6.930	97	1602	95.29 ug/L #	33
32) Carbon tetrachloride SCAN	7.198	117	644	36.72 ug/L #	67
33) Benzene SCAN	7.538	78	16957	366.31 ug/L	95
35) Trichloroethene SCAN	8.579	130	144504	11359.42 ug/L	80
36) Toluene-d8 SCAN	10.486	98	236664	4635.86 ug/L	96
37) Toluene SCAN	10.580	91	8576	131.18 ug/L	86
39) Tetrachloroethene SCAN	11.430	166	9167	583.63 ug/L	86
44) o-Xylene SCAN	13.781	91	1589	24.92 ug/L	76

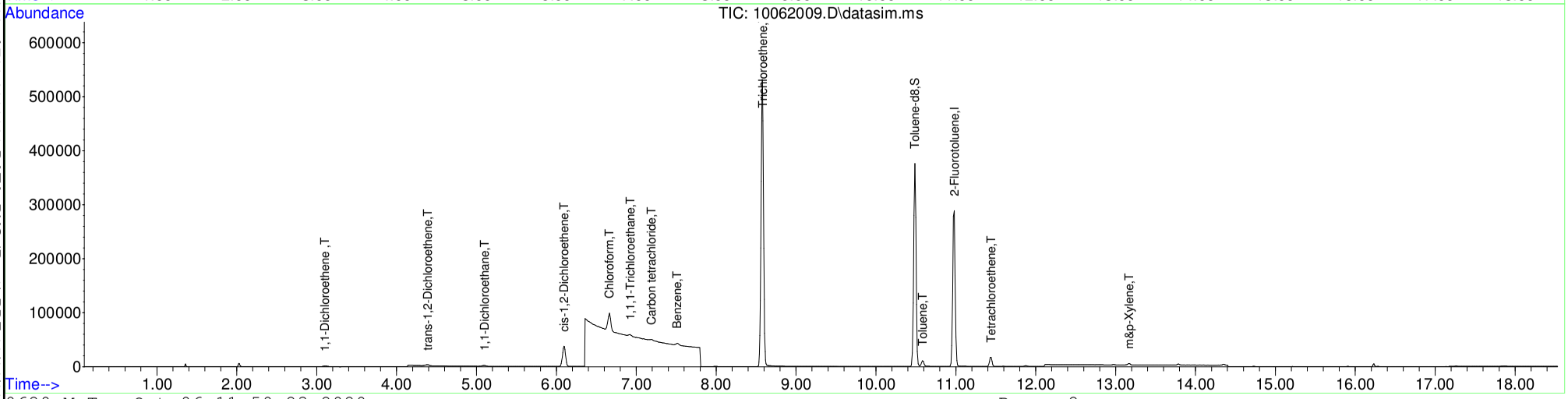
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062009.D
Acq On : 6 Oct 2020 11:31
InstName : AG5975C
Operator : TD
Sample : 2009036-02RE1
Misc : 10X DL; 90-10
ALS Vial : 9 Sample Multiplier: 10

Quant Time: Oct 06 11:49:59 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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2009036-03RE1

Quantitation Report (Not Reviewed)

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Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062010.D
Acq On : 6 Oct 2020 11:54
InstName : AG5975C
Operator : TD
Sample : 2009036-03RE1
Misc : 10X DL; 90-10
ALS Vial : 10 Sample Multiplier: 10

Quant Time: Oct 06 12:13:33 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

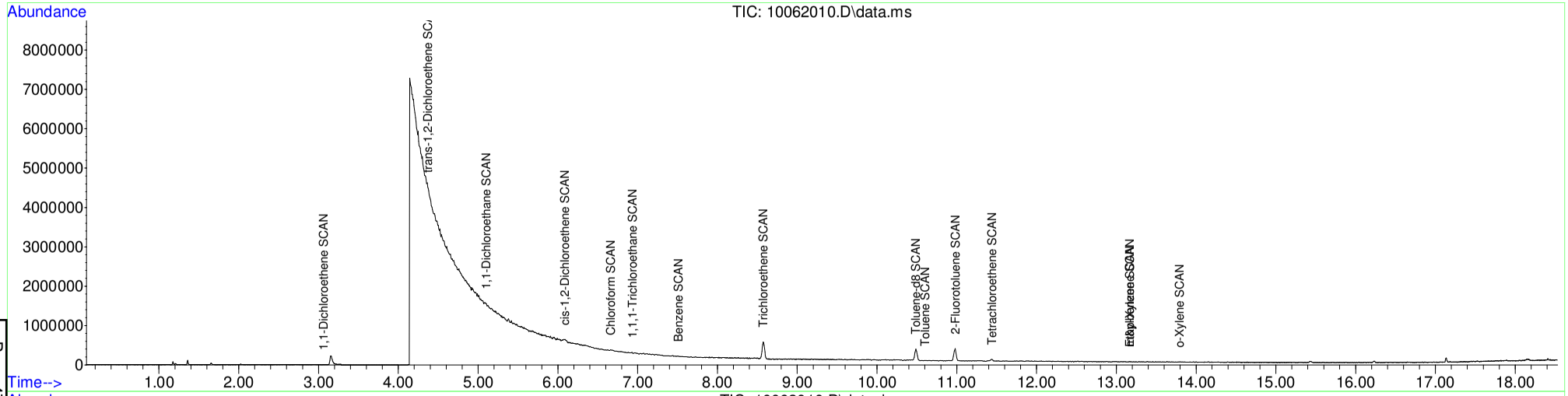
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.980	109	487362	5000.00 ug/L	0.01
System Monitoring Compounds					
12) Toluene-d8	10.487	98	414572	4345.33 ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.91%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.097	61	2353	120.91 ug/L	72
3] trans-1,2-Dichloroethene	4.369	61	3959	176.07 ug/L	87
4] 1,1-Dichloroethane	5.086	63	2217	79.21 ug/L	72
5] cis-1,2-Dichloroethene	6.088	61	72058	2438.95 ug/L	98
6] Chloroform	6.652	83	22028	728.44 ug/L	99
7] 1,1,1-Trichloroethane	6.919	97	2477	75.42 ug/L	99
8] Carbon tetrachloride	7.187	117	893	28.89 ug/L	99
9] Benzene	7.515	78	4414	53.31 ug/L	57
11] Trichloroethene	8.575	130	305788	12265.05 ug/L RPT	93
13] Toluene	10.582	91	4734	38.92 ug/L	98
15] Tetrachloroethene	11.442	166	21183	601.78 ug/L	98
19] m&p-Xylene	13.162	91	3579	30.93 ug/L	92
20] o-Xylene	13.782	91	3237	26.18 ug/L	94
25) 2-Fluorotoluene SCAN	10.979	109	241650	5086.43 ug/L	99
26) 1,1-Dichloroethene SCAN	3.066	61	247	24.48 ug/L	68
27) trans-1,2-Dichloroethe...	4.368	61	2139	171.33 ug/L #	58
28) 1,1-Dichloroethane SCAN	5.104	63	1049	72.60 ug/L #	54
29) cis-1,2-Dichloroethene...	6.086	61	42144	2722.35 ug/L #	81
30) Chloroform SCAN	6.662	83	15688	934.31 ug/L	86
31) 1,1,1-Trichloroethane ...	6.930	97	1242	81.17 ug/L #	33
33) Benzene SCAN	7.514	78	19702	467.64 ug/L #	91
35) Trichloroethene SCAN	8.573	130	149957	12952.25 ug/L	85
36) Toluene-d8 SCAN	10.486	98	217525	4681.77 ug/L	95
37) Toluene SCAN	10.601	91	2726	45.81 ug/L #	30
39) Tetrachloroethene SCAN	11.441	166	10842	758.44 ug/L	90
42) Ethylbenzene SCAN	13.161	91	2806	25.89 ug/L #	55
43) m&p-Xylene SCAN	13.161	91	2806	25.89 ug/L #	67
44) o-Xylene SCAN	13.789	91	1940	33.43 ug/L	89

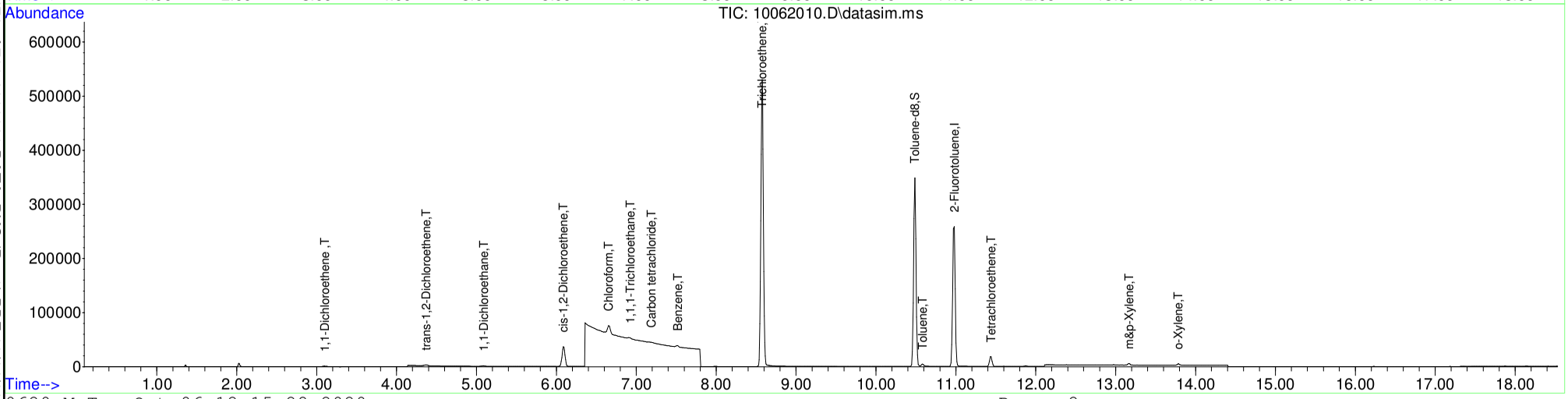
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062010.D
Acq On : 6 Oct 2020 11:54
InstName : AG5975C
Operator : TD
Sample : 2009036-03RE1
Misc : 10X DL; 90-10
ALS Vial : 10 Sample Multiplier: 10

Quant Time: Oct 06 12:13:33 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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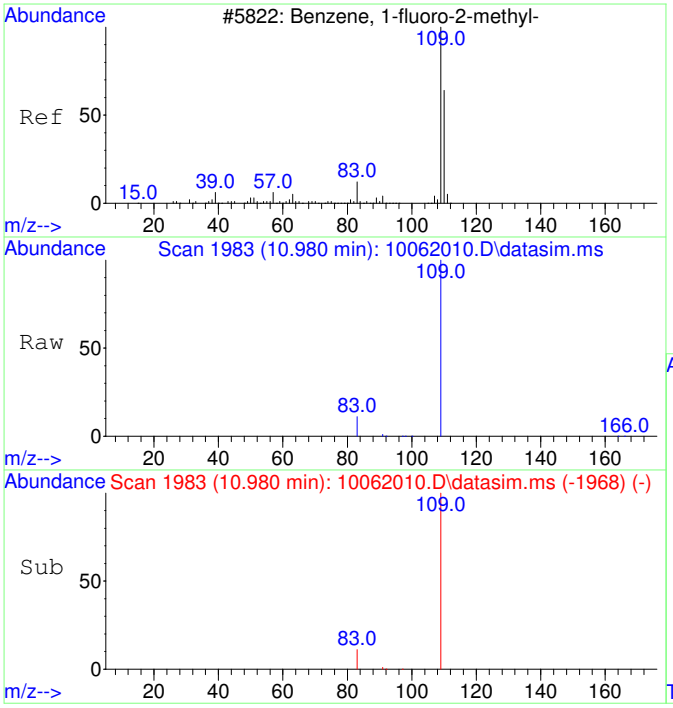
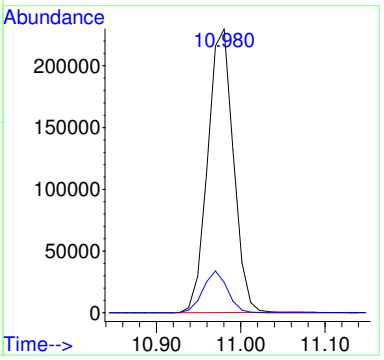
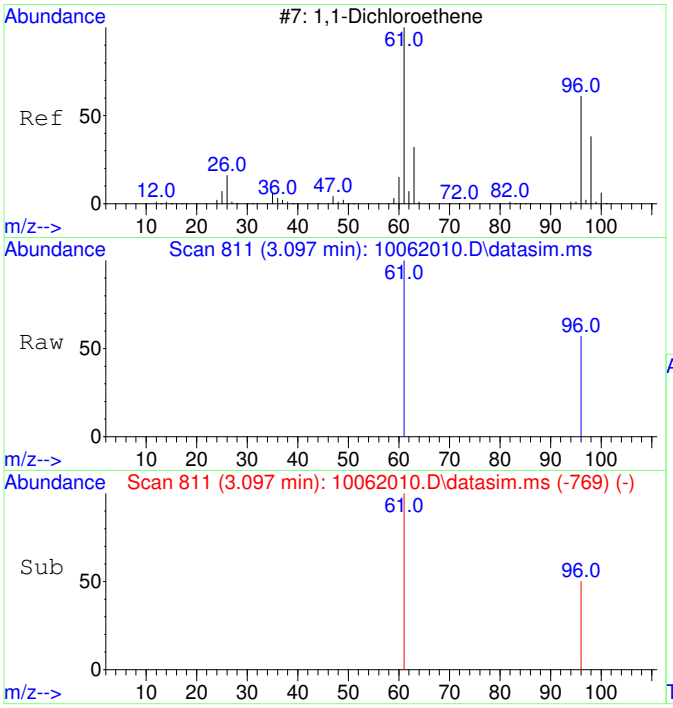


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.980 min Scan# 1983
Delta R.T. 0.010 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion:109 Resp: 487362

Ion	Ratio	Lower	Upper
109	100		
83	13.9	0.0	42.3

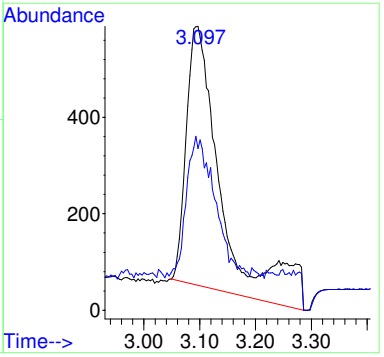


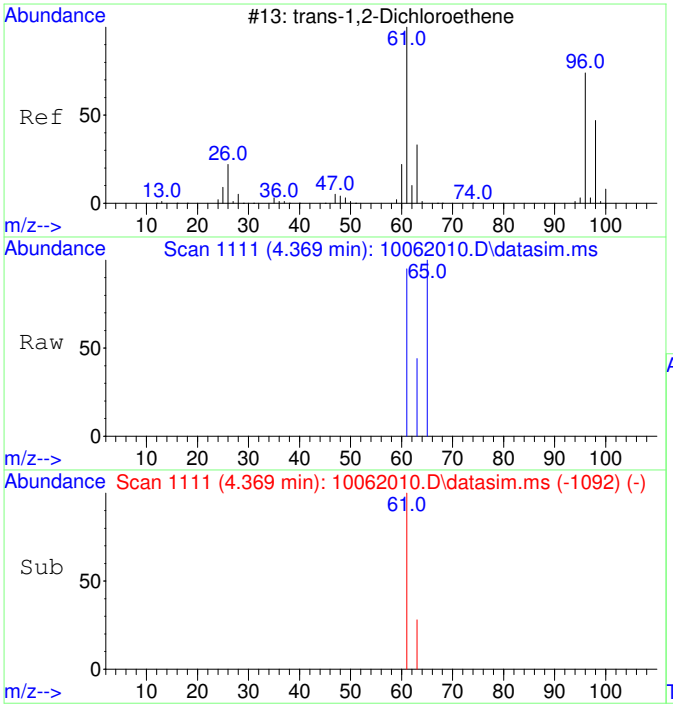


#2
1,1-Dichloroethene
Concen: 120.91 ug/L
RT: 3.097 min Scan# 811
Delta R.T. 0.007 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion: 61 Resp: 2353

Ion	Ratio	Lower	Upper
61	100		
96	44.5	37.2	97.2

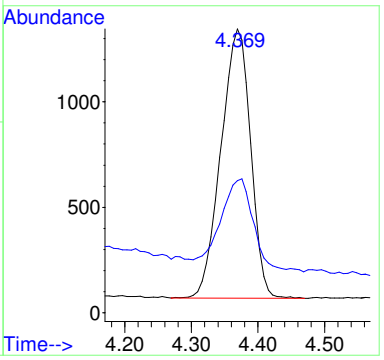


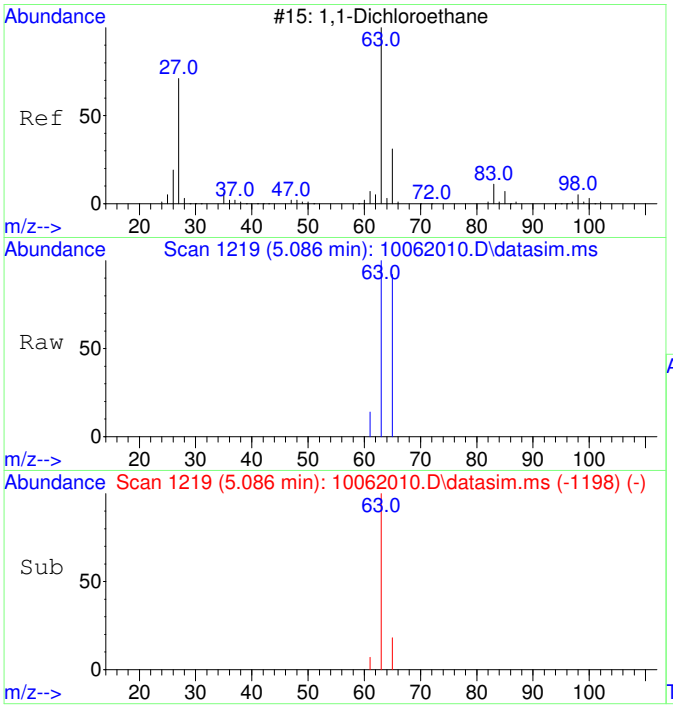


#3
trans-1,2-Dichloroethene
Concen: 176.07 ug/L
RT: 4.369 min Scan# 1111
Delta R.T. -0.027 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion: 61 Resp: 3959

Ion	Ratio	Lower	Upper
61	100		
63	39.4	2.4	62.4

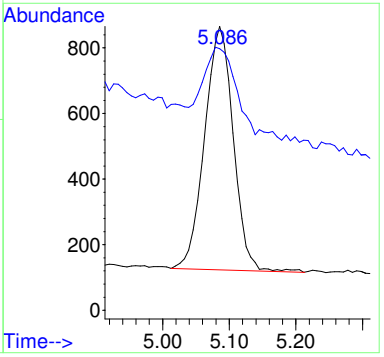


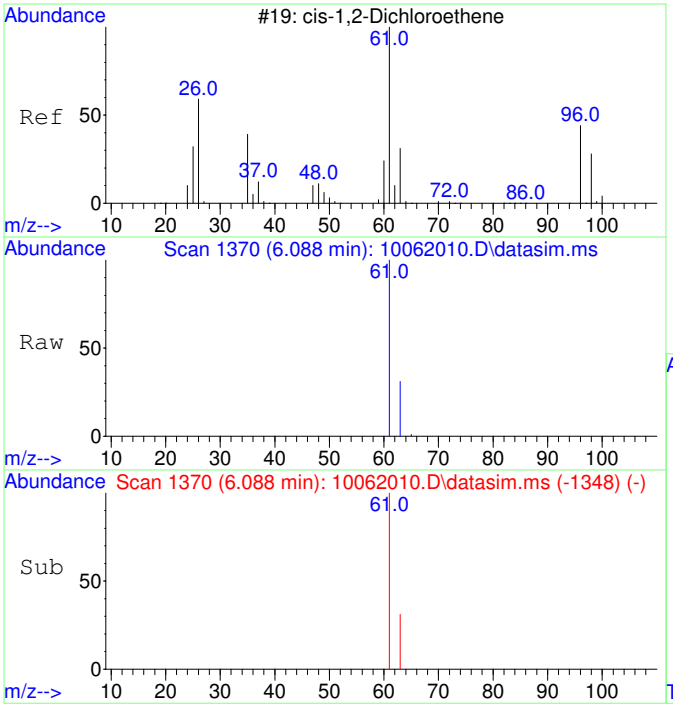


#4
1,1-Dichloroethane
Concen: 79.21 ug/L
RT: 5.086 min Scan# 1219
Delta R.T. -0.013 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion: 63 Resp: 2217

Ion	Ratio	Lower	Upper
63	100		
65	47.6	1.8	61.8

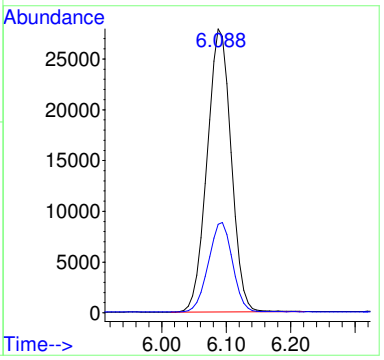


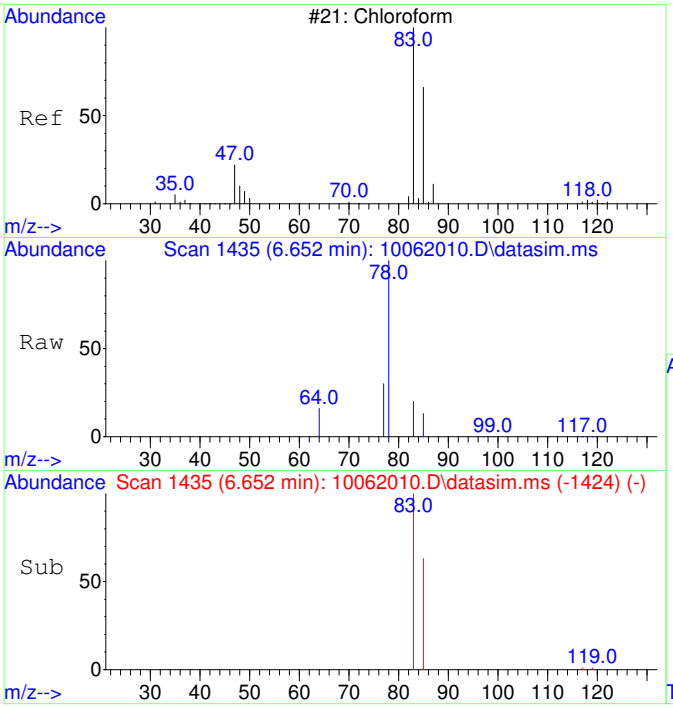


#5
cis-1,2-Dichloroethene
Concen: 2438.95 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. -0.007 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion: 61 Resp: 72058

Ion	Ratio	Lower	Upper
61	100		
63	31.6	2.5	62.5

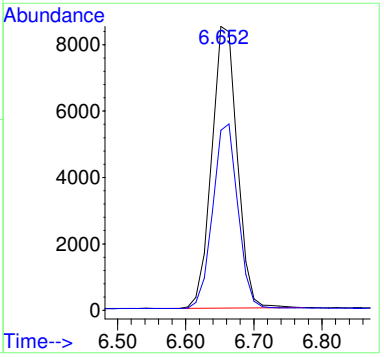


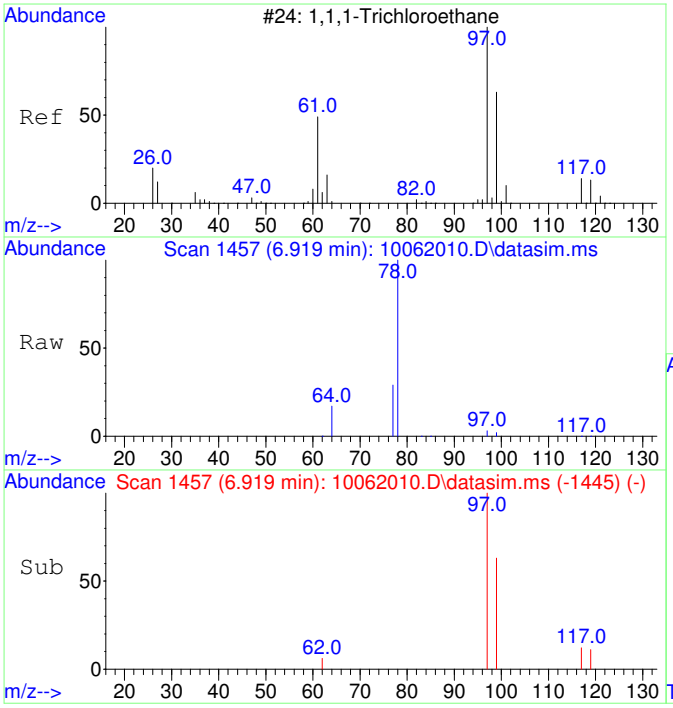


#6
Chloroform
Concen: 728.44 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. -0.012 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion: 83 Resp: 22028

Ion	Ratio	Lower	Upper
83	100		
85	64.3	35.1	95.1

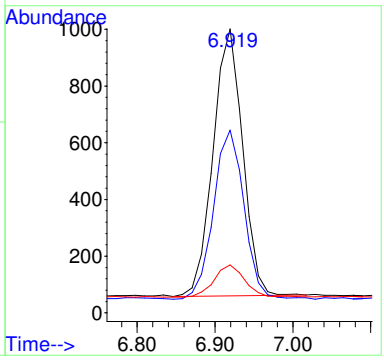


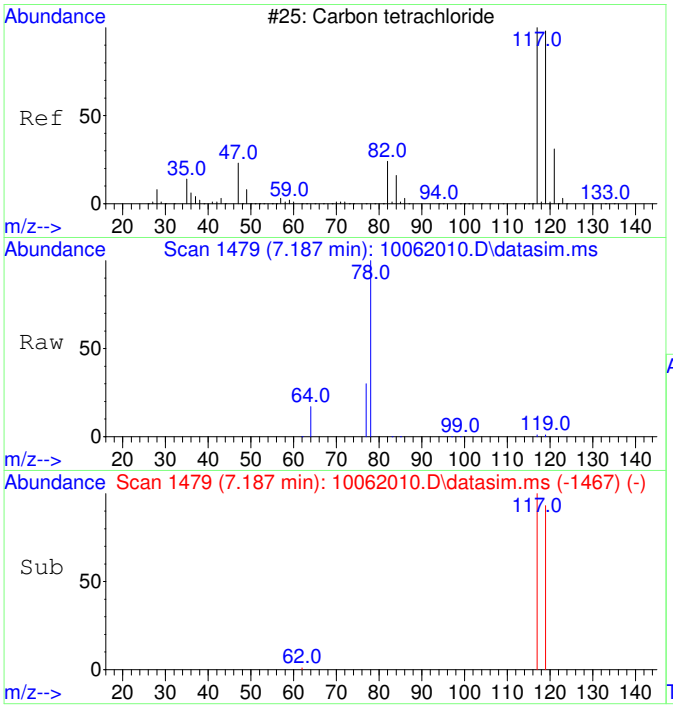


#7
1,1,1-Trichloroethane
Concen: 75.42 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion: 97 Resp: 2477

Ion	Ratio	Lower	Upper
97	100		
99	65.7	34.6	94.6
117	12.8	0.0	43.2

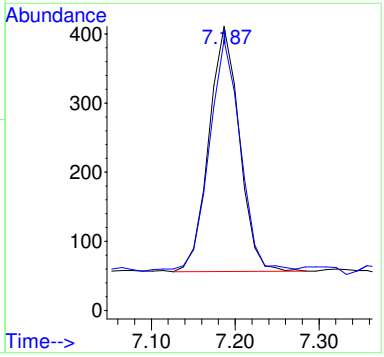


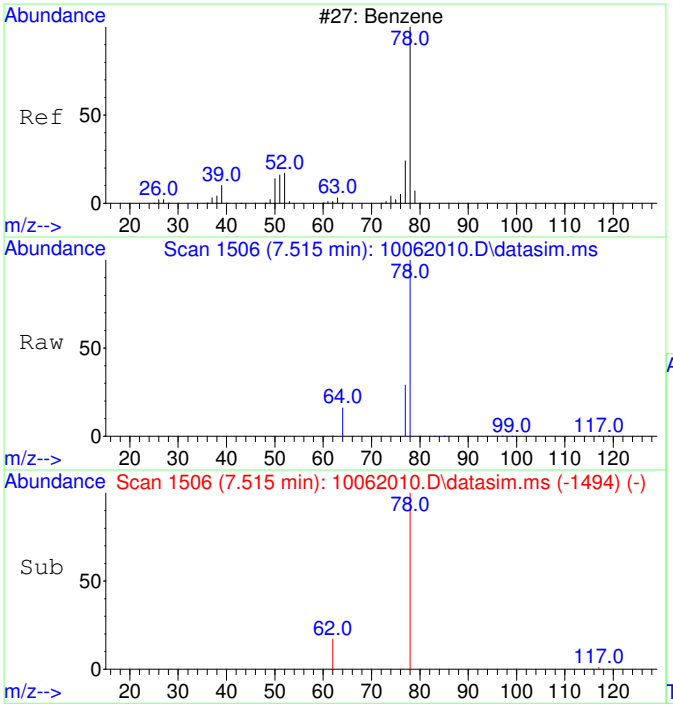


#8
Carbon tetrachloride
Concen: 28.89 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion:117 Resp: 893

Ion	Ratio	Lower	Upper
117	100		
119	95.0	66.4	126.4

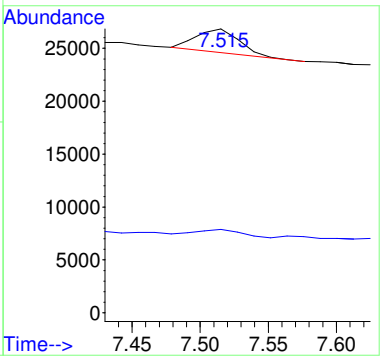


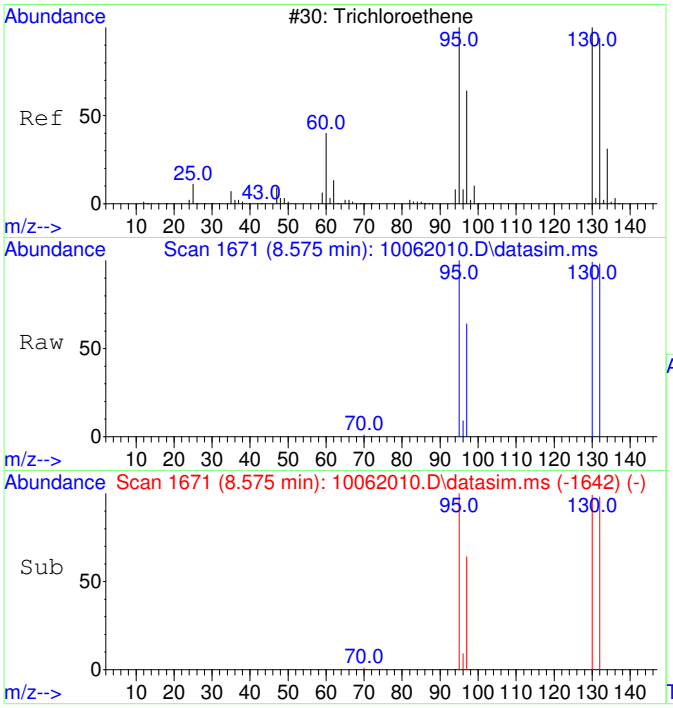


#9
Benzene
Concen: 53.31 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. -0.000 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion: 78 Resp: 4414

Ion	Ratio	Lower	Upper
78	100		
77	44.3	0.0	53.2

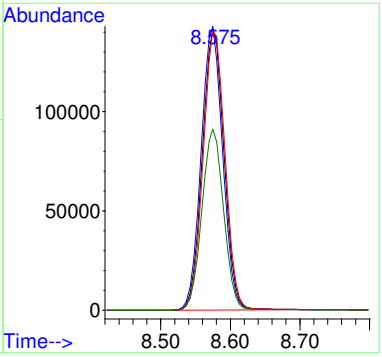


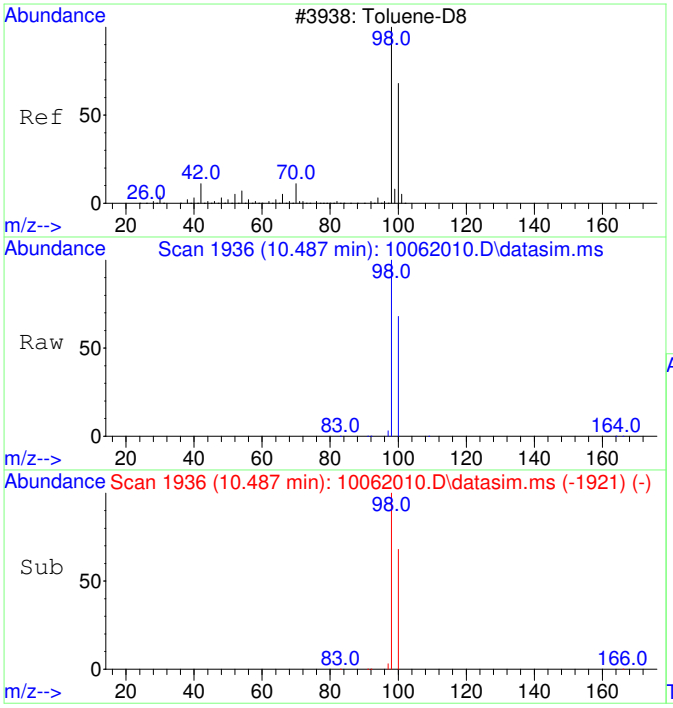


#11
Trichloroethene
Concen: 12265.05 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion:130 Resp: 305788

Ion	Ratio	Lower	Upper
130	100		
95	100.3	60.7	120.7
132	100.0	76.0	116.0
97	64.3	38.6	78.6

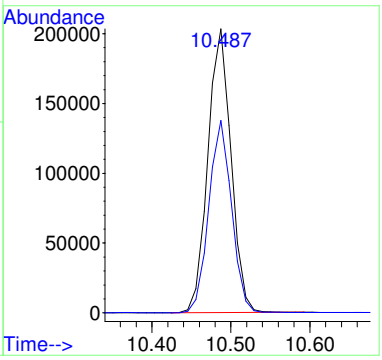


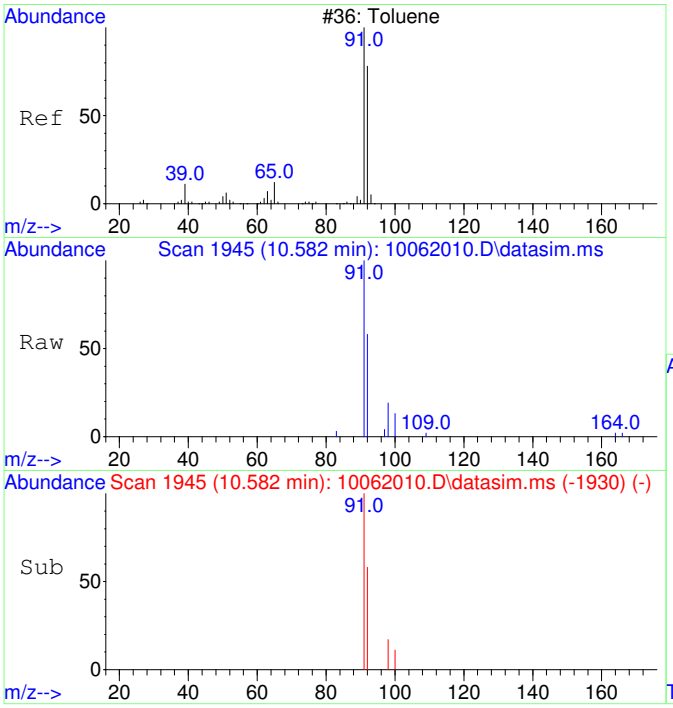


#12
Toluene-d8
Concen: 4345.33 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.010 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion: 98 Resp: 414572

Ion	Ratio	Lower	Upper
98	100		
100	66.4	37.1	97.1

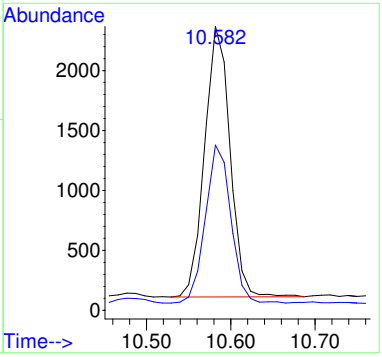


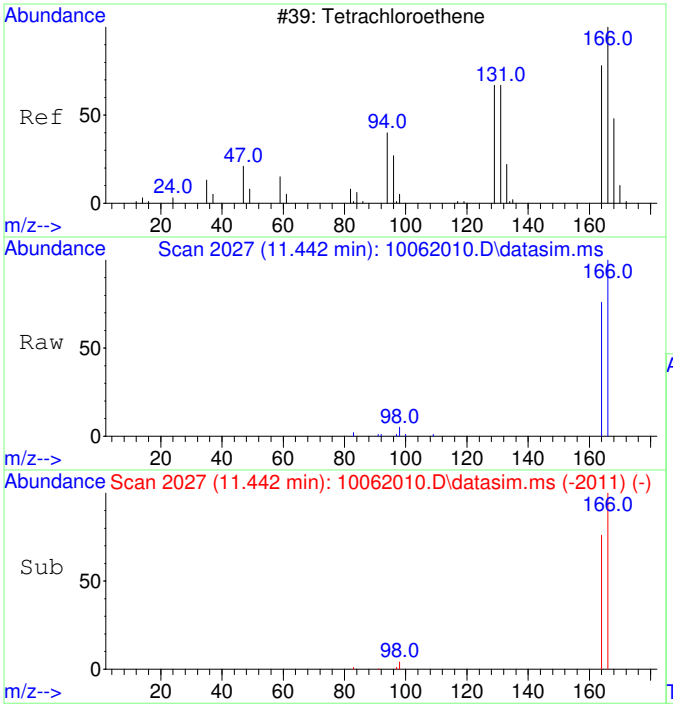


#13
Toluene
Concen: 38.92 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.010 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion: 91 Resp: 4734

Ion	Ratio	Lower	Upper
91	100		
92	58.4	29.9	89.9

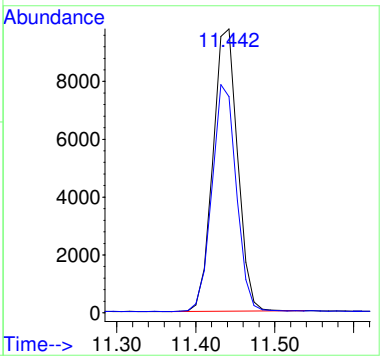


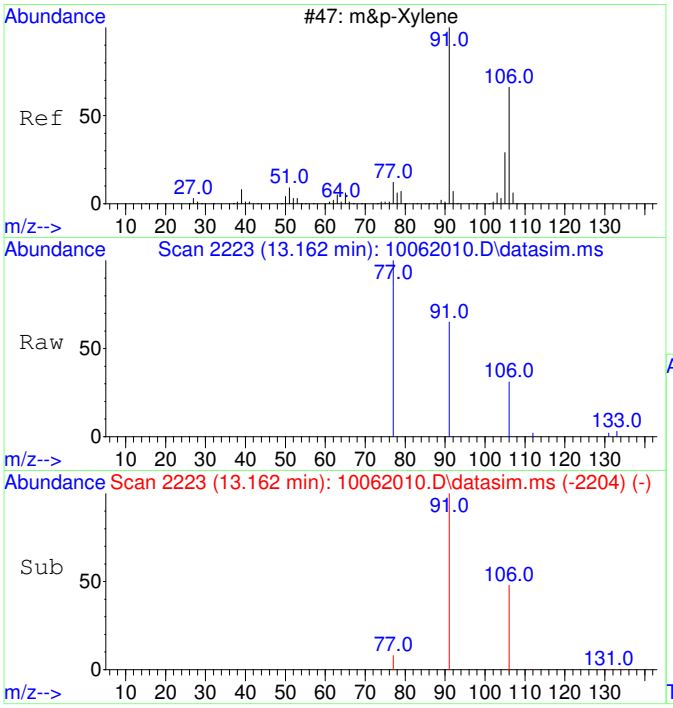


#15
Tetrachloroethene
Concen: 601.78 ug/L
RT: 11.442 min Scan# 2027
Delta R.T. 0.021 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion:166 Resp: 21183

Ion	Ratio	Lower	Upper
166	100		
164	79.2	47.8	107.8

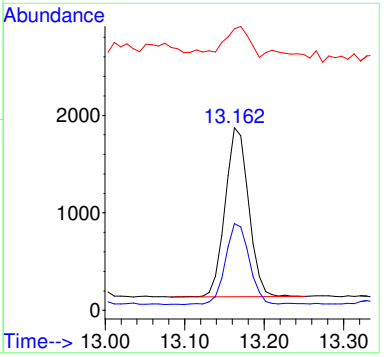


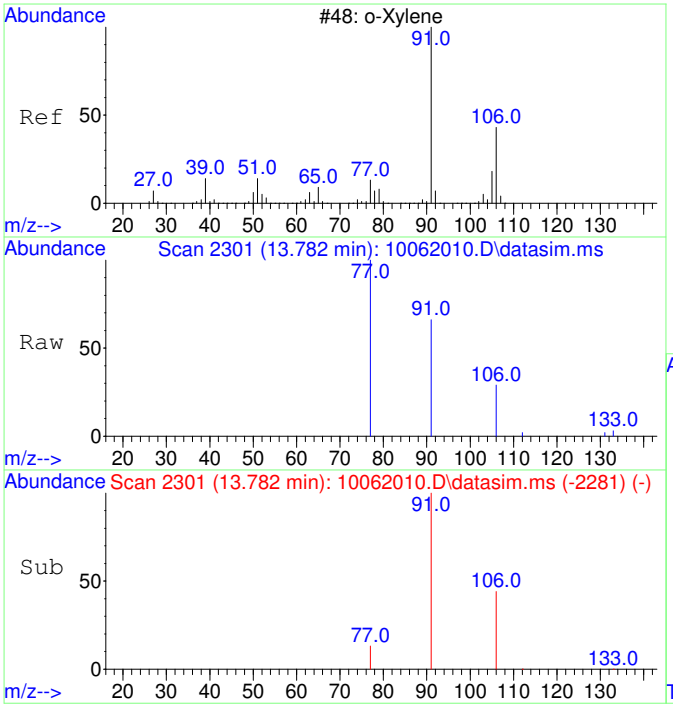


#19
m&p-Xylene
Concen: 30.93 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.000 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion: 91 Resp: 3579

Ion	Ratio	Lower	Upper
91	100		
106	48.1	22.2	82.2
77	20.1	0.0	42.4

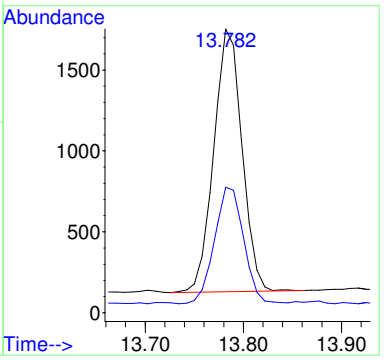


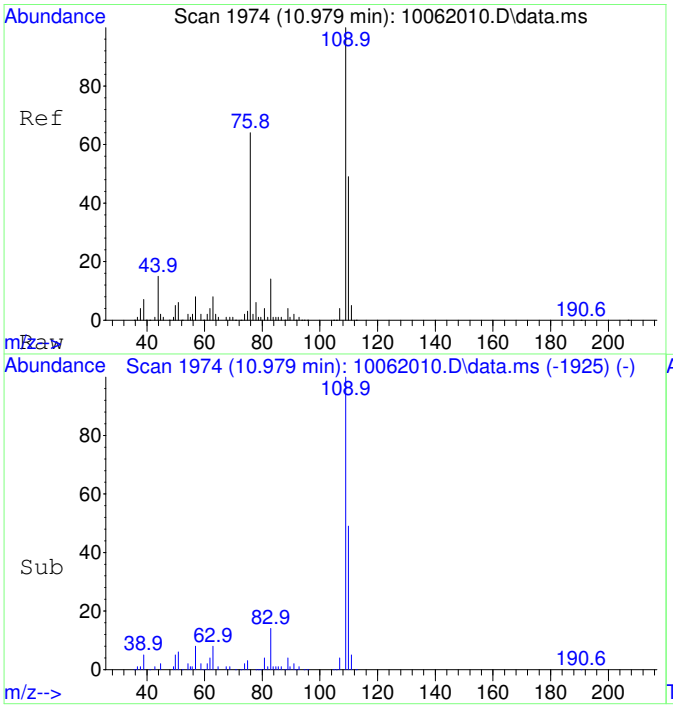


#20
o-Xylene
Concen: 26.18 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion: 91 Resp: 3237

Ion	Ratio	Lower	Upper
91	100		
106	45.2	19.2	79.2

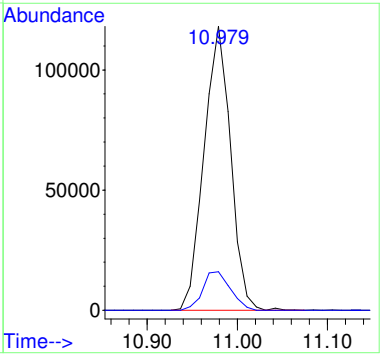


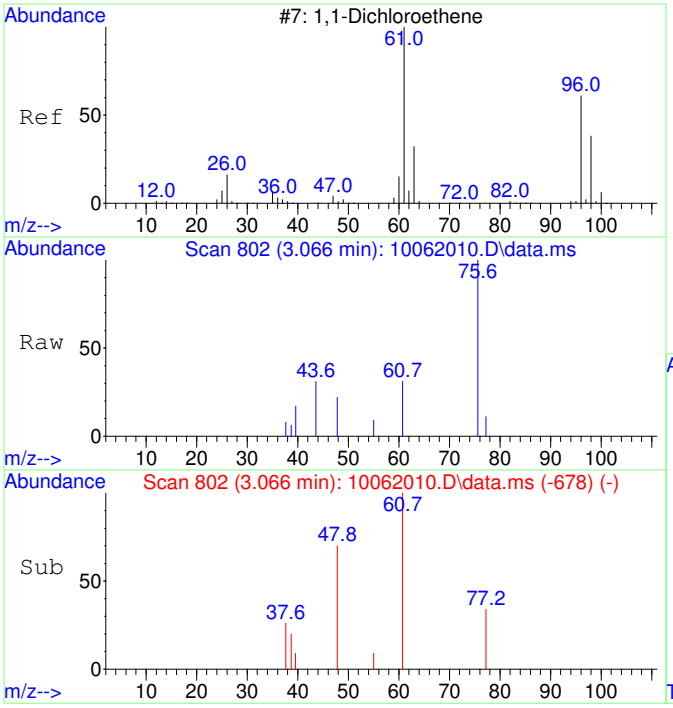


#25
2-Fluorotoluene SCAN
Concen: 5086.43 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.010 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion:109 Resp: 241650

Ion	Ratio	Lower	Upper
109	100		
83	14.3	0.0	43.8

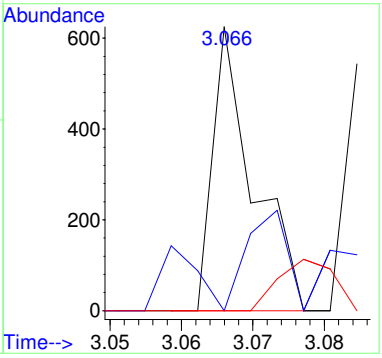


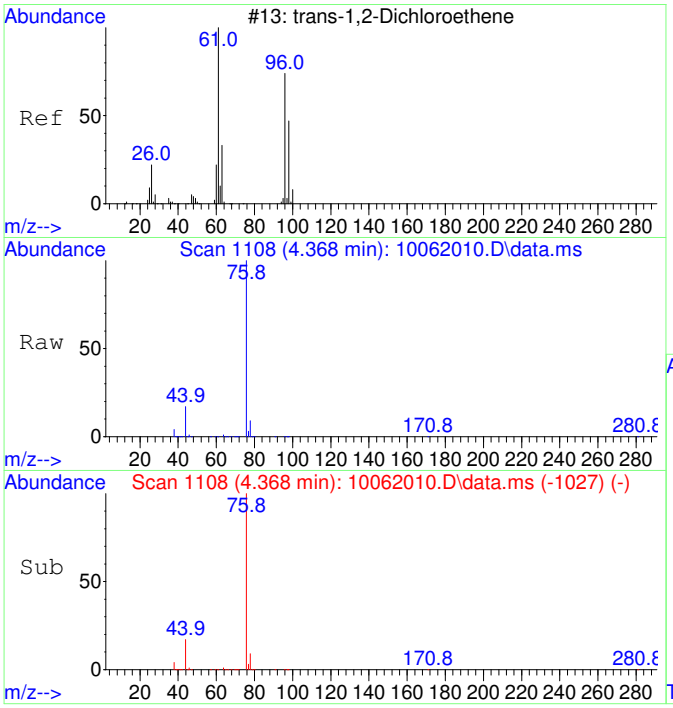


#26
1,1-Dichloroethene SCAN
Concen: 24.48 ug/L
RT: 3.066 min Scan# 802
Delta R.T. -0.041 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion: 61 Resp: 247

Ion	Ratio	Lower	Upper
61	100		
96	35.2	33.1	93.1
98	24.7	11.2	71.2

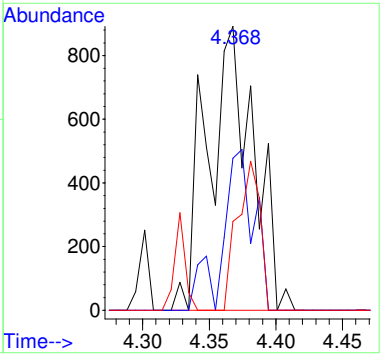


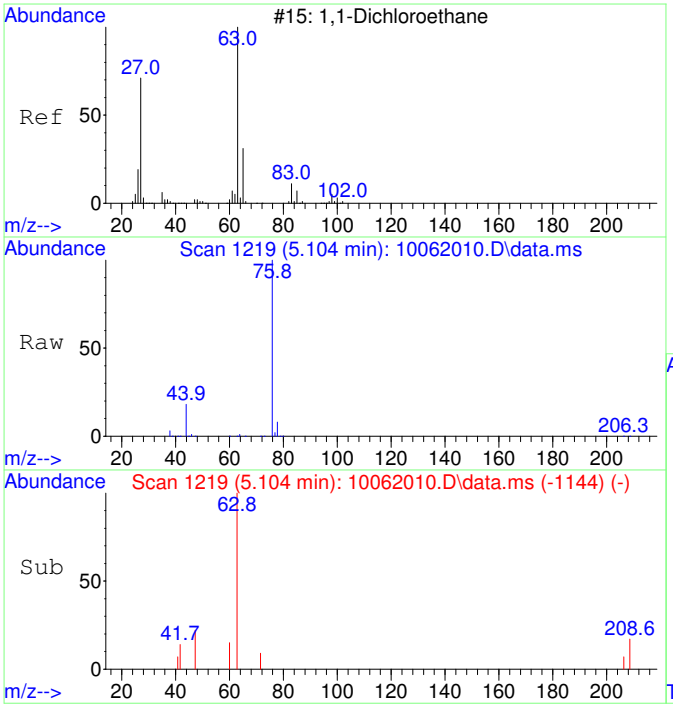


#27
trans-1,2-Dichloroethene SCAN
Concen: 171.33 ug/L
RT: 4.368 min Scan# 1108
Delta R.T. -0.033 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion: 61 Resp: 2139

Ion	Ratio	Lower	Upper
61	100		
96	38.9	49.0	109.0#
98	26.0	20.5	80.5

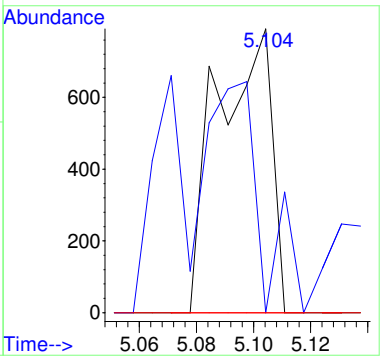


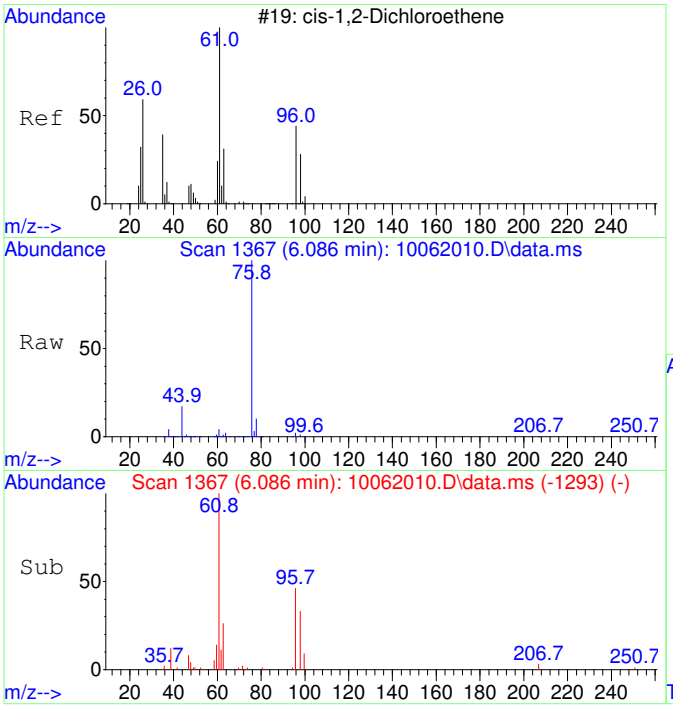


#28
1,1-Dichloroethane SCAN
Concen: 72.60 ug/L
RT: 5.104 min Scan# 1219
Delta R.T. -0.000 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion: 63 Resp: 1049

Ion	Ratio	Lower	Upper
63	100		
65	59.4	1.3	61.3
83	0.0	0.0	45.9

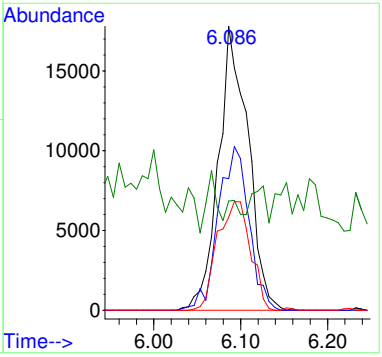


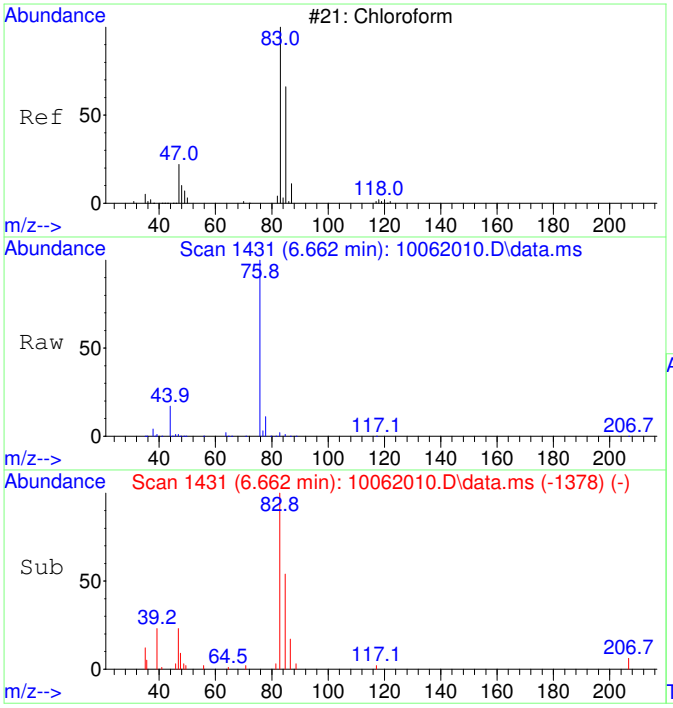


#29
cis-1,2-Dichloroethene SCAN
Concen: 2722.35 ug/L
RT: 6.086 min Scan# 1367
Delta R.T. -0.007 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion: 61 Resp: 42144

Ion	Ratio	Lower	Upper
61	100		
96	59.6	39.9	99.9
98	42.7	13.5	73.5
64	2.3	4.5	64.5#

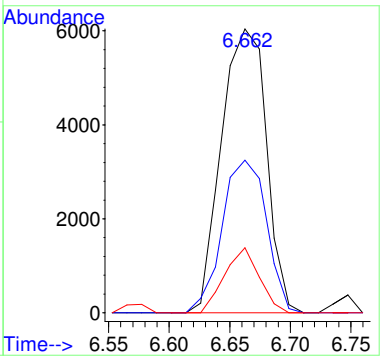


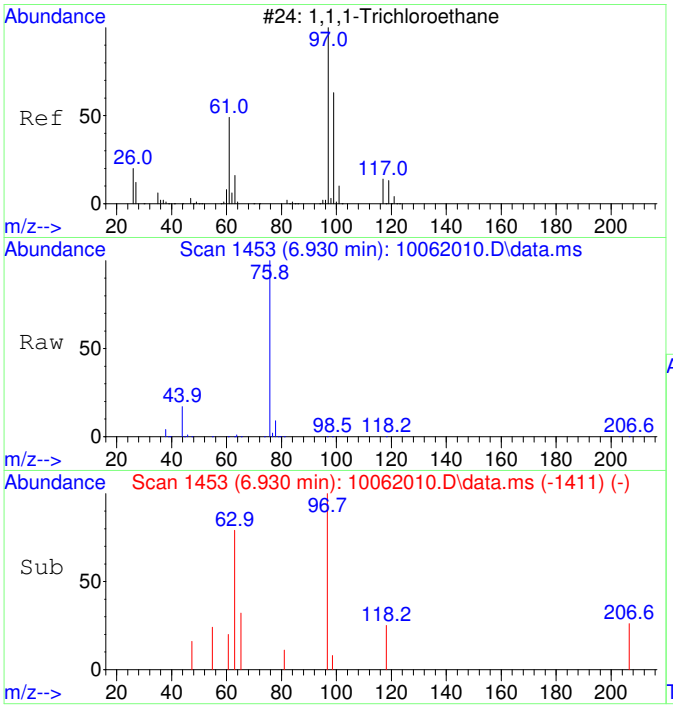


#30
Chloroform SCAN
Concen: 934.31 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. -0.000 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion: 83 Resp: 15688

Ion	Ratio	Lower	Upper
83	100		
85	53.1	34.6	94.6
47	17.7	0.0	53.4

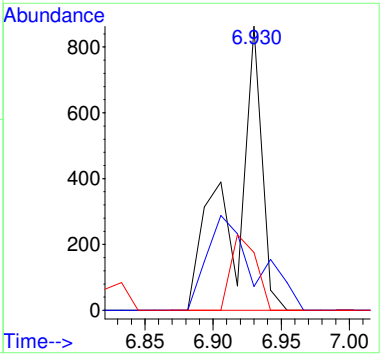


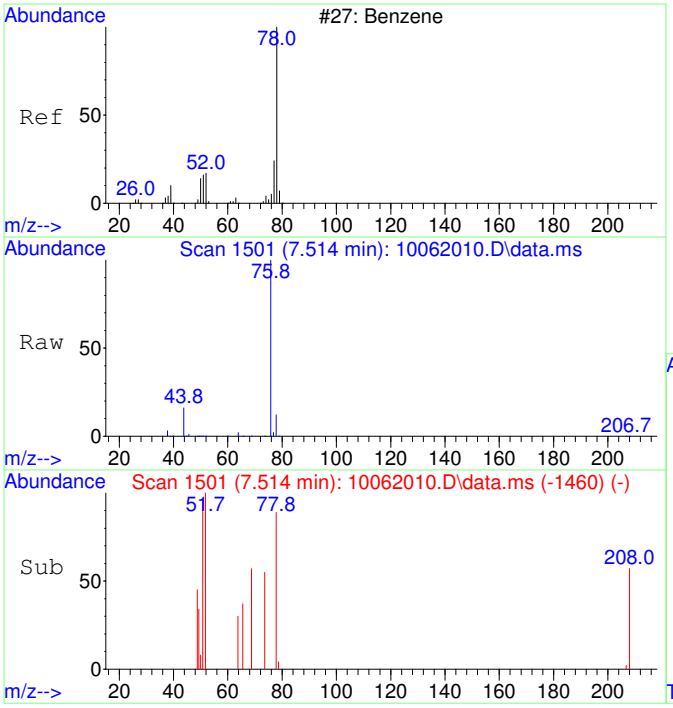


#31
1,1,1-Trichloroethane SCAN
Concen: 81.17 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. 0.012 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion: 97 Resp: 1242

Ion	Ratio	Lower	Upper
97	100		
99	0.0	43.6	103.6#
61	23.8	18.0	78.0

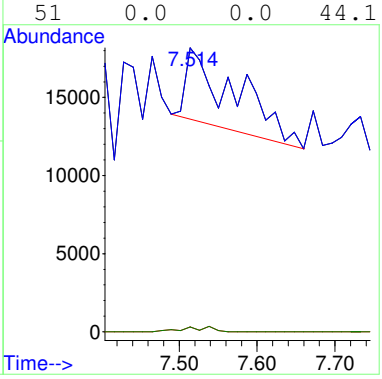


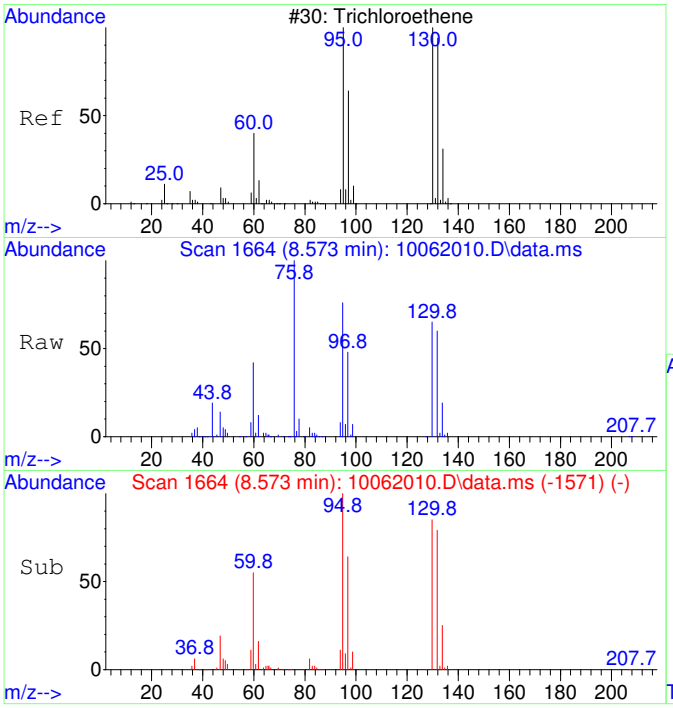


#33
Benzene SCAN
Concen: 467.64 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. -0.000 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion: 78 Resp: 19702

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	0.0	0.0	47.9
51	0.0	0.0	44.1

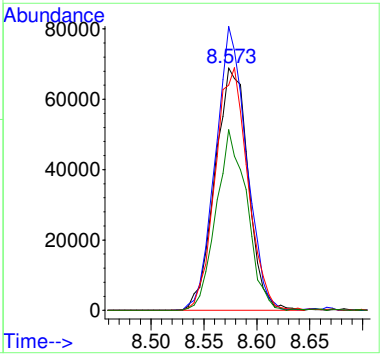


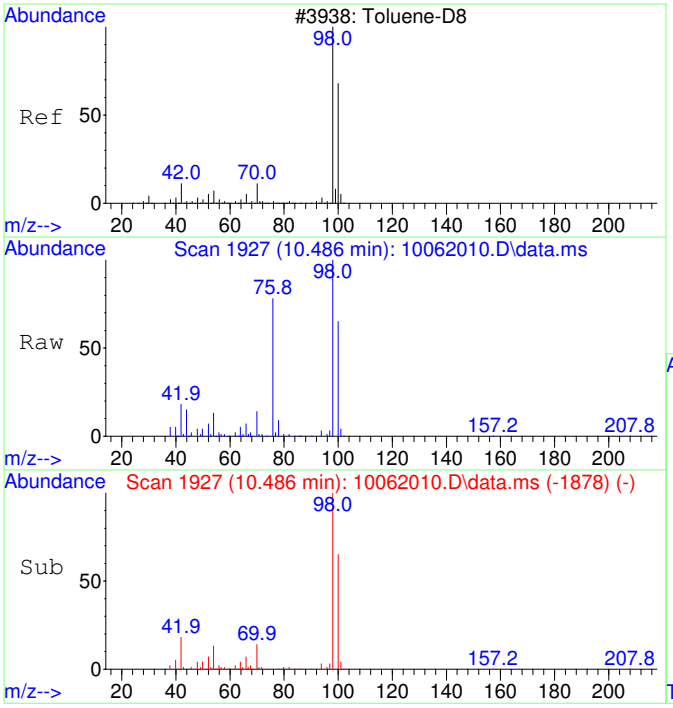


#35
Trichloroethene SCAN
Concen: 12952.25 ug/L
RT: 8.573 min Scan# 1664
Delta R.T. 0.005 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion:130 Resp: 149957

Ion	Ratio	Lower	Upper
130	100		
95	109.2	60.5	120.5
132	98.3	59.6	119.6
97	69.1	28.2	88.2

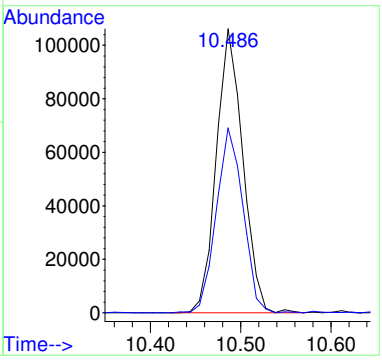


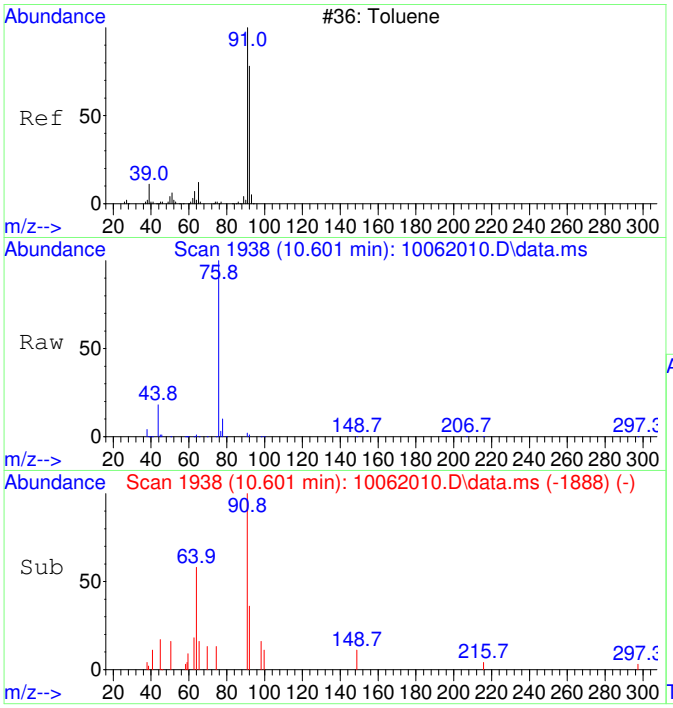


#36
Toluene-d8 SCAN
Concen: 4681.77 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.010 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion: 98 Resp: 217525

Ion	Ratio	Lower	Upper
98	100		
100	65.6	40.0	100.0

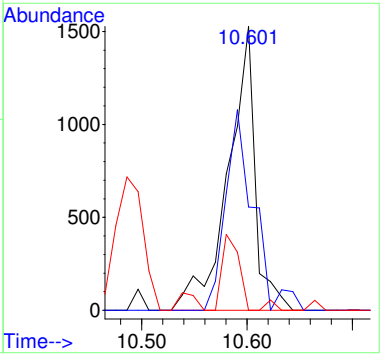


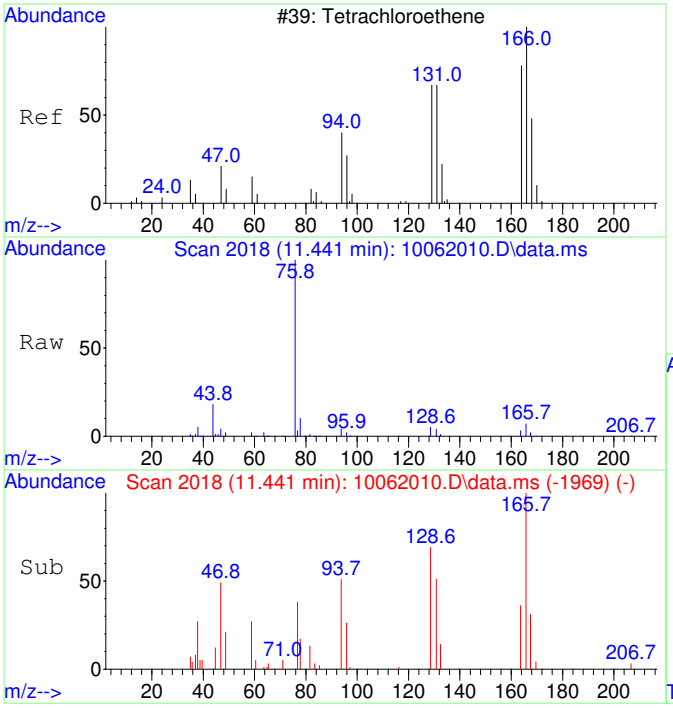


#37
Toluene SCAN
Concen: 45.81 ug/L
RT: 10.601 min Scan# 1938
Delta R.T. 0.021 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion: 91 Resp: 2726

Ion	Ratio	Lower	Upper
91	100		
92	0.0	28.3	88.3#
65	0.0	0.0	41.0

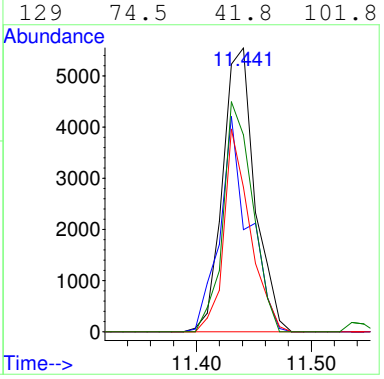


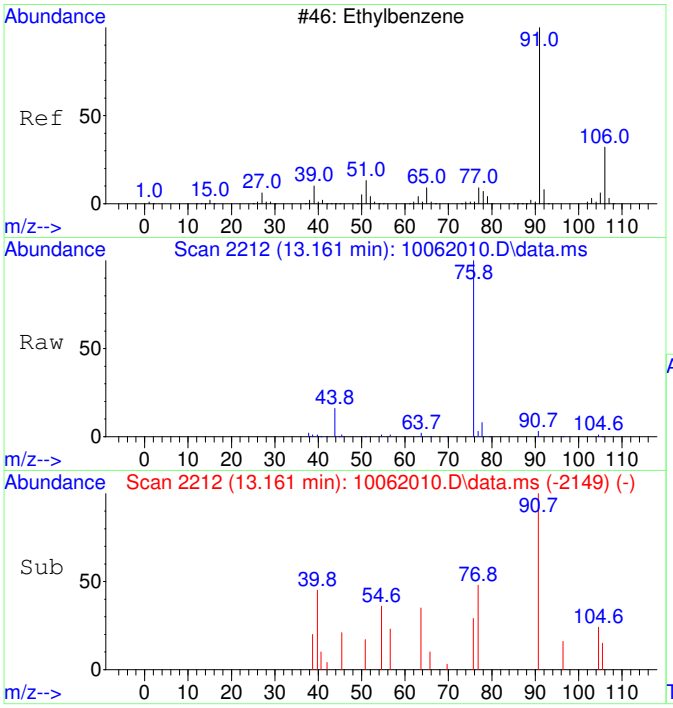


#39
Tetrachloroethene SCAN
Concen: 758.44 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.010 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion:166 Resp: 10842

Ion	Ratio	Lower	Upper
166	100		
164	68.4	50.9	110.9
131	57.8	38.7	98.7
129	74.5	41.8	101.8

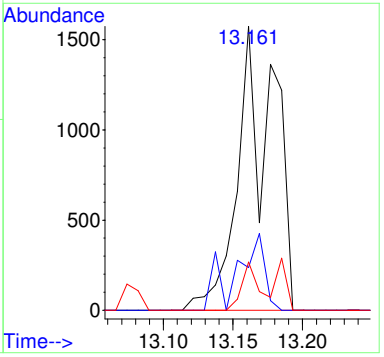


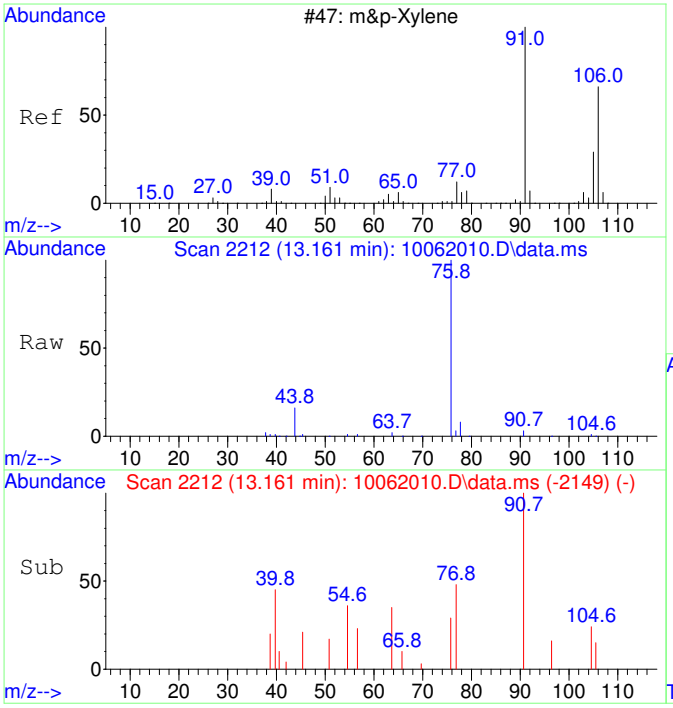


#42
Ethylbenzene SCAN
Concen: 25.89 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.000 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion: 91 Resp: 2806

Ion	Ratio	Lower	Upper
91	100		
106	16.9	23.1	83.1#
51	6.2	0.0	40.1

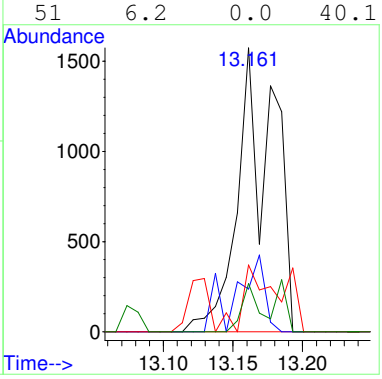


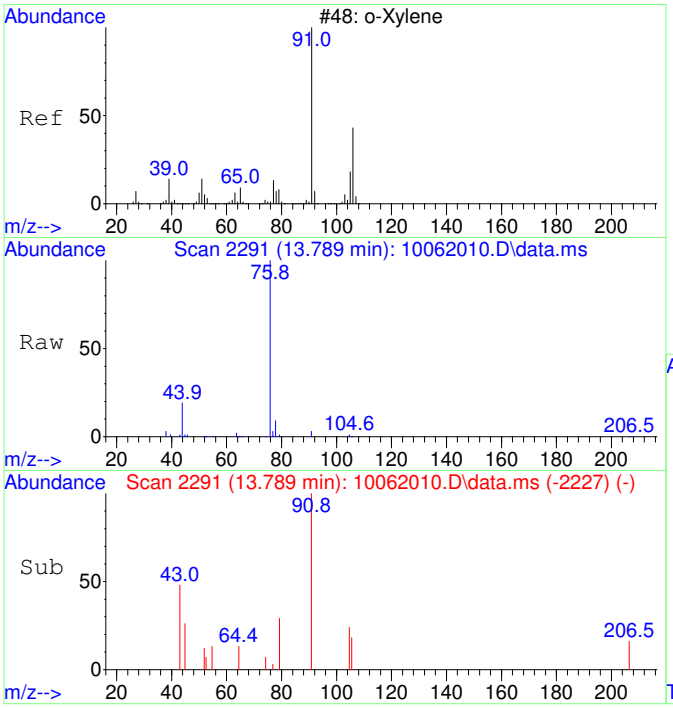


#43
m&p-Xylene SCAN
Concen: 25.89 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.000 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion: 91 Resp: 2806

Ion	Ratio	Lower	Upper
91	100		
106	16.9	23.1	83.1#
105	23.3	0.0	54.7
51	6.2	0.0	40.1

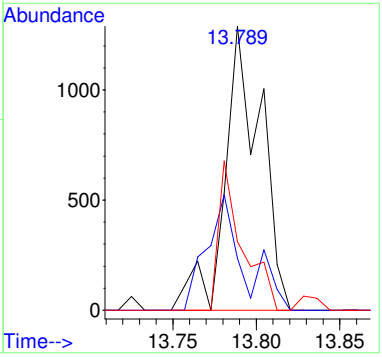




#44
o-Xylene SCAN
Concen: 33.43 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.008 min
Lab File: 10062010.D
Acq: 6 Oct 2020 11:54

Tgt Ion: 91 Resp: 1940

Ion	Ratio	Lower	Upper
91	100		
106	42.2	18.0	78.0
105	34.5	0.0	56.6



CRDL STANDARD

Radiello D1

Laboratory: EPA Region 9 Laboratory
SDG: 20274B
Client: California Site Cleanup Section 3
Project: MEW OU1 FY2020 Vapor Intrusion Investigation
Instrument ID: AG5975CV
Calibration: 2008017
Sequence: S20J006

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
B20J004-MRL1	1,1-Dichloroethene	0.131	0.112	86	ug/m³ Air	50 - 150
	trans-1,2-Dichloroethene	0.160	0.153	95	ug/m³ Air	50 - 150
	1,1-Dichloroethane	0.157	0.151	96	ug/m³ Air	50 - 150
	cis-1,2-Dichloroethene	0.160	0.158	99	ug/m³ Air	50 - 150
	Chloroform	0.132	0.139	105	ug/m³ Air	50 - 150
	Trichloroethene	0.144	0.148	103	ug/m³ Air	50 - 150
	Tetrachloroethene	0.168	0.169	101	ug/m³ Air	50 - 150
	Toluene-d8	992	887	89	ug/m³ Air	86 - 118

Quantitation Report (Not Reviewed)

Table of Contents

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052008.D
Acq On : 5 Oct 2020 12:39
InstName : AG5975C
Operator : TD
Sample : B20J004-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 05 12:57:47 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

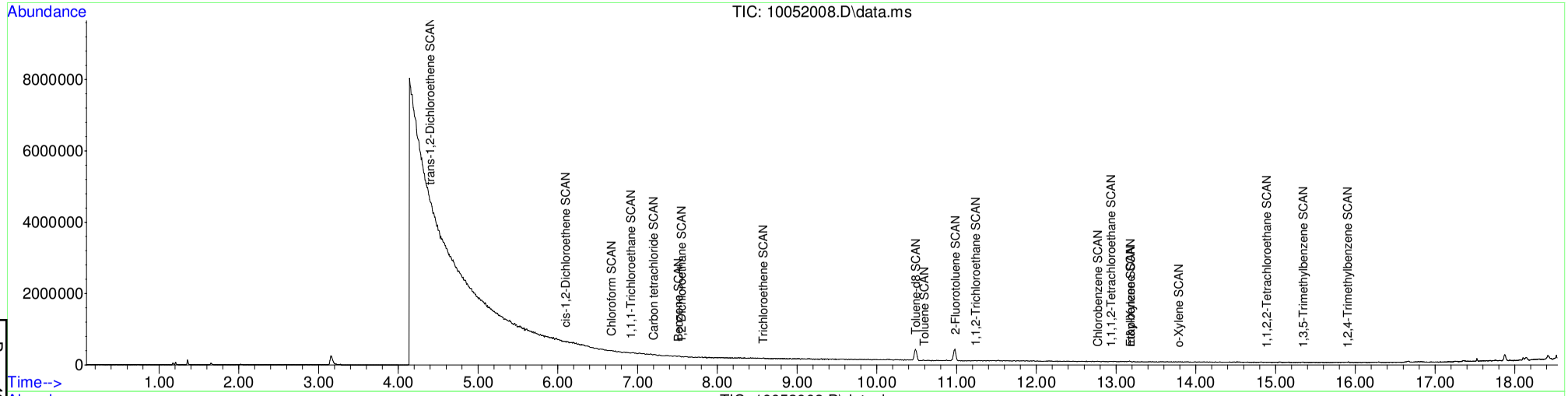
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	530253	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.487	98	463791	4468.00	ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 89.36%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.093	61	1423	67.21	ug/L #	45
3] trans-1,2-Dichloroethene	4.395	61	1168	47.74	ug/L	73
4] 1,1-Dichloroethane	5.099	63	1460	47.94	ug/L	80
5] cis-1,2-Dichloroethene	6.094	61	1586	49.34	ug/L	97
6] Chloroform	6.664	83	1731	52.61	ug/L	98
7] 1,1,1-Trichloroethane	6.919	97	1732	48.47	ug/L	100
8] Carbon tetrachloride	7.187	117	1613	47.96	ug/L	98
9] Benzene	7.515	78	9493	105.37	ug/L	61
10] 1,2-Dichloroethane	7.552	62	1664	51.74	ug/L #	29
11] Trichloroethene	8.575	130	1396	51.46	ug/L	91
13] Toluene	10.582	91	8176	61.78	ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	1437	49.83	ug/L	89
15] Tetrachloroethene	11.442	166	1929	50.37	ug/L	95
16] Chlorobenzene	12.773	112	4687	49.46	ug/L	87
17] 1,1,1,2-Tetrachloroethane	12.924	131	1761	51.86	ug/L	95
18] Ethylbenzene	12.980	91	9701	60.22	ug/L	94
19] m&p-Xylene	13.170	91	15752	125.12	ug/L	95
20] o-Xylene	13.782	91	7011	52.12	ug/L	95
21] 1,1,2,2-Tetrachloroethane	14.880	83	2983	50.04	ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	8046	56.20	ug/L	95
23] 1,2,4-Trimethylbenzene	15.906	105	8880	59.72	ug/L	91
25) 2-Fluorotoluene SCAN	10.979	109	252437	4883.68	ug/L	96
27) trans-1,2-Dichloroethe...	4.394	61	500	36.81	ug/L #	43
29) cis-1,2-Dichloroethene...	6.099	61	337	20.01	ug/L #	29
30) Chloroform SCAN	6.674	83	963	52.71	ug/L #	32
31) 1,1,1-Trichloroethane ...	6.918	97	522	31.36	ug/L	86
32) Carbon tetrachloride SCAN	7.197	117	485	27.93	ug/L #	14
33) Benzene SCAN	7.514	78	17033	371.59	ug/L	95
34) 1,2-Dichloroethane SCAN	7.550	62	642	37.93	ug/L #	1
35) Trichloroethene SCAN	8.573	130	304	24.13	ug/L #	1
36) Toluene-d8 SCAN	10.486	98	239965	4746.97	ug/L	94
37) Toluene SCAN	10.591	91	4271	65.97	ug/L	94
38) 1,1,2-Trichloroethane ...	11.241	97	1170	80.52	ug/L	79
40) Chlorobenzene SCAN	12.772	112	1717	38.81	ug/L #	51
41) 1,1,1,2-Tetrachloroeth...	12.931	131	498	30.42	ug/L #	14
42) Ethylbenzene SCAN	13.177	91	8254	69.98	ug/L	86
43) m&p-Xylene SCAN	13.177	91	8254	69.98	ug/L	85
44) o-Xylene SCAN	13.781	91	4564	72.29	ug/L	78
45) 1,1,2,2-Tetrachloroeth...	14.886	83	2438	79.20	ug/L #	42
46) 1,3,5-Trimethylbenzene...	15.343	105	4736	71.18	ug/L	88
47) 1,2,4-Trimethylbenzene...	15.904	105	4779	70.20	ug/L #	77

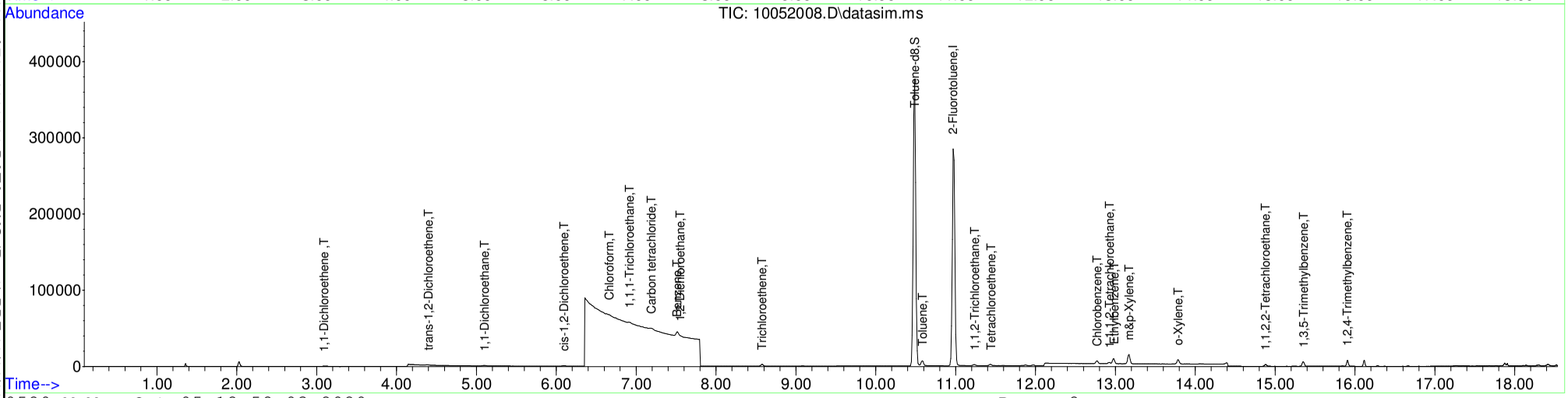
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052008.D
Acq On : 5 Oct 2020 12:39
InstName : AG5975C
Operator : TD
Sample : B20J004-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 05 12:57:47 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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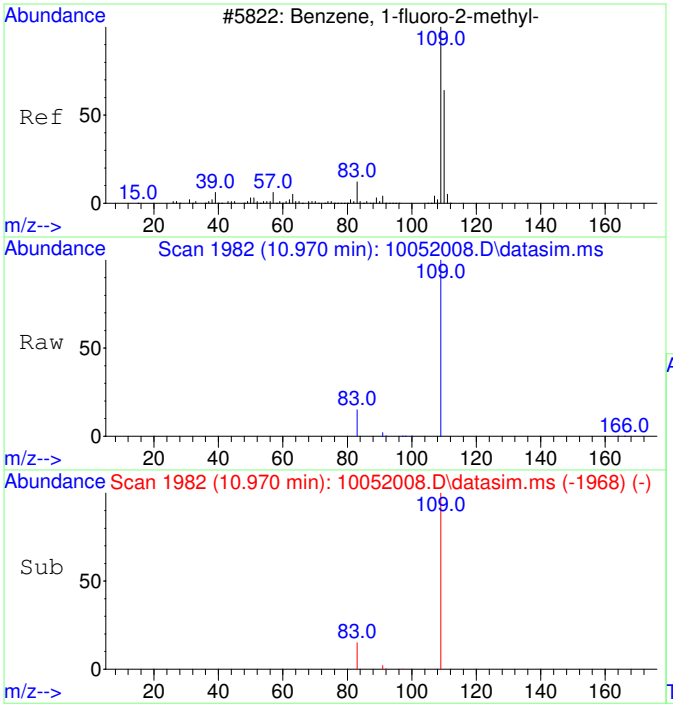
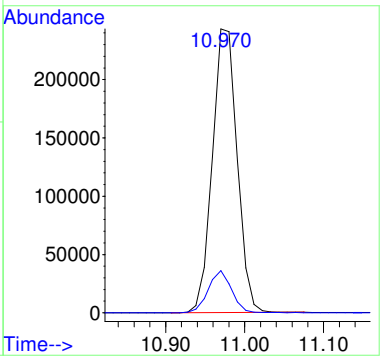
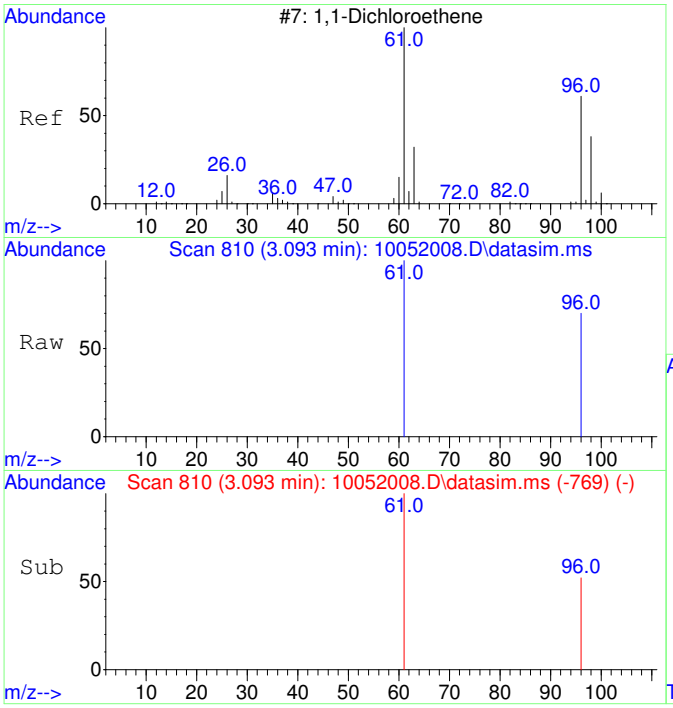


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:109 Resp: 530253

Ion	Ratio	Lower	Upper
109	100		
83	13.9	0.0	42.3

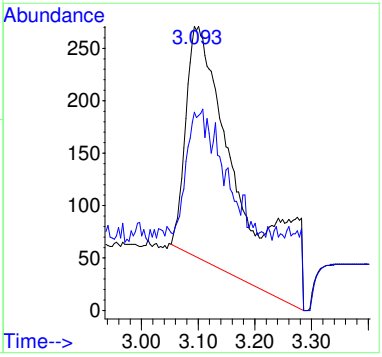




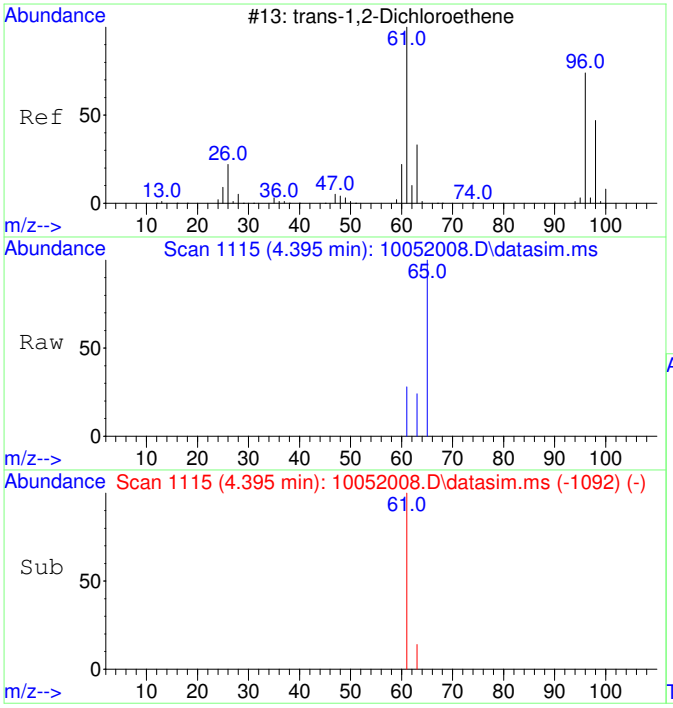
#2
1,1-Dichloroethene
Concen: 67.21 ug/L
RT: 3.093 min Scan# 810
Delta R.T. 0.003 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 61 Resp: 1423

Ion	Ratio	Lower	Upper
61	100		
96	23.3	37.2	97.2#



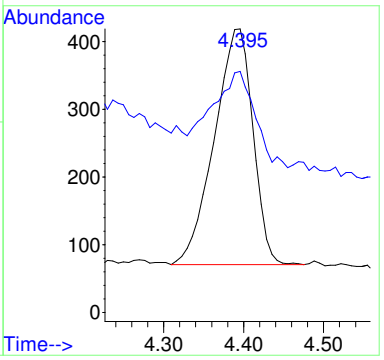
Before MI:
IMPROPER
BASELINE

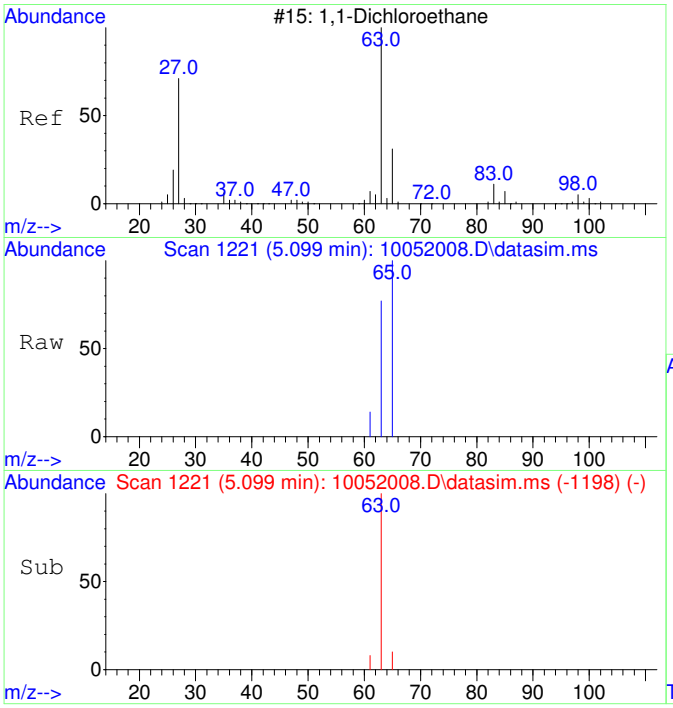


#3
trans-1,2-Dichloroethene
Concen: 47.74 ug/L
RT: 4.395 min Scan# 1115
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 61 Resp: 1168

Ion	Ratio	Lower	Upper
61	100		
63	47.6	2.4	62.4

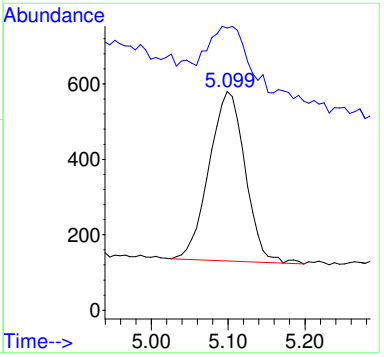


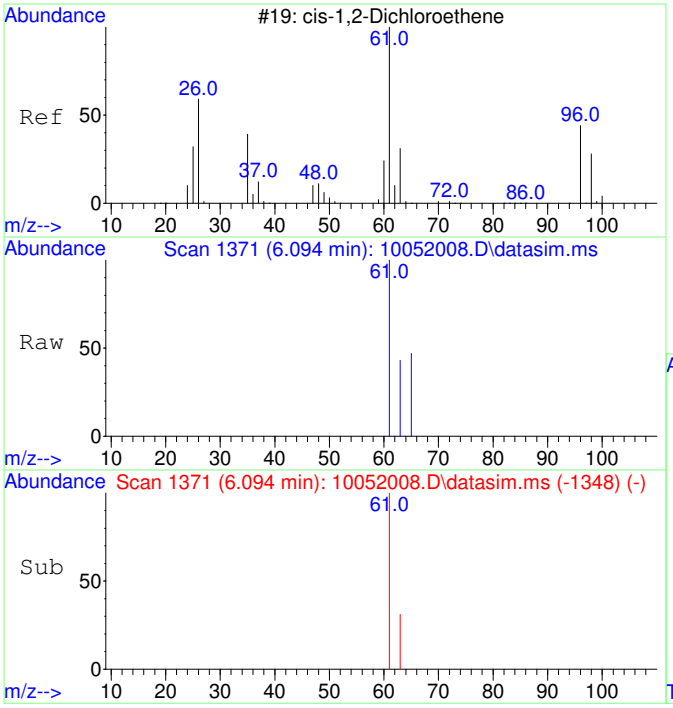


#4
1,1-Dichloroethane
Concen: 47.94 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 63 Resp: 1460

Ion	Ratio	Lower	Upper
63	100		
65	42.7	1.8	61.8

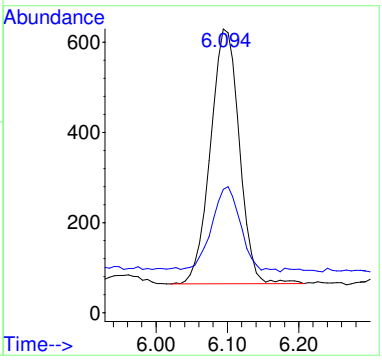


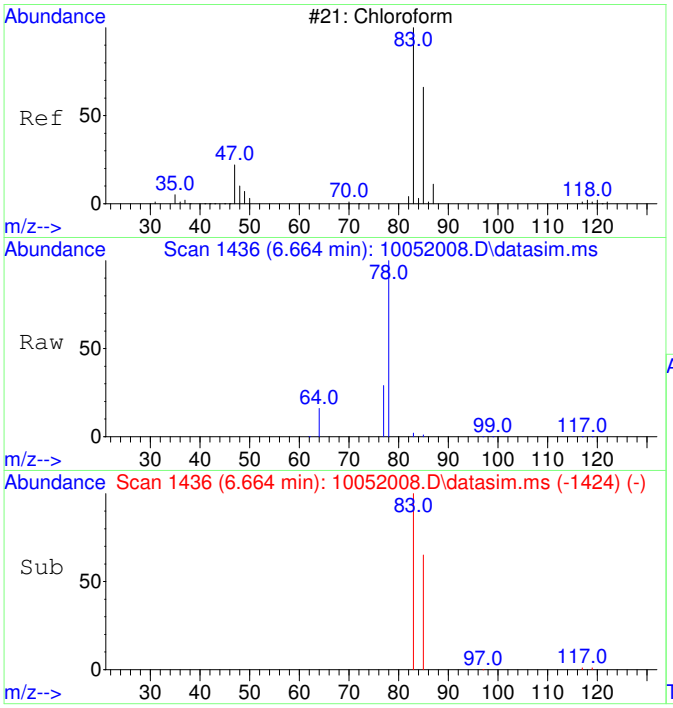


#5
cis-1,2-Dichloroethene
Concen: 49.34 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 61 Resp: 1586

Ion	Ratio	Lower	Upper
61	100		
63	34.0	2.5	62.5

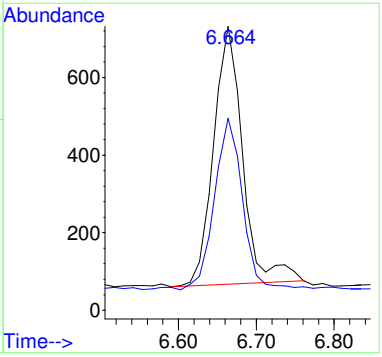


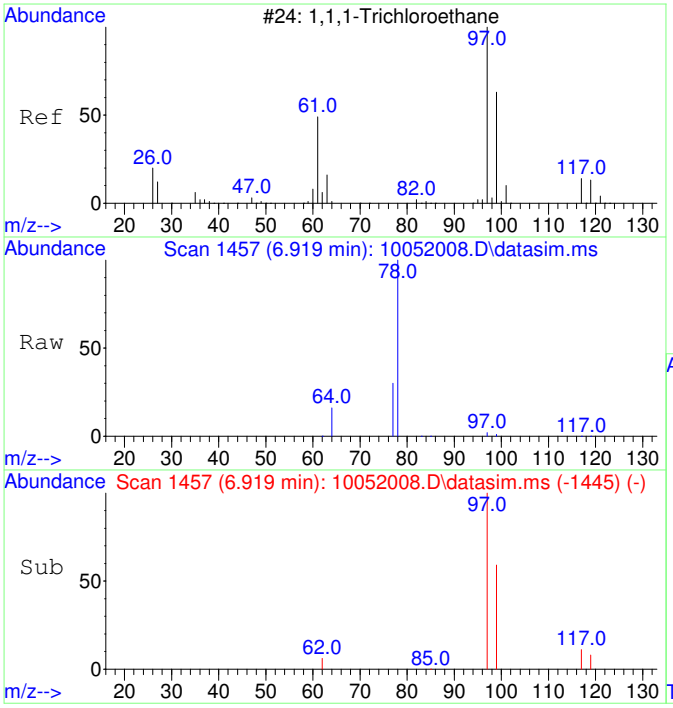


#6
Chloroform
Concen: 52.61 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 83 Resp: 1731

Ion	Ratio	Lower	Upper
83	100		
85	63.8	35.1	95.1

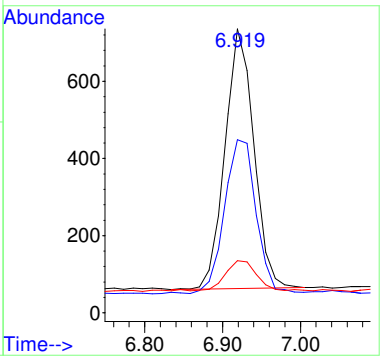


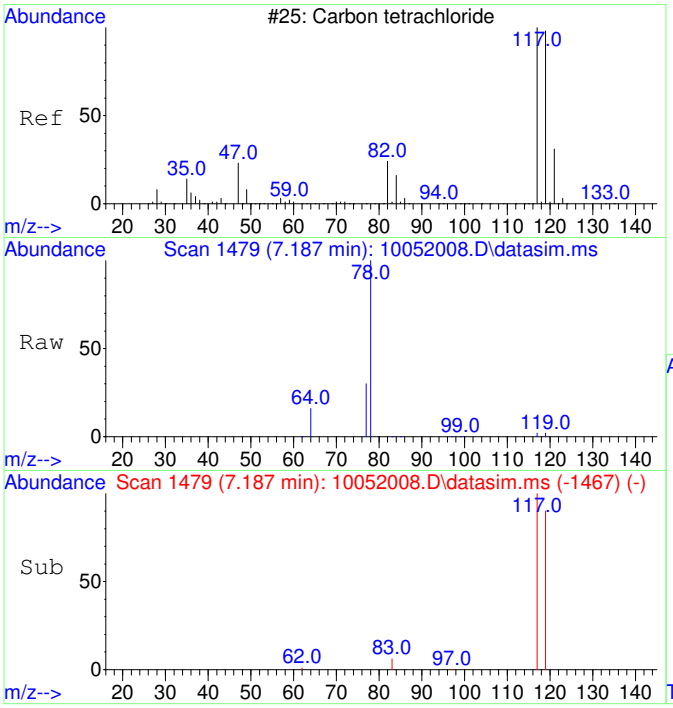


#7
1,1,1-Trichloroethane
Concen: 48.47 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 97 Resp: 1732

Ion	Ratio	Lower	Upper
97	100		
99	64.4	34.6	94.6
117	12.6	0.0	43.2

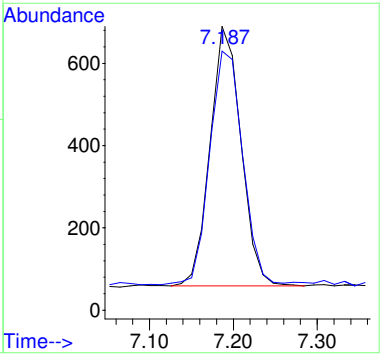


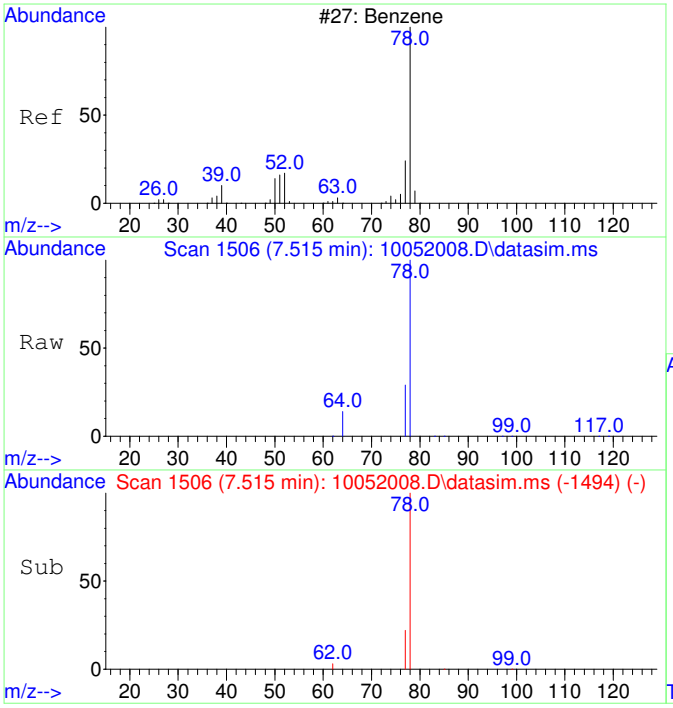


#8
Carbon tetrachloride
Concen: 47.96 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:117 Resp: 1613

Ion	Ratio	Lower	Upper
117	100		
119	94.4	66.4	126.4

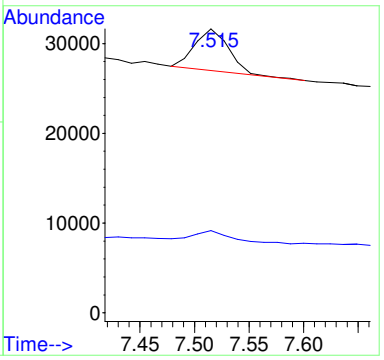


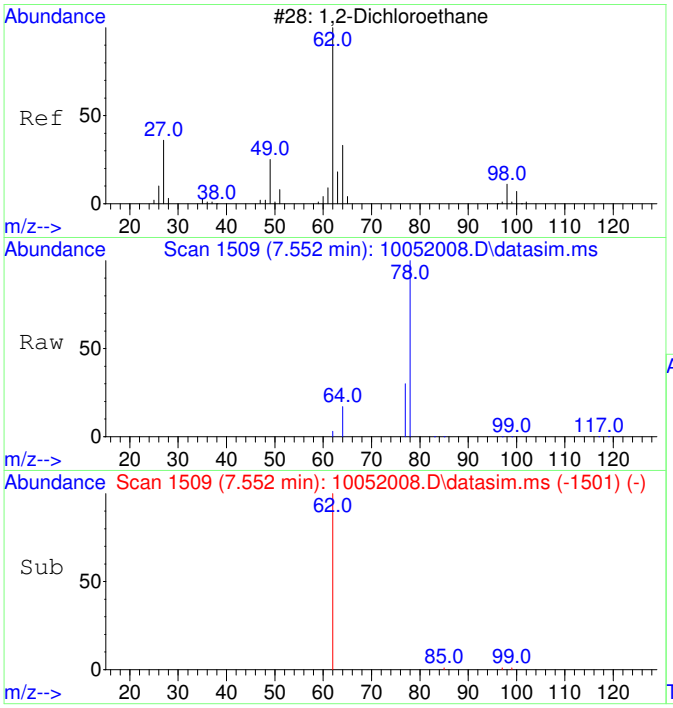


#9
Benzene
Concen: 105.37 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 78 Resp: 9493

Ion	Ratio	Lower	Upper
78	100		
77	42.0	0.0	53.2

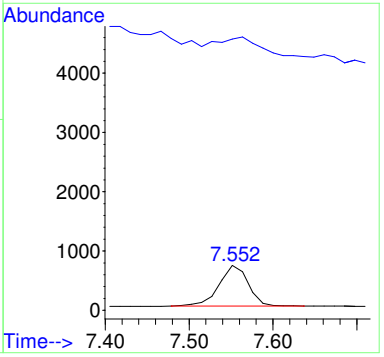


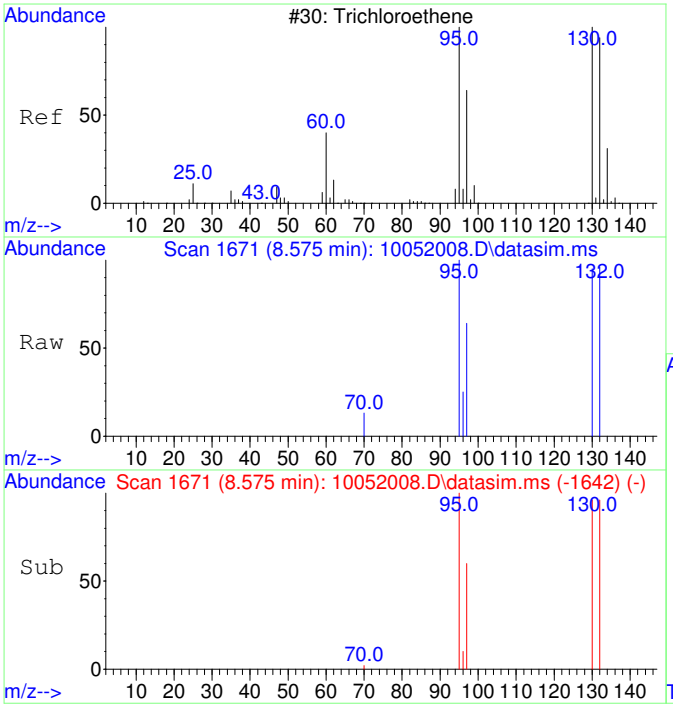


#10
1,2-Dichloroethane
Concen: 51.74 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 62 Resp: 1664

Ion	Ratio	Lower	Upper
62	100		
64	72.2	2.3	62.3#

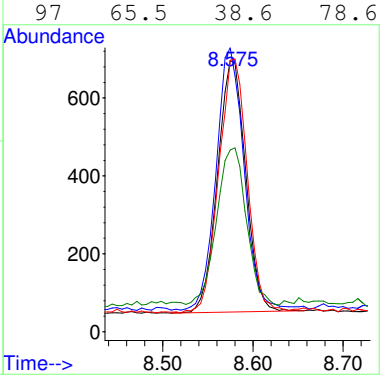


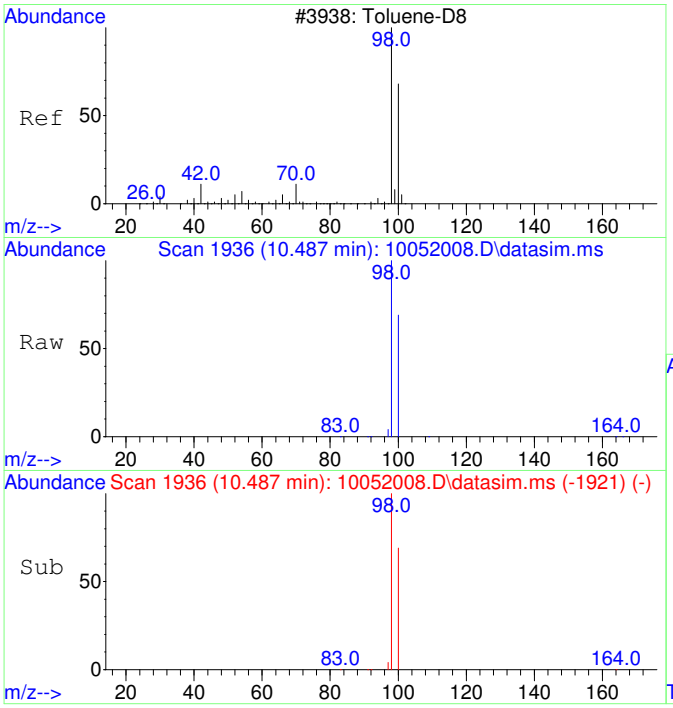


#11
Trichloroethene
Concen: 51.46 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:130 Resp: 1396

Ion	Ratio	Lower	Upper
130	100		
95	103.4	60.7	120.7
132	101.1	76.0	116.0
97	65.5	38.6	78.6

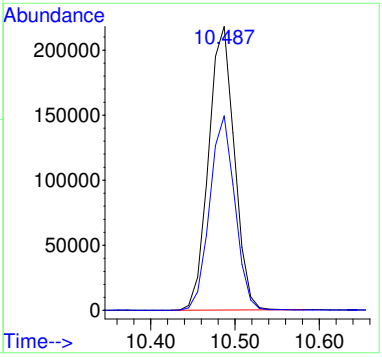


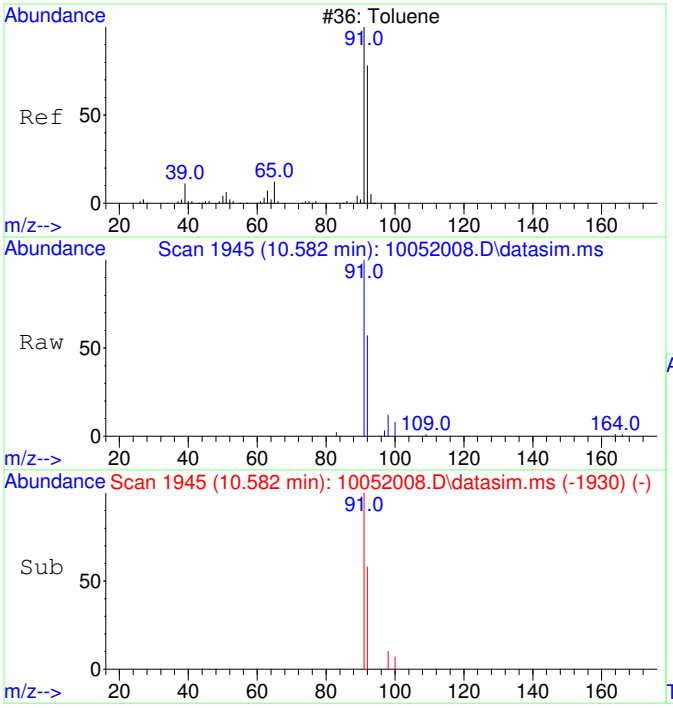


#12
Toluene-d8
Concen: 4468.00 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 98 Resp: 463791

Ion	Ratio	Lower	Upper
98	100		
100	66.7	37.1	97.1

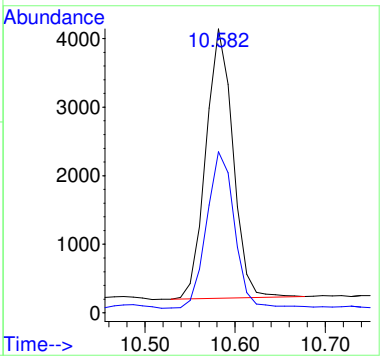


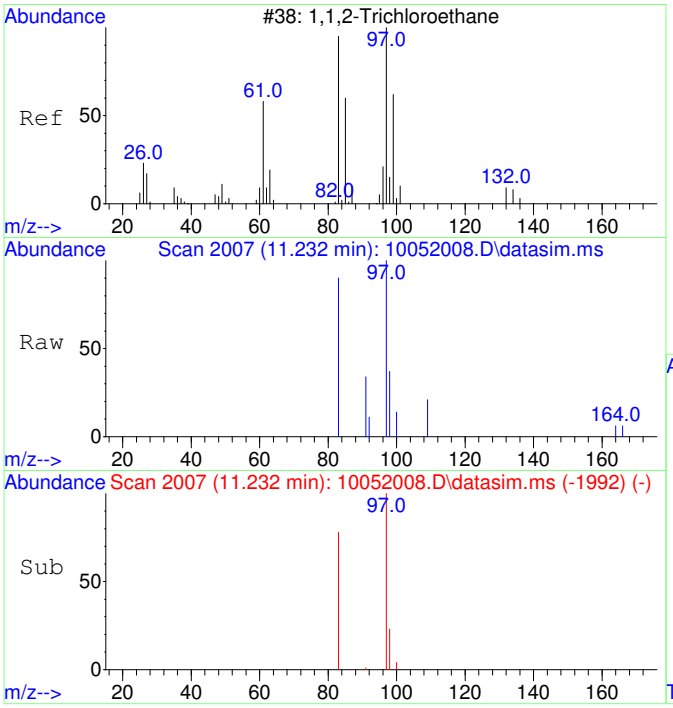


#13
Toluene
Concen: 61.78 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 8176

Ion	Ratio	Lower	Upper
91	100		
92	60.3	29.9	89.9

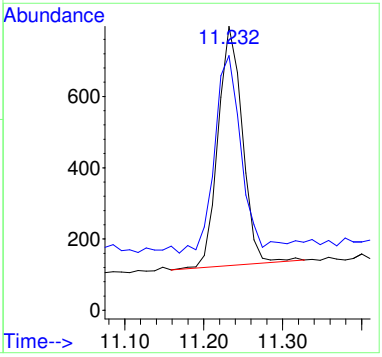


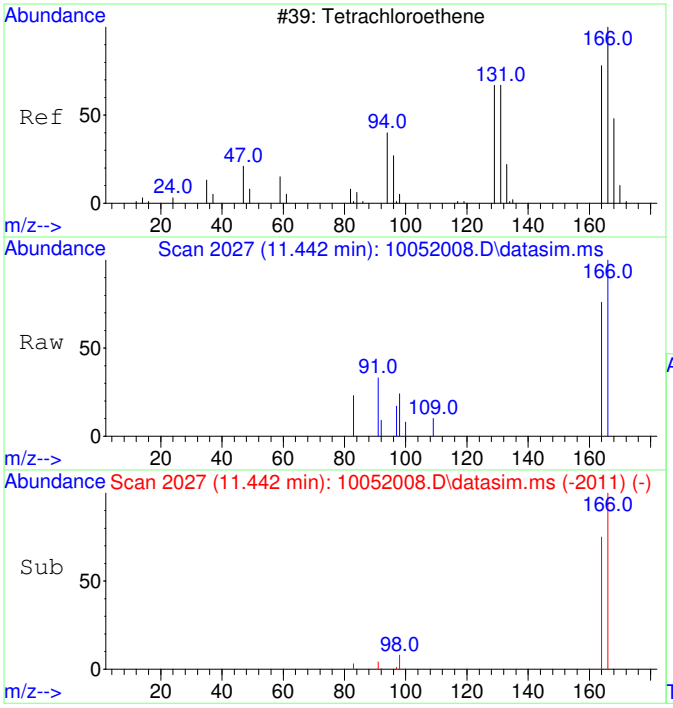


#14
1,1,2-Trichloroethane
Concen: 49.83 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 97 Resp: 1437

Ion	Ratio	Lower	Upper
97	100		
83	91.0	51.2	111.2

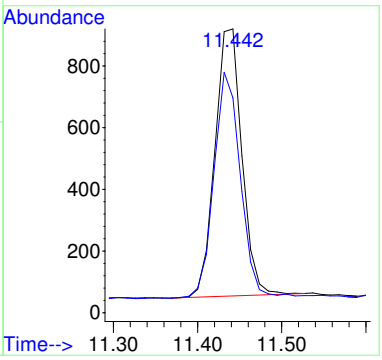


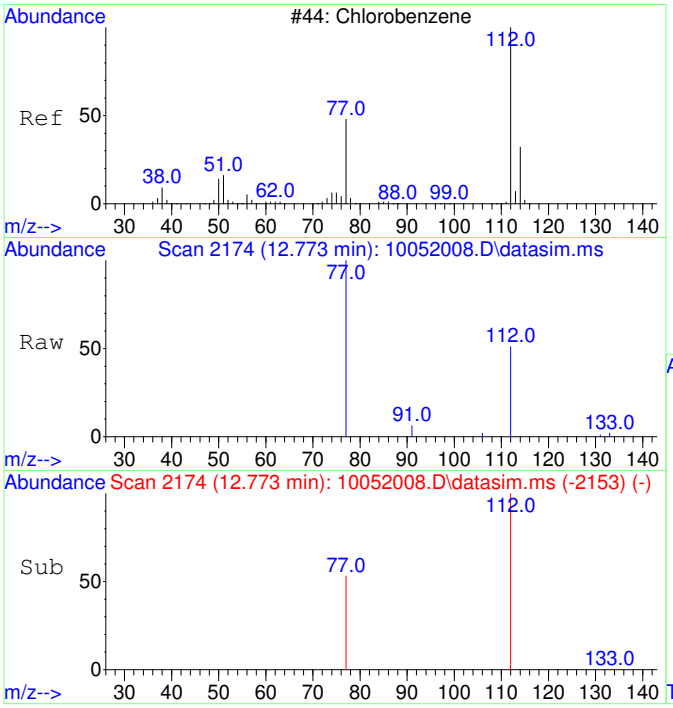


#15
Tetrachloroethene
Concen: 50.37 ug/L
RT: 11.442 min Scan# 2027
Delta R.T. 0.021 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:166 Resp: 1929

Ion	Ratio	Lower	Upper
166	100		
164	82.0	47.8	107.8

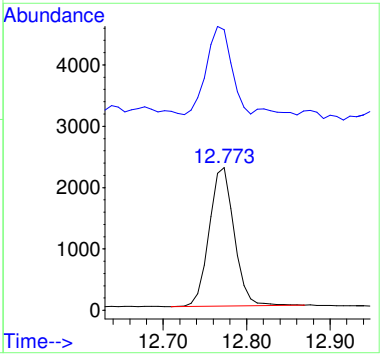


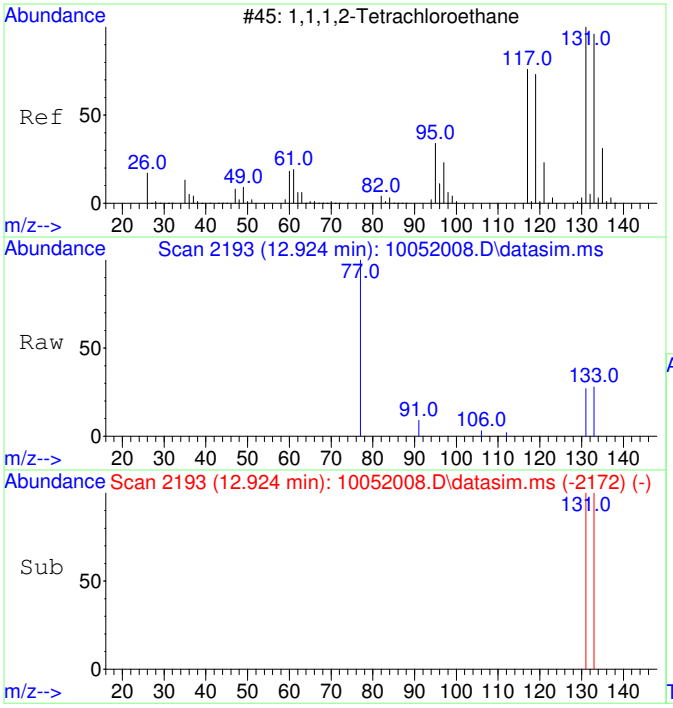


#16
Chlorobenzene
Concen: 49.46 ug/L
RT: 12.773 min Scan# 2174
Delta R.T. 0.016 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:112 Resp: 4687

Ion	Ratio	Lower	Upper
112	100		
77	63.1	23.6	83.6

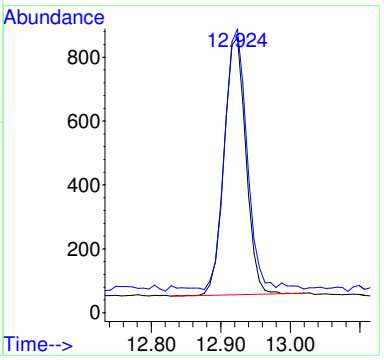


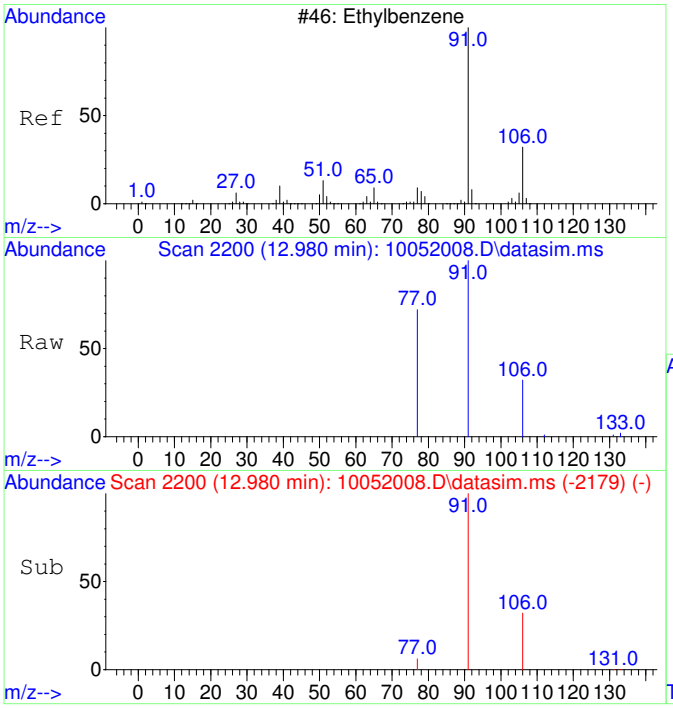


#17
1,1,1,2-Tetrachloroethane
Concen: 51.86 ug/L
RT: 12.924 min Scan# 2193
Delta R.T. 0.016 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:131 Resp: 1761

Ion	Ratio	Lower	Upper
131	100		
133	101.3	66.3	126.3

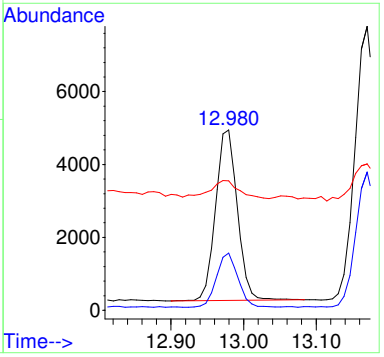


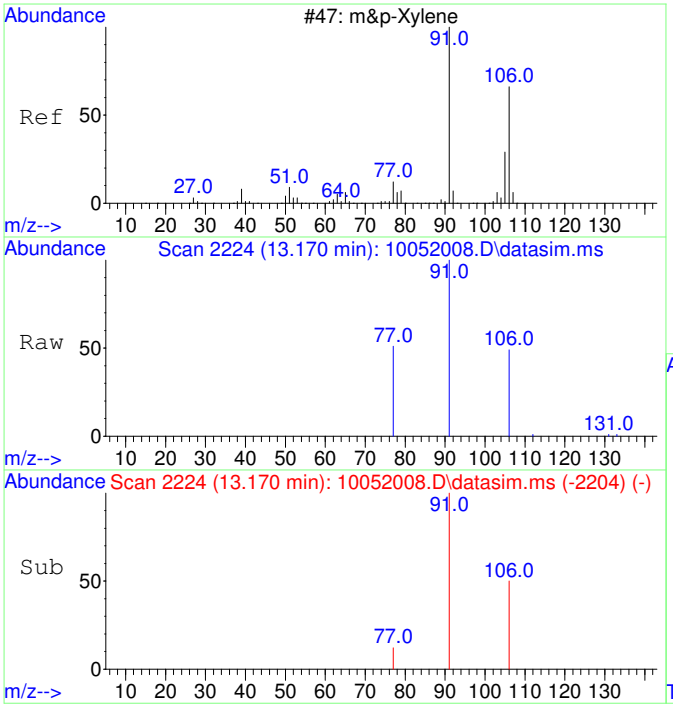


#18
Ethylbenzene
Concen: 60.22 ug/L
RT: 12.980 min Scan# 2200
Delta R.T. 0.016 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 9701

Ion	Ratio	Lower	Upper
91	100		
106	31.2	3.0	63.0
77	14.3	0.0	38.2

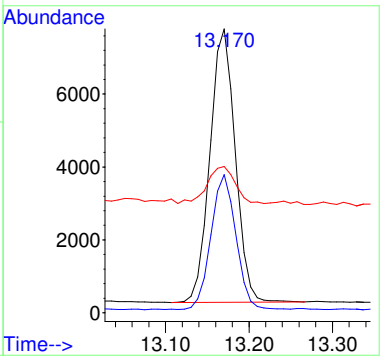


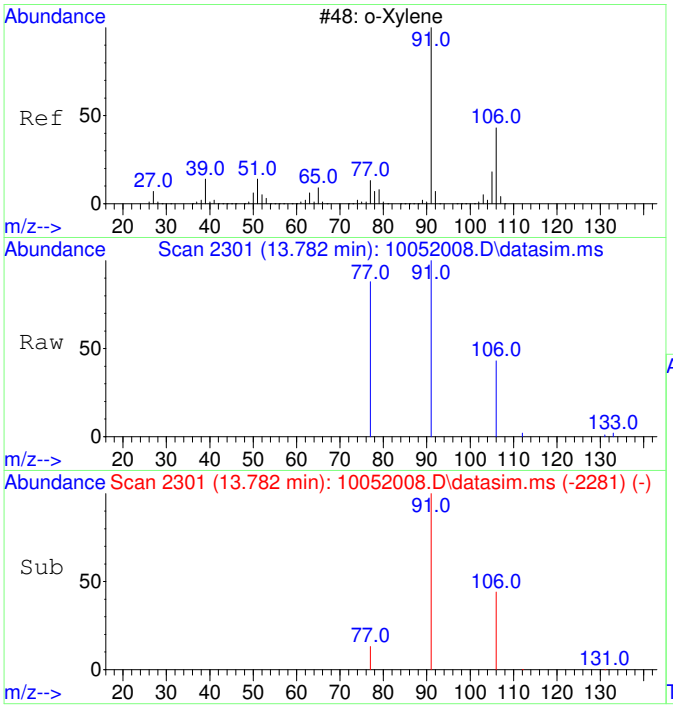


#19
m&p-Xylene
Concen: 125.12 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.008 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 15752

Ion	Ratio	Lower	Upper
91	100		
106	48.6	22.2	82.2
77	14.8	0.0	42.4

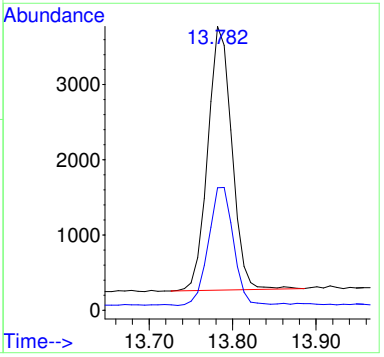


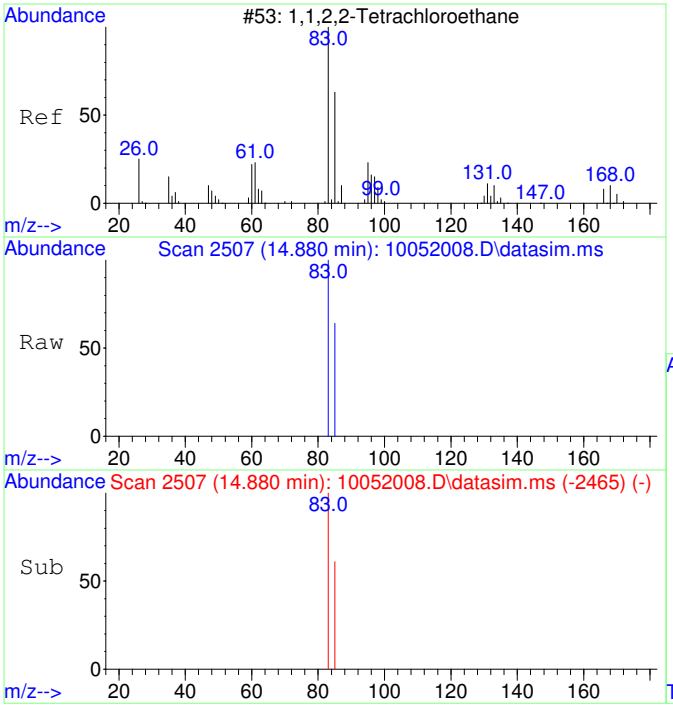


#20
o-Xylene
Concen: 52.12 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 7011

Ion	Ratio	Lower	Upper
91	100		
106	45.8	19.2	79.2

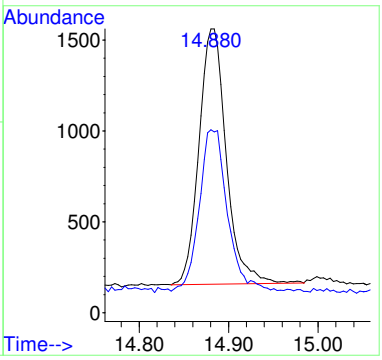


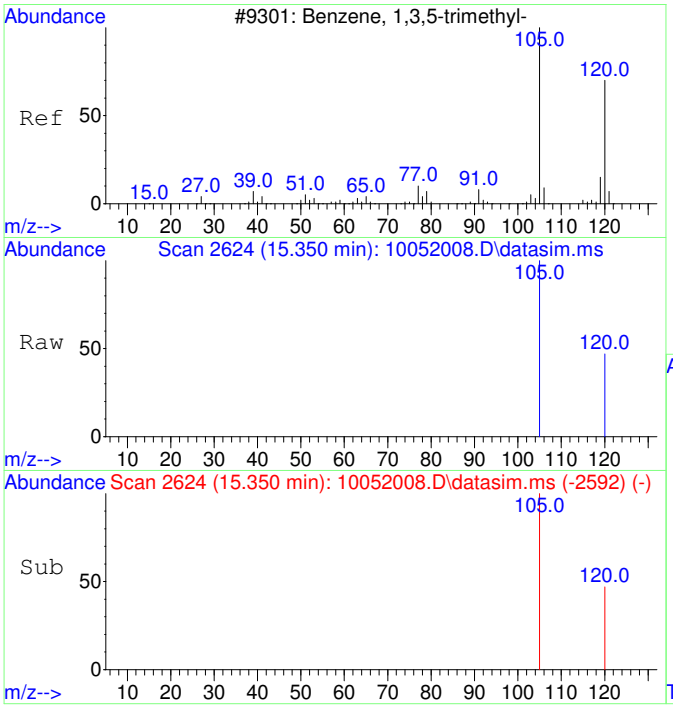


#21
1,1,2,2-Tetrachloroethane
Concen: 50.04 ug/L
RT: 14.880 min Scan# 2507
Delta R.T. 0.007 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 83 Resp: 2983

Ion	Ratio	Lower	Upper
83	100		
85	64.8	34.8	94.8

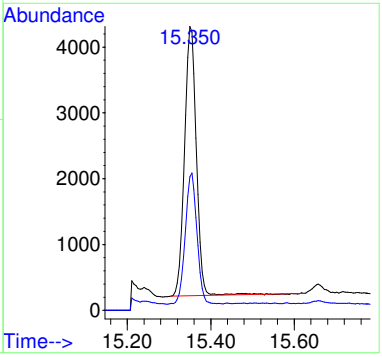


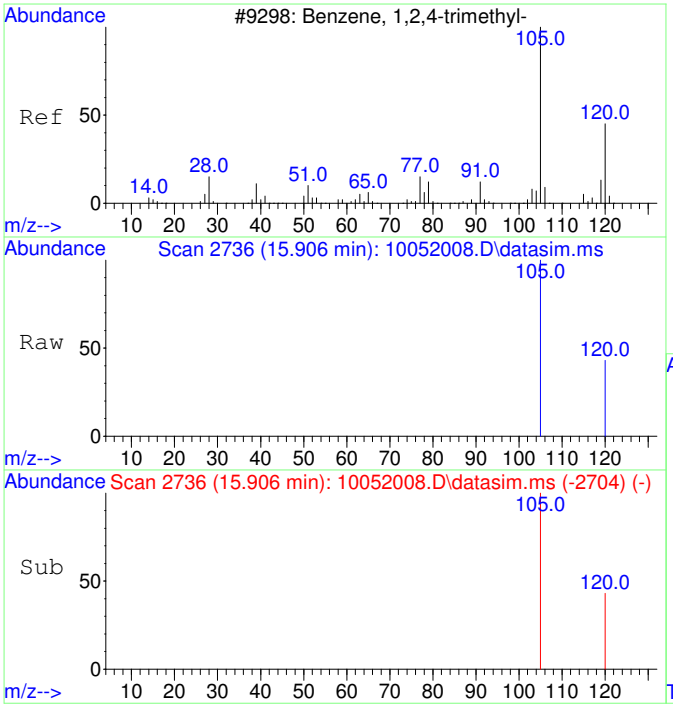


#22
1,3,5-Trimethylbenzene
Concen: 56.20 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.005 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:105 Resp: 8046

Ion	Ratio	Lower	Upper
105	100		
120	47.7	21.1	81.1

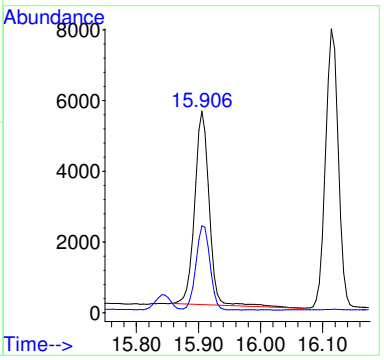


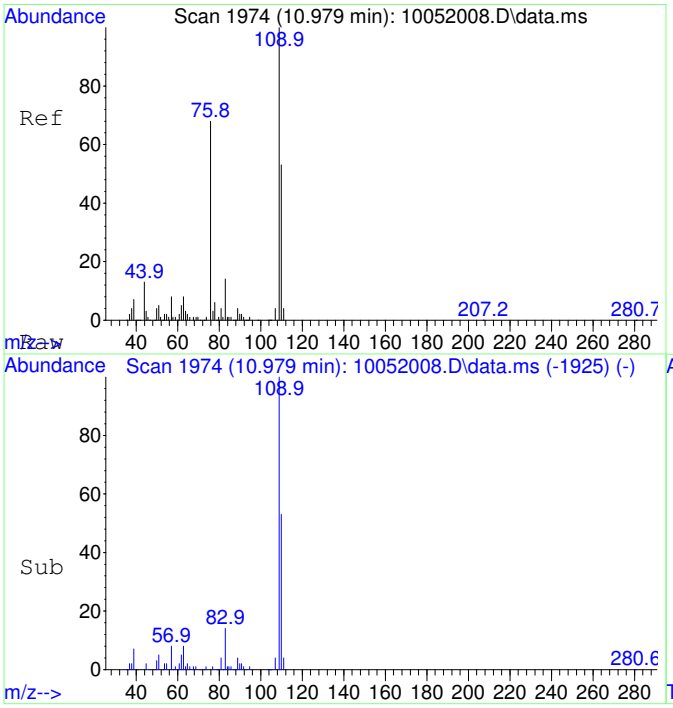


#23
1,2,4-Trimethylbenzene
Concen: 59.72 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:105 Resp: 8880

Ion	Ratio	Lower	Upper
105	100		
120	41.2	17.2	77.2

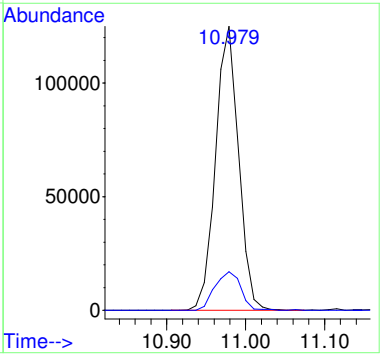


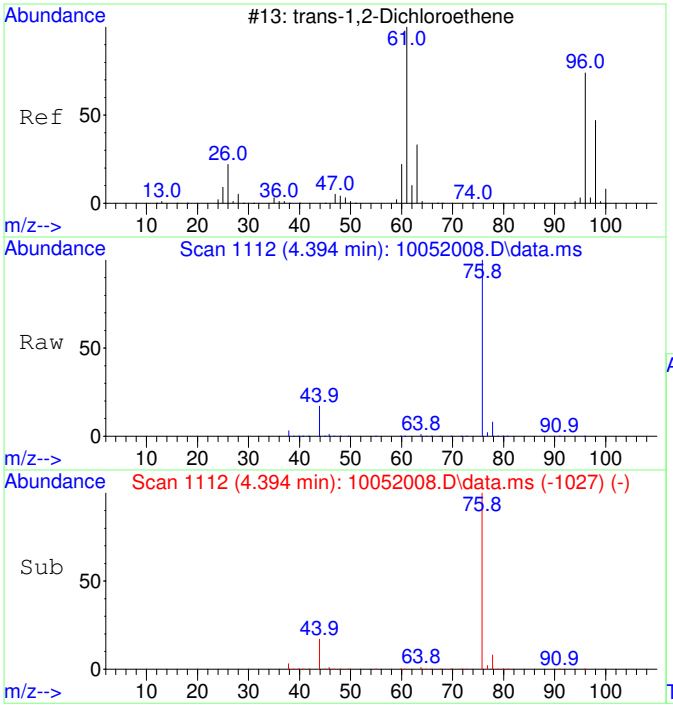


#25
2-Fluorotoluene SCAN
Concen: 4883.68 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:109 Resp: 252437

Ion	Ratio	Lower	Upper
109	100		
83	15.3	0.0	43.8

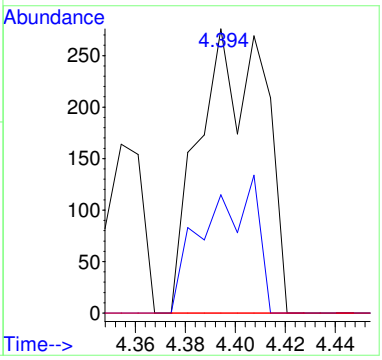


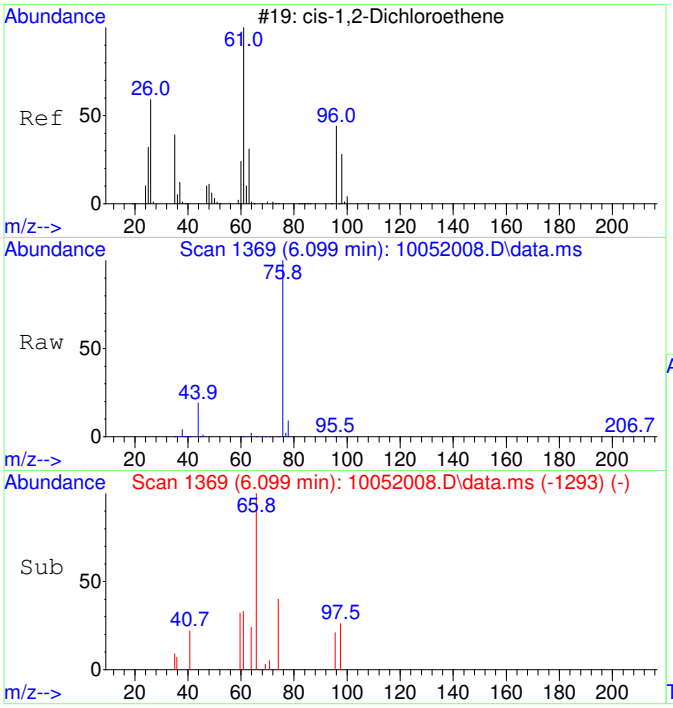


#27
trans-1,2-Dichloroethene SCAN
Concen: 36.81 ug/L
RT: 4.394 min Scan# 1112
Delta R.T. -0.007 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 61 Resp: 500

Ion	Ratio	Lower	Upper
61	100		
96	38.2	49.0	109.0#
98	0.0	20.5	80.5#

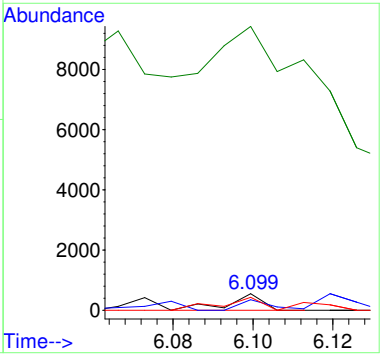


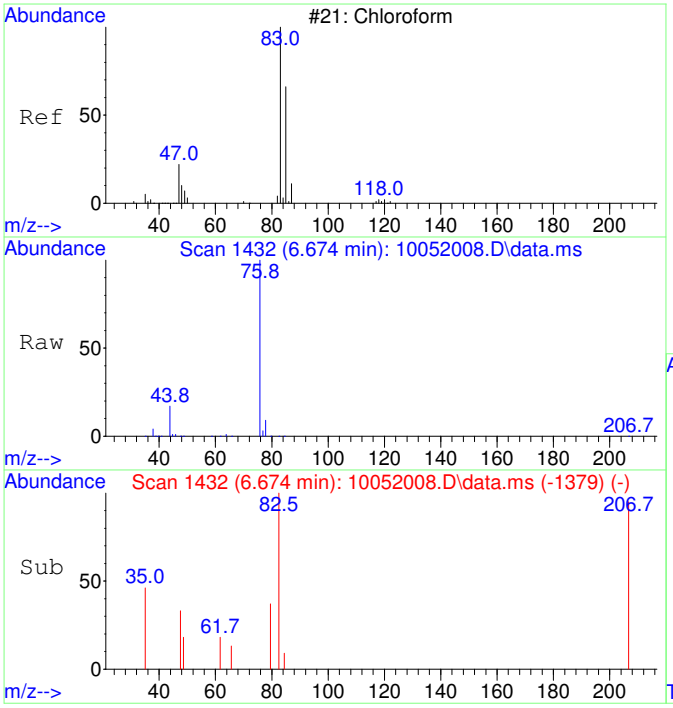


#29
cis-1,2-Dichloroethene SCAN
Concen: 20.01 ug/L
RT: 6.099 min Scan# 1369
Delta R.T. 0.006 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 61 Resp: 337

Ion	Ratio	Lower	Upper
61	100		
96	52.2	39.9	99.9
98	145.1	13.5	73.5#
64	0.0	4.5	64.5#

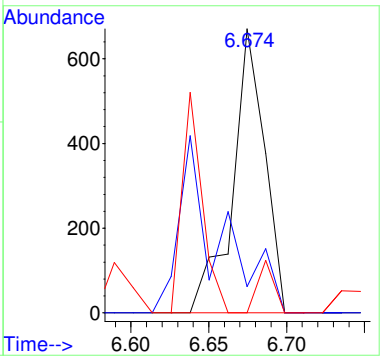


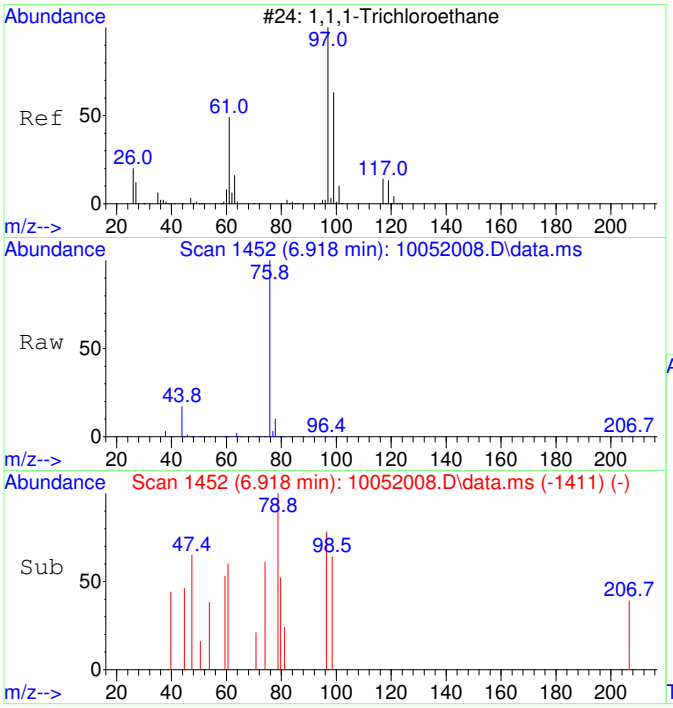


#30
Chloroform SCAN
Concen: 52.71 ug/L
RT: 6.674 min Scan# 1432
Delta R.T. 0.012 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 83 Resp: 963

Ion	Ratio	Lower	Upper
83	100		
85	0.0	34.6	94.6#
47	9.3	0.0	53.4

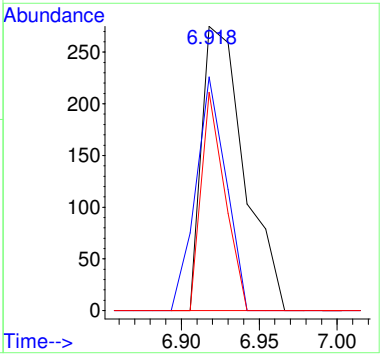


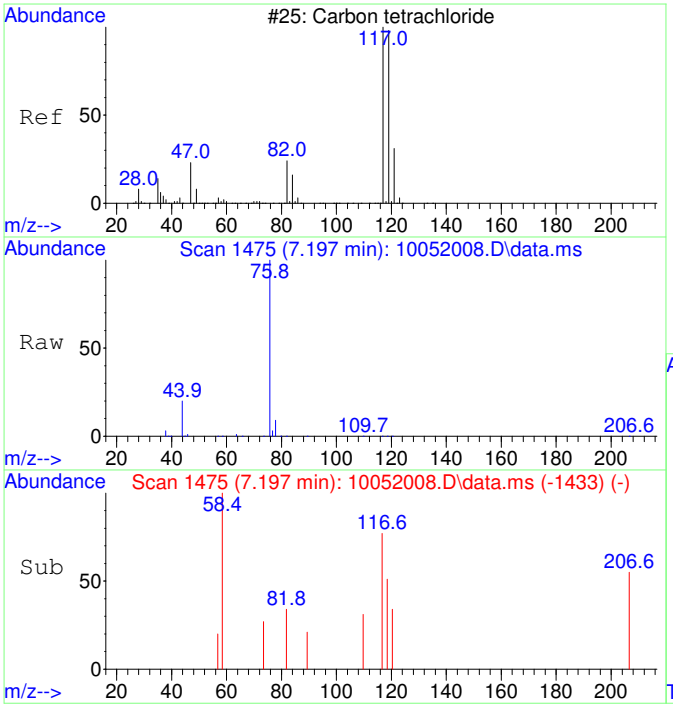


#31
1,1,1-Trichloroethane SCAN
Concen: 31.36 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 97 Resp: 522

Ion	Ratio	Lower	Upper
97	100		
99	58.4	43.6	103.6
61	42.7	18.0	78.0

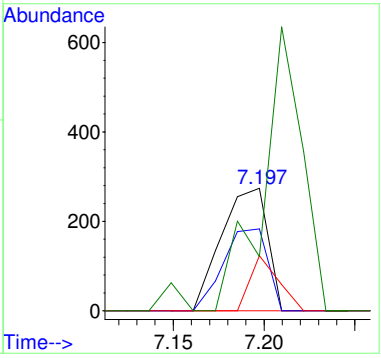


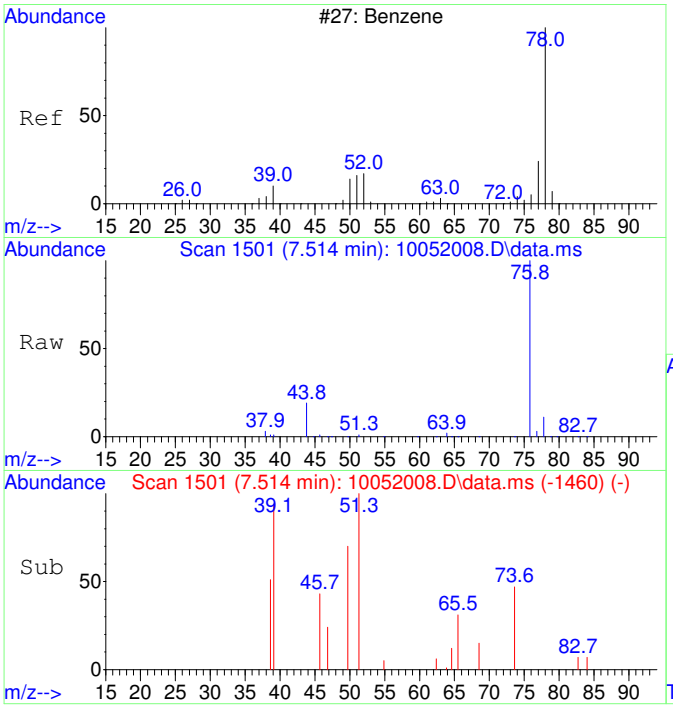


#32
Carbon tetrachloride SCAN
Concen: 27.93 ug/L
RT: 7.197 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:117 Resp: 485

Ion	Ratio	Lower	Upper
117	100		
119	64.3	75.5	135.5#
121	27.4	0.0	58.8
82	207.0	0.0	59.2#

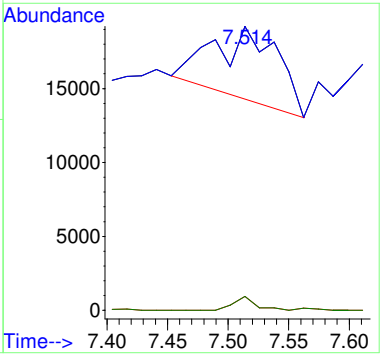


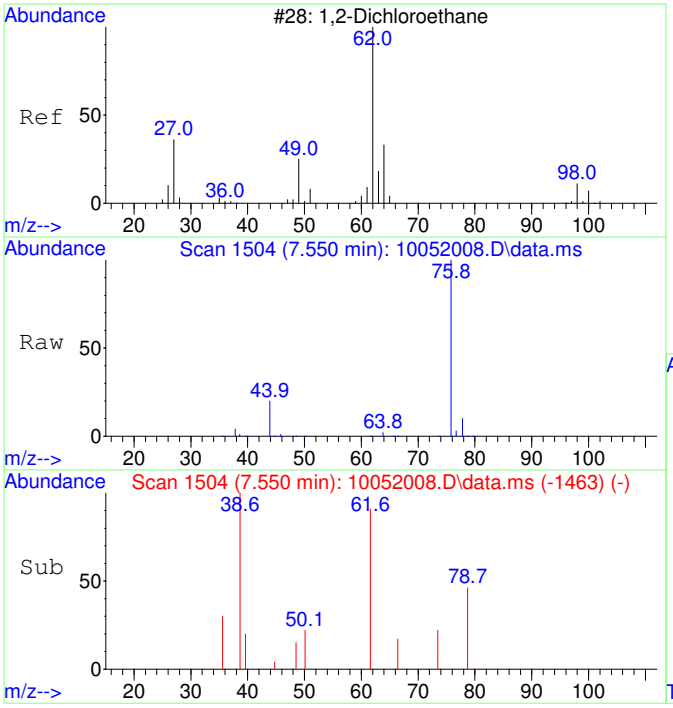


#33
Benzene SCAN
Concen: 371.59 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 78 Resp: 17033

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	6.9	0.0	47.9
51	6.9	0.0	44.1

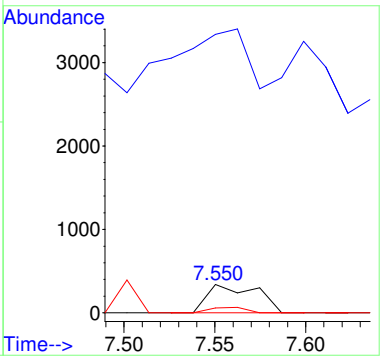


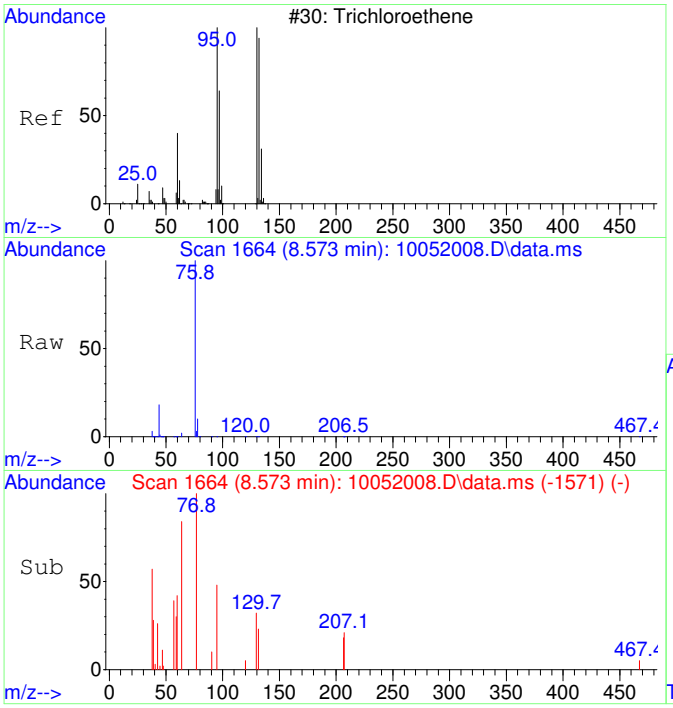


#34
1,2-Dichloroethane SCAN
Concen: 37.93 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 62 Resp: 642

Ion	Ratio	Lower	Upper
62	100		
64	797.2	5.2	65.2#
49	14.2	3.9	63.9

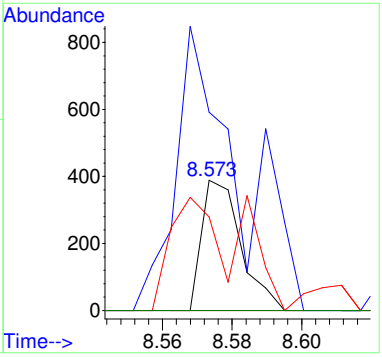


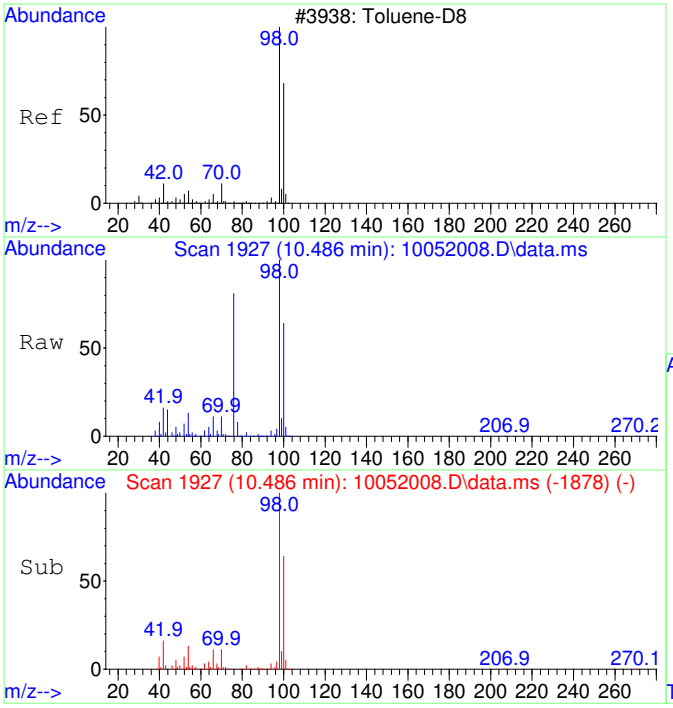


#35
Trichloroethene SCAN
Concen: 24.13 ug/L
RT: 8.573 min Scan# 1664
Delta R.T. 0.005 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:130 Resp: 304

Ion	Ratio	Lower	Upper
130	100		
95	352.0	60.5	120.5#
132	152.3	59.6	119.6#
97	0.0	28.2	88.2#

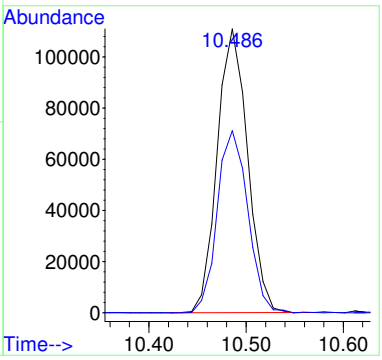


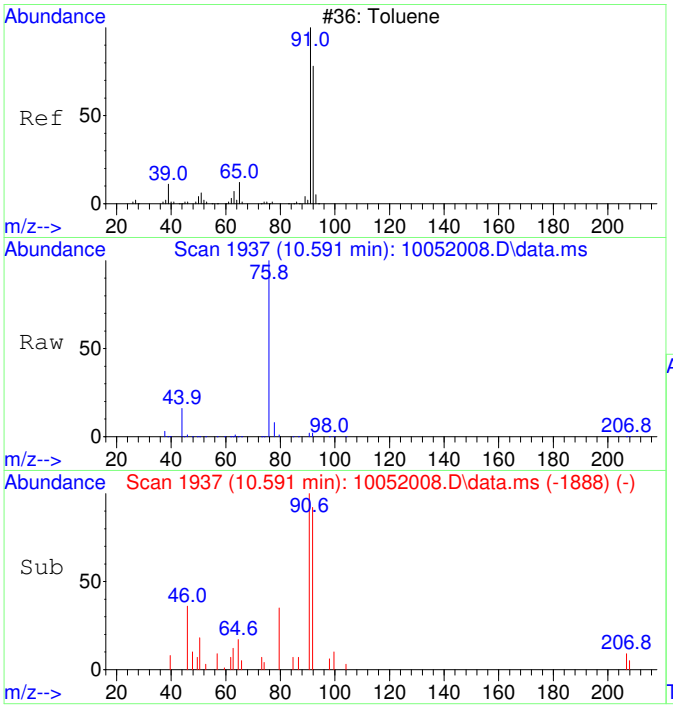


#36
Toluene-d8 SCAN
Concen: 4746.97 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 98 Resp: 239965

Ion	Ratio	Lower	Upper
98	100		
100	64.8	40.0	100.0

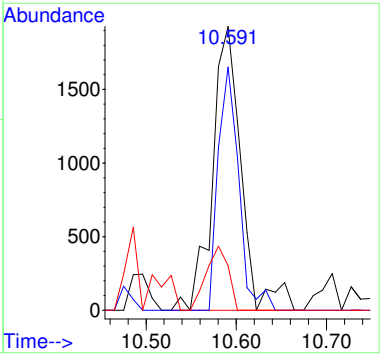


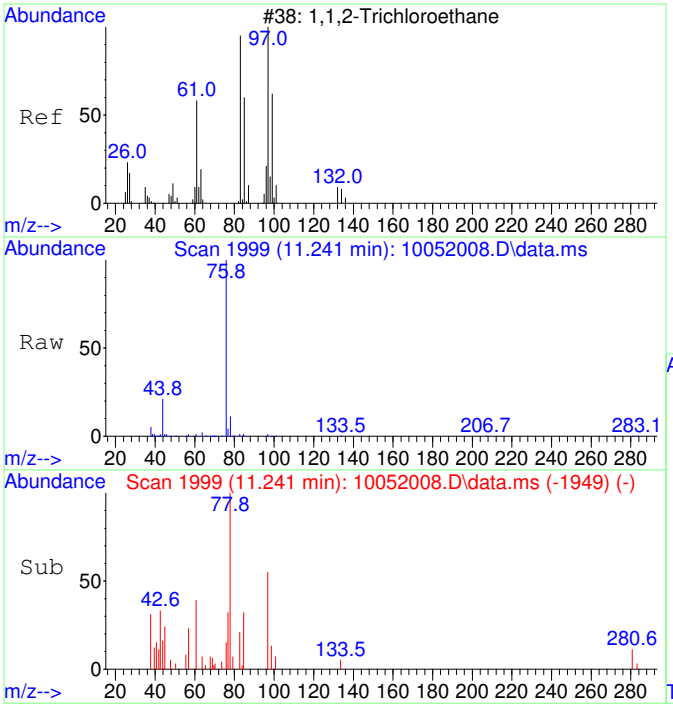


#37
Toluene SCAN
Concen: 65.97 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 4271

Ion	Ratio	Lower	Upper
91	100		
92	61.4	28.3	88.3
65	17.3	0.0	41.0

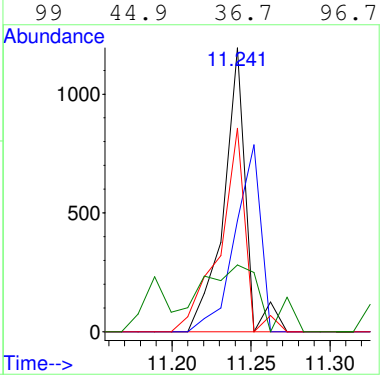


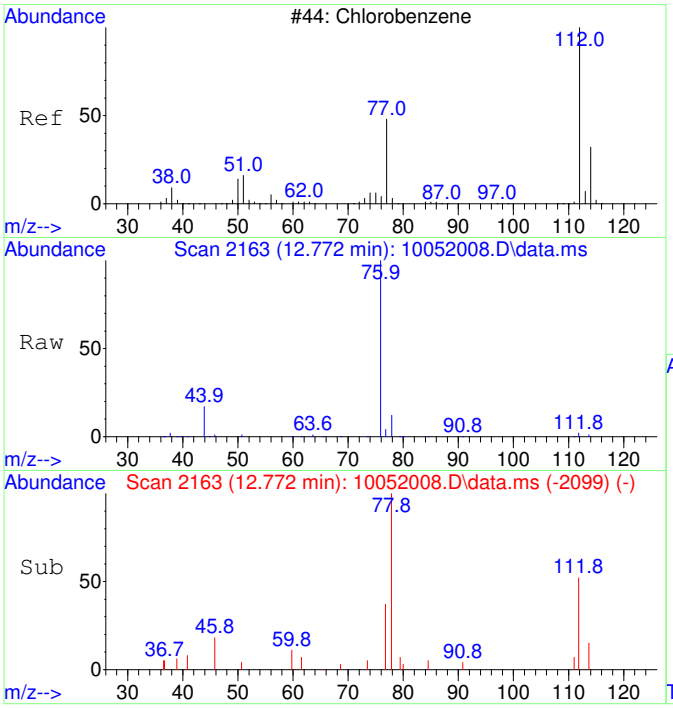


#38
1,1,2-Trichloroethane SCAN
Concen: 80.52 ug/L
RT: 11.241 min Scan# 1999
Delta R.T. 0.021 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 97 Resp: 1170

Ion	Ratio	Lower	Upper
97	100		
83	75.8	57.7	117.7
61	82.9	32.1	92.1
99	44.9	36.7	96.7

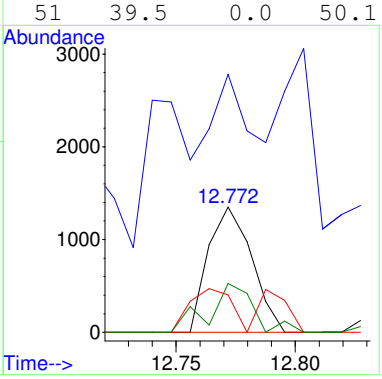


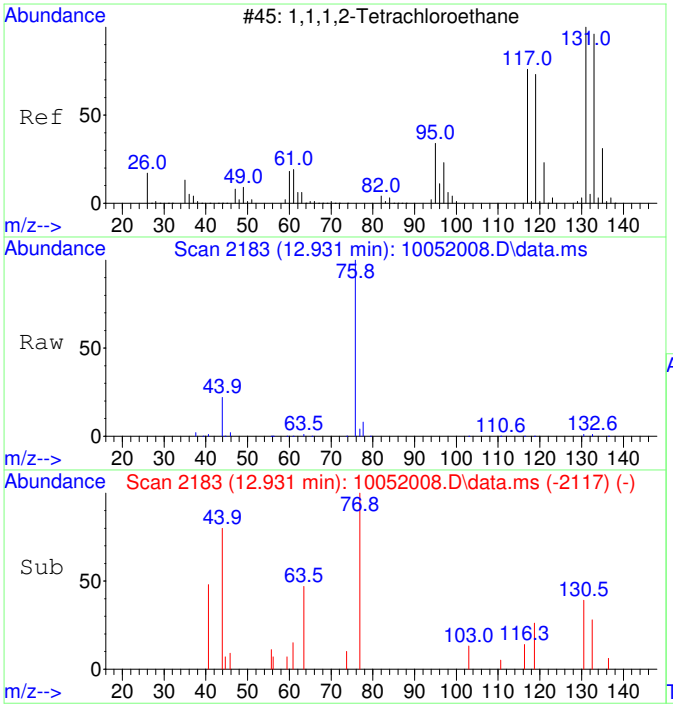


#40
Chlorobenzene SCAN
Concen: 38.81 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.008 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:112 Resp: 1717

Ion	Ratio	Lower	Upper
112	100		
77	0.0	28.2	88.2#
114	33.5	2.3	62.3
51	39.5	0.0	50.1

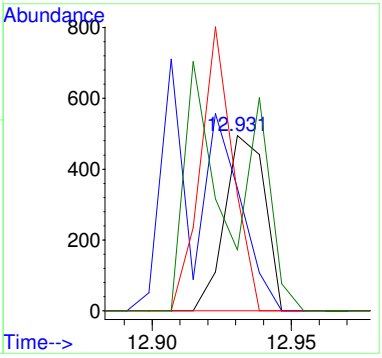


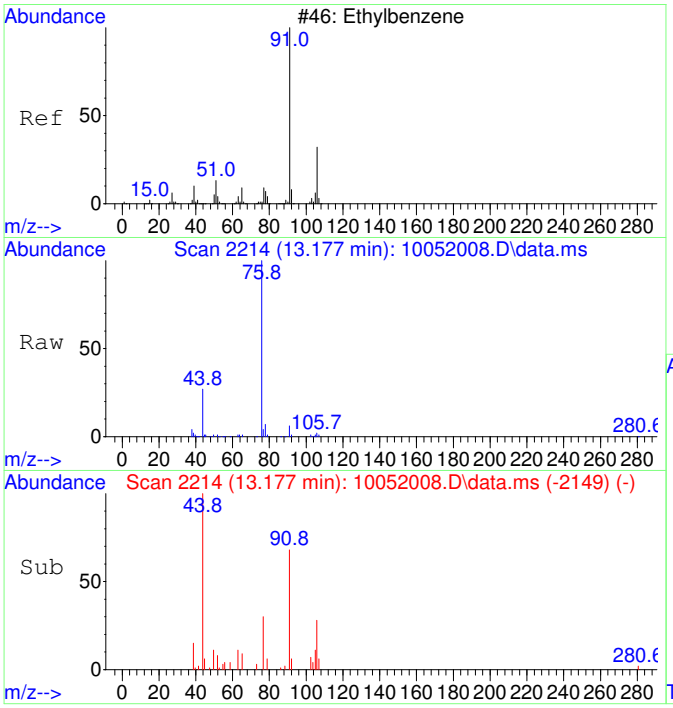


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 30.42 ug/L
RT: 12.931 min Scan# 2183
Delta R.T. 0.024 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:131 Resp: 498

Ion	Ratio	Lower	Upper
131	100		
133	0.0	66.9	126.9#
119	130.5	40.4	100.4#
117	0.0	35.1	95.1#

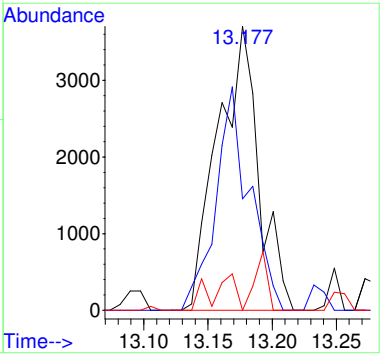


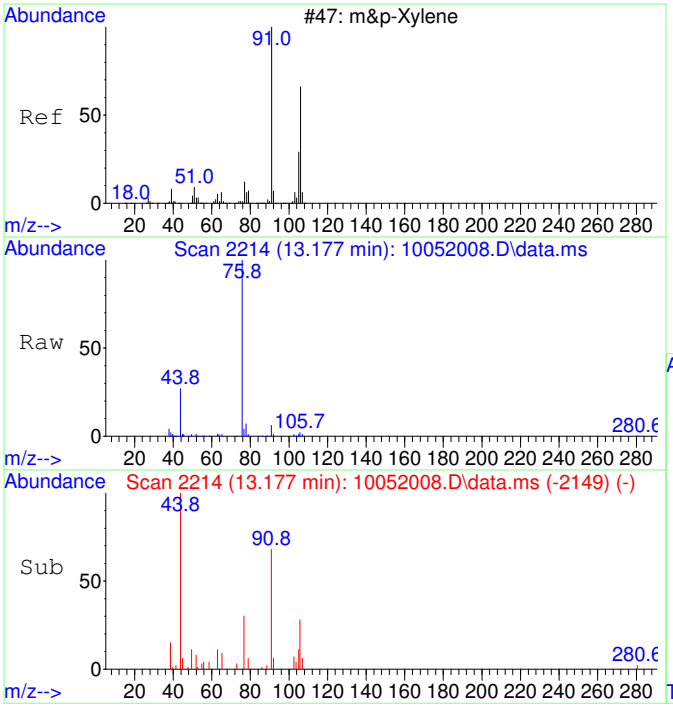


#42
Ethylbenzene SCAN
Concen: 69.98 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 8254

Ion	Ratio	Lower	Upper
91	100		
106	64.1	23.1	83.1
51	7.5	0.0	40.1

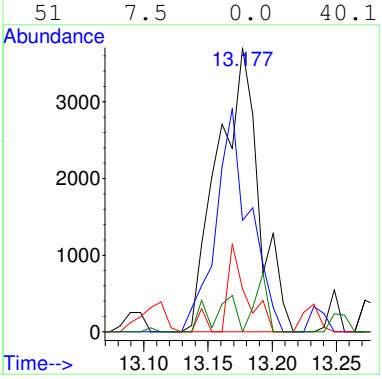


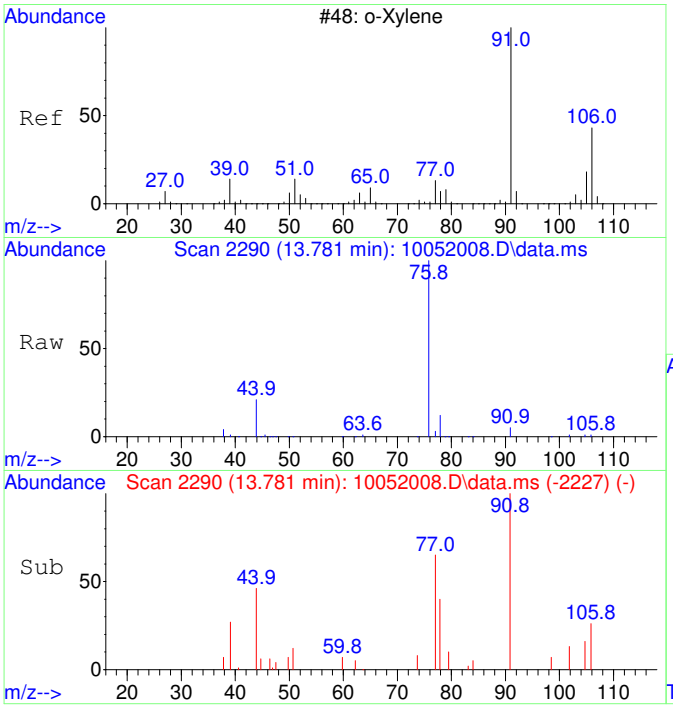


#43
m&p-Xylene SCAN
Concen: 69.98 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 8254

Ion	Ratio	Lower	Upper
91	100		
106	64.1	23.1	83.1
105	15.4	0.0	54.7
51	7.5	0.0	40.1

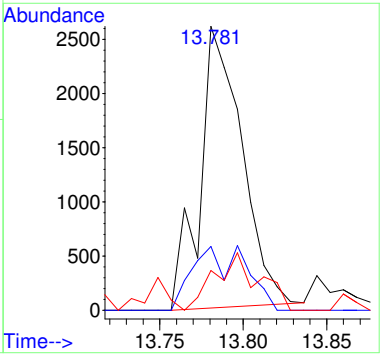


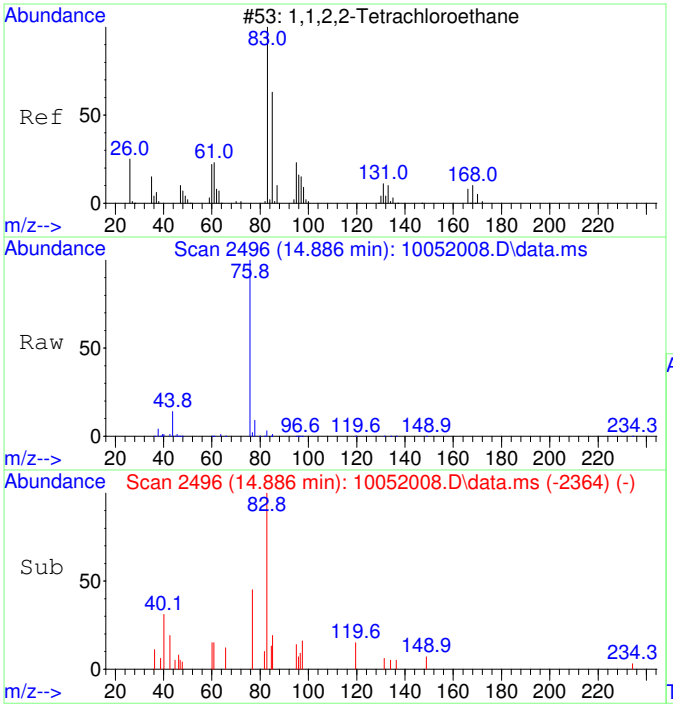


#44
o-Xylene SCAN
Concen: 72.29 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 4564

Ion	Ratio	Lower	Upper
91	100		
106	28.4	18.0	78.0
105	21.6	0.0	56.6

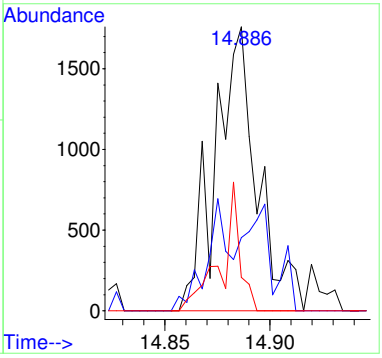


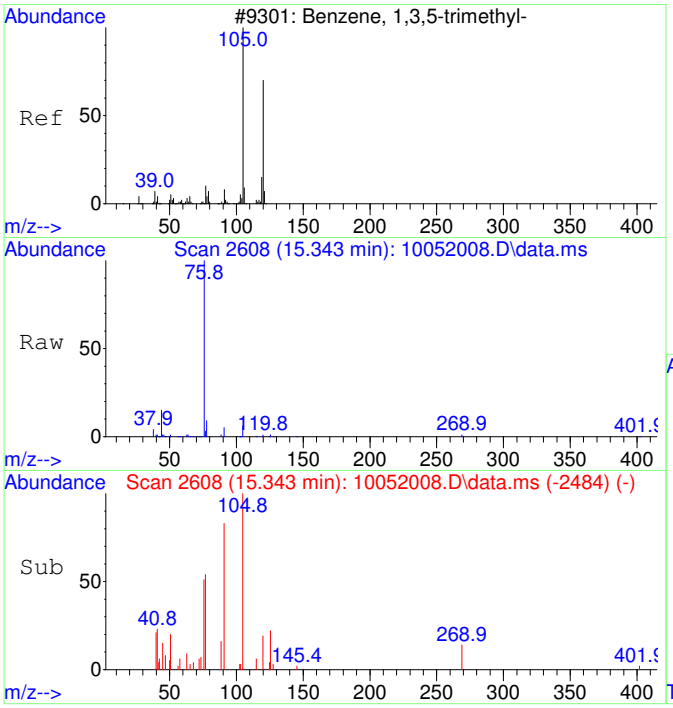


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 79.20 ug/L
RT: 14.886 min Scan# 2496
Delta R.T. 0.015 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 83 Resp: 2438

Ion	Ratio	Lower	Upper
83	100		
85	8.7	35.9	95.9#
95	20.1	0.0	47.4

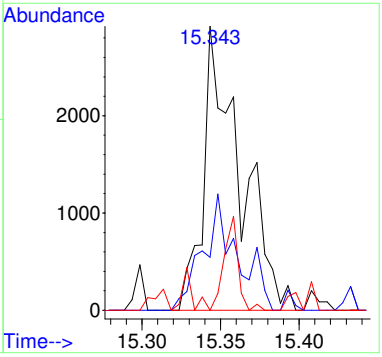


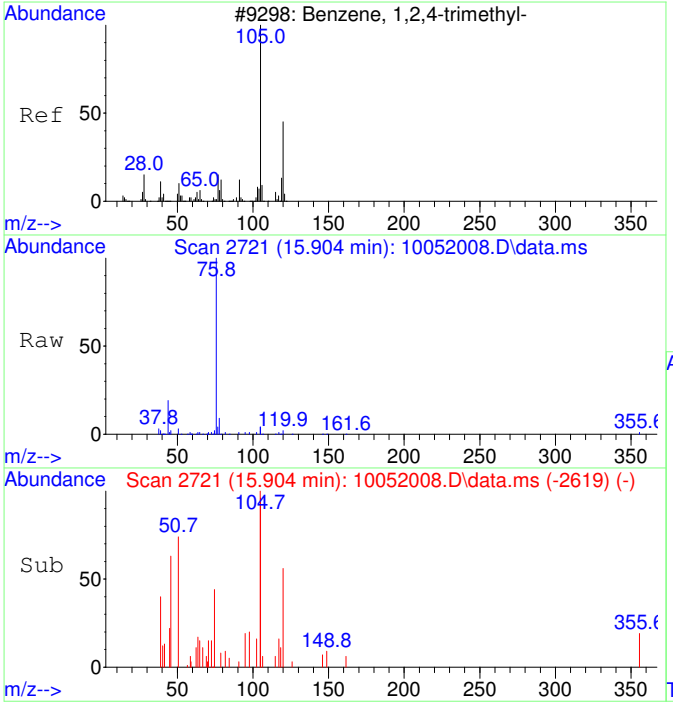


#46
1,3,5-Trimethylbenzene SCAN
Concen: 71.18 ug/L
RT: 15.343 min Scan# 2608
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:105 Resp: 4736

Ion	Ratio	Lower	Upper
105	100		
120	38.2	18.3	78.3
119	12.6	0.0	43.1

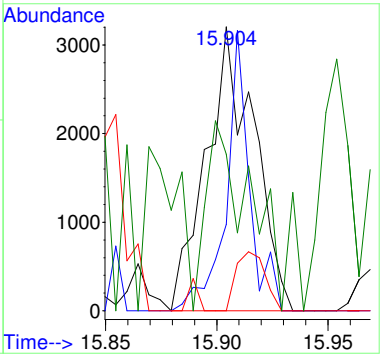




#47
1,2,4-Trimethylbenzene SCAN
Concen: 70.20 ug/L
RT: 15.904 min Scan# 2721
Delta R.T. 0.005 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:105 Resp: 4779

Ion	Ratio	Lower	Upper
105	100		
120	48.0	16.9	76.9
119	12.7	0.0	41.9
77	61.3	0.0	42.3#



Quantitation Report (QT Reviewed)

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M.I. Performed By:
TD at 2:39 pm, Oct 05, 2020

M.I. Approved By:
ZR at 3:56 pm, Oct 07, 2020

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052008.D
Acq On : 5 Oct 2020 12:39
InstName : AG5975C
Operator : TD
Sample : B20J004-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 05 12:57:47 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

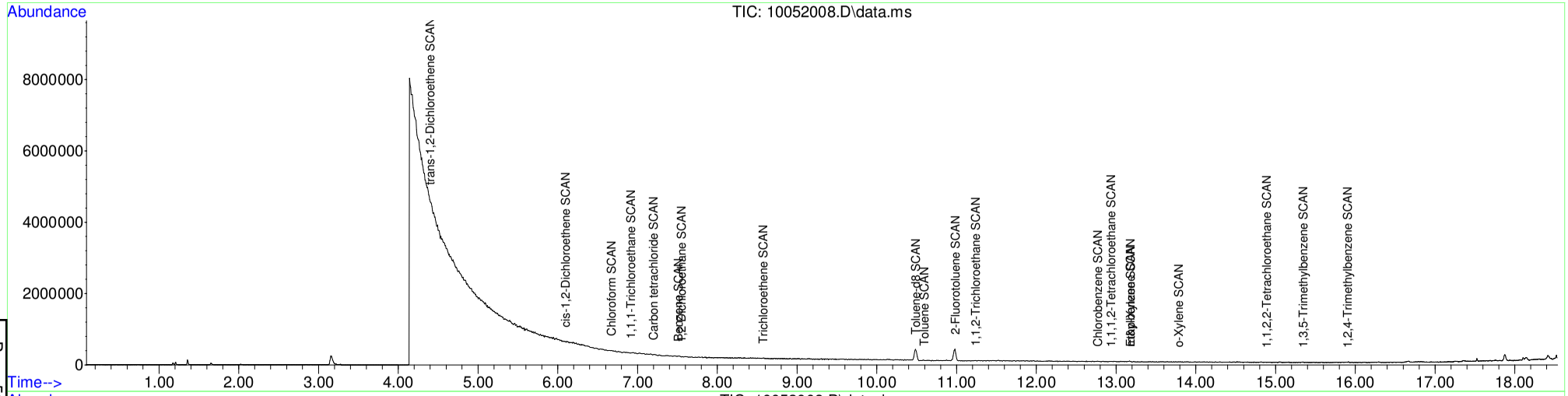
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	530253	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.487	98	463791	4468.00	ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 89.36%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.093	61	909m	42.93	ug/L	
3] trans-1,2-Dichloroethene	4.395	61	1168	47.74	ug/L	73
4] 1,1-Dichloroethane	5.099	63	1460	47.94	ug/L	80
5] cis-1,2-Dichloroethene	6.094	61	1586	49.34	ug/L	97
6] Chloroform	6.664	83	1731	52.61	ug/L	98
7] 1,1,1-Trichloroethane	6.919	97	1732	48.47	ug/L	100
8] Carbon tetrachloride	7.187	117	1613	47.96	ug/L	98
9] Benzene	7.515	78	9493	105.37	ug/L	61
10] 1,2-Dichloroethane	7.552	62	1664	51.74	ug/L #	29
11] Trichloroethene	8.575	130	1396	51.46	ug/L	91
13] Toluene	10.582	91	8176	61.78	ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	1437	49.83	ug/L	89
15] Tetrachloroethene	11.442	166	1929	50.37	ug/L	95
16] Chlorobenzene	12.773	112	4687	49.46	ug/L	87
17] 1,1,1,2-Tetrachloroethane	12.924	131	1761	51.86	ug/L	95
18] Ethylbenzene	12.980	91	9701	60.22	ug/L	94
19] m&p-Xylene	13.170	91	15752	125.12	ug/L	95
20] o-Xylene	13.782	91	7011	52.12	ug/L	95
21] 1,1,2,2-Tetrachloroethane	14.880	83	2983	50.04	ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	8046	56.20	ug/L	95
23] 1,2,4-Trimethylbenzene	15.906	105	8880	59.72	ug/L	91
25) 2-Fluorotoluene SCAN	10.979	109	252437	4883.68	ug/L	96
27) trans-1,2-Dichloroethe...	4.394	61	500	36.81	ug/L #	43
29) cis-1,2-Dichloroethene...	6.099	61	337	20.01	ug/L #	29
30) Chloroform SCAN	6.674	83	963	52.71	ug/L #	32
31) 1,1,1-Trichloroethane ...	6.918	97	522	31.36	ug/L	86
32) Carbon tetrachloride SCAN	7.197	117	485	27.93	ug/L #	14
33) Benzene SCAN	7.514	78	17033	371.59	ug/L	95
34) 1,2-Dichloroethane SCAN	7.550	62	642	37.93	ug/L #	1
35) Trichloroethene SCAN	8.573	130	304	24.13	ug/L #	1
36) Toluene-d8 SCAN	10.486	98	239965	4746.97	ug/L	94
37) Toluene SCAN	10.591	91	4271	65.97	ug/L	94
38) 1,1,2-Trichloroethane ...	11.241	97	1170	80.52	ug/L	79
40) Chlorobenzene SCAN	12.772	112	1717	38.81	ug/L #	51
41) 1,1,1,2-Tetrachloroeth...	12.931	131	498	30.42	ug/L #	14
42) Ethylbenzene SCAN	13.177	91	8254	69.98	ug/L	86
43) m&p-Xylene SCAN	13.177	91	8254	69.98	ug/L	85
44) o-Xylene SCAN	13.781	91	4564	72.29	ug/L	78
45) 1,1,2,2-Tetrachloroeth...	14.886	83	2438	79.20	ug/L #	42
46) 1,3,5-Trimethylbenzene...	15.343	105	4736	71.18	ug/L	88
47) 1,2,4-Trimethylbenzene...	15.904	105	4779	70.20	ug/L #	77

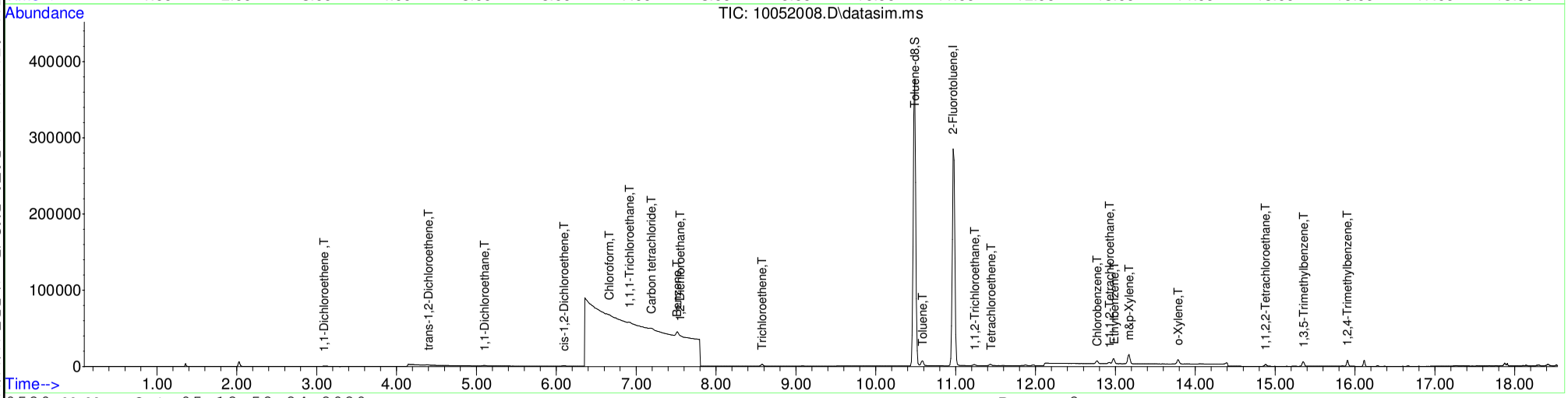
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052008.D
Acq On : 5 Oct 2020 12:39
InstName : AG5975C
Operator : TD
Sample : B20J004-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 05 12:57:47 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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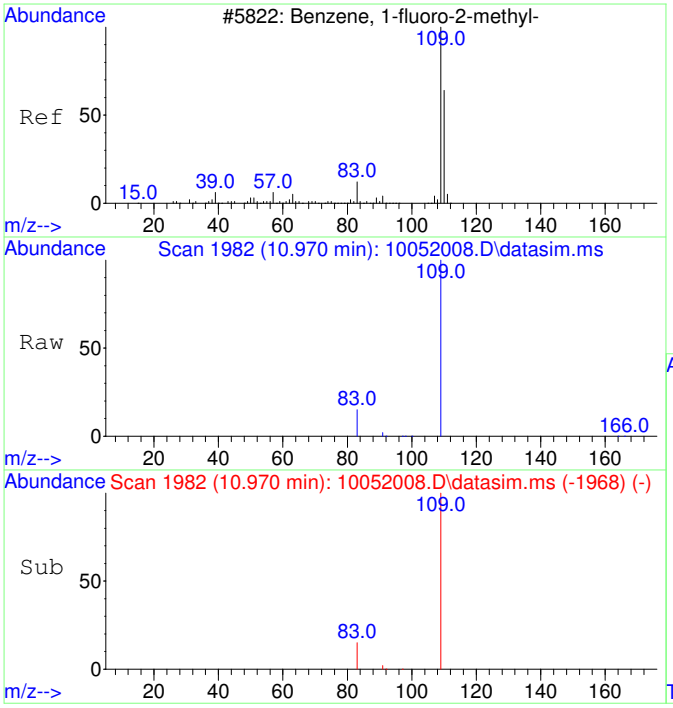
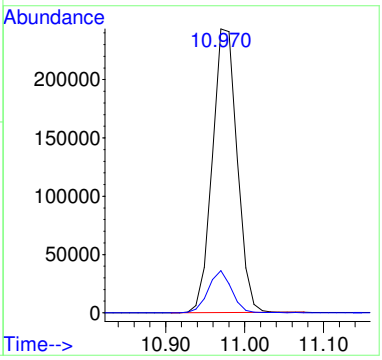
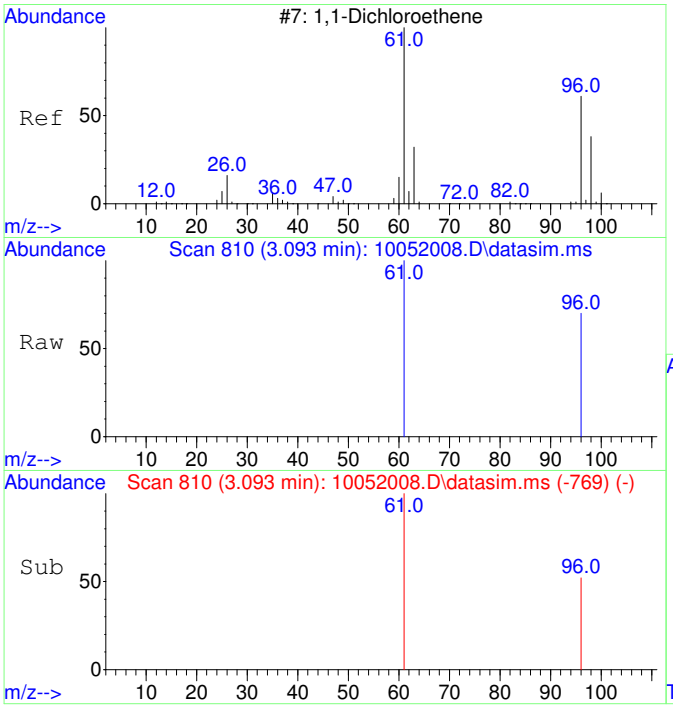


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:109 Resp: 530253

Ion	Ratio	Lower	Upper
109	100		
83	13.9	0.0	42.3

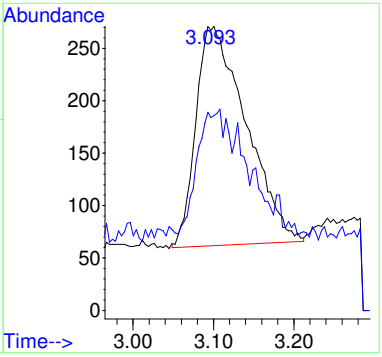


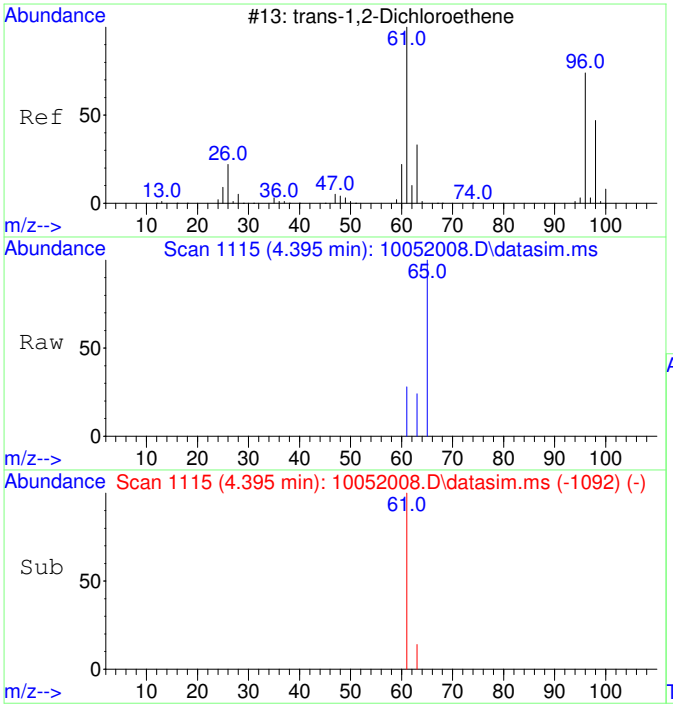


#2
1,1-Dichloroethene
Concen: 42.93 ug/L m
RT: 3.093 min Scan# 810
Delta R.T. 0.003 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 61 Resp: 909

Ion	Ratio	Lower	Upper
61	100		
96	36.4	37.2	97.2#

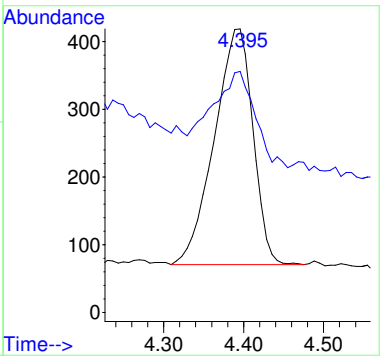


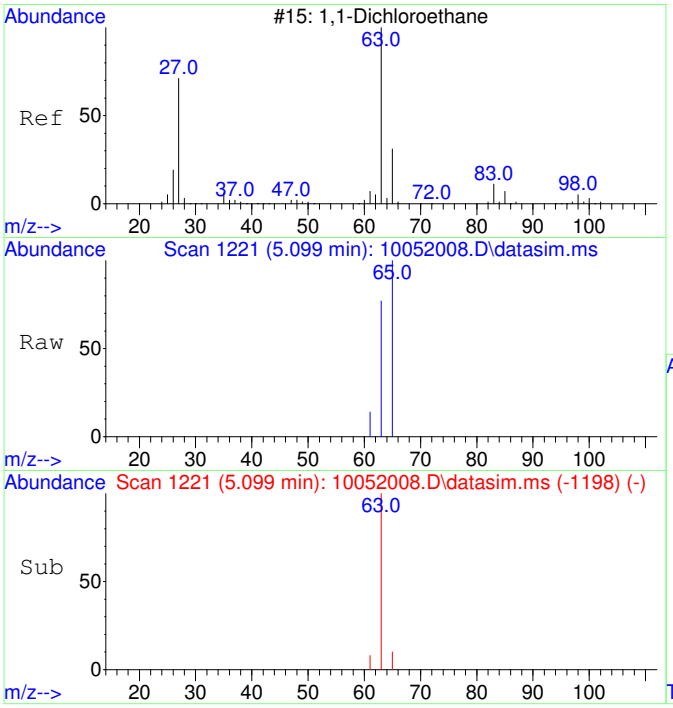


#3
trans-1,2-Dichloroethene
Concen: 47.74 ug/L
RT: 4.395 min Scan# 1115
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 61 Resp: 1168

Ion	Ratio	Lower	Upper
61	100		
63	47.6	2.4	62.4

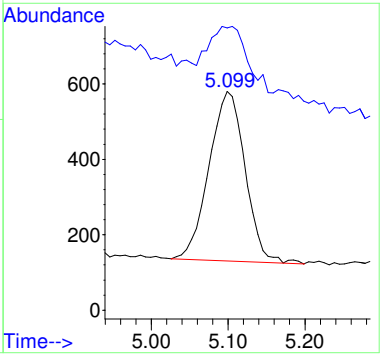


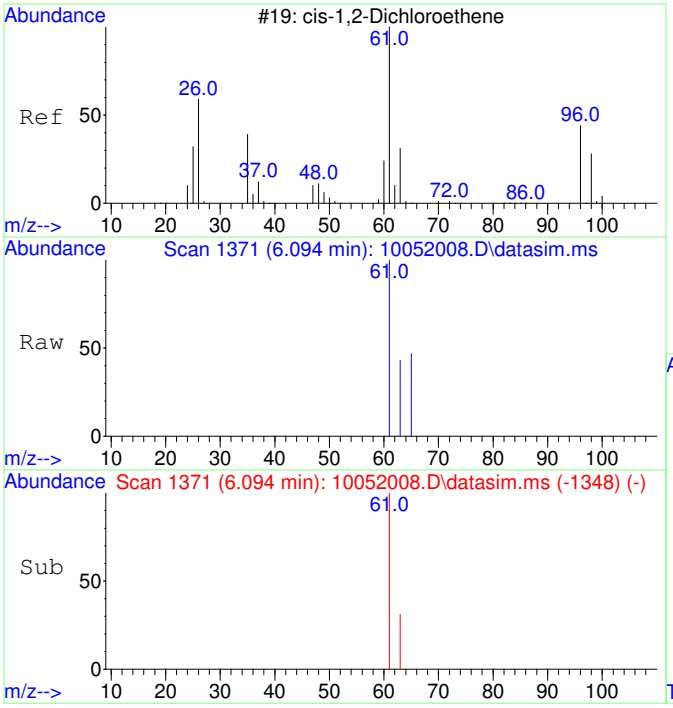


#4
1,1-Dichloroethane
Concen: 47.94 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 63 Resp: 1460

Ion	Ratio	Lower	Upper
63	100		
65	42.7	1.8	61.8

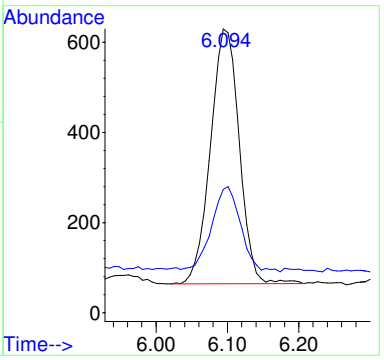


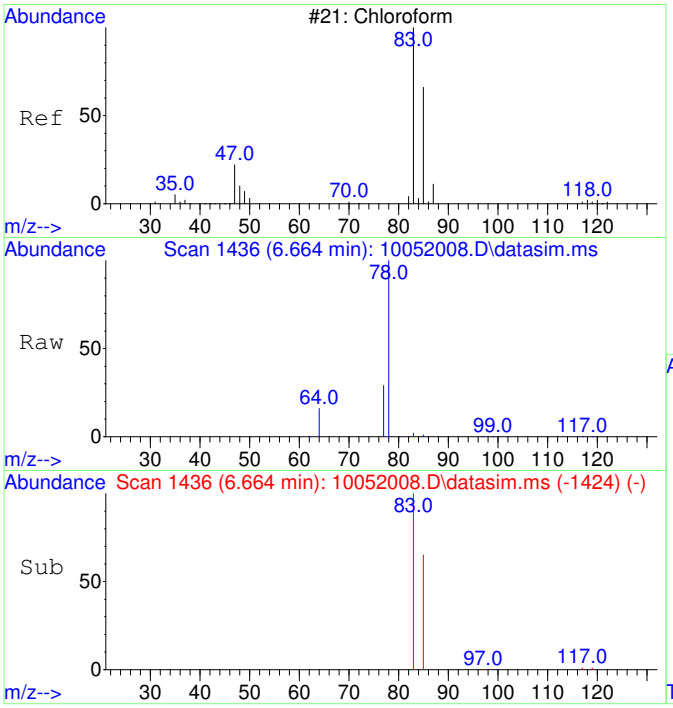


#5
cis-1,2-Dichloroethene
Concen: 49.34 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 61 Resp: 1586

Ion	Ratio	Lower	Upper
61	100		
63	34.0	2.5	62.5

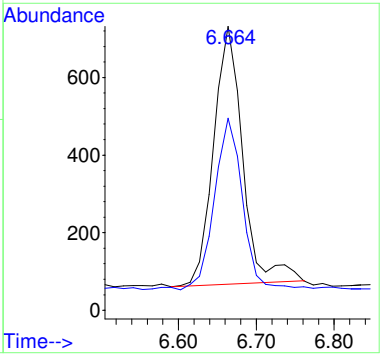


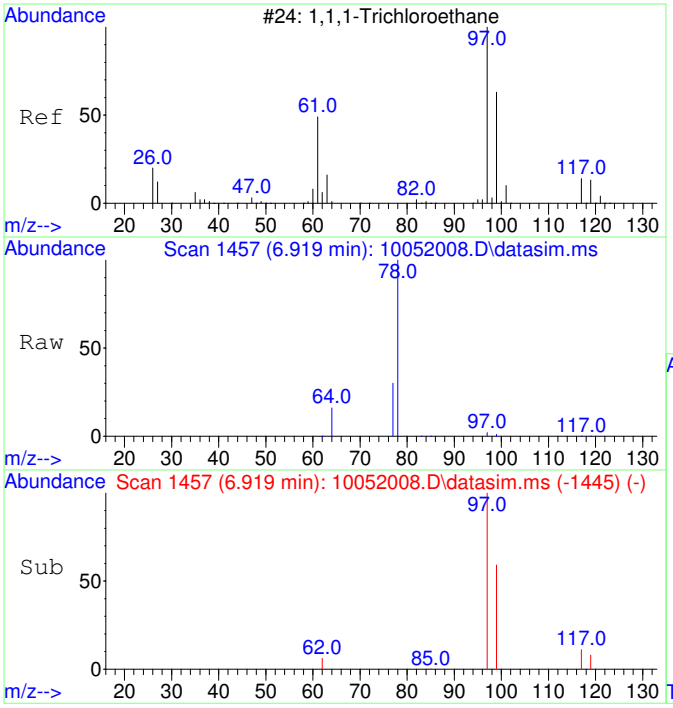


#6
Chloroform
Concen: 52.61 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 83 Resp: 1731

Ion	Ratio	Lower	Upper
83	100		
85	63.8	35.1	95.1

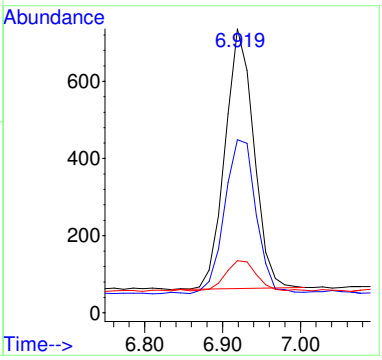


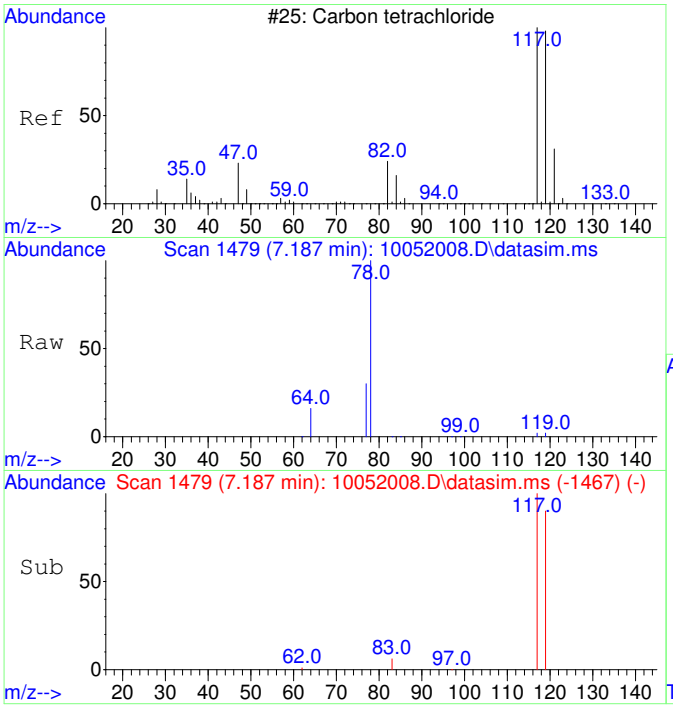


#7
1,1,1-Trichloroethane
Concen: 48.47 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 97 Resp: 1732

Ion	Ratio	Lower	Upper
97	100		
99	64.4	34.6	94.6
117	12.6	0.0	43.2

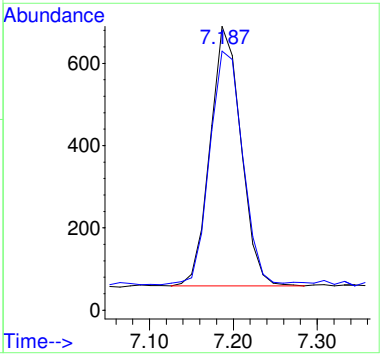


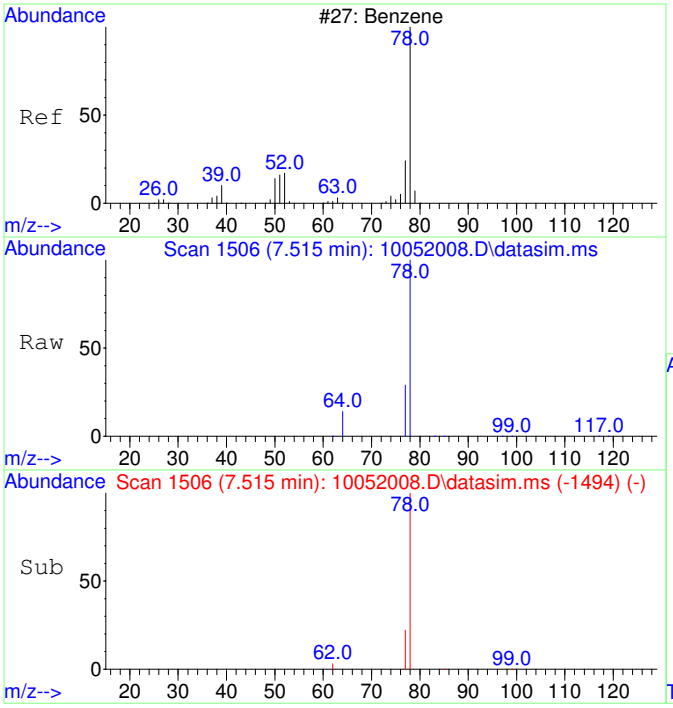


#8
Carbon tetrachloride
Concen: 47.96 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:117 Resp: 1613

Ion	Ratio	Lower	Upper
117	100		
119	94.4	66.4	126.4

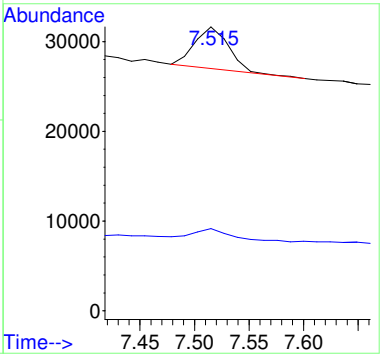


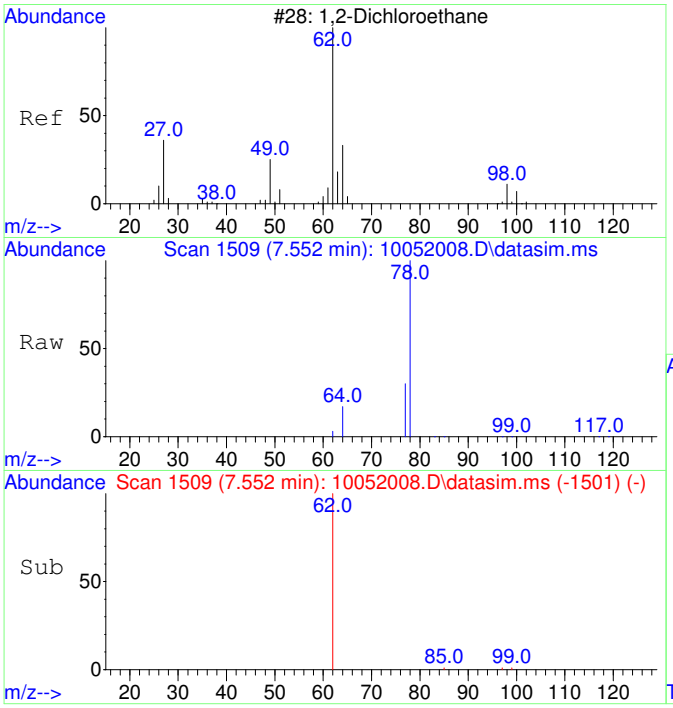


#9
Benzene
Concen: 105.37 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 78 Resp: 9493

Ion	Ratio	Lower	Upper
78	100		
77	42.0	0.0	53.2

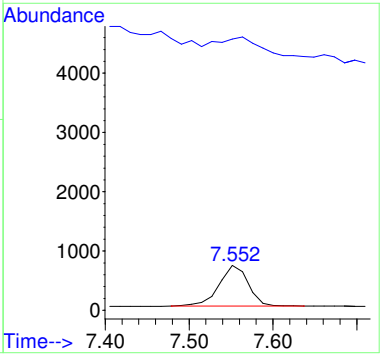


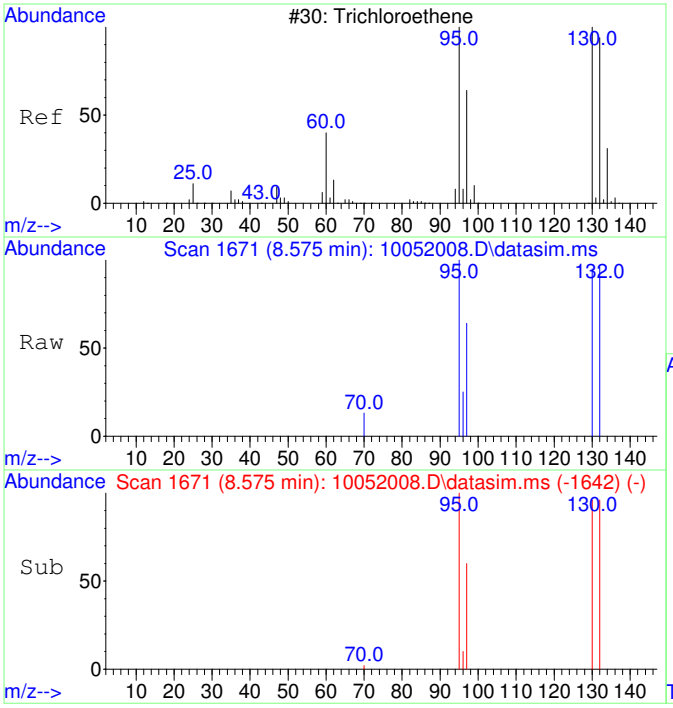


#10
1,2-Dichloroethane
Concen: 51.74 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 62 Resp: 1664

Ion	Ratio	Lower	Upper
62	100		
64	72.2	2.3	62.3#

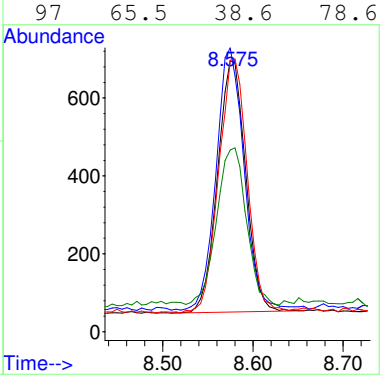


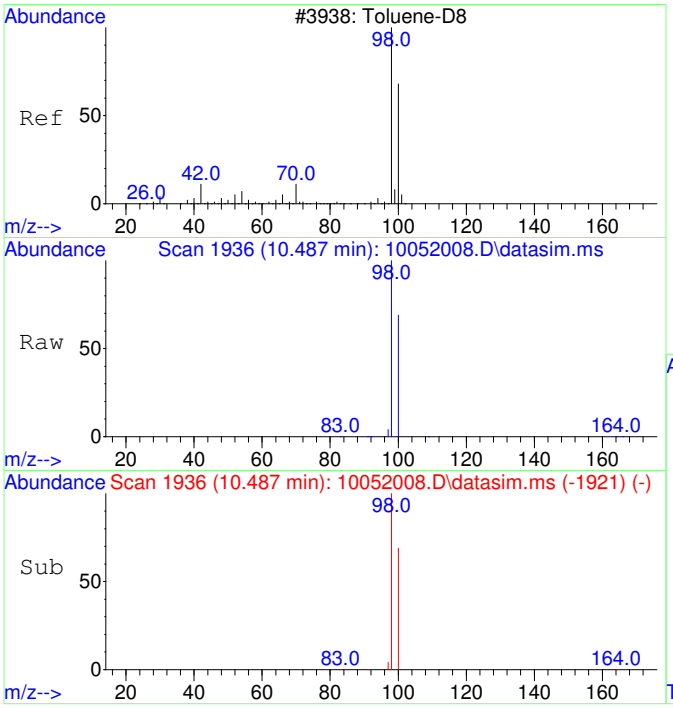


#11
Trichloroethene
Concen: 51.46 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:130 Resp: 1396

Ion	Ratio	Lower	Upper
130	100		
95	103.4	60.7	120.7
132	101.1	76.0	116.0
97	65.5	38.6	78.6

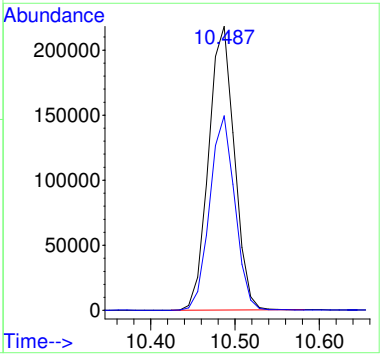


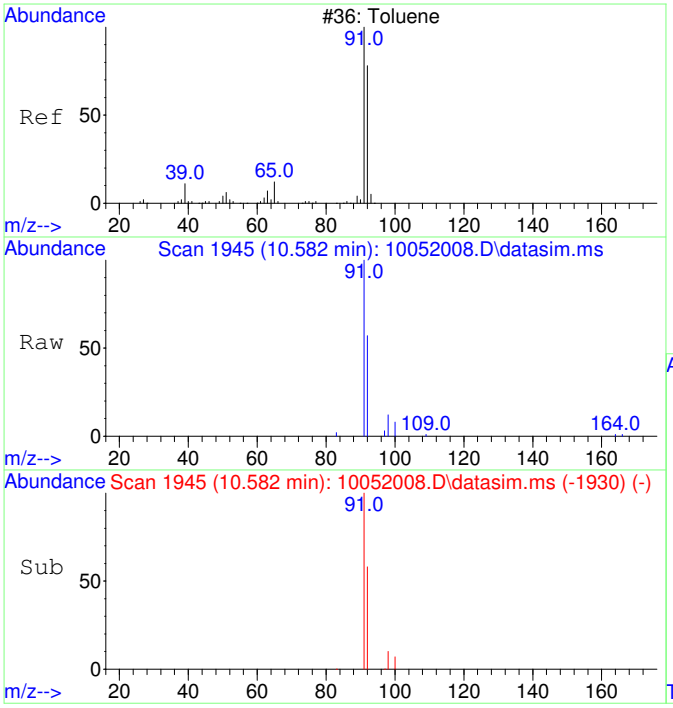


#12
Toluene-d8
Concen: 4468.00 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 98 Resp: 463791

Ion	Ratio	Lower	Upper
98	100		
100	66.7	37.1	97.1

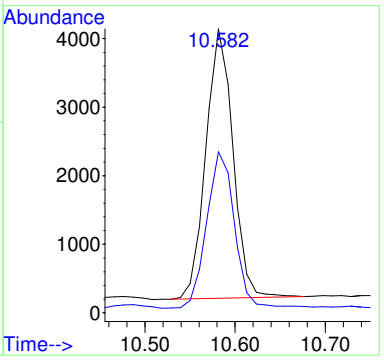


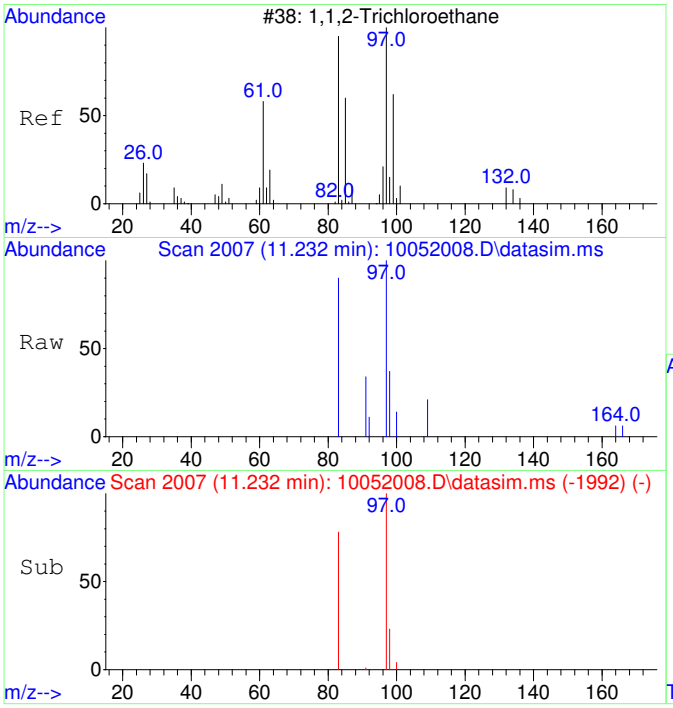


#13
Toluene
Concen: 61.78 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 8176

Ion	Ratio	Lower	Upper
91	100		
92	60.3	29.9	89.9

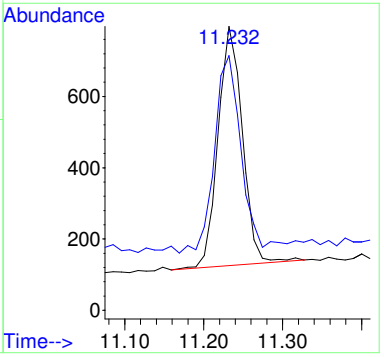


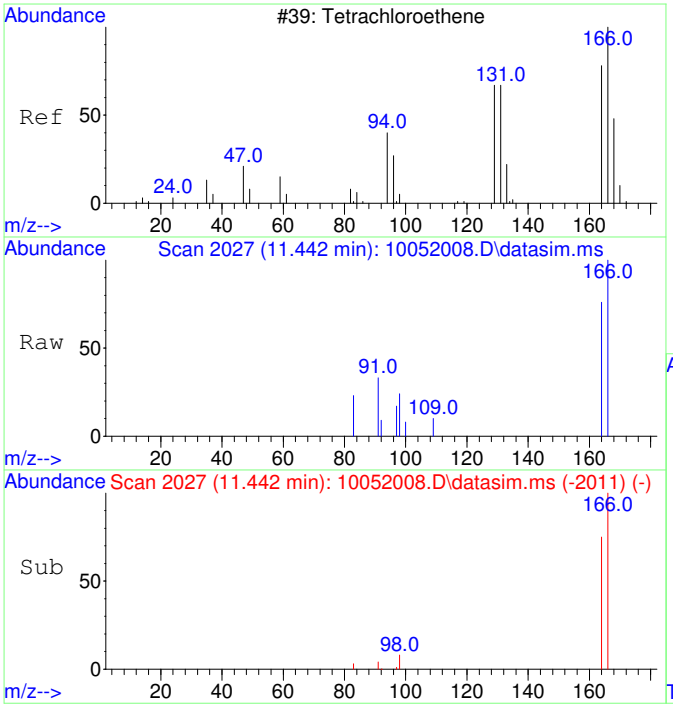


#14
1,1,2-Trichloroethane
Concen: 49.83 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 97 Resp: 1437

Ion	Ratio	Lower	Upper
97	100		
83	91.0	51.2	111.2

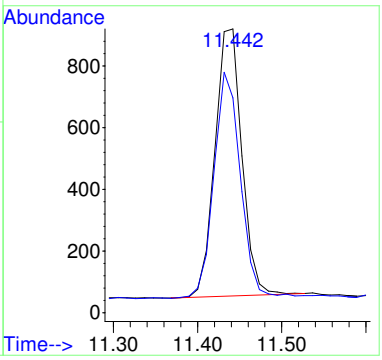


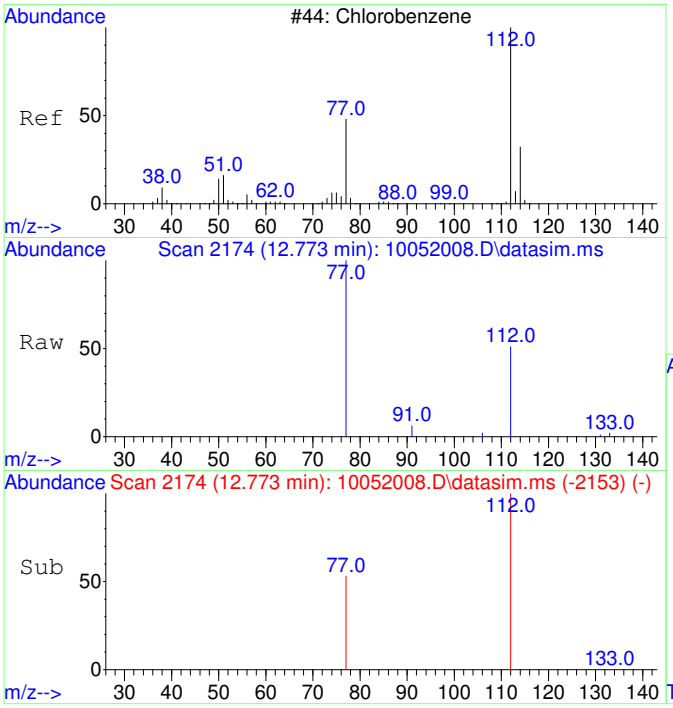


#15
Tetrachloroethene
Concen: 50.37 ug/L
RT: 11.442 min Scan# 2027
Delta R.T. 0.021 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:166 Resp: 1929

Ion	Ratio	Lower	Upper
166	100		
164	82.0	47.8	107.8

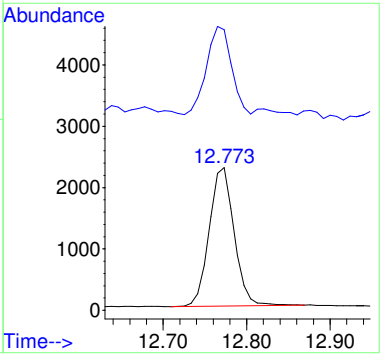


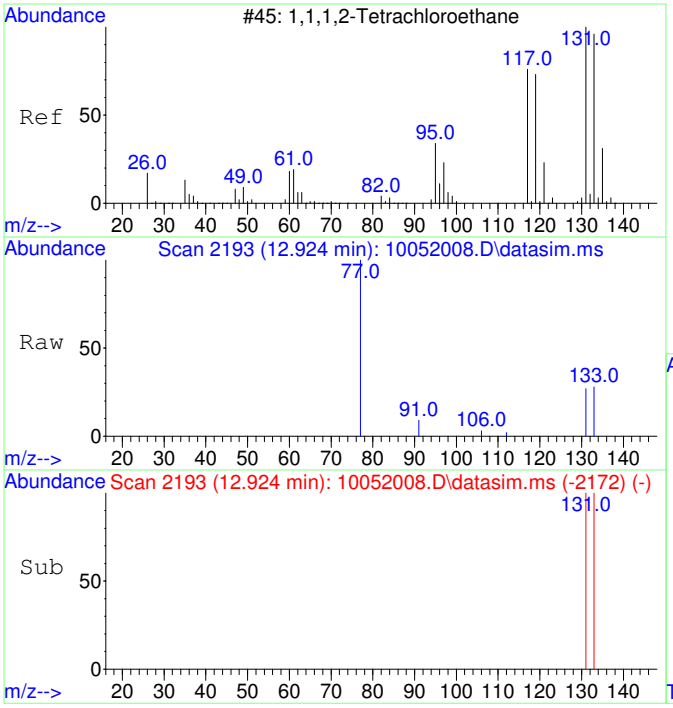


#16
Chlorobenzene
Concen: 49.46 ug/L
RT: 12.773 min Scan# 2174
Delta R.T. 0.016 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:112 Resp: 4687

Ion	Ratio	Lower	Upper
112	100		
77	63.1	23.6	83.6

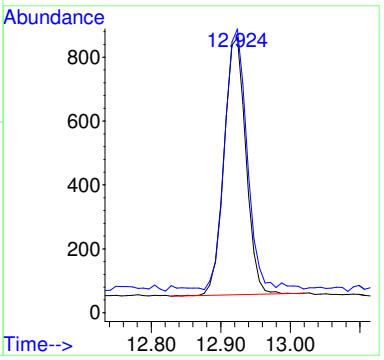


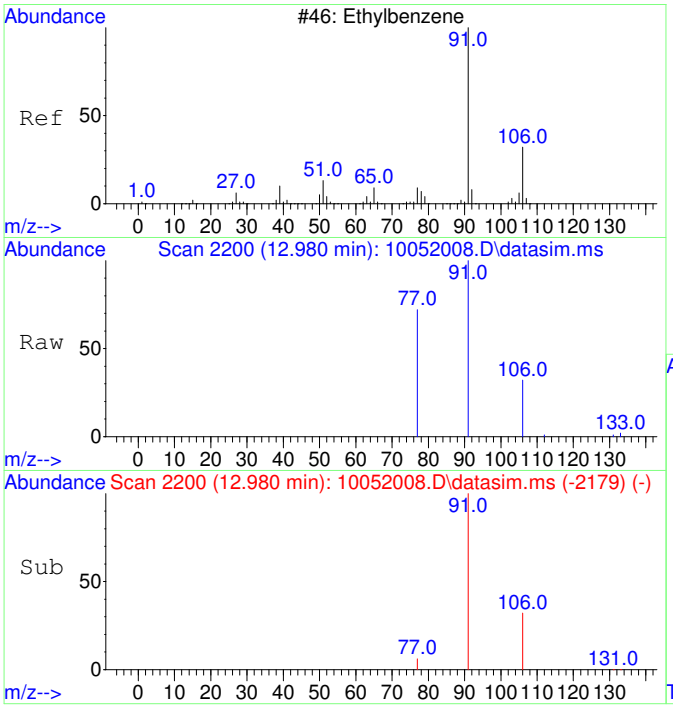


#17
1,1,1,2-Tetrachloroethane
Concen: 51.86 ug/L
RT: 12.924 min Scan# 2193
Delta R.T. 0.016 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:131 Resp: 1761

Ion	Ratio	Lower	Upper
131	100		
133	101.3	66.3	126.3

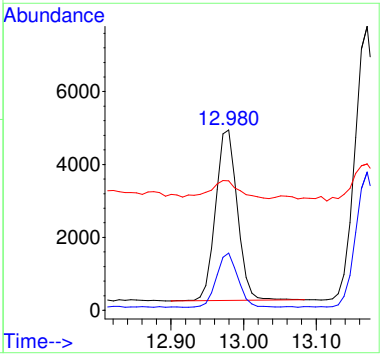


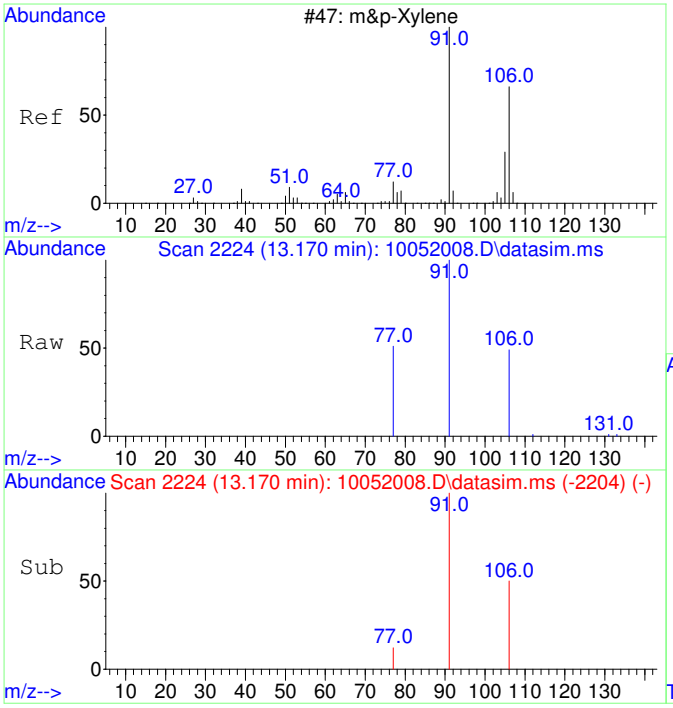


#18
Ethylbenzene
Concen: 60.22 ug/L
RT: 12.980 min Scan# 2200
Delta R.T. 0.016 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 9701

Ion	Ratio	Lower	Upper
91	100		
106	31.2	3.0	63.0
77	14.3	0.0	38.2

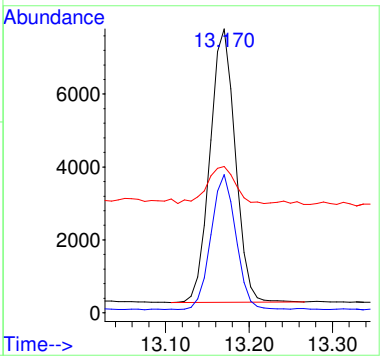


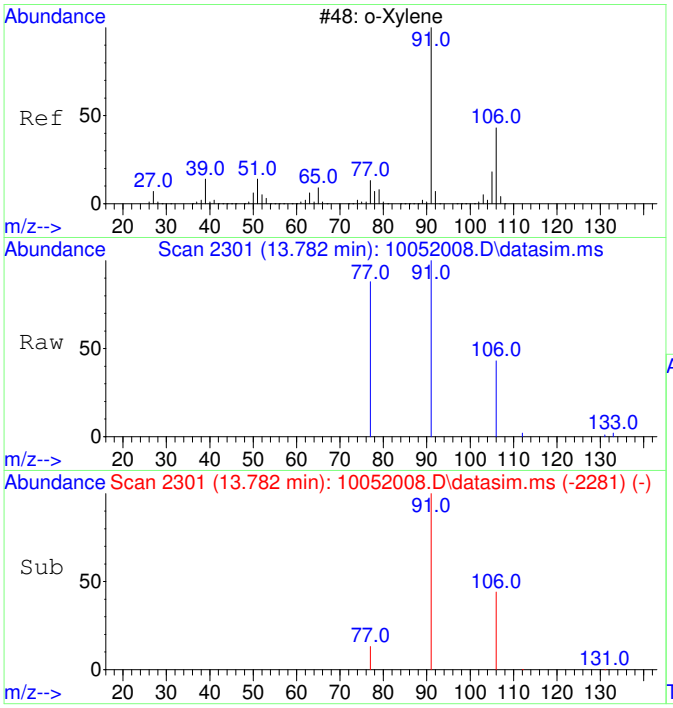


#19
m&p-Xylene
Concen: 125.12 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.008 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 15752

Ion	Ratio	Lower	Upper
91	100		
106	48.6	22.2	82.2
77	14.8	0.0	42.4

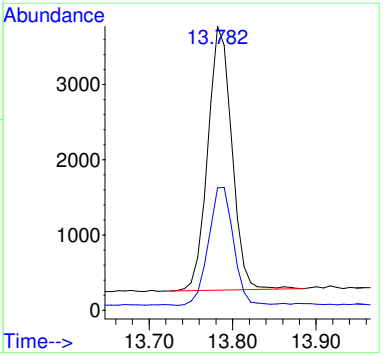


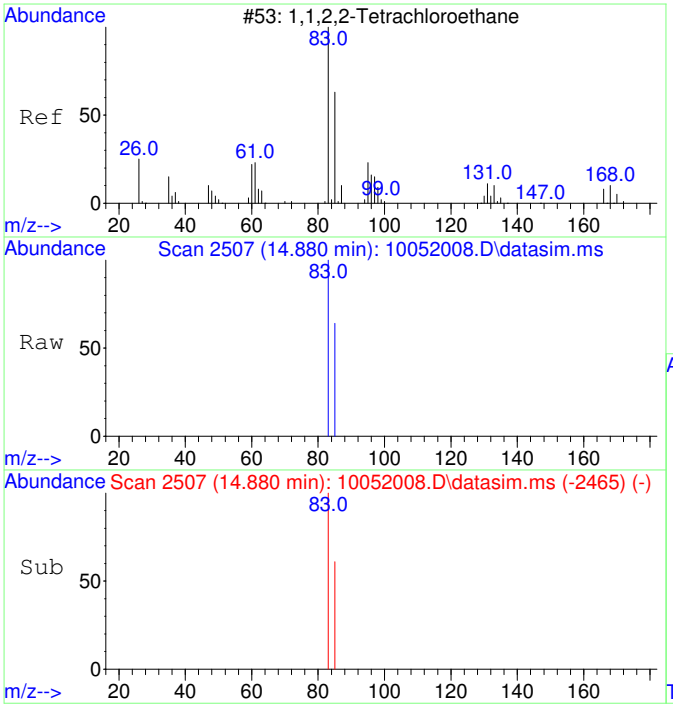


#20
o-Xylene
Concen: 52.12 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 7011

Ion	Ratio	Lower	Upper
91	100		
106	45.8	19.2	79.2

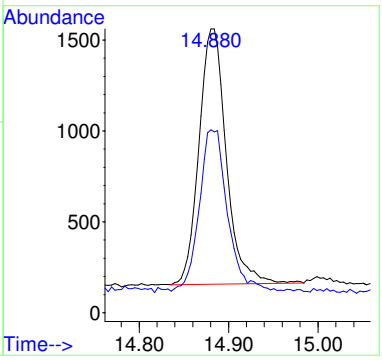


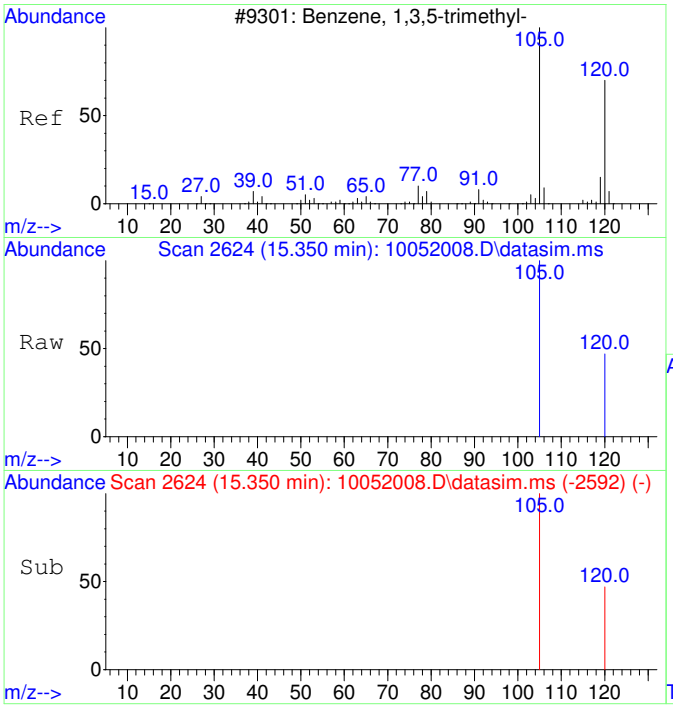


#21
1,1,2,2-Tetrachloroethane
Concen: 50.04 ug/L
RT: 14.880 min Scan# 2507
Delta R.T. 0.007 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 83 Resp: 2983

Ion	Ratio	Lower	Upper
83	100		
85	64.8	34.8	94.8

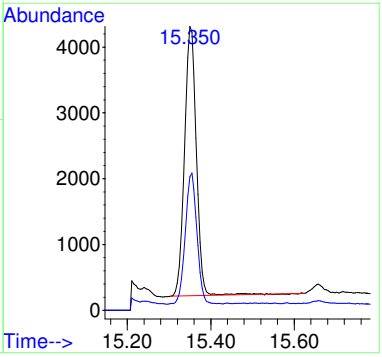


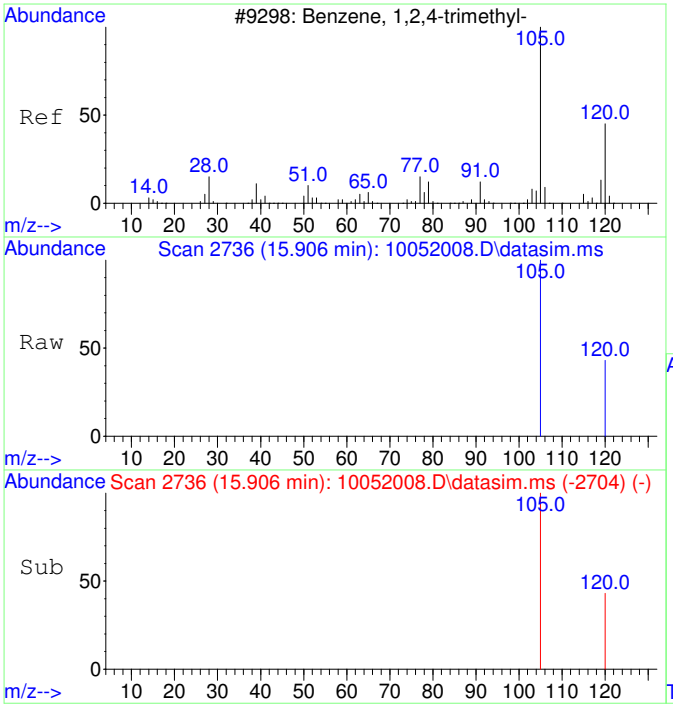


#22
1,3,5-Trimethylbenzene
Concen: 56.20 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.005 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:105 Resp: 8046

Ion	Ratio	Lower	Upper
105	100		
120	47.7	21.1	81.1

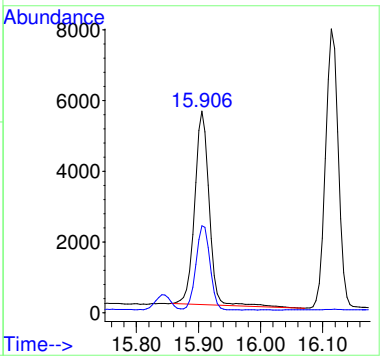


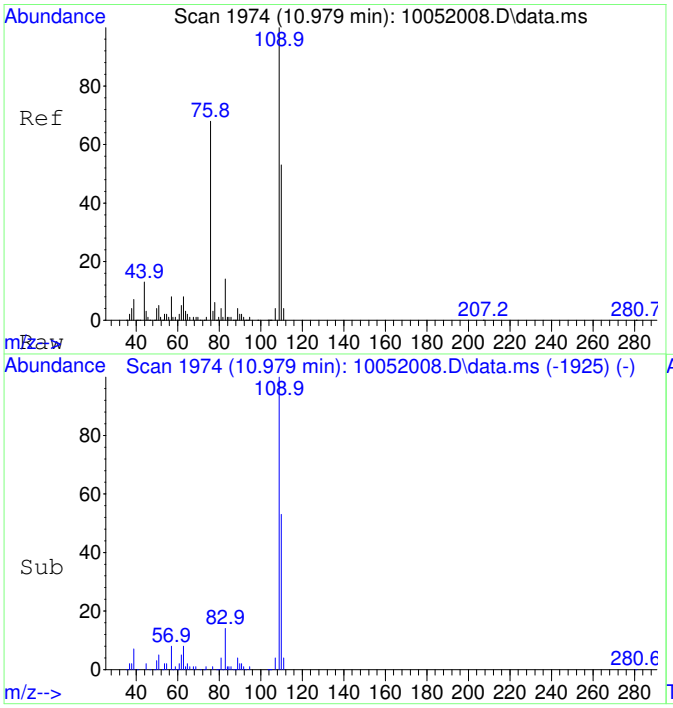


#23
1,2,4-Trimethylbenzene
Concen: 59.72 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:105 Resp: 8880

Ion	Ratio	Lower	Upper
105	100		
120	41.2	17.2	77.2

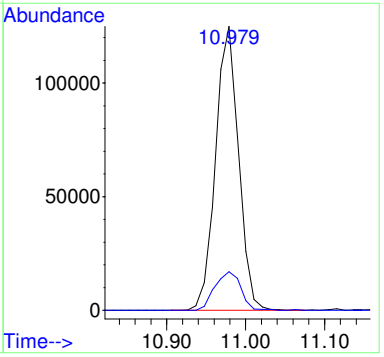


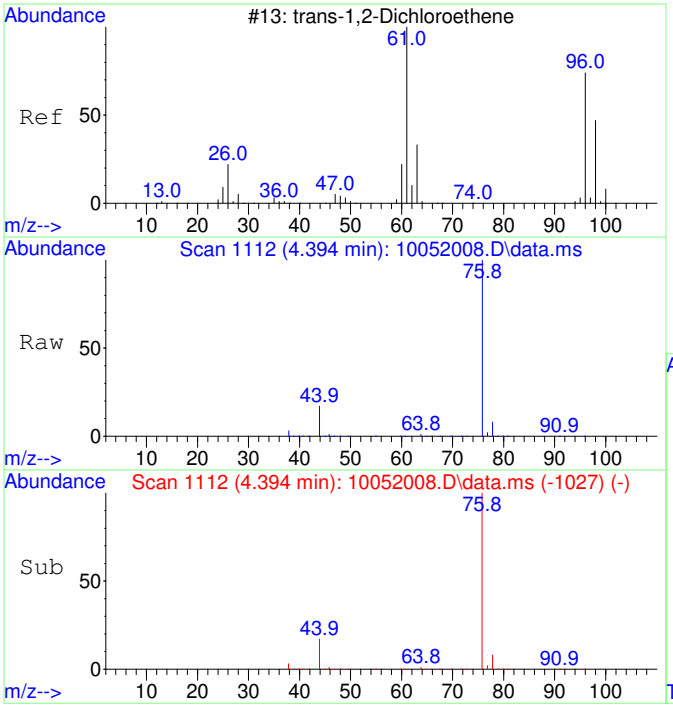


#25
2-Fluorotoluene SCAN
Concen: 4883.68 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:109 Resp: 252437

Ion	Ratio	Lower	Upper
109	100		
83	15.3	0.0	43.8

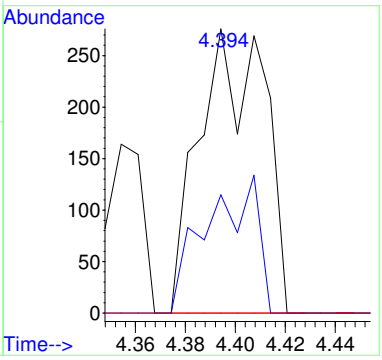


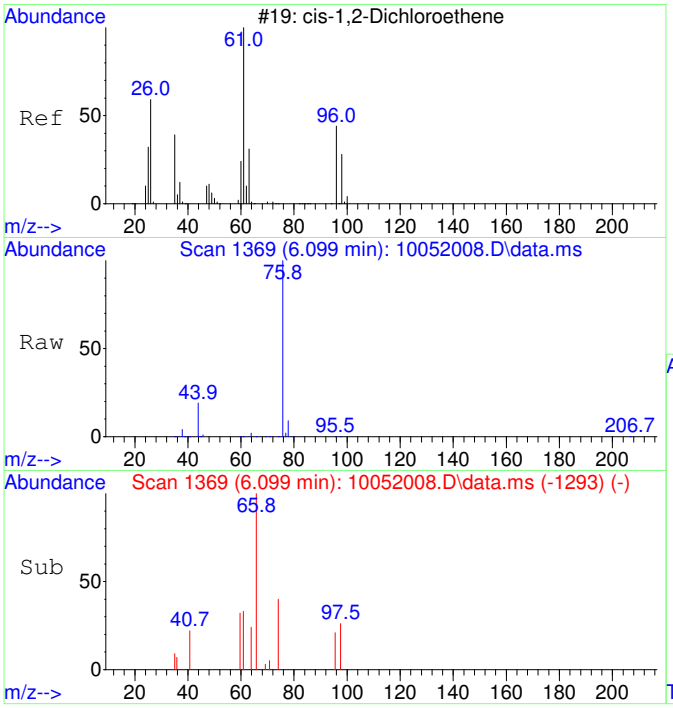


#27
trans-1,2-Dichloroethene SCAN
Concen: 36.81 ug/L
RT: 4.394 min Scan# 1112
Delta R.T. -0.007 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 61 Resp: 500

Ion	Ratio	Lower	Upper
61	100		
96	38.2	49.0	109.0#
98	0.0	20.5	80.5#

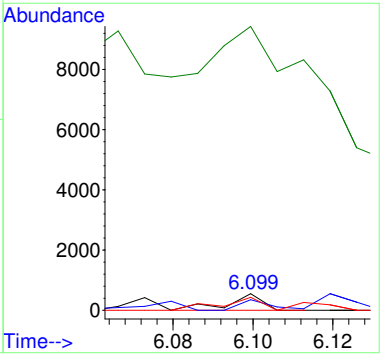


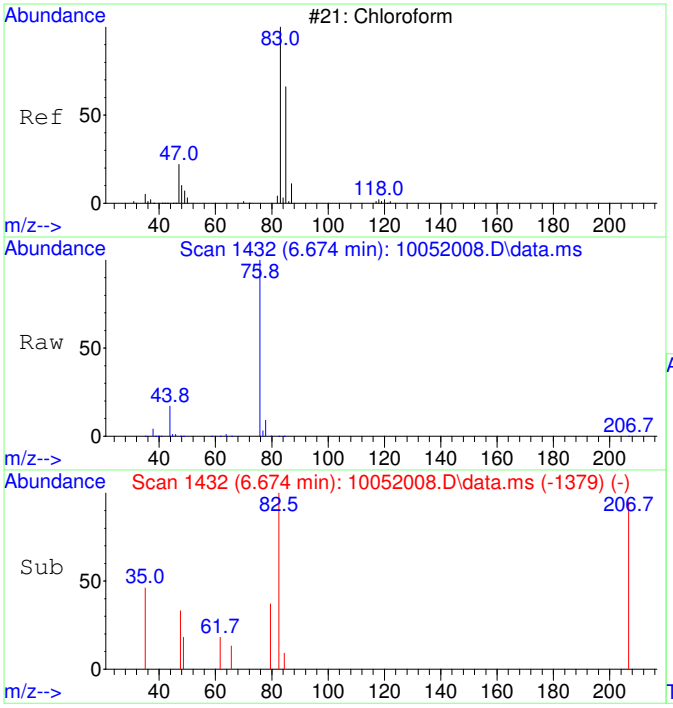


#29
cis-1,2-Dichloroethene SCAN
Concen: 20.01 ug/L
RT: 6.099 min Scan# 1369
Delta R.T. 0.006 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 61 Resp: 337

Ion	Ratio	Lower	Upper
61	100		
96	52.2	39.9	99.9
98	145.1	13.5	73.5#
64	0.0	4.5	64.5#

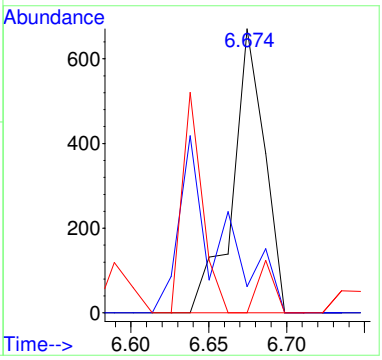


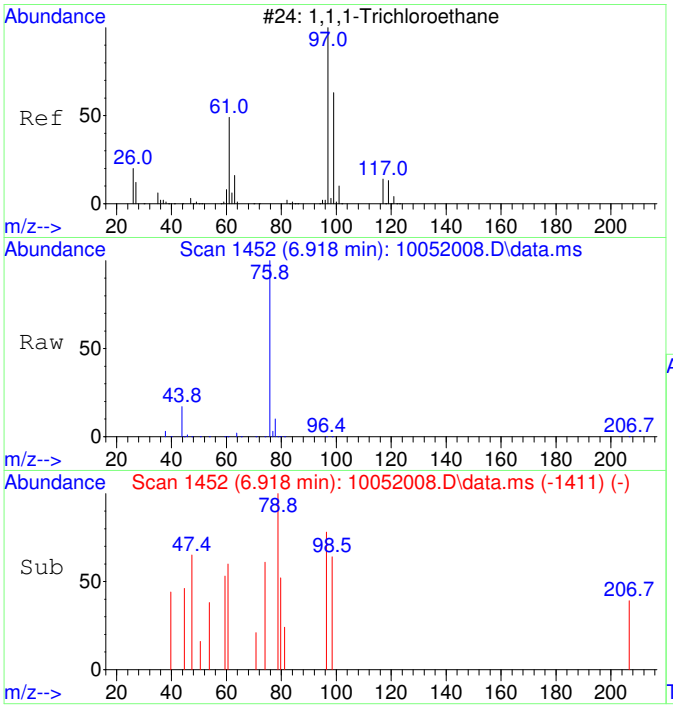


#30
Chloroform SCAN
Concen: 52.71 ug/L
RT: 6.674 min Scan# 1432
Delta R.T. 0.012 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 83 Resp: 963

Ion	Ratio	Lower	Upper
83	100		
85	0.0	34.6	94.6#
47	9.3	0.0	53.4

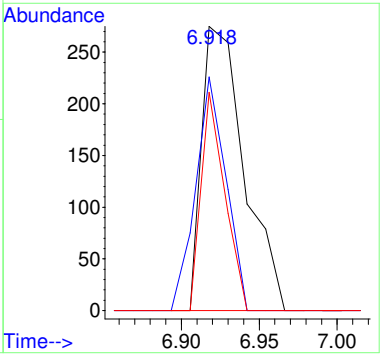


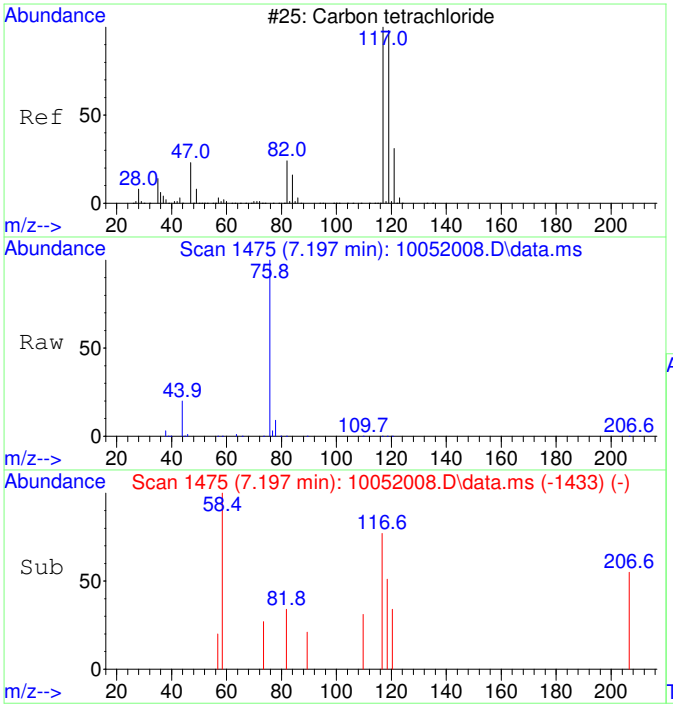


#31
1,1,1-Trichloroethane SCAN
Concen: 31.36 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 97 Resp: 522

Ion	Ratio	Lower	Upper
97	100		
99	58.4	43.6	103.6
61	42.7	18.0	78.0

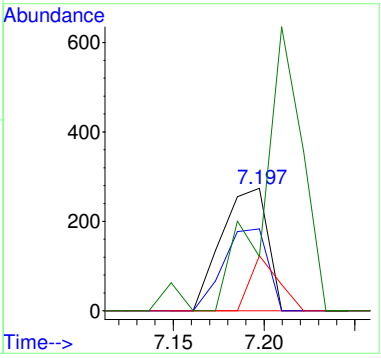


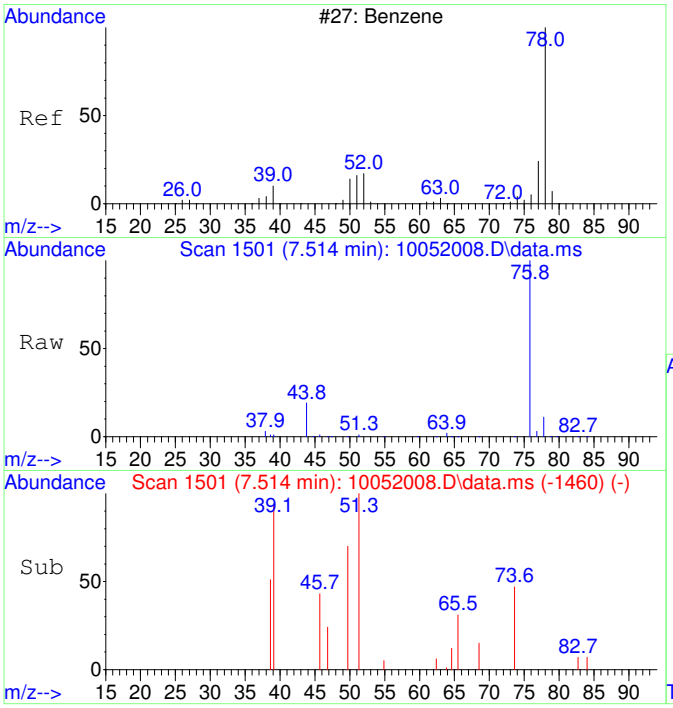


#32
Carbon tetrachloride SCAN
Concen: 27.93 ug/L
RT: 7.197 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:117 Resp: 485

Ion	Ratio	Lower	Upper
117	100		
119	64.3	75.5	135.5#
121	27.4	0.0	58.8
82	207.0	0.0	59.2#

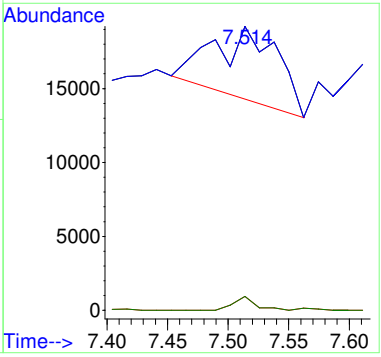


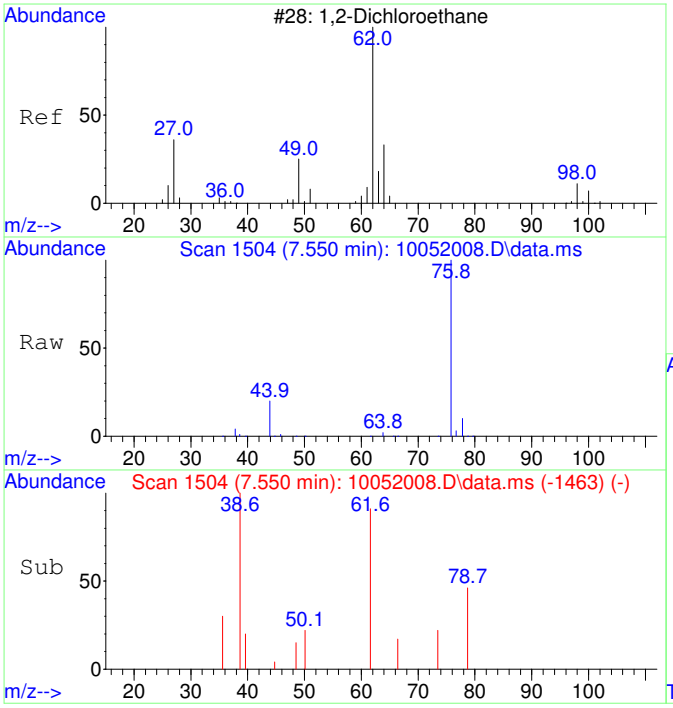


#33
Benzene SCAN
Concen: 371.59 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 78 Resp: 17033

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	6.9	0.0	47.9
51	6.9	0.0	44.1

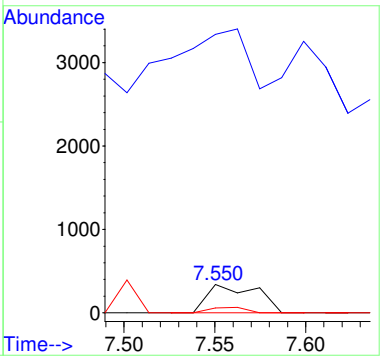


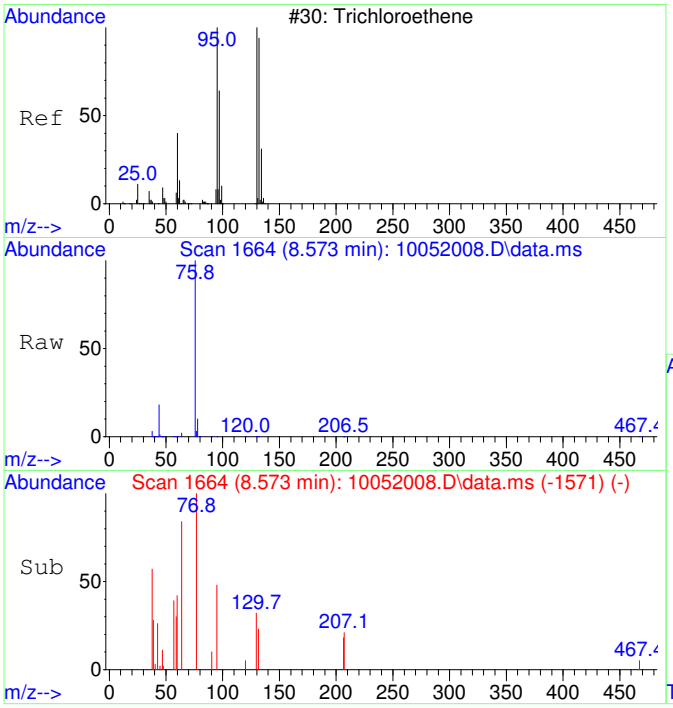


#34
1,2-Dichloroethane SCAN
Concen: 37.93 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 62 Resp: 642

Ion	Ratio	Lower	Upper
62	100		
64	797.2	5.2	65.2#
49	14.2	3.9	63.9

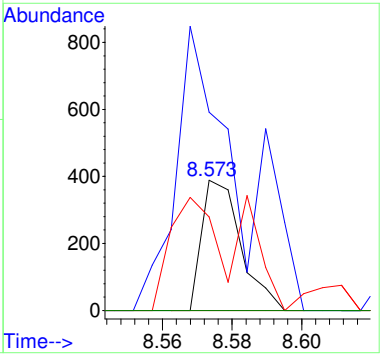


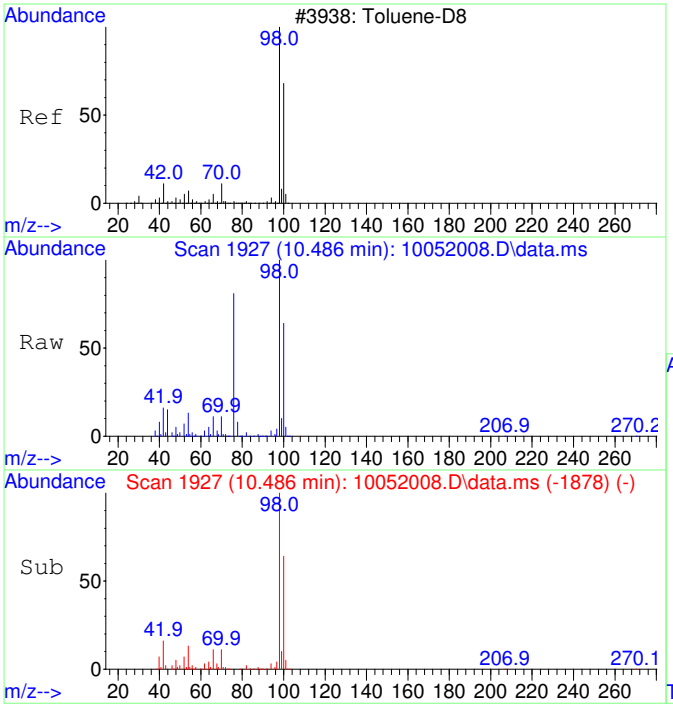


#35
Trichloroethene SCAN
Concen: 24.13 ug/L
RT: 8.573 min Scan# 1664
Delta R.T. 0.005 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:130 Resp: 304

Ion	Ratio	Lower	Upper
130	100		
95	352.0	60.5	120.5#
132	152.3	59.6	119.6#
97	0.0	28.2	88.2#

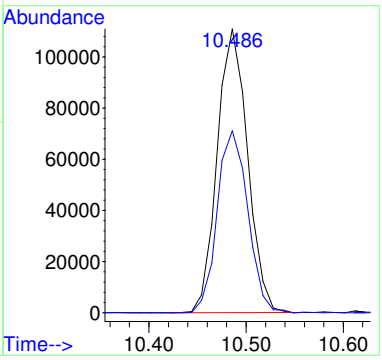


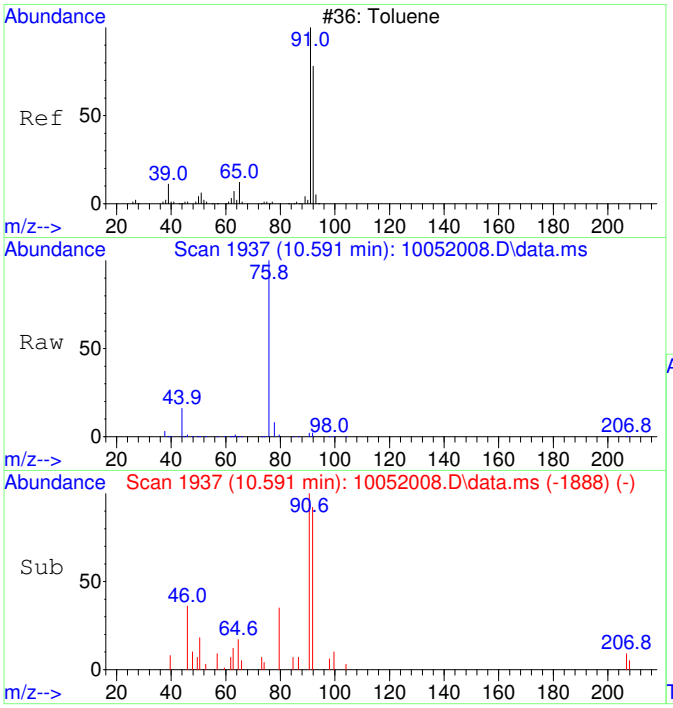


#36
Toluene-d8 SCAN
Concen: 4746.97 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 98 Resp: 239965

Ion	Ratio	Lower	Upper
98	100		
100	64.8	40.0	100.0

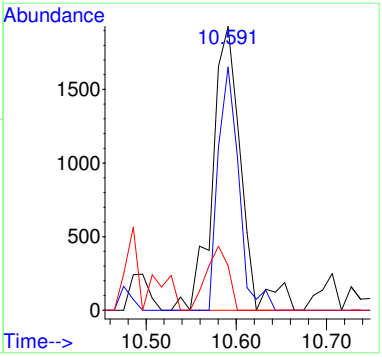


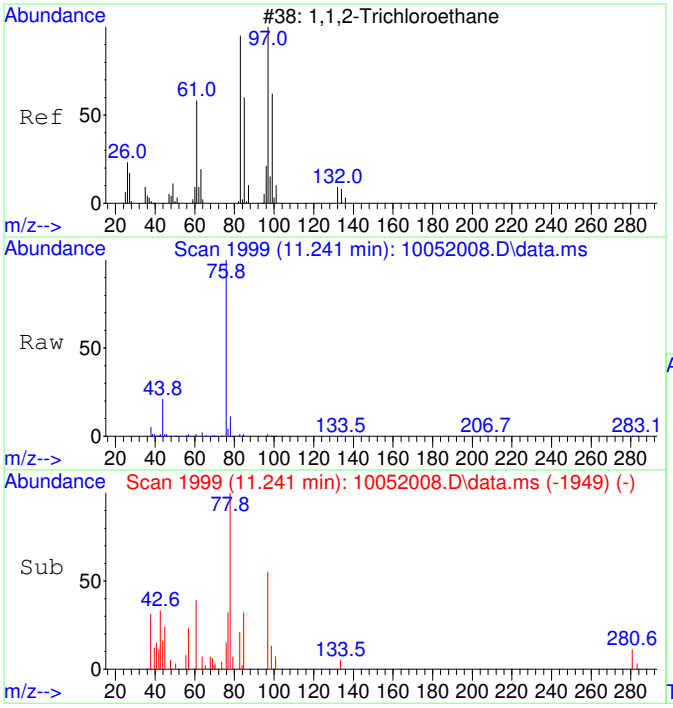


#37
Toluene SCAN
Concen: 65.97 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.010 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 4271

Ion	Ratio	Lower	Upper
91	100		
92	61.4	28.3	88.3
65	17.3	0.0	41.0

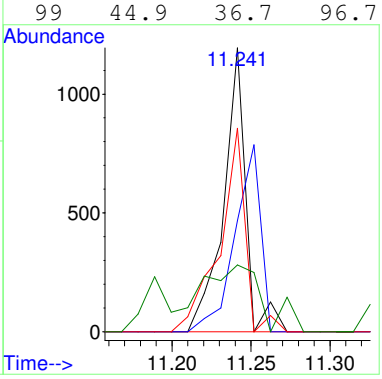


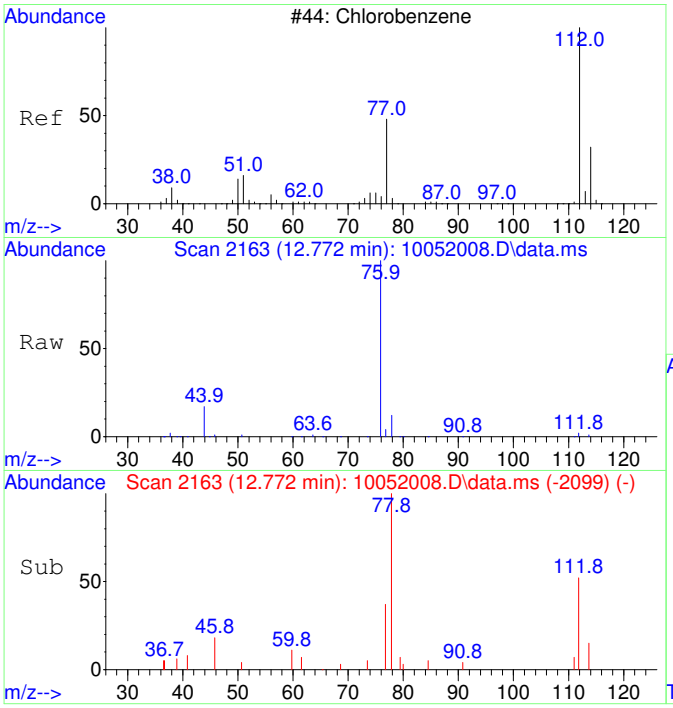


#38
1,1,2-Trichloroethane SCAN
Concen: 80.52 ug/L
RT: 11.241 min Scan# 1999
Delta R.T. 0.021 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 97 Resp: 1170

Ion	Ratio	Lower	Upper
97	100		
83	75.8	57.7	117.7
61	82.9	32.1	92.1
99	44.9	36.7	96.7

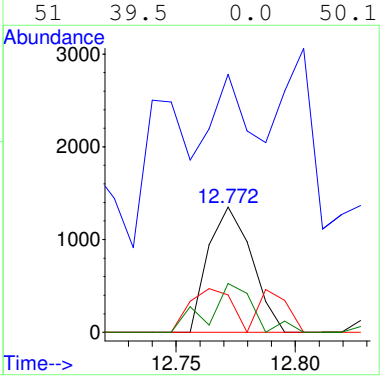


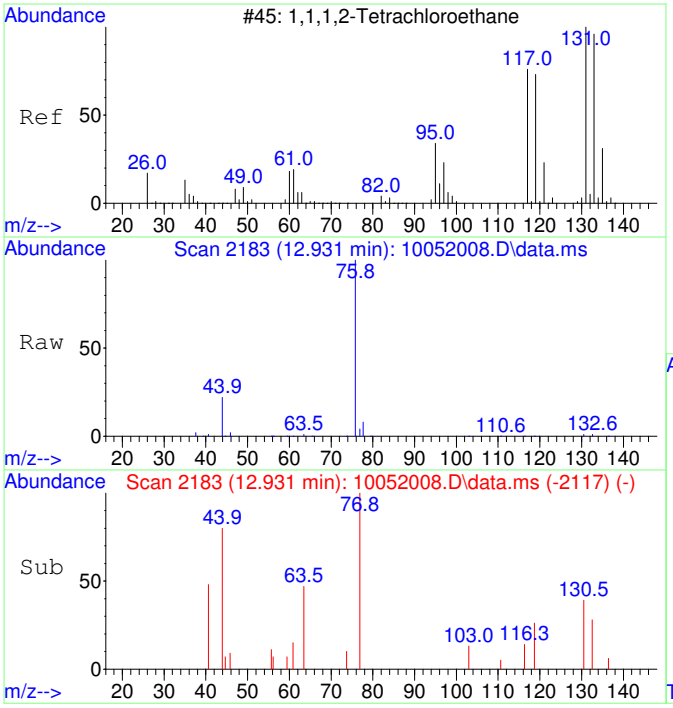


#40
Chlorobenzene SCAN
Concen: 38.81 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.008 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:112 Resp: 1717

Ion	Ratio	Lower	Upper
112	100		
77	0.0	28.2	88.2#
114	33.5	2.3	62.3
51	39.5	0.0	50.1

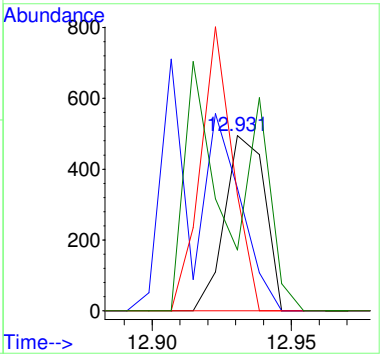


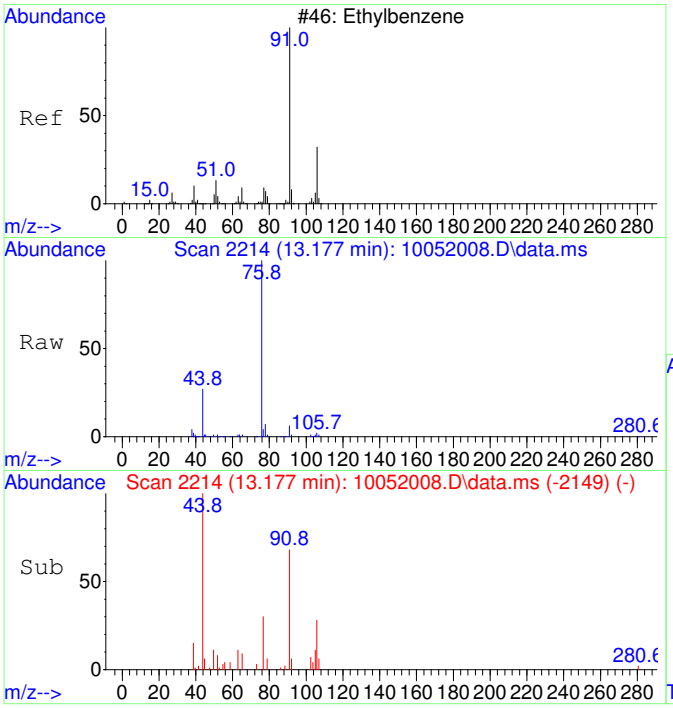


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 30.42 ug/L
RT: 12.931 min Scan# 2183
Delta R.T. 0.024 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:131 Resp: 498

Ion	Ratio	Lower	Upper
131	100		
133	0.0	66.9	126.9#
119	130.5	40.4	100.4#
117	0.0	35.1	95.1#

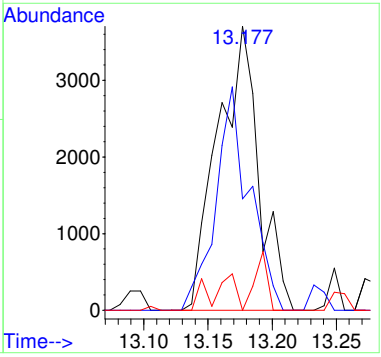


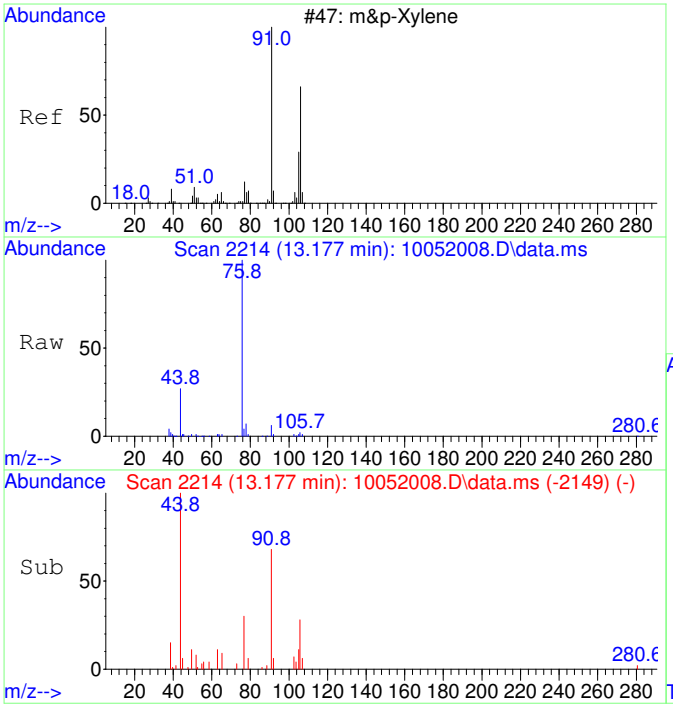


#42
Ethylbenzene SCAN
Concen: 69.98 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 8254

Ion	Ratio	Lower	Upper
91	100		
106	64.1	23.1	83.1
51	7.5	0.0	40.1

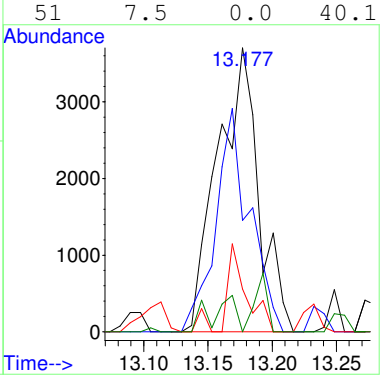


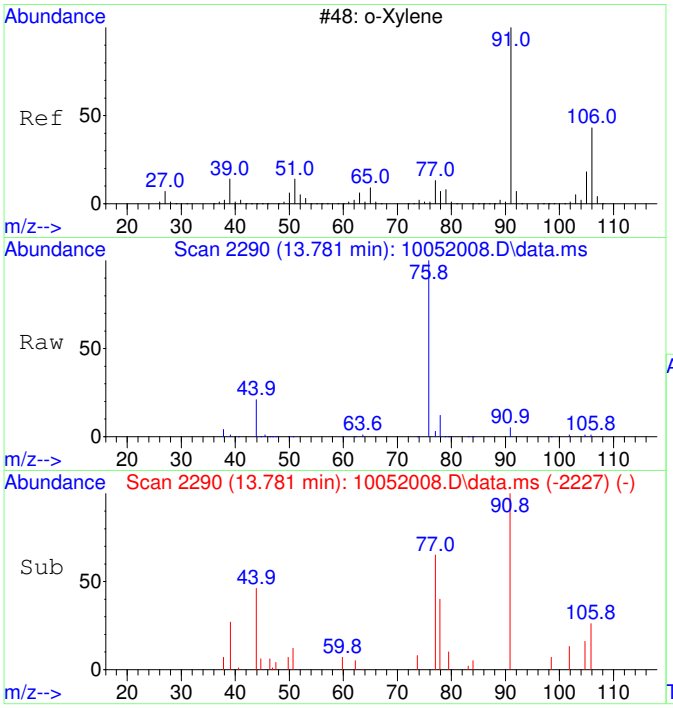


#43
m&p-Xylene SCAN
Concen: 69.98 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 8254

Ion	Ratio	Lower	Upper
91	100		
106	64.1	23.1	83.1
105	15.4	0.0	54.7
51	7.5	0.0	40.1

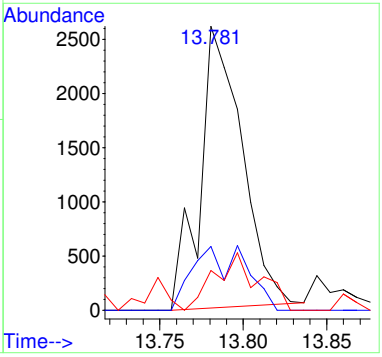


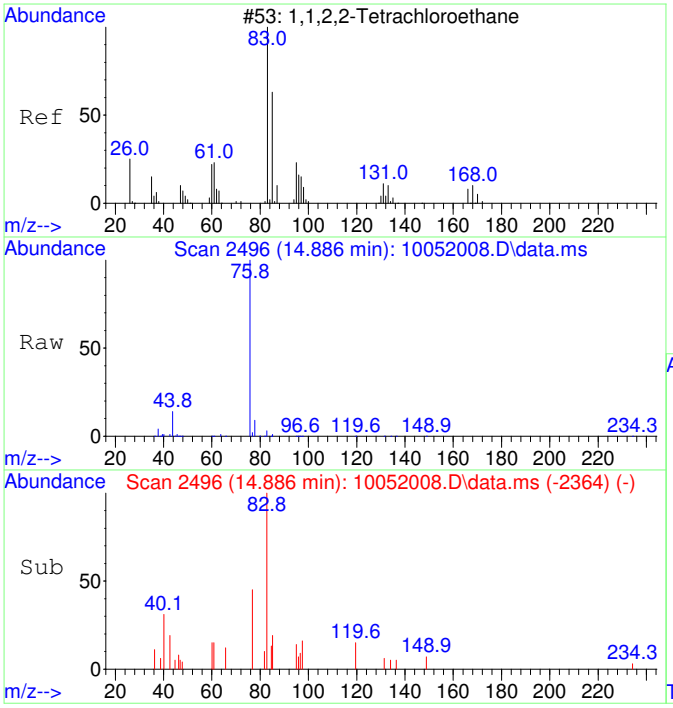


#44
o-Xylene SCAN
Concen: 72.29 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 91 Resp: 4564

Ion	Ratio	Lower	Upper
91	100		
106	28.4	18.0	78.0
105	21.6	0.0	56.6

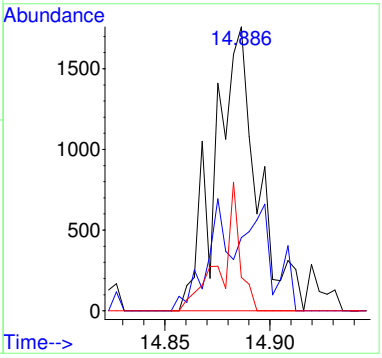


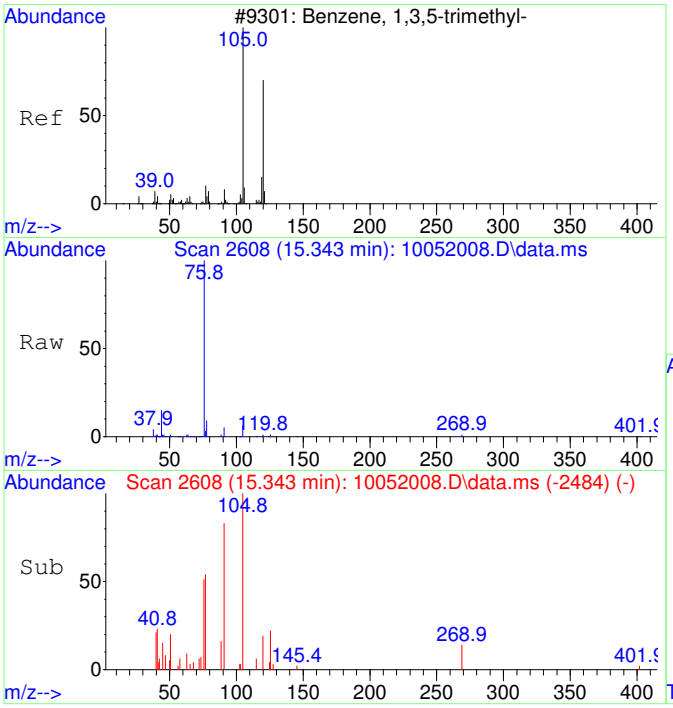


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 79.20 ug/L
RT: 14.886 min Scan# 2496
Delta R.T. 0.015 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion: 83 Resp: 2438

Ion	Ratio	Lower	Upper
83	100		
85	8.7	35.9	95.9#
95	20.1	0.0	47.4

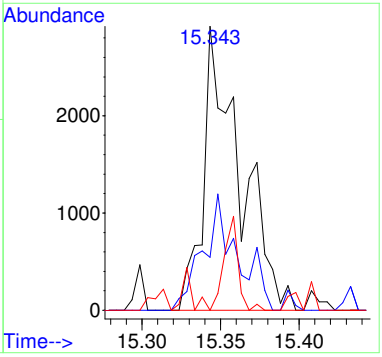


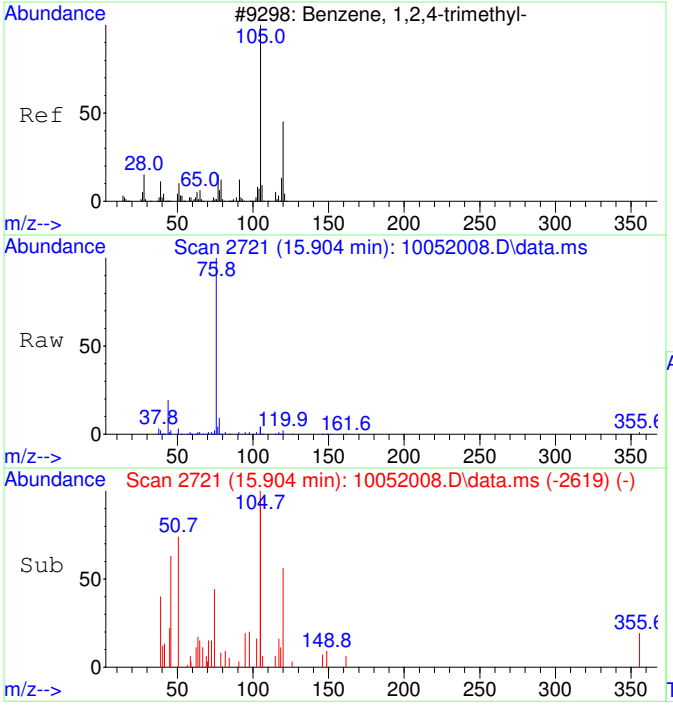


#46
1,3,5-Trimethylbenzene SCAN
Concen: 71.18 ug/L
RT: 15.343 min Scan# 2608
Delta R.T. -0.000 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:105 Resp: 4736

Ion	Ratio	Lower	Upper
105	100		
120	38.2	18.3	78.3
119	12.6	0.0	43.1

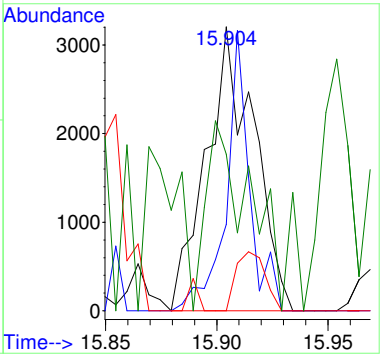




#47
1,2,4-Trimethylbenzene SCAN
Concen: 70.20 ug/L
RT: 15.904 min Scan# 2721
Delta R.T. 0.005 min
Lab File: 10052008.D
Acq: 5 Oct 2020 12:39

Tgt Ion:105 Resp: 4779

Ion	Ratio	Lower	Upper
105	100		
120	48.0	16.9	76.9
119	12.7	0.0	41.9
77	61.3	0.0	42.3#



CRDL STANDARD

Radiello D1

Laboratory: EPA Region 9 Laboratory
SDG: 20274B
Client: California Site Cleanup Section 3
Project: MEW OU1 FY2020 Vapor Intrusion Investigation
Instrument ID: AG5975CV
Calibration: 2008017
Sequence: S20J006

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
S20J006-CRL1	1,1-Dichloroethene	50.0	48.2	96	ug/L	60 - 140
	trans-1,2-Dichloroethene	50.0	50.5	101	ug/L	60 - 140
	1,1-Dichloroethane	50.0	49.6	99	ug/L	60 - 140
	cis-1,2-Dichloroethene	50.0	50.1	100	ug/L	60 - 140
	Chloroform	50.0	47.3	95	ug/L	60 - 140
	Trichloroethene	50.0	47.9	96	ug/L	60 - 140
	Tetrachloroethene	50.0	49.8	100	ug/L	60 - 140
	Toluene-d8	50.0	49.6	99	ug/L	60 - 140

QLS REPORT

Instrument Name: AG5975C
Sample Name: S20J006-CRL1
Misc Info: 2030073 0.05 mg/L
Date Acquired: 10/5/20 10:17
QLast Update: Fri Aug 21 08:33:54 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.970	5000.0	5000.00	100%	60	140	pass
2)	1,1-Dichloroethene	3.090	50.0	48.21	96%	60	140	pass
3)	trans-1,2-Dichloroethene	4.396	50.0	50.46	101%	60	140	pass
4)	1,1-Dichloroethane	5.099	50.0	49.62	99%	60	140	pass
5)	cis-1,2-Dichloroethene	6.094	50.0	50.11	100%	60	140	pass
6)	Chloroform	6.664	50.0	47.30	95%	60	140	pass
7)	1,1,1-Trichloroethane	6.919	50.0	46.36	93%	60	140	pass
8)	Carbon tetrachloride	7.187	50.0	46.32	93%	60	140	pass
10)	1,2-Dichloroethane	7.552	50.0	49.66	99%	60	140	pass
11)	Trichloroethene	8.569	50.0	47.86	96%	60	140	pass
12)	Toluene-d8	10.477	50.0	49.63	99%	60	140	pass
13)	Toluene	10.571	50.0	51.10	102%	60	140	pass
14)	1,1,2-Trichloroethane	11.222	50.0	48.71	97%	60	140	pass
15)	Tetrachloroethene	11.421	50.0	49.81	100%	60	140	pass
16)	Chlorobenzene	12.757	50.0	52.51	105%	60	140	pass
17)	1,1,1,2-Tetrachloroethane	12.908	50.0	50.75	101%	60	140	pass
18)	Ethylbenzene	12.964	50.0	53.40	107%	60	140	pass
19)	m&p-Xylene	13.162	100.0	106.01	106%	60	140	pass
20)	o-Xylene	13.774	50.0	51.93	104%	60	140	pass
21)	1,1,2,2-Tetrachloroethane	14.873	50.0	53.05	106%	60	140	pass
22)	1,3,5-Trimethylbenzene	15.345	50.0	54.53	109%	60	140	pass
23)	1,2,4-Trimethylbenzene	15.896	50.0	55.00	110%	60	140	pass
24)	Naphthalene	17.903	50.0	54.63	109%	60	140	pass

Quantitation Report (Not Reviewed)

Table of Contents

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052004.D
Acq On : 5 Oct 2020 10:17
InstName : AG5975C
Operator : TD
Sample : S20J006-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 05 10:36:11 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

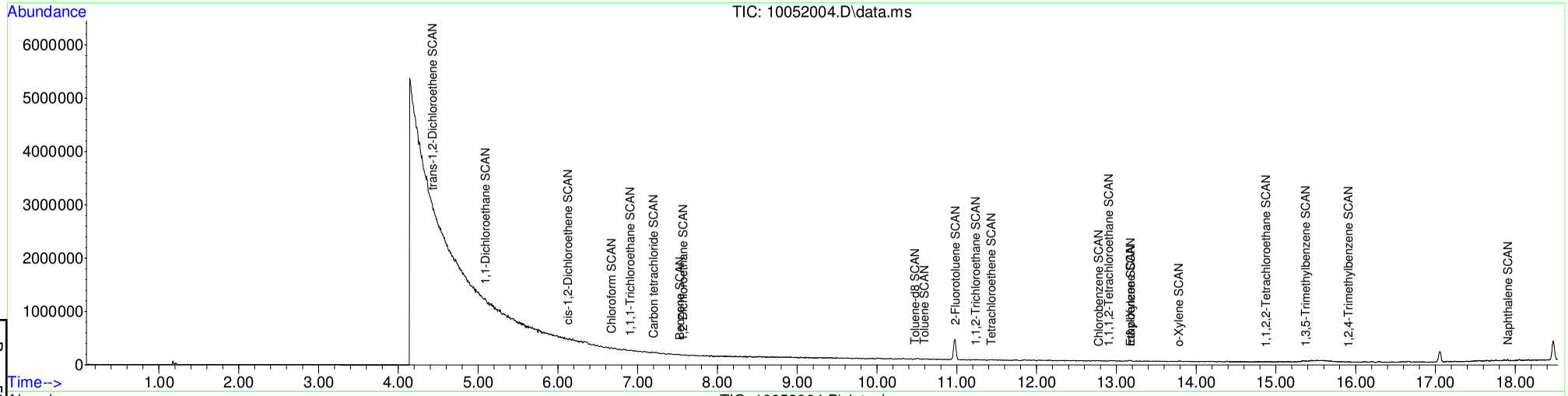
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	622858	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	6051	49.63 ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 0.99%#		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.097	61	1650	66.34 ug/L #	45
3] trans-1,2-Dichloroethene	4.416	61	1450	50.46 ug/L	75
4] 1,1-Dichloroethane	5.112	63	1775	49.62 ug/L	89
5] cis-1,2-Dichloroethene	6.101	61	1892	50.11 ug/L	100
6] Chloroform	6.664	83	1828	47.30 ug/L	98
7] 1,1,1-Trichloroethane	6.931	97	1946	46.36 ug/L	99
8] Carbon tetrachloride	7.199	117	1830	46.32 ug/L	99
9] Benzene	7.515	78	5979	56.50 ug/L	62
10] 1,2-Dichloroethane	7.552	62	1876	49.66 ug/L #	1
11] Trichloroethene	8.580	130	1525	47.86 ug/L	94
13] Toluene	10.582	91	7943	51.10 ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	1650	48.71 ug/L	98
15] Tetrachloroethene	11.432	166	2241	49.81 ug/L	98
16] Chlorobenzene	12.773	112	5845	52.51 ug/L	90
17] 1,1,1,2-Tetrachloroethane	12.916	131	2024	50.75 ug/L	98
18] Ethylbenzene	12.980	91	10105	53.40 ug/L	94
19] m&p-Xylene	13.170	91	15677	106.01 ug/L	94
20] o-Xylene	13.782	91	8205	51.93 ug/L	95
21] 1,1,2,2-Tetrachloroethane	14.880	83	3715	53.05 ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	9170	54.53 ug/L	97
23] 1,2,4-Trimethylbenzene	15.906	105	9608	55.00 ug/L	94
24] Naphthalene	17.906	128	15081	54.63 ug/L	97
25) 2-Fluorotoluene SCAN	10.979	109	311239	5126.05 ug/L	95
27) trans-1,2-Dichloroethe...	4.428	61	320	20.06 ug/L #	51
28) 1,1-Dichloroethane SCAN	5.091	63	418	22.64 ug/L #	1
29) cis-1,2-Dichloroethene...	6.119	61	484	24.46 ug/L #	37
30) Chloroform SCAN	6.675	83	714	33.27 ug/L #	83
31) 1,1,1-Trichloroethane ...	6.906	97	730	37.33 ug/L #	19
32) Carbon tetrachloride SCAN	7.198	117	795	38.97 ug/L #	66
33) Benzene SCAN	7.526	78	7705	143.10 ug/L	94
34) 1,2-Dichloroethane SCAN	7.563	62	1641	82.54 ug/L #	44
36) Toluene-d8 SCAN	10.475	98	3179	53.54 ug/L #	15
37) Toluene SCAN	10.591	91	6327	83.20 ug/L #	43
38) 1,1,2-Trichloroethane ...	11.231	97	512	30.00 ug/L #	1
39) Tetrachloroethene SCAN	11.430	166	1437	78.66 ug/L #	42
40) Chlorobenzene SCAN	12.772	112	3003	57.79 ug/L #	1
41) 1,1,1,2-Tetrachloroeth...	12.899	131	454	23.61 ug/L #	21
42) Ethylbenzene SCAN	13.177	91	9119	65.82 ug/L	88
43) m&p-Xylene SCAN	13.177	91	9119	65.82 ug/L	89
44) o-Xylene SCAN	13.781	91	4747	64.01 ug/L	91
45) 1,1,2,2-Tetrachloroeth...	14.875	83	1578	43.64 ug/L #	31
46) 1,3,5-Trimethylbenzene...	15.368	105	4990	63.85 ug/L #	39
47) 1,2,4-Trimethylbenzene...	15.909	105	5070	63.40 ug/L	85
48) Naphthalene SCAN	17.905	128	7300	60.33 ug/L	87

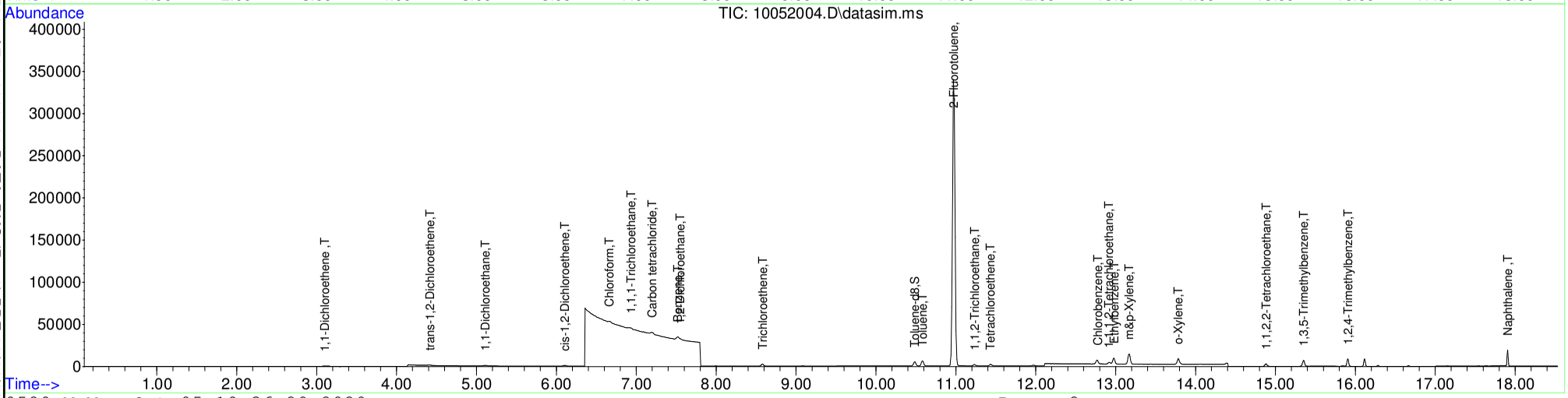
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052004.D
Acq On : 5 Oct 2020 10:17
InstName : AG5975C
Operator : TD
Sample : S20J006-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 05 10:36:11 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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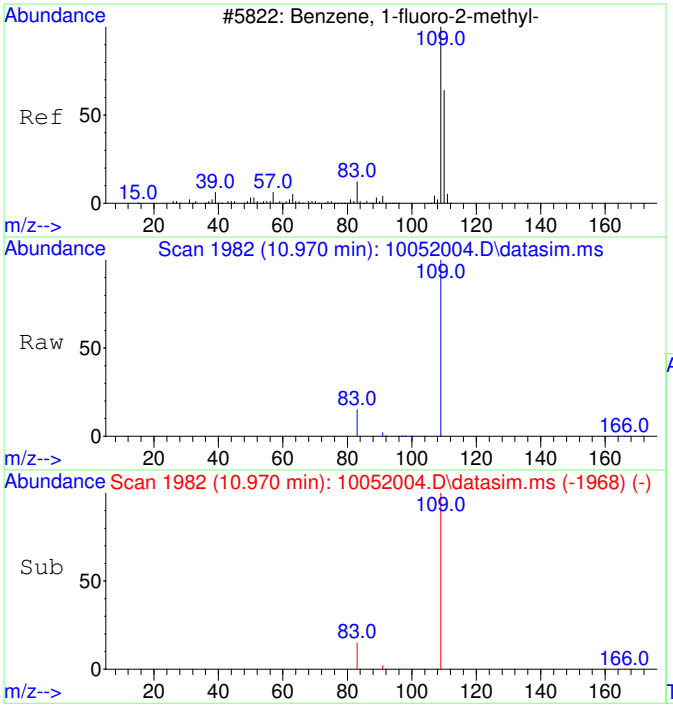
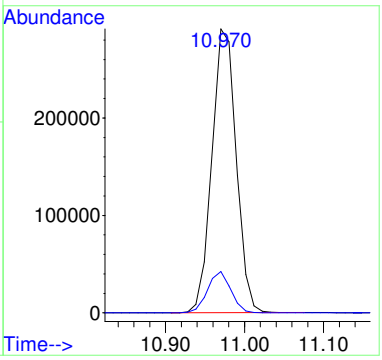
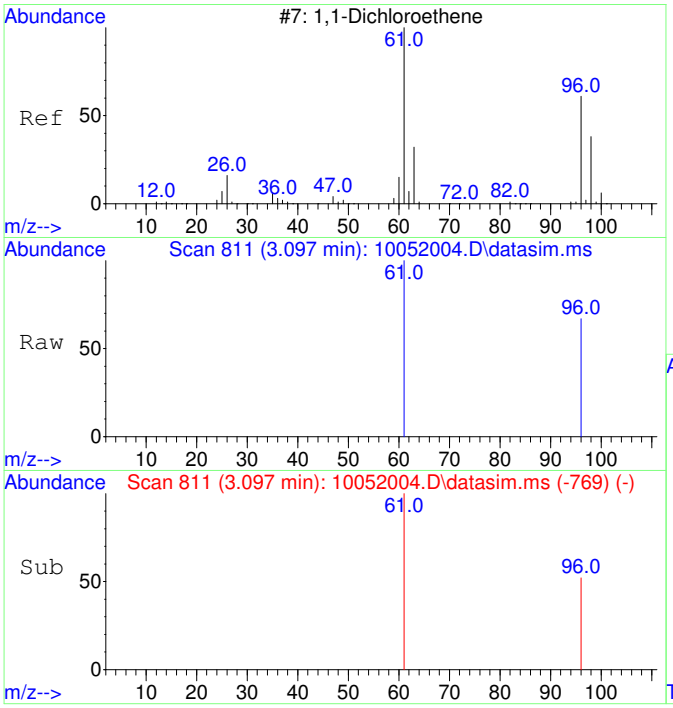


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:109 Resp: 622858

Ion	Ratio	Lower	Upper
109	100		
83	13.9	0.0	42.3

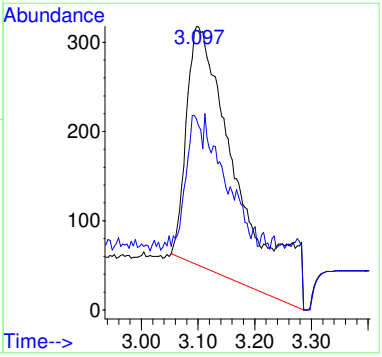




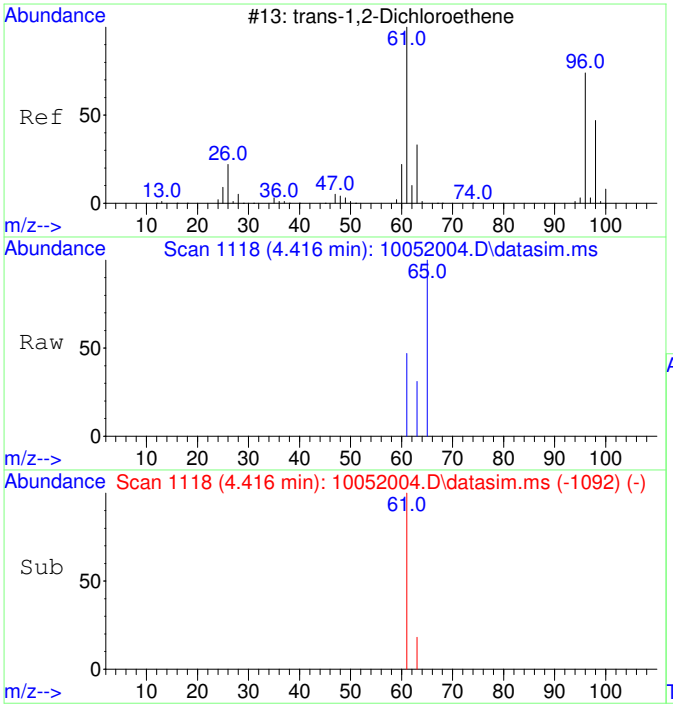
#2
1,1-Dichloroethene
Concen: 66.34 ug/L
RT: 3.097 min Scan# 811
Delta R.T. 0.007 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 61 Resp: 1650

Ion	Ratio	Lower	Upper
61	100		
96	23.2	37.2	97.2#



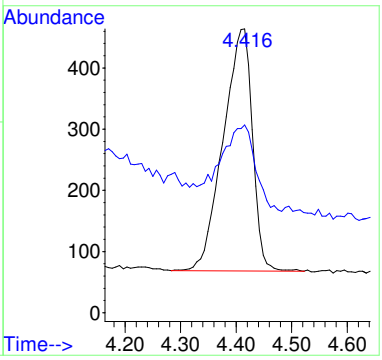
Before MI:
IMPROPER
BASELINE

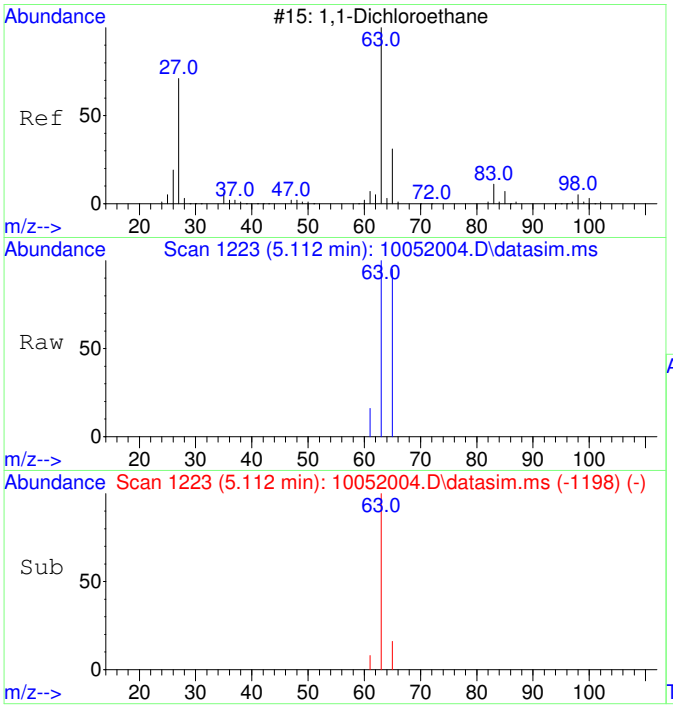


#3
trans-1,2-Dichloroethene
Concen: 50.46 ug/L
RT: 4.416 min Scan# 1118
Delta R.T. 0.020 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 61 Resp: 1450

Ion	Ratio	Lower	Upper
61	100		
63	46.5	2.4	62.4

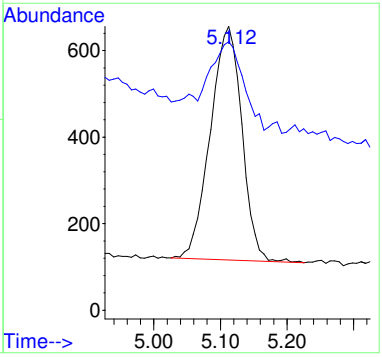


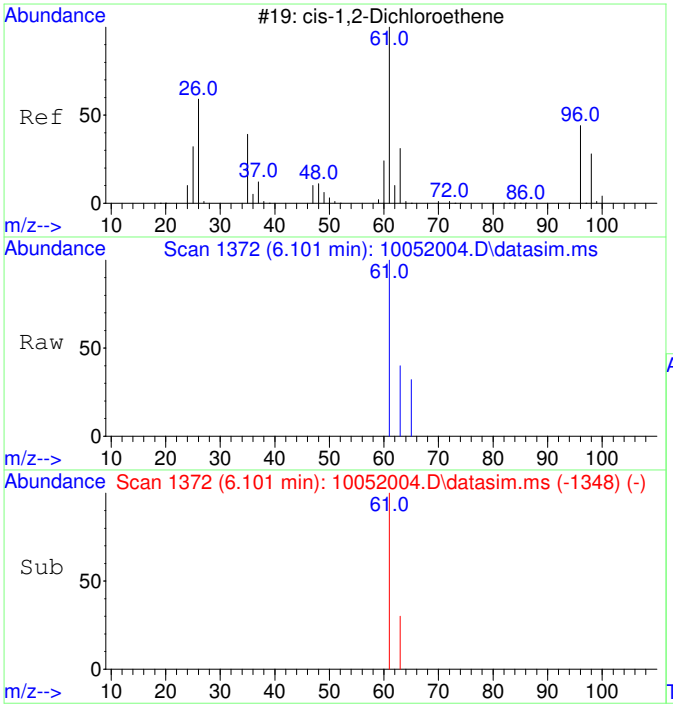


#4
1,1-Dichloroethane
Concen: 49.62 ug/L
RT: 5.112 min Scan# 1223
Delta R.T. 0.013 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 63 Resp: 1775

Ion	Ratio	Lower	Upper
63	100		
65	37.7	1.8	61.8

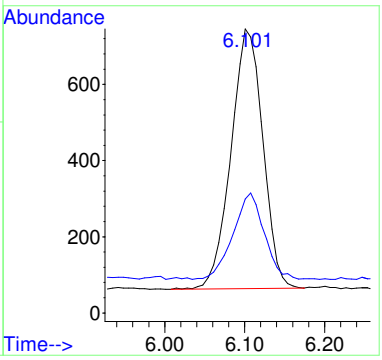


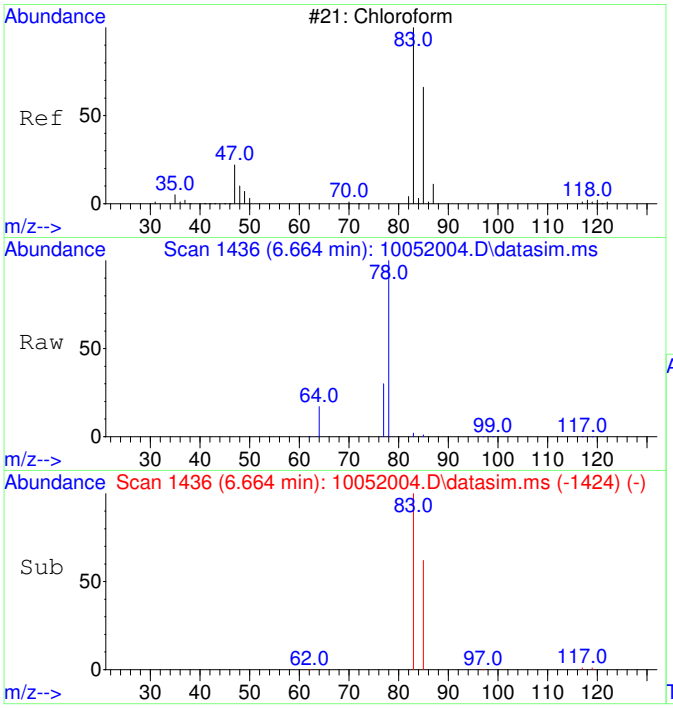


#5
cis-1,2-Dichloroethene
Concen: 50.11 ug/L
RT: 6.101 min Scan# 1372
Delta R.T. 0.007 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 61 Resp: 1892

Ion	Ratio	Lower	Upper
61	100		
63	32.7	2.5	62.5

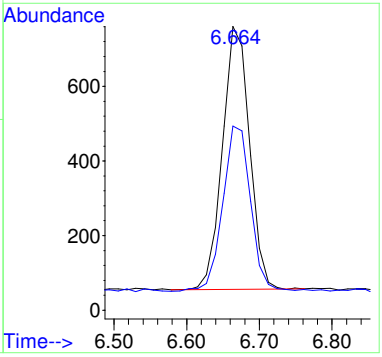


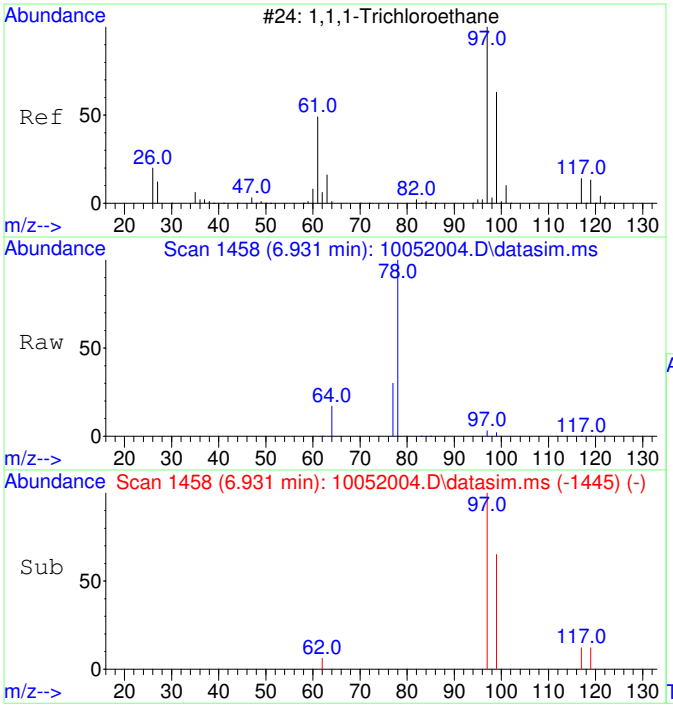


#6
Chloroform
Concen: 47.30 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 83 Resp: 1828

Ion	Ratio	Lower	Upper
83	100		
85	63.8	35.1	95.1

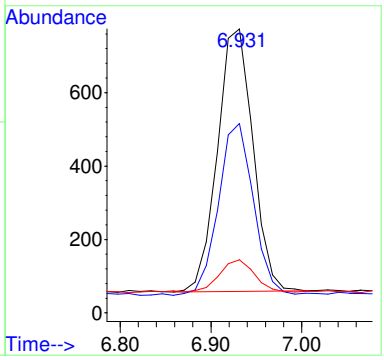


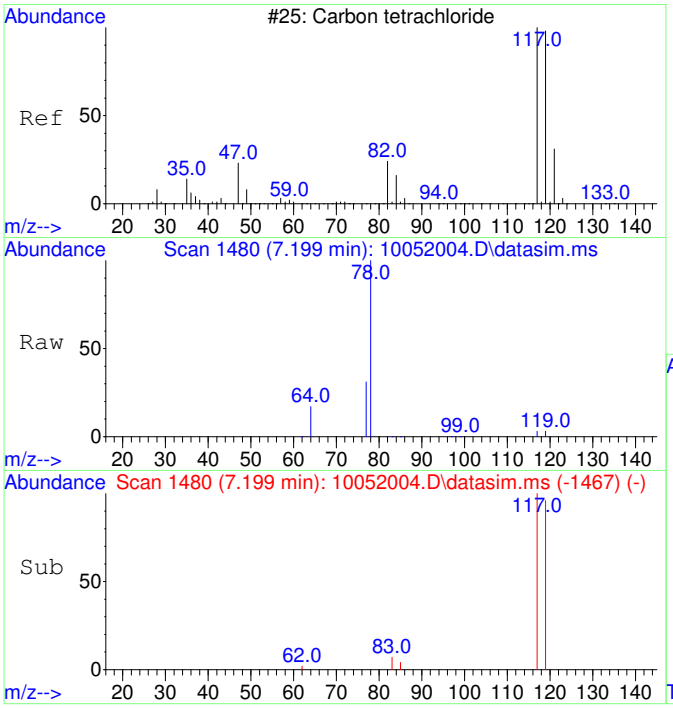


#7
1,1,1-Trichloroethane
Concen: 46.36 ug/L
RT: 6.931 min Scan# 1458
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 97 Resp: 1946

Ion	Ratio	Lower	Upper
97	100		
99	63.7	34.6	94.6
117	13.3	0.0	43.2

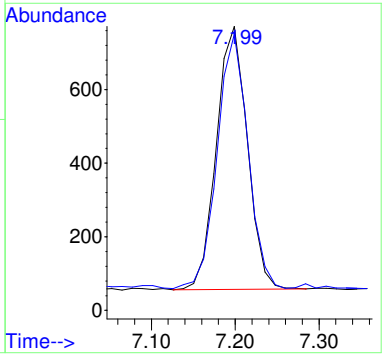


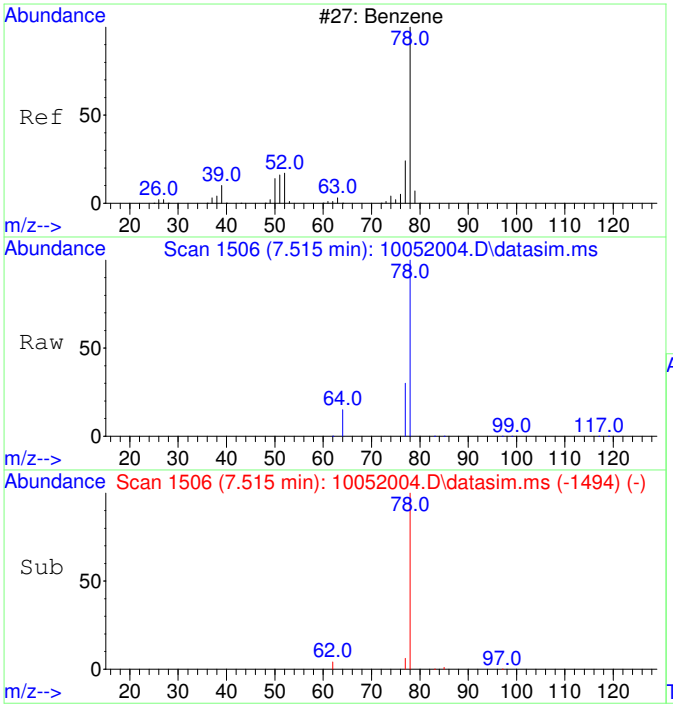


#8
Carbon tetrachloride
Concen: 46.32 ug/L
RT: 7.199 min Scan# 1480
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:117 Resp: 1830

Ion	Ratio	Lower	Upper
117	100		
119	95.8	66.4	126.4

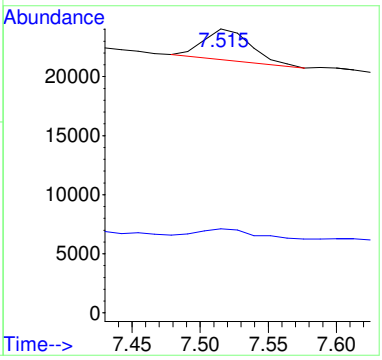


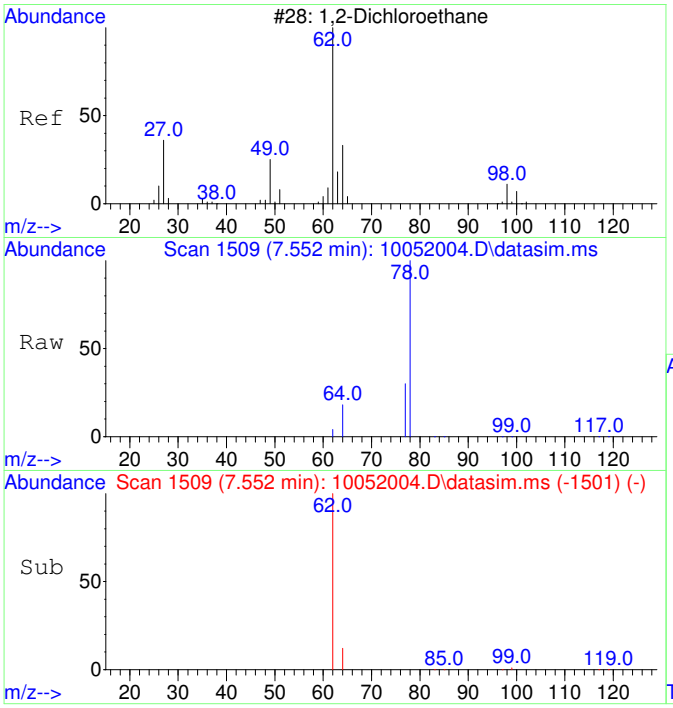


#9
Benzene
Concen: 56.50 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 78 Resp: 5979

Ion	Ratio	Lower	Upper
78	100		
77	41.6	0.0	53.2

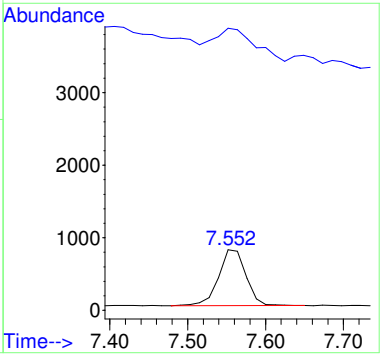


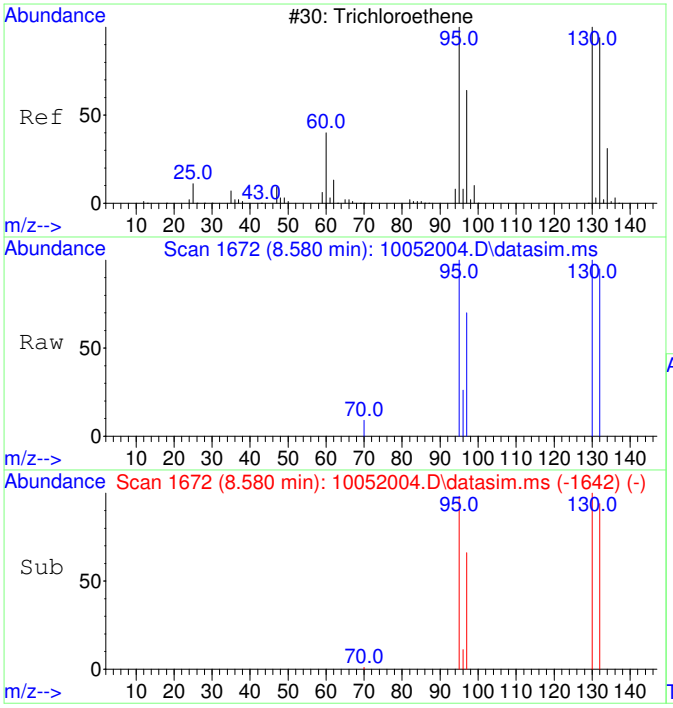


#10
1,2-Dichloroethane
Concen: 49.66 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. -0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 62 Resp: 1876

Ion	Ratio	Lower	Upper
62	100		
64	89.3	2.3	62.3#

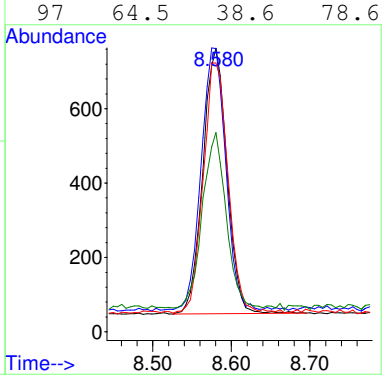


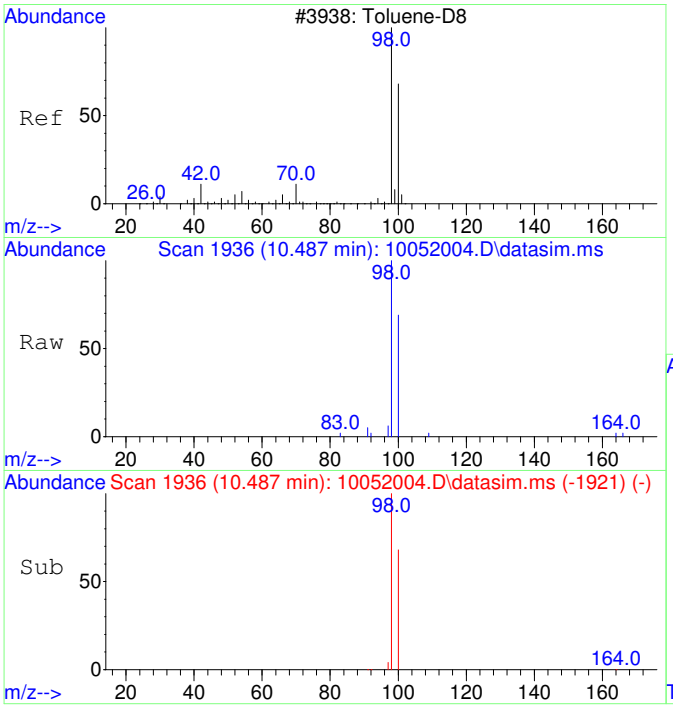


#11
Trichloroethene
Concen: 47.86 ug/L
RT: 8.580 min Scan# 1672
Delta R.T. 0.011 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:130 Resp: 1525

Ion	Ratio	Lower	Upper
130	100		
95	99.7	60.7	120.7
132	97.0	76.0	116.0
97	64.5	38.6	78.6

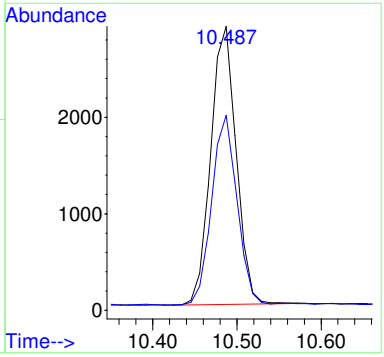


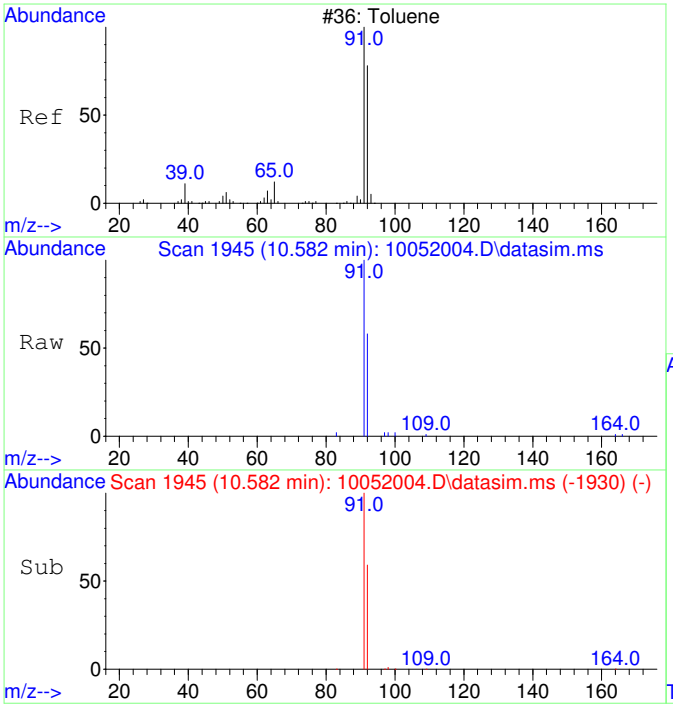


#12
Toluene-d8
Concen: 49.63 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 98 Resp: 6051

Ion	Ratio	Lower	Upper
98	100		
100	67.1	37.1	97.1

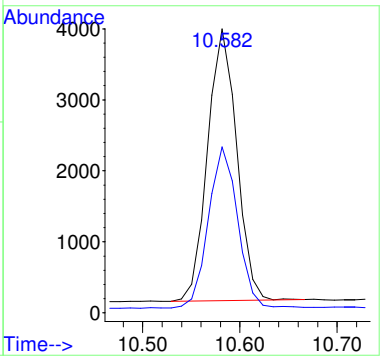


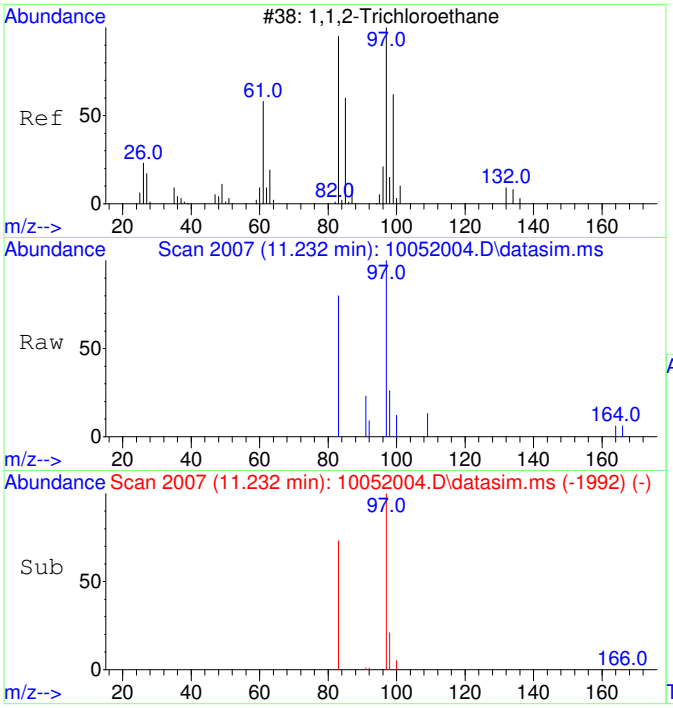


#13
Toluene
Concen: 51.10 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 7943

Ion	Ratio	Lower	Upper
91	100		
92	59.3	29.9	89.9

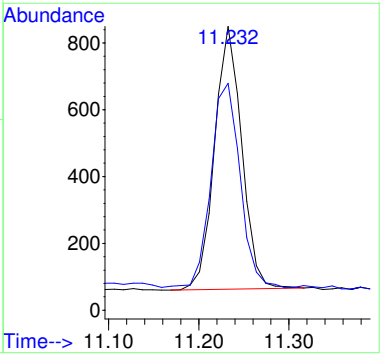


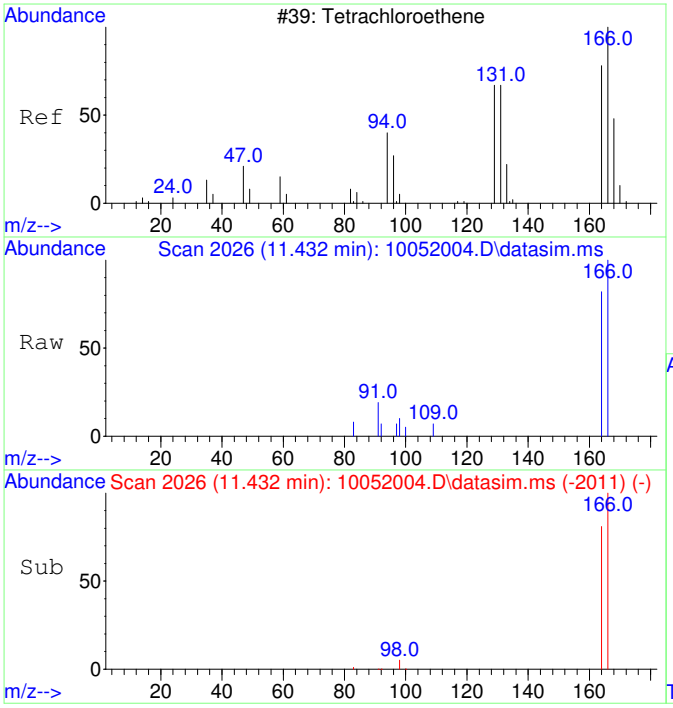


#14
1,1,2-Trichloroethane
Concen: 48.71 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 97 Resp: 1650

Ion	Ratio	Lower	Upper
97	100		
83	82.7	51.2	111.2

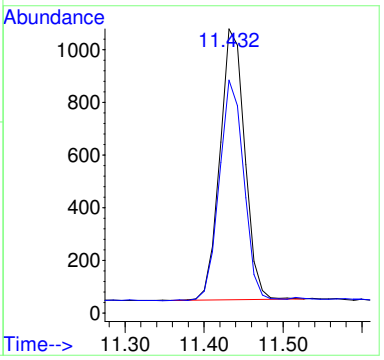


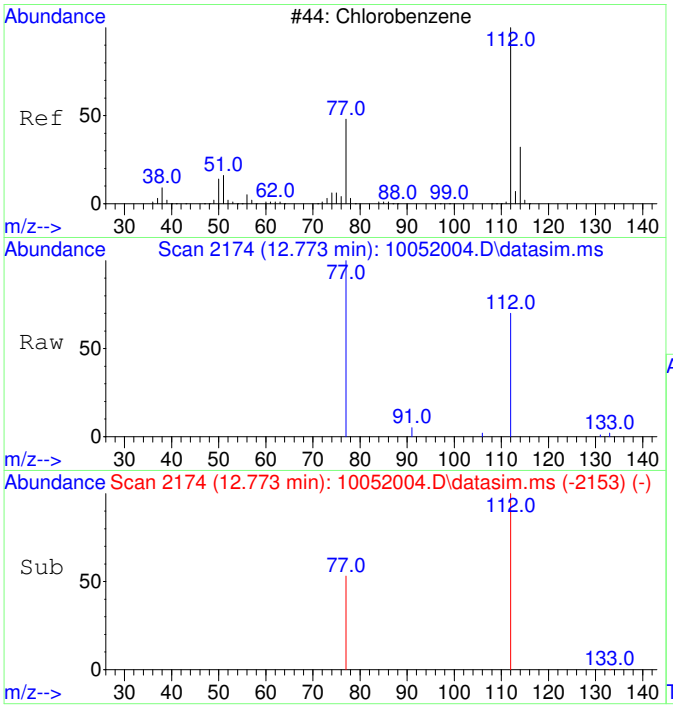


#15
Tetrachloroethene
Concen: 49.81 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:166 Resp: 2241

Ion	Ratio	Lower	Upper
166	100		
164	79.7	47.8	107.8

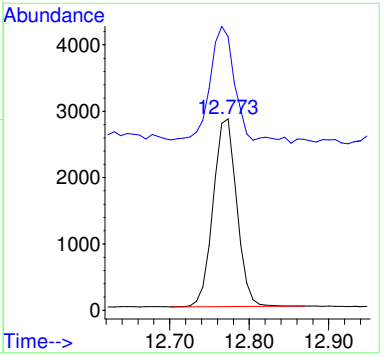


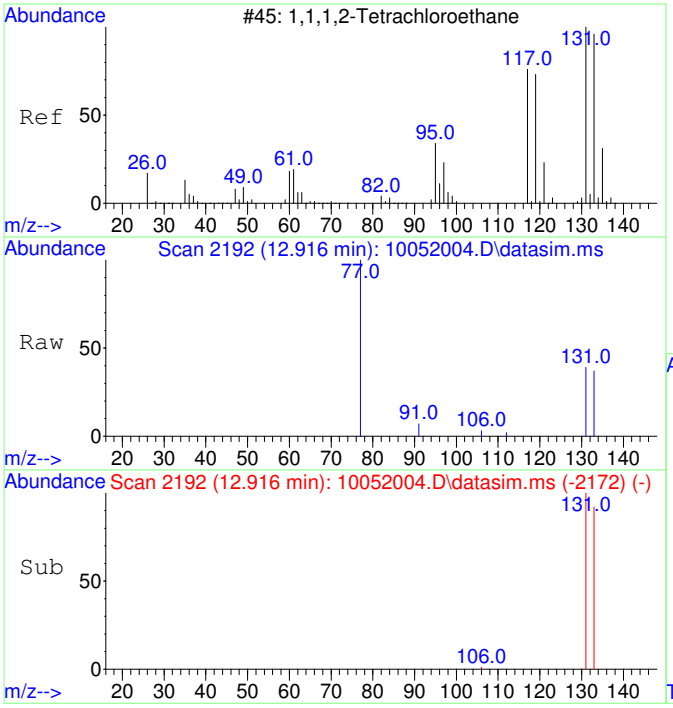


#16
Chlorobenzene
Concen: 52.51 ug/L
RT: 12.773 min Scan# 2174
Delta R.T. 0.016 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:112 Resp: 5845

Ion	Ratio	Lower	Upper
112	100		
77	60.8	23.6	83.6

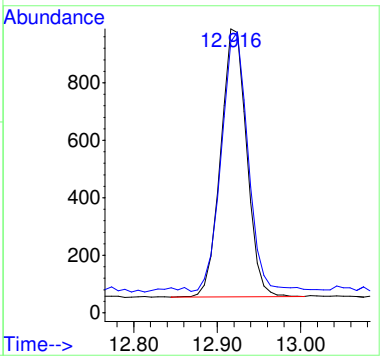


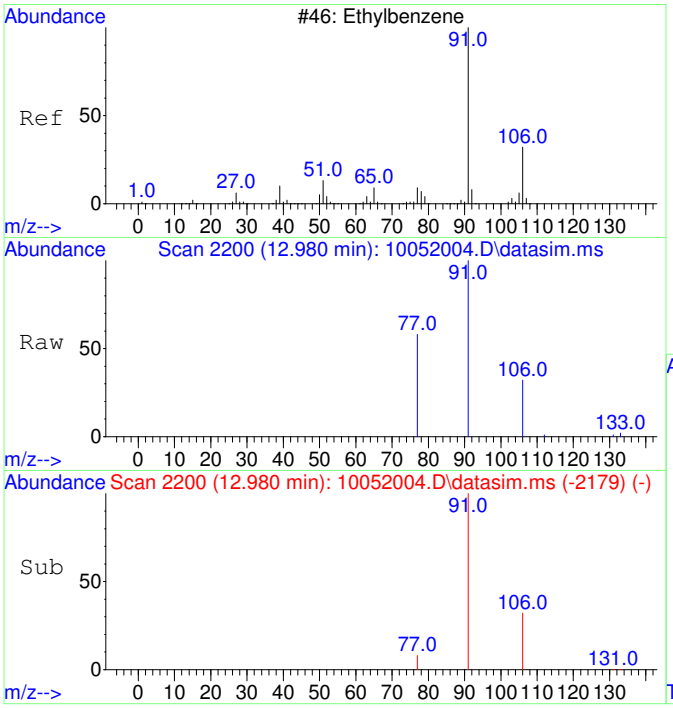


#17
1,1,1,2-Tetrachloroethane
Concen: 50.75 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.008 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:131 Resp: 2024

Ion	Ratio	Lower	Upper
131	100		
133	98.1	66.3	126.3

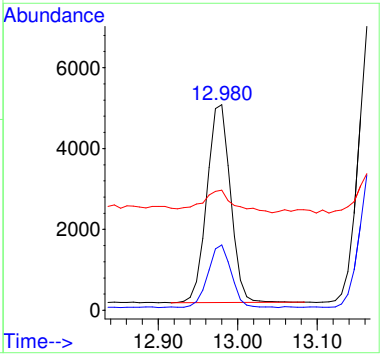


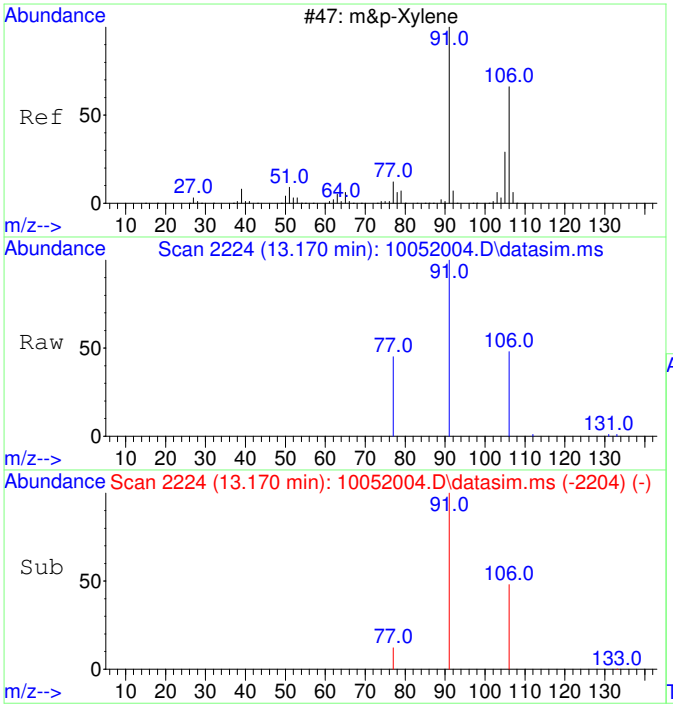


#18
Ethylbenzene
Concen: 53.40 ug/L
RT: 12.980 min Scan# 2200
Delta R.T. 0.016 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 10105

Ion	Ratio	Lower	Upper
91	100		
106	31.5	3.0	63.0
77	15.1	0.0	38.2

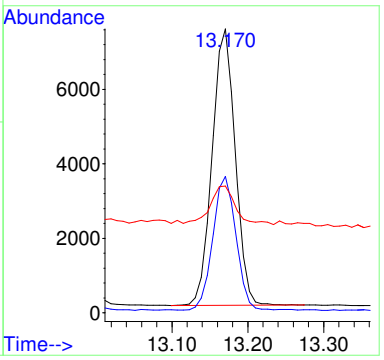


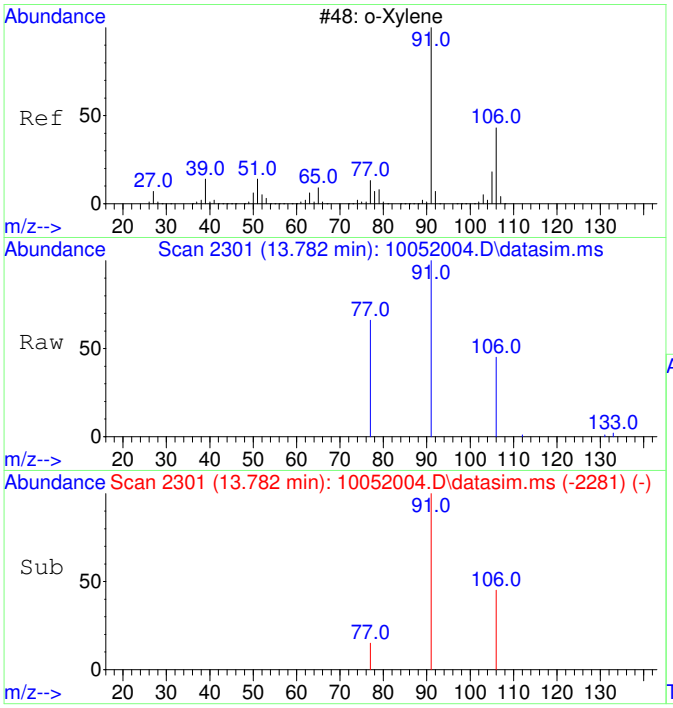


#19
m&p-Xylene
Concen: 106.01 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.008 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 15677

Ion	Ratio	Lower	Upper
91	100		
106	48.3	22.2	82.2
77	15.3	0.0	42.4

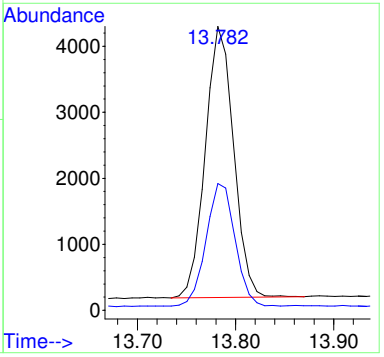


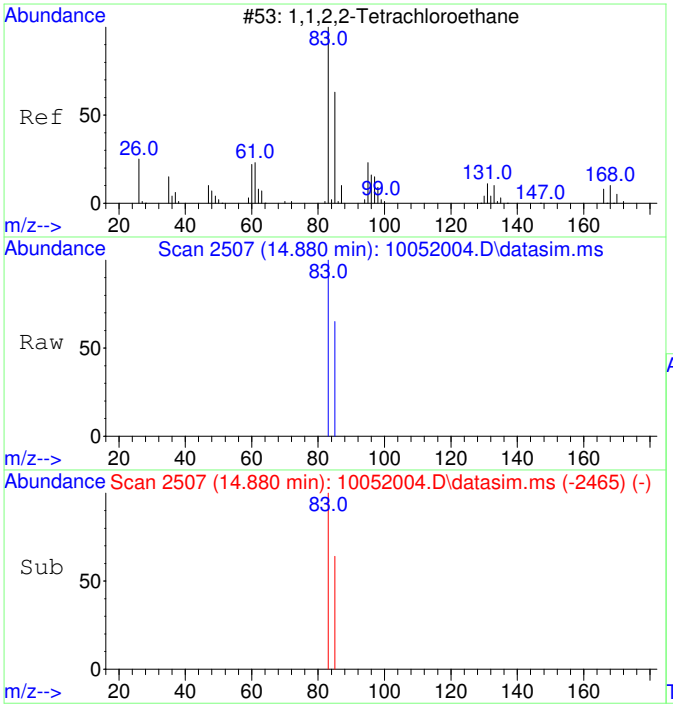


#20
o-Xylene
Concen: 51.93 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 8205

Ion	Ratio	Lower	Upper
91	100		
106	46.0	19.2	79.2

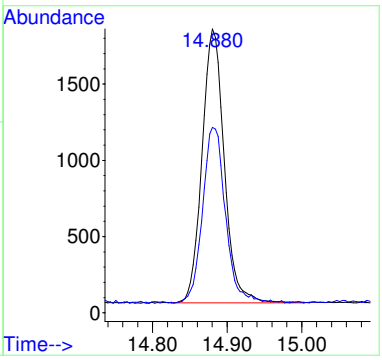


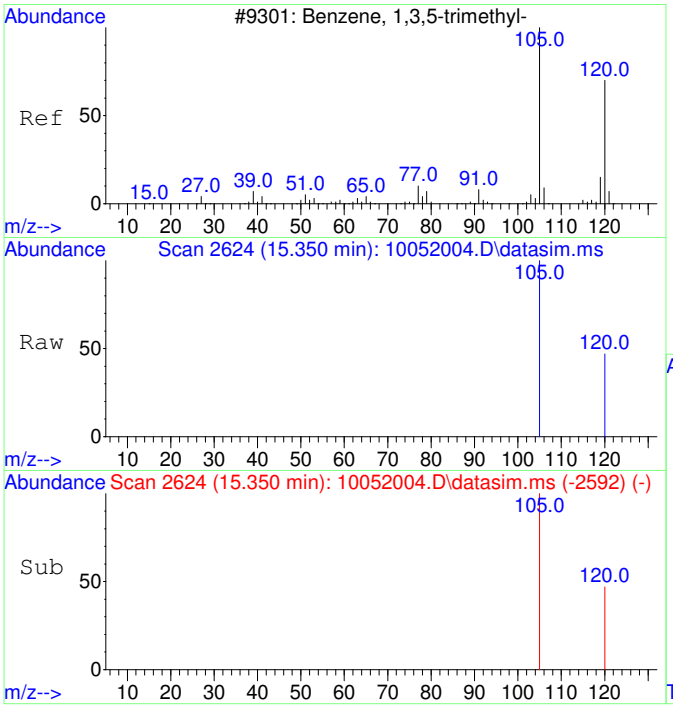


#21
1,1,2,2-Tetrachloroethane
Concen: 53.05 ug/L
RT: 14.880 min Scan# 2507
Delta R.T. 0.007 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 83 Resp: 3715

Ion	Ratio	Lower	Upper
83	100		
85	65.2	34.8	94.8

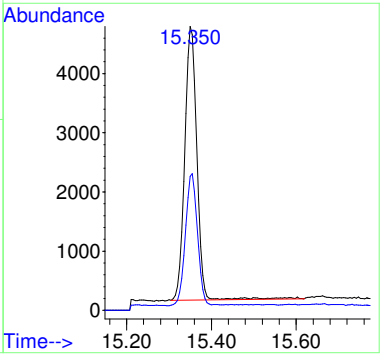


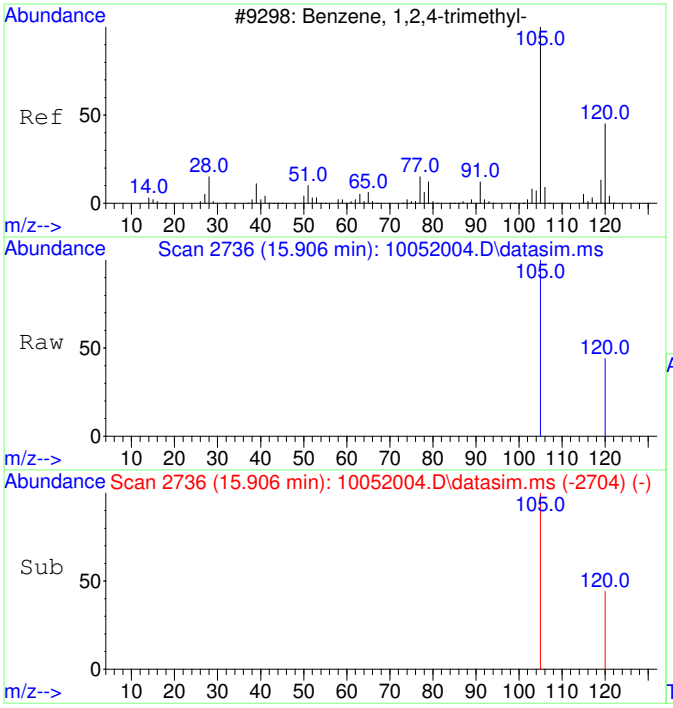


#22
1,3,5-Trimethylbenzene
Concen: 54.53 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.005 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:105 Resp: 9170

Ion	Ratio	Lower	Upper
105	100		
120	48.8	21.1	81.1

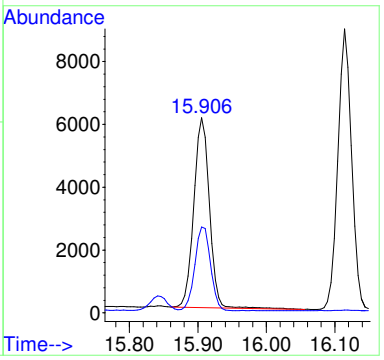


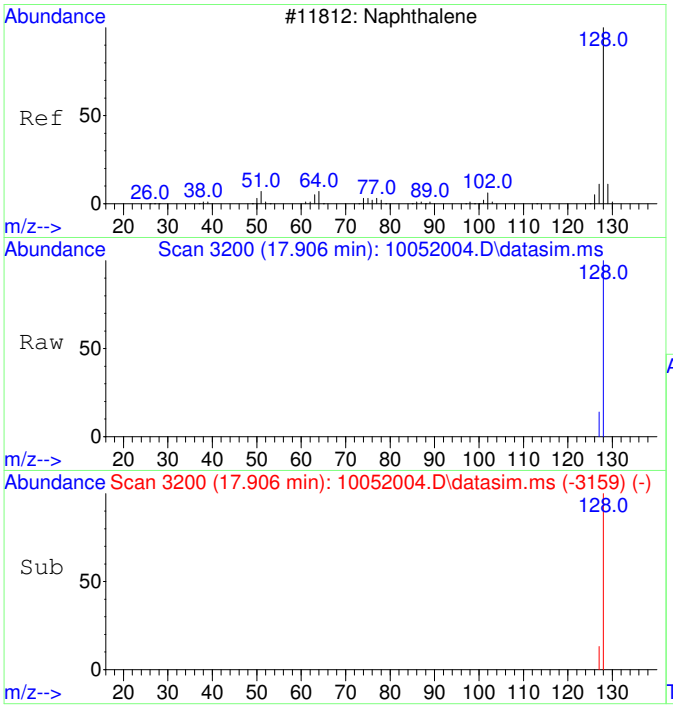


#23
1,2,4-Trimethylbenzene
Concen: 55.00 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:105 Resp: 9608

Ion	Ratio	Lower	Upper
105	100		
120	43.3	17.2	77.2

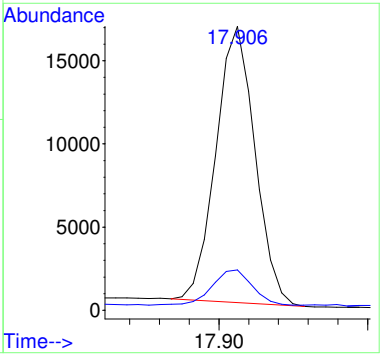


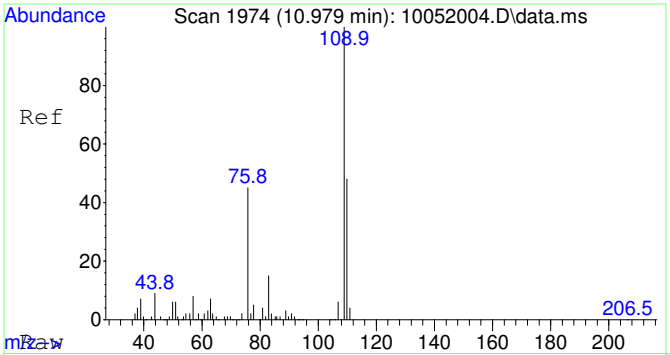


#24
Naphthalene
Concen: 54.63 ug/L
RT: 17.906 min Scan# 3200
Delta R.T. 0.004 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:128 Resp: 15081

Ion	Ratio	Lower	Upper
128	100		
127	13.8	0.0	42.5

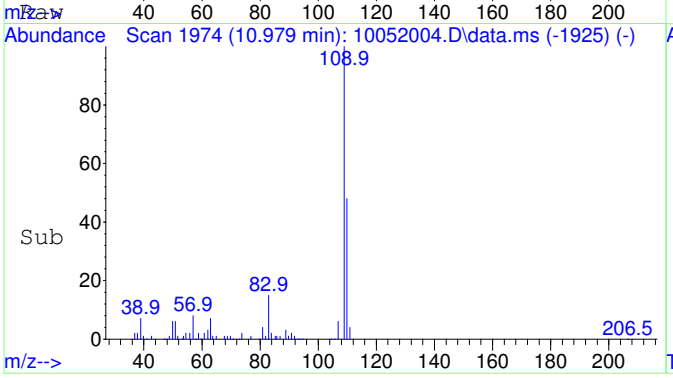


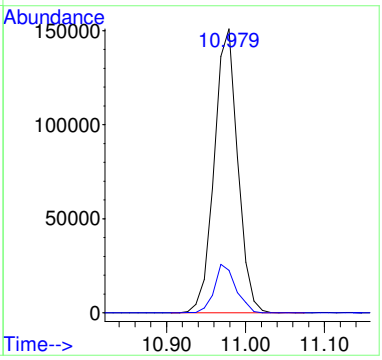


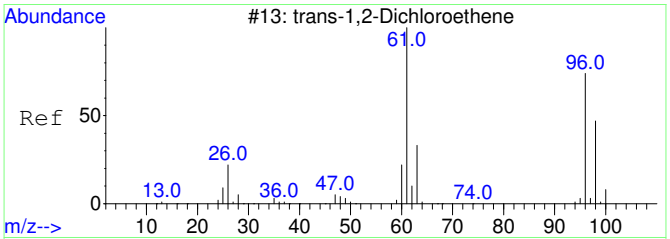
#25
2-Fluorotoluene SCAN
Concen: 5126.05 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:109 Resp: 311239

Ion	Ratio	Lower	Upper
109	100		
83	15.7	0.0	43.8



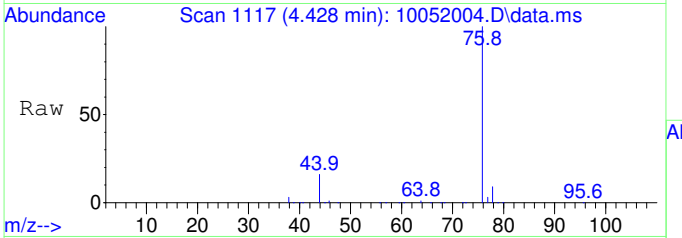


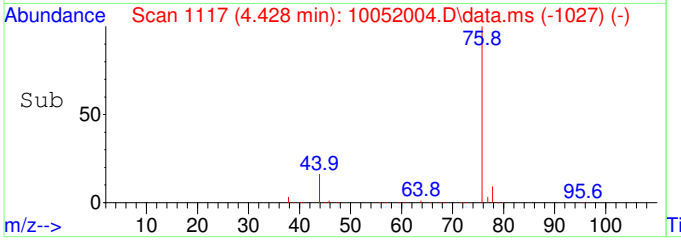


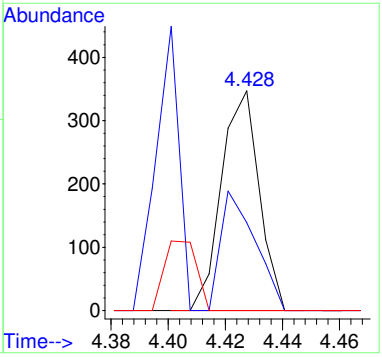
#27
trans-1,2-Dichloroethene SCAN
Concen: 20.06 ug/L
RT: 4.428 min Scan# 1117
Delta R.T. 0.027 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

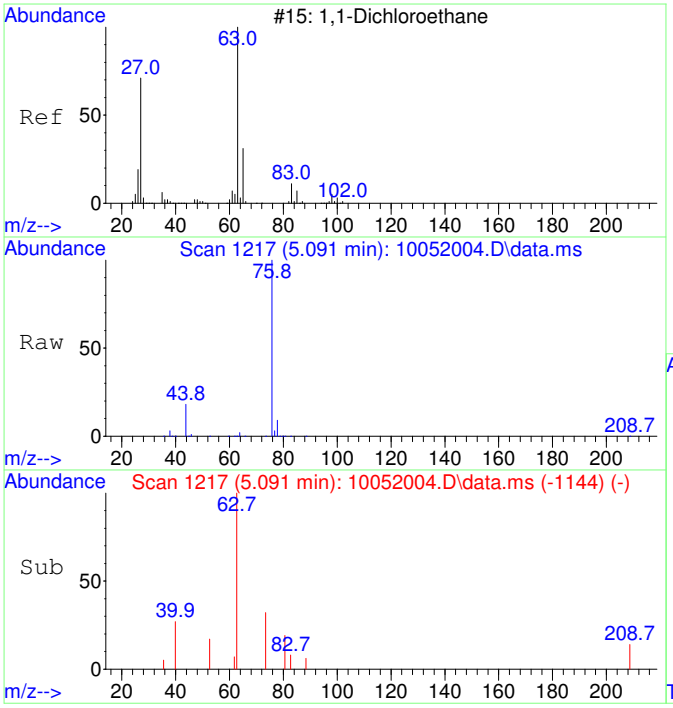
Tgt Ion: 61 Resp: 320

Ion	Ratio	Lower	Upper
61	100		
96	50.0	49.0	109.0
98	0.0	20.5	80.5#





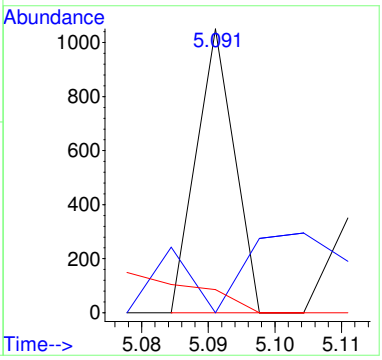


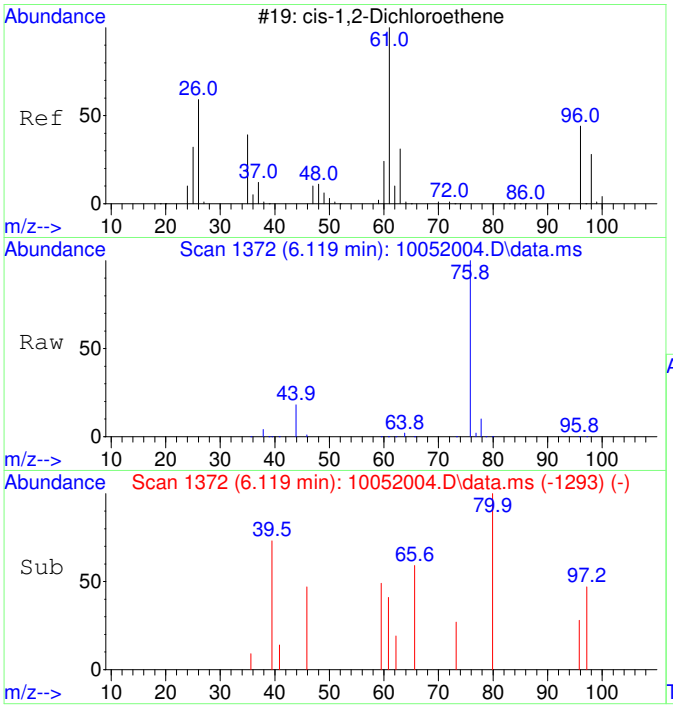


#28
1,1-Dichloroethane SCAN
Concen: 22.64 ug/L
RT: 5.091 min Scan# 1217
Delta R.T. -0.013 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 63 Resp: 418

Ion	Ratio	Lower	Upper
63	100		
65	163.4	1.3	61.3#
83	0.0	0.0	45.9

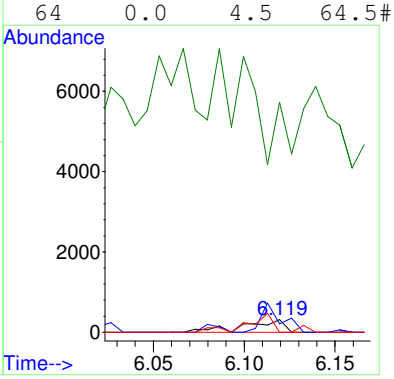


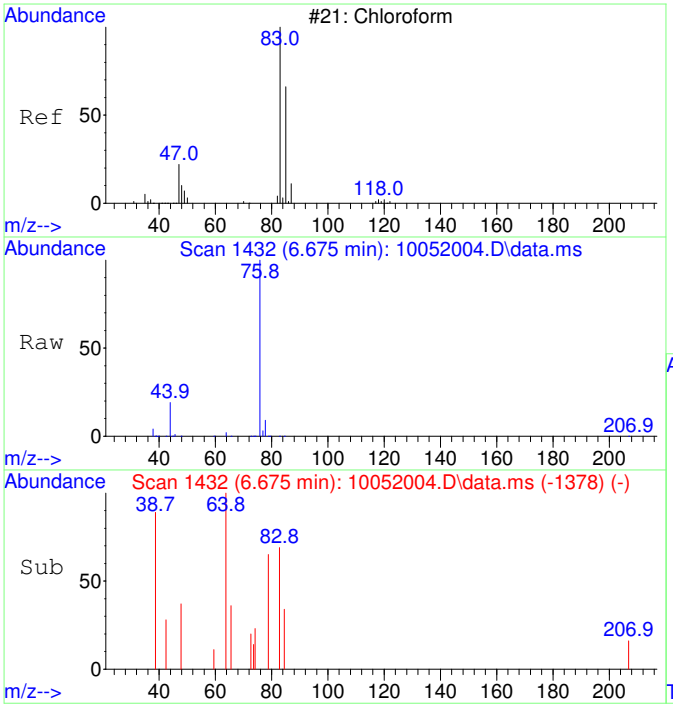


#29
cis-1,2-Dichloroethene SCAN
Concen: 24.46 ug/L
RT: 6.119 min Scan# 1372
Delta R.T. 0.027 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 61 Resp: 484

Ion	Ratio	Lower	Upper
61	100		
96	115.5	39.9	99.9#
98	94.0	13.5	73.5#
64	0.0	4.5	64.5#

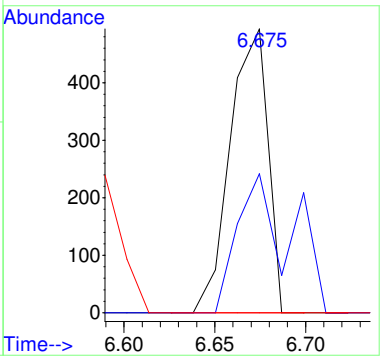


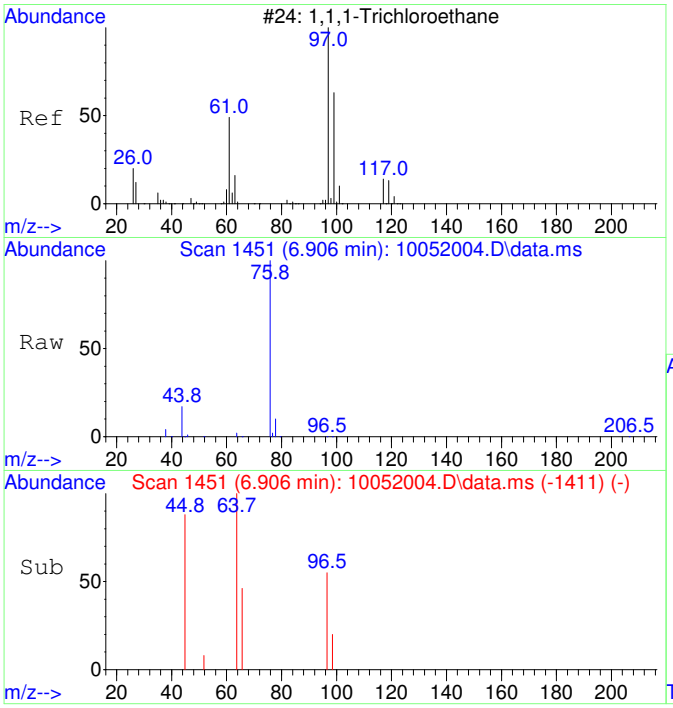


#30
Chloroform SCAN
Concen: 33.27 ug/L
RT: 6.675 min Scan# 1432
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 83 Resp: 714

Ion	Ratio	Lower	Upper
83	100		
85	68.6	34.6	94.6
47	0.0	0.0	53.4

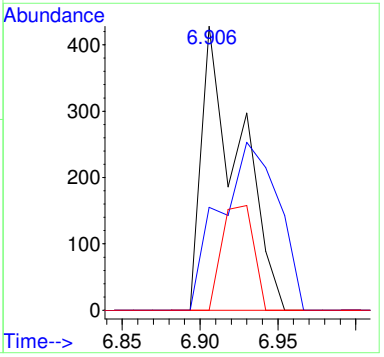


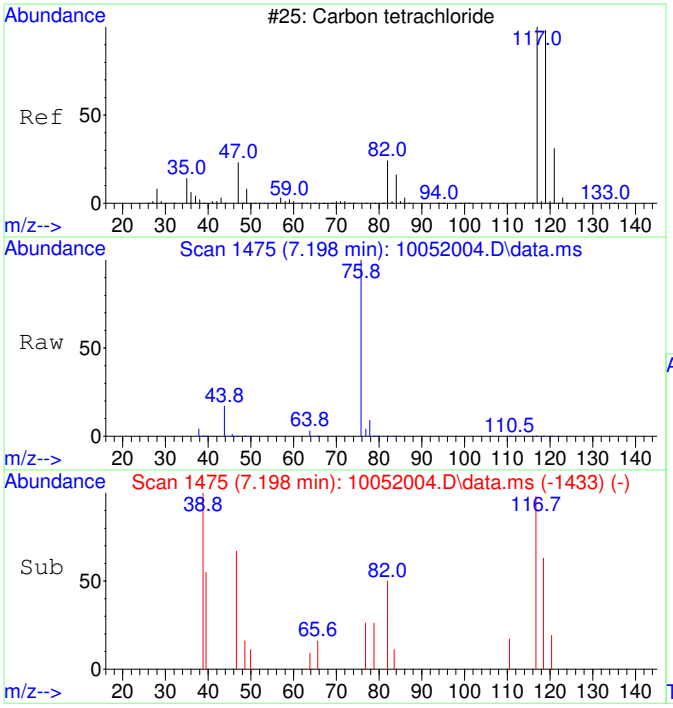


#31
1,1,1-Trichloroethane SCAN
Concen: 37.33 ug/L
RT: 6.906 min Scan# 1451
Delta R.T. -0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 97 Resp: 730

Ion	Ratio	Lower	Upper
97	100		
99	0.0	43.6	103.6#
61	0.0	18.0	78.0#

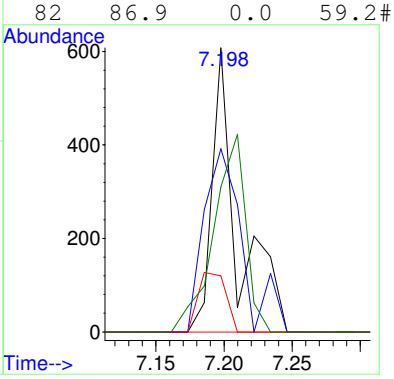


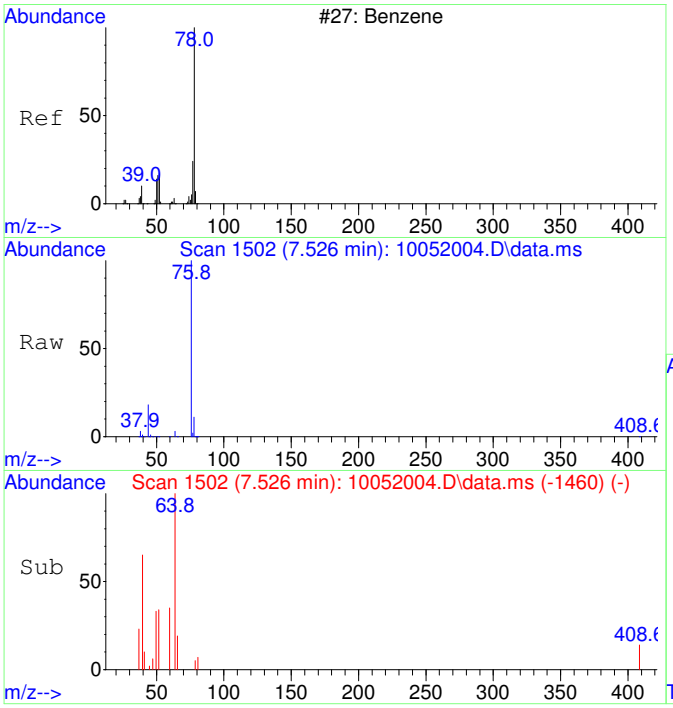


#32
Carbon tetrachloride SCAN
Concen: 38.97 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:117 Resp: 795

Ion	Ratio	Lower	Upper
117	100		
119	96.6	75.5	135.5
121	0.0	0.0	58.8
82	86.9	0.0	59.2#

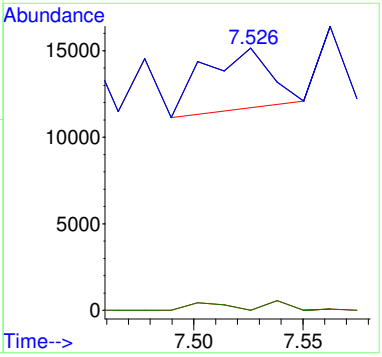


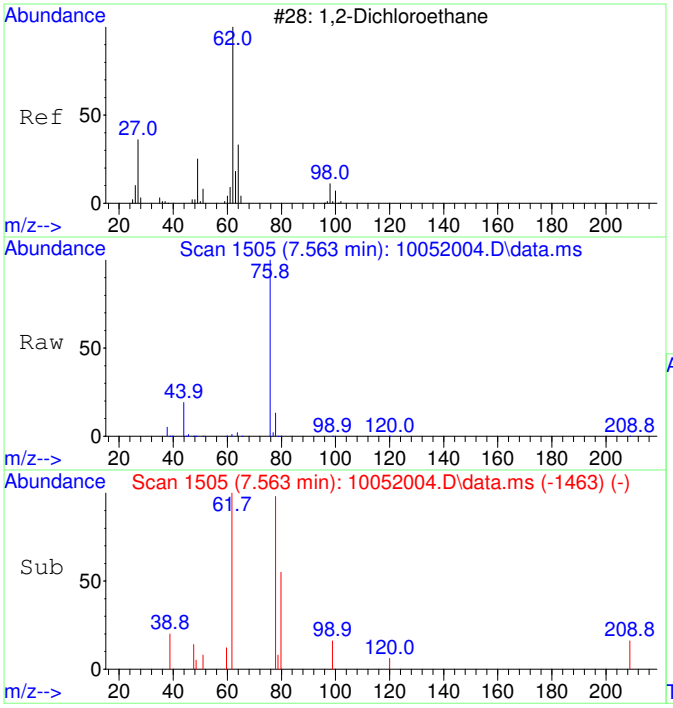


#33
Benzene SCAN
Concen: 143.10 ug/L
RT: 7.526 min Scan# 1502
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 78 Resp: 7705

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	6.0	0.0	47.9
51	6.0	0.0	44.1

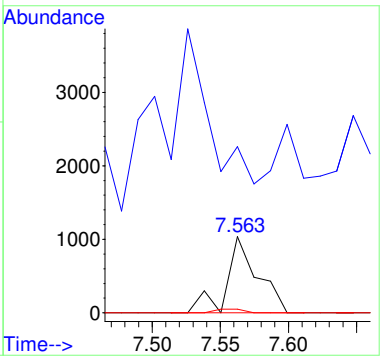


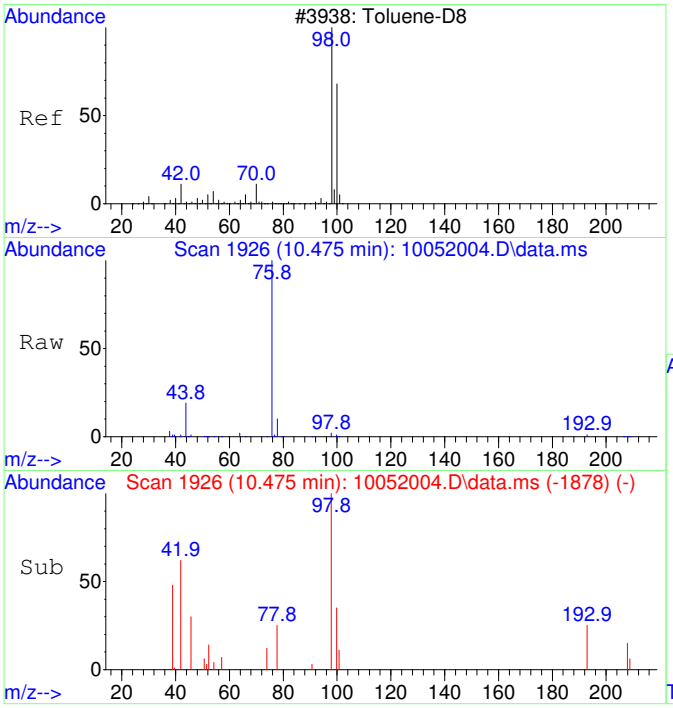


#34
1,2-Dichloroethane SCAN
Concen: 82.54 ug/L
RT: 7.563 min Scan# 1505
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 62 Resp: 1641

Ion	Ratio	Lower	Upper
62	100		
64	0.0	5.2	65.2#
49	4.5	3.9	63.9

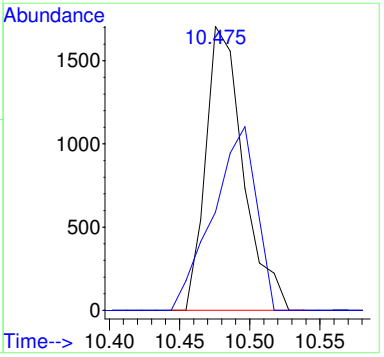


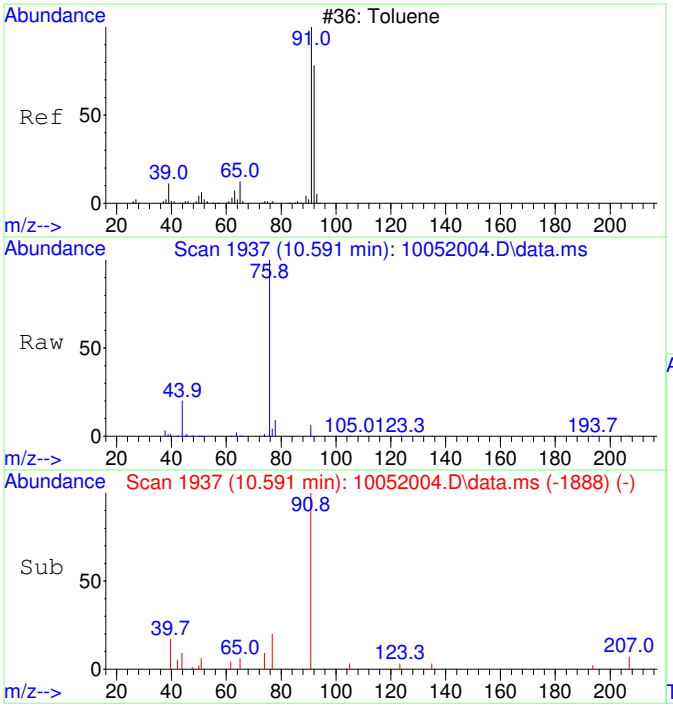


#36
Toluene-d8 SCAN
Concen: 53.54 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. -0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 98 Resp: 3179

Ion	Ratio	Lower	Upper
98	100		
100	0.0	40.0	100.0#

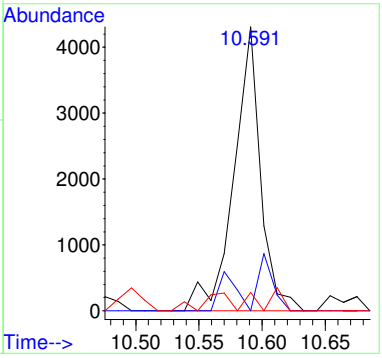


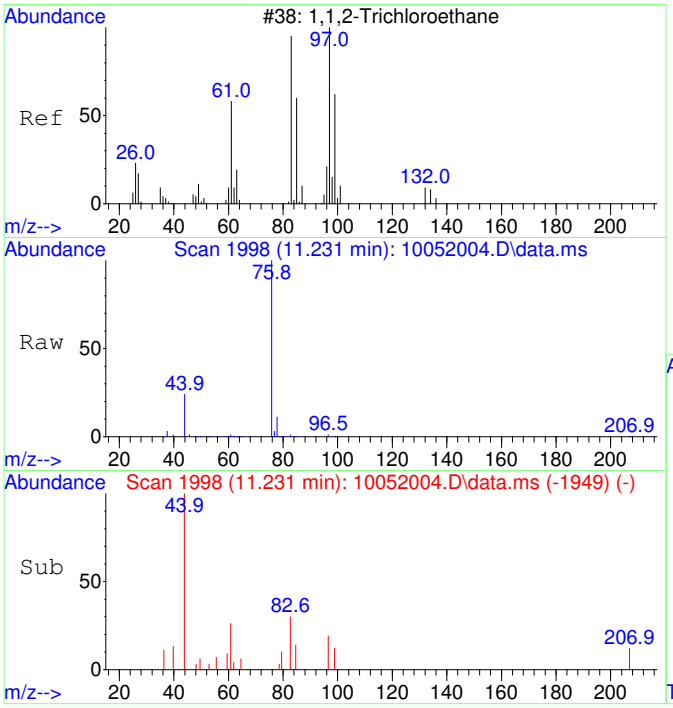


#37
Toluene SCAN
Concen: 83.20 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 6327

Ion	Ratio	Lower	Upper
91	100		
92	11.0	28.3	88.3#
65	2.8	0.0	41.0

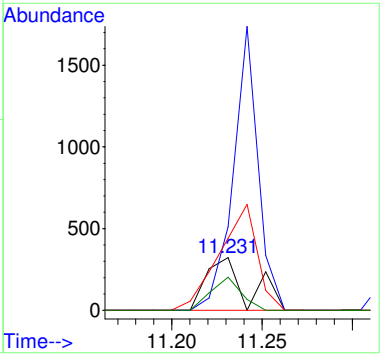


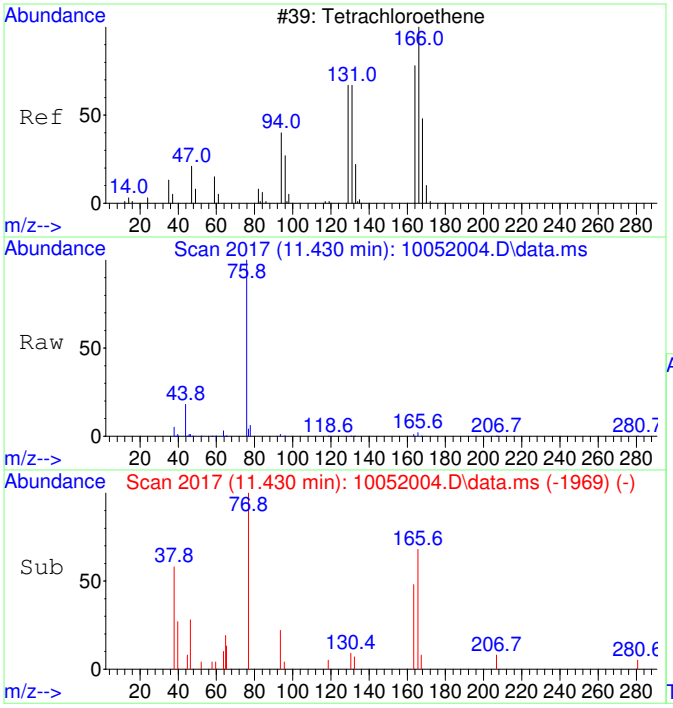


#38
1,1,2-Trichloroethane SCAN
Concen: 30.00 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 97 Resp: 512

Ion	Ratio	Lower	Upper
97	100		
83	327.1	57.7	117.7#
61	185.0	32.1	92.1#
99	46.3	36.7	96.7

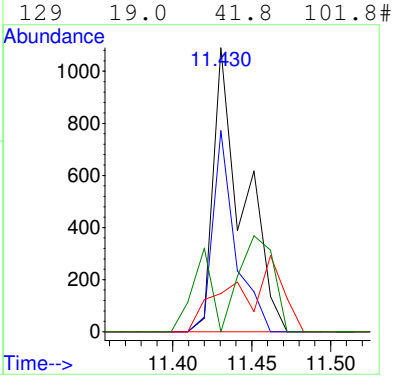


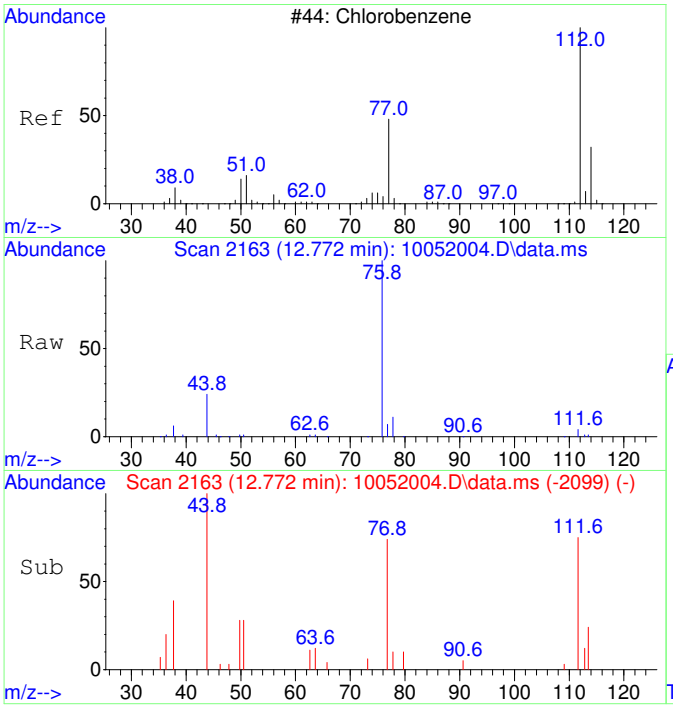


#39
Tetrachloroethene SCAN
Concen: 78.66 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. -0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:166 Resp: 1437

Ion	Ratio	Lower	Upper
166	100		
164	53.3	50.9	110.9
131	0.0	38.7	98.7#
129	19.0	41.8	101.8#

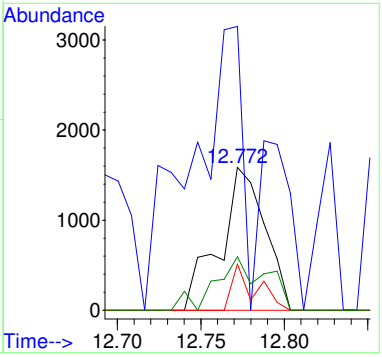


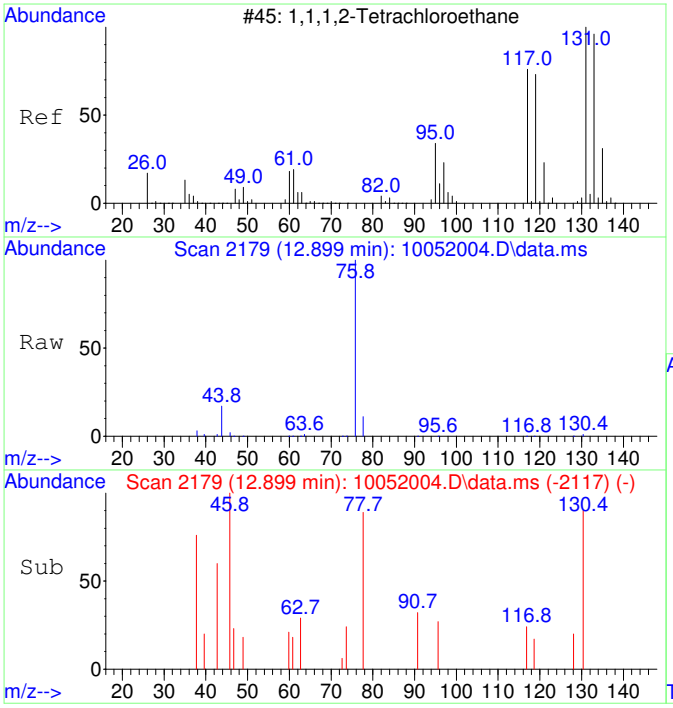


#40
Chlorobenzene SCAN
Concen: 57.79 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.008 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:112 Resp: 3003

Ion	Ratio	Lower	Upper
112	100		
77	223.3	28.2	88.2#
114	16.5	2.3	62.3
51	41.4	0.0	50.1

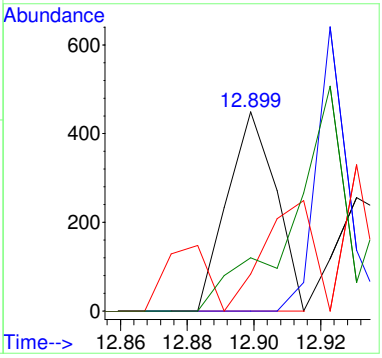


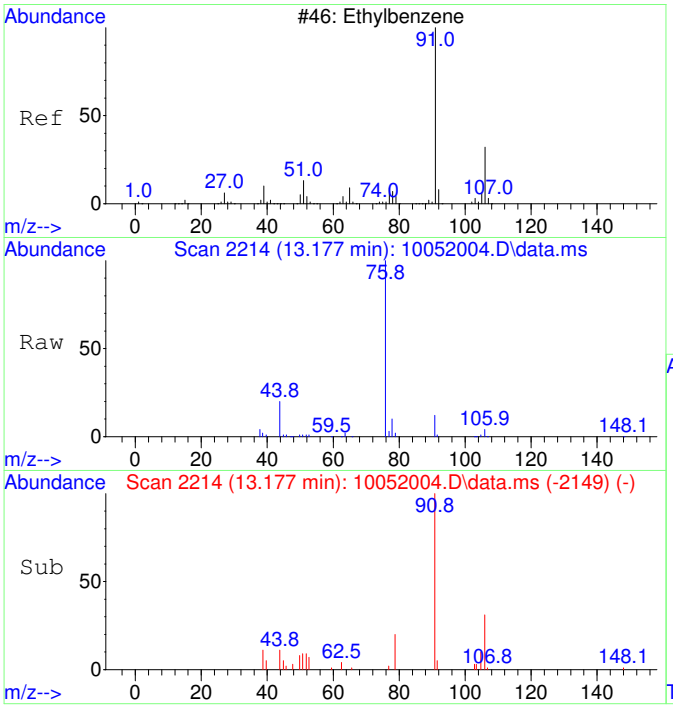


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 23.61 ug/L
RT: 12.899 min Scan# 2179
Delta R.T. -0.008 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:131 Resp: 454

Ion	Ratio	Lower	Upper
131	100		
133	0.0	66.9	126.9#
119	29.1	40.4	100.4#
117	0.0	35.1	95.1#

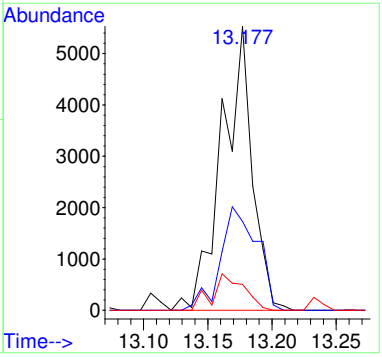


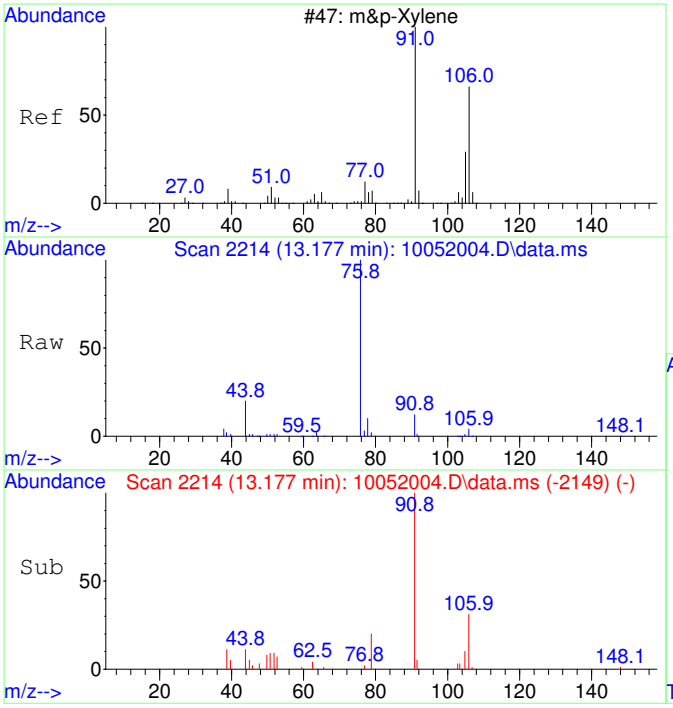


#42
Ethylbenzene SCAN
Concen: 65.82 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 9119

Ion	Ratio	Lower	Upper
91	100		
106	43.9	23.1	83.1
51	13.3	0.0	40.1

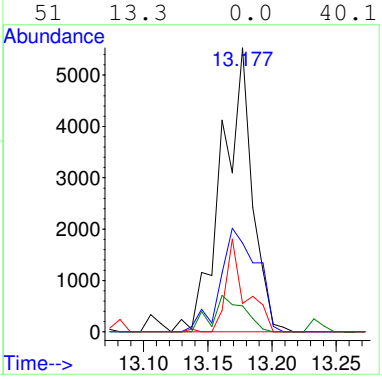


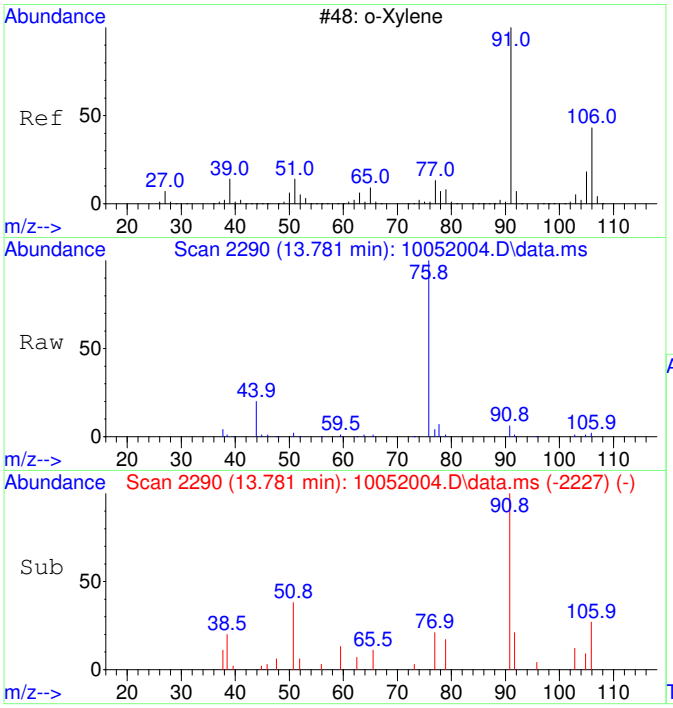


#43
m&p-Xylene SCAN
Concen: 65.82 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 9119

Ion	Ratio	Lower	Upper
91	100		
106	43.9	23.1	83.1
105	21.2	0.0	54.7
51	13.3	0.0	40.1

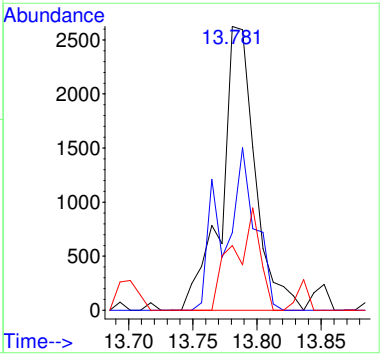


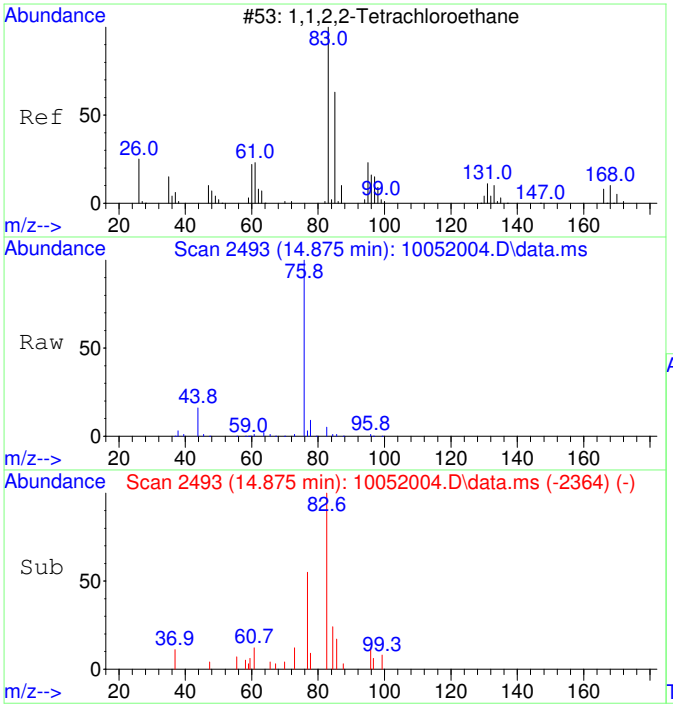


#44
o-Xylene SCAN
Concen: 64.01 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. 0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 4747

Ion	Ratio	Lower	Upper
91	100		
106	55.5	18.0	78.0
105	28.8	0.0	56.6

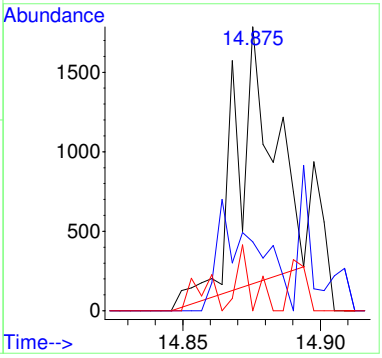


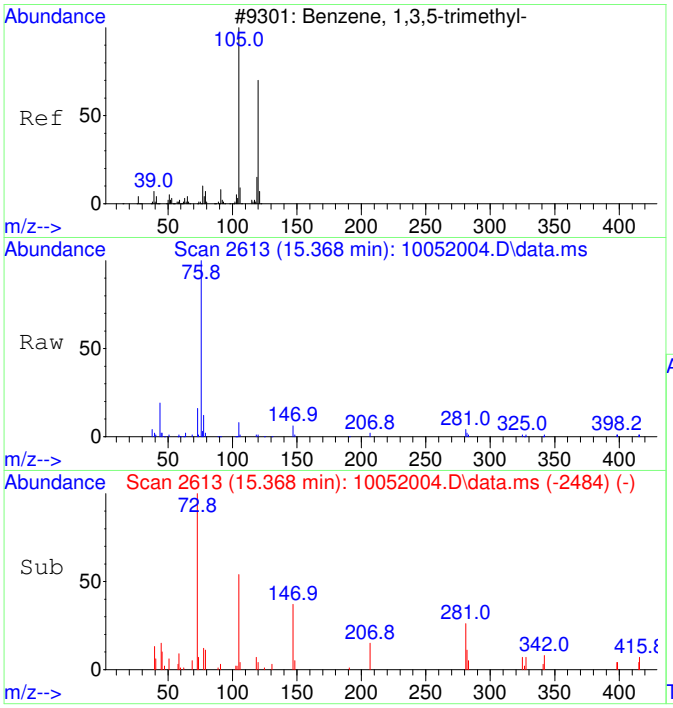


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 43.64 ug/L
RT: 14.875 min Scan# 2493
Delta R.T. 0.004 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 83 Resp: 1578

Ion	Ratio	Lower	Upper
83	100		
85	0.0	35.9	95.9#
95	10.0	0.0	47.4

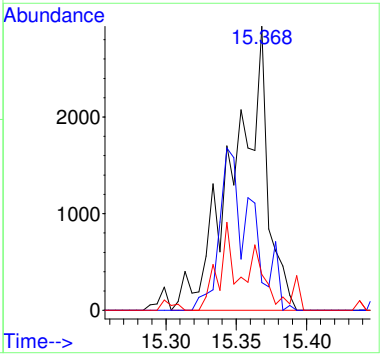


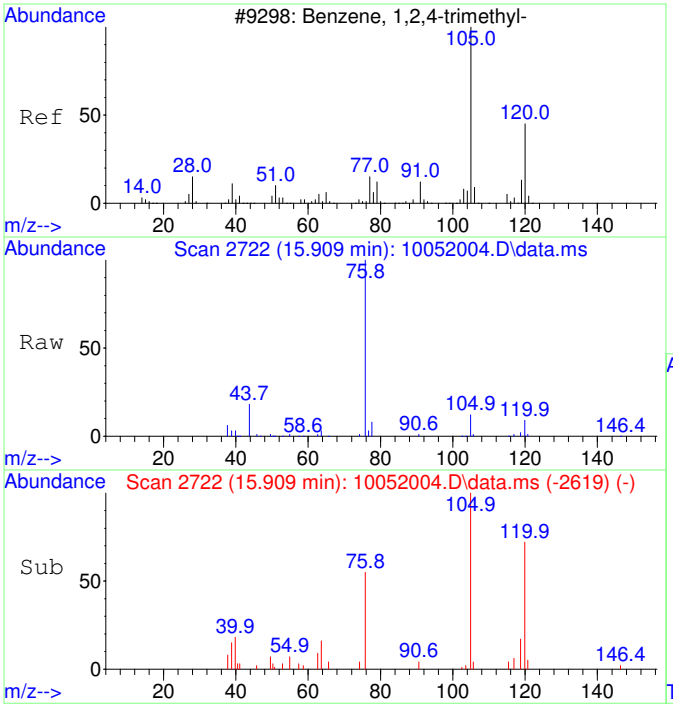


#46
1,3,5-Trimethylbenzene SCAN
Concen: 63.85 ug/L
RT: 15.368 min Scan# 2613
Delta R.T. 0.025 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:105 Resp: 4990

Ion	Ratio	Lower	Upper
105	100		
120	0.0	18.3	78.3#
119	4.0	0.0	43.1

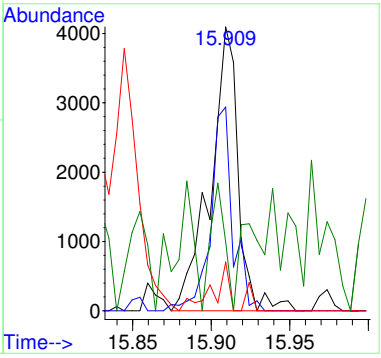


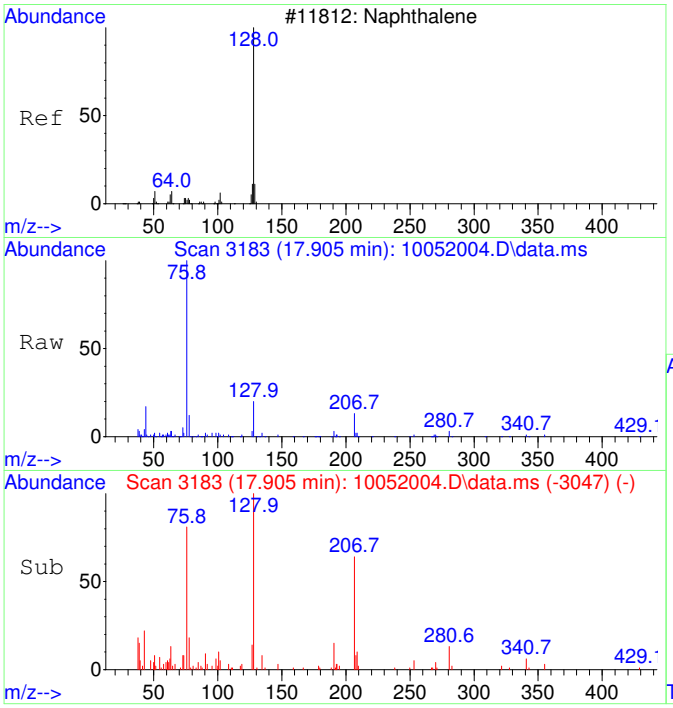


#47
1,2,4-Trimethylbenzene SCAN
Concen: 63.40 ug/L
RT: 15.909 min Scan# 2722
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:105 Resp: 5070

Ion	Ratio	Lower	Upper
105	100		
120	56.7	16.9	76.9
119	9.6	0.0	41.9
77	23.1	0.0	42.3

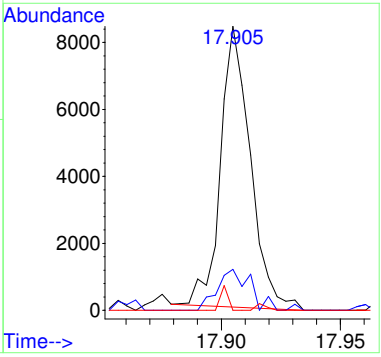




#48
Naphthalene SCAN
Concen: 60.33 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.004 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:128 Resp: 7300

Ion	Ratio	Lower	Upper
128	100		
127	16.2	0.0	44.0
129	2.2	0.0	40.8



Quantitation Report (QT Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052004.D
Acq On : 5 Oct 2020 10:17
InstName : AG5975C
Operator : TD
Sample : S20J006-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

M.I. Performed By:
TD at 10:47 am, Oct 05, 2020

M.I. Approved By:
ZR at 3:55 pm, Oct 07, 2020

Quant Time: Oct 05 10:36:11 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

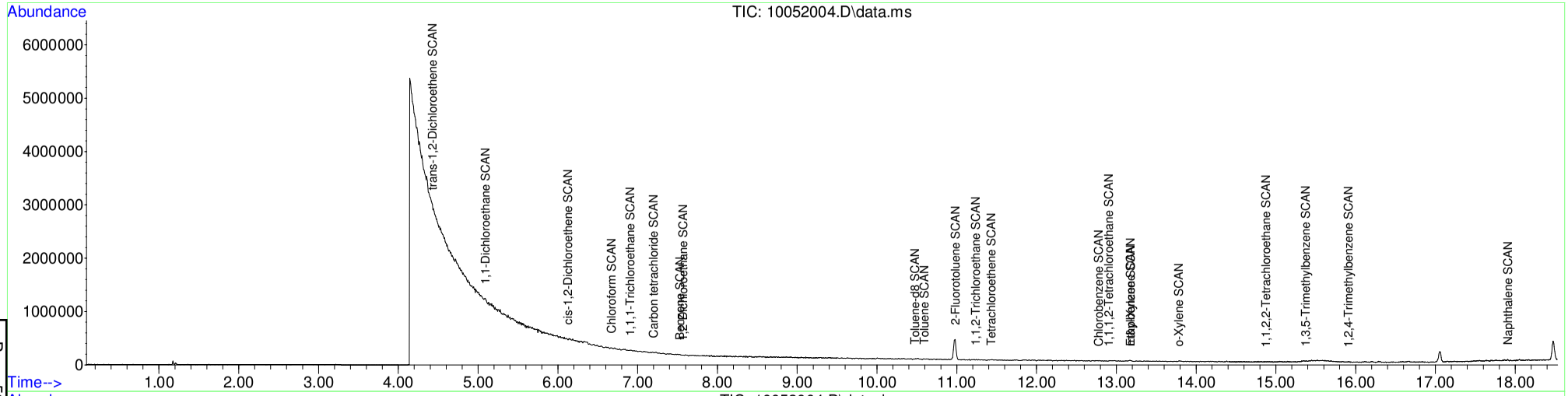
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	622858	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	6051	49.63 ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 0.99%#		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.097	61	1199m	48.21 ug/L	
3] trans-1,2-Dichloroethene	4.416	61	1450	50.46 ug/L	75
4] 1,1-Dichloroethane	5.112	63	1775	49.62 ug/L	89
5] cis-1,2-Dichloroethene	6.101	61	1892	50.11 ug/L	100
6] Chloroform	6.664	83	1828	47.30 ug/L	98
7] 1,1,1-Trichloroethane	6.931	97	1946	46.36 ug/L	99
8] Carbon tetrachloride	7.199	117	1830	46.32 ug/L	99
9] Benzene	7.515	78	5979	56.50 ug/L	62
10] 1,2-Dichloroethane	7.552	62	1876	49.66 ug/L #	1
11] Trichloroethene	8.580	130	1525	47.86 ug/L	94
13] Toluene	10.582	91	7943	51.10 ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	1650	48.71 ug/L	98
15] Tetrachloroethene	11.432	166	2241	49.81 ug/L	98
16] Chlorobenzene	12.773	112	5845	52.51 ug/L	90
17] 1,1,1,2-Tetrachloroethane	12.916	131	2024	50.75 ug/L	98
18] Ethylbenzene	12.980	91	10105	53.40 ug/L	94
19] m&p-Xylene	13.170	91	15677	106.01 ug/L	94
20] o-Xylene	13.782	91	8205	51.93 ug/L	95
21] 1,1,2,2-Tetrachloroethane	14.880	83	3715	53.05 ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	9170	54.53 ug/L	97
23] 1,2,4-Trimethylbenzene	15.906	105	9608	55.00 ug/L	94
24] Naphthalene	17.906	128	15081	54.63 ug/L	97
25) 2-Fluorotoluene SCAN	10.979	109	311239	5126.05 ug/L	95
27) trans-1,2-Dichloroethe...	4.428	61	320	20.06 ug/L #	51
28) 1,1-Dichloroethane SCAN	5.091	63	418	22.64 ug/L #	1
29) cis-1,2-Dichloroethene...	6.119	61	484	24.46 ug/L #	37
30) Chloroform SCAN	6.675	83	714	33.27 ug/L #	83
31) 1,1,1-Trichloroethane ...	6.906	97	730	37.33 ug/L #	19
32) Carbon tetrachloride SCAN	7.198	117	795	38.97 ug/L #	66
33) Benzene SCAN	7.526	78	7705	143.10 ug/L	94
34) 1,2-Dichloroethane SCAN	7.563	62	1641	82.54 ug/L #	44
36) Toluene-d8 SCAN	10.475	98	3179	53.54 ug/L #	15
37) Toluene SCAN	10.591	91	6327	83.20 ug/L #	43
38) 1,1,2-Trichloroethane ...	11.231	97	512	30.00 ug/L #	1
39) Tetrachloroethene SCAN	11.430	166	1437	78.66 ug/L #	42
40) Chlorobenzene SCAN	12.772	112	3003	57.79 ug/L #	1
41) 1,1,1,2-Tetrachloroeth...	12.899	131	454	23.61 ug/L #	21
42) Ethylbenzene SCAN	13.177	91	9119	65.82 ug/L	88
43) m&p-Xylene SCAN	13.177	91	9119	65.82 ug/L	89
44) o-Xylene SCAN	13.781	91	4747	64.01 ug/L	91
45) 1,1,2,2-Tetrachloroeth...	14.875	83	1578	43.64 ug/L #	31
46) 1,3,5-Trimethylbenzene...	15.368	105	4990	63.85 ug/L #	39
47) 1,2,4-Trimethylbenzene...	15.909	105	5070	63.40 ug/L	85
48) Naphthalene SCAN	17.905	128	7300	60.33 ug/L	87

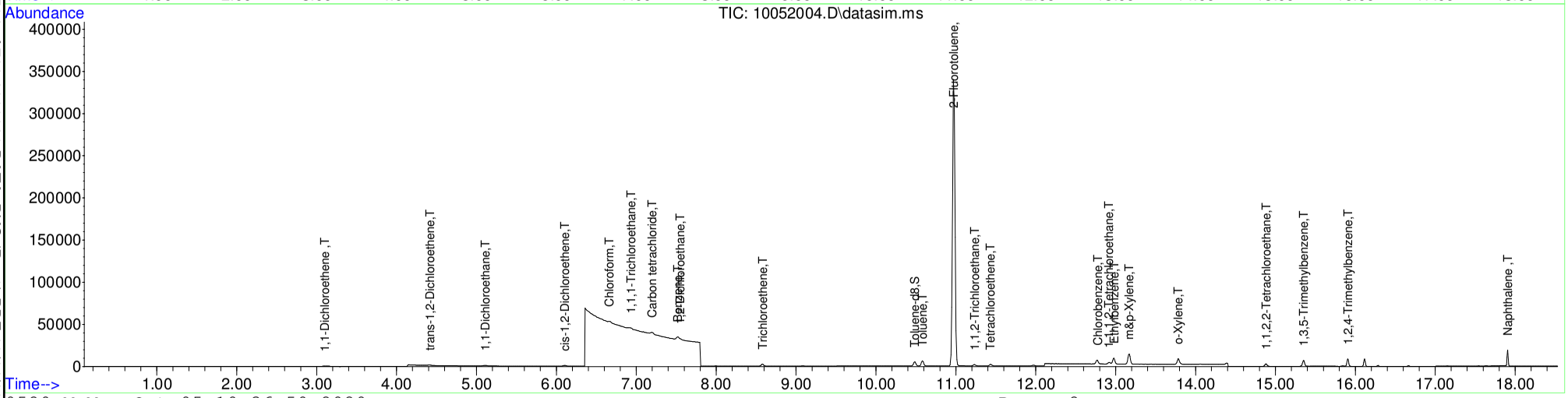
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100520\
Data File : 10052004.D
Acq On : 5 Oct 2020 10:17
InstName : AG5975C
Operator : TD
Sample : S20J006-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 05 10:36:11 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100520.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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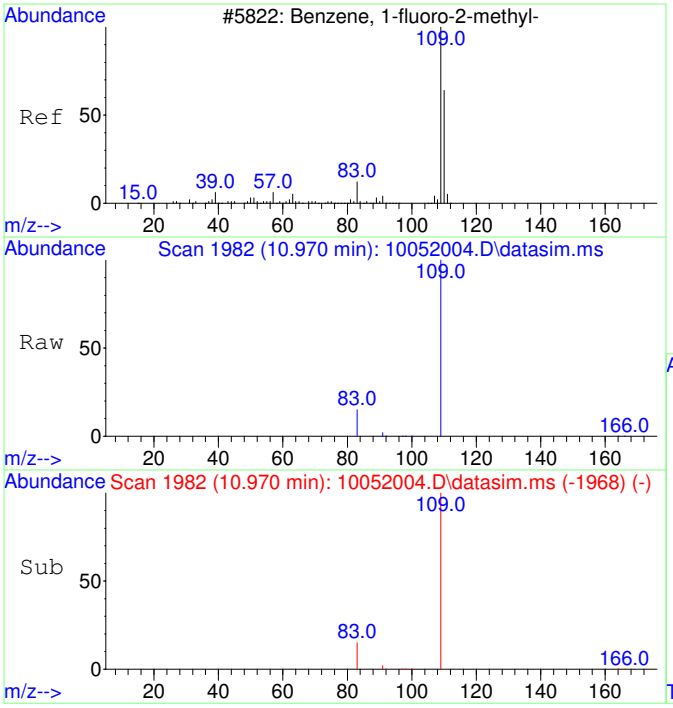
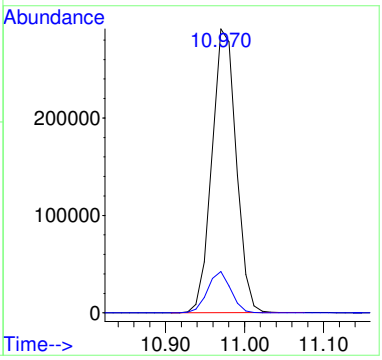
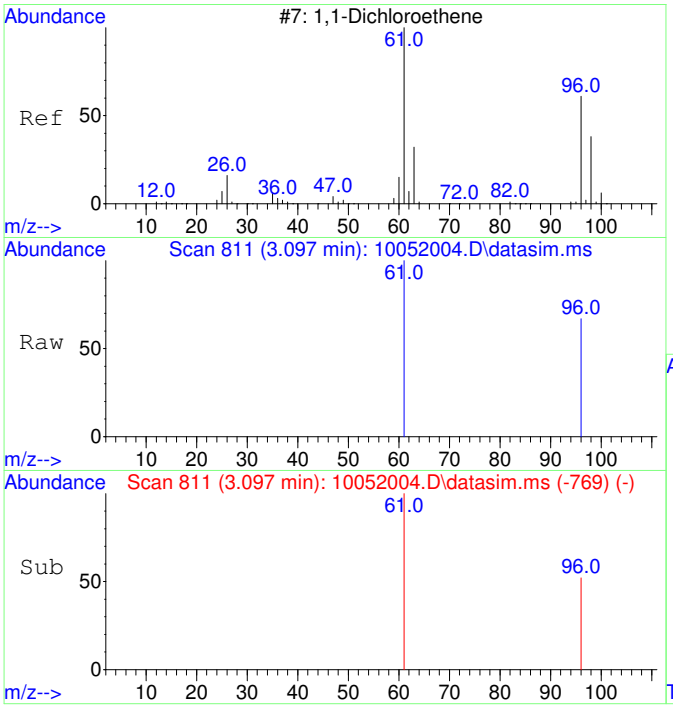


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:109 Resp: 622858

Ion	Ratio	Lower	Upper
109	100		
83	13.9	0.0	42.3

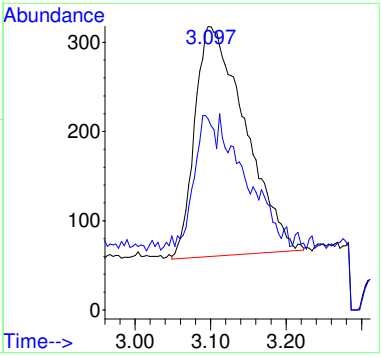


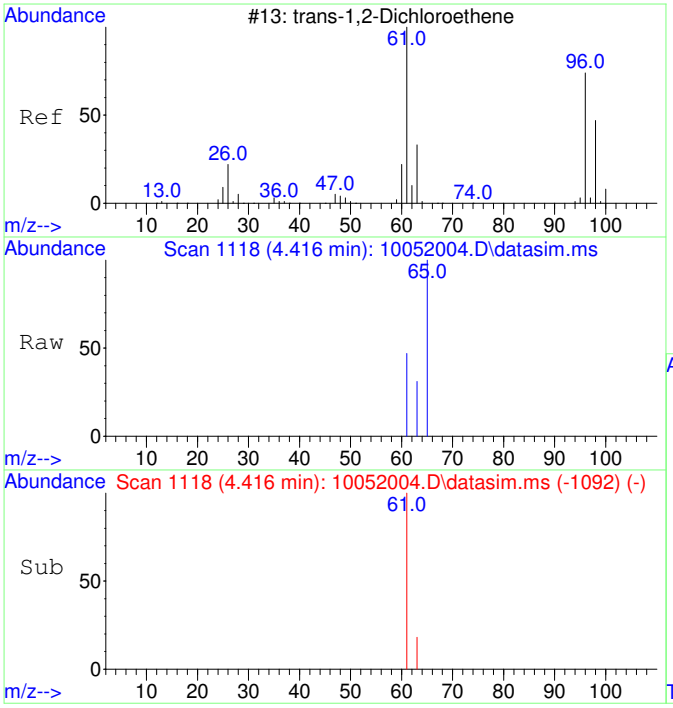


#2
1,1-Dichloroethene
Concen: 48.21 ug/L m
RT: 3.097 min Scan# 811
Delta R.T. 0.007 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 61 Resp: 1199

Ion	Ratio	Lower	Upper
61	100		
96	31.9	37.2	97.2#

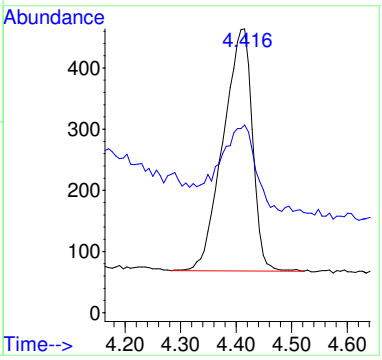


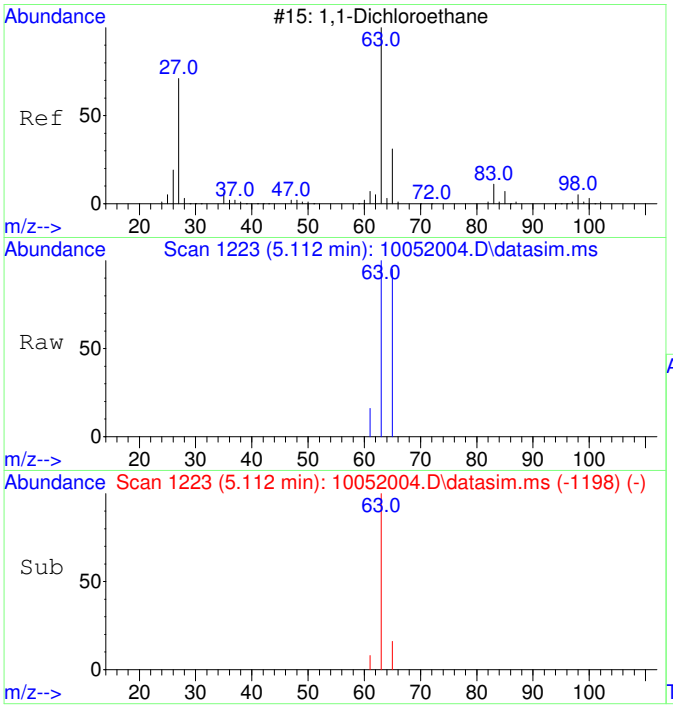


#3
trans-1,2-Dichloroethene
Concen: 50.46 ug/L
RT: 4.416 min Scan# 1118
Delta R.T. 0.020 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 61 Resp: 1450

Ion	Ratio	Lower	Upper
61	100		
63	46.5	2.4	62.4

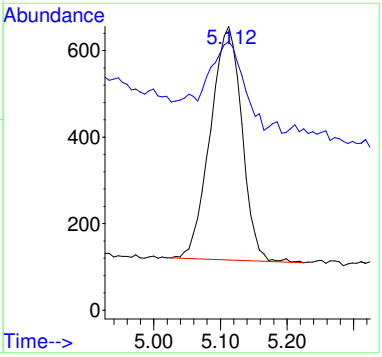


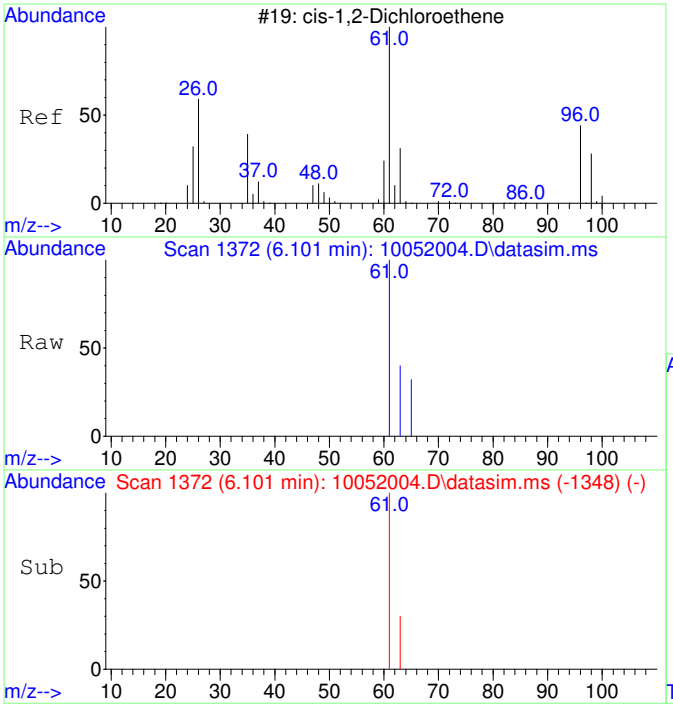


#4
1,1-Dichloroethane
Concen: 49.62 ug/L
RT: 5.112 min Scan# 1223
Delta R.T. 0.013 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 63 Resp: 1775

Ion	Ratio	Lower	Upper
63	100		
65	37.7	1.8	61.8

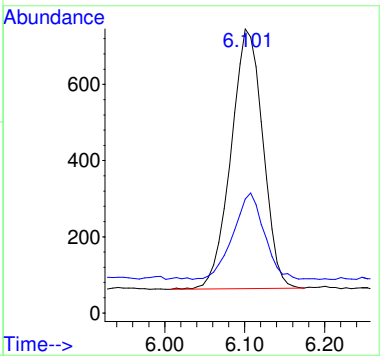


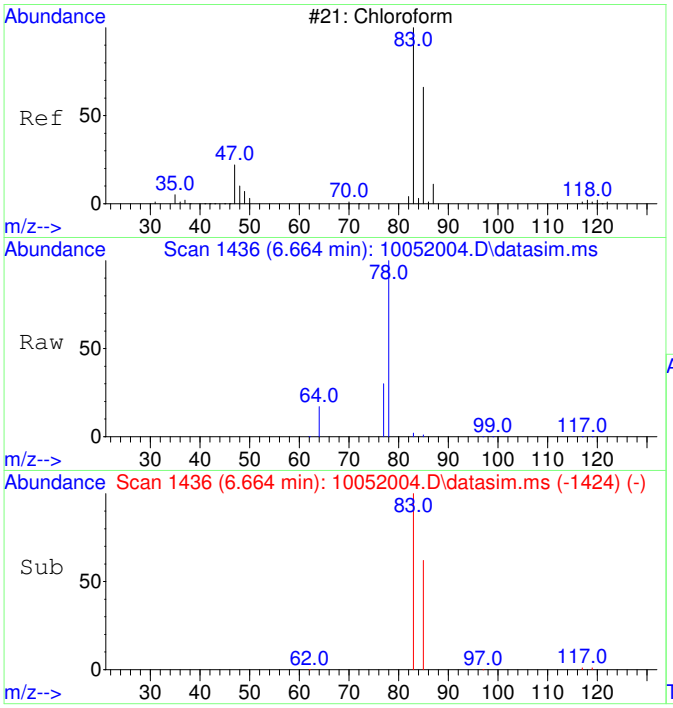


#5
cis-1,2-Dichloroethene
Concen: 50.11 ug/L
RT: 6.101 min Scan# 1372
Delta R.T. 0.007 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 61 Resp: 1892

Ion	Ratio	Lower	Upper
61	100		
63	32.7	2.5	62.5

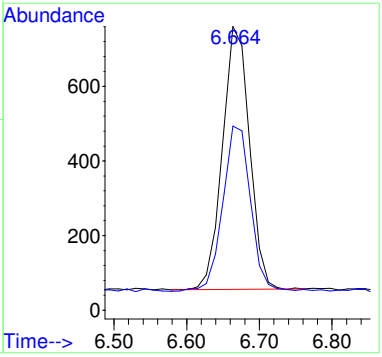


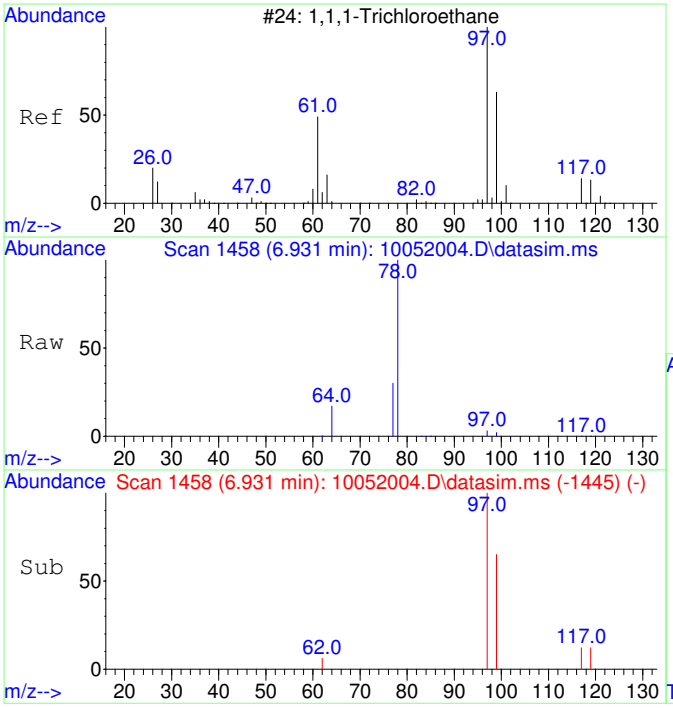


#6
Chloroform
Concen: 47.30 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 83 Resp: 1828

Ion	Ratio	Lower	Upper
83	100		
85	63.8	35.1	95.1

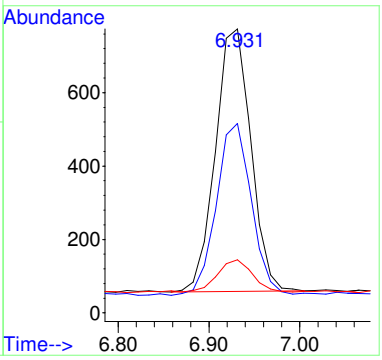


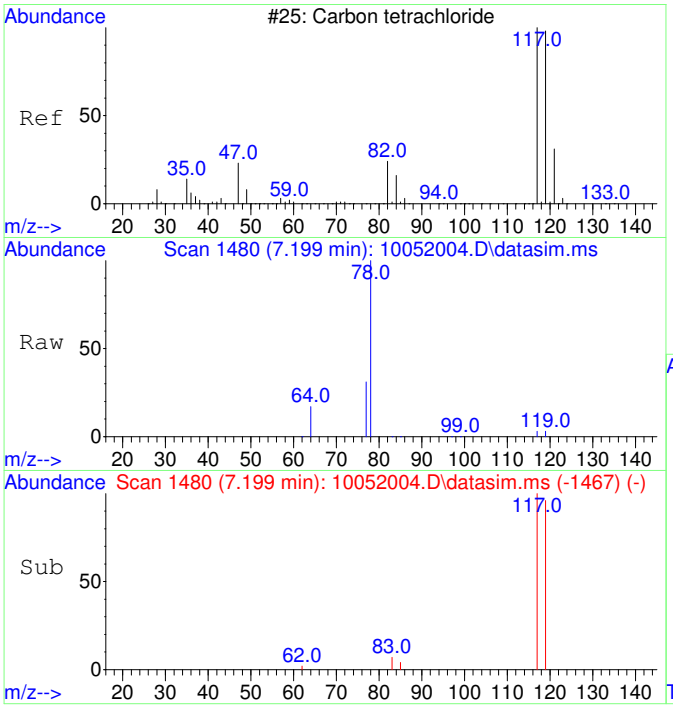


#7
1,1,1-Trichloroethane
Concen: 46.36 ug/L
RT: 6.931 min Scan# 1458
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 97 Resp: 1946

Ion	Ratio	Lower	Upper
97	100		
99	63.7	34.6	94.6
117	13.3	0.0	43.2

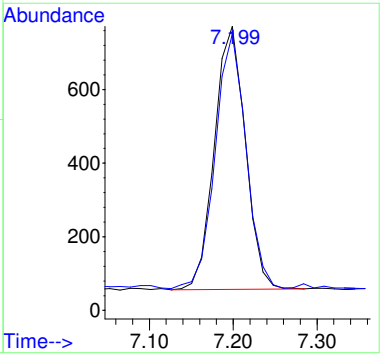


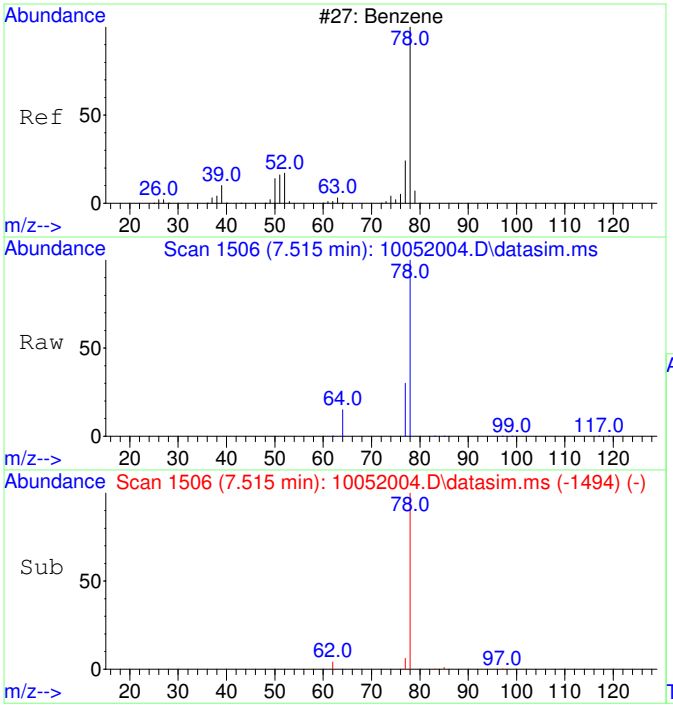


#8
Carbon tetrachloride
Concen: 46.32 ug/L
RT: 7.199 min Scan# 1480
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:117 Resp: 1830

Ion	Ratio	Lower	Upper
117	100		
119	95.8	66.4	126.4

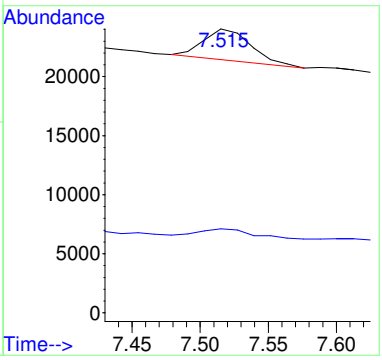


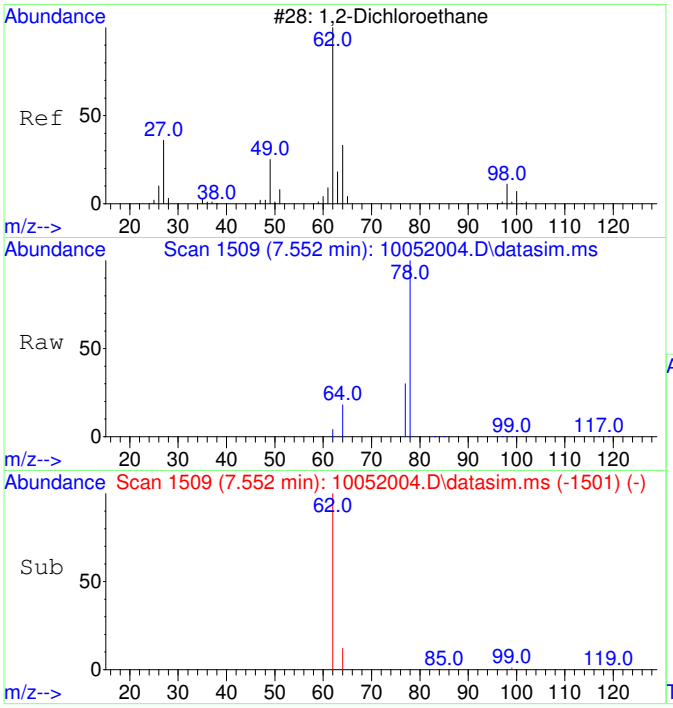


#9
Benzene
Concen: 56.50 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 78 Resp: 5979

Ion	Ratio	Lower	Upper
78	100		
77	41.6	0.0	53.2

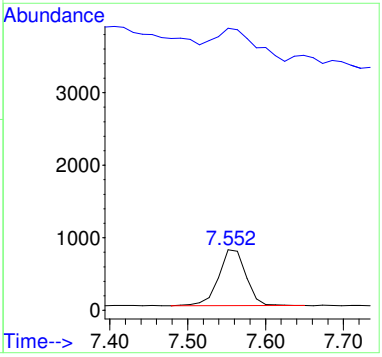


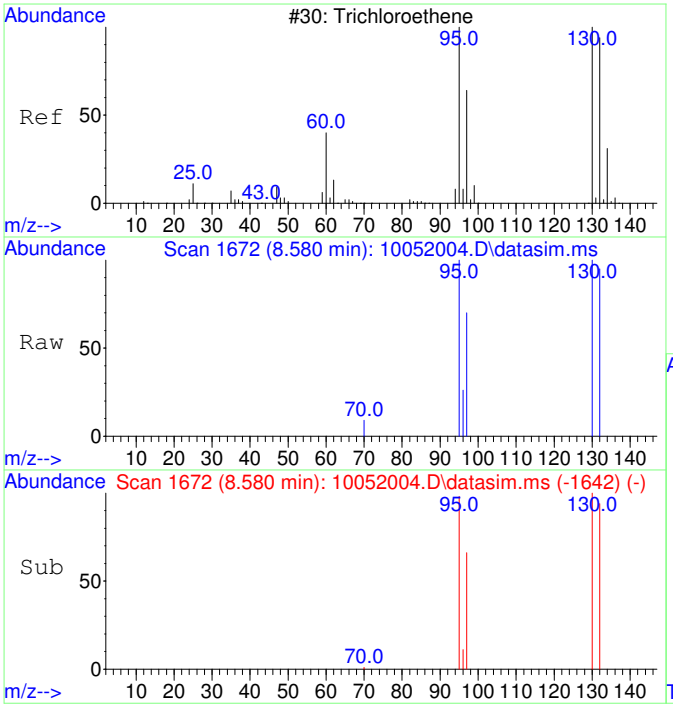


#10
1,2-Dichloroethane
Concen: 49.66 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. -0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 62 Resp: 1876

Ion	Ratio	Lower	Upper
62	100		
64	89.3	2.3	62.3#

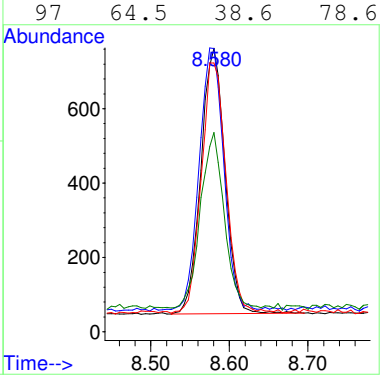


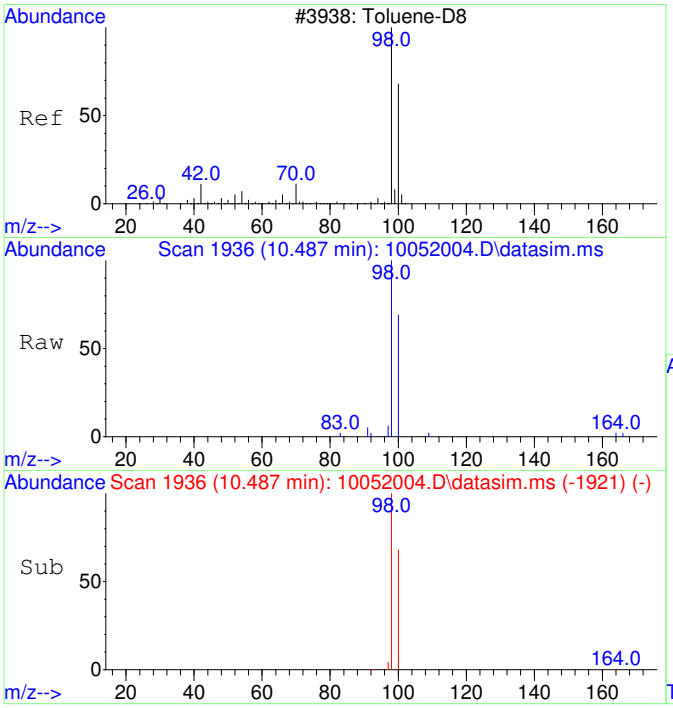


#11
Trichloroethene
Concen: 47.86 ug/L
RT: 8.580 min Scan# 1672
Delta R.T. 0.011 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:130 Resp: 1525

Ion	Ratio	Lower	Upper
130	100		
95	99.7	60.7	120.7
132	97.0	76.0	116.0
97	64.5	38.6	78.6

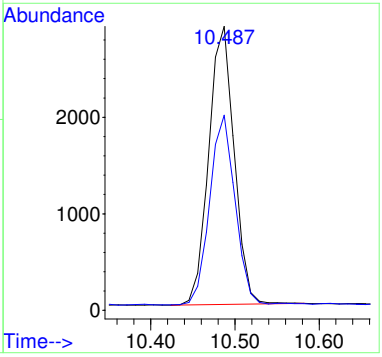


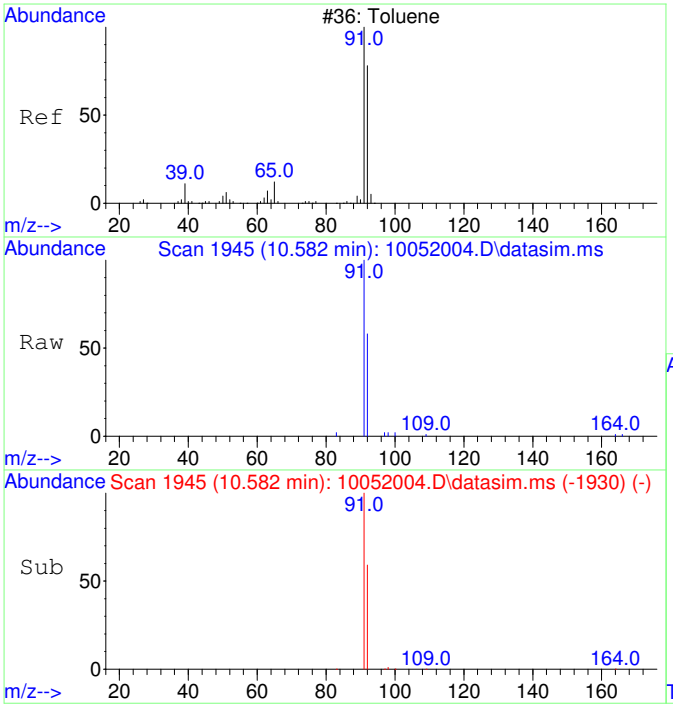


#12
Toluene-d8
Concen: 49.63 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 98 Resp: 6051

Ion	Ratio	Lower	Upper
98	100		
100	67.1	37.1	97.1

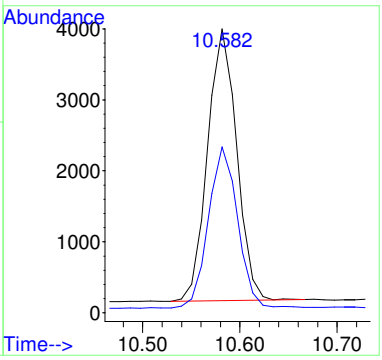


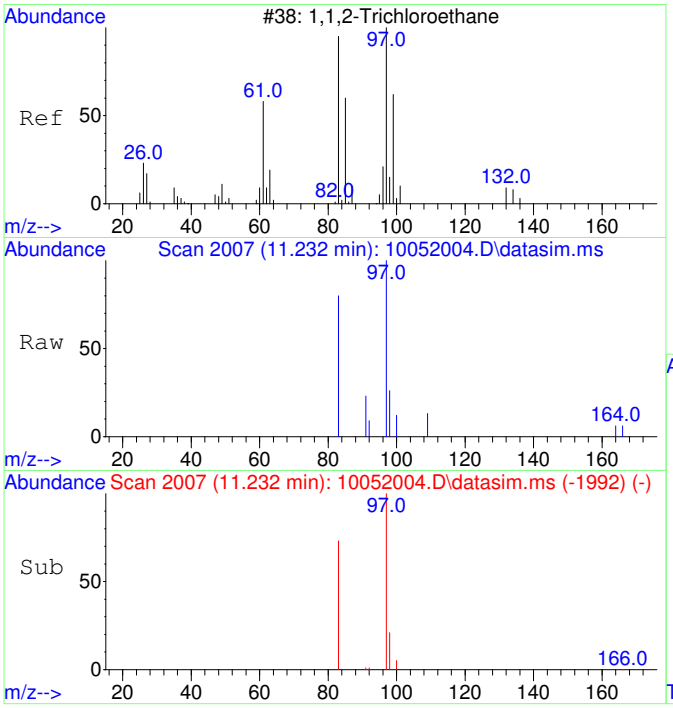


#13
Toluene
Concen: 51.10 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 7943

Ion	Ratio	Lower	Upper
91	100		
92	59.3	29.9	89.9

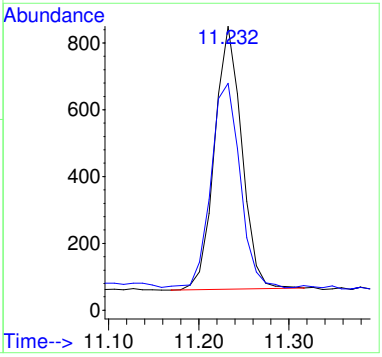


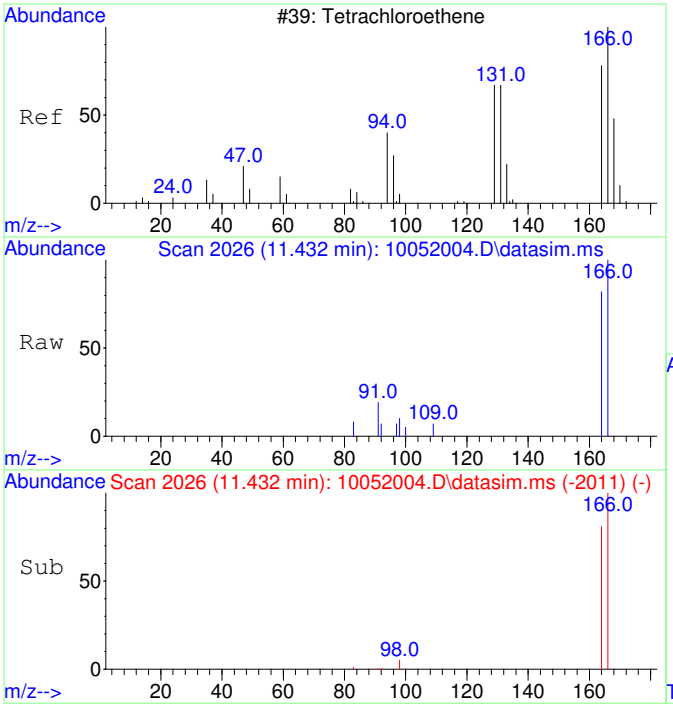


#14
1,1,2-Trichloroethane
Concen: 48.71 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 97 Resp: 1650

Ion	Ratio	Lower	Upper
97	100		
83	82.7	51.2	111.2

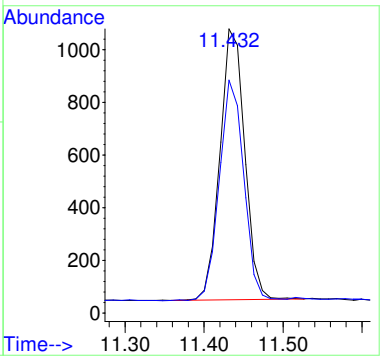


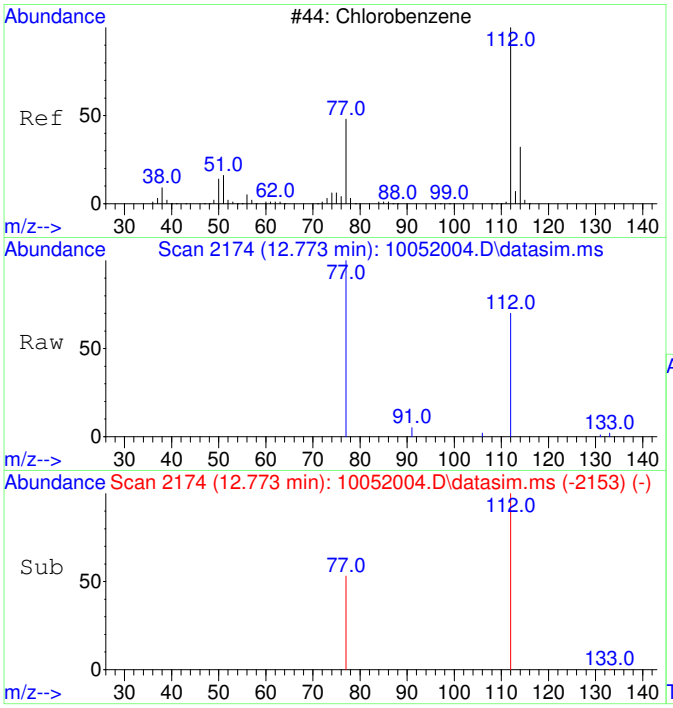


#15
Tetrachloroethene
Concen: 49.81 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:166 Resp: 2241

Ion	Ratio	Lower	Upper
166	100		
164	79.7	47.8	107.8

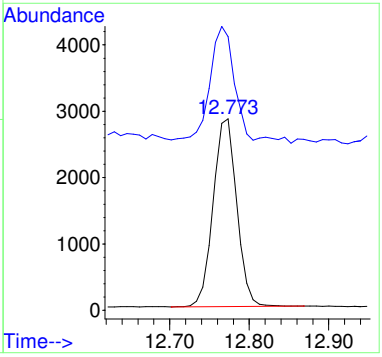


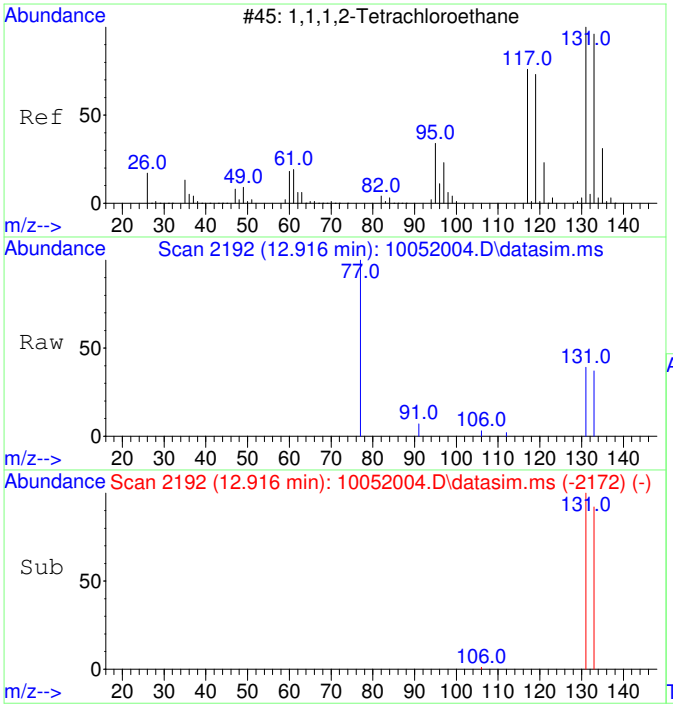


#16
Chlorobenzene
Concen: 52.51 ug/L
RT: 12.773 min Scan# 2174
Delta R.T. 0.016 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:112 Resp: 5845

Ion	Ratio	Lower	Upper
112	100		
77	60.8	23.6	83.6

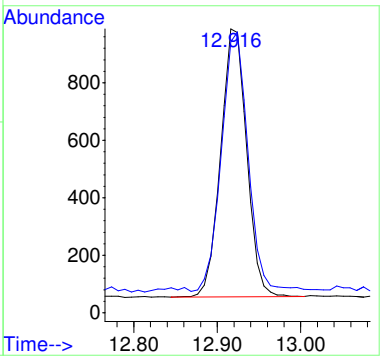


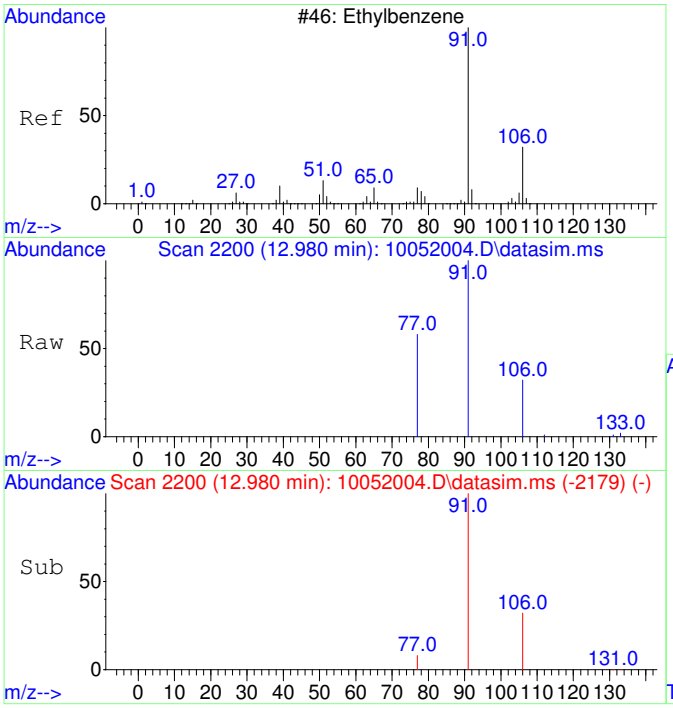


#17
1,1,1,2-Tetrachloroethane
Concen: 50.75 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.008 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:131 Resp: 2024

Ion	Ratio	Lower	Upper
131	100		
133	98.1	66.3	126.3

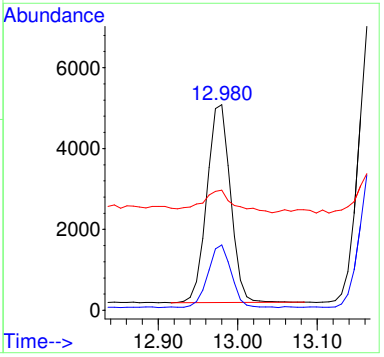


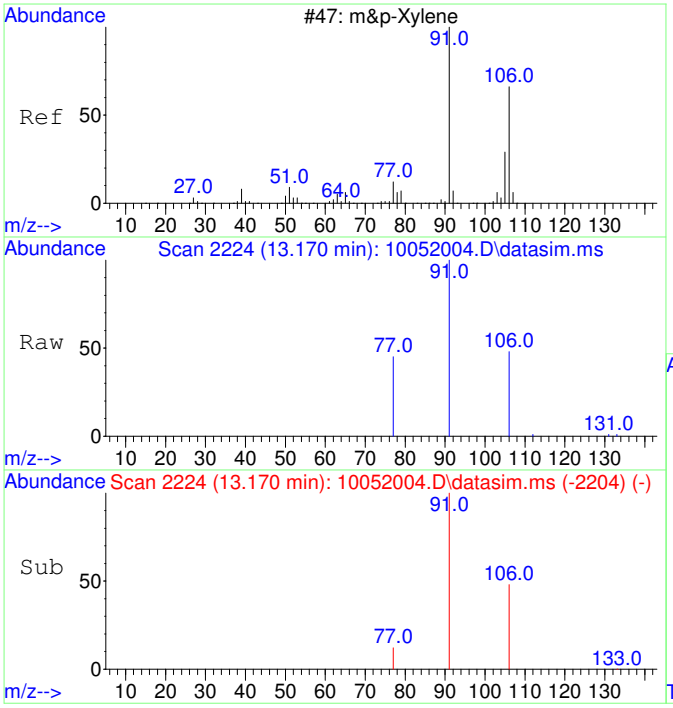


#18
Ethylbenzene
Concen: 53.40 ug/L
RT: 12.980 min Scan# 2200
Delta R.T. 0.016 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 10105

Ion	Ratio	Lower	Upper
91	100		
106	31.5	3.0	63.0
77	15.1	0.0	38.2

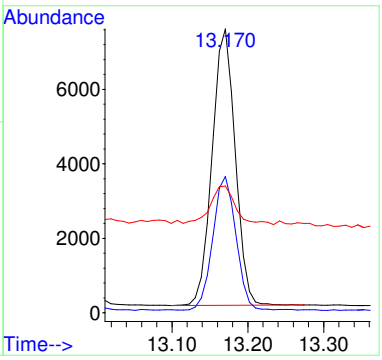


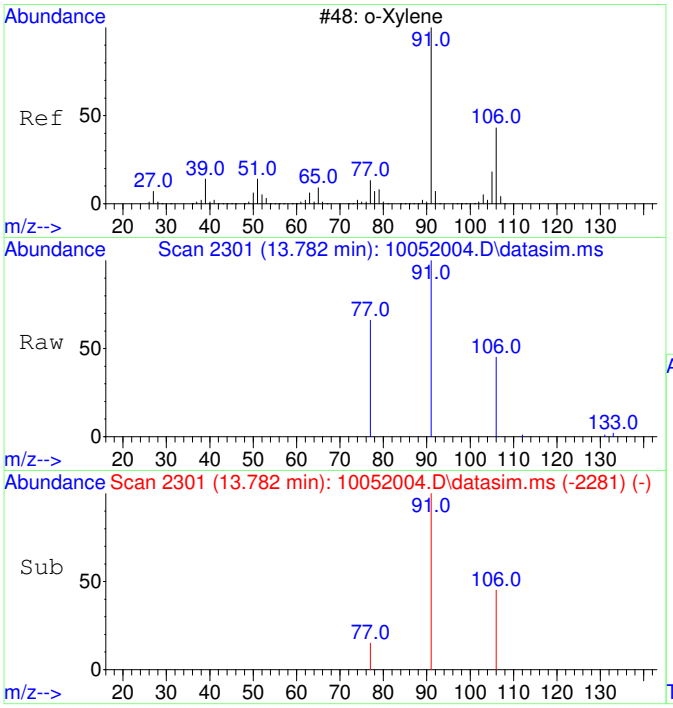


#19
m&p-Xylene
Concen: 106.01 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.008 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 15677

Ion	Ratio	Lower	Upper
91	100		
106	48.3	22.2	82.2
77	15.3	0.0	42.4

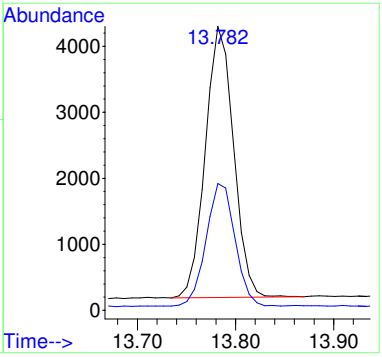


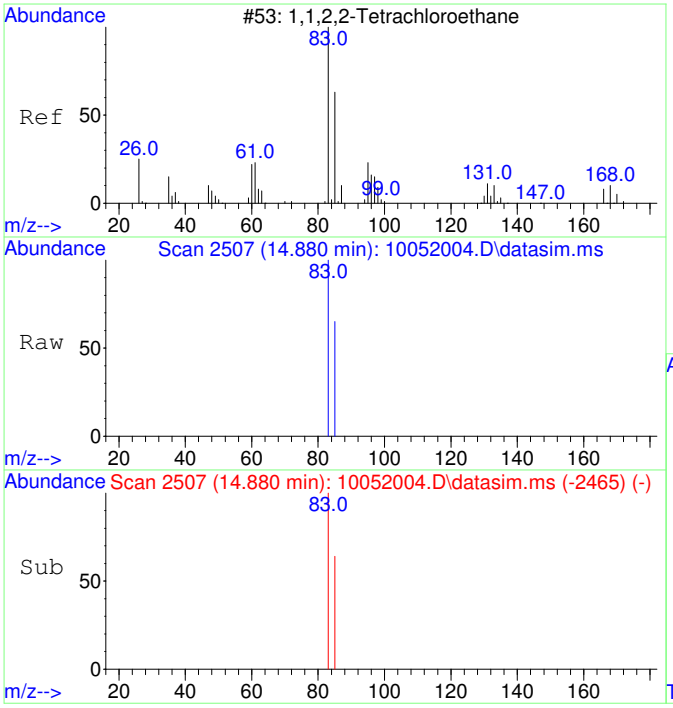


#20
o-Xylene
Concen: 51.93 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 8205

Ion	Ratio	Lower	Upper
91	100		
106	46.0	19.2	79.2

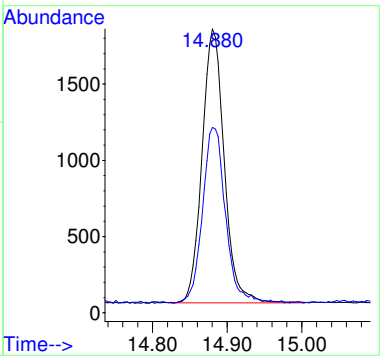


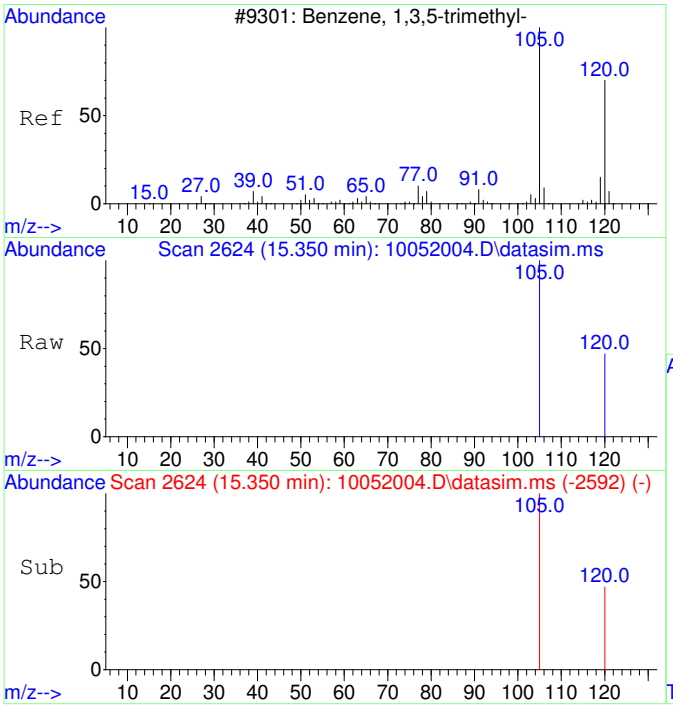


#21
1,1,2,2-Tetrachloroethane
Concen: 53.05 ug/L
RT: 14.880 min Scan# 2507
Delta R.T. 0.007 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 83 Resp: 3715

Ion	Ratio	Lower	Upper
83	100		
85	65.2	34.8	94.8

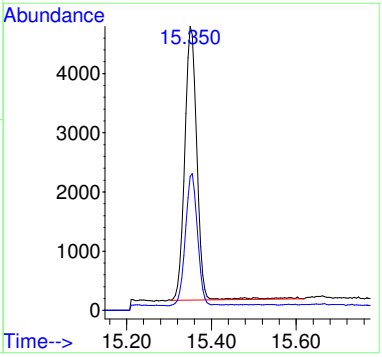


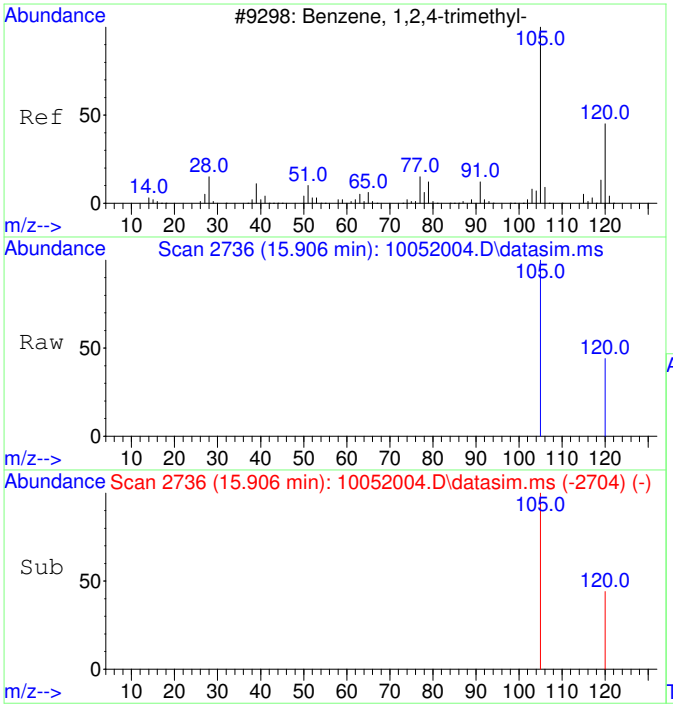


#22
1,3,5-Trimethylbenzene
Concen: 54.53 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.005 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:105 Resp: 9170

Ion	Ratio	Lower	Upper
105	100		
120	48.8	21.1	81.1

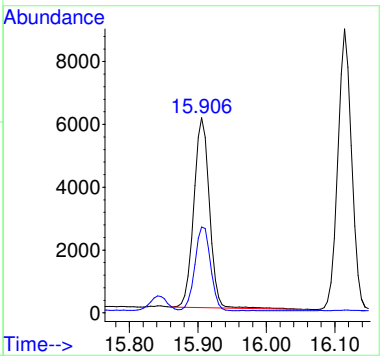


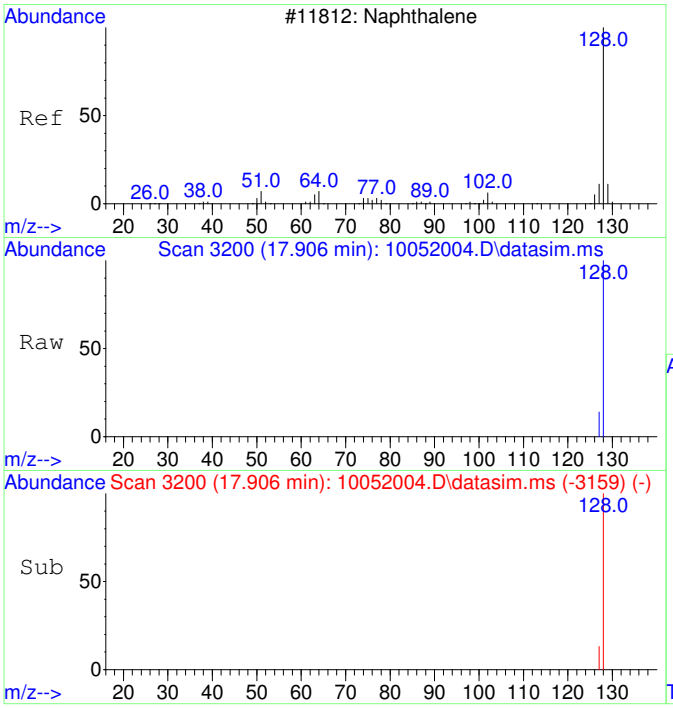


#23
1,2,4-Trimethylbenzene
Concen: 55.00 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:105 Resp: 9608

Ion	Ratio	Lower	Upper
105	100		
120	43.3	17.2	77.2

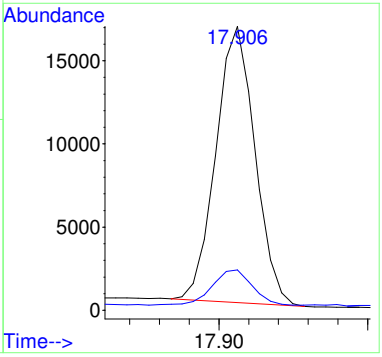


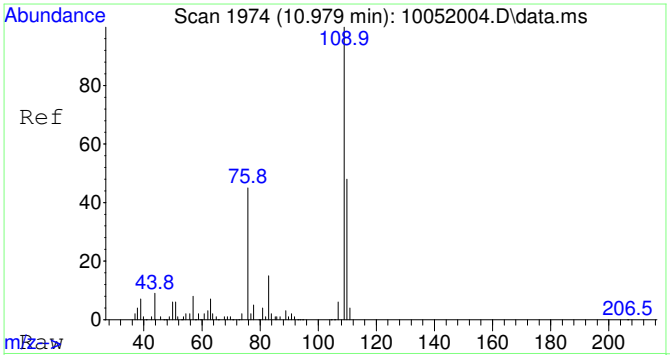


#24
Naphthalene
Concen: 54.63 ug/L
RT: 17.906 min Scan# 3200
Delta R.T. 0.004 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:128 Resp: 15081

Ion	Ratio	Lower	Upper
128	100		
127	13.8	0.0	42.5

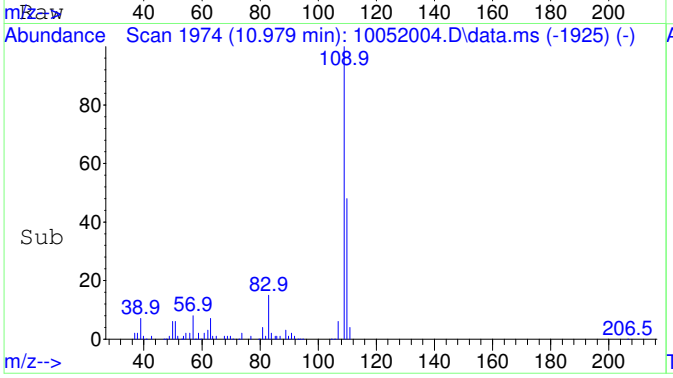


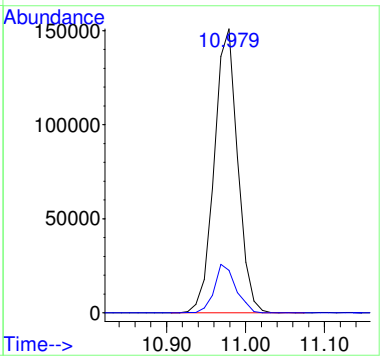


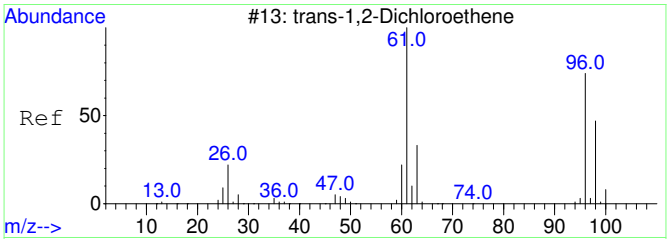
#25
2-Fluorotoluene SCAN
Concen: 5126.05 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:109 Resp: 311239

Ion	Ratio	Lower	Upper
109	100		
83	15.7	0.0	43.8



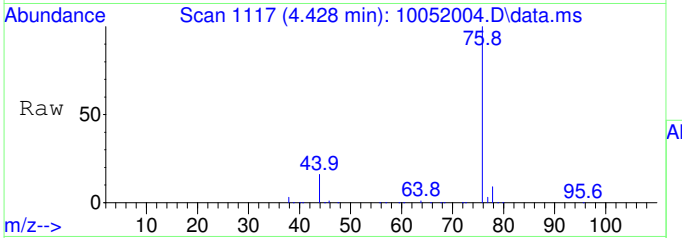


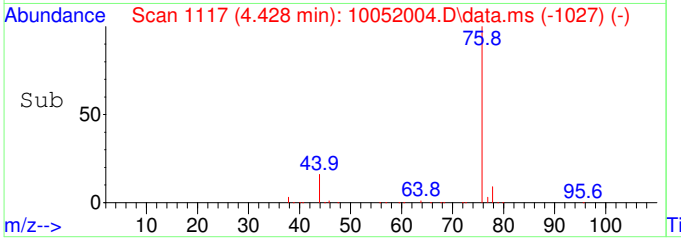


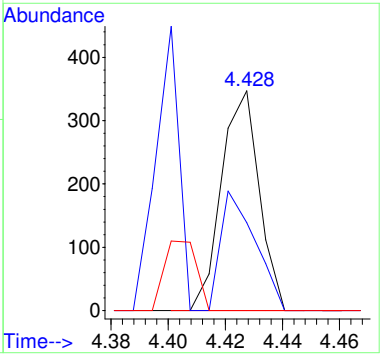
#27
trans-1,2-Dichloroethene SCAN
Concen: 20.06 ug/L
RT: 4.428 min Scan# 1117
Delta R.T. 0.027 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

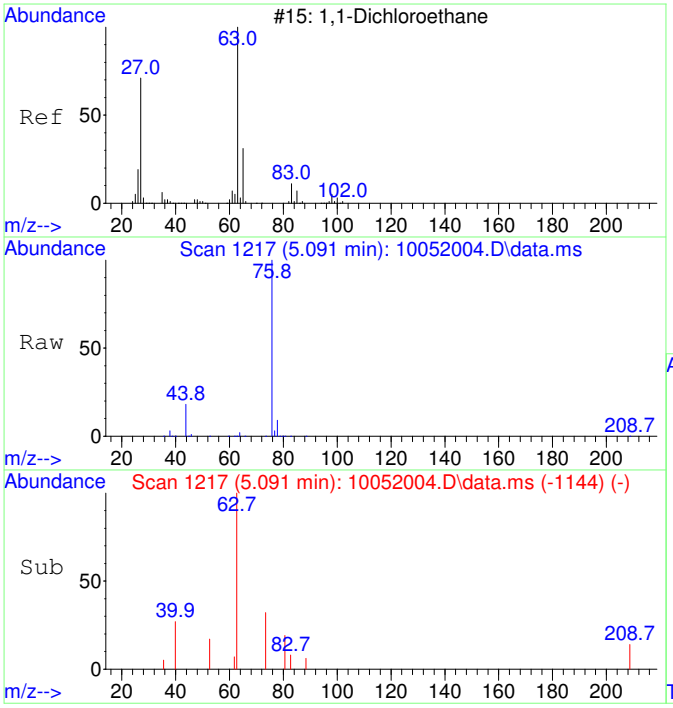
Tgt Ion: 61 Resp: 320

Ion	Ratio	Lower	Upper
61	100		
96	50.0	49.0	109.0
98	0.0	20.5	80.5#





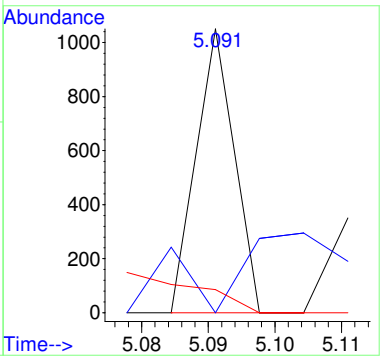


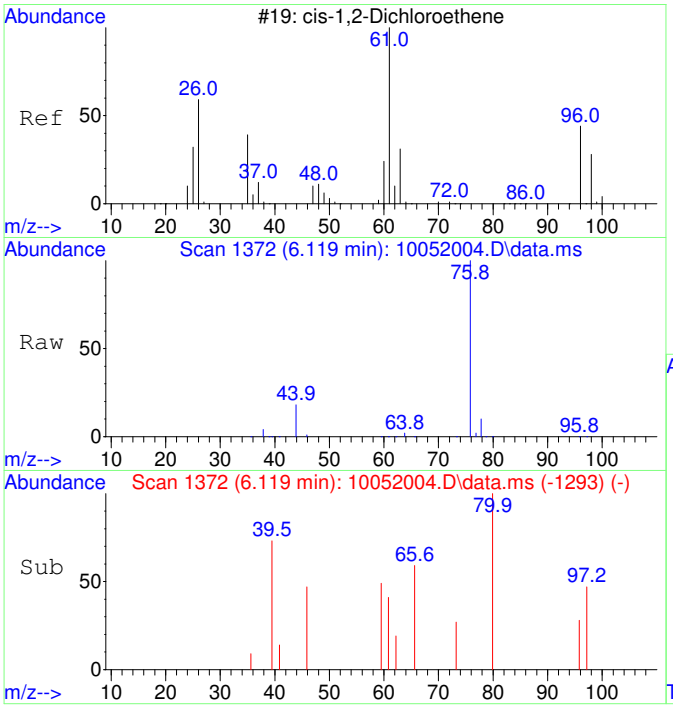


#28
1,1-Dichloroethane SCAN
Concen: 22.64 ug/L
RT: 5.091 min Scan# 1217
Delta R.T. -0.013 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 63 Resp: 418

Ion	Ratio	Lower	Upper
63	100		
65	163.4	1.3	61.3#
83	0.0	0.0	45.9

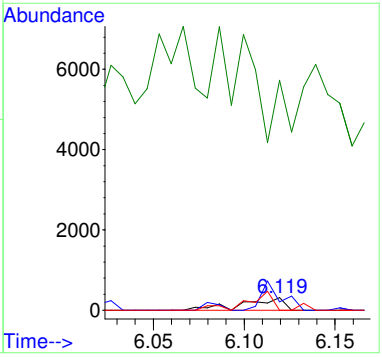


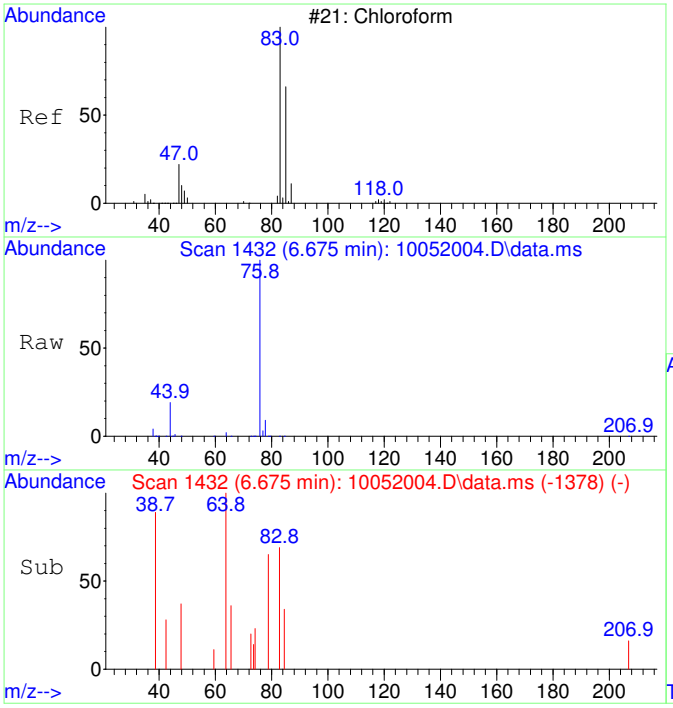


#29
cis-1,2-Dichloroethene SCAN
Concen: 24.46 ug/L
RT: 6.119 min Scan# 1372
Delta R.T. 0.027 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 61 Resp: 484

Ion	Ratio	Lower	Upper
61	100		
96	115.5	39.9	99.9#
98	94.0	13.5	73.5#
64	0.0	4.5	64.5#

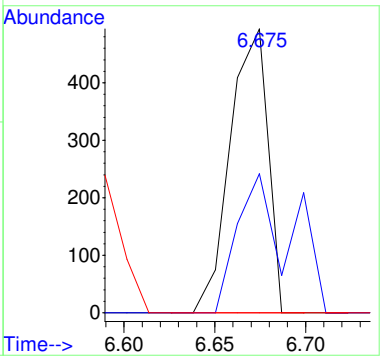


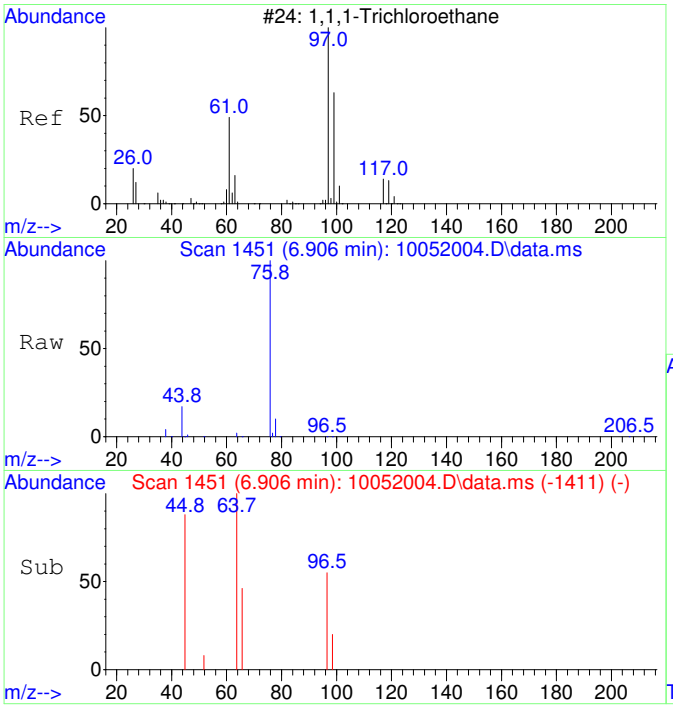


#30
Chloroform SCAN
Concen: 33.27 ug/L
RT: 6.675 min Scan# 1432
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 83 Resp: 714

Ion	Ratio	Lower	Upper
83	100		
85	68.6	34.6	94.6
47	0.0	0.0	53.4

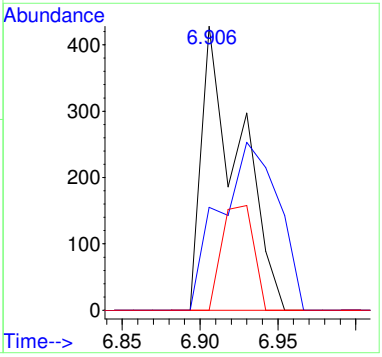


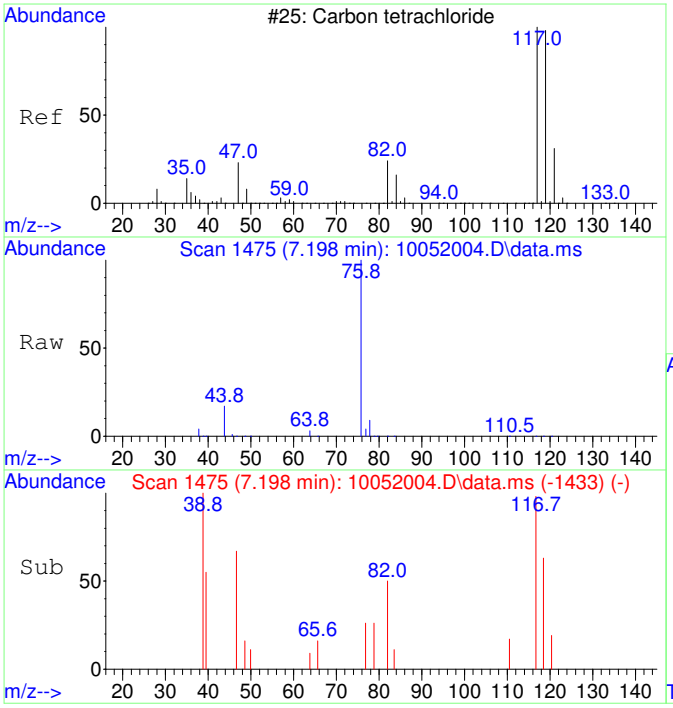


#31
1,1,1-Trichloroethane SCAN
Concen: 37.33 ug/L
RT: 6.906 min Scan# 1451
Delta R.T. -0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 97 Resp: 730

Ion	Ratio	Lower	Upper
97	100		
99	0.0	43.6	103.6#
61	0.0	18.0	78.0#

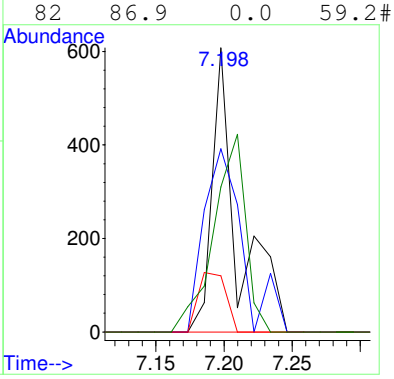


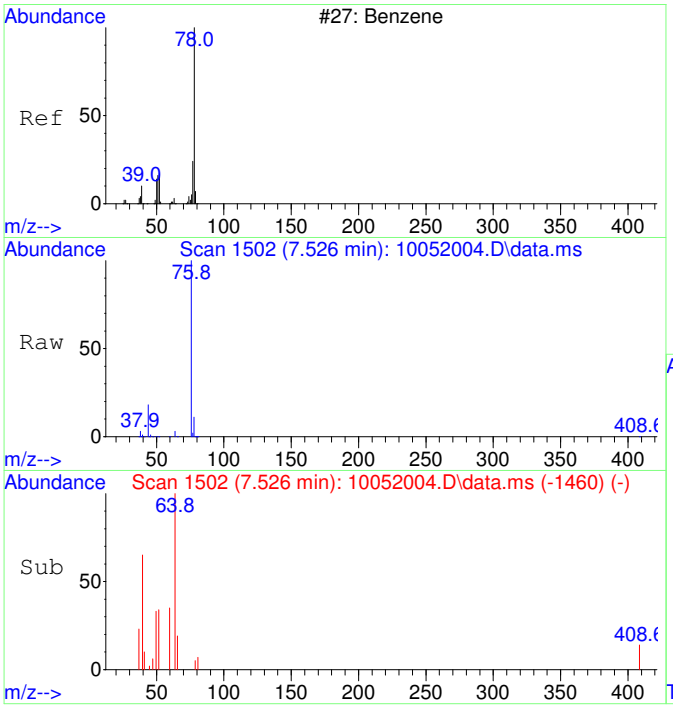


#32
Carbon tetrachloride SCAN
Concen: 38.97 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:117 Resp: 795

Ion	Ratio	Lower	Upper
117	100		
119	96.6	75.5	135.5
121	0.0	0.0	58.8
82	86.9	0.0	59.2#

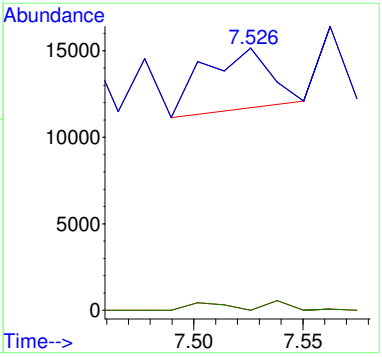


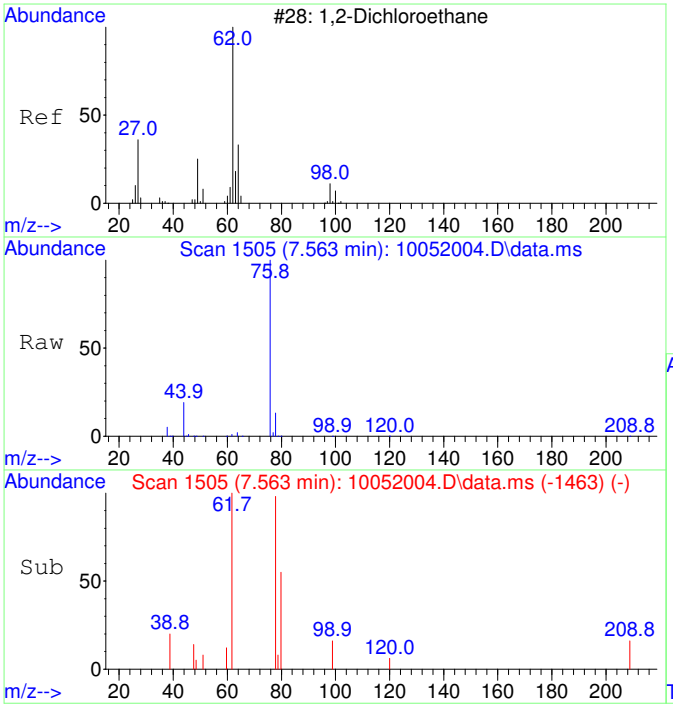


#33
Benzene SCAN
Concen: 143.10 ug/L
RT: 7.526 min Scan# 1502
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 78 Resp: 7705

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	6.0	0.0	47.9
51	6.0	0.0	44.1

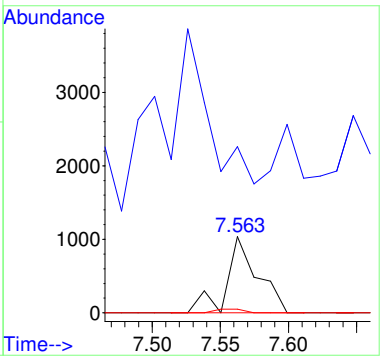


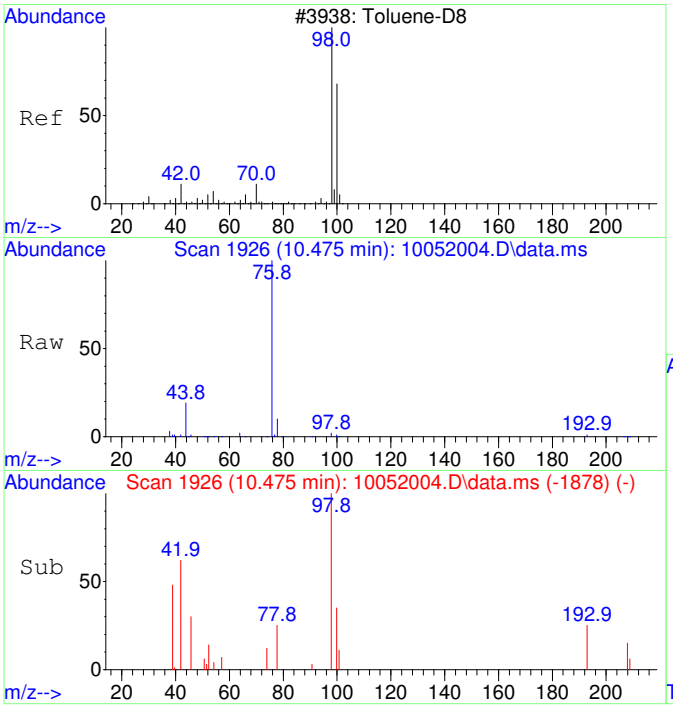


#34
1,2-Dichloroethane SCAN
Concen: 82.54 ug/L
RT: 7.563 min Scan# 1505
Delta R.T. 0.012 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 62 Resp: 1641

Ion	Ratio	Lower	Upper
62	100		
64	0.0	5.2	65.2#
49	4.5	3.9	63.9

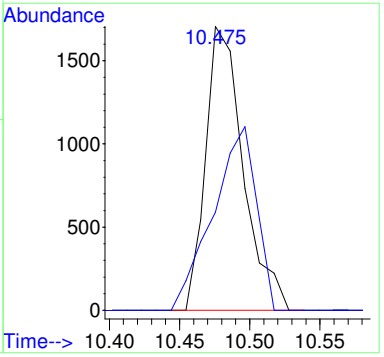


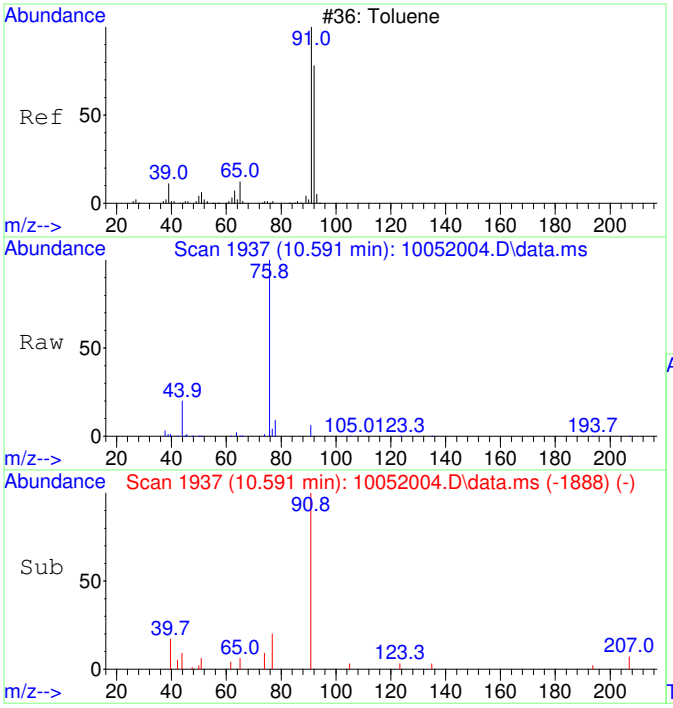


#36
Toluene-d8 SCAN
Concen: 53.54 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. -0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 98 Resp: 3179

Ion	Ratio	Lower	Upper
98	100		
100	0.0	40.0	100.0#

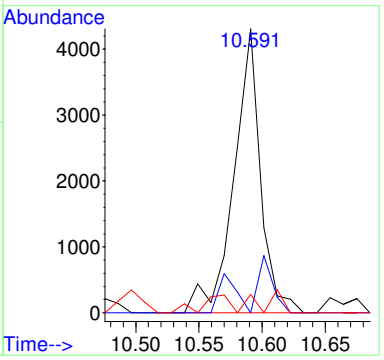


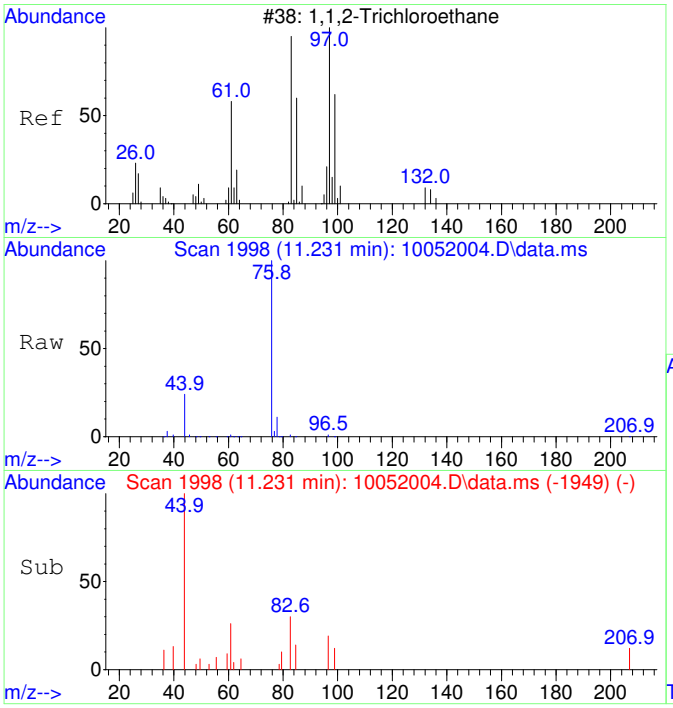


#37
Toluene SCAN
Concen: 83.20 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 6327

Ion	Ratio	Lower	Upper
91	100		
92	11.0	28.3	88.3#
65	2.8	0.0	41.0

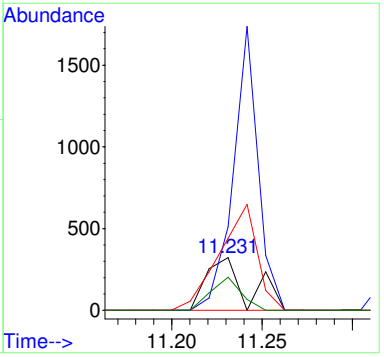


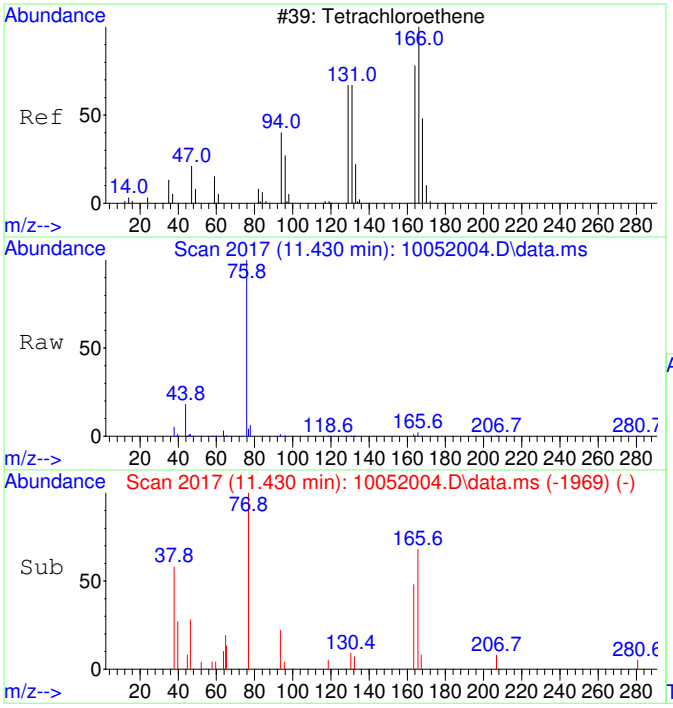


#38
1,1,2-Trichloroethane SCAN
Concen: 30.00 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 97 Resp: 512

Ion	Ratio	Lower	Upper
97	100		
83	327.1	57.7	117.7#
61	185.0	32.1	92.1#
99	46.3	36.7	96.7

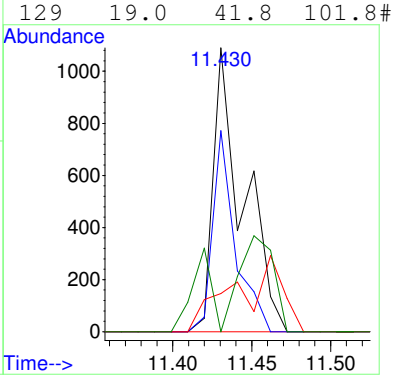


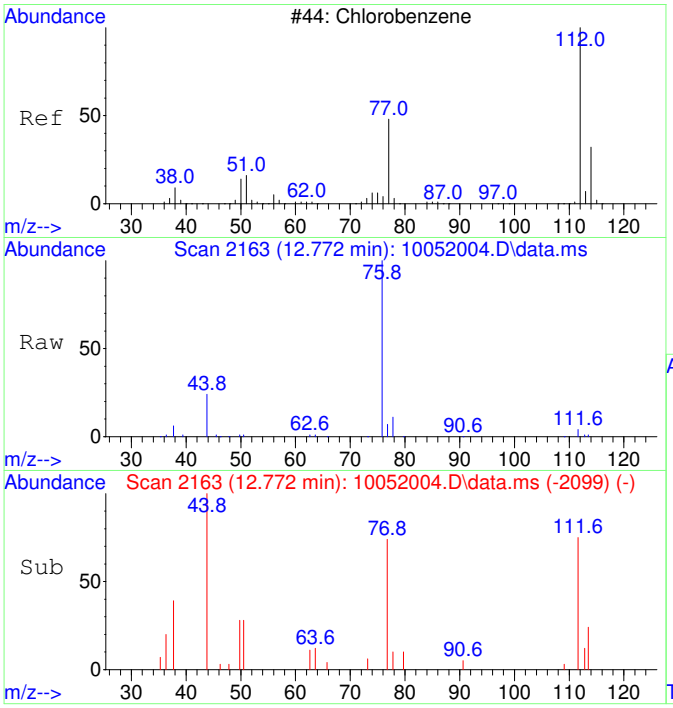


#39
Tetrachloroethene SCAN
Concen: 78.66 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. -0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:166 Resp: 1437

Ion	Ratio	Lower	Upper
166	100		
164	53.3	50.9	110.9
131	0.0	38.7	98.7#
129	19.0	41.8	101.8#

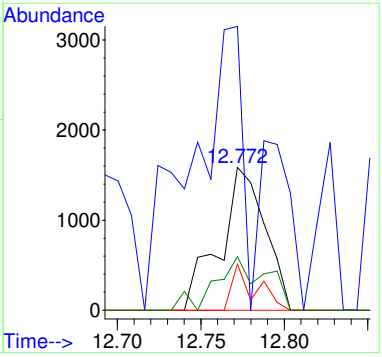


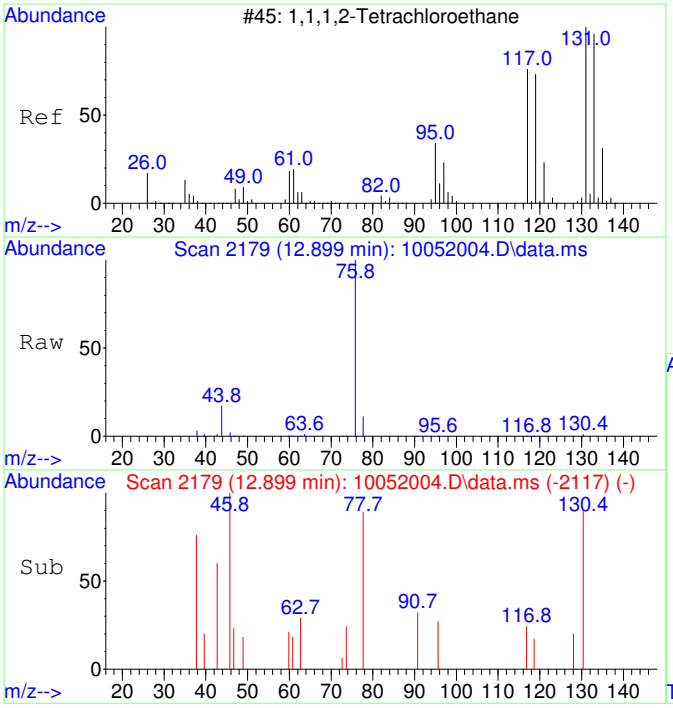


#40
Chlorobenzene SCAN
Concen: 57.79 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.008 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:112 Resp: 3003

Ion	Ratio	Lower	Upper
112	100		
77	223.3	28.2	88.2#
114	16.5	2.3	62.3
51	41.4	0.0	50.1

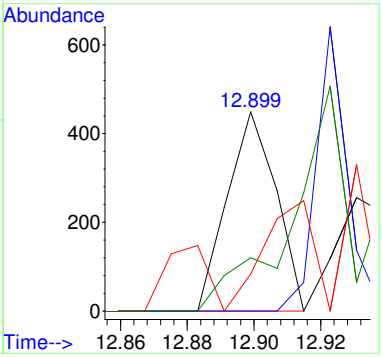


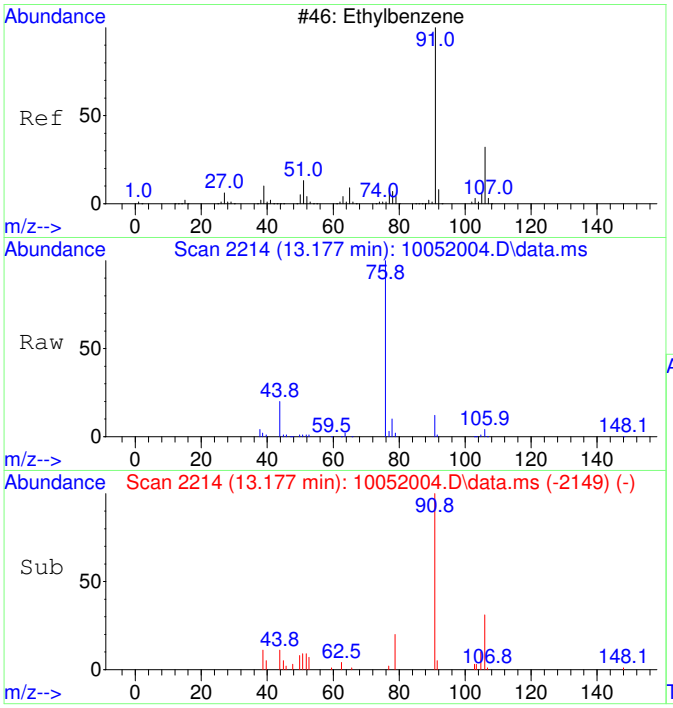


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 23.61 ug/L
RT: 12.899 min Scan# 2179
Delta R.T. -0.008 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:131 Resp: 454

Ion	Ratio	Lower	Upper
131	100		
133	0.0	66.9	126.9#
119	29.1	40.4	100.4#
117	0.0	35.1	95.1#

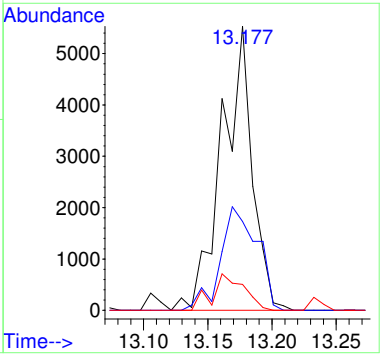


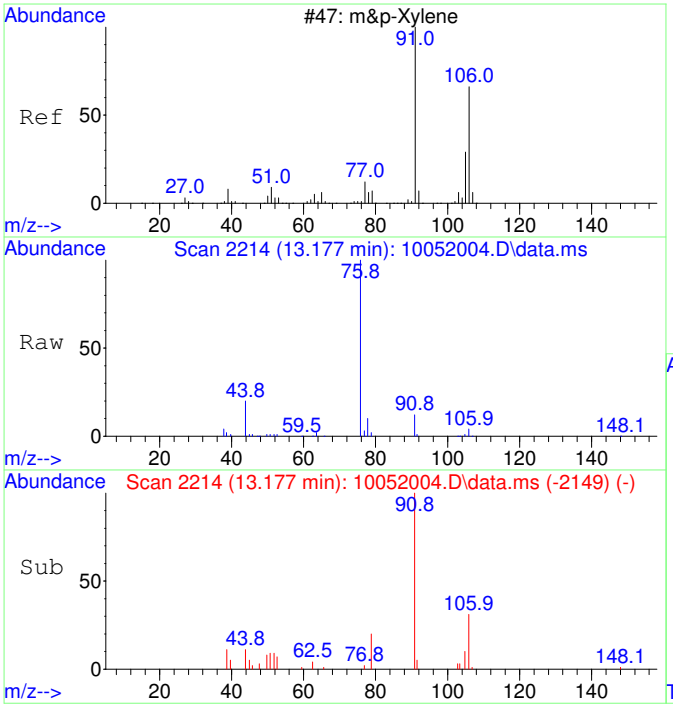


#42
Ethylbenzene SCAN
Concen: 65.82 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 9119

Ion	Ratio	Lower	Upper
91	100		
106	43.9	23.1	83.1
51	13.3	0.0	40.1

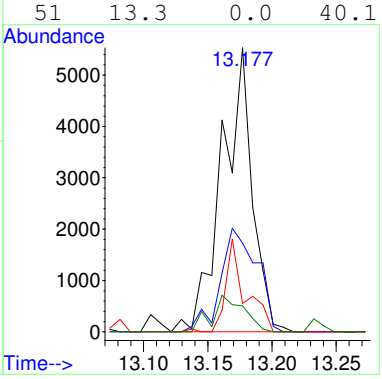


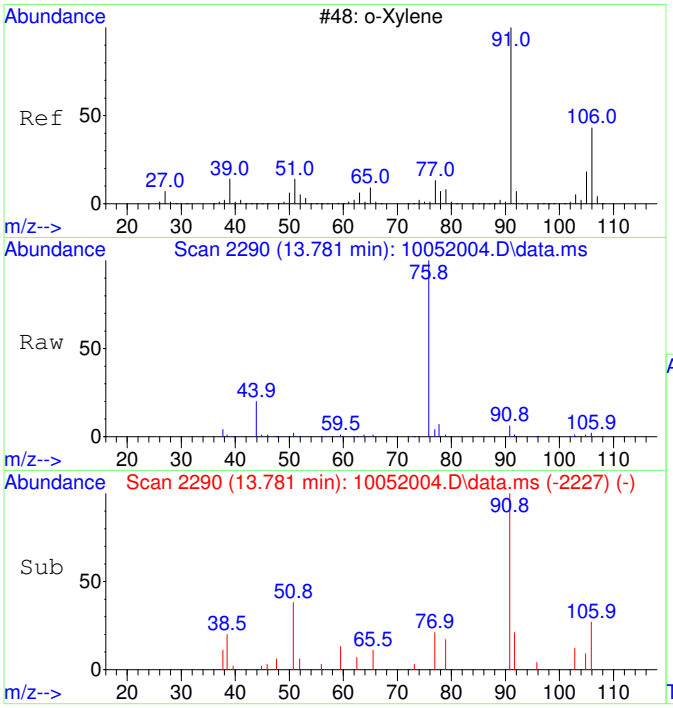


#43
m&p-Xylene SCAN
Concen: 65.82 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 9119

Ion	Ratio	Lower	Upper
91	100		
106	43.9	23.1	83.1
105	21.2	0.0	54.7
51	13.3	0.0	40.1

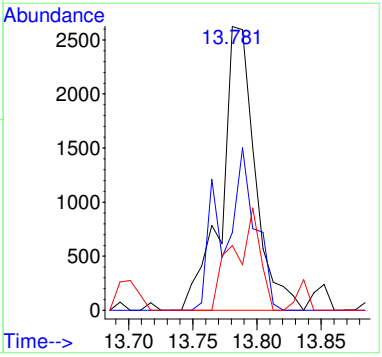


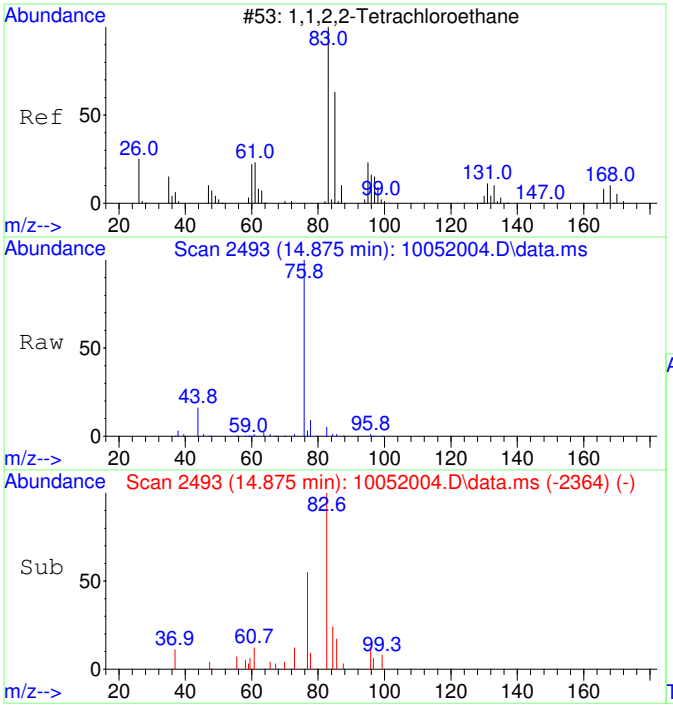


#44
o-Xylene SCAN
Concen: 64.01 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. 0.000 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 91 Resp: 4747

Ion	Ratio	Lower	Upper
91	100		
106	55.5	18.0	78.0
105	28.8	0.0	56.6

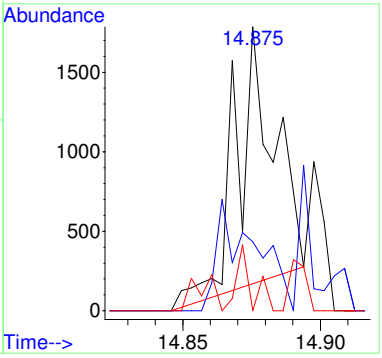


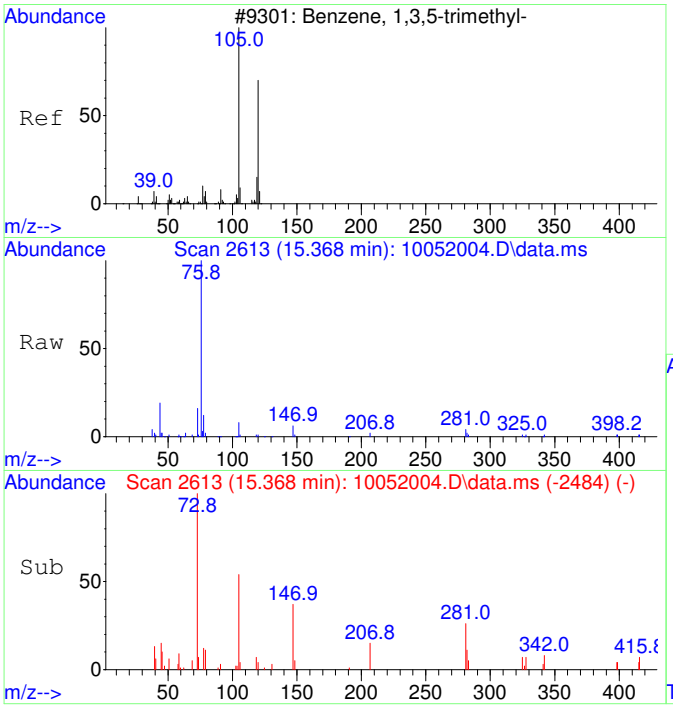


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 43.64 ug/L
RT: 14.875 min Scan# 2493
Delta R.T. 0.004 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion: 83 Resp: 1578

Ion	Ratio	Lower	Upper
83	100		
85	0.0	35.9	95.9#
95	10.0	0.0	47.4

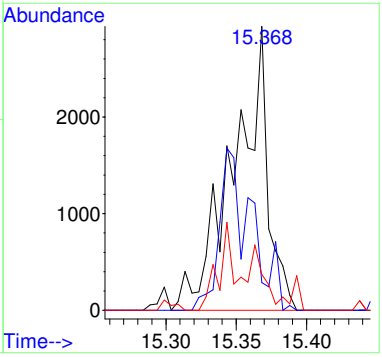


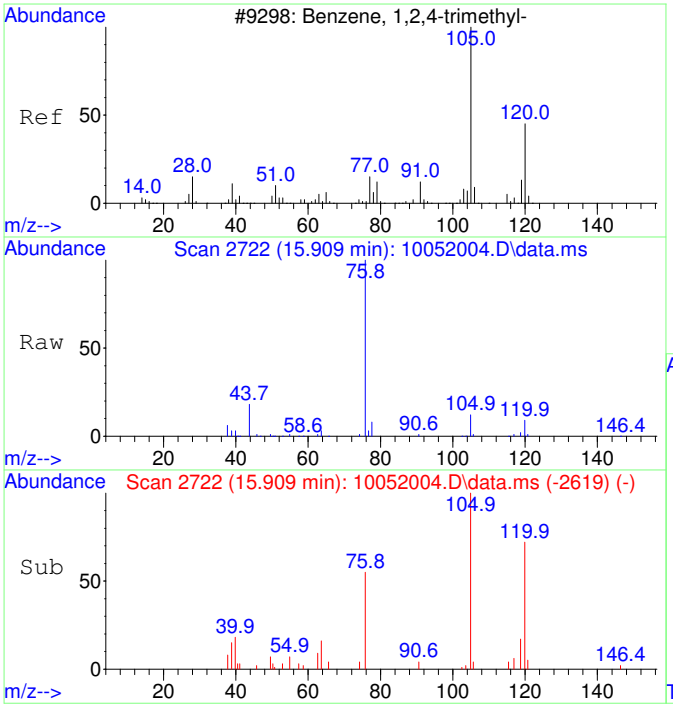


#46
1,3,5-Trimethylbenzene SCAN
Concen: 63.85 ug/L
RT: 15.368 min Scan# 2613
Delta R.T. 0.025 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:105 Resp: 4990

Ion	Ratio	Lower	Upper
105	100		
120	0.0	18.3	78.3#
119	4.0	0.0	43.1

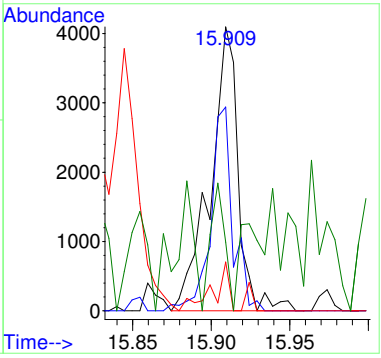


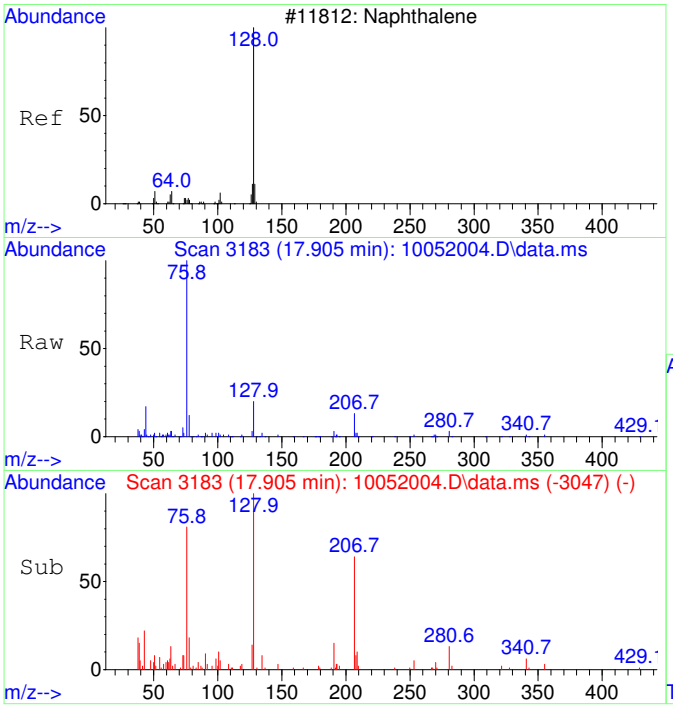


#47
1,2,4-Trimethylbenzene SCAN
Concen: 63.40 ug/L
RT: 15.909 min Scan# 2722
Delta R.T. 0.010 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:105 Resp: 5070

Ion	Ratio	Lower	Upper
105	100		
120	56.7	16.9	76.9
119	9.6	0.0	41.9
77	23.1	0.0	42.3

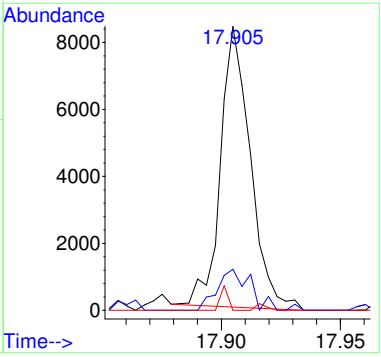




#48
Naphthalene SCAN
Concen: 60.33 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.004 min
Lab File: 10052004.D
Acq: 5 Oct 2020 10:17

Tgt Ion:128 Resp: 7300

Ion	Ratio	Lower	Upper
128	100		
127	16.2	0.0	44.0
129	2.2	0.0	40.8



CRDL STANDARD

Radiello D1

Laboratory: EPA Region 9 Laboratory
SDG: 20274B
Client: California Site Cleanup Section 3
Project: MEW OU1 FY2020 Vapor Intrusion Investigation
Instrument ID: AG5975CV
Calibration: 2008017
Sequence: S20J009

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
S20J009-CRL1	1,1-Dichloroethene	50.0	50.3	101	ug/L	60 - 140
	trans-1,2-Dichloroethene	50.0	50.1	100	ug/L	60 - 140
	1,1-Dichloroethane	50.0	50.6	101	ug/L	60 - 140
	cis-1,2-Dichloroethene	50.0	49.6	99	ug/L	60 - 140
	Chloroform	50.0	46.5	93	ug/L	60 - 140
	Trichloroethene	50.0	47.8	96	ug/L	60 - 140
	Tetrachloroethene	50.0	49.4	99	ug/L	60 - 140
	Toluene-d8	50.0	51.0	102	ug/L	60 - 140

QLS REPORT

Instrument Name: AG5975C
Sample Name: S20J009-CRL1
Misc Info: 2030073 0.05 mg/L
Date Acquired: 10/6/20 9:23
QLast Update: Fri Aug 21 08:33:54 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.970	5000.0	5000.00	100%	60	140	pass
2)	1,1-Dichloroethene	3.090	50.0	50.34	101%	60	140	pass
3)	trans-1,2-Dichloroethene	4.396	50.0	50.10	100%	60	140	pass
4)	1,1-Dichloroethane	5.099	50.0	50.60	101%	60	140	pass
5)	cis-1,2-Dichloroethene	6.094	50.0	49.55	99%	60	140	pass
6)	Chloroform	6.664	50.0	46.47	93%	60	140	pass
7)	1,1,1-Trichloroethane	6.919	50.0	45.07	90%	60	140	pass
8)	Carbon tetrachloride	7.187	50.0	45.14	90%	60	140	pass
10)	1,2-Dichloroethane	7.552	50.0	49.33	99%	60	140	pass
11)	Trichloroethene	8.569	50.0	47.75	95%	60	140	pass
12)	Toluene-d8	10.477	50.0	50.99	102%	60	140	pass
13)	Toluene	10.571	50.0	51.50	103%	60	140	pass
14)	1,1,2-Trichloroethane	11.222	50.0	49.62	99%	60	140	pass
15)	Tetrachloroethene	11.421	50.0	49.37	99%	60	140	pass
16)	Chlorobenzene	12.757	50.0	53.49	107%	60	140	pass
17)	1,1,1,2-Tetrachloroethane	12.908	50.0	51.17	102%	60	140	pass
18)	Ethylbenzene	12.964	50.0	54.32	109%	60	140	pass
19)	m&p-Xylene	13.162	100.0	107.92	108%	60	140	pass
20)	o-Xylene	13.774	50.0	53.34	107%	60	140	pass
21)	1,1,2,2-Tetrachloroethane	14.873	50.0	54.81	110%	60	140	pass
22)	1,3,5-Trimethylbenzene	15.345	50.0	54.58	109%	60	140	pass
23)	1,2,4-Trimethylbenzene	15.896	50.0	56.71	113%	60	140	pass
24)	Naphthalene	17.903	50.0	50.25	100%	60	140	pass

Quantitation Report (Not Reviewed)

Table of Contents

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062004.D
Acq On : 6 Oct 2020 9:23
InstName : AG5975C
Operator : TD
Sample : S20J009-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 06 09:41:49 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

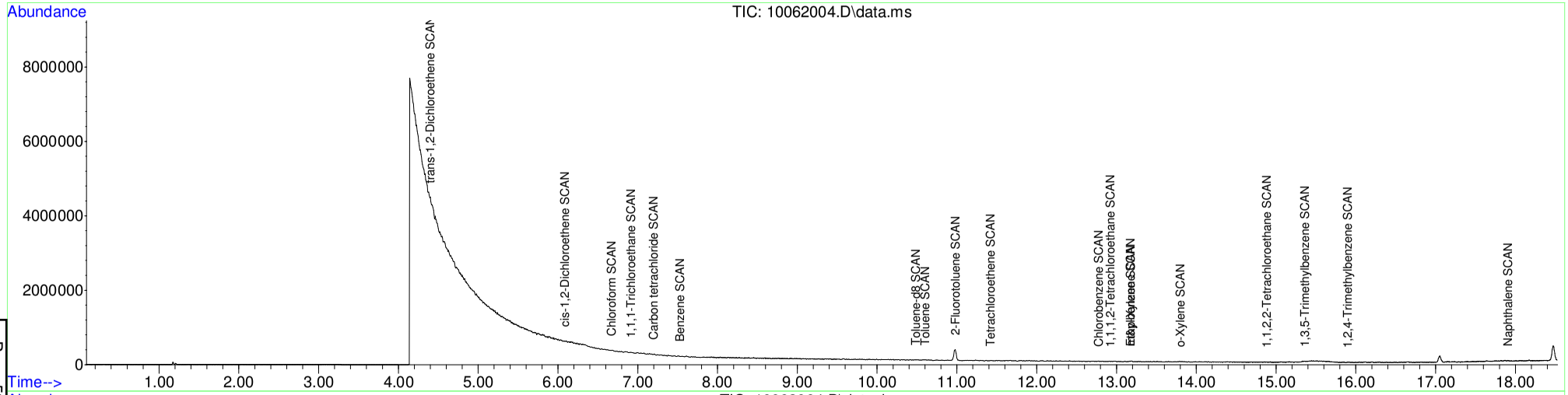
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.980	109	488006	5000.00 ug/L	0.01
System Monitoring Compounds					
12) Toluene-d8	10.487	98	4871	50.99 ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery =	1.02%#	
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.097	61	1420	72.87 ug/L	86
3] trans-1,2-Dichloroethene	4.382	61	1128	50.10 ug/L	62
4] 1,1-Dichloroethane	5.092	63	1418	50.60 ug/L #	43
5] cis-1,2-Dichloroethene	6.094	61	1466	49.55 ug/L	99
6] Chloroform	6.664	83	1407	46.47 ug/L	95
7] 1,1,1-Trichloroethane	6.919	97	1482	45.07 ug/L	98
8] Carbon tetrachloride	7.187	117	1397	45.14 ug/L	98
9] Benzene	7.503	78	5033	60.70 ug/L #	1
10] 1,2-Dichloroethane	7.552	62	1460	49.33 ug/L	71
11] Trichloroethene	8.575	130	1192	47.75 ug/L	92
13] Toluene	10.582	91	6272	51.50 ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	1317	49.62 ug/L	95
15] Tetrachloroethene	11.432	166	1740	49.37 ug/L	96
16] Chlorobenzene	12.773	112	4665	53.49 ug/L	85
17] 1,1,1,2-Tetrachloroethane	12.924	131	1599	51.17 ug/L	98
18] Ethylbenzene	12.980	91	8053	54.32 ug/L	95
19] m&p-Xylene	13.170	91	12504	107.92 ug/L	95
20] o-Xylene	13.782	91	6603	53.34 ug/L	95
21] 1,1,2,2-Tetrachloroethane	14.880	83	3007	54.81 ug/L	99
22] 1,3,5-Trimethylbenzene	15.350	105	7191	54.58 ug/L	96
23] 1,2,4-Trimethylbenzene	15.906	105	7761	56.71 ug/L	92
24] Naphthalene	17.907	128	10869	50.25 ug/L	96
25) 2-Fluorotoluene SCAN	10.979	109	244641	5142.59 ug/L	100
27) trans-1,2-Dichloroethe...	4.394	61	289	23.12 ug/L #	67
29) cis-1,2-Dichloroethene...	6.080	61	317	20.45 ug/L #	35
30) Chloroform SCAN	6.662	83	604	35.92 ug/L #	72
31) 1,1,1-Trichloroethane ...	6.918	97	452	29.50 ug/L #	19
32) Carbon tetrachloride SCAN	7.198	117	701	43.86 ug/L #	68
33) Benzene SCAN	7.526	78	11544	273.65 ug/L	93
36) Toluene-d8 SCAN	10.486	98	2687	57.76 ug/L	96
37) Toluene SCAN	10.601	91	5273	88.50 ug/L #	30
39) Tetrachloroethene SCAN	11.420	166	763	53.30 ug/L #	47
40) Chlorobenzene SCAN	12.772	112	2088	51.29 ug/L #	54
41) 1,1,1,2-Tetrachloroeth...	12.923	131	1096	72.74 ug/L #	52
42) Ethylbenzene SCAN	13.177	91	6451	59.43 ug/L	97
43) m&p-Xylene SCAN	13.177	91	6451	59.43 ug/L	95
44) o-Xylene SCAN	13.797	91	3814	65.64 ug/L	94
45) 1,1,2,2-Tetrachloroeth...	14.879	83	1686	59.51 ug/L	89
46) 1,3,5-Trimethylbenzene...	15.363	105	3834	62.61 ug/L	67
47) 1,2,4-Trimethylbenzene...	15.899	105	4895	78.13 ug/L	75
48) Naphthalene SCAN	17.906	128	4447	46.91 ug/L	90

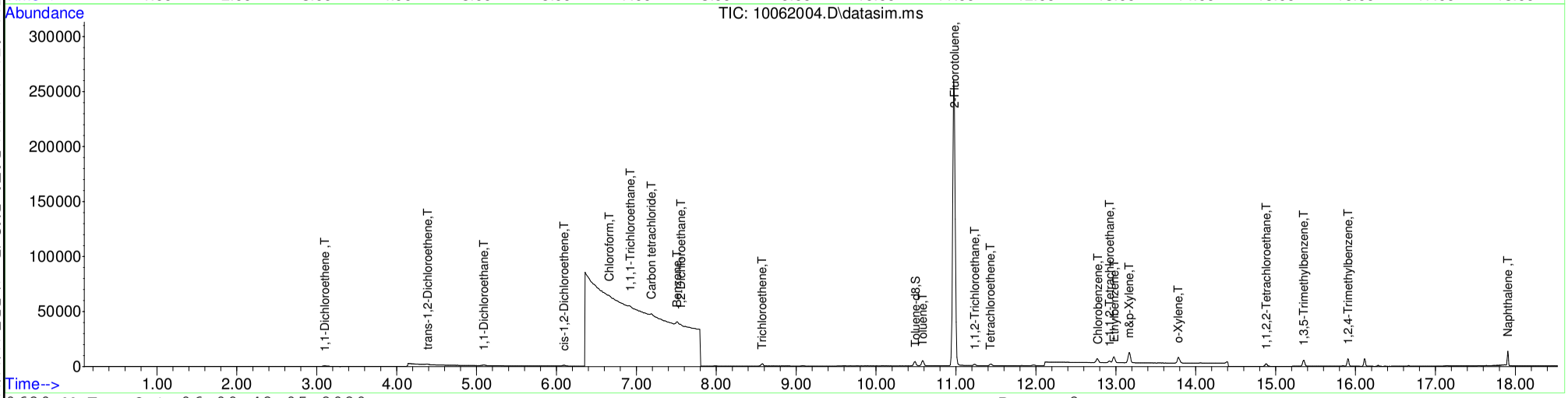
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062004.D
Acq On : 6 Oct 2020 9:23
InstName : AG5975C
Operator : TD
Sample : S20J009-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 06 09:41:49 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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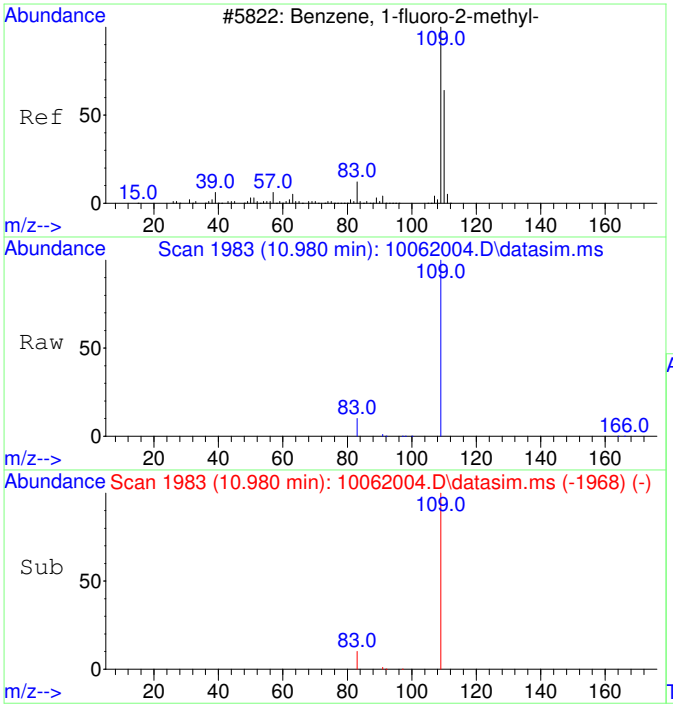
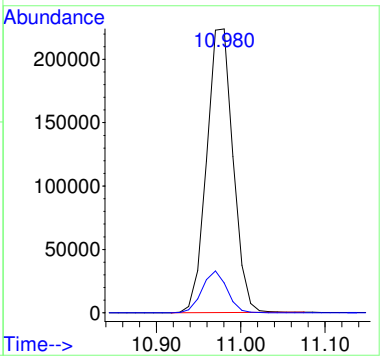
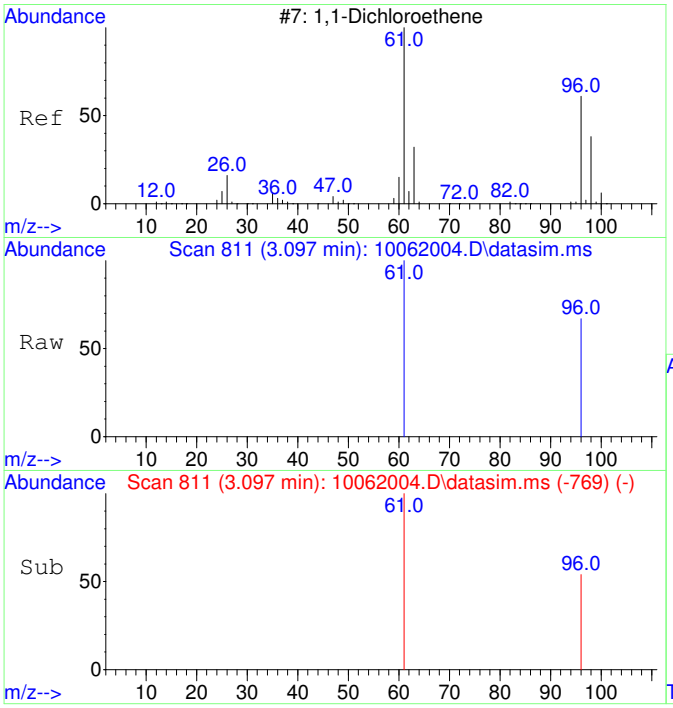


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.980 min Scan# 1983
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:109 Resp: 488006

Ion	Ratio	Lower	Upper
109	100		
83	13.9	0.0	42.3

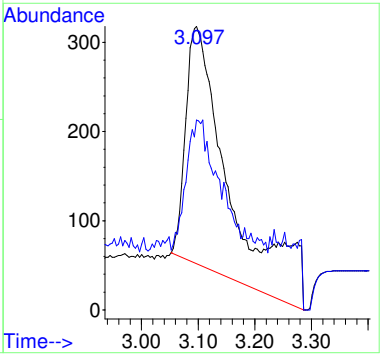




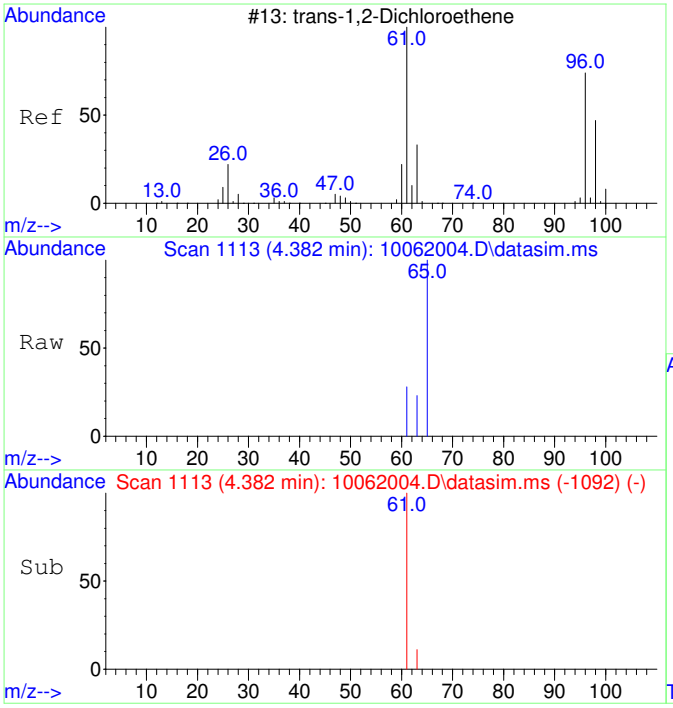
#2
1,1-Dichloroethene
Concen: 72.87 ug/L
RT: 3.097 min Scan# 811
Delta R.T. 0.007 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 61 Resp: 1420

Ion	Ratio	Lower	Upper
61	100		
96	56.1	37.2	97.2



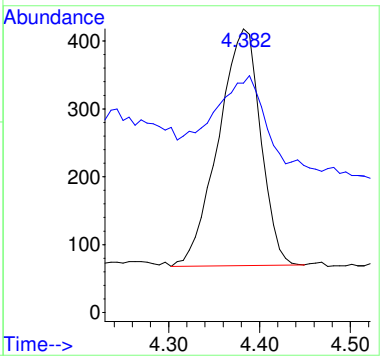
Before MI:
IMPROPER
BASELINE

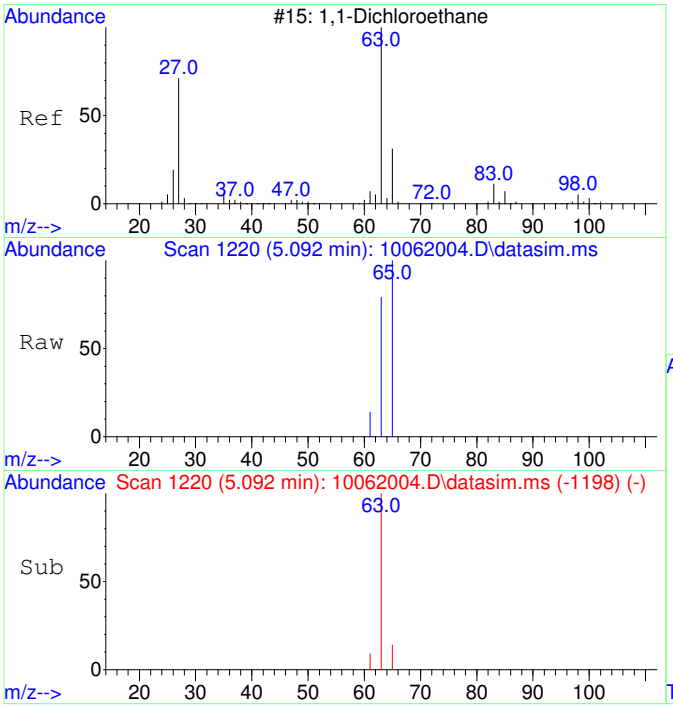


#3
trans-1,2-Dichloroethene
Concen: 50.10 ug/L
RT: 4.382 min Scan# 1113
Delta R.T. -0.013 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 61 Resp: 1128

Ion	Ratio	Lower	Upper
61	100		
63	53.5	2.4	62.4

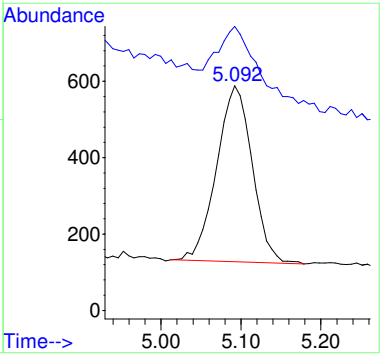


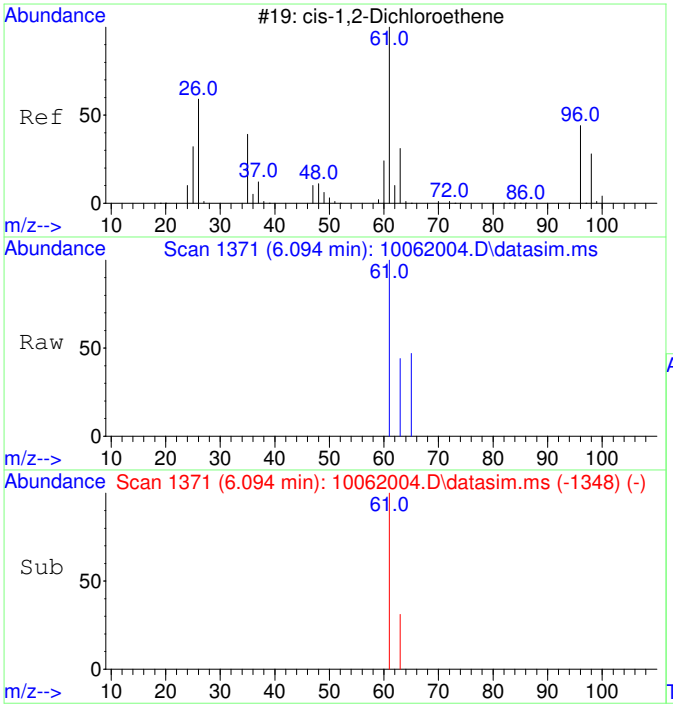


#4
1,1-Dichloroethane
Concen: 50.60 ug/L
RT: 5.092 min Scan# 1220
Delta R.T. -0.007 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 63 Resp: 1418

Ion	Ratio	Lower	Upper
63	100		
65	63.6	1.8	61.8#

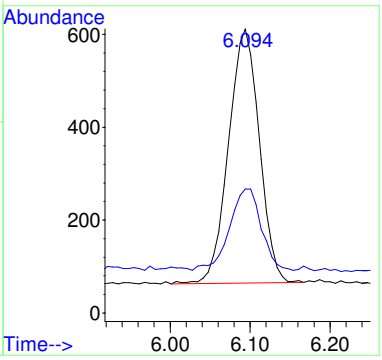


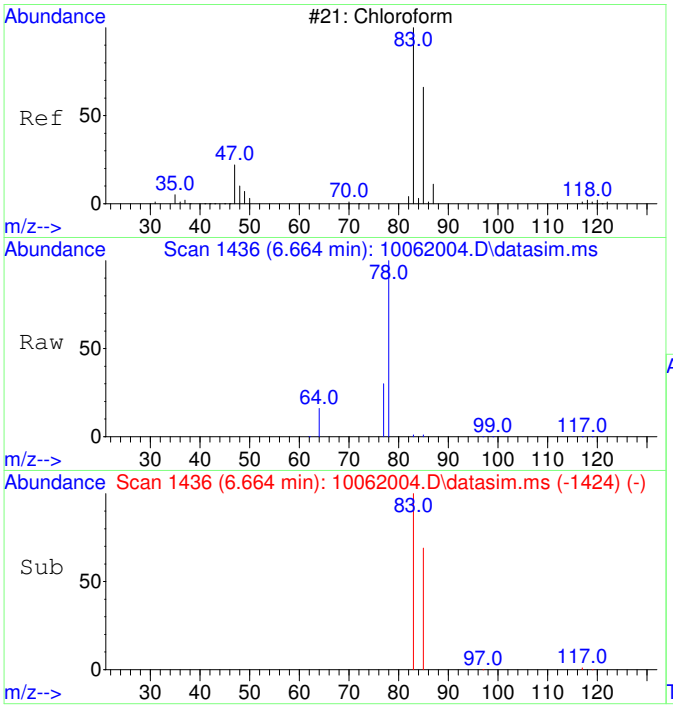


#5
cis-1,2-Dichloroethene
Concen: 49.55 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 61 Resp: 1466

Ion	Ratio	Lower	Upper
61	100		
63	32.8	2.5	62.5

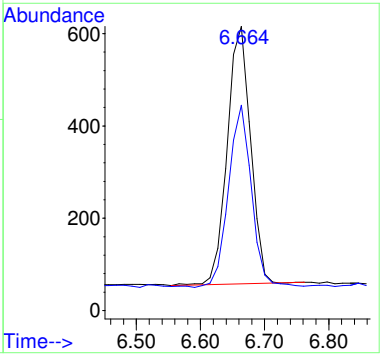


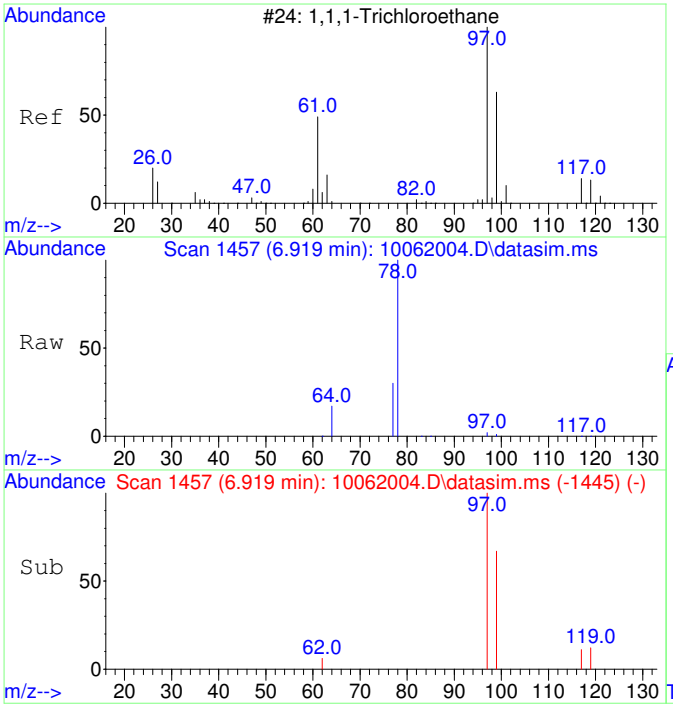


#6
Chloroform
Concen: 46.47 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 83 Resp: 1407

Ion	Ratio	Lower	Upper
83	100		
85	69.1	35.1	95.1

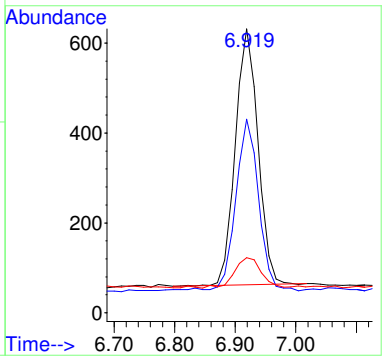


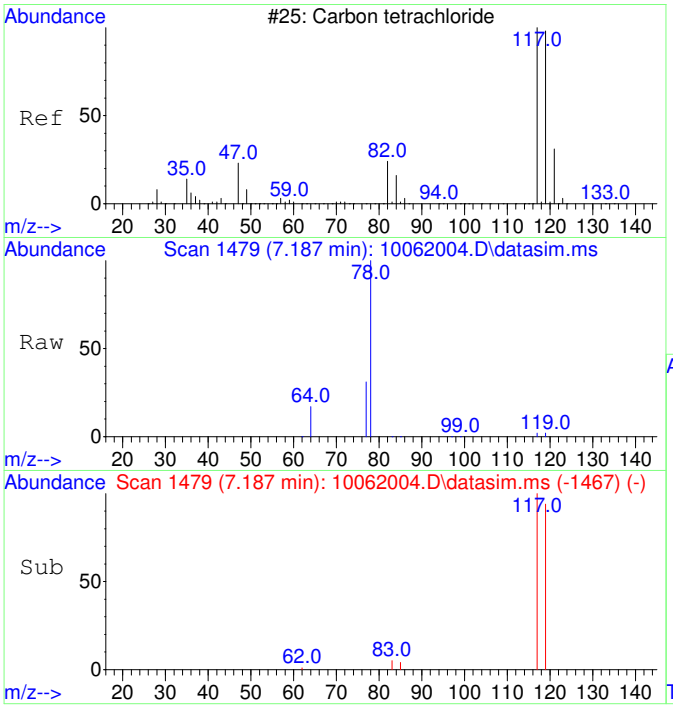


#7
1,1,1-Trichloroethane
Concen: 45.07 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 97 Resp: 1482

Ion	Ratio	Lower	Upper
97	100		
99	66.3	34.6	94.6
117	14.3	0.0	43.2

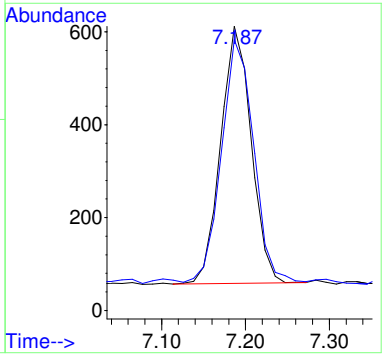


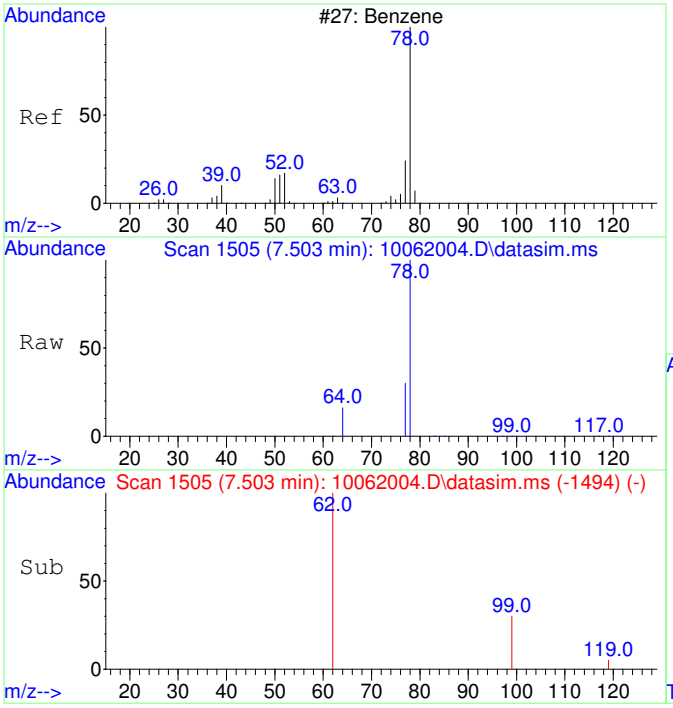


#8
Carbon tetrachloride
Concen: 45.14 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:117 Resp: 1397

Ion	Ratio	Lower	Upper
117	100		
119	98.4	66.4	126.4

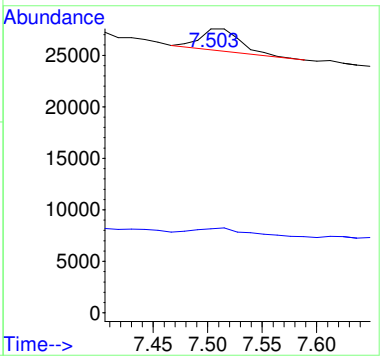


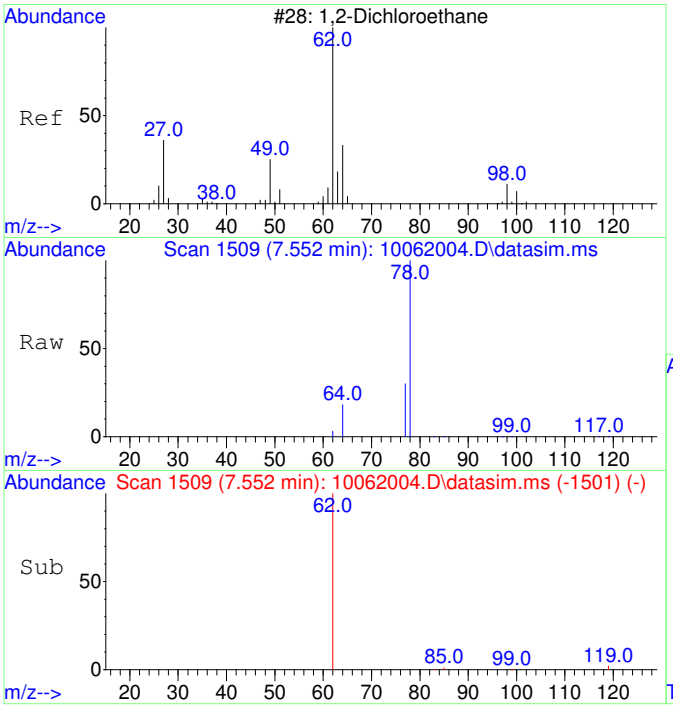


#9
Benzene
Concen: 60.70 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 78 Resp: 5033

Ion	Ratio	Lower	Upper
78	100		
77	71.5	0.0	53.2#

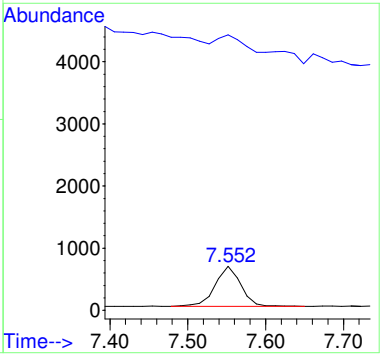


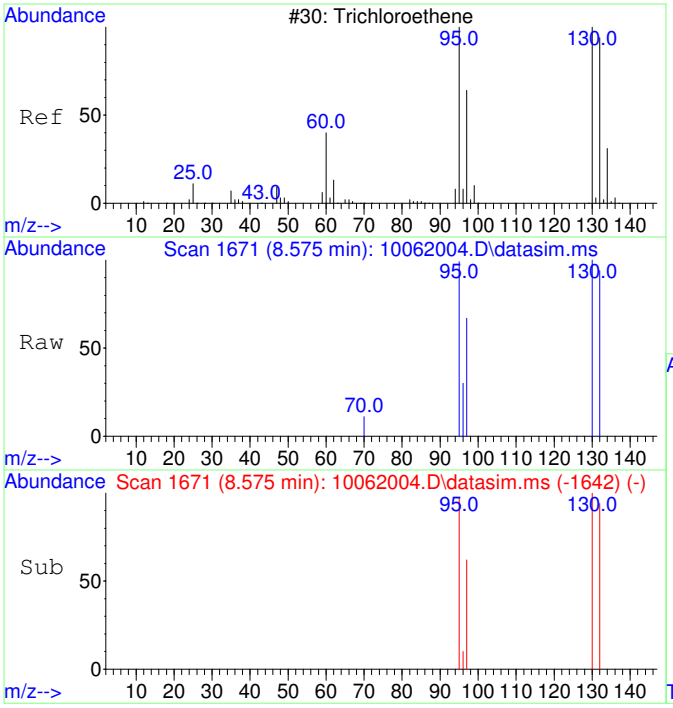


#10
1,2-Dichloroethane
Concen: 49.33 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 62 Resp: 1460

Ion	Ratio	Lower	Upper
62	100		
64	48.4	2.3	62.3

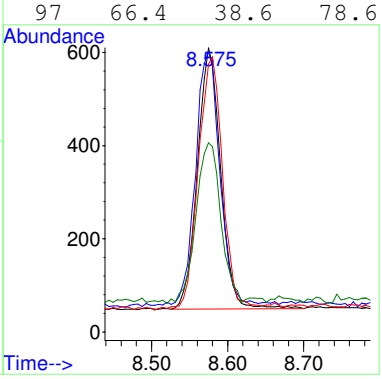


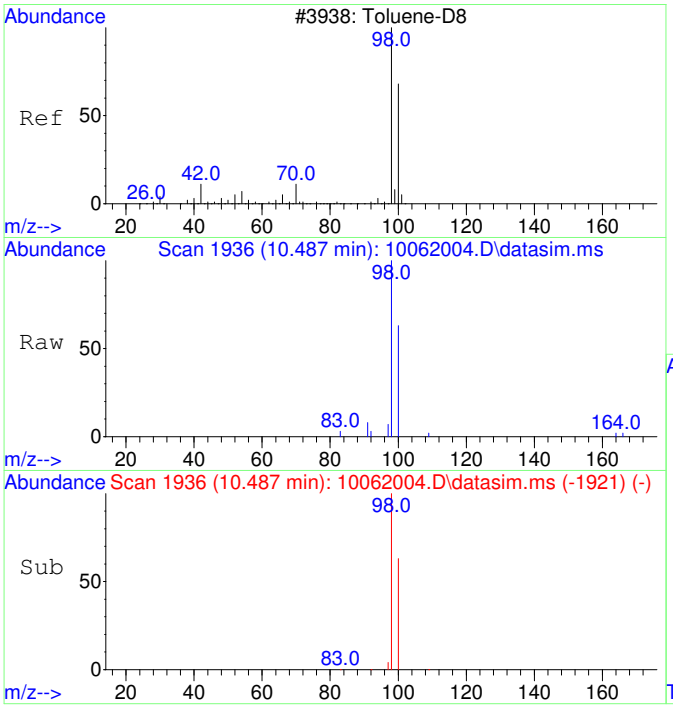


#11
Trichloroethene
Concen: 47.75 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:130 Resp: 1192

Ion	Ratio	Lower	Upper
130	100		
95	99.6	60.7	120.7
132	102.2	76.0	116.0
97	66.4	38.6	78.6

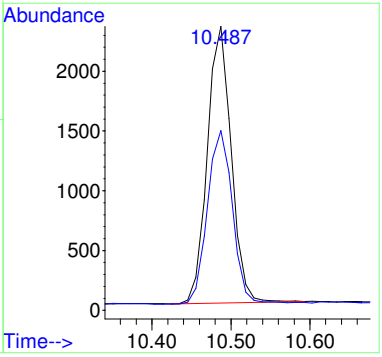


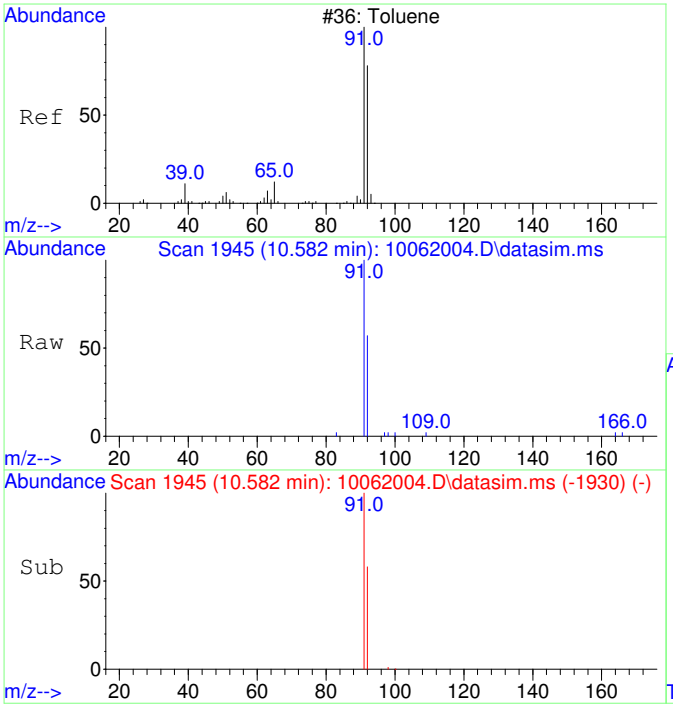


#12
Toluene-d8
Concen: 50.99 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 98 Resp: 4871

Ion	Ratio	Lower	Upper
98	100		
100	65.1	37.1	97.1

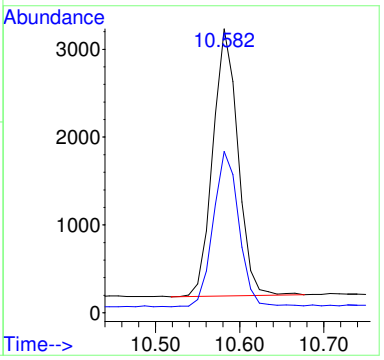


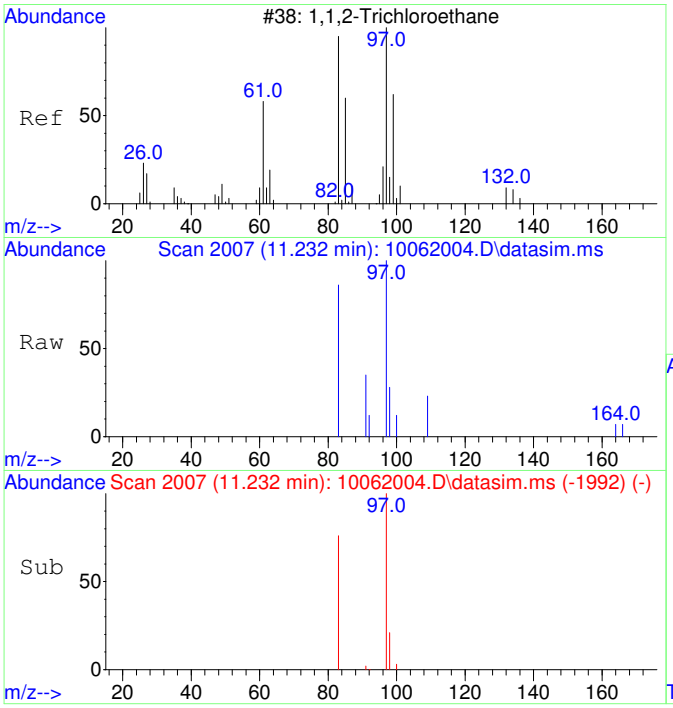


#13
Toluene
Concen: 51.50 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 6272

Ion	Ratio	Lower	Upper
91	100		
92	58.9	29.9	89.9

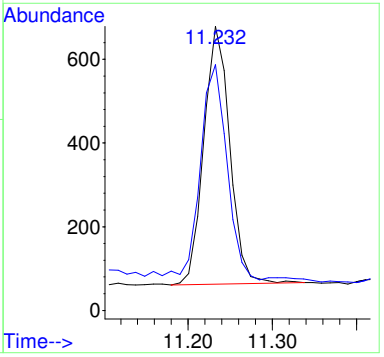


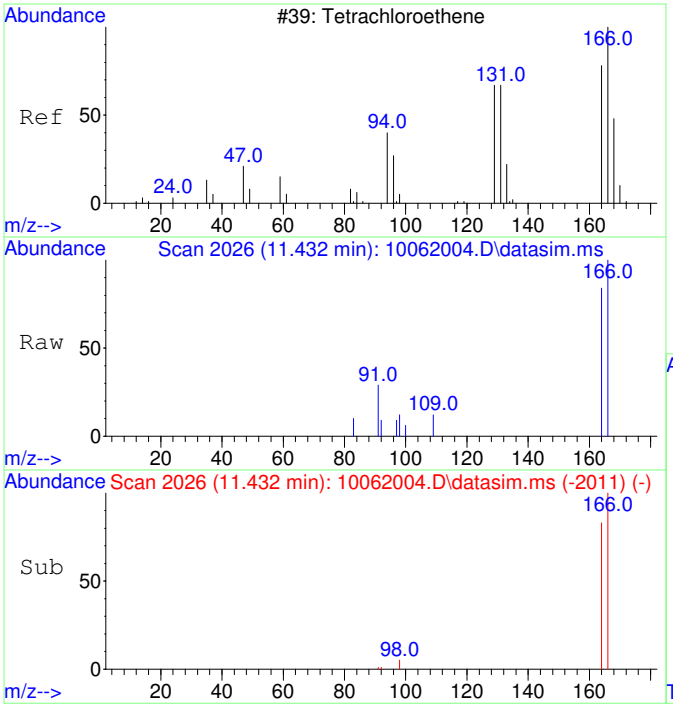


#14
1,1,2-Trichloroethane
Concen: 49.62 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 97 Resp: 1317

Ion	Ratio	Lower	Upper
97	100		
83	85.4	51.2	111.2

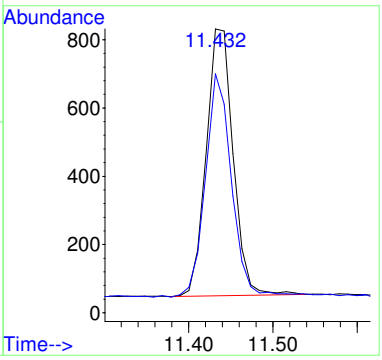


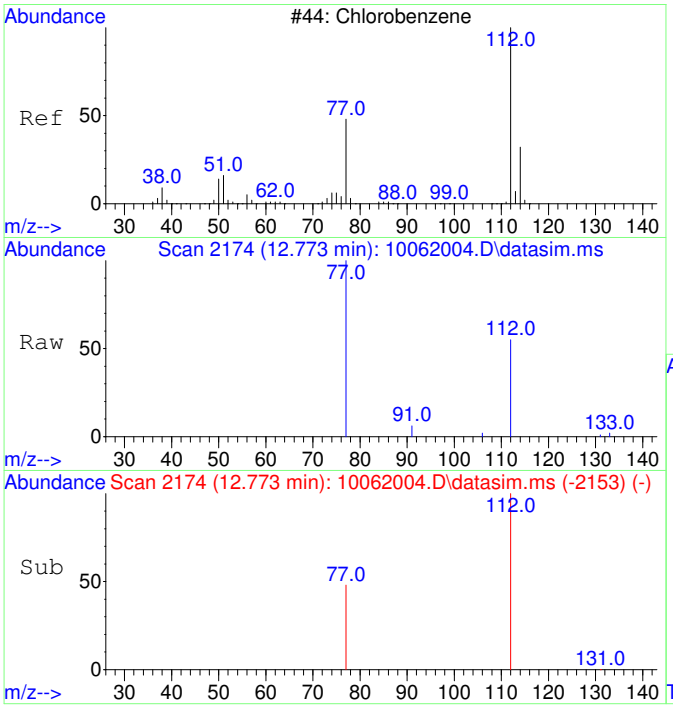


#15
Tetrachloroethene
Concen: 49.37 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:166 Resp: 1740

Ion	Ratio	Lower	Upper
166	100		
164	81.6	47.8	107.8

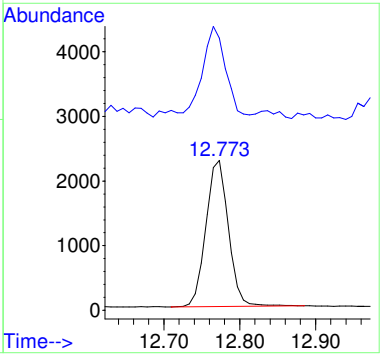


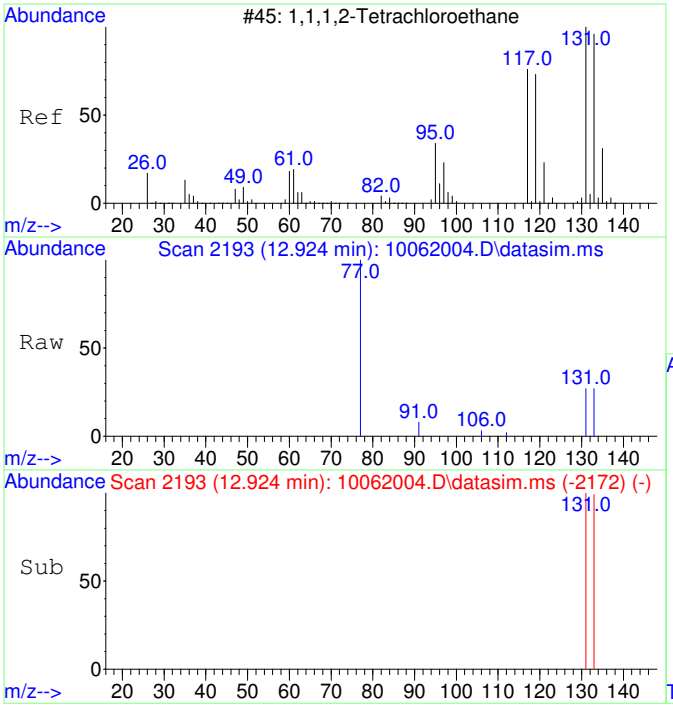


#16
Chlorobenzene
Concen: 53.49 ug/L
RT: 12.773 min Scan# 2174
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:112 Resp: 4665

Ion	Ratio	Lower	Upper
112	100		
77	64.4	23.6	83.6

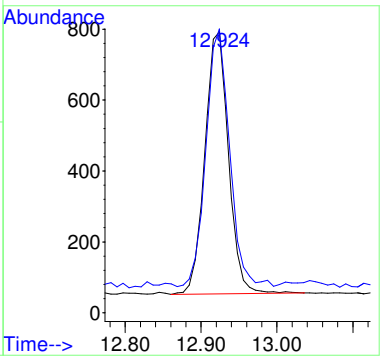


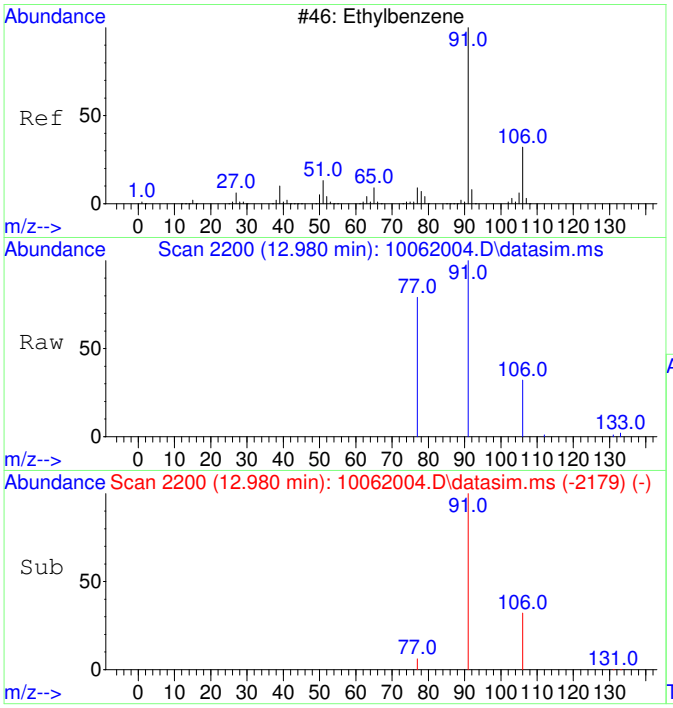


#17
1,1,1,2-Tetrachloroethane
Concen: 51.17 ug/L
RT: 12.924 min Scan# 2193
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:131 Resp: 1599

Ion	Ratio	Lower	Upper
131	100		
133	97.8	66.3	126.3

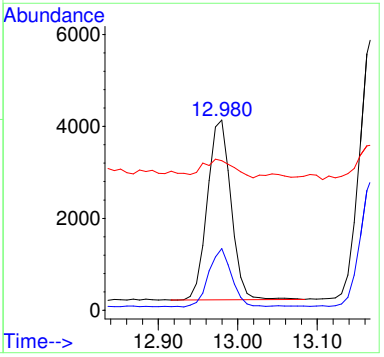


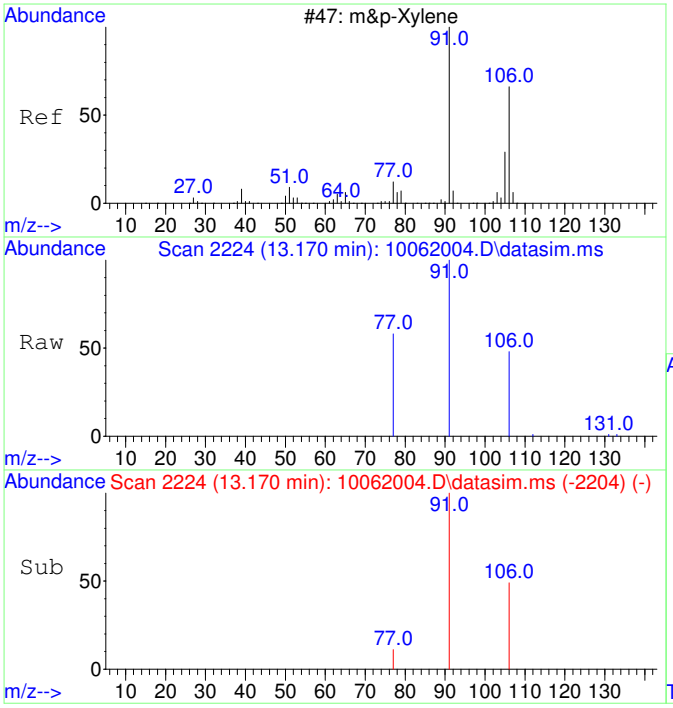


#18
Ethylbenzene
Concen: 54.32 ug/L
RT: 12.980 min Scan# 2200
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 8053

Ion	Ratio	Lower	Upper
91	100		
106	31.1	3.0	63.0
77	13.0	0.0	38.2

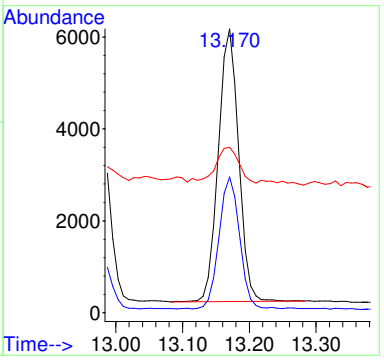


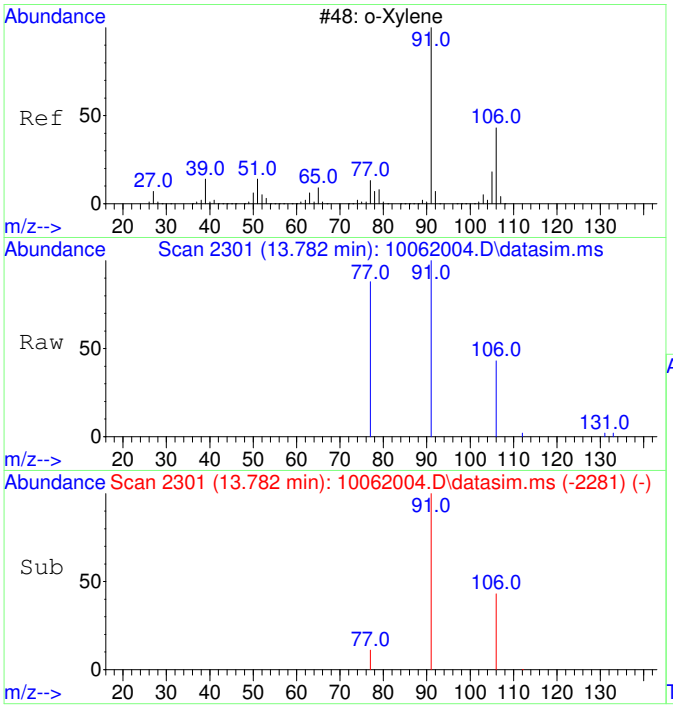


#19
m&p-Xylene
Concen: 107.92 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.008 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 12504

Ion	Ratio	Lower	Upper
91	100		
106	48.8	22.2	82.2
77	15.5	0.0	42.4

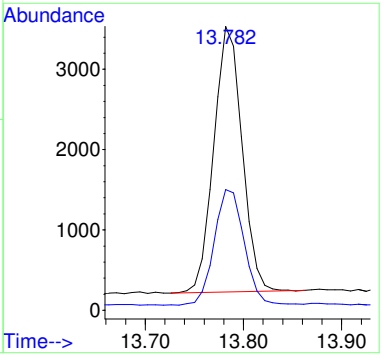


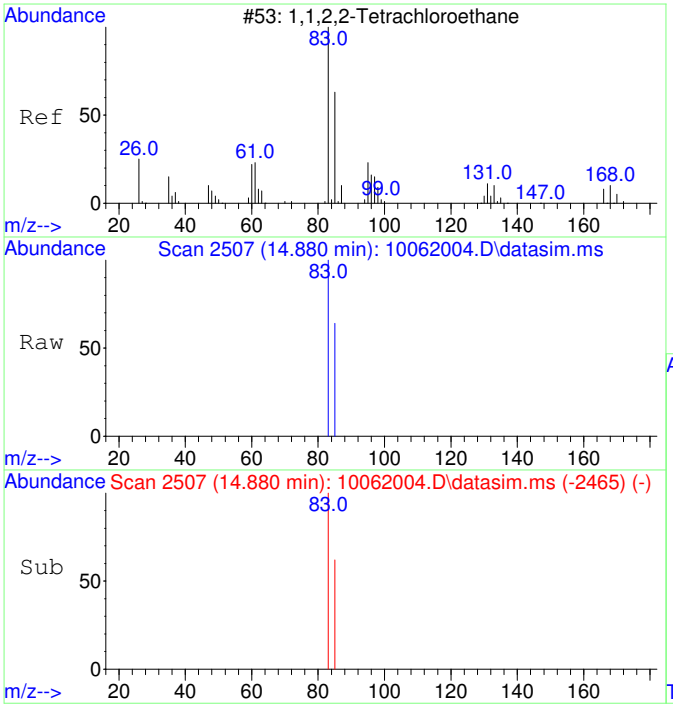


#20
o-Xylene
Concen: 53.34 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 6603

Ion	Ratio	Lower	Upper
91	100		
106	45.5	19.2	79.2

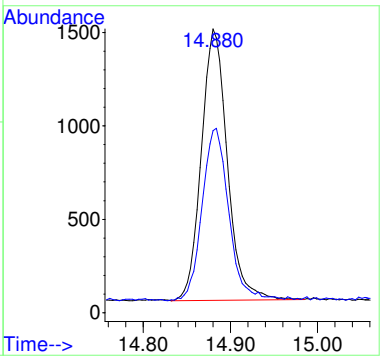


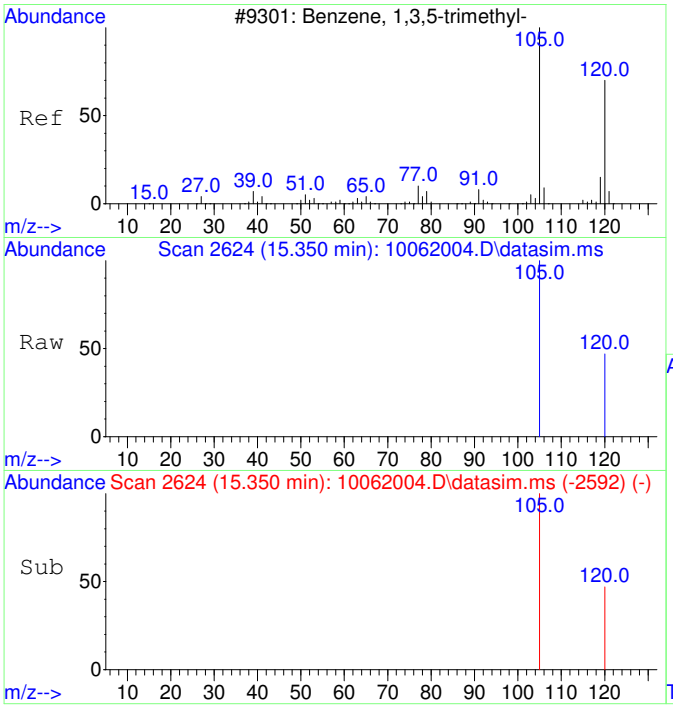


#21
1,1,2,2-Tetrachloroethane
Concen: 54.81 ug/L
RT: 14.880 min Scan# 2507
Delta R.T. 0.007 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 83 Resp: 3007

Ion	Ratio	Lower	Upper
83	100		
85	64.2	34.8	94.8

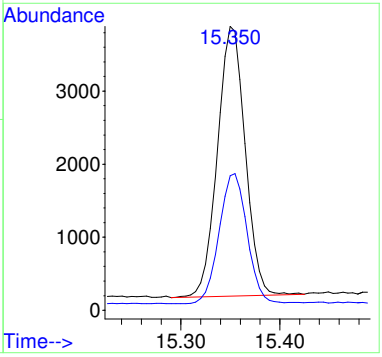


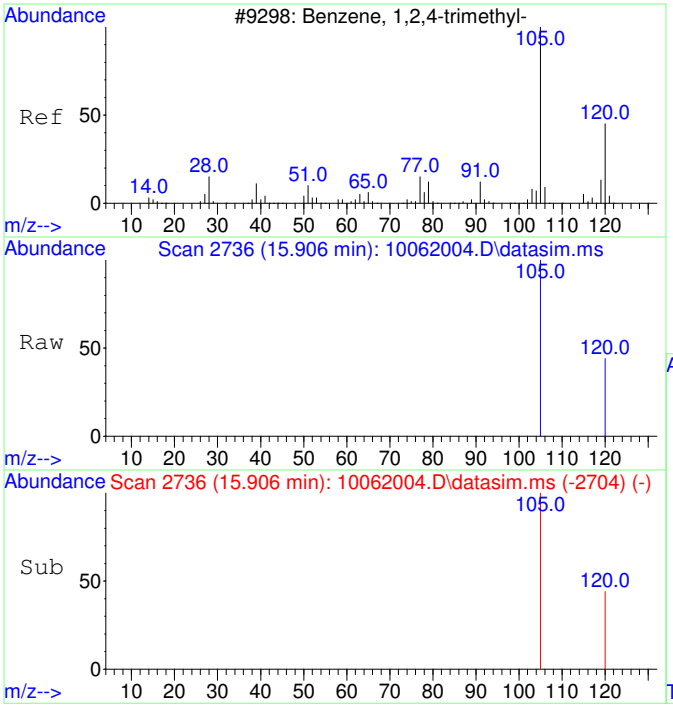


#22
1,3,5-Trimethylbenzene
Concen: 54.58 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.005 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:105 Resp: 7191

Ion	Ratio	Lower	Upper
105	100		
120	48.4	21.1	81.1

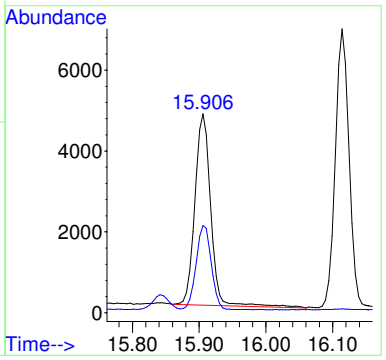


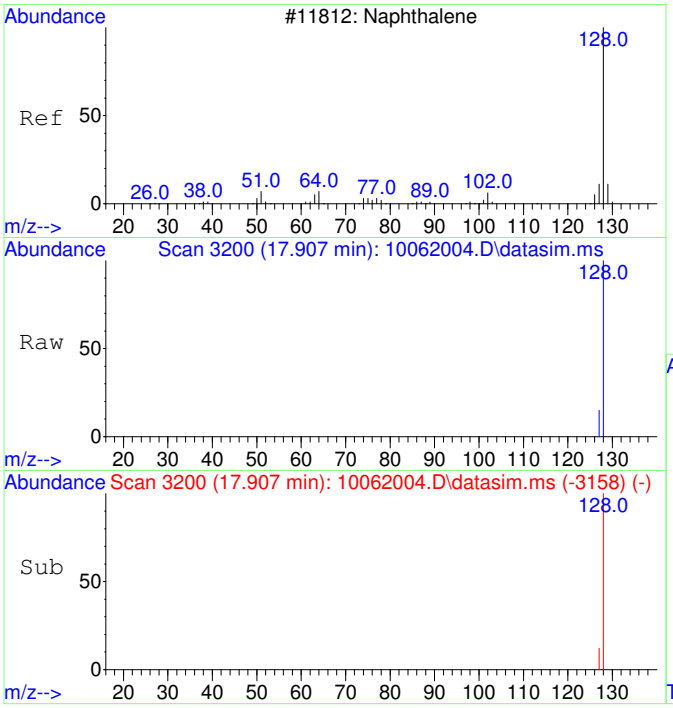


#23
1,2,4-Trimethylbenzene
Concen: 56.71 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:105 Resp: 7761

Ion	Ratio	Lower	Upper
105	100		
120	41.6	17.2	77.2

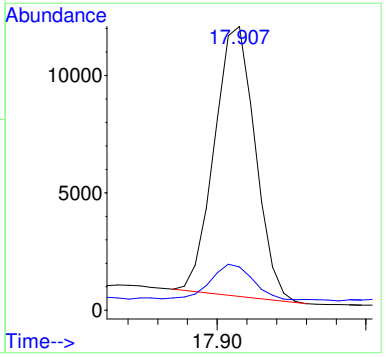


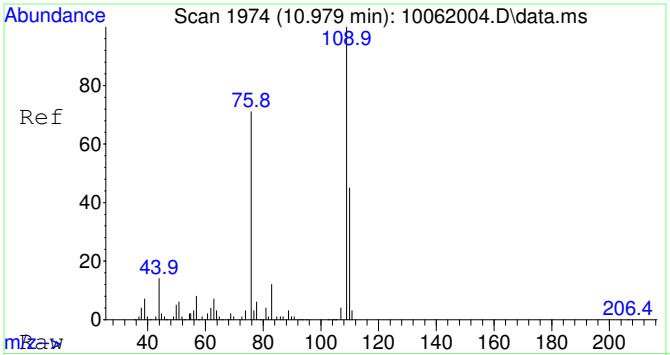


#24
Naphthalene
Concen: 50.25 ug/L
RT: 17.907 min Scan# 3200
Delta R.T. 0.005 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:128 Resp: 10869

Ion	Ratio	Lower	Upper
128	100		
127	13.9	0.0	42.5

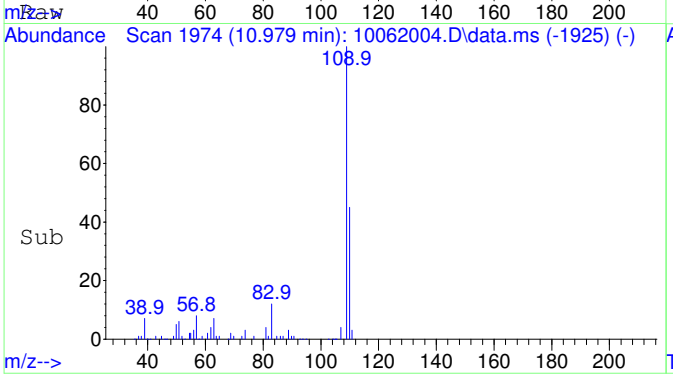


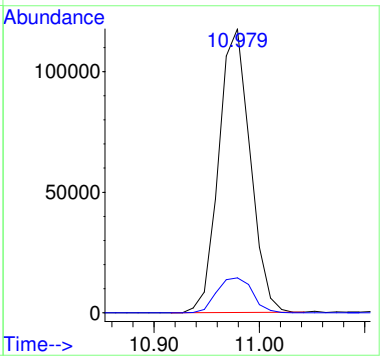


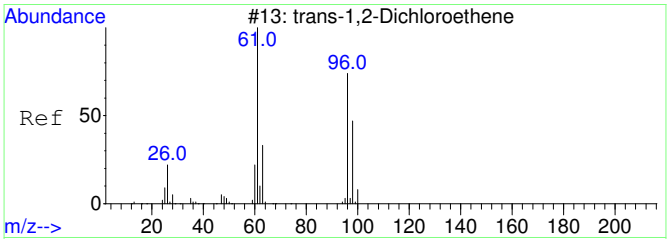
#25
2-Fluorotoluene SCAN
Concen: 5142.59 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

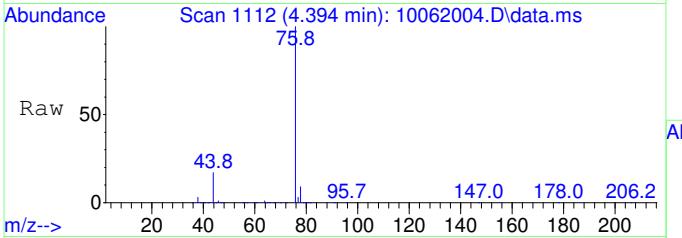
Tgt Ion:109 Resp: 244641

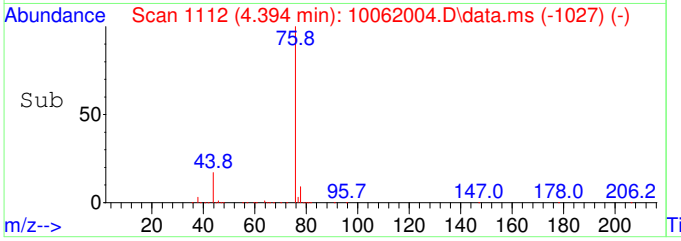
Ion	Ratio	Lower	Upper
109	100		
83	14.0	0.0	43.8







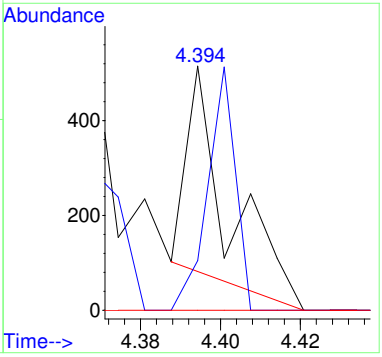


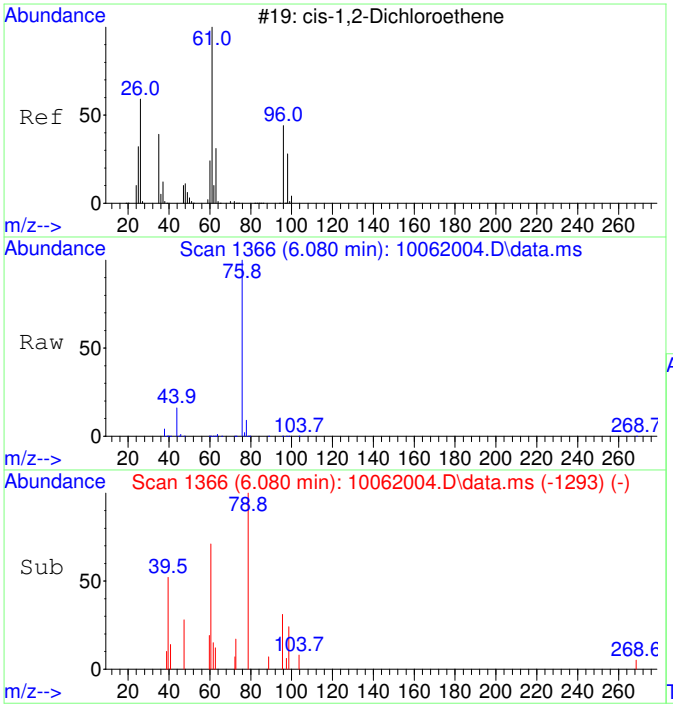


#27
trans-1,2-Dichloroethene SCAN
Concen: 23.12 ug/L
RT: 4.394 min Scan# 1112
Delta R.T. -0.007 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 61 Resp: 289

Ion	Ratio	Lower	Upper
61	100		
96	85.1	49.0	109.0
98	0.0	20.5	80.5#

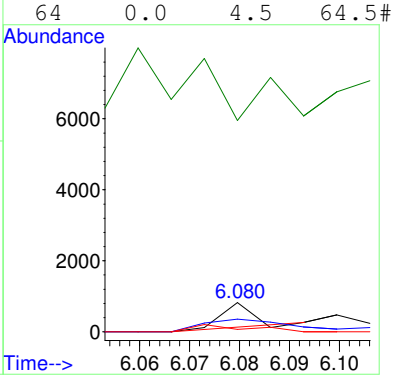


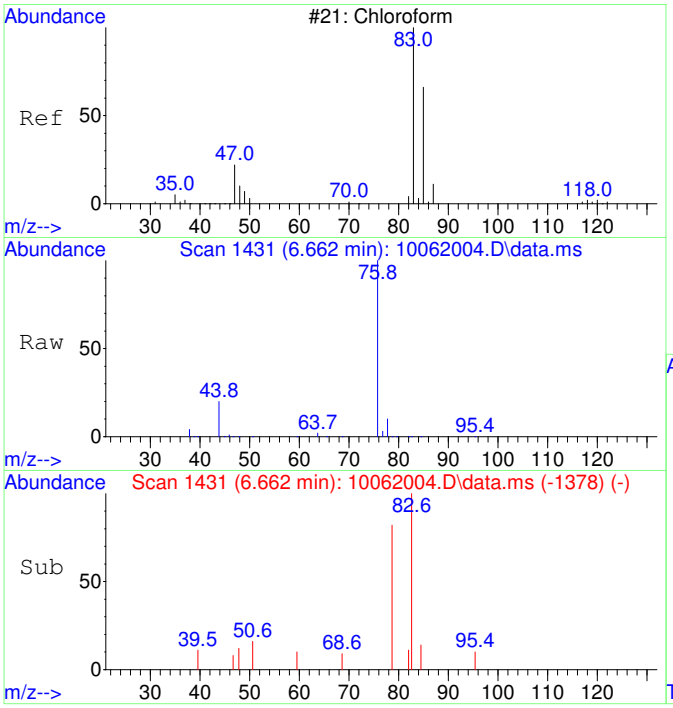


#29
cis-1,2-Dichloroethene SCAN
Concen: 20.45 ug/L
RT: 6.080 min Scan# 1366
Delta R.T. -0.013 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 61 Resp: 317

Ion	Ratio	Lower	Upper
61	100		
96	152.4	39.9	99.9#
98	50.5	13.5	73.5
64	0.0	4.5	64.5#

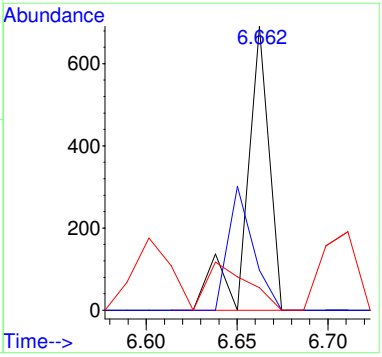


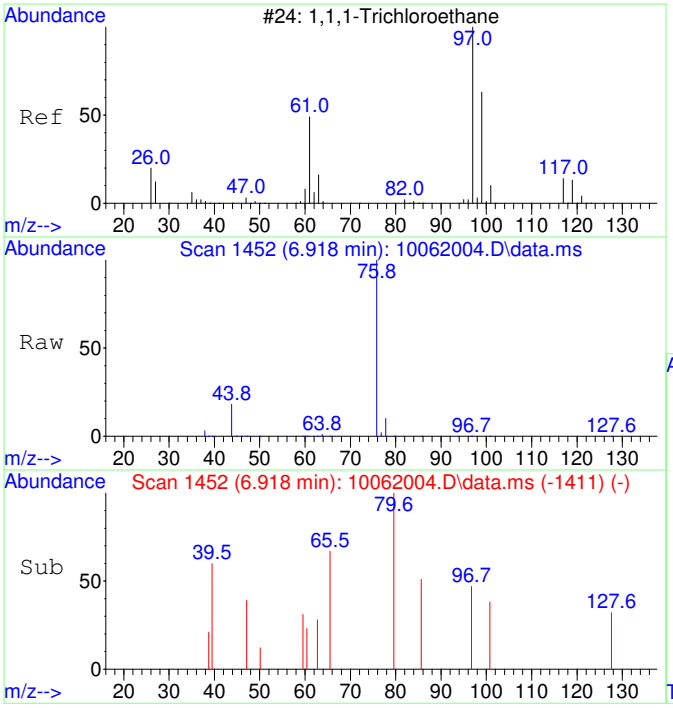


#30
Chloroform SCAN
Concen: 35.92 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 83 Resp: 604

Ion	Ratio	Lower	Upper
83	100		
85	48.2	34.6	94.6
47	0.0	0.0	53.4

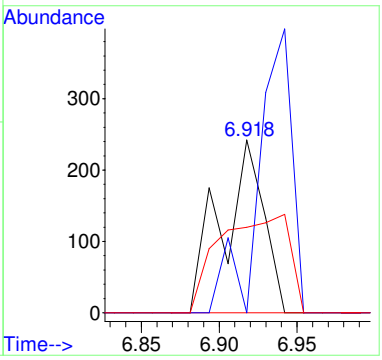


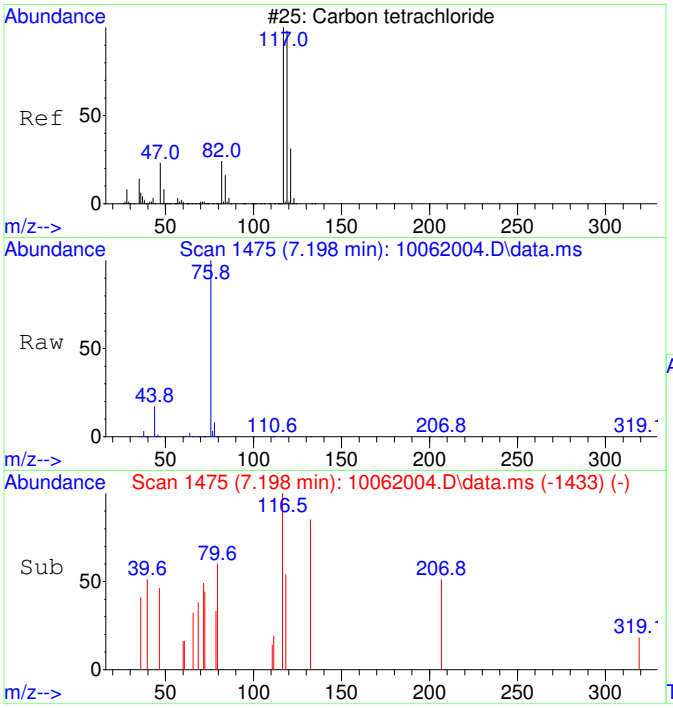


#31
1,1,1-Trichloroethane SCAN
Concen: 29.50 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 97 Resp: 452

Ion	Ratio	Lower	Upper
97	100		
99	0.0	43.6	103.6#
61	0.0	18.0	78.0#

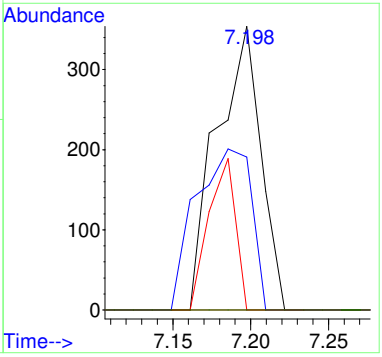


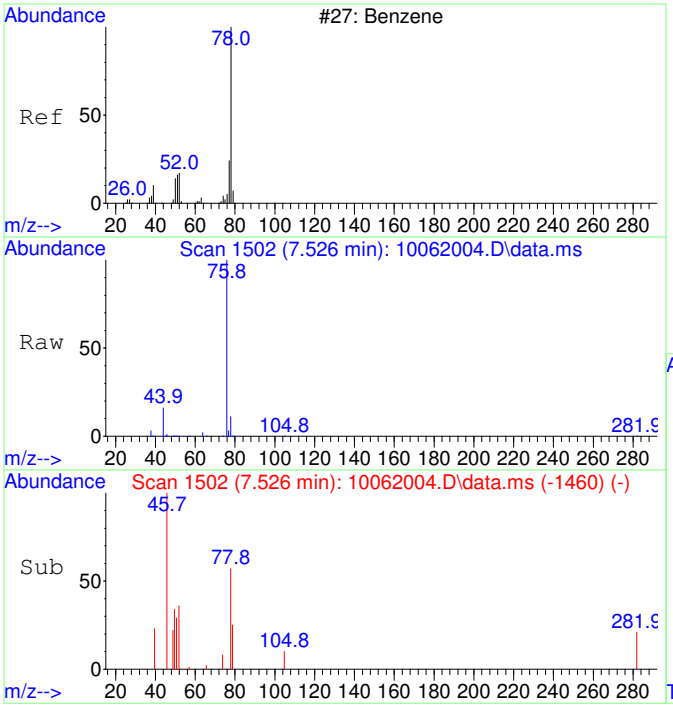


#32
Carbon tetrachloride SCAN
Concen: 43.86 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:117 Resp: 701

Ion	Ratio	Lower	Upper
117	100		
119	71.5	75.5	135.5#
121	32.5	0.0	58.8
82	0.0	0.0	59.2

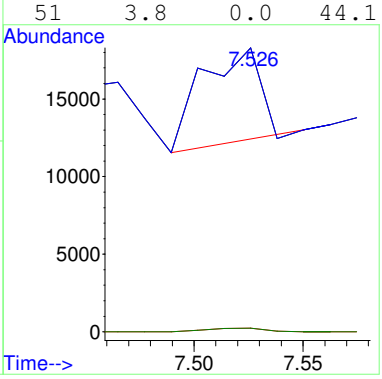


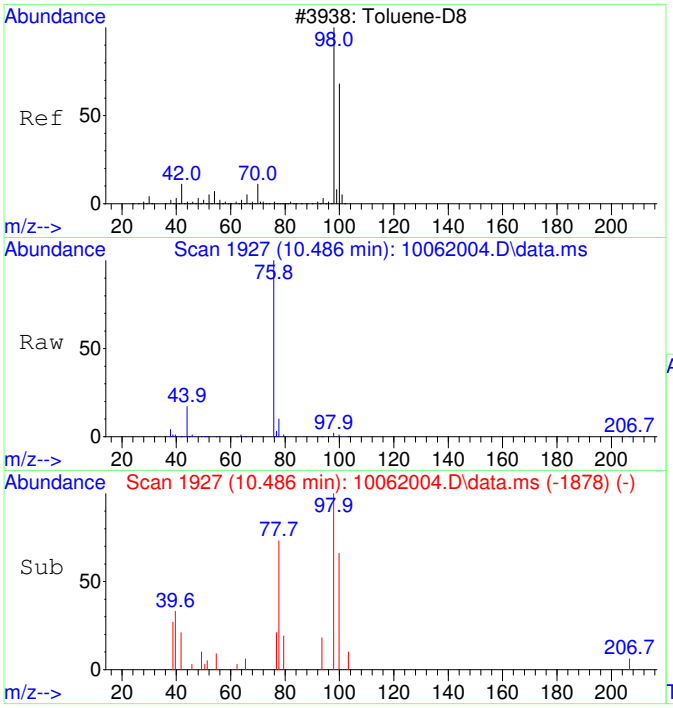


#33
Benzene SCAN
Concen: 273.65 ug/L
RT: 7.526 min Scan# 1502
Delta R.T. 0.012 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 78 Resp: 11544

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	3.8	0.0	47.9
51	3.8	0.0	44.1

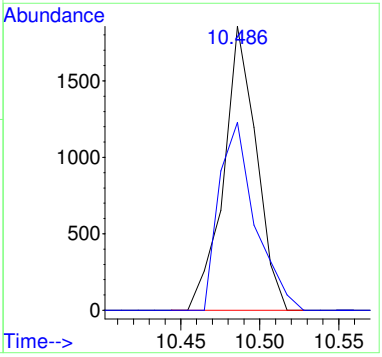


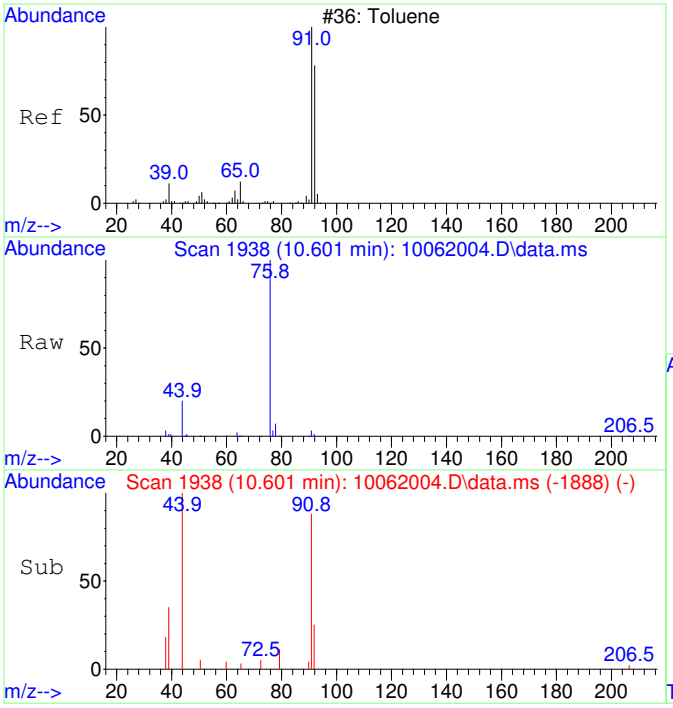


#36
Toluene-d8 SCAN
Concen: 57.76 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 98 Resp: 2687

Ion	Ratio	Lower	Upper
98	100		
100	73.1	40.0	100.0

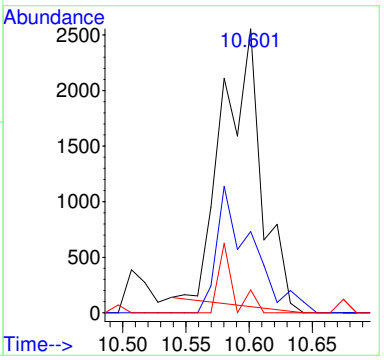


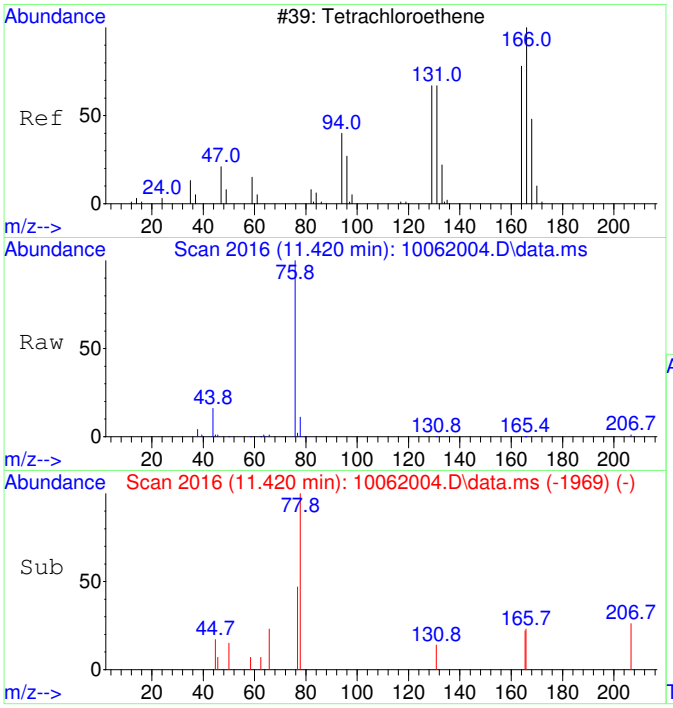


#37
Toluene SCAN
Concen: 88.50 ug/L
RT: 10.601 min Scan# 1938
Delta R.T. 0.021 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 5273

Ion	Ratio	Lower	Upper
91	100		
92	0.0	28.3	88.3#
65	0.0	0.0	41.0

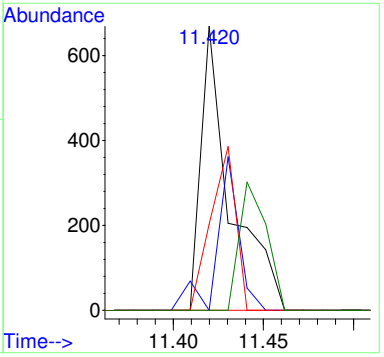


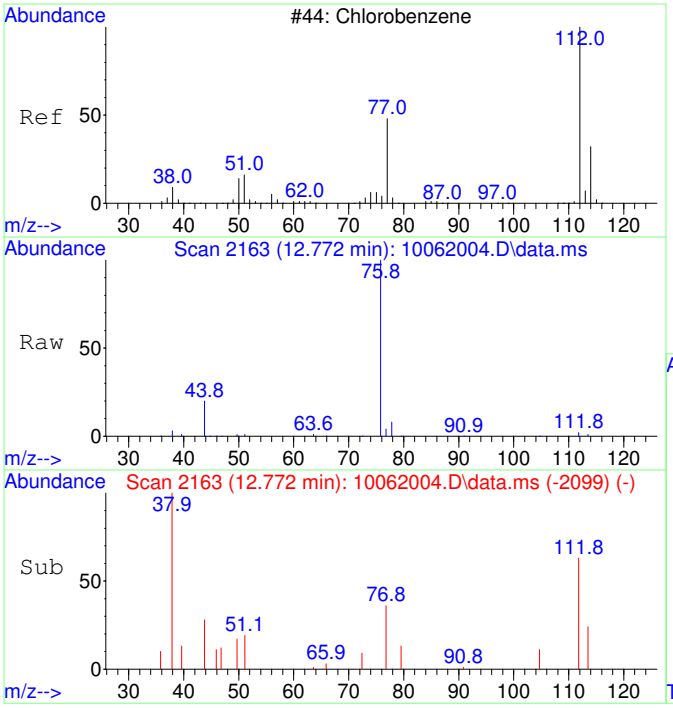


#39
Tetrachloroethene SCAN
Concen: 53.30 ug/L
RT: 11.420 min Scan# 2016
Delta R.T. -0.011 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:166 Resp: 763

Ion	Ratio	Lower	Upper
166	100		
164	40.0	50.9	110.9#
131	48.6	38.7	98.7
129	0.0	41.8	101.8#

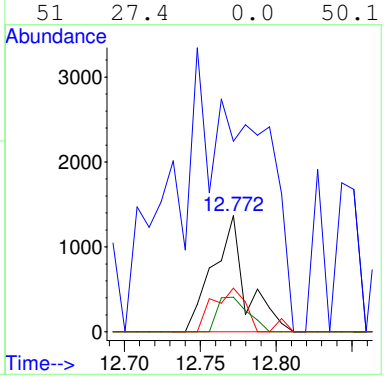


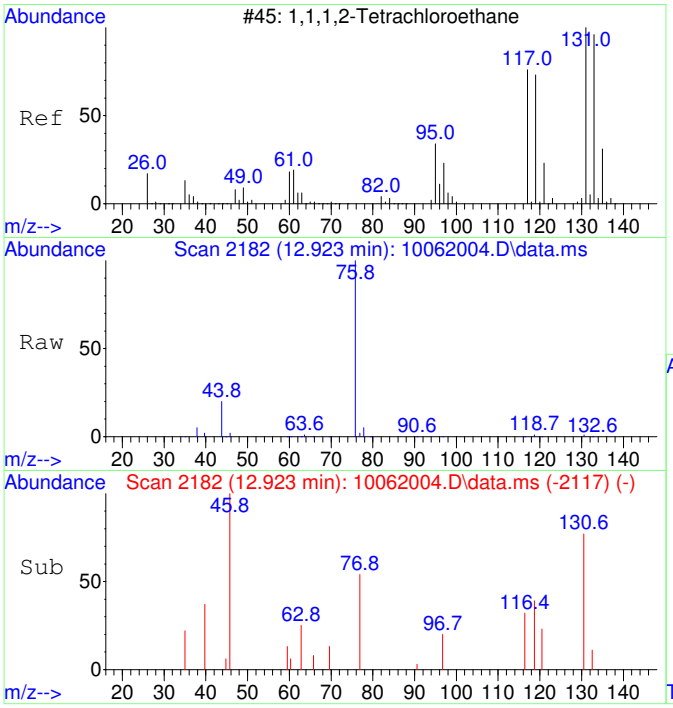


#40
Chlorobenzene SCAN
Concen: 51.29 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.008 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:112 Resp: 2088

Ion	Ratio	Lower	Upper
112	100		
77	0.0	28.2	88.2#
114	36.4	2.3	62.3
51	27.4	0.0	50.1

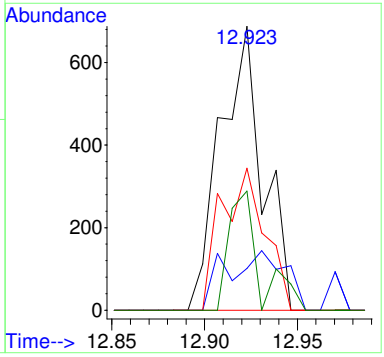


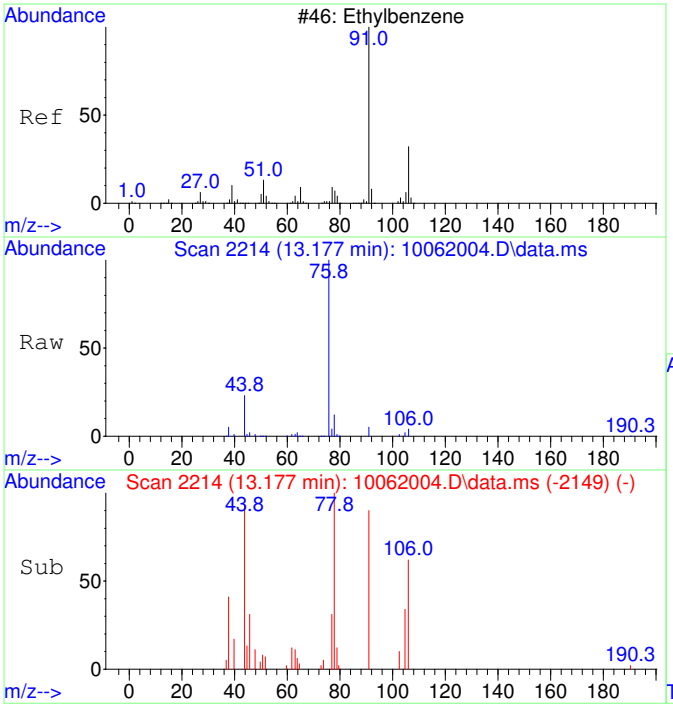


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 72.74 ug/L
RT: 12.923 min Scan# 2182
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:131 Resp: 1096

Ion	Ratio	Lower	Upper
131	100		
133	28.7	66.9	126.9#
119	51.6	40.4	100.4
117	30.4	35.1	95.1#

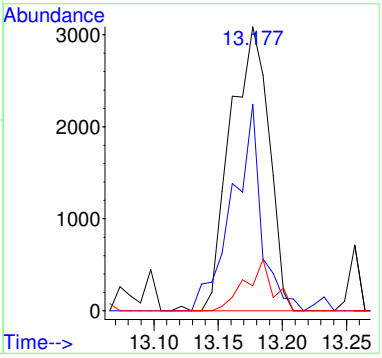


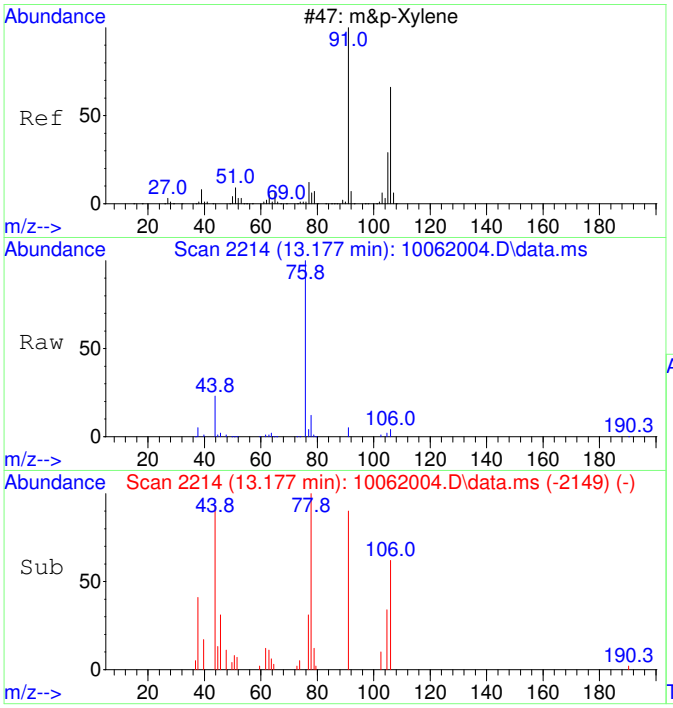


#42
Ethylbenzene SCAN
Concen: 59.43 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 6451

Ion	Ratio	Lower	Upper
91	100		
106	54.5	23.1	83.1
51	13.0	0.0	40.1

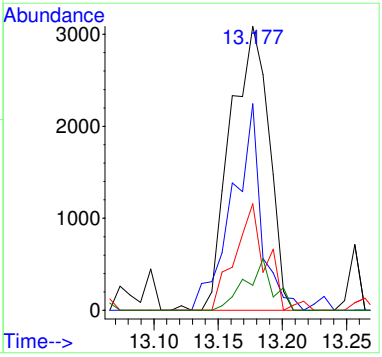


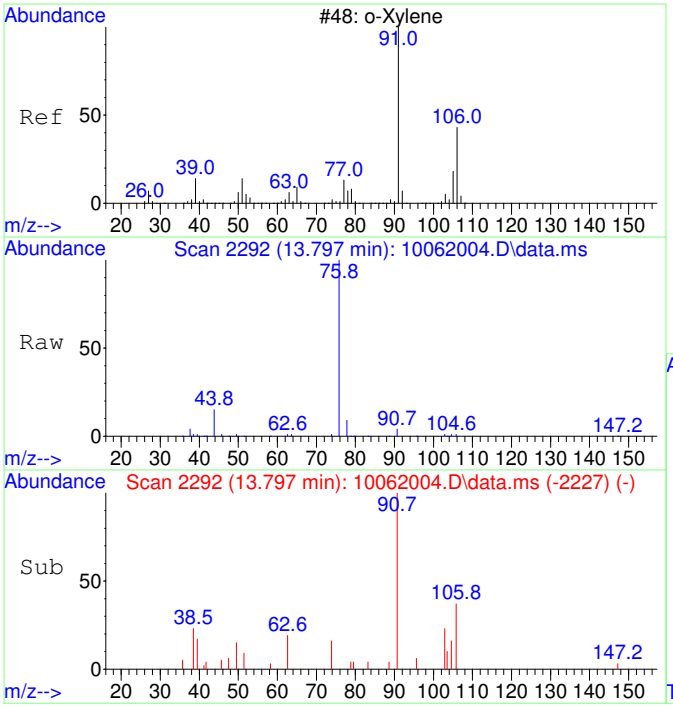


#43
m&p-Xylene SCAN
Concen: 59.43 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 6451

Ion	Ratio	Lower	Upper
91	100		
106	54.5	23.1	83.1
105	30.3	0.0	54.7
51	13.0	0.0	40.1

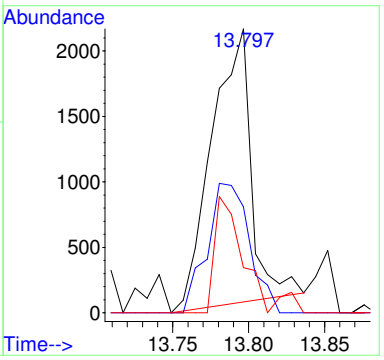


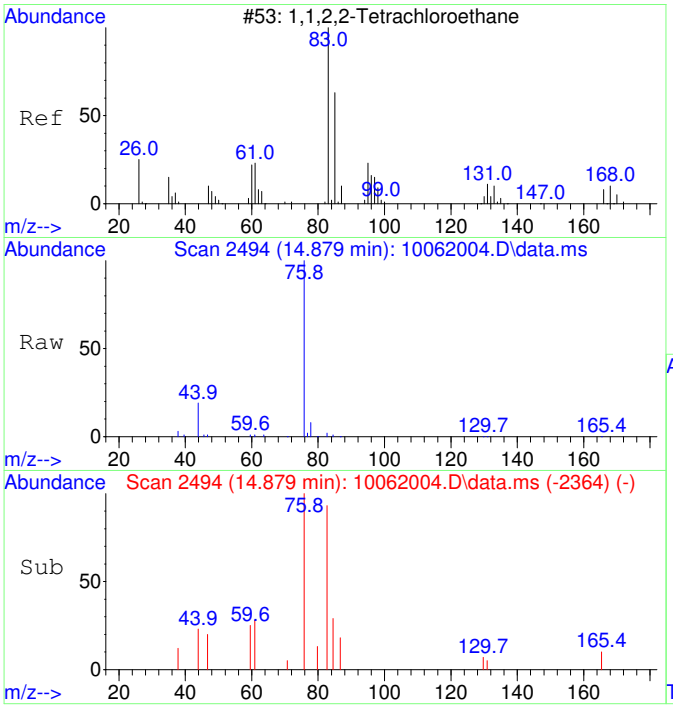


#44
o-Xylene SCAN
Concen: 65.64 ug/L
RT: 13.797 min Scan# 2292
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 3814

Ion	Ratio	Lower	Upper
91	100		
106	50.3	18.0	78.0
105	32.3	0.0	56.6

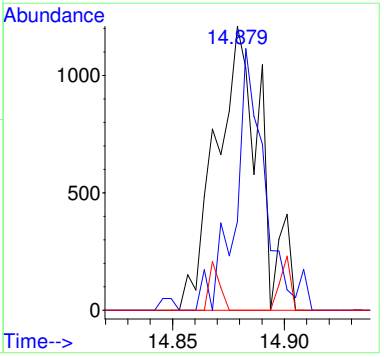


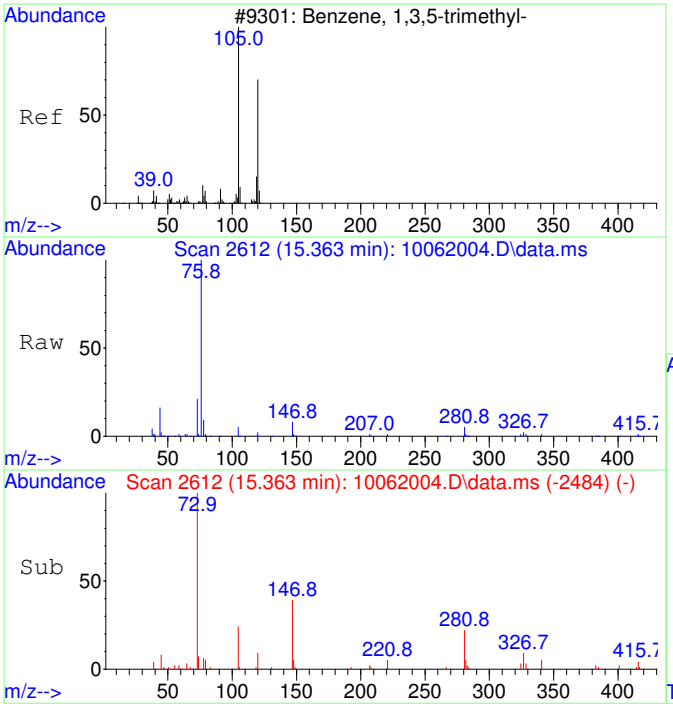


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 59.51 ug/L
RT: 14.879 min Scan# 2494
Delta R.T. 0.007 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 83 Resp: 1686

Ion	Ratio	Lower	Upper
83	100		
85	61.0	35.9	95.9
95	4.0	0.0	47.4

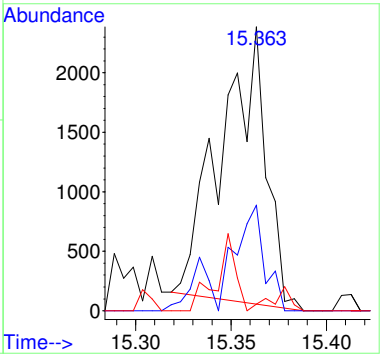


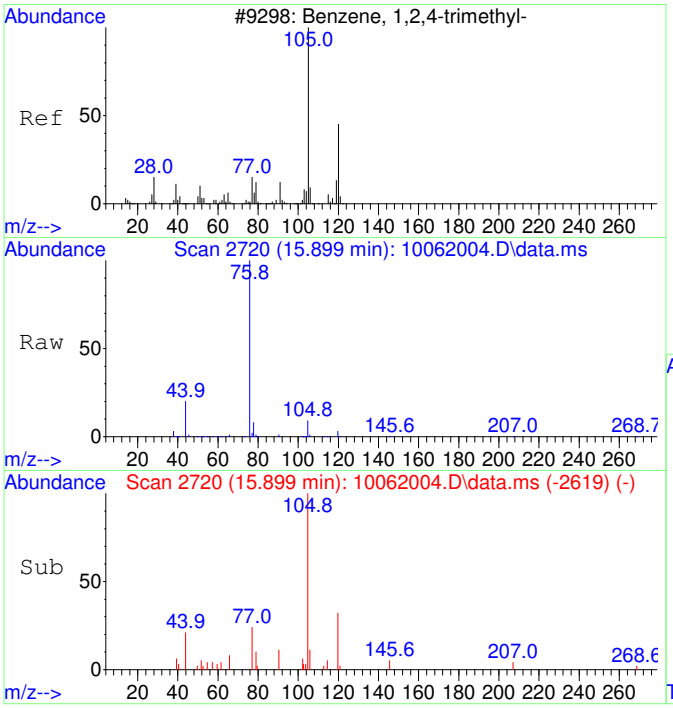


#46
1,3,5-Trimethylbenzene SCAN
Concen: 62.61 ug/L
RT: 15.363 min Scan# 2612
Delta R.T. 0.020 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:105 Resp: 3834

Ion	Ratio	Lower	Upper
105	100		
120	24.7	18.3	78.3
119	2.1	0.0	43.1

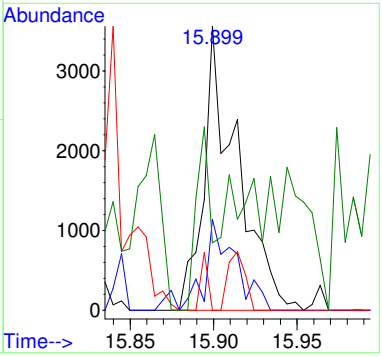


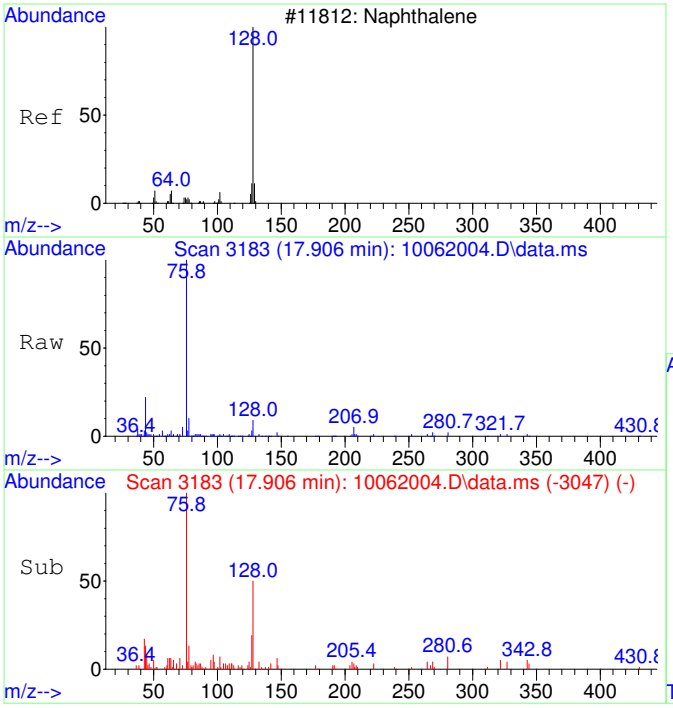


#47
1,2,4-Trimethylbenzene SCAN
Concen: 78.13 ug/L
RT: 15.899 min Scan# 2720
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:105 Resp: 4895

Ion	Ratio	Lower	Upper
105	100		
120	28.8	16.9	76.9
119	4.4	0.0	41.9
77	22.1	0.0	42.3

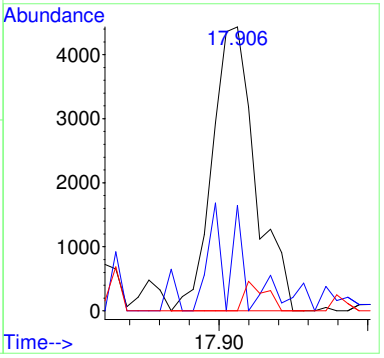




#48
Naphthalene SCAN
Concen: 46.91 ug/L
RT: 17.906 min Scan# 3183
Delta R.T. 0.005 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:128 Resp: 4447

Ion	Ratio	Lower	Upper
128	100		
127	17.0	0.0	44.0
129	5.3	0.0	40.8



Quantitation Report (QT Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062004.D
Acq On : 6 Oct 2020 9:23
InstName : AG5975C
Operator : TD
Sample : S20J009-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

M.I. Performed By:
TD at 6:15 am, Oct 08, 2020

M.I. Approved By:
ZR at 11:23 am, Oct 12, 2020

Quant Time: Oct 06 09:41:49 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

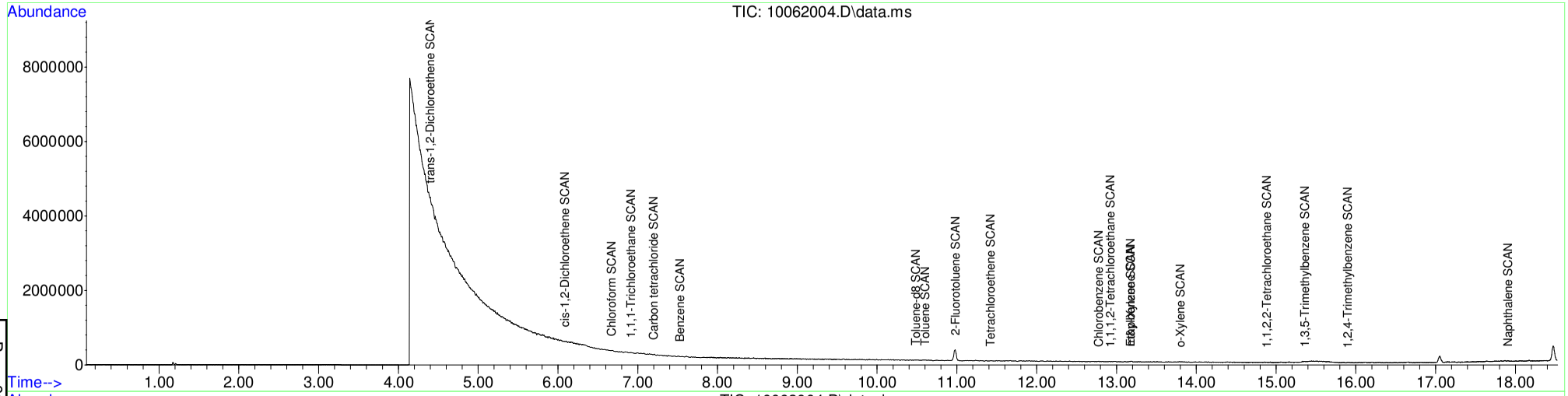
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.980	109	488006	5000.00	ug/L	0.01
System Monitoring Compounds						
12) Toluene-d8	10.487	98	4871	50.99	ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 1.02%#			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.097	61	981m	50.34	ug/L	
3] trans-1,2-Dichloroethene	4.382	61	1128	50.10	ug/L	62
4] 1,1-Dichloroethane	5.092	63	1418	50.60	ug/L #	43
5] cis-1,2-Dichloroethene	6.094	61	1466	49.55	ug/L	99
6] Chloroform	6.664	83	1407	46.47	ug/L	95
7] 1,1,1-Trichloroethane	6.919	97	1482	45.07	ug/L	98
8] Carbon tetrachloride	7.187	117	1397	45.14	ug/L	98
9] Benzene	7.503	78	5033	60.70	ug/L #	1
10] 1,2-Dichloroethane	7.552	62	1460	49.33	ug/L	71
11] Trichloroethene	8.575	130	1192	47.75	ug/L	92
13] Toluene	10.582	91	6272	51.50	ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	1317	49.62	ug/L	95
15] Tetrachloroethene	11.432	166	1740	49.37	ug/L	96
16] Chlorobenzene	12.773	112	4665	53.49	ug/L	85
17] 1,1,1,2-Tetrachloroethane	12.924	131	1599	51.17	ug/L	98
18] Ethylbenzene	12.980	91	8053	54.32	ug/L	95
19] m&p-Xylene	13.170	91	12504	107.92	ug/L	95
20] o-Xylene	13.782	91	6603	53.34	ug/L	95
21] 1,1,2,2-Tetrachloroethane	14.880	83	3007	54.81	ug/L	99
22] 1,3,5-Trimethylbenzene	15.350	105	7191	54.58	ug/L	96
23] 1,2,4-Trimethylbenzene	15.906	105	7761	56.71	ug/L	92
24] Naphthalene	17.907	128	10869	50.25	ug/L	96
25) 2-Fluorotoluene SCAN	10.979	109	244641	5142.59	ug/L	100
27) trans-1,2-Dichloroethe...	4.394	61	289	23.12	ug/L #	67
29) cis-1,2-Dichloroethene...	6.080	61	317	20.45	ug/L #	35
30) Chloroform SCAN	6.662	83	604	35.92	ug/L #	72
31) 1,1,1-Trichloroethane ...	6.918	97	452	29.50	ug/L #	19
32) Carbon tetrachloride SCAN	7.198	117	701	43.86	ug/L #	68
33) Benzene SCAN	7.526	78	11544	273.65	ug/L	93
36) Toluene-d8 SCAN	10.486	98	2687	57.76	ug/L	96
37) Toluene SCAN	10.601	91	5273	88.50	ug/L #	30
39) Tetrachloroethene SCAN	11.420	166	763	53.30	ug/L #	47
40) Chlorobenzene SCAN	12.772	112	2088	51.29	ug/L #	54
41) 1,1,1,2-Tetrachloroeth...	12.923	131	1096	72.74	ug/L #	52
42) Ethylbenzene SCAN	13.177	91	6451	59.43	ug/L	97
43) m&p-Xylene SCAN	13.177	91	6451	59.43	ug/L	95
44) o-Xylene SCAN	13.797	91	3814	65.64	ug/L	94
45) 1,1,2,2-Tetrachloroeth...	14.879	83	1686	59.51	ug/L	89
46) 1,3,5-Trimethylbenzene...	15.363	105	3834	62.61	ug/L	67
47) 1,2,4-Trimethylbenzene...	15.899	105	4895	78.13	ug/L	75
48) Naphthalene SCAN	17.906	128	4447	46.91	ug/L	90

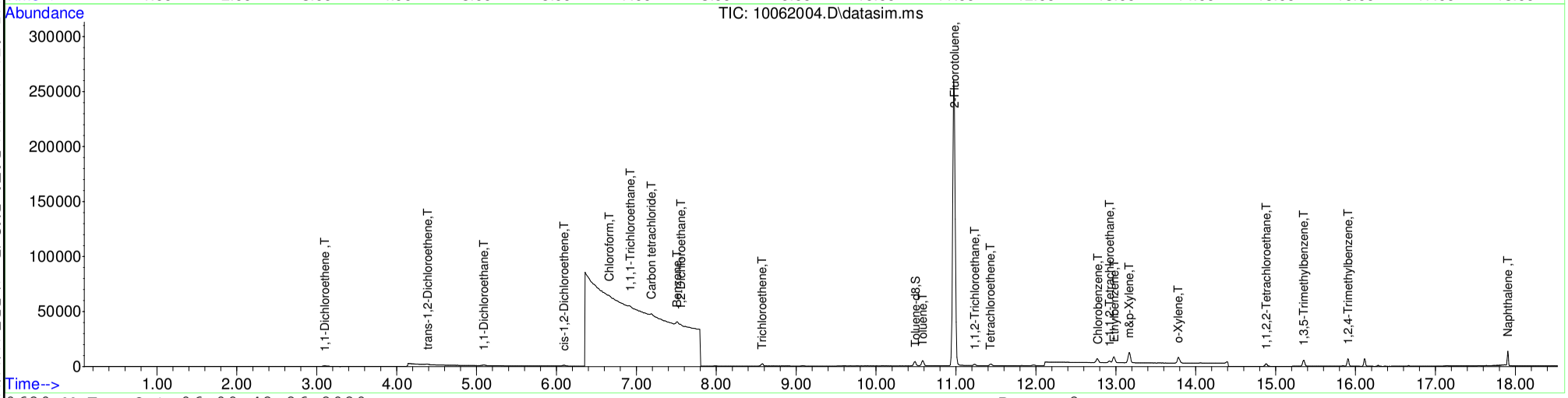
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100620\
Data File : 10062004.D
Acq On : 6 Oct 2020 9:23
InstName : AG5975C
Operator : TD
Sample : S20J009-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 06 09:41:49 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100620.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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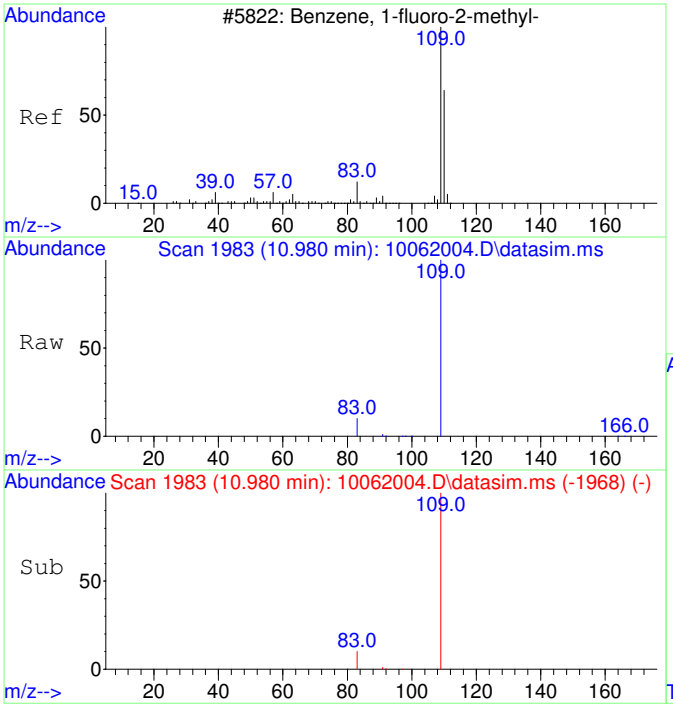
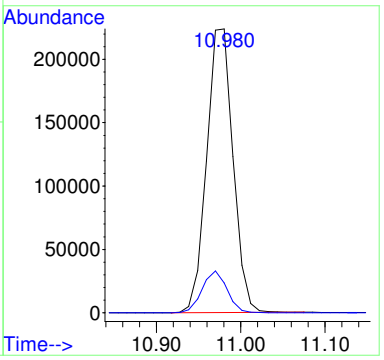
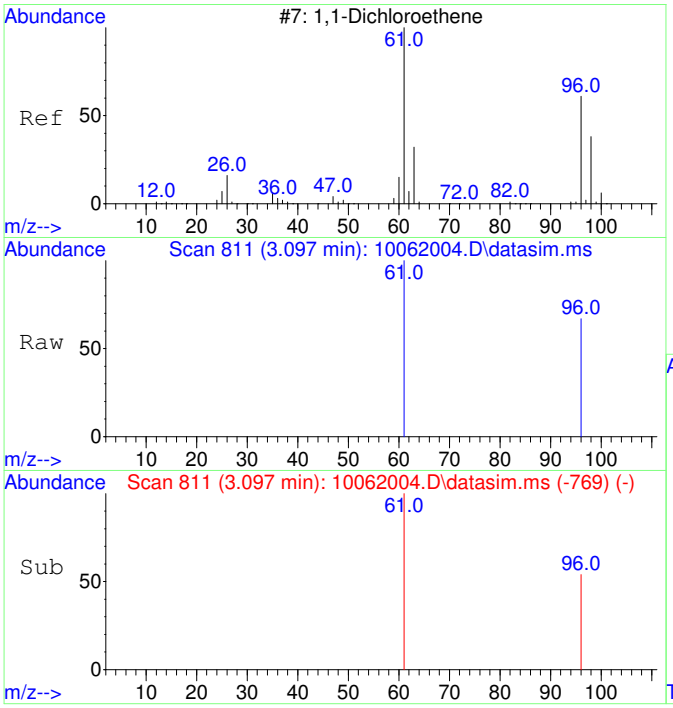


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.980 min Scan# 1983
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:109 Resp: 488006

Ion	Ratio	Lower	Upper
109	100		
83	13.9	0.0	42.3

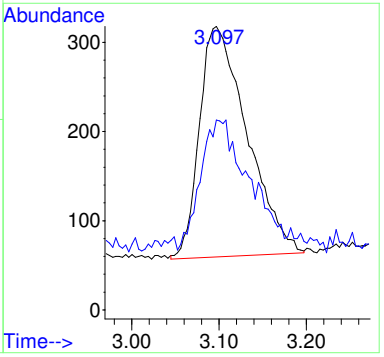


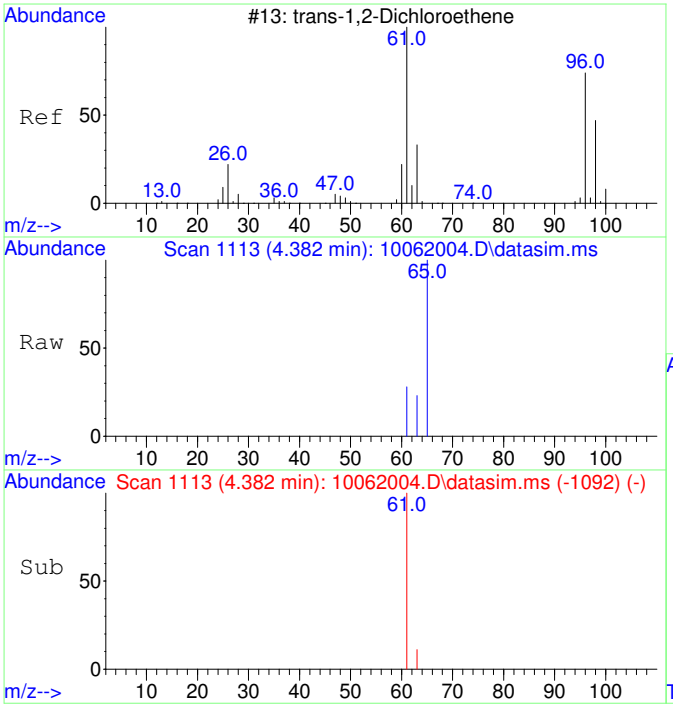


#2
1,1-Dichloroethene
Concen: 50.34 ug/L m
RT: 3.097 min Scan# 811
Delta R.T. 0.007 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 61 Resp: 981

Ion	Ratio	Lower	Upper
61	100		
96	81.2	37.2	97.2

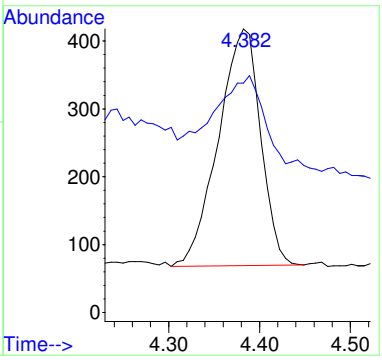


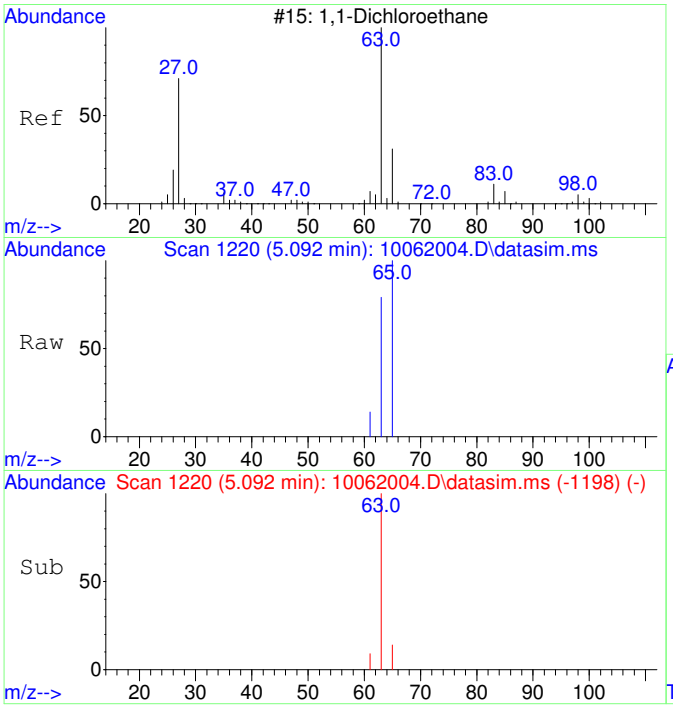


#3
trans-1,2-Dichloroethene
Concen: 50.10 ug/L
RT: 4.382 min Scan# 1113
Delta R.T. -0.013 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 61 Resp: 1128

Ion	Ratio	Lower	Upper
61	100		
63	53.5	2.4	62.4

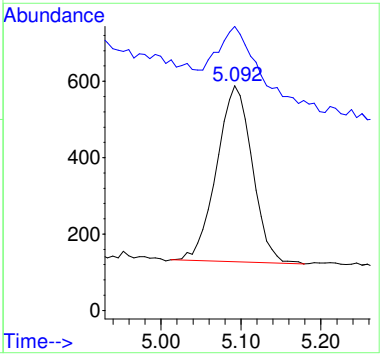


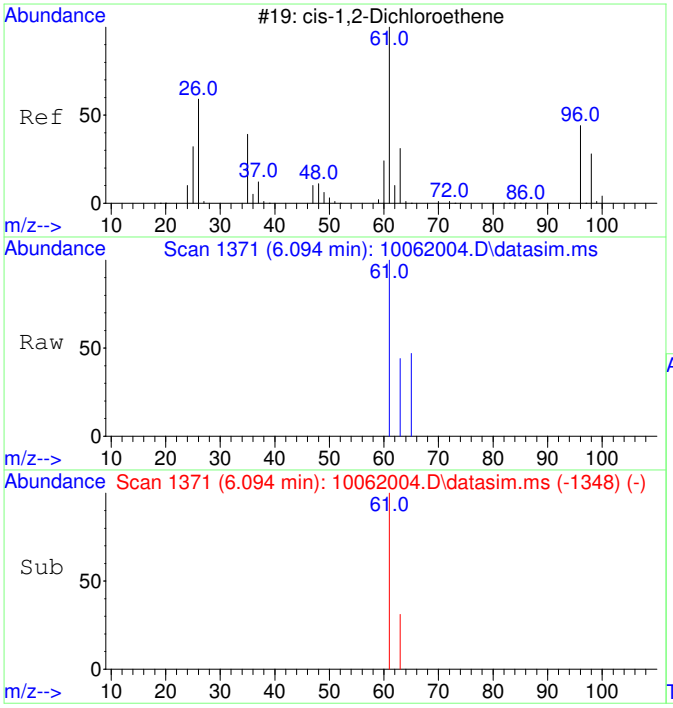


#4
1,1-Dichloroethane
Concen: 50.60 ug/L
RT: 5.092 min Scan# 1220
Delta R.T. -0.007 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 63 Resp: 1418

Ion	Ratio	Lower	Upper
63	100		
65	63.6	1.8	61.8#

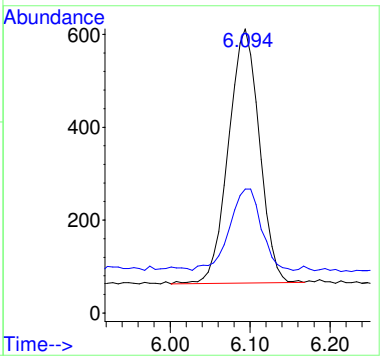


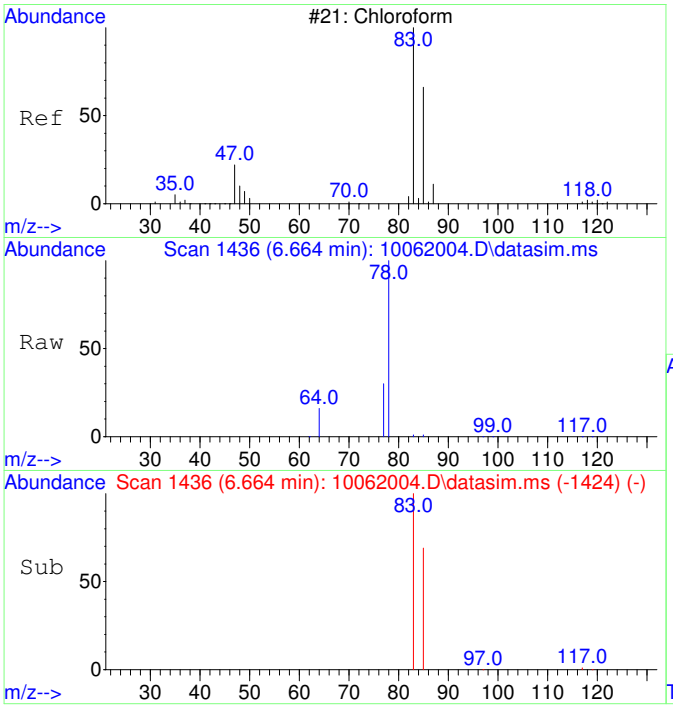


#5
cis-1,2-Dichloroethene
Concen: 49.55 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 61 Resp: 1466

Ion	Ratio	Lower	Upper
61	100		
63	32.8	2.5	62.5

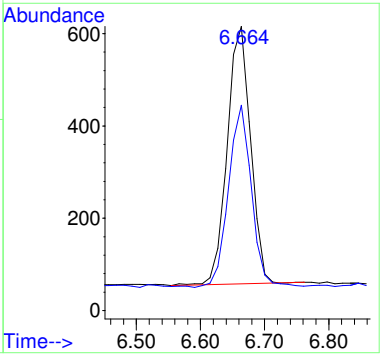


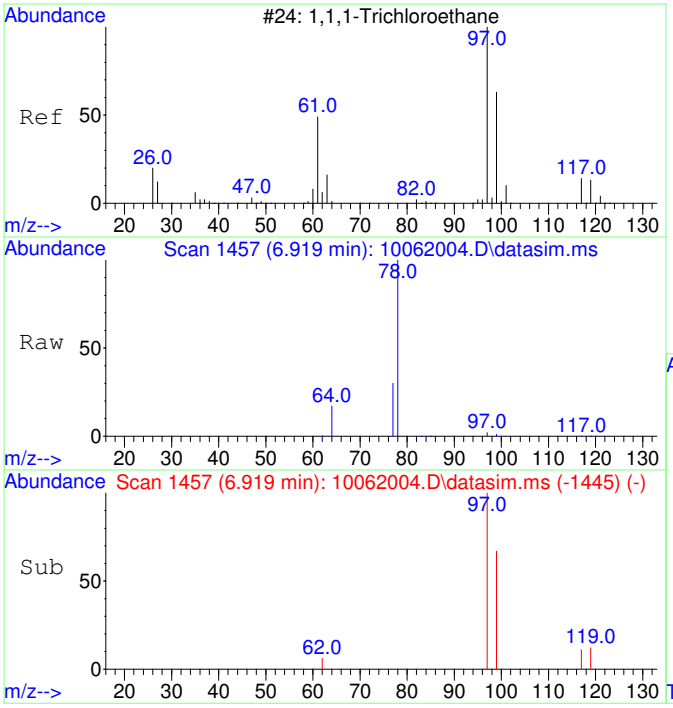


#6
Chloroform
Concen: 46.47 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 83 Resp: 1407

Ion	Ratio	Lower	Upper
83	100		
85	69.1	35.1	95.1

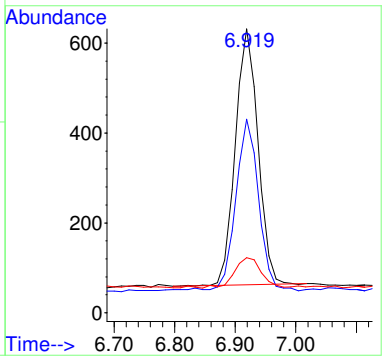


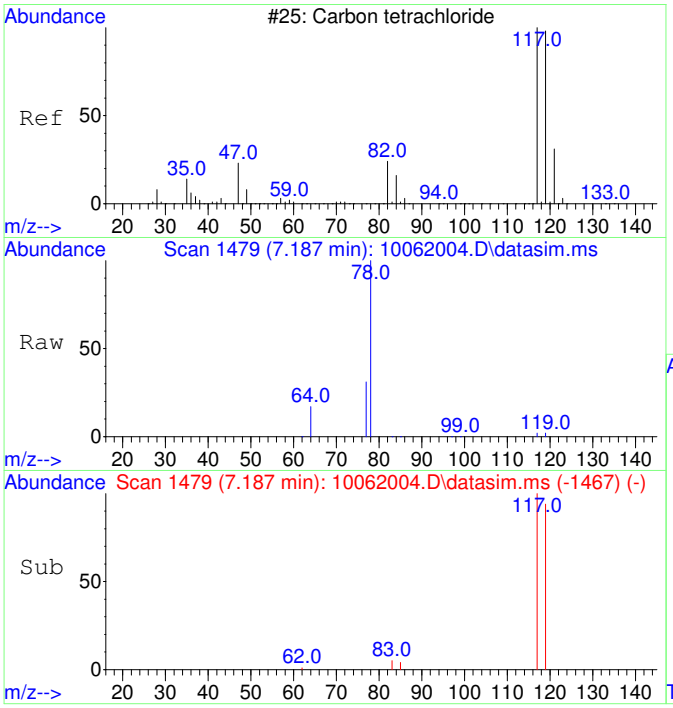


#7
1,1,1-Trichloroethane
Concen: 45.07 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 97 Resp: 1482

Ion	Ratio	Lower	Upper
97	100		
99	66.3	34.6	94.6
117	14.3	0.0	43.2

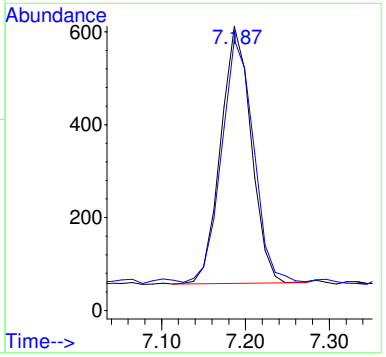


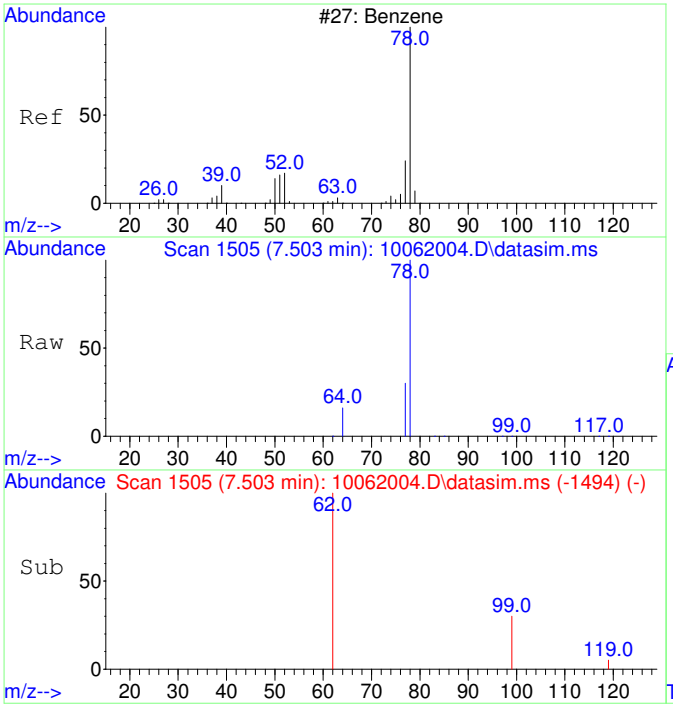


#8
Carbon tetrachloride
Concen: 45.14 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:117 Resp: 1397

Ion	Ratio	Lower	Upper
117	100		
119	98.4	66.4	126.4

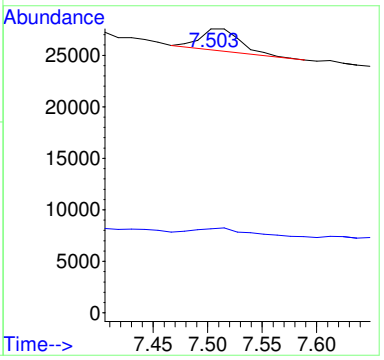


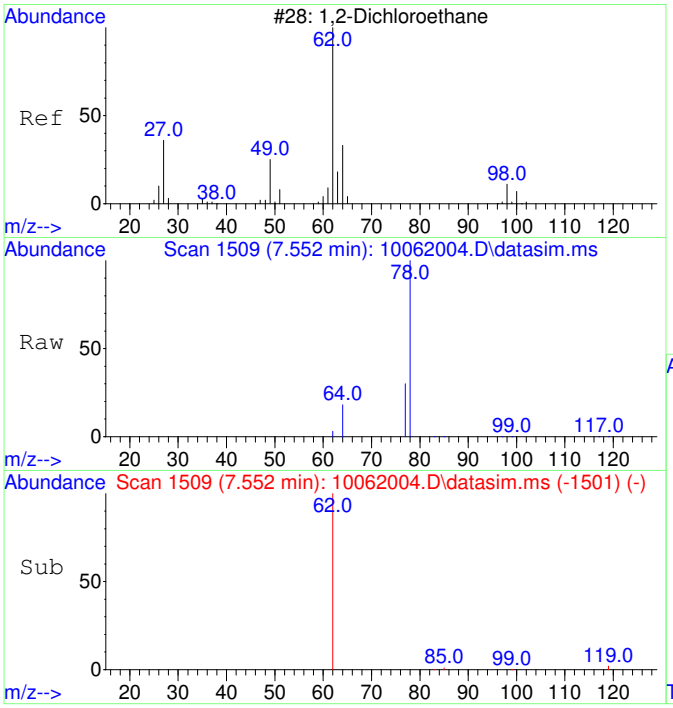


#9
Benzene
Concen: 60.70 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 78 Resp: 5033

Ion	Ratio	Lower	Upper
78	100		
77	71.5	0.0	53.2#

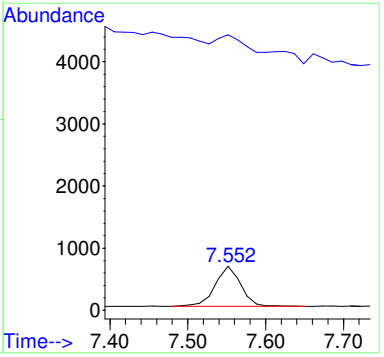


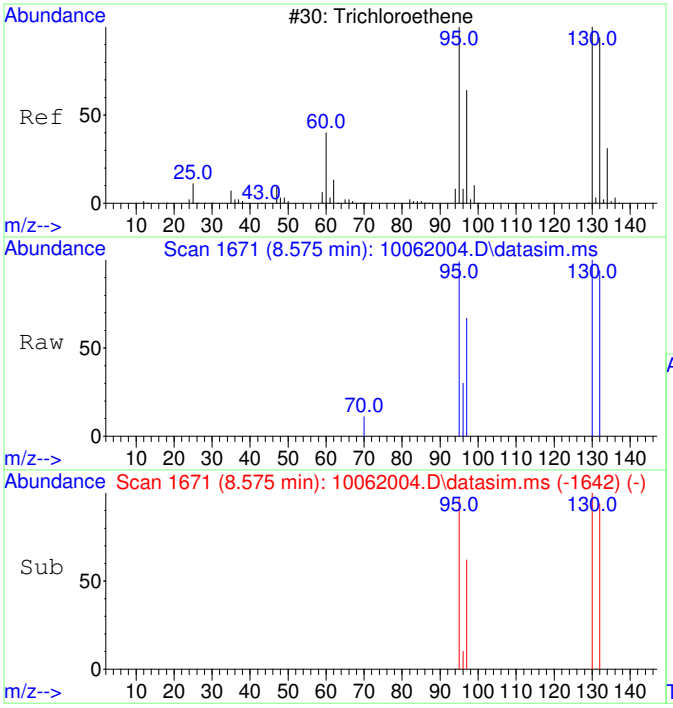


#10
1,2-Dichloroethane
Concen: 49.33 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 62 Resp: 1460

Ion	Ratio	Lower	Upper
62	100		
64	48.4	2.3	62.3

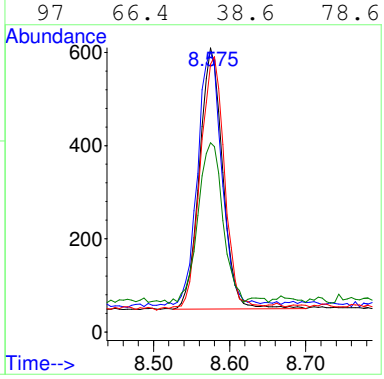


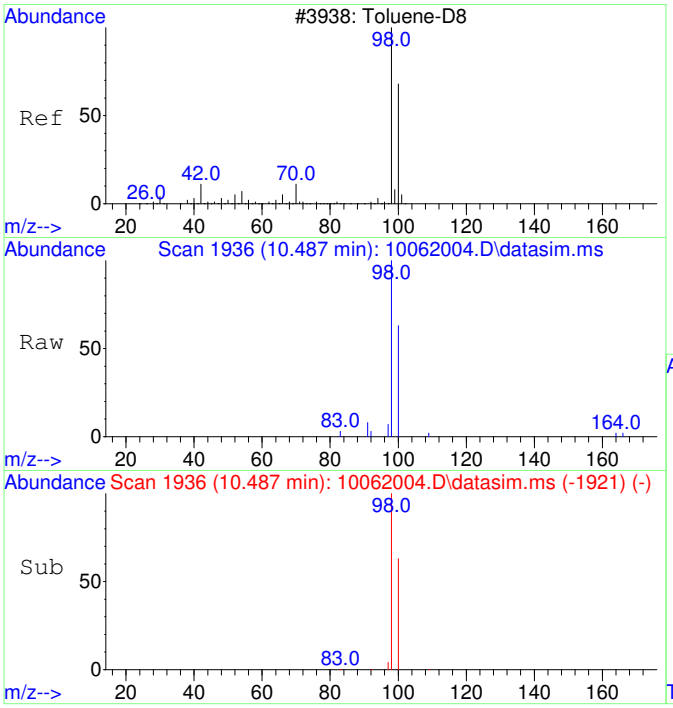


#11
Trichloroethene
Concen: 47.75 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:130 Resp: 1192

Ion	Ratio	Lower	Upper
130	100		
95	99.6	60.7	120.7
132	102.2	76.0	116.0
97	66.4	38.6	78.6

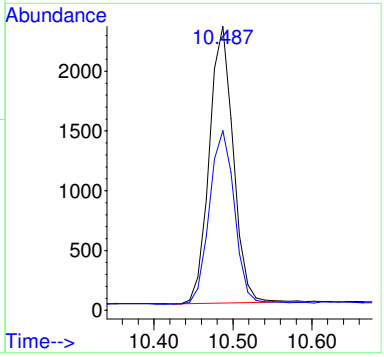


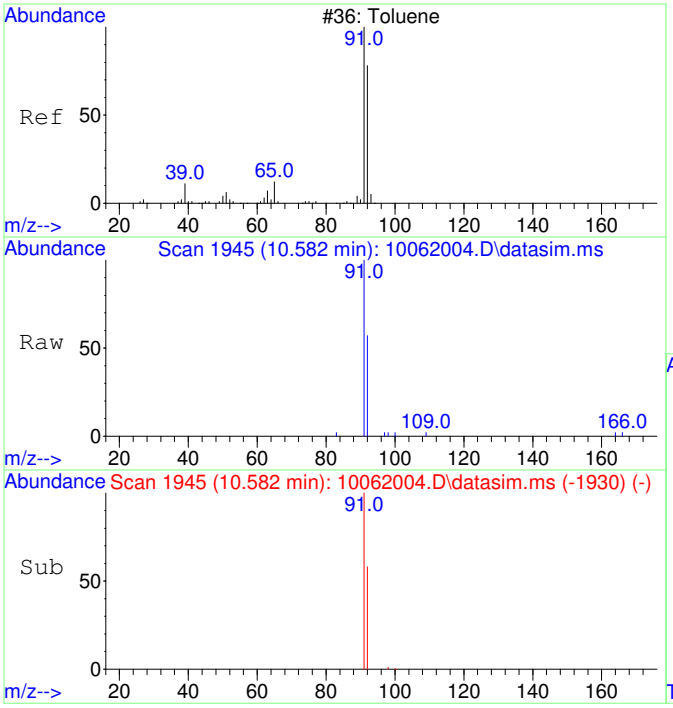


#12
Toluene-d8
Concen: 50.99 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 98 Resp: 4871

Ion	Ratio	Lower	Upper
98	100		
100	65.1	37.1	97.1

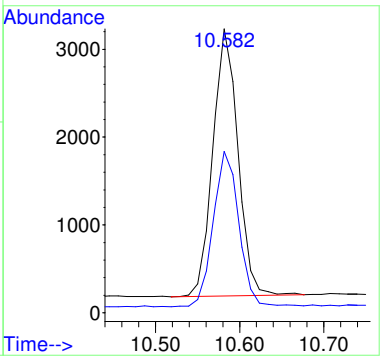


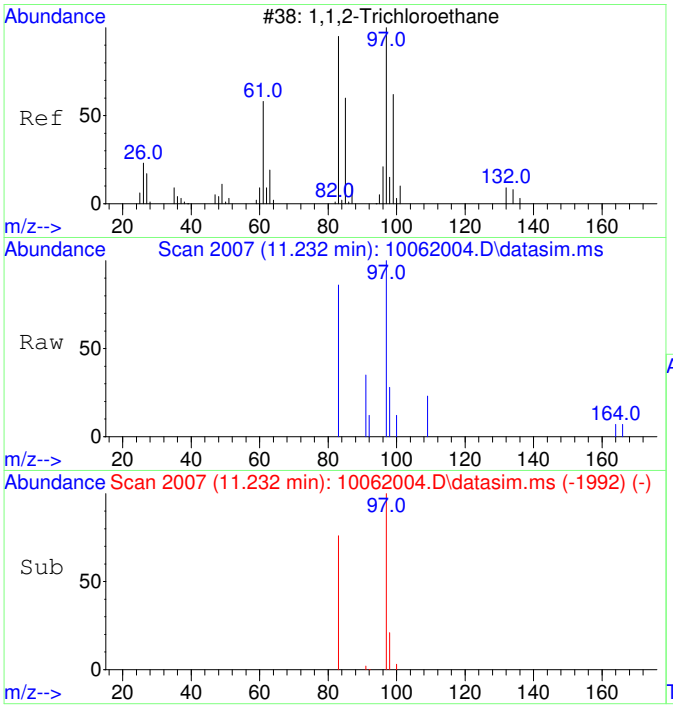


#13
Toluene
Concen: 51.50 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 6272

Ion	Ratio	Lower	Upper
91	100		
92	58.9	29.9	89.9

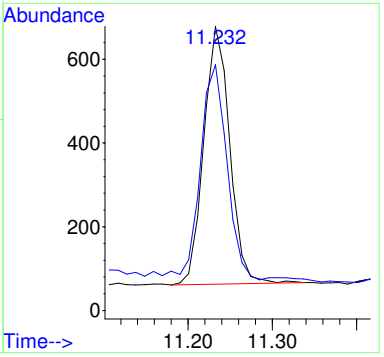


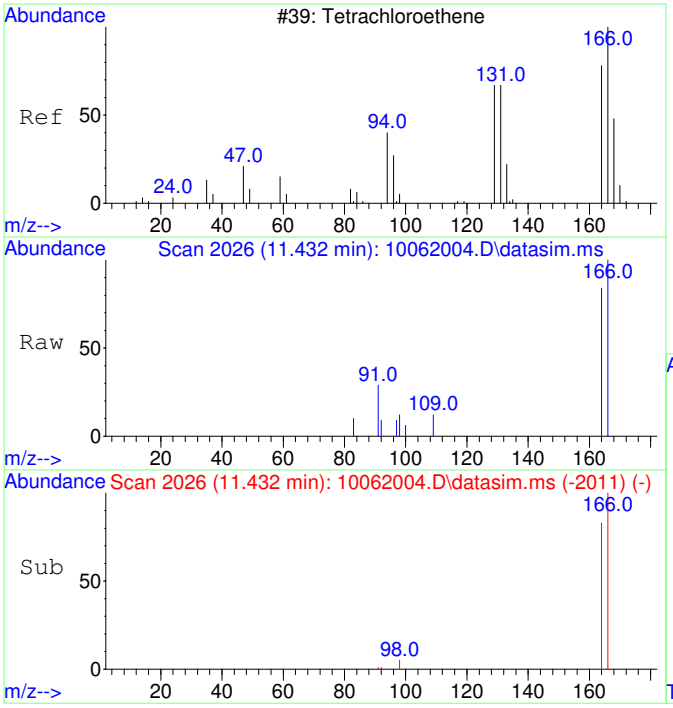


#14
1,1,2-Trichloroethane
Concen: 49.62 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 97 Resp: 1317

Ion	Ratio	Lower	Upper
97	100		
83	85.4	51.2	111.2

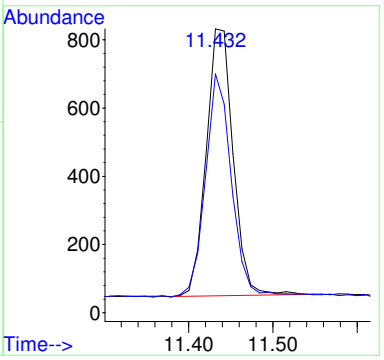


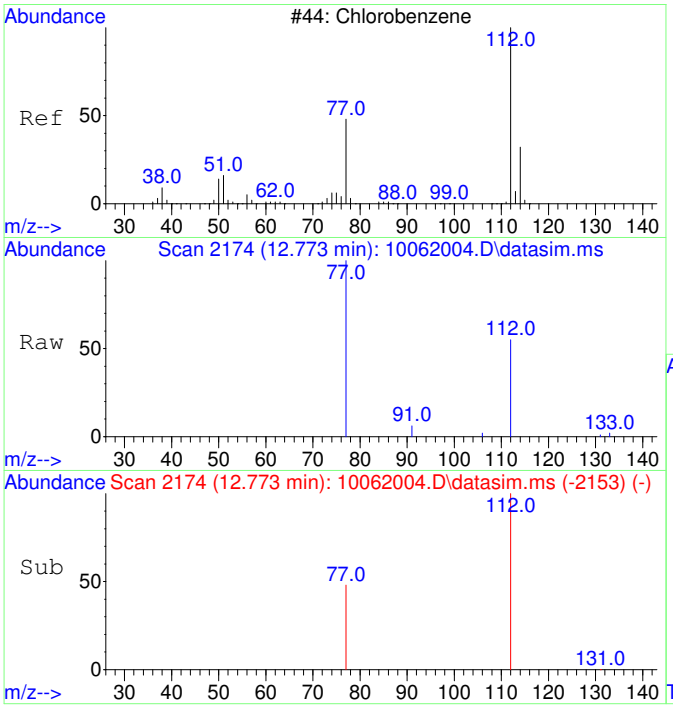


#15
Tetrachloroethene
Concen: 49.37 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:166 Resp: 1740

Ion	Ratio	Lower	Upper
166	100		
164	81.6	47.8	107.8

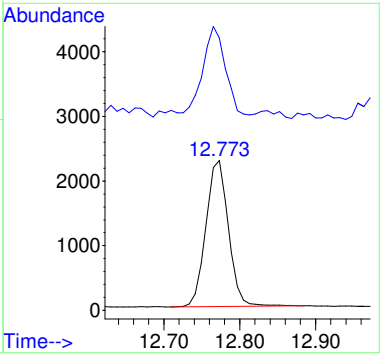


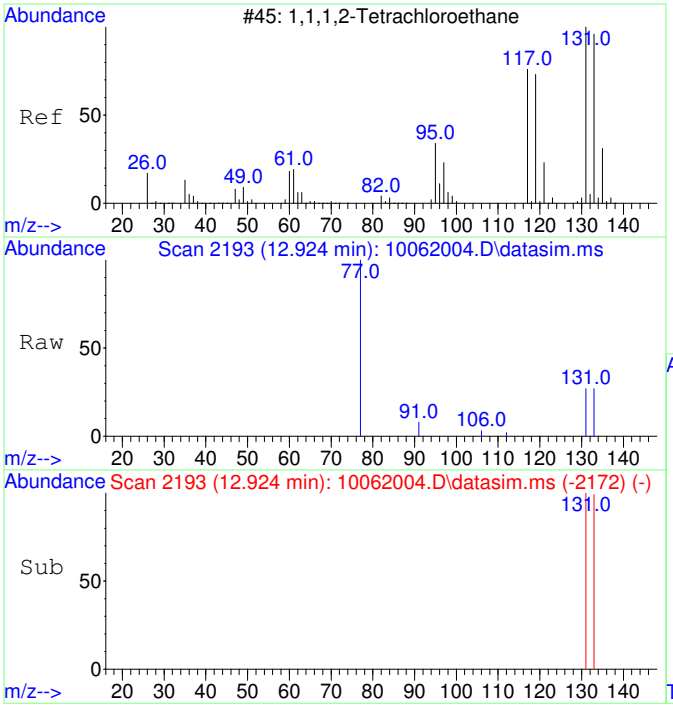


#16
Chlorobenzene
Concen: 53.49 ug/L
RT: 12.773 min Scan# 2174
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:112 Resp: 4665

Ion	Ratio	Lower	Upper
112	100		
77	64.4	23.6	83.6

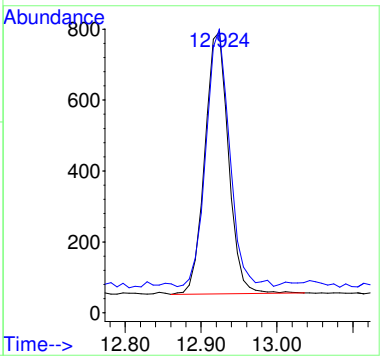


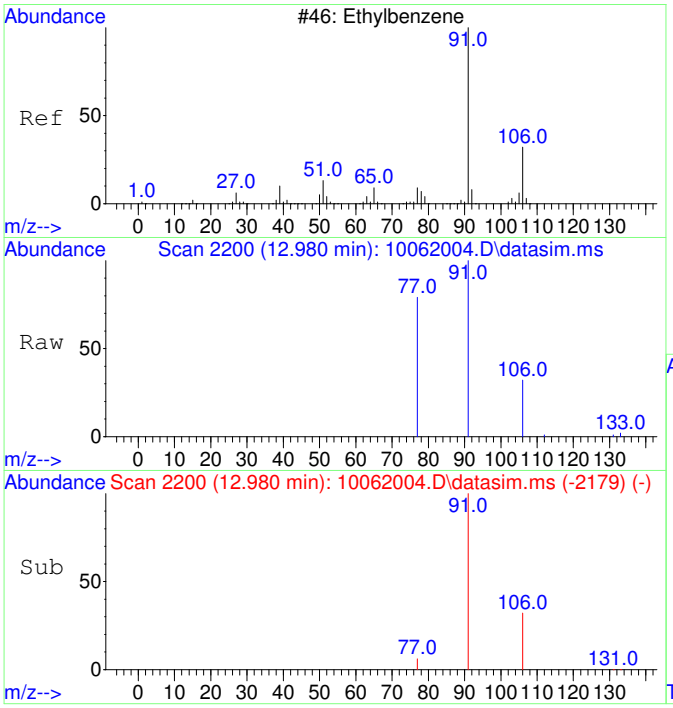


#17
1,1,1,2-Tetrachloroethane
Concen: 51.17 ug/L
RT: 12.924 min Scan# 2193
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:131 Resp: 1599

Ion	Ratio	Lower	Upper
131	100		
133	97.8	66.3	126.3

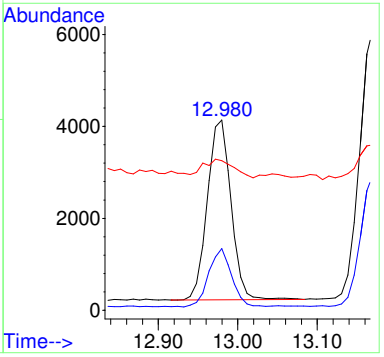


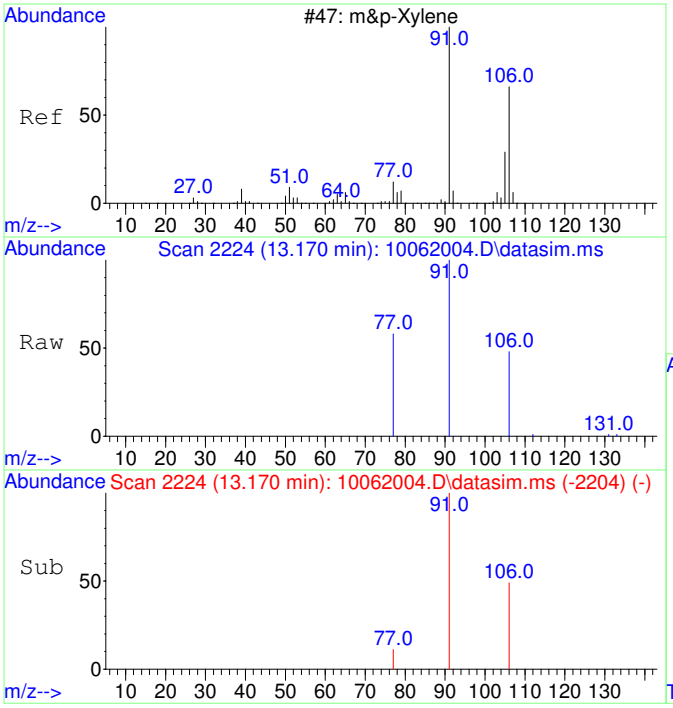


#18
Ethylbenzene
Concen: 54.32 ug/L
RT: 12.980 min Scan# 2200
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 8053

Ion	Ratio	Lower	Upper
91	100		
106	31.1	3.0	63.0
77	13.0	0.0	38.2

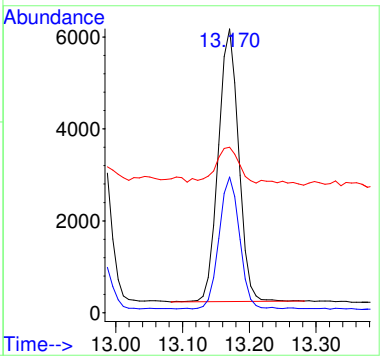


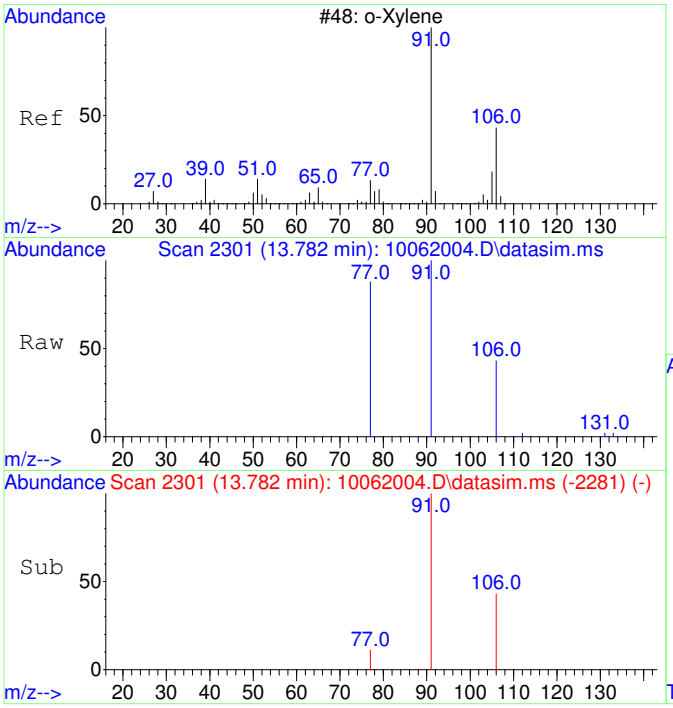


#19
m&p-Xylene
Concen: 107.92 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.008 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 12504

Ion	Ratio	Lower	Upper
91	100		
106	48.8	22.2	82.2
77	15.5	0.0	42.4

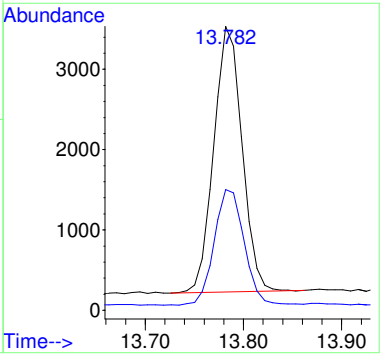


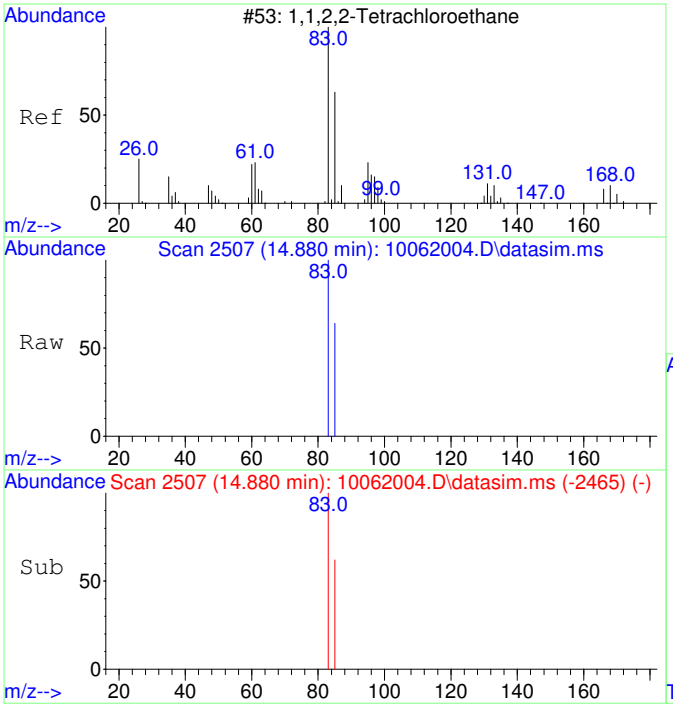


#20
o-Xylene
Concen: 53.34 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 6603

Ion	Ratio	Lower	Upper
91	100		
106	45.5	19.2	79.2

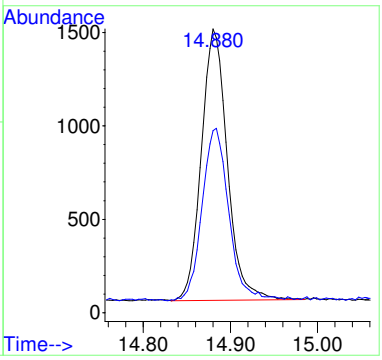


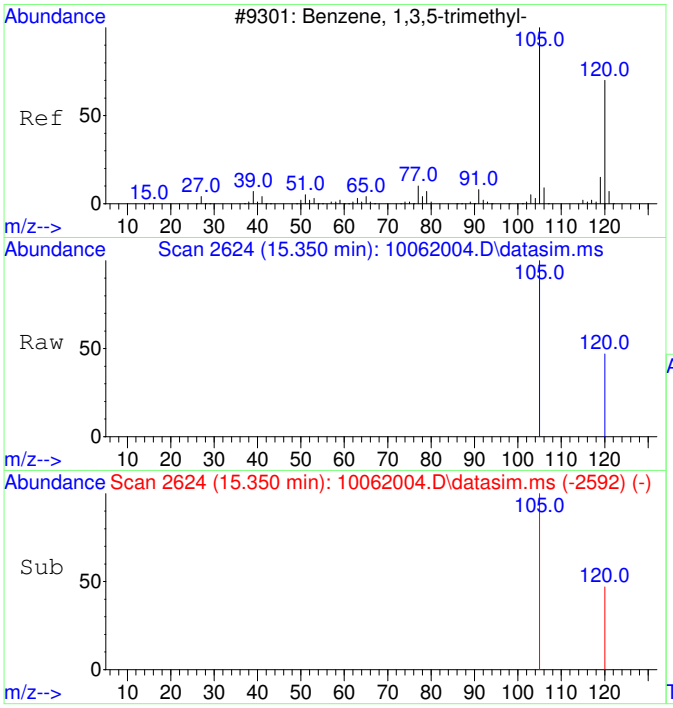


#21
1,1,2,2-Tetrachloroethane
Concen: 54.81 ug/L
RT: 14.880 min Scan# 2507
Delta R.T. 0.007 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 83 Resp: 3007

Ion	Ratio	Lower	Upper
83	100		
85	64.2	34.8	94.8

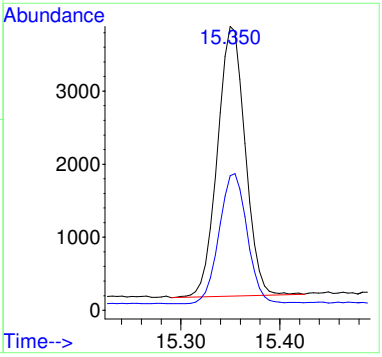


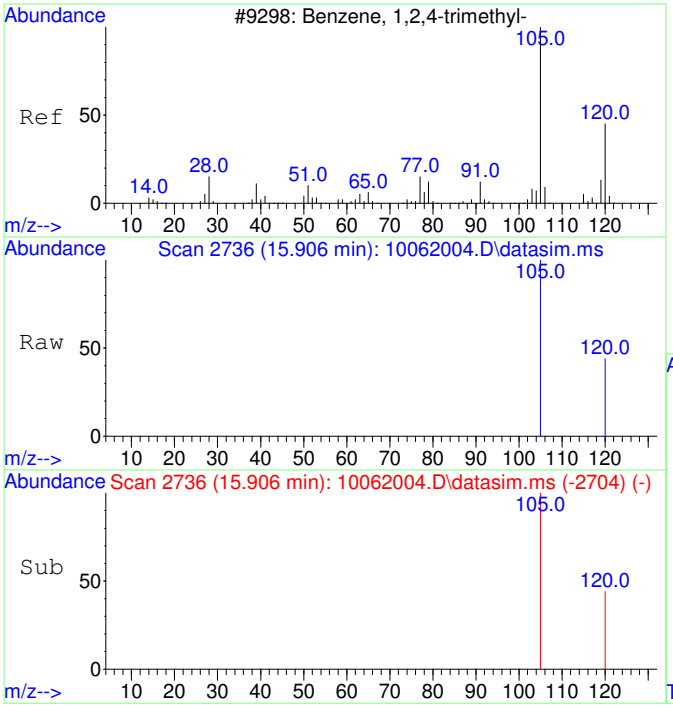


#22
1,3,5-Trimethylbenzene
Concen: 54.58 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.005 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:105 Resp: 7191

Ion	Ratio	Lower	Upper
105	100		
120	48.4	21.1	81.1

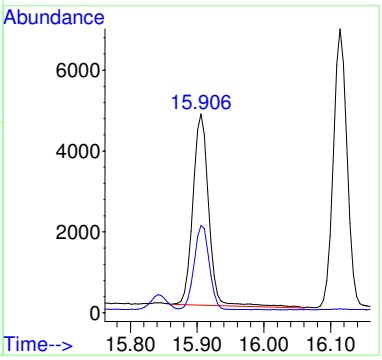


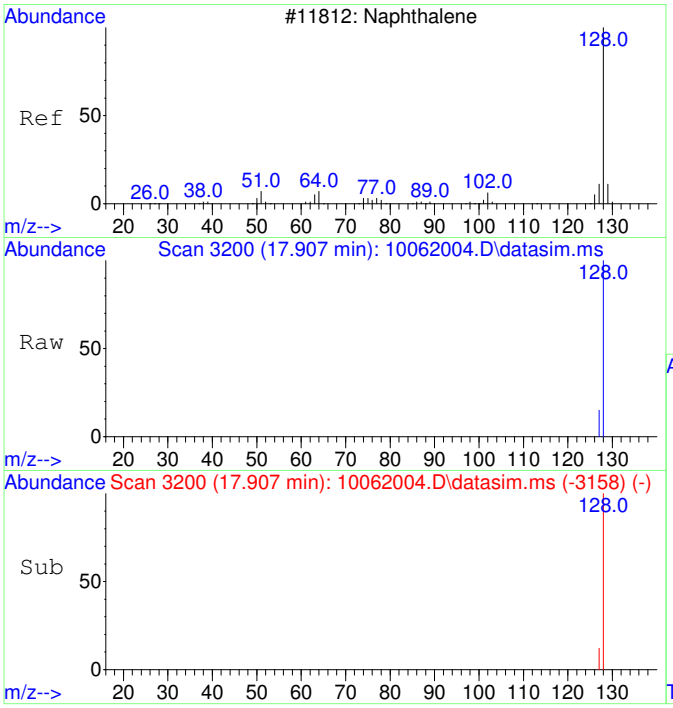


#23
1,2,4-Trimethylbenzene
Concen: 56.71 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:105 Resp: 7761

Ion	Ratio	Lower	Upper
105	100		
120	41.6	17.2	77.2

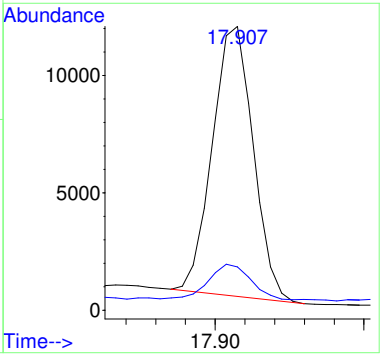


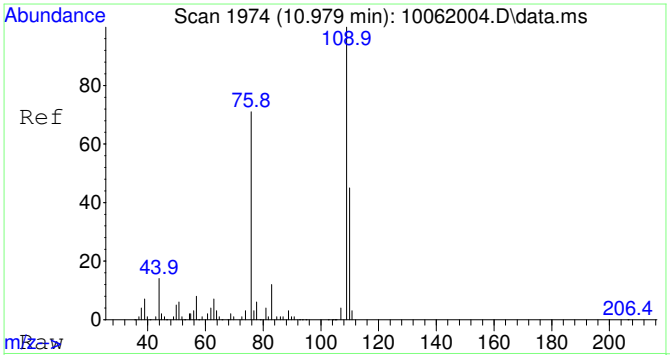


#24
Naphthalene
Concen: 50.25 ug/L
RT: 17.907 min Scan# 3200
Delta R.T. 0.005 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:128 Resp: 10869

Ion	Ratio	Lower	Upper
128	100		
127	13.9	0.0	42.5

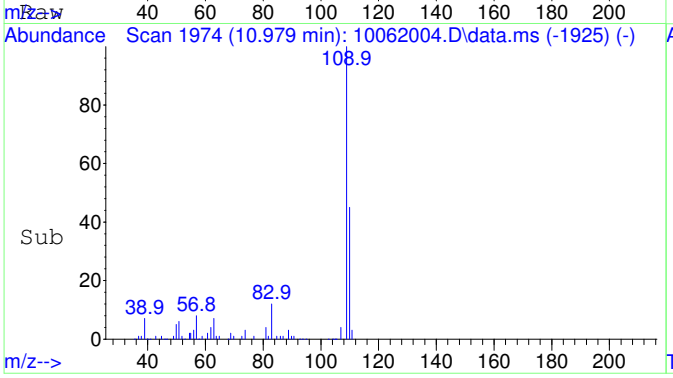


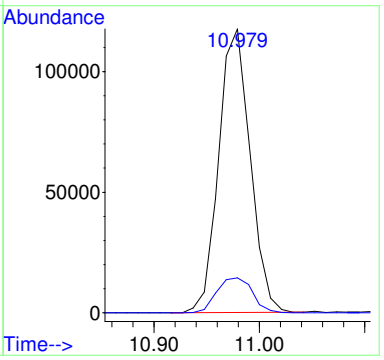


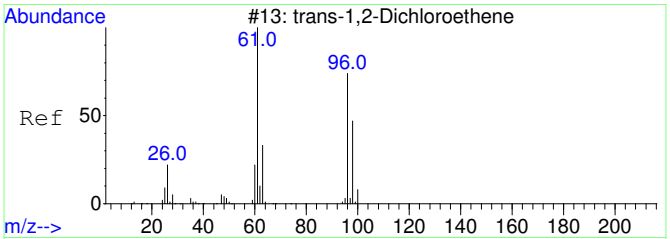
#25
2-Fluorotoluene SCAN
Concen: 5142.59 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

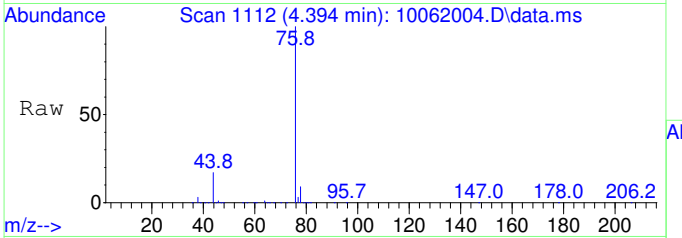
Tgt Ion:109 Resp: 244641

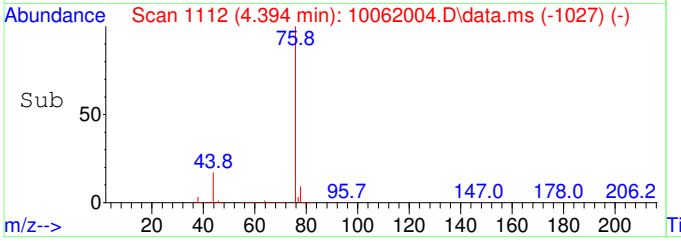
Ion	Ratio	Lower	Upper
109	100		
83	14.0	0.0	43.8







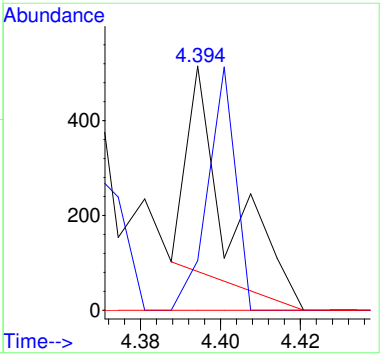


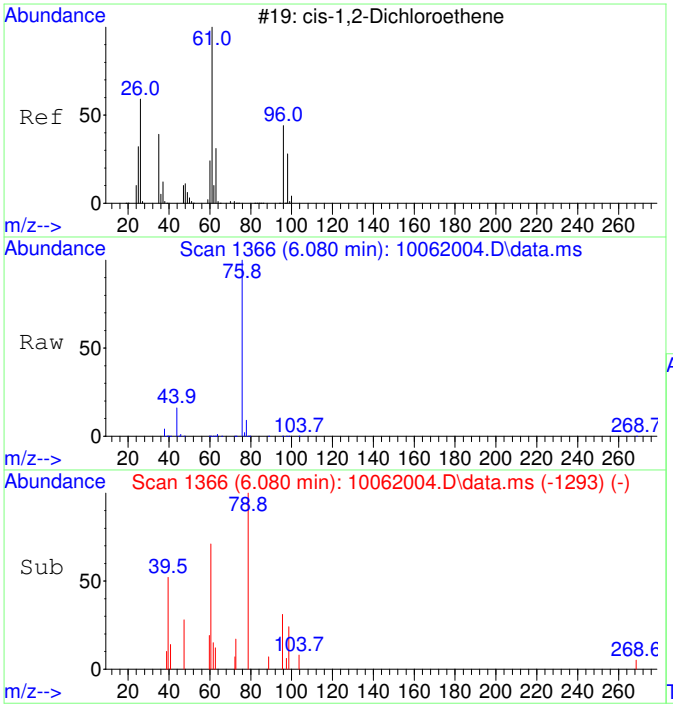


#27
trans-1,2-Dichloroethene SCAN
Concen: 23.12 ug/L
RT: 4.394 min Scan# 1112
Delta R.T. -0.007 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 61 Resp: 289

Ion	Ratio	Lower	Upper
61	100		
96	85.1	49.0	109.0
98	0.0	20.5	80.5#

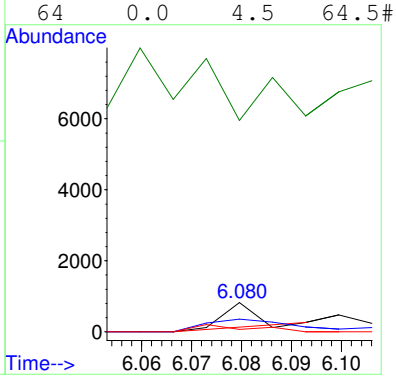


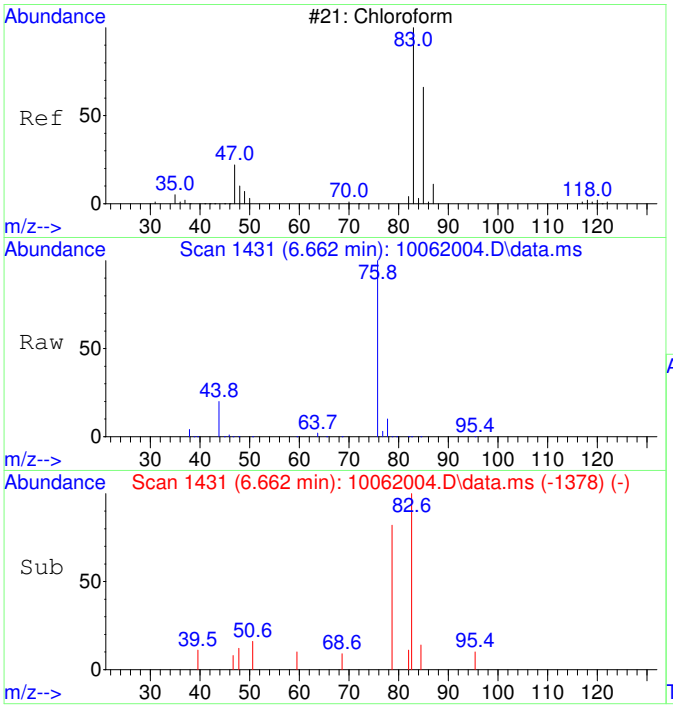


#29
cis-1,2-Dichloroethene SCAN
Concen: 20.45 ug/L
RT: 6.080 min Scan# 1366
Delta R.T. -0.013 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 61 Resp: 317

Ion	Ratio	Lower	Upper
61	100		
96	152.4	39.9	99.9#
98	50.5	13.5	73.5
64	0.0	4.5	64.5#

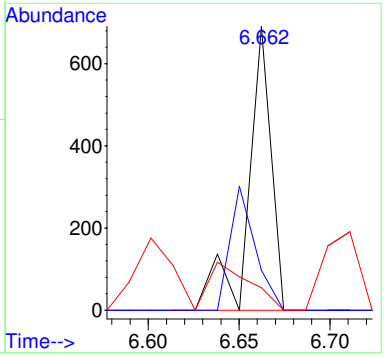


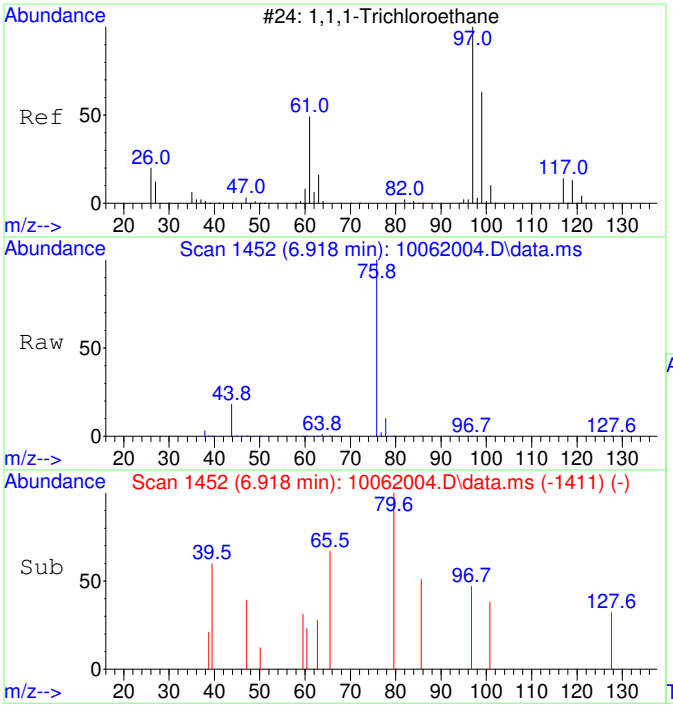


#30
Chloroform SCAN
Concen: 35.92 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 83 Resp: 604

Ion	Ratio	Lower	Upper
83	100		
85	48.2	34.6	94.6
47	0.0	0.0	53.4

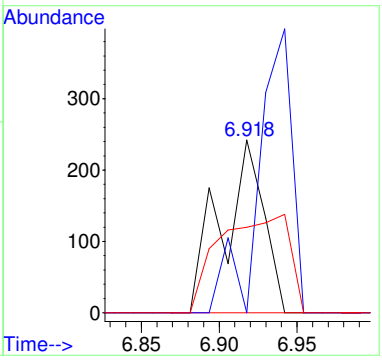


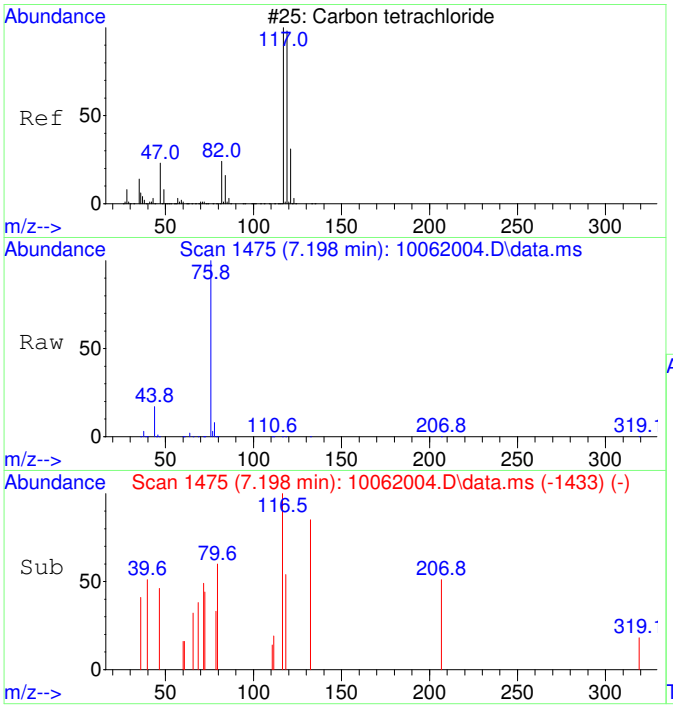


#31
1,1,1-Trichloroethane SCAN
Concen: 29.50 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 97 Resp: 452

Ion	Ratio	Lower	Upper
97	100		
99	0.0	43.6	103.6#
61	0.0	18.0	78.0#

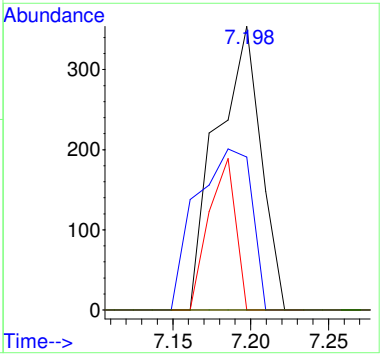


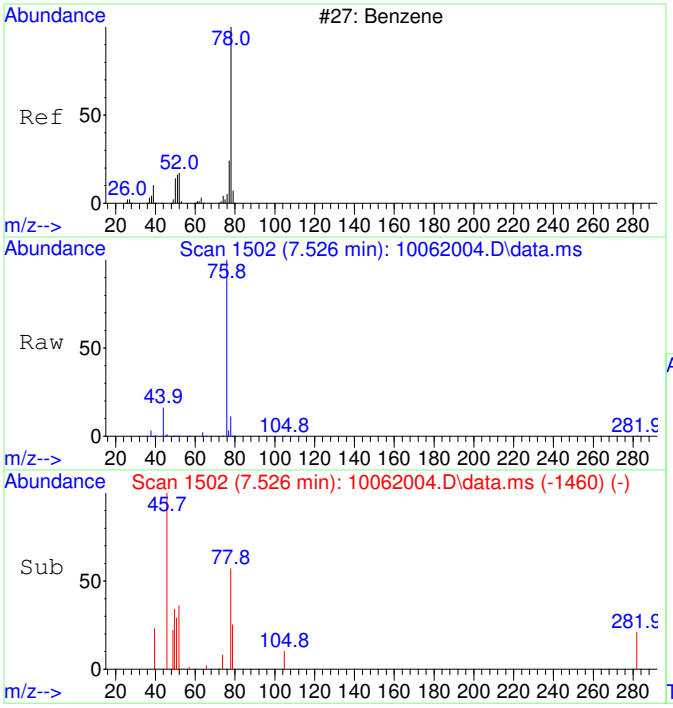


#32
Carbon tetrachloride SCAN
Concen: 43.86 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:117 Resp: 701

Ion	Ratio	Lower	Upper
117	100		
119	71.5	75.5	135.5#
121	32.5	0.0	58.8
82	0.0	0.0	59.2

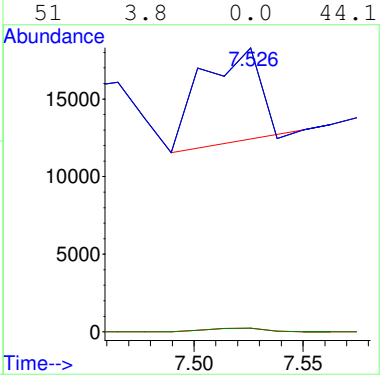


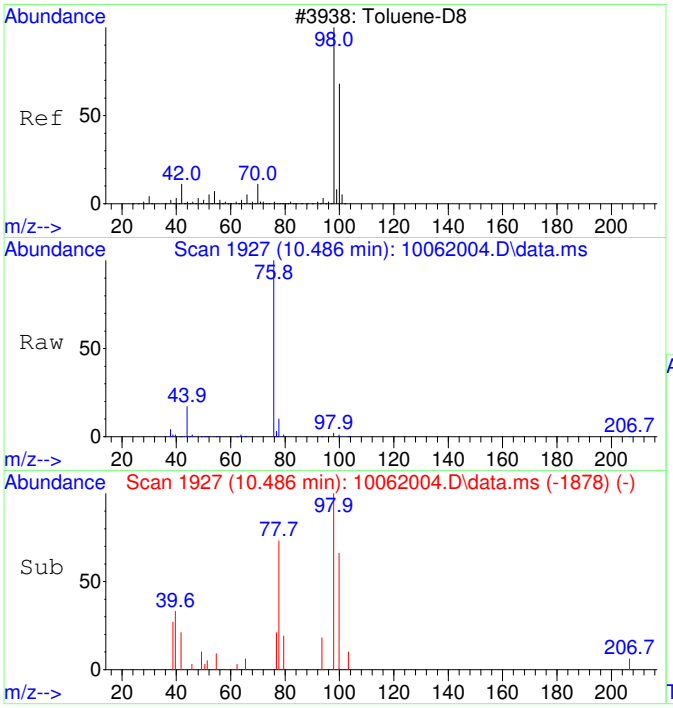


#33
Benzene SCAN
Concen: 273.65 ug/L
RT: 7.526 min Scan# 1502
Delta R.T. 0.012 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 78 Resp: 11544

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	3.8	0.0	47.9
51	3.8	0.0	44.1

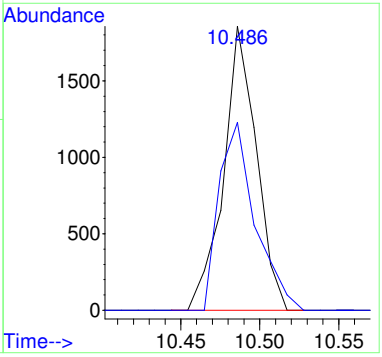


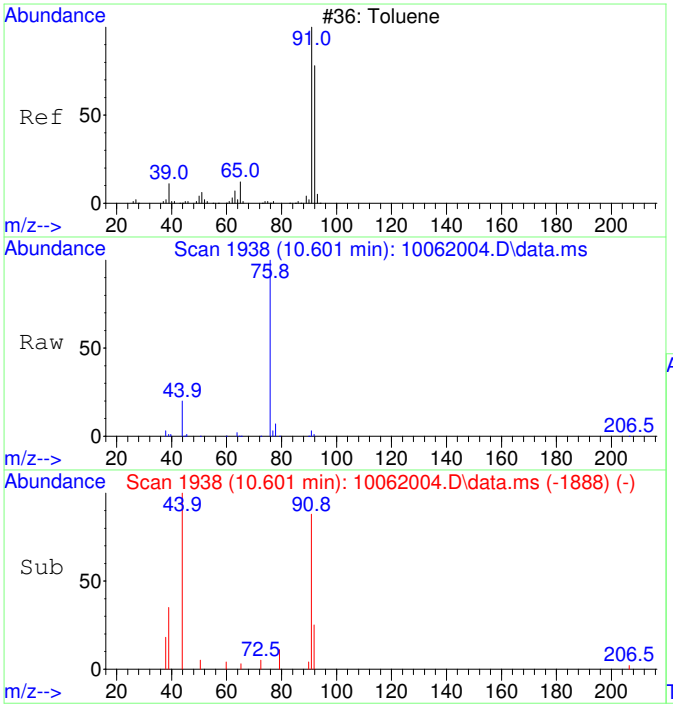


#36
Toluene-d8 SCAN
Concen: 57.76 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.010 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 98 Resp: 2687

Ion	Ratio	Lower	Upper
98	100		
100	73.1	40.0	100.0

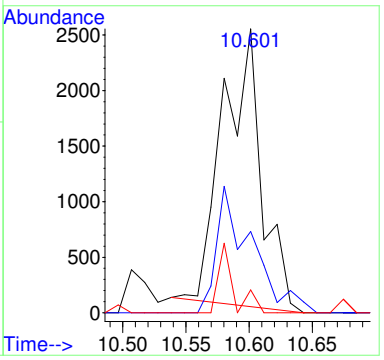


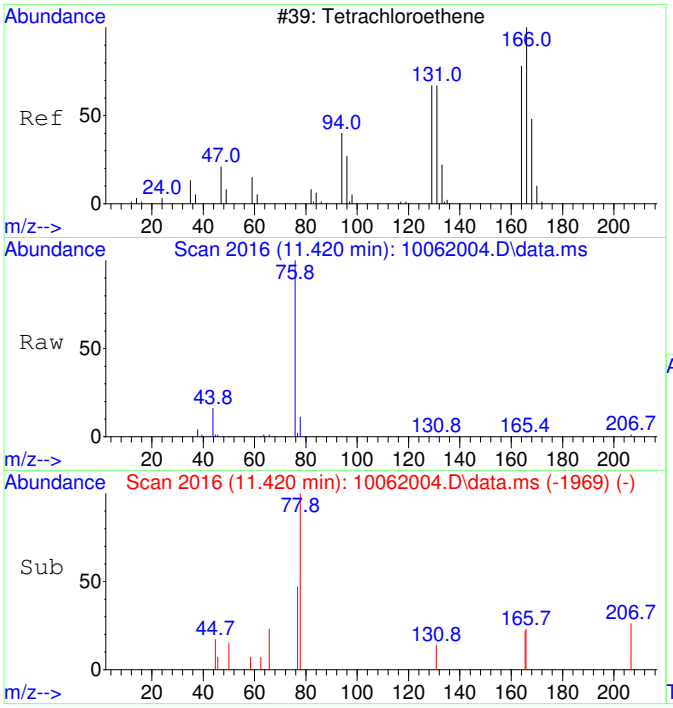


#37
Toluene SCAN
Concen: 88.50 ug/L
RT: 10.601 min Scan# 1938
Delta R.T. 0.021 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 5273

Ion	Ratio	Lower	Upper
91	100		
92	0.0	28.3	88.3#
65	0.0	0.0	41.0

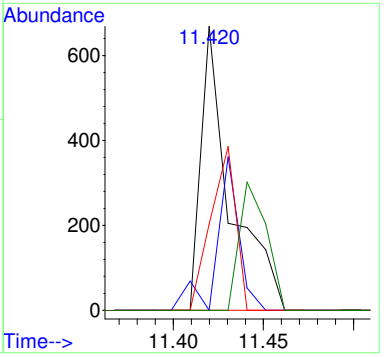


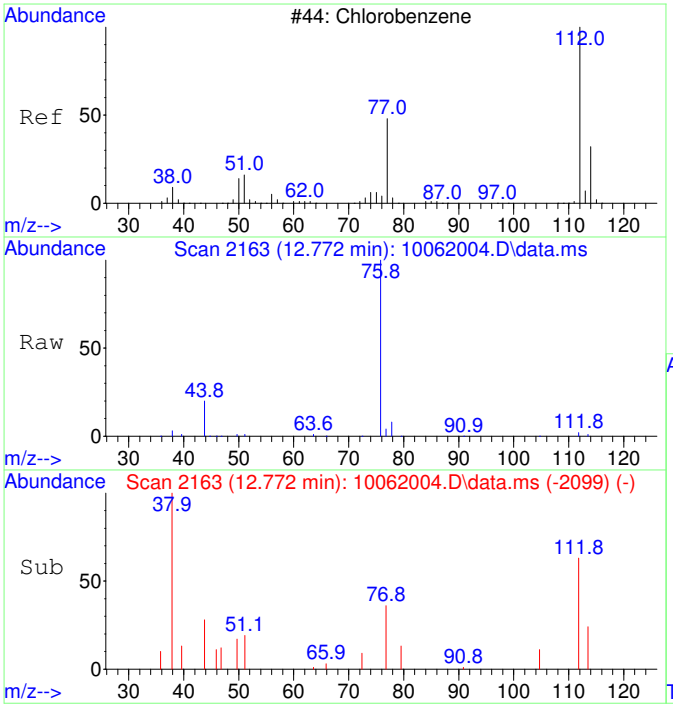


#39
Tetrachloroethene SCAN
Concen: 53.30 ug/L
RT: 11.420 min Scan# 2016
Delta R.T. -0.011 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:166 Resp: 763

Ion	Ratio	Lower	Upper
166	100		
164	40.0	50.9	110.9#
131	48.6	38.7	98.7
129	0.0	41.8	101.8#

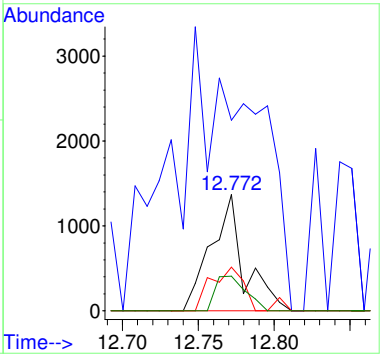


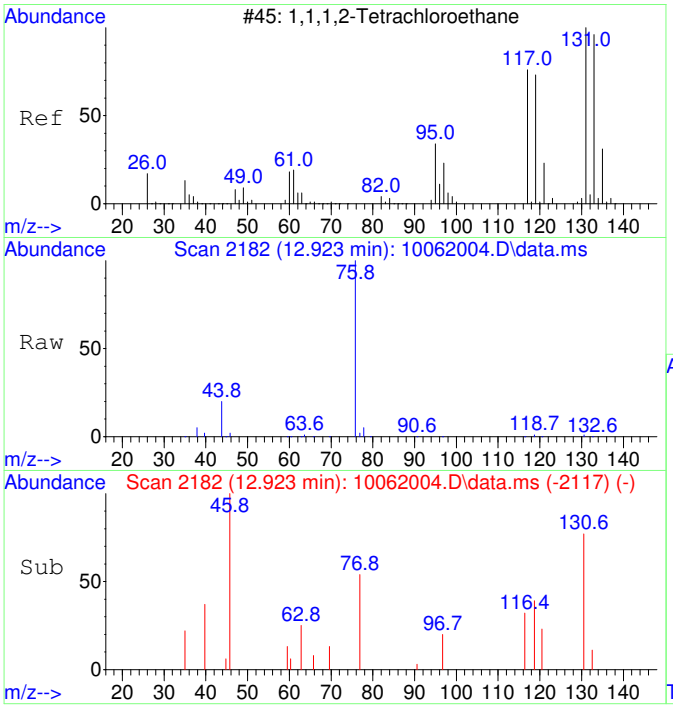


#40
Chlorobenzene SCAN
Concen: 51.29 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.008 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:112 Resp: 2088

Ion	Ratio	Lower	Upper
112	100		
77	0.0	28.2	88.2#
114	36.4	2.3	62.3
51	27.4	0.0	50.1

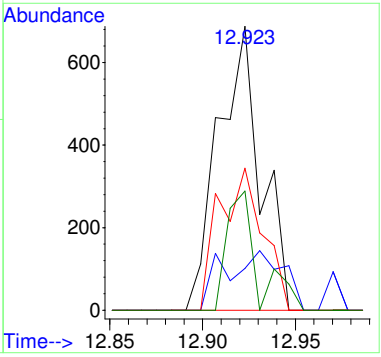


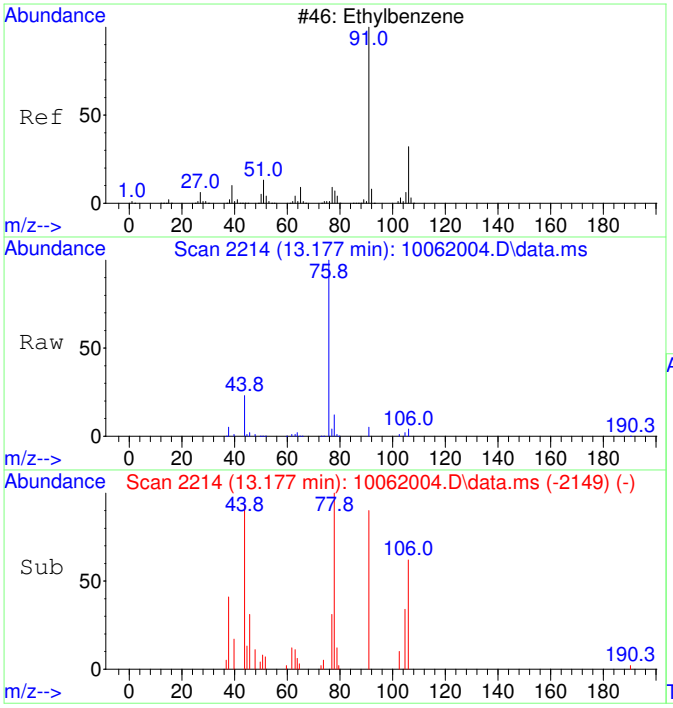


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 72.74 ug/L
RT: 12.923 min Scan# 2182
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:131 Resp: 1096

Ion	Ratio	Lower	Upper
131	100		
133	28.7	66.9	126.9#
119	51.6	40.4	100.4
117	30.4	35.1	95.1#

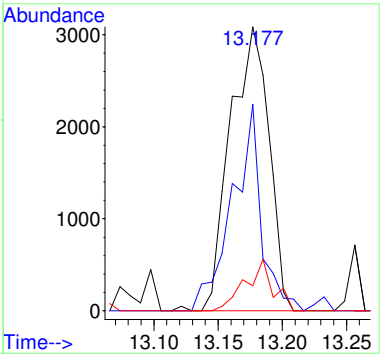


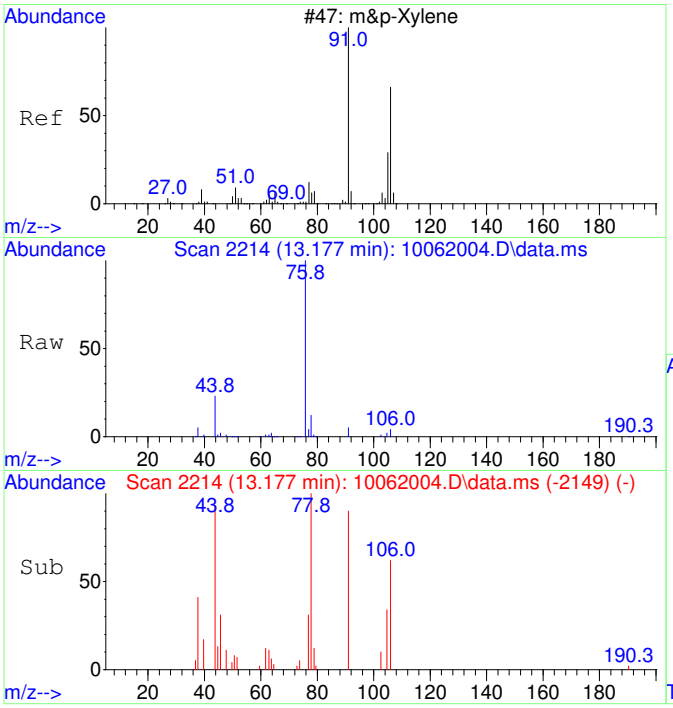


#42
Ethylbenzene SCAN
Concen: 59.43 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 6451

Ion	Ratio	Lower	Upper
91	100		
106	54.5	23.1	83.1
51	13.0	0.0	40.1

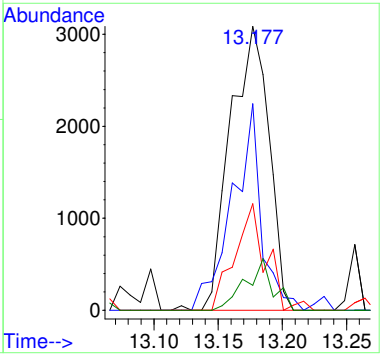


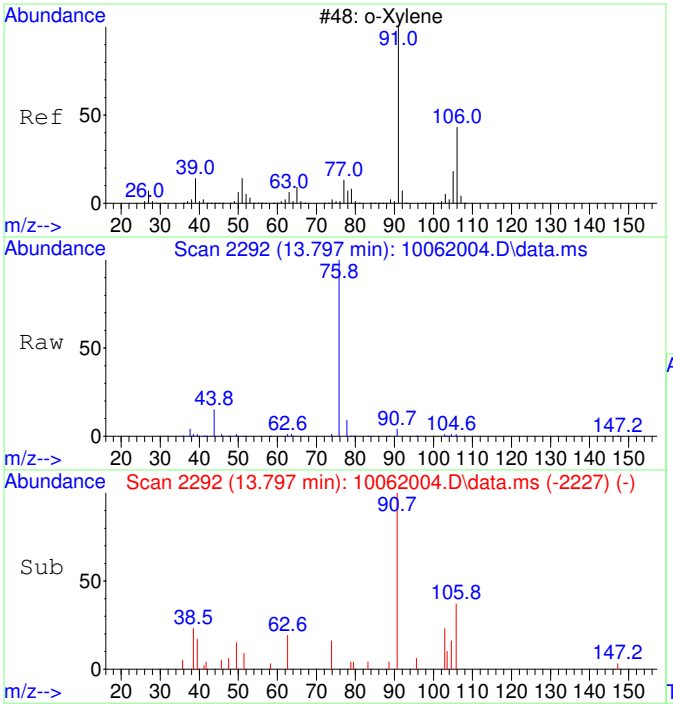


#43
m&p-Xylene SCAN
Concen: 59.43 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 6451

Ion	Ratio	Lower	Upper
91	100		
106	54.5	23.1	83.1
105	30.3	0.0	54.7
51	13.0	0.0	40.1

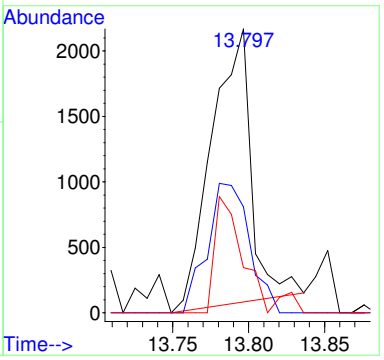


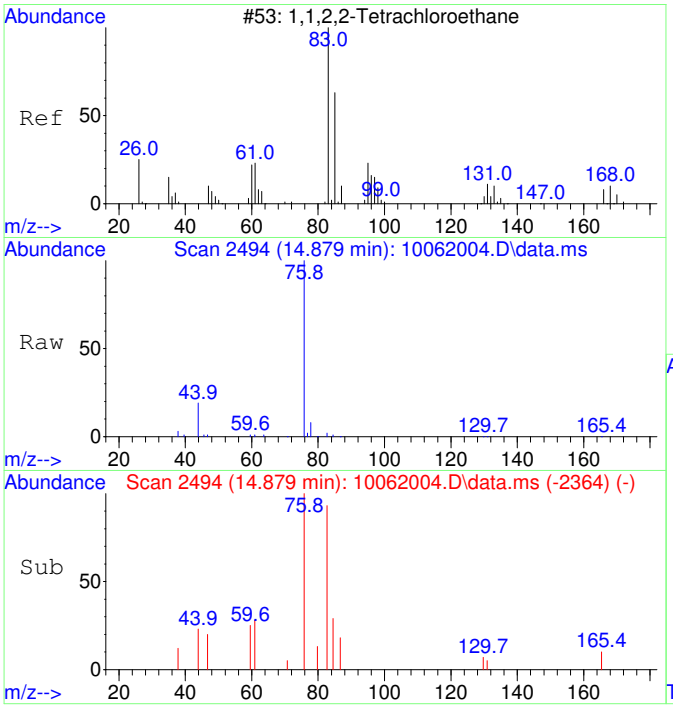


#44
o-Xylene SCAN
Concen: 65.64 ug/L
RT: 13.797 min Scan# 2292
Delta R.T. 0.016 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 91 Resp: 3814

Ion	Ratio	Lower	Upper
91	100		
106	50.3	18.0	78.0
105	32.3	0.0	56.6

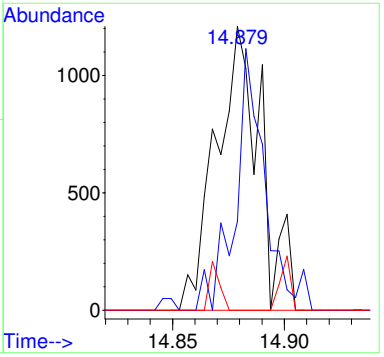


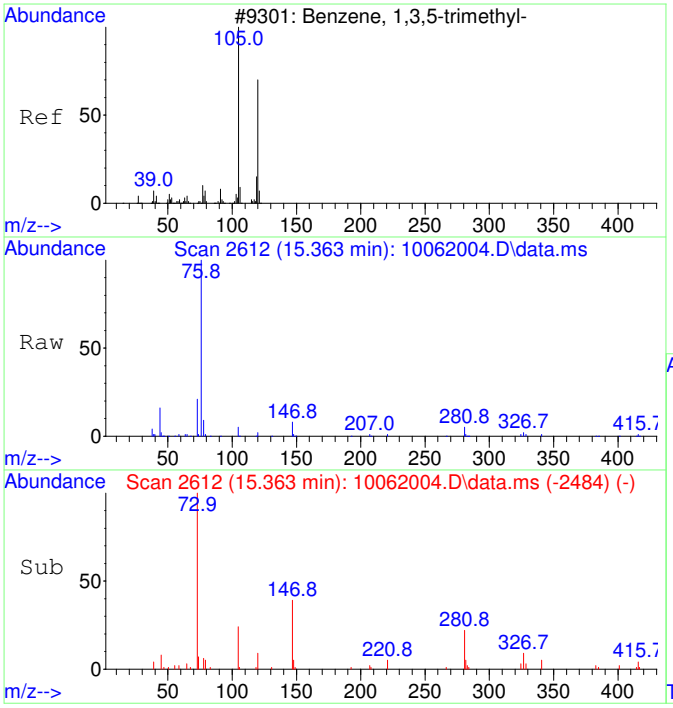


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 59.51 ug/L
RT: 14.879 min Scan# 2494
Delta R.T. 0.007 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion: 83 Resp: 1686

Ion	Ratio	Lower	Upper
83	100		
85	61.0	35.9	95.9
95	4.0	0.0	47.4

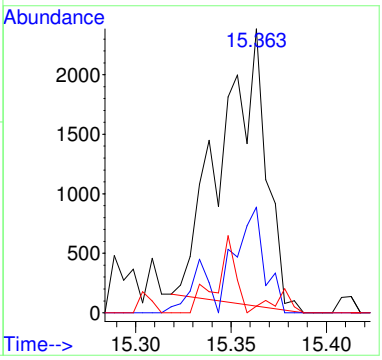


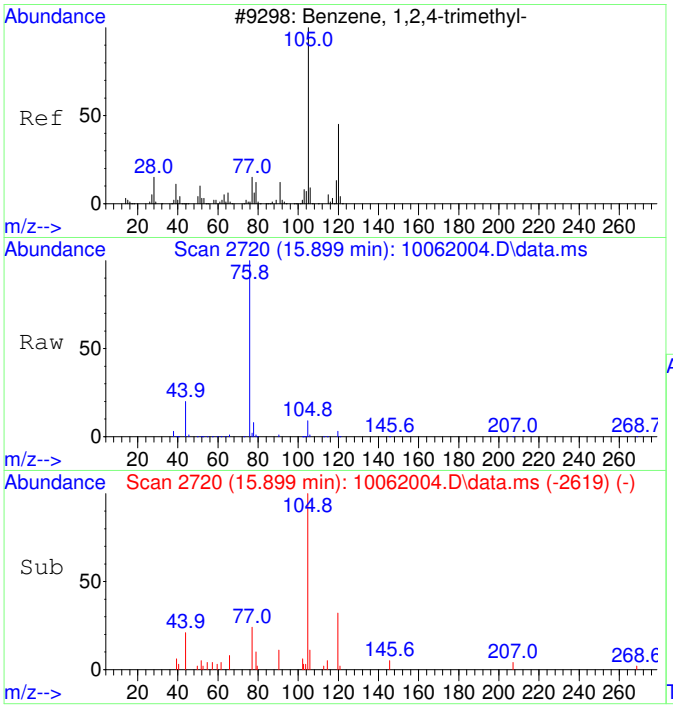


#46
1,3,5-Trimethylbenzene SCAN
Concen: 62.61 ug/L
RT: 15.363 min Scan# 2612
Delta R.T. 0.020 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:105 Resp: 3834

Ion	Ratio	Lower	Upper
105	100		
120	24.7	18.3	78.3
119	2.1	0.0	43.1

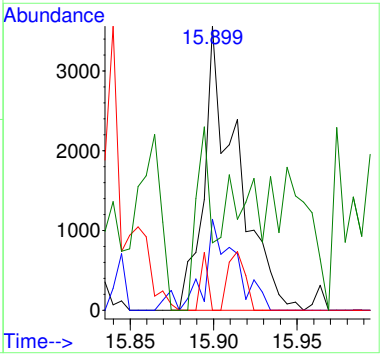


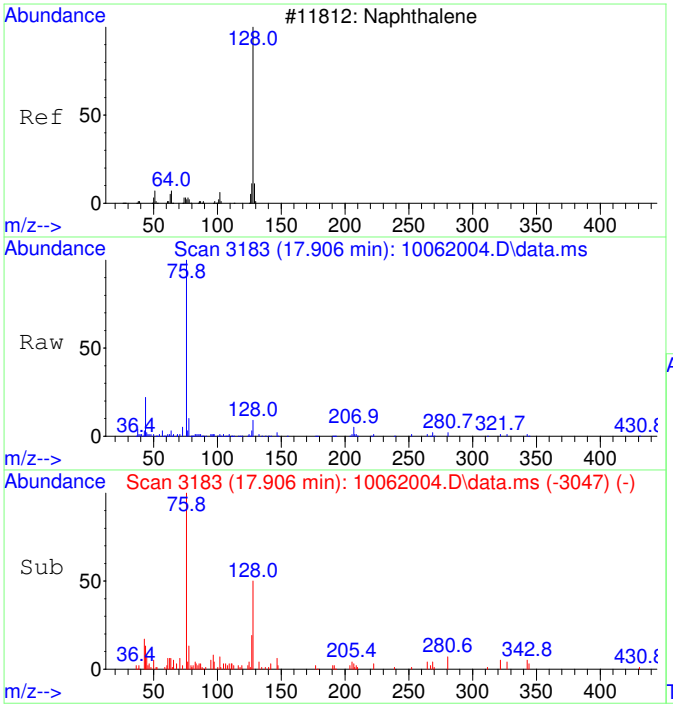


#47
1,2,4-Trimethylbenzene SCAN
Concen: 78.13 ug/L
RT: 15.899 min Scan# 2720
Delta R.T. -0.000 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:105 Resp: 4895

Ion	Ratio	Lower	Upper
105	100		
120	28.8	16.9	76.9
119	4.4	0.0	41.9
77	22.1	0.0	42.3

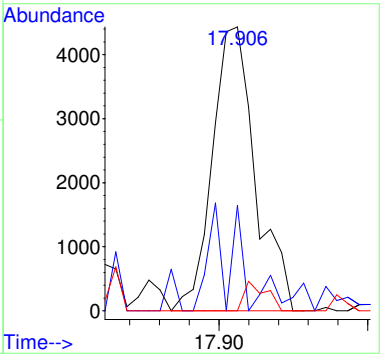




#48
Naphthalene SCAN
Concen: 46.91 ug/L
RT: 17.906 min Scan# 3183
Delta R.T. 0.005 min
Lab File: 10062004.D
Acq: 6 Oct 2020 9:23

Tgt Ion:128 Resp: 4447

Ion	Ratio	Lower	Upper
128	100		
127	17.0	0.0	44.0
129	5.3	0.0	40.8



SECOND SOURCE CALIBRATION CHECK

Laboratory:

Client:

Instrument ID:

Lab File ID:

Sequence:

Lab Sample ID:

SDG:

Project:

Calibration:

Calibration Date:

Injection Date:

Injection Time:

COMPOUND	TYPE			RESPONSE FACTOR			% DIFF / DRIFT	
		STD	SCV	ICAL	SCV	MIN (#)	SCV	LIMIT (#)

Analytical Standard Record

EPA Region 9 Laboratory

1639096

Description:	2-Fluorotlouene	**Expires:**	12/31/29
Standard Type:	Other Solution	**Prepared:**	09/22/16
Solvent:	na	**Prepared By:**	** Vendor **
Final Volume (mls):	100	**Department:**	Volatiles
Vials:	1	**Last Edit:**	09/22/16 11:46 by RH
Vendor:		**Lot Numbe**	STBF8552V

Aldrich; Cat # F15323-100G, bar code #AU008468

Analyte	CAS Number	Concentration (ppm)
2-Fluorotoluene	95-52-3	1000000

SIGMA-ALDRICH®

3050 Spruce Street, Saint Louis, MO 63103 USA
Email USA: techserv@sial.com Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:	2-FLUOROTOLUENE
	>= 99 %
Product Number:	F15323
Batch Number:	STBF8552V
Brand:	Aldrich
CAS Number:	95-52-3
Formula:	$CH_3C_6H_4F$
Formula Weight:	110.13
Quality Release Date:	14 SEP 2015

TEST	SPECIFICATION	RESULT
APPEARANCE (COLOR)	COLORLESS TO VERY FAINT YELLOW	VERY FAINT YELLOW
APPEARANCE (FORM)	LIQUID	LIQUID
COLOR (IN APHA)	≤ 50 APHA	40 APHA
PURITY (GC AREA %)	≥ 99.0 %	99.9 %
INFRARED SPECTRUM	CONFORMS TO STRUCTURE	CONFORMS

Dr. Claudia Geitner
Manager Quality Control
Steinheim, Germany

Sigma-Aldrich warrants that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Analytical Standard Record

EPA Region 9 Laboratory

1740054

Description:	VOA BFB tuning mix, stock STD.	**Expires:**	11/30/22
Standard Type:	Other Solution	**Prepared:**	10/03/17
Solvent:	Solvent Lot #	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	10/03/17 14:37 by YNB
Vendor:	Restek	**Lot Numbe**	A0129653

RESTEK Cat No. 30003, LOT # A0129653, Bar code #AU009457

Analyte	CAS Number	Concentration (ppm)
4-Bromofluorobenzene	460-00-4	5000

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110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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Certificate of Analysis

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Certificate #3222.01

ilac-MRA

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30003 **Lot No.:** A0129653

Description : VOA Tuning Compound Mix

VOA Tuning Compound Mix 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KOV) **Purity** 99%	5,002.0 µg/mL	+/- 29.3545	µg/mL	Gravimetric
			+/- 280.4856	µg/mL	Unstressed
			+/- 287.0473	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

A4009453	1740050
54	51
55	52
56	53
57	54

Analytical Standard Record

EPA Region 9 Laboratory

1843069

Description:	VOA 502/524 VOC Mix, Stock	**Expires:**	09/30/20
Standard Type:	Other Solution	**Prepared:**	10/24/18
Solvent:	MeOH	**Prepared By:**	** Vendor **
Final Volume (mls):	1.15	**Department:**	Volatiles
Vials:	1	**Last Edit:**	10/24/18 12:14 by YNB
Vendor:	Sigma Aldrich	**Lot Numbe**	LRAC0242

Sigma-Aldrich (Supelco), Cat # 502111, Lot# LRAC0242, bar code AU010582

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromo-3-chloropropane	96-12-8	2000
1,1,1,2-Tetrachloroethane	630-20-6	2000
Benzene	71-43-2	2000
4-Chlorotoluene	106-43-4	2000
2-Chlorotoluene	95-49-8	2000
2,2-Dichloropropane	594-20-7	2000
1,4-Dichlorobenzene	106-46-7	2000
1,3-Dichloropropane	142-28-9	2000
1,3-Dichlorobenzene	541-73-1	2000
1,3,5-Trimethylbenzene	108-67-8	2000
1,2-Dichloropropane	78-87-5	2000
1,2-Dichloroethane	107-06-2	2000
Bromochloromethane	74-97-5	2000
1,2-Dibromoethane (EDB)	106-93-4	2000
Bromodichloromethane	75-27-4	2000
1,2,4-Trimethylbenzene	95-63-6	2000
1,2,4-Trichlorobenzene	120-82-1	2000
1,2,3-Trimethylbenzene	526-73-8	2000
1,2,3-Trichloropropane	96-18-4	2000
1,2,3-Trichlorobenzene	87-61-6	2000
1,1-Dichloropropene	563-58-6	2000
1,1-Dichloroethene	75-35-4	2000
1,1-Dichloroethane	75-34-3	2000
1,1,2-Trichloroethane	79-00-5	2000
1,1,2,2-Tetrachloroethane	79-34-5	2000
1,1,1-Trichloroethane	71-55-6	2000
1,2-Dichlorobenzene	95-50-1	2000
Hexachlorobutadiene	87-68-3	2000
trans-1,3-Dichloropropene	10061-02-6	2000
trans-1,2-Dichloroethene	156-60-5	2000

Analytical Standard Record

EPA Region 9 Laboratory

1843069

Toluene	108-88-3	2000
Tetrachloroethene	127-18-4	2000
tert-Butylbenzene	98-06-6	2000
Styrene	100-42-5	2000
sec-Butylbenzene	135-98-8	2000
Propylbenzene	103-65-1	2000
p-Isopropyltoluene	99-87-6	2000
o-Xylene	95-47-6	2000
Naphthalene	91-20-3	2000
Bromobenzene	108-86-1	2000
Isopropylbenzene	98-82-8	2000
Trichloroethene	79-01-6	2000
Ethylbenzene	100-41-4	2000
Dichloromethane	75-09-2	2000
Dibromomethane	74-95-3	2000
cis-1,3-Dichloropropene	10061-01-5	2000
cis-1,2-Dichloroethene	156-59-2	2000
Chloroform	67-66-3	2000
Chlorodibromomethane	124-48-1	2000
Chlorobenzene	108-90-7	2000
Carbon tetrachloride	56-23-5	2000
Butylbenzene	104-51-8	2000
Bromoform	75-25-2	2000
m&p-Xylene	179601-23-1	4000

Certificate of Analysis

502/524 VOLATILE ORGANICS CALIBRATION

Certified Reference Material

Product ID 502111
Lot **LRAC0242**
Expiration Date September 2020
MFG Date September 2018
Storage Conditions Freeze
Solvent/Matrix METHANOL

Analyte	*Units*	*Certified Value* [1,4]	*Analytical Value*	*Raw Material Purity,%*	*Raw Material lot*	*Elution order*	*CAS*
1,1-DICHLOROETHYLENE	µg/ml	2000 ± 170	2120	99.9998	LC08188	1	75-35-4
DICHLOROMETHANE	µg/ml	2000 ± 140	2040	99.99	SHBK1353	2	75-09-2
TRANS-1,2-DICHLOROETHYLENE	µg/ml	2000 ± 140	2040	99.7	MKBH9850V	3	156-60-5
1,1-DICHLOROETHANE	µg/ml	2001 ± 130	1980	99.9	LB68167	4	75-34-3
2,2-DICHLOROPROPANE	µg/ml	2000 ± 135	2010	98.4	BCBR0622V	5	594-20-7
CIS-1,2-DICHLOROETHYLENE	µg/ml	2001 ± 130	2010	99.9	LB73428	6	156-59-2
CHLOROFORM	µg/ml	2000 ± 120	2000	99.94	MKBV7632V	7	67-66-3
BROMOCHLOROMETHANE	µg/ml	2001 ± 110	1990	98.9	LB39040	8	74-97-5
1,1,1-TRICHLOROETHANE	µg/ml	2000 ± 140	2020	97.2	LC06533	9	71-55-6
1,1-DICHLOROPROPYLENE	µg/ml	2001 ± 125	1990	99.5	7738900	10	563-58-6
CARBON TETRACHLORIDE	µg/ml	2000 ± 140	1990	99.97	02041MB	11	56-23-5
1,2-DICHLOROETHANE	µg/ml	2001 ± 110	2010	99.9	LB74294	12	107-06-02
BENZENE	µg/ml	2000 ± 120	1970	99.99	SHBJ5344	13	71-43-2
TRICHLOROETHYLENE	µg/ml	2001 ± 110	2010	98.6	LB86674	14	79-01-6
1,2-DICHLOROPROPANE	µg/ml	2001 ± 120	1980	99.9	LC14320	15	78-87-5
BROMODICHLOROMETHANE	µg/ml	2001 ± 120	1980	97.9	MKCF8470	16	75-27-4
DIBROMOMETHANE	µg/ml	2001 ± 110	2030	98.8	LB81118	17	74-95-3
TRANS 1,3-DICHLOROPROPENE	µg/ml	2002 ± 120	1970	99	ZDMSLEK	18	10061-02-06
TOLUENE	µg/ml	2000 ± 110	2010	99.98	MKCF0747	19	108-88-3
CIS 1,3-DICHLOROPROPENE	µg/ml	2001 ± 120	1990	99.3	MKBZ5000V	20	10061-01-5
1,1,2-TRICHLOROETHANE	µg/ml	2000 ± 110	2010	99.9	LB87978	21	79-00-5
1,3-DICHLOROPROPANE	µg/ml	2000 ± 110	1990	99.9	LC10811	22	142-28-9
TETRACHLOROETHYLENE	µg/ml	2000 ± 110	2010	99.9	LB67182	23	127-18-4
DIBROMOCHLOROMETHANE	µg/ml	2000 ± 120	2020	96.5	LB89245	24	124-48-1

ANAB ACCREDITED ISO GUIDE 34 REFERENCE MATERIAL PRODUCER

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

SIGMA-ALDRICH®
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307-742-5452
rctechgroup@sial.com www.sigma-aldrich.com

Lot **LRAC0242**
Expiration Date September 2020
MFG Date September 2018
Storage Conditions Freeze
Solvent/Matrix METHANOL

1,2-DIBROMOETHANE	µg/ml	2003 ± 110	2020	99.1	LB42792	25	106-93-4
CHLOROBENZENE	µg/ml	2000 ± 94	1990	99.9	LB93949	26	108-90-7
1,1,1,2-TETRACHLOROETHANE	µg/ml	2000 ± 110	1980	99.9	LC14810	27	630-20-6
ETHYLBENZENE	µg/ml	2000 ± 110	1980	99.87	SHBK2389	28	100-41-4
M-XYLENE	µg/ml	2002 ± 110	2000	99.8	LB87531	29	108-38-3
P-XYLENE	µg/ml	2000 ± 110	2000	99.9	LB73203	29	106-42-3
O-XYLENE	µg/ml	2000 ± 110	2000	99.5	LB92424	30	95-47-6
STYRENE	µg/ml	2000 ± 98	1990	99.9	LC17632	31	100-42-5
CUMENE	µg/ml	2000 ± 99	2010	99.9	LB89580	32	98-82-8
BROMOFORM	µg/ml	2001 ± 120	2050	96.1	67996PJ	33	75-25-2
1,1,2,2-TETRACHLOROETHANE	µg/ml	2000 ± 100	1990	99.9	LB51327	34	79-34-5
1,2,3-TRICHLOROPROPANE	µg/ml	2001 ± 99	2020	99	BCBH8722V	35	96-18-4
N-PROPYLBENZENE	µg/ml	2000 ± 100	1990	99.9	T2HFC	36	103-65-1
BROMOBENZENE	µg/ml	2001 ± 98	1980	99.5	LB99843	37	108-86-1
1,2,4-TRIMETHYLBENZENE	µg/ml	2000 ± 100	2020	98.9	LB97224	38	95-63-6
2-CHLOROTOLUENE	µg/ml	2001 ± 98	2010	99.9	LC01464	39	95-49-8
4-CHLOROTOLUENE	µg/ml	2001 ± 92	2000	99.9	LC02742	40	106-43-4
TERT-BUTYLBENZENE	µg/ml	2000 ± 93	2000	99.9	LB40373	41	98-06-6
1,3,5-TRIMETHYLBENZENE	µg/ml	2000 ± 94	1980	99.3	LB82157	42	108-67-8
SEC-BUTYLBENZENE	µg/ml	2000 ± 93	1990	99.4	LB77150	43	135-98-8
P-ISOPROPYLTOLUENE	µg/ml	2000 ± 88	1960	98.7	LB40003	44	99-87-6
1,4-DICHLOROBENZENE	µg/ml	2000 ± 88	2000	99.9	LB90630	45	106-46-7
1,3-DICHLOROBENZENE	µg/ml	2001 ± 94	2010	99.9	LC17654	46	541-73-1
N-BUTYLBENZENE	µg/ml	2000 ± 91	2010	99.9	LB81630	47	104-51-8
1,2-DICHLOROBENZENE	µg/ml	2001 ± 82	2010	99.4	LB58923	48	95-50-1
1,2-DIBROMO-3-CHLOROPROPANE	µg/ml	2000 ± 89	2060	96.8	LB06608	49	96-12-8
1,2,3-TRICHLOROBENZENE	µg/ml	2000 ± 73	2010	99.9	LC20450	50	87-61-6
HEXACHLOROBUTADIENE	µg/ml	2000 ± 81	2060	97.4	MKCD4346	51	87-68-3

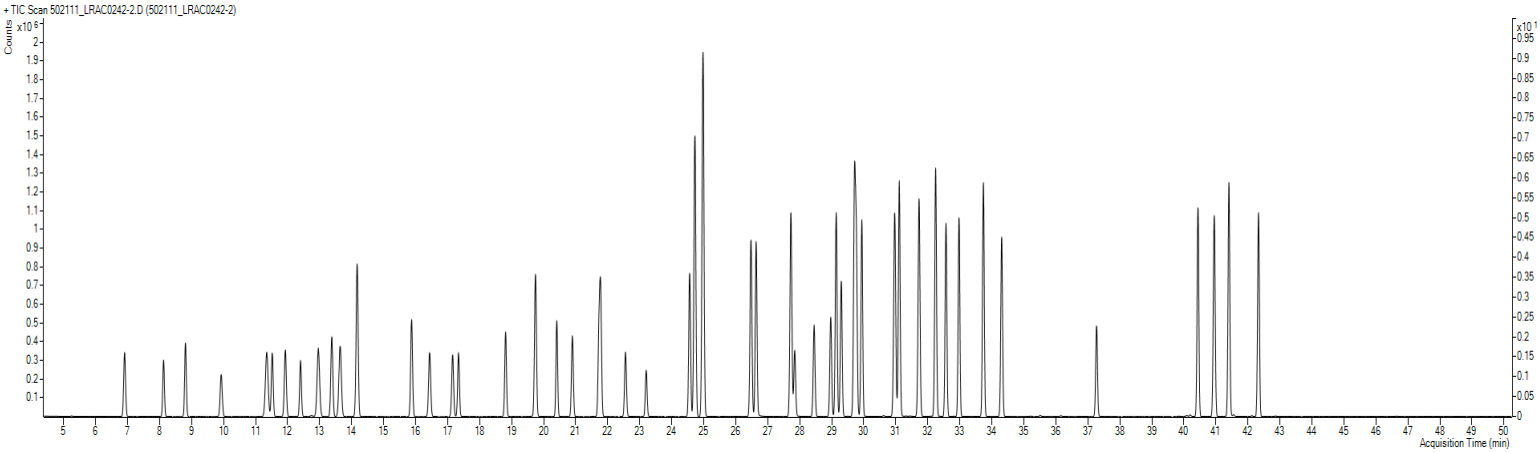
Certificate of Analysis

502/524 VOLATILE ORGANICS CALIBRATION

Certified Reference Material

Product ID 502111
Lot **LRAC0242**
Expiration Date September 2020
MFG Date September 2018
Storage Conditions Freeze
Solvent/Matrix METHANOL

NAPHTHALENE	µg/ml	2000 ± 81	1990	99.9	16412TN	52	91-20-3
1,2,4-TRICHLOROBENZENE	µg/ml	2001 ± 67	2020	99.4	LB48083	53	120-82-1



Additional Information:

Analytical Method Parameters:

Column: VOCOL, 60 m x 0.25 mm x 1.5 µm df
35°C (4 min) to 200°C (5 min) at 4°C/min
Detector: MSD, 200°C
Injection Volume: 1 µL

ANAB ACCREDITED ISO GUIDE 34 REFERENCE MATERIAL PRODUCER

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

SIGMA-ALDRICH®
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Lot **LRAC0242**
Expiration Date September 2020
MFG Date September 2018
Storage Conditions Freeze
Solvent/Matrix METHANOL

1 Certified value - based on the gravimetric preparation and analytically verified by RTC with associated uncertainties from the preparation and analytical procedures.

4 Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

Traceability: The standard was manufactured under an ISO/IEC 17025:2005 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were preformed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Homogeneity: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared using a one-way analysis of variance approach as described by TNI EL-V3-2009 Appendix A.2. See Instructions for minimum sub-sample size.

Expiration is at end of month given on certificate and label.

THIS PRODUCT WAS DESIGNED, PRODUCED AND VERIFIED FOR ACCURACY AND STABILITY IN ACCORDANCE WITH ISO/IEC 17025:2005 (ANAB Cert AT-1467) and ISO GUIDE 34:2009 (ANAB Cert AR-1470).

MSDS reports for components comprising greater than 1.0% of the solution or 0.1% for components known to be carcinogens are available upon request.

Robert O'Brien - QC Supervisor

Mark Pooler - QA Supervisor

Certification Date October 04, 2018
Version -1042018

Analytical Standard Record

EPA Region 9 Laboratory

1920044

Description:	Toluene-d8	Expires:	05/15/29
Standard Type:	Calibration Standa	Prepared:	05/15/19
Solvent:	na	Prepared By:	** Vendor **
Final Volume (mls):	0.1	Department:	Volatiles
Vials:	1	Last Edit:	05/15/19 13:00 by TD

Supelco; POS # 18C-262, bar code #AU0010912

Experation date changed, neat standard, per ZAR

Analyte	CAS Number	Concentration	Units
Toluene-d8	2037-26-5	1000000	ppm

Reviewed By Date

CERTIFICATE OF ANALYSIS

FROM VENDOR

IS NOT AVAILABLE.

Analytical Standard Record

EPA Region 9 Laboratory

1920045

Description:	Toluene-d8	Expires:	05/15/29
Standard Type:	Calibration Standa	Prepared:	05/15/19
Solvent:	na	Prepared By:	** Vendor **
Final Volume (mls):	0.1	Department:	Volatiles
Vials:	1	Last Edit:	05/15/19 13:00 by TD

Supelco; POS # 18C-262, bar code #AU0010913

Experation date changed, neat standard, per ZAR

Analyte	CAS Number	Concentration	Units
Toluene-d8	2037-26-5	1000000	ppm

Reviewed By Date

CERTIFICATE OF ANALYSIS

FROM VENDOR

IS NOT AVAILABLE.

Analytical Standard Record

EPA Region 9 Laboratory

1937061

Description:	VOA 502.2 CAL 2000 MEGA MIX, Stock	**Expires:**	03/31/21
Standard Type:	Other Solution	**Prepared:**	09/10/19
Solvent:	MeOH	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	09/10/19 13:18 by YNB
Vendor:	Restek	**Lot Numbe**	A0146957

RESTEK, catalog # 30431, Barcode AU011277

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	2000
Bromobenzene	108-86-1	2000
Benzene	71-43-2	2000
4-Chlorotoluene	106-43-4	2000
2-Chlorotoluene	95-49-8	2000
2,2-Dichloropropane	594-20-7	2000
1,4-Dichlorobenzene	106-46-7	2000
1,3-Dichloropropane	142-28-9	2000
1,3-Dichlorobenzene	541-73-1	2000
1,3,5-Trimethylbenzene	108-67-8	2000
1,2-Dichloropropane	78-87-5	2000
1,1,1,2-Tetrachloroethane	630-20-6	2000
1,2-Dichlorobenzene	95-50-1	2000
Bromoform	75-25-2	2000
1,2-Dibromo-3-chloropropane	96-12-8	2000
1,2,4-Trimethylbenzene	95-63-6	2000
1,2,4-Trichlorobenzene	120-82-1	2000
1,2,3-Trichloropropane	96-18-4	2000
1,2,3-Trichlorobenzene	87-61-6	2000
1,1-Dichloropropene	563-58-6	2000
1,1-Dichloroethene	75-35-4	2000
1,1-Dichloroethane	75-34-3	2000
1,1,2-Trichloroethane	79-00-5	2000
1,1,2,2-Tetrachloroethane	79-34-5	2000
1,1,1-Trichloroethane	71-55-6	2000
1,2-Dichloroethane	107-06-2	2000
Hexachlorobutadiene	87-68-3	2000
trans-1,3-Dichloropropene	10061-02-6	2000
trans-1,2-Dichloroethene	156-60-5	2000
Toluene	108-88-3	2000

Analytical Standard Record

EPA Region 9 Laboratory

1937061

Tetrachloroethene	127-18-4	2000
tert-Butylbenzene	98-06-6	2000
Styrene	100-42-5	2000
sec-Butylbenzene	135-98-8	2000
Propylbenzene	103-65-1	2000
p-Isopropyltoluene	99-87-6	2000
o-Xylene	95-47-6	2000
Naphthalene	91-20-3	2000
Bromochloromethane	74-97-5	2000
Isopropylbenzene	98-82-8	2000
Bromodichloromethane	75-27-4	2000
Ethylbenzene	100-41-4	2000
Dichloromethane	75-09-2	2000
Dibromomethane	74-95-3	2000
cis-1,3-Dichloropropene	10061-01-5	2000
cis-1,2-Dichloroethene	156-59-2	2000
Chloroform	67-66-3	2000
Chlorodibromomethane	124-48-1	2000
Chlorobenzene	108-90-7	2000
Carbon tetrachloride	56-23-5	2000
Butylbenzene	104-51-8	2000
Trichloroethene	79-01-6	2000
m&p-Xylene	179601-23-1	4000

CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30431 **Lot No.:** A0146957

Description : 502.2 CAL2000 Mega-Mix

502.2 CAL2000 Mega-Mix 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,1-dichloroethene		2,008.6 µg/mL	+/- 12.7358	µg/mL	Gravimetric
	CAS # 75-35-4	(Lot SHBG8609V)		+/- 90.6111	µg/mL	Unstressed
	Purity 99%			+/- 100.5146	µg/mL	Stressed
2	Methylene chloride (dichloromethane)		2,007.1 µg/mL	+/- 12.7263	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBK5095)		+/- 90.5435	µg/mL	Unstressed
	Purity 99%			+/- 100.4395	µg/mL	Stressed
3	trans-1,2-Dichloroethene		2,005.2 µg/mL	+/- 12.7140	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)		+/- 90.4563	µg/mL	Unstressed
	Purity 99%			+/- 100.3427	µg/mL	Stressed
4	1,1-Dichloroethane		2,003.1 µg/mL	+/- 12.7009	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 462600)		+/- 90.3630	µg/mL	Unstressed
	Purity 99%			+/- 100.2393	µg/mL	Stressed
5	2,2-Dichloropropane		2,000.3 µg/mL	+/- 12.6830	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBT5124)		+/- 90.2358	µg/mL	Unstressed
	Purity 99%			+/- 100.0982	µg/mL	Stressed
6	cis-1,2-Dichloroethene		2,002.5 µg/mL	+/- 12.6972	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBX5945V)		+/- 90.3369	µg/mL	Unstressed
	Purity 99%			+/- 100.2103	µg/mL	Stressed
7	chloroform		2,004.8 µg/mL	+/- 12.7115	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBJ9076)		+/- 90.4382	µg/mL	Unstressed
	Purity 99%			+/- 100.3227	µg/mL	Stressed

8	Bromochloromethane			2,000.7	µg/mL	+/-	12.6854	µg/mL	Gravimetric
	CAS #	74-97-5	(Lot 00008541)			+/-	90.2525	µg/mL	Unstressed
	Purity	98%				+/-	100.1167	µg/mL	Stressed
9	1,1,1-trichloroethane			2,000.9	µg/mL	+/-	12.6872	µg/mL	Gravimetric
	CAS #	71-55-6	(Lot 190123CG)			+/-	90.2652	µg/mL	Unstressed
	Purity	98%				+/-	100.1308	µg/mL	Stressed
10	1,1-Dichloropropene			2,004.3	µg/mL	+/-	12.7084	µg/mL	Gravimetric
	CAS #	563-58-6	(Lot 190122JLM)			+/-	90.4163	µg/mL	Unstressed
	Purity	99%				+/-	100.2984	µg/mL	Stressed
11	carbon tetrachloride			2,004.5	µg/mL	+/-	12.7100	µg/mL	Gravimetric
	CAS #	56-23-5	(Lot SHBJ2110)			+/-	90.4277	µg/mL	Unstressed
	Purity	99%				+/-	100.3110	µg/mL	Stressed
12	1,2-Dichloroethane			2,007.5	µg/mL	+/-	12.7290	µg/mL	Gravimetric
	CAS #	107-06-2	(Lot SHBJ6510)			+/-	90.5630	µg/mL	Unstressed
	Purity	99%				+/-	100.4612	µg/mL	Stressed
13	Benzene			2,004.2	µg/mL	+/-	12.7079	µg/mL	Gravimetric
	CAS #	71-43-2	(Lot SHBJ5344)			+/-	90.4126	µg/mL	Unstressed
	Purity	99%				+/-	100.2944	µg/mL	Stressed
14	Trichloroethene			2,003.4	µg/mL	+/-	12.7030	µg/mL	Gravimetric
	CAS #	79-01-6	(Lot SHBH1955V)			+/-	90.3781	µg/mL	Unstressed
	Purity	99%				+/-	100.2560	µg/mL	Stressed
15	1,2-Dichloropropane			2,007.7	µg/mL	+/-	12.7299	µg/mL	Gravimetric
	CAS #	78-87-5	(Lot BCBR0882V)			+/-	90.5690	µg/mL	Unstressed
	Purity	99%				+/-	100.4678	µg/mL	Stressed
16	bromodichloromethane			2,016.1	µg/mL	+/-	12.7833	µg/mL	Gravimetric
	CAS #	75-27-4	(Lot MKCF8470)			+/-	90.9495	µg/mL	Unstressed
	Purity	99%				+/-	100.8899	µg/mL	Stressed
17	Dibromomethane			2,002.3	µg/mL	+/-	12.6960	µg/mL	Gravimetric
	CAS #	74-95-3	(Lot 10201030)			+/-	90.3278	µg/mL	Unstressed
	Purity	99%				+/-	100.2003	µg/mL	Stressed
18	cis-1,3-Dichloropropene			2,005.6	µg/mL	+/-	12.7170	µg/mL	Gravimetric
	CAS #	10061-01-5	(Lot 25076)			+/-	90.4773	µg/mL	Unstressed
	Purity	99%				+/-	100.3661	µg/mL	Stressed
19	Toluene			2,000.7	µg/mL	+/-	12.6856	µg/mL	Gravimetric
	CAS #	108-88-3	(Lot SHBJ5659)			+/-	90.2539	µg/mL	Unstressed
	Purity	99%				+/-	100.1182	µg/mL	Stressed
20	trans-1,3-Dichloropropene			2,004.3	µg/mL	+/-	12.7083	µg/mL	Gravimetric
	CAS #	10061-02-6	(Lot C797620)			+/-	90.4155	µg/mL	Unstressed
	Purity	98%				+/-	100.2975	µg/mL	Stressed
21	1,1,2-Trichloroethane			2,007.0	µg/mL	+/-	12.7254	µg/mL	Gravimetric
	CAS #	79-00-5	(Lot FGB01)			+/-	90.5375	µg/mL	Unstressed
	Purity	99%				+/-	100.4328	µg/mL	Stressed
22	1,3-Dichloropropane			2,001.5	µg/mL	+/-	12.6909	µg/mL	Gravimetric
	CAS #	142-28-9	(Lot BCBG2162V)			+/-	90.2918	µg/mL	Unstressed
	Purity	99%				+/-	100.1603	µg/mL	Stressed
23	Tetrachloroethene			2,005.1	µg/mL	+/-	12.7136	µg/mL	Gravimetric
	CAS #	127-18-4	(Lot SHBH9691)			+/-	90.4533	µg/mL	Unstressed
	Purity	99%				+/-	100.3394	µg/mL	Stressed

24	dibromochloromethane			2,003.7	µg/mL	+/-	12.7046	µg/mL	Gravimetric
	CAS #	124-48-1	(Lot MKCC0877)			+/-	90.3890	µg/mL	Unstressed
	Purity	98%				+/-	100.2681	µg/mL	Stressed
25	1,2-Dibromoethane (EDB)			2,000.7	µg/mL	+/-	12.6858	µg/mL	Gravimetric
	CAS #	106-93-4	(Lot BCBP2268V)			+/-	90.2557	µg/mL	Unstressed
	Purity	99%				+/-	100.1202	µg/mL	Stressed
26	Chlorobenzene			2,005.3	µg/mL	+/-	12.7147	µg/mL	Gravimetric
	CAS #	108-90-7	(Lot SHBH4459V)			+/-	90.4608	µg/mL	Unstressed
	Purity	99%				+/-	100.3477	µg/mL	Stressed
27	1,1,1,2-Tetrachloroethane			2,001.7	µg/mL	+/-	12.6919	µg/mL	Gravimetric
	CAS #	630-20-6	(Lot MKBS3769V)			+/-	90.2990	µg/mL	Unstressed
	Purity	99%				+/-	100.1683	µg/mL	Stressed
28	Ethylbenzene			2,001.6	µg/mL	+/-	12.6917	µg/mL	Gravimetric
	CAS #	100-41-4	(Lot SHBJ4278)			+/-	90.2972	µg/mL	Unstressed
	Purity	99%				+/-	100.1663	µg/mL	Stressed
29	m-Xylene			2,003.4	µg/mL	+/-	12.7031	µg/mL	Gravimetric
	CAS #	108-38-3	(Lot SHBJ2338)			+/-	90.3784	µg/mL	Unstressed
	Purity	99%				+/-	100.2563	µg/mL	Stressed
30	p-Xylene			2,001.8	µg/mL	+/-	12.6927	µg/mL	Gravimetric
	CAS #	106-42-3	(Lot SHBJ7329)			+/-	90.3044	µg/mL	Unstressed
	Purity	99%				+/-	100.1743	µg/mL	Stressed
31	o-Xylene			2,004.6	µg/mL	+/-	12.7102	µg/mL	Gravimetric
	CAS #	95-47-6	(Lot SHBH7231)			+/-	90.4289	µg/mL	Unstressed
	Purity	99%				+/-	100.3124	µg/mL	Stressed
32	Styrene			2,001.4	µg/mL	+/-	12.6899	µg/mL	Gravimetric
	CAS #	100-42-5	(Lot MKCC9766)			+/-	90.2845	µg/mL	Unstressed
	Purity	99%				+/-	100.1522	µg/mL	Stressed
33	Isopropylbenzene (cumene)			2,001.3	µg/mL	+/-	12.6894	µg/mL	Gravimetric
	CAS #	98-82-8	(Lot P15E008)			+/-	90.2809	µg/mL	Unstressed
	Purity	99%				+/-	100.1482	µg/mL	Stressed
34	bromoform			2,004.6	µg/mL	+/-	12.7102	µg/mL	Gravimetric
	CAS #	75-25-2	(Lot SHBJ4835)			+/-	90.4292	µg/mL	Unstressed
	Purity	99%				+/-	100.3127	µg/mL	Stressed
35	1,1,2,2-Tetrachloroethane			2,005.5	µg/mL	+/-	12.7161	µg/mL	Gravimetric
	CAS #	79-34-5	(Lot CFA4D)			+/-	90.4713	µg/mL	Unstressed
	Purity	99%				+/-	100.3594	µg/mL	Stressed
36	1,2,3-Trichloropropane			2,002.0	µg/mL	+/-	12.6942	µg/mL	Gravimetric
	CAS #	96-18-4	(Lot BCBH8722V)			+/-	90.3152	µg/mL	Unstressed
	Purity	99%				+/-	100.1863	µg/mL	Stressed
37	n-Propylbenzene			2,001.2	µg/mL	+/-	12.6891	µg/mL	Gravimetric
	CAS #	103-65-1	(Lot WXBC3346V)			+/-	90.2791	µg/mL	Unstressed
	Purity	99%				+/-	100.1462	µg/mL	Stressed
38	Bromobenzene			2,003.2	µg/mL	+/-	12.7016	µg/mL	Gravimetric
	CAS #	108-86-1	(Lot WXBC5147V)			+/-	90.3675	µg/mL	Unstressed
	Purity	99%				+/-	100.2443	µg/mL	Stressed
39	1,3,5-Trimethylbenzene			2,001.4	µg/mL	+/-	12.6904	µg/mL	Gravimetric
	CAS #	108-67-8	(Lot BCBS7648V)			+/-	90.2881	µg/mL	Unstressed
	Purity	99%				+/-	100.1562	µg/mL	Stressed

40	2-Chlorotoluene		2,003.5	µg/mL	+/-	12.7033	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKBW5554V)			+/-	90.3802	µg/mL	Unstressed
	Purity 99%				+/-	100.2583	µg/mL	Stressed
41	4-Chlorotoluene		2,002.8	µg/mL	+/-	12.6990	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKBL7753V)			+/-	90.3495	µg/mL	Unstressed
	Purity 99%				+/-	100.2243	µg/mL	Stressed
42	tert-Butylbenzene		2,002.2	µg/mL	+/-	12.6950	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot STBD6954V)			+/-	90.3206	µg/mL	Unstressed
	Purity 99%				+/-	100.1923	µg/mL	Stressed
43	1,2,4-Trimethylbenzene		2,001.6	µg/mL	+/-	12.6911	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot MKBJ6229V)			+/-	90.2932	µg/mL	Unstressed
	Purity 98%				+/-	100.1619	µg/mL	Stressed
44	sec-Butylbenzene		2,002.0	µg/mL	+/-	12.6939	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKBR9260V)			+/-	90.3134	µg/mL	Unstressed
	Purity 99%				+/-	100.1843	µg/mL	Stressed
45	p-Isopropyltoluene (p-Cymene)		2,000.4	µg/mL	+/-	12.6835	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKCB7536)			+/-	90.2394	µg/mL	Unstressed
	Purity 99%				+/-	100.1022	µg/mL	Stressed
46	1,3-Dichlorobenzene		2,008.3	µg/mL	+/-	12.7339	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBQ7100V)			+/-	90.5976	µg/mL	Unstressed
	Purity 99%				+/-	100.4995	µg/mL	Stressed
47	1,4-Dichlorobenzene		2,000.4	µg/mL	+/-	12.6836	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS4401V)			+/-	90.2397	µg/mL	Unstressed
	Purity 99%				+/-	100.1025	µg/mL	Stressed
48	n-Butylbenzene		2,000.3	µg/mL	+/-	12.6833	µg/mL	Gravimetric
	CAS # 104-51-8	(Lot 09804AE)			+/-	90.2376	µg/mL	Unstressed
	Purity 99%				+/-	100.1002	µg/mL	Stressed
49	1,2-Dichlorobenzene		2,005.0	µg/mL	+/-	12.7128	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBG3111V)			+/-	90.4472	µg/mL	Unstressed
	Purity 99%				+/-	100.3327	µg/mL	Stressed
50	1,2-Dibromo-3-chloropropane		2,000.1	µg/mL	+/-	12.6820	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot FBL01)			+/-	90.2286	µg/mL	Unstressed
	Purity 99%				+/-	100.0902	µg/mL	Stressed
51	1,2,4-Trichlorobenzene		2,002.0	µg/mL	+/-	12.6939	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBJ9215)			+/-	90.3134	µg/mL	Unstressed
	Purity 99%				+/-	100.1843	µg/mL	Stressed
52	Hexachlorobutadiene		2,004.0	µg/mL	+/-	12.7064	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	90.4018	µg/mL	Unstressed
	Purity 99%				+/-	100.2824	µg/mL	Stressed
53	Naphthalene		2,003.9	µg/mL	+/-	12.7061	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBZ8680V)			+/-	90.4000	µg/mL	Unstressed
	Purity 99%				+/-	100.2804	µg/mL	Stressed
54	1,2,3-Trichlorobenzene		2,003.9	µg/mL	+/-	12.7061	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)			+/-	90.4000	µg/mL	Unstressed
	Purity 99%				+/-	100.2804	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

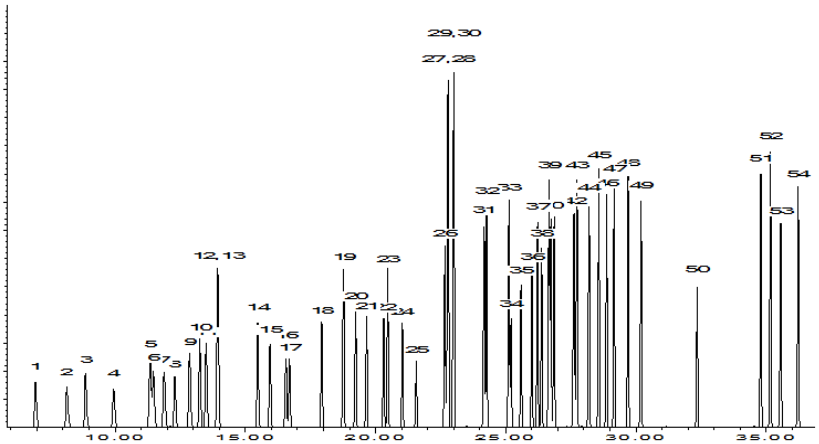
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Date Mixed: 12-Mar-2019 **Balance:** 1126342624

Fang-Yun Lo - QC Analyst

Date Passed: 20-Mar-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Analytical Standard Record

EPA Region 9 Laboratory

1937062

Description:	VOA 502.2 CAL 2000 MEGA MIX, Stock	**Expires:**	03/31/21
Standard Type:	Other Solution	**Prepared:**	09/10/19
Solvent:	MeOH	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	09/10/19 13:18 by YNB
Vendor:	Restek	**Lot Numbe**	A0146957

RESTEK, catalog # 30431, Barcode AU011278

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	2000
Bromobenzene	108-86-1	2000
Benzene	71-43-2	2000
4-Chlorotoluene	106-43-4	2000
2-Chlorotoluene	95-49-8	2000
2,2-Dichloropropane	594-20-7	2000
1,4-Dichlorobenzene	106-46-7	2000
1,3-Dichloropropane	142-28-9	2000
1,3-Dichlorobenzene	541-73-1	2000
1,3,5-Trimethylbenzene	108-67-8	2000
1,2-Dichloropropane	78-87-5	2000
1,1,1,2-Tetrachloroethane	630-20-6	2000
1,2-Dichlorobenzene	95-50-1	2000
Bromoform	75-25-2	2000
1,2-Dibromo-3-chloropropane	96-12-8	2000
1,2,4-Trimethylbenzene	95-63-6	2000
1,2,4-Trichlorobenzene	120-82-1	2000
1,2,3-Trichloropropane	96-18-4	2000
1,2,3-Trichlorobenzene	87-61-6	2000
1,1-Dichloropropene	563-58-6	2000
1,1-Dichloroethene	75-35-4	2000
1,1-Dichloroethane	75-34-3	2000
1,1,2-Trichloroethane	79-00-5	2000
1,1,2,2-Tetrachloroethane	79-34-5	2000
1,1,1-Trichloroethane	71-55-6	2000
1,2-Dichloroethane	107-06-2	2000
Hexachlorobutadiene	87-68-3	2000
trans-1,3-Dichloropropene	10061-02-6	2000
trans-1,2-Dichloroethene	156-60-5	2000
Toluene	108-88-3	2000

Analytical Standard Record

EPA Region 9 Laboratory

1937062

Tetrachloroethene	127-18-4	2000
tert-Butylbenzene	98-06-6	2000
Styrene	100-42-5	2000
sec-Butylbenzene	135-98-8	2000
Propylbenzene	103-65-1	2000
p-Isopropyltoluene	99-87-6	2000
o-Xylene	95-47-6	2000
Naphthalene	91-20-3	2000
Bromochloromethane	74-97-5	2000
Isopropylbenzene	98-82-8	2000
Bromodichloromethane	75-27-4	2000
Ethylbenzene	100-41-4	2000
Dichloromethane	75-09-2	2000
Dibromomethane	74-95-3	2000
cis-1,3-Dichloropropene	10061-01-5	2000
cis-1,2-Dichloroethene	156-59-2	2000
Chloroform	67-66-3	2000
Chlorodibromomethane	124-48-1	2000
Chlorobenzene	108-90-7	2000
Carbon tetrachloride	56-23-5	2000
Butylbenzene	104-51-8	2000
Trichloroethene	79-01-6	2000
m&p-Xylene	179601-23-1	4000

RESTEK®
110 Benner Circle
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Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30431 **Lot No.:** A0146957

Description : 502.2 CAL2000 Mega-Mix

502.2 CAL2000 Mega-Mix 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2021 **Storage:** 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,1-dichloroethene		2,008.6 µg/mL	+/- 12.7358	µg/mL	Gravimetric
	CAS # 75-35-4	(Lot SHBG8609V)		+/- 90.6111	µg/mL	Unstressed
	Purity 99%			+/- 100.5146	µg/mL	Stressed
2	Methylene chloride (dichloromethane)		2,007.1 µg/mL	+/- 12.7263	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBK5095)		+/- 90.5435	µg/mL	Unstressed
	Purity 99%			+/- 100.4395	µg/mL	Stressed
3	trans-1,2-Dichloroethene		2,005.2 µg/mL	+/- 12.7140	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)		+/- 90.4563	µg/mL	Unstressed
	Purity 99%			+/- 100.3427	µg/mL	Stressed
4	1,1-Dichloroethane		2,003.1 µg/mL	+/- 12.7009	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 462600)		+/- 90.3630	µg/mL	Unstressed
	Purity 99%			+/- 100.2393	µg/mL	Stressed
5	2,2-Dichloropropane		2,000.3 µg/mL	+/- 12.6830	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBT5124)		+/- 90.2358	µg/mL	Unstressed
	Purity 99%			+/- 100.0982	µg/mL	Stressed
6	cis-1,2-Dichloroethene		2,002.5 µg/mL	+/- 12.6972	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBX5945V)		+/- 90.3369	µg/mL	Unstressed
	Purity 99%			+/- 100.2103	µg/mL	Stressed
7	chloroform		2,004.8 µg/mL	+/- 12.7115	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBJ9076)		+/- 90.4382	µg/mL	Unstressed
	Purity 99%			+/- 100.3227	µg/mL	Stressed

8	Bromochloromethane			2,000.7	µg/mL	+/-	12.6854	µg/mL	Gravimetric
	CAS #	74-97-5	(Lot 00008541)			+/-	90.2525	µg/mL	Unstressed
	Purity	98%				+/-	100.1167	µg/mL	Stressed
9	1,1,1-trichloroethane			2,000.9	µg/mL	+/-	12.6872	µg/mL	Gravimetric
	CAS #	71-55-6	(Lot 190123CG)			+/-	90.2652	µg/mL	Unstressed
	Purity	98%				+/-	100.1308	µg/mL	Stressed
10	1,1-Dichloropropene			2,004.3	µg/mL	+/-	12.7084	µg/mL	Gravimetric
	CAS #	563-58-6	(Lot 190122JLM)			+/-	90.4163	µg/mL	Unstressed
	Purity	99%				+/-	100.2984	µg/mL	Stressed
11	carbon tetrachloride			2,004.5	µg/mL	+/-	12.7100	µg/mL	Gravimetric
	CAS #	56-23-5	(Lot SHBJ2110)			+/-	90.4277	µg/mL	Unstressed
	Purity	99%				+/-	100.3110	µg/mL	Stressed
12	1,2-Dichloroethane			2,007.5	µg/mL	+/-	12.7290	µg/mL	Gravimetric
	CAS #	107-06-2	(Lot SHBJ6510)			+/-	90.5630	µg/mL	Unstressed
	Purity	99%				+/-	100.4612	µg/mL	Stressed
13	Benzene			2,004.2	µg/mL	+/-	12.7079	µg/mL	Gravimetric
	CAS #	71-43-2	(Lot SHBJ5344)			+/-	90.4126	µg/mL	Unstressed
	Purity	99%				+/-	100.2944	µg/mL	Stressed
14	Trichloroethene			2,003.4	µg/mL	+/-	12.7030	µg/mL	Gravimetric
	CAS #	79-01-6	(Lot SHBH1955V)			+/-	90.3781	µg/mL	Unstressed
	Purity	99%				+/-	100.2560	µg/mL	Stressed
15	1,2-Dichloropropane			2,007.7	µg/mL	+/-	12.7299	µg/mL	Gravimetric
	CAS #	78-87-5	(Lot BCBR0882V)			+/-	90.5690	µg/mL	Unstressed
	Purity	99%				+/-	100.4678	µg/mL	Stressed
16	bromodichloromethane			2,016.1	µg/mL	+/-	12.7833	µg/mL	Gravimetric
	CAS #	75-27-4	(Lot MKCF8470)			+/-	90.9495	µg/mL	Unstressed
	Purity	99%				+/-	100.8899	µg/mL	Stressed
17	Dibromomethane			2,002.3	µg/mL	+/-	12.6960	µg/mL	Gravimetric
	CAS #	74-95-3	(Lot 10201030)			+/-	90.3278	µg/mL	Unstressed
	Purity	99%				+/-	100.2003	µg/mL	Stressed
18	cis-1,3-Dichloropropene			2,005.6	µg/mL	+/-	12.7170	µg/mL	Gravimetric
	CAS #	10061-01-5	(Lot 25076)			+/-	90.4773	µg/mL	Unstressed
	Purity	99%				+/-	100.3661	µg/mL	Stressed
19	Toluene			2,000.7	µg/mL	+/-	12.6856	µg/mL	Gravimetric
	CAS #	108-88-3	(Lot SHBJ5659)			+/-	90.2539	µg/mL	Unstressed
	Purity	99%				+/-	100.1182	µg/mL	Stressed
20	trans-1,3-Dichloropropene			2,004.3	µg/mL	+/-	12.7083	µg/mL	Gravimetric
	CAS #	10061-02-6	(Lot C797620)			+/-	90.4155	µg/mL	Unstressed
	Purity	98%				+/-	100.2975	µg/mL	Stressed
21	1,1,2-Trichloroethane			2,007.0	µg/mL	+/-	12.7254	µg/mL	Gravimetric
	CAS #	79-00-5	(Lot FGB01)			+/-	90.5375	µg/mL	Unstressed
	Purity	99%				+/-	100.4328	µg/mL	Stressed
22	1,3-Dichloropropane			2,001.5	µg/mL	+/-	12.6909	µg/mL	Gravimetric
	CAS #	142-28-9	(Lot BCBG2162V)			+/-	90.2918	µg/mL	Unstressed
	Purity	99%				+/-	100.1603	µg/mL	Stressed
23	Tetrachloroethene			2,005.1	µg/mL	+/-	12.7136	µg/mL	Gravimetric
	CAS #	127-18-4	(Lot SHBH9691)			+/-	90.4533	µg/mL	Unstressed
	Purity	99%				+/-	100.3394	µg/mL	Stressed

24	dibromochloromethane			2,003.7	µg/mL	+/-	12.7046	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCC0877)				+/-	90.3890	µg/mL	Unstressed
	Purity 98%					+/-	100.2681	µg/mL	Stressed
25	1,2-Dibromoethane (EDB)			2,000.7	µg/mL	+/-	12.6858	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBP2268V)				+/-	90.2557	µg/mL	Unstressed
	Purity 99%					+/-	100.1202	µg/mL	Stressed
26	Chlorobenzene			2,005.3	µg/mL	+/-	12.7147	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBH4459V)				+/-	90.4608	µg/mL	Unstressed
	Purity 99%					+/-	100.3477	µg/mL	Stressed
27	1,1,1,2-Tetrachloroethane			2,001.7	µg/mL	+/-	12.6919	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)				+/-	90.2990	µg/mL	Unstressed
	Purity 99%					+/-	100.1683	µg/mL	Stressed
28	Ethylbenzene			2,001.6	µg/mL	+/-	12.6917	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBJ4278)				+/-	90.2972	µg/mL	Unstressed
	Purity 99%					+/-	100.1663	µg/mL	Stressed
29	m-Xylene			2,003.4	µg/mL	+/-	12.7031	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBJ2338)				+/-	90.3784	µg/mL	Unstressed
	Purity 99%					+/-	100.2563	µg/mL	Stressed
30	p-Xylene			2,001.8	µg/mL	+/-	12.6927	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBJ7329)				+/-	90.3044	µg/mL	Unstressed
	Purity 99%					+/-	100.1743	µg/mL	Stressed
31	o-Xylene			2,004.6	µg/mL	+/-	12.7102	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH7231)				+/-	90.4289	µg/mL	Unstressed
	Purity 99%					+/-	100.3124	µg/mL	Stressed
32	Styrene			2,001.4	µg/mL	+/-	12.6899	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCC9766)				+/-	90.2845	µg/mL	Unstressed
	Purity 99%					+/-	100.1522	µg/mL	Stressed
33	Isopropylbenzene (cumene)			2,001.3	µg/mL	+/-	12.6894	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot P15E008)				+/-	90.2809	µg/mL	Unstressed
	Purity 99%					+/-	100.1482	µg/mL	Stressed
34	bromoform			2,004.6	µg/mL	+/-	12.7102	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBJ4835)				+/-	90.4292	µg/mL	Unstressed
	Purity 99%					+/-	100.3127	µg/mL	Stressed
35	1,1,2,2-Tetrachloroethane			2,005.5	µg/mL	+/-	12.7161	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)				+/-	90.4713	µg/mL	Unstressed
	Purity 99%					+/-	100.3594	µg/mL	Stressed
36	1,2,3-Trichloropropane			2,002.0	µg/mL	+/-	12.6942	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)				+/-	90.3152	µg/mL	Unstressed
	Purity 99%					+/-	100.1863	µg/mL	Stressed
37	n-Propylbenzene			2,001.2	µg/mL	+/-	12.6891	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot WXBC3346V)				+/-	90.2791	µg/mL	Unstressed
	Purity 99%					+/-	100.1462	µg/mL	Stressed
38	Bromobenzene			2,003.2	µg/mL	+/-	12.7016	µg/mL	Gravimetric
	CAS # 108-86-1	(Lot WXBC5147V)				+/-	90.3675	µg/mL	Unstressed
	Purity 99%					+/-	100.2443	µg/mL	Stressed
39	1,3,5-Trimethylbenzene			2,001.4	µg/mL	+/-	12.6904	µg/mL	Gravimetric
	CAS # 108-67-8	(Lot BCBS7648V)				+/-	90.2881	µg/mL	Unstressed
	Purity 99%					+/-	100.1562	µg/mL	Stressed

40	2-Chlorotoluene		2,003.5	µg/mL	+/-	12.7033	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKBW5554V)			+/-	90.3802	µg/mL	Unstressed
	Purity 99%				+/-	100.2583	µg/mL	Stressed
41	4-Chlorotoluene		2,002.8	µg/mL	+/-	12.6990	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKBL7753V)			+/-	90.3495	µg/mL	Unstressed
	Purity 99%				+/-	100.2243	µg/mL	Stressed
42	tert-Butylbenzene		2,002.2	µg/mL	+/-	12.6950	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot STBD6954V)			+/-	90.3206	µg/mL	Unstressed
	Purity 99%				+/-	100.1923	µg/mL	Stressed
43	1,2,4-Trimethylbenzene		2,001.6	µg/mL	+/-	12.6911	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot MKBJ6229V)			+/-	90.2932	µg/mL	Unstressed
	Purity 98%				+/-	100.1619	µg/mL	Stressed
44	sec-Butylbenzene		2,002.0	µg/mL	+/-	12.6939	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKBR9260V)			+/-	90.3134	µg/mL	Unstressed
	Purity 99%				+/-	100.1843	µg/mL	Stressed
45	p-Isopropyltoluene (p-Cymene)		2,000.4	µg/mL	+/-	12.6835	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKCB7536)			+/-	90.2394	µg/mL	Unstressed
	Purity 99%				+/-	100.1022	µg/mL	Stressed
46	1,3-Dichlorobenzene		2,008.3	µg/mL	+/-	12.7339	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBQ7100V)			+/-	90.5976	µg/mL	Unstressed
	Purity 99%				+/-	100.4995	µg/mL	Stressed
47	1,4-Dichlorobenzene		2,000.4	µg/mL	+/-	12.6836	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS4401V)			+/-	90.2397	µg/mL	Unstressed
	Purity 99%				+/-	100.1025	µg/mL	Stressed
48	n-Butylbenzene		2,000.3	µg/mL	+/-	12.6833	µg/mL	Gravimetric
	CAS # 104-51-8	(Lot 09804AE)			+/-	90.2376	µg/mL	Unstressed
	Purity 99%				+/-	100.1002	µg/mL	Stressed
49	1,2-Dichlorobenzene		2,005.0	µg/mL	+/-	12.7128	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBG3111V)			+/-	90.4472	µg/mL	Unstressed
	Purity 99%				+/-	100.3327	µg/mL	Stressed
50	1,2-Dibromo-3-chloropropane		2,000.1	µg/mL	+/-	12.6820	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot FBL01)			+/-	90.2286	µg/mL	Unstressed
	Purity 99%				+/-	100.0902	µg/mL	Stressed
51	1,2,4-Trichlorobenzene		2,002.0	µg/mL	+/-	12.6939	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBJ9215)			+/-	90.3134	µg/mL	Unstressed
	Purity 99%				+/-	100.1843	µg/mL	Stressed
52	Hexachlorobutadiene		2,004.0	µg/mL	+/-	12.7064	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	90.4018	µg/mL	Unstressed
	Purity 99%				+/-	100.2824	µg/mL	Stressed
53	Naphthalene		2,003.9	µg/mL	+/-	12.7061	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBZ8680V)			+/-	90.4000	µg/mL	Unstressed
	Purity 99%				+/-	100.2804	µg/mL	Stressed
54	1,2,3-Trichlorobenzene		2,003.9	µg/mL	+/-	12.7061	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)			+/-	90.4000	µg/mL	Unstressed
	Purity 99%				+/-	100.2804	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

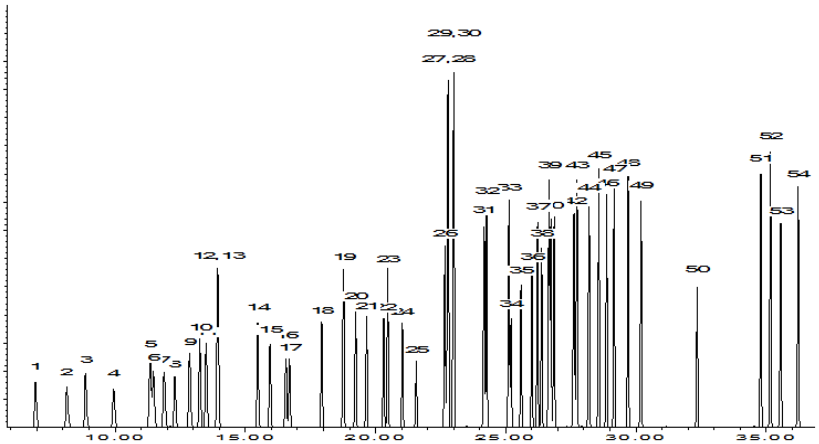
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Date Mixed: 12-Mar-2019 **Balance:** 1126342624

Date Passed: 20-Mar-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Analytical Standard Record

EPA Region 9 Laboratory

1937063

Description:	VOA 502.2 CAL 2000 MEGA MIX, Stock	**Expires:**	03/31/21
Standard Type:	Other Solution	**Prepared:**	09/10/19
Solvent:	MeOH	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	09/10/19 13:18 by YNB
Vendor:	Restek	**Lot Numbe**	A0146957

RESTEK, catalog # 30431, Barcode AU011279

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	2000
Bromobenzene	108-86-1	2000
Benzene	71-43-2	2000
4-Chlorotoluene	106-43-4	2000
2-Chlorotoluene	95-49-8	2000
2,2-Dichloropropane	594-20-7	2000
1,4-Dichlorobenzene	106-46-7	2000
1,3-Dichloropropane	142-28-9	2000
1,3-Dichlorobenzene	541-73-1	2000
1,3,5-Trimethylbenzene	108-67-8	2000
1,2-Dichloropropane	78-87-5	2000
1,1,1,2-Tetrachloroethane	630-20-6	2000
1,2-Dichlorobenzene	95-50-1	2000
Bromoform	75-25-2	2000
1,2-Dibromo-3-chloropropane	96-12-8	2000
1,2,4-Trimethylbenzene	95-63-6	2000
1,2,4-Trichlorobenzene	120-82-1	2000
1,2,3-Trichloropropane	96-18-4	2000
1,2,3-Trichlorobenzene	87-61-6	2000
1,1-Dichloropropene	563-58-6	2000
1,1-Dichloroethene	75-35-4	2000
1,1-Dichloroethane	75-34-3	2000
1,1,2-Trichloroethane	79-00-5	2000
1,1,2,2-Tetrachloroethane	79-34-5	2000
1,1,1-Trichloroethane	71-55-6	2000
1,2-Dichloroethane	107-06-2	2000
Hexachlorobutadiene	87-68-3	2000
trans-1,3-Dichloropropene	10061-02-6	2000
trans-1,2-Dichloroethene	156-60-5	2000
Toluene	108-88-3	2000

Analytical Standard Record

EPA Region 9 Laboratory

1937063

Tetrachloroethene	127-18-4	2000
tert-Butylbenzene	98-06-6	2000
Styrene	100-42-5	2000
sec-Butylbenzene	135-98-8	2000
Propylbenzene	103-65-1	2000
p-Isopropyltoluene	99-87-6	2000
o-Xylene	95-47-6	2000
Naphthalene	91-20-3	2000
Bromochloromethane	74-97-5	2000
Isopropylbenzene	98-82-8	2000
Bromodichloromethane	75-27-4	2000
Ethylbenzene	100-41-4	2000
Dichloromethane	75-09-2	2000
Dibromomethane	74-95-3	2000
cis-1,3-Dichloropropene	10061-01-5	2000
cis-1,2-Dichloroethene	156-59-2	2000
Chloroform	67-66-3	2000
Chlorodibromomethane	124-48-1	2000
Chlorobenzene	108-90-7	2000
Carbon tetrachloride	56-23-5	2000
Butylbenzene	104-51-8	2000
Trichloroethene	79-01-6	2000
m&p-Xylene	179601-23-1	4000

CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30431 **Lot No.:** A0146957

Description : 502.2 CAL2000 Mega-Mix

502.2 CAL2000 Mega-Mix 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,1-dichloroethene		2,008.6 µg/mL	+/- 12.7358	µg/mL	Gravimetric
	CAS # 75-35-4	(Lot SHBG8609V)		+/- 90.6111	µg/mL	Unstressed
	Purity 99%			+/- 100.5146	µg/mL	Stressed
2	Methylene chloride (dichloromethane)		2,007.1 µg/mL	+/- 12.7263	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBK5095)		+/- 90.5435	µg/mL	Unstressed
	Purity 99%			+/- 100.4395	µg/mL	Stressed
3	trans-1,2-Dichloroethene		2,005.2 µg/mL	+/- 12.7140	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)		+/- 90.4563	µg/mL	Unstressed
	Purity 99%			+/- 100.3427	µg/mL	Stressed
4	1,1-Dichloroethane		2,003.1 µg/mL	+/- 12.7009	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 462600)		+/- 90.3630	µg/mL	Unstressed
	Purity 99%			+/- 100.2393	µg/mL	Stressed
5	2,2-Dichloropropane		2,000.3 µg/mL	+/- 12.6830	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBT5124)		+/- 90.2358	µg/mL	Unstressed
	Purity 99%			+/- 100.0982	µg/mL	Stressed
6	cis-1,2-Dichloroethene		2,002.5 µg/mL	+/- 12.6972	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBX5945V)		+/- 90.3369	µg/mL	Unstressed
	Purity 99%			+/- 100.2103	µg/mL	Stressed
7	chloroform		2,004.8 µg/mL	+/- 12.7115	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBJ9076)		+/- 90.4382	µg/mL	Unstressed
	Purity 99%			+/- 100.3227	µg/mL	Stressed

8	Bromochloromethane			2,000.7	µg/mL	+/-	12.6854	µg/mL	Gravimetric
	CAS #	74-97-5	(Lot 00008541)			+/-	90.2525	µg/mL	Unstressed
	Purity	98%				+/-	100.1167	µg/mL	Stressed
9	1,1,1-trichloroethane			2,000.9	µg/mL	+/-	12.6872	µg/mL	Gravimetric
	CAS #	71-55-6	(Lot 190123CG)			+/-	90.2652	µg/mL	Unstressed
	Purity	98%				+/-	100.1308	µg/mL	Stressed
10	1,1-Dichloropropene			2,004.3	µg/mL	+/-	12.7084	µg/mL	Gravimetric
	CAS #	563-58-6	(Lot 190122JLM)			+/-	90.4163	µg/mL	Unstressed
	Purity	99%				+/-	100.2984	µg/mL	Stressed
11	carbon tetrachloride			2,004.5	µg/mL	+/-	12.7100	µg/mL	Gravimetric
	CAS #	56-23-5	(Lot SHBJ2110)			+/-	90.4277	µg/mL	Unstressed
	Purity	99%				+/-	100.3110	µg/mL	Stressed
12	1,2-Dichloroethane			2,007.5	µg/mL	+/-	12.7290	µg/mL	Gravimetric
	CAS #	107-06-2	(Lot SHBJ6510)			+/-	90.5630	µg/mL	Unstressed
	Purity	99%				+/-	100.4612	µg/mL	Stressed
13	Benzene			2,004.2	µg/mL	+/-	12.7079	µg/mL	Gravimetric
	CAS #	71-43-2	(Lot SHBJ5344)			+/-	90.4126	µg/mL	Unstressed
	Purity	99%				+/-	100.2944	µg/mL	Stressed
14	Trichloroethene			2,003.4	µg/mL	+/-	12.7030	µg/mL	Gravimetric
	CAS #	79-01-6	(Lot SHBH1955V)			+/-	90.3781	µg/mL	Unstressed
	Purity	99%				+/-	100.2560	µg/mL	Stressed
15	1,2-Dichloropropane			2,007.7	µg/mL	+/-	12.7299	µg/mL	Gravimetric
	CAS #	78-87-5	(Lot BCBR0882V)			+/-	90.5690	µg/mL	Unstressed
	Purity	99%				+/-	100.4678	µg/mL	Stressed
16	bromodichloromethane			2,016.1	µg/mL	+/-	12.7833	µg/mL	Gravimetric
	CAS #	75-27-4	(Lot MKCF8470)			+/-	90.9495	µg/mL	Unstressed
	Purity	99%				+/-	100.8899	µg/mL	Stressed
17	Dibromomethane			2,002.3	µg/mL	+/-	12.6960	µg/mL	Gravimetric
	CAS #	74-95-3	(Lot 10201030)			+/-	90.3278	µg/mL	Unstressed
	Purity	99%				+/-	100.2003	µg/mL	Stressed
18	cis-1,3-Dichloropropene			2,005.6	µg/mL	+/-	12.7170	µg/mL	Gravimetric
	CAS #	10061-01-5	(Lot 25076)			+/-	90.4773	µg/mL	Unstressed
	Purity	99%				+/-	100.3661	µg/mL	Stressed
19	Toluene			2,000.7	µg/mL	+/-	12.6856	µg/mL	Gravimetric
	CAS #	108-88-3	(Lot SHBJ5659)			+/-	90.2539	µg/mL	Unstressed
	Purity	99%				+/-	100.1182	µg/mL	Stressed
20	trans-1,3-Dichloropropene			2,004.3	µg/mL	+/-	12.7083	µg/mL	Gravimetric
	CAS #	10061-02-6	(Lot C797620)			+/-	90.4155	µg/mL	Unstressed
	Purity	98%				+/-	100.2975	µg/mL	Stressed
21	1,1,2-Trichloroethane			2,007.0	µg/mL	+/-	12.7254	µg/mL	Gravimetric
	CAS #	79-00-5	(Lot FGB01)			+/-	90.5375	µg/mL	Unstressed
	Purity	99%				+/-	100.4328	µg/mL	Stressed
22	1,3-Dichloropropane			2,001.5	µg/mL	+/-	12.6909	µg/mL	Gravimetric
	CAS #	142-28-9	(Lot BCBG2162V)			+/-	90.2918	µg/mL	Unstressed
	Purity	99%				+/-	100.1603	µg/mL	Stressed
23	Tetrachloroethene			2,005.1	µg/mL	+/-	12.7136	µg/mL	Gravimetric
	CAS #	127-18-4	(Lot SHBH9691)			+/-	90.4533	µg/mL	Unstressed
	Purity	99%				+/-	100.3394	µg/mL	Stressed

24	dibromochloromethane			2,003.7	µg/mL	+/-	12.7046	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCC0877)				+/-	90.3890	µg/mL	Unstressed
	Purity 98%					+/-	100.2681	µg/mL	Stressed
25	1,2-Dibromoethane (EDB)			2,000.7	µg/mL	+/-	12.6858	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBP2268V)				+/-	90.2557	µg/mL	Unstressed
	Purity 99%					+/-	100.1202	µg/mL	Stressed
26	Chlorobenzene			2,005.3	µg/mL	+/-	12.7147	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBH4459V)				+/-	90.4608	µg/mL	Unstressed
	Purity 99%					+/-	100.3477	µg/mL	Stressed
27	1,1,1,2-Tetrachloroethane			2,001.7	µg/mL	+/-	12.6919	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)				+/-	90.2990	µg/mL	Unstressed
	Purity 99%					+/-	100.1683	µg/mL	Stressed
28	Ethylbenzene			2,001.6	µg/mL	+/-	12.6917	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBJ4278)				+/-	90.2972	µg/mL	Unstressed
	Purity 99%					+/-	100.1663	µg/mL	Stressed
29	m-Xylene			2,003.4	µg/mL	+/-	12.7031	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBJ2338)				+/-	90.3784	µg/mL	Unstressed
	Purity 99%					+/-	100.2563	µg/mL	Stressed
30	p-Xylene			2,001.8	µg/mL	+/-	12.6927	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBJ7329)				+/-	90.3044	µg/mL	Unstressed
	Purity 99%					+/-	100.1743	µg/mL	Stressed
31	o-Xylene			2,004.6	µg/mL	+/-	12.7102	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH7231)				+/-	90.4289	µg/mL	Unstressed
	Purity 99%					+/-	100.3124	µg/mL	Stressed
32	Styrene			2,001.4	µg/mL	+/-	12.6899	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCC9766)				+/-	90.2845	µg/mL	Unstressed
	Purity 99%					+/-	100.1522	µg/mL	Stressed
33	Isopropylbenzene (cumene)			2,001.3	µg/mL	+/-	12.6894	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot P15E008)				+/-	90.2809	µg/mL	Unstressed
	Purity 99%					+/-	100.1482	µg/mL	Stressed
34	bromoform			2,004.6	µg/mL	+/-	12.7102	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBJ4835)				+/-	90.4292	µg/mL	Unstressed
	Purity 99%					+/-	100.3127	µg/mL	Stressed
35	1,1,2,2-Tetrachloroethane			2,005.5	µg/mL	+/-	12.7161	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)				+/-	90.4713	µg/mL	Unstressed
	Purity 99%					+/-	100.3594	µg/mL	Stressed
36	1,2,3-Trichloropropane			2,002.0	µg/mL	+/-	12.6942	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)				+/-	90.3152	µg/mL	Unstressed
	Purity 99%					+/-	100.1863	µg/mL	Stressed
37	n-Propylbenzene			2,001.2	µg/mL	+/-	12.6891	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot WXBC3346V)				+/-	90.2791	µg/mL	Unstressed
	Purity 99%					+/-	100.1462	µg/mL	Stressed
38	Bromobenzene			2,003.2	µg/mL	+/-	12.7016	µg/mL	Gravimetric
	CAS # 108-86-1	(Lot WXBC5147V)				+/-	90.3675	µg/mL	Unstressed
	Purity 99%					+/-	100.2443	µg/mL	Stressed
39	1,3,5-Trimethylbenzene			2,001.4	µg/mL	+/-	12.6904	µg/mL	Gravimetric
	CAS # 108-67-8	(Lot BCBS7648V)				+/-	90.2881	µg/mL	Unstressed
	Purity 99%					+/-	100.1562	µg/mL	Stressed

40	2-Chlorotoluene		2,003.5	µg/mL	+/-	12.7033	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKBW5554V)			+/-	90.3802	µg/mL	Unstressed
	Purity 99%				+/-	100.2583	µg/mL	Stressed
41	4-Chlorotoluene		2,002.8	µg/mL	+/-	12.6990	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKBL7753V)			+/-	90.3495	µg/mL	Unstressed
	Purity 99%				+/-	100.2243	µg/mL	Stressed
42	tert-Butylbenzene		2,002.2	µg/mL	+/-	12.6950	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot STBD6954V)			+/-	90.3206	µg/mL	Unstressed
	Purity 99%				+/-	100.1923	µg/mL	Stressed
43	1,2,4-Trimethylbenzene		2,001.6	µg/mL	+/-	12.6911	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot MKBJ6229V)			+/-	90.2932	µg/mL	Unstressed
	Purity 98%				+/-	100.1619	µg/mL	Stressed
44	sec-Butylbenzene		2,002.0	µg/mL	+/-	12.6939	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKBR9260V)			+/-	90.3134	µg/mL	Unstressed
	Purity 99%				+/-	100.1843	µg/mL	Stressed
45	p-Isopropyltoluene (p-Cymene)		2,000.4	µg/mL	+/-	12.6835	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKCB7536)			+/-	90.2394	µg/mL	Unstressed
	Purity 99%				+/-	100.1022	µg/mL	Stressed
46	1,3-Dichlorobenzene		2,008.3	µg/mL	+/-	12.7339	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBQ7100V)			+/-	90.5976	µg/mL	Unstressed
	Purity 99%				+/-	100.4995	µg/mL	Stressed
47	1,4-Dichlorobenzene		2,000.4	µg/mL	+/-	12.6836	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS4401V)			+/-	90.2397	µg/mL	Unstressed
	Purity 99%				+/-	100.1025	µg/mL	Stressed
48	n-Butylbenzene		2,000.3	µg/mL	+/-	12.6833	µg/mL	Gravimetric
	CAS # 104-51-8	(Lot 09804AE)			+/-	90.2376	µg/mL	Unstressed
	Purity 99%				+/-	100.1002	µg/mL	Stressed
49	1,2-Dichlorobenzene		2,005.0	µg/mL	+/-	12.7128	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBG3111V)			+/-	90.4472	µg/mL	Unstressed
	Purity 99%				+/-	100.3327	µg/mL	Stressed
50	1,2-Dibromo-3-chloropropane		2,000.1	µg/mL	+/-	12.6820	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot FBL01)			+/-	90.2286	µg/mL	Unstressed
	Purity 99%				+/-	100.0902	µg/mL	Stressed
51	1,2,4-Trichlorobenzene		2,002.0	µg/mL	+/-	12.6939	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBJ9215)			+/-	90.3134	µg/mL	Unstressed
	Purity 99%				+/-	100.1843	µg/mL	Stressed
52	Hexachlorobutadiene		2,004.0	µg/mL	+/-	12.7064	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	90.4018	µg/mL	Unstressed
	Purity 99%				+/-	100.2824	µg/mL	Stressed
53	Naphthalene		2,003.9	µg/mL	+/-	12.7061	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBZ8680V)			+/-	90.4000	µg/mL	Unstressed
	Purity 99%				+/-	100.2804	µg/mL	Stressed
54	1,2,3-Trichlorobenzene		2,003.9	µg/mL	+/-	12.7061	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)			+/-	90.4000	µg/mL	Unstressed
	Purity 99%				+/-	100.2804	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

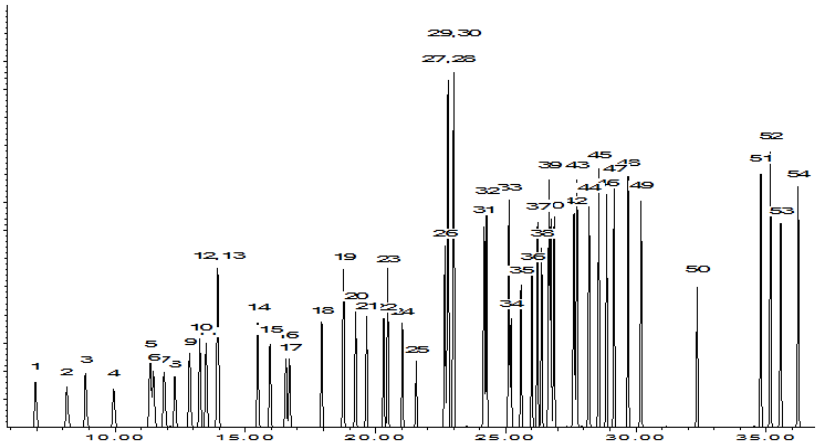
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Date Mixed: 12-Mar-2019 **Balance:** 1126342624

Date Passed: 20-Mar-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Analytical Standard Record

EPA Region 9 Laboratory

2004018

Description:	Passive indoor air Surrogate Stock	Expires:	07/21/20
Standard Type:	Calibration Standa	Prepared:	01/21/20
Solvent:	CS2	Prepared By:	Tatyana Dadiomov
Final Volume (mls):	2	Department:	Volatiles
Vials:	1	Last Edit:	01/21/20 09:38 by TD

Analyte	CAS Number	Concentration	Units
Toluene-d8	2037-26-5	10000	ug/mL

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1920044	Toluene-d8	05/15/19	** Vendor **	07/21/20	01/21/20 09:34 by TD	0.02

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2004019

Description:	Passive indoor air Internal Standard Stock	Expires:	07/21/20
Standard Type:	Internal Standard	Prepared:	01/21/20
Solvent:	CS2	Prepared By:	Tatyana Dadiomov
Final Volume (mls):	2	Department:	Volatiles
Vials:	1	Last Edit:	01/21/20 09:38 by TD

Analyte	CAS Number	Concentration	Units
2-Fluorotoluene	95-52-3	10000	ug/mL

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1639096	2-Fluorotoluene	09/22/16	** Vendor **	12/31/29	09/22/17 11:57 by TD	0.02

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2004021

Description:	Passive indoor air stock std 50	Expires:	07/21/20
Standard Type:	Analyte Spike	Prepared:	01/21/20
Solvent:	CS2	Prepared By:	Tatyana Dadiomov
Final Volume (mls):	20	Department:	Volatiles
Vials:	1	Last Edit:	01/21/20 10:10 by TD

Analyte	CAS Number	Concentration	Units
1,2-Dibromoethane (EDB)	106-93-4	50	ug/mL
1,1,1,2-Tetrachloroethane	630-20-6	50	ug/mL
Bromobenzene	108-86-1	50	ug/mL
Benzene	71-43-2	50	ug/mL
4-Chlorotoluene	106-43-4	50	ug/mL
2-Chlorotoluene	95-49-8	50	ug/mL
2,2-Dichloropropane	594-20-7	50	ug/mL
1,4-Dichlorobenzene	106-46-7	50	ug/mL
1,3-Dichloropropane	142-28-9	50	ug/mL
1,3-Dichlorobenzene	541-73-1	50	ug/mL
1,3,5-Trimethylbenzene	108-67-8	50	ug/mL
1,2-Dichloropropane	78-87-5	50	ug/mL
Bromodichloromethane	75-27-4	50	ug/mL
1,2-Dichlorobenzene	95-50-1	50	ug/mL
Bromoform	75-25-2	50	ug/mL
1,2-Dibromo-3-chloropropane	96-12-8	50	ug/mL
1,2,4-Trimethylbenzene	95-63-6	50	ug/mL
1,2,4-Trichlorobenzene	120-82-1	50	ug/mL
1,2,3-Trichloropropane	96-18-4	50	ug/mL
1,2,3-Trichlorobenzene	87-61-6	50	ug/mL
1,1-Dichloropropene	563-58-6	50	ug/mL
1,1-Dichloroethene	75-35-4	50	ug/mL
1,1-Dichloroethane	75-34-3	50	ug/mL
1,1,2-Trichloroethane	79-00-5	50	ug/mL
1,1,2,2-Tetrachloroethane	79-34-5	50	ug/mL
1,1,1-Trichloroethane	71-55-6	50	ug/mL
1,2-Dichloroethane	107-06-2	50	ug/mL
Isopropylbenzene	98-82-8	50	ug/mL
trans-1,3-Dichloropropene	10061-02-6	50	ug/mL
trans-1,2-Dichloroethene	156-60-5	50	ug/mL

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2004021

Toluene-d8	2037-26-5	50	ug/mL
Toluene	108-88-3	50	ug/mL
Tetrachloroethene	127-18-4	50	ug/mL
tert-Butylbenzene	98-06-6	50	ug/mL
Styrene	100-42-5	50	ug/mL
sec-Butylbenzene	135-98-8	50	ug/mL
Propylbenzene	103-65-1	50	ug/mL
p-Isopropyltoluene	99-87-6	50	ug/mL
o-Xylene	95-47-6	50	ug/mL
Bromochloromethane	74-97-5	50	ug/mL
m&p-Xylene	179601-23-1	100	ug/mL
Trichloroethene	79-01-6	50	ug/mL
Hexachlorobutadiene	87-68-3	50	ug/mL
Ethylbenzene	100-41-4	50	ug/mL
Dichloromethane	75-09-2	50	ug/mL
Dibromomethane	74-95-3	50	ug/mL
cis-1,3-Dichloropropene	10061-01-5	50	ug/mL
cis-1,2-Dichloroethene	156-59-2	50	ug/mL
Chloroform	67-66-3	50	ug/mL
Chlorodibromomethane	124-48-1	50	ug/mL
Chlorobenzene	108-90-7	50	ug/mL
Carbon tetrachloride	56-23-5	50	ug/mL
Butylbenzene	104-51-8	50	ug/mL
Naphthalene	91-20-3	50	ug/mL

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2004018	Passive indoor air Surrogate Stock	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 09:38 by TD	0.1
1937061	VOA 502.2 CAL 2000 MEGA MIX, St	09/10/19	** Vendor **	07/21/20	01/21/20 10:04 by TD	0.5

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2004023

Description:	Passive indoor air 10	Expires:	07/21/20
Standard Type:	Calibration Standa	Prepared:	01/21/20
Solvent:	CS2	Prepared By:	Tatyana Dadiomov
Final Volume (mls):	10	Department:	Volatiles
Vials:	1	Last Edit:	01/21/20 10:10 by TD

Analyte	CAS Number	Concentration	Units
1,2-Dibromoethane (EDB)	106-93-4	10	ug/mL
Bromobenzene	108-86-1	10	ug/mL
Benzene	71-43-2	10	ug/mL
4-Chlorotoluene	106-43-4	10	ug/mL
2-Fluorotoluene	95-52-3	5	ug/mL
2-Chlorotoluene	95-49-8	10	ug/mL
2,2-Dichloropropane	594-20-7	10	ug/mL
1,4-Dichlorobenzene	106-46-7	10	ug/mL
1,3-Dichloropropane	142-28-9	10	ug/mL
1,3-Dichlorobenzene	541-73-1	10	ug/mL
1,3,5-Trimethylbenzene	108-67-8	10	ug/mL
1,2-Dichloropropane	78-87-5	10	ug/mL
1,1,1,2-Tetrachloroethane	630-20-6	10	ug/mL
1,2-Dichlorobenzene	95-50-1	10	ug/mL
Bromoform	75-25-2	10	ug/mL
1,2-Dibromo-3-chloropropane	96-12-8	10	ug/mL
1,2,4-Trimethylbenzene	95-63-6	10	ug/mL
1,2,4-Trichlorobenzene	120-82-1	10	ug/mL
1,2,3-Trichloropropane	96-18-4	10	ug/mL
1,2,3-Trichlorobenzene	87-61-6	10	ug/mL
1,1-Dichloropropene	563-58-6	10	ug/mL
1,1-Dichloroethene	75-35-4	10	ug/mL
1,1-Dichloroethane	75-34-3	10	ug/mL
1,1,2-Trichloroethane	79-00-5	10	ug/mL
1,1,2,2-Tetrachloroethane	79-34-5	10	ug/mL
1,1,1-Trichloroethane	71-55-6	10	ug/mL
1,2-Dichloroethane	107-06-2	10	ug/mL
Isopropylbenzene	98-82-8	10	ug/mL
trans-1,3-Dichloropropene	10061-02-6	10	ug/mL
trans-1,2-Dichloroethene	156-60-5	10	ug/mL

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2004023

Toluene-d8	2037-26-5	10	ug/mL
Toluene	108-88-3	10	ug/mL
Tetrachloroethene	127-18-4	10	ug/mL
tert-Butylbenzene	98-06-6	10	ug/mL
Styrene	100-42-5	10	ug/mL
sec-Butylbenzene	135-98-8	10	ug/mL
Propylbenzene	103-65-1	10	ug/mL
p-Isopropyltoluene	99-87-6	10	ug/mL
o-Xylene	95-47-6	10	ug/mL
Bromochloromethane	74-97-5	10	ug/mL
m&p-Xylene	179601-23-1	20	ug/mL
Bromodichloromethane	75-27-4	10	ug/mL
Hexachlorobutadiene	87-68-3	10	ug/mL
Ethylbenzene	100-41-4	10	ug/mL
Dichloromethane	75-09-2	10	ug/mL
Dibromomethane	74-95-3	10	ug/mL
cis-1,3-Dichloropropene	10061-01-5	10	ug/mL
cis-1,2-Dichloroethene	156-59-2	10	ug/mL
Chloroform	67-66-3	10	ug/mL
Chlorodibromomethane	124-48-1	10	ug/mL
Chlorobenzene	108-90-7	10	ug/mL
Carbon tetrachloride	56-23-5	10	ug/mL
Butylbenzene	104-51-8	10	ug/mL
Trichloroethene	79-01-6	10	ug/mL
Naphthalene	91-20-3	10	ug/mL

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2004021	Passive indoor air stock std 50	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 10:10 by TD	2
2004019	Passive indoor air Internal Standard Sto	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 09:38 by TD	0.005

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2004024

Description:	Passive indoor air 5	Expires:	07/21/20
Standard Type:	Calibration Standa	Prepared:	01/21/20
Solvent:	CS2	Prepared By:	Tatyana Dadiomov
Final Volume (mls):	10	Department:	Volatiles
Vials:	1	Last Edit:	01/21/20 10:10 by TD

Analyte	CAS Number	Concentration	Units
1,2-Dibromoethane (EDB)	106-93-4	5	ug/mL
Bromobenzene	108-86-1	5	ug/mL
Benzene	71-43-2	5	ug/mL
4-Chlorotoluene	106-43-4	5	ug/mL
2-Fluorotoluene	95-52-3	5	ug/mL
2-Chlorotoluene	95-49-8	5	ug/mL
2,2-Dichloropropane	594-20-7	5	ug/mL
1,4-Dichlorobenzene	106-46-7	5	ug/mL
1,3-Dichloropropane	142-28-9	5	ug/mL
1,3-Dichlorobenzene	541-73-1	5	ug/mL
1,3,5-Trimethylbenzene	108-67-8	5	ug/mL
1,2-Dichloropropane	78-87-5	5	ug/mL
1,1,1,2-Tetrachloroethane	630-20-6	5	ug/mL
1,2-Dichlorobenzene	95-50-1	5	ug/mL
Bromoform	75-25-2	5	ug/mL
1,2-Dibromo-3-chloropropane	96-12-8	5	ug/mL
1,2,4-Trimethylbenzene	95-63-6	5	ug/mL
1,2,4-Trichlorobenzene	120-82-1	5	ug/mL
1,2,3-Trichloropropane	96-18-4	5	ug/mL
1,2,3-Trichlorobenzene	87-61-6	5	ug/mL
1,1-Dichloropropene	563-58-6	5	ug/mL
1,1-Dichloroethene	75-35-4	5	ug/mL
1,1-Dichloroethane	75-34-3	5	ug/mL
1,1,2-Trichloroethane	79-00-5	5	ug/mL
1,1,2,2-Tetrachloroethane	79-34-5	5	ug/mL
1,1,1-Trichloroethane	71-55-6	5	ug/mL
1,2-Dichloroethane	107-06-2	5	ug/mL
Isopropylbenzene	98-82-8	5	ug/mL
trans-1,3-Dichloropropene	10061-02-6	5	ug/mL
trans-1,2-Dichloroethene	156-60-5	5	ug/mL

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2004024

Toluene-d8	2037-26-5	5	ug/mL
Toluene	108-88-3	5	ug/mL
Tetrachloroethene	127-18-4	5	ug/mL
tert-Butylbenzene	98-06-6	5	ug/mL
Styrene	100-42-5	5	ug/mL
sec-Butylbenzene	135-98-8	5	ug/mL
Propylbenzene	103-65-1	5	ug/mL
p-Isopropyltoluene	99-87-6	5	ug/mL
o-Xylene	95-47-6	5	ug/mL
Bromochloromethane	74-97-5	5	ug/mL
m&p-Xylene	179601-23-1	10	ug/mL
Bromodichloromethane	75-27-4	5	ug/mL
Hexachlorobutadiene	87-68-3	5	ug/mL
Ethylbenzene	100-41-4	5	ug/mL
Dichloromethane	75-09-2	5	ug/mL
Dibromomethane	74-95-3	5	ug/mL
cis-1,3-Dichloropropene	10061-01-5	5	ug/mL
cis-1,2-Dichloroethene	156-59-2	5	ug/mL
Chloroform	67-66-3	5	ug/mL
Chlorodibromomethane	124-48-1	5	ug/mL
Chlorobenzene	108-90-7	5	ug/mL
Carbon tetrachloride	56-23-5	5	ug/mL
Butylbenzene	104-51-8	5	ug/mL
Trichloroethene	79-01-6	5	ug/mL
Naphthalene	91-20-3	5	ug/mL

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2004021	Passive indoor air stock std 50	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 10:10 by TD	1
2004019	Passive indoor air Internal Standard Sto	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 09:38 by TD	0.005

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2004025

Description:	Passive indoor air 1	Expires:	07/21/20
Standard Type:	Calibration Standa	Prepared:	01/21/20
Solvent:	CS2	Prepared By:	Tatyana Dadiomov
Final Volume (mls):	10	Department:	Volatiles
Vials:	1	Last Edit:	01/21/20 10:10 by TD

Analyte	CAS Number	Concentration	Units
1,2-Dibromoethane (EDB)	106-93-4	1	ug/mL
Bromobenzene	108-86-1	1	ug/mL
Benzene	71-43-2	1	ug/mL
4-Chlorotoluene	106-43-4	1	ug/mL
2-Fluorotoluene	95-52-3	5	ug/mL
2-Chlorotoluene	95-49-8	1	ug/mL
2,2-Dichloropropane	594-20-7	1	ug/mL
1,4-Dichlorobenzene	106-46-7	1	ug/mL
1,3-Dichloropropane	142-28-9	1	ug/mL
1,3-Dichlorobenzene	541-73-1	1	ug/mL
1,3,5-Trimethylbenzene	108-67-8	1	ug/mL
1,2-Dichloropropane	78-87-5	1	ug/mL
1,1,1,2-Tetrachloroethane	630-20-6	1	ug/mL
1,2-Dichlorobenzene	95-50-1	1	ug/mL
Bromoform	75-25-2	1	ug/mL
1,2-Dibromo-3-chloropropane	96-12-8	1	ug/mL
1,2,4-Trimethylbenzene	95-63-6	1	ug/mL
1,2,4-Trichlorobenzene	120-82-1	1	ug/mL
1,2,3-Trichloropropane	96-18-4	1	ug/mL
1,2,3-Trichlorobenzene	87-61-6	1	ug/mL
1,1-Dichloropropene	563-58-6	1	ug/mL
1,1-Dichloroethene	75-35-4	1	ug/mL
1,1-Dichloroethane	75-34-3	1	ug/mL
1,1,2-Trichloroethane	79-00-5	1	ug/mL
1,1,2,2-Tetrachloroethane	79-34-5	1	ug/mL
1,1,1-Trichloroethane	71-55-6	1	ug/mL
1,2-Dichloroethane	107-06-2	1	ug/mL
Isopropylbenzene	98-82-8	1	ug/mL
trans-1,3-Dichloropropene	10061-02-6	1	ug/mL
trans-1,2-Dichloroethene	156-60-5	1	ug/mL

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2004025

Toluene-d8	2037-26-5	1	ug/mL
Toluene	108-88-3	1	ug/mL
Tetrachloroethene	127-18-4	1	ug/mL
tert-Butylbenzene	98-06-6	1	ug/mL
Styrene	100-42-5	1	ug/mL
sec-Butylbenzene	135-98-8	1	ug/mL
Propylbenzene	103-65-1	1	ug/mL
p-Isopropyltoluene	99-87-6	1	ug/mL
o-Xylene	95-47-6	1	ug/mL
Bromochloromethane	74-97-5	1	ug/mL
m&p-Xylene	179601-23-1	2	ug/mL
Bromodichloromethane	75-27-4	1	ug/mL
Hexachlorobutadiene	87-68-3	1	ug/mL
Ethylbenzene	100-41-4	1	ug/mL
Dichloromethane	75-09-2	1	ug/mL
Dibromomethane	74-95-3	1	ug/mL
cis-1,3-Dichloropropene	10061-01-5	1	ug/mL
cis-1,2-Dichloroethene	156-59-2	1	ug/mL
Chloroform	67-66-3	1	ug/mL
Chlorodibromomethane	124-48-1	1	ug/mL
Chlorobenzene	108-90-7	1	ug/mL
Carbon tetrachloride	56-23-5	1	ug/mL
Butylbenzene	104-51-8	1	ug/mL
Trichloroethene	79-01-6	1	ug/mL
Naphthalene	91-20-3	1	ug/mL

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2004021	Passive indoor air stock std 50	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 10:10 by TD	0.2
2004019	Passive indoor air Internal Standard Sto	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 09:38 by TD	0.005

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2004026

Description:	Passive indoor air 0.15	Expires:	07/21/20
Standard Type:	Calibration Standa	Prepared:	01/21/20
Solvent:	CS2	Prepared By:	Tatyana Dadiomov
Final Volume (mls):	10	Department:	Volatiles
Vials:	1	Last Edit:	01/21/20 10:10 by TD

Analyte	CAS Number	Concentration	Units
1,2-Dibromoethane (EDB)	106-93-4	0.15	ug/mL
Bromobenzene	108-86-1	0.15	ug/mL
Benzene	71-43-2	0.15	ug/mL
4-Chlorotoluene	106-43-4	0.15	ug/mL
2-Fluorotoluene	95-52-3	5	ug/mL
2-Chlorotoluene	95-49-8	0.15	ug/mL
2,2-Dichloropropane	594-20-7	0.15	ug/mL
1,4-Dichlorobenzene	106-46-7	0.15	ug/mL
1,3-Dichloropropane	142-28-9	0.15	ug/mL
1,3-Dichlorobenzene	541-73-1	0.15	ug/mL
1,3,5-Trimethylbenzene	108-67-8	0.15	ug/mL
1,2-Dichloropropane	78-87-5	0.15	ug/mL
1,1,1,2-Tetrachloroethane	630-20-6	0.15	ug/mL
1,2-Dichlorobenzene	95-50-1	0.15	ug/mL
Bromoform	75-25-2	0.15	ug/mL
1,2-Dibromo-3-chloropropane	96-12-8	0.15	ug/mL
1,2,4-Trimethylbenzene	95-63-6	0.15	ug/mL
1,2,4-Trichlorobenzene	120-82-1	0.15	ug/mL
1,2,3-Trichloropropane	96-18-4	0.15	ug/mL
1,2,3-Trichlorobenzene	87-61-6	0.15	ug/mL
1,1-Dichloropropene	563-58-6	0.15	ug/mL
1,1-Dichloroethene	75-35-4	0.15	ug/mL
1,1-Dichloroethane	75-34-3	0.15	ug/mL
1,1,2-Trichloroethane	79-00-5	0.15	ug/mL
1,1,2,2-Tetrachloroethane	79-34-5	0.15	ug/mL
1,1,1-Trichloroethane	71-55-6	0.15	ug/mL
1,2-Dichloroethane	107-06-2	0.15	ug/mL
Isopropylbenzene	98-82-8	0.15	ug/mL
trans-1,3-Dichloropropene	10061-02-6	0.15	ug/mL
trans-1,2-Dichloroethene	156-60-5	0.15	ug/mL

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2004026

Toluene-d8	2037-26-5	0.15	ug/mL
Toluene	108-88-3	0.15	ug/mL
Tetrachloroethene	127-18-4	0.15	ug/mL
tert-Butylbenzene	98-06-6	0.15	ug/mL
Styrene	100-42-5	0.15	ug/mL
sec-Butylbenzene	135-98-8	0.15	ug/mL
Propylbenzene	103-65-1	0.15	ug/mL
p-Isopropyltoluene	99-87-6	0.15	ug/mL
o-Xylene	95-47-6	0.15	ug/mL
Bromochloromethane	74-97-5	0.15	ug/mL
m&p-Xylene	179601-23-1	0.3	ug/mL
Bromodichloromethane	75-27-4	0.15	ug/mL
Hexachlorobutadiene	87-68-3	0.15	ug/mL
Ethylbenzene	100-41-4	0.15	ug/mL
Dichloromethane	75-09-2	0.15	ug/mL
Dibromomethane	74-95-3	0.15	ug/mL
cis-1,3-Dichloropropene	10061-01-5	0.15	ug/mL
cis-1,2-Dichloroethene	156-59-2	0.15	ug/mL
Chloroform	67-66-3	0.15	ug/mL
Chlorodibromomethane	124-48-1	0.15	ug/mL
Chlorobenzene	108-90-7	0.15	ug/mL
Carbon tetrachloride	56-23-5	0.15	ug/mL
Butylbenzene	104-51-8	0.15	ug/mL
Trichloroethene	79-01-6	0.15	ug/mL
Naphthalene	91-20-3	0.15	ug/mL

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2004021	Passive indoor air stock std 50	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 10:10 by TD	0.03
2004019	Passive indoor air Internal Standard Sto	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 09:38 by TD	0.005

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2004027

Description:	Passive indoor air 0.05	Expires:	07/21/20
Standard Type:	Calibration Standa	Prepared:	01/21/20
Solvent:	CS2	Prepared By:	Tatyana Dadiomov
Final Volume (mls):	10	Department:	Volatiles
Vials:	1	Last Edit:	01/21/20 10:10 by TD

Analyte	CAS Number	Concentration	Units
1,2-Dibromoethane (EDB)	106-93-4	0.05	ug/mL
Bromobenzene	108-86-1	0.05	ug/mL
Benzene	71-43-2	0.05	ug/mL
4-Chlorotoluene	106-43-4	0.05	ug/mL
2-Fluorotoluene	95-52-3	5	ug/mL
2-Chlorotoluene	95-49-8	0.05	ug/mL
2,2-Dichloropropane	594-20-7	0.05	ug/mL
1,4-Dichlorobenzene	106-46-7	0.05	ug/mL
1,3-Dichloropropane	142-28-9	0.05	ug/mL
1,3-Dichlorobenzene	541-73-1	0.05	ug/mL
1,3,5-Trimethylbenzene	108-67-8	0.05	ug/mL
1,2-Dichloropropane	78-87-5	0.05	ug/mL
1,1,1,2-Tetrachloroethane	630-20-6	0.05	ug/mL
1,2-Dichlorobenzene	95-50-1	0.05	ug/mL
Bromoform	75-25-2	0.05	ug/mL
1,2-Dibromo-3-chloropropane	96-12-8	0.05	ug/mL
1,2,4-Trimethylbenzene	95-63-6	0.05	ug/mL
1,2,4-Trichlorobenzene	120-82-1	0.05	ug/mL
1,2,3-Trichloropropane	96-18-4	0.05	ug/mL
1,2,3-Trichlorobenzene	87-61-6	0.05	ug/mL
1,1-Dichloropropene	563-58-6	0.05	ug/mL
1,1-Dichloroethene	75-35-4	0.05	ug/mL
1,1-Dichloroethane	75-34-3	0.05	ug/mL
1,1,2-Trichloroethane	79-00-5	0.05	ug/mL
1,1,2,2-Tetrachloroethane	79-34-5	0.05	ug/mL
1,1,1-Trichloroethane	71-55-6	0.05	ug/mL
1,2-Dichloroethane	107-06-2	0.05	ug/mL
Isopropylbenzene	98-82-8	0.05	ug/mL
trans-1,3-Dichloropropene	10061-02-6	0.05	ug/mL
trans-1,2-Dichloroethene	156-60-5	0.05	ug/mL

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2004027

Toluene-d8	2037-26-5	0.05	ug/mL
Toluene	108-88-3	0.05	ug/mL
Tetrachloroethene	127-18-4	0.05	ug/mL
tert-Butylbenzene	98-06-6	0.05	ug/mL
Styrene	100-42-5	0.05	ug/mL
sec-Butylbenzene	135-98-8	0.05	ug/mL
Propylbenzene	103-65-1	0.05	ug/mL
p-Isopropyltoluene	99-87-6	0.05	ug/mL
o-Xylene	95-47-6	0.05	ug/mL
Bromochloromethane	74-97-5	0.05	ug/mL
m&p-Xylene	179601-23-1	0.1	ug/mL
Bromodichloromethane	75-27-4	0.05	ug/mL
Hexachlorobutadiene	87-68-3	0.05	ug/mL
Ethylbenzene	100-41-4	0.05	ug/mL
Dichloromethane	75-09-2	0.05	ug/mL
Dibromomethane	74-95-3	0.05	ug/mL
cis-1,3-Dichloropropene	10061-01-5	0.05	ug/mL
cis-1,2-Dichloroethene	156-59-2	0.05	ug/mL
Chloroform	67-66-3	0.05	ug/mL
Chlorodibromomethane	124-48-1	0.05	ug/mL
Chlorobenzene	108-90-7	0.05	ug/mL
Carbon tetrachloride	56-23-5	0.05	ug/mL
Butylbenzene	104-51-8	0.05	ug/mL
Trichloroethene	79-01-6	0.05	ug/mL
Naphthalene	91-20-3	0.05	ug/mL

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2004021	Passive indoor air stock std 50	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 10:10 by TD	0.01
2004019	Passive indoor air Internal Standard Sto	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 09:38 by TD	0.005

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2016028

Description:	passive air WORKING BFB 50 mg/L	**Expires:**	09/15/20
Standard Type:	Other Solution	**Prepared:**	04/15/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	5	**Department:**	Volatiles
Vials:	1	**Last Edit:**	04/17/20 12:22 by TD
Vendor:	*Prepared*	**Lot Numbe**	1748145

Analyte	CAS Number	Concentration (ppm)
4-Bromofluorobenzene	460-00-4	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1740054	VOA BFB tuning mix, stock STD.	10/03/17	** Vendor **	11/30/22	10/03/17 14:37 by YNB	0.05

Analytical Standard Record

EPA Region 9 Laboratory

2017002

Description:	Passive indoor air 25	**Expires:**	07/21/20
Standard Type:	Other Solution	**Prepared:**	04/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	04/22/20 10:13 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	25
Bromobenzene	108-86-1	25
Benzene	71-43-2	25
4-Chlorotoluene	106-43-4	25
2-Fluorotoluene	95-52-3	5
2-Chlorotoluene	95-49-8	25
2,2-Dichloropropane	594-20-7	25
1,4-Dichlorobenzene	106-46-7	25
1,3-Dichloropropane	142-28-9	25
1,3-Dichlorobenzene	541-73-1	25
1,3,5-Trimethylbenzene	108-67-8	25
1,2-Dichloropropane	78-87-5	25
1,1,1,2-Tetrachloroethane	630-20-6	25
1,2-Dichlorobenzene	95-50-1	25
Bromoform	75-25-2	25
1,2-Dibromo-3-chloropropane	96-12-8	25
1,2,4-Trimethylbenzene	95-63-6	25
1,2,4-Trichlorobenzene	120-82-1	25
1,2,3-Trichloropropane	96-18-4	25
1,2,3-Trichlorobenzene	87-61-6	25
1,1-Dichloropropene	563-58-6	25
1,1-Dichloroethene	75-35-4	25
1,1-Dichloroethane	75-34-3	25
1,1,2-Trichloroethane	79-00-5	25
1,1,2,2-Tetrachloroethane	79-34-5	25
1,1,1-Trichloroethane	71-55-6	25
1,2-Dichloroethane	107-06-2	25
Isopropylbenzene	98-82-8	25
trans-1,3-Dichloropropene	10061-02-6	25
trans-1,2-Dichloroethene	156-60-5	25

Analytical Standard Record

EPA Region 9 Laboratory

2017002

Toluene-d8	2037-26-5	25
Toluene	108-88-3	25
Tetrachloroethene	127-18-4	25
tert-Butylbenzene	98-06-6	25
Styrene	100-42-5	25
sec-Butylbenzene	135-98-8	25
Propylbenzene	103-65-1	25
p-Isopropyltoluene	99-87-6	25
o-Xylene	95-47-6	25
Bromochloromethane	74-97-5	25
m&p-Xylene	179601-23-1	50
Bromodichloromethane	75-27-4	25
Hexachlorobutadiene	87-68-3	25
Ethylbenzene	100-41-4	25
Dichloromethane	75-09-2	25
Dibromomethane	74-95-3	25
cis-1,3-Dichloropropene	10061-01-5	25
cis-1,2-Dichloroethene	156-59-2	25
Chloroform	67-66-3	25
Chlorodibromomethane	124-48-1	25
Chlorobenzene	108-90-7	25
Carbon tetrachloride	56-23-5	25
Butylbenzene	104-51-8	25
Trichloroethene	79-01-6	25
Naphthalene	91-20-3	25

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2004021	Passive indoor air stock std 50	01/21/20	Tatyana Dadiomov	07/21/20	01/29/20 06:58 by TD	5
2004019	Passive indoor air Internal Standard Sto	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 09:38 by TD	0.005

Analytical Standard Record

EPA Region 9 Laboratory

2020011

Description:	Passive indoor air MRL Spike	**Expires:**	11/13/20
Standard Type:	Analyte Spike	**Prepared:**	05/13/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	2	**Department:**	Volatiles
Vials:	1	**Last Edit:**	05/13/20 10:46 by TD
Vendor:	*Prepared*	**Lot Numbe**	1748145

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	20
Bromobenzene	108-86-1	20
Benzene	71-43-2	20
4-Chlorotoluene	106-43-4	20
2-Chlorotoluene	95-49-8	20
2,2-Dichloropropane	594-20-7	20
1,4-Dichlorobenzene	106-46-7	20
1,3-Dichloropropane	142-28-9	20
1,3-Dichlorobenzene	541-73-1	20
1,3,5-Trimethylbenzene	108-67-8	20
1,2-Dichloropropane	78-87-5	20
1,1,1,2-Tetrachloroethane	630-20-6	20
1,2-Dichlorobenzene	95-50-1	20
Bromoform	75-25-2	20
1,2-Dibromo-3-chloropropane	96-12-8	20
1,2,4-Trimethylbenzene	95-63-6	20
1,2,4-Trichlorobenzene	120-82-1	20
1,2,3-Trichloropropane	96-18-4	20
1,2,3-Trichlorobenzene	87-61-6	20
1,1-Dichloropropene	563-58-6	20
1,1-Dichloroethene	75-35-4	20
1,1-Dichloroethane	75-34-3	20
1,1,2-Trichloroethane	79-00-5	20
1,1,2,2-Tetrachloroethane	79-34-5	20
1,1,1-Trichloroethane	71-55-6	20
1,2-Dichloroethane	107-06-2	20
Hexachlorobutadiene	87-68-3	20
trans-1,3-Dichloropropene	10061-02-6	20
trans-1,2-Dichloroethene	156-60-5	20
Toluene	108-88-3	20

Analytical Standard Record

EPA Region 9 Laboratory

2020011

Tetrachloroethene	127-18-4	20
tert-Butylbenzene	98-06-6	20
Styrene	100-42-5	20
sec-Butylbenzene	135-98-8	20
Propylbenzene	103-65-1	20
p-Isopropyltoluene	99-87-6	20
o-Xylene	95-47-6	20
Naphthalene	91-20-3	20
Bromochloromethane	74-97-5	20
Isopropylbenzene	98-82-8	20
Bromodichloromethane	75-27-4	20
Ethylbenzene	100-41-4	20
Dichloromethane	75-09-2	20
Dibromomethane	74-95-3	20
cis-1,3-Dichloropropene	10061-01-5	20
cis-1,2-Dichloroethene	156-59-2	20
Chloroform	67-66-3	20
Chlorodibromomethane	124-48-1	20
Chlorobenzene	108-90-7	20
Carbon tetrachloride	56-23-5	20
Butylbenzene	104-51-8	20
Trichloroethene	79-01-6	20
m&p-Xylene	179601-23-1	40

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1937062	VOA 502.2 CAL 2000 MEGA MIX, St	09/10/19	** Vendor **	11/13/20	05/13/20 10:46 by TD	0.02

Analytical Standard Record

EPA Region 9 Laboratory

2030064

Description:	Passive indoor air Surrogate Stock	**Expires:**	01/22/21
Standard Type:	Other Solution	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	2	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 08:52 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
Toluene-d8	2037-26-5	10000

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1920045	Toluene-d8	05/15/19	** Vendor **	01/22/21	07/22/20 08:49 by TD	0.02

Analytical Standard Record

EPA Region 9 Laboratory

2030065

Description:	Passive indoor air Internal Standard Stock	**Expires:**	01/22/21
Standard Type:	Other Solution	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	2	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 08:52 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
2-Fluorotoluene	95-52-3	10000

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1639096	2-Fluorotoluene	09/22/16	** Vendor **	12/31/29	09/22/17 11:57 by TD	0.02

Analytical Standard Record

EPA Region 9 Laboratory

2030066

Description:	Passive indoor air stock std 50	**Expires:**	01/22/21
Standard Type:	Analyte Spike	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	20	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 08:55 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	50
1,1,1,2-Tetrachloroethane	630-20-6	50
Bromobenzene	108-86-1	50
Benzene	71-43-2	50
4-Chlorotoluene	106-43-4	50
2-Chlorotoluene	95-49-8	50
2,2-Dichloropropane	594-20-7	50
1,4-Dichlorobenzene	106-46-7	50
1,3-Dichloropropane	142-28-9	50
1,3-Dichlorobenzene	541-73-1	50
1,3,5-Trimethylbenzene	108-67-8	50
1,2-Dichloropropane	78-87-5	50
Bromodichloromethane	75-27-4	50
1,2-Dichlorobenzene	95-50-1	50
Bromoform	75-25-2	50
1,2-Dibromo-3-chloropropane	96-12-8	50
1,2,4-Trimethylbenzene	95-63-6	50
1,2,4-Trichlorobenzene	120-82-1	50
1,2,3-Trichloropropane	96-18-4	50
1,2,3-Trichlorobenzene	87-61-6	50
1,1-Dichloropropene	563-58-6	50
1,1-Dichloroethene	75-35-4	50
1,1-Dichloroethane	75-34-3	50
1,1,2-Trichloroethane	79-00-5	50
1,1,2,2-Tetrachloroethane	79-34-5	50
1,1,1-Trichloroethane	71-55-6	50
1,2-Dichloroethane	107-06-2	50
Isopropylbenzene	98-82-8	50
trans-1,3-Dichloropropene	10061-02-6	50
trans-1,2-Dichloroethene	156-60-5	50

Analytical Standard Record

EPA Region 9 Laboratory

2030066

Toluene-d8	2037-26-5	50
Toluene	108-88-3	50
Tetrachloroethene	127-18-4	50
tert-Butylbenzene	98-06-6	50
Styrene	100-42-5	50
sec-Butylbenzene	135-98-8	50
Propylbenzene	103-65-1	50
p-Isopropyltoluene	99-87-6	50
o-Xylene	95-47-6	50
Bromochloromethane	74-97-5	50
m&p-Xylene	179601-23-1	100
Trichloroethene	79-01-6	50
Hexachlorobutadiene	87-68-3	50
Ethylbenzene	100-41-4	50
Dichloromethane	75-09-2	50
Dibromomethane	74-95-3	50
cis-1,3-Dichloropropene	10061-01-5	50
cis-1,2-Dichloroethene	156-59-2	50
Chloroform	67-66-3	50
Chlorodibromomethane	124-48-1	50
Chlorobenzene	108-90-7	50
Carbon tetrachloride	56-23-5	50
Butylbenzene	104-51-8	50
Naphthalene	91-20-3	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1937063	VOA 502.2 CAL 2000 MEGA MIX, St	09/10/19	** Vendor **	01/22/21	07/22/20 08:48 by TD	0.5
2030064	Passive indoor air Surrogate Stock	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:52 by TD	0.1

Analytical Standard Record

EPA Region 9 Laboratory

2030067

Description:	Passive air Surrogate/I.S. Working solutio	**Expires:**	01/22/21
Standard Type:	Surrogate Spike	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	25	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 08:56 by TD
Vendor:	Restek	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
Toluene-d8	2037-26-5	200
2-Fluorotoluene	95-52-3	200

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2030064	Passive indoor air Surrogate Stock	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:52 by TD	0.5
2030065	Passive indoor air Internal Standard Sto	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:52 by TD	0.5

Analytical Standard Record

EPA Region 9 Laboratory

2030068

Description:	Passive indoor air 25	**Expires:**	01/22/21
Standard Type:	Other Solution	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 08:58 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	25
Bromobenzene	108-86-1	25
Benzene	71-43-2	25
4-Chlorotoluene	106-43-4	25
2-Fluorotoluene	95-52-3	5
2-Chlorotoluene	95-49-8	25
2,2-Dichloropropane	594-20-7	25
1,4-Dichlorobenzene	106-46-7	25
1,3-Dichloropropane	142-28-9	25
1,3-Dichlorobenzene	541-73-1	25
1,3,5-Trimethylbenzene	108-67-8	25
1,2-Dichloropropane	78-87-5	25
1,1,1,2-Tetrachloroethane	630-20-6	25
1,2-Dichlorobenzene	95-50-1	25
Bromoform	75-25-2	25
1,2-Dibromo-3-chloropropane	96-12-8	25
1,2,4-Trimethylbenzene	95-63-6	25
1,2,4-Trichlorobenzene	120-82-1	25
1,2,3-Trichloropropane	96-18-4	25
1,2,3-Trichlorobenzene	87-61-6	25
1,1-Dichloropropene	563-58-6	25
1,1-Dichloroethene	75-35-4	25
1,1-Dichloroethane	75-34-3	25
1,1,2-Trichloroethane	79-00-5	25
1,1,2,2-Tetrachloroethane	79-34-5	25
1,1,1-Trichloroethane	71-55-6	25
1,2-Dichloroethane	107-06-2	25
Isopropylbenzene	98-82-8	25
trans-1,3-Dichloropropene	10061-02-6	25
trans-1,2-Dichloroethene	156-60-5	25

Analytical Standard Record

EPA Region 9 Laboratory

2030068

Toluene-d8	2037-26-5	25
Toluene	108-88-3	25
Tetrachloroethene	127-18-4	25
tert-Butylbenzene	98-06-6	25
Styrene	100-42-5	25
sec-Butylbenzene	135-98-8	25
Propylbenzene	103-65-1	25
p-Isopropyltoluene	99-87-6	25
o-Xylene	95-47-6	25
Bromochloromethane	74-97-5	25
m&p-Xylene	179601-23-1	50
Bromodichloromethane	75-27-4	25
Hexachlorobutadiene	87-68-3	25
Ethylbenzene	100-41-4	25
Dichloromethane	75-09-2	25
Dibromomethane	74-95-3	25
cis-1,3-Dichloropropene	10061-01-5	25
cis-1,2-Dichloroethene	156-59-2	25
Chloroform	67-66-3	25
Chlorodibromomethane	124-48-1	25
Chlorobenzene	108-90-7	25
Carbon tetrachloride	56-23-5	25
Butylbenzene	104-51-8	25
Trichloroethene	79-01-6	25
Naphthalene	91-20-3	25

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2030066	Passive indoor air stock std 50	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:55 by TD	5
2030065	Passive indoor air Internal Standard Sto	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:52 by TD	0.005

Analytical Standard Record

EPA Region 9 Laboratory

2030069

Description:	Passive indoor air 10	**Expires:**	01/22/21
Standard Type:	Other Solution	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 08:59 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	10
Bromobenzene	108-86-1	10
Benzene	71-43-2	10
4-Chlorotoluene	106-43-4	10
2-Fluorotoluene	95-52-3	5
2-Chlorotoluene	95-49-8	10
2,2-Dichloropropane	594-20-7	10
1,4-Dichlorobenzene	106-46-7	10
1,3-Dichloropropane	142-28-9	10
1,3-Dichlorobenzene	541-73-1	10
1,3,5-Trimethylbenzene	108-67-8	10
1,2-Dichloropropane	78-87-5	10
1,1,1,2-Tetrachloroethane	630-20-6	10
1,2-Dichlorobenzene	95-50-1	10
Bromoform	75-25-2	10
1,2-Dibromo-3-chloropropane	96-12-8	10
1,2,4-Trimethylbenzene	95-63-6	10
1,2,4-Trichlorobenzene	120-82-1	10
1,2,3-Trichloropropane	96-18-4	10
1,2,3-Trichlorobenzene	87-61-6	10
1,1-Dichloropropene	563-58-6	10
1,1-Dichloroethene	75-35-4	10
1,1-Dichloroethane	75-34-3	10
1,1,2-Trichloroethane	79-00-5	10
1,1,2,2-Tetrachloroethane	79-34-5	10
1,1,1-Trichloroethane	71-55-6	10
1,2-Dichloroethane	107-06-2	10
Isopropylbenzene	98-82-8	10
trans-1,3-Dichloropropene	10061-02-6	10
trans-1,2-Dichloroethene	156-60-5	10

Analytical Standard Record

EPA Region 9 Laboratory

2030069

Toluene-d8	2037-26-5	10
Toluene	108-88-3	10
Tetrachloroethene	127-18-4	10
tert-Butylbenzene	98-06-6	10
Styrene	100-42-5	10
sec-Butylbenzene	135-98-8	10
Propylbenzene	103-65-1	10
p-Isopropyltoluene	99-87-6	10
o-Xylene	95-47-6	10
Bromochloromethane	74-97-5	10
m&p-Xylene	179601-23-1	20
Bromodichloromethane	75-27-4	10
Hexachlorobutadiene	87-68-3	10
Ethylbenzene	100-41-4	10
Dichloromethane	75-09-2	10
Dibromomethane	74-95-3	10
cis-1,3-Dichloropropene	10061-01-5	10
cis-1,2-Dichloroethene	156-59-2	10
Chloroform	67-66-3	10
Chlorodibromomethane	124-48-1	10
Chlorobenzene	108-90-7	10
Carbon tetrachloride	56-23-5	10
Butylbenzene	104-51-8	10
Trichloroethene	79-01-6	10
Naphthalene	91-20-3	10

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2030066	Passive indoor air stock std 50	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:55 by TD	2
2030065	Passive indoor air Internal Standard Sto	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:52 by TD	0.005

Analytical Standard Record

EPA Region 9 Laboratory

2030070

Description:	Passive indoor air 5	**Expires:**	01/22/21
Standard Type:	Other Solution	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 08:59 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	5
Bromobenzene	108-86-1	5
Benzene	71-43-2	5
4-Chlorotoluene	106-43-4	5
2-Fluorotoluene	95-52-3	5
2-Chlorotoluene	95-49-8	5
2,2-Dichloropropane	594-20-7	5
1,4-Dichlorobenzene	106-46-7	5
1,3-Dichloropropane	142-28-9	5
1,3-Dichlorobenzene	541-73-1	5
1,3,5-Trimethylbenzene	108-67-8	5
1,2-Dichloropropane	78-87-5	5
1,1,1,2-Tetrachloroethane	630-20-6	5
1,2-Dichlorobenzene	95-50-1	5
Bromoform	75-25-2	5
1,2-Dibromo-3-chloropropane	96-12-8	5
1,2,4-Trimethylbenzene	95-63-6	5
1,2,4-Trichlorobenzene	120-82-1	5
1,2,3-Trichloropropane	96-18-4	5
1,2,3-Trichlorobenzene	87-61-6	5
1,1-Dichloropropene	563-58-6	5
1,1-Dichloroethene	75-35-4	5
1,1-Dichloroethane	75-34-3	5
1,1,2-Trichloroethane	79-00-5	5
1,1,2,2-Tetrachloroethane	79-34-5	5
1,1,1-Trichloroethane	71-55-6	5
1,2-Dichloroethane	107-06-2	5
Isopropylbenzene	98-82-8	5
trans-1,3-Dichloropropene	10061-02-6	5
trans-1,2-Dichloroethene	156-60-5	5

Analytical Standard Record

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2030070

Toluene-d8	2037-26-5	5
Toluene	108-88-3	5
Tetrachloroethene	127-18-4	5
tert-Butylbenzene	98-06-6	5
Styrene	100-42-5	5
sec-Butylbenzene	135-98-8	5
Propylbenzene	103-65-1	5
p-Isopropyltoluene	99-87-6	5
o-Xylene	95-47-6	5
Bromochloromethane	74-97-5	5
m&p-Xylene	179601-23-1	10
Bromodichloromethane	75-27-4	5
Hexachlorobutadiene	87-68-3	5
Ethylbenzene	100-41-4	5
Dichloromethane	75-09-2	5
Dibromomethane	74-95-3	5
cis-1,3-Dichloropropene	10061-01-5	5
cis-1,2-Dichloroethene	156-59-2	5
Chloroform	67-66-3	5
Chlorodibromomethane	124-48-1	5
Chlorobenzene	108-90-7	5
Carbon tetrachloride	56-23-5	5
Butylbenzene	104-51-8	5
Trichloroethene	79-01-6	5
Naphthalene	91-20-3	5

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2030066	Passive indoor air stock std 50	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:55 by TD	1
2030065	Passive indoor air Internal Standard Sto	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:52 by TD	0.005

Analytical Standard Record

EPA Region 9 Laboratory

2030071

Description:	Passive indoor air 1	**Expires:**	01/22/21
Standard Type:	Other Solution	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 09:00 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	1
Bromobenzene	108-86-1	1
Benzene	71-43-2	1
4-Chlorotoluene	106-43-4	1
2-Fluorotoluene	95-52-3	5
2-Chlorotoluene	95-49-8	1
2,2-Dichloropropane	594-20-7	1
1,4-Dichlorobenzene	106-46-7	1
1,3-Dichloropropane	142-28-9	1
1,3-Dichlorobenzene	541-73-1	1
1,3,5-Trimethylbenzene	108-67-8	1
1,2-Dichloropropane	78-87-5	1
1,1,1,2-Tetrachloroethane	630-20-6	1
1,2-Dichlorobenzene	95-50-1	1
Bromoform	75-25-2	1
1,2-Dibromo-3-chloropropane	96-12-8	1
1,2,4-Trimethylbenzene	95-63-6	1
1,2,4-Trichlorobenzene	120-82-1	1
1,2,3-Trichloropropane	96-18-4	1
1,2,3-Trichlorobenzene	87-61-6	1
1,1-Dichloropropene	563-58-6	1
1,1-Dichloroethene	75-35-4	1
1,1-Dichloroethane	75-34-3	1
1,1,2-Trichloroethane	79-00-5	1
1,1,2,2-Tetrachloroethane	79-34-5	1
1,1,1-Trichloroethane	71-55-6	1
1,2-Dichloroethane	107-06-2	1
Isopropylbenzene	98-82-8	1
trans-1,3-Dichloropropene	10061-02-6	1
trans-1,2-Dichloroethene	156-60-5	1

Analytical Standard Record

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2030071

Toluene-d8	2037-26-5	1
Toluene	108-88-3	1
Tetrachloroethene	127-18-4	1
tert-Butylbenzene	98-06-6	1
Styrene	100-42-5	1
sec-Butylbenzene	135-98-8	1
Propylbenzene	103-65-1	1
p-Isopropyltoluene	99-87-6	1
o-Xylene	95-47-6	1
Bromochloromethane	74-97-5	1
m&p-Xylene	179601-23-1	2
Bromodichloromethane	75-27-4	1
Hexachlorobutadiene	87-68-3	1
Ethylbenzene	100-41-4	1
Dichloromethane	75-09-2	1
Dibromomethane	74-95-3	1
cis-1,3-Dichloropropene	10061-01-5	1
cis-1,2-Dichloroethene	156-59-2	1
Chloroform	67-66-3	1
Chlorodibromomethane	124-48-1	1
Chlorobenzene	108-90-7	1
Carbon tetrachloride	56-23-5	1
Butylbenzene	104-51-8	1
Trichloroethene	79-01-6	1
Naphthalene	91-20-3	1

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2030066	Passive indoor air stock std 50	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:55 by TD	0.2
2030065	Passive indoor air Internal Standard Sto	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:52 by TD	0.005

Analytical Standard Record

EPA Region 9 Laboratory

2030072

Description:	Passive indoor air 0.15	**Expires:**	01/22/21
Standard Type:	Other Solution	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 09:01 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	0.15
Bromobenzene	108-86-1	0.15
Benzene	71-43-2	0.15
4-Chlorotoluene	106-43-4	0.15
2-Fluorotoluene	95-52-3	5
2-Chlorotoluene	95-49-8	0.15
2,2-Dichloropropane	594-20-7	0.15
1,4-Dichlorobenzene	106-46-7	0.15
1,3-Dichloropropane	142-28-9	0.15
1,3-Dichlorobenzene	541-73-1	0.15
1,3,5-Trimethylbenzene	108-67-8	0.15
1,2-Dichloropropane	78-87-5	0.15
1,1,1,2-Tetrachloroethane	630-20-6	0.15
1,2-Dichlorobenzene	95-50-1	0.15
Bromoform	75-25-2	0.15
1,2-Dibromo-3-chloropropane	96-12-8	0.15
1,2,4-Trimethylbenzene	95-63-6	0.15
1,2,4-Trichlorobenzene	120-82-1	0.15
1,2,3-Trichloropropane	96-18-4	0.15
1,2,3-Trichlorobenzene	87-61-6	0.15
1,1-Dichloropropene	563-58-6	0.15
1,1-Dichloroethene	75-35-4	0.15
1,1-Dichloroethane	75-34-3	0.15
1,1,2-Trichloroethane	79-00-5	0.15
1,1,2,2-Tetrachloroethane	79-34-5	0.15
1,1,1-Trichloroethane	71-55-6	0.15
1,2-Dichloroethane	107-06-2	0.15
Isopropylbenzene	98-82-8	0.15
trans-1,3-Dichloropropene	10061-02-6	0.15
trans-1,2-Dichloroethene	156-60-5	0.15

Analytical Standard Record

EPA Region 9 Laboratory

2030072

Toluene-d8	2037-26-5	0.15
Toluene	108-88-3	0.15
Tetrachloroethene	127-18-4	0.15
tert-Butylbenzene	98-06-6	0.15
Styrene	100-42-5	0.15
sec-Butylbenzene	135-98-8	0.15
Propylbenzene	103-65-1	0.15
p-Isopropyltoluene	99-87-6	0.15
o-Xylene	95-47-6	0.15
Bromochloromethane	74-97-5	0.15
m&p-Xylene	179601-23-1	0.3
Bromodichloromethane	75-27-4	0.15
Hexachlorobutadiene	87-68-3	0.15
Ethylbenzene	100-41-4	0.15
Dichloromethane	75-09-2	0.15
Dibromomethane	74-95-3	0.15
cis-1,3-Dichloropropene	10061-01-5	0.15
cis-1,2-Dichloroethene	156-59-2	0.15
Chloroform	67-66-3	0.15
Chlorodibromomethane	124-48-1	0.15
Chlorobenzene	108-90-7	0.15
Carbon tetrachloride	56-23-5	0.15
Butylbenzene	104-51-8	0.15
Trichloroethene	79-01-6	0.15
Naphthalene	91-20-3	0.15

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2030066	Passive indoor air stock std 50	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:55 by TD	0.03
2030065	Passive indoor air Internal Standard Sto	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:52 by TD	0.005

Analytical Standard Record

EPA Region 9 Laboratory

2030073

Description:	Passive indoor air 0.05	**Expires:**	01/22/21
Standard Type:	Other Solution	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 09:01 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	0.05
Bromobenzene	108-86-1	0.05
Benzene	71-43-2	0.05
4-Chlorotoluene	106-43-4	0.05
2-Fluorotoluene	95-52-3	5
2-Chlorotoluene	95-49-8	0.05
2,2-Dichloropropane	594-20-7	0.05
1,4-Dichlorobenzene	106-46-7	0.05
1,3-Dichloropropane	142-28-9	0.05
1,3-Dichlorobenzene	541-73-1	0.05
1,3,5-Trimethylbenzene	108-67-8	0.05
1,2-Dichloropropane	78-87-5	0.05
1,1,1,2-Tetrachloroethane	630-20-6	0.05
1,2-Dichlorobenzene	95-50-1	0.05
Bromoform	75-25-2	0.05
1,2-Dibromo-3-chloropropane	96-12-8	0.05
1,2,4-Trimethylbenzene	95-63-6	0.05
1,2,4-Trichlorobenzene	120-82-1	0.05
1,2,3-Trichloropropane	96-18-4	0.05
1,2,3-Trichlorobenzene	87-61-6	0.05
1,1-Dichloropropene	563-58-6	0.05
1,1-Dichloroethene	75-35-4	0.05
1,1-Dichloroethane	75-34-3	0.05
1,1,2-Trichloroethane	79-00-5	0.05
1,1,2,2-Tetrachloroethane	79-34-5	0.05
1,1,1-Trichloroethane	71-55-6	0.05
1,2-Dichloroethane	107-06-2	0.05
Isopropylbenzene	98-82-8	0.05
trans-1,3-Dichloropropene	10061-02-6	0.05
trans-1,2-Dichloroethene	156-60-5	0.05

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2030073

Toluene-d8	2037-26-5	0.05
Toluene	108-88-3	0.05
Tetrachloroethene	127-18-4	0.05
tert-Butylbenzene	98-06-6	0.05
Styrene	100-42-5	0.05
sec-Butylbenzene	135-98-8	0.05
Propylbenzene	103-65-1	0.05
p-Isopropyltoluene	99-87-6	0.05
o-Xylene	95-47-6	0.05
Bromochloromethane	74-97-5	0.05
m&p-Xylene	179601-23-1	0.1
Bromodichloromethane	75-27-4	0.05
Hexachlorobutadiene	87-68-3	0.05
Ethylbenzene	100-41-4	0.05
Dichloromethane	75-09-2	0.05
Dibromomethane	74-95-3	0.05
cis-1,3-Dichloropropene	10061-01-5	0.05
cis-1,2-Dichloroethene	156-59-2	0.05
Chloroform	67-66-3	0.05
Chlorodibromomethane	124-48-1	0.05
Chlorobenzene	108-90-7	0.05
Carbon tetrachloride	56-23-5	0.05
Butylbenzene	104-51-8	0.05
Trichloroethene	79-01-6	0.05
Naphthalene	91-20-3	0.05

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2030066	Passive indoor air stock std 50	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:55 by TD	0.01
2030065	Passive indoor air Internal Standard Sto	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:52 by TD	0.005

Analytical Standard Record

EPA Region 9 Laboratory

2030074

Description:	Passive indoor air SCV	**Expires:**	09/30/20
Standard Type:	Other Solution	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 09:03 by TD
Vendor:	*Prepared*	**Lot Numbe**	1811012

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	5
1,1,1,2-Tetrachloroethane	630-20-6	5
Benzene	71-43-2	5
4-Chlorotoluene	106-43-4	5
2-Fluorotoluene	95-52-3	5
2-Chlorotoluene	95-49-8	5
2,2-Dichloropropane	594-20-7	5
1,4-Dichlorobenzene	106-46-7	5
1,3-Dichloropropane	142-28-9	5
1,3-Dichlorobenzene	541-73-1	5
1,3,5-Trimethylbenzene	108-67-8	5
1,2-Dichloropropane	78-87-5	5
Bromochloromethane	74-97-5	5
1,2-Dichlorobenzene	95-50-1	5
Bromodichloromethane	75-27-4	5
1,2-Dibromo-3-chloropropane	96-12-8	5
1,2,4-Trimethylbenzene	95-63-6	5
1,2,4-Trichlorobenzene	120-82-1	5
1,2,3-Trimethylbenzene	526-73-8	5
1,2,3-Trichloropropane	96-18-4	5
1,2,3-Trichlorobenzene	87-61-6	5
1,1-Dichloropropene	563-58-6	5
1,1-Dichloroethene	75-35-4	5
1,1-Dichloroethane	75-34-3	5
1,1,2-Trichloroethane	79-00-5	5
1,1,2,2-Tetrachloroethane	79-34-5	5
1,1,1-Trichloroethane	71-55-6	5
1,2-Dichloroethane	107-06-2	5
Isopropylbenzene	98-82-8	5
trans-1,3-Dichloropropene	10061-02-6	5

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2030074

trans-1,2-Dichloroethene	156-60-5	5
Toluene-d8	2037-26-5	5
Toluene	108-88-3	5
Tetrachloroethene	127-18-4	5
tert-Butylbenzene	98-06-6	5
Styrene	100-42-5	5
sec-Butylbenzene	135-98-8	5
Propylbenzene	103-65-1	5
p-Isopropyltoluene	99-87-6	5
o-Xylene	95-47-6	5
Bromobenzene	108-86-1	5
m&p-Xylene	179601-23-1	10
Trichloroethene	79-01-6	5
Hexachlorobutadiene	87-68-3	5
Ethylbenzene	100-41-4	5
Dichloromethane	75-09-2	5
Dibromomethane	74-95-3	5
cis-1,3-Dichloropropene	10061-01-5	5
cis-1,2-Dichloroethene	156-59-2	5
Chloroform	67-66-3	5
Chlorodibromomethane	124-48-1	5
Chlorobenzene	108-90-7	5
Carbon tetrachloride	56-23-5	5
Butylbenzene	104-51-8	5
Bromoform	75-25-2	5
Naphthalene	91-20-3	5

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1843069	VOA 502/524 VOC Mix, Stock	10/24/18	** Vendor **	09/30/20	07/22/20 08:50 by TD	0.025
2030067	Passive air Surrogate/I.S. Working solu	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:56 by TD	0.25

Analytical Standard Record

EPA Region 9 Laboratory

2039024

Description:	VOA BFB tuning mix, stock STD.	**Expires:**	10/31/25
Standard Type:	Other Solution	**Prepared:**	09/24/20
Solvent:	Solvent Lot #	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	09/24/20 11:26 by EM
Vendor:	Restek	**Lot Numbe**	A0162498

RESTEK Cat No. 30003, LOT # A0162498 Bar code #AU012127

Analyte	CAS Number	Concentration (ppm)
4-Bromofluorobenzene	460-00-4	5000

CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30003 **Lot No.:** A0162498

Description : VOA Tuning Compound Mix

VOA Tuning Compound Mix 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2025 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1-Bromo-4-fluorobenzene (BFB)	5,012.0 µg/mL	+/- 29.4132 µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KO)		+/- 281.0463 µg/mL	Unstressed
	Purity 99%		+/- 287.6211 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

AU012127/2039024
AU012128/2039025
AU012129/2039026
AU012130/2039027
AU012131/2039028

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

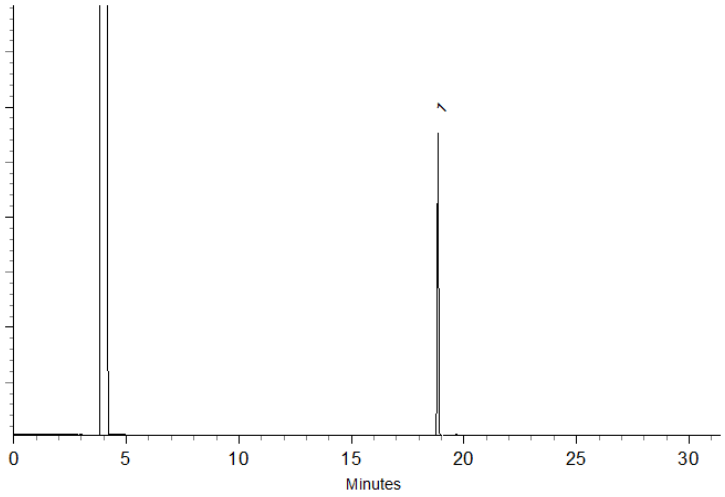
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Kylie Struble - Operations Technician I

Date Mixed: 13-Jul-2020 **Balance:** B707717271

Justine Albertson - Operations Tech-ARM QC

Date Passed: 14-Jul-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Analytical Standard Record

EPA Region 9 Laboratory

2040028

Description:	passive air WORKING BFB 50 mg/L	**Expires:**	03/30/21
Standard Type:	Other Solution	**Prepared:**	09/30/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	5	**Department:**	Volatiles
Vials:	1	**Last Edit:**	10/05/20 08:43 by TD
Vendor:	*Prepared*	**Lot Numbe**	1748145

Analyte	CAS Number	Concentration (ppm)
4-Bromofluorobenzene	460-00-4	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2039024	VOA BFB tuning mix, stock STD.	09/24/20	** Vendor **	10/31/25	09/24/20 11:26 by EM	0.05