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United States Environmental Protection Agency
Region 9 Laboratory

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

Date: **2/22/2021**

Subject: **Analytical Testing Results - Project R21S04**
WorkOrder **2102006**

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 FY2021 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 Bob Hopeman, 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: 2102006**
Project Number: R21S04	**75 Hawthorne Street**	**Reported:** 02/22/21 12:53
Project: MEW OU1 FY2021 Vapor Intrusion Investigation	**San Francisco CA, 94105**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
G6-014-2ft-2d-R	2102006-01	Radiello 130	02/05/21 15:17	02/08/21 12:56
F6-031-3ft-2d-R	2102006-02	Radiello 130	02/05/21 15:35	02/08/21 12:56
F6-010-2.5ft-2d-R	2102006-03	Radiello 130	02/05/21 16:28	02/08/21 12:56
F6-006-3ft-2d-R	2102006-04	Radiello 130	02/05/21 16:38	02/08/21 12:56
Waverly-MH1-2ft-2d-R	2102006-05	Radiello 130	02/05/21 16:00	02/08/21 12:56
Waverly-MH1-2.5ft-2d-R	2102006-06	Radiello 130	02/05/21 16:00	02/08/21 12:56
Waverly-MH2-2.5ft-2d-R	2102006-07	Radiello 130	02/05/21 16:06	02/08/21 12:56
Waverly-MH3-2ft-2d-R	2102006-08	Radiello 130	02/05/21 16:16	02/08/21 12:56
235 Fairchild-SC-4ft-2d	2102006-09	Radiello 130	02/05/21 16:22	02/08/21 12:56
Classics-MH1-3ft-2d-R	2102006-10	Radiello 130	02/05/21 16:45	02/08/21 12:56
Classics-MH2-2.5ft-2d-R	2102006-11	Radiello 130	02/05/21 16:50	02/08/21 12:56

Work Order 2102006

VOA Passive:Samples 2102006-01, -03, - 04, - 05 and 10 had comments on the COC saying the diffuser was wet or moisture but no moisture was observed in the samples exept sample 2102006- 10. While transferring the CS2 into the autosampler vials no distinct density layers were noted in the pasture pipets.

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Project Number: R21S04
Project: MEW OU1 FY2021 Vapor Intrusion Investigation

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

WorkOrder: 2102006
Reported: 02/22/21 12:53

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 2102006-01									**Radiello 130 - Sampled: 02/05/21 15:17**
Sample ID: G6-014-2ft-2d-R									
						Volatile Organic Compounds Collected on Passive Air Sampling Devices			
1,1-Dichloroethene	RE1	2.5		0.60	ug/m³ Air	B21B045	02/10/21	02/10/21	Radiello D1
trans-1,2-Dichloroethene	RE1	19		0.73	"	"	"	"	Radiello D1
1,1-Dichloroethane	RE1	1.7		0.72	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene	RE1	36		0.73	"	"	"	"	Radiello D1
Chloroform	RE1	33		0.60	"	"	"	"	Radiello D1
Trichloroethene	RE1	220		0.66	"	"	"	"	Radiello D1
Tetrachloroethene	RE1	6.5		0.77	"	"	"	"	Radiello D1
Surrogate: Toluene-d8	*RE1*		86 %	*86-118%*		"	"	"	
Lab ID: 2102006-02									**Radiello 130 - Sampled: 02/05/21 15:35**
Sample ID: F6-031-3ft-2d-R									
						Volatile Organic Compounds Collected on Passive Air Sampling Devices			
1,1-Dichloroethene	RE1	7.7		0.46	ug/m³ Air	B21B045	02/10/21	02/10/21	Radiello D1
trans-1,2-Dichloroethene	RE1	9.5		0.57	"	"	"	"	Radiello D1
1,1-Dichloroethane	RE1	8.0		0.56	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene	RE1	83		0.57	"	"	"	"	Radiello D1
Chloroform	RE1	17		0.47	"	"	"	"	Radiello D1
Trichloroethene	RE3	400		2.6	"	"	"	02/16/21	Radiello D1
Tetrachloroethene	RE1	41		0.60	"	"	"	02/10/21	Radiello D1
Surrogate: Toluene-d8	*RE1*		86 %	*86-118%*		"	"	"	
Lab ID: 2102006-03									**Radiello 130 - Sampled: 02/05/21 16:28**
Sample ID: F6-010-2.5ft-2d-R									
						Volatile Organic Compounds Collected on Passive Air Sampling Devices			
1,1-Dichloroethene		12		0.46	ug/m³ Air	B21B045	02/10/21	02/10/21	Radiello D1
trans-1,2-Dichloroethene		16		0.57	"	"	"	"	Radiello D1
1,1-Dichloroethane		11		0.56	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		260		0.57	"	"	"	"	Radiello D1
Chloroform		71		0.47	"	"	"	"	Radiello D1
Trichloroethene	RE2	1,300		5.1	"	"	"	02/16/21	Radiello D1
Tetrachloroethene		42		0.60	"	"	"	02/10/21	Radiello D1
Surrogate: Toluene-d8			86 %	*86-118%*		"	"	"	
Lab ID: 2102006-04									**Radiello 130 - Sampled: 02/05/21 16:38**
Sample ID: F6-006-3ft-2d-R									
						Volatile Organic Compounds Collected on Passive Air Sampling Devices			
1,1-Dichloroethene		12	J, Q7	0.46	ug/m³ Air	B21B045	02/10/21	02/10/21	Radiello D1
trans-1,2-Dichloroethene		15	J, Q7	0.57	"	"	"	"	Radiello D1
1,1-Dichloroethane		12	J, Q7	0.56	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		240	J, Q7	0.57	"	"	"	"	Radiello D1
Chloroform		54	J, Q7	0.47	"	"	"	"	Radiello D1
Trichloroethene	RE3	1,000		5.1	"	"	"	02/16/21	Radiello D1
Tetrachloroethene		31	J, Q7	0.60	"	"	"	02/10/21	Radiello D1
Surrogate: Toluene-d8			**85 %**	*86-118%*		"	"	"	

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Project Number: R21S04
Project: MEW OU1 FY2021 Vapor Intrusion Investigation

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

WorkOrder: 2102006
Reported: 02/22/21 12:53

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 2102006-05									**Radiello 130 - Sampled: 02/05/21 16:00**
Sample ID: Waverly-MH1-2ft-2d-R									
						Volatile Organic Compounds Collected on Passive Air Sampling Devices			
1,1-Dichloroethene	RE1	ND	U	0.47	ug/m³ Air	B21B045	02/10/21	02/10/21	Radiello D1
trans-1,2-Dichloroethene	RE1	ND	U	0.57	"	"	"	"	Radiello D1
1,1-Dichloroethane	RE1	ND	U	0.56	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene	RE1	ND	U	0.57	"	"	"	"	Radiello D1
Chloroform	RE1	5.8		0.47	"	"	"	"	Radiello D1
Trichloroethene	RE1	15		0.51	"	"	"	"	Radiello D1
Tetrachloroethene	RE1	ND	U	0.60	"	"	"	"	Radiello D1
Surrogate: Toluene-d8	*RE1*		86 %	*86-118%*		"	"	"	
Lab ID: 2102006-06									**Radiello 130 - Sampled: 02/05/21 16:00**
Sample ID: Waverly-MH1-2.5ft-2d-R									
						Volatile Organic Compounds Collected on Passive Air Sampling Devices			
1,1-Dichloroethene	RE1	ND	U	0.47	ug/m³ Air	B21B045	02/10/21	02/15/21	Radiello D1
trans-1,2-Dichloroethene	RE1	ND	U	0.57	"	"	"	"	Radiello D1
1,1-Dichloroethane	RE1	ND	U	0.56	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene	RE1	ND	U	0.57	"	"	"	"	Radiello D1
Chloroform	RE1	6.3		0.47	"	"	"	"	Radiello D1
Trichloroethene	RE1	17		0.51	"	"	"	"	Radiello D1
Tetrachloroethene	RE1	0.31	C1, J	0.60	"	"	"	"	Radiello D1
Surrogate: Toluene-d8	*RE1*		97 %	*86-118%*		"	"	"	
Lab ID: 2102006-07									**Radiello 130 - Sampled: 02/05/21 16:06**
Sample ID: Waverly-MH2-2.5ft-2d-R									
						Volatile Organic Compounds Collected on Passive Air Sampling Devices			
1,1-Dichloroethene		ND	U	0.46	ug/m³ Air	B21B045	02/10/21	02/10/21	Radiello D1
trans-1,2-Dichloroethene		ND	U	0.57	"	"	"	"	Radiello D1
1,1-Dichloroethane		ND	U	0.56	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		ND	U	0.57	"	"	"	"	Radiello D1
Chloroform		17		0.47	"	"	"	"	Radiello D1
Trichloroethene		13		0.51	"	"	"	"	Radiello D1
Tetrachloroethene		ND	U	0.60	"	"	"	"	Radiello D1
Surrogate: Toluene-d8			86 %	*86-118%*		"	"	"	
Lab ID: 2102006-08									**Radiello 130 - Sampled: 02/05/21 16:16**
Sample ID: Waverly-MH3-2ft-2d-R									
						Volatile Organic Compounds Collected on Passive Air Sampling Devices			
1,1-Dichloroethene	RE1	ND	U	0.46	ug/m³ Air	B21B045	02/10/21	02/15/21	Radiello D1
trans-1,2-Dichloroethene	RE1	ND	U	0.57	"	"	"	"	Radiello D1
1,1-Dichloroethane	RE1	ND	U	0.56	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene	RE1	ND	U	0.57	"	"	"	"	Radiello D1
Chloroform	RE1	14		0.47	"	"	"	"	Radiello D1
Trichloroethene	RE1	ND	U	0.51	"	"	"	"	Radiello D1

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Project: MEW OU1 FY2021 Vapor Intrusion Investigation

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

WorkOrder: 2102006
Reported: 02/22/21 12:53

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 2102006-08									**Radiello 130 - Sampled: 02/05/21 16:16**
Sample ID: Waverly-MH3-2ft-2d-R									
					Volatile Organic Compounds Collected on Passive Air Sampling Devices				
Tetrachloroethene	RE1	ND	U	0.60	ug/m³ Air	B21B045	02/10/21	02/15/21	Radiello D1
Surrogate: Toluene-d8	*RE1*		98 %	*86-118%*		"	"	"	
Lab ID: 2102006-09									**Radiello 130 - Sampled: 02/05/21 16:22**
Sample ID: 235 Fairchild-SC-4ft-2d									
					Volatile Organic Compounds Collected on Passive Air Sampling Devices				
1,1-Dichloroethene		2.3		0.46	ug/m³ Air	B21B045	02/10/21	02/10/21	Radiello D1
trans-1,2-Dichloroethene		2.5		0.57	"	"	"	"	Radiello D1
1,1-Dichloroethane		2.3		0.56	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		36		0.57	"	"	"	"	Radiello D1
Chloroform		22		0.47	"	"	"	"	Radiello D1
Trichloroethene		110		0.51	"	"	"	"	Radiello D1
Tetrachloroethene		5.0		0.60	"	"	"	"	Radiello D1
Surrogate: Toluene-d8			86 %	*86-118%*		"	"	"	
Lab ID: 2102006-10									**Radiello 130 - Sampled: 02/05/21 16:45**
Sample ID: Classics-MH1-3ft-2d-R									
					Volatile Organic Compounds Collected on Passive Air Sampling Devices				
1,1-Dichloroethene	RE1	20		0.46	ug/m³ Air	B21B045	02/10/21	02/15/21	Radiello D1
trans-1,2-Dichloroethene	RE1	27		0.57	"	"	"	"	Radiello D1
1,1-Dichloroethane	RE1	19		0.56	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene	RE3	410		5.7	"	"	"	02/16/21	Radiello D1
Chloroform	RE1	87		0.47	"	"	"	02/15/21	Radiello D1
Trichloroethene	RE3	1,600		5.1	"	"	"	02/16/21	Radiello D1
Tetrachloroethene	RE1	50		0.60	"	"	"	02/15/21	Radiello D1
Surrogate: Toluene-d8	*RE1*		97 %	*86-118%*		"	"	"	
Lab ID: 2102006-11									**Radiello 130 - Sampled: 02/05/21 16:50**
Sample ID: Classics-MH2-2.5ft-2d-R									
					Volatile Organic Compounds Collected on Passive Air Sampling Devices				
1,1-Dichloroethene	RE1	17		0.46	ug/m³ Air	B21B045	02/10/21	02/15/21	Radiello D1
trans-1,2-Dichloroethene	RE1	23		0.57	"	"	"	"	Radiello D1
1,1-Dichloroethane	RE1	18		0.56	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene	RE3	360		5.7	"	"	"	02/16/21	Radiello D1
Chloroform	RE1	83		0.47	"	"	"	02/15/21	Radiello D1
Trichloroethene	RE3	1,300		5.1	"	"	"	02/16/21	Radiello D1
Tetrachloroethene	RE1	40		0.60	"	"	"	02/15/21	Radiello D1
Surrogate: Toluene-d8	*RE1*		97 %	*86-118%*		"	"	"	

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Project Number: R21S04	**75 Hawthorne Street**	**Reported:** 02/22/21 12:53
Project: MEW OU1 FY2021 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 B21B045 - Passive Air Sampler										
Blank (B21B045-BLK1)				Prepared & Analyzed: 02/10/21						
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	*855*		ug/m³ Air	*992*		*86*	*86-118*			
LCS (B21B045-BS1)				Prepared & Analyzed: 02/10/21						
1,1-Dichloroethene	8.98	0.13	ug/m³ Air	13.1		69	22-143			
trans-1,2-Dichloroethene	11.5	0.16	ug/m³ Air	16.0		72	35-133			
1,1-Dichloroethane	11.9	0.16	ug/m³ Air	15.7		76	43-140			
cis-1,2-Dichloroethene	12.4	0.16	ug/m³ Air	16.0		77	49-134			
Chloroform	10.9	0.13	ug/m³ Air	13.2		82	56-132			
Trichloroethene	12.2	0.14	ug/m³ Air	14.4		85	69-124			
Tetrachloroethene	15.0	0.17	ug/m³ Air	16.8		89	69-124			
Surrogate: Toluene-d8	*862*		ug/m³ Air	*992*		*87*	*86-118*			
LCS Dup (B21B045-BSD1)				Prepared & Analyzed: 02/10/21						
1,1-Dichloroethene	8.59	0.13	ug/m³ Air	13.1		66	22-143	4	62	
trans-1,2-Dichloroethene	11.3	0.16	ug/m³ Air	16.0		71	35-133	1	53	
1,1-Dichloroethane	11.8	0.16	ug/m³ Air	15.7		75	43-140	0.5	44	
cis-1,2-Dichloroethene	12.3	0.16	ug/m³ Air	16.0		77	49-134	0.8	39	
Chloroform	10.8	0.13	ug/m³ Air	13.2		82	56-132	0.2	41	
Trichloroethene	12.1	0.14	ug/m³ Air	14.4		84	69-124	0.7	20	
Tetrachloroethene	15.0	0.17	ug/m³ Air	16.8		89	69-124	0.2	20	
Surrogate: Toluene-d8	*858*		ug/m³ Air	*992*		*86*	*86-118*			

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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 S21B029 - B21B045										
Instrument Blank (S21B029-IBL1)				Prepared & Analyzed: 02/10/21						
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
Chlorobenzene	ND	0.0	ug/L							U
Surrogate: Toluene-d8	*0.00*		ug/L				*86-118*			*U*
Batch S21B036 - B21B045										
Instrument Blank (S21B036-IBL1)				Prepared & Analyzed: 02/15/21						
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*
Batch S21B047 - B21B045										
Instrument Blank (S21B047-IBL1)				Prepared & Analyzed: 02/16/21						
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 Number: R21S04	**75 Hawthorne Street**	**Reported:** 02/22/21 12:53
Project: MEW OU1 FY2021 Vapor Intrusion Investigation	**San Francisco CA, 94105**	

Qualifiers and Comments

Q7	Surrogate spike recoveries for this sample were outside control limits.
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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VOA Passive:Samples 2102006-01, -03, - 04, - 05 and 10 had comments on the COC saying the diffuser was wet or moisture but no moisture was observed in the samples exept sample 2102006- 10. While transferring the CS2 into the autosampler vials no distinct density layers were noted in the pasture pipets. TD 02/15/21

WORK ORDER

Printed: 2/9/2021 6:42:06AM

2102006

EPA Region 9 Laboratory

Client: **California Site Cleanup Section 3**
Project: **MEW OU1 FY2021 Vapor Intrusion Investigation**
Project Number: **R21S04**

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
Cooler 1	Cooler	22	Yes	Yes	Yes	No	No	

Date Due:	02/22/21 17:00 (14 day TAT)	SDG:	21039A
Received By:	Junn Masongsong	Date Received:	02/08/21 12:56
Logged In By:	Junn Masongsong	Date Logged In:	02/08/21 13:46

Analysis	Hold Time Expires	Comments	
2102006-01 G6-014-2ft-2d-R [Radiello 130] Sampled 02/05/21 15:17 (GMT-08:00) Pacific Time (US &			**Y887Q**
VOCs, Passive Samplers	08/04/21	7 day prelim requested	
2102006-02 F6-031-3ft-2d-R [Radiello 130] Sampled 02/05/21 15:35 (GMT-08:00) Pacific Time (US &			**Y888Q**
VOCs, Passive Samplers	08/04/21	7 day prelim requested	
2102006-03 F6-010-2.5ft-2d-R [Radiello 130] Sampled 02/05/21 16:28 (GMT-08:00) Pacific Time (US &			**Y894Q**
VOCs, Passive Samplers	08/04/21	7 day prelim requested	
2102006-04 F6-006-3ft-2d-R [Radiello 130] Sampled 02/05/21 16:38 (GMT-08:00) Pacific Time (US &			**Y895Q**
VOCs, Passive Samplers	08/04/21	7 day prelim requested	
2102006-05 Waverly-MH1-2ft-2d-R [Radiello 130] Sampled 02/05/21 16:00 (GMT-08:00) Pacific Time (US &			**Y889Q**
VOCs, Passive Samplers	08/04/21	7 day prelim requested	
2102006-06 Waverly-MH1-2.5ft-2d-R [Radiello 130] Sampled 02/05/21 16:00 (GMT-08:00) Pacific Time (US &			**Y890Q**
VOCs, Passive Samplers	08/04/21	7 day prelim requested	

WORK ORDER

Printed: 2/9/2021 6:42:06AM

2102006

EPA Region 9 Laboratory

Client: **California Site Cleanup Section 3** **Project Number:** **R21S04**
Project: **MEW OU1 FY2021 Vapor Intrusion Investigation**

Analysis	Hold Time Expires	Comments

Analysis	Expires	Comments

2102006-07 Waverly-MH2-2.5ft-2d-R [Radiello 130] Sampled 02/05/21 16:06 **Y891Q**
(GMT-08:00) Pacific Time (US &

VOCs, Passive Samplers	08/04/21	7 day prelim requested

2102006-08 Waverly-MH3-2ft-2d-R [Radiello 130] Sampled 02/05/21 16:16 **Y892Q**
(GMT-08:00) Pacific Time (US &

VOCs, Passive Samplers	08/04/21	7 day prelim requested

2102006-09 235 Fairchild-SC-4ft-2d [Radiello 130] Sampled 02/05/21 16:22 **Y893Q**
(GMT-08:00) Pacific Time (US &

VOCs, Passive Samplers	08/04/21	7 day prelim requested

2102006-10 Classics-MH1-3ft-2d-R [Radiello 130] Sampled 02/05/21 16:45 **Y896Q**
(GMT-08:00) Pacific Time (US &

VOCs, Passive Samplers	08/04/21	7 day prelim requested

2102006-11 Classics-MH2-2.5ft-2d-R [Radiello 130] Sampled 02/05/21 16:50 **Y897Q**
(GMT-08:00) Pacific Time (US &

VOCs, Passive Samplers	08/04/21	7 day prelim requested

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: R21S04
MEW (M6) OU1

FY21 MEW OU1 Vapor Intrusion and Sewer Pathway

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

Laboratory:
EPA R9 Richmond

Sampler: Alana Lee

Analysis: TCE, cis & trans 1,2-DCE, PCE, 1,1-DCE, 1,1-DCA, chloroform
(Preliminary TCE 7 d TAT requested)

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/m^3	
02/03/2021 02/05/2021	13:27 15:17	Sewer Gas	X		G6-014-2ft-2d-R	Y887Q	1	64	64	50-500	Moisture
02/03/2021 02/05/2021	14:40 15:35	Sewer Gas	X		F6-031-3ft-2d-R	Y888Q	1	64	64	100-800	
02/03/2021 02/05/2021	15:26 16:28	Sewer Gas	X		F6-010-2.5ft-2d-R	Y894Q	1	64	64	500-1500	diffuser wet
02/03/2021 02/05/2021	15:33 16:38	Sewer Gas	X		F6-006-3ft-2d-R	Y895Q	1	64	64	500-1000	diffuser wet
02/03/2021 02/05/2021	15:07 16:00	Sewer Gas	X		Waverly-MH1-2ft-2d-R	Y889Q	1	64	64	<50	Moisture
02/03/2021 02/05/2021	15:07 16:00	Sewer Gas	X		Waverly-MH1-2.5ft-2d-R	Y890Q	1	64	64	<50	Plastic B1 holder
02/03/2021 02/05/2021	15:10 16:06	Sewer Gas	X		Waverly-MH2-2.5ft-2d-R	Y891Q	1	64	64	<50	
02/03/2021 02/05/2021	15:15 16:16	Sewer Gas	X		Waverly-MH3-2ft-2d-R	Y892Q	1	64	64	<50	
02/03/2021 02/05/2021	15:21 16:22	Sewer Gas	X		235 Fairchild-SC-4ft-2d	Y893Q	1	64	64	<80	
02/03/2021 02/05/2021	15:38 16:45	Sewer Gas	X		Classics-MH1-3ft-2d-R	Y896Q	1	64	64	300-1000	diffuser wet
02/03/2021 02/05/2021	15:40 16:50	Sewer Gas	X		Classics-MH2-2.5ft-2d-R	Y897Q	1	64	64	100-800	

Relinquished by: *(Signature)* Alana Lee — Date/Time 2/8/2021 1256

Received by: *(Signature)* Date/Time

Relinquished by: *(Signature)* Date/Time

Received for Laboratory by: *(Signature)* R9 LAB — Date/Time 2/8/21 1250

Temp

Seals Intact? (Y/N)

Conditions / Remarks

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Cooler/Box/Env 1 of 1

U.S. Environmental Protection Agency
Region 9 Richmond Laboratory

1337 South 46th Street
Richmond, CA 94804

Sample Receipt Checklist

Note in WO memo any items outside acceptable limits.

Project No: 221504 **Work Order No(s):** 2102006 **Date:** 2/8/21 **by** JDM

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

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

TEMPERATURE 22 **°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):

7-day prelim results requested

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

Exposure Time in Minutes

	Sample ID Number	Start Date (XX/XX/XXXX)	Start Time	End Date	End Time	Minutes	Start temp C	End temp C	Avg temp K	Plate #
1	G6-014-2ft-2d-R	02/03/21	13:27	02/05/21	15:17	2990	17.78	17.78	290.93	Y887Q
2	F6-031-3ft-2d-R	02/03/21	14:40	02/05/21	15:35	2935	17.78	17.78	290.93	Y888Q
3	F6-010-2.5ft-2d-R	02/03/21	15:26	02/05/21	16:28	2942	17.78	17.78	290.93	Y894Q
4	F6-006-3ft-2d-R	02/03/21	15:33	02/05/21	16:38	2945	17.78	17.78	290.93	Y895Q
5	Waverly-MH1-2ft-2d-R	02/03/21	15:07	02/05/21	16:00	2933	17.78	17.78	290.93	Y889Q
6	Waverly-MH1-2.5ft-2d-R	02/03/21	15:07	02/05/21	16:00	2933	17.78	17.78	290.93	Y890Q
7	Waverly-MH2-2.5ft-2d-R	02/03/21	15:10	02/05/21	16:06	2936	17.78	17.78	290.93	Y891Q
8	Waverly-MH3-2ft-2d-R	02/03/21	15:15	02/05/21	16:16	2941	17.78	17.78	290.93	Y892Q
9	235 Fairchild-SC-4ft-2d	02/03/21	15:21	02/05/21	16:22	2941	17.78	17.78	290.93	Y893Q
10	Classics-MH1-3ft-2d-R	02/03/21	15:38	02/05/21	16:45	2947	17.78	17.78	290.93	Y896Q
11	Classics-MH2-2.5ft-2d-R	02/03/21	15:40	02/05/21	16:50	2950	17.78	17.78	290.93	Y897Q

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BATCH

B21B045

Batch Date: 02/10/2021

Batch Matrix: Radiello 130

Batch Analyses:

VOCs, Passive Samplers

PREPARATION BENCH SHEET

B21B045

EPA Region 9 Laboratory

Project: R21S04

Printed: 2/15/2021 7:52:00AM

Matrix: Radiello 13 **Analysis: VOCs, Passive Sample** **Prepared using: Volatiles - Passive Air Sampler** **Surrogate used: 2106036**

Lab Number	SampleName	Prepared	Initial (Tube)	Final (mL)	Source ID	Spike ID 1	ul Spike 1	ul Surrogate	Ext pH	Prepared by	Extraction Comments
2102006-01 A	G6-014-2ft-2d-R	02/10/21 06:49	1	2				50		TD	7 day prelim requested
2102006-01RE1 A	G6-014-2ft-2d-R	02/10/21 06:49	1	2				50		TD	Added 2/11/2021 by TD
2102006-02 A	F6-031-3ft-2d-R	02/10/21 06:49	1	2				50		TD	7 day prelim requested
2102006-02RE1 A	F6-031-3ft-2d-R	02/10/21 06:49	1	2				50		TD	Added 2/11/2021 by TD
2102006-03 A	F6-010-2.5ft-2d-R	02/10/21 06:49	1	2				50		TD	7 day prelim requested
2102006-04 A	F6-006-3ft-2d-R	02/10/21 06:49	1	2				50		TD	7 day prelim requested
2102006-04RE1 A	F6-006-3ft-2d-R	02/10/21 06:49	1	2				50		TD	Added 2/11/2021 by TD
2102006-05 A	Waverly-MH1-2ft-2d-R	02/10/21 06:49	1	2				50		TD	7 day prelim requested
2102006-05RE1 A	Waverly-MH1-2ft-2d-R	02/10/21 06:49	1	2				50		TD	Added 2/11/2021 by TD
2102006-06 A	Waverly-MH1-2.5ft-2d-R	02/10/21 06:49	1	2				50		TD	7 day prelim requested
2102006-07 A	Waverly-MH2-2.5ft-2d-R	02/10/21 06:49	1	2				50		TD	7 day prelim requested
2102006-08 A	Waverly-MH3-2ft-2d-R	02/10/21 06:49	1	2				50		TD	7 day prelim requested
2102006-09 A	235 Fairchild-SC-4ft-2d	02/10/21 06:49	1	2				50		TD	7 day prelim requested
2102006-10 A	Classics-MH1-3ft-2d-R	02/10/21 06:49	1	2				50		TD	7 day prelim requested
2102006-11 A	Classics-MH2-2.5ft-2d-R	02/10/21 06:49	1	2				50		TD	7 day prelim requested
2102008-01 A	265 Whisman-WomenRR-BZ-2d	02/10/21 06:49	1	2				50		TD	7 day prelim requested
2102008-02 A	265 Whisman-MenRR-BZ-2d	02/10/21 06:49	1	2				50		TD	7 day prelim requested

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PREPARATION BENCH SHEET

B21B045

EPA Region 9 Laboratory

Project: R21S04

Printed: 2/15/2021 7:52:00AM

Matrix: Radiello 13 **Analysis: VOCs, Passive Sampler** **Prepared using: Volatiles - Passive Air Sampler** **Surrogate used: 2106036**

Lab Number	SampleName	Prepared	Initial (Tube)	Final (mL)	Source ID	Spike ID 1	ul Spike 1	ul Surrogate	Ext pH	Prepared by	Extraction Comments
2102008-03 A	265 Whisman-PrvtOFC 3-BZ-2d	02/10/21 06:49	1	2				50		TD	7 day prelim requested
2102008-04 A	265 Whisman-Utilities-BZ-2d	02/10/21 06:49	1	2				50		TD	7 day prelim requested
2102008-05 A	265 Whisman-NE-OUT -2d	02/10/21 06:49	1	2				50		TD	7 day prelim requested
B21B045-BLK1	Blank	02/10/21 06:49	1	2				50		TD	
B21B045-BS1	LCS	02/10/21 06:49	1	2		2006158	5	50		TD	
B21B045-BSD1	LCS Dup	02/10/21 06:49	1	2		2006158	5	50		TD	
B21B045-MRL1	MRL Check	02/10/21 06:49	1	2		2047001	5	50		TD	

Batch Comments

Reagents

Reagent #	Description
2045009	passive air Radiello tubes
2107031	Carbon disulfide

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PREPARATION BENCH SHEET

B21B045

EPA Region 9 Laboratory

Project: R21S04

Printed: 2/15/2021 7:52:00AM

Matrix: Radiello 13 **Analysis: QC** **Prepared using: Volatiles - Passive Air Sampler** **Surrogate used: 2106036**

Lab Number	SampleName	Prepared	Initial (Tube)	Final (mL)	Source ID	Spike ID 1	ul Spike 1	ul Surrogate	Ext pH	Prepared by	Extraction Comments

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Calibration

2012007

Calibration Date: 12/07/2020

Instrument: AG5975CV

Calibration Analyses:

VOCs, Passive Samplers

Response Factor Report AG5975C

Method Path : C:\MSDCHEM\1\RAVIOLI METHODS\2020\
Method File : 120720.M
Title : Volatile Organic Analysis - Passive samplers
Last Update : Tue Dec 08 06:26:34 2020
Response Via : Initial Calibration

Calibration Files
25 =12072003.D 10 =12072004.D 5 =12072005.D 1 =12072006.D .15 =12072007.D .05 =12072008.D

		Compound	25	10	5	1	.15	.05	Avg	%RSD
1)	I	2-Fluorotoluene	----------ISTD----------							
2)	T	1,1-Dichloroet...	0.174	0.246	0.204	0.167	0.171	0.227	0.198	16.57
3)	T	trans-1,2-Dich...	0.211	0.313	0.252	0.232	0.226	0.266	0.250	14.68
4)	T	1,1-Dichloroet...	0.247	0.374	0.298	0.280	0.267	0.324	0.299	15.23
5)	T	cis-1,2-Dichlo...	0.259	0.389	0.300	0.300	0.280	0.328	0.309	14.61
6)	T	Chloroform	0.243	0.372	0.288	0.290	0.261	0.328	0.297	15.82
7)	T	1,1,1-Trichlor...	0.262	0.402	0.307	0.324	0.288	0.331	0.319	14.98
8)	T	Carbon tetrach...	0.253	0.386	0.294	0.317	0.272	0.308	0.305	15.19
9)	T	Benzene	0.685	1.056	0.809	0.872	0.785		0.841	16.34
10)	T	1,2-Dichloroet...	0.229	0.357	0.281	0.294	0.262	0.299	0.287	14.89
11)	T	Trichloroethene	0.220	0.334	0.257	0.283	0.241	0.260	0.266	14.84
12)	S	Toluene-d8	0.801	1.227	0.912	1.050	0.874	0.946	0.968	15.62
13)	T	Toluene	0.946	1.473	1.114	1.330	1.112	1.259	1.206	15.50
14)	T	1,1,2-Trichlor...	0.234	0.355	0.267	0.300	0.249	0.270	0.279	15.44
15)	T	Tetrachloroethene	0.308	0.471	0.361	0.414	0.343	0.357	0.376	15.40
16)	T	Chlorobenzene	0.760	1.156	0.896	1.026	0.842	0.923	0.934	15.02
17)	T	1,1,1,2-Tetrac...	0.267	0.404	0.313	0.361	0.296	0.321	0.327	14.91
18)	T	Ethylbenzene	1.202	1.838	1.469	1.741	1.437	1.553	1.540	14.78
19)	T	m&p-Xylene	0.896	1.383	1.106	1.349	1.128	1.253	1.186	15.27
)	T	o-Xylene	0.998	1.528	1.211	1.414	1.189	1.303	1.274	14.55
)	T	1,1,2,2-Tetrac...	0.475	0.722	0.569	0.658	0.541	0.596	0.594	14.67
)	T	1,3,5-Trimethy...	1.044	1.632	1.337	1.605	1.324	1.463	1.401	15.51
)	T	1,2,4-Trimethy...	1.047	1.635	1.350	1.658	1.375	1.531	1.433	15.93
)	T	Naphthalene	1.677	2.640	2.275	2.668	2.073	2.595	2.321	16.96
)		2-Fluorotoluen...			0.568				0.568	0.00
)		1,1-Dichloroet...			0.132				0.132	0.00
)		trans-1,2-Dich...			0.169				0.169	0.00
)		1,1-Dichloroet...			0.199				0.199	0.00
)		cis-1,2-Dichlo...			0.196				0.196	0.00
)		Chloroform SCAN			0.183				0.183	0.00
)		1,1,1-Trichlor...			0.188				0.188	0.00
)		Carbon tetrach...			0.161				0.161	0.00
)		Benzene SCAN			0.570				0.570	0.00
)		1,2-Dichloroet...			0.178				0.178	0.00
)		Trichloroethen...			0.124				0.124	0.00
)		Toluene-d8 SCAN			0.532				0.532	0.00
)		Toluene SCAN			0.655				0.655	0.00
)		1,1,2-Trichlor...			0.164				0.164	0.00
)		Tetrachloroeth...			0.147				0.147	0.00
)		Chlorobenzene ...			0.471				0.471	0.00
)		1,1,1,2-Tetrac...			0.162				0.162	0.00
)		Ethylbenzene SCAN			1.249				1.249	0.00

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Response Factor Report AG5975C

Method Path : C:\MSDCHEM\1\RAVIOLI METHODS\2020\
Method File : 120720.M

43)	m&p-Xylene SCAN	1.249	1.249	0.00
44)	o-Xylene SCAN	0.682	0.682	0.00
45)	1,1,2,2-Tetrac...	0.355	0.355	0.00
46)	1,3,5-Trimethy...	0.719	0.719	0.00
47)	1,2,4-Trimethy...	0.735	0.735	0.00
48)	Naphthalene SCAN	1.103	1.103	0.00

(#) = Out of Range

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Method Path : C:\MSDCHEM\1\RAVIOLI METHODS\2020\
Method File : 120720.M
Title : Volatile Organic Analysis - Passive samplers
Last Update : Tue Dec 08 06:14:00 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	10.980	1.000	A	1	A	B
2	T	1,1-Dichloroethene	-61	3.090	0.281	A	1	A	B
3	T	trans-1,2-Dichloroethene	-61	4.376	0.399	A	1	A	B
4	T	1,1-Dichloroethane	-63	5.086	0.463	A	1	A	B
5	T	cis-1,2-Dichloroethene	-61	6.088	0.554	A	1	A	B
6	T	Chloroform	-83	6.652	0.606	A	1	A	B
7	T	1,1,1-Trichloroethane	-97	6.919	0.630	A	2	A	B
8	T	Carbon tetrachloride	-117	7.187	0.655	A	1	A	B
9	T	Benzene	-78	7.515	0.684	A	1	A	B
10	T	1,2-Dichloroethane	-62	7.552	0.688	A	1	A	B
11	T	Trichloroethene	-130	8.575	0.781	A	3	A	B
12	S	Toluene-d8	-98	10.487	0.955	A	1	A	B
13	T	Toluene	-91	10.582	0.964	A	1	A	B
14	T	1,1,2-Trichloroethane	-97	11.232	1.023	A	1	A	B
15	T	Tetrachloroethene	-166	11.432	1.041	A	1	A	B
16	T	Chlorobenzene	-112	12.773	1.163	A	1	A	B
17	T	1,1,1,2-Tetrachloroethane	-131	12.916	1.176	A	1	A	B
18	T	Ethylbenzene	-91	12.972	1.181	A	2	A	B
19	T	m&p-Xylene	-91	13.170	1.199	A	2	A	B
20	T	o-Xylene	-91	13.782	1.255	A	1	A	B
21	T	1,1,2,2-Tetrachloroethane	-83	14.880	1.355	A	1	A	B
22	T	1,3,5-Trimethylbenzene	-105	15.350	1.398	A	1	A	B
23	T	1,2,4-Trimethylbenzene	-105	15.906	1.449	A	1	A	B
24	T	Naphthalene	-128	17.904	1.631	A	1	A	B
25		2-Fluorotoluene SCAN	109	10.979	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	4.381	0.399	A	2	A	B
28		1,1-Dichloroethane SCAN	63	5.084	0.463	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	0.630	A	2	A	B
32		Carbon tetrachloride SCAN	117	7.185	0.654	A	3	A	B
33		Benzene SCAN	78	7.514	0.684	A	3	A	B
34		1,2-Dichloroethane SCAN	62	7.563	0.689	A	2	A	B
35		Trichloroethene SCAN	130	8.573	0.781	A	3	A	B
36		Toluene-d8 SCAN	98	10.486	0.955	A	1	A	B
37		Toluene SCAN	91	10.591	0.965	A	2	A	B
38		1,1,2-Trichloroethane SCAN	97	11.242	1.024	A	3	A	B
39		Tetrachloroethene SCAN	166	11.441	1.042	A	3	A	B
40		Chlorobenzene SCAN	112	12.772	1.163	A	3	A	B
41		1,1,1,2-Tetrachloroethane SCAN	131	12.915	1.176	A	3	A	B
42		Ethylbenzene SCAN	91	13.169	1.199	A	2	A	B
43		m&p-Xylene SCAN	91	13.169	1.199	A	3	A	B
44		o-Xylene SCAN	91	13.789	1.256	A	2	A	B
45		1,1,2,2-Tetrachloroethane SCAN	83	14.883	1.355	A	2	A	B
46		1,3,5-Trimethylbenzene SCAN	105	15.353	1.398	A	2	A	B
47		1,2,4-Trimethylbenzene SCAN	105	15.904	1.448	A	3	A	B
48		Naphthalene SCAN	128	17.902	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

120720.M Tue Dec 08 06:15:00 2020

CHEMSTATION AREA COUNT REPORT

AG5975C
S20L021-SCV1
2050006 5 mg/L
12/7/2020
Tue Dec 08 06:26:34 2020
TD

#	Name	L1	L2	L3	L4	L5	L6
1)	2-Fluorotoluene	195592	176421	204852	192171	252253	187138
2)	1,1-Dichloroethene	170346	86947	41693	6436	1297	424
3)	trans-1,2-Dichloroethene	205918	110501	51683	8899	1710	498
4)	1,1-Dichloroethane	241671	132043	60968	10775	2024	607
5)	cis-1,2-Dichloroethene	253462	137108	61359	11528	2117	614
6)	Chloroform	237224	131342	58933	11165	1973	614
7)	1,1,1-Trichloroethane	255903	141724	62918	12471	2178	620
8)	Carbon tetrachloride	247265	136366	60233	12168	2056	577
9)	Benzene	670255	372633	165647	33507	5940	1867
10)	1,2-Dichloroethane	224138	125989	57511	11309	1980	560
11)	Trichloroethene	214893	117776	52638	10868	1823	486
12)	Toluene-d8	783017	433076	186913	40349	6615	1770
13)	Toluene	925356	519895	228131	51129	8413	2356
14)	1,1,2-Trichloroethane	229135	125208	54754	11523	1884	506
15)	Tetrachloroethene	300972	166120	73978	15897	2596	668
16)	Chlorobenzene	743020	408040	183636	39448	6372	1728
17)	1,1,1,2-Tetrachloroethane	260820	142468	64105	13873	2240	601
18)	Ethylbenzene	1175852	648617	300900	66895	10872	2907
19)	m&p-Xylene	1752375	976041	453072	103724	17074	4690
20)	o-Xylene	976193	538998	248059	54333	9001	2438
21)	1,1,2,2-Tetrachloroethane	464694	254605	116584	25279	4095	1116
22)	1,3,5-Trimethylbenzene	1021322	575841	273812	61678	10017	2738
23)	1,2,4-Trimethylbenzene	1023644	576868	276580	63729	10405	2866
24)	Naphthalene	1640326	931520	465960	102525	15689	4856

CHEMSTATION CONCENTRATION REPORT

AG5975C
S20L021-SCV1
2050006 5 mg/L
12/7/2020
Tue Dec 08 06:26:34 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: S20L021-SCV1
Misc Info: 2050006 5 mg/L
Date Acquired: 12/7/2020
QLast Update: Tue Dec 08 06:26:34 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.980	5000	5000.00	100%	70	130	pass
2)	1,1-Dichloroethene	3.090	5000	4697.57	94%	70	130	pass
3)	trans-1,2-Dichloroethene	4.376	5000	4318.17	86%	70	130	pass
4)	1,1-Dichloroethane	5.086	5000	4222.35	84%	70	130	pass
5)	cis-1,2-Dichloroethene	6.088	5000	4269.62	85%	70	130	pass
6)	Chloroform	6.652	5000	4262.13	85%	70	130	pass
7)	1,1,1-Trichloroethane	6.919	5000	4308.50	86%	70	130	pass
8)	Carbon tetrachloride	7.187	5000	4351.53	87%	70	130	pass
9)	Benzene	7.515	5000	4202.26	84%	70	130	pass
10)	1,2-Dichloroethane	7.552	5000	4298.38	86%	70	130	pass
11)	Trichloroethene	8.575	5000	4340.71	87%	70	130	pass
12)	Toluene-d8	10.487	5000	4348.70	87%	70	130	pass
13)	Toluene	10.582	5000	4260.28	85%	70	130	pass
14)	1,1,2-Trichloroethane	11.232	5000	4329.97	87%	70	130	pass
15)	Tetrachloroethene	11.432	5000	4347.15	87%	70	130	pass
16)	Chlorobenzene	12.773	5000	4281.56	86%	70	130	pass
17)	1,1,1,2-Tetrachloroethane	12.916	5000	4337.37	87%	70	130	pass
18)	Ethylbenzene	12.972	5000	4256.29	85%	70	130	pass
19)	m&p-Xylene	13.170	10000	8404.52	84%	70	130	pass
20)	o-Xylene	13.782	5000	4221.29	84%	70	130	pass
21)	1,1,2,2-Tetrachloroethane	14.880	5000	4187.17	84%	70	130	pass
22)	1,3,5-Trimethylbenzene	15.350	5000	4202.52	84%	70	130	pass
23)	1,2,4-Trimethylbenzene	15.906	5000	4083.40	82%	70	130	pass
24)	Naphthalene	17.904	5000	3980.40	80%	70	130	pass

SEQUENCE

S20L021

Sequence Date: 12/07/2020

Instrument: AG5975CV

Sequence Analyses:

VOCs, Passive Samplers

ANALYST / REVIEWER - DATA REVIEW CHECKLIST

BATCH #:	ICAL	SEQUENCE #:	S20L021 12/07/20
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.	Tue Dec 08 06:26:34 2020			
	Initial Calibration ID (LIMS number):	2012007			
	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 #:	S20L021 12/07/20
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 12/08/20
	REVIEWED BY:	ZIYAD RAJABI (Affiliate) Digitally signed by ZIYAD RAJABI (Affiliate) Date: 2020.12.16 12:37:09 -08'00' SIGN HERE

COMMENTS

Custom analyte list.

Injection Log

Operator: TD
Directory: C:\msdchem\1\Ravioli Data\2020\120720\

Vial	File Name	Mult	Sample Info	Misc Info	Date Acquired
1	12072001.D	1	S20L021-IBL1		7 Dec 2020 12:15
2	12072002.D	1	S20L021-TUN1	BFB 2016028	7 Dec 2020 12:36
3	12072003.D	1	S20L021-CAL1	2030068 25 mg/L	7 Dec 2020 12:46
4	12072004.D	1	S20L021-CAL2	2030069 10 mg/L	7 Dec 2020 13:09
5	12072005.D	1	S20L021-CAL3	2030070 5 mg/L	7 Dec 2020 13:33
6	12072006.D	1	S20L021-CAL4	2030071 1 mg/L	7 Dec 2020 13:56
7	12072007.D	1	S20L021-CAL5	2030072 0.15 mg/L	7 Dec 2020 14:20
8	12072008.D	1	S20L021-CAL6	2030073 0.05 mg/L	7 Dec 2020 14:43
9	12072009.D	1	S20L021-SCV1	2050006 5 mg/L	7 Dec 2020 15:07

GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\Ravioli Data\2020\120720\12072002.D
Tune Time : 7 Dec 2020 12:36

Daily Calibration File : C:\msdchem\1\Ravioli Data\2020\120720\12072005.D

204852

File	Sample	Surrogate Recovery %	Internal Standard Responses
12072003.D	S20L021-CAL1	413*	195592
12072004.D	S20L021-CAL2	253*	176421
12072005.D	S20L021-CAL3	94	204852
12072006.D	S20L021-CAL4	22*	192171
12072007.D	S20L021-CAL5	3*	252253
12072008.D	S20L021-CAL6	1*	187138
12072009.D	S20L021-SCV1	87	207424

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

Created: Tue Dec 08 06:17:21 2020 AG5975C

Analysis Sequence

S20L021

Project:
Analysis:

Instrument: AG5975CV **Calibration ID:** 2012007 Printed: 12/08/2020 8:30 am

Lab Number	Sample Name	Order	Analyzed Date	STD ID	ISTD ID	Sequenced By	File ID	Comments
S20L021-IBL1	Instrument Blank	1	12/7/20 12:15			TD	12072001.D	
S20L021-TUN1	BFB	2	12/7/20 12:36	2040028		TD	12072002.D	
S20L021-CAL1	Cal Standard	3	12/7/20 12:46	2030068		TD	12072003.D	
S20L021-CAL2	Cal Standard	4	12/7/20 13:09	2030069		TD	12072004.D	
S20L021-CAL3	Cal Standard	5	12/7/20 13:33	2030070		TD	12072005.D	
S20L021-CAL4	Cal Standard	6	12/7/20 13:56	2030071		TD	12072006.D	
S20L021-CAL5	Cal Standard	7	12/7/20 14:20	2030072		TD	12072007.D	
S20L021-CAL6	Cal Standard	8	12/7/20 14:43	2030073		TD	12072008.D	
S20L021-SCV1	Secondary Cal Check	9	12/7/20 15:07	2050006		TD	12072009.D	

Sequence Comments

Reagents

Reagent # **Description**

Table of Contents

SEQUENCE DATA

S20L021

S20L021-TUN1

Table of Contents

```
Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072002.D
Acq On    :  7 Dec 2020  12:36
Operator  : TD
Sample    : S20L021-TUN1
Misc      : BFB   2016028
ALS Vial  : 2   Sample Multiplier: 1
InstName  : AG5975C

Integration File: Ravioli.P

Method    : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Title     : Volatile Organic Analysis  -  Passive samplers
Last Update  : Mon Nov 16 10:20:51 2020
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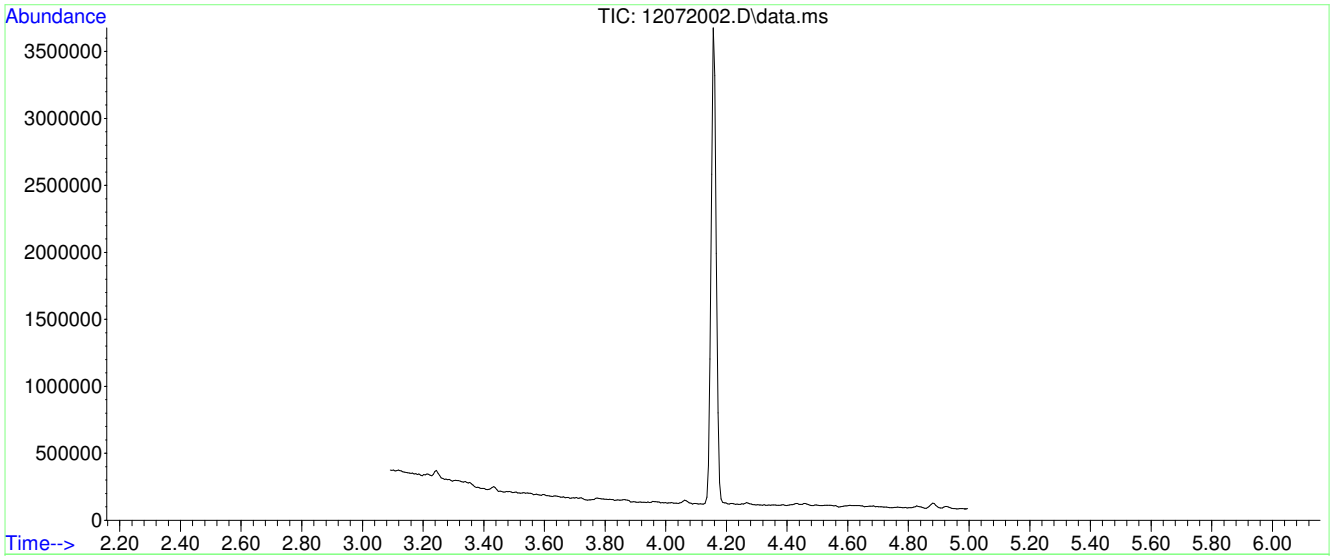


AutoFind: Scans 203, 204, 205; Background Corrected with Scan 196

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.5	137040	PASS
75	95	30	60	46.5	310597	PASS
95	95	100	100	100.0	668117	PASS
96	95	5	9	6.5	43341	PASS
173	174	0.00	2	0.8	4347	PASS
174	95	50	120	79.5	531392	PASS
175	174	5	9	7.3	38789	PASS
176	174	95	101	96.3	511595	PASS
177	176	5	9	6.6	33584	PASS

Average of 4.151 to 4.162 min.: 12072002.D\data.ms
S20L021-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	4552	48.00	3650	61.00	28379	73.00	23998
37.00	26357	49.00	27133	62.00	27973	74.00	95080
38.00	24764	50.00	137040	63.00	20853	75.00	310597
39.00	9488	51.00	42584	64.00	1796	75.95	22851
39.95	557	52.05	1745	65.00	126	76.95	3235
42.05	138	55.00	1576	67.00	1442	77.95	1686
42.95	65	56.00	8339	68.00	58325	78.95	12291
44.00	1307	57.00	17115	69.00	60005	79.95	3553
45.00	5742	58.05	734	70.00	4405	80.90	13001
45.95	206	59.10	57	71.10	114	81.90	2522
47.00	10608	60.00	5611	72.05	2925	83.00	410

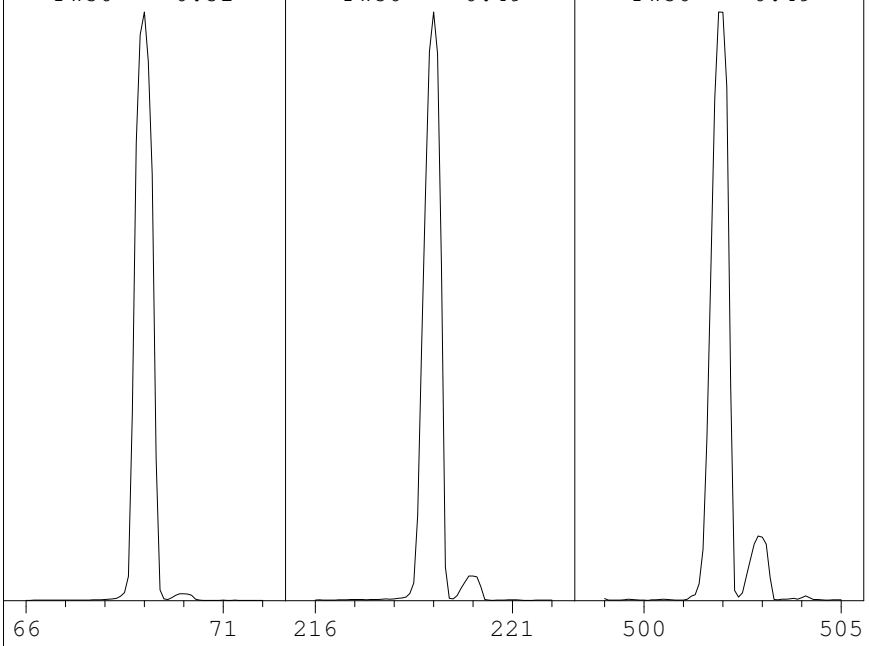
Average of 4.151 to 4.162 min.: 12072002.D\data.ms
S20L021-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
85.95	609	102.85	321	115.95	1924	129.95	2095
87.00	25592	103.95	2104	116.90	3084	130.90	886
88.00	24848	105.00	819	117.95	2001	131.90	58
90.90	1648	105.95	2177	118.90	2859	133.00	279
92.00	15659	106.95	527	122.95	273	134.00	129
93.00	24101	109.85	321	123.95	299	134.90	856
94.00	70760	110.95	442	124.85	259	136.10	114
95.00	668117	111.85	292	125.95	127	136.90	1086
96.00	43341	112.70	50	127.10	66	138.95	130
97.05	1335	112.90	294	127.90	1958	139.95	418
98.00	67	114.95	554	128.90	966	140.95	5022

Average of 4.151 to 4.162 min.: 12072002.D\data.ms
S20L021-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
141.90	600	152.90	359	173.05	4347	192.95	169
142.90	5556	153.90	363	174.00	531392	207.00	1
143.80	97	154.95	1273	175.00	38789	218.90	180
144.00	260	155.95	207	176.00	511595	232.95	256
144.95	539	156.95	1033	177.00	33584	234.90	78
145.90	937	157.80	61	177.95	945	236.00	57
146.95	566	158.85	705	179.00	59	248.90	117
147.95	1326	161.00	667	184.80	65	249.10	59
148.95	466	171.10	183	186.90	51	249.90	201
149.90	587	171.80	112	190.80	93	250.90	72
151.90	273	172.10	220	191.00	100	251.95	53

Mass	69.00	Mass	219.00	Mass	501.90
Ab	484578	Ab	285879	Ab	8394
Pw50	0.51	Pw50	0.49	Pw50	0.49

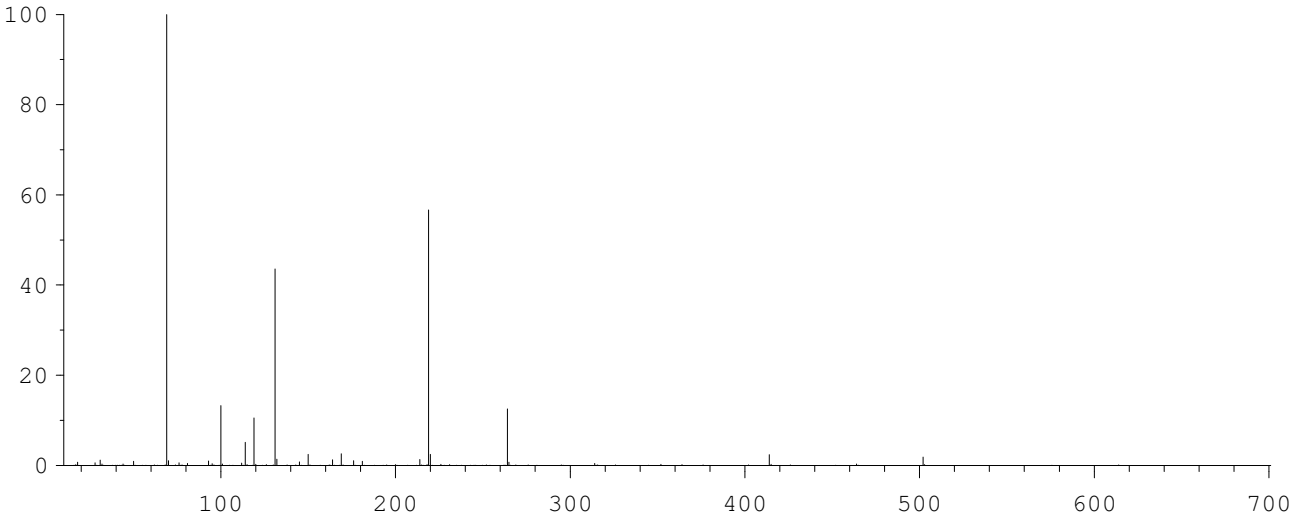


Ion Pol	Pos	MassGain	-1186
		MassOffs	-39
Emission	34.6	AmuGain	984
EIEnrgy	69.9	AmuOffs	128.50
Filament	1	Wid219	-0.003
		DC Pol	Pos
Repeller	22.25		
IonFcus	68.3	HEDEnab	On
EntLens	0.0	EMVolts	1424
EntOffs	Var		
		Samples	8
PFTBA	Open	Averages	3
		Stepsize	0.10

Temperatures and Pressures:

MS Source	230	Turbo Speed	100
MS Quad	150	HiVac	0.00e+00

Scan: 10.00 - 701.00 Samples: 8 Thresh: 100 Step: 0.10
123 peaks Base: 69.00 Abundance: 459008



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	459008	100.00	70.00	4731	1.03
219.00	260032	56.65	220.00	11346	4.36
502.00	8435	1.84	503.00	770	9.13

Air/Water Check: H20~0.73% N2~0.58% O2~0.30% CO2~0.34% N2/H2O~79.92%

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 75158
Repeller Maximum 30 volts using ion 219; Gain Factor 0.75

MassGain Values(Samples): -1176(3) -1170(2) -1147(1) -1106(0) -1019(FS)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset:	128.5	128.5	128.5	128.5	128.5	128.5	128.5
Entrance Lens Offset:	14.8	11.3	11.3	13.1	14.8	16.1	16.1
Target Abund(%):	1.0	100.0	45.0	55.0	2.5	2.0	
Actual Tune Abund(%):	0.9	100.0	43.6	56.7	2.4	1.8	

S20L021-CAL1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072003.D
Acq On : 7 Dec 2020 12:46
InstName : AG5975C
Operator : TD
Sample : S20L021-CAL1
Misc : 2030068 25 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 06:07:30 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:05:27 2020
Response via : Initial Calibration

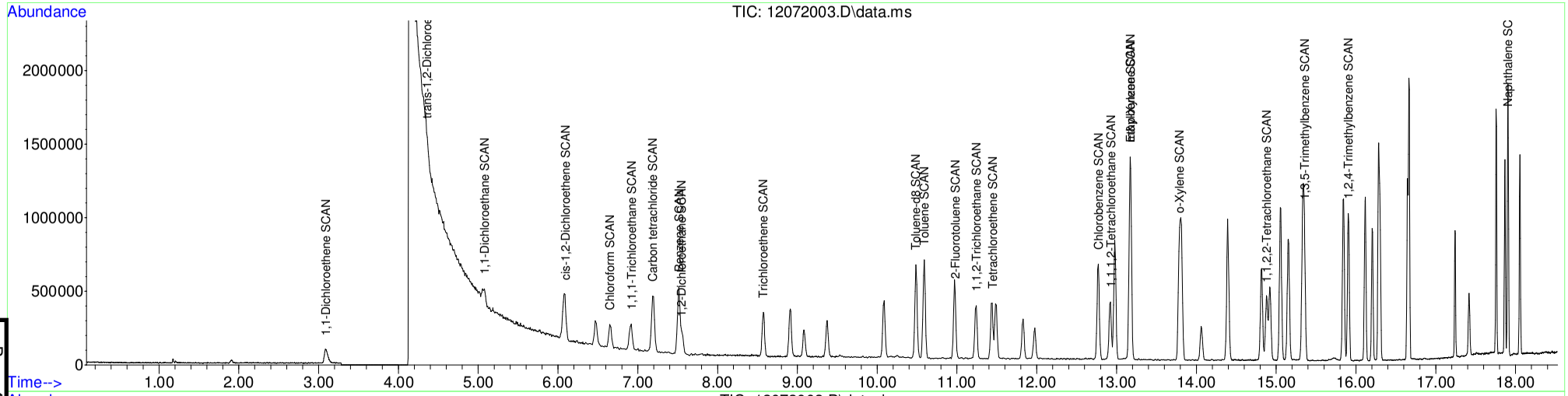
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	195592	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	783017	20670.27 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 413.41%#		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	170346	22037.91 ug/L	84
3] trans-1,2-Dichloroethene	4.356	61	205918	21060.88 ug/L	98
4] 1,1-Dichloroethane	5.073	63	241671	20695.11 ug/L	95
5] cis-1,2-Dichloroethene	6.081	61	253462	20956.68 ug/L	98
6] Chloroform	6.652	83	237224	20420.55 ug/L	99
7] 1,1,1-Trichloroethane	6.907	97	255903	20506.40 ug/L	100
8] Carbon tetrachloride	7.187	117	247265	20724.90 ug/L	99
9] Benzene	7.503	78	670255	20364.68 ug/L	99
10] 1,2-Dichloroethane	7.540	62	224138	19962.69 ug/L	97
11] Trichloroethene	8.575	130	214893	20679.73 ug/L	97
13] Toluene	10.582	91	925356	19619.32 ug/L	98
14] 1,1,2-Trichloroethane	11.232	97	229135	20974.53 ug/L	98
15] Tetrachloroethene	11.432	166	300972	20486.92 ug/L	100
16] Chlorobenzene	12.765	112	743020	20334.85 ug/L	96
17] 1,1,1,2-Tetrachloroethane	12.916	131	260820	20394.84 ug/L	100
18] Ethylbenzene	12.972	91	1175852	19518.61 ug/L	100
19] m&p-Xylene	13.170	91	1752375	37774.13 ug/L	99
20] o-Xylene	13.782	91	976193	19591.47 ug/L	99
21] 1,1,2,2-Tetrachloroethane	14.880	83	464694	20015.11 ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	1021322	18638.90 ug/L	97
23] 1,2,4-Trimethylbenzene	15.906	105	1023644	18264.40 ug/L	97
24] Naphthalene	17.906	128	1640326	18716.50 ug/L	99
25) 2-Fluorotoluene SCAN	10.979	109	107568	4845.04 ug/L	90
26) 1,1-Dichloroethene SCAN	3.092	61	114339	22060.31 ug/L	78
27) trans-1,2-Dichloroethe...	4.355	61	142038	21515.51 ug/L	73
28) 1,1-Dichloroethane SCAN	5.078	63	159065	20413.14 ug/L	96
29) cis-1,2-Dichloroethene...	6.086	61	165784	21641.88 ug/L #	71
30) Chloroform SCAN	6.650	83	148403	20770.38 ug/L	94
31) 1,1,1-Trichloroethane ...	6.918	97	149993	20343.72 ug/L	91
32) Carbon tetrachloride SCAN	7.186	117	132317	21000.99 ug/L	92
33) Benzene SCAN	7.514	78	444213	19914.88 ug/L	95
34) 1,2-Dichloroethane SCAN	7.551	62	142194	20380.16 ug/L	90
35) Trichloroethene SCAN	8.574	130	104899	21567.59 ug/L	82
36) Toluene-d8 SCAN	10.486	98	453304	21769.62 ug/L	96
37) Toluene SCAN	10.591	91	549975	21451.87 ug/L	99
38) 1,1,2-Trichloroethane ...	11.242	97	130461	20301.54 ug/L	90
39) Tetrachloroethene SCAN	11.441	166	123296	21377.55 ug/L	93
40) Chlorobenzene SCAN	12.772	112	385691	20945.08 ug/L	91
41) 1,1,1,2-Tetrachloroeth...	12.923	131	124333	19570.67 ug/L	94
42) Ethylbenzene SCAN	13.169	91	985008	20161.14 ug/L	90
43) m&p-Xylene SCAN	13.169	91	985008	20161.14 ug/L	91
44) o-Xylene SCAN	13.789	91	551443	20669.90 ug/L	96
45) 1,1,2,2-Tetrachloroeth...	14.883	83	287763	20744.94 ug/L	96
46) 1,3,5-Trimethylbenzene...	15.353	105	548275	19480.16 ug/L	96
47) 1,2,4-Trimethylbenzene...	15.904	105	547845	19051.38 ug/L	95
48) Naphthalene SCAN	17.905	128	775245	17960.74 ug/L	99

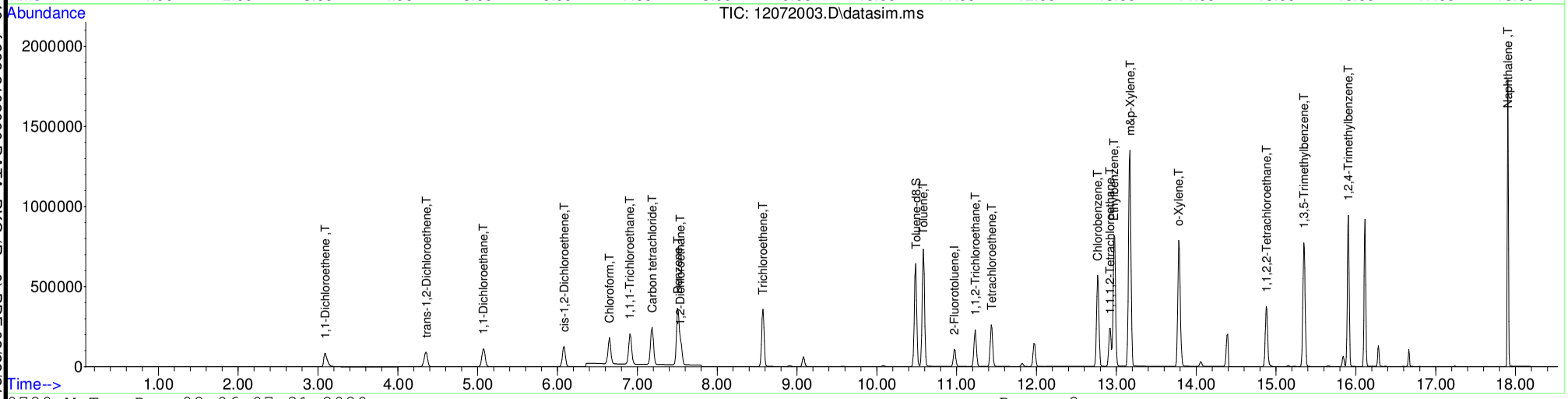
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072003.D
Acq On : 7 Dec 2020 12:46
InstName : AG5975C
Operator : TD
Sample : S20L021-CAL1
Misc : 2030068 25 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 06:07:30 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:05:27 2020
Response via : Initial Calibration





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S20L021-CAL2

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072004.D
Acq On : 7 Dec 2020 13:09
InstName : AG5975C
Operator : TD
Sample : S20L021-CAL2
Misc : 2030069 10 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 06:07:37 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:05:27 2020
Response via : Initial Calibration

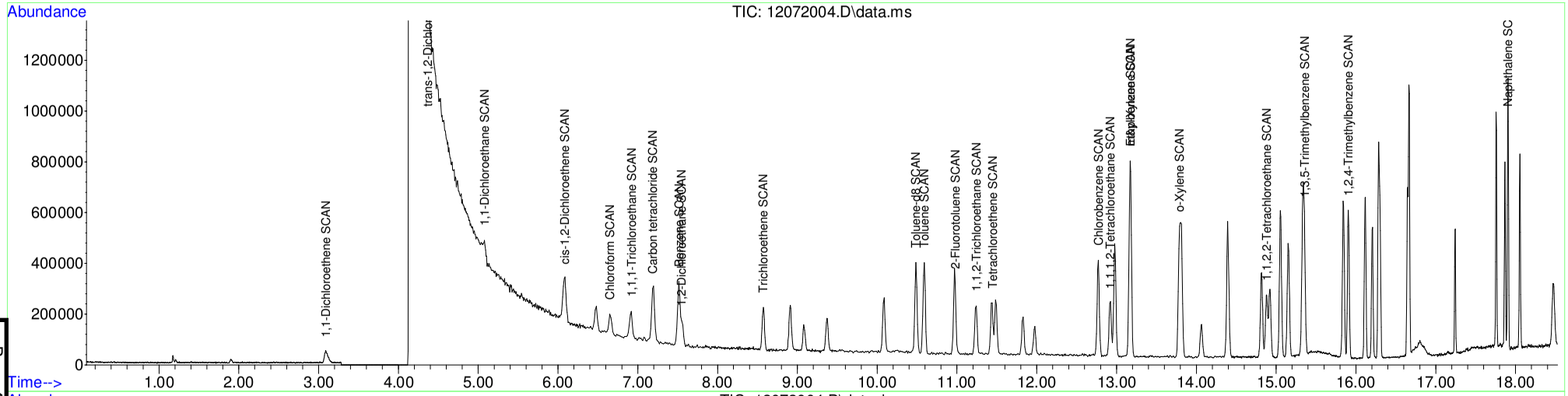
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	176421	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	433076	12674.76 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 253.50%#		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	86947	12470.79 ug/L	83
3] trans-1,2-Dichloroethene	4.363	61	110501	12529.95 ug/L	98
4] 1,1-Dichloroethane	5.079	63	132043	12536.01 ug/L	95
5] cis-1,2-Dichloroethene	6.081	61	137108	12568.20 ug/L	98
6] Chloroform	6.652	83	131342	12534.68 ug/L	100
7] 1,1,1-Trichloroethane	6.907	97	141724	12590.94 ug/L	100
8] Carbon tetrachloride	7.187	117	136366	12671.75 ug/L	100
9] Benzene	7.503	78	372633	12552.19 ug/L	99
10] 1,2-Dichloroethane	7.552	62	125989	12440.48 ug/L	96
11] Trichloroethene	8.575	130	117776	12565.51 ug/L	97
13] Toluene	10.582	91	519895	12220.57 ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	125208	12706.72 ug/L	98
15] Tetrachloroethene	11.432	166	166120	12536.41 ug/L	100
16] Chlorobenzene	12.765	112	408040	12380.66 ug/L	97
17] 1,1,1,2-Tetrachloroethane	12.916	131	142468	12350.87 ug/L	100
18] Ethylbenzene	12.972	91	648617	11936.73 ug/L	99
19] m&p-Xylene	13.170	91	976041	23325.78 ug/L	99
20] o-Xylene	13.782	91	538998	11992.76 ug/L	99
21] 1,1,2,2-Tetrachloroethane	14.880	83	254605	12157.90 ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	575841	11650.94 ug/L	97
23] 1,2,4-Trimethylbenzene	15.906	105	576868	11411.26 ug/L	98
24] Naphthalene	17.906	128	931520	11783.86 ug/L	99
25) 2-Fluorotoluene SCAN	10.979	109	96635	4825.58 ug/L	89
26) 1,1-Dichloroethene SCAN	3.092	61	56502	12085.98 ug/L	84
27) trans-1,2-Dichloroethe...	4.361	61	75186	12626.56 ug/L	73
28) 1,1-Dichloroethane SCAN	5.078	63	88864	12643.34 ug/L	88
29) cis-1,2-Dichloroethene...	6.080	61	91005	13170.99 ug/L #	72
30) Chloroform SCAN	6.650	83	84697	13142.28 ug/L	93
31) 1,1,1-Trichloroethane ...	6.918	97	86330	12981.41 ug/L	87
32) Carbon tetrachloride SCAN	7.186	117	75421	13271.42 ug/L	98
33) Benzene SCAN	7.514	78	236468	11753.30 ug/L	94
34) 1,2-Dichloroethane SCAN	7.551	62	86803	13793.10 ug/L	89
35) Trichloroethene SCAN	8.574	130	57024	12998.36 ug/L	84
36) Toluene-d8 SCAN	10.486	98	254870	13570.03 ug/L	96
37) Toluene SCAN	10.591	91	298139	12892.64 ug/L	97
38) 1,1,2-Trichloroethane ...	11.242	97	75107	12957.75 ug/L	92
39) Tetrachloroethene SCAN	11.441	166	70990	13646.05 ug/L	94
40) Chlorobenzene SCAN	12.772	112	212671	12804.17 ug/L	88
41) 1,1,1,2-Tetrachloroeth...	12.915	131	69780	12177.30 ug/L	96
42) Ethylbenzene SCAN	13.169	91	550521	12492.52 ug/L	92
43) m&p-Xylene SCAN	13.169	91	550521	12492.52 ug/L	93
44) o-Xylene SCAN	13.789	91	311880	12960.63 ug/L	94
45) 1,1,2,2-Tetrachloroeth...	14.879	83	162435	12982.48 ug/L	95
46) 1,3,5-Trimethylbenzene...	15.353	105	310755	12240.89 ug/L	97
47) 1,2,4-Trimethylbenzene...	15.904	105	310112	11956.06 ug/L	96
48) Naphthalene SCAN	17.905	128	451948	11608.46 ug/L	98

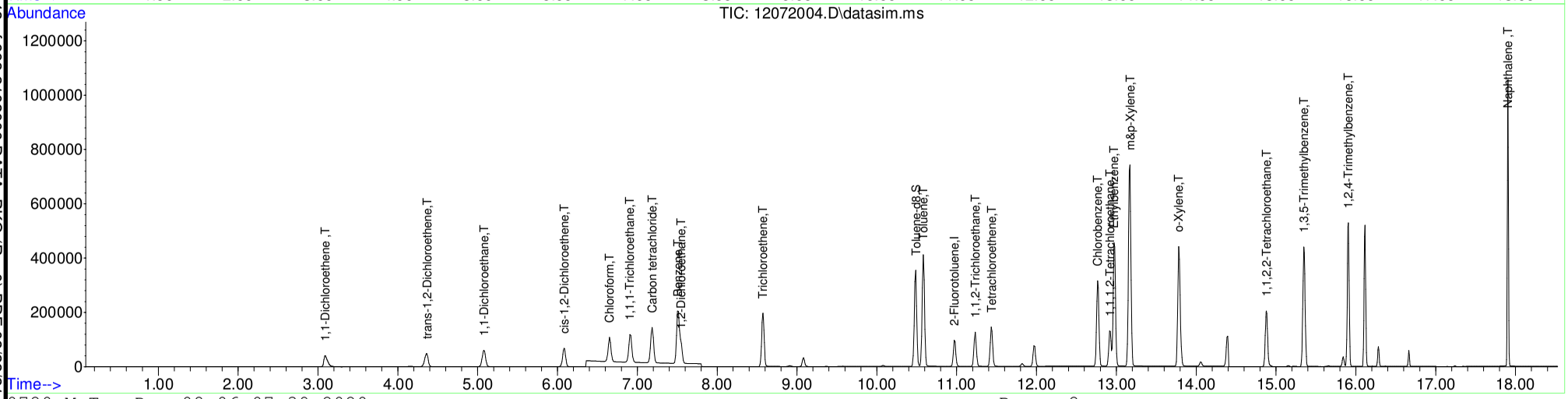
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072004.D
Acq On : 7 Dec 2020 13:09
InstName : AG5975C
Operator : TD
Sample : S20L021-CAL2
Misc : 2030069 10 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 06:07:37 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:05:27 2020
Response via : Initial Calibration





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S20L021-CAL3

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072005.D
Acq On : 7 Dec 2020 13:33
InstName : AG5975C
Operator : TD
Sample : S20L021-CAL3
Misc : 2030070 5 mg/L
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 06:06:47 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:05:27 2020
Response via : Initial Calibration

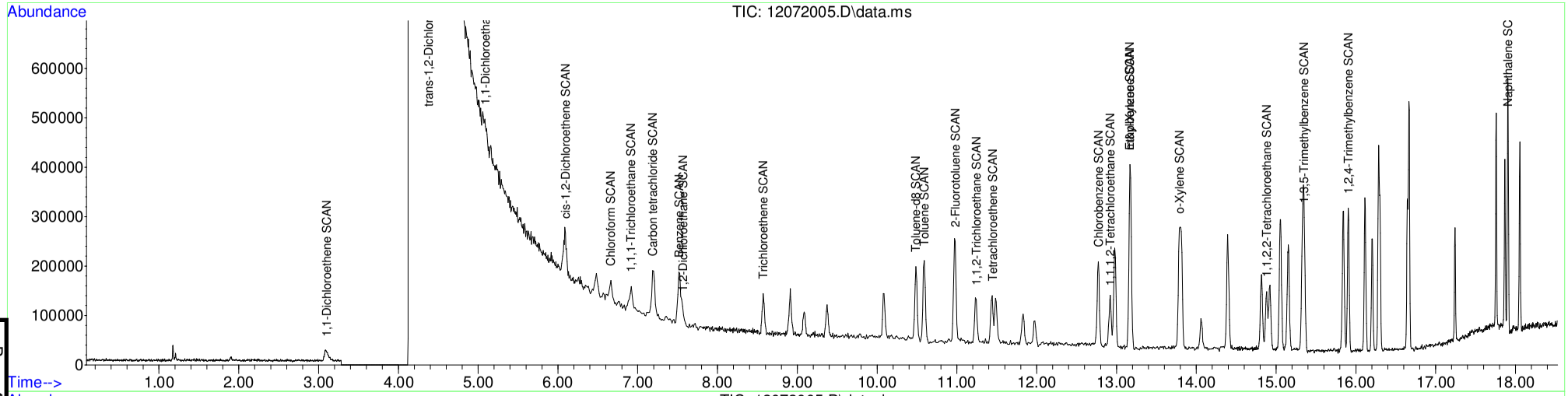
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.980	109	204852	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.487	98	186913	4711.13	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 94.22%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.090	61	41693	5150.06	ug/L	82
3] trans-1,2-Dichloroethene	4.376	61	51683	5047.09	ug/L	97
4] 1,1-Dichloroethane	5.086	63	60968	4984.90	ug/L	95
5] cis-1,2-Dichloroethene	6.088	61	61359	4843.94	ug/L	98
6] Chloroform	6.652	83	58933	4843.71	ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	62918	4813.93	ug/L	100
8] Carbon tetrachloride	7.187	117	60233	4820.31	ug/L	100
9] Benzene	7.515	78	165647	4805.43	ug/L	100
10] 1,2-Dichloroethane	7.552	62	57511	4890.64	ug/L	98
11] Trichloroethene	8.575	130	52638	4836.52	ug/L	98
13] Toluene	10.582	91	228131	4618.17	ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	54754	4785.50	ug/L	99
15] Tetrachloroethene	11.432	166	73978	4807.99	ug/L	99
16] Chlorobenzene	12.773	112	183636	4798.54	ug/L	97
17] 1,1,1,2-Tetrachloroethane	12.916	131	64105	4786.10	ug/L	99
18] Ethylbenzene	12.972	91	300900	4769.02	ug/L	99
19] m&p-Xylene	13.170	91	453072	9324.93	ug/L	98
20] o-Xylene	13.782	91	248059	4753.32	ug/L	98
21] 1,1,2,2-Tetrachloroethane	14.880	83	116584	4794.47	ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	273812	4771.13	ug/L	98
23] 1,2,4-Trimethylbenzene	15.906	105	276580	4711.81	ug/L	97
24] Naphthalene	17.904	128	465960	5076.38	ug/L	99
25) 2-Fluorotoluene SCAN	10.979	109	116264	5000.00	ug/L	96
26) 1,1-Dichloroethene SCAN	3.096	61	27142	5000.00	ug/L #	31
27) trans-1,2-Dichloroethe...	4.381	61	34571	5000.00	ug/L	82
28) 1,1-Dichloroethane SCAN	5.084	63	40806	5000.00	ug/L	94
29) cis-1,2-Dichloroethene...	6.093	61	40115	5000.00	ug/L	80
30) Chloroform SCAN	6.662	83	37416	5000.00	ug/L	98
31) 1,1,1-Trichloroethane ...	6.918	97	38610	5000.00	ug/L	90
32) Carbon tetrachloride SCAN	7.185	117	32994	5000.00	ug/L	96
33) Benzene SCAN	7.514	78	116808	5000.00	ug/L	95
34) 1,2-Dichloroethane SCAN	7.563	62	36537	5000.00	ug/L	84
35) Trichloroethene SCAN	8.573	130	25470	5000.00	ug/L	83
36) Toluene-d8 SCAN	10.486	98	109043	5000.00	ug/L	97
37) Toluene SCAN	10.591	91	134257	5000.00	ug/L	96
38) 1,1,2-Trichloroethane ...	11.242	97	33652	5000.00	ug/L	92
39) Tetrachloroethene SCAN	11.441	166	30203	5000.00	ug/L	89
40) Chlorobenzene SCAN	12.772	112	96431	5000.00	ug/L	84
41) 1,1,1,2-Tetrachloroeth...	12.915	131	33269	5000.00	ug/L	93
42) Ethylbenzene SCAN	13.169	91	255849	5000.00	ug/L	93
43) m&p-Xylene SCAN	13.169	91	255849	5000.00	ug/L	94
44) o-Xylene SCAN	13.789	91	139708	5000.00	ug/L	99
45) 1,1,2,2-Tetrachloroeth...	14.883	83	72641	5000.00	ug/L	94
46) 1,3,5-Trimethylbenzene...	15.353	105	147389	5000.00	ug/L	99
47) 1,2,4-Trimethylbenzene...	15.904	105	150588	5000.00	ug/L	97
48) Naphthalene SCAN	17.902	128	226034	5000.00	ug/L	98

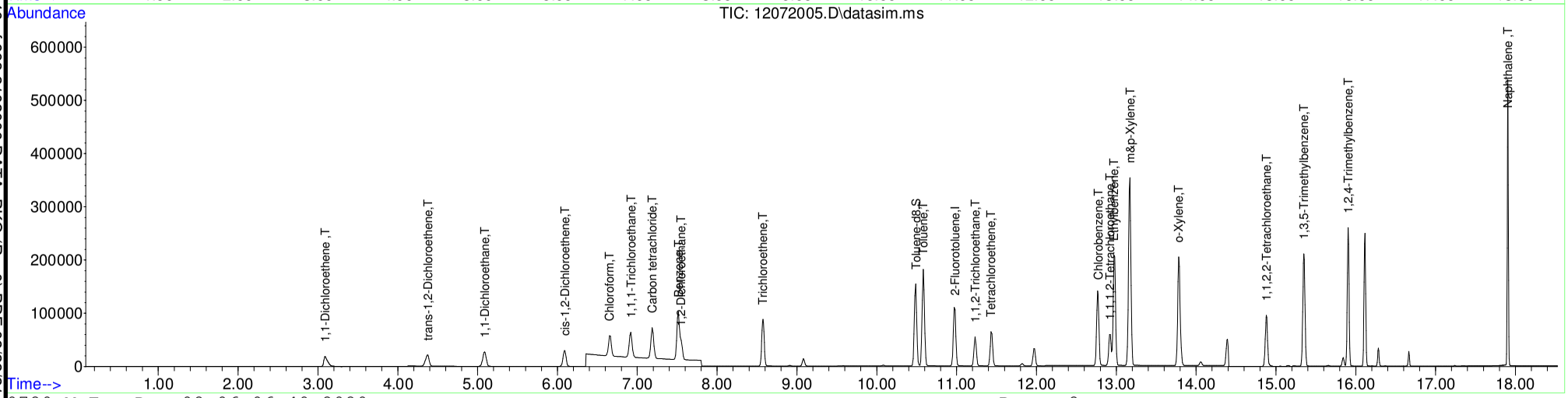
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072005.D
Acq On : 7 Dec 2020 13:33
InstName : AG5975C
Operator : TD
Sample : S20L021-CAL3
Misc : 2030070 5 mg/L
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 06:06:47 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:05:27 2020
Response via : Initial Calibration





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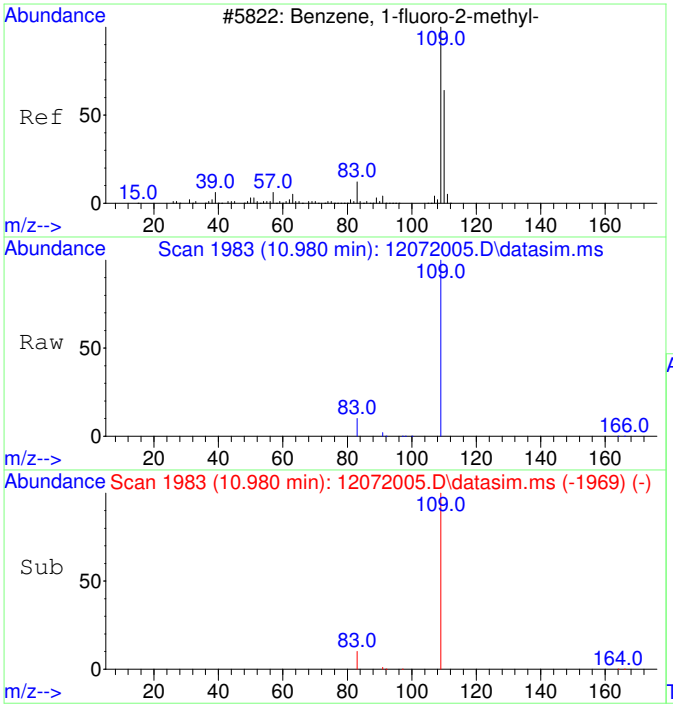
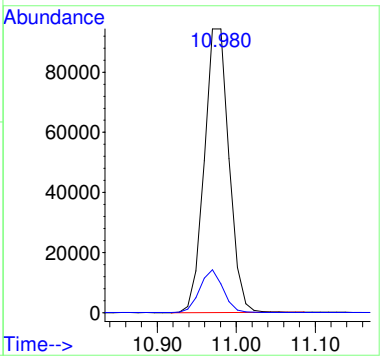
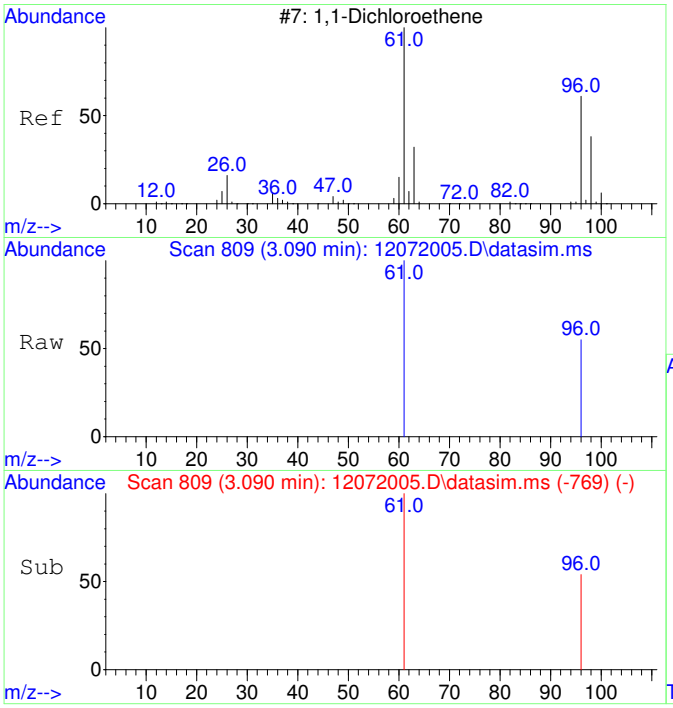


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.980 min Scan# 1983
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:109 Resp: 204852

Ion	Ratio	Lower	Upper
109	100		
83	14.1	0.0	42.3

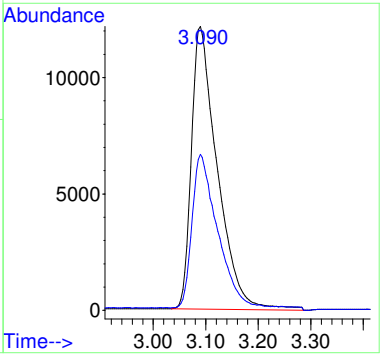


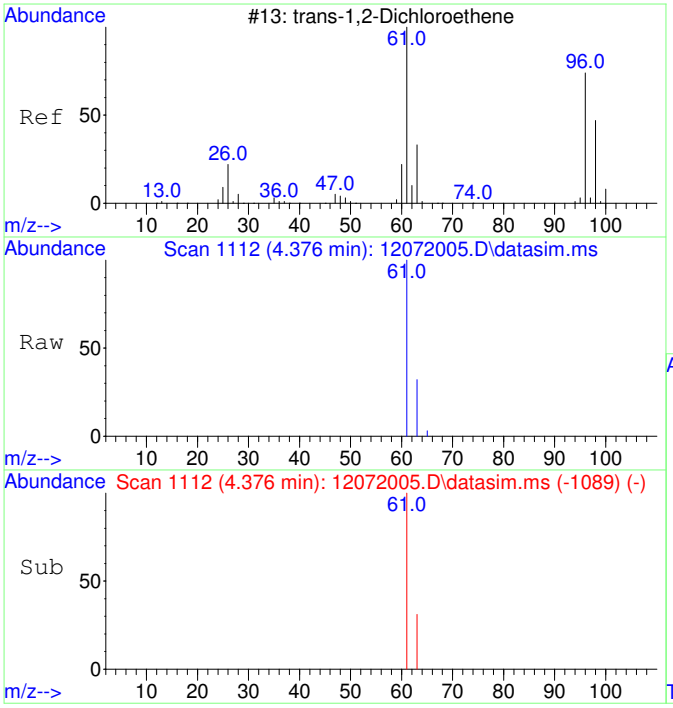


#2
1,1-Dichloroethene
Concen: 5150.06 ug/L
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 61 Resp: 41693

Ion	Ratio	Lower	Upper
61	100		
96	52.8	37.2	97.2

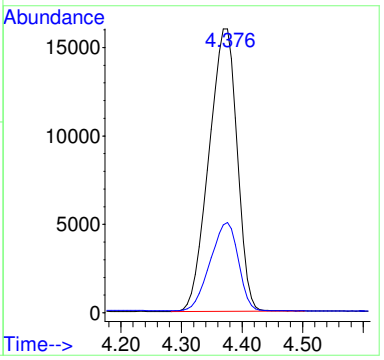


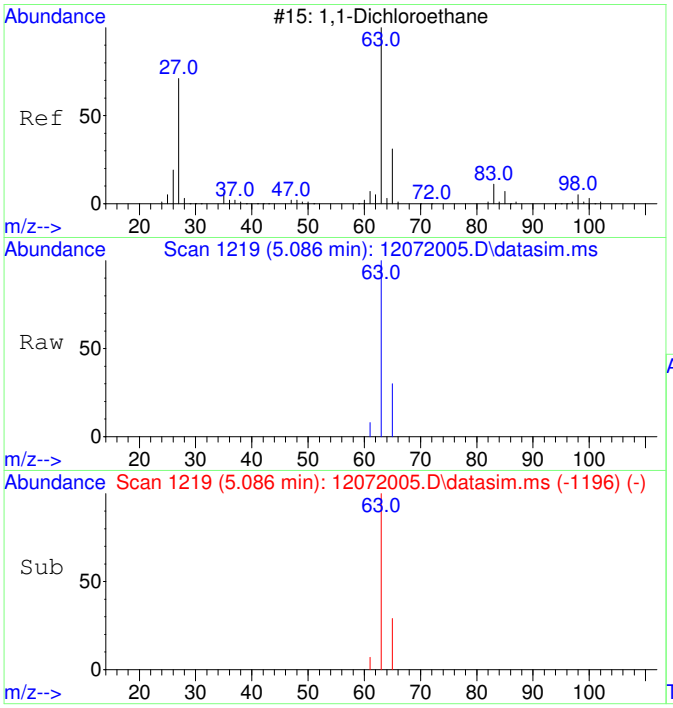


#3
trans-1,2-Dichloroethene
Concen: 5047.09 ug/L
RT: 4.376 min Scan# 1112
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 61 Resp: 51683

Ion	Ratio	Lower	Upper
61	100		
63	30.9	2.4	62.4

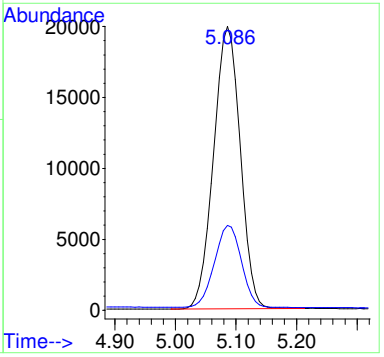


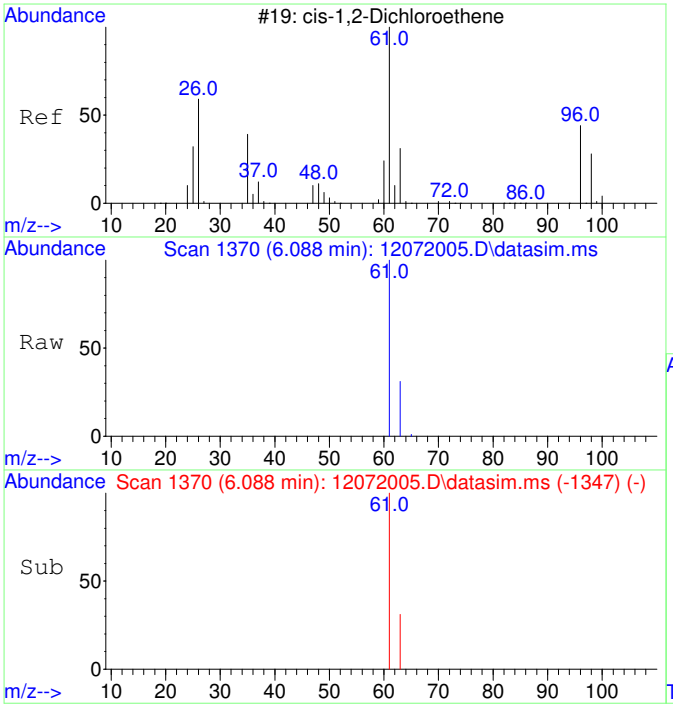


#4
1,1-Dichloroethane
Concen: 4984.90 ug/L
RT: 5.086 min Scan# 1219
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 63 Resp: 60968

Ion	Ratio	Lower	Upper
63	100		
65	29.2	1.8	61.8

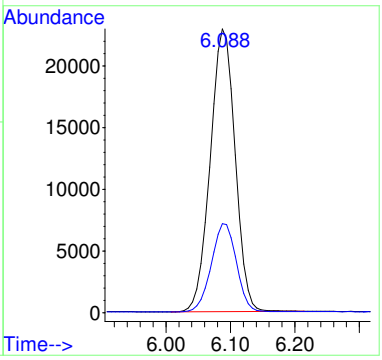


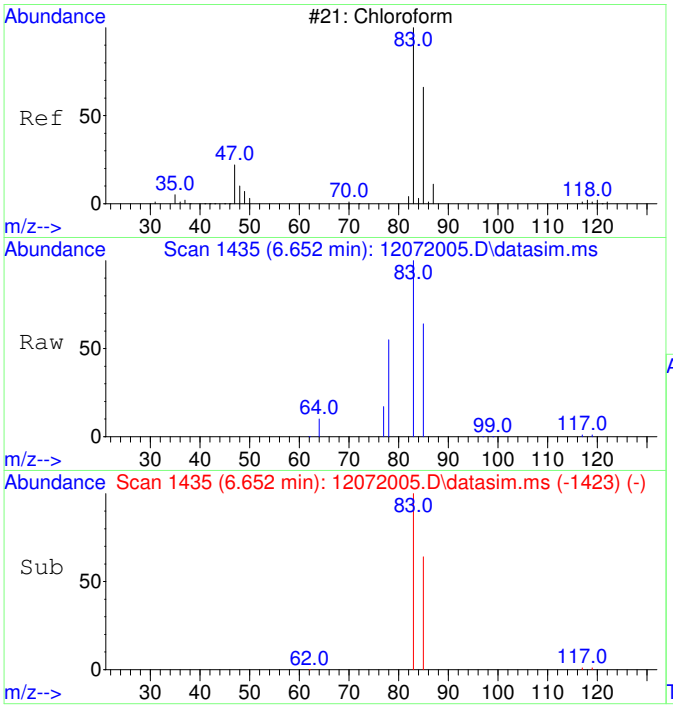


#5
cis-1,2-Dichloroethene
Concen: 4843.94 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 61 Resp: 61359

Ion	Ratio	Lower	Upper
61	100		
63	31.3	2.5	62.5

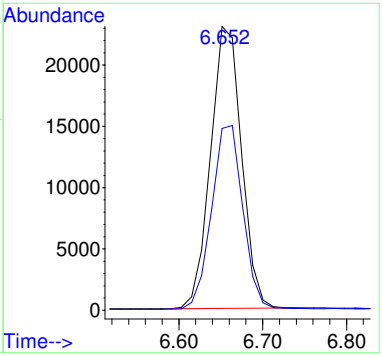


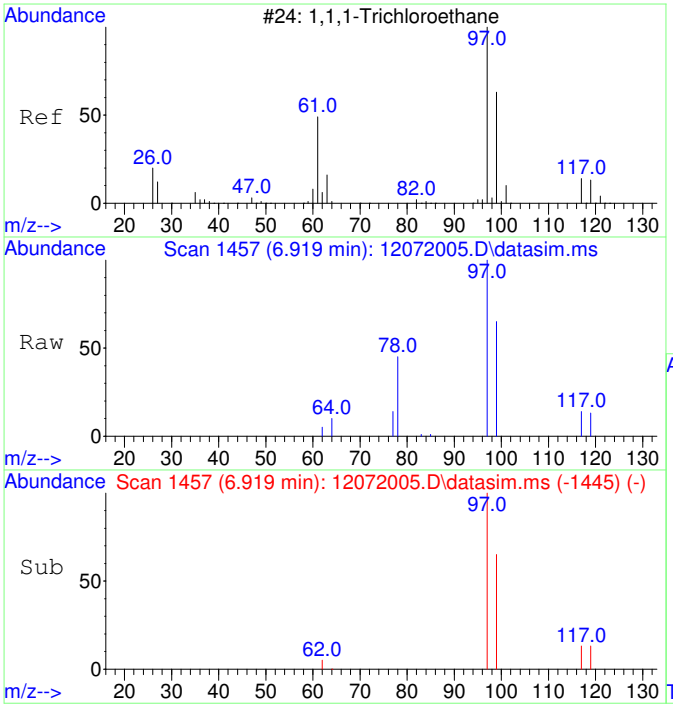


#6
Chloroform
Concen: 4843.71 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 83 Resp: 58933

Ion	Ratio	Lower	Upper
83	100		
85	65.4	35.1	95.1

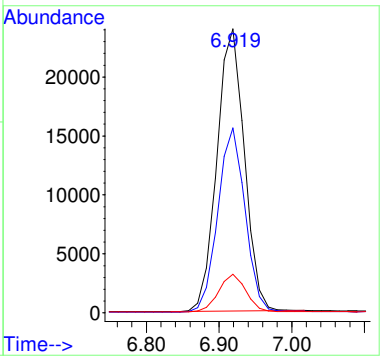


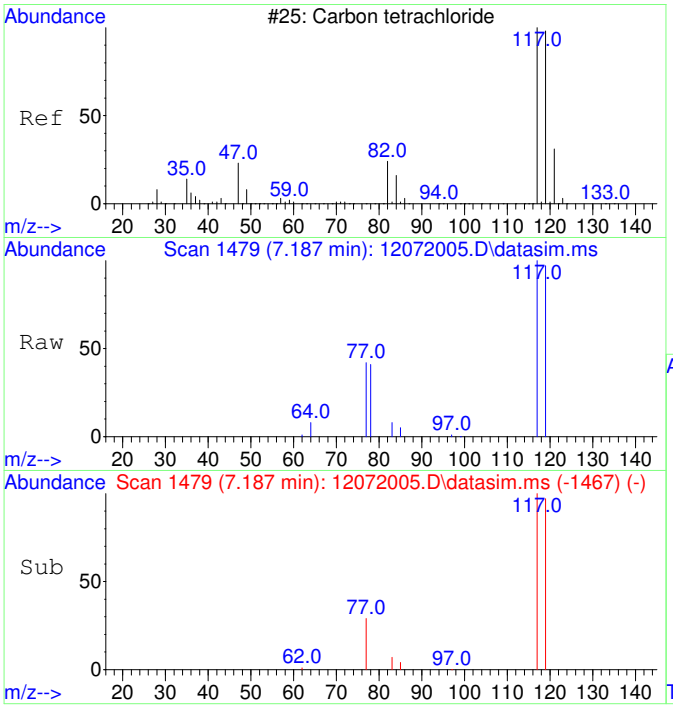


#7
1,1,1-Trichloroethane
Concen: 4813.93 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 97 Resp: 62918

Ion	Ratio	Lower	Upper
97	100		
99	64.3	34.6	94.6
117	13.1	0.0	43.2

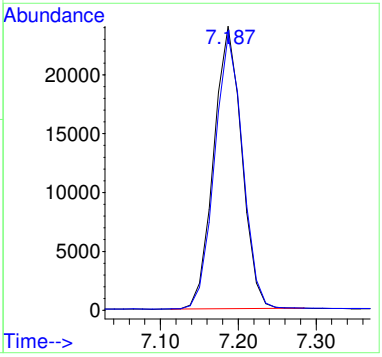


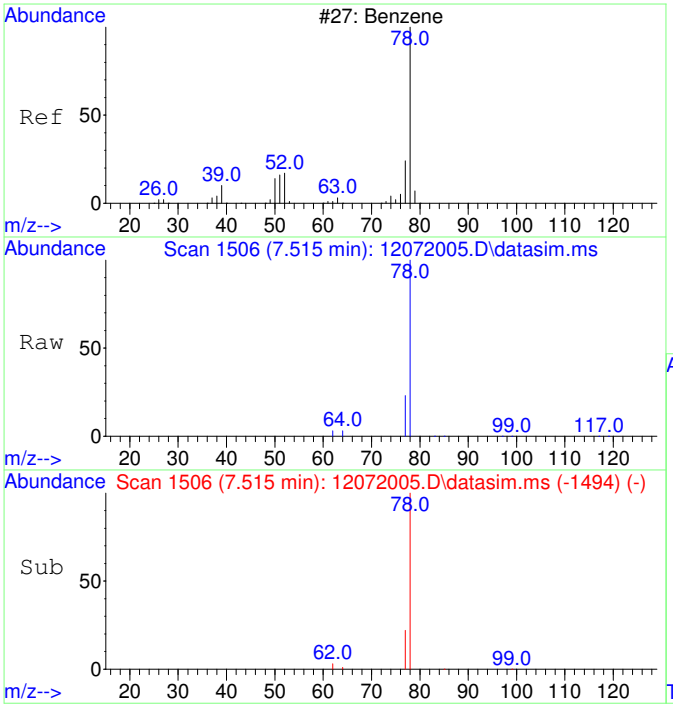


#8
Carbon tetrachloride
Concen: 4820.31 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:117 Resp: 60233

Ion	Ratio	Lower	Upper
117	100		
119	96.5	66.4	126.4

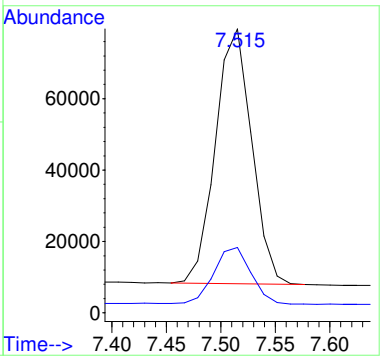


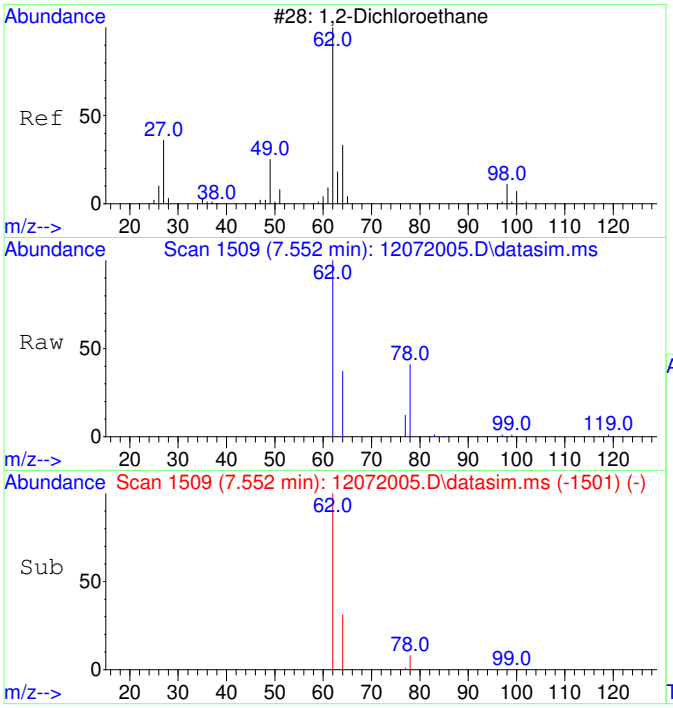


#9
Benzene
Concen: 4805.43 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 78 Resp: 165647

Ion	Ratio	Lower	Upper
78	100		
77	23.4	0.0	53.2

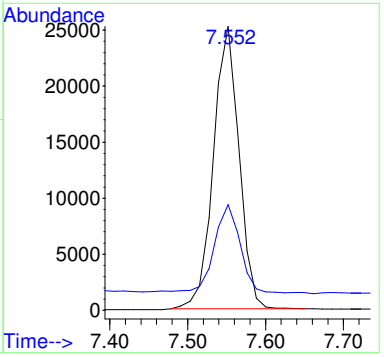


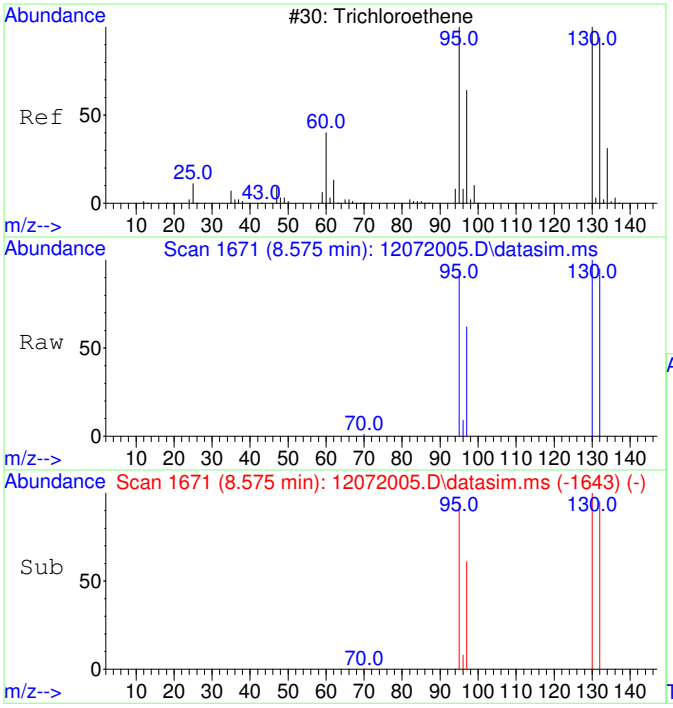


#10
1,2-Dichloroethane
Concen: 4890.64 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 62 Resp: 57511

Ion	Ratio	Lower	Upper
62	100		
64	31.0	2.3	62.3

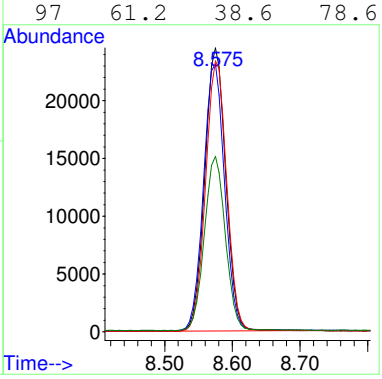


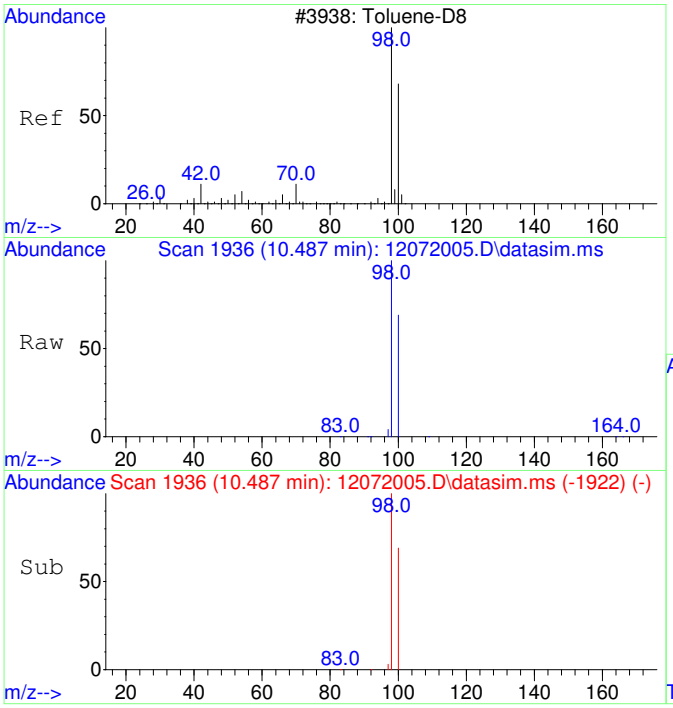


#11
Trichloroethene
Concen: 4836.52 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:130 Resp: 52638

Ion	Ratio	Lower	Upper
130	100		
95	94.8	60.7	120.7
132	95.9	76.0	116.0
97	61.2	38.6	78.6

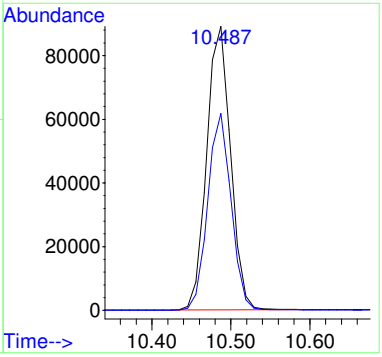


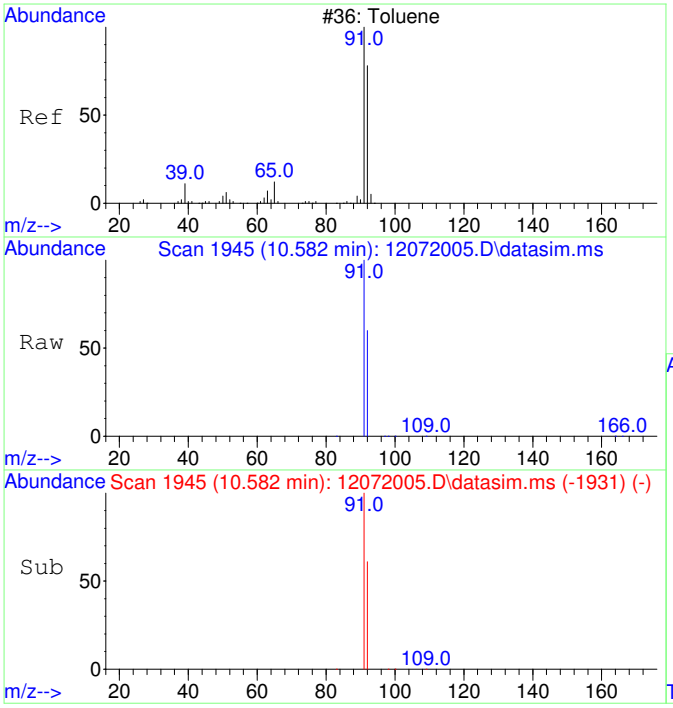


#12
Toluene-d8
Concen: 4711.13 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 98 Resp: 186913

Ion	Ratio	Lower	Upper
98	100		
100	67.7	37.1	97.1

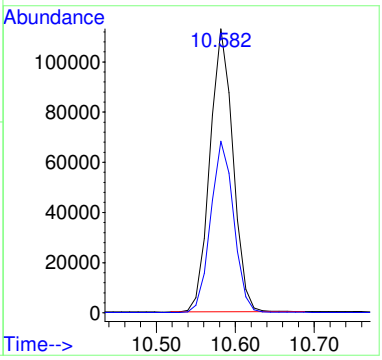


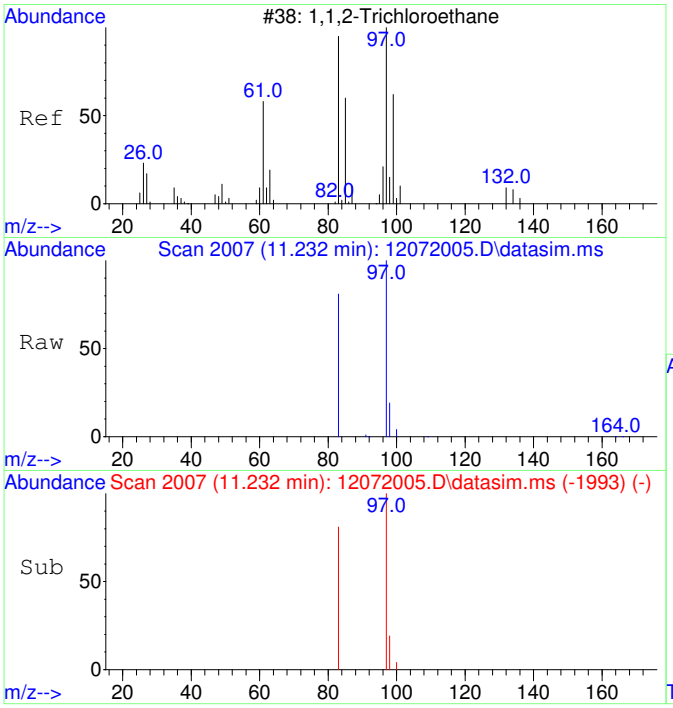


#13
Toluene
Concen: 4618.17 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 91 Resp: 228131

Ion	Ratio	Lower	Upper
91	100		
92	60.6	29.9	89.9

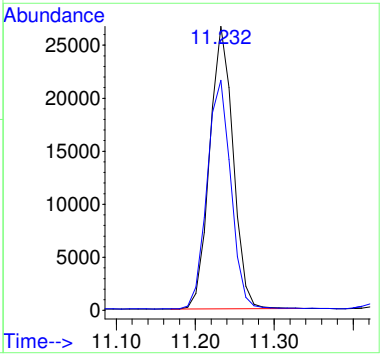


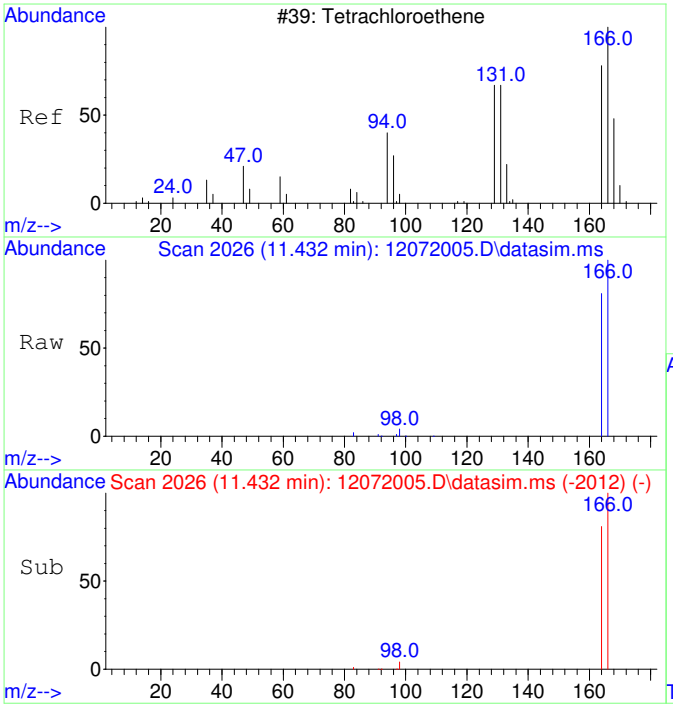


#14
1,1,2-Trichloroethane
Concen: 4785.50 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 97 Resp: 54754

Ion	Ratio	Lower	Upper
97	100		
83	82.2	51.2	111.2

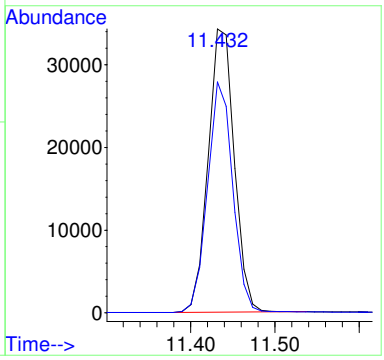


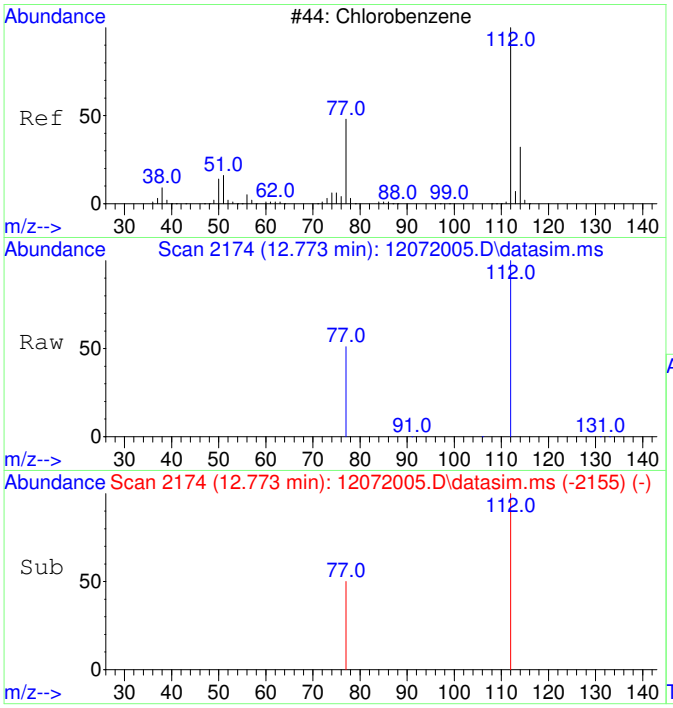


#15
Tetrachloroethene
Concen: 4807.99 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:166 Resp: 73978

Ion	Ratio	Lower	Upper
166	100		
164	78.3	47.8	107.8

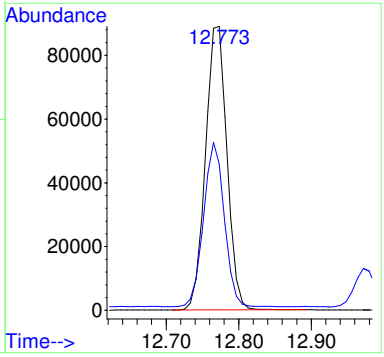


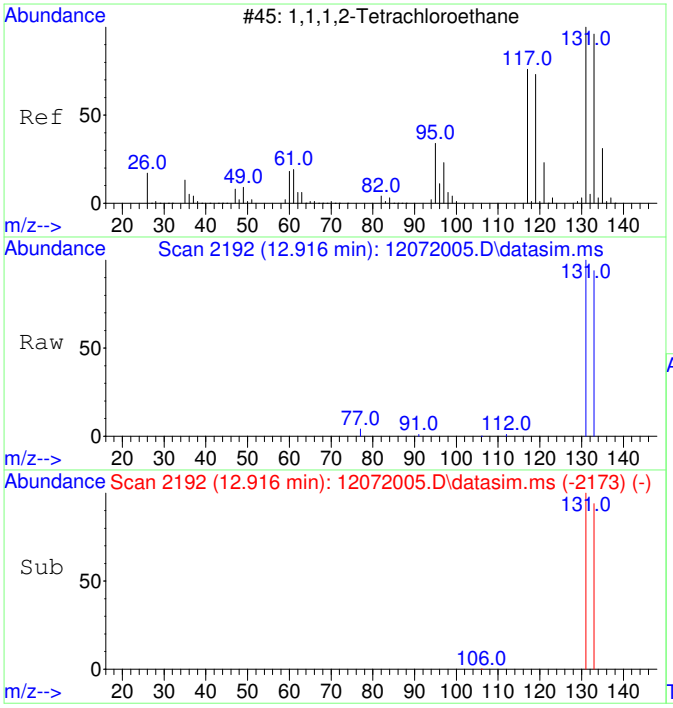


#16
Chlorobenzene
Concen: 4798.54 ug/L
RT: 12.773 min Scan# 2174
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:112 Resp: 183636

Ion	Ratio	Lower	Upper
112	100		
77	55.5	23.6	83.6

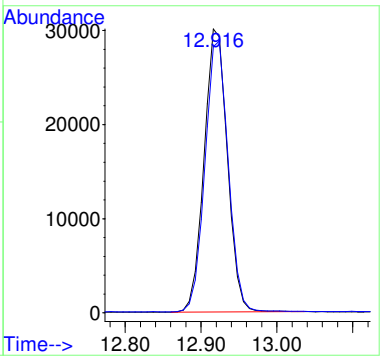


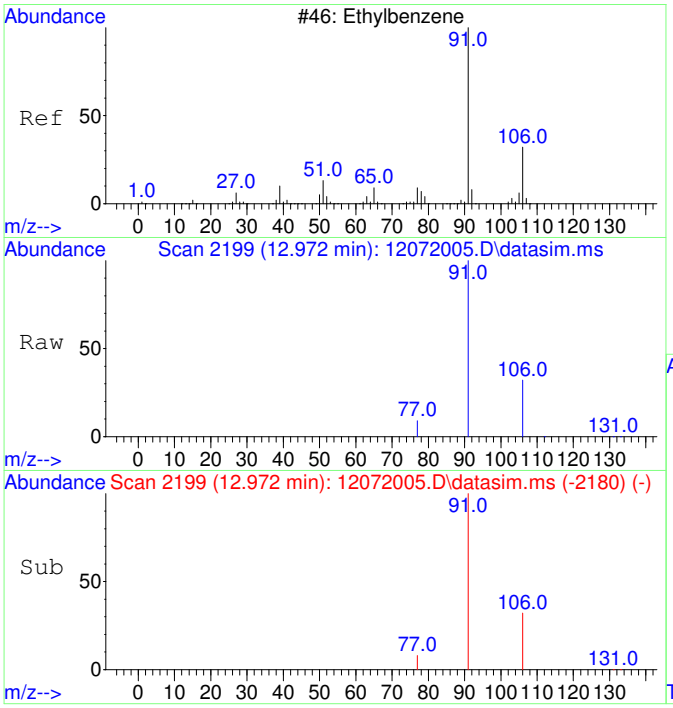


#17
1,1,1,2-Tetrachloroethane
Concen: 4786.10 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:131 Resp: 64105

Ion	Ratio	Lower	Upper
131	100		
133	95.6	66.3	126.3

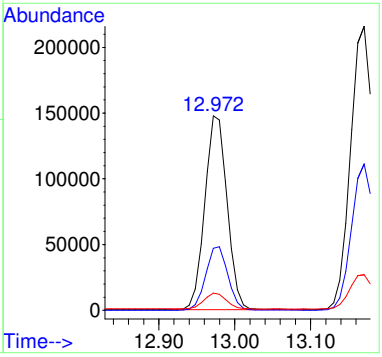


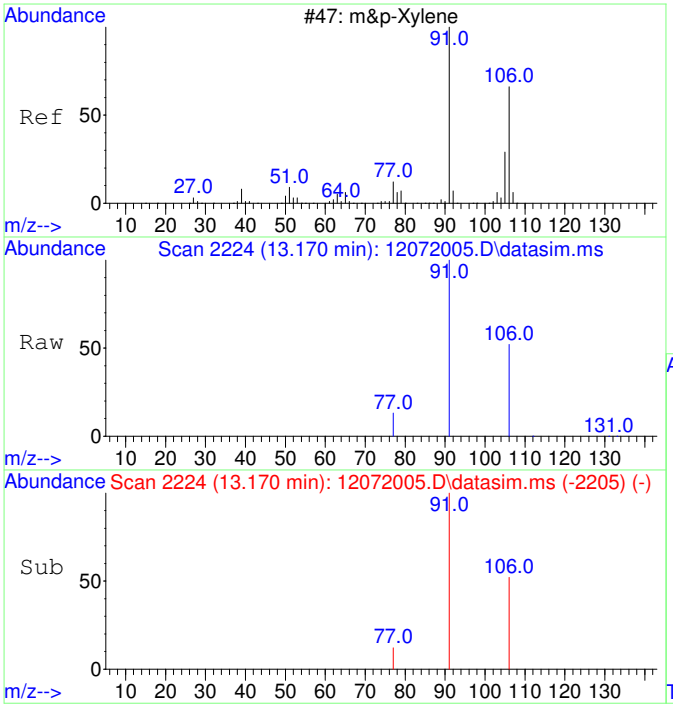


#18
Ethylbenzene
Concen: 4769.02 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 91 Resp: 300900

Ion	Ratio	Lower	Upper
91	100		
106	32.4	3.0	63.0
77	8.0	0.0	38.2

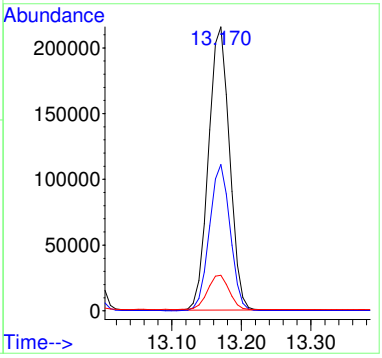


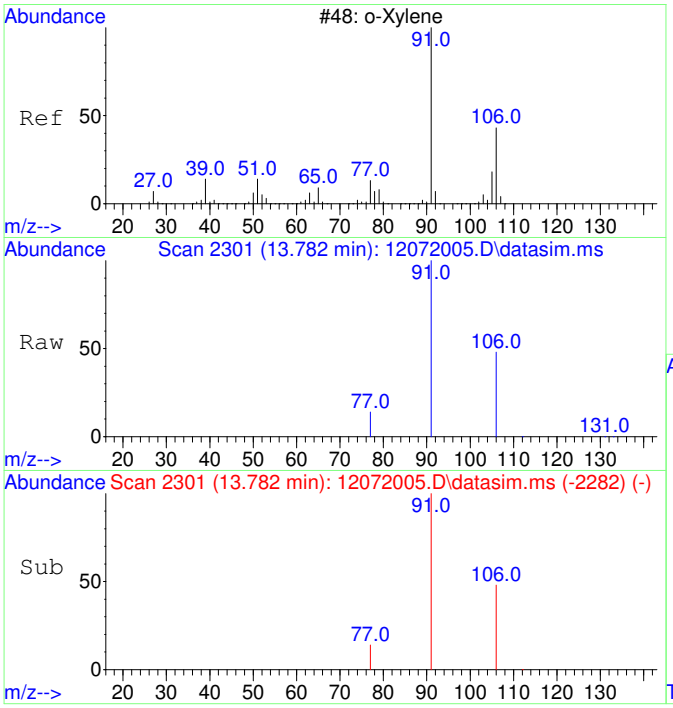


#19
m&p-Xylene
Concen: 9324.93 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 91 Resp: 453072

Ion	Ratio	Lower	Upper
91	100		
106	50.9	22.2	82.2
77	12.3	0.0	42.4

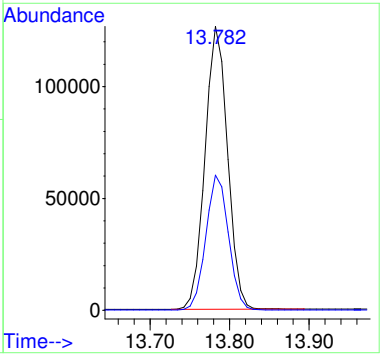


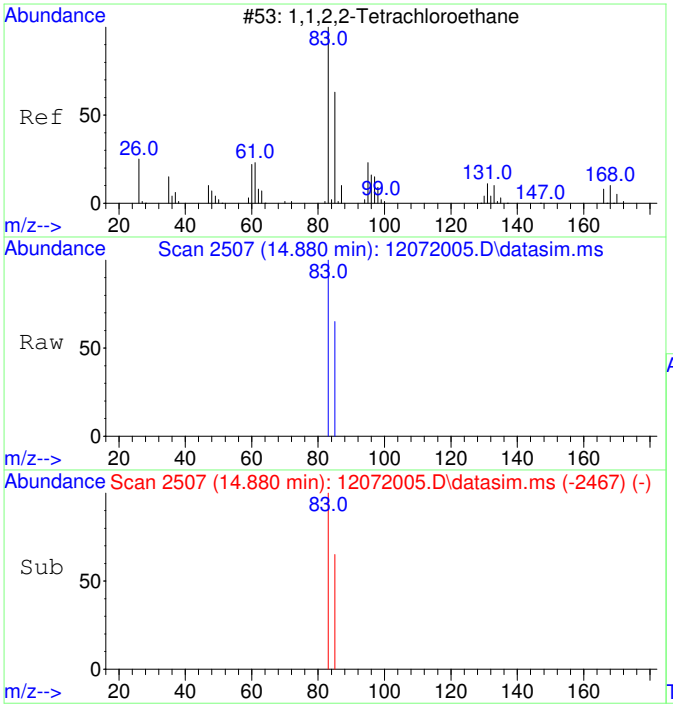


#20
o-Xylene
Concen: 4753.32 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 91 Resp: 248059

Ion	Ratio	Lower	Upper
91	100		
106	48.0	19.2	79.2

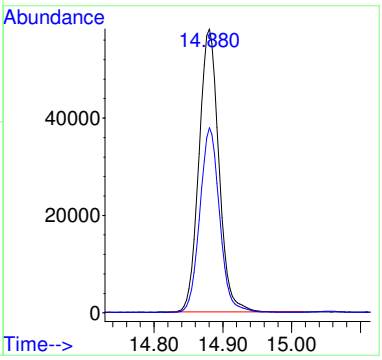


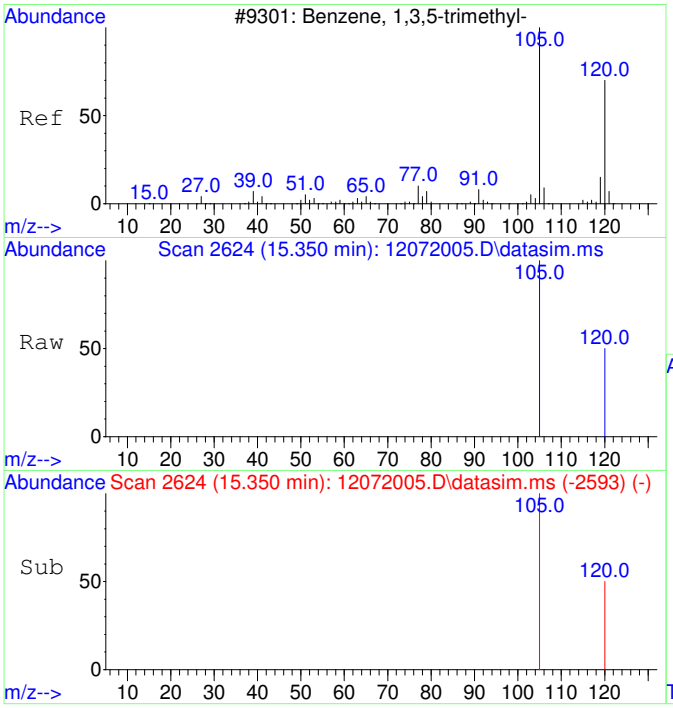


#21
1,1,2,2-Tetrachloroethane
Concen: 4794.47 ug/L
RT: 14.880 min Scan# 2507
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 83 Resp: 116584

Ion	Ratio	Lower	Upper
83	100		
85	64.5	34.8	94.8

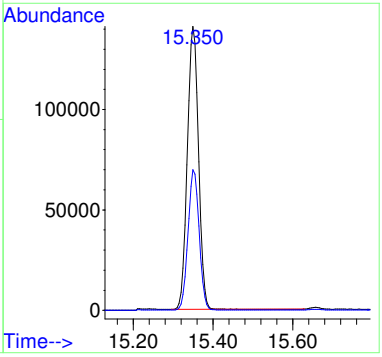


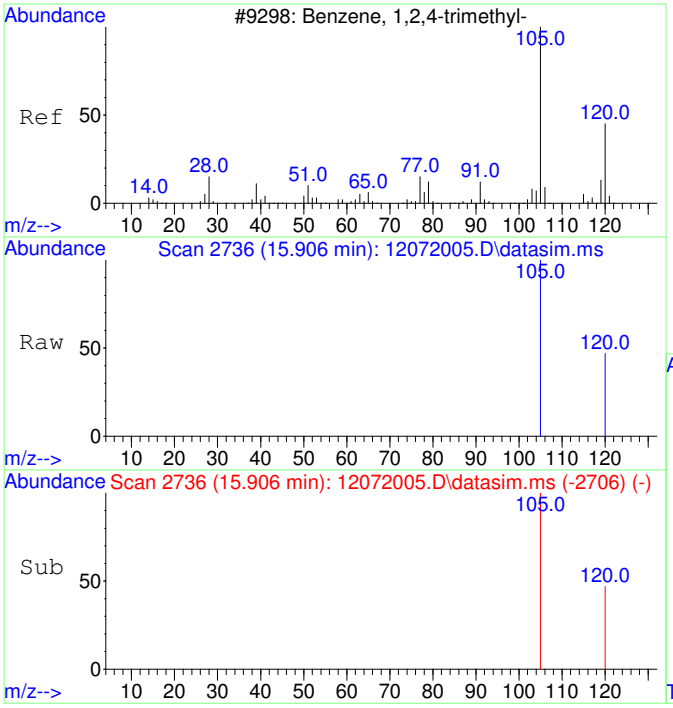


#22
1,3,5-Trimethylbenzene
Concen: 4771.13 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:105 Resp: 273812

Ion	Ratio	Lower	Upper
105	100		
120	49.4	21.1	81.1

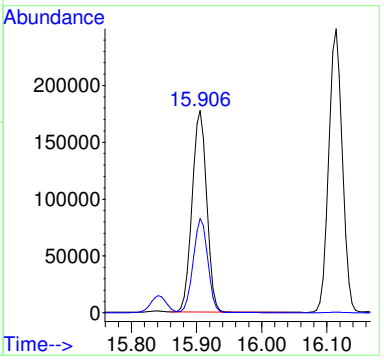


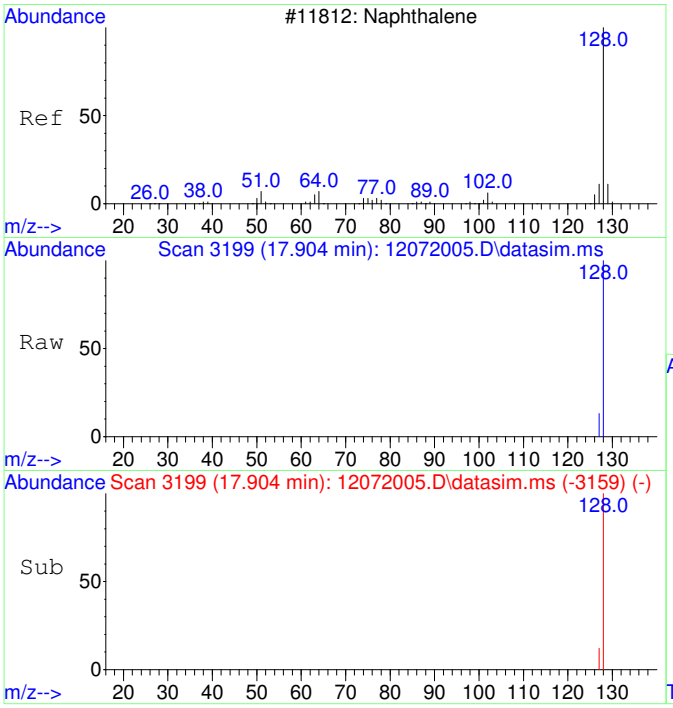


#23
1,2,4-Trimethylbenzene
Concen: 4711.81 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:105 Resp: 276580

Ion	Ratio	Lower	Upper
105	100		
120	45.5	17.2	77.2

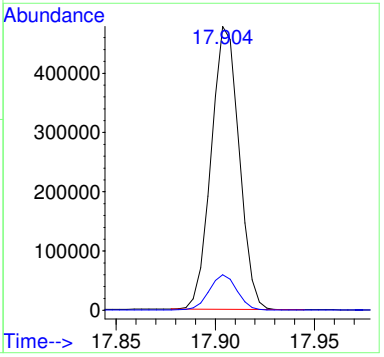


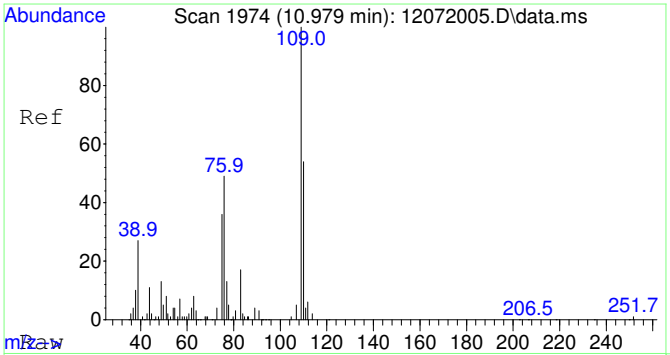


#24
Naphthalene
Concen: 5076.38 ug/L
RT: 17.904 min Scan# 3199
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:128 Resp: 465960

Ion	Ratio	Lower	Upper
128	100		
127	12.2	0.0	42.5

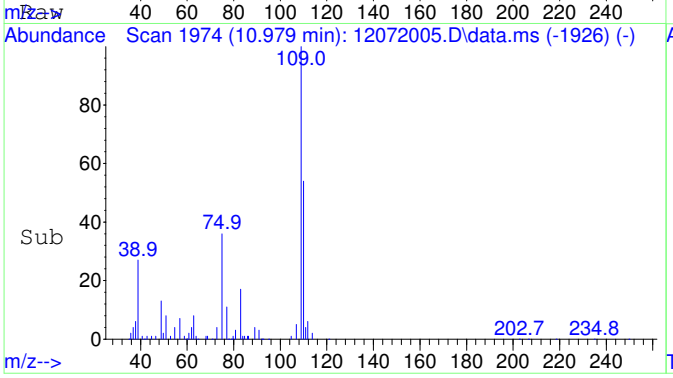


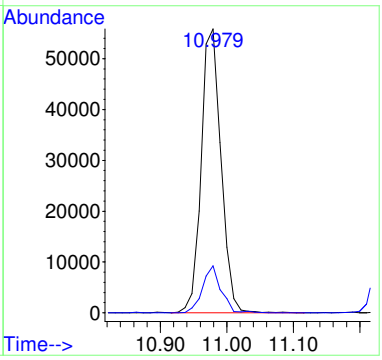


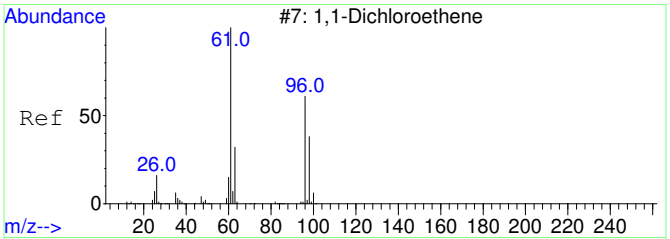
#25
2-Fluorotoluene SCAN
Concen: 5000.00 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

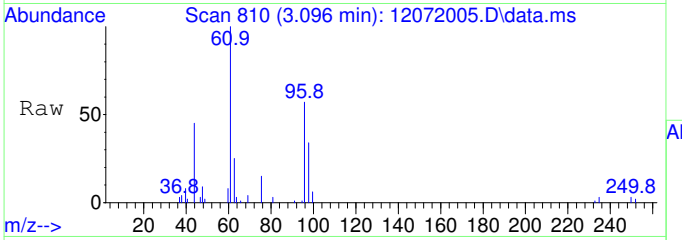
Tgt Ion:109 Resp: 116264

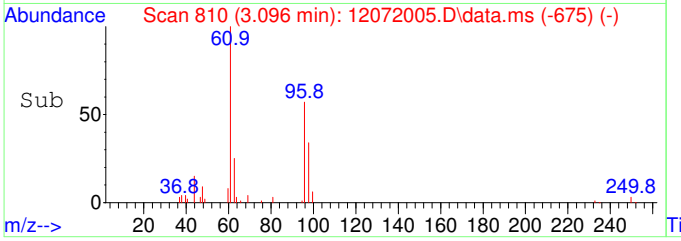
Ion	Ratio	Lower	Upper
109	100		
83	15.5	0.0	43.8







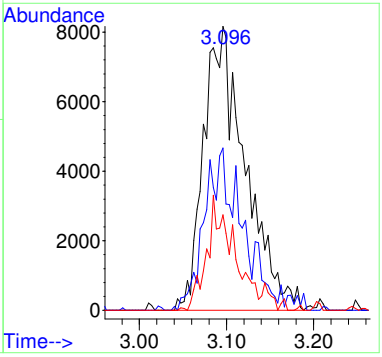


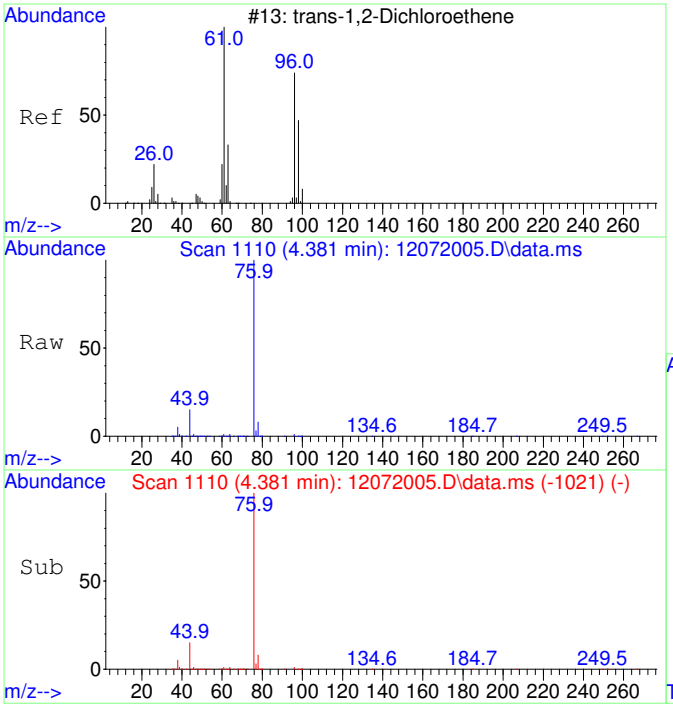


#26
1,1-Dichloroethene SCAN
Concen: 5000.00 ug/L
RT: 3.096 min Scan# 810
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 61 Resp: 27142

Ion	Ratio	Lower	Upper
61	100		
96	7.9	33.1	93.1#
98	0.0	11.2	71.2#

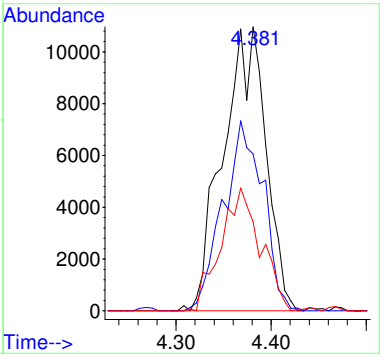


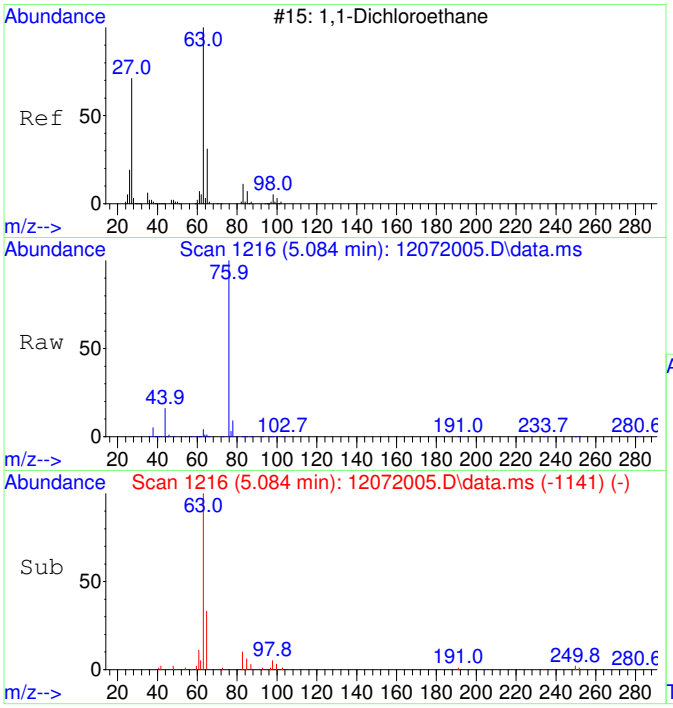


#27
trans-1,2-Dichloroethene SCAN
Concen: 5000.00 ug/L
RT: 4.381 min Scan# 1110
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 61 Resp: 34571

Ion	Ratio	Lower	Upper
61	100		
96	62.1	49.0	109.0
98	39.6	20.5	80.5

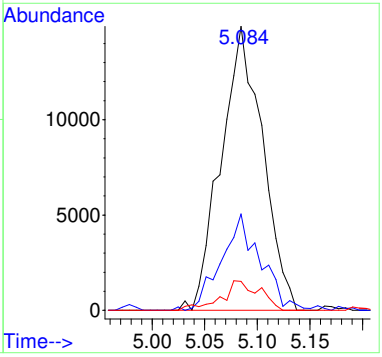


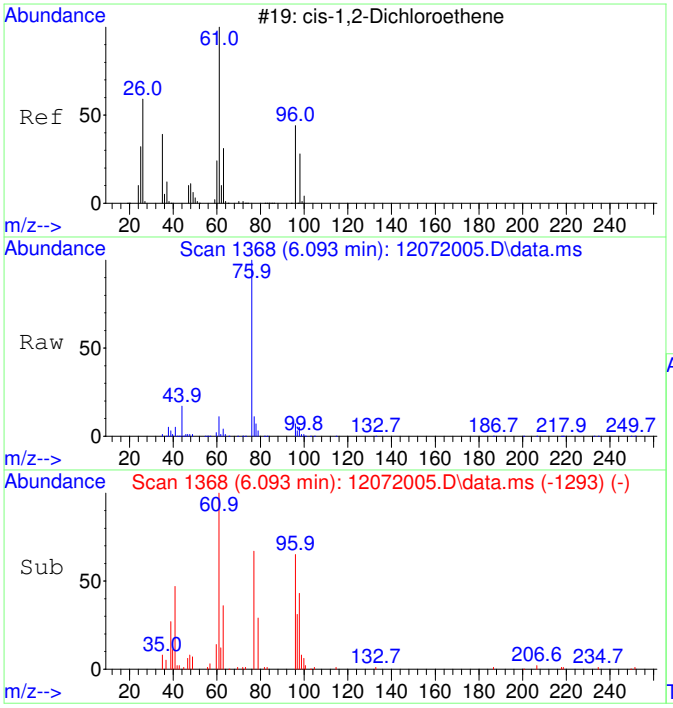


#28
1,1-Dichloroethane SCAN
Concen: 5000.00 ug/L
RT: 5.084 min Scan# 1216
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 63 Resp: 40806

Ion	Ratio	Lower	Upper
63	100		
65	32.2	1.3	61.3
83	9.5	0.0	45.9

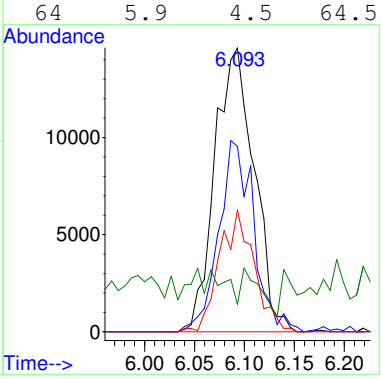


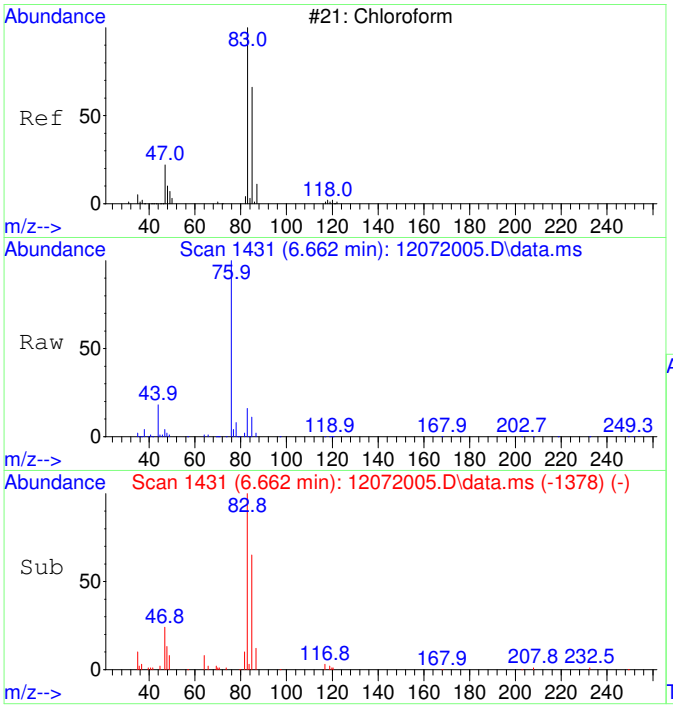


#29
cis-1,2-Dichloroethene SCAN
Concen: 5000.00 ug/L
RT: 6.093 min Scan# 1368
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 61 Resp: 40115

Ion	Ratio	Lower	Upper
61	100		
96	59.9	39.9	99.9
98	37.6	13.5	73.5
64	5.9	4.5	64.5

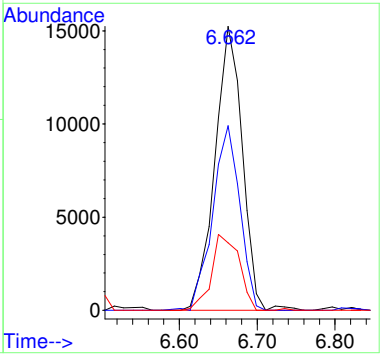


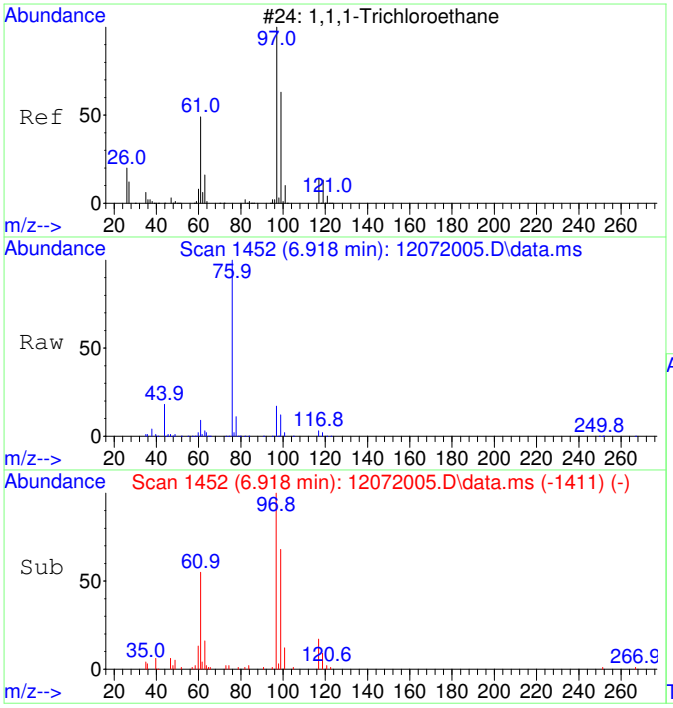


#30
Chloroform SCAN
Concen: 5000.00 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 83 Resp: 37416

Ion	Ratio	Lower	Upper
83	100		
85	64.3	34.6	94.6
47	26.7	0.0	53.4

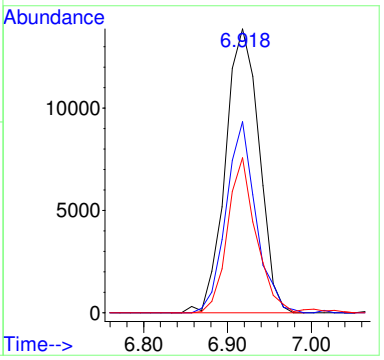


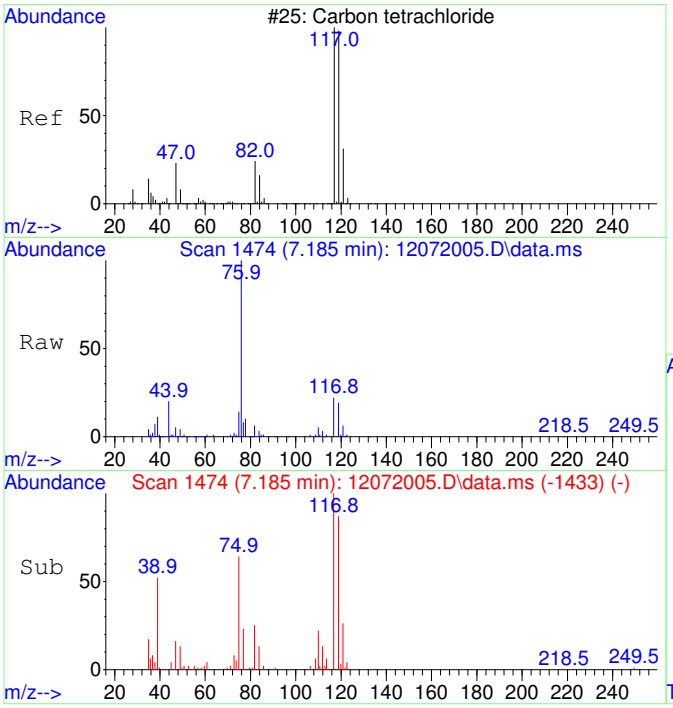


#31
1,1,1-Trichloroethane SCAN
Concen: 5000.00 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 97 Resp: 38610

Ion	Ratio	Lower	Upper
97	100		
99	59.6	43.6	103.6
61	47.4	18.0	78.0

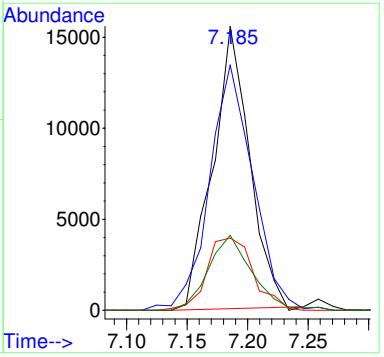


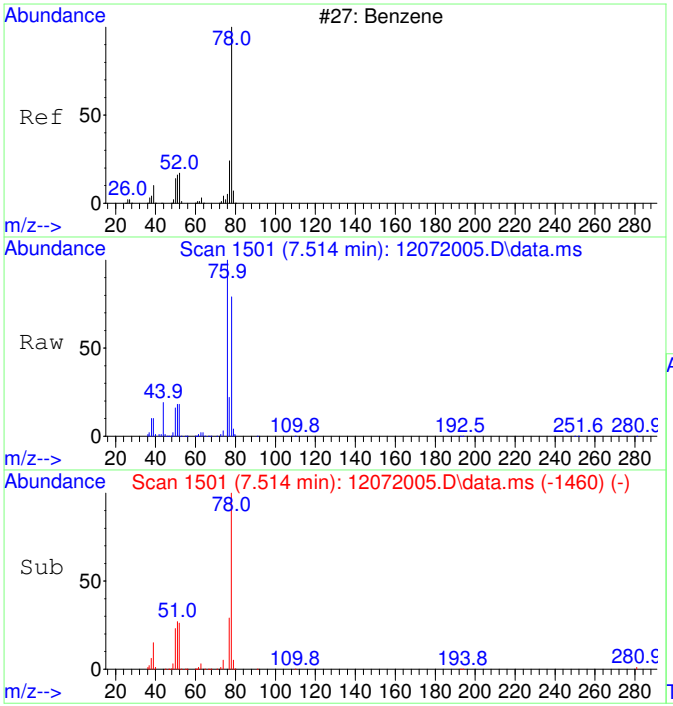


#32
Carbon tetrachloride SCAN
Concen: 5000.00 ug/L
RT: 7.185 min Scan# 1474
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:117 Resp: 32994

Ion	Ratio	Lower	Upper
117	100		
119	102.7	75.5	135.5
121	32.4	0.0	58.8
82	31.6	0.0	59.2

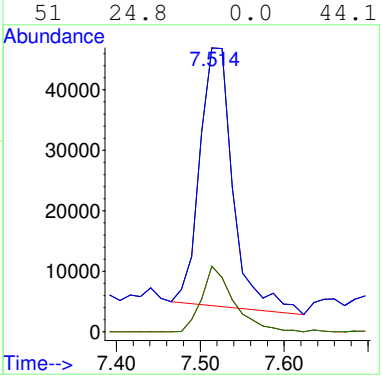


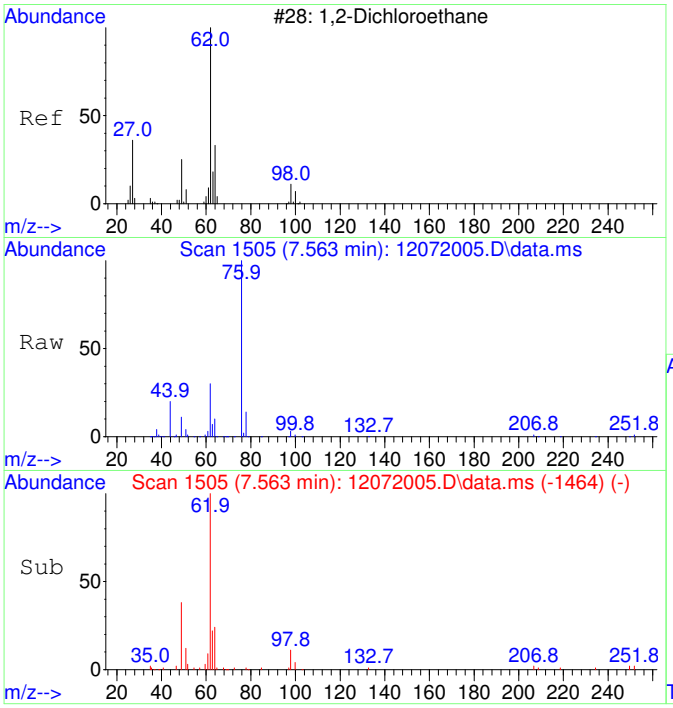


#33
Benzene SCAN
Concen: 5000.00 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 78 Resp: 116808

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	24.8	0.0	47.9
51	24.8	0.0	44.1

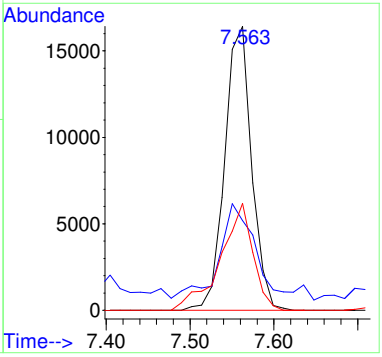


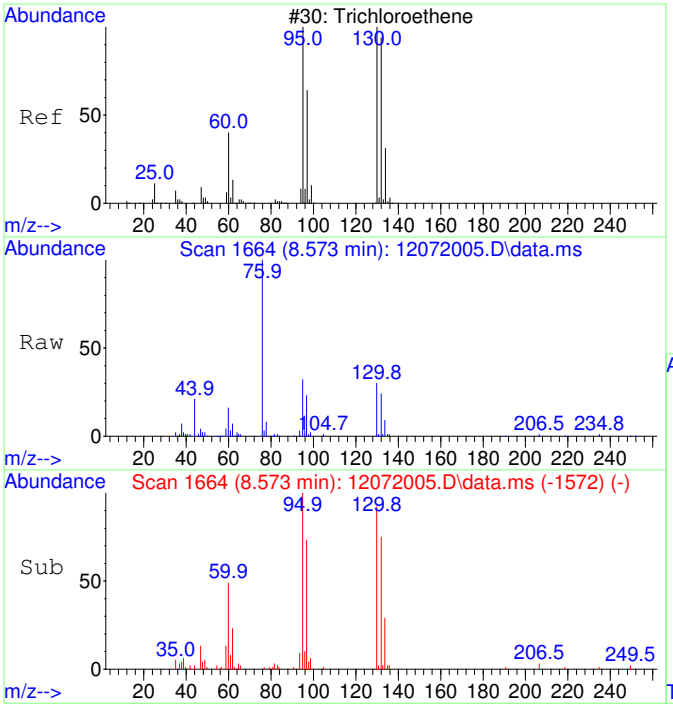


#34
1,2-Dichloroethane SCAN
Concen: 5000.00 ug/L
RT: 7.563 min Scan# 1505
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 62 Resp: 36537

Ion	Ratio	Lower	Upper
62	100		
64	42.1	5.2	65.2
49	45.6	3.9	63.9

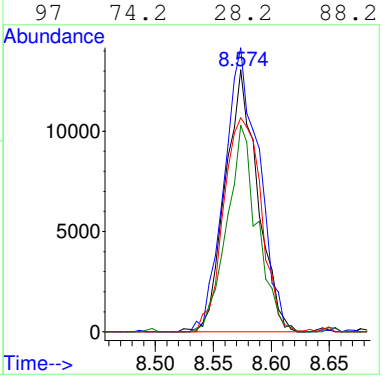


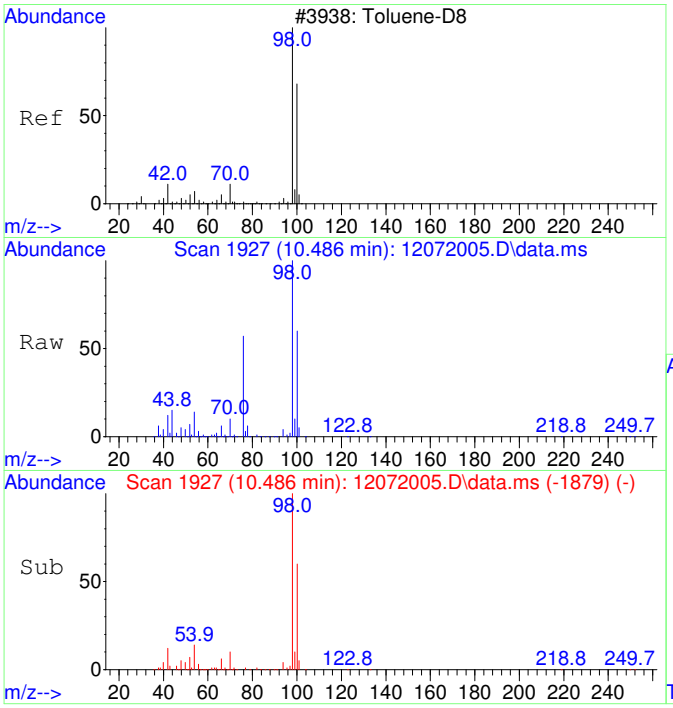


#35
Trichloroethene SCAN
Concen: 5000.00 ug/L
RT: 8.573 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:130 Resp: 25470

Ion	Ratio	Lower	Upper
130	100		
95	116.2	60.5	120.5
132	94.3	59.6	119.6
97	74.2	28.2	88.2

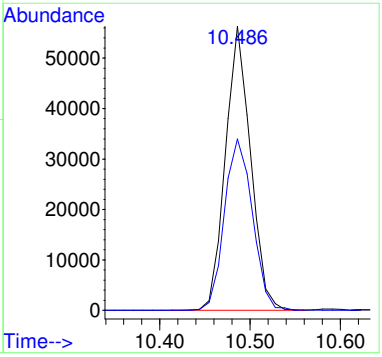


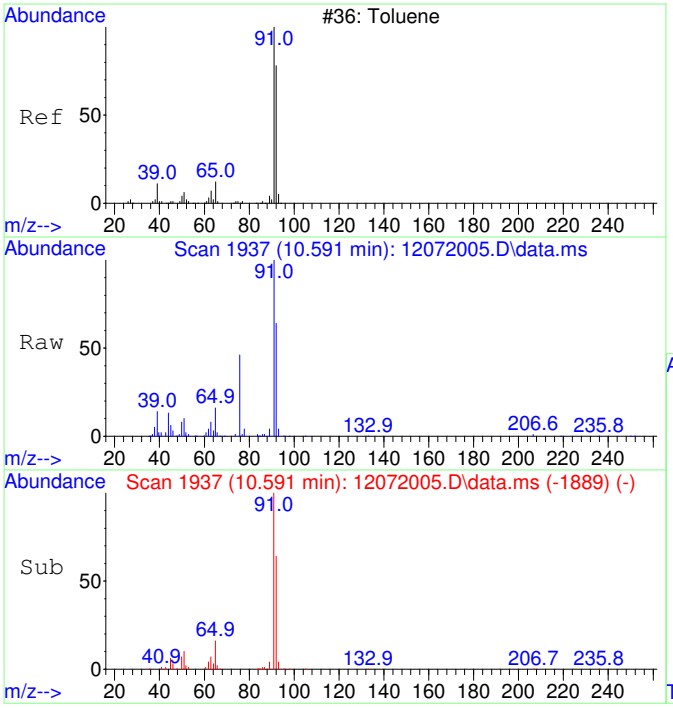


#36
Toluene-d8 SCAN
Concen: 5000.00 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 98 Resp: 109043

Ion	Ratio	Lower	Upper
98	100		
100	67.2	40.0	100.0

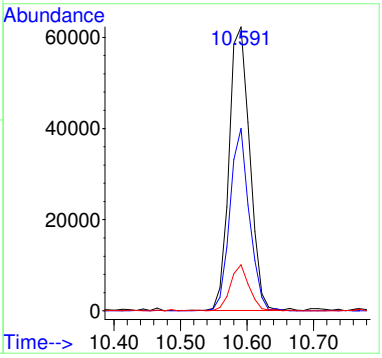


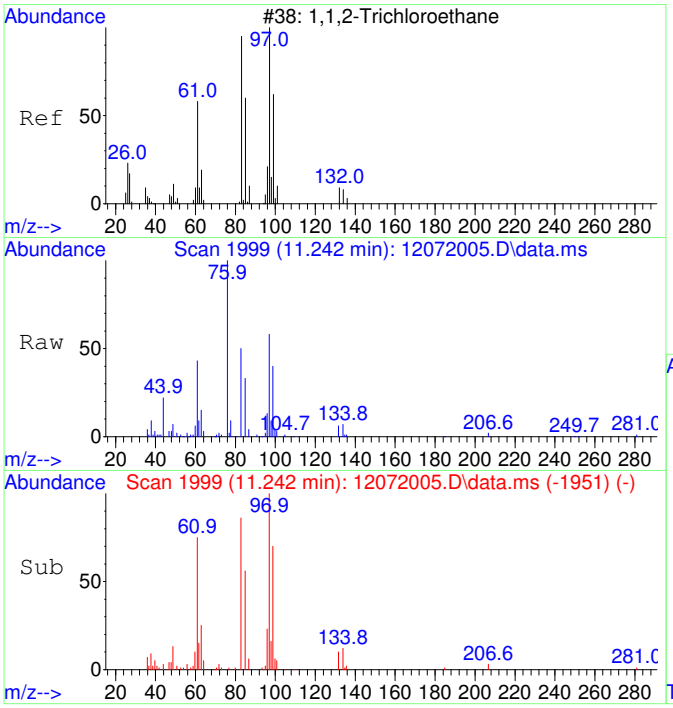


#37
Toluene SCAN
Concen: 5000.00 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 91 Resp: 134257

Ion	Ratio	Lower	Upper
91	100		
92	60.4	28.3	88.3
65	14.8	0.0	41.0

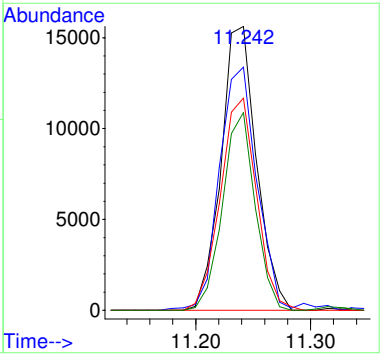


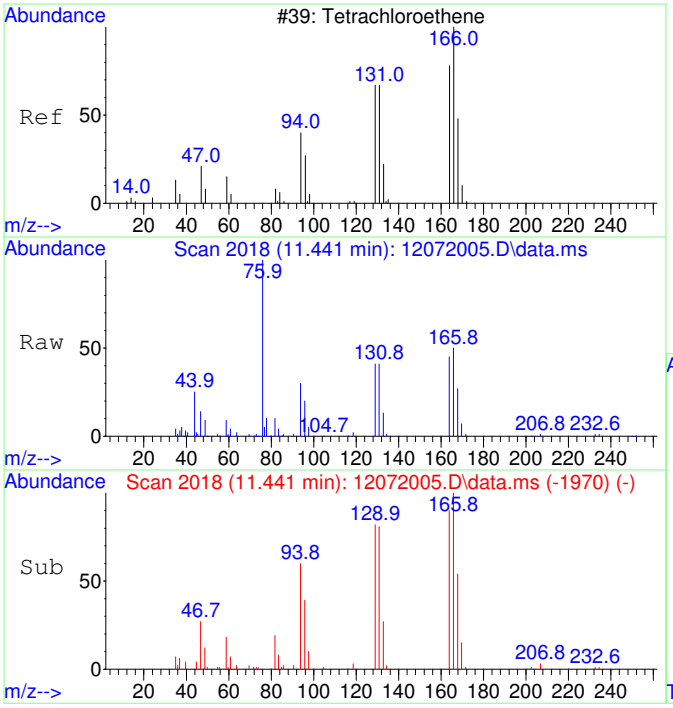


#38
1,1,2-Trichloroethane SCAN
Concen: 5000.00 ug/L
RT: 11.242 min Scan# 1999
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 97 Resp: 33652

Ion	Ratio	Lower	Upper
97	100		
83	91.4	57.7	117.7
61	76.2	32.1	92.1
99	63.8	36.7	96.7

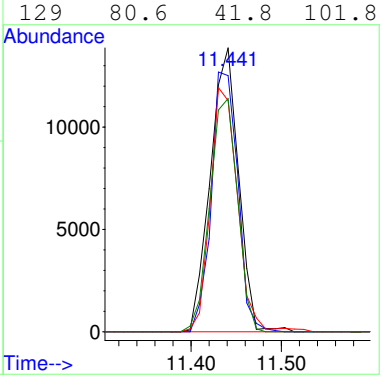


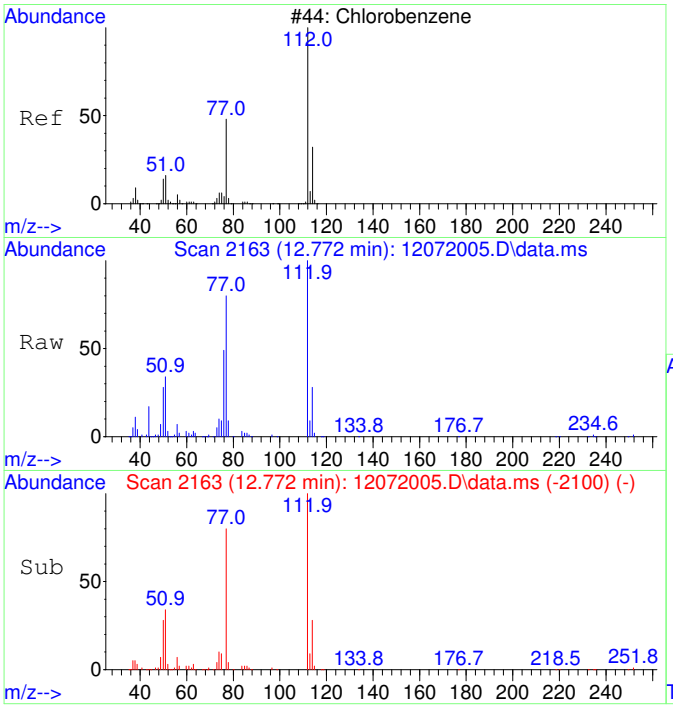


#39
Tetrachloroethene SCAN
Concen: 5000.00 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:166 Resp: 30203

Ion	Ratio	Lower	Upper
166	100		
164	85.5	50.9	110.9
131	82.9	38.7	98.7
129	80.6	41.8	101.8

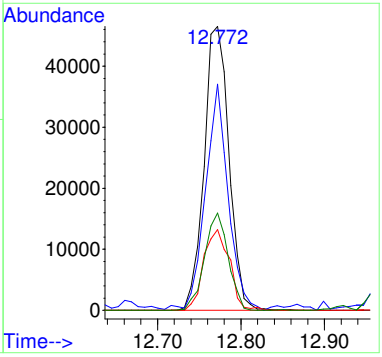


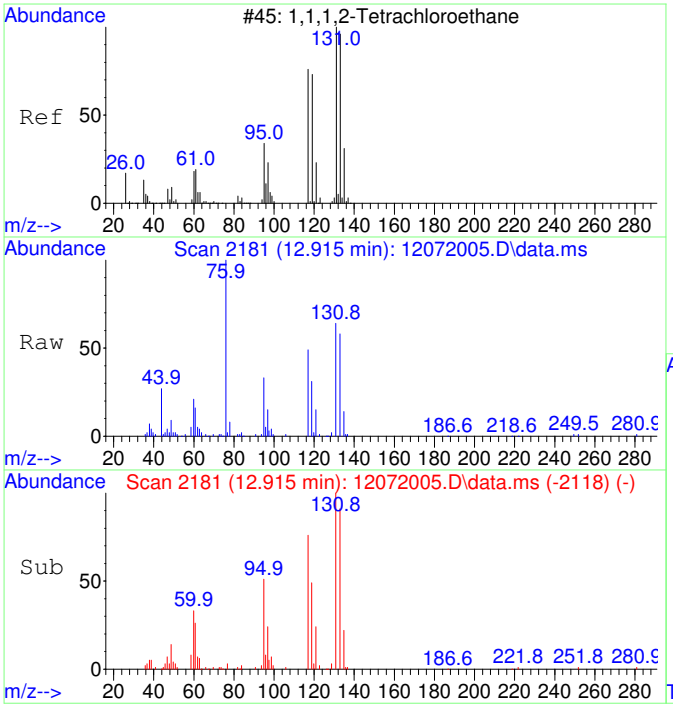


#40
Chlorobenzene SCAN
Concen: 5000.00 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:112 Resp: 96431

Ion	Ratio	Lower	Upper
112	100		
77	72.1	28.2	88.2
114	29.5	2.3	62.3
51	32.6	0.0	50.1

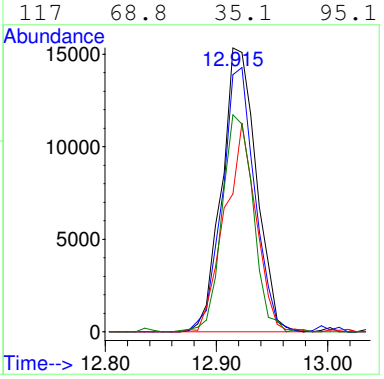


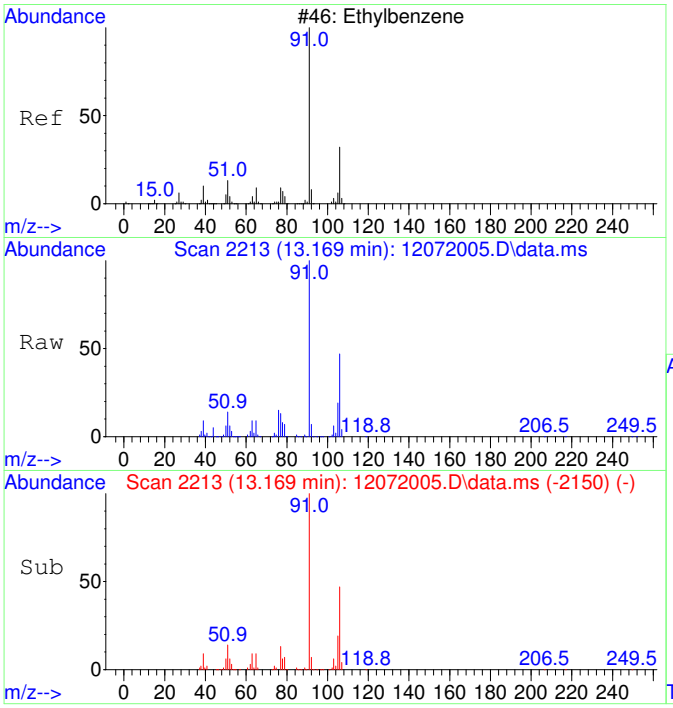


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 5000.00 ug/L
RT: 12.915 min Scan# 2181
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:131 Resp: 33269

Ion	Ratio	Lower	Upper
131	100		
133	87.3	66.9	126.9
119	66.4	40.4	100.4
117	68.8	35.1	95.1

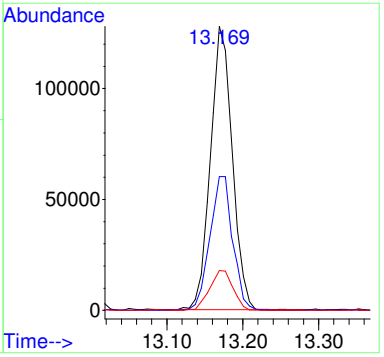


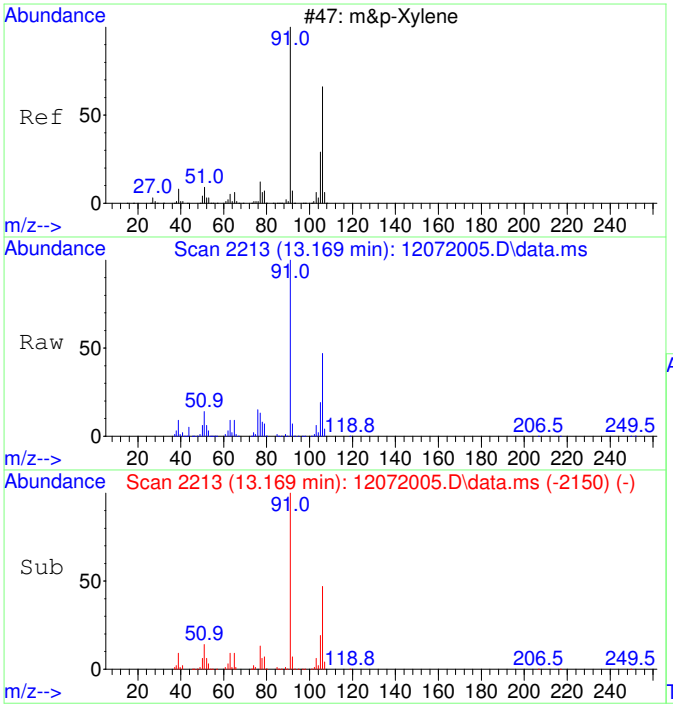


#42
Ethylbenzene SCAN
Concen: 5000.00 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 91 Resp: 255849

Ion	Ratio	Lower	Upper
91	100		
106	49.4	23.1	83.1
51	15.1	0.0	40.1

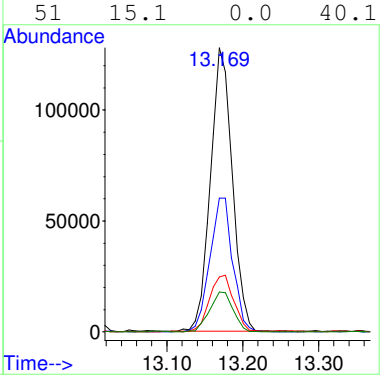


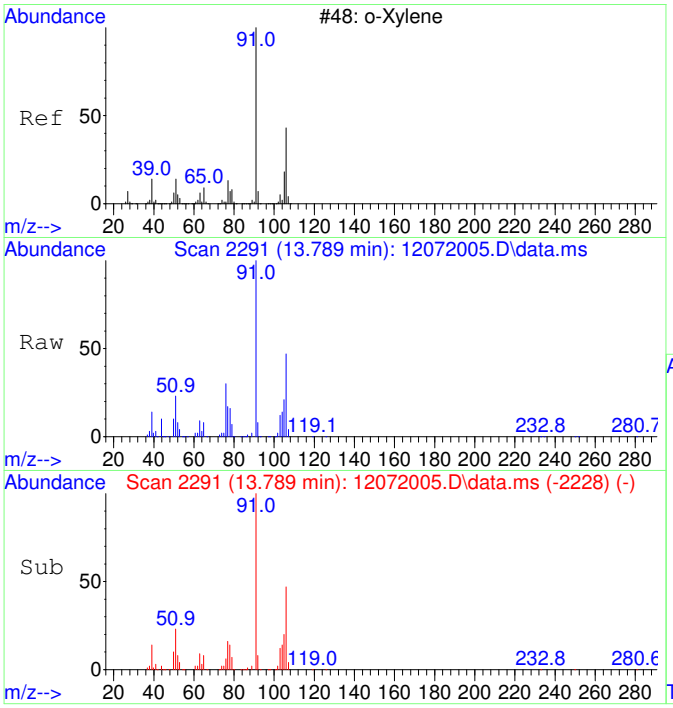


#43
m&p-Xylene SCAN
Concen: 5000.00 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 91 Resp: 255849

Ion	Ratio	Lower	Upper
91	100		
106	49.4	23.1	83.1
105	22.0	0.0	54.7
51	15.1	0.0	40.1

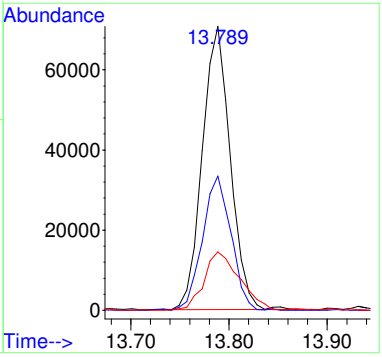


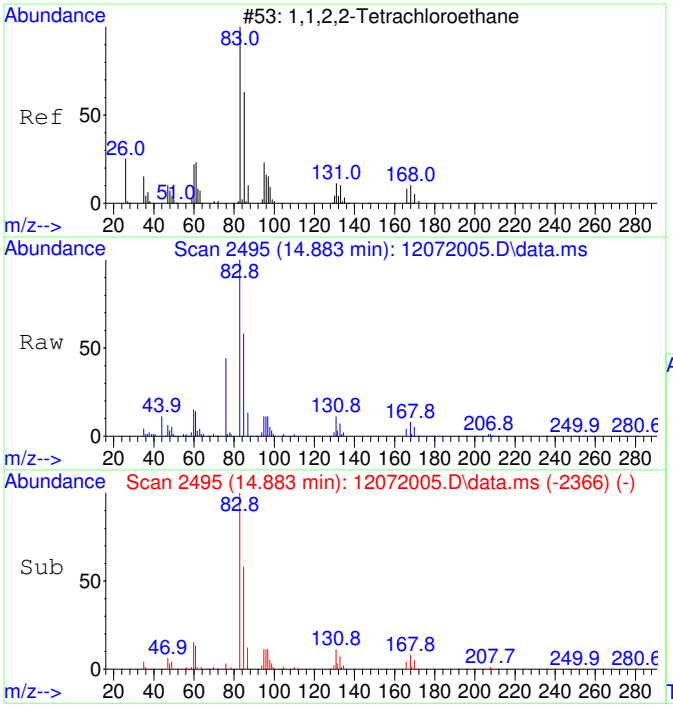


#44
o-Xylene SCAN
Concen: 5000.00 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 91 Resp: 139708

Ion	Ratio	Lower	Upper
91	100		
106	48.0	18.0	78.0
105	25.8	0.0	56.6

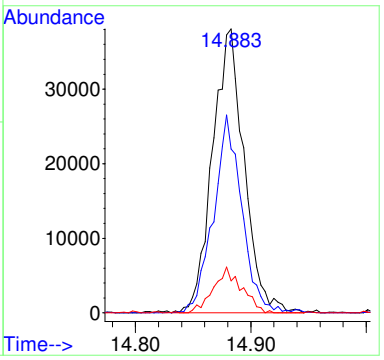


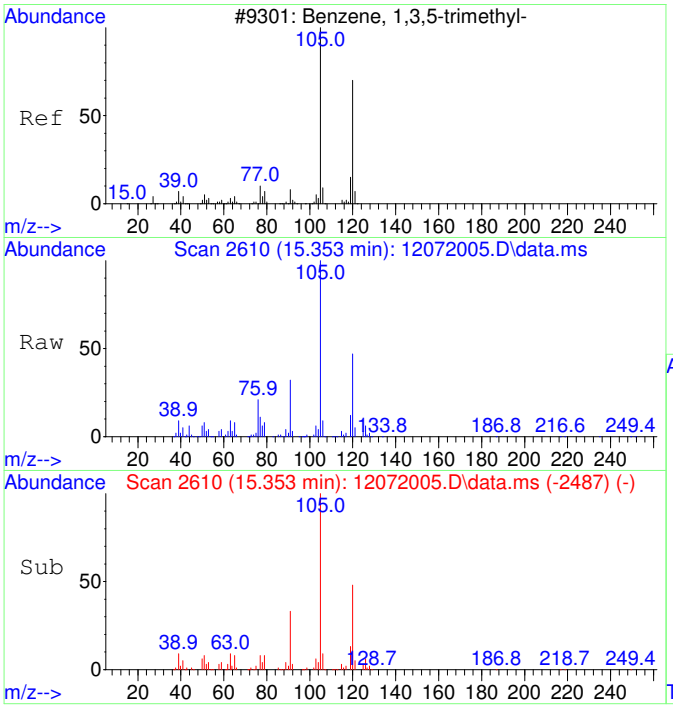


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 5000.00 ug/L
RT: 14.883 min Scan# 2495
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 83 Resp: 72641

Ion	Ratio	Lower	Upper
83	100		
85	61.3	35.9	95.9
95	14.3	0.0	47.4

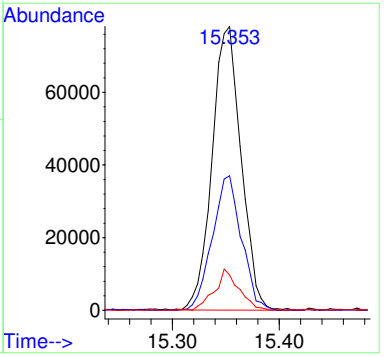


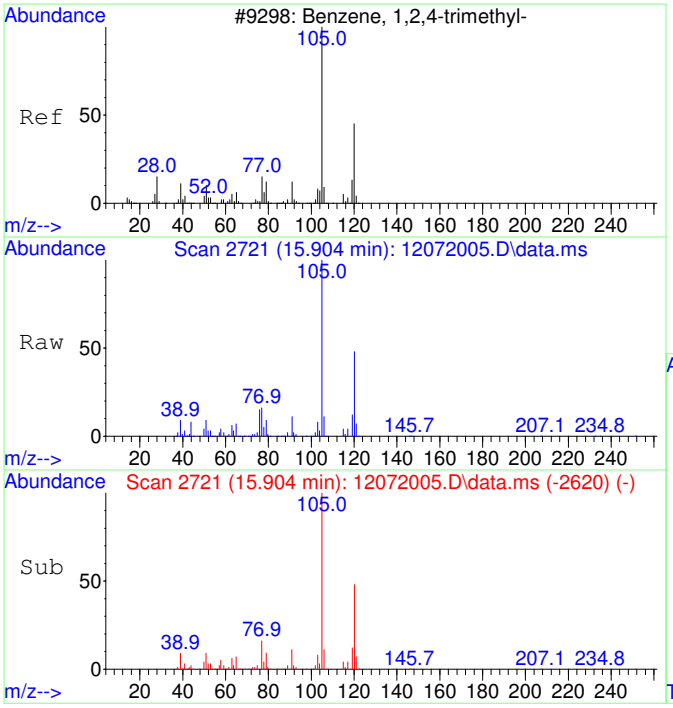


#46
1,3,5-Trimethylbenzene SCAN
Concen: 5000.00 ug/L
RT: 15.353 min Scan# 2610
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:105 Resp: 147389

Ion	Ratio	Lower	Upper
105	100		
120	47.6	18.3	78.3
119	12.4	0.0	43.1

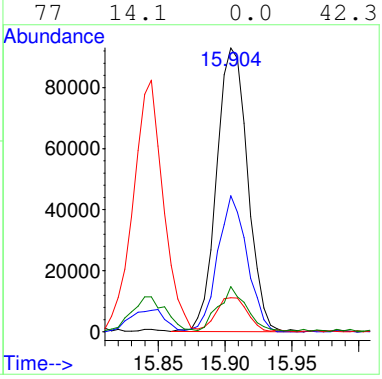


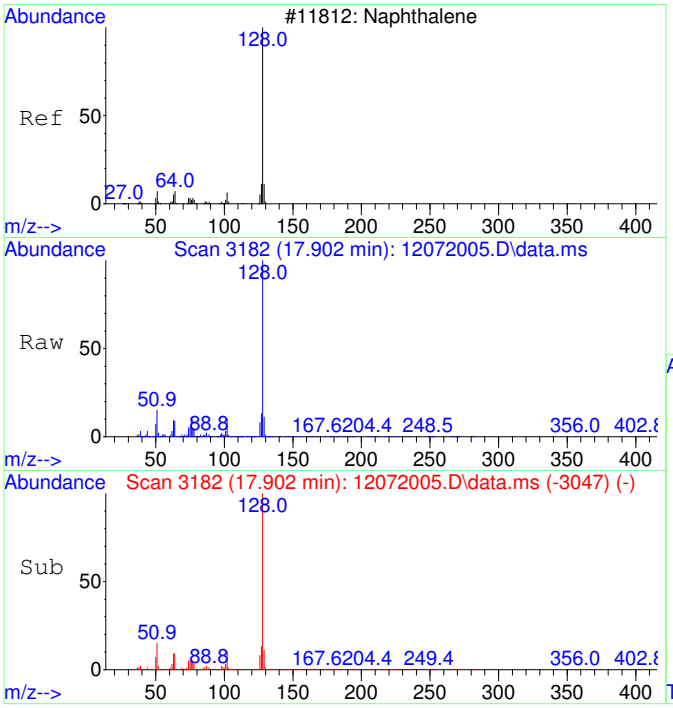


#47
1,2,4-Trimethylbenzene SCAN
Concen: 5000.00 ug/L
RT: 15.904 min Scan# 2721
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:105 Resp: 150588

Ion	Ratio	Lower	Upper
105	100		
120	44.8	16.9	76.9
119	11.0	0.0	41.9
77	14.1	0.0	42.3

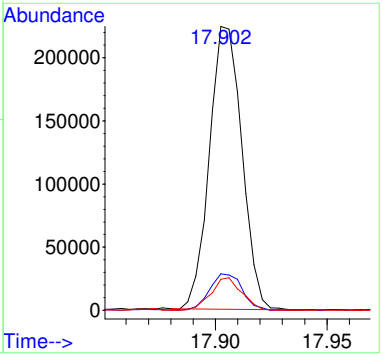




#48
Naphthalene SCAN
Concen: 5000.00 ug/L
RT: 17.902 min Scan# 3182
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:128 Resp: 226034

Ion	Ratio	Lower	Upper
128	100		
127	12.9	0.0	44.0
129	10.9	0.0	40.8



S20L021-CAL4

Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072006.D
Acq On : 7 Dec 2020 13:56
InstName : AG5975C
Operator : TD
Sample : S20L021-CAL4
Misc : 2030071 1 mg/L
ALS Vial : 6 Sample Multiplier: 1

Before Manual Integration

Quant Time: Dec 08 06:06:55 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:05:27 2020
Response via : Initial Calibration

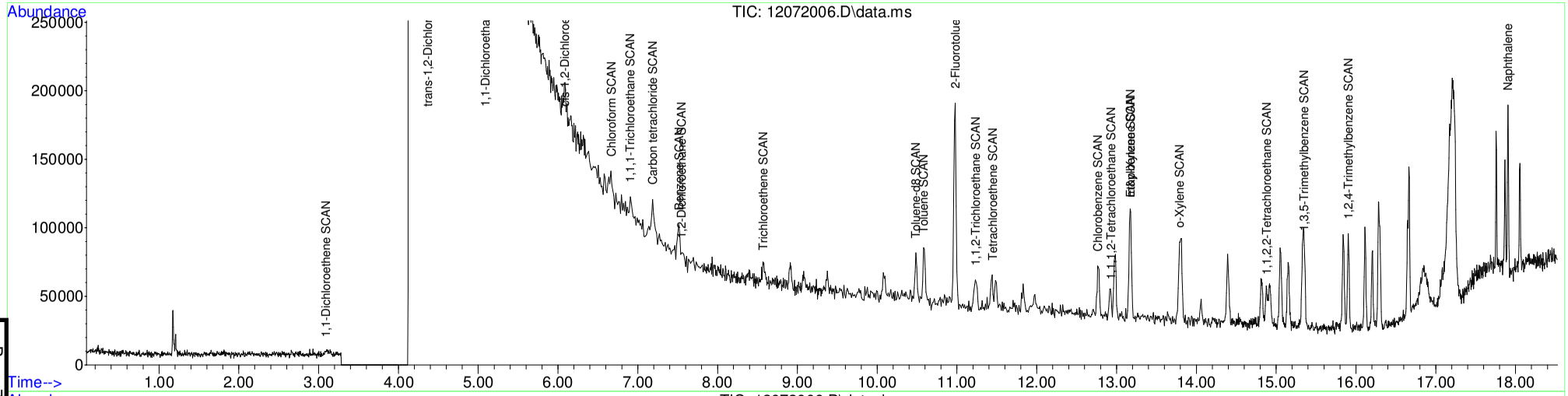
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	192171	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	40349	1084.10 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 21.68%#		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.086	61	6977	918.69 ug/L	89
3] trans-1,2-Dichloroethene	4.363	61	8899	926.37 ug/L	100
4] 1,1-Dichloroethane	5.079	63	10775	939.13 ug/L	98
5] cis-1,2-Dichloroethene	6.088	61	11528	970.12 ug/L	98
6] Chloroform	6.652	83	11165	978.21 ug/L	100
7] 1,1,1-Trichloroethane	6.907	97	12471	1017.13 ug/L	100
8] Carbon tetrachloride	7.187	117	12168	1038.04 ug/L	99
9] Benzene	7.503	78	33507	1036.18 ug/L	92
10] 1,2-Dichloroethane	7.552	62	11309	1025.16 ug/L	92
11] Trichloroethene	8.575	130	10868	1064.47 ug/L	98
13] Toluene	10.582	91	51129	1103.33 ug/L	100
14] 1,1,2-Trichloroethane	11.232	97	11523	1073.57 ug/L	100
15] Tetrachloroethene	11.432	166	15897	1101.36 ug/L	100
16] Chlorobenzene	12.765	112	39448	1098.83 ug/L	97
17] 1,1,1,2-Tetrachloroethane	12.916	131	13873	1104.11 ug/L	100
18] Ethylbenzene	12.972	91	66895	1130.19 ug/L	98
19] m&p-Xylene	13.171	91	103724	2275.67 ug/L	98
20] o-Xylene	13.782	91	54333	1109.83 ug/L	98
21] 1,1,2,2-Tetrachloroethane	14.881	83	25279	1108.19 ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	61678	1145.65 ug/L	97
23] 1,2,4-Trimethylbenzene	15.906	105	63729	1157.33 ug/L	96
24] Naphthalene	17.906	128	102525	1190.66 ug/L	99
25) 2-Fluorotoluene SCAN	10.979	109	105526	4837.67 ug/L	98
26) 1,1-Dichloroethene SCAN	3.085	61	1144	224.65 ug/L #	62
27) trans-1,2-Dichloroethe...	4.368	61	6412	988.56 ug/L #	42
28) 1,1-Dichloroethane SCAN	5.085	63	6350	829.42 ug/L	77
29) cis-1,2-Dichloroethene...	6.080	61	9880	1312.72 ug/L #	64
30) Chloroform SCAN	6.663	83	8176	1164.68 ug/L	94
31) 1,1,1-Trichloroethane ...	6.906	97	8197	1131.56 ug/L	87
32) Carbon tetrachloride SCAN	7.186	117	6968	1125.63 ug/L	95
33) Benzene SCAN	7.514	78	24495	1117.71 ug/L	96
34) 1,2-Dichloroethane SCAN	7.551	62	7265	1059.80 ug/L #	37
35) Trichloroethene SCAN	8.574	130	4582	958.85 ug/L #	47
36) Toluene-d8 SCAN	10.486	98	23597	1153.40 ug/L	96
37) Toluene SCAN	10.581	91	32509	1290.59 ug/L	96
38) 1,1,2-Trichloroethane ...	11.231	97	7321	1159.53 ug/L	93
39) Tetrachloroethene SCAN	11.441	166	6895	1216.76 ug/L #	28
40) Chlorobenzene SCAN	12.764	112	21721	1200.56 ug/L	74
41) 1,1,1,2-Tetrachloroeth...	12.931	131	7376	1181.69 ug/L	92
42) Ethylbenzene SCAN	13.177	91	59613	1241.88 ug/L	94
43) m&p-Xylene SCAN	13.177	91	59613	1241.88 ug/L	95
44) o-Xylene SCAN	13.789	91	34205	1304.94 ug/L	97
45) 1,1,2,2-Tetrachloroeth...	14.883	83	16288	1195.11 ug/L	92
46) 1,3,5-Trimethylbenzene...	15.353	105	34045	1231.15 ug/L	98
47) 1,2,4-Trimethylbenzene...	15.904	105	36077	1276.92 ug/L	93
48) Naphthalene SCAN	17.905	128	51467	1213.61 ug/L	96

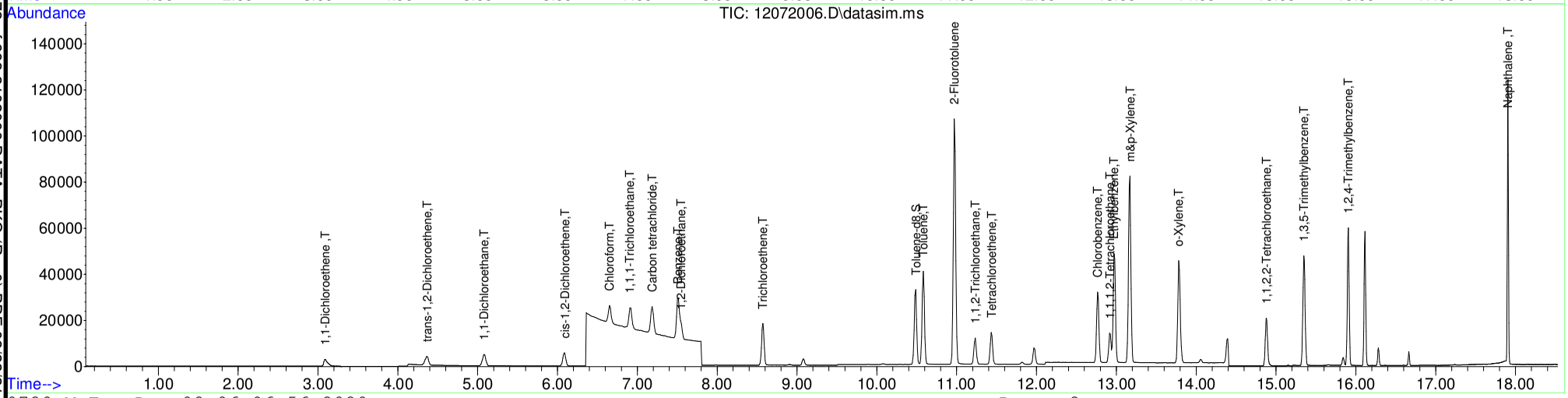
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072006.D
Acq On : 7 Dec 2020 13:56
InstName : AG5975C
Operator : TD
Sample : S20L021-CAL4
Misc : 2030071 1 mg/L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 06:06:55 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:05:27 2020
Response via : Initial Calibration





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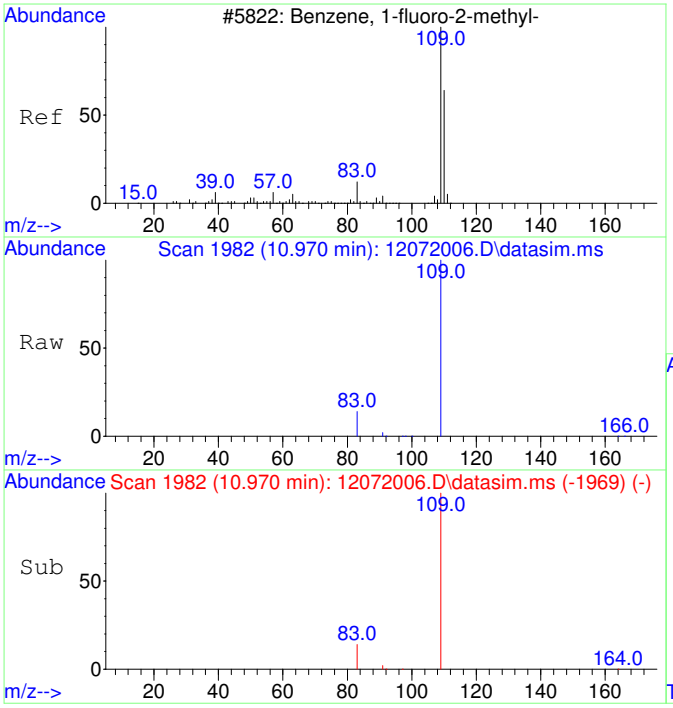
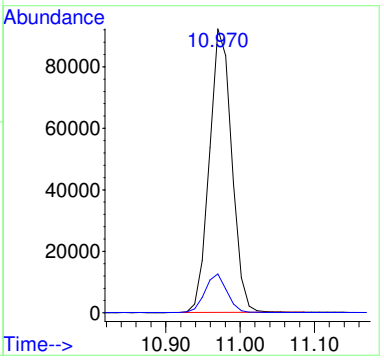
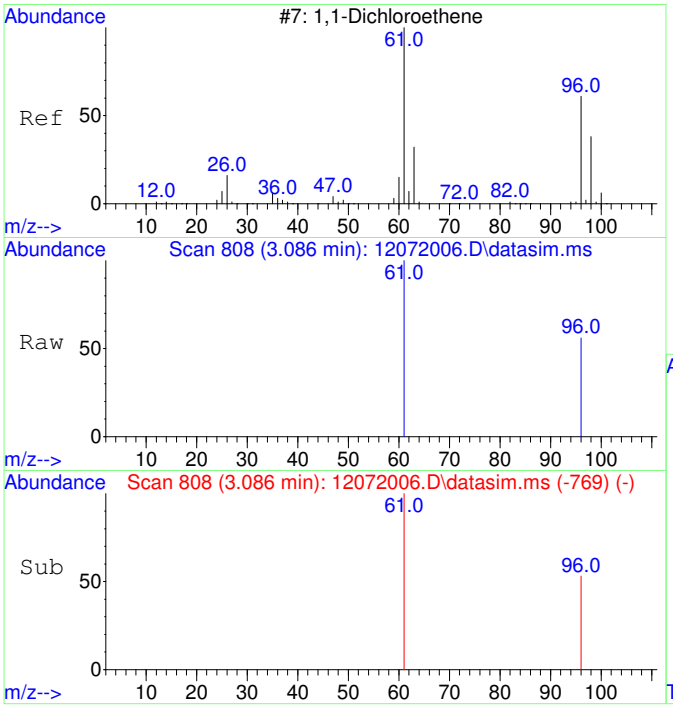


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:109 Resp: 192171

Ion	Ratio	Lower	Upper
109	100		
83	13.3	0.0	42.3

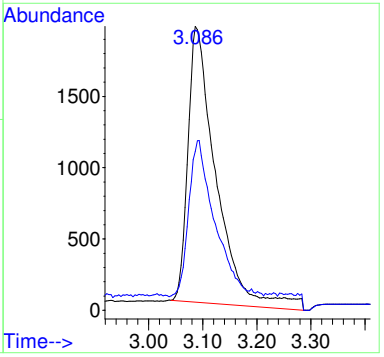




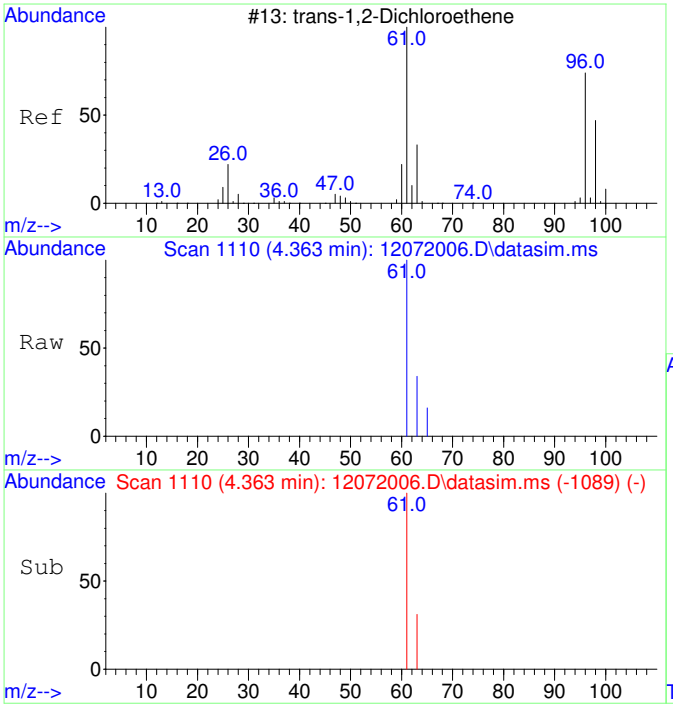
#2
1,1-Dichloroethene
Concen: 918.69 ug/L
RT: 3.086 min Scan# 808
Delta R.T. -0.004 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 6977

Ion	Ratio	Lower	Upper
61	100		
96	58.6	37.2	97.2



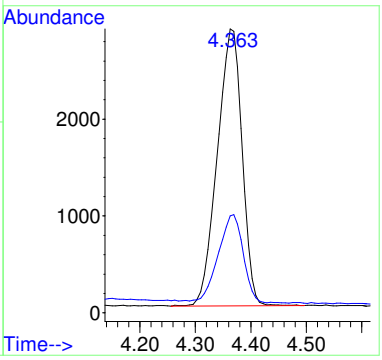
Before MI:
IMPROPER
BASELINE

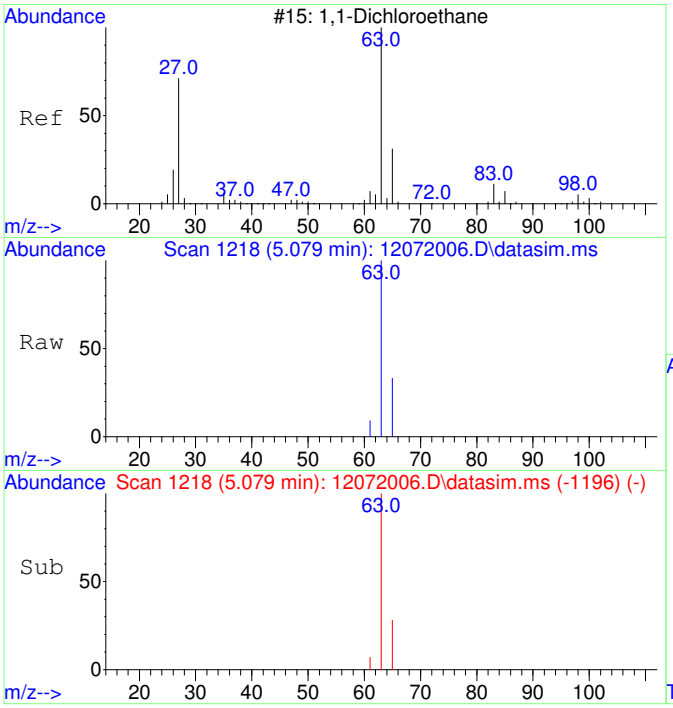


#3
trans-1,2-Dichloroethene
Concen: 926.37 ug/L
RT: 4.363 min Scan# 1110
Delta R.T. -0.013 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 8899

Ion	Ratio	Lower	Upper
61	100		
63	32.2	2.4	62.4

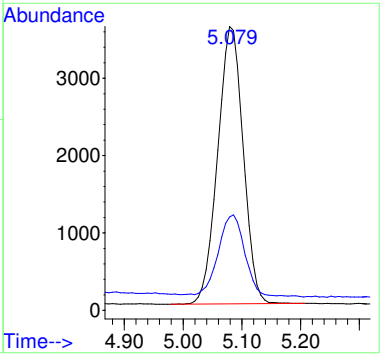


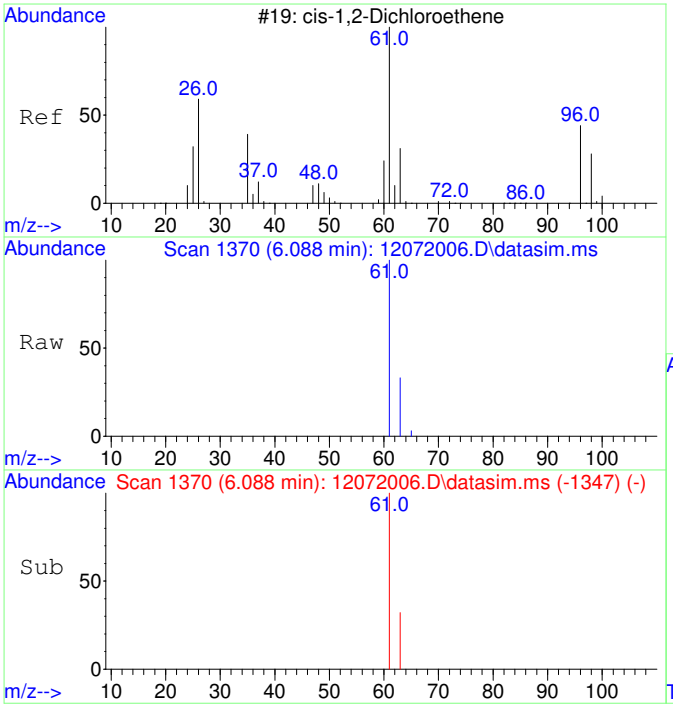


#4
1,1-Dichloroethane
Concen: 939.13 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.006 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 63 Resp: 10775

Ion	Ratio	Lower	Upper
63	100		
65	30.8	1.8	61.8

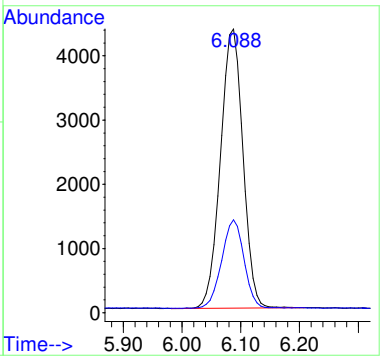


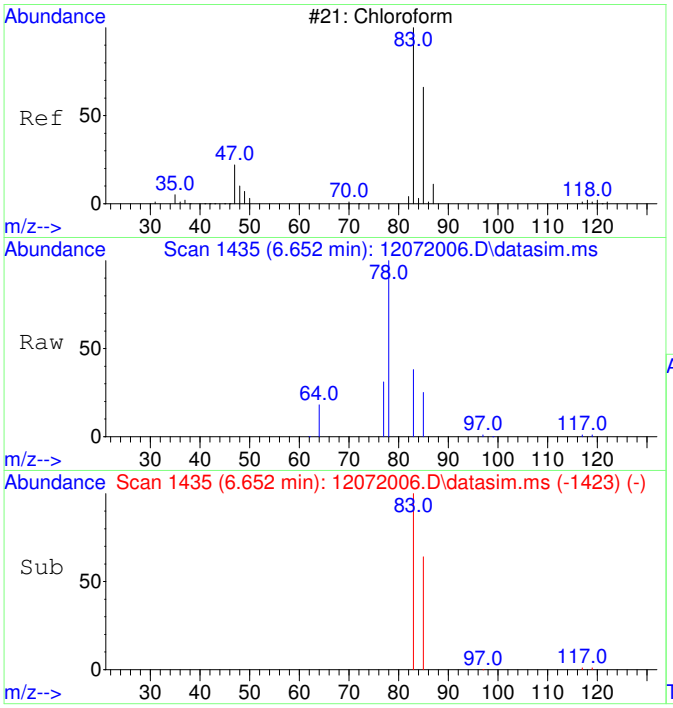


#5
cis-1,2-Dichloroethene
Concen: 970.12 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 11528

Ion	Ratio	Lower	Upper
61	100		
63	31.2	2.5	62.5

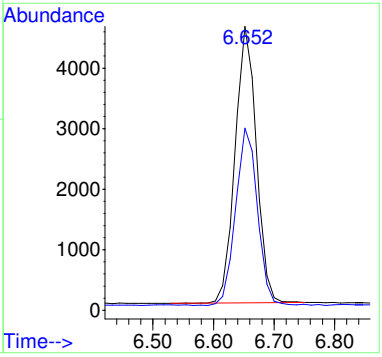


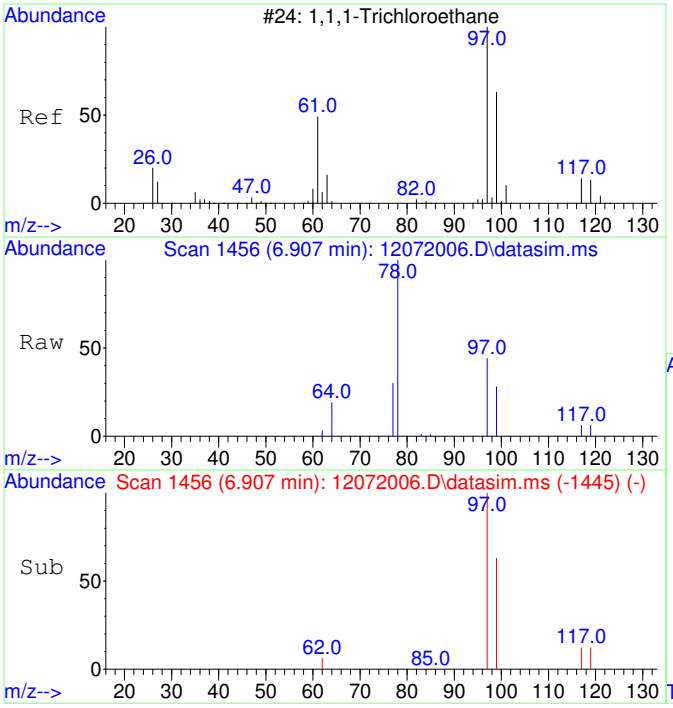


#6
Chloroform
Concen: 978.21 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 83 Resp: 11165

Ion	Ratio	Lower	Upper
83	100		
85	65.4	35.1	95.1

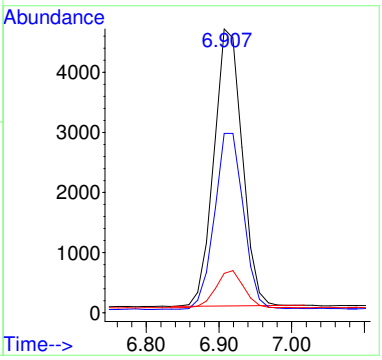


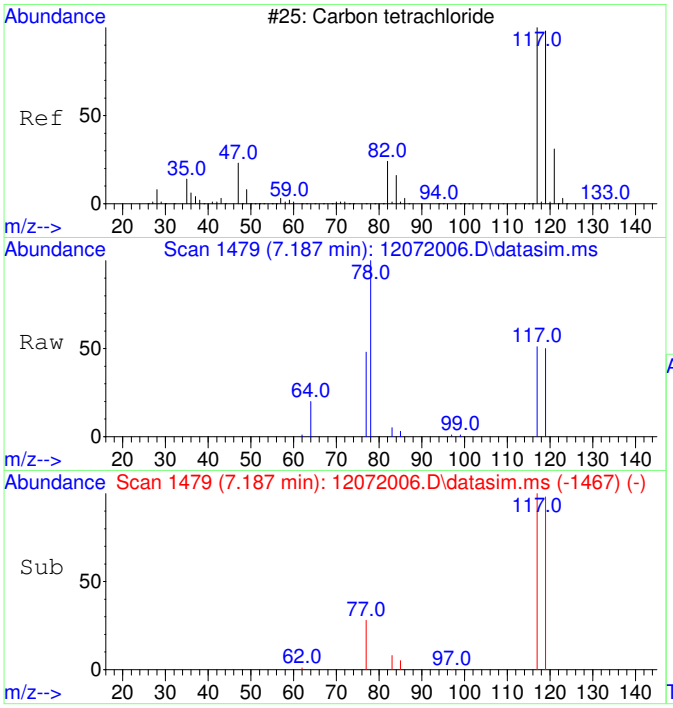


#7
1,1,1-Trichloroethane
Concen: 1017.13 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 97 Resp: 12471

Ion	Ratio	Lower	Upper
97	100		
99	64.8	34.6	94.6
117	13.2	0.0	43.2

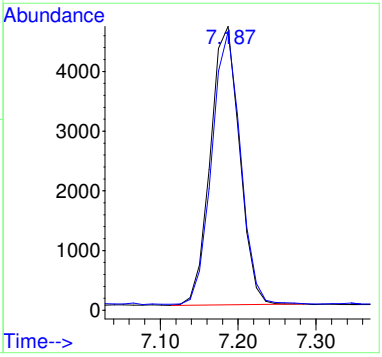


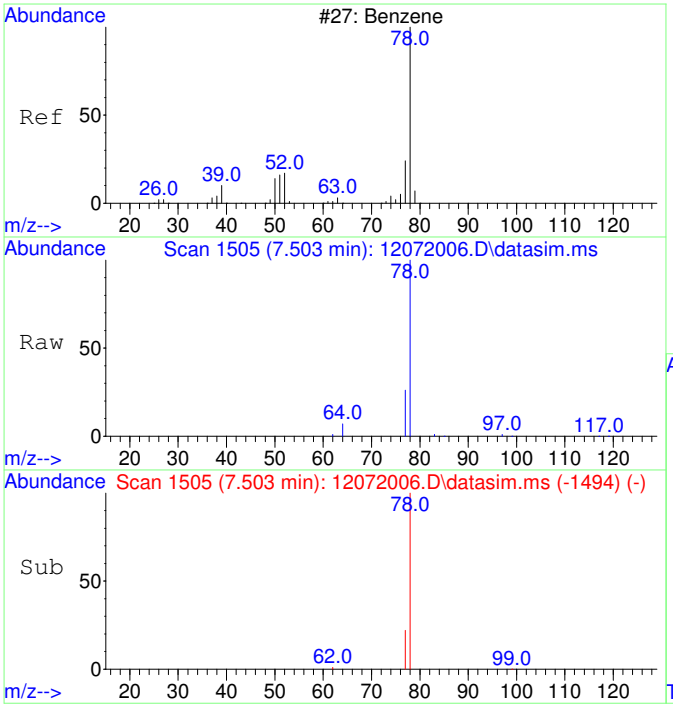


#8
Carbon tetrachloride
Concen: 1038.04 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:117 Resp: 12168

Ion	Ratio	Lower	Upper
117	100		
119	95.6	66.4	126.4

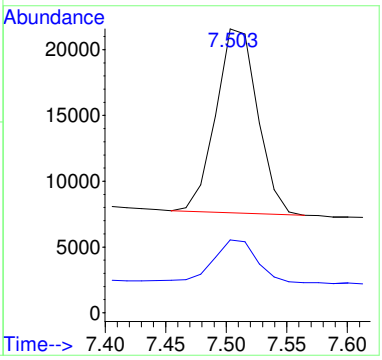


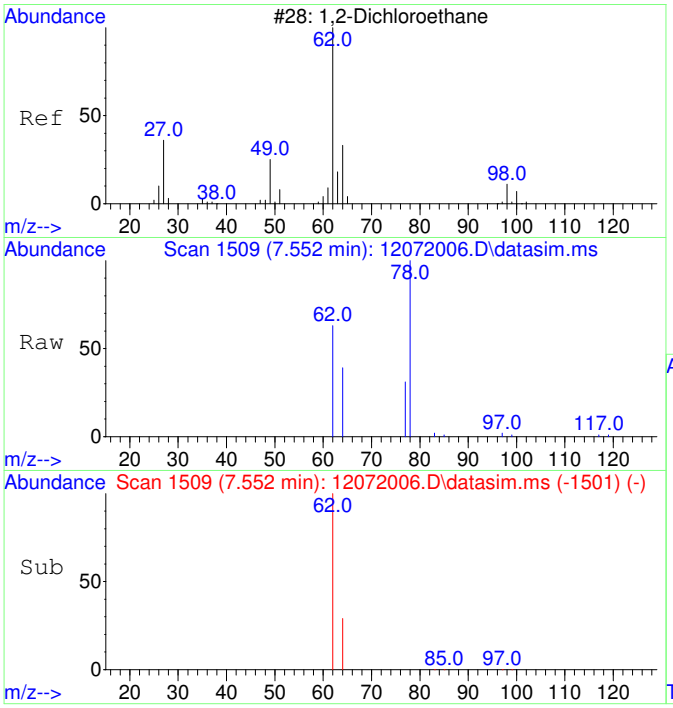


#9
Benzene
Concen: 1036.18 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 78 Resp: 33507

Ion	Ratio	Lower	Upper
78	100		
77	27.2	0.0	53.2

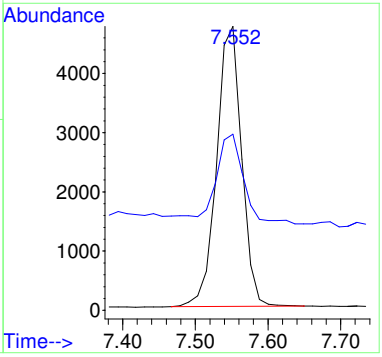


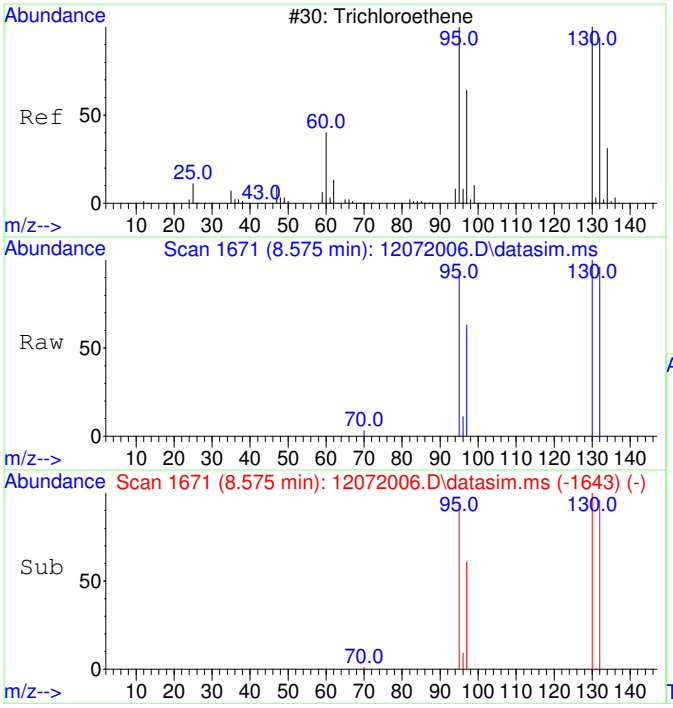


#10
1,2-Dichloroethane
Concen: 1025.16 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 62 Resp: 11309

Ion	Ratio	Lower	Upper
62	100		
64	36.9	2.3	62.3

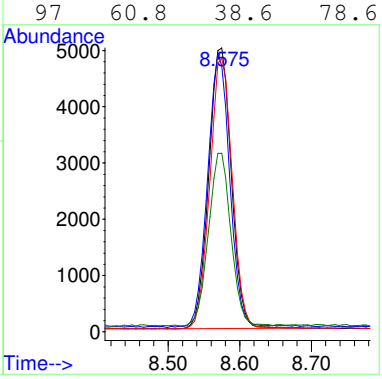


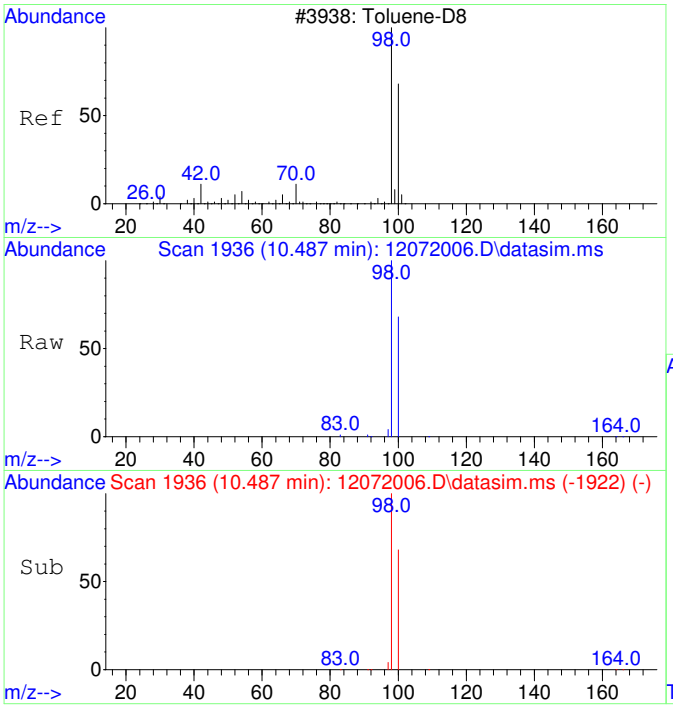


#11
Trichloroethene
Concen: 1064.47 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:130 Resp: 10868

Ion	Ratio	Lower	Upper
130	100		
95	94.8	60.7	120.7
132	95.6	76.0	116.0
97	60.8	38.6	78.6

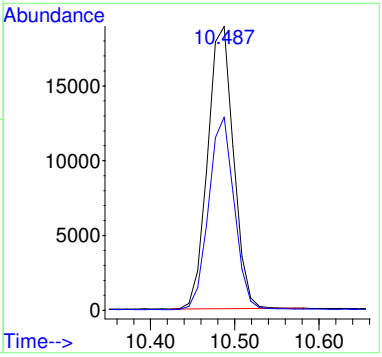


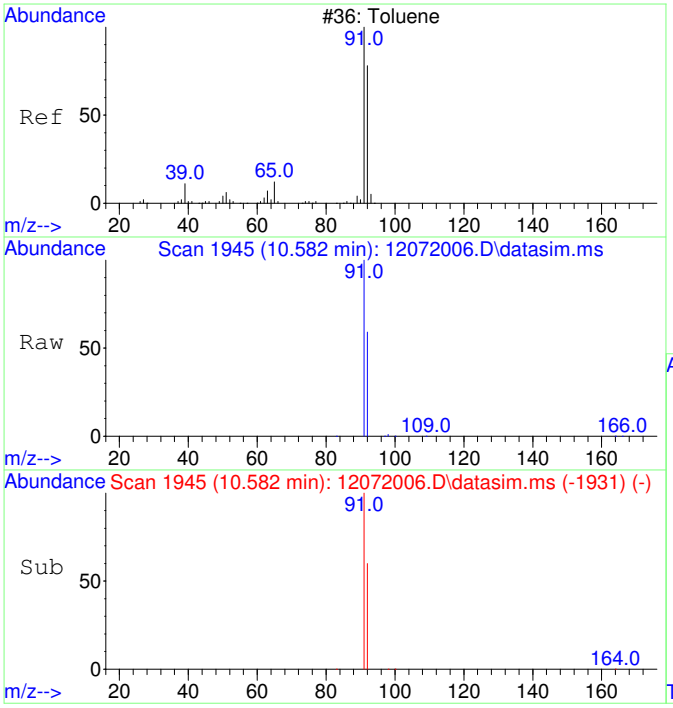


#12
Toluene-d8
Concen: 1084.10 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 98 Resp: 40349

Ion	Ratio	Lower	Upper
98	100		
100	66.9	37.1	97.1

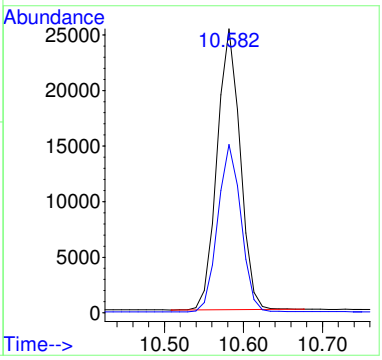


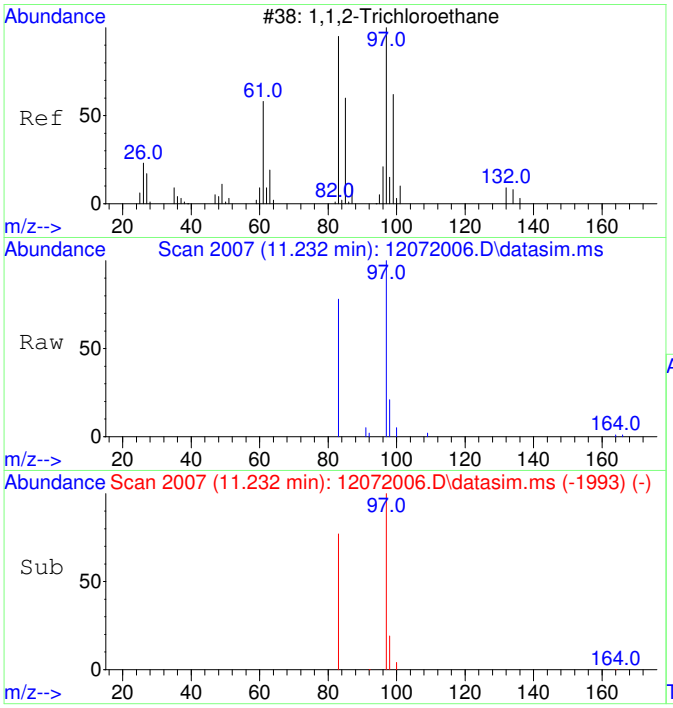


#13
Toluene
Concen: 1103.33 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 51129

Ion	Ratio	Lower	Upper
91	100		
92	59.8	29.9	89.9

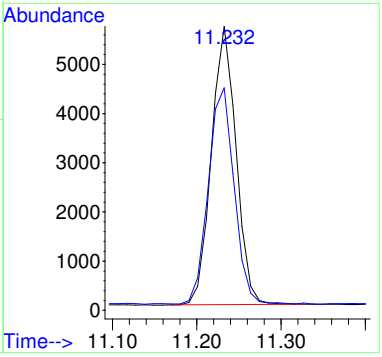


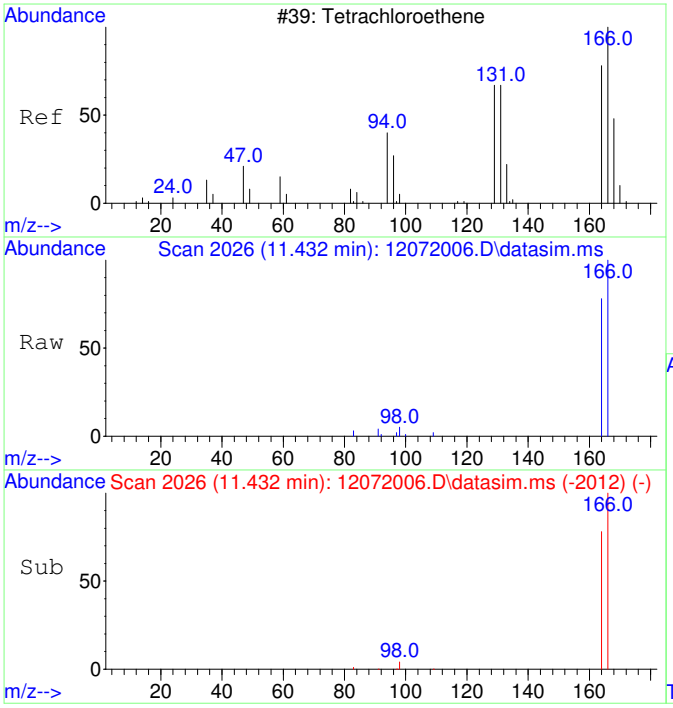


#14
1,1,2-Trichloroethane
Concen: 1073.57 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 97 Resp: 11523

Ion	Ratio	Lower	Upper
97	100		
83	81.4	51.2	111.2

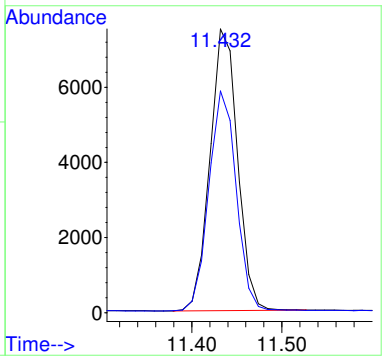


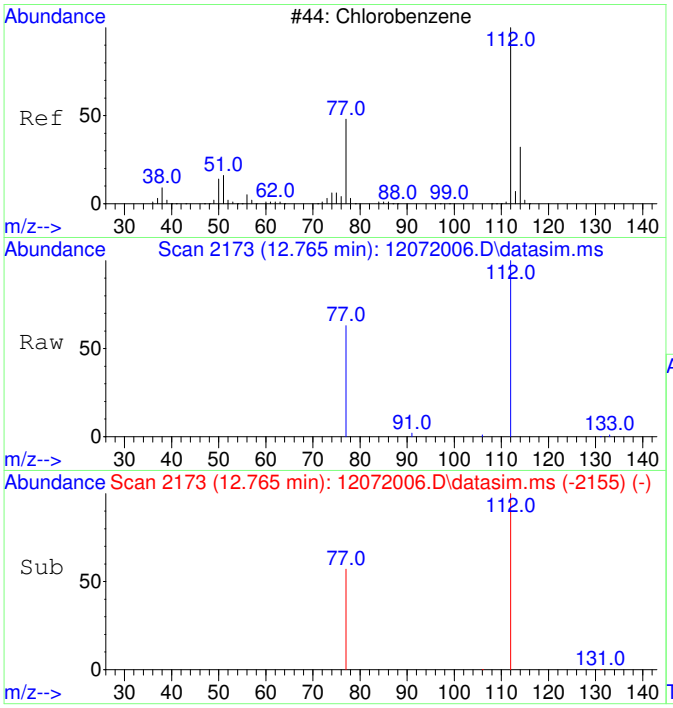


#15
Tetrachloroethene
Concen: 1101.36 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:166 Resp: 15897

Ion	Ratio	Lower	Upper
166	100		
164	77.5	47.8	107.8

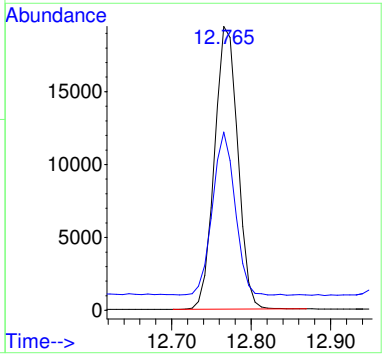


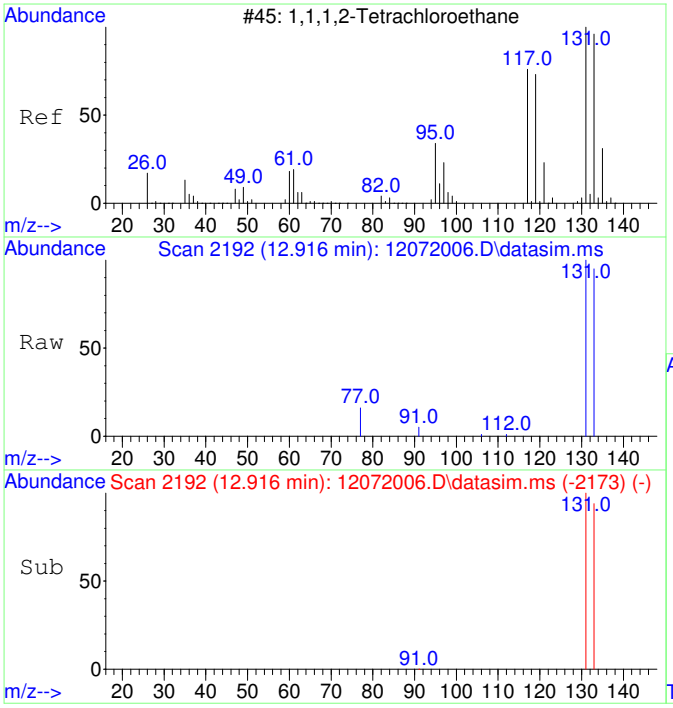


#16
Chlorobenzene
Concen: 1098.83 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:112 Resp: 39448

Ion	Ratio	Lower	Upper
112	100		
77	55.4	23.6	83.6

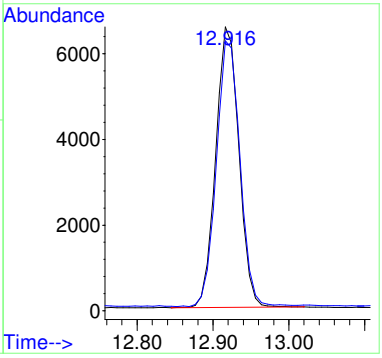


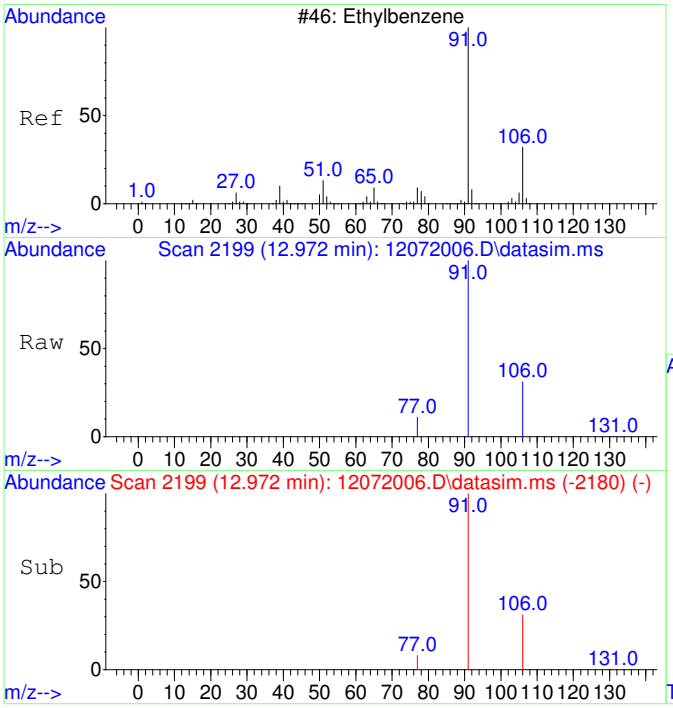


#17
1,1,1,2-Tetrachloroethane
Concen: 1104.11 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:131 Resp: 13873

Ion	Ratio	Lower	Upper
131	100		
133	95.9	66.3	126.3

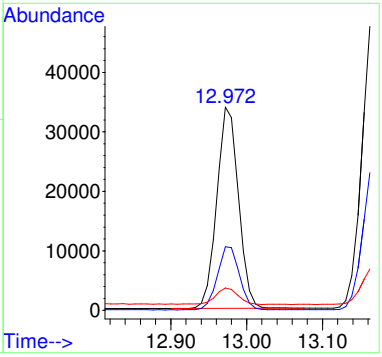


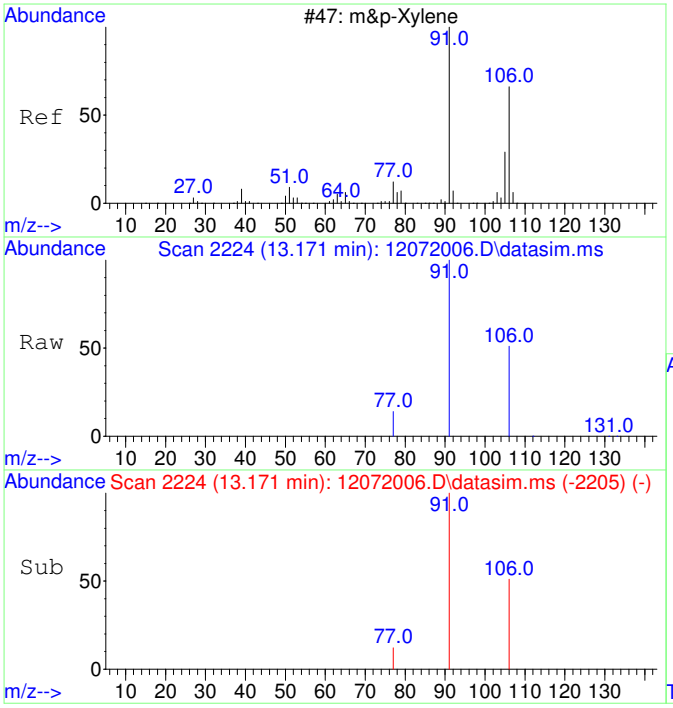


#18
Ethylbenzene
Concen: 1130.19 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 66895

Ion	Ratio	Lower	Upper
91	100		
106	32.0	3.0	63.0
77	8.4	0.0	38.2

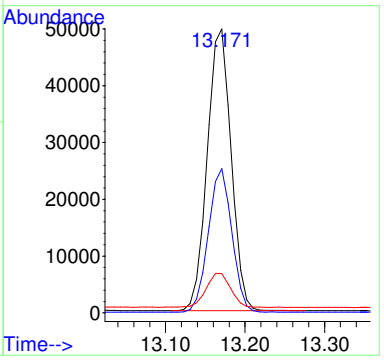


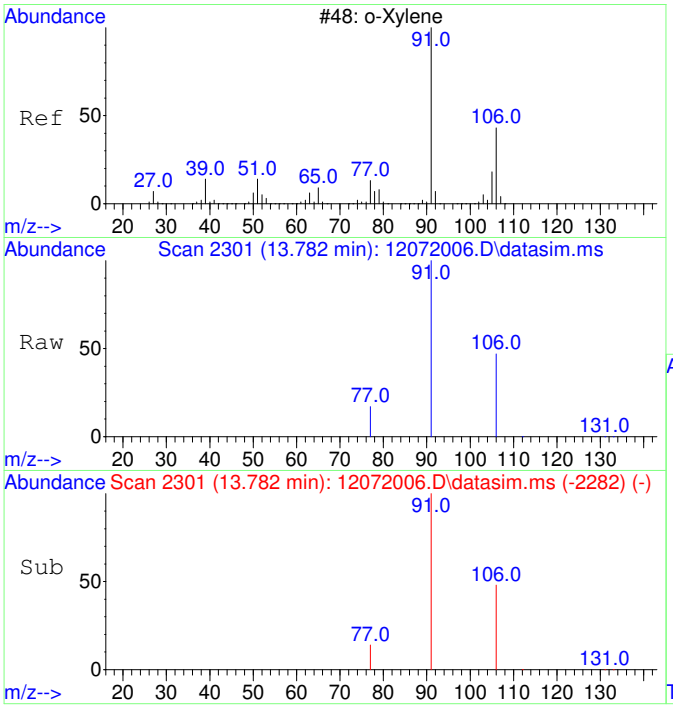


#19
m&p-Xylene
Concen: 2275.67 ug/L
RT: 13.171 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 103724

Ion	Ratio	Lower	Upper
91	100		
106	50.1	22.2	82.2
77	12.4	0.0	42.4

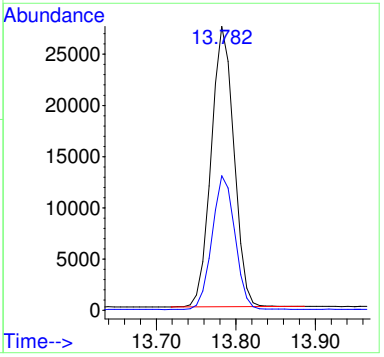


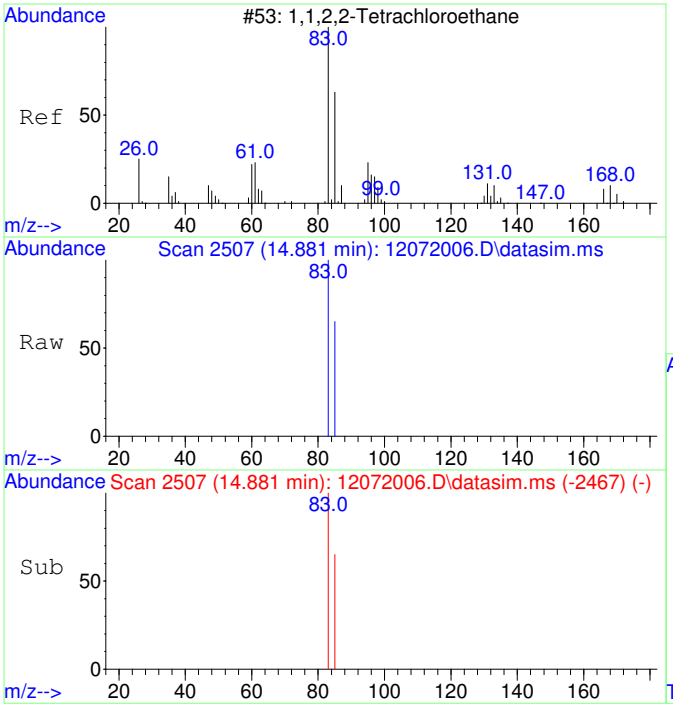


#20
o-Xylene
Concen: 1109.83 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 54333

Ion	Ratio	Lower	Upper
91	100		
106	48.1	19.2	79.2

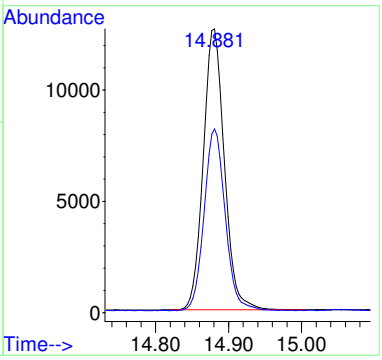


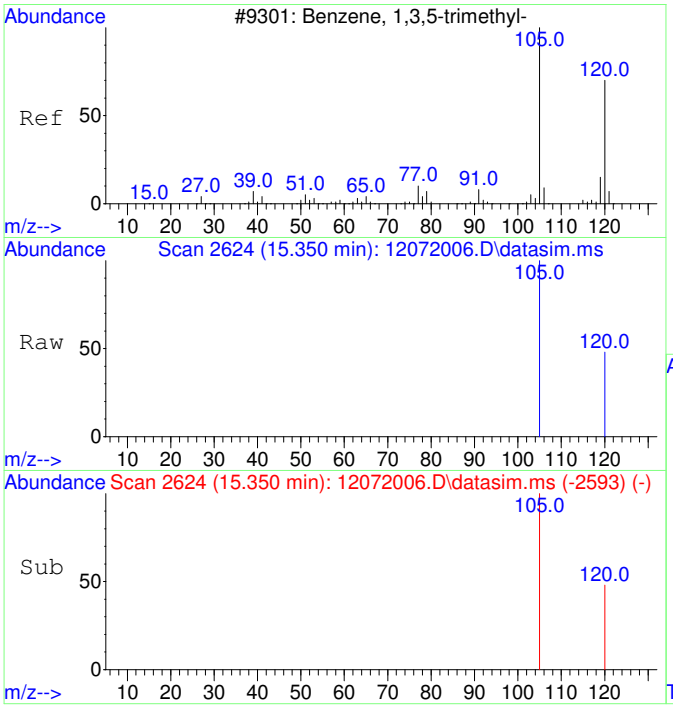


#21
1,1,2,2-Tetrachloroethane
Concen: 1108.19 ug/L
RT: 14.881 min Scan# 2507
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 83 Resp: 25279

Ion	Ratio	Lower	Upper
83	100		
85	64.7	34.8	94.8

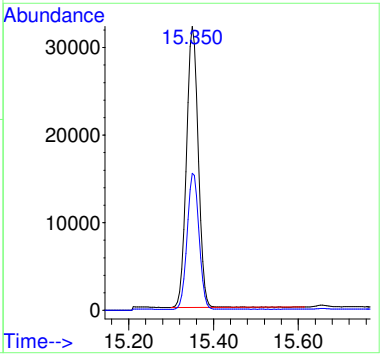


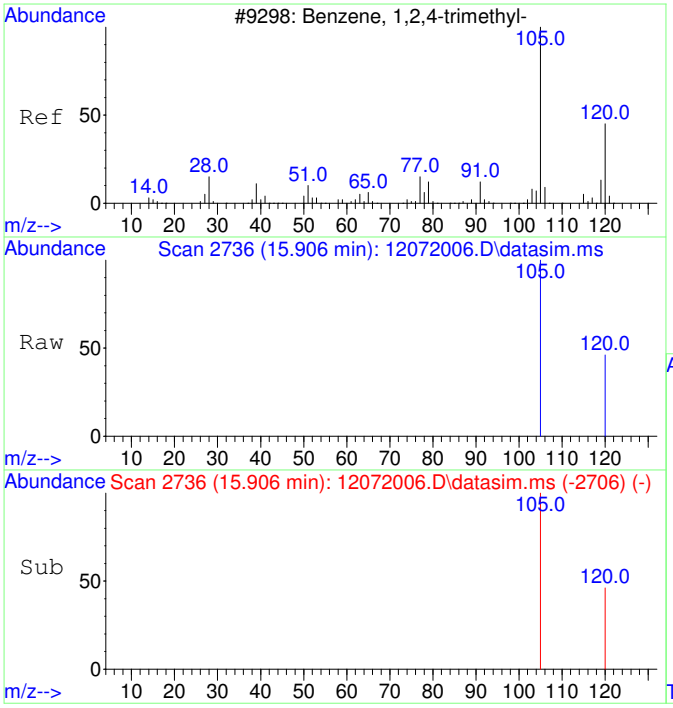


#22
1,3,5-Trimethylbenzene
Concen: 1145.65 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:105 Resp: 61678

Ion	Ratio	Lower	Upper
105	100		
120	48.9	21.1	81.1

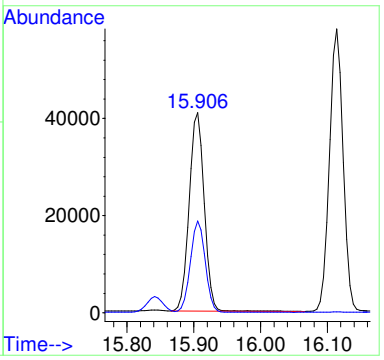


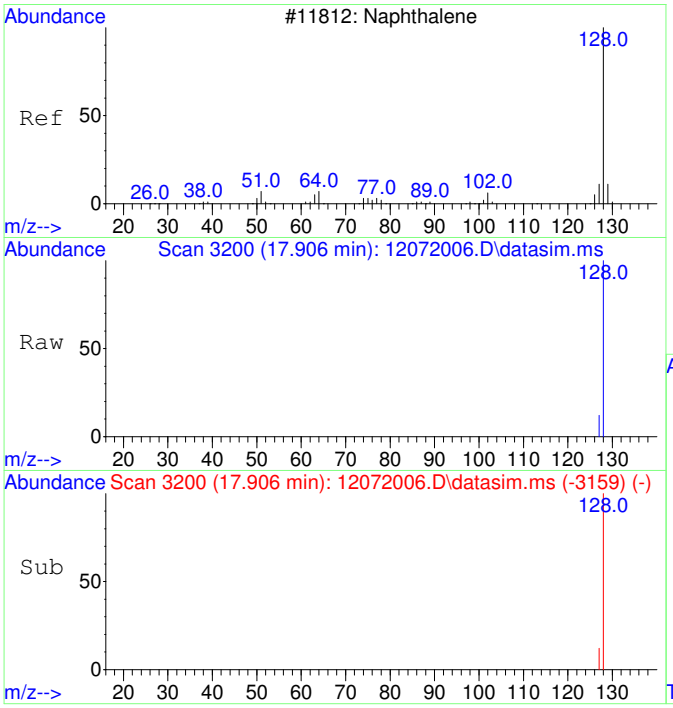


#23
1,2,4-Trimethylbenzene
Concen: 1157.33 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:105 Resp: 63729

Ion	Ratio	Lower	Upper
105	100		
120	44.7	17.2	77.2

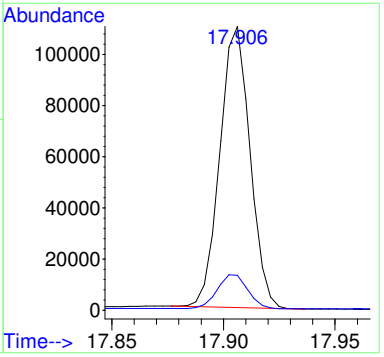


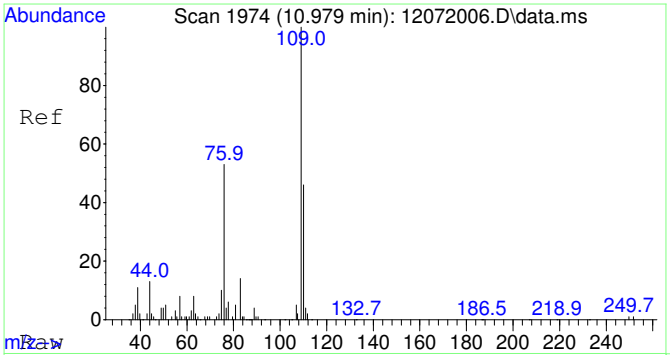


#24
Naphthalene
Concen: 1190.66 ug/L
RT: 17.906 min Scan# 3200
Delta R.T. 0.003 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:128 Resp: 102525

Ion	Ratio	Lower	Upper
128	100		
127	12.3	0.0	42.5

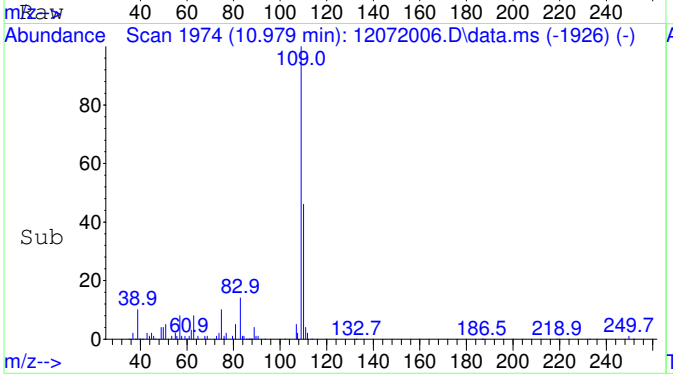


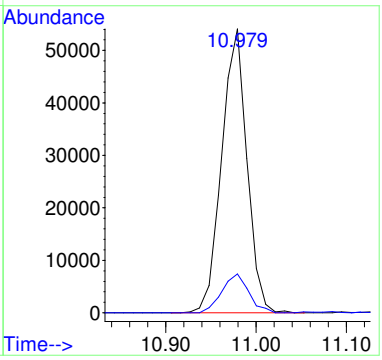


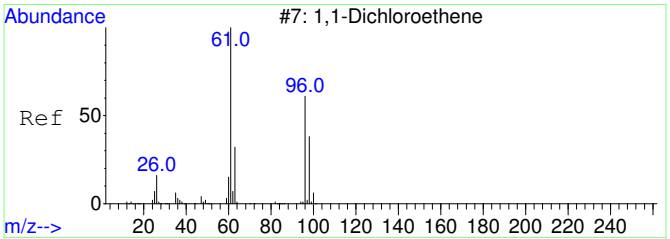
#25
2-Fluorotoluene SCAN
Concen: 4837.67 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

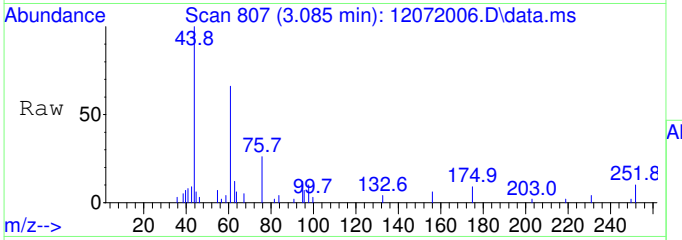
Tgt Ion:109 Resp: 105526

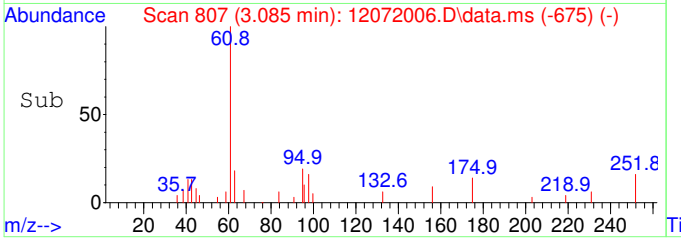
Ion	Ratio	Lower	Upper
109	100		
83	14.5	0.0	43.8







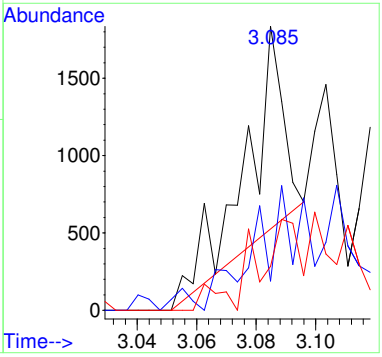


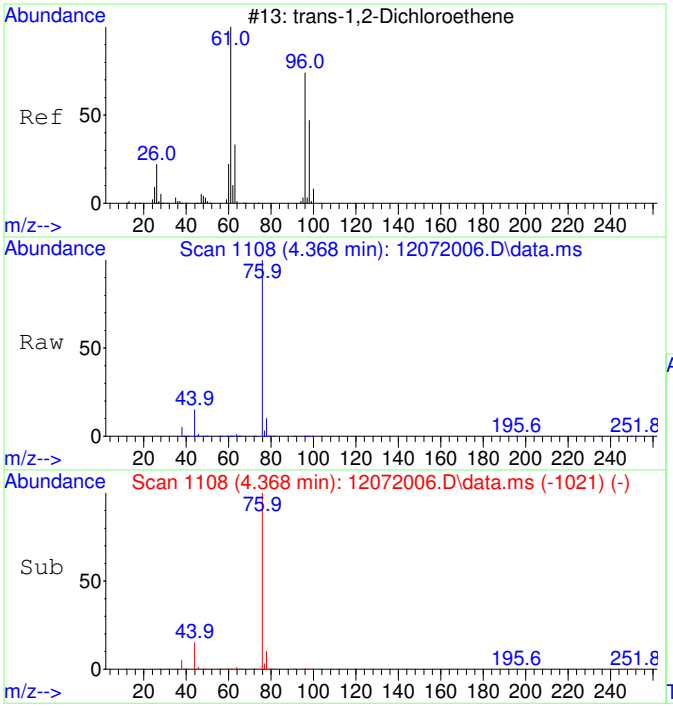


#26
1,1-Dichloroethene SCAN
Concen: 224.65 ug/L
RT: 3.085 min Scan# 807
Delta R.T. -0.011 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 1144

Ion	Ratio	Lower	Upper
61	100		
96	22.7	33.1	93.1#
98	30.9	11.2	71.2

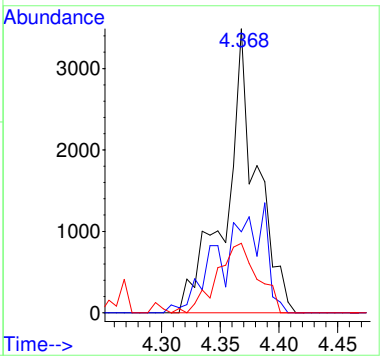


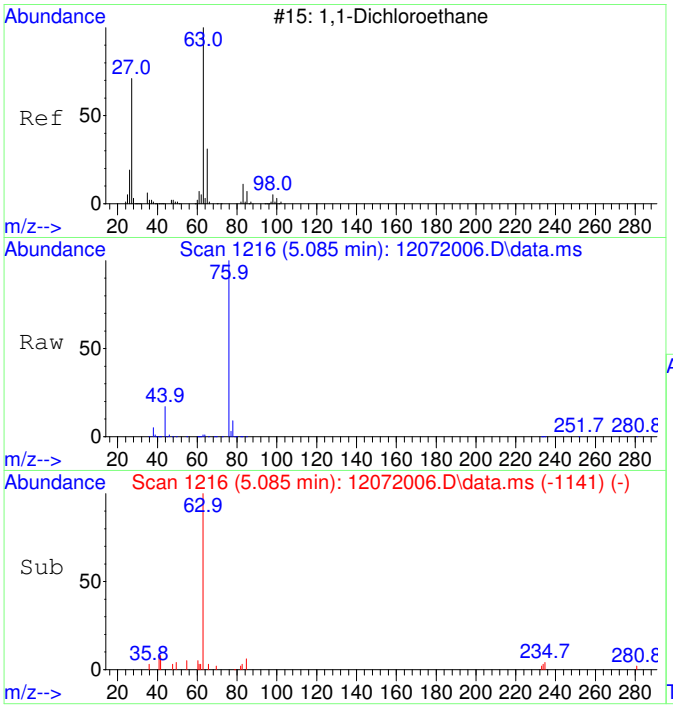


#27
trans-1,2-Dichloroethene SCAN
Concen: 988.56 ug/L
RT: 4.368 min Scan# 1108
Delta R.T. -0.013 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 6412

Ion	Ratio	Lower	Upper
61	100		
96	10.7	49.0	109.0#
98	31.9	20.5	80.5

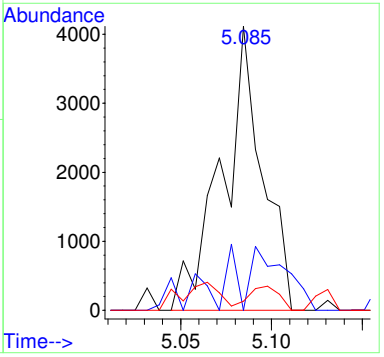


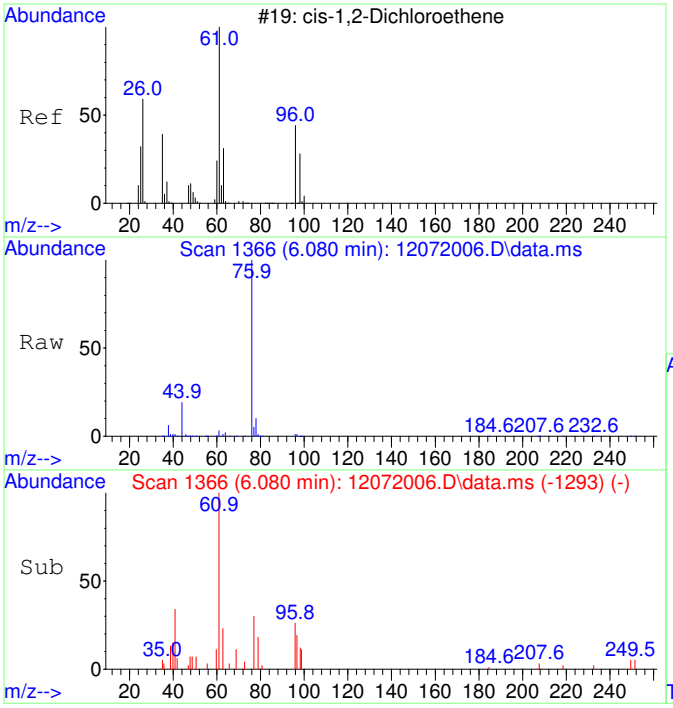


#28
1,1-Dichloroethane SCAN
Concen: 829.42 ug/L
RT: 5.085 min Scan# 1216
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 63 Resp: 6350

Ion	Ratio	Lower	Upper
63	100		
65	19.2	1.3	61.3
83	5.5	0.0	45.9

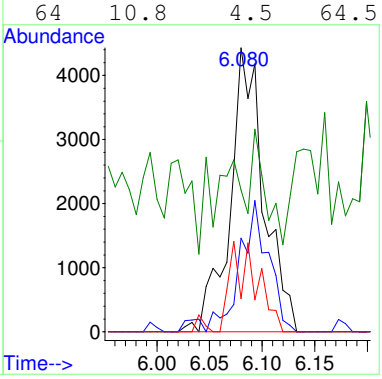


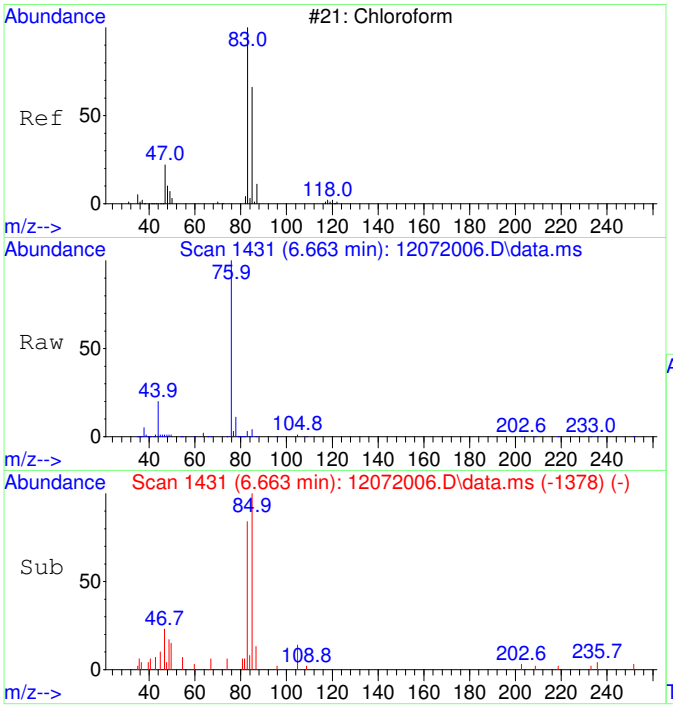


#29
cis-1,2-Dichloroethene SCAN
Concen: 1312.72 ug/L
RT: 6.080 min Scan# 1366
Delta R.T. -0.013 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 9880

Ion	Ratio	Lower	Upper
61	100		
96	38.7	39.9	99.9#
98	24.7	13.5	73.5
64	10.8	4.5	64.5

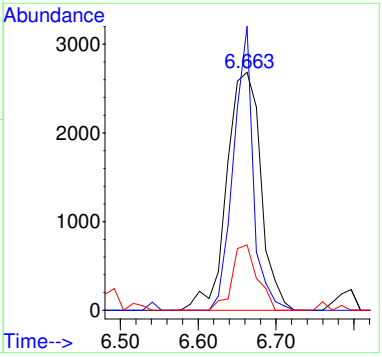


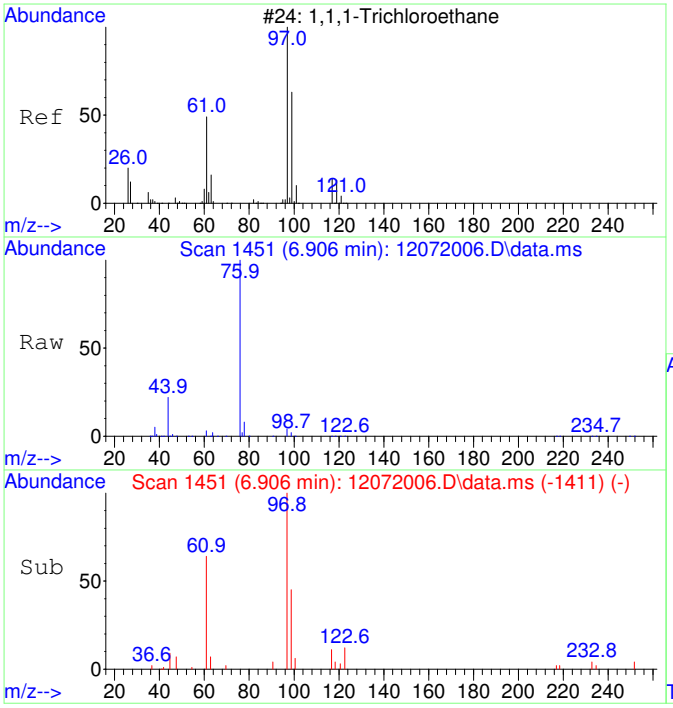


#30
Chloroform SCAN
Concen: 1164.68 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 83 Resp: 8176

Ion	Ratio	Lower	Upper
83	100		
85	69.0	34.6	94.6
47	20.4	0.0	53.4

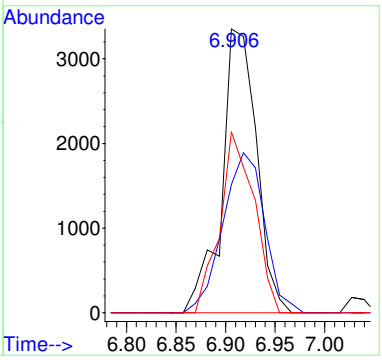


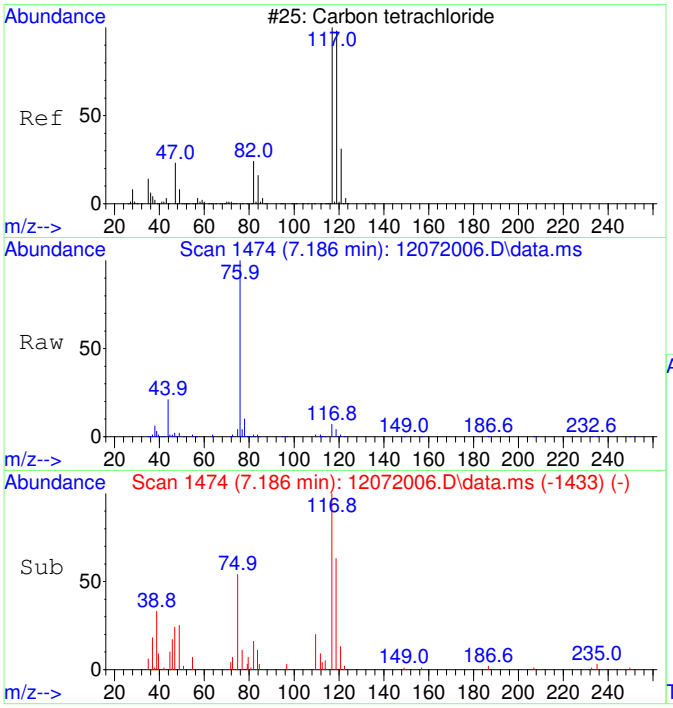


#31
1,1,1-Trichloroethane SCAN
Concen: 1131.56 ug/L
RT: 6.906 min Scan# 1451
Delta R.T. -0.012 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 97 Resp: 8197

Ion	Ratio	Lower	Upper
97	100		
99	67.6	43.6	103.6
61	62.6	18.0	78.0

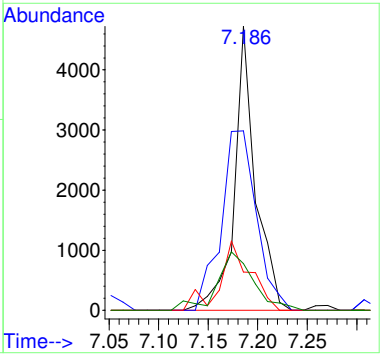


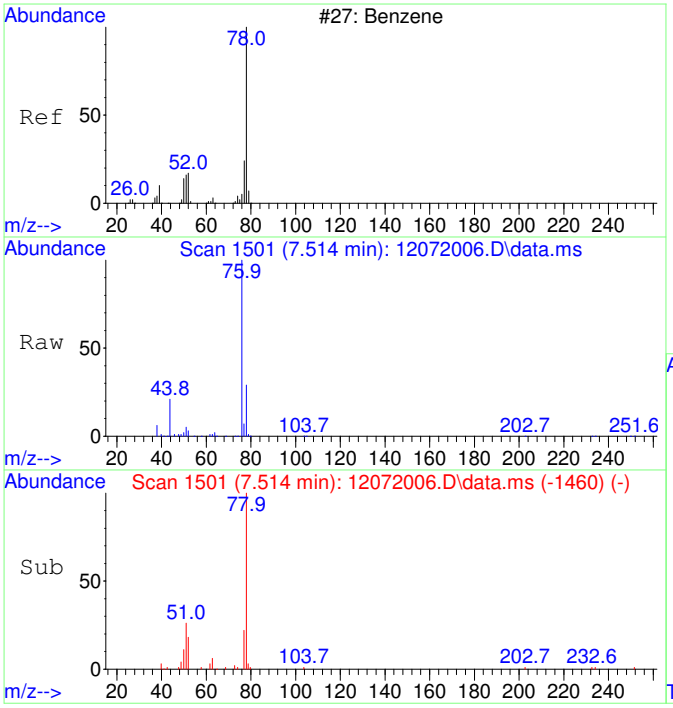


#32
Carbon tetrachloride SCAN
Concen: 1125.63 ug/L
RT: 7.186 min Scan# 1474
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:117 Resp: 6968

Ion	Ratio	Lower	Upper
117	100		
119	106.5	75.5	135.5
121	35.5	0.0	58.8
82	35.6	0.0	59.2

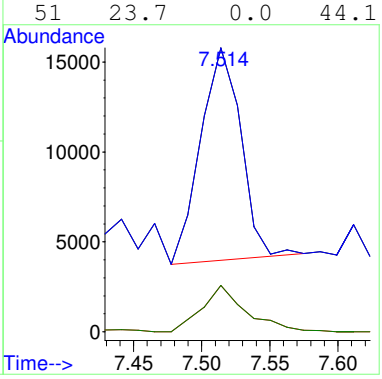


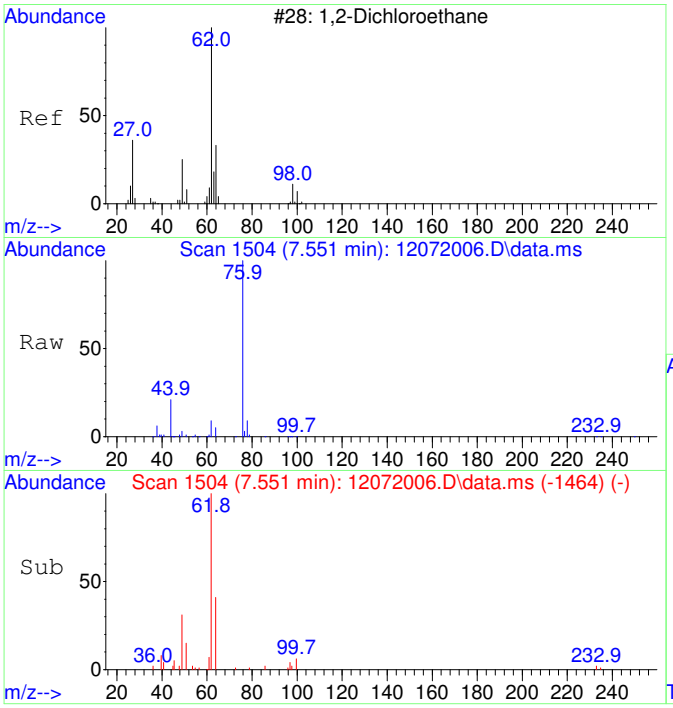


#33
Benzene SCAN
Concen: 1117.71 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 78 Resp: 24495

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	23.7	0.0	47.9
51	23.7	0.0	44.1

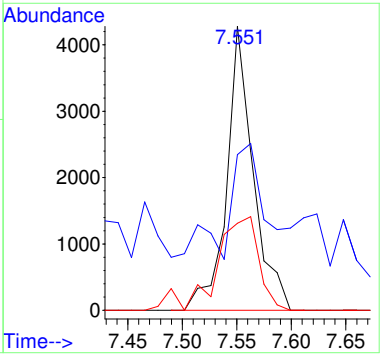


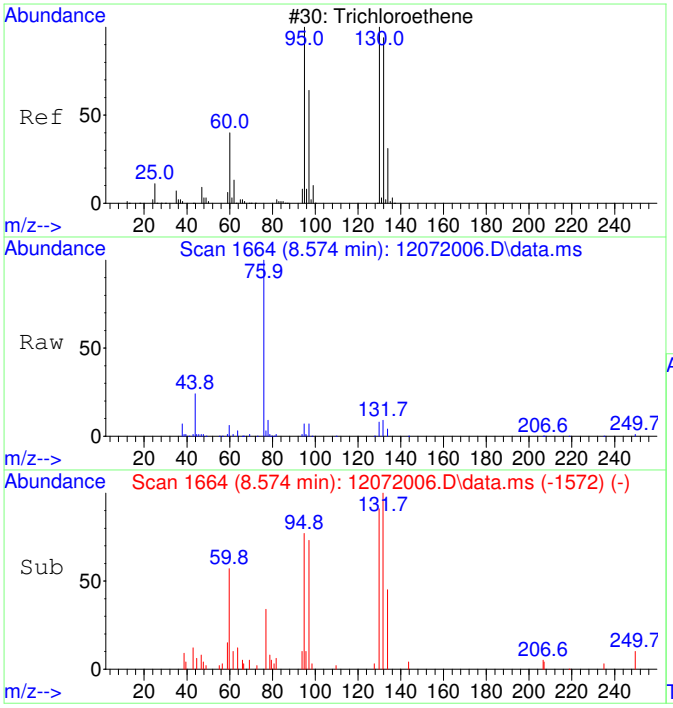


#34
1,2-Dichloroethane SCAN
Concen: 1059.80 ug/L
RT: 7.551 min Scan# 1504
Delta R.T. -0.012 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 62 Resp: 7265

Ion	Ratio	Lower	Upper
62	100		
64	91.7	5.2	65.2#
49	49.6	3.9	63.9

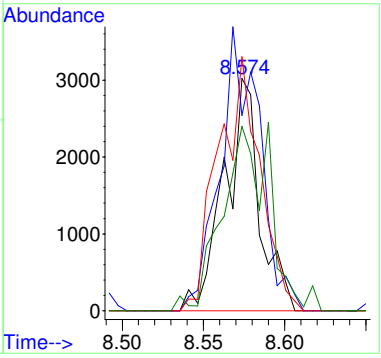


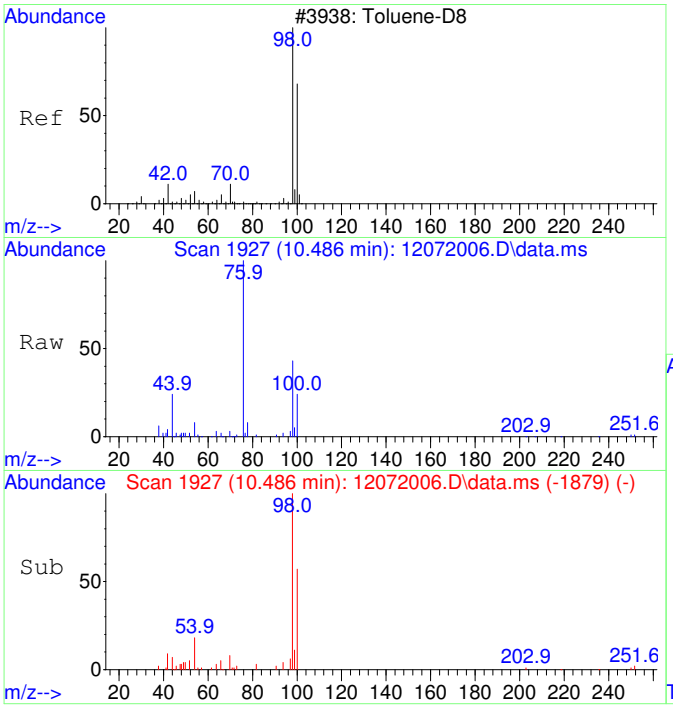


#35
Trichloroethene SCAN
Concen: 958.85 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:130 Resp: 4582

Ion	Ratio	Lower	Upper
130	100		
95	136.4	60.5	120.5#
132	129.1	59.6	119.6#
97	0.0	28.2	88.2#

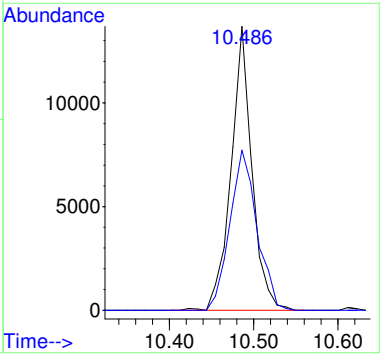


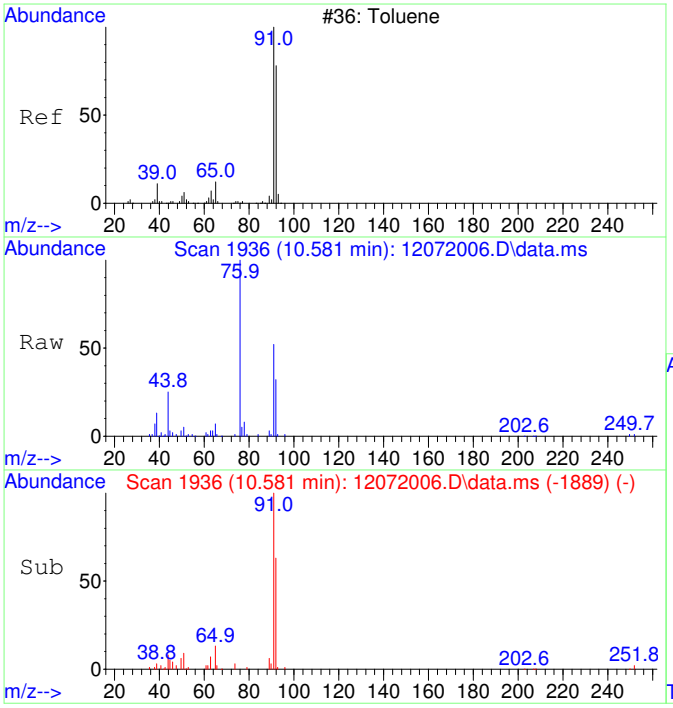


#36
Toluene-d8 SCAN
Concen: 1153.40 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 98 Resp: 23597

Ion	Ratio	Lower	Upper
98	100		
100	73.3	40.0	100.0

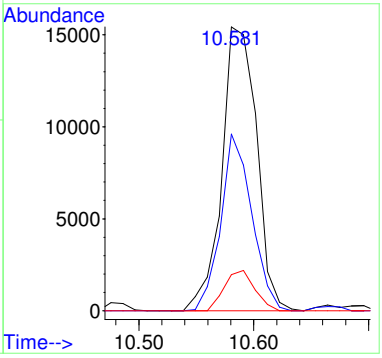


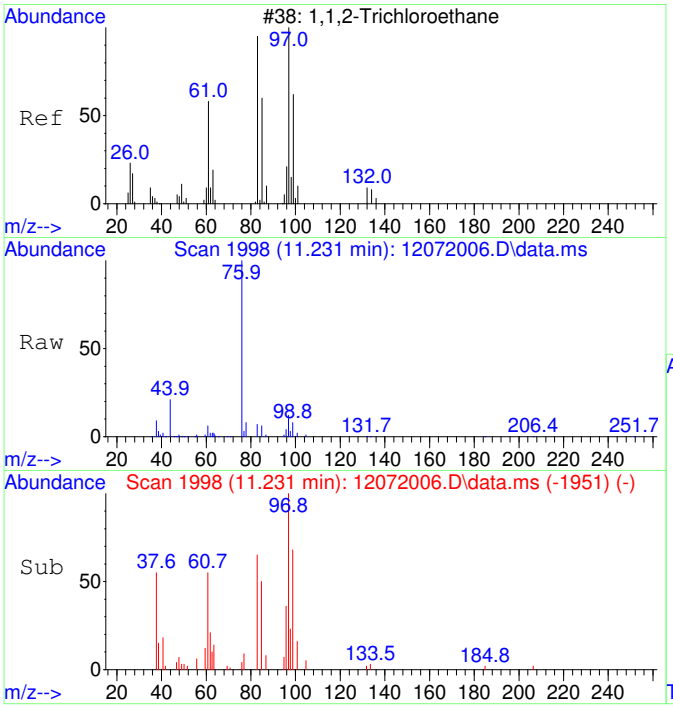


#37
Toluene SCAN
Concen: 1290.59 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 32509

Ion	Ratio	Lower	Upper
91	100		
92	55.5	28.3	88.3
65	12.5	0.0	41.0

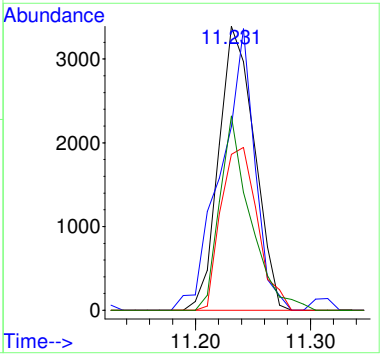


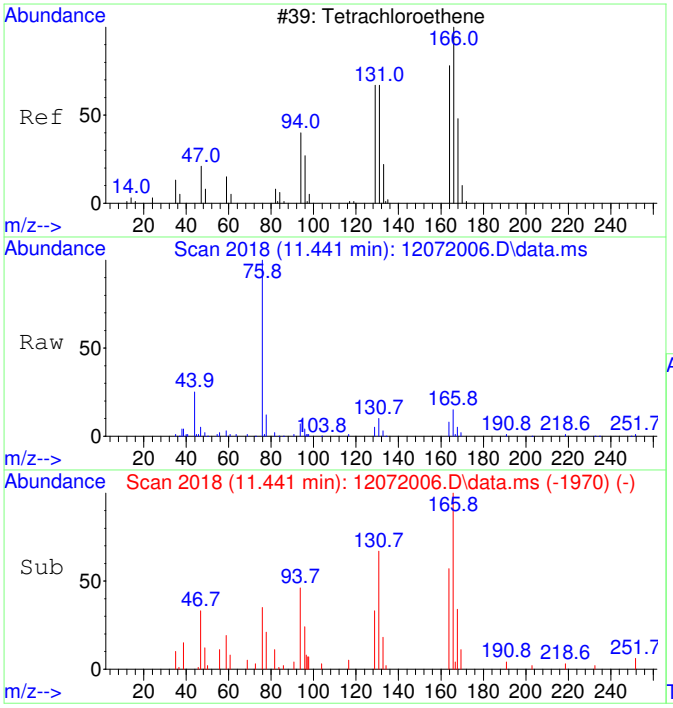


#38
1,1,2-Trichloroethane SCAN
Concen: 1159.53 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. -0.010 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 97 Resp: 7321

Ion	Ratio	Lower	Upper
97	100		
83	93.8	57.7	117.7
61	59.0	32.1	92.1
99	59.0	36.7	96.7

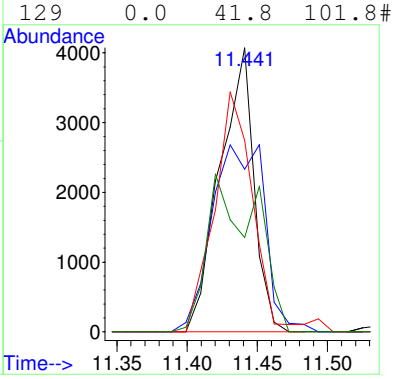


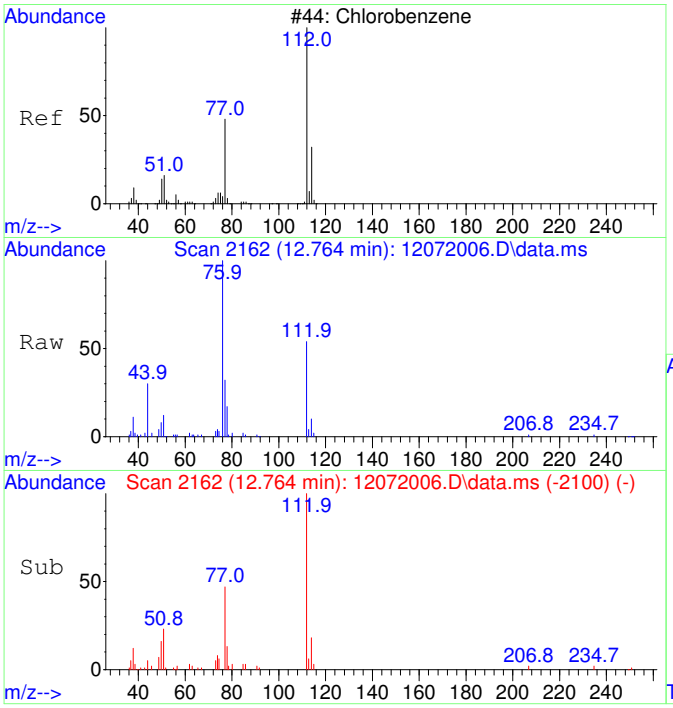


#39
Tetrachloroethene SCAN
Concen: 1216.76 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:166 Resp: 6895

Ion	Ratio	Lower	Upper
166	100		
164	0.0	50.9	110.9#
131	96.5	38.7	98.7
129	0.0	41.8	101.8#

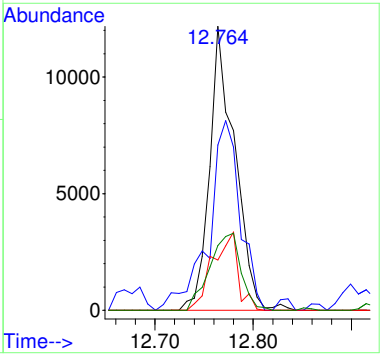


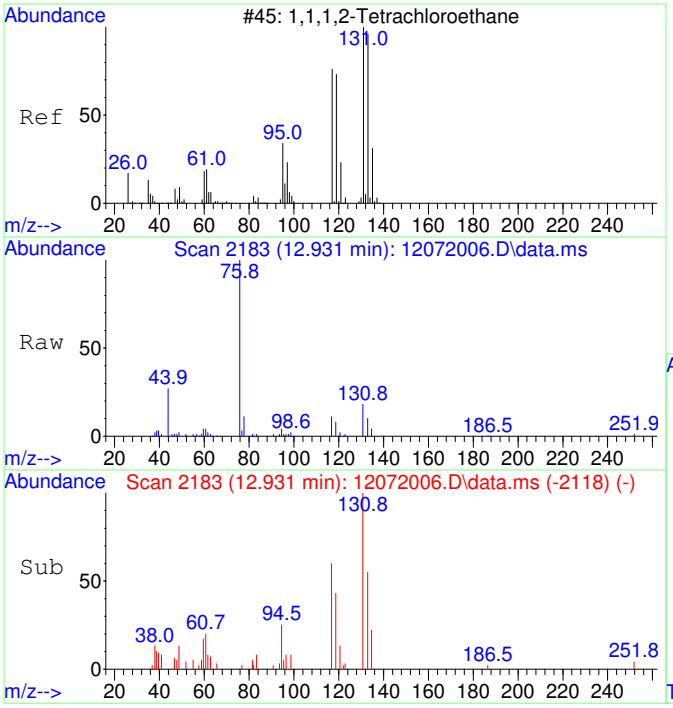


#40
Chlorobenzene SCAN
Concen: 1200.56 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. -0.008 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:112 Resp: 21721

Ion	Ratio	Lower	Upper
112	100		
77	83.6	28.2	88.2
114	27.8	2.3	62.3
51	33.6	0.0	50.1

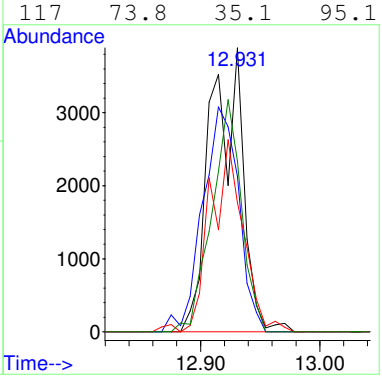


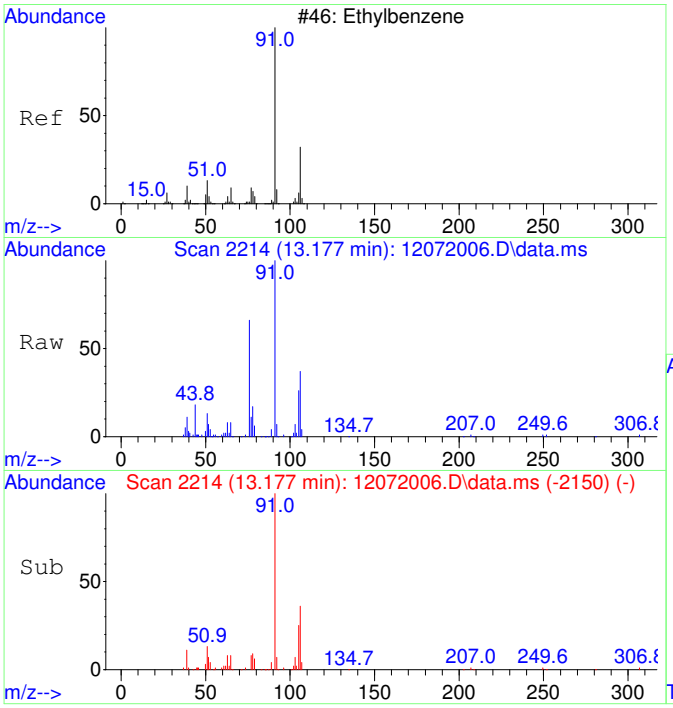


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 1181.69 ug/L
RT: 12.931 min Scan# 2183
Delta R.T. 0.016 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:131 Resp: 7376

Ion	Ratio	Lower	Upper
131	100		
133	87.2	66.9	126.9
119	68.4	40.4	100.4
117	73.8	35.1	95.1

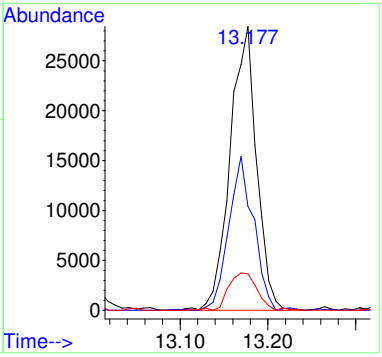


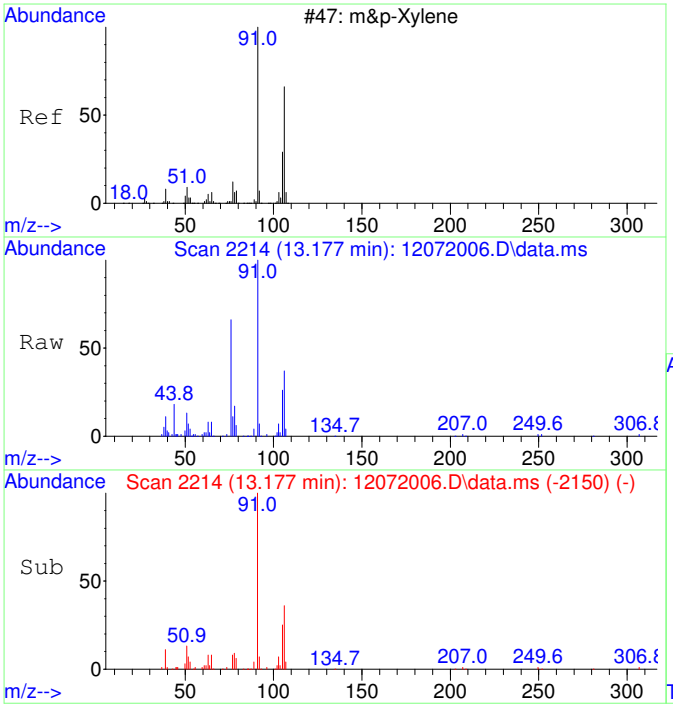


#42
Ethylbenzene SCAN
Concen: 1241.88 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 59613

Ion	Ratio	Lower	Upper
91	100		
106	49.7	23.1	83.1
51	14.4	0.0	40.1

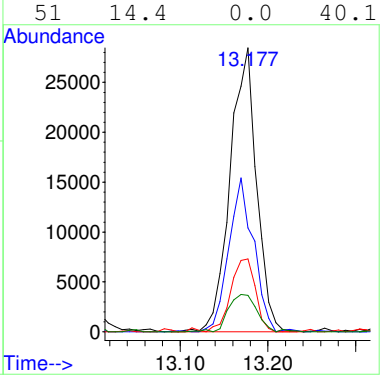


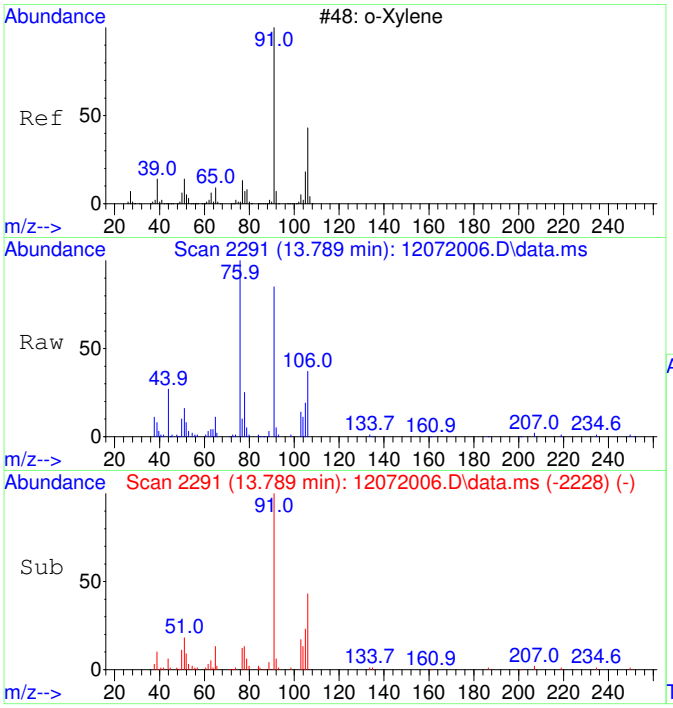


#43
m&p-Xylene SCAN
Concen: 1241.88 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 59613

Ion	Ratio	Lower	Upper
91	100		
106	49.7	23.1	83.1
105	23.9	0.0	54.7
51	14.4	0.0	40.1

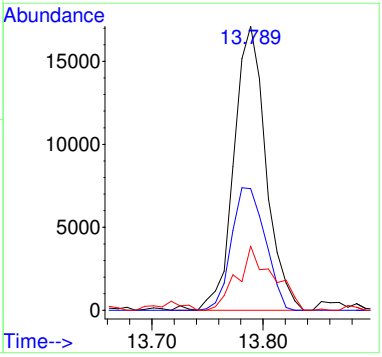


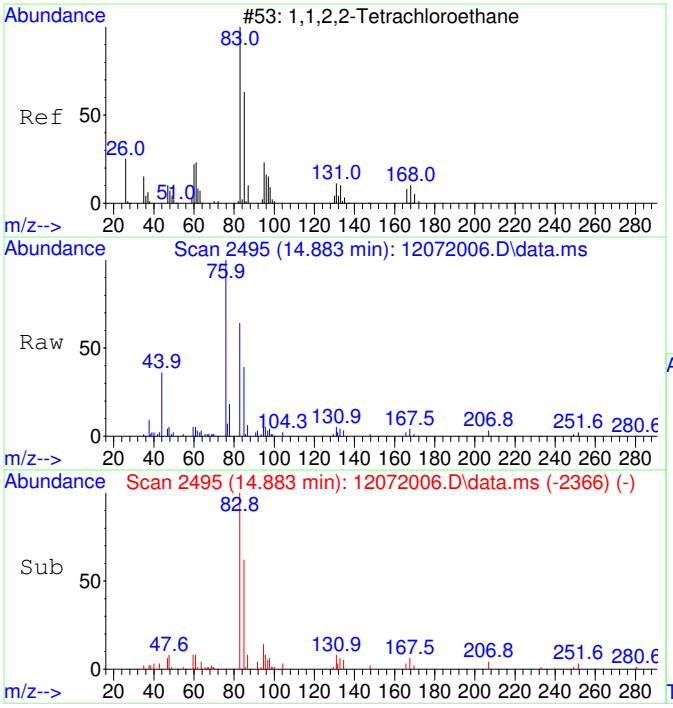


#44
o-Xylene SCAN
Concen: 1304.94 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 34205

Ion	Ratio	Lower	Upper
91	100		
106	45.6	18.0	78.0
105	25.2	0.0	56.6

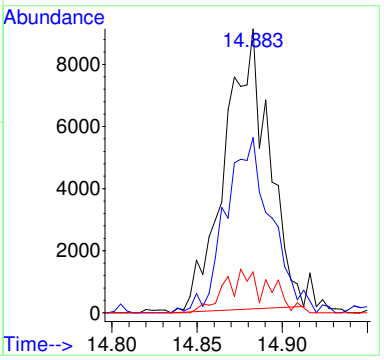


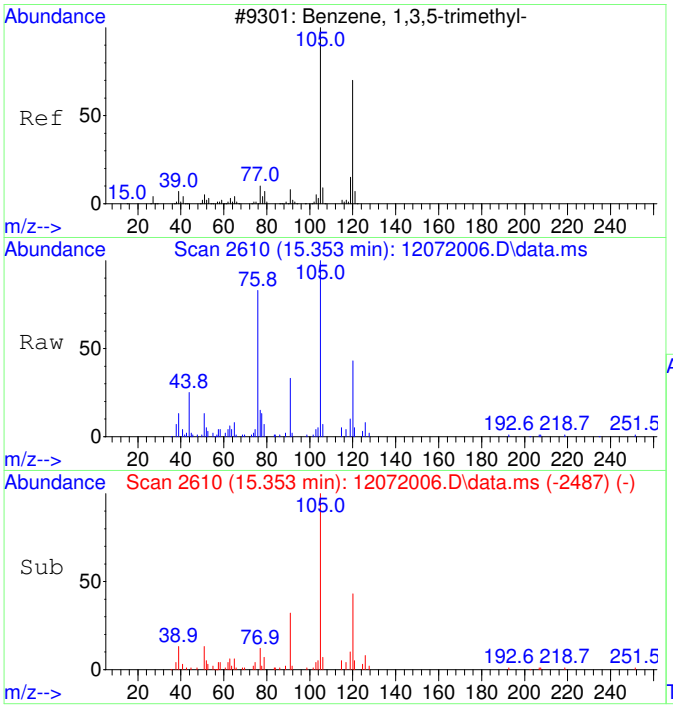


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 1195.11 ug/L
RT: 14.883 min Scan# 2495
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 83 Resp: 16288

Ion	Ratio	Lower	Upper
83	100		
85	64.8	35.9	95.9
95	3.3	0.0	47.4

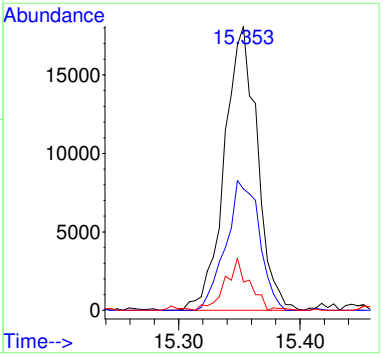


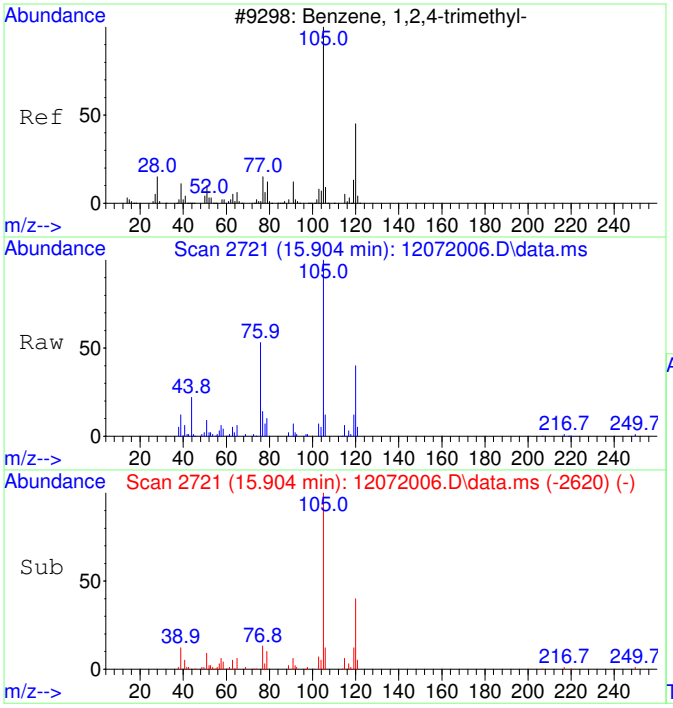


#46
1,3,5-Trimethylbenzene SCAN
Concen: 1231.15 ug/L
RT: 15.353 min Scan# 2610
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:105 Resp: 34045

Ion	Ratio	Lower	Upper
105	100		
120	46.5	18.3	78.3
119	13.6	0.0	43.1

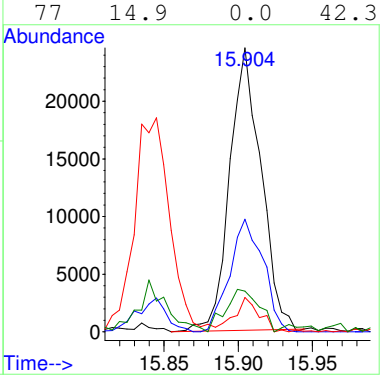


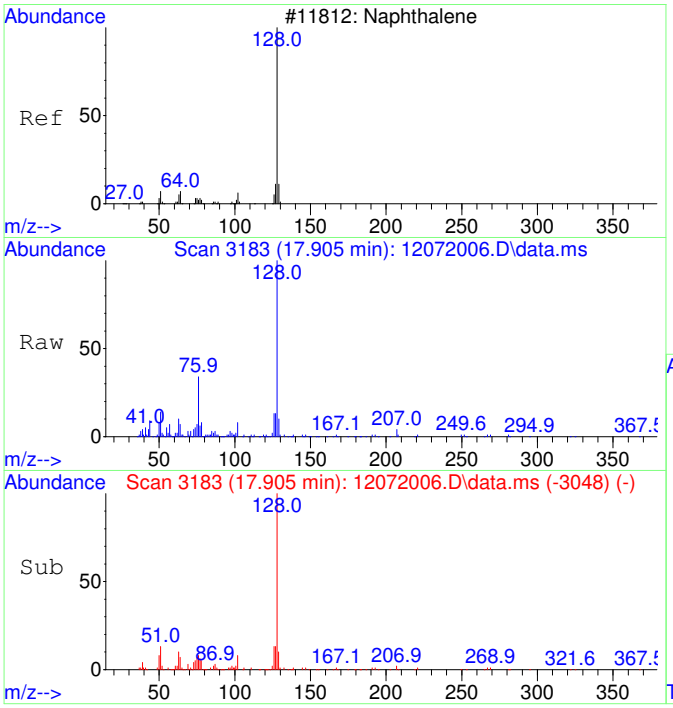


#47
1,2,4-Trimethylbenzene SCAN
Concen: 1276.92 ug/L
RT: 15.904 min Scan# 2721
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:105 Resp: 36077

Ion	Ratio	Lower	Upper
105	100		
120	42.6	16.9	76.9
119	8.0	0.0	41.9
77	14.9	0.0	42.3

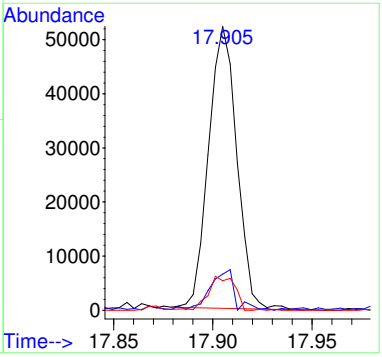




#48
Naphthalene SCAN
Concen: 1213.61 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.003 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:128 Resp: 51467

Ion	Ratio	Lower	Upper
128	100		
127	11.1	0.0	44.0
129	10.8	0.0	40.8



Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072006.D
Acq On : 7 Dec 2020 13:56
InstName : AG5975C
Operator : TD
Sample : S20L021-CAL4
Misc : 2030071 1 mg/L
ALS Vial : 6 Sample Multiplier: 1

M.I. Performed By:
TD at 6:22 am, Dec 08, 2020

M.I. Approved By:
ZAR at 2:53 pm, Dec 14, 2020

Quant Time: Dec 08 06:06:55 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:05:27 2020
Response via : Initial Calibration

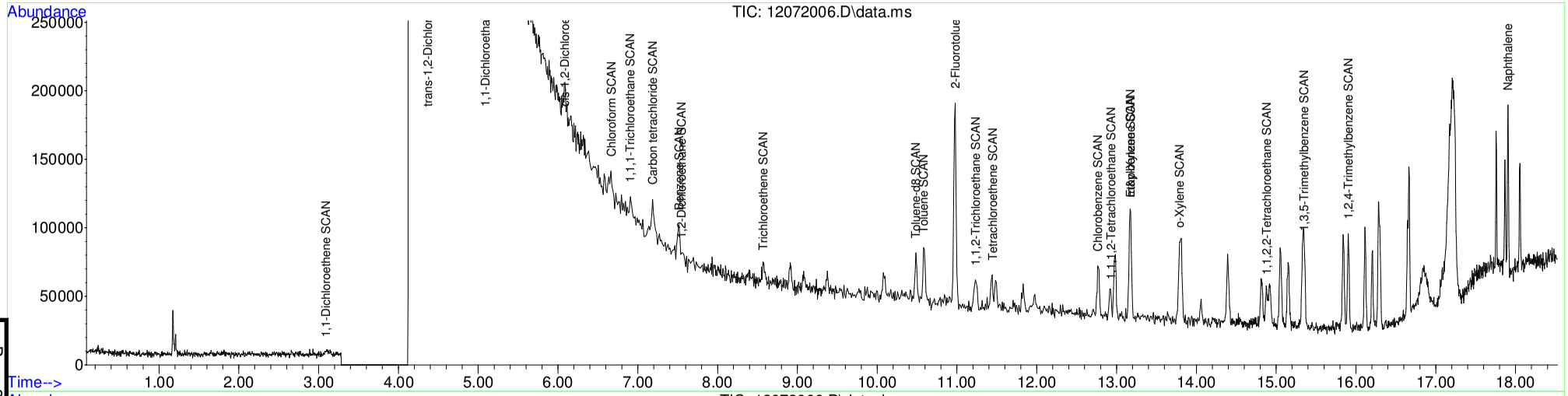
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	192171	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.487	98	40349	1084.10	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 21.68%#			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.086	61	6436m	847.46	ug/L	
3] trans-1,2-Dichloroethene	4.363	61	8899	926.37	ug/L	100
4] 1,1-Dichloroethane	5.079	63	10775	939.13	ug/L	98
5] cis-1,2-Dichloroethene	6.088	61	11528	970.12	ug/L	98
6] Chloroform	6.652	83	11165	978.21	ug/L	100
7] 1,1,1-Trichloroethane	6.907	97	12471	1017.13	ug/L	100
8] Carbon tetrachloride	7.187	117	12168	1038.04	ug/L	99
9] Benzene	7.503	78	33507	1036.18	ug/L	92
10] 1,2-Dichloroethane	7.552	62	11309	1025.16	ug/L	92
11] Trichloroethene	8.575	130	10868	1064.47	ug/L	98
13] Toluene	10.582	91	51129	1103.33	ug/L	100
14] 1,1,2-Trichloroethane	11.232	97	11523	1073.57	ug/L	100
15] Tetrachloroethene	11.432	166	15897	1101.36	ug/L	100
16] Chlorobenzene	12.765	112	39448	1098.83	ug/L	97
17] 1,1,1,2-Tetrachloroethane	12.916	131	13873	1104.11	ug/L	100
18] Ethylbenzene	12.972	91	66895	1130.19	ug/L	98
19] m&p-Xylene	13.171	91	103724	2275.67	ug/L	98
20] o-Xylene	13.782	91	54333	1109.83	ug/L	98
21] 1,1,2,2-Tetrachloroethane	14.881	83	25279	1108.19	ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	61678	1145.65	ug/L	97
23] 1,2,4-Trimethylbenzene	15.906	105	63729	1157.33	ug/L	96
24] Naphthalene	17.906	128	102525	1190.66	ug/L	99
25) 2-Fluorotoluene SCAN	10.979	109	105526	4837.67	ug/L	98
26) 1,1-Dichloroethene SCAN	3.085	61	1144	224.65	ug/L #	62
27) trans-1,2-Dichloroethe...	4.368	61	6412	988.56	ug/L #	42
28) 1,1-Dichloroethane SCAN	5.085	63	6350	829.42	ug/L	77
29) cis-1,2-Dichloroethene...	6.080	61	9880	1312.72	ug/L #	64
30) Chloroform SCAN	6.663	83	8176	1164.68	ug/L	94
31) 1,1,1-Trichloroethane ...	6.906	97	8197	1131.56	ug/L	87
32) Carbon tetrachloride SCAN	7.186	117	6968	1125.63	ug/L	95
33) Benzene SCAN	7.514	78	24495	1117.71	ug/L	96
34) 1,2-Dichloroethane SCAN	7.551	62	7265	1059.80	ug/L #	37
35) Trichloroethene SCAN	8.574	130	4582	958.85	ug/L #	47
36) Toluene-d8 SCAN	10.486	98	23597	1153.40	ug/L	96
37) Toluene SCAN	10.581	91	32509	1290.59	ug/L	96
38) 1,1,2-Trichloroethane ...	11.231	97	7321	1159.53	ug/L	93
39) Tetrachloroethene SCAN	11.441	166	6895	1216.76	ug/L #	28
40) Chlorobenzene SCAN	12.764	112	21721	1200.56	ug/L	74
41) 1,1,1,2-Tetrachloroeth...	12.931	131	7376	1181.69	ug/L	92
42) Ethylbenzene SCAN	13.177	91	59613	1241.88	ug/L	94
43) m&p-Xylene SCAN	13.177	91	59613	1241.88	ug/L	95
44) o-Xylene SCAN	13.789	91	34205	1304.94	ug/L	97
45) 1,1,2,2-Tetrachloroeth...	14.883	83	16288	1195.11	ug/L	92
46) 1,3,5-Trimethylbenzene...	15.353	105	34045	1231.15	ug/L	98
47) 1,2,4-Trimethylbenzene...	15.904	105	36077	1276.92	ug/L	93
48) Naphthalene SCAN	17.905	128	51467	1213.61	ug/L	96

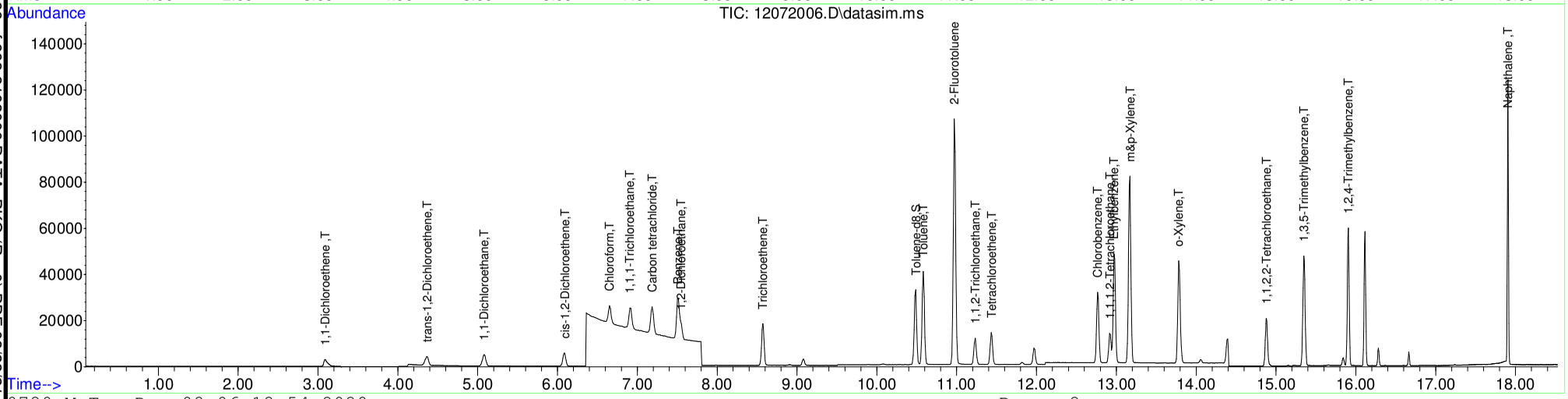
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072006.D
Acq On : 7 Dec 2020 13:56
InstName : AG5975C
Operator : TD
Sample : S20L021-CAL4
Misc : 2030071 1 mg/L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 06:06:55 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:05:27 2020
Response via : Initial Calibration





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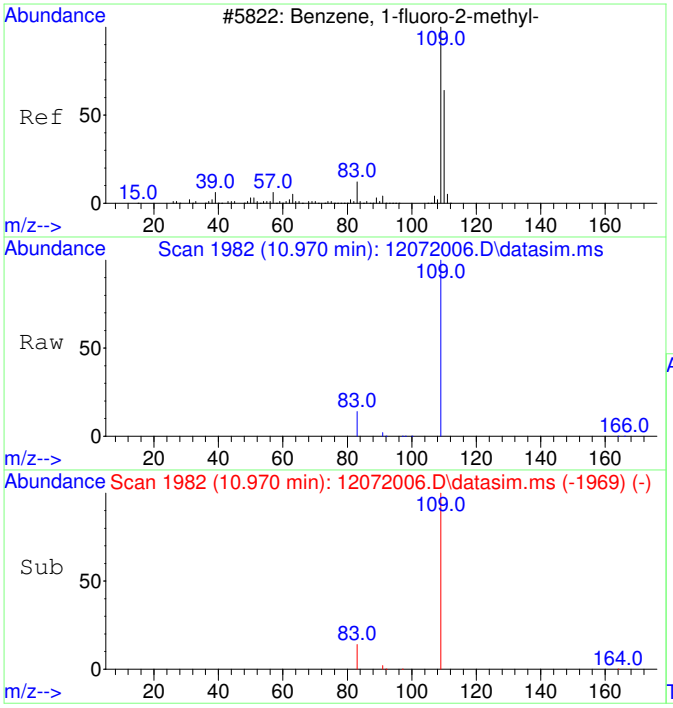
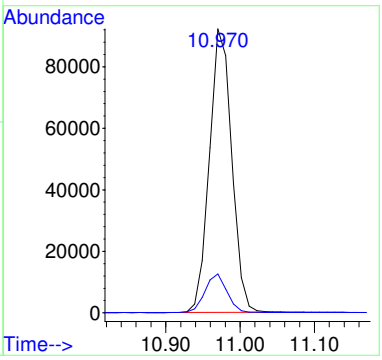
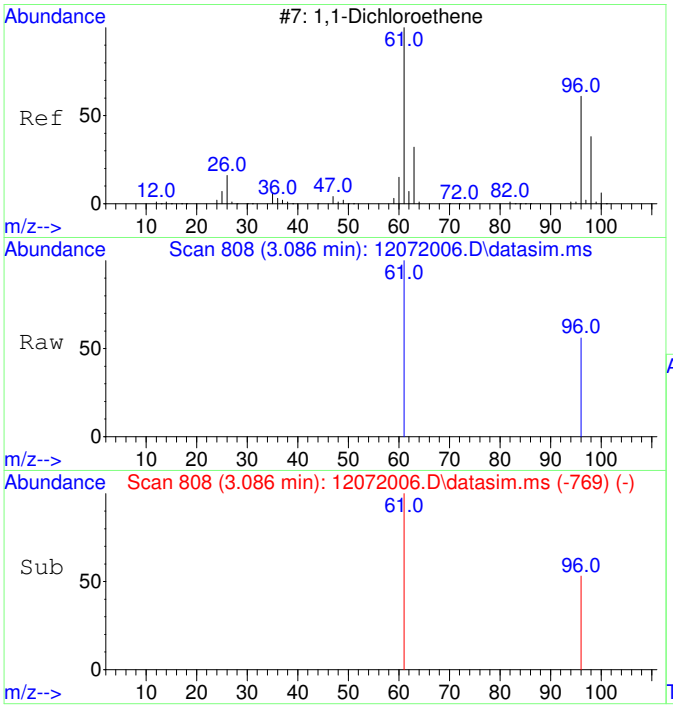


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:109 Resp: 192171

Ion	Ratio	Lower	Upper
109	100		
83	13.3	0.0	42.3

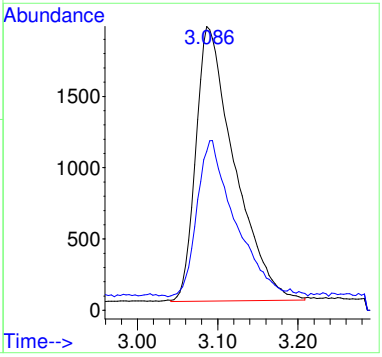


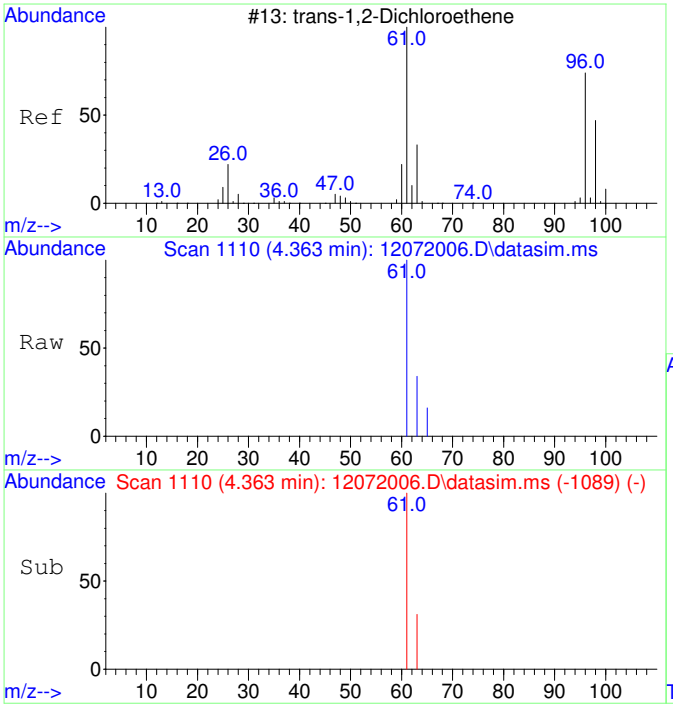


#2
1,1-Dichloroethene
Concen: 847.46 ug/L m
RT: 3.086 min Scan# 808
Delta R.T. -0.004 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 6436

Ion	Ratio	Lower	Upper
61	100		
96	63.5	37.2	97.2

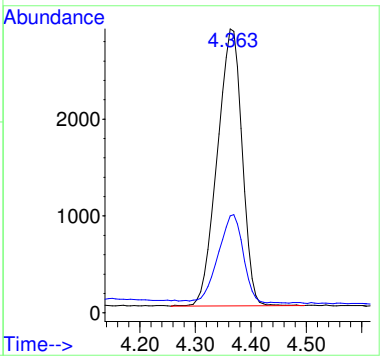


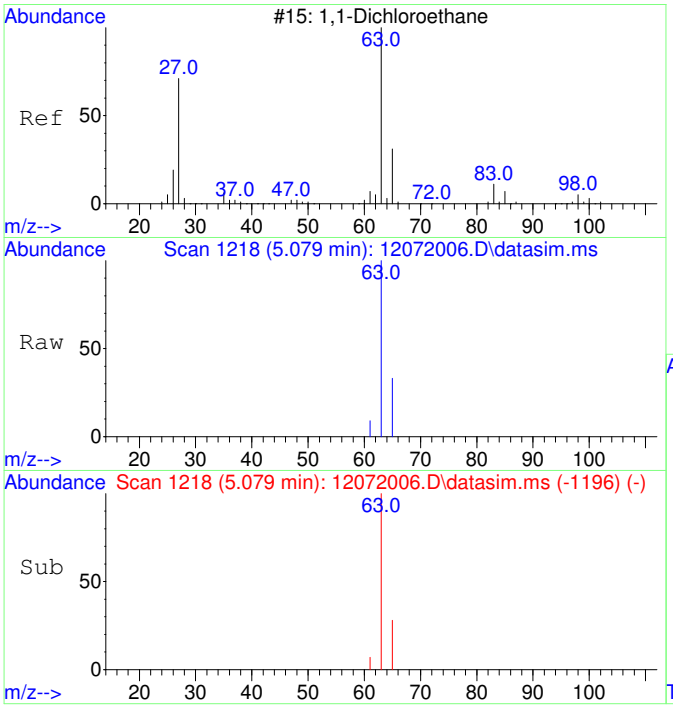


#3
trans-1,2-Dichloroethene
Concen: 926.37 ug/L
RT: 4.363 min Scan# 1110
Delta R.T. -0.013 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 8899

Ion	Ratio	Lower	Upper
61	100		
63	32.2	2.4	62.4

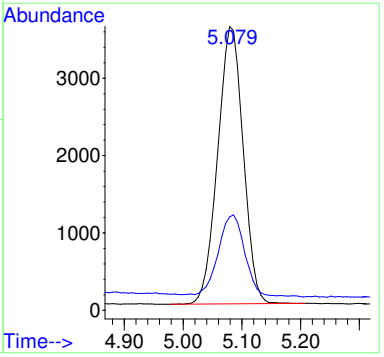


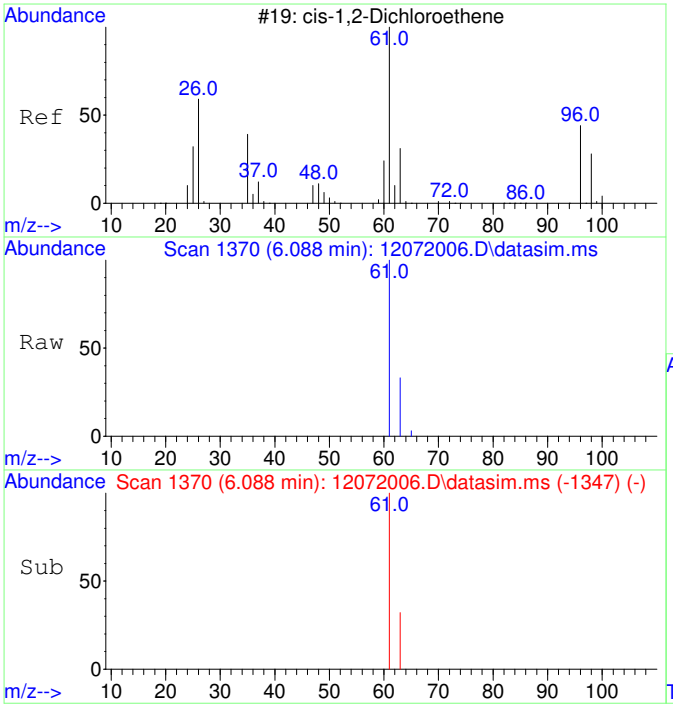


#4
1,1-Dichloroethane
Concen: 939.13 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.006 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 63 Resp: 10775

Ion	Ratio	Lower	Upper
63	100		
65	30.8	1.8	61.8

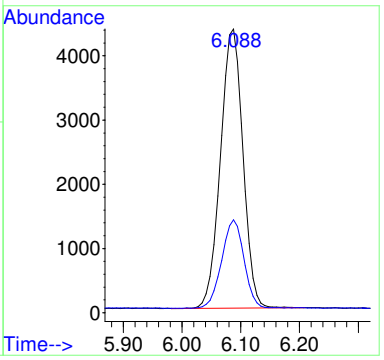


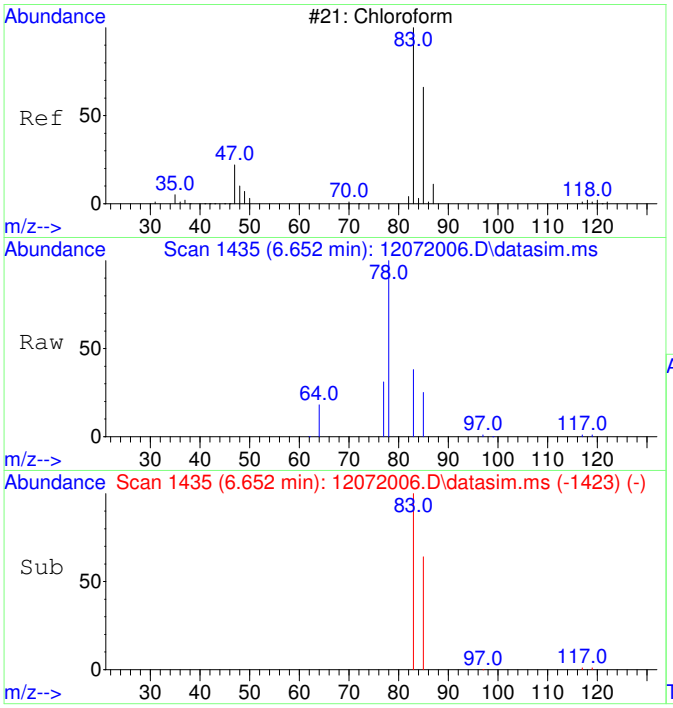


#5
cis-1,2-Dichloroethene
Concen: 970.12 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 11528

Ion	Ratio	Lower	Upper
61	100		
63	31.2	2.5	62.5

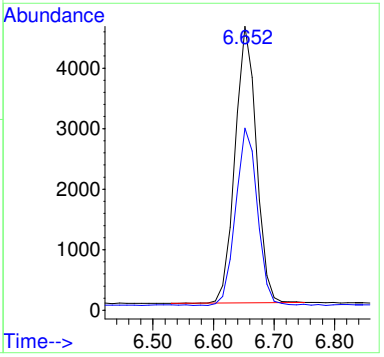


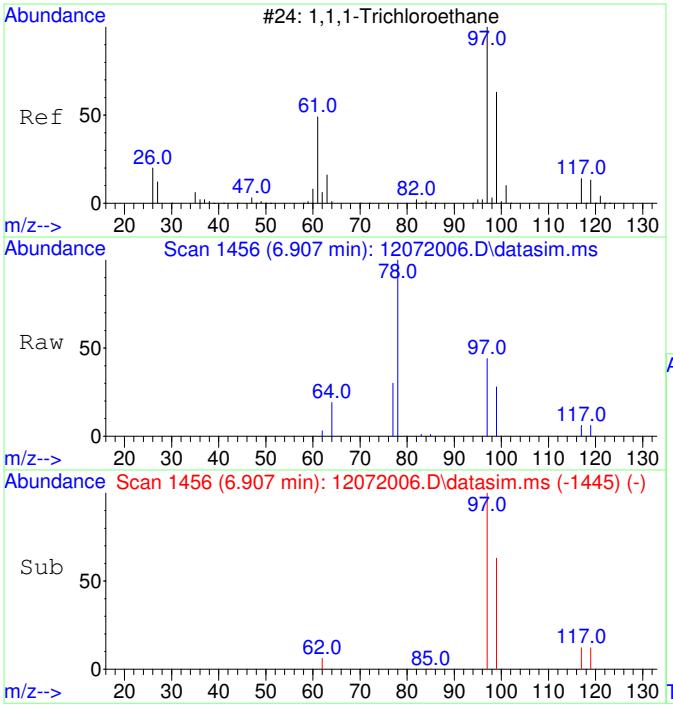


#6
Chloroform
Concen: 978.21 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 83 Resp: 11165

Ion	Ratio	Lower	Upper
83	100		
85	65.4	35.1	95.1

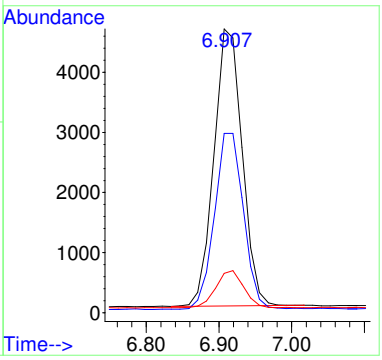


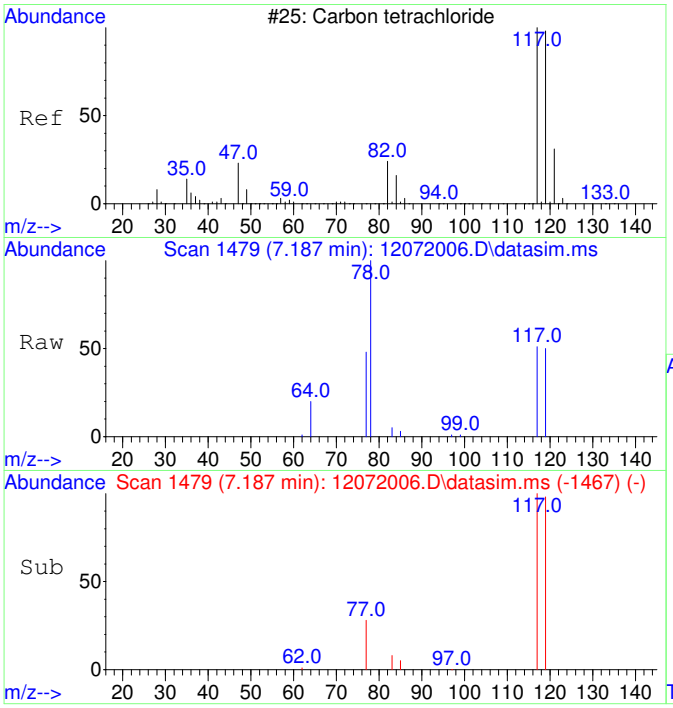


#7
1,1,1-Trichloroethane
Concen: 1017.13 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 97 Resp: 12471

Ion	Ratio	Lower	Upper
97	100		
99	64.8	34.6	94.6
117	13.2	0.0	43.2

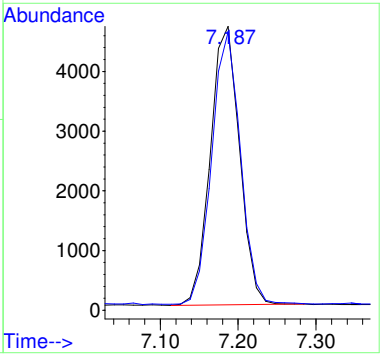


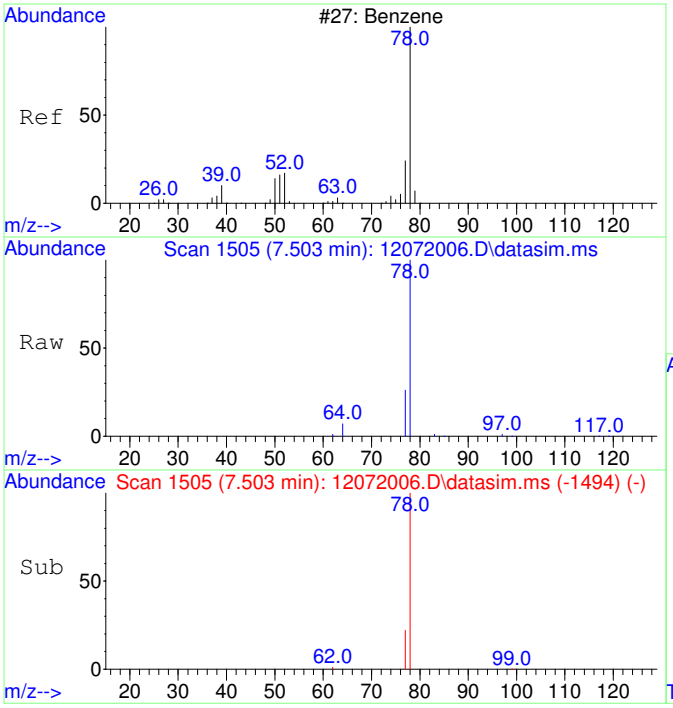


#8
Carbon tetrachloride
Concen: 1038.04 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:117 Resp: 12168

Ion	Ratio	Lower	Upper
117	100		
119	95.6	66.4	126.4

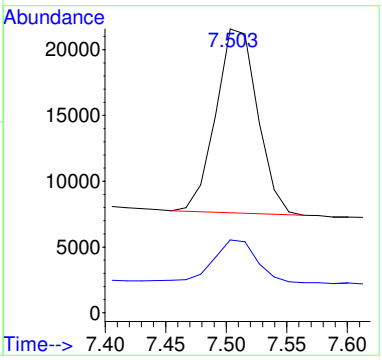


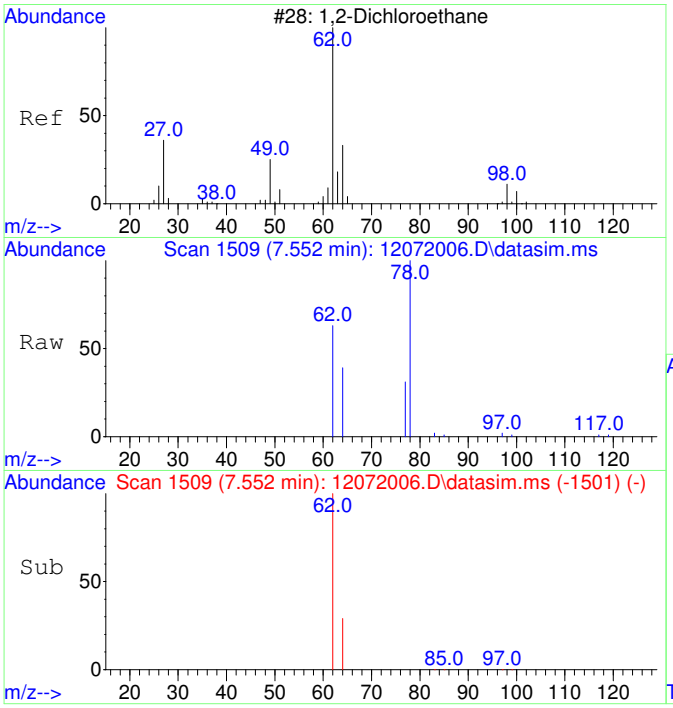


#9
Benzene
Concen: 1036.18 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 78 Resp: 33507

Ion	Ratio	Lower	Upper
78	100		
77	27.2	0.0	53.2

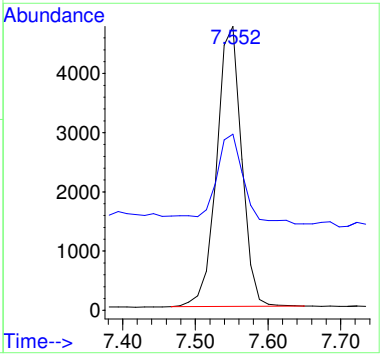


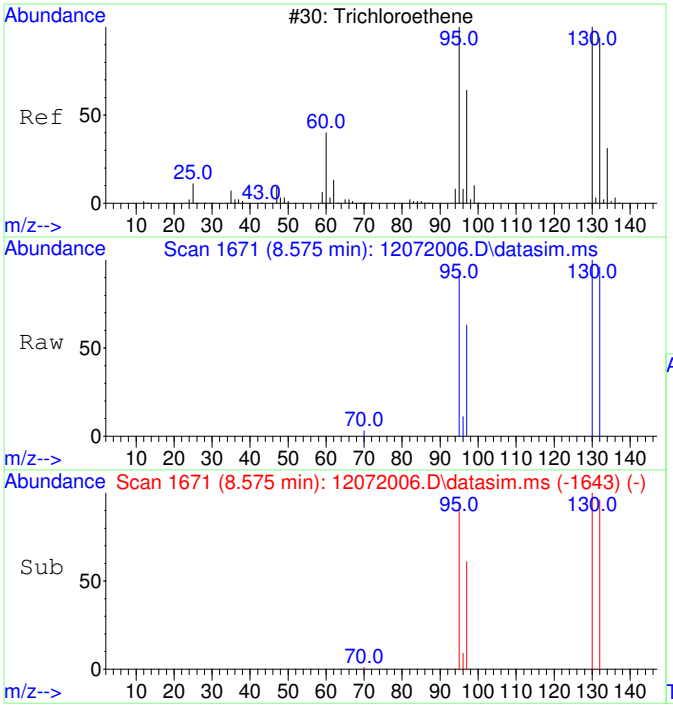


#10
1,2-Dichloroethane
Concen: 1025.16 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 62 Resp: 11309

Ion	Ratio	Lower	Upper
62	100		
64	36.9	2.3	62.3

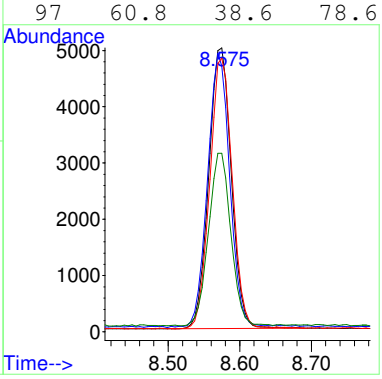


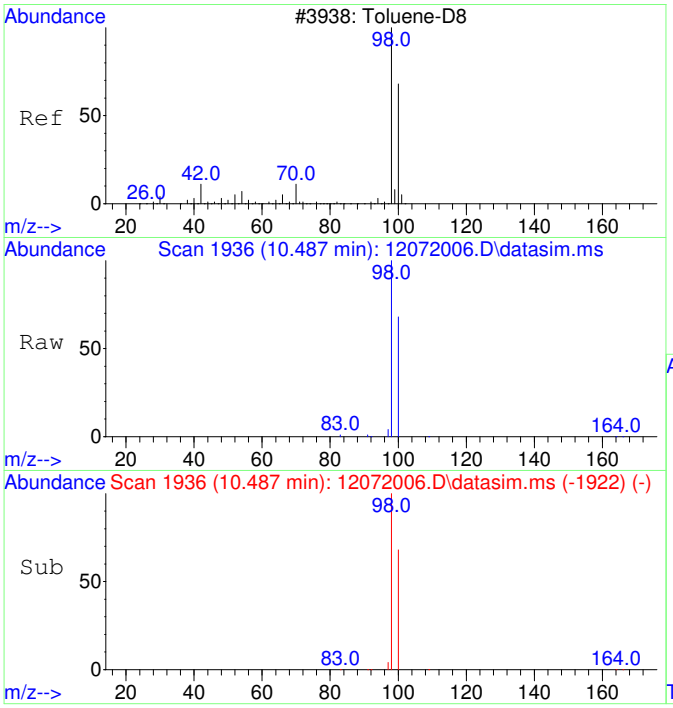


#11
Trichloroethene
Concen: 1064.47 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:130 Resp: 10868

Ion	Ratio	Lower	Upper
130	100		
95	94.8	60.7	120.7
132	95.6	76.0	116.0
97	60.8	38.6	78.6

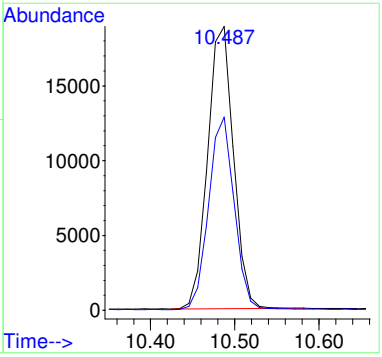


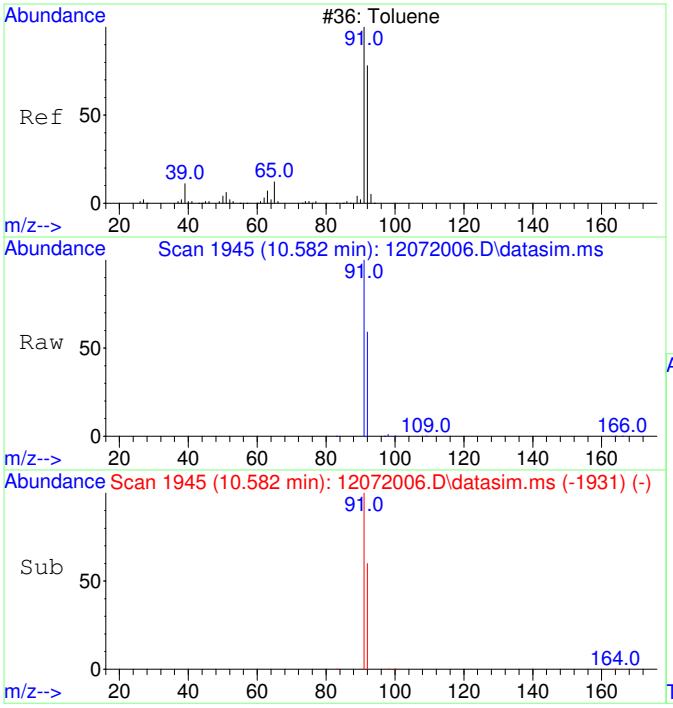


#12
Toluene-d8
Concen: 1084.10 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 98 Resp: 40349

Ion	Ratio	Lower	Upper
98	100		
100	66.9	37.1	97.1

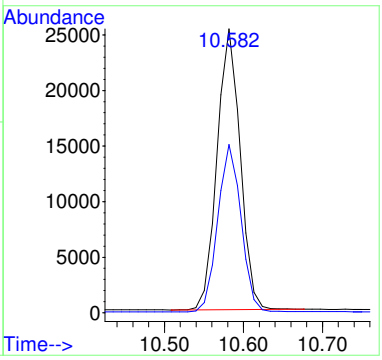


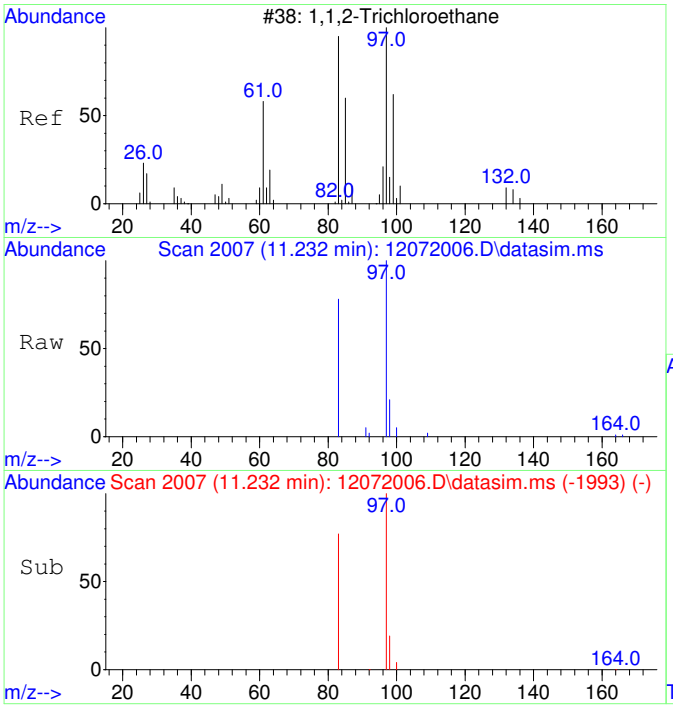


#13
Toluene
Concen: 1103.33 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 51129

Ion	Ratio	Lower	Upper
91	100		
92	59.8	29.9	89.9

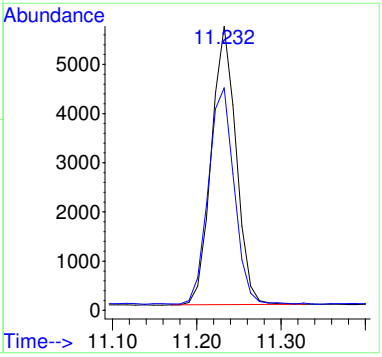


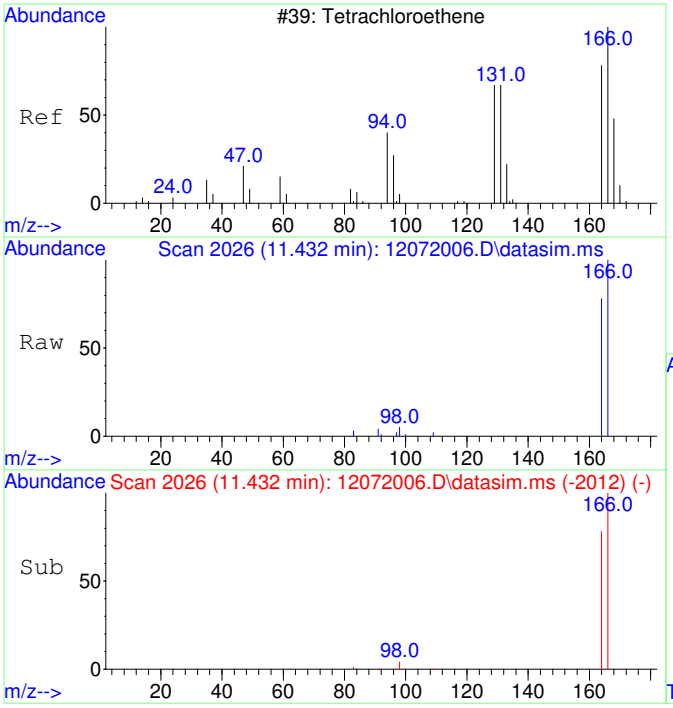


#14
1,1,2-Trichloroethane
Concen: 1073.57 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 97 Resp: 11523

Ion	Ratio	Lower	Upper
97	100		
83	81.4	51.2	111.2

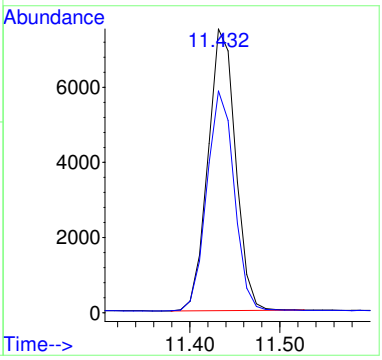


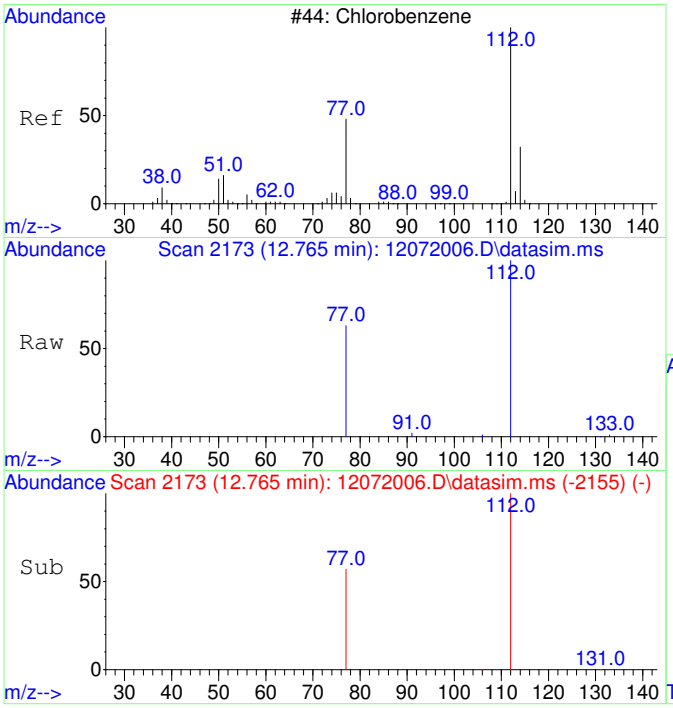


#15
Tetrachloroethene
Concen: 1101.36 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:166 Resp: 15897

Ion	Ratio	Lower	Upper
166	100		
164	77.5	47.8	107.8

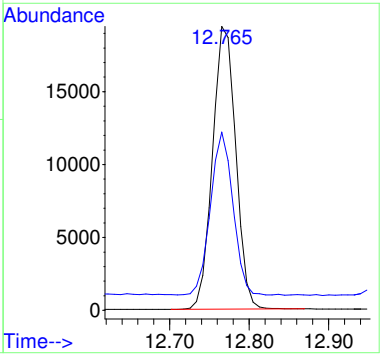


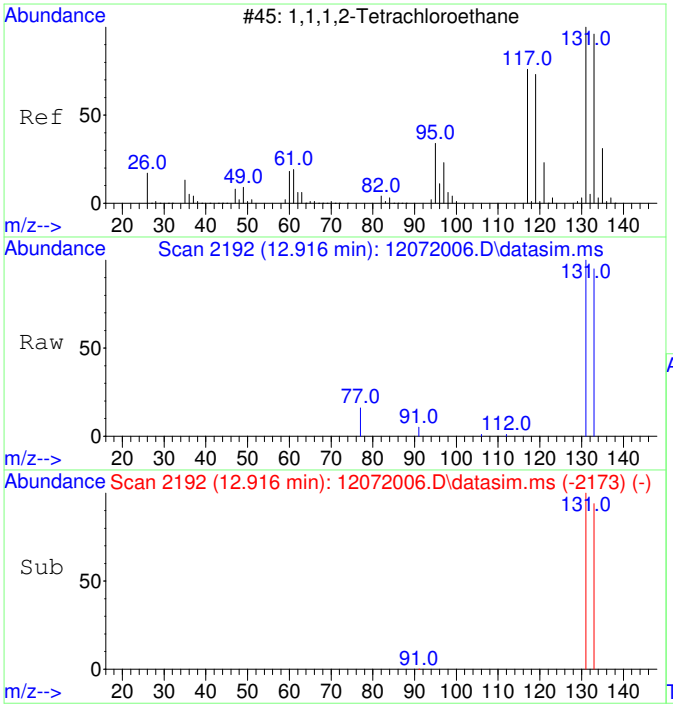


#16
Chlorobenzene
Concen: 1098.83 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:112 Resp: 39448

Ion	Ratio	Lower	Upper
112	100		
77	55.4	23.6	83.6

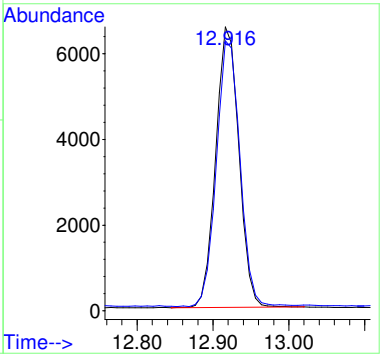


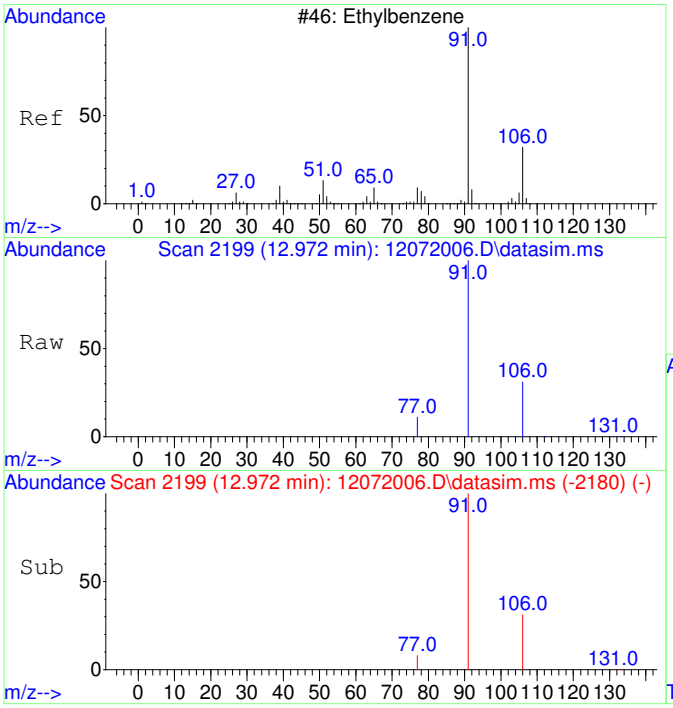


#17
1,1,1,2-Tetrachloroethane
Concen: 1104.11 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:131 Resp: 13873

Ion	Ratio	Lower	Upper
131	100		
133	95.9	66.3	126.3

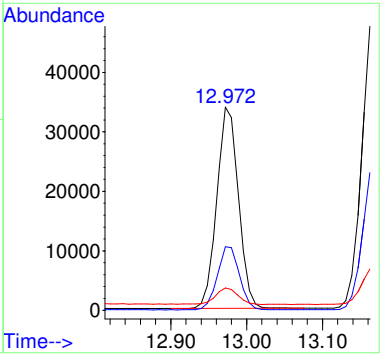


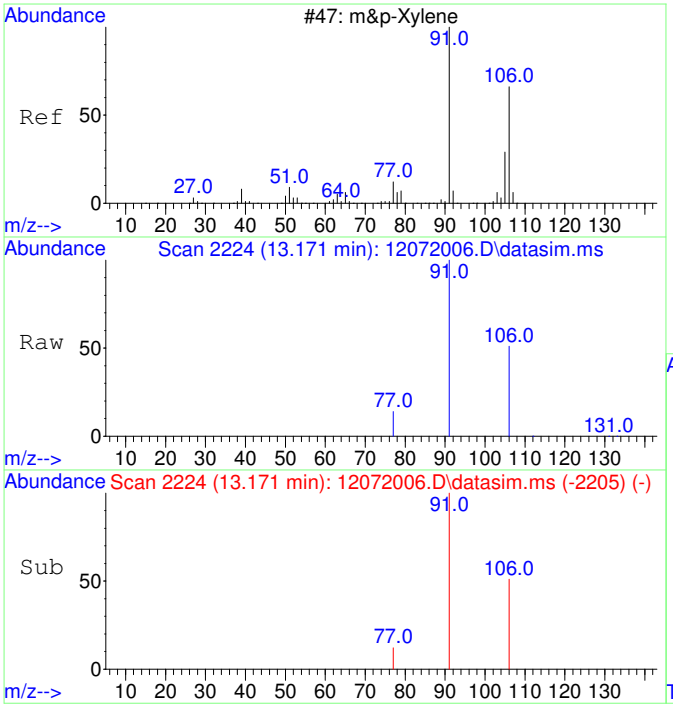


#18
Ethylbenzene
Concen: 1130.19 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 66895

Ion	Ratio	Lower	Upper
91	100		
106	32.0	3.0	63.0
77	8.4	0.0	38.2

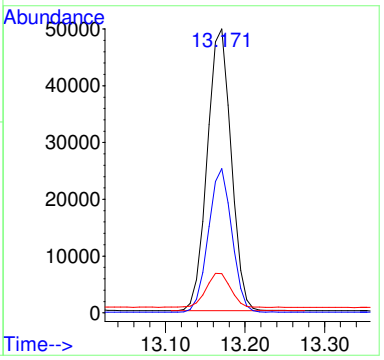


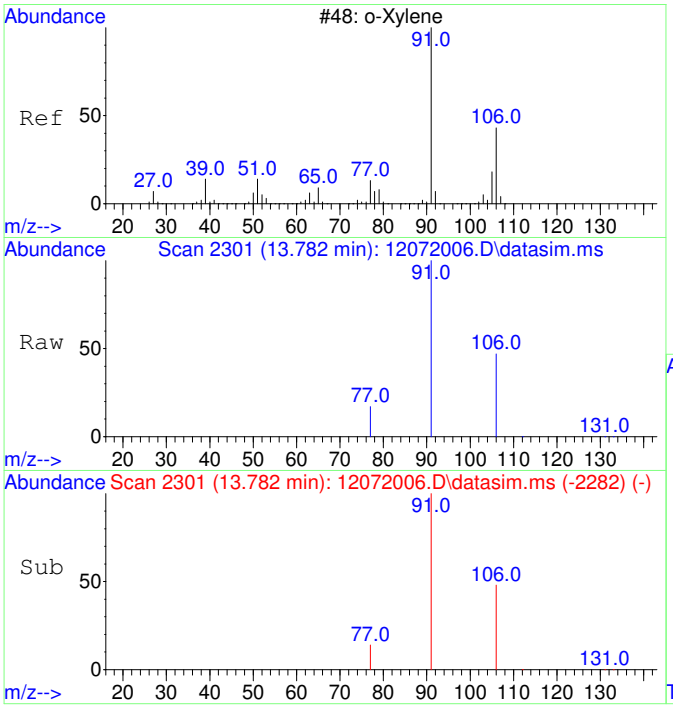


#19
m&p-Xylene
Concen: 2275.67 ug/L
RT: 13.171 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 103724

Ion	Ratio	Lower	Upper
91	100		
106	50.1	22.2	82.2
77	12.4	0.0	42.4

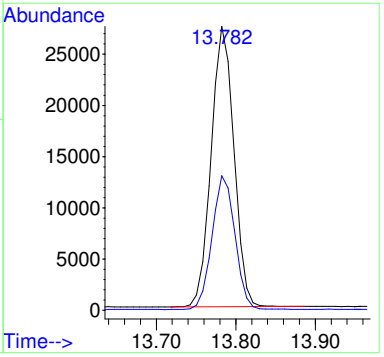


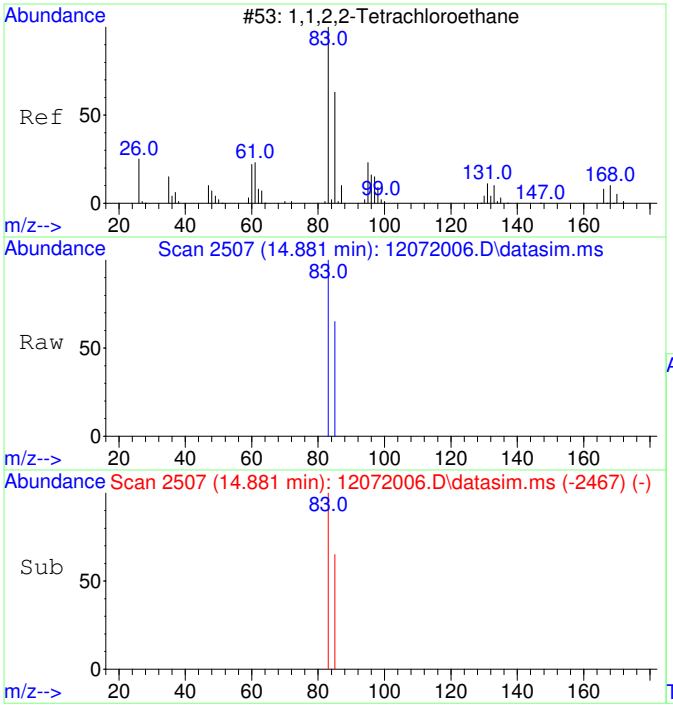


#20
o-Xylene
Concen: 1109.83 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 54333

Ion	Ratio	Lower	Upper
91	100		
106	48.1	19.2	79.2

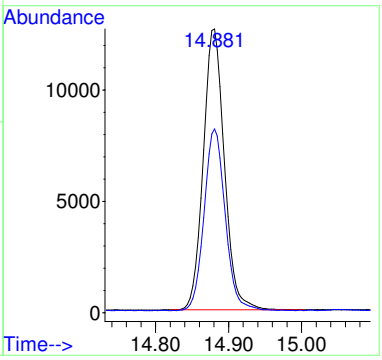


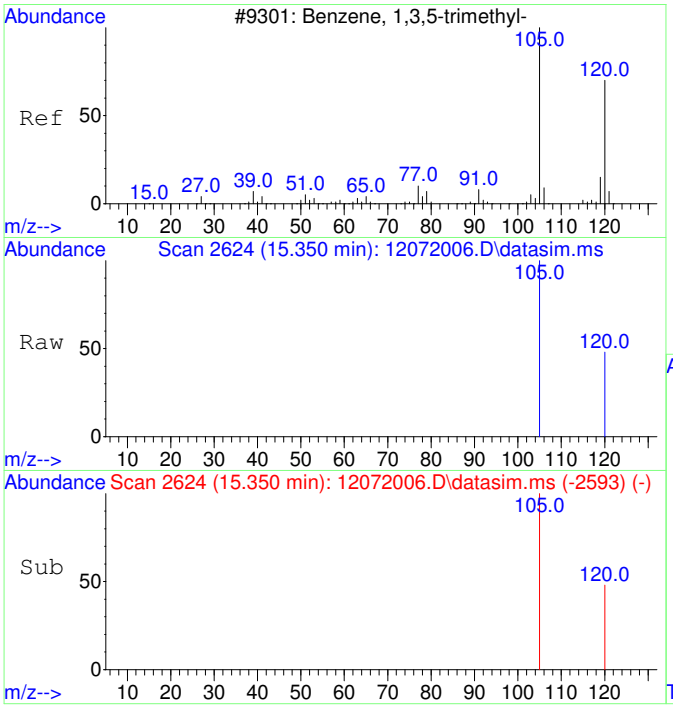


#21
1,1,2,2-Tetrachloroethane
Concen: 1108.19 ug/L
RT: 14.881 min Scan# 2507
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 83 Resp: 25279

Ion	Ratio	Lower	Upper
83	100		
85	64.7	34.8	94.8

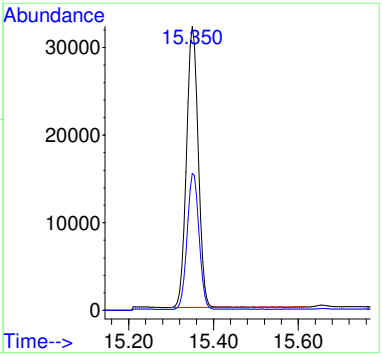


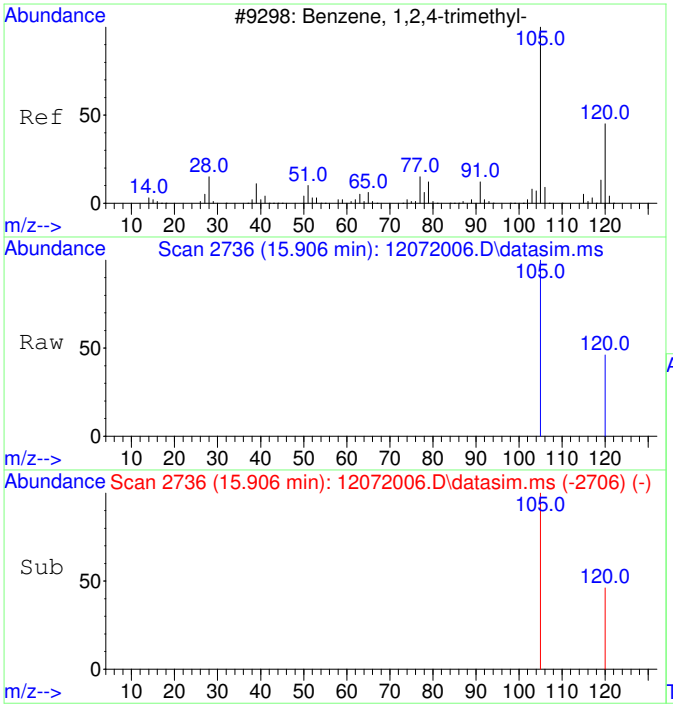


#22
1,3,5-Trimethylbenzene
Concen: 1145.65 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:105 Resp: 61678

Ion	Ratio	Lower	Upper
105	100		
120	48.9	21.1	81.1

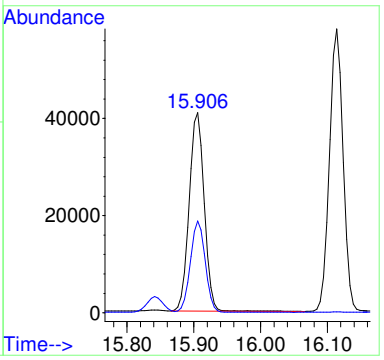


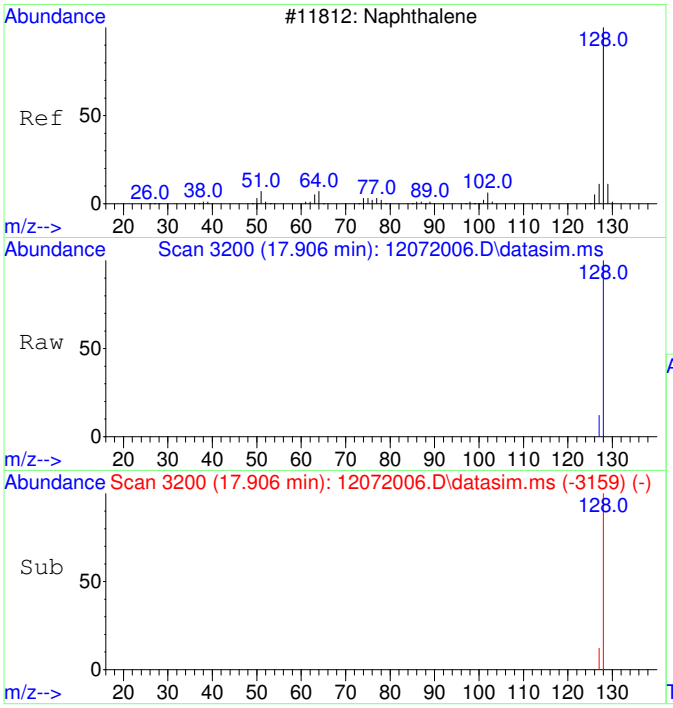


#23
1,2,4-Trimethylbenzene
Concen: 1157.33 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:105 Resp: 63729

Ion	Ratio	Lower	Upper
105	100		
120	44.7	17.2	77.2

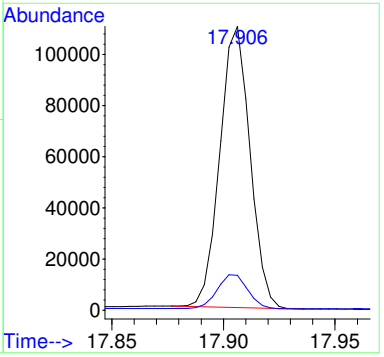


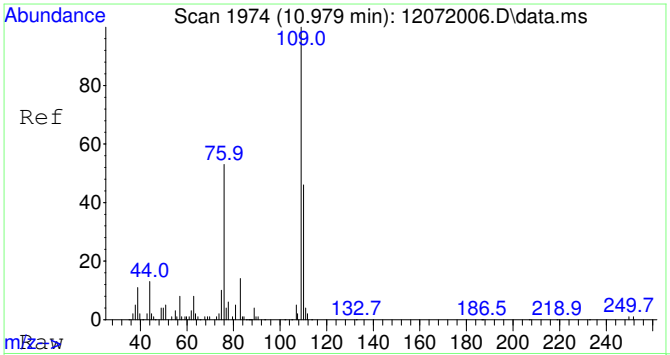


#24
Naphthalene
Concen: 1190.66 ug/L
RT: 17.906 min Scan# 3200
Delta R.T. 0.003 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:128 Resp: 102525

Ion	Ratio	Lower	Upper
128	100		
127	12.3	0.0	42.5

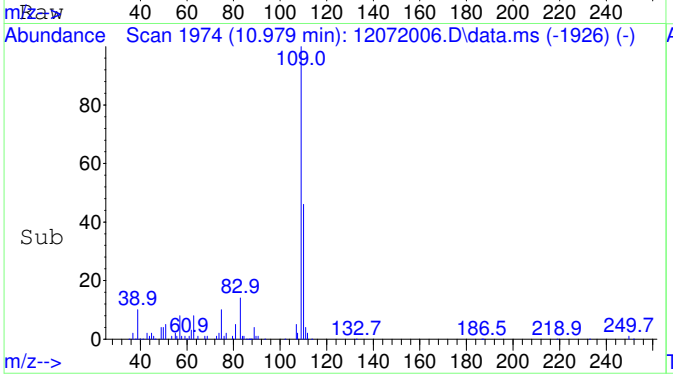


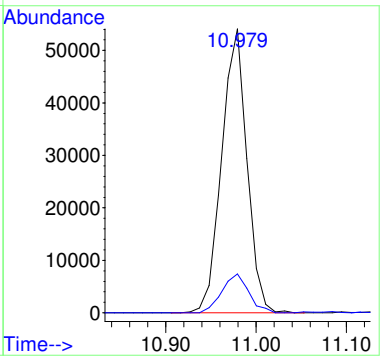


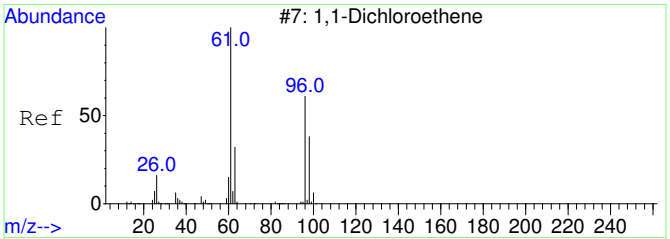
#25
2-Fluorotoluene SCAN
Concen: 4837.67 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

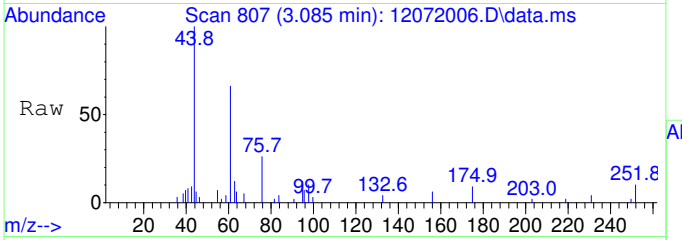
Tgt Ion:109 Resp: 105526

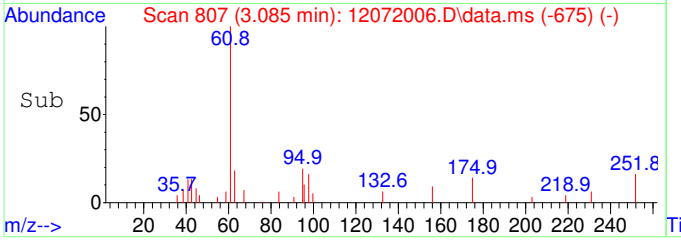
Ion	Ratio	Lower	Upper
109	100		
83	14.5	0.0	43.8







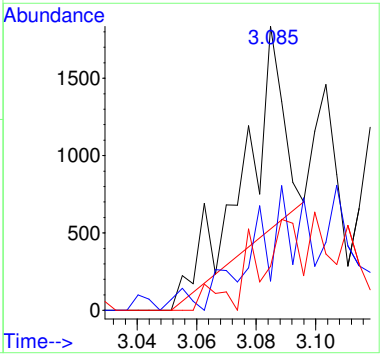


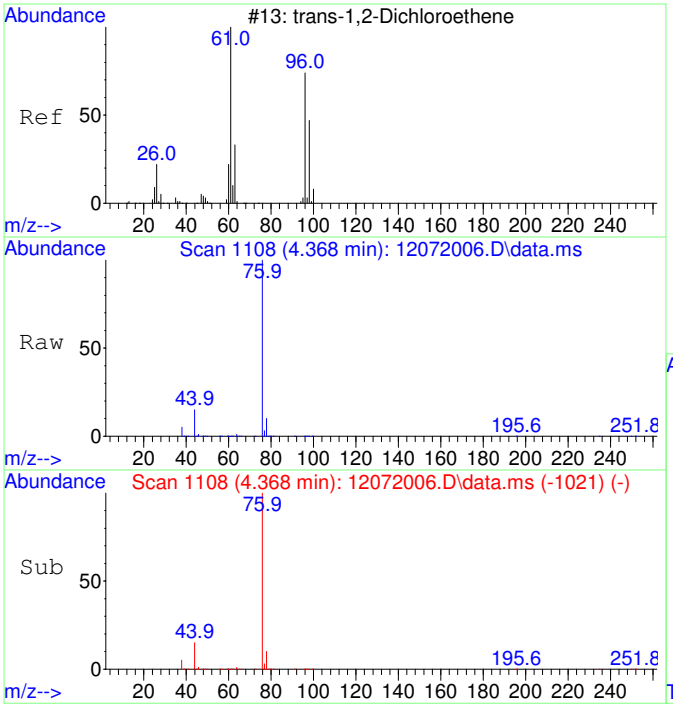


#26
1,1-Dichloroethene SCAN
Concen: 224.65 ug/L
RT: 3.085 min Scan# 807
Delta R.T. -0.011 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 1144

Ion	Ratio	Lower	Upper
61	100		
96	22.7	33.1	93.1#
98	30.9	11.2	71.2

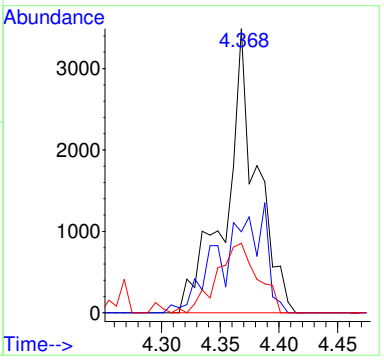


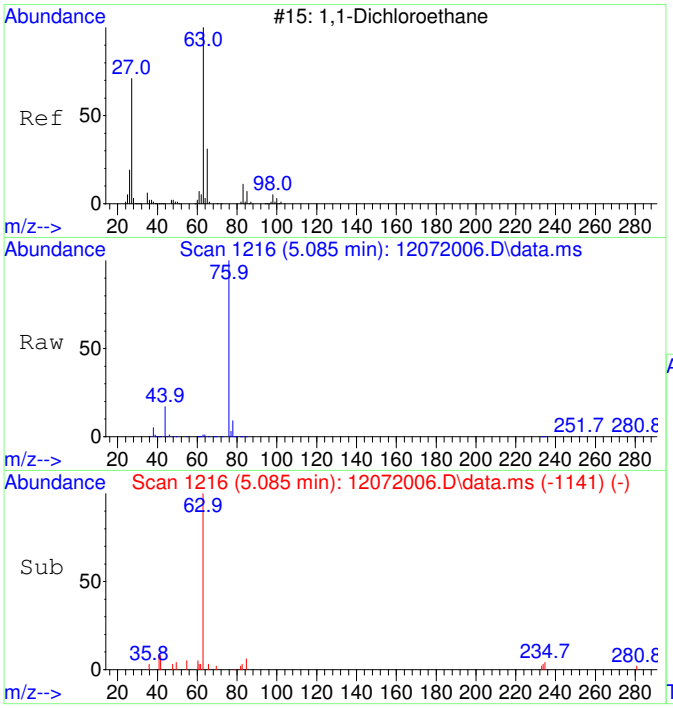


#27
trans-1,2-Dichloroethene SCAN
Concen: 988.56 ug/L
RT: 4.368 min Scan# 1108
Delta R.T. -0.013 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 6412

Ion	Ratio	Lower	Upper
61	100		
96	10.7	49.0	109.0#
98	31.9	20.5	80.5

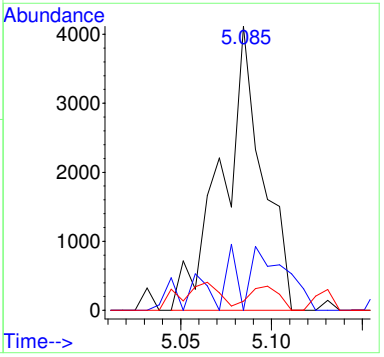


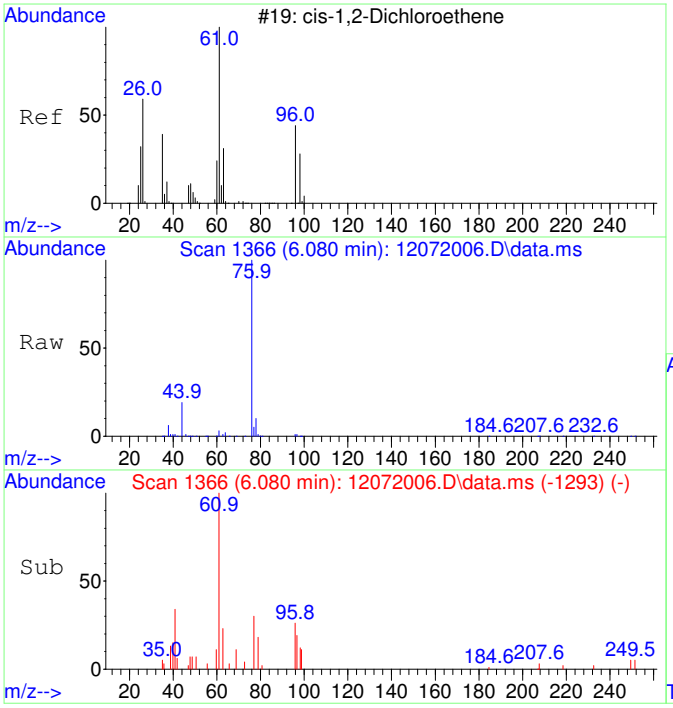


#28
1,1-Dichloroethane SCAN
Concen: 829.42 ug/L
RT: 5.085 min Scan# 1216
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 63 Resp: 6350

Ion	Ratio	Lower	Upper
63	100		
65	19.2	1.3	61.3
83	5.5	0.0	45.9

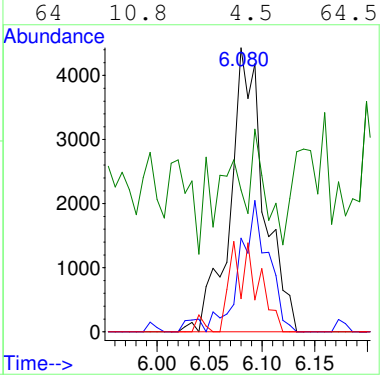


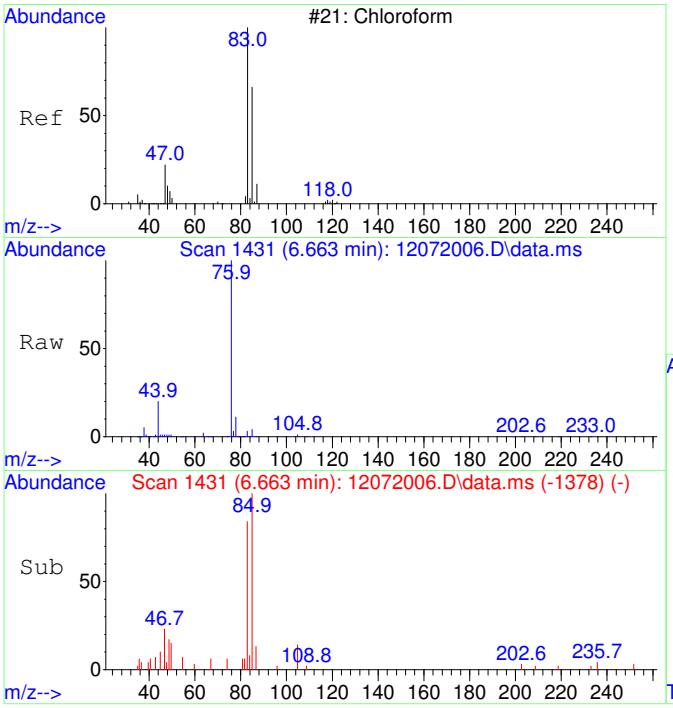


#29
cis-1,2-Dichloroethene SCAN
Concen: 1312.72 ug/L
RT: 6.080 min Scan# 1366
Delta R.T. -0.013 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 9880

Ion	Ratio	Lower	Upper
61	100		
96	38.7	39.9	99.9#
98	24.7	13.5	73.5
64	10.8	4.5	64.5

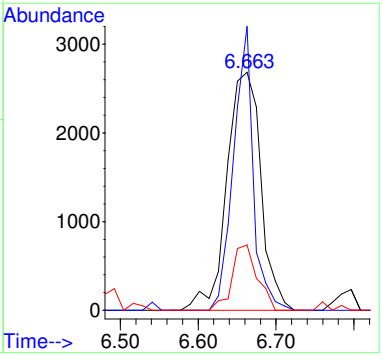


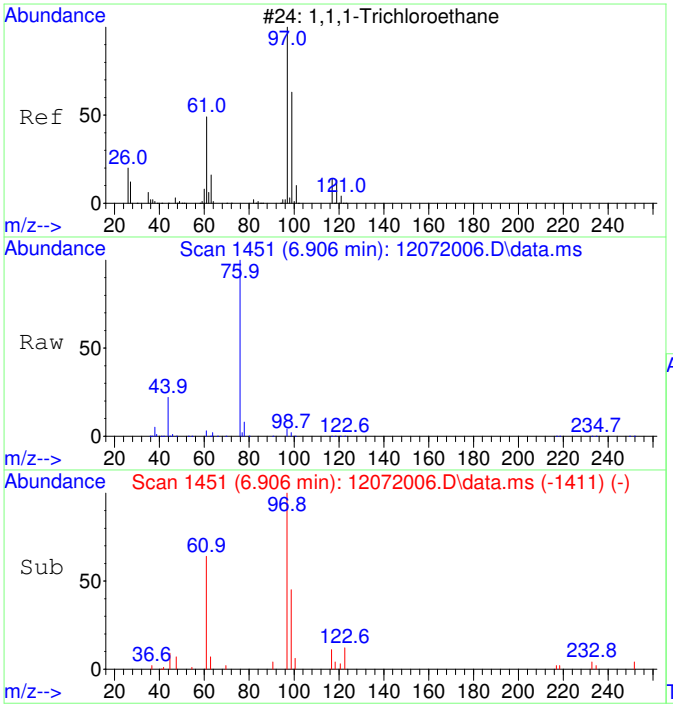


#30
Chloroform SCAN
Concen: 1164.68 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 83 Resp: 8176

Ion	Ratio	Lower	Upper
83	100		
85	69.0	34.6	94.6
47	20.4	0.0	53.4

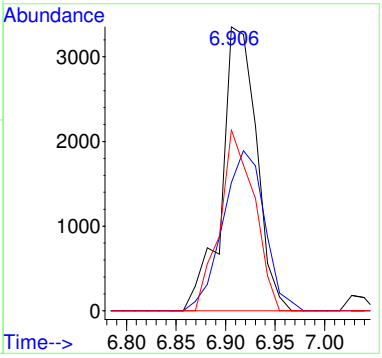


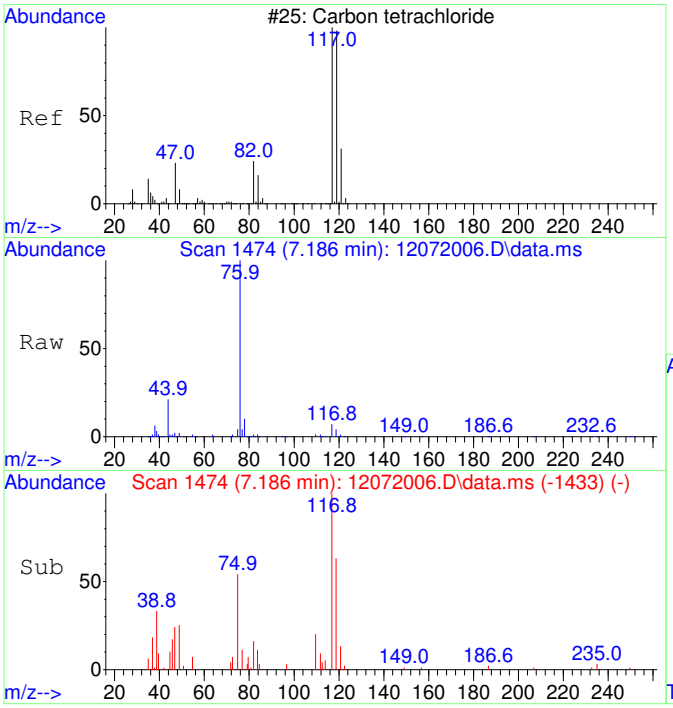


#31
1,1,1-Trichloroethane SCAN
Concen: 1131.56 ug/L
RT: 6.906 min Scan# 1451
Delta R.T. -0.012 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 97 Resp: 8197

Ion	Ratio	Lower	Upper
97	100		
99	67.6	43.6	103.6
61	62.6	18.0	78.0

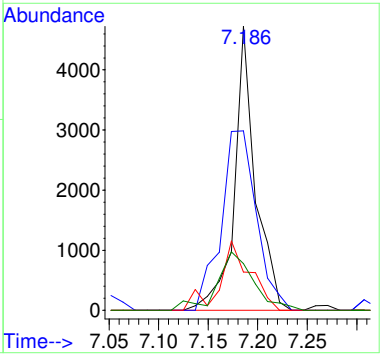


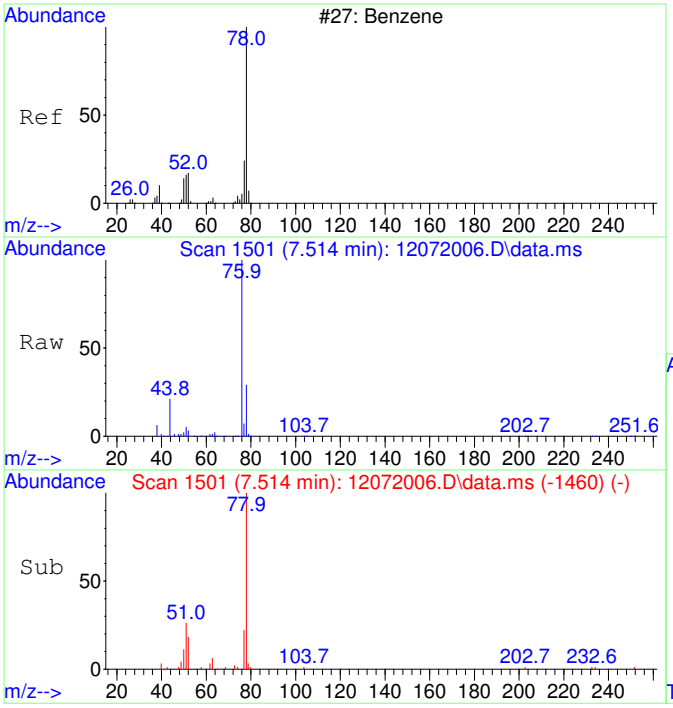


#32
Carbon tetrachloride SCAN
Concen: 1125.63 ug/L
RT: 7.186 min Scan# 1474
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:117 Resp: 6968

Ion	Ratio	Lower	Upper
117	100		
119	106.5	75.5	135.5
121	35.5	0.0	58.8
82	35.6	0.0	59.2

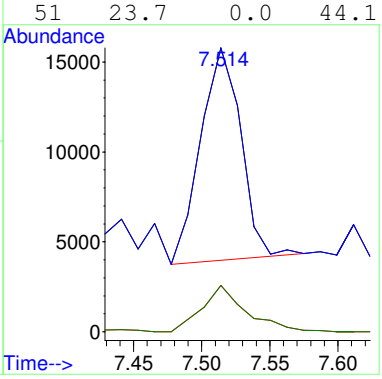


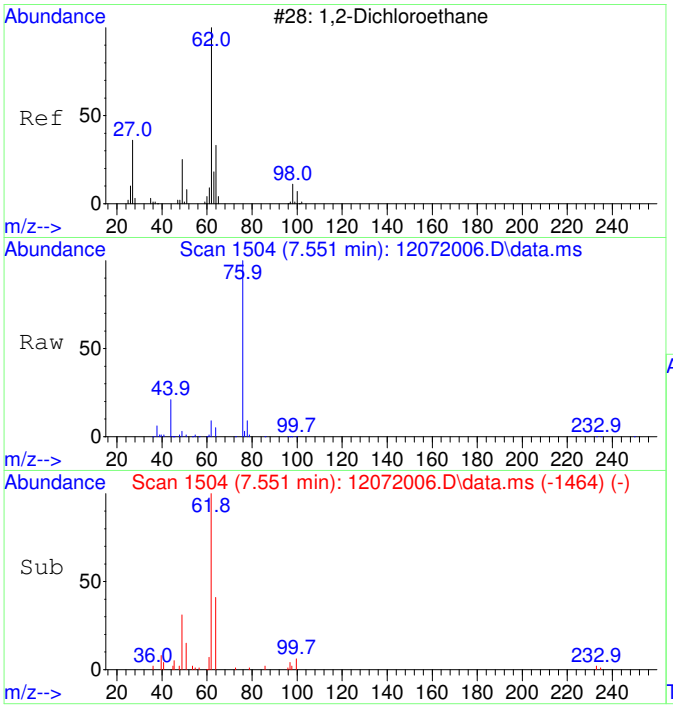


#33
Benzene SCAN
Concen: 1117.71 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 78 Resp: 24495

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	23.7	0.0	47.9
51	23.7	0.0	44.1

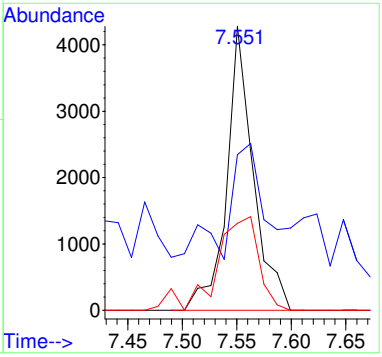


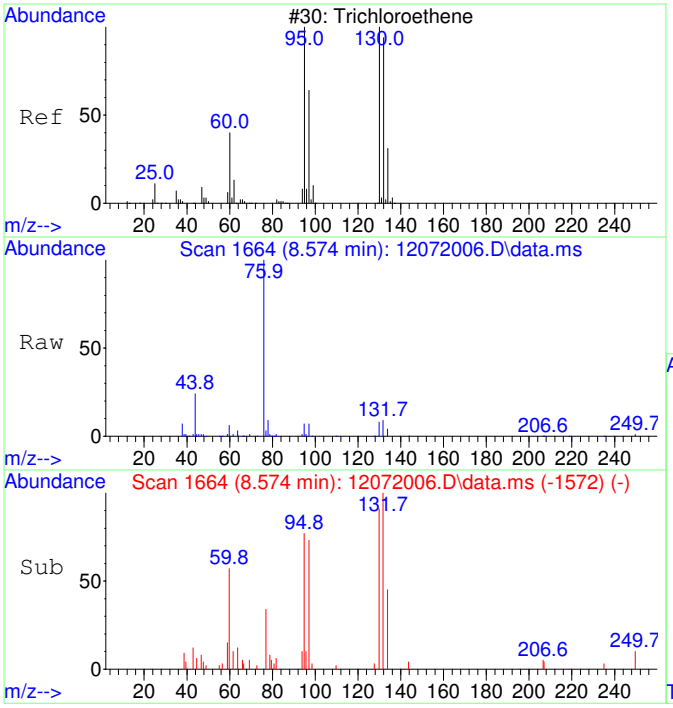


#34
1,2-Dichloroethane SCAN
Concen: 1059.80 ug/L
RT: 7.551 min Scan# 1504
Delta R.T. -0.012 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 62 Resp: 7265

Ion	Ratio	Lower	Upper
62	100		
64	91.7	5.2	65.2#
49	49.6	3.9	63.9

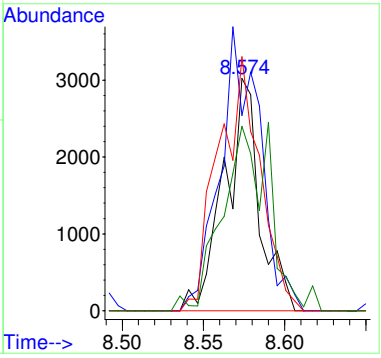


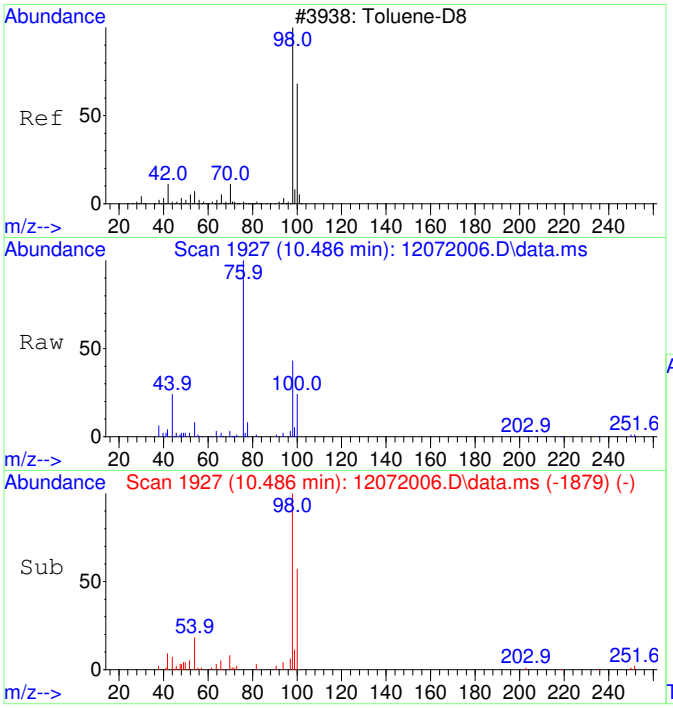


#35
Trichloroethene SCAN
Concen: 958.85 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:130 Resp: 4582

Ion	Ratio	Lower	Upper
130	100		
95	136.4	60.5	120.5#
132	129.1	59.6	119.6#
97	0.0	28.2	88.2#

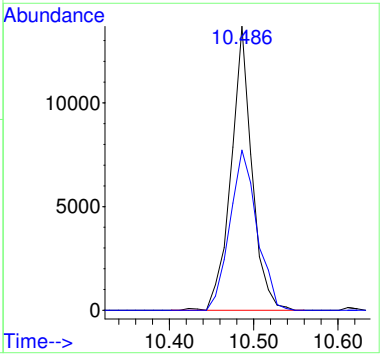


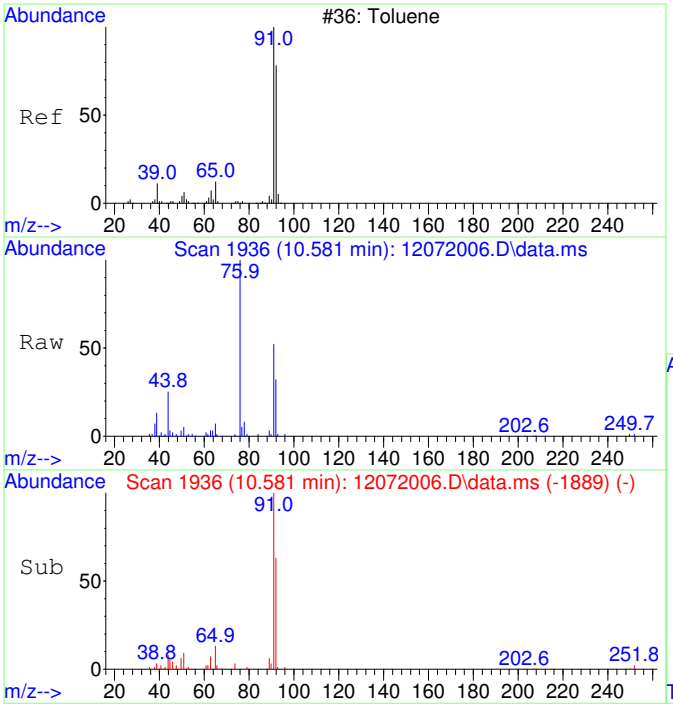


#36
Toluene-d8 SCAN
Concen: 1153.40 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 98 Resp: 23597

Ion	Ratio	Lower	Upper
98	100		
100	73.3	40.0	100.0

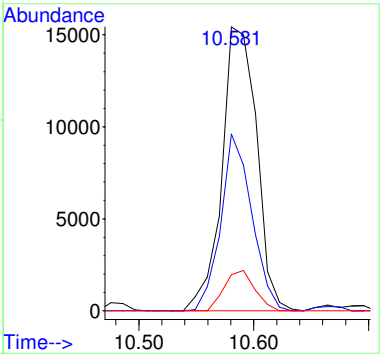


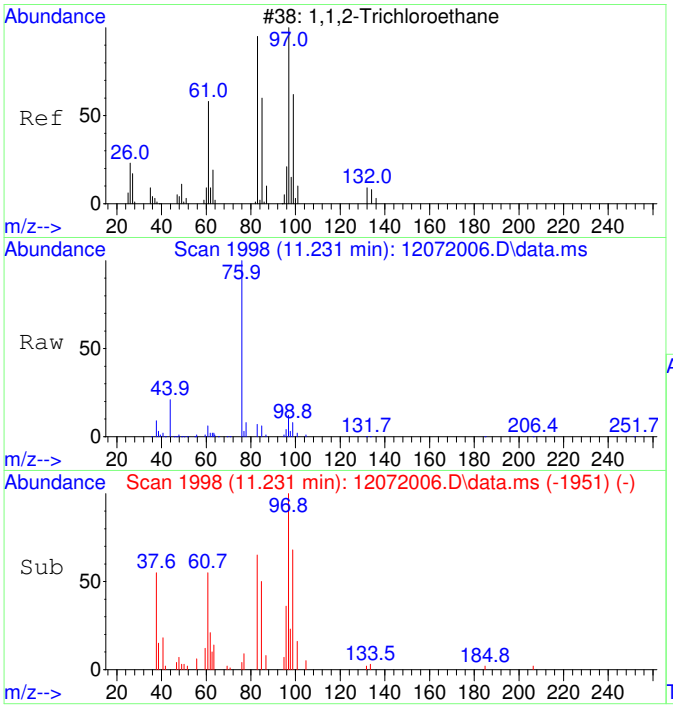


#37
Toluene SCAN
Concen: 1290.59 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 32509

Ion	Ratio	Lower	Upper
91	100		
92	55.5	28.3	88.3
65	12.5	0.0	41.0

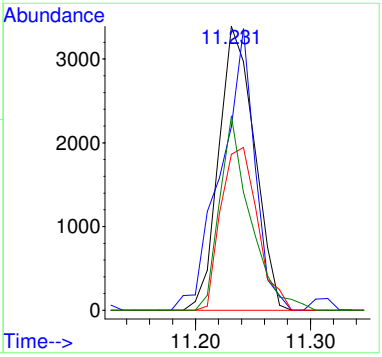


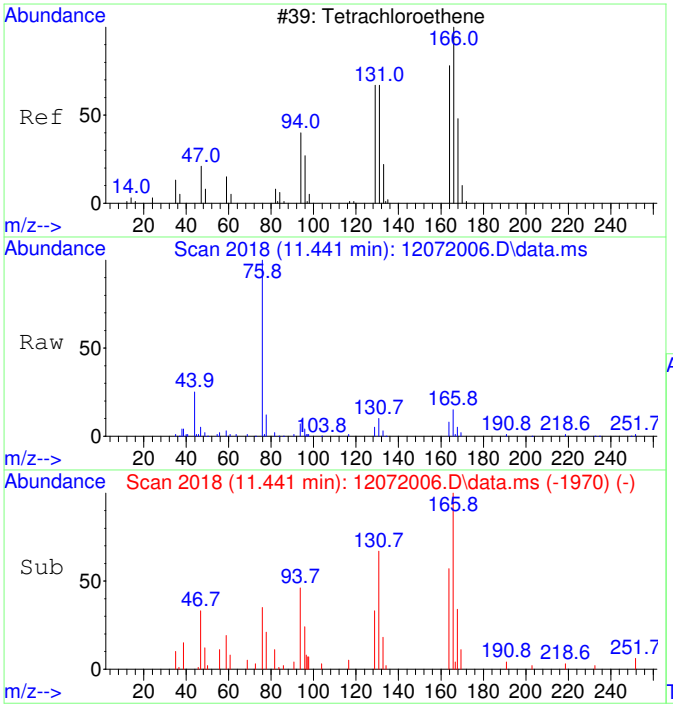


#38
1,1,2-Trichloroethane SCAN
Concen: 1159.53 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. -0.010 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 97 Resp: 7321

Ion	Ratio	Lower	Upper
97	100		
83	93.8	57.7	117.7
61	59.0	32.1	92.1
99	59.0	36.7	96.7

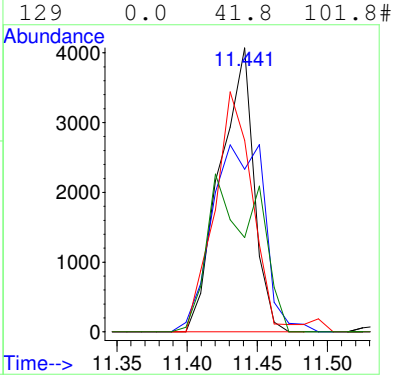


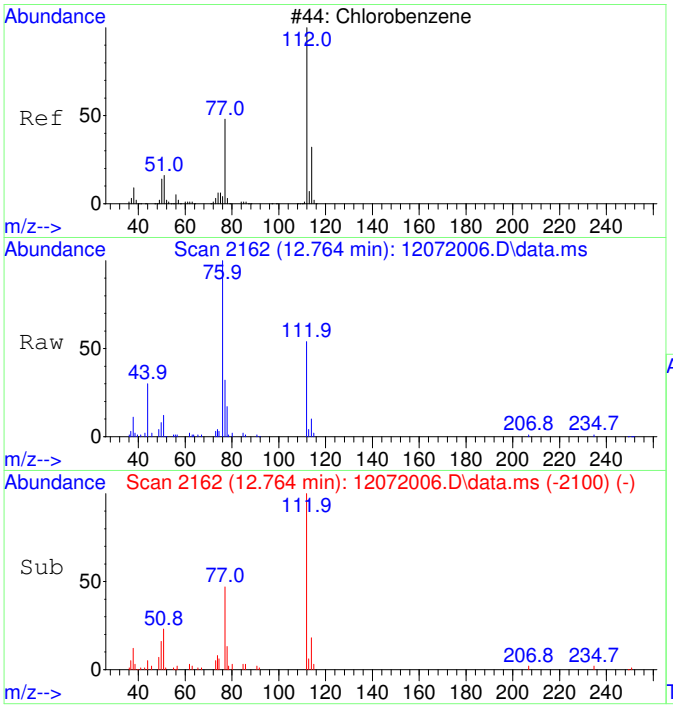


#39
Tetrachloroethene SCAN
Concen: 1216.76 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:166 Resp: 6895

Ion	Ratio	Lower	Upper
166	100		
164	0.0	50.9	110.9#
131	96.5	38.7	98.7
129	0.0	41.8	101.8#

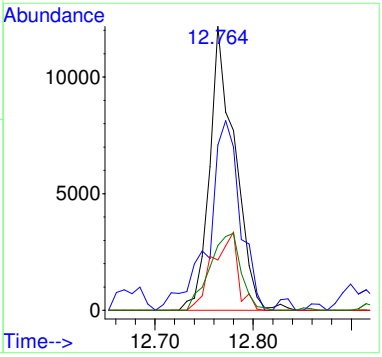


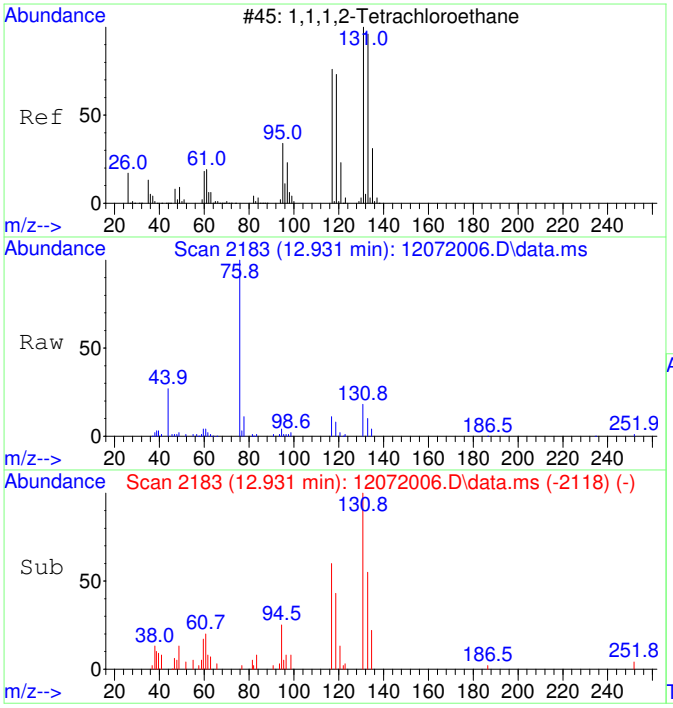


#40
Chlorobenzene SCAN
Concen: 1200.56 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. -0.008 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:112 Resp: 21721

Ion	Ratio	Lower	Upper
112	100		
77	83.6	28.2	88.2
114	27.8	2.3	62.3
51	33.6	0.0	50.1

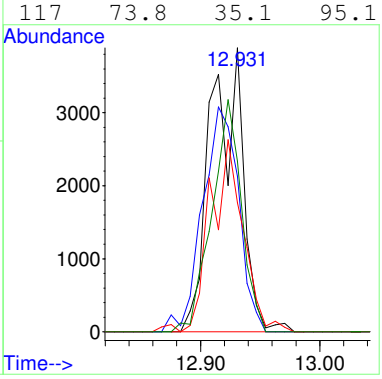


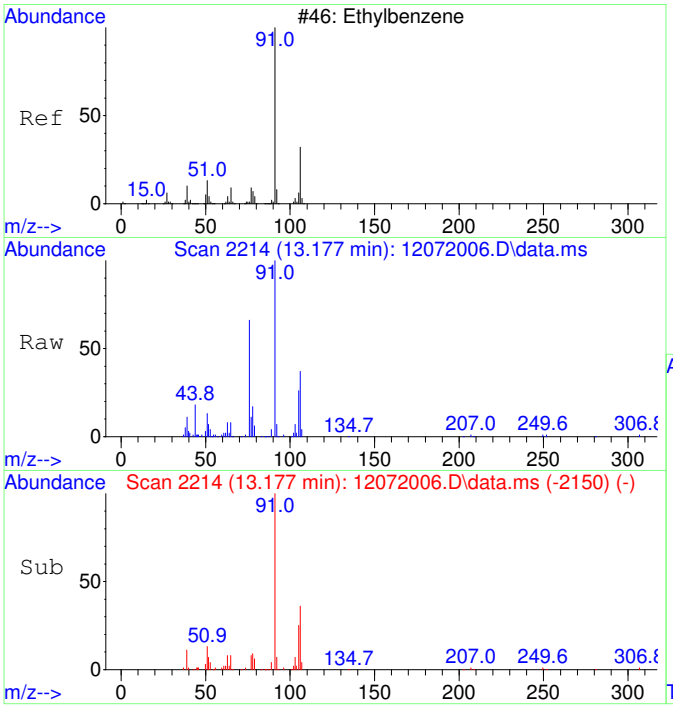


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 1181.69 ug/L
RT: 12.931 min Scan# 2183
Delta R.T. 0.016 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:131 Resp: 7376

Ion	Ratio	Lower	Upper
131	100		
133	87.2	66.9	126.9
119	68.4	40.4	100.4
117	73.8	35.1	95.1

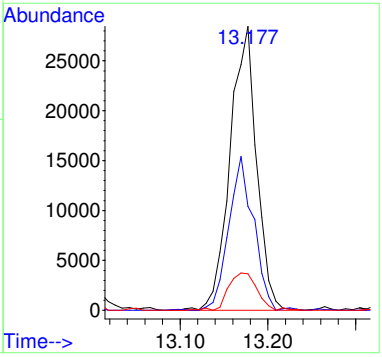


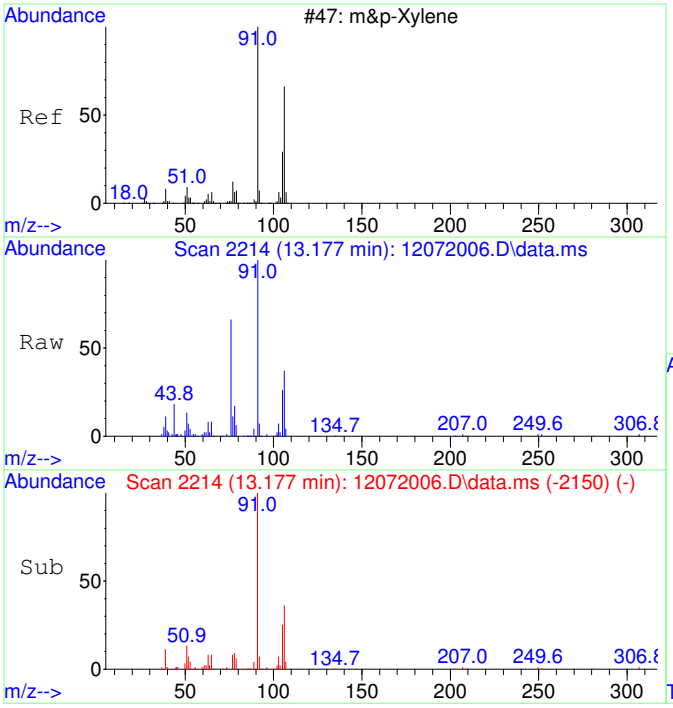


#42
Ethylbenzene SCAN
Concen: 1241.88 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 59613

Ion	Ratio	Lower	Upper
91	100		
106	49.7	23.1	83.1
51	14.4	0.0	40.1

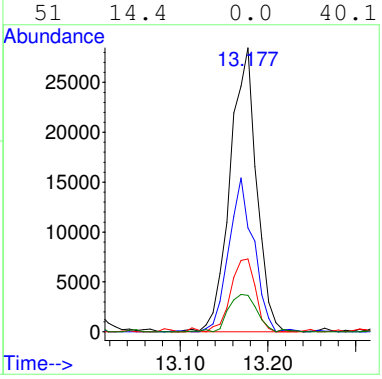


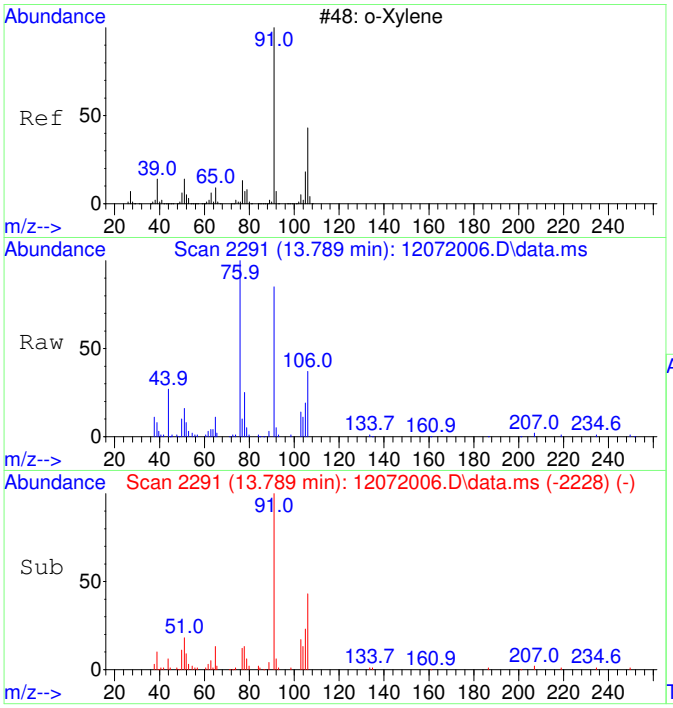


#43
m&p-Xylene SCAN
Concen: 1241.88 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 59613

Ion	Ratio	Lower	Upper
91	100		
106	49.7	23.1	83.1
105	23.9	0.0	54.7
51	14.4	0.0	40.1

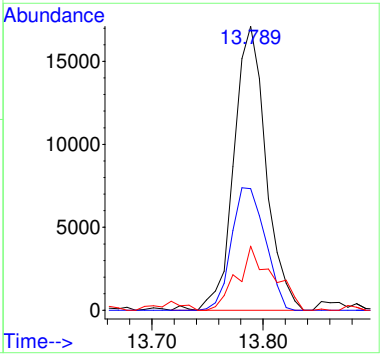


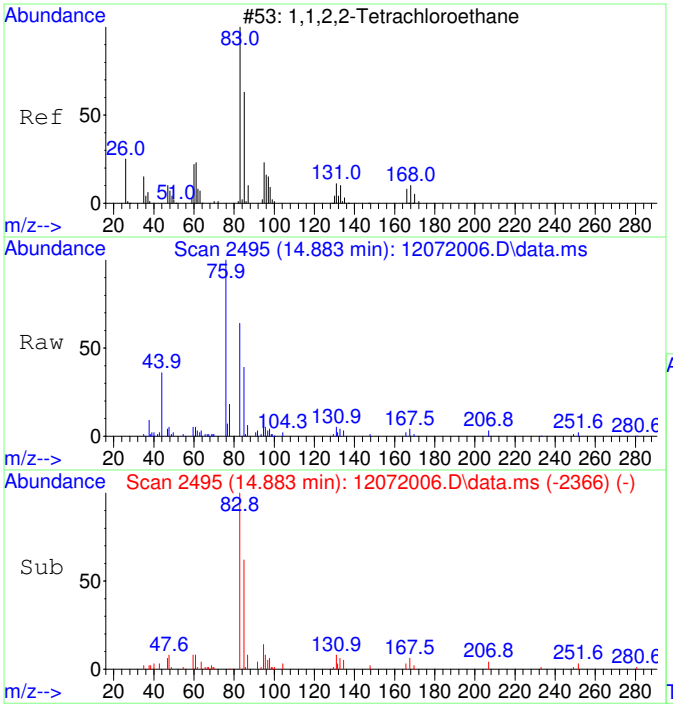


#44
o-Xylene SCAN
Concen: 1304.94 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 34205

Ion	Ratio	Lower	Upper
91	100		
106	45.6	18.0	78.0
105	25.2	0.0	56.6

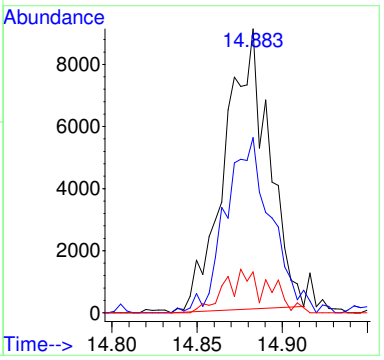


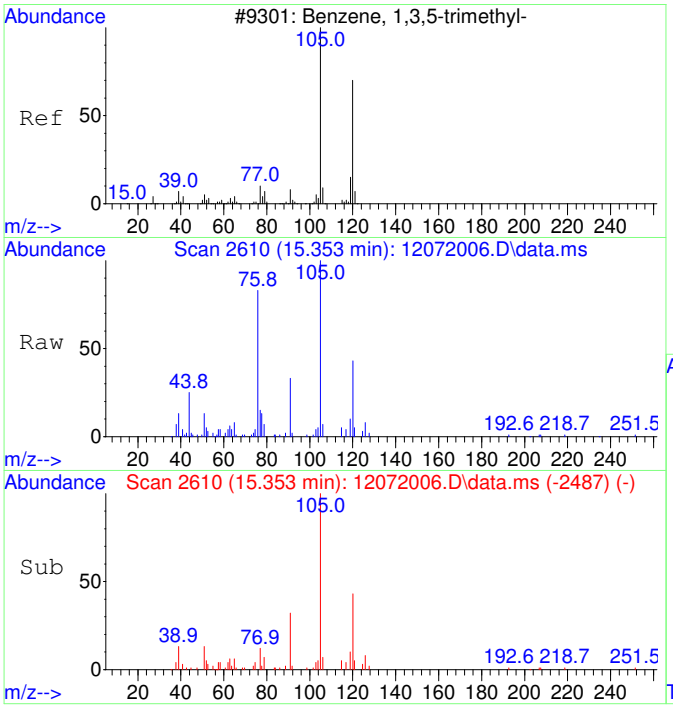


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 1195.11 ug/L
RT: 14.883 min Scan# 2495
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 83 Resp: 16288

Ion	Ratio	Lower	Upper
83	100		
85	64.8	35.9	95.9
95	3.3	0.0	47.4

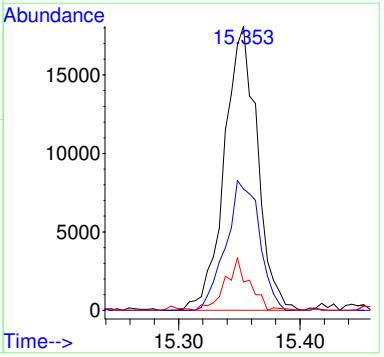


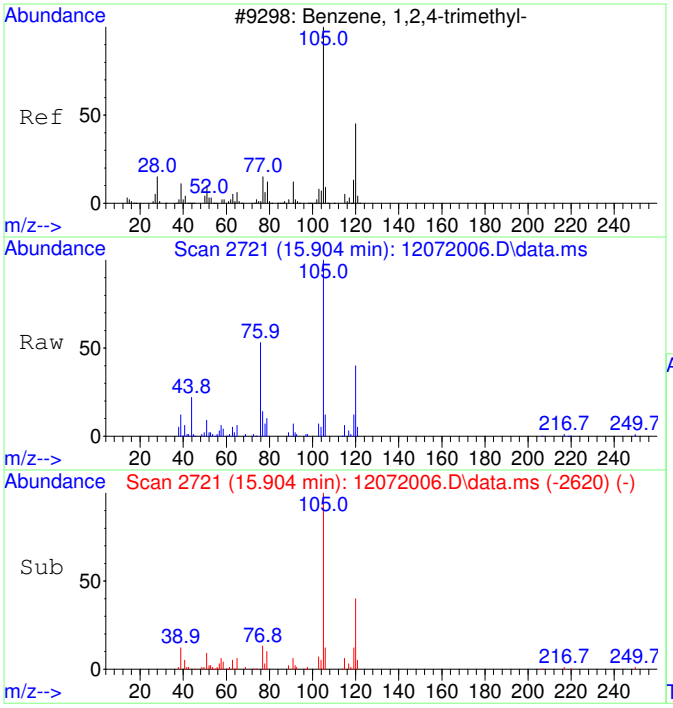


#46
1,3,5-Trimethylbenzene SCAN
Concen: 1231.15 ug/L
RT: 15.353 min Scan# 2610
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:105 Resp: 34045

Ion	Ratio	Lower	Upper
105	100		
120	46.5	18.3	78.3
119	13.6	0.0	43.1

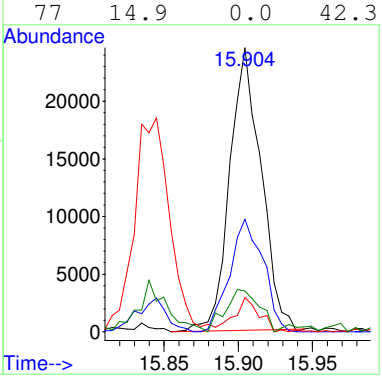


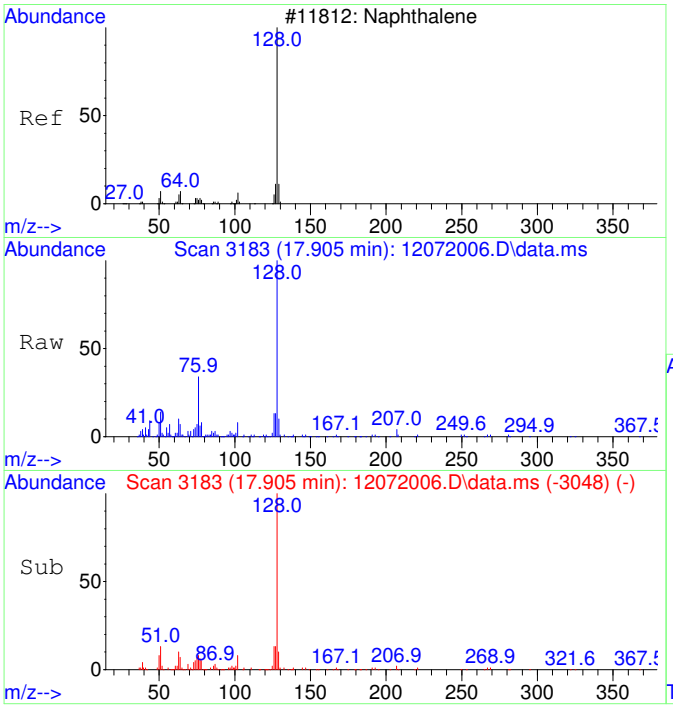


#47
1,2,4-Trimethylbenzene SCAN
Concen: 1276.92 ug/L
RT: 15.904 min Scan# 2721
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:105 Resp: 36077

Ion	Ratio	Lower	Upper
105	100		
120	42.6	16.9	76.9
119	8.0	0.0	41.9
77	14.9	0.0	42.3

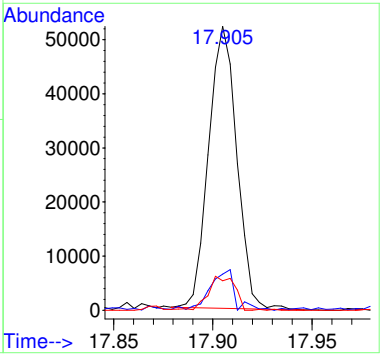




#48
Naphthalene SCAN
Concen: 1213.61 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.003 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:128 Resp: 51467

Ion	Ratio	Lower	Upper
128	100		
127	11.1	0.0	44.0
129	10.8	0.0	40.8



S20L021-CAL5

Quantitation Report (Not Reviewed)

Table of Contents

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072007.D
Acq On : 7 Dec 2020 14:20
InstName : AG5975C
Operator : TD
Sample : S20L021-CAL5
Misc : 2030072 0.15 mg/L
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 06:25:46 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:14:00 2020
Response via : Initial Calibration

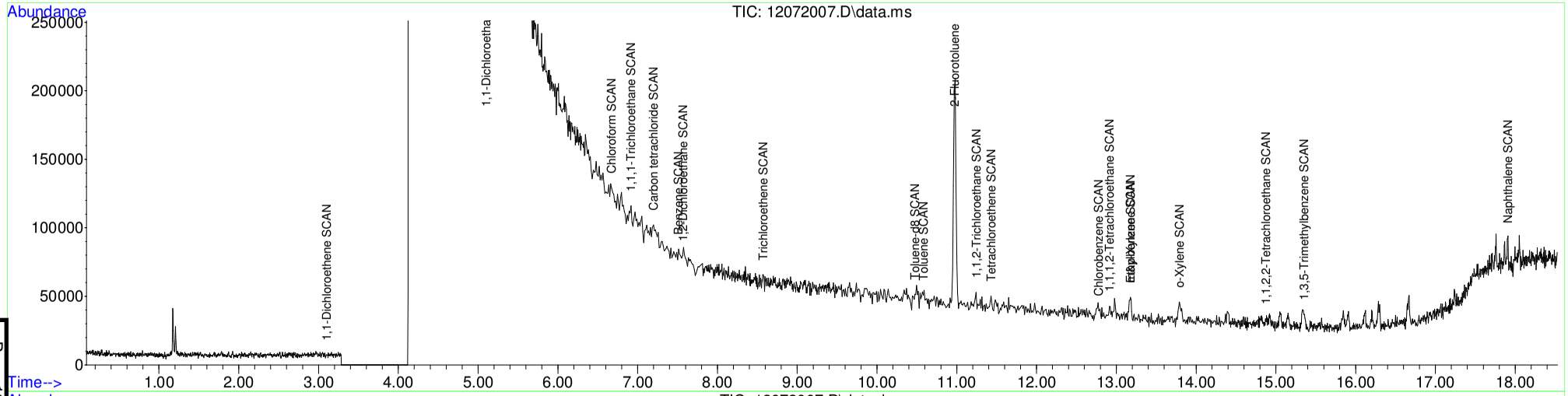
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	252253	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	6615	135.40 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery =	2.71%#	
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.094	61	1752	175.49 ug/L	68
3] trans-1,2-Dichloroethene	4.383	61	1710	135.61 ug/L	95
4] 1,1-Dichloroethane	5.099	63	2024	134.39 ug/L	92
5] cis-1,2-Dichloroethene	6.094	61	2117	135.72 ug/L	99
6] Chloroform	6.664	83	1973	131.69 ug/L	97
7] 1,1,1-Trichloroethane	6.919	97	2178	135.33 ug/L	99
8] Carbon tetrachloride	7.187	117	2056	133.62 ug/L	100
9] Benzene	7.515	78	5940	139.94 ug/L	60
10] 1,2-Dichloroethane	7.552	62	1980	136.74 ug/L	83
11] Trichloroethene	8.575	130	1823	136.03 ug/L	95
13] Toluene	10.582	91	8413	138.31 ug/L	99
14] 1,1,2-Trichloroethane	11.233	97	1884	133.72 ug/L	94
15] Tetrachloroethene	11.432	166	2596	137.02 ug/L	98
16] Chlorobenzene	12.765	112	6372	135.22 ug/L	92
17] 1,1,1,2-Tetrachloroethane	12.916	131	2240	135.81 ug/L	98
18] Ethylbenzene	12.972	91	10872	139.93 ug/L	97
19] m&p-Xylene	13.171	91	17074	285.38 ug/L	97
20] o-Xylene	13.782	91	9001	140.07 ug/L	98
21] 1,1,2,2-Tetrachloroethane	14.877	83	4095	136.76 ug/L	99
22] 1,3,5-Trimethylbenzene	15.350	105	10017	141.75 ug/L	97
23] 1,2,4-Trimethylbenzene	15.906	105	10405	143.95 ug/L	96
24] Naphthalene	17.906	128	15689	132.61 ug/L	99
25) 2-Fluorotoluene SCAN	10.969	109	138220	4827.25 ug/L	98
26) 1,1-Dichloroethene SCAN	3.100	61	229	34.26 ug/L #	25
28) 1,1-Dichloroethane SCAN	5.098	63	1695	168.66 ug/L #	84
30) Chloroform SCAN	6.675	83	1484	161.05 ug/L	67
31) 1,1,1-Trichloroethane ...	6.918	97	1425	149.86 ug/L #	72
32) Carbon tetrachloride SCAN	7.198	117	1629	200.47 ug/L #	56
33) Benzene SCAN	7.514	78	3800	132.09 ug/L	95
34) 1,2-Dichloroethane SCAN	7.563	62	1740	193.37 ug/L #	1
35) Trichloroethene SCAN	8.568	130	926	147.62 ug/L #	26
36) Toluene-d8 SCAN	10.476	98	4177	155.54 ug/L #	15
37) Toluene SCAN	10.581	91	5663	171.27 ug/L	87
38) 1,1,2-Trichloroethane ...	11.242	97	1595	192.45 ug/L #	67
39) Tetrachloroethene SCAN	11.431	166	600	80.66 ug/L #	53
40) Chlorobenzene SCAN	12.780	112	4260	179.38 ug/L #	59
41) 1,1,1,2-Tetrachloroeth...	12.915	131	1066	130.10 ug/L	77
42) Ethylbenzene SCAN	13.177	91	10693	169.70 ug/L	92
43) m&p-Xylene SCAN	13.177	91	10693	169.70 ug/L #	80
44) o-Xylene SCAN	13.789	91	6073	176.50 ug/L	97
45) 1,1,2,2-Tetrachloroeth...	14.872	83	2552	142.65 ug/L #	45
46) 1,3,5-Trimethylbenzene...	15.353	105	6061	166.98 ug/L	98
48) Naphthalene SCAN	17.905	128	9093	163.35 ug/L	75

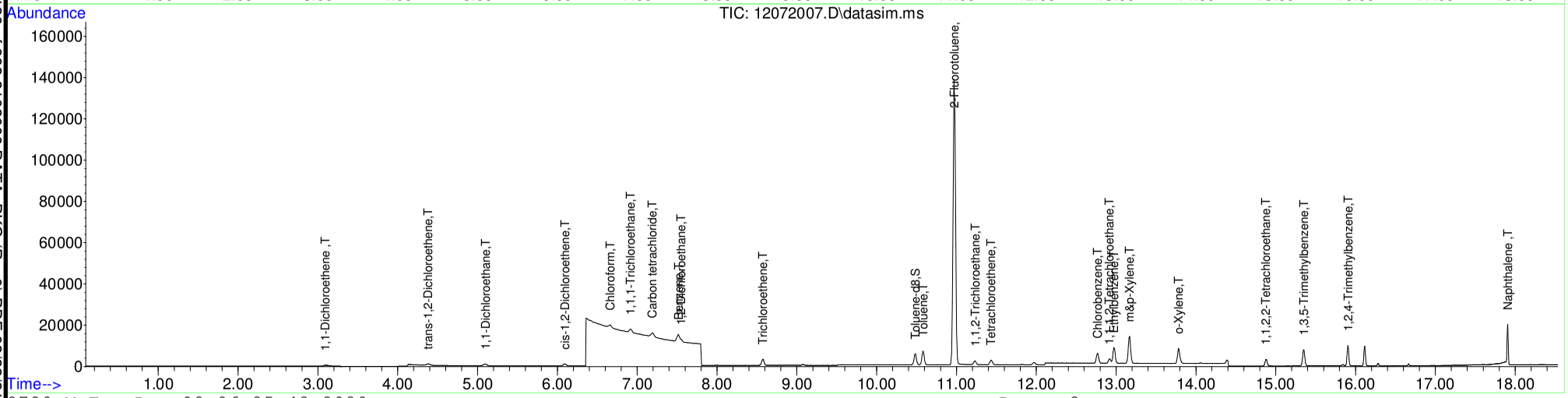
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072007.D
Acq On : 7 Dec 2020 14:20
InstName : AG5975C
Operator : TD
Sample : S20L021-CAL5
Misc : 2030072 0.15 mg/L
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 06:25:46 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:14:00 2020
Response via : Initial Calibration





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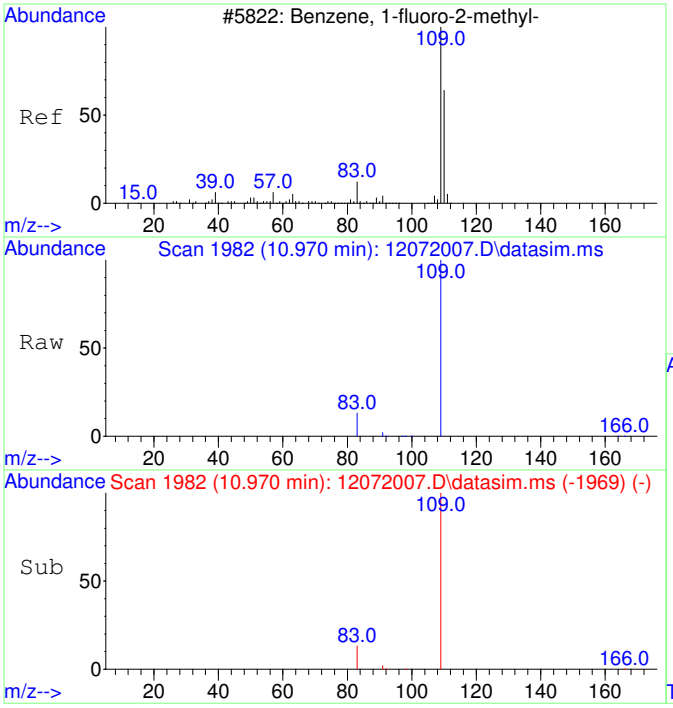
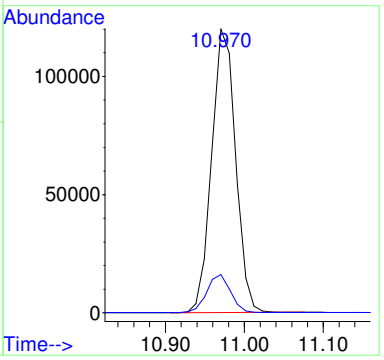
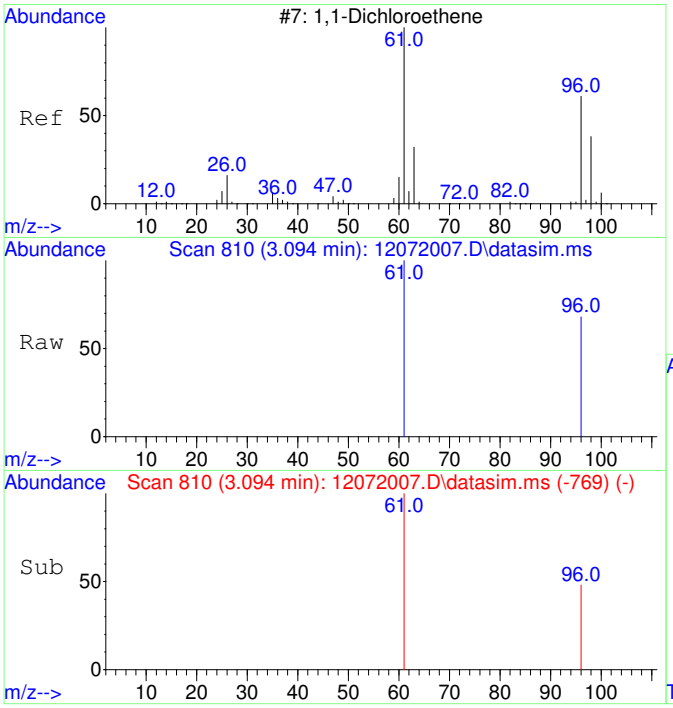


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:109 Resp: 252253

Ion	Ratio	Lower	Upper
109	100		
83	13.2	0.0	42.3

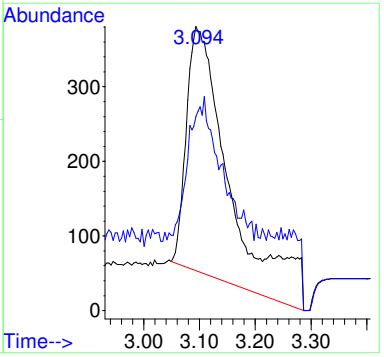




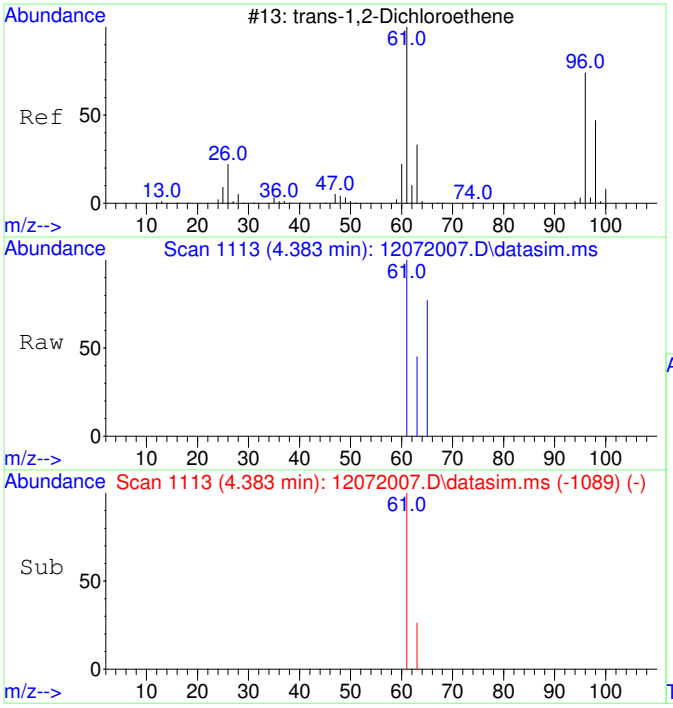
#2
1,1-Dichloroethene
Concen: 175.49 ug/L
RT: 3.094 min Scan# 810
Delta R.T. 0.004 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 61 Resp: 1752

Ion	Ratio	Lower	Upper
61	100		
96	41.5	37.2	97.2



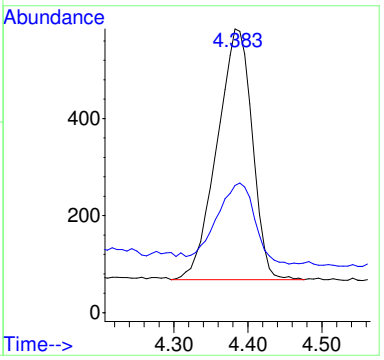
Before MI:
IMPROPER
BASELINE

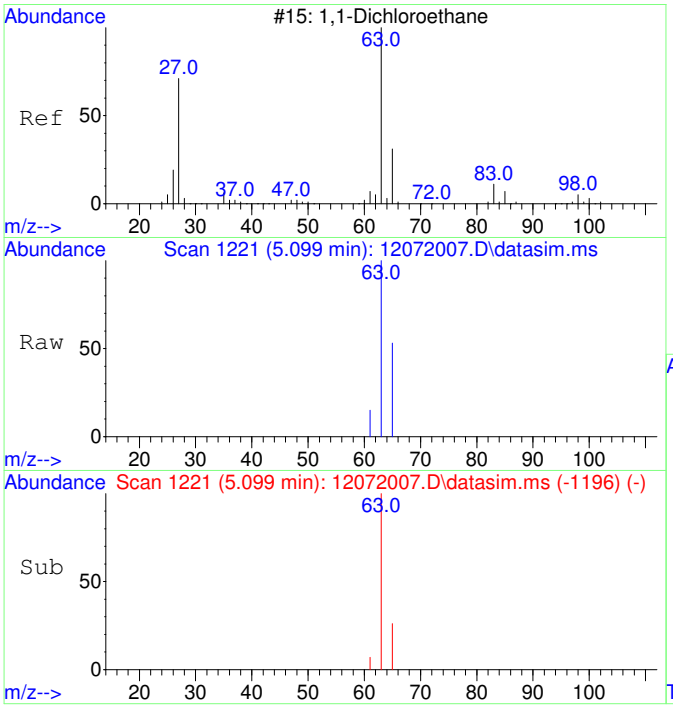


#3
trans-1,2-Dichloroethene
Concen: 135.61 ug/L
RT: 4.383 min Scan# 1113
Delta R.T. 0.007 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 61 Resp: 1710

Ion	Ratio	Lower	Upper
61	100		
63	35.1	2.4	62.4

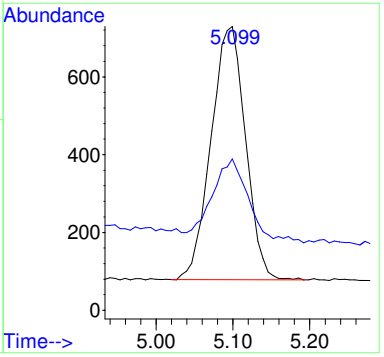


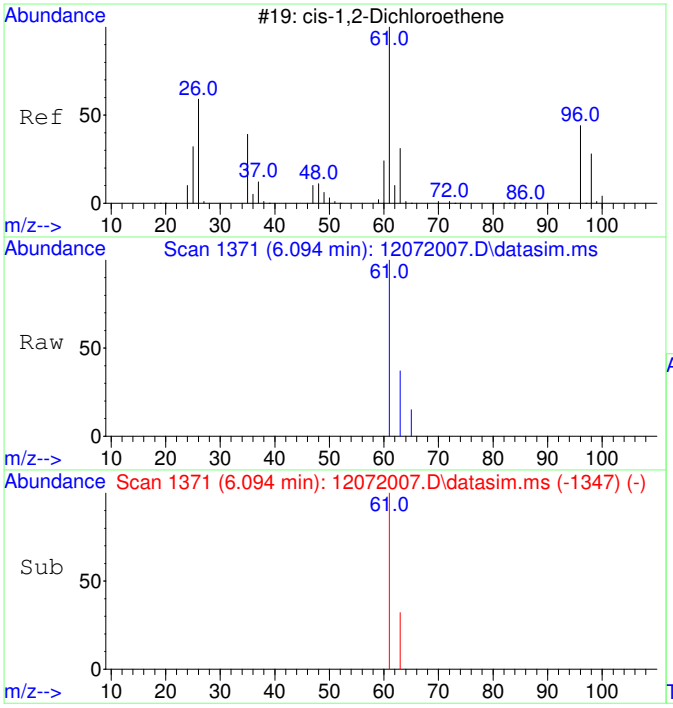


#4
1,1-Dichloroethane
Concen: 134.39 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. 0.014 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 63 Resp: 2024

Ion	Ratio	Lower	Upper
63	100		
65	36.1	1.8	61.8

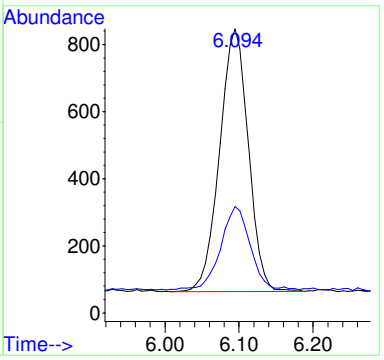


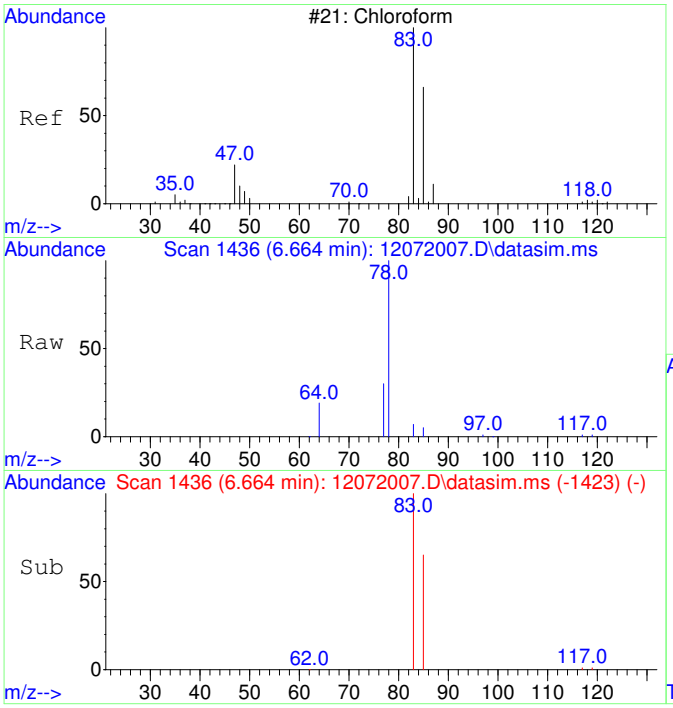


#5
cis-1,2-Dichloroethene
Concen: 135.72 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. 0.007 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 61 Resp: 2117

Ion	Ratio	Lower	Upper
61	100		
63	32.2	2.5	62.5

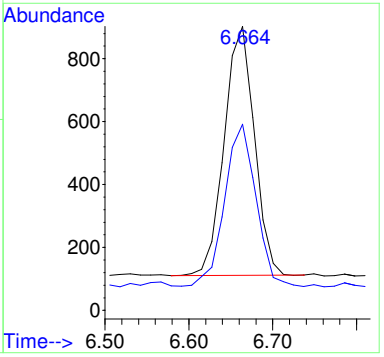


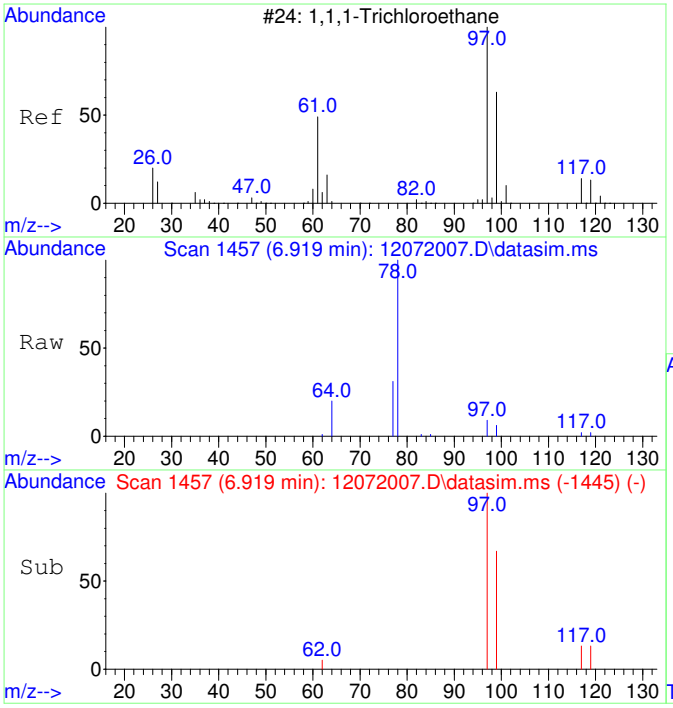


#6
Chloroform
Concen: 131.69 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. 0.012 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 83 Resp: 1973

Ion	Ratio	Lower	Upper
83	100		
85	67.3	35.1	95.1

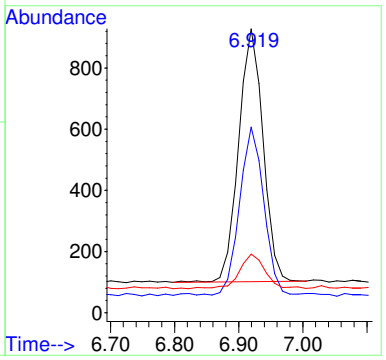


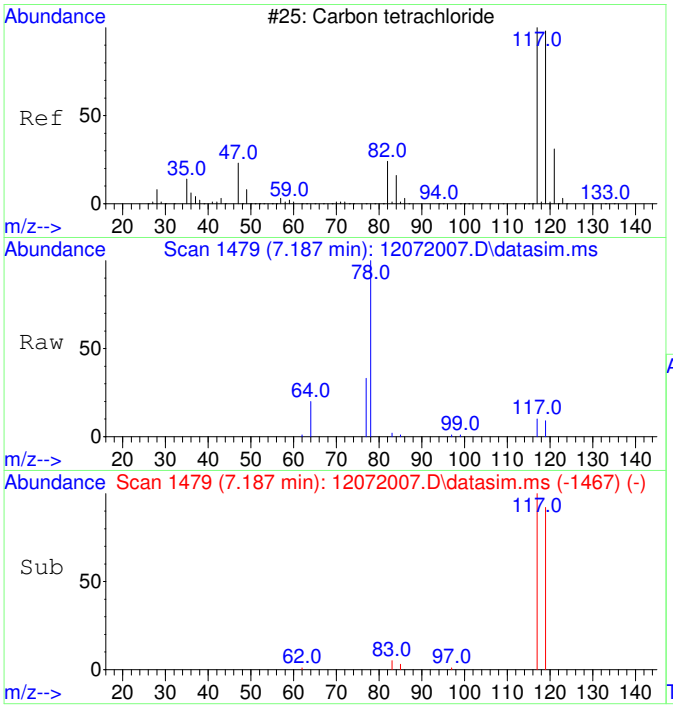


#7
1,1,1-Trichloroethane
Concen: 135.33 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 97 Resp: 2178

Ion	Ratio	Lower	Upper
97	100		
99	65.1	34.6	94.6
117	14.1	0.0	43.2

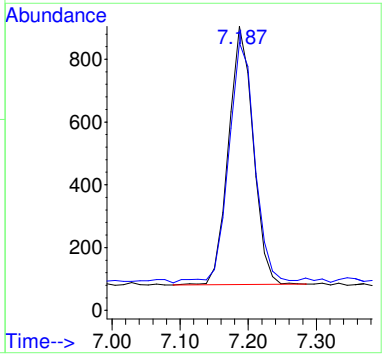


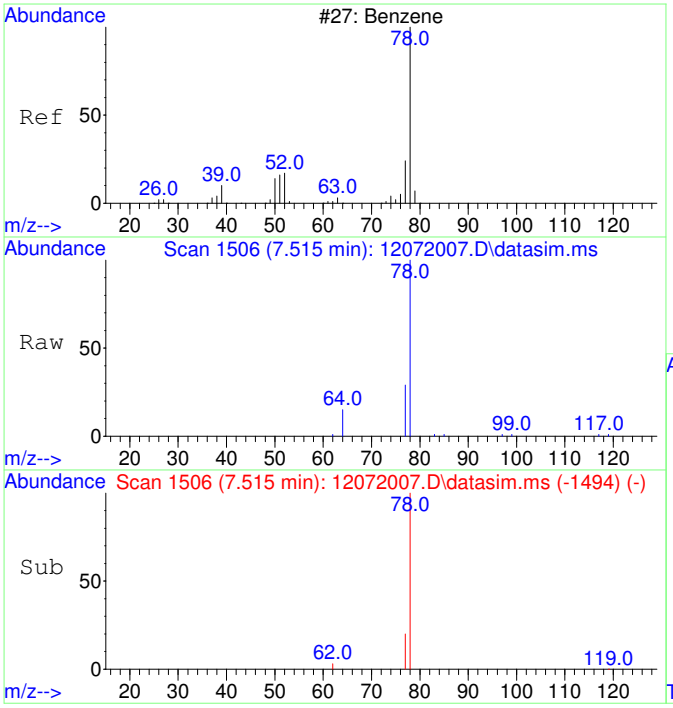


#8
Carbon tetrachloride
Concen: 133.62 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:117 Resp: 2056

Ion	Ratio	Lower	Upper
117	100		
119	96.6	66.4	126.4

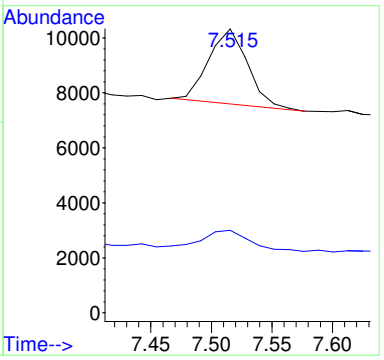


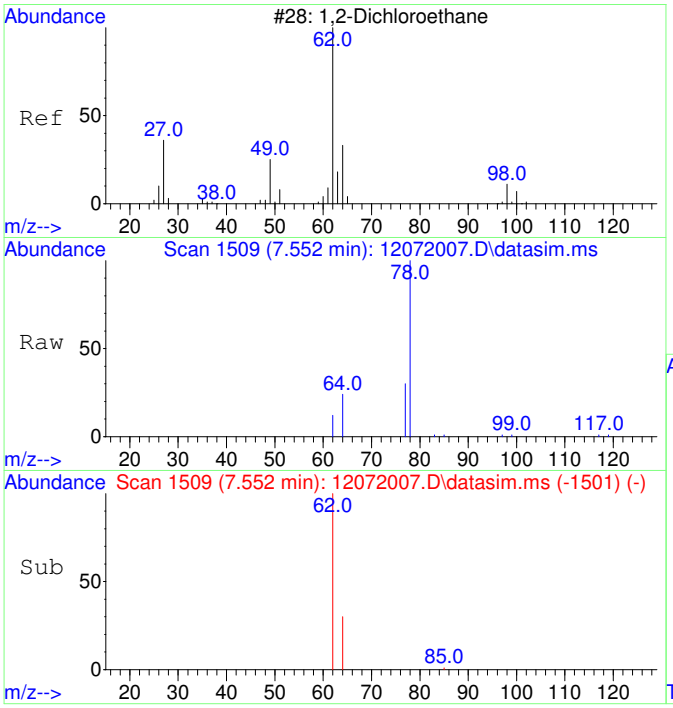


#9
Benzene
Concen: 139.94 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 78 Resp: 5940

Ion	Ratio	Lower	Upper
78	100		
77	42.5	0.0	53.2

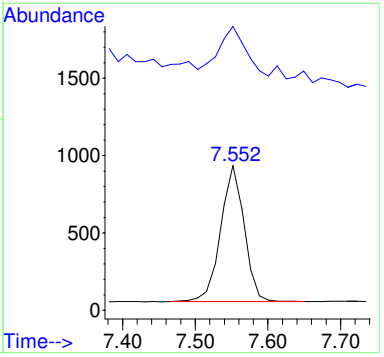


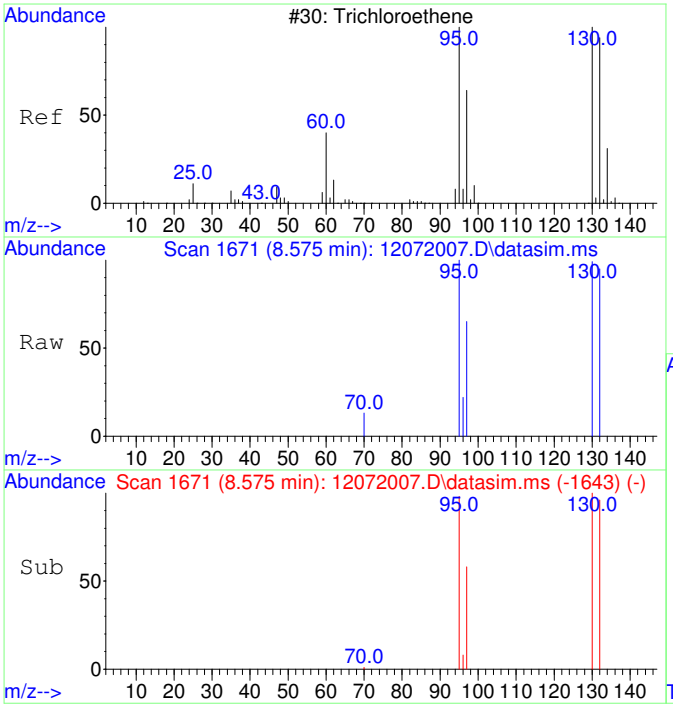


#10
1,2-Dichloroethane
Concen: 136.74 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 62 Resp: 1980

Ion	Ratio	Lower	Upper
62	100		
64	41.8	2.3	62.3

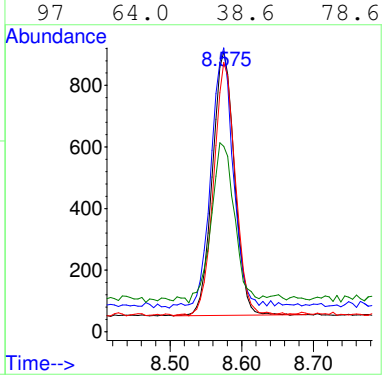


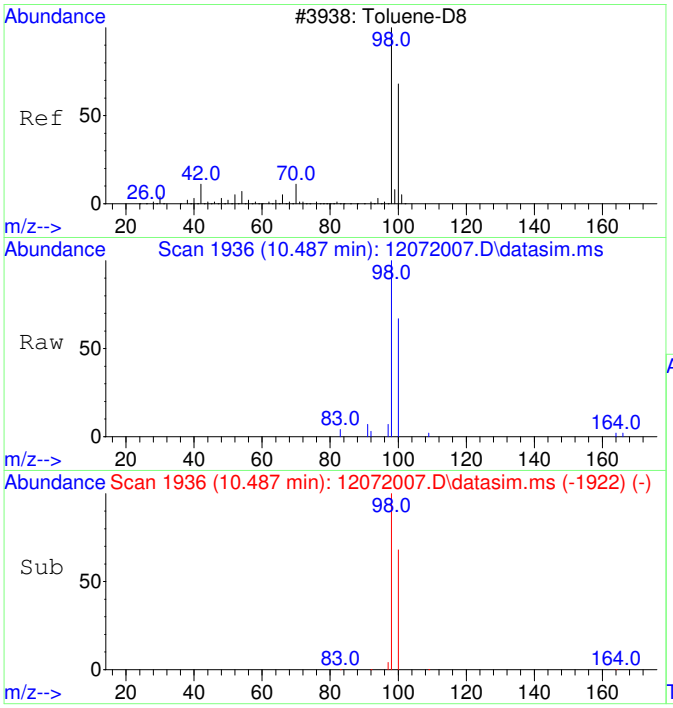


#11
Trichloroethene
Concen: 136.03 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:130 Resp: 1823

Ion	Ratio	Lower	Upper
130	100		
95	95.9	60.7	120.7
132	94.1	76.0	116.0
97	64.0	38.6	78.6

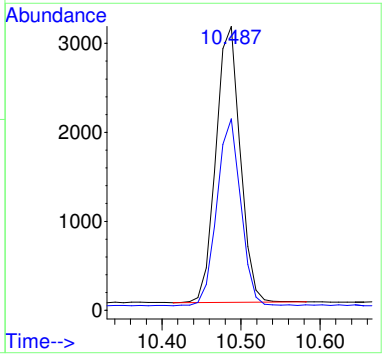


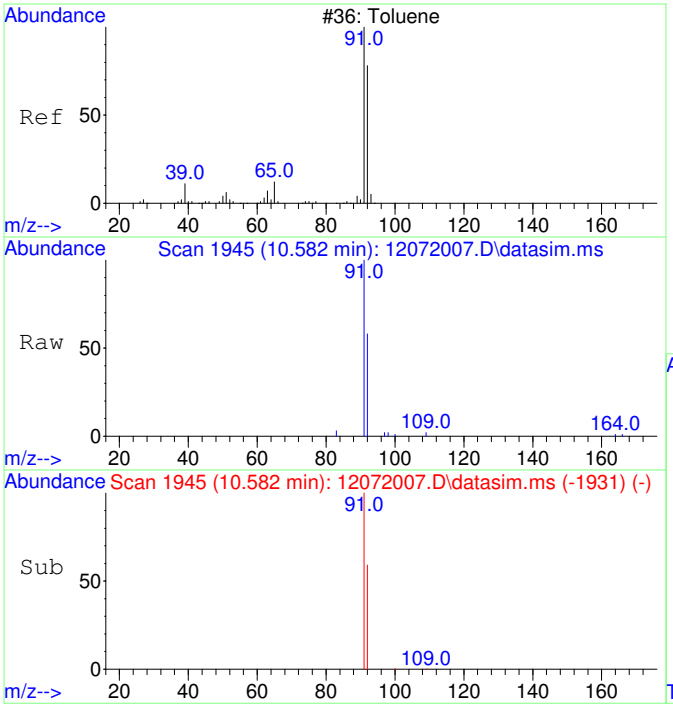


#12
Toluene-d8
Concen: 135.40 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 98 Resp: 6615

Ion	Ratio	Lower	Upper
98	100		
100	66.2	37.1	97.1

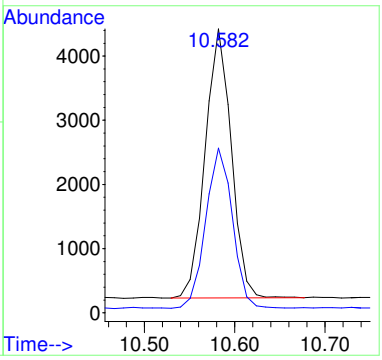


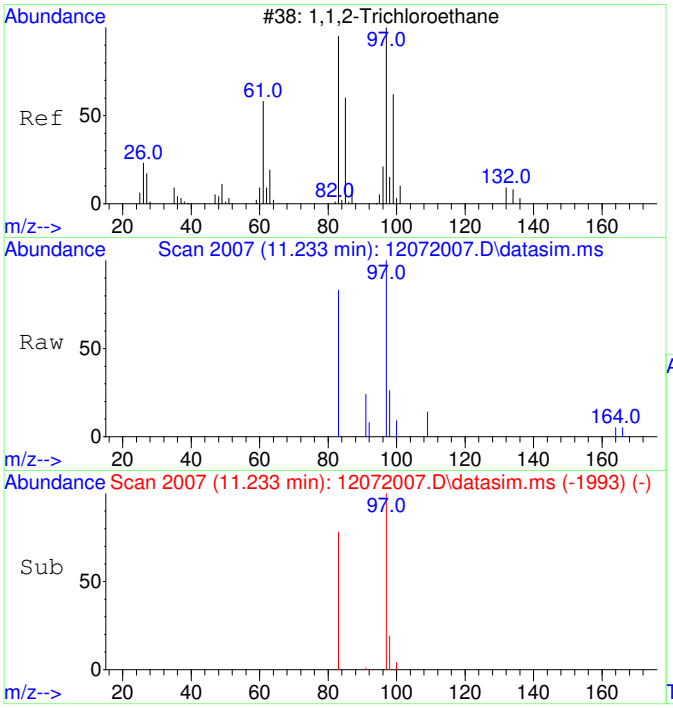


#13
Toluene
Concen: 138.31 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 8413

Ion	Ratio	Lower	Upper
91	100		
92	60.6	29.9	89.9

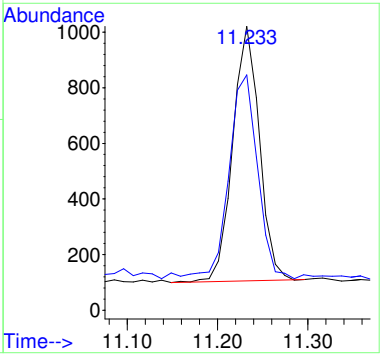


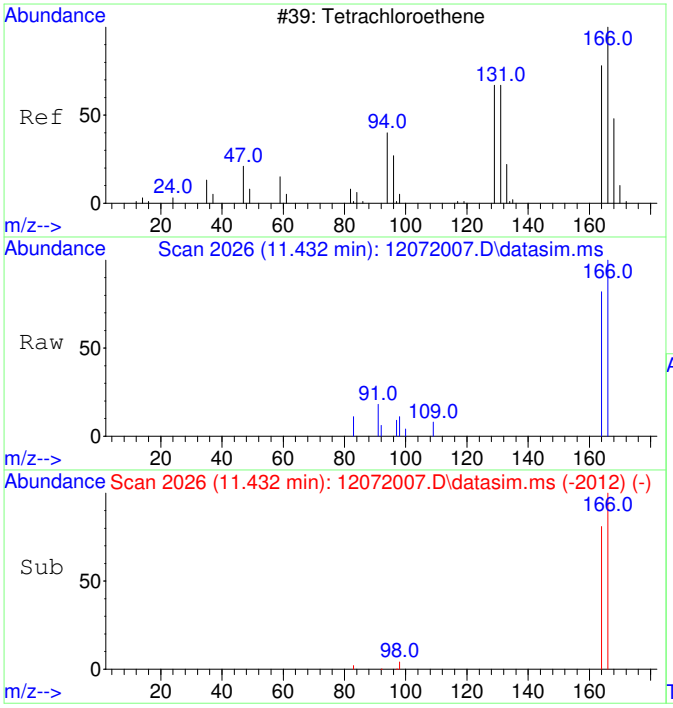


#14
1,1,2-Trichloroethane
Concen: 133.72 ug/L
RT: 11.233 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 97 Resp: 1884

Ion	Ratio	Lower	Upper
97	100		
83	86.1	51.2	111.2

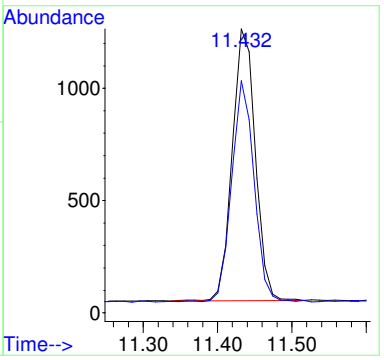


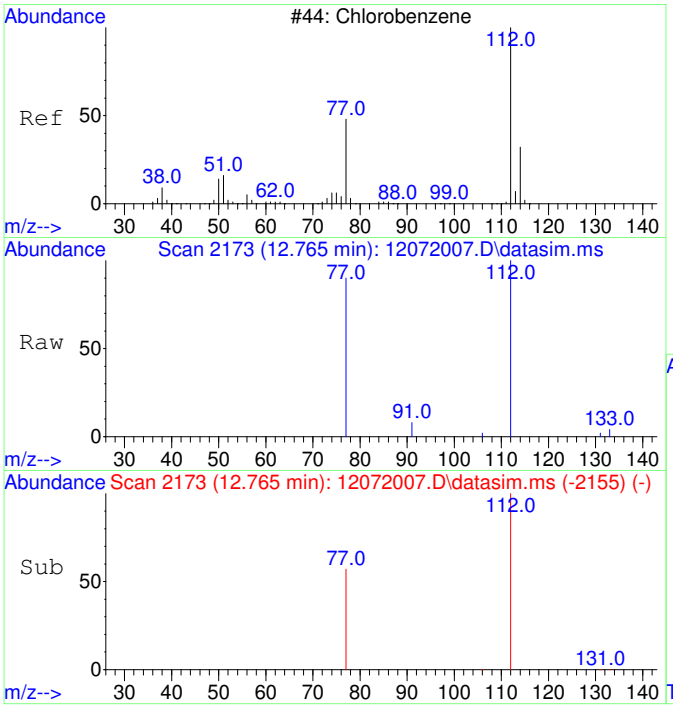


#15
Tetrachloroethene
Concen: 137.02 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:166 Resp: 2596

Ion	Ratio	Lower	Upper
166	100		
164	79.8	47.8	107.8

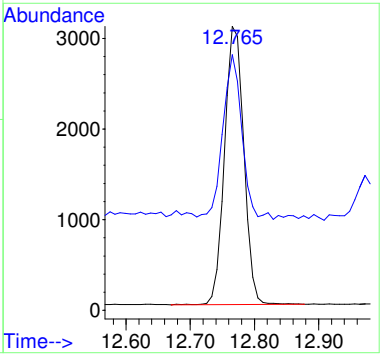


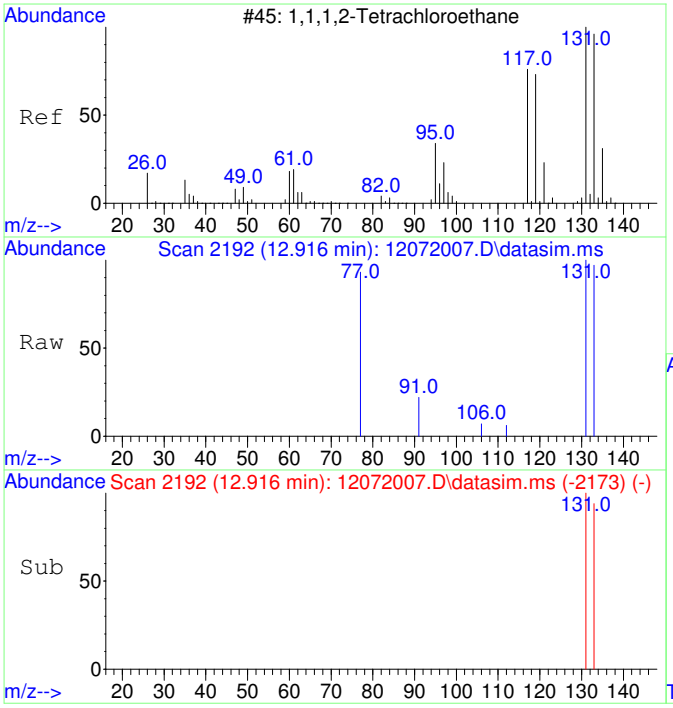


#16
Chlorobenzene
Concen: 135.22 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:112 Resp: 6372

Ion	Ratio	Lower	Upper
112	100		
77	59.1	23.6	83.6

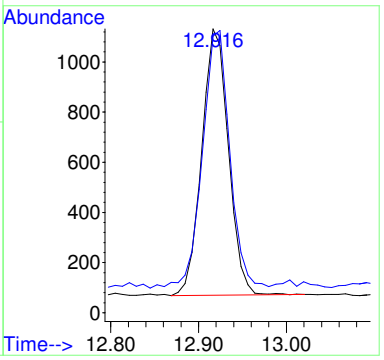


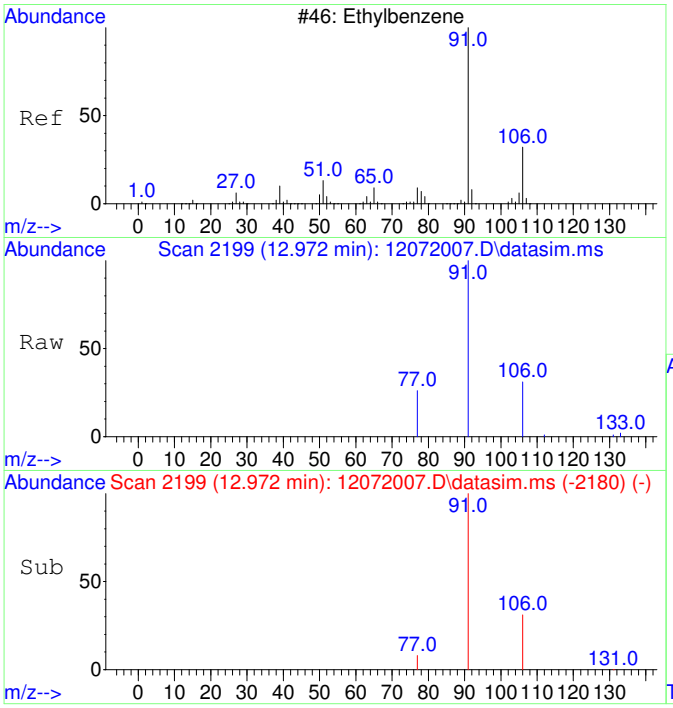


#17
1,1,1,2-Tetrachloroethane
Concen: 135.81 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:131 Resp: 2240

Ion	Ratio	Lower	Upper
131	100		
133	98.2	66.3	126.3

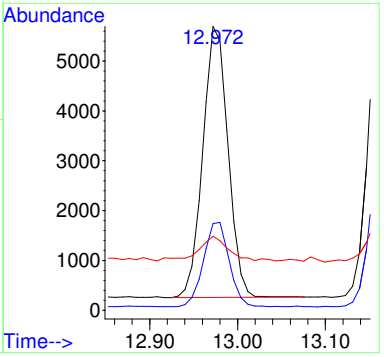


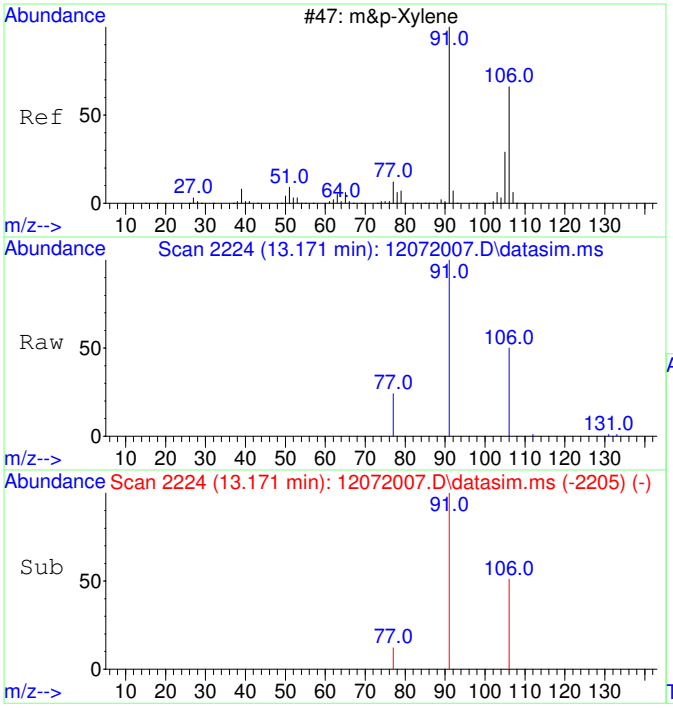


#18
Ethylbenzene
Concen: 139.93 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 10872

Ion	Ratio	Lower	Upper
91	100		
106	31.7	3.0	63.0
77	10.6	0.0	38.2

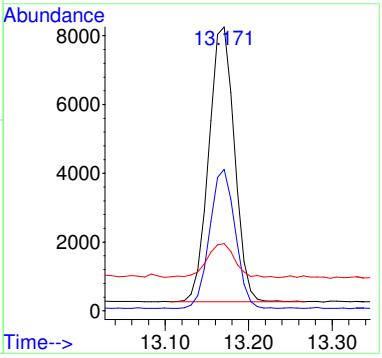


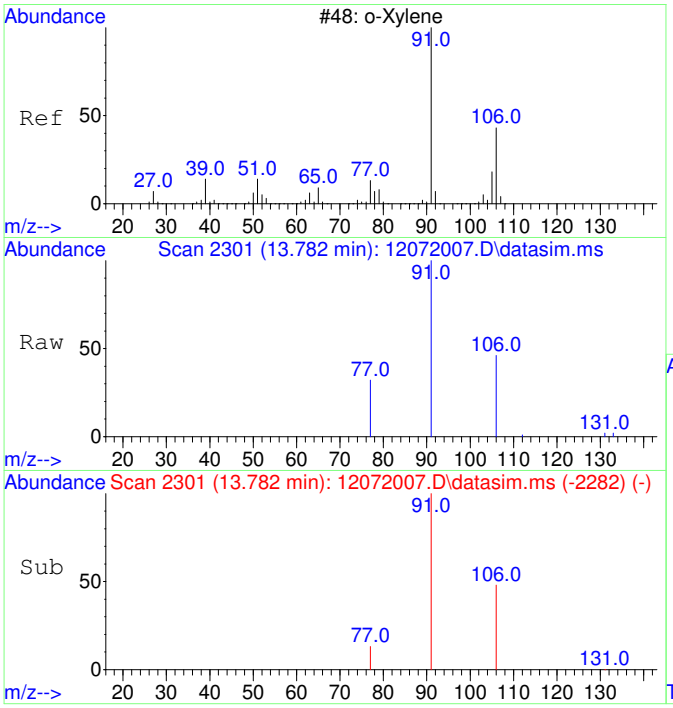


#19
m&p-Xylene
Concen: 285.38 ug/L
RT: 13.171 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 17074

Ion	Ratio	Lower	Upper
91	100		
106	50.4	22.2	82.2
77	13.6	0.0	42.4

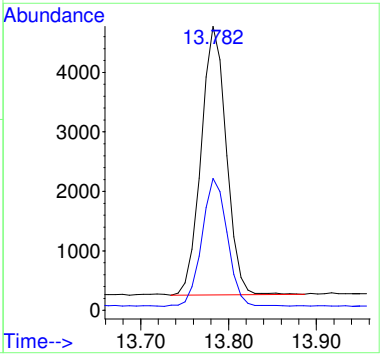


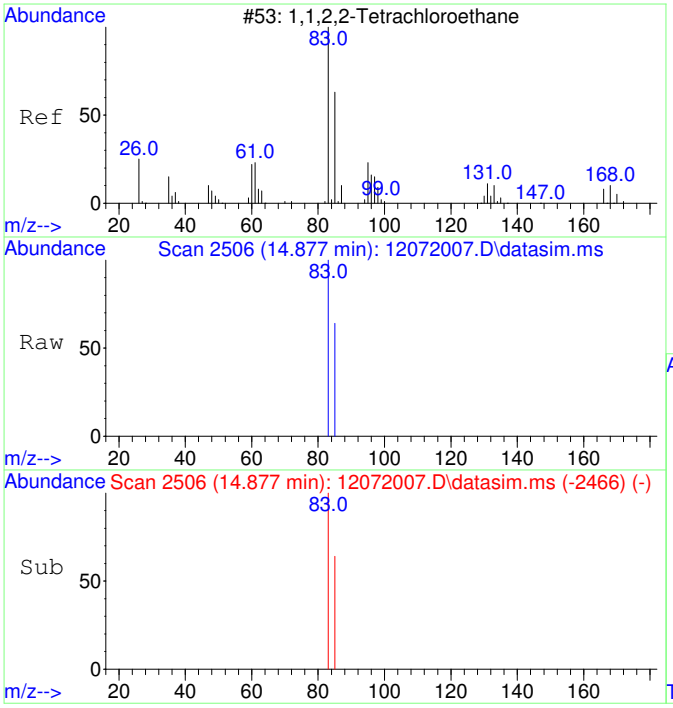


#20
o-Xylene
Concen: 140.07 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 9001

Ion	Ratio	Lower	Upper
91	100		
106	48.2	19.2	79.2

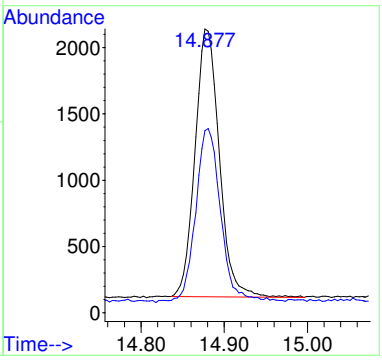


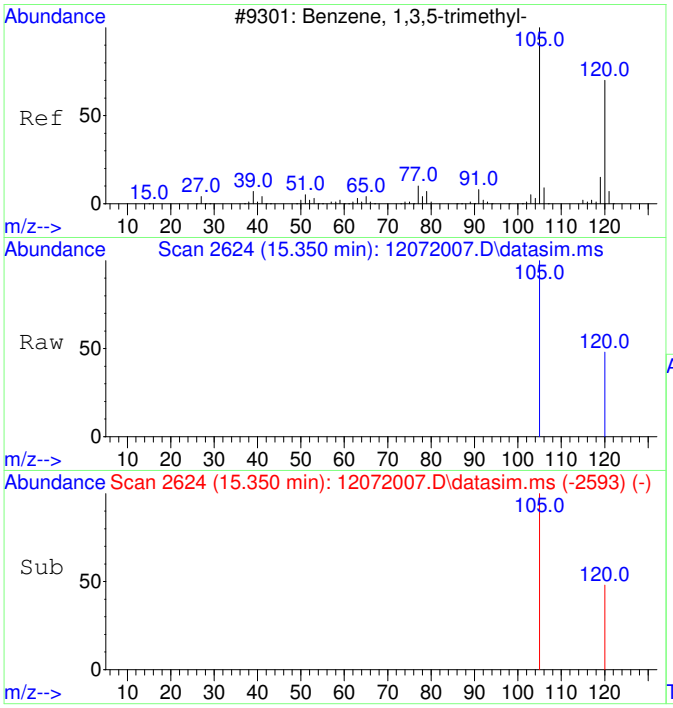


#21
1,1,2,2-Tetrachloroethane
Concen: 136.76 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. -0.003 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 83 Resp: 4095

Ion	Ratio	Lower	Upper
83	100		
85	63.8	34.8	94.8

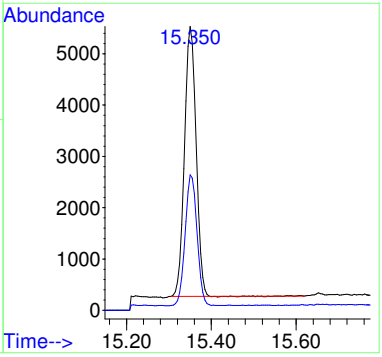


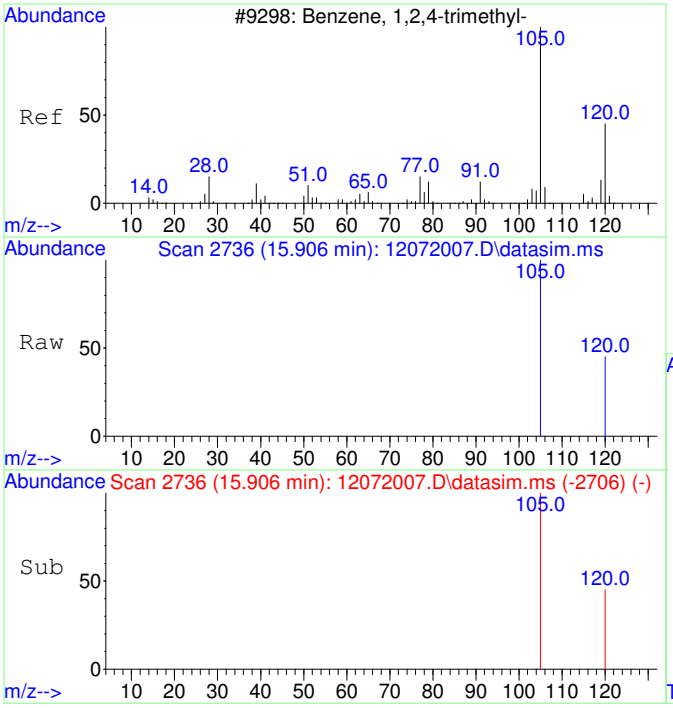


#22
1,3,5-Trimethylbenzene
Concen: 141.75 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:105 Resp: 10017

Ion	Ratio	Lower	Upper
105	100		
120	48.7	21.1	81.1

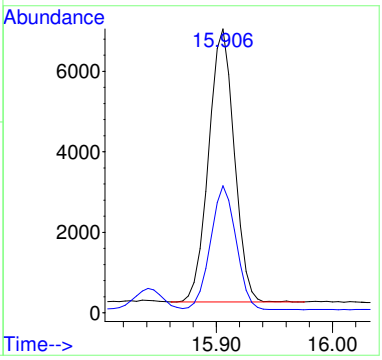


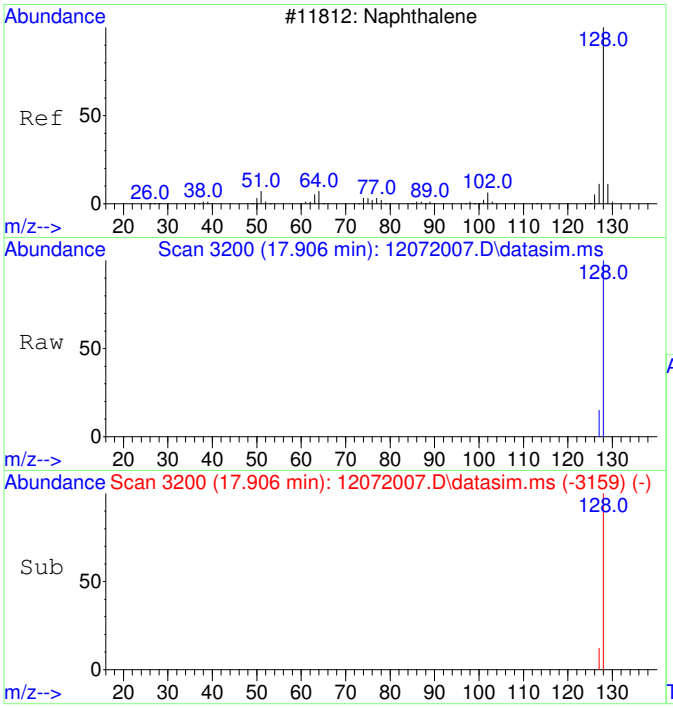


#23
1,2,4-Trimethylbenzene
Concen: 143.95 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:105 Resp: 10405

Ion	Ratio	Lower	Upper
105	100		
120	44.6	17.2	77.2

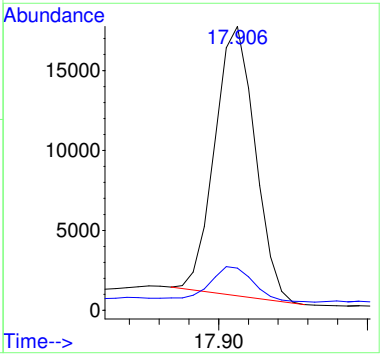


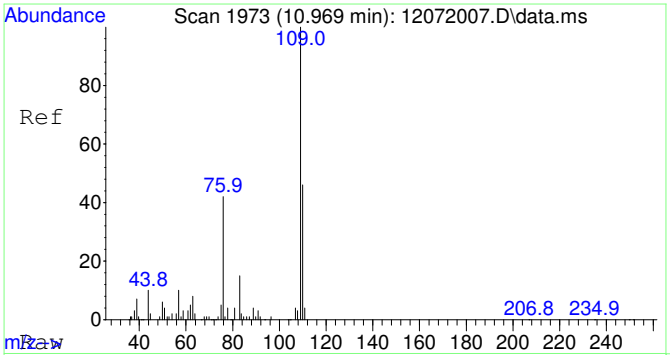


#24
Naphthalene
Concen: 132.61 ug/L
RT: 17.906 min Scan# 3200
Delta R.T. 0.003 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:128 Resp: 15689

Ion	Ratio	Lower	Upper
128	100		
127	12.2	0.0	42.5

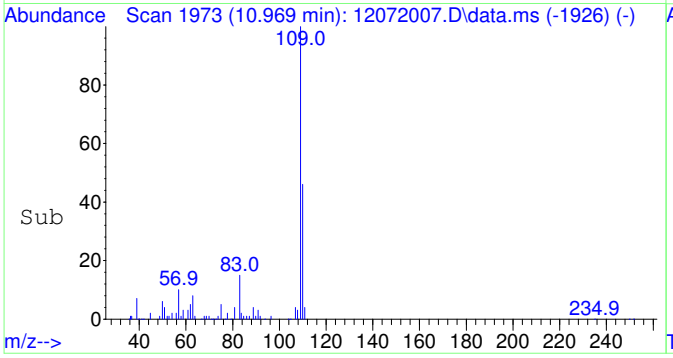


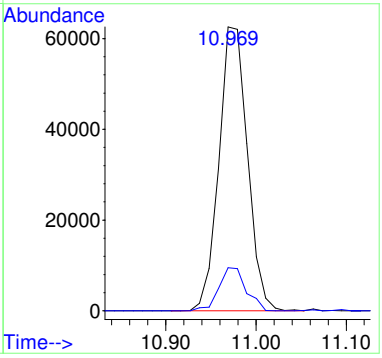


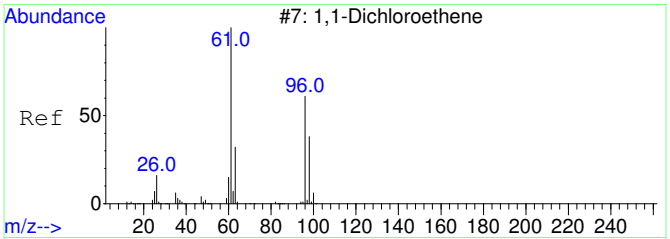
#25
2-Fluorotoluene SCAN
Concen: 4827.25 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

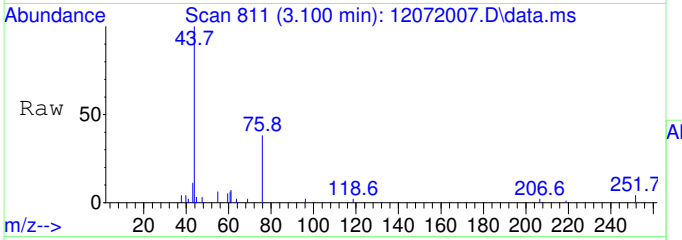
Tgt Ion:109 Resp: 138220

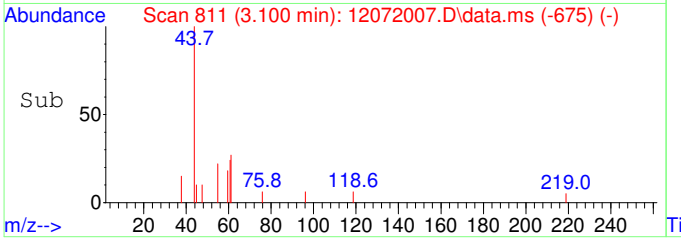
Ion	Ratio	Lower	Upper
109	100		
83	14.5	0.0	43.8







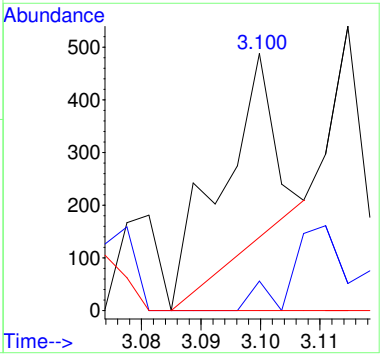


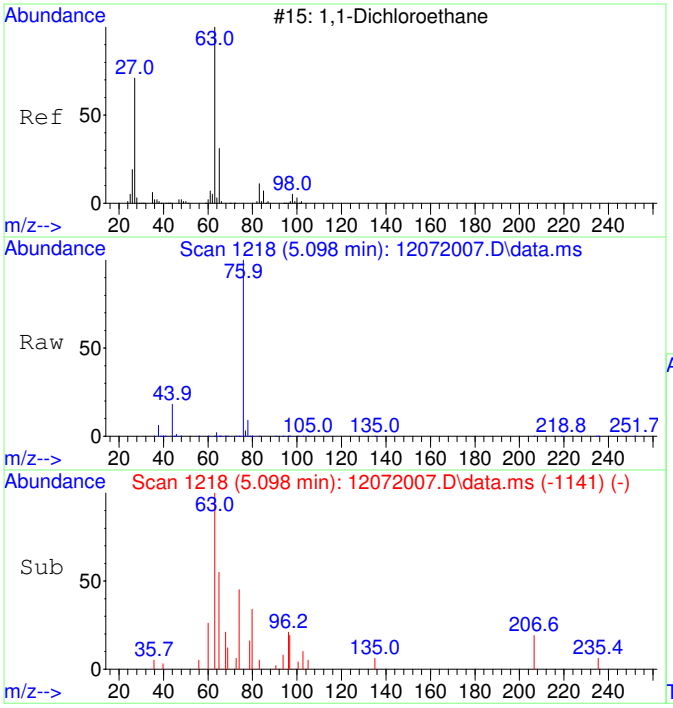


#26
1,1-Dichloroethene SCAN
Concen: 34.26 ug/L
RT: 3.100 min Scan# 811
Delta R.T. 0.004 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 61 Resp: 229

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

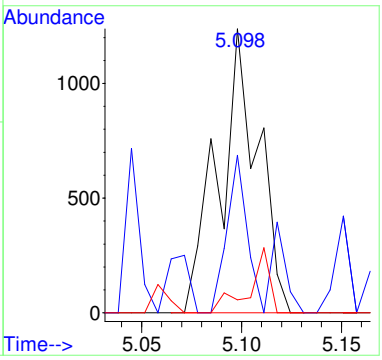


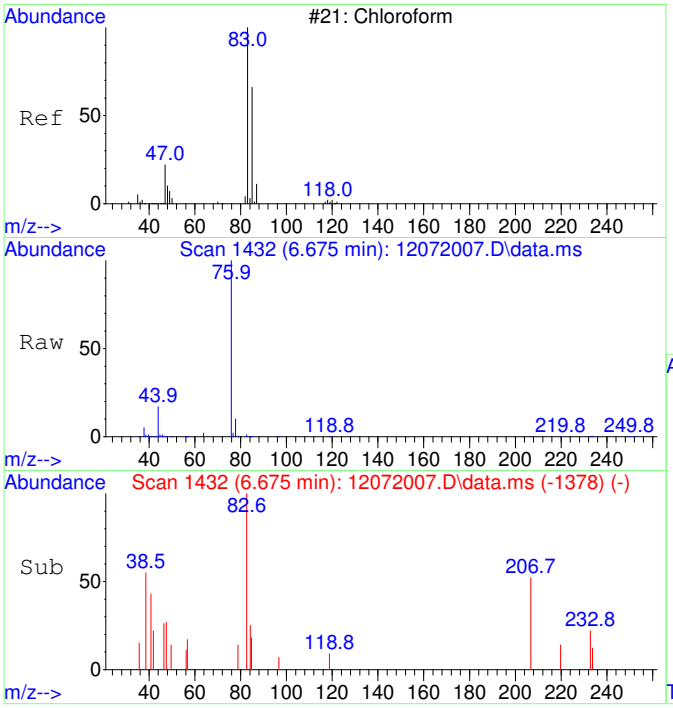


#28
1,1-Dichloroethane SCAN
Concen: 168.66 ug/L
RT: 5.098 min Scan# 1218
Delta R.T. 0.014 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 63 Resp: 1695

Ion	Ratio	Lower	Upper
63	100		
65	28.4	1.3	61.3
83	0.0	0.0	45.9

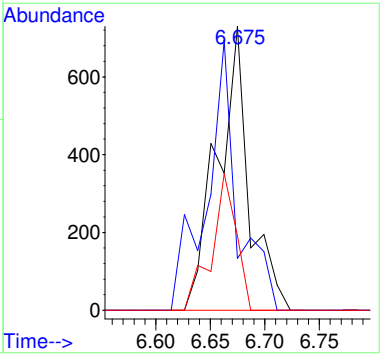


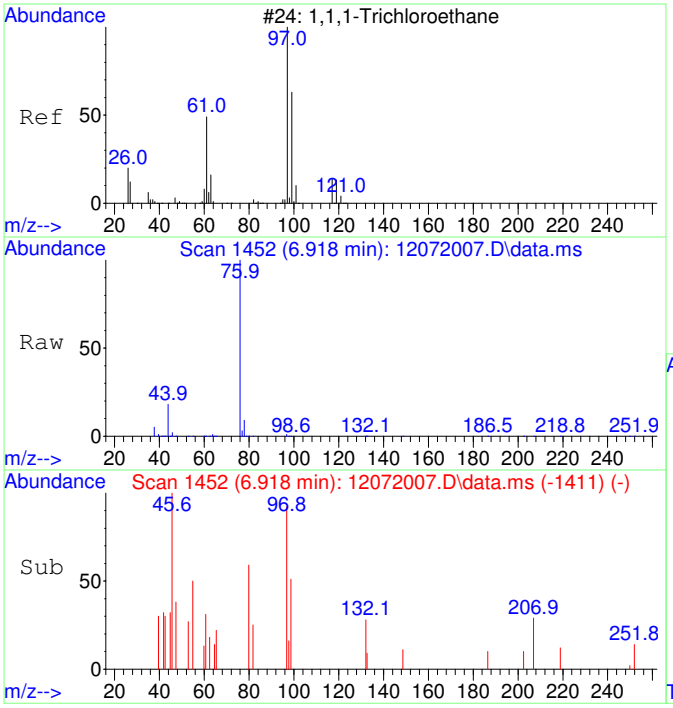


#30
Chloroform SCAN
Concen: 161.05 ug/L
RT: 6.675 min Scan# 1432
Delta R.T. 0.012 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 83 Resp: 1484

Ion	Ratio	Lower	Upper
83	100		
85	91.5	34.6	94.6
47	37.3	0.0	53.4

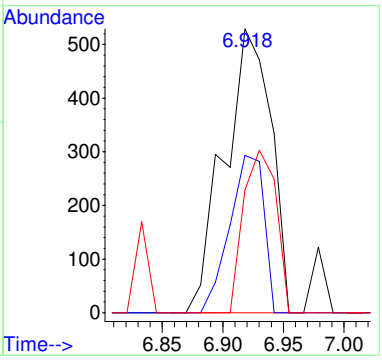


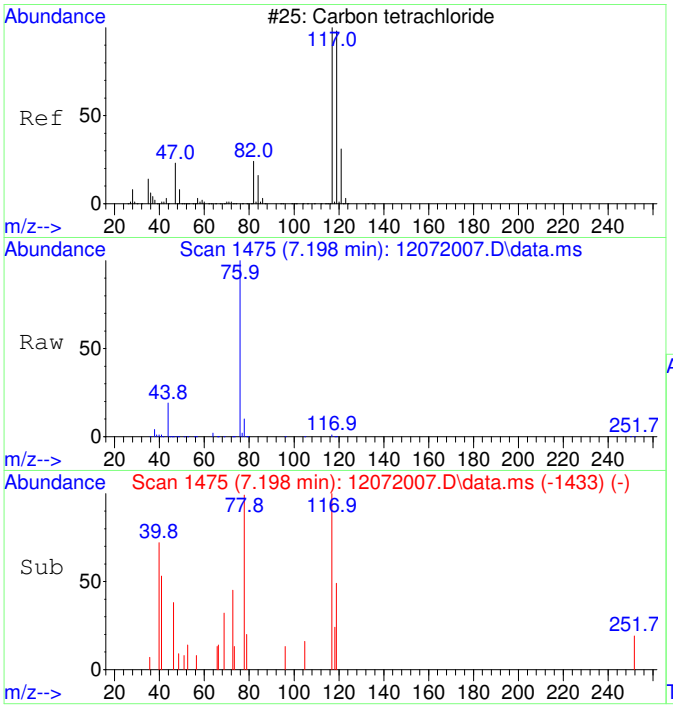


#31
1,1,1-Trichloroethane SCAN
Concen: 149.86 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 97 Resp: 1425

Ion	Ratio	Lower	Upper
97	100		
99	40.8	43.6	103.6#
61	40.0	18.0	78.0

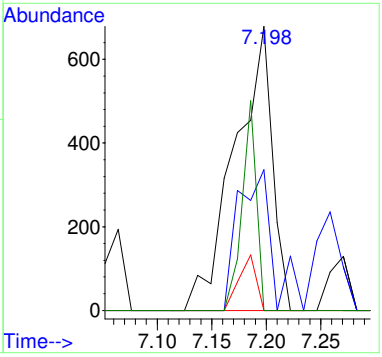


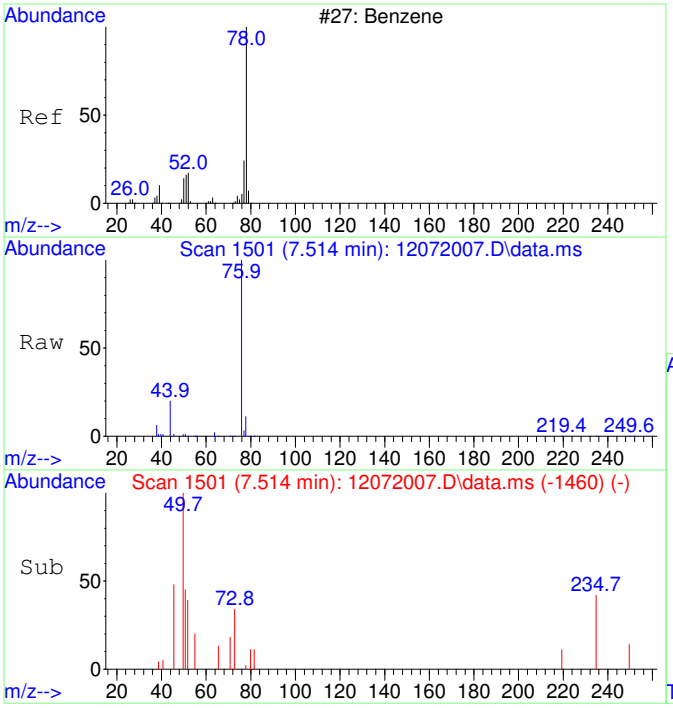


#32
Carbon tetrachloride SCAN
Concen: 200.47 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:117 Resp: 1629

Ion	Ratio	Lower	Upper
117	100		
119	45.5	75.5	135.5#
121	9.0	0.0	58.8
82	28.0	0.0	59.2

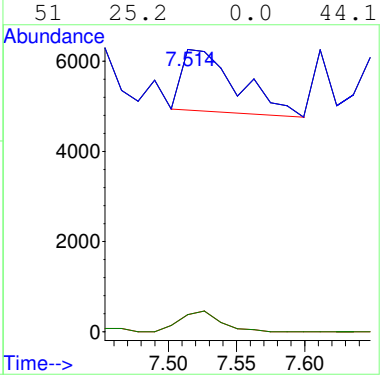


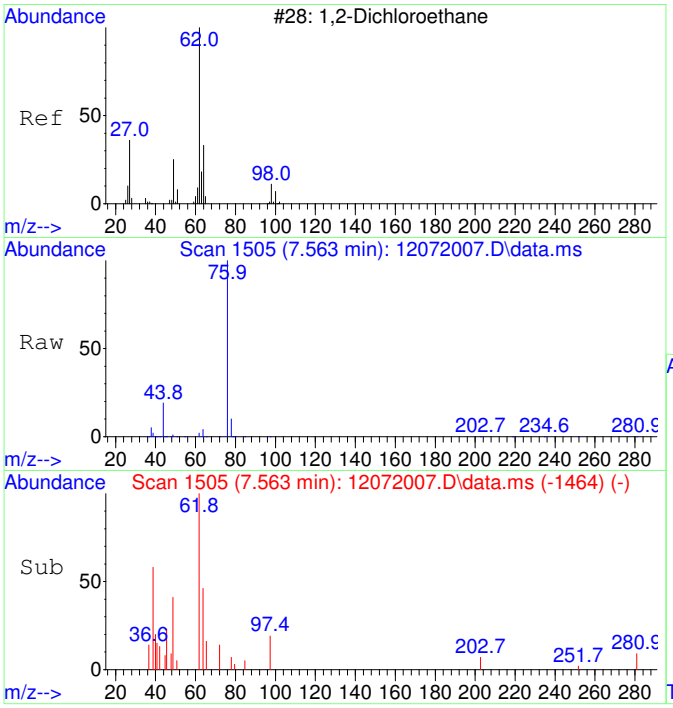


#33
Benzene SCAN
Concen: 132.09 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 78 Resp: 3800

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	25.2	0.0	47.9
51	25.2	0.0	44.1

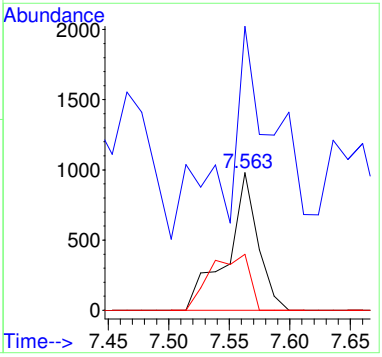


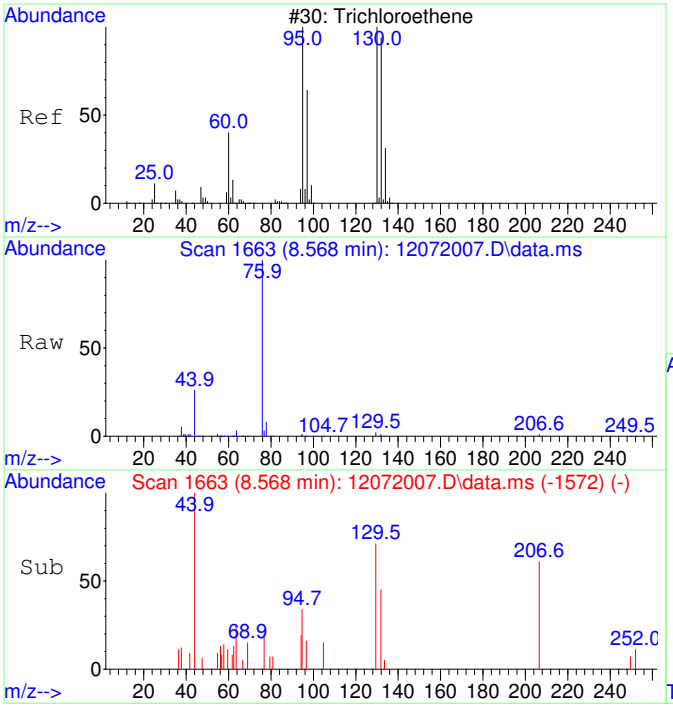


#34
1,2-Dichloroethane SCAN
Concen: 193.37 ug/L
RT: 7.563 min Scan# 1505
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 62 Resp: 1740

Ion	Ratio	Lower	Upper
62	100		
64	207.2	5.2	65.2#
49	52.0	3.9	63.9

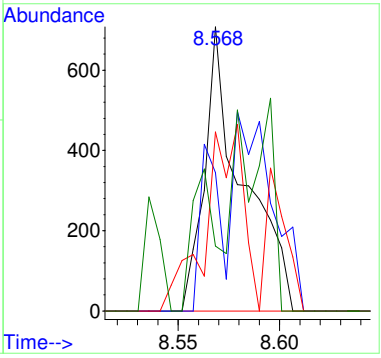


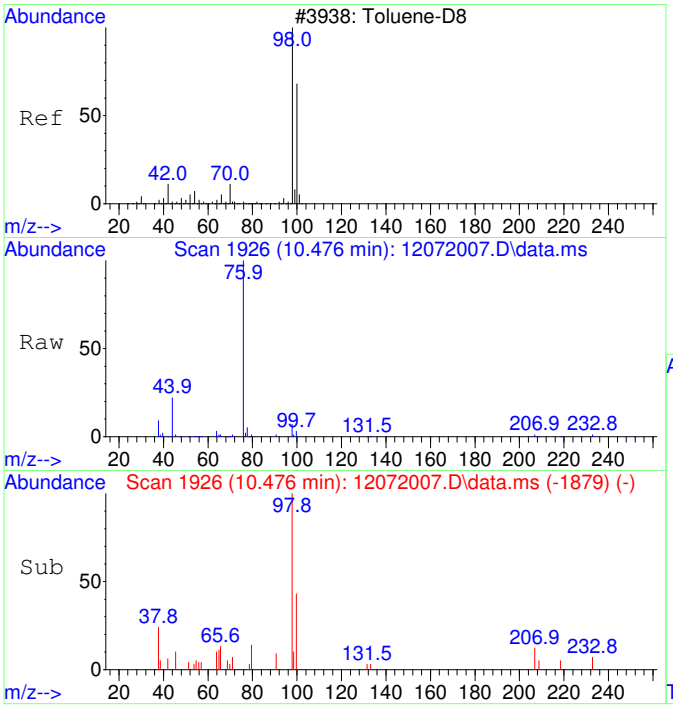


#35
Trichloroethene SCAN
Concen: 147.62 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.005 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:130 Resp: 926

Ion	Ratio	Lower	Upper
130	100		
95	25.4	60.5	120.5#
132	0.0	59.6	119.6#
97	22.9	28.2	88.2#

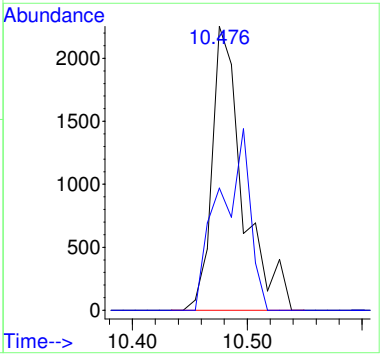


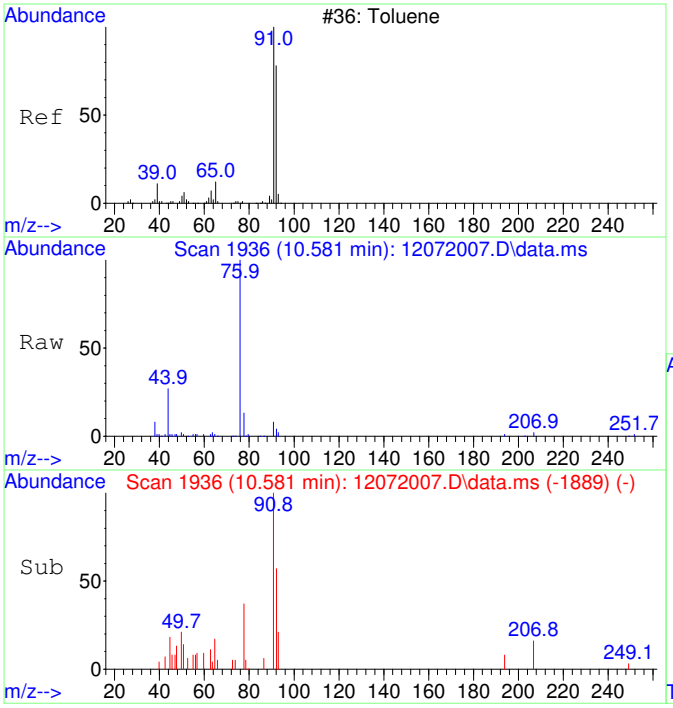


#36
Toluene-d8 SCAN
Concen: 155.54 ug/L
RT: 10.476 min Scan# 1926
Delta R.T. -0.010 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 98 Resp: 4177

Ion	Ratio	Lower	Upper
98	100		
100	0.0	40.0	100.0#

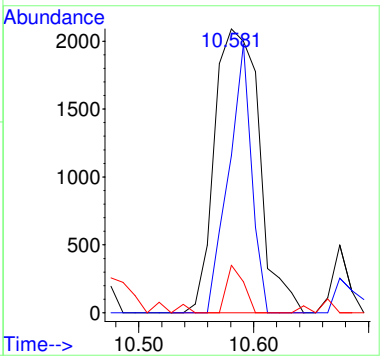


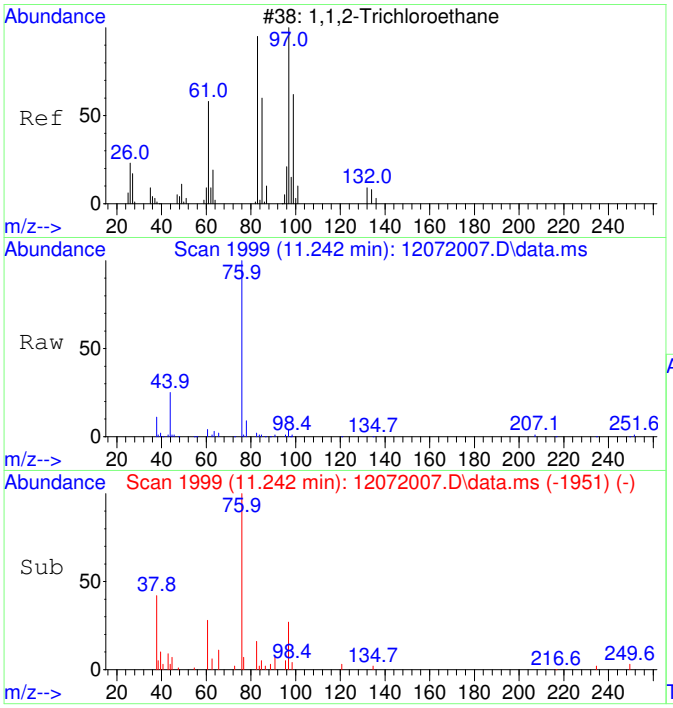


#37
Toluene SCAN
Concen: 171.27 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 5663

Ion	Ratio	Lower	Upper
91	100		
92	48.6	28.3	88.3
65	6.4	0.0	41.0

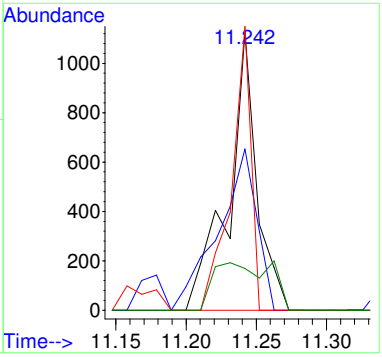


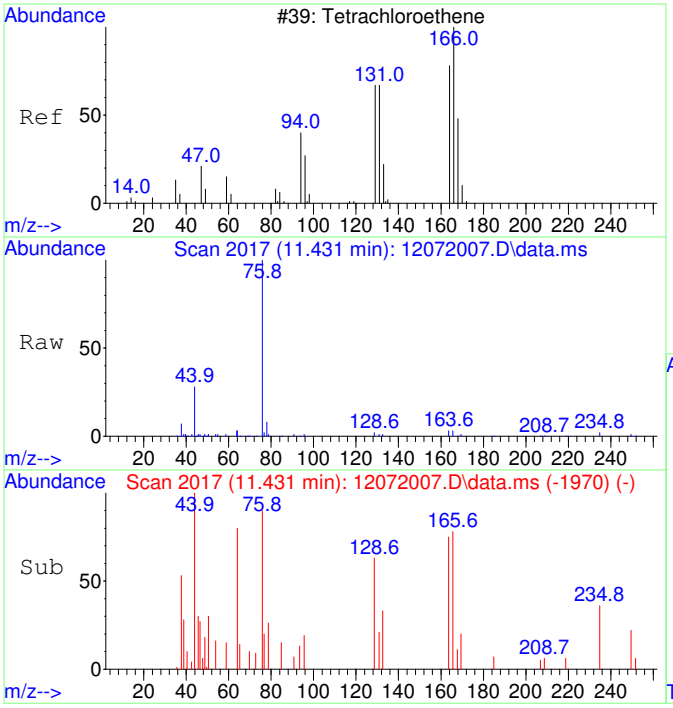


#38
1,1,2-Trichloroethane SCAN
Concen: 192.45 ug/L
RT: 11.242 min Scan# 1999
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 97 Resp: 1595

Ion	Ratio	Lower	Upper
97	100		
83	78.3	57.7	117.7
61	70.2	32.1	92.1
99	0.0	36.7	96.7#

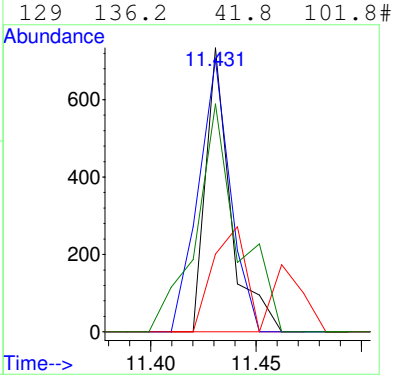


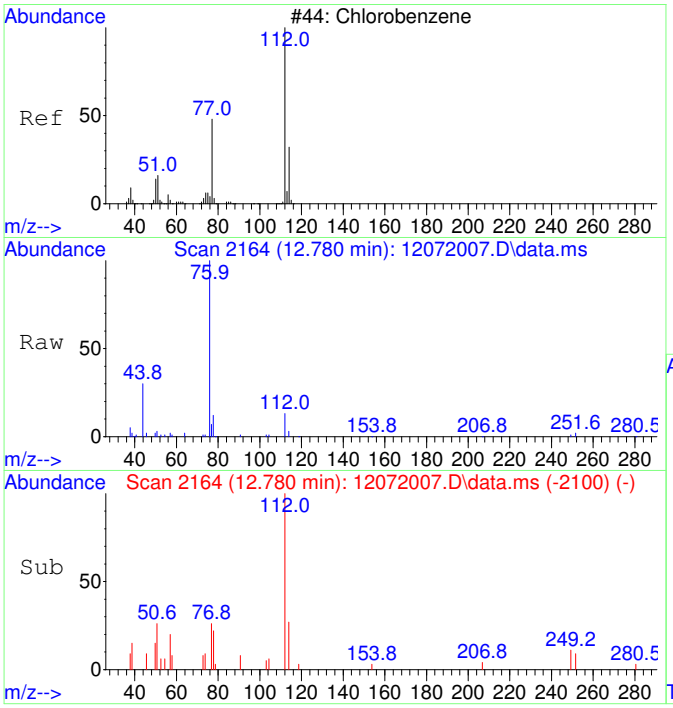


#39
Tetrachloroethene SCAN
Concen: 80.66 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. -0.010 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:166 Resp: 600

Ion	Ratio	Lower	Upper
166	100		
164	124.3	50.9	110.9#
131	78.3	38.7	98.7
129	136.2	41.8	101.8#

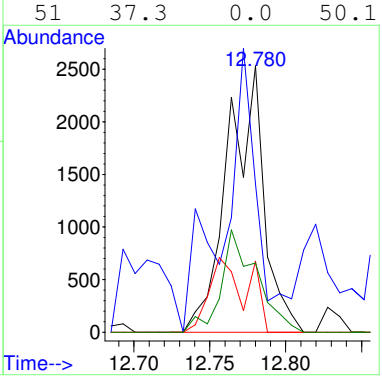


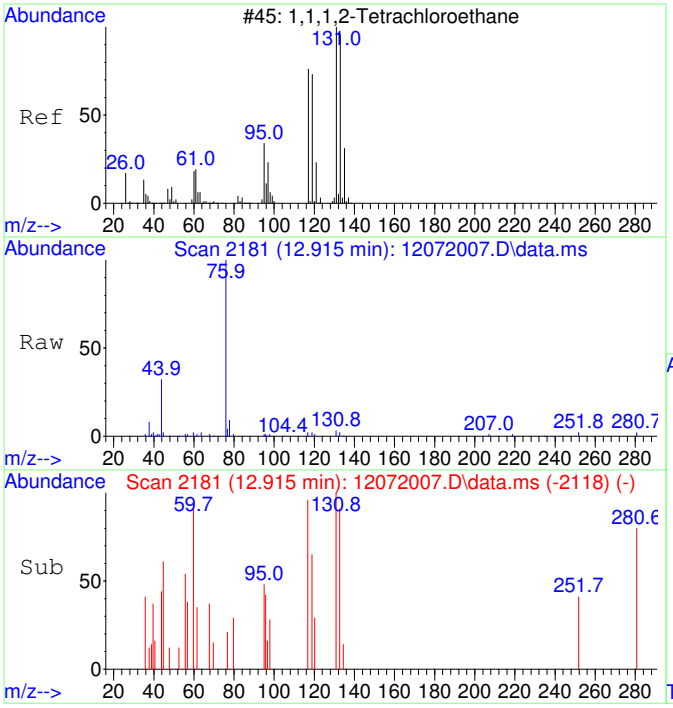


#40
Chlorobenzene SCAN
Concen: 179.38 ug/L
RT: 12.780 min Scan# 2164
Delta R.T. 0.008 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:112 Resp: 4260

Ion	Ratio	Lower	Upper
112	100		
77	83.0	28.2	88.2
114	0.0	2.3	62.3#
51	37.3	0.0	50.1

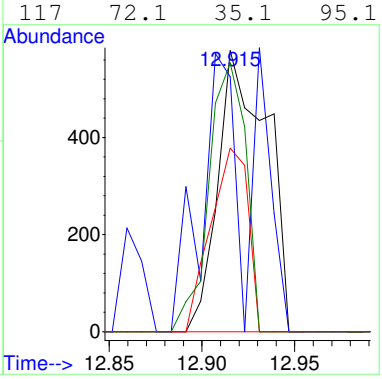


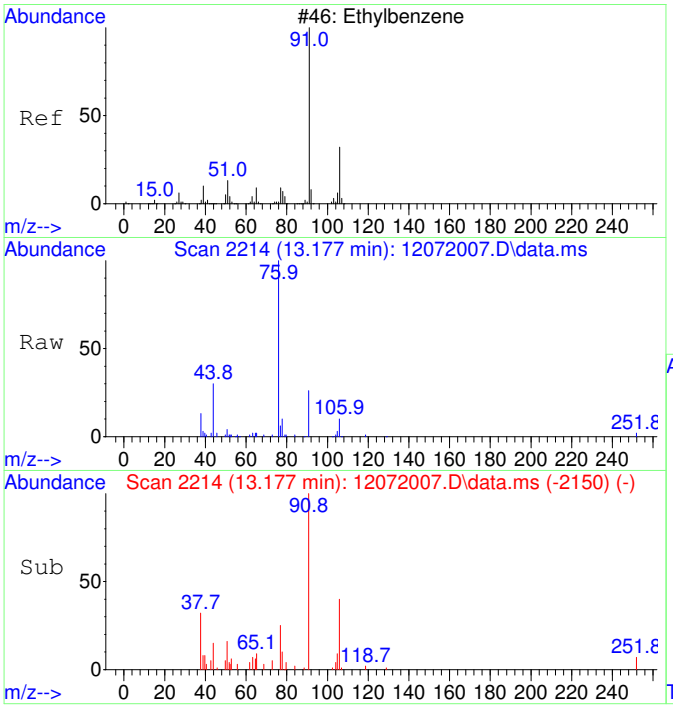


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 130.10 ug/L
RT: 12.915 min Scan# 2181
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:131 Resp: 1066

Ion	Ratio	Lower	Upper
131	100		
133	67.2	66.9	126.9
119	50.0	40.4	100.4
117	72.1	35.1	95.1

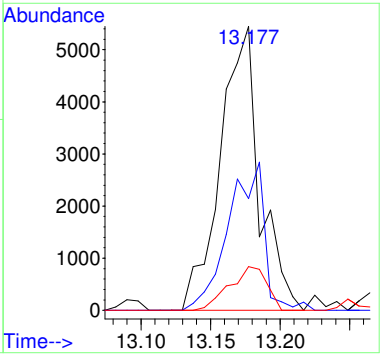


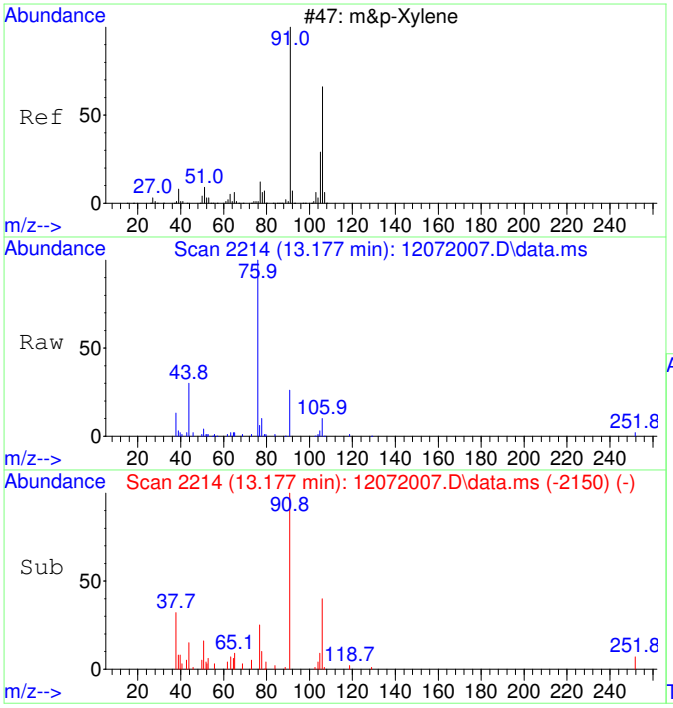


#42
Ethylbenzene SCAN
Concen: 169.70 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 10693

Ion	Ratio	Lower	Upper
91	100		
106	48.0	23.1	83.1
51	14.6	0.0	40.1

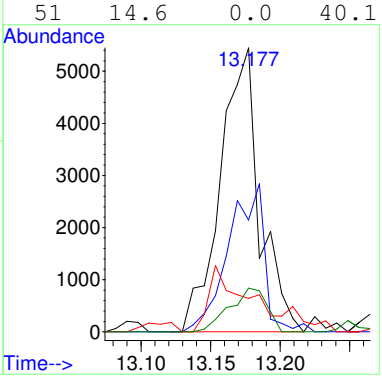


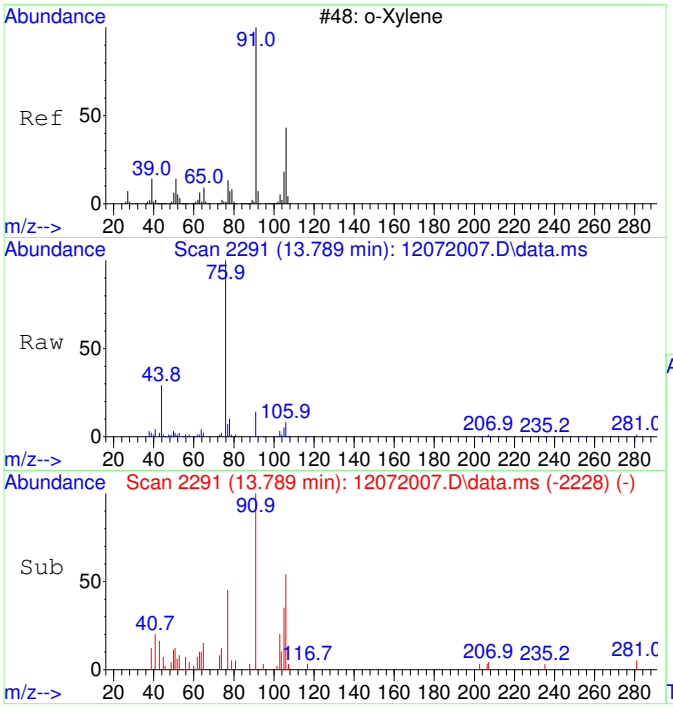


#43
m&p-Xylene SCAN
Concen: 169.70 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 10693

Ion	Ratio	Lower	Upper
91	100		
106	48.0	23.1	83.1
105	0.0	0.0	54.7
51	14.6	0.0	40.1

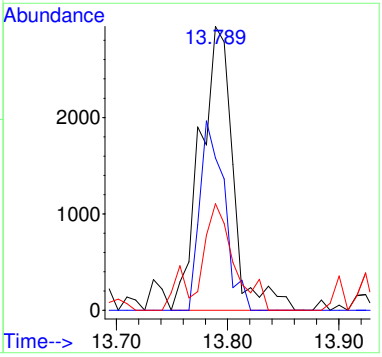


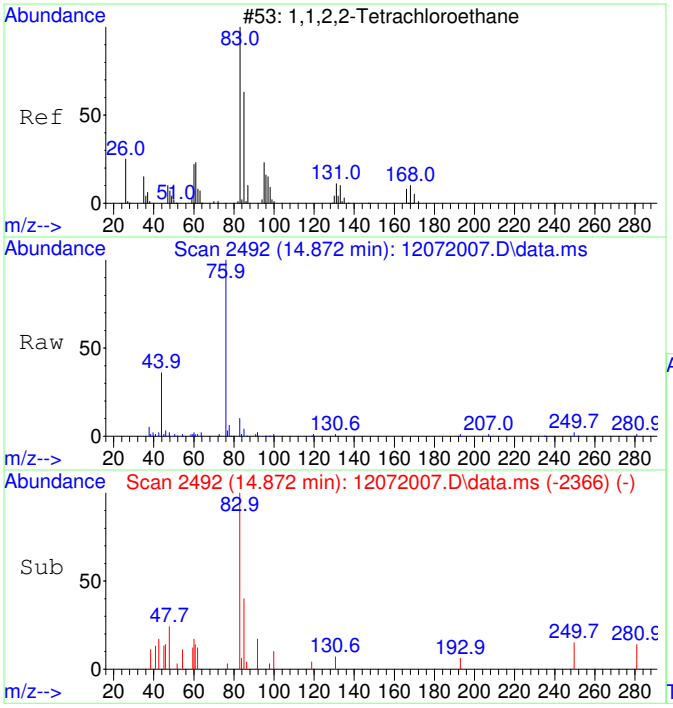


#44
o-Xylene SCAN
Concen: 176.50 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 6073

Ion	Ratio	Lower	Upper
91	100		
106	49.8	18.0	78.0
105	28.8	0.0	56.6

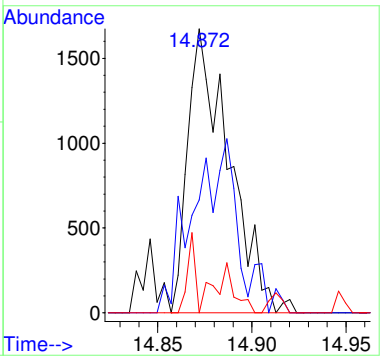


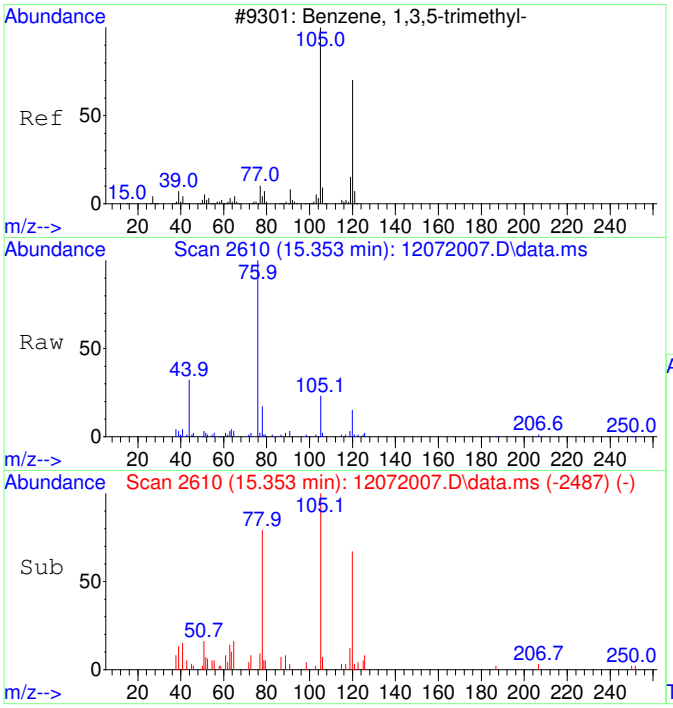


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 142.65 ug/L
RT: 14.872 min Scan# 2492
Delta R.T. -0.011 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 83 Resp: 2552

Ion	Ratio	Lower	Upper
83	100		
85	16.8	35.9	95.9#
95	4.7	0.0	47.4

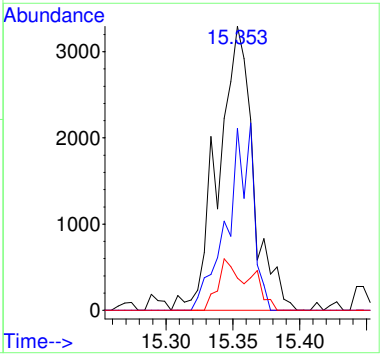


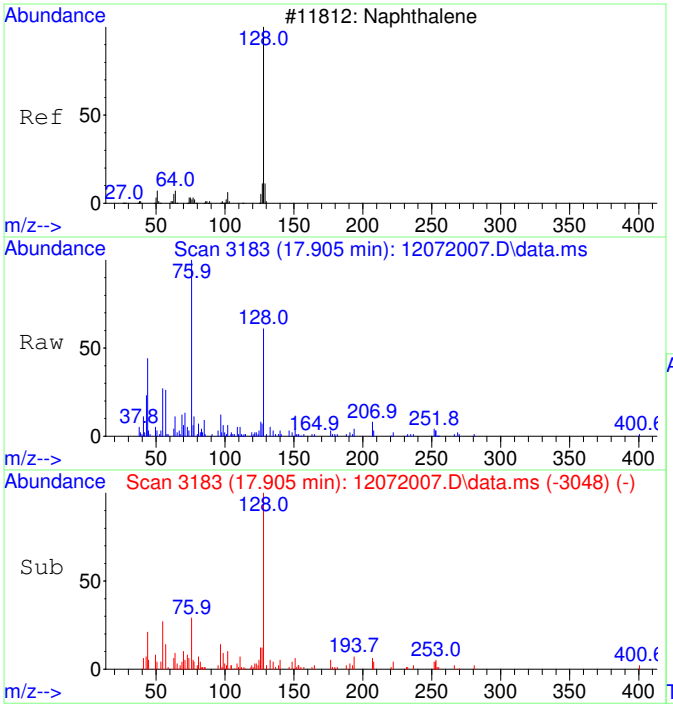


#46
1,3,5-Trimethylbenzene SCAN
Concen: 166.98 ug/L
RT: 15.353 min Scan# 2610
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:105 Resp: 6061

Ion	Ratio	Lower	Upper
105	100		
120	48.4	18.3	78.3
119	16.2	0.0	43.1

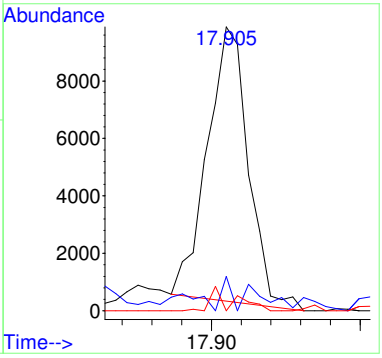




#48
Naphthalene SCAN
Concen: 163.35 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.003 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:128 Resp: 9093

Ion	Ratio	Lower	Upper
128	100		
127	2.9	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\120720\
Data File : 12072007.D
Acq On : 7 Dec 2020 14:20
InstName : AG5975C
Operator : TD
Sample : S20L021-CAL5
Misc : 2030072 0.15 mg/L
ALS Vial : 7 Sample Multiplier: 1

M.I. Performed By:
TD at 6:29 am, Dec 08, 2020

M.I. Approved By:
ZAR at 2:54 pm, Dec 14, 2020

Quant Time: Dec 08 06:25:46 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:14:00 2020
Response via : Initial Calibration

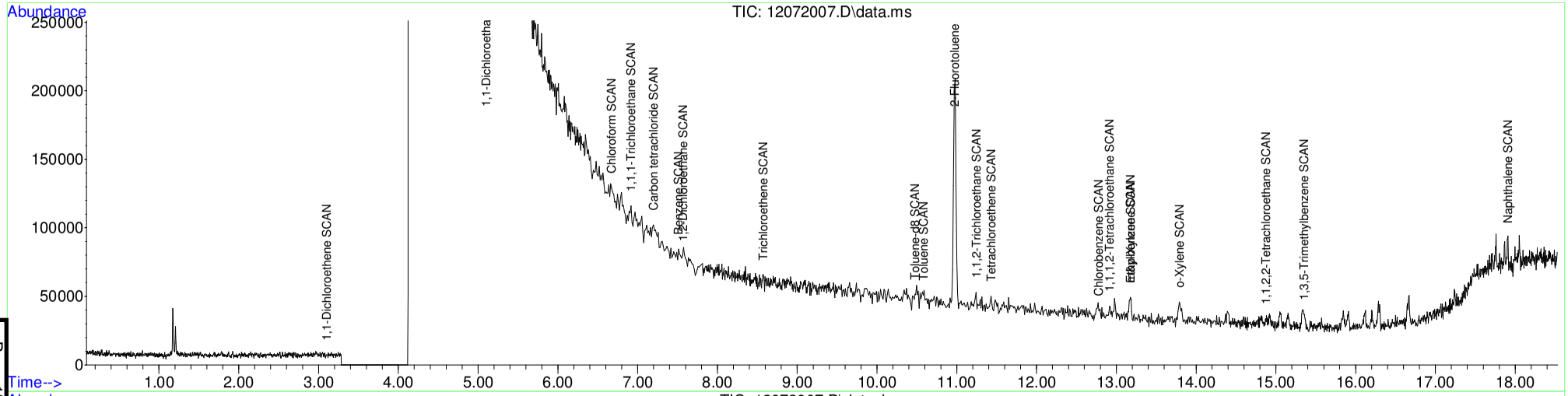
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	252253	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.487	98	6615	135.40	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 2.71%#			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.094	61	1297m	129.92	ug/L	
3] trans-1,2-Dichloroethene	4.383	61	1710	135.61	ug/L	95
4] 1,1-Dichloroethane	5.099	63	2024	134.39	ug/L	92
5] cis-1,2-Dichloroethene	6.094	61	2117	135.72	ug/L	99
6] Chloroform	6.664	83	1973	131.69	ug/L	97
7] 1,1,1-Trichloroethane	6.919	97	2178	135.33	ug/L	99
8] Carbon tetrachloride	7.187	117	2056	133.62	ug/L	100
9] Benzene	7.515	78	5940	139.94	ug/L	60
10] 1,2-Dichloroethane	7.552	62	1980	136.74	ug/L	83
11] Trichloroethene	8.575	130	1823	136.03	ug/L	95
13] Toluene	10.582	91	8413	138.31	ug/L	99
14] 1,1,2-Trichloroethane	11.233	97	1884	133.72	ug/L	94
15] Tetrachloroethene	11.432	166	2596	137.02	ug/L	98
16] Chlorobenzene	12.765	112	6372	135.22	ug/L	92
17] 1,1,1,2-Tetrachloroethane	12.916	131	2240	135.81	ug/L	98
18] Ethylbenzene	12.972	91	10872	139.93	ug/L	97
19] m&p-Xylene	13.171	91	17074	285.38	ug/L	97
20] o-Xylene	13.782	91	9001	140.07	ug/L	98
21] 1,1,2,2-Tetrachloroethane	14.877	83	4095	136.76	ug/L	99
22] 1,3,5-Trimethylbenzene	15.350	105	10017	141.75	ug/L	97
23] 1,2,4-Trimethylbenzene	15.906	105	10405	143.95	ug/L	96
24] Naphthalene	17.906	128	15689	132.61	ug/L	99
25) 2-Fluorotoluene SCAN	10.969	109	138220	4827.25	ug/L	98
26) 1,1-Dichloroethene SCAN	3.100	61	229	34.26	ug/L #	25
28) 1,1-Dichloroethane SCAN	5.098	63	1695	168.66	ug/L #	84
30) Chloroform SCAN	6.675	83	1484	161.05	ug/L	67
31) 1,1,1-Trichloroethane ...	6.918	97	1425	149.86	ug/L #	72
32) Carbon tetrachloride SCAN	7.198	117	1629	200.47	ug/L #	56
33) Benzene SCAN	7.514	78	3800	132.09	ug/L	95
34) 1,2-Dichloroethane SCAN	7.563	62	1740	193.37	ug/L #	1
35) Trichloroethene SCAN	8.568	130	926	147.62	ug/L #	26
36) Toluene-d8 SCAN	10.476	98	4177	155.54	ug/L #	15
37) Toluene SCAN	10.581	91	5663	171.27	ug/L	87
38) 1,1,2-Trichloroethane ...	11.242	97	1595	192.45	ug/L #	67
39) Tetrachloroethene SCAN	11.431	166	600	80.66	ug/L #	53
40) Chlorobenzene SCAN	12.780	112	4260	179.38	ug/L #	59
41) 1,1,1,2-Tetrachloroeth...	12.915	131	1066	130.10	ug/L	77
42) Ethylbenzene SCAN	13.177	91	10693	169.70	ug/L	92
43) m&p-Xylene SCAN	13.177	91	10693	169.70	ug/L #	80
44) o-Xylene SCAN	13.789	91	6073	176.50	ug/L	97
45) 1,1,2,2-Tetrachloroeth...	14.872	83	2552	142.65	ug/L #	45
46) 1,3,5-Trimethylbenzene...	15.353	105	6061	166.98	ug/L	98
48) Naphthalene SCAN	17.905	128	9093	163.35	ug/L	75

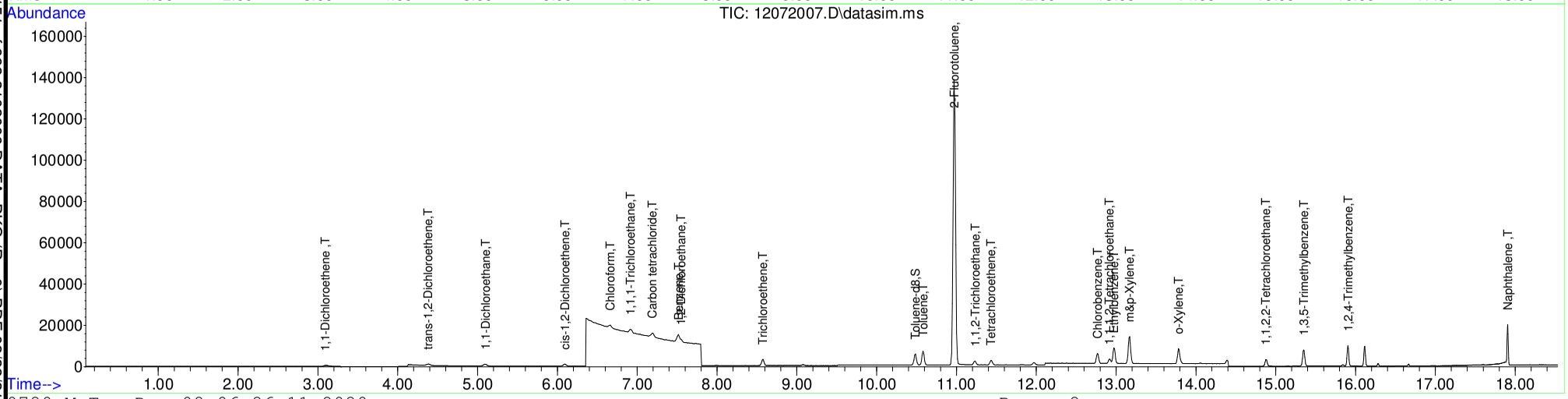
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072007.D
Acq On : 7 Dec 2020 14:20
InstName : AG5975C
Operator : TD
Sample : S20L021-CAL5
Misc : 2030072 0.15 mg/L
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 06:25:46 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:14:00 2020
Response via : Initial Calibration





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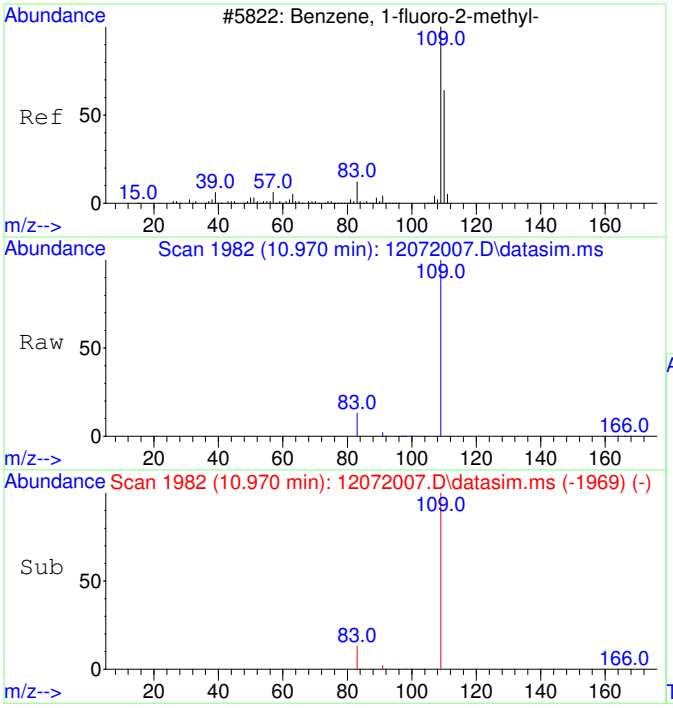
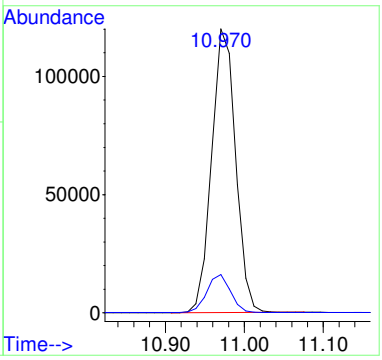
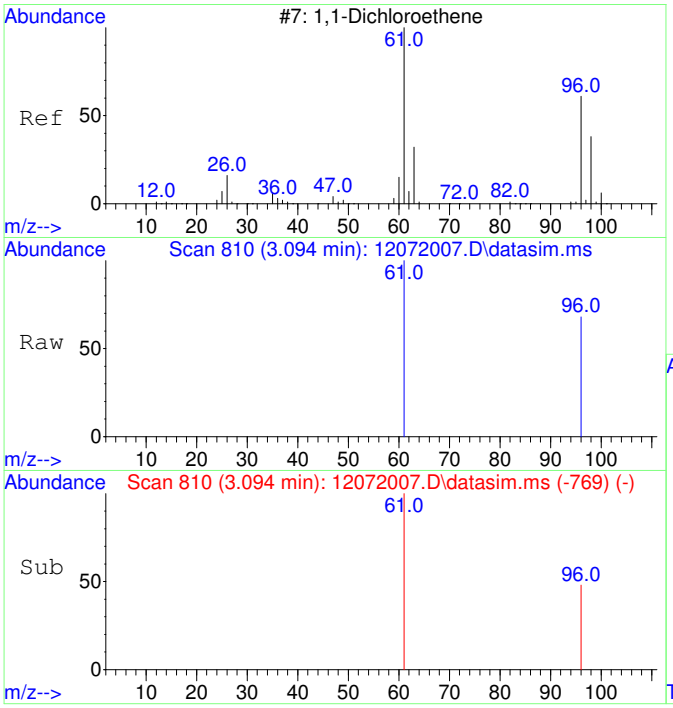


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:109 Resp: 252253

Ion	Ratio	Lower	Upper
109	100		
83	13.2	0.0	42.3

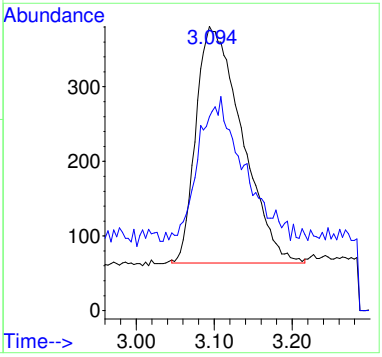


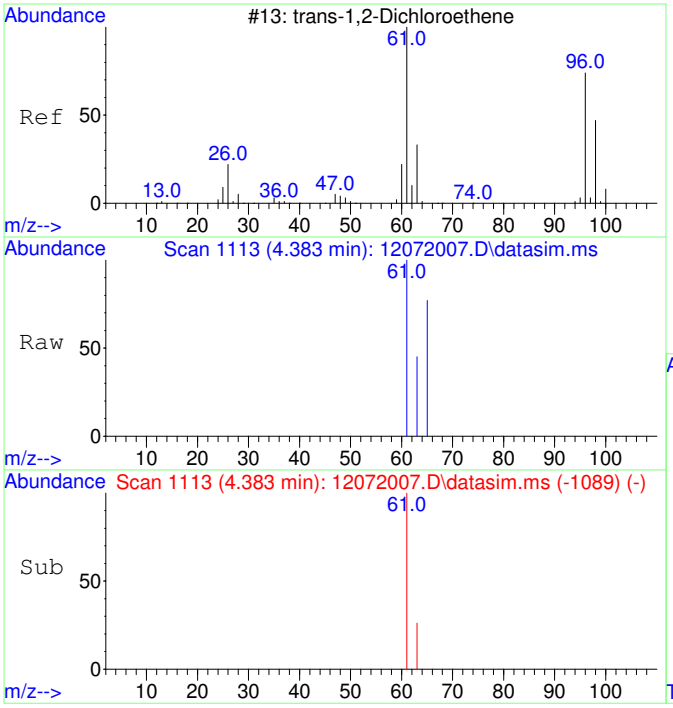


#2
1,1-Dichloroethene
Concen: 129.92 ug/L m
RT: 3.094 min Scan# 810
Delta R.T. 0.004 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 61 Resp: 1297

Ion	Ratio	Lower	Upper
61	100		
96	56.1	37.2	97.2

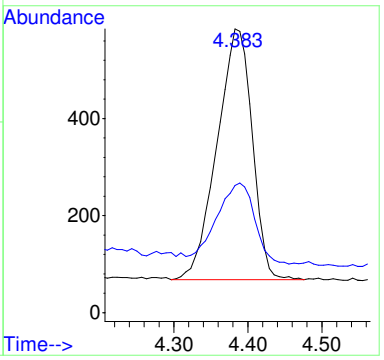


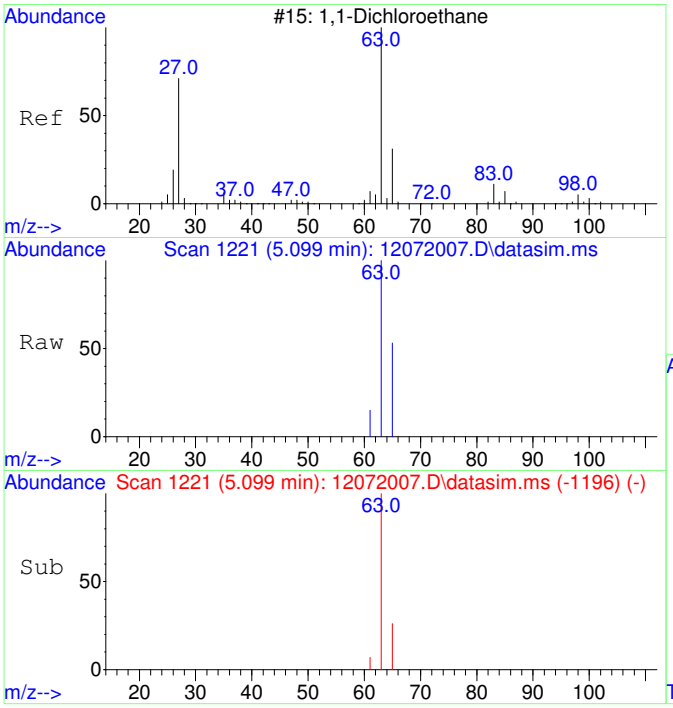


#3
trans-1,2-Dichloroethene
Concen: 135.61 ug/L
RT: 4.383 min Scan# 1113
Delta R.T. 0.007 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 61 Resp: 1710

Ion	Ratio	Lower	Upper
61	100		
63	35.1	2.4	62.4

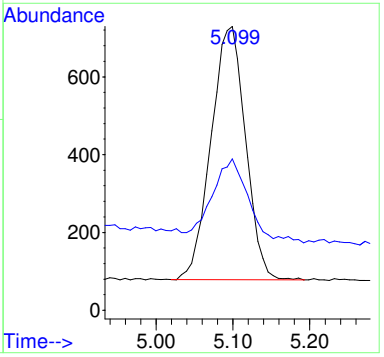


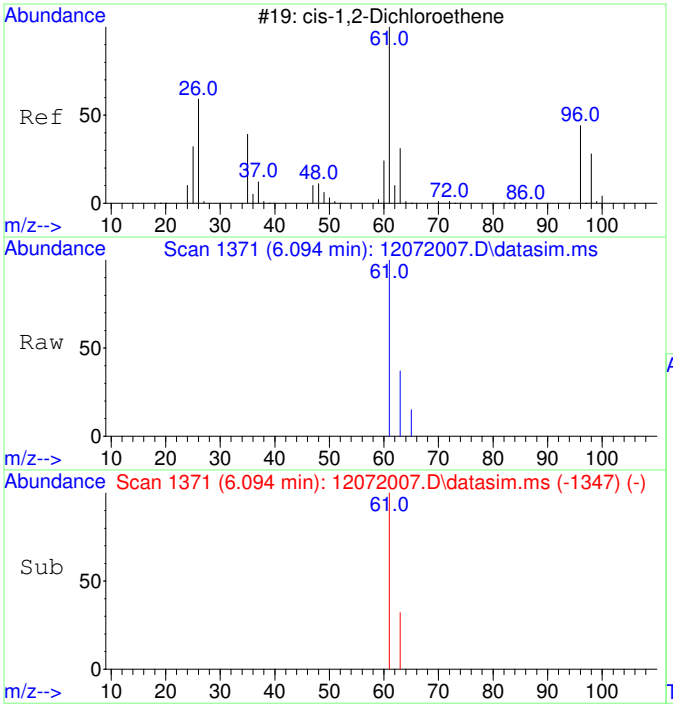


#4
1,1-Dichloroethane
Concen: 134.39 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. 0.014 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 63 Resp: 2024

Ion	Ratio	Lower	Upper
63	100		
65	36.1	1.8	61.8

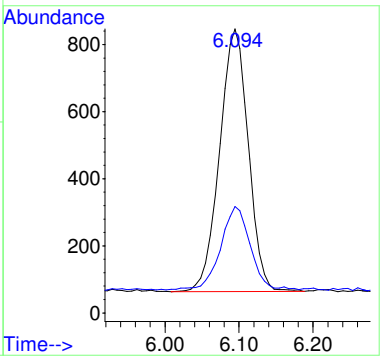


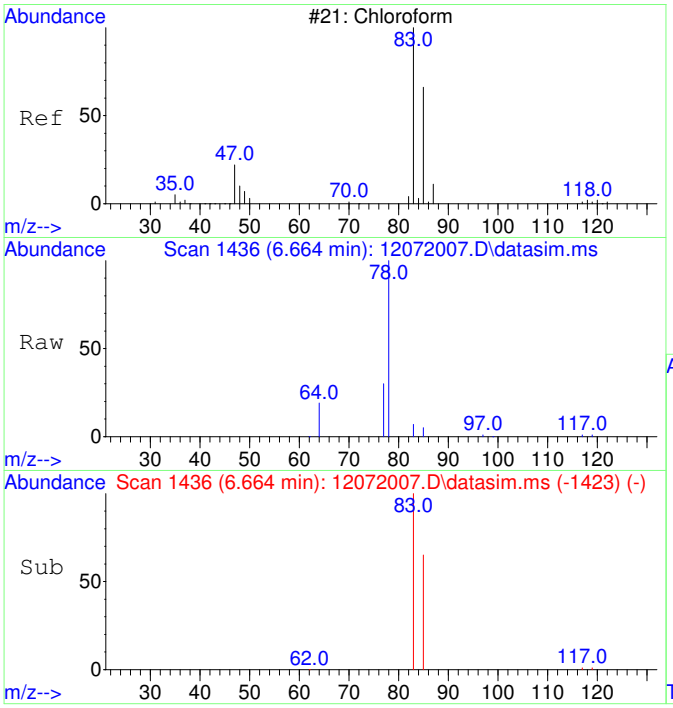


#5
cis-1,2-Dichloroethene
Concen: 135.72 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. 0.007 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 61 Resp: 2117

Ion	Ratio	Lower	Upper
61	100		
63	32.2	2.5	62.5

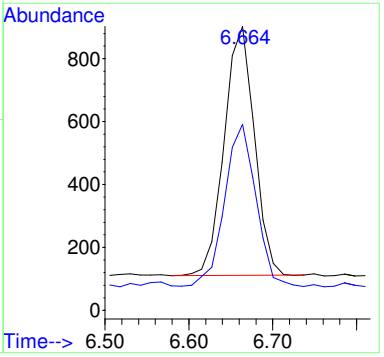


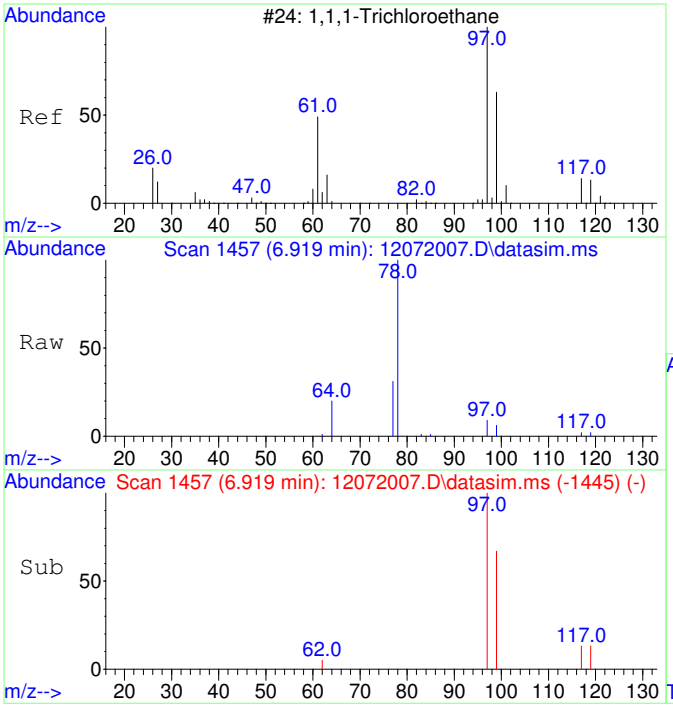


#6
Chloroform
Concen: 131.69 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. 0.012 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 83 Resp: 1973

Ion	Ratio	Lower	Upper
83	100		
85	67.3	35.1	95.1

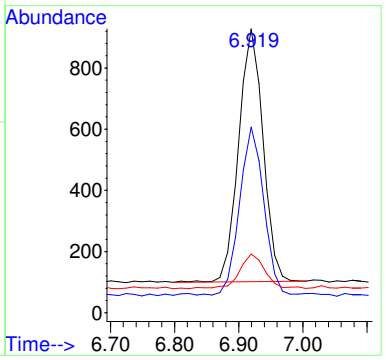


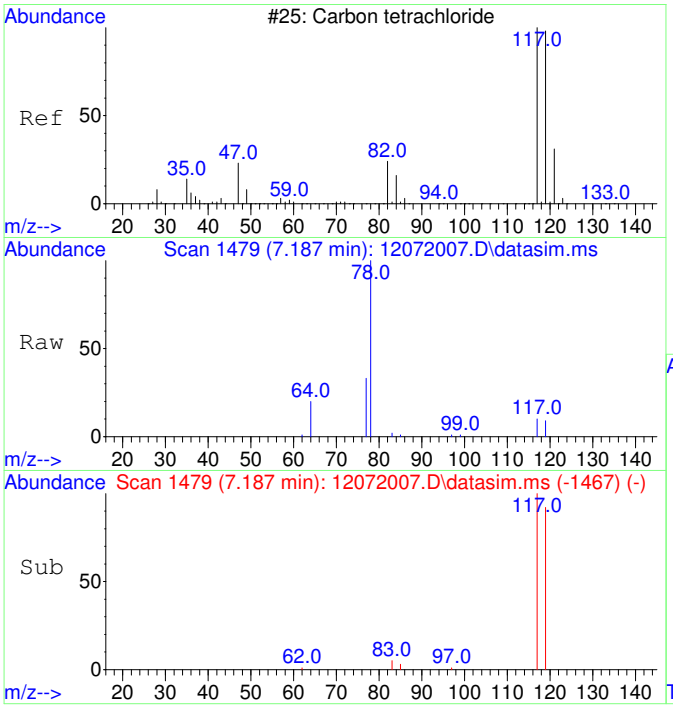


#7
1,1,1-Trichloroethane
Concen: 135.33 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 97 Resp: 2178

Ion	Ratio	Lower	Upper
97	100		
99	65.1	34.6	94.6
117	14.1	0.0	43.2

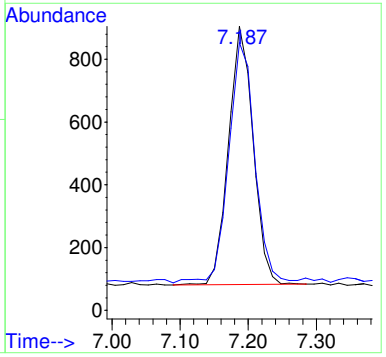


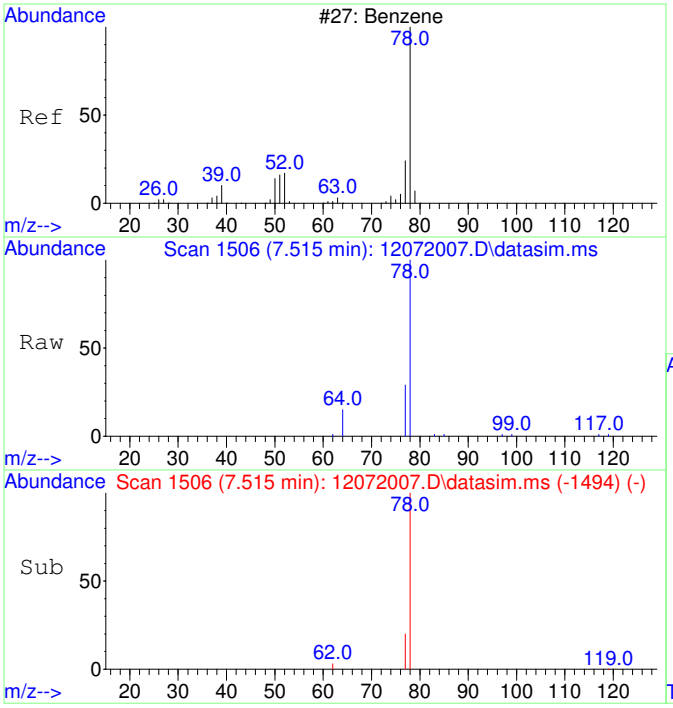


#8
Carbon tetrachloride
Concen: 133.62 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:117 Resp: 2056

Ion	Ratio	Lower	Upper
117	100		
119	96.6	66.4	126.4

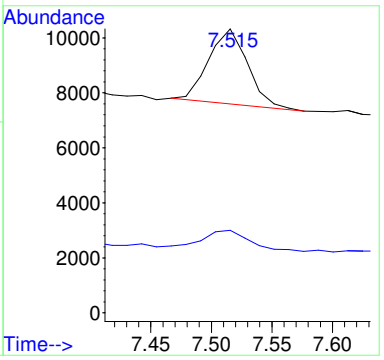


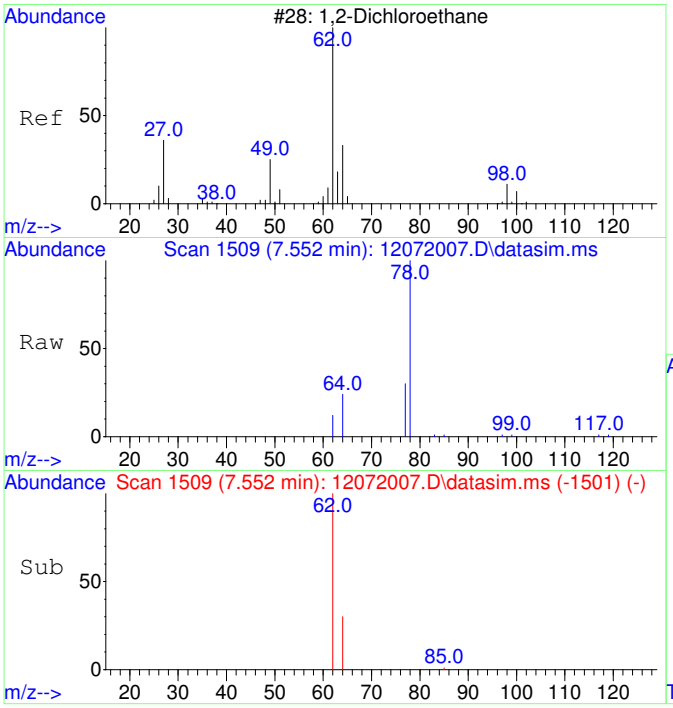


#9
Benzene
Concen: 139.94 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 78 Resp: 5940

Ion	Ratio	Lower	Upper
78	100		
77	42.5	0.0	53.2

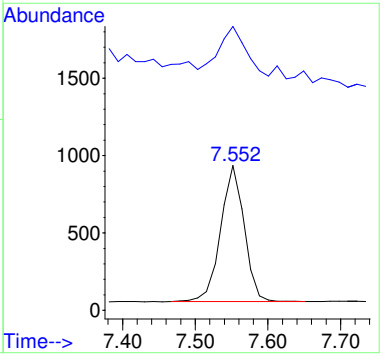


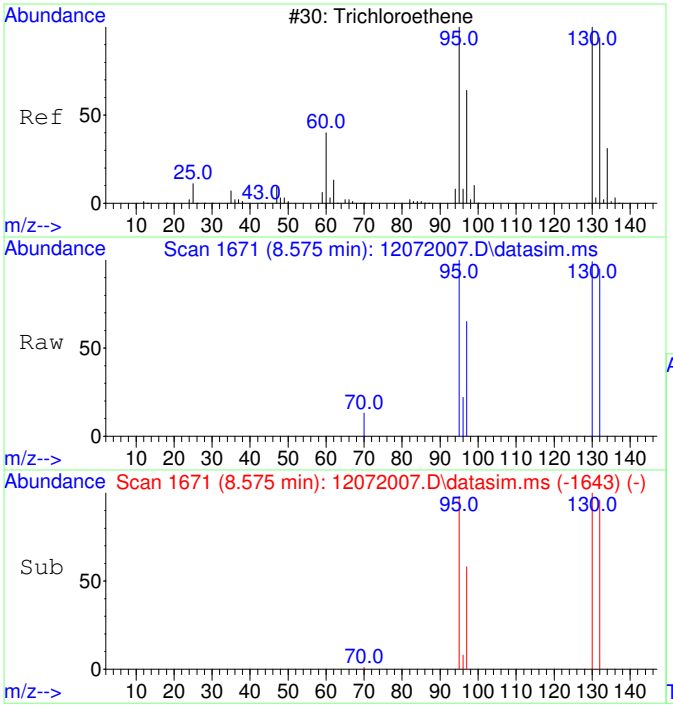


#10
1,2-Dichloroethane
Concen: 136.74 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 62 Resp: 1980

Ion	Ratio	Lower	Upper
62	100		
64	41.8	2.3	62.3

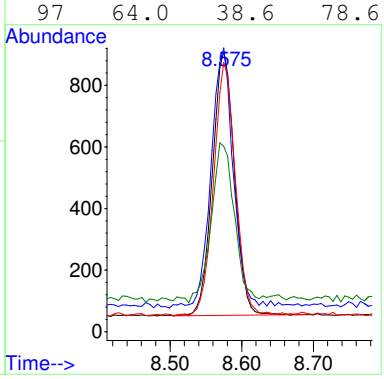


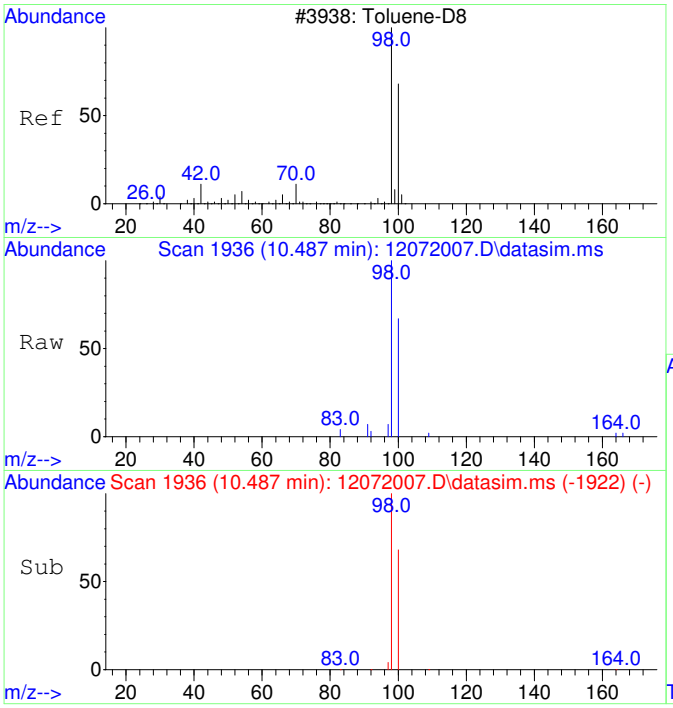


#11
Trichloroethene
Concen: 136.03 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:130 Resp: 1823

Ion	Ratio	Lower	Upper
130	100		
95	95.9	60.7	120.7
132	94.1	76.0	116.0
97	64.0	38.6	78.6

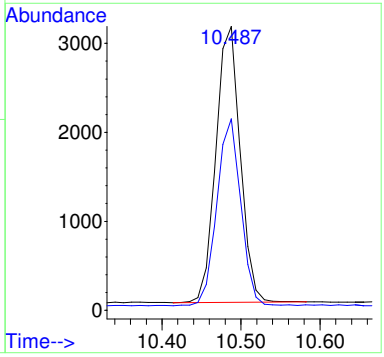


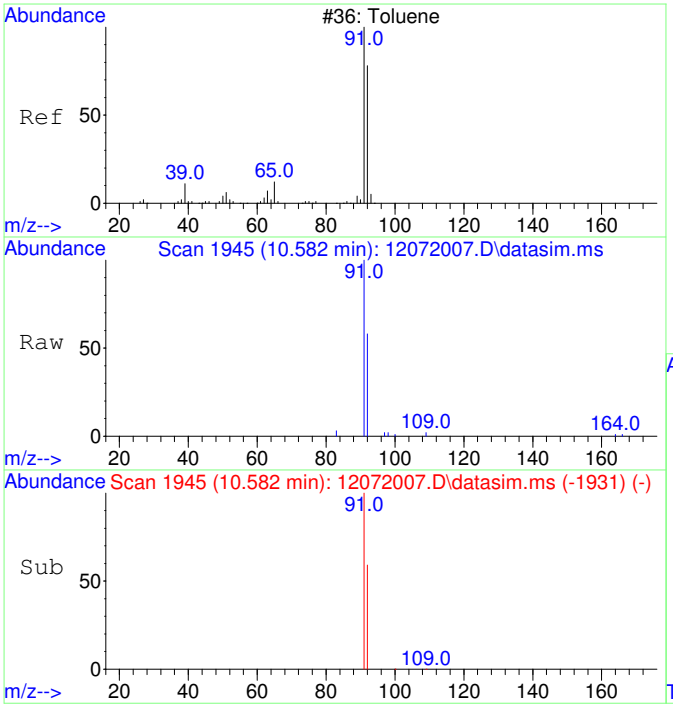


#12
Toluene-d8
Concen: 135.40 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 98 Resp: 6615

Ion	Ratio	Lower	Upper
98	100		
100	66.2	37.1	97.1

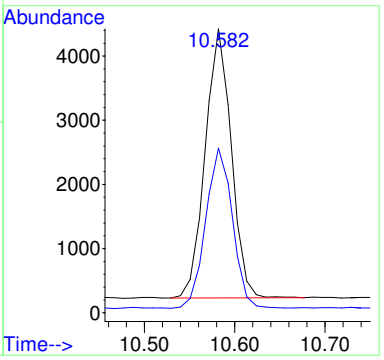


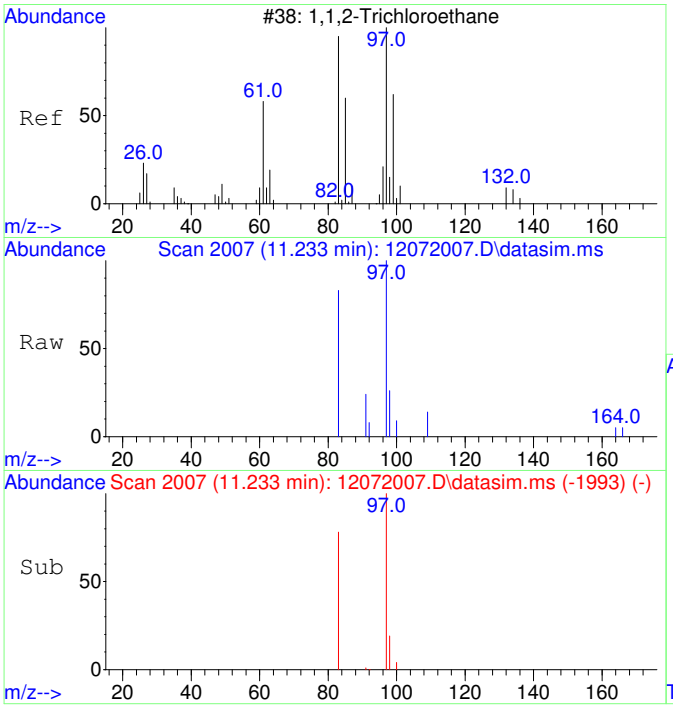


#13
Toluene
Concen: 138.31 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 8413

Ion	Ratio	Lower	Upper
91	100		
92	60.6	29.9	89.9

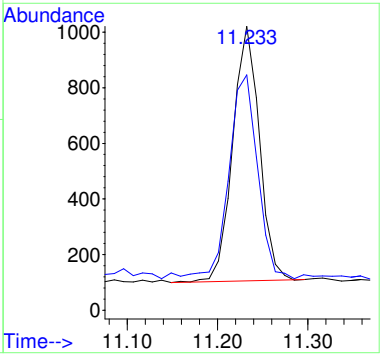


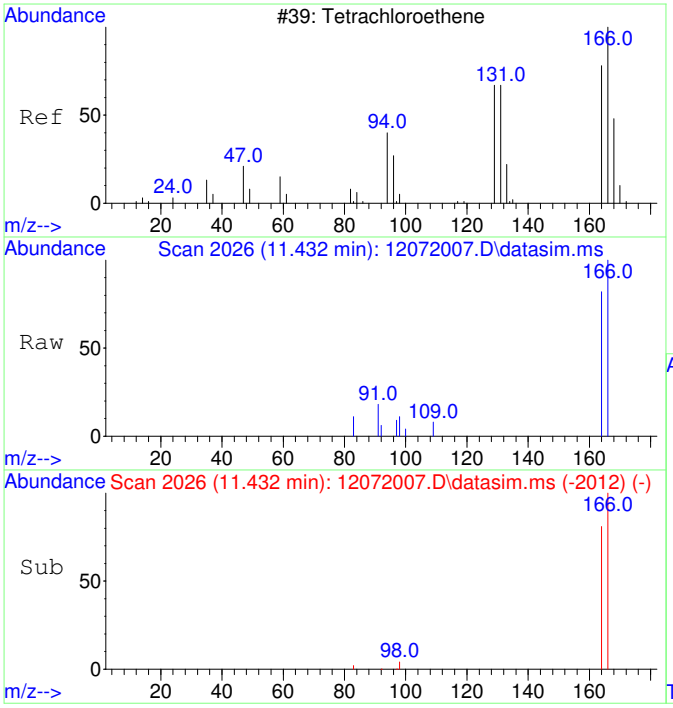


#14
1,1,2-Trichloroethane
Concen: 133.72 ug/L
RT: 11.233 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 97 Resp: 1884

Ion	Ratio	Lower	Upper
97	100		
83	86.1	51.2	111.2

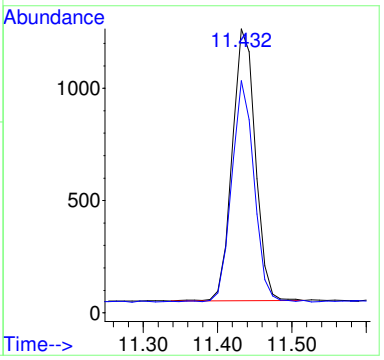


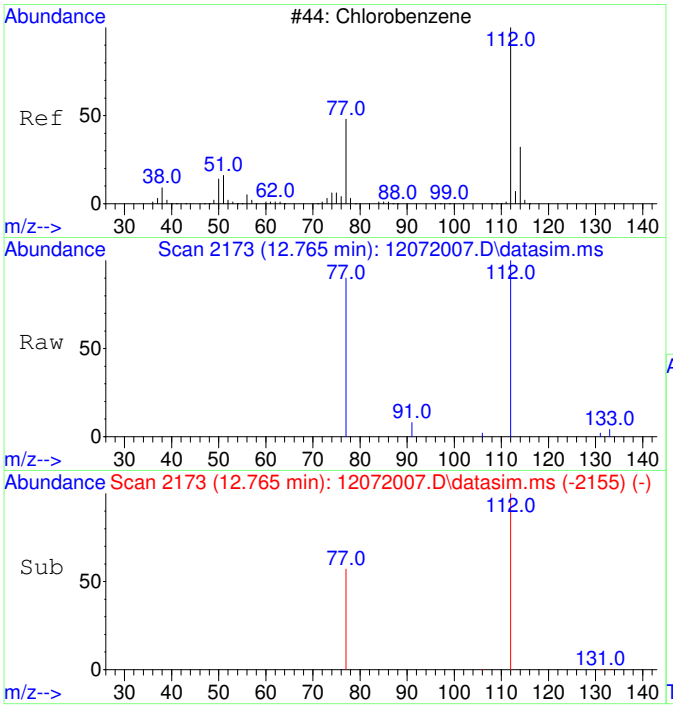


#15
Tetrachloroethene
Concen: 137.02 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:166 Resp: 2596

Ion	Ratio	Lower	Upper
166	100		
164	79.8	47.8	107.8

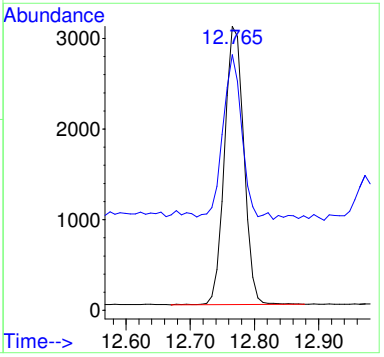


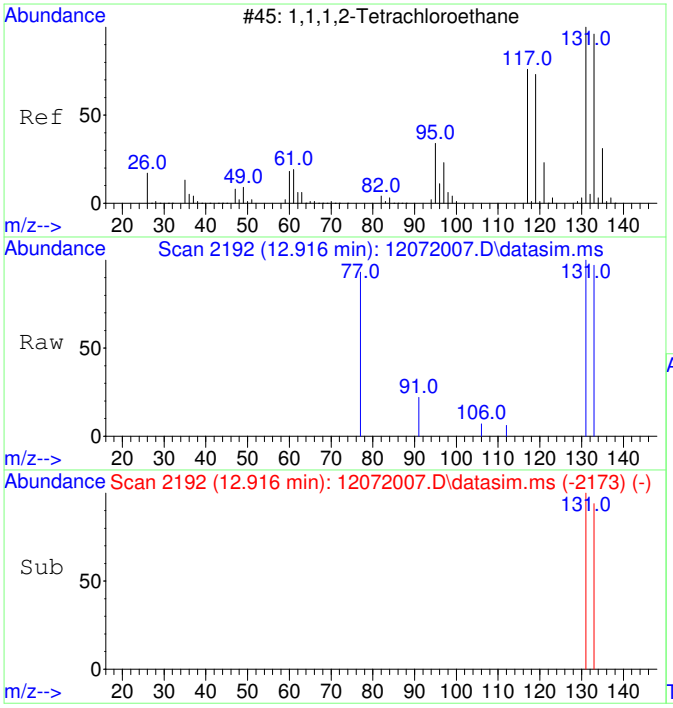


#16
Chlorobenzene
Concen: 135.22 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:112 Resp: 6372

Ion	Ratio	Lower	Upper
112	100		
77	59.1	23.6	83.6

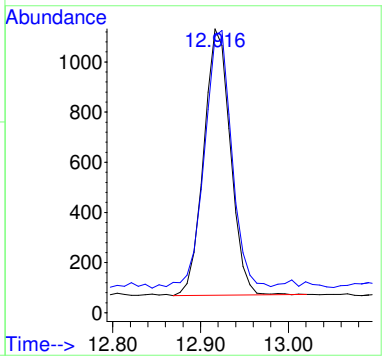


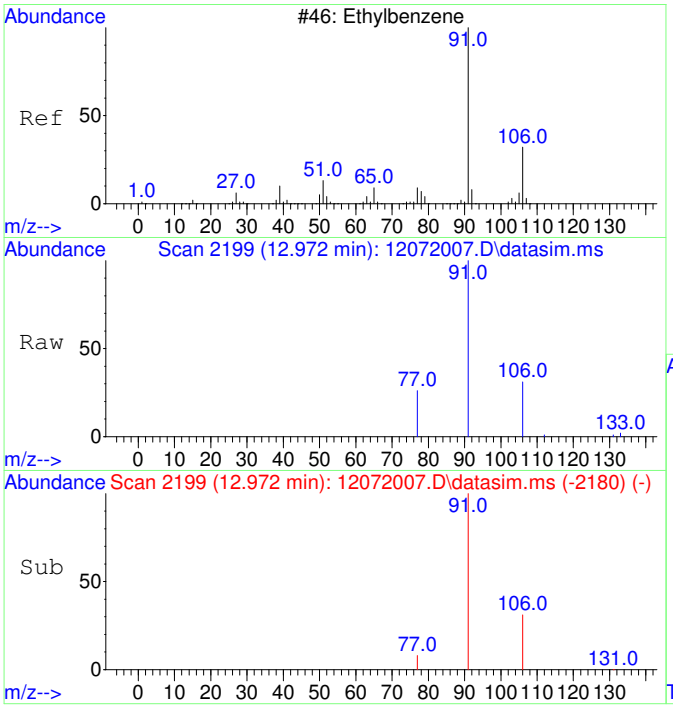


#17
1,1,1,2-Tetrachloroethane
Concen: 135.81 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:131 Resp: 2240

Ion	Ratio	Lower	Upper
131	100		
133	98.2	66.3	126.3

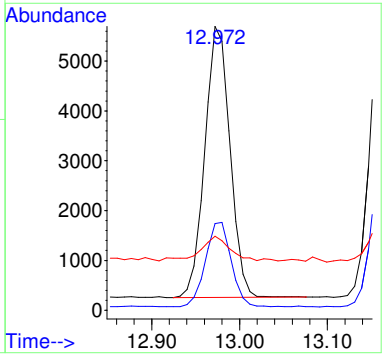


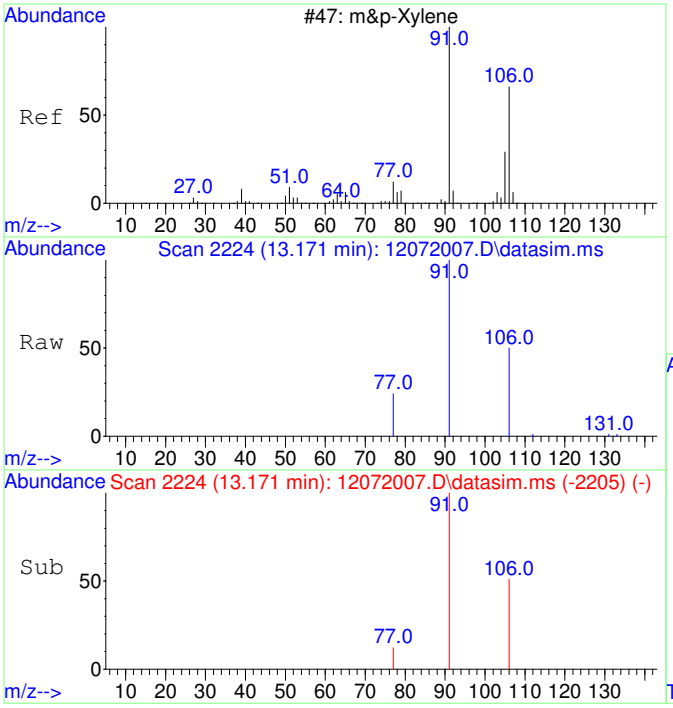


#18
Ethylbenzene
Concen: 139.93 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 10872

Ion	Ratio	Lower	Upper
91	100		
106	31.7	3.0	63.0
77	10.6	0.0	38.2

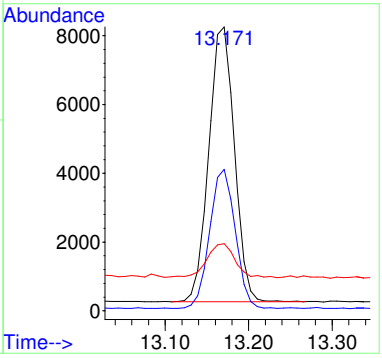


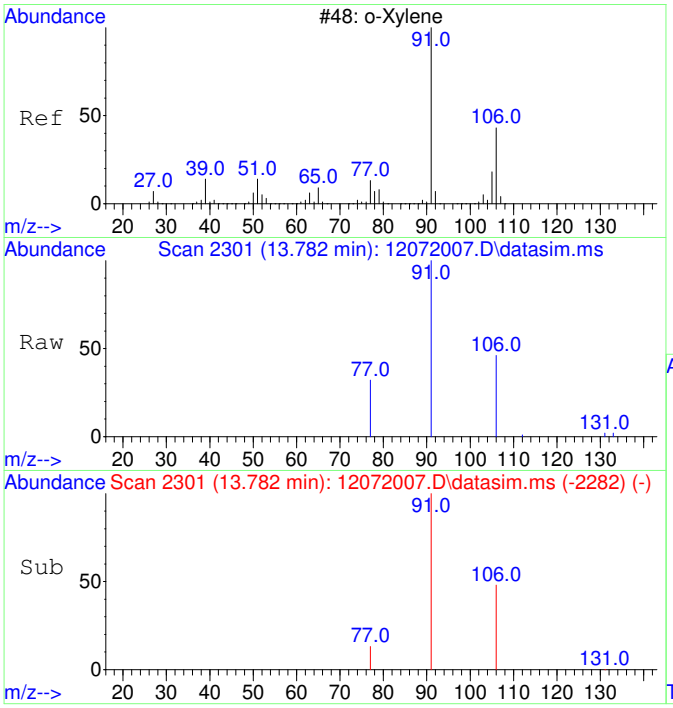


#19
m&p-Xylene
Concen: 285.38 ug/L
RT: 13.171 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 17074

Ion	Ratio	Lower	Upper
91	100		
106	50.4	22.2	82.2
77	13.6	0.0	42.4

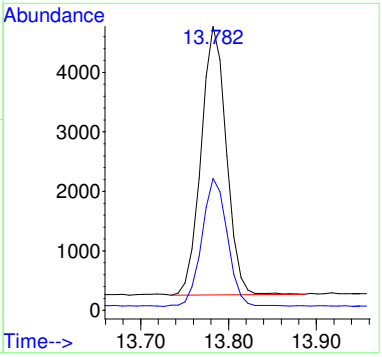


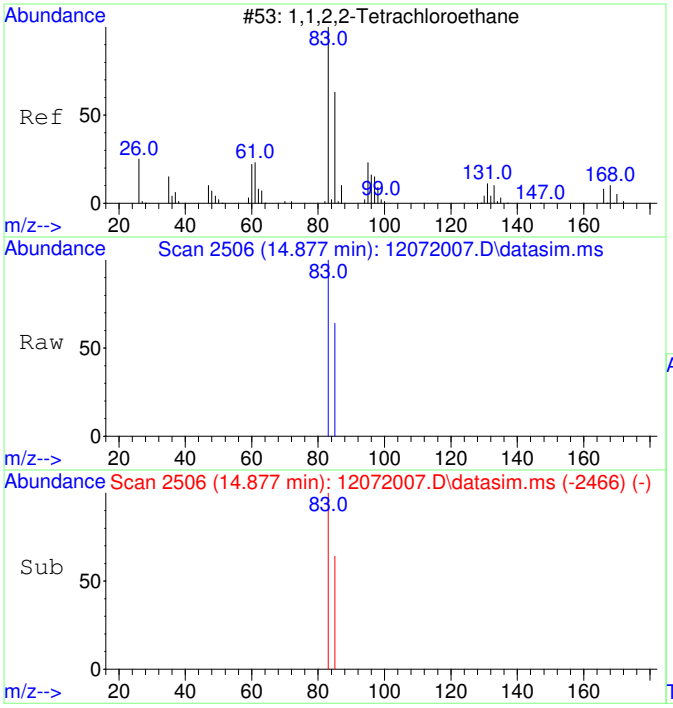


#20
o-Xylene
Concen: 140.07 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 9001

Ion	Ratio	Lower	Upper
91	100		
106	48.2	19.2	79.2

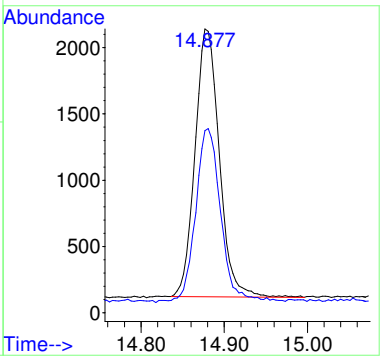


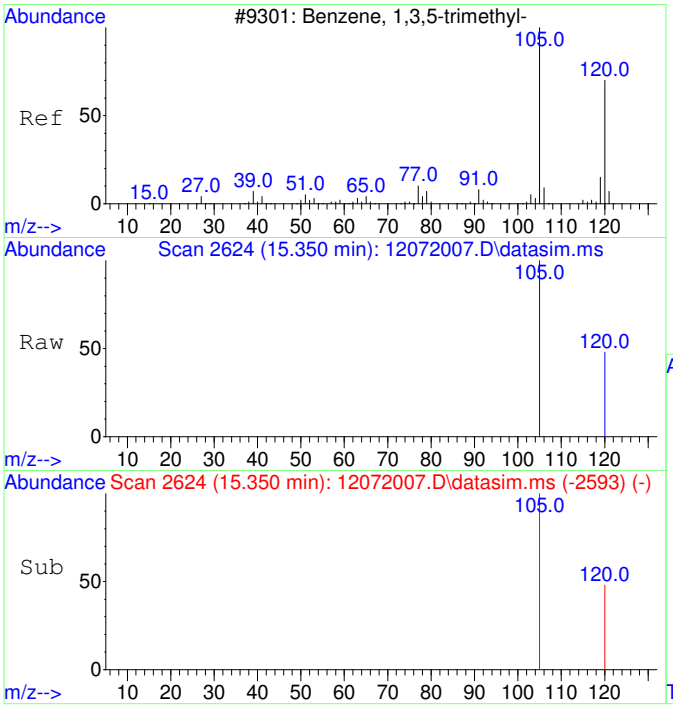


#21
1,1,2,2-Tetrachloroethane
Concen: 136.76 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. -0.003 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 83 Resp: 4095

Ion	Ratio	Lower	Upper
83	100		
85	63.8	34.8	94.8

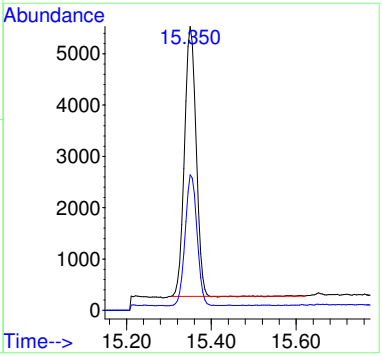


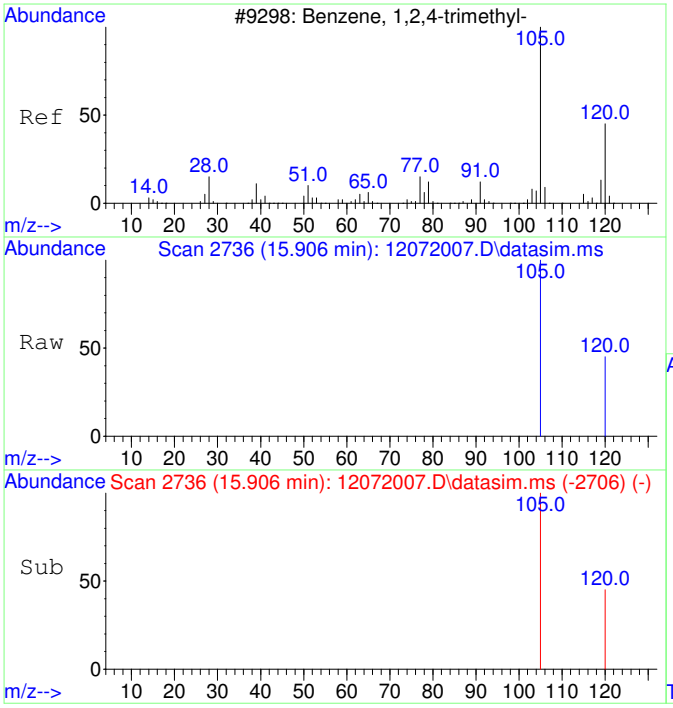


#22
1,3,5-Trimethylbenzene
Concen: 141.75 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:105 Resp: 10017

Ion	Ratio	Lower	Upper
105	100		
120	48.7	21.1	81.1

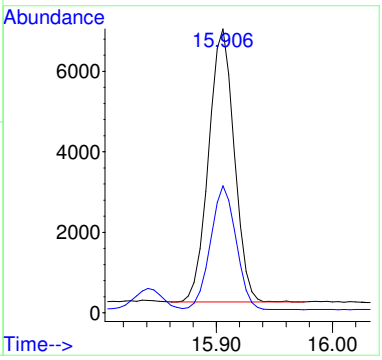


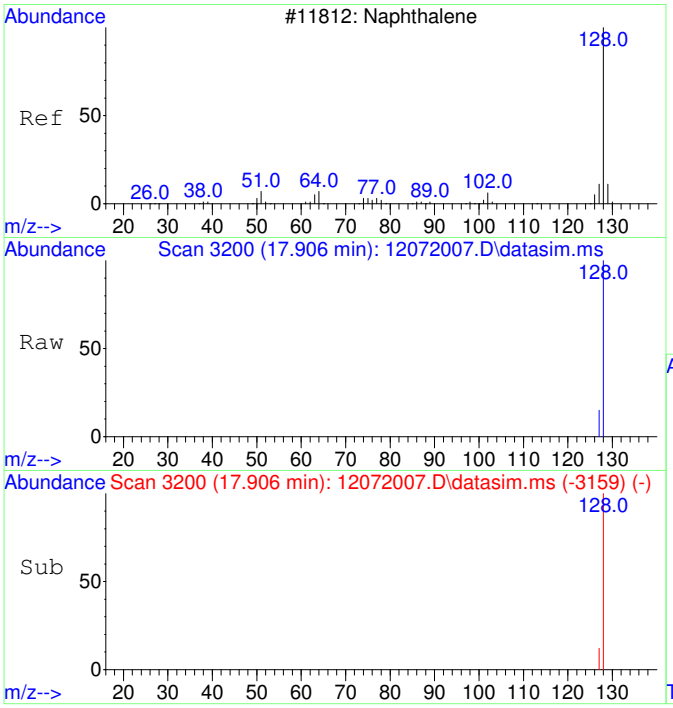


#23
1,2,4-Trimethylbenzene
Concen: 143.95 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:105 Resp: 10405

Ion	Ratio	Lower	Upper
105	100		
120	44.6	17.2	77.2

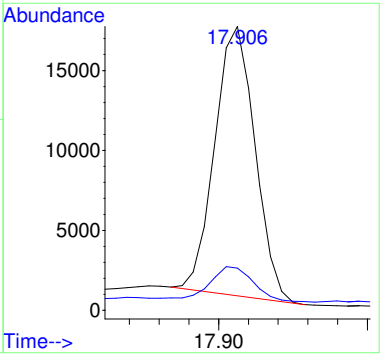


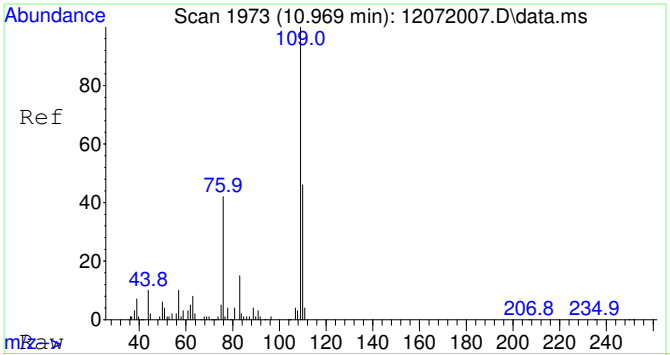


#24
Naphthalene
Concen: 132.61 ug/L
RT: 17.906 min Scan# 3200
Delta R.T. 0.003 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:128 Resp: 15689

Ion	Ratio	Lower	Upper
128	100		
127	12.2	0.0	42.5

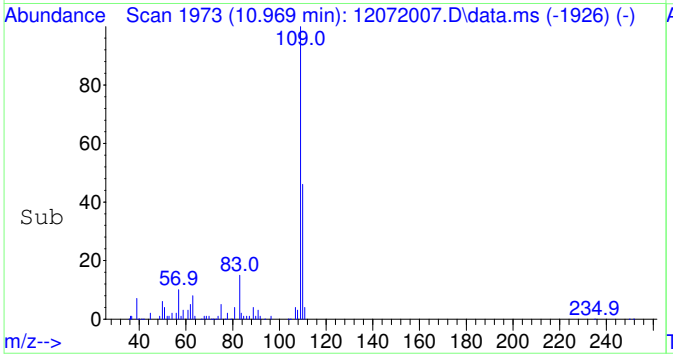


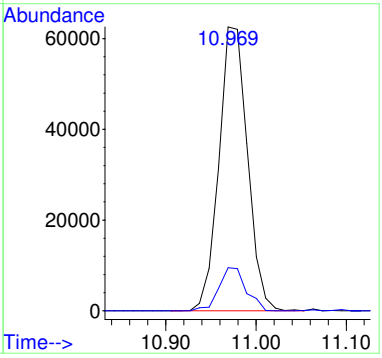


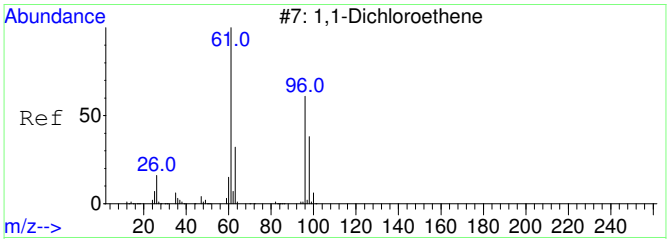
#25
2-Fluorotoluene SCAN
Concen: 4827.25 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

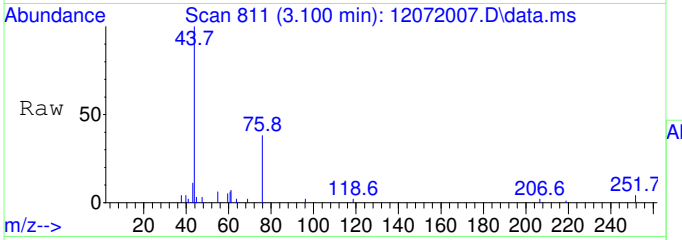
Tgt Ion:109 Resp: 138220

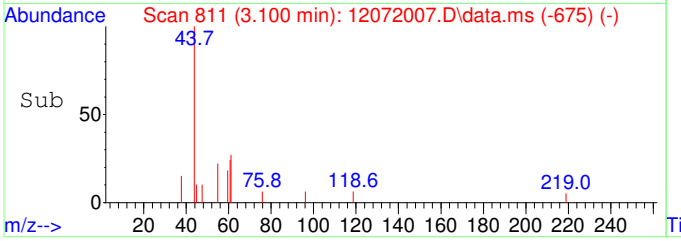
Ion	Ratio	Lower	Upper
109	100		
83	14.5	0.0	43.8







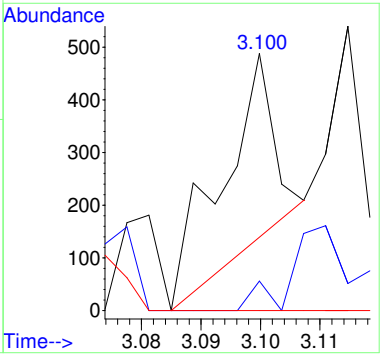


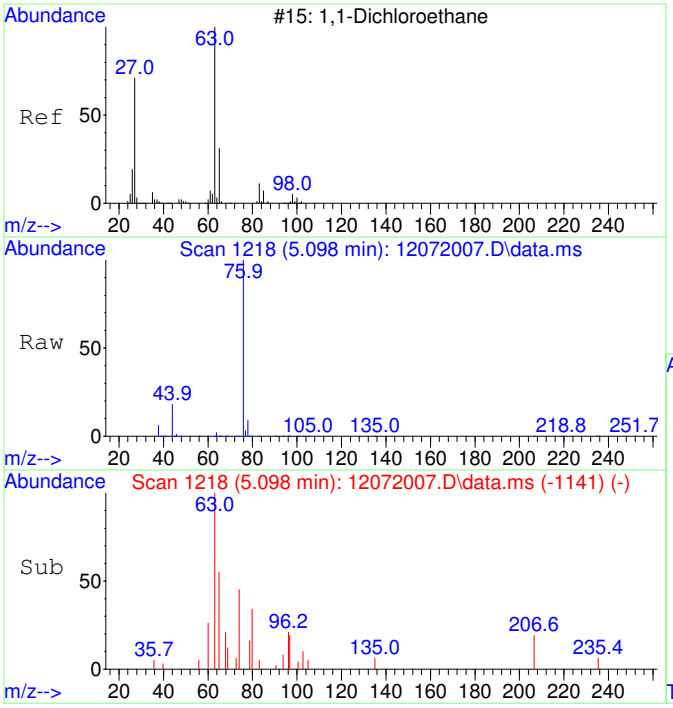


#26
1,1-Dichloroethene SCAN
Concen: 34.26 ug/L
RT: 3.100 min Scan# 811
Delta R.T. 0.004 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 61 Resp: 229

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

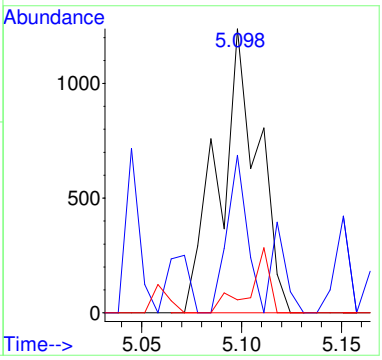


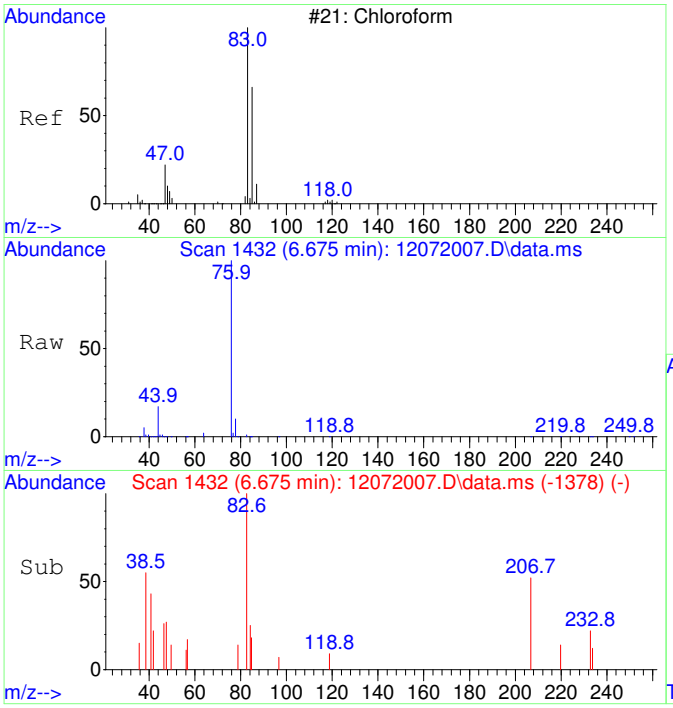


#28
1,1-Dichloroethane SCAN
Concen: 168.66 ug/L
RT: 5.098 min Scan# 1218
Delta R.T. 0.014 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 63 Resp: 1695

Ion	Ratio	Lower	Upper
63	100		
65	28.4	1.3	61.3
83	0.0	0.0	45.9

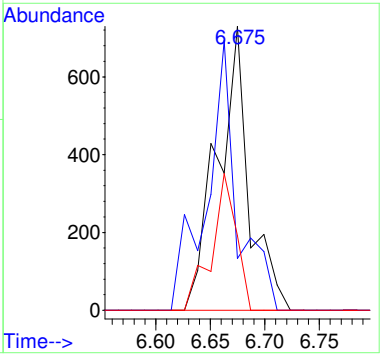


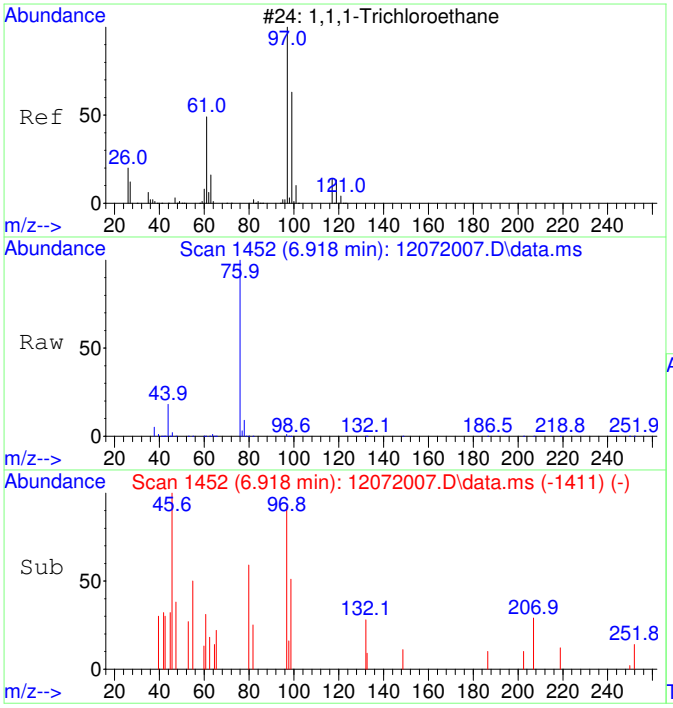


#30
Chloroform SCAN
Concen: 161.05 ug/L
RT: 6.675 min Scan# 1432
Delta R.T. 0.012 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 83 Resp: 1484

Ion	Ratio	Lower	Upper
83	100		
85	91.5	34.6	94.6
47	37.3	0.0	53.4

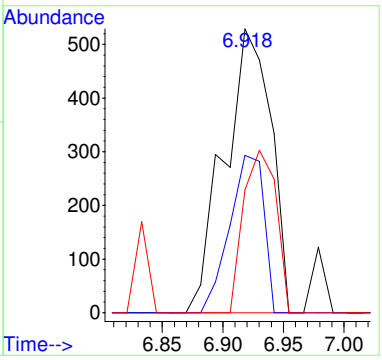


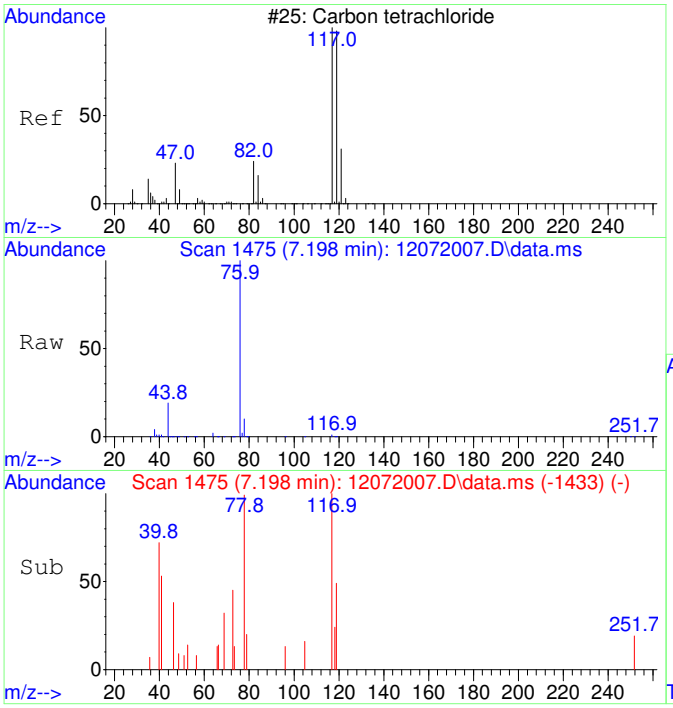


#31
1,1,1-Trichloroethane SCAN
Concen: 149.86 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 97 Resp: 1425

Ion	Ratio	Lower	Upper
97	100		
99	40.8	43.6	103.6#
61	40.0	18.0	78.0

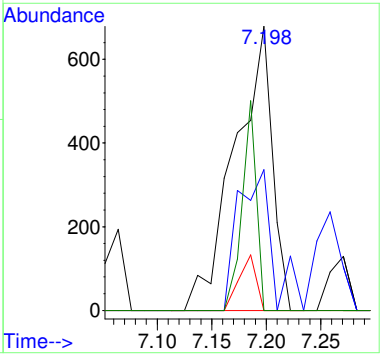


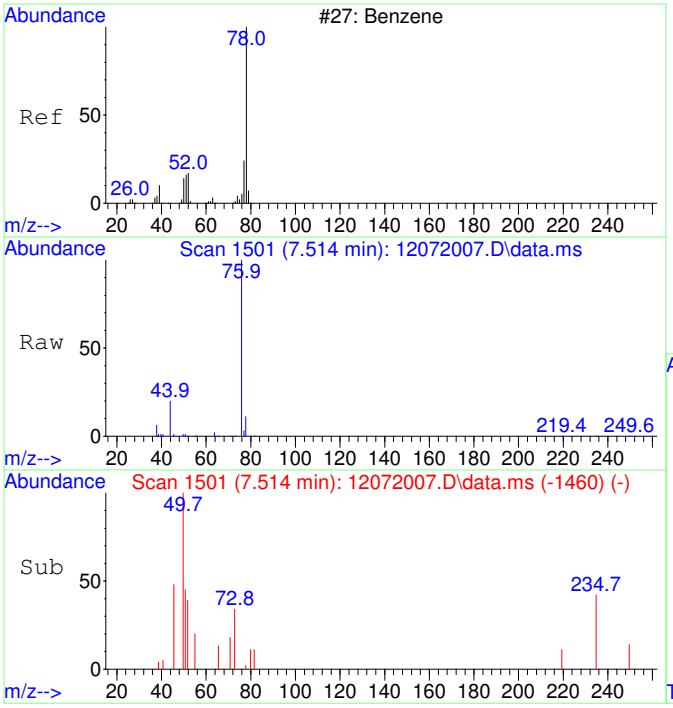


#32
Carbon tetrachloride SCAN
Concen: 200.47 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:117 Resp: 1629

Ion	Ratio	Lower	Upper
117	100		
119	45.5	75.5	135.5#
121	9.0	0.0	58.8
82	28.0	0.0	59.2

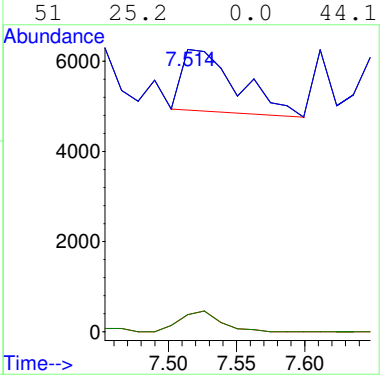


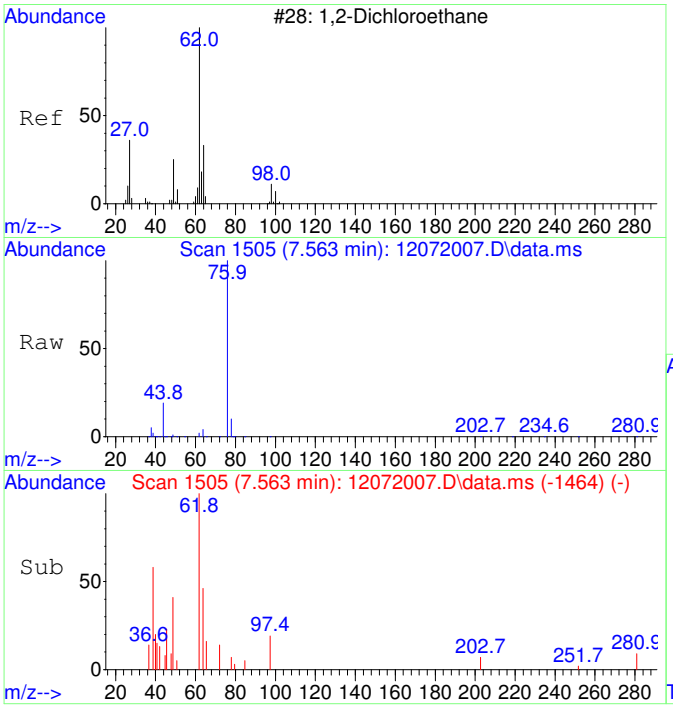


#33
Benzene SCAN
Concen: 132.09 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 78 Resp: 3800

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	25.2	0.0	47.9
51	25.2	0.0	44.1

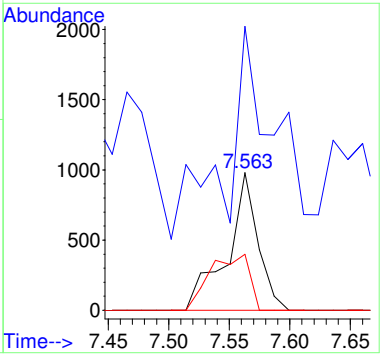


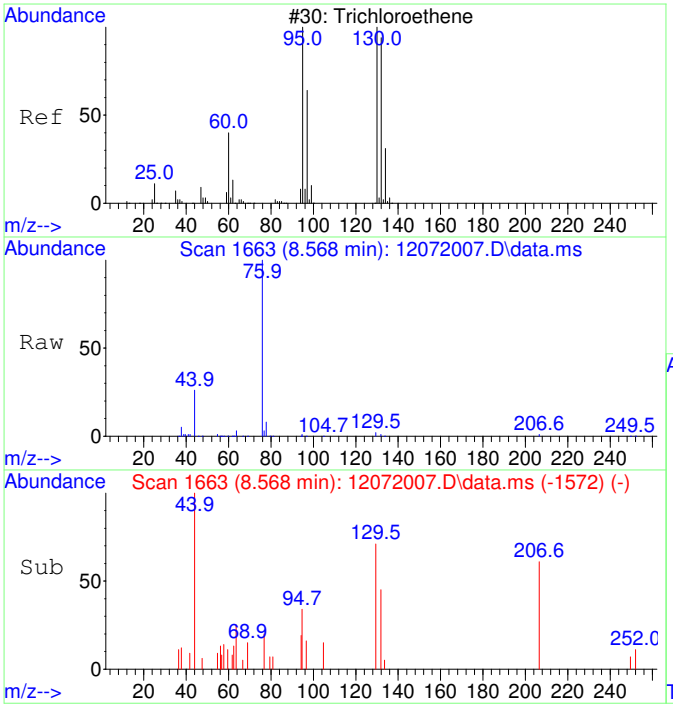


#34
1,2-Dichloroethane SCAN
Concen: 193.37 ug/L
RT: 7.563 min Scan# 1505
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 62 Resp: 1740

Ion	Ratio	Lower	Upper
62	100		
64	207.2	5.2	65.2#
49	52.0	3.9	63.9

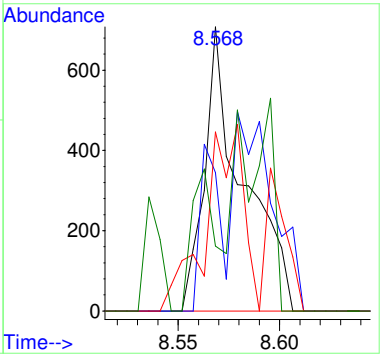


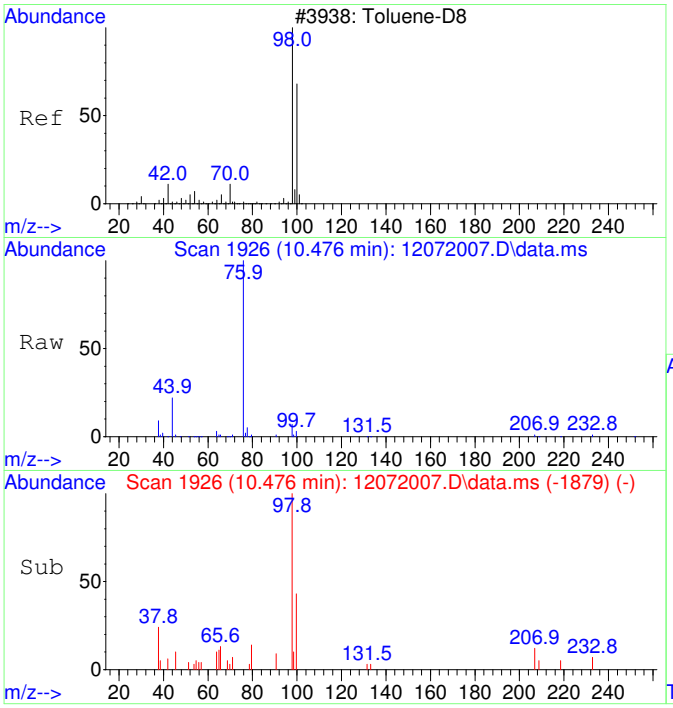


#35
Trichloroethene SCAN
Concen: 147.62 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.005 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:130 Resp: 926

Ion	Ratio	Lower	Upper
130	100		
95	25.4	60.5	120.5#
132	0.0	59.6	119.6#
97	22.9	28.2	88.2#

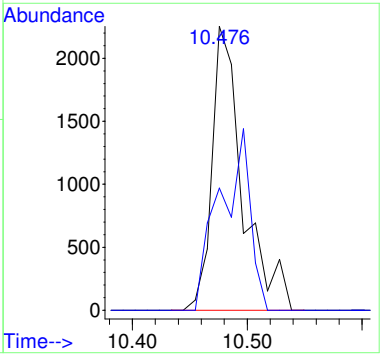


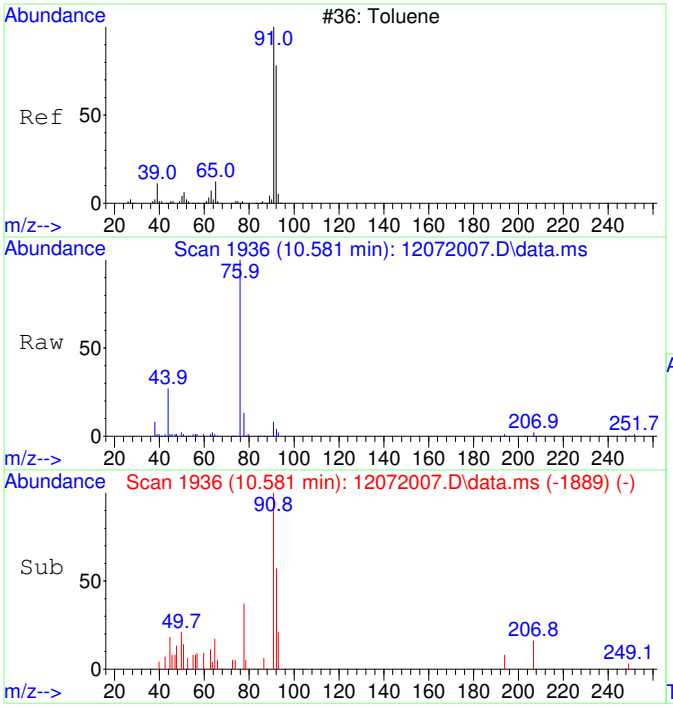


#36
Toluene-d8 SCAN
Concen: 155.54 ug/L
RT: 10.476 min Scan# 1926
Delta R.T. -0.010 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 98 Resp: 4177

Ion	Ratio	Lower	Upper
98	100		
100	0.0	40.0	100.0#

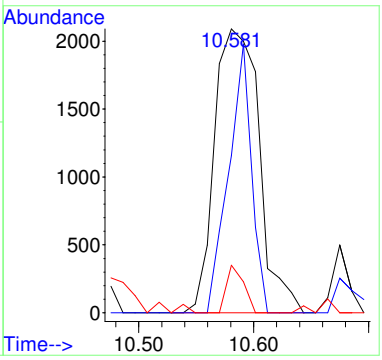


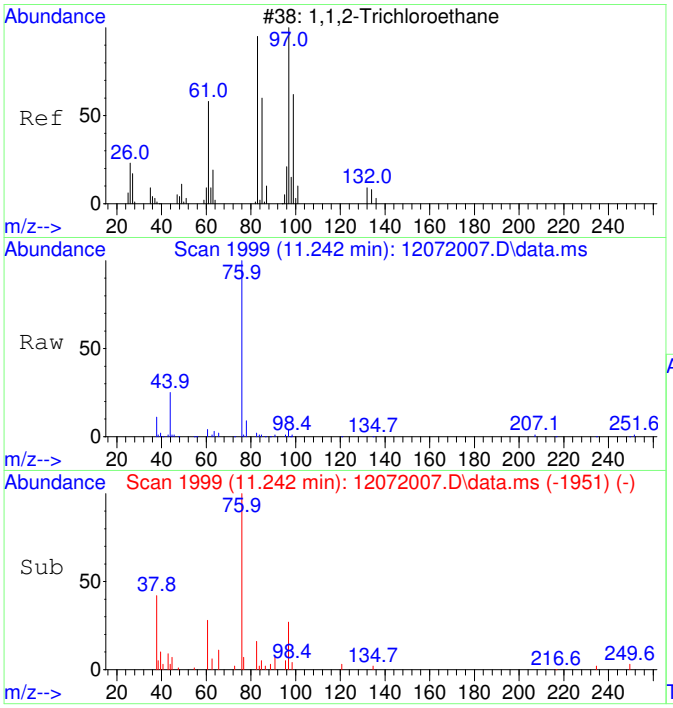


#37
Toluene SCAN
Concen: 171.27 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 5663

Ion	Ratio	Lower	Upper
91	100		
92	48.6	28.3	88.3
65	6.4	0.0	41.0

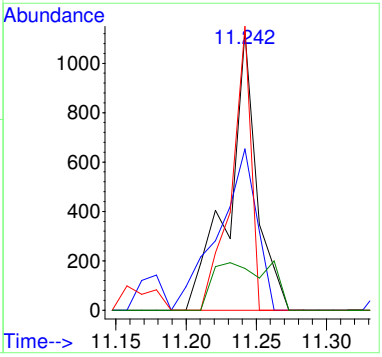


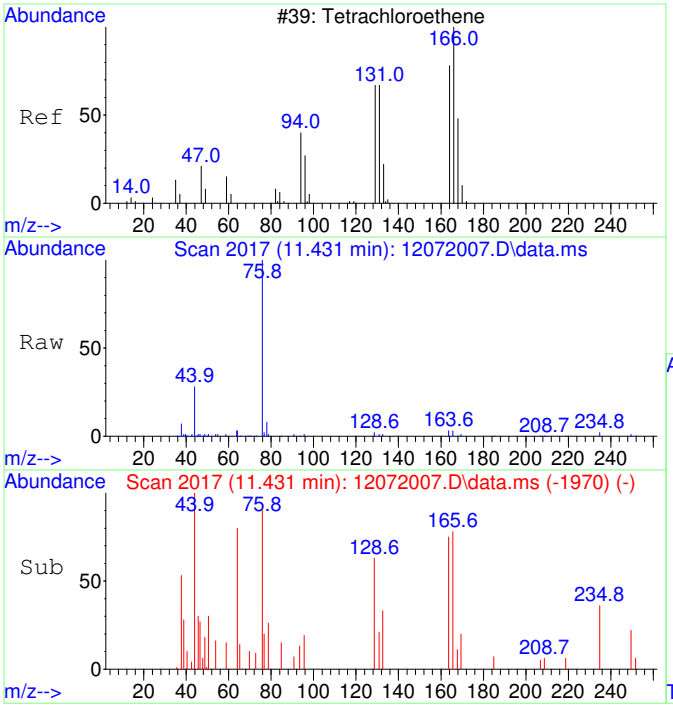


#38
1,1,2-Trichloroethane SCAN
Concen: 192.45 ug/L
RT: 11.242 min Scan# 1999
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 97 Resp: 1595

Ion	Ratio	Lower	Upper
97	100		
83	78.3	57.7	117.7
61	70.2	32.1	92.1
99	0.0	36.7	96.7#

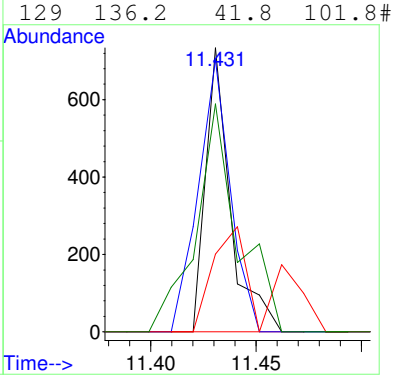


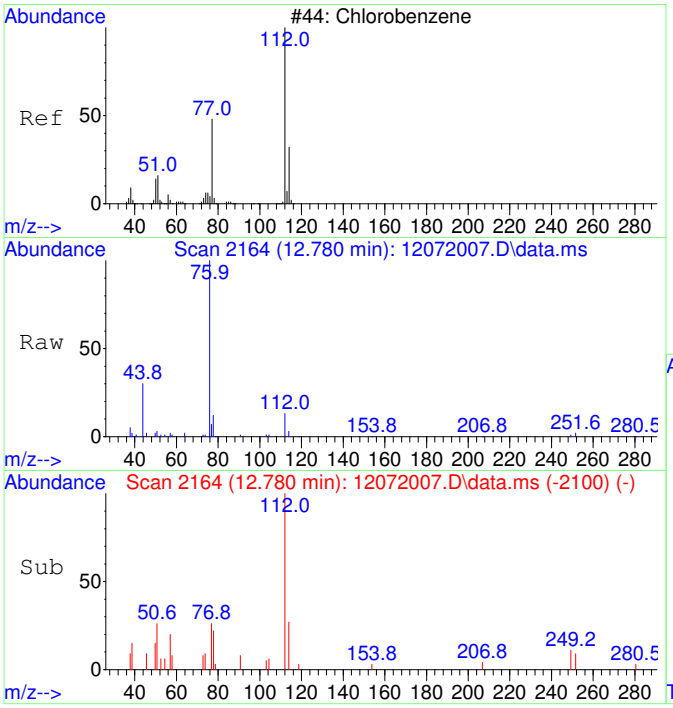


#39
Tetrachloroethene SCAN
Concen: 80.66 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. -0.010 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:166 Resp: 600

Ion	Ratio	Lower	Upper
166	100		
164	124.3	50.9	110.9#
131	78.3	38.7	98.7
129	136.2	41.8	101.8#

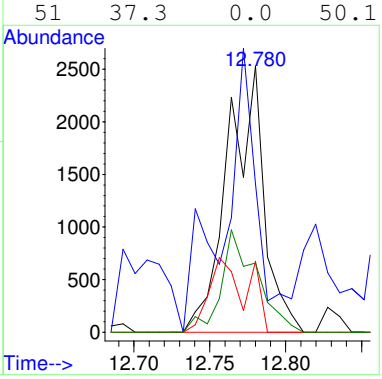


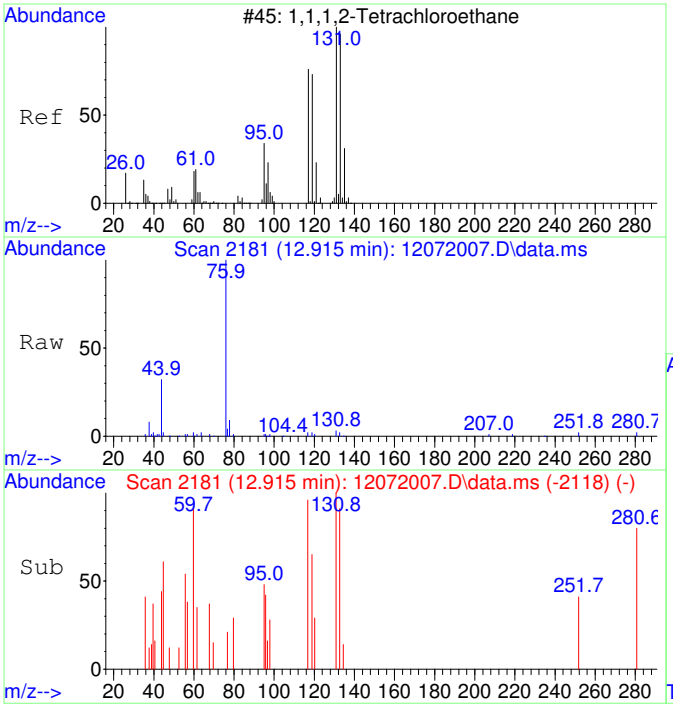


#40
Chlorobenzene SCAN
Concen: 179.38 ug/L
RT: 12.780 min Scan# 2164
Delta R.T. 0.008 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:112 Resp: 4260

Ion	Ratio	Lower	Upper
112	100		
77	83.0	28.2	88.2
114	0.0	2.3	62.3#
51	37.3	0.0	50.1

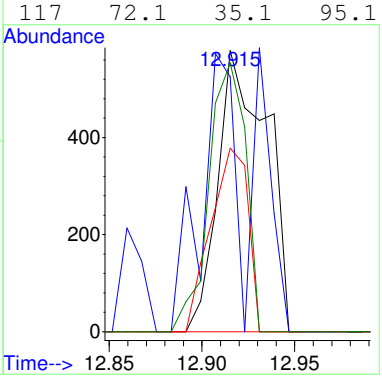


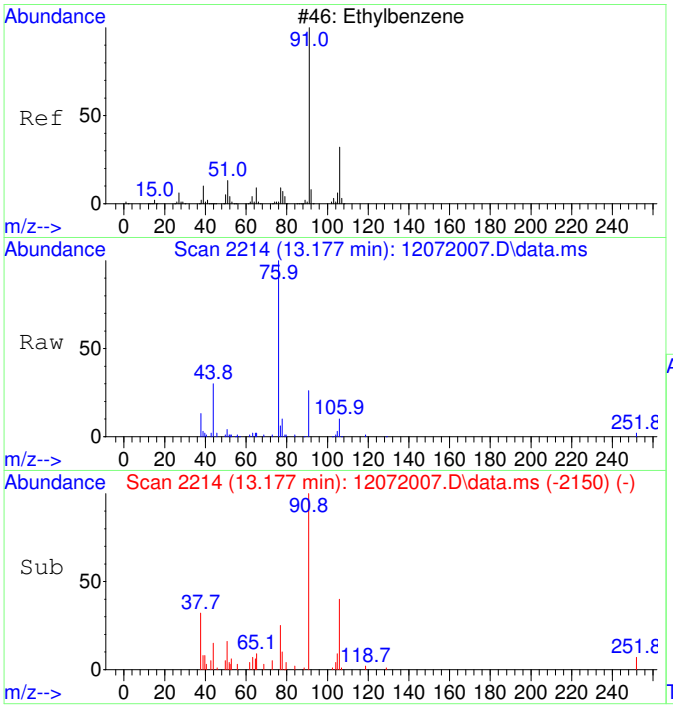


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 130.10 ug/L
RT: 12.915 min Scan# 2181
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:131 Resp: 1066

Ion	Ratio	Lower	Upper
131	100		
133	67.2	66.9	126.9
119	50.0	40.4	100.4
117	72.1	35.1	95.1

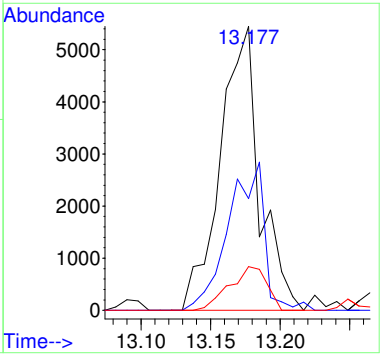


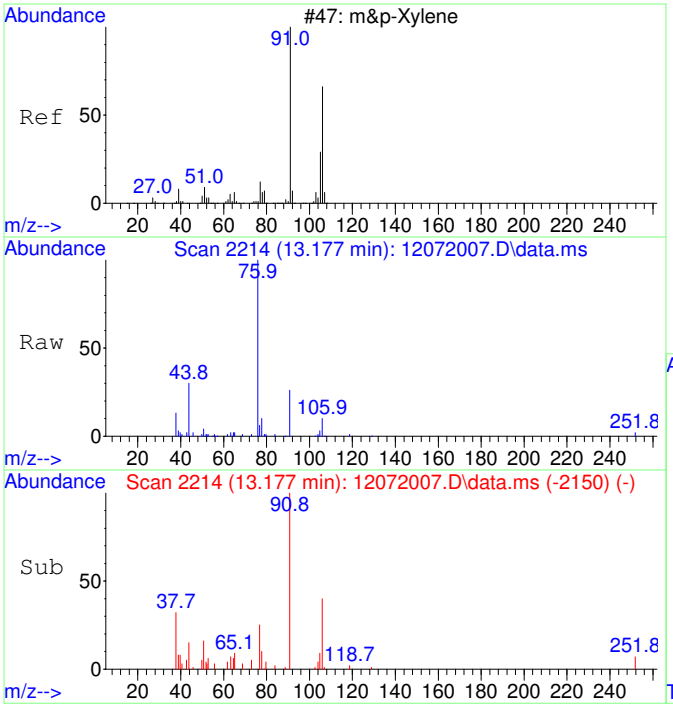


#42
Ethylbenzene SCAN
Concen: 169.70 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 10693

Ion	Ratio	Lower	Upper
91	100		
106	48.0	23.1	83.1
51	14.6	0.0	40.1

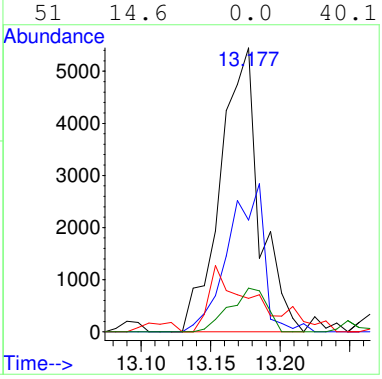


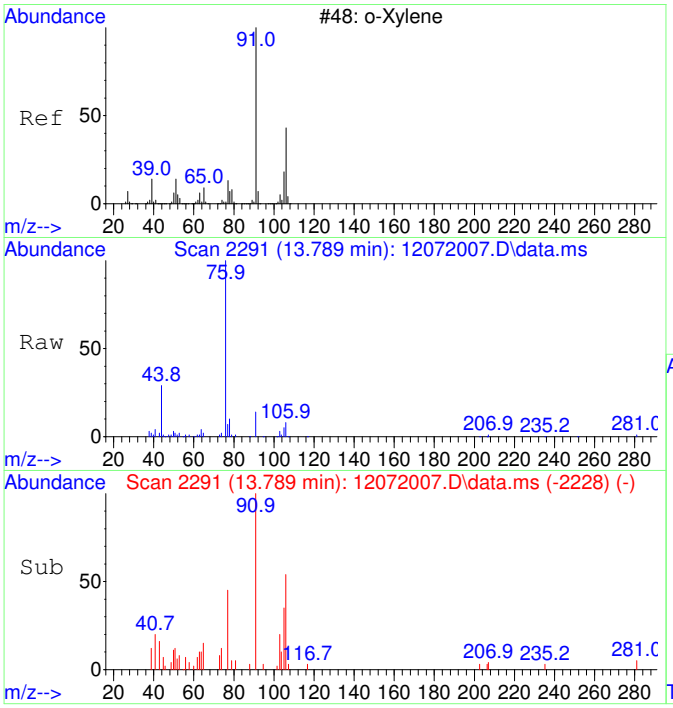


#43
m&p-Xylene SCAN
Concen: 169.70 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 10693

Ion	Ratio	Lower	Upper
91	100		
106	48.0	23.1	83.1
105	0.0	0.0	54.7
51	14.6	0.0	40.1

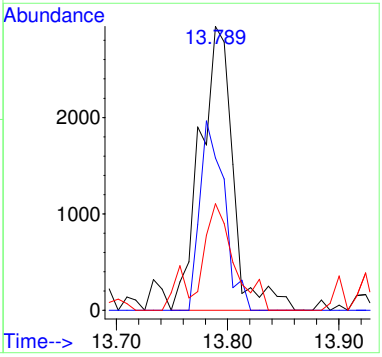


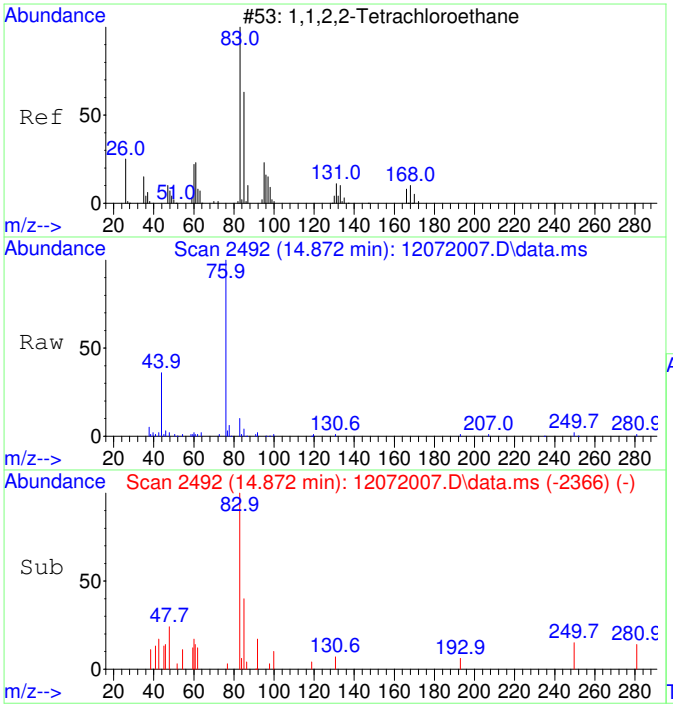


#44
o-Xylene SCAN
Concen: 176.50 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 6073

Ion	Ratio	Lower	Upper
91	100		
106	49.8	18.0	78.0
105	28.8	0.0	56.6

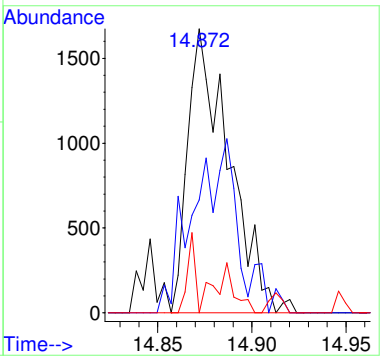


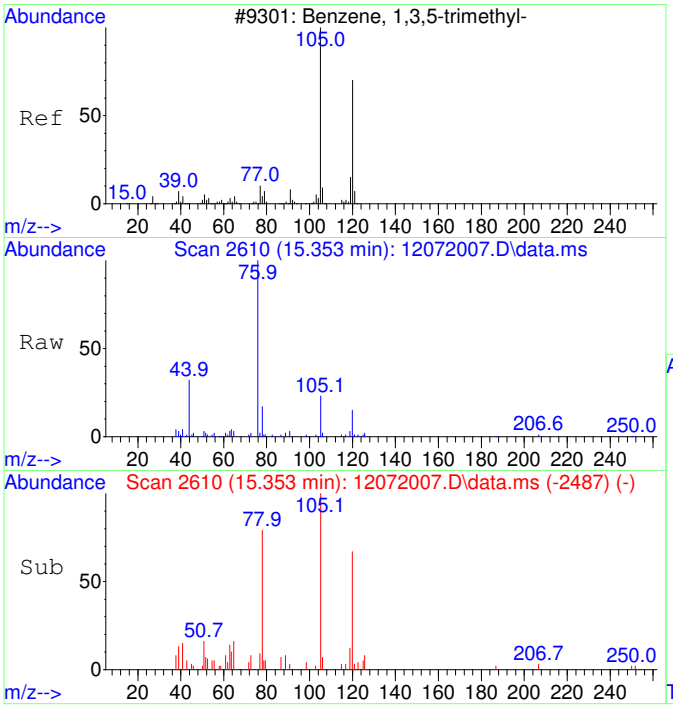


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 142.65 ug/L
RT: 14.872 min Scan# 2492
Delta R.T. -0.011 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 83 Resp: 2552

Ion	Ratio	Lower	Upper
83	100		
85	16.8	35.9	95.9#
95	4.7	0.0	47.4

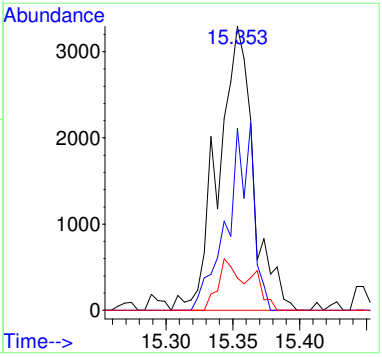


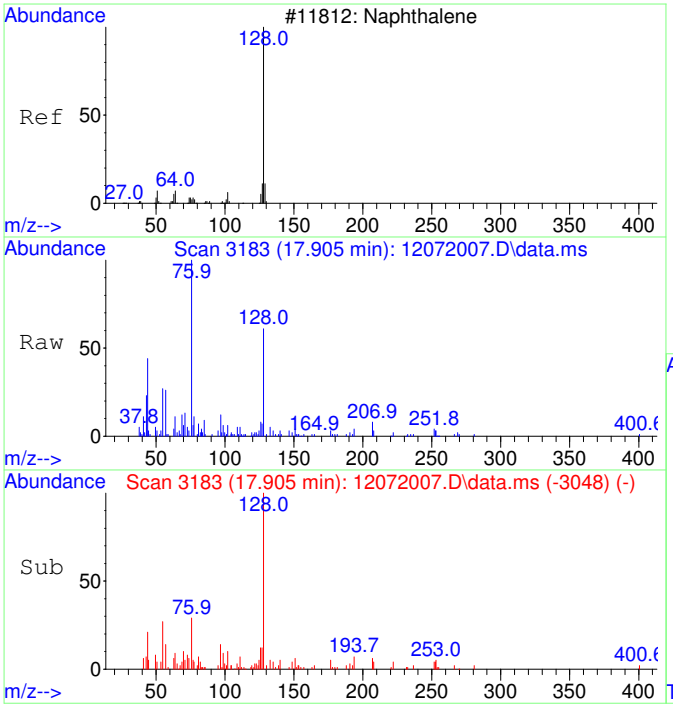


#46
1,3,5-Trimethylbenzene SCAN
Concen: 166.98 ug/L
RT: 15.353 min Scan# 2610
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:105 Resp: 6061

Ion	Ratio	Lower	Upper
105	100		
120	48.4	18.3	78.3
119	16.2	0.0	43.1

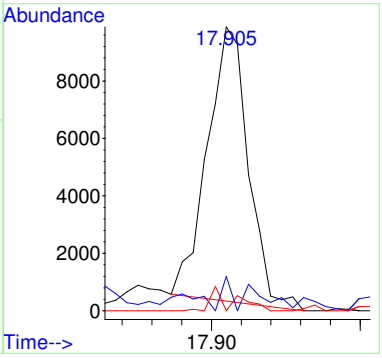




#48
Naphthalene SCAN
Concen: 163.35 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.003 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:128 Resp: 9093

Ion	Ratio	Lower	Upper
128	100		
127	2.9	0.0	44.0
129	2.2	0.0	40.8



S20L021-CAL6

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072008.D
Acq On : 7 Dec 2020 14:43
InstName : AG5975C
Operator : TD
Sample : S20L021-CAL6
Misc : 2030073 0.05 mg/L
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 06:07:11 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:05:27 2020
Response via : Initial Calibration

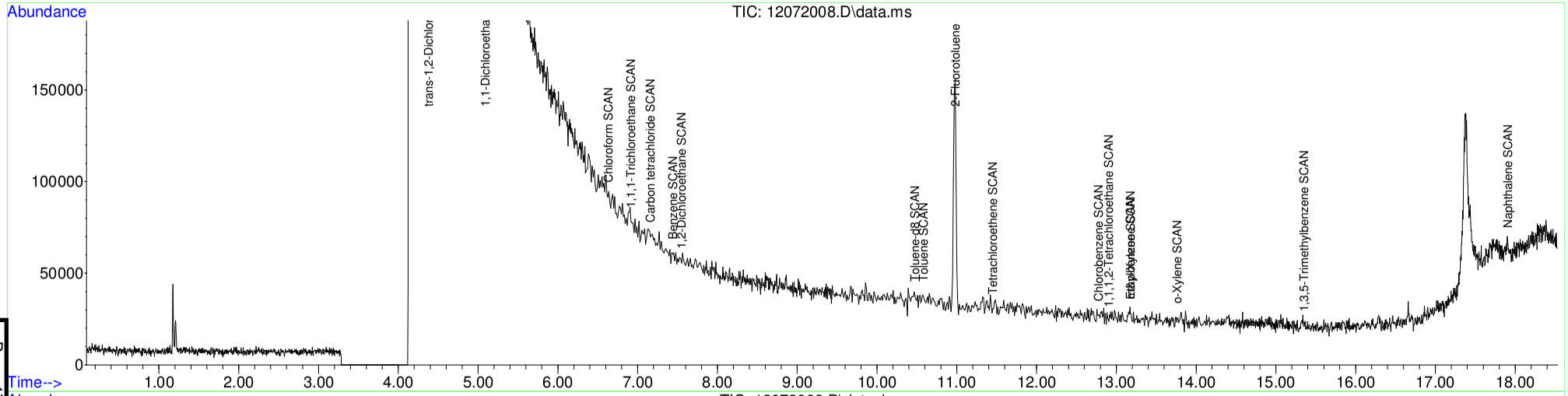
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	187138	5000.00	ug/L	-0.01
System Monitoring Compounds						
12) Toluene-d8	10.487	98	1770	48.84	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 0.98%#			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.090	61	810	109.52	ug/L #	37
3] trans-1,2-Dichloroethene	4.369	61	498	53.24	ug/L	86
4] 1,1-Dichloroethane	5.079	63	607	54.33	ug/L	88
5] cis-1,2-Dichloroethene	6.088	61	614	53.06	ug/L	92
6] Chloroform	6.652	83	614	55.24	ug/L	97
7] 1,1,1-Trichloroethane	6.919	97	620	51.93	ug/L	91
8] Carbon tetrachloride	7.187	117	577	50.55	ug/L	92
9] Benzene	7.515	78	1867	59.29	ug/L	77
10] 1,2-Dichloroethane	7.552	62	560	52.13	ug/L #	1
11] Trichloroethene	8.575	130	486	48.88	ug/L	92
13] Toluene	10.582	91	2356	52.21	ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	506	48.41	ug/L	81
15] Tetrachloroethene	11.432	166	668	47.52	ug/L	94
16] Chlorobenzene	12.765	112	1728	49.43	ug/L	91
17] 1,1,1,2-Tetrachloroethane	12.916	131	601	49.12	ug/L	98
18] Ethylbenzene	12.972	91	2907	50.43	ug/L	96
19] m&p-Xylene	13.170	91	4690	105.66	ug/L	95
20] o-Xylene	13.782	91	2438	51.14	ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.880	83	1116	50.24	ug/L	99
22] 1,3,5-Trimethylbenzene	15.350	105	2738	52.23	ug/L	93
23] 1,2,4-Trimethylbenzene	15.906	105	2866	53.45	ug/L	96
24] Naphthalene	17.906	128	3948	47.08	ug/L	98
25) 2-Fluorotoluene SCAN	10.979	109	96904	4561.89	ug/L	95
27) trans-1,2-Dichloroethe...	4.374	61	187	29.61	ug/L #	17
28) 1,1-Dichloroethane SCAN	5.084	63	244	32.73	ug/L #	41
30) Chloroform SCAN	6.626	83	556	81.33	ug/L #	27
31) 1,1,1-Trichloroethane ...	6.918	97	369	52.31	ug/L #	58
32) Carbon tetrachloride SCAN	7.161	117	602	99.86	ug/L #	25
33) Benzene SCAN	7.441	78	4687	219.62	ug/L	93
34) 1,2-Dichloroethane SCAN	7.550	62	414	62.02	ug/L #	57
36) Toluene-d8 SCAN	10.475	98	1073	53.86	ug/L	84
37) Toluene SCAN	10.580	91	1855	75.62	ug/L #	79
39) Tetrachloroethene SCAN	11.451	166	469	84.99	ug/L #	54
40) Chlorobenzene SCAN	12.772	112	416	23.61	ug/L #	55
41) 1,1,1,2-Tetrachloroeth...	12.907	131	516	84.89	ug/L #	18
42) Ethylbenzene SCAN	13.177	91	2897	61.97	ug/L	82
43) m&p-Xylene SCAN	13.177	91	2897	61.97	ug/L	81
44) o-Xylene SCAN	13.765	91	1791	70.17	ug/L #	51
46) 1,3,5-Trimethylbenzene...	15.353	105	930	34.54	ug/L	88
48) Naphthalene SCAN	17.905	128	2901	70.25	ug/L	74

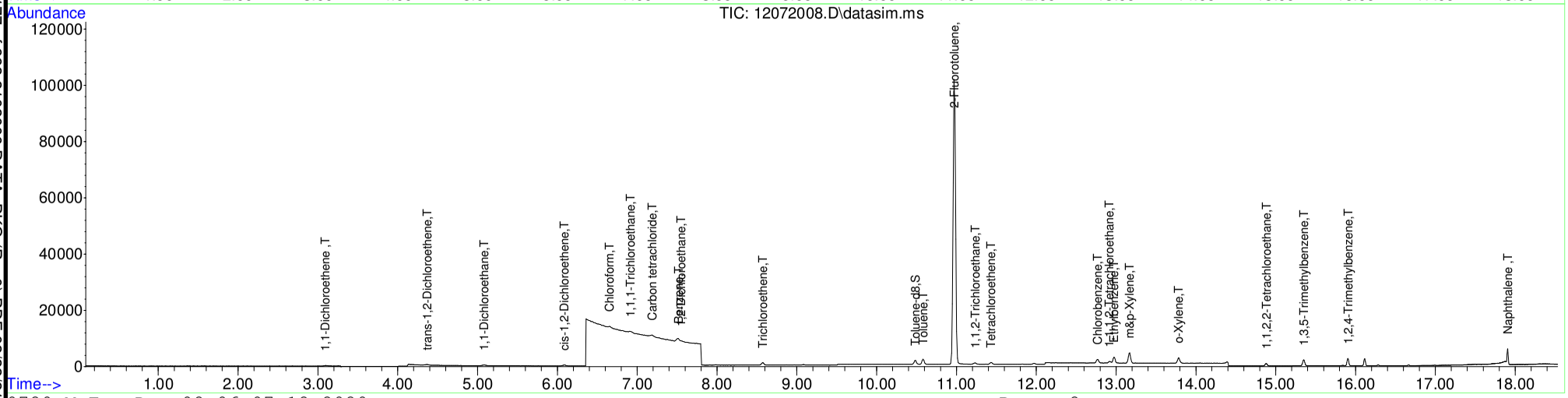
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072008.D
Acq On : 7 Dec 2020 14:43
InstName : AG5975C
Operator : TD
Sample : S20L021-CAL6
Misc : 2030073 0.05 mg/L
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 06:07:11 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:05:27 2020
Response via : Initial Calibration





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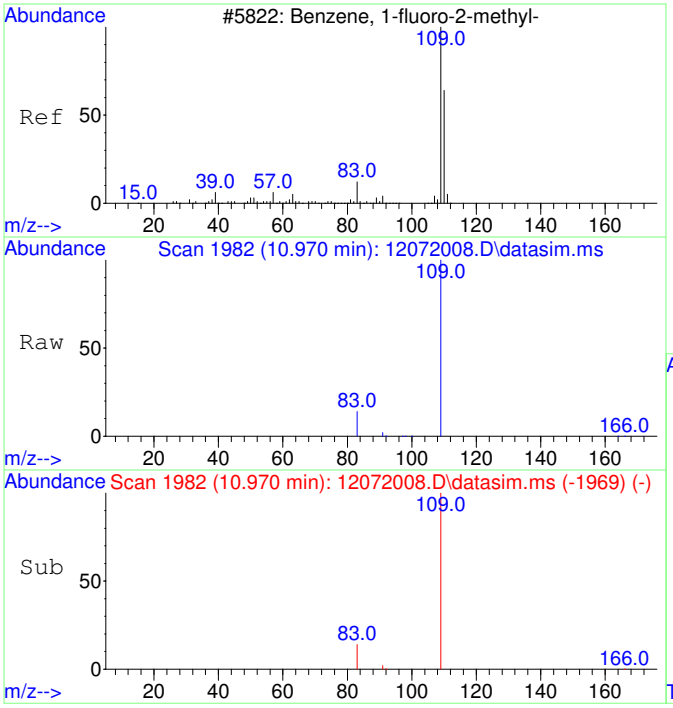
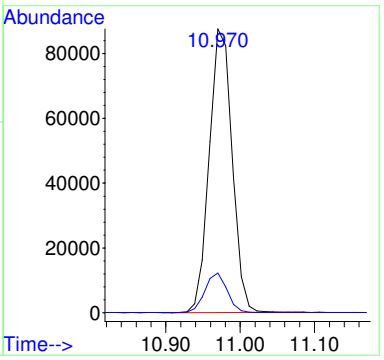
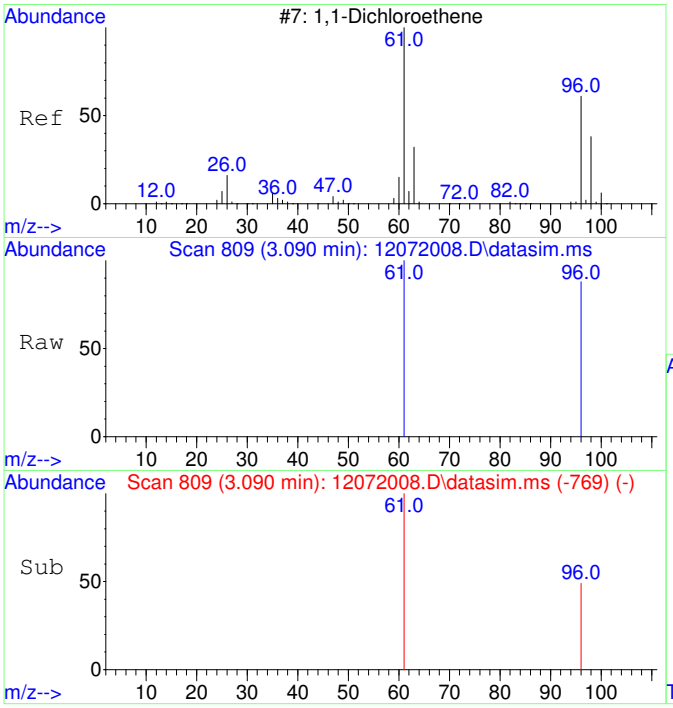


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:109 Resp: 187138

Ion	Ratio	Lower	Upper
109	100		
83	13.4	0.0	42.3

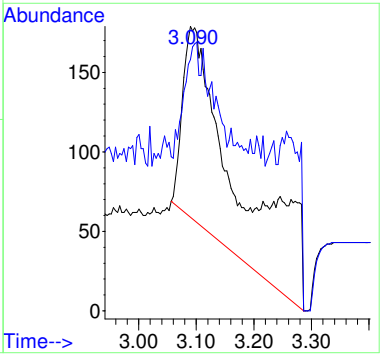




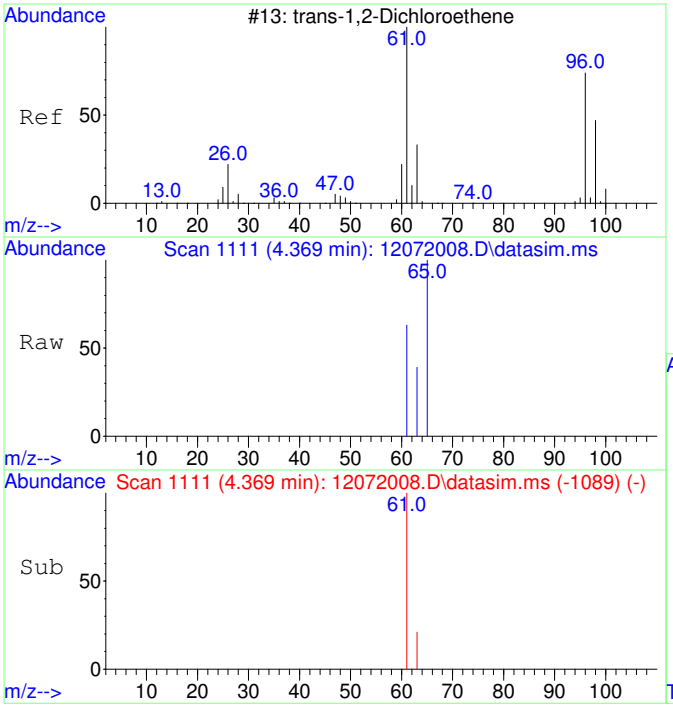
#2
1,1-Dichloroethene
Concen: 109.52 ug/L
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 61 Resp: 810

Ion	Ratio	Lower	Upper
61	100		
96	16.8	37.2	97.2#



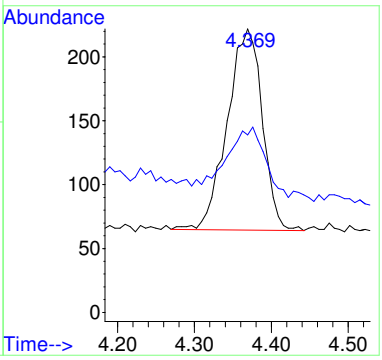
Before MI:
IMPROPER
BASELINE

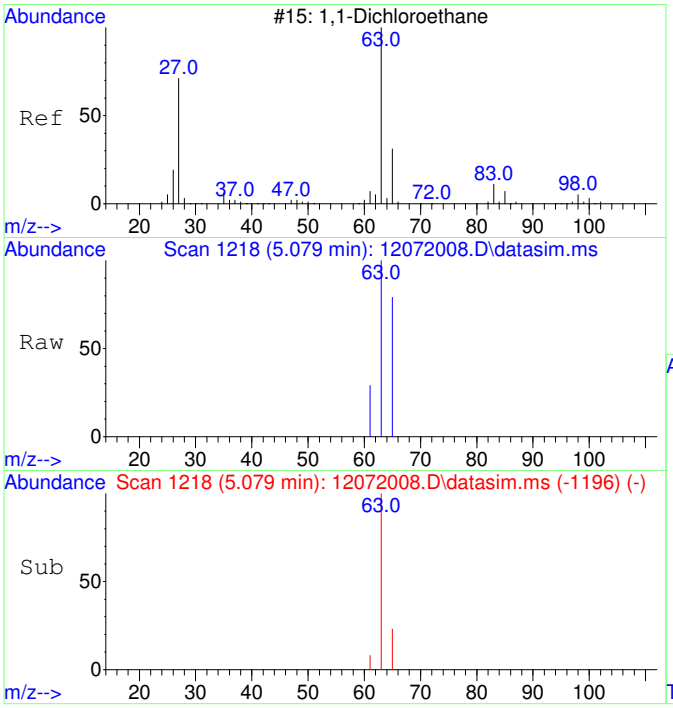


#3
trans-1,2-Dichloroethene
Concen: 53.24 ug/L
RT: 4.369 min Scan# 1111
Delta R.T. -0.007 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 61 Resp: 498

Ion	Ratio	Lower	Upper
61	100		
63	40.2	2.4	62.4

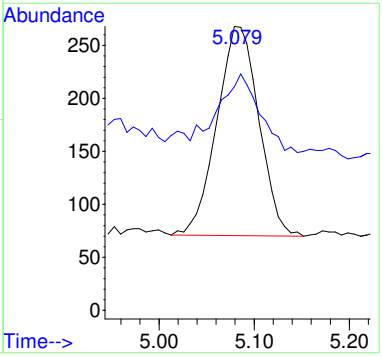


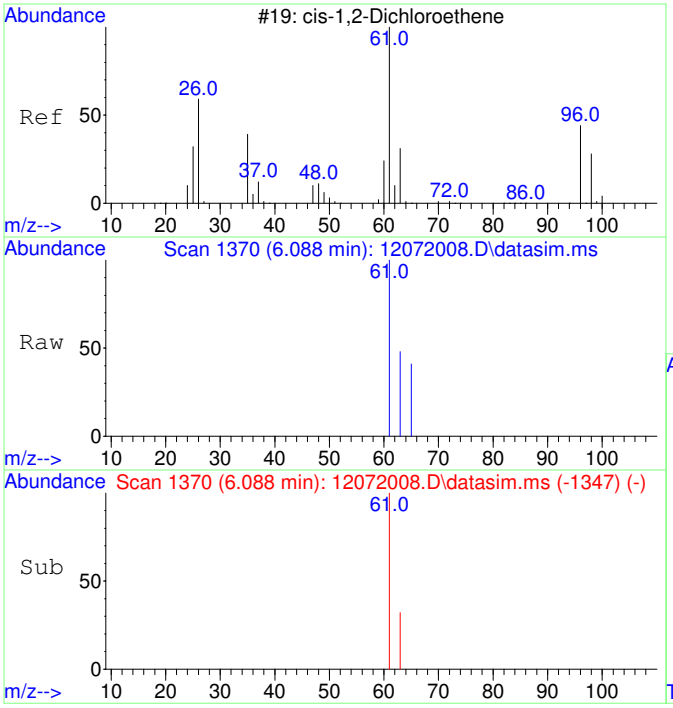


#4
1,1-Dichloroethane
Concen: 54.33 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.007 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 63 Resp: 607

Ion	Ratio	Lower	Upper
63	100		
65	38.6	1.8	61.8

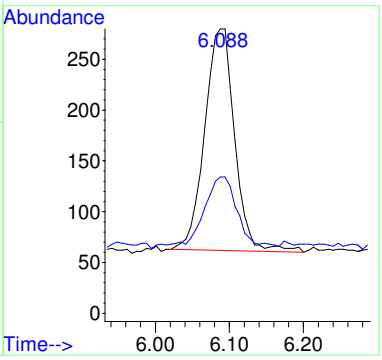


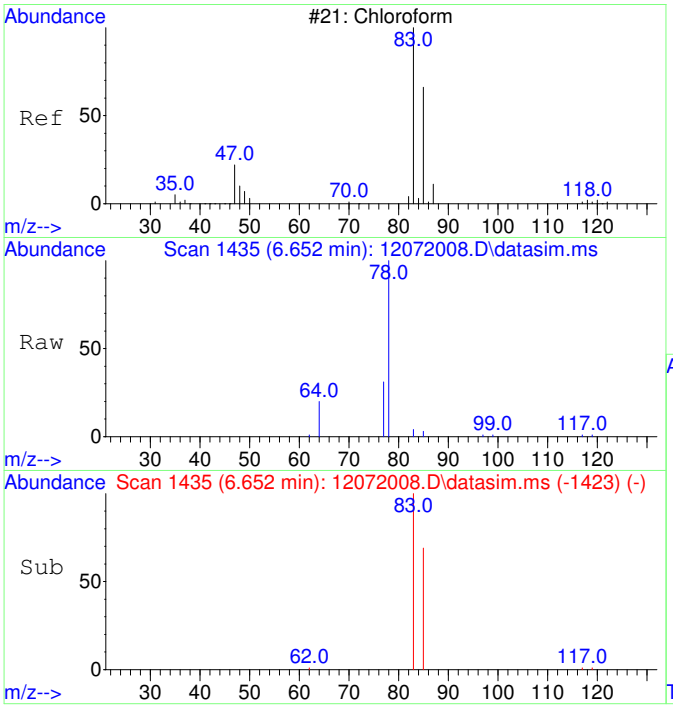


#5
cis-1,2-Dichloroethene
Concen: 53.06 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 61 Resp: 614

Ion	Ratio	Lower	Upper
61	100		
63	36.8	2.5	62.5

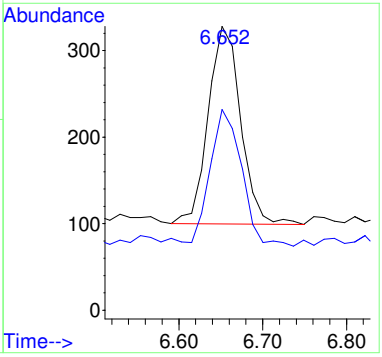


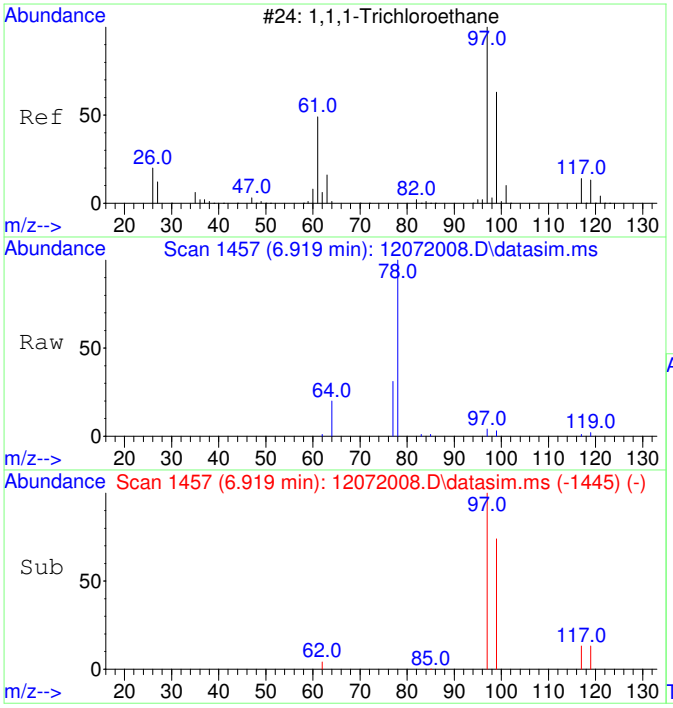


#6
Chloroform
Concen: 55.24 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 83 Resp: 614

Ion	Ratio	Lower	Upper
83	100		
85	67.1	35.1	95.1

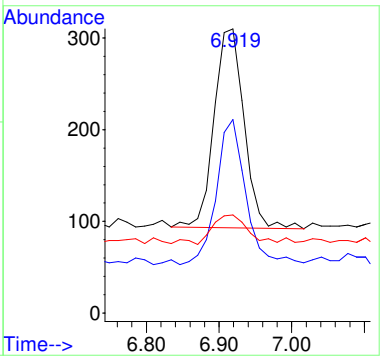


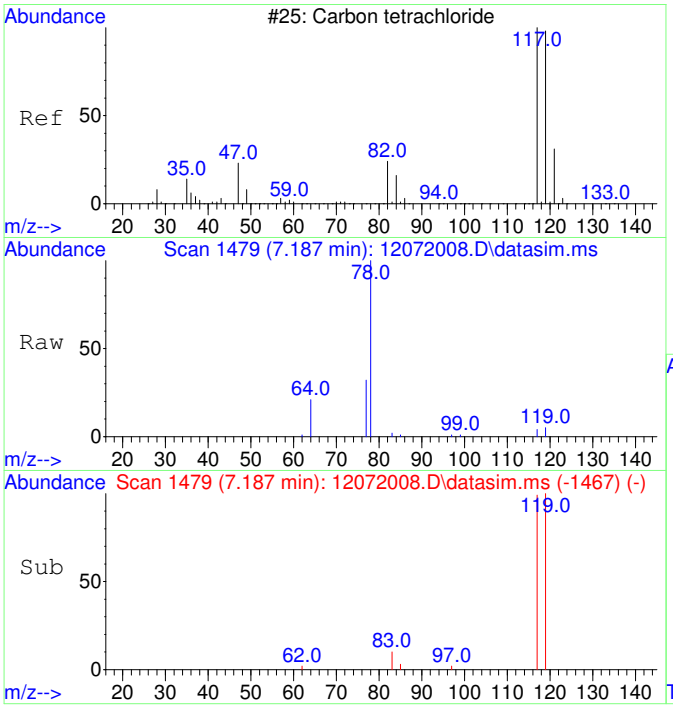


#7
1,1,1-Trichloroethane
Concen: 51.93 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 97 Resp: 620

Ion	Ratio	Lower	Upper
97	100		
99	71.5	34.6	94.6
117	16.8	0.0	43.2

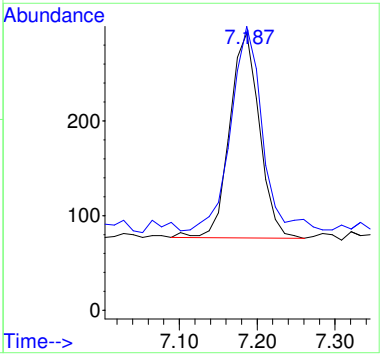


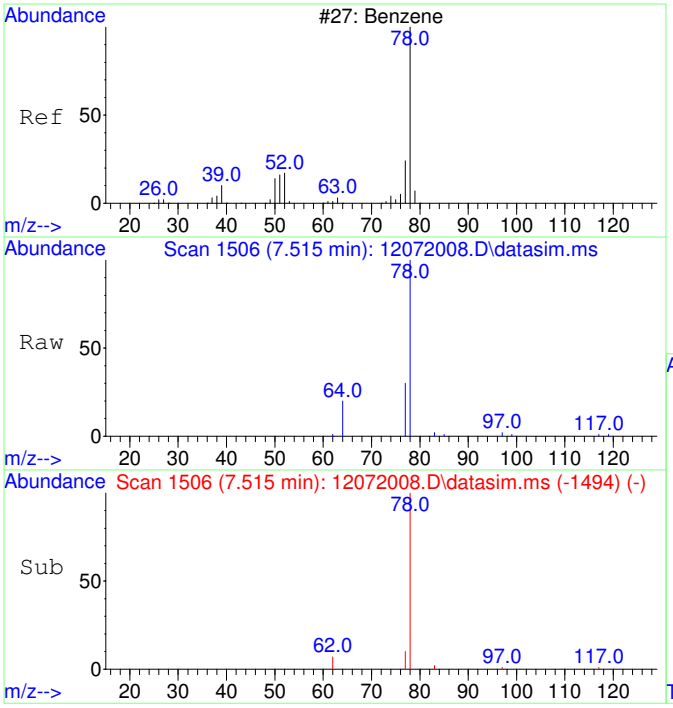


#8
Carbon tetrachloride
Concen: 50.55 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:117 Resp: 577

Ion	Ratio	Lower	Upper
117	100		
119	103.8	66.4	126.4

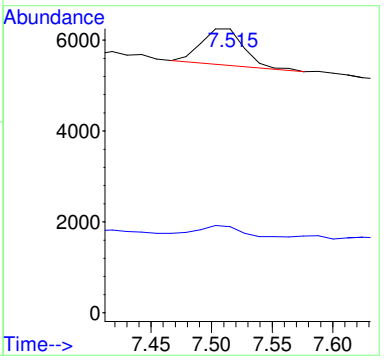


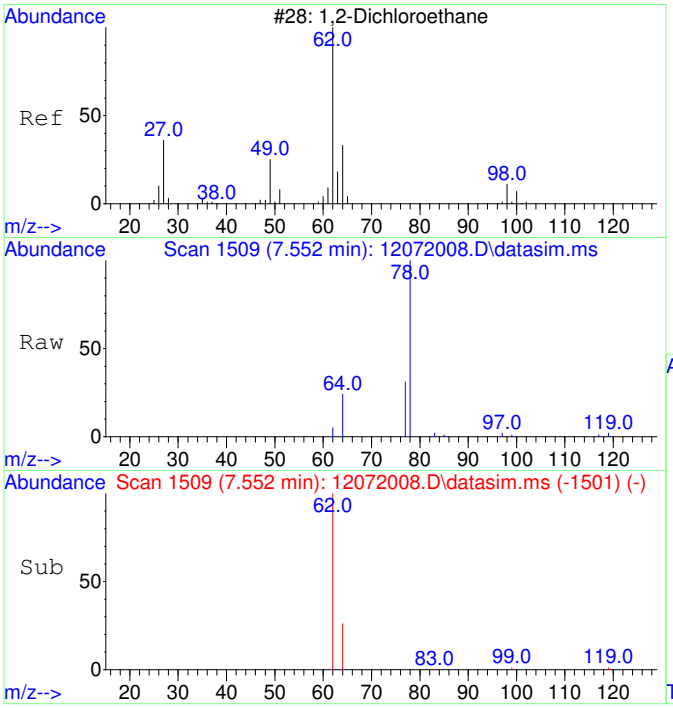


#9
Benzene
Concen: 59.29 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 78 Resp: 1867

Ion	Ratio	Lower	Upper
78	100		
77	34.5	0.0	53.2

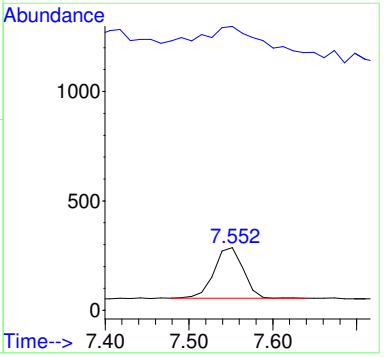


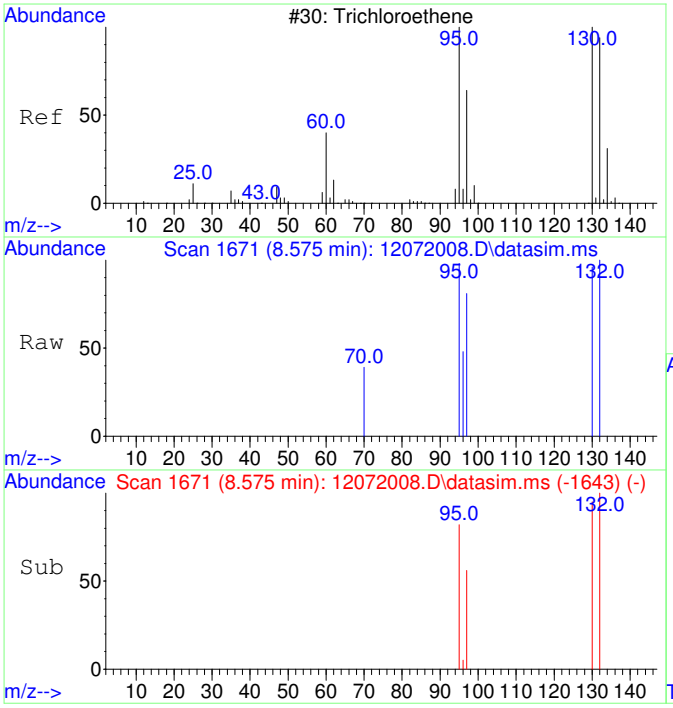


#10
1,2-Dichloroethane
Concen: 52.13 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 62 Resp: 560

Ion	Ratio	Lower	Upper
62	100		
64	107.5	2.3	62.3#

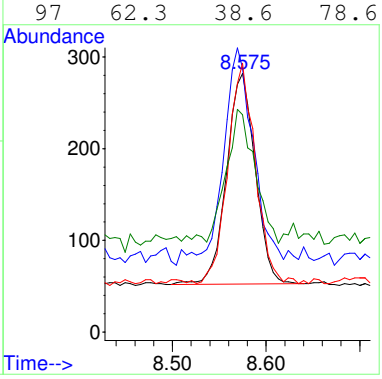


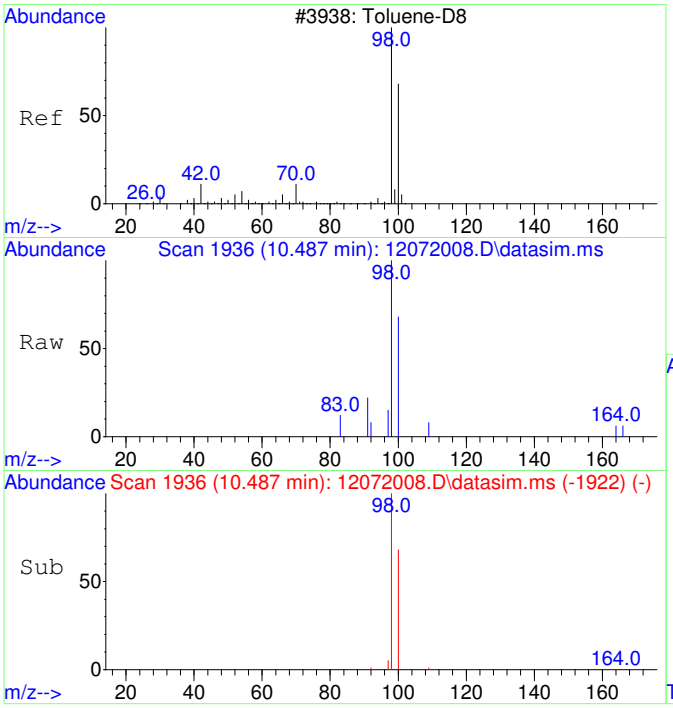


#11
Trichloroethene
Concen: 48.88 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:130 Resp: 486

Ion	Ratio	Lower	Upper
130	100		
95	104.3	60.7	120.7
132	100.6	76.0	116.0
97	62.3	38.6	78.6

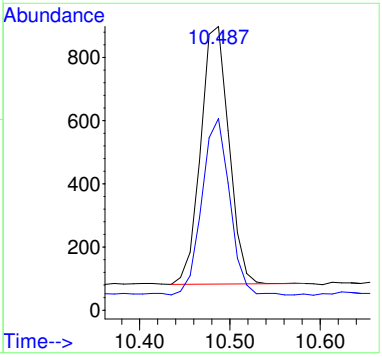


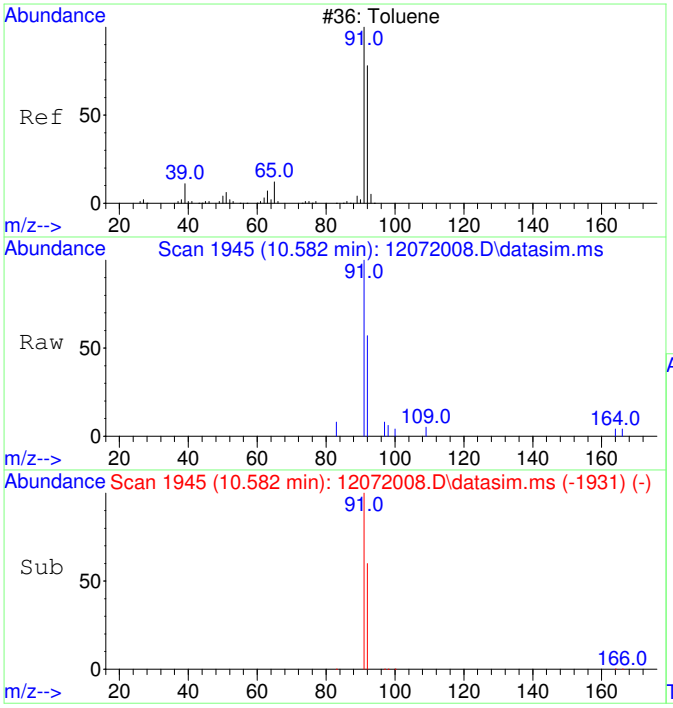


#12
Toluene-d8
Concen: 48.84 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 98 Resp: 1770

Ion	Ratio	Lower	Upper
98	100		
100	66.7	37.1	97.1

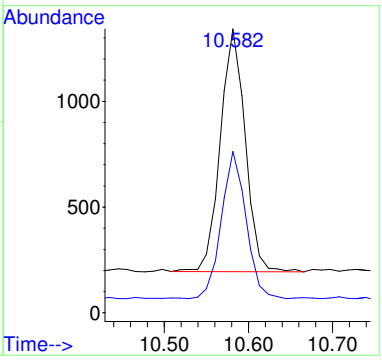


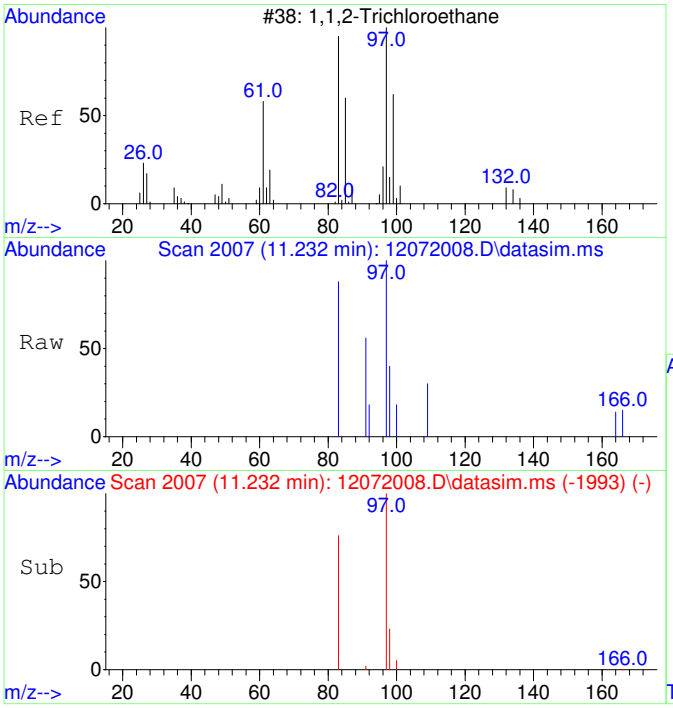


#13
Toluene
Concen: 52.21 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 2356

Ion	Ratio	Lower	Upper
91	100		
92	59.3	29.9	89.9

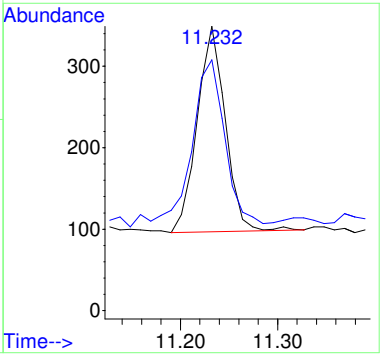


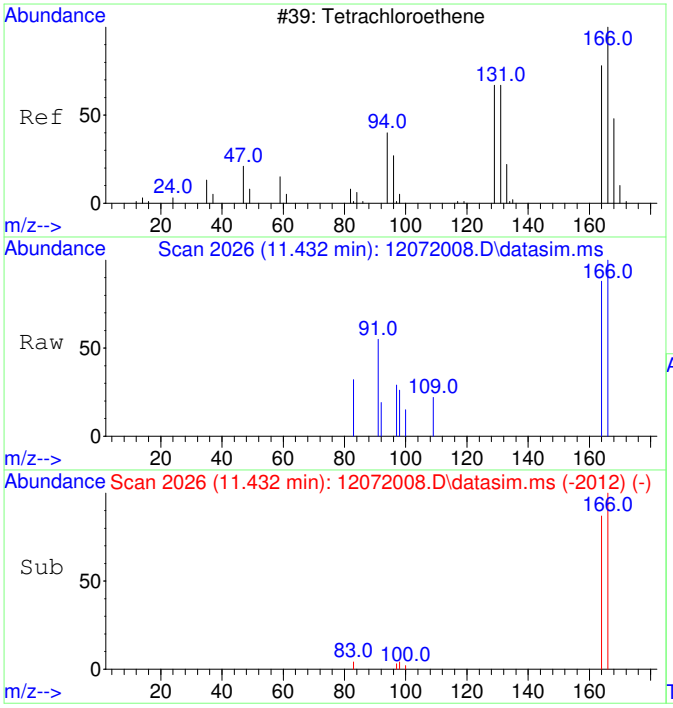


#14
1,1,2-Trichloroethane
Concen: 48.41 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 97 Resp: 506

Ion	Ratio	Lower	Upper
97	100		
83	98.4	51.2	111.2

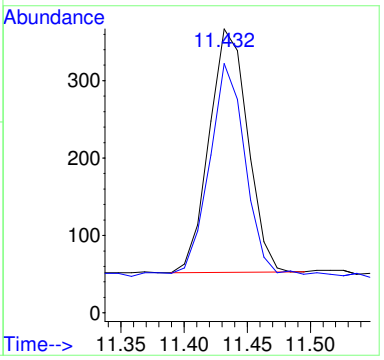


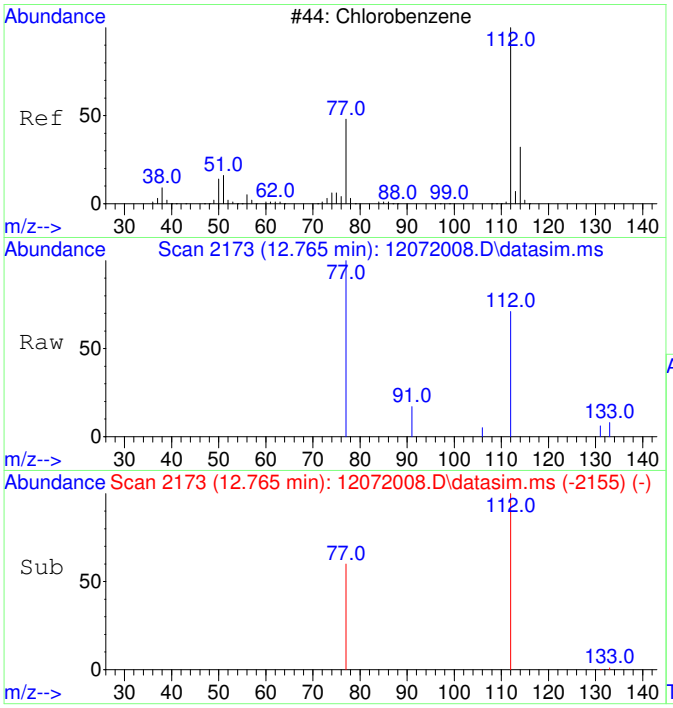


#15
Tetrachloroethene
Concen: 47.52 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:166 Resp: 668

Ion	Ratio	Lower	Upper
166	100		
164	83.4	47.8	107.8

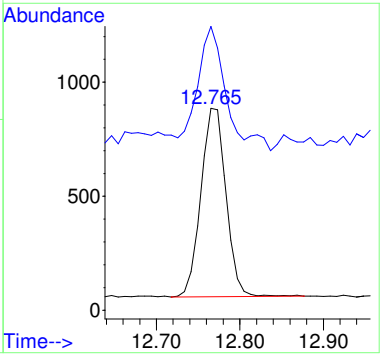


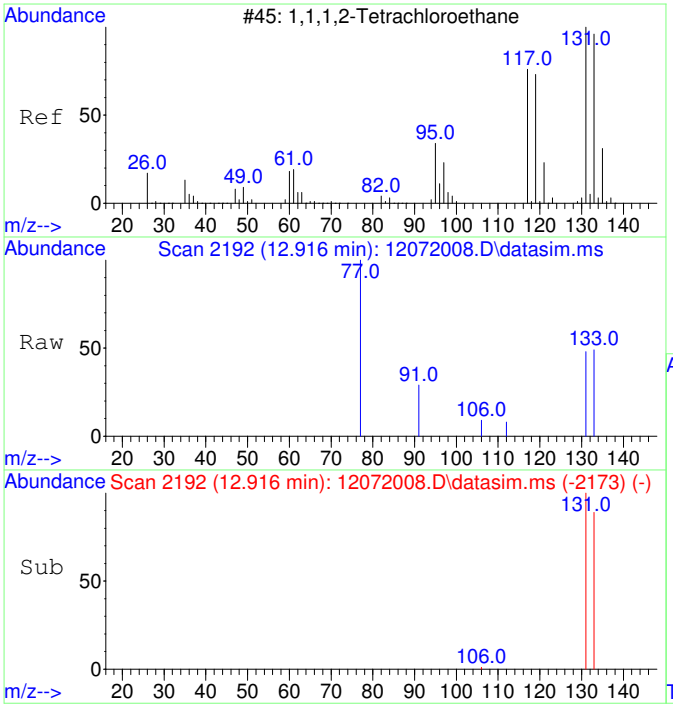


#16
Chlorobenzene
Concen: 49.43 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:112 Resp: 1728

Ion	Ratio	Lower	Upper
112	100		
77	60.0	23.6	83.6

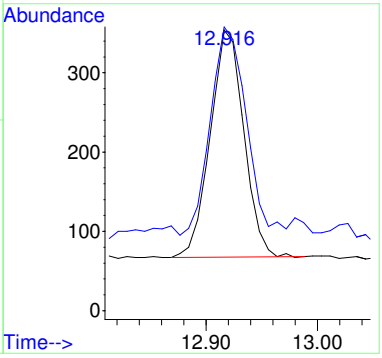


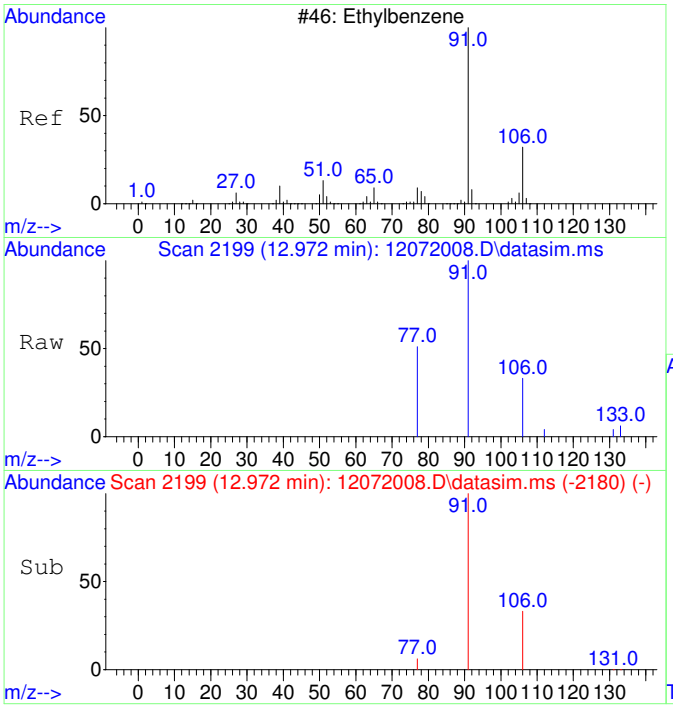


#17
1,1,1,2-Tetrachloroethane
Concen: 49.12 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:131 Resp: 601

Ion	Ratio	Lower	Upper
131	100		
133	98.5	66.3	126.3

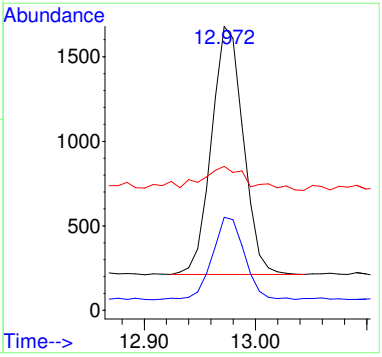


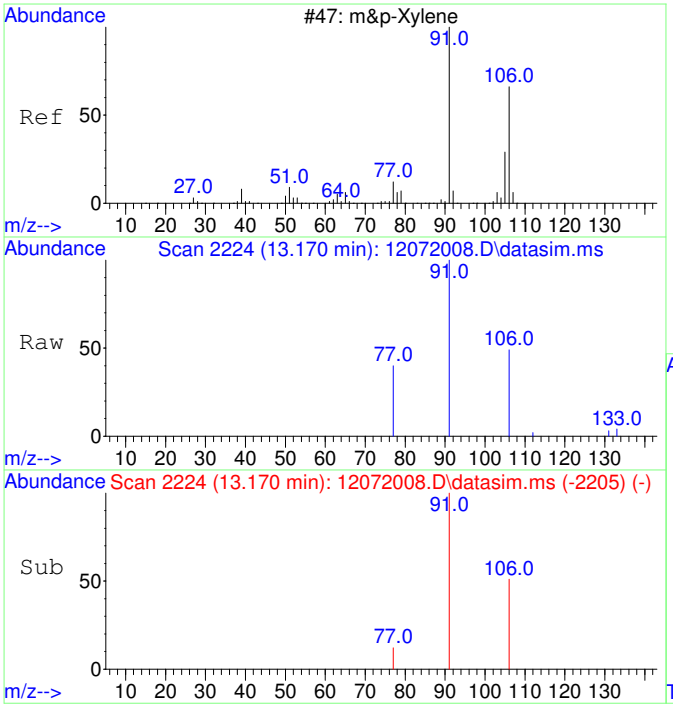


#18
Ethylbenzene
Concen: 50.43 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 2907

Ion	Ratio	Lower	Upper
91	100		
106	33.7	3.0	63.0
77	13.9	0.0	38.2

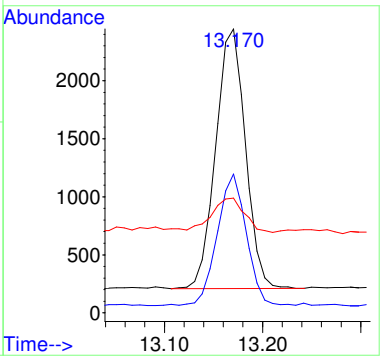


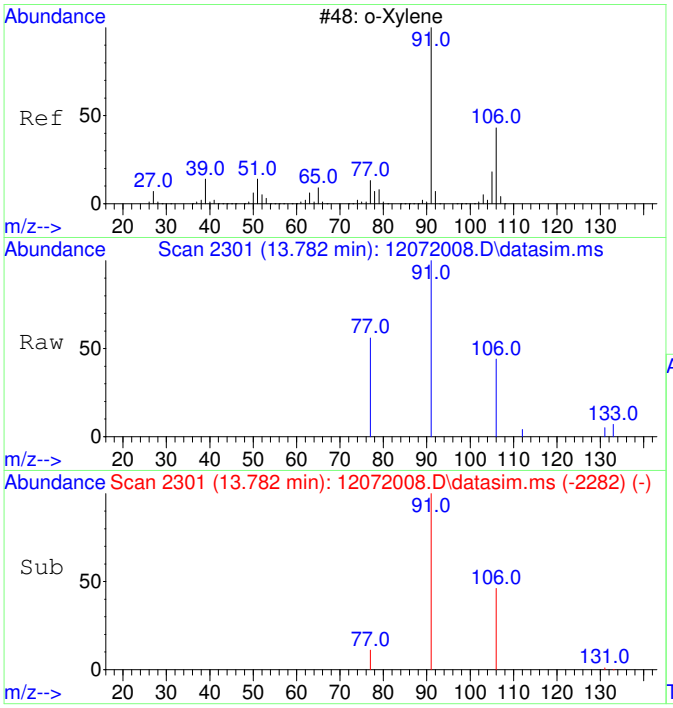


#19
m&p-Xylene
Concen: 105.66 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 4690

Ion	Ratio	Lower	Upper
91	100		
106	49.2	22.2	82.2
77	15.2	0.0	42.4

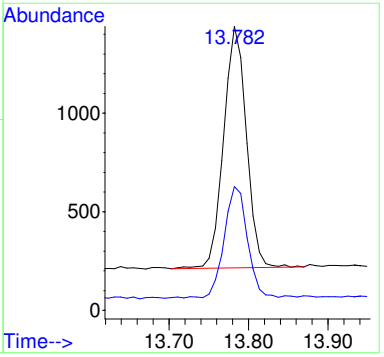


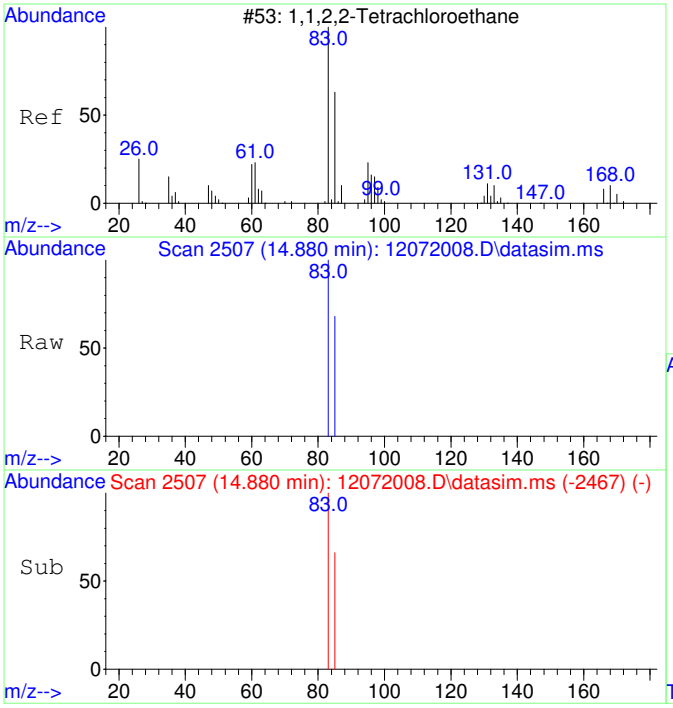


#20
o-Xylene
Concen: 51.14 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 2438

Ion	Ratio	Lower	Upper
91	100		
106	46.8	19.2	79.2

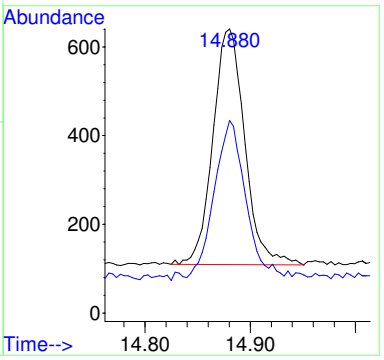


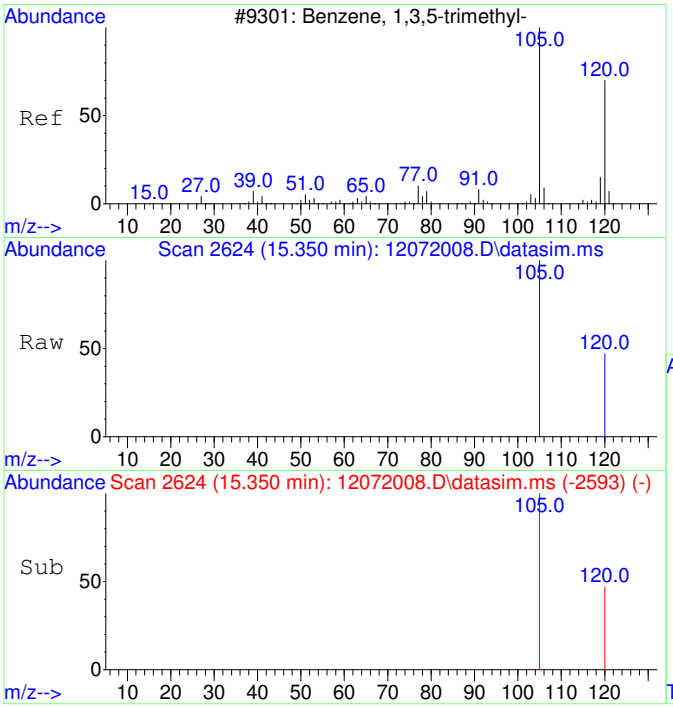


#21
1,1,2,2-Tetrachloroethane
Concen: 50.24 ug/L
RT: 14.880 min Scan# 2507
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 83 Resp: 1116

Ion	Ratio	Lower	Upper
83	100		
85	63.8	34.8	94.8

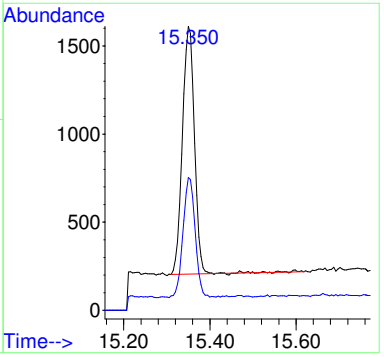


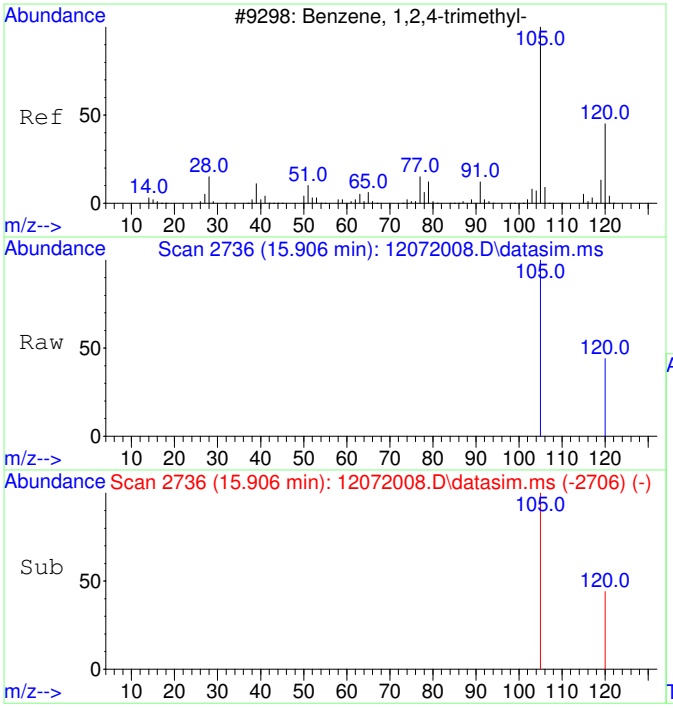


#22
1,3,5-Trimethylbenzene
Concen: 52.23 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:105 Resp: 2738

Ion	Ratio	Lower	Upper
105	100		
120	46.1	21.1	81.1

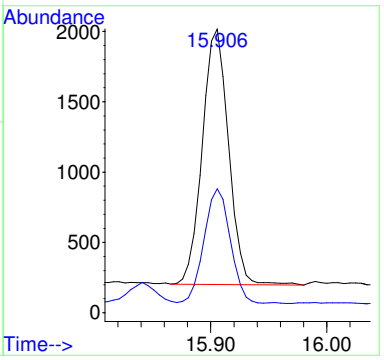


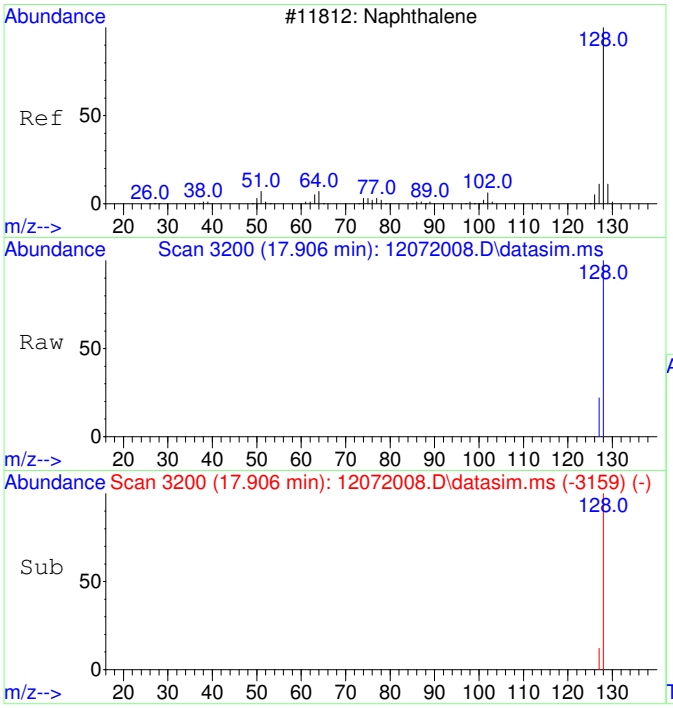


#23
1,2,4-Trimethylbenzene
Concen: 53.45 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:105 Resp: 2866

Ion	Ratio	Lower	Upper
105	100		
120	44.2	17.2	77.2

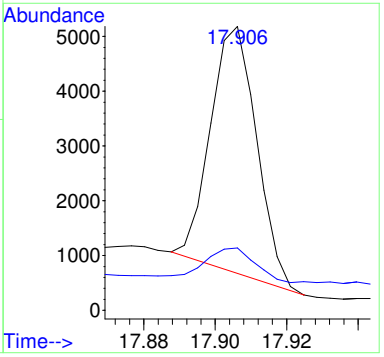




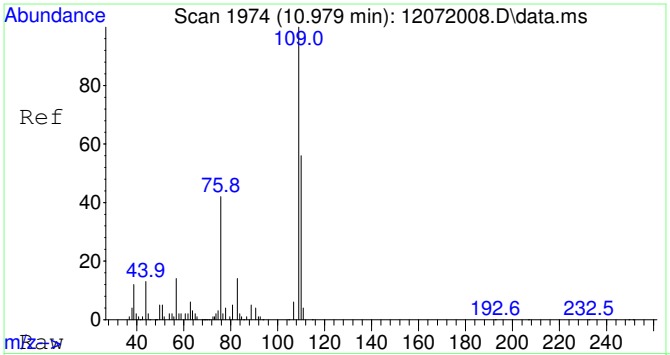
#24
Naphthalene
Concen: 47.08 ug/L
RT: 17.906 min Scan# 3200
Delta R.T. 0.002 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:128 Resp: 3948

Ion	Ratio	Lower	Upper
128	100		
127	13.4	0.0	42.5



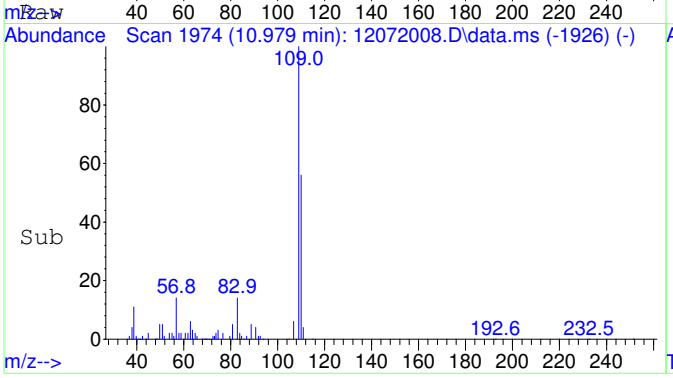
Before MI:
IMPROPER
BASELINE

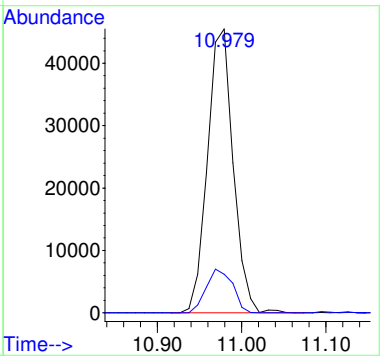


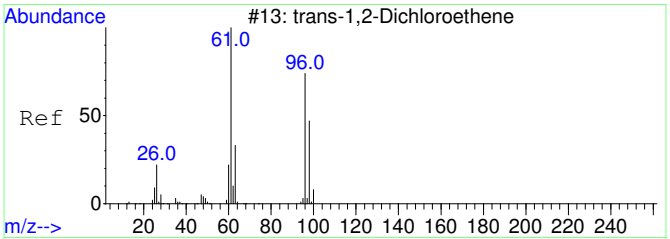
#25
2-Fluorotoluene SCAN
Concen: 4561.89 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

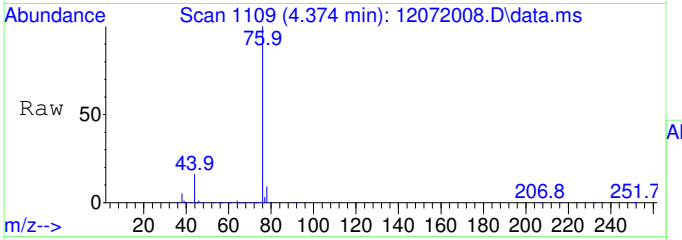
Tgt Ion:109 Resp: 96904

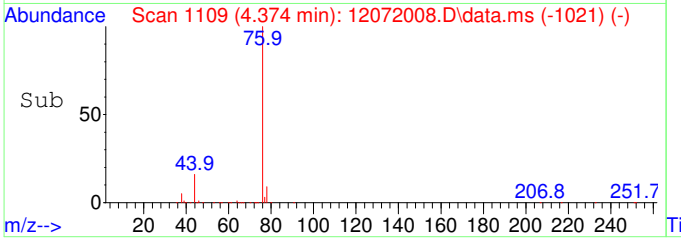
Ion	Ratio	Lower	Upper
109	100		
83	15.8	0.0	43.8







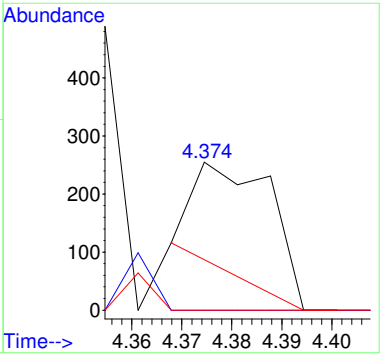


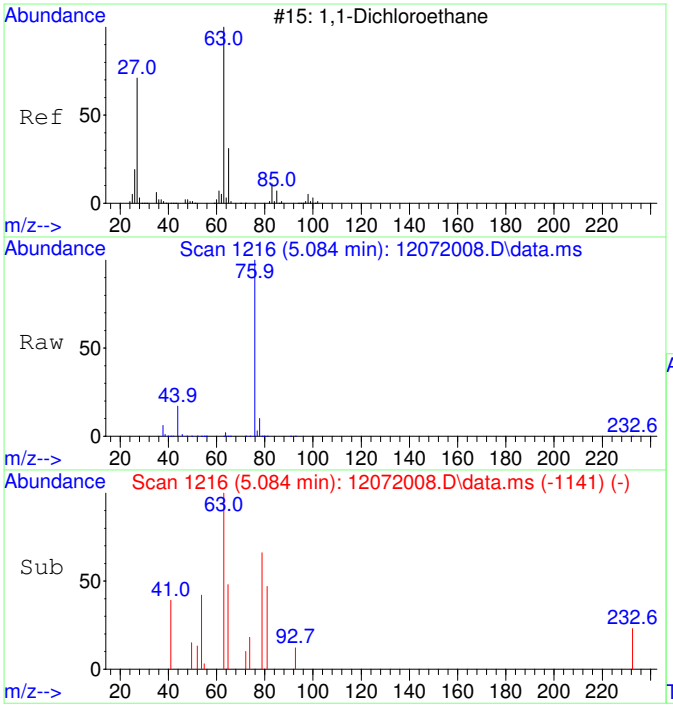


#27
trans-1,2-Dichloroethene SCAN
Concen: 29.61 ug/L
RT: 4.374 min Scan# 1109
Delta R.T. -0.007 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 61 Resp: 187

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

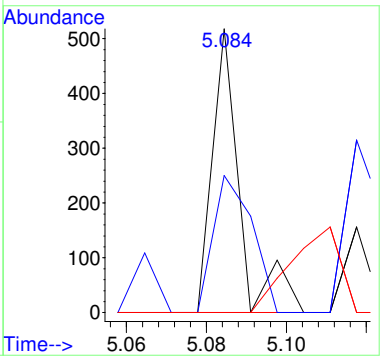


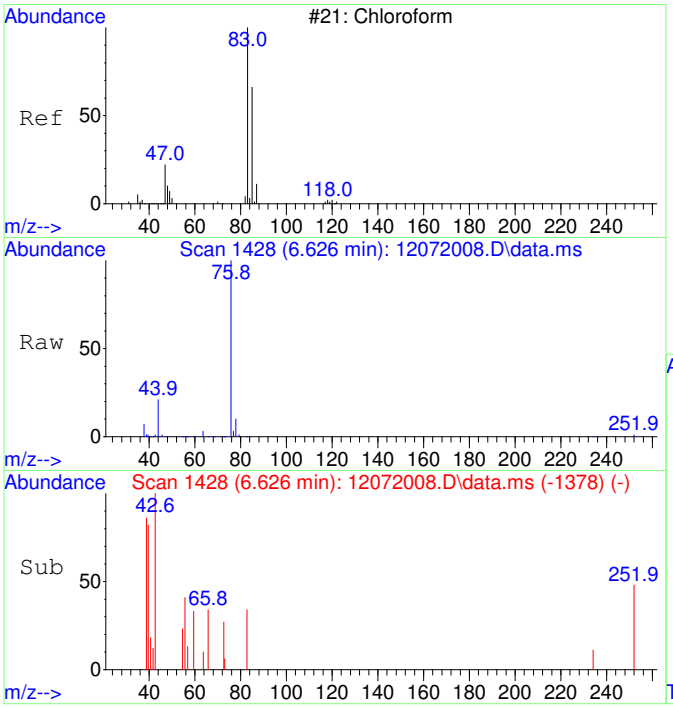


#28
1,1-Dichloroethane SCAN
Concen: 32.73 ug/L
RT: 5.084 min Scan# 1216
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 63 Resp: 244

Ion	Ratio	Lower	Upper
63	100		
65	69.7	1.3	61.3#
83	0.0	0.0	45.9

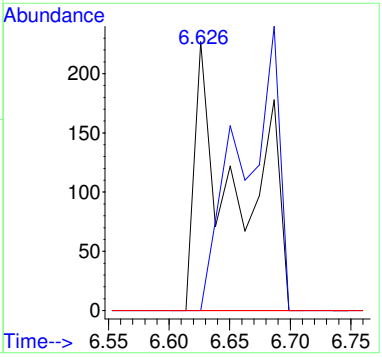


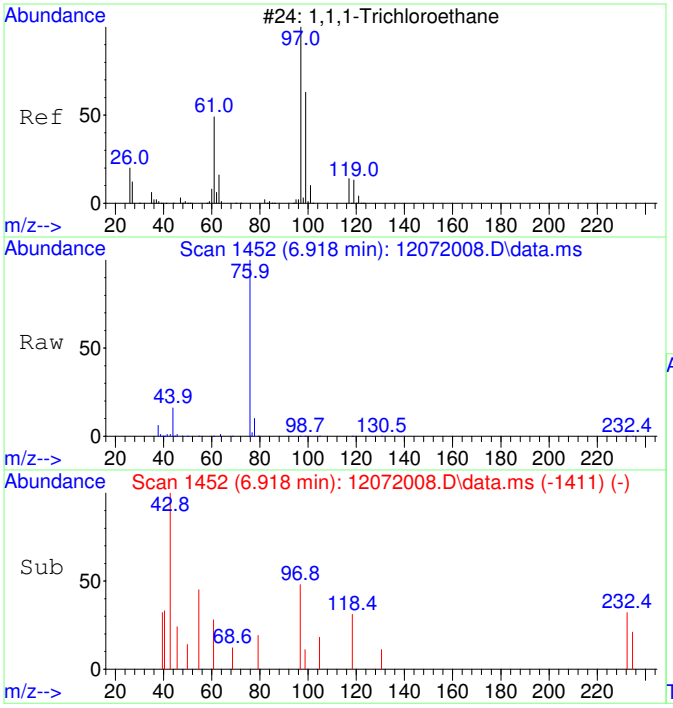


#30
Chloroform SCAN
Concen: 81.33 ug/L
RT: 6.626 min Scan# 1428
Delta R.T. -0.036 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 83 Resp: 556

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

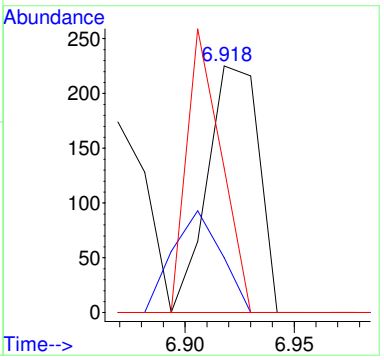


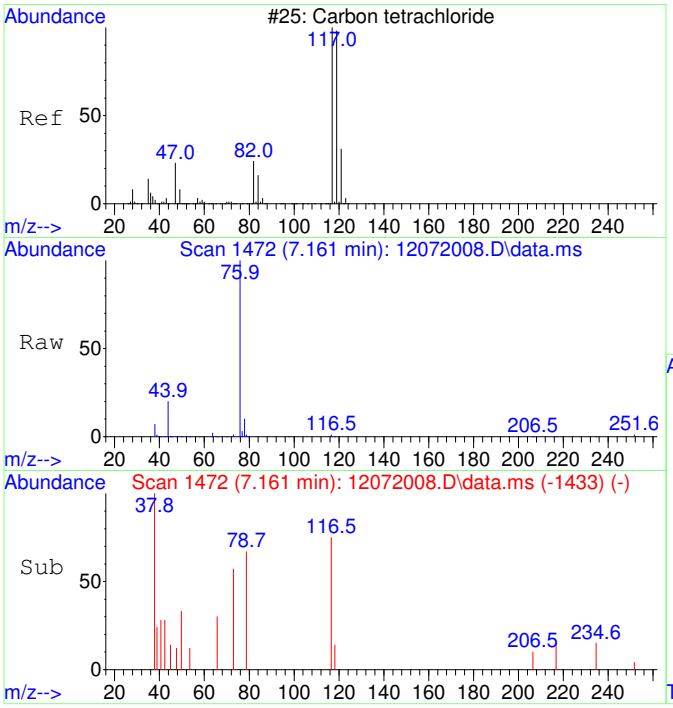


#31
1,1,1-Trichloroethane SCAN
Concen: 52.31 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 97 Resp: 369

Ion	Ratio	Lower	Upper
97	100		
99	39.3	43.6	103.6#
61	77.2	18.0	78.0

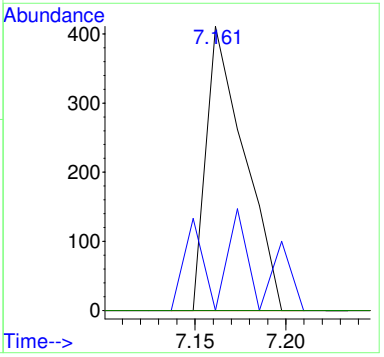


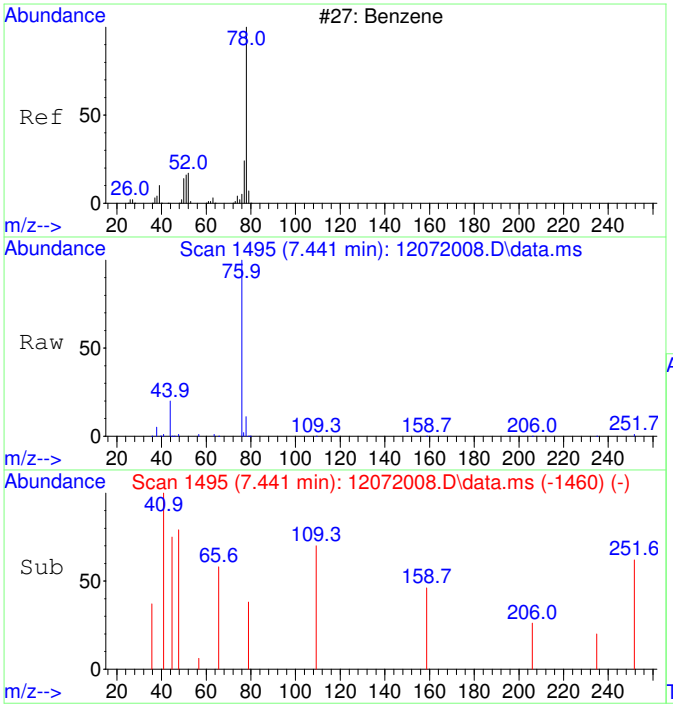


#32
Carbon tetrachloride SCAN
Concen: 99.86 ug/L
RT: 7.161 min Scan# 1472
Delta R.T. -0.024 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:117 Resp: 602

Ion	Ratio	Lower	Upper
117	100		
119	16.1	75.5	135.5#
121	0.0	0.0	58.8
82	0.0	0.0	59.2

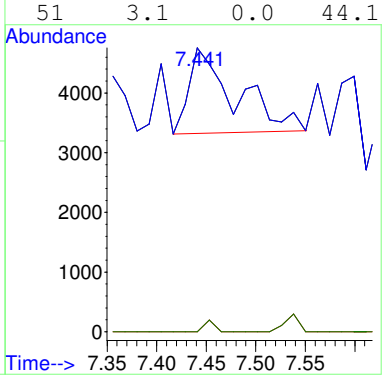


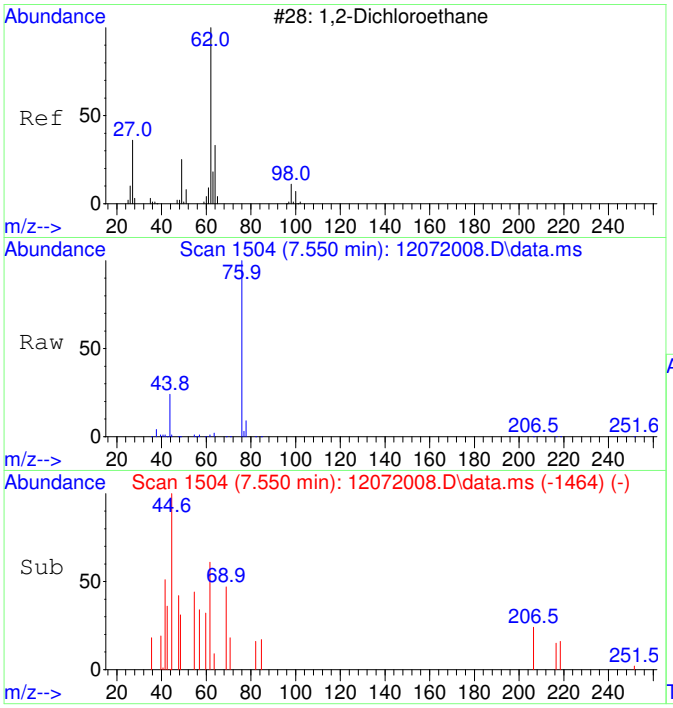


#33
Benzene SCAN
Concen: 219.62 ug/L
RT: 7.441 min Scan# 1495
Delta R.T. -0.073 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 78 Resp: 4687

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	3.1	0.0	47.9
51	3.1	0.0	44.1

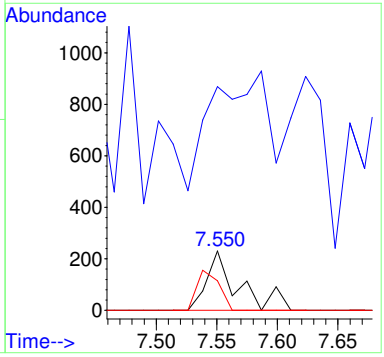


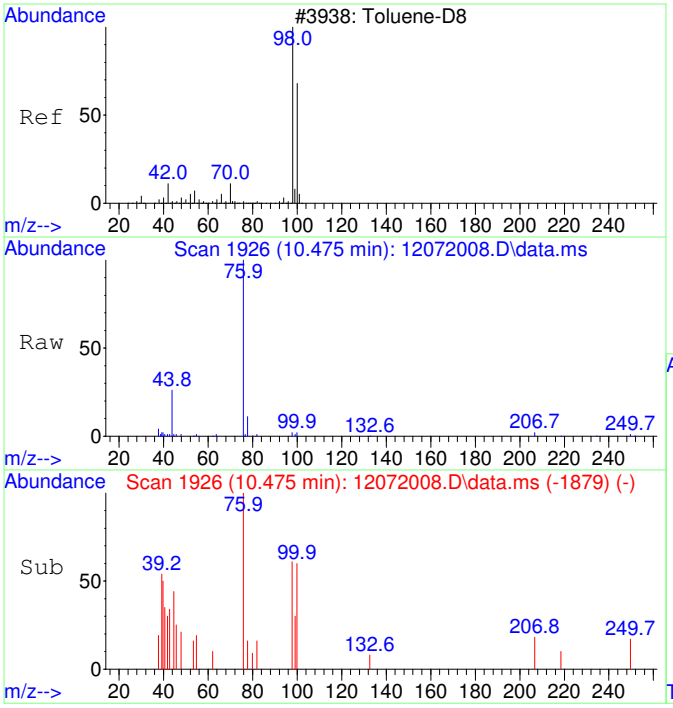


#34
1,2-Dichloroethane SCAN
Concen: 62.02 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. -0.012 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 62 Resp: 414

Ion	Ratio	Lower	Upper
62	100		
64	0.0	5.2	65.2#
49	47.8	3.9	63.9

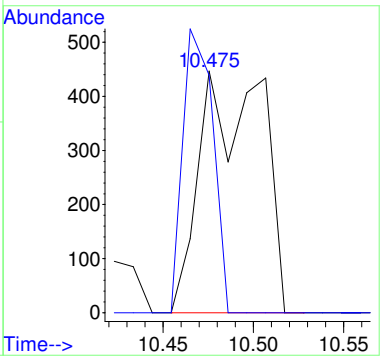


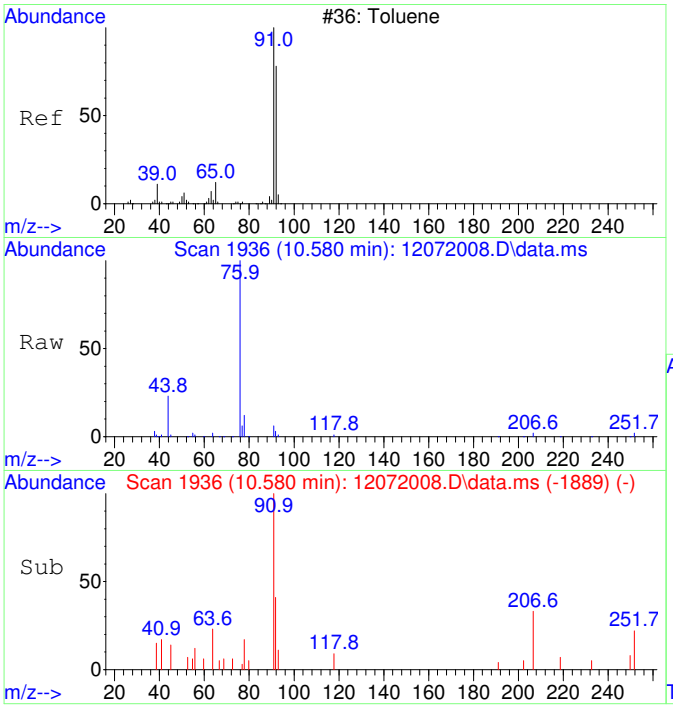


#36
Toluene-d8 SCAN
Concen: 53.86 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. -0.010 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 98 Resp: 1073

Ion	Ratio	Lower	Upper
98	100		
100	56.6	40.0	100.0

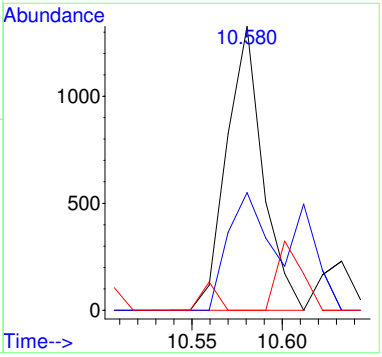


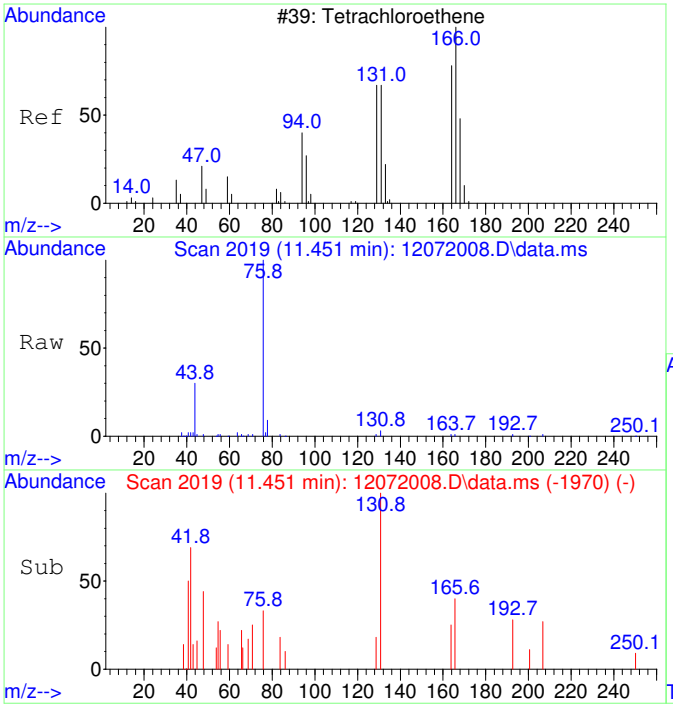


#37
Toluene SCAN
Concen: 75.62 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 1855

Ion	Ratio	Lower	Upper
91	100		
92	72.7	28.3	88.3
65	0.0	0.0	41.0

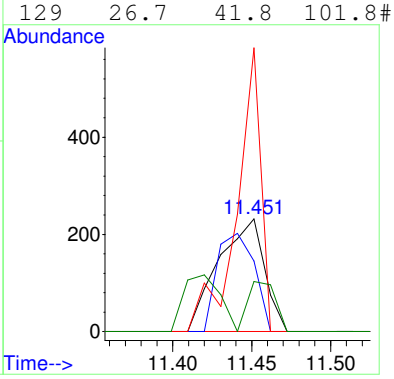


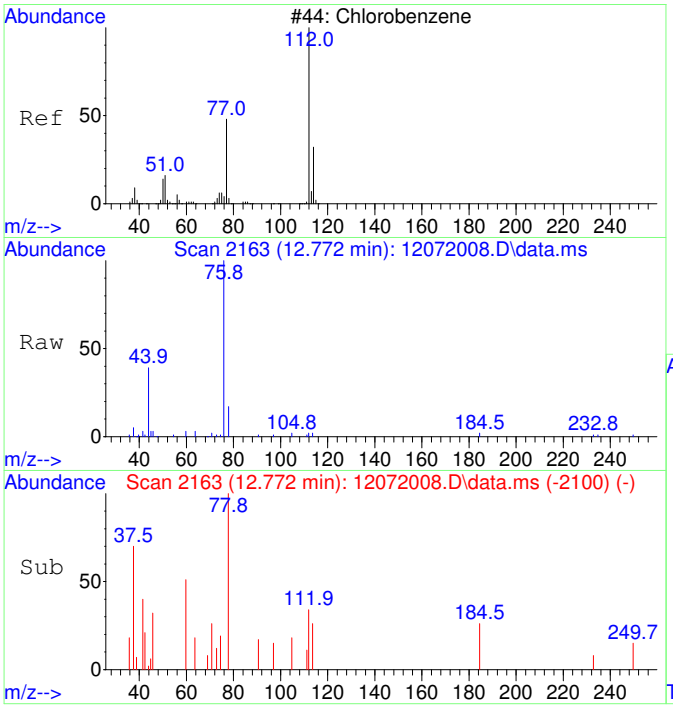


#39
Tetrachloroethene SCAN
Concen: 84.99 ug/L
RT: 11.451 min Scan# 2019
Delta R.T. 0.011 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:166 Resp: 469

Ion	Ratio	Lower	Upper
166	100		
164	70.8	50.9	110.9
131	131.1	38.7	98.7#
129	26.7	41.8	101.8#

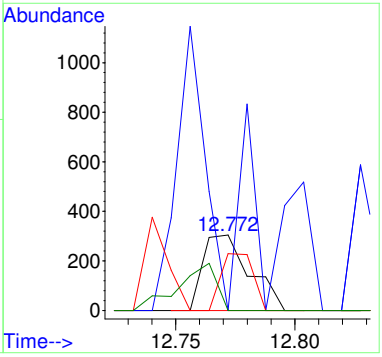


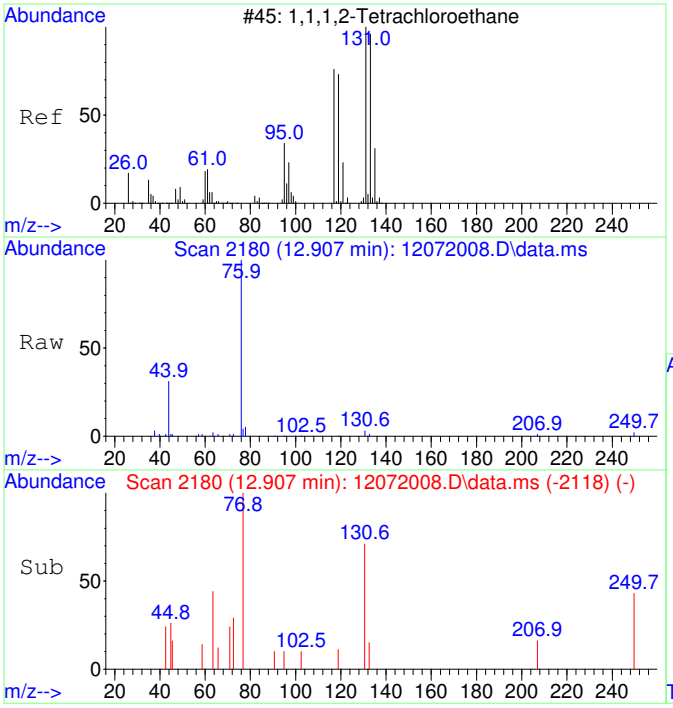


#40
Chlorobenzene SCAN
Concen: 23.61 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:112 Resp: 416

Ion	Ratio	Lower	Upper
112	100		
77	95.4	28.2	88.2#
114	52.2	2.3	62.3
51	0.0	0.0	50.1

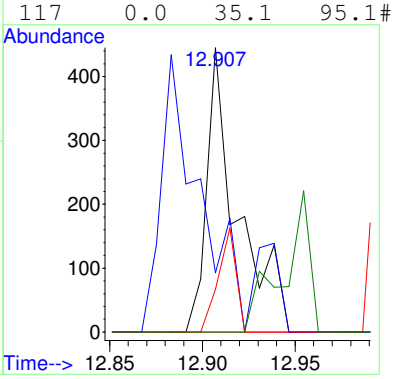


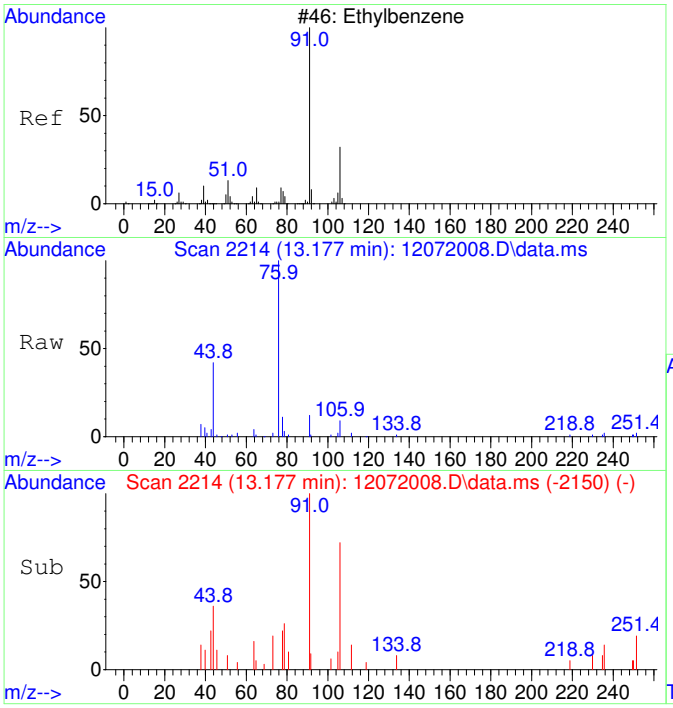


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 84.89 ug/L
RT: 12.907 min Scan# 2180
Delta R.T. -0.008 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:131 Resp: 516

Ion	Ratio	Lower	Upper
131	100		
133	0.0	66.9	126.9#
119	21.3	40.4	100.4#
117	0.0	35.1	95.1#

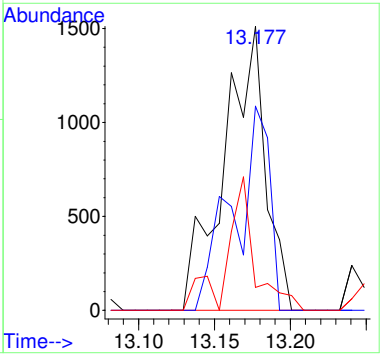


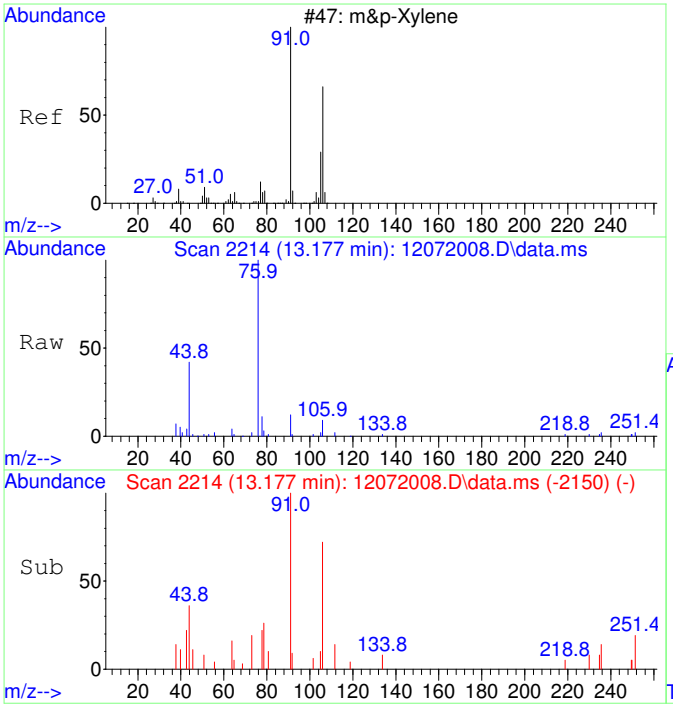


#42
Ethylbenzene SCAN
Concen: 61.97 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 2897

Ion	Ratio	Lower	Upper
91	100		
106	60.7	23.1	83.1
51	31.6	0.0	40.1

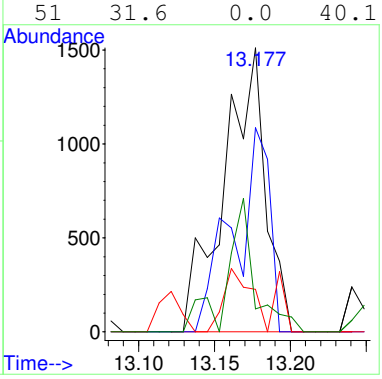


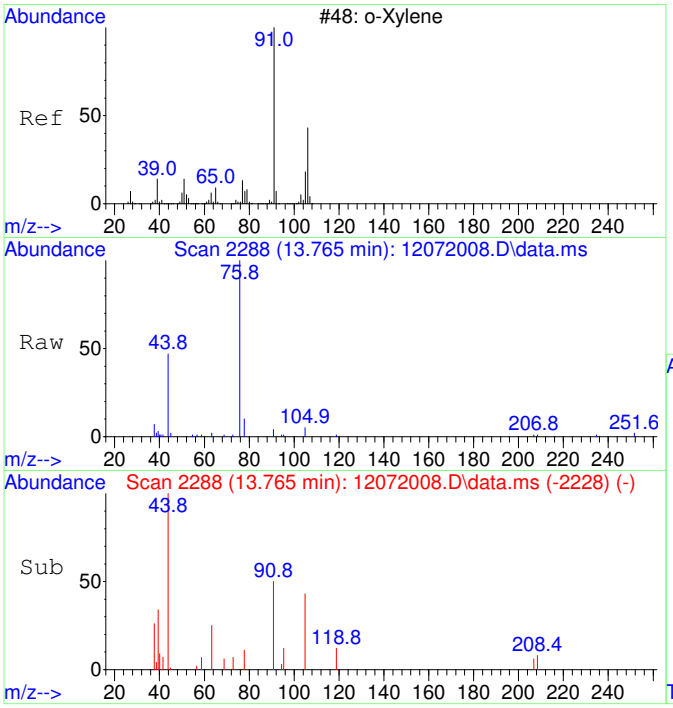


#43
m&p-Xylene SCAN
Concen: 61.97 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 2897

Ion	Ratio	Lower	Upper
91	100		
106	60.7	23.1	83.1
105	14.9	0.0	54.7
51	31.6	0.0	40.1

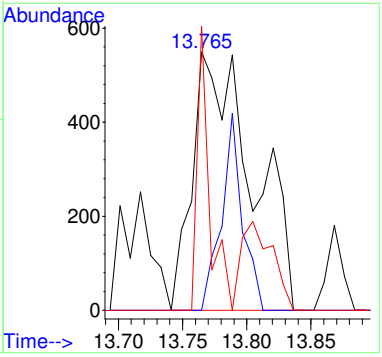


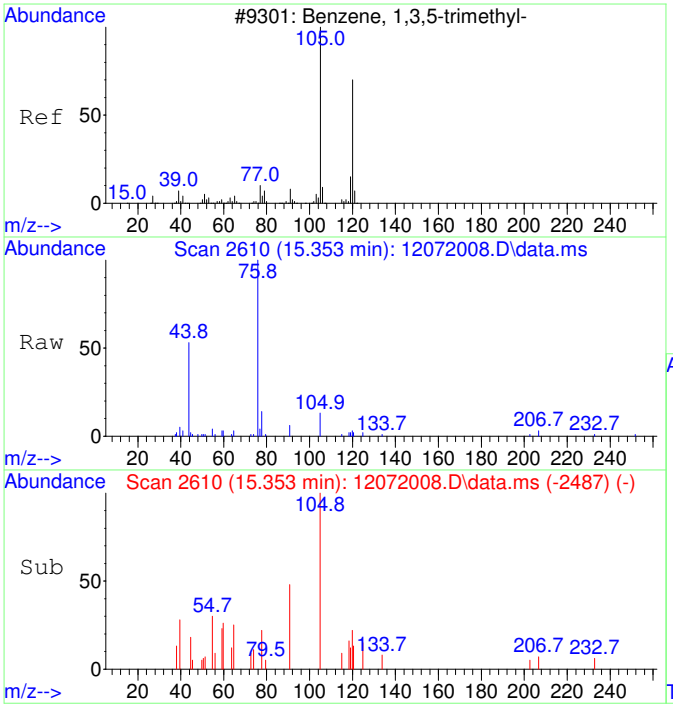


#44
o-Xylene SCAN
Concen: 70.17 ug/L
RT: 13.765 min Scan# 2288
Delta R.T. -0.024 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 1791

Ion	Ratio	Lower	Upper
91	100		
106	0.0	18.0	78.0#
105	22.3	0.0	56.6

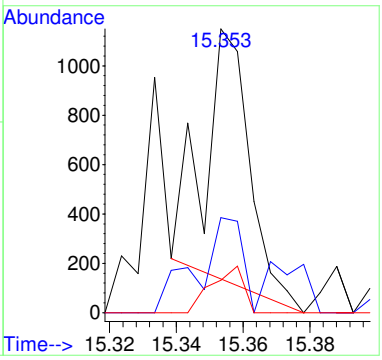


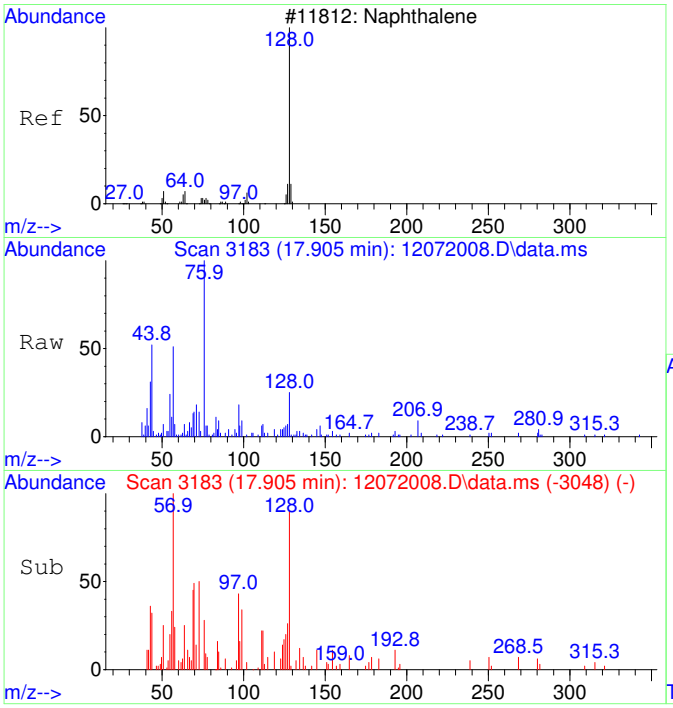


#46
1,3,5-Trimethylbenzene SCAN
Concen: 34.54 ug/L
RT: 15.353 min Scan# 2610
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:105 Resp: 930

Ion	Ratio	Lower	Upper
105	100		
120	38.6	18.3	78.3
119	13.5	0.0	43.1

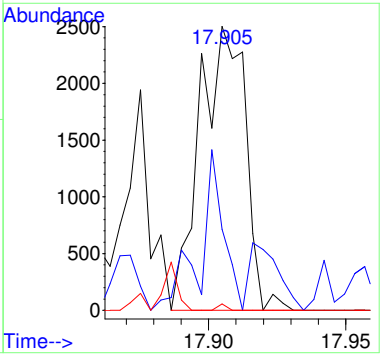




#48
Naphthalene SCAN
Concen: 70.25 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.002 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:128 Resp: 2901

Ion	Ratio	Lower	Upper
128	100		
127	29.2	0.0	44.0
129	6.7	0.0	40.8



Quantitation Report (QT Reviewed)

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M.I. Performed By:

TD at 6:30 am, Dec 08, 2020

M.I. Approved By:

ZAR at 2:54 pm, Dec 14, 2020

Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072008.D
Acq On : 7 Dec 2020 14:43
InstName : AG5975C
Operator : TD
Sample : S20L021-CAL6
Misc : 2030073 0.05 mg/L
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 06:07:11 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:05:27 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	187138	5000.00	ug/L	-0.01
System Monitoring Compounds						
12) Toluene-d8	10.487	98	1770	48.84	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 0.98%#			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.090	61	424m	57.33	ug/L	
3] trans-1,2-Dichloroethene	4.369	61	498	53.24	ug/L	86
4] 1,1-Dichloroethane	5.079	63	607	54.33	ug/L	88
5] cis-1,2-Dichloroethene	6.088	61	614	53.06	ug/L	92
6] Chloroform	6.652	83	614	55.24	ug/L	97
7] 1,1,1-Trichloroethane	6.919	97	620	51.93	ug/L	91
8] Carbon tetrachloride	7.187	117	577	50.55	ug/L	92
9] Benzene	7.515	78	1867	59.29	ug/L	77
10] 1,2-Dichloroethane	7.552	62	560	52.13	ug/L #	1
11] Trichloroethene	8.575	130	486	48.88	ug/L	92
13] Toluene	10.582	91	2356	52.21	ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	506	48.41	ug/L	81
15] Tetrachloroethene	11.432	166	668	47.52	ug/L	94
16] Chlorobenzene	12.765	112	1728	49.43	ug/L	91
17] 1,1,1,2-Tetrachloroethane	12.916	131	601	49.12	ug/L	98
18] Ethylbenzene	12.972	91	2907	50.43	ug/L	96
19] m&p-Xylene	13.170	91	4690	105.66	ug/L	95
20] o-Xylene	13.782	91	2438	51.14	ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.880	83	1116	50.24	ug/L	99
22] 1,3,5-Trimethylbenzene	15.350	105	2738	52.23	ug/L	93
23] 1,2,4-Trimethylbenzene	15.906	105	2866	53.45	ug/L	96
24] Naphthalene	17.906	128	4856m	57.91	ug/L	
25) 2-Fluorotoluene SCAN	10.979	109	96904	4561.89	ug/L	95
27) trans-1,2-Dichloroethe...	4.374	61	187	29.61	ug/L #	17
28) 1,1-Dichloroethane SCAN	5.084	63	244	32.73	ug/L #	41
30) Chloroform SCAN	6.626	83	556	81.33	ug/L #	27
31) 1,1,1-Trichloroethane ...	6.918	97	369	52.31	ug/L #	58
32) Carbon tetrachloride SCAN	7.161	117	602	99.86	ug/L #	25
33) Benzene SCAN	7.441	78	4687	219.62	ug/L	93
34) 1,2-Dichloroethane SCAN	7.550	62	414	62.02	ug/L #	57
36) Toluene-d8 SCAN	10.475	98	1073	53.86	ug/L	84
37) Toluene SCAN	10.580	91	1855	75.62	ug/L #	79
39) Tetrachloroethene SCAN	11.451	166	469	84.99	ug/L #	54
40) Chlorobenzene SCAN	12.772	112	416	23.61	ug/L #	55
41) 1,1,1,2-Tetrachloroeth...	12.907	131	516	84.89	ug/L #	18
42) Ethylbenzene SCAN	13.177	91	2897	61.97	ug/L	82
43) m&p-Xylene SCAN	13.177	91	2897	61.97	ug/L	81
44) o-Xylene SCAN	13.765	91	1791	70.17	ug/L #	51
46) 1,3,5-Trimethylbenzene...	15.353	105	930	34.54	ug/L	88
48) Naphthalene SCAN	17.905	128	2901	70.25	ug/L	74

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072008.D
Acq On : 7 Dec 2020 14:43
InstName : AG5975C
Operator : TD
Sample : S20L021-CAL6
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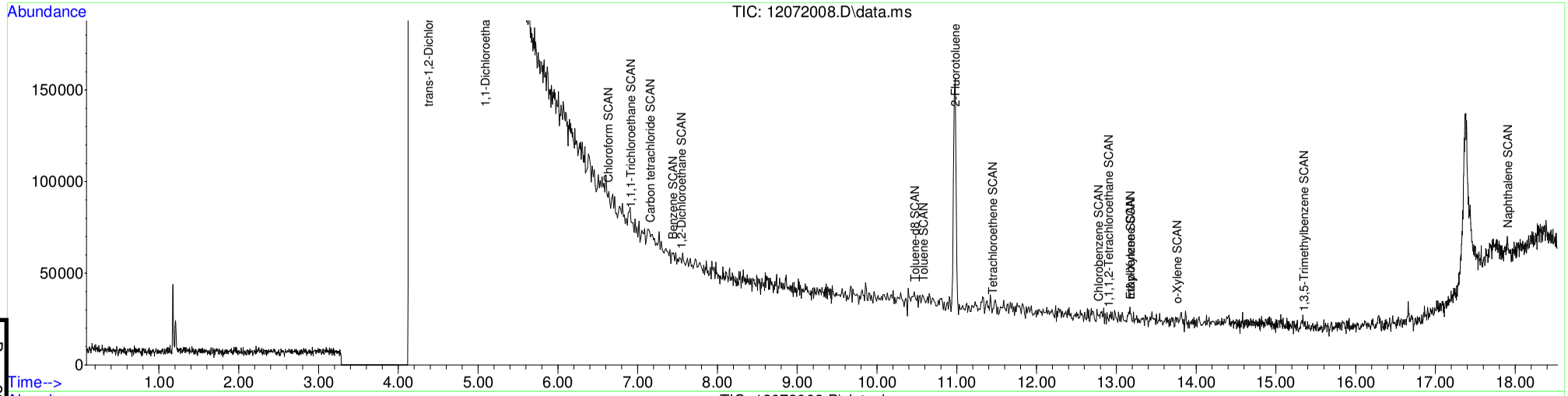
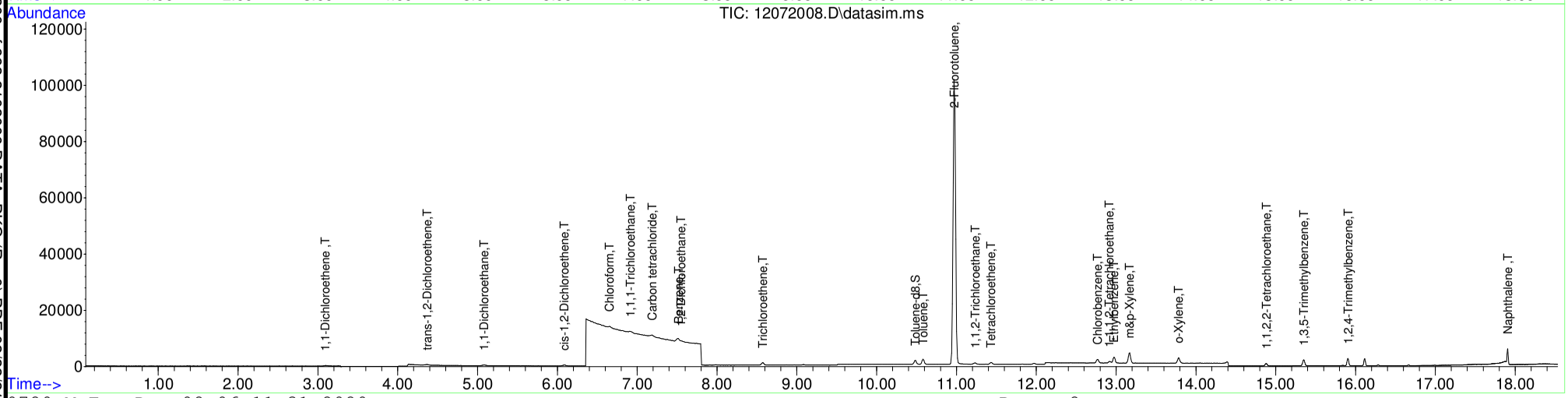
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:05:27 2020
Response via : Initial Calibration





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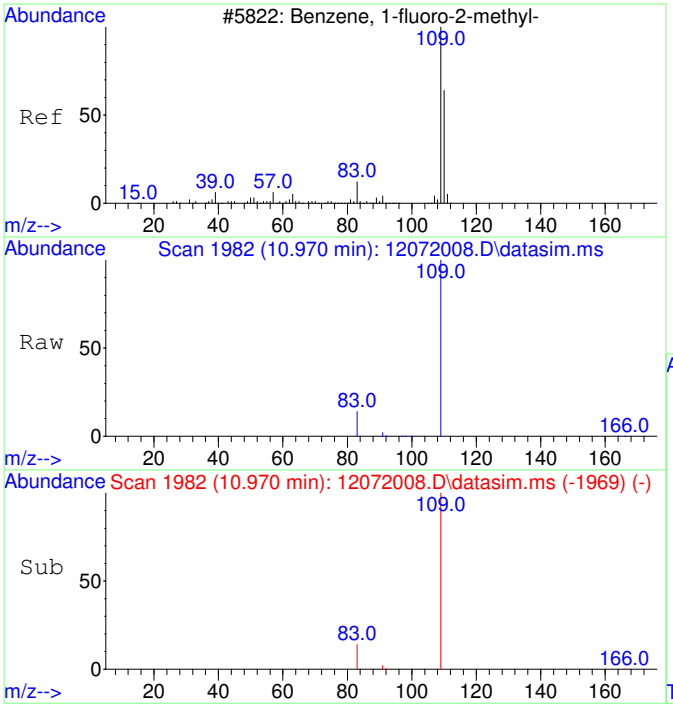
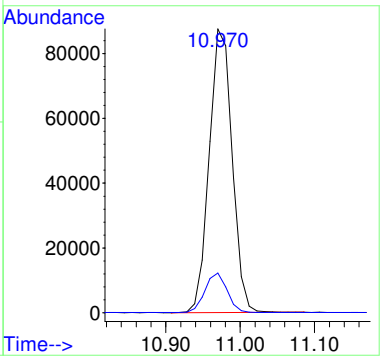
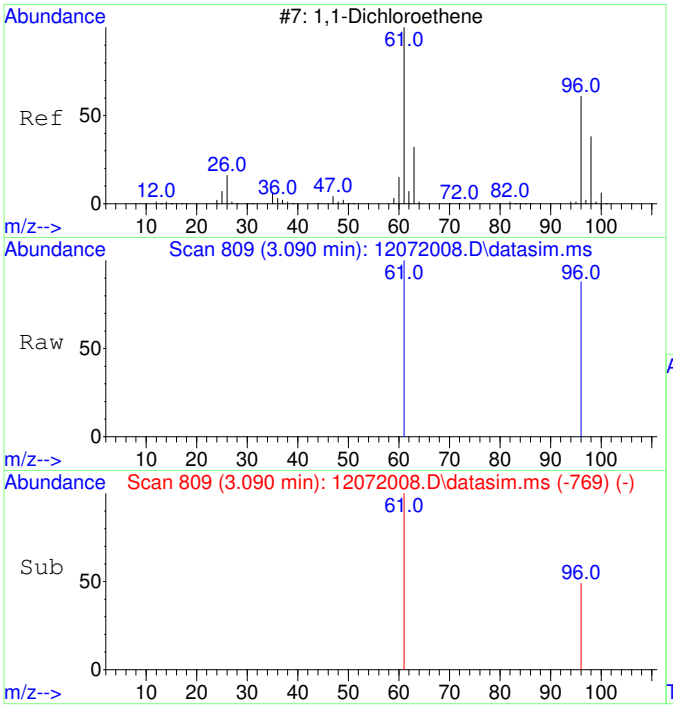


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:109 Resp: 187138

Ion	Ratio	Lower	Upper
109	100		
83	13.4	0.0	42.3

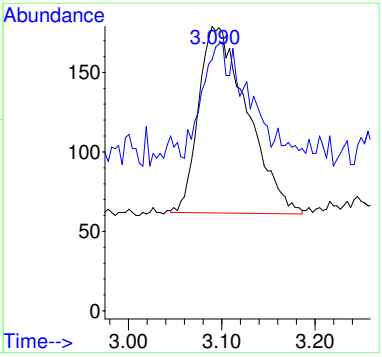


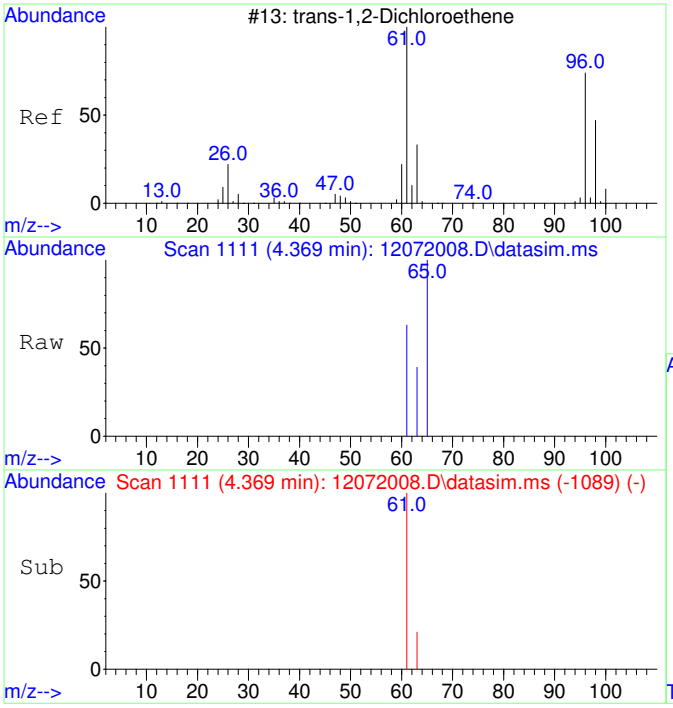


#2
1,1-Dichloroethene
Concen: 57.33 ug/L m
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 61 Resp: 424

Ion	Ratio	Lower	Upper
61	100		
96	32.1	37.2	97.2#

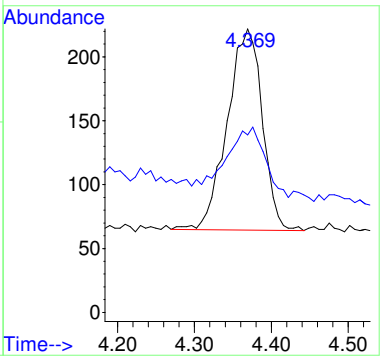


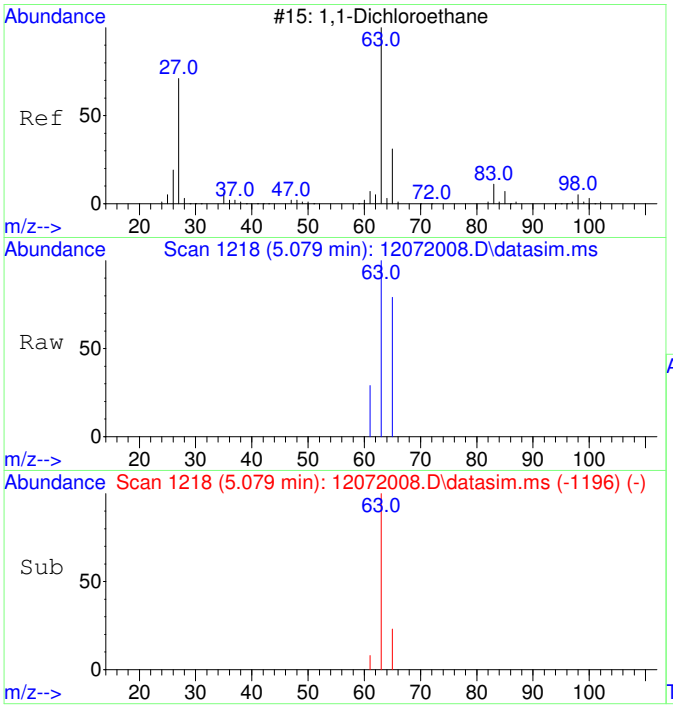


#3
trans-1,2-Dichloroethene
Concen: 53.24 ug/L
RT: 4.369 min Scan# 1111
Delta R.T. -0.007 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 61 Resp: 498

Ion	Ratio	Lower	Upper
61	100		
63	40.2	2.4	62.4

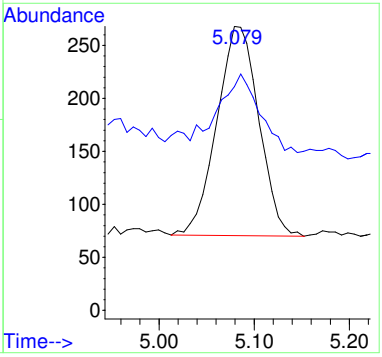


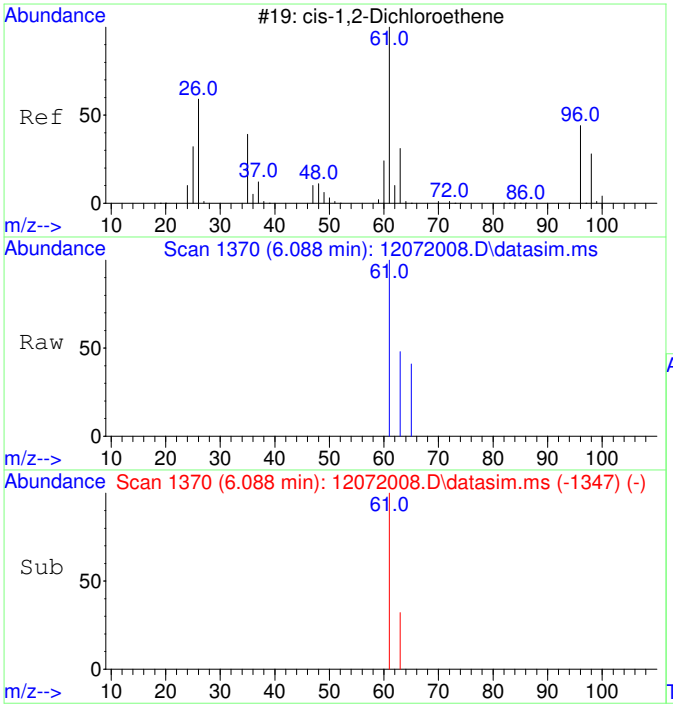


#4
1,1-Dichloroethane
Concen: 54.33 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.007 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 63 Resp: 607

Ion	Ratio	Lower	Upper
63	100		
65	38.6	1.8	61.8

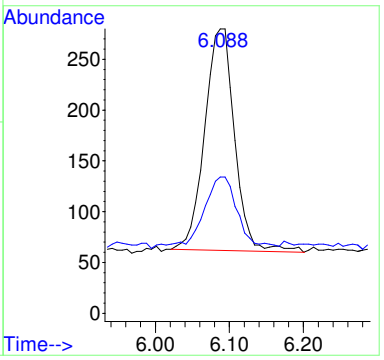


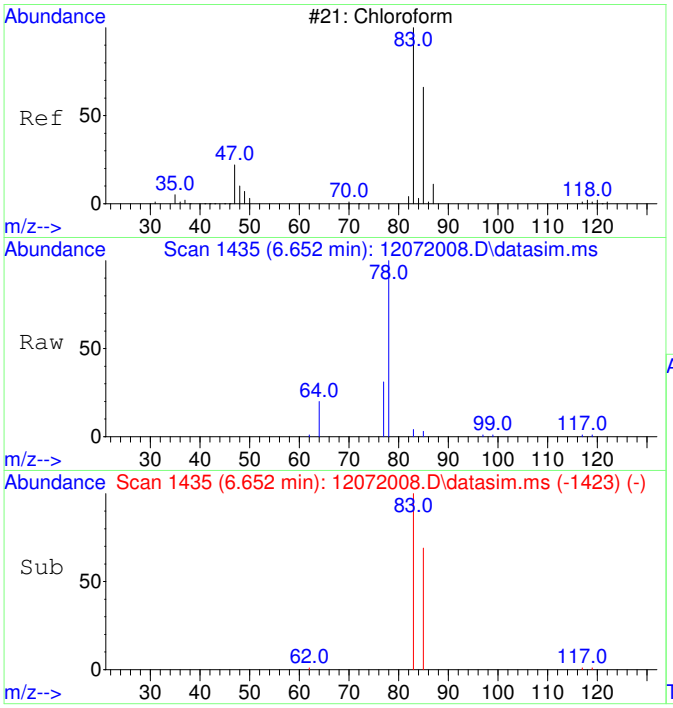


#5
cis-1,2-Dichloroethene
Concen: 53.06 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 61 Resp: 614

Ion	Ratio	Lower	Upper
61	100		
63	36.8	2.5	62.5

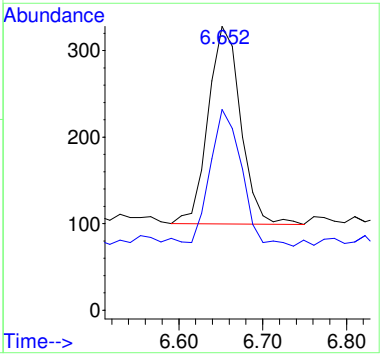


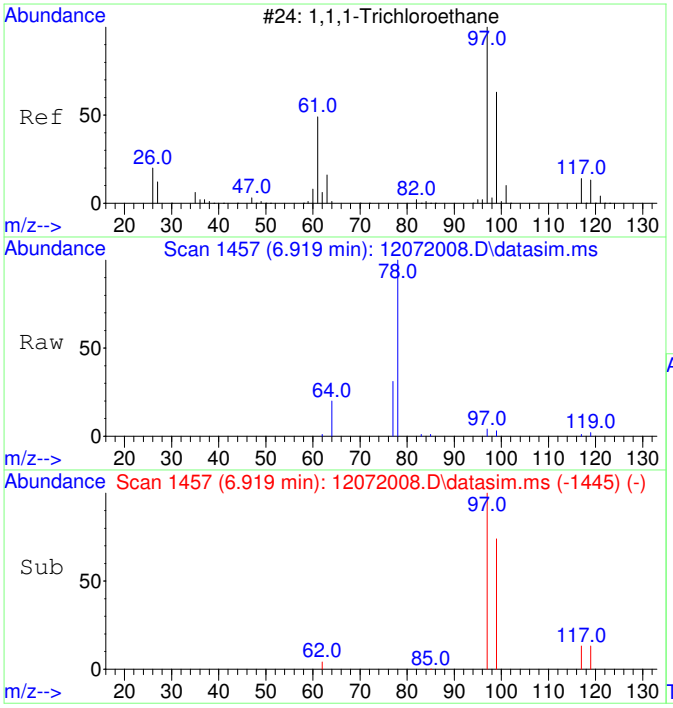


#6
Chloroform
Concen: 55.24 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 83 Resp: 614

Ion	Ratio	Lower	Upper
83	100		
85	67.1	35.1	95.1

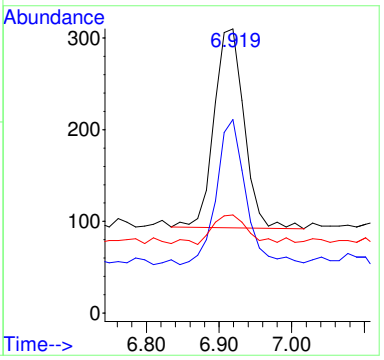


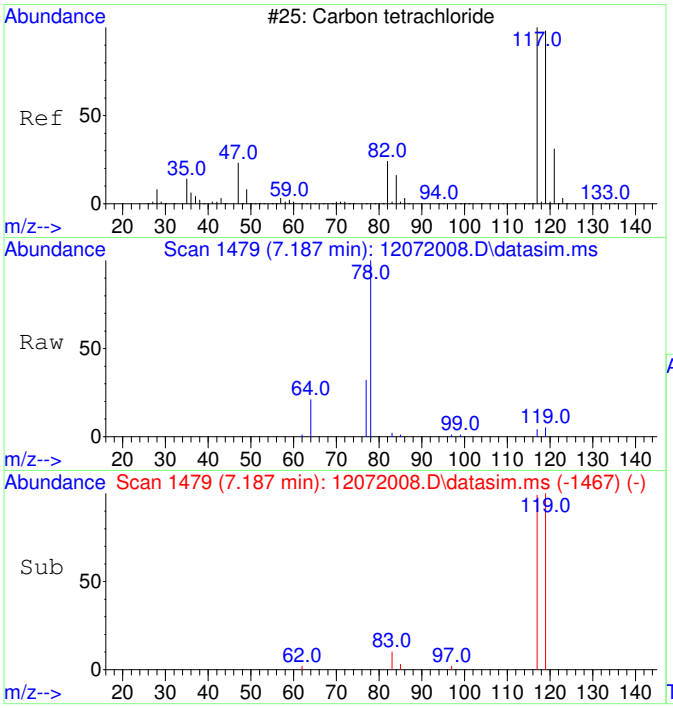


#7
1,1,1-Trichloroethane
Concen: 51.93 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 97 Resp: 620

Ion	Ratio	Lower	Upper
97	100		
99	71.5	34.6	94.6
117	16.8	0.0	43.2

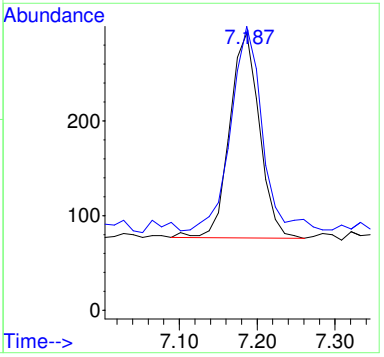


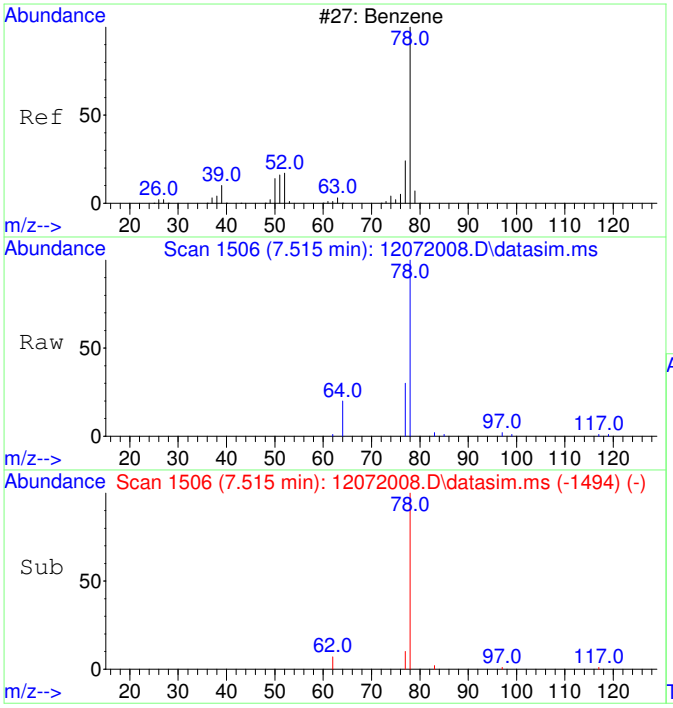


#8
Carbon tetrachloride
Concen: 50.55 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:117 Resp: 577

Ion	Ratio	Lower	Upper
117	100		
119	103.8	66.4	126.4

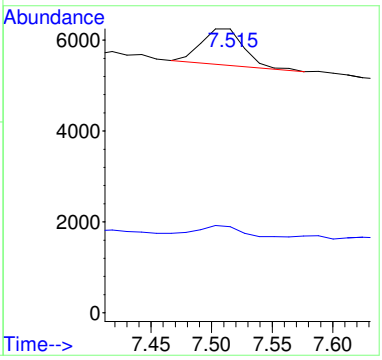


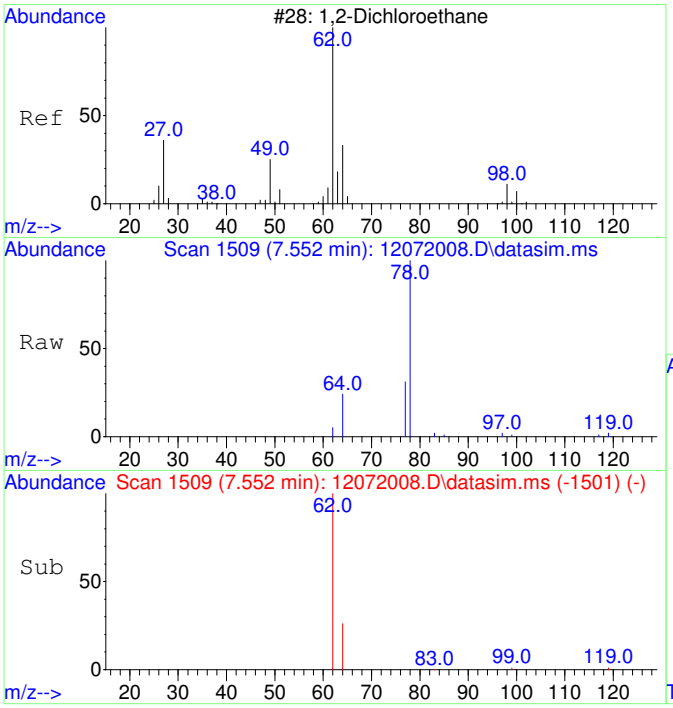


#9
Benzene
Concen: 59.29 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 78 Resp: 1867

Ion	Ratio	Lower	Upper
78	100		
77	34.5	0.0	53.2

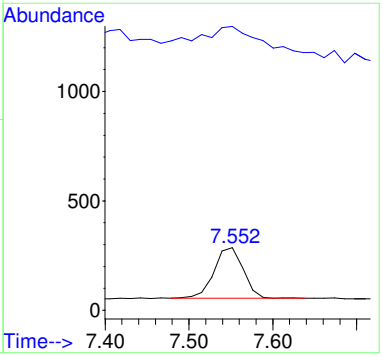


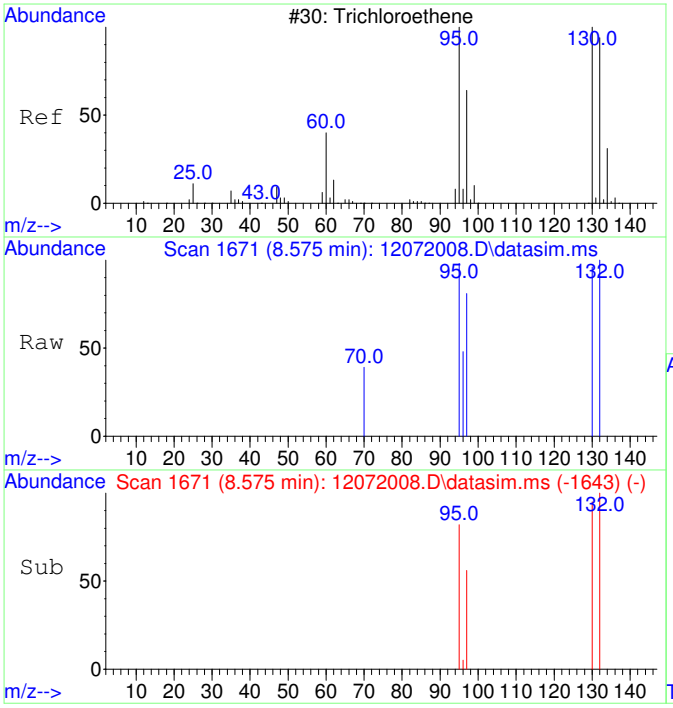


#10
1,2-Dichloroethane
Concen: 52.13 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 62 Resp: 560

Ion	Ratio	Lower	Upper
62	100		
64	107.5	2.3	62.3#

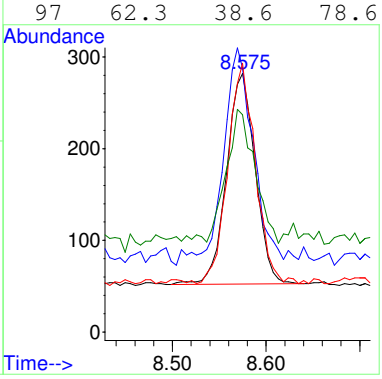


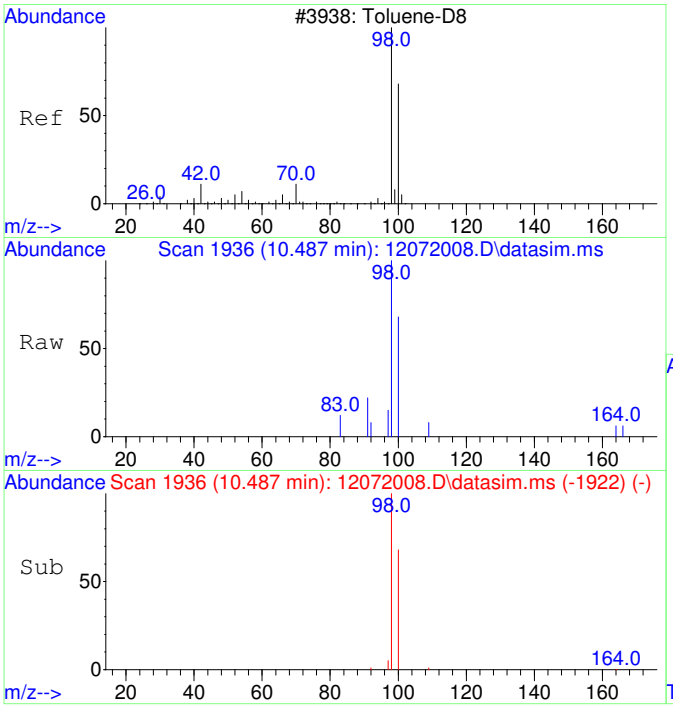


#11
Trichloroethene
Concen: 48.88 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:130 Resp: 486

Ion	Ratio	Lower	Upper
130	100		
95	104.3	60.7	120.7
132	100.6	76.0	116.0
97	62.3	38.6	78.6

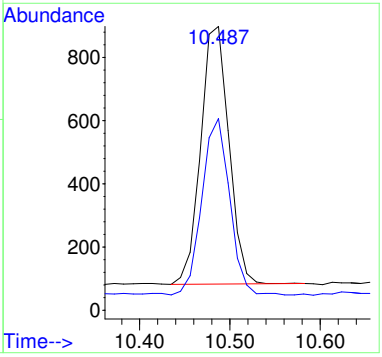


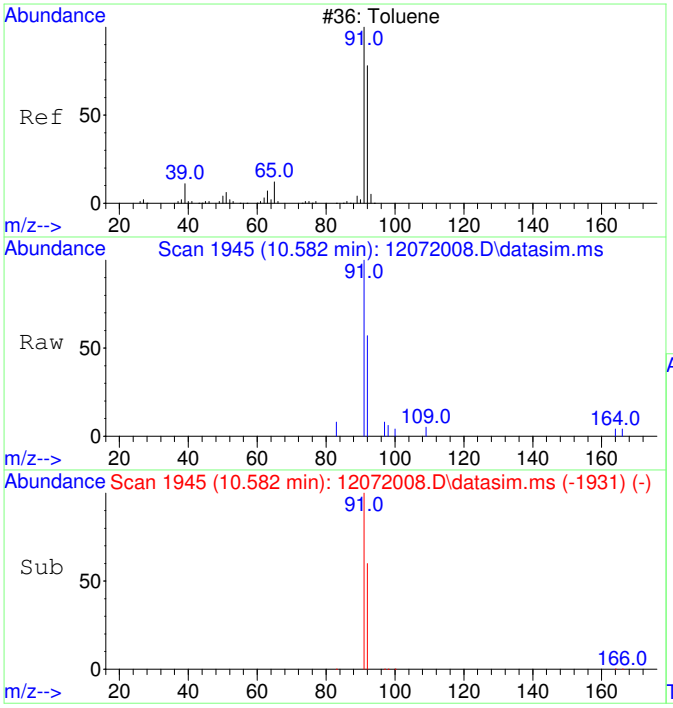


#12
Toluene-d8
Concen: 48.84 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 98 Resp: 1770

Ion	Ratio	Lower	Upper
98	100		
100	66.7	37.1	97.1

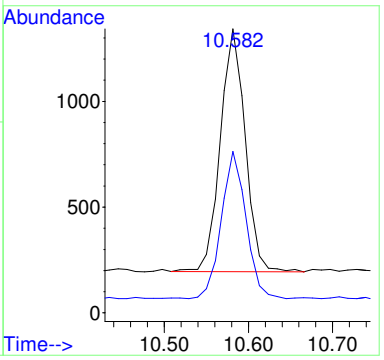


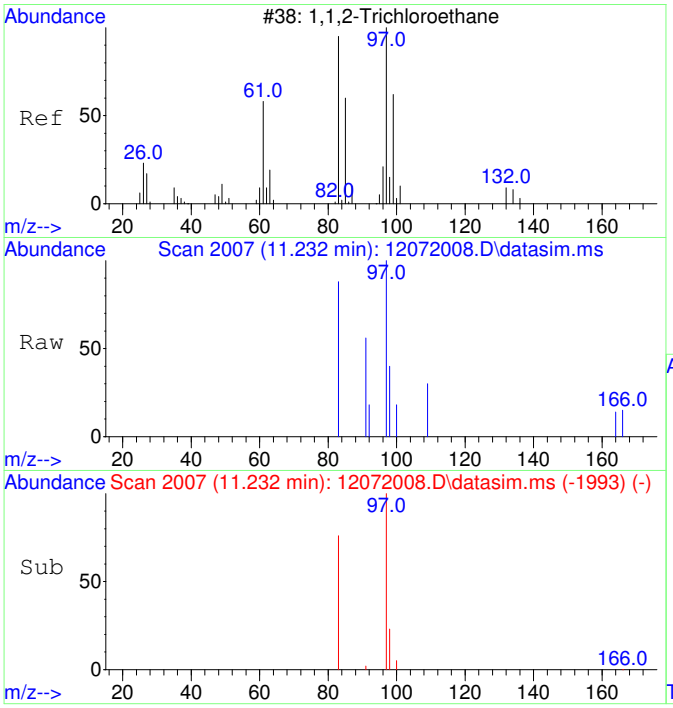


#13
Toluene
Concen: 52.21 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 2356

Ion	Ratio	Lower	Upper
91	100		
92	59.3	29.9	89.9

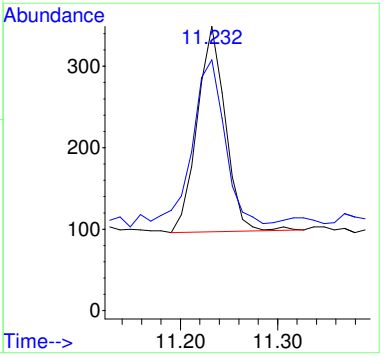


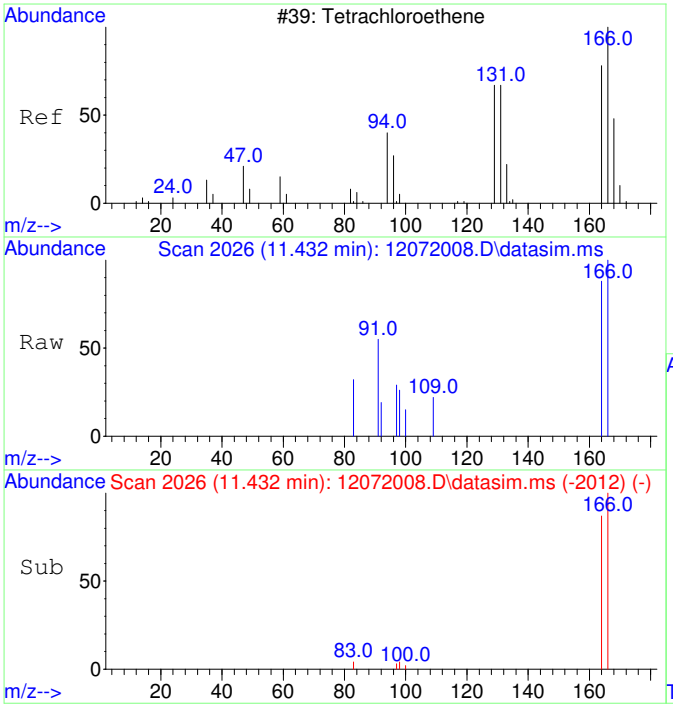


#14
1,1,2-Trichloroethane
Concen: 48.41 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 97 Resp: 506

Ion	Ratio	Lower	Upper
97	100		
83	98.4	51.2	111.2

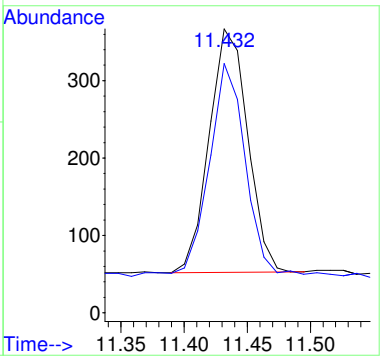


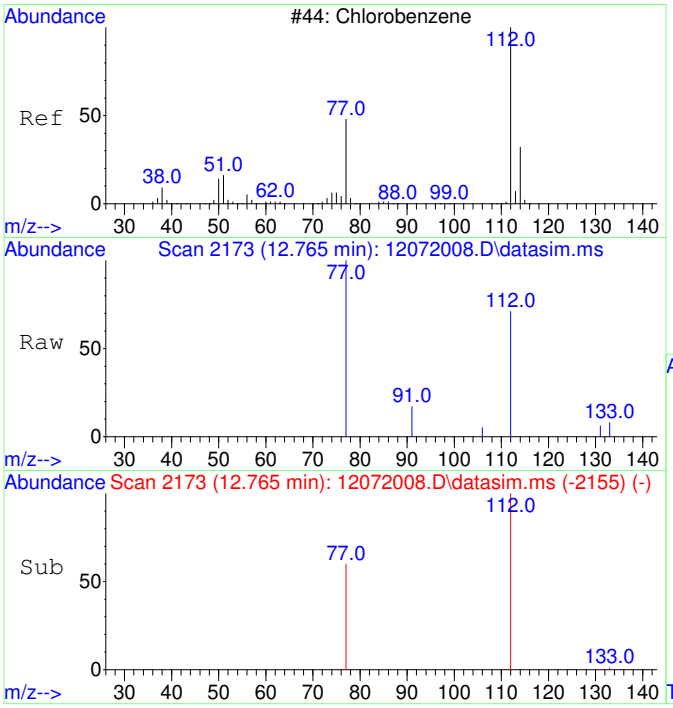


#15
Tetrachloroethene
Concen: 47.52 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:166 Resp: 668

Ion	Ratio	Lower	Upper
166	100		
164	83.4	47.8	107.8

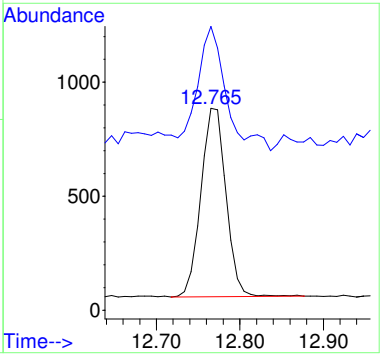


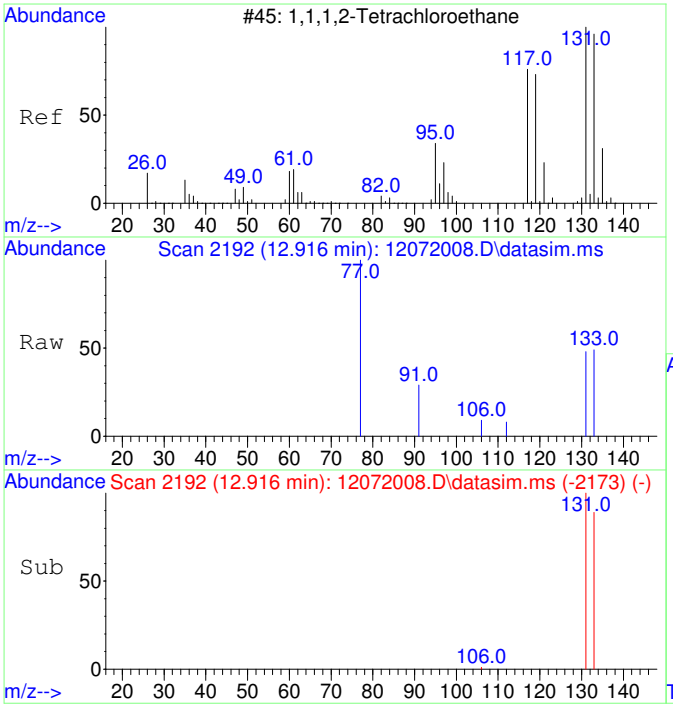


#16
Chlorobenzene
Concen: 49.43 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:112 Resp: 1728

Ion	Ratio	Lower	Upper
112	100		
77	60.0	23.6	83.6

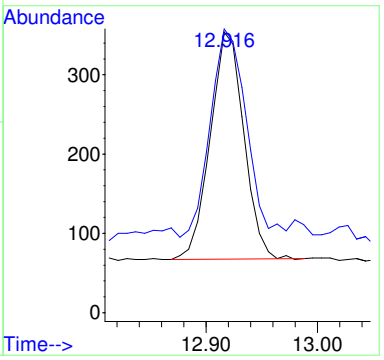


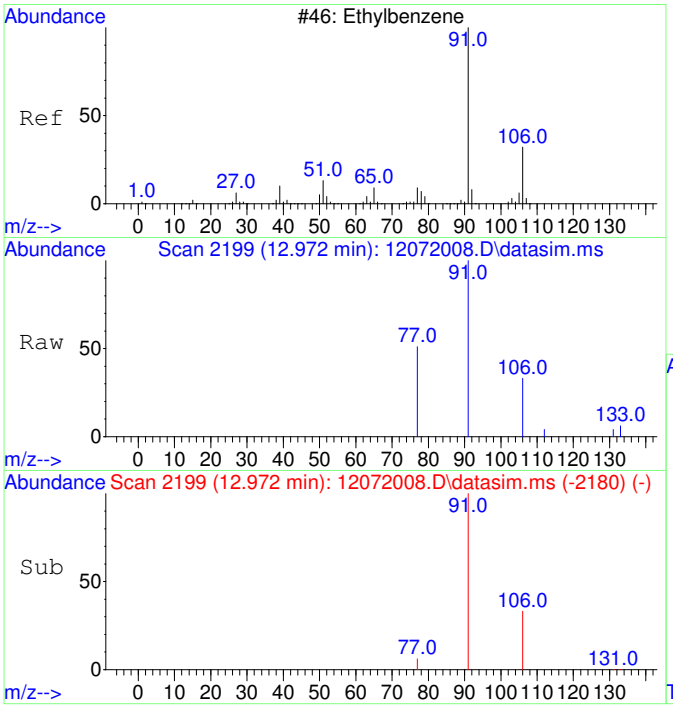


#17
1,1,1,2-Tetrachloroethane
Concen: 49.12 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:131 Resp: 601

Ion	Ratio	Lower	Upper
131	100		
133	98.5	66.3	126.3

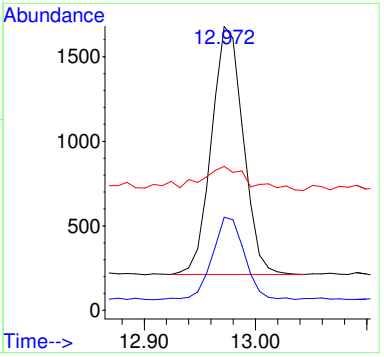


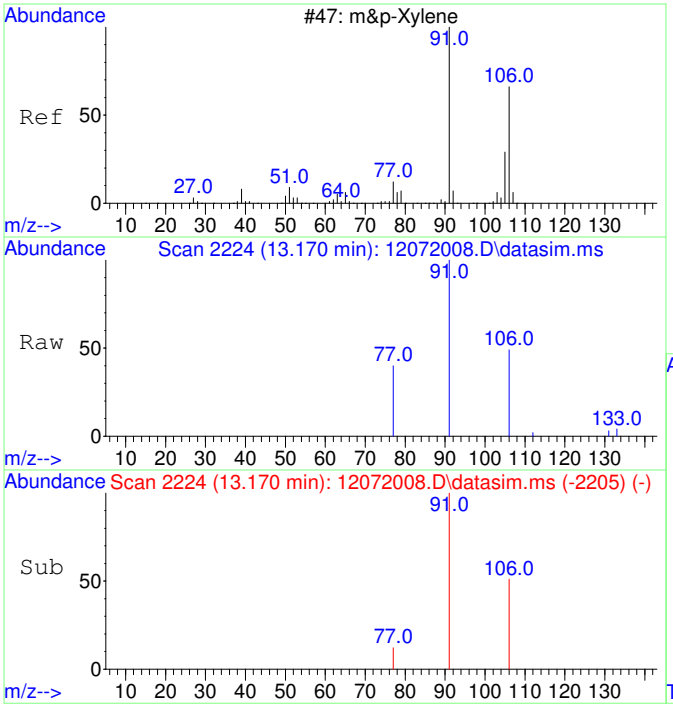


#18
Ethylbenzene
Concen: 50.43 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 2907

Ion	Ratio	Lower	Upper
91	100		
106	33.7	3.0	63.0
77	13.9	0.0	38.2

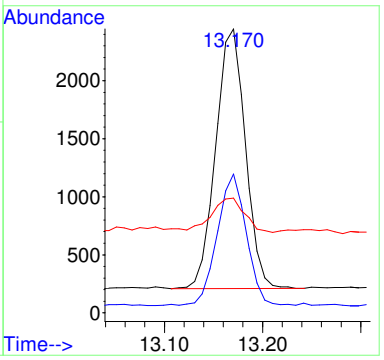


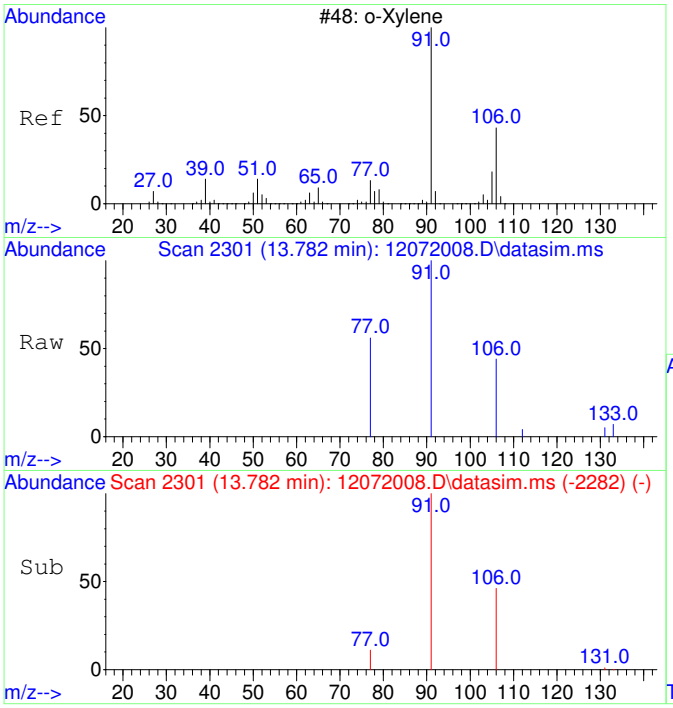


#19
m&p-Xylene
Concen: 105.66 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 4690

Ion	Ratio	Lower	Upper
91	100		
106	49.2	22.2	82.2
77	15.2	0.0	42.4

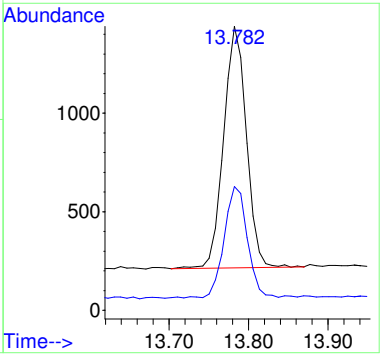


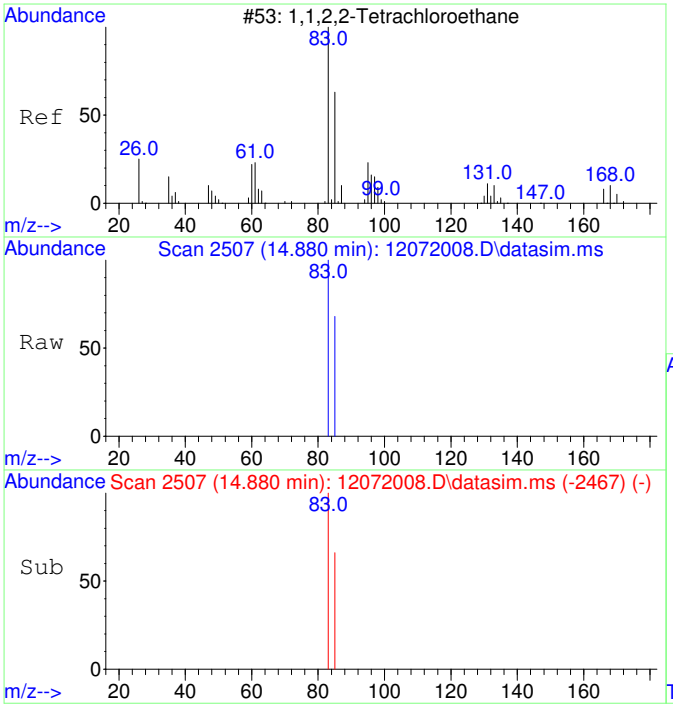


#20
o-Xylene
Concen: 51.14 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 2438

Ion	Ratio	Lower	Upper
91	100		
106	46.8	19.2	79.2

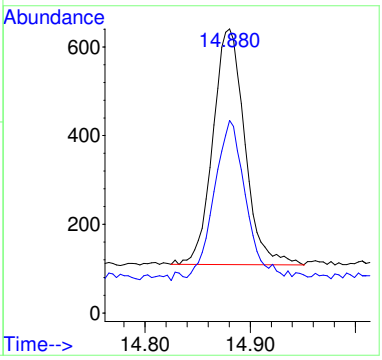


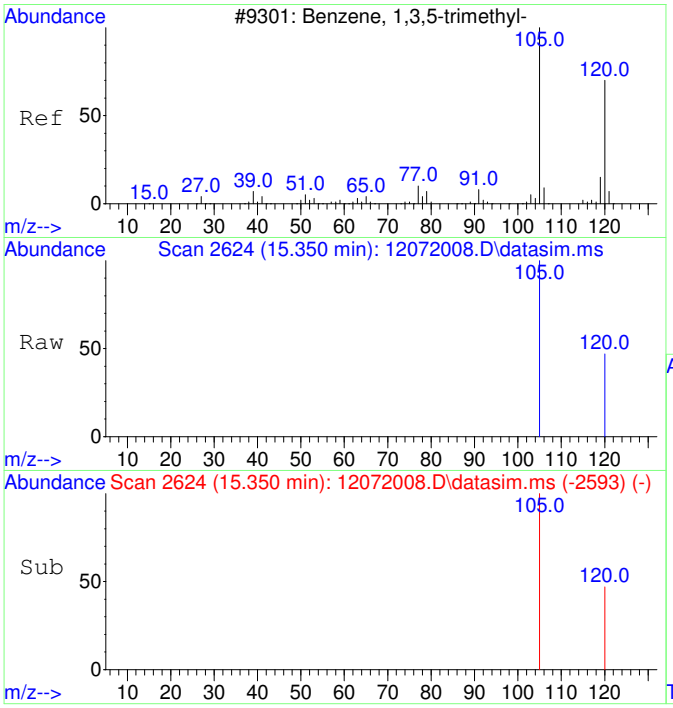


#21
1,1,2,2-Tetrachloroethane
Concen: 50.24 ug/L
RT: 14.880 min Scan# 2507
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 83 Resp: 1116

Ion	Ratio	Lower	Upper
83	100		
85	63.8	34.8	94.8

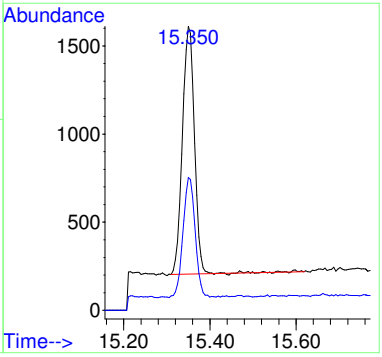


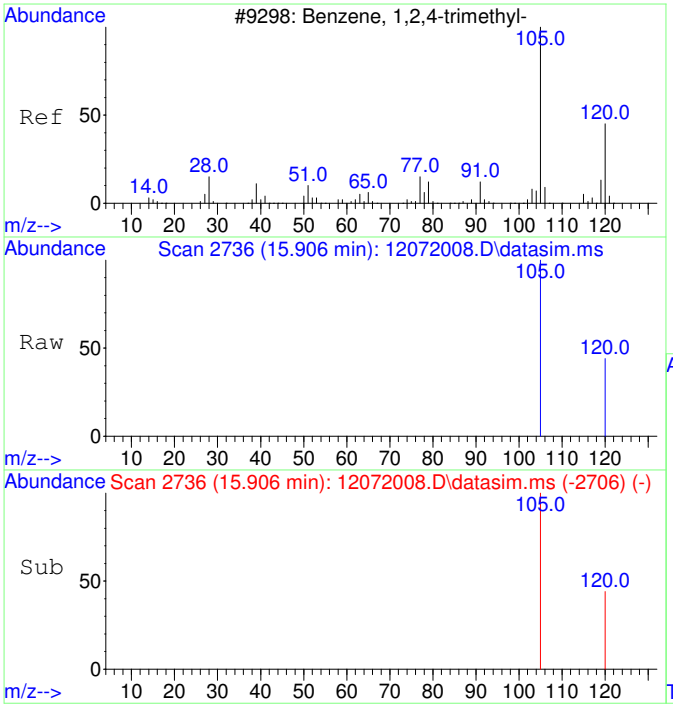


#22
1,3,5-Trimethylbenzene
Concen: 52.23 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:105 Resp: 2738

Ion	Ratio	Lower	Upper
105	100		
120	46.1	21.1	81.1

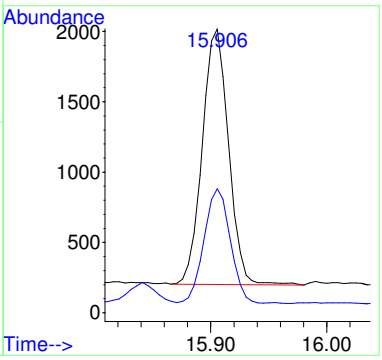


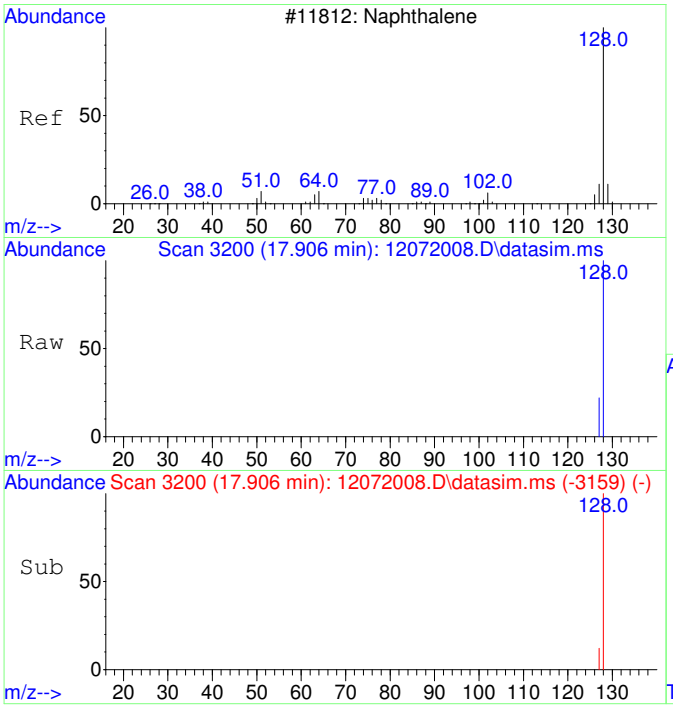


#23
1,2,4-Trimethylbenzene
Concen: 53.45 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:105 Resp: 2866

Ion	Ratio	Lower	Upper
105	100		
120	44.2	17.2	77.2

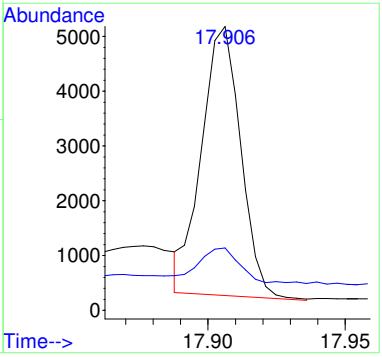


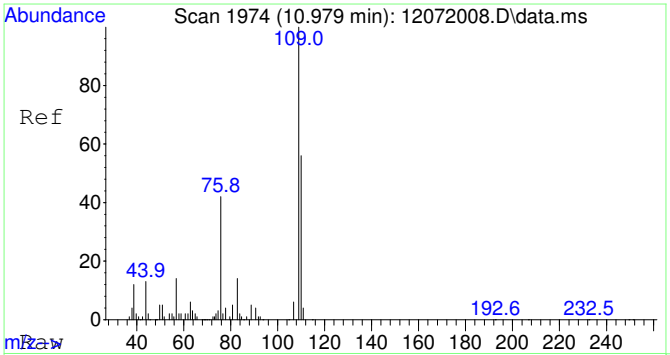


#24
Naphthalene
Concen: 57.91 ug/L m
RT: 17.906 min Scan# 3200
Delta R.T. 0.002 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:128 Resp: 4856

Ion	Ratio	Lower	Upper
128	100		
127	10.9	0.0	42.5

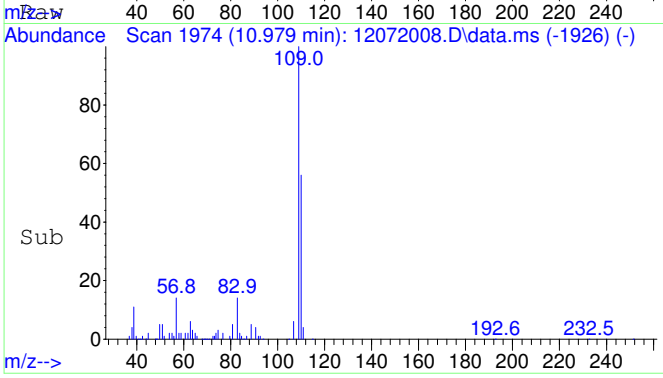


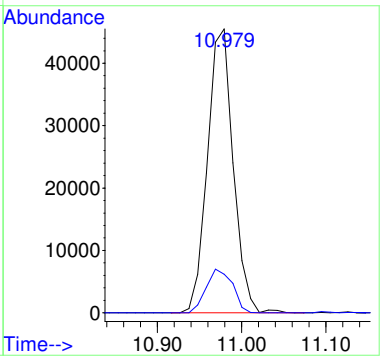


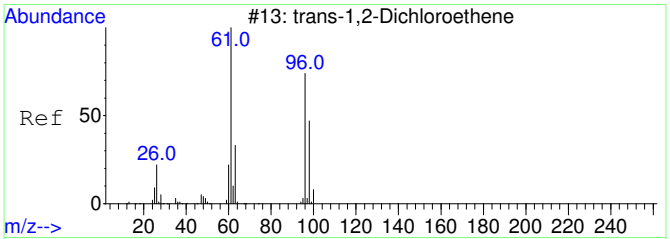
#25
2-Fluorotoluene SCAN
Concen: 4561.89 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

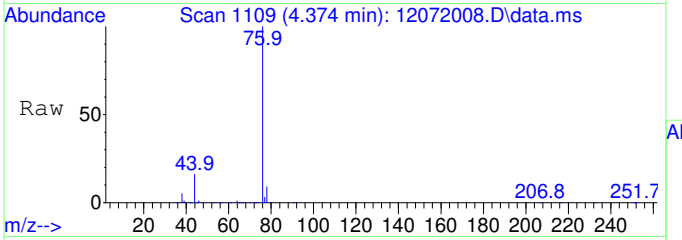
Tgt Ion:109 Resp: 96904

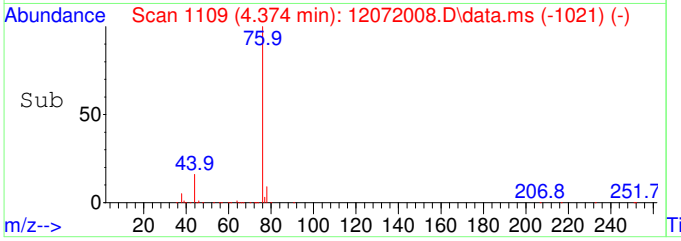
Ion	Ratio	Lower	Upper
109	100		
83	15.8	0.0	43.8







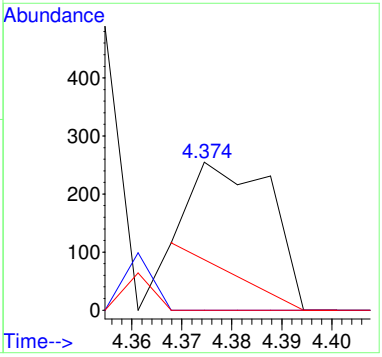


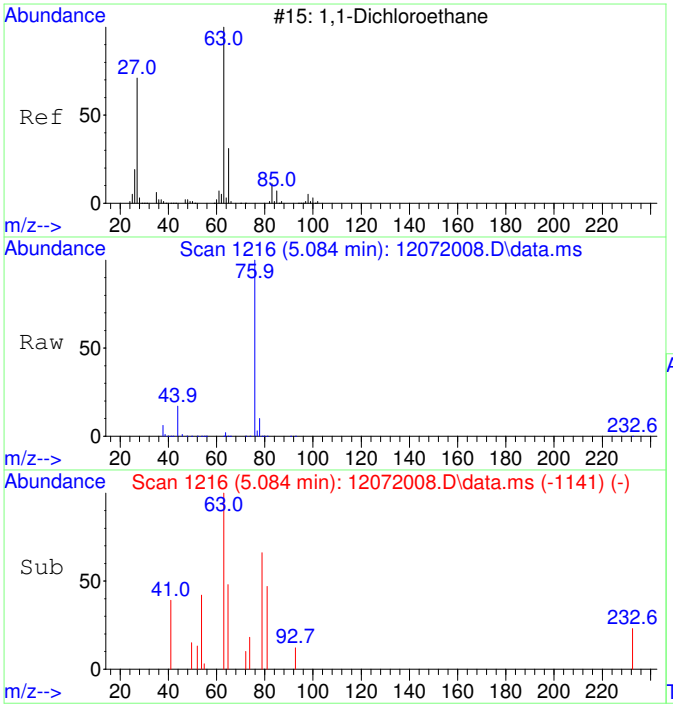


#27
trans-1,2-Dichloroethene SCAN
Concen: 29.61 ug/L
RT: 4.374 min Scan# 1109
Delta R.T. -0.007 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 61 Resp: 187

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

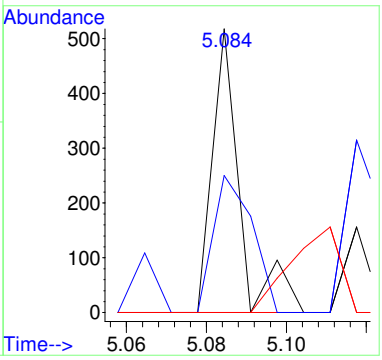


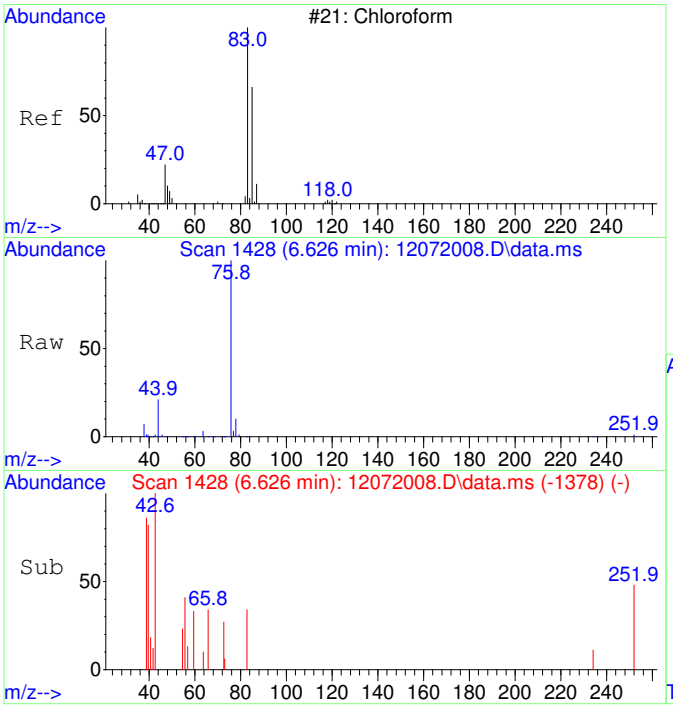


#28
1,1-Dichloroethane SCAN
Concen: 32.73 ug/L
RT: 5.084 min Scan# 1216
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 63 Resp: 244

Ion	Ratio	Lower	Upper
63	100		
65	69.7	1.3	61.3#
83	0.0	0.0	45.9

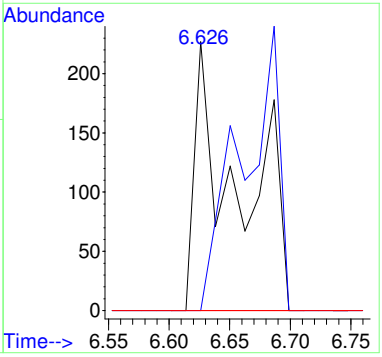


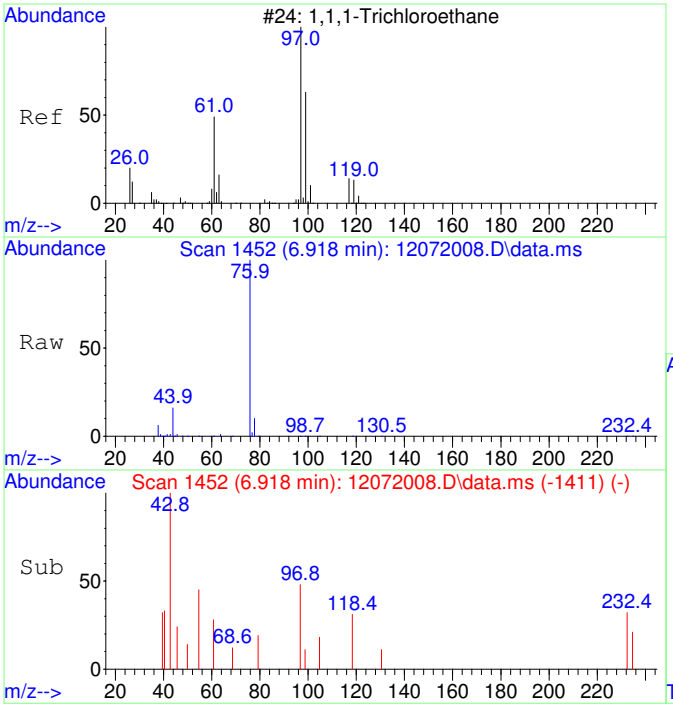


#30
Chloroform SCAN
Concen: 81.33 ug/L
RT: 6.626 min Scan# 1428
Delta R.T. -0.036 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 83 Resp: 556

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

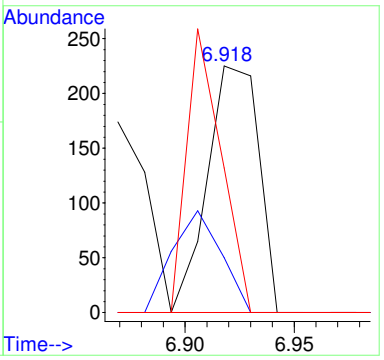


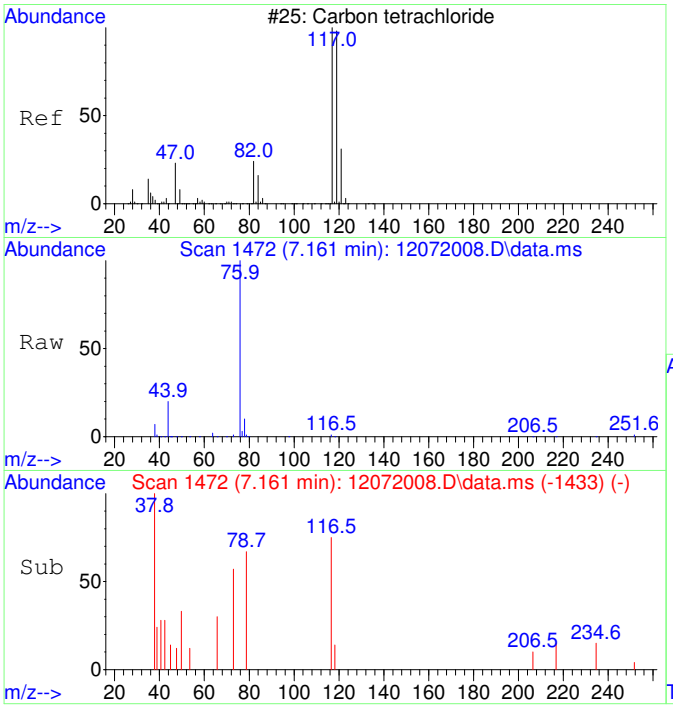


#31
1,1,1-Trichloroethane SCAN
Concen: 52.31 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 97 Resp: 369

Ion	Ratio	Lower	Upper
97	100		
99	39.3	43.6	103.6#
61	77.2	18.0	78.0

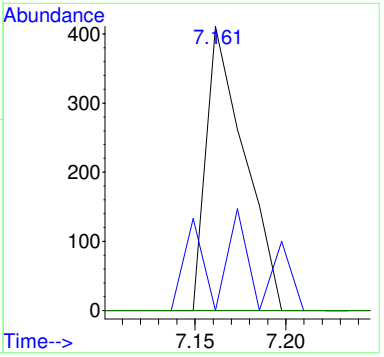


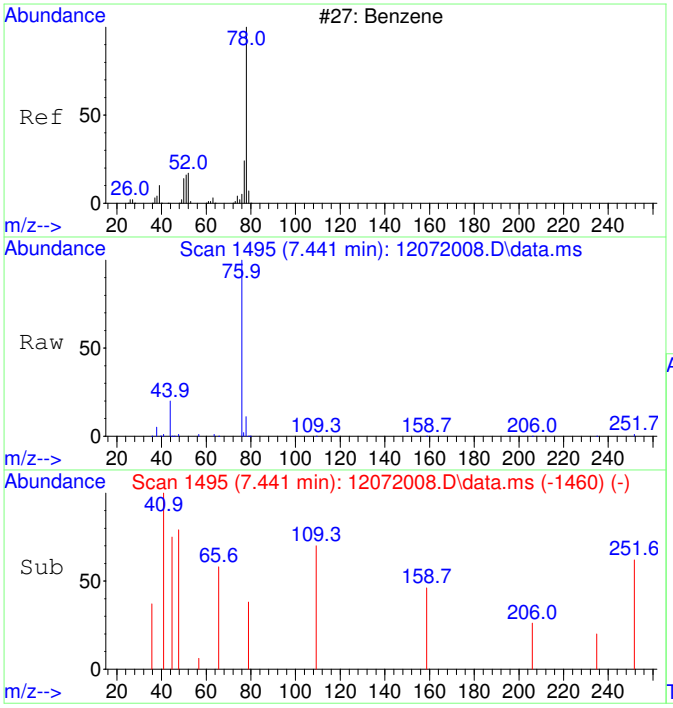


#32
Carbon tetrachloride SCAN
Concen: 99.86 ug/L
RT: 7.161 min Scan# 1472
Delta R.T. -0.024 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:117 Resp: 602

Ion	Ratio	Lower	Upper
117	100		
119	16.1	75.5	135.5#
121	0.0	0.0	58.8
82	0.0	0.0	59.2

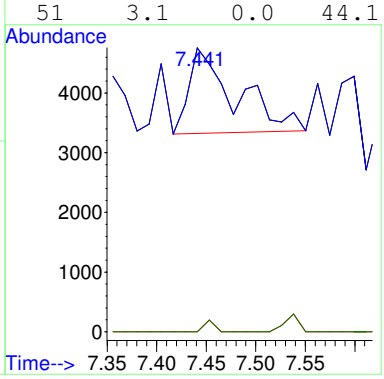


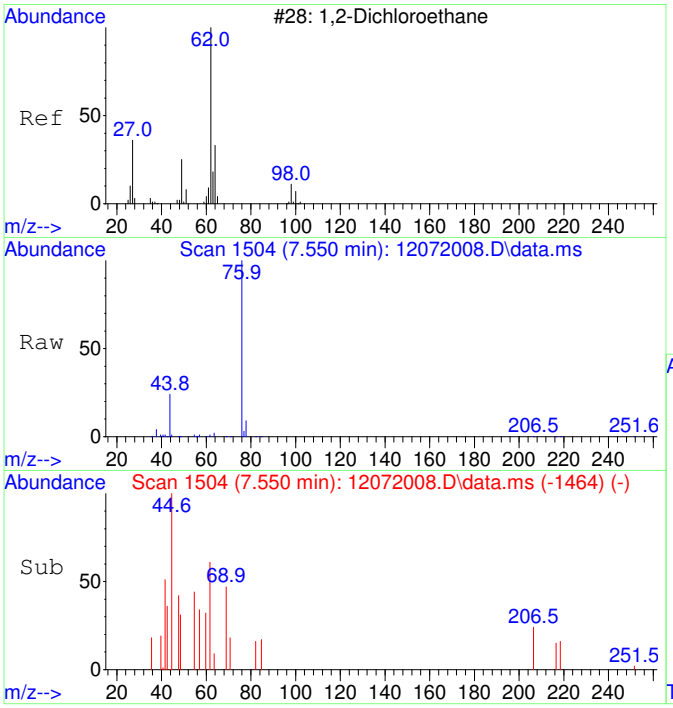


#33
Benzene SCAN
Concen: 219.62 ug/L
RT: 7.441 min Scan# 1495
Delta R.T. -0.073 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 78 Resp: 4687

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	3.1	0.0	47.9
51	3.1	0.0	44.1

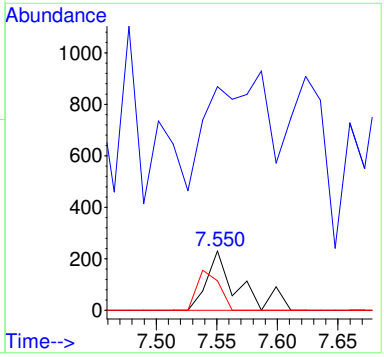


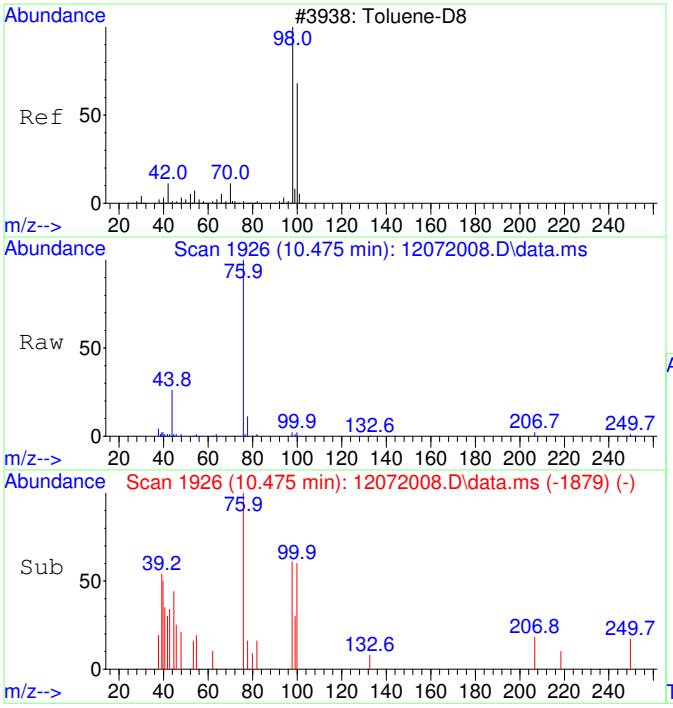


#34
1,2-Dichloroethane SCAN
Concen: 62.02 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. -0.012 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 62 Resp: 414

Ion	Ratio	Lower	Upper
62	100		
64	0.0	5.2	65.2#
49	47.8	3.9	63.9

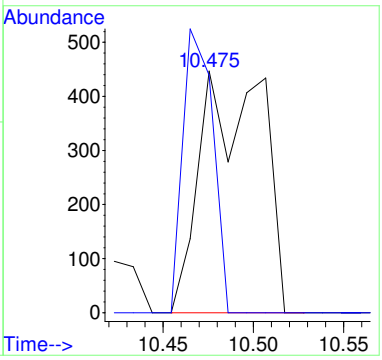


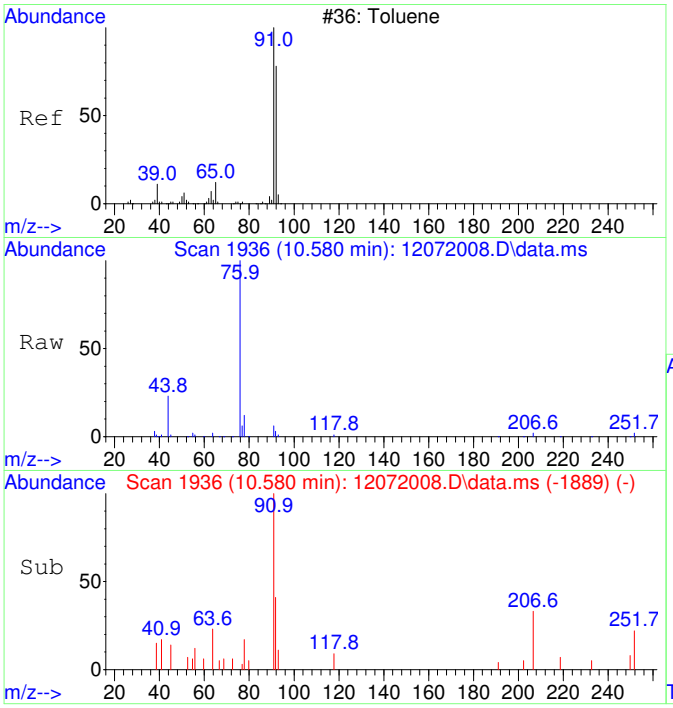


#36
Toluene-d8 SCAN
Concen: 53.86 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. -0.010 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 98 Resp: 1073

Ion	Ratio	Lower	Upper
98	100		
100	56.6	40.0	100.0

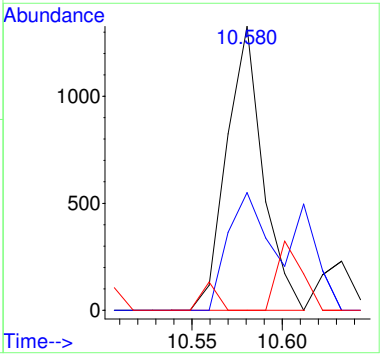


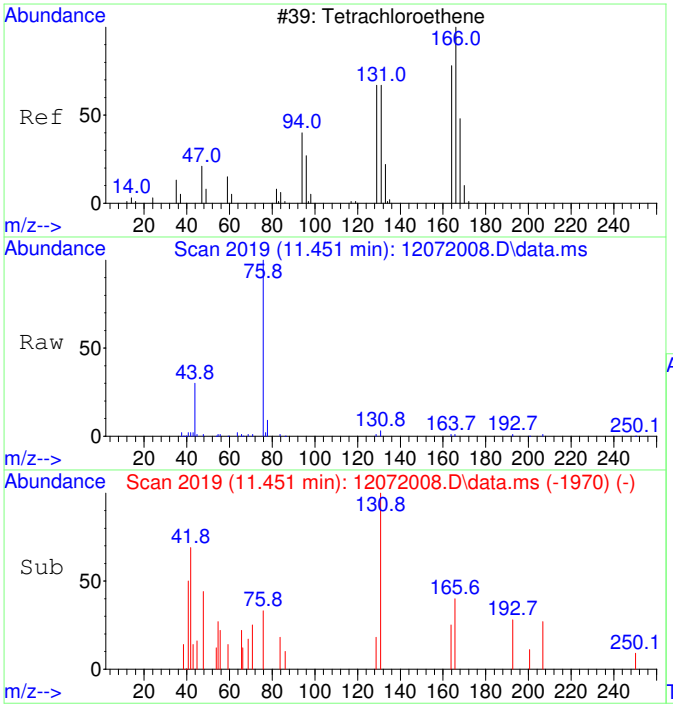


#37
Toluene SCAN
Concen: 75.62 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 1855

Ion	Ratio	Lower	Upper
91	100		
92	72.7	28.3	88.3
65	0.0	0.0	41.0

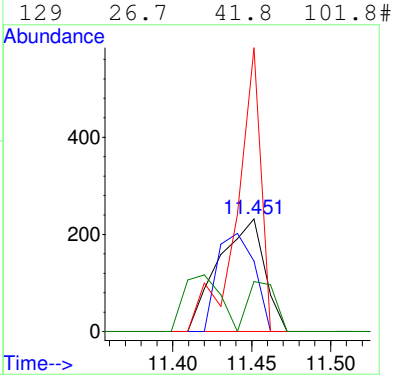


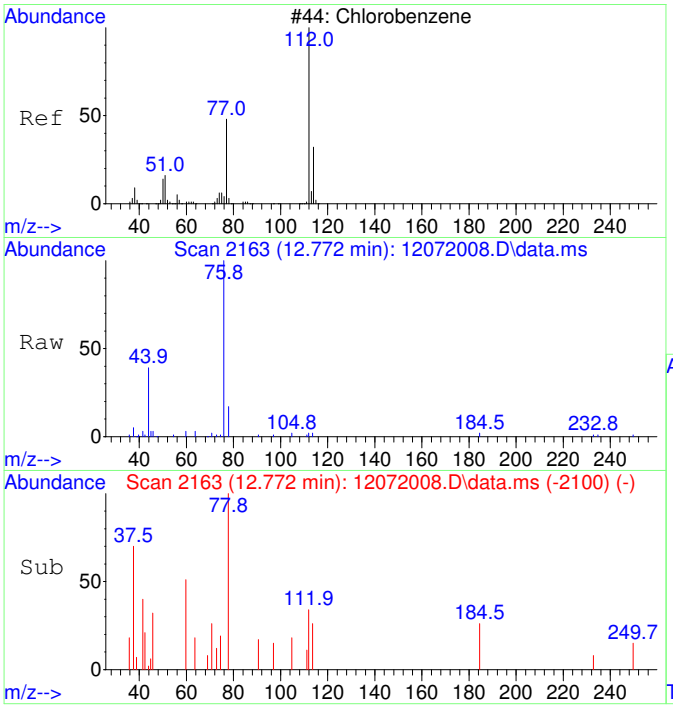


#39
Tetrachloroethene SCAN
Concen: 84.99 ug/L
RT: 11.451 min Scan# 2019
Delta R.T. 0.011 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:166 Resp: 469

Ion	Ratio	Lower	Upper
166	100		
164	70.8	50.9	110.9
131	131.1	38.7	98.7#
129	26.7	41.8	101.8#

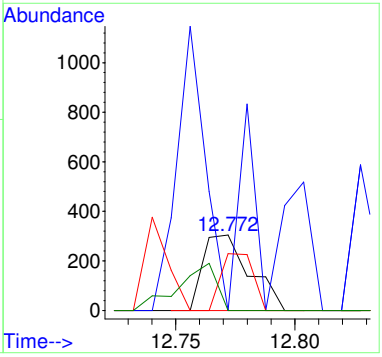


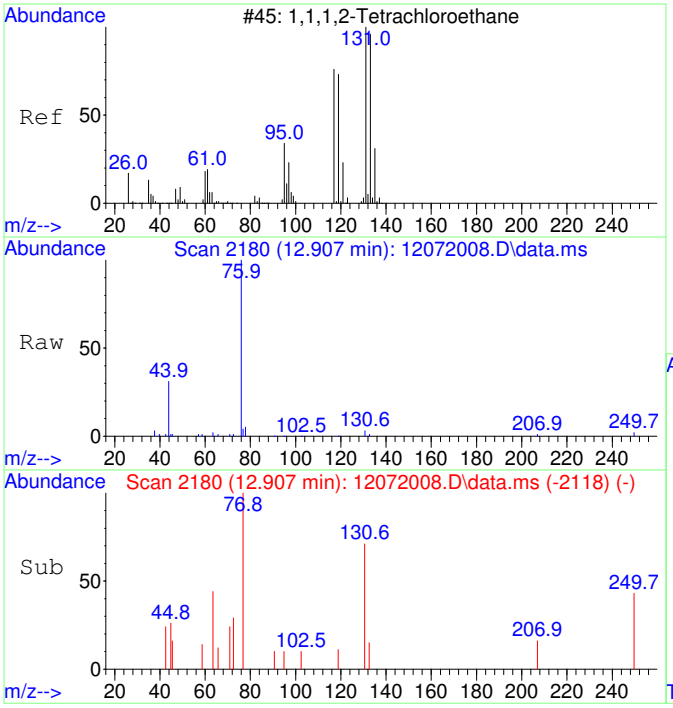


#40
Chlorobenzene SCAN
Concen: 23.61 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:112 Resp: 416

Ion	Ratio	Lower	Upper
112	100		
77	95.4	28.2	88.2#
114	52.2	2.3	62.3
51	0.0	0.0	50.1

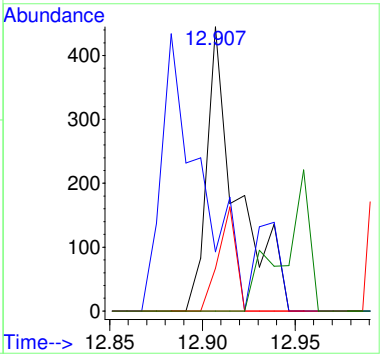


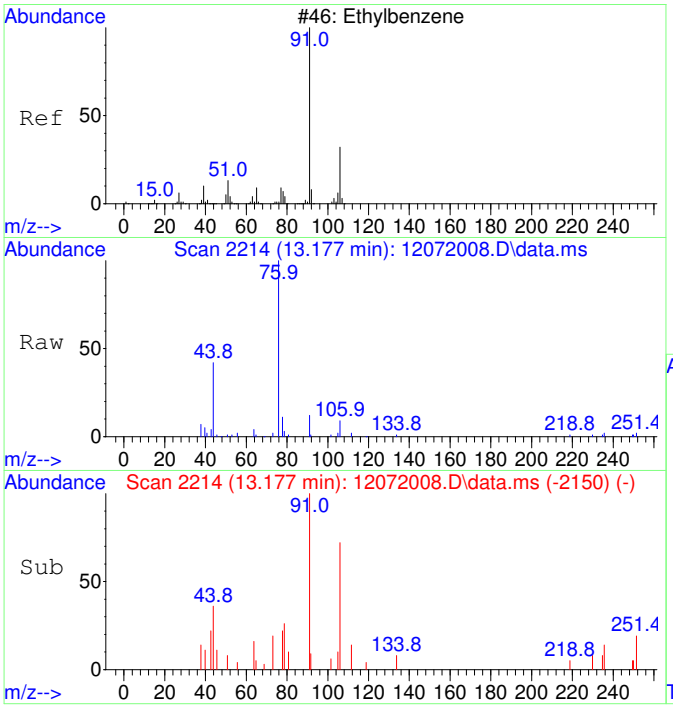


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 84.89 ug/L
RT: 12.907 min Scan# 2180
Delta R.T. -0.008 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:131 Resp: 516

Ion	Ratio	Lower	Upper
131	100		
133	0.0	66.9	126.9#
119	21.3	40.4	100.4#
117	0.0	35.1	95.1#

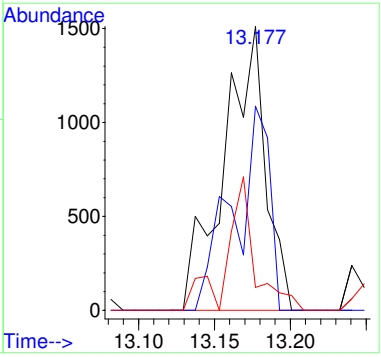


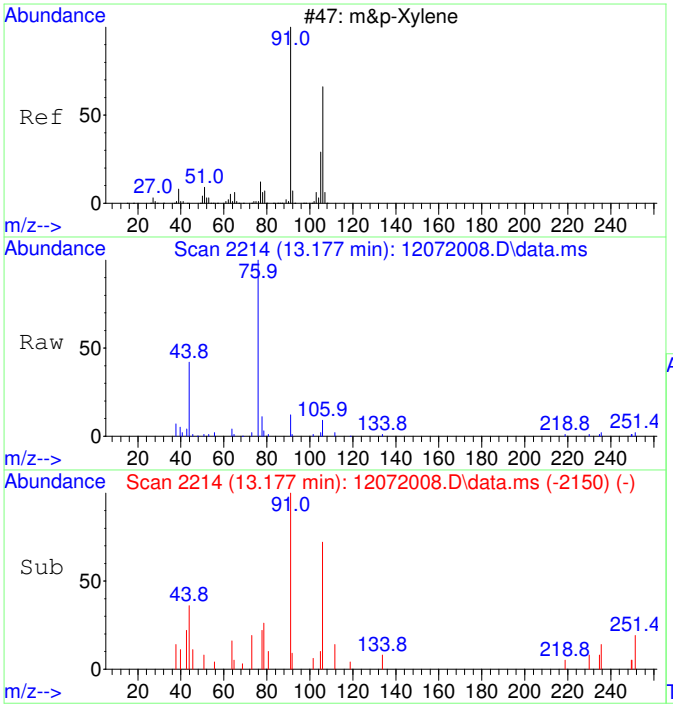


#42
Ethylbenzene SCAN
Concen: 61.97 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 2897

Ion	Ratio	Lower	Upper
91	100		
106	60.7	23.1	83.1
51	31.6	0.0	40.1

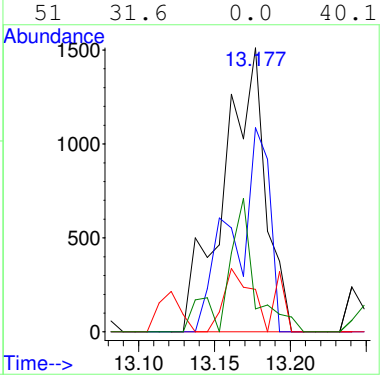


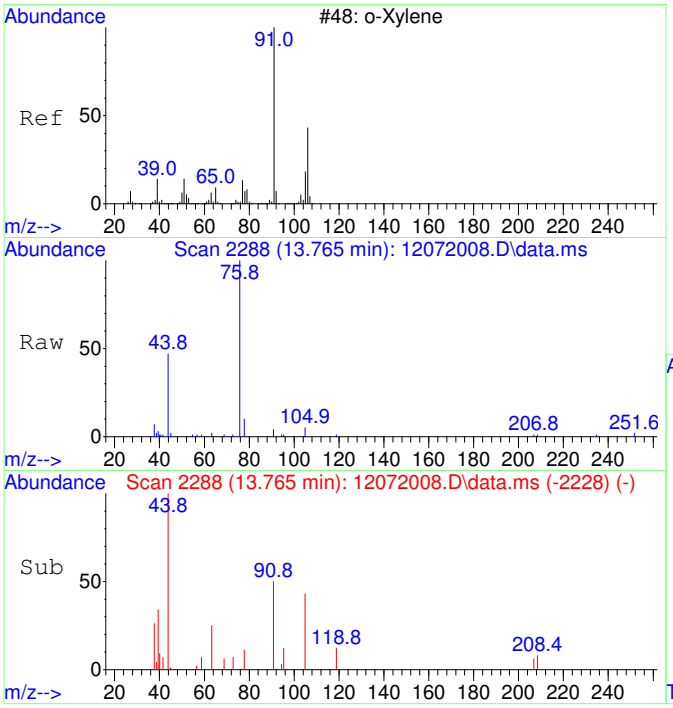


#43
m&p-Xylene SCAN
Concen: 61.97 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 2897

Ion	Ratio	Lower	Upper
91	100		
106	60.7	23.1	83.1
105	14.9	0.0	54.7
51	31.6	0.0	40.1

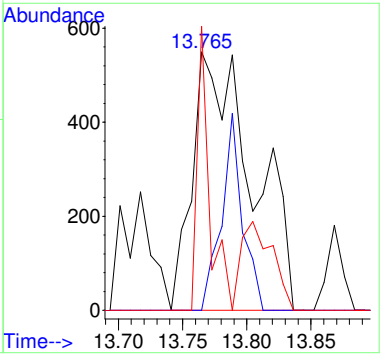


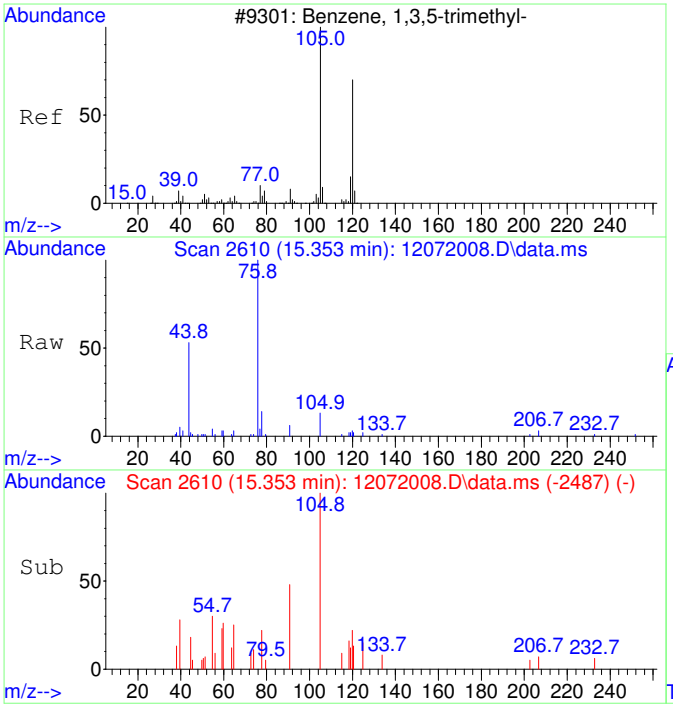


#44
o-Xylene SCAN
Concen: 70.17 ug/L
RT: 13.765 min Scan# 2288
Delta R.T. -0.024 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 1791

Ion	Ratio	Lower	Upper
91	100		
106	0.0	18.0	78.0#
105	22.3	0.0	56.6

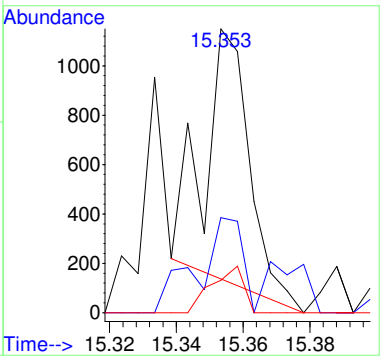


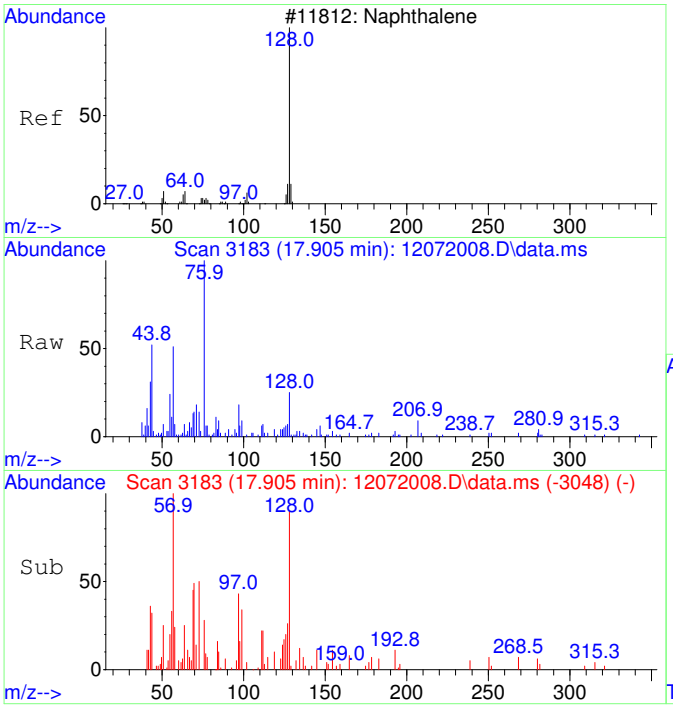


#46
1,3,5-Trimethylbenzene SCAN
Concen: 34.54 ug/L
RT: 15.353 min Scan# 2610
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:105 Resp: 930

Ion	Ratio	Lower	Upper
105	100		
120	38.6	18.3	78.3
119	13.5	0.0	43.1

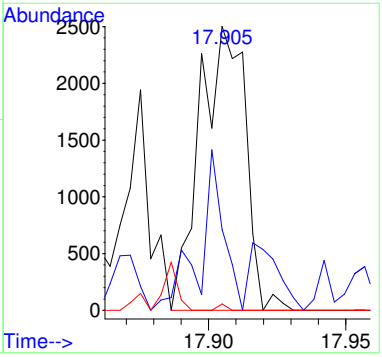




#48
Naphthalene SCAN
Concen: 70.25 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.002 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:128 Resp: 2901

Ion	Ratio	Lower	Upper
128	100		
127	29.2	0.0	44.0
129	6.7	0.0	40.8



S20L021-SCV1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072009.D
Acq On : 7 Dec 2020 15:07
InstName : AG5975C
Operator : TD
Sample : S20L021-SCV1
Misc : 2050006 5 mg/L
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 08 06:27:44 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

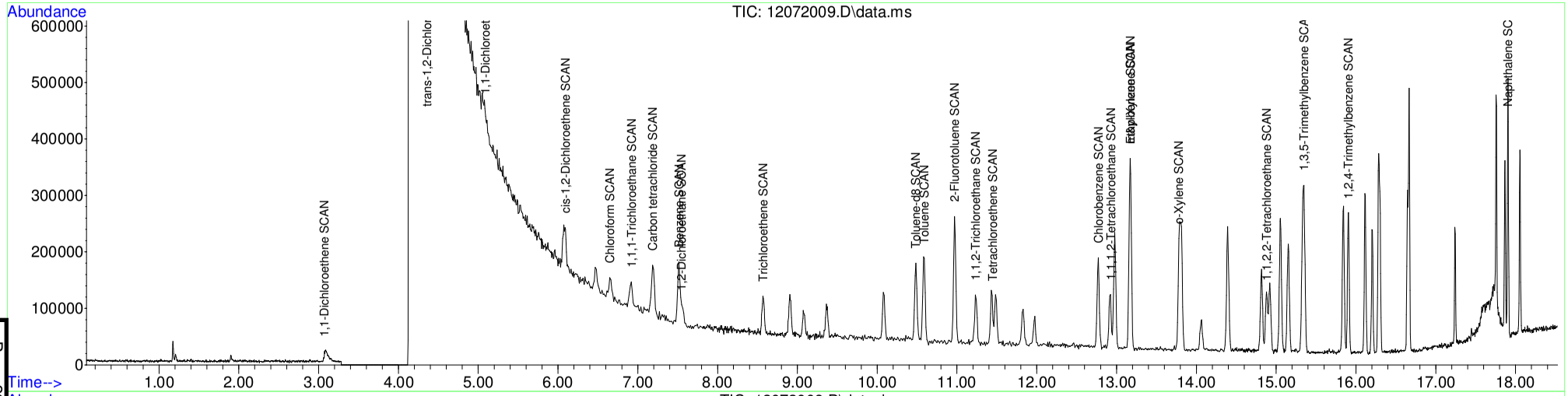
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	207424	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	174700	4348.70 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.97%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	38636	4697.57 ug/L	83
3] trans-1,2-Dichloroethene	4.363	61	44774	4318.17 ug/L	98
4] 1,1-Dichloroethane	5.079	63	52290	4222.35 ug/L	96
5] cis-1,2-Dichloroethene	6.081	61	54763	4269.62 ug/L	98
6] Chloroform	6.652	83	52508	4262.13 ug/L	100
7] 1,1,1-Trichloroethane	6.907	97	57019	4308.50 ug/L	100
8] Carbon tetrachloride	7.187	117	55058	4351.53 ug/L	100
9] Benzene	7.503	78	146674	4202.26 ug/L	99
10] 1,2-Dichloroethane	7.540	62	51181	4298.38 ug/L	99
11] Trichloroethene	8.569	130	47835	4340.71 ug/L	97
13] Toluene	10.582	91	213094	4260.28 ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	50164	4329.97 ug/L	99
15] Tetrachloroethene	11.432	166	67727	4347.15 ug/L	100
16] Chlorobenzene	12.765	112	165909	4281.56 ug/L	97
17] 1,1,1,2-Tetrachloroethane	12.916	131	58824	4337.37 ug/L	99
18] Ethylbenzene	12.972	91	271921	4256.29 ug/L	99
19] m&p-Xylene	13.170	91	413479	8404.52 ug/L	98
20] o-Xylene	13.782	91	223060	4221.29 ug/L	98
21] 1,1,2,2-Tetrachloroethane	14.880	83	103095	4187.17 ug/L	100
22] 1,3,5-Trimethylbenzene	15.348	105	244208	4202.52 ug/L	97
23] 1,2,4-Trimethylbenzene	15.904	105	242702	4083.40 ug/L	97
24] Naphthalene	17.906	128	383301	3980.40 ug/L	99
25) 2-Fluorotoluene SCAN	10.969	109	113839	4835.01 ug/L	95
26) 1,1-Dichloroethene SCAN	3.074	61	23589	4291.60 ug/L #	25
27) trans-1,2-Dichloroethe...	4.355	61	31153	4449.79 ug/L	75
28) 1,1-Dichloroethane SCAN	5.085	63	34885	4221.49 ug/L	98
29) cis-1,2-Dichloroethene...	6.086	61	39559	4869.56 ug/L	73
30) Chloroform SCAN	6.650	83	31690	4182.31 ug/L	83
31) 1,1,1-Trichloroethane ...	6.918	97	35723	4568.77 ug/L	94
32) Carbon tetrachloride SCAN	7.186	117	30391	4548.43 ug/L	87
33) Benzene SCAN	7.514	78	90391	3821.24 ug/L	92
34) 1,2-Dichloroethane SCAN	7.550	62	33773	4564.44 ug/L	93
35) Trichloroethene SCAN	8.568	130	23933	4640.02 ug/L	80
36) Toluene-d8 SCAN	10.486	98	104677	4740.29 ug/L	97
37) Toluene SCAN	10.591	91	124623	4583.66 ug/L	91
38) 1,1,2-Trichloroethane ...	11.231	97	30637	4495.59 ug/L	90
39) Tetrachloroethene SCAN	11.441	166	28525	4663.66 ug/L	89
40) Chlorobenzene SCAN	12.772	112	86547	4431.87 ug/L	86
41) 1,1,1,2-Tetrachloroeth...	12.923	131	32613	4840.63 ug/L	93
42) Ethylbenzene SCAN	13.169	91	244014	4709.58 ug/L	91
43) m&p-Xylene SCAN	13.169	91	244014	4709.58 ug/L	92
44) o-Xylene SCAN	13.781	91	136107	4810.72 ug/L	94
45) 1,1,2,2-Tetrachloroeth...	14.876	83	66354	4510.62 ug/L	94
46) 1,3,5-Trimethylbenzene...	15.347	105	134206	4496.33 ug/L	98
47) 1,2,4-Trimethylbenzene...	15.903	105	131912	4325.59 ug/L	97
48) Naphthalene SCAN	17.905	128	192878	4213.67 ug/L	99

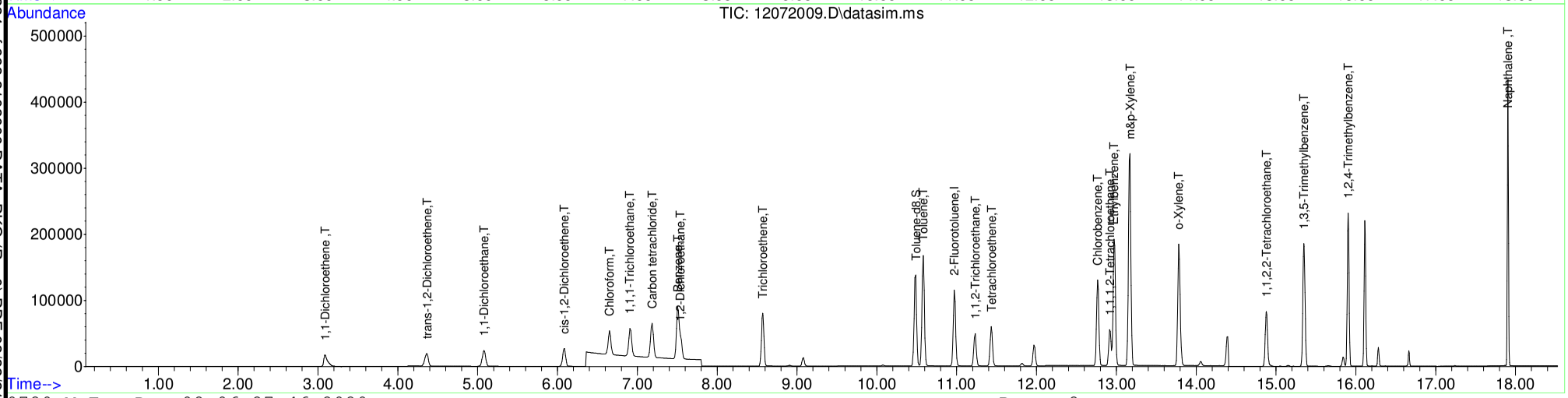
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072009.D
Acq On : 7 Dec 2020 15:07
InstName : AG5975C
Operator : TD
Sample : S20L021-SCV1
Misc : 2050006 5 mg/L
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 08 06:27:44 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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SEQUENCE

S21B029

Sequence Date: 02/10/2021

Instrument: AG5975CV

Sequence Analyses:

VOCs, Passive Samplers

ANALYST / REVIEWER - DATA REVIEW CHECKLIST

BATCH #:	B21B045	SEQUENCE #:	S21B029 02/10/21
BATCH #:	PRELIMINARY	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.	Tue Dec 08 06:26:34 2020			
	Initial Calibration ID (LIMS number):	2012007			
	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 #:	B21B045	SEQUENCE #:	S21B029 02/10/21
BATCH #:	PRELIMINARY	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/N	Y/N	2103008-03 IS low
	Surrogates within QC criteria?	☐	Y/N	Y/N	*see comments
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	RE for low surr. recovery and dilutions
	Do any samples need to be re-digested or re-extracted?	✔			
	Were all data qualifiers appropriately applied?	☐	Y	Y	
	Are problems, anomalies, discrepancies documented in LIMS? Specify if applicable.	✔			
MANUAL INT	Were manual integrations performed and documented? Specify if applicable.	☐	Y	Y	KO reviewed 2/15/21

APPROVALS	ANALYST INITIALS & DATE:	TD 02/15/21
	REVIEWED BY:	ESTRELLITA MANUEL (Affiliate) Digitally signed by ESTRELLITA MANUEL (Affiliate) Date: 2021.02.15 11:13:05 -08'00' SIGN HERE

COMMENTS

Custom analyte list.

* Samples 2102006-04,-06,-08,-10,-11; 2102008-04,-05 have low surrogate %R

Injection Log

Operator: TD
Directory: C:\msdchem\1\Ravioli Data\2021\021021\

Vial	File Name	Mult	Sample Info	Misc Info	Date Acquired
1	02102101.D	1	S21B029-IBL1		10 Feb 2021 8:57
2	02102102.D	1	S21B029-TUN1	BFB 2040028	10 Feb 2021 9:30
3	02102103.D	1	S21B029-CCV1	2106039 5 mg/L	10 Feb 2021 9:39
4	02102104.D	1	S21B029-CRL1	2106042 0.05 mg/L	10 Feb 2021 10:03
5	02102105.D	1	B21B045-BLK1		10 Feb 2021 10:26
6	02102106.D	1	B21B045-BS1		10 Feb 2021 10:50
7	02102107.D	1	B21B045-BSD1		10 Feb 2021 11:37
8	02102108.D	1	B21B045-MRL1		10 Feb 2021 12:01
9	02102109.D	1	2102006-01		10 Feb 2021 12:24
10	02102110.D	1	2102006-02		10 Feb 2021 12:48
11	02102111.D	1	2102006-03		10 Feb 2021 13:12
12	02102112.D	1	2102006-04		10 Feb 2021 13:35
13	02102113.D	1	2102006-05		10 Feb 2021 13:59
14	02102114.D	1	2102006-06		10 Feb 2021 14:22
15	02102115.D	1	2102006-07		10 Feb 2021 14:46
16	02102116.D	1	2102006-08		10 Feb 2021 15:10
17	02102117.D	1	2102006-09		10 Feb 2021 15:33
18	02102118.D	1	2102006-10		10 Feb 2021 15:57
19	02102119.D	1	2102006-11		10 Feb 2021 16:20
20	02102120.D	1	2102008-01		10 Feb 2021 16:44
21	02102121.D	1	2102008-02		10 Feb 2021 17:08
22	02102122.D	1	2102008-03		10 Feb 2021 17:31
23	02102123.D	1	2102008-04		10 Feb 2021 17:55
24	02102124.D	1	2102008-05		10 Feb 2021 18:19
25	02102125.D	1	2102006-01RE1	RA for low Surr	10 Feb 2021 18:42
26	02102126.D	1	2102006-02RE1	RA for low Surr	10 Feb 2021 19:06
27	02102127.D	1	2102006-04RE1	RA for low Surr	10 Feb 2021 19:30
28	02102128.D	1	2102006-05RE1	RA for low Surr	10 Feb 2021 19:53

GC/MS QA-QC Check Report

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Tune File : C:\msdchem\1\Ravioli Data\2021\021021\02102102.D
Tune Time : 10 Feb 2021 9:30

Daily Calibration File : C:\msdchem\1\Ravioli Data\2021\021021\02102103.D

223096

File	Sample	Surrogate Recovery %	Internal Standard Responses
02102103.D	S21B029-CC	88	223096
02102104.D	S21B029-CR	1*	234587
02102105.D	B21B045-BL	86	217728
02102106.D	B21B045-BS	87	171585
02102107.D	B21B045-BSD	86	174473
02102108.D	B21B045-MR	86	193222
02102109.D	2102006-01	85*	249203
02102110.D	2102006-02	85*	204373
02102111.D	2102006-03	86	141956
02102112.D	2102006-04	85*	196670
02102113.D	2102006-05	85*	173597
02102114.D	2102006-06	85*	176043
02102115.D	2102006-07	86	193566
02102116.D	2102006-08	85*	199080
02102117.D	2102006-09	86	156622
02102118.D	2102006-10	85*	173383
02102119.D	2102006-11	85*	168231
02102120.D	2102008-01	86	181577
02102121.D	2102008-02	86	218761
02102122.D	2102008-03	88	104394*
02102123.D	2102008-04	85*	191814

```
02102124.D
         2102008-05   85*                    225704
--------------------------------------------------------------------------
02102125.D
         2102006-01RE1   86                  164338      RA for low surr
--------------------------------------------------------------------------
02102126.D
         2102006-02RE1   86                 170598       RA for low surr
--------------------------------------------------------------------------
02102127.D
         2102006-04RE1   85*                152743       RA for low surr
--------------------------------------------------------------------------
02102128.D
         2102006-05RE1   86                 177039       RA for low surr
--------------------------------------------------------------------------
(fails) - fails 12hr time check   * - fails criteria

    Created: Thu Feb 11 06:32:10 2021  AG5975C
```

Analysis Sequence

S21B029

Project: R21S04
Analysis: VOCs, Passive Samplers

Instrument: AG5975CV **Calibration ID:** 2012007 Printed: 02/15/2021 8:02 am

Lab Number	Sample Name	Order	Analyzed Date	STD ID	ISTD ID	Sequenced By	File ID	Comments
S21B029-IBL1	Instrument Blank	1	2/10/21 8:57			TD	02102101.D	
S21B029-TUN1	BFB	2	2/10/21 9:30	2040028		TD	02102102.D	
S21B029-CCV1	Calibration Check	3	2/10/21 9:39	2106039		TD	02102103.D	
S21B029-CRL1	Instrument RL Check	4	2/10/21 10:03	2106042		TD	02102104.D	
B21B045-BLK1	Blank	5	2/10/21 10:26			TD	02102105.D	
B21B045-BS1	LCS	6	2/10/21 10:50			TD	02102106.D	
B21B045-BSD1	LCS Dup	7	2/10/21 11:37			TD	02102107.D	
B21B045-MRL1	MRL Check	8	2/10/21 12:01			TD	02102108.D	
2102006-01 A	G6-014-2ft-2d-R	9	2/10/21 12:24			TD	02102109.D	
2102006-02 A	F6-031-3ft-2d-R	10	2/10/21 12:48			TD	02102110.D	
2102006-03 A	F6-010-2.5ft-2d-R	11	2/10/21 13:12			TD	02102111.D	
2102006-04 A	F6-006-3ft-2d-R	12	2/10/21 13:35			TD	02102112.D	
2102006-05 A	Waverly-MH1-2ft-2d-R	13	2/10/21 13:59			TD	02102113.D	
2102006-06 A	Waverly-MH1-2.5ft-2d-R	14	2/10/21 14:22			TD	02102114.D	
2102006-07 A	Waverly-MH2-2.5ft-2d-R	15	2/10/21 14:46			TD	02102115.D	
2102006-08 A	Waverly-MH3-2ft-2d-R	16	2/10/21 15:10			TD	02102116.D	
2102006-09 A	235 Fairchild-SC-4ft-2d	17	2/10/21 15:33			TD	02102117.D	
2102006-10 A	Classics-MH1-3ft-2d-R	18	2/10/21 15:57			TD	02102118.D	
2102006-11 A	Classics-MH2-2.5ft-2d-R	19	2/10/21 16:20			TD	02102119.D	
2102008-01 A	265 Whisman-WomenRR-BZ-2d	20	2/10/21 16:44			TD	02102120.D	
2102008-02 A	265 Whisman-MenRR-BZ-2d	21	2/10/21 17:08			TD	02102121.D	
2102008-03 A	265 Whisman-PrvtOFC3-BZ-2d	22	2/10/21 17:31			TD	02102122.D	

Page 231 of 993 2102006 DATA_PKG (Rev0).PDF 02/22/21 13:00:58

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Analysis Sequence

S21B029

(Continued)

Project: R21S04
Analysis: VOCs, Passive Samplers

Instrument: AG5975CV **Calibration ID:** 2012007 Printed: 02/15/2021 8:02 am

Lab Number	Sample Name	Order	Analyzed Date	STD ID	ISTD ID	Sequenced By	File ID	Comments
2102008-04 A	265 Whisman-Utilities-BZ-2d	23	2/10/21 17:55			TD	02102123.D	
2102008-05 A	265 Whisman-NE-OUT-2d	24	2/10/21 18:19			TD	02102124.D	
2102006-01RE1 A	G6-014-2ft-2d-R	25	2/10/21 18:42			TD	02102125.D	
2102006-02RE1 A	F6-031-3ft-2d-R	26	2/10/21 19:06			TD	02102126.D	
2102006-04RE1 A	F6-006-3ft-2d-R	27	2/10/21 19:30			TD	02102127.D	
2102006-05RE1 A	Waverly-MH1-2ft-2d-R	28	2/10/21 19:53			TD	02102128.D	

Sequence Comments

Reagents

Reagent #	Description

SEQUENCE DATA

S21B029

S21B029-IBL1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102101.D
Acq On : 10 Feb 2021 8:57
InstName : AG5975C
Operator : TD
Sample : S21B029-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 10 09:16:33 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

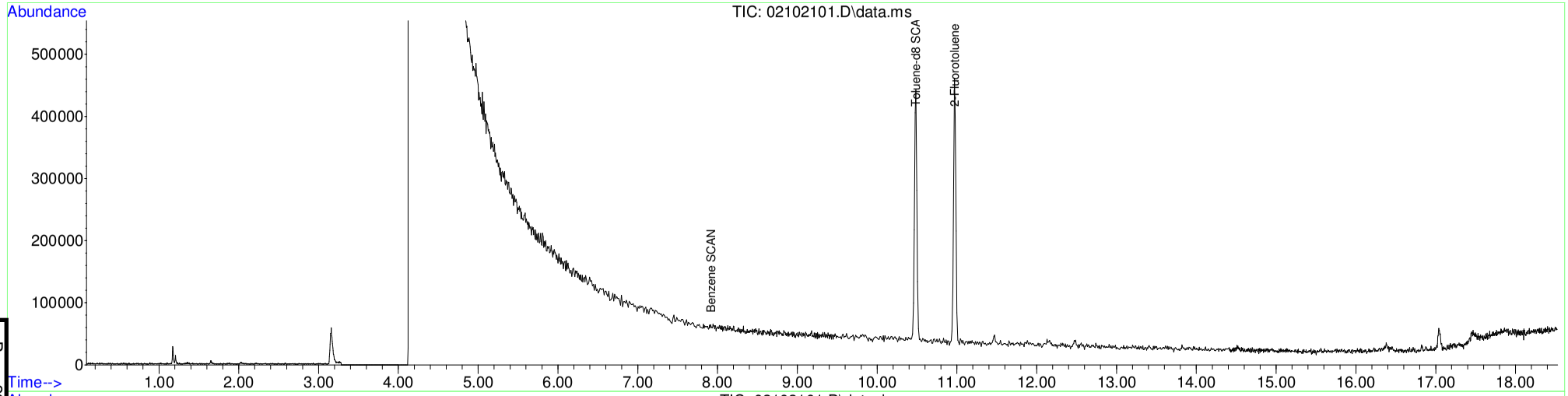
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	572240	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	484437	4371.04	ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 87.42%			
Target Compounds						Qvalue
25) 2-Fluorotoluene SCAN	10.969	109	340409	5240.68	ug/L	100
33) Benzene SCAN	7.920	78	1838	28.16	ug/L	94
36) Toluene-d8 SCAN	10.486	98	301046	4941.59	ug/L	93

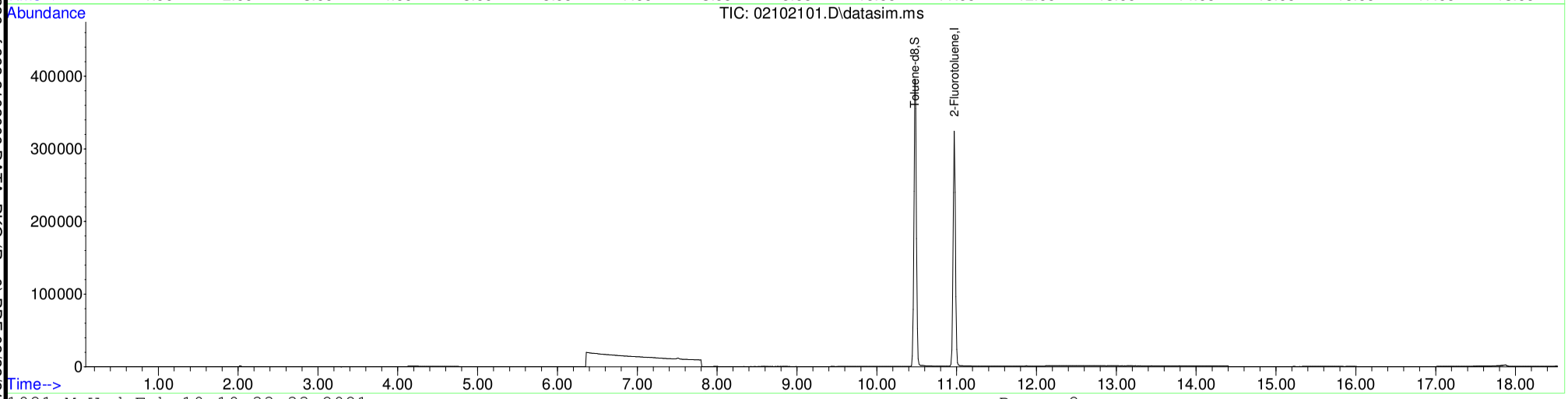
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102101.D
Acq On : 10 Feb 2021 8:57
InstName : AG5975C
Operator : TD
Sample : S21B029-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 10 09:16:33 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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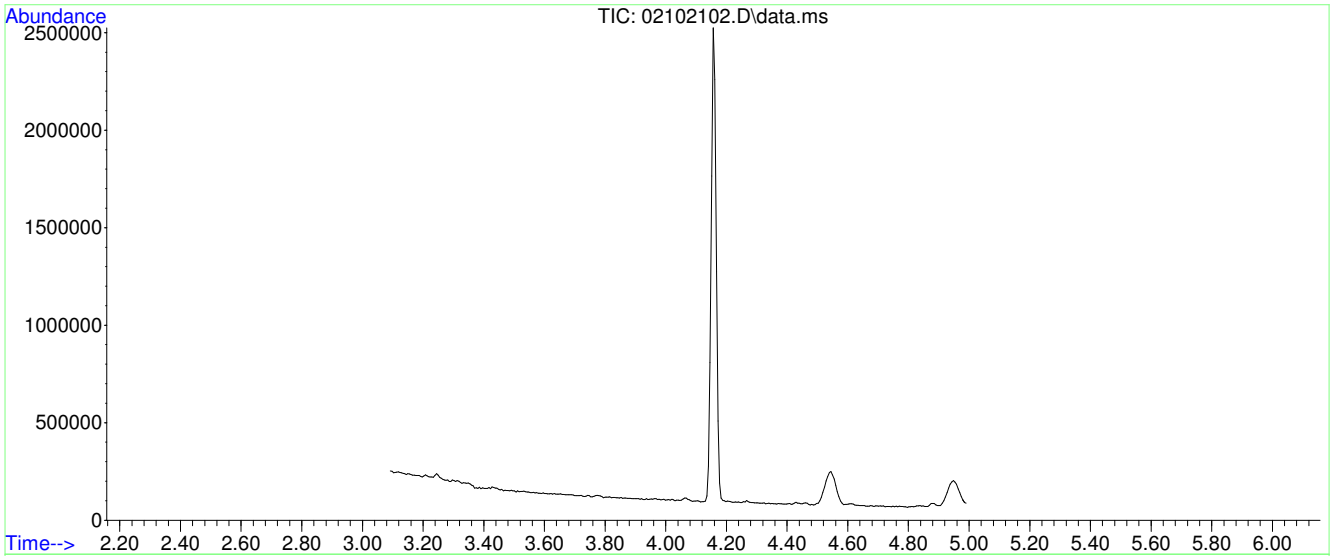
S21B029-TUN1

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102102.D
Acq On : 10 Feb 2021 9:30
Operator : TD
Sample : S21B029-TUN1
Misc : BFB 2040028
ALS Vial : 2 Sample Multiplier: 1
InstName : AG5975C

Integration File: Ravioli.P

Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Title : Volatile Organic Analysis - Passive samplers
Last Update : Tue Dec 08 06:26:34 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	19.9	88243	PASS
75	95	30	60	47.7	211237	PASS
95	95	100	100	100.0	442901	PASS
96	95	5	9	6.7	29499	PASS
173	174	0.00	2	1.1	4083	PASS
174	95	50	120	84.0	372032	PASS
175	174	5	9	7.5	27723	PASS
176	174	95	101	95.7	356011	PASS
177	176	5	9	6.3	22389	PASS

Average of 4.151 to 4.162 min.: 02102102.D\data.ms
S21B029-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	3103	47.95	2371	62.00	19811	74.00	65917
37.05	17555	49.00	17909	63.05	14105	75.00	211237
38.00	14945	50.00	88243	64.00	1104	76.00	16003
39.00	6084	51.05	28003	65.10	60	76.95	1790
39.95	16	52.00	1178	66.95	873	77.95	1435
41.05	108	55.00	1024	68.00	38872	78.90	8522
43.15	285	56.00	5817	69.00	39693	79.95	2658
44.00	1850	57.00	11136	70.00	2964	80.90	9038
45.00	3334	58.05	491	71.15	149	81.90	1754
46.00	264	60.00	3794	72.00	2062	83.00	166
47.00	6570	61.00	18944	73.00	17056	86.00	425

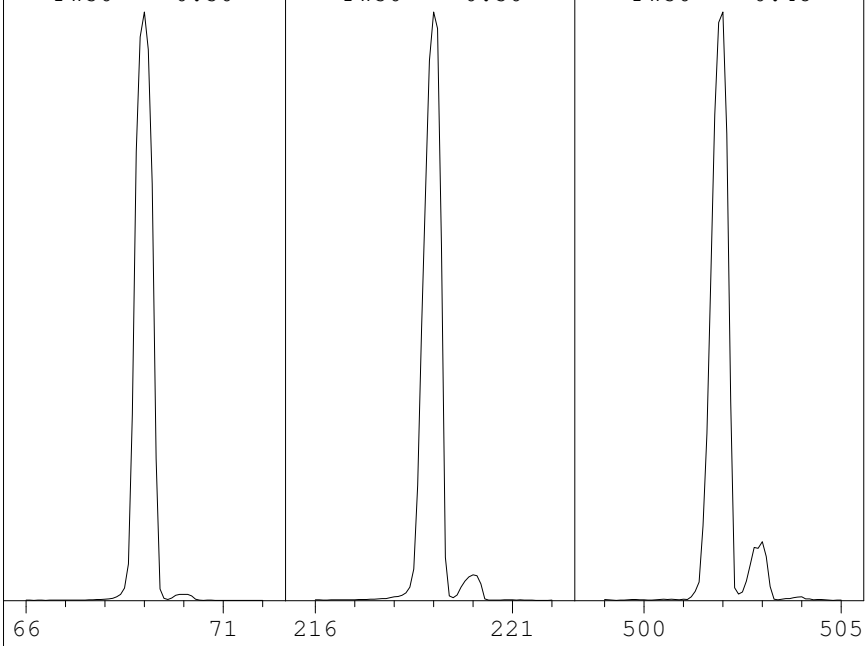
Average of 4.151 to 4.162 min.: 02102102.D\data.ms
S21B029-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.00	15617	104.90	500	118.90	1932	130.90	522
88.00	14669	105.95	1550	120.00	58	133.95	130
90.95	1315	106.90	341	122.90	111	134.90	700
92.00	11338	109.75	134	123.90	156	135.80	55
93.00	16566	110.95	330	124.70	52	136.90	529
94.00	48435	111.85	123	124.90	67	138.80	126
95.00	442901	112.90	247	125.95	209	140.05	219
96.05	29499	114.90	408	126.90	66	140.95	4055
97.05	730	115.90	1241	127.95	1414	141.95	510
102.80	150	116.95	2329	128.95	677	142.90	4044
103.85	1393	117.80	1520	129.95	1211	143.85	267

Average of 4.151 to 4.162 min.: 02102102.D\data.ms
S21B029-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
144.95	440	156.05	135	177.00	22389		
145.90	588	156.95	698	177.95	568		
146.95	310	158.95	599	207.00	199		
147.85	1002	160.85	615				
148.80	66	170.85	131				
149.00	224	171.20	142				
149.90	482	171.85	265				
151.90	282	173.05	4083				
152.85	297	174.00	372032				
153.95	172	175.00	27723				
155.00	1005	176.00	356011				

Mass	69.00	Mass	219.00	Mass	502.00
Ab	486346	Ab	349778	Ab	20100
Pw50	0.50	Pw50	0.50	Pw50	0.48

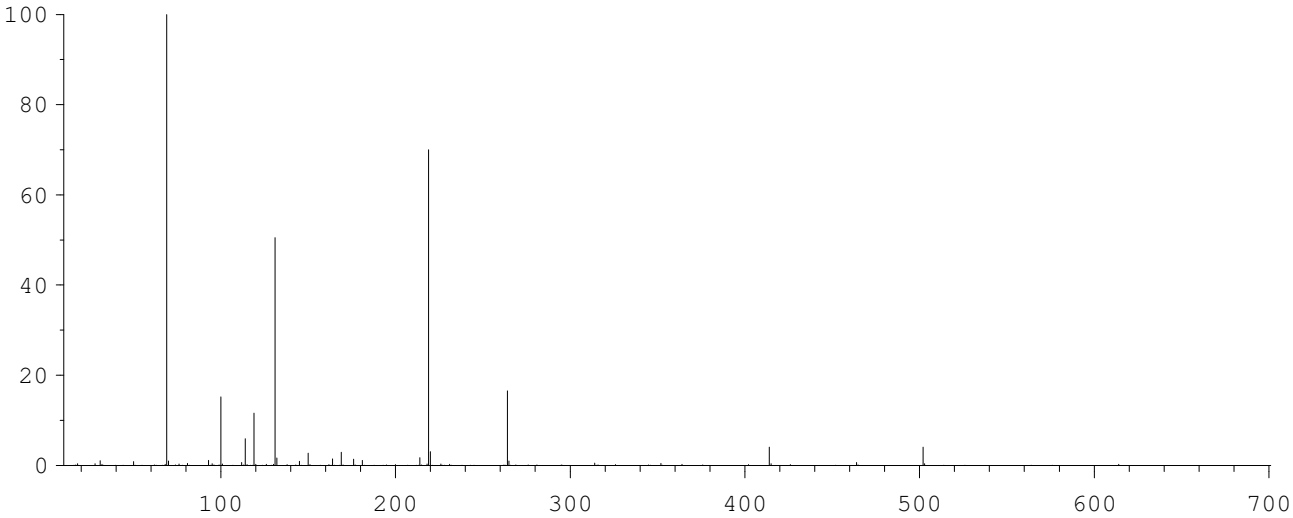


Ion Pol	Pos	MassGain	-1190
		MassOffs	-39
Emission	34.6	AmuGain	984
EIEnrgy	69.9	AmuOffs	128.50
Filament	1	Wid219	-0.003
		DC Pol	Pos
Repeller	22.25		
IonFcus	68.3	HEDEnab	On
EntLens	0.0	EMVolts	1424
EntOffs	Var		
		Samples	8
PFTBA	Open	Averages	3
		Stepsize	0.10

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
120 peaks Base: 69.00 Abundance: 464384



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	464384	100.00	70.00	4440	0.96
219.00	324928	69.97	220.00	14084	4.33
502.00	18912	4.07	503.00	1885	9.97

Air/Water Check: H20~0.35% N2~0.36% O2~0.27% CO2~0.05% N2/H2O~103.64%

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 110960
Repeller Maximum 30 volts using ion 219; Gain Factor 1.11

MassGain Values(Samples): -1180(3) -1174(2) -1152(1) -1111(0) -1024(FS)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset:	128.5	128.5	128.5	128.5	128.5	128.5	128.5
Entrance Lens Offset:	14.8	11.3	11.3	13.1	14.8	16.1	16.1
Target Abund(%):	1.0	100.0	45.0	55.0	2.5	2.0	
Actual Tune Abund(%):	0.9	100.0	50.5	70.0	4.1	4.1	

S21B029-CCV1

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102103.D
Acq On : 10 Feb 2021 9:39
InstName : AG5975C
Operator : TD
Sample : S21B029-CCV1
Misc : 2106039 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 10 09:58:30 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 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	109	0.00
2	T	1,1-Dichloroethene	0.198	0.206	-4.0	110	0.00
3	T	trans-1,2-Dichloroethene	0.250	0.243	2.8	105	0.02
4	T	1,1-Dichloroethane	0.299	0.289	3.3	106	0.01
5	T	cis-1,2-Dichloroethene	0.309	0.295	4.5	107	0.00
6	T	Chloroform	0.297	0.289	2.7	109	0.01
7	T	1,1,1-Trichloroethane	0.319	0.319	0.0	113	0.00
8	T	Carbon tetrachloride	0.305	0.299	2.0	111	0.00
9	T	Benzene	0.841	0.759	9.8	102	0.00
10	T	1,2-Dichloroethane	0.287	0.287	0.0	111	0.00
11	T	Trichloroethene	0.266	0.242	9.0	103	0.00
12	S	Toluene-d8	0.968	0.855	11.7	102	-0.01
13	T	Toluene	1.206	1.049	13.0	103	0.00
14	T	1,1,2-Trichloroethane	0.279	0.240	14.0	98	0.00
15	T	Tetrachloroethene	0.376	0.345	8.2	104	0.00
16	T	Chlorobenzene	0.934	0.815	12.7	99	0.00
17	T	1,1,1,2-Tetrachloroethane	0.327	0.288	11.9	100	0.00
18	T	Ethylbenzene	1.540	1.335	13.3	99	0.00
19	T	m&p-Xylene	1.186	1.046	11.8	103	0.00
20	T	o-Xylene	1.274	1.103	13.4	99	0.00
21	T	1,1,2,2-Tetrachloroethane	0.594	0.491	17.3	94	0.00
22	T	1,3,5-Trimethylbenzene	1.401	1.235	11.8	101	0.00
23	T	1,2,4-Trimethylbenzene	1.433	1.246	13.0	100	0.00
24	T	Naphthalene	2.321	2.126	8.4	102	0.00
25		2-Fluorotoluene SCAN	0.568	0.602	-6.0	116	-0.01
26		1,1-Dichloroethene SCAN	0.132	0.130	1.5	107	0.00
27		trans-1,2-Dichloroethene SC	0.169	0.178	-5.3	115	0.02
28		1,1-Dichloroethane SCAN	0.199	0.204	-2.5	112	0.01
29		cis-1,2-Dichloroethene SCAN	0.196	0.201	-2.6	112	0.01
30		Chloroform SCAN	0.183	0.179	2.2	107	0.01
31		1,1,1-Trichloroethane SCAN	0.188	0.219	-16.5	126	0.01
32		Carbon tetrachloride SCAN	0.161	0.187	-16.1	126	0.01
33		Benzene SCAN	0.570	0.517	9.3	99	0.01
34		1,2-Dichloroethane SCAN	0.178	0.191	-7.3	117	0.00
35		Trichloroethene SCAN	0.124	0.145	-16.9	127	0.00
36		Toluene-d8 SCAN	0.532	0.553	-3.9	113	0.00
37		Toluene SCAN	0.655	0.695	-6.1	115	-0.01
38		1,1,2-Trichloroethane SCAN	0.164	0.143	12.8	95	0.00
39		Tetrachloroethene SCAN	0.147	0.156	-6.1	115	-0.01
40		Chlorobenzene SCAN	0.471	0.453	3.8	105	0.00
41		1,1,1,2-Tetrachloroethane S	0.162	0.162	0.0	109	0.00
42		Ethylbenzene SCAN	1.249	1.278	-2.3	111	0.00
43		m&p-Xylene SCAN	1.249	1.278	-2.3	111	0.00
44		o-Xylene SCAN	0.682	0.704	-3.2	112	0.00
45		1,1,2,2-Tetrachloroethane S	0.355	0.305	14.1	94	0.00
46		1,3,5-Trimethylbenzene SCAN	0.719	0.725	-0.8	110	0.00
47		1,2,4-Trimethylbenzene SCAN	0.735	0.760	-3.4	113	0.00
48		Naphthalene SCAN	1.103	1.137	-3.1	112	0.00

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102103.D
Acq On : 10 Feb 2021 9:39
InstName : AG5975C
Operator : TD
Sample : S21B029-CCV1
Misc : 2106039 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 10 09:58:30 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

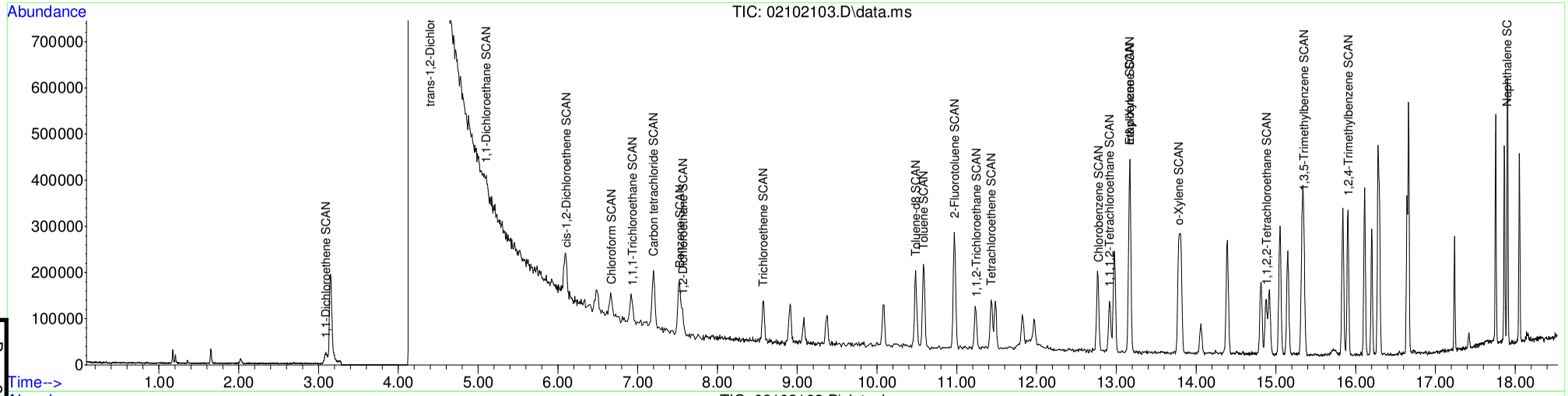
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	223096	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	190655	4412.48	ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 88.25%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.094	61	46068	5207.72	ug/L	81
3] trans-1,2-Dichloroethene	4.396	61	54153	4855.84	ug/L	97
4] 1,1-Dichloroethane	5.099	63	64448	4838.51	ug/L	95
5] cis-1,2-Dichloroethene	6.094	61	65808	4770.32	ug/L	98
6] Chloroform	6.664	83	64461	4864.80	ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	71176	5000.43	ug/L	99
8] Carbon tetrachloride	7.187	117	66613	4894.95	ug/L	100
9] Benzene	7.515	78	169427	4513.15	ug/L	99
10] 1,2-Dichloroethane	7.552	62	63938	4992.55	ug/L	97
11] Trichloroethene	8.575	130	53991	4555.16	ug/L	97
13] Toluene	10.582	91	233989	4349.40	ug/L	99
14] 1,1,2-Trichloroethane	11.233	97	53526	4295.61	ug/L	99
15] Tetrachloroethene	11.432	166	76909	4589.73	ug/L	99
16] Chlorobenzene	12.765	112	181917	4364.89	ug/L	97
17] 1,1,1,2-Tetrachloroethane	12.916	131	64161	4398.55	ug/L	99
18] Ethylbenzene	12.972	91	297731	4332.91	ug/L	99
19] m&p-Xylene	13.163	91	466716	8820.22	ug/L	97
20] o-Xylene	13.782	91	246080	4329.79	ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.877	83	109472	4133.84	ug/L	100
22] 1,3,5-Trimethylbenzene	15.348	105	275563	4408.98	ug/L	97
23] 1,2,4-Trimethylbenzene	15.900	105	277901	4347.16	ug/L	97
24] Naphthalene	17.903	128	474244	4578.85	ug/L	100
25) 2-Fluorotoluene SCAN	10.969	109	134391	5306.93	ug/L	99
26) 1,1-Dichloroethene SCAN	3.092	61	28948	4896.61	ug/L #	59
27) trans-1,2-Dichloroethe...	4.401	61	39623	5262.04	ug/L	75
28) 1,1-Dichloroethane SCAN	5.098	63	45535	5123.18	ug/L	97
29) cis-1,2-Dichloroethene...	6.106	61	44952	5144.71	ug/L #	73
30) Chloroform SCAN	6.675	83	39930	4899.60	ug/L	88
31) 1,1,1-Trichloroethane ...	6.930	97	48813	5804.36	ug/L #	46
32) Carbon tetrachloride SCAN	7.198	117	41701	5802.70	ug/L	97
33) Benzene SCAN	7.526	78	115425	4536.76	ug/L	95
34) 1,2-Dichloroethane SCAN	7.563	62	42586	5351.21	ug/L	93
35) Trichloroethene SCAN	8.574	130	32350	5831.28	ug/L	90
36) Toluene-d8 SCAN	10.486	98	123334	5192.82	ug/L	88
37) Toluene SCAN	10.581	91	154979	5299.74	ug/L	95
38) 1,1,2-Trichloroethane ...	11.242	97	31825	4341.86	ug/L	87
39) Tetrachloroethene SCAN	11.431	166	34800	5289.90	ug/L	91
40) Chlorobenzene SCAN	12.772	112	101001	4808.70	ug/L	86
41) 1,1,1,2-Tetrachloroeth...	12.915	131	36135	4986.63	ug/L	91
42) Ethylbenzene SCAN	13.169	91	285218	5118.13	ug/L	92
43) m&p-Xylene SCAN	13.169	91	285218	5118.13	ug/L	93
44) o-Xylene SCAN	13.781	91	157079	5161.97	ug/L	97
45) 1,1,2,2-Tetrachloroeth...	14.879	83	68123	4305.57	ug/L	94
46) 1,3,5-Trimethylbenzene...	15.347	105	161756	5038.64	ug/L	100
47) 1,2,4-Trimethylbenzene...	15.903	105	169647	5172.19	ug/L	96
48) Naphthalene SCAN	17.901	128	253732	5153.71	ug/L	99

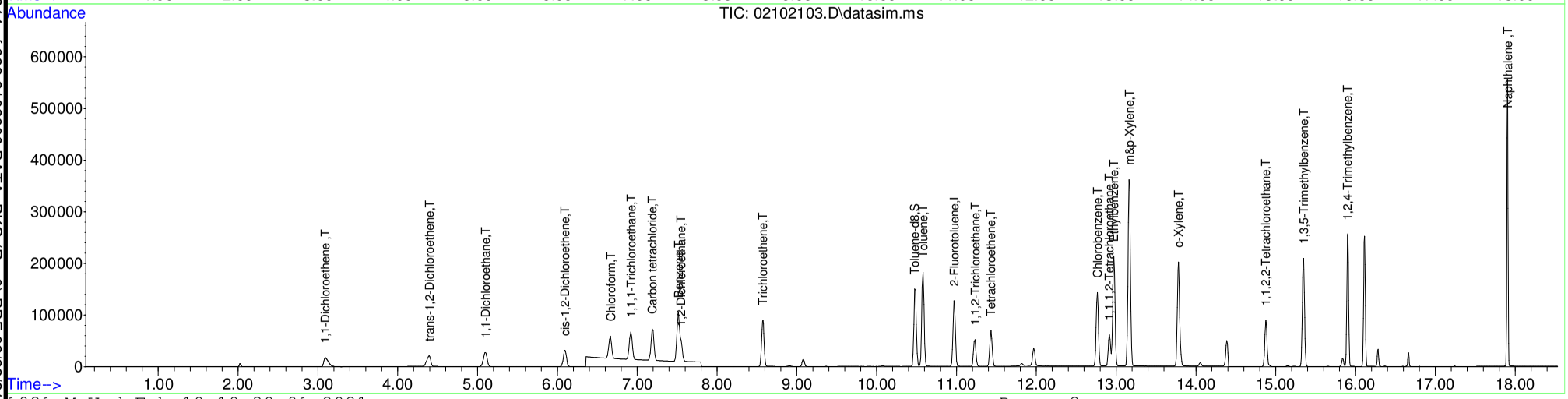
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102103.D
Acq On : 10 Feb 2021 9:39
InstName : AG5975C
Operator : TD
Sample : S21B029-CCV1
Misc : 2106039 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 10 09:58:30 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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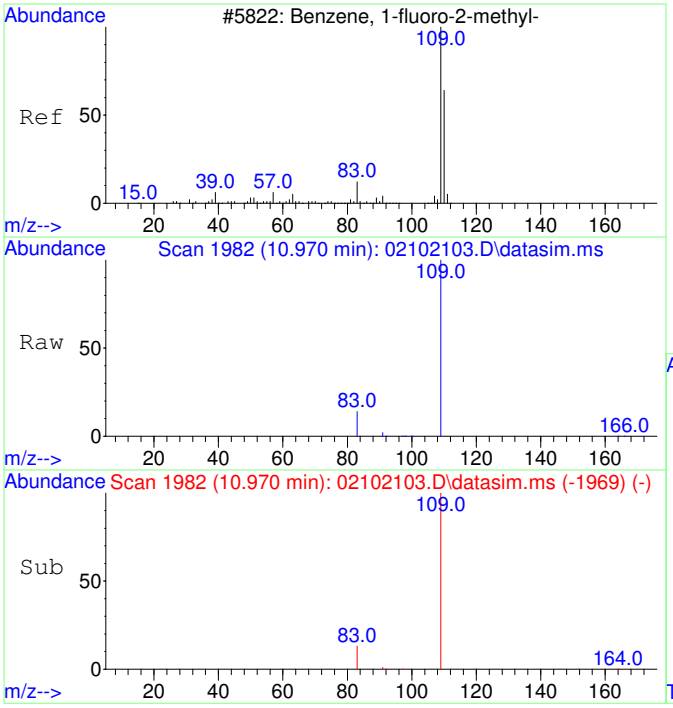
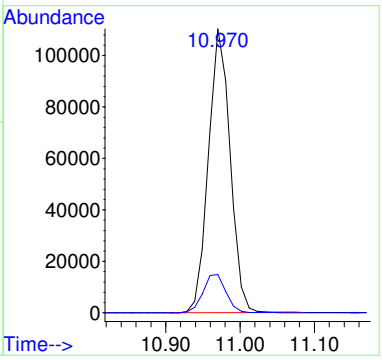
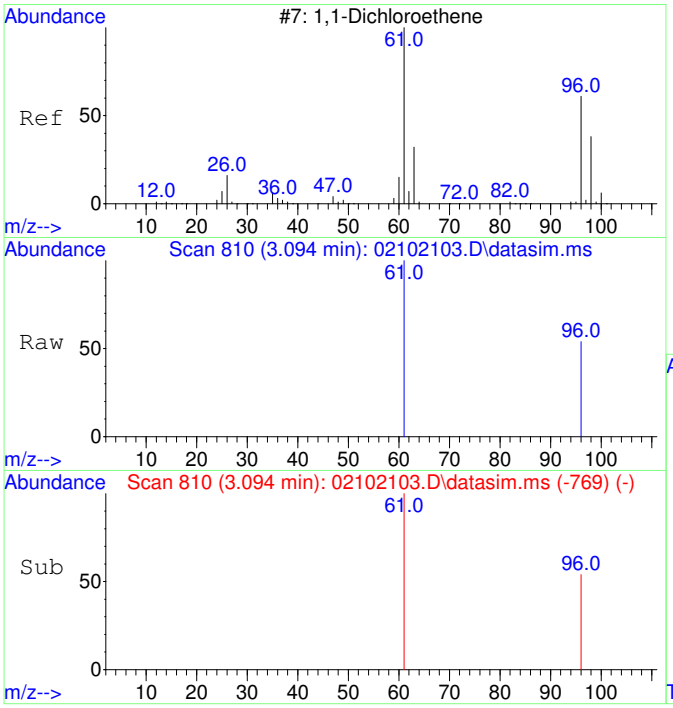


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion:109 Resp: 223096

Ion	Ratio	Lower	Upper
109	100		
83	14.3	0.0	42.3

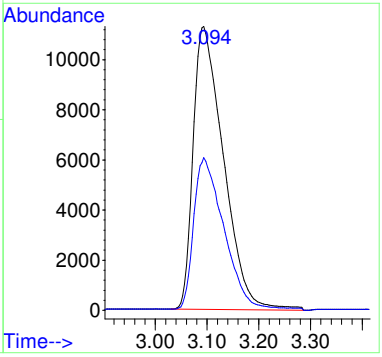


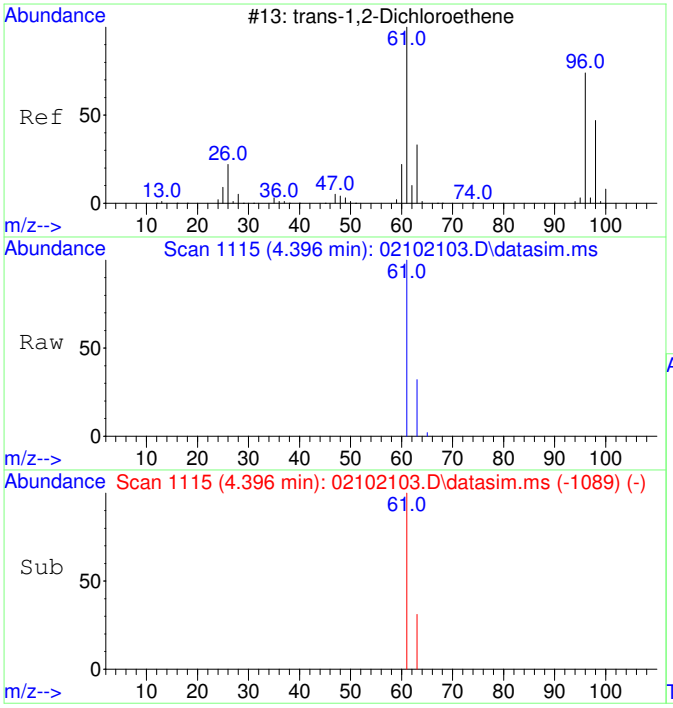


#2
1,1-Dichloroethene
Concen: 5207.72 ug/L
RT: 3.094 min Scan# 810
Delta R.T. 0.004 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 61 Resp: 46068

Ion	Ratio	Lower	Upper
61	100		
96	52.1	37.2	97.2

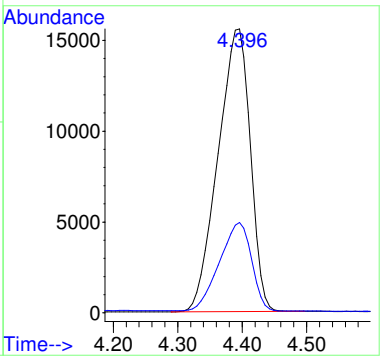


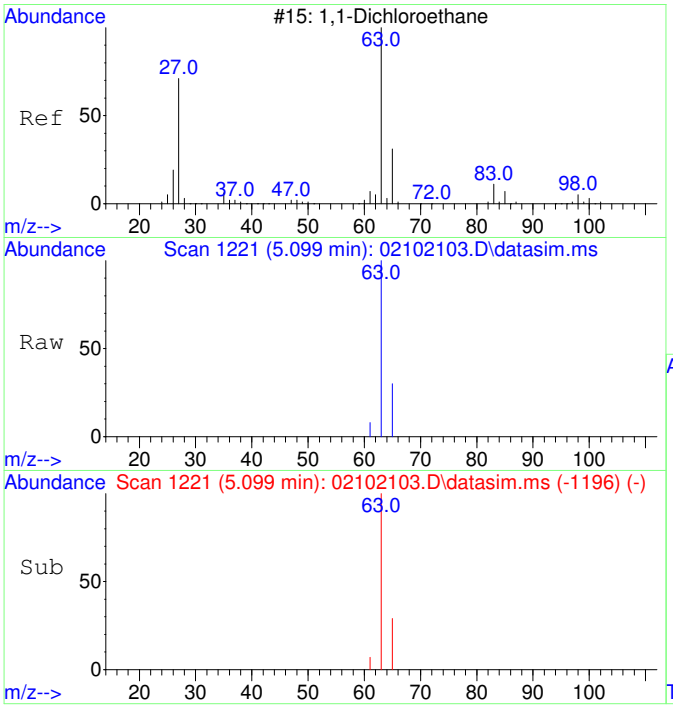


#3
trans-1,2-Dichloroethene
Concen: 4855.84 ug/L
RT: 4.396 min Scan# 1115
Delta R.T. 0.020 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 61 Resp: 54153

Ion	Ratio	Lower	Upper
61	100		
63	31.0	2.4	62.4

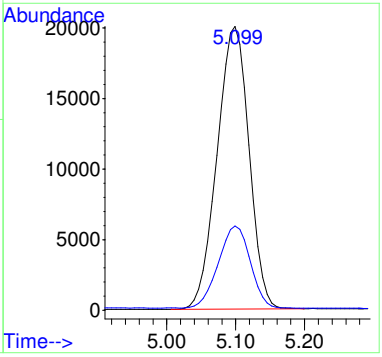


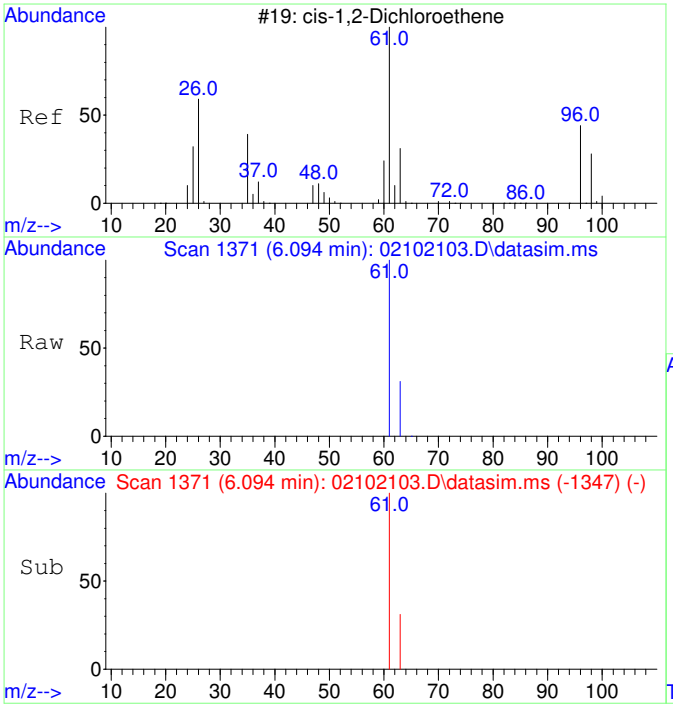


#4
1,1-Dichloroethane
Concen: 4838.51 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. 0.014 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 63 Resp: 64448

Ion	Ratio	Lower	Upper
63	100		
65	29.0	1.8	61.8

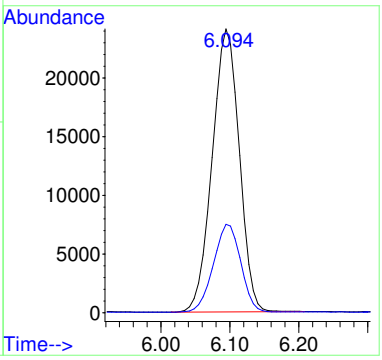


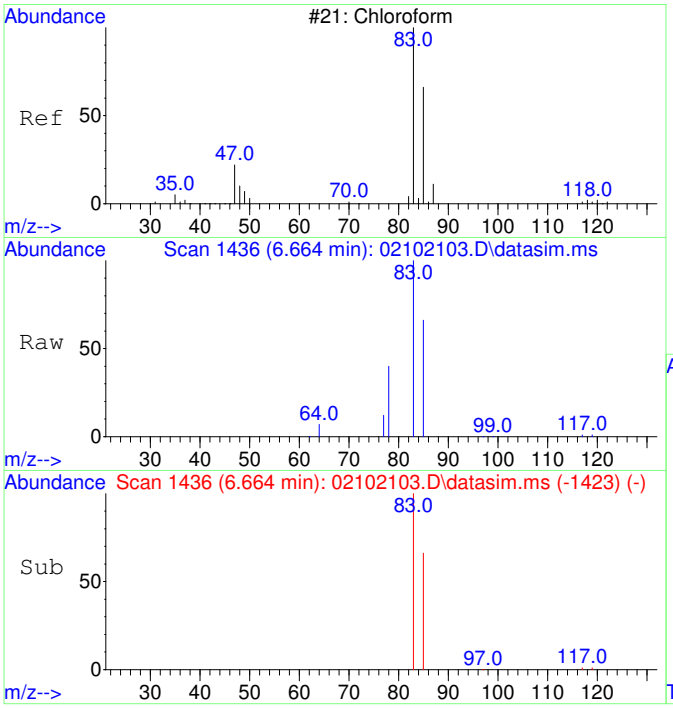


#5
cis-1,2-Dichloroethene
Concen: 4770.32 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. 0.007 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 61 Resp: 65808

Ion	Ratio	Lower	Upper
61	100		
63	31.2	2.5	62.5

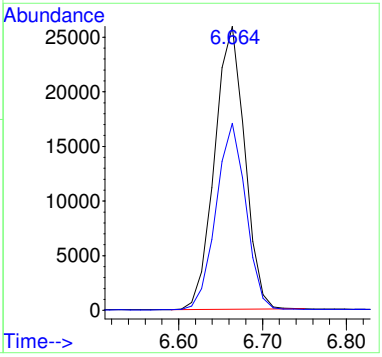


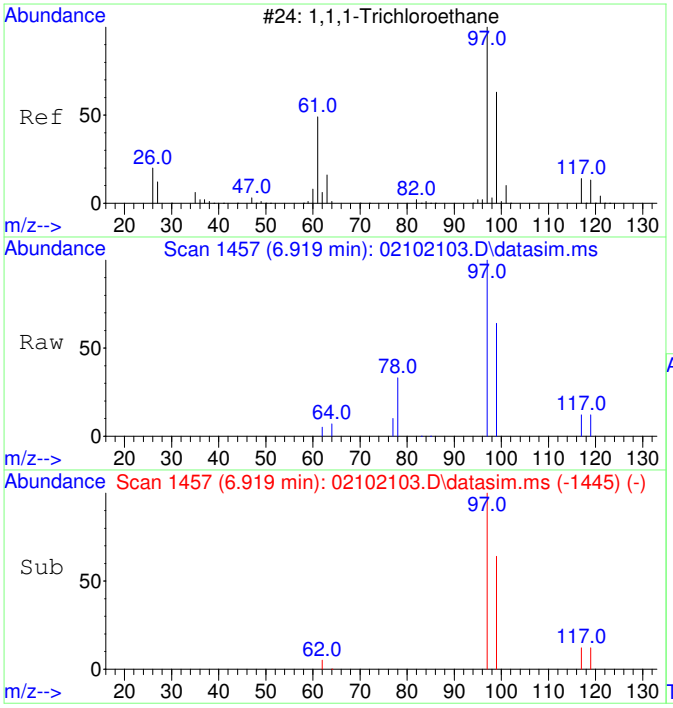


#6
Chloroform
Concen: 4864.80 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. 0.012 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 83 Resp: 64461

Ion	Ratio	Lower	Upper
83	100		
85	65.0	35.1	95.1

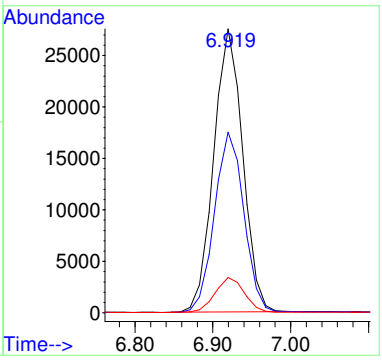


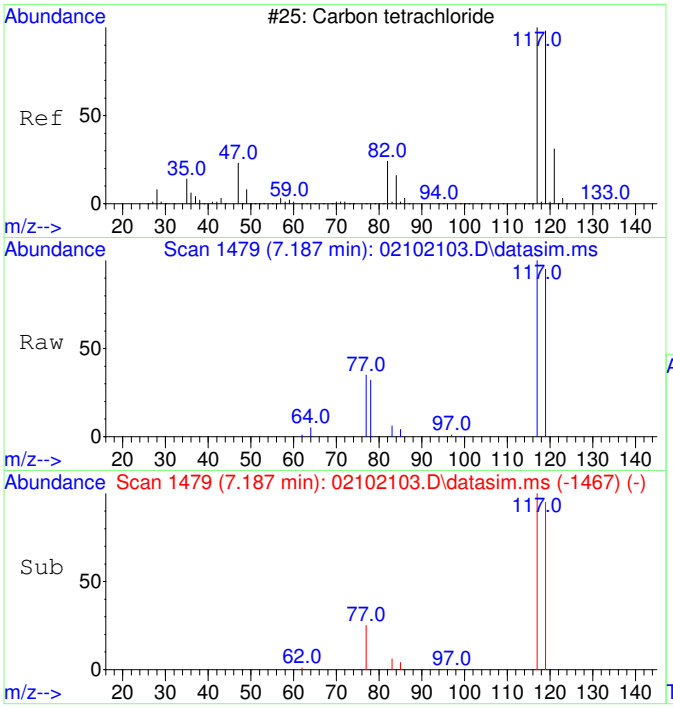


#7
1,1,1-Trichloroethane
Concen: 5000.43 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 97 Resp: 71176

Ion	Ratio	Lower	Upper
97	100		
99	64.2	34.6	94.6
117	12.4	0.0	43.2

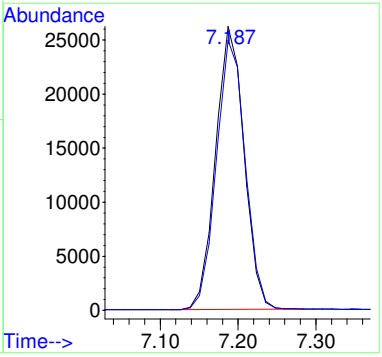


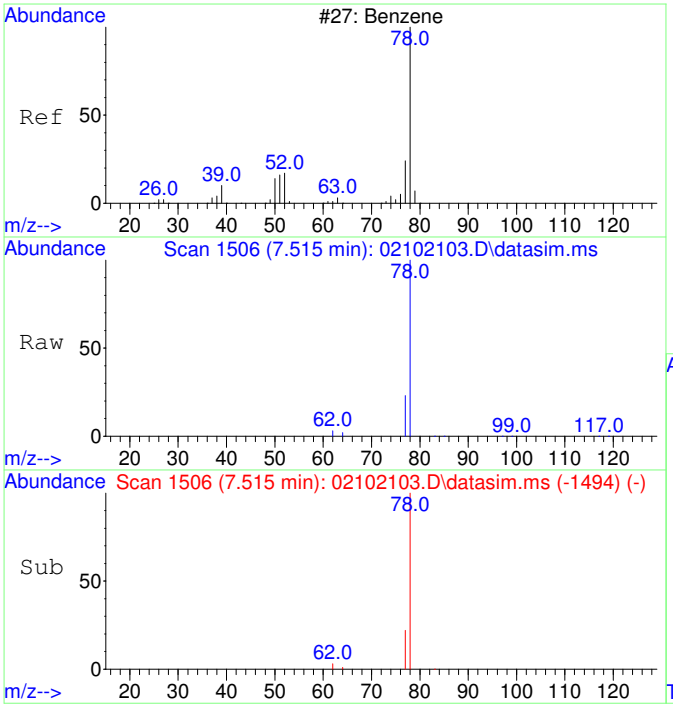


#8
Carbon tetrachloride
Concen: 4894.95 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion:117 Resp: 66613

Ion	Ratio	Lower	Upper
117	100		
119	96.2	66.4	126.4

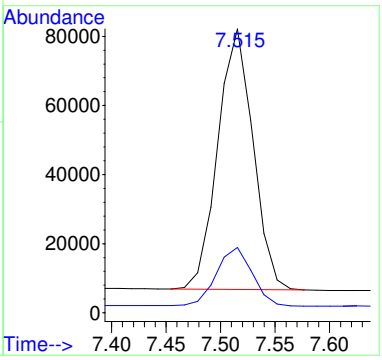


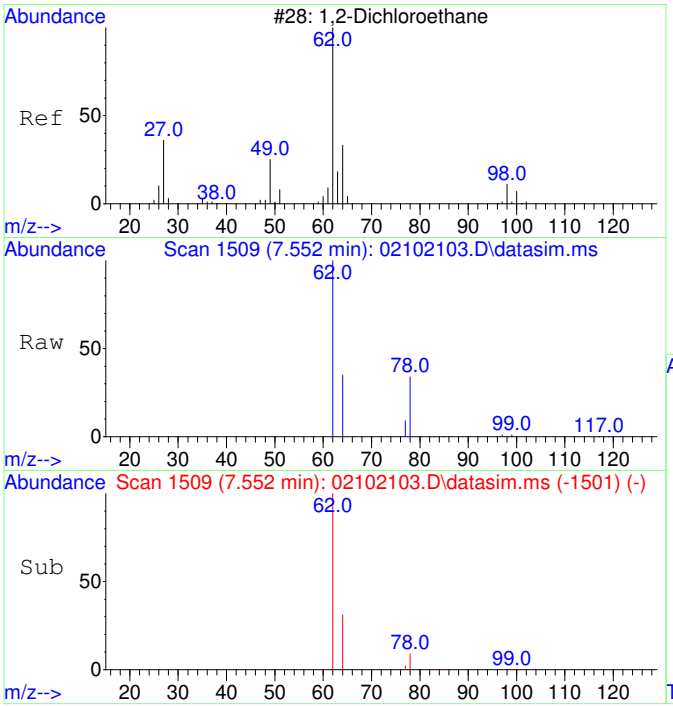


#9
Benzene
Concen: 4513.15 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 78 Resp: 169427

Ion	Ratio	Lower	Upper
78	100		
77	22.8	0.0	53.2

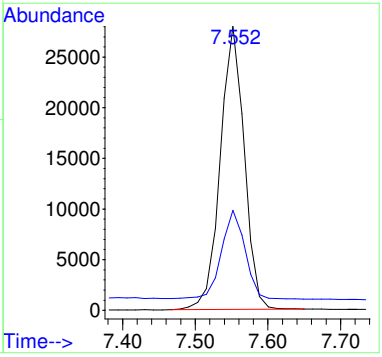


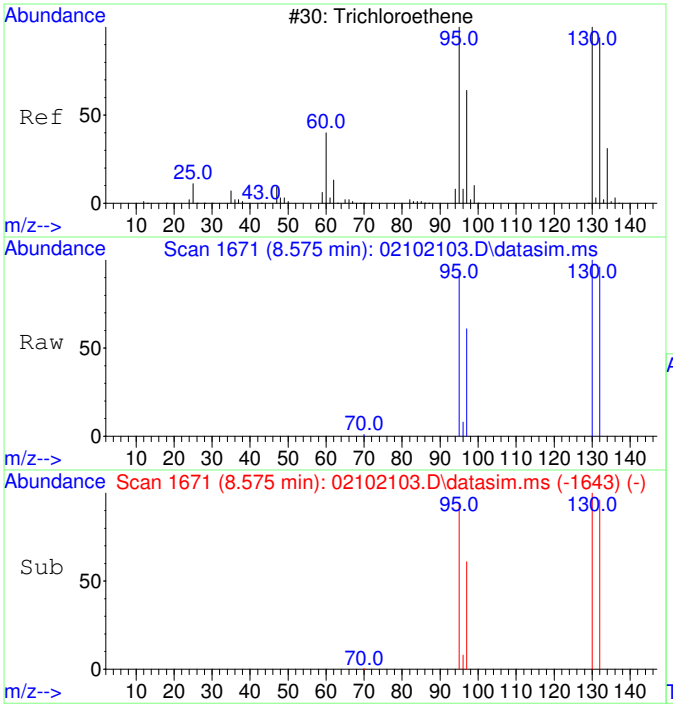


#10
1,2-Dichloroethane
Concen: 4992.55 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 62 Resp: 63938

Ion	Ratio	Lower	Upper
62	100		
64	30.4	2.3	62.3

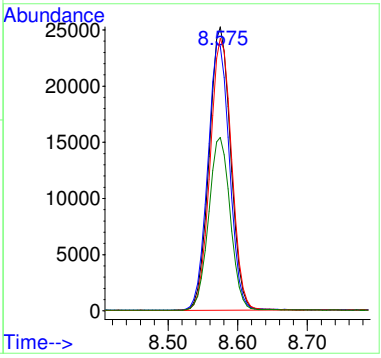


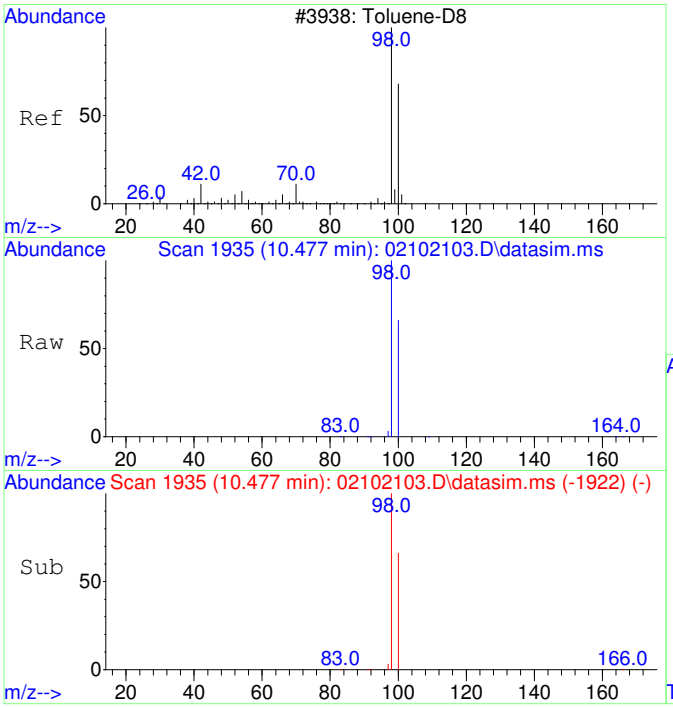


#11
Trichloroethene
Concen: 4555.16 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion:130 Resp: 53991

Ion	Ratio	Lower	Upper
130	100		
95	95.0	60.7	120.7
132	96.3	76.0	116.0
97	61.2	38.6	78.6

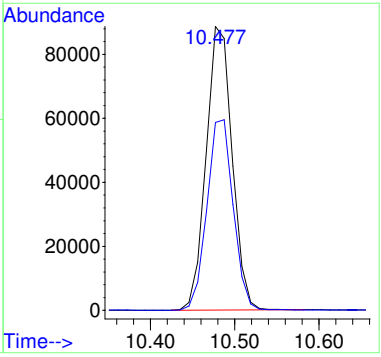


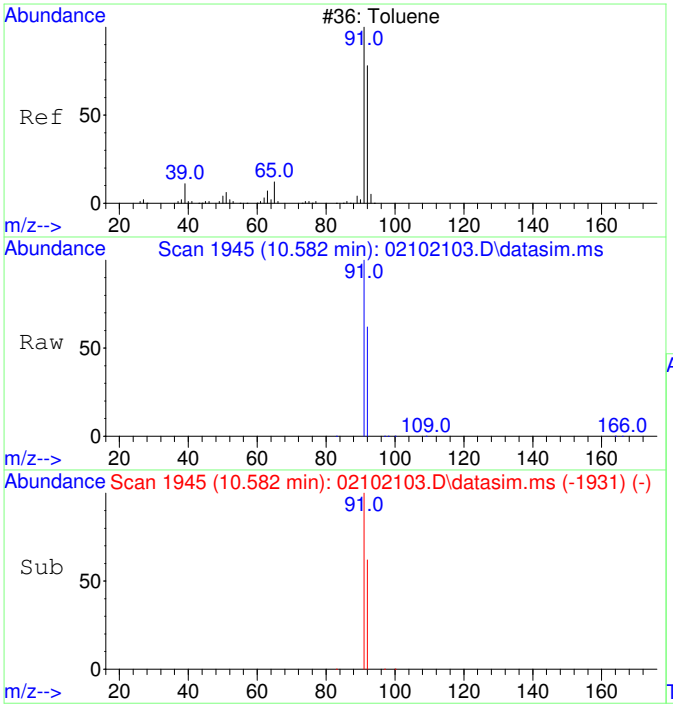


#12
Toluene-d8
Concen: 4412.48 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 98 Resp: 190655

Ion	Ratio	Lower	Upper
98	100		
100	67.6	37.1	97.1

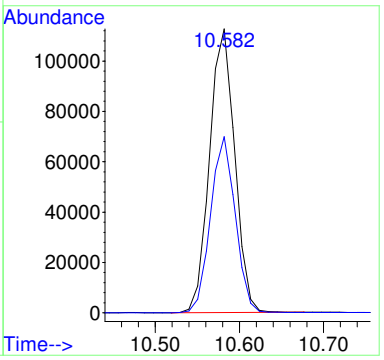


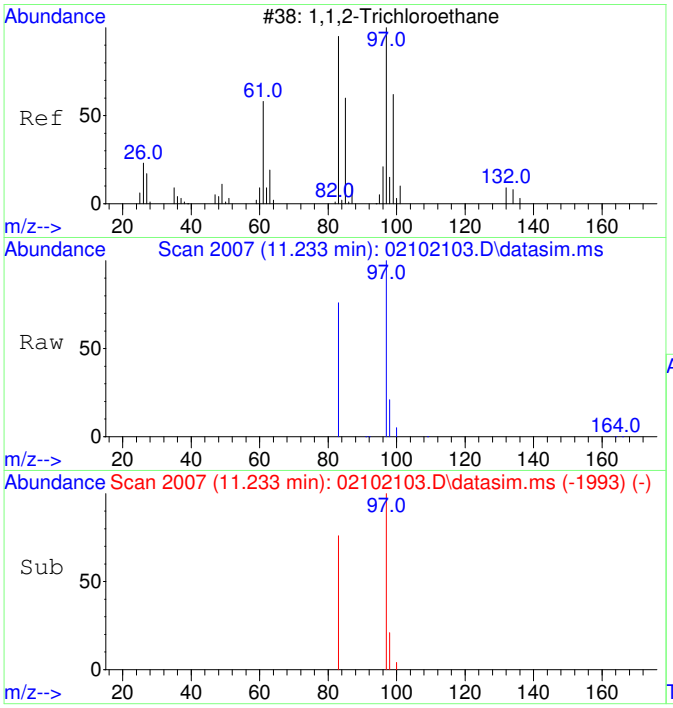


#13
Toluene
Concen: 4349.40 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 91 Resp: 233989

Ion	Ratio	Lower	Upper
91	100		
92	60.8	29.9	89.9

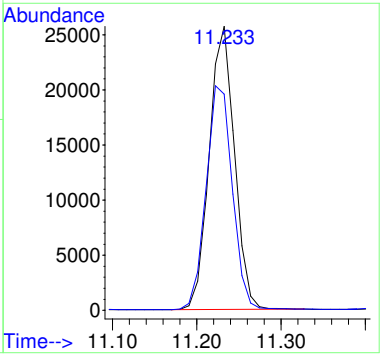


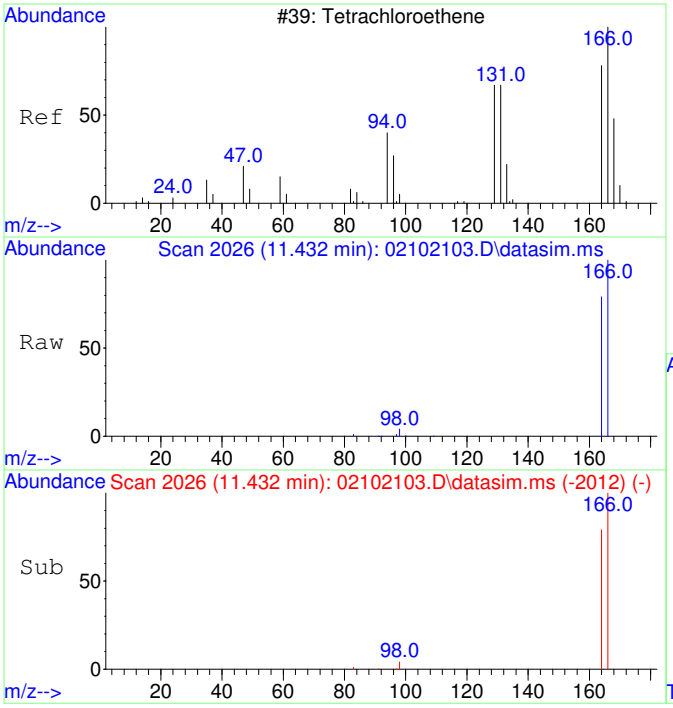


#14
1,1,2-Trichloroethane
Concen: 4295.61 ug/L
RT: 11.233 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 97 Resp: 53526

Ion	Ratio	Lower	Upper
97	100		
83	82.0	51.2	111.2

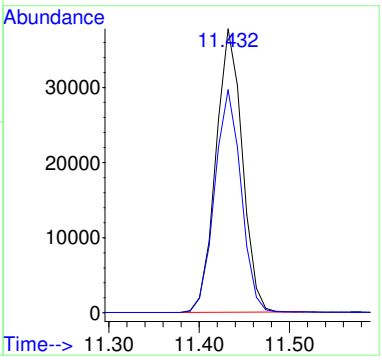


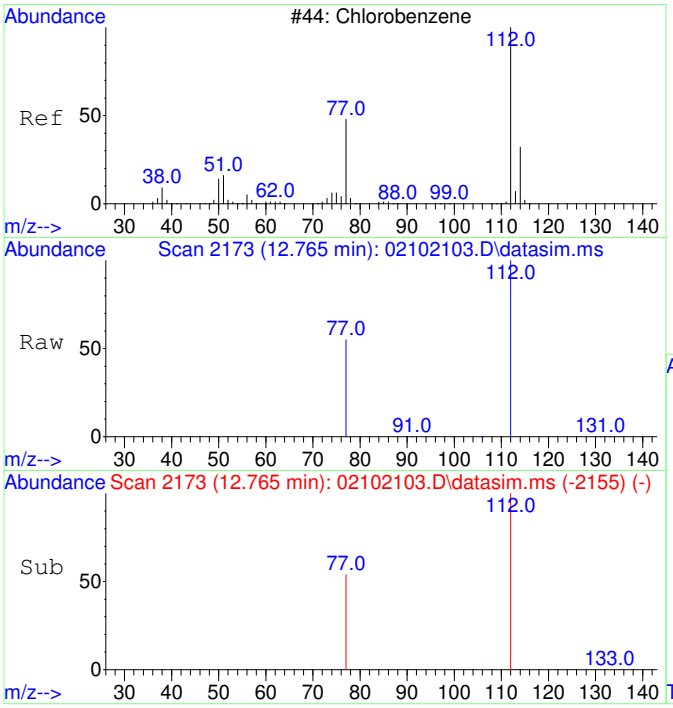


#15
Tetrachloroethene
Concen: 4589.73 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion:166 Resp: 76909

Ion	Ratio	Lower	Upper
166	100		
164	78.6	47.8	107.8

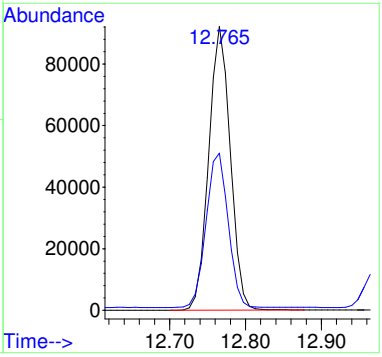


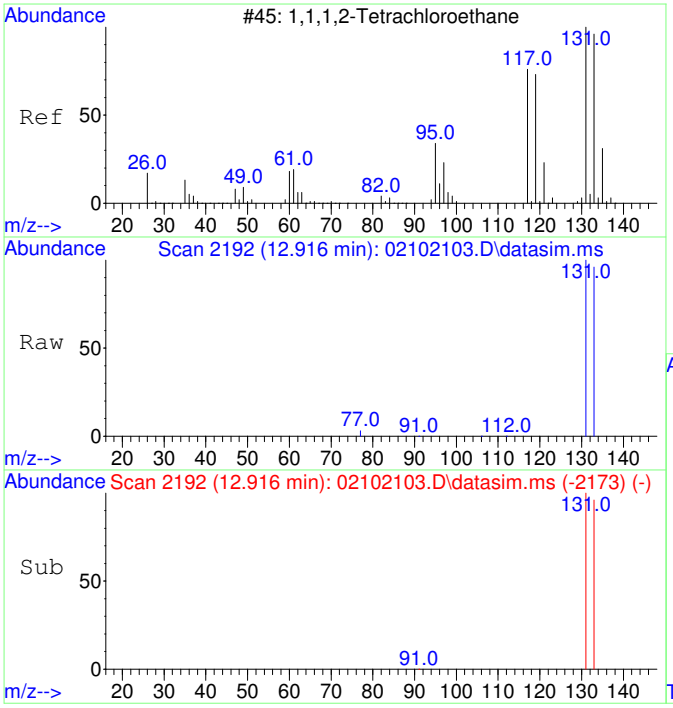


#16
Chlorobenzene
Concen: 4364.89 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion:112 Resp: 181917

Ion	Ratio	Lower	Upper
112	100		
77	55.6	23.6	83.6

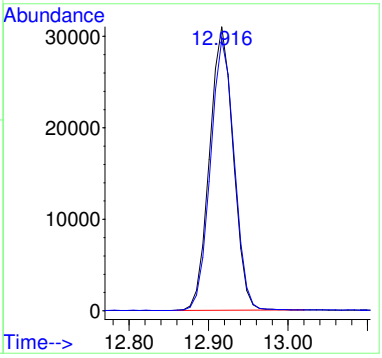


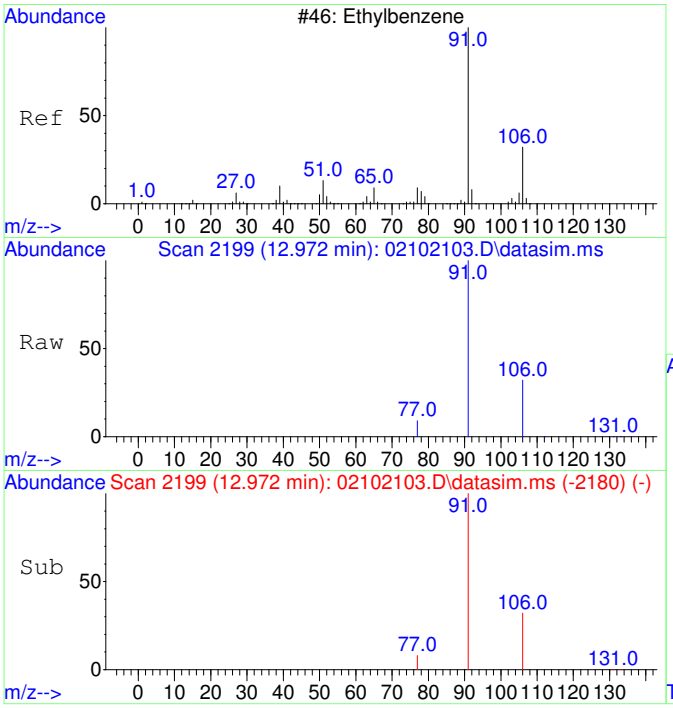


#17
1,1,1,2-Tetrachloroethane
Concen: 4398.55 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion:131 Resp: 64161

Ion	Ratio	Lower	Upper
131	100		
133	95.6	66.3	126.3

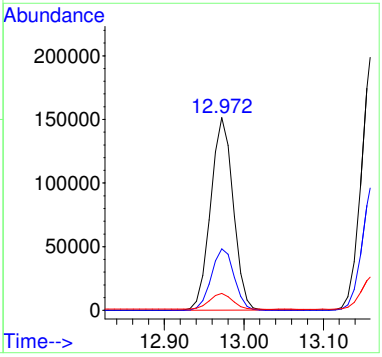


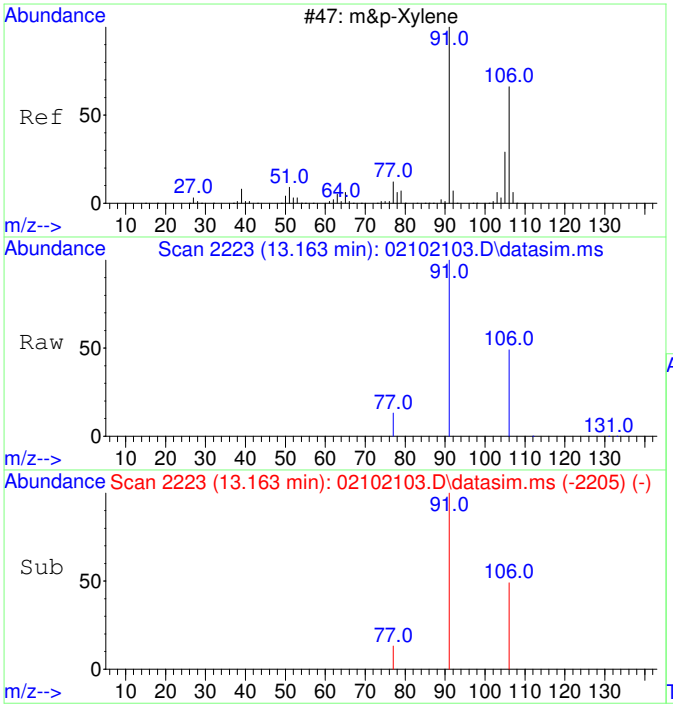


#18
Ethylbenzene
Concen: 4332.91 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 91 Resp: 297731

Ion	Ratio	Lower	Upper
91	100		
106	32.3	3.0	63.0
77	8.2	0.0	38.2

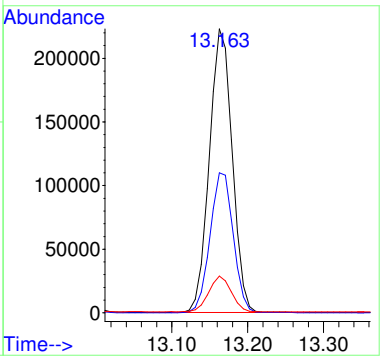


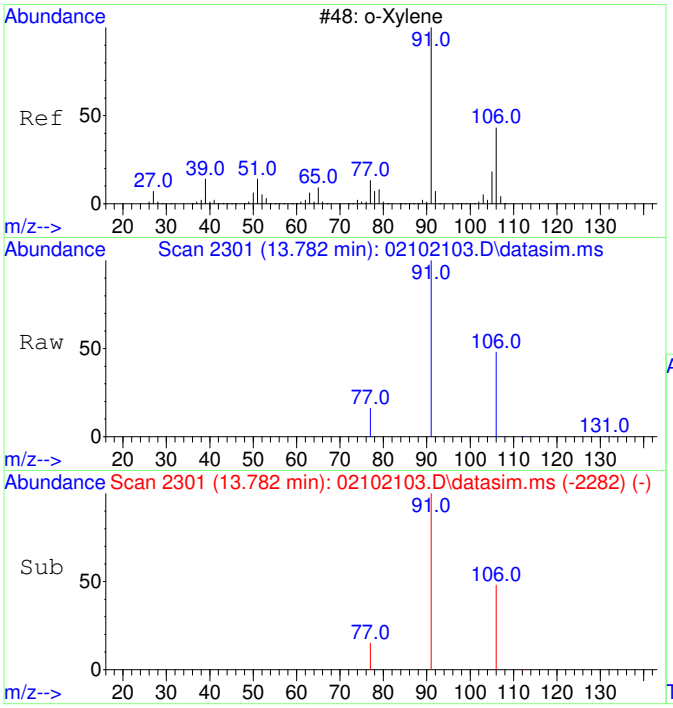


#19
m&p-Xylene
Concen: 8820.22 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 91 Resp: 466716

Ion	Ratio	Lower	Upper
91	100		
106	50.0	22.2	82.2
77	12.3	0.0	42.4

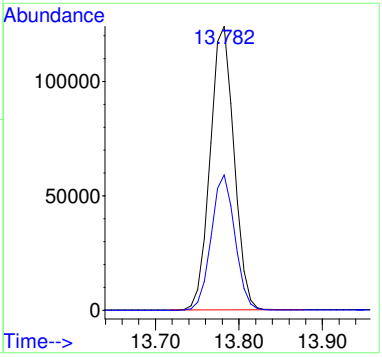


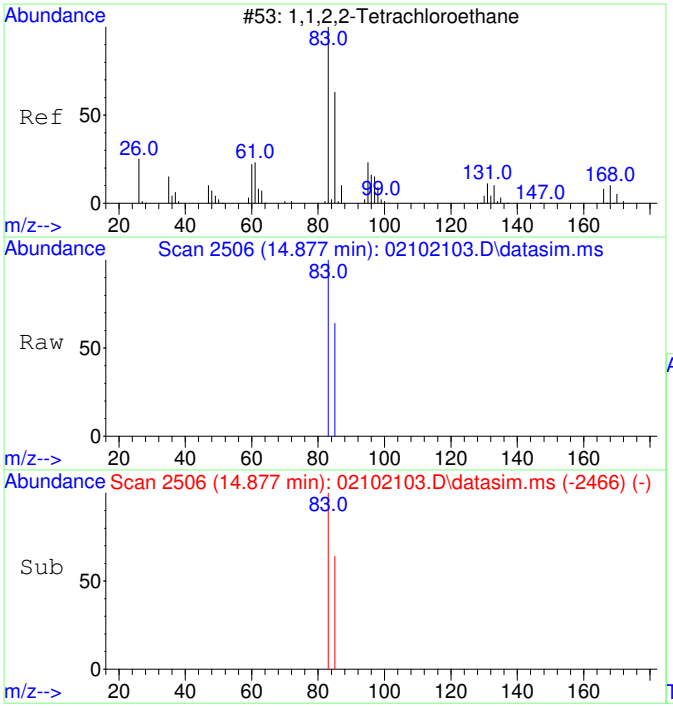


#20
o-Xylene
Concen: 4329.79 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 91 Resp: 246080

Ion	Ratio	Lower	Upper
91	100		
106	47.3	19.2	79.2

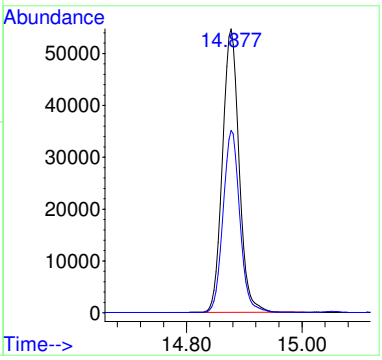


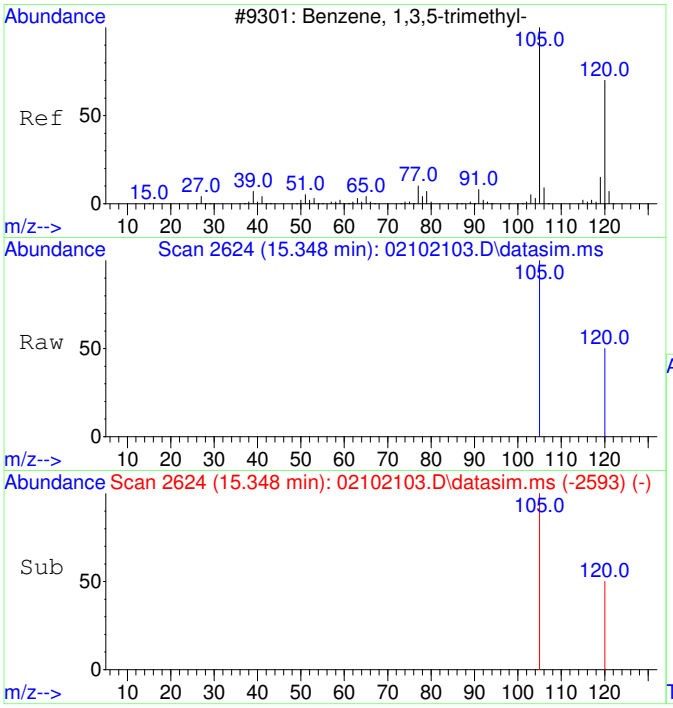


#21
1,1,2,2-Tetrachloroethane
Concen: 4133.84 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. -0.003 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 83 Resp: 109472

Ion	Ratio	Lower	Upper
83	100		
85	64.5	34.8	94.8

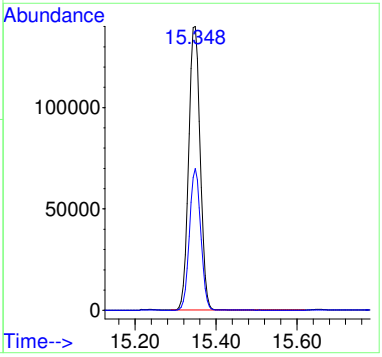


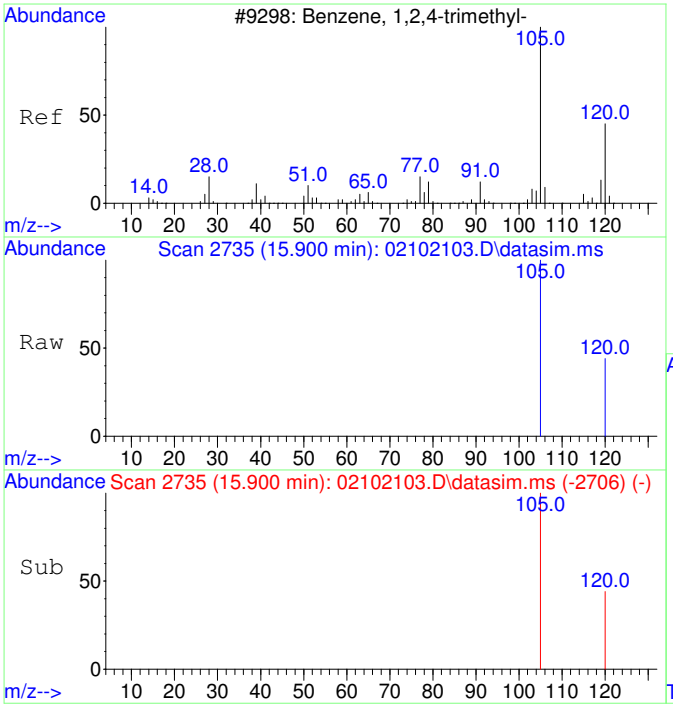


#22
1,3,5-Trimethylbenzene
Concen: 4408.98 ug/L
RT: 15.348 min Scan# 2624
Delta R.T. -0.001 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion:105 Resp: 275563

Ion	Ratio	Lower	Upper
105	100		
120	48.8	21.1	81.1

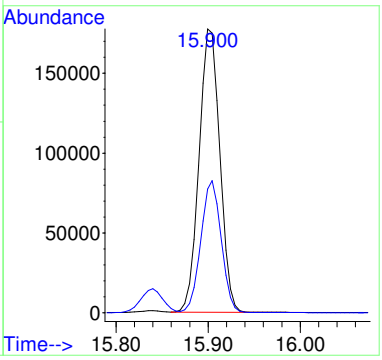


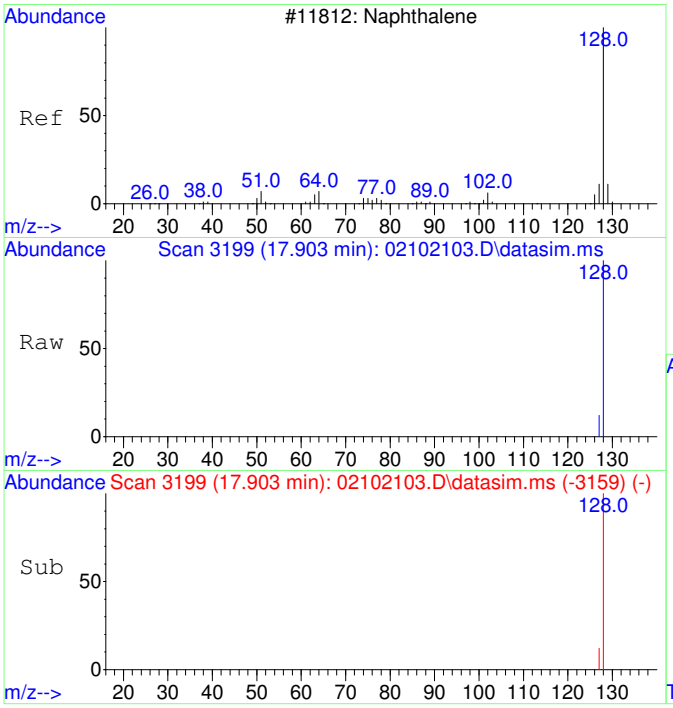


#23
1,2,4-Trimethylbenzene
Concen: 4347.16 ug/L
RT: 15.900 min Scan# 2735
Delta R.T. -0.006 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion:105 Resp: 277901

Ion	Ratio	Lower	Upper
105	100		
120	44.9	17.2	77.2

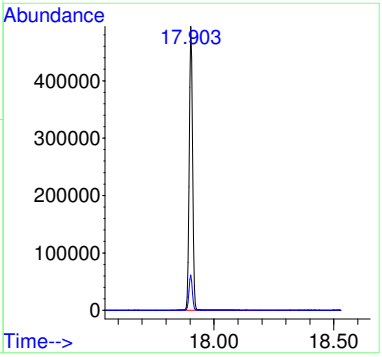


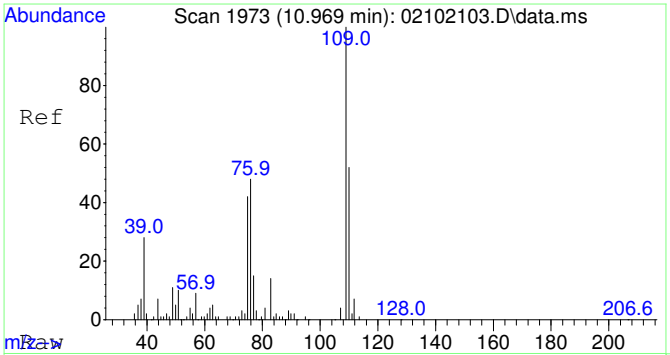


#24
Naphthalene
Concen: 4578.85 ug/L
RT: 17.903 min Scan# 3199
Delta R.T. -0.001 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion:128 Resp: 474244

Ion	Ratio	Lower	Upper
128	100		
127	12.3	0.0	42.5

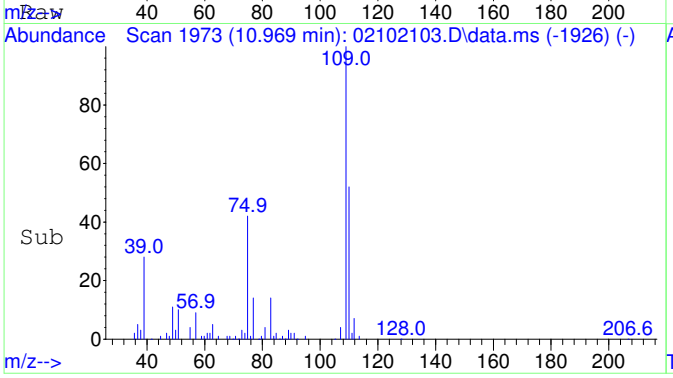


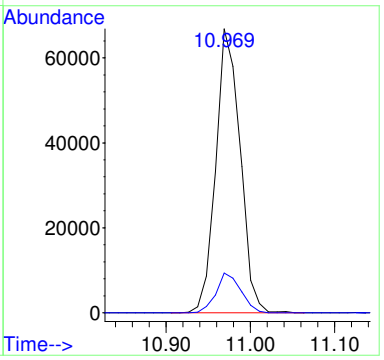


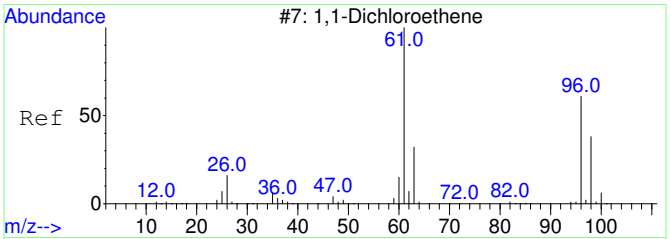
#25
2-Fluorotoluene SCAN
Concen: 5306.93 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion:109 Resp: 134391

Ion	Ratio	Lower	Upper
109	100		
83	14.2	0.0	43.8



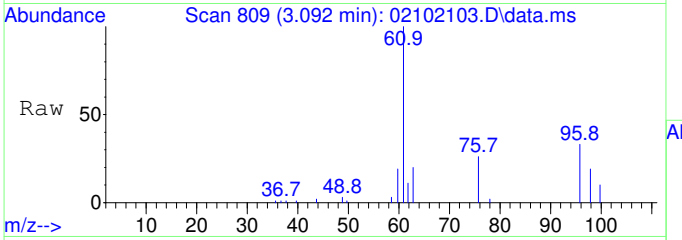


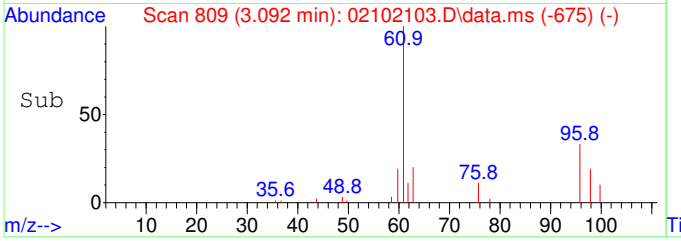


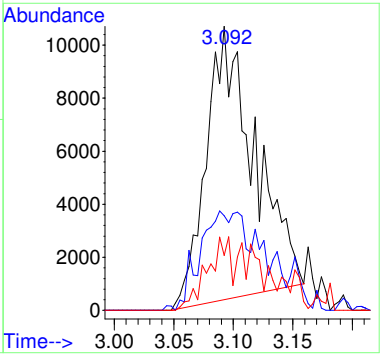
#26
1,1-Dichloroethene SCAN
Concen: 4896.61 ug/L
RT: 3.092 min Scan# 809
Delta R.T. -0.003 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

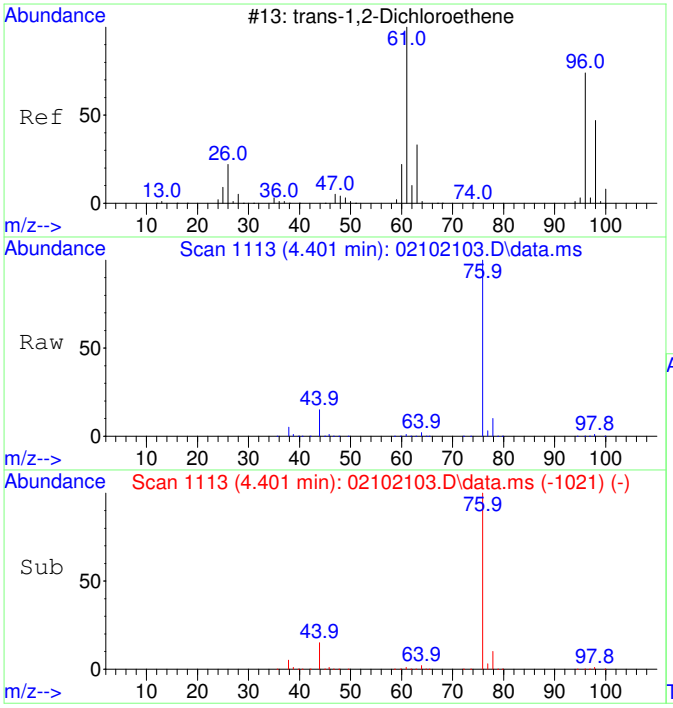
Tgt Ion: 61 Resp: 28948

Ion	Ratio	Lower	Upper
61	100		
96	37.7	33.1	93.1
98	8.3	11.2	71.2#





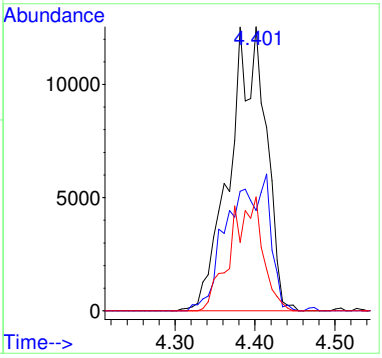


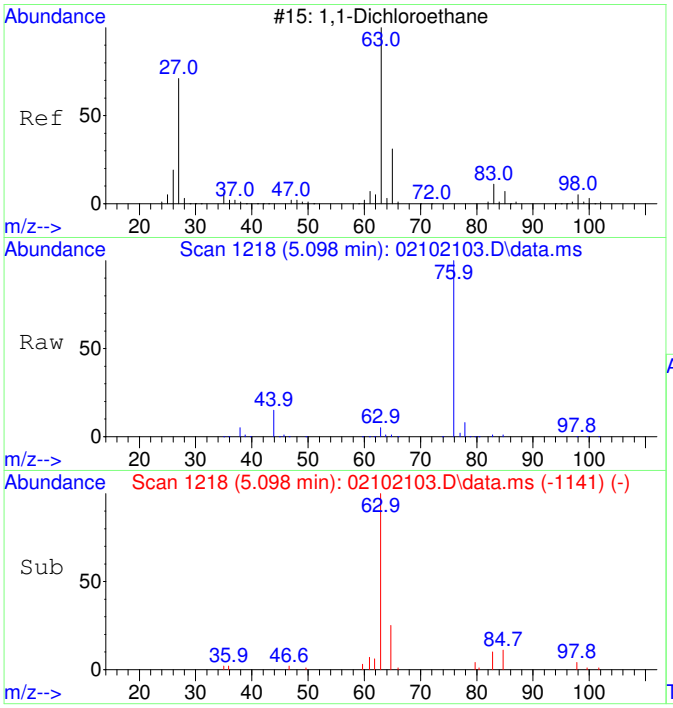


#27
trans-1,2-Dichloroethene SCAN
Concen: 5262.04 ug/L
RT: 4.401 min Scan# 1113
Delta R.T. 0.020 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 61 Resp: 39623

Ion	Ratio	Lower	Upper
61	100		
96	55.0	49.0	109.0
98	35.1	20.5	80.5

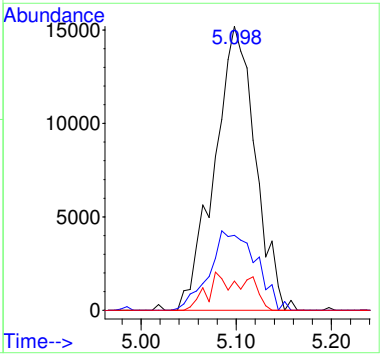


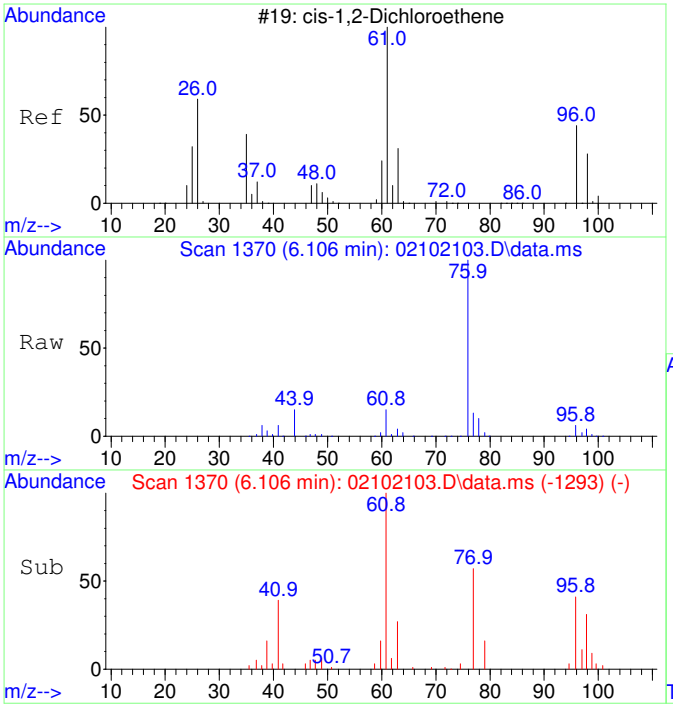


#28
1,1-Dichloroethane SCAN
Concen: 5123.18 ug/L
RT: 5.098 min Scan# 1218
Delta R.T. 0.014 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 63 Resp: 45535

Ion	Ratio	Lower	Upper
63	100		
65	31.7	1.3	61.3
83	12.6	0.0	45.9

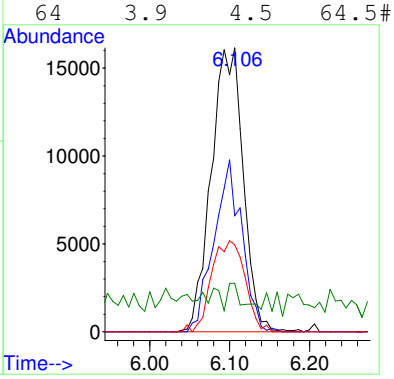


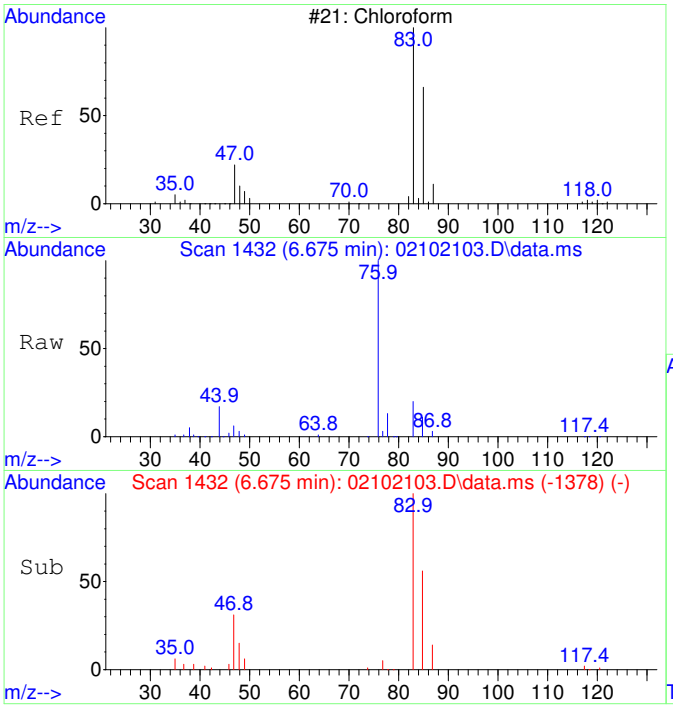


#29
cis-1,2-Dichloroethene SCAN
Concen: 5144.71 ug/L
RT: 6.106 min Scan# 1370
Delta R.T. 0.013 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 61 Resp: 44952

Ion	Ratio	Lower	Upper
61	100		
96	52.7	39.9	99.9
98	33.5	13.5	73.5
64	3.9	4.5	64.5#

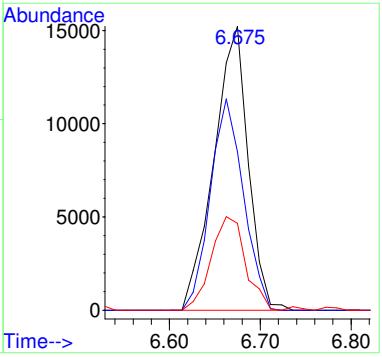


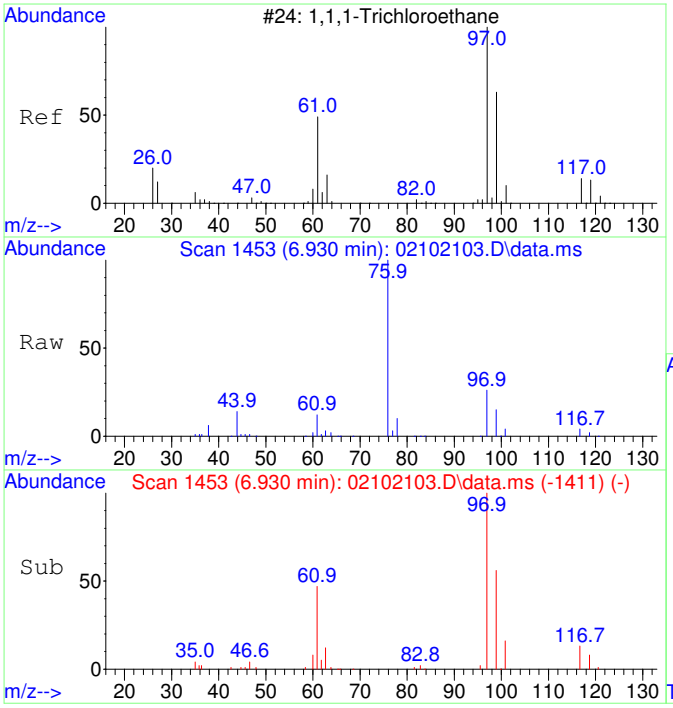


#30
Chloroform SCAN
Concen: 4899.60 ug/L
RT: 6.675 min Scan# 1432
Delta R.T. 0.012 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 83 Resp: 39930

Ion	Ratio	Lower	Upper
83	100		
85	72.1	34.6	94.6
47	33.2	0.0	53.4

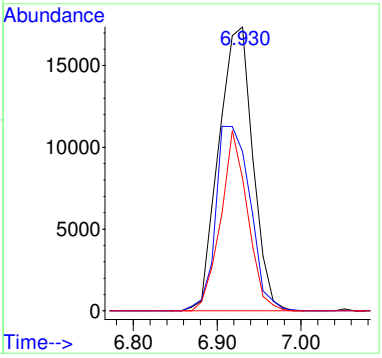


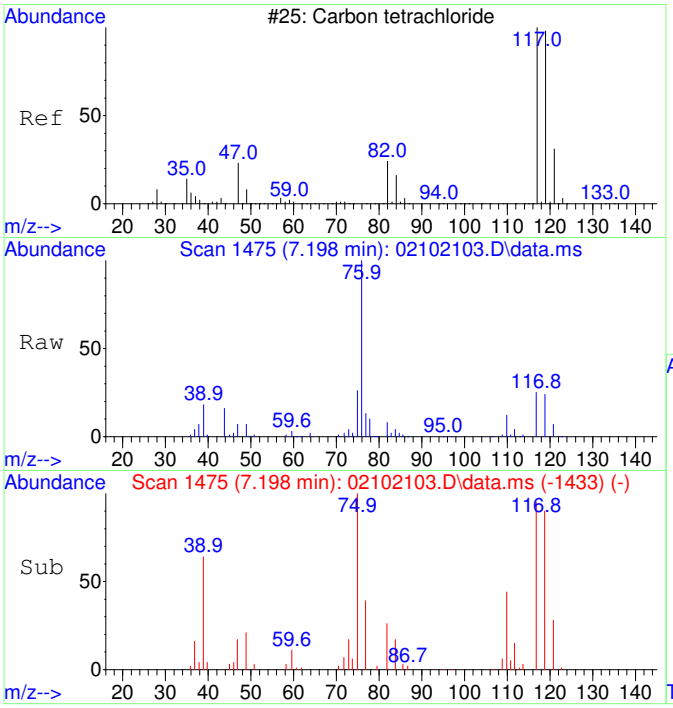


#31
1,1,1-Trichloroethane SCAN
Concen: 5804.36 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. 0.012 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 97 Resp: 48813

Ion	Ratio	Lower	Upper
97	100		
99	0.0	43.6	103.6#
61	50.2	18.0	78.0

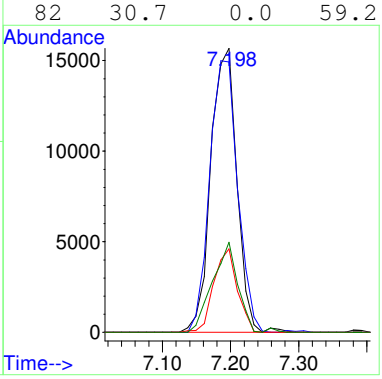


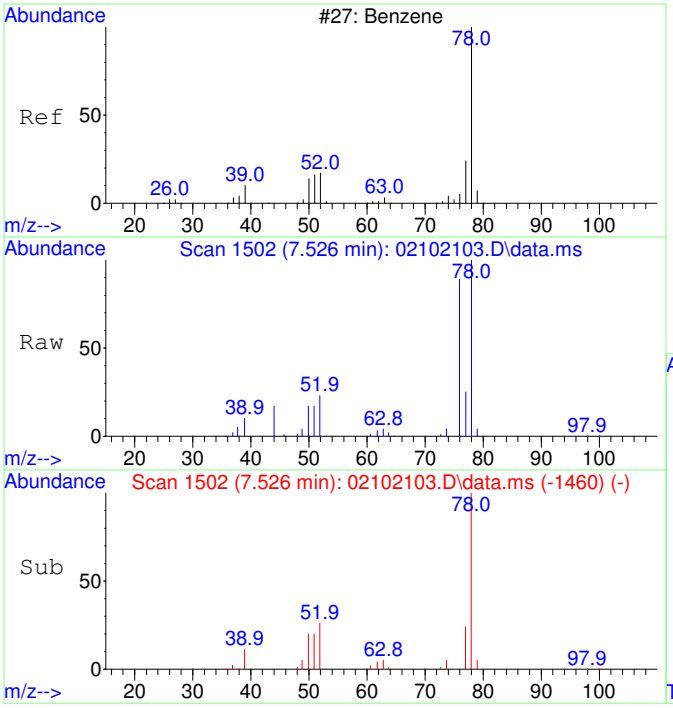


#32
Carbon tetrachloride SCAN
Concen: 5802.70 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion:117 Resp: 41701

Ion	Ratio	Lower	Upper
117	100		
119	102.5	75.5	135.5
121	26.7	0.0	58.8
82	30.7	0.0	59.2

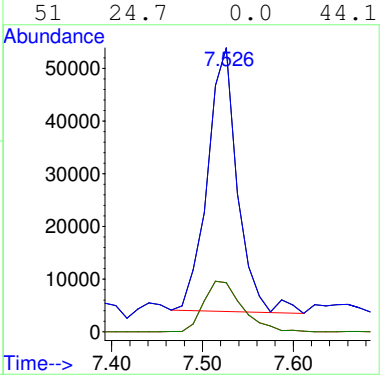


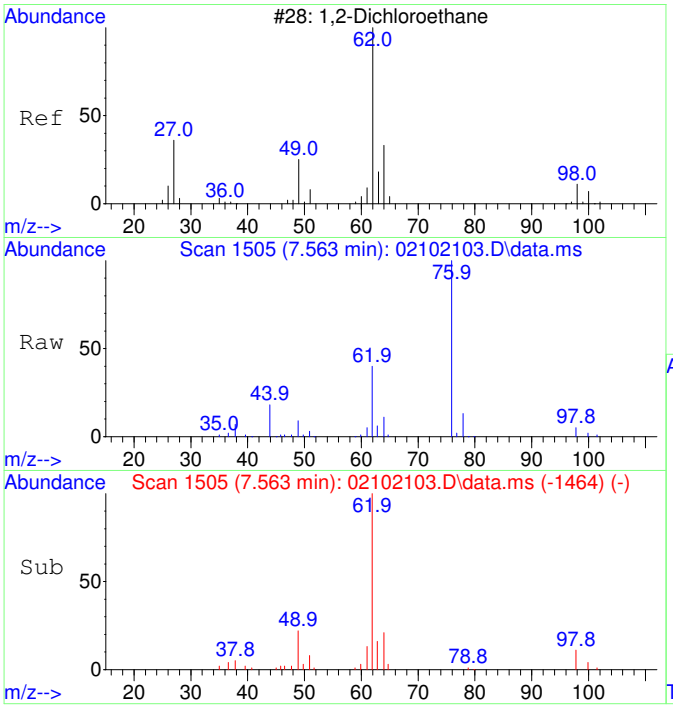


#33
Benzene SCAN
Concen: 4536.76 ug/L
RT: 7.526 min Scan# 1502
Delta R.T. 0.012 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 78 Resp: 115425

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	24.7	0.0	47.9
51	24.7	0.0	44.1

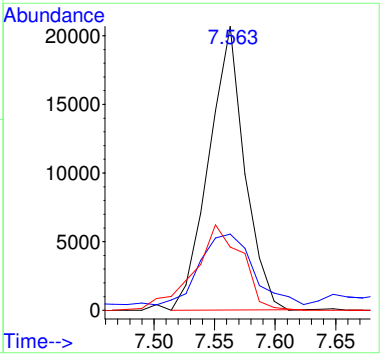


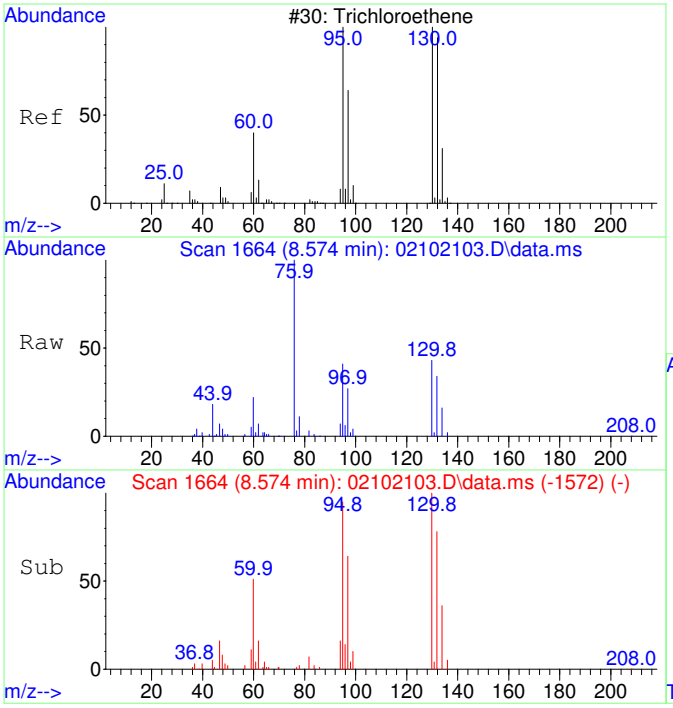


#34
1,2-Dichloroethane SCAN
Concen: 5351.21 ug/L
RT: 7.563 min Scan# 1505
Delta R.T. 0.000 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 62 Resp: 42586

Ion	Ratio	Lower	Upper
62	100		
64	36.5	5.2	65.2
49	40.3	3.9	63.9

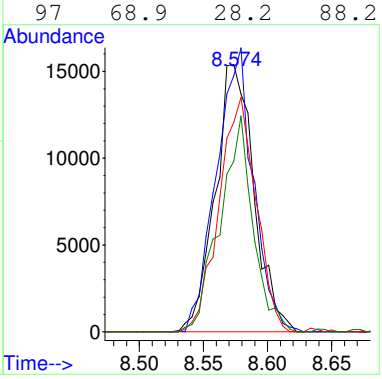


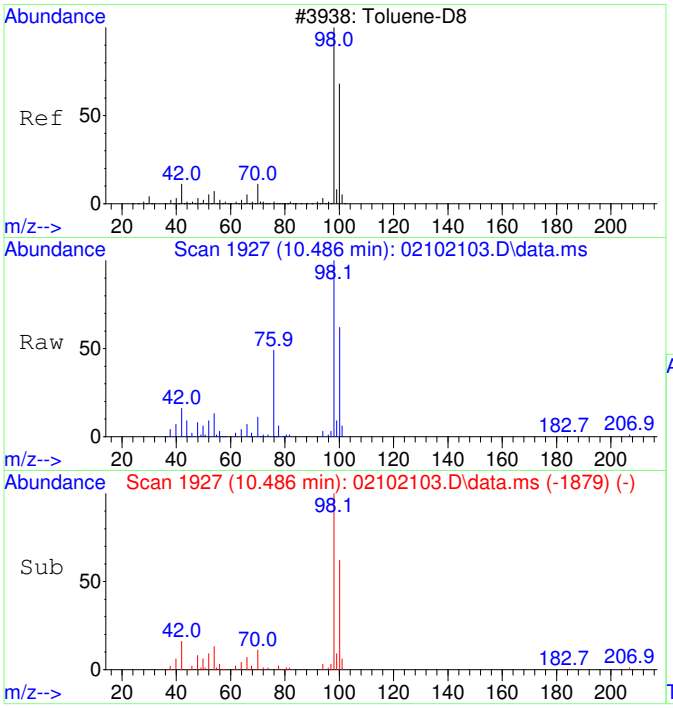


#35
Trichloroethene SCAN
Concen: 5831.28 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion:130 Resp: 32350

Ion	Ratio	Lower	Upper
130	100		
95	101.3	60.5	120.5
132	84.0	59.6	119.6
97	68.9	28.2	88.2

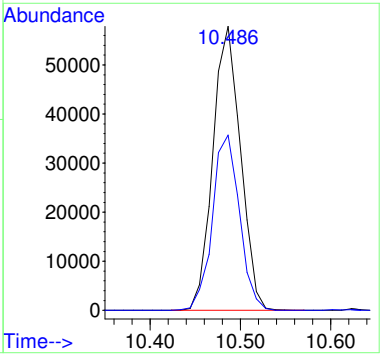


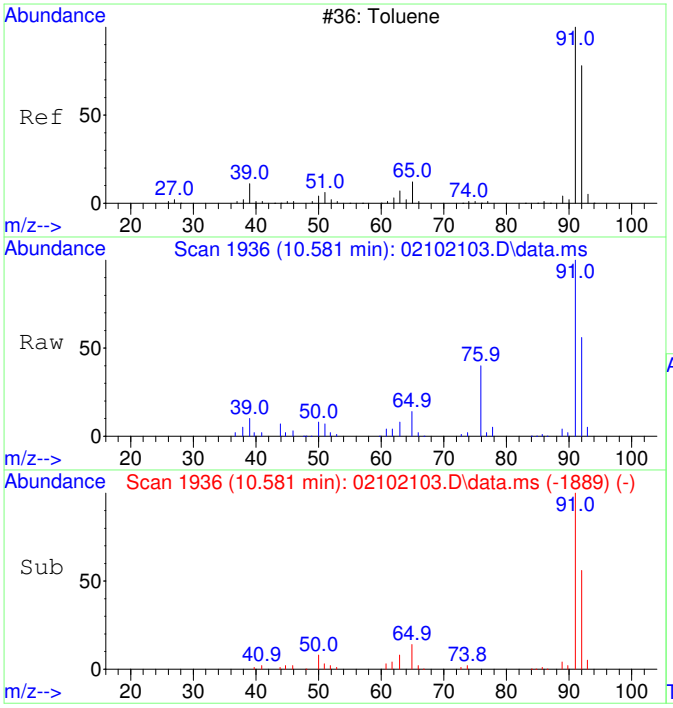


#36
Toluene-d8 SCAN
Concen: 5192.82 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 98 Resp: 123334

Ion	Ratio	Lower	Upper
98	100		
100	60.4	40.0	100.0

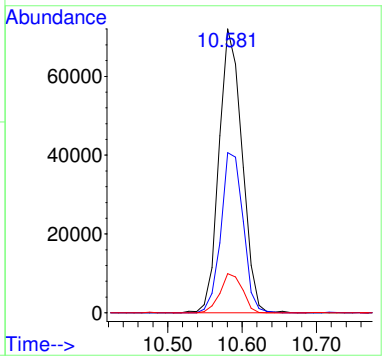


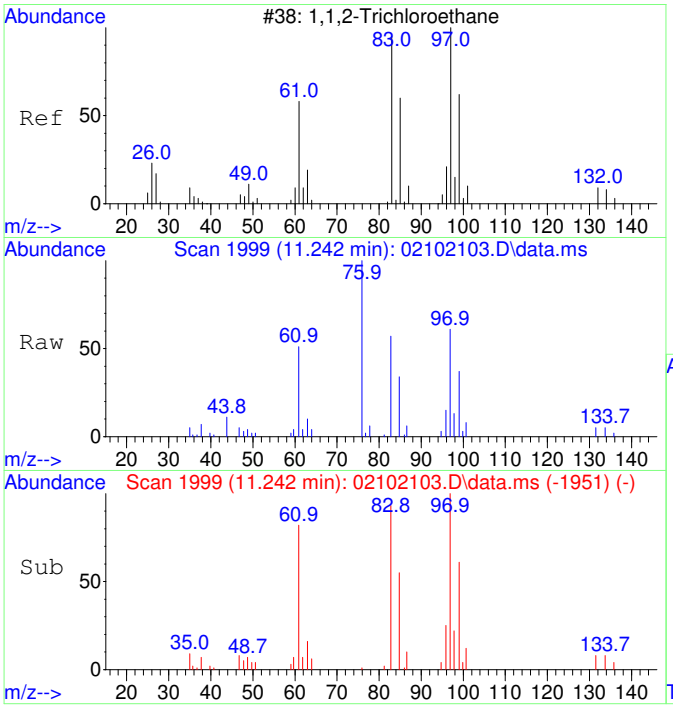


#37
Toluene SCAN
Concen: 5299.74 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 91 Resp: 154979

Ion	Ratio	Lower	Upper
91	100		
92	54.4	28.3	88.3
65	13.4	0.0	41.0

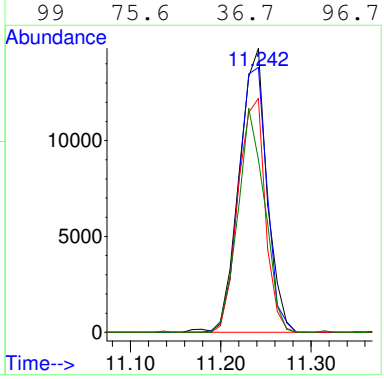


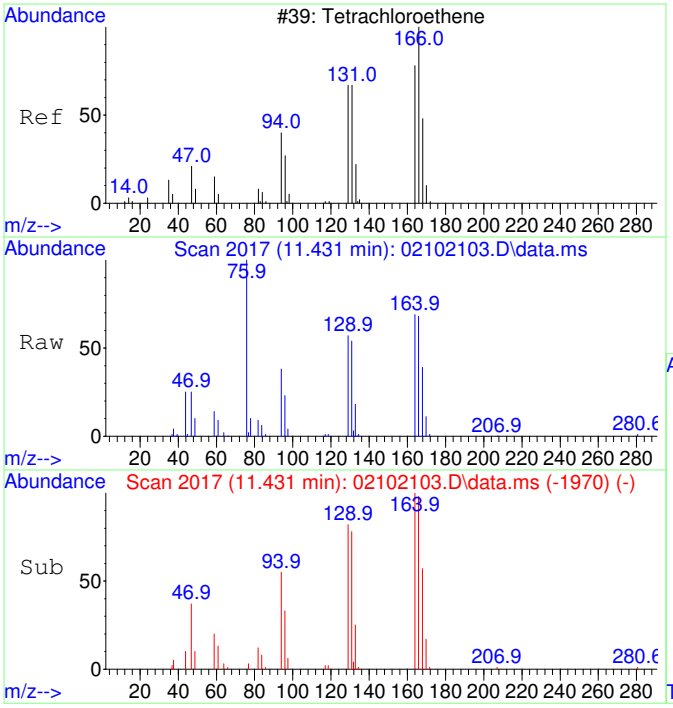


#38
1,1,2-Trichloroethane SCAN
Concen: 4341.86 ug/L
RT: 11.242 min Scan# 1999
Delta R.T. 0.000 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 97 Resp: 31825

Ion	Ratio	Lower	Upper
97	100		
83	94.8	57.7	117.7
61	80.1	32.1	92.1
99	75.6	36.7	96.7

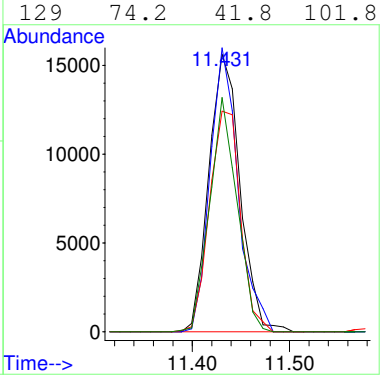


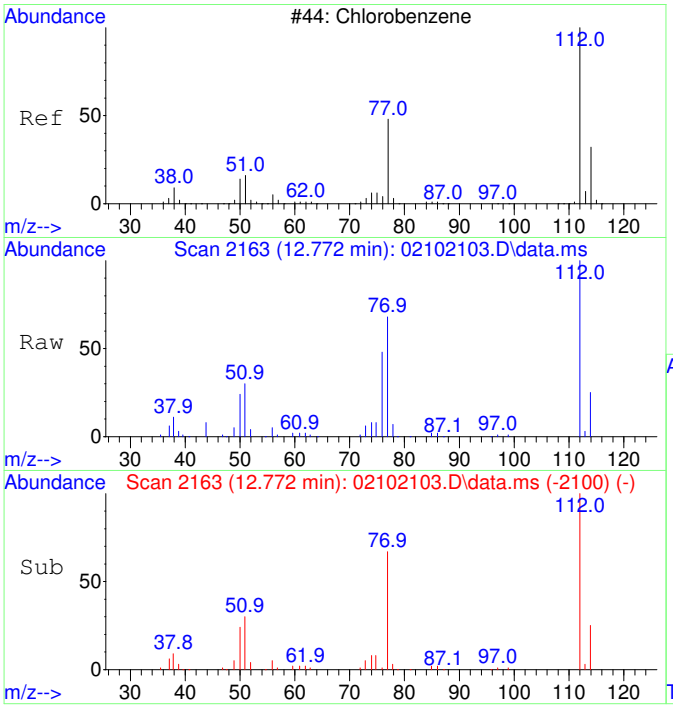


#39
Tetrachloroethene SCAN
Concen: 5289.90 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. -0.010 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion:166 Resp: 34800

Ion	Ratio	Lower	Upper
166	100		
164	91.6	50.9	110.9
131	78.7	38.7	98.7
129	74.2	41.8	101.8

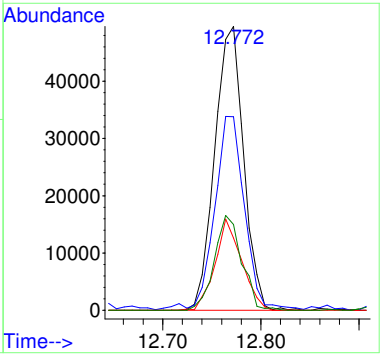


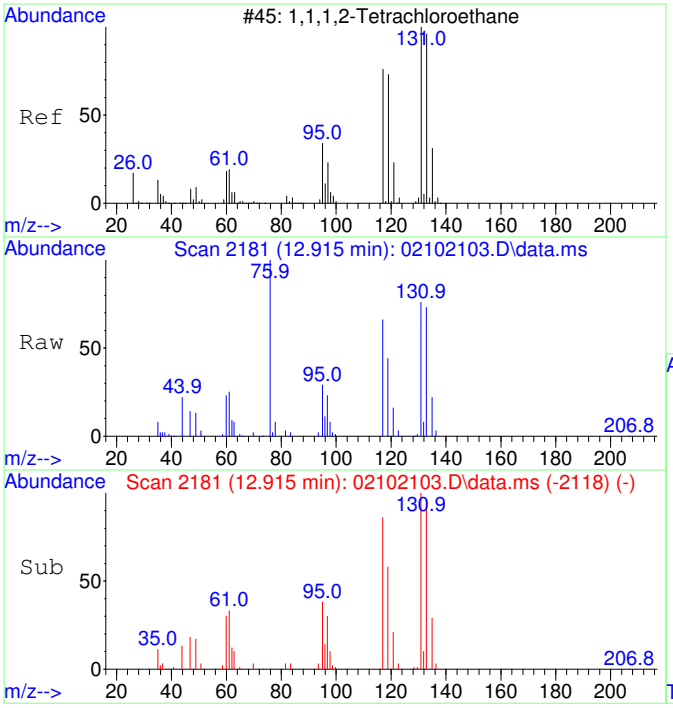


#40
Chlorobenzene SCAN
Concen: 4808.70 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.000 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion:112 Resp: 101001

Ion	Ratio	Lower	Upper
112	100		
77	69.6	28.2	88.2
114	29.6	2.3	62.3
51	31.7	0.0	50.1

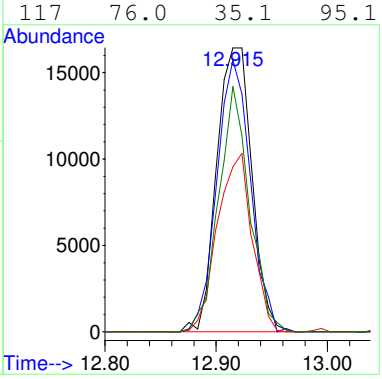


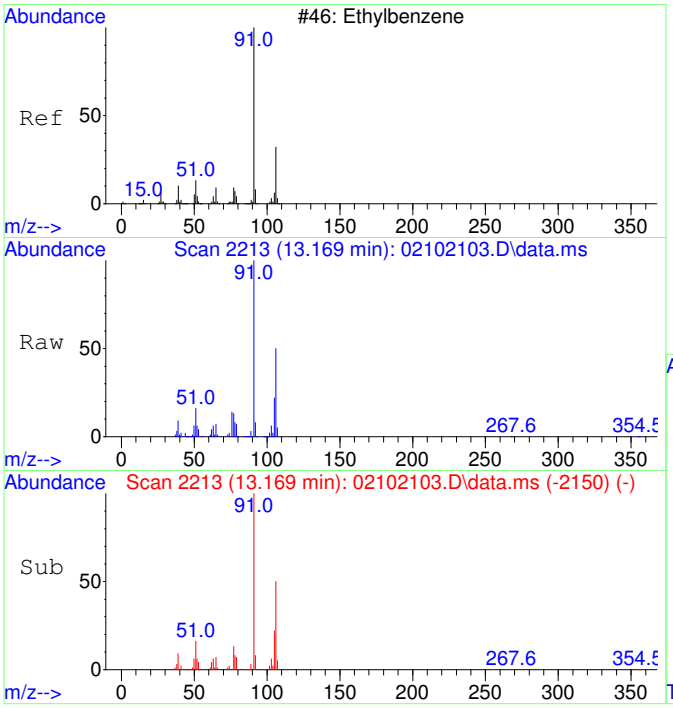


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 4986.63 ug/L
RT: 12.915 min Scan# 2181
Delta R.T. 0.000 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion:131 Resp: 36135

Ion	Ratio	Lower	Upper
131	100		
133	91.5	66.9	126.9
119	61.7	40.4	100.4
117	76.0	35.1	95.1

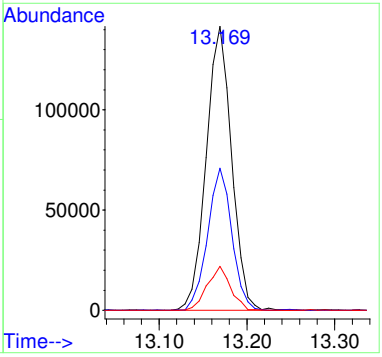


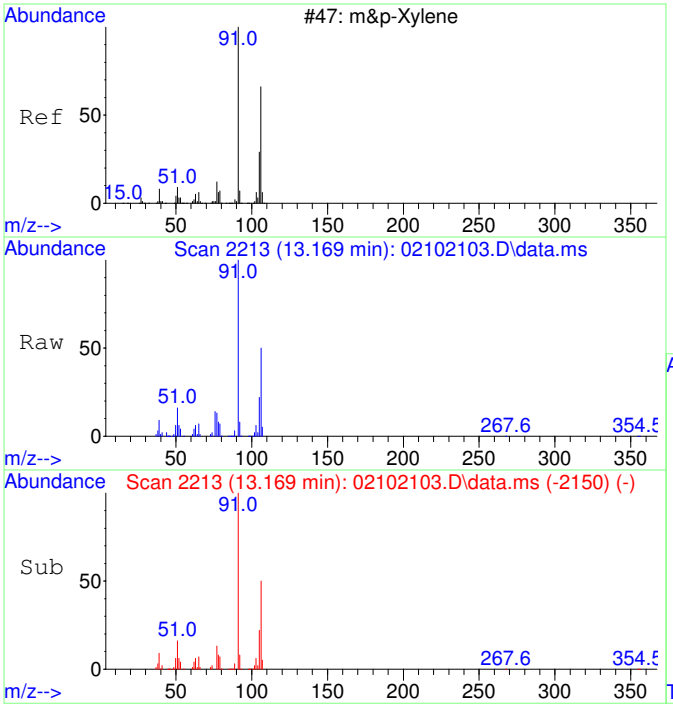


#42
Ethylbenzene SCAN
Concen: 5118.13 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 91 Resp: 285218

Ion	Ratio	Lower	Upper
91	100		
106	47.9	23.1	83.1
51	14.2	0.0	40.1

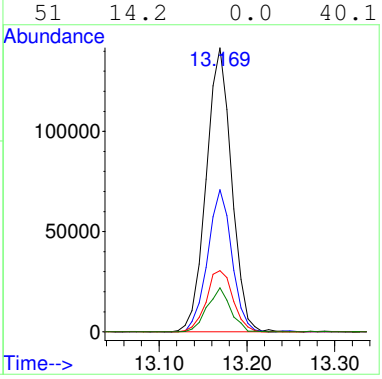


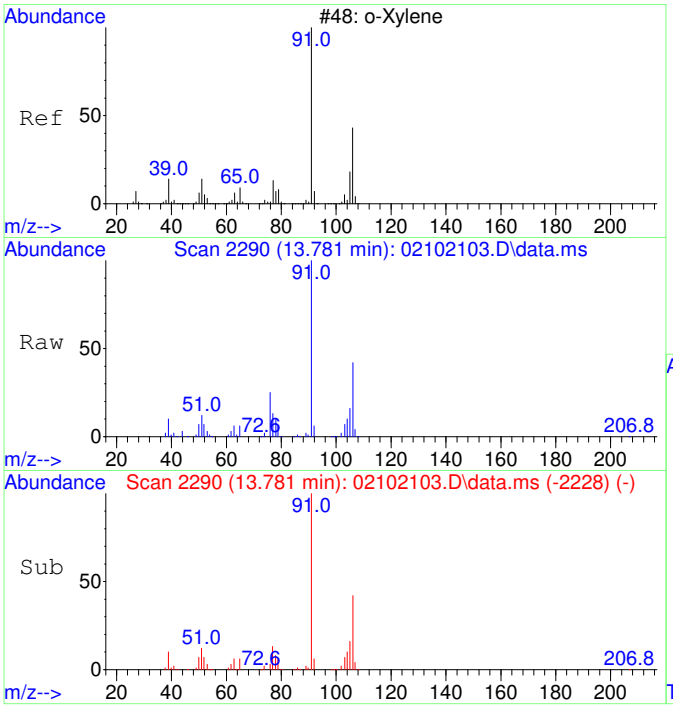


#43
m&p-Xylene SCAN
Concen: 5118.13 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 91 Resp: 285218

Ion	Ratio	Lower	Upper
91	100		
106	47.9	23.1	83.1
105	22.6	0.0	54.7
51	14.2	0.0	40.1

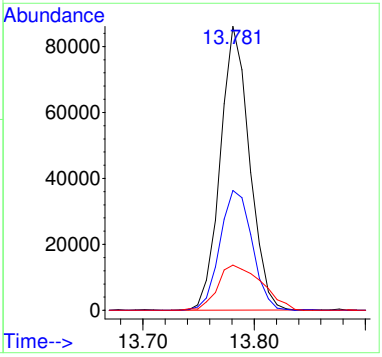


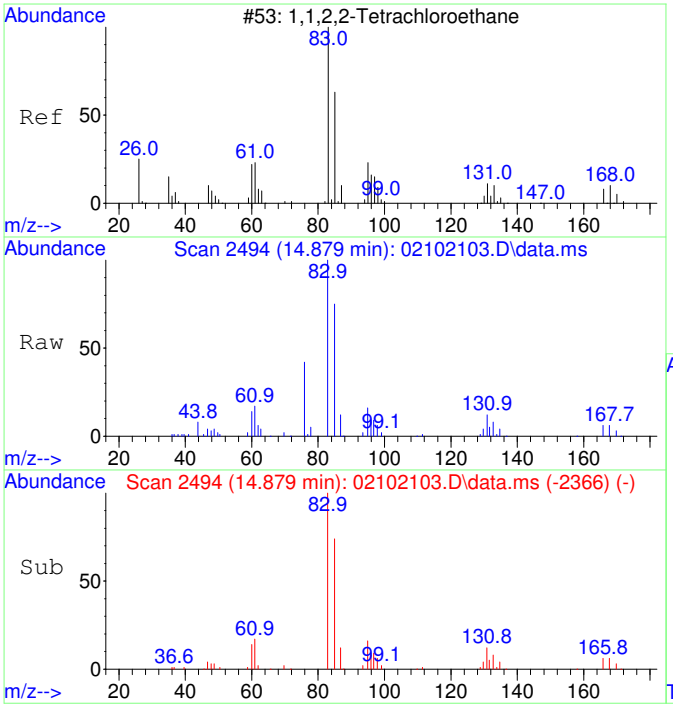


#44
o-Xylene SCAN
Concen: 5161.97 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.008 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 91 Resp: 157079

Ion	Ratio	Lower	Upper
91	100		
106	46.6	18.0	78.0
105	24.2	0.0	56.6

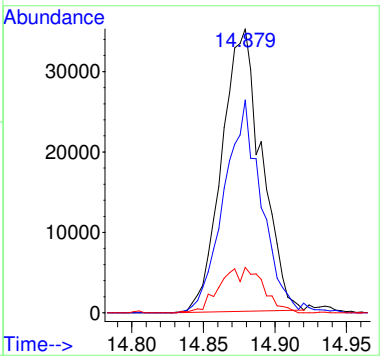


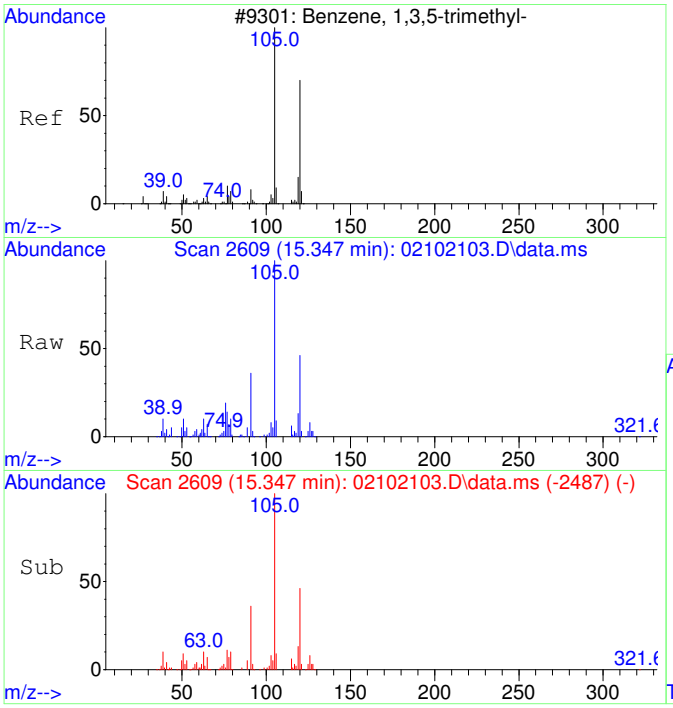


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 4305.57 ug/L
RT: 14.879 min Scan# 2494
Delta R.T. -0.003 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion: 83 Resp: 68123

Ion	Ratio	Lower	Upper
83	100		
85	71.7	35.9	95.9
95	17.6	0.0	47.4

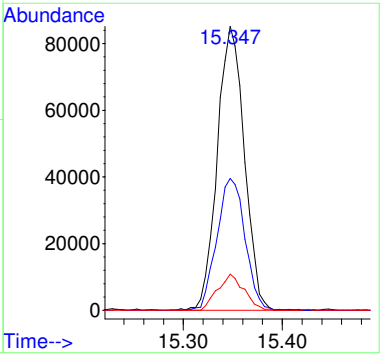


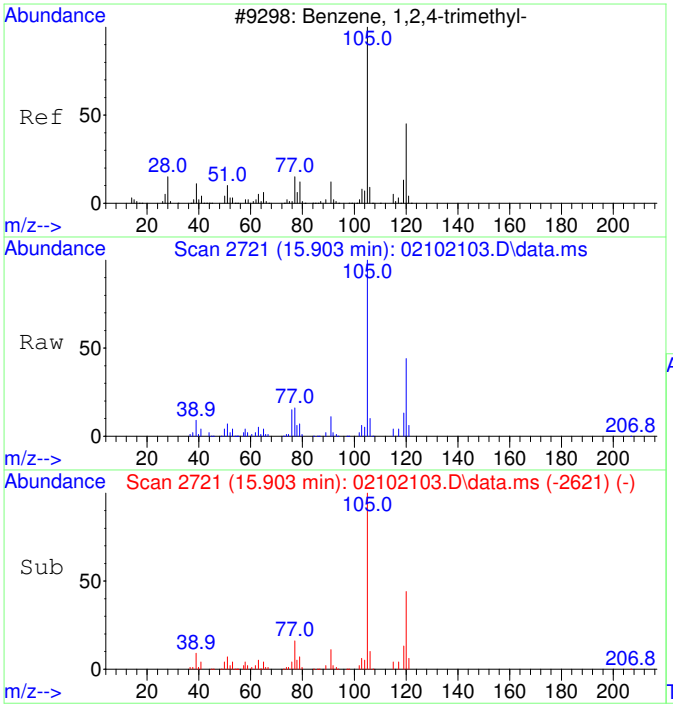


#46
1,3,5-Trimethylbenzene SCAN
Concen: 5038.64 ug/L
RT: 15.347 min Scan# 2609
Delta R.T. -0.006 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion:105 Resp: 161756

Ion	Ratio	Lower	Upper
105	100		
120	48.3	18.3	78.3
119	12.4	0.0	43.1

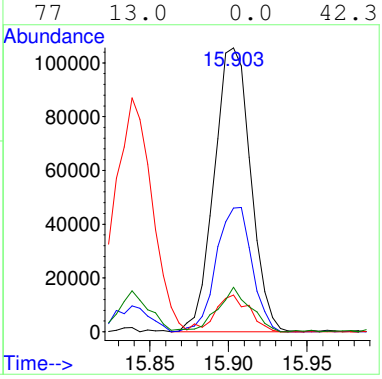


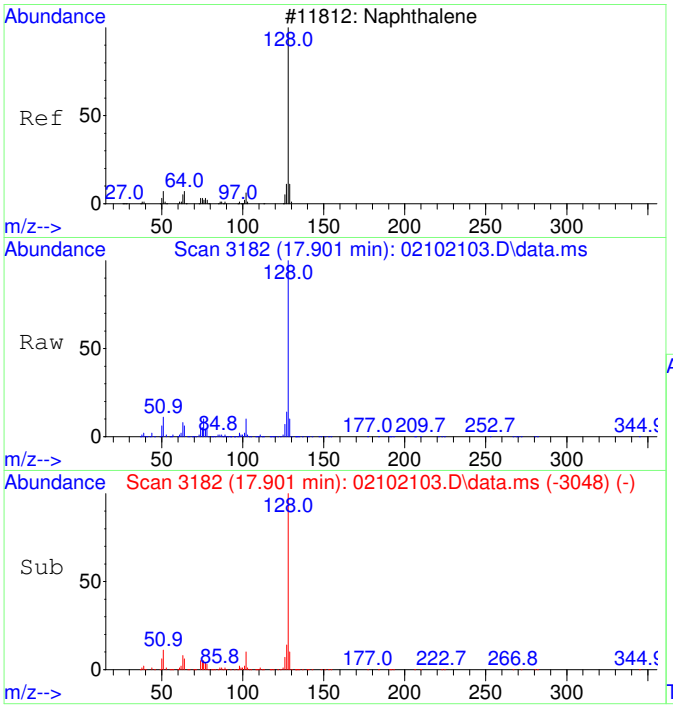


#47
1,2,4-Trimethylbenzene SCAN
Concen: 5172.19 ug/L
RT: 15.903 min Scan# 2721
Delta R.T. -0.001 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion:105 Resp: 169647

Ion	Ratio	Lower	Upper
105	100		
120	42.9	16.9	76.9
119	11.6	0.0	41.9
77	13.0	0.0	42.3

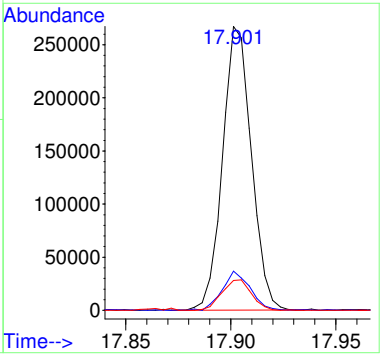




#48
Naphthalene SCAN
Concen: 5153.71 ug/L
RT: 17.901 min Scan# 3182
Delta R.T. -0.001 min
Lab File: 02102103.D
Acq: 10 Feb 2021 9:39

Tgt Ion:128 Resp: 253732

Ion	Ratio	Lower	Upper
128	100		
127	13.3	0.0	44.0
129	11.0	0.0	40.8



S21B029-CRL1

QLS REPORT

Instrument Name: AG5975C
Sample Name: S21B029-CRL1
Misc Info: 2106042 0.05 mg/L
Date Acquired: 2/10/21 10:03
QLast Update: Tue Dec 08 06:26:34 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.980	5000.0	5000.00	100%	60	140	pass
2)	1,1-Dichloroethene	3.090	50.0	46.77	94%	60	140	pass
3)	trans-1,2-Dichloroethene	4.376	50.0	43.24	86%	60	140	pass
4)	1,1-Dichloroethane	5.086	50.0	43.20	86%	60	140	pass
5)	cis-1,2-Dichloroethene	6.088	50.0	42.47	85%	60	140	pass
6)	Chloroform	6.652	50.0	50.03	100%	60	140	pass
7)	1,1,1-Trichloroethane	6.919	50.0	45.43	91%	60	140	pass
8)	Carbon tetrachloride	7.187	50.0	45.42	91%	60	140	pass
10)	1,2-Dichloroethane	7.552	50.0	48.12	96%	60	140	pass
11)	Trichloroethene	8.575	50.0	43.01	86%	60	140	pass
12)	Toluene-d8	10.487	50.0	43.16	86%	60	140	pass
13)	Toluene	10.582	50.0	49.99	100%	60	140	pass
14)	1,1,2-Trichloroethane	11.232	50.0	41.06	82%	60	140	pass
15)	Tetrachloroethene	11.432	50.0	44.89	90%	60	140	pass
16)	Chlorobenzene	12.773	50.0	75.67	151%	60	140	FAIL
17)	1,1,1,2-Tetrachloroethane	12.916	50.0	43.49	87%	60	140	pass
18)	Ethylbenzene	12.972	50.0	45.80	92%	60	140	pass
19)	m&p-Xylene	13.170	100.0	94.00	94%	60	140	pass
20)	o-Xylene	13.782	50.0	45.58	91%	60	140	pass
21)	1,1,2,2-Tetrachloroethane	14.880	50.0	42.99	86%	60	140	pass
22)	1,3,5-Trimethylbenzene	15.350	50.0	44.93	90%	60	140	pass
23)	1,2,4-Trimethylbenzene	15.906	50.0	51.06	102%	60	140	pass
24)	Naphthalene	17.904	50.0	44.43	89%	60	140	pass

Quantitation Report (Not Reviewed)

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Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102104.D
Acq On : 10 Feb 2021 10:03
InstName : AG5975C
Operator : TD
Sample : S21B029-CRL1
Misc : 2106042 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 10 10:22:03 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	234587	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	1961	43.16 ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery =	0.86%#	
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	770	82.78 ug/L #	54
3] trans-1,2-Dichloroethene	4.389	61	507	43.24 ug/L	58
4] 1,1-Dichloroethane	5.092	63	605	43.20 ug/L	76
5] cis-1,2-Dichloroethene	6.088	61	616	42.47 ug/L	99
6] Chloroform	6.652	83	697	50.03 ug/L	98
7] 1,1,1-Trichloroethane	6.919	97	680	45.43 ug/L	95
8] Carbon tetrachloride	7.187	117	650	45.42 ug/L	96
9] Benzene	7.503	78	3888	98.49 ug/L	71
10] 1,2-Dichloroethane	7.552	62	648	48.12 ug/L	48
11] Trichloroethene	8.570	130	536	43.01 ug/L	93
13] Toluene	10.582	91	2828	49.99 ug/L	99
14] 1,1,2-Trichloroethane	11.233	97	538	41.06 ug/L	97
15] Tetrachloroethene	11.432	166	791	44.89 ug/L	94
16] Chlorobenzene	12.765	112	3316	75.67 ug/L	89
17] 1,1,1,2-Tetrachloroethane	12.916	131	667	43.49 ug/L	94
18] Ethylbenzene	12.972	91	3309	45.80 ug/L	94
19] m&p-Xylene	13.163	91	5230	94.00 ug/L	97
20] o-Xylene	13.782	91	2724	45.58 ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.873	83	1197	42.99 ug/L	99
22] 1,3,5-Trimethylbenzene	15.345	105	2953	44.93 ug/L	96
23] 1,2,4-Trimethylbenzene	15.901	105	3432	51.06 ug/L	91
24] Naphthalene	17.903	128	4839	44.43 ug/L	99
25) 2-Fluorotoluene SCAN	10.969	109	138532	5202.49 ug/L	99
27) trans-1,2-Dichloroethe...	4.395	61	220	27.79 ug/L	90
29) cis-1,2-Dichloroethene...	6.113	61	357	38.86 ug/L #	1
30) Chloroform SCAN	6.663	83	403	47.03 ug/L #	83
31) 1,1,1-Trichloroethane ...	6.918	97	363	41.05 ug/L	84
32) Carbon tetrachloride SCAN	7.161	117	281	37.19 ug/L #	15
33) Benzene SCAN	7.514	78	5720	213.81 ug/L	94
35) Trichloroethene SCAN	8.574	130	273	46.80 ug/L #	61
36) Toluene-d8 SCAN	10.486	98	1556	62.30 ug/L #	15
37) Toluene SCAN	10.570	91	1930	62.77 ug/L #	78
38) 1,1,2-Trichloroethane ...	11.231	97	884	114.70 ug/L #	18
40) Chlorobenzene SCAN	12.772	112	2312	104.68 ug/L	72
41) 1,1,1,2-Tetrachloroeth...	12.899	131	347	45.54 ug/L #	57
42) Ethylbenzene SCAN	13.161	91	5049	86.16 ug/L	79
43) m&p-Xylene SCAN	13.161	91	5049	86.16 ug/L	77
44) o-Xylene SCAN	13.797	91	2117	66.16 ug/L #	58
45) 1,1,2,2-Tetrachloroeth...	14.879	83	734	44.12 ug/L #	61
46) 1,3,5-Trimethylbenzene...	15.358	105	2537	75.16 ug/L	89
47) 1,2,4-Trimethylbenzene...	15.895	105	2189	63.47 ug/L	89
48) Naphthalene SCAN	17.905	128	3273	63.22 ug/L	90

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

Quantitation Report (Not Reviewed)

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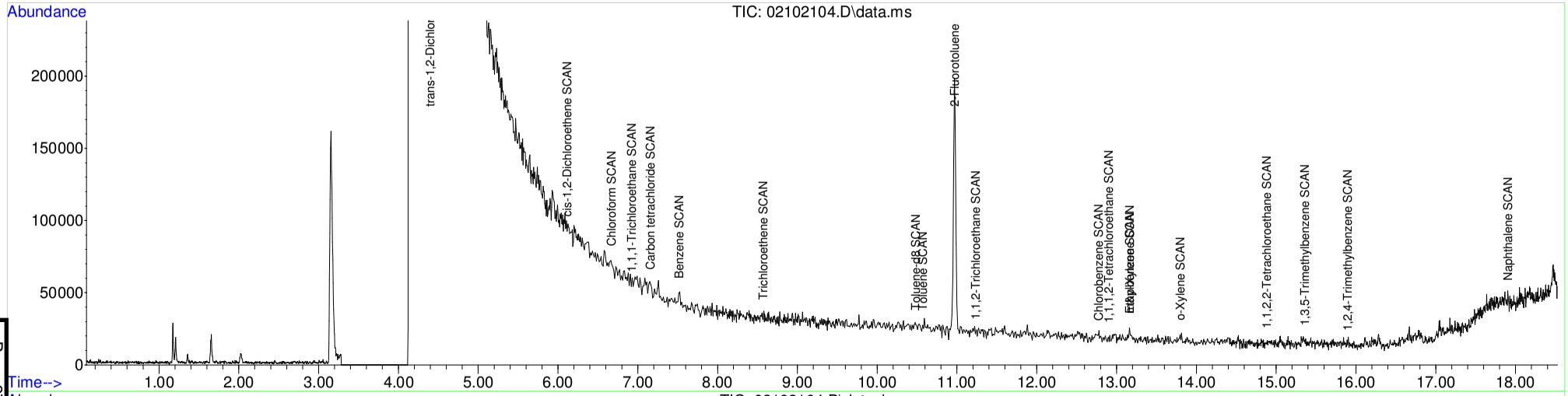

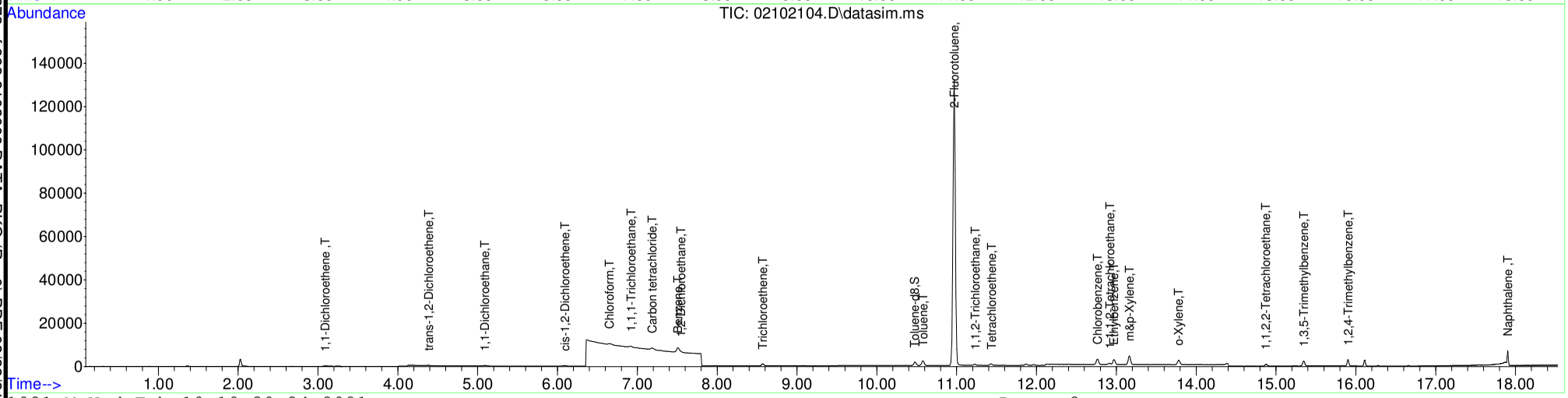

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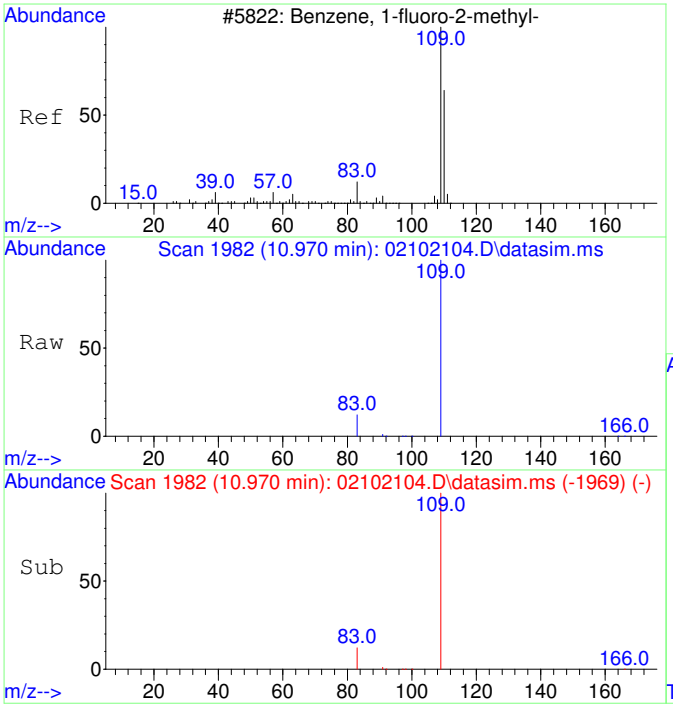
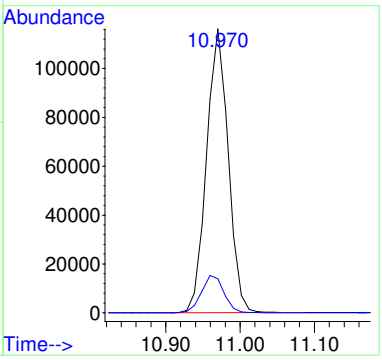
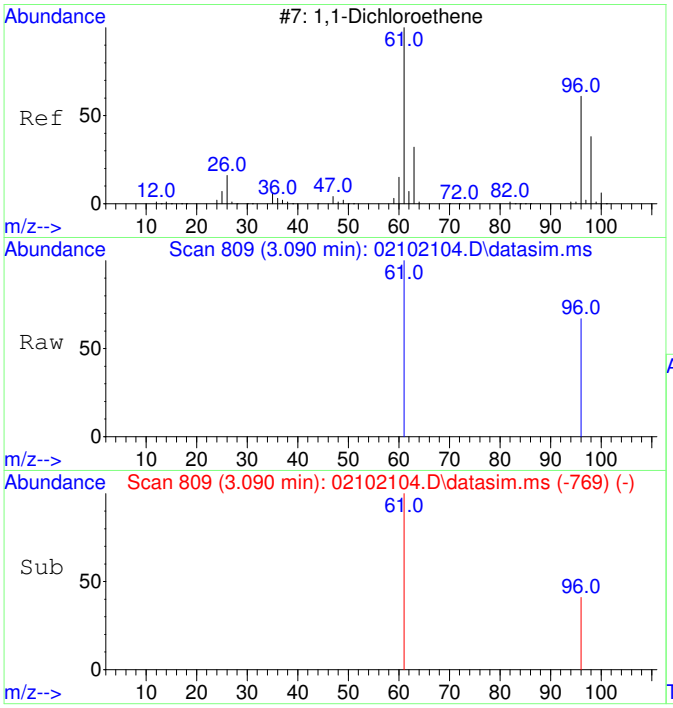


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:109 Resp: 234587

Ion	Ratio	Lower	Upper
109	100		
83	13.6	0.0	42.3

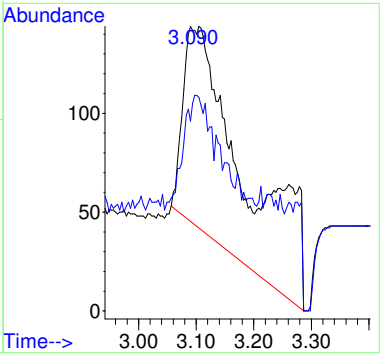




#2
1,1-Dichloroethene
Concen: 82.78 ug/L
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 61 Resp: 770

Ion	Ratio	Lower	Upper
61	100		
96	30.0	37.2	97.2#



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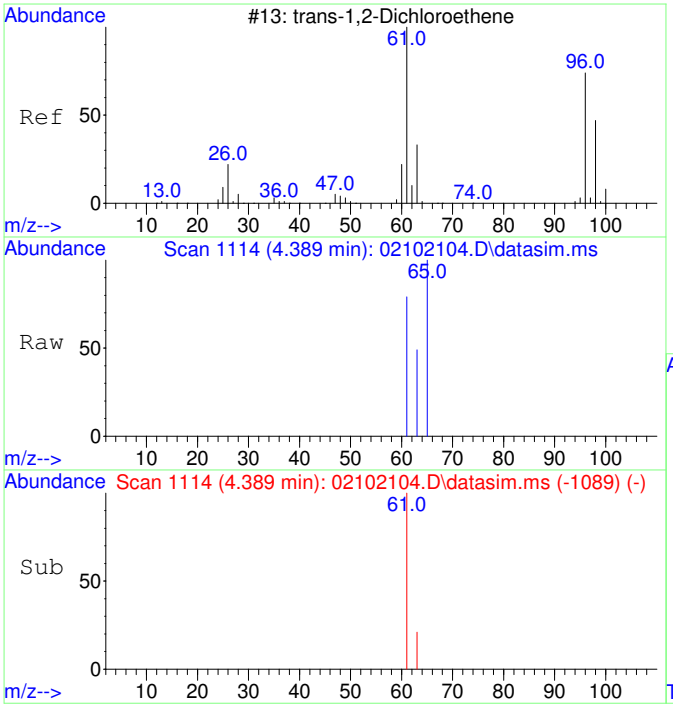
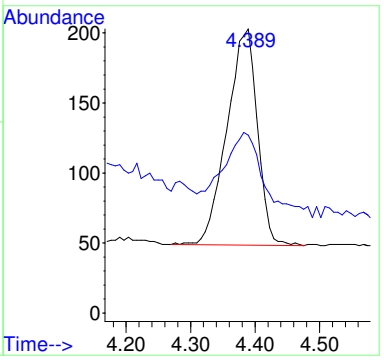
IMPROPER
BASELINE

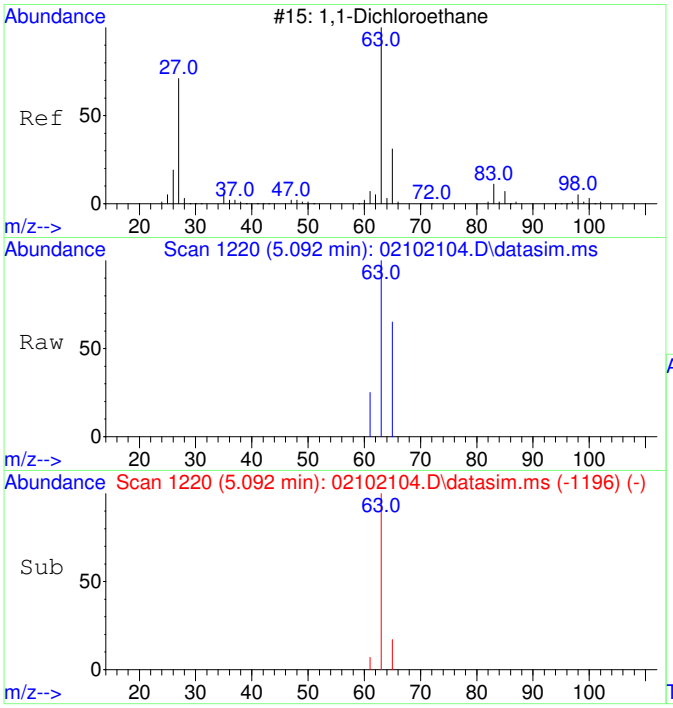


#3
trans-1,2-Dichloroethene
Concen: 43.24 ug/L
RT: 4.389 min Scan# 1114
Delta R.T. 0.013 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 61 Resp: 507

Ion	Ratio	Lower	Upper
61	100		
63	56.2	2.4	62.4

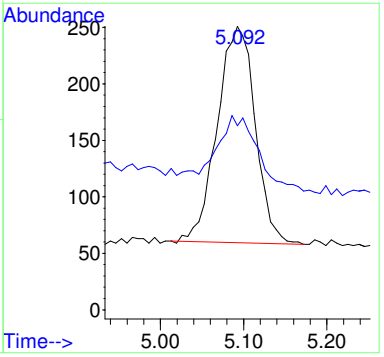


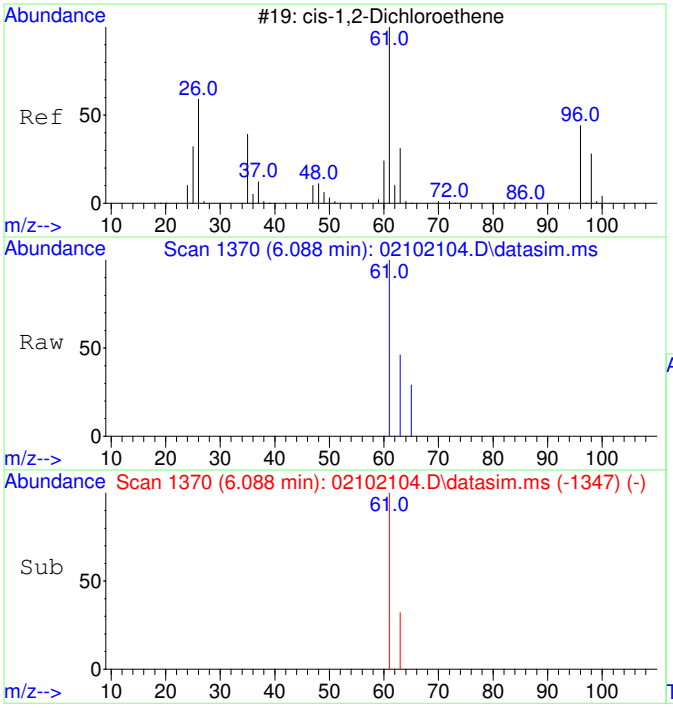


#4
1,1-Dichloroethane
Concen: 43.20 ug/L
RT: 5.092 min Scan# 1220
Delta R.T. 0.007 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 63 Resp: 605

Ion	Ratio	Lower	Upper
63	100		
65	45.3	1.8	61.8

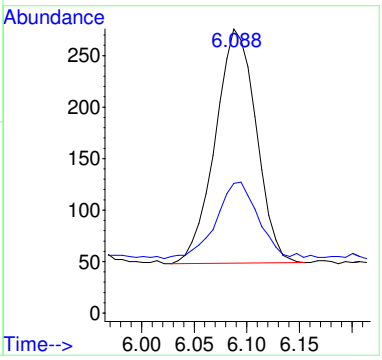


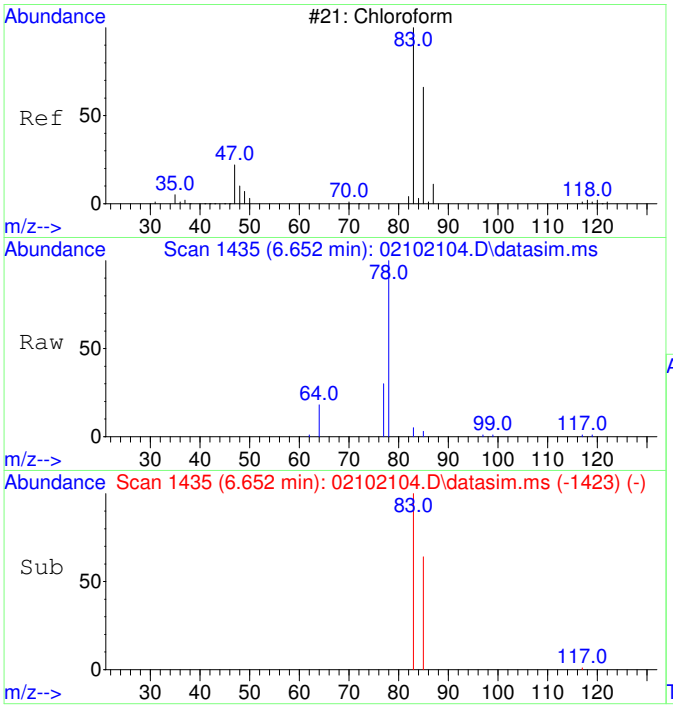


#5
cis-1,2-Dichloroethene
Concen: 42.47 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 61 Resp: 616

Ion	Ratio	Lower	Upper
61	100		
63	33.1	2.5	62.5

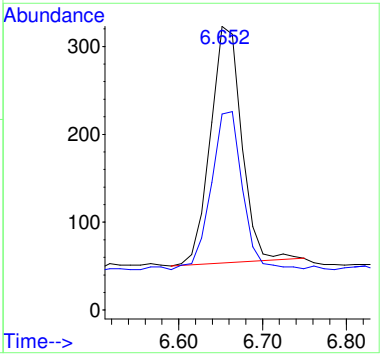


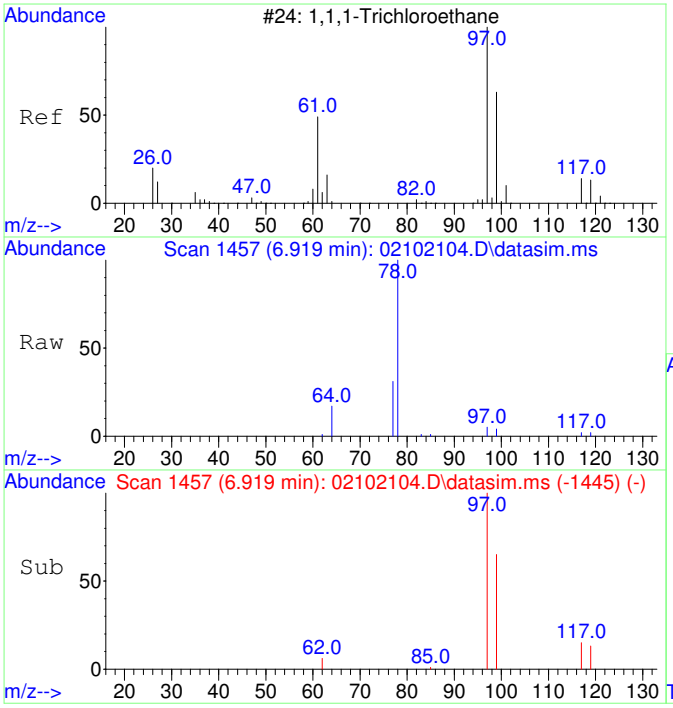


#6
Chloroform
Concen: 50.03 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 83 Resp: 697

Ion	Ratio	Lower	Upper
83	100		
85	66.4	35.1	95.1

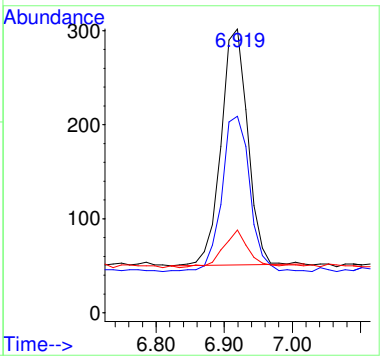


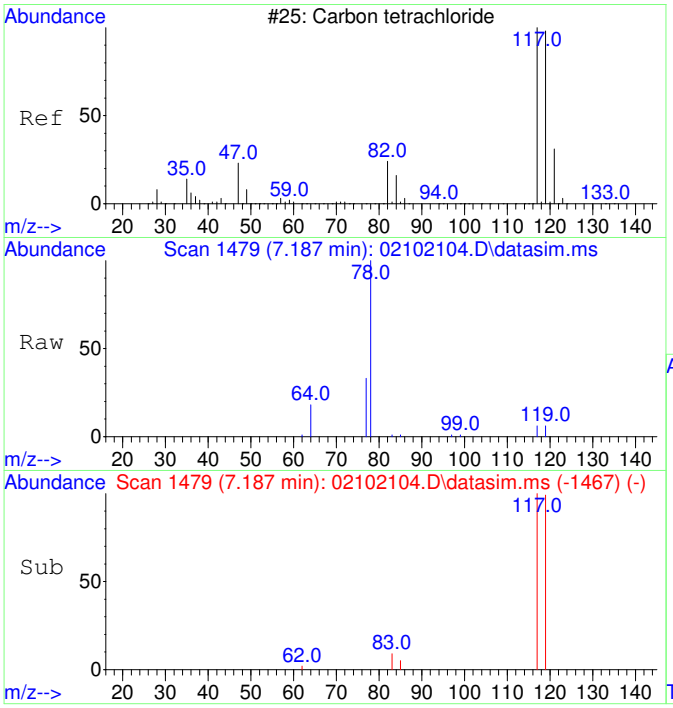


#7
1,1,1-Trichloroethane
Concen: 45.43 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 97 Resp: 680

Ion	Ratio	Lower	Upper
97	100		
99	68.5	34.6	94.6
117	15.6	0.0	43.2

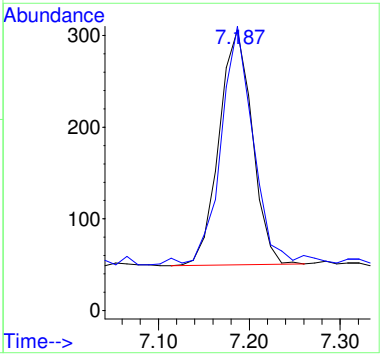


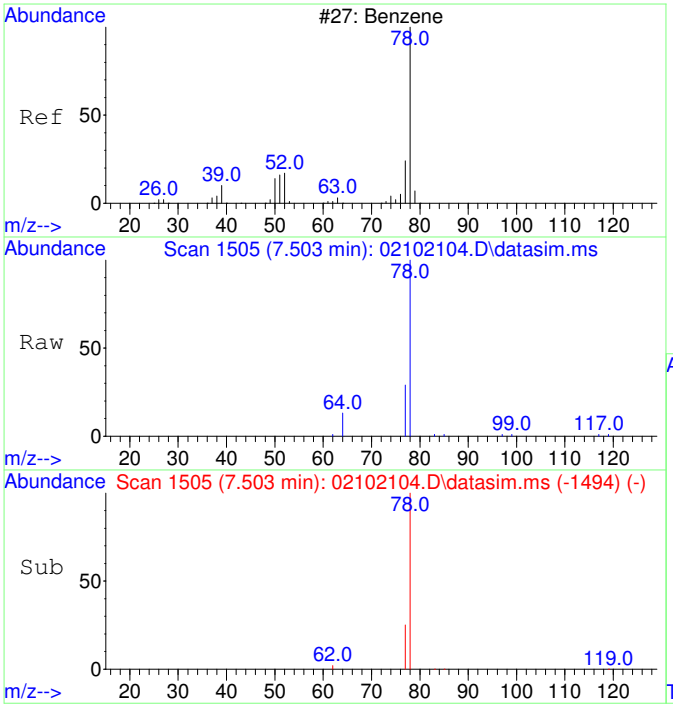


#8
Carbon tetrachloride
Concen: 45.42 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:117 Resp: 650

Ion	Ratio	Lower	Upper
117	100		
119	100.8	66.4	126.4

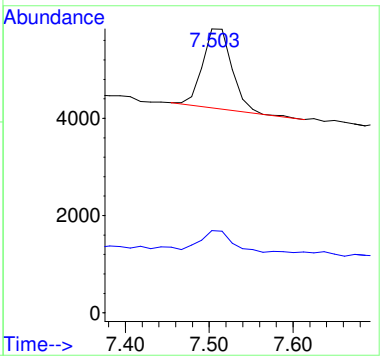


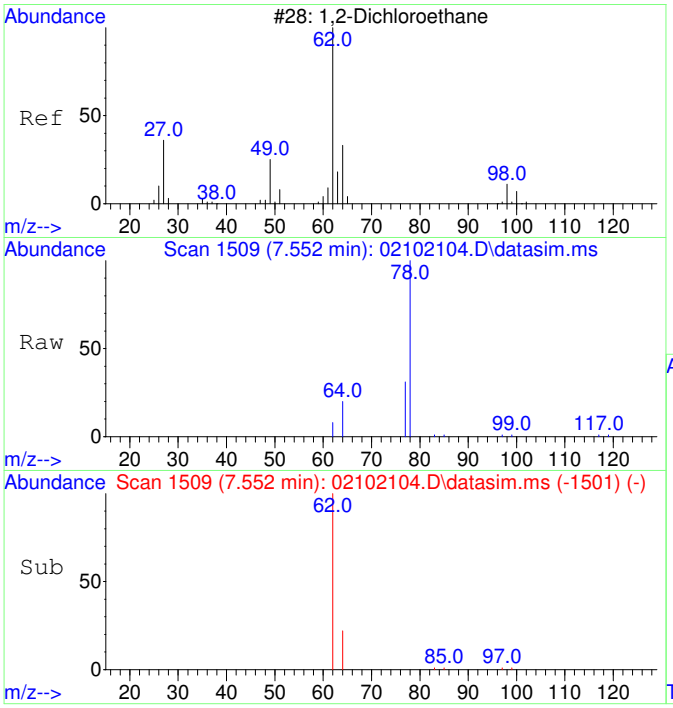


#9
Benzene
Concen: 98.49 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 78 Resp: 3888

Ion	Ratio	Lower	Upper
78	100		
77	37.5	0.0	53.2

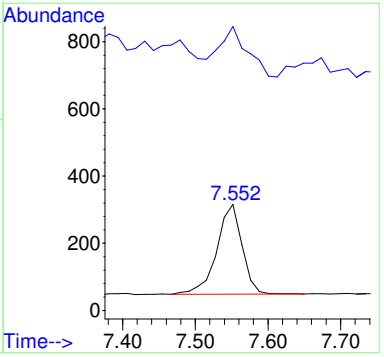


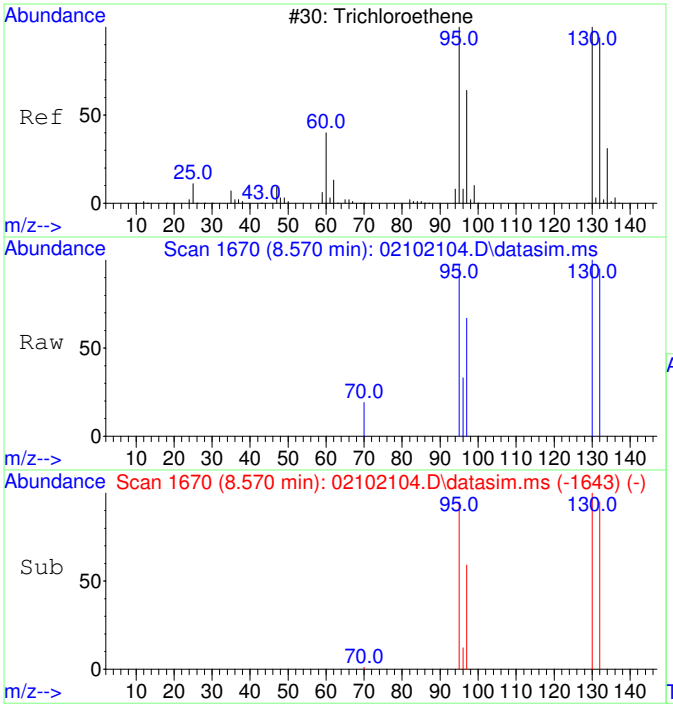


#10
1,2-Dichloroethane
Concen: 48.12 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 62 Resp: 648

Ion	Ratio	Lower	Upper
62	100		
64	61.3	2.3	62.3

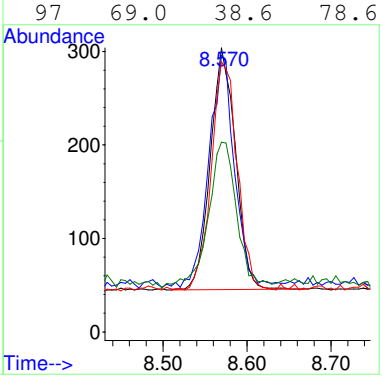


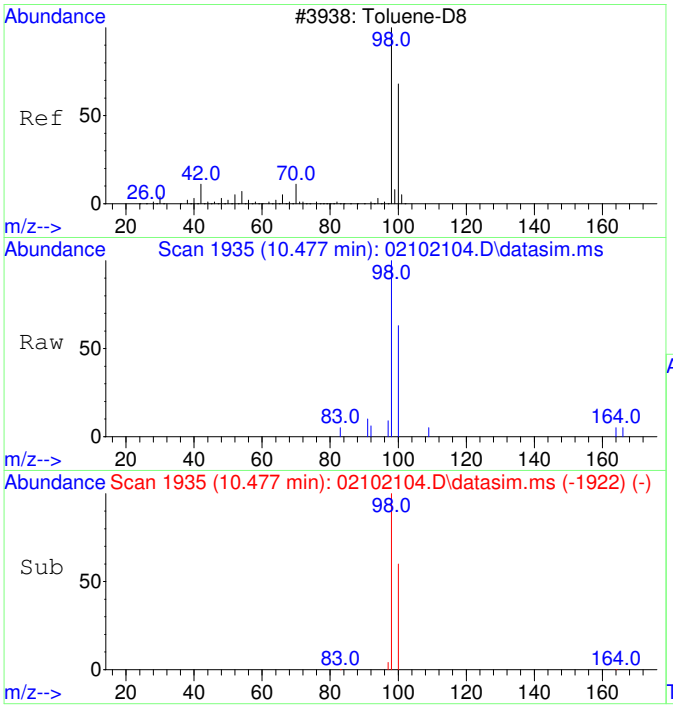


#11
Trichloroethene
Concen: 43.01 ug/L
RT: 8.570 min Scan# 1670
Delta R.T. -0.005 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:130 Resp: 536

Ion	Ratio	Lower	Upper
130	100		
95	98.9	60.7	120.7
132	97.0	76.0	116.0
97	69.0	38.6	78.6

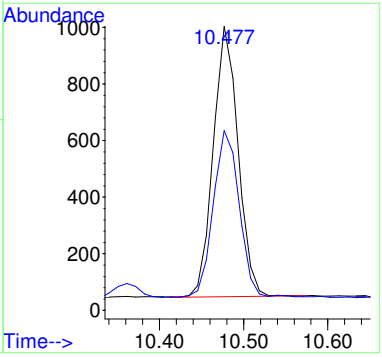


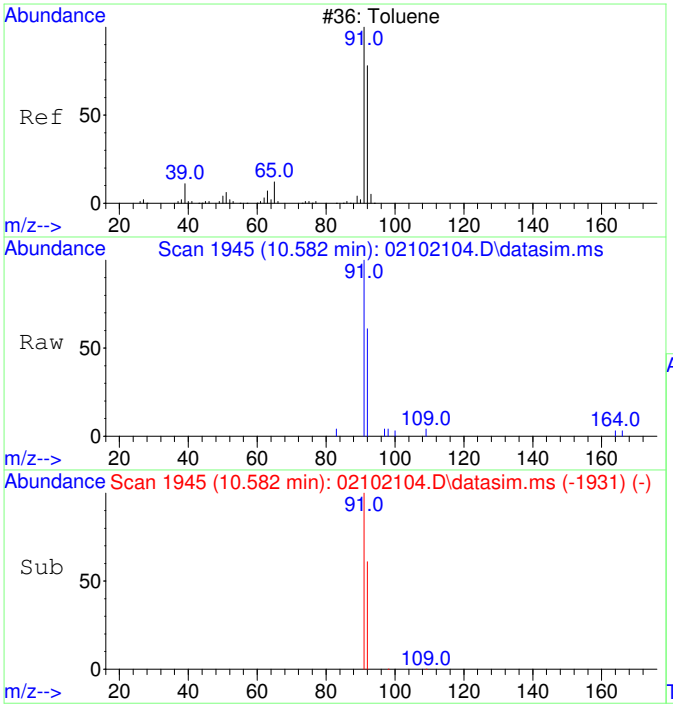


#12
Toluene-d8
Concen: 43.16 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 98 Resp: 1961

Ion	Ratio	Lower	Upper
98	100		
100	64.1	37.1	97.1

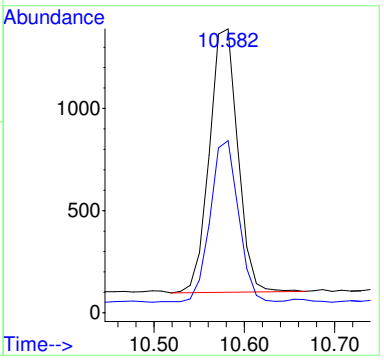


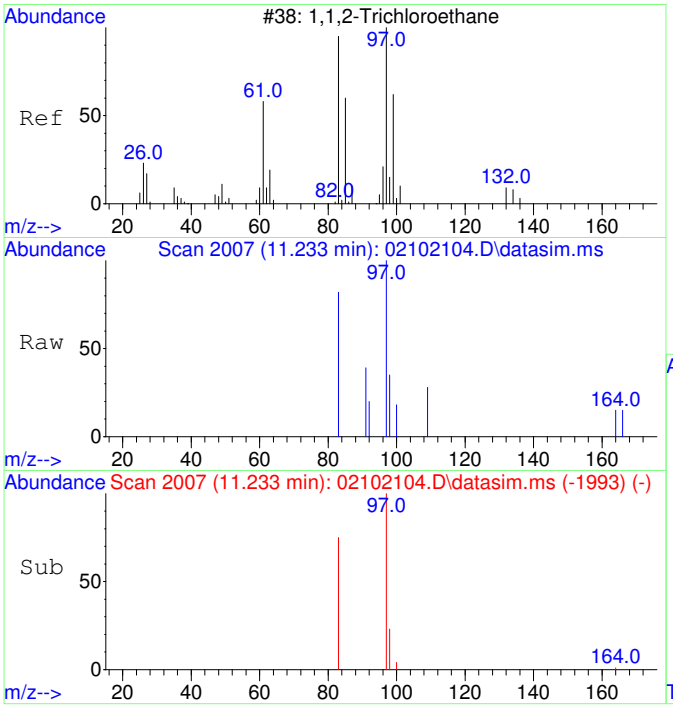


#13
Toluene
Concen: 49.99 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 2828

Ion	Ratio	Lower	Upper
91	100		
92	60.5	29.9	89.9

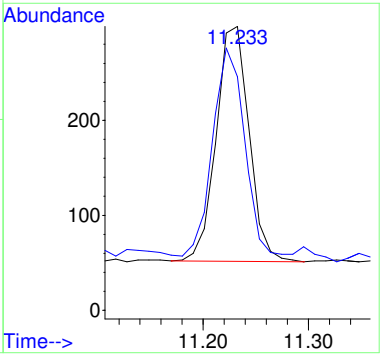


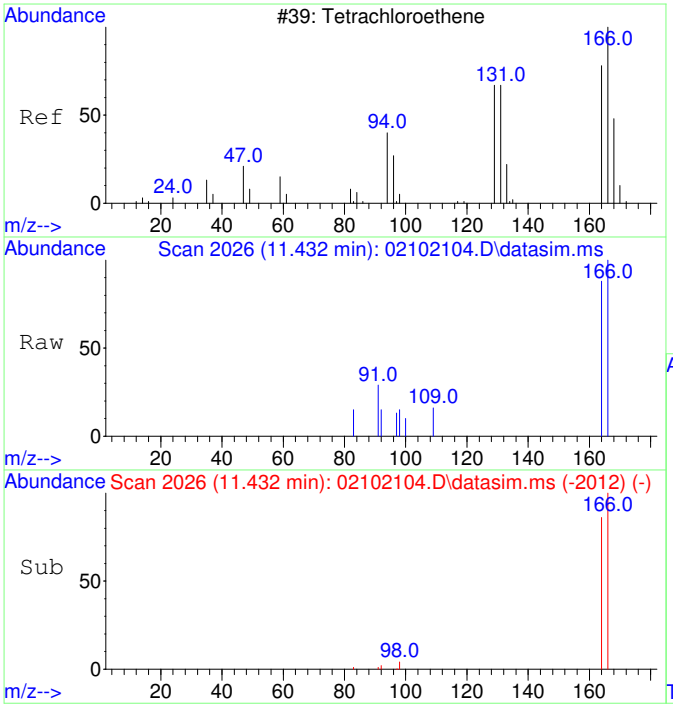


#14
1,1,2-Trichloroethane
Concen: 41.06 ug/L
RT: 11.233 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 97 Resp: 538

Ion	Ratio	Lower	Upper
97	100		
83	84.2	51.2	111.2

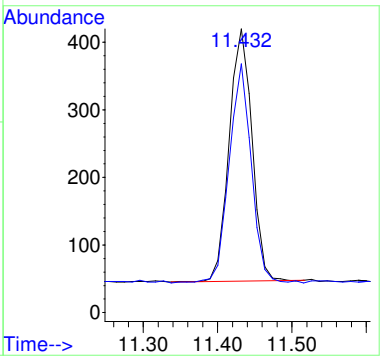


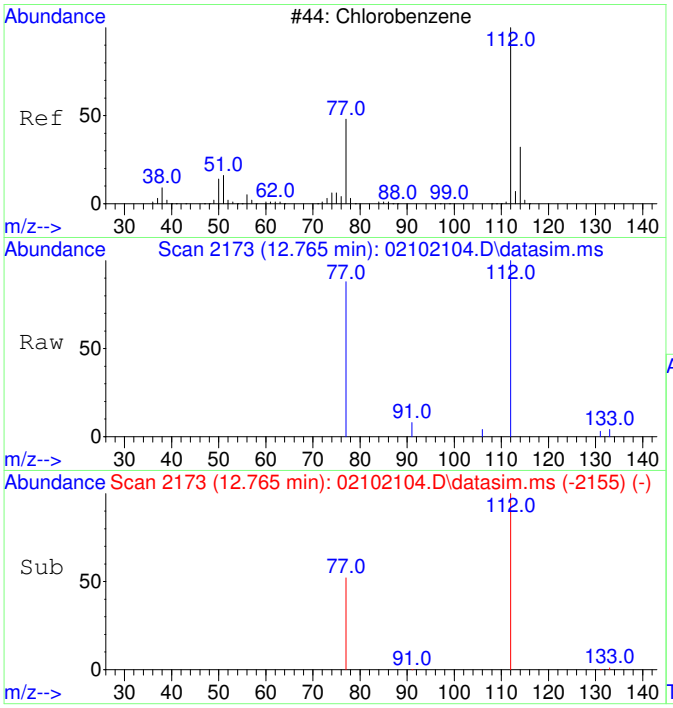


#15
Tetrachloroethene
Concen: 44.89 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:166 Resp: 791

Ion	Ratio	Lower	Upper
166	100		
164	83.2	47.8	107.8

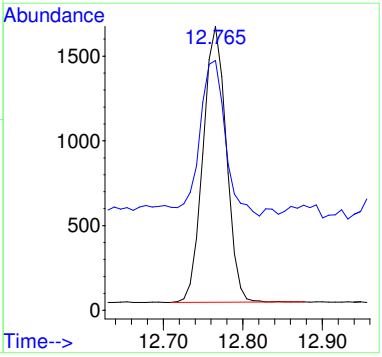


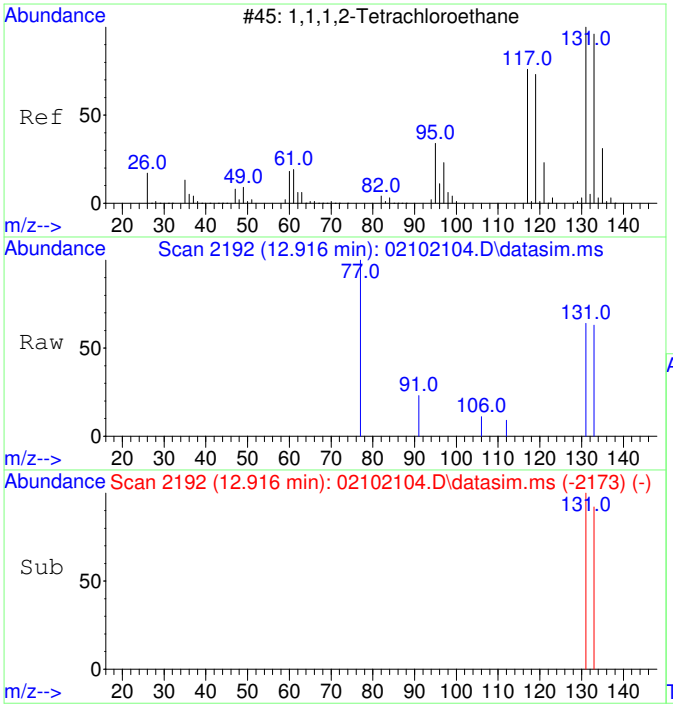


#16
Chlorobenzene
Concen: 75.67 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:112 Resp: 3316

Ion	Ratio	Lower	Upper
112	100		
77	61.3	23.6	83.6

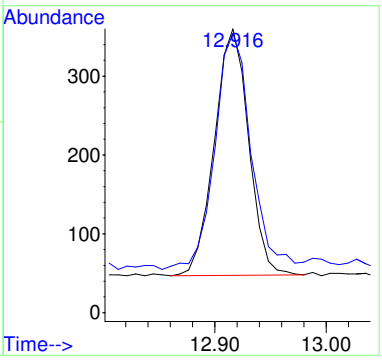


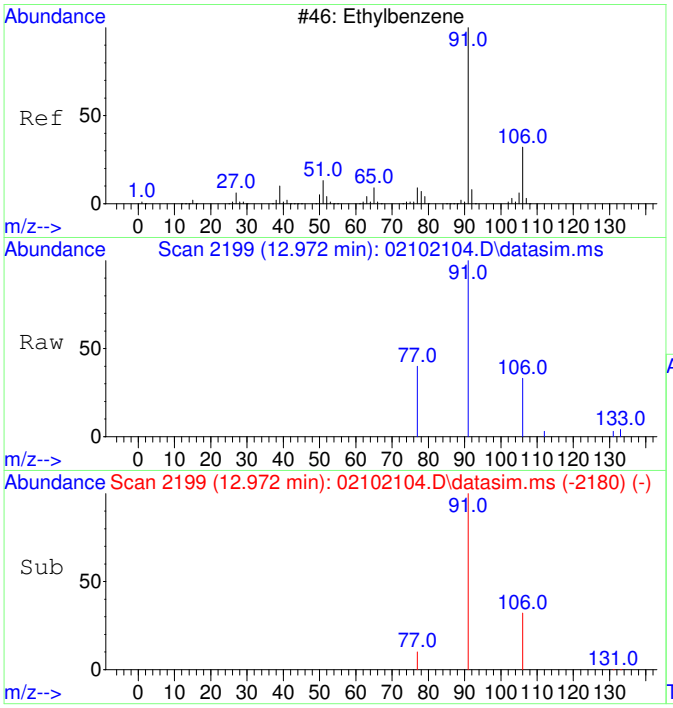


#17
1,1,1,2-Tetrachloroethane
Concen: 43.49 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:131 Resp: 667

Ion	Ratio	Lower	Upper
131	100		
133	101.8	66.3	126.3

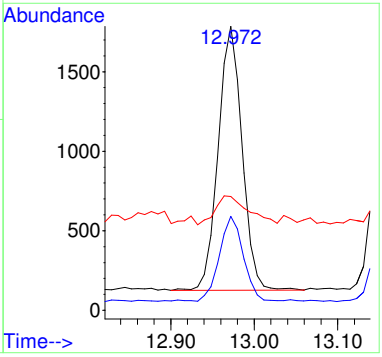


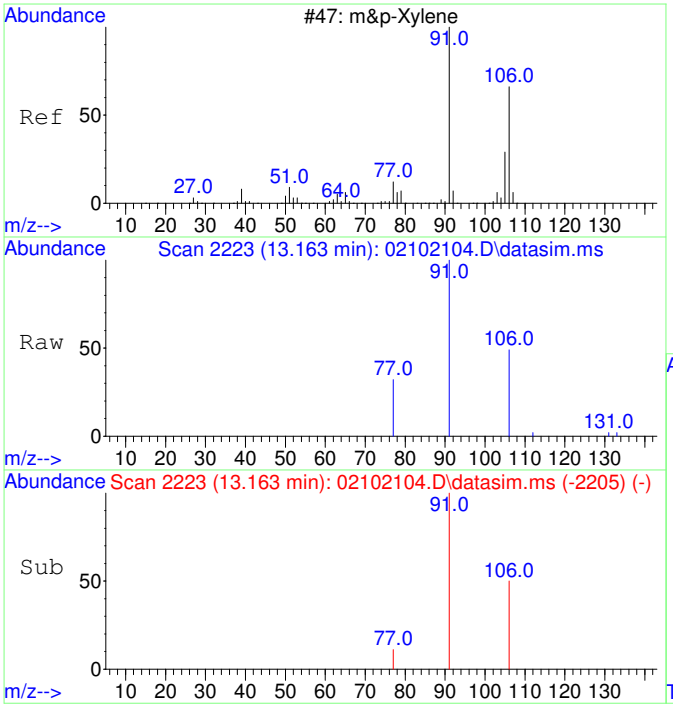


#18
Ethylbenzene
Concen: 45.80 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 3309

Ion	Ratio	Lower	Upper
91	100		
106	31.6	3.0	63.0
77	14.9	0.0	38.2

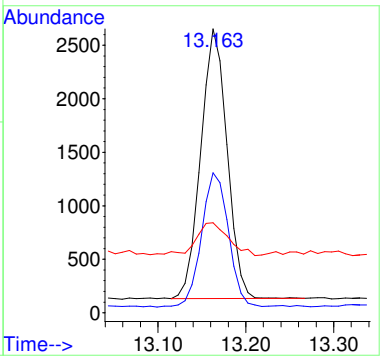


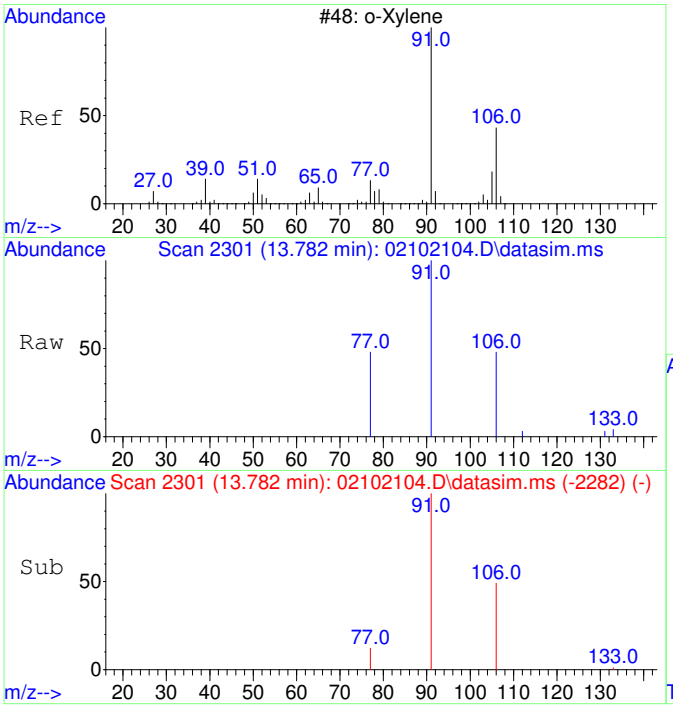


#19
m&p-Xylene
Concen: 94.00 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 5230

Ion	Ratio	Lower	Upper
91	100		
106	50.6	22.2	82.2
77	14.5	0.0	42.4

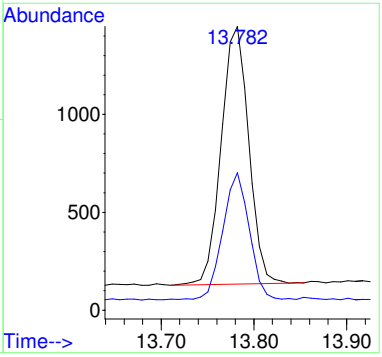


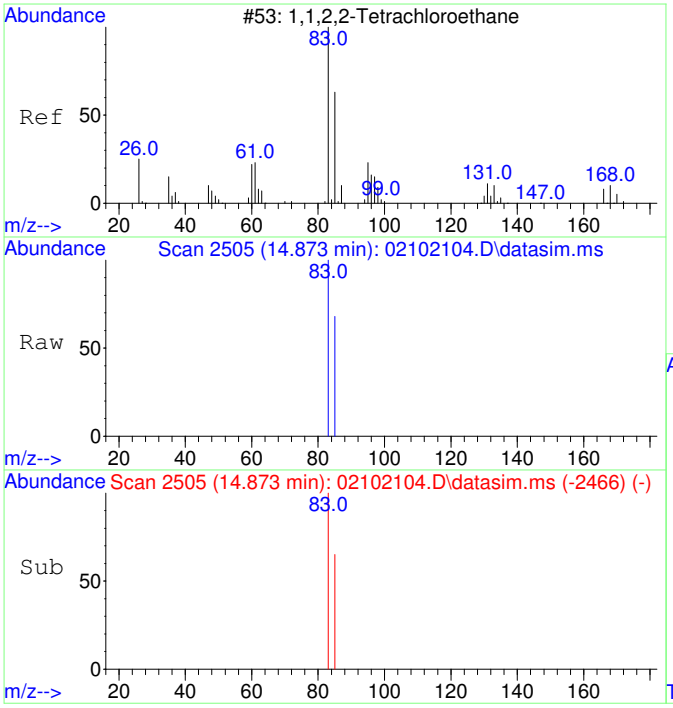


#20
o-Xylene
Concen: 45.58 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 2724

Ion	Ratio	Lower	Upper
91	100		
106	47.4	19.2	79.2

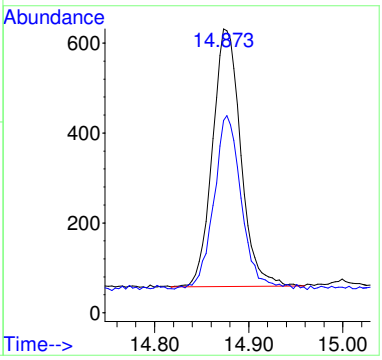


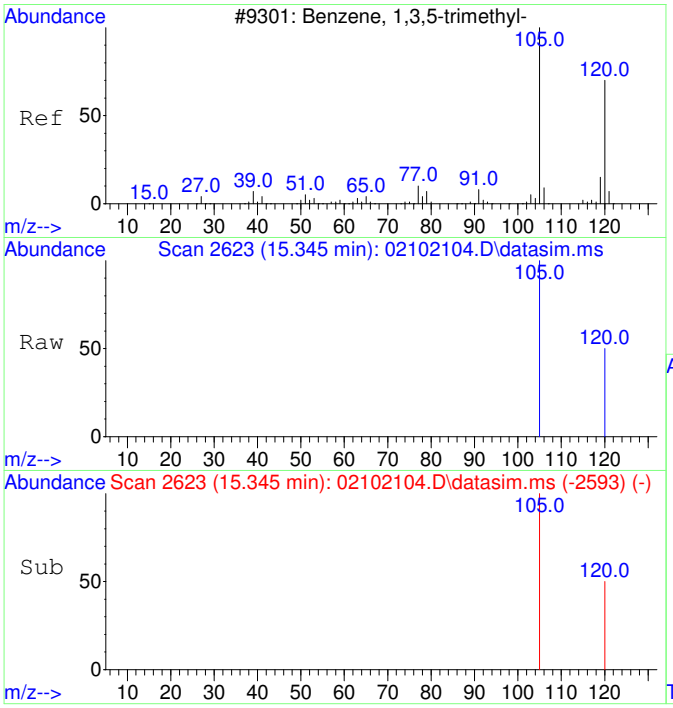


#21
1,1,2,2-Tetrachloroethane
Concen: 42.99 ug/L
RT: 14.873 min Scan# 2505
Delta R.T. -0.007 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 83 Resp: 1197

Ion	Ratio	Lower	Upper
83	100		
85	65.3	34.8	94.8

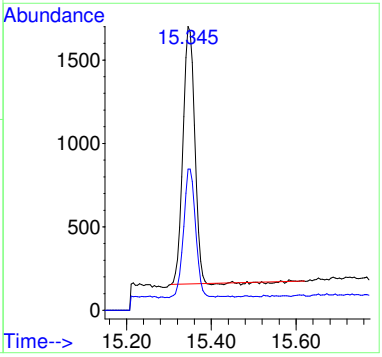


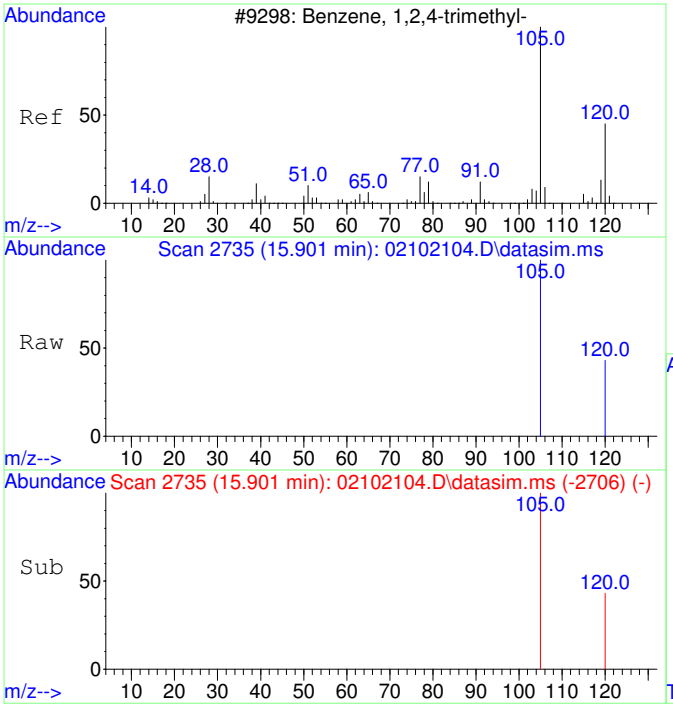


#22
1,3,5-Trimethylbenzene
Concen: 44.93 ug/L
RT: 15.345 min Scan# 2623
Delta R.T. -0.005 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:105 Resp: 2953

Ion	Ratio	Lower	Upper
105	100		
120	48.1	21.1	81.1

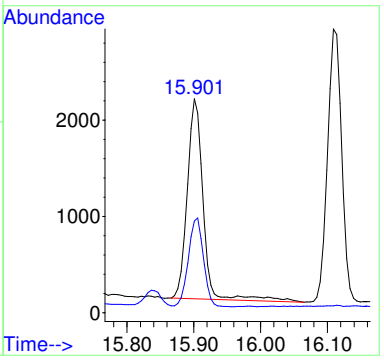


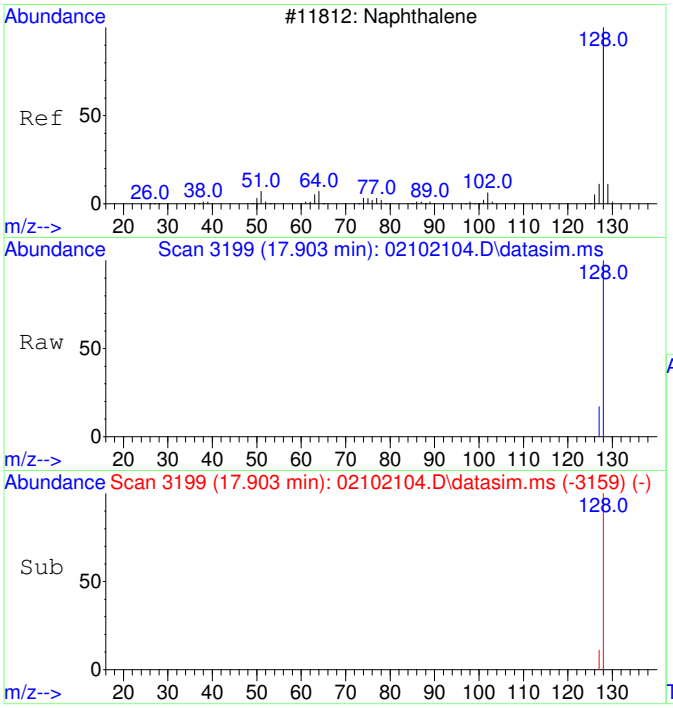


#23
1,2,4-Trimethylbenzene
Concen: 51.06 ug/L
RT: 15.901 min Scan# 2735
Delta R.T. -0.005 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:105 Resp: 3432

Ion	Ratio	Lower	Upper
105	100		
120	41.3	17.2	77.2

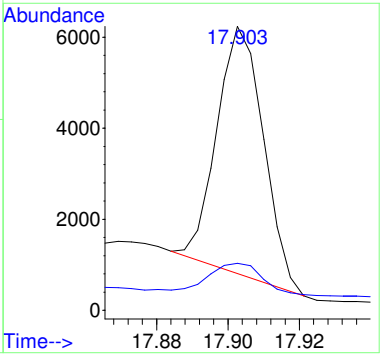


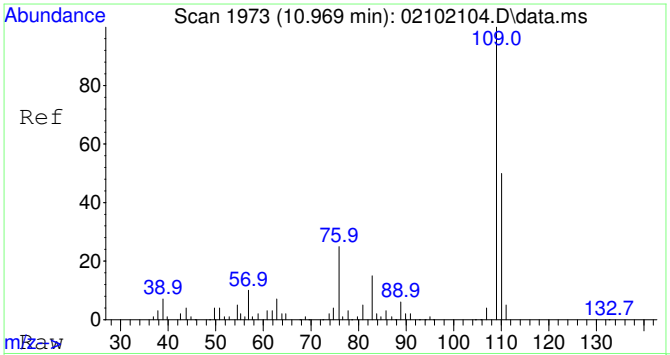


#24
Naphthalene
Concen: 44.43 ug/L
RT: 17.903 min Scan# 3199
Delta R.T. -0.001 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:128 Resp: 4839

Ion	Ratio	Lower	Upper
128	100		
127	13.0	0.0	42.5

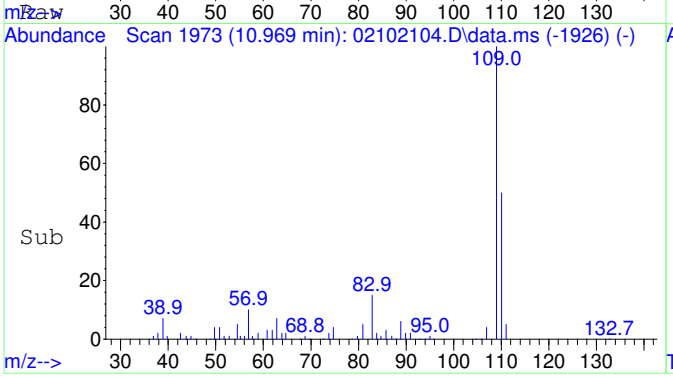


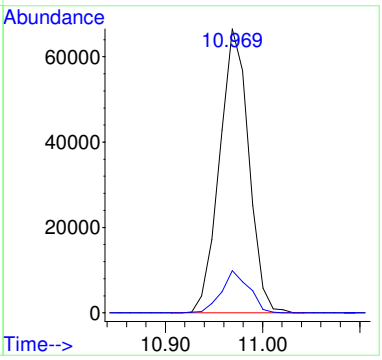


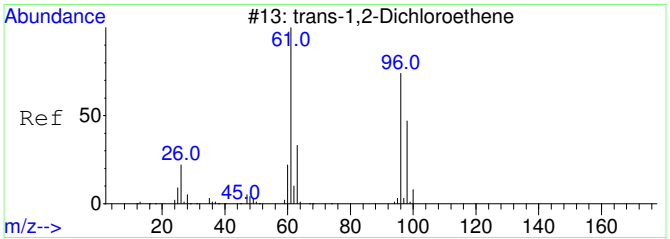
#25
2-Fluorotoluene SCAN
Concen: 5202.49 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:109 Resp: 138532

Ion	Ratio	Lower	Upper
109	100		
83	14.1	0.0	43.8



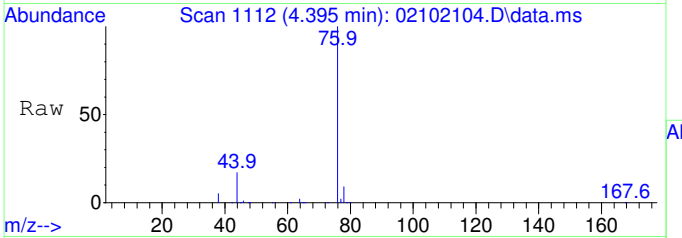


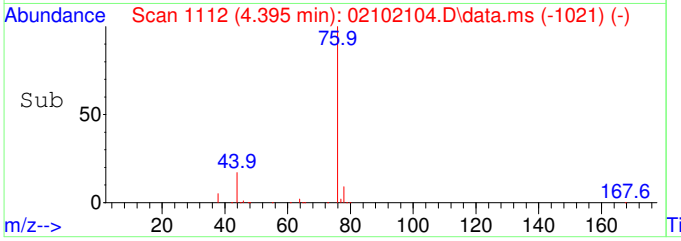


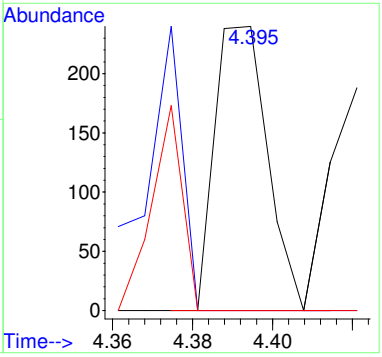
#27
trans-1,2-Dichloroethene SCAN
Concen: 27.79 ug/L
RT: 4.395 min Scan# 1112
Delta R.T. 0.013 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

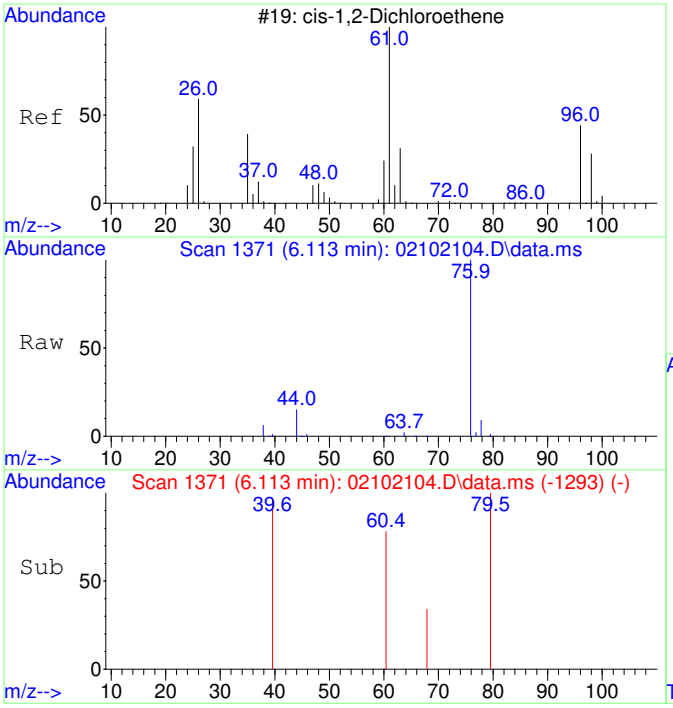
Tgt Ion: 61 Resp: 220

Ion	Ratio	Lower	Upper
61	100		
96	70.9	49.0	109.0
98	42.3	20.5	80.5





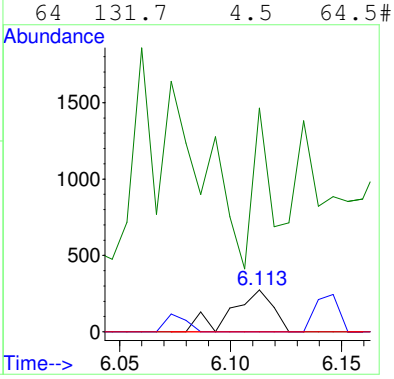


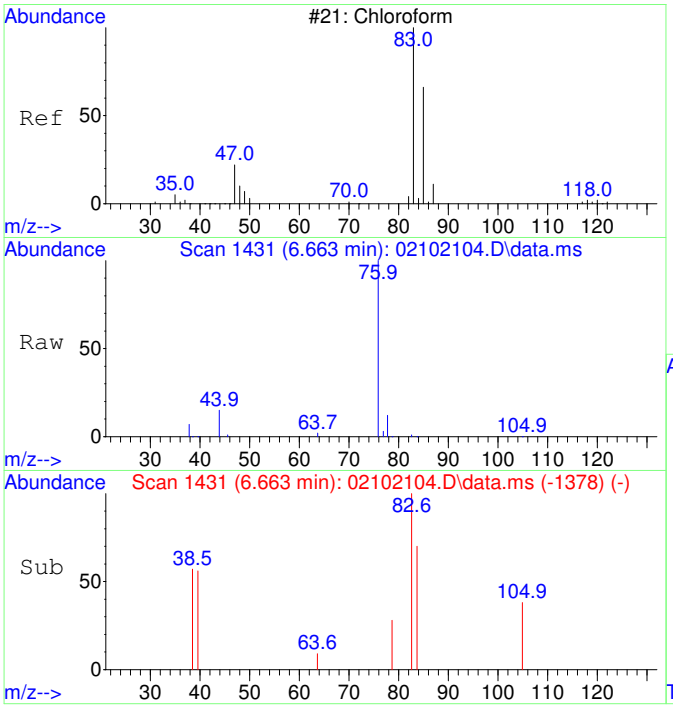


#29
cis-1,2-Dichloroethene SCAN
Concen: 38.86 ug/L
RT: 6.113 min Scan# 1371
Delta R.T. 0.020 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 61 Resp: 357

Ion	Ratio	Lower	Upper
61	100		
96	0.0	39.9	99.9#
98	0.0	13.5	73.5#
64	131.7	4.5	64.5#

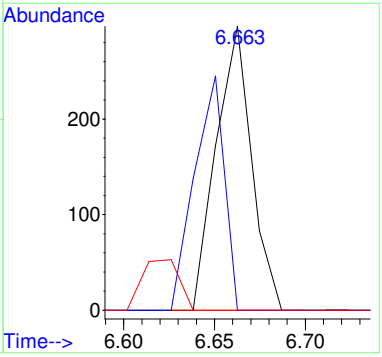


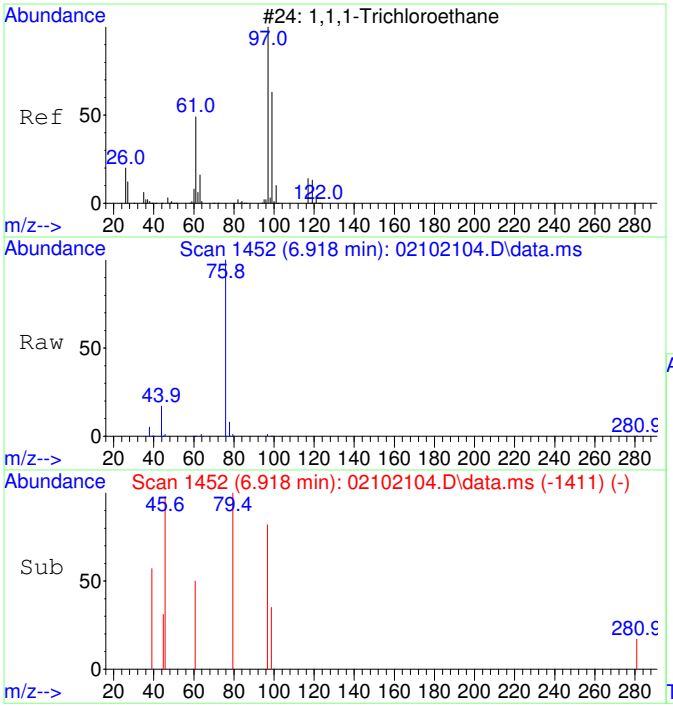


#30
Chloroform SCAN
Concen: 47.03 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 83 Resp: 403

Ion	Ratio	Lower	Upper
83	100		
85	69.5	34.6	94.6
47	0.0	0.0	53.4

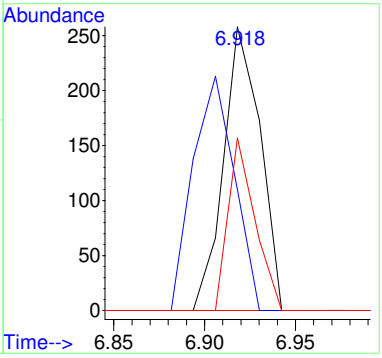


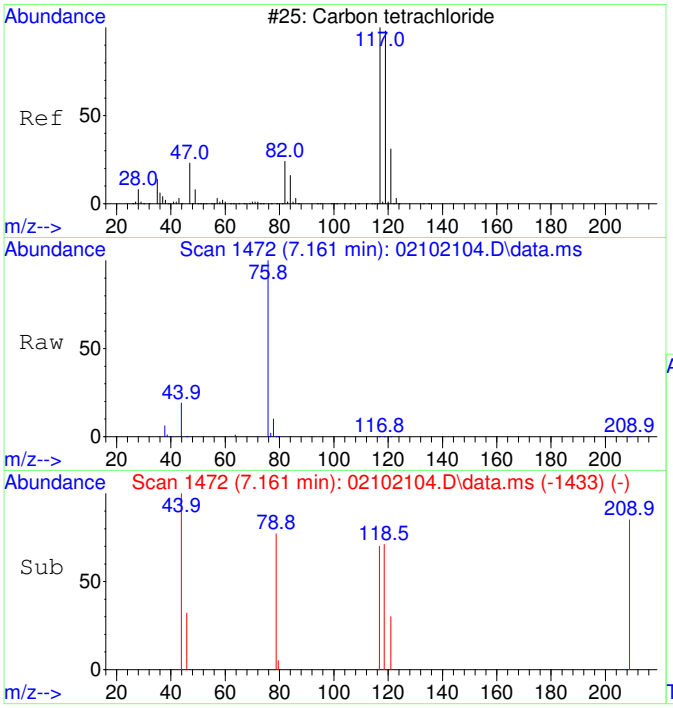


#31
1,1,1-Trichloroethane SCAN
Concen: 41.05 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 97 Resp: 363

Ion	Ratio	Lower	Upper
97	100		
99	92.6	43.6	103.6
61	44.4	18.0	78.0

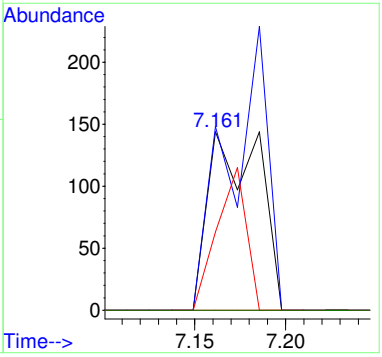


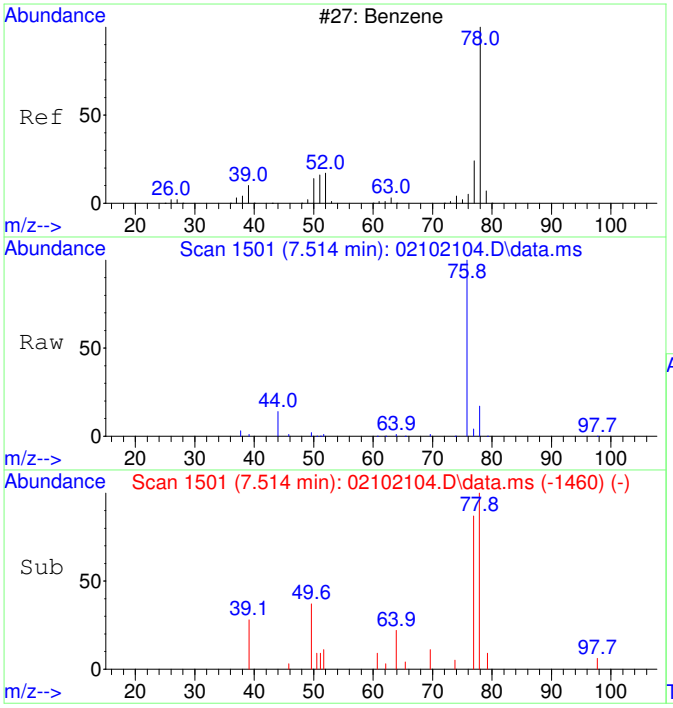


#32
Carbon tetrachloride SCAN
Concen: 37.19 ug/L
RT: 7.161 min Scan# 1472
Delta R.T. -0.024 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:117 Resp: 281

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

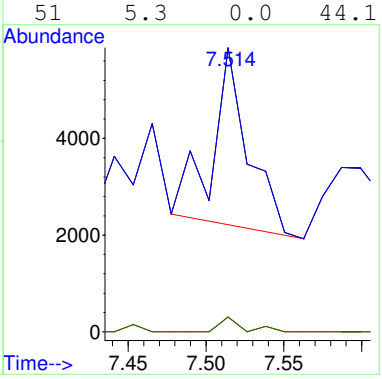


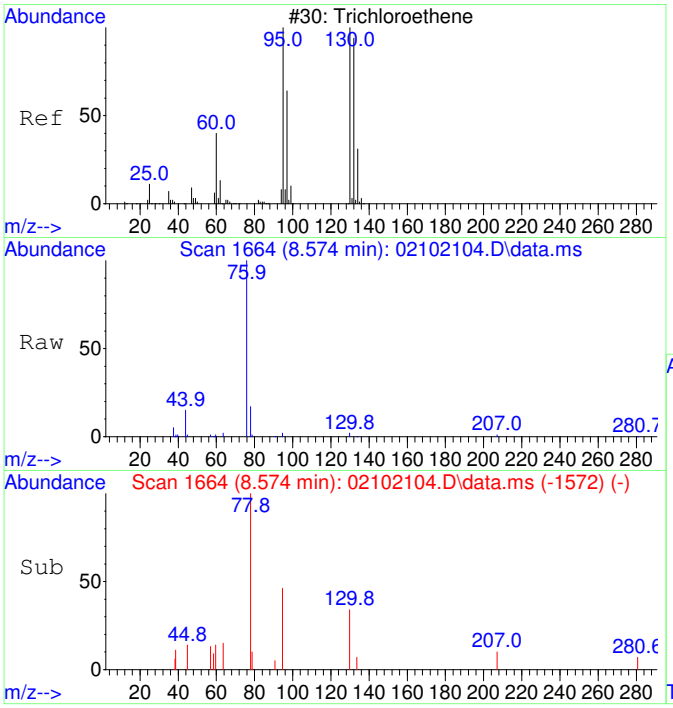


#33
Benzene SCAN
Concen: 213.81 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 78 Resp: 5720

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	5.3	0.0	47.9
51	5.3	0.0	44.1

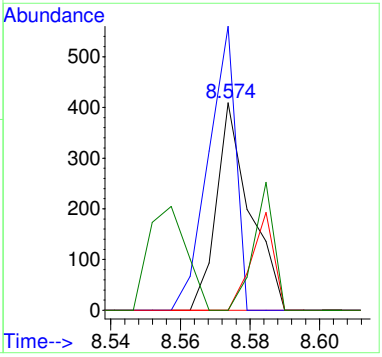


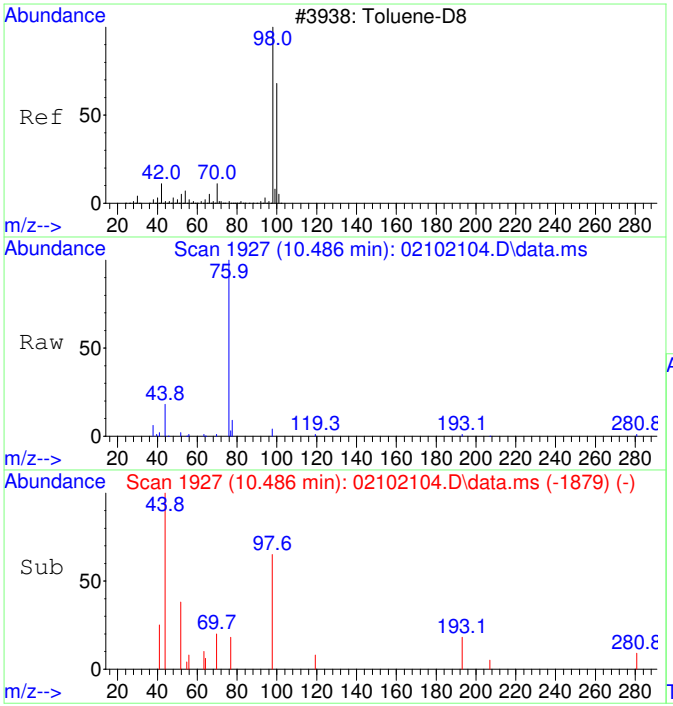


#35
Trichloroethene SCAN
Concen: 46.80 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:130 Resp: 273

Ion	Ratio	Lower	Upper
130	100		
95	112.5	60.5	120.5
132	31.9	59.6	119.6#
97	38.1	28.2	88.2

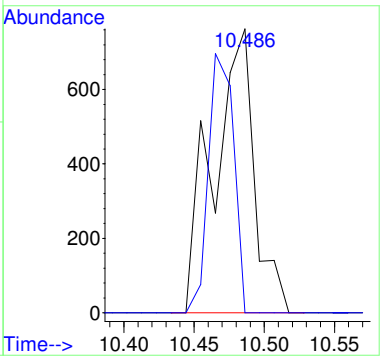


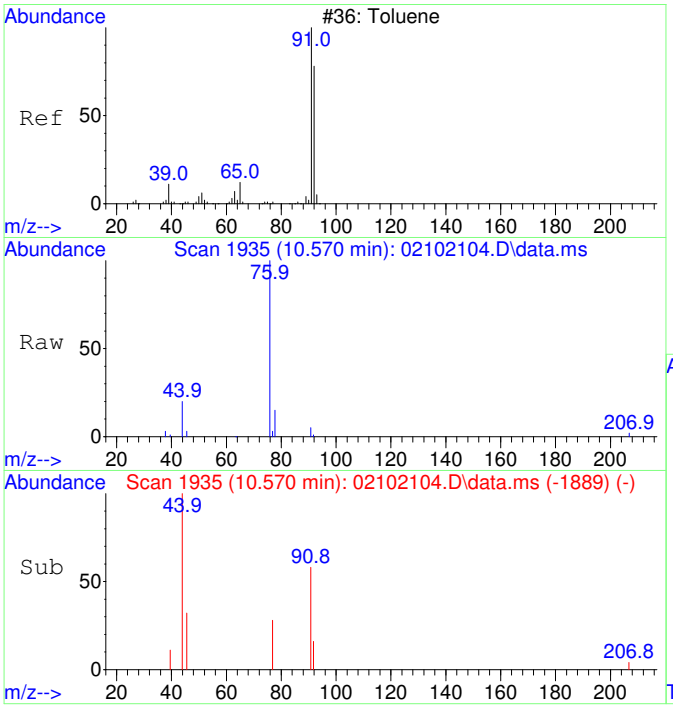


#36
Toluene-d8 SCAN
Concen: 62.30 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 98 Resp: 1556

Ion	Ratio	Lower	Upper
98	100		
100	0.0	40.0	100.0#

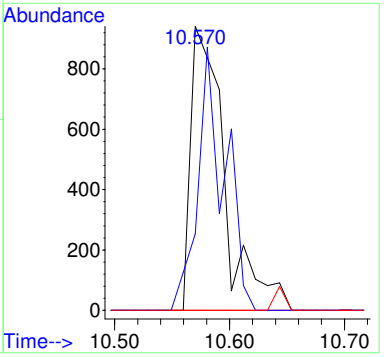


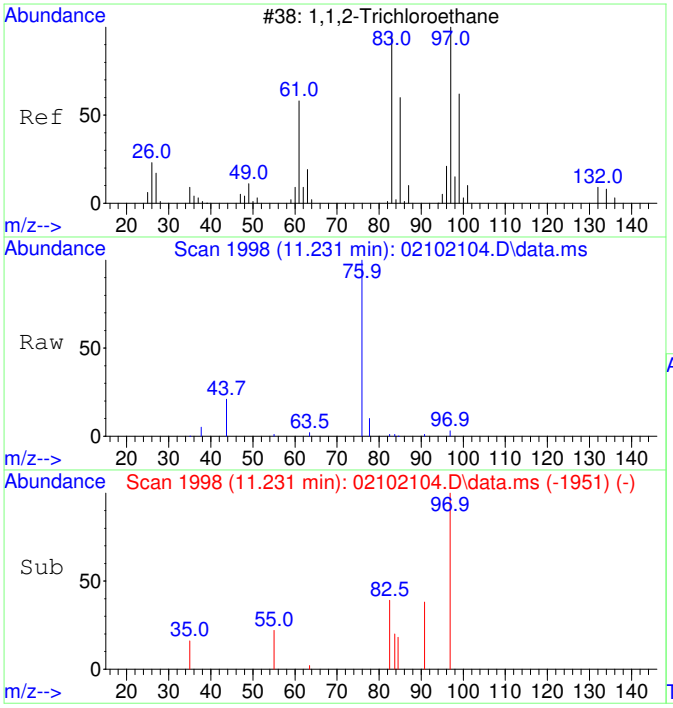


#37
Toluene SCAN
Concen: 62.77 ug/L
RT: 10.570 min Scan# 1935
Delta R.T. -0.021 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 1930

Ion	Ratio	Lower	Upper
91	100		
92	73.6	28.3	88.3
65	0.0	0.0	41.0

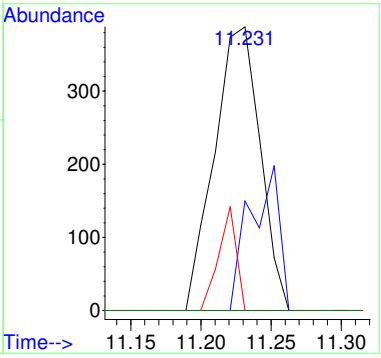


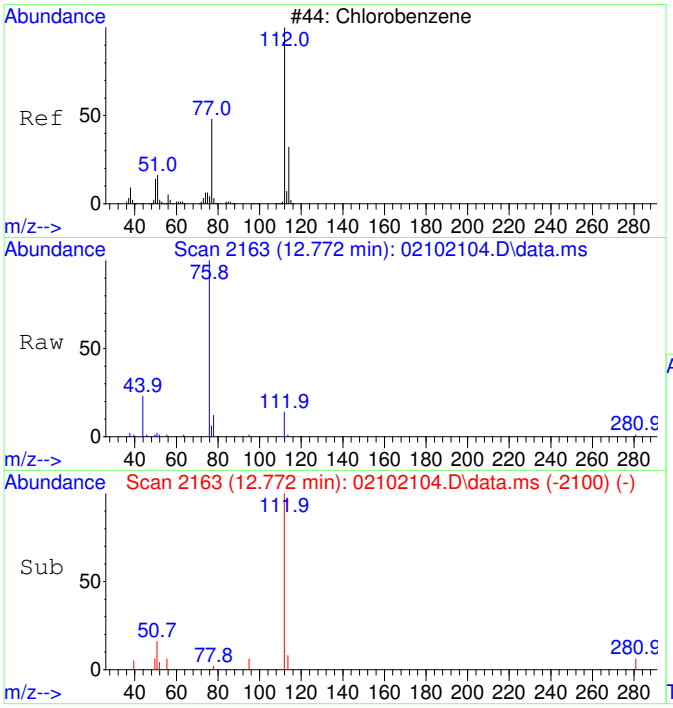


#38
1,1,2-Trichloroethane SCAN
Concen: 114.70 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. -0.010 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 97 Resp: 884

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	14.1	32.1	92.1#
99	0.0	36.7	96.7#

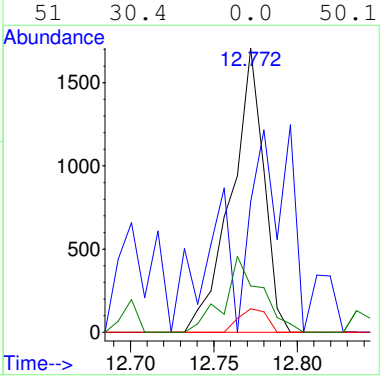


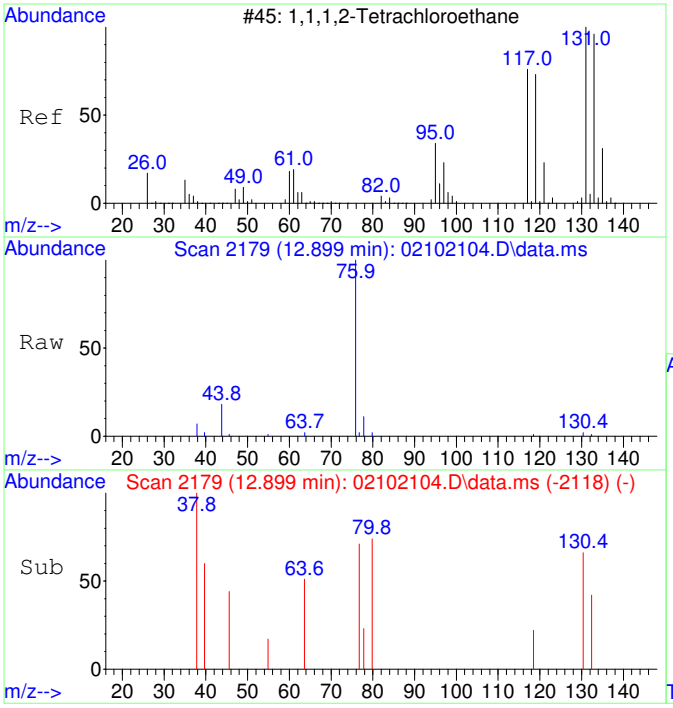


#40
Chlorobenzene SCAN
Concen: 104.68 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:112 Resp: 2312

Ion	Ratio	Lower	Upper
112	100		
77	42.6	28.2	88.2
114	7.2	2.3	62.3
51	30.4	0.0	50.1

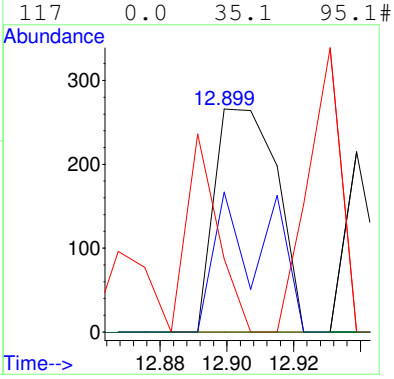


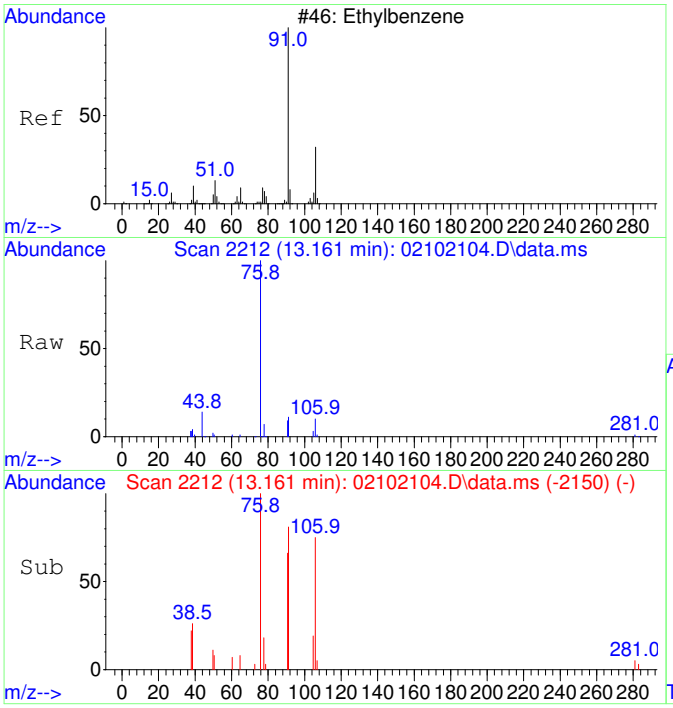


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 45.54 ug/L
RT: 12.899 min Scan# 2179
Delta R.T. -0.016 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:131 Resp: 347

Ion	Ratio	Lower	Upper
131	100		
133	52.4	66.9	126.9#
119	68.0	40.4	100.4
117	0.0	35.1	95.1#

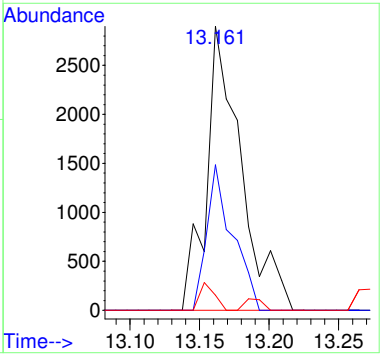


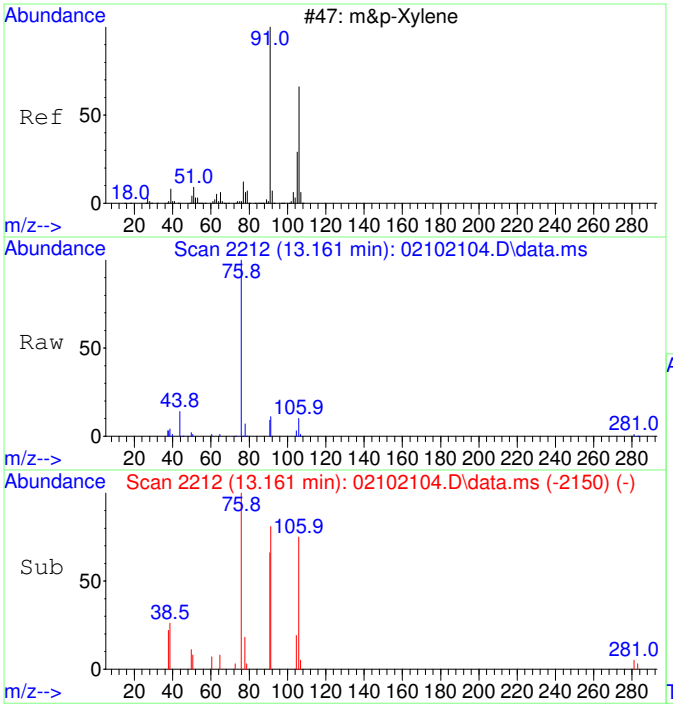


#42
Ethylbenzene SCAN
Concen: 86.16 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.008 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 5049

Ion	Ratio	Lower	Upper
91	100		
106	37.9	23.1	83.1
51	4.1	0.0	40.1

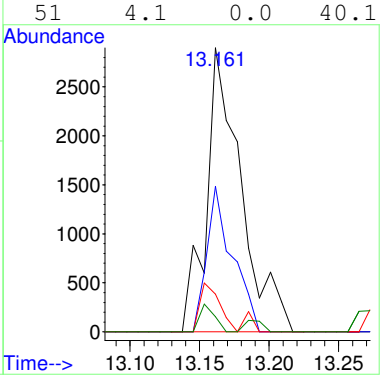


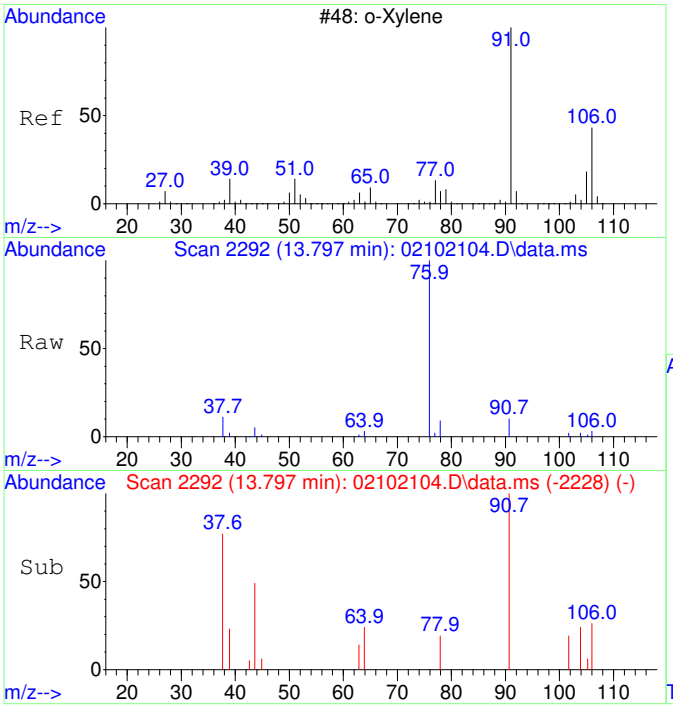


#43
m&p-Xylene SCAN
Concen: 86.16 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.008 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 5049

Ion	Ratio	Lower	Upper
91	100		
106	37.9	23.1	83.1
105	9.7	0.0	54.7
51	4.1	0.0	40.1

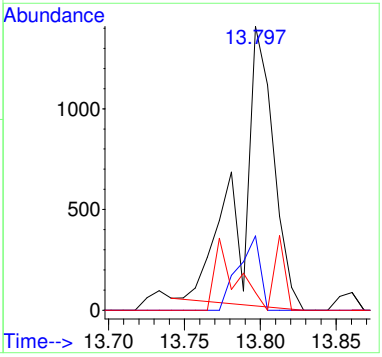


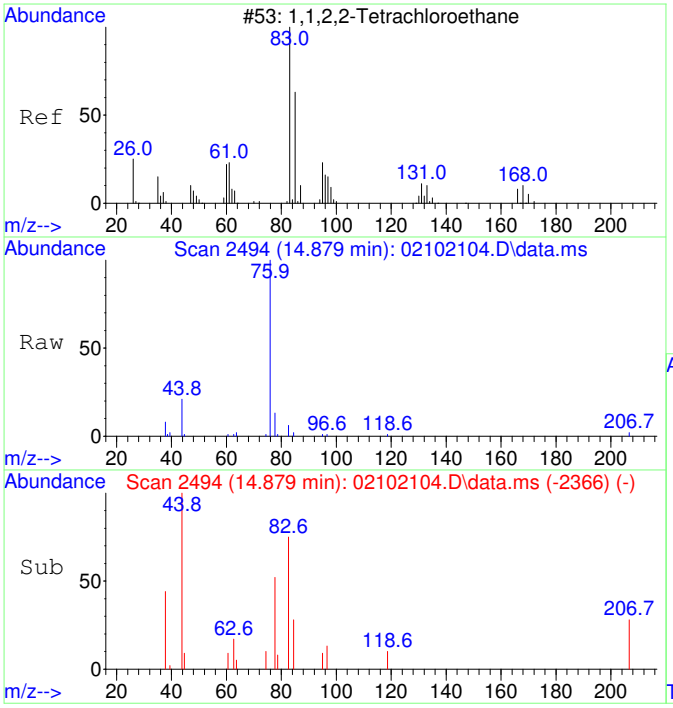


#44
o-Xylene SCAN
Concen: 66.16 ug/L
RT: 13.797 min Scan# 2292
Delta R.T. 0.008 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 2117

Ion	Ratio	Lower	Upper
91	100		
106	17.7	18.0	78.0#
105	8.4	0.0	56.6

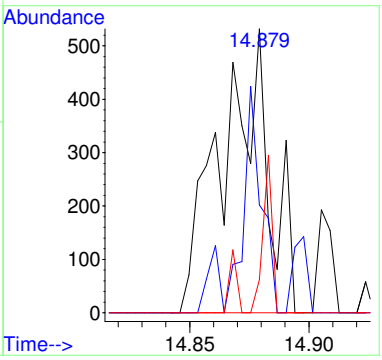


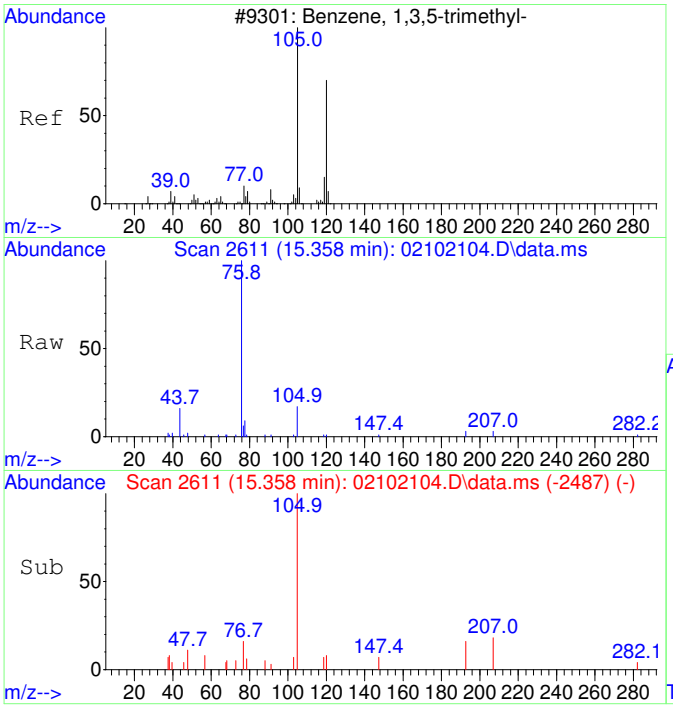


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 44.12 ug/L
RT: 14.879 min Scan# 2494
Delta R.T. -0.004 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 83 Resp: 734

Ion	Ratio	Lower	Upper
83	100		
85	30.0	35.9	95.9#
95	10.8	0.0	47.4

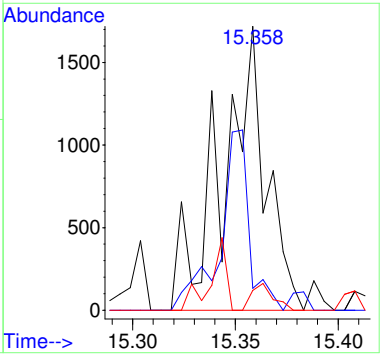


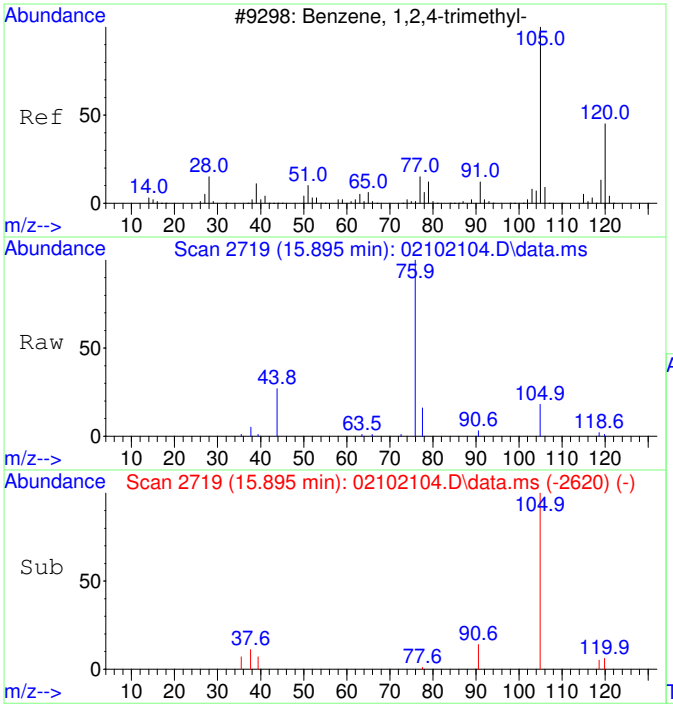


#46
1,3,5-Trimethylbenzene SCAN
Concen: 75.16 ug/L
RT: 15.358 min Scan# 2611
Delta R.T. 0.005 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:105 Resp: 2537

Ion	Ratio	Lower	Upper
105	100		
120	42.6	18.3	78.3
119	4.7	0.0	43.1

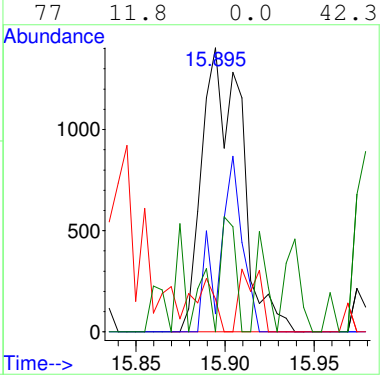


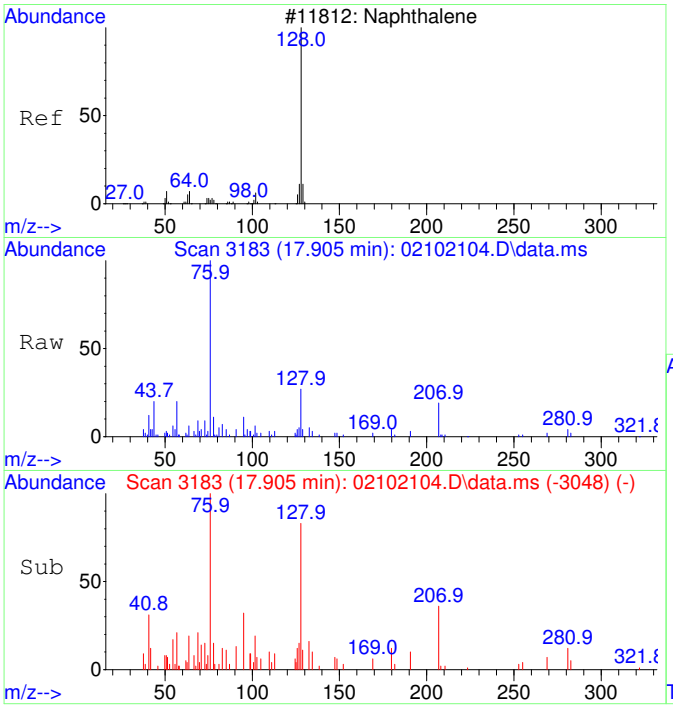


#47
1,2,4-Trimethylbenzene SCAN
Concen: 63.47 ug/L
RT: 15.895 min Scan# 2719
Delta R.T. -0.010 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:105 Resp: 2189

Ion	Ratio	Lower	Upper
105	100		
120	36.5	16.9	76.9
119	11.1	0.0	41.9
77	11.8	0.0	42.3

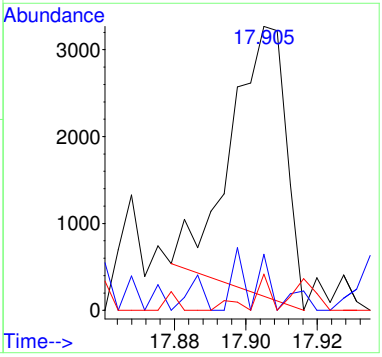




#48
Naphthalene SCAN
Concen: 63.22 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.003 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:128 Resp: 3273

Ion	Ratio	Lower	Upper
128	100		
127	12.1	0.0	44.0
129	4.2	0.0	40.8



Quantitation Report (QT Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102104.D
Acq On : 10 Feb 2021 10:03
InstName : AG5975C
Operator : TD
Sample : S21B029-CRL1
Misc : 2106042 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

M.I. Performed By:
TD at 10:35 am, Feb 10, 2021

M.I. Approved By:
Kathy O'Brien at 12:06 pm, Fe

Quant Time: Feb 10 10:22:03 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

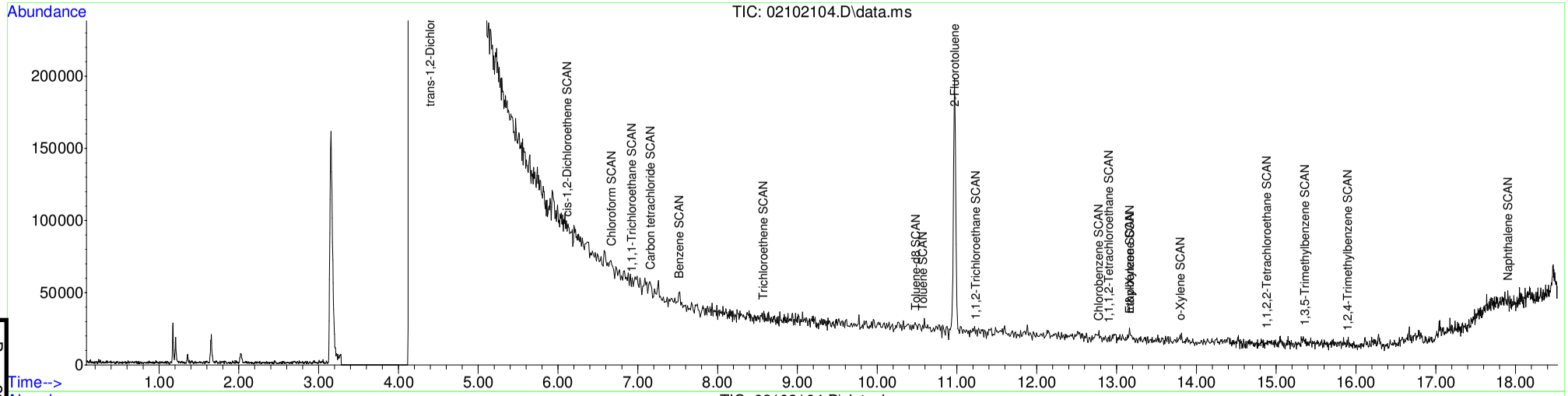
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	234587	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	1961	43.16 ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery =	0.86%#	
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	435m	46.77 ug/L	
3] trans-1,2-Dichloroethene	4.389	61	507	43.24 ug/L	58
4] 1,1-Dichloroethane	5.092	63	605	43.20 ug/L	76
5] cis-1,2-Dichloroethene	6.088	61	616	42.47 ug/L	99
6] Chloroform	6.652	83	697	50.03 ug/L	98
7] 1,1,1-Trichloroethane	6.919	97	680	45.43 ug/L	95
8] Carbon tetrachloride	7.187	117	650	45.42 ug/L	96
9] Benzene	7.503	78	3888	98.49 ug/L	71
10] 1,2-Dichloroethane	7.552	62	648	48.12 ug/L	48
11] Trichloroethene	8.570	130	536	43.01 ug/L	93
13] Toluene	10.582	91	2828	49.99 ug/L	99
14] 1,1,2-Trichloroethane	11.233	97	538	41.06 ug/L	97
15] Tetrachloroethene	11.432	166	791	44.89 ug/L	94
16] Chlorobenzene	12.765	112	3316	75.67 ug/L	89
17] 1,1,1,2-Tetrachloroethane	12.916	131	667	43.49 ug/L	94
18] Ethylbenzene	12.972	91	3309	45.80 ug/L	94
19] m&p-Xylene	13.163	91	5230	94.00 ug/L	97
20] o-Xylene	13.782	91	2724	45.58 ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.873	83	1197	42.99 ug/L	99
22] 1,3,5-Trimethylbenzene	15.345	105	2953	44.93 ug/L	96
23] 1,2,4-Trimethylbenzene	15.901	105	3432	51.06 ug/L	91
24] Naphthalene	17.903	128	4839	44.43 ug/L	99
25) 2-Fluorotoluene SCAN	10.969	109	138532	5202.49 ug/L	99
27) trans-1,2-Dichloroethe...	4.395	61	220	27.79 ug/L	90
29) cis-1,2-Dichloroethene...	6.113	61	357	38.86 ug/L #	1
30) Chloroform SCAN	6.663	83	403	47.03 ug/L #	83
31) 1,1,1-Trichloroethane ...	6.918	97	363	41.05 ug/L	84
32) Carbon tetrachloride SCAN	7.161	117	281	37.19 ug/L #	15
33) Benzene SCAN	7.514	78	5720	213.81 ug/L	94
35) Trichloroethene SCAN	8.574	130	273	46.80 ug/L #	61
36) Toluene-d8 SCAN	10.486	98	1556	62.30 ug/L #	15
37) Toluene SCAN	10.570	91	1930	62.77 ug/L #	78
38) 1,1,2-Trichloroethane ...	11.231	97	884	114.70 ug/L #	18
40) Chlorobenzene SCAN	12.772	112	2312	104.68 ug/L	72
41) 1,1,1,2-Tetrachloroeth...	12.899	131	347	45.54 ug/L #	57
42) Ethylbenzene SCAN	13.161	91	5049	86.16 ug/L	79
43) m&p-Xylene SCAN	13.161	91	5049	86.16 ug/L	77
44) o-Xylene SCAN	13.797	91	2117	66.16 ug/L #	58
45) 1,1,2,2-Tetrachloroeth...	14.879	83	734	44.12 ug/L #	61
46) 1,3,5-Trimethylbenzene...	15.358	105	2537	75.16 ug/L	89
47) 1,2,4-Trimethylbenzene...	15.895	105	2189	63.47 ug/L	89
48) Naphthalene SCAN	17.905	128	3273	63.22 ug/L	90

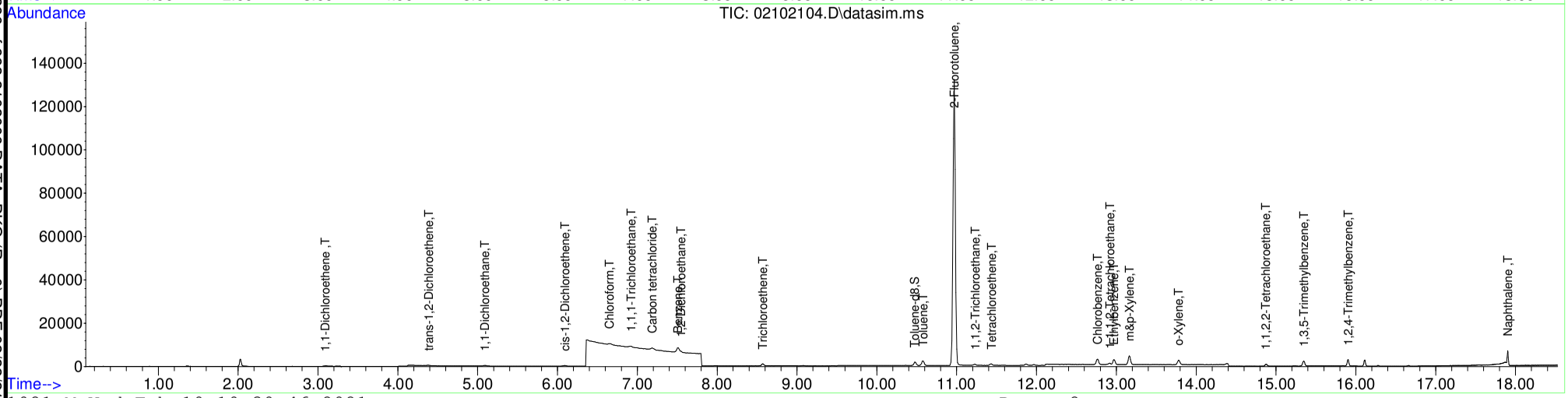
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102104.D
Acq On : 10 Feb 2021 10:03
InstName : AG5975C
Operator : TD
Sample : S21B029-CRL1
Misc : 2106042 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 10 10:22:03 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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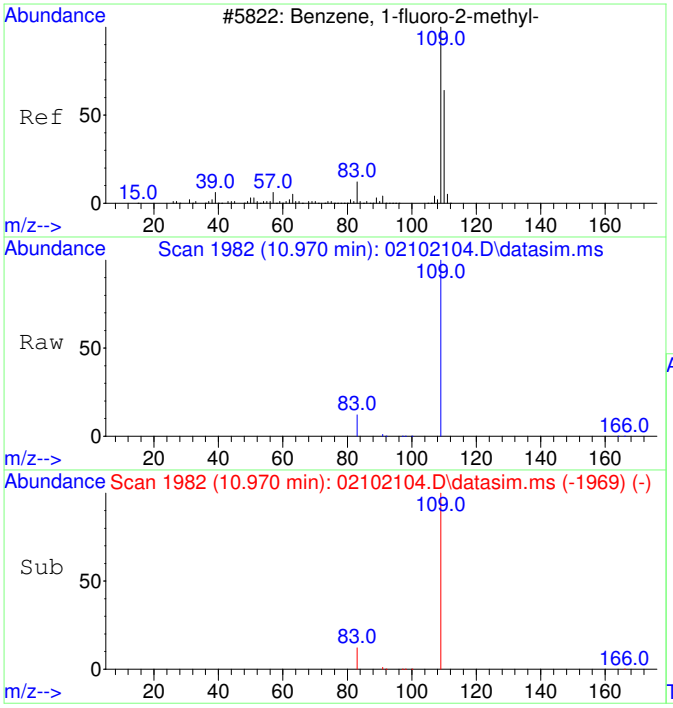
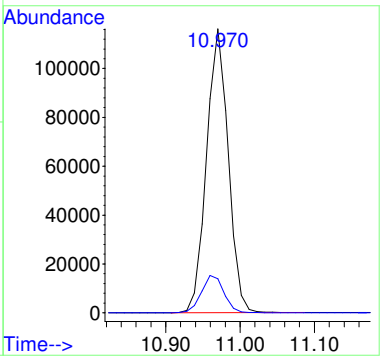
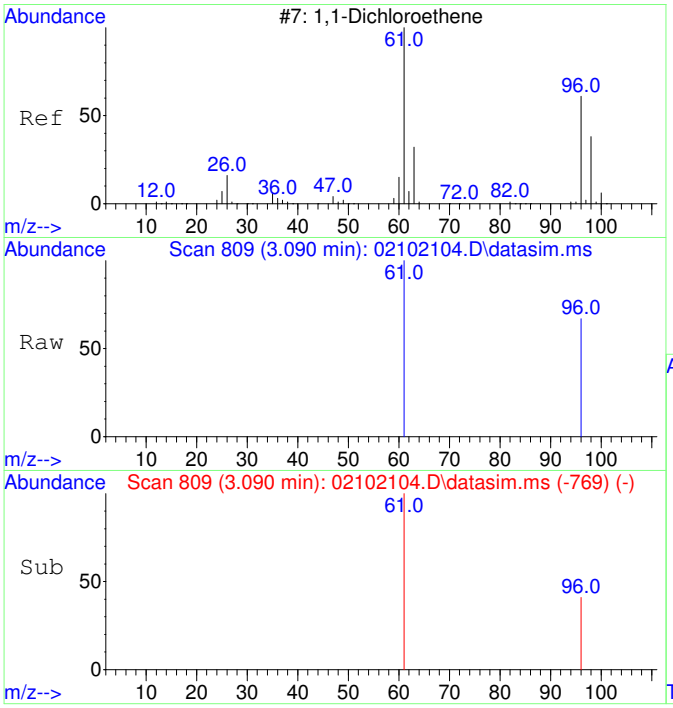


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:109 Resp: 234587

Ion	Ratio	Lower	Upper
109	100		
83	13.6	0.0	42.3

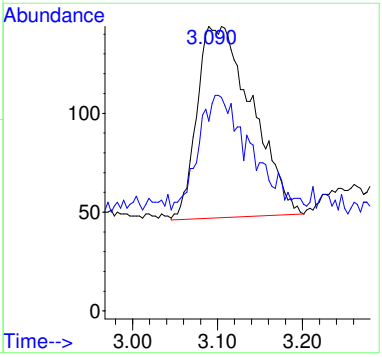


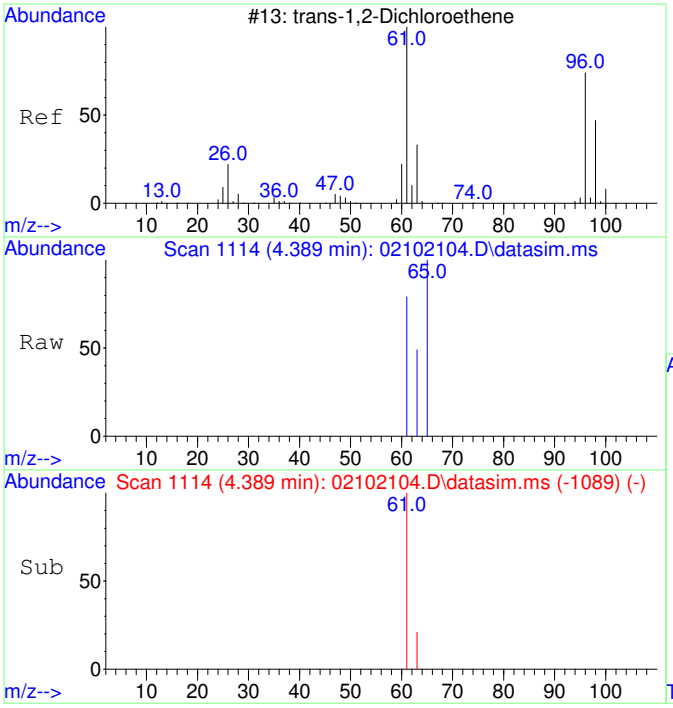


#2
1,1-Dichloroethene
Concen: 46.77 ug/L m
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 61 Resp: 435

Ion	Ratio	Lower	Upper
61	100		
96	53.1	37.2	97.2

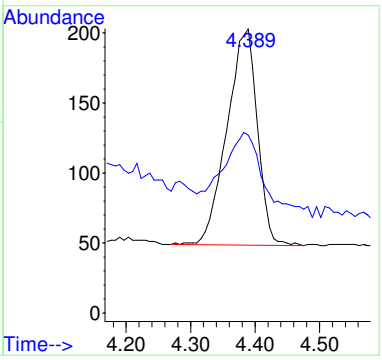


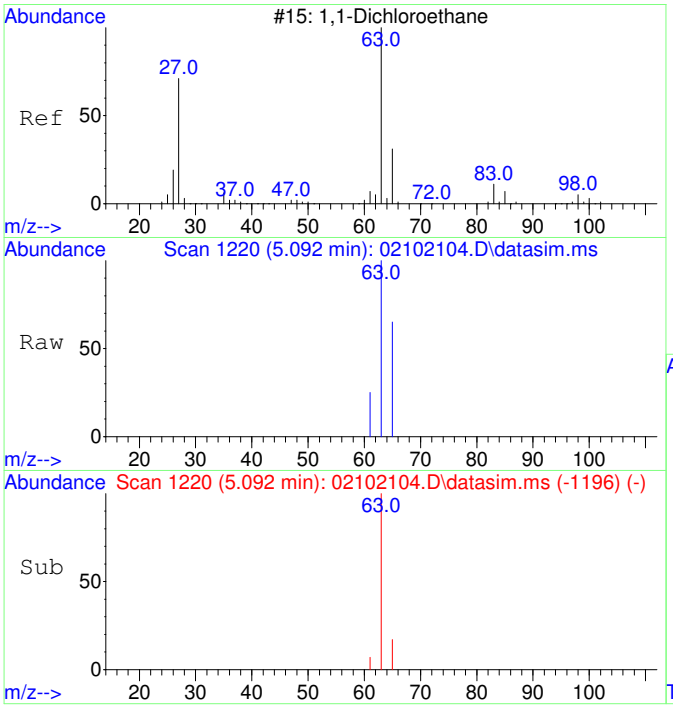


#3
trans-1,2-Dichloroethene
Concen: 43.24 ug/L
RT: 4.389 min Scan# 1114
Delta R.T. 0.013 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 61 Resp: 507

Ion	Ratio	Lower	Upper
61	100		
63	56.2	2.4	62.4

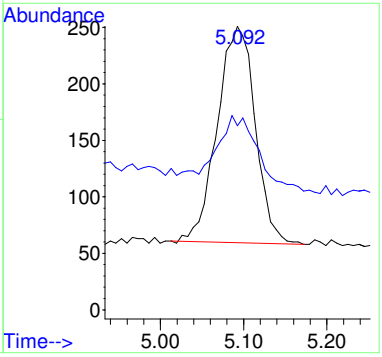


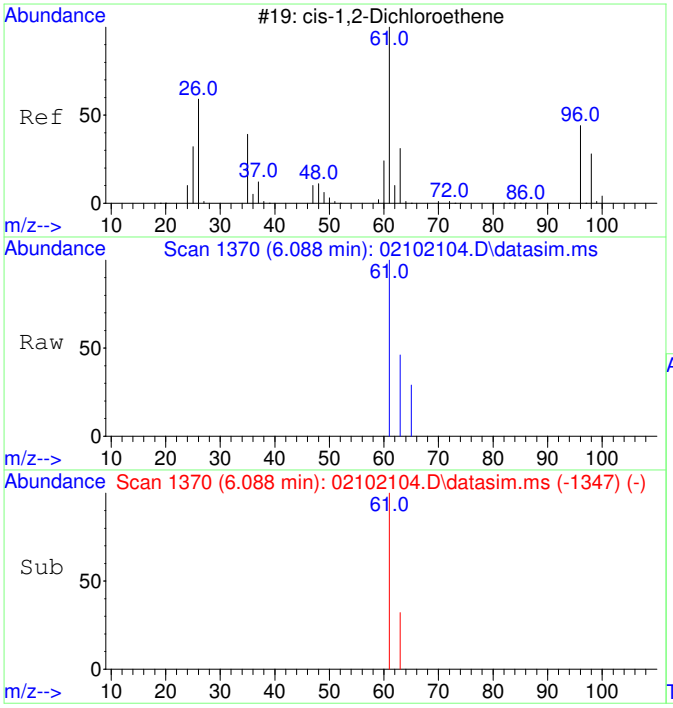


#4
1,1-Dichloroethane
Concen: 43.20 ug/L
RT: 5.092 min Scan# 1220
Delta R.T. 0.007 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 63 Resp: 605

Ion	Ratio	Lower	Upper
63	100		
65	45.3	1.8	61.8

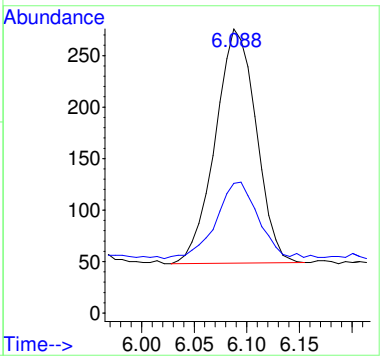


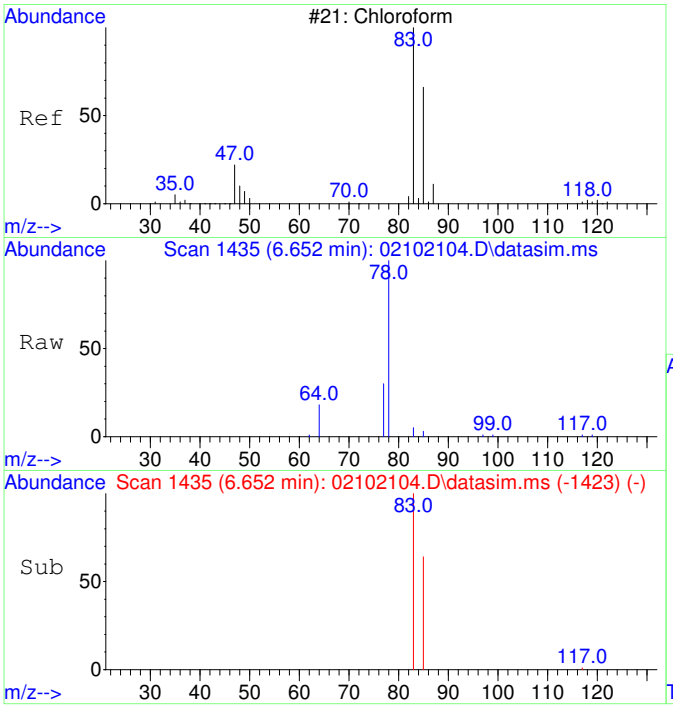


#5
cis-1,2-Dichloroethene
Concen: 42.47 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 61 Resp: 616

Ion	Ratio	Lower	Upper
61	100		
63	33.1	2.5	62.5

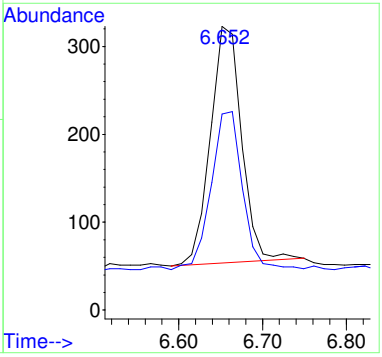


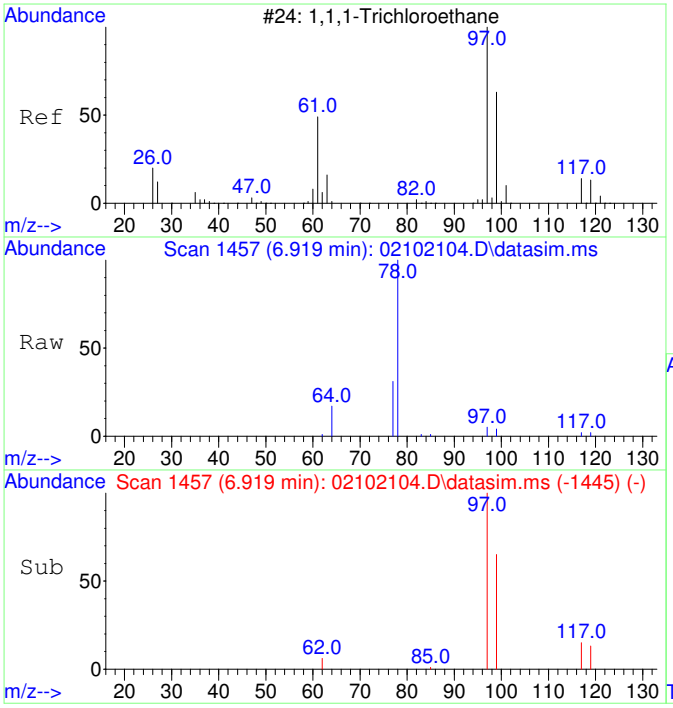


#6
Chloroform
Concen: 50.03 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 83 Resp: 697

Ion	Ratio	Lower	Upper
83	100		
85	66.4	35.1	95.1

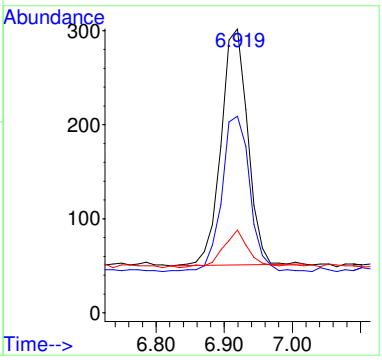


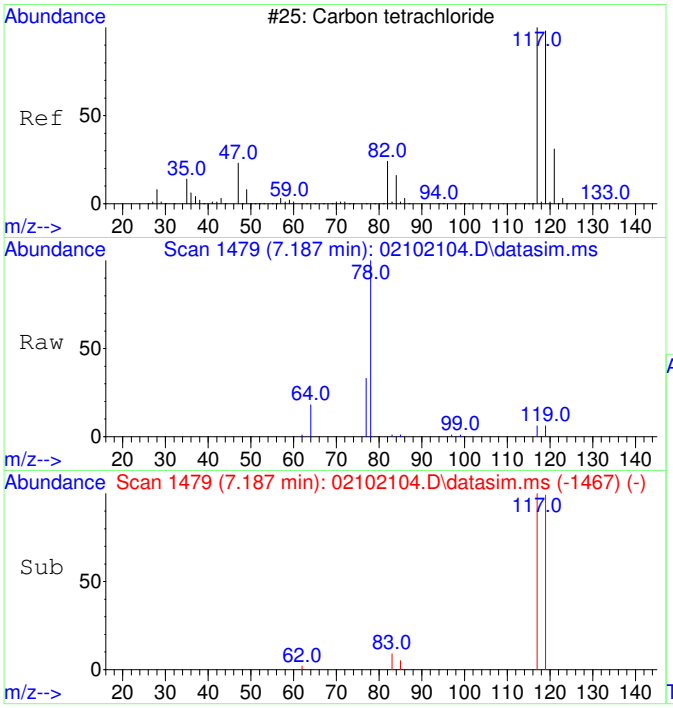


#7
1,1,1-Trichloroethane
Concen: 45.43 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 97 Resp: 680

Ion	Ratio	Lower	Upper
97	100		
99	68.5	34.6	94.6
117	15.6	0.0	43.2

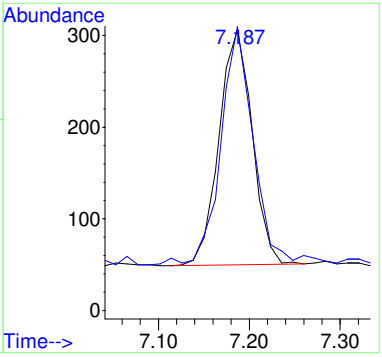


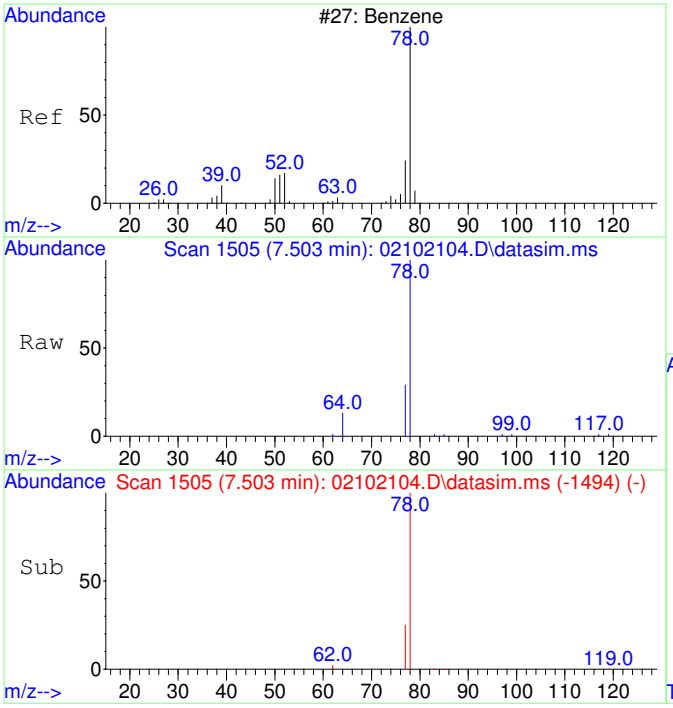


#8
Carbon tetrachloride
Concen: 45.42 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:117 Resp: 650

Ion	Ratio	Lower	Upper
117	100		
119	100.8	66.4	126.4

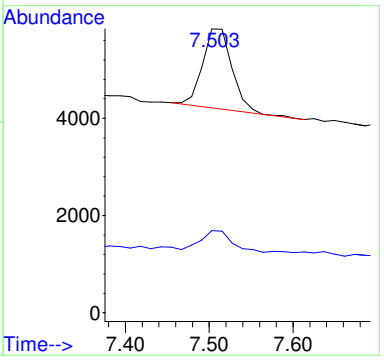


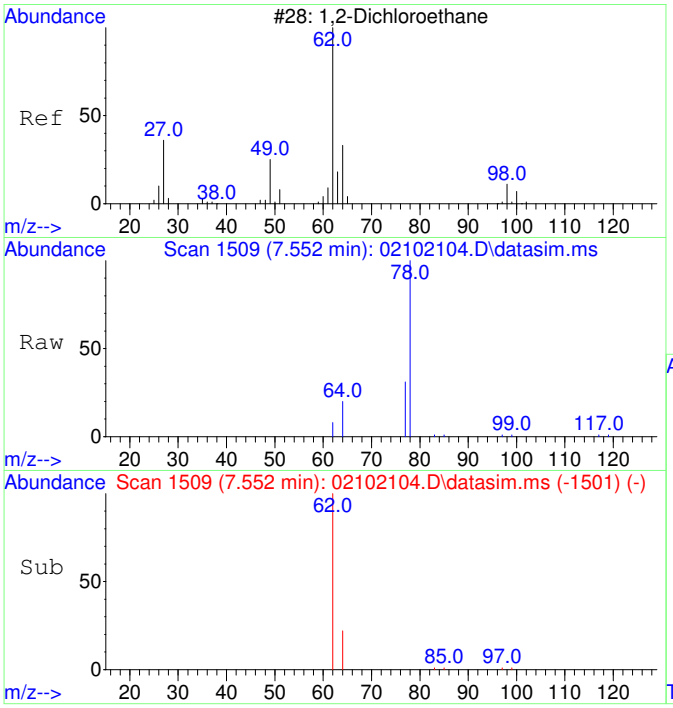


#9
Benzene
Concen: 98.49 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 78 Resp: 3888

Ion	Ratio	Lower	Upper
78	100		
77	37.5	0.0	53.2

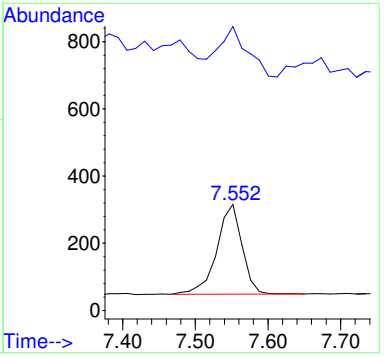


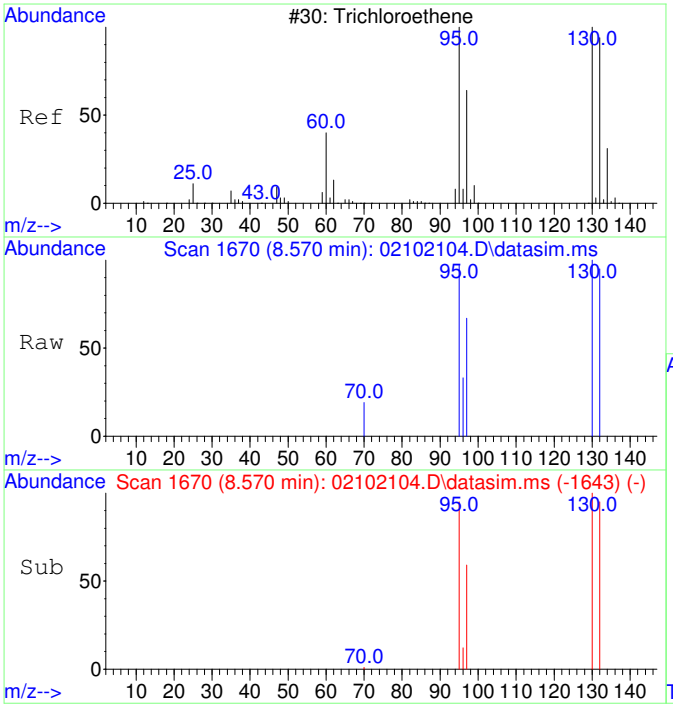


#10
1,2-Dichloroethane
Concen: 48.12 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 62 Resp: 648

Ion	Ratio	Lower	Upper
62	100		
64	61.3	2.3	62.3

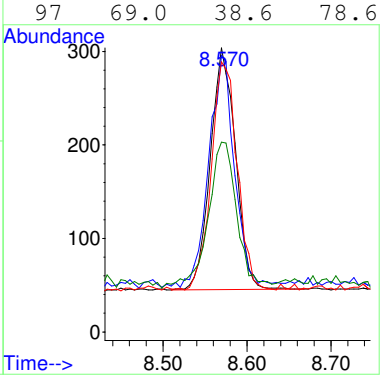


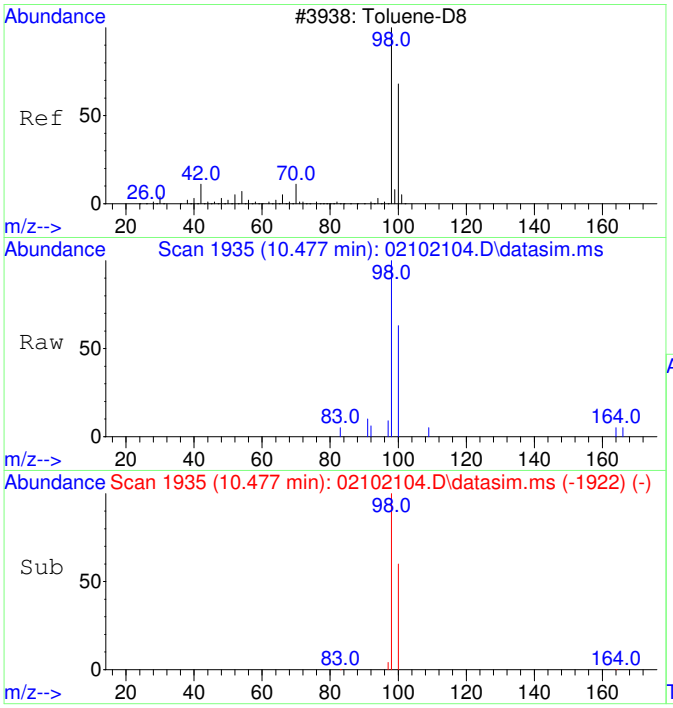


#11
Trichloroethene
Concen: 43.01 ug/L
RT: 8.570 min Scan# 1670
Delta R.T. -0.005 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:130 Resp: 536

Ion	Ratio	Lower	Upper
130	100		
95	98.9	60.7	120.7
132	97.0	76.0	116.0
97	69.0	38.6	78.6

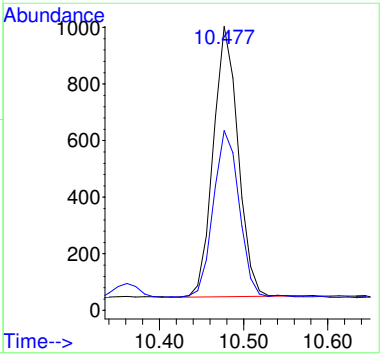


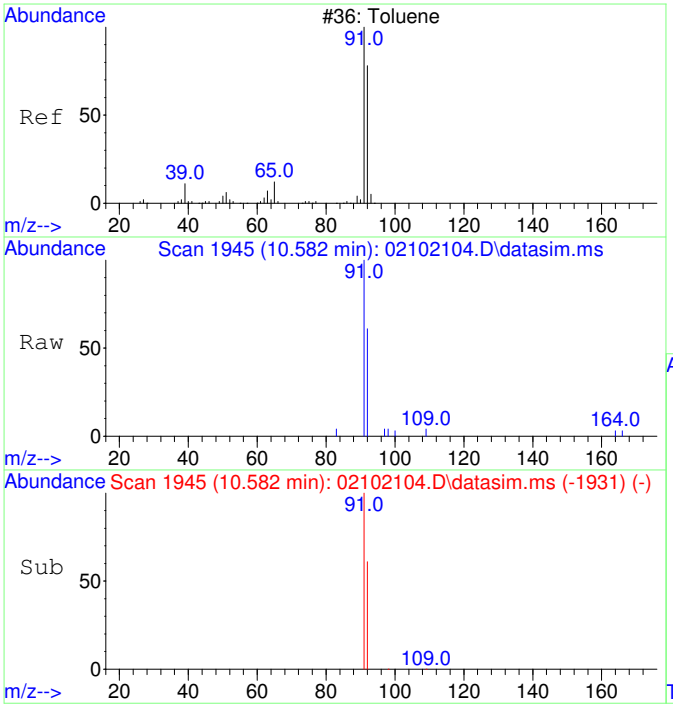


#12
Toluene-d8
Concen: 43.16 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 98 Resp: 1961

Ion	Ratio	Lower	Upper
98	100		
100	64.1	37.1	97.1

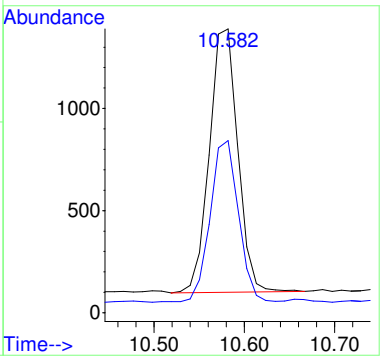


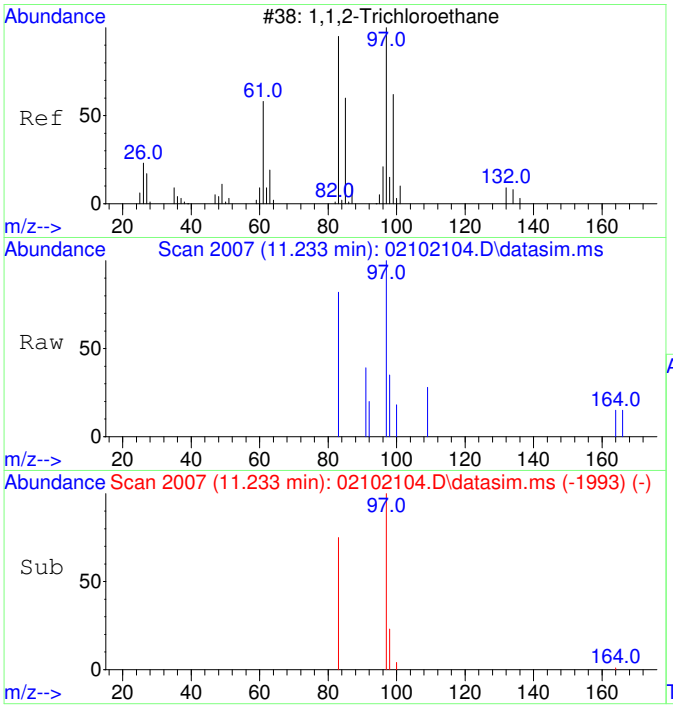


#13
Toluene
Concen: 49.99 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 2828

Ion	Ratio	Lower	Upper
91	100		
92	60.5	29.9	89.9

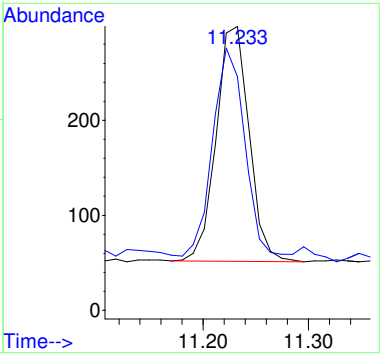


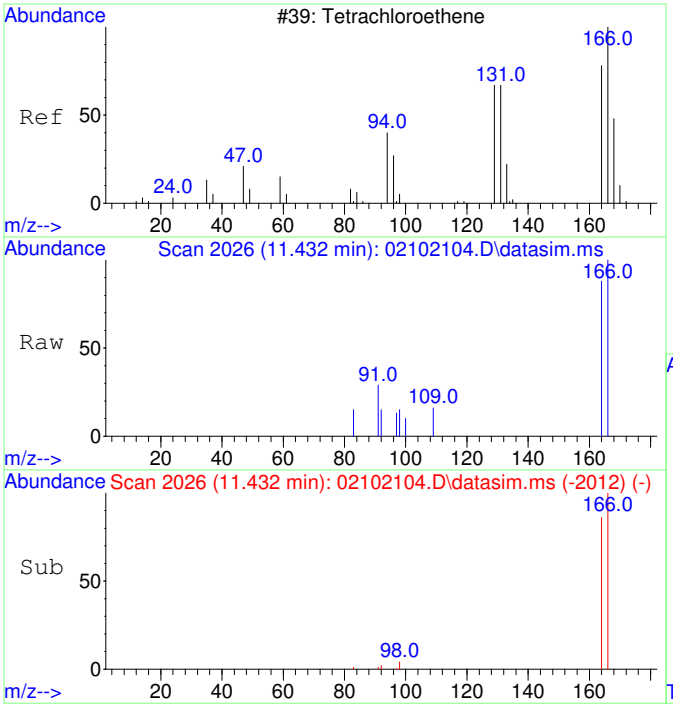


#14
1,1,2-Trichloroethane
Concen: 41.06 ug/L
RT: 11.233 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 97 Resp: 538

Ion	Ratio	Lower	Upper
97	100		
83	84.2	51.2	111.2

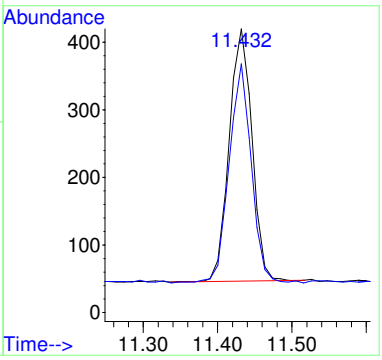


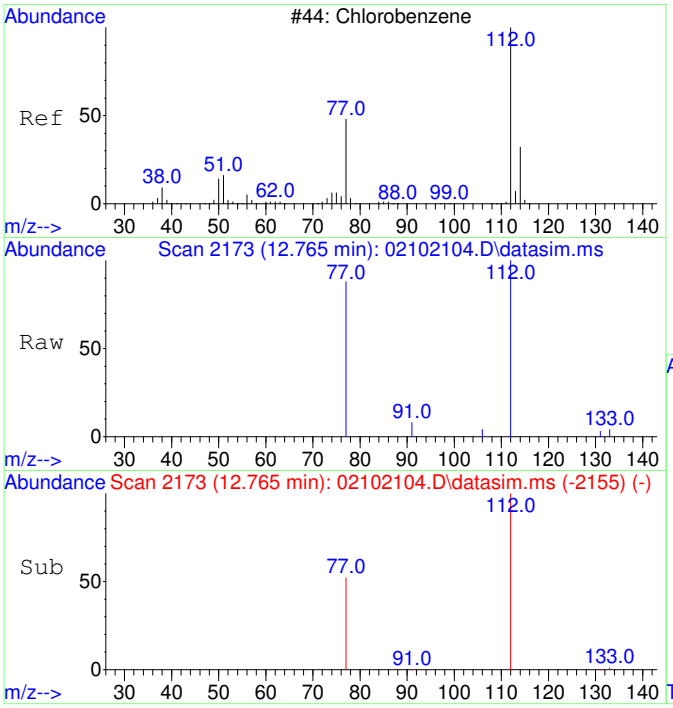


#15
Tetrachloroethene
Concen: 44.89 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:166 Resp: 791

Ion	Ratio	Lower	Upper
166	100		
164	83.2	47.8	107.8

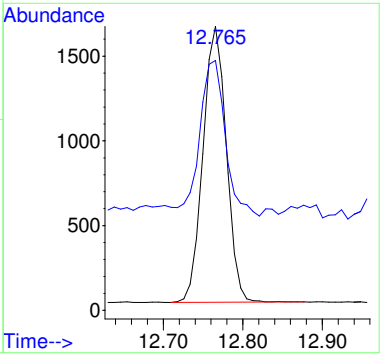


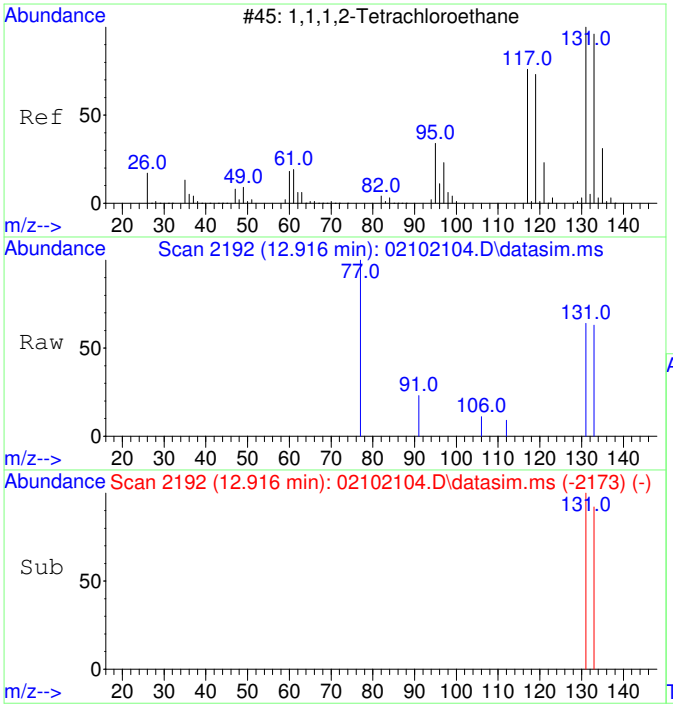


#16
Chlorobenzene
Concen: 75.67 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:112 Resp: 3316

Ion	Ratio	Lower	Upper
112	100		
77	61.3	23.6	83.6

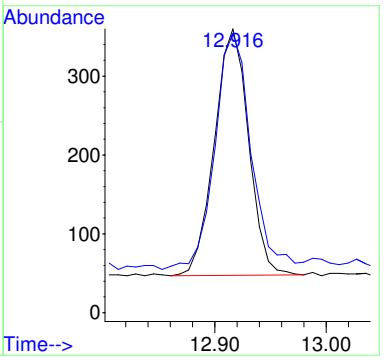


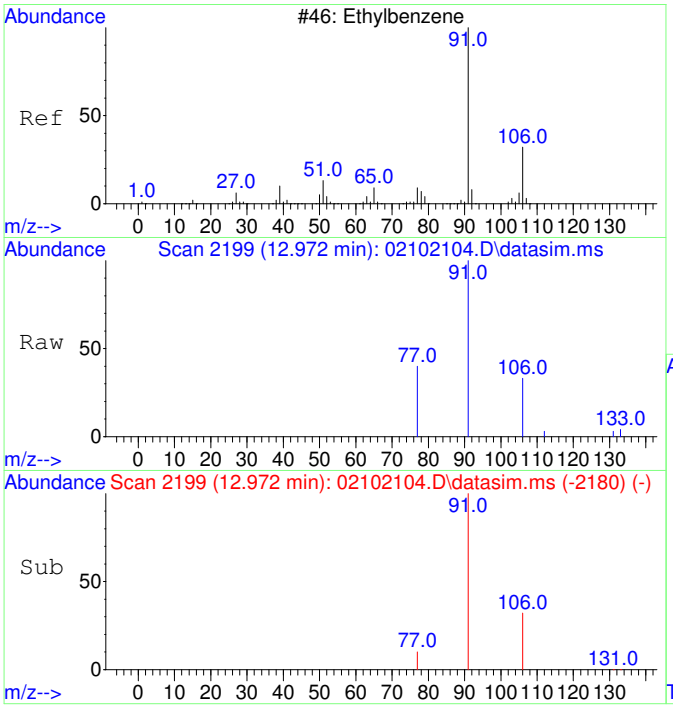


#17
1,1,1,2-Tetrachloroethane
Concen: 43.49 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:131 Resp: 667

Ion	Ratio	Lower	Upper
131	100		
133	101.8	66.3	126.3

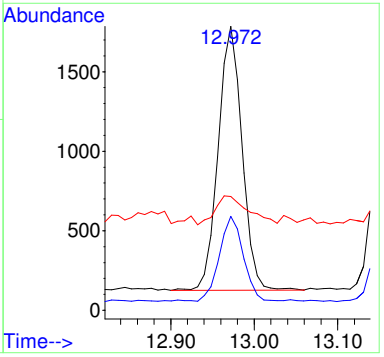


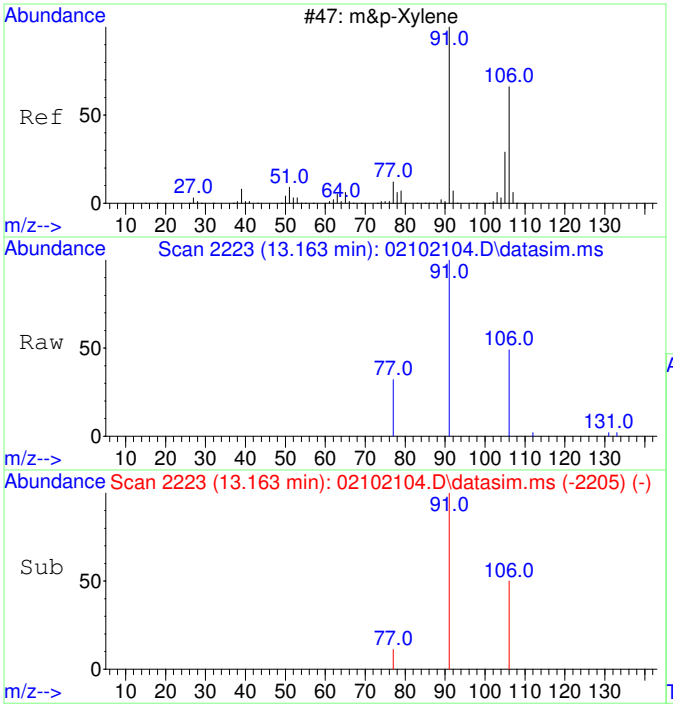


#18
Ethylbenzene
Concen: 45.80 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 3309

Ion	Ratio	Lower	Upper
91	100		
106	31.6	3.0	63.0
77	14.9	0.0	38.2

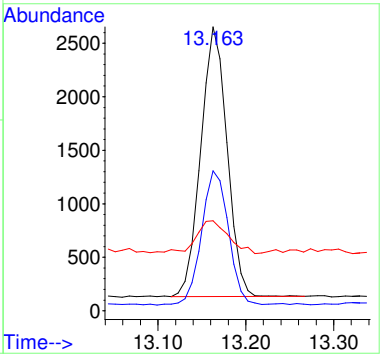


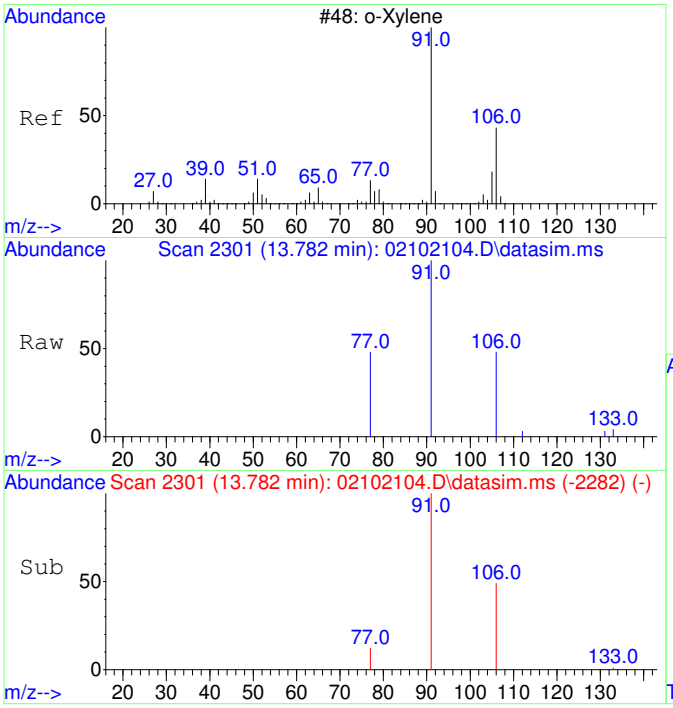


#19
m&p-Xylene
Concen: 94.00 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 5230

Ion	Ratio	Lower	Upper
91	100		
106	50.6	22.2	82.2
77	14.5	0.0	42.4

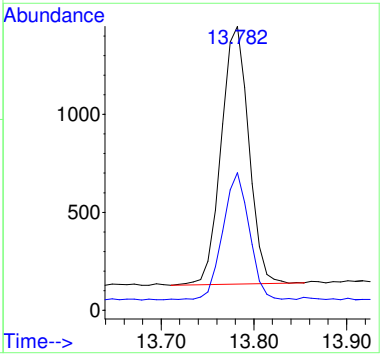


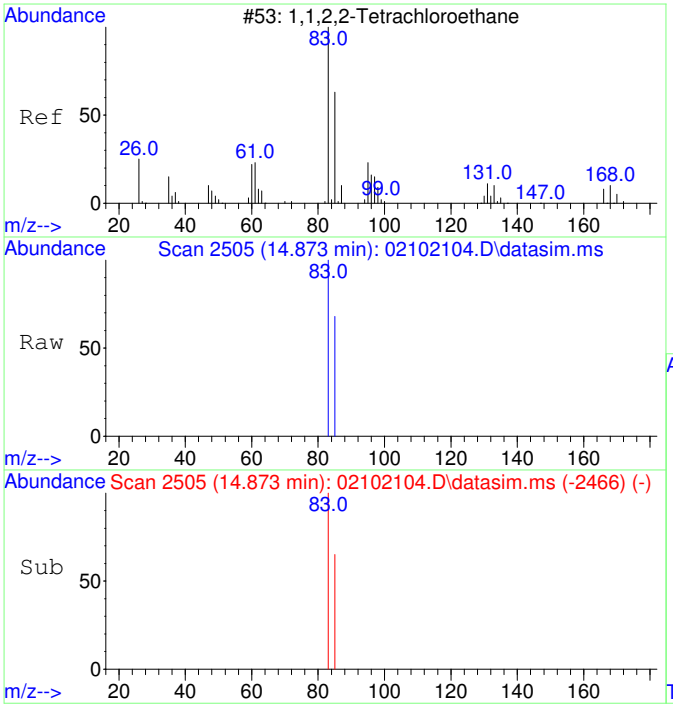


#20
o-Xylene
Concen: 45.58 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 2724

Ion	Ratio	Lower	Upper
91	100		
106	47.4	19.2	79.2

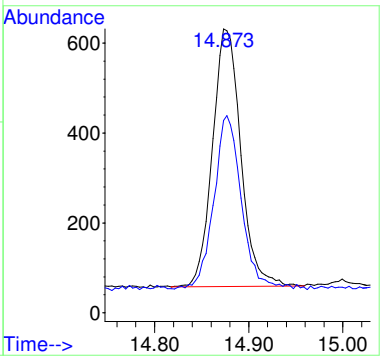


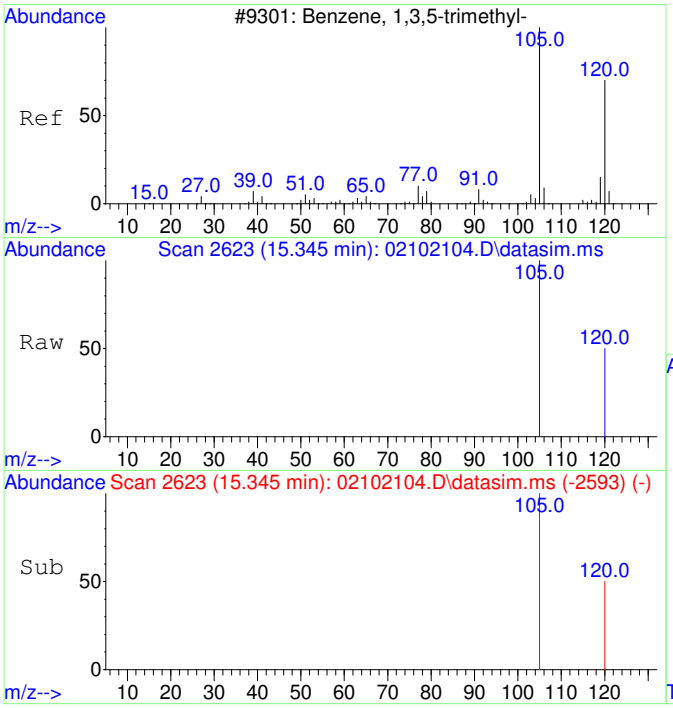


#21
1,1,2,2-Tetrachloroethane
Concen: 42.99 ug/L
RT: 14.873 min Scan# 2505
Delta R.T. -0.007 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 83 Resp: 1197

Ion	Ratio	Lower	Upper
83	100		
85	65.3	34.8	94.8

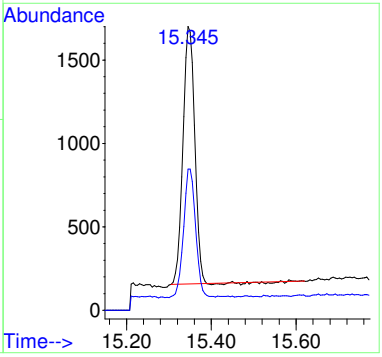


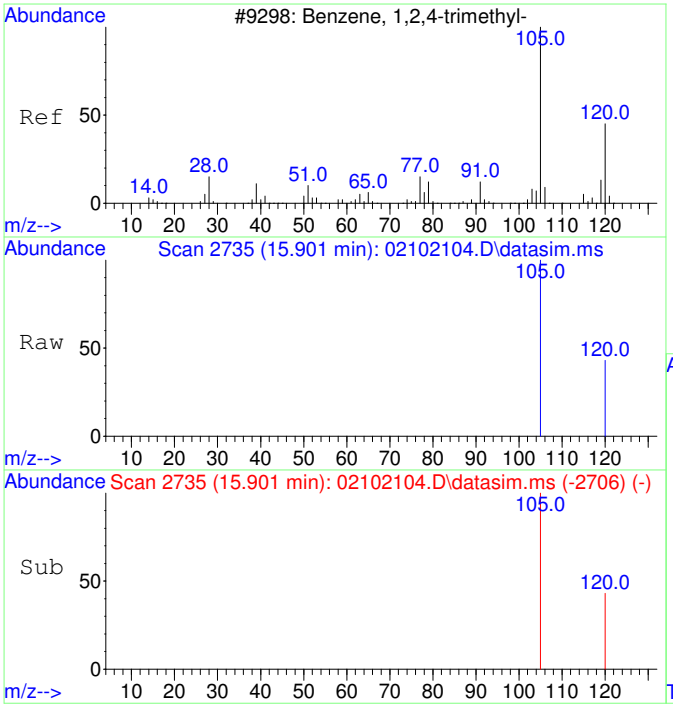


#22
1,3,5-Trimethylbenzene
Concen: 44.93 ug/L
RT: 15.345 min Scan# 2623
Delta R.T. -0.005 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:105 Resp: 2953

Ion	Ratio	Lower	Upper
105	100		
120	48.1	21.1	81.1

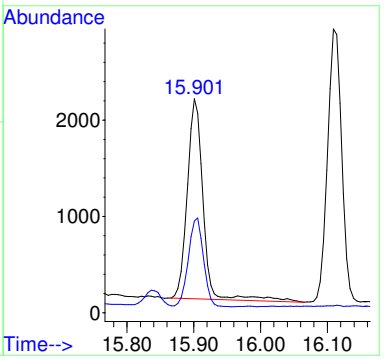


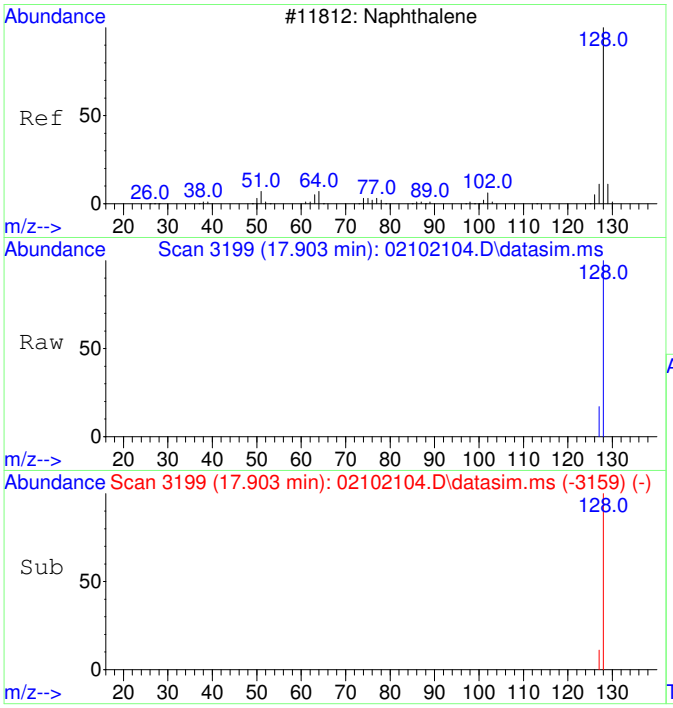


#23
1,2,4-Trimethylbenzene
Concen: 51.06 ug/L
RT: 15.901 min Scan# 2735
Delta R.T. -0.005 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:105 Resp: 3432

Ion	Ratio	Lower	Upper
105	100		
120	41.3	17.2	77.2

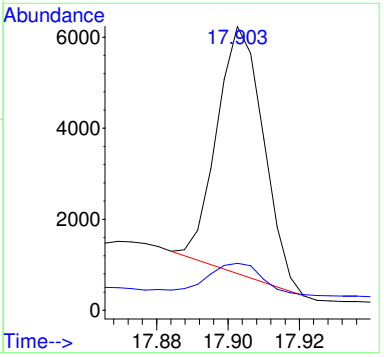


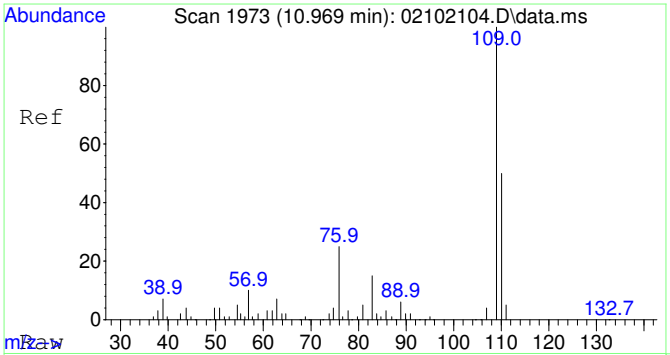


#24
Naphthalene
Concen: 44.43 ug/L
RT: 17.903 min Scan# 3199
Delta R.T. -0.001 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:128 Resp: 4839

Ion	Ratio	Lower	Upper
128	100		
127	13.0	0.0	42.5

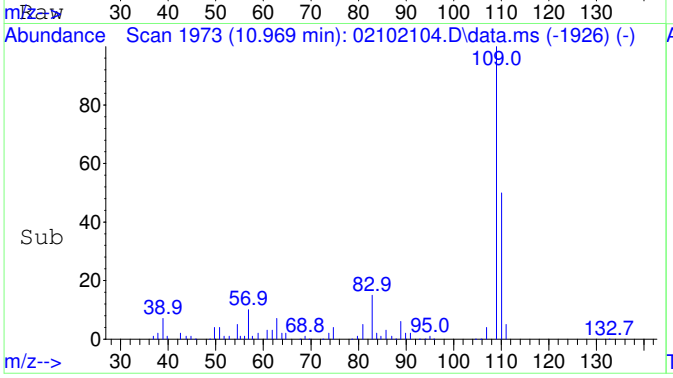


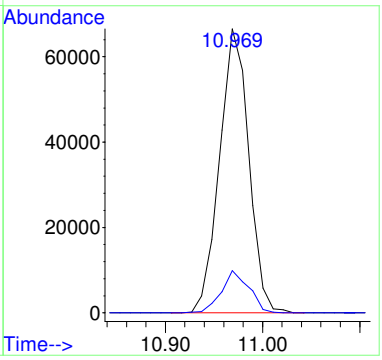


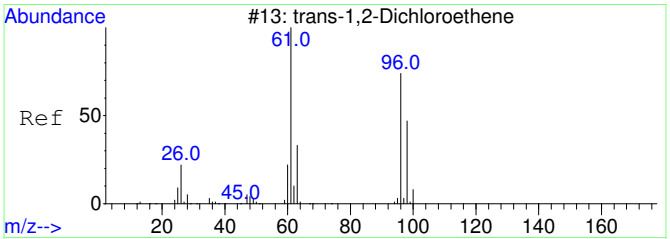
#25
2-Fluorotoluene SCAN
Concen: 5202.49 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

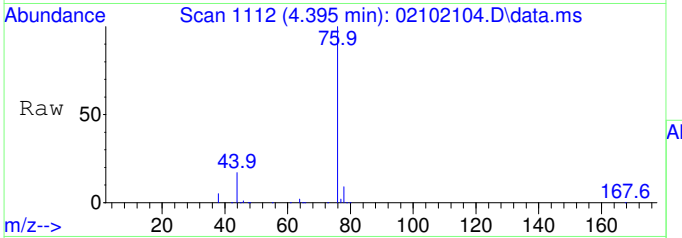
Tgt Ion:109 Resp: 138532

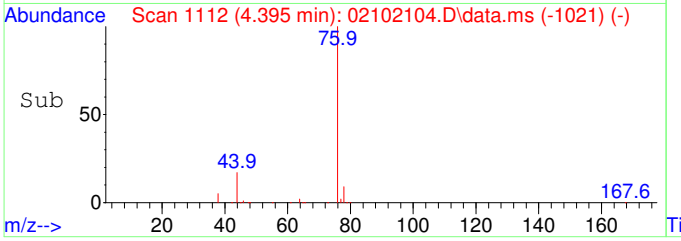
Ion	Ratio	Lower	Upper
109	100		
83	14.1	0.0	43.8







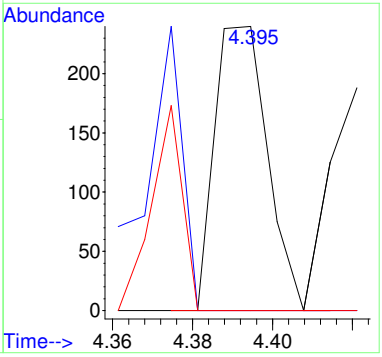


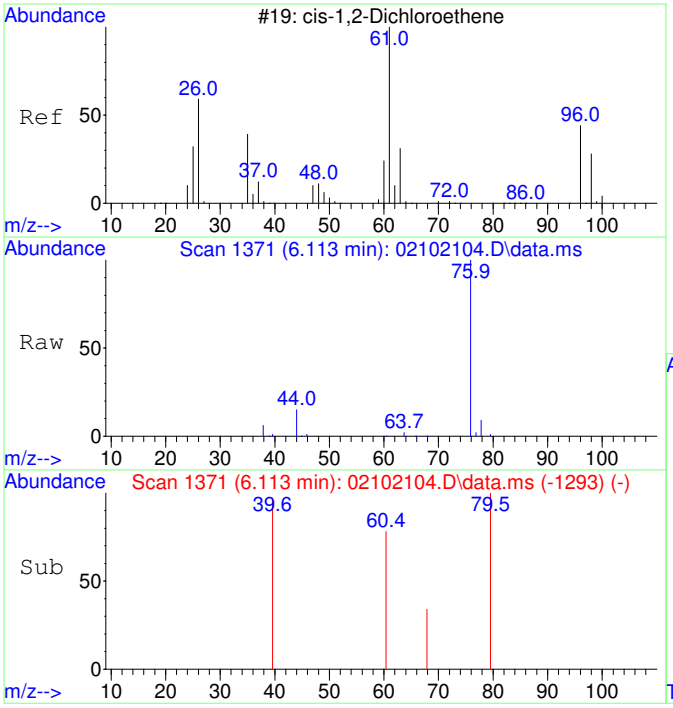


#27
trans-1,2-Dichloroethene SCAN
Concen: 27.79 ug/L
RT: 4.395 min Scan# 1112
Delta R.T. 0.013 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 61 Resp: 220

Ion	Ratio	Lower	Upper
61	100		
96	70.9	49.0	109.0
98	42.3	20.5	80.5

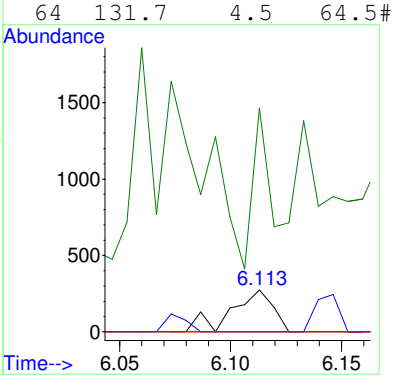


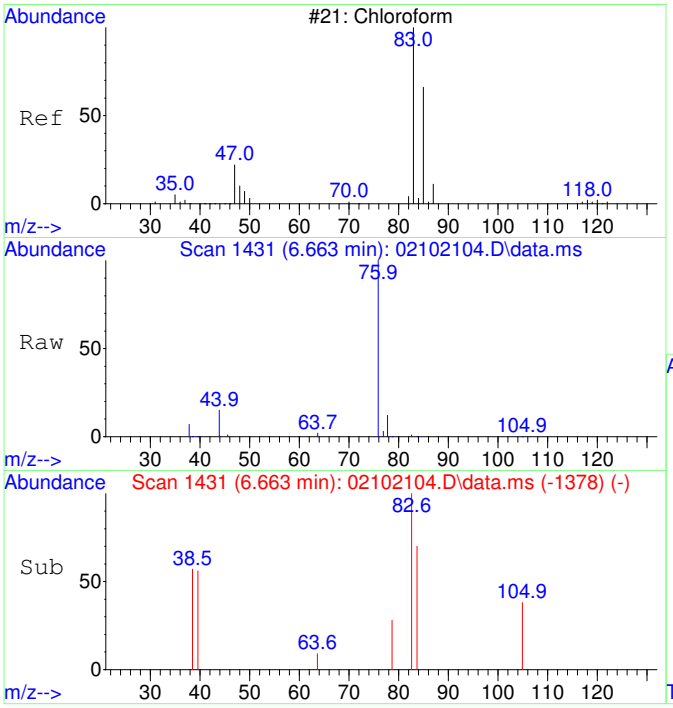


#29
cis-1,2-Dichloroethene SCAN
Concen: 38.86 ug/L
RT: 6.113 min Scan# 1371
Delta R.T. 0.020 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 61 Resp: 357

Ion	Ratio	Lower	Upper
61	100		
96	0.0	39.9	99.9#
98	0.0	13.5	73.5#
64	131.7	4.5	64.5#

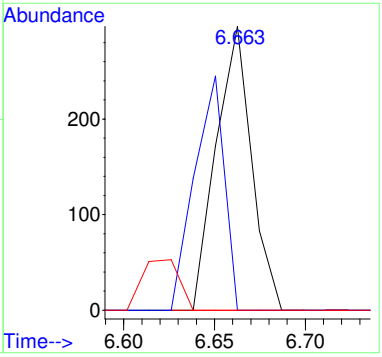


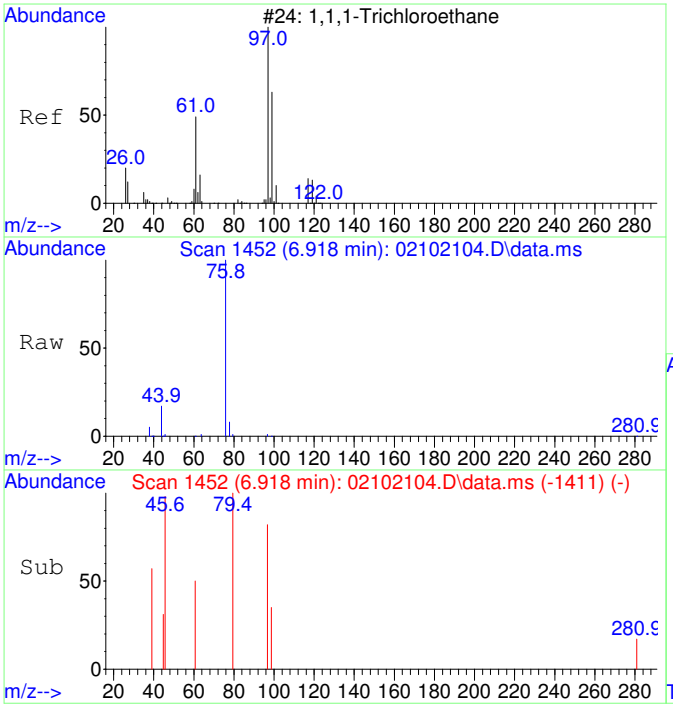


#30
Chloroform SCAN
Concen: 47.03 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 83 Resp: 403

Ion	Ratio	Lower	Upper
83	100		
85	69.5	34.6	94.6
47	0.0	0.0	53.4

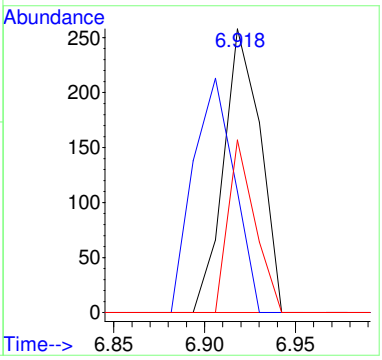


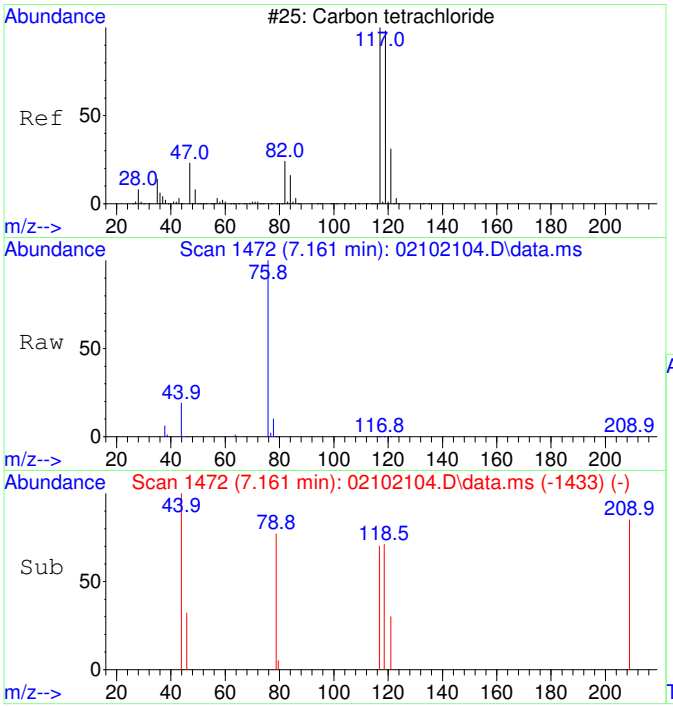


#31
1,1,1-Trichloroethane SCAN
Concen: 41.05 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 97 Resp: 363

Ion	Ratio	Lower	Upper
97	100		
99	92.6	43.6	103.6
61	44.4	18.0	78.0

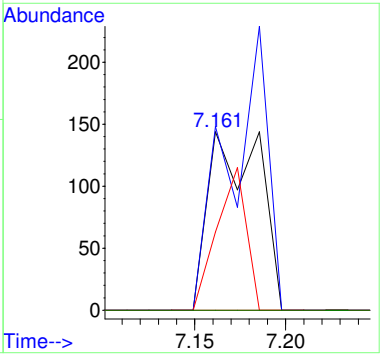


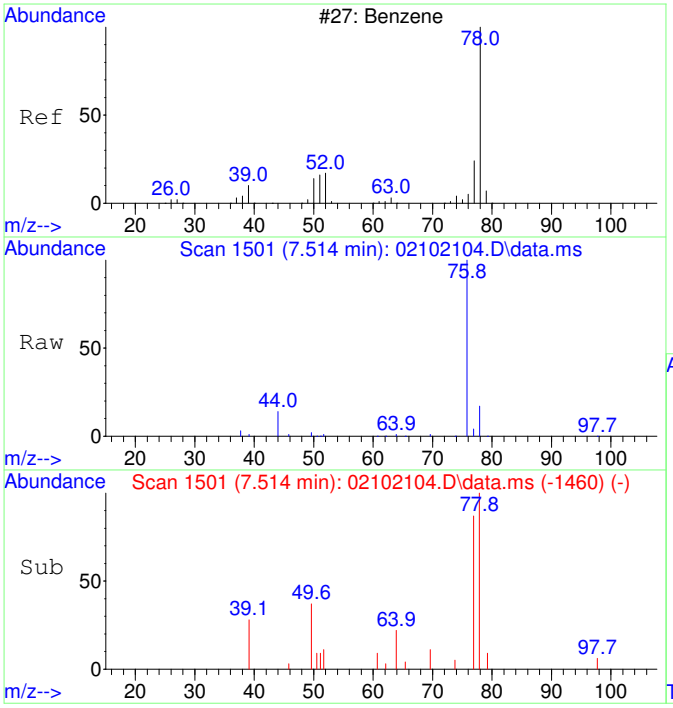


#32
Carbon tetrachloride SCAN
Concen: 37.19 ug/L
RT: 7.161 min Scan# 1472
Delta R.T. -0.024 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:117 Resp: 281

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

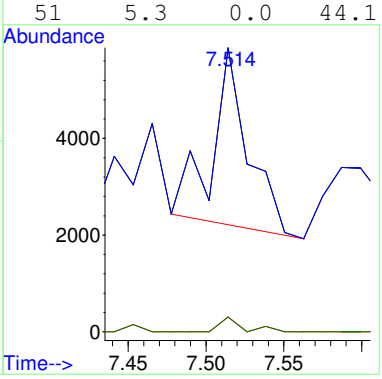


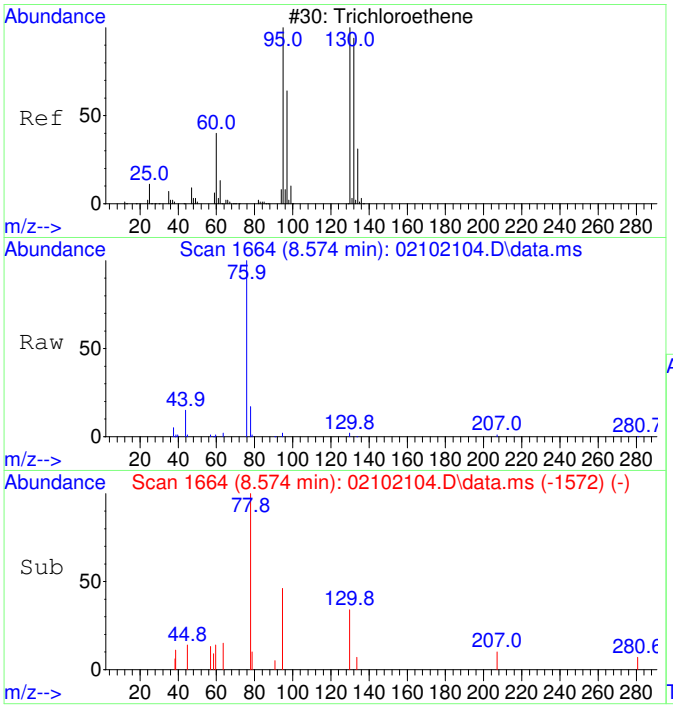


#33
Benzene SCAN
Concen: 213.81 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 78 Resp: 5720

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	5.3	0.0	47.9
51	5.3	0.0	44.1

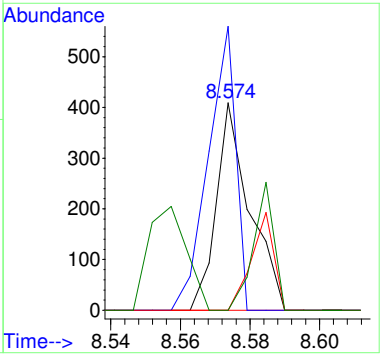


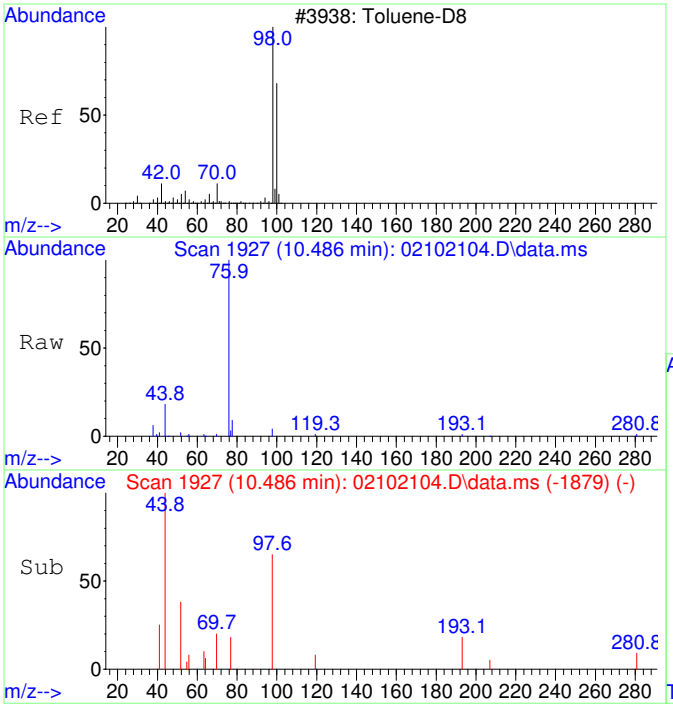


#35
Trichloroethene SCAN
Concen: 46.80 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:130 Resp: 273

Ion	Ratio	Lower	Upper
130	100		
95	112.5	60.5	120.5
132	31.9	59.6	119.6#
97	38.1	28.2	88.2

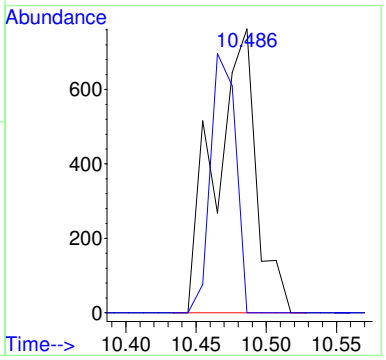


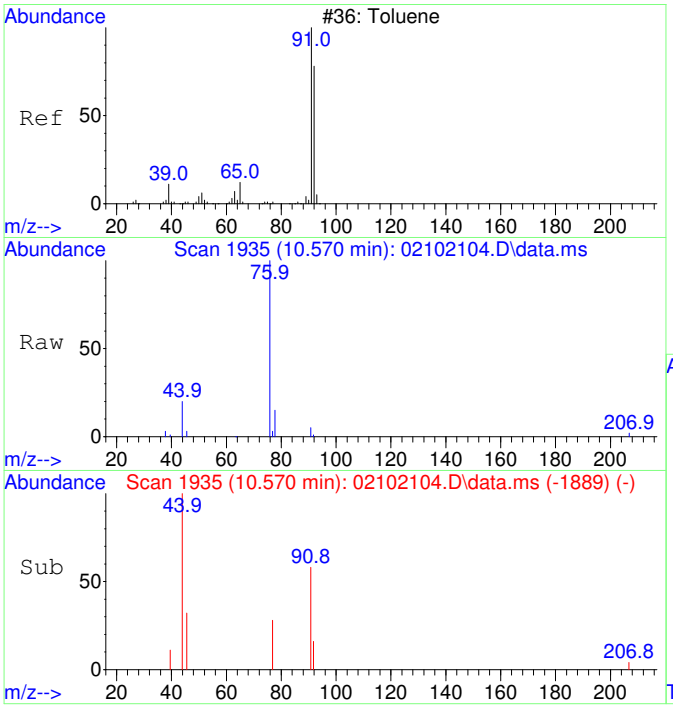


#36
Toluene-d8 SCAN
Concen: 62.30 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 98 Resp: 1556

Ion	Ratio	Lower	Upper
98	100		
100	0.0	40.0	100.0#

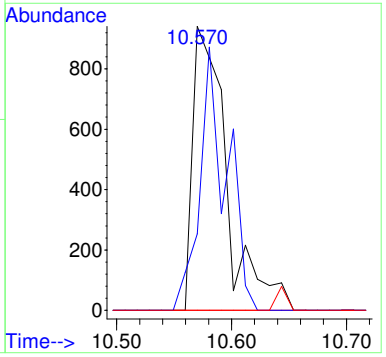


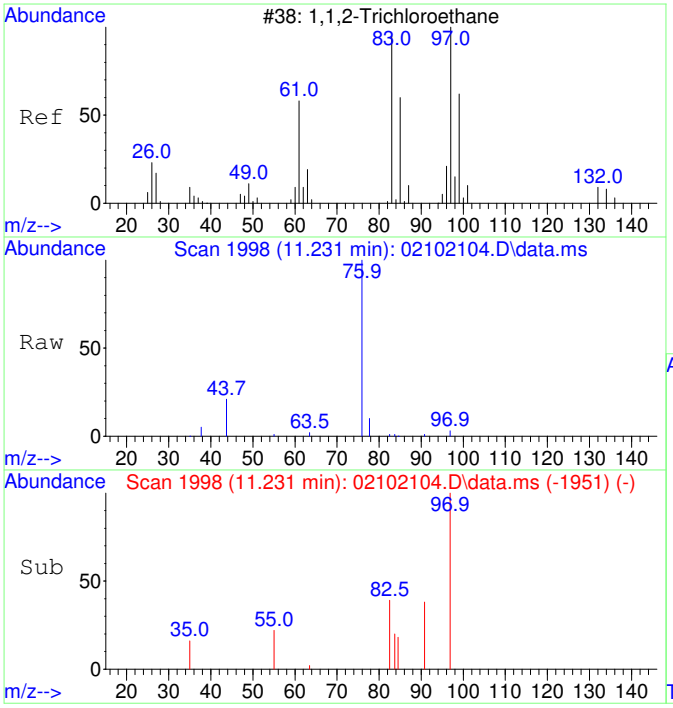


#37
Toluene SCAN
Concen: 62.77 ug/L
RT: 10.570 min Scan# 1935
Delta R.T. -0.021 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 1930

Ion	Ratio	Lower	Upper
91	100		
92	73.6	28.3	88.3
65	0.0	0.0	41.0

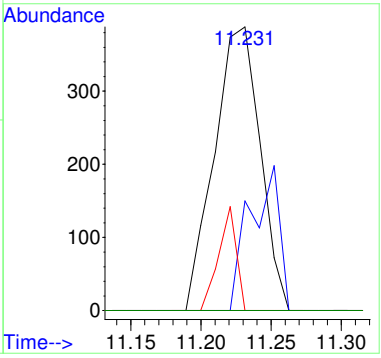


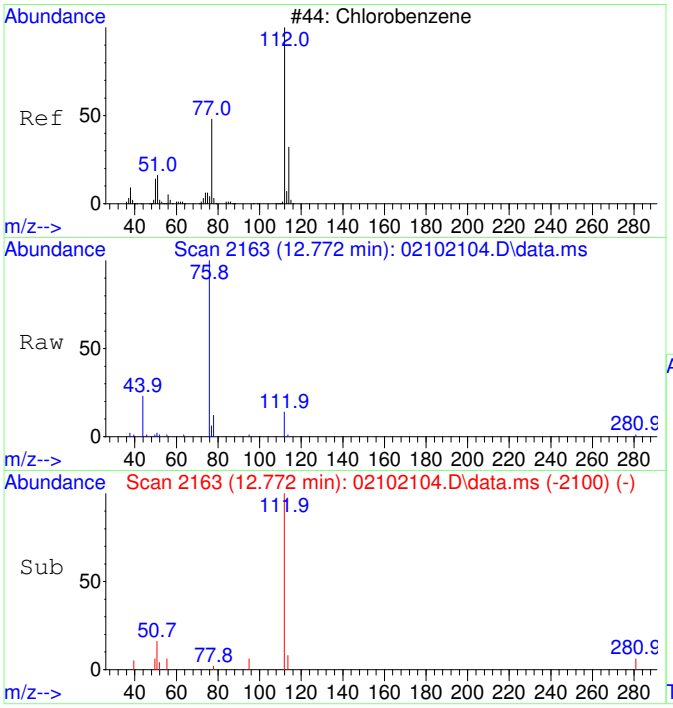


#38
1,1,2-Trichloroethane SCAN
Concen: 114.70 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. -0.010 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 97 Resp: 884

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	14.1	32.1	92.1#
99	0.0	36.7	96.7#

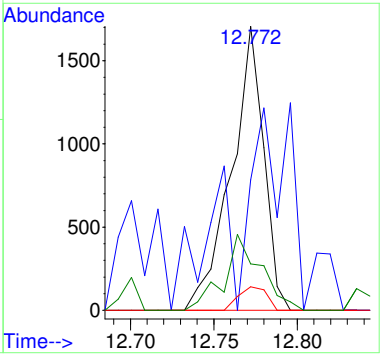


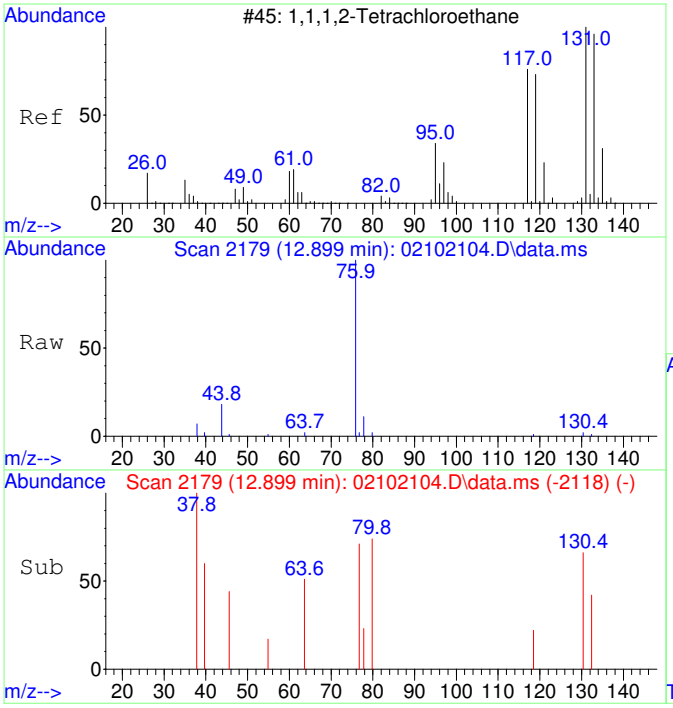


#40
Chlorobenzene SCAN
Concen: 104.68 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:112 Resp: 2312

Ion	Ratio	Lower	Upper
112	100		
77	42.6	28.2	88.2
114	7.2	2.3	62.3
51	30.4	0.0	50.1

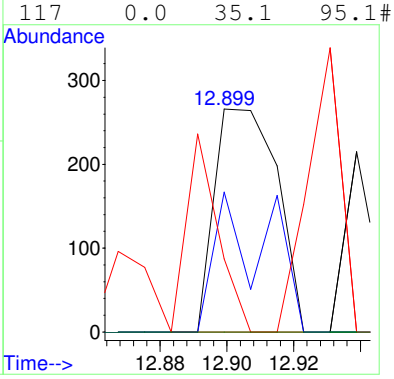


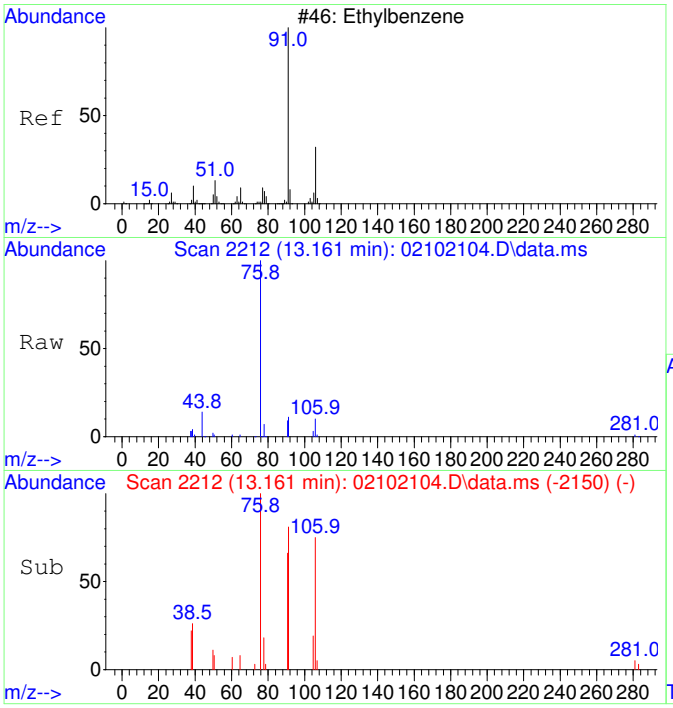


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 45.54 ug/L
RT: 12.899 min Scan# 2179
Delta R.T. -0.016 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:131 Resp: 347

Ion	Ratio	Lower	Upper
131	100		
133	52.4	66.9	126.9#
119	68.0	40.4	100.4
117	0.0	35.1	95.1#

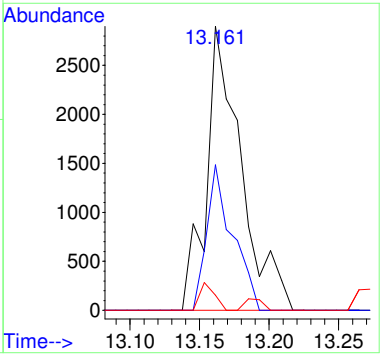


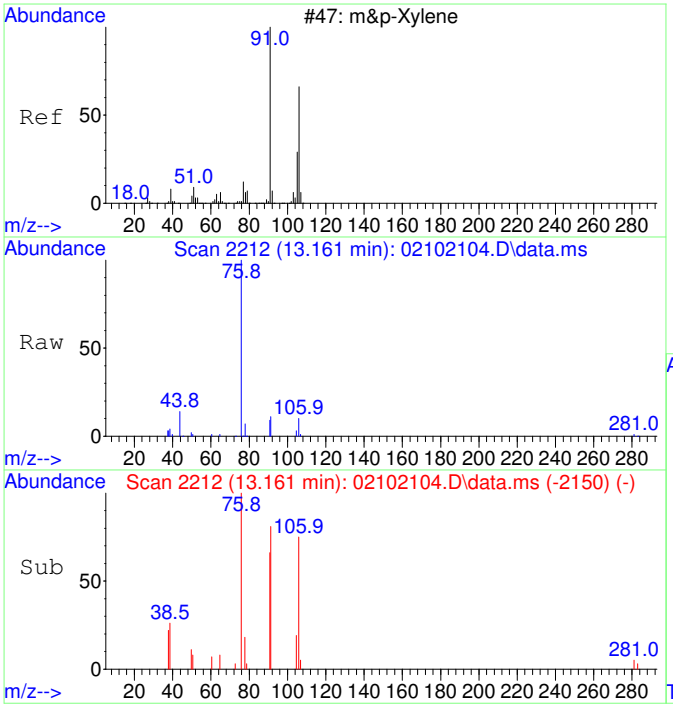


#42
Ethylbenzene SCAN
Concen: 86.16 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.008 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 5049

Ion	Ratio	Lower	Upper
91	100		
106	37.9	23.1	83.1
51	4.1	0.0	40.1

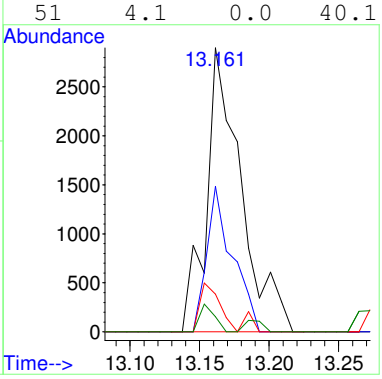


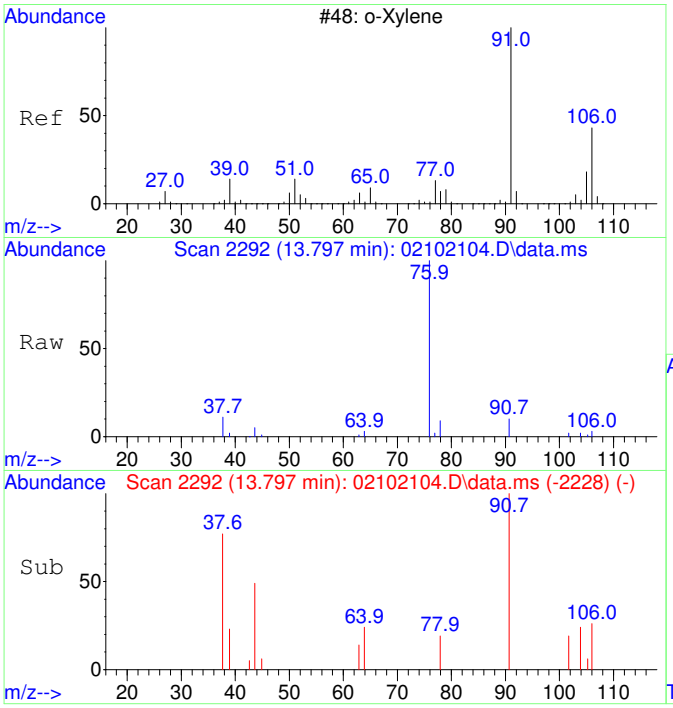


#43
m&p-Xylene SCAN
Concen: 86.16 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.008 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 5049

Ion	Ratio	Lower	Upper
91	100		
106	37.9	23.1	83.1
105	9.7	0.0	54.7
51	4.1	0.0	40.1

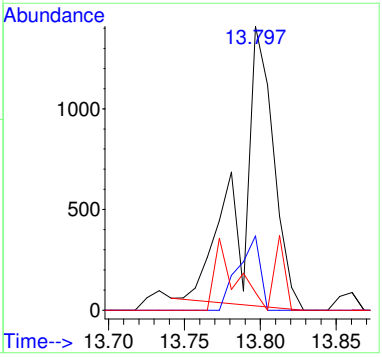


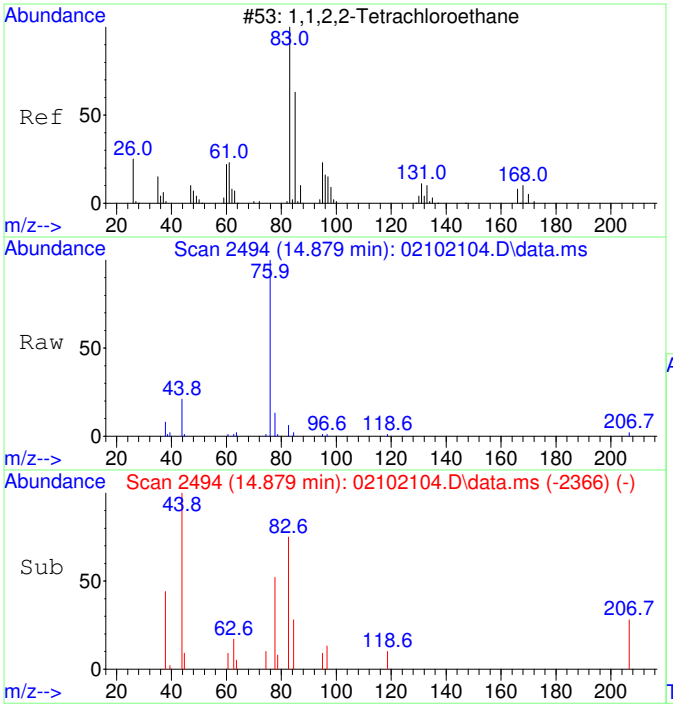


#44
o-Xylene SCAN
Concen: 66.16 ug/L
RT: 13.797 min Scan# 2292
Delta R.T. 0.008 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 2117

Ion	Ratio	Lower	Upper
91	100		
106	17.7	18.0	78.0#
105	8.4	0.0	56.6

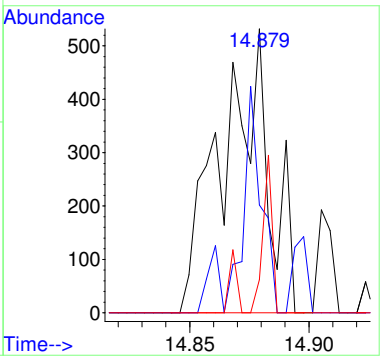


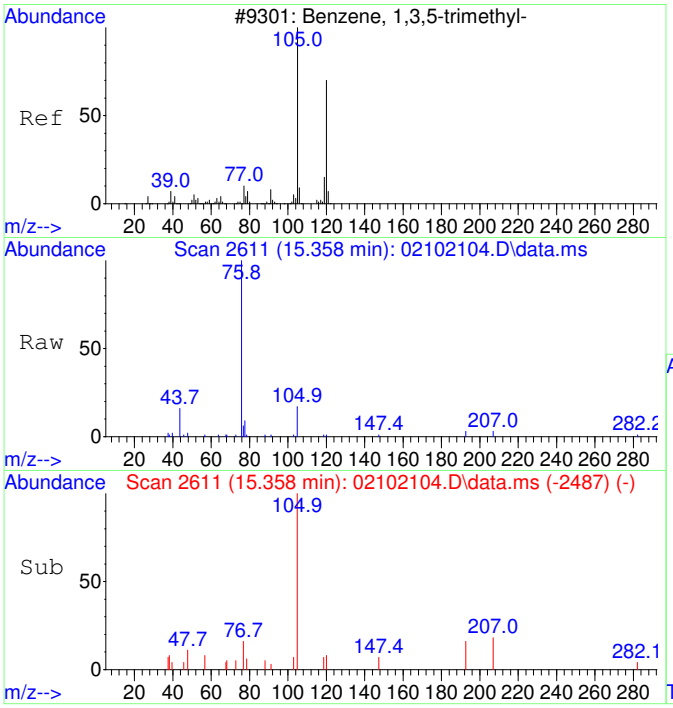


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 44.12 ug/L
RT: 14.879 min Scan# 2494
Delta R.T. -0.004 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 83 Resp: 734

Ion	Ratio	Lower	Upper
83	100		
85	30.0	35.9	95.9#
95	10.8	0.0	47.4

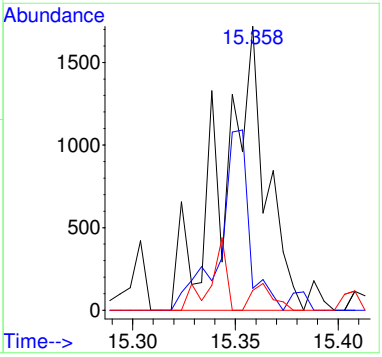


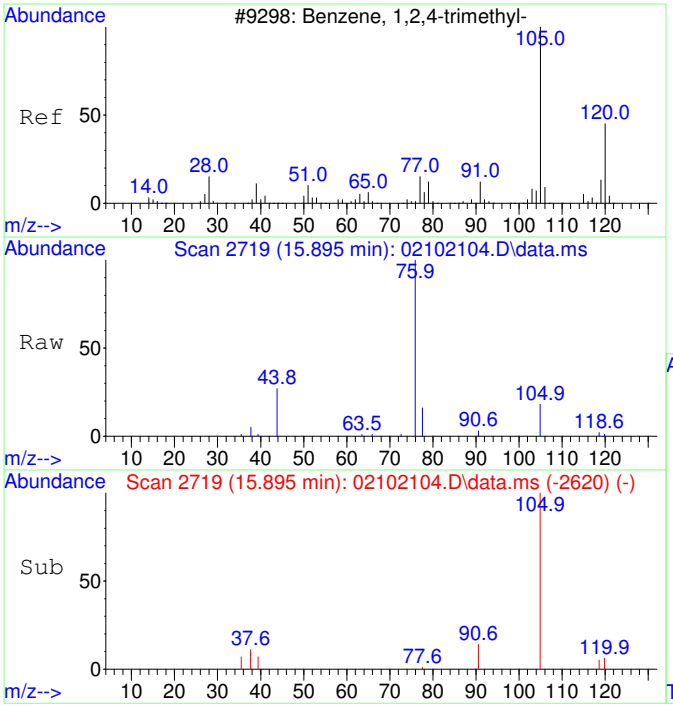


#46
1,3,5-Trimethylbenzene SCAN
Concen: 75.16 ug/L
RT: 15.358 min Scan# 2611
Delta R.T. 0.005 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:105 Resp: 2537

Ion	Ratio	Lower	Upper
105	100		
120	42.6	18.3	78.3
119	4.7	0.0	43.1

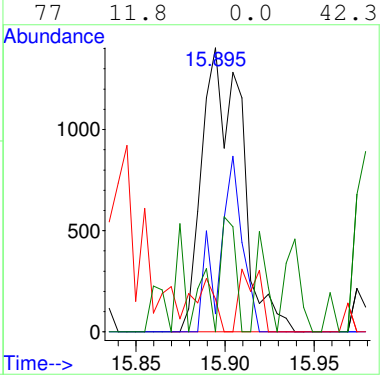


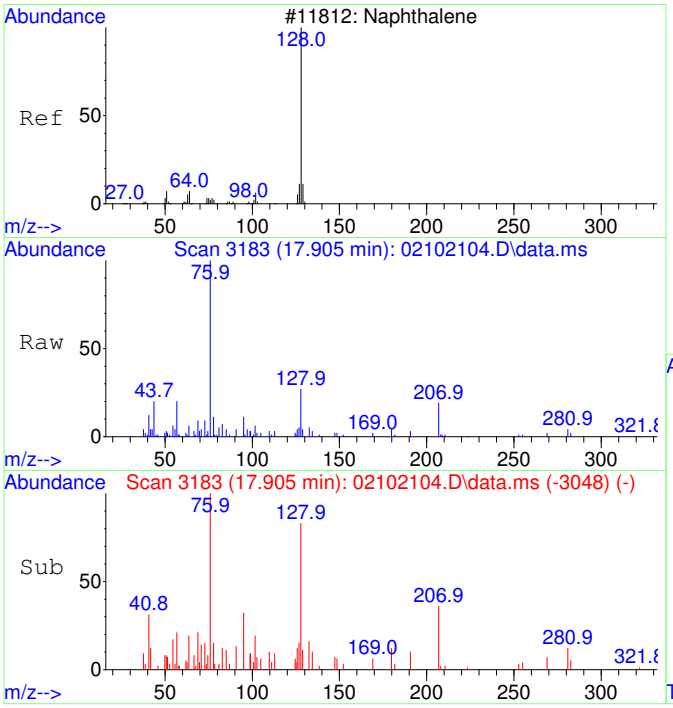


#47
1,2,4-Trimethylbenzene SCAN
Concen: 63.47 ug/L
RT: 15.895 min Scan# 2719
Delta R.T. -0.010 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:105 Resp: 2189

Ion	Ratio	Lower	Upper
105	100		
120	36.5	16.9	76.9
119	11.1	0.0	41.9
77	11.8	0.0	42.3

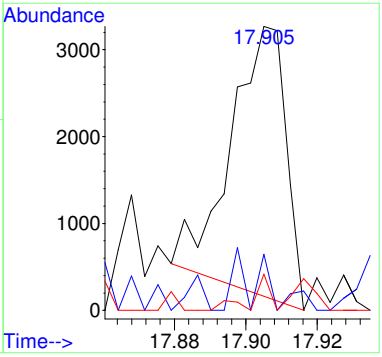




#48
Naphthalene SCAN
Concen: 63.22 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.003 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:128 Resp: 3273

Ion	Ratio	Lower	Upper
128	100		
127	12.1	0.0	44.0
129	4.2	0.0	40.8



B21B045-BLK1

Quantitation Report (Not Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102105.D
Acq On : 10 Feb 2021 10:26
InstName : AG5975C
Operator : TD
Sample : B21B045-BLK1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 10 10:45:41 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

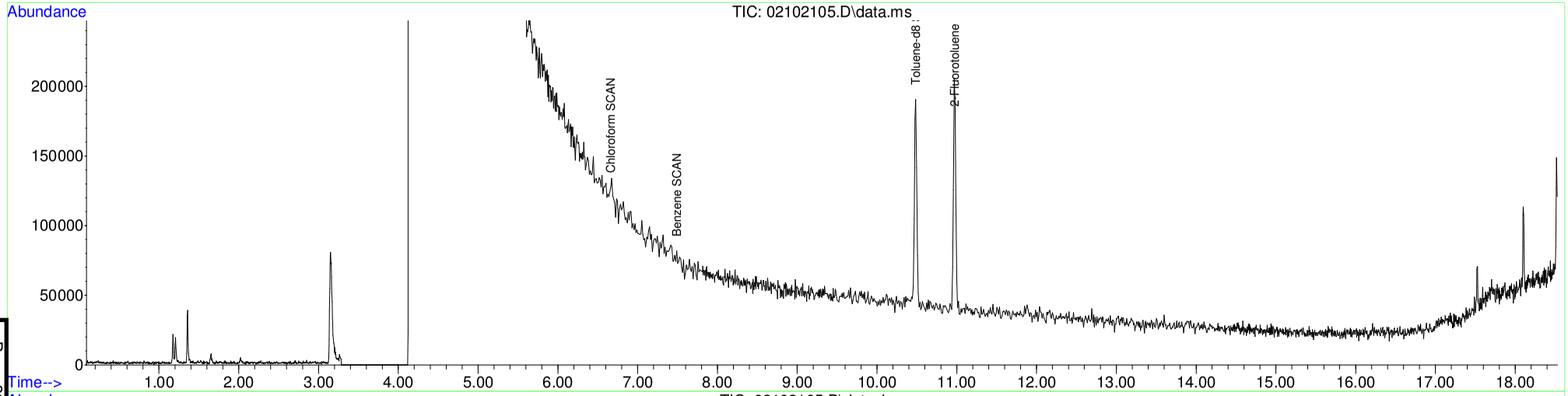
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)		
Internal Standards								
1) 2-Fluorotoluene	10.970	109	217728	5000.00	ug/L	0.00		
System Monitoring Compounds								
12) Toluene-d8	10.477	98	181638	4307.43	ug/L	-0.01		
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.15%					
Target Compounds						Qvalue		
9] Benzene	7.503	78	1966	53.66	ug/L #	11	NT	
25) 2-Fluorotoluene SCAN	10.969	109	126876	5133.70	ug/L	95		
30) Chloroform SCAN	6.662	83	288	36.21	ug/L #	27		
33) Benzene SCAN	7.490	78	8552	344.42	ug/L #	91		
36) Toluene-d8 SCAN	10.486	98	107857	4653.14	ug/L	100		

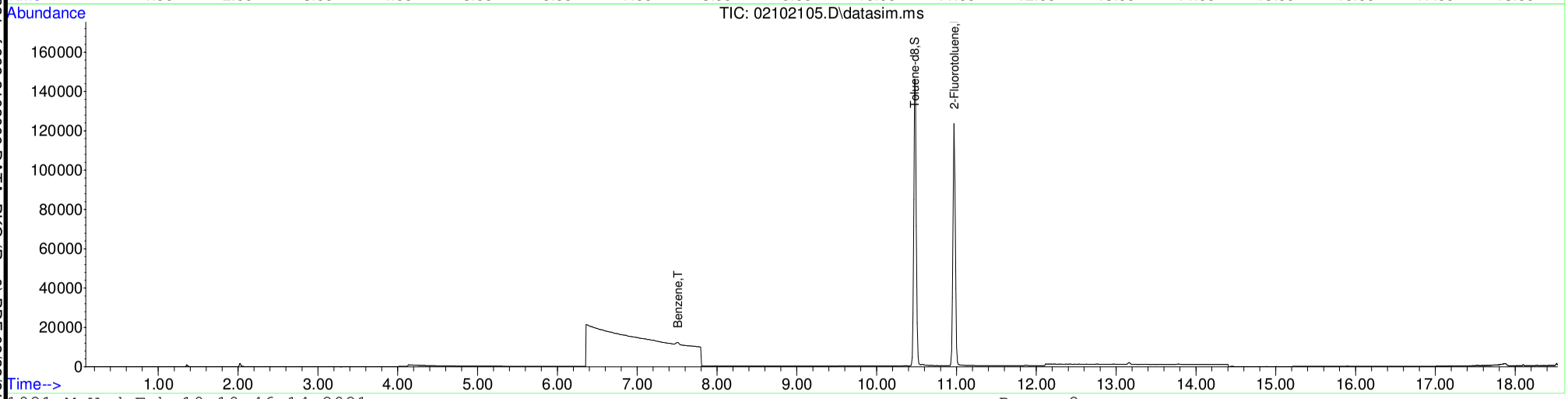
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102105.D
Acq On : 10 Feb 2021 10:26
InstName : AG5975C
Operator : TD
Sample : B21B045-BLK1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 10 10:45:41 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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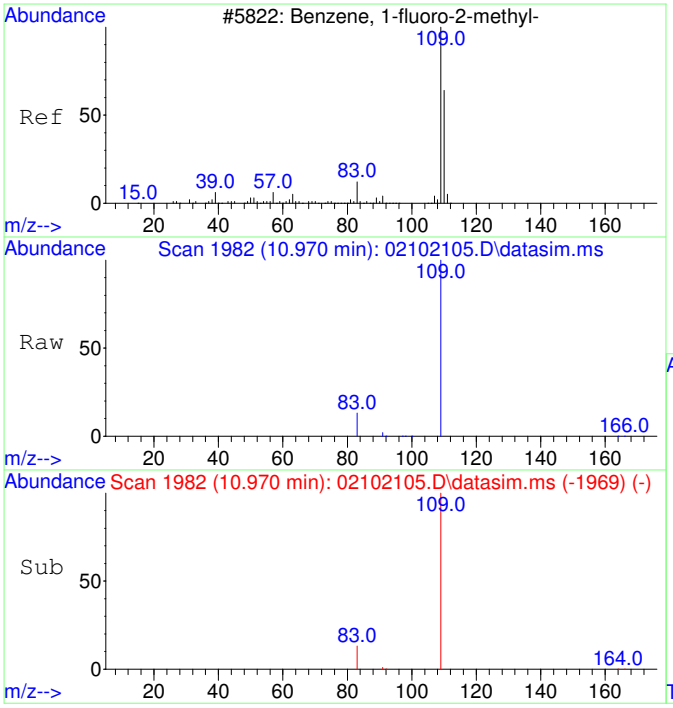
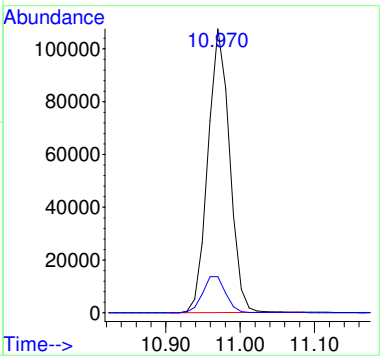
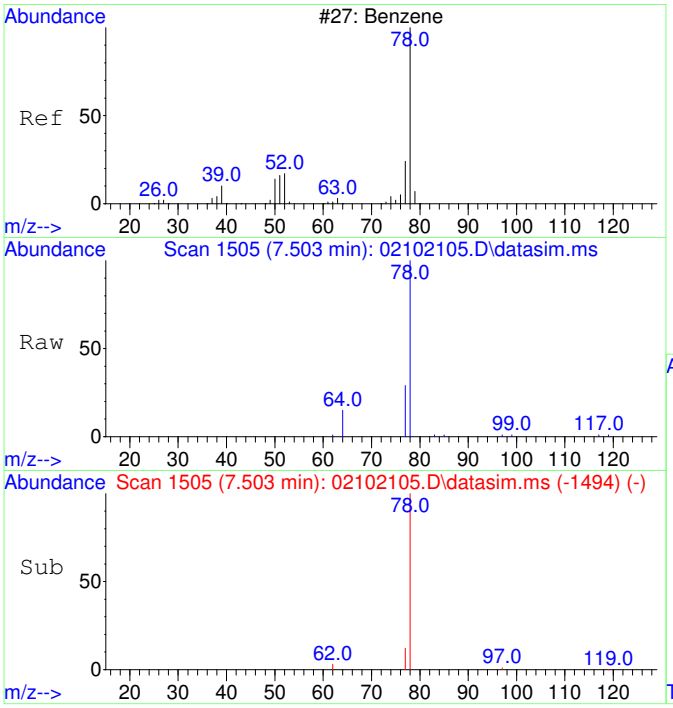


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 02102105.D
Acq: 10 Feb 2021 10:26

Tgt Ion:109 Resp: 217728

Ion	Ratio	Lower	Upper
109	100		
83	13.6	0.0	42.3

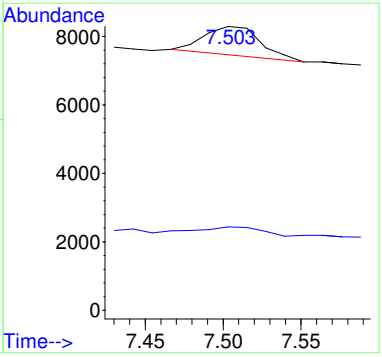


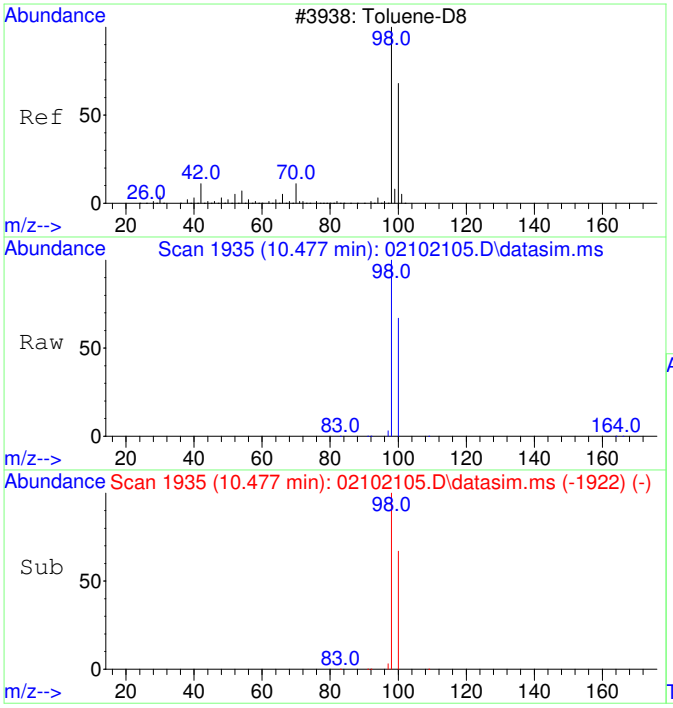


#9
Benzene
Concen: 53.66 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 02102105.D
Acq: 10 Feb 2021 10:26

Tgt Ion: 78 Resp: 1966

Ion	Ratio	Lower	Upper
78	100		
77	66.4	0.0	53.2#

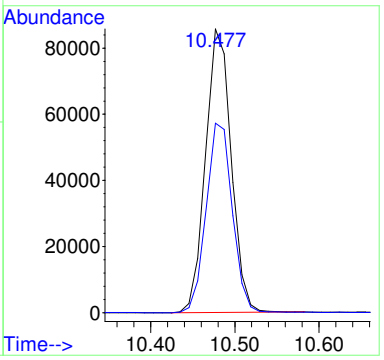


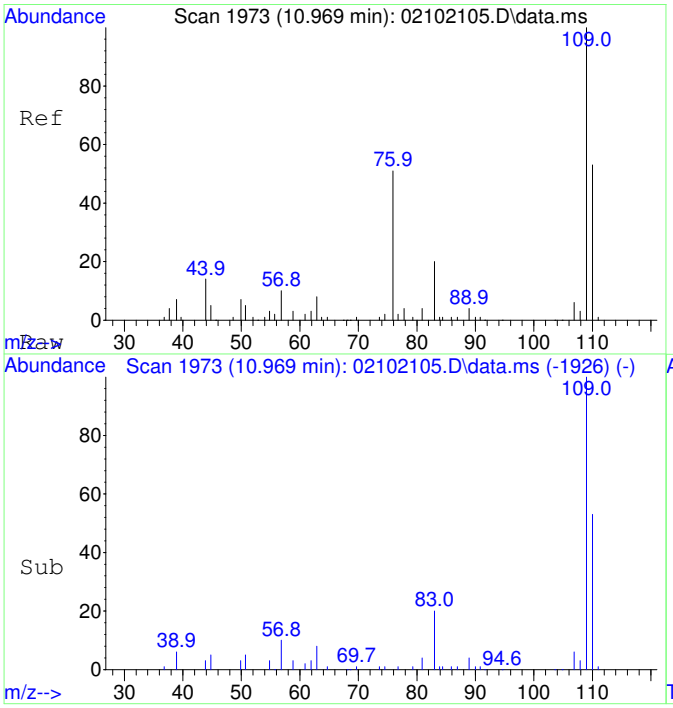


#12
Toluene-d8
Concen: 4307.43 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 02102105.D
Acq: 10 Feb 2021 10:26

Tgt Ion: 98 Resp: 181638

Ion	Ratio	Lower	Upper
98	100		
100	68.0	37.1	97.1

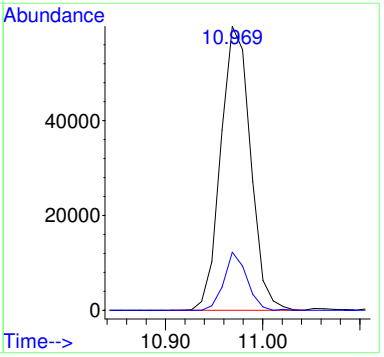


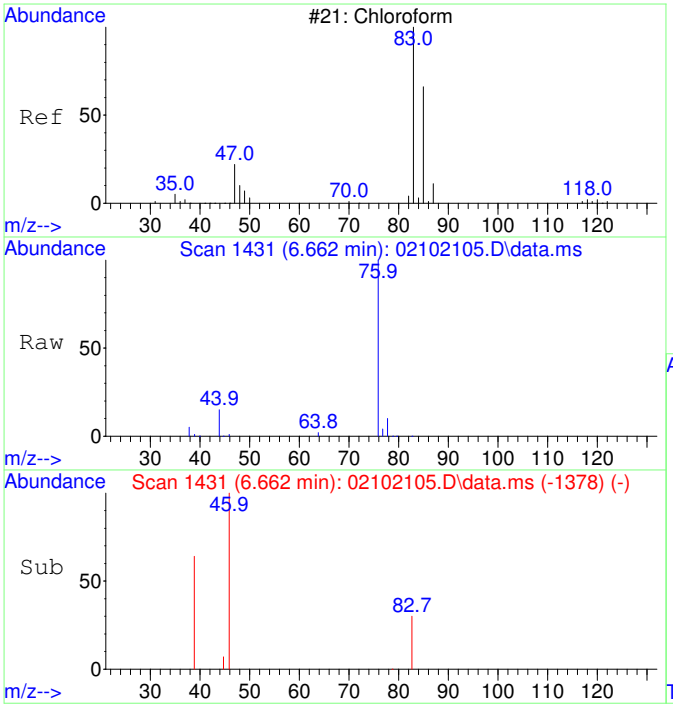


#25
2-Fluorotoluene SCAN
Concen: 5133.70 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 02102105.D
Acq: 10 Feb 2021 10:26

Tgt Ion:109 Resp: 126876

Ion	Ratio	Lower	Upper
109	100		
83	15.8	0.0	43.8

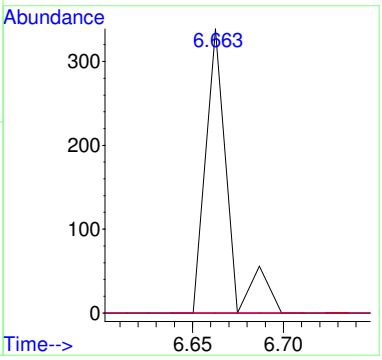


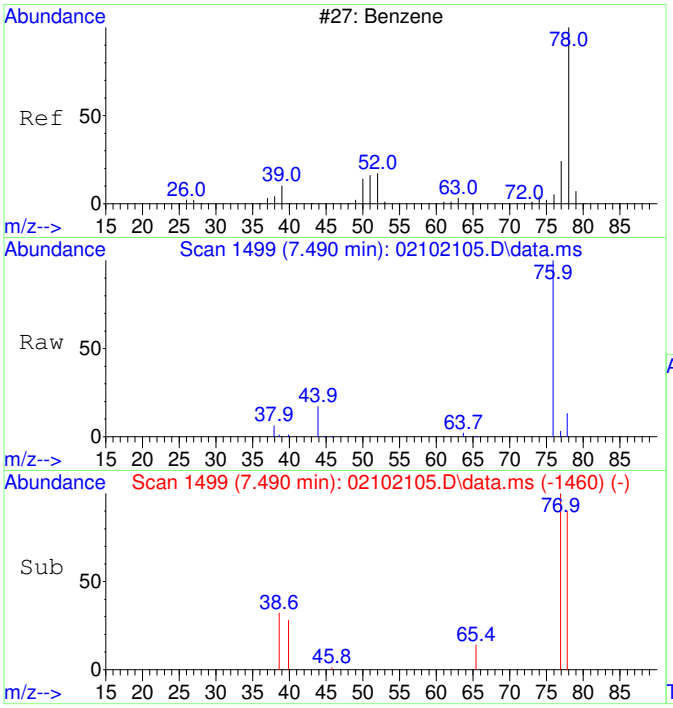


#30
Chloroform SCAN
Concen: 36.21 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 02102105.D
Acq: 10 Feb 2021 10:26

Tgt Ion: 83 Resp: 288

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

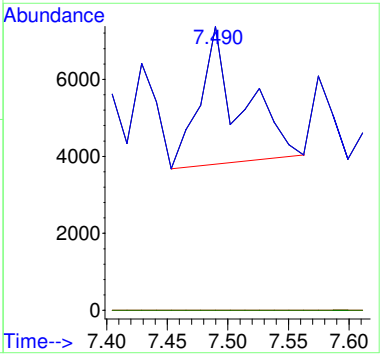


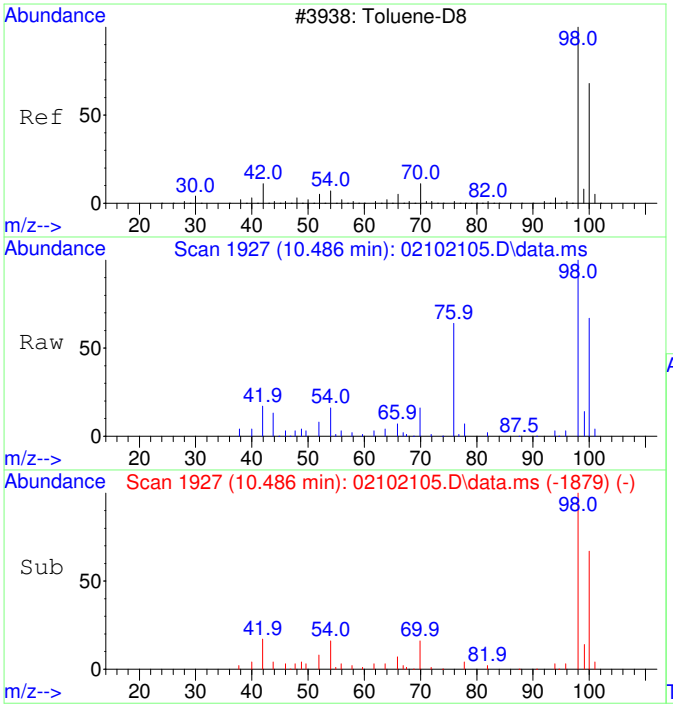


#33
Benzene SCAN
Concen: 344.42 ug/L
RT: 7.490 min Scan# 1499
Delta R.T. -0.024 min
Lab File: 02102105.D
Acq: 10 Feb 2021 10:26

Tgt Ion: 78 Resp: 8552

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

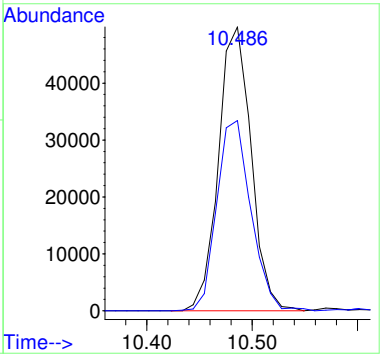




#36
Toluene-d8 SCAN
Concen: 4653.14 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 02102105.D
Acq: 10 Feb 2021 10:26

Tgt Ion: 98 Resp: 107857

Ion	Ratio	Lower	Upper
98	100		
100	70.0	40.0	100.0



B21B045-BS1

Sample Name: B21B045-BS1
Misc Info: 0
Date Acquired: 2/10/2021
QLast Update: Tue Dec 08 06:26:34 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.980	5000	5000.00	100%	70	130	pass
2)	**1,1-Dichloroethene**	**3.090**	**5000**	**3440.38**	**69%**	**22**	**143**	**pass**
3)	**trans-1,2-Dichloroethene**	**4.376**	**5000**	**3581.47**	**72%**	**35**	**133**	**pass**
4)	**1,1-Dichloroethane**	**5.086**	**5000**	**3777.78**	**76%**	**43**	**140**	**pass**
5)	**cis-1,2-Dichloroethene**	**6.088**	**5000**	**3869.72**	**77%**	**49**	**134**	**pass**
6)	**Chloroform**	**6.652**	**5000**	**4105.17**	**82%**	**56**	**132**	**pass**
11)	**Trichloroethene**	**8.575**	**5000**	**4238.25**	**85%**	**69**	**124**	**pass**
12)	Toluene-d8	10.487	5000	4345.87	87%	70	130	pass
15)	**Tetrachloroethene**	**11.432**	**5000**	**4449.34**	**89%**	**69**	**124**	**pass**

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102106.D
Acq On : 10 Feb 2021 10:50
InstName : AG5975C
Operator : TD
Sample : B21B045-BS1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 10 11:09:22 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

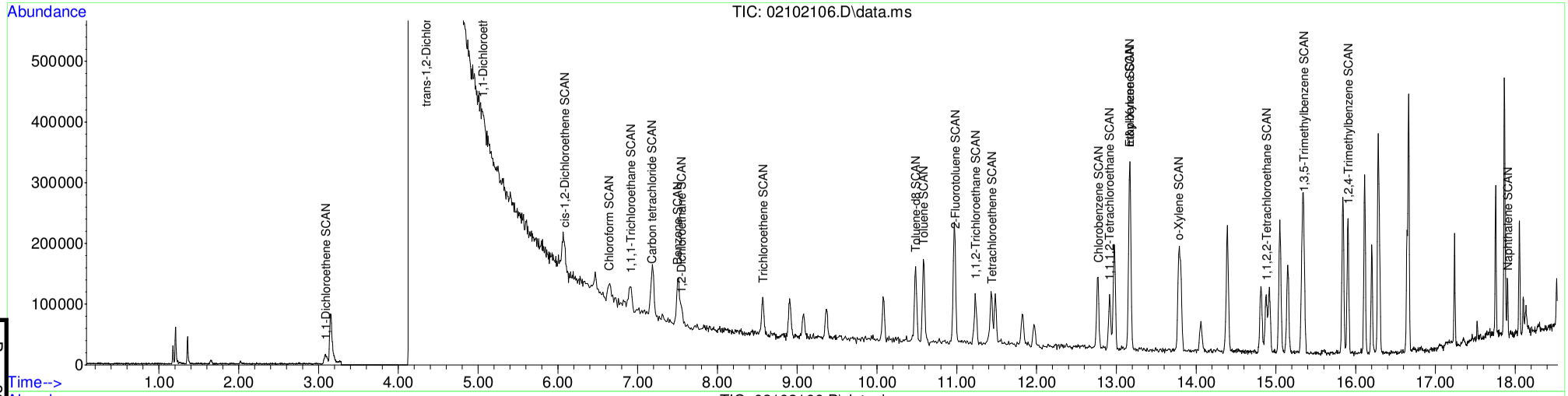
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	171585	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	144421	4345.87	ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.92%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.086	61	23407	3440.38	ug/L	80
3] trans-1,2-Dichloroethene	4.343	61	30719	3581.47	ug/L	98
4] 1,1-Dichloroethane	5.066	63	38701	3777.78	ug/L	95
5] cis-1,2-Dichloroethene	6.074	61	41058	3869.72	ug/L	98
6] Chloroform	6.640	83	41836	4105.17	ug/L	100
7] 1,1,1-Trichloroethane	6.907	97	48549	4434.72	ug/L	99
8] Carbon tetrachloride	7.175	117	46480	4440.87	ug/L	100
9] Benzene	7.503	78	113222	3921.39	ug/L	99
10] 1,2-Dichloroethane	7.540	62	42746	4339.81	ug/L	98
11] Trichloroethene	8.570	130	38636	4238.25	ug/L	98
13] Toluene	10.582	91	169719	4101.83	ug/L	99
14] 1,1,2-Trichloroethane	11.233	97	39827	4155.76	ug/L	99
15] Tetrachloroethene	11.432	166	57342	4449.34	ug/L	100
16] Chlorobenzene	12.765	112	124088	3871.17	ug/L	97
17] 1,1,1,2-Tetrachloroethane	12.916	131	49750	4434.50	ug/L	99
18] Ethylbenzene	12.972	91	231976	4389.46	ug/L	99
19] m&p-Xylene	13.163	91	350106	8602.78	ug/L	97
20] o-Xylene	13.782	91	171459	3922.50	ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.877	83	80037	3929.65	ug/L	100
22] 1,3,5-Trimethylbenzene	15.345	105	213226	4435.78	ug/L	96
23] 1,2,4-Trimethylbenzene	15.901	105	200683	4081.68	ug/L	96
24] Naphthalene	17.903	128	67801	851.14	ug/L	97
25) 2-Fluorotoluene SCAN	10.979	109	105006	5391.38	ug/L	100
26) 1,1-Dichloroethene SCAN	3.085	61	16586	3647.80	ug/L #	69
27) trans-1,2-Dichloroethe...	4.348	61	22169	3827.94	ug/L	78
28) 1,1-Dichloroethane SCAN	5.058	63	27472	4018.81	ug/L	94
29) cis-1,2-Dichloroethene...	6.080	61	29164	4339.81	ug/L #	73
30) Chloroform SCAN	6.638	83	26146	4171.37	ug/L	94
31) 1,1,1-Trichloroethane ...	6.918	97	34847	5387.61	ug/L #	43
32) Carbon tetrachloride SCAN	7.173	117	30752	5563.77	ug/L	87
33) Benzene SCAN	7.502	78	83363	4260.22	ug/L	95
34) 1,2-Dichloroethane SCAN	7.551	62	25406	4150.82	ug/L	74
35) Trichloroethene SCAN	8.568	130	21968	5148.64	ug/L	90
36) Toluene-d8 SCAN	10.486	98	89967	4925.11	ug/L	94
37) Toluene SCAN	10.581	91	106587	4739.13	ug/L	94
38) 1,1,2-Trichloroethane ...	11.231	97	24022	4261.17	ug/L	87
39) Tetrachloroethene SCAN	11.441	166	28862	5704.36	ug/L	92
40) Chlorobenzene SCAN	12.772	112	70070	4337.57	ug/L	89
41) 1,1,1,2-Tetrachloroeth...	12.915	131	28593	5130.40	ug/L	91
42) Ethylbenzene SCAN	13.169	91	222125	5182.56	ug/L	89
43) m&p-Xylene SCAN	13.169	91	222125	5182.56	ug/L	90
44) o-Xylene SCAN	13.781	91	105369	4502.18	ug/L	96
45) 1,1,2,2-Tetrachloroeth...	14.879	83	51622	4242.13	ug/L	99
46) 1,3,5-Trimethylbenzene...	15.349	105	127325	5156.79	ug/L	97
47) 1,2,4-Trimethylbenzene...	15.905	105	117389	4653.37	ug/L	94
48) Naphthalene SCAN	17.905	128	35409	935.13	ug/L	94

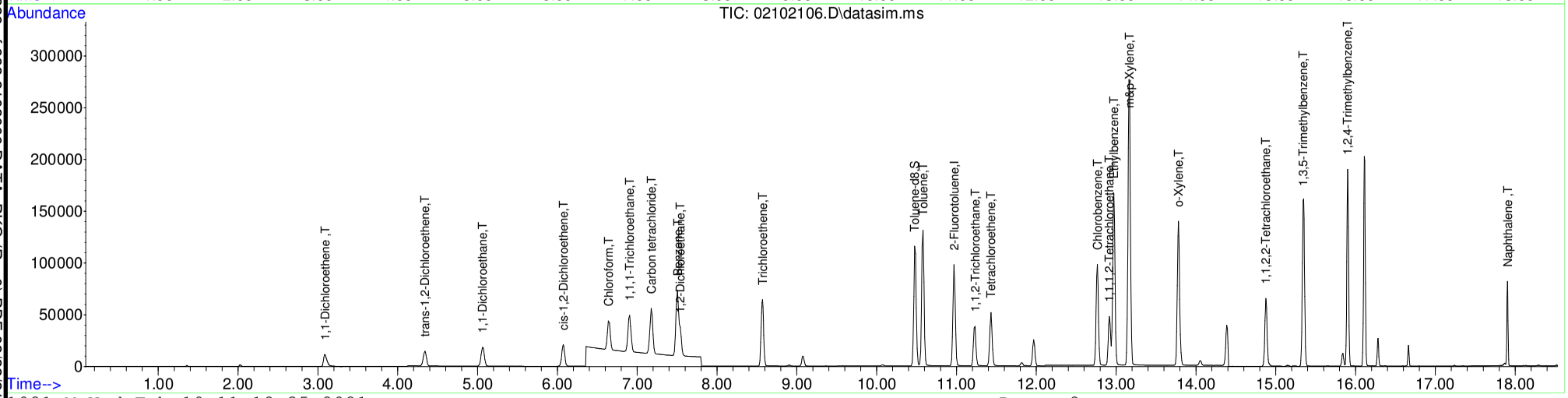
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102106.D
Acq On : 10 Feb 2021 10:50
InstName : AG5975C
Operator : TD
Sample : B21B045-BS1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 10 11:09:22 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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B21B045-BSD1

Sample Name: B21B045-BSD1
Misc Info: 0
Date Acquired: 2/10/2021
QLast Update: Tue Dec 08 06:26:34 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.980	5000	5000.00	100%	70	130	pass
2)	**1,1-Dichloroethene**	**3.090**	**5000**	**3290.78**	**66%**	**22**	**143**	**pass**
3)	**trans-1,2-Dichloroethene**	**4.376**	**5000**	**3539.04**	**71%**	**35**	**133**	**pass**
4)	**1,1-Dichloroethane**	**5.086**	**5000**	**3758.55**	**75%**	**43**	**140**	**pass**
5)	**cis-1,2-Dichloroethene**	**6.088**	**5000**	**3839.22**	**77%**	**49**	**134**	**pass**
6)	**Chloroform**	**6.652**	**5000**	**4095.40**	**82%**	**56**	**132**	**pass**
11)	**Trichloroethene**	**8.575**	**5000**	**4210.38**	**84%**	**69**	**124**	**pass**
12)	Toluene-d8	10.487	5000	4324.99	86%	70	130	pass
15)	**Tetrachloroethene**	**11.432**	**5000**	**4459.78**	**89%**	**69**	**124**	**pass**

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102107.D
Acq On : 10 Feb 2021 11:37
InstName : AG5975C
Operator : TD
Sample : B21B045-BSD1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 10 11:56:36 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

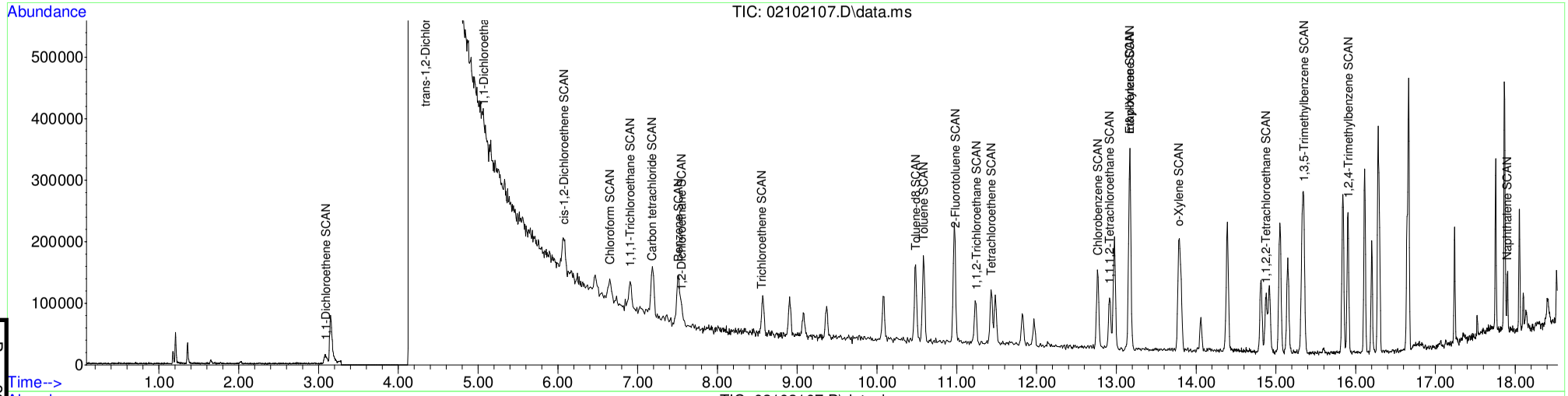
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	174473	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	146146	4324.99	ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.50%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.083	61	22766	3290.78	ug/L	81
3] trans-1,2-Dichloroethene	4.343	61	30866	3539.04	ug/L	97
4] 1,1-Dichloroethane	5.066	63	39152	3758.55	ug/L	95
5] cis-1,2-Dichloroethene	6.075	61	41420	3839.22	ug/L	98
6] Chloroform	6.640	83	42439	4095.40	ug/L	100
7] 1,1,1-Trichloroethane	6.907	97	49043	4405.69	ug/L	100
8] Carbon tetrachloride	7.175	117	46965	4412.93	ug/L	100
9] Benzene	7.503	78	113955	3881.45	ug/L	99
10] 1,2-Dichloroethane	7.540	62	43183	4311.61	ug/L	99
11] Trichloroethene	8.570	130	39028	4210.38	ug/L	97
13] Toluene	10.582	91	172158	4091.90	ug/L	99
14] 1,1,2-Trichloroethane	11.233	97	40496	4155.62	ug/L	99
15] Tetrachloroethene	11.432	166	58444	4459.78	ug/L	99
16] Chlorobenzene	12.765	112	126998	3896.37	ug/L	97
17] 1,1,1,2-Tetrachloroethane	12.916	131	51019	4472.33	ug/L	100
18] Ethylbenzene	12.972	91	237058	4411.37	ug/L	99
19] m&p-Xylene	13.163	91	358243	8657.01	ug/L	98
20] o-Xylene	13.782	91	175929	3958.14	ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.877	83	82572	3987.00	ug/L	100
22] 1,3,5-Trimethylbenzene	15.345	105	220794	4517.18	ug/L	97
23] 1,2,4-Trimethylbenzene	15.901	105	208605	4172.57	ug/L	96
24] Naphthalene	17.903	128	74098	914.80	ug/L	96
25) 2-Fluorotoluene SCAN	10.979	109	98106	4953.73	ug/L	94
26) 1,1-Dichloroethene SCAN	3.089	61	15996	3459.80	ug/L #	32
27) trans-1,2-Dichloroethe...	4.342	61	20631	3503.40	ug/L	81
28) 1,1-Dichloroethane SCAN	5.071	63	27485	3954.16	ug/L	90
29) cis-1,2-Dichloroethene...	6.073	61	29385	4300.32	ug/L #	72
30) Chloroform SCAN	6.651	83	34493	5411.97	ug/L	89
31) 1,1,1-Trichloroethane ...	6.906	97	34585	5258.60	ug/L	87
32) Carbon tetrachloride SCAN	7.174	117	30944	5505.84	ug/L	93
33) Benzene SCAN	7.514	78	76724	3856.03	ug/L	91
34) 1,2-Dichloroethane SCAN	7.551	62	32999	5302.12	ug/L	85
35) Trichloroethene SCAN	8.557	130	22889	5275.70	ug/L	89
36) Toluene-d8 SCAN	10.486	98	96095	5173.51	ug/L	93
37) Toluene SCAN	10.581	91	113366	4957.10	ug/L	93
38) 1,1,2-Trichloroethane ...	11.242	97	25183	4393.18	ug/L	92
39) Tetrachloroethene SCAN	11.431	166	29584	5750.28	ug/L	93
40) Chlorobenzene SCAN	12.764	112	75364	4588.06	ug/L	88
41) 1,1,1,2-Tetrachloroeth...	12.915	131	28379	5007.71	ug/L	94
42) Ethylbenzene SCAN	13.169	91	221817	5089.71	ug/L	94
43) m&p-Xylene SCAN	13.169	91	221817	5089.71	ug/L	95
44) o-Xylene SCAN	13.781	91	112252	4716.88	ug/L	95
45) 1,1,2,2-Tetrachloroeth...	14.872	83	56376	4556.11	ug/L	95
46) 1,3,5-Trimethylbenzene...	15.349	105	136000	5416.96	ug/L	97
47) 1,2,4-Trimethylbenzene...	15.905	105	122003	4756.22	ug/L	95
48) Naphthalene SCAN	17.901	128	40686	1056.70	ug/L	99

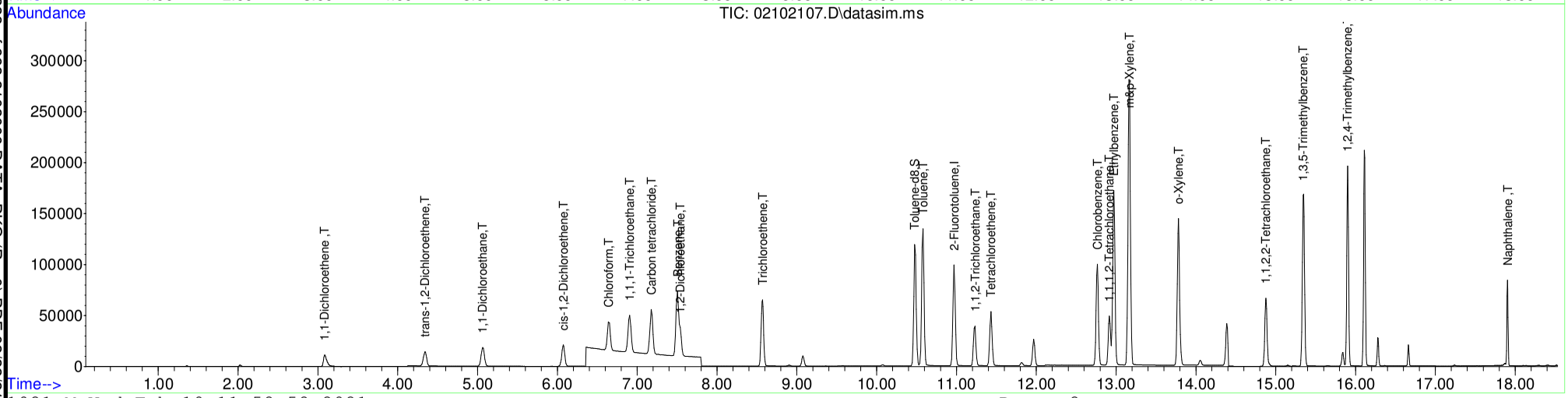
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102107.D
Acq On : 10 Feb 2021 11:37
InstName : AG5975C
Operator : TD
Sample : B21B045-BSD1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 10 11:56:36 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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B21B045-MRL1

Quantitation Report (Not Reviewed)

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Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102108.D
Acq On : 10 Feb 2021 12:01
InstName : AG5975C
Operator : TD
Sample : B21B045-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 10 12:20:10 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

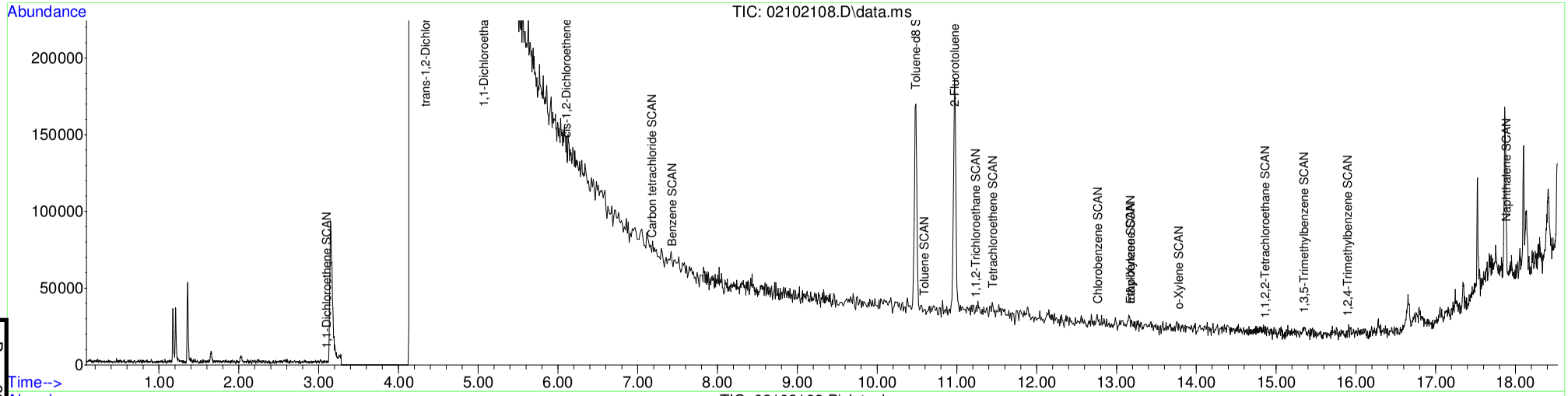
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	193222	5000.00	ug/L	-0.01
System Monitoring Compounds						
12) Toluene-d8	10.477	98	161764	4322.66	ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.45%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.093	61	577	75.31	ug/L #	59
3] trans-1,2-Dichloroethene	4.356	61	329	34.06	ug/L	82
4] 1,1-Dichloroethane	5.079	63	417	36.15	ug/L	77
5] cis-1,2-Dichloroethene	6.081	61	426	35.65	ug/L	98
6] Chloroform	6.652	83	482	42.00	ug/L	94
7] 1,1,1-Trichloroethane	6.907	97	511	41.45	ug/L	96
8] Carbon tetrachloride	7.175	117	506	42.93	ug/L	97
9] Benzene	7.503	78	3437	105.71	ug/L	77
10] 1,2-Dichloroethane	7.539	62	464	41.83	ug/L #	37
11] Trichloroethene	8.564	130	427	41.60	ug/L	94
13] Toluene	10.582	91	2162	46.40	ug/L	95
14] 1,1,2-Trichloroethane	11.232	97	467	43.27	ug/L	90
15] Tetrachloroethene	11.432	166	622	42.86	ug/L	94
16] Chlorobenzene	12.765	112	1458	40.39	ug/L	87
17] 1,1,1,2-Tetrachloroethane	12.916	131	531	42.03	ug/L	100
18] Ethylbenzene	12.972	91	2783	46.76	ug/L	93
19] m&p-Xylene	13.162	91	5123	111.79	ug/L	97
20] o-Xylene	13.782	91	2209	44.88	ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.877	83	896	39.07	ug/L	96
22] 1,3,5-Trimethylbenzene	15.350	105	2354	43.49	ug/L	95
23] 1,2,4-Trimethylbenzene	15.901	105	2796	50.50	ug/L	89
24] Naphthalene	17.904	128	388	4.33	ug/L #	68
25) 2-Fluorotoluene SCAN	10.969	109	118834	5418.13	ug/L	94
26) 1,1-Dichloroethene SCAN	3.096	61	70	13.67	ug/L #	25
27) trans-1,2-Dichloroethe...	4.341	61	192	29.44	ug/L #	17
28) 1,1-Dichloroethane SCAN	5.071	63	173	22.47	ug/L #	75
29) cis-1,2-Dichloroethene...	6.100	61	192	25.37	ug/L #	1
32) Carbon tetrachloride SCAN	7.173	117	337	54.14	ug/L #	15
33) Benzene SCAN	7.429	78	20086	911.54	ug/L #	91
36) Toluene-d8 SCAN	10.486	98	100820	4901.20	ug/L	95
37) Toluene SCAN	10.591	91	1091	43.08	ug/L #	40
38) 1,1,2-Trichloroethane ...	11.231	97	360	56.71	ug/L #	35
39) Tetrachloroethene SCAN	11.441	166	298	52.30	ug/L #	20
40) Chlorobenzene SCAN	12.764	112	1389	76.36	ug/L	79
42) Ethylbenzene SCAN	13.169	91	3043	63.05	ug/L	68
43) m&p-Xylene SCAN	13.169	91	3043	63.05	ug/L	72
44) o-Xylene SCAN	13.781	91	2515	95.43	ug/L	88
45) 1,1,2,2-Tetrachloroeth...	14.864	83	148	10.80	ug/L #	26
46) 1,3,5-Trimethylbenzene...	15.353	105	2524	90.78	ug/L	87
47) 1,2,4-Trimethylbenzene...	15.899	105	2077	73.11	ug/L #	94
48) Naphthalene SCAN	17.888	128	275	6.45	ug/L #	68

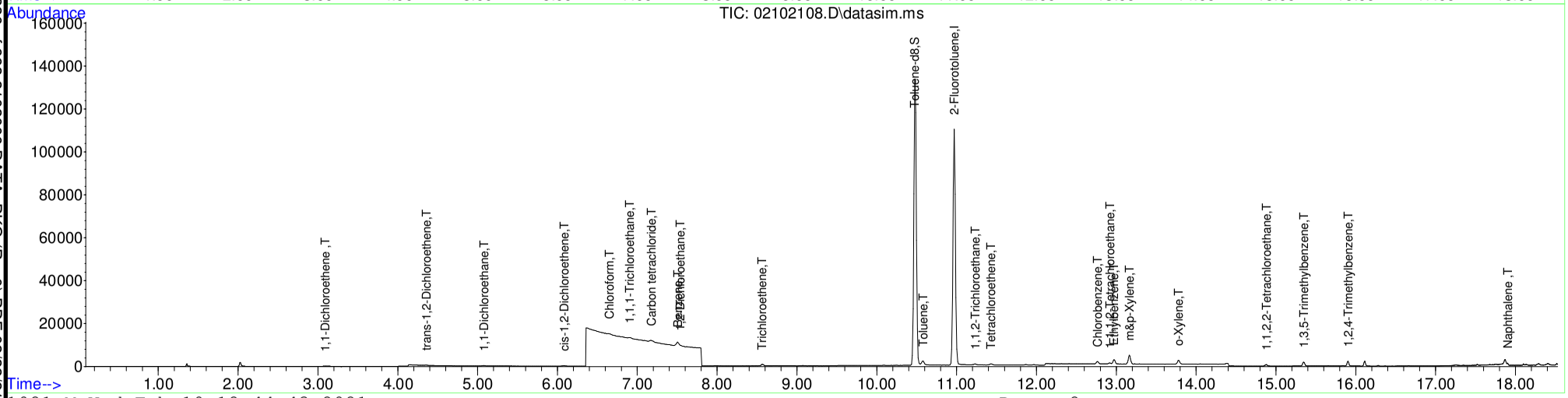
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102108.D
Acq On : 10 Feb 2021 12:01
InstName : AG5975C
Operator : TD
Sample : B21B045-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 10 12:20:10 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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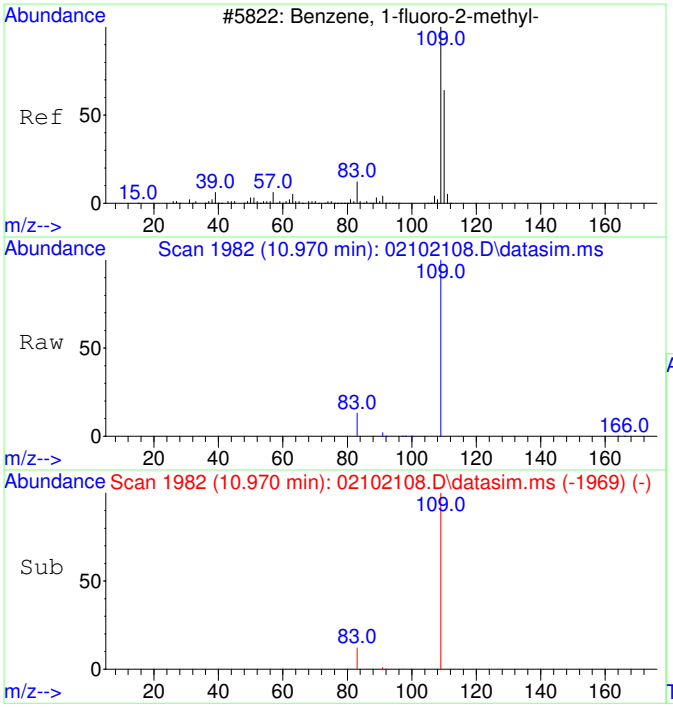
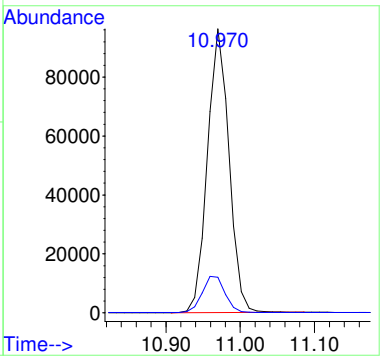
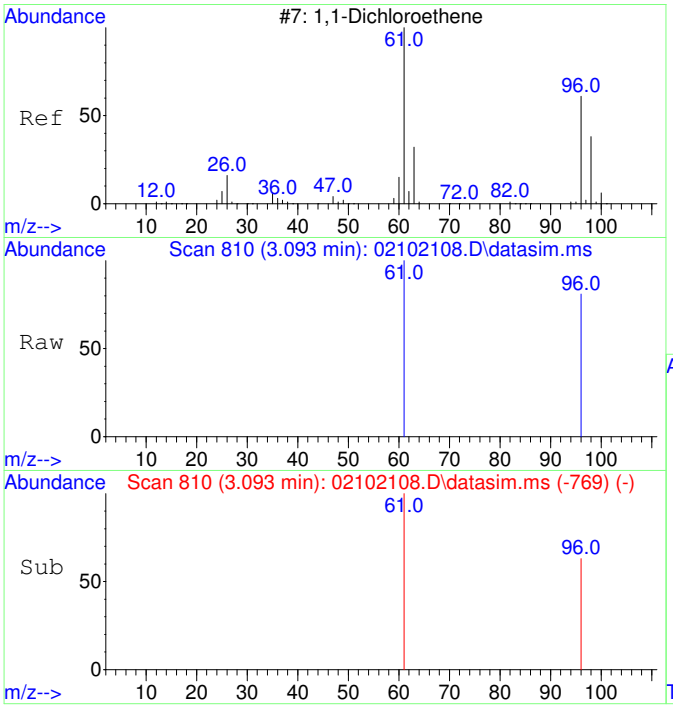


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:109 Resp: 193222

Ion	Ratio	Lower	Upper
109	100		
83	13.6	0.0	42.3

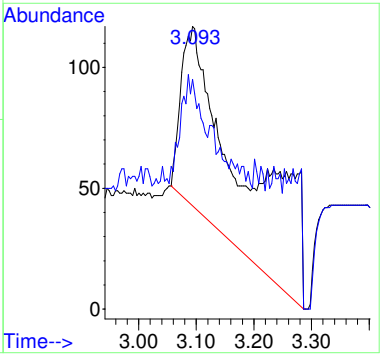




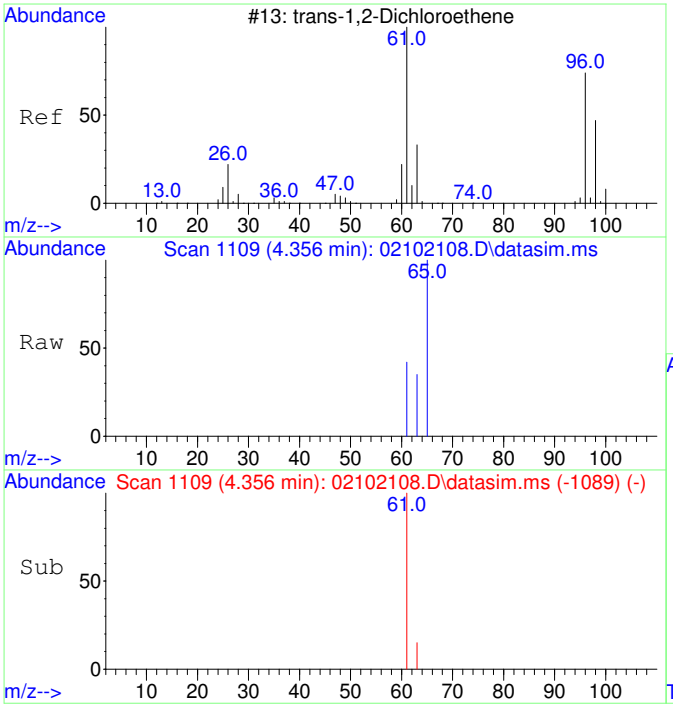
#2
1,1-Dichloroethene
Concen: 75.31 ug/L
RT: 3.093 min Scan# 810
Delta R.T. 0.004 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 61 Resp: 577

Ion	Ratio	Lower	Upper
61	100		
96	34.0	37.2	97.2#



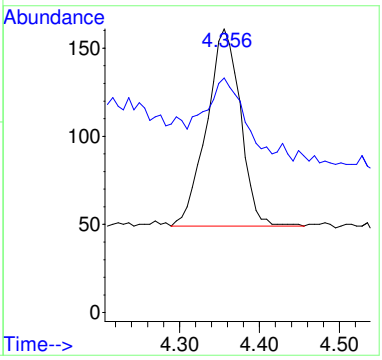
Before MI:
IMPROPER
BASELINE

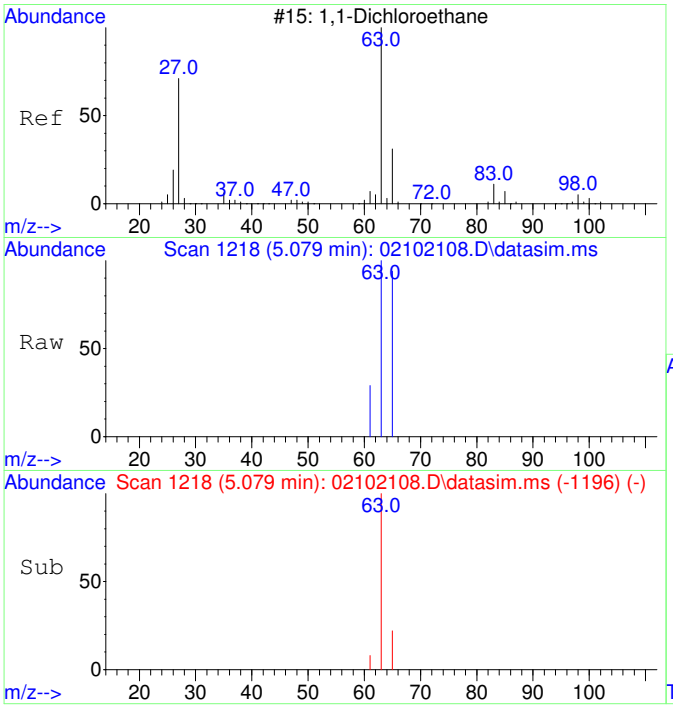


#3
trans-1,2-Dichloroethene
Concen: 34.06 ug/L
RT: 4.356 min Scan# 1109
Delta R.T. -0.020 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 61 Resp: 329

Ion	Ratio	Lower	Upper
61	100		
63	42.6	2.4	62.4

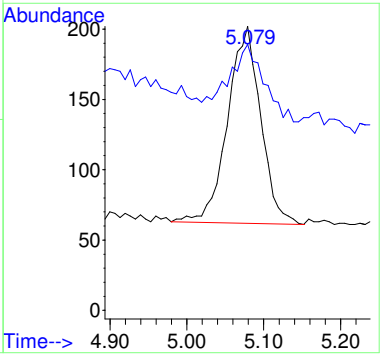


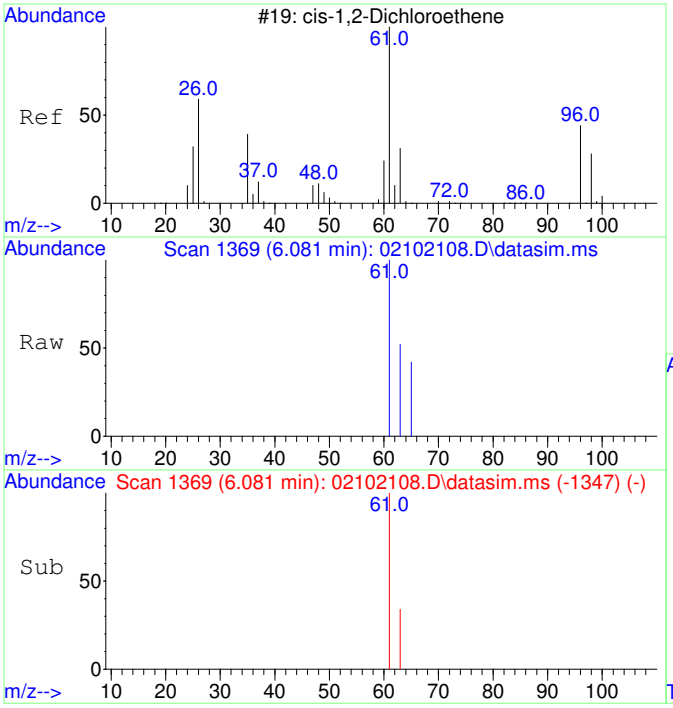


#4
1,1-Dichloroethane
Concen: 36.15 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.007 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 63 Resp: 417

Ion	Ratio	Lower	Upper
63	100		
65	44.6	1.8	61.8

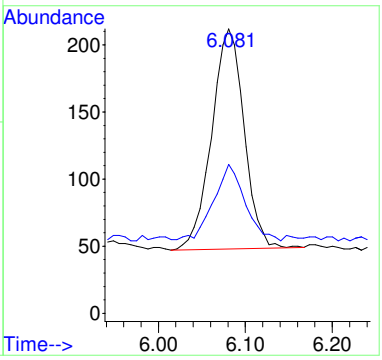


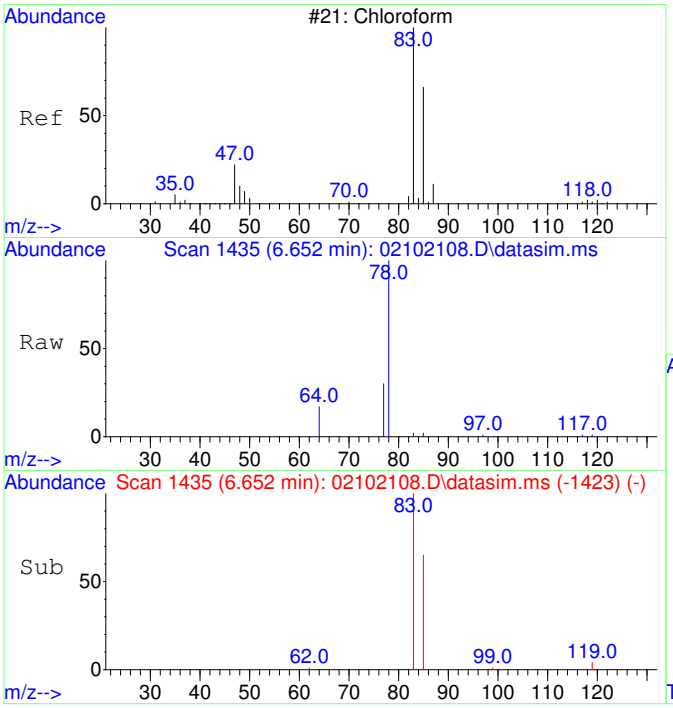


#5
cis-1,2-Dichloroethene
Concen: 35.65 ug/L
RT: 6.081 min Scan# 1369
Delta R.T. -0.007 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 61 Resp: 426

Ion	Ratio	Lower	Upper
61	100		
63	33.6	2.5	62.5

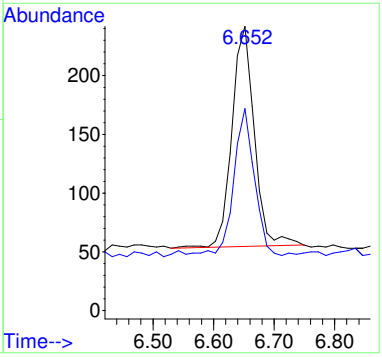


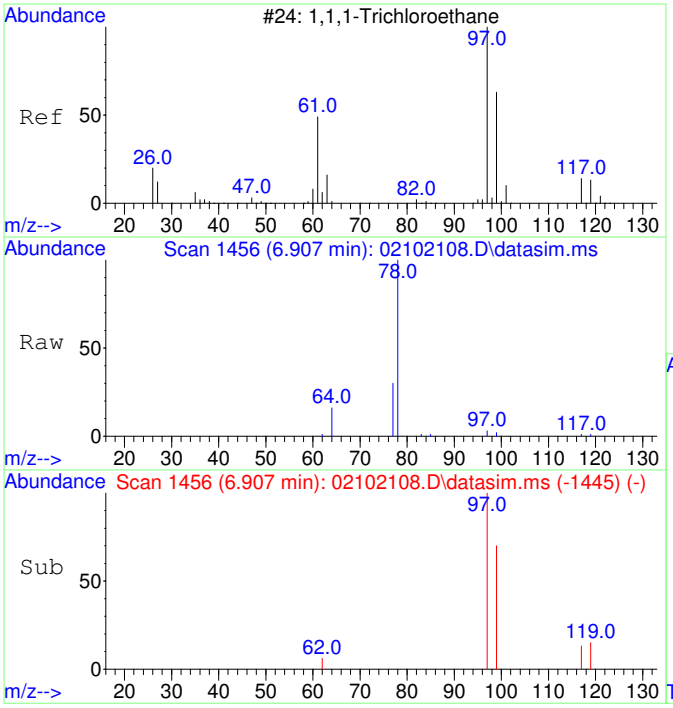


#6
Chloroform
Concen: 42.00 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 83 Resp: 482

Ion	Ratio	Lower	Upper
83	100		
85	60.4	35.1	95.1

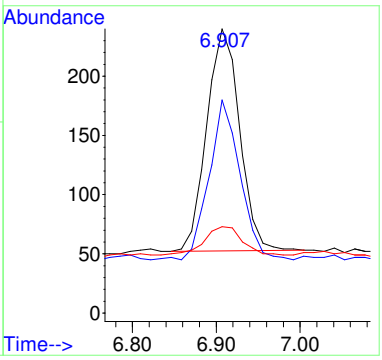


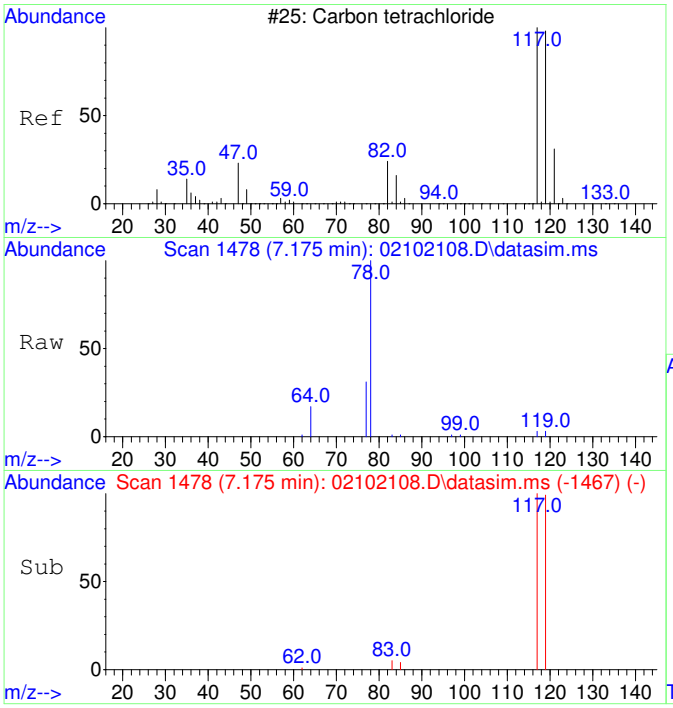


#7
1,1,1-Trichloroethane
Concen: 41.45 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 97 Resp: 511

Ion	Ratio	Lower	Upper
97	100		
99	67.9	34.6	94.6
117	14.5	0.0	43.2

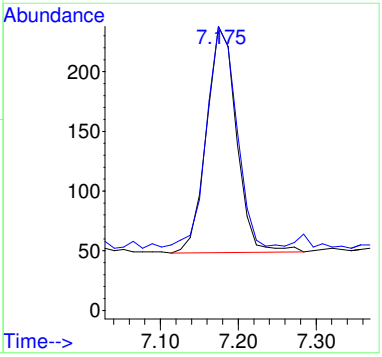


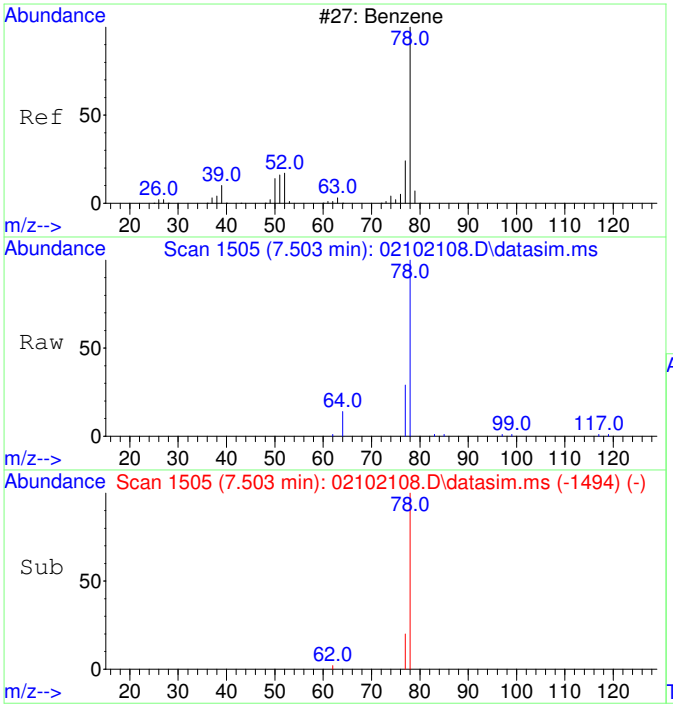


#8
Carbon tetrachloride
Concen: 42.93 ug/L
RT: 7.175 min Scan# 1478
Delta R.T. -0.012 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:117 Resp: 506

Ion	Ratio	Lower	Upper
117	100		
119	99.8	66.4	126.4

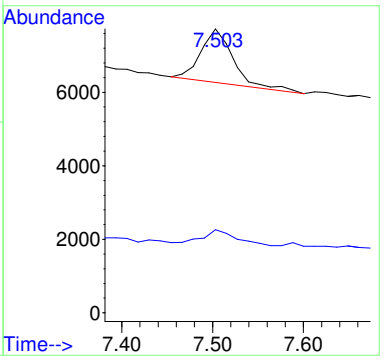


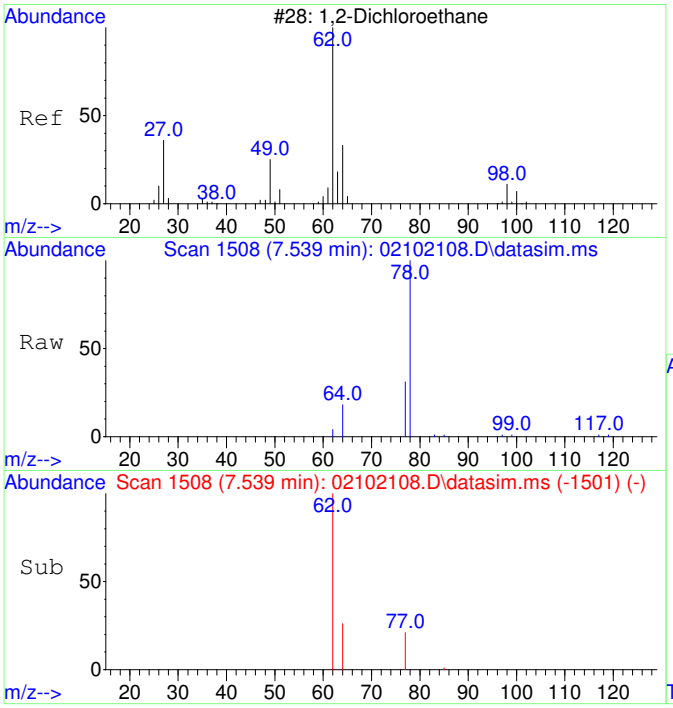


#9
Benzene
Concen: 105.71 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 78 Resp: 3437

Ion	Ratio	Lower	Upper
78	100		
77	34.6	0.0	53.2

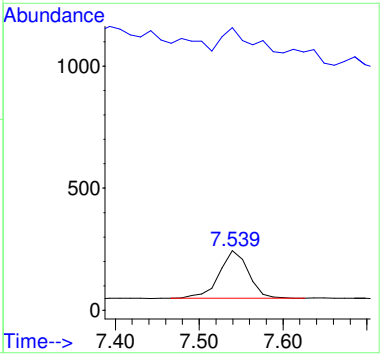


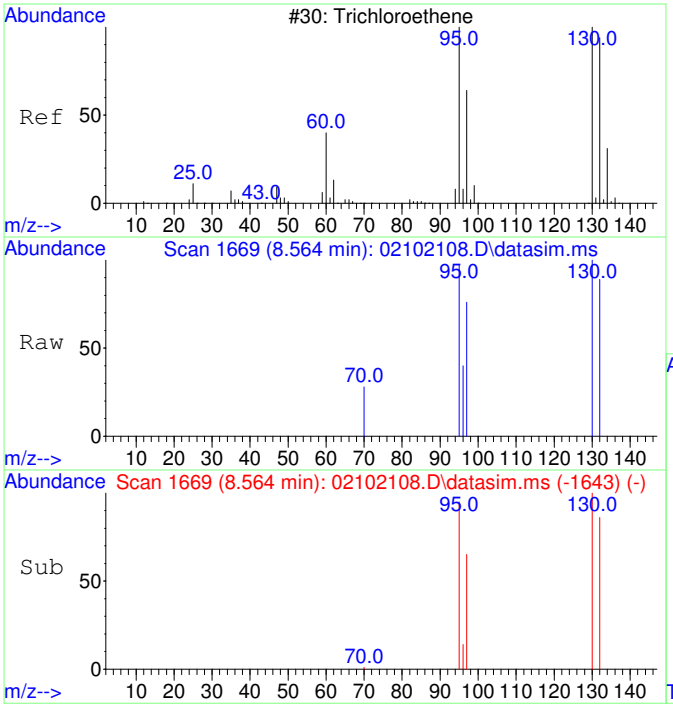


#10
1,2-Dichloroethane
Concen: 41.83 ug/L
RT: 7.539 min Scan# 1508
Delta R.T. -0.012 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 62 Resp: 464

Ion	Ratio	Lower	Upper
62	100		
64	67.7	2.3	62.3#

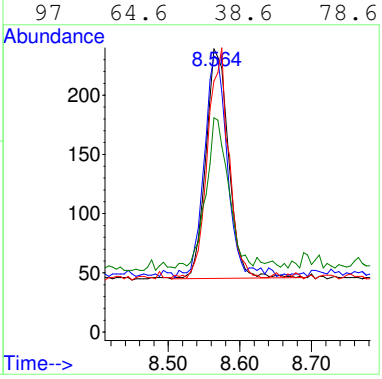


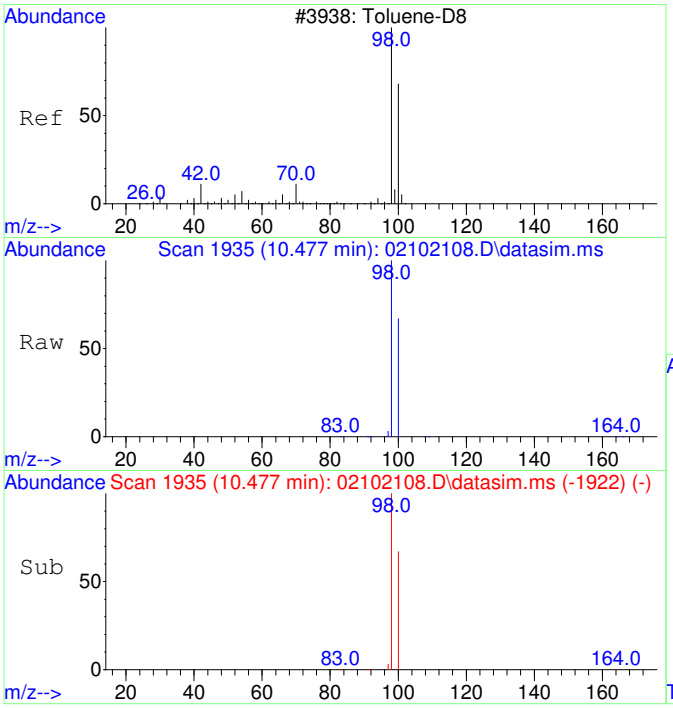


#11
Trichloroethene
Concen: 41.60 ug/L
RT: 8.564 min Scan# 1669
Delta R.T. -0.011 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:130 Resp: 427

Ion	Ratio	Lower	Upper
130	100		
95	96.7	60.7	120.7
132	91.1	76.0	116.0
97	64.6	38.6	78.6

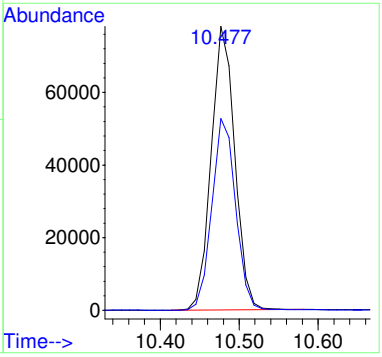


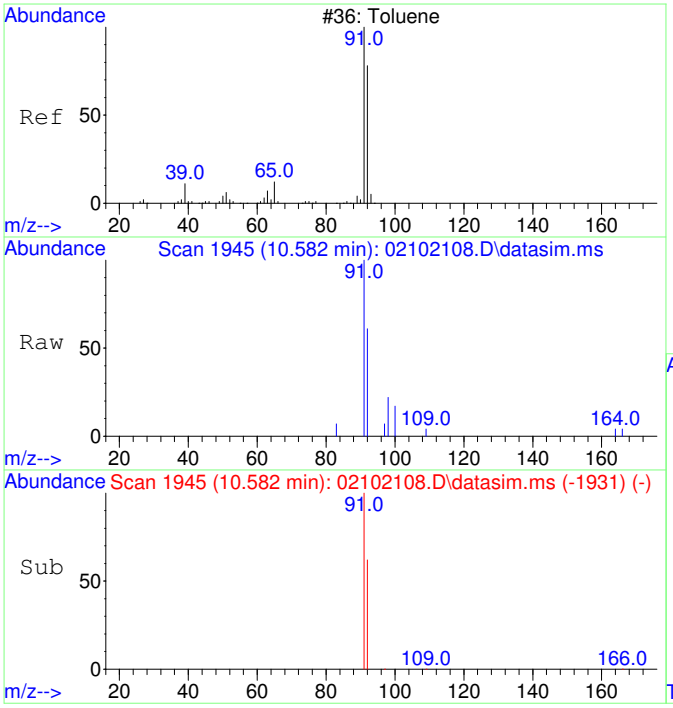


#12
Toluene-d8
Concen: 4322.66 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.011 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 98 Resp: 161764

Ion	Ratio	Lower	Upper
98	100		
100	67.8	37.1	97.1

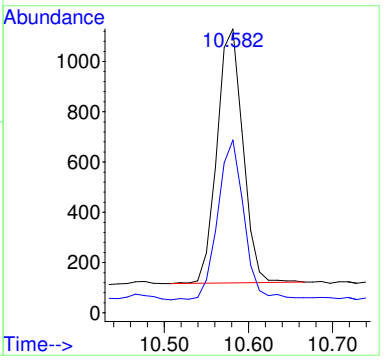


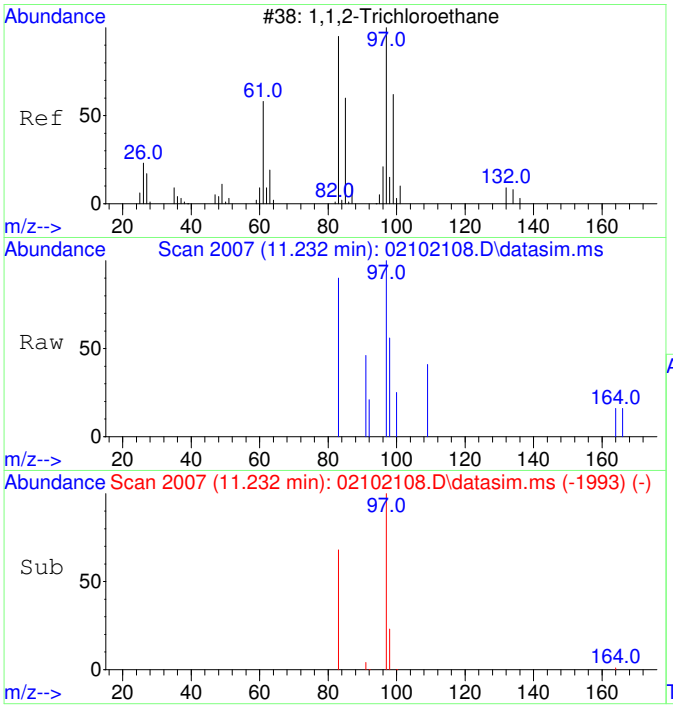


#13
Toluene
Concen: 46.40 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 2162

Ion	Ratio	Lower	Upper
91	100		
92	63.7	29.9	89.9

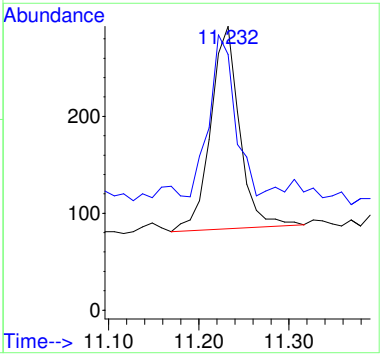


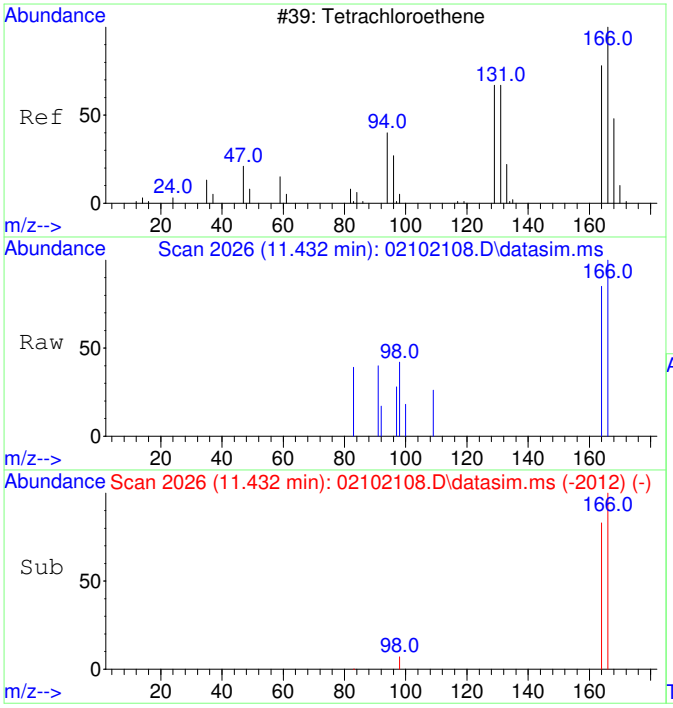


#14
1,1,2-Trichloroethane
Concen: 43.27 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 97 Resp: 467

Ion	Ratio	Lower	Upper
97	100		
83	71.9	51.2	111.2

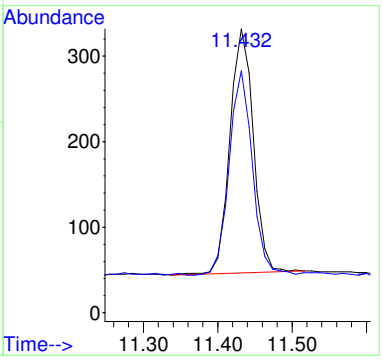


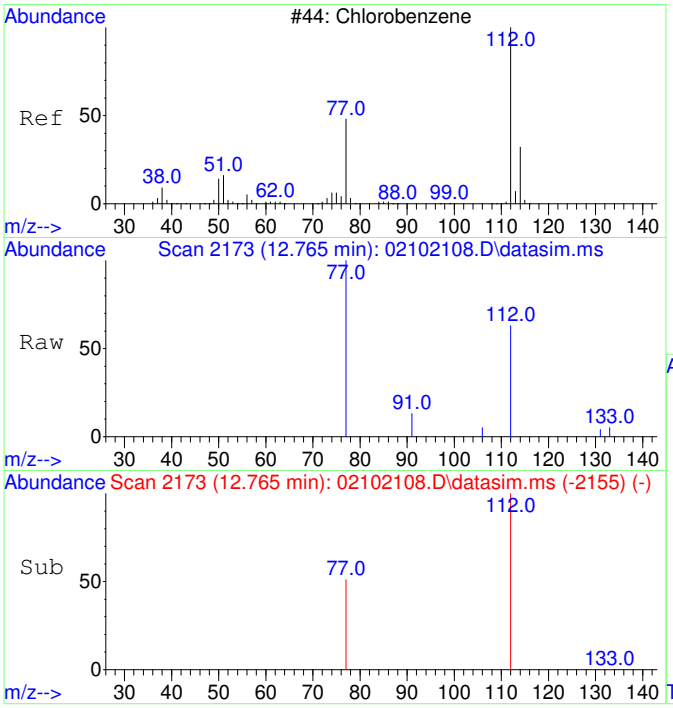


#15
Tetrachloroethene
Concen: 42.86 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:166 Resp: 622

Ion	Ratio	Lower	Upper
166	100		
164	82.6	47.8	107.8

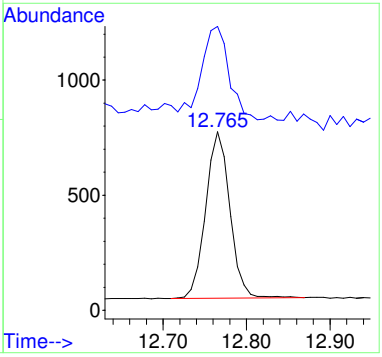


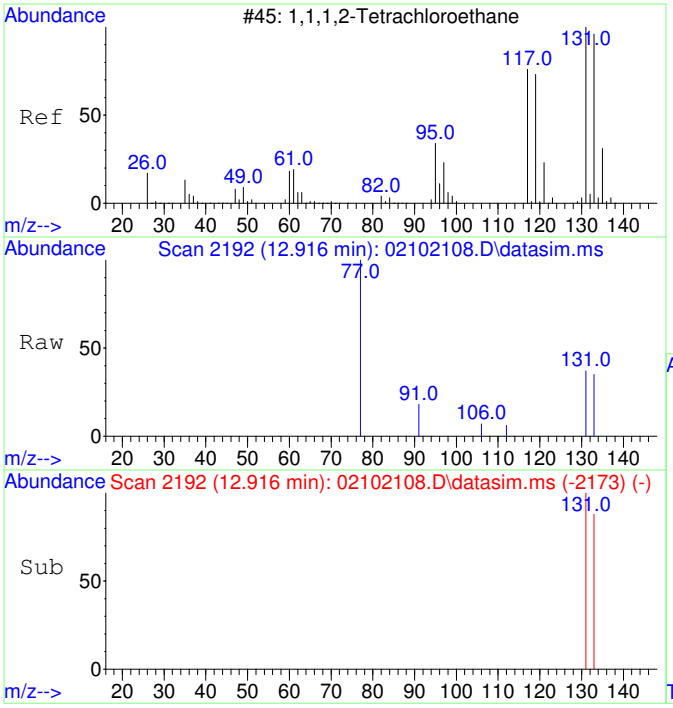


#16
Chlorobenzene
Concen: 40.39 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:112 Resp: 1458

Ion	Ratio	Lower	Upper
112	100		
77	62.8	23.6	83.6

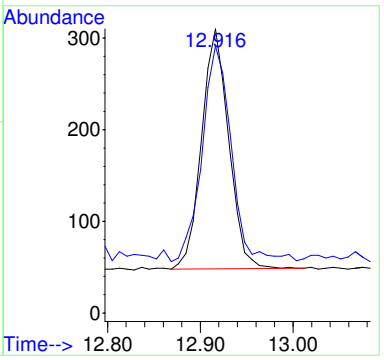


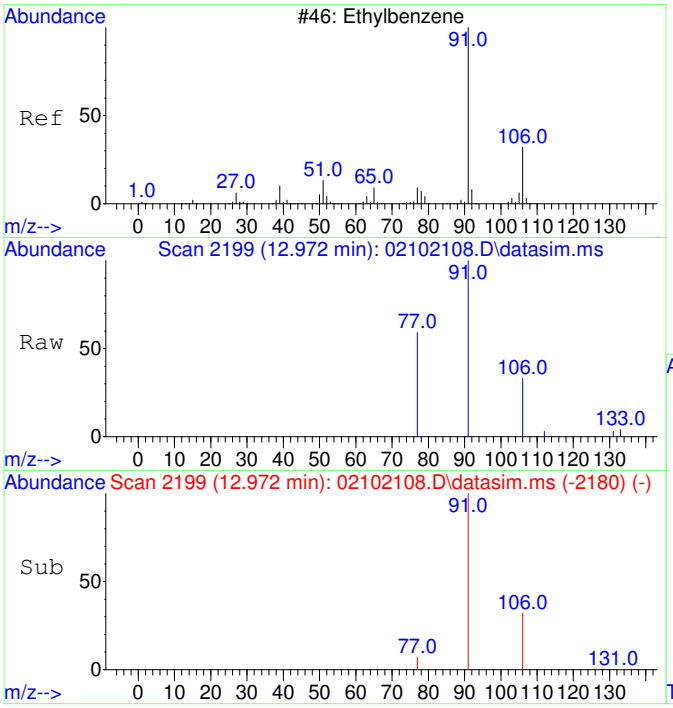


#17
1,1,1,2-Tetrachloroethane
Concen: 42.03 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:131 Resp: 531

Ion	Ratio	Lower	Upper
131	100		
133	96.4	66.3	126.3

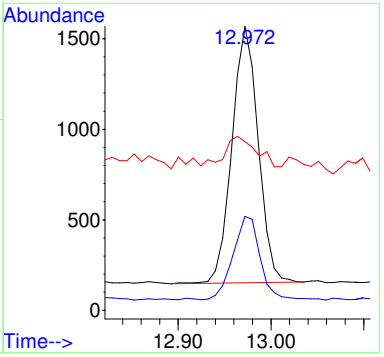


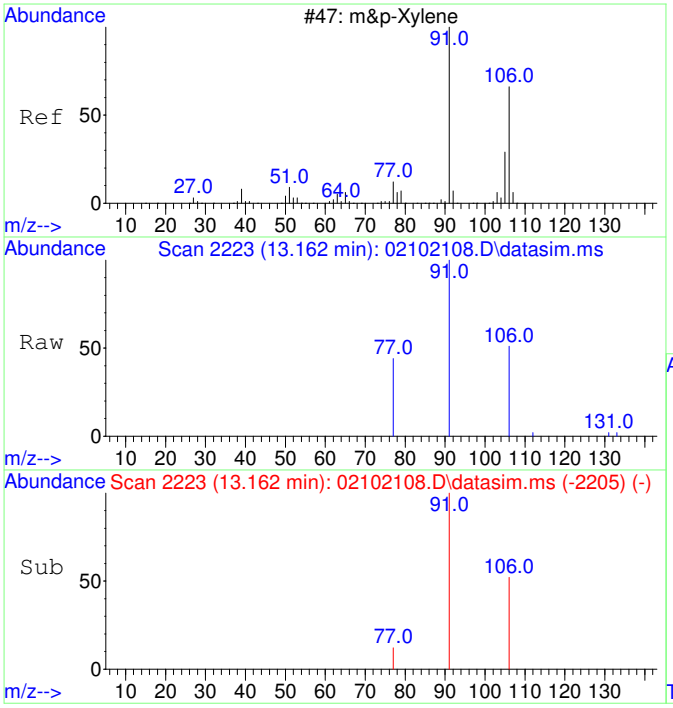


#18
Ethylbenzene
Concen: 46.76 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 2783

Ion	Ratio	Lower	Upper
91	100		
106	33.8	3.0	63.0
77	18.8	0.0	38.2

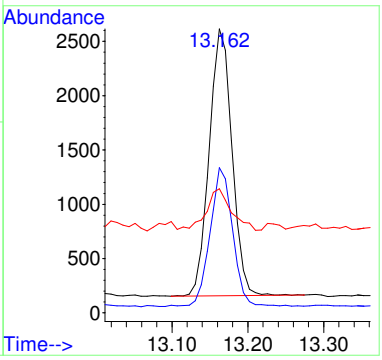


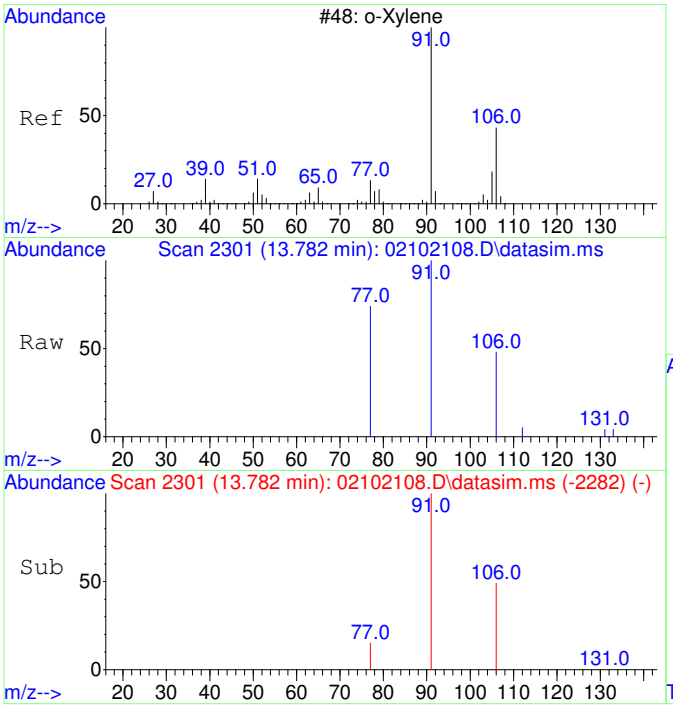


#19
m&p-Xylene
Concen: 111.79 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 5123

Ion	Ratio	Lower	Upper
91	100		
106	51.6	22.2	82.2
77	16.6	0.0	42.4

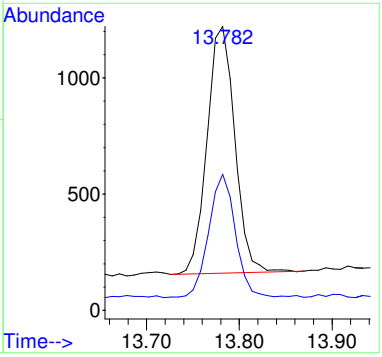


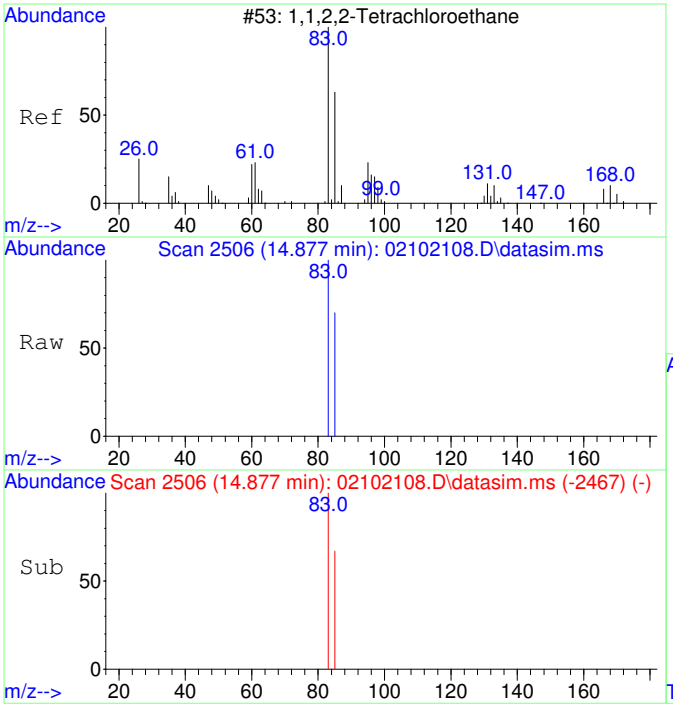


#20
o-Xylene
Concen: 44.88 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 2209

Ion	Ratio	Lower	Upper
91	100		
106	47.3	19.2	79.2

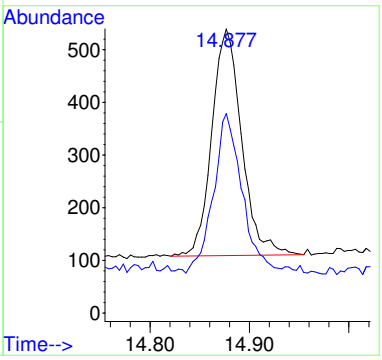


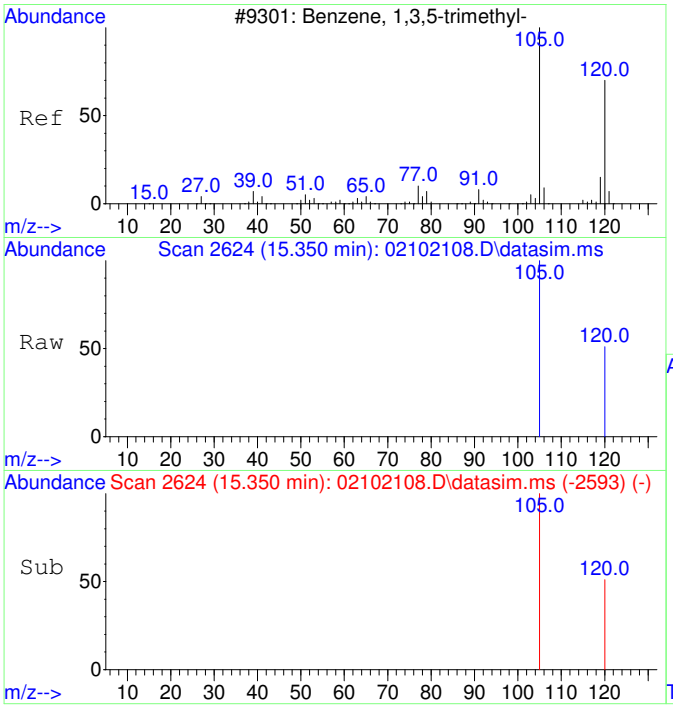


#21
1,1,2,2-Tetrachloroethane
Concen: 39.07 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. -0.004 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 83 Resp: 896

Ion	Ratio	Lower	Upper
83	100		
85	67.9	34.8	94.8

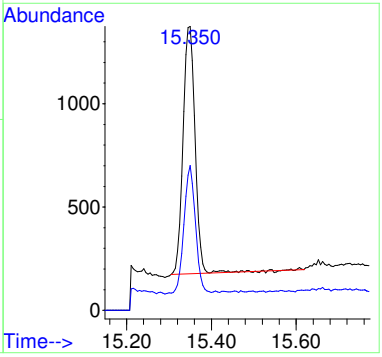


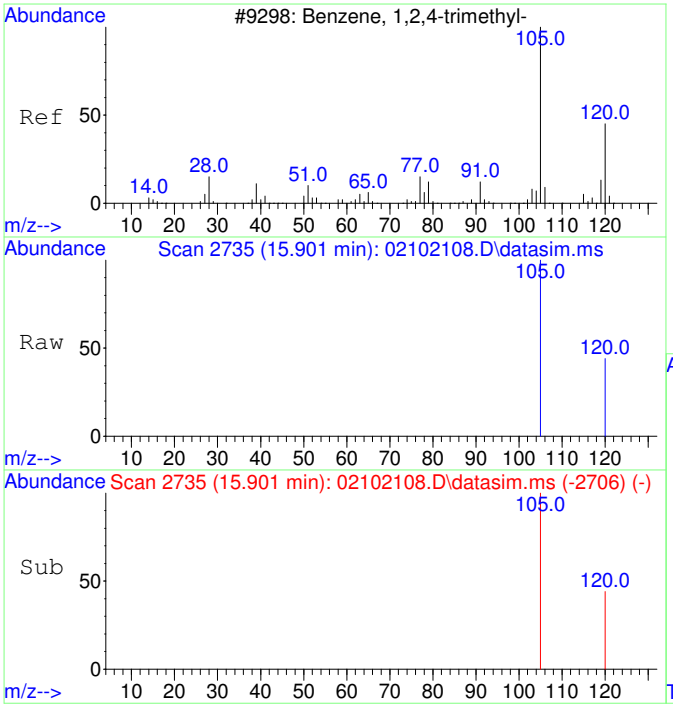


#22
1,3,5-Trimethylbenzene
Concen: 43.49 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:105 Resp: 2354

Ion	Ratio	Lower	Upper
105	100		
120	47.6	21.1	81.1

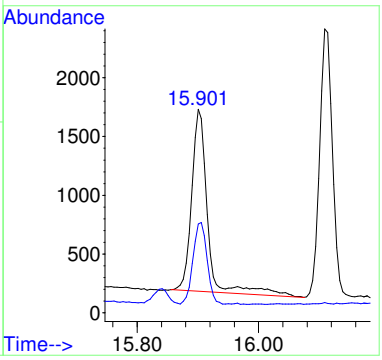


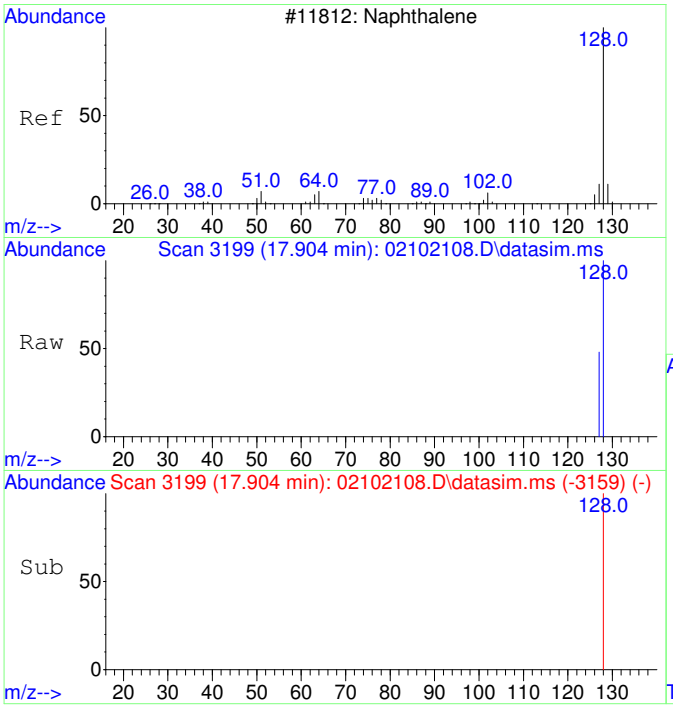


#23
1,2,4-Trimethylbenzene
Concen: 50.50 ug/L
RT: 15.901 min Scan# 2735
Delta R.T. -0.005 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:105 Resp: 2796

Ion	Ratio	Lower	Upper
105	100		
120	39.9	17.2	77.2

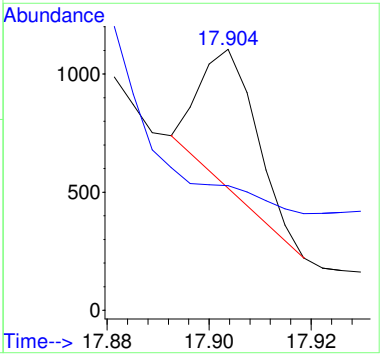


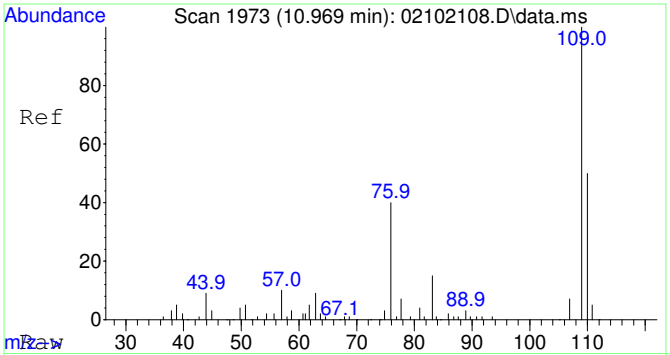


#24
Naphthalene
Concen: 4.33 ug/L
RT: 17.904 min Scan# 3199
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:128 Resp: 388

Ion	Ratio	Lower	Upper
128	100		
127	0.0	0.0	42.5

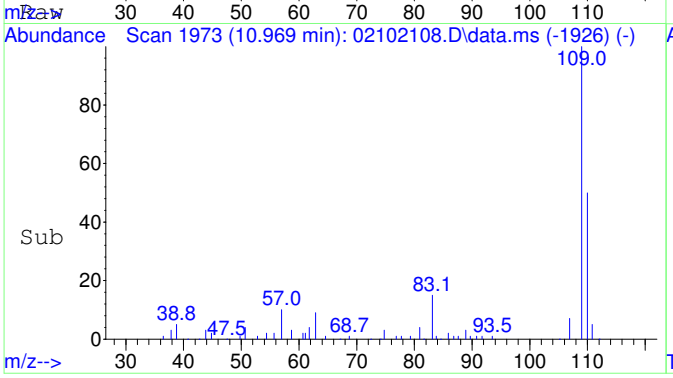


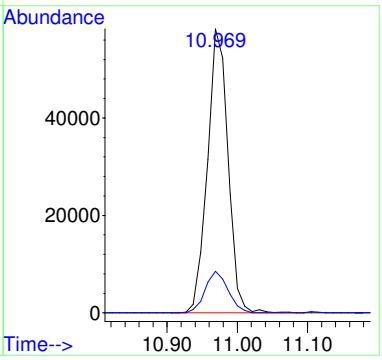


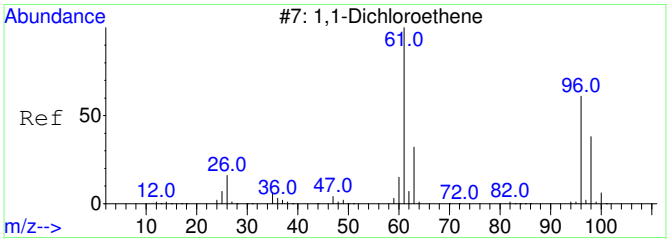
#25
2-Fluorotoluene SCAN
Concen: 5418.13 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:109 Resp: 118834

Ion	Ratio	Lower	Upper
109	100		
83	16.2	0.0	43.8



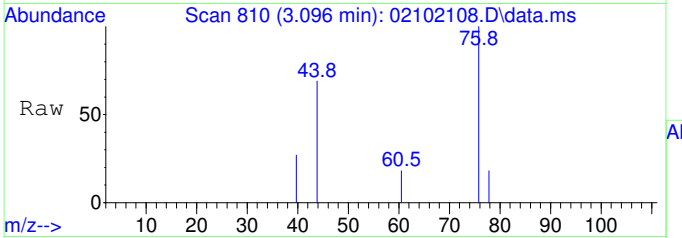


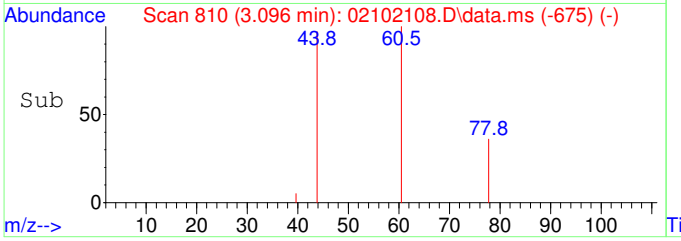


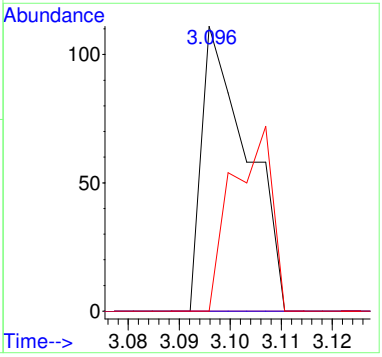
#26
1,1-Dichloroethene SCAN
Concen: 13.67 ug/L
RT: 3.096 min Scan# 810
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

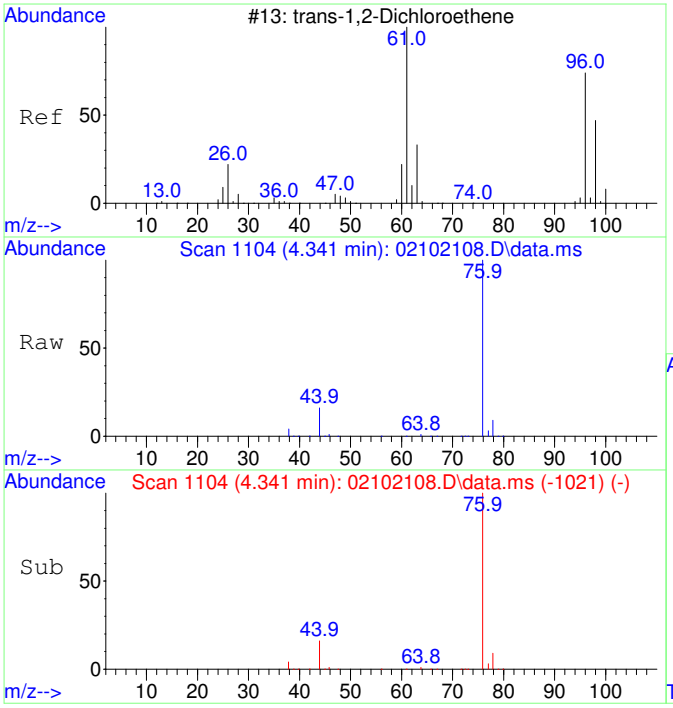
Tgt Ion: 61 Resp: 70

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





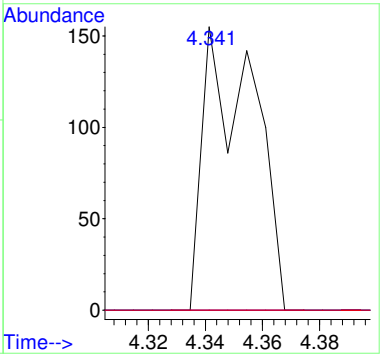


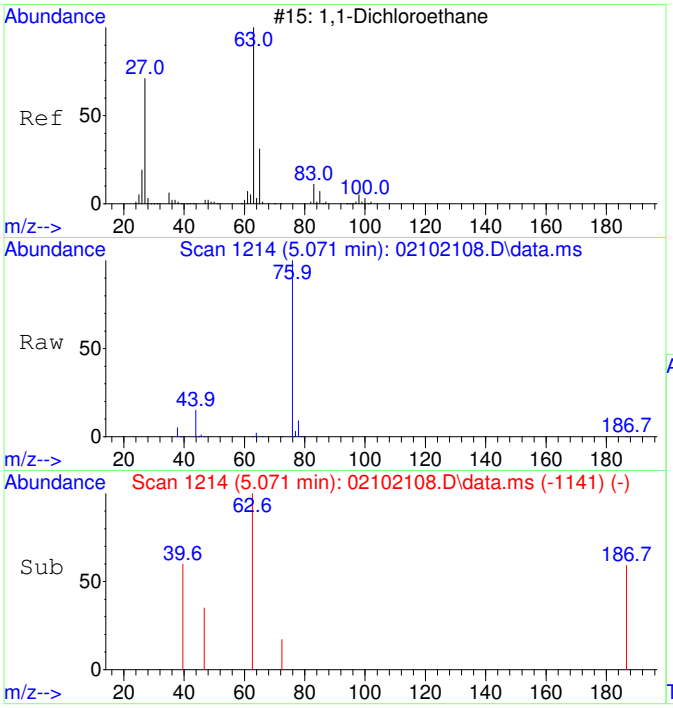


#27
trans-1,2-Dichloroethene SCAN
Concen: 29.44 ug/L
RT: 4.341 min Scan# 1104
Delta R.T. -0.040 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 61 Resp: 192

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

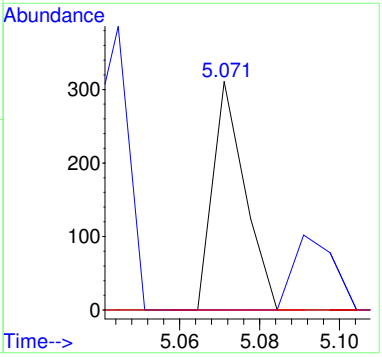


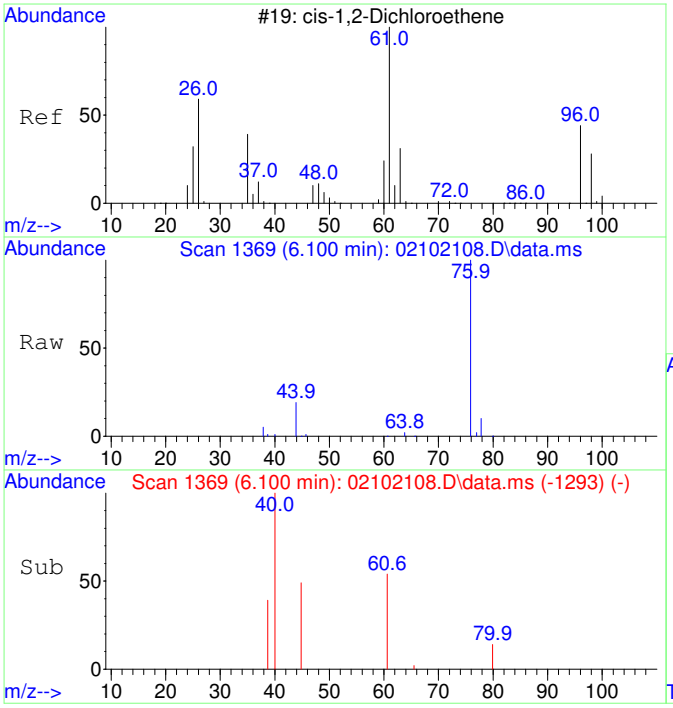


#28
1,1-Dichloroethane SCAN
Concen: 22.47 ug/L
RT: 5.071 min Scan# 1214
Delta R.T. -0.013 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 63 Resp: 173

Ion	Ratio	Lower	Upper
63	100		
65	41.6	1.3	61.3
83	0.0	0.0	45.9

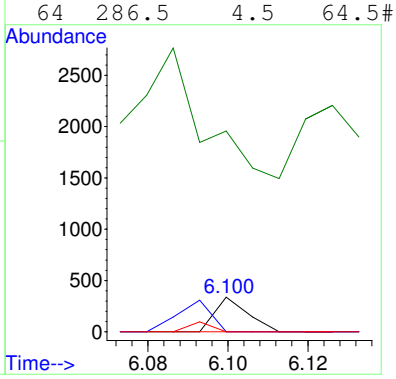


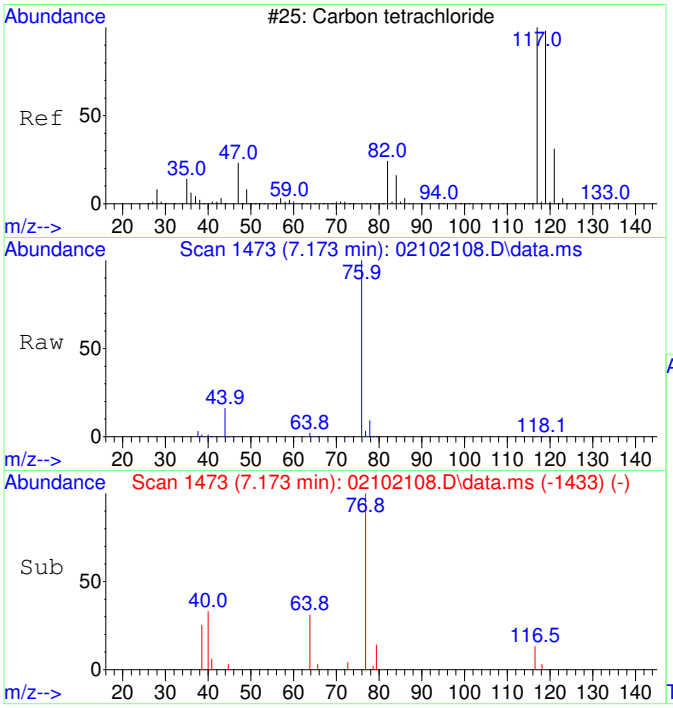


#29
cis-1,2-Dichloroethene SCAN
Concen: 25.37 ug/L
RT: 6.100 min Scan# 1369
Delta R.T. 0.007 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 61 Resp: 192

Ion	Ratio	Lower	Upper
61	100		
96	93.8	39.9	99.9
98	0.0	13.5	73.5#
64	286.5	4.5	64.5#

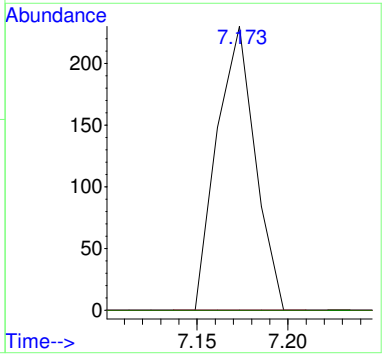


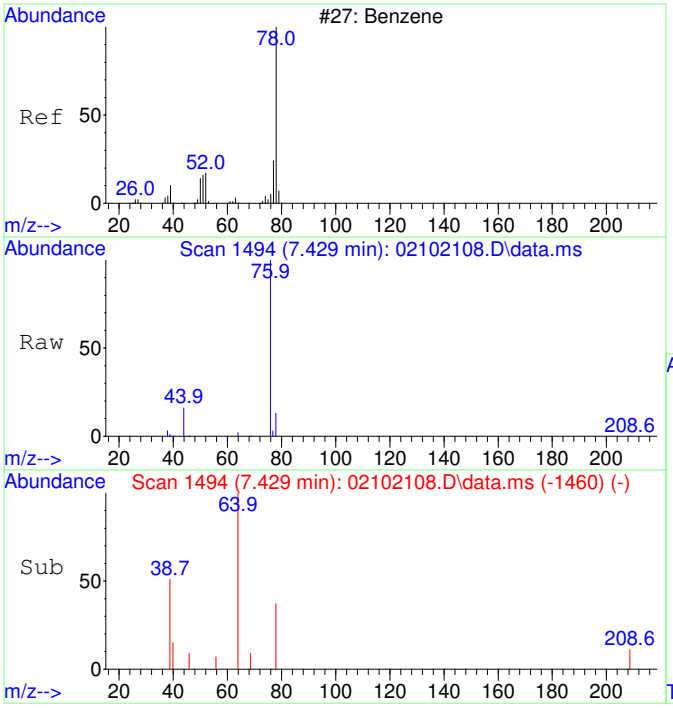


#32
Carbon tetrachloride SCAN
Concen: 54.14 ug/L
RT: 7.173 min Scan# 1473
Delta R.T. -0.012 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:117 Resp: 337

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

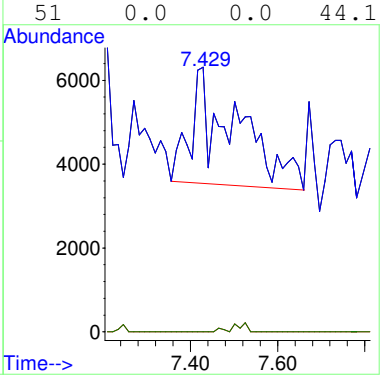


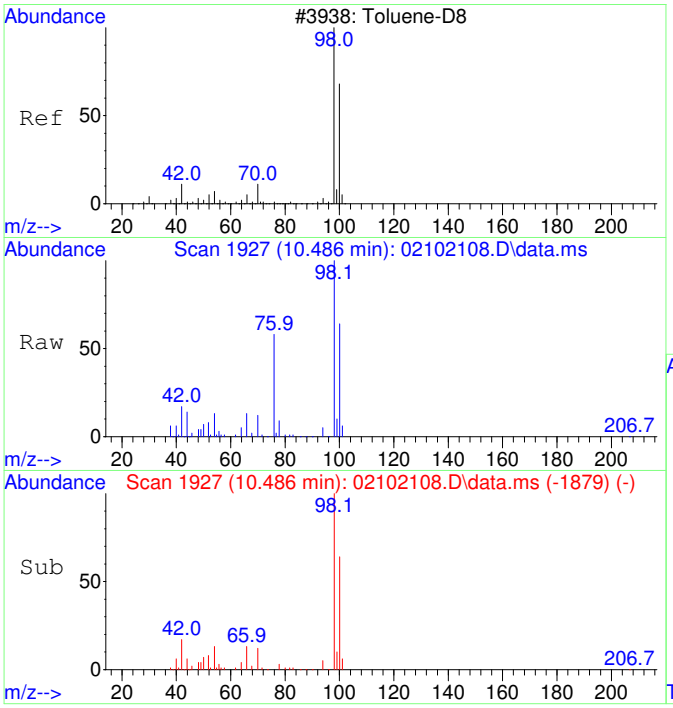


#33
Benzene SCAN
Concen: 911.54 ug/L
RT: 7.429 min Scan# 1494
Delta R.T. -0.085 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 78 Resp: 20086

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

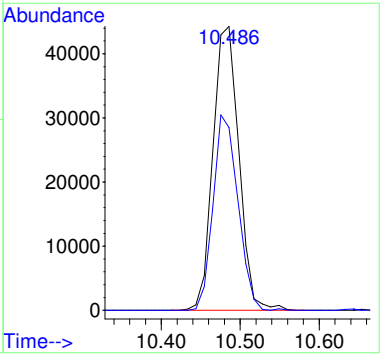


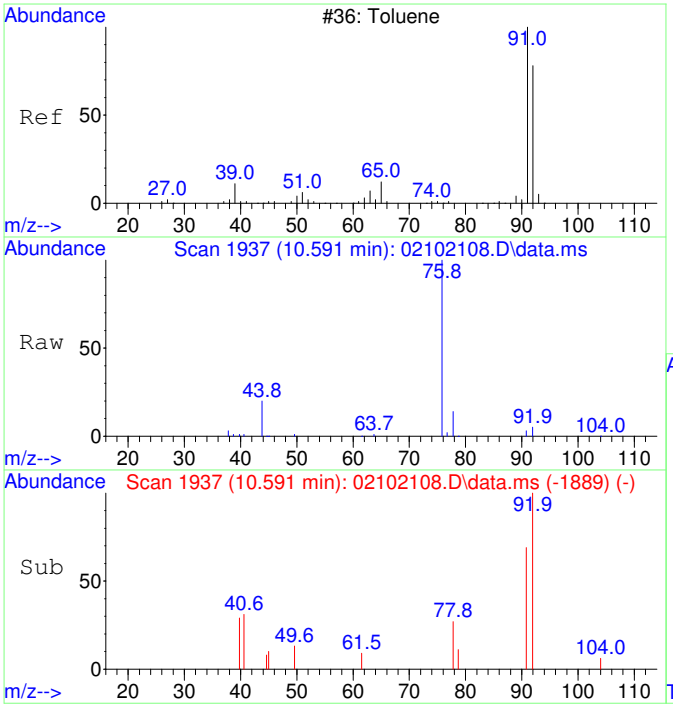


#36
Toluene-d8 SCAN
Concen: 4901.20 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 98 Resp: 100820

Ion	Ratio	Lower	Upper
98	100		
100	65.8	40.0	100.0

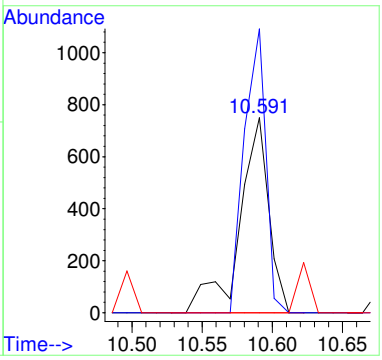


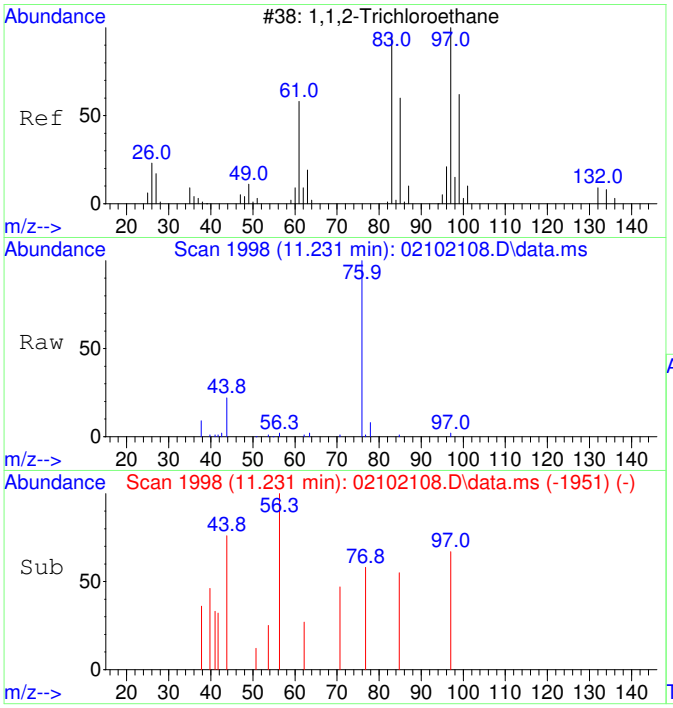


#37
Toluene SCAN
Concen: 43.08 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 1091

Ion	Ratio	Lower	Upper
91	100		
92	107.1	28.3	88.3#
65	0.0	0.0	41.0

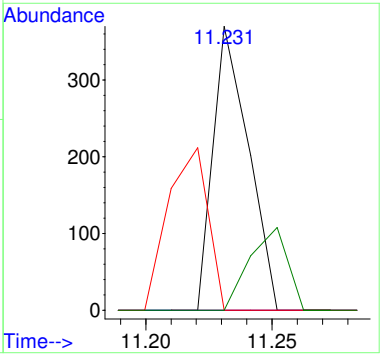


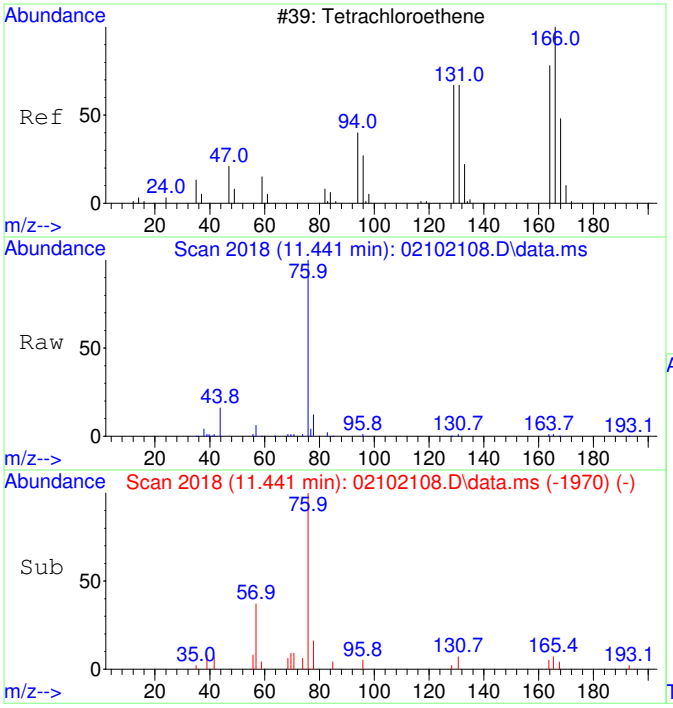


#38
1,1,2-Trichloroethane SCAN
Concen: 56.71 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. -0.011 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 97 Resp: 360

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	65.0	32.1	92.1
99	0.0	36.7	96.7#

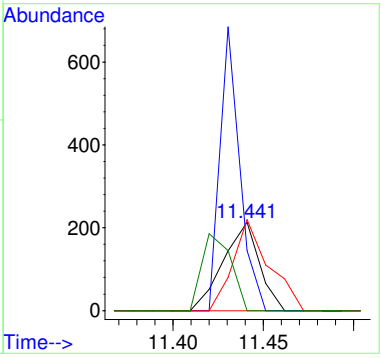


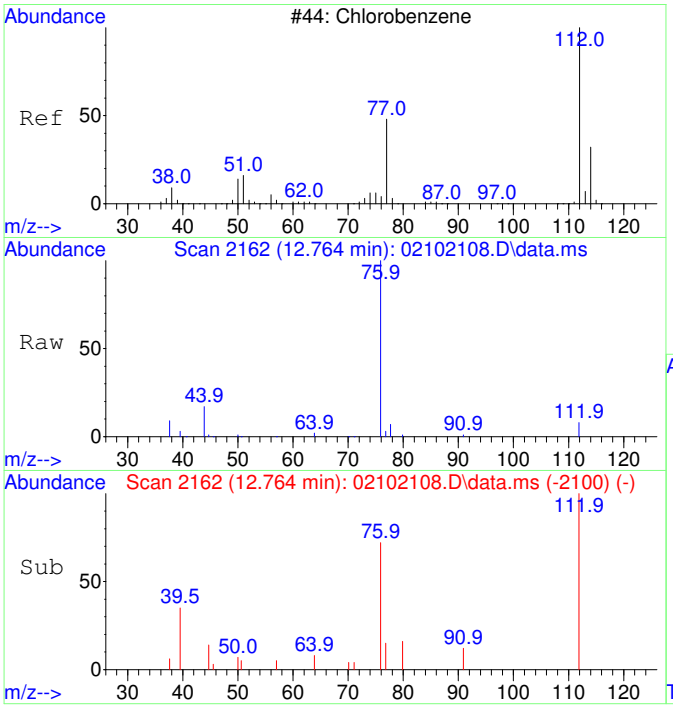


#39
Tetrachloroethene SCAN
Concen: 52.30 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:166 Resp: 298

Ion	Ratio	Lower	Upper
166	100		
164	175.5	50.9	110.9#
131	103.0	38.7	98.7#
129	0.0	41.8	101.8#

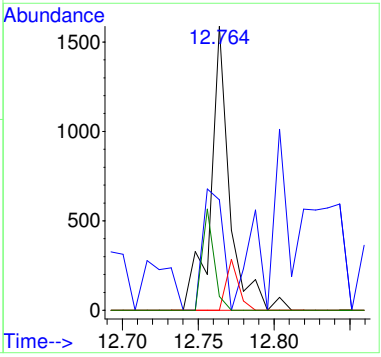


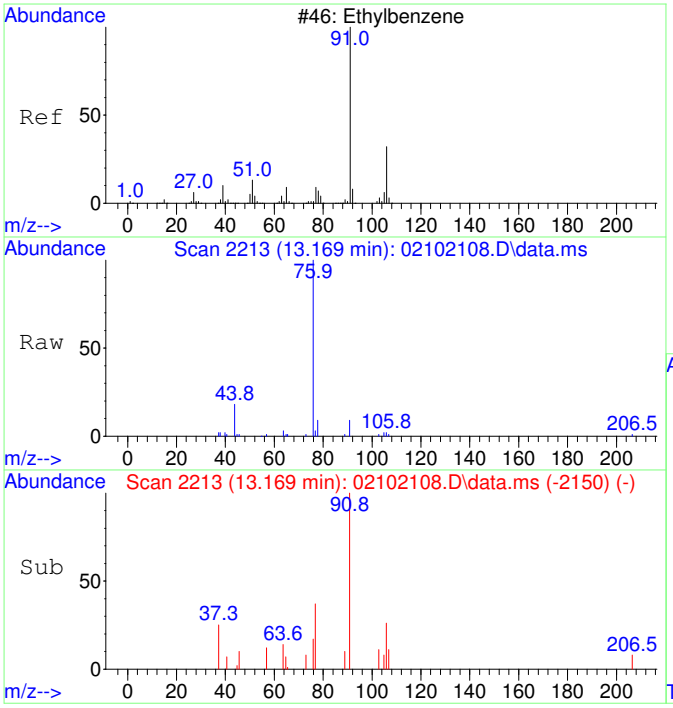


#40
Chlorobenzene SCAN
Concen: 76.36 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. -0.008 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:112 Resp: 1389

Ion	Ratio	Lower	Upper
112	100		
77	44.5	28.2	88.2
114	11.5	2.3	62.3
51	22.1	0.0	50.1

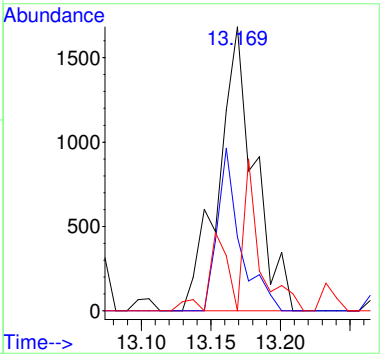


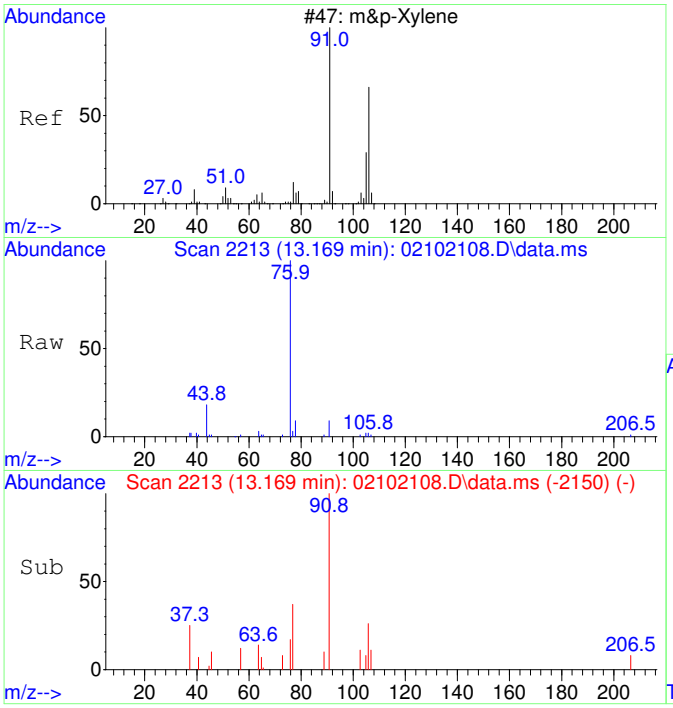


#42
Ethylbenzene SCAN
Concen: 63.05 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 3043

Ion	Ratio	Lower	Upper
91	100		
106	36.1	23.1	83.1
51	37.8	0.0	40.1

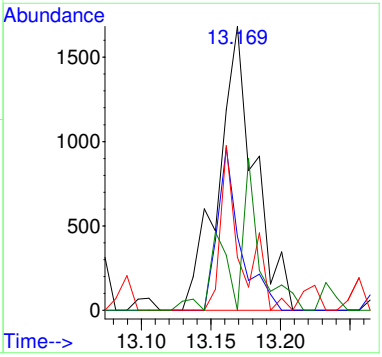


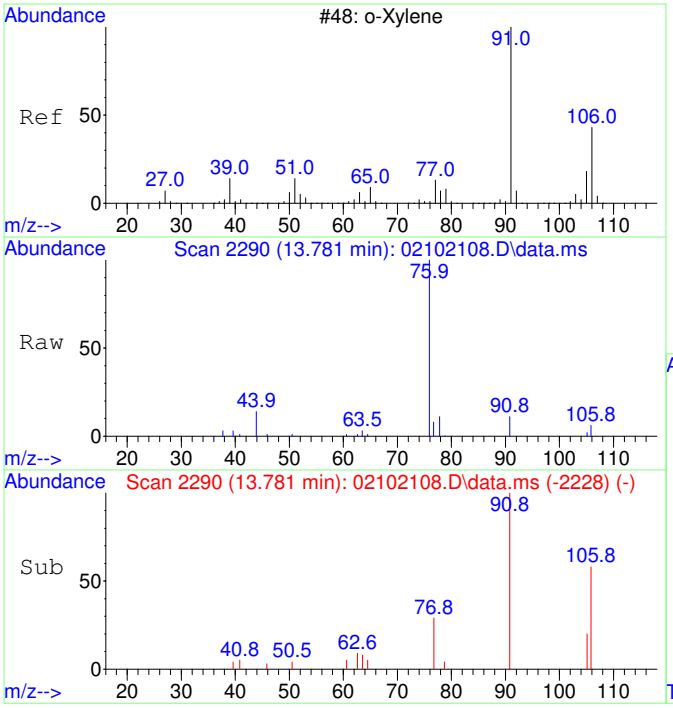


#43
m&p-Xylene SCAN
Concen: 63.05 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 3043

Ion	Ratio	Lower	Upper
91	100		
106	36.1	23.1	83.1
105	32.7	0.0	54.7
51	37.8	0.0	40.1

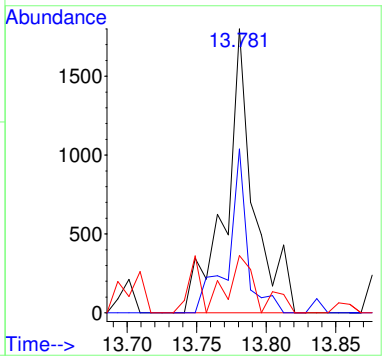


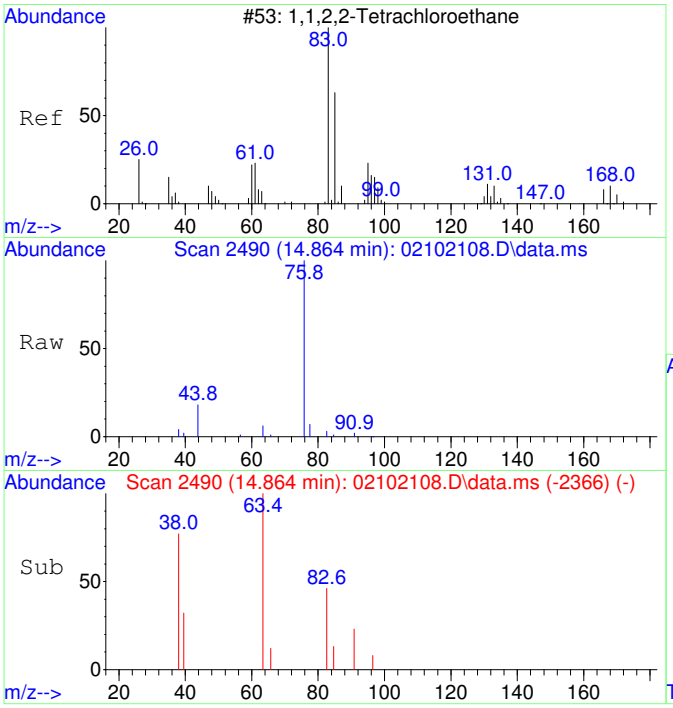


#44
o-Xylene SCAN
Concen: 95.43 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.008 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 2515

Ion	Ratio	Lower	Upper
91	100		
106	39.0	18.0	78.0
105	22.3	0.0	56.6

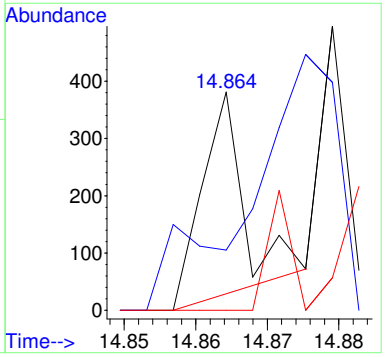


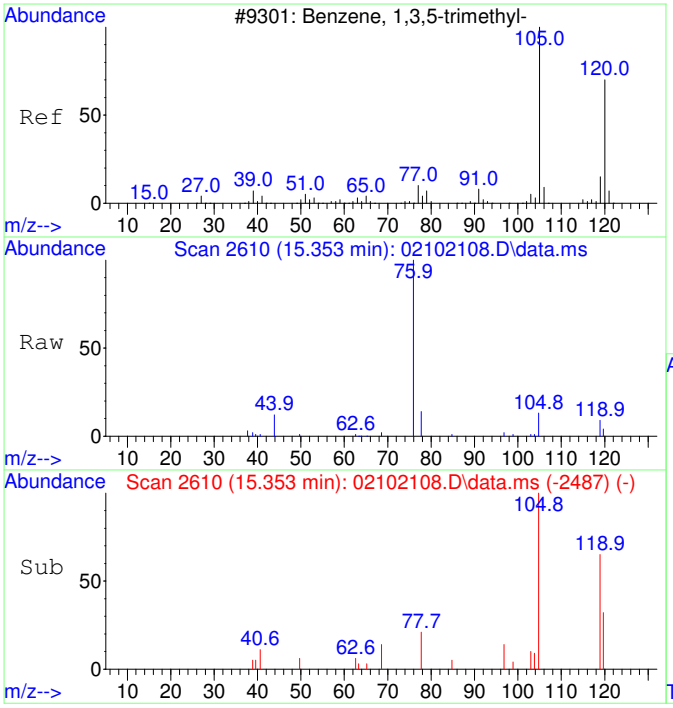


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 10.80 ug/L
RT: 14.864 min Scan# 2490
Delta R.T. -0.019 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 83 Resp: 148

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

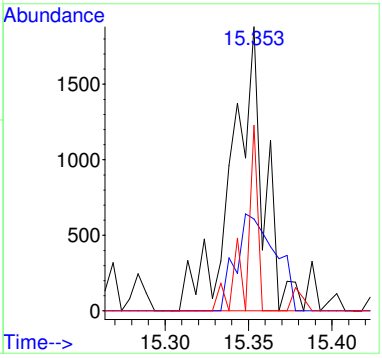


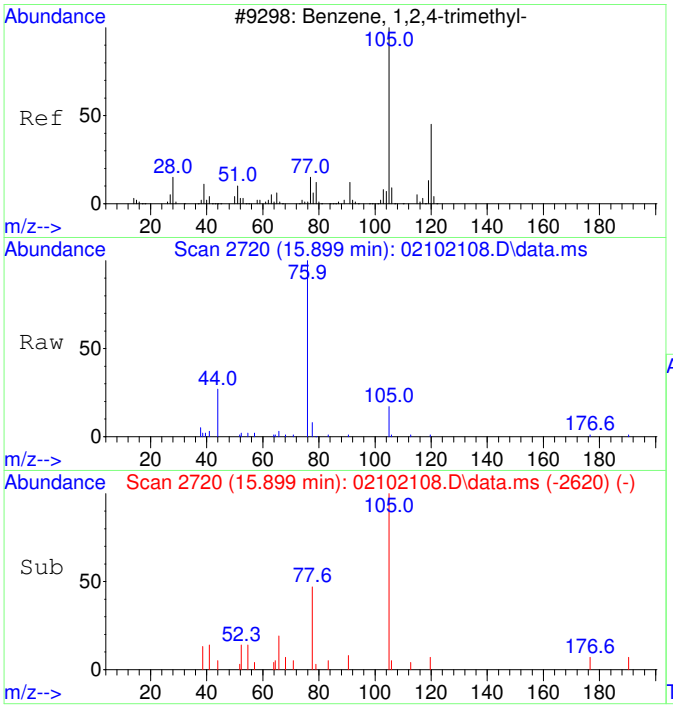


#46
1,3,5-Trimethylbenzene SCAN
Concen: 90.78 ug/L
RT: 15.353 min Scan# 2610
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:105 Resp: 2524

Ion	Ratio	Lower	Upper
105	100		
120	41.4	18.3	78.3
119	22.3	0.0	43.1

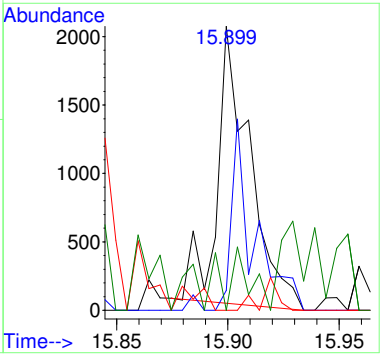


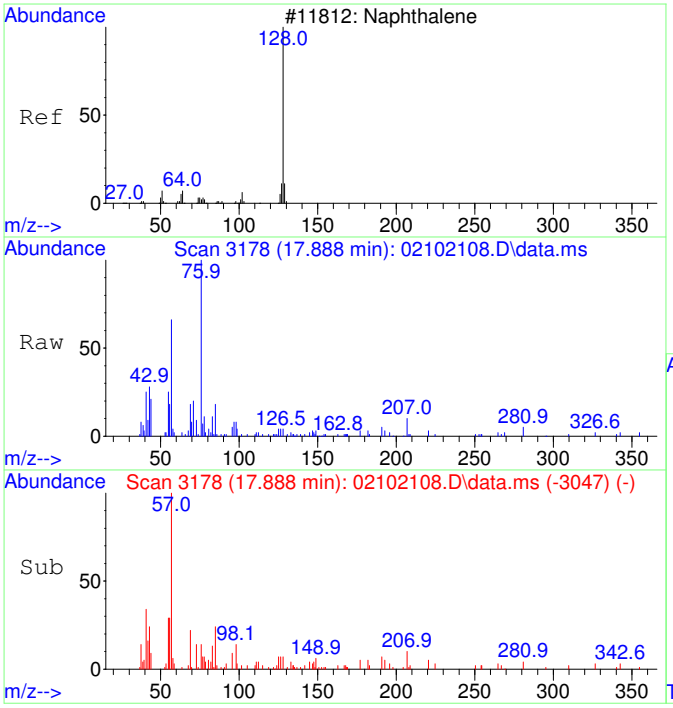


#47
1,2,4-Trimethylbenzene SCAN
Concen: 73.11 ug/L
RT: 15.899 min Scan# 2720
Delta R.T. -0.005 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:105 Resp: 2077

Ion	Ratio	Lower	Upper
105	100		
120	45.7	16.9	76.9
119	0.0	0.0	41.9
77	12.1	0.0	42.3

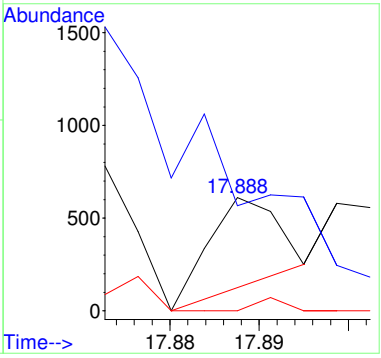




#48
Naphthalene SCAN
Concen: 6.45 ug/L
RT: 17.888 min Scan# 3178
Delta R.T. -0.015 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:128 Resp: 275

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



Quantitation Report (QT Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102108.D
Acq On : 10 Feb 2021 12:01
InstName : AG5975C
Operator : TD
Sample : B21B045-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

M.I. Performed By:
TD at 12:47 pm, Feb 10, 2021

M.I. Approved By:
Kathy O'Brien at 12:08 pm, Fe

Quant Time: Feb 10 12:20:10 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

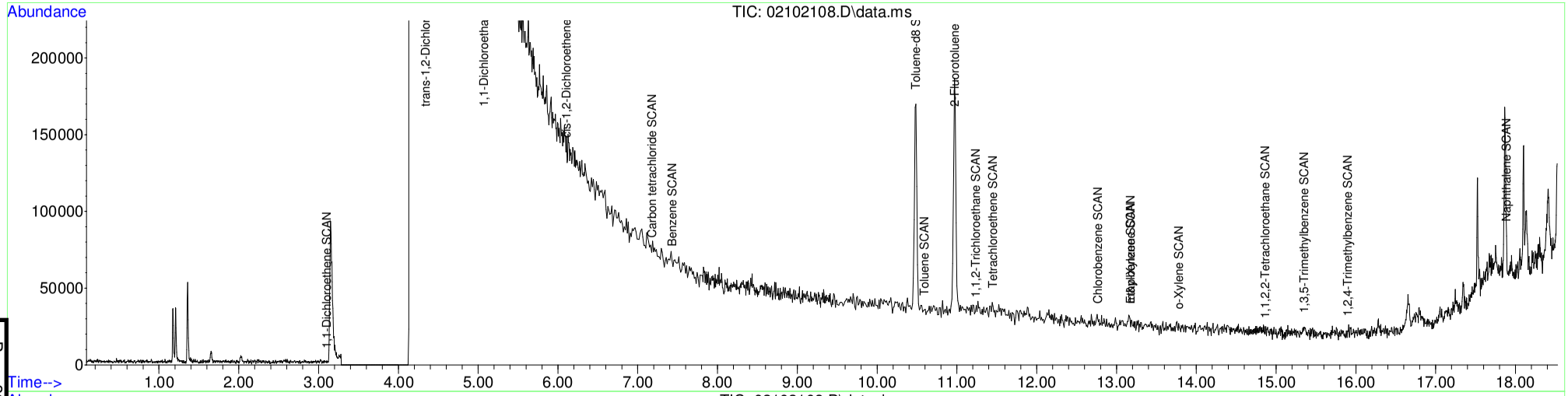
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	193222	5000.00 ug/L	-0.01
System Monitoring Compounds					
12) Toluene-d8	10.477	98	161764	4322.66 ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.45%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.093	61	242m	31.59 ug/L	
3] trans-1,2-Dichloroethene	4.356	61	329	34.06 ug/L	82
4] 1,1-Dichloroethane	5.079	63	417	36.15 ug/L	77
5] cis-1,2-Dichloroethene	6.081	61	426	35.65 ug/L	98
6] Chloroform	6.652	83	482	42.00 ug/L	94
7] 1,1,1-Trichloroethane	6.907	97	511	41.45 ug/L	96
8] Carbon tetrachloride	7.175	117	506	42.93 ug/L	97
9] Benzene	7.503	78	3437	105.71 ug/L	77
10] 1,2-Dichloroethane	7.539	62	464	41.83 ug/L #	37
11] Trichloroethene	8.564	130	427	41.60 ug/L	94
13] Toluene	10.582	91	2162	46.40 ug/L	95
14] 1,1,2-Trichloroethane	11.232	97	467	43.27 ug/L	90
15] Tetrachloroethene	11.432	166	622	42.86 ug/L	94
16] Chlorobenzene	12.765	112	1458	40.39 ug/L	87
17] 1,1,1,2-Tetrachloroethane	12.916	131	531	42.03 ug/L	100
18] Ethylbenzene	12.972	91	2783	46.76 ug/L	93
19] m&p-Xylene	13.162	91	5123	111.79 ug/L	97
20] o-Xylene	13.782	91	2209	44.88 ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.877	83	896	39.07 ug/L	96
22] 1,3,5-Trimethylbenzene	15.350	105	2354	43.49 ug/L	95
23] 1,2,4-Trimethylbenzene	15.901	105	2796	50.50 ug/L	89
24] Naphthalene	17.904	128	388	4.33 ug/L #	68
25) 2-Fluorotoluene SCAN	10.969	109	118834	5418.13 ug/L	94
26) 1,1-Dichloroethene SCAN	3.096	61	70	13.67 ug/L #	25
27) trans-1,2-Dichloroethe...	4.341	61	192	29.44 ug/L #	17
28) 1,1-Dichloroethane SCAN	5.071	63	173	22.47 ug/L #	75
29) cis-1,2-Dichloroethene...	6.100	61	192	25.37 ug/L #	1
32) Carbon tetrachloride SCAN	7.173	117	337	54.14 ug/L #	15
33) Benzene SCAN	7.429	78	20086	911.54 ug/L #	91
36) Toluene-d8 SCAN	10.486	98	100820	4901.20 ug/L	95
37) Toluene SCAN	10.591	91	1091	43.08 ug/L #	40
38) 1,1,2-Trichloroethane ...	11.231	97	360	56.71 ug/L #	35
39) Tetrachloroethene SCAN	11.441	166	298	52.30 ug/L #	20
40) Chlorobenzene SCAN	12.764	112	1389	76.36 ug/L	79
42) Ethylbenzene SCAN	13.169	91	3043	63.05 ug/L	68
43) m&p-Xylene SCAN	13.169	91	3043	63.05 ug/L	72
44) o-Xylene SCAN	13.781	91	2515	95.43 ug/L	88
45) 1,1,2,2-Tetrachloroeth...	14.864	83	148	10.80 ug/L #	26
46) 1,3,5-Trimethylbenzene...	15.353	105	2524	90.78 ug/L	87
47) 1,2,4-Trimethylbenzene...	15.899	105	2077	73.11 ug/L #	94
48) Naphthalene SCAN	17.888	128	275	6.45 ug/L #	68

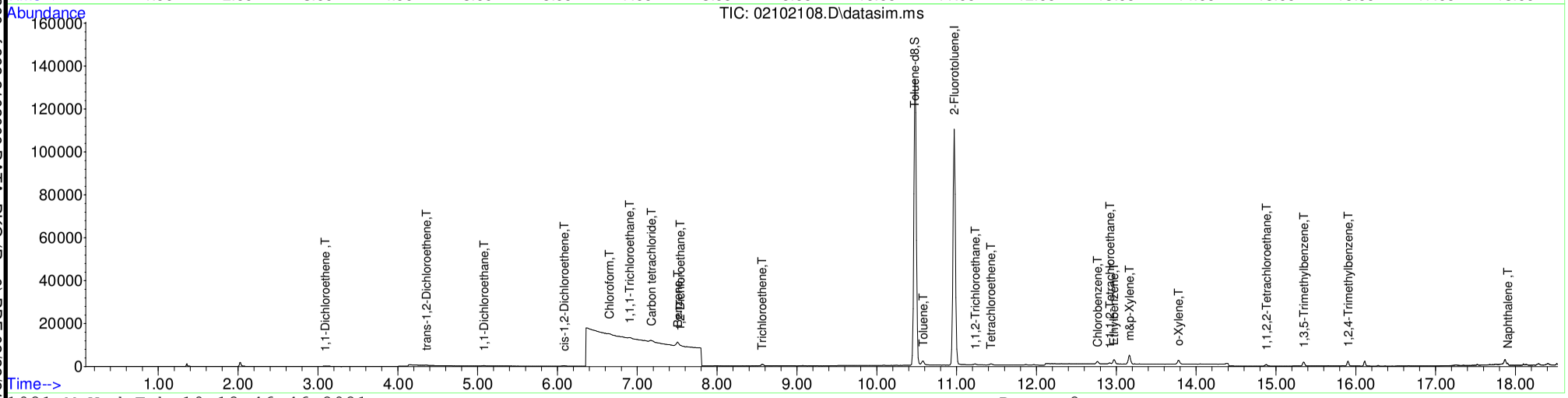
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102108.D
Acq On : 10 Feb 2021 12:01
InstName : AG5975C
Operator : TD
Sample : B21B045-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 10 12:20:10 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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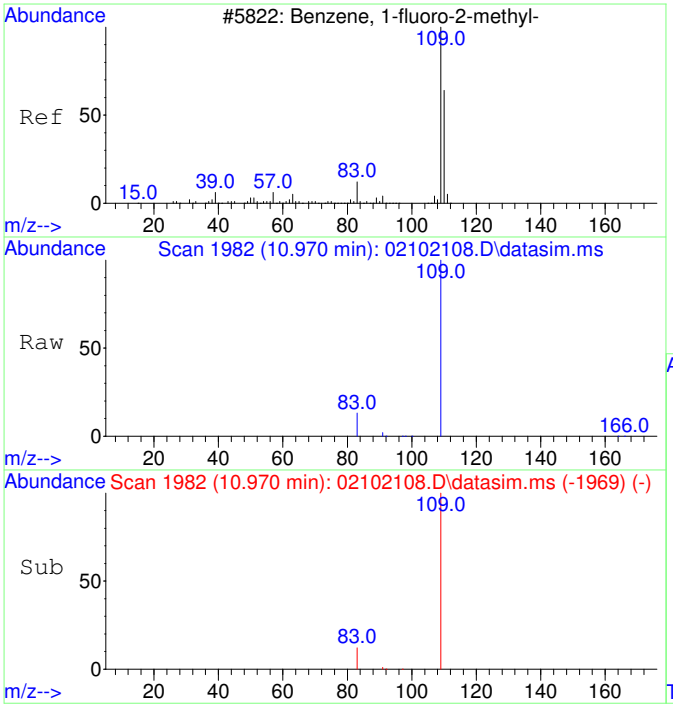
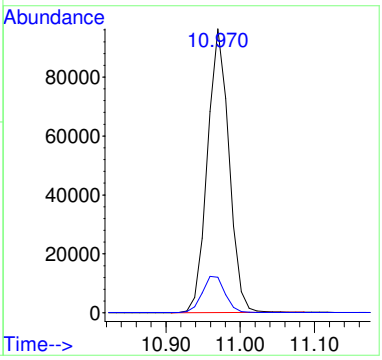
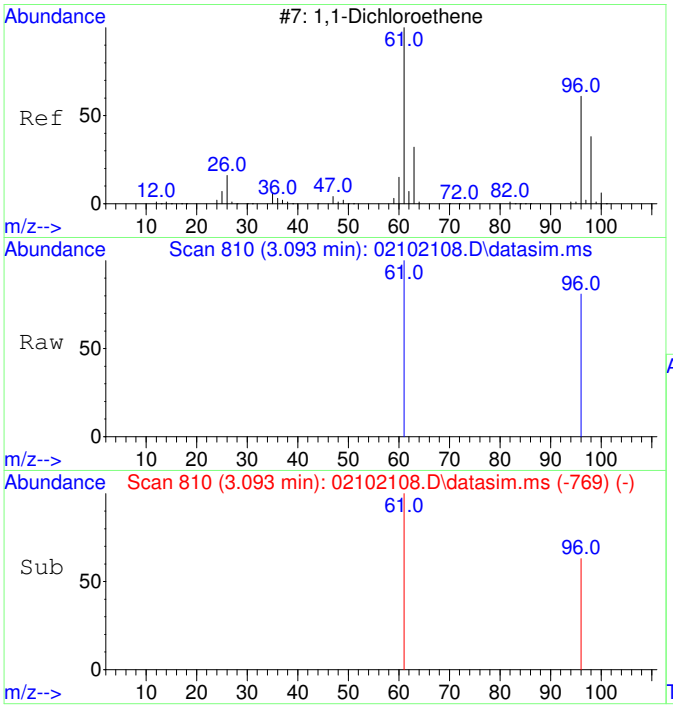


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:109 Resp: 193222

Ion	Ratio	Lower	Upper
109	100		
83	13.6	0.0	42.3

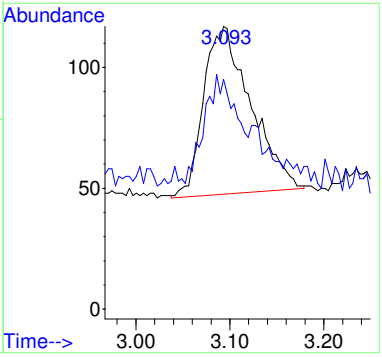


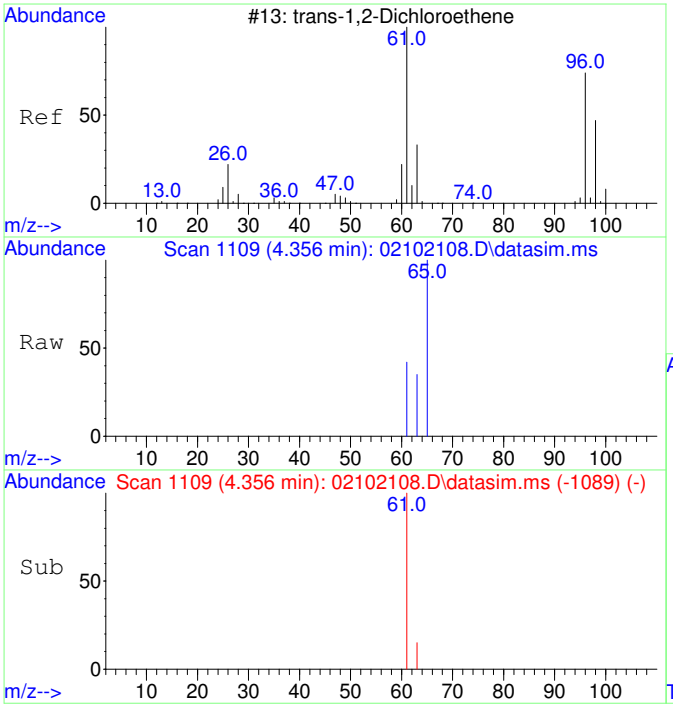


#2
1,1-Dichloroethene
Concen: 31.59 ug/L m
RT: 3.093 min Scan# 810
Delta R.T. 0.004 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 61 Resp: 242

Ion	Ratio	Lower	Upper
61	100		
96	81.0	37.2	97.2

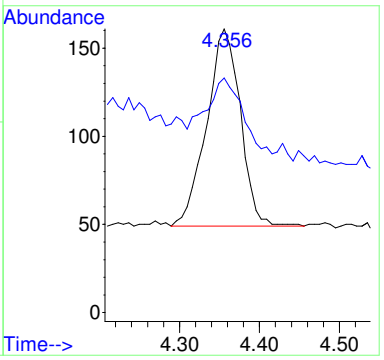


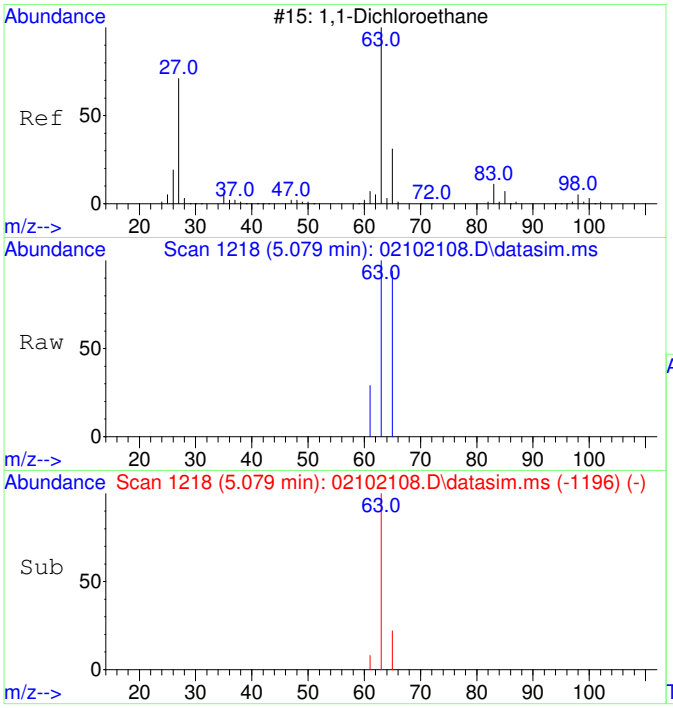


#3
trans-1,2-Dichloroethene
Concen: 34.06 ug/L
RT: 4.356 min Scan# 1109
Delta R.T. -0.020 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 61 Resp: 329

Ion	Ratio	Lower	Upper
61	100		
63	42.6	2.4	62.4

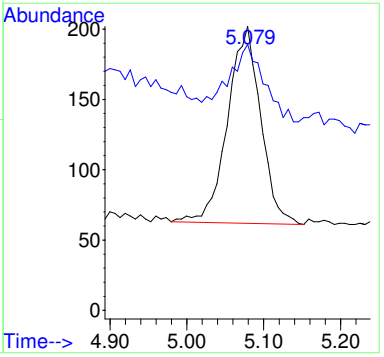


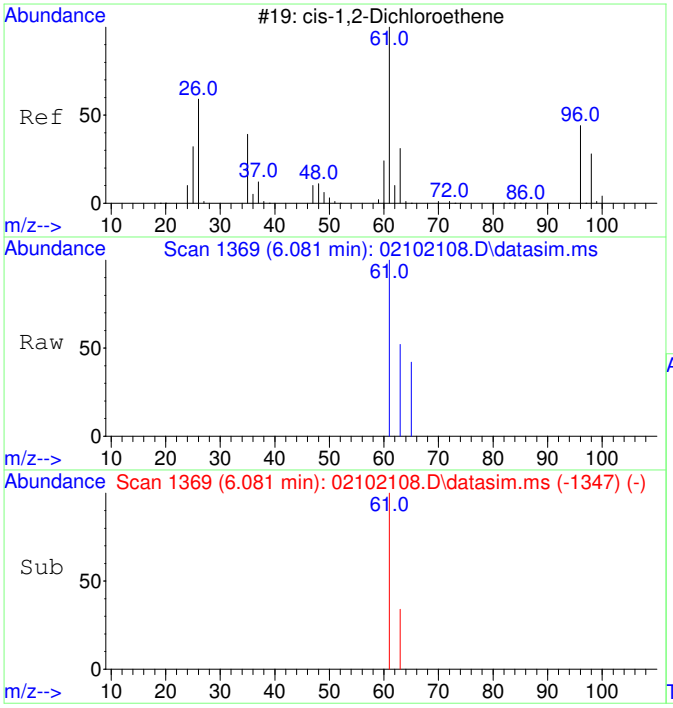


#4
1,1-Dichloroethane
Concen: 36.15 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.007 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 63 Resp: 417

Ion	Ratio	Lower	Upper
63	100		
65	44.6	1.8	61.8

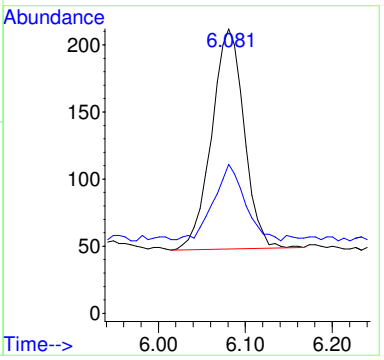


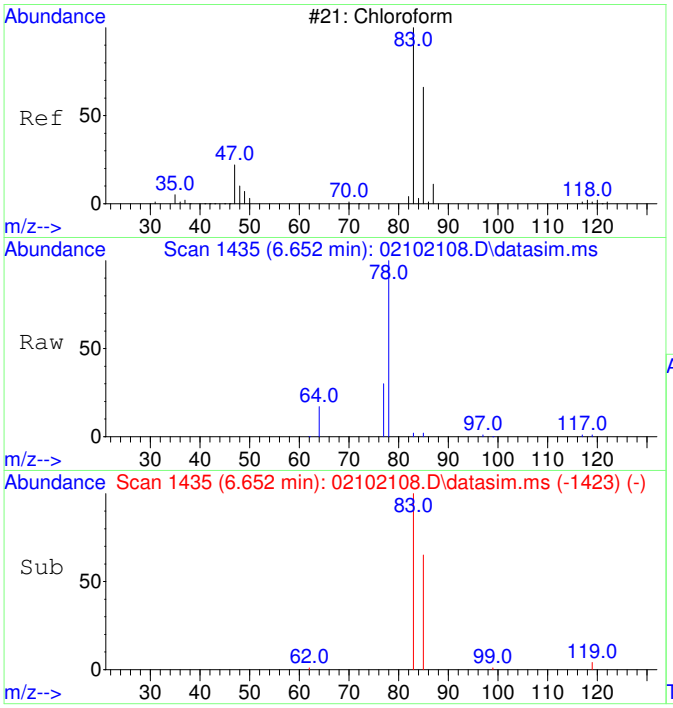


#5
cis-1,2-Dichloroethene
Concen: 35.65 ug/L
RT: 6.081 min Scan# 1369
Delta R.T. -0.007 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 61 Resp: 426

Ion	Ratio	Lower	Upper
61	100		
63	33.6	2.5	62.5

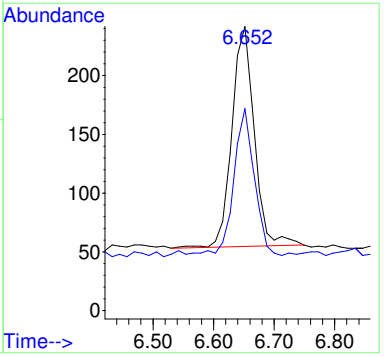


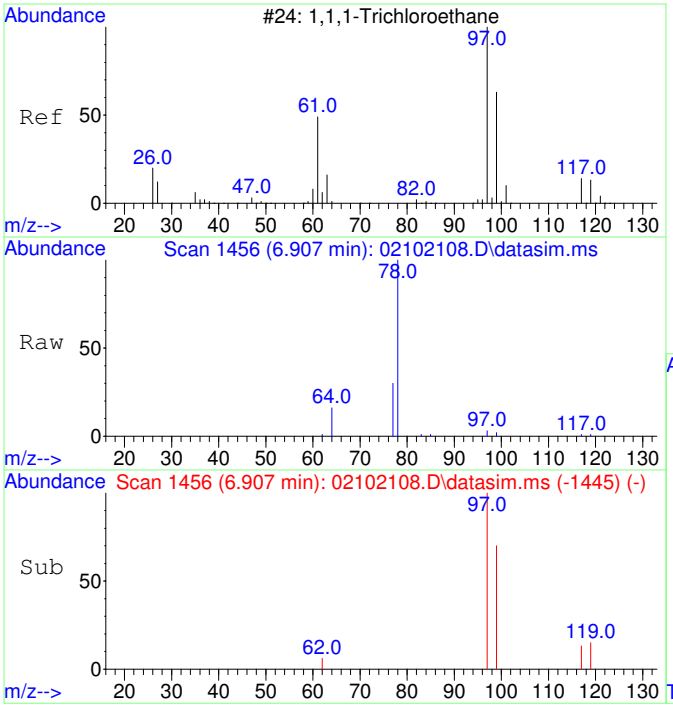


#6
Chloroform
Concen: 42.00 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 83 Resp: 482

Ion	Ratio	Lower	Upper
83	100		
85	60.4	35.1	95.1

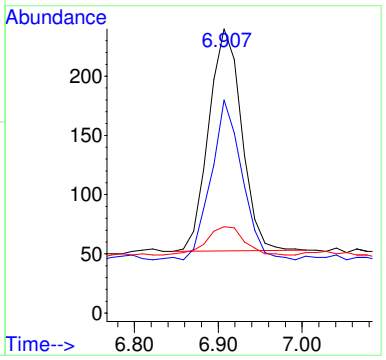


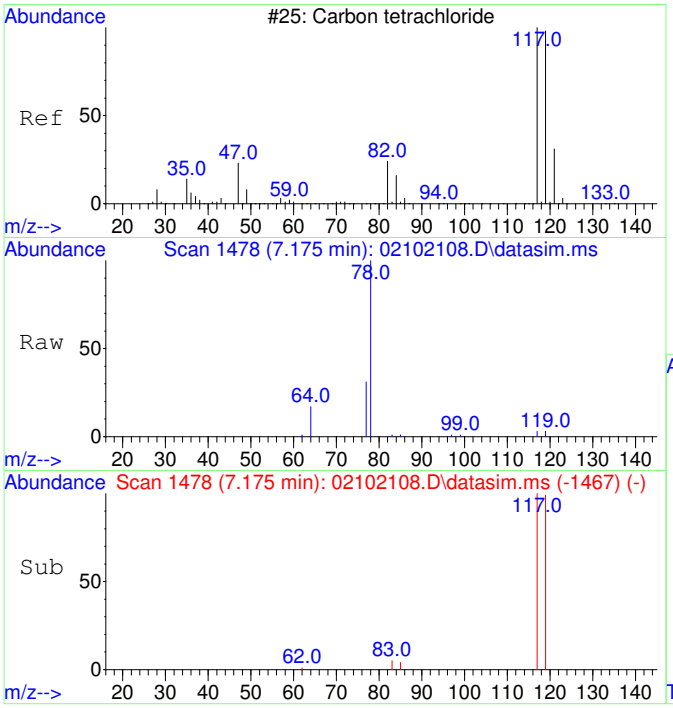


#7
1,1,1-Trichloroethane
Concen: 41.45 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 97 Resp: 511

Ion	Ratio	Lower	Upper
97	100		
99	67.9	34.6	94.6
117	14.5	0.0	43.2

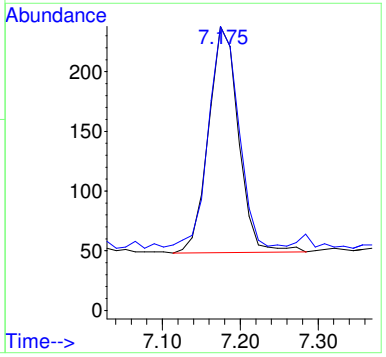


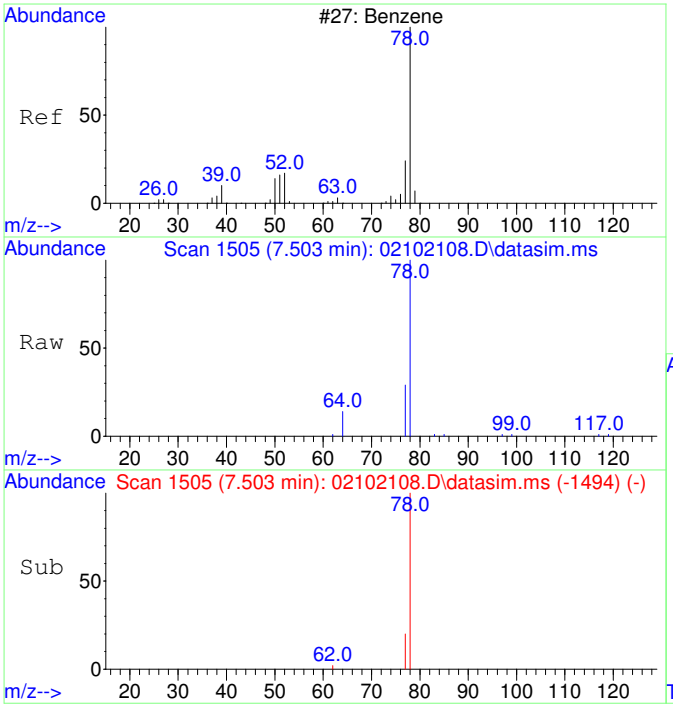


#8
Carbon tetrachloride
Concen: 42.93 ug/L
RT: 7.175 min Scan# 1478
Delta R.T. -0.012 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:117 Resp: 506

Ion	Ratio	Lower	Upper
117	100		
119	99.8	66.4	126.4

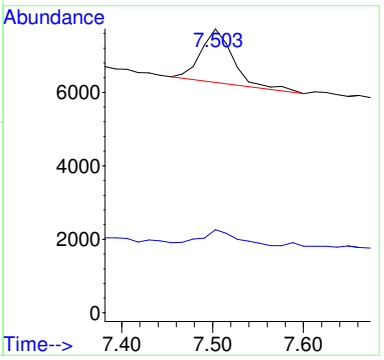


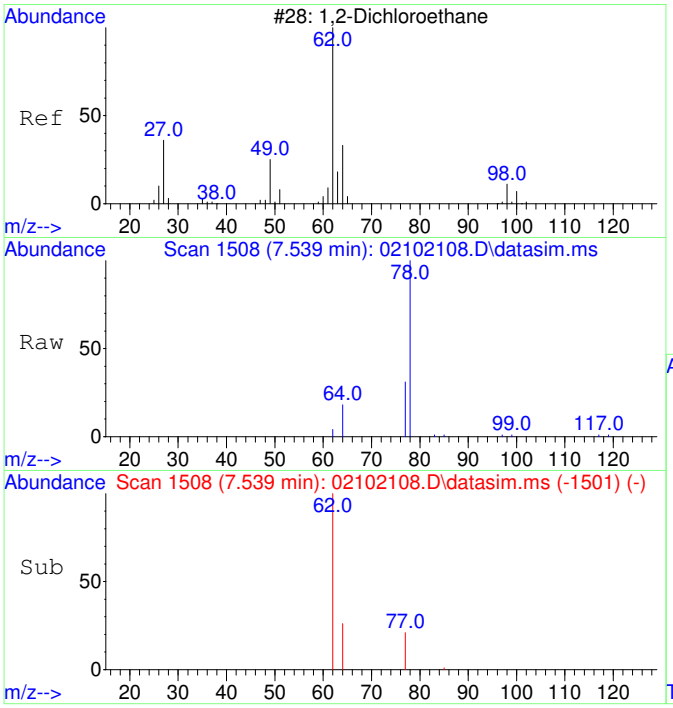


#9
Benzene
Concen: 105.71 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 78 Resp: 3437

Ion	Ratio	Lower	Upper
78	100		
77	34.6	0.0	53.2

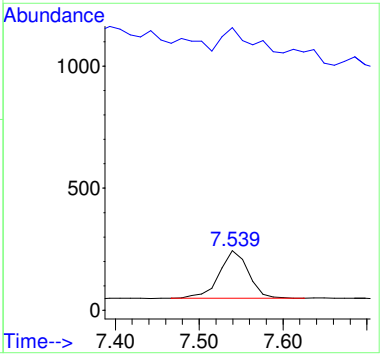


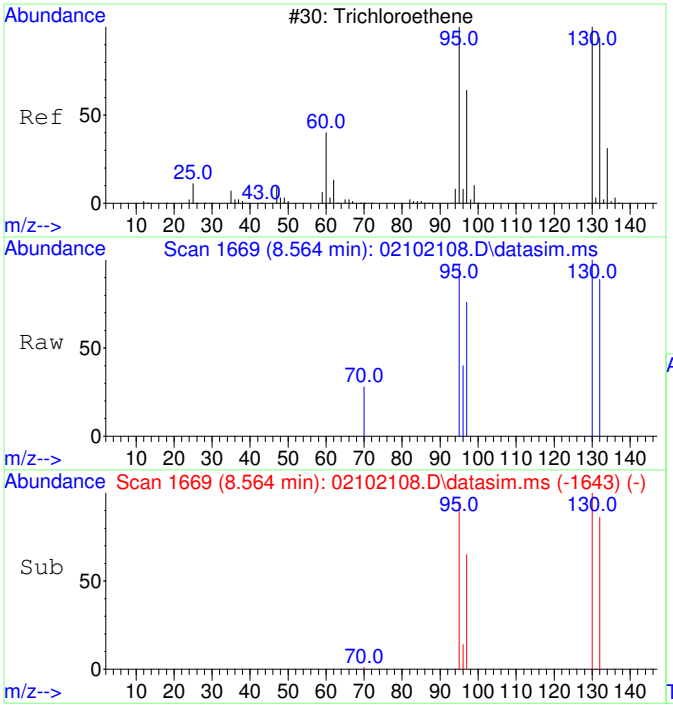


#10
1,2-Dichloroethane
Concen: 41.83 ug/L
RT: 7.539 min Scan# 1508
Delta R.T. -0.012 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 62 Resp: 464

Ion	Ratio	Lower	Upper
62	100		
64	67.7	2.3	62.3#

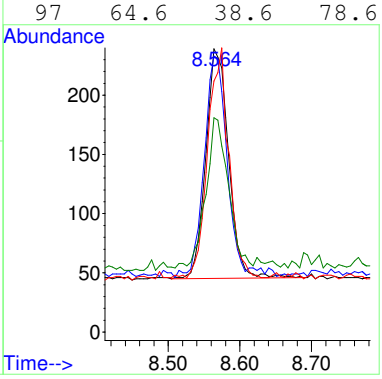


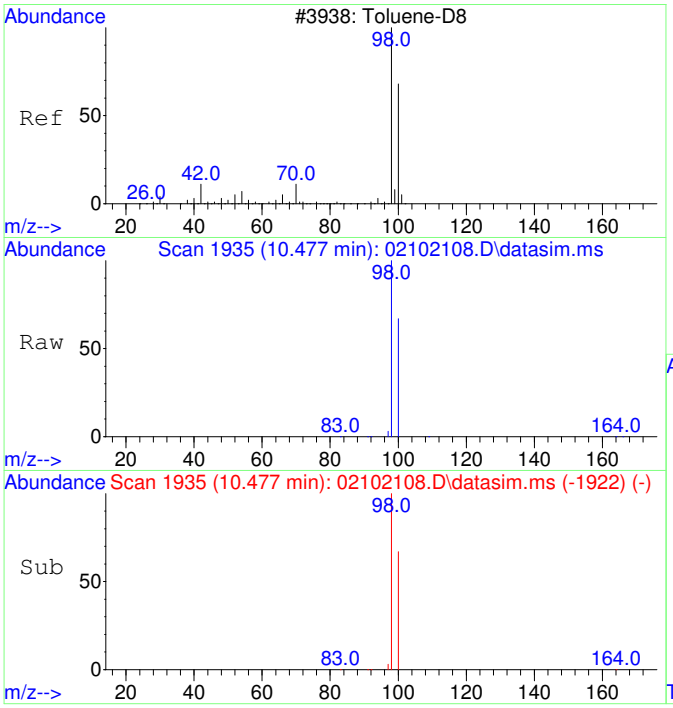


#11
Trichloroethene
Concen: 41.60 ug/L
RT: 8.564 min Scan# 1669
Delta R.T. -0.011 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:130 Resp: 427

Ion	Ratio	Lower	Upper
130	100		
95	96.7	60.7	120.7
132	91.1	76.0	116.0
97	64.6	38.6	78.6

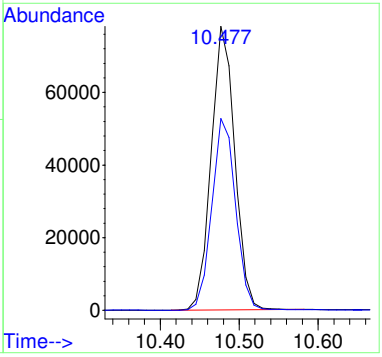


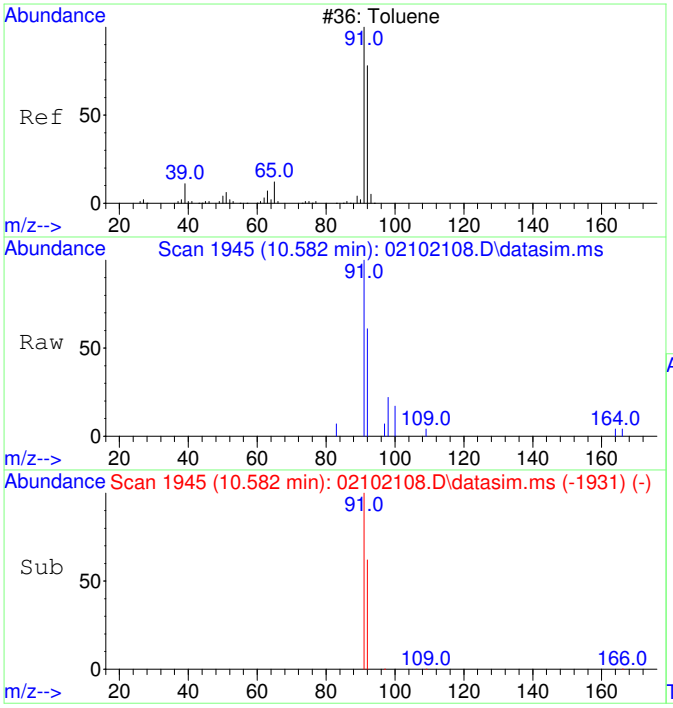


#12
Toluene-d8
Concen: 4322.66 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.011 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 98 Resp: 161764

Ion	Ratio	Lower	Upper
98	100		
100	67.8	37.1	97.1

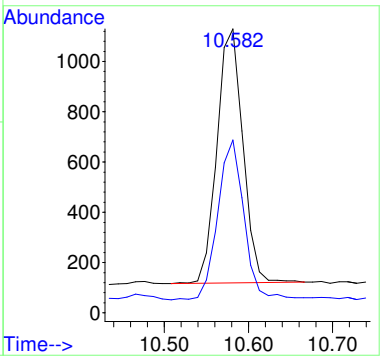


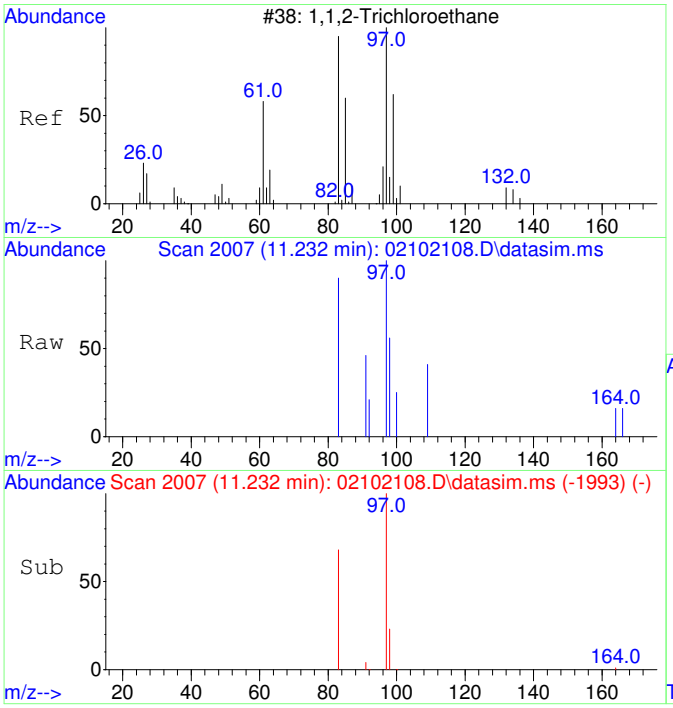


#13
Toluene
Concen: 46.40 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 2162

Ion	Ratio	Lower	Upper
91	100		
92	63.7	29.9	89.9

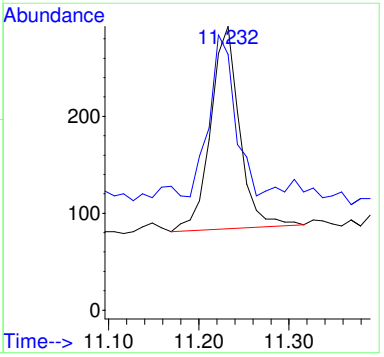


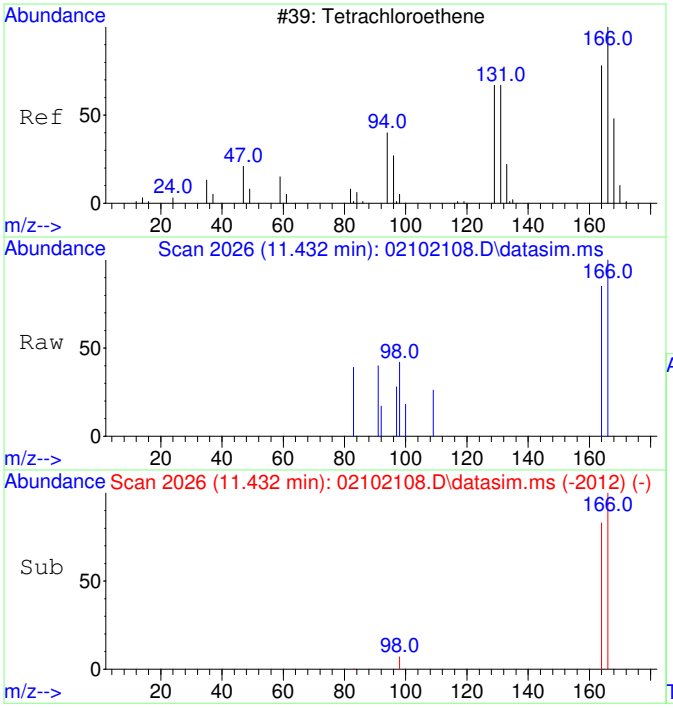


#14
1,1,2-Trichloroethane
Concen: 43.27 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 97 Resp: 467

Ion	Ratio	Lower	Upper
97	100		
83	71.9	51.2	111.2

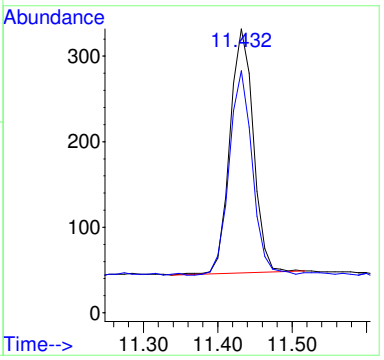


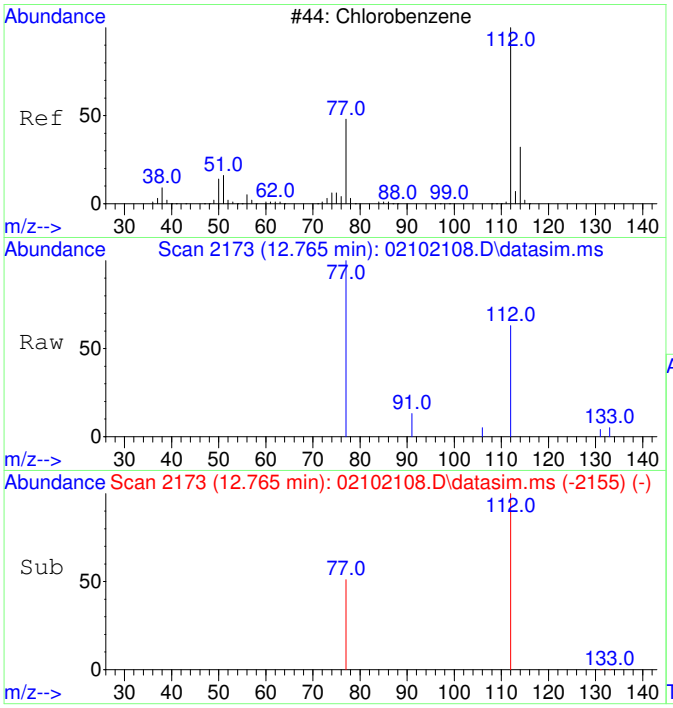


#15
Tetrachloroethene
Concen: 42.86 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:166 Resp: 622

Ion	Ratio	Lower	Upper
166	100		
164	82.6	47.8	107.8

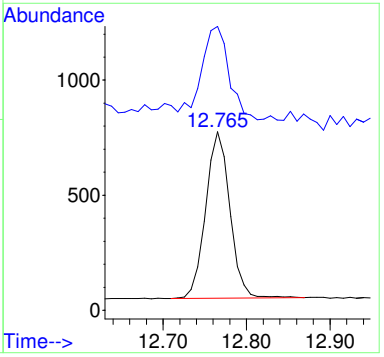


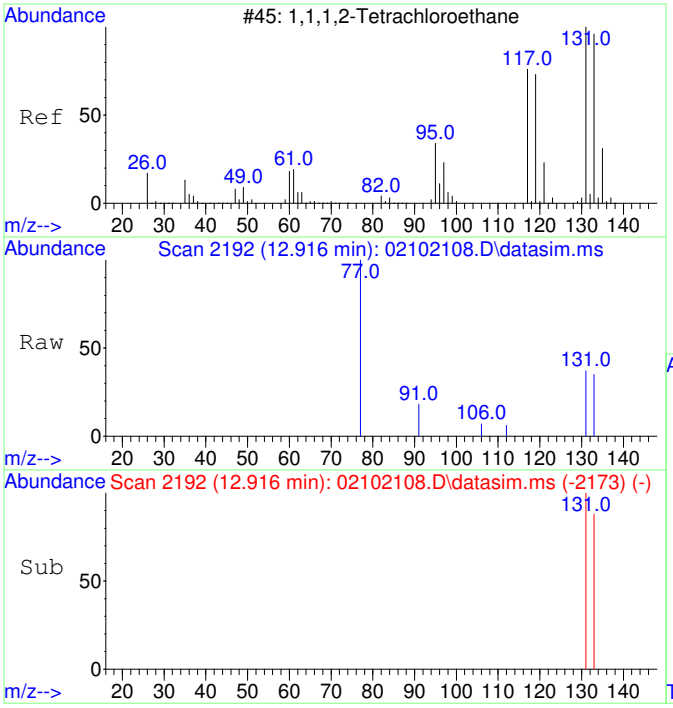


#16
Chlorobenzene
Concen: 40.39 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:112 Resp: 1458

Ion	Ratio	Lower	Upper
112	100		
77	62.8	23.6	83.6

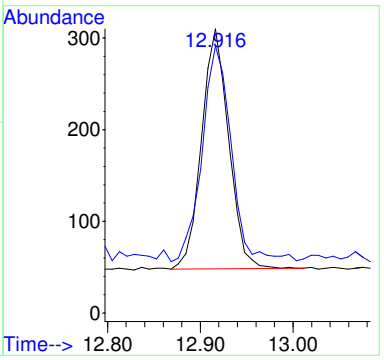


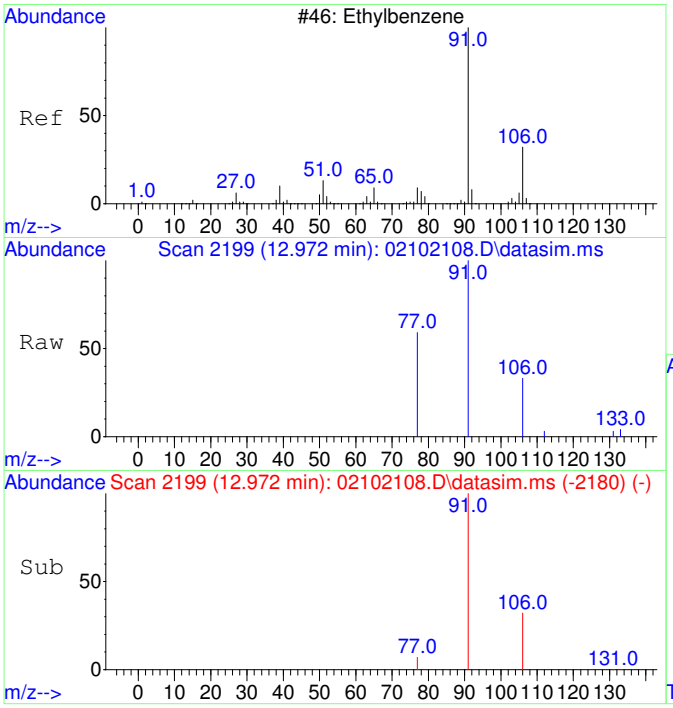


#17
1,1,1,2-Tetrachloroethane
Concen: 42.03 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:131 Resp: 531

Ion	Ratio	Lower	Upper
131	100		
133	96.4	66.3	126.3

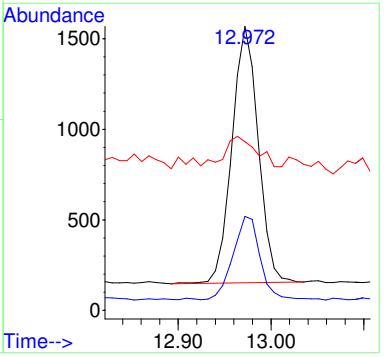


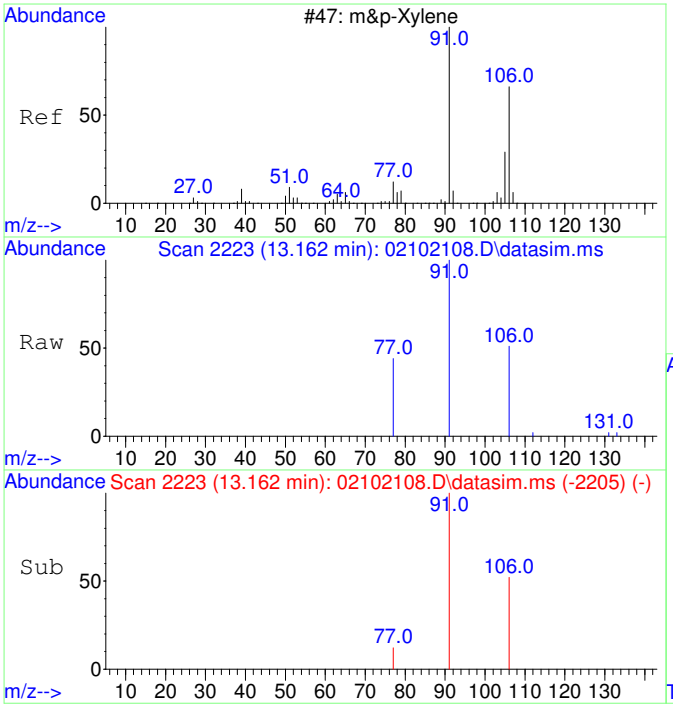


#18
Ethylbenzene
Concen: 46.76 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 2783

Ion	Ratio	Lower	Upper
91	100		
106	33.8	3.0	63.0
77	18.8	0.0	38.2

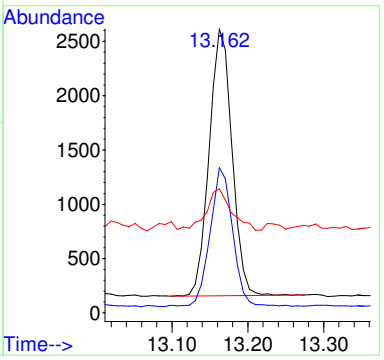


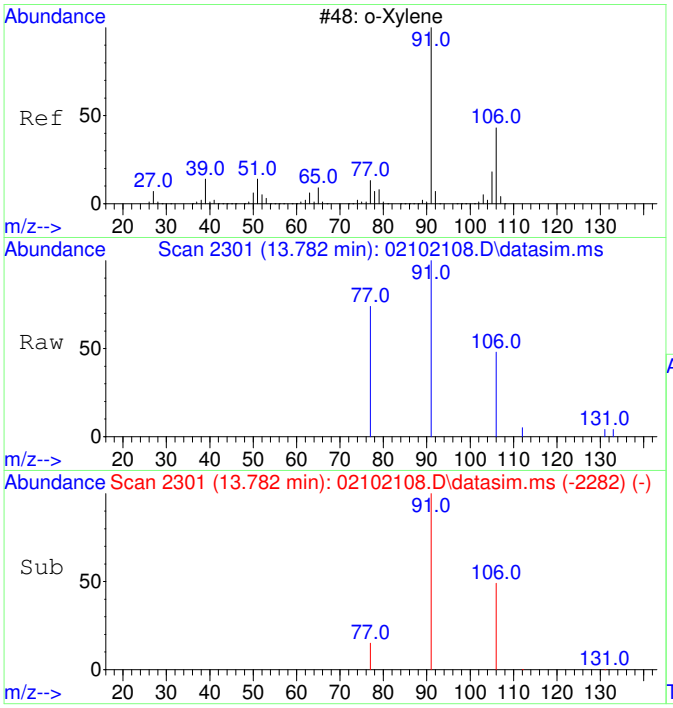


#19
m&p-Xylene
Concen: 111.79 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 5123

Ion	Ratio	Lower	Upper
91	100		
106	51.6	22.2	82.2
77	16.6	0.0	42.4

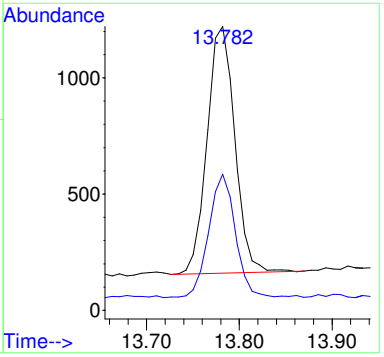


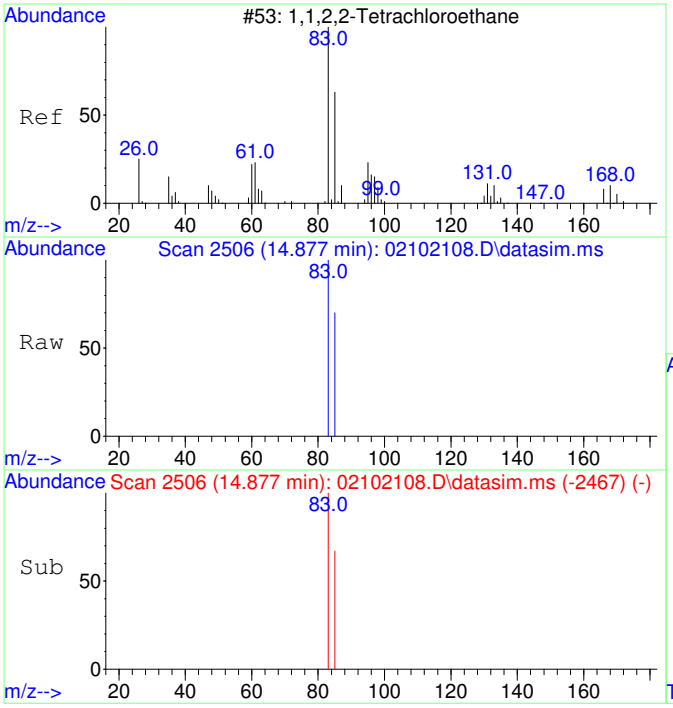


#20
o-Xylene
Concen: 44.88 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 2209

Ion	Ratio	Lower	Upper
91	100		
106	47.3	19.2	79.2

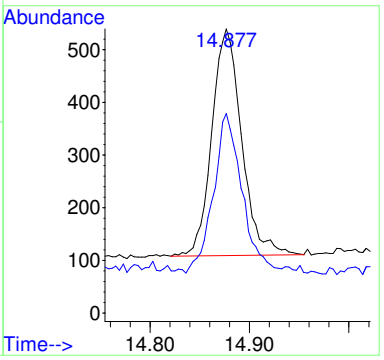


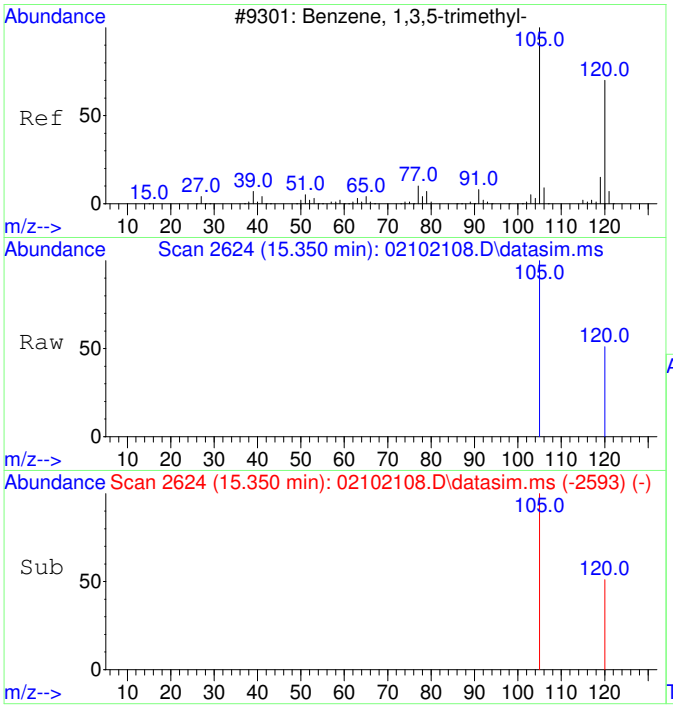


#21
1,1,2,2-Tetrachloroethane
Concen: 39.07 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. -0.004 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 83 Resp: 896

Ion	Ratio	Lower	Upper
83	100		
85	67.9	34.8	94.8

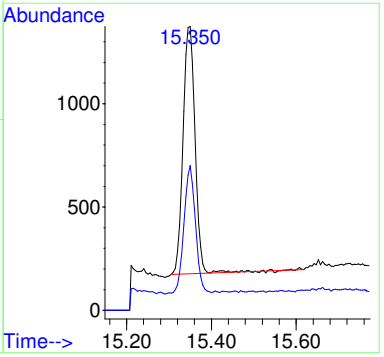


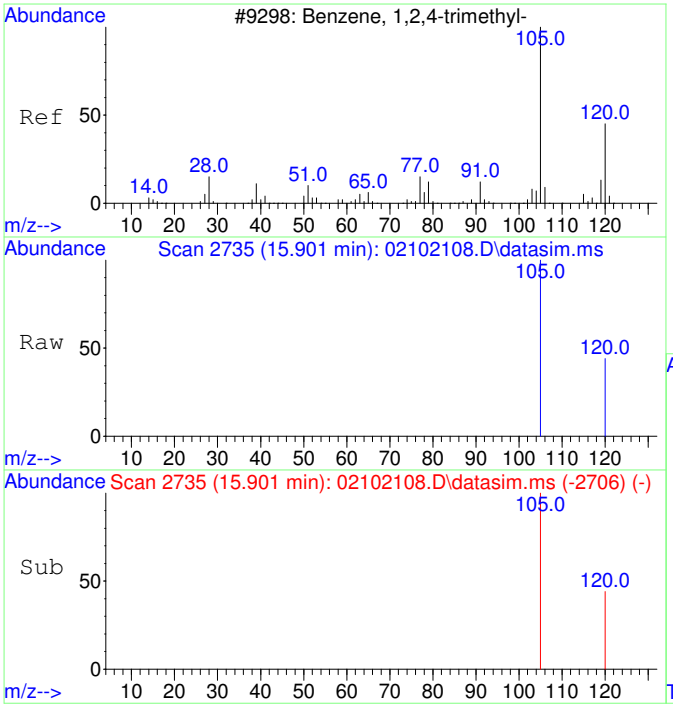


#22
1,3,5-Trimethylbenzene
Concen: 43.49 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:105 Resp: 2354

Ion	Ratio	Lower	Upper
105	100		
120	47.6	21.1	81.1

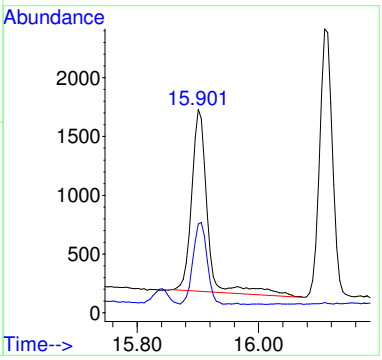


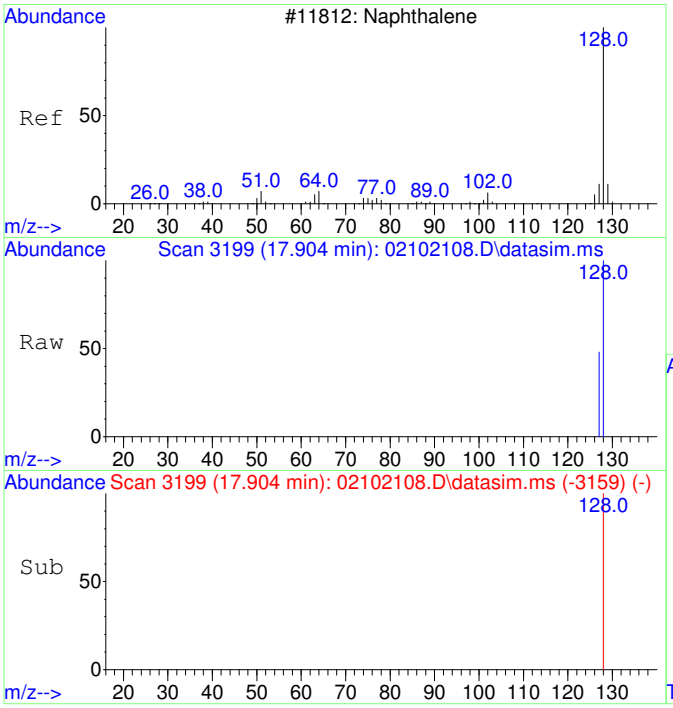


#23
1,2,4-Trimethylbenzene
Concen: 50.50 ug/L
RT: 15.901 min Scan# 2735
Delta R.T. -0.005 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:105 Resp: 2796

Ion	Ratio	Lower	Upper
105	100		
120	39.9	17.2	77.2

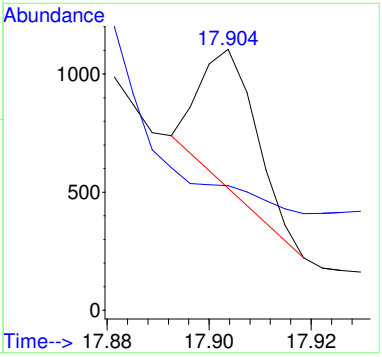


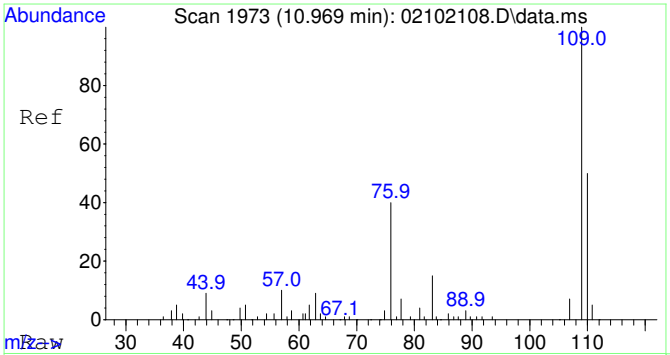


#24
Naphthalene
Concen: 4.33 ug/L
RT: 17.904 min Scan# 3199
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:128 Resp: 388

Ion	Ratio	Lower	Upper
128	100		
127	0.0	0.0	42.5

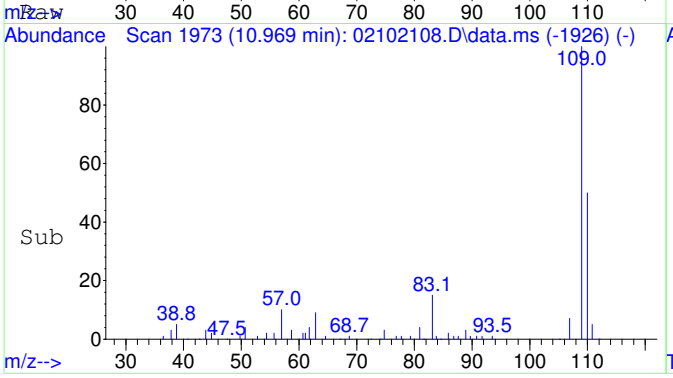


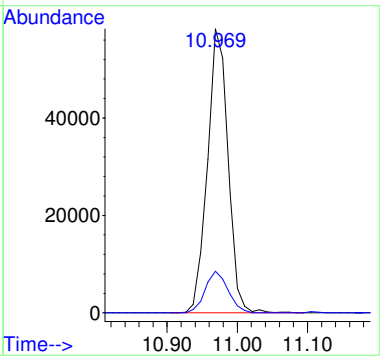


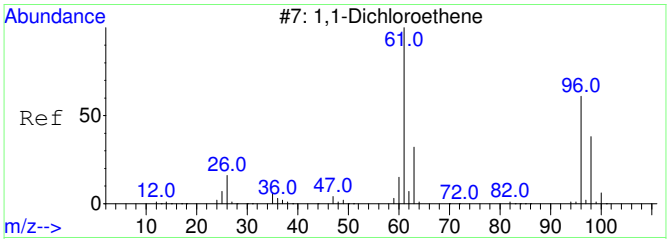
#25
2-Fluorotoluene SCAN
Concen: 5418.13 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:109 Resp: 118834

Ion	Ratio	Lower	Upper
109	100		
83	16.2	0.0	43.8



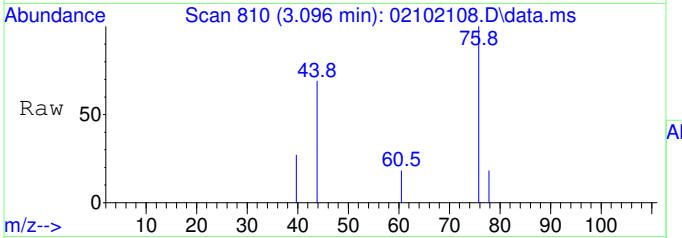


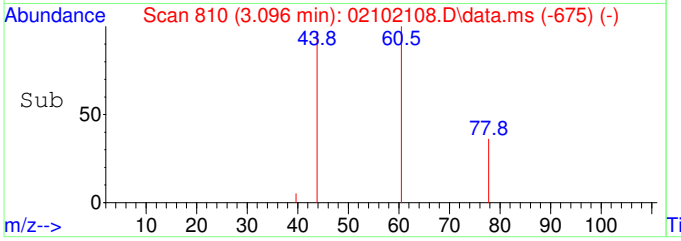


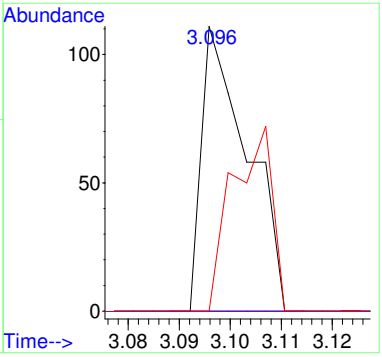
#26
1,1-Dichloroethene SCAN
Concen: 13.67 ug/L
RT: 3.096 min Scan# 810
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

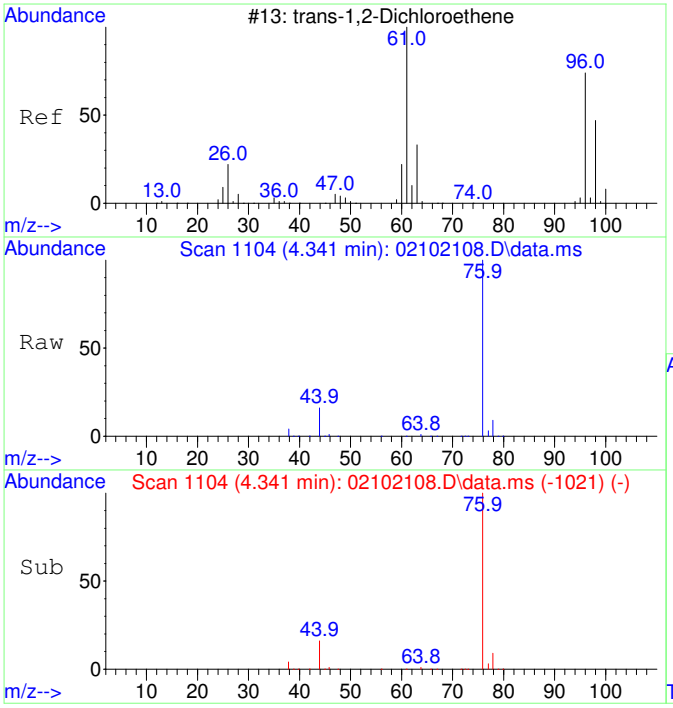
Tgt Ion: 61 Resp: 70

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





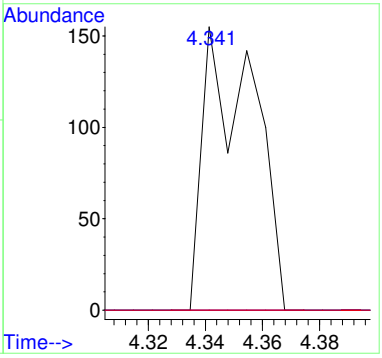


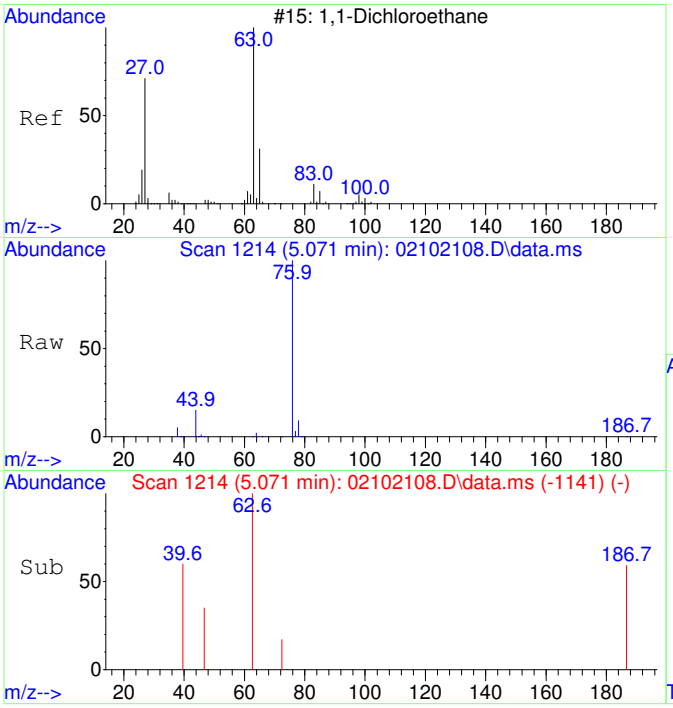


#27
trans-1,2-Dichloroethene SCAN
Concen: 29.44 ug/L
RT: 4.341 min Scan# 1104
Delta R.T. -0.040 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 61 Resp: 192

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

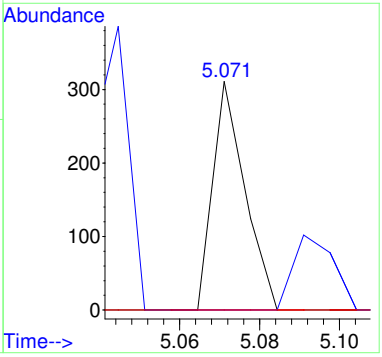


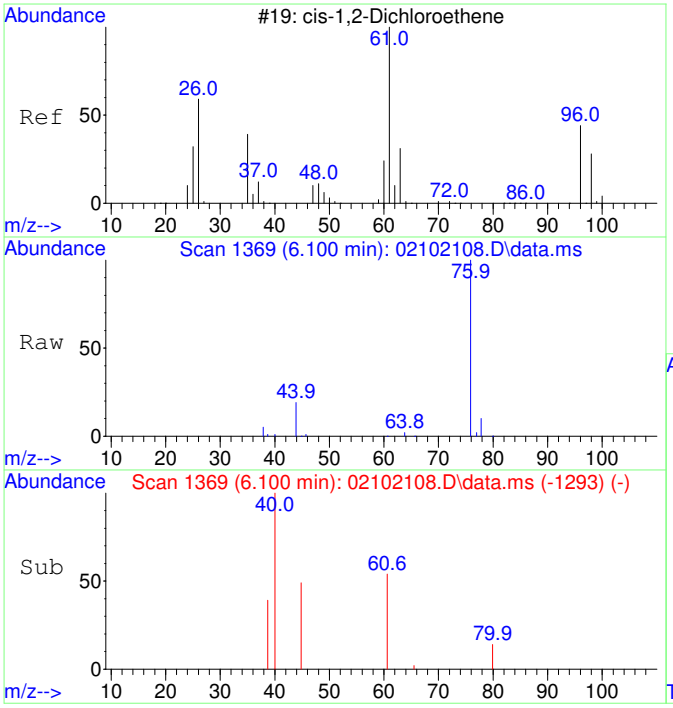


#28
1,1-Dichloroethane SCAN
Concen: 22.47 ug/L
RT: 5.071 min Scan# 1214
Delta R.T. -0.013 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 63 Resp: 173

Ion	Ratio	Lower	Upper
63	100		
65	41.6	1.3	61.3
83	0.0	0.0	45.9

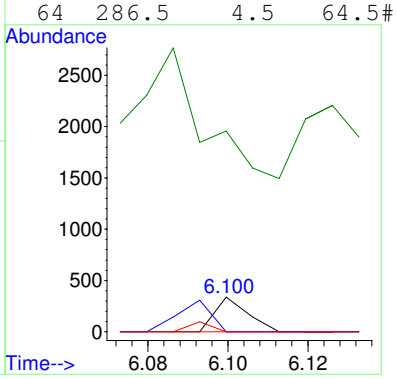


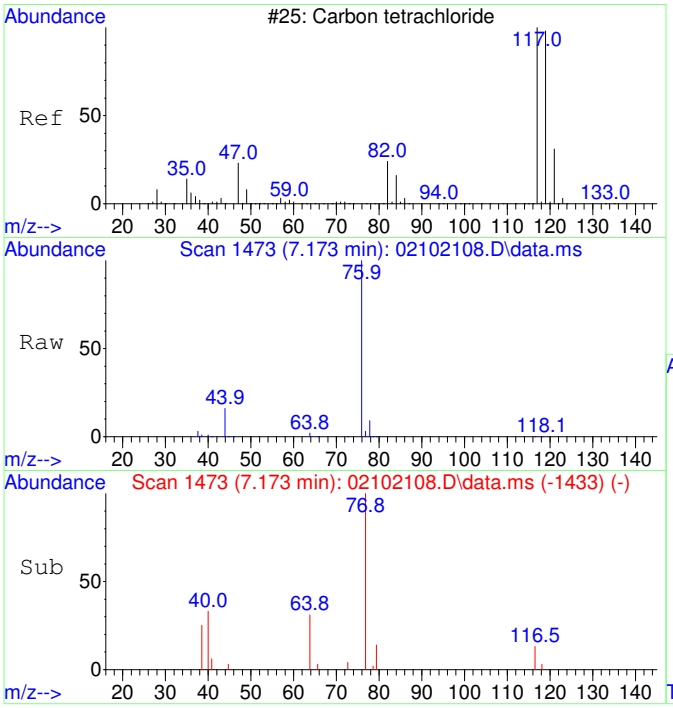


#29
cis-1,2-Dichloroethene SCAN
Concen: 25.37 ug/L
RT: 6.100 min Scan# 1369
Delta R.T. 0.007 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 61 Resp: 192

Ion	Ratio	Lower	Upper
61	100		
96	93.8	39.9	99.9
98	0.0	13.5	73.5#
64	286.5	4.5	64.5#

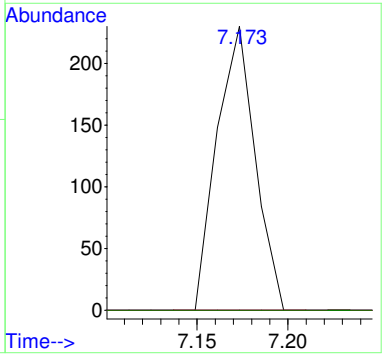


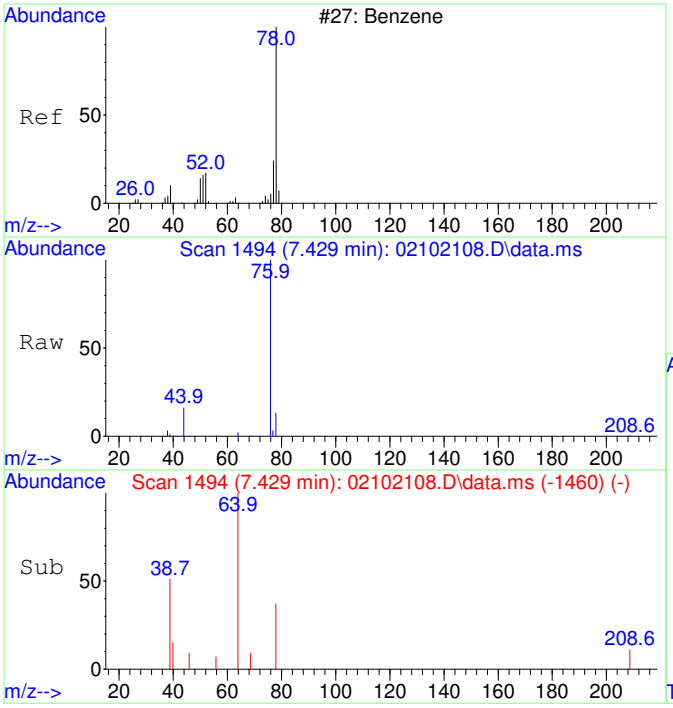


#32
Carbon tetrachloride SCAN
Concen: 54.14 ug/L
RT: 7.173 min Scan# 1473
Delta R.T. -0.012 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:117 Resp: 337

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

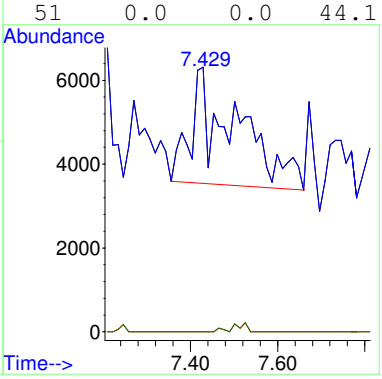


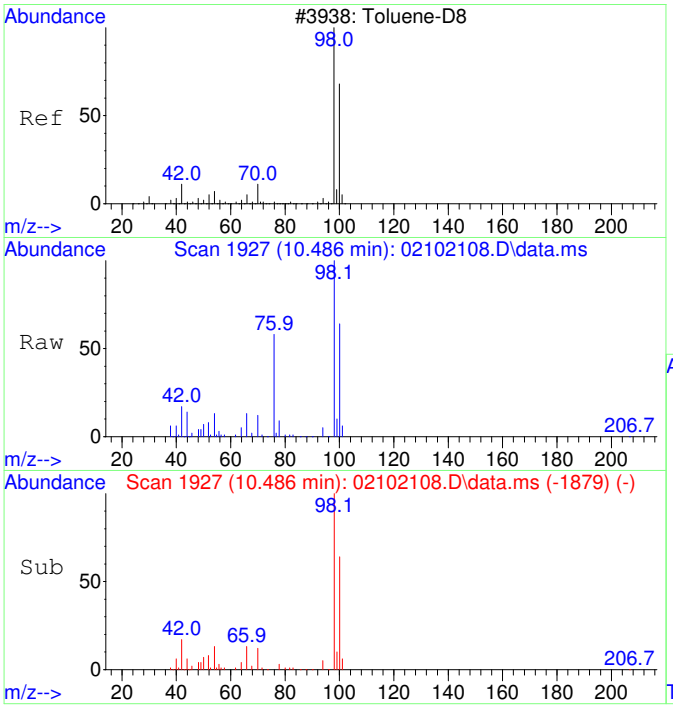


#33
Benzene SCAN
Concen: 911.54 ug/L
RT: 7.429 min Scan# 1494
Delta R.T. -0.085 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 78 Resp: 20086

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

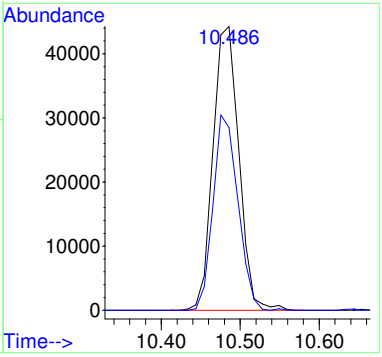


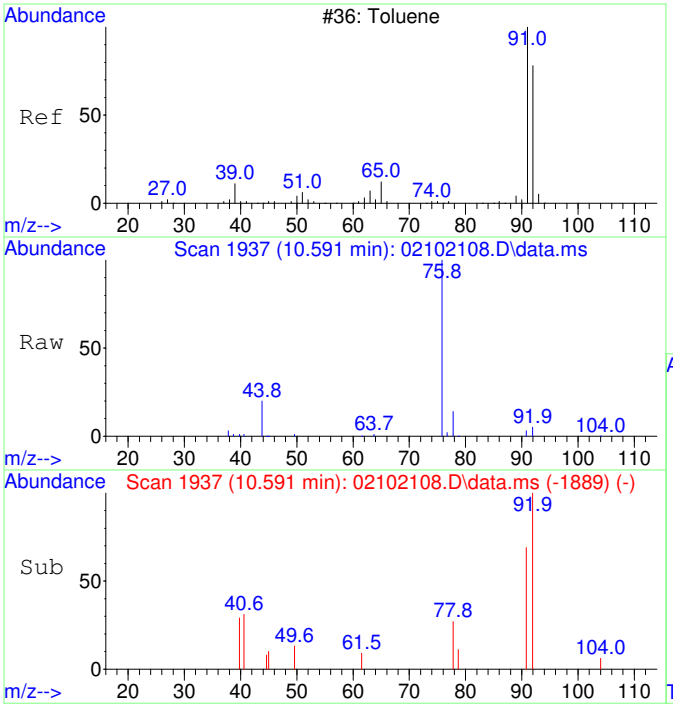


#36
Toluene-d8 SCAN
Concen: 4901.20 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 98 Resp: 100820

Ion	Ratio	Lower	Upper
98	100		
100	65.8	40.0	100.0

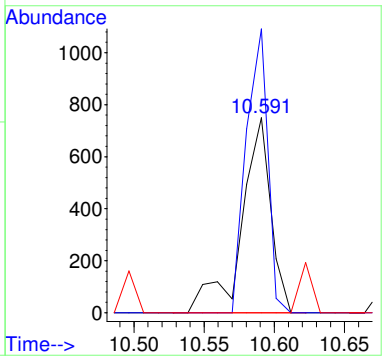


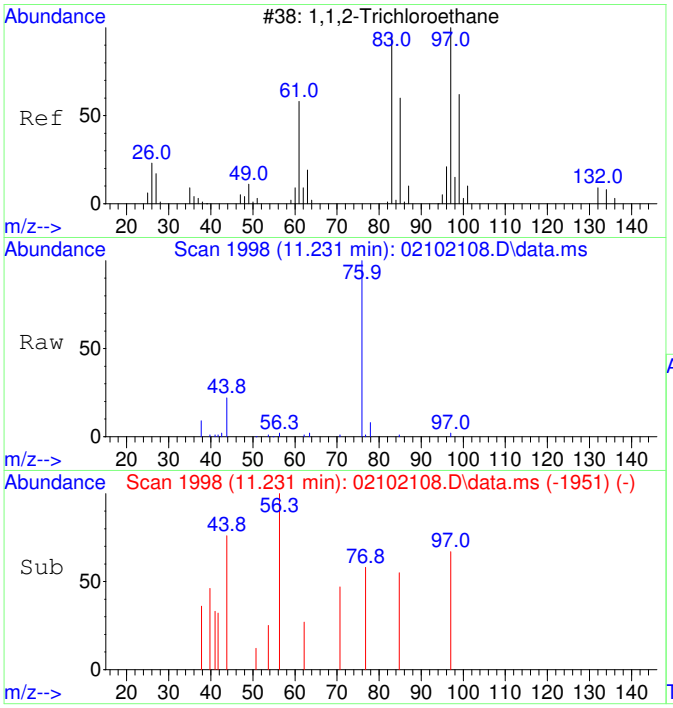


#37
Toluene SCAN
Concen: 43.08 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 1091

Ion	Ratio	Lower	Upper
91	100		
92	107.1	28.3	88.3#
65	0.0	0.0	41.0

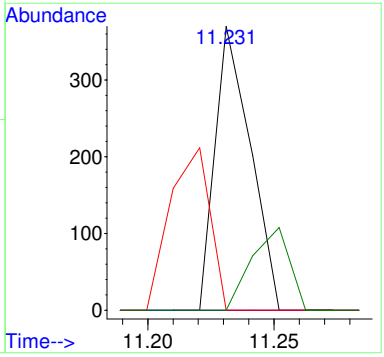


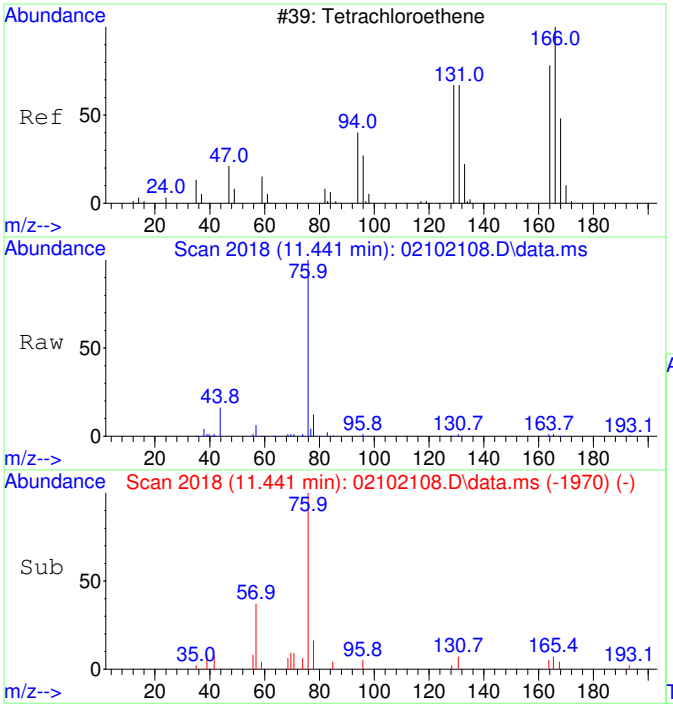


#38
1,1,2-Trichloroethane SCAN
Concen: 56.71 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. -0.011 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 97 Resp: 360

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	65.0	32.1	92.1
99	0.0	36.7	96.7#

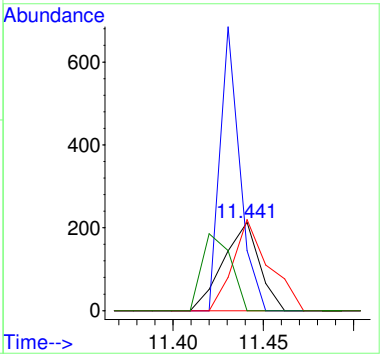


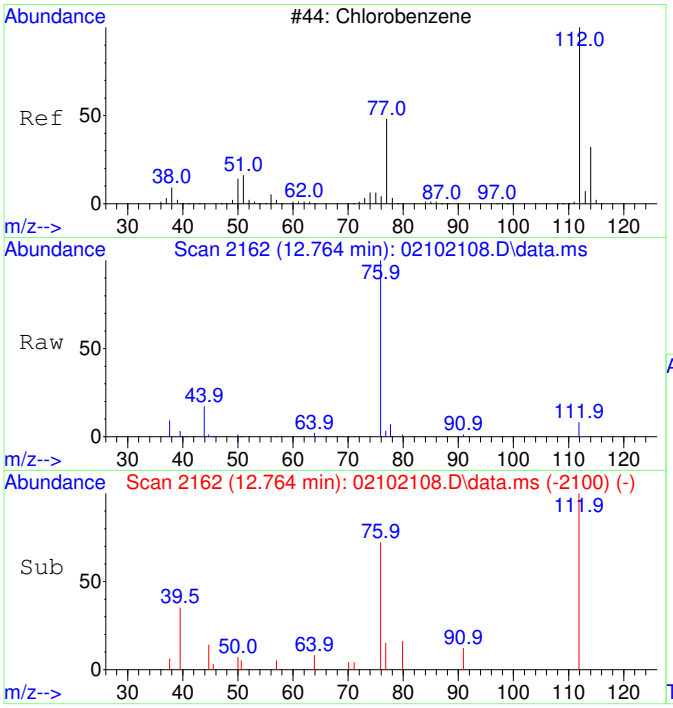


#39
Tetrachloroethene SCAN
Concen: 52.30 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:166 Resp: 298

Ion	Ratio	Lower	Upper
166	100		
164	175.5	50.9	110.9#
131	103.0	38.7	98.7#
129	0.0	41.8	101.8#

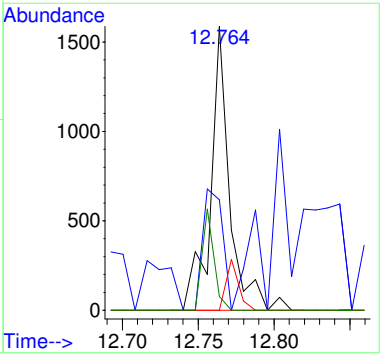


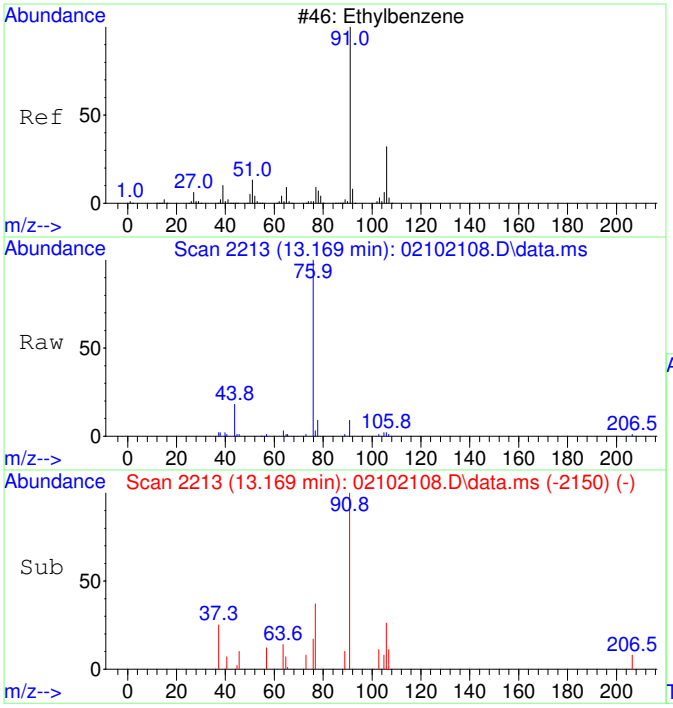


#40
Chlorobenzene SCAN
Concen: 76.36 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. -0.008 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:112 Resp: 1389

Ion	Ratio	Lower	Upper
112	100		
77	44.5	28.2	88.2
114	11.5	2.3	62.3
51	22.1	0.0	50.1

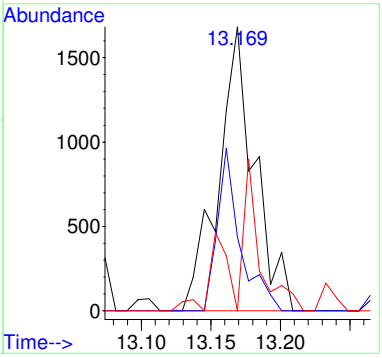


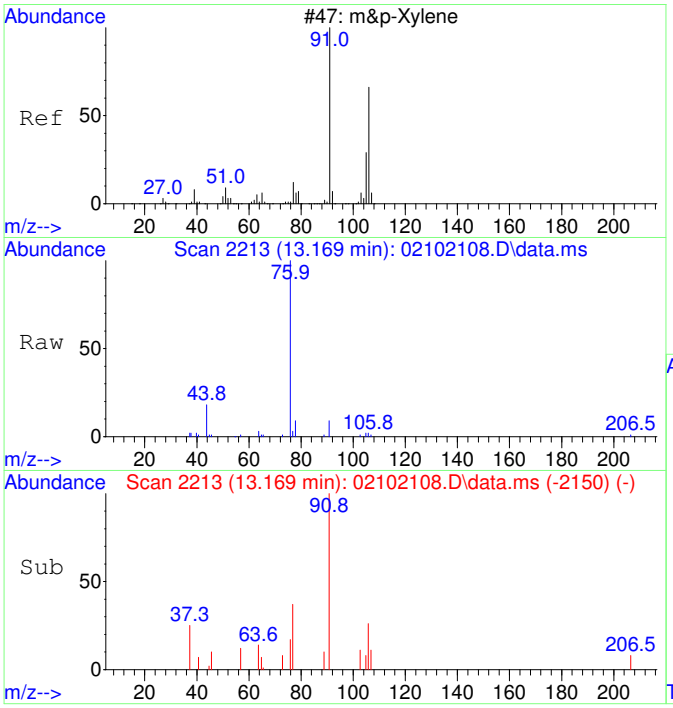


#42
Ethylbenzene SCAN
Concen: 63.05 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 3043

Ion	Ratio	Lower	Upper
91	100		
106	36.1	23.1	83.1
51	37.8	0.0	40.1

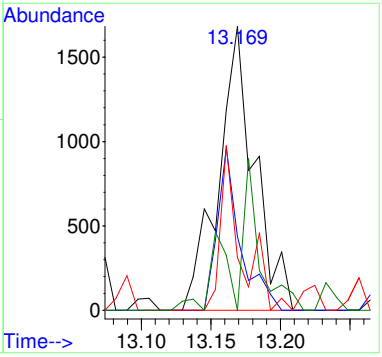


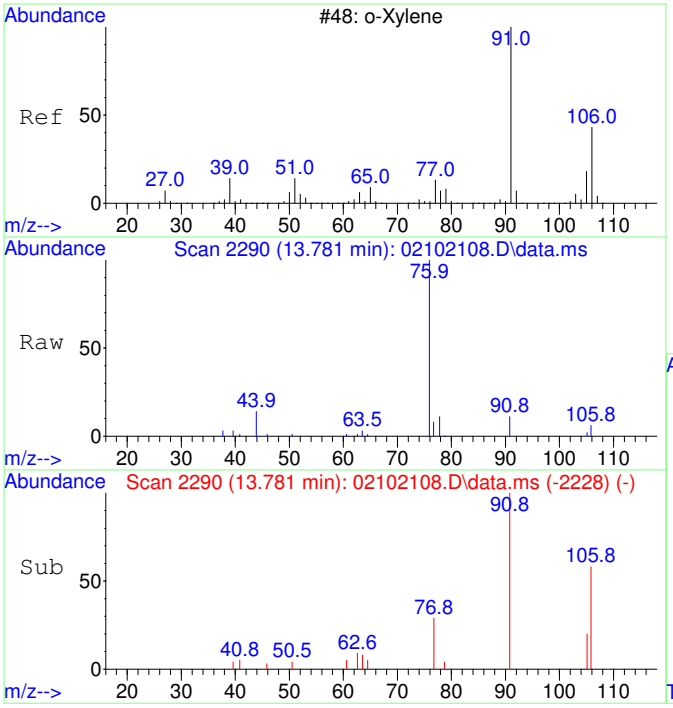


#43
m&p-Xylene SCAN
Concen: 63.05 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 3043

Ion	Ratio	Lower	Upper
91	100		
106	36.1	23.1	83.1
105	32.7	0.0	54.7
51	37.8	0.0	40.1

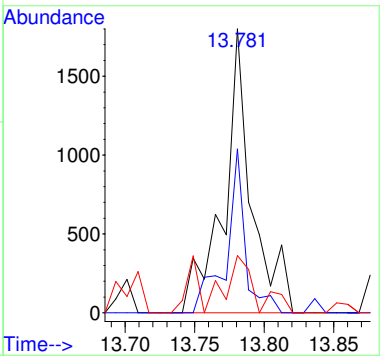


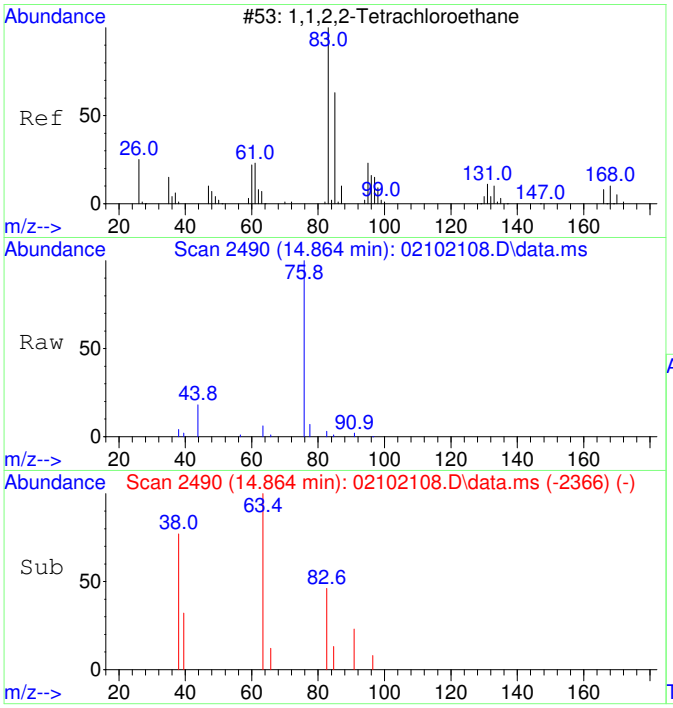


#44
o-Xylene SCAN
Concen: 95.43 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.008 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 2515

Ion	Ratio	Lower	Upper
91	100		
106	39.0	18.0	78.0
105	22.3	0.0	56.6

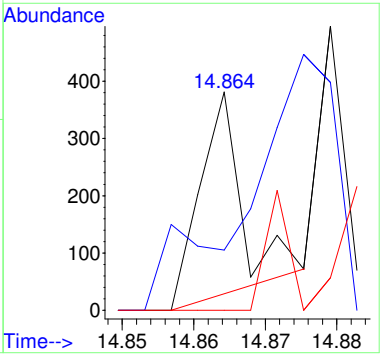


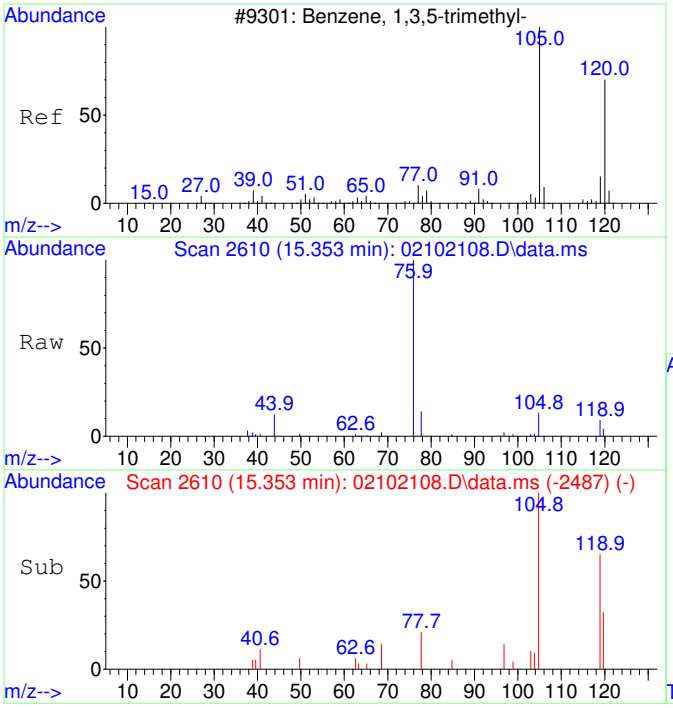


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 10.80 ug/L
RT: 14.864 min Scan# 2490
Delta R.T. -0.019 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 83 Resp: 148

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

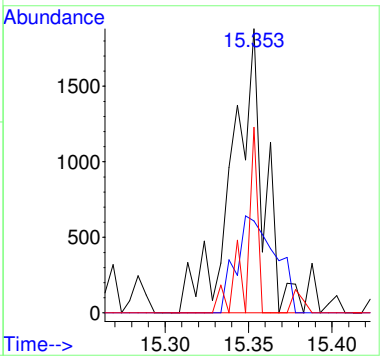


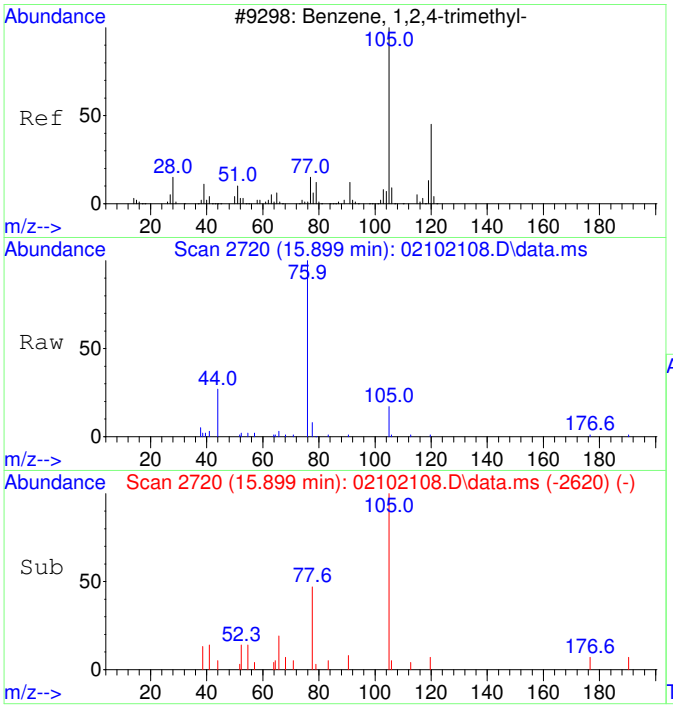


#46
1,3,5-Trimethylbenzene SCAN
Concen: 90.78 ug/L
RT: 15.353 min Scan# 2610
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:105 Resp: 2524

Ion	Ratio	Lower	Upper
105	100		
120	41.4	18.3	78.3
119	22.3	0.0	43.1

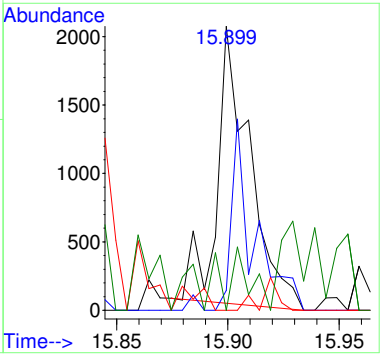


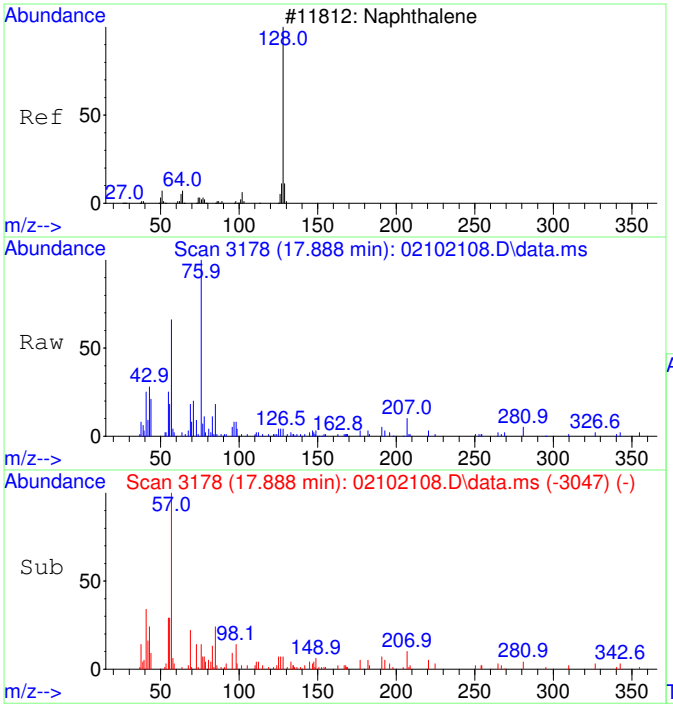


#47
1,2,4-Trimethylbenzene SCAN
Concen: 73.11 ug/L
RT: 15.899 min Scan# 2720
Delta R.T. -0.005 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:105 Resp: 2077

Ion	Ratio	Lower	Upper
105	100		
120	45.7	16.9	76.9
119	0.0	0.0	41.9
77	12.1	0.0	42.3

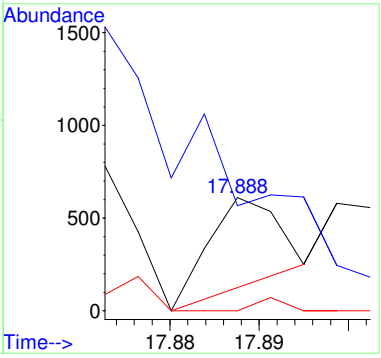




#48
Naphthalene SCAN
Concen: 6.45 ug/L
RT: 17.888 min Scan# 3178
Delta R.T. -0.015 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:128 Resp: 275

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



2102006-03

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102111.D
Acq On : 10 Feb 2021 13:12
InstName : AG5975C
Operator : TD
Sample : 2102006-03
Misc :
ALS Vial : 11 Sample Multiplier: 1

REPORT

Quant Time: Feb 11 09:20:30 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

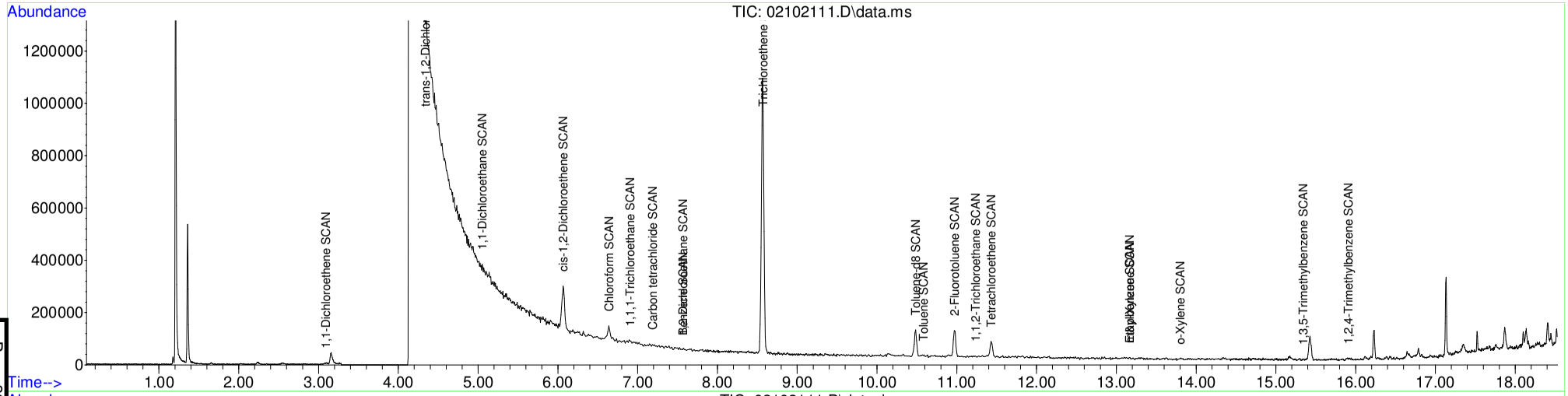
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	141956	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	118230	4300.31 ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.01%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.086	61	7206	1280.21 ug/L	85
3] trans-1,2-Dichloroethene	4.316	61	9899	1394.99 ug/L	97
4] 1,1-Dichloroethane	5.053	63	8552	1009.04 ug/L	99
5] cis-1,2-Dichloroethene	6.061	61	197046	22447.84 ug/L	98
6] Chloroform	6.640	83	63305	7508.34 ug/L	100
7] 1,1,1-Trichloroethane	6.895	97	6224	687.20 ug/L	99
8] Carbon tetrachloride	7.163	117	1274	147.13 ug/L	99
9] Benzene	7.491	78	1500	62.80 ug/L #	18
10] 1,2-Dichloroethane	7.540	62	212	26.02 ug/L #	1
11] Trichloroethene	8.564	130	710307	94181.57 ug/L **OC**	97
13] Toluene	10.582	91	6165	180.10 ug/L	100
15] Tetrachloroethene	11.432	166	37730	3538.63 ug/L	99
19] m&p-Xylene	13.163	91	3776	112.15 ug/L	94
20] o-Xylene	13.782	91	1545	42.72 ug/L	96
22] 1,3,5-Trimethylbenzene	15.345	105	1407	35.38 ug/L	92
23] 1,2,4-Trimethylbenzene	15.901	105	3161	77.71 ug/L	90
25) 2-Fluorotoluene SCAN	10.969	109	78206	4853.46 ug/L	98
26) 1,1-Dichloroethene SCAN	3.089	61	1834	487.54 ug/L #	37
27) trans-1,2-Dichloroethe...	4.335	61	6762	1411.30 ug/L	72
28) 1,1-Dichloroethane SCAN	5.051	63	6217	1099.29 ug/L	84
29) cis-1,2-Dichloroethene...	6.067	61	134324	24160.35 ug/L #	78
30) Chloroform SCAN	6.638	83	45637	8800.68 ug/L	95
31) 1,1,1-Trichloroethane ...	6.906	97	3220	601.75 ug/L #	57
32) Carbon tetrachloride SCAN	7.186	117	499	109.12 ug/L #	53
33) Benzene SCAN	7.563	78	2933	181.17 ug/L	94
34) 1,2-Dichloroethane SCAN	7.563	62	185	36.53 ug/L #	40
35) Trichloroethene SCAN	8.568	130	378491	107221.79 ug/L	84
36) Toluene-d8 SCAN	10.486	98	76331	5050.79 ug/L	94
37) Toluene SCAN	10.581	91	3521	189.23 ug/L	76
38) 1,1,2-Trichloroethane ...	11.231	97	188	40.31 ug/L #	13
39) Tetrachloroethene SCAN	11.431	166	19723	4711.72 ug/L	96
42) Ethylbenzene SCAN	13.169	91	1860	52.45 ug/L #	94
43) m&p-Xylene SCAN	13.169	91	1860	52.45 ug/L #	82
44) o-Xylene SCAN	13.797	91	617	31.87 ug/L #	59
46) 1,3,5-Trimethylbenzene...	15.344	105	581	28.44 ug/L	76
47) 1,2,4-Trimethylbenzene...	15.909	105	2267	108.62 ug/L #	49

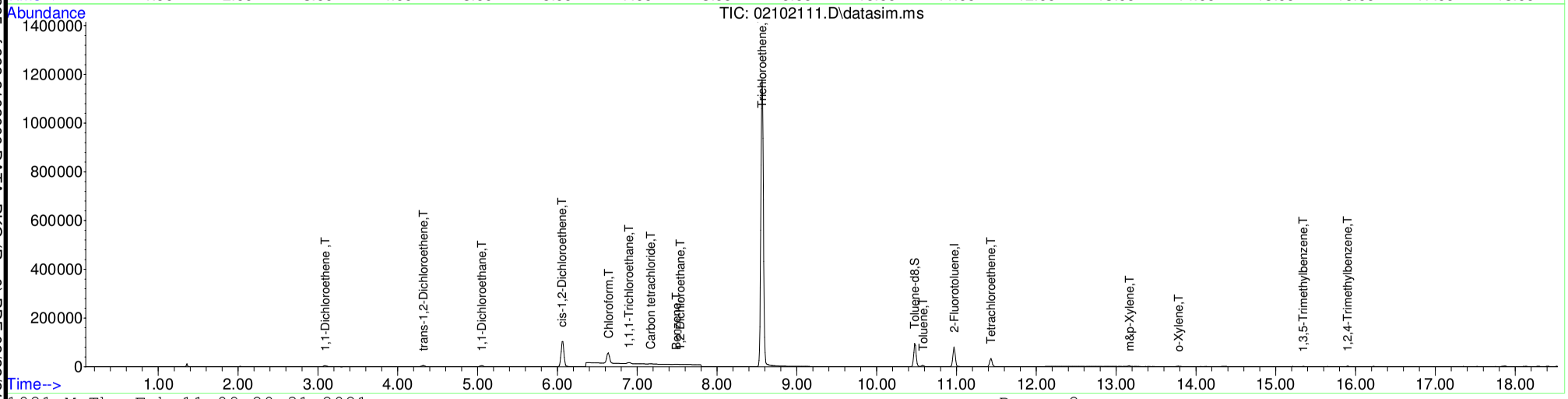
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102111.D
Acq On : 10 Feb 2021 13:12
InstName : AG5975C
Operator : TD
Sample : 2102006-03
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 11 09:20:30 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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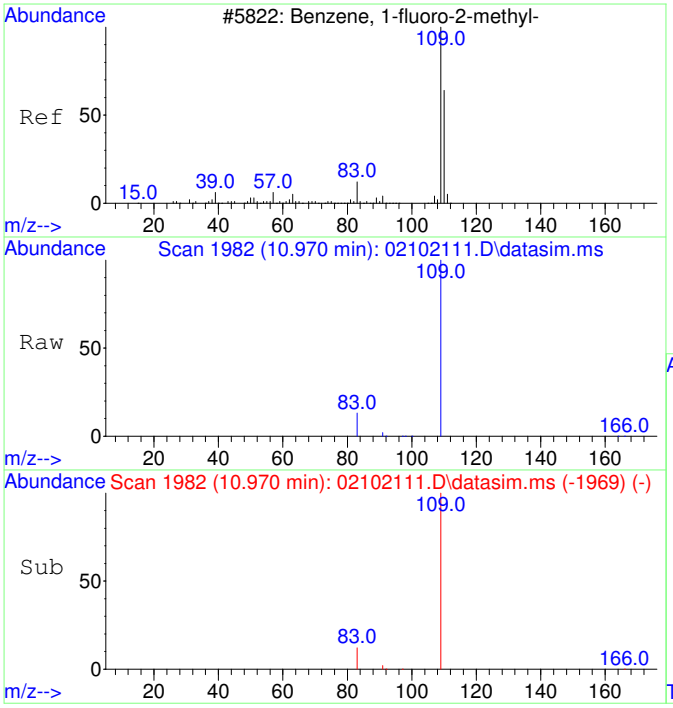
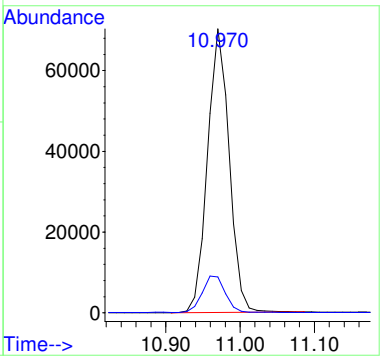
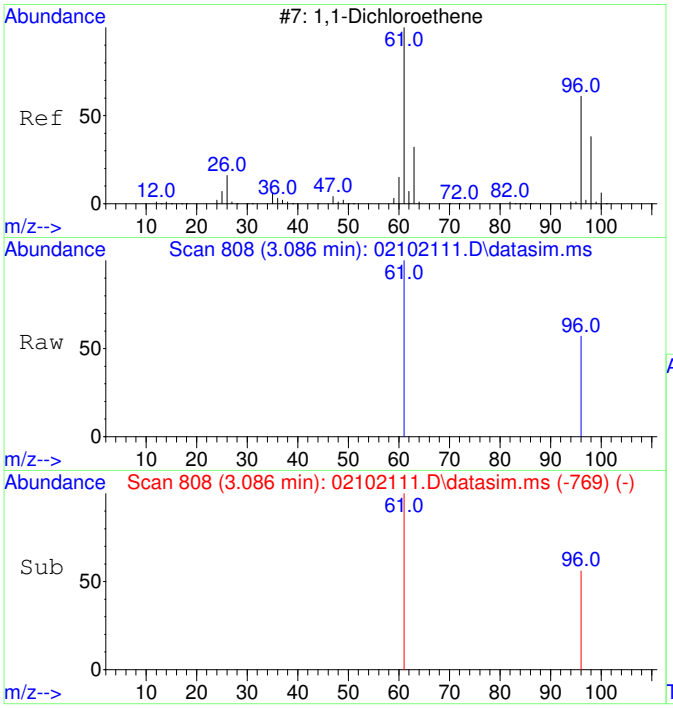


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion:109 Resp: 141956

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

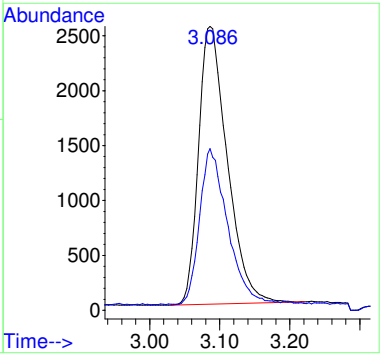


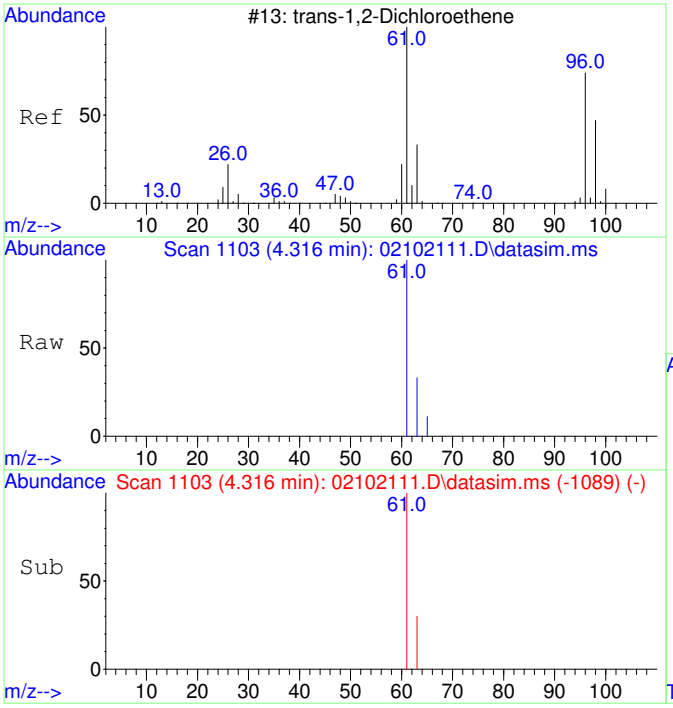


#2
1,1-Dichloroethene
Concen: 1280.21 ug/L
RT: 3.086 min Scan# 808
Delta R.T. -0.004 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 61 Resp: 7206

Ion	Ratio	Lower	Upper
61	100		
96	54.8	37.2	97.2

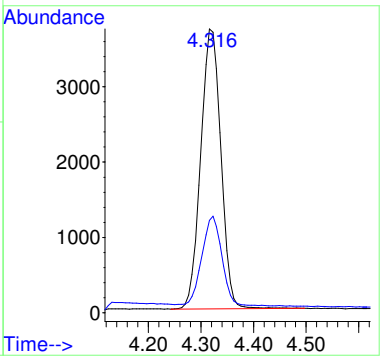


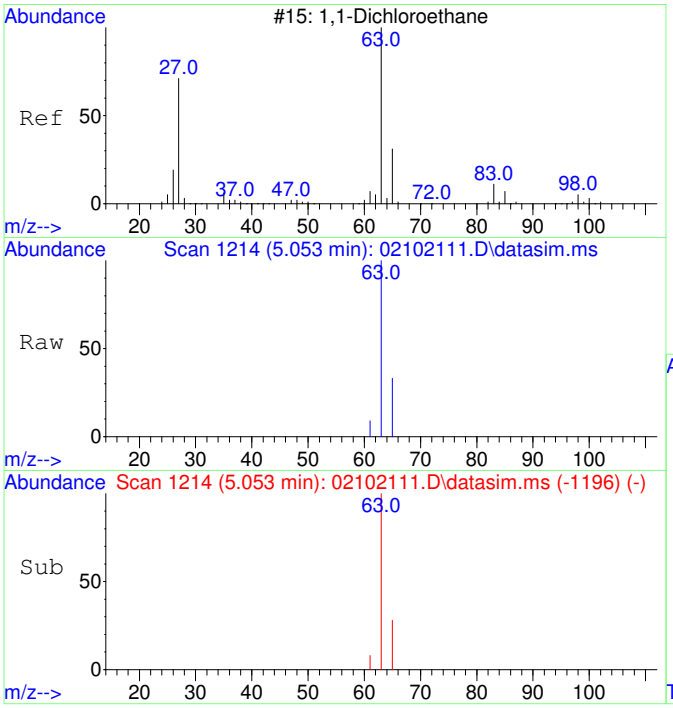


#3
trans-1,2-Dichloroethene
Concen: 1394.99 ug/L
RT: 4.316 min Scan# 1103
Delta R.T. -0.059 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 61 Resp: 9899

Ion	Ratio	Lower	Upper
61	100		
63	30.9	2.4	62.4

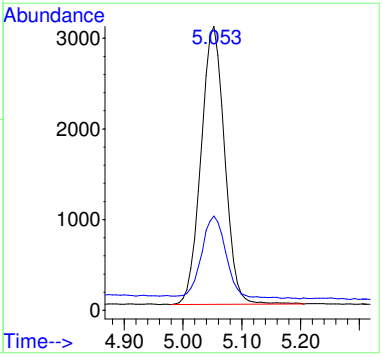


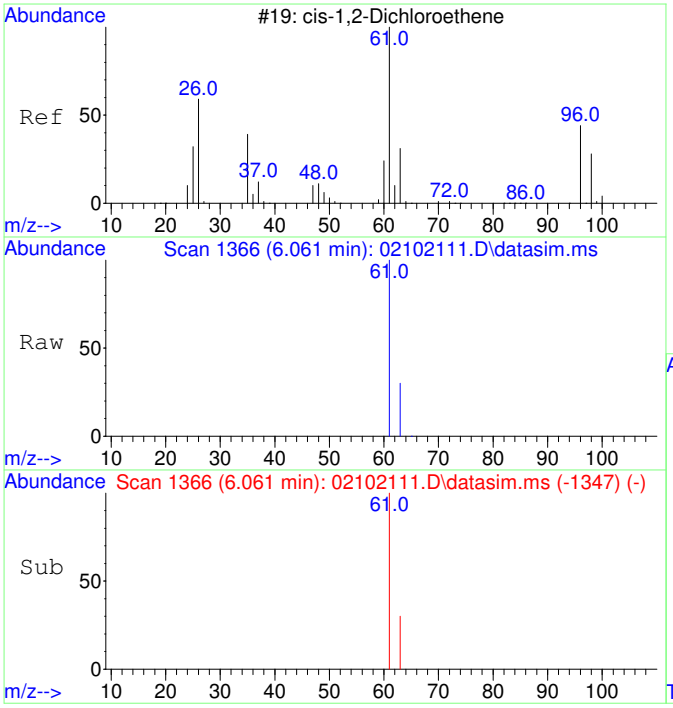


#4
1,1-Dichloroethane
Concen: 1009.04 ug/L
RT: 5.053 min Scan# 1214
Delta R.T. -0.033 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 63 Resp: 8552

Ion	Ratio	Lower	Upper
63	100		
65	31.2	1.8	61.8

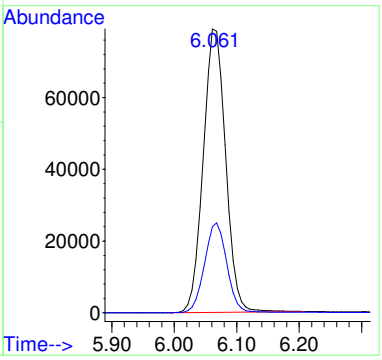


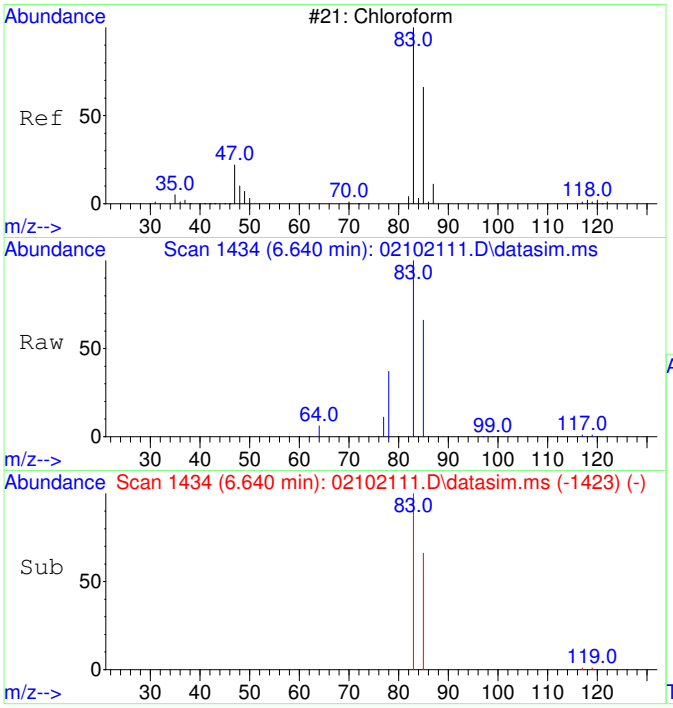


#5
cis-1,2-Dichloroethene
Concen: 22447.84 ug/L
RT: 6.061 min Scan# 1366
Delta R.T. -0.026 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 61 Resp: 197046

Ion	Ratio	Lower	Upper
61	100		
63	31.3	2.5	62.5

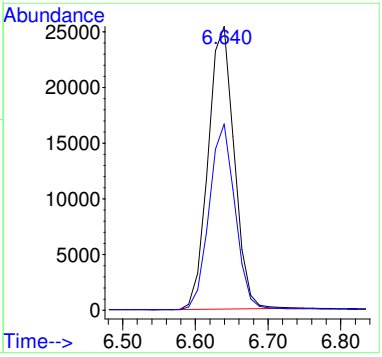


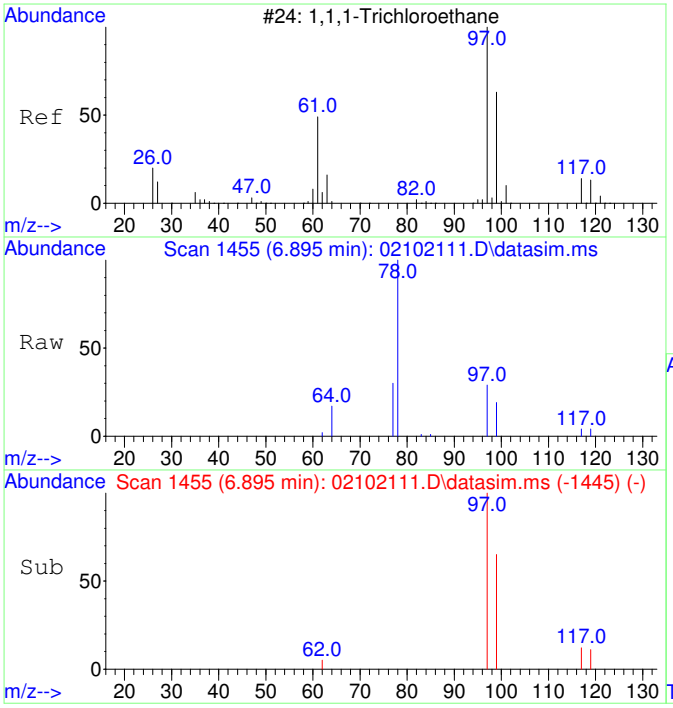


#6
Chloroform
Concen: 7508.34 ug/L
RT: 6.640 min Scan# 1434
Delta R.T. -0.012 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 83 Resp: 63305

Ion	Ratio	Lower	Upper
83	100		
85	64.9	35.1	95.1

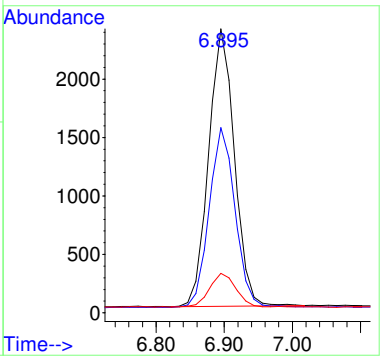


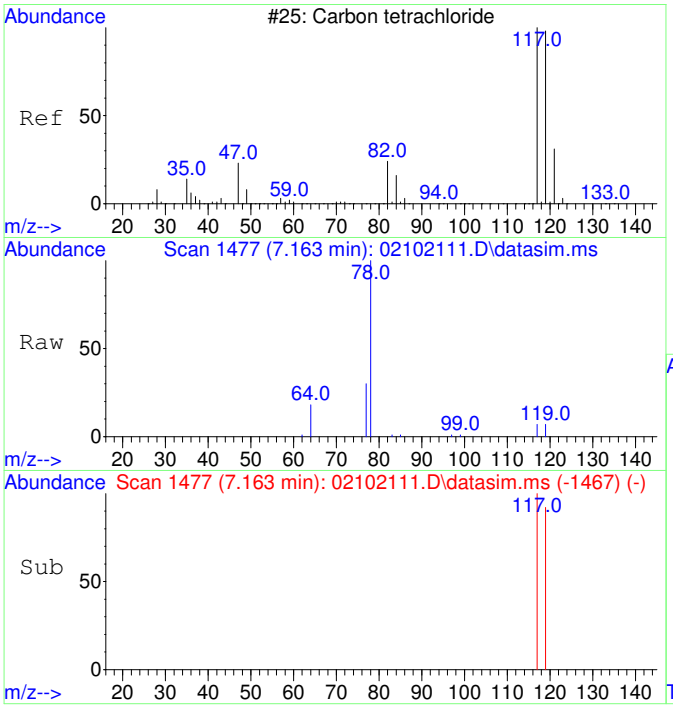


#7
1,1,1-Trichloroethane
Concen: 687.20 ug/L
RT: 6.895 min Scan# 1455
Delta R.T. -0.024 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 97 Resp: 6224

Ion	Ratio	Lower	Upper
97	100		
99	64.8	34.6	94.6
117	12.4	0.0	43.2

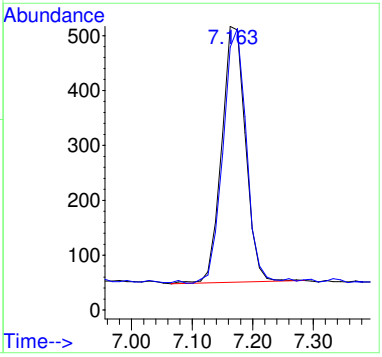


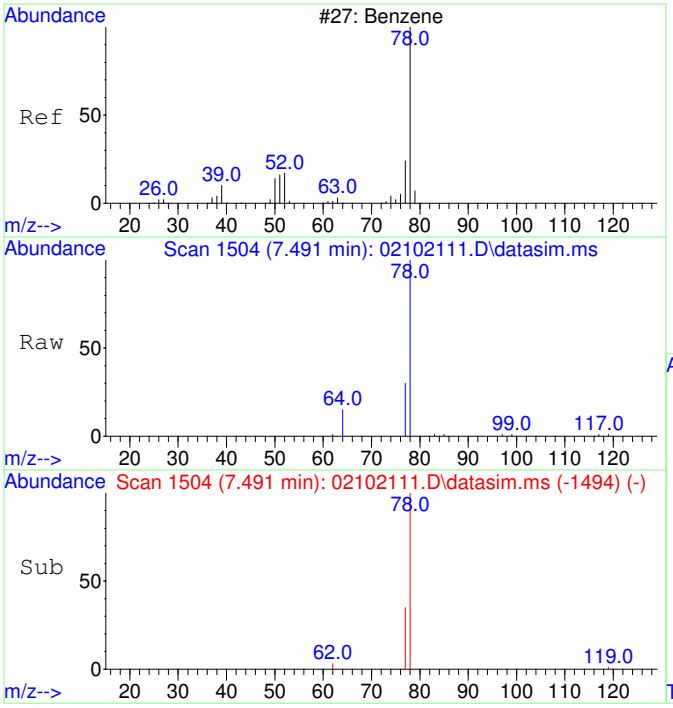


#8
Carbon tetrachloride
Concen: 147.13 ug/L
RT: 7.163 min Scan# 1477
Delta R.T. -0.024 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion:117 Resp: 1274

Ion	Ratio	Lower	Upper
117	100		
119	97.5	66.4	126.4

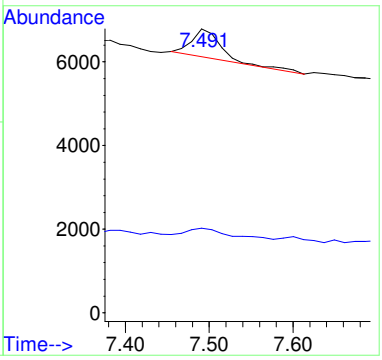


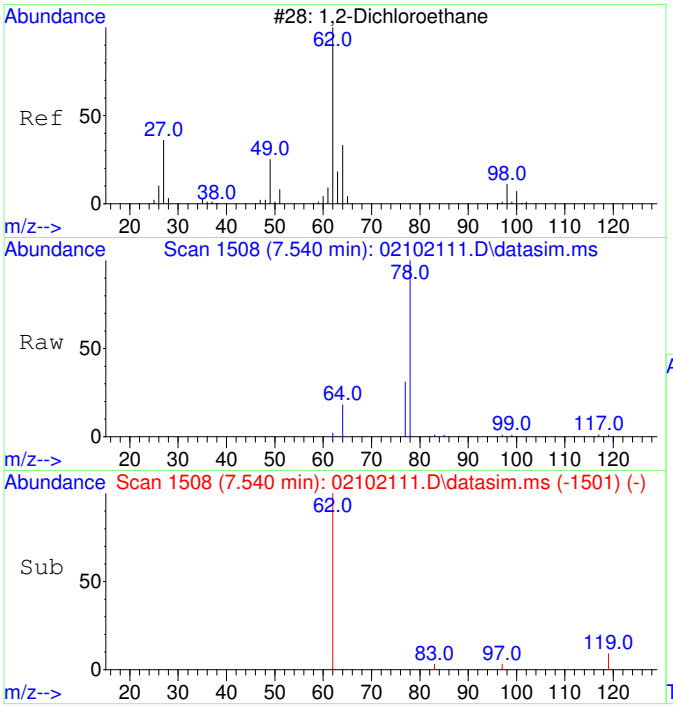


#9
Benzene
Concen: 62.80 ug/L
RT: 7.491 min Scan# 1504
Delta R.T. -0.024 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 78 Resp: 1500

Ion	Ratio	Lower	Upper
78	100		
77	63.3	0.0	53.2#

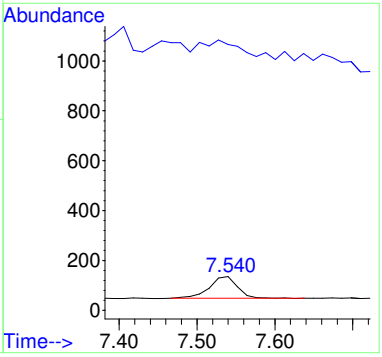


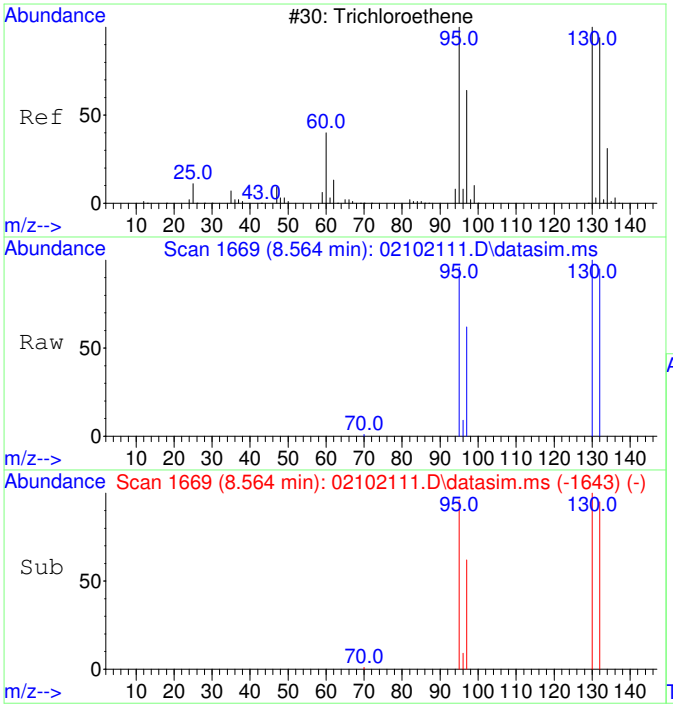


#10
1,2-Dichloroethane
Concen: 26.02 ug/L
RT: 7.540 min Scan# 1508
Delta R.T. -0.012 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 62 Resp: 212

Ion	Ratio	Lower	Upper
62	100		
64	130.7	2.3	62.3#

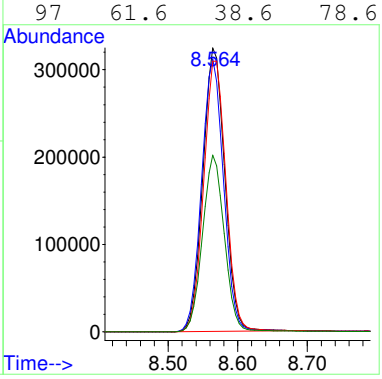


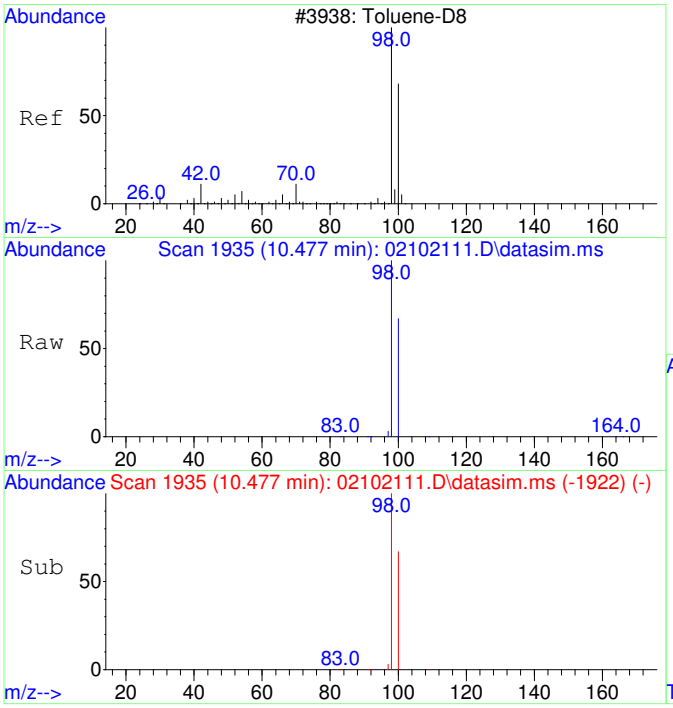


#11
Trichloroethene
Concen: 94181.57 ug/L
RT: 8.564 min Scan# 1669
Delta R.T. -0.011 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion:130 Resp: 710307

Ion	Ratio	Lower	Upper
130	100		
95	95.8	60.7	120.7
132	96.7	76.0	116.0
97	61.6	38.6	78.6

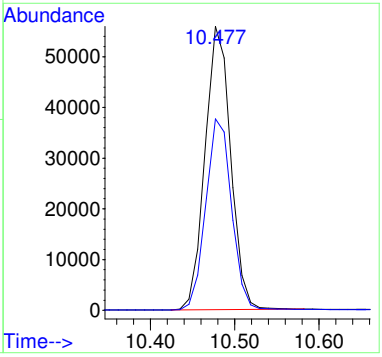


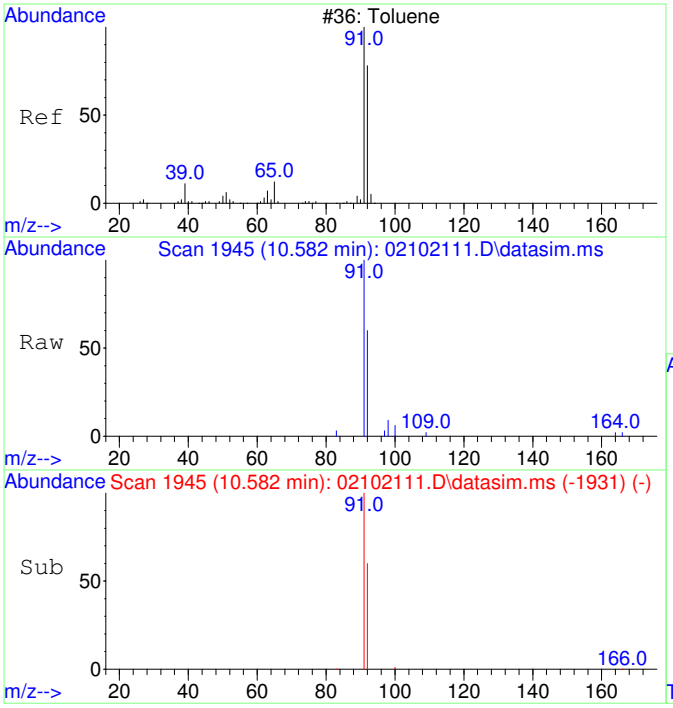


#12
Toluene-d8
Concen: 4300.31 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 98 Resp: 118230

Ion	Ratio	Lower	Upper
98	100		
100	67.6	37.1	97.1

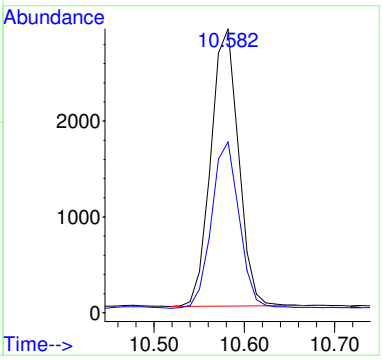


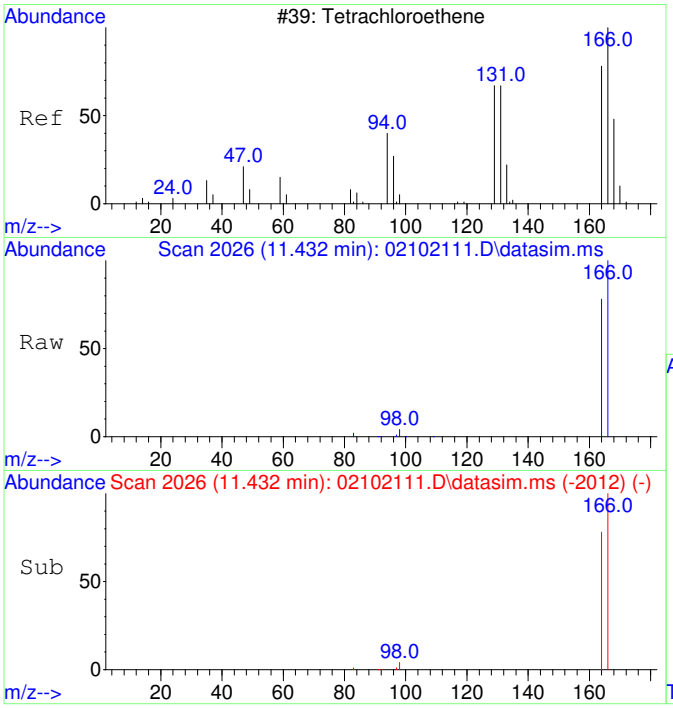


#13
Toluene
Concen: 180.10 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 91 Resp: 6165

Ion	Ratio	Lower	Upper
91	100		
92	59.8	29.9	89.9

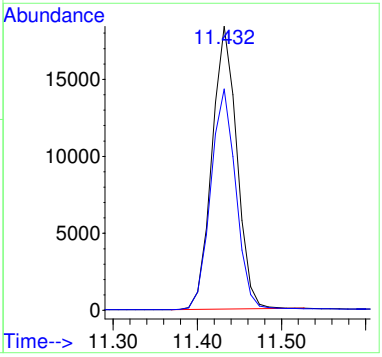


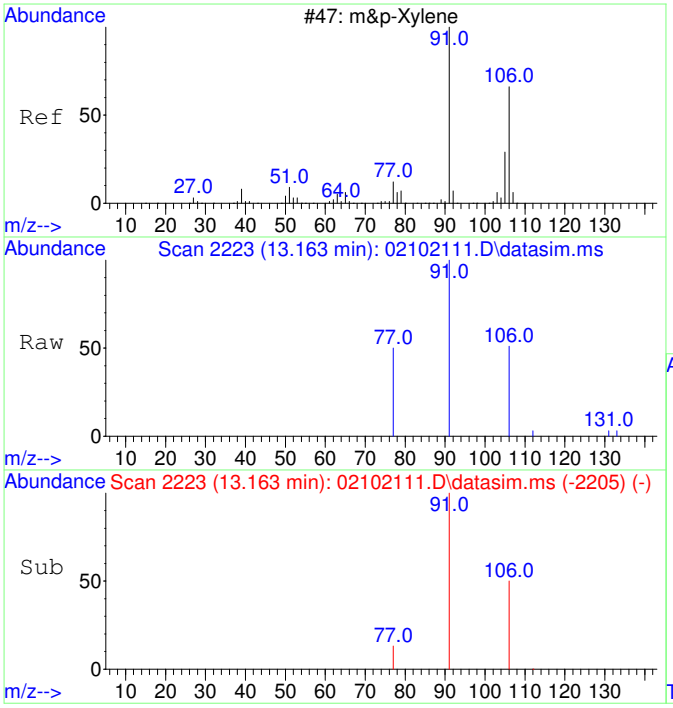


#15
Tetrachloroethene
Concen: 3538.63 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion:166 Resp: 37730

Ion	Ratio	Lower	Upper
166	100		
164	78.3	47.8	107.8

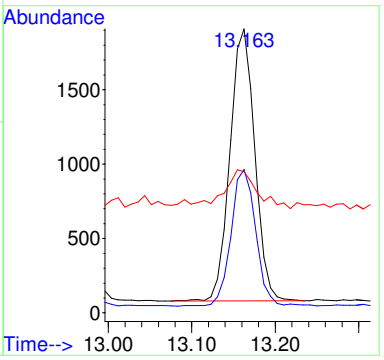


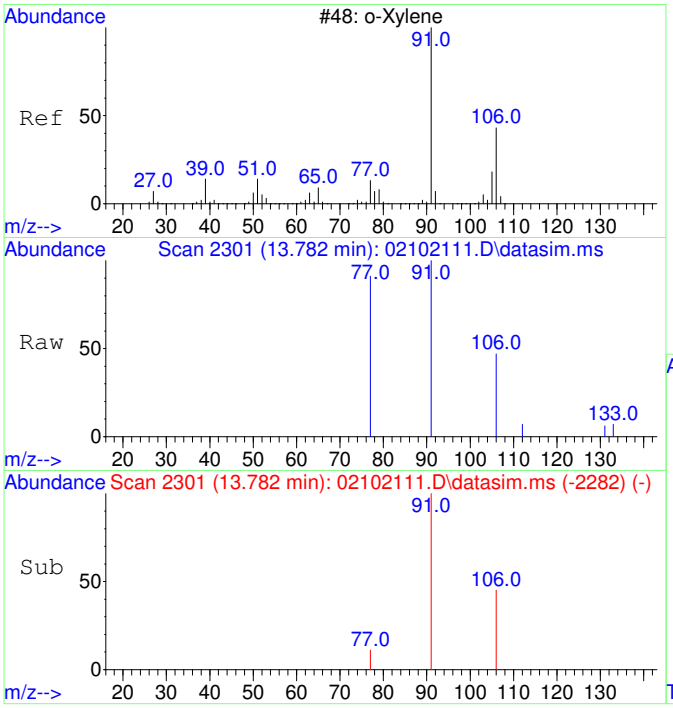


#19
m&p-Xylene
Concen: 112.15 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 91 Resp: 3776

Ion	Ratio	Lower	Upper
91	100		
106	50.0	22.2	82.2
77	18.9	0.0	42.4

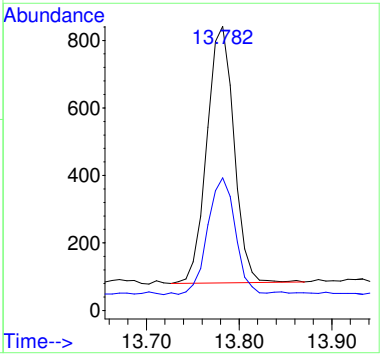


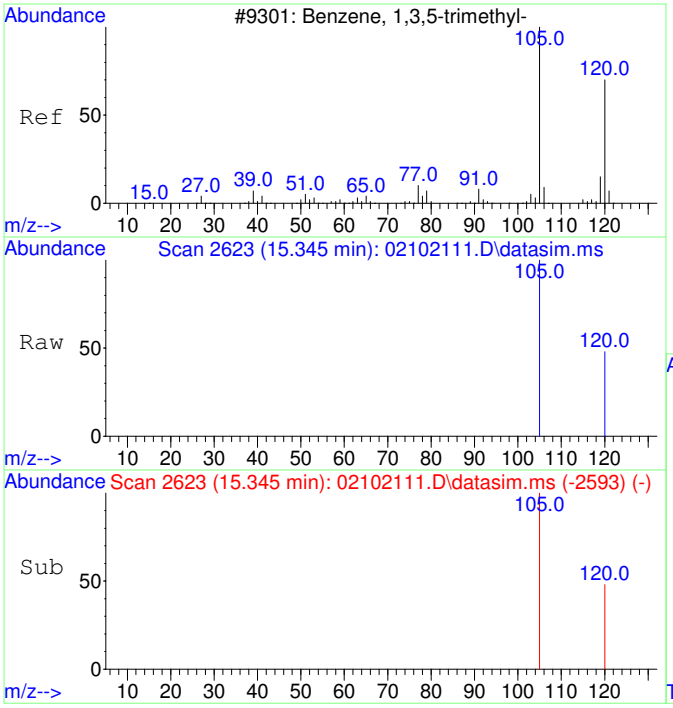


#20
o-Xylene
Concen: 42.72 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 91 Resp: 1545

Ion	Ratio	Lower	Upper
91	100		
106	46.6	19.2	79.2

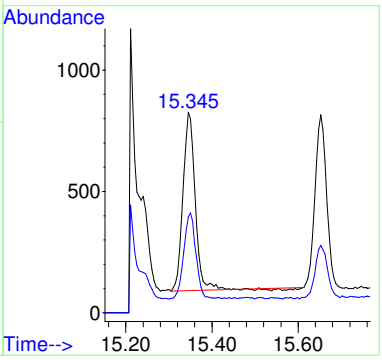


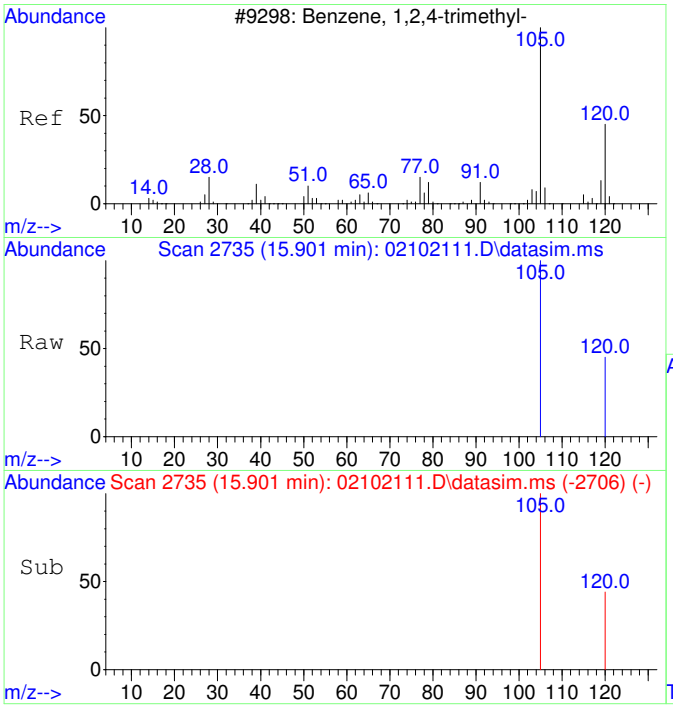


#22
1,3,5-Trimethylbenzene
Concen: 35.38 ug/L
RT: 15.345 min Scan# 2623
Delta R.T. -0.005 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion:105 Resp: 1407

Ion	Ratio	Lower	Upper
105	100		
120	45.6	21.1	81.1

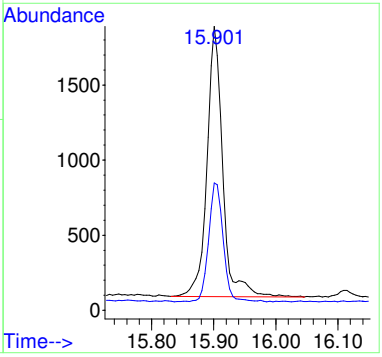


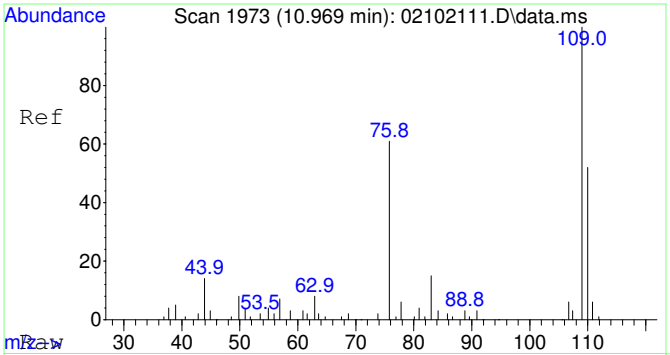


#23
1,2,4-Trimethylbenzene
Concen: 77.71 ug/L
RT: 15.901 min Scan# 2735
Delta R.T. -0.005 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion:105 Resp: 3161

Ion	Ratio	Lower	Upper
105	100		
120	40.6	17.2	77.2

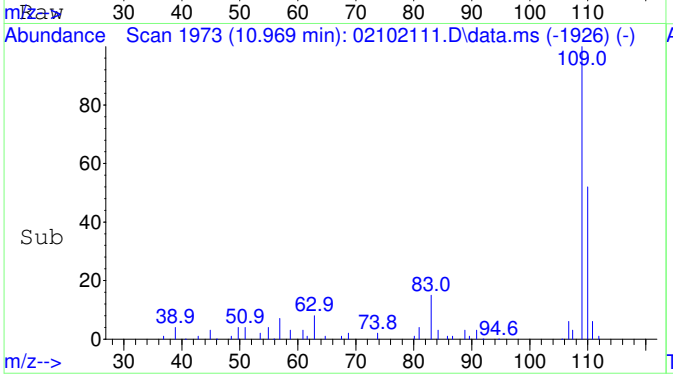


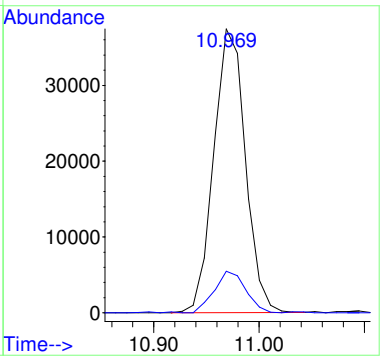


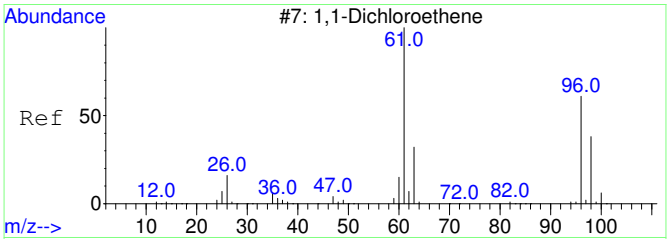
#25
2-Fluorotoluene SCAN
Concen: 4853.46 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

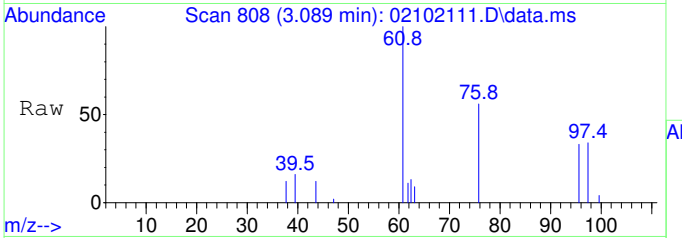
Tgt Ion:109 Resp: 78206

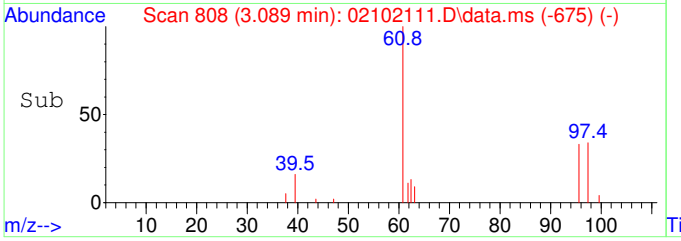
Ion	Ratio	Lower	Upper
109	100		
83	14.6	0.0	43.8







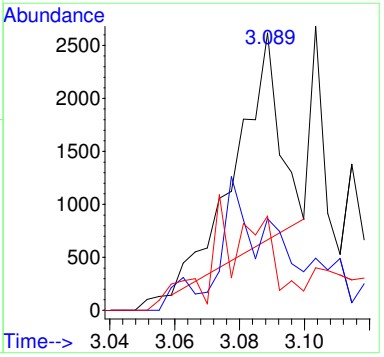


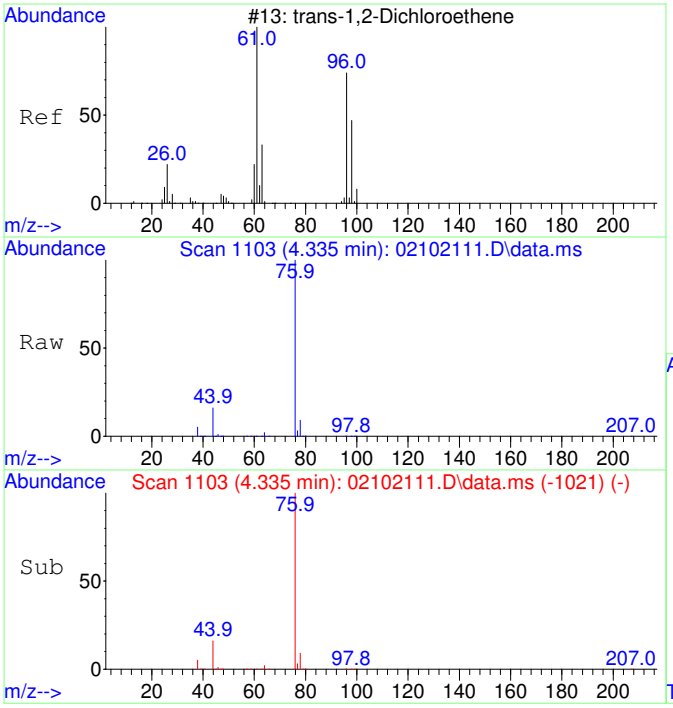


#26
1,1-Dichloroethene SCAN
Concen: 487.54 ug/L
RT: 3.089 min Scan# 808
Delta R.T. -0.007 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 61 Resp: 1834

Ion	Ratio	Lower	Upper
61	100		
96	0.0	33.1	93.1#
98	19.6	11.2	71.2

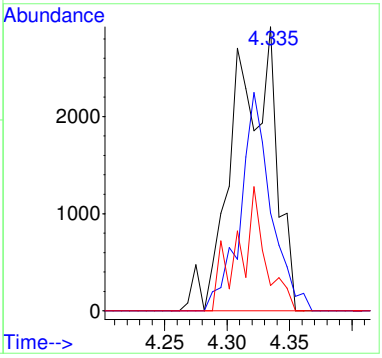


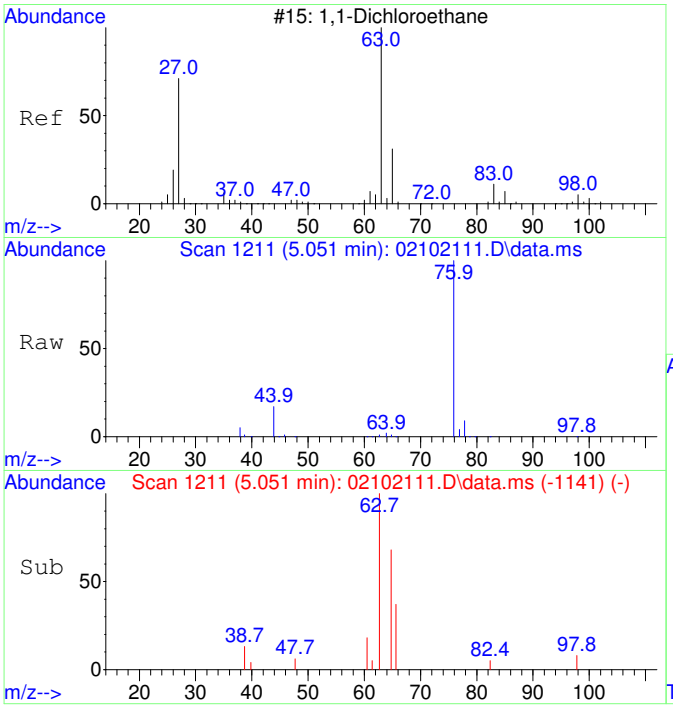


#27
trans-1,2-Dichloroethene SCAN
Concen: 1411.30 ug/L
RT: 4.335 min Scan# 1103
Delta R.T. -0.046 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 61 Resp: 6762

Ion	Ratio	Lower	Upper
61	100		
96	56.8	49.0	109.0
98	28.6	20.5	80.5

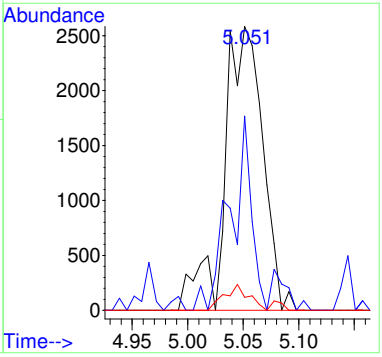


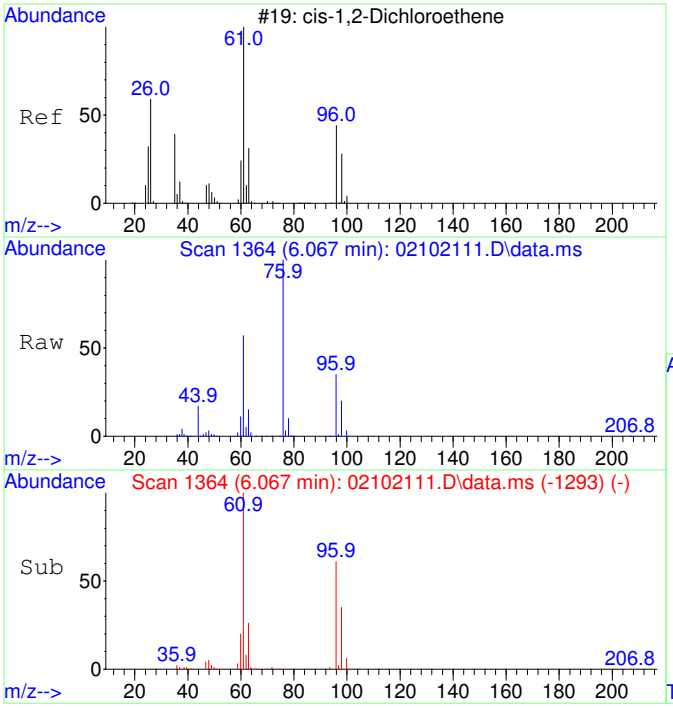


#28
1,1-Dichloroethane SCAN
Concen: 1099.29 ug/L
RT: 5.051 min Scan# 1211
Delta R.T. -0.033 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 63 Resp: 6217

Ion	Ratio	Lower	Upper
63	100		
65	37.9	1.3	61.3
83	5.7	0.0	45.9

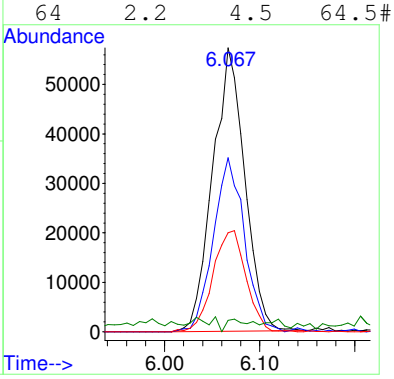


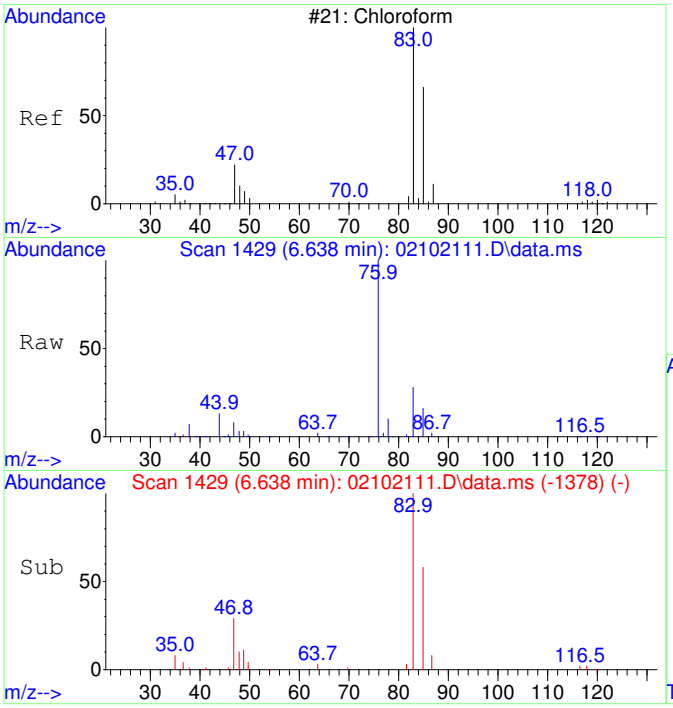


#29
cis-1,2-Dichloroethene SCAN
Concen: 24160.35 ug/L
RT: 6.067 min Scan# 1364
Delta R.T. -0.026 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 61 Resp: 134324

Ion	Ratio	Lower	Upper
61	100		
96	59.9	39.9	99.9
98	36.9	13.5	73.5
64	2.2	4.5	64.5#

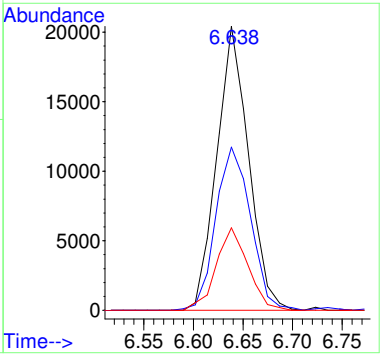


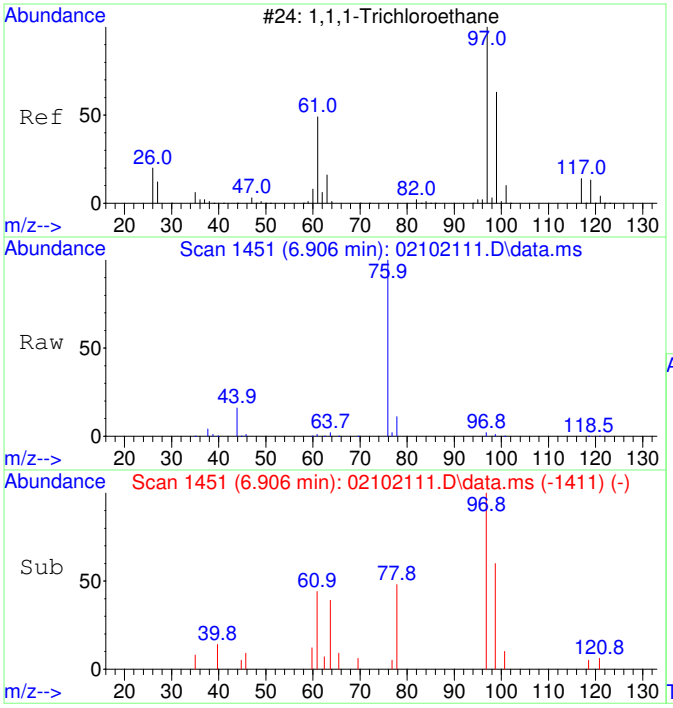


#30
Chloroform SCAN
Concen: 8800.68 ug/L
RT: 6.638 min Scan# 1429
Delta R.T. -0.024 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 83 Resp: 45637

Ion	Ratio	Lower	Upper
83	100		
85	62.9	34.6	94.6
47	29.2	0.0	53.4

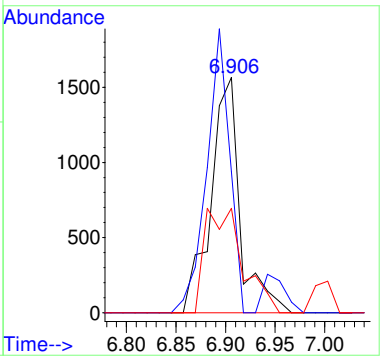


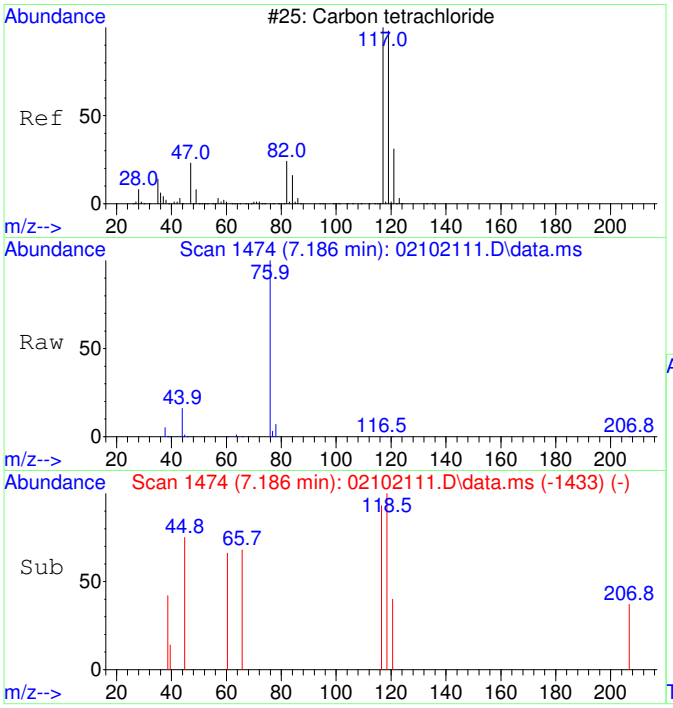


#31
1,1,1-Trichloroethane SCAN
Concen: 601.75 ug/L
RT: 6.906 min Scan# 1451
Delta R.T. -0.012 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 97 Resp: 3220

Ion	Ratio	Lower	Upper
97	100		
99	94.9	43.6	103.6
61	0.0	18.0	78.0#

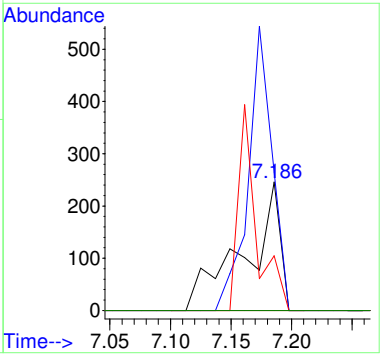


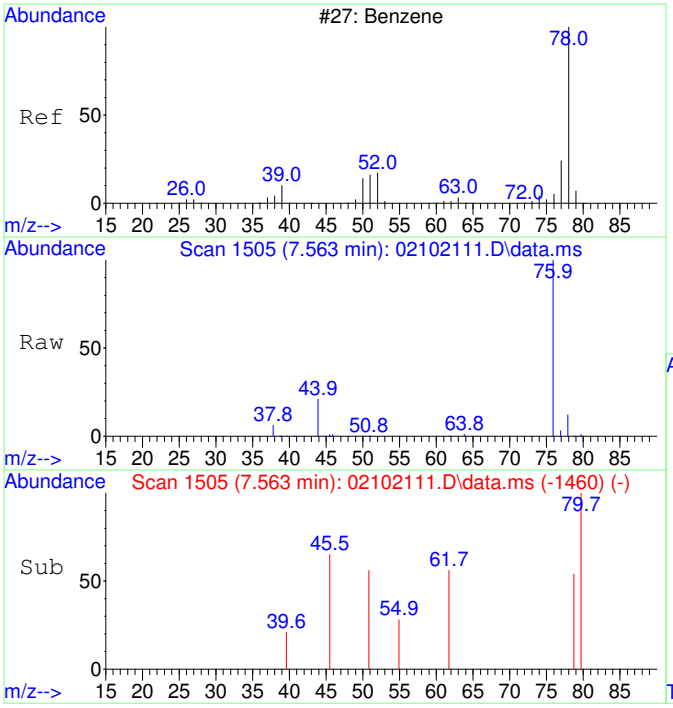


#32
Carbon tetrachloride SCAN
Concen: 109.12 ug/L
RT: 7.186 min Scan# 1474
Delta R.T. 0.000 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion:117 Resp: 499

Ion	Ratio	Lower	Upper
117	100		
119	149.9	75.5	135.5#
121	0.0	0.0	58.8
82	0.0	0.0	59.2

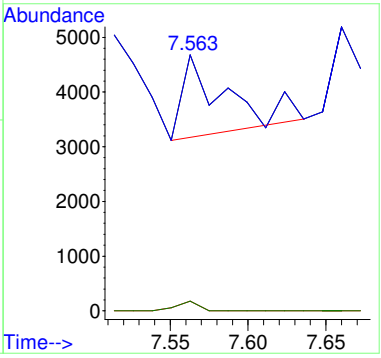


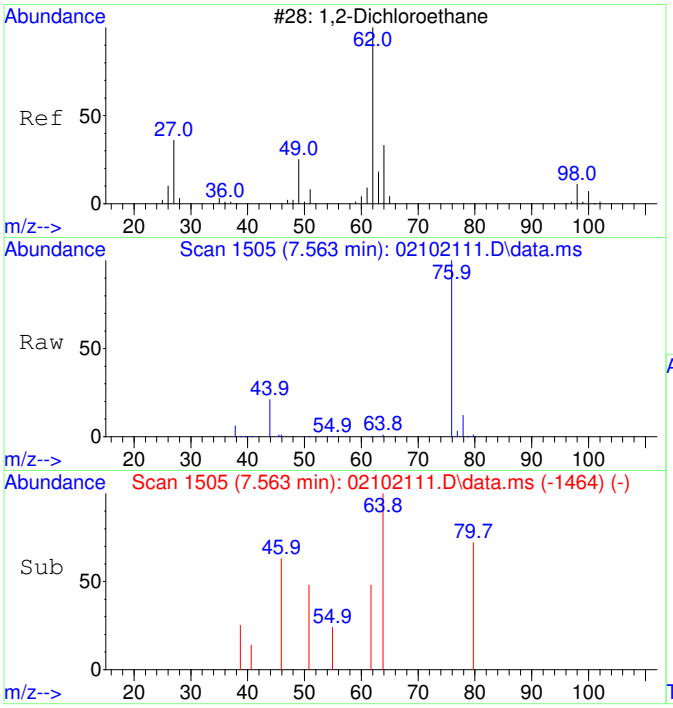


#33
Benzene SCAN
Concen: 181.17 ug/L
RT: 7.563 min Scan# 1505
Delta R.T. 0.049 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 78 Resp: 2933

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	5.9	0.0	47.9
51	5.9	0.0	44.1

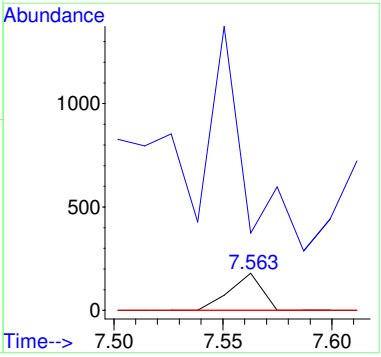


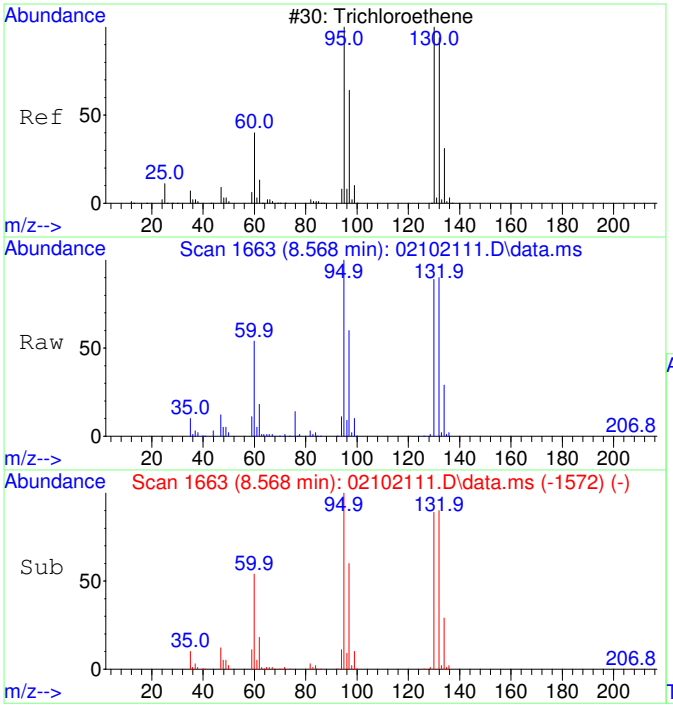


#34
1,2-Dichloroethane SCAN
Concen: 36.53 ug/L
RT: 7.563 min Scan# 1505
Delta R.T. 0.000 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 62 Resp: 185

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

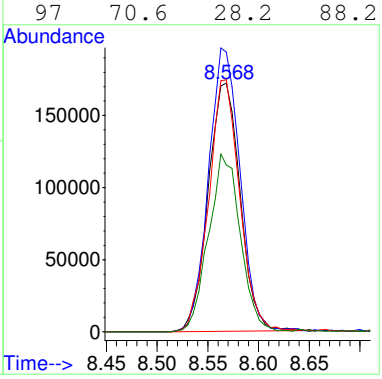


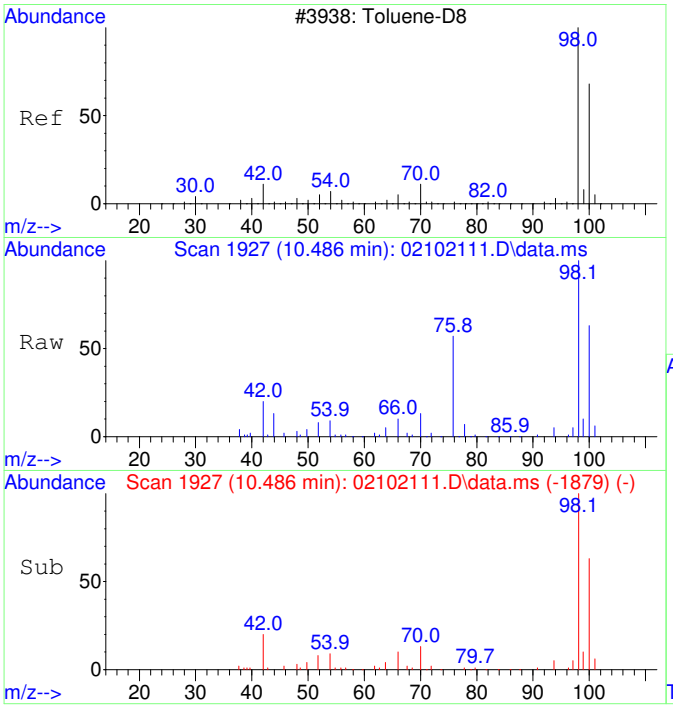


#35
Trichloroethene SCAN
Concen: 107221.79 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.005 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion:130 Resp: 378491

Ion	Ratio	Lower	Upper
130	100		
95	112.5	60.5	120.5
132	98.0	59.6	119.6
97	70.6	28.2	88.2

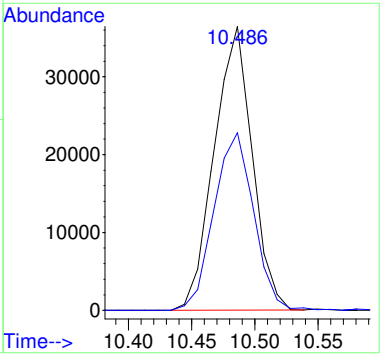


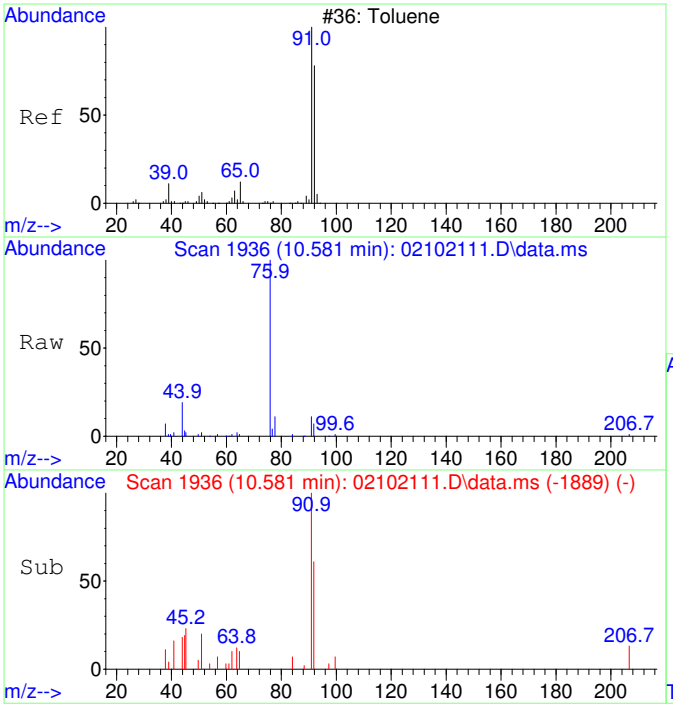


#36
Toluene-d8 SCAN
Concen: 5050.79 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 98 Resp: 76331

Ion	Ratio	Lower	Upper
98	100		
100	65.4	40.0	100.0

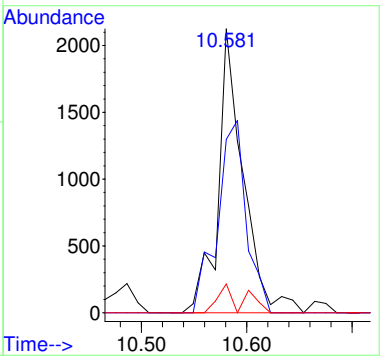


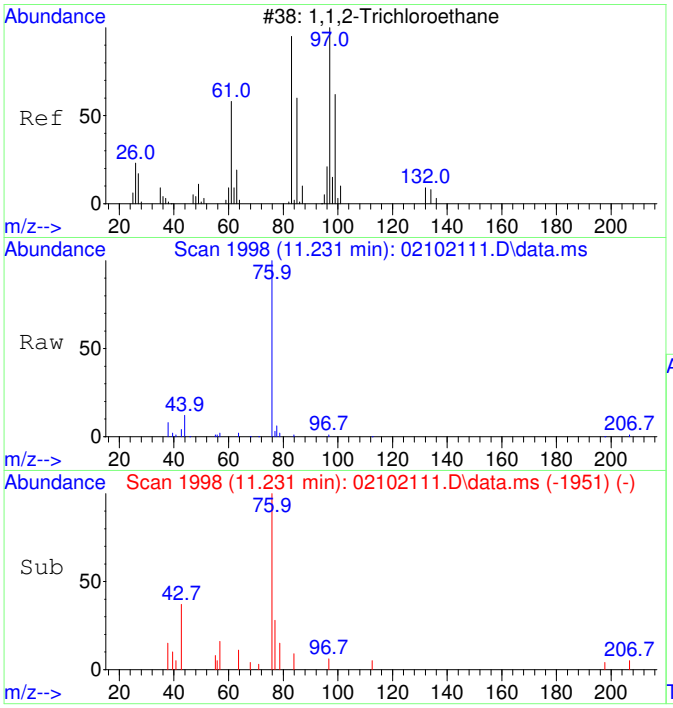


#37
Toluene SCAN
Concen: 189.23 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 91 Resp: 3521

Ion	Ratio	Lower	Upper
91	100		
92	77.8	28.3	88.3
65	5.4	0.0	41.0

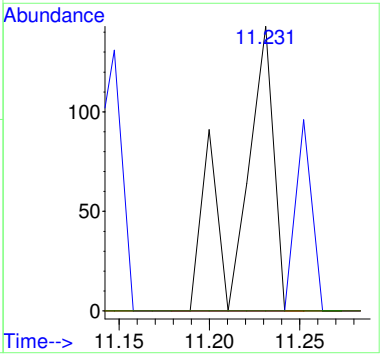


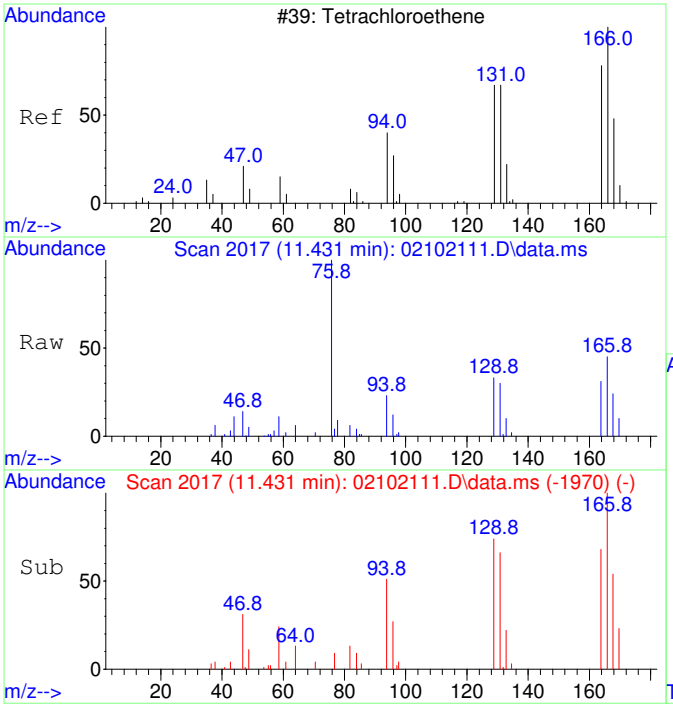


#38
1,1,2-Trichloroethane SCAN
Concen: 40.31 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. -0.010 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 97 Resp: 188

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#

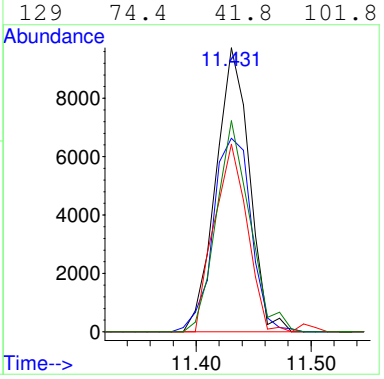


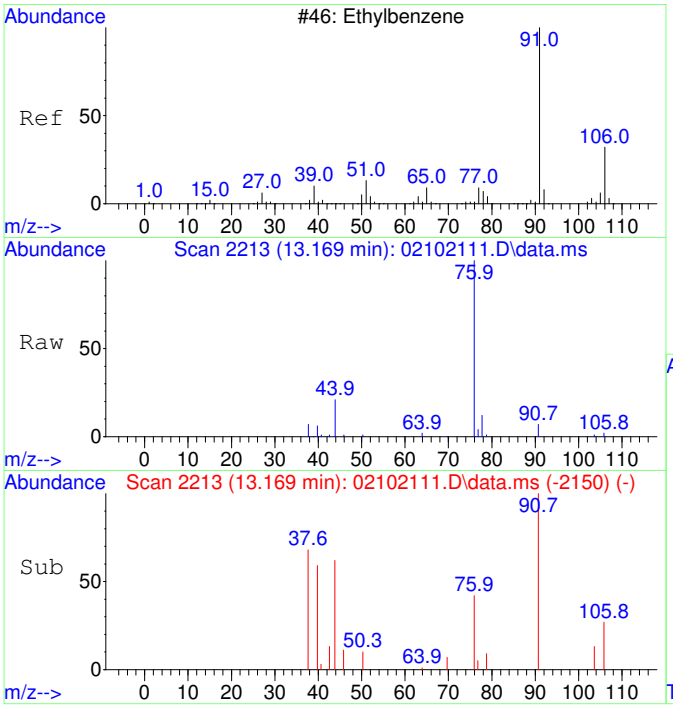


#39
Tetrachloroethene SCAN
Concen: 4711.72 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. -0.010 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion:166 Resp: 19723

Ion	Ratio	Lower	Upper
166	100		
164	77.8	50.9	110.9
131	64.7	38.7	98.7
129	74.4	41.8	101.8

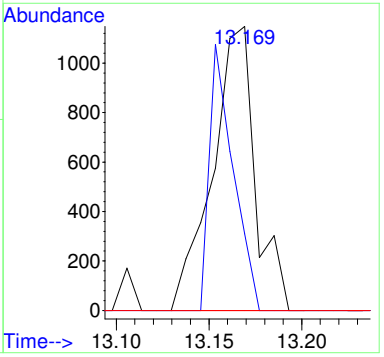


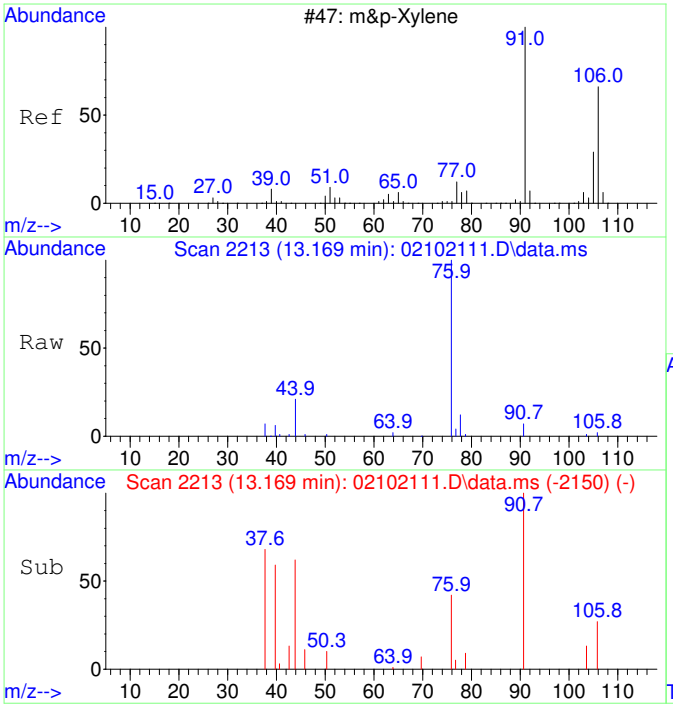


#42
Ethylbenzene SCAN
Concen: 52.45 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 91 Resp: 1860

Ion	Ratio	Lower	Upper
91	100		
106	52.0	23.1	83.1
51	0.0	0.0	40.1

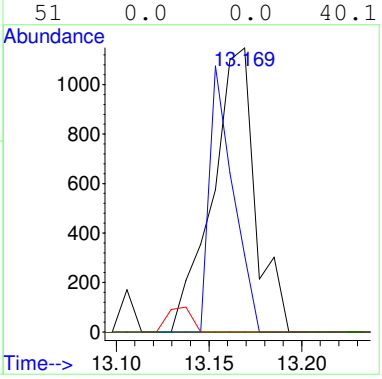


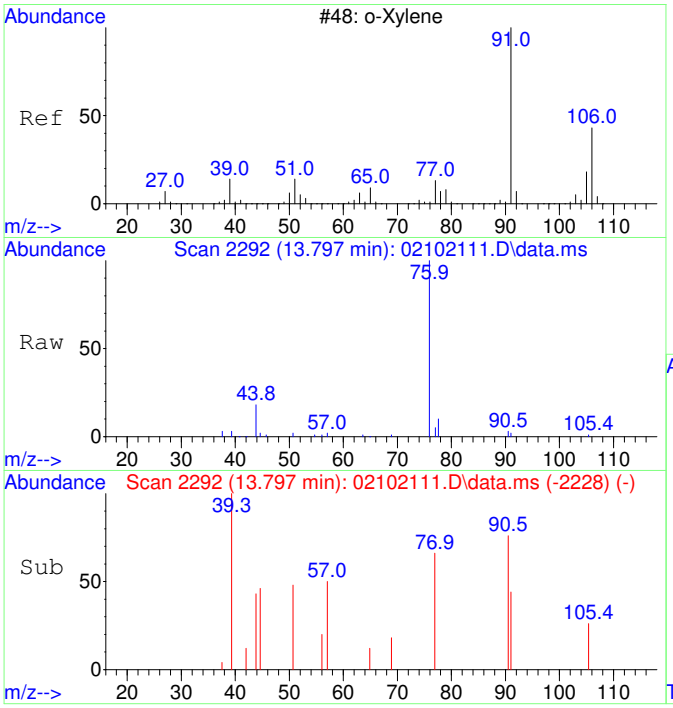


#43
m&p-Xylene SCAN
Concen: 52.45 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 91 Resp: 1860

Ion	Ratio	Lower	Upper
91	100		
106	52.0	23.1	83.1
105	0.0	0.0	54.7
51	0.0	0.0	40.1

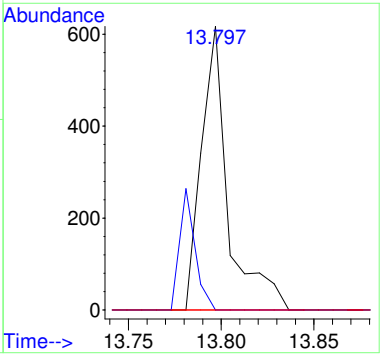


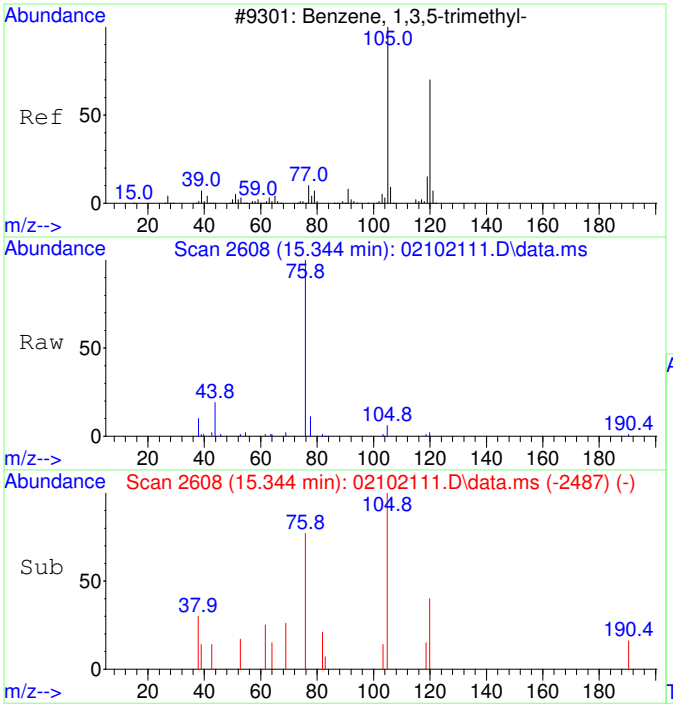


#44
o-Xylene SCAN
Concen: 31.87 ug/L
RT: 13.797 min Scan# 2292
Delta R.T. 0.008 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion: 91 Resp: 617

Ion	Ratio	Lower	Upper
91	100		
106	24.8	18.0	78.0
105	0.0	0.0	56.6

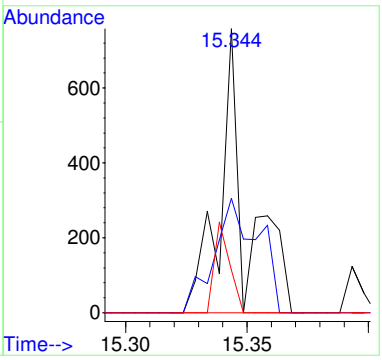


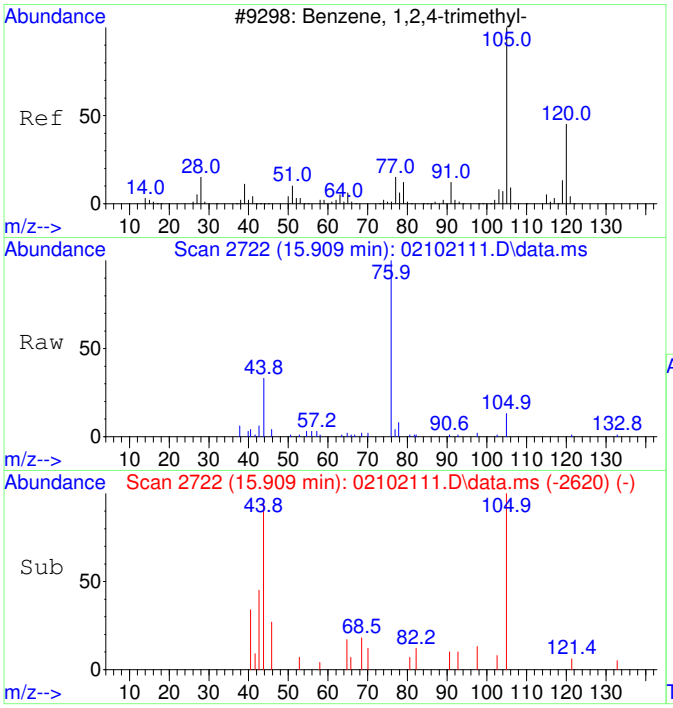


#46
1,3,5-Trimethylbenzene SCAN
Concen: 28.44 ug/L
RT: 15.344 min Scan# 2608
Delta R.T. -0.010 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion:105 Resp: 581

Ion	Ratio	Lower	Upper
105	100		
120	66.6	18.3	78.3
119	18.2	0.0	43.1

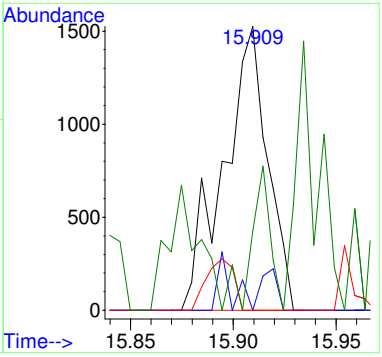




#47
1,2,4-Trimethylbenzene SCAN
Concen: 108.62 ug/L
RT: 15.909 min Scan# 2722
Delta R.T. 0.005 min
Lab File: 02102111.D
Acq: 10 Feb 2021 13:12

Tgt Ion:105 Resp: 2267

Ion	Ratio	Lower	Upper
105	100		
120	5.4	16.9	76.9#
119	0.0	0.0	41.9
77	22.5	0.0	42.3



2102006-04

Quantitation Report (Not Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102112.D
Acq On : 10 Feb 2021 13:35
InstName : AG5975C
Operator : TD
Sample : 2102006-04
Misc :
ALS Vial : 12 Sample Multiplier: 1

REPORT

Quant Time: Feb 11 09:20:37 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

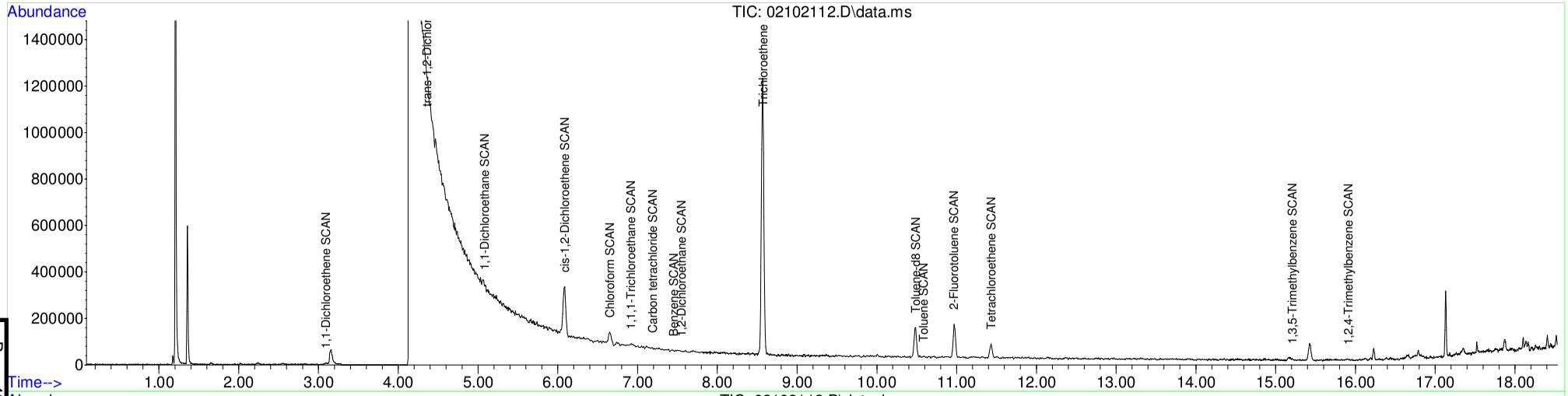
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	196670	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	161435	4238.24 ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery =	84.76%#	SURR↓
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	9841	1261.95 ug/L	84
3] trans-1,2-Dichloroethene	4.356	61	12677	1289.47 ug/L	98
4] 1,1-Dichloroethane	5.079	63	12278	1045.64 ug/L	98
5] cis-1,2-Dichloroethene	6.081	61	261301	21486.40 ug/L	98
6] Chloroform	6.652	83	67621	5789.00 ug/L	100
7] 1,1,1-Trichloroethane	6.907	97	7012	558.82 ug/L	99
8] Carbon tetrachloride	7.175	117	1669	139.12 ug/L	98
9] Benzene	7.503	78	2097	63.36 ug/L	58
11] Trichloroethene	8.569	130	773111	73990.73 ug/L oc	97
13] Toluene	10.582	91	4535	95.62 ug/L	97
15] Tetrachloroethene	11.432	166	38560	2610.36 ug/L	100
19] m&p-Xylene	13.163	91	2119	45.43 ug/L	93
22] 1,3,5-Trimethylbenzene	15.348	105	1381	25.06 ug/L	96
23] 1,2,4-Trimethylbenzene	15.899	105	3222	57.17 ug/L	92
25) 2-Fluorotoluene SCAN	10.969	109	114215	5116.23 ug/L	97
26) 1,1-Dichloroethene SCAN	3.096	61	5314	1019.65 ug/L #	29
27) trans-1,2-Dichloroethe...	4.355	61	8944	1347.39 ug/L	78
28) 1,1-Dichloroethane SCAN	5.078	63	10634	1357.20 ug/L	82
29) cis-1,2-Dichloroethene...	6.086	61	184238	23919.08 ug/L #	78
30) Chloroform SCAN	6.650	83	47597	6625.13 ug/L	94
31) 1,1,1-Trichloroethane ...	6.918	97	5357	722.59 ug/L	82
32) Carbon tetrachloride SCAN	7.186	117	904	142.69 ug/L	81
33) Benzene SCAN	7.453	78	11946	532.63 ug/L #	91
34) 1,2-Dichloroethane SCAN	7.551	62	194	27.65 ug/L #	1
35) Trichloroethene SCAN	8.568	130	425413	86986.91 ug/L	85
36) Toluene-d8 SCAN	10.486	98	99403	4747.60 ug/L	99
37) Toluene SCAN	10.581	91	2931	113.70 ug/L	71
39) Tetrachloroethene SCAN	11.431	166	18549	3198.47 ug/L	97
46) 1,3,5-Trimethylbenzene...	15.205	105	1847	65.26 ug/L	74
47) 1,2,4-Trimethylbenzene...	15.913	105	2533	87.60 ug/L	79

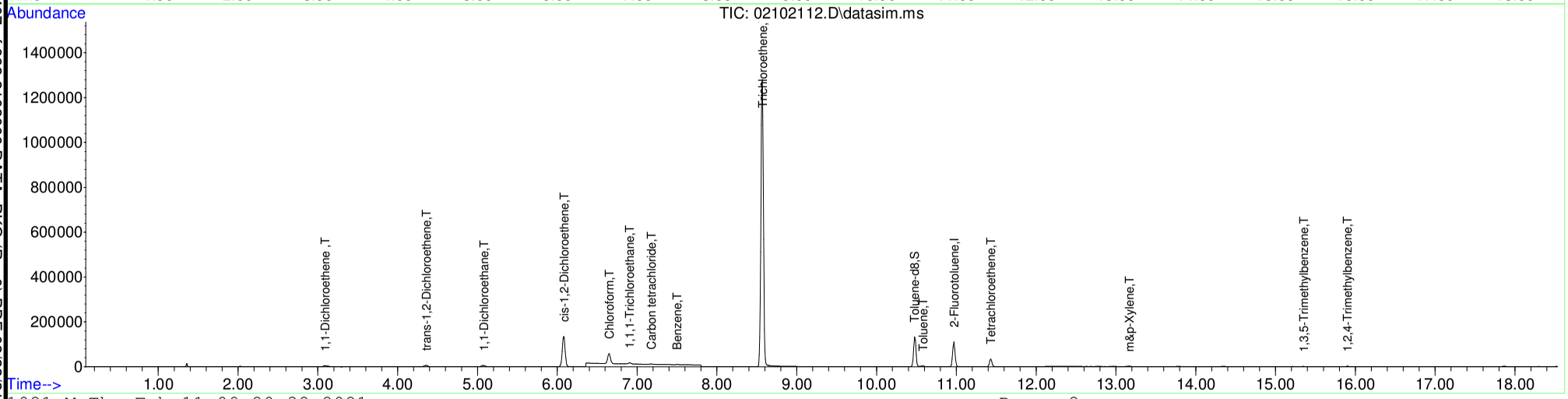
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102112.D
Acq On : 10 Feb 2021 13:35
InstName : AG5975C
Operator : TD
Sample : 2102006-04
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 11 09:20:37 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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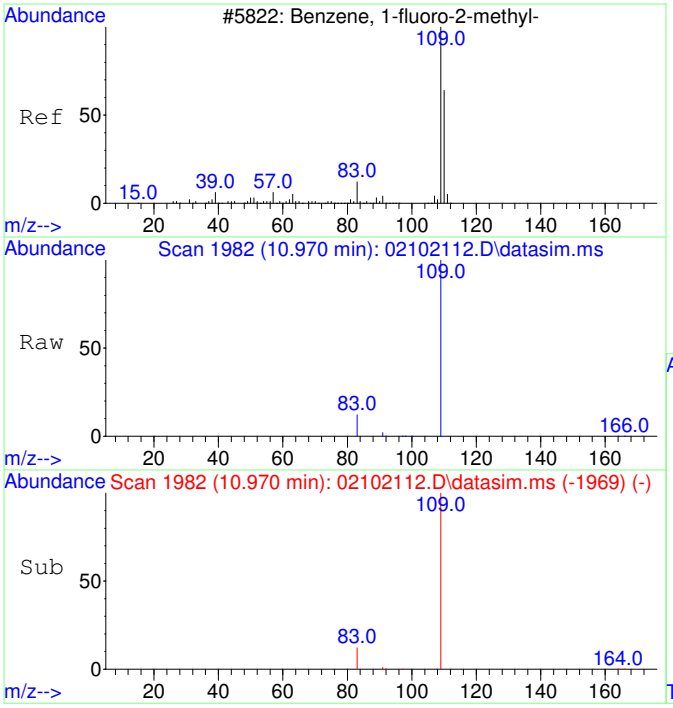
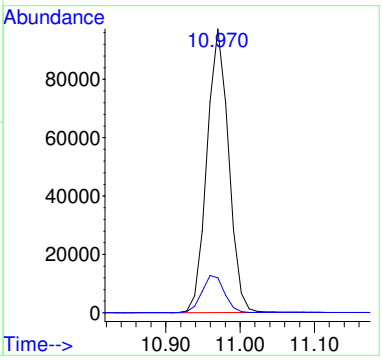
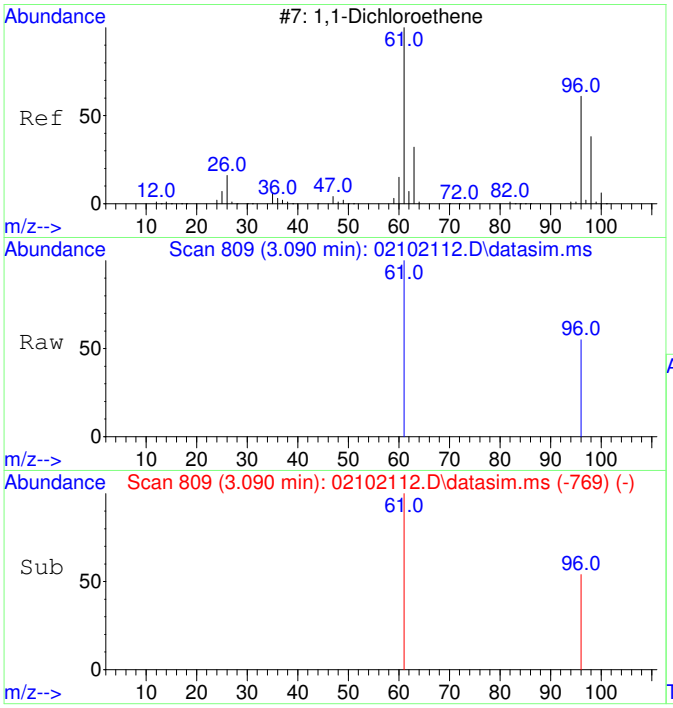


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion:109 Resp: 196670

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

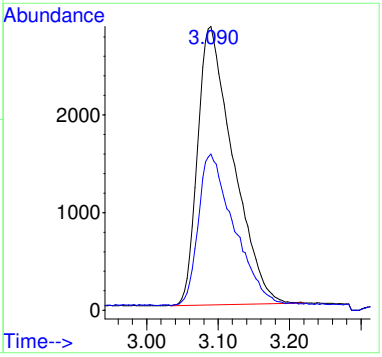


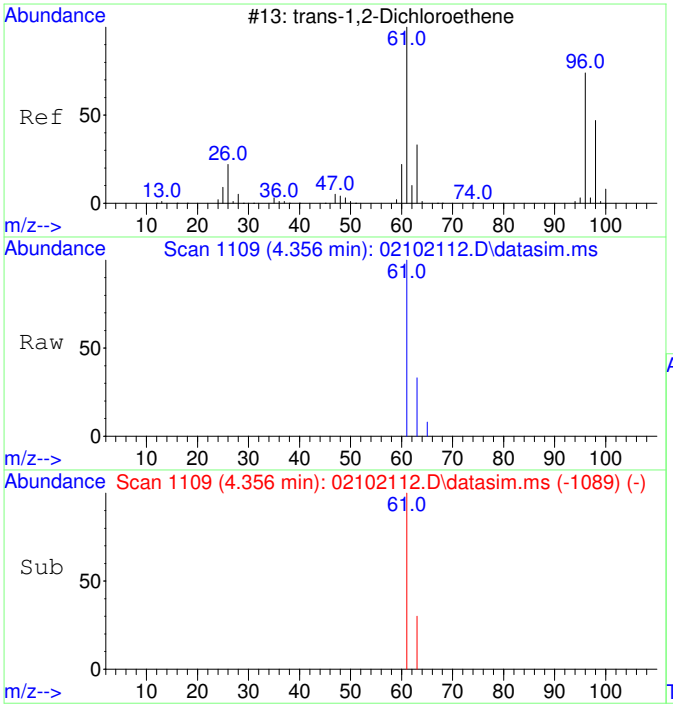


#2
1,1-Dichloroethene
Concen: 1261.95 ug/L
RT: 3.090 min Scan# 809
Delta R.T. -0.000 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion: 61 Resp: 9841

Ion	Ratio	Lower	Upper
61	100		
96	54.7	37.2	97.2

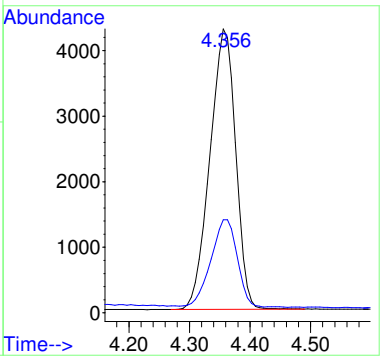


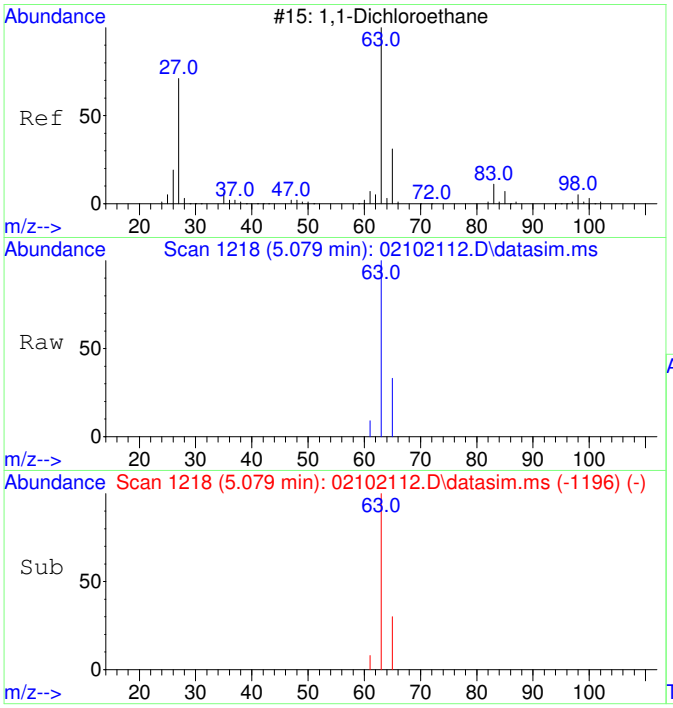


#3
trans-1,2-Dichloroethene
Concen: 1289.47 ug/L
RT: 4.356 min Scan# 1109
Delta R.T. -0.020 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion: 61 Resp: 12677

Ion	Ratio	Lower	Upper
61	100		
63	31.2	2.4	62.4

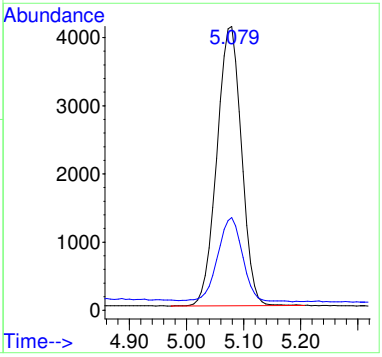


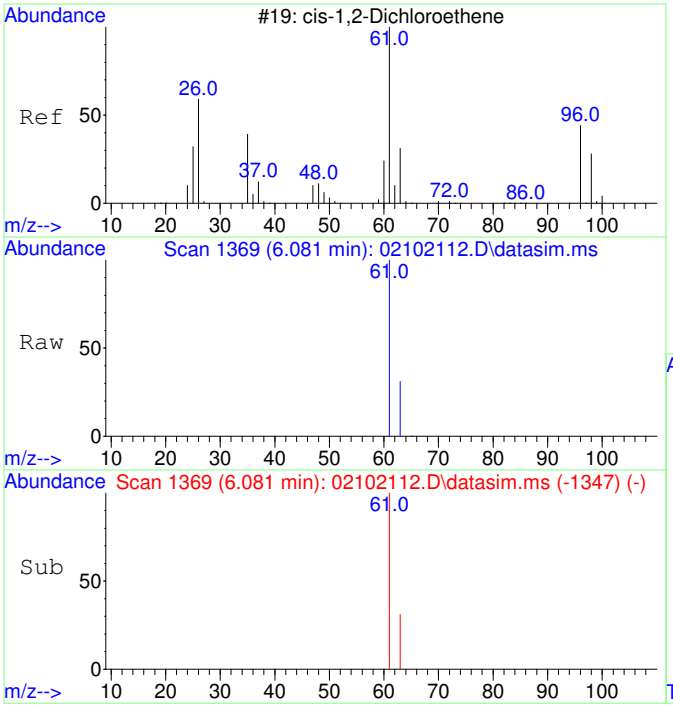


#4
1,1-Dichloroethane
Concen: 1045.64 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.006 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion: 63 Resp: 12278

Ion	Ratio	Lower	Upper
63	100		
65	30.9	1.8	61.8

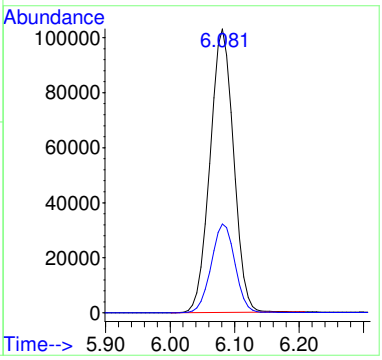


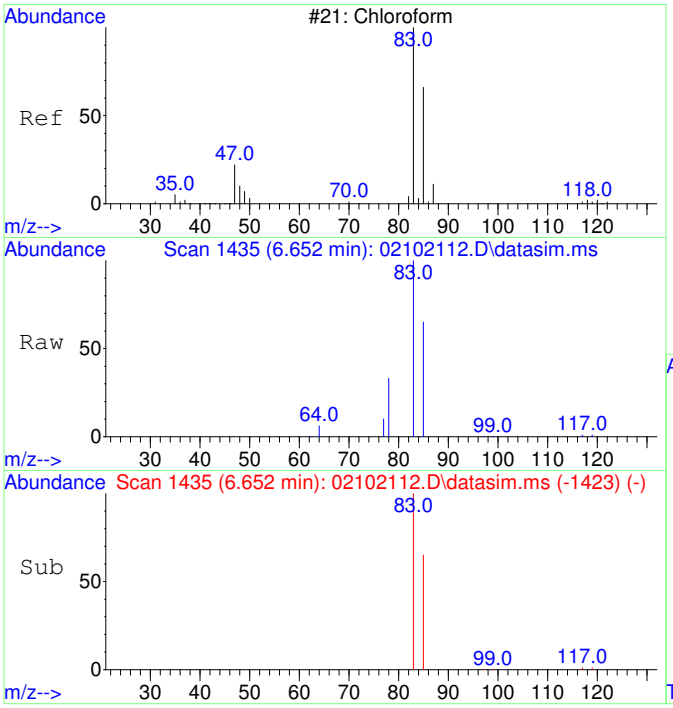


#5
cis-1,2-Dichloroethene
Concen: 21486.40 ug/L
RT: 6.081 min Scan# 1369
Delta R.T. -0.006 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion: 61 Resp: 261301

Ion	Ratio	Lower	Upper
61	100		
63	31.4	2.5	62.5

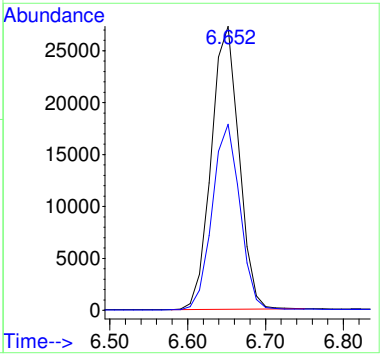


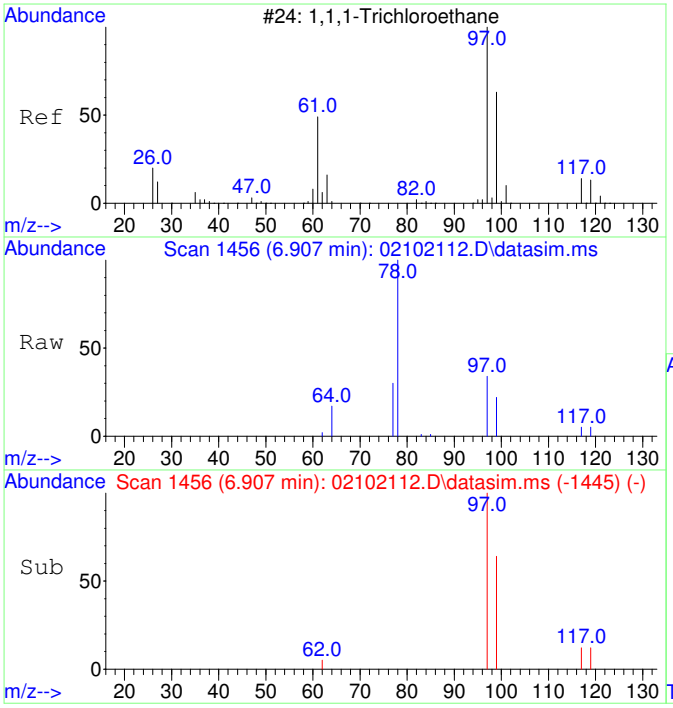


#6
Chloroform
Concen: 5789.00 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion: 83 Resp: 67621

Ion	Ratio	Lower	Upper
83	100		
85	64.9	35.1	95.1

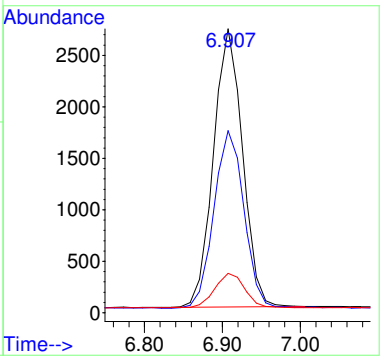


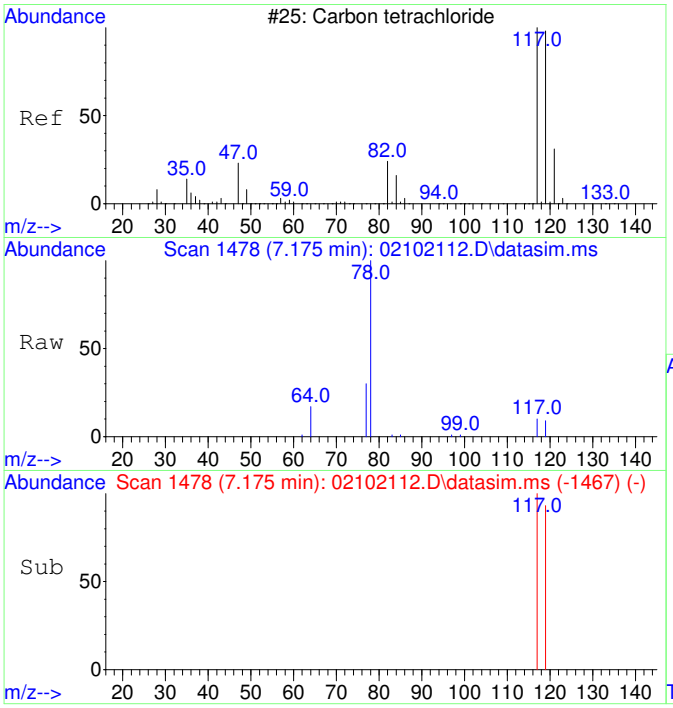


#7
1,1,1-Trichloroethane
Concen: 558.82 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion: 97 Resp: 7012

Ion	Ratio	Lower	Upper
97	100		
99	65.6	34.6	94.6
117	12.8	0.0	43.2

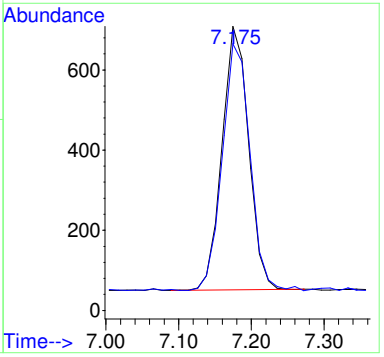


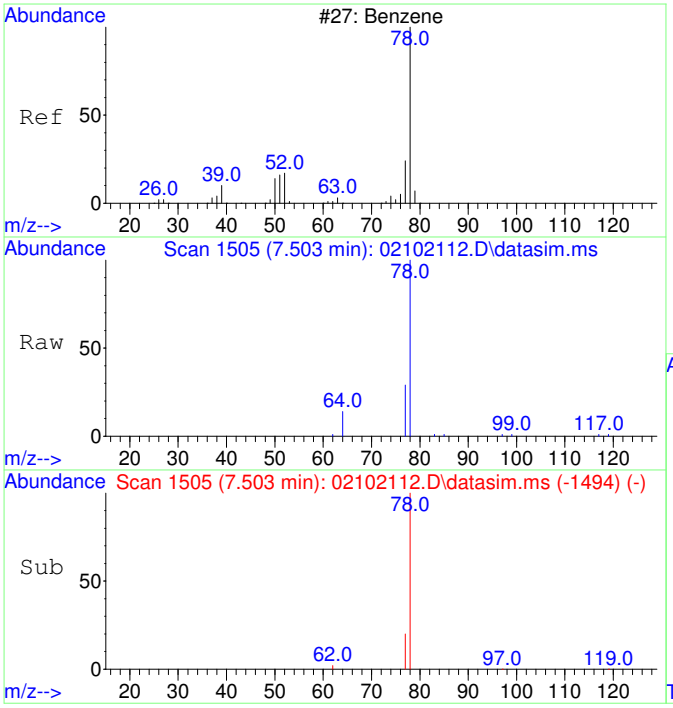


#8
Carbon tetrachloride
Concen: 139.12 ug/L
RT: 7.175 min Scan# 1478
Delta R.T. -0.012 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion:117 Resp: 1669

Ion	Ratio	Lower	Upper
117	100		
119	98.3	66.4	126.4

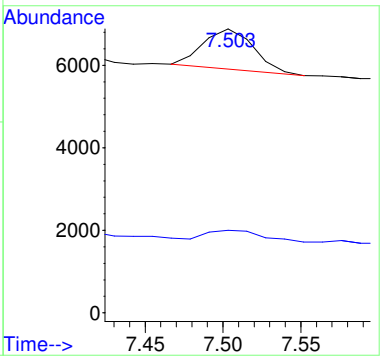


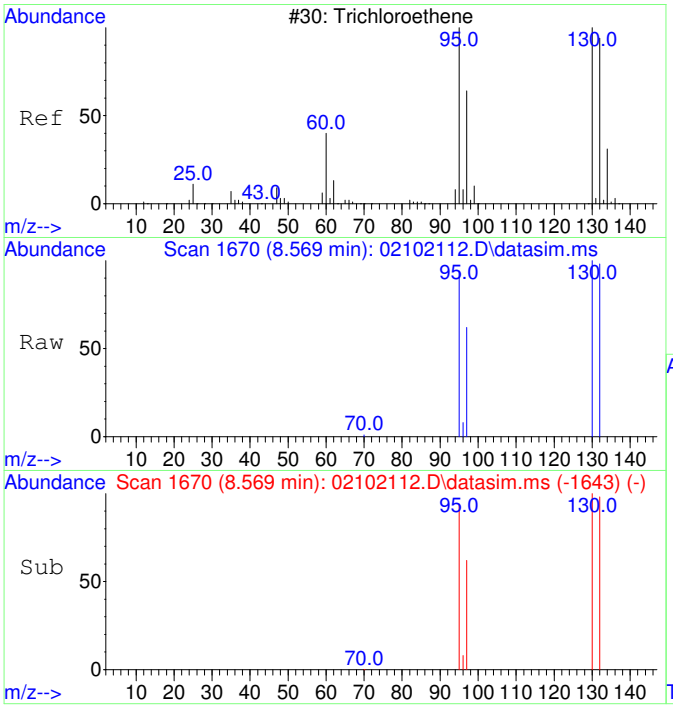


#9
Benzene
Concen: 63.36 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion: 78 Resp: 2097

Ion	Ratio	Lower	Upper
78	100		
77	43.7	0.0	53.2

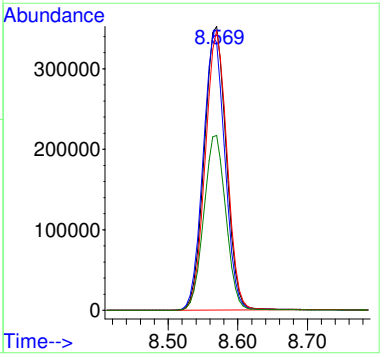


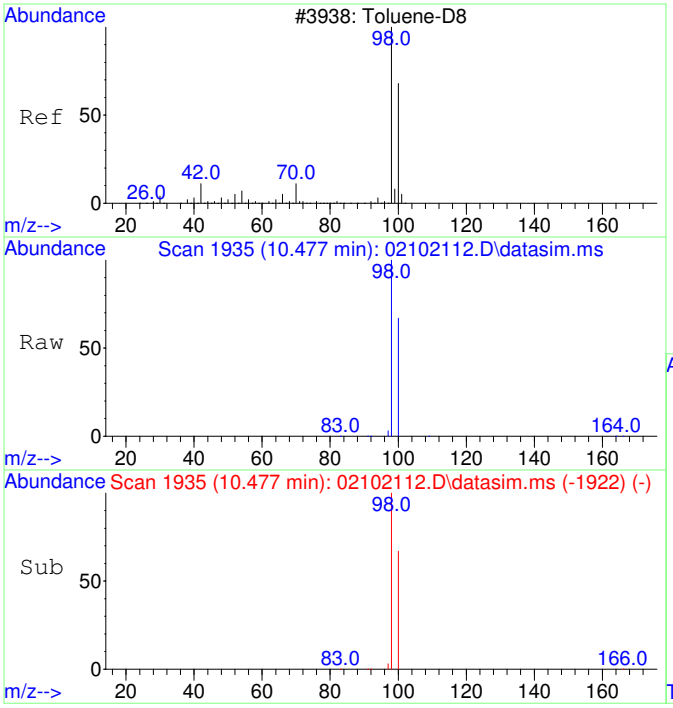


#11
Trichloroethene
Concen: 73990.73 ug/L
RT: 8.569 min Scan# 1670
Delta R.T. -0.005 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion:130 Resp: 773111

Ion	Ratio	Lower	Upper
130	100		
95	96.1	60.7	120.7
132	96.8	76.0	116.0
97	61.7	38.6	78.6

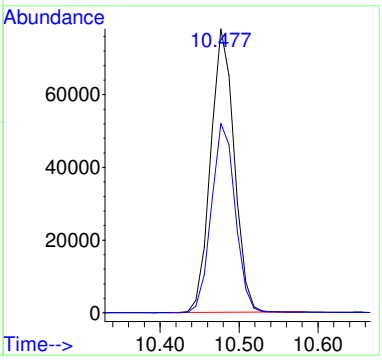


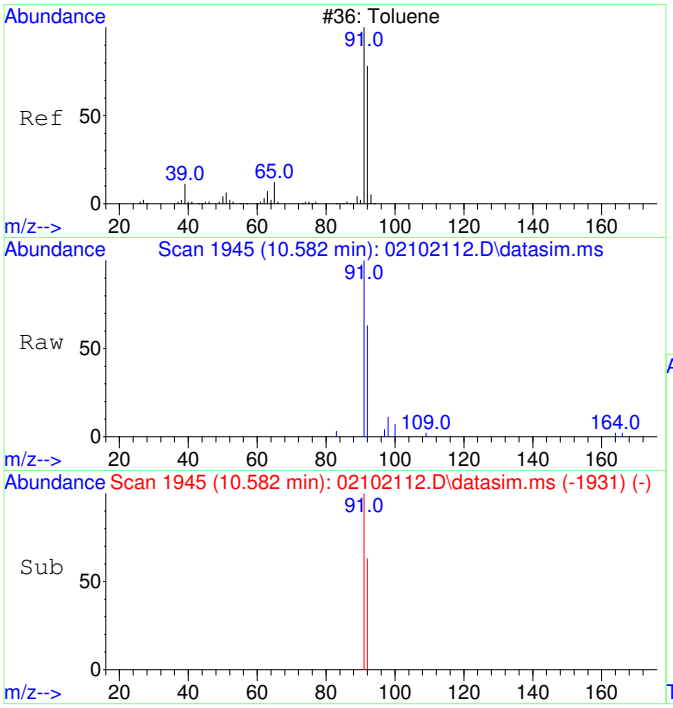


#12
Toluene-d8
Concen: 4238.24 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion: 98 Resp: 161435

Ion	Ratio	Lower	Upper
98	100		
100	67.4	37.1	97.1

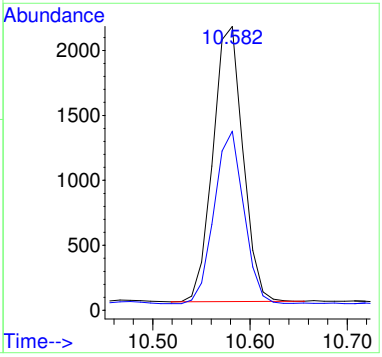


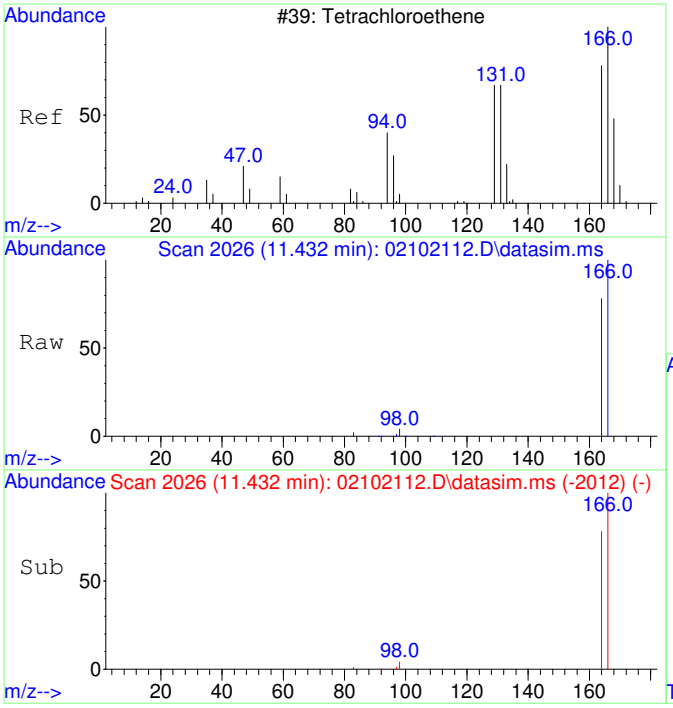


#13
Toluene
Concen: 95.62 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion: 91 Resp: 4535

Ion	Ratio	Lower	Upper
91	100		
92	61.9	29.9	89.9

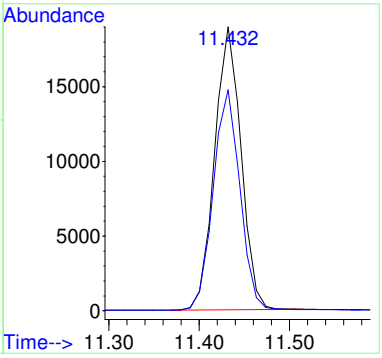


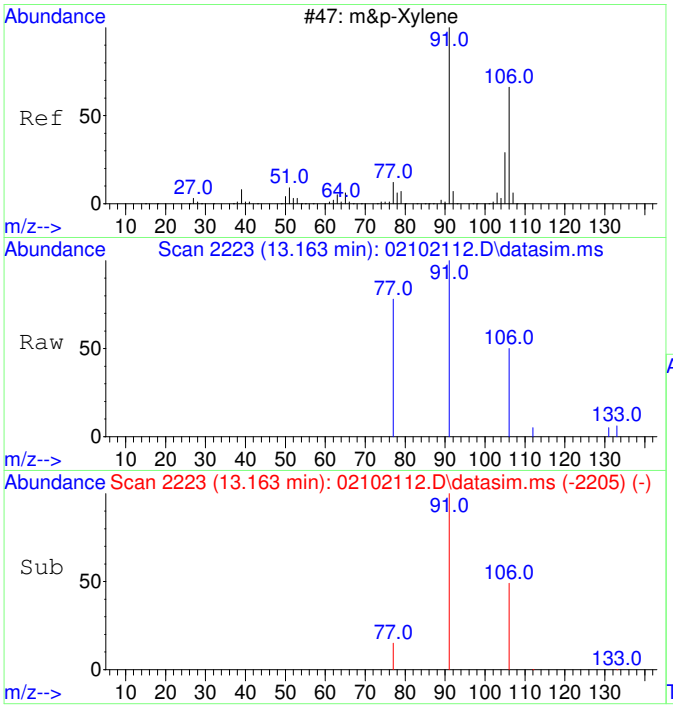


#15
Tetrachloroethene
Concen: 2610.36 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion:166 Resp: 38560

Ion	Ratio	Lower	Upper
166	100		
164	78.0	47.8	107.8

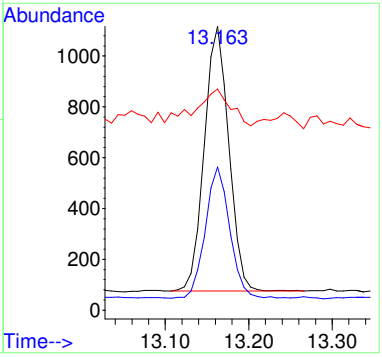


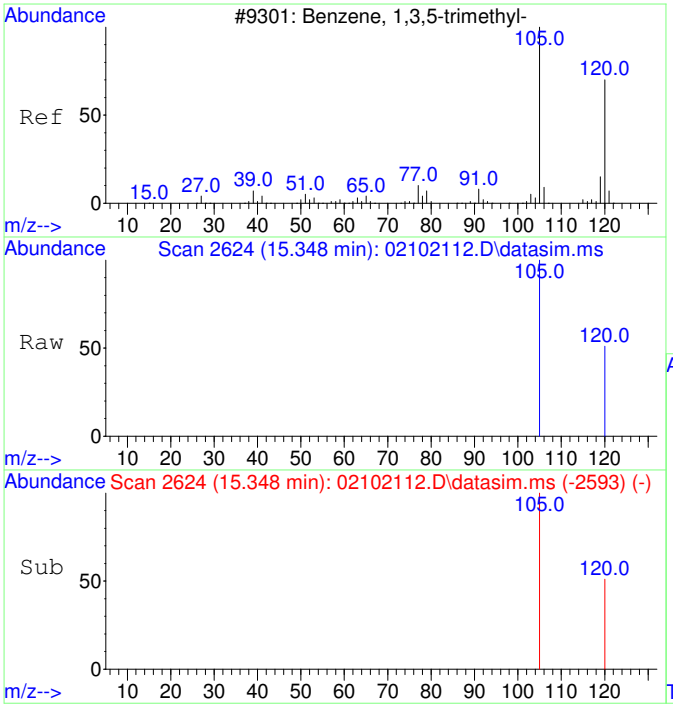


#19
m&p-Xylene
Concen: 45.43 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion: 91 Resp: 2119

Ion	Ratio	Lower	Upper
91	100		
106	49.2	22.2	82.2
77	20.5	0.0	42.4

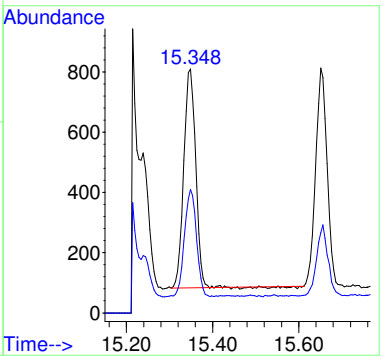


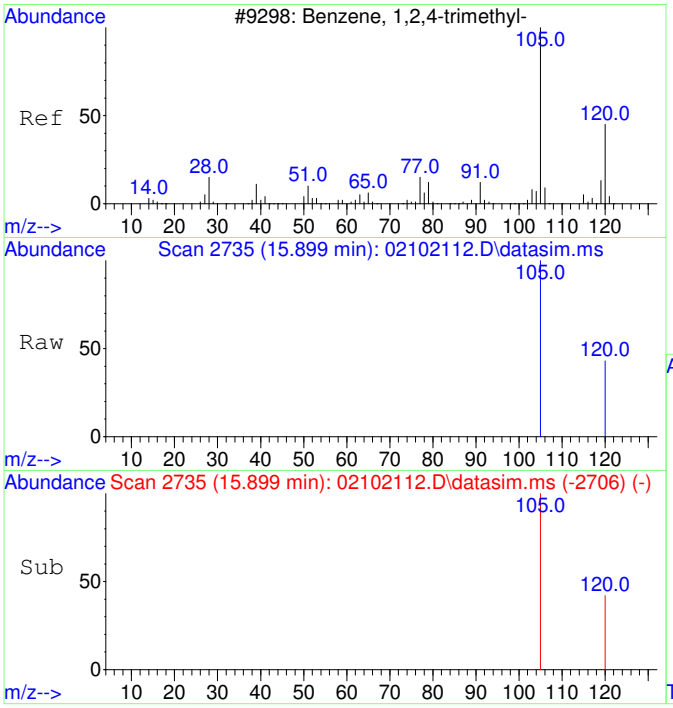


#22
1,3,5-Trimethylbenzene
Concen: 25.06 ug/L
RT: 15.348 min Scan# 2624
Delta R.T. -0.001 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion:105 Resp: 1381

Ion	Ratio	Lower	Upper
105	100		
120	48.1	21.1	81.1

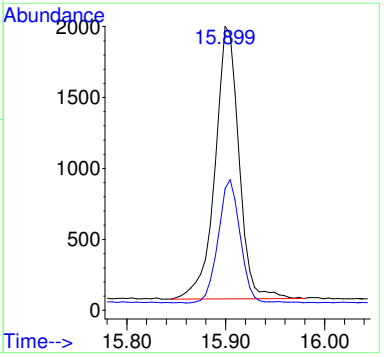


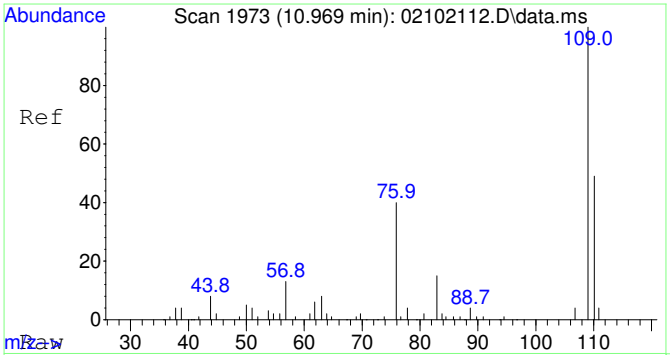


#23
1,2,4-Trimethylbenzene
Concen: 57.17 ug/L
RT: 15.899 min Scan# 2735
Delta R.T. -0.006 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion:105 Resp: 3222

Ion	Ratio	Lower	Upper
105	100		
120	41.7	17.2	77.2

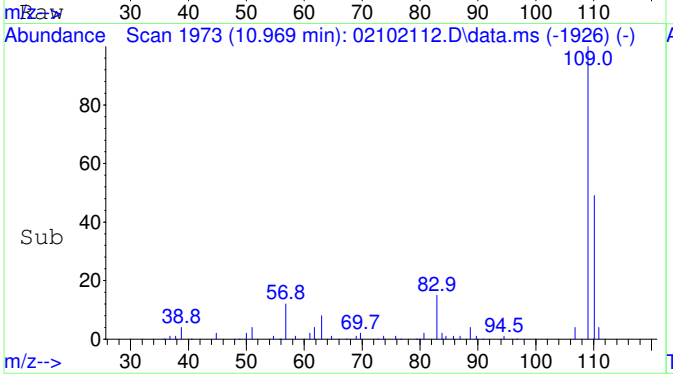


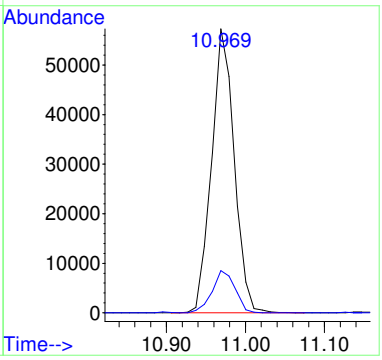


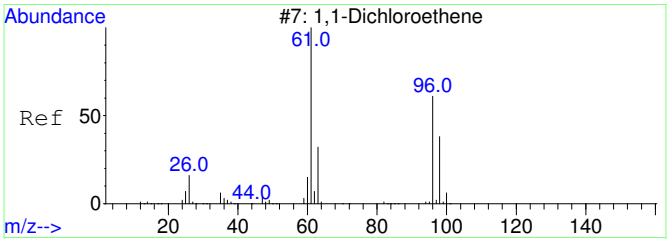
#25
2-Fluorotoluene SCAN
Concen: 5116.23 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion:109 Resp: 114215

Ion	Ratio	Lower	Upper
109	100		
83	15.0	0.0	43.8



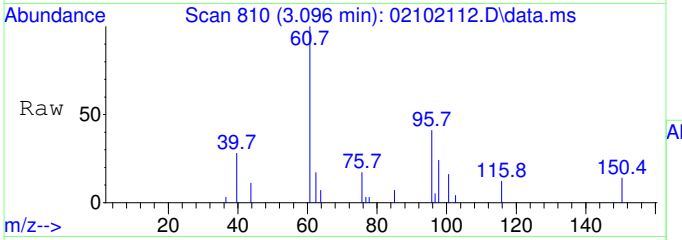


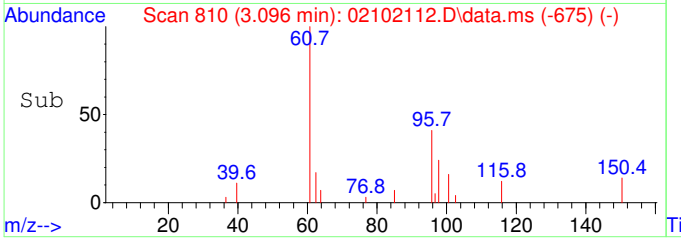


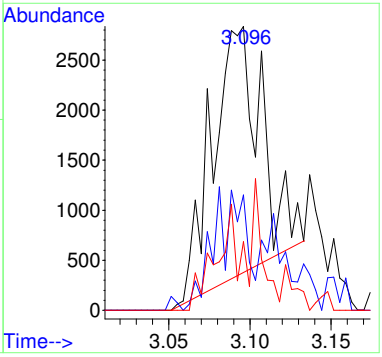
#26
1,1-Dichloroethene SCAN
Concen: 1019.65 ug/L
RT: 3.096 min Scan# 810
Delta R.T. 0.000 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

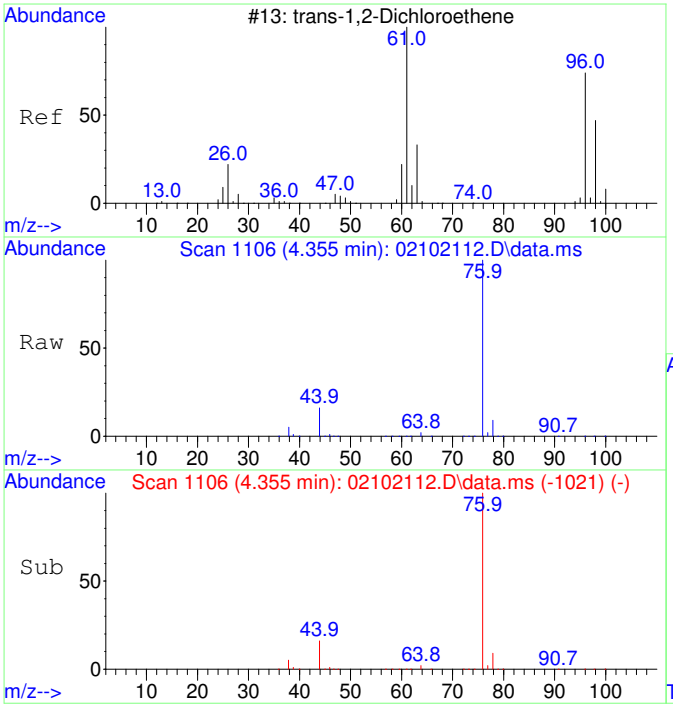
Tgt Ion: 61 Resp: 5314

Ion	Ratio	Lower	Upper
61	100		
96	0.0	33.1	93.1#
98	7.1	11.2	71.2#





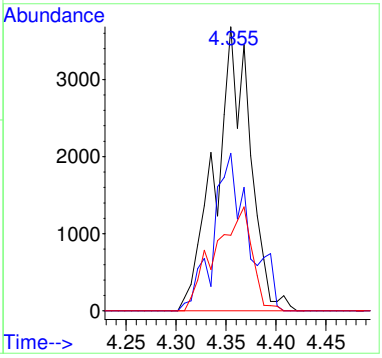


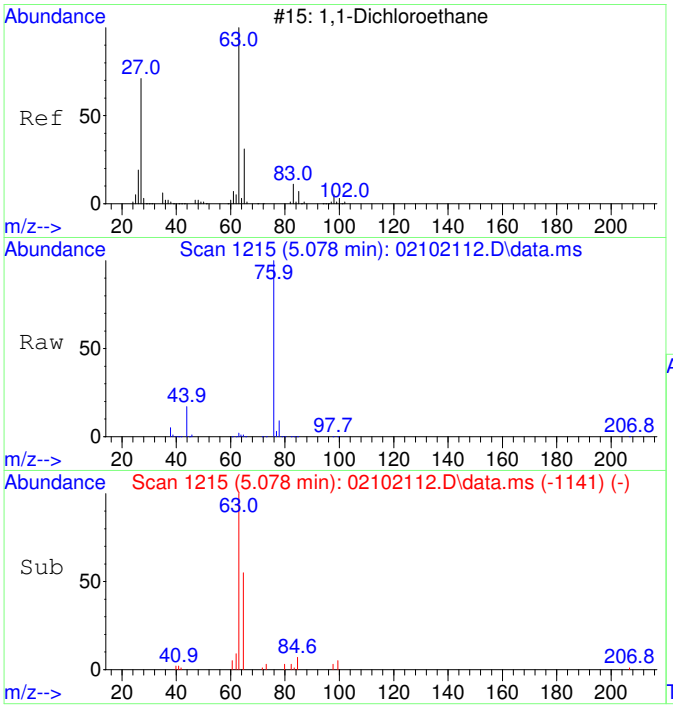


#27
trans-1,2-Dichloroethene SCAN
Concen: 1347.39 ug/L
RT: 4.355 min Scan# 1106
Delta R.T. -0.026 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion: 61 Resp: 8944

Ion	Ratio	Lower	Upper
61	100		
96	56.6	49.0	109.0
98	39.2	20.5	80.5

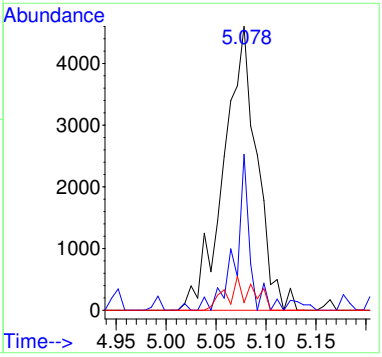


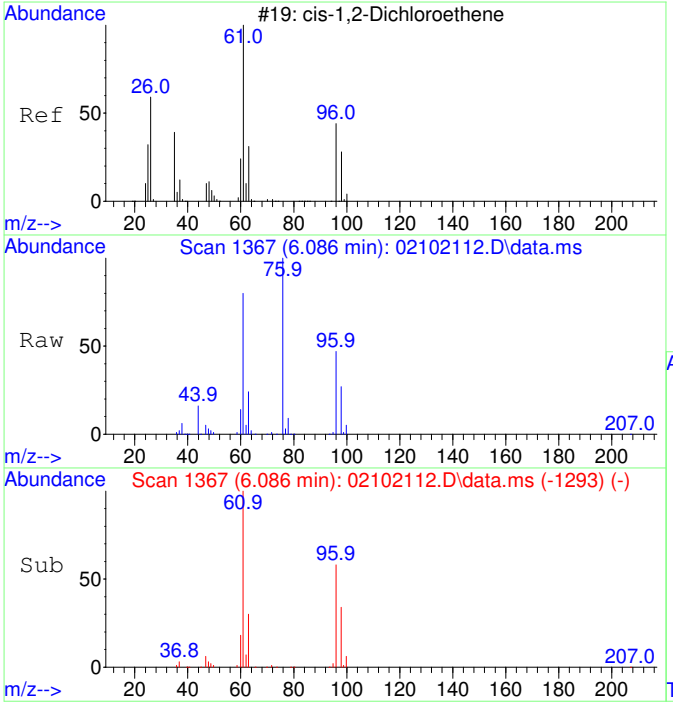


#28
1,1-Dichloroethane SCAN
Concen: 1357.20 ug/L
RT: 5.078 min Scan# 1215
Delta R.T. -0.006 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion: 63 Resp: 10634

Ion	Ratio	Lower	Upper
63	100		
65	23.3	1.3	61.3
83	5.0	0.0	45.9

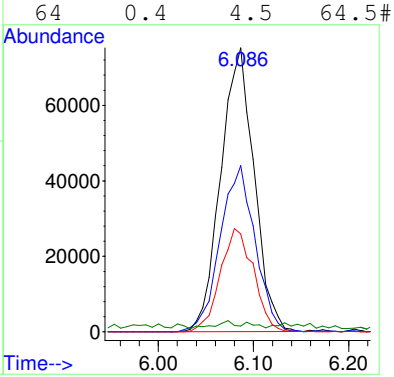


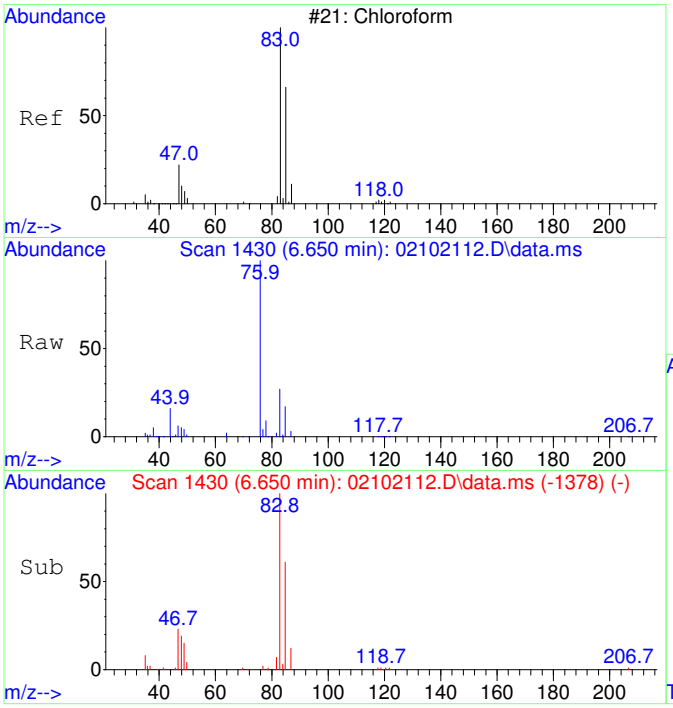


#29
cis-1,2-Dichloroethene SCAN
Concen: 23919.08 ug/L
RT: 6.086 min Scan# 1367
Delta R.T. -0.006 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion: 61 Resp: 184238

Ion	Ratio	Lower	Upper
61	100		
96	61.0	39.9	99.9
98	36.2	13.5	73.5
64	0.4	4.5	64.5#

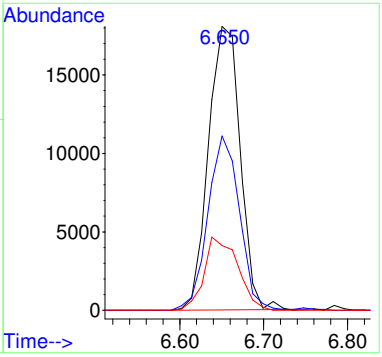


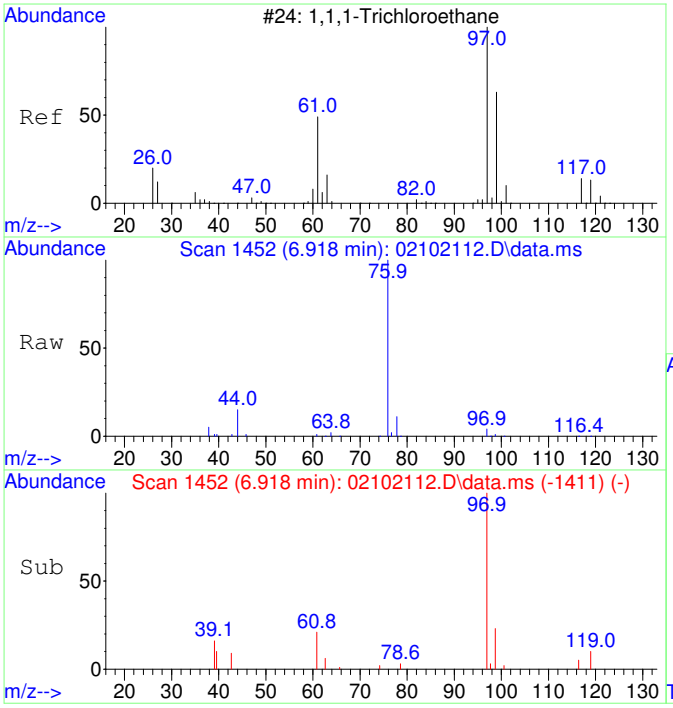


#30
Chloroform SCAN
Concen: 6625.13 ug/L
RT: 6.650 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion: 83 Resp: 47597

Ion	Ratio	Lower	Upper
83	100		
85	60.6	34.6	94.6
47	27.2	0.0	53.4

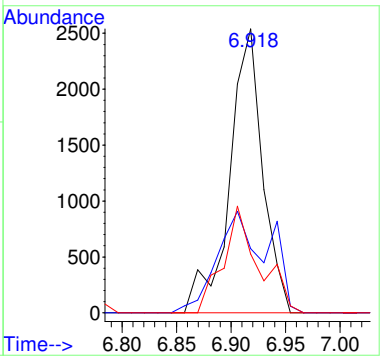


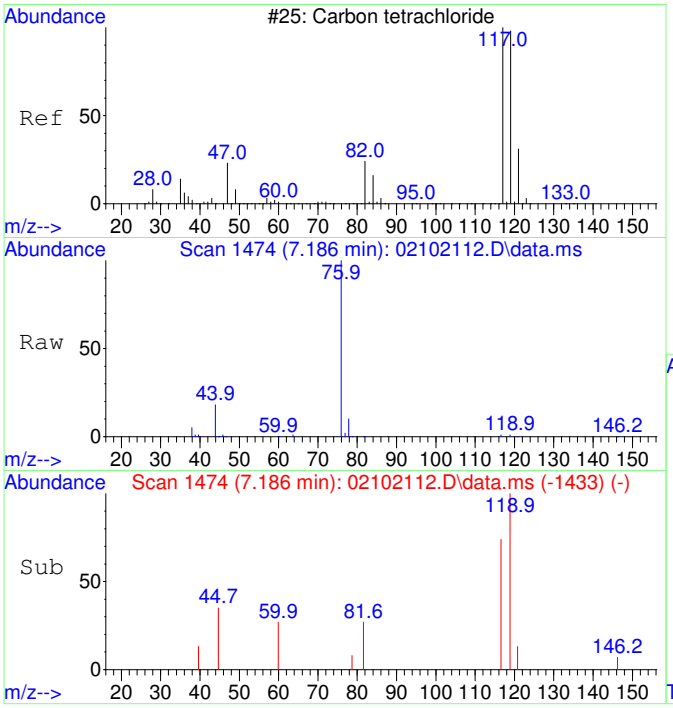


#31
1,1,1-Trichloroethane SCAN
Concen: 722.59 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion: 97 Resp: 5357

Ion	Ratio	Lower	Upper
97	100		
99	54.5	43.6	103.6
61	40.9	18.0	78.0

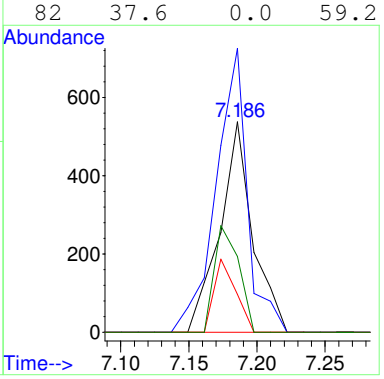


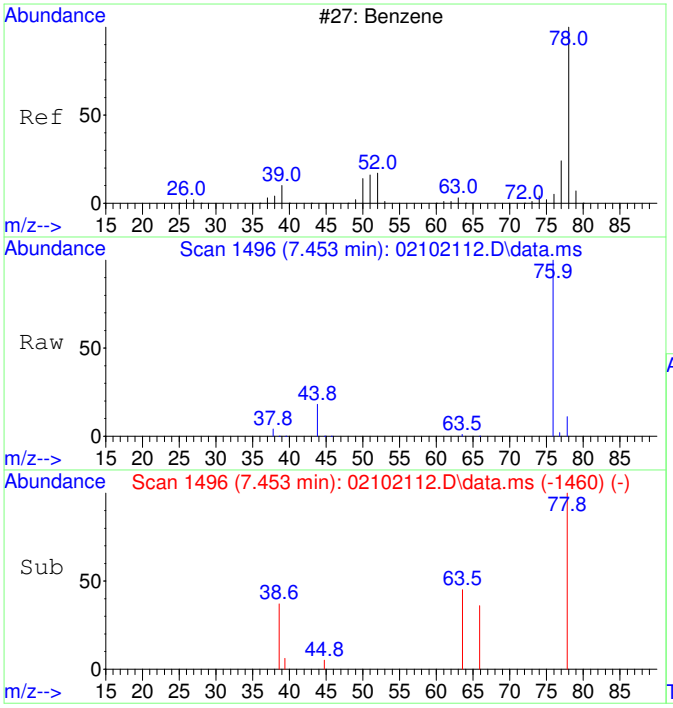


#32
Carbon tetrachloride SCAN
Concen: 142.69 ug/L
RT: 7.186 min Scan# 1474
Delta R.T. 0.000 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion:117 Resp: 904

Ion	Ratio	Lower	Upper
117	100		
119	127.9	75.5	135.5
121	22.9	0.0	58.8
82	37.6	0.0	59.2

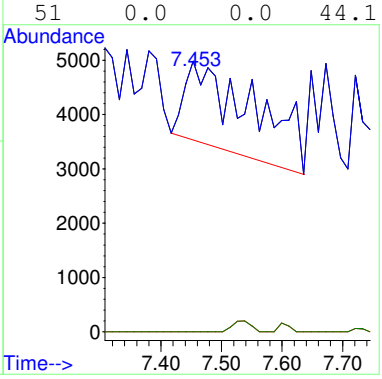


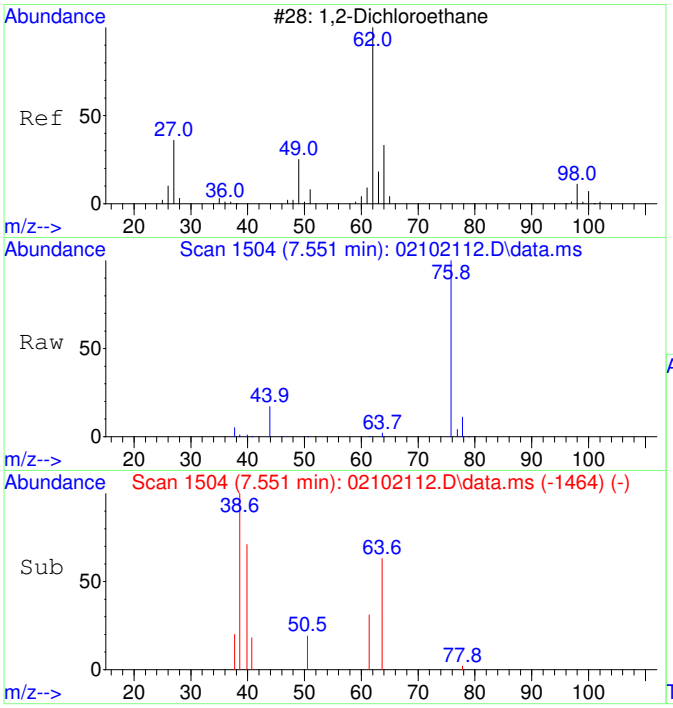


#33
Benzene SCAN
Concen: 532.63 ug/L
RT: 7.453 min Scan# 1496
Delta R.T. -0.061 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion: 78 Resp: 11946

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

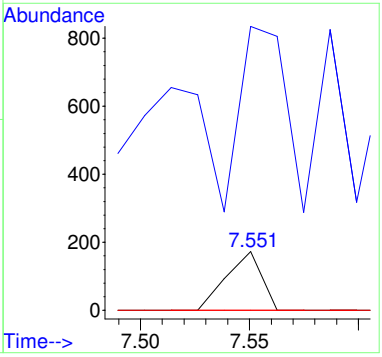


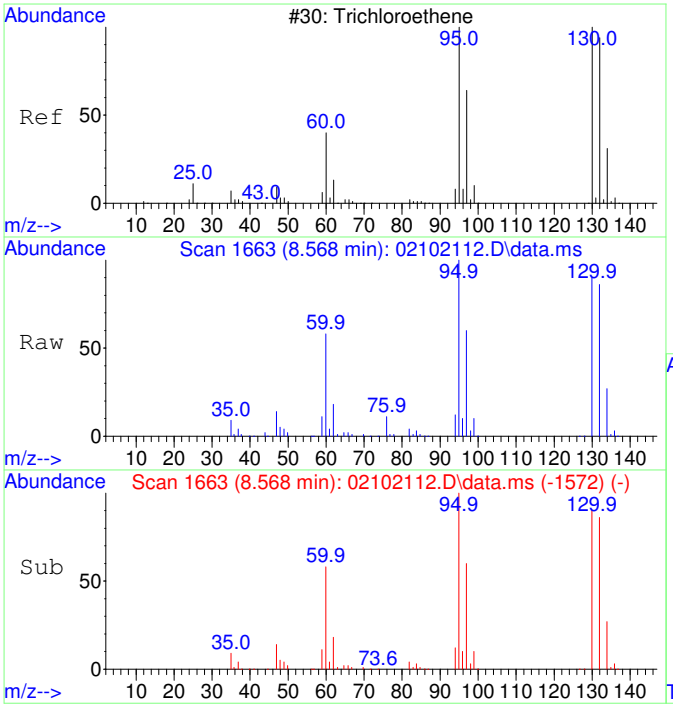


#34
1,2-Dichloroethane SCAN
Concen: 27.65 ug/L
RT: 7.551 min Scan# 1504
Delta R.T. -0.012 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion: 62 Resp: 194

Ion	Ratio	Lower	Upper
62	100		
64	399.5	5.2	65.2#
49	0.0	3.9	63.9#

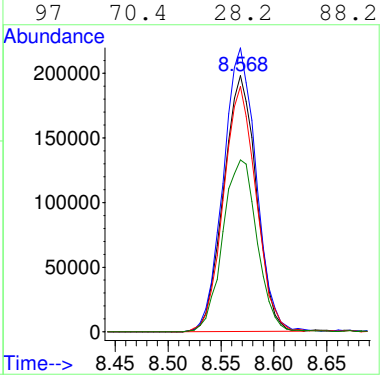


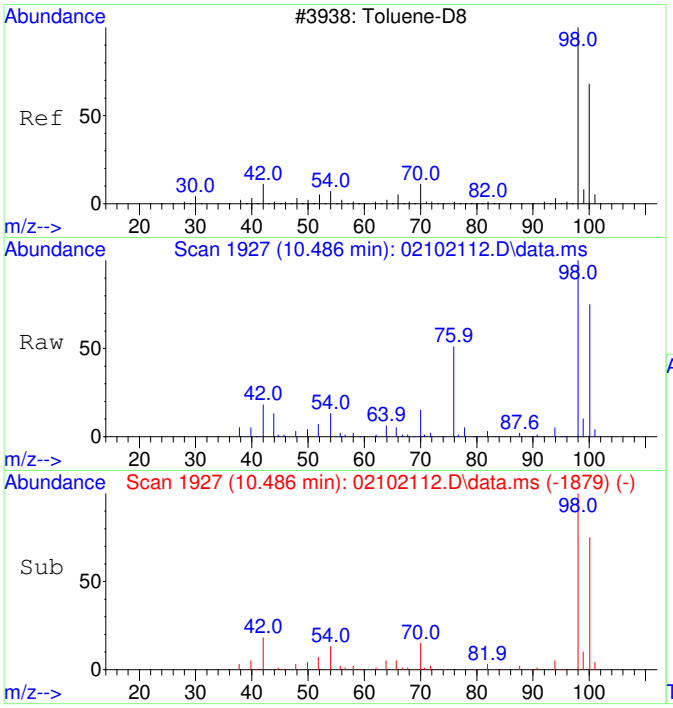


#35
Trichloroethene SCAN
Concen: 86986.91 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.005 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion:130 Resp: 425413

Ion	Ratio	Lower	Upper
130	100		
95	111.3	60.5	120.5
132	95.2	59.6	119.6
97	70.4	28.2	88.2

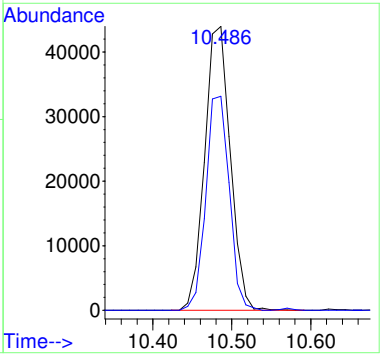


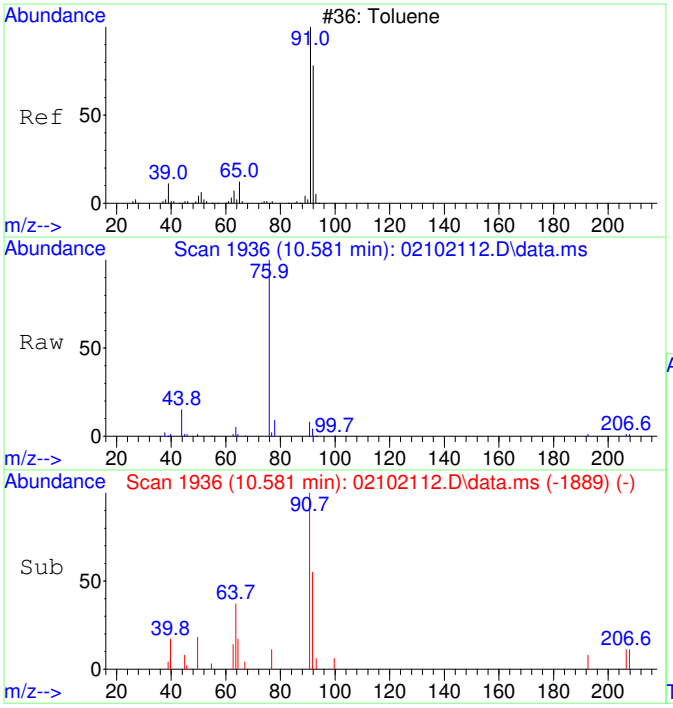


#36
Toluene-d8 SCAN
Concen: 4747.60 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion: 98 Resp: 99403

Ion	Ratio	Lower	Upper
98	100		
100	68.8	40.0	100.0

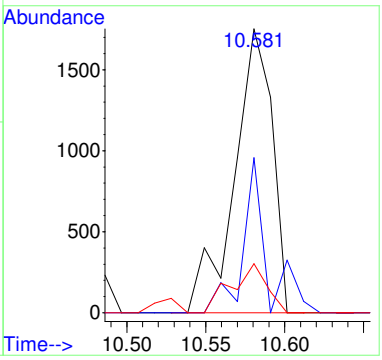


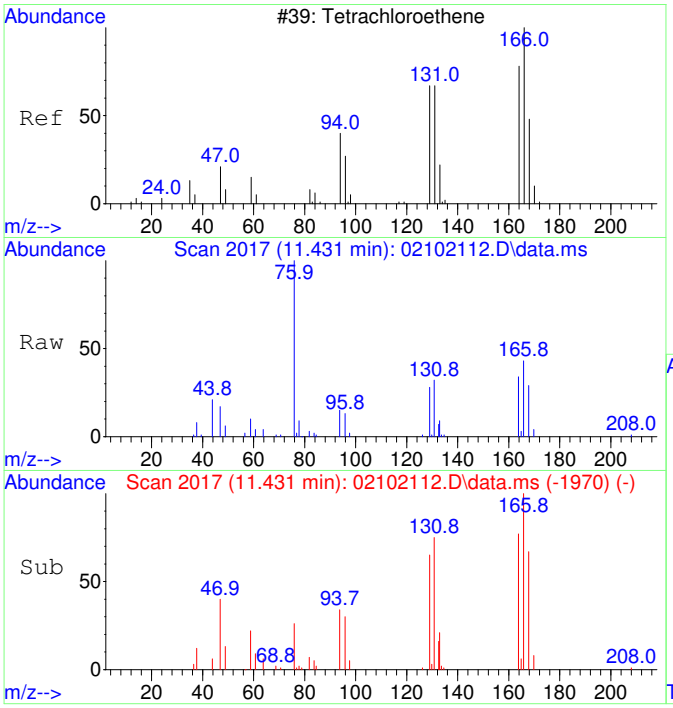


#37
Toluene SCAN
Concen: 113.70 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion: 91 Resp: 2931

Ion	Ratio	Lower	Upper
91	100		
92	34.5	28.3	88.3
65	16.3	0.0	41.0

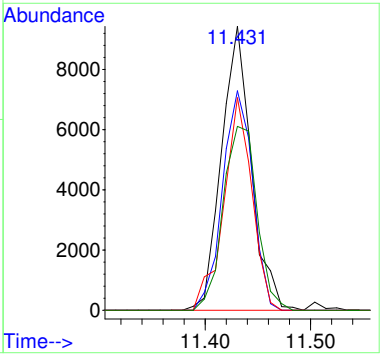


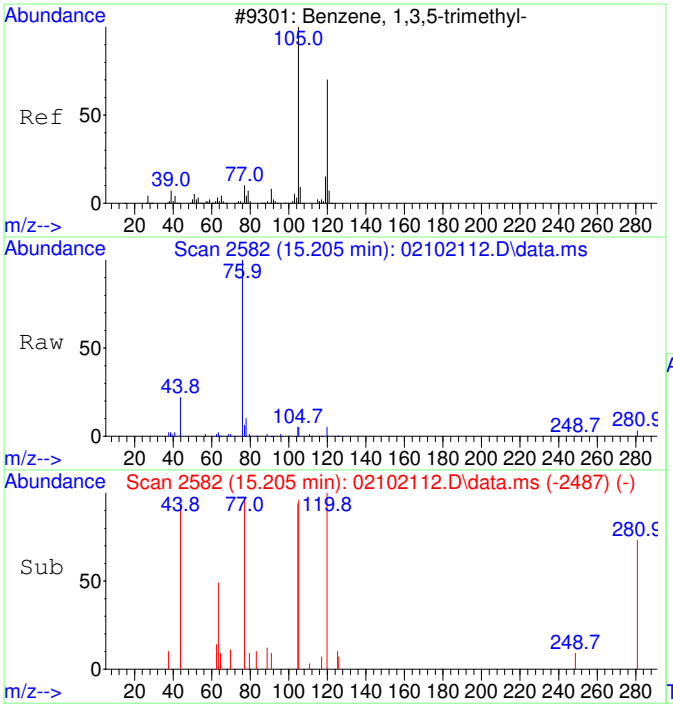


#39
Tetrachloroethene SCAN
Concen: 3198.47 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. -0.010 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion:166 Resp: 18549

Ion	Ratio	Lower	Upper
166	100		
164	78.1	50.9	110.9
131	70.6	38.7	98.7
129	73.8	41.8	101.8

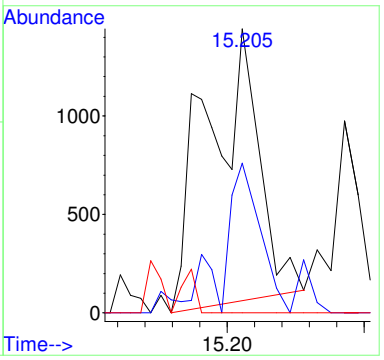


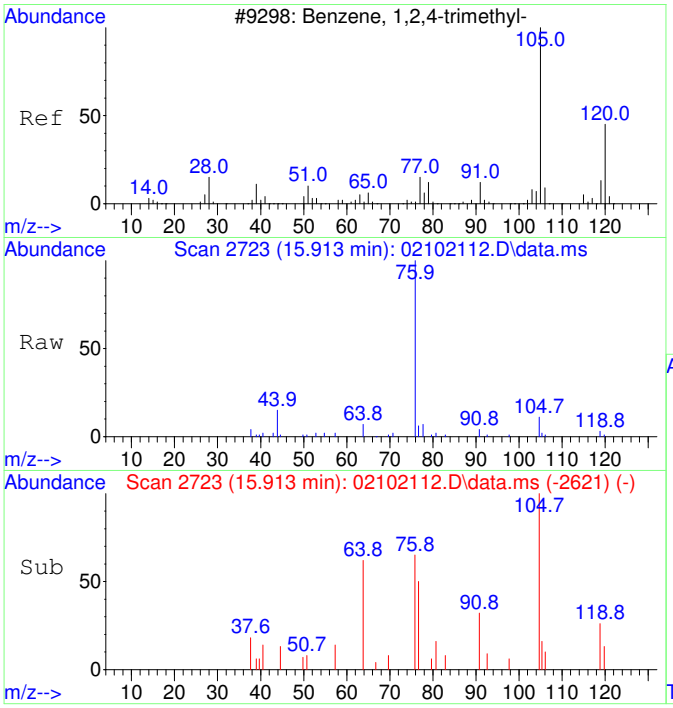


#46
1,3,5-Trimethylbenzene SCAN
Concen: 65.26 ug/L
RT: 15.205 min Scan# 2582
Delta R.T. -0.148 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion:105 Resp: 1847

Ion	Ratio	Lower	Upper
105	100		
120	29.7	18.3	78.3
119	4.3	0.0	43.1

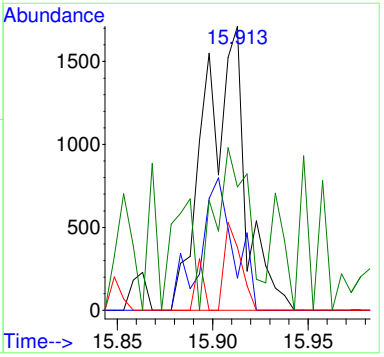




#47
1,2,4-Trimethylbenzene SCAN
Concen: 87.60 ug/L
RT: 15.913 min Scan# 2723
Delta R.T. 0.009 min
Lab File: 02102112.D
Acq: 10 Feb 2021 13:35

Tgt Ion:105 Resp: 2533

Ion	Ratio	Lower	Upper
105	100		
120	39.0	16.9	76.9
119	12.4	0.0	41.9
77	40.7	0.0	42.3



2102006-07

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102115.D
Acq On : 10 Feb 2021 14:46
InstName : AG5975C
Operator : TD
Sample : 2102006-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

REPORT

Quant Time: Feb 11 09:20:54 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

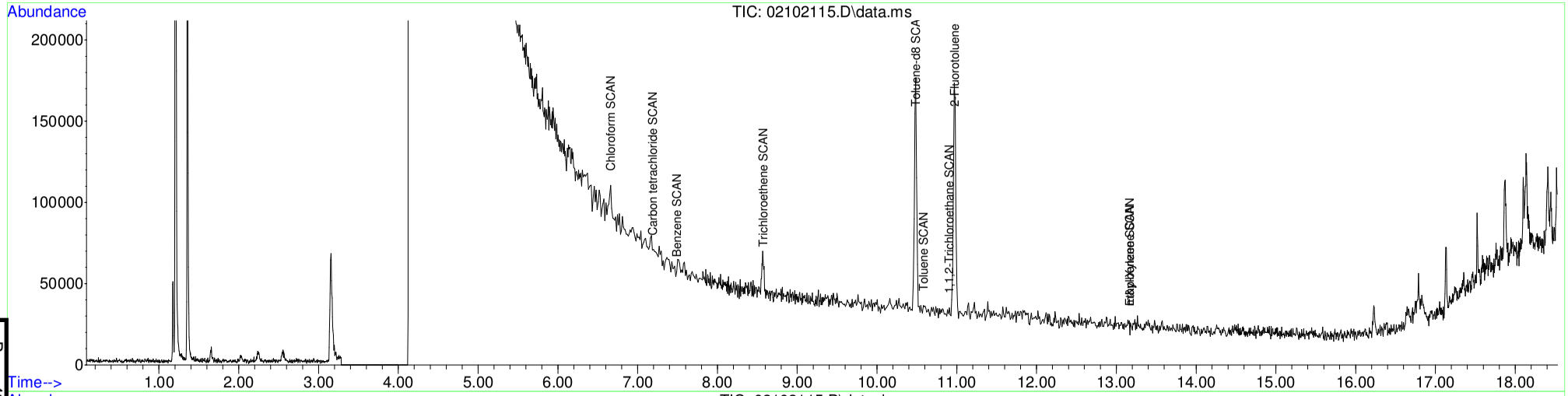
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	193566	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	160537	4282.25	ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 85.65%#			
Target Compounds						Qvalue
3] trans-1,2-Dichloroethene	4.349	61	233	24.08	ug/L #	36
6] Chloroform	6.640	83	21130	1837.94	ug/L	100
8] Carbon tetrachloride	7.175	117	288	24.39	ug/L	96
9] Benzene	7.503	78	2844	87.32	ug/L	59
11] Trichloroethene	8.570	130	12919	1256.24	ug/L	97
13] Toluene	10.582	91	1346	28.84	ug/L	100
25) 2-Fluorotoluene SCAN	10.969	109	116642	5308.73	ug/L	100
30) Chloroform SCAN	6.663	83	16586	2345.66	ug/L	86
32) Carbon tetrachloride SCAN	7.186	117	362	58.06	ug/L #	15
33) Benzene SCAN	7.490	78	3237	146.64	ug/L	98
35) Trichloroethene SCAN	8.574	130	7386	1534.48	ug/L #	74
36) Toluene-d8 SCAN	10.486	98	97625	4737.45	ug/L	99
37) Toluene SCAN	10.581	91	768	30.27	ug/L #	87
38) 1,1,2-Trichloroethane ...	10.906	97	203	31.92	ug/L #	13
42) Ethylbenzene SCAN	13.161	91	1248	25.81	ug/L #	35
43) m&p-Xylene SCAN	13.161	91	1248	25.81	ug/L #	40

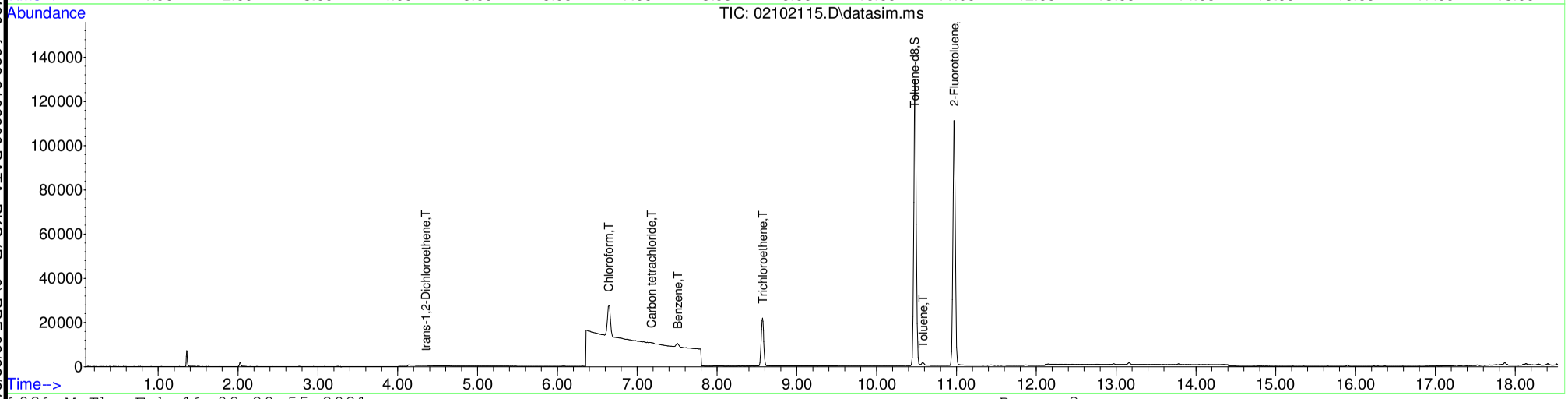
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102115.D
Acq On : 10 Feb 2021 14:46
InstName : AG5975C
Operator : TD
Sample : 2102006-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 11 09:20:54 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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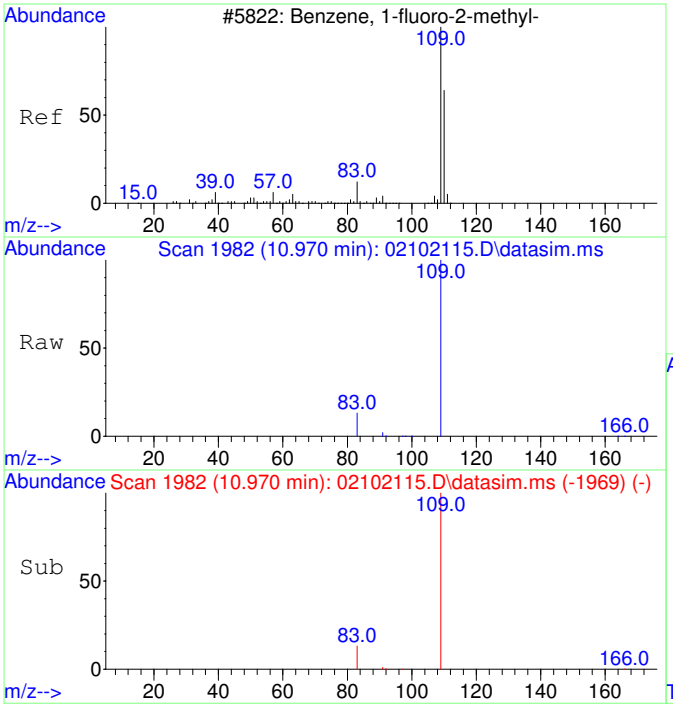
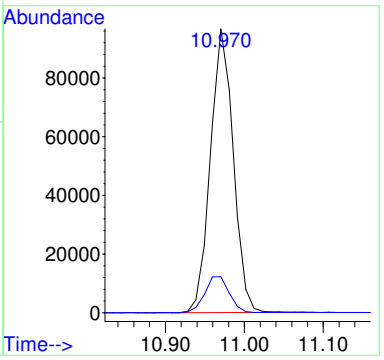
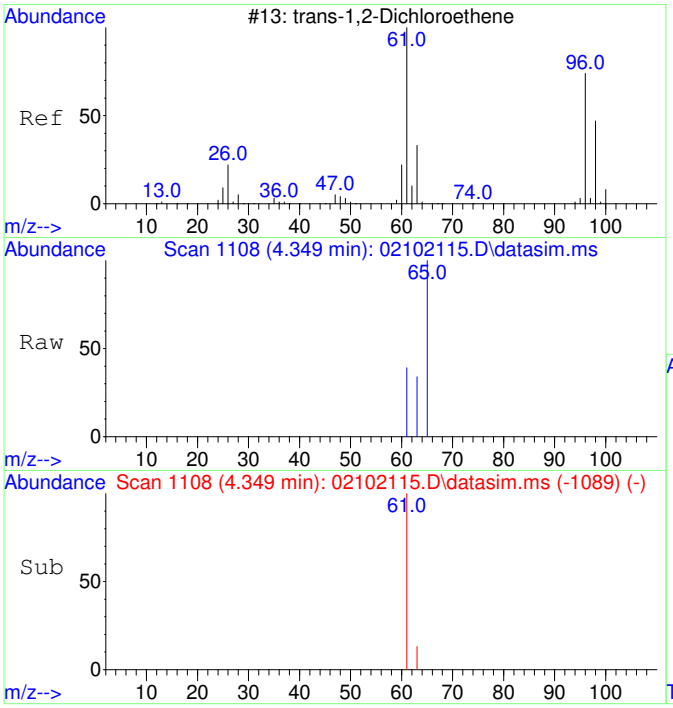


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 02102115.D
Acq: 10 Feb 2021 14:46

Tgt Ion:109 Resp: 193566

Ion	Ratio	Lower	Upper
109	100		
83	13.6	0.0	42.3

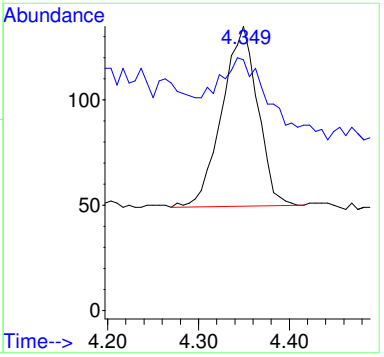


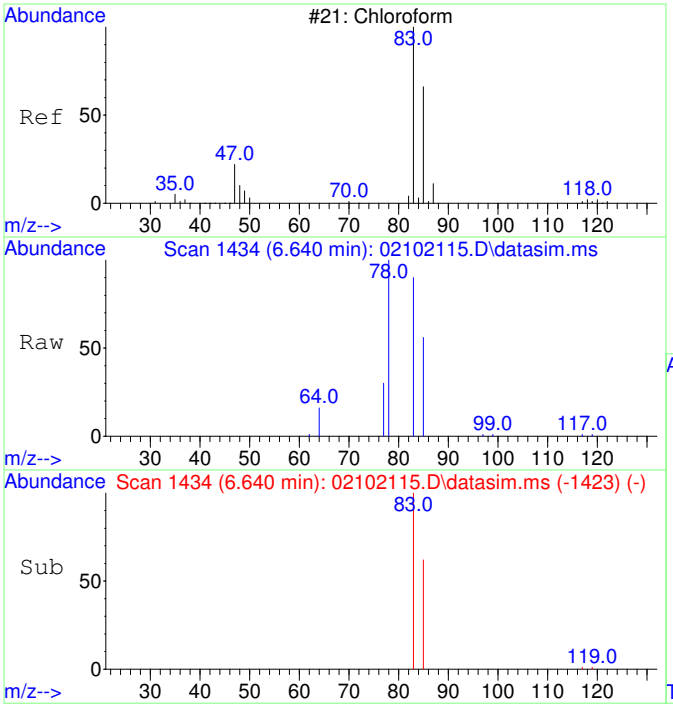


#3
trans-1,2-Dichloroethene
Concen: 24.08 ug/L
RT: 4.349 min Scan# 1108
Delta R.T. -0.026 min
Lab File: 02102115.D
Acq: 10 Feb 2021 14:46

Tgt Ion: 61 Resp: 233

Ion	Ratio	Lower	Upper
61	100		
63	68.2	2.4	62.4#

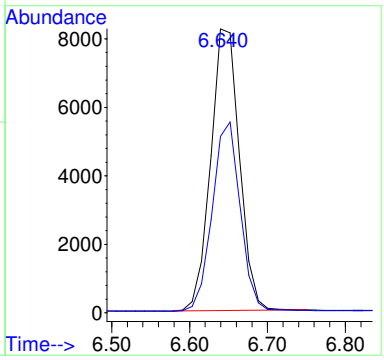


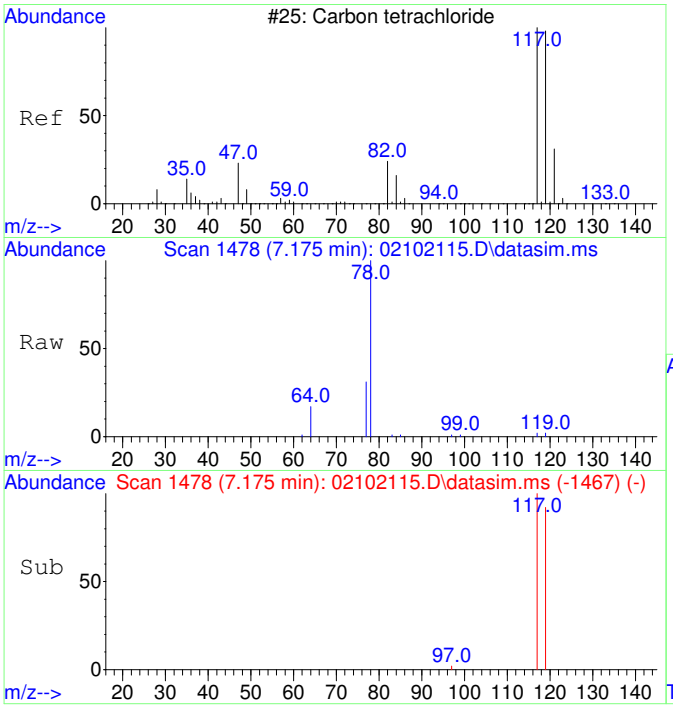


#6
Chloroform
Concen: 1837.94 ug/L
RT: 6.640 min Scan# 1434
Delta R.T. -0.012 min
Lab File: 02102115.D
Acq: 10 Feb 2021 14:46

Tgt Ion: 83 Resp: 21130

Ion	Ratio	Lower	Upper
83	100		
85	64.8	35.1	95.1

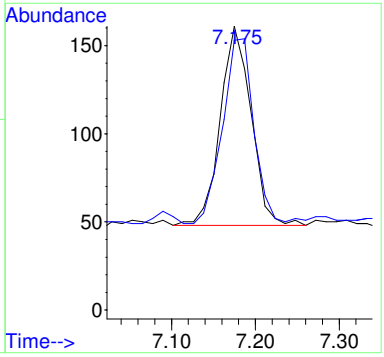


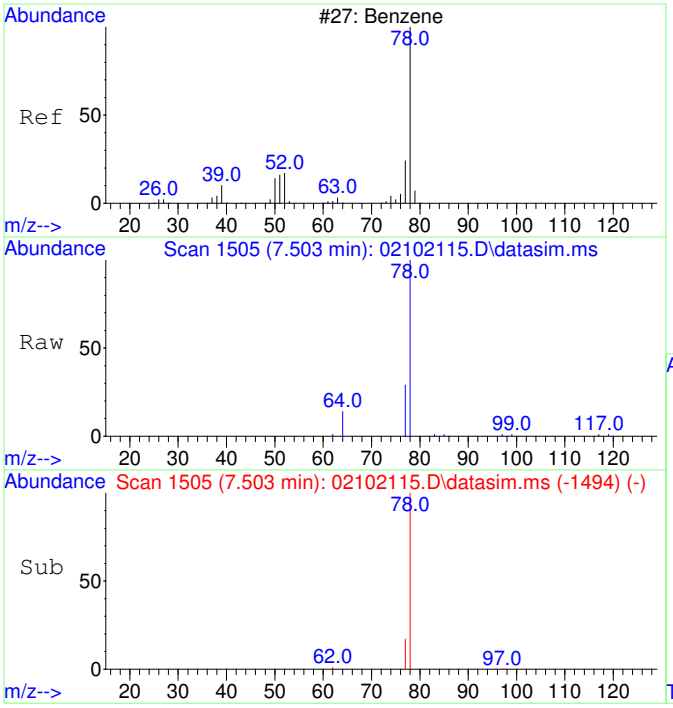


#8
Carbon tetrachloride
Concen: 24.39 ug/L
RT: 7.175 min Scan# 1478
Delta R.T. -0.012 min
Lab File: 02102115.D
Acq: 10 Feb 2021 14:46

Tgt Ion:117 Resp: 288

Ion	Ratio	Lower	Upper
117	100		
119	92.7	66.4	126.4

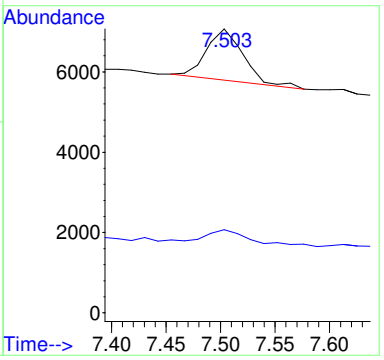


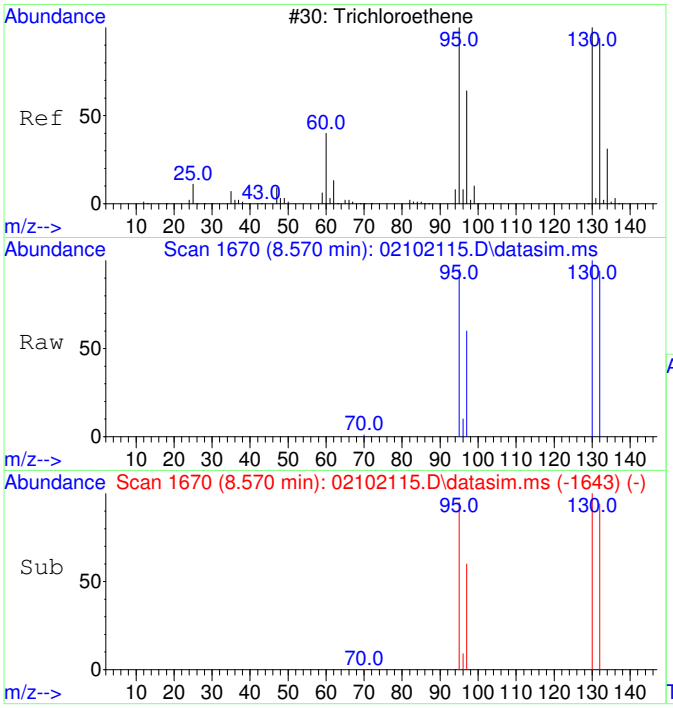


#9
Benzene
Concen: 87.32 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 02102115.D
Acq: 10 Feb 2021 14:46

Tgt Ion: 78 Resp: 2844

Ion	Ratio	Lower	Upper
78	100		
77	43.2	0.0	53.2

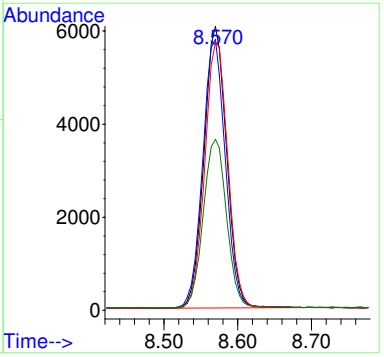


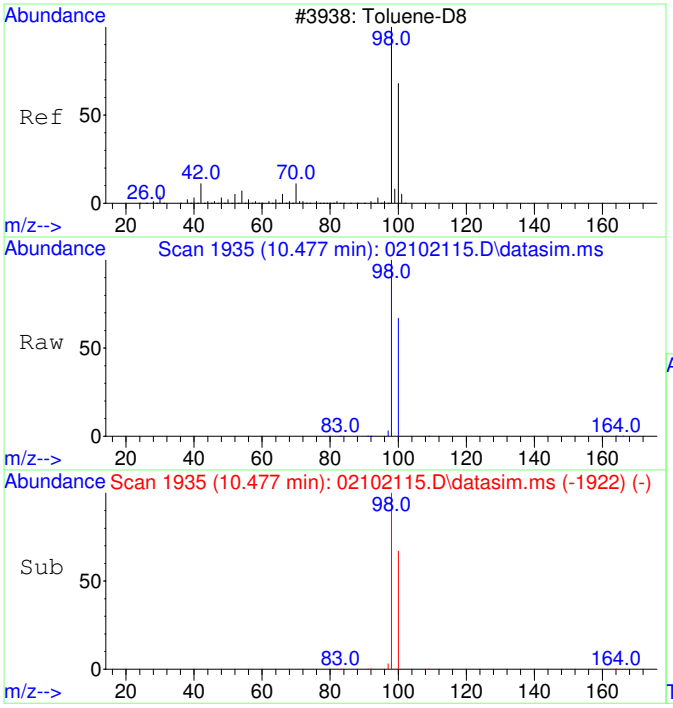


#11
Trichloroethene
Concen: 1256.24 ug/L
RT: 8.570 min Scan# 1670
Delta R.T. -0.005 min
Lab File: 02102115.D
Acq: 10 Feb 2021 14:46

Tgt Ion:130 Resp: 12919

Ion	Ratio	Lower	Upper
130	100		
95	94.9	60.7	120.7
132	95.5	76.0	116.0
97	61.0	38.6	78.6

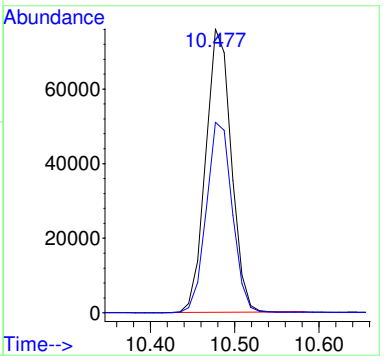


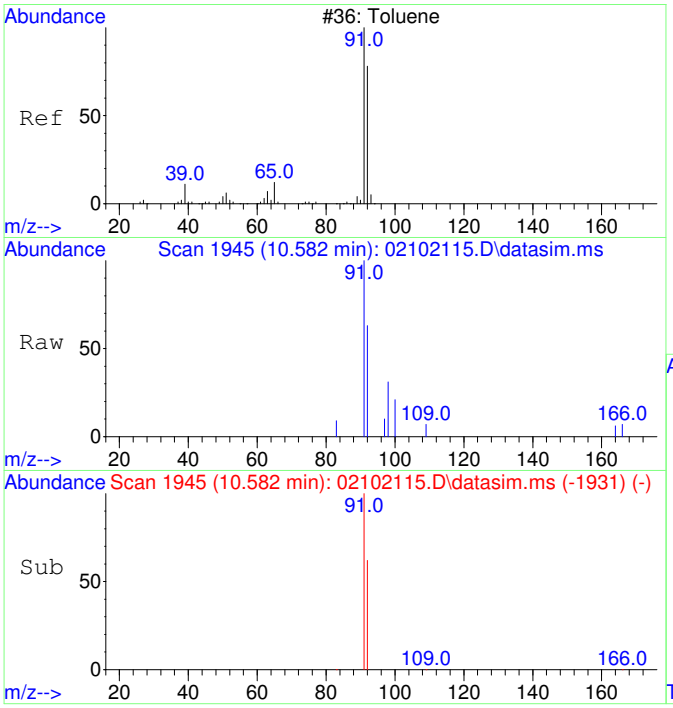


#12
Toluene-d8
Concen: 4282.25 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 02102115.D
Acq: 10 Feb 2021 14:46

Tgt Ion: 98 Resp: 160537

Ion	Ratio	Lower	Upper
98	100		
100	67.9	37.1	97.1

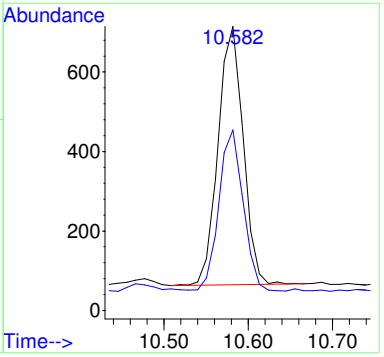


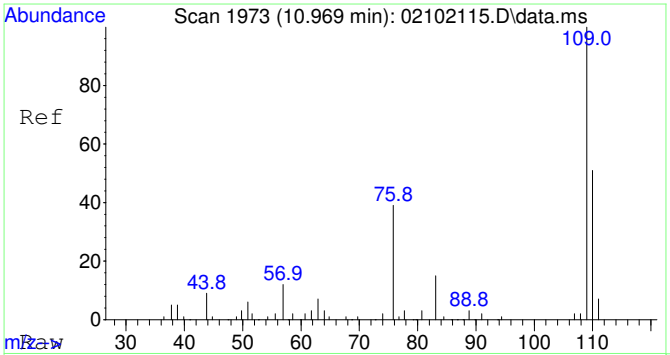


#13
Toluene
Concen: 28.84 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 02102115.D
Acq: 10 Feb 2021 14:46

Tgt Ion: 91 Resp: 1346

Ion	Ratio	Lower	Upper
91	100		
92	59.7	29.9	89.9

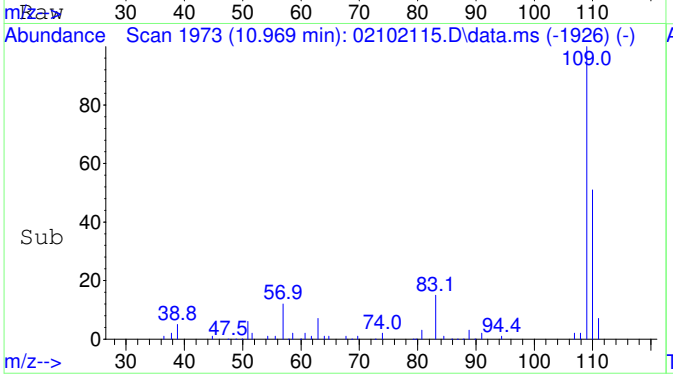


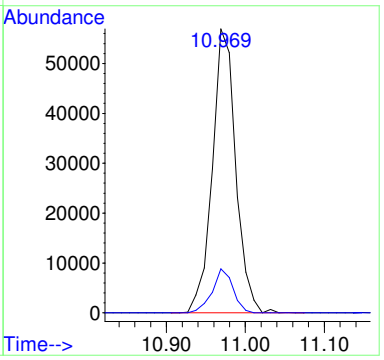


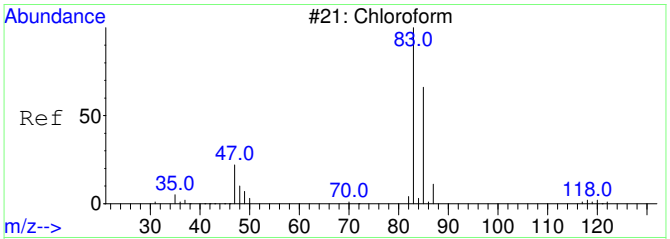
#25
2-Fluorotoluene SCAN
Concen: 5308.73 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 02102115.D
Acq: 10 Feb 2021 14:46

Tgt Ion:109 Resp: 116642

Ion	Ratio	Lower	Upper
109	100		
83	13.7	0.0	43.8



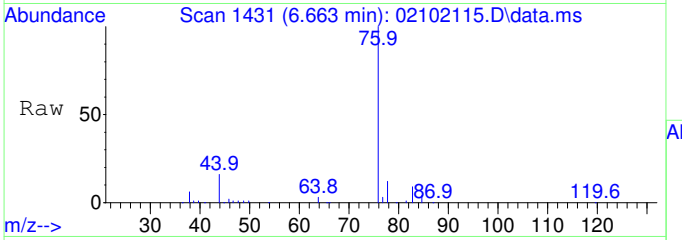


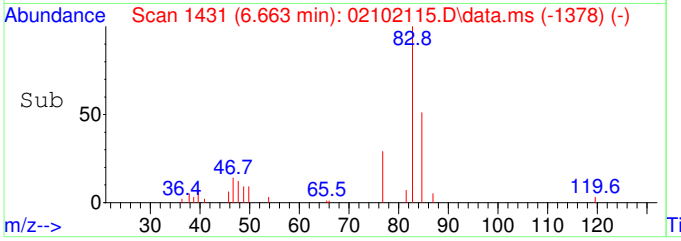


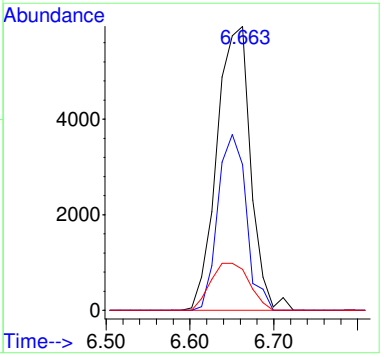
#30
Chloroform SCAN
Concen: 2345.66 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 02102115.D
Acq: 10 Feb 2021 14:46

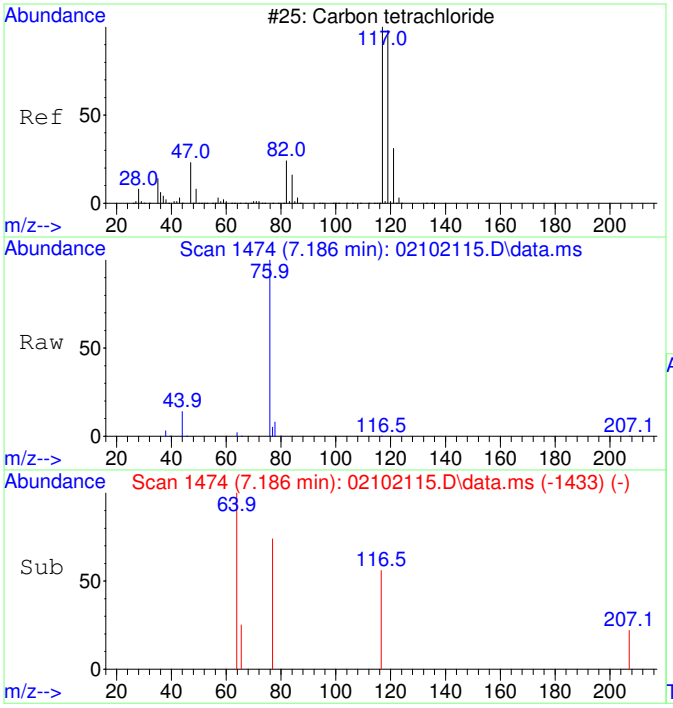
Tgt Ion: 83 Resp: 16586

Ion	Ratio	Lower	Upper
83	100		
85	52.1	34.6	94.6
47	19.0	0.0	53.4





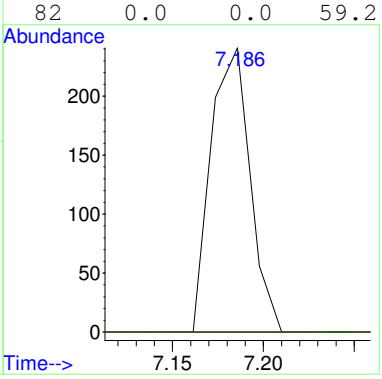


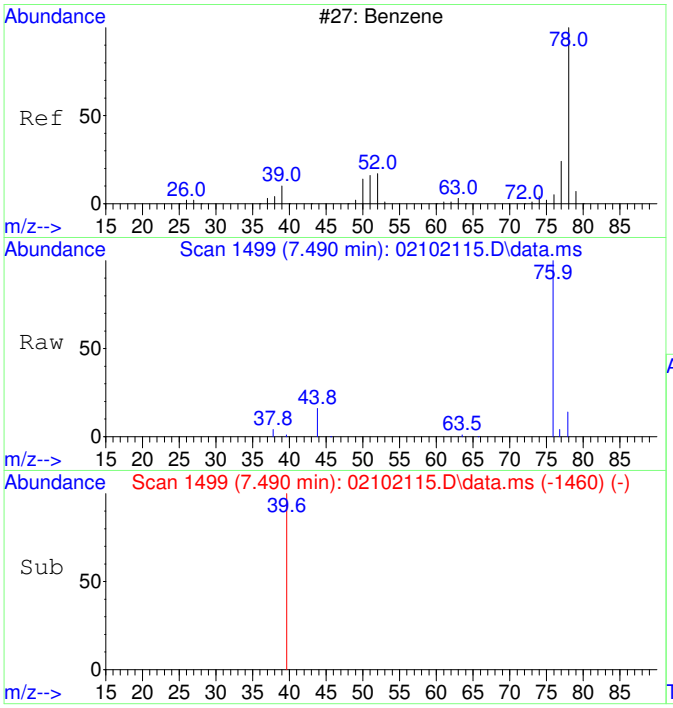


#32
Carbon tetrachloride SCAN
Concen: 58.06 ug/L
RT: 7.186 min Scan# 1474
Delta R.T. 0.000 min
Lab File: 02102115.D
Acq: 10 Feb 2021 14:46

Tgt Ion:117 Resp: 362

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

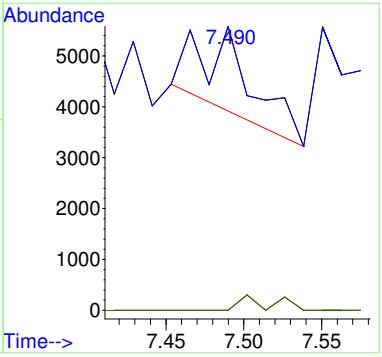


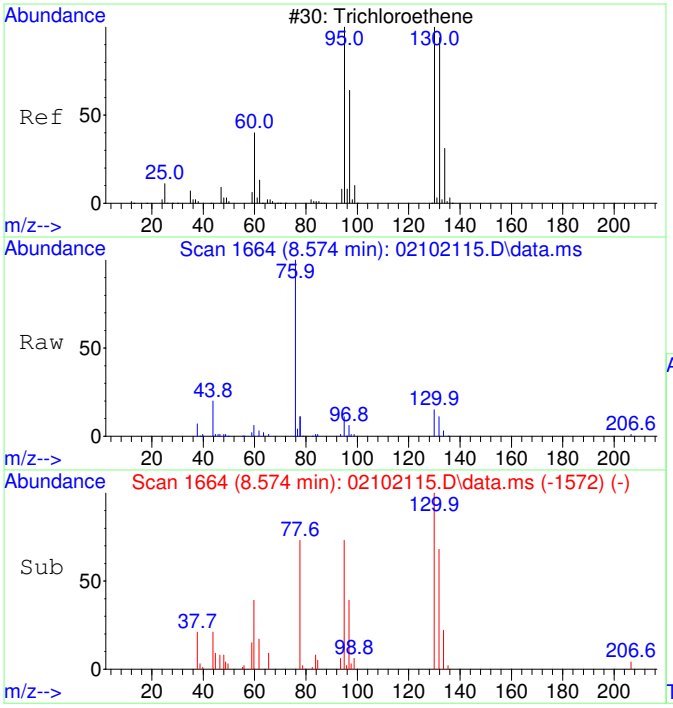


#33
Benzene SCAN
Concen: 146.64 ug/L
RT: 7.490 min Scan# 1499
Delta R.T. -0.024 min
Lab File: 02102115.D
Acq: 10 Feb 2021 14:46

Tgt Ion: 78 Resp: 3237

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	12.8	0.0	47.9
51	12.8	0.0	44.1

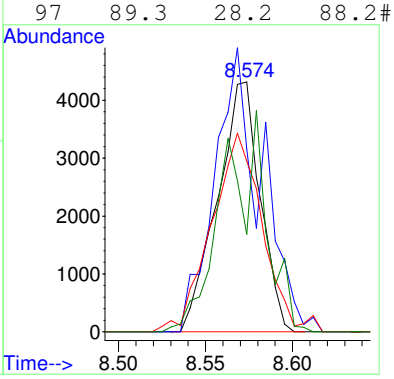


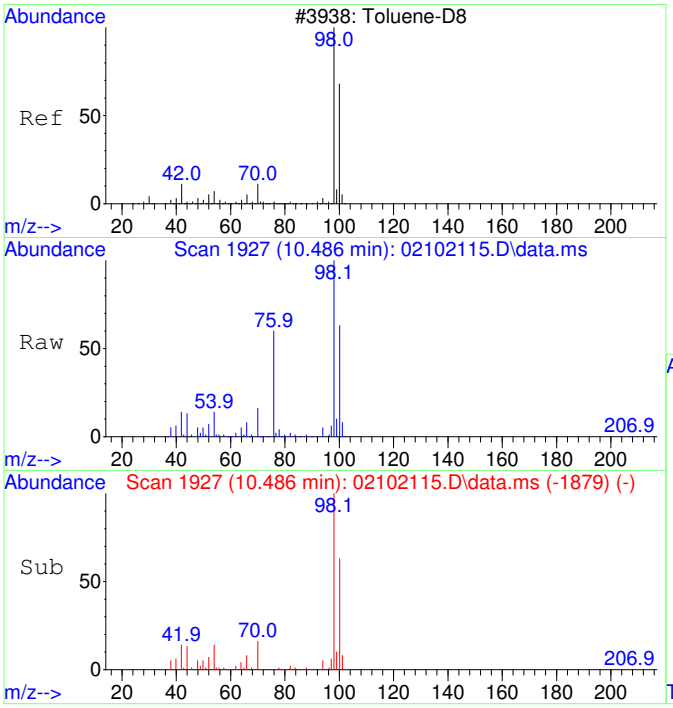


#35
Trichloroethene SCAN
Concen: 1534.48 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 02102115.D
Acq: 10 Feb 2021 14:46

Tgt Ion:130 Resp: 7386

Ion	Ratio	Lower	Upper
130	100		
95	124.4	60.5	120.5#
132	94.6	59.6	119.6
97	89.3	28.2	88.2#

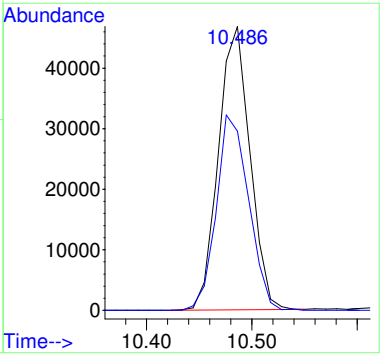


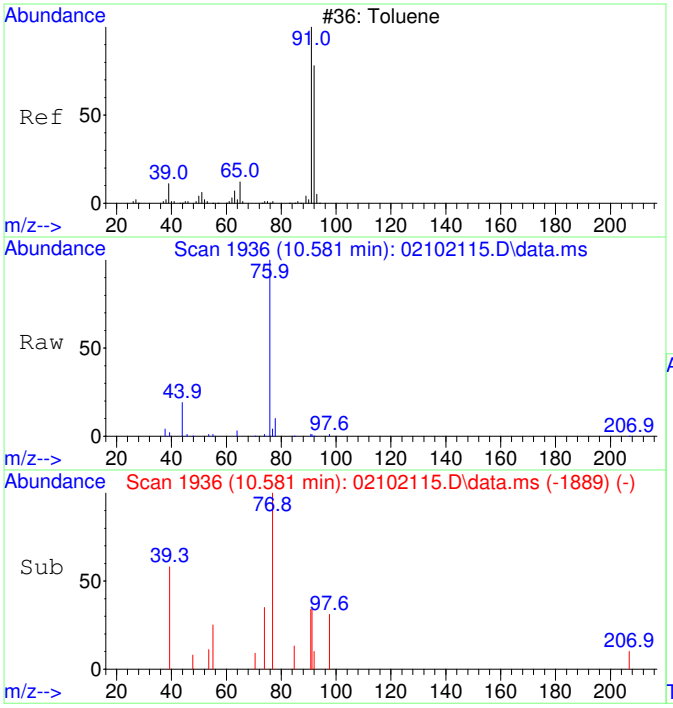


#36
Toluene-d8 SCAN
Concen: 4737.45 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 02102115.D
Acq: 10 Feb 2021 14:46

Tgt Ion: 98 Resp: 97625

Ion	Ratio	Lower	Upper
98	100		
100	70.6	40.0	100.0

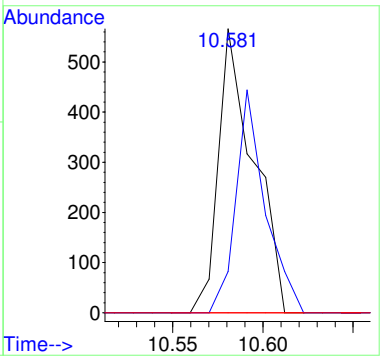


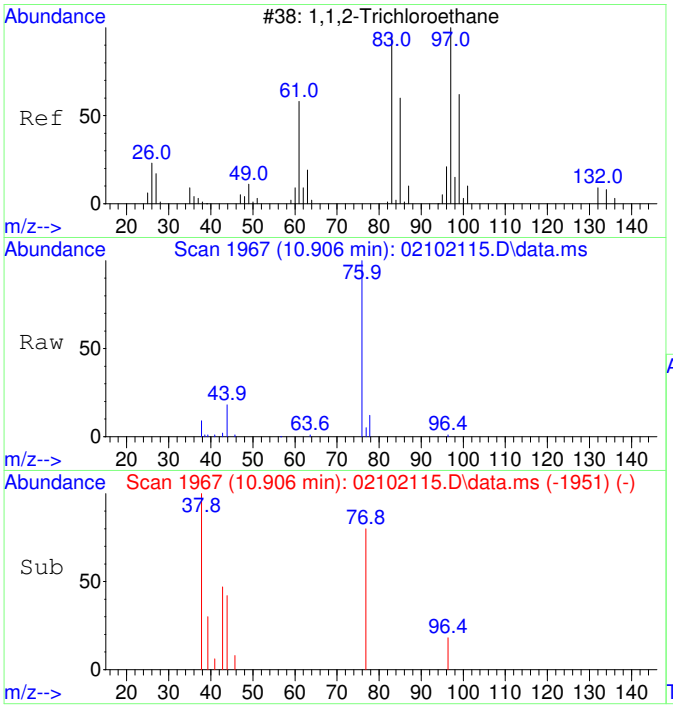


#37
Toluene SCAN
Concen: 30.27 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 02102115.D
Acq: 10 Feb 2021 14:46

Tgt Ion: 91 Resp: 768

Ion	Ratio	Lower	Upper
91	100		
92	65.8	28.3	88.3
65	0.0	0.0	41.0

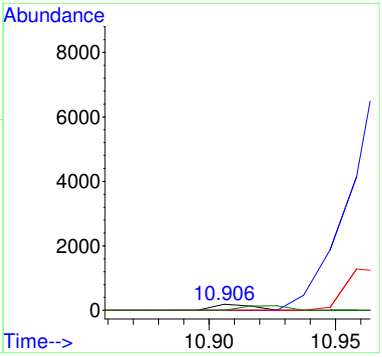


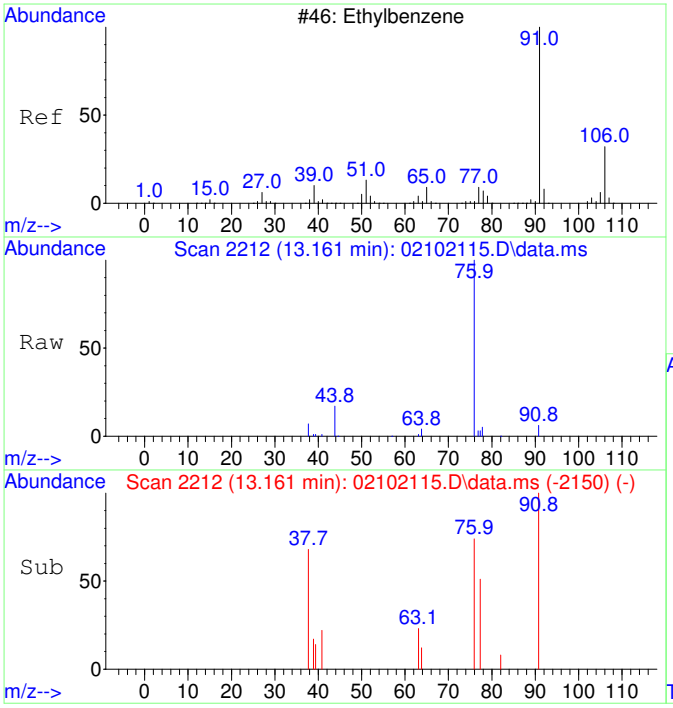


#38
1,1,2-Trichloroethane SCAN
Concen: 31.92 ug/L
RT: 10.906 min Scan# 1967
Delta R.T. -0.336 min
Lab File: 02102115.D
Acq: 10 Feb 2021 14:46

Tgt Ion: 97 Resp: 203

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#

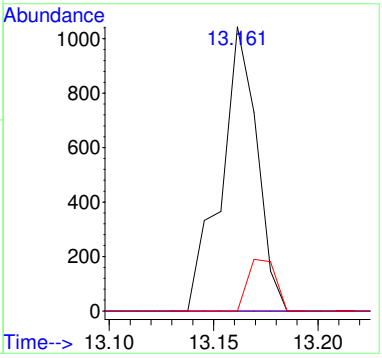


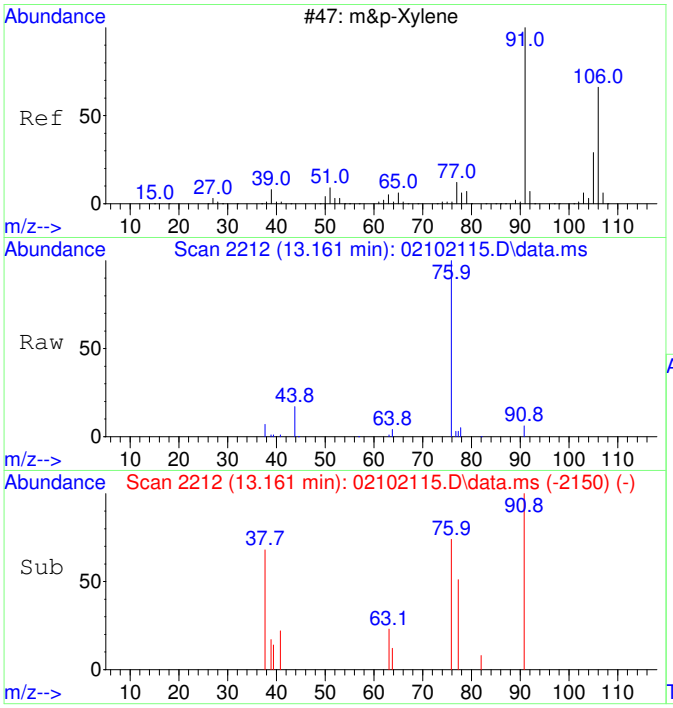


#42
Ethylbenzene SCAN
Concen: 25.81 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.008 min
Lab File: 02102115.D
Acq: 10 Feb 2021 14:46

Tgt Ion: 91 Resp: 1248

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.1	83.1#
51	14.2	0.0	40.1

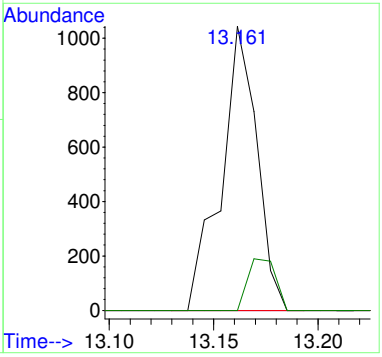




#43
m&p-Xylene SCAN
Concen: 25.81 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.008 min
Lab File: 02102115.D
Acq: 10 Feb 2021 14:46

Tgt Ion: 91 Resp: 1248

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.1	83.1#
105	0.0	0.0	54.7
51	14.2	0.0	40.1



2102006-09

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102117.D
Acq On : 10 Feb 2021 15:33
InstName : AG5975C
Operator : TD
Sample : 2102006-09
Misc :
ALS Vial : 17 Sample Multiplier: 1

REPORT

Quant Time: Feb 11 09:21:04 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

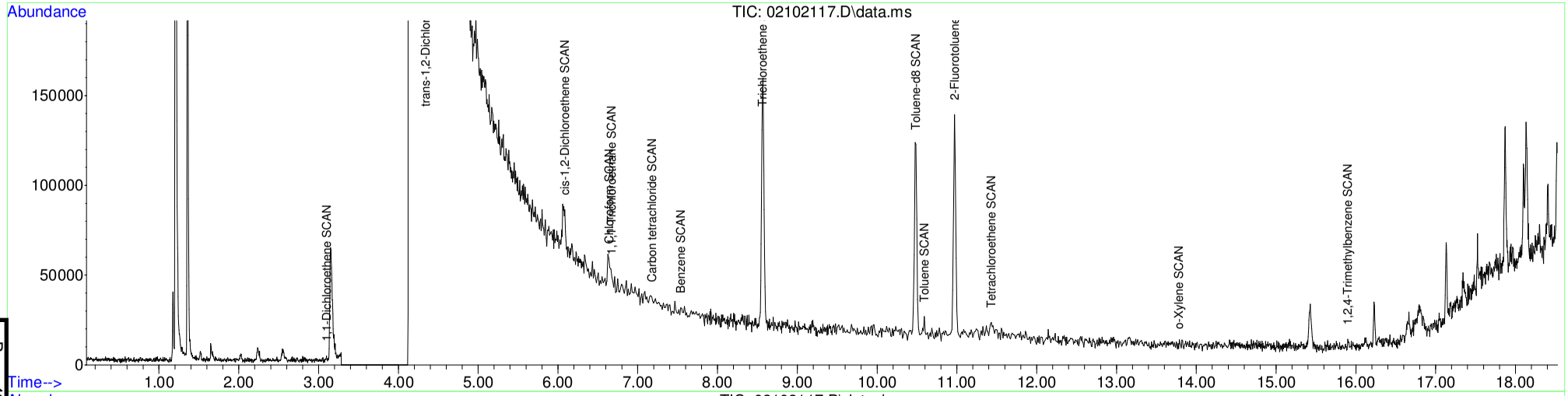
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	156622	5000.00 ug/L	-0.01
System Monitoring Compounds					
12) Toluene-d8	10.477	98	130686	4308.26 ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.17%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.086	61	1517	244.27 ug/L	84
3] trans-1,2-Dichloroethene	4.336	61	1730	220.97 ug/L	99
4] 1,1-Dichloroethane	5.059	63	1888	201.90 ug/L	98
5] cis-1,2-Dichloroethene	6.068	61	30995	3200.36 ug/L	98
6] Chloroform	6.639	83	21532	2314.68 ug/L	100
7] 1,1,1-Trichloroethane	6.895	97	982	98.27 ug/L	99
8] Carbon tetrachloride	7.175	117	816	85.41 ug/L	96
9] Benzene	7.503	78	3370	127.87 ug/L	64
11] Trichloroethene	8.564	130	86567	10403.35 ug/L	98
13] Toluene	10.582	91	5030	133.18 ug/L	97
15] Tetrachloroethene	11.432	166	4874	414.32 ug/L	99
18] Ethylbenzene	12.972	91	1294	26.82 ug/L	92
19] m&p-Xylene	13.162	91	3593	96.72 ug/L	96
20] o-Xylene	13.782	91	1249	31.30 ug/L	96
23] 1,2,4-Trimethylbenzene	15.901	105	1604	35.74 ug/L	90
25) 2-Fluorotoluene SCAN	10.969	109	92825	5221.28 ug/L	99
26) 1,1-Dichloroethene SCAN	3.100	61	127	30.60 ug/L #	1
27) trans-1,2-Dichloroethe...	4.335	61	801	151.52 ug/L #	48
29) cis-1,2-Dichloroethene...	6.086	61	21104	3440.45 ug/L #	28
30) Chloroform SCAN	6.638	83	14102	2464.79 ug/L	98
31) 1,1,1-Trichloroethane ...	6.662	97	157	26.59 ug/L #	19
32) Carbon tetrachloride SCAN	7.173	117	959	190.08 ug/L #	45
33) Benzene SCAN	7.538	78	1494	83.64 ug/L	86
35) Trichloroethene SCAN	8.563	130	50548	12978.74 ug/L	87
36) Toluene-d8 SCAN	10.486	98	78431	4703.78 ug/L	99
37) Toluene SCAN	10.591	91	4483	218.37 ug/L #	32
39) Tetrachloroethene SCAN	11.430	166	1819	393.86 ug/L	90
44) o-Xylene SCAN	13.773	91	534	25.00 ug/L	77
47) 1,2,4-Trimethylbenzene...	15.899	105	974	42.30 ug/L	93

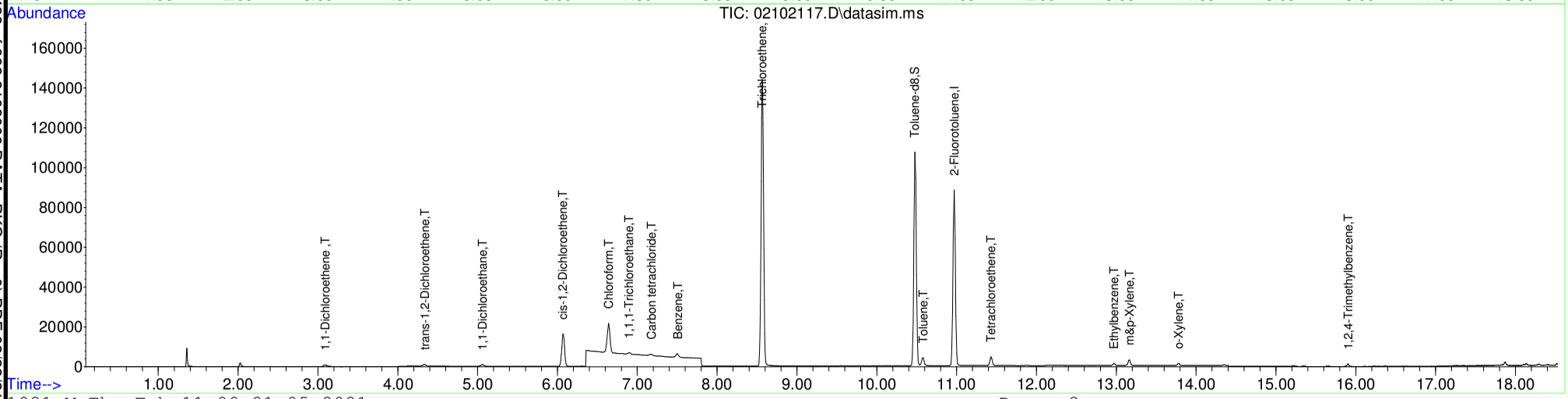
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102117.D
Acq On : 10 Feb 2021 15:33
InstName : AG5975C
Operator : TD
Sample : 2102006-09
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 11 09:21:04 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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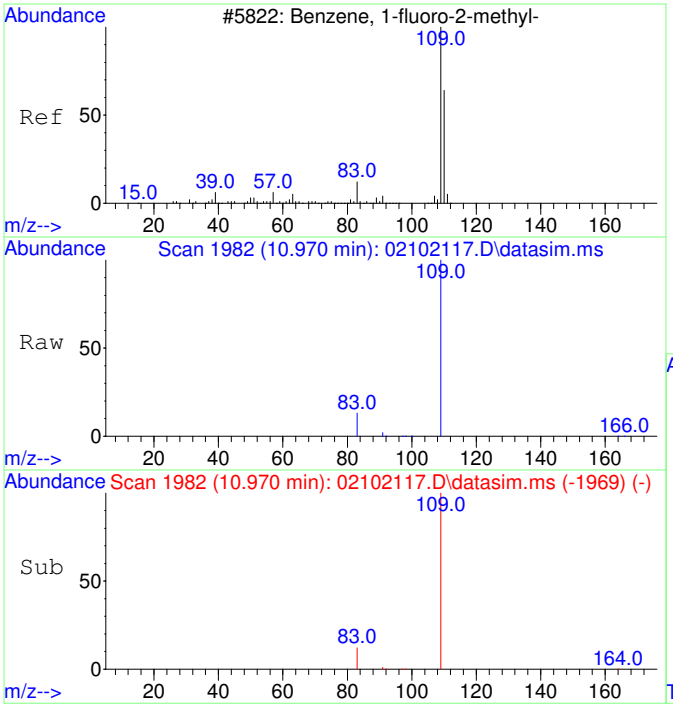
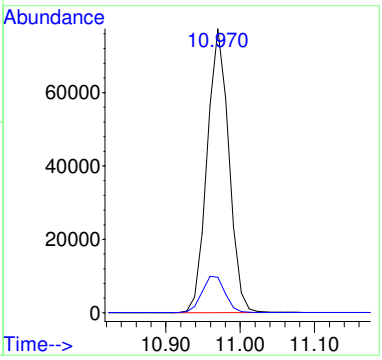
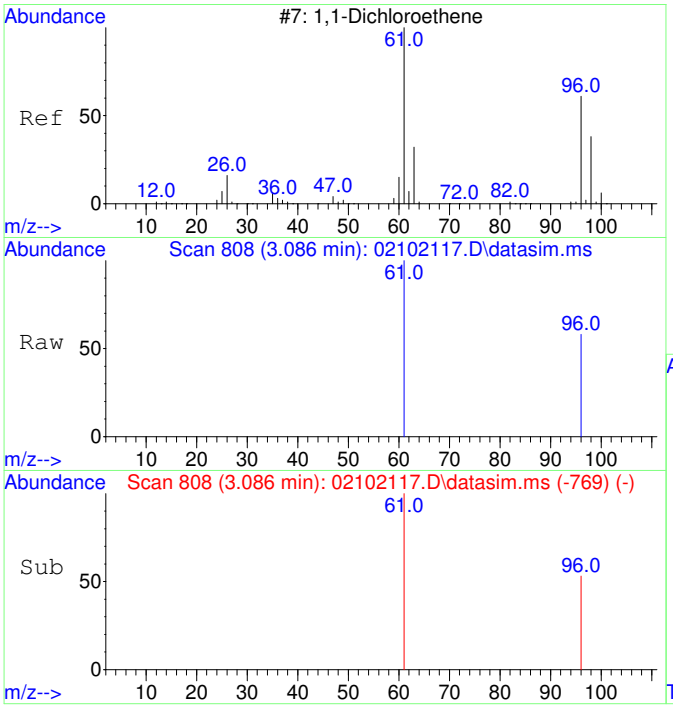


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion:109 Resp: 156622

Ion	Ratio	Lower	Upper
109	100		
83	13.7	0.0	42.3

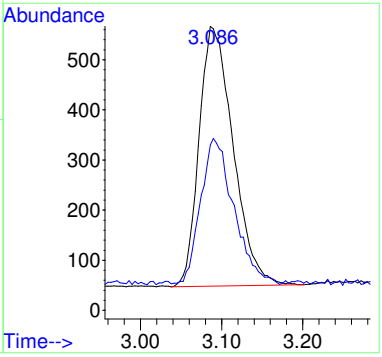


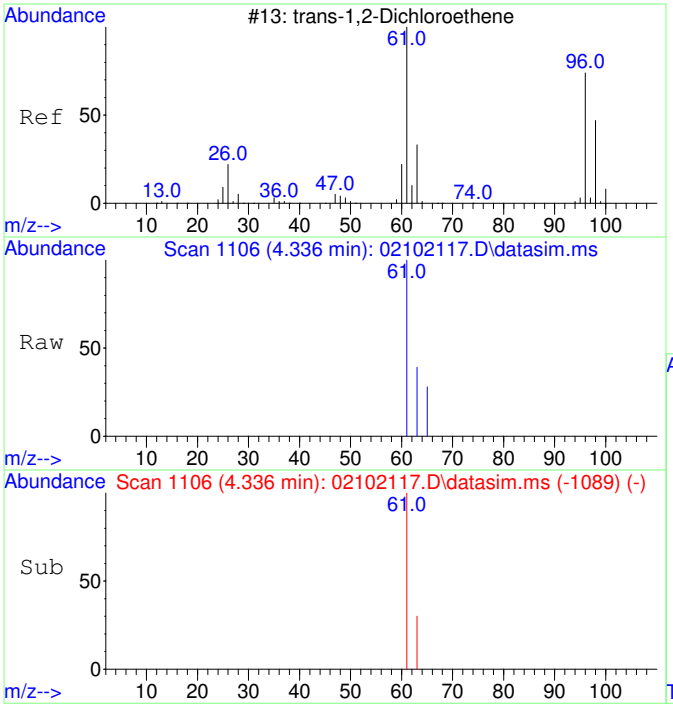


#2
1,1-Dichloroethene
Concen: 244.27 ug/L
RT: 3.086 min Scan# 808
Delta R.T. -0.004 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion: 61 Resp: 1517

Ion	Ratio	Lower	Upper
61	100		
96	54.1	37.2	97.2

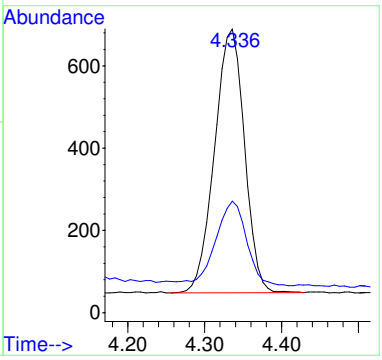


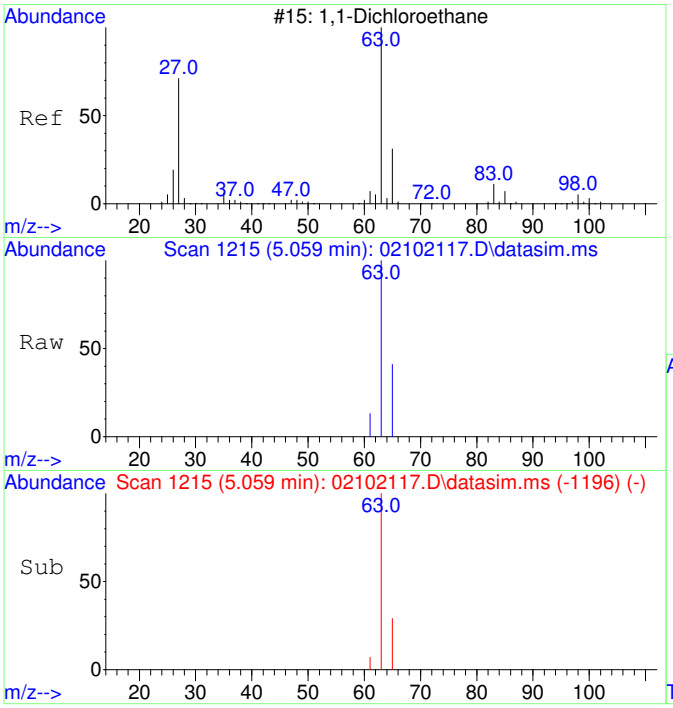


#3
trans-1,2-Dichloroethene
Concen: 220.97 ug/L
RT: 4.336 min Scan# 1106
Delta R.T. -0.040 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion: 61 Resp: 1730

Ion	Ratio	Lower	Upper
61	100		
63	33.1	2.4	62.4

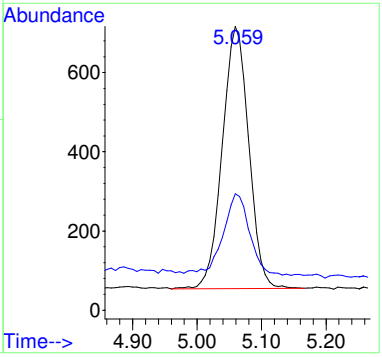


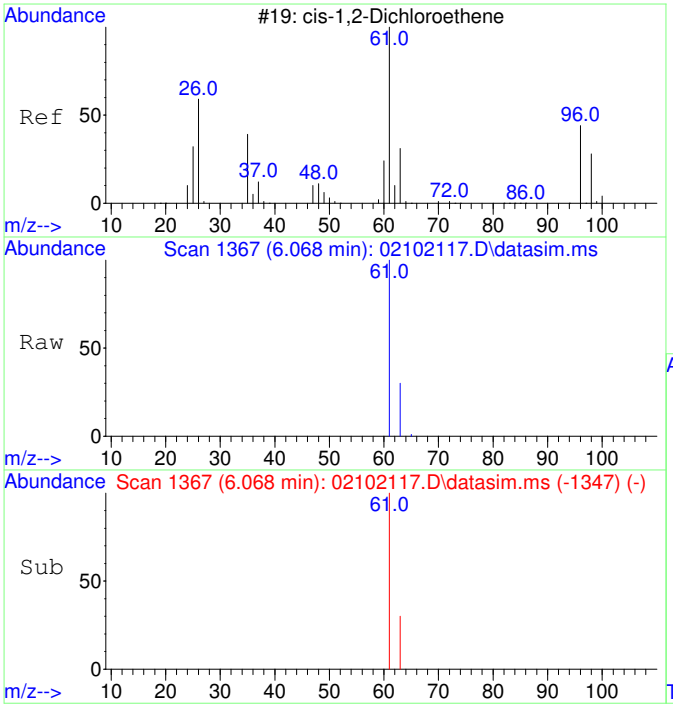


#4
1,1-Dichloroethane
Concen: 201.90 ug/L
RT: 5.059 min Scan# 1215
Delta R.T. -0.027 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion: 63 Resp: 1888

Ion	Ratio	Lower	Upper
63	100		
65	32.7	1.8	61.8

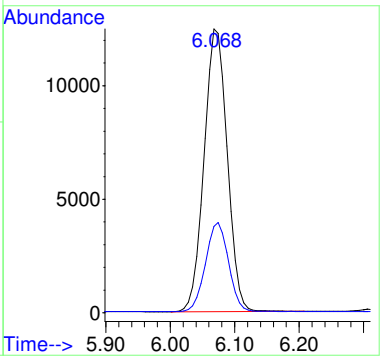


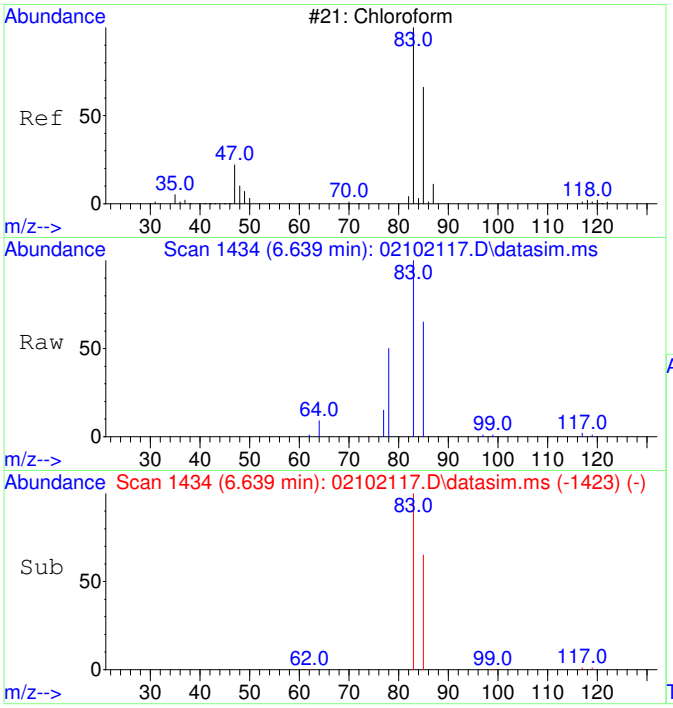


#5
cis-1,2-Dichloroethene
Concen: 3200.36 ug/L
RT: 6.068 min Scan# 1367
Delta R.T. -0.020 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion: 61 Resp: 30995

Ion	Ratio	Lower	Upper
61	100		
63	31.2	2.5	62.5

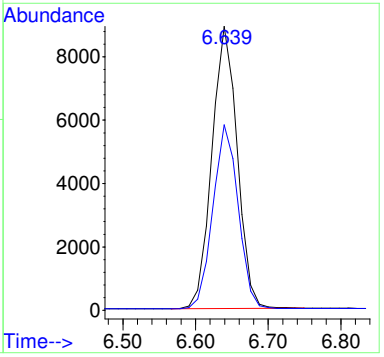


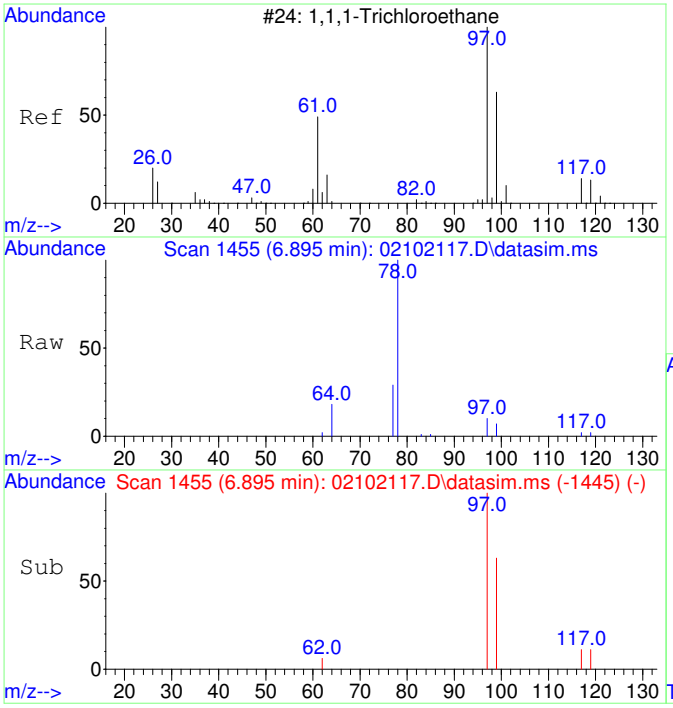


#6
Chloroform
Concen: 2314.68 ug/L
RT: 6.639 min Scan# 1434
Delta R.T. -0.012 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion: 83 Resp: 21532

Ion	Ratio	Lower	Upper
83	100		
85	65.0	35.1	95.1

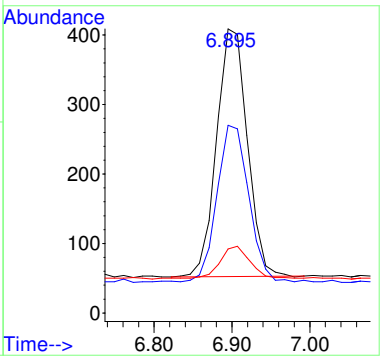


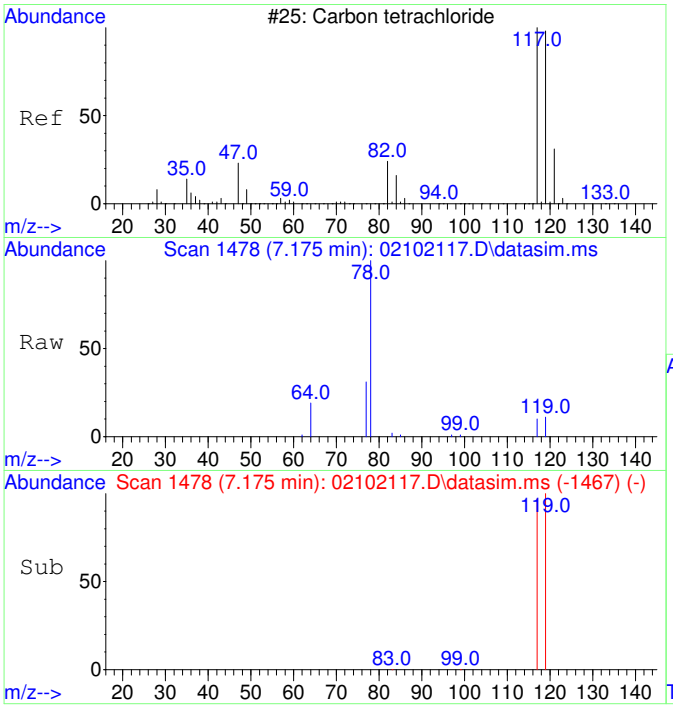


#7
1,1,1-Trichloroethane
Concen: 98.27 ug/L
RT: 6.895 min Scan# 1455
Delta R.T. -0.024 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion: 97 Resp: 982

Ion	Ratio	Lower	Upper
97	100		
99	65.1	34.6	94.6
117	13.4	0.0	43.2

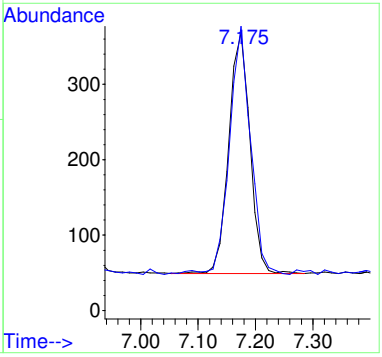


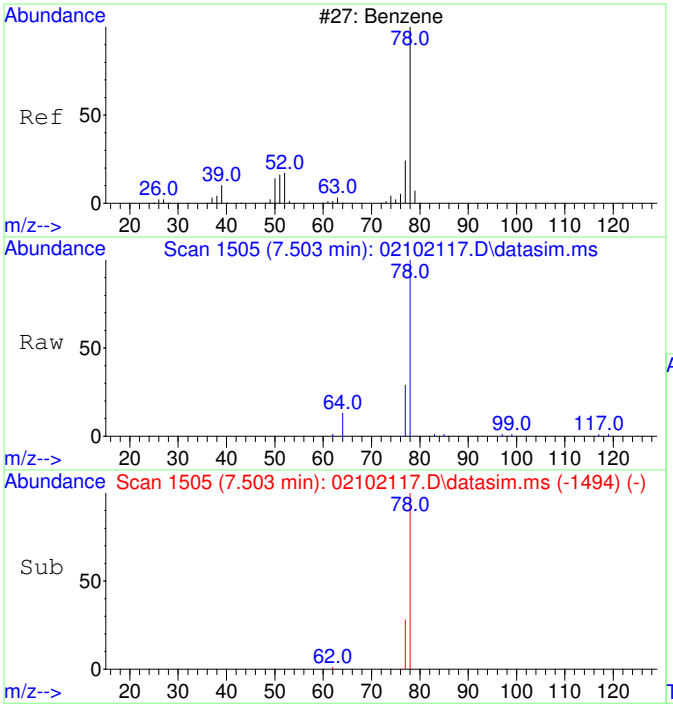


#8
Carbon tetrachloride
Concen: 85.41 ug/L
RT: 7.175 min Scan# 1478
Delta R.T. -0.012 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion:117 Resp: 816

Ion	Ratio	Lower	Upper
117	100		
119	100.1	66.4	126.4

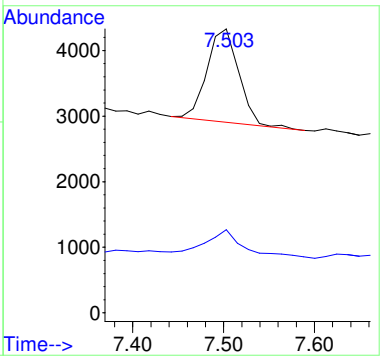


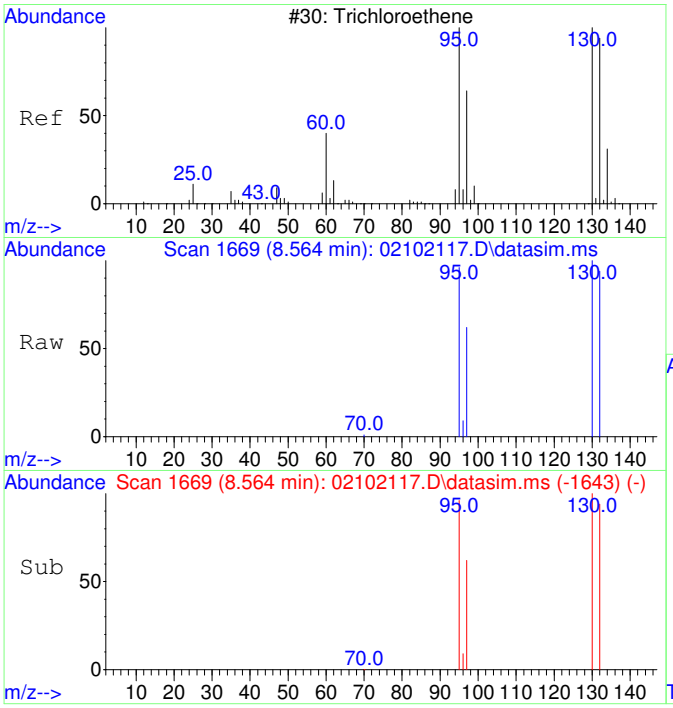


#9
Benzene
Concen: 127.87 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion: 78 Resp: 3370

Ion	Ratio	Lower	Upper
78	100		
77	40.8	0.0	53.2

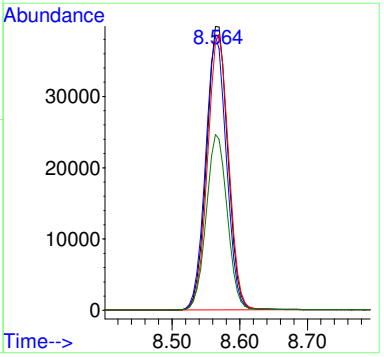


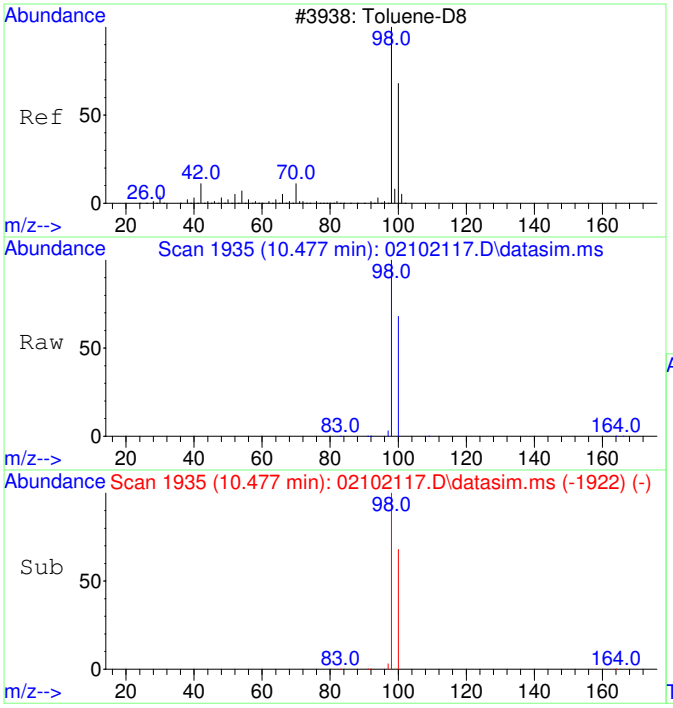


#11
Trichloroethene
Concen: 10403.35 ug/L
RT: 8.564 min Scan# 1669
Delta R.T. -0.011 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion:130 Resp: 86567

Ion	Ratio	Lower	Upper
130	100		
95	94.8	60.7	120.7
132	96.1	76.0	116.0
97	61.2	38.6	78.6

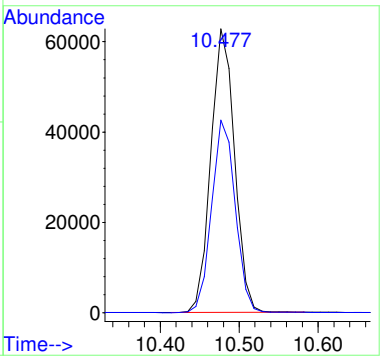


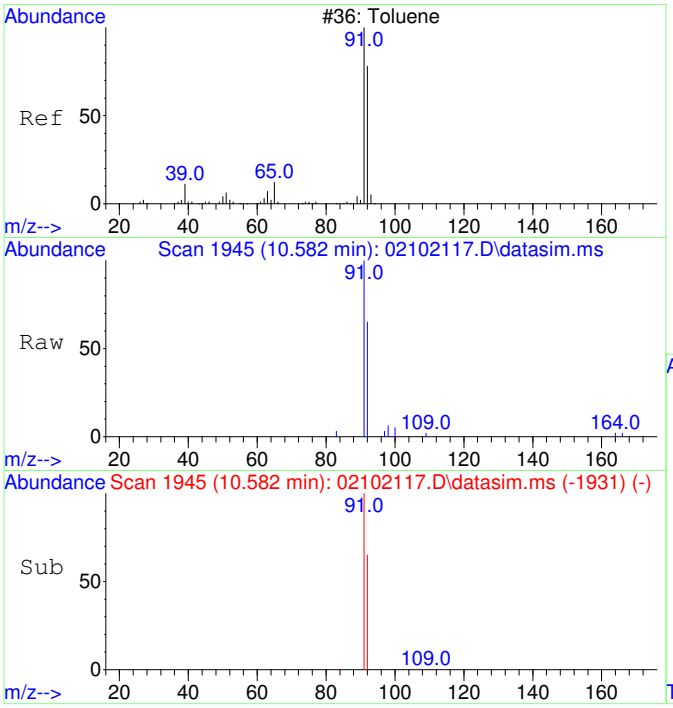


#12
Toluene-d8
Concen: 4308.26 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.011 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion: 98 Resp: 130686

Ion	Ratio	Lower	Upper
98	100		
100	67.5	37.1	97.1

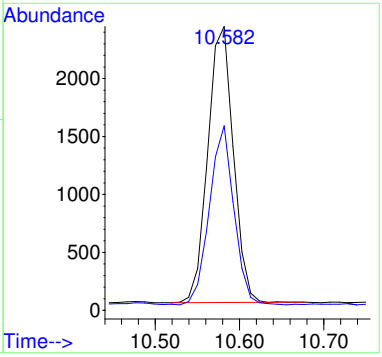


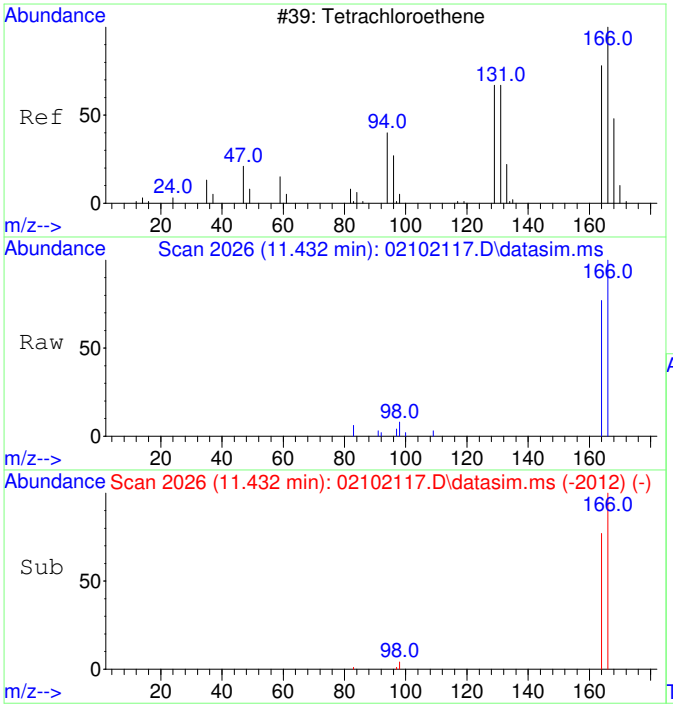


#13
Toluene
Concen: 133.18 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion: 91 Resp: 5030

Ion	Ratio	Lower	Upper
91	100		
92	61.8	29.9	89.9

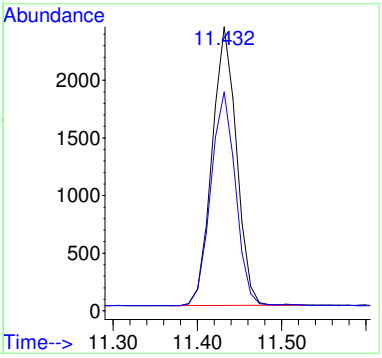


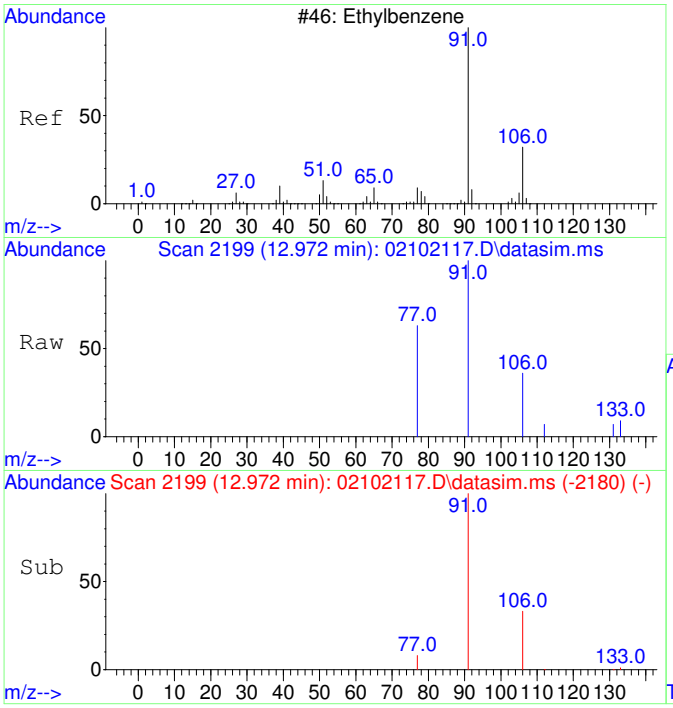


#15
Tetrachloroethene
Concen: 414.32 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion:166 Resp: 4874

Ion	Ratio	Lower	Upper
166	100		
164	77.1	47.8	107.8

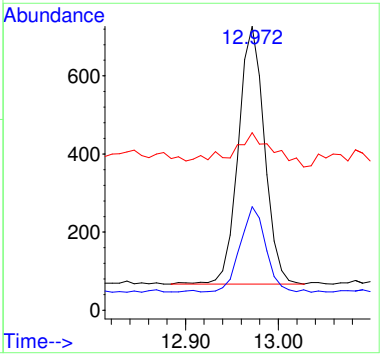


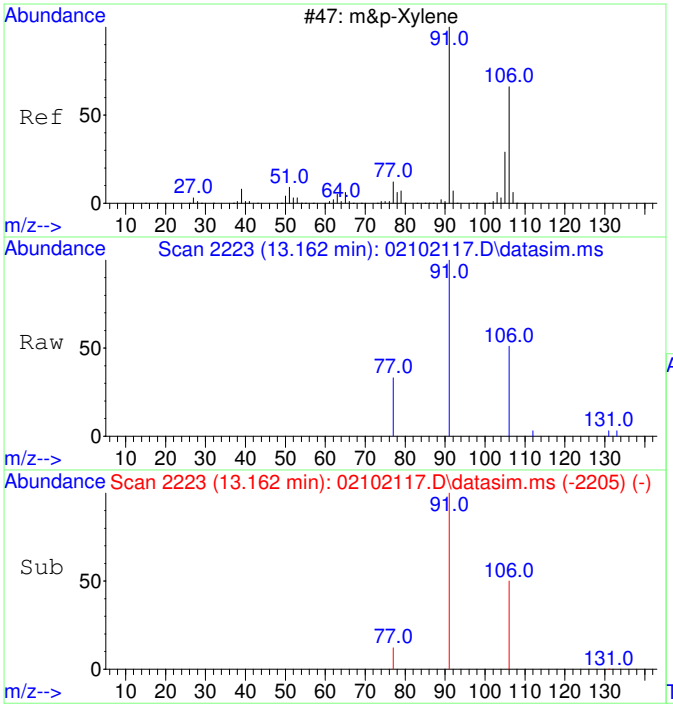


#18
Ethylbenzene
Concen: 26.82 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion: 91 Resp: 1294

Ion	Ratio	Lower	Upper
91	100		
106	32.4	3.0	63.0
77	21.7	0.0	38.2

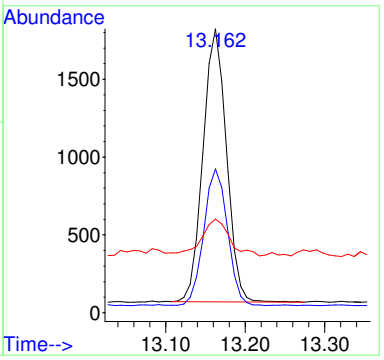


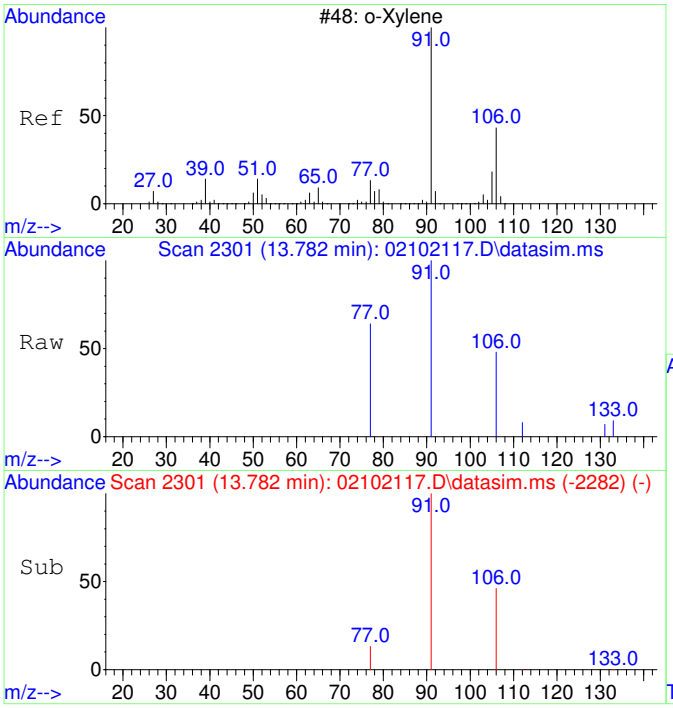


#19
m&p-Xylene
Concen: 96.72 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion: 91 Resp: 3593

Ion	Ratio	Lower	Upper
91	100		
106	50.3	22.2	82.2
77	16.1	0.0	42.4

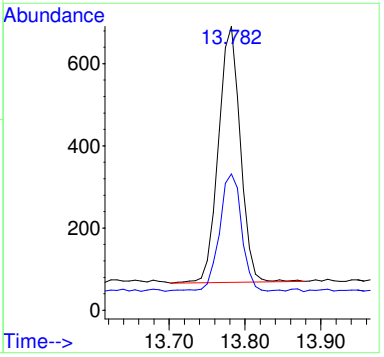


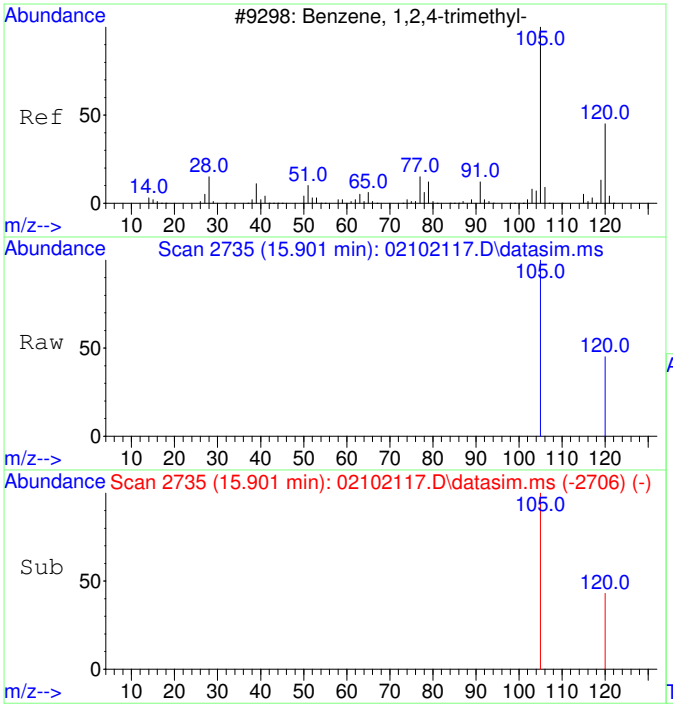


#20
o-Xylene
Concen: 31.30 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion: 91 Resp: 1249

Ion	Ratio	Lower	Upper
91	100		
106	46.3	19.2	79.2

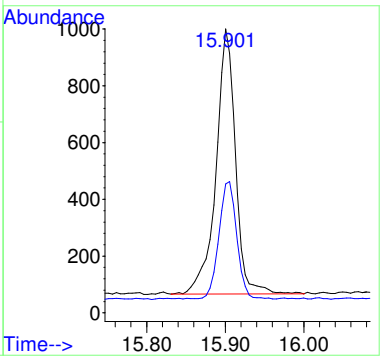


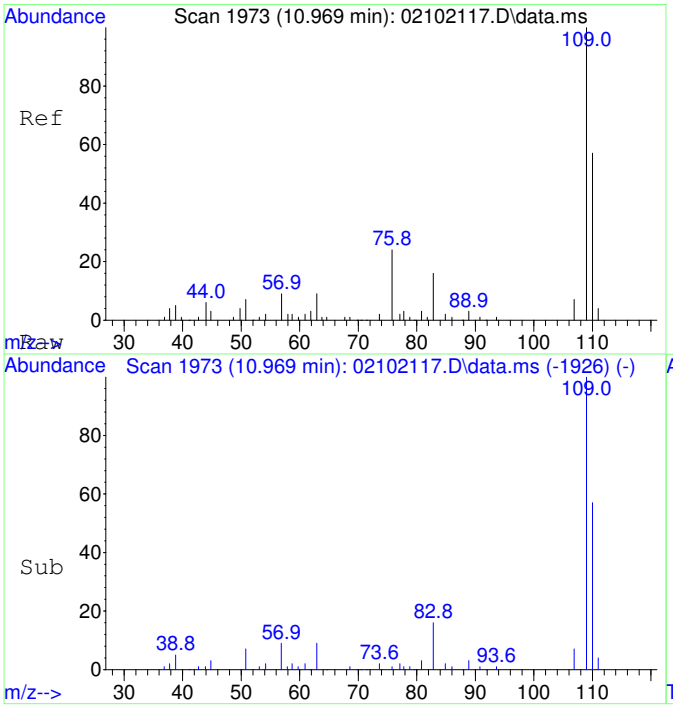


#23
1,2,4-Trimethylbenzene
Concen: 35.74 ug/L
RT: 15.901 min Scan# 2735
Delta R.T. -0.005 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion:105 Resp: 1604

Ion	Ratio	Lower	Upper
105	100		
120	40.3	17.2	77.2

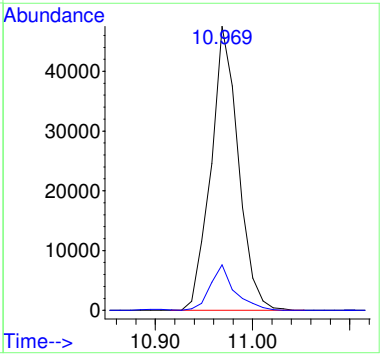


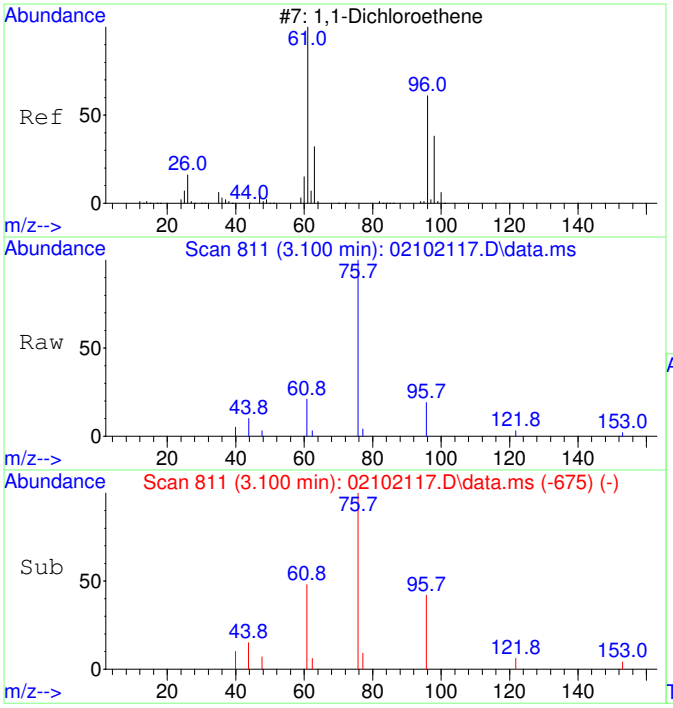


#25
2-Fluorotoluene SCAN
Concen: 5221.28 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion:109 Resp: 92825

Ion	Ratio	Lower	Upper
109	100		
83	14.2	0.0	43.8

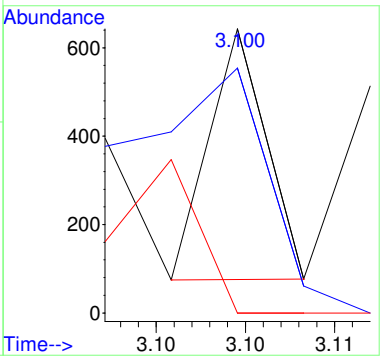


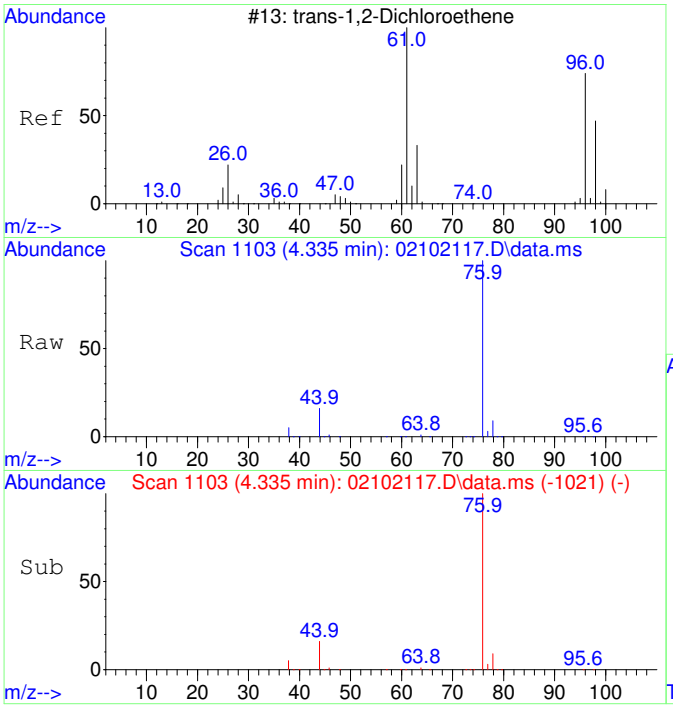


#26
1,1-Dichloroethene SCAN
Concen: 30.60 ug/L
RT: 3.100 min Scan# 811
Delta R.T. 0.004 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion: 61 Resp: 127

Ion	Ratio	Lower	Upper
61	100		
96	329.1	33.1	93.1#
98	122.0	11.2	71.2#

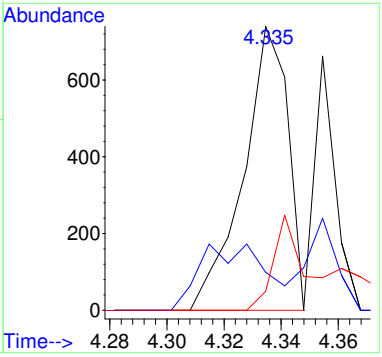


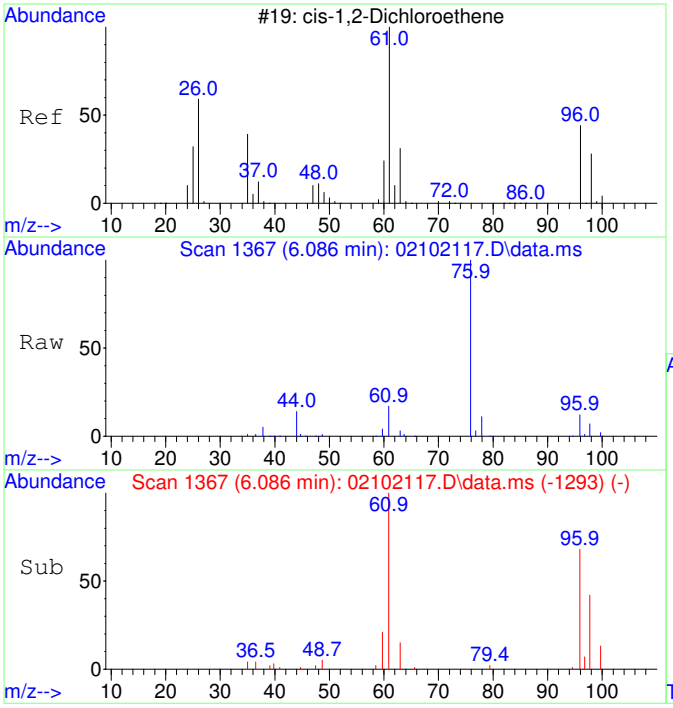


#27
trans-1,2-Dichloroethene SCAN
Concen: 151.52 ug/L
RT: 4.335 min Scan# 1103
Delta R.T. -0.046 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion: 61 Resp: 801

Ion	Ratio	Lower	Upper
61	100		
96	15.6	49.0	109.0#
98	36.3	20.5	80.5

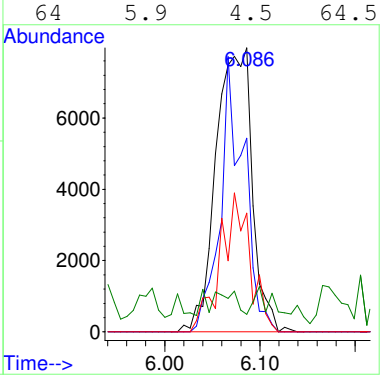


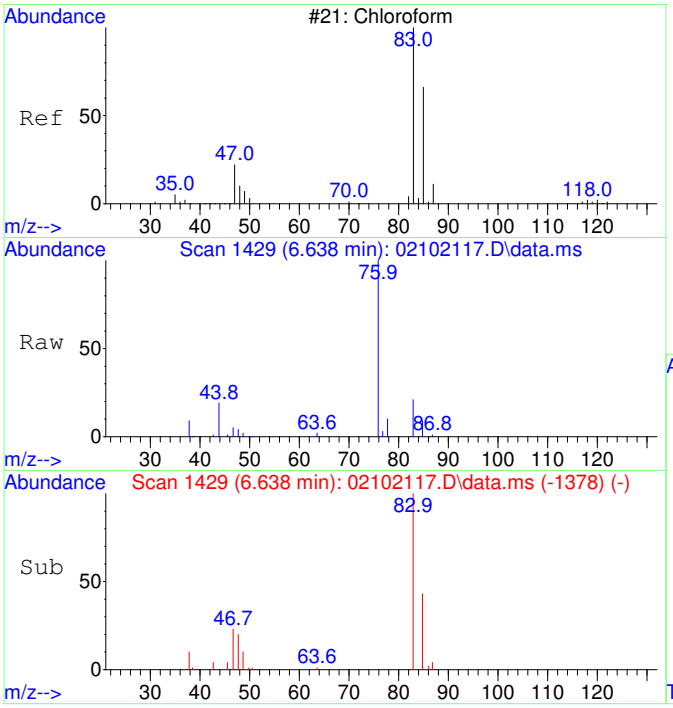


#29
cis-1,2-Dichloroethene SCAN
Concen: 3440.45 ug/L
RT: 6.086 min Scan# 1367
Delta R.T. -0.007 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion: 61 Resp: 21104

Ion	Ratio	Lower	Upper
61	100		
96	0.0	39.9	99.9#
98	0.0	13.5	73.5#
64	5.9	4.5	64.5

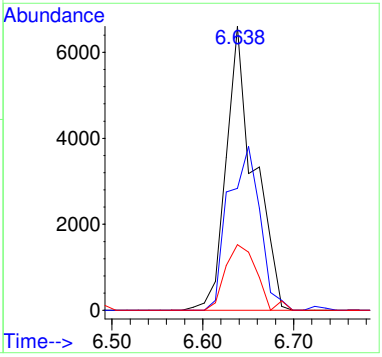


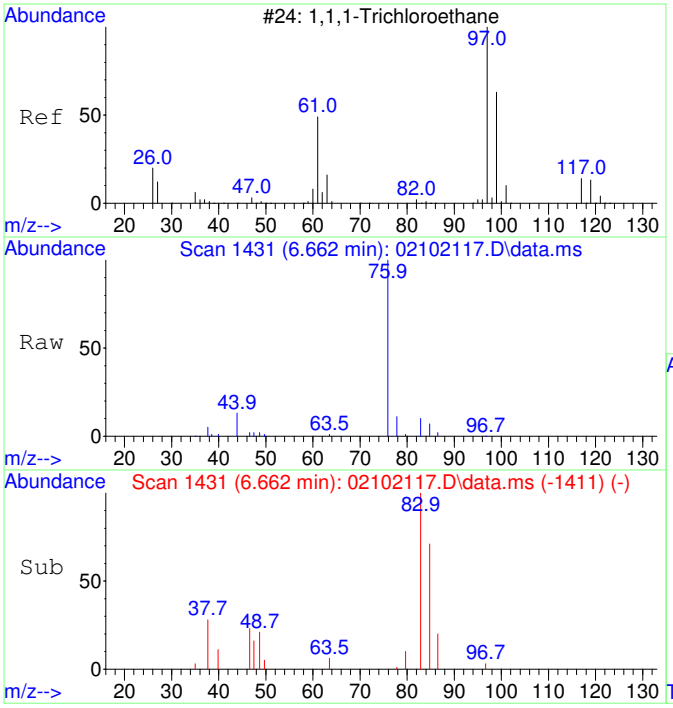


#30
Chloroform SCAN
Concen: 2464.79 ug/L
RT: 6.638 min Scan# 1429
Delta R.T. -0.024 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion: 83 Resp: 14102

Ion	Ratio	Lower	Upper
83	100		
85	65.5	34.6	94.6
47	26.3	0.0	53.4

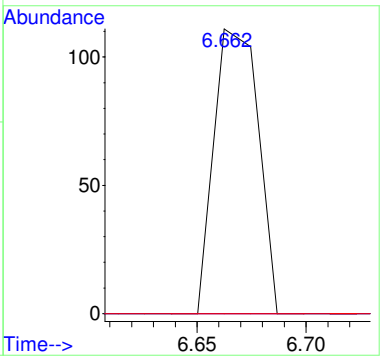


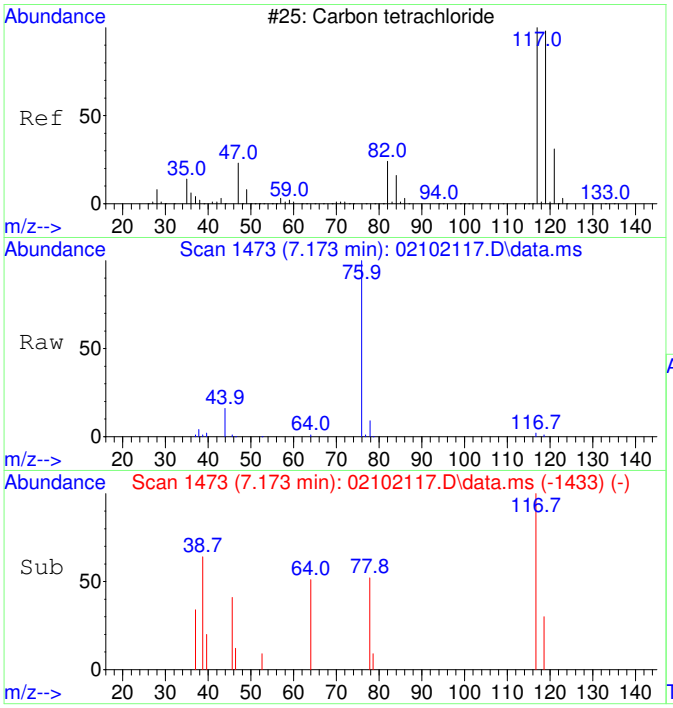


#31
1,1,1-Trichloroethane SCAN
Concen: 26.59 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. -0.255 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion: 97 Resp: 157

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

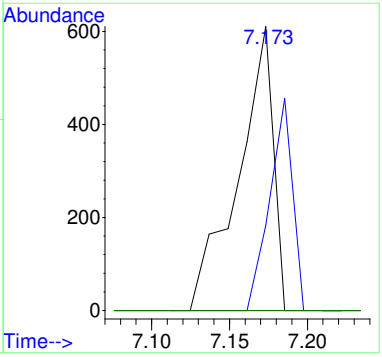


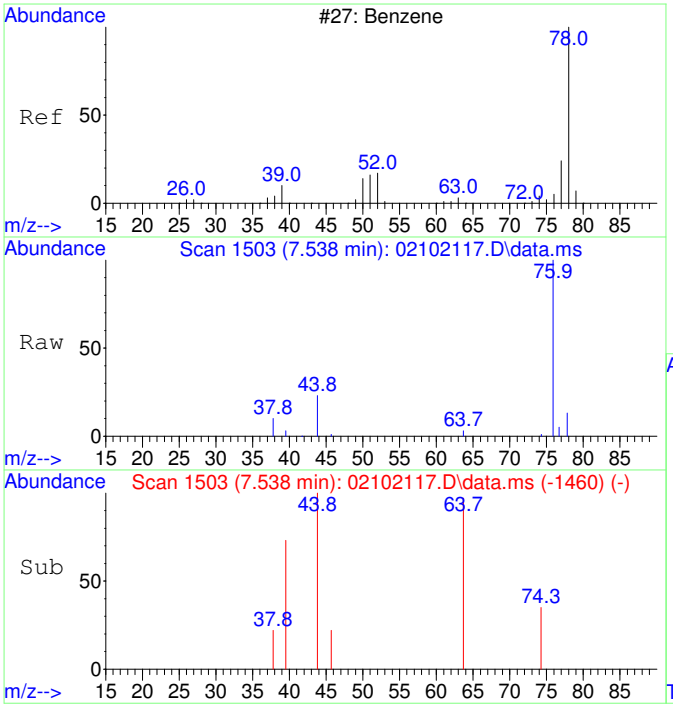


#32
Carbon tetrachloride SCAN
Concen: 190.08 ug/L
RT: 7.173 min Scan# 1473
Delta R.T. -0.012 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion:117 Resp: 959

Ion	Ratio	Lower	Upper
117	100		
119	48.6	75.5	135.5#
121	0.0	0.0	58.8
82	0.0	0.0	59.2

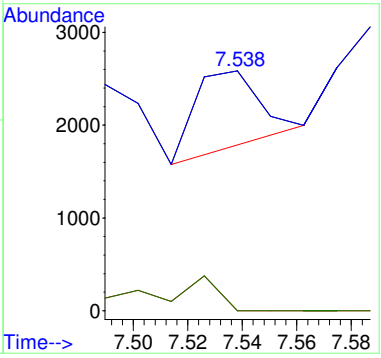


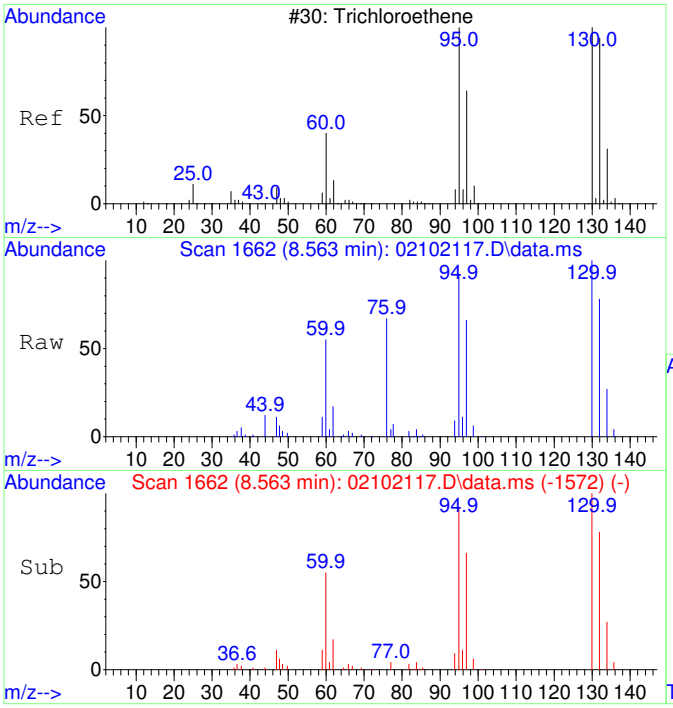


#33
Benzene SCAN
Concen: 83.64 ug/L
RT: 7.538 min Scan# 1503
Delta R.T. 0.024 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion: 78 Resp: 1494

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	40.9	0.0	47.9
51	40.9	0.0	44.1

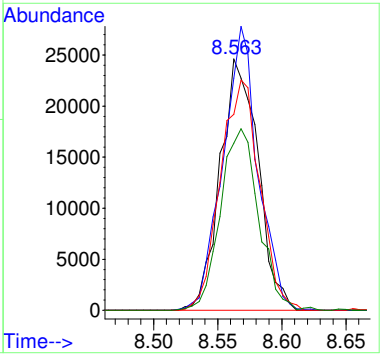


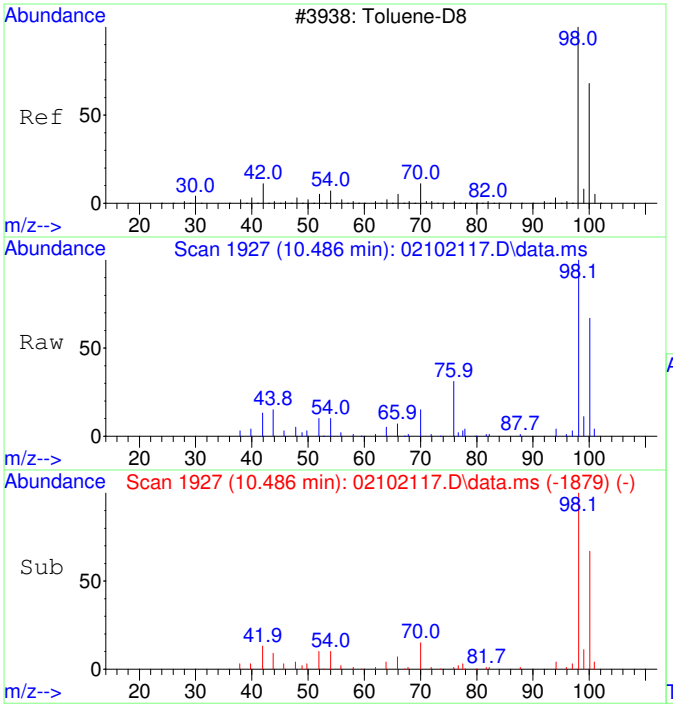


#35
Trichloroethene SCAN
Concen: 12978.74 ug/L
RT: 8.563 min Scan# 1662
Delta R.T. -0.011 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion:130 Resp: 50548

Ion	Ratio	Lower	Upper
130	100		
95	105.0	60.5	120.5
132	95.4	59.6	119.6
97	73.2	28.2	88.2

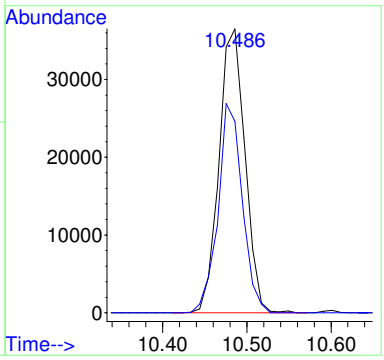


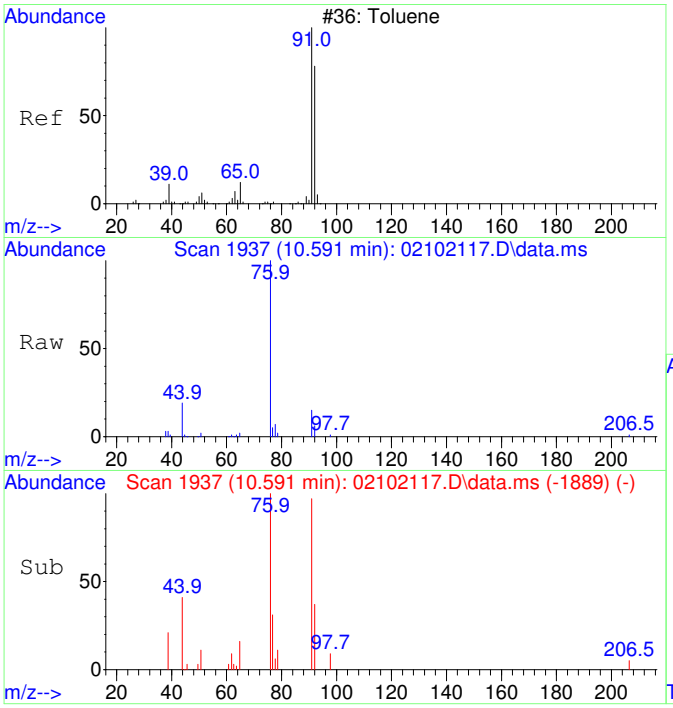


#36
Toluene-d8 SCAN
Concen: 4703.78 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion: 98 Resp: 78431

Ion	Ratio	Lower	Upper
98	100		
100	68.8	40.0	100.0

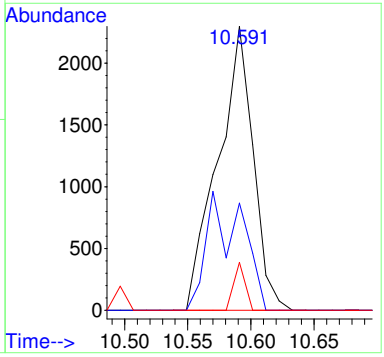


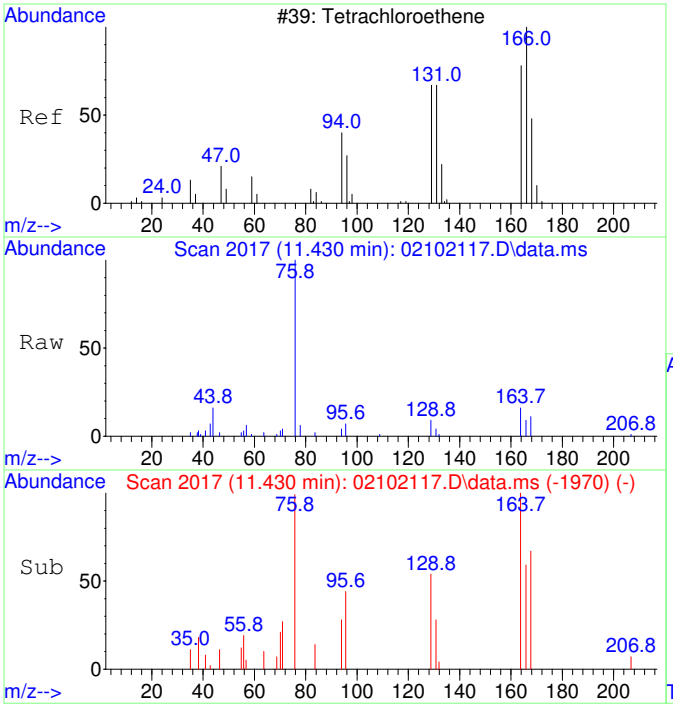


#37
Toluene SCAN
Concen: 218.37 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. -0.000 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion: 91 Resp: 4483

Ion	Ratio	Lower	Upper
91	100		
92	0.0	28.3	88.3#
65	5.4	0.0	41.0

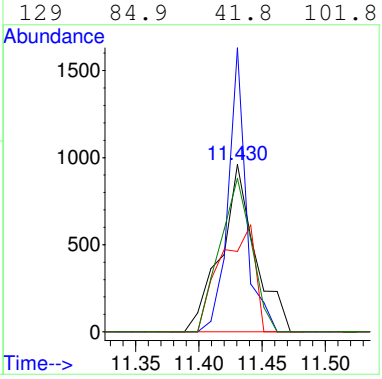


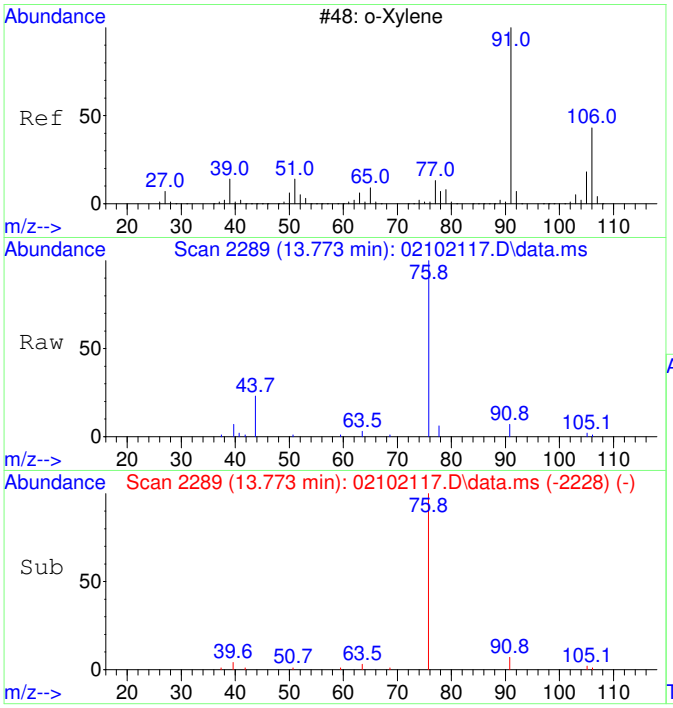


#39
Tetrachloroethene SCAN
Concen: 393.86 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. -0.011 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion:166 Resp: 1819

Ion	Ratio	Lower	Upper
166	100		
164	88.5	50.9	110.9
131	63.9	38.7	98.7
129	84.9	41.8	101.8

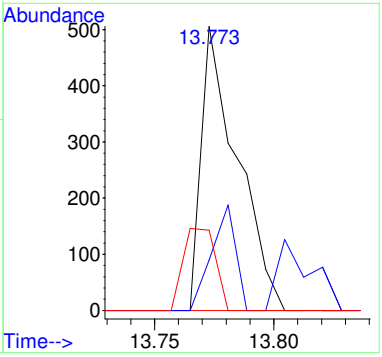


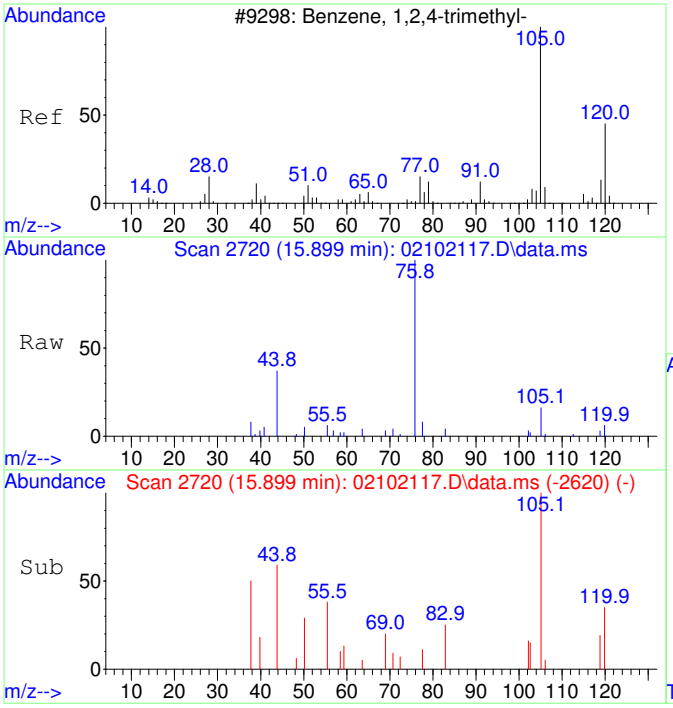


#44
o-Xylene SCAN
Concen: 25.00 ug/L
RT: 13.773 min Scan# 2289
Delta R.T. -0.016 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion: 91 Resp: 534

Ion	Ratio	Lower	Upper
91	100		
106	24.7	18.0	78.0
105	25.8	0.0	56.6

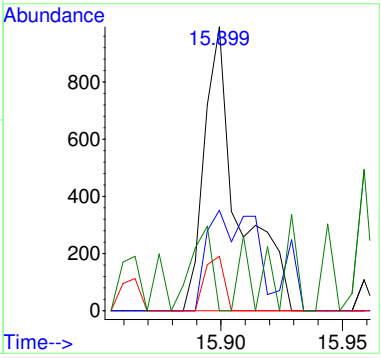




#47
1,2,4-Trimethylbenzene SCAN
Concen: 42.30 ug/L
RT: 15.899 min Scan# 2720
Delta R.T. -0.005 min
Lab File: 02102117.D
Acq: 10 Feb 2021 15:33

Tgt Ion:105 Resp: 974

Ion	Ratio	Lower	Upper
105	100		
120	43.2	16.9	76.9
119	10.8	0.0	41.9
77	18.5	0.0	42.3



2102006-01RE1

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102125.D
Acq On : 10 Feb 2021 18:42
InstName : AG5975C
Operator : TD
Sample : 2102006-01RE1
Misc : RA for low Surr
ALS Vial : 25 Sample Multiplier: 1

REPORT

Quant Time: Feb 11 09:21:49 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

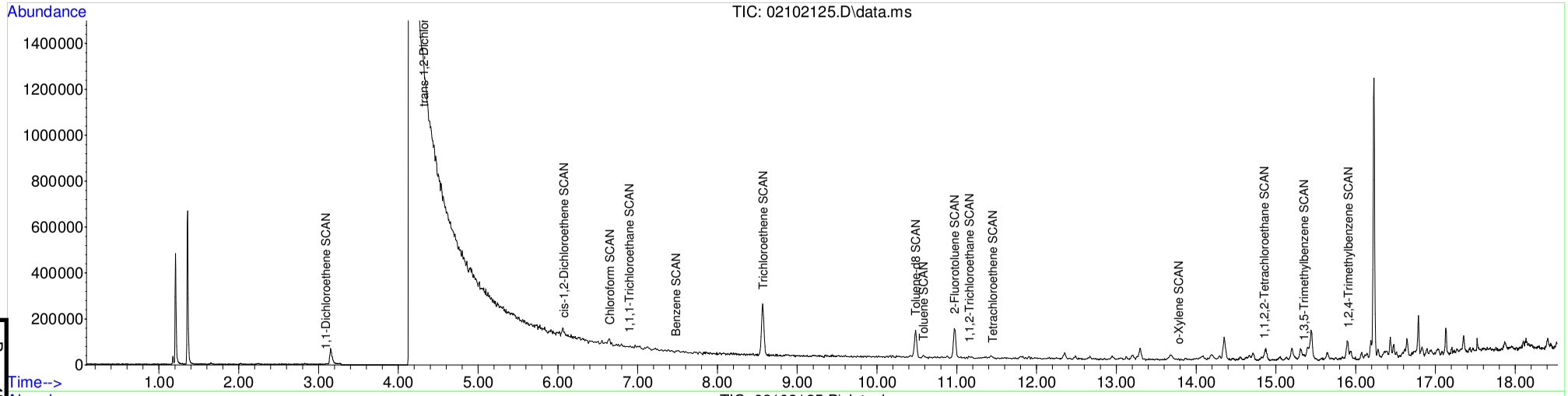
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	164338	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	136924	4301.97 ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.04%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.086	61	1342	205.95 ug/L	84
3] trans-1,2-Dichloroethene	4.330	61	10890	1325.63 ug/L	100
4] 1,1-Dichloroethane	5.053	63	1169	119.14 ug/L	94
5] cis-1,2-Dichloroethene	6.068	61	25186	2478.46 ug/L	98
6] Chloroform	6.640	83	26439	2708.74 ug/L	100
7] 1,1,1-Trichloroethane	6.895	97	1930	184.07 ug/L	99
9] Benzene	7.491	78	1397	50.52 ug/L	64
10] 1,2-Dichloroethane	7.540	62	452	47.91 ug/L #	24
11] Trichloroethene	8.564	130	143968	16489.28 ug/L	97
13] Toluene	10.582	91	12349	311.62 ug/L	99
14] 1,1,2-Trichloroethane	11.159	97	1462	159.28 ug/L #	19
15] Tetrachloroethene	11.432	166	5259	426.06 ug/L	99
19] m&p-Xylene	13.163	91	1274	32.69 ug/L	91
20] o-Xylene	13.782	91	1170	27.95 ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.870	83	4391	225.10 ug/L #	43
22] 1,3,5-Trimethylbenzene	15.349	105	19697	427.83 ug/L	93
23] 1,2,4-Trimethylbenzene	15.900	105	46539	988.29 ug/L	96
25) 2-Fluorotoluene SCAN	10.969	109	94703	5076.81 ug/L	91
26) 1,1-Dichloroethene SCAN	3.096	61	327	75.09 ug/L #	53
27) trans-1,2-Dichloroethe...	4.322	61	8973	1617.70 ug/L	71
29) cis-1,2-Dichloroethene...	6.073	61	19207	2984.18 ug/L	83
30) Chloroform SCAN	6.651	83	19168	3192.95 ug/L	93
31) 1,1,1-Trichloroethane ...	6.894	97	1126	181.77 ug/L #	44
33) Benzene SCAN	7.478	78	5380	287.07 ug/L #	91
35) Trichloroethene SCAN	8.568	130	77676	19007.72 ug/L	81
36) Toluene-d8 SCAN	10.486	98	86847	4963.97 ug/L	96
37) Toluene SCAN	10.581	91	7989	370.88 ug/L	97
38) 1,1,2-Trichloroethane ...	11.158	97	1000	185.21 ug/L #	13
39) Tetrachloroethene SCAN	11.452	166	1796	370.62 ug/L #	54
44) o-Xylene SCAN	13.781	91	773	34.49 ug/L #	26
45) 1,1,2,2-Tetrachloroeth...	14.857	83	900	77.22 ug/L	69
46) 1,3,5-Trimethylbenzene...	15.352	105	12449	526.43 ug/L	94
47) 1,2,4-Trimethylbenzene...	15.903	105	30384	1257.55 ug/L	93

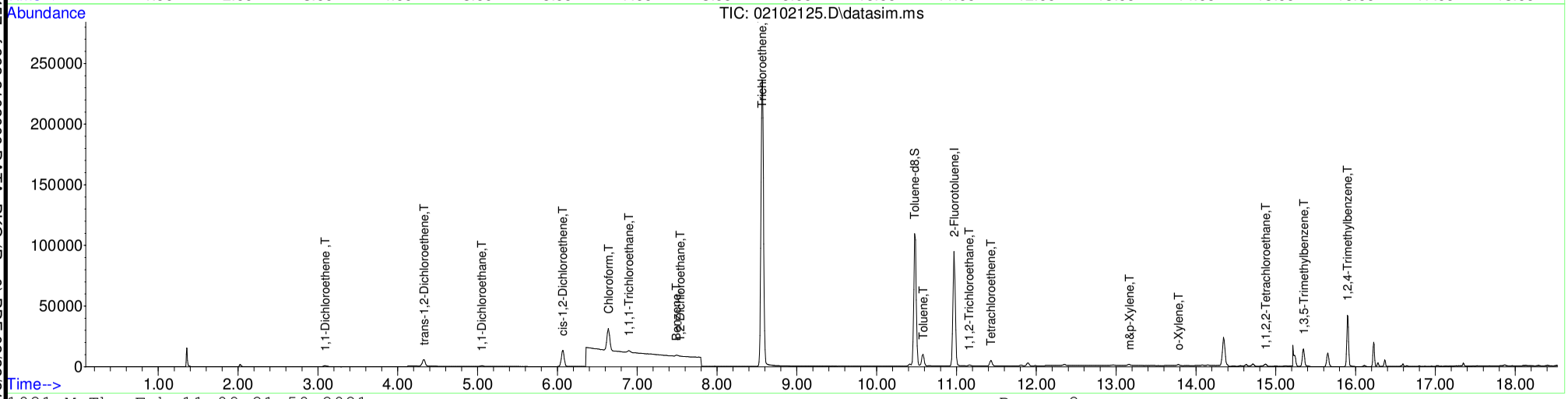
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102125.D
Acq On : 10 Feb 2021 18:42
InstName : AG5975C
Operator : TD
Sample : 2102006-01RE1
Misc : RA for low Surr
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 11 09:21:49 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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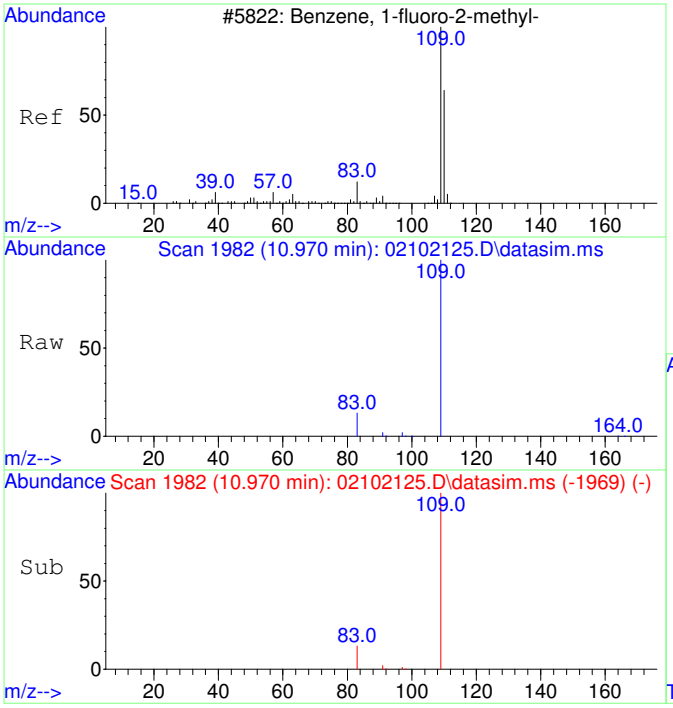
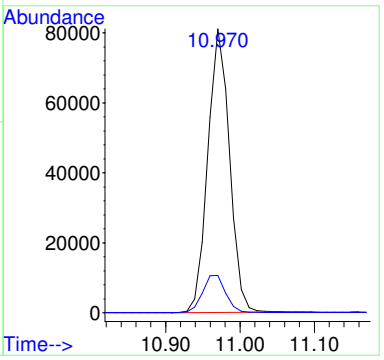
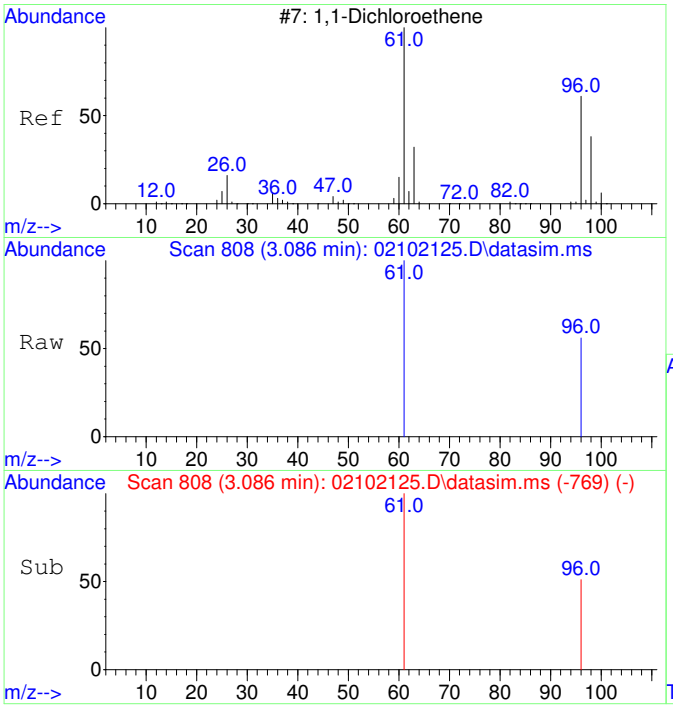


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion:109 Resp: 164338

Ion	Ratio	Lower	Upper
109	100		
83	14.0	0.0	42.3

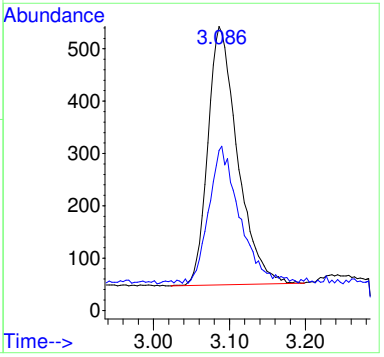


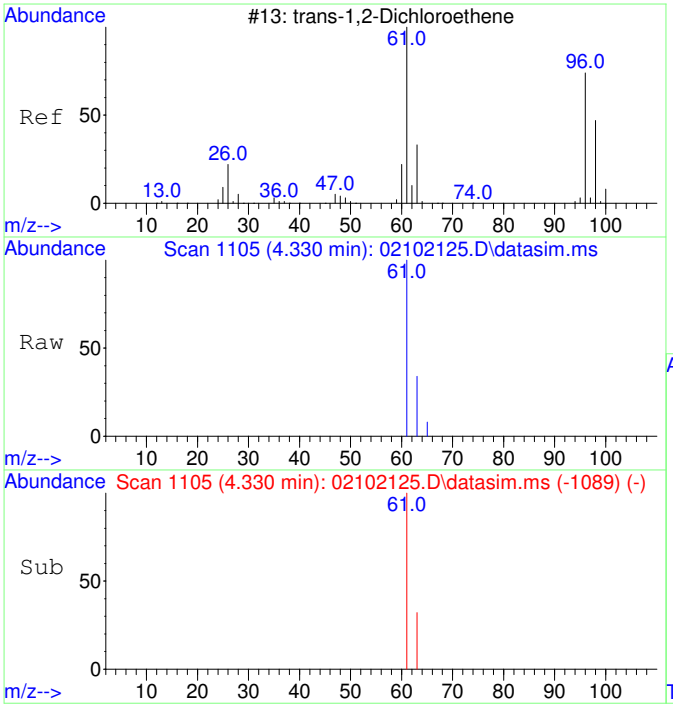


#2
1,1-Dichloroethene
Concen: 205.95 ug/L
RT: 3.086 min Scan# 808
Delta R.T. -0.004 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 61 Resp: 1342

Ion	Ratio	Lower	Upper
61	100		
96	54.5	37.2	97.2

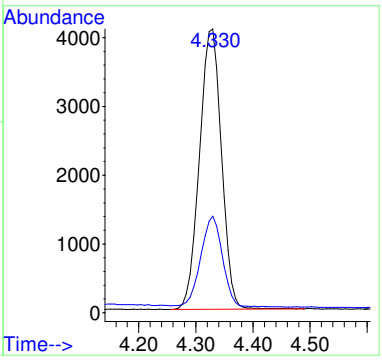


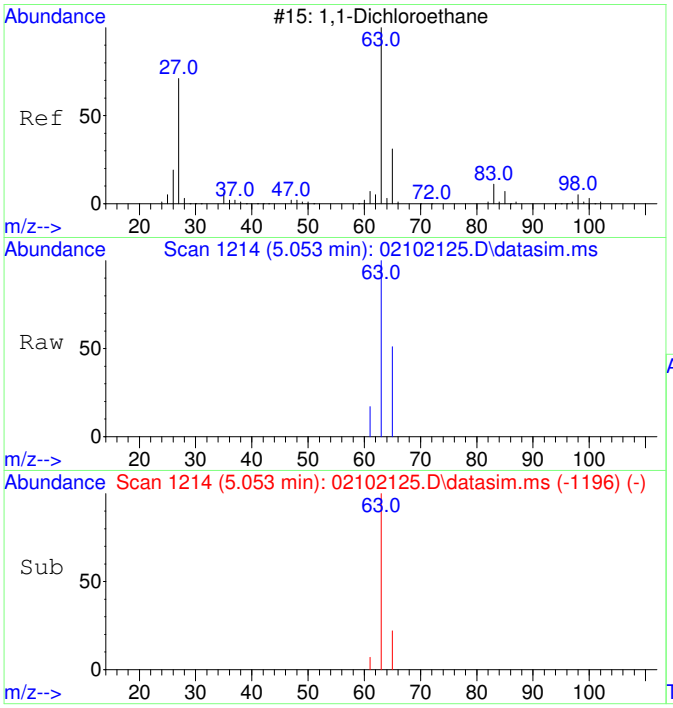


#3
trans-1,2-Dichloroethene
Concen: 1325.63 ug/L
RT: 4.330 min Scan# 1105
Delta R.T. -0.046 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 61 Resp: 10890

Ion	Ratio	Lower	Upper
61	100		
63	32.5	2.4	62.4

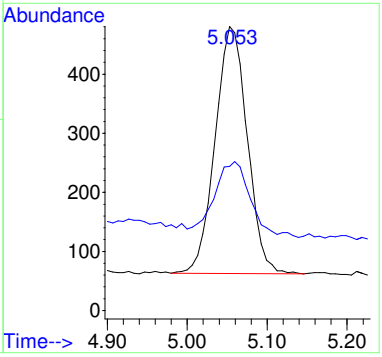


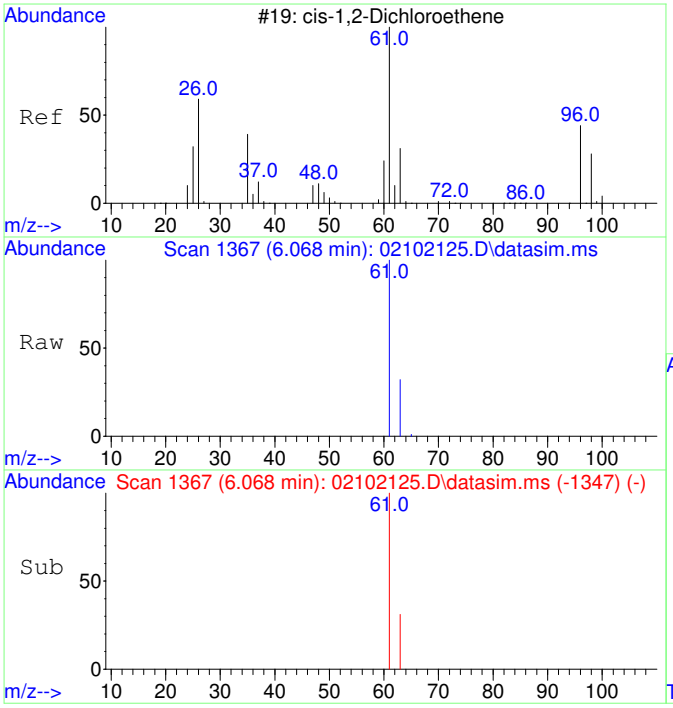


#4
1,1-Dichloroethane
Concen: 119.14 ug/L
RT: 5.053 min Scan# 1214
Delta R.T. -0.033 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 63 Resp: 1169

Ion	Ratio	Lower	Upper
63	100		
65	35.0	1.8	61.8

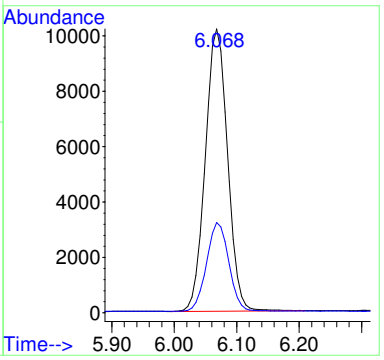


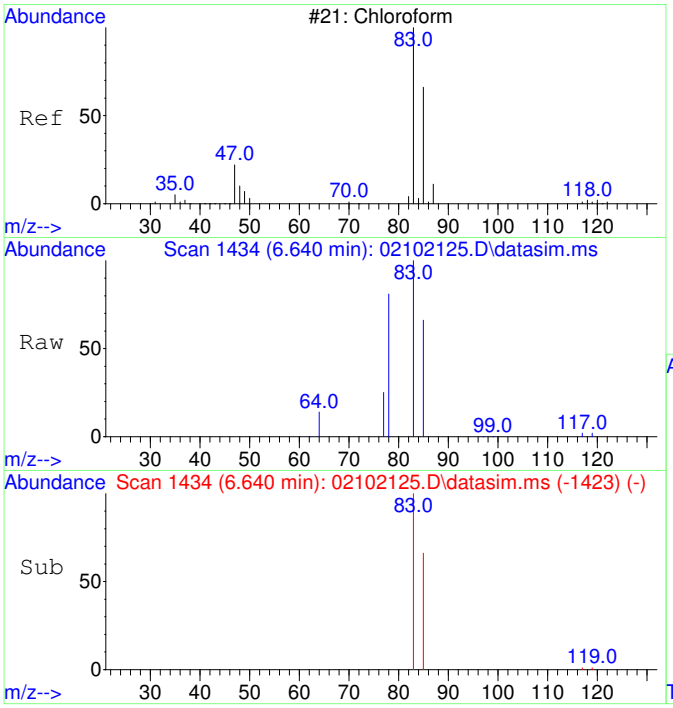


#5
cis-1,2-Dichloroethene
Concen: 2478.46 ug/L
RT: 6.068 min Scan# 1367
Delta R.T. -0.020 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 61 Resp: 25186

Ion	Ratio	Lower	Upper
61	100		
63	31.4	2.5	62.5

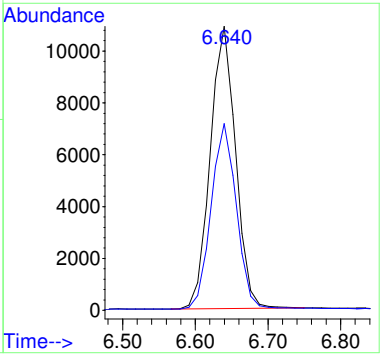


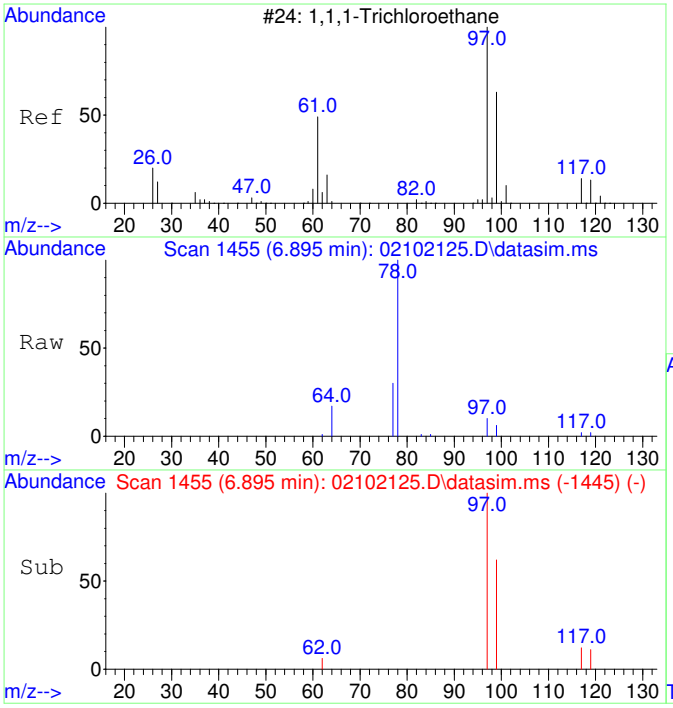


#6
Chloroform
Concen: 2708.74 ug/L
RT: 6.640 min Scan# 1434
Delta R.T. -0.012 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 83 Resp: 26439

Ion	Ratio	Lower	Upper
83	100		
85	64.8	35.1	95.1

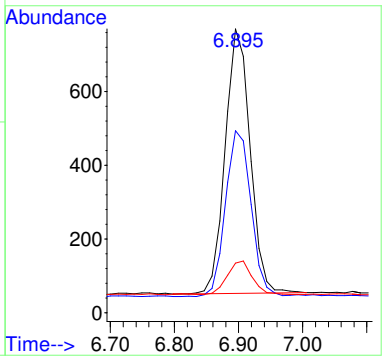


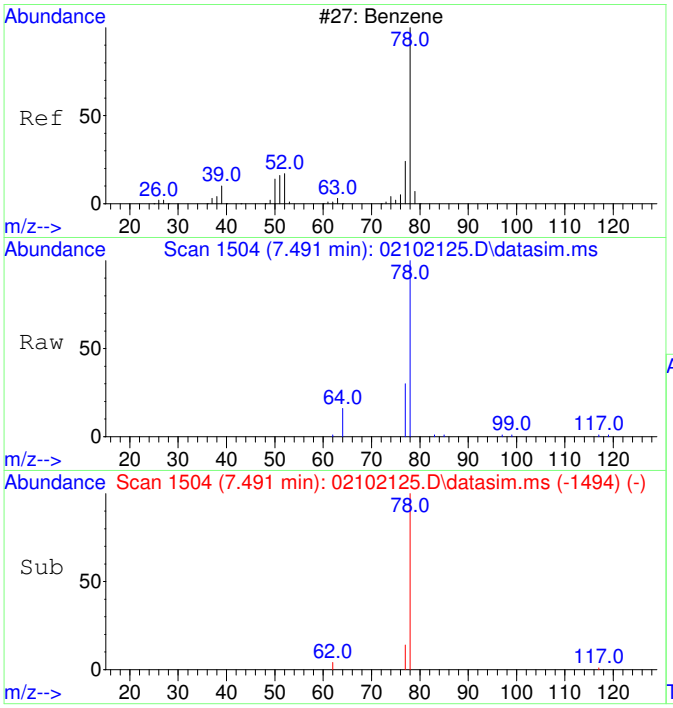


#7
1,1,1-Trichloroethane
Concen: 184.07 ug/L
RT: 6.895 min Scan# 1455
Delta R.T. -0.024 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 97 Resp: 1930

Ion	Ratio	Lower	Upper
97	100		
99	63.5	34.6	94.6
117	12.5	0.0	43.2

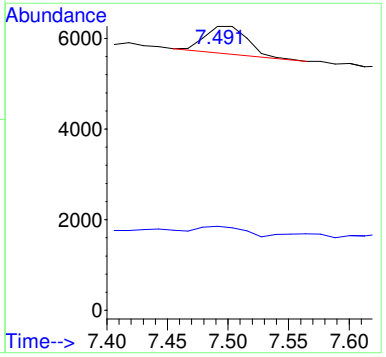


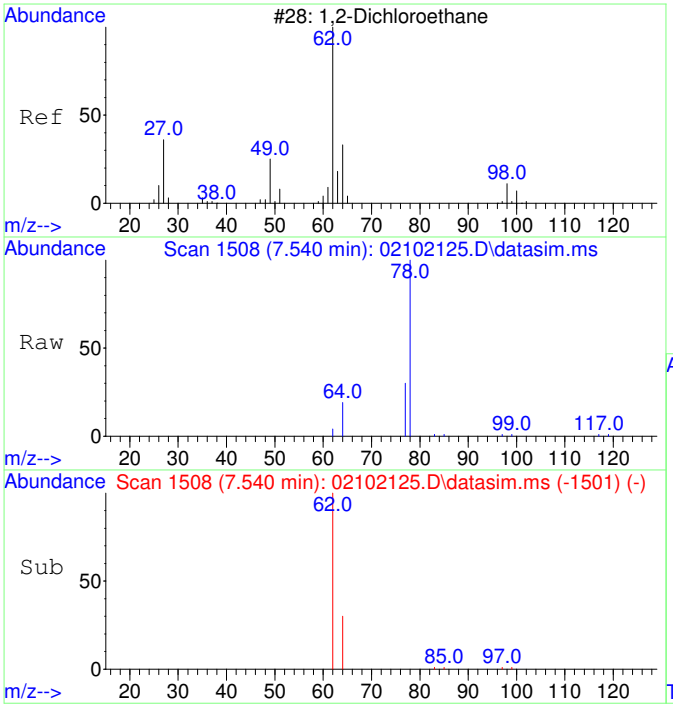


#9
Benzene
Concen: 50.52 ug/L
RT: 7.491 min Scan# 1504
Delta R.T. -0.024 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 78 Resp: 1397

Ion	Ratio	Lower	Upper
78	100		
77	40.9	0.0	53.2

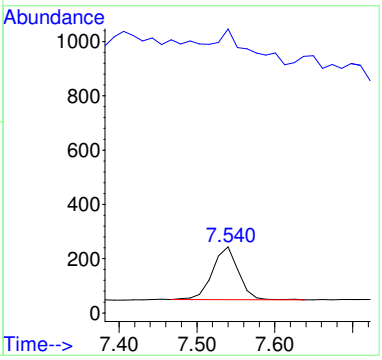


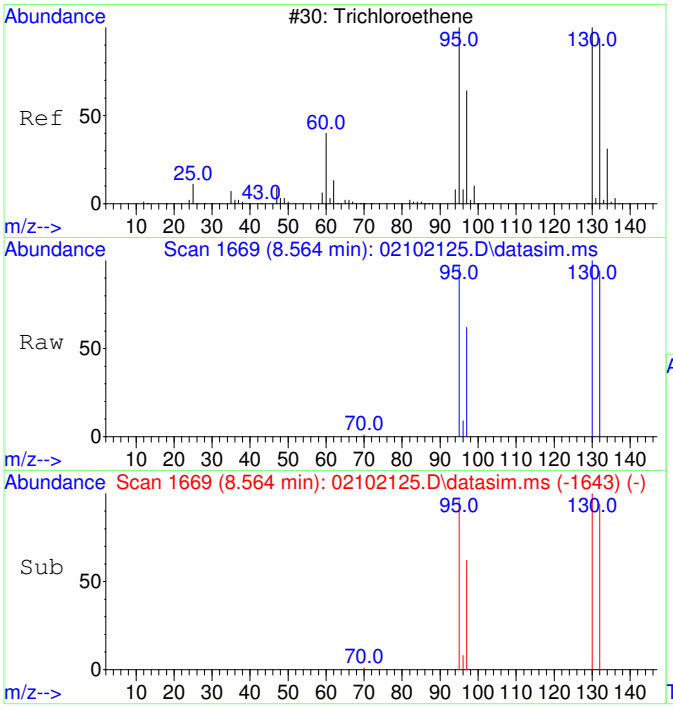


#10
1,2-Dichloroethane
Concen: 47.91 ug/L
RT: 7.540 min Scan# 1508
Delta R.T. -0.012 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 62 Resp: 452

Ion	Ratio	Lower	Upper
62	100		
64	74.8	2.3	62.3#

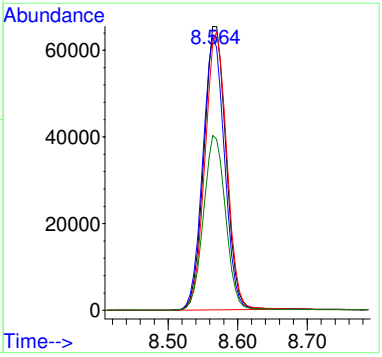


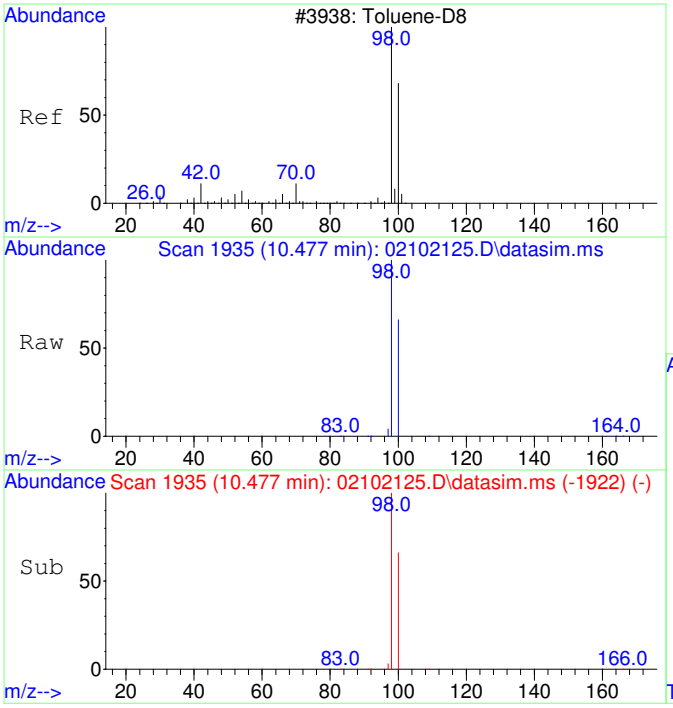


#11
Trichloroethene
Concen: 16489.28 ug/L
RT: 8.564 min Scan# 1669
Delta R.T. -0.011 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion:130 Resp: 143968

Ion	Ratio	Lower	Upper
130	100		
95	95.1	60.7	120.7
132	96.6	76.0	116.0
97	61.3	38.6	78.6

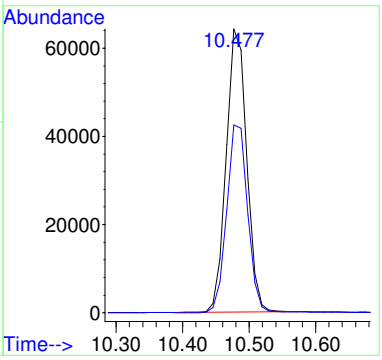


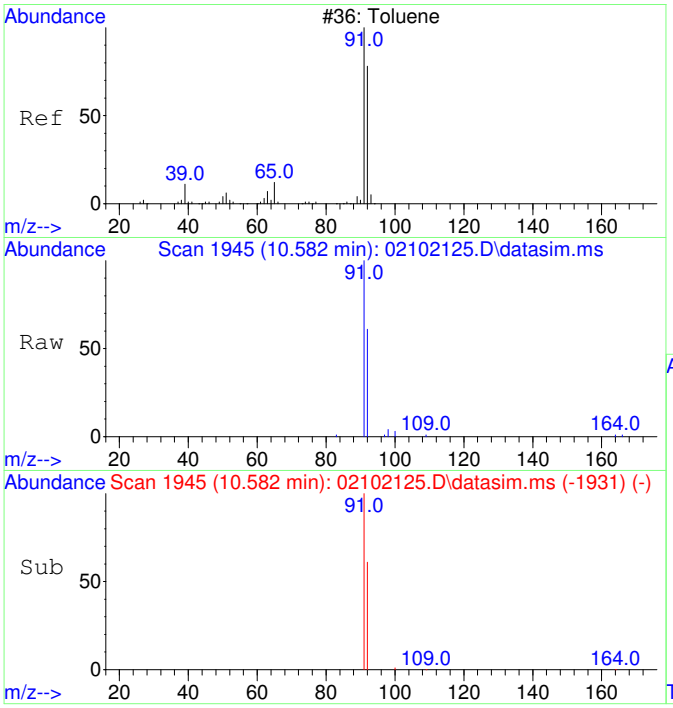


#12
Toluene-d8
Concen: 4301.97 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 98 Resp: 136924

Ion	Ratio	Lower	Upper
98	100		
100	67.4	37.1	97.1

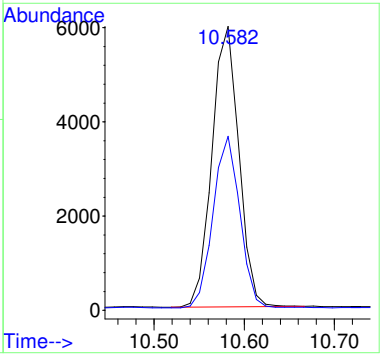


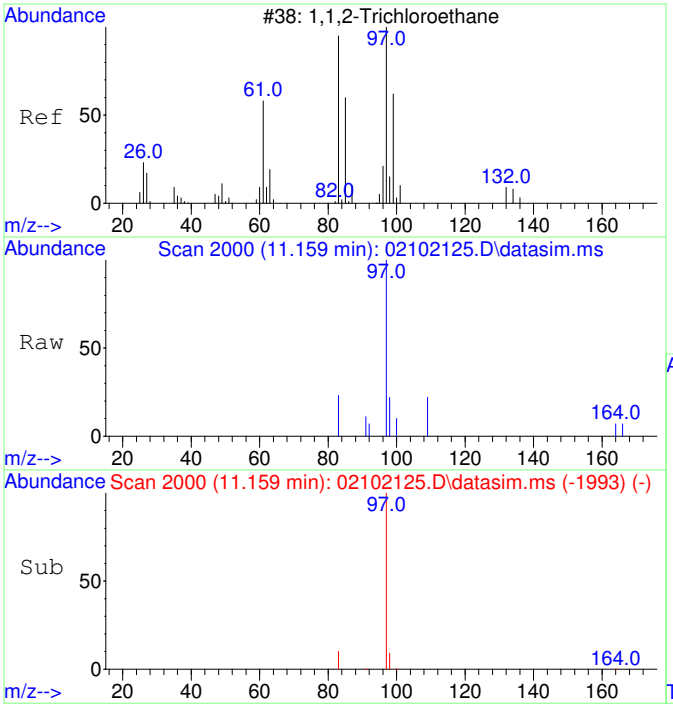


#13
Toluene
Concen: 311.62 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 91 Resp: 12349

Ion	Ratio	Lower	Upper
91	100		
92	60.8	29.9	89.9

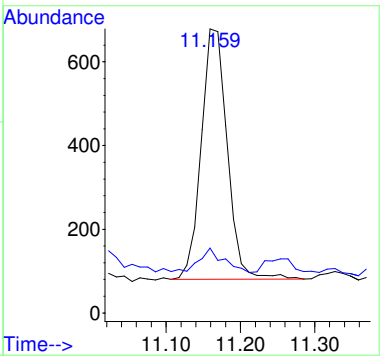


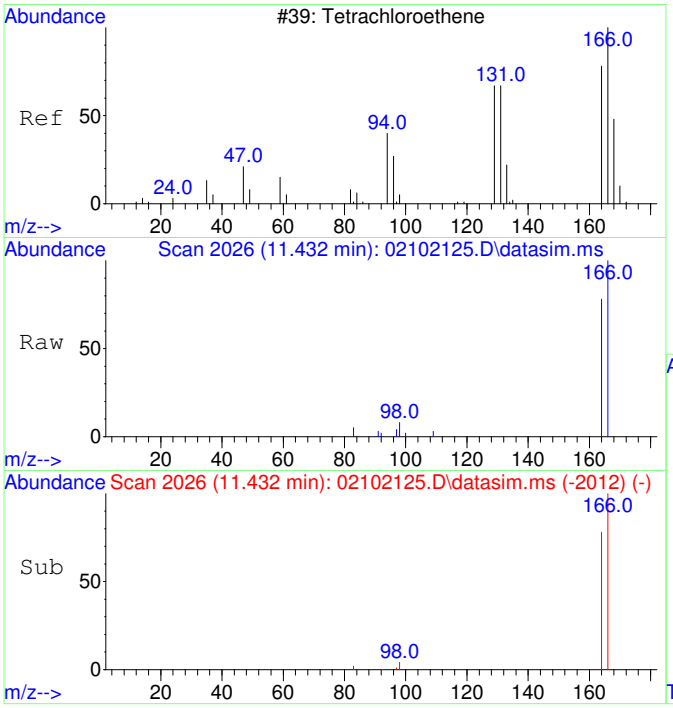


#14
1,1,2-Trichloroethane
Concen: 159.28 ug/L
RT: 11.159 min Scan# 2000
Delta R.T. -0.073 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 97 Resp: 1462

Ion	Ratio	Lower	Upper
97	100		
83	9.0	51.2	111.2#

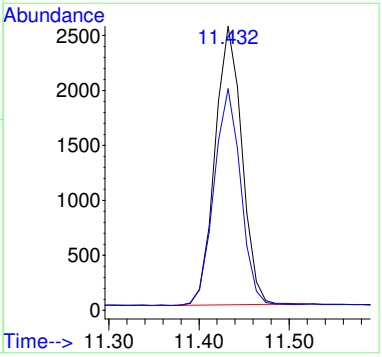


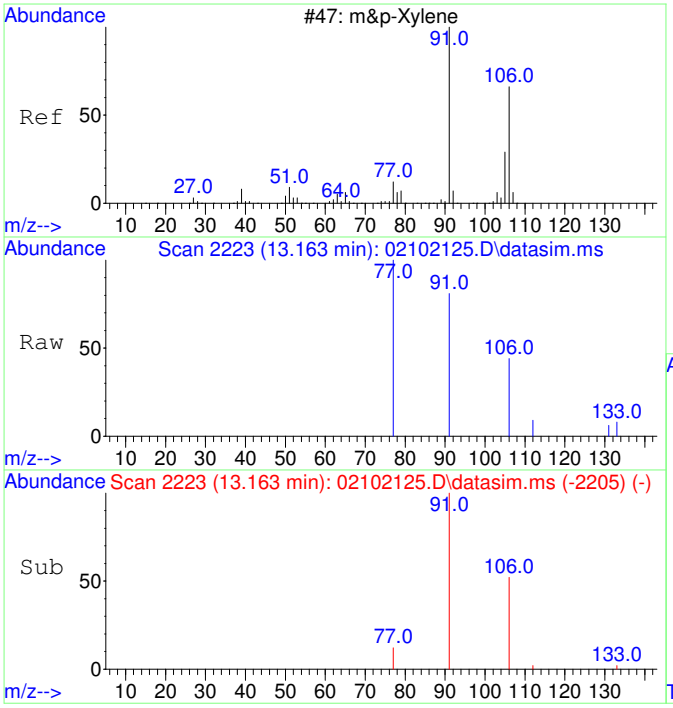


#15
Tetrachloroethene
Concen: 426.06 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion:166 Resp: 5259

Ion	Ratio	Lower	Upper
166	100		
164	76.7	47.8	107.8

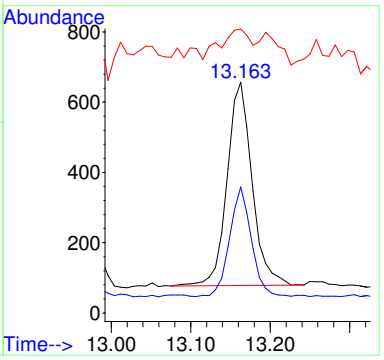


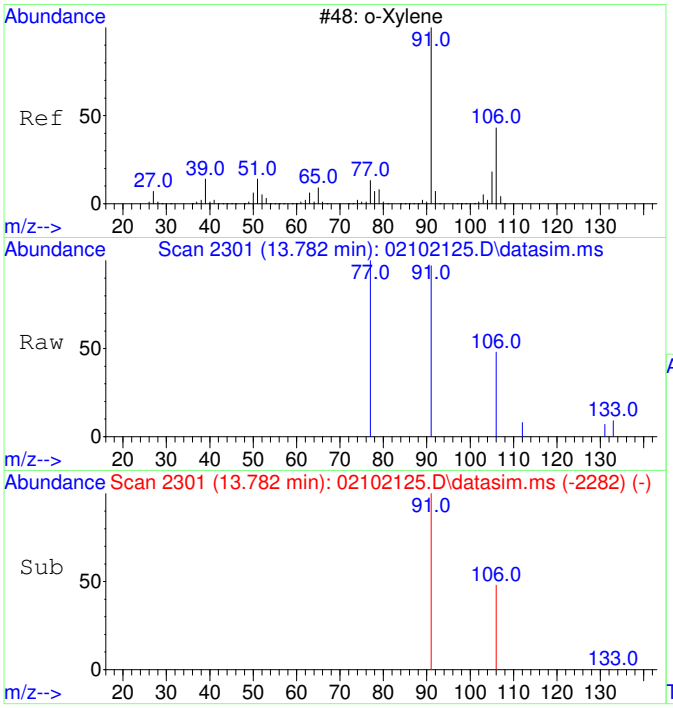


#19
m&p-Xylene
Concen: 32.69 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 91 Resp: 1274

Ion	Ratio	Lower	Upper
91	100		
106	46.3	22.2	82.2
77	17.4	0.0	42.4

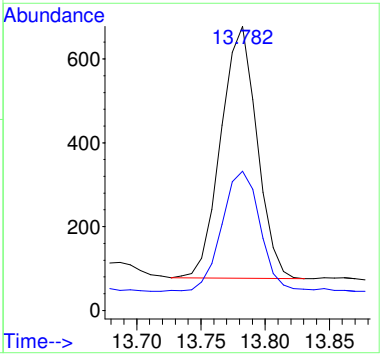


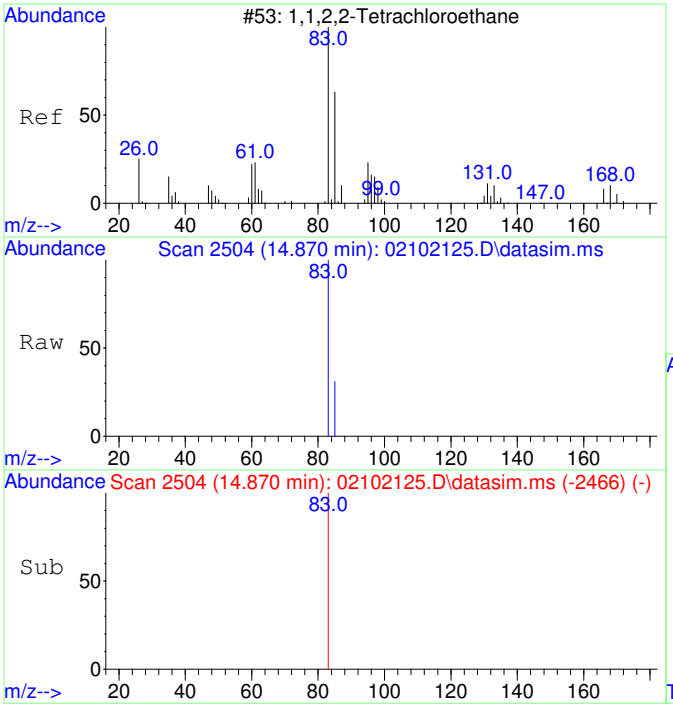


#20
o-Xylene
Concen: 27.95 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 91 Resp: 1170

Ion	Ratio	Lower	Upper
91	100		
106	50.9	19.2	79.2

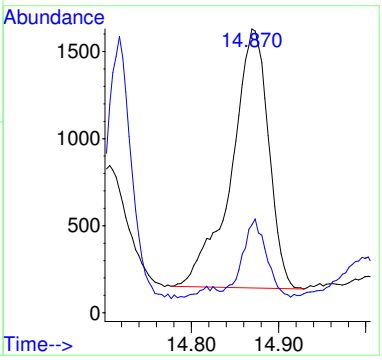


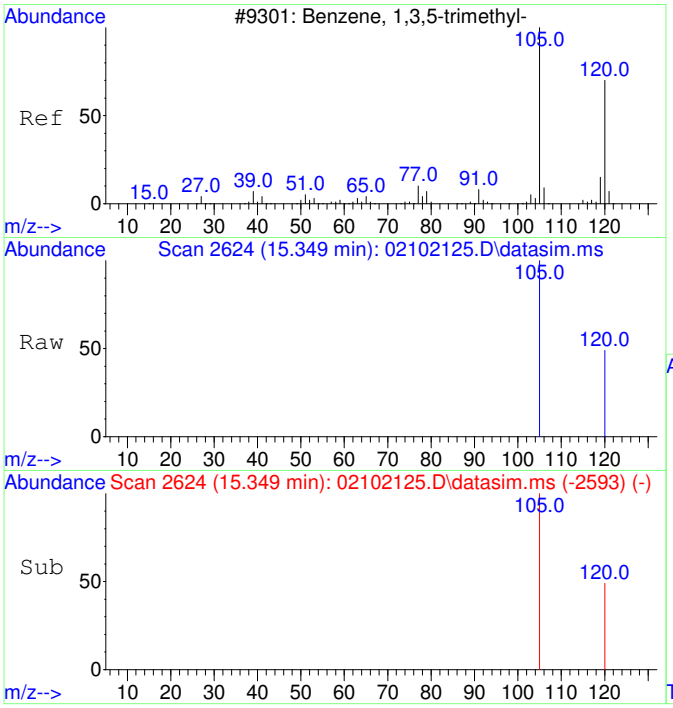


#21
1,1,2,2-Tetrachloroethane
Concen: 225.10 ug/L
RT: 14.870 min Scan# 2504
Delta R.T. -0.011 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 83 Resp: 4391

Ion	Ratio	Lower	Upper
83	100		
85	19.5	34.8	94.8#

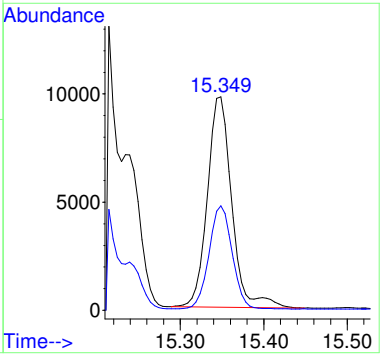


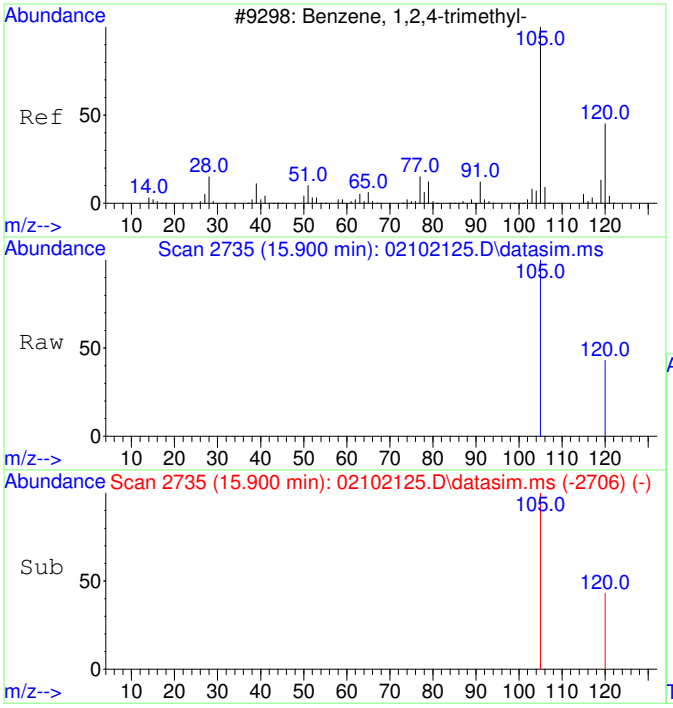


#22
1,3,5-Trimethylbenzene
Concen: 427.83 ug/L
RT: 15.349 min Scan# 2624
Delta R.T. -0.001 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion:105 Resp: 19697

Ion	Ratio	Lower	Upper
105	100		
120	46.3	21.1	81.1

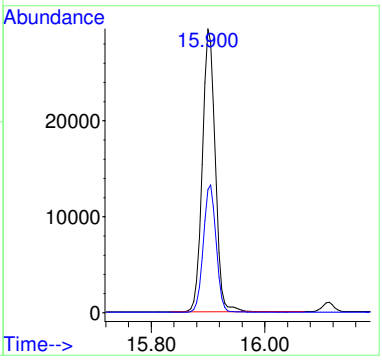


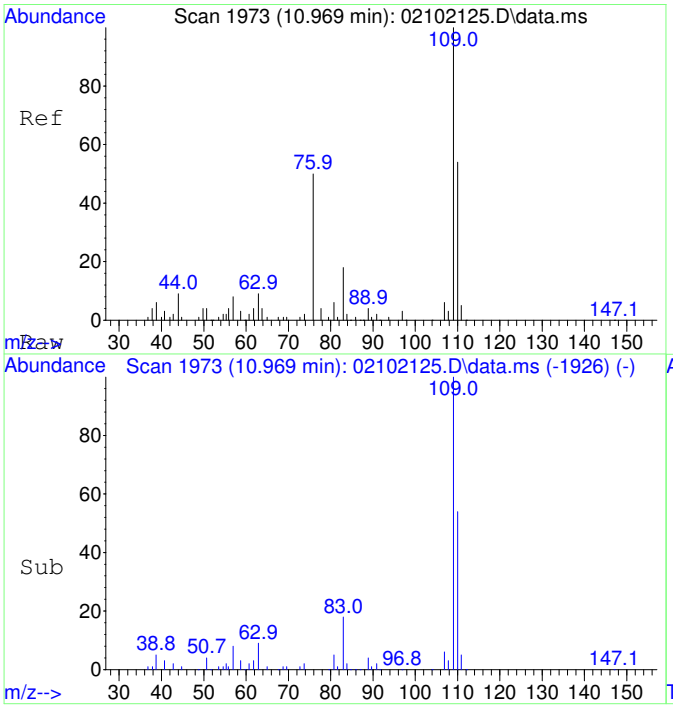


#23
1,2,4-Trimethylbenzene
Concen: 988.29 ug/L
RT: 15.900 min Scan# 2735
Delta R.T. -0.006 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion:105 Resp: 46539

Ion	Ratio	Lower	Upper
105	100		
120	44.7	17.2	77.2

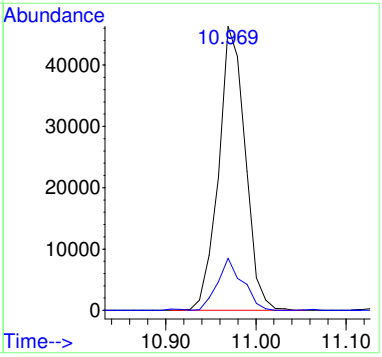


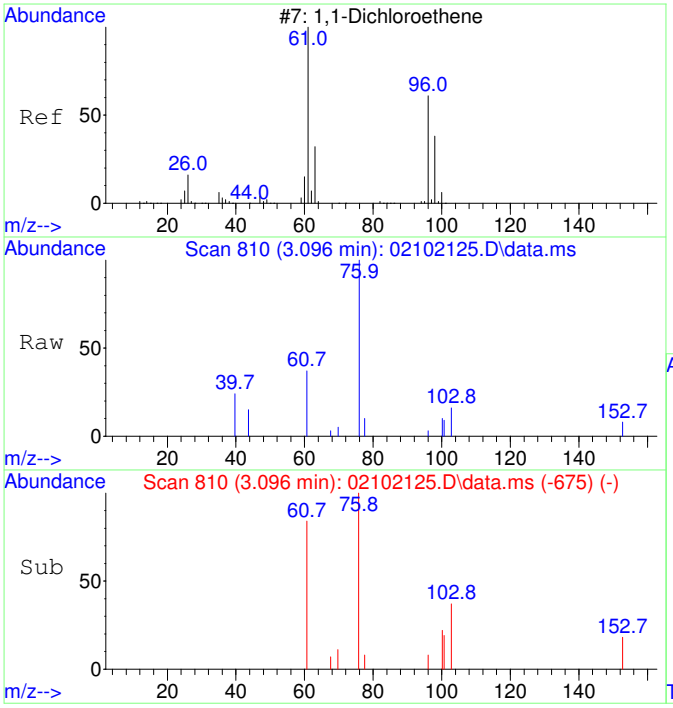


#25
2-Fluorotoluene SCAN
Concen: 5076.81 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion:109 Resp: 94703

Ion	Ratio	Lower	Upper
109	100		
83	17.4	0.0	43.8

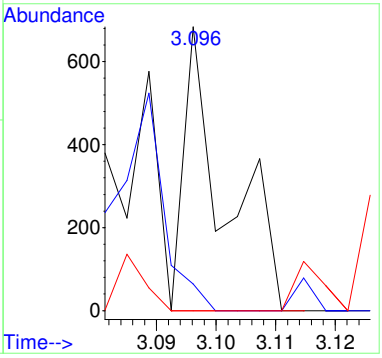


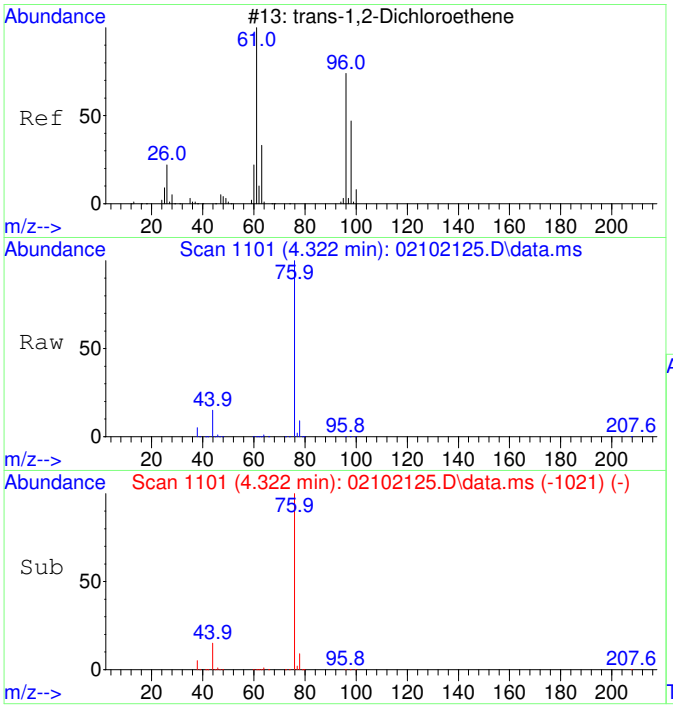


#26
1,1-Dichloroethene SCAN
Concen: 75.09 ug/L
RT: 3.096 min Scan# 810
Delta R.T. 0.000 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 61 Resp: 327

Ion	Ratio	Lower	Upper
61	100		
96	90.5	33.1	93.1
98	0.0	11.2	71.2#

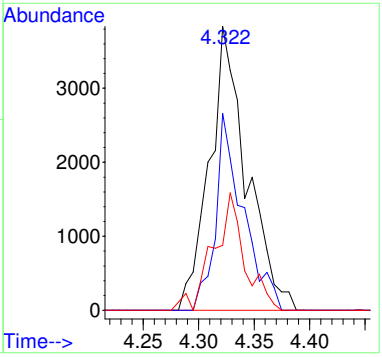


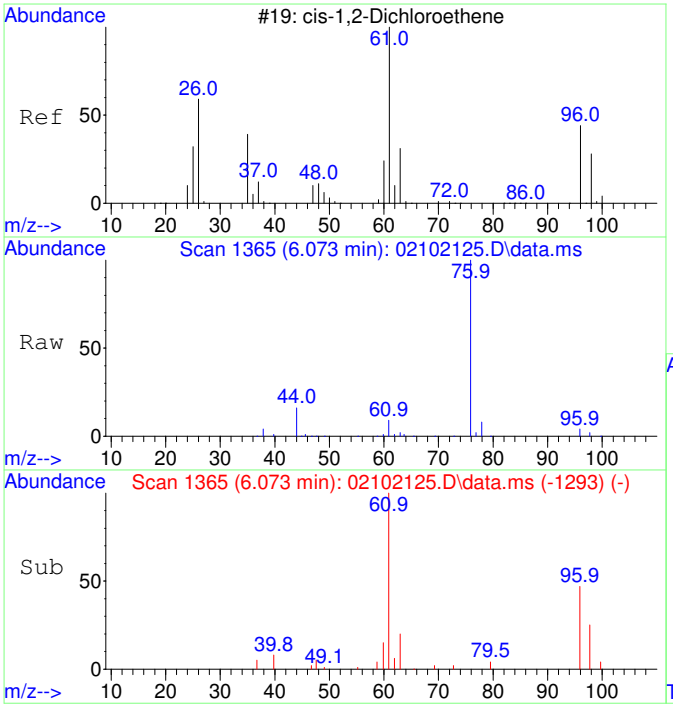


#27
trans-1,2-Dichloroethene SCAN
Concen: 1617.70 ug/L
RT: 4.322 min Scan# 1101
Delta R.T. -0.059 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 61 Resp: 8973

Ion	Ratio	Lower	Upper
61	100		
96	50.8	49.0	109.0
98	34.4	20.5	80.5

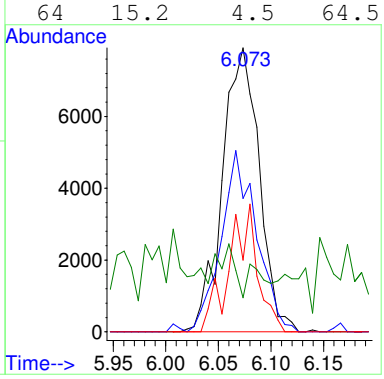


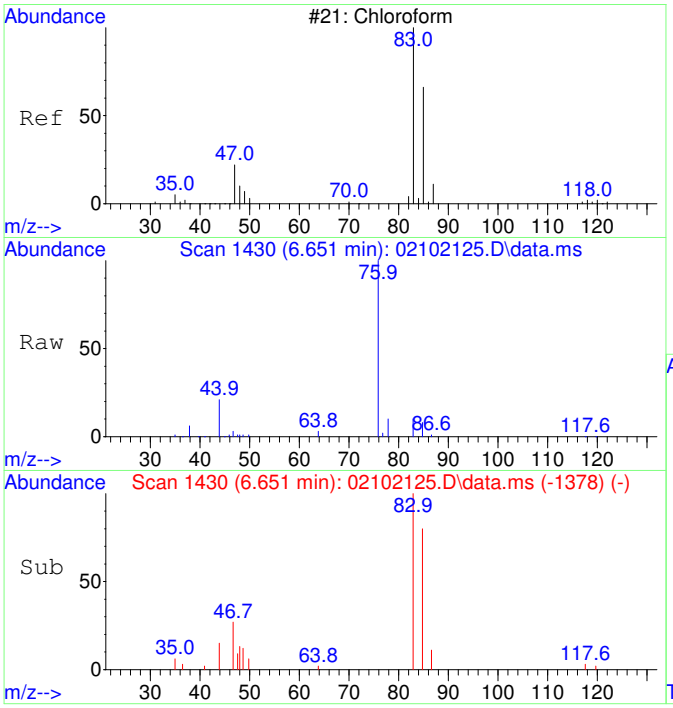


#29
cis-1,2-Dichloroethene SCAN
Concen: 2984.18 ug/L
RT: 6.073 min Scan# 1365
Delta R.T. -0.020 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 61 Resp: 19207

Ion	Ratio	Lower	Upper
61	100		
96	61.6	39.9	99.9
98	34.5	13.5	73.5
64	15.2	4.5	64.5

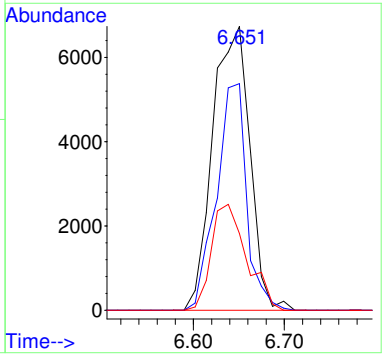


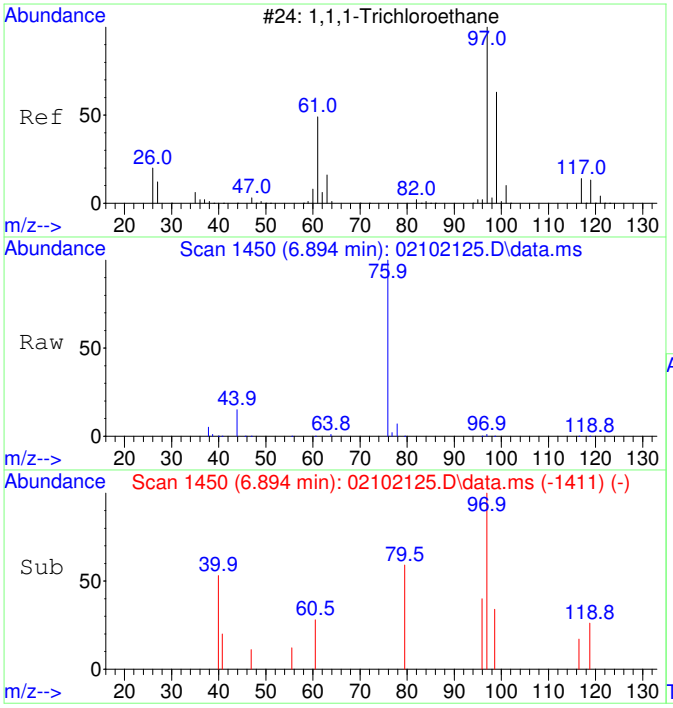


#30
Chloroform SCAN
Concen: 3192.95 ug/L
RT: 6.651 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 83 Resp: 19168

Ion	Ratio	Lower	Upper
83	100		
85	65.1	34.6	94.6
47	35.7	0.0	53.4

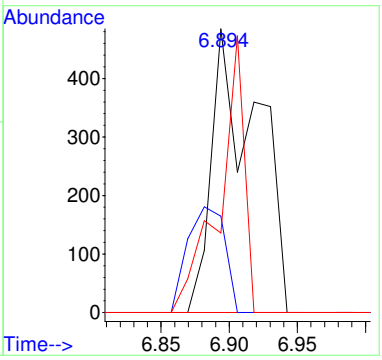


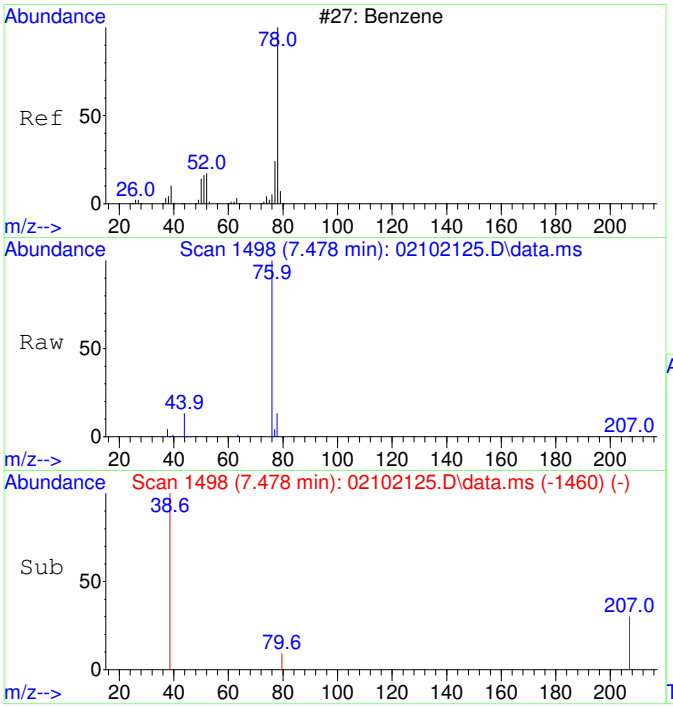


#31
1,1,1-Trichloroethane SCAN
Concen: 181.77 ug/L
RT: 6.894 min Scan# 1450
Delta R.T. -0.024 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 97 Resp: 1126

Ion	Ratio	Lower	Upper
97	100		
99	0.0	43.6	103.6#
61	53.4	18.0	78.0

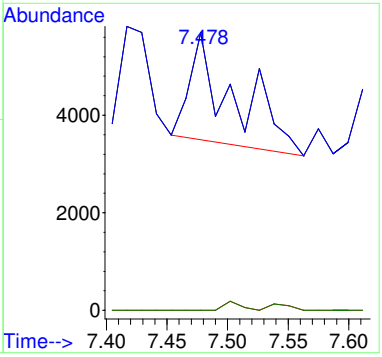


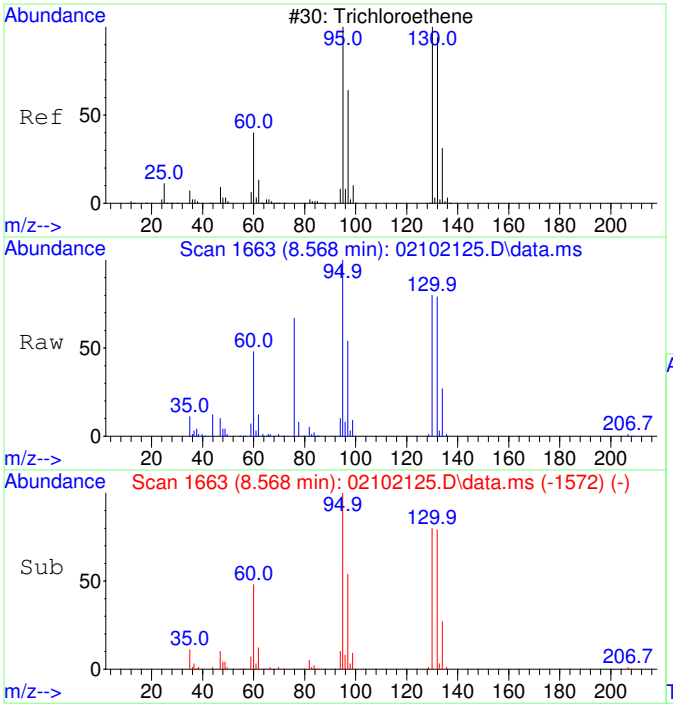


#33
Benzene SCAN
Concen: 287.07 ug/L
RT: 7.478 min Scan# 1498
Delta R.T. -0.036 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 78 Resp: 5380

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

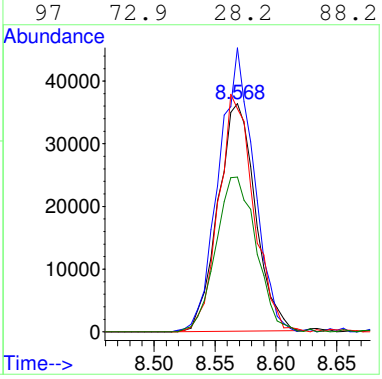


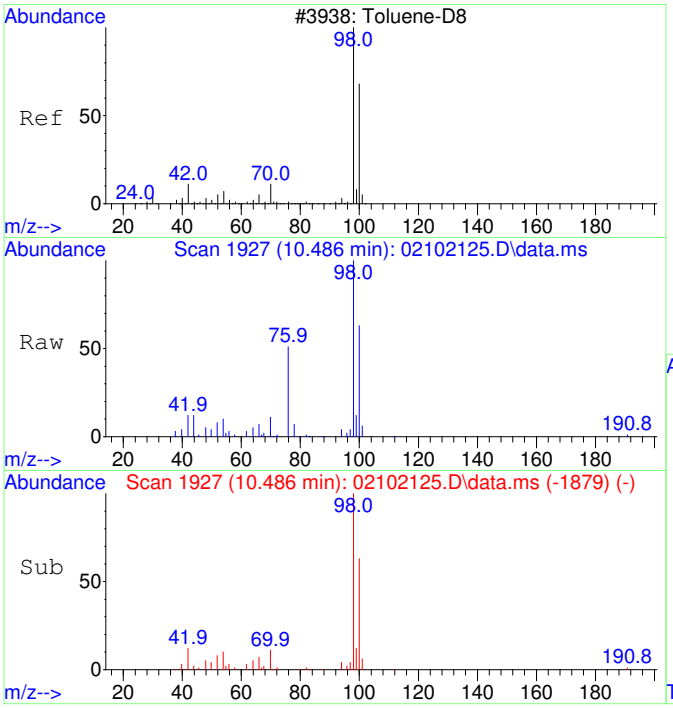


#35
Trichloroethene SCAN
Concen: 19007.72 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.005 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion:130 Resp: 77676

Ion	Ratio	Lower	Upper
130	100		
95	117.6	60.5	120.5
132	97.6	59.6	119.6
97	72.9	28.2	88.2

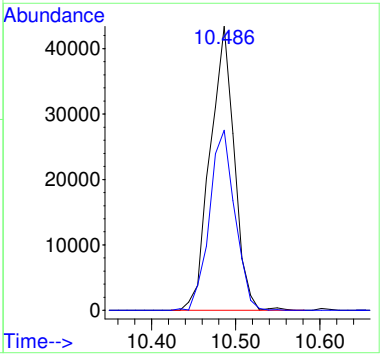


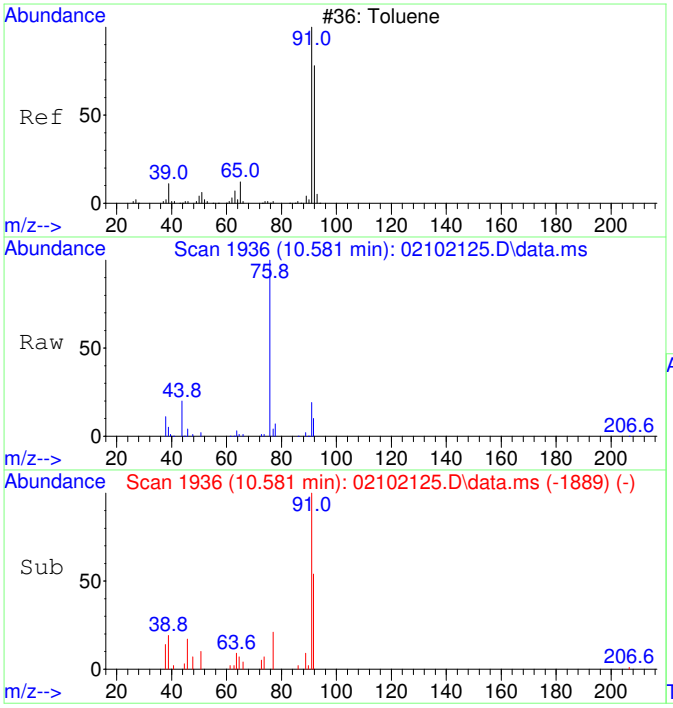


#36
Toluene-d8 SCAN
Concen: 4963.97 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 98 Resp: 86847

Ion	Ratio	Lower	Upper
98	100		
100	66.8	40.0	100.0

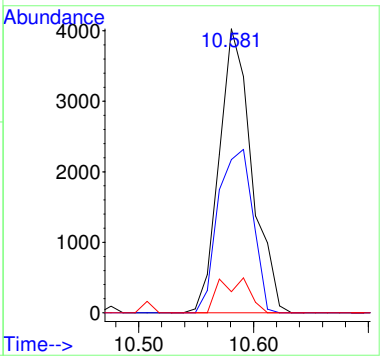


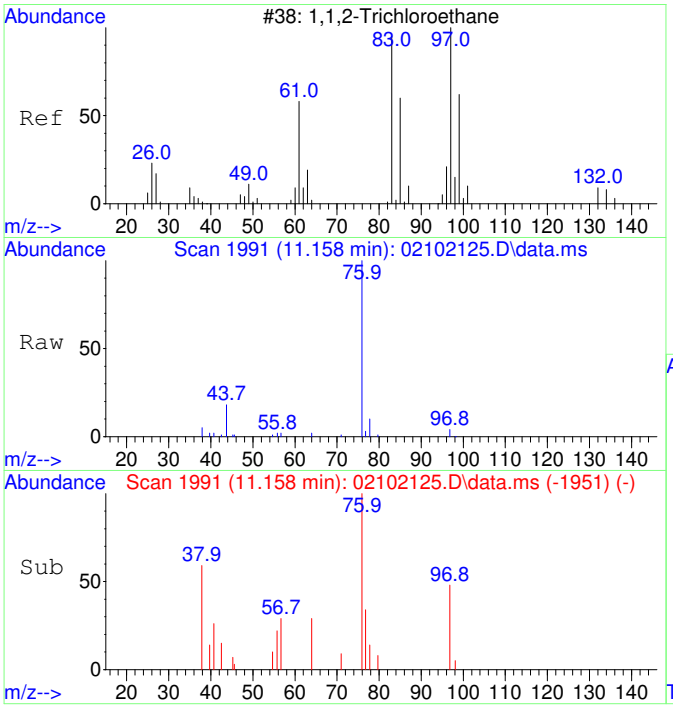


#37
Toluene SCAN
Concen: 370.88 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 91 Resp: 7989

Ion	Ratio	Lower	Upper
91	100		
92	61.1	28.3	88.3
65	11.2	0.0	41.0

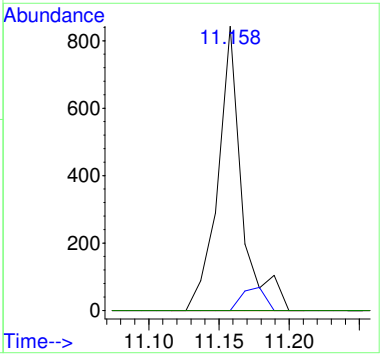


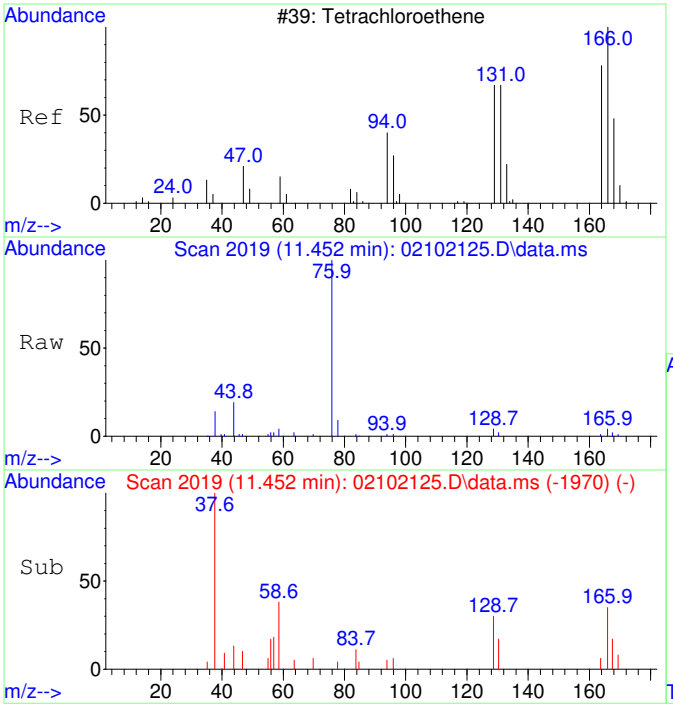


#38
1,1,2-Trichloroethane SCAN
Concen: 185.21 ug/L
RT: 11.158 min Scan# 1991
Delta R.T. -0.084 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 97 Resp: 1000

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#

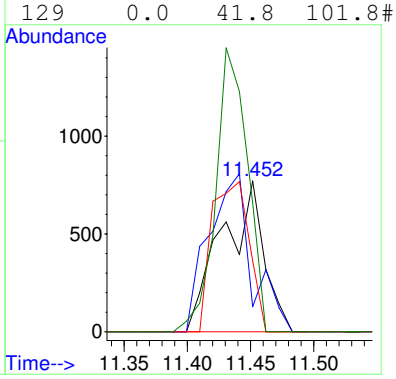


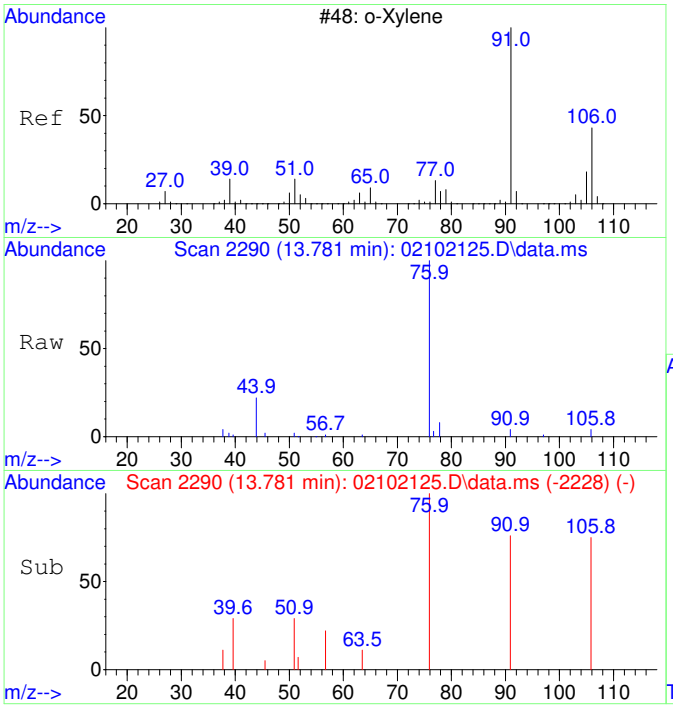


#39
Tetrachloroethene SCAN
Concen: 370.62 ug/L
RT: 11.452 min Scan# 2019
Delta R.T. 0.011 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion:166 Resp: 1796

Ion	Ratio	Lower	Upper
166	100		
164	106.6	50.9	110.9
131	87.8	38.7	98.7
129	0.0	41.8	101.8#

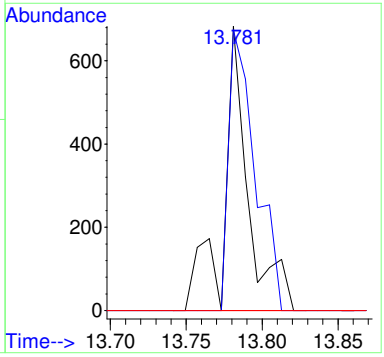


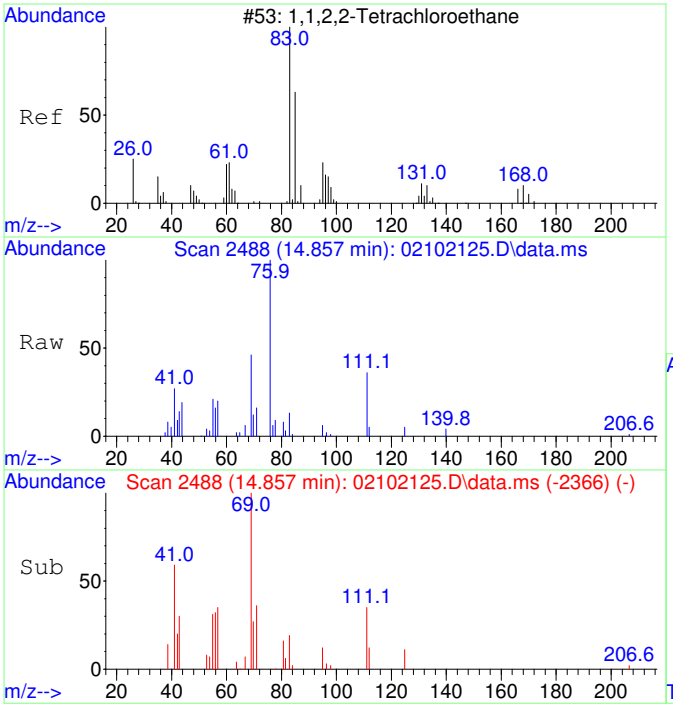


#44
o-Xylene SCAN
Concen: 34.49 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.008 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 91 Resp: 773

Ion	Ratio	Lower	Upper
91	100		
106	106.7	18.0	78.0#
105	0.0	0.0	56.6

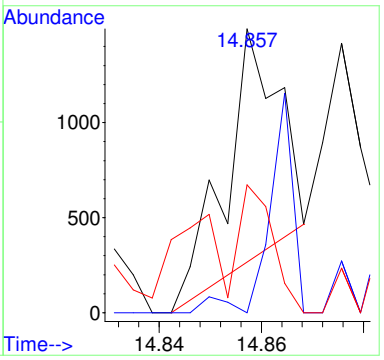


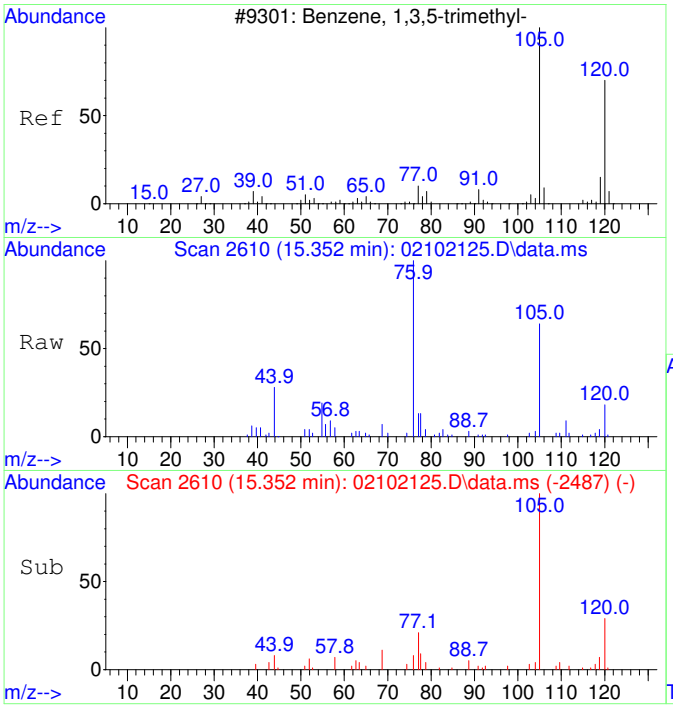


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 77.22 ug/L
RT: 14.857 min Scan# 2488
Delta R.T. -0.026 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion: 83 Resp: 900

Ion	Ratio	Lower	Upper
83	100		
85	40.8	35.9	95.9
95	30.3	0.0	47.4

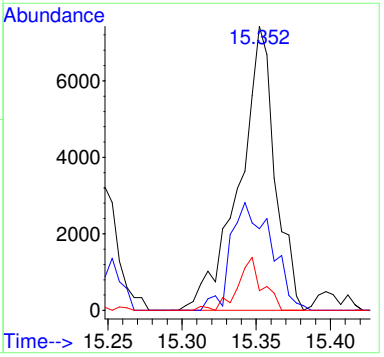


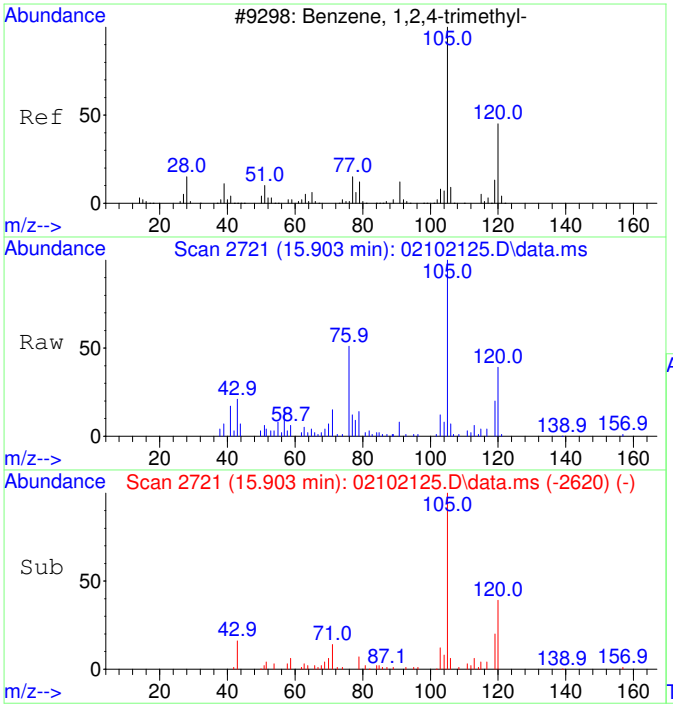


#46
1,3,5-Trimethylbenzene SCAN
Concen: 526.43 ug/L
RT: 15.352 min Scan# 2610
Delta R.T. -0.001 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion:105 Resp: 12449

Ion	Ratio	Lower	Upper
105	100		
120	43.4	18.3	78.3
119	12.8	0.0	43.1

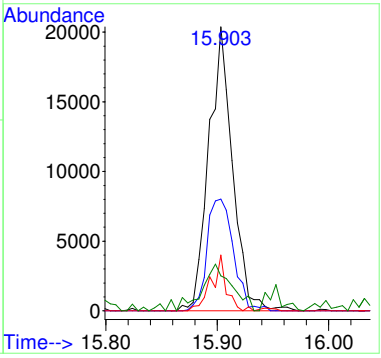




#47
1,2,4-Trimethylbenzene SCAN
Concen: 1257.55 ug/L
RT: 15.903 min Scan# 2721
Delta R.T. -0.001 min
Lab File: 02102125.D
Acq: 10 Feb 2021 18:42

Tgt Ion:105 Resp: 30384

Ion	Ratio	Lower	Upper
105	100		
120	43.6	16.9	76.9
119	12.0	0.0	41.9
77	21.1	0.0	42.3



2102006-02RE1

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102126.D
Acq On : 10 Feb 2021 19:06
InstName : AG5975C
Operator : TD
Sample : 2102006-02RE1
Misc : RA for low Surr
ALS Vial : 26 Sample Multiplier: 1

REPORT

Quant Time: Feb 11 09:21:56 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

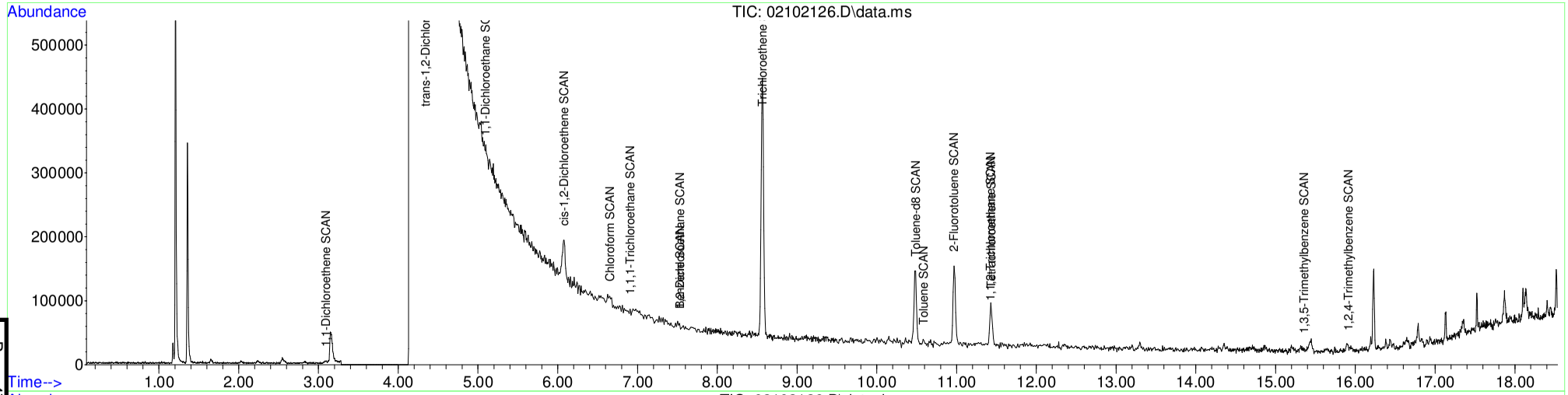
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	170598	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	141762	4290.54 ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery =	85.81%#	
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.082	61	5637	833.32 ug/L	84
3] trans-1,2-Dichloroethene	4.336	61	7123	835.26 ug/L	99
4] 1,1-Dichloroethane	5.059	63	7273	714.06 ug/L	98
5] cis-1,2-Dichloroethene	6.068	61	76570	7258.47 ug/L	98
6] Chloroform	6.639	83	18701	1845.66 ug/L	99
7] 1,1,1-Trichloroethane	6.895	97	3487	320.36 ug/L	99
9] Benzene	7.503	78	1603	55.84 ug/L #	24
10] 1,2-Dichloroethane	7.540	62	413	42.17 ug/L #	42
11] Trichloroethene	8.564	130	271786	29986.57 ug/L OC	97
13] Toluene	10.582	91	3483	84.67 ug/L	99
15] Tetrachloroethene	11.432	166	43777	3416.44 ug/L	100
21] 1,1,2,2-Tetrachloroethane	14.869	83	904	44.64 ug/L #	39
22] 1,3,5-Trimethylbenzene	15.350	105	3626	75.87 ug/L	97
23] 1,2,4-Trimethylbenzene	15.901	105	8610	176.13 ug/L	94
25) 2-Fluorotoluene SCAN	10.969	109	104929	5418.59 ug/L	97
26) 1,1-Dichloroethene SCAN	3.088	61	3759	831.51 ug/L #	63
27) trans-1,2-Dichloroethe...	4.341	61	5612	974.63 ug/L #	70
28) 1,1-Dichloroethane SCAN	5.084	63	5029	739.94 ug/L #	78
29) cis-1,2-Dichloroethene...	6.073	61	56498	8455.95 ug/L #	74
30) Chloroform SCAN	6.650	83	15680	2516.08 ug/L	86
31) 1,1,1-Trichloroethane ...	6.906	97	1727	268.55 ug/L #	48
33) Benzene SCAN	7.526	78	11716	602.20 ug/L	92
34) 1,2-Dichloroethane SCAN	7.526	62	402	66.06 ug/L #	40
35) Trichloroethene SCAN	8.563	130	151021	35599.56 ug/L	89
36) Toluene-d8 SCAN	10.486	98	89887	4949.20 ug/L	94
37) Toluene SCAN	10.580	91	3034	135.68 ug/L	92
38) 1,1,2-Trichloroethane ...	11.420	97	159	28.37 ug/L #	1
39) Tetrachloroethene SCAN	11.430	166	19778	3931.59 ug/L	84
46) 1,3,5-Trimethylbenzene...	15.348	105	2216	90.27 ug/L	82
47) 1,2,4-Trimethylbenzene...	15.909	105	5046	201.18 ug/L	93

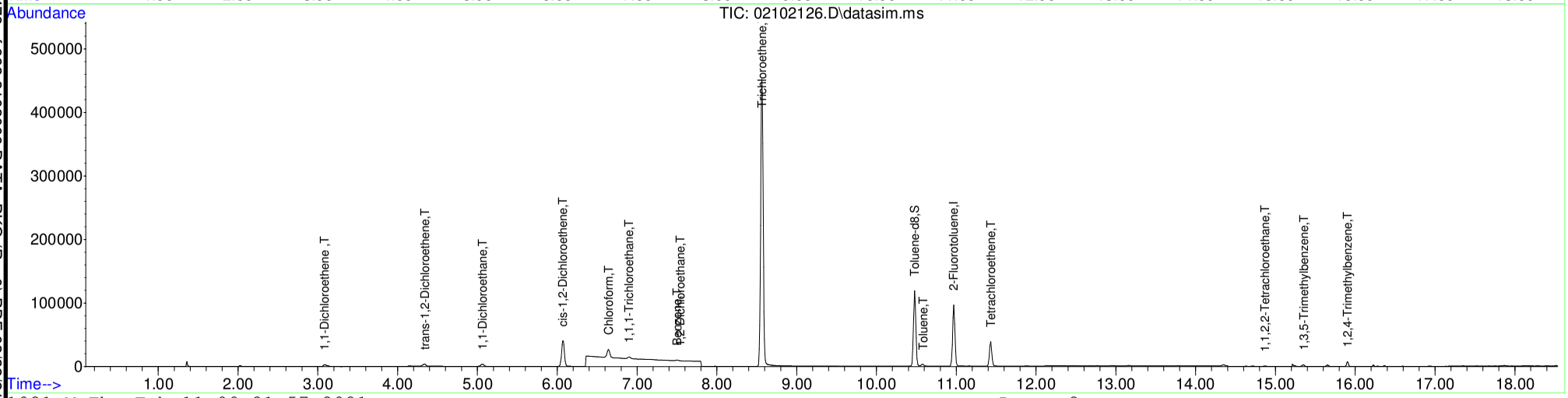
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102126.D
Acq On : 10 Feb 2021 19:06
InstName : AG5975C
Operator : TD
Sample : 2102006-02RE1
Misc : RA for low Surr
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 11 09:21:56 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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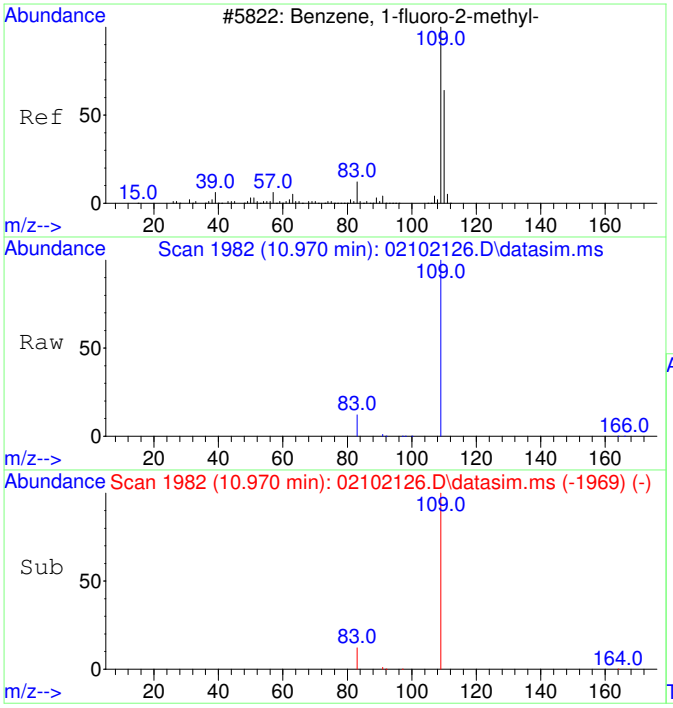
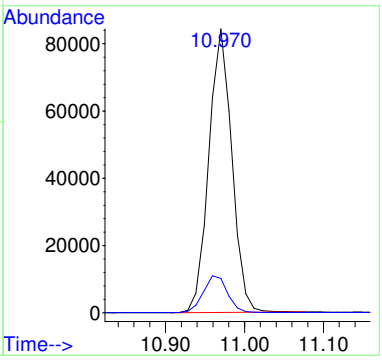
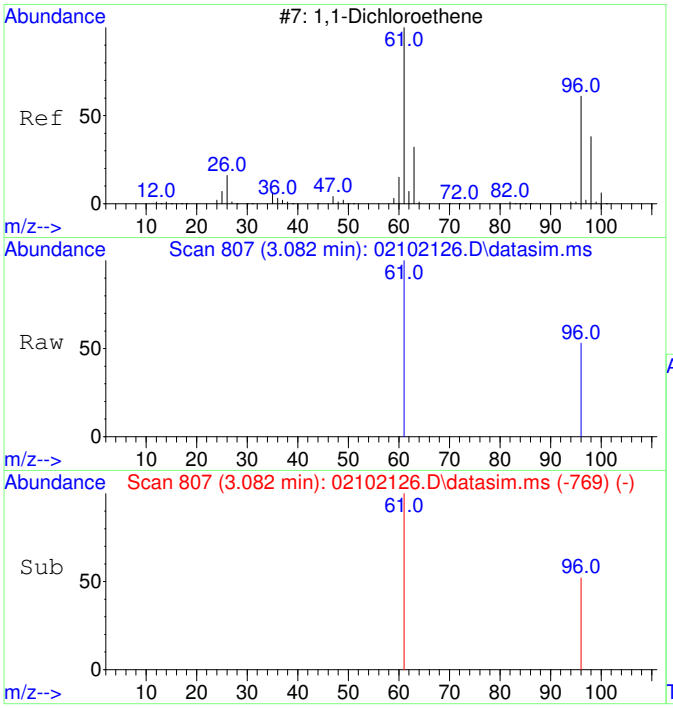


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion:109 Resp: 170598

Ion	Ratio	Lower	Upper
109	100		
83	13.6	0.0	42.3

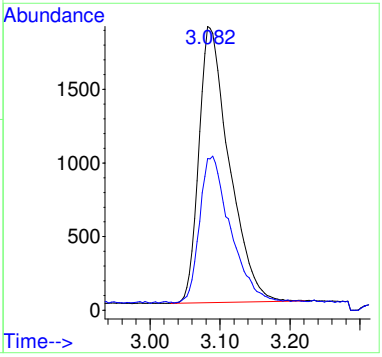


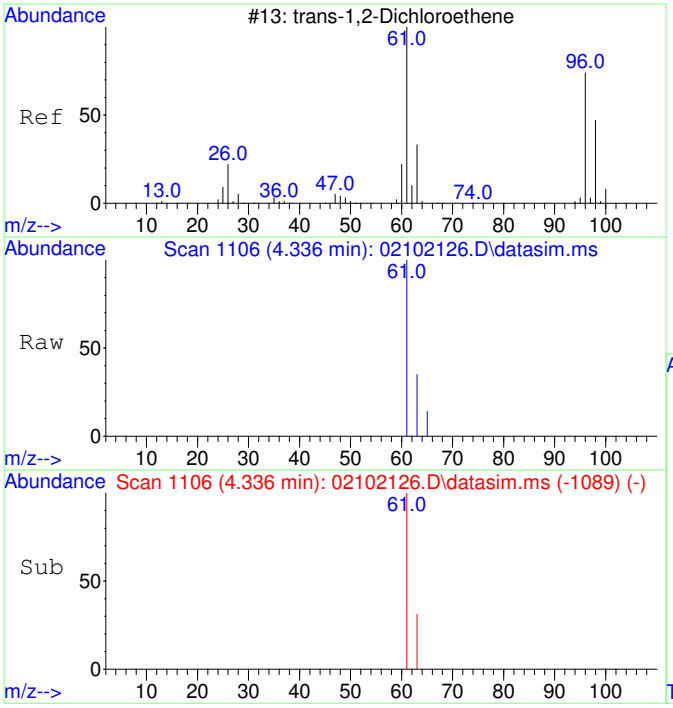


#2
1,1-Dichloroethene
Concen: 833.32 ug/L
RT: 3.082 min Scan# 807
Delta R.T. -0.008 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion: 61 Resp: 5637

Ion	Ratio	Lower	Upper
61	100		
96	54.3	37.2	97.2

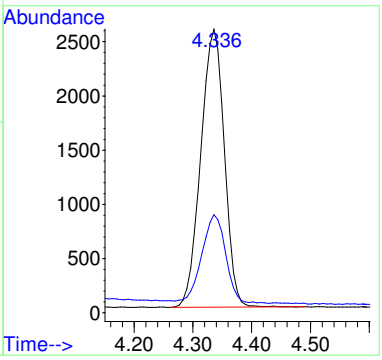


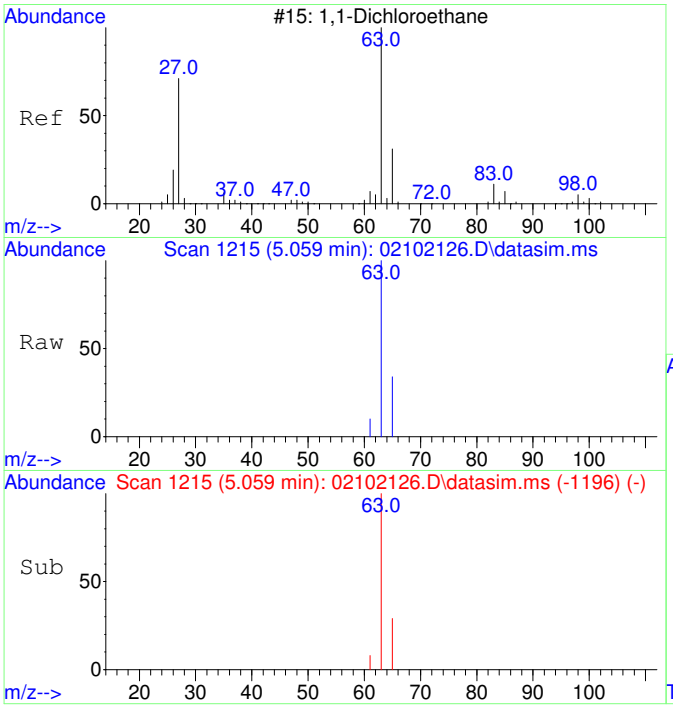


#3
trans-1,2-Dichloroethene
Concen: 835.26 ug/L
RT: 4.336 min Scan# 1106
Delta R.T. -0.040 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion: 61 Resp: 7123

Ion	Ratio	Lower	Upper
61	100		
63	32.9	2.4	62.4

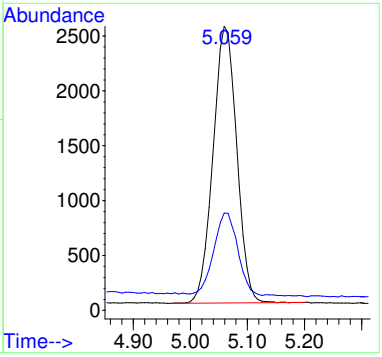


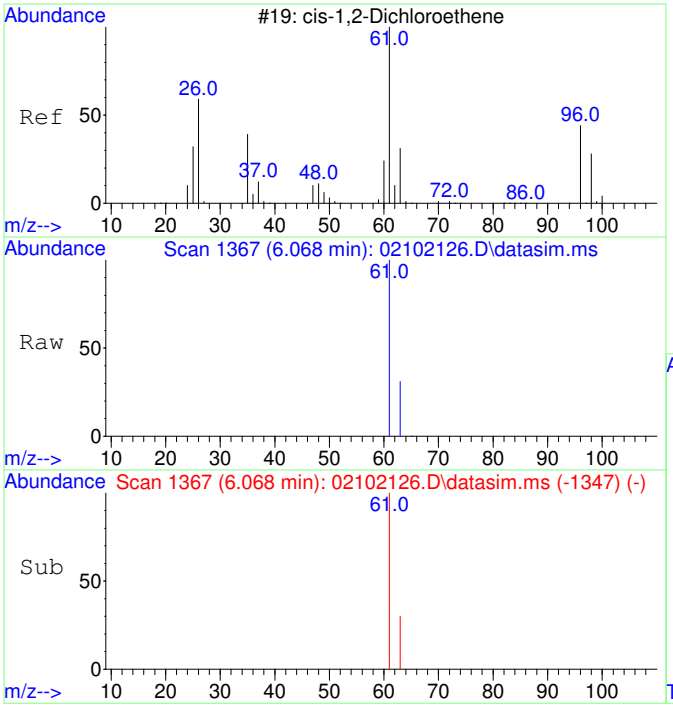


#4
1,1-Dichloroethane
Concen: 714.06 ug/L
RT: 5.059 min Scan# 1215
Delta R.T. -0.026 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion: 63 Resp: 7273

Ion	Ratio	Lower	Upper
63	100		
65	30.4	1.8	61.8

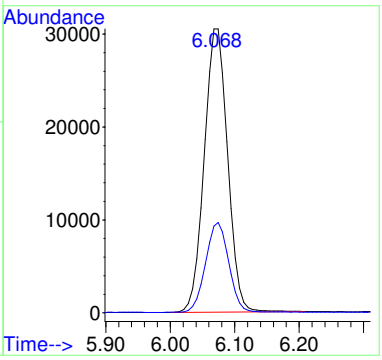


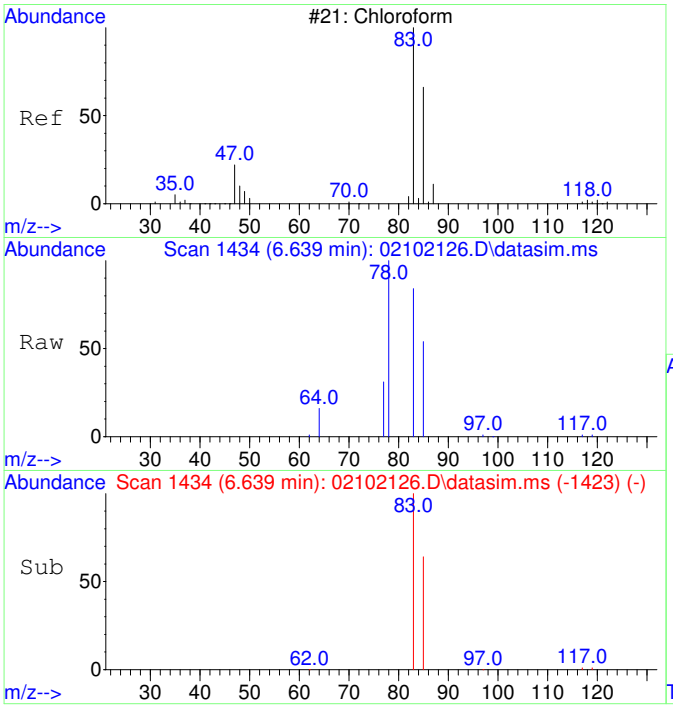


#5
cis-1,2-Dichloroethene
Concen: 7258.47 ug/L
RT: 6.068 min Scan# 1367
Delta R.T. -0.020 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion: 61 Resp: 76570

Ion	Ratio	Lower	Upper
61	100		
63	31.3	2.5	62.5

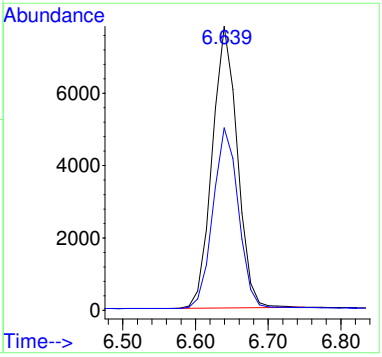


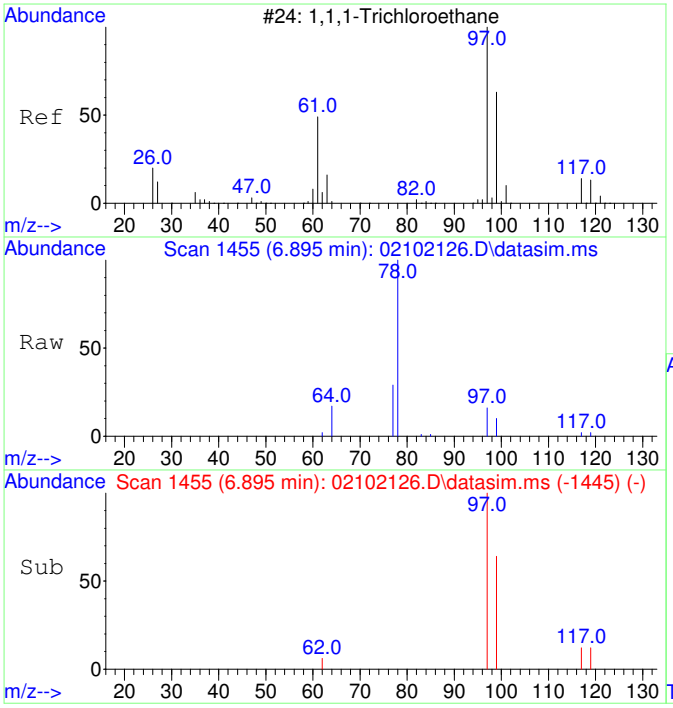


#6
Chloroform
Concen: 1845.66 ug/L
RT: 6.639 min Scan# 1434
Delta R.T. -0.012 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion: 83 Resp: 18701

Ion	Ratio	Lower	Upper
83	100		
85	64.7	35.1	95.1

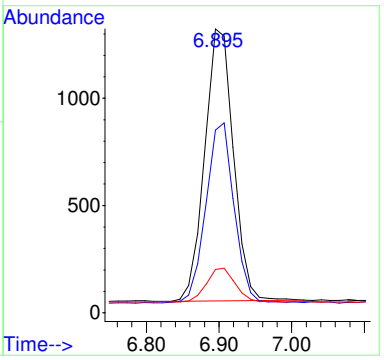


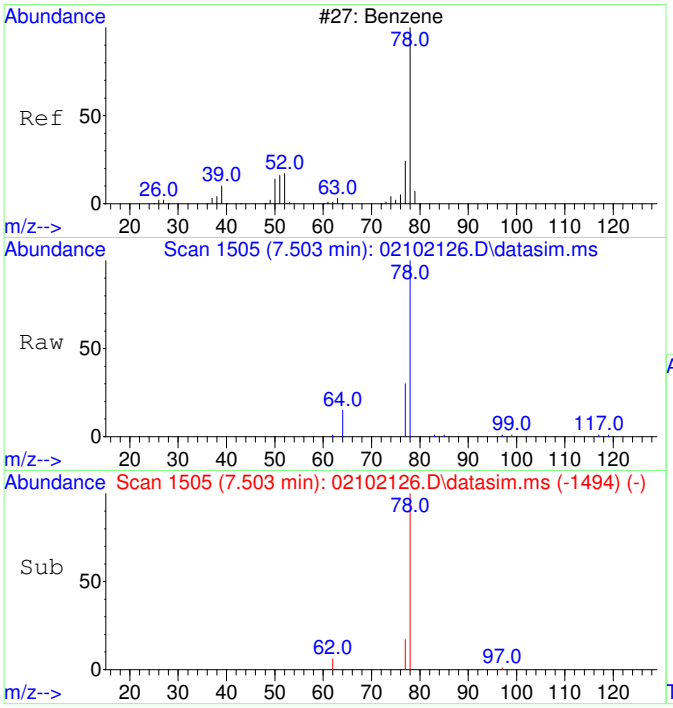


#7
1,1,1-Trichloroethane
Concen: 320.36 ug/L
RT: 6.895 min Scan# 1455
Delta R.T. -0.024 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion: 97 Resp: 3487

Ion	Ratio	Lower	Upper
97	100		
99	64.9	34.6	94.6
117	12.4	0.0	43.2

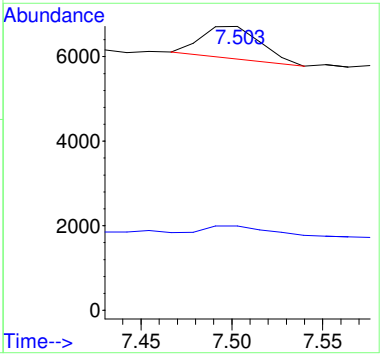


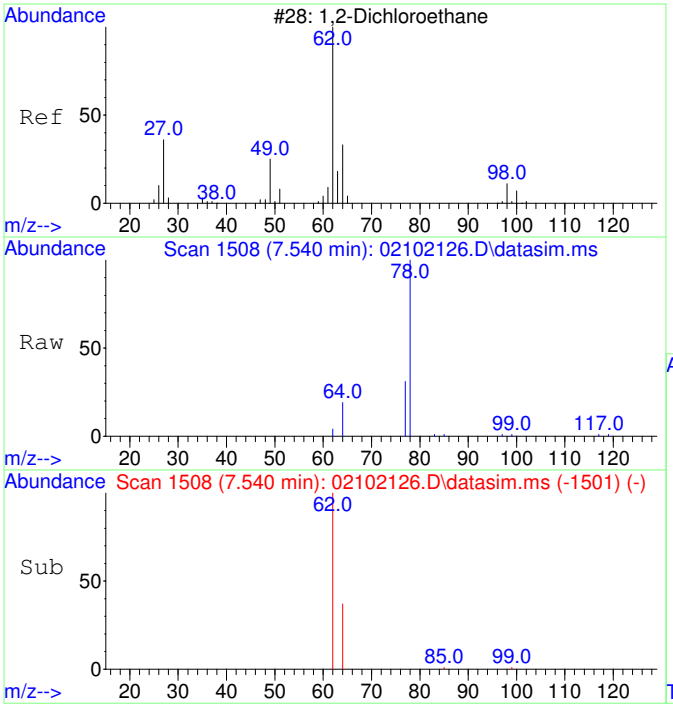


#9
Benzene
Concen: 55.84 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion: 78 Resp: 1603

Ion	Ratio	Lower	Upper
78	100		
77	60.3	0.0	53.2#

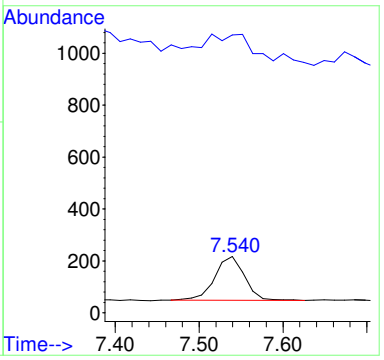


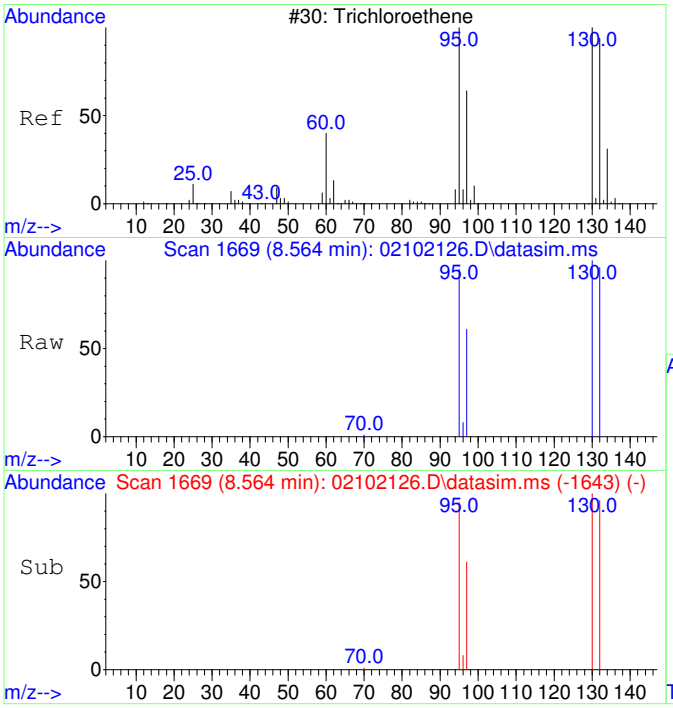


#10
1,2-Dichloroethane
Concen: 42.17 ug/L
RT: 7.540 min Scan# 1508
Delta R.T. -0.012 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion: 62 Resp: 413

Ion	Ratio	Lower	Upper
62	100		
64	0.0	2.3	62.3#

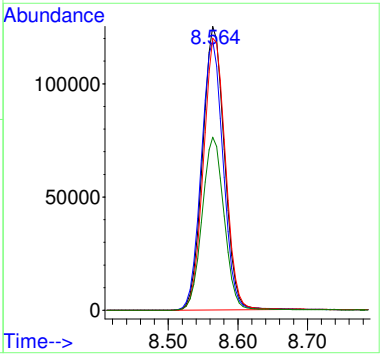


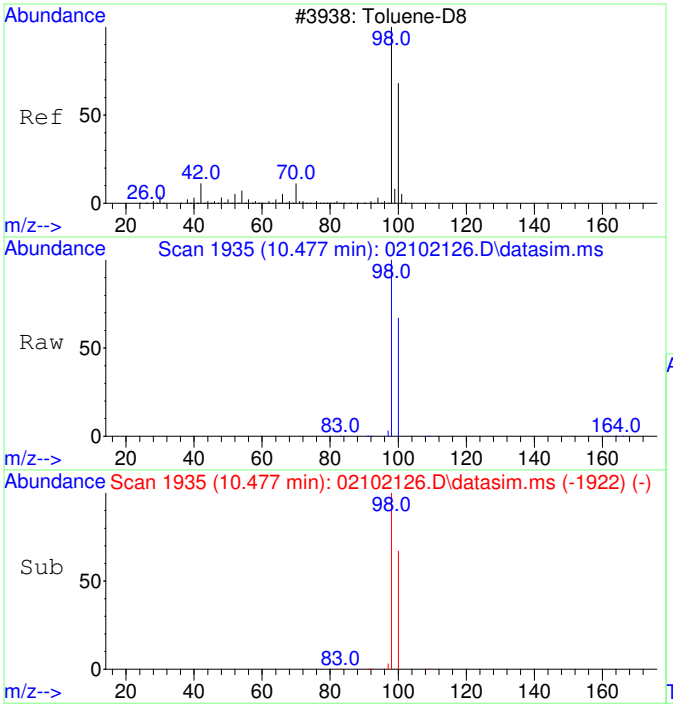


#11
Trichloroethene
Concen: 29986.57 ug/L
RT: 8.564 min Scan# 1669
Delta R.T. -0.011 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion:130 Resp: 271786

Ion	Ratio	Lower	Upper
130	100		
95	94.9	60.7	120.7
132	96.4	76.0	116.0
97	61.3	38.6	78.6

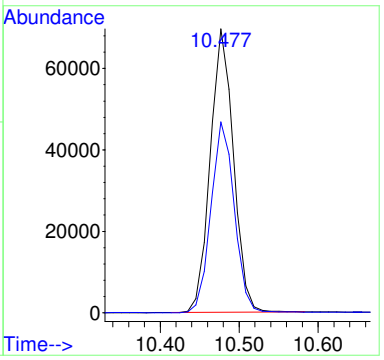


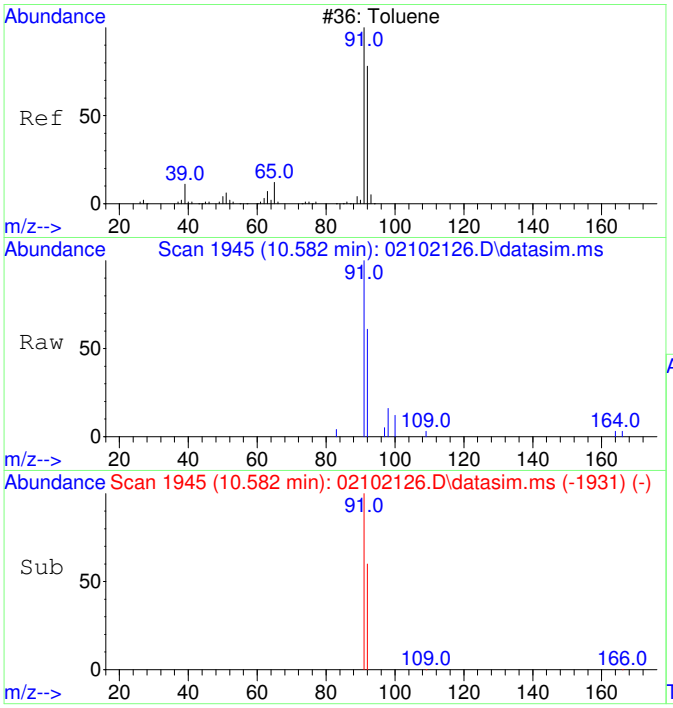


#12
Toluene-d8
Concen: 4290.54 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion: 98 Resp: 141762

Ion	Ratio	Lower	Upper
98	100		
100	67.3	37.1	97.1

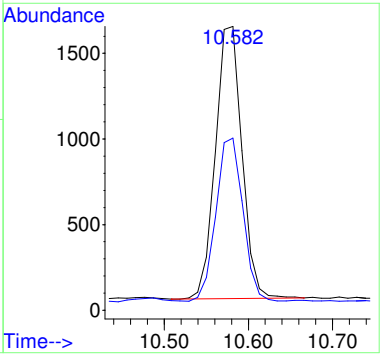


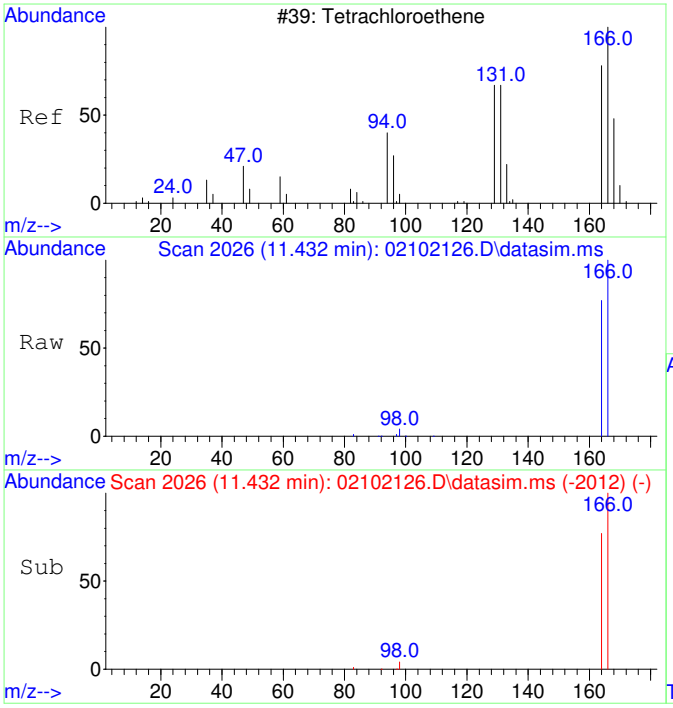


#13
Toluene
Concen: 84.67 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion: 91 Resp: 3483

Ion	Ratio	Lower	Upper
91	100		
92	60.7	29.9	89.9

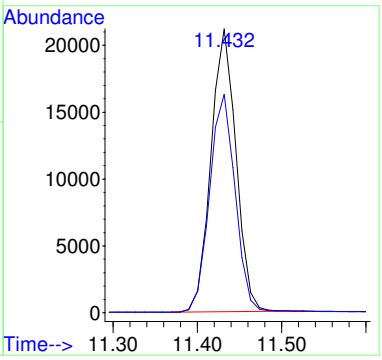


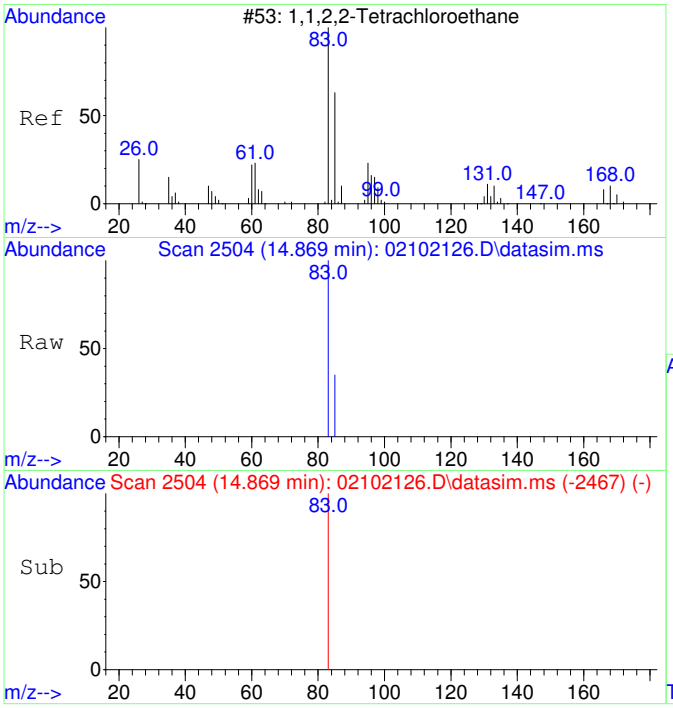


#15
Tetrachloroethene
Concen: 3416.44 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion:166 Resp: 43777

Ion	Ratio	Lower	Upper
166	100		
164	78.2	47.8	107.8

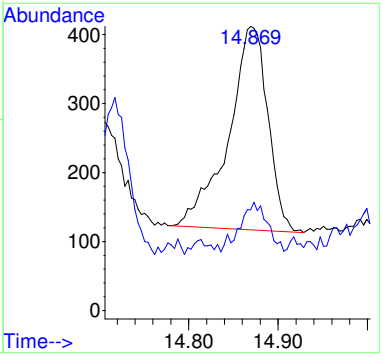


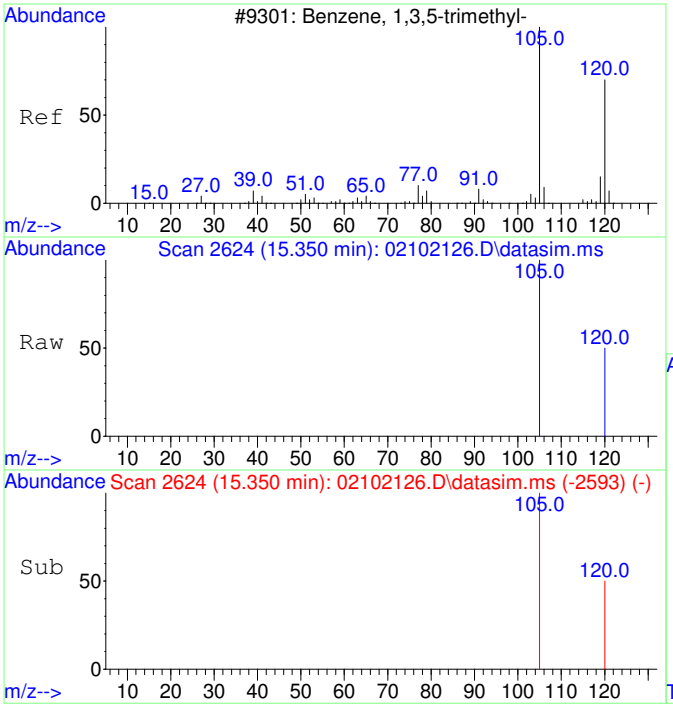


#21
1,1,2,2-Tetrachloroethane
Concen: 44.64 ug/L
RT: 14.869 min Scan# 2504
Delta R.T. -0.011 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion: 83 Resp: 904

Ion	Ratio	Lower	Upper
83	100		
85	16.5	34.8	94.8#

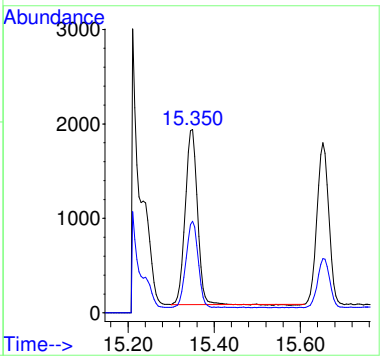


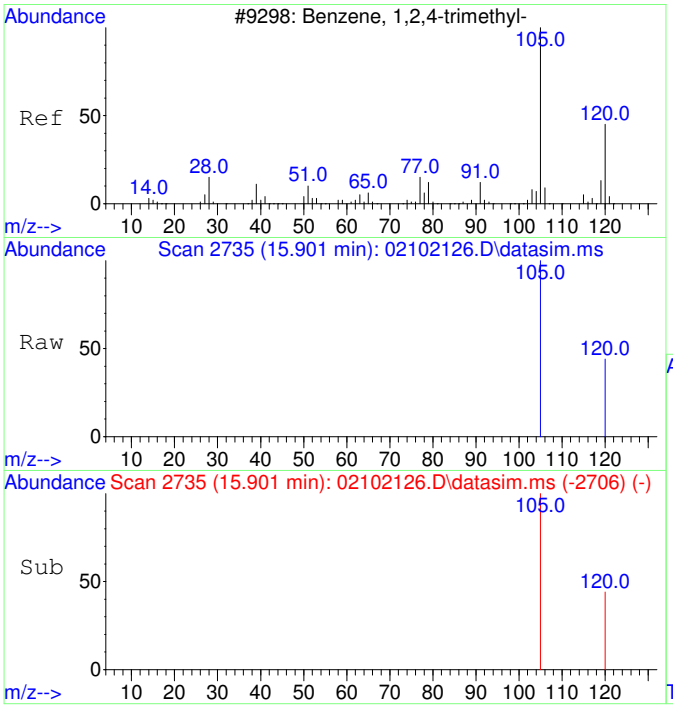


#22
1,3,5-Trimethylbenzene
Concen: 75.87 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.000 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion:105 Resp: 3626

Ion	Ratio	Lower	Upper
105	100		
120	49.0	21.1	81.1

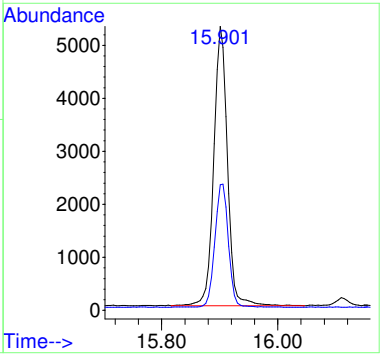


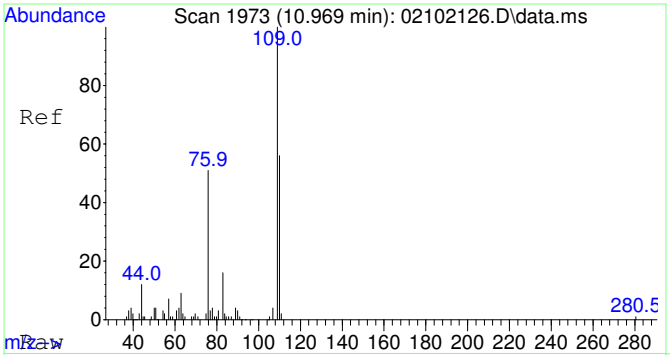


#23
1,2,4-Trimethylbenzene
Concen: 176.13 ug/L
RT: 15.901 min Scan# 2735
Delta R.T. -0.005 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion:105 Resp: 8610

Ion	Ratio	Lower	Upper
105	100		
120	43.4	17.2	77.2

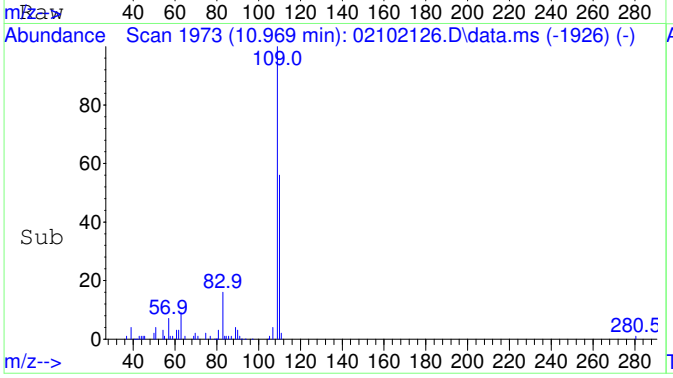


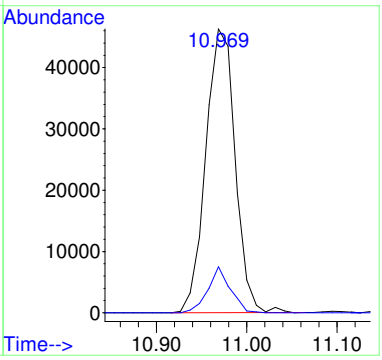


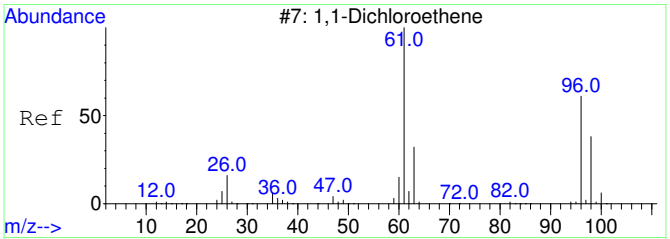
#25
2-Fluorotoluene SCAN
Concen: 5418.59 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

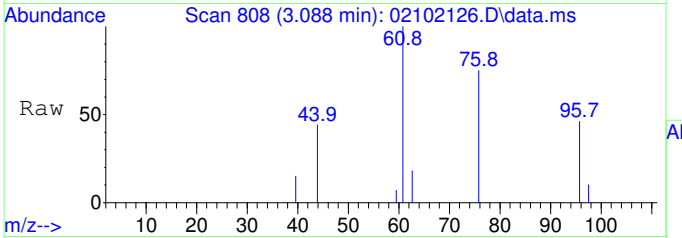
Tgt Ion:109 Resp: 104929

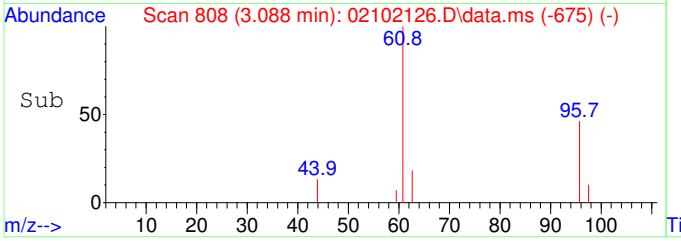
Ion	Ratio	Lower	Upper
109	100		
83	12.4	0.0	43.8







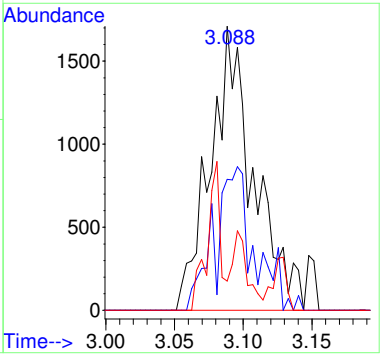


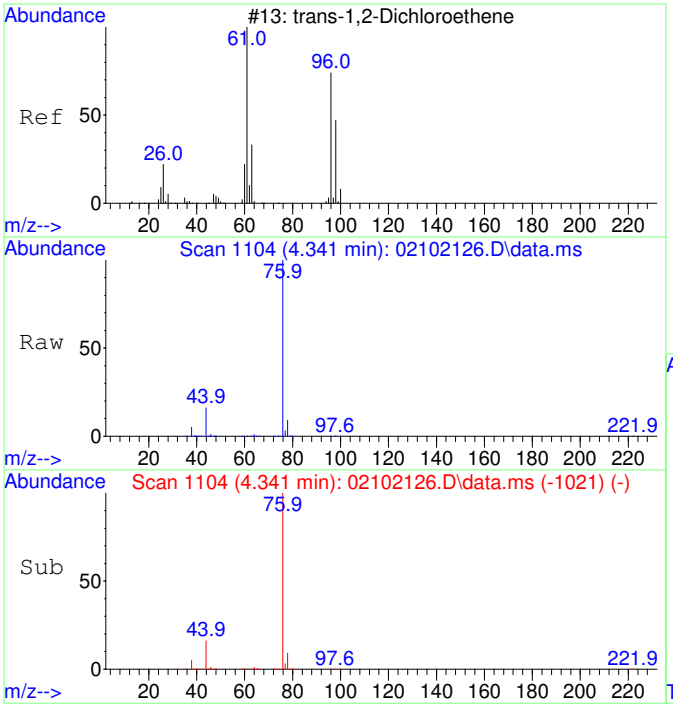


#26
1,1-Dichloroethene SCAN
Concen: 831.51 ug/L
RT: 3.088 min Scan# 808
Delta R.T. -0.007 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion: 61 Resp: 3759

Ion	Ratio	Lower	Upper
61	100		
96	44.7	33.1	93.1
98	4.8	11.2	71.2#

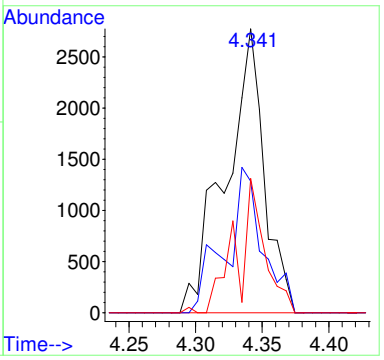


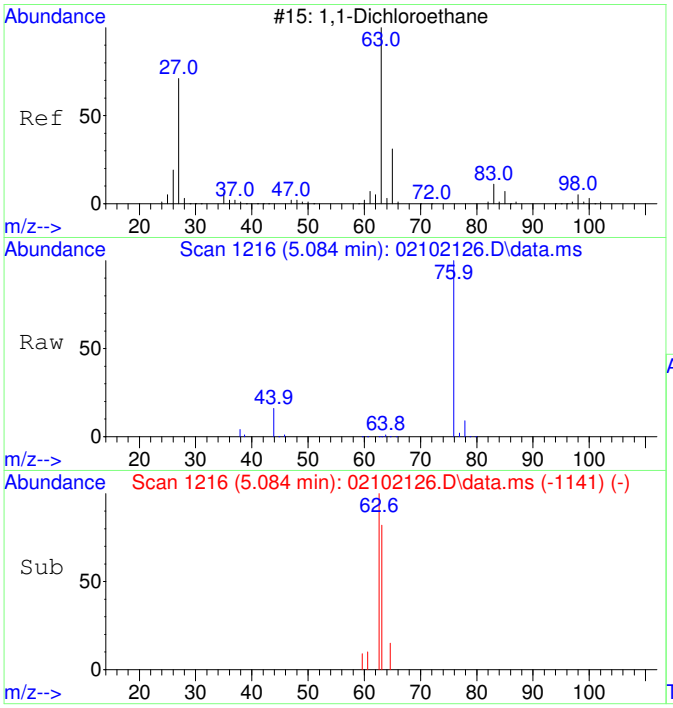


#27
trans-1,2-Dichloroethene SCAN
Concen: 974.63 ug/L
RT: 4.341 min Scan# 1104
Delta R.T. -0.040 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion: 61 Resp: 5612

Ion	Ratio	Lower	Upper
61	100		
96	48.7	49.0	109.0#
98	34.0	20.5	80.5

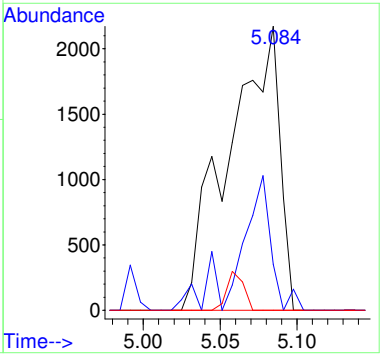


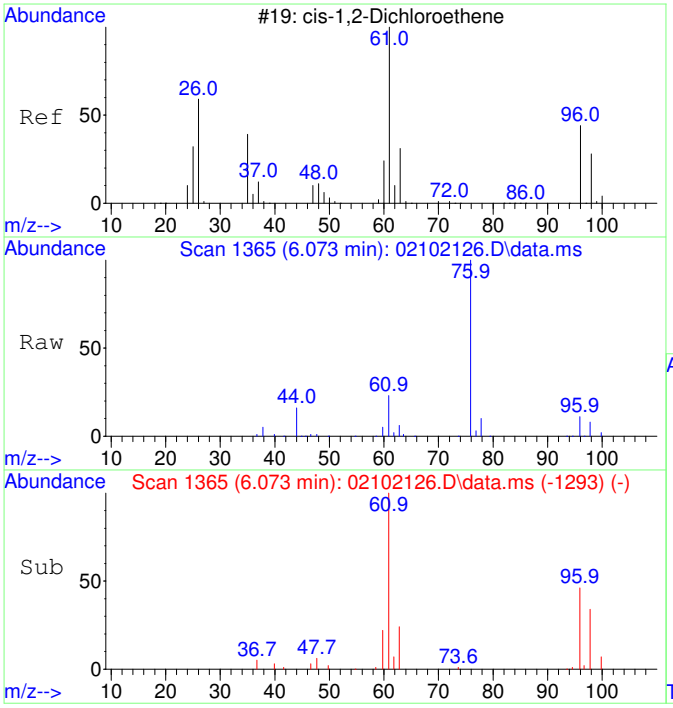


#28
1,1-Dichloroethane SCAN
Concen: 739.94 ug/L
RT: 5.084 min Scan# 1216
Delta R.T. 0.000 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion: 63 Resp: 5029

Ion	Ratio	Lower	Upper
63	100		
65	23.5	1.3	61.3
83	0.0	0.0	45.9

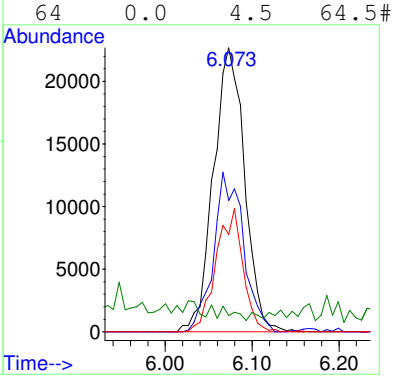


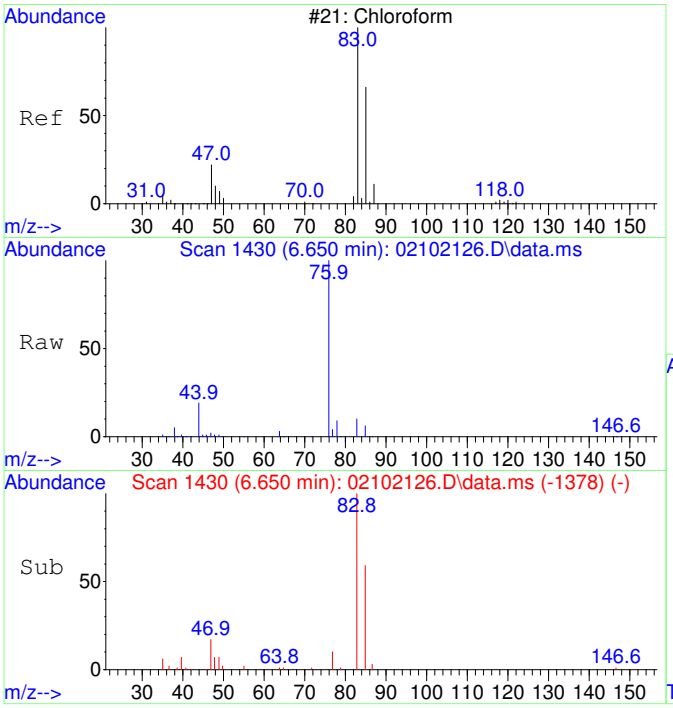


#29
cis-1,2-Dichloroethene SCAN
Concen: 8455.95 ug/L
RT: 6.073 min Scan# 1365
Delta R.T. -0.020 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion: 61 Resp: 56498

Ion	Ratio	Lower	Upper
61	100		
96	53.5	39.9	99.9
98	37.5	13.5	73.5
64	0.0	4.5	64.5#

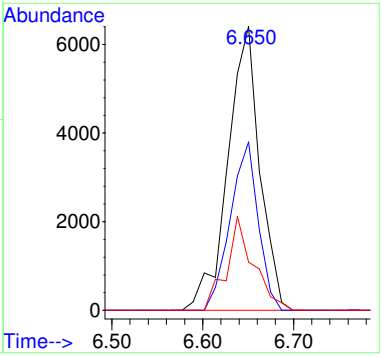


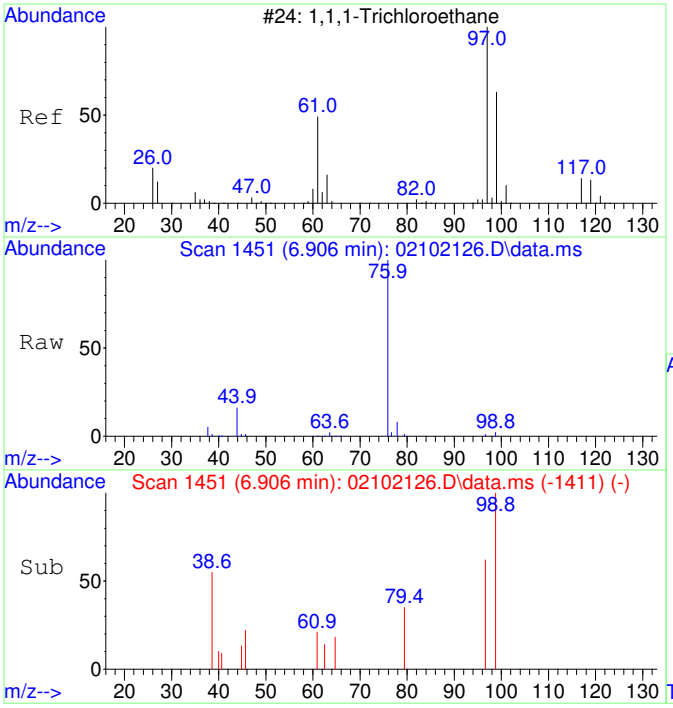


#30
Chloroform SCAN
Concen: 2516.08 ug/L
RT: 6.650 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion: 83 Resp: 15680

Ion	Ratio	Lower	Upper
83	100		
85	51.8	34.6	94.6
47	27.9	0.0	53.4

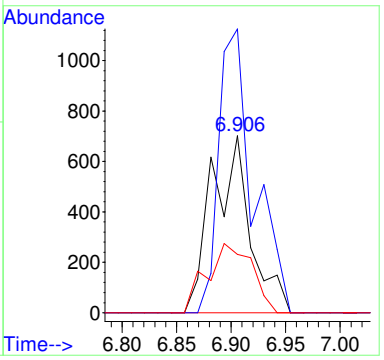


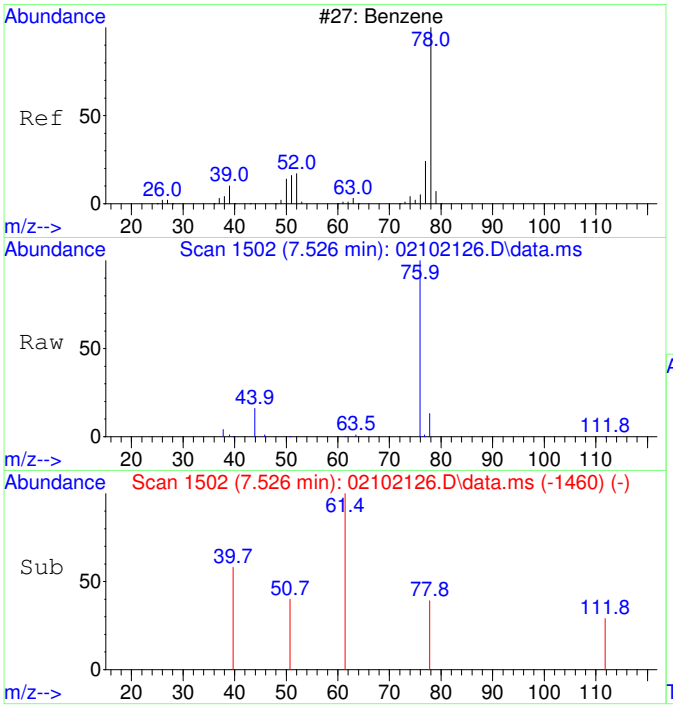


#31
1,1,1-Trichloroethane SCAN
Concen: 268.55 ug/L
RT: 6.906 min Scan# 1451
Delta R.T. -0.012 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion: 97 Resp: 1727

Ion	Ratio	Lower	Upper
97	100		
99	144.6	43.6	103.6#
61	45.9	18.0	78.0

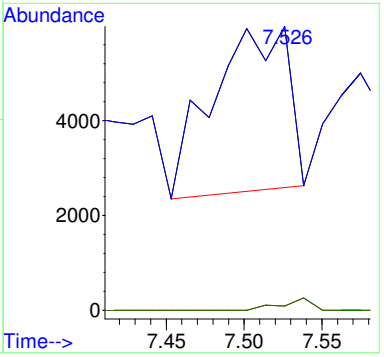


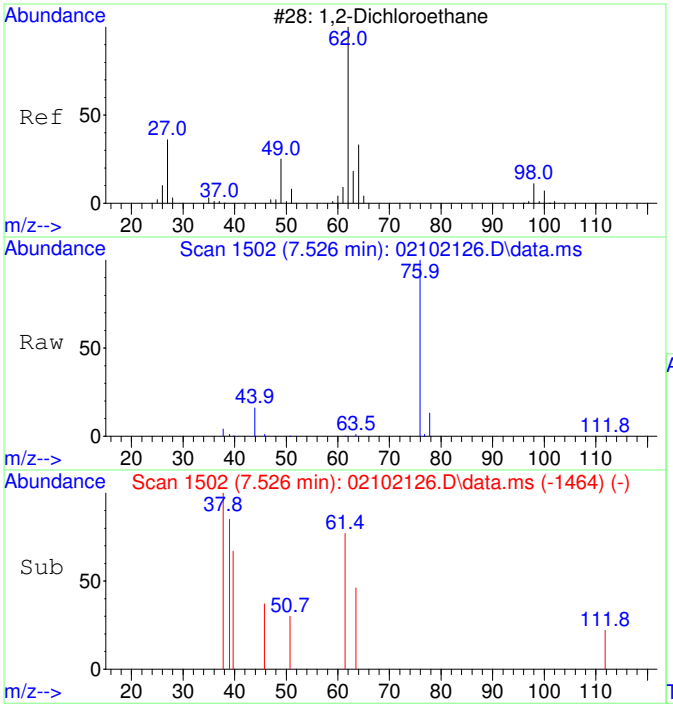


#33
Benzene SCAN
Concen: 602.20 ug/L
RT: 7.526 min Scan# 1502
Delta R.T. 0.012 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion: 78 Resp: 11716

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

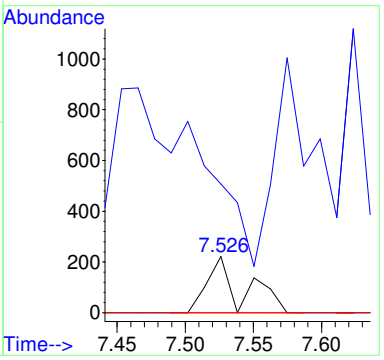


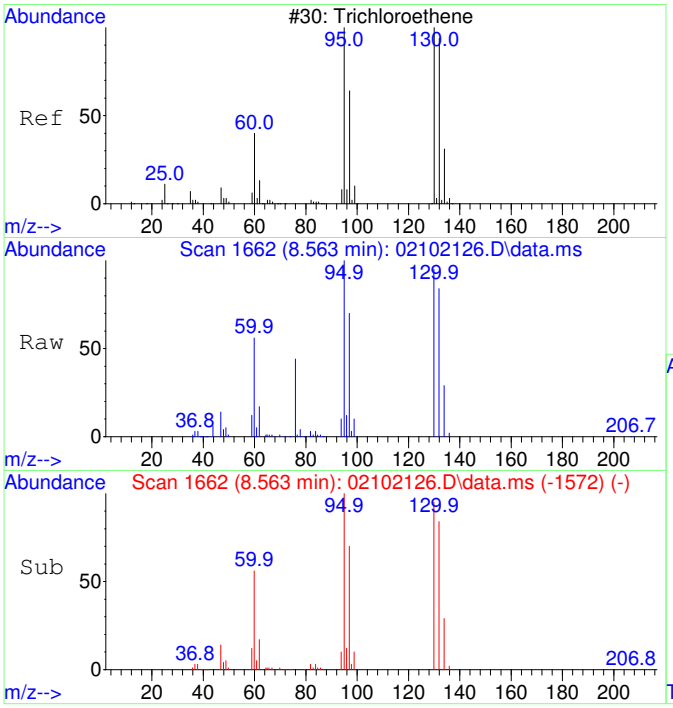


#34
1,2-Dichloroethane SCAN
Concen: 66.06 ug/L
RT: 7.526 min Scan# 1502
Delta R.T. -0.036 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion: 62 Resp: 402

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

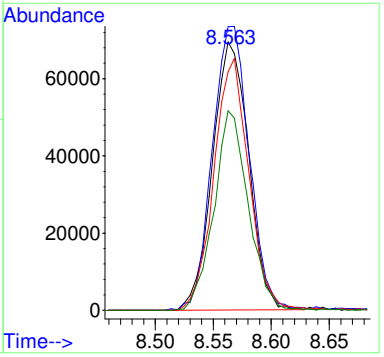


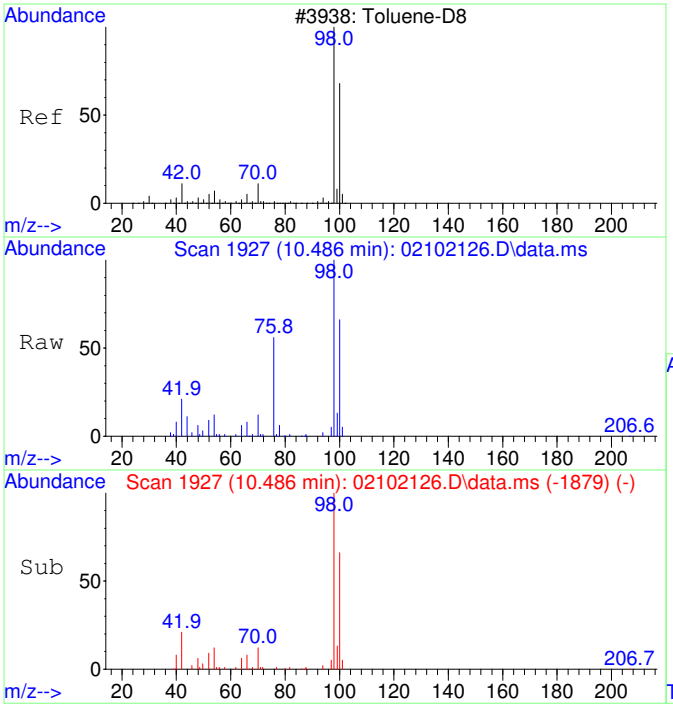


#35
Trichloroethene SCAN
Concen: 35599.56 ug/L
RT: 8.563 min Scan# 1662
Delta R.T. -0.011 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion:130 Resp: 151021

Ion	Ratio	Lower	Upper
130	100		
95	107.9	60.5	120.5
132	90.6	59.6	119.6
97	70.6	28.2	88.2

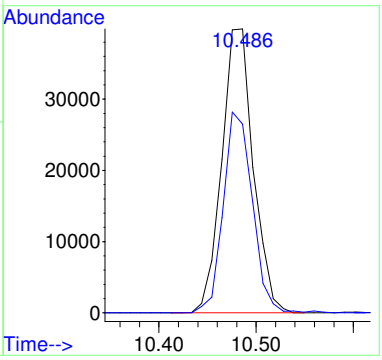


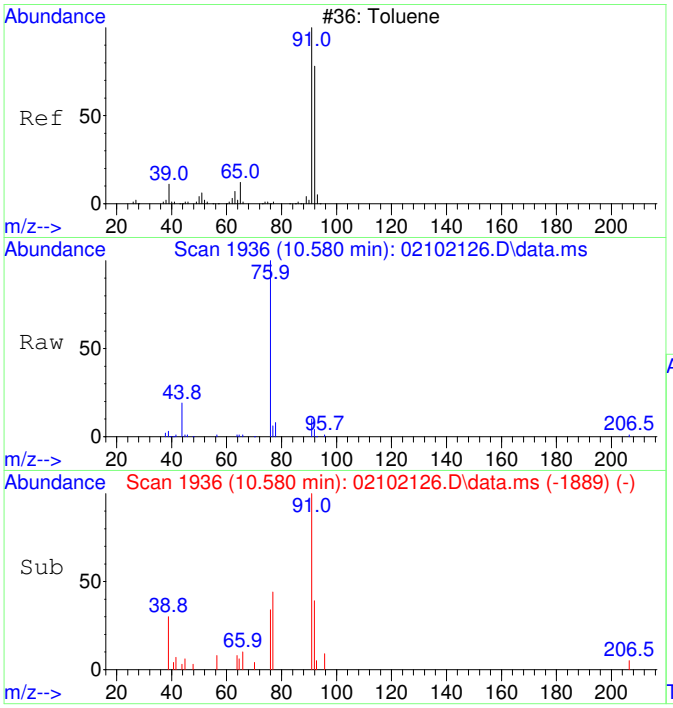


#36
Toluene-d8 SCAN
Concen: 4949.20 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion: 98 Resp: 89887

Ion	Ratio	Lower	Upper
98	100		
100	65.2	40.0	100.0

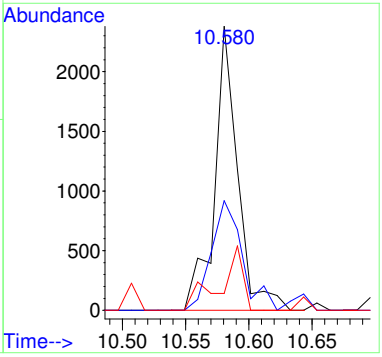


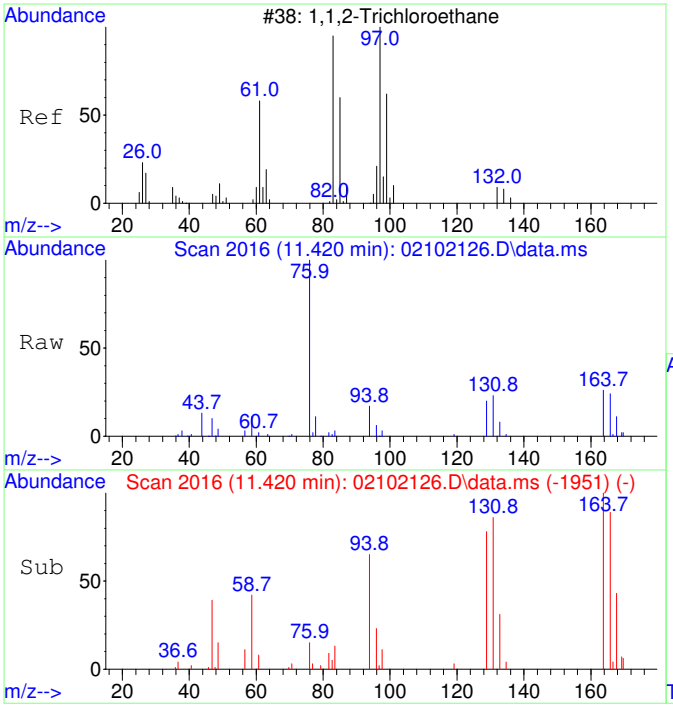


#37
Toluene SCAN
Concen: 135.68 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion: 91 Resp: 3034

Ion	Ratio	Lower	Upper
91	100		
92	55.7	28.3	88.3
65	22.1	0.0	41.0

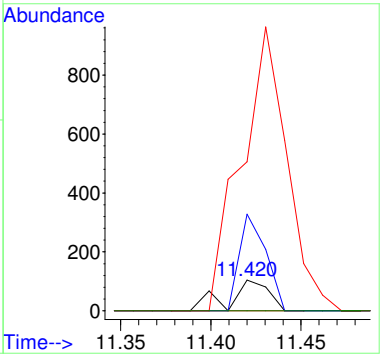


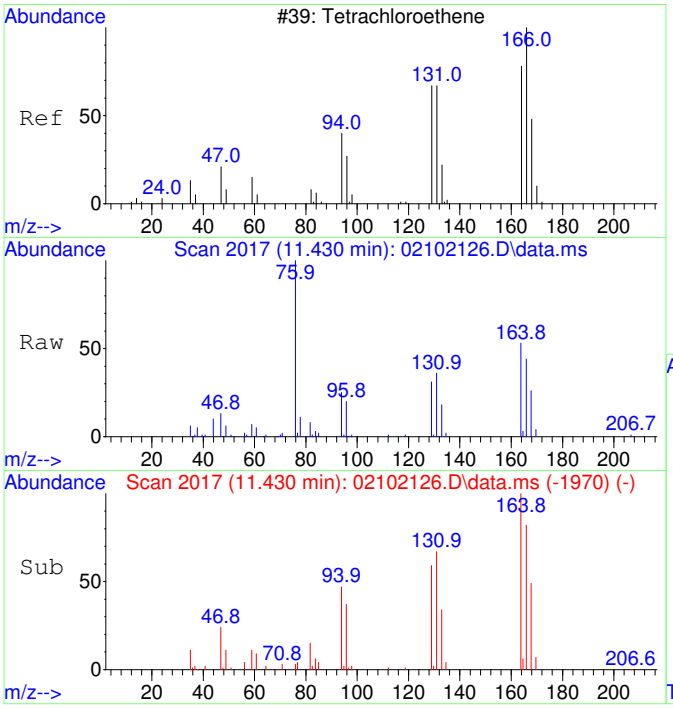


#38
1,1,2-Trichloroethane SCAN
Concen: 28.37 ug/L
RT: 11.420 min Scan# 2016
Delta R.T. 0.178 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion: 97 Resp: 159

Ion	Ratio	Lower	Upper
97	100		
83	212.6	57.7	117.7#
61	1073.0	32.1	92.1#
99	0.0	36.7	96.7#

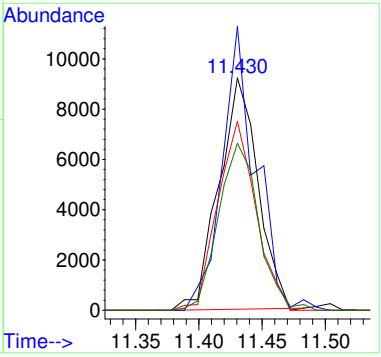


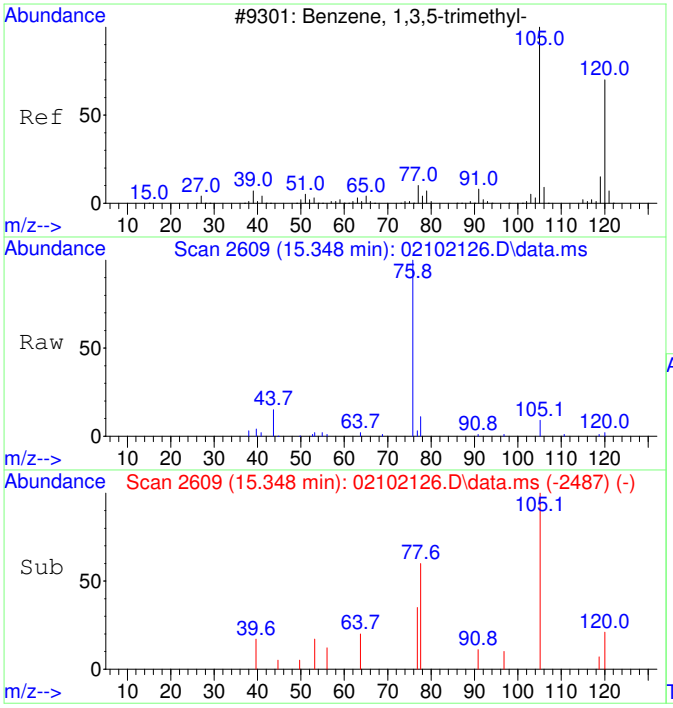


#39
Tetrachloroethene SCAN
Concen: 3931.59 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. -0.010 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion:166 Resp: 19778

Ion	Ratio	Lower	Upper
166	100		
164	106.7	50.9	110.9
131	79.5	38.7	98.7
129	74.4	41.8	101.8

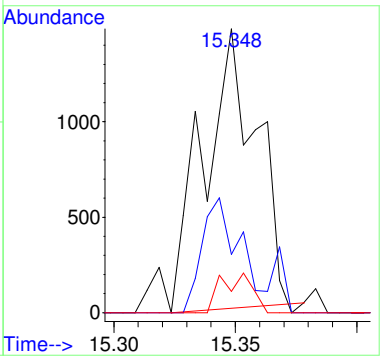


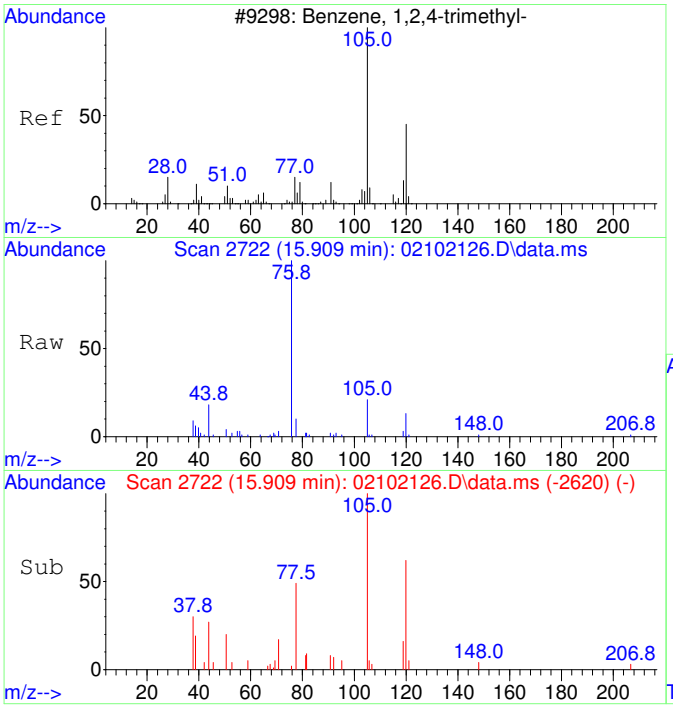


#46
1,3,5-Trimethylbenzene SCAN
Concen: 90.27 ug/L
RT: 15.348 min Scan# 2609
Delta R.T. -0.005 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion:105 Resp: 2216

Ion	Ratio	Lower	Upper
105	100		
120	34.7	18.3	78.3
119	8.4	0.0	43.1

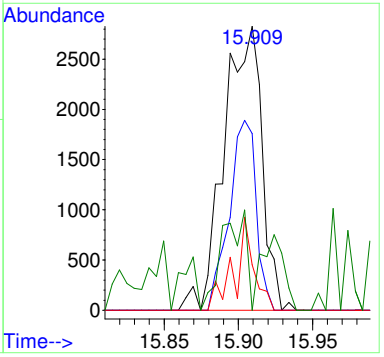




#47
1,2,4-Trimethylbenzene SCAN
Concen: 201.18 ug/L
RT: 15.909 min Scan# 2722
Delta R.T. 0.005 min
Lab File: 02102126.D
Acq: 10 Feb 2021 19:06

Tgt Ion:105 Resp: 5046

Ion	Ratio	Lower	Upper
105	100		
120	47.5	16.9	76.9
119	16.6	0.0	41.9
77	22.3	0.0	42.3



2102006-05RE1

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102128.D
Acq On : 10 Feb 2021 19:53
InstName : AG5975C
Operator : TD
Sample : 2102006-05RE1
Misc : RA for low Surr
ALS Vial : 28 Sample Multiplier: 1

REPORT

Quant Time: Feb 11 09:22:10 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

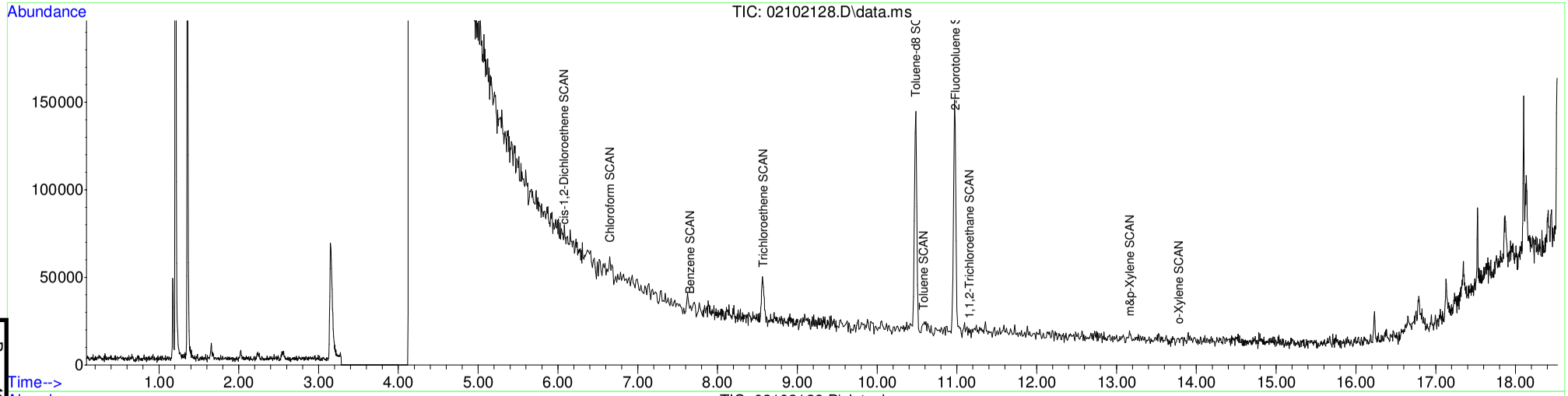
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	177039	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	147603	4304.79	ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.10%			
Target Compounds						Qvalue
6] Chloroform	6.640	83	6521	620.16	ug/L	98
8] Carbon tetrachloride	7.175	117	291	26.95	ug/L	90
9] Benzene	7.503	78	3100	104.06	ug/L	72
11] Trichloroethene	8.570	130	13348	1419.13	ug/L	97
13] Toluene	10.582	91	3705	86.79	ug/L	99
19] m&p-Xylene	13.163	91	2853	67.94	ug/L	95
23] 1,2,4-Trimethylbenzene	15.901	105	1537	30.30	ug/L	90
25) 2-Fluorotoluene SCAN	10.980	109	108046	5376.56	ug/L	99
29) cis-1,2-Dichloroethene...	6.073	61	178	25.67	ug/L #	1
30) Chloroform SCAN	6.651	83	5949	919.87	ug/L	84
33) Benzene SCAN	7.648	78	1222	60.53	ug/L	98
35) Trichloroethene SCAN	8.568	130	8618	1957.58	ug/L	84
36) Toluene-d8 SCAN	10.486	98	86304	4579.04	ug/L	98
37) Toluene SCAN	10.581	91	2771	119.41	ug/L	73
38) 1,1,2-Trichloroethane ...	11.158	97	395	67.91	ug/L #	13
43) m&p-Xylene SCAN	13.161	91	1946	44.00	ug/L #	95
44) o-Xylene SCAN	13.773	91	595	24.64	ug/L #	36

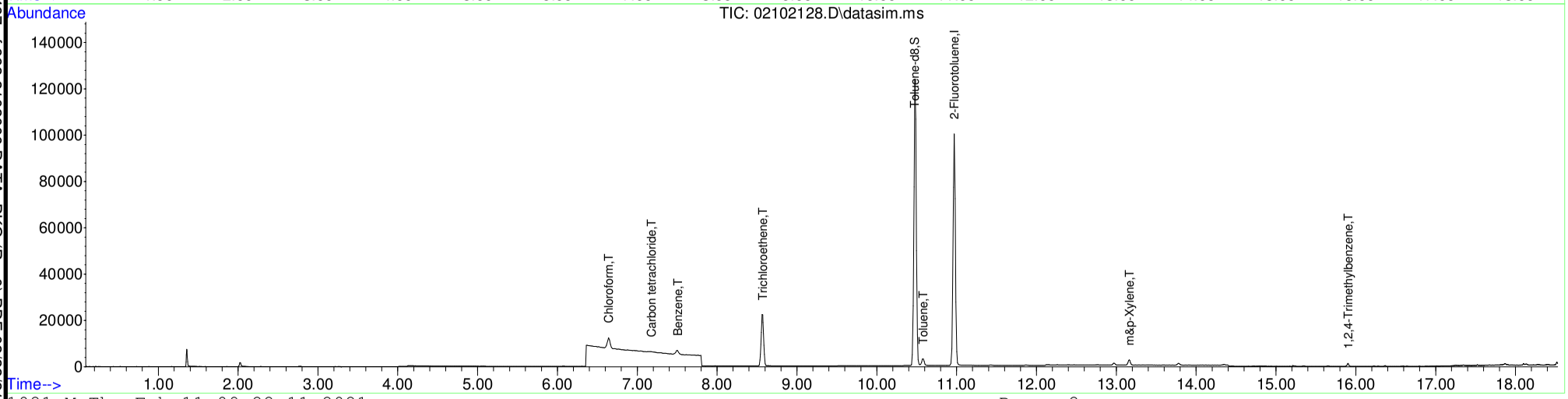
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102128.D
Acq On : 10 Feb 2021 19:53
InstName : AG5975C
Operator : TD
Sample : 2102006-05RE1
Misc : RA for low Surr
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 11 09:22:10 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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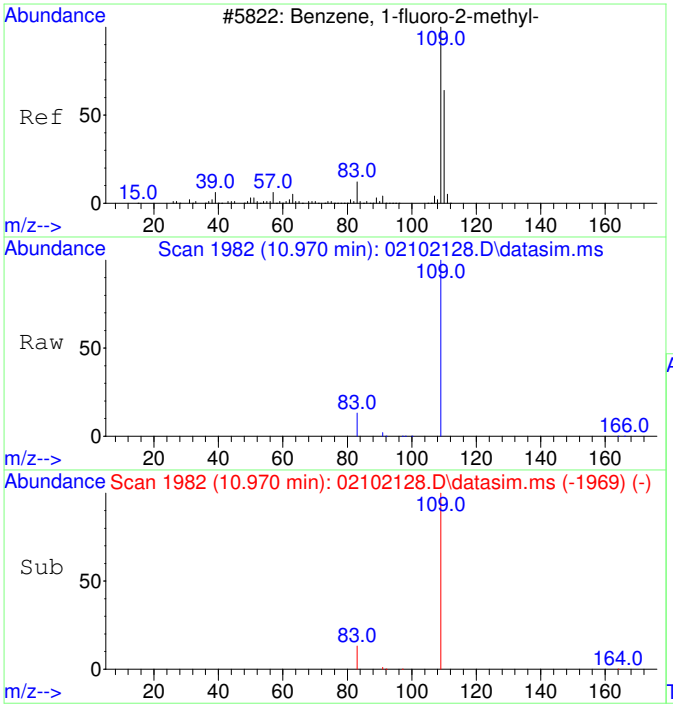
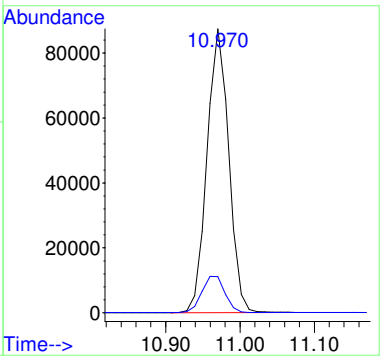
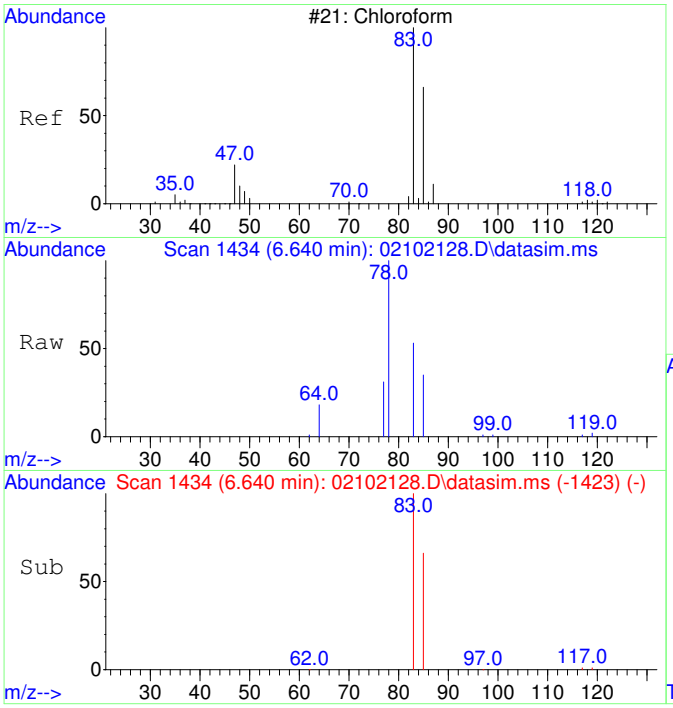


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 02102128.D
Acq: 10 Feb 2021 19:53

Tgt Ion:109 Resp: 177039

Ion	Ratio	Lower	Upper
109	100		
83	13.6	0.0	42.3

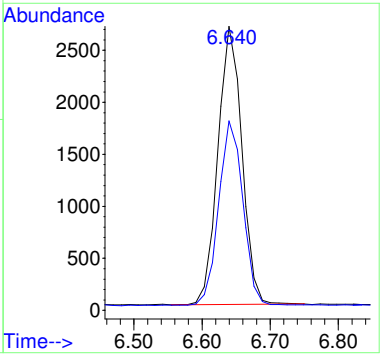


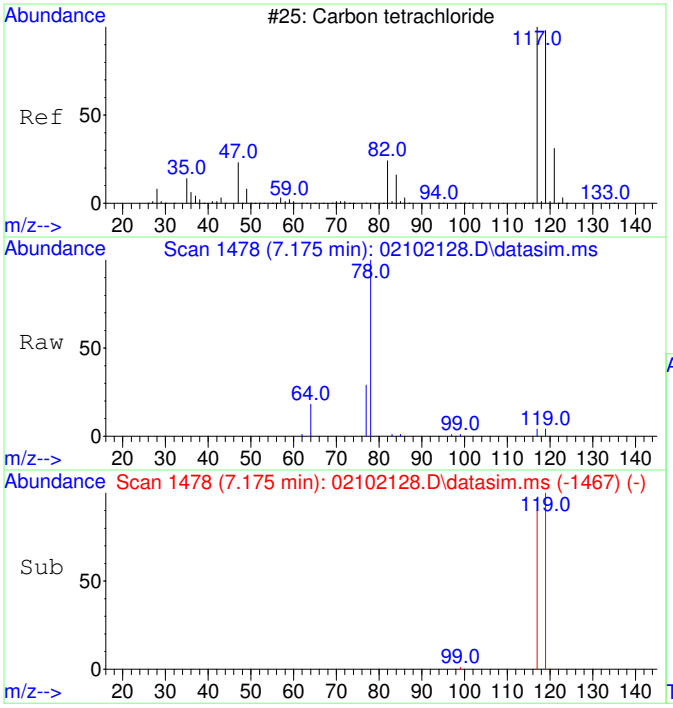


#6
Chloroform
Concen: 620.16 ug/L
RT: 6.640 min Scan# 1434
Delta R.T. -0.012 min
Lab File: 02102128.D
Acq: 10 Feb 2021 19:53

Tgt Ion: 83 Resp: 6521

Ion	Ratio	Lower	Upper
83	100		
85	66.5	35.1	95.1

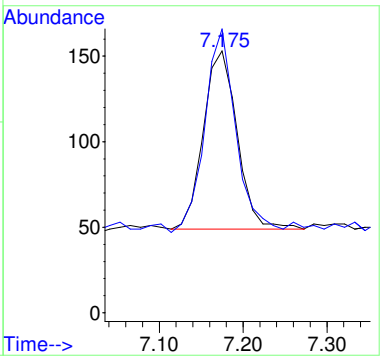


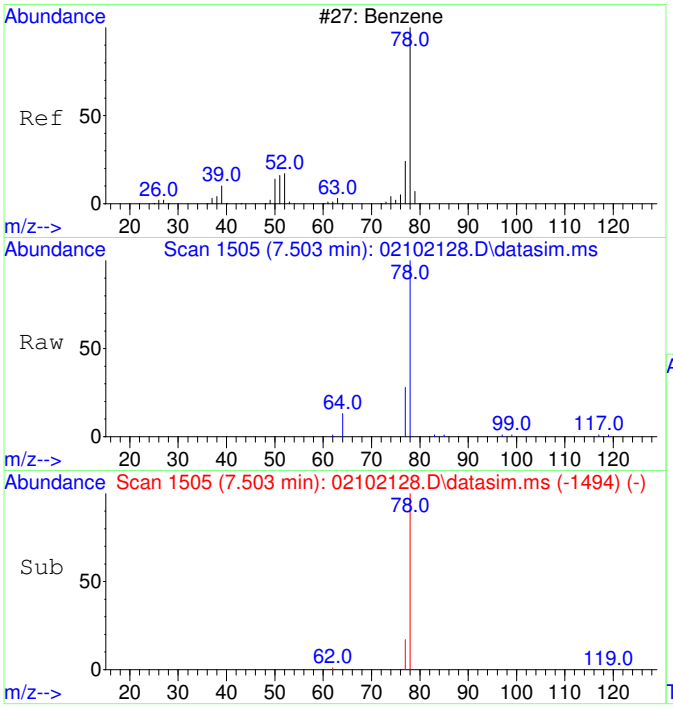


#8
Carbon tetrachloride
Concen: 26.95 ug/L
RT: 7.175 min Scan# 1478
Delta R.T. -0.012 min
Lab File: 02102128.D
Acq: 10 Feb 2021 19:53

Tgt Ion:117 Resp: 291

Ion	Ratio	Lower	Upper
117	100		
119	105.8	66.4	126.4

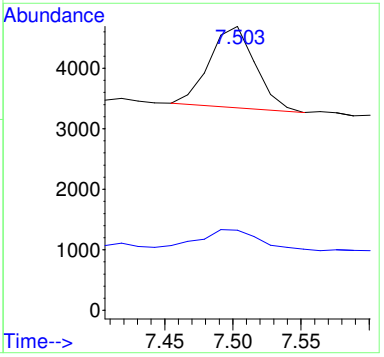


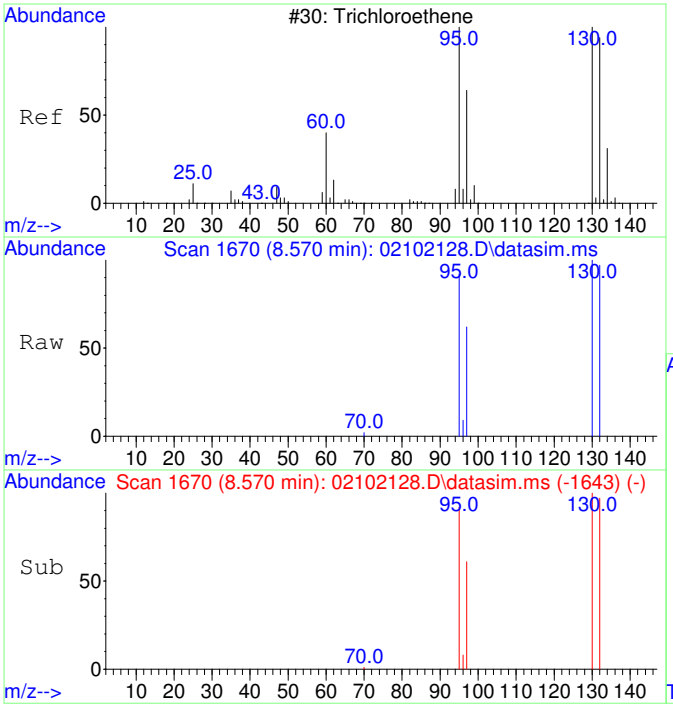


#9
Benzene
Concen: 104.06 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 02102128.D
Acq: 10 Feb 2021 19:53

Tgt Ion: 78 Resp: 3100

Ion	Ratio	Lower	Upper
78	100		
77	36.6	0.0	53.2

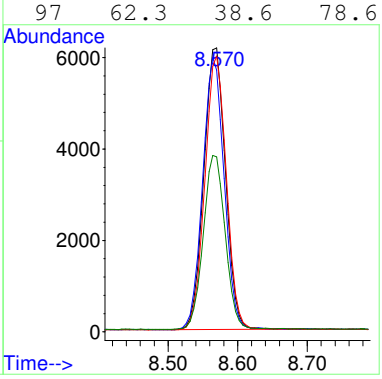


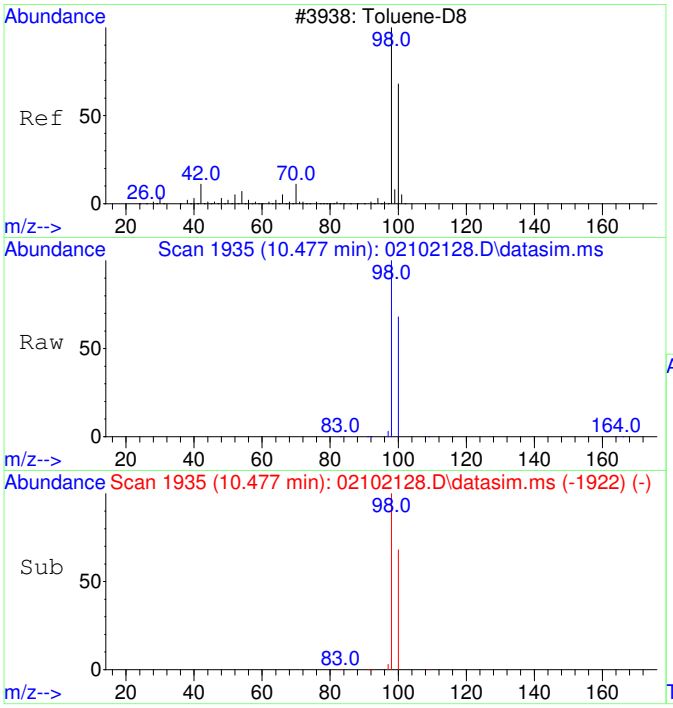


#11
Trichloroethene
Concen: 1419.13 ug/L
RT: 8.570 min Scan# 1670
Delta R.T. -0.005 min
Lab File: 02102128.D
Acq: 10 Feb 2021 19:53

Tgt Ion:130 Resp: 13348

Ion	Ratio	Lower	Upper
130	100		
95	95.0	60.7	120.7
132	95.5	76.0	116.0
97	62.3	38.6	78.6

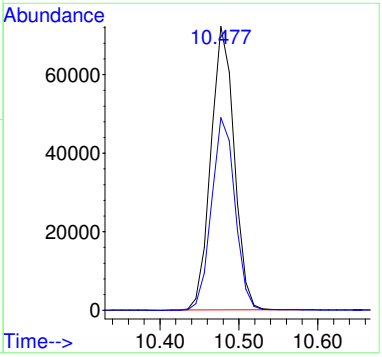


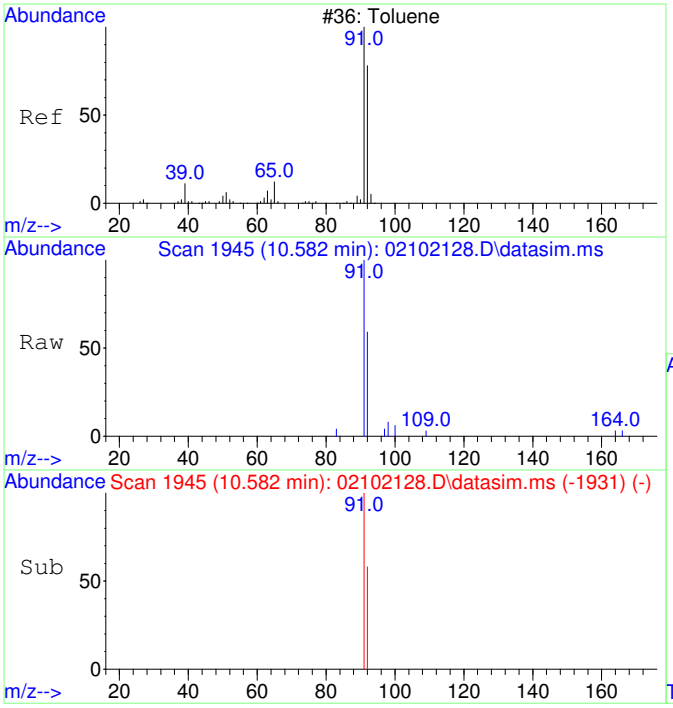


#12
Toluene-d8
Concen: 4304.79 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 02102128.D
Acq: 10 Feb 2021 19:53

Tgt Ion: 98 Resp: 147603

Ion	Ratio	Lower	Upper
98	100		
100	68.1	37.1	97.1

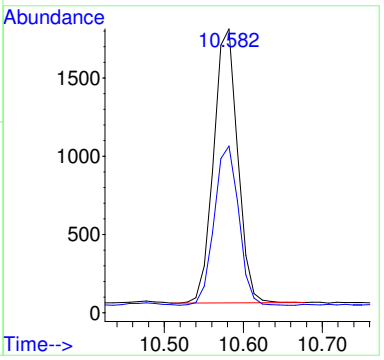


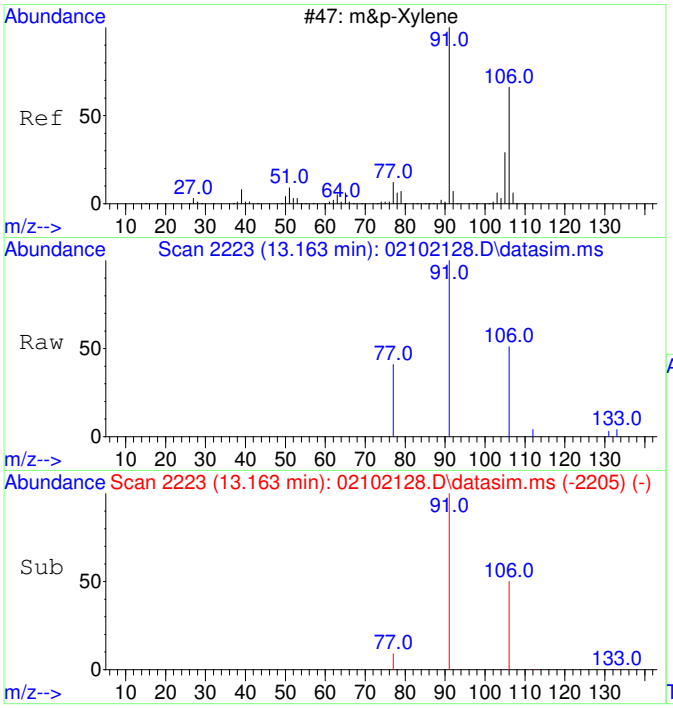


#13
Toluene
Concen: 86.79 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 02102128.D
Acq: 10 Feb 2021 19:53

Tgt Ion: 91 Resp: 3705

Ion	Ratio	Lower	Upper
91	100		
92	59.3	29.9	89.9

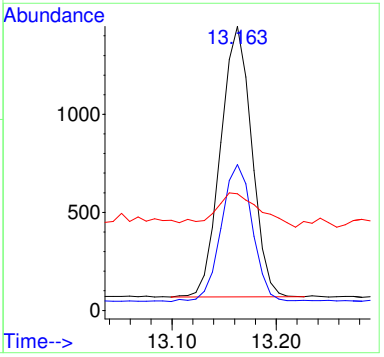


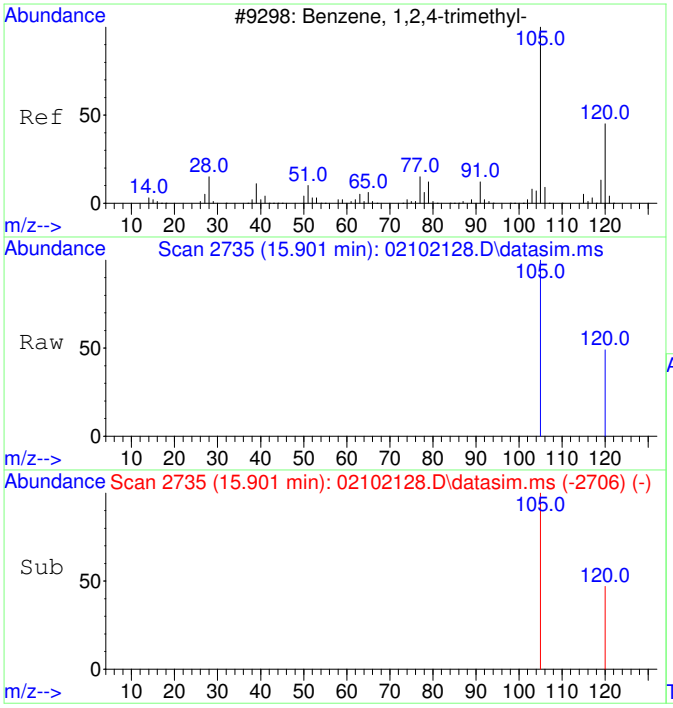


#19
m&p-Xylene
Concen: 67.94 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 02102128.D
Acq: 10 Feb 2021 19:53

Tgt Ion: 91 Resp: 2853

Ion	Ratio	Lower	Upper
91	100		
106	50.5	22.2	82.2
77	18.3	0.0	42.4

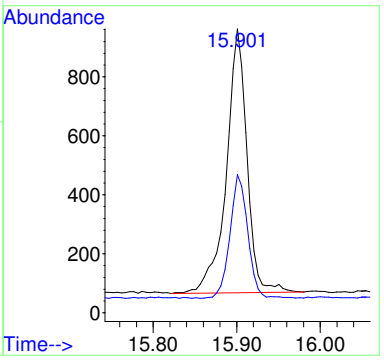


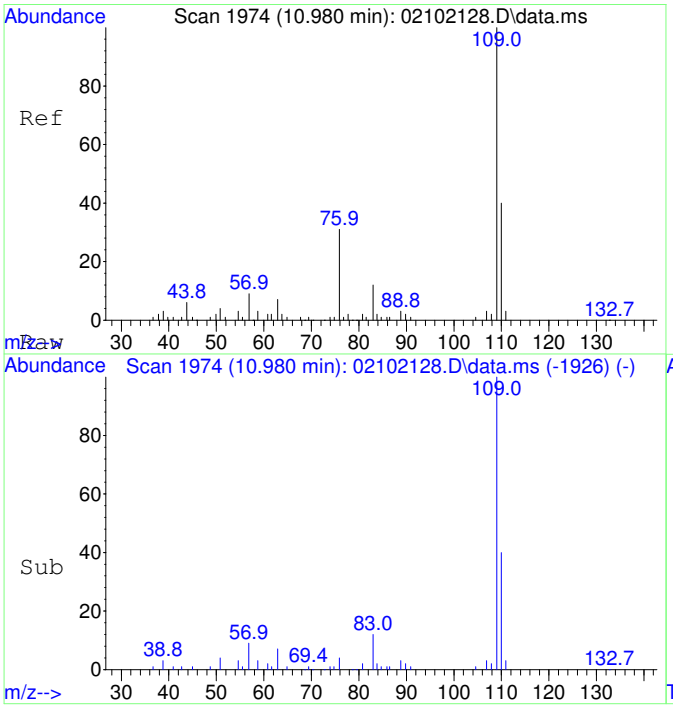


#23
1,2,4-Trimethylbenzene
Concen: 30.30 ug/L
RT: 15.901 min Scan# 2735
Delta R.T. -0.005 min
Lab File: 02102128.D
Acq: 10 Feb 2021 19:53

Tgt Ion:105 Resp: 1537

Ion	Ratio	Lower	Upper
105	100		
120	40.4	17.2	77.2

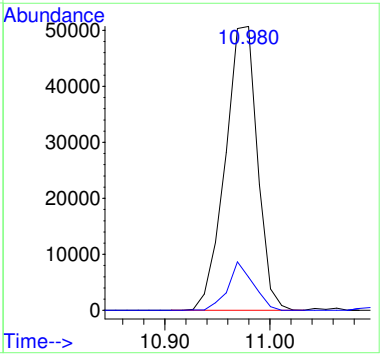


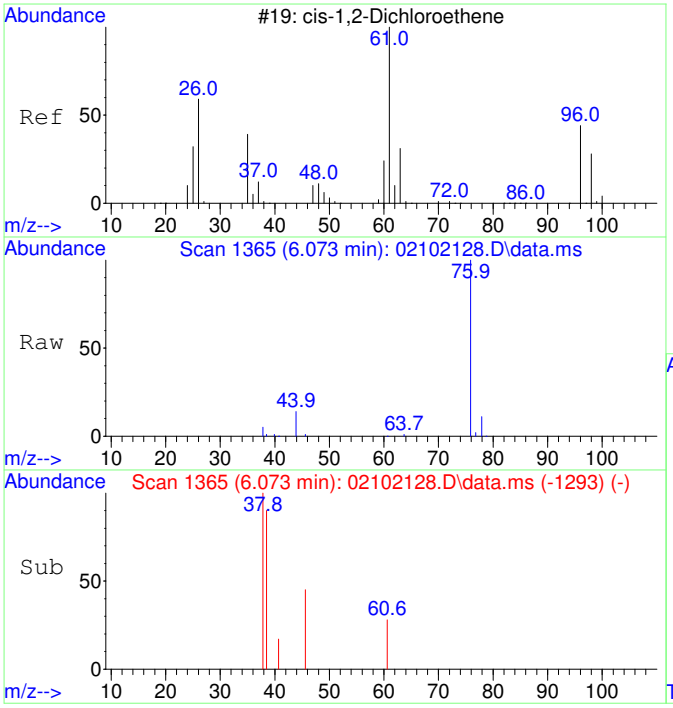


#25
2-Fluorotoluene SCAN
Concen: 5376.56 ug/L
RT: 10.980 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 02102128.D
Acq: 10 Feb 2021 19:53

Tgt Ion:109 Resp: 108046

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	43.8

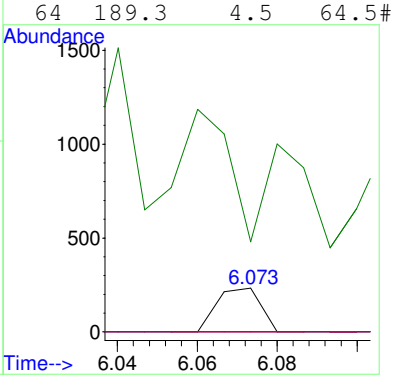


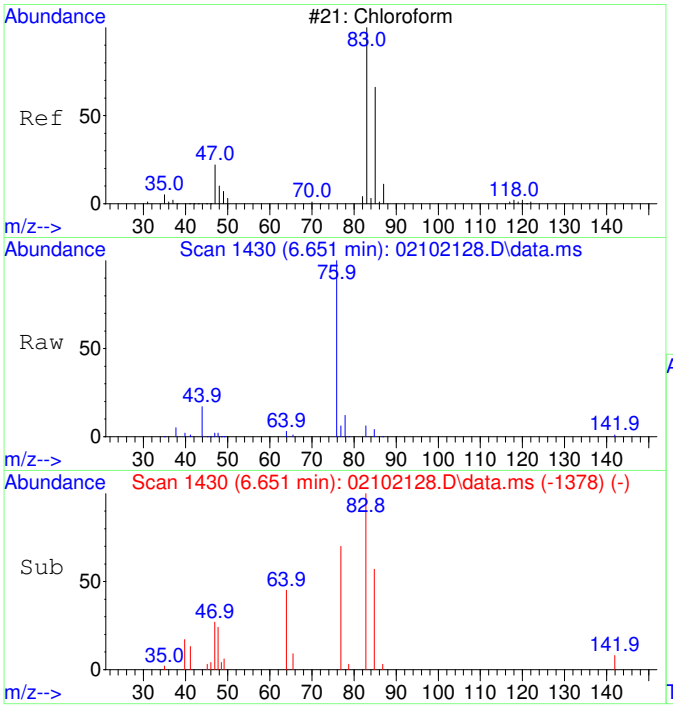


#29
cis-1,2-Dichloroethene SCAN
Concen: 25.67 ug/L
RT: 6.073 min Scan# 1365
Delta R.T. -0.020 min
Lab File: 02102128.D
Acq: 10 Feb 2021 19:53

Tgt Ion: 61 Resp: 178

Ion	Ratio	Lower	Upper
61	100		
96	0.0	39.9	99.9#
98	0.0	13.5	73.5#
64	189.3	4.5	64.5#

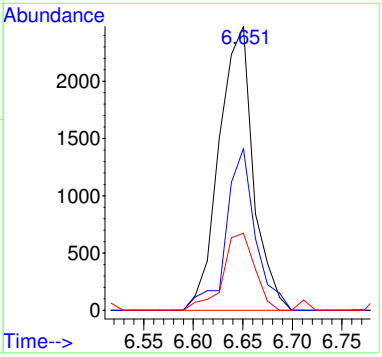


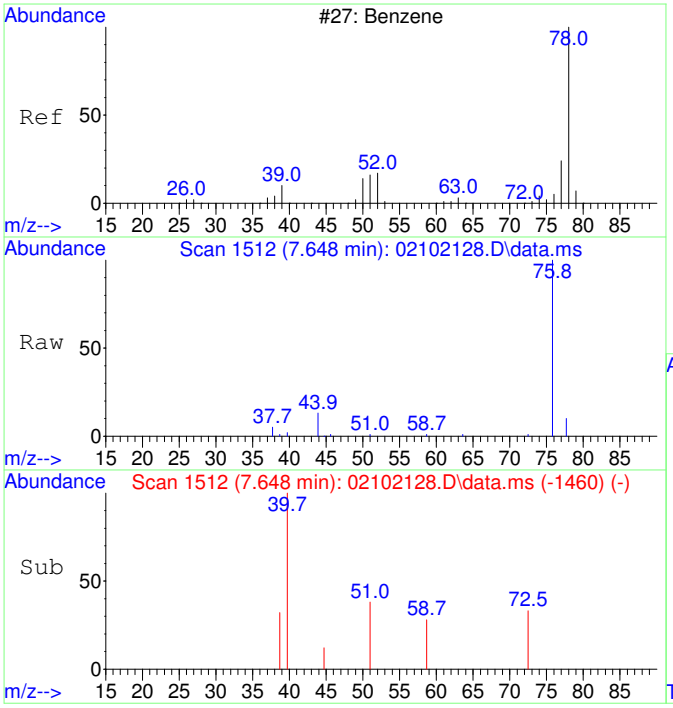


#30
Chloroform SCAN
Concen: 919.87 ug/L
RT: 6.651 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 02102128.D
Acq: 10 Feb 2021 19:53

Tgt Ion: 83 Resp: 5949

Ion	Ratio	Lower	Upper
83	100		
85	48.9	34.6	94.6
47	25.4	0.0	53.4

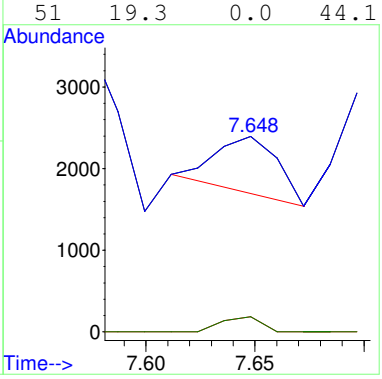


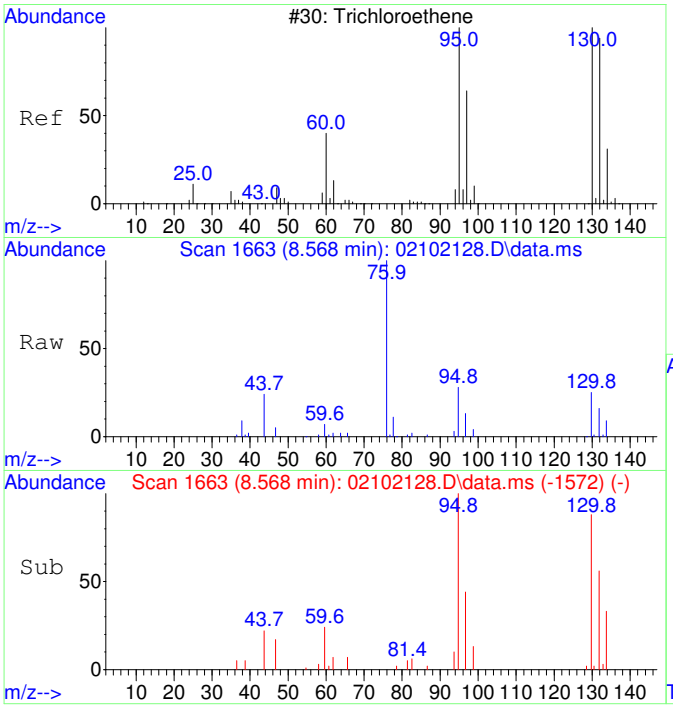


#33
Benzene SCAN
Concen: 60.53 ug/L
RT: 7.648 min Scan# 1512
Delta R.T. 0.134 min
Lab File: 02102128.D
Acq: 10 Feb 2021 19:53

Tgt Ion: 78 Resp: 1222

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	19.3	0.0	47.9
51	19.3	0.0	44.1

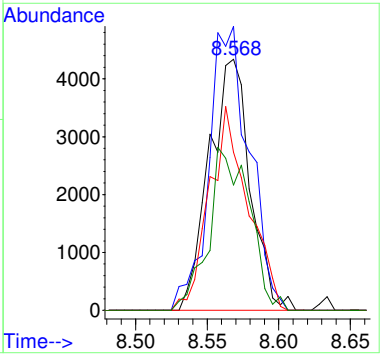


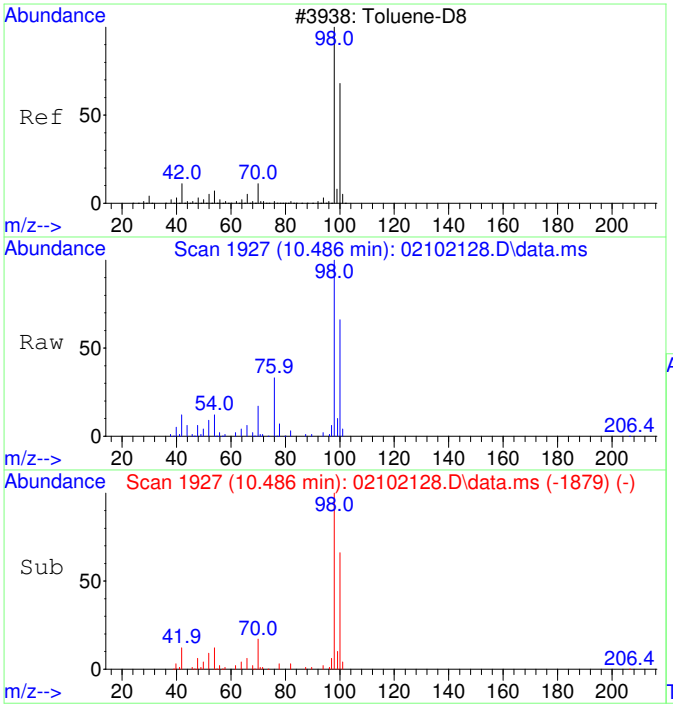


#35
Trichloroethene SCAN
Concen: 1957.58 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.005 min
Lab File: 02102128.D
Acq: 10 Feb 2021 19:53

Tgt Ion:130 Resp: 8618

Ion	Ratio	Lower	Upper
130	100		
95	111.6	60.5	120.5
132	76.8	59.6	119.6
97	64.8	28.2	88.2

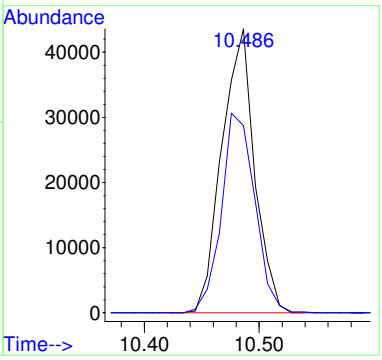


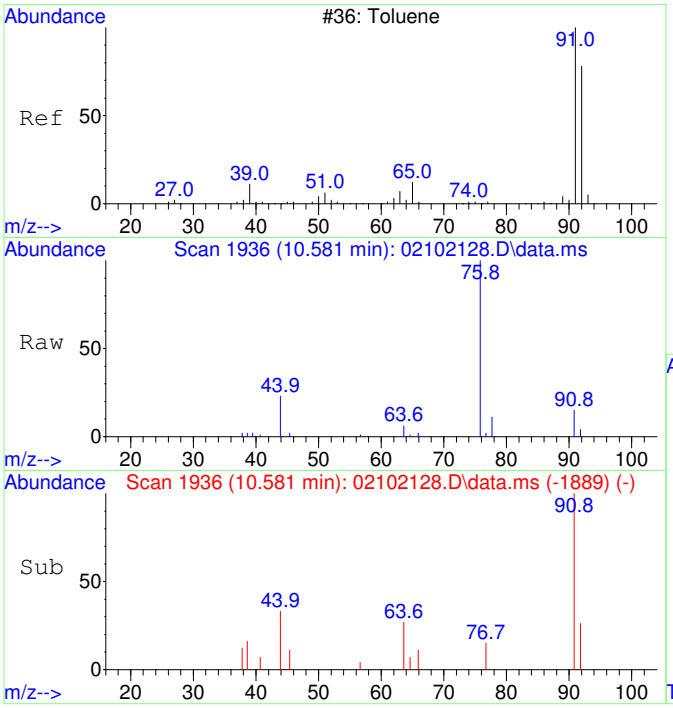


#36
Toluene-d8 SCAN
Concen: 4579.04 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 02102128.D
Acq: 10 Feb 2021 19:53

Tgt Ion: 98 Resp: 86304

Ion	Ratio	Lower	Upper
98	100		
100	72.0	40.0	100.0

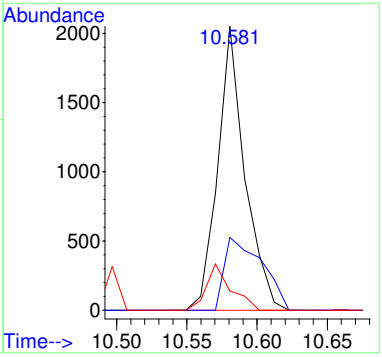


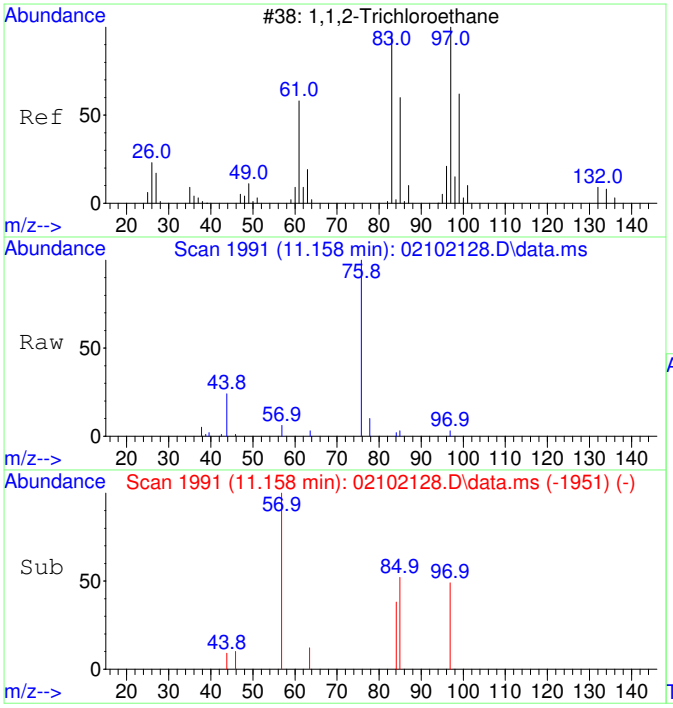


#37
Toluene SCAN
Concen: 119.41 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 02102128.D
Acq: 10 Feb 2021 19:53

Tgt Ion: 91 Resp: 2771

Ion	Ratio	Lower	Upper
91	100		
92	35.5	28.3	88.3
65	14.7	0.0	41.0

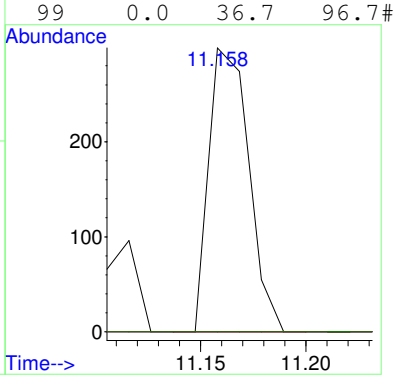


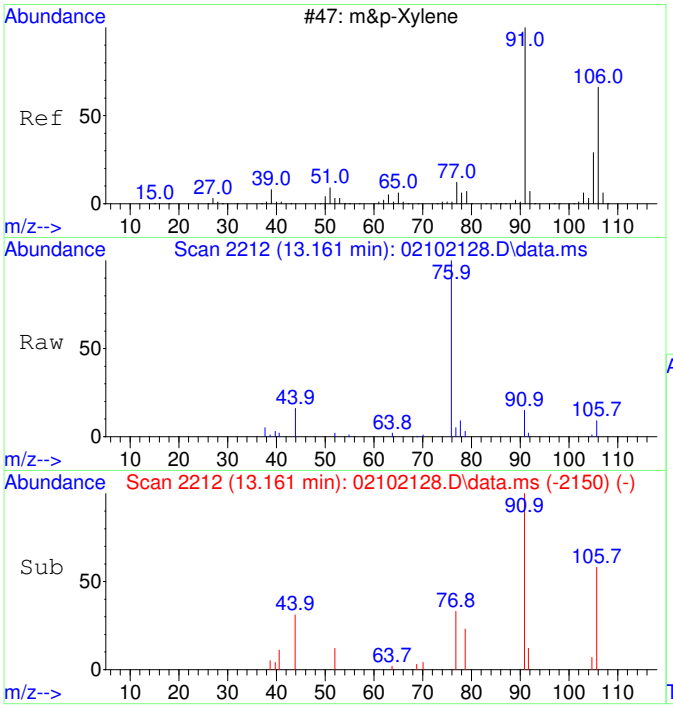


#38
1,1,2-Trichloroethane SCAN
Concen: 67.91 ug/L
RT: 11.158 min Scan# 1991
Delta R.T. -0.084 min
Lab File: 02102128.D
Acq: 10 Feb 2021 19:53

Tgt Ion: 97 Resp: 395

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#

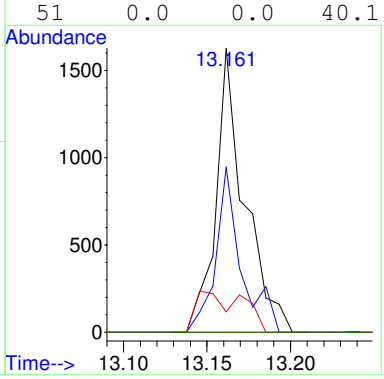


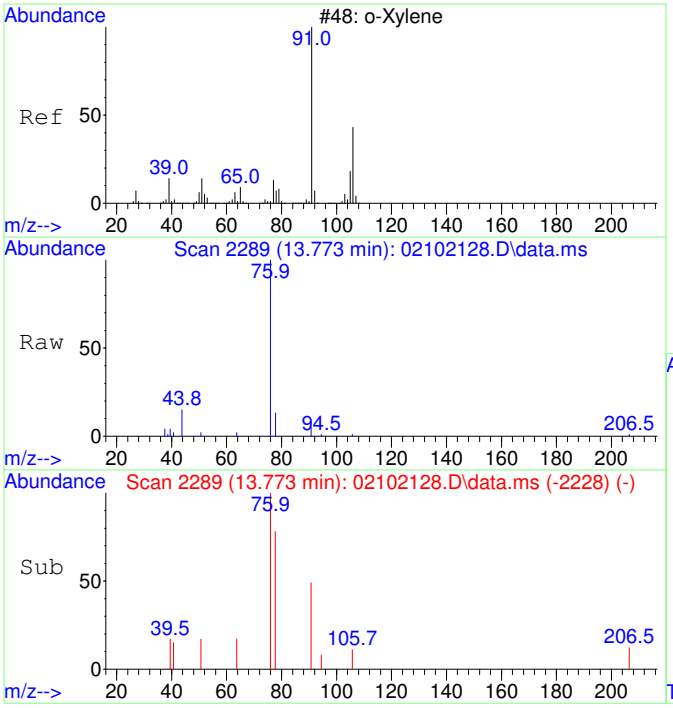


#43
m&p-Xylene SCAN
Concen: 44.00 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.008 min
Lab File: 02102128.D
Acq: 10 Feb 2021 19:53

Tgt Ion: 91 Resp: 1946

Ion	Ratio	Lower	Upper
91	100		
106	51.5	23.1	83.1
105	23.3	0.0	54.7
51	0.0	0.0	40.1

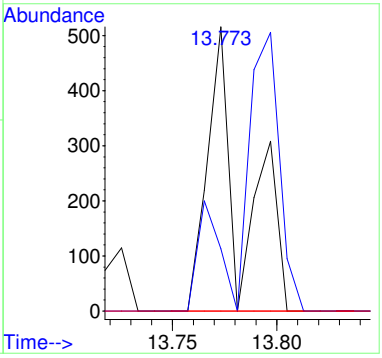




#44
o-Xylene SCAN
Concen: 24.64 ug/L
RT: 13.773 min Scan# 2289
Delta R.T. -0.016 min
Lab File: 02102128.D
Acq: 10 Feb 2021 19:53

Tgt Ion: 91 Resp: 595

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



Calibration

2102007

Calibration Date: 02/15/2021

Instrument: AG5975CV

Calibration Analyses:

VOCs, Passive Samplers

Response Factor Report AG5975C

Method Path : C:\MSDCHEM\1\RAVIOLI METHODS\2021\
Method File : 021521.M
Title : Volatile Organic Analysis - Passive samplers
Last Update : Mon Feb 15 13:27:06 2021
Response Via : Initial Calibration

Calibration Files
25 =02152103.D 10 =02152104.D 5 =02152105.D 1 =02152106.D .15 =02152107.D .05 =02152108.D

		Compound	25	10	5	1	.15	.05	Avg	%RSD
1)	I	2-Fluorotoluene	----------ISTD----------							
2)	T	1,1-Dichloroet...	0.227	0.243	0.251	0.223	0.234	0.220	0.233	5.18
3)	T	trans-1,2-Dich...	0.234	0.249	0.266	0.251	0.258	0.219	0.246	6.91
4)	T	1,1-Dichloroet...	0.275	0.295	0.315	0.300	0.304	0.291	0.296	4.55
5)	T	cis-1,2-Dichlo...	0.270	0.288	0.308	0.297	0.303	0.286	0.292	4.68
6)	T	Chloroform	0.282	0.295	0.316	0.304	0.323	0.348	0.311	7.40
7)	T	1,1,1-Trichlor...	0.278	0.288	0.307	0.299	0.298	0.306	0.296	3.78
8)	T	Carbon tetrach...	0.241	0.244	0.257	0.250	0.243	0.249	0.247	2.48
9)	T	Benzene	0.714	0.753	0.806	0.855	1.126		0.851	19.16
10)	T	1,2-Dichloroet...	0.251	0.266	0.284	0.281	0.284	0.263	0.272	5.02
11)	T	Trichloroethene	0.208	0.217	0.234	0.235	0.233	0.225	0.225	4.80
12)	S	Toluene-d8	0.791	0.835	0.877	0.907	0.890	0.871	0.862	4.88
13)	T	Toluene	0.971	1.043	1.101	1.189	1.302	1.554	1.193	17.68
14)	T	1,1,2-Trichlor...	0.221	0.228	0.238	0.244	0.239	0.240	0.235	3.69
15)	T	Tetrachloroethene	0.281	0.298	0.312	0.326	0.325	0.332	0.312	6.30
16)	T	Chlorobenzene	0.773	0.827	0.853	0.906	1.108	1.492	0.993	27.22
17)	T	1,1,1,2-Tetrac...	0.236	0.241	0.244	0.250	0.248	0.234	0.242	2.53
18)	T	Ethylbenzene	1.310	1.430	1.467	1.596	1.616	1.610	1.505	8.24
19)	T	m&p-Xylene	1.009	1.102	1.131	1.245	1.292	1.323	1.184	10.33
)	T	o-Xylene	1.113	1.214	1.224	1.344	1.398	1.400	1.282	9.07
)	T	1,1,2,2-Tetrac...	0.486	0.514	0.513	0.540	0.532	0.542	0.521	4.08
)	T	1,3,5-Trimethy...	1.267	1.389	1.383	1.518	1.542	1.406	1.417	7.08
)	T	1,2,4-Trimethy...	1.295	1.416	1.405	1.557	1.678	1.686	1.506	10.58
)	T	Naphthalene	2.190	2.208	2.176	1.979	1.707	1.885	2.024	10.05
)		2-Fluorotoluen...			0.538				0.538	0.00
)		1,1-Dichloroet...			0.171				0.171	0.00
)		trans-1,2-Dich...			0.180				0.180	0.00
)		1,1-Dichloroet...			0.222				0.222	0.00
)		cis-1,2-Dichlo...			0.206				0.206	0.00
)		Chloroform SCAN			0.189				0.189	0.00
)		1,1,1-Trichlor...			0.194				0.194	0.00
)		Carbon tetrach...			0.156				0.156	0.00
)		Benzene SCAN			0.532				0.532	0.00
)		1,2-Dichloroet...			0.194				0.194	0.00
)		Trichloroethen...			0.118				0.118	0.00
)		Toluene-d8 SCAN			0.475				0.475	0.00
)		Toluene SCAN			0.681				0.681	0.00
)		1,1,2-Trichlor...			0.135				0.135	0.00
)		Tetrachloroeth...			0.132				0.132	0.00
)		Chlorobenzene ...			0.417				0.417	0.00
)		1,1,1,2-Tetrac...			0.134				0.134	0.00
)		Ethylbenzene SCAN			1.264				1.264	0.00

Response Factor Report AG5975C

Method Path : C:\MSDCHEM\1\RAVIOLI METHODS\2021\
Method File : 021521.M

43)	m&p-Xylene SCAN	1.264	1.264	0.00
44)	o-Xylene SCAN	0.687	0.687	0.00
45)	1,1,2,2-Tetrac...	0.320	0.320	0.00
46)	1,3,5-Trimethy...	0.724	0.724	0.00
47)	1,2,4-Trimethy...	0.719	0.719	0.00
48)	Naphthalene SCAN	0.933	0.933	0.00

(#) = Out of Range

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Method Path : C:\MSDCHEM\1\RAVIOLI METHODS\2021\
Method File : 021521.M
Title : Volatile Organic Analysis - Passive samplers
Last Update : Mon Feb 15 13:33:37 2021
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	10.928	1.000	A	1	A	B
2	T	1,1-Dichloroethene	-61	3.056	0.280	A	1	A	B
3	T	trans-1,2-Dichloroethene	-61	4.230	0.387	A	1	A	B
4	T	1,1-Dichloroethane	-63	4.980	0.456	A	1	A	B
5	T	cis-1,2-Dichloroethene	-61	6.001	0.549	A	1	A	B
6	T	Chloroform	-83	6.579	0.602	A	1	A	B
7	T	1,1,1-Trichloroethane	-97	6.834	0.625	A	2	A	B
8	T	Carbon tetrachloride	-117	7.114	0.651	A	1	A	B
9	T	Benzene	-78	7.442	0.681	A	1	A	B
10	T	1,2-Dichloroethane	-62	7.479	0.684	A	1	A	B
11	T	Trichloroethene	-130	8.520	0.780	A	3	A	B
12	S	Toluene-d8	-98	10.435	0.955	A	1	A	B
13	T	Toluene	-91	10.540	0.964	A	1	A	B
14	T	1,1,2-Trichloroethane	-97	11.190	1.024	A	1	A	B
15	T	Tetrachloroethene	-166	11.390	1.042	A	1	A	B
16	T	Chlorobenzene	-112	12.726	1.164	A	1	A	B
17	T	1,1,1,2-Tetrachloroethane	-131	12.877	1.178	A	1	A	B
18	T	Ethylbenzene	-91	12.932	1.183	A	2	A	B
19	T	m&p-Xylene	-91	13.131	1.202	A	2	A	B
20	T	o-Xylene	-91	13.742	1.258	A	1	A	B
21	T	1,1,2,2-Tetrachloroethane	-83	14.840	1.358	A	1	A	B
22	T	1,3,5-Trimethylbenzene	-105	15.314	1.401	A	1	A	B
23	T	1,2,4-Trimethylbenzene	-105	15.875	1.453	A	1	A	B
24	T	Naphthalene	-128	17.888	1.637	A	1	A	B
25		2-Fluorotoluene SCAN	109	10.937	1.001	A	1	A	B
26		1,1-Dichloroethene SCAN	61	3.055	0.280	A	2	A	B
27		trans-1,2-Dichloroethene SCAN	61	4.229	0.387	A	2	A	B
28		1,1-Dichloroethane SCAN	63	4.972	0.455	A	2	A	B
29		cis-1,2-Dichloroethene SCAN	61	6.000	0.549	A	3	A	B
30		Chloroform SCAN	83	6.577	0.602	A	2	A	B
31		1,1,1-Trichloroethane SCAN	97	6.845	0.626	A	2	A	B
32		Carbon tetrachloride SCAN	117	7.100	0.650	A	3	A	B
33		Benzene SCAN	78	7.441	0.681	A	3	A	B
34		1,2-Dichloroethane SCAN	62	7.490	0.685	A	2	A	B
35		Trichloroethene SCAN	130	8.519	0.780	A	3	A	B
36		Toluene-d8 SCAN	98	10.444	0.956	A	1	A	B
37		Toluene SCAN	91	10.549	0.965	A	2	A	B
38		1,1,2-Trichloroethane SCAN	97	11.189	1.024	A	3	A	B
39		Tetrachloroethene SCAN	166	11.399	1.043	A	3	A	B
40		Chlorobenzene SCAN	112	12.732	1.165	A	3	A	B
41		1,1,1,2-Tetrachloroethane SCAN	131	12.875	1.178	A	3	A	B
42		Ethylbenzene SCAN	91	13.130	1.201	A	2	A	B
43		m&p-Xylene SCAN	91	13.130	1.201	A	3	A	B
44		o-Xylene SCAN	91	13.749	1.258	A	2	A	B
45		1,1,2,2-Tetrachloroethane SCAN	83	14.842	1.358	A	2	A	B
46		1,3,5-Trimethylbenzene SCAN	105	15.312	1.401	A	2	A	B
47		1,2,4-Trimethylbenzene SCAN	105	15.878	1.453	A	3	A	B
48		Naphthalene SCAN	128	17.886	1.637	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

021521.M Mon Feb 15 14:00:40 2021

CHEMSTATION AREA COUNT REPORT

AG5975C
S21B036-SCV1
2106043 5 mg/L
2/15/2021
Mon Feb 15 13:33:37 2021
TD

#	Name	L1	L2	L3	L4	L5	L6
1)	2-Fluorotoluene	235970	208366	212739	302131	287015	225463
2)	1,1-Dichloroethene	268248 ⌄	101180	53347	13468	2015	495
3)	trans-1,2-Dichloroethene	276171	103894	56505	15162	2218	493
4)	1,1-Dichloroethane	323997	122768	66926	18121	2616	655
5)	cis-1,2-Dichloroethene	319049	120177	65562	17957	2612 ⌄	644
6)	Chloroform	333135	123089	67243	18369	2778	785
7)	1,1,1-Trichloroethane	327896	120030	65405	18071	2563	689
8)	Carbon tetrachloride	284227	101610	54767	15121	2089	561
9)	Benzene	841975	313771	171507	51663	9697	3886
10)	1,2-Dichloroethane	295696	111046	60497	16951	2445	594
11)	Trichloroethene	245151 ⌄	90593 ⌄	49716 ⌄	14179 ⌄	2005 ⌄	507 ⌄
12)	Toluene-d8	932926	348125	186497	54792	7659	1963
13)	Toluene	1145134	434853	234187	71825	11212	3504
14)	1,1,2-Trichloroethane	260856	94980	50636	14752	2062	540
15)	Tetrachloroethene	331376	124209	66440	19722	2800	748
16)	Chlorobenzene	912506	344837	181446	54756	9544	3365
17)	1,1,1,2-Tetrachloroethane	279034	100451	51840	15091	2133	528
18)	Ethylbenzene	1545223	595887	312076	96451	13917	3629
19)	m&p-Xylene	2381596	918598	481125	150404	22258	5966
20)	o-Xylene	1313570	505763	260419	81216	12039	3156
21)	1,1,2,2-Tetrachloroethane	573424	214265	109090	32622	4577	1223
22)	1,3,5-Trimethylbenzene	1494788	578781	294238	91713	13278	3170
23)	1,2,4-Trimethylbenzene	1528443	590235	298986	94099	14450	3801
24)	Naphthalene	2584161	920310	462978	119572	14699	5881

CHEMSTATION CONCENTRATION REPORT

AG5975C
S21B036-SCV1
2106043 5 mg/L
2/15/2021
Mon Feb 15 13:33:37 2021
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: S21B036-SCV1
Misc Info: 2106043 5 mg/L
Date Acquired: 2/15/2021
QLast Update: Mon Feb 15 13:33:37 2021
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.928	5000	5000.00	100%	70	130	pass
2)	1,1-Dichloroethene	3.056	5000	5072.56	101%	70	130	pass
3)	trans-1,2-Dichloroethene	4.230	5000	4910.26	98%	70	130	pass
4)	1,1-Dichloroethane	4.980	5000	4930.26	99%	70	130	pass
5)	cis-1,2-Dichloroethene	6.001	5000	4909.99	98%	70	130	pass
6)	Chloroform	6.579	5000	4786.45	96%	70	130	pass
7)	1,1,1-Trichloroethane	6.834	5000	4940.16	99%	70	130	pass
8)	Carbon tetrachloride	7.114	5000	4962.86	99%	70	130	pass
9)	Benzene	7.442	5000	4531.13	91%	70	130	pass
10)	1,2-Dichloroethane	7.479	5000	4978.75	100%	70	130	pass
11)	Trichloroethene	8.520	5000	5010.63	100%	70	130	pass
12)	Toluene-d8	10.435	5000	4840.62	97%	70	130	pass
13)	Toluene	10.540	5000	4542.84	91%	70	130	pass
14)	1,1,2-Trichloroethane	11.190	5000	4968.02	99%	70	130	pass
15)	Tetrachloroethene	11.390	5000	4934.05	99%	70	130	pass
16)	Chlorobenzene	12.726	5000	4262.10	85%	70	130	pass
17)	1,1,1,2-Tetrachloroethane	12.877	5000	4959.84	99%	70	130	pass
18)	Ethylbenzene	12.932	5000	4883.39	98%	70	130	pass
19)	m&p-Xylene	13.131	10000	9479.11	95%	70	130	pass
20)	o-Xylene	13.742	5000	4761.98	95%	70	130	pass
21)	1,1,2,2-Tetrachloroethane	14.840	5000	4852.62	97%	70	130	pass
22)	1,3,5-Trimethylbenzene	15.314	5000	4940.62	99%	70	130	pass
23)	1,2,4-Trimethylbenzene	15.875	5000	4673.86	93%	70	130	pass
24)	Naphthalene	17.888	5000	4835.19	97%	70	130	pass

SEQUENCE

S21B036

Sequence Date: 02/15/2021

Instrument: AG5975CV

Sequence Analyses:

VOCs, Passive Samplers

ANALYST / REVIEWER - DATA REVIEW CHECKLIST

BATCH #:	B21B045	SEQUENCE #:	S21B036 02/15/21
BATCH #:		ANALYSIS:	VOA Passive Air. ICAL; R21S04

	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.	Mon Feb 15 13:33:37 2021			
	Initial Calibration ID (LIMS number):	2102007			
	ICAL within QC criteria?	☐	Y	Y	Chlorobenzene >20%
	SCV within QC criteria?	☐	Y	Y	
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 #:	B21B045	SEQUENCE #:	S21B036 02/15/21
BATCH #:		ANALYSIS:	VOA Passive Air. ICAL; R21S04

	CHECKLIST ITEM	N/A	ANALYST Y/N	REVIEWER Y/N	IDENTIFY OUTLIERS / COMMENTS
IS / SS	Internal standards within QC criteria?	☐	Y	Y	* SEE COMMENTS
	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?	✔			
	Do any samples need to be re-digested or re-extracted?	✔			
	Were all data qualifiers appropriately applied?	☐	Y	Y	
	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 02/16/21
	REVIEWED BY:	ZIYAD RAJABI (Affiliate) Digitally signed by ZIYAD RAJABI (Affiliate) Date: 2021.02.17 15:59:59 -08'00' SIGN HERE

COMMENTS

Custom analyte list.

* Samples: 2102006-02RE2,-03RE1,-04RE2,-10RE2, and -11RE2 failed IS due to incorrect dilution.

Injection Log

Operator: TD
Directory: C:\msdchem\1\Ravioli Data\2021\021521ICAL\

Vial	File Name	Mult	Sample Info	Misc Info	Date Acquired
1	02152101.D	1	S21B036-IBL1		15 Feb 2021 10:00
2	02152102.D	1	S21B036-TUN1	BFB 2040028	15 Feb 2021 10:56
3	02152103.D	1	S21B036-CAL1	2106037 25 mg/L	15 Feb 2021 11:05
4	02152104.D	1	S21B036-CAL2	2106038 10 mg/L	15 Feb 2021 11:29
5	02152105.D	1	S21B036-CAL3	2106039 5 mg/L	15 Feb 2021 11:53
6	02152106.D	1	S21B036-CAL4	2106040 1 mg/L	15 Feb 2021 12:16
7	02152107.D	1	S21B036-CAL5	2106041 0.15 mg/L	15 Feb 2021 12:40
8	02152108.D	1	S21B036-CAL6	2106042 0.05 mg/L	15 Feb 2021 13:03
9	02152109.D	1	S21B036-SCV1	2106043 5 mg/L	15 Feb 2021 13:27
10	02152110.D	1	2102006-06RE1	RA for low surr	15 Feb 2021 13:55
11	02152111.D	1	2102006-08RE1	RA for low surr	15 Feb 2021 14:18
12	02152112.D	1	2102008-03RE1	RA for low IS	15 Feb 2021 14:42
13	02152113.D	1	2102008-04RE1	RA for low surr	15 Feb 2021 15:06
14	02152114.D	1	2102008-05RE1	RA for low surr	15 Feb 2021 15:29
15	02152115.D	5	2102006-02RE2	5X DL (160-40)	15 Feb 2021 15:53
16	02152116.D	10	2102006-03RE1	10X DL (180-20)	15 Feb 2021 16:16
17	02152117.D	10	2102006-04RE2	10X DL (180-20)	15 Feb 2021 16:40
18	02152118.D	10	2102006-10RE2	10X DL (180-20)	15 Feb 2021 17:03
19	02152119.D	10	2102006-11RE2	10X DL (180-20)	15 Feb 2021 17:27
20	02152120.D	1	2102006-10RE1	RA for low surr	15 Feb 2021 17:51
21	02152121.D	1	2102006-11RE1	RA for low surr	15 Feb 2021 18:14

not used

GC/MS QA-QC Check Report

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Tune File : C:\msdchem\1\Ravioli Data\2021\021521ICAL\02152102.D
Tune Time : 15 Feb 2021 10:56

Daily Calibration File : C:\msdchem\1\Ravioli Data\2021\021521ICAL\02152105.D

212739

File	Sample	Surrogate Recovery %	Internal Standard Responses	
02152103.D	S21B036-CAL1	459*	235970	
02152104.D	S21B036-CAL2	194*	208366	
02152105.D	S21B036-CAL3	102	212739	
02152106.D	S21B036-CAL4	21*	302131	
02152107.D	S21B036-CAL5	3*	287015	
02152108.D	S21B036-CAL6	1*	225463	
02152109.D	S21B036-SCV	97	219779	
02152110.D	2102006-06RE1	97	252962	RA for low surr
02152111.D	2102006-08RE1	98	230887	RA for low surr
02152112.D	2102008-03RE1	101	197991	RA for low surr
02152113.D	2102008-04RE1	99	291448	RA for low surr
02152114.D	2102008-05RE1	98	257329	RA for low surr
02152115.D	2102006-02RE2	98	470517*	5X DL incorrect DL , NOT USED
02152116.D	2102006-03RE1	98	434795*	10X DL incorrect DL , NOT USED
02152117.D	2102006-04RE2	98	551939*	10X DL incorrect DL , NOT USED
02152118.D	2102006-10RE1	98	434083*	10X DL incorrect DL , NOT USED
02152119.D	2102006-11RE1	98	432214*	10X DL incorrect DL , NOT USED
02152120.D	2102006-10RE2	97	242311	RA for low surr
02152121.D	2102006-11RE2	97	264138	RA for low surr

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

Created: Tue Feb 16 06:20:35 2021 AG5975C

Analysis Sequence

S21B036

Project: R21S04
Analysis: VOCs, Passive Samplers

Instrument: AG5975CV **Calibration ID:** 2102007 Printed: 02/16/2021 1:46 pm

Lab Number	Sample Name	Order	Analyzed Date	STD ID	ISTD ID	Sequenced By	File ID	Comments
S21B036-IBL1	Instrument Blank	1	2/15/21 10:00			TD	02152101.D	
S21B036-TUN1	BFB	2	2/15/21 10:56	2040028		TD	02152102.D	
S21B036-CAL1	Cal Standard	3	2/15/21 11:05	2106037		TD	02152103.D	
S21B036-CAL2	Cal Standard	4	2/15/21 11:29	2106038		TD	02152104.D	
S21B036-CAL3	Cal Standard	5	2/15/21 11:53	2106039		TD	02152105.D	
S21B036-CAL4	Cal Standard	6	2/15/21 12:16	2106040		TD	02152106.D	
S21B036-CAL5	Cal Standard	7	2/15/21 12:40	2106041		TD	02152107.D	
S21B036-CAL6	Cal Standard	8	2/15/21 13:03	2106042		TD	02152108.D	
S21B036-SCV1	Secondary Cal Check	9	2/15/21 13:27	2106043		TD	02152109.D	
2102006-06RE1 A	Waverly-MH1-2.5ft-2d-R	10	2/15/21 13:55			TD	02152110.D	
2102006-08RE1 A	Waverly-MH3-2ft-2d-R	11	2/15/21 14:18			TD	02152111.D	
2102008-03RE1 A	265 Whisman-PrvtOFC3-BZ-2d	12	2/15/21 14:42			TD	02152112.D	
2102008-04RE1 A	265 Whisman-Utilities-BZ-2d	13	2/15/21 15:06			TD	02152113.D	
2102008-05RE1 A	265 Whisman-NE-OUT-2d	14	2/15/21 15:29			TD	02152114.D	
2102006-02RE2 A	F6-031-3ft-2d-R	15	2/15/21 15:53			TD	02152115.D	
2102006-03RE1 A	F6-010-2.5ft-2d-R	16	2/15/21 16:16			TD	02152116.D	
2102006-04RE2 A	F6-006-3ft-2d-R	17	2/15/21 16:40			TD	02152117.D	
2102006-10RE2 A	Classics-MH1-3ft-2d-R	18	2/15/21 17:03			TD	02152118.D	
2102006-11RE2 A	Classics-MH2-2.5ft-2d-R	19	2/15/21 17:27			TD	02152119.D	
2102006-10RE1 A	Classics-MH1-3ft-2d-R	20	2/15/21 17:51			TD	02152120.D	
2102006-11RE1 A	Classics-MH2-2.5ft-2d-R	21	2/15/21 18:14			TD	02152121.D	

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Analysis Sequence

S21B036

(Continued)

Project: R21S04
Analysis: VOCs, Passive Samplers

Instrument: AG5975CV **Calibration ID:** 2102007 Printed: 02/16/2021 1:46 pm

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

Sequence Comments

Reagents

Reagent #	Description

SEQUENCE DATA

S21B036

S21B036-IBL1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152101.D
Acq On : 15 Feb 2021 10:00
InstName : AG5975C
Operator : TD
Sample : S21B036-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 15 13:34:53 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration

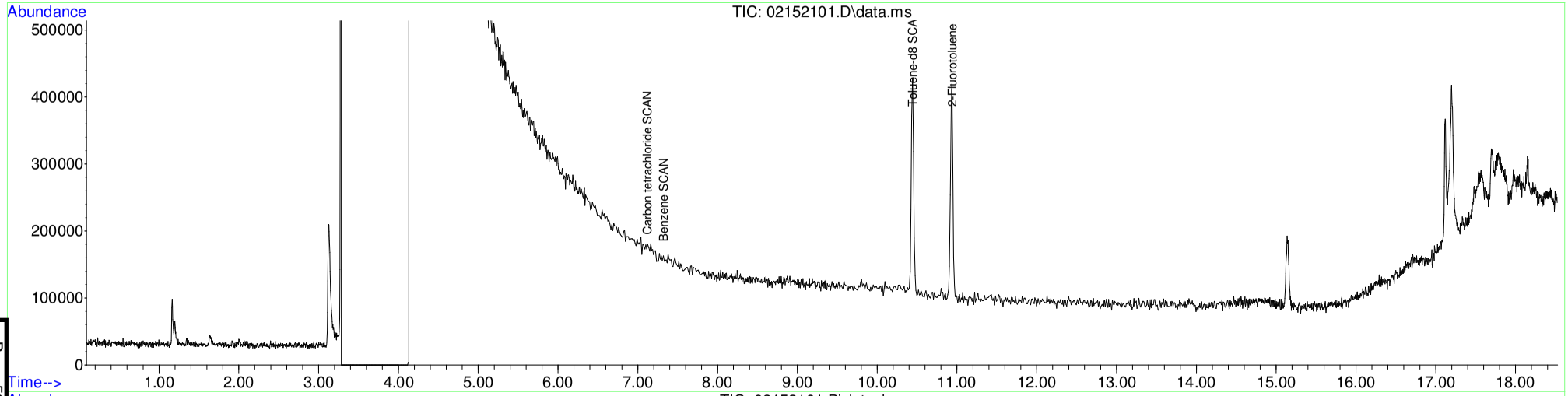
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.928	109	505776	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.435	98	431381	4949.52	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 98.99%			
Target Compounds						Qvalue
3] trans-1,2-Dichloroethene	4.243	61	604	24.27	ug/L	87
9] Benzene	7.442	78	2853	33.15	ug/L	45
22] 1,3,5-Trimethylbenzene	15.314	105	8165	56.95	ug/L	72
24] Naphthalene	17.851	128	20188	93.05	ug/L #	68
25) 2-Fluorotoluene SCAN	10.938	109	266221	4889.13	ug/L	98
32) Carbon tetrachloride SCAN	7.113	117	547	34.64	ug/L #	45
33) Benzene SCAN	7.320	78	7319	135.94	ug/L	96
36) Toluene-d8 SCAN	10.444	98	236900	4926.61	ug/L	97

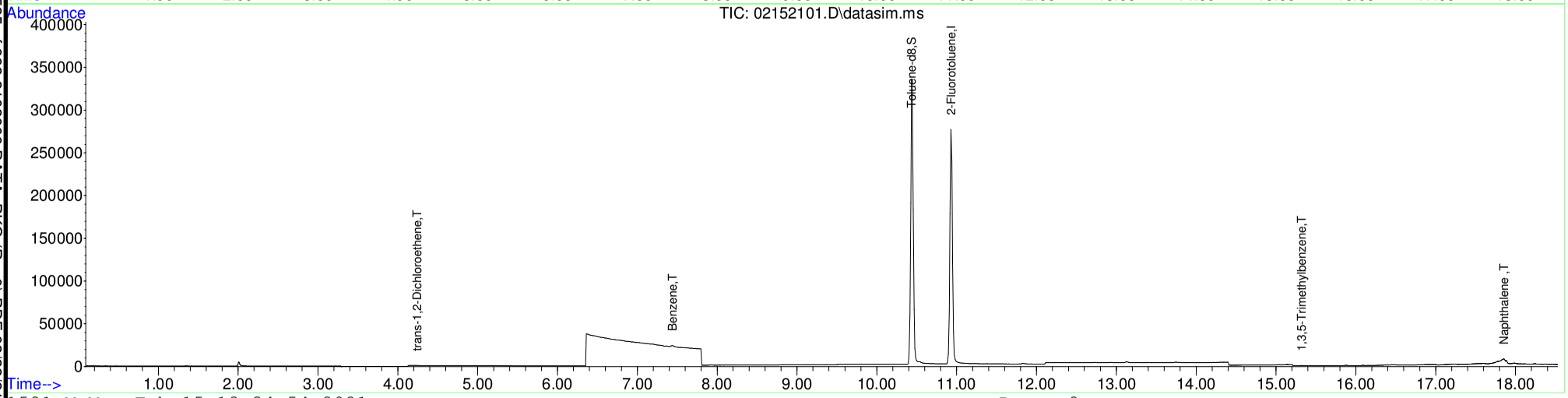
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152101.D
Acq On : 15 Feb 2021 10:00
InstName : AG5975C
Operator : TD
Sample : S21B036-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 15 13:34:53 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration





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S21B036-TUN1

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Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152102.D
Acq On    : 15 Feb 2021  10:56
Operator  : TD
Sample    : S21B036-TUN1
Misc      : BFB   2040028
ALS Vial  : 2   Sample Multiplier: 1
InstName  : AG5975C

Integration File: Ravioli.P

Method    : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Title     : Volatile Organic Analysis  -  Passive samplers
Last Update  : Mon Feb 15 08:00:43 2021
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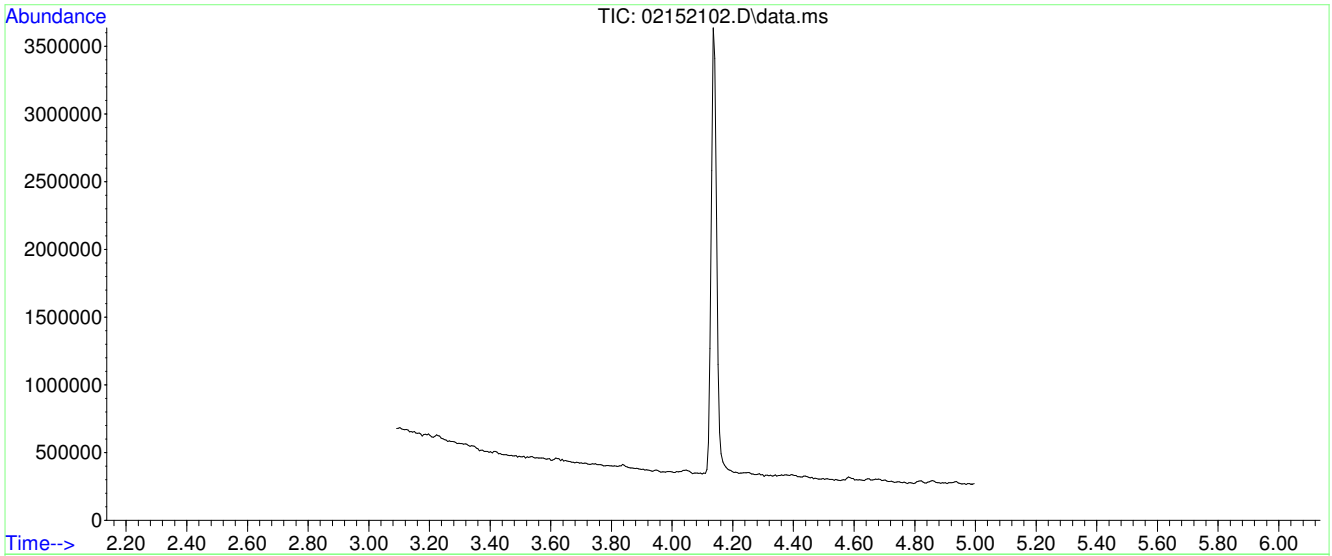
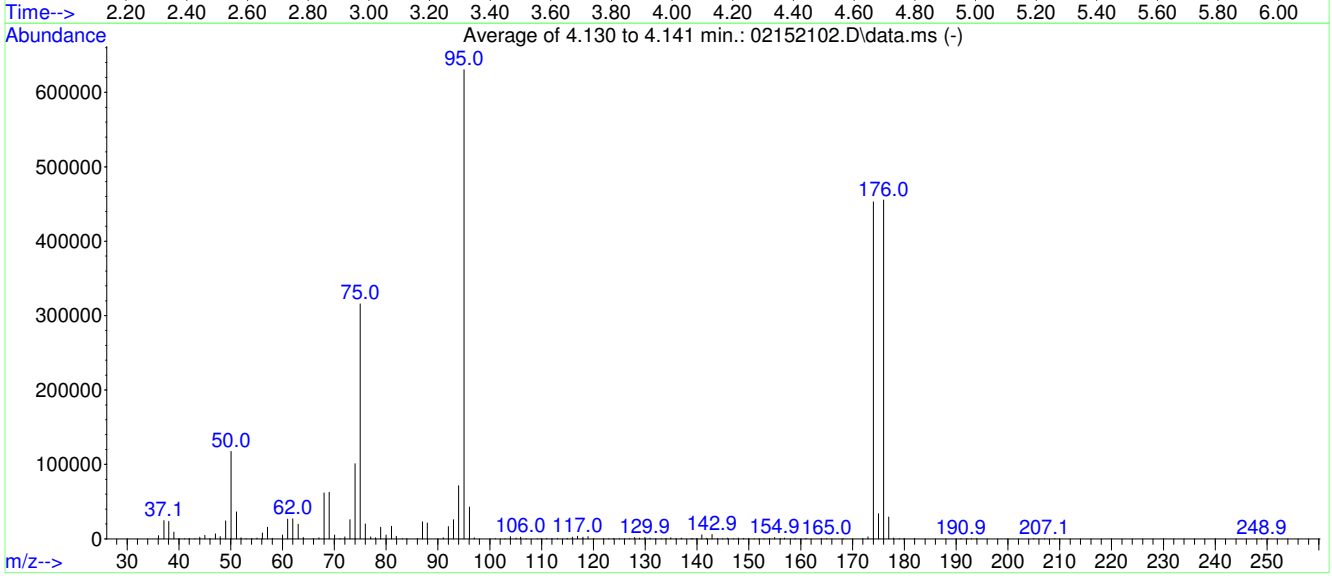




AutoFind: Scans 199, 200, 201; Background Corrected with Scan 193

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.7	117571	PASS
75	95	30	60	50.1	315630	PASS
95	95	100	100	100.0	630336	PASS
96	95	5	9	6.8	42707	PASS
173	174	0.00	2	0.6	2550	PASS
174	95	50	120	71.9	452971	PASS
175	174	5	9	7.4	33741	PASS
176	174	95	101	100.5	455444	PASS
177	176	5	9	6.5	29450	PASS

Average of 4.130 to 4.141 min.: 02152102.D\data.ms
S21B036-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	4220	47.05	6796	58.00	617	71.10	302
37.10	24400	48.00	3103	60.00	4973	72.00	2845
38.05	23101	49.05	23917	61.00	26683	73.00	25626
39.05	9005	50.05	117571	62.00	26757	74.00	100910
40.00	194	51.10	36352	63.00	19754	75.00	315630
41.10	154	52.00	1513	64.00	1794	76.00	19925
42.00	106	53.00	117	65.95	225	77.00	2696
43.10	418	54.05	180	67.05	1502	77.95	1363
44.00	2051	55.05	1015	68.00	61784	78.95	15397
45.00	4788	56.10	8077	69.00	62527	80.00	4939
46.00	344	57.10	15449	70.05	4943	81.00	16957

Average of 4.130 to 4.141 min.: 02152102.D\data.ms
S21B036-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
81.95	3449	96.10	42707	112.00	149	125.00	190
83.10	66	97.00	1511	113.05	532	126.05	122
84.00	316	101.05	185	114.95	555	127.00	134
86.00	306	102.95	193	115.95	2243	127.95	1985
87.00	22703	103.95	3247	116.95	3481	128.90	1164
87.95	21243	105.05	948	117.95	2312	129.95	2031
91.00	1583	105.95	2449	118.95	3203	130.95	1014
92.00	16366	107.00	436	120.05	61	132.00	140
93.00	25631	109.15	286	121.90	168	133.05	240
94.00	71237	109.90	292	122.95	275	134.00	478
95.00	630336	111.00	636	123.90	390	134.95	1342

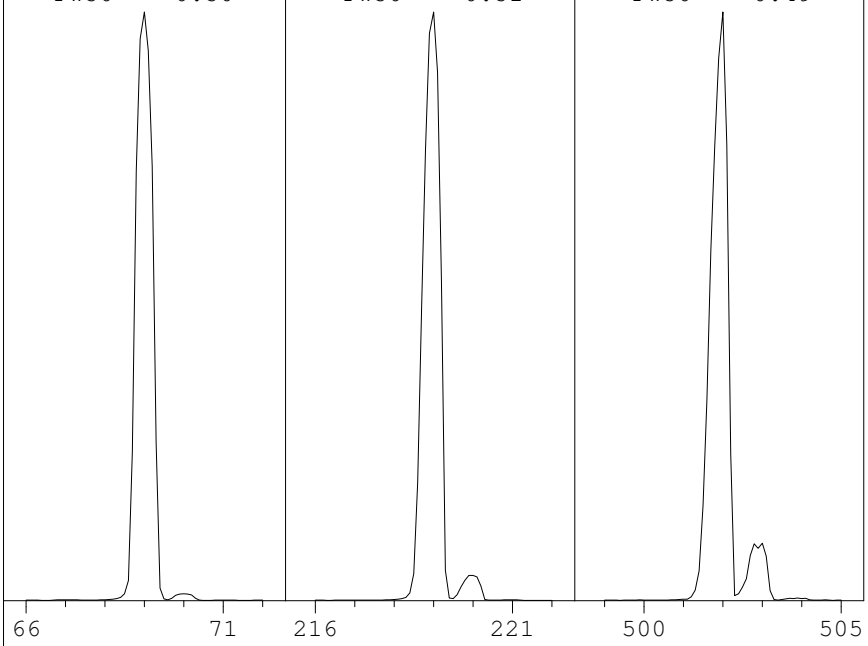
Average of 4.130 to 4.141 min.: 02152102.D\data.ms
S21B036-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
135.90	63	147.00	232	158.95	613	177.90	928
136.95	1058	147.95	1210	161.00	738	179.00	140
138.95	118	149.00	652	164.05	198	179.90	26
139.20	73	149.95	633	165.00	223	181.90	137
139.95	501	151.05	198	168.20	140	190.95	227
140.90	5531	151.95	327	172.00	151	192.10	54
141.85	645	152.95	437	173.00	2550	192.95	202
142.90	5768	153.90	427	174.00	452971	193.95	175
143.95	402	154.95	1664	175.00	33741	205.00	60
144.95	345	156.10	87	176.00	455444	207.05	246
145.90	895	156.90	1065	177.00	29450	209.05	64

Average of 4.130 to 4.141 min.: 02152102.D\data.ms
S21B036-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
248.95	125						
250.20	61						

Mass	Ab	Pw50
69.00	620705	0.50
219.00	383678	0.51
502.00	13951	0.49

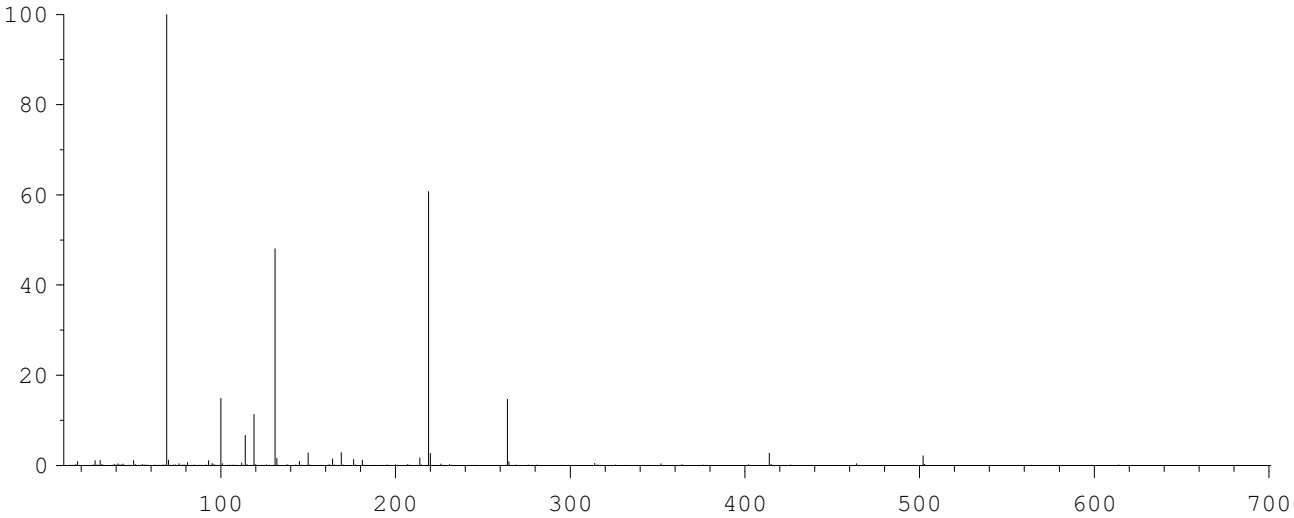


Ion Pol	Pos	MassGain	-1190
		MassOffs	-38
Emission	34.6	AmuGain	973
EIEnrgy	69.9	AmuOffs	129.19
Filament	1	Wid219	-0.003
		DC Pol	Pos
Repeller	27.78		
IonFcus	63.6	HEDEnab	On
EntLens	0.0	EMVolts	1376
EntOffs	Var		
		Samples	8
PFTBA	Open	Averages	3
		Stepsize	0.10

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
178 peaks Base: 69.00 Abundance: 589248



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	589248	100.00	70.00	6746	1.14
219.00	357888	60.74	220.00	15560	4.35
502.00	12583	2.14	503.00	1363	10.83

Air/Water Check: H20~0.84% N2~1.02% O2~0.25% CO2~0.33% N2/H2O~120.93%

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 57984
Repeller Maximum 30 volts using ion 219; Gain Factor 0.58

MassGain Values(Samples): -1175(3) -1167(2) -1149(1) -1108(0) -1056(FS)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset:	129.2	129.2	129.2	129.2	129.2	129.2	129.2
Entrance Lens Offset:	14.1	13.3	13.3	14.3	15.6	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	48.0	60.7	2.7	2.1	

S21B036-CAL1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152103.D
Acq On : 15 Feb 2021 11:05
InstName : AG5975C
Operator : TD
Sample : S21B036-CAL1
Misc : 2106037 25 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 15 13:25:32 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:23:57 2021
Response via : Initial Calibration

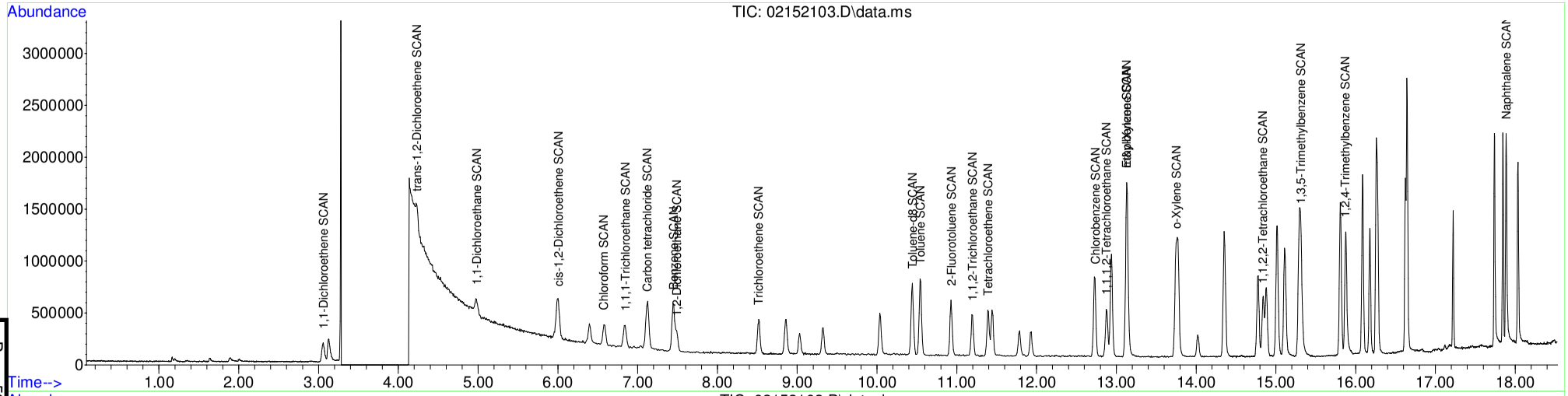
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.928	109	235970	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.435	98	932926	22943.04 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 458.86%#		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.057	61	268248	24405.71 ug/L	91
3] trans-1,2-Dichloroethene	4.230	61	276171	23785.34 ug/L	98
4] 1,1-Dichloroethane	4.980	63	323997	23167.02 ug/L	100
5] cis-1,2-Dichloroethene	6.002	61	319049	23136.98 ug/L	98
6] Chloroform	6.579	83	333135	22665.69 ug/L	98
7] 1,1,1-Trichloroethane	6.834	97	327896	23476.42 ug/L	98
8] Carbon tetrachloride	7.114	117	284227	24352.50 ug/L	98
9] Benzene	7.442	78	841975	20969.78 ug/L	100
10] 1,2-Dichloroethane	7.479	62	295696	23071.82 ug/L	98
11] Trichloroethene	8.515	130	245151	23065.60 ug/L	94
13] Toluene	10.540	91	1145134	20333.89 ug/L	98
14] 1,1,2-Trichloroethane	11.191	97	260856	23518.07 ug/L	96
15] Tetrachloroethene	11.390	166	331376	22474.36 ug/L	100
16] Chlorobenzene	12.726	112	912506	19462.17 ug/L	91
17] 1,1,1,2-Tetrachloroethane	12.877	131	279034	24417.10 ug/L	99
18] Ethylbenzene	12.932	91	1545223	21758.88 ug/L	99
19] m&p-Xylene	13.131	91	2381596	42631.84 ug/L	97
20] o-Xylene	13.743	91	1313570	21707.75 ug/L	98
21] 1,1,2,2-Tetrachloroethane	14.840	83	573424	23315.07 ug/L	100
22] 1,3,5-Trimethylbenzene	15.314	105	1494788	22345.18 ug/L	97
23] 1,2,4-Trimethylbenzene	15.875	105	1528443	21498.90 ug/L	96
24] Naphthalene	17.888	128	2584161	27050.30 ug/L	99
25) 2-Fluorotoluene SCAN	10.927	109	119205	4692.29 ug/L	82
26) 1,1-Dichloroethene SCAN	3.055	61	180417	22336.60 ug/L	84
27) trans-1,2-Dichloroethe...	4.235	61	172881	20388.38 ug/L	82
28) 1,1-Dichloroethane SCAN	4.979	63	206729	19692.82 ug/L	87
29) cis-1,2-Dichloroethene...	6.007	61	206187	21199.77 ug/L #	74
30) Chloroform SCAN	6.578	83	209629	23550.31 ug/L	96
31) 1,1,1-Trichloroethane ...	6.845	97	198190	21654.84 ug/L	89
32) Carbon tetrachloride SCAN	7.113	117	154209	20929.65 ug/L	90
33) Benzene SCAN	7.453	78	524644	20886.95 ug/L	96
34) 1,2-Dichloroethane SCAN	7.490	62	186575	20354.67 ug/L	89
35) Trichloroethene SCAN	8.519	130	118985	21428.50 ug/L #	77
36) Toluene-d8 SCAN	10.444	98	522124	23273.32 ug/L	99
37) Toluene SCAN	10.539	91	668180	20779.09 ug/L	99
38) 1,1,2-Trichloroethane ...	11.200	97	149866	23470.77 ug/L	95
39) Tetrachloroethene SCAN	11.389	166	141380	22621.98 ug/L	91
40) Chlorobenzene SCAN	12.732	112	471344	23970.84 ug/L	88
41) 1,1,1,2-Tetrachloroeth...	12.875	131	143738	22758.54 ug/L	93
42) Ethylbenzene SCAN	13.130	91	1352053	22668.09 ug/L	90
43) m&p-Xylene SCAN	13.130	91	1352053	22668.09 ug/L	91
44) o-Xylene SCAN	13.749	91	735946	22694.85 ug/L	94
45) 1,1,2,2-Tetrachloroeth...	14.839	83	347078	22959.02 ug/L	98
46) 1,3,5-Trimethylbenzene...	15.313	105	790801	23147.19 ug/L	96
47) 1,2,4-Trimethylbenzene...	15.873	105	814975	24029.22 ug/L	92
48) Naphthalene SCAN	17.886	128	1372164	31162.80 ug/L	95

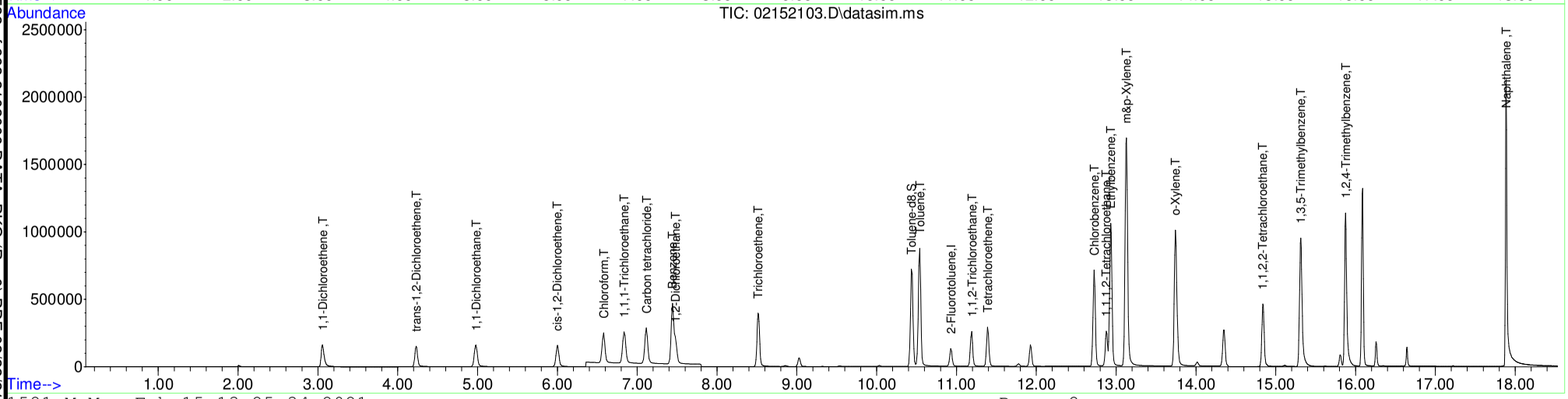
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152103.D
Acq On : 15 Feb 2021 11:05
InstName : AG5975C
Operator : TD
Sample : S21B036-CAL1
Misc : 2106037 25 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 15 13:25:32 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:23:57 2021
Response via : Initial Calibration





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S21B036-CAL2

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152104.D
Acq On : 15 Feb 2021 11:29
InstName : AG5975C
Operator : TD
Sample : S21B036-CAL2
Misc : 2106038 10 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 15 13:25:36 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:23:57 2021
Response via : Initial Calibration

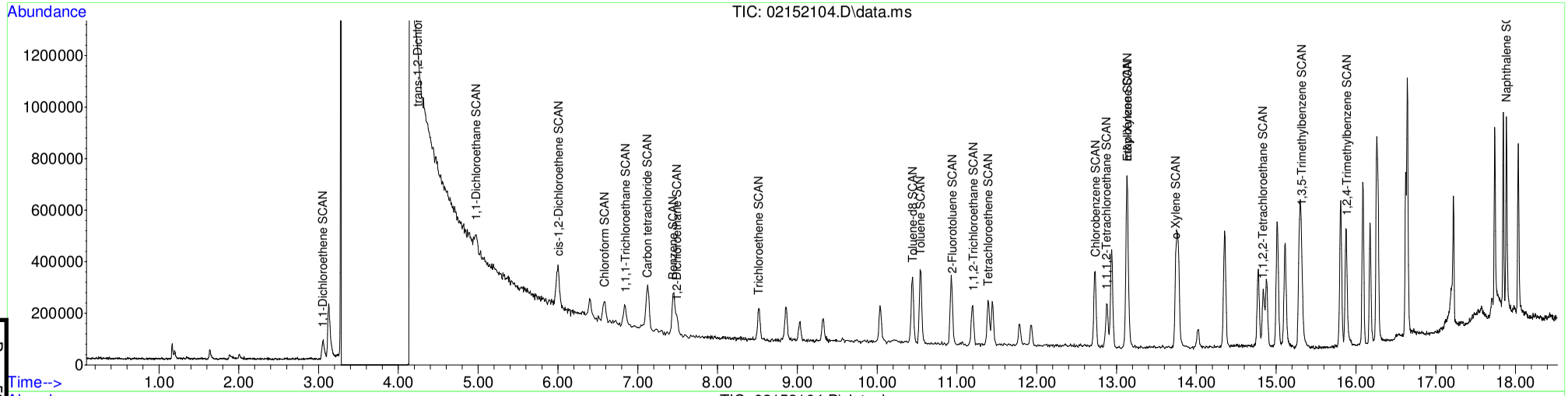
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.928	109	208366	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.435	98	348125	9695.47 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 193.91%#		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.057	61	101180	10425.08 ug/L	89
3] trans-1,2-Dichloroethene	4.230	61	103894	10133.32 ug/L	98
4] 1,1-Dichloroethane	4.980	63	122768	9941.33 ug/L	99
5] cis-1,2-Dichloroethene	6.002	61	120177	9869.62 ug/L	98
6] Chloroform	6.579	83	123089	9484.14 ug/L	98
7] 1,1,1-Trichloroethane	6.834	97	120030	9732.30 ug/L	98
8] Carbon tetrachloride	7.114	117	101610	9859.27 ug/L	98
9] Benzene	7.443	78	313771	8849.88 ug/L	99
10] 1,2-Dichloroethane	7.479	62	111046	9812.26 ug/L	98
11] Trichloroethene	8.515	130	90593	9652.85 ug/L	94
13] Toluene	10.540	91	434853	8744.53 ug/L	98
14] 1,1,2-Trichloroethane	11.191	97	94980	9697.57 ug/L	96
15] Tetrachloroethene	11.390	166	124209	9540.02 ug/L	100
16] Chlorobenzene	12.726	112	344837	8329.12 ug/L	90
17] 1,1,1,2-Tetrachloroethane	12.877	131	100451	9954.54 ug/L	99
18] Ethylbenzene	12.932	91	595887	9502.53 ug/L	98
19] m&p-Xylene	13.131	91	918598	18621.79 ug/L	97
20] o-Xylene	13.743	91	505763	9465.39 ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.840	83	214265	9866.02 ug/L	100
22] 1,3,5-Trimethylbenzene	15.314	105	578781	9798.25 ug/L	97
23] 1,2,4-Trimethylbenzene	15.875	105	590235	9402.04 ug/L	96
24] Naphthalene	17.888	128	920310	10909.79 ug/L	100
25) 2-Fluorotoluene SCAN	10.938	109	115572	5151.97 ug/L	91
26) 1,1-Dichloroethene SCAN	3.052	61	65783	9223.23 ug/L	84
27) trans-1,2-Dichloroethe...	4.236	61	70729	9446.33 ug/L	77
28) 1,1-Dichloroethane SCAN	4.972	63	82135	8860.63 ug/L	87
29) cis-1,2-Dichloroethene...	6.007	61	77650	9041.52 ug/L #	77
30) Chloroform SCAN	6.578	83	82890	10545.75 ug/L	95
31) 1,1,1-Trichloroethane ...	6.845	97	70374	8707.94 ug/L	91
32) Carbon tetrachloride SCAN	7.113	117	50720	7795.81 ug/L	91
33) Benzene SCAN	7.441	78	199703	9003.78 ug/L	97
34) 1,2-Dichloroethane SCAN	7.490	62	75153	9285.10 ug/L	98
35) Trichloroethene SCAN	8.514	130	45863	9353.88 ug/L	82
36) Toluene-d8 SCAN	10.444	98	192149	9699.57 ug/L	96
37) Toluene SCAN	10.539	91	257174	9057.12 ug/L	98
38) 1,1,2-Trichloroethane ...	11.200	97	57107	10128.46 ug/L	93
39) Tetrachloroethene SCAN	11.389	166	54740	9919.22 ug/L	92
40) Chlorobenzene SCAN	12.733	112	176582	10170.02 ug/L	86
41) 1,1,1,2-Tetrachloroeth...	12.876	131	51451	9225.64 ug/L	94
42) Ethylbenzene SCAN	13.130	91	515677	9791.04 ug/L	91
43) m&p-Xylene SCAN	13.130	91	515677	9791.04 ug/L	92
44) o-Xylene SCAN	13.741	91	282305	9858.93 ug/L	94
45) 1,1,2,2-Tetrachloroeth...	14.835	83	130180	9752.15 ug/L	98
46) 1,3,5-Trimethylbenzene...	15.313	105	295542	9796.71 ug/L	94
47) 1,2,4-Trimethylbenzene...	15.879	105	310455	10366.31 ug/L	91
48) Naphthalene SCAN	17.887	128	432824	11131.96 ug/L	99

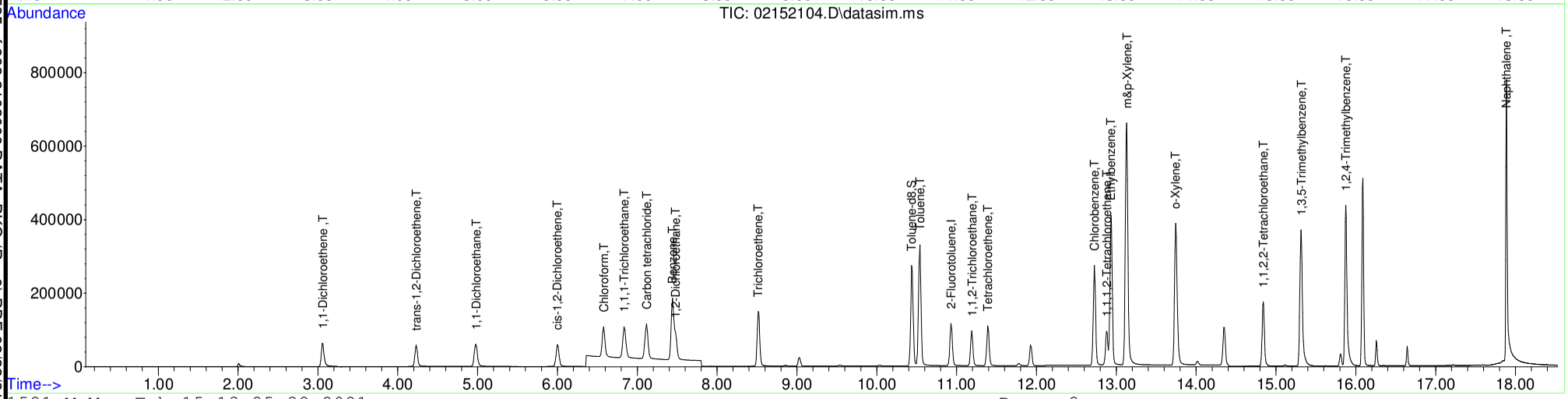
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152104.D
Acq On : 15 Feb 2021 11:29
InstName : AG5975C
Operator : TD
Sample : S21B036-CAL2
Misc : 2106038 10 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 15 13:25:36 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:23:57 2021
Response via : Initial Calibration





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S21B036-CAL3

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152105.D
Acq On : 15 Feb 2021 11:53
InstName : AG5975C
Operator : TD
Sample : S21B036-CAL3
Misc : 2106039 5 mg/L
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 15 13:25:40 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:23:57 2021
Response via : Initial Calibration

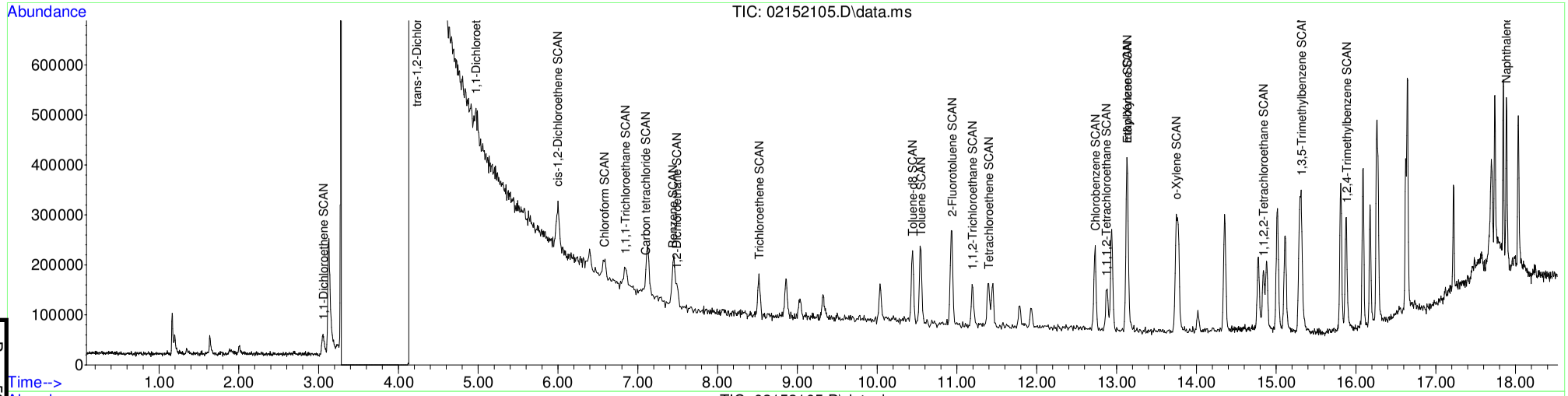
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.928	109	212739	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.435	98	186497	5087.28 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 101.75%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.056	61	53347	5383.62 ug/L	91
3] trans-1,2-Dichloroethene	4.230	61	56505	5397.94 ug/L	98
4] 1,1-Dichloroethane	4.980	63	66926	5308.03 ug/L	99
5] cis-1,2-Dichloroethene	6.001	61	65562	5273.65 ug/L	98
6] Chloroform	6.579	83	67243	5074.64 ug/L	99
7] 1,1,1-Trichloroethane	6.834	97	65405	5194.17 ug/L	98
8] Carbon tetrachloride	7.114	117	54767	5204.83 ug/L	98
9] Benzene	7.442	78	171507	4737.90 ug/L	99
10] 1,2-Dichloroethane	7.479	62	60497	5235.76 ug/L	98
11] Trichloroethene	8.520	130	49716	5188.44 ug/L	94
13] Toluene	10.540	91	234187	4612.50 ug/L	99
14] 1,1,2-Trichloroethane	11.190	97	50636	5063.72 ug/L	96
15] Tetrachloroethene	11.390	166	66440	4998.11 ug/L	99
16] Chlorobenzene	12.726	112	181446	4292.52 ug/L	91
17] 1,1,1,2-Tetrachloroethane	12.877	131	51840	5031.66 ug/L	99
18] Ethylbenzene	12.932	91	312076	4874.34 ug/L	99
19] m&p-Xylene	13.131	91	481125	9552.86 ug/L	97
20] o-Xylene	13.742	91	260419	4773.58 ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.840	83	109090	4919.89 ug/L	99
22] 1,3,5-Trimethylbenzene	15.314	105	294238	4878.80 ug/L	97
23] 1,2,4-Trimethylbenzene	15.875	105	298986	4664.74 ug/L	95
24] Naphthalene	17.888	128	462978	5375.55 ug/L	97
25) 2-Fluorotoluene SCAN	10.937	109	114517	5000.00 ug/L	94
26) 1,1-Dichloroethene SCAN	3.055	61	36410	5000.00 ug/L	83
27) trans-1,2-Dichloroethe...	4.229	61	38223	5000.00 ug/L	80
28) 1,1-Dichloroethane SCAN	4.972	63	47321	5000.00 ug/L	90
29) cis-1,2-Dichloroethene...	6.000	61	43842	5000.00 ug/L	79
30) Chloroform SCAN	6.577	83	40125	5000.00 ug/L	90
31) 1,1,1-Trichloroethane ...	6.845	97	41256	5000.00 ug/L	91
32) Carbon tetrachloride SCAN	7.100	117	33213	5000.00 ug/L	88
33) Benzene SCAN	7.441	78	113227	5000.00 ug/L	97
34) 1,2-Dichloroethane SCAN	7.490	62	41319	5000.00 ug/L	94
35) Trichloroethene SCAN	8.519	130	25030	5000.00 ug/L	80
36) Toluene-d8 SCAN	10.444	98	101129	5000.00 ug/L	96
37) Toluene SCAN	10.549	91	144953	5000.00 ug/L	97
38) 1,1,2-Trichloroethane ...	11.189	97	28783	5000.00 ug/L	90
39) Tetrachloroethene SCAN	11.399	166	28172	5000.00 ug/L	89
40) Chlorobenzene SCAN	12.732	112	88637	5000.00 ug/L #	74
41) 1,1,1,2-Tetrachloroeth...	12.875	131	28470	5000.00 ug/L	93
42) Ethylbenzene SCAN	13.130	91	268868	5000.00 ug/L	90
43) m&p-Xylene SCAN	13.130	91	268868	5000.00 ug/L	92
44) o-Xylene SCAN	13.749	91	146177	5000.00 ug/L	99
45) 1,1,2,2-Tetrachloroeth...	14.842	83	68145	5000.00 ug/L	98
46) 1,3,5-Trimethylbenzene...	15.312	105	154003	5000.00 ug/L	98
47) 1,2,4-Trimethylbenzene...	15.878	105	152885	5000.00 ug/L	94
48) Naphthalene SCAN	17.886	128	198486	5000.00 ug/L	97

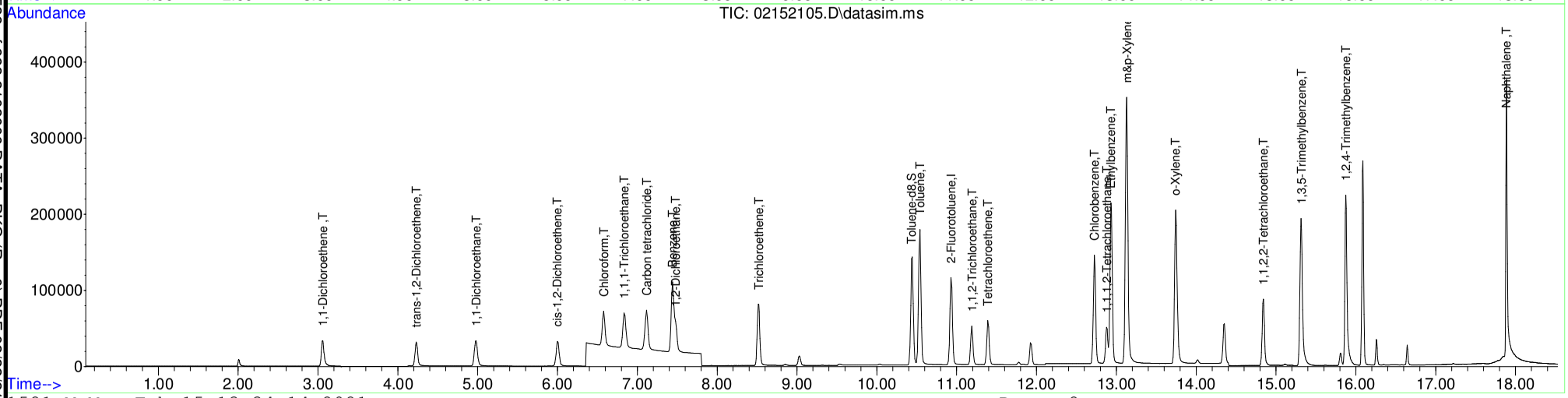
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152105.D
Acq On : 15 Feb 2021 11:53
InstName : AG5975C
Operator : TD
Sample : S21B036-CAL3
Misc : 2106039 5 mg/L
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 15 13:25:40 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:23:57 2021
Response via : Initial Calibration





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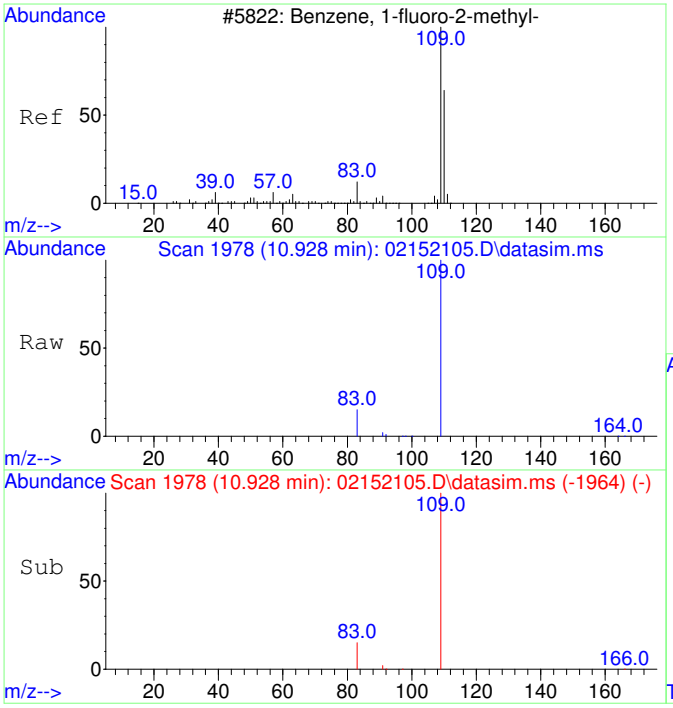
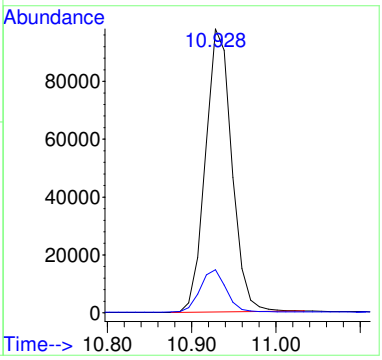
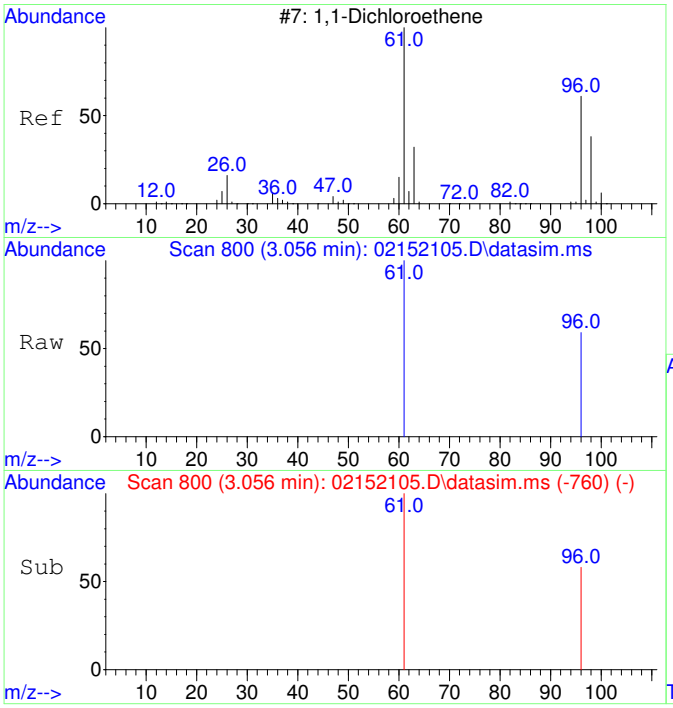


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.928 min Scan# 1978
Delta R.T. 0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion:109 Resp: 212739

Ion	Ratio	Lower	Upper
109	100		
83	14.8	0.0	42.3

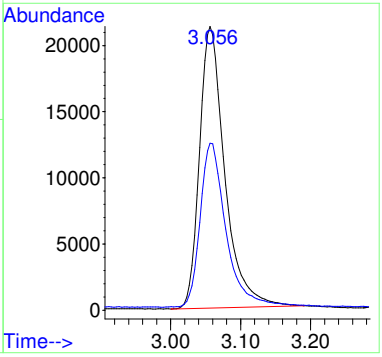


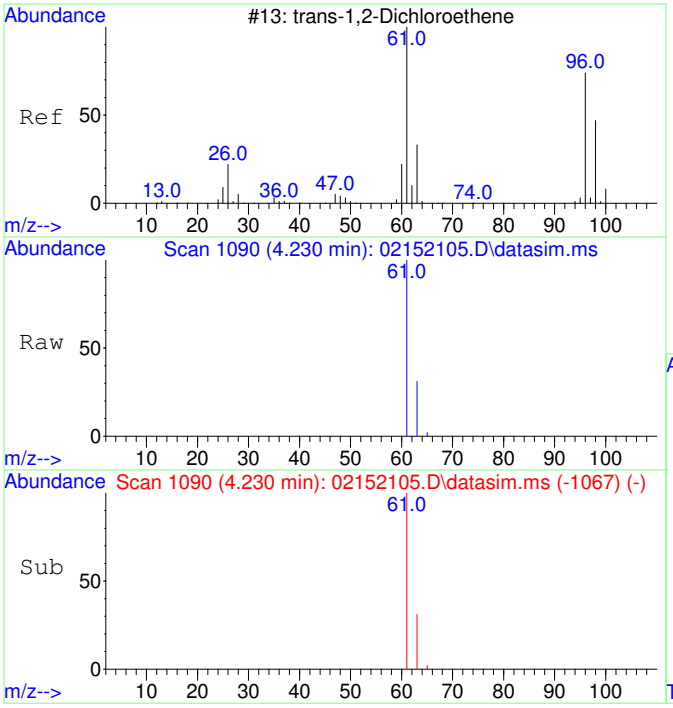


#2
1,1-Dichloroethene
Concen: 5383.62 ug/L
RT: 3.056 min Scan# 800
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 61 Resp: 53347

Ion	Ratio	Lower	Upper
61	100		
96	60.1	37.2	97.2

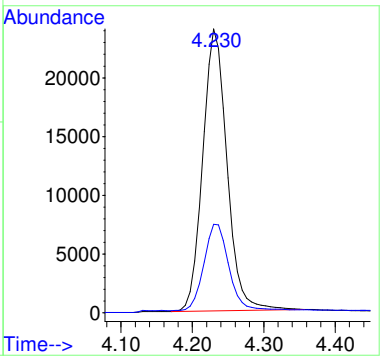


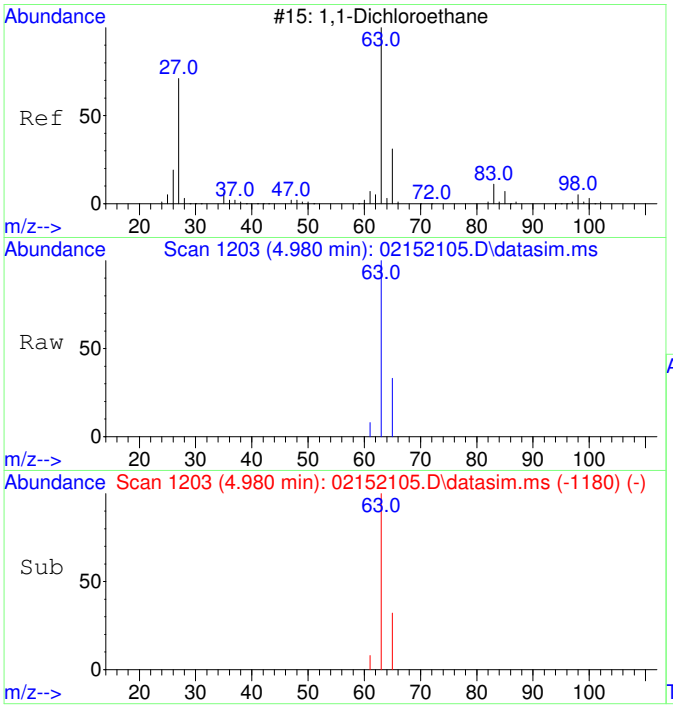


#3
trans-1,2-Dichloroethene
Concen: 5397.94 ug/L
RT: 4.230 min Scan# 1090
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 61 Resp: 56505

Ion	Ratio	Lower	Upper
61	100		
63	31.2	2.4	62.4

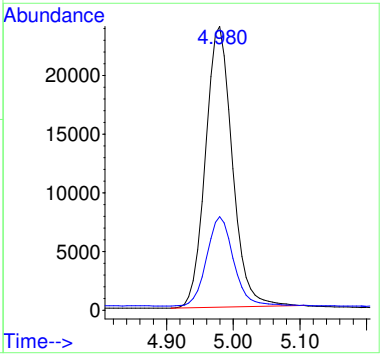


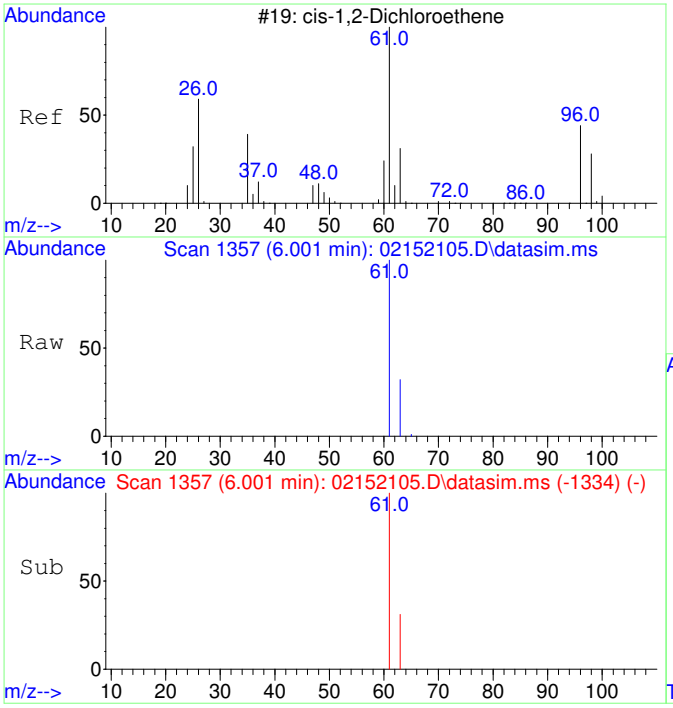


#4
1,1-Dichloroethane
Concen: 5308.03 ug/L
RT: 4.980 min Scan# 1203
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 63 Resp: 66926

Ion	Ratio	Lower	Upper
63	100		
65	31.5	1.8	61.8

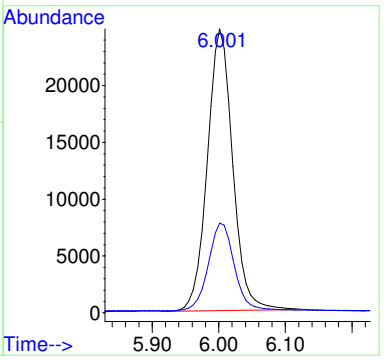


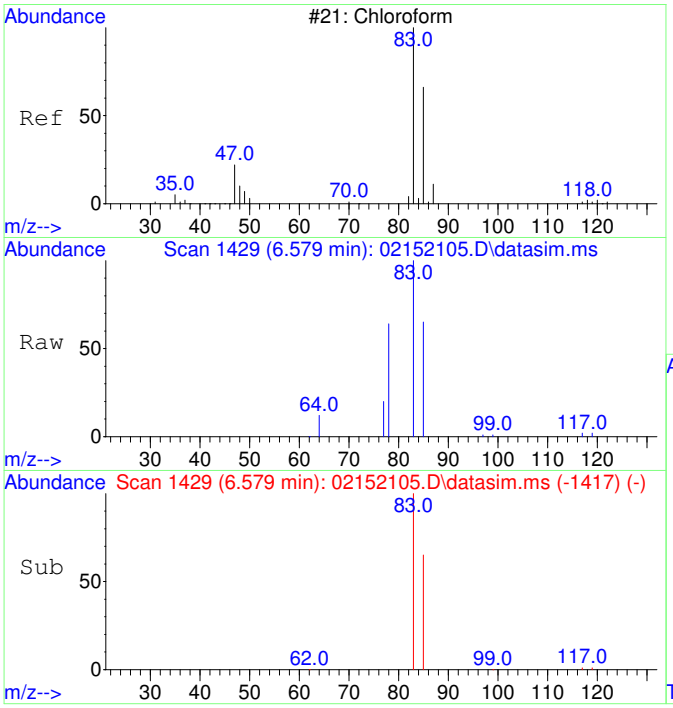


#5
cis-1,2-Dichloroethene
Concen: 5273.65 ug/L
RT: 6.001 min Scan# 1357
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 61 Resp: 65562

Ion	Ratio	Lower	Upper
61	100		
63	31.5	2.5	62.5

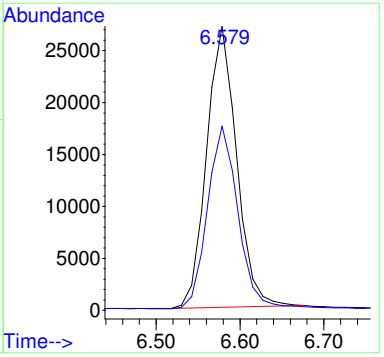


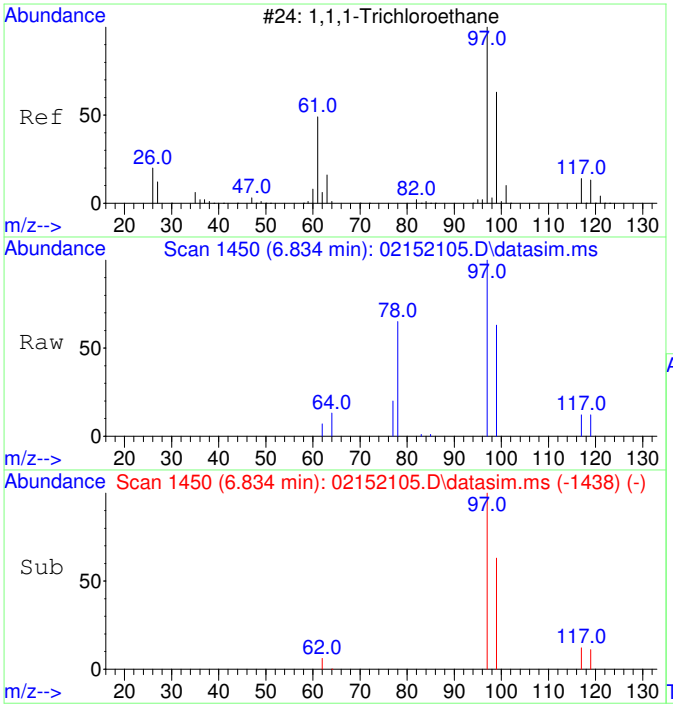


#6
Chloroform
Concen: 5074.64 ug/L
RT: 6.579 min Scan# 1429
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 83 Resp: 67243

Ion	Ratio	Lower	Upper
83	100		
85	66.2	35.1	95.1

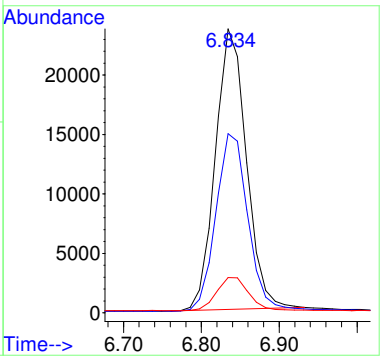


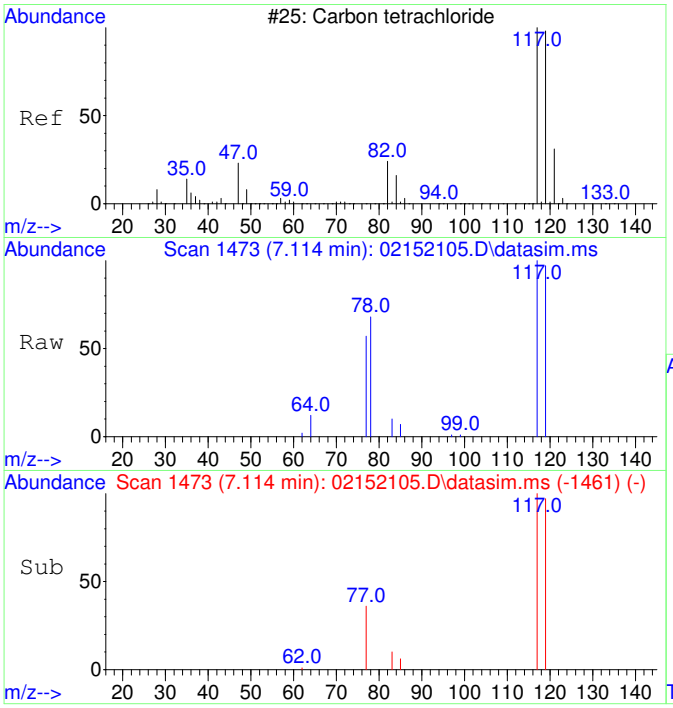


#7
1,1,1-Trichloroethane
Concen: 5194.17 ug/L
RT: 6.834 min Scan# 1450
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 97 Resp: 65405

Ion	Ratio	Lower	Upper
97	100		
99	65.7	34.6	94.6
117	12.4	0.0	43.2

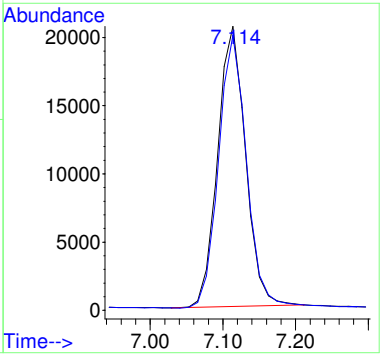


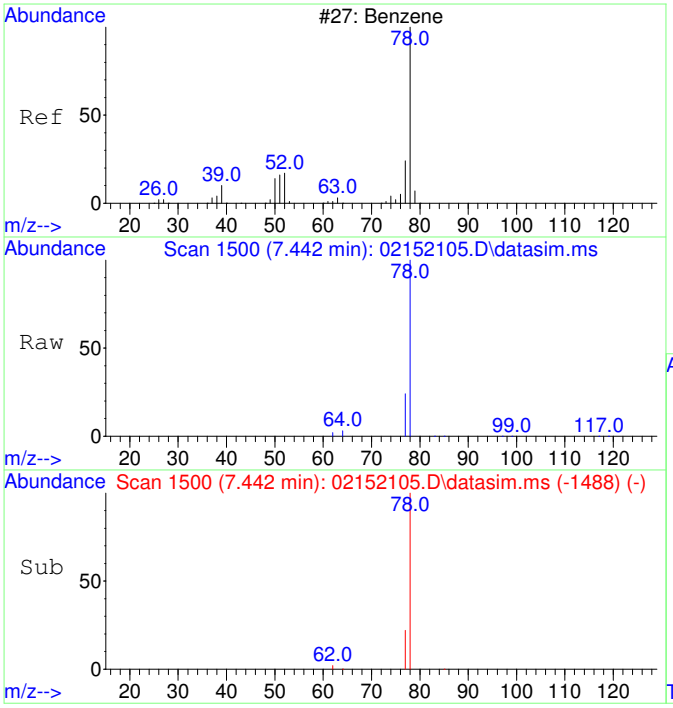


#8
Carbon tetrachloride
Concen: 5204.83 ug/L
RT: 7.114 min Scan# 1473
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion:117 Resp: 54767

Ion	Ratio	Lower	Upper
117	100		
119	98.3	66.4	126.4

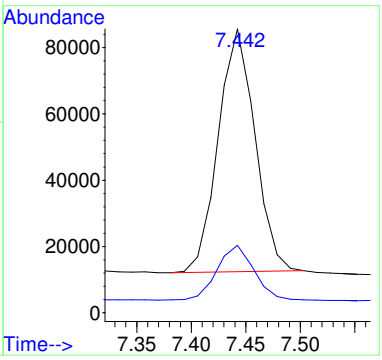


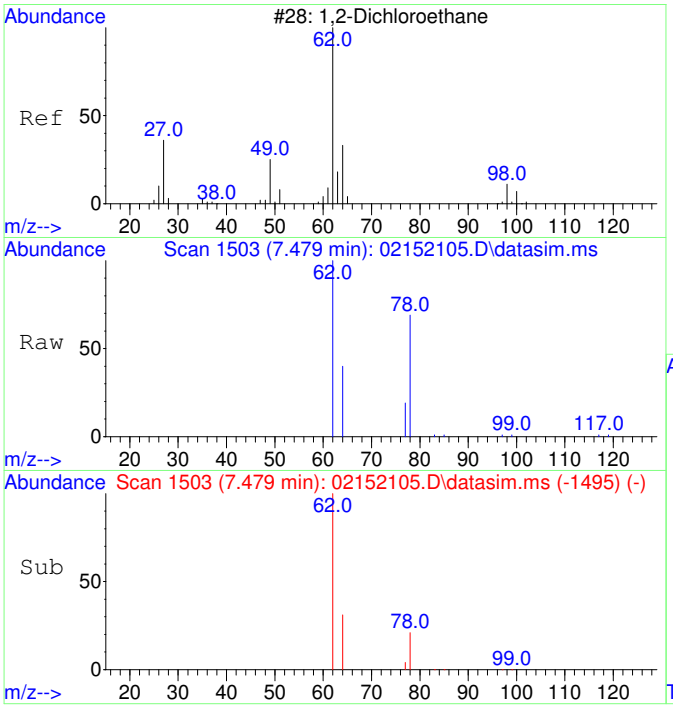


#9
Benzene
Concen: 4737.90 ug/L
RT: 7.442 min Scan# 1500
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 78 Resp: 171507

Ion	Ratio	Lower	Upper
78	100		
77	22.9	0.0	53.2

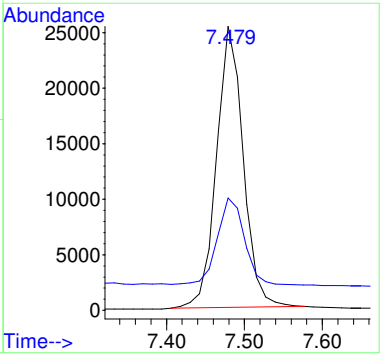


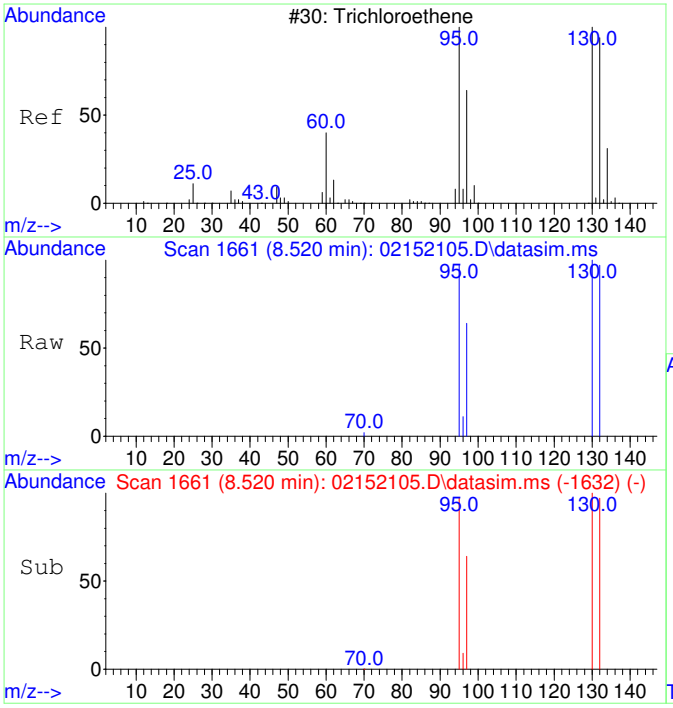


#10
1,2-Dichloroethane
Concen: 5235.76 ug/L
RT: 7.479 min Scan# 1503
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 62 Resp: 60497

Ion	Ratio	Lower	Upper
62	100		
64	31.2	2.3	62.3

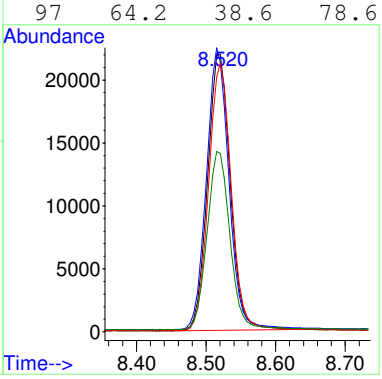


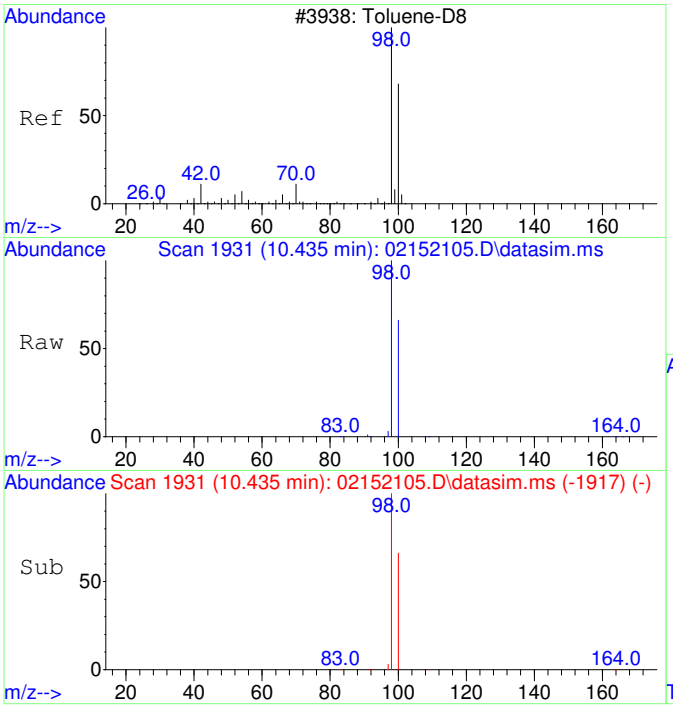


#11
Trichloroethene
Concen: 5188.44 ug/L
RT: 8.520 min Scan# 1661
Delta R.T. 0.005 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion:130 Resp: 49716

Ion	Ratio	Lower	Upper
130	100		
95	100.2	60.7	120.7
132	96.1	76.0	116.0
97	64.2	38.6	78.6

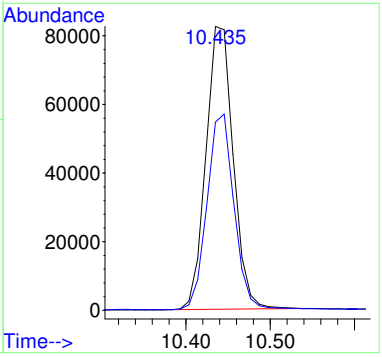


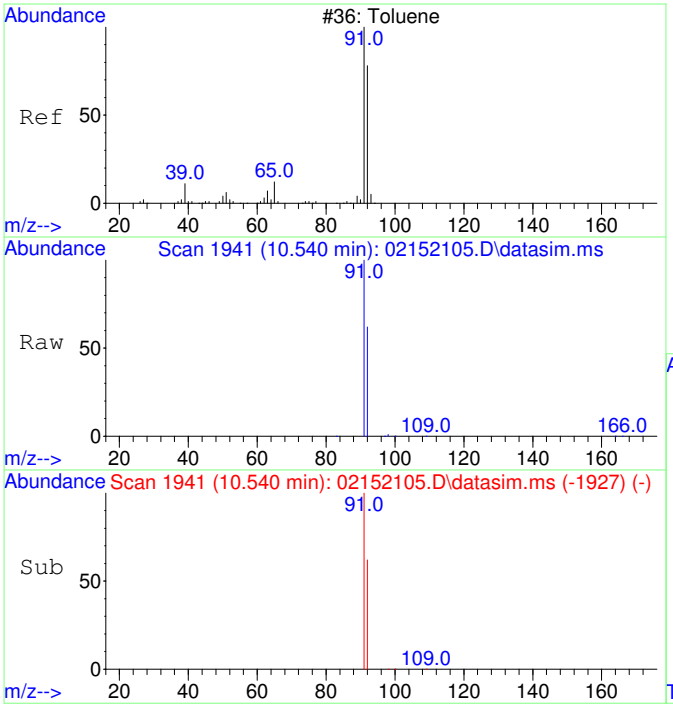


#12
Toluene-d8
Concen: 5087.28 ug/L
RT: 10.435 min Scan# 1931
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 98 Resp: 186497

Ion	Ratio	Lower	Upper
98	100		
100	67.7	37.1	97.1

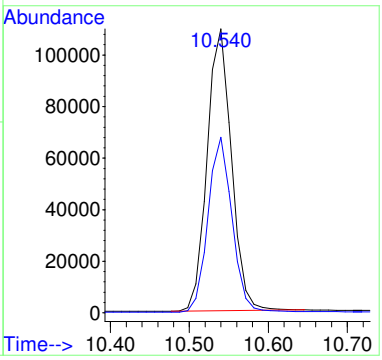


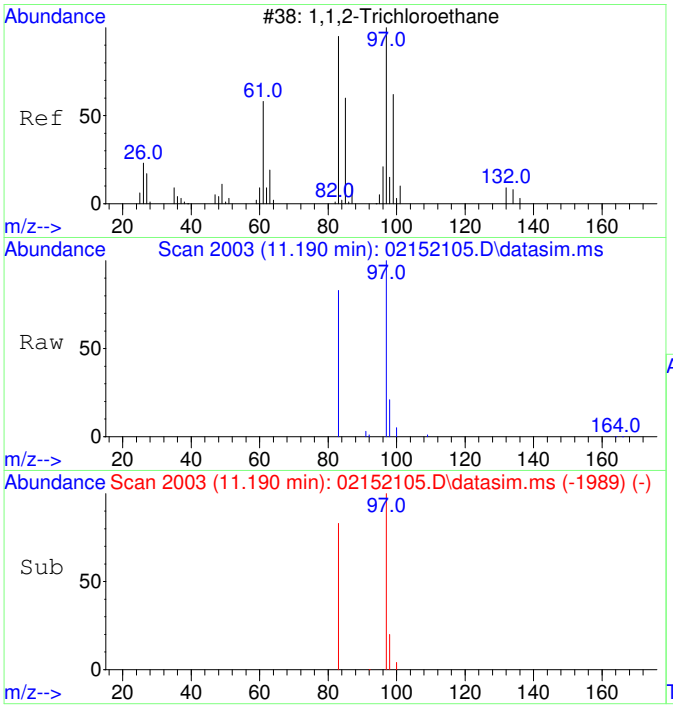


#13
Toluene
Concen: 4612.50 ug/L
RT: 10.540 min Scan# 1941
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 91 Resp: 234187

Ion	Ratio	Lower	Upper
91	100		
92	60.8	29.9	89.9

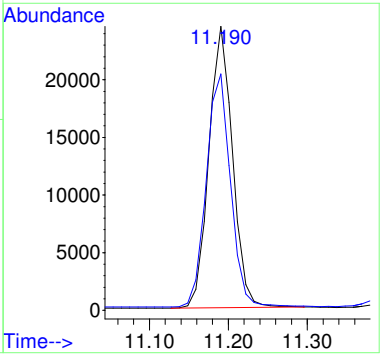


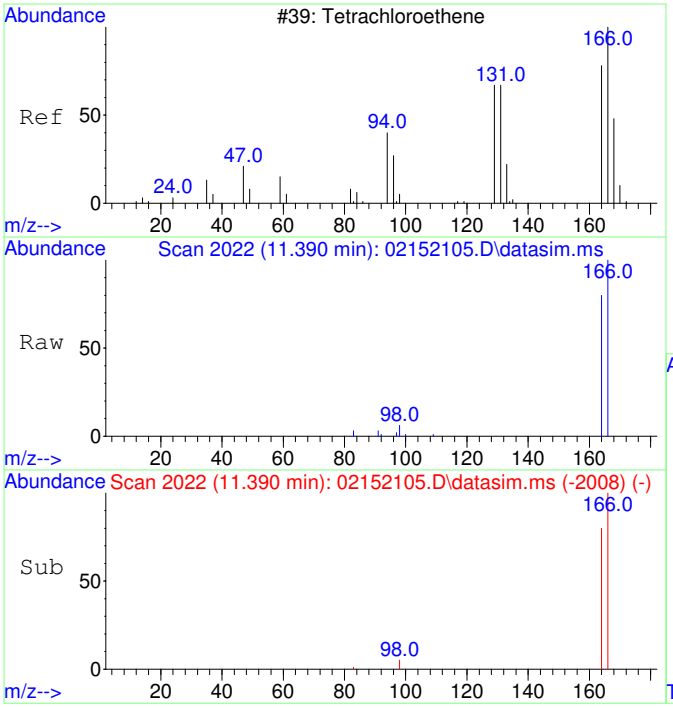


#14
1,1,2-Trichloroethane
Concen: 5063.72 ug/L
RT: 11.190 min Scan# 2003
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 97 Resp: 50636

Ion	Ratio	Lower	Upper
97	100		
83	84.6	51.2	111.2

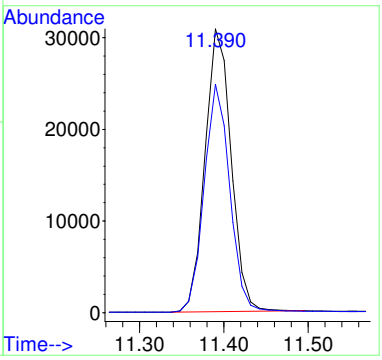


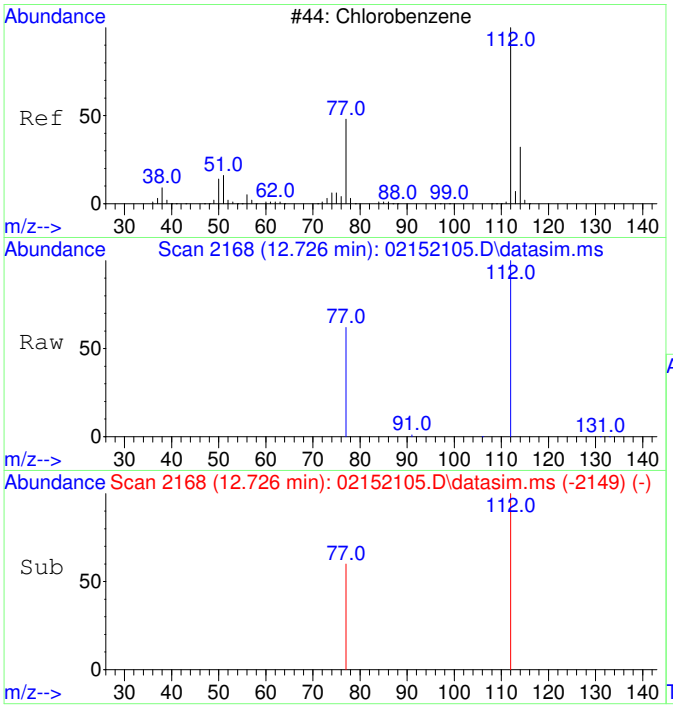


#15
Tetrachloroethene
Concen: 4998.11 ug/L
RT: 11.390 min Scan# 2022
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion:166 Resp: 66440

Ion	Ratio	Lower	Upper
166	100		
164	78.5	47.8	107.8

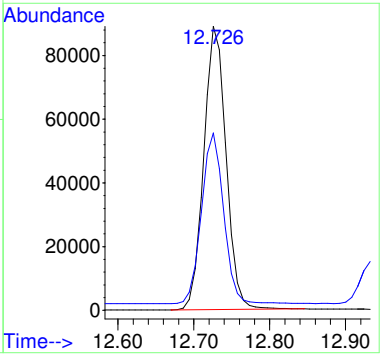


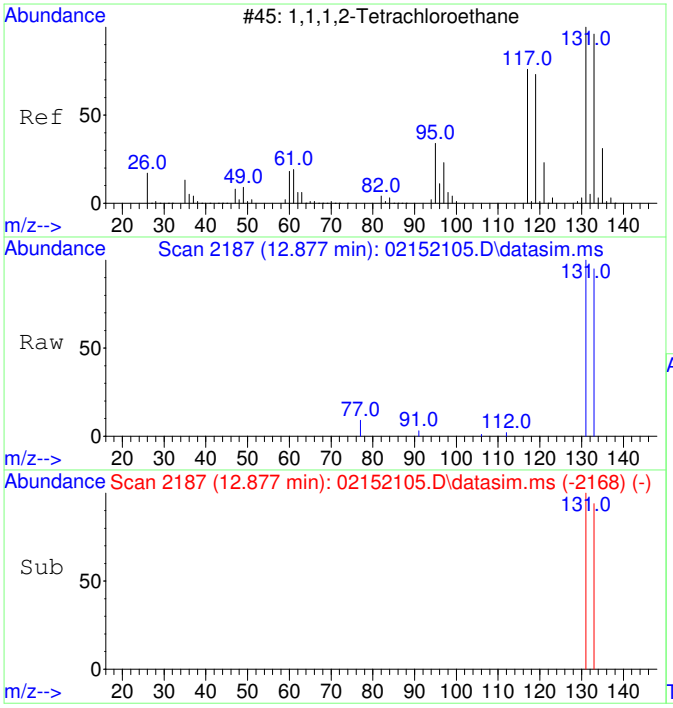


#16
Chlorobenzene
Concen: 4292.52 ug/L
RT: 12.726 min Scan# 2168
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion:112 Resp: 181446

Ion	Ratio	Lower	Upper
112	100		
77	59.9	23.6	83.6

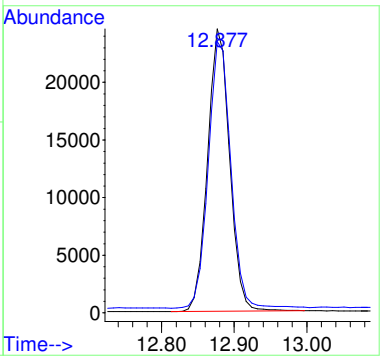


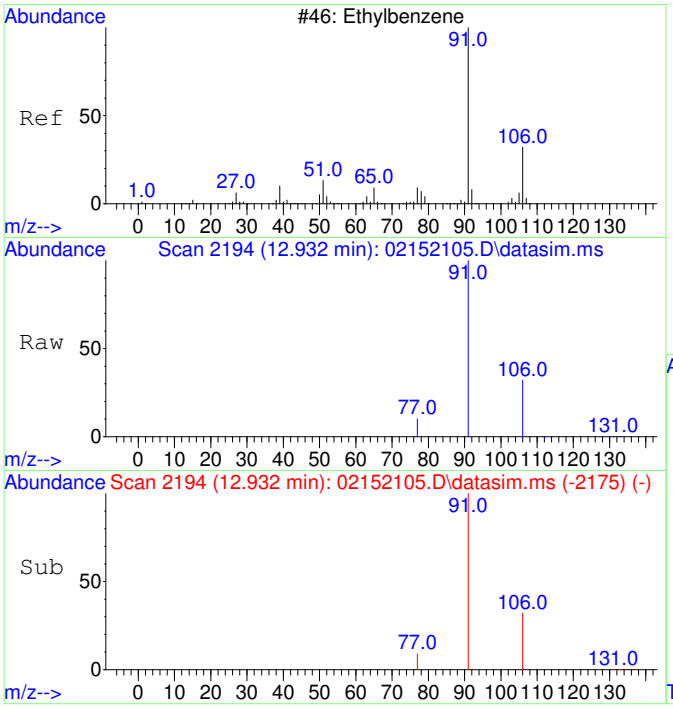


#17
1,1,1,2-Tetrachloroethane
Concen: 5031.66 ug/L
RT: 12.877 min Scan# 2187
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion:131 Resp: 51840

Ion	Ratio	Lower	Upper
131	100		
133	95.6	66.3	126.3

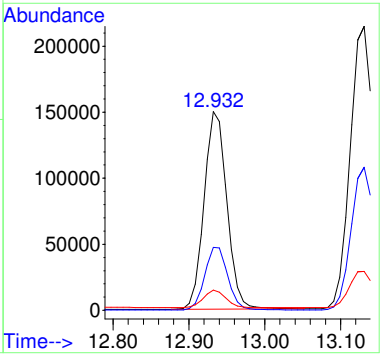


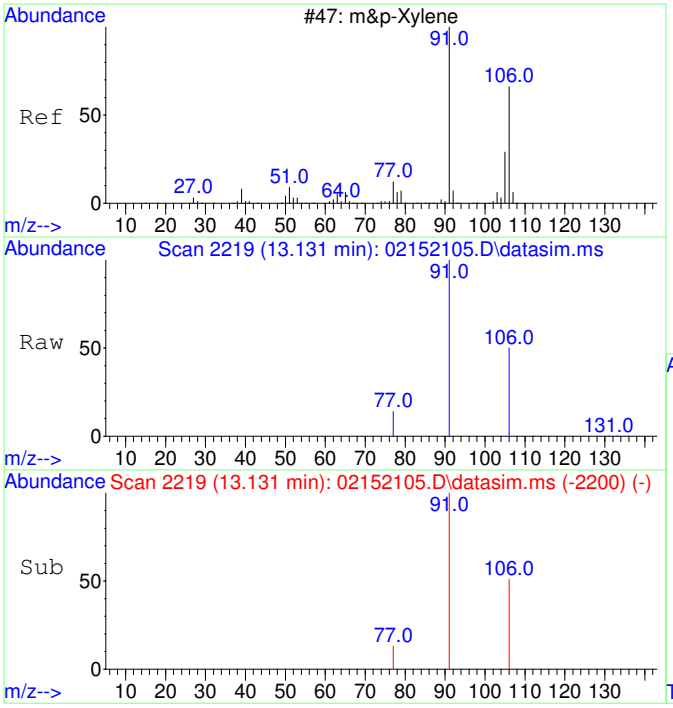


#18
Ethylbenzene
Concen: 4874.34 ug/L
RT: 12.932 min Scan# 2194
Delta R.T. 0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 91 Resp: 312076

Ion	Ratio	Lower	Upper
91	100		
106	32.1	3.0	63.0
77	8.7	0.0	38.2

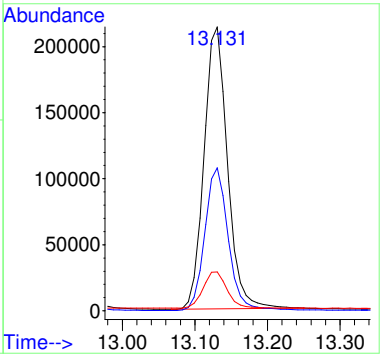


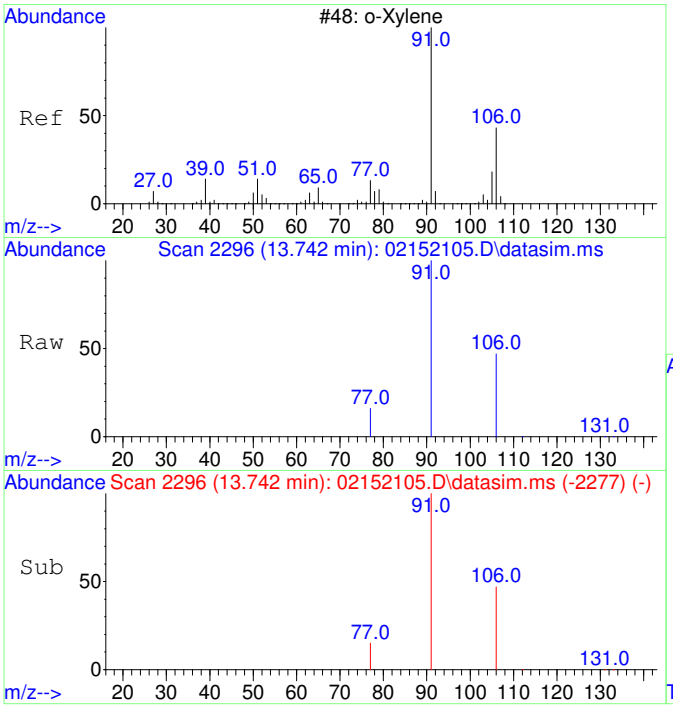


#19
m&p-Xylene
Concen: 9552.86 ug/L
RT: 13.131 min Scan# 2219
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 91 Resp: 481125

Ion	Ratio	Lower	Upper
91	100		
106	50.1	22.2	82.2
77	13.1	0.0	42.4

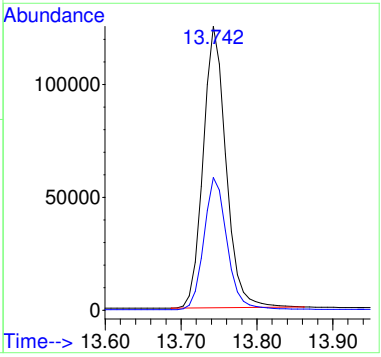


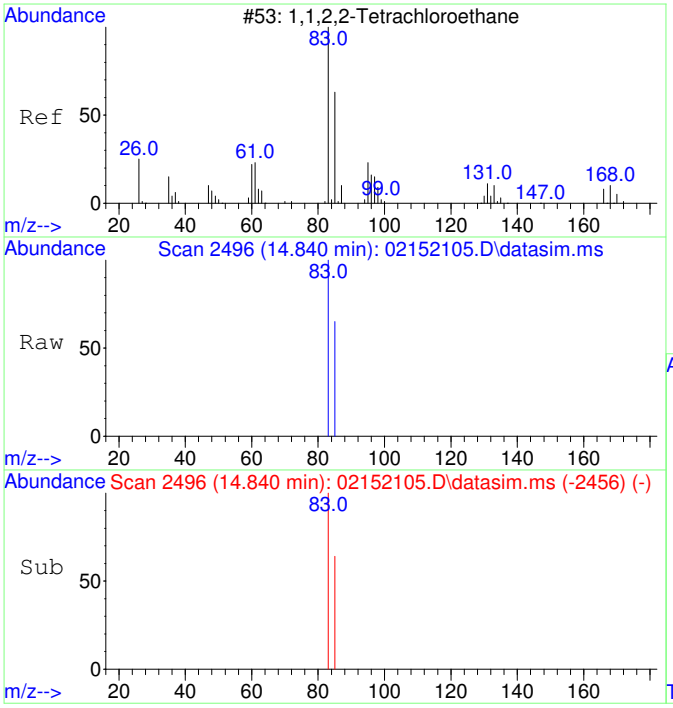


#20
o-Xylene
Concen: 4773.58 ug/L
RT: 13.742 min Scan# 2296
Delta R.T. -0.001 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 91 Resp: 260419

Ion	Ratio	Lower	Upper
91	100		
106	47.3	19.2	79.2

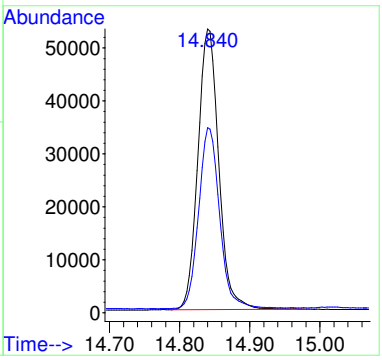


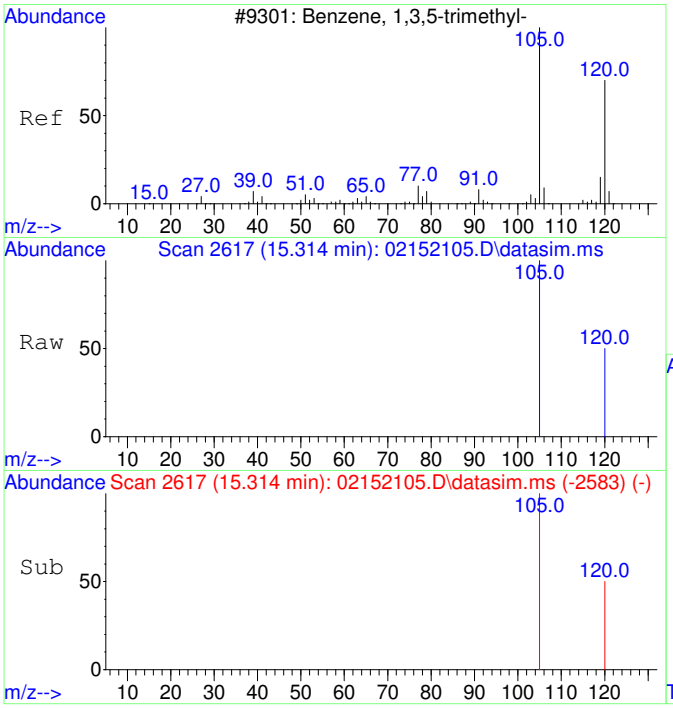


#21
1,1,2,2-Tetrachloroethane
Concen: 4919.89 ug/L
RT: 14.840 min Scan# 2496
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 83 Resp: 109090

Ion	Ratio	Lower	Upper
83	100		
85	64.0	34.8	94.8

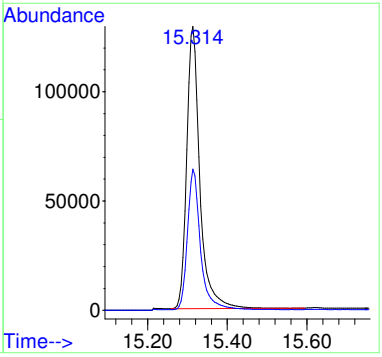


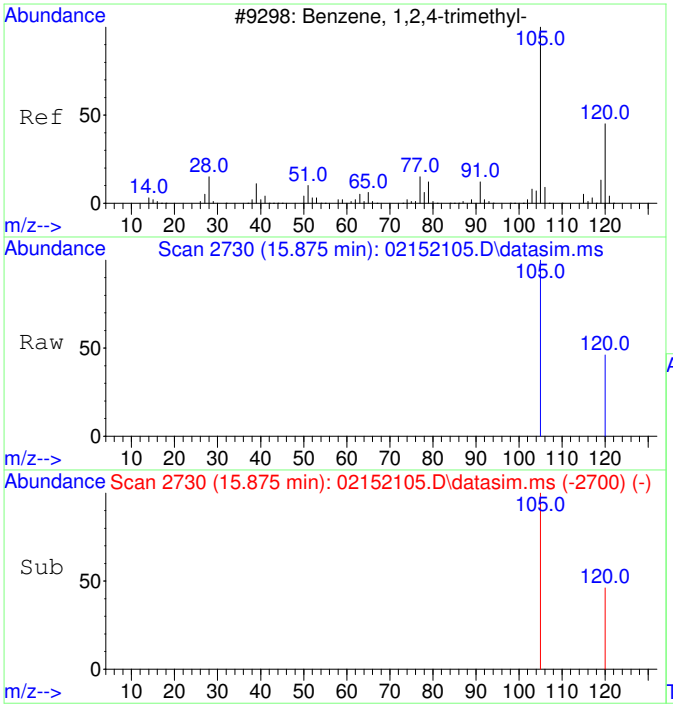


#22
1,3,5-Trimethylbenzene
Concen: 4878.80 ug/L
RT: 15.314 min Scan# 2617
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion:105 Resp: 294238

Ion	Ratio	Lower	Upper
105	100		
120	49.3	21.1	81.1

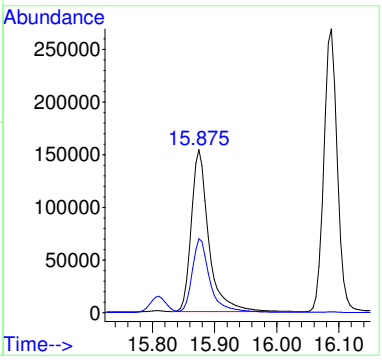


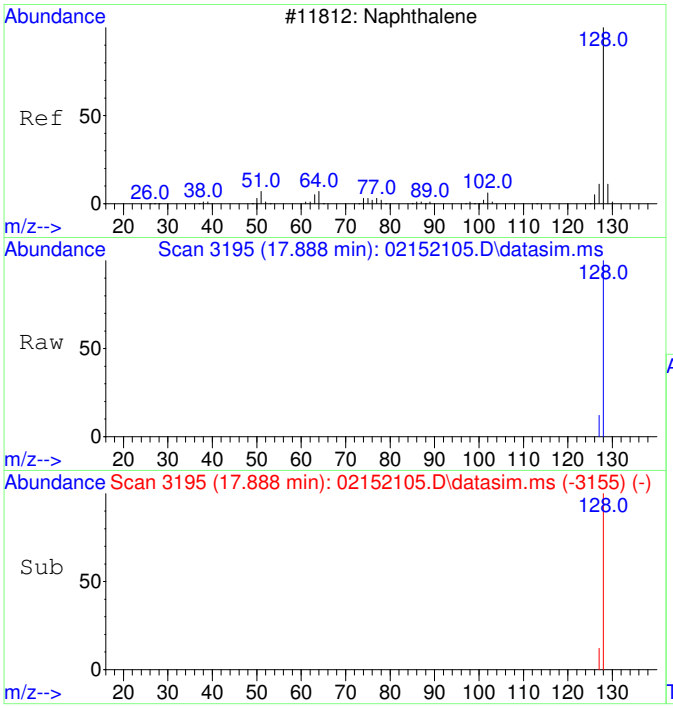


#23
1,2,4-Trimethylbenzene
Concen: 4664.74 ug/L
RT: 15.875 min Scan# 2730
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion:105 Resp: 298986

Ion	Ratio	Lower	Upper
105	100		
120	44.1	17.2	77.2

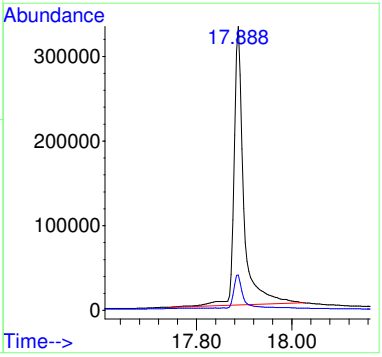


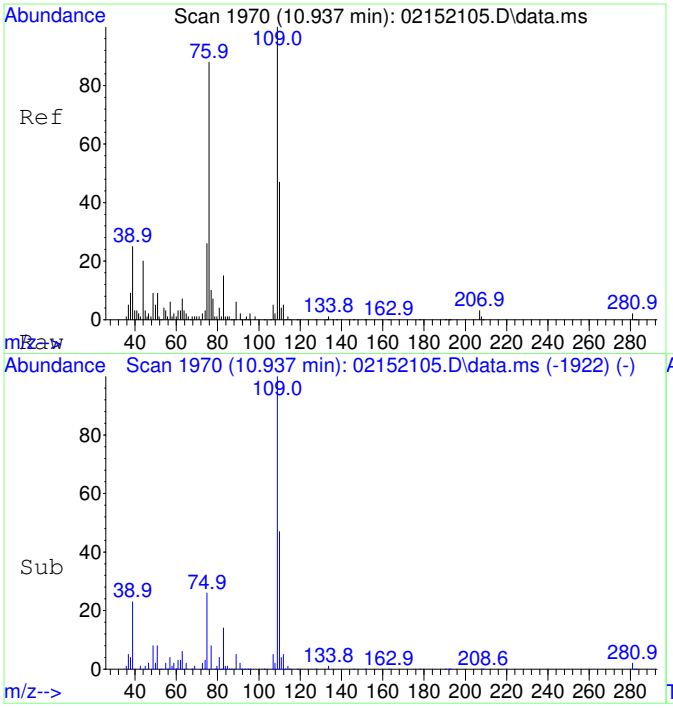


#24
Naphthalene
Concen: 5375.55 ug/L
RT: 17.888 min Scan# 3195
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion:128 Resp: 462978

Ion	Ratio	Lower	Upper
128	100		
127	11.4	0.0	42.5

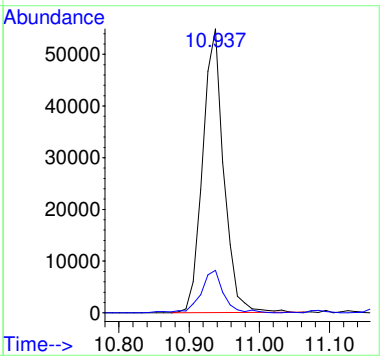


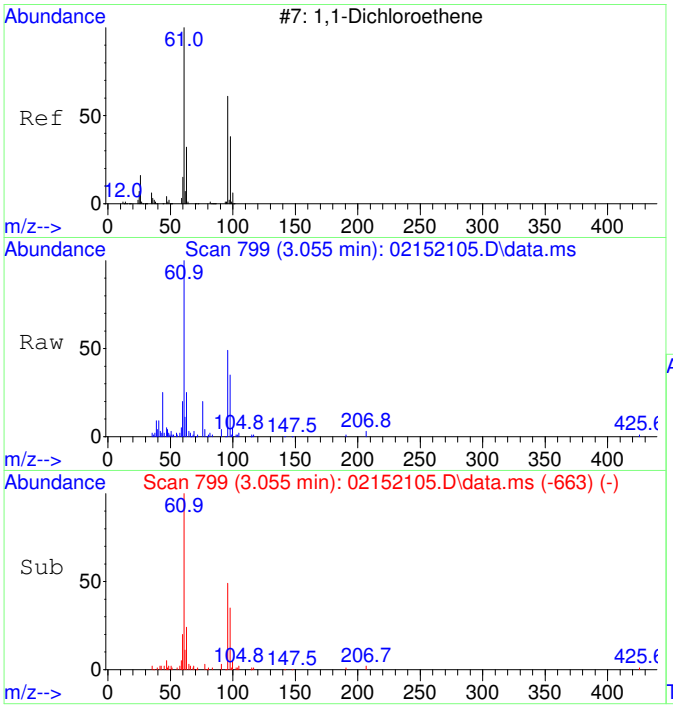


#25
2-Fluorotoluene SCAN
Concen: 5000.00 ug/L
RT: 10.937 min Scan# 1970
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion:109 Resp: 114517

Ion	Ratio	Lower	Upper
109	100		
83	16.3	0.0	43.8

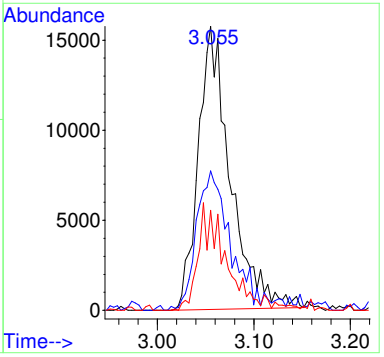


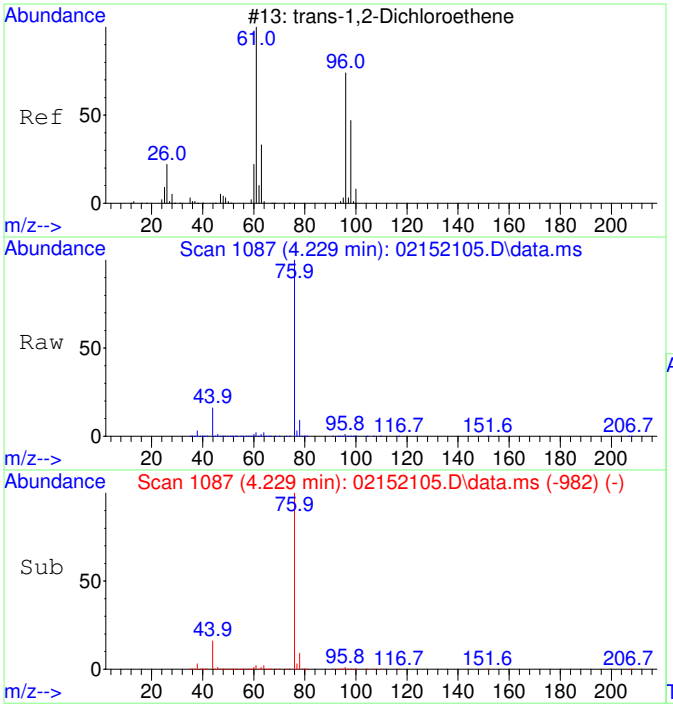


#26
1,1-Dichloroethene SCAN
Concen: 5000.00 ug/L
RT: 3.055 min Scan# 799
Delta R.T. 0.003 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 61 Resp: 36410

Ion	Ratio	Lower	Upper
61	100		
96	51.3	33.1	93.1
98	29.0	11.2	71.2

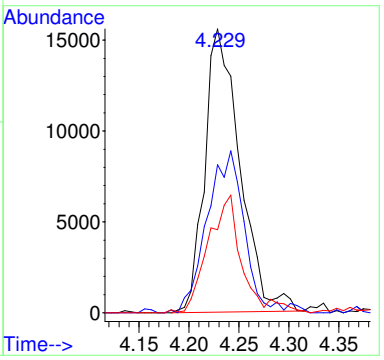


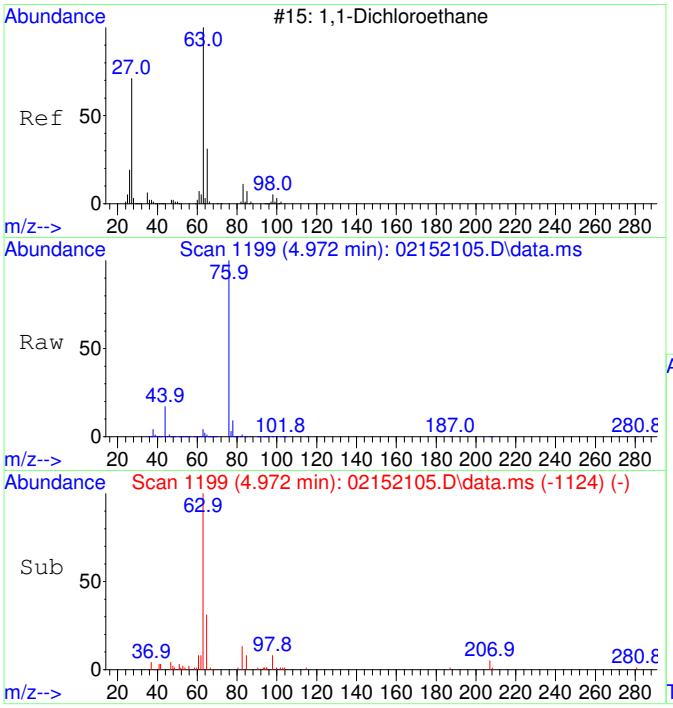


#27
trans-1,2-Dichloroethene SCAN
Concen: 5000.00 ug/L
RT: 4.229 min Scan# 1087
Delta R.T. -0.007 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 61 Resp: 38223

Ion	Ratio	Lower	Upper
61	100		
96	58.3	49.0	109.0
98	40.0	20.5	80.5

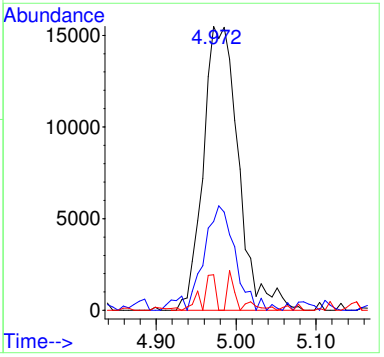


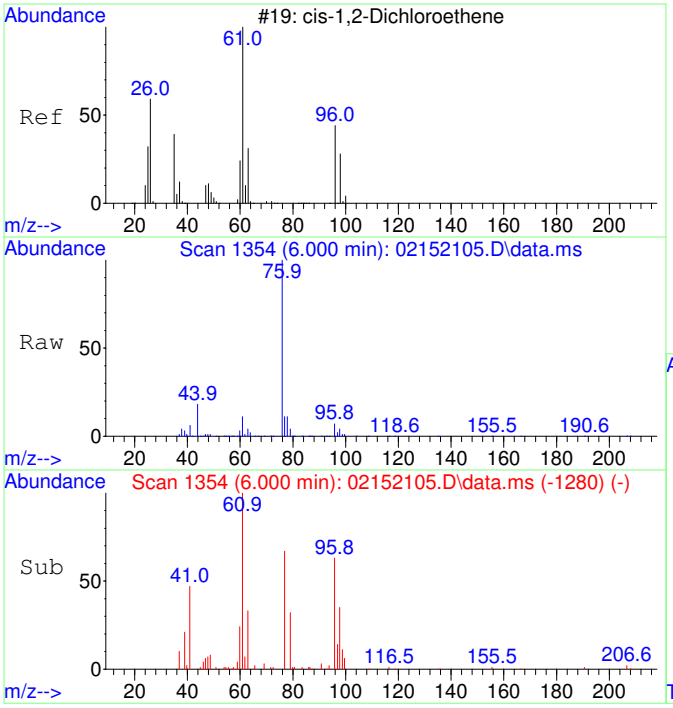


#28
1,1-Dichloroethane SCAN
Concen: 5000.00 ug/L
RT: 4.972 min Scan# 1199
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 63 Resp: 47321

Ion	Ratio	Lower	Upper
63	100		
65	32.0	1.3	61.3
82	4.6	0.0	45.9

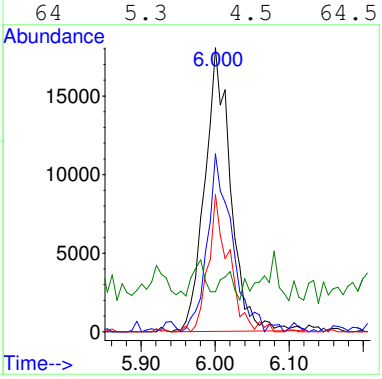


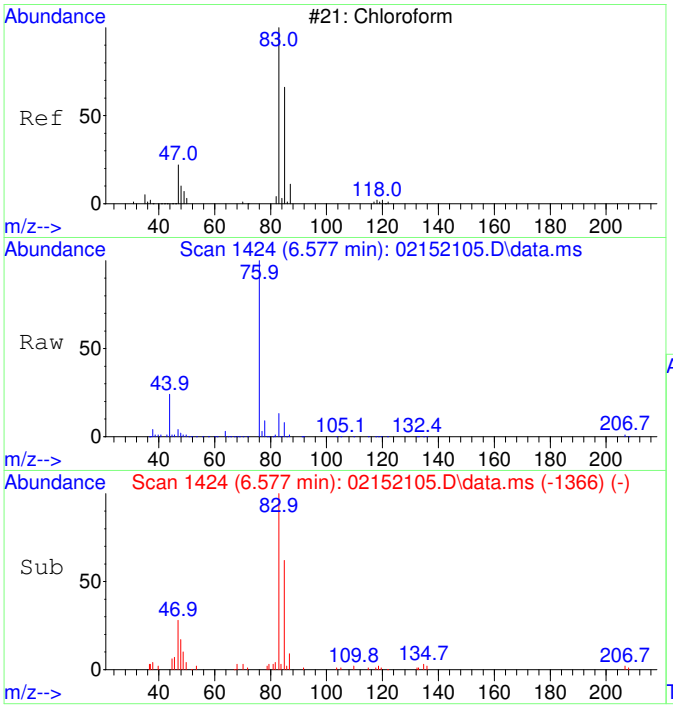


#29
cis-1,2-Dichloroethene SCAN
Concen: 5000.00 ug/L
RT: 6.000 min Scan# 1354
Delta R.T. -0.007 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 61 Resp: 43842

Ion	Ratio	Lower	Upper
61	100		
96	60.4	39.9	99.9
98	36.2	13.5	73.5
64	5.3	4.5	64.5

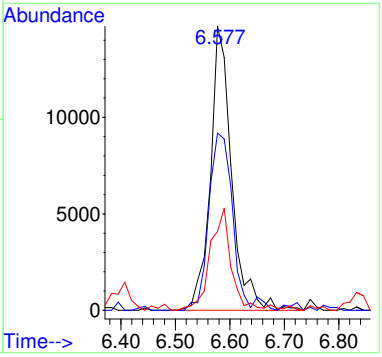


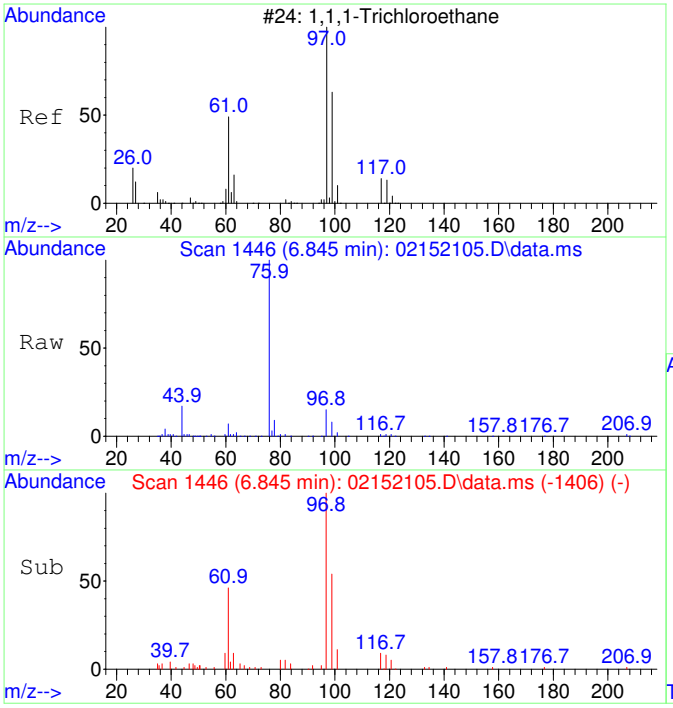


#30
Chloroform SCAN
Concen: 5000.00 ug/L
RT: 6.577 min Scan# 1424
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 83 Resp: 40125

Ion	Ratio	Lower	Upper
83	100		
85	70.0	34.6	94.6
47	33.5	0.0	53.4

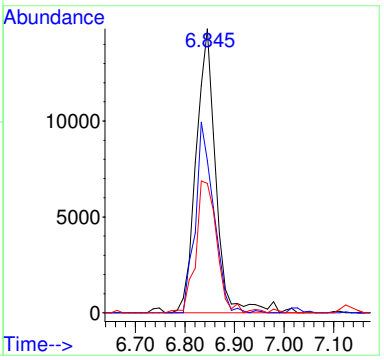


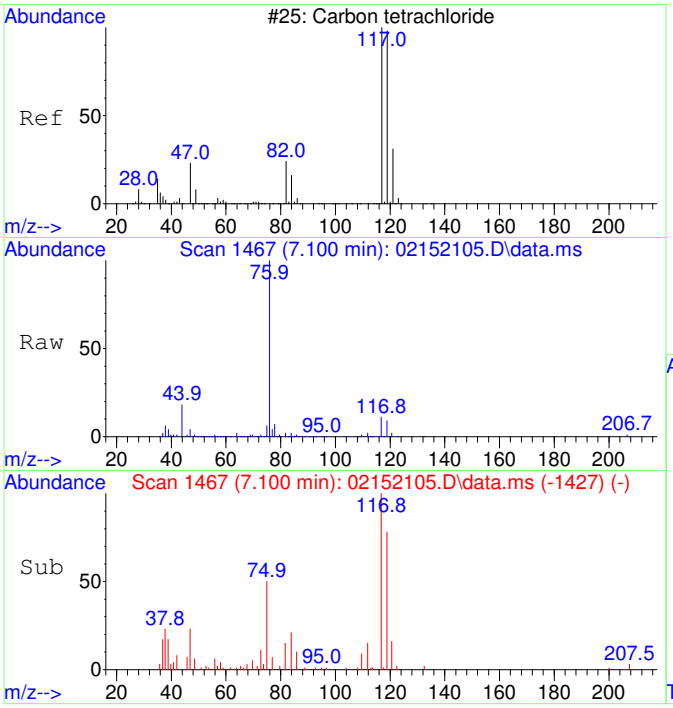


#31
1,1,1-Trichloroethane SCAN
Concen: 5000.00 ug/L
RT: 6.845 min Scan# 1446
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 97 Resp: 41256

Ion	Ratio	Lower	Upper
97	100		
99	61.5	43.6	103.6
61	47.5	18.0	78.0

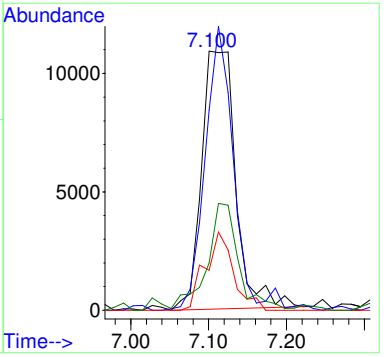


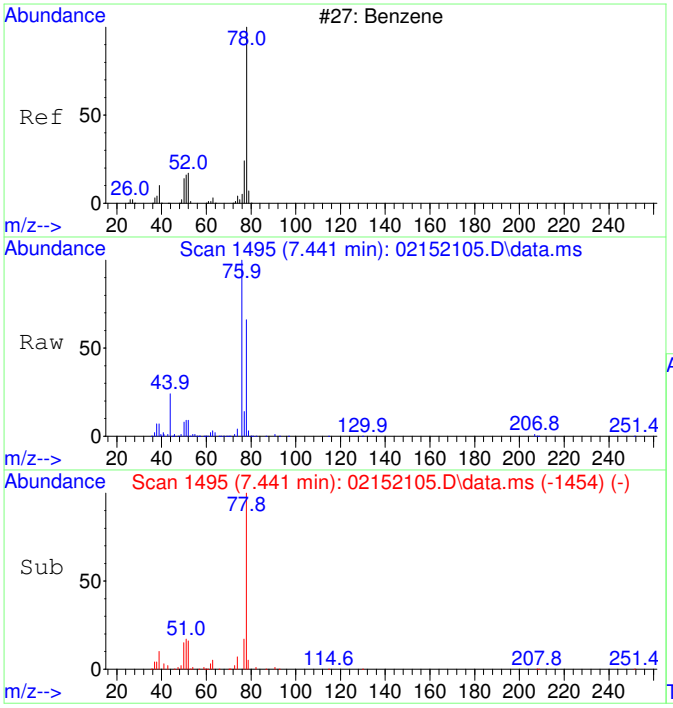


#32
Carbon tetrachloride SCAN
Concen: 5000.00 ug/L
RT: 7.100 min Scan# 1467
Delta R.T. -0.012 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion:117 Resp: 33213

Ion	Ratio	Lower	Upper
117	100		
119	92.3	75.5	135.5
121	25.2	0.0	58.8
82	36.0	0.0	59.2

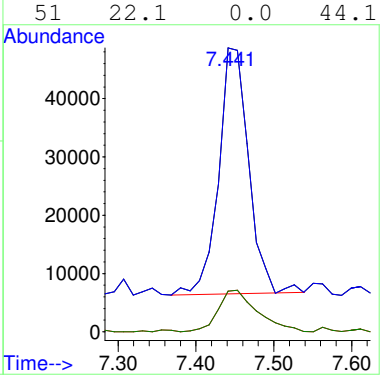


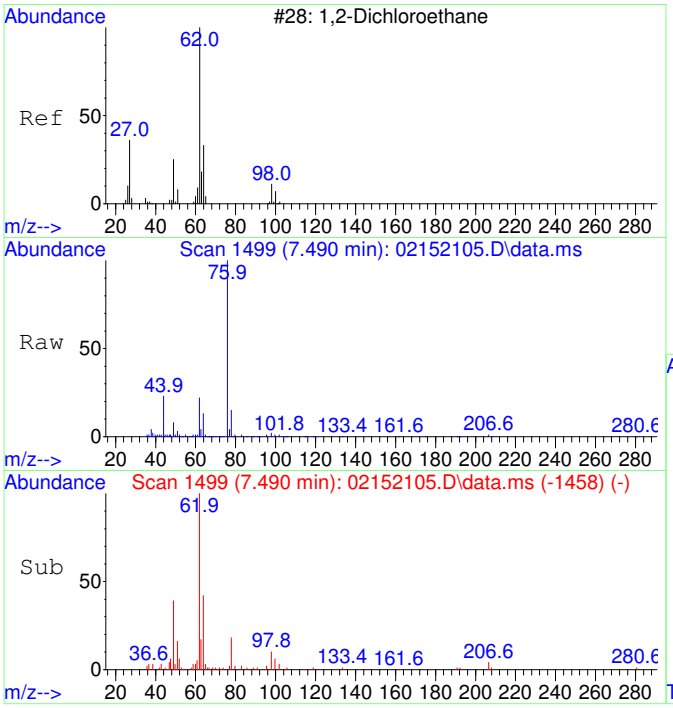


#33
Benzene SCAN
Concen: 5000.00 ug/L
RT: 7.441 min Scan# 1495
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 78 Resp: 113227

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	22.1	0.0	47.9
51	22.1	0.0	44.1

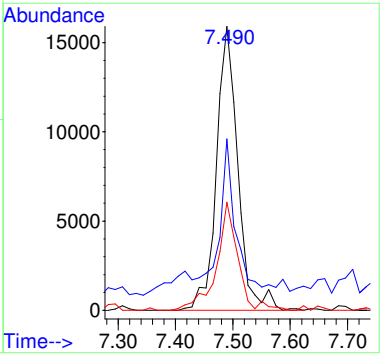


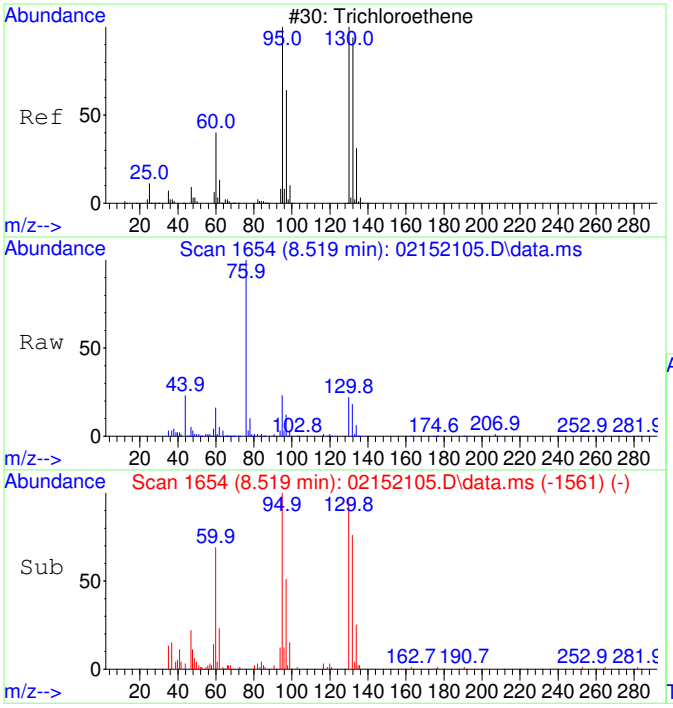


#34
1,2-Dichloroethane SCAN
Concen: 5000.00 ug/L
RT: 7.490 min Scan# 1499
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 62 Resp: 41319

Ion	Ratio	Lower	Upper
62	100		
64	29.8	5.2	65.2
49	35.2	3.9	63.9

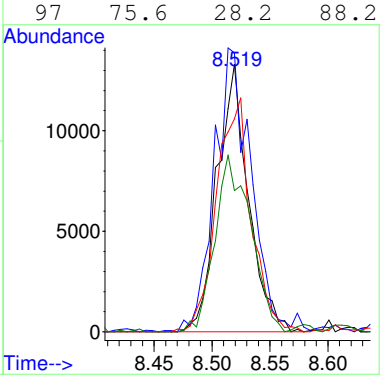


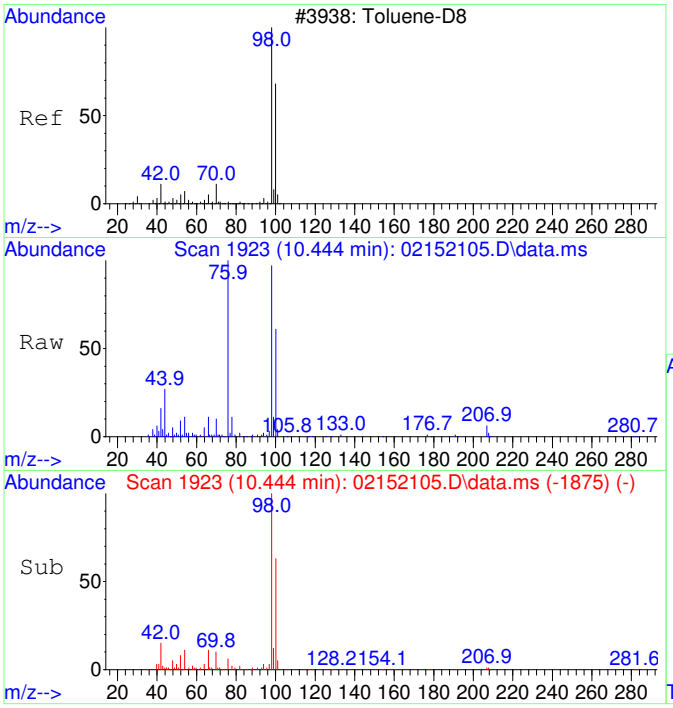


#35
Trichloroethene SCAN
Concen: 5000.00 ug/L
RT: 8.519 min Scan# 1654
Delta R.T. 0.005 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion:130 Resp: 25030

Ion	Ratio	Lower	Upper
130	100		
95	119.2	60.5	120.5
132	96.4	59.6	119.6
97	75.6	28.2	88.2

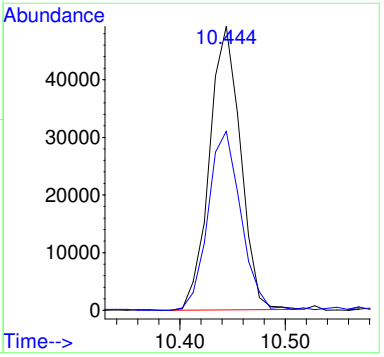


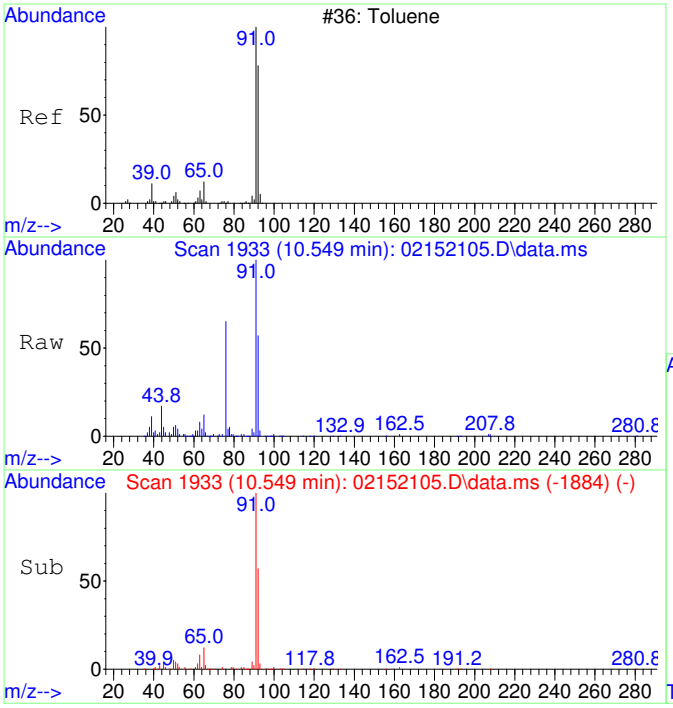


#36
Toluene-d8 SCAN
Concen: 5000.00 ug/L
RT: 10.444 min Scan# 1923
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 98 Resp: 101129

Ion	Ratio	Lower	Upper
98	100		
100	66.6	40.0	100.0

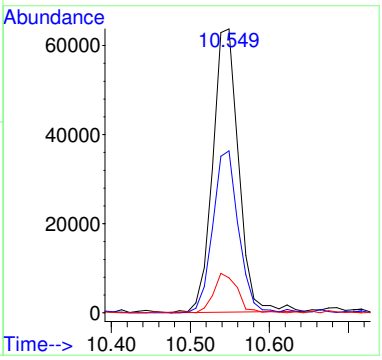


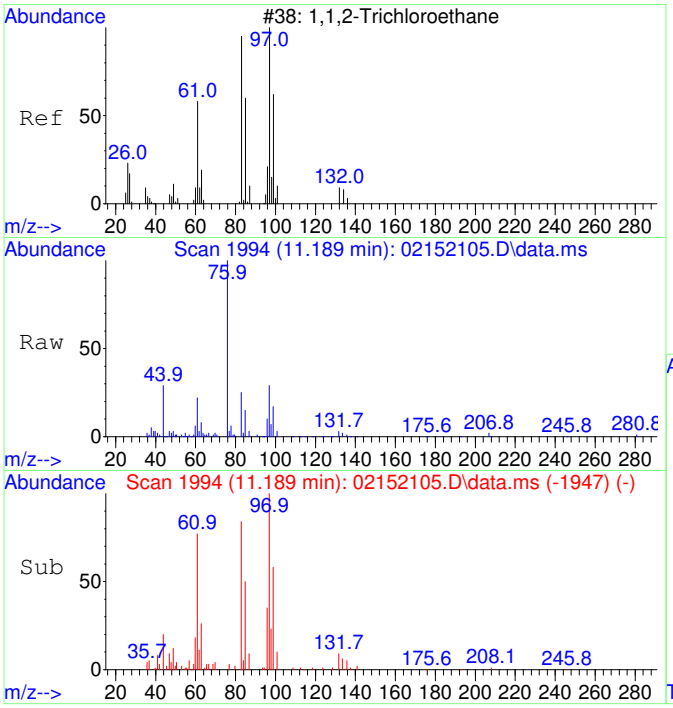


#37
Toluene SCAN
Concen: 5000.00 ug/L
RT: 10.549 min Scan# 1933
Delta R.T. 0.010 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 91 Resp: 144953

Ion	Ratio	Lower	Upper
91	100		
92	56.6	28.3	88.3
65	12.6	0.0	41.0

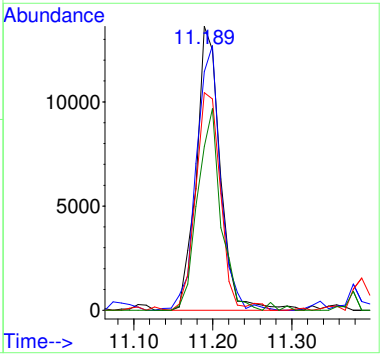


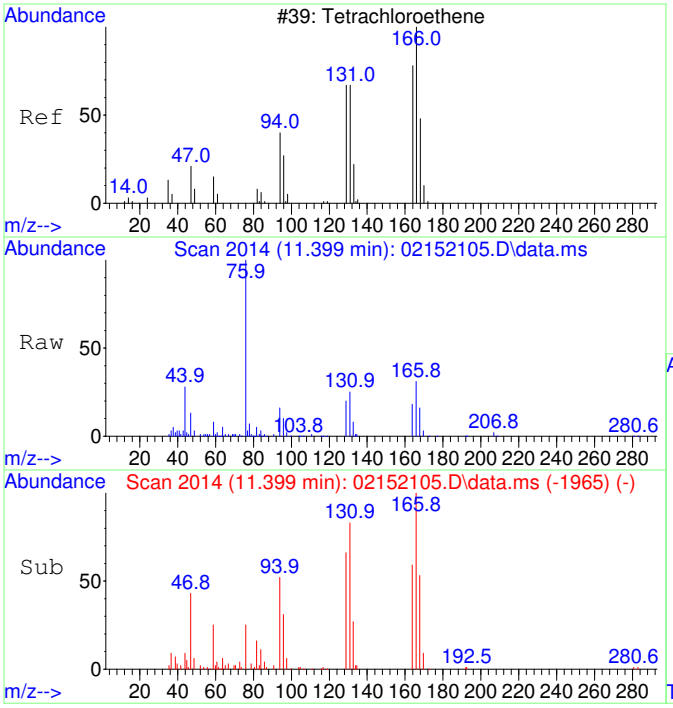


#38
1,1,2-Trichloroethane SCAN
Concen: 5000.00 ug/L
RT: 11.189 min Scan# 1994
Delta R.T. -0.011 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 97 Resp: 28783

Ion	Ratio	Lower	Upper
97	100		
83	94.3	57.7	117.7
61	79.8	32.1	92.1
99	68.8	36.7	96.7

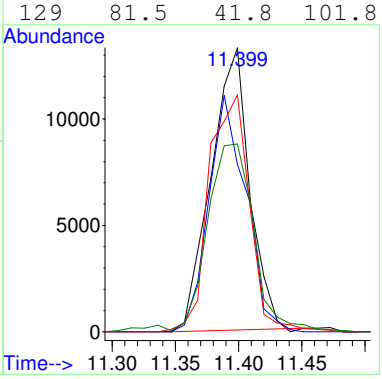


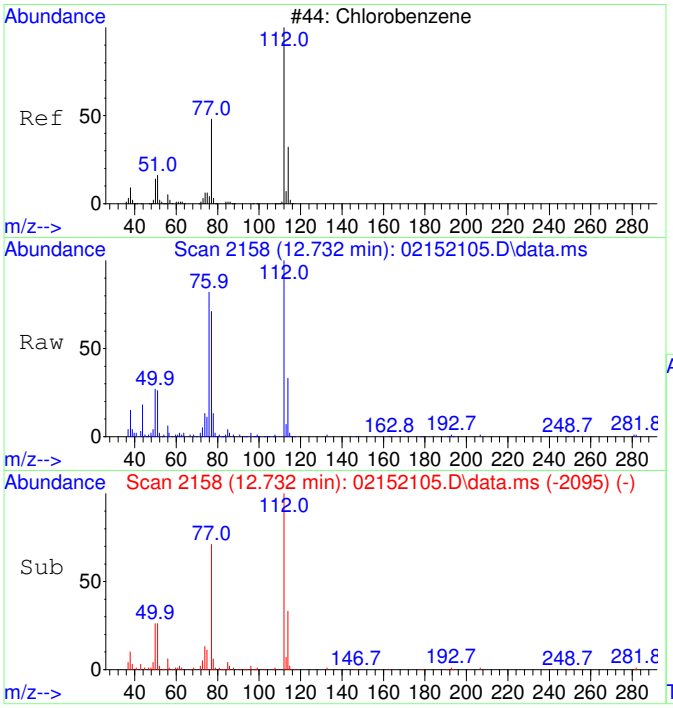


#39
Tetrachloroethene SCAN
Concen: 5000.00 ug/L
RT: 11.399 min Scan# 2014
Delta R.T. 0.010 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion:166 Resp: 28172

Ion	Ratio	Lower	Upper
166	100		
164	81.2	50.9	110.9
131	88.2	38.7	98.7
129	81.5	41.8	101.8

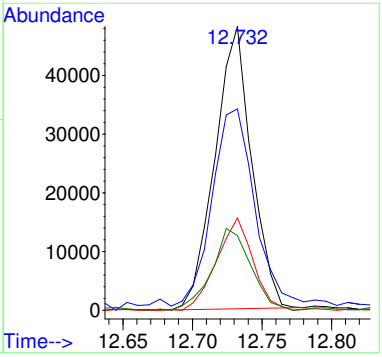


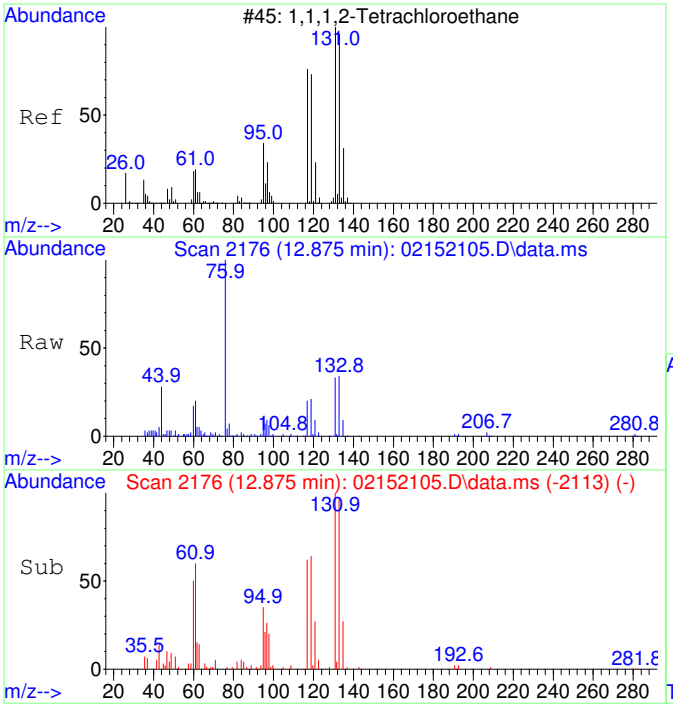


#40
Chlorobenzene SCAN
Concen: 5000.00 ug/L
RT: 12.732 min Scan# 2158
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion:112 Resp: 88637

Ion	Ratio	Lower	Upper
112	100		
77	88.8	28.2	88.2#
114	31.6	2.3	62.3
51	30.1	0.0	50.1

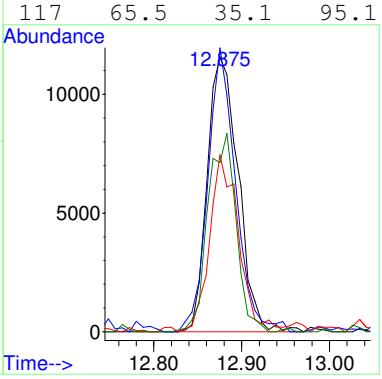


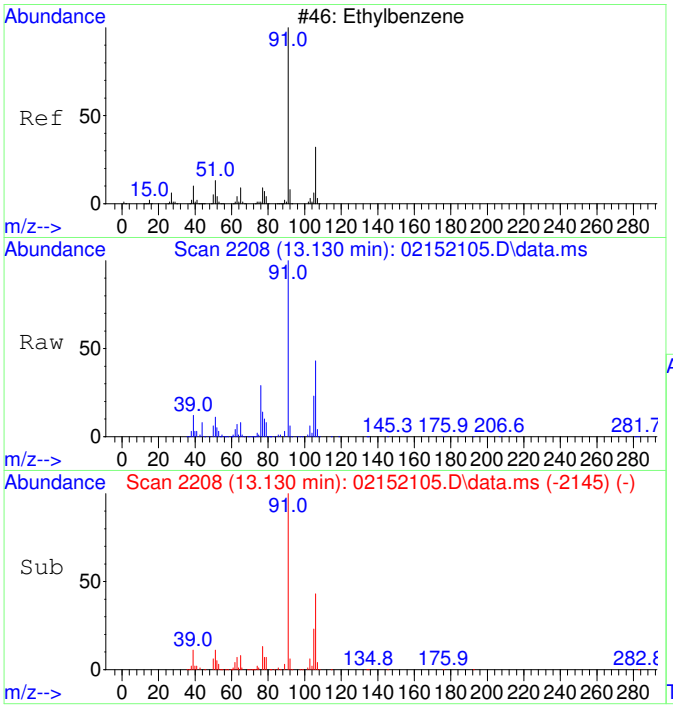


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 5000.00 ug/L
RT: 12.875 min Scan# 2176
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion:131 Resp: 28470

Ion	Ratio	Lower	Upper
131	100		
133	92.8	66.9	126.9
119	57.5	40.4	100.4
117	65.5	35.1	95.1

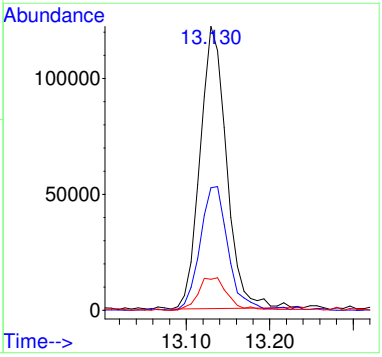


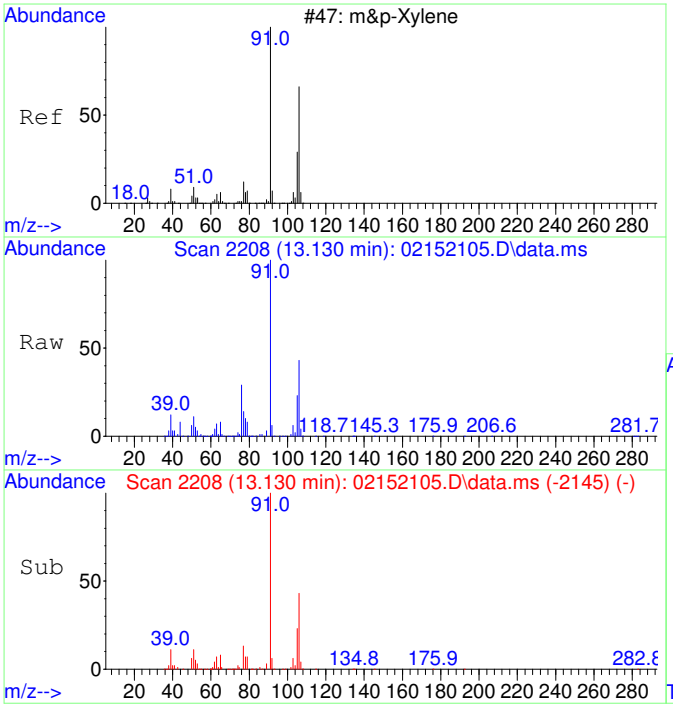


#42
Ethylbenzene SCAN
Concen: 5000.00 ug/L
RT: 13.130 min Scan# 2208
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 91 Resp: 268868

Ion	Ratio	Lower	Upper
91	100		
106	46.1	23.1	83.1
51	13.0	0.0	40.1

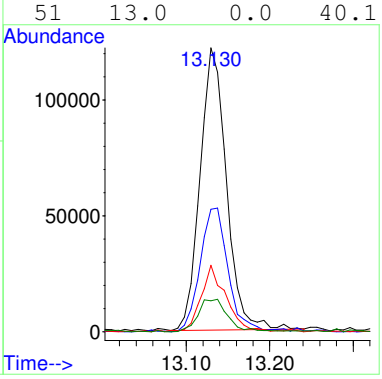


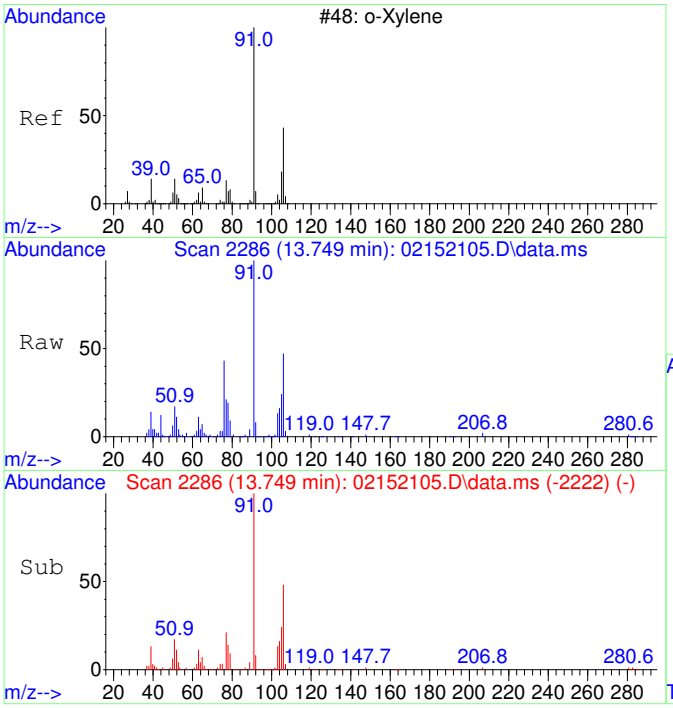


#43
m&p-Xylene SCAN
Concen: 5000.00 ug/L
RT: 13.130 min Scan# 2208
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 91 Resp: 268868

Ion	Ratio	Lower	Upper
91	100		
106	46.1	23.1	83.1
105	22.0	0.0	54.7
51	13.0	0.0	40.1

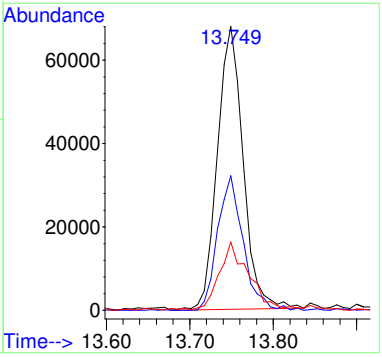


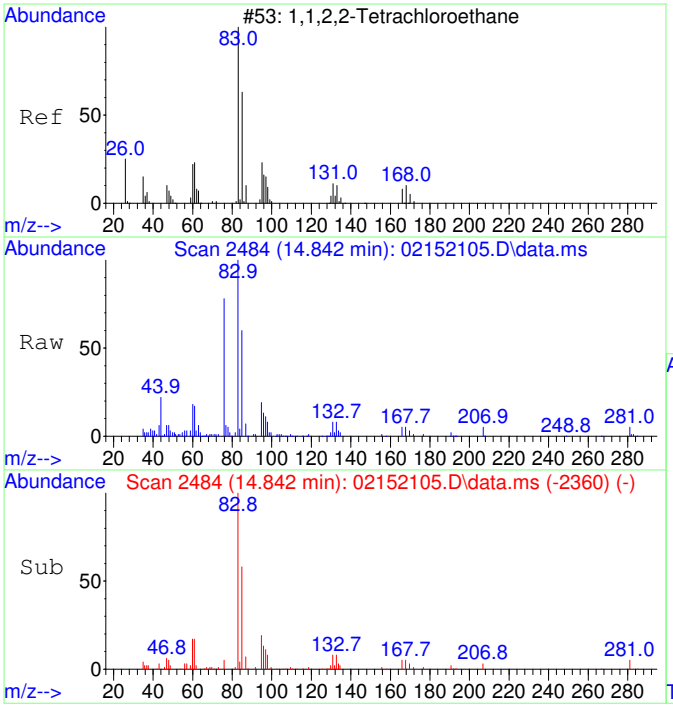


#44
o-Xylene SCAN
Concen: 5000.00 ug/L
RT: 13.749 min Scan# 2286
Delta R.T. 0.008 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 91 Resp: 146177

Ion	Ratio	Lower	Upper
91	100		
106	46.9	18.0	78.0
105	26.0	0.0	56.6

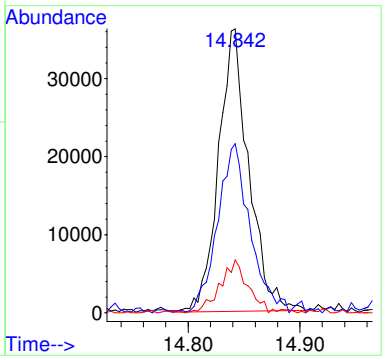


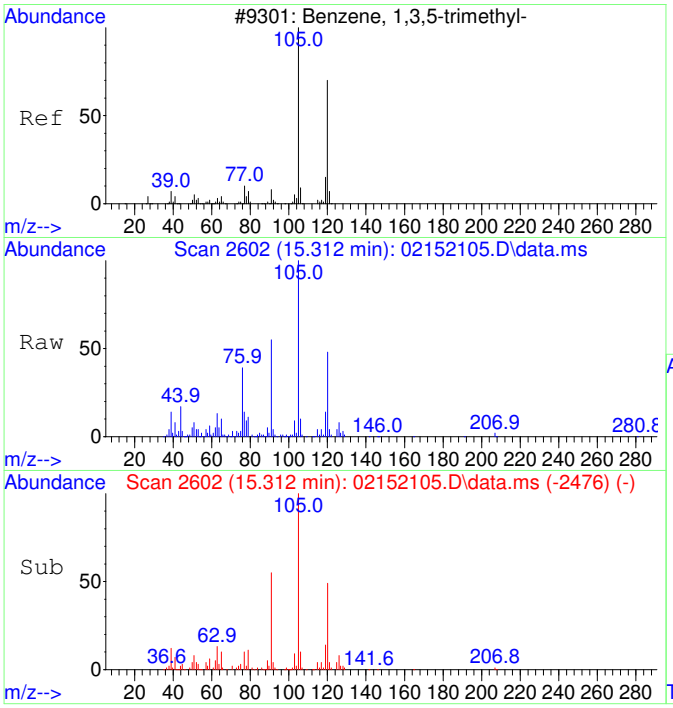


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 5000.00 ug/L
RT: 14.842 min Scan# 2484
Delta R.T. 0.007 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion: 83 Resp: 68145

Ion	Ratio	Lower	Upper
83	100		
85	63.9	35.9	95.9
95	16.5	0.0	47.4

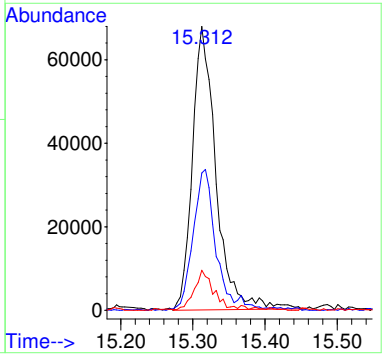


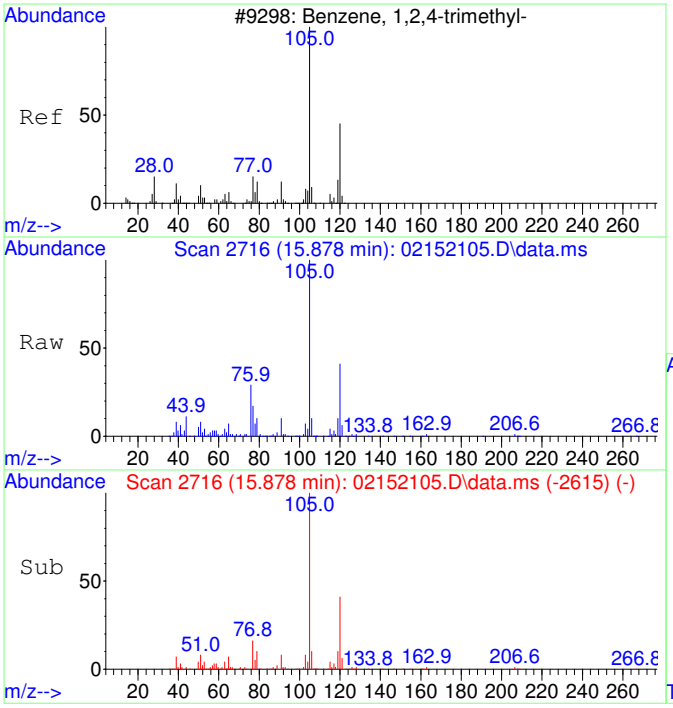


#46
1,3,5-Trimethylbenzene SCAN
Concen: 5000.00 ug/L
RT: 15.312 min Scan# 2602
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion:105 Resp: 154003

Ion	Ratio	Lower	Upper
105	100		
120	48.7	18.3	78.3
119	10.6	0.0	43.1

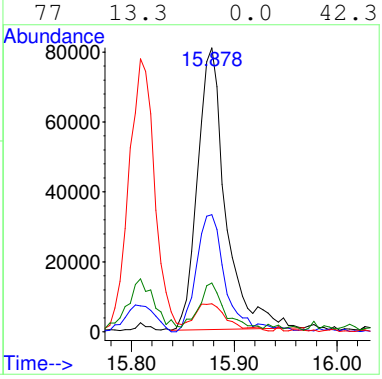


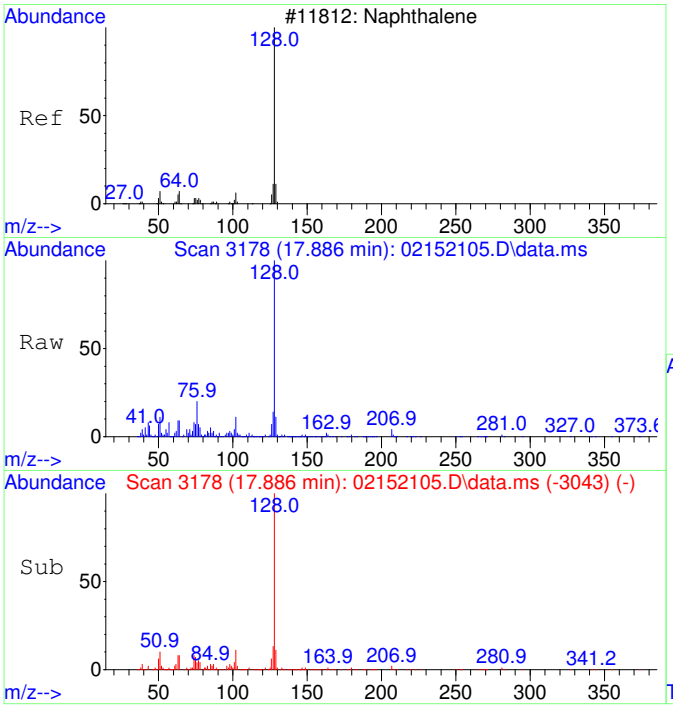


#47
1,2,4-Trimethylbenzene SCAN
Concen: 5000.00 ug/L
RT: 15.878 min Scan# 2716
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion:105 Resp: 152885

Ion	Ratio	Lower	Upper
105	100		
120	43.1	16.9	76.9
119	8.2	0.0	41.9
77	13.3	0.0	42.3

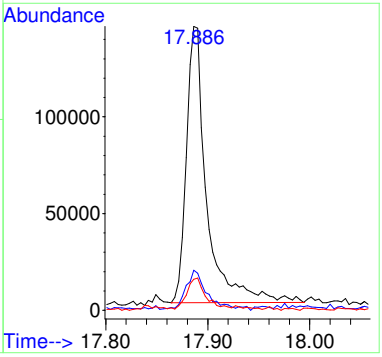




#48
Naphthalene SCAN
Concen: 5000.00 ug/L
RT: 17.886 min Scan# 3178
Delta R.T. -0.000 min
Lab File: 02152105.D
Acq: 15 Feb 2021 11:53

Tgt Ion:128 Resp: 198486

Ion	Ratio	Lower	Upper
128	100		
127	13.0	0.0	44.0
129	9.7	0.0	40.8



S21B036-CAL4

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152106.D
Acq On : 15 Feb 2021 12:16
InstName : AG5975C
Operator : TD
Sample : S21B036-CAL4
Misc : 2106040 1 mg/L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 15 13:25:43 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:23:57 2021
Response via : Initial Calibration

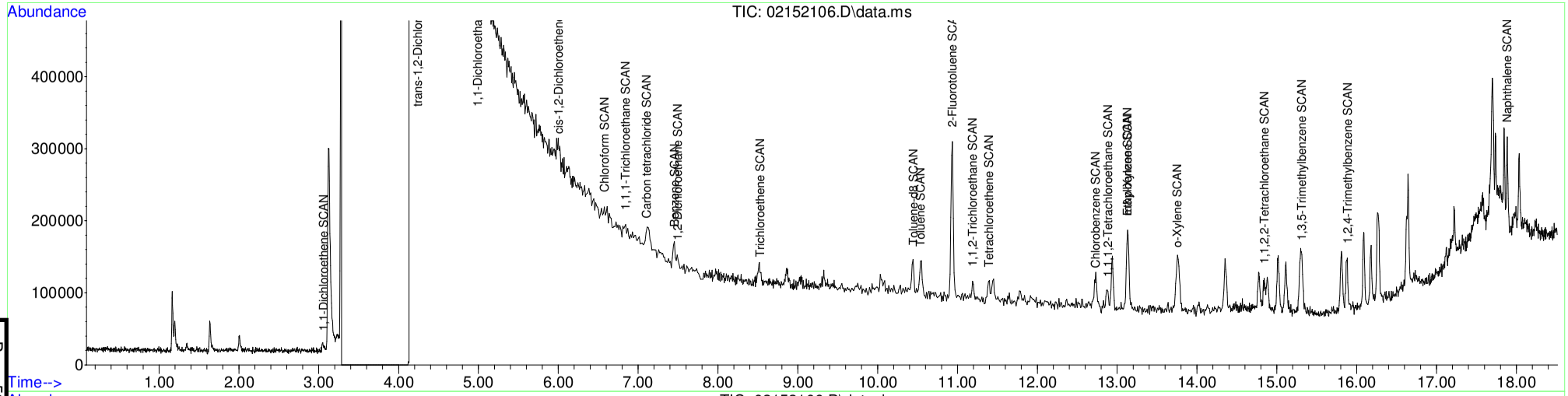
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.928	109	302131	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.435	98	54792	1052.40	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 21.05%#			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.057	61	13468	957.02	ug/L	92
3] trans-1,2-Dichloroethene	4.237	61	15162	1019.88	ug/L	98
4] 1,1-Dichloroethane	4.980	63	18121	1011.98	ug/L	99
5] cis-1,2-Dichloroethene	6.002	61	17957	1017.06	ug/L	98
6] Chloroform	6.579	83	18369	976.10	ug/L	100
7] 1,1,1-Trichloroethane	6.846	97	18071	1010.51	ug/L	98
8] Carbon tetrachloride	7.114	117	15121	1011.86	ug/L	100
9] Benzene	7.442	78	51663	1004.93	ug/L	98
10] 1,2-Dichloroethane	7.479	62	16951	1032.98	ug/L	89
11] Trichloroethene	8.521	130	14179	1041.93	ug/L	94
13] Toluene	10.540	91	71825	996.10	ug/L	100
14] 1,1,2-Trichloroethane	11.191	97	14752	1038.76	ug/L	96
15] Tetrachloroethene	11.390	166	19722	1044.67	ug/L	99
16] Chlorobenzene	12.726	112	54756	912.11	ug/L	91
17] 1,1,1,2-Tetrachloroethane	12.877	131	15091	1031.37	ug/L	98
18] Ethylbenzene	12.932	91	96451	1060.75	ug/L	98
19] m&p-Xylene	13.131	91	150404	2102.75	ug/L	97
20] o-Xylene	13.743	91	81216	1048.25	ug/L	96
21] 1,1,2,2-Tetrachloroethane	14.840	83	32622	1035.94	ug/L	99
22] 1,3,5-Trimethylbenzene	15.314	105	91713	1070.77	ug/L	97
23] 1,2,4-Trimethylbenzene	15.875	105	94099	1033.75	ug/L	95
24] Naphthalene	17.888	128	119572	977.56	ug/L	98
25) 2-Fluorotoluene SCAN	10.938	109	160052	4920.54	ug/L	96
26) 1,1-Dichloroethene SCAN	3.055	61	9197	889.30	ug/L #	53
27) trans-1,2-Dichloroethe...	4.235	61	9860	908.18	ug/L	87
28) 1,1-Dichloroethane SCAN	4.992	63	10635	791.23	ug/L	83
29) cis-1,2-Dichloroethene...	6.007	61	12177	977.85	ug/L #	76
30) Chloroform SCAN	6.578	83	12358	1084.31	ug/L	89
31) 1,1,1-Trichloroethane ...	6.845	97	12214	1042.30	ug/L	95
32) Carbon tetrachloride SCAN	7.101	117	9465	1003.31	ug/L #	15
33) Benzene SCAN	7.453	78	38052	1183.18	ug/L	97
34) 1,2-Dichloroethane SCAN	7.490	62	10843	923.89	ug/L #	57
35) Trichloroethene SCAN	8.525	130	7439	1046.35	ug/L #	75
36) Toluene-d8 SCAN	10.444	98	34564	1203.29	ug/L	92
37) Toluene SCAN	10.539	91	44117	1071.52	ug/L	92
38) 1,1,2-Trichloroethane ...	11.189	97	8594	1051.19	ug/L	80
39) Tetrachloroethene SCAN	11.389	166	8202	1025.00	ug/L #	65
40) Chlorobenzene SCAN	12.725	112	29926	1188.65	ug/L	77
41) 1,1,1,2-Tetrachloroeth...	12.883	131	7144	883.44	ug/L	86
42) Ethylbenzene SCAN	13.130	91	90262	1181.92	ug/L	93
43) m&p-Xylene SCAN	13.130	91	90262	1181.92	ug/L	94
44) o-Xylene SCAN	13.749	91	46619	1122.81	ug/L	93
45) 1,1,2,2-Tetrachloroeth...	14.842	83	22067	1140.07	ug/L	93
46) 1,3,5-Trimethylbenzene...	15.313	105	47501	1085.91	ug/L	93
47) 1,2,4-Trimethylbenzene...	15.883	105	48631	1119.88	ug/L	98
48) Naphthalene SCAN	17.887	128	57658	1022.71	ug/L	93

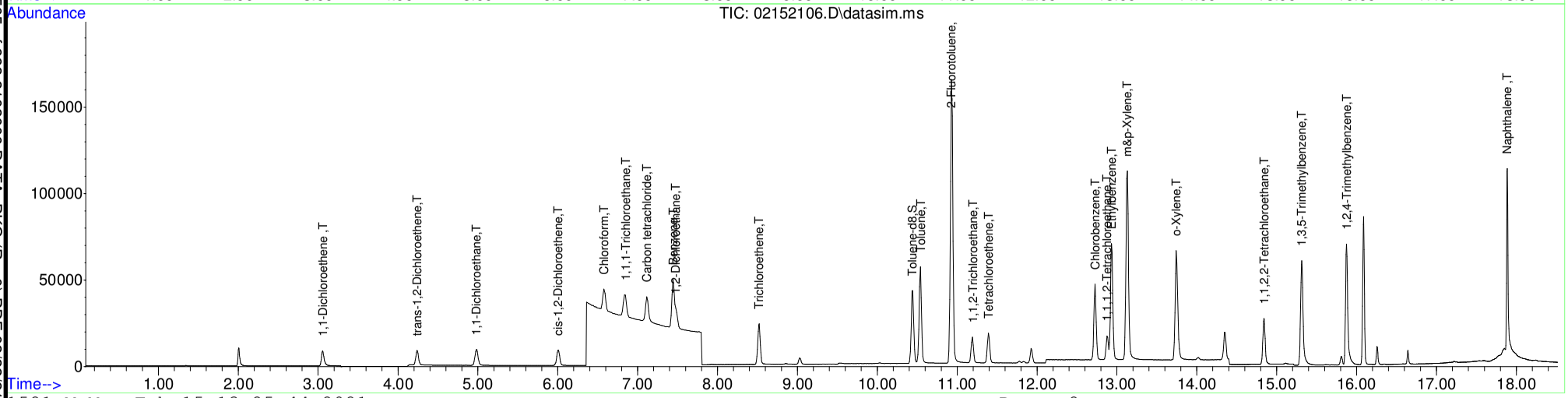
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152106.D
Acq On : 15 Feb 2021 12:16
InstName : AG5975C
Operator : TD
Sample : S21B036-CAL4
Misc : 2106040 1 mg/L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 15 13:25:43 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:23:57 2021
Response via : Initial Calibration





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S21B036-CAL5

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152107.D
Acq On : 15 Feb 2021 12:40
InstName : AG5975C
Operator : TD
Sample : S21B036-CAL5
Misc : 2106041 0.15 mg/L
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 15 13:25:46 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:23:57 2021
Response via : Initial Calibration

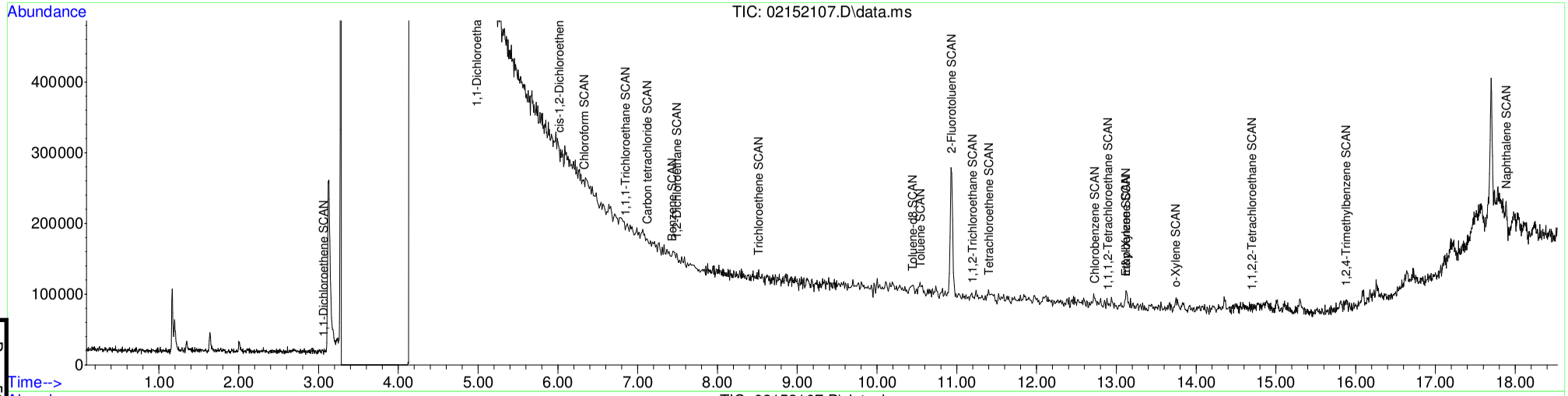
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.928	109	287015	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.435	98	7659	154.86	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 3.10%#			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.056	61	2015	150.72	ug/L	89
3] trans-1,2-Dichloroethene	4.237	61	2218	157.05	ug/L	99
4] 1,1-Dichloroethane	4.986	63	2616	153.79	ug/L	92
5] cis-1,2-Dichloroethene	6.001	61	2612	155.73	ug/L	100
6] Chloroform	6.579	83	2778	155.39	ug/L	100
7] 1,1,1-Trichloroethane	6.834	97	2563	150.87	ug/L	94
8] Carbon tetrachloride	7.114	117	2089	147.15	ug/L	95
9] Benzene	7.442	78	9697	198.56	ug/L	72
10] 1,2-Dichloroethane	7.479	62	2445	156.84	ug/L	73
11] Trichloroethene	8.520	130	2005	155.09	ug/L	92
13] Toluene	10.540	91	11212	163.68	ug/L	98
14] 1,1,2-Trichloroethane	11.190	97	2062	152.84	ug/L	90
15] Tetrachloroethene	11.390	166	2800	156.13	ug/L	92
16] Chlorobenzene	12.726	112	9544	167.35	ug/L	81
17] 1,1,1,2-Tetrachloroethane	12.877	131	2133	153.45	ug/L	94
18] Ethylbenzene	12.932	91	13917	161.12	ug/L	96
19] m&p-Xylene	13.131	91	22258	327.57	ug/L	95
20] o-Xylene	13.742	91	12039	163.57	ug/L	98
21] 1,1,2,2-Tetrachloroethane	14.840	83	4577	153.00	ug/L	94
22] 1,3,5-Trimethylbenzene	15.314	105	13278	163.19	ug/L	97
23] 1,2,4-Trimethylbenzene	15.875	105	14450	167.10	ug/L	94
24] Naphthalene	17.888	128	14699	126.50	ug/L	98
25) 2-Fluorotoluene SCAN	10.927	109	148526	4806.68	ug/L	92
26) 1,1-Dichloroethene SCAN	3.055	61	269	27.38	ug/L #	23
28) 1,1-Dichloroethane SCAN	4.978	63	1678	131.42	ug/L #	50
29) cis-1,2-Dichloroethene...	6.013	61	1566	132.38	ug/L #	50
30) Chloroform SCAN	6.332	83	353	32.60	ug/L	95
31) 1,1,1-Trichloroethane ...	6.845	97	1601	143.82	ug/L #	66
32) Carbon tetrachloride SCAN	7.113	117	1423	158.78	ug/L #	51
33) Benzene SCAN	7.429	78	12858	420.86	ug/L	97
34) 1,2-Dichloroethane SCAN	7.490	62	2524	226.39	ug/L #	5
35) Trichloroethene SCAN	8.519	130	960	142.14	ug/L #	63
36) Toluene-d8 SCAN	10.444	98	5044	184.85	ug/L	84
37) Toluene SCAN	10.539	91	6847	175.06	ug/L	94
38) 1,1,2-Trichloroethane ...	11.200	97	1491	191.98	ug/L #	56
39) Tetrachloroethene SCAN	11.399	166	1394	183.38	ug/L #	37
40) Chlorobenzene SCAN	12.724	112	6237	260.78	ug/L #	1
41) 1,1,1,2-Tetrachloroeth...	12.891	131	194	25.25	ug/L #	1
42) Ethylbenzene SCAN	13.122	91	12102	166.81	ug/L	95
43) m&p-Xylene SCAN	13.122	91	12102	166.81	ug/L	95
44) o-Xylene SCAN	13.741	91	6879	174.40	ug/L	90
45) 1,1,2,2-Tetrachloroeth...	14.701	83	532	28.93	ug/L	82
47) 1,2,4-Trimethylbenzene...	15.878	105	8370	202.90	ug/L	78
48) Naphthalene SCAN	17.883	128	7155	133.60	ug/L	58

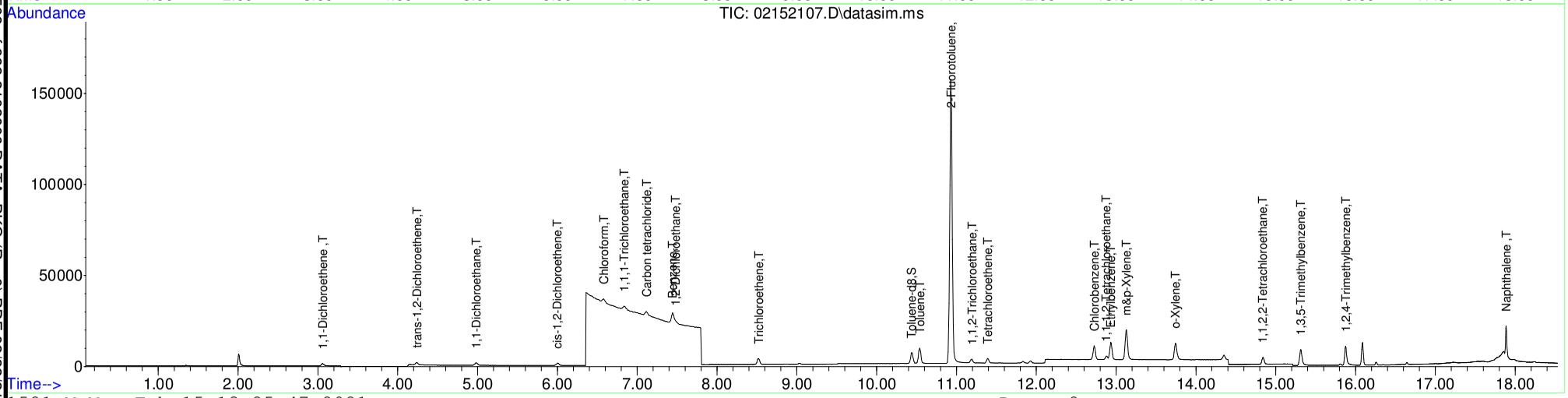
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152107.D
Acq On : 15 Feb 2021 12:40
InstName : AG5975C
Operator : TD
Sample : S21B036-CAL5
Misc : 2106041 0.15 mg/L
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 15 13:25:46 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:23:57 2021
Response via : Initial Calibration





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S21B036-CAL6

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Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152108.D
Acq On : 15 Feb 2021 13:03
InstName : AG5975C
Operator : TD
Sample : S21B036-CAL6
Misc : 2106042 0.05 mg/L
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 15 13:25:49 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:23:57 2021
Response via : Initial Calibration

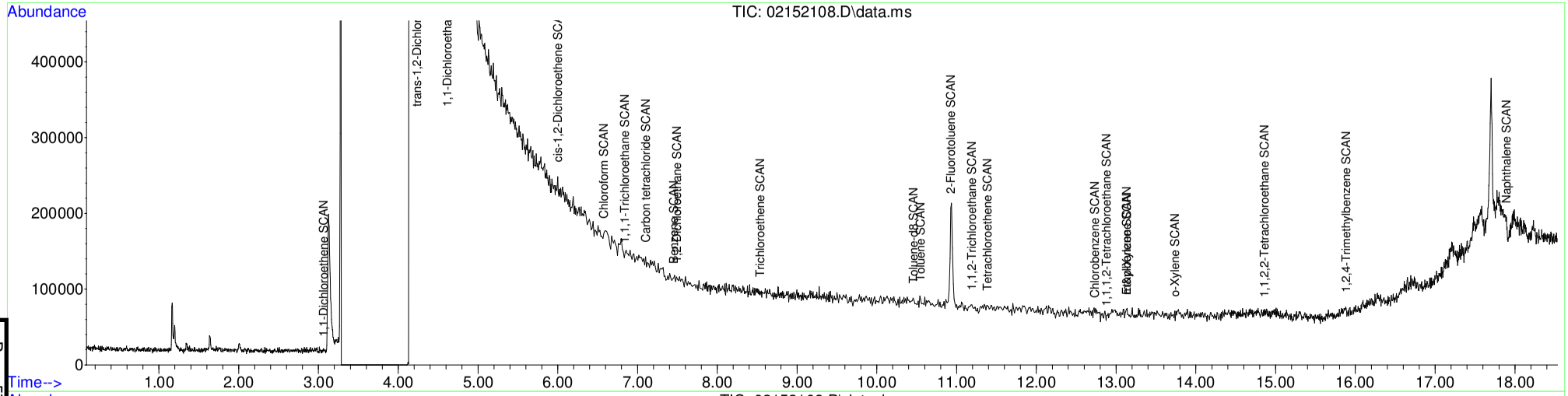
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.928	109	225463	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.435	98	1963	50.52	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 1.01%#			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.057	61	495	47.13	ug/L	99
3] trans-1,2-Dichloroethene	4.230	61	493	44.44	ug/L #	1
4] 1,1-Dichloroethane	4.980	63	655	49.02	ug/L	77
5] cis-1,2-Dichloroethene	6.002	61	644	48.88	ug/L	97
6] Chloroform	6.579	83	785	55.90	ug/L	91
7] 1,1,1-Trichloroethane	6.834	97	689	51.63	ug/L	85
8] Carbon tetrachloride	7.114	117	561	50.31	ug/L	98
9] Benzene	7.443	78	3886	101.29	ug/L #	28
10] 1,2-Dichloroethane	7.479	62	594	48.51	ug/L	99
11] Trichloroethene	8.515	130	507	49.93	ug/L	83
13] Toluene	10.540	91	3504	65.12	ug/L	98
14] 1,1,2-Trichloroethane	11.191	97	540	50.95	ug/L #	37
15] Tetrachloroethene	11.390	166	748	53.09	ug/L	97
16] Chlorobenzene	12.726	112	3365	75.11	ug/L	70
17] 1,1,1,2-Tetrachloroethane	12.877	131	528	48.36	ug/L	86
18] Ethylbenzene	12.932	91	3629	53.48	ug/L	95
19] m&p-Xylene	13.131	91	5966	111.77	ug/L	95
20] o-Xylene	13.743	91	3156	54.59	ug/L	99
21] 1,1,2,2-Tetrachloroethane	14.840	83	1223	52.04	ug/L	86
22] 1,3,5-Trimethylbenzene	15.314	105	3170	49.60	ug/L	99
23] 1,2,4-Trimethylbenzene	15.875	105	3801	55.96	ug/L	93
24] Naphthalene	17.858	128	4249	46.55	ug/L #	68
25) 2-Fluorotoluene SCAN	10.927	109	114184	4704.11	ug/L	91
26) 1,1-Dichloroethene SCAN	3.059	61	315	40.82	ug/L #	71
27) trans-1,2-Dichloroethe...	4.229	61	367	45.30	ug/L	78
28) 1,1-Dichloroethane SCAN	4.614	63	317	31.60	ug/L	72
29) cis-1,2-Dichloroethene...	6.000	61	483	51.98	ug/L #	47
30) Chloroform SCAN	6.578	83	1252	147.21	ug/L #	35
31) 1,1,1-Trichloroethane ...	6.833	97	589	67.36	ug/L #	36
32) Carbon tetrachloride SCAN	7.101	117	231	32.81	ug/L #	15
33) Benzene SCAN	7.453	78	12640	526.67	ug/L	94
34) 1,2-Dichloroethane SCAN	7.490	62	1652	188.63	ug/L #	61
35) Trichloroethene SCAN	8.530	130	154	29.03	ug/L #	37
36) Toluene-d8 SCAN	10.455	98	1353	63.12	ug/L	75
37) Toluene SCAN	10.539	91	2099	68.32	ug/L #	30
38) 1,1,2-Trichloroethane ...	11.189	97	426	69.83	ug/L #	17
39) Tetrachloroethene SCAN	11.378	166	358	59.95	ug/L #	29
40) Chlorobenzene SCAN	12.733	112	2473	131.63	ug/L #	54
41) 1,1,1,2-Tetrachloroeth...	12.876	131	310	51.37	ug/L #	14
42) Ethylbenzene SCAN	13.130	91	2584	45.34	ug/L	87
43) m&p-Xylene SCAN	13.130	91	2584	45.34	ug/L	81
44) o-Xylene SCAN	13.733	91	2150	69.39	ug/L #	53
45) 1,1,2,2-Tetrachloroeth...	14.857	83	914	63.28	ug/L	67
47) 1,2,4-Trimethylbenzene...	15.879	105	3058	94.37	ug/L #	28
48) Naphthalene SCAN	17.894	128	1292	30.71	ug/L	63

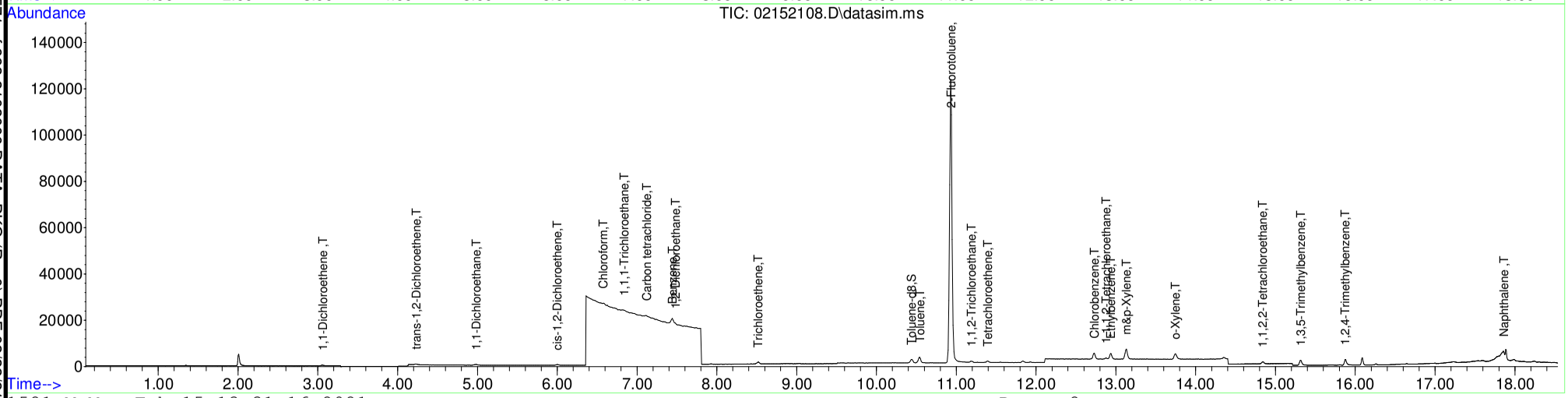
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152108.D
Acq On : 15 Feb 2021 13:03
InstName : AG5975C
Operator : TD
Sample : S21B036-CAL6
Misc : 2106042 0.05 mg/L
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 15 13:25:49 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:23:57 2021
Response via : Initial Calibration





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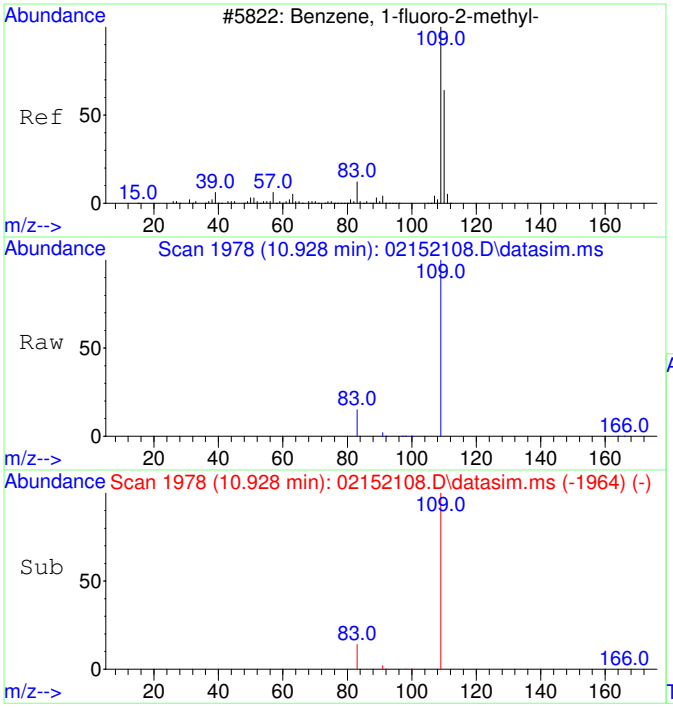
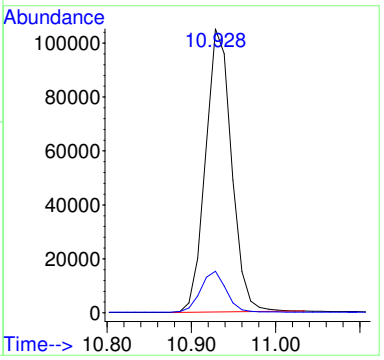
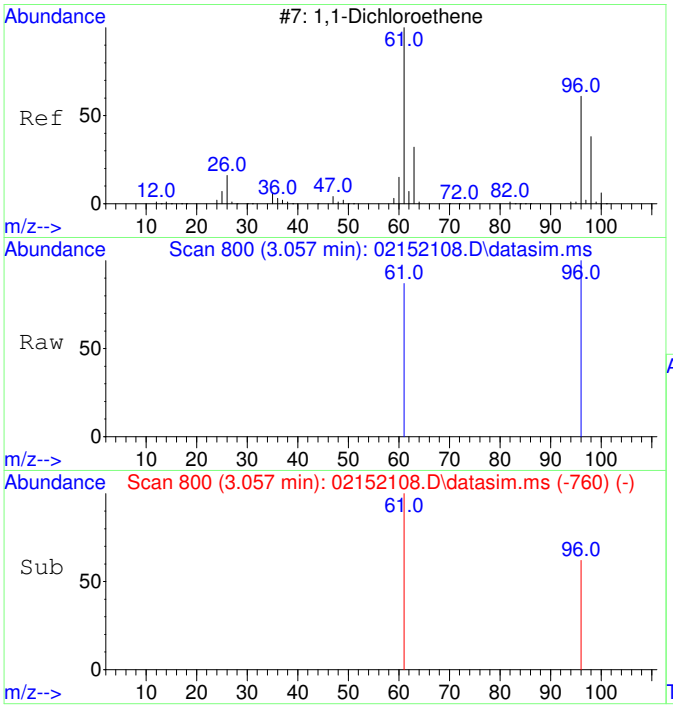


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.928 min Scan# 1978
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:109 Resp: 225463

Ion	Ratio	Lower	Upper
109	100		
83	14.2	0.0	42.3

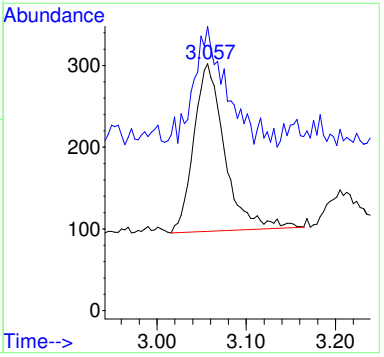


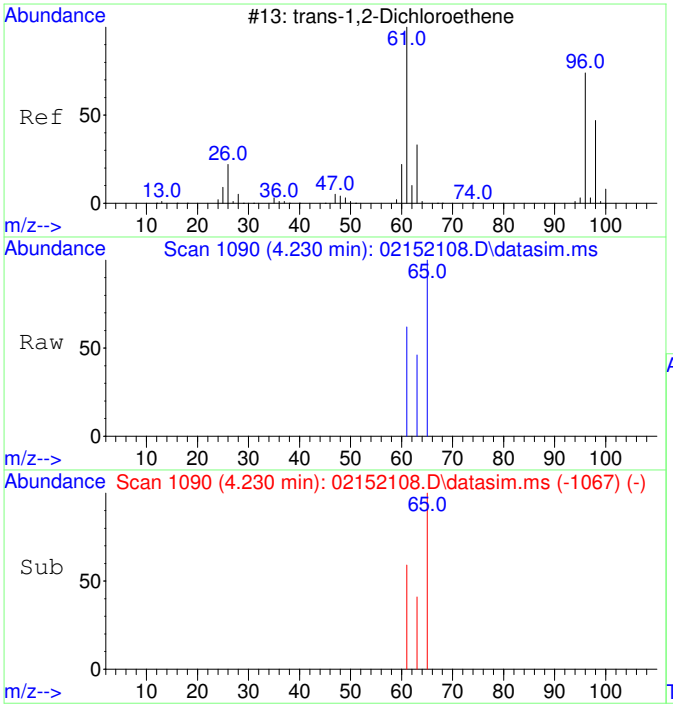


#2
1,1-Dichloroethene
Concen: 47.13 ug/L
RT: 3.057 min Scan# 800
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 61 Resp: 495

Ion	Ratio	Lower	Upper
61	100		
96	67.7	37.2	97.2

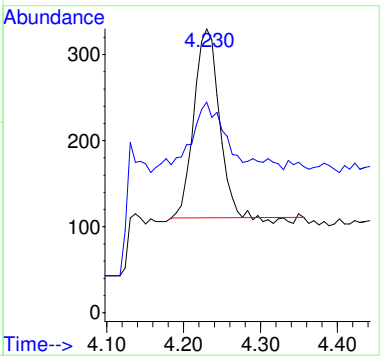


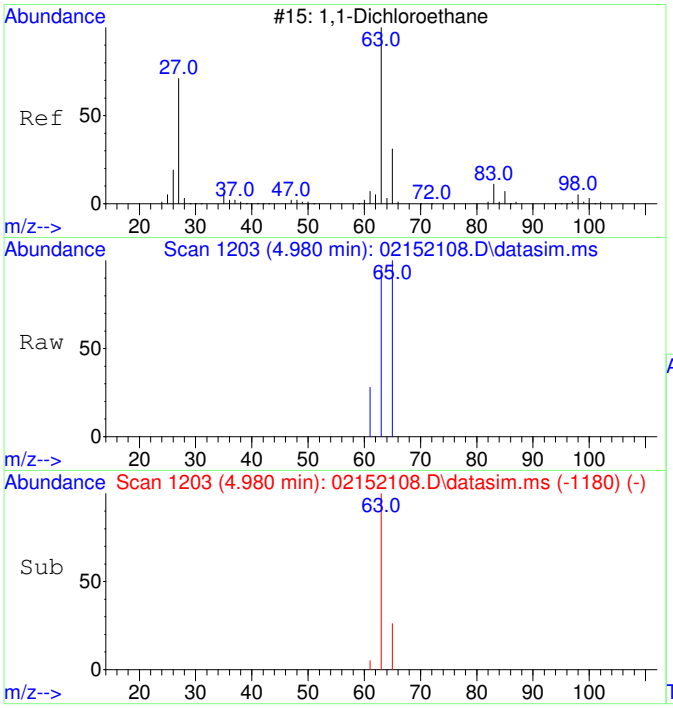


#3
trans-1,2-Dichloroethene
Concen: 44.44 ug/L
RT: 4.230 min Scan# 1090
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 61 Resp: 493

Ion	Ratio	Lower	Upper
61	100		
63	149.3	2.4	62.4#

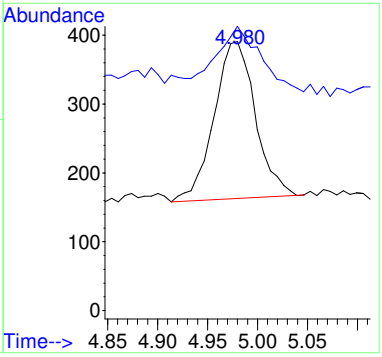


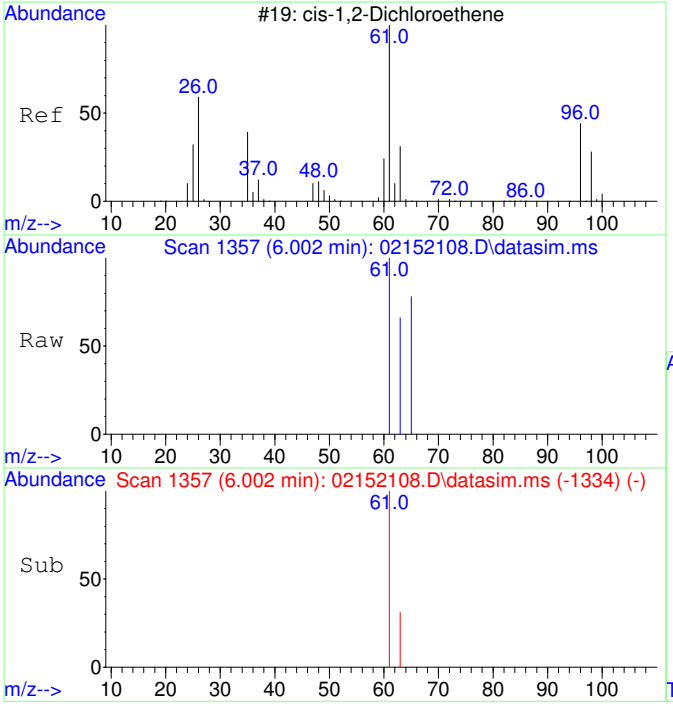


#4
1,1-Dichloroethane
Concen: 49.02 ug/L
RT: 4.980 min Scan# 1203
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 63 Resp: 655

Ion	Ratio	Lower	Upper
63	100		
65	44.4	1.8	61.8

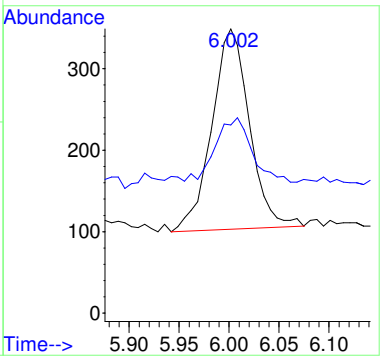


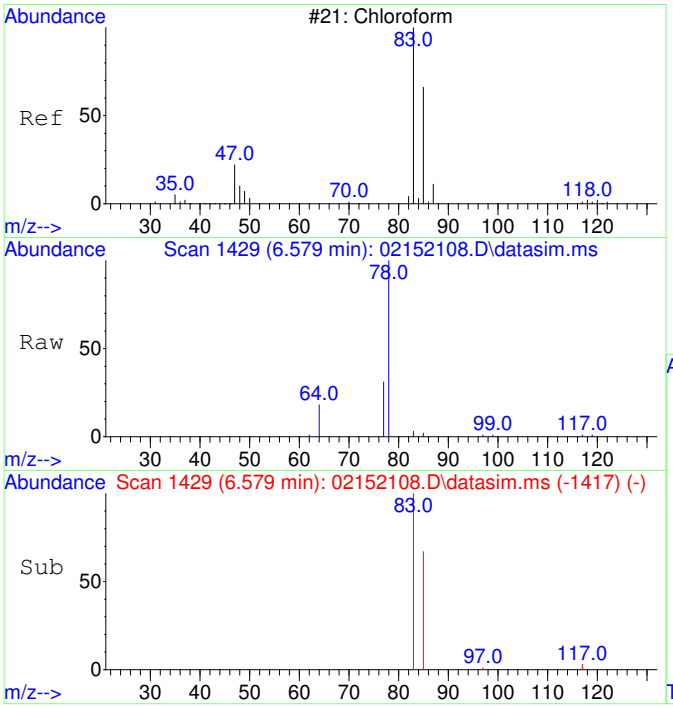


#5
cis-1,2-Dichloroethene
Concen: 48.88 ug/L
RT: 6.002 min Scan# 1357
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 61 Resp: 644

Ion	Ratio	Lower	Upper
61	100		
63	34.3	2.5	62.5

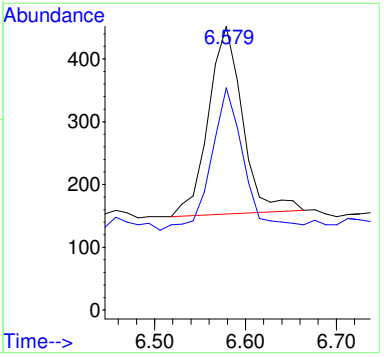


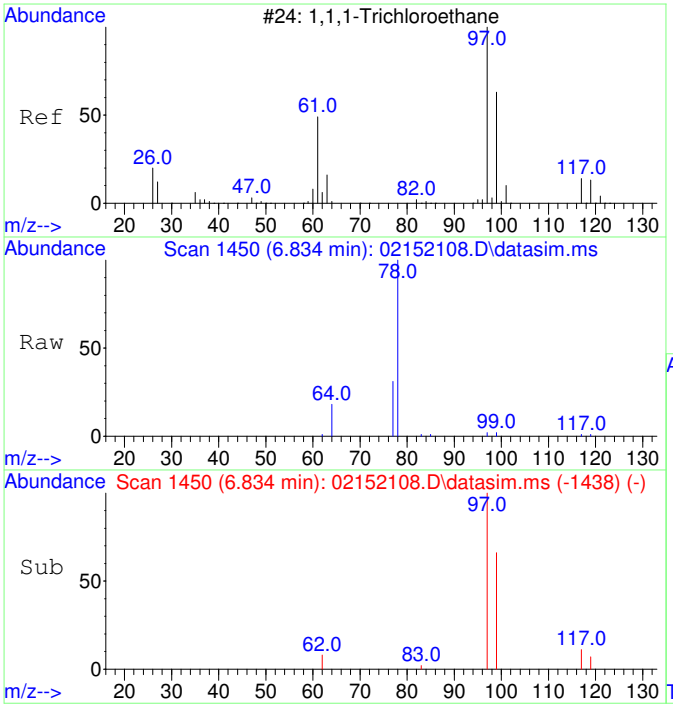


#6
Chloroform
Concen: 55.90 ug/L
RT: 6.579 min Scan# 1429
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 83 Resp: 785

Ion	Ratio	Lower	Upper
83	100		
85	72.1	35.1	95.1

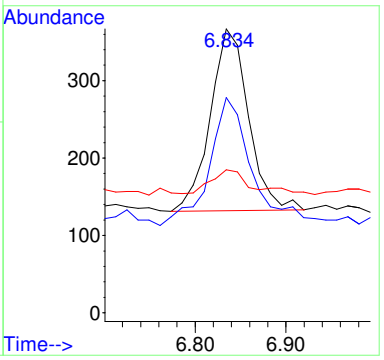


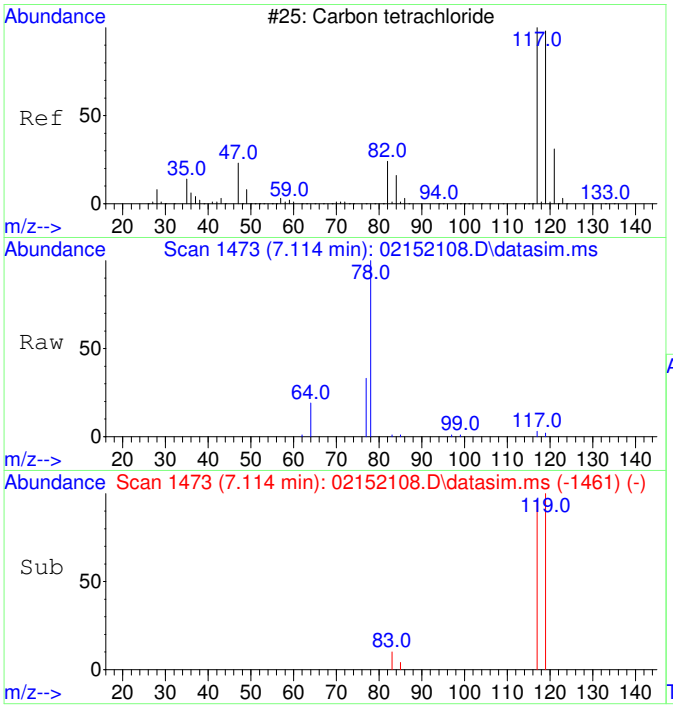


#7
1,1,1-Trichloroethane
Concen: 51.63 ug/L
RT: 6.834 min Scan# 1450
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 97 Resp: 689

Ion	Ratio	Lower	Upper
97	100		
99	78.1	34.6	94.6
117	14.8	0.0	43.2

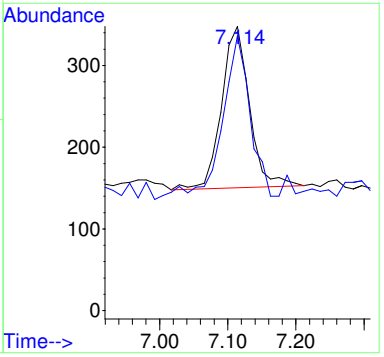


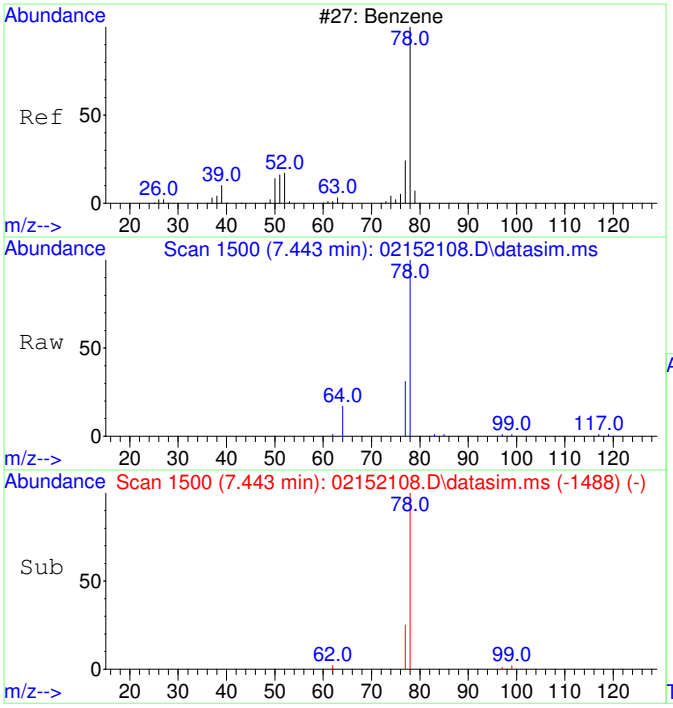


#8
Carbon tetrachloride
Concen: 50.31 ug/L
RT: 7.114 min Scan# 1473
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:117 Resp: 561

Ion	Ratio	Lower	Upper
117	100		
119	94.5	66.4	126.4

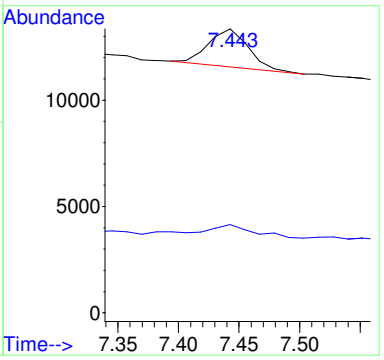


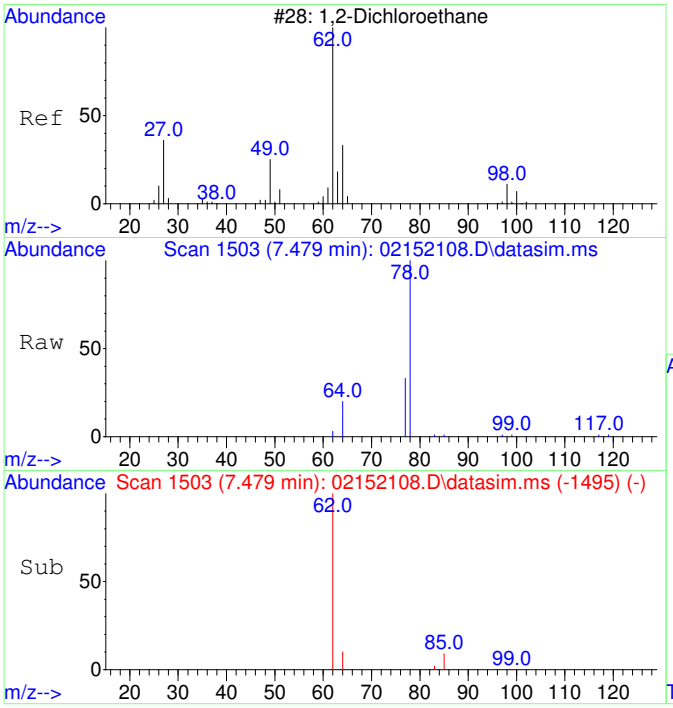


#9
Benzene
Concen: 101.29 ug/L
RT: 7.443 min Scan# 1500
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 78 Resp: 3886

Ion	Ratio	Lower	Upper
78	100		
77	58.2	0.0	53.2#

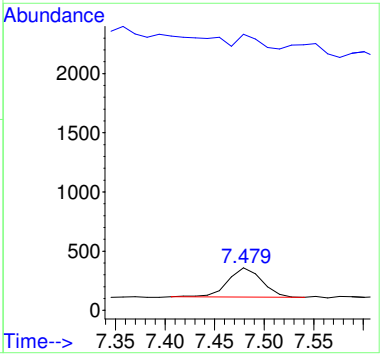


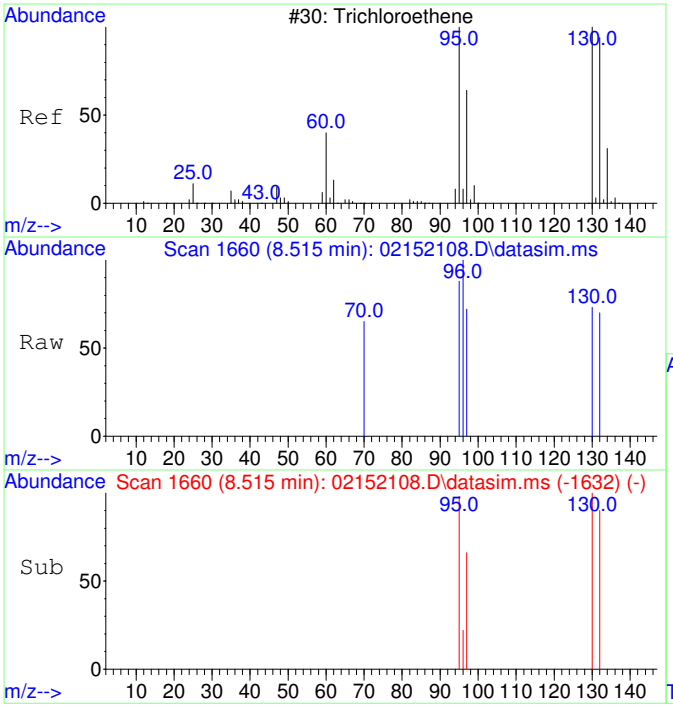


#10
1,2-Dichloroethane
Concen: 48.51 ug/L
RT: 7.479 min Scan# 1503
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 62 Resp: 594

Ion	Ratio	Lower	Upper
62	100		
64	31.6	2.3	62.3

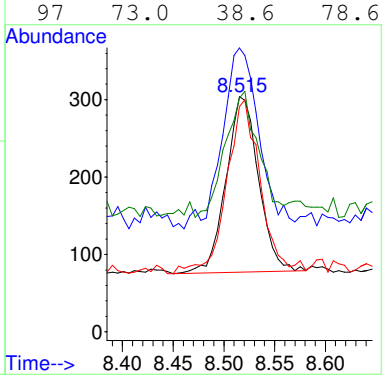


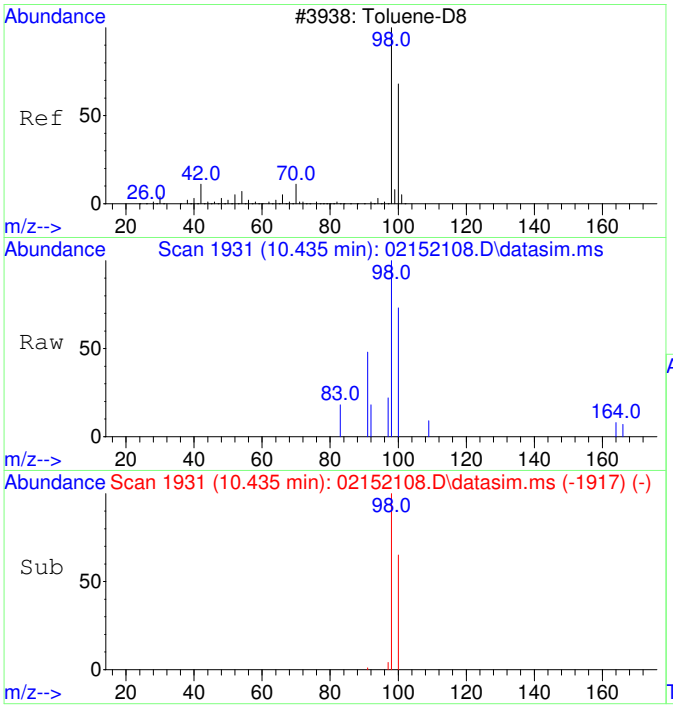


#11
Trichloroethene
Concen: 49.93 ug/L
RT: 8.515 min Scan# 1660
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:130 Resp: 507

Ion	Ratio	Lower	Upper
130	100		
95	116.6	60.7	120.7
132	102.2	76.0	116.0
97	73.0	38.6	78.6

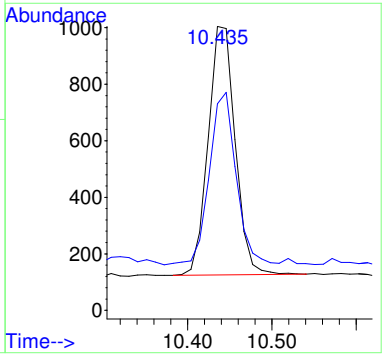


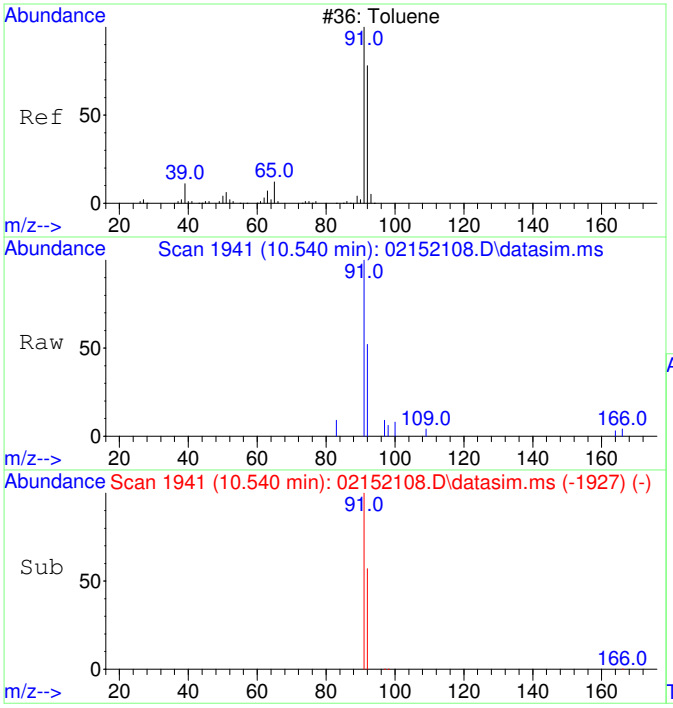


#12
Toluene-d8
Concen: 50.52 ug/L
RT: 10.435 min Scan# 1931
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 98 Resp: 1963

Ion	Ratio	Lower	Upper
98	100		
100	67.6	37.1	97.1

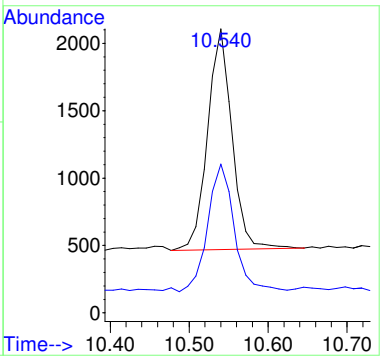


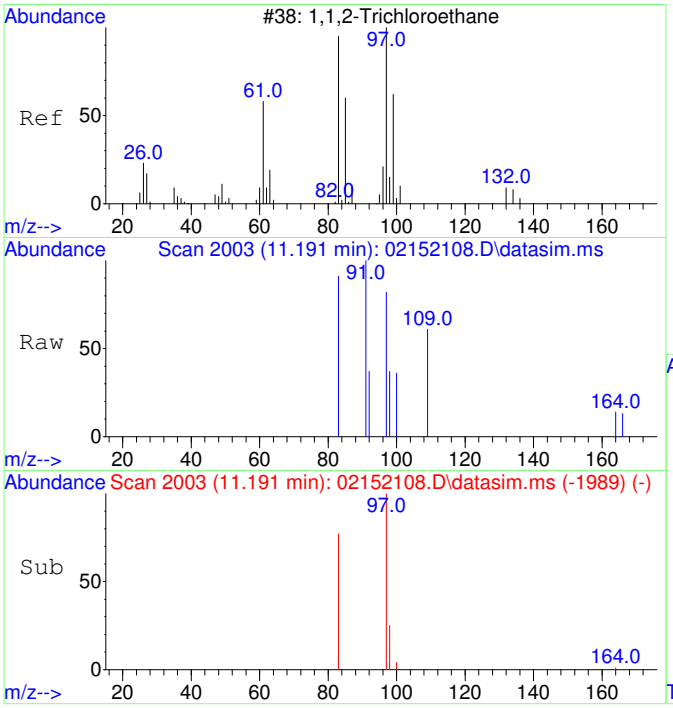


#13
Toluene
Concen: 65.12 ug/L
RT: 10.540 min Scan# 1941
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 91 Resp: 3504

Ion	Ratio	Lower	Upper
91	100		
92	61.6	29.9	89.9

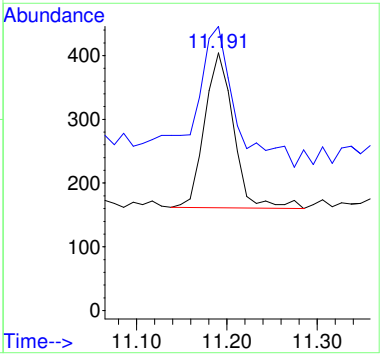


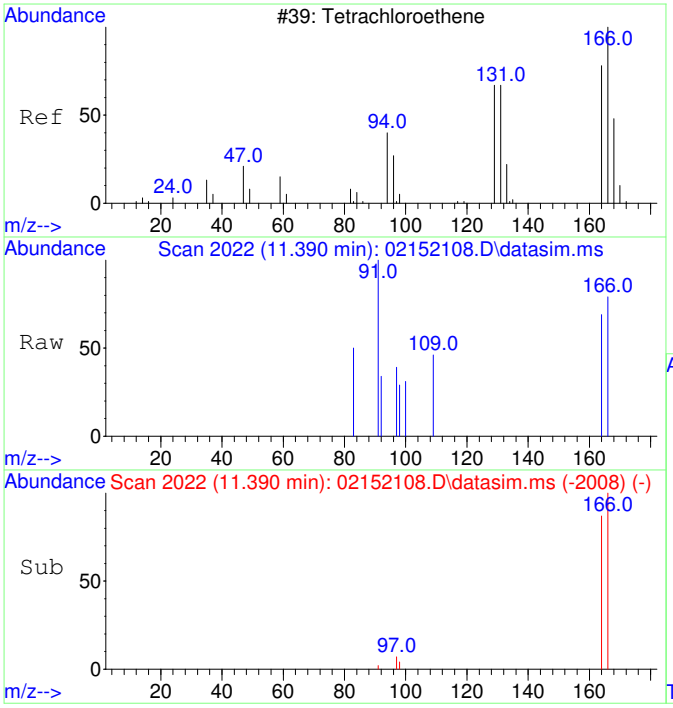


#14
1,1,2-Trichloroethane
Concen: 50.95 ug/L
RT: 11.191 min Scan# 2003
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 97 Resp: 540

Ion	Ratio	Lower	Upper
97	100		
83	137.0	51.2	111.2#

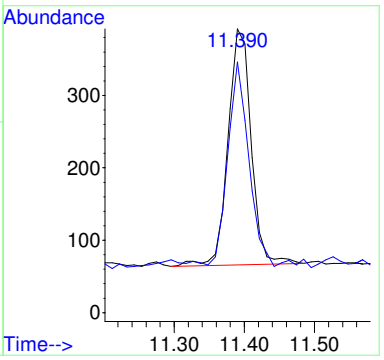


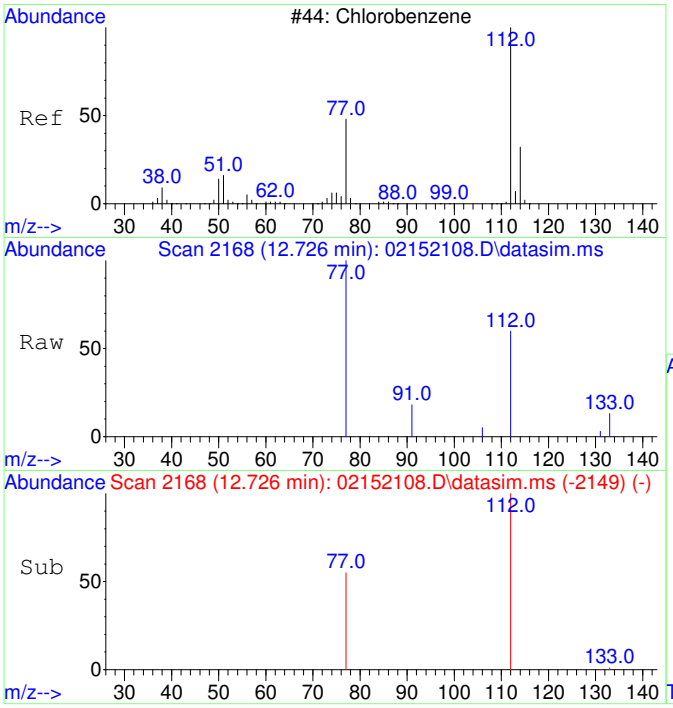


#15
Tetrachloroethene
Concen: 53.09 ug/L
RT: 11.390 min Scan# 2022
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:166 Resp: 748

Ion	Ratio	Lower	Upper
166	100		
164	75.3	47.8	107.8

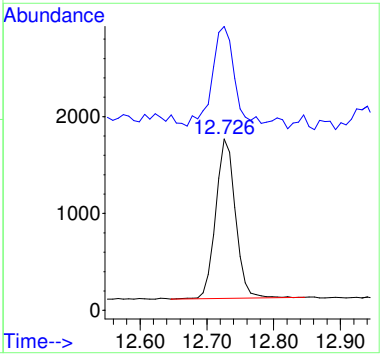


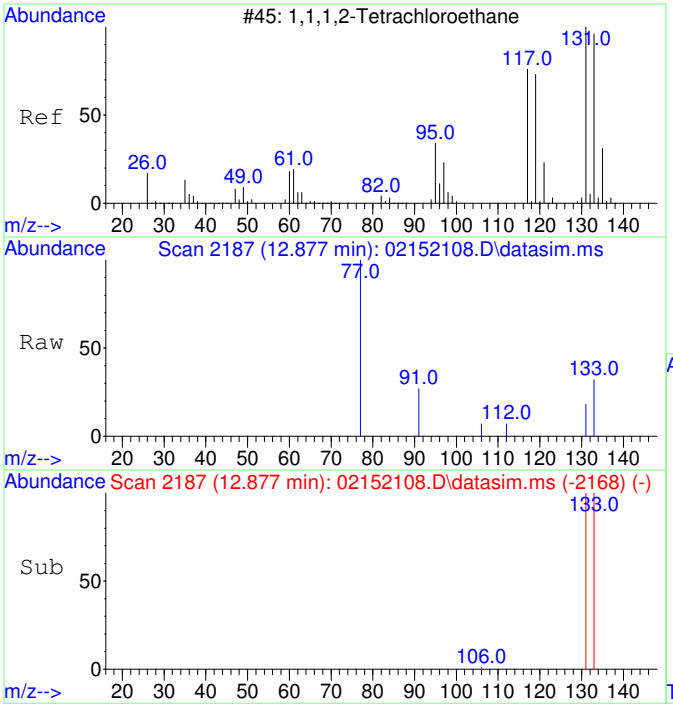


#16
Chlorobenzene
Concen: 75.11 ug/L
RT: 12.726 min Scan# 2168
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:112 Resp: 3365

Ion	Ratio	Lower	Upper
112	100		
77	75.0	23.6	83.6

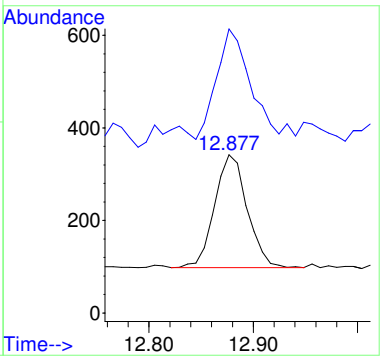


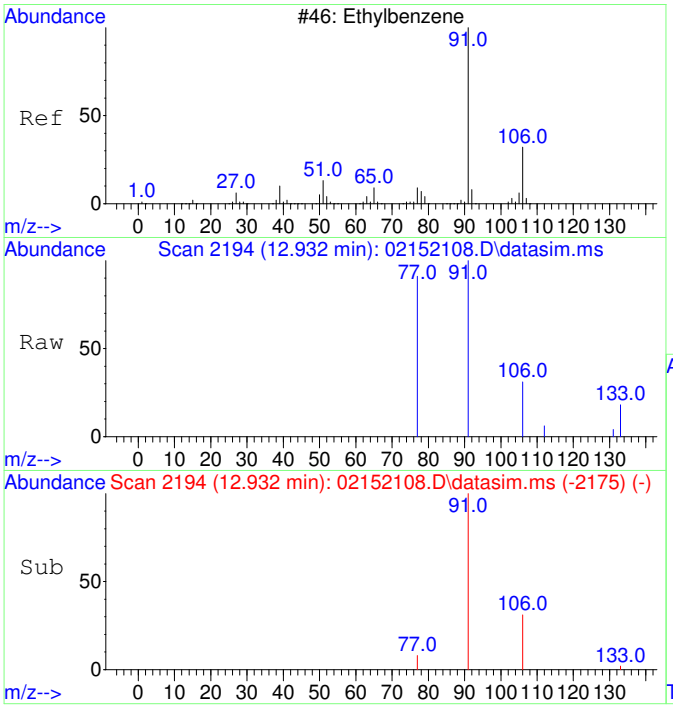


#17
1,1,1,2-Tetrachloroethane
Concen: 48.36 ug/L
RT: 12.877 min Scan# 2187
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:131 Resp: 528

Ion	Ratio	Lower	Upper
131	100		
133	110.2	66.3	126.3

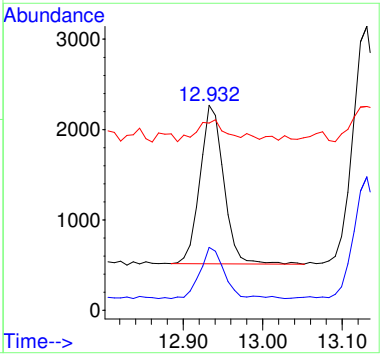


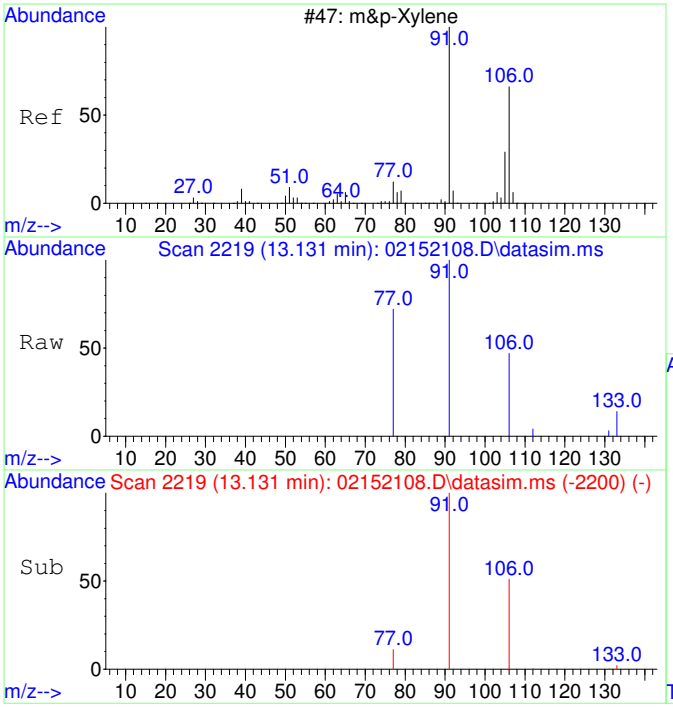


#18
Ethylbenzene
Concen: 53.48 ug/L
RT: 12.932 min Scan# 2194
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 91 Resp: 3629

Ion	Ratio	Lower	Upper
91	100		
106	32.5	3.0	63.0
77	15.9	0.0	38.2

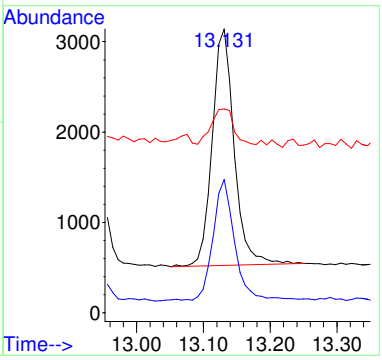


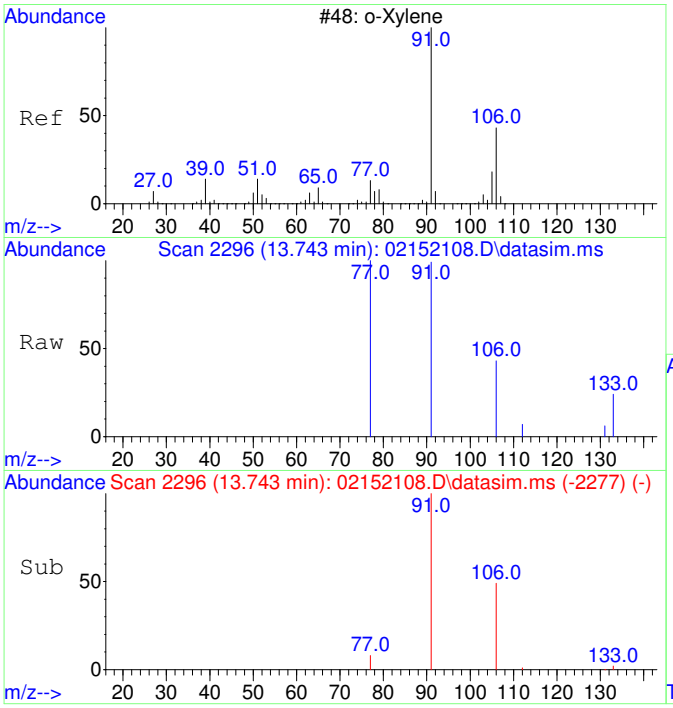


#19
m&p-Xylene
Concen: 111.77 ug/L
RT: 13.131 min Scan# 2219
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 91 Resp: 5966

Ion	Ratio	Lower	Upper
91	100		
106	49.0	22.2	82.2
77	15.3	0.0	42.4

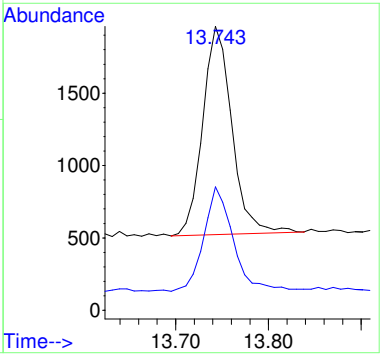


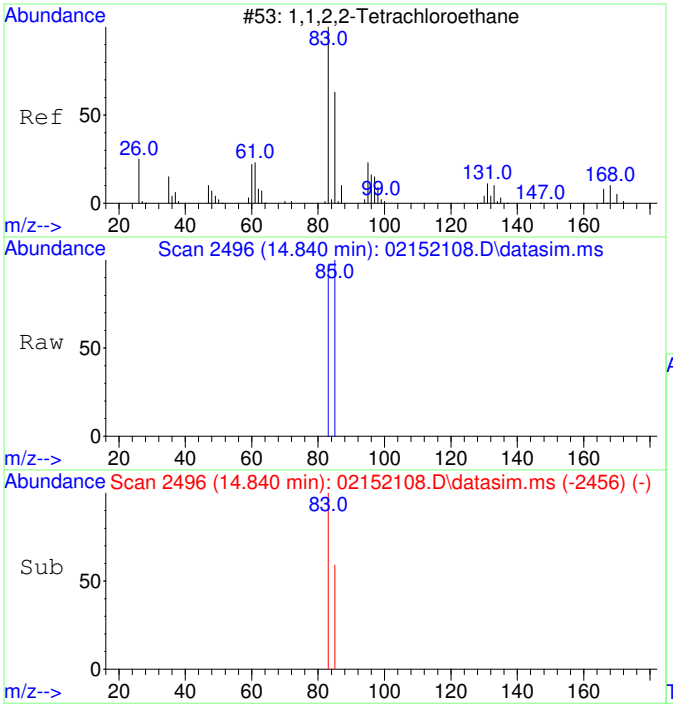


#20
o-Xylene
Concen: 54.59 ug/L
RT: 13.743 min Scan# 2296
Delta R.T. -0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 91 Resp: 3156

Ion	Ratio	Lower	Upper
91	100		
106	49.7	19.2	79.2

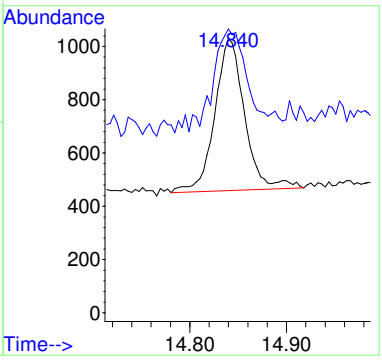


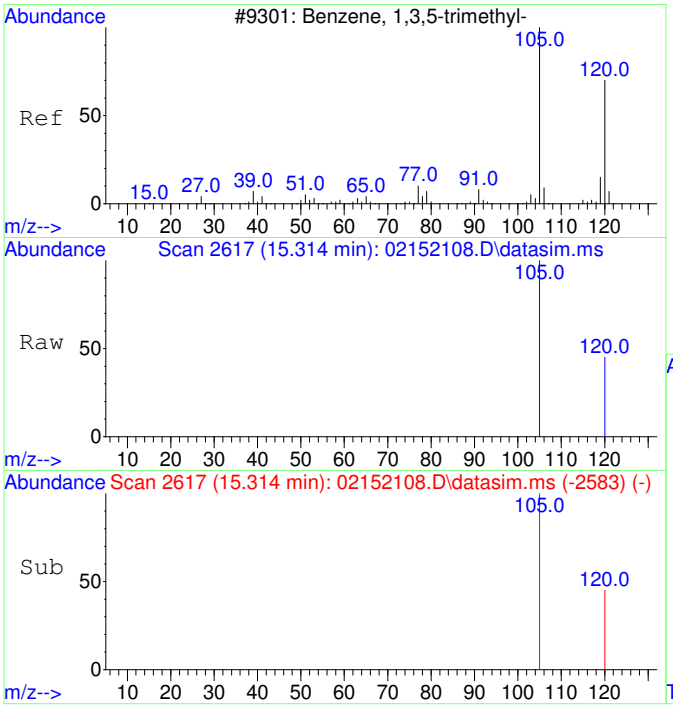


#21
1,1,2,2-Tetrachloroethane
Concen: 52.04 ug/L
RT: 14.840 min Scan# 2496
Delta R.T. -0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 83 Resp: 1223

Ion	Ratio	Lower	Upper
83	100		
85	75.7	34.8	94.8

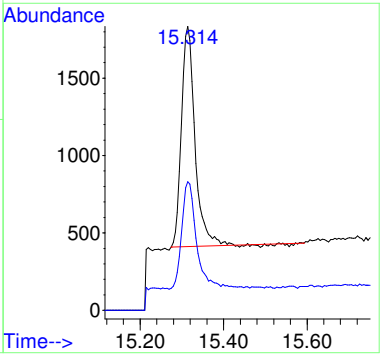


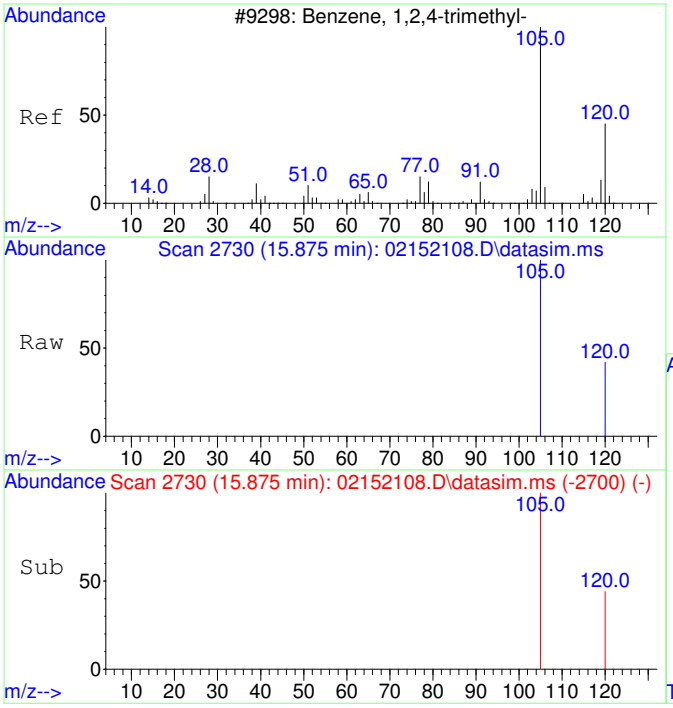


#22
1,3,5-Trimethylbenzene
Concen: 49.60 ug/L
RT: 15.314 min Scan# 2617
Delta R.T. -0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:105 Resp: 3170

Ion	Ratio	Lower	Upper
105	100		
120	51.5	21.1	81.1

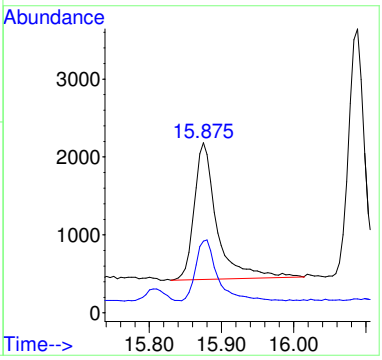


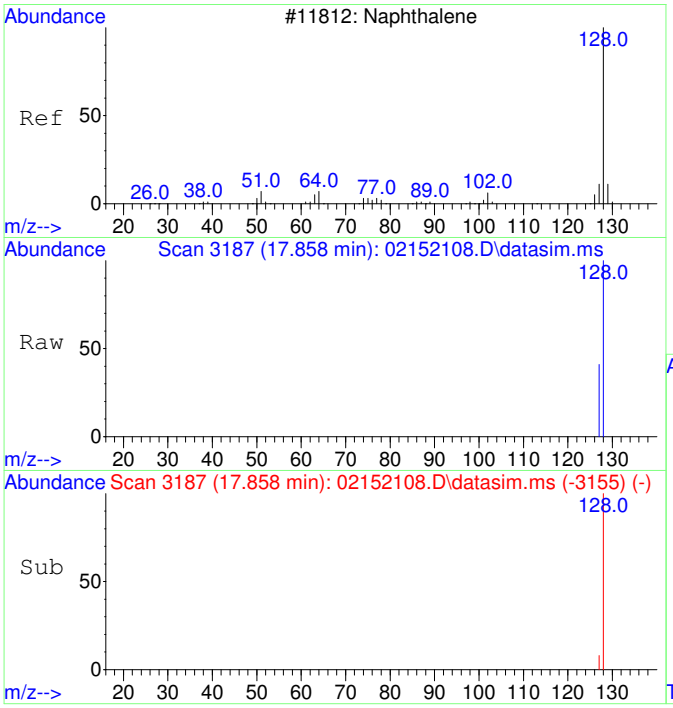


#23
1,2,4-Trimethylbenzene
Concen: 55.96 ug/L
RT: 15.875 min Scan# 2730
Delta R.T. -0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:105 Resp: 3801

Ion	Ratio	Lower	Upper
105	100		
120	42.5	17.2	77.2

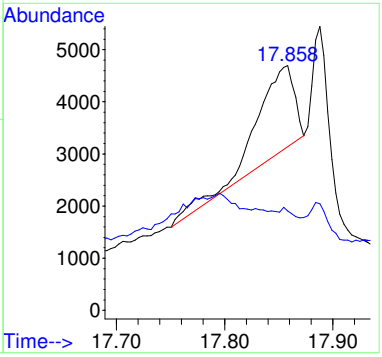




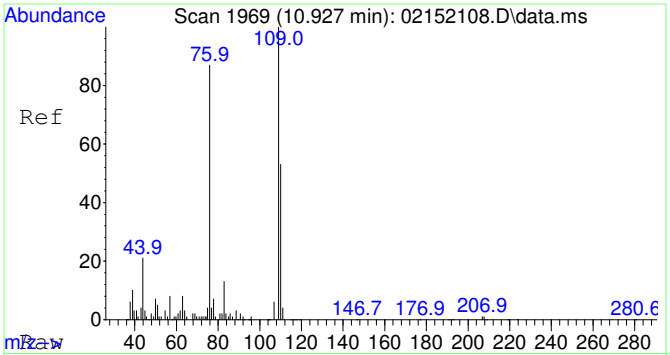
#24
Naphthalene
Concen: 46.55 ug/L
RT: 17.858 min Scan# 3187
Delta R.T. -0.030 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:128 Resp: 4249

Ion	Ratio	Lower	Upper
128	100		
127	0.0	0.0	42.5



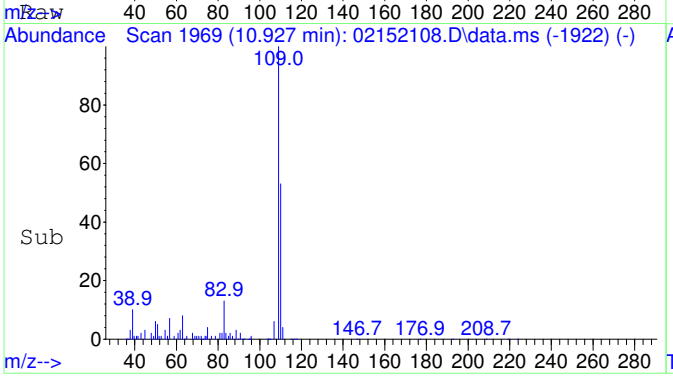
Before MI:
Peak MISSED

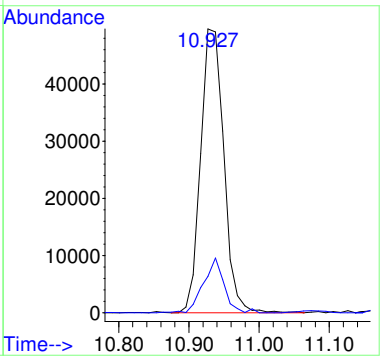


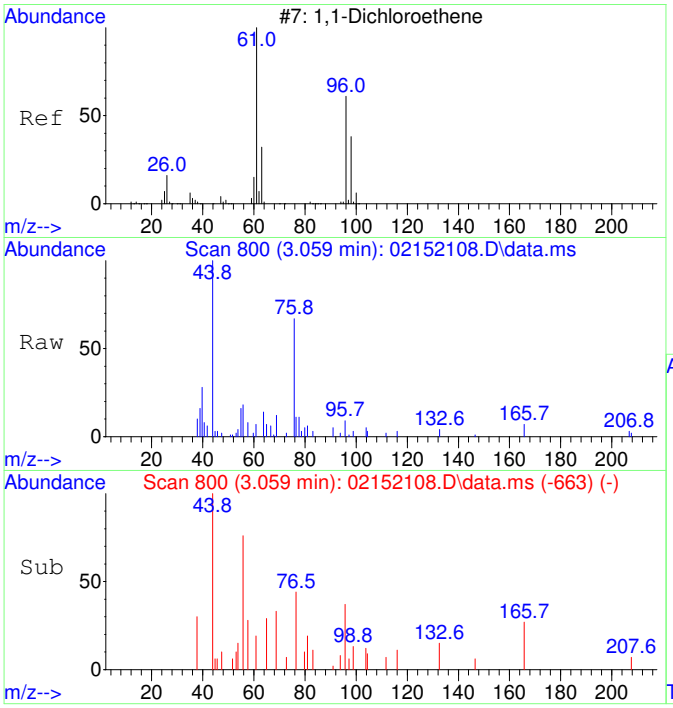
#25
2-Fluorotoluene SCAN
Concen: 4704.11 ug/L
RT: 10.927 min Scan# 1969
Delta R.T. -0.010 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:109 Resp: 114184

Ion	Ratio	Lower	Upper
109	100		
83	17.3	0.0	43.8



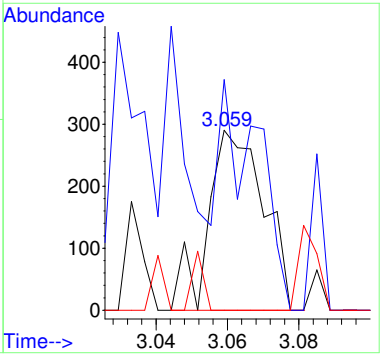


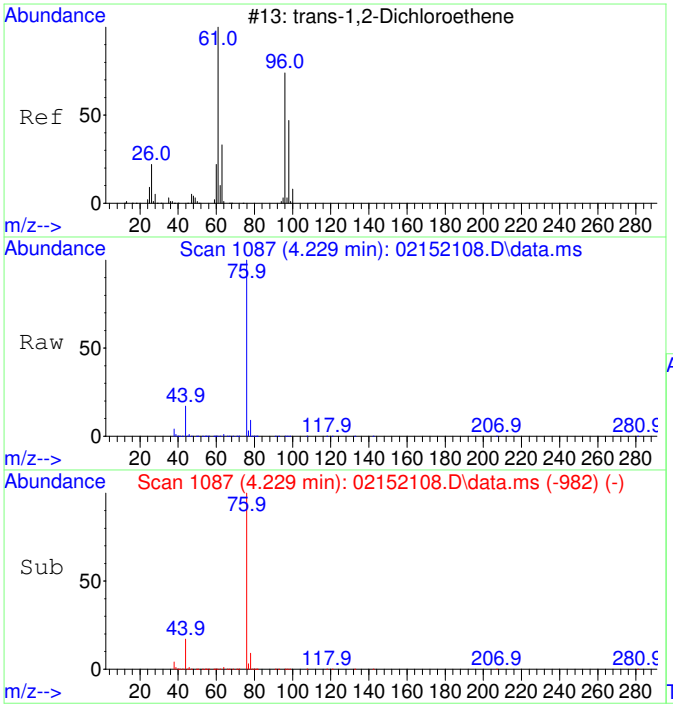


#26
1,1-Dichloroethene SCAN
Concen: 40.82 ug/L
RT: 3.059 min Scan# 800
Delta R.T. 0.007 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 61 Resp: 315

Ion	Ratio	Lower	Upper
61	100		
96	59.0	33.1	93.1
98	0.0	11.2	71.2#

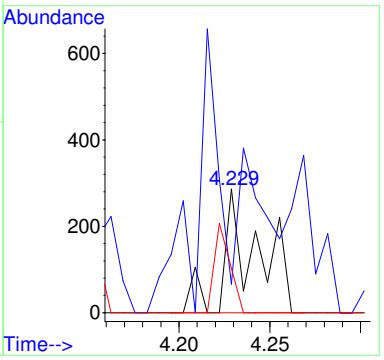


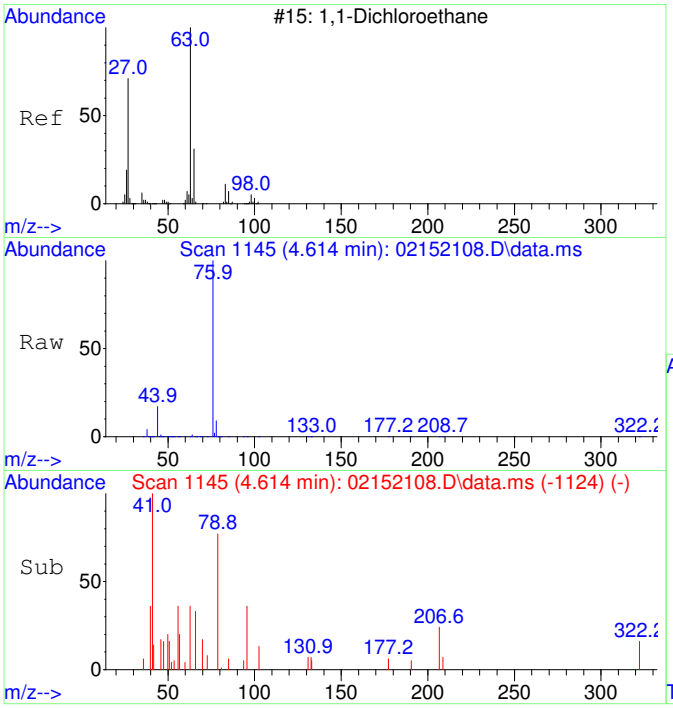


#27
trans-1,2-Dichloroethene SCAN
Concen: 45.30 ug/L
RT: 4.229 min Scan# 1087
Delta R.T. -0.007 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 61 Resp: 367

Ion	Ratio	Lower	Upper
61	100		
96	61.0	49.0	109.0
98	33.5	20.5	80.5

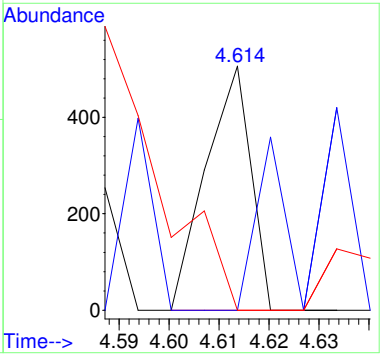


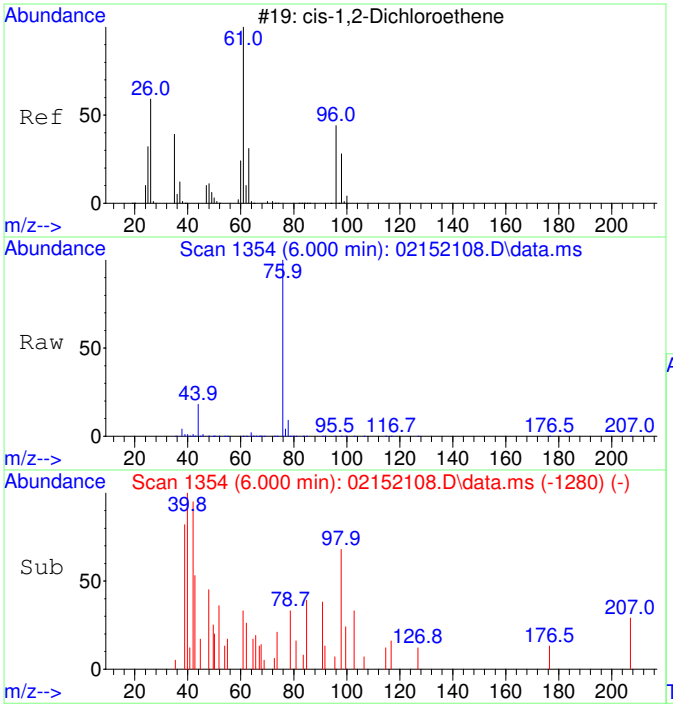


#28
1,1-Dichloroethane SCAN
Concen: 31.60 ug/L
RT: 4.614 min Scan# 1145
Delta R.T. -0.358 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 63 Resp: 317

Ion	Ratio	Lower	Upper
63	100		
65	45.1	1.3	61.3
82	29.7	0.0	45.9

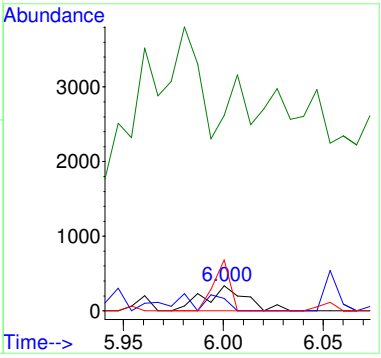


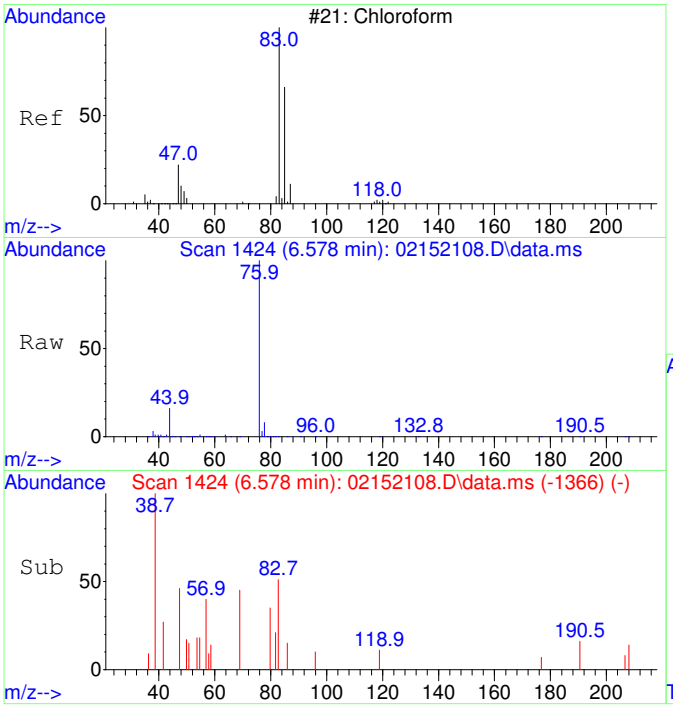


#29
cis-1,2-Dichloroethene SCAN
Concen: 51.98 ug/L
RT: 6.000 min Scan# 1354
Delta R.T. -0.007 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 61 Resp: 483

Ion	Ratio	Lower	Upper
61	100		
96	31.3	39.9	99.9#
98	79.9	13.5	73.5#
64	0.0	4.5	64.5#

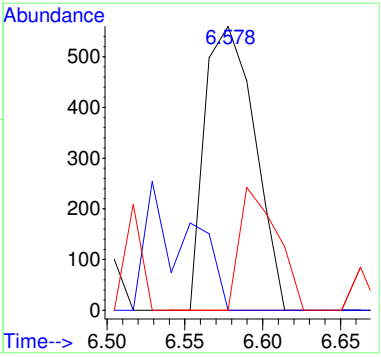


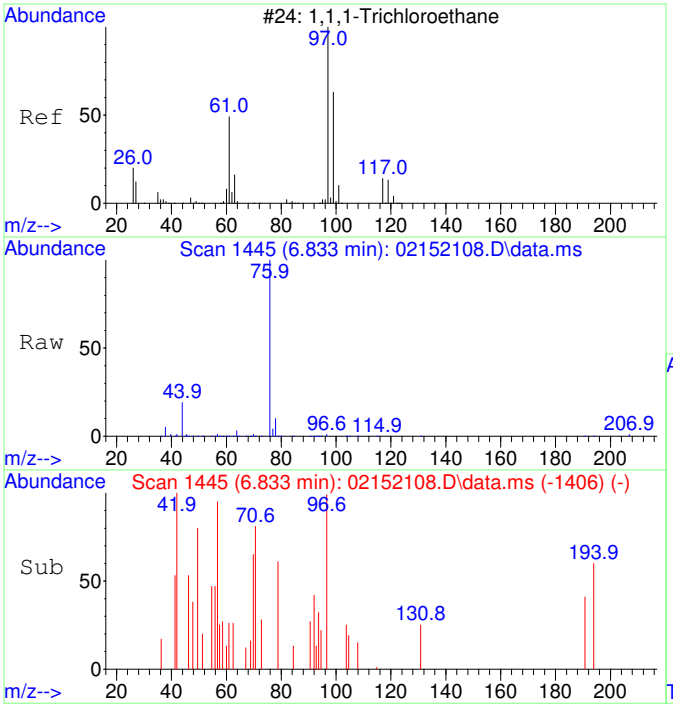


#30
Chloroform SCAN
Concen: 147.21 ug/L
RT: 6.578 min Scan# 1424
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 83 Resp: 1252

Ion	Ratio	Lower	Upper
83	100		
85	0.0	34.6	94.6#
47	32.6	0.0	53.4

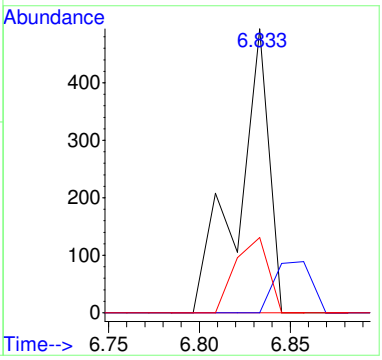


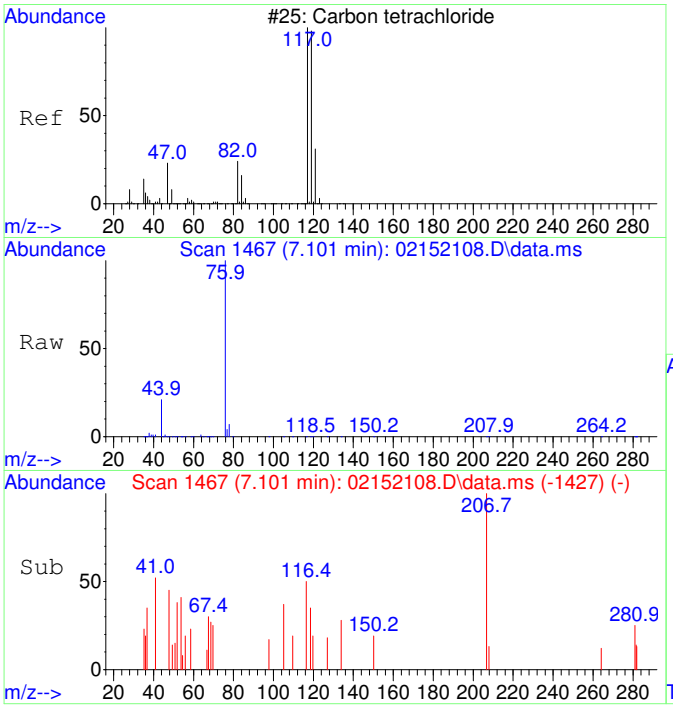


#31
1,1,1-Trichloroethane SCAN
Concen: 67.36 ug/L
RT: 6.833 min Scan# 1445
Delta R.T. -0.012 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 97 Resp: 589

Ion	Ratio	Lower	Upper
97	100		
99	0.0	43.6	103.6#
61	28.2	18.0	78.0

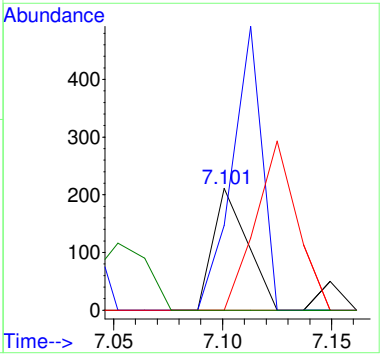


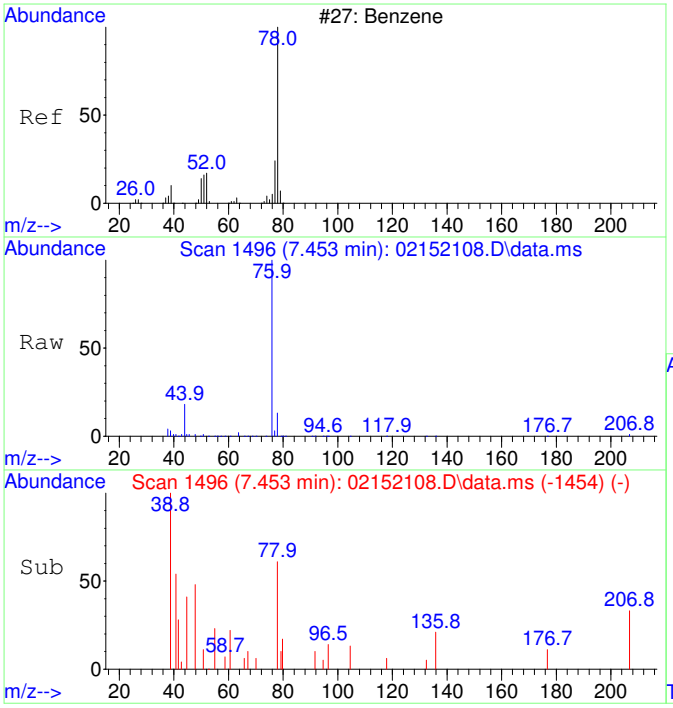


#32
Carbon tetrachloride SCAN
Concen: 32.81 ug/L
RT: 7.101 min Scan# 1467
Delta R.T. -0.012 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:117 Resp: 231

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

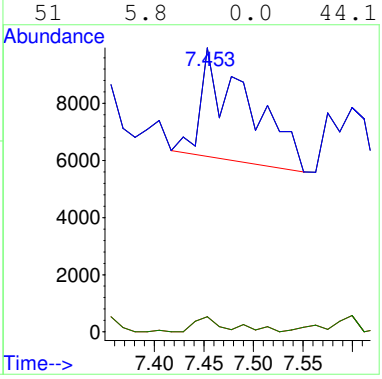


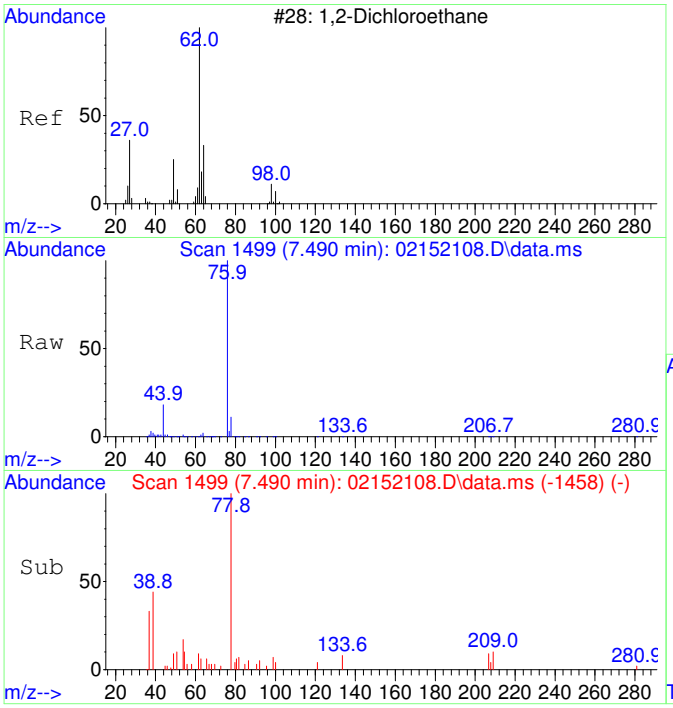


#33
Benzene SCAN
Concen: 526.67 ug/L
RT: 7.453 min Scan# 1496
Delta R.T. 0.012 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 78 Resp: 12640

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	5.8	0.0	47.9
51	5.8	0.0	44.1

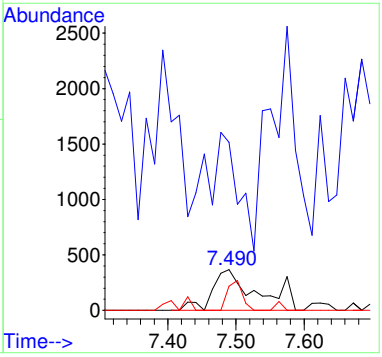


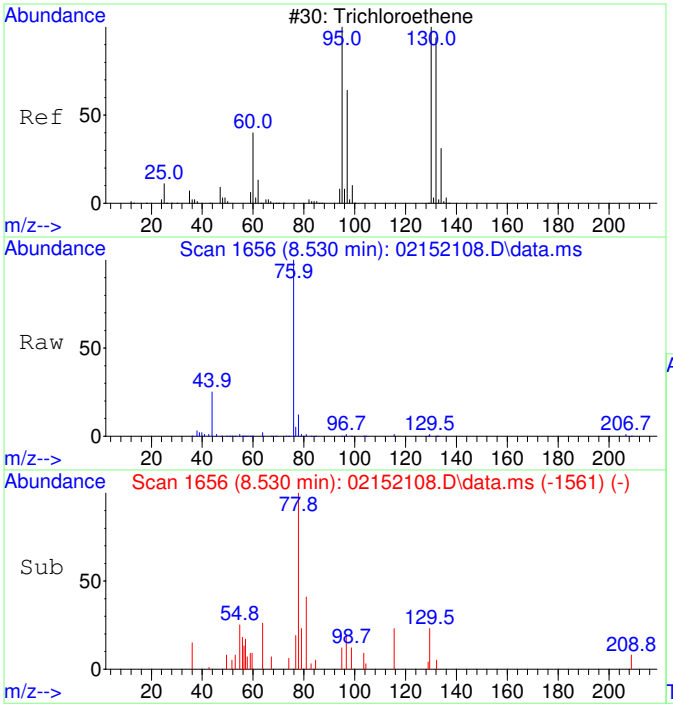


#34
1,2-Dichloroethane SCAN
Concen: 188.63 ug/L
RT: 7.490 min Scan# 1499
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 62 Resp: 1652

Ion	Ratio	Lower	Upper
62	100		
64	0.0	5.2	65.2#
49	24.3	3.9	63.9

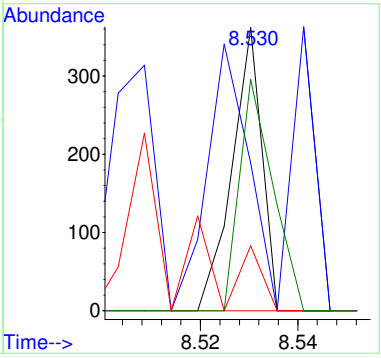


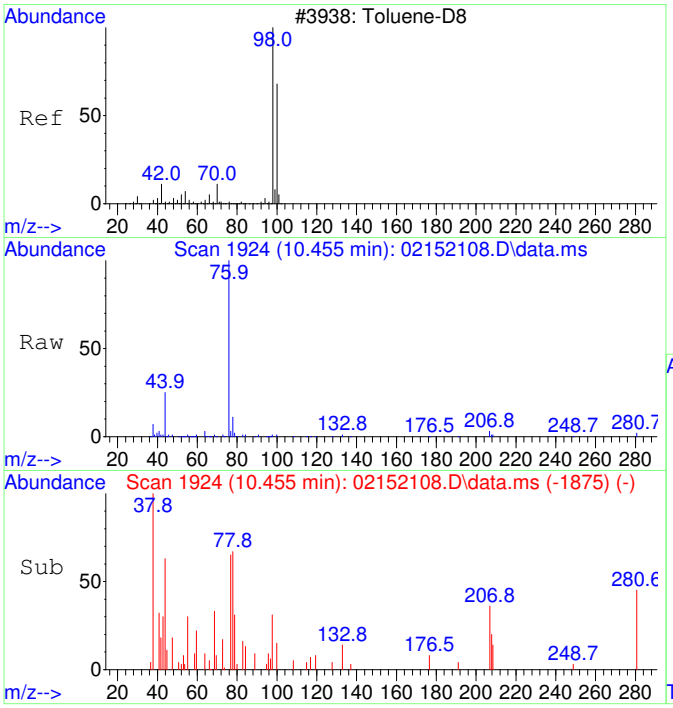


#35
Trichloroethene SCAN
Concen: 29.03 ug/L
RT: 8.530 min Scan# 1656
Delta R.T. 0.016 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:130 Resp: 154

Ion	Ratio	Lower	Upper
130	100		
95	131.8	60.5	120.5#
132	0.0	59.6	119.6#
97	91.6	28.2	88.2#

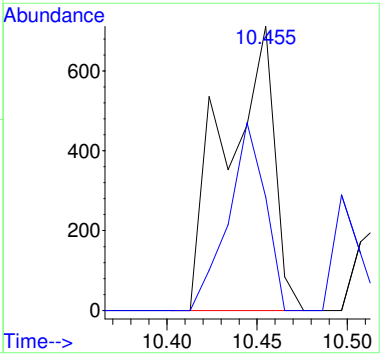


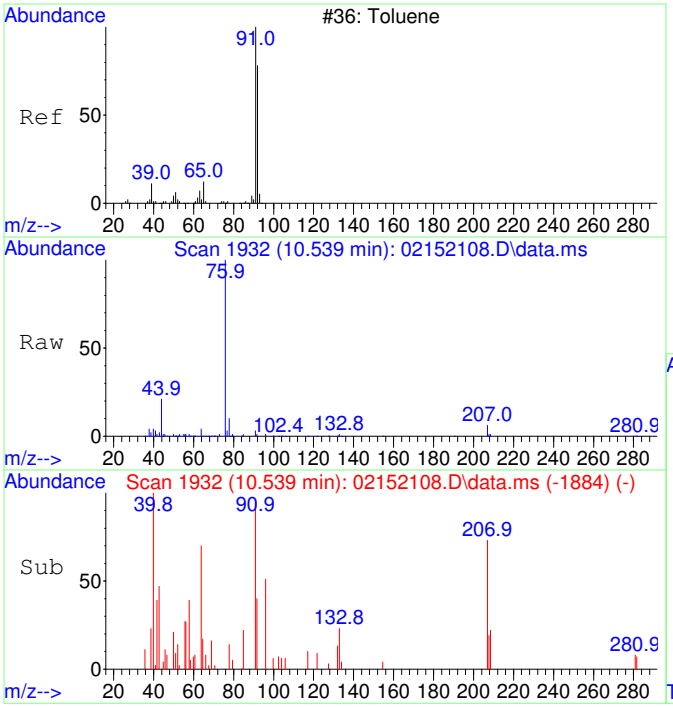


#36
Toluene-d8 SCAN
Concen: 63.12 ug/L
RT: 10.455 min Scan# 1924
Delta R.T. 0.011 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 98 Resp: 1353

Ion	Ratio	Lower	Upper
98	100		
100	49.8	40.0	100.0

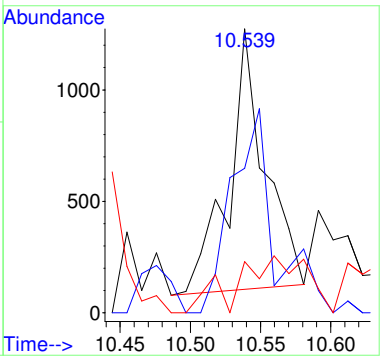


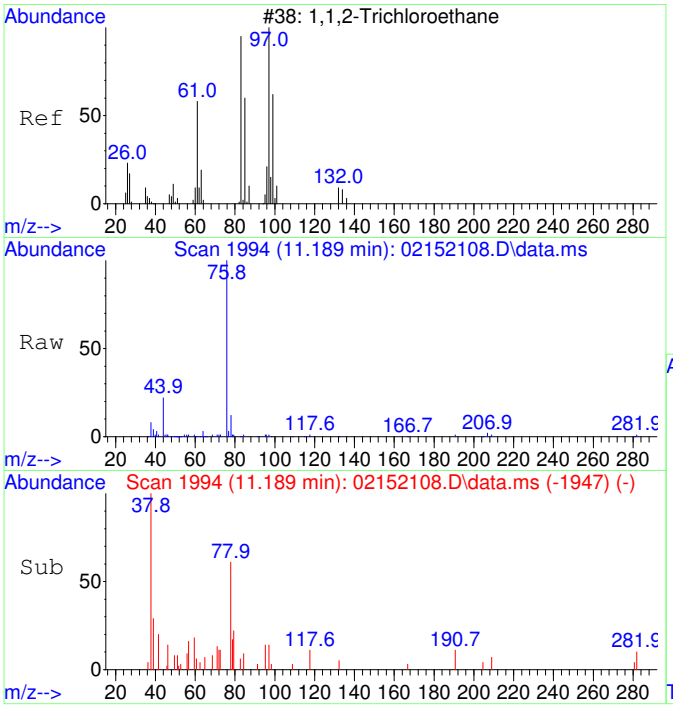


#37
Toluene SCAN
Concen: 68.32 ug/L
RT: 10.539 min Scan# 1932
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 91 Resp: 2099

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

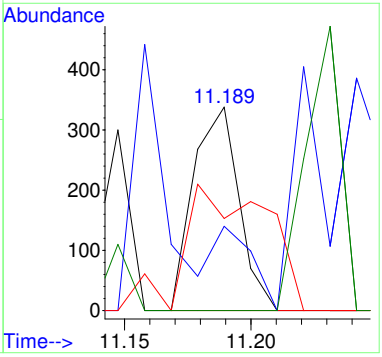


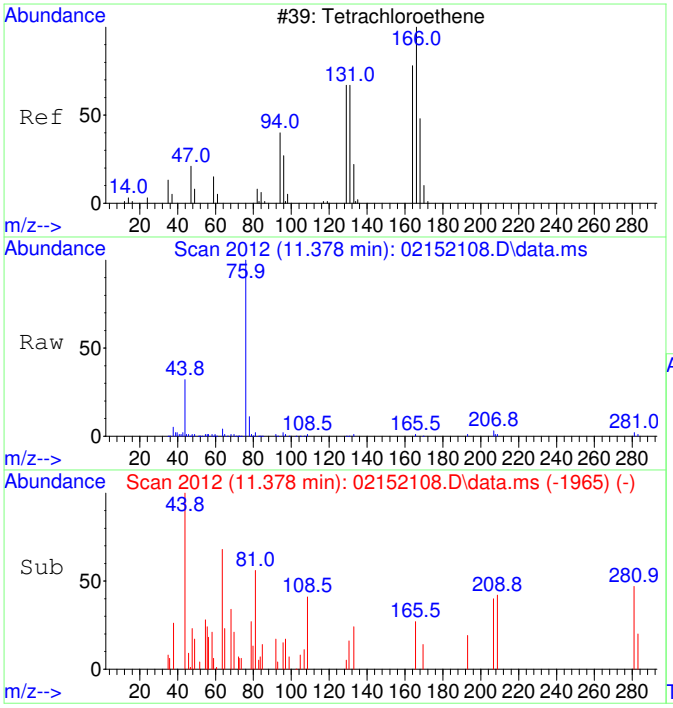


#38
1,1,2-Trichloroethane SCAN
Concen: 69.83 ug/L
RT: 11.189 min Scan# 1994
Delta R.T. -0.010 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 97 Resp: 426

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	113.1	32.1	92.1#
99	0.0	36.7	96.7#

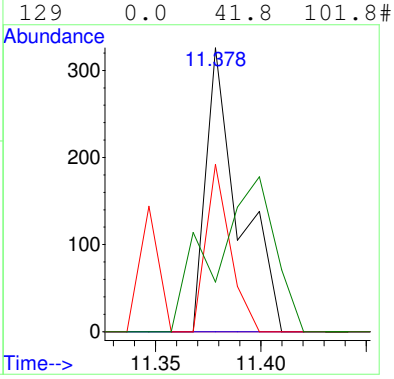


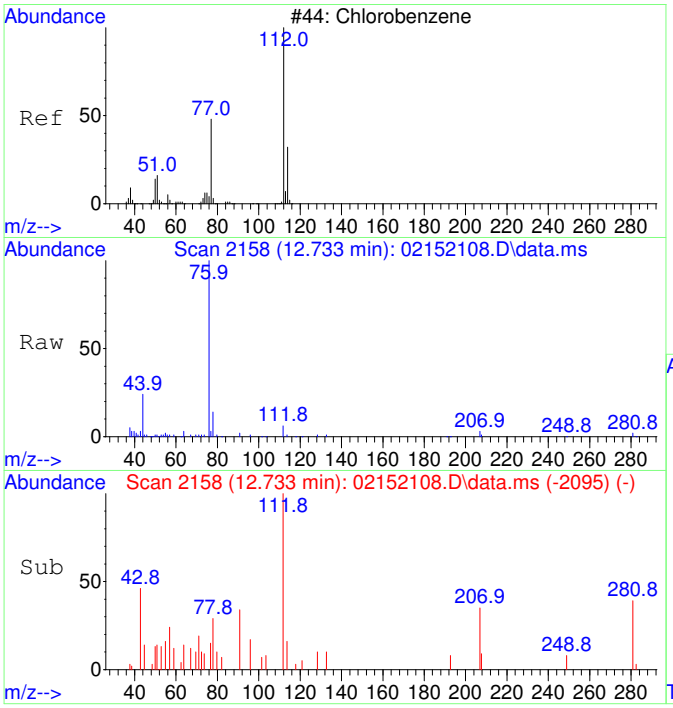


#39
Tetrachloroethene SCAN
Concen: 59.95 ug/L
RT: 11.378 min Scan# 2012
Delta R.T. -0.010 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:166 Resp: 358

Ion	Ratio	Lower	Upper
166	100		
164	0.0	50.9	110.9#
131	43.0	38.7	98.7
129	0.0	41.8	101.8#

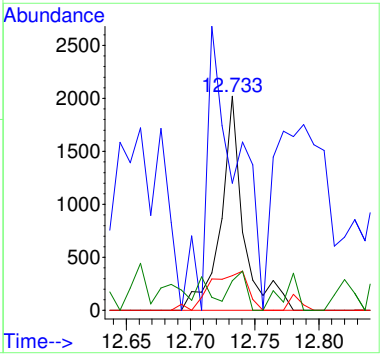


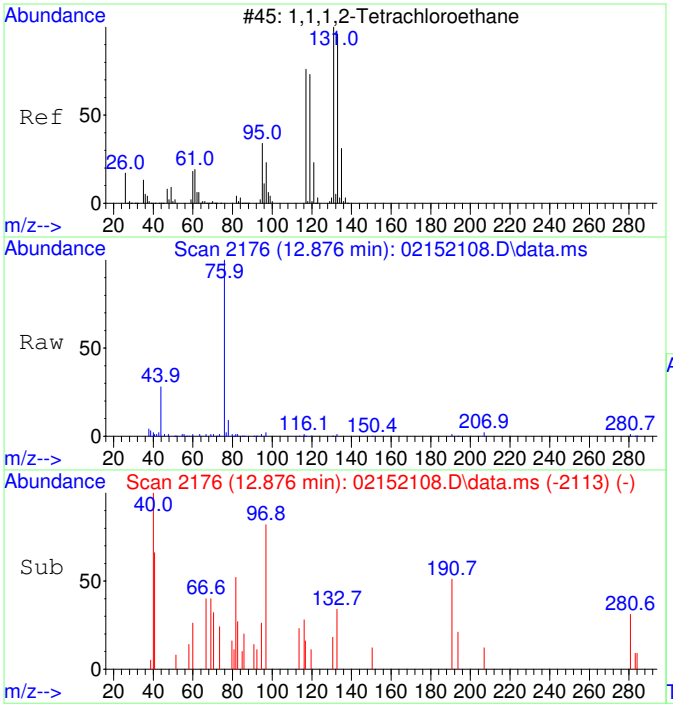


#40
Chlorobenzene SCAN
Concen: 131.63 ug/L
RT: 12.733 min Scan# 2158
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:112 Resp: 2473

Ion	Ratio	Lower	Upper
112	100		
77	0.0	28.2	88.2#
114	30.4	2.3	62.3
51	10.1	0.0	50.1

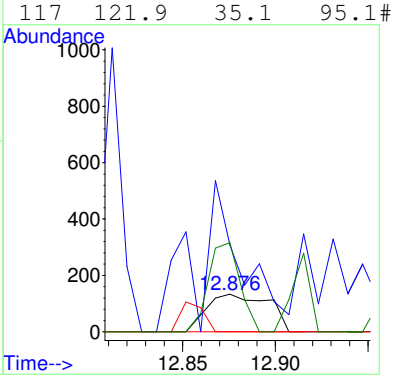


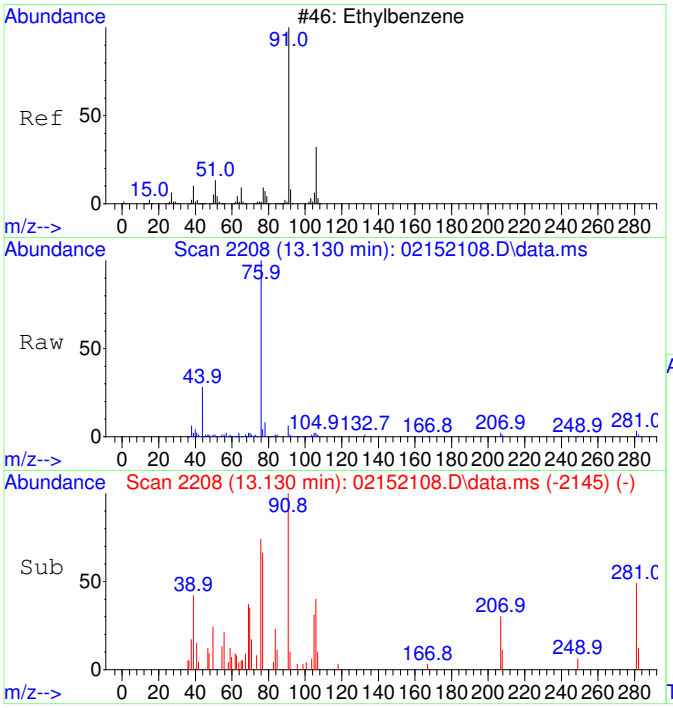


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 51.37 ug/L
RT: 12.876 min Scan# 2176
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:131 Resp: 310

Ion	Ratio	Lower	Upper
131	100		
133	190.3	66.9	126.9#
119	0.0	40.4	100.4#
117	121.9	35.1	95.1#

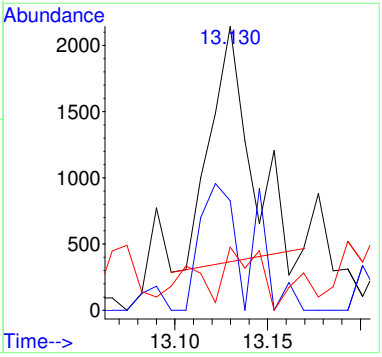


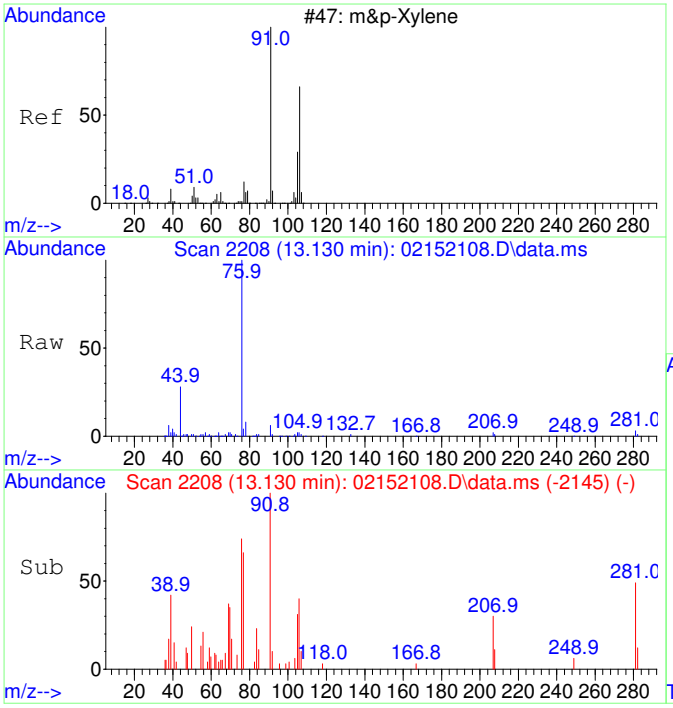


#42
Ethylbenzene SCAN
Concen: 45.34 ug/L
RT: 13.130 min Scan# 2208
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 91 Resp: 2584

Ion	Ratio	Lower	Upper
91	100		
106	45.9	23.1	83.1
51	20.9	0.0	40.1

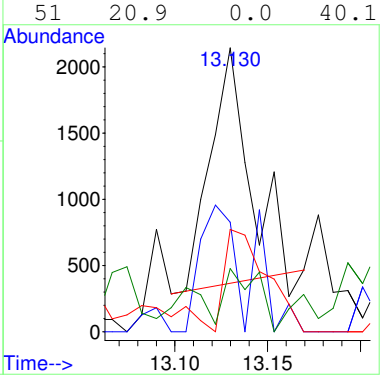


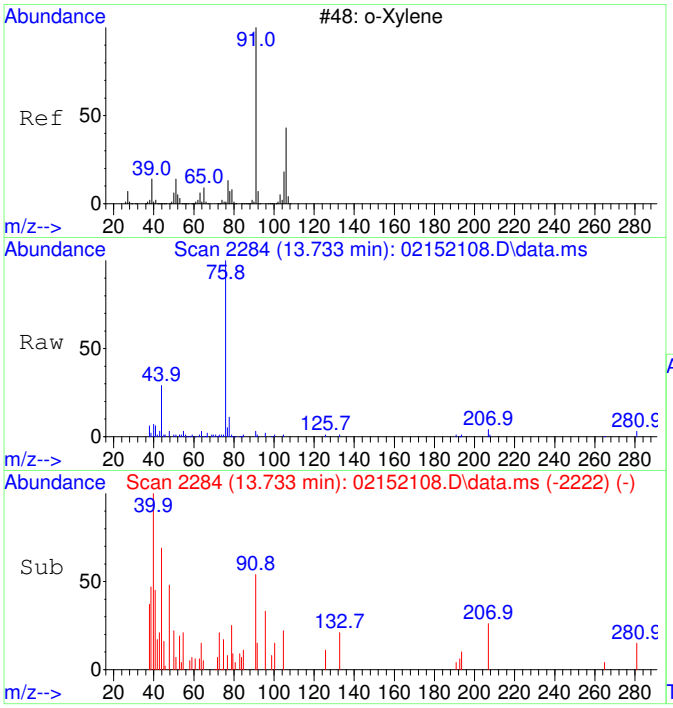


#43
m&p-Xylene SCAN
Concen: 45.34 ug/L
RT: 13.130 min Scan# 2208
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 91 Resp: 2584

Ion	Ratio	Lower	Upper
91	100		
106	45.9	23.1	83.1
105	41.8	0.0	54.7
51	20.9	0.0	40.1

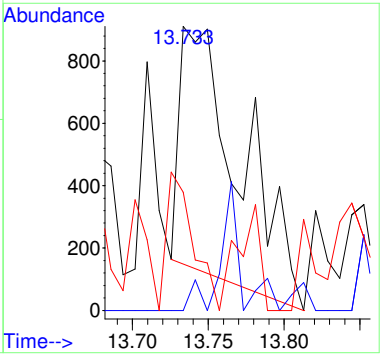


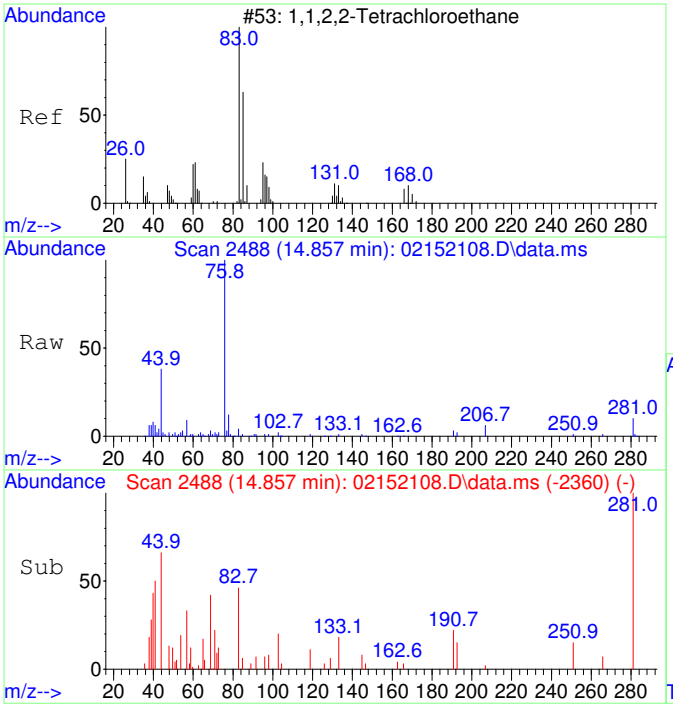


#44
o-Xylene SCAN
Concen: 69.39 ug/L
RT: 13.733 min Scan# 2284
Delta R.T. -0.008 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 91 Resp: 2150

Ion	Ratio	Lower	Upper
91	100		
106	0.0	18.0	78.0#
105	25.2	0.0	56.6

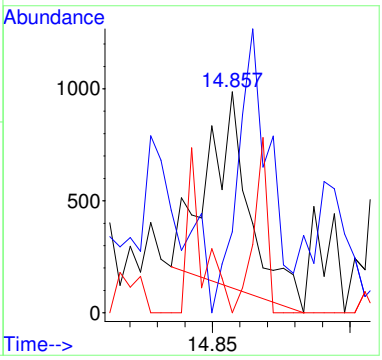


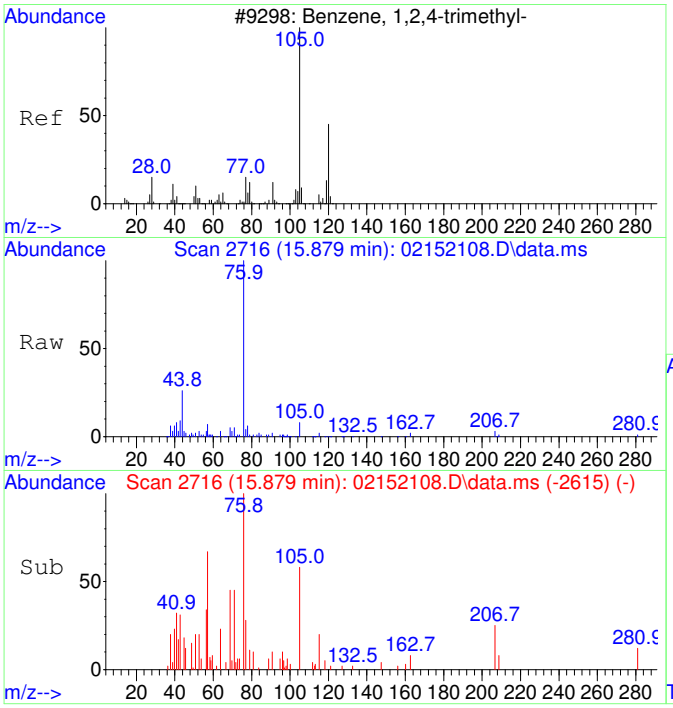


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 63.28 ug/L
RT: 14.857 min Scan# 2488
Delta R.T. 0.022 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 83 Resp: 914

Ion	Ratio	Lower	Upper
83	100		
85	93.8	35.9	95.9
95	29.2	0.0	47.4

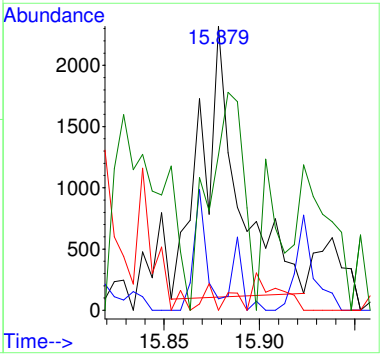


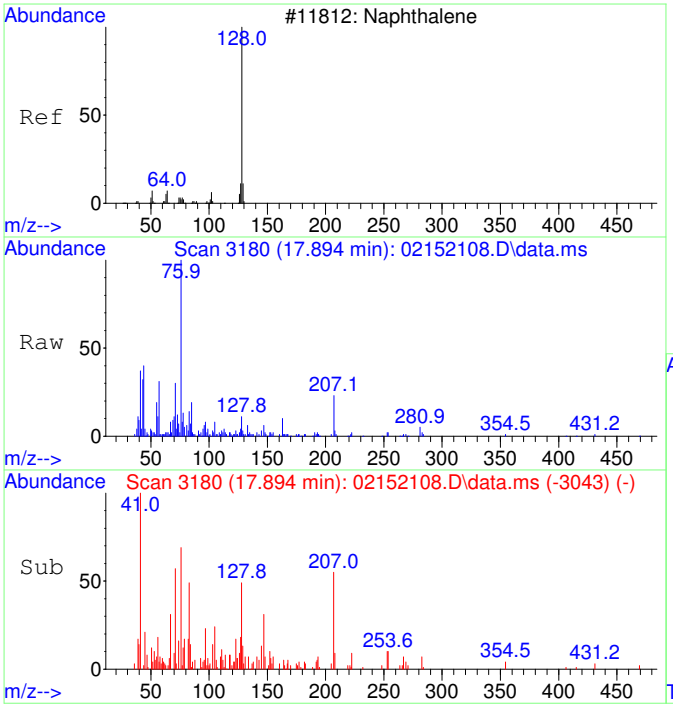


#47
1,2,4-Trimethylbenzene SCAN
Concen: 94.37 ug/L
RT: 15.879 min Scan# 2716
Delta R.T. -0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:105 Resp: 3058

Ion	Ratio	Lower	Upper
105	100		
120	5.6	16.9	76.9#
119	2.6	0.0	41.9
77	72.9	0.0	42.3#

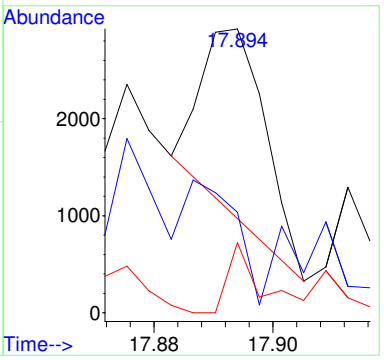




#48
Naphthalene SCAN
Concen: 30.71 ug/L
RT: 17.894 min Scan# 3180
Delta R.T. 0.007 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:128 Resp: 1292

Ion	Ratio	Lower	Upper
128	100		
127	35.2	0.0	44.0
129	17.0	0.0	40.8



Quantitation Report (QT Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152108.D
Acq On : 15 Feb 2021 13:03
InstName : AG5975C
Operator : TD
Sample : S21B036-CAL6
Misc : 2106042 0.05 mg/L
ALS Vial : 8 Sample Multiplier: 1

M.I. Performed By:
TD at 1:36 pm, Feb 15, 2021

M.I. Approved By:
ZAR at 3:52 pm, Feb 17, 2021

Quant Time: Feb 15 13:25:49 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:23:57 2021
Response via : Initial Calibration

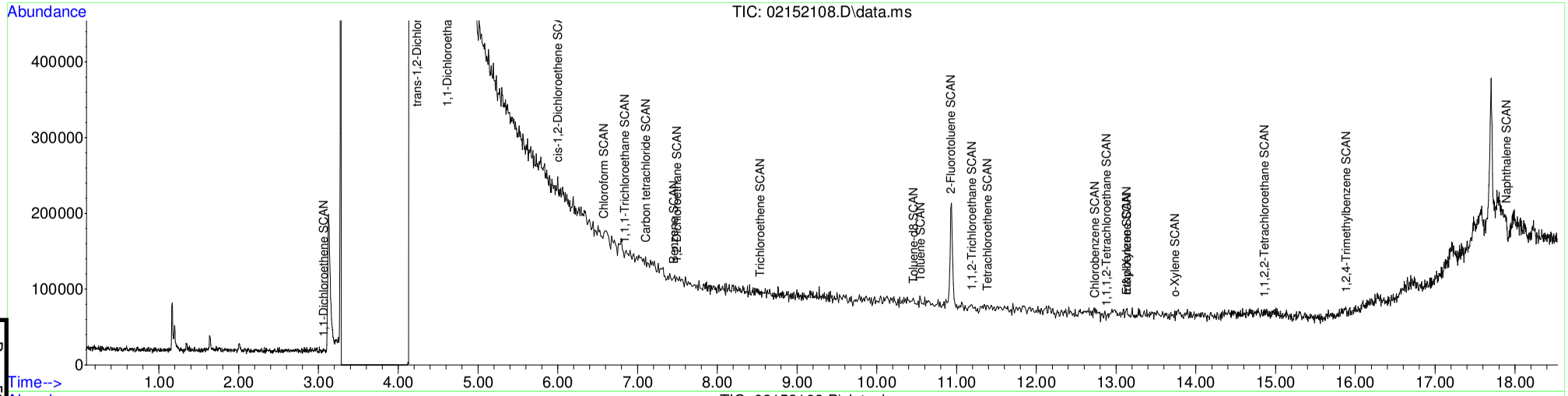
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.928	109	225463	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.435	98	1963	50.52	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery =	1.01%#		
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.057	61	495	47.13	ug/L	99
3] trans-1,2-Dichloroethene	4.230	61	493	44.44	ug/L #	1
4] 1,1-Dichloroethane	4.980	63	655	49.02	ug/L	77
5] cis-1,2-Dichloroethene	6.002	61	644	48.88	ug/L	97
6] Chloroform	6.579	83	785	55.90	ug/L	91
7] 1,1,1-Trichloroethane	6.834	97	689	51.63	ug/L	85
8] Carbon tetrachloride	7.114	117	561	50.31	ug/L	98
9] Benzene	7.443	78	3886	101.29	ug/L #	28
10] 1,2-Dichloroethane	7.479	62	594	48.51	ug/L	99
11] Trichloroethene	8.515	130	507	49.93	ug/L	83
13] Toluene	10.540	91	3504	65.12	ug/L	98
14] 1,1,2-Trichloroethane	11.191	97	540	50.95	ug/L #	37
15] Tetrachloroethene	11.390	166	748	53.09	ug/L	97
16] Chlorobenzene	12.726	112	3365	75.11	ug/L	70
17] 1,1,1,2-Tetrachloroethane	12.877	131	528	48.36	ug/L	86
18] Ethylbenzene	12.932	91	3629	53.48	ug/L	95
19] m&p-Xylene	13.131	91	5966	111.77	ug/L	95
20] o-Xylene	13.743	91	3156	54.59	ug/L	99
21] 1,1,2,2-Tetrachloroethane	14.840	83	1223	52.04	ug/L	86
22] 1,3,5-Trimethylbenzene	15.314	105	3170	49.60	ug/L	99
23] 1,2,4-Trimethylbenzene	15.875	105	3801	55.96	ug/L	93
24] Naphthalene	17.888	128	5881m	64.43	ug/L	
25) 2-Fluorotoluene SCAN	10.927	109	114184	4704.11	ug/L	91
26) 1,1-Dichloroethene SCAN	3.059	61	315	40.82	ug/L #	71
27) trans-1,2-Dichloroethe...	4.229	61	367	45.30	ug/L	78
28) 1,1-Dichloroethane SCAN	4.614	63	317	31.60	ug/L	72
29) cis-1,2-Dichloroethene...	6.000	61	483	51.98	ug/L #	47
30) Chloroform SCAN	6.578	83	1252	147.21	ug/L #	35
31) 1,1,1-Trichloroethane ...	6.833	97	589	67.36	ug/L #	36
32) Carbon tetrachloride SCAN	7.101	117	231	32.81	ug/L #	15
33) Benzene SCAN	7.453	78	12640	526.67	ug/L	94
34) 1,2-Dichloroethane SCAN	7.490	62	1652	188.63	ug/L #	61
35) Trichloroethene SCAN	8.530	130	154	29.03	ug/L #	37
36) Toluene-d8 SCAN	10.455	98	1353	63.12	ug/L	75
37) Toluene SCAN	10.539	91	2099	68.32	ug/L #	30
38) 1,1,2-Trichloroethane ...	11.189	97	426	69.83	ug/L #	17
39) Tetrachloroethene SCAN	11.378	166	358	59.95	ug/L #	29
40) Chlorobenzene SCAN	12.733	112	2473	131.63	ug/L #	54
41) 1,1,1,2-Tetrachloroeth...	12.876	131	310	51.37	ug/L #	14
42) Ethylbenzene SCAN	13.130	91	2584	45.34	ug/L	87
43) m&p-Xylene SCAN	13.130	91	2584	45.34	ug/L	81
44) o-Xylene SCAN	13.733	91	2150	69.39	ug/L #	53
45) 1,1,2,2-Tetrachloroeth...	14.857	83	914	63.28	ug/L	67
47) 1,2,4-Trimethylbenzene...	15.879	105	3058	94.37	ug/L #	28
48) Naphthalene SCAN	17.894	128	1292	30.71	ug/L	63

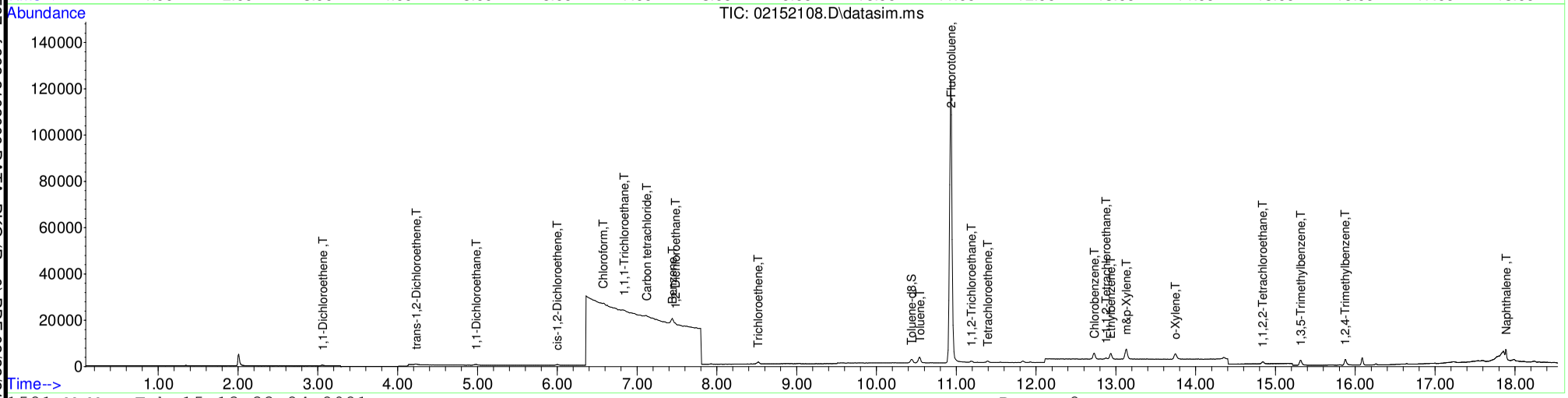
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152108.D
Acq On : 15 Feb 2021 13:03
InstName : AG5975C
Operator : TD
Sample : S21B036-CAL6
Misc : 2106042 0.05 mg/L
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 15 13:25:49 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:23:57 2021
Response via : Initial Calibration





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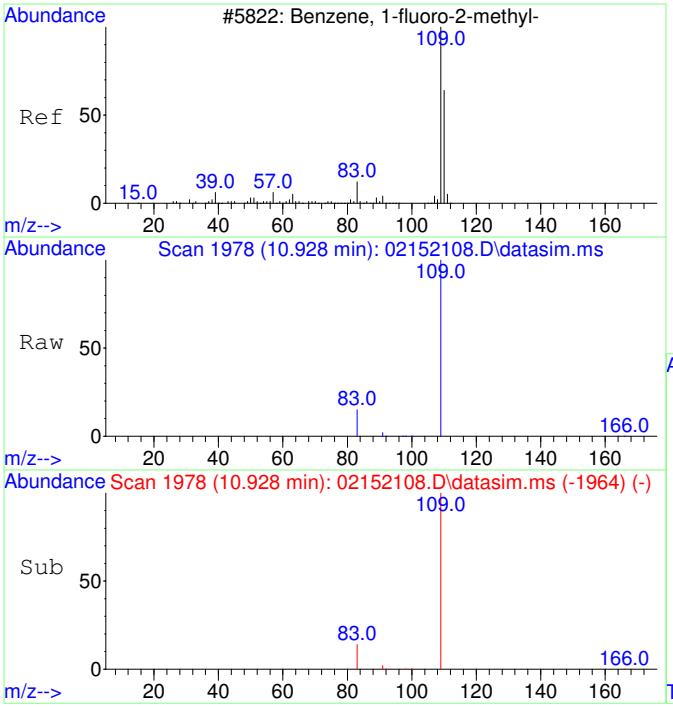
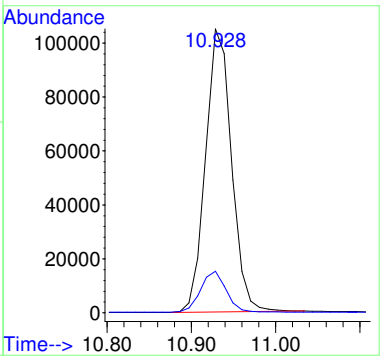
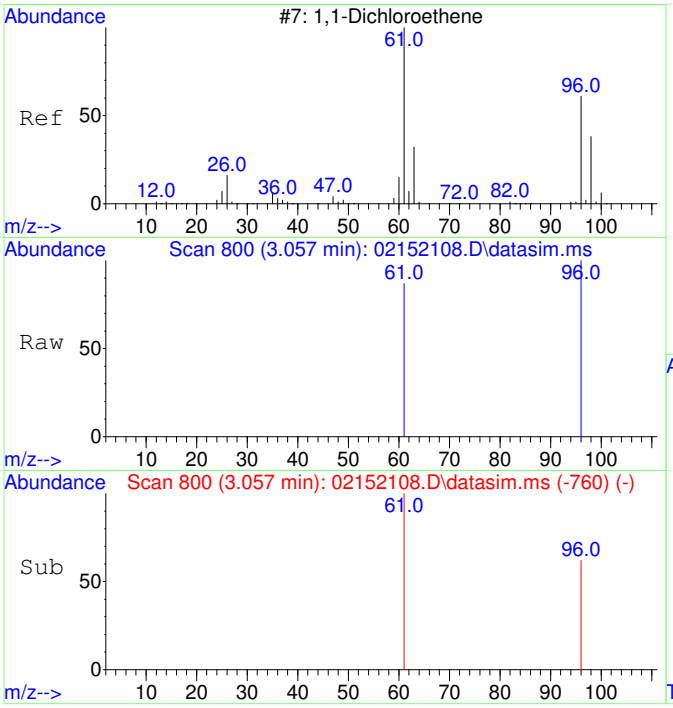


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.928 min Scan# 1978
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:109 Resp: 225463

Ion	Ratio	Lower	Upper
109	100		
83	14.2	0.0	42.3

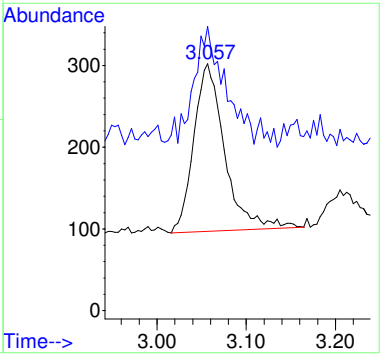


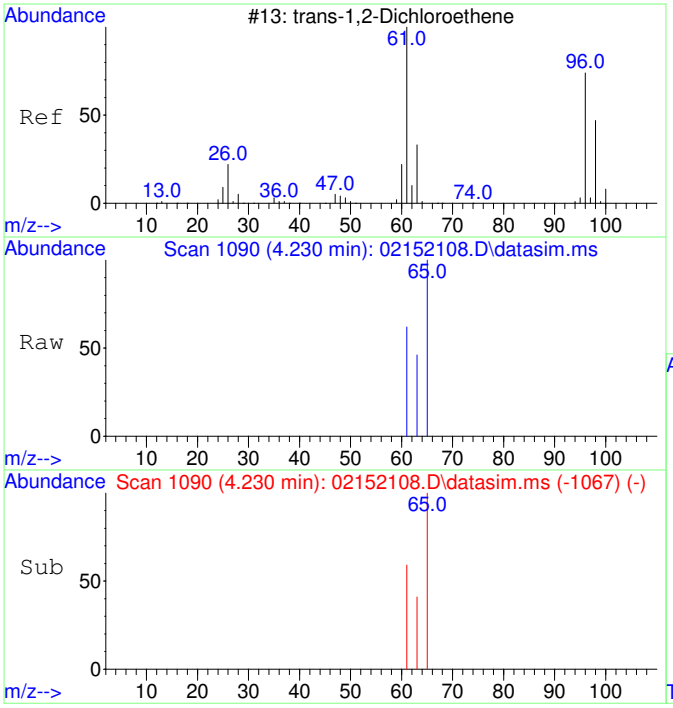


#2
1,1-Dichloroethene
Concen: 47.13 ug/L
RT: 3.057 min Scan# 800
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 61 Resp: 495

Ion	Ratio	Lower	Upper
61	100		
96	67.7	37.2	97.2

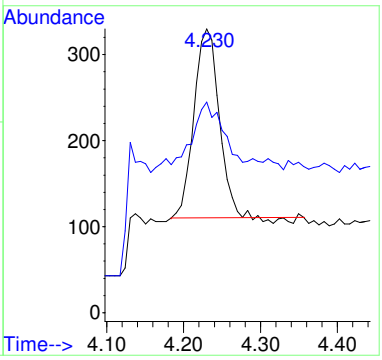


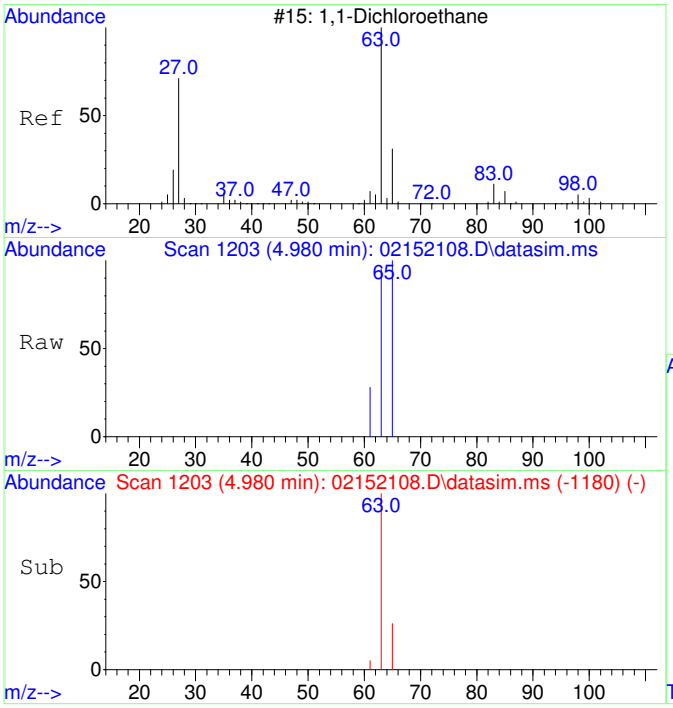


#3
trans-1,2-Dichloroethene
Concen: 44.44 ug/L
RT: 4.230 min Scan# 1090
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 61 Resp: 493

Ion	Ratio	Lower	Upper
61	100		
63	149.3	2.4	62.4#

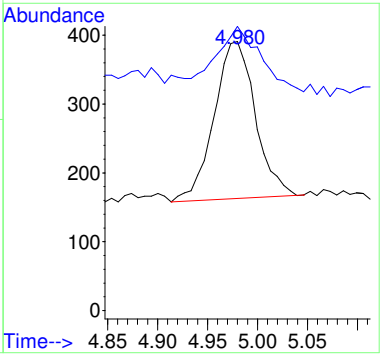


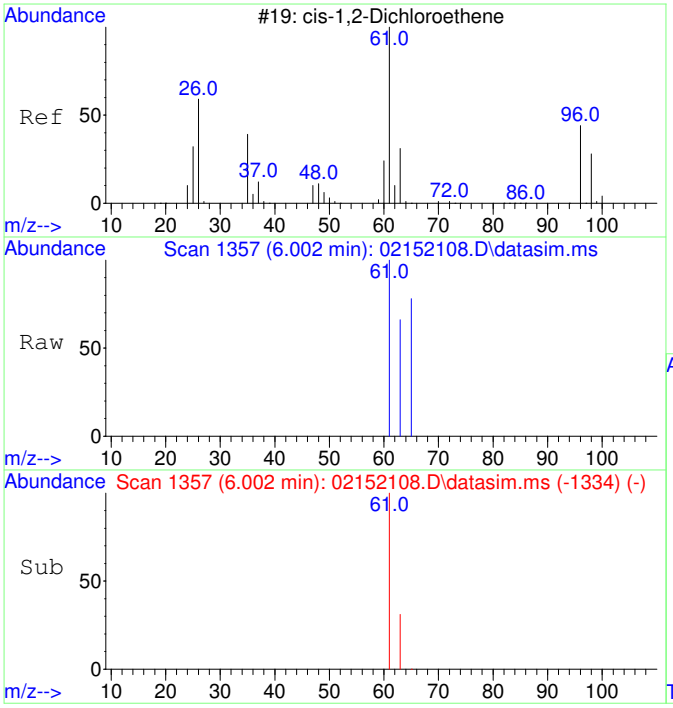


#4
1,1-Dichloroethane
Concen: 49.02 ug/L
RT: 4.980 min Scan# 1203
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 63 Resp: 655

Ion	Ratio	Lower	Upper
63	100		
65	44.4	1.8	61.8

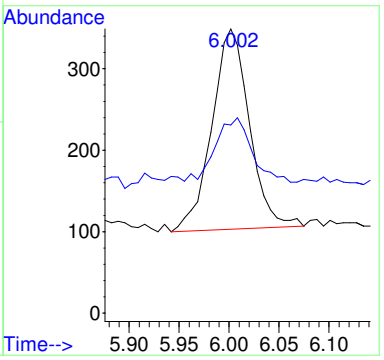


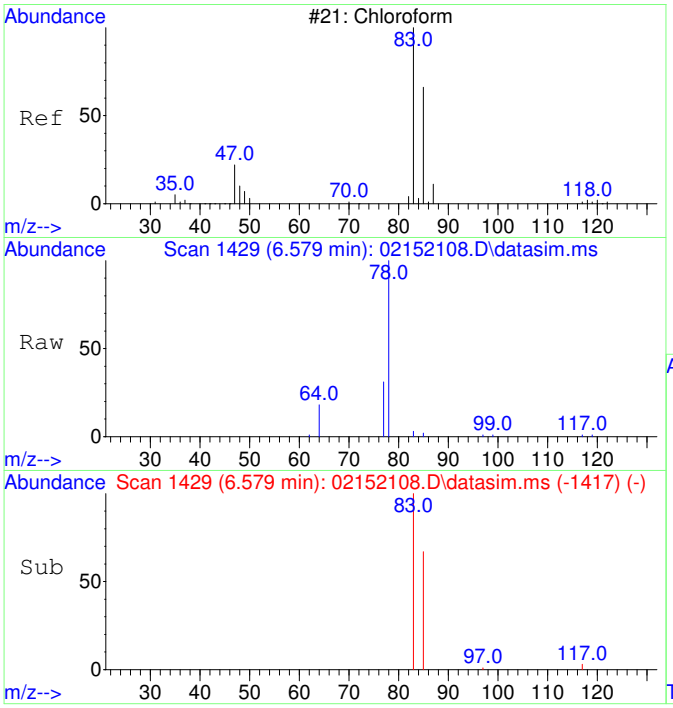


#5
cis-1,2-Dichloroethene
Concen: 48.88 ug/L
RT: 6.002 min Scan# 1357
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 61 Resp: 644

Ion	Ratio	Lower	Upper
61	100		
63	34.3	2.5	62.5

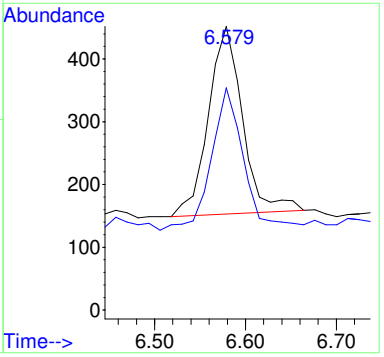


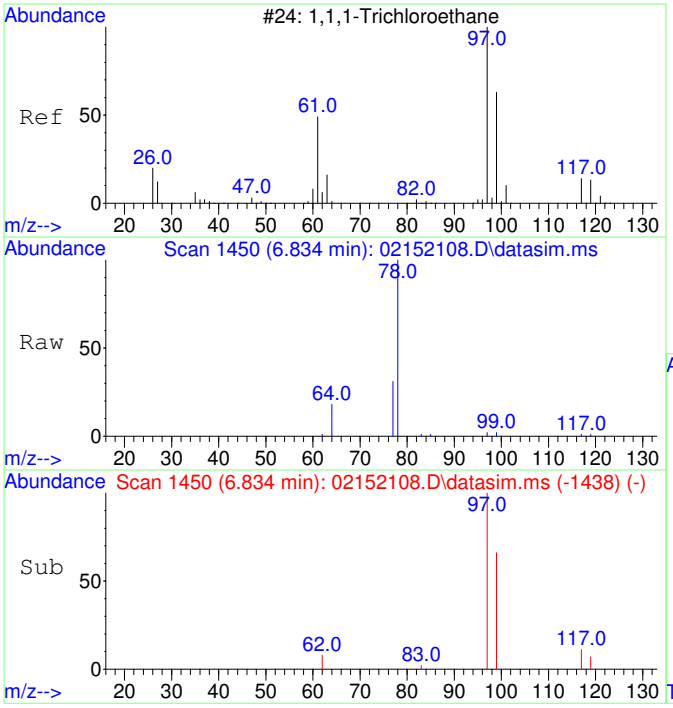


#6
Chloroform
Concen: 55.90 ug/L
RT: 6.579 min Scan# 1429
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 83 Resp: 785

Ion	Ratio	Lower	Upper
83	100		
85	72.1	35.1	95.1

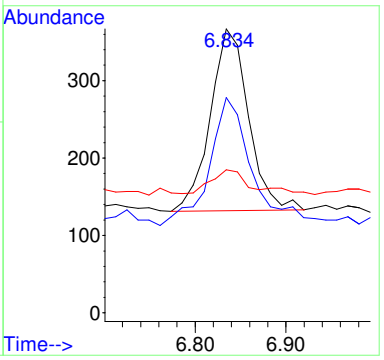


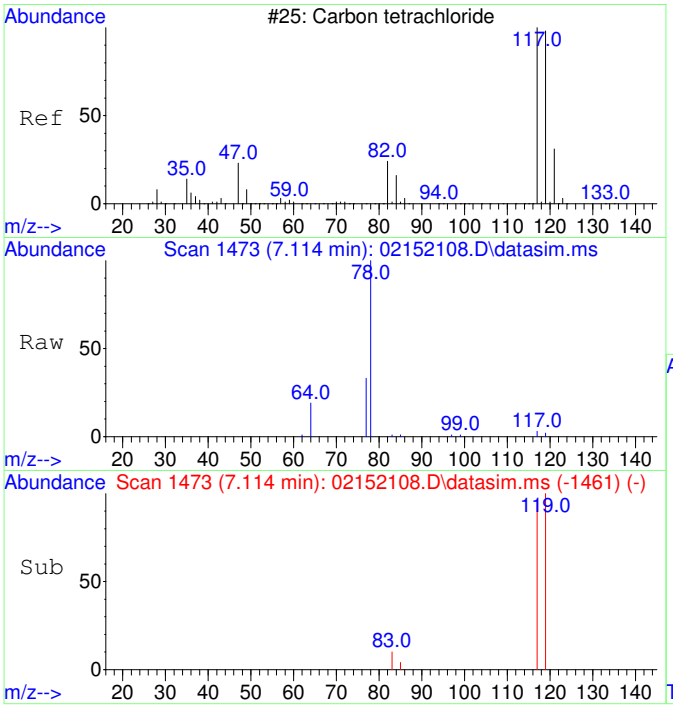


#7
1,1,1-Trichloroethane
Concen: 51.63 ug/L
RT: 6.834 min Scan# 1450
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 97 Resp: 689

Ion	Ratio	Lower	Upper
97	100		
99	78.1	34.6	94.6
117	14.8	0.0	43.2

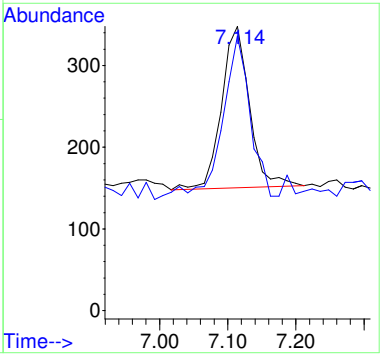


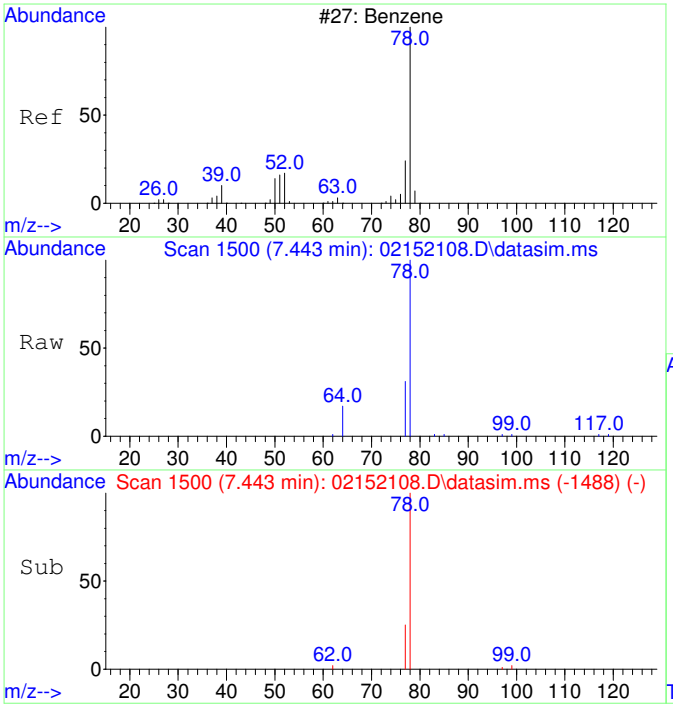


#8
Carbon tetrachloride
Concen: 50.31 ug/L
RT: 7.114 min Scan# 1473
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:117 Resp: 561

Ion	Ratio	Lower	Upper
117	100		
119	94.5	66.4	126.4

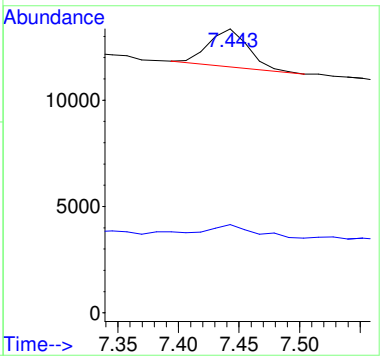


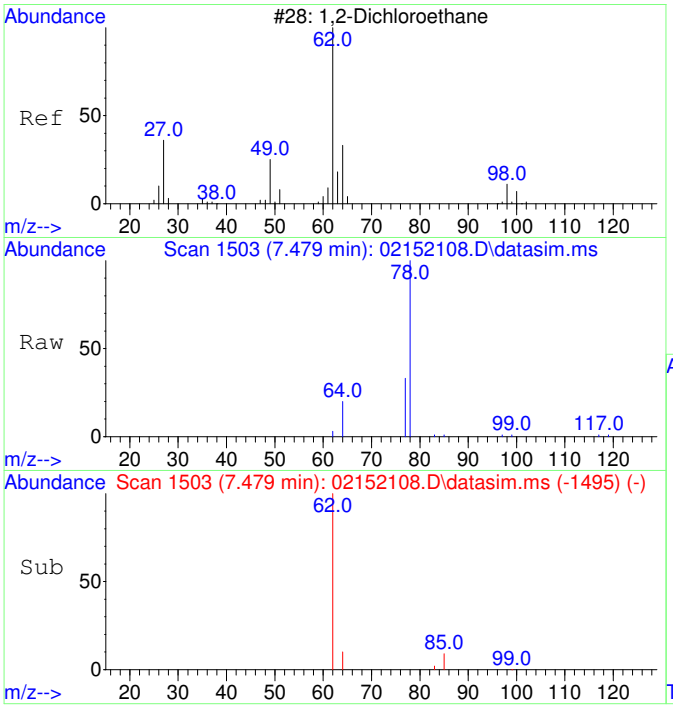


#9
Benzene
Concen: 101.29 ug/L
RT: 7.443 min Scan# 1500
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 78 Resp: 3886

Ion	Ratio	Lower	Upper
78	100		
77	58.2	0.0	53.2#

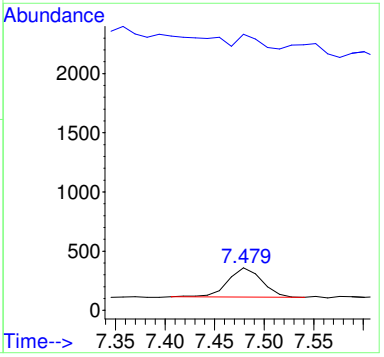


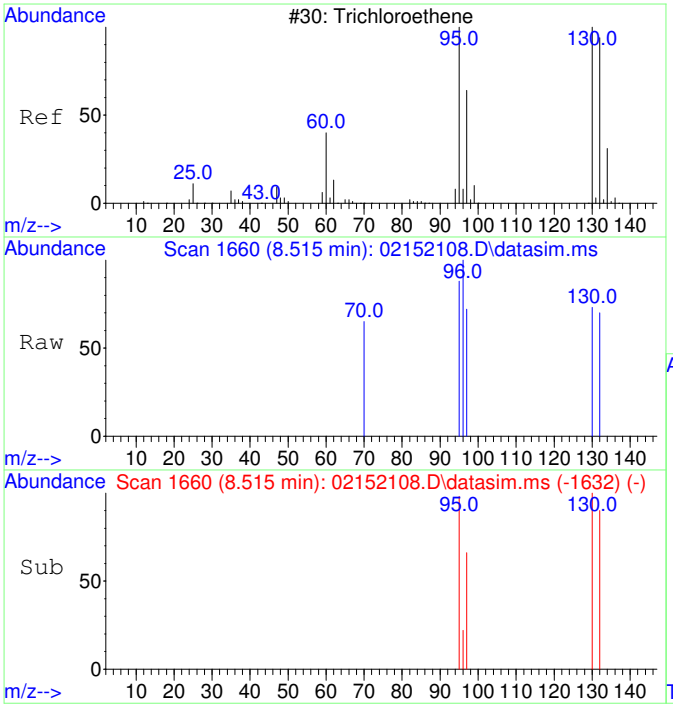


#10
1,2-Dichloroethane
Concen: 48.51 ug/L
RT: 7.479 min Scan# 1503
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 62 Resp: 594

Ion	Ratio	Lower	Upper
62	100		
64	31.6	2.3	62.3

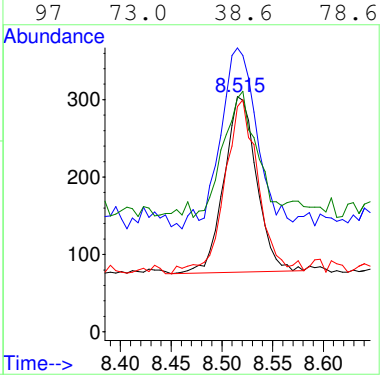


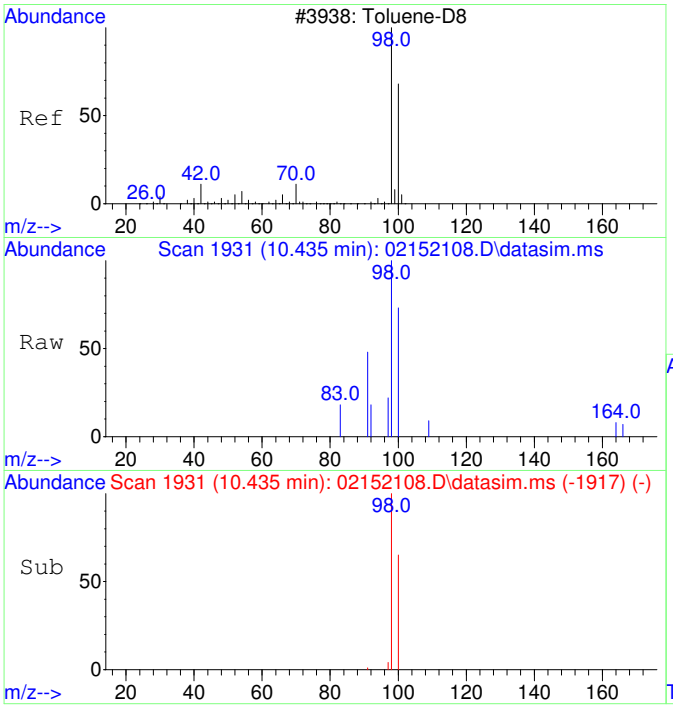


#11
Trichloroethene
Concen: 49.93 ug/L
RT: 8.515 min Scan# 1660
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:130 Resp: 507

Ion	Ratio	Lower	Upper
130	100		
95	116.6	60.7	120.7
132	102.2	76.0	116.0
97	73.0	38.6	78.6

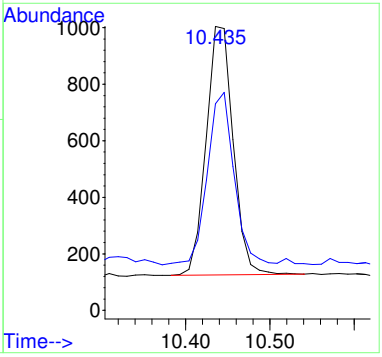


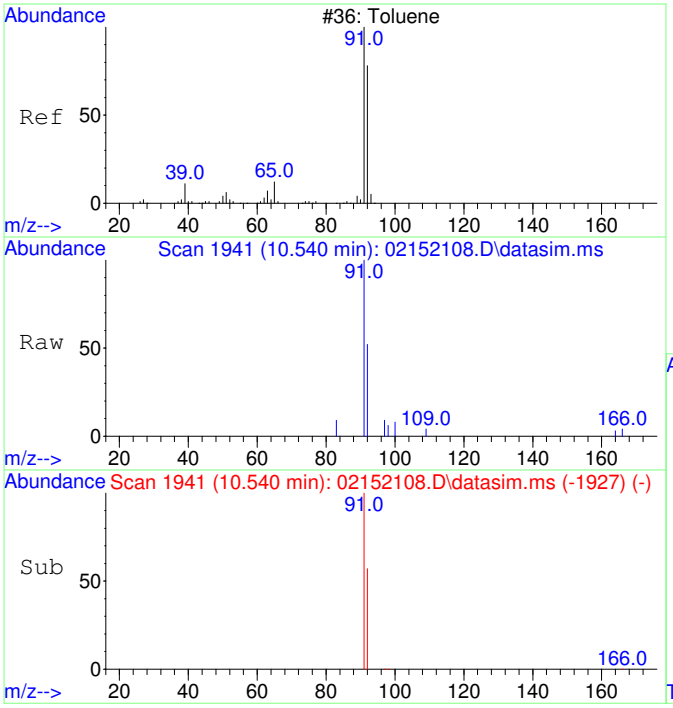


#12
Toluene-d8
Concen: 50.52 ug/L
RT: 10.435 min Scan# 1931
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 98 Resp: 1963

Ion	Ratio	Lower	Upper
98	100		
100	67.6	37.1	97.1

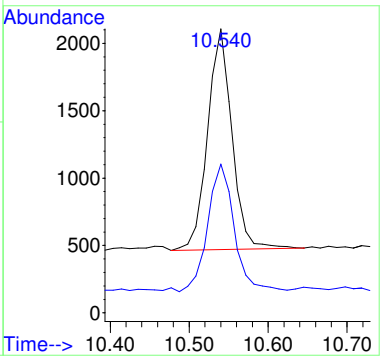


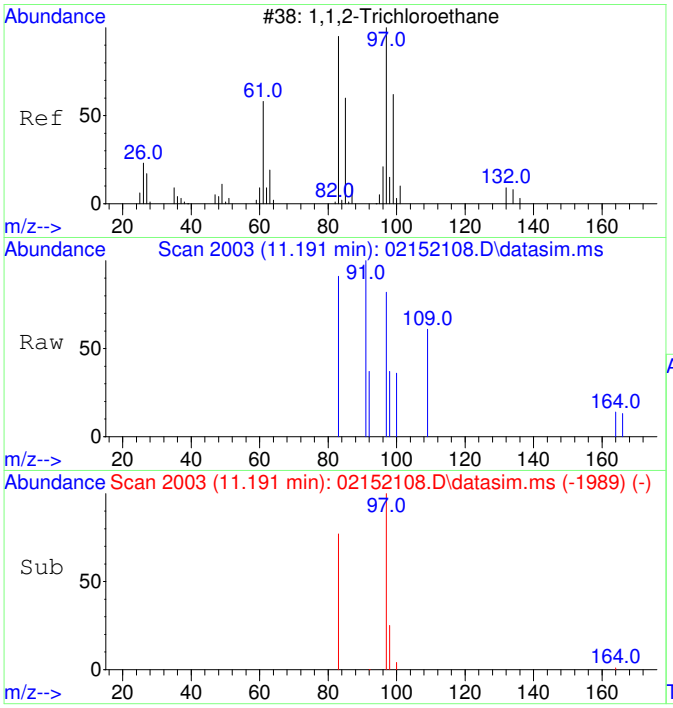


#13
Toluene
Concen: 65.12 ug/L
RT: 10.540 min Scan# 1941
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 91 Resp: 3504

Ion	Ratio	Lower	Upper
91	100		
92	61.6	29.9	89.9

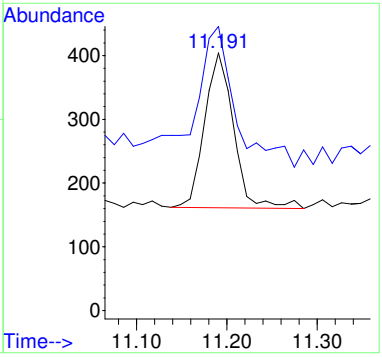


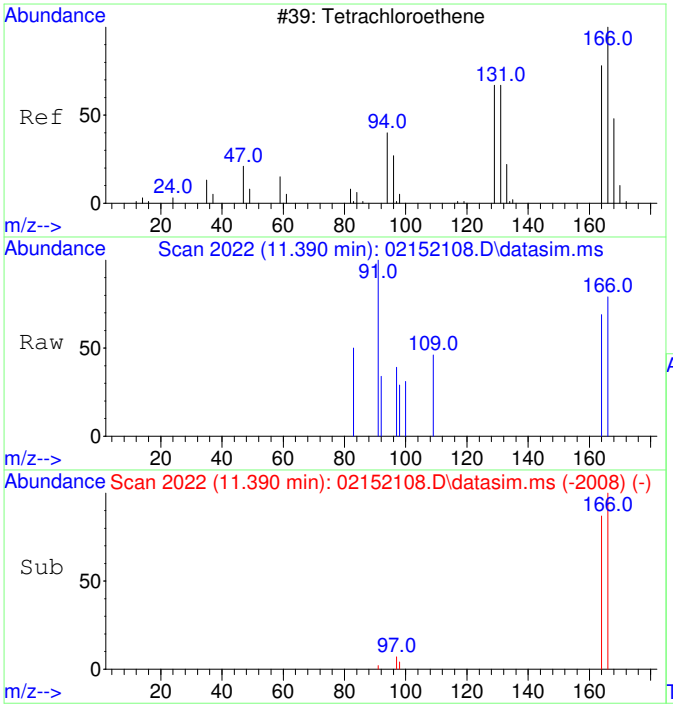


#14
1,1,2-Trichloroethane
Concen: 50.95 ug/L
RT: 11.191 min Scan# 2003
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 97 Resp: 540

Ion	Ratio	Lower	Upper
97	100		
83	137.0	51.2	111.2#

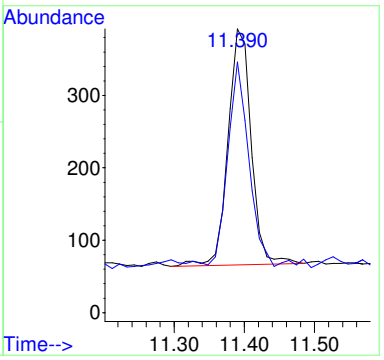


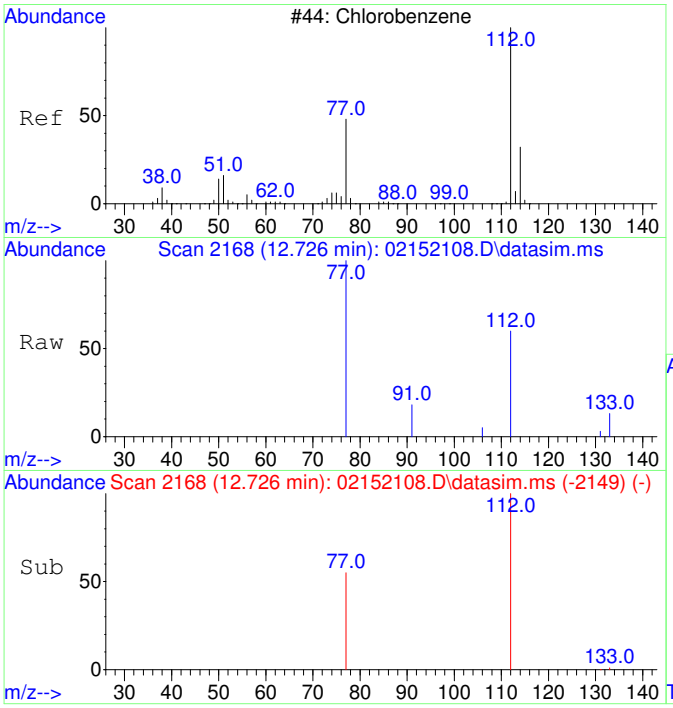


#15
Tetrachloroethene
Concen: 53.09 ug/L
RT: 11.390 min Scan# 2022
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:166 Resp: 748

Ion	Ratio	Lower	Upper
166	100		
164	75.3	47.8	107.8

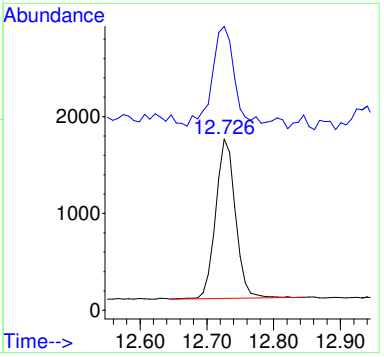


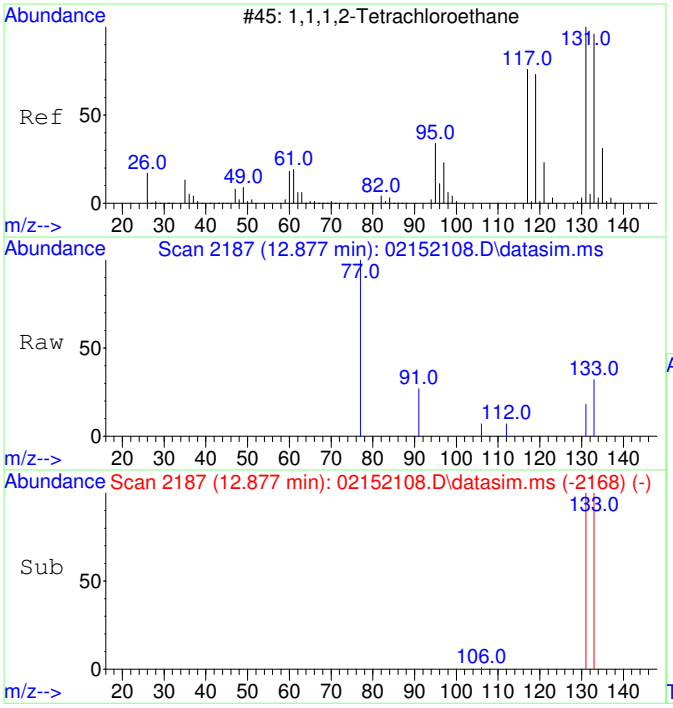


#16
Chlorobenzene
Concen: 75.11 ug/L
RT: 12.726 min Scan# 2168
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:112 Resp: 3365

Ion	Ratio	Lower	Upper
112	100		
77	75.0	23.6	83.6

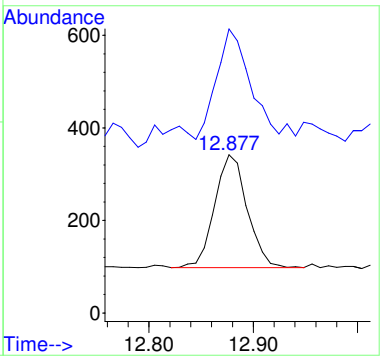


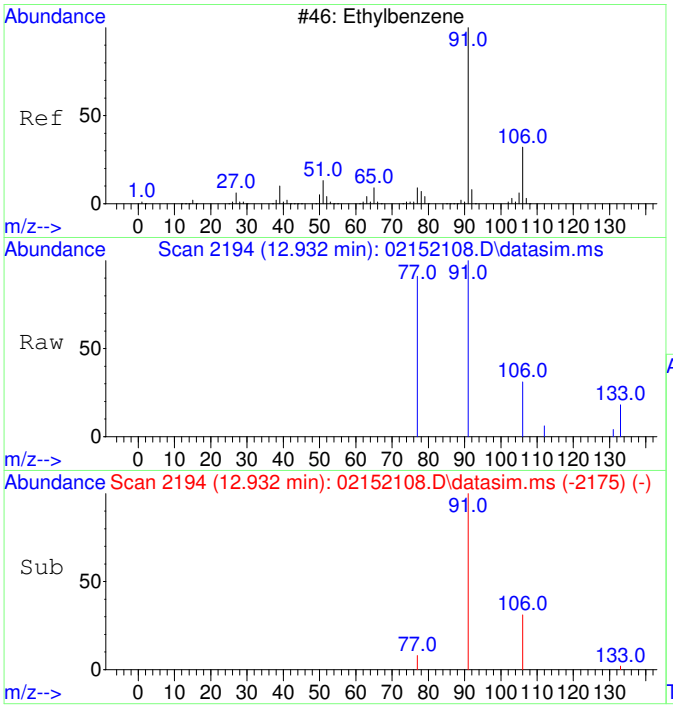


#17
1,1,1,2-Tetrachloroethane
Concen: 48.36 ug/L
RT: 12.877 min Scan# 2187
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:131 Resp: 528

Ion	Ratio	Lower	Upper
131	100		
133	110.2	66.3	126.3

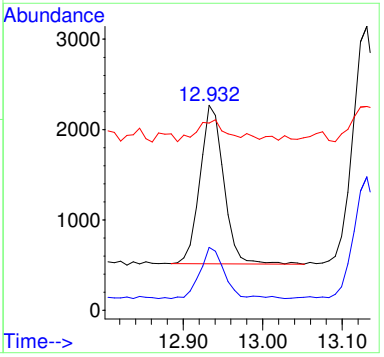


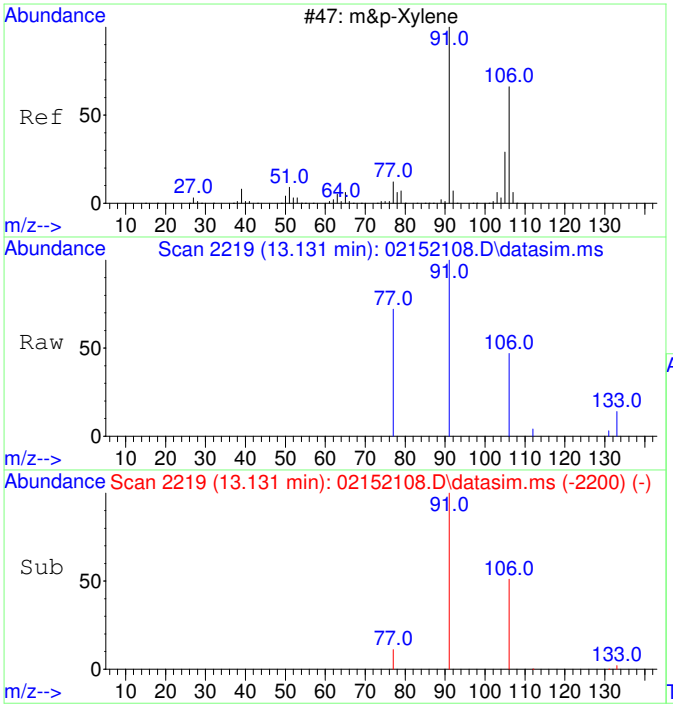


#18
Ethylbenzene
Concen: 53.48 ug/L
RT: 12.932 min Scan# 2194
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 91 Resp: 3629

Ion	Ratio	Lower	Upper
91	100		
106	32.5	3.0	63.0
77	15.9	0.0	38.2

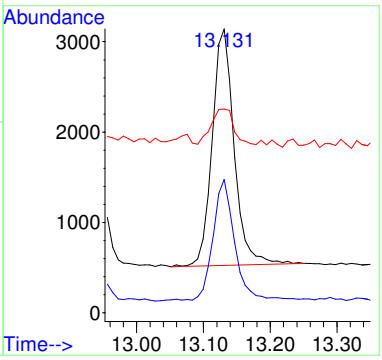


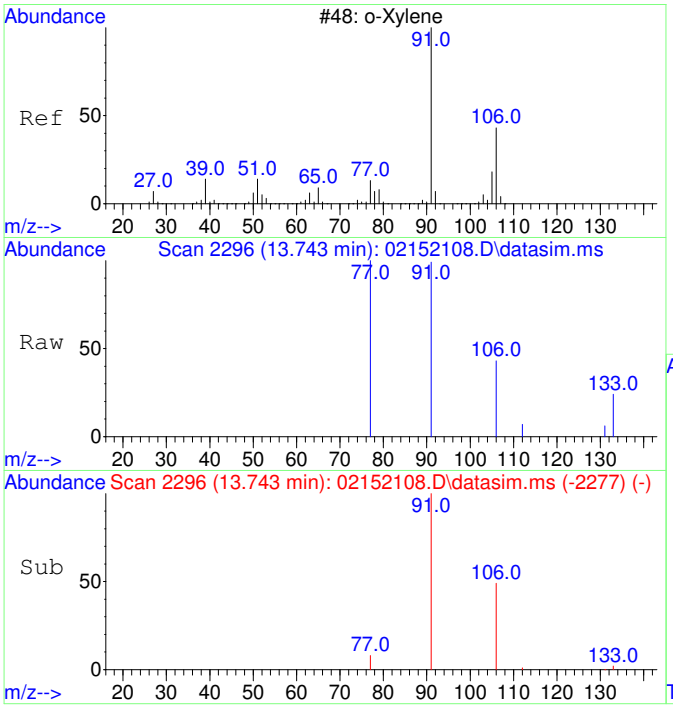


#19
m&p-Xylene
Concen: 111.77 ug/L
RT: 13.131 min Scan# 2219
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 91 Resp: 5966

Ion	Ratio	Lower	Upper
91	100		
106	49.0	22.2	82.2
77	15.3	0.0	42.4

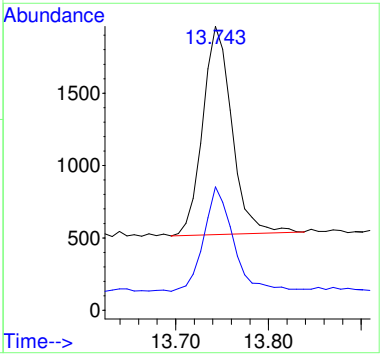


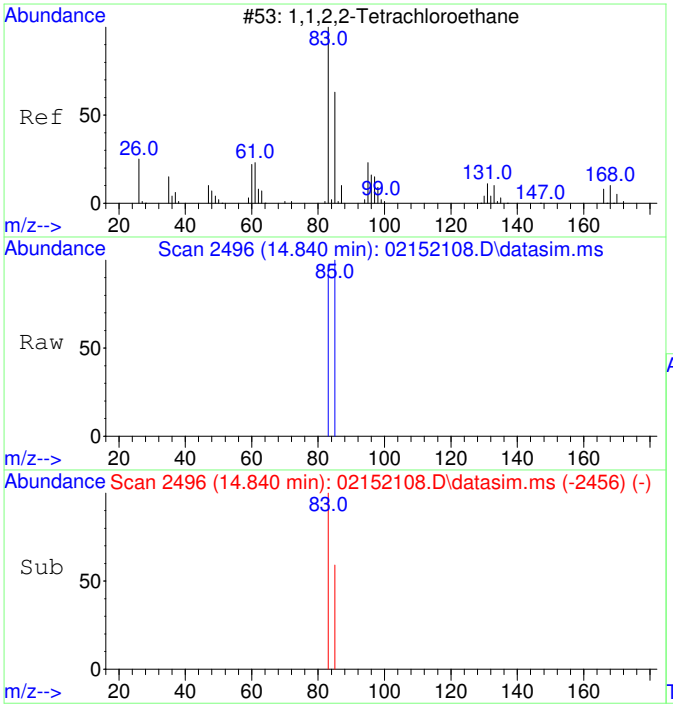


#20
o-Xylene
Concen: 54.59 ug/L
RT: 13.743 min Scan# 2296
Delta R.T. -0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 91 Resp: 3156

Ion	Ratio	Lower	Upper
91	100		
106	49.7	19.2	79.2

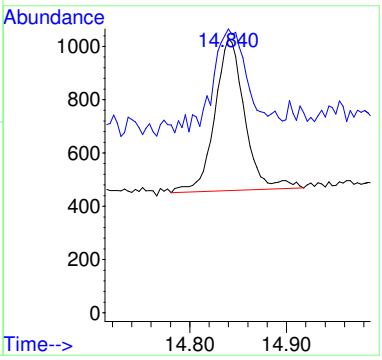


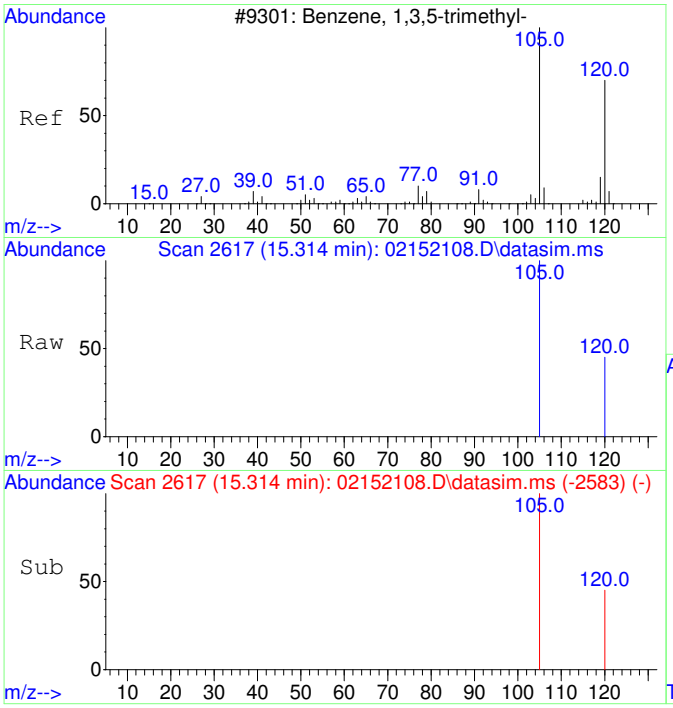


#21
1,1,2,2-Tetrachloroethane
Concen: 52.04 ug/L
RT: 14.840 min Scan# 2496
Delta R.T. -0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 83 Resp: 1223

Ion	Ratio	Lower	Upper
83	100		
85	75.7	34.8	94.8

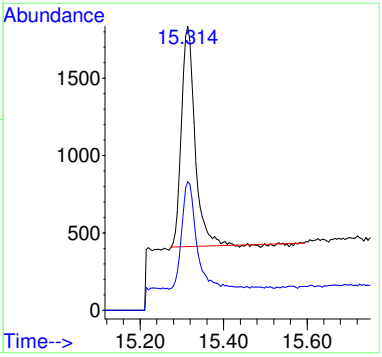


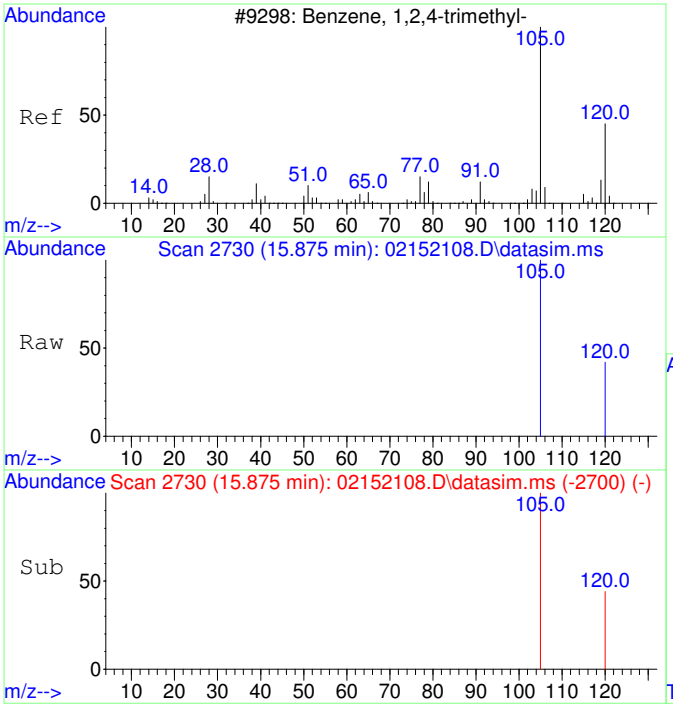


#22
1,3,5-Trimethylbenzene
Concen: 49.60 ug/L
RT: 15.314 min Scan# 2617
Delta R.T. -0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:105 Resp: 3170

Ion	Ratio	Lower	Upper
105	100		
120	51.5	21.1	81.1

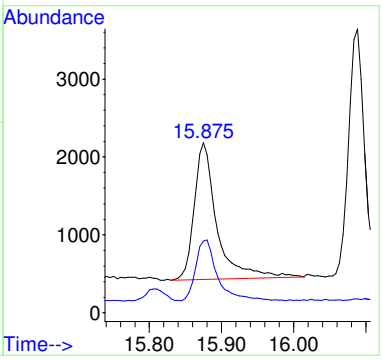


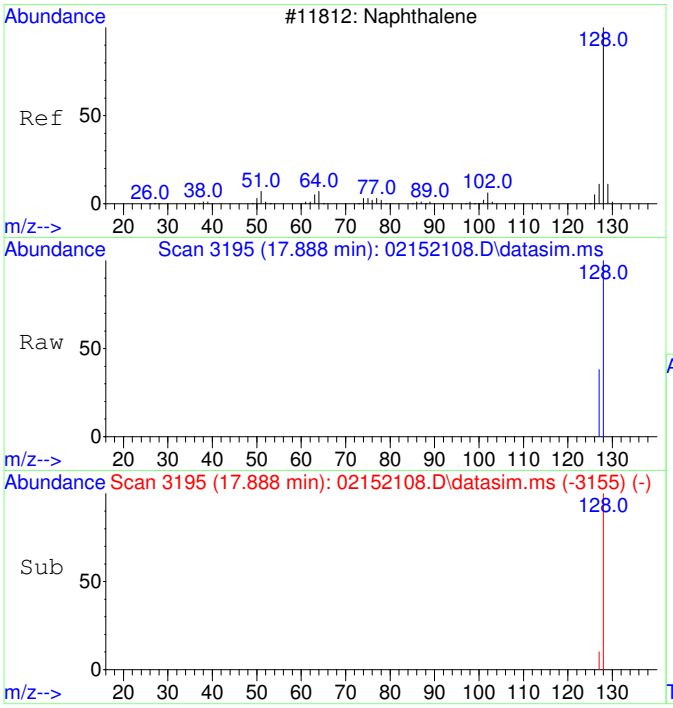


#23
1,2,4-Trimethylbenzene
Concen: 55.96 ug/L
RT: 15.875 min Scan# 2730
Delta R.T. -0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:105 Resp: 3801

Ion	Ratio	Lower	Upper
105	100		
120	42.5	17.2	77.2

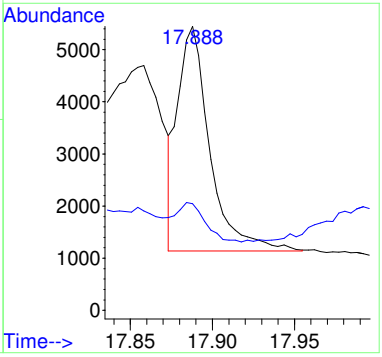


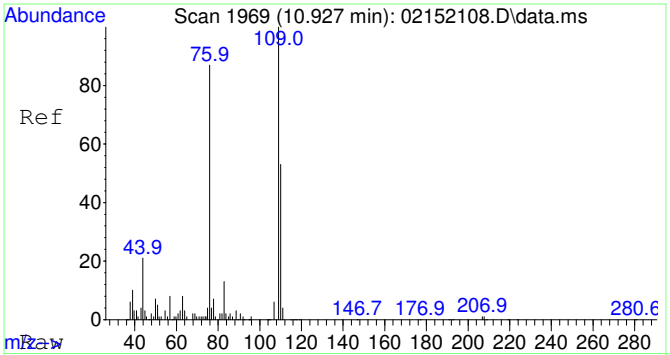


#24
Naphthalene
Concen: 64.43 ug/L m
RT: 17.888 min Scan# 3195
Delta R.T. -0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:128 Resp: 5881

Ion	Ratio	Lower	Upper
128	100		
127	0.0	0.0	42.5

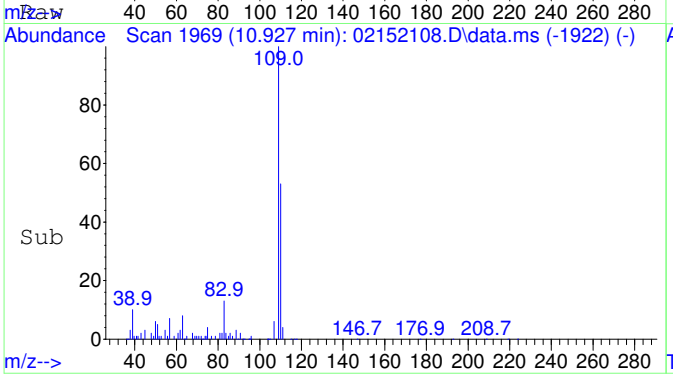


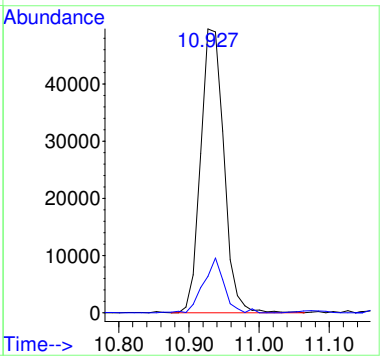


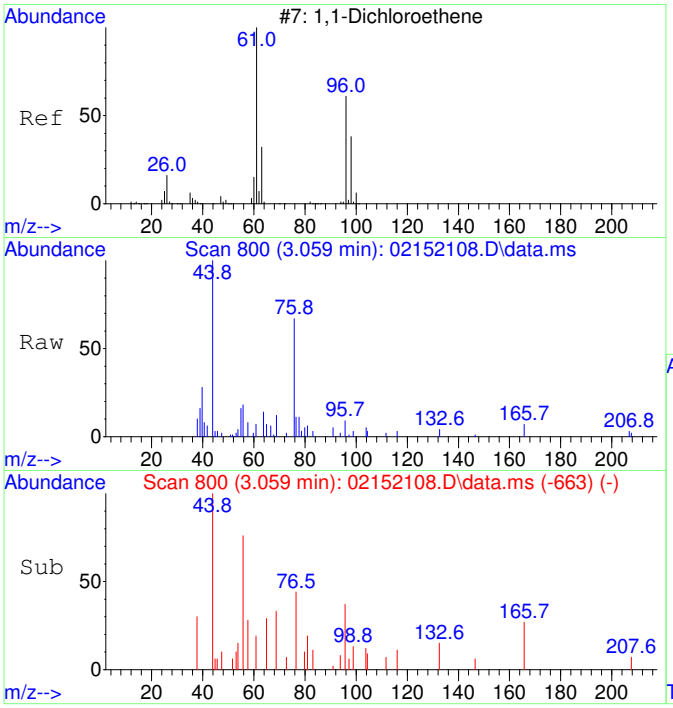
#25
2-Fluorotoluene SCAN
Concen: 4704.11 ug/L
RT: 10.927 min Scan# 1969
Delta R.T. -0.010 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:109 Resp: 114184

Ion	Ratio	Lower	Upper
109	100		
83	17.3	0.0	43.8



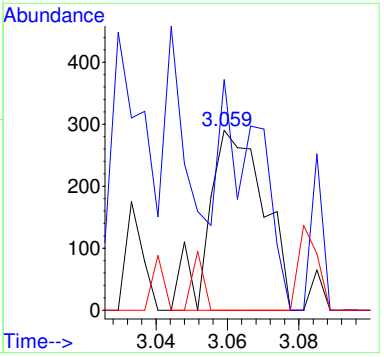


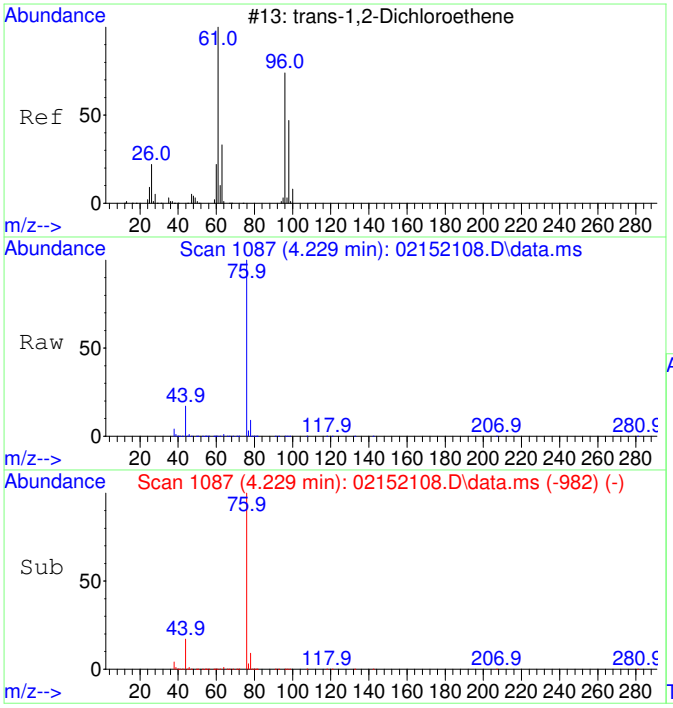


#26
1,1-Dichloroethene SCAN
Concen: 40.82 ug/L
RT: 3.059 min Scan# 800
Delta R.T. 0.007 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 61 Resp: 315

Ion	Ratio	Lower	Upper
61	100		
96	59.0	33.1	93.1
98	0.0	11.2	71.2#

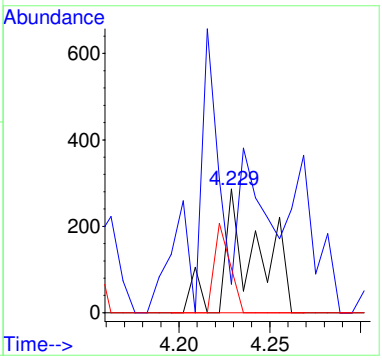


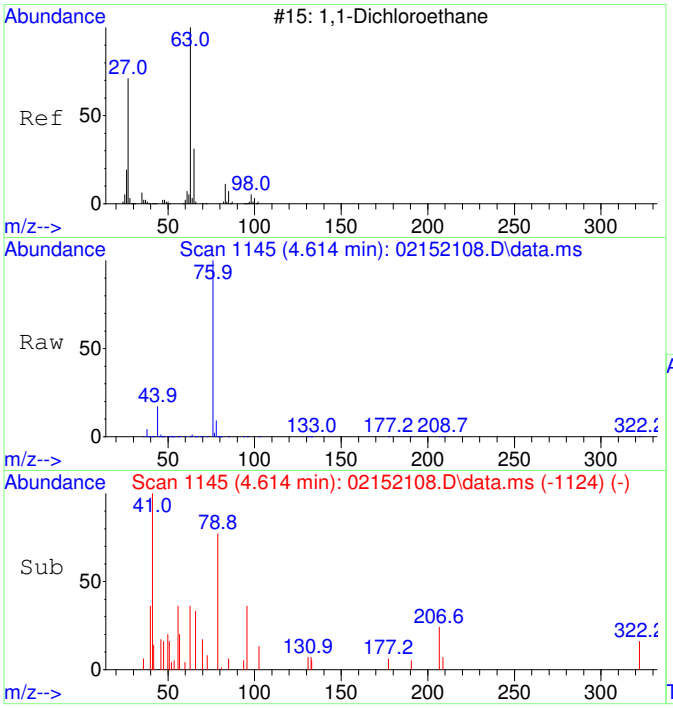


#27
trans-1,2-Dichloroethene SCAN
Concen: 45.30 ug/L
RT: 4.229 min Scan# 1087
Delta R.T. -0.007 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 61 Resp: 367

Ion	Ratio	Lower	Upper
61	100		
96	61.0	49.0	109.0
98	33.5	20.5	80.5

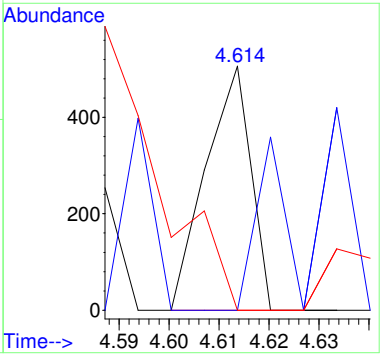


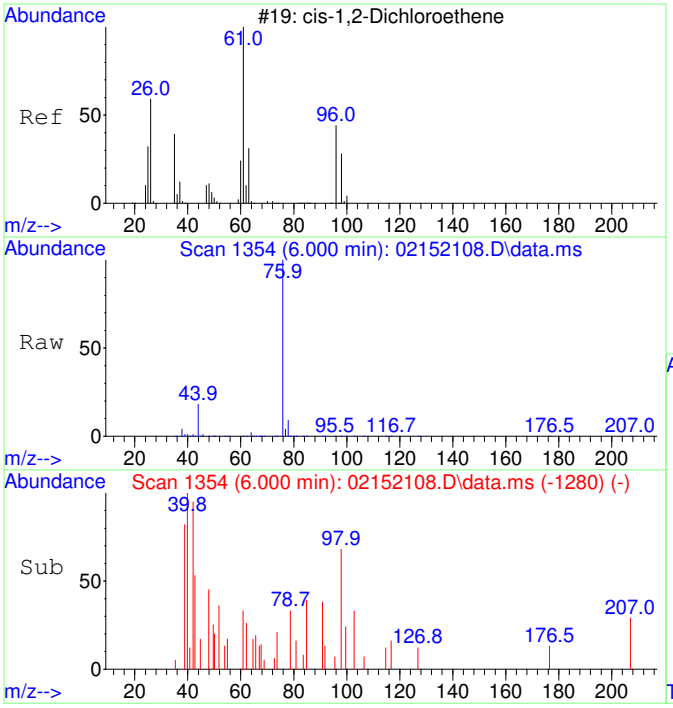


#28
1,1-Dichloroethane SCAN
Concen: 31.60 ug/L
RT: 4.614 min Scan# 1145
Delta R.T. -0.358 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 63 Resp: 317

Ion	Ratio	Lower	Upper
63	100		
65	45.1	1.3	61.3
82	29.7	0.0	45.9

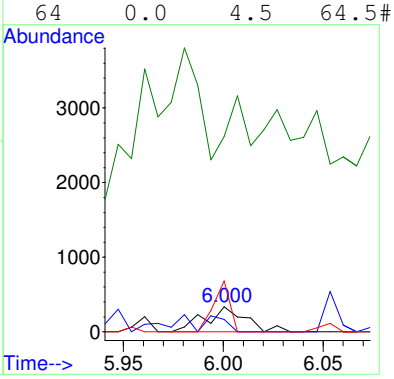


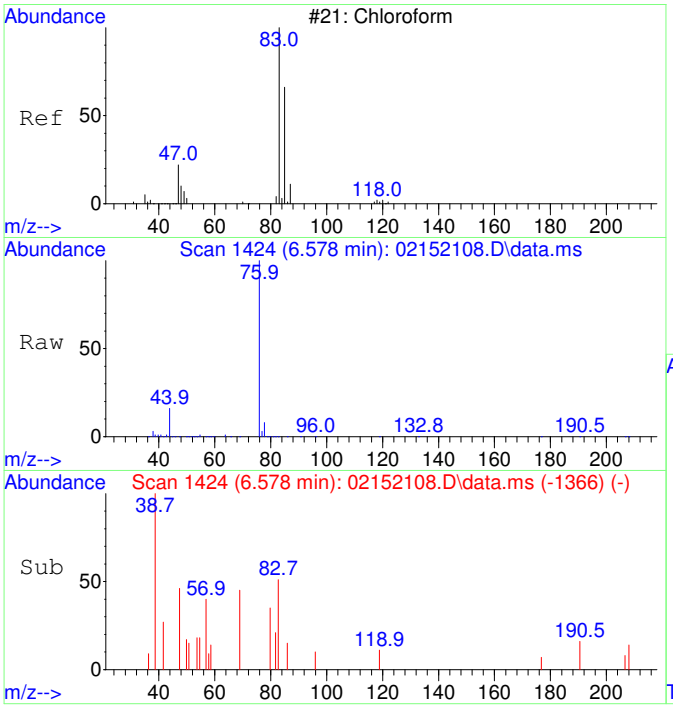


#29
cis-1,2-Dichloroethene SCAN
Concen: 51.98 ug/L
RT: 6.000 min Scan# 1354
Delta R.T. -0.007 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 61 Resp: 483

Ion	Ratio	Lower	Upper
61	100		
96	31.3	39.9	99.9#
98	79.9	13.5	73.5#
64	0.0	4.5	64.5#

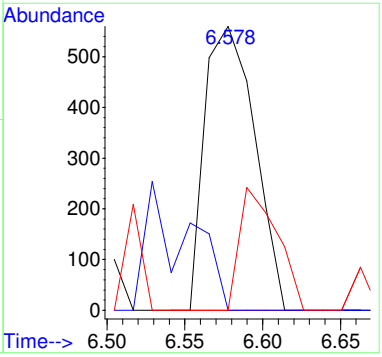


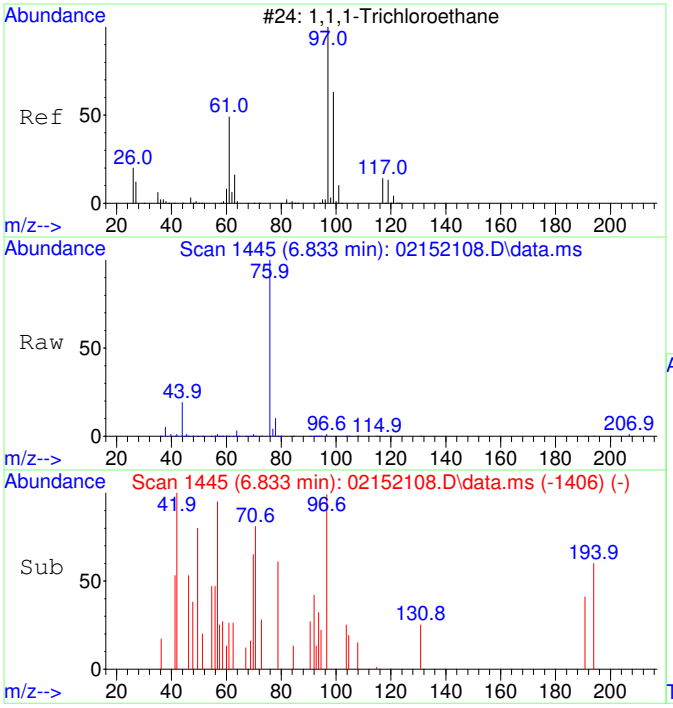


#30
Chloroform SCAN
Concen: 147.21 ug/L
RT: 6.578 min Scan# 1424
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 83 Resp: 1252

Ion	Ratio	Lower	Upper
83	100		
85	0.0	34.6	94.6#
47	32.6	0.0	53.4

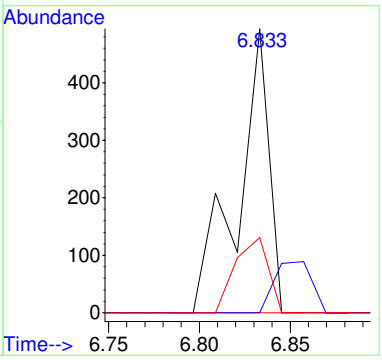


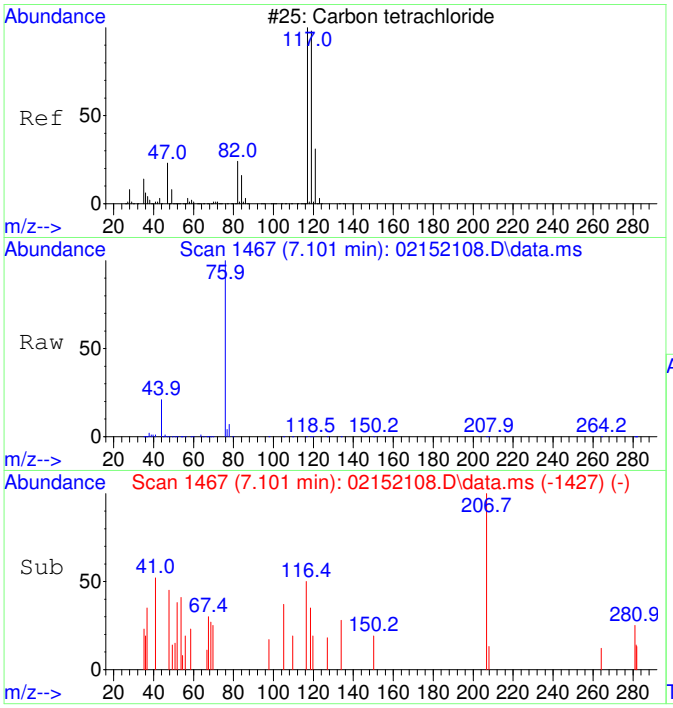


#31
1,1,1-Trichloroethane SCAN
Concen: 67.36 ug/L
RT: 6.833 min Scan# 1445
Delta R.T. -0.012 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 97 Resp: 589

Ion	Ratio	Lower	Upper
97	100		
99	0.0	43.6	103.6#
61	28.2	18.0	78.0

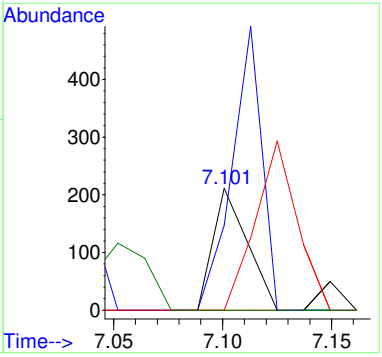


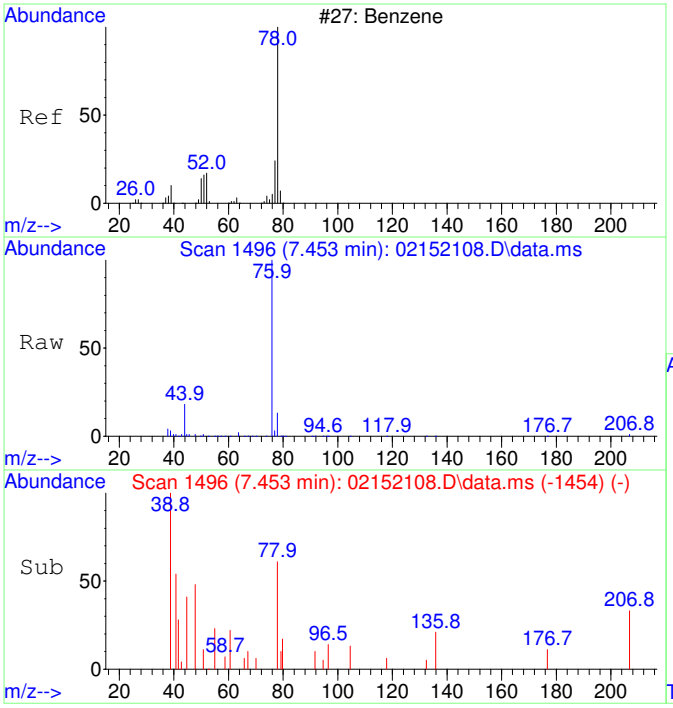


#32
Carbon tetrachloride SCAN
Concen: 32.81 ug/L
RT: 7.101 min Scan# 1467
Delta R.T. -0.012 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:117 Resp: 231

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

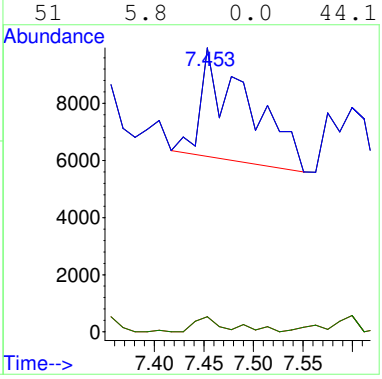


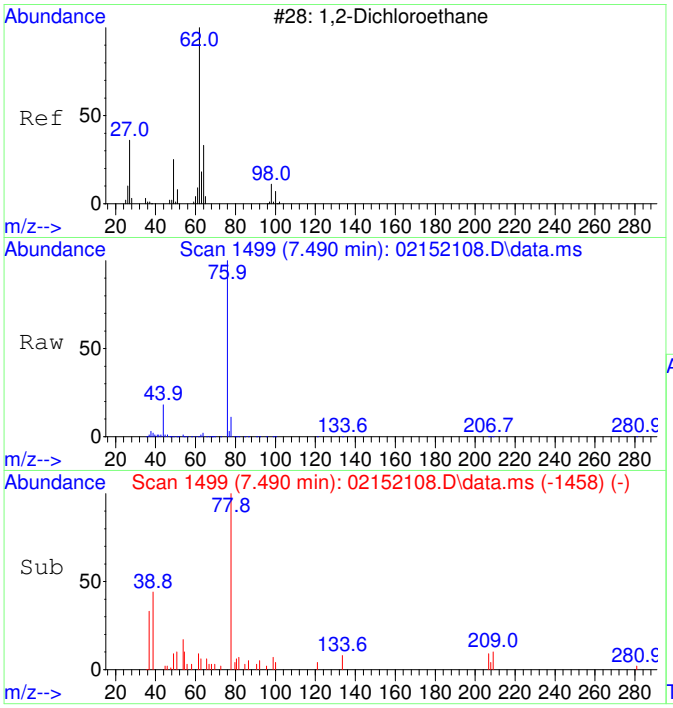


#33
Benzene SCAN
Concen: 526.67 ug/L
RT: 7.453 min Scan# 1496
Delta R.T. 0.012 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 78 Resp: 12640

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	5.8	0.0	47.9
51	5.8	0.0	44.1

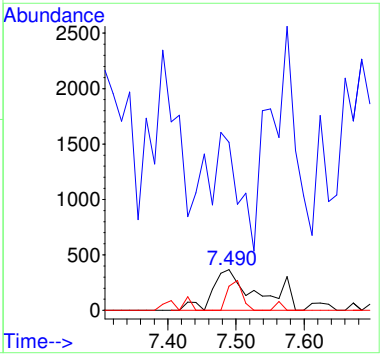


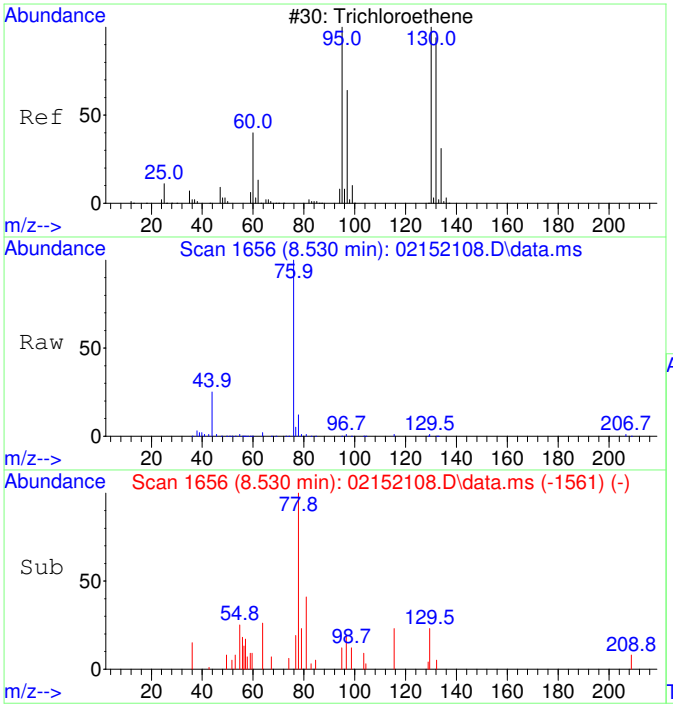


#34
1,2-Dichloroethane SCAN
Concen: 188.63 ug/L
RT: 7.490 min Scan# 1499
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 62 Resp: 1652

Ion	Ratio	Lower	Upper
62	100		
64	0.0	5.2	65.2#
49	24.3	3.9	63.9

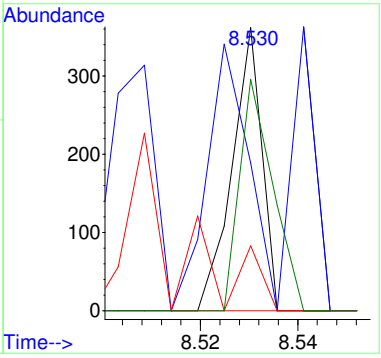


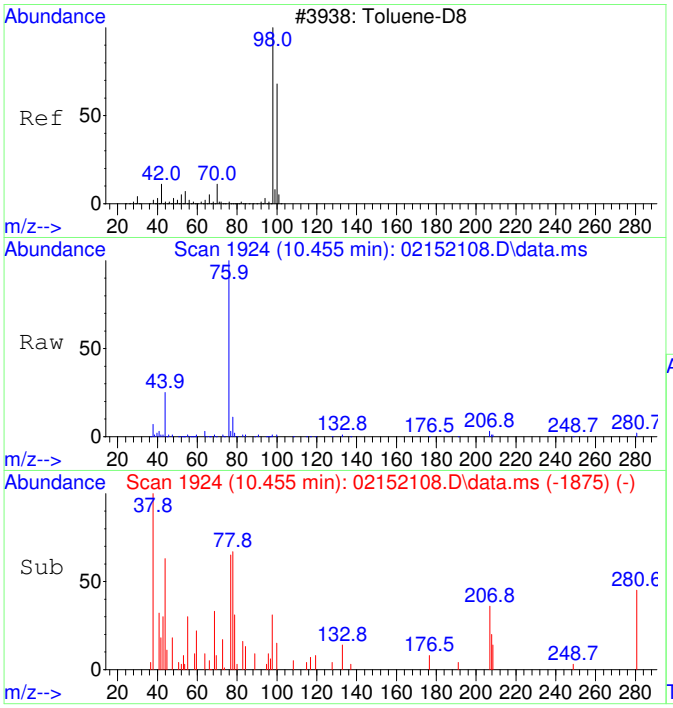


#35
Trichloroethene SCAN
Concen: 29.03 ug/L
RT: 8.530 min Scan# 1656
Delta R.T. 0.016 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:130 Resp: 154

Ion	Ratio	Lower	Upper
130	100		
95	131.8	60.5	120.5#
132	0.0	59.6	119.6#
97	91.6	28.2	88.2#

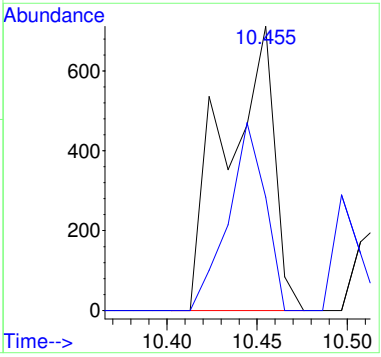


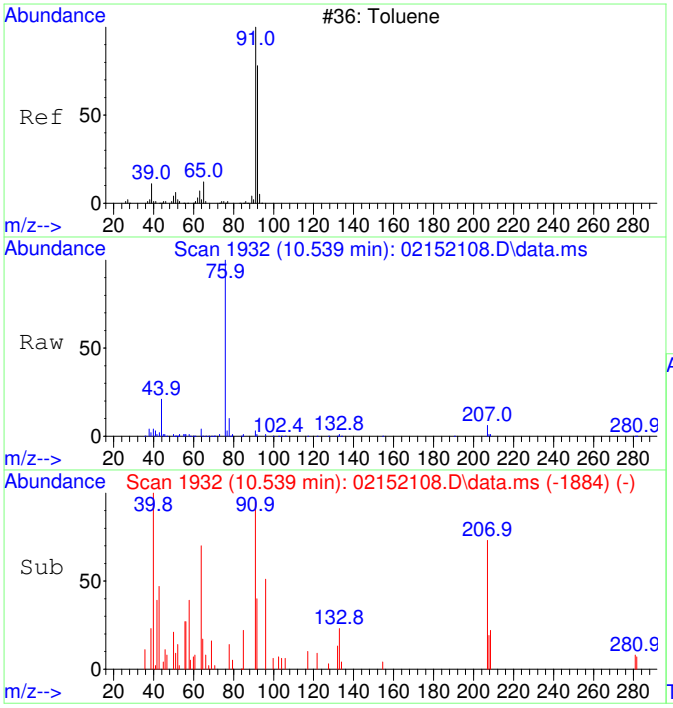


#36
Toluene-d8 SCAN
Concen: 63.12 ug/L
RT: 10.455 min Scan# 1924
Delta R.T. 0.011 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 98 Resp: 1353

Ion	Ratio	Lower	Upper
98	100		
100	49.8	40.0	100.0

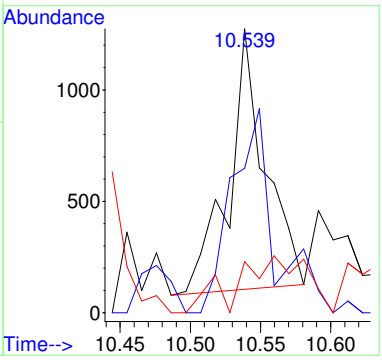


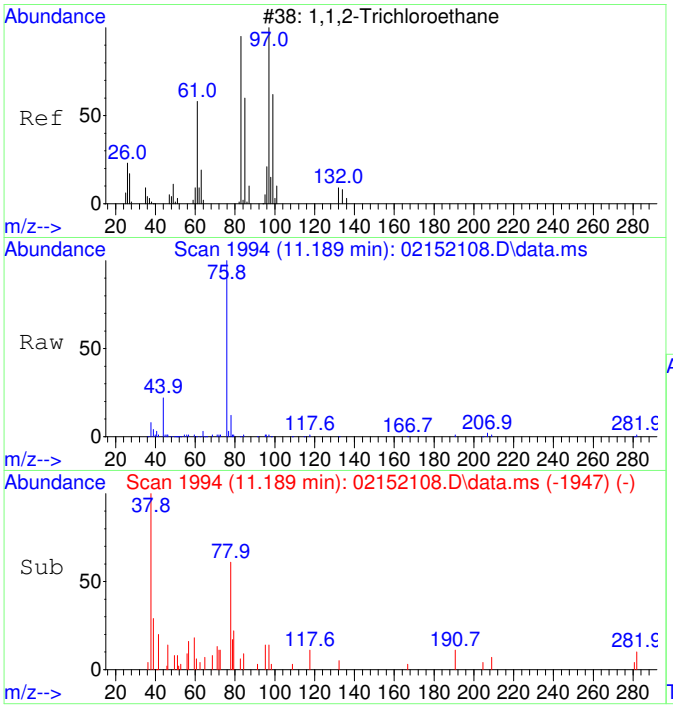


#37
Toluene SCAN
Concen: 68.32 ug/L
RT: 10.539 min Scan# 1932
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 91 Resp: 2099

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

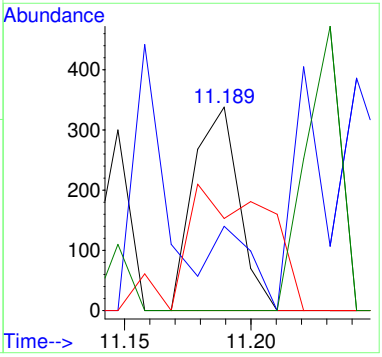


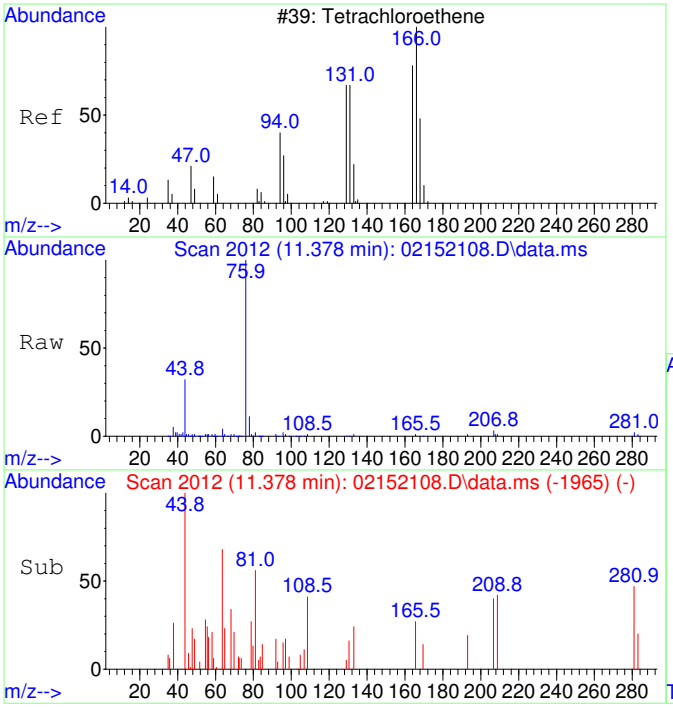


#38
1,1,2-Trichloroethane SCAN
Concen: 69.83 ug/L
RT: 11.189 min Scan# 1994
Delta R.T. -0.010 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 97 Resp: 426

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	113.1	32.1	92.1#
99	0.0	36.7	96.7#

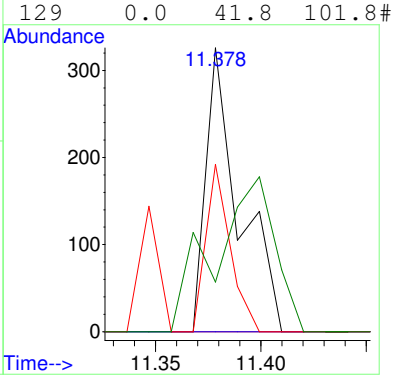


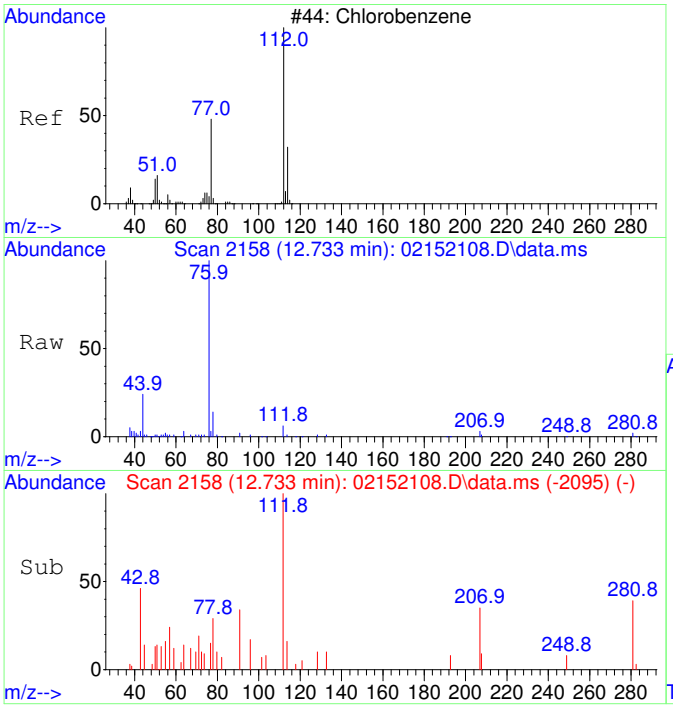


#39
Tetrachloroethene SCAN
Concen: 59.95 ug/L
RT: 11.378 min Scan# 2012
Delta R.T. -0.010 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:166 Resp: 358

Ion	Ratio	Lower	Upper
166	100		
164	0.0	50.9	110.9#
131	43.0	38.7	98.7
129	0.0	41.8	101.8#

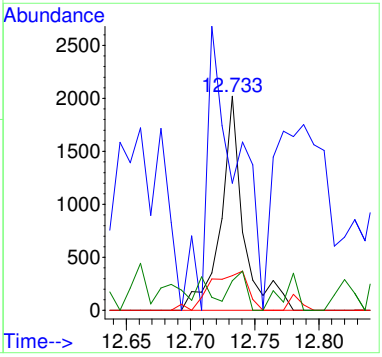


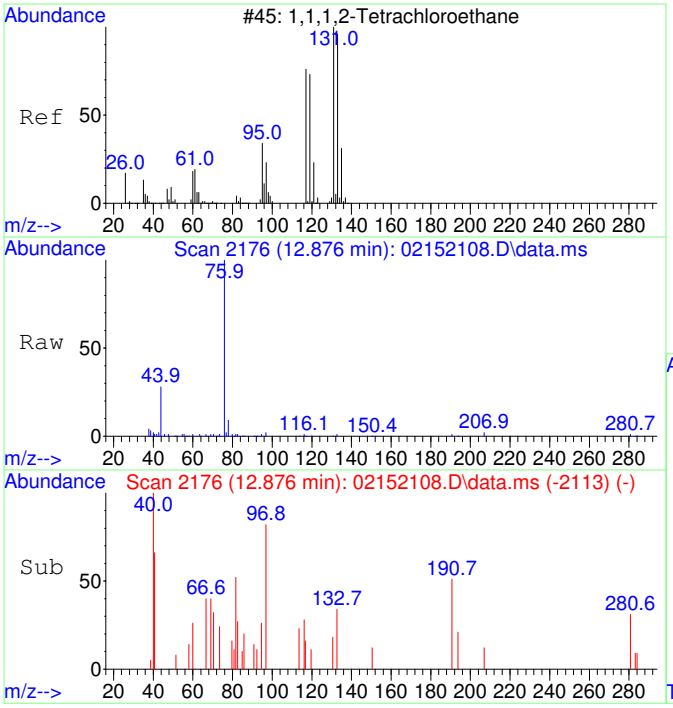


#40
Chlorobenzene SCAN
Concen: 131.63 ug/L
RT: 12.733 min Scan# 2158
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:112 Resp: 2473

Ion	Ratio	Lower	Upper
112	100		
77	0.0	28.2	88.2#
114	30.4	2.3	62.3
51	10.1	0.0	50.1

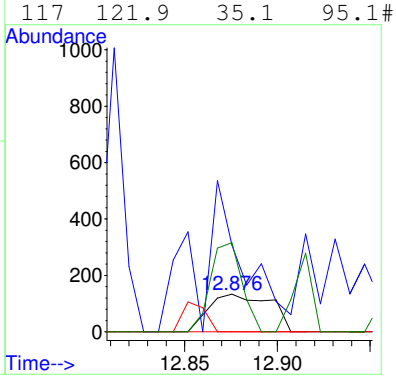


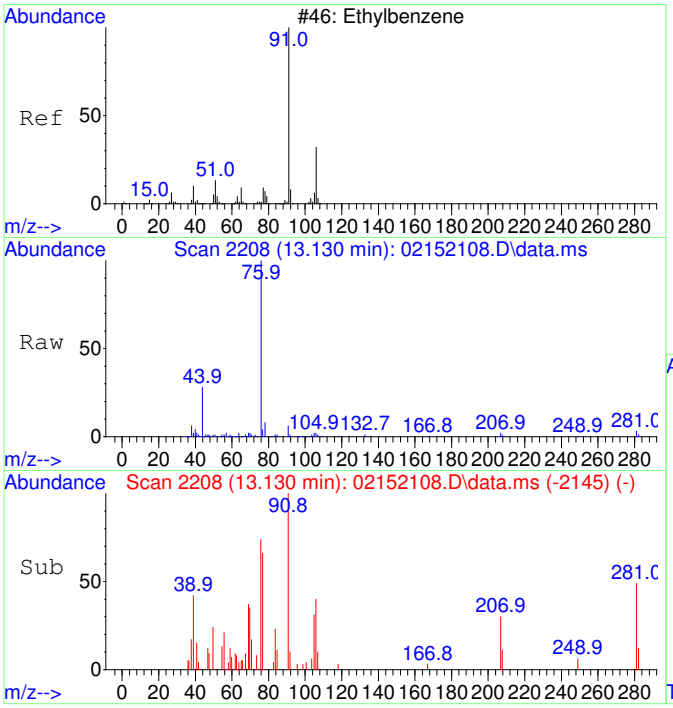


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 51.37 ug/L
RT: 12.876 min Scan# 2176
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:131 Resp: 310

Ion	Ratio	Lower	Upper
131	100		
133	190.3	66.9	126.9#
119	0.0	40.4	100.4#
117	121.9	35.1	95.1#

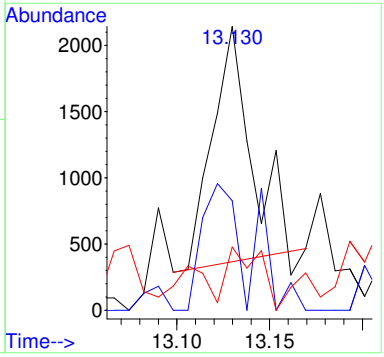


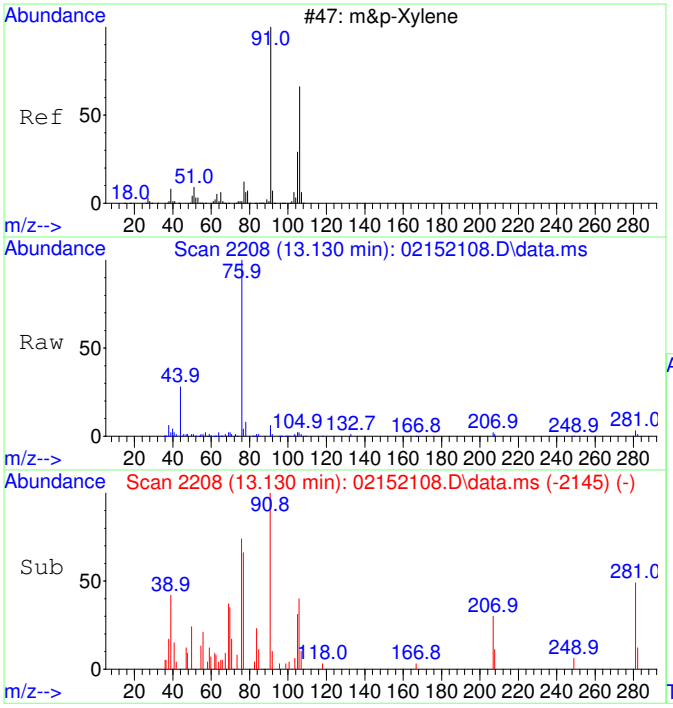


#42
Ethylbenzene SCAN
Concen: 45.34 ug/L
RT: 13.130 min Scan# 2208
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 91 Resp: 2584

Ion	Ratio	Lower	Upper
91	100		
106	45.9	23.1	83.1
51	20.9	0.0	40.1

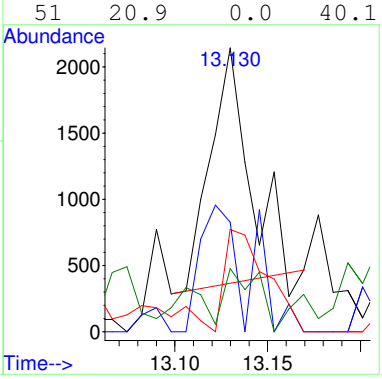


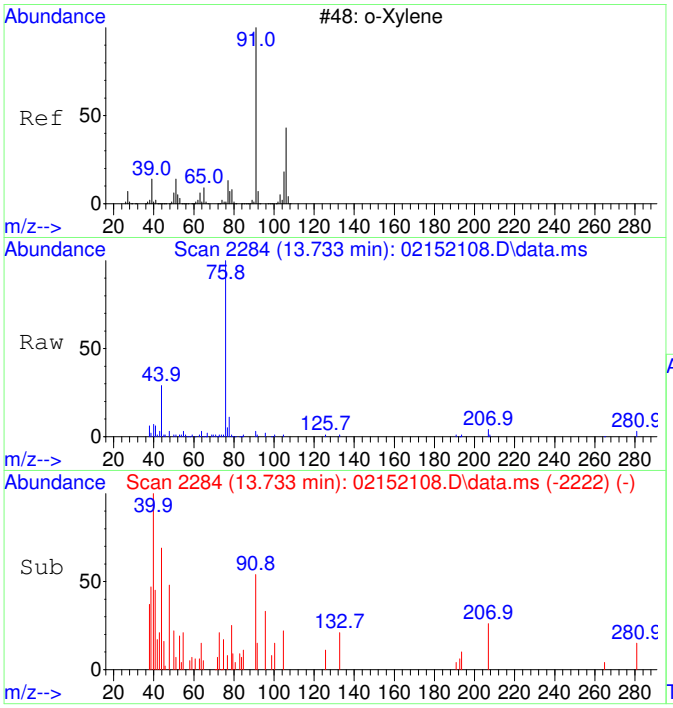


#43
m&p-Xylene SCAN
Concen: 45.34 ug/L
RT: 13.130 min Scan# 2208
Delta R.T. 0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 91 Resp: 2584

Ion	Ratio	Lower	Upper
91	100		
106	45.9	23.1	83.1
105	41.8	0.0	54.7
51	20.9	0.0	40.1

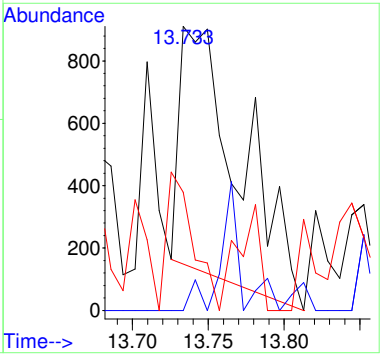


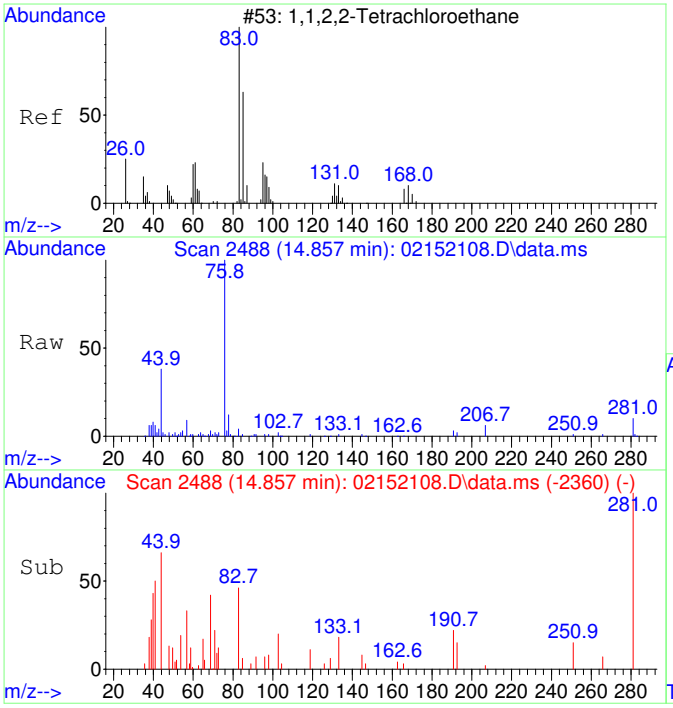


#44
o-Xylene SCAN
Concen: 69.39 ug/L
RT: 13.733 min Scan# 2284
Delta R.T. -0.008 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 91 Resp: 2150

Ion	Ratio	Lower	Upper
91	100		
106	0.0	18.0	78.0#
105	25.2	0.0	56.6

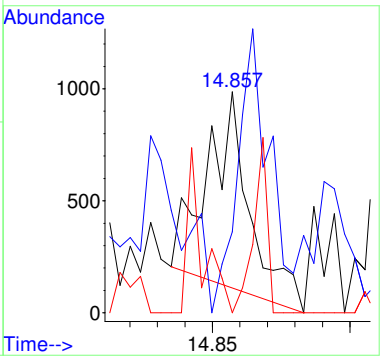


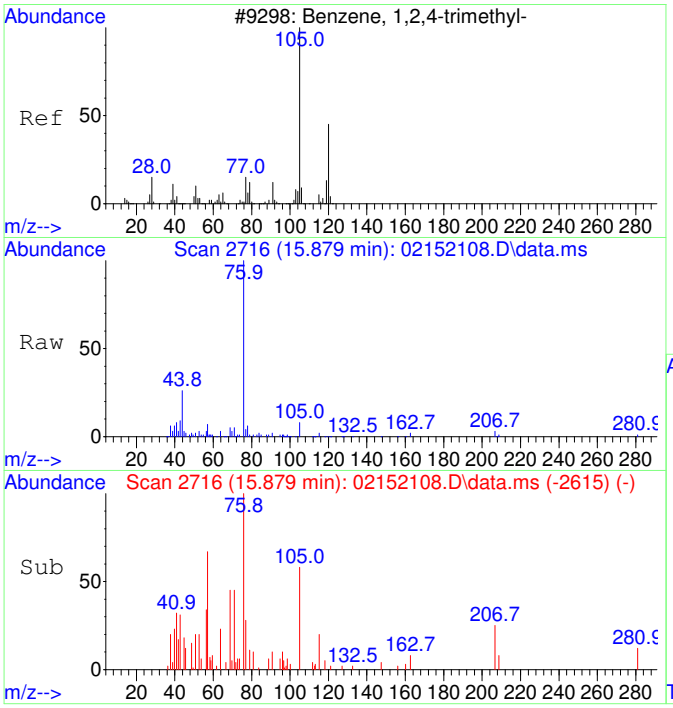


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 63.28 ug/L
RT: 14.857 min Scan# 2488
Delta R.T. 0.022 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion: 83 Resp: 914

Ion	Ratio	Lower	Upper
83	100		
85	93.8	35.9	95.9
95	29.2	0.0	47.4

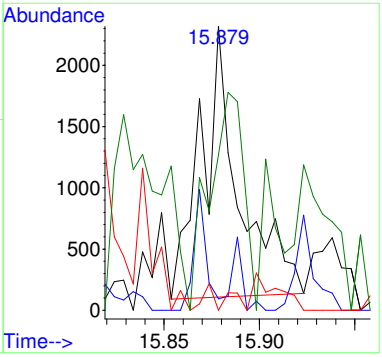


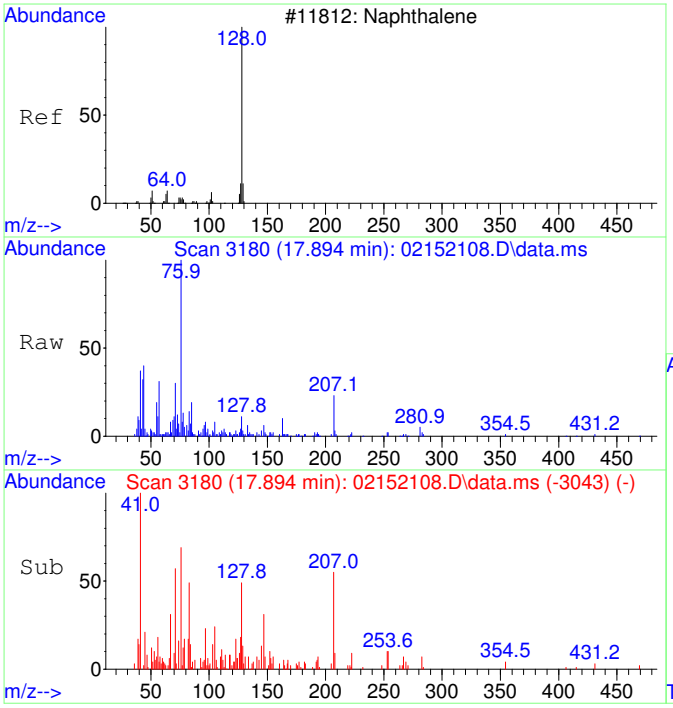


#47
1,2,4-Trimethylbenzene SCAN
Concen: 94.37 ug/L
RT: 15.879 min Scan# 2716
Delta R.T. -0.000 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:105 Resp: 3058

Ion	Ratio	Lower	Upper
105	100		
120	5.6	16.9	76.9#
119	2.6	0.0	41.9
77	72.9	0.0	42.3#

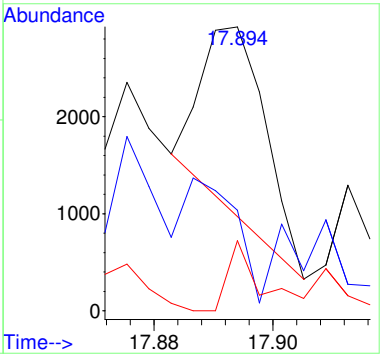




#48
Naphthalene SCAN
Concen: 30.71 ug/L
RT: 17.894 min Scan# 3180
Delta R.T. 0.007 min
Lab File: 02152108.D
Acq: 15 Feb 2021 13:03

Tgt Ion:128 Resp: 1292

Ion	Ratio	Lower	Upper
128	100		
127	35.2	0.0	44.0
129	17.0	0.0	40.8



S21B036-SCV1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152109.D
Acq On : 15 Feb 2021 13:27
InstName : AG5975C
Operator : TD
Sample : S21B036-SCV1
Misc : 2106043 5 mg/L
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 15 13:46:08 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration

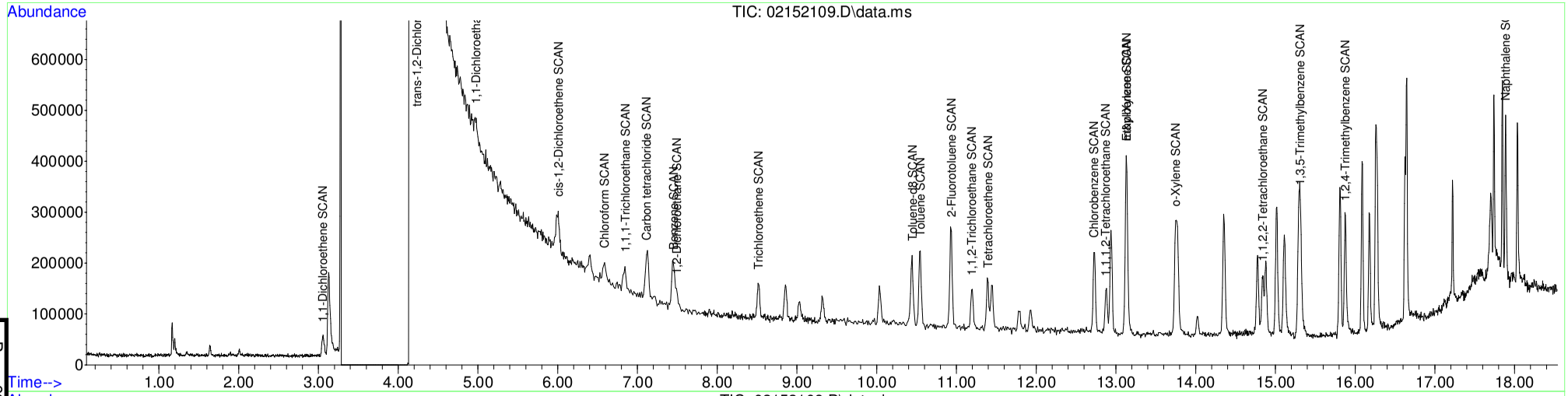
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.928	109	219779	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.435	98	183327	4840.62	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 96.81%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.056	61	51928	5072.56	ug/L	90
3] trans-1,2-Dichloroethene	4.230	61	53101	4910.26	ug/L	98
4] 1,1-Dichloroethane	4.980	63	64220	4930.26	ug/L	100
5] cis-1,2-Dichloroethene	6.002	61	63061	4909.99	ug/L	98
6] Chloroform	6.579	83	65523	4786.45	ug/L	99
7] 1,1,1-Trichloroethane	6.834	97	64265	4940.16	ug/L	98
8] Carbon tetrachloride	7.114	117	53949	4962.86	ug/L	98
9] Benzene	7.442	78	169450	4531.13	ug/L	99
10] 1,2-Dichloroethane	7.479	62	59431	4978.75	ug/L	100
11] Trichloroethene	8.521	130	49601	5010.63	ug/L	94
13] Toluene	10.540	91	238283	4542.84	ug/L	99
14] 1,1,2-Trichloroethane	11.191	97	51323	4968.02	ug/L	96
15] Tetrachloroethene	11.390	166	67759	4934.05	ug/L	100
16] Chlorobenzene	12.726	112	186122	4262.10	ug/L	91
17] 1,1,1,2-Tetrachloroethane	12.877	131	52791	4959.84	ug/L	99
18] Ethylbenzene	12.932	91	323002	4883.39	ug/L	98
19] m&p-Xylene	13.131	91	493209	9479.11	ug/L	97
20] o-Xylene	13.743	91	268383	4761.98	ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.840	83	111159	4852.62	ug/L	99
22] 1,3,5-Trimethylbenzene	15.314	105	307827	4940.62	ug/L	97
23] 1,2,4-Trimethylbenzene	15.875	105	309484	4673.86	ug/L	96
24] Naphthalene	17.888	128	455860	4835.19	ug/L	100
25) 2-Fluorotoluene SCAN	10.937	109	111046	4693.14	ug/L	91
26) 1,1-Dichloroethene SCAN	3.051	61	34013	4521.22	ug/L #	72
27) trans-1,2-Dichloroethe...	4.235	61	34039	4310.06	ug/L	81
28) 1,1-Dichloroethane SCAN	4.978	63	42453	4341.96	ug/L	97
29) cis-1,2-Dichloroethene...	6.007	61	41240	4552.60	ug/L #	78
30) Chloroform SCAN	6.590	83	37401	4511.27	ug/L	88
31) 1,1,1-Trichloroethane ...	6.845	97	42139	4943.43	ug/L	84
32) Carbon tetrachloride SCAN	7.113	117	30567	4454.26	ug/L	84
33) Benzene SCAN	7.453	78	100728	4305.57	ug/L	94
34) 1,2-Dichloroethane SCAN	7.490	62	39496	4626.30	ug/L	92
35) Trichloroethene SCAN	8.519	130	24310	4700.62	ug/L	86
36) Toluene-d8 SCAN	10.444	98	101842	4873.96	ug/L	96
37) Toluene SCAN	10.549	91	132125	4411.52	ug/L	97
38) 1,1,2-Trichloroethane ...	11.189	97	28407	4776.62	ug/L	92
39) Tetrachloroethene SCAN	11.399	166	27784	4773.18	ug/L	89
40) Chlorobenzene SCAN	12.724	112	99357	5425.18	ug/L	88
41) 1,1,1,2-Tetrachloroeth...	12.875	131	24635	4187.90	ug/L	93
42) Ethylbenzene SCAN	13.130	91	266242	4792.57	ug/L	93
43) m&p-Xylene SCAN	13.130	91	266242	4792.57	ug/L	93
44) o-Xylene SCAN	13.749	91	148359	4912.08	ug/L	94
45) 1,1,2,2-Tetrachloroeth...	14.842	83	65698	4666.05	ug/L	95
46) 1,3,5-Trimethylbenzene...	15.312	105	155595	4889.87	ug/L	98
47) 1,2,4-Trimethylbenzene...	15.878	105	161884	5124.72	ug/L	91
48) Naphthalene SCAN	17.886	128	218845	5336.27	ug/L	97

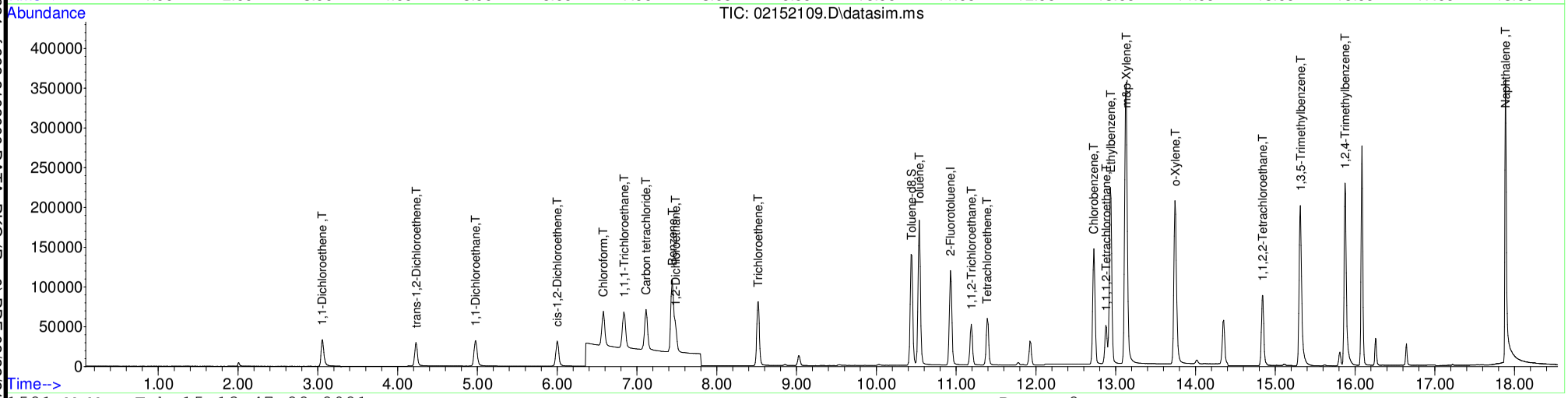
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152109.D
Acq On : 15 Feb 2021 13:27
InstName : AG5975C
Operator : TD
Sample : S21B036-SCV1
Misc : 2106043 5 mg/L
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 15 13:46:08 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration





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2102006-06RE1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152110.D
Acq On : 15 Feb 2021 13:55
InstName : AG5975C
Operator : TD
Sample : 2102006-06RE1
Misc : RA for low surr
ALS Vial : 10 Sample Multiplier: 1

REPORT

Quant Time: Feb 16 06:17:45 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration

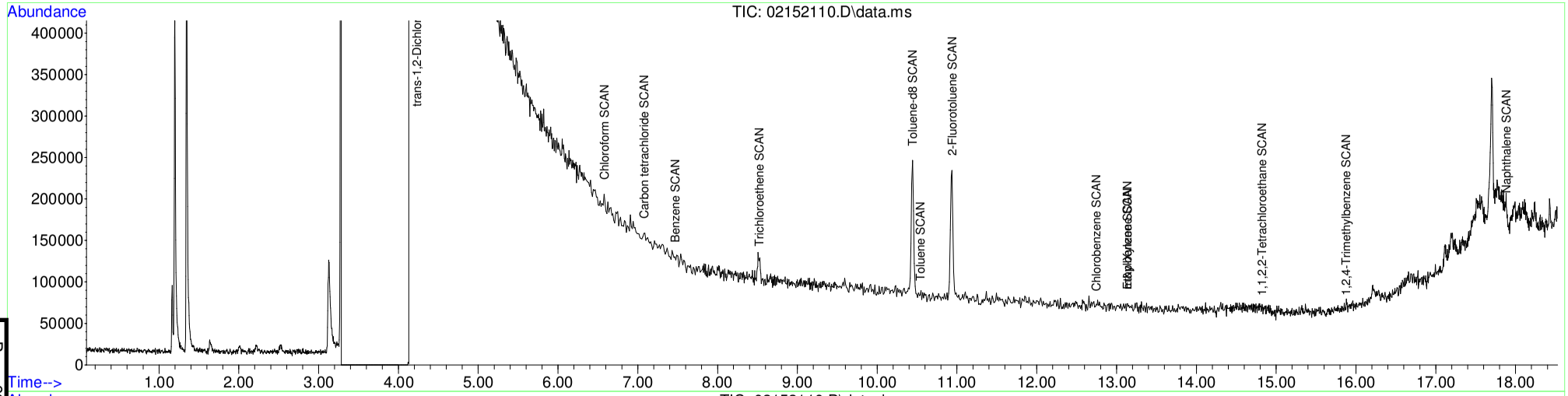
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.928	109	252962	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.435	98	212501	4874.91	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 97.50%			
Target Compounds						Qvalue
6] Chloroform	6.579	83	10595	672.44	ug/L	98
8] Carbon tetrachloride	7.114	117	382	30.53	ug/L	84
9] Benzene	7.442	78	4523	105.08	ug/L	41
11] Trichloroethene	8.521	130	18466	1620.71	ug/L	95
13] Toluene	10.540	91	6177	102.32	ug/L	98
15] Tetrachloroethene	11.390	166	413	26.13	ug/L	85
18] Ethylbenzene	12.932	91	2836	37.25	ug/L	86
19] m&p-Xylene	13.131	91	6439	107.52	ug/L	97
20] o-Xylene	13.743	91	3185	49.10	ug/L	100
22] 1,3,5-Trimethylbenzene	15.314	105	2434	33.94	ug/L	99
23] 1,2,4-Trimethylbenzene	15.875	105	5449	71.50	ug/L	95
24] Naphthalene	17.888	128	10874	100.21	ug/L	96
25) 2-Fluorotoluene SCAN	10.937	109	129945	4771.46	ug/L	97
27) trans-1,2-Dichloroethe...	4.229	61	279	30.69	ug/L #	17
30) Chloroform SCAN	6.578	83	7323	767.42	ug/L	71
32) Carbon tetrachloride SCAN	7.076	117	304	38.49	ug/L #	24
33) Benzene SCAN	7.465	78	10531	391.09	ug/L	97
35) Trichloroethene SCAN	8.519	130	8575	1440.57	ug/L #	65
36) Toluene-d8 SCAN	10.444	98	113823	4732.78	ug/L	98
37) Toluene SCAN	10.539	91	5749	166.77	ug/L	78
40) Chlorobenzene SCAN	12.740	112	506	24.00	ug/L #	1
42) Ethylbenzene SCAN	13.130	91	3099	48.47	ug/L #	35
43) m&p-Xylene SCAN	13.130	91	3099	48.47	ug/L #	47
45) 1,1,2,2-Tetrachloroeth...	14.816	83	726	44.80	ug/L	88
47) 1,2,4-Trimethylbenzene...	15.873	105	1875	51.57	ug/L #	70
48) Naphthalene SCAN	17.886	128	4712	99.82	ug/L	75

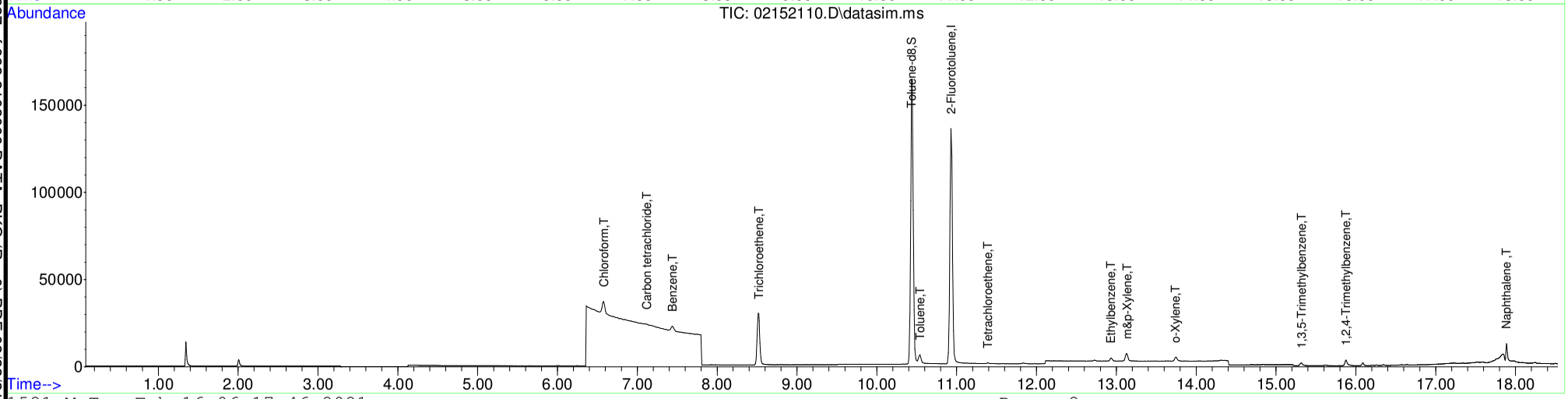
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152110.D
Acq On : 15 Feb 2021 13:55
InstName : AG5975C
Operator : TD
Sample : 2102006-06RE1
Misc : RA for low surr
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 16 06:17:45 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration





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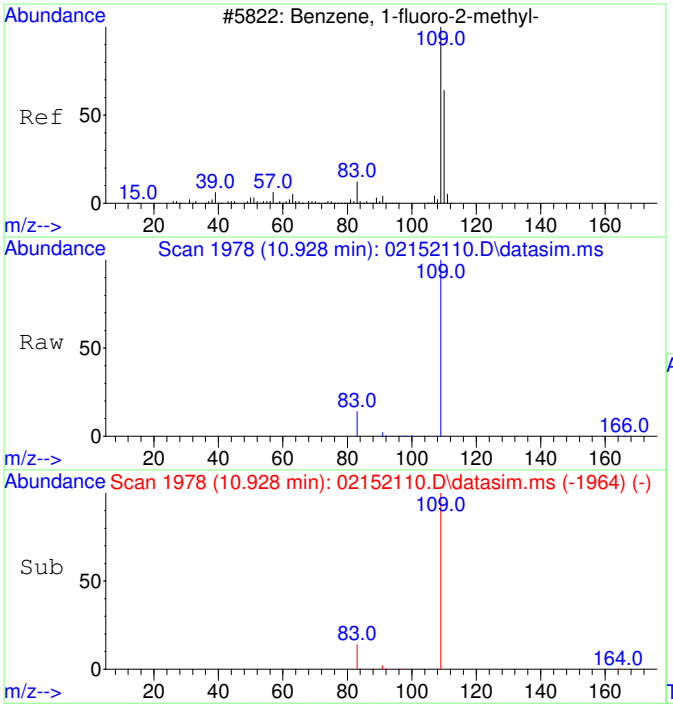
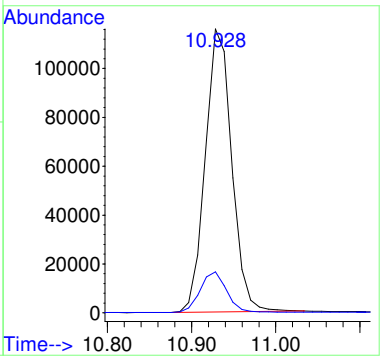
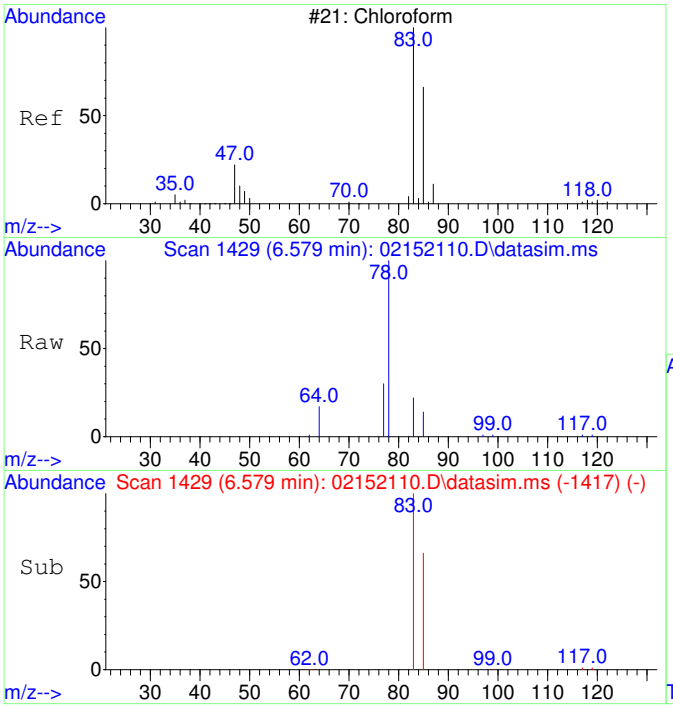


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.928 min Scan# 1978
Delta R.T. 0.000 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion:109 Resp: 252962

Ion	Ratio	Lower	Upper
109	100		
83	14.1	0.0	42.3

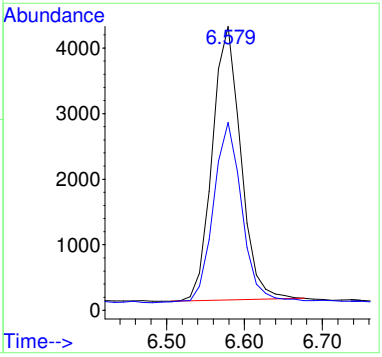


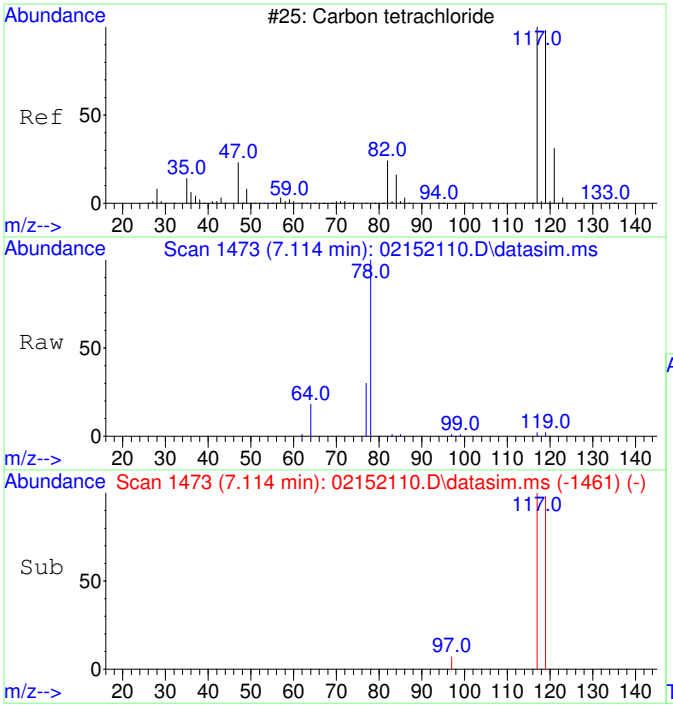


#6
Chloroform
Concen: 672.44 ug/L
RT: 6.579 min Scan# 1429
Delta R.T. 0.000 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion: 83 Resp: 10595

Ion	Ratio	Lower	Upper
83	100		
85	66.7	35.1	95.1

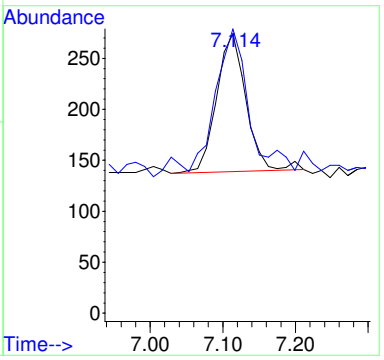


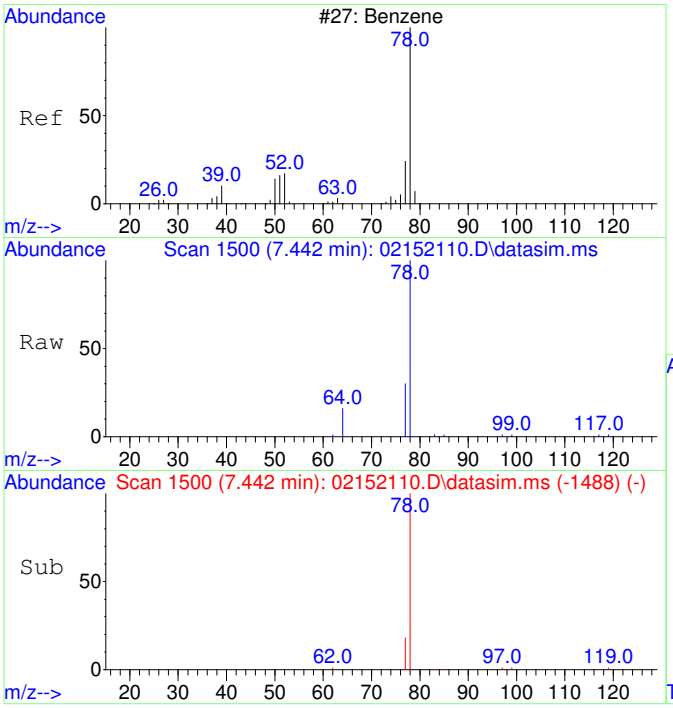


#8
Carbon tetrachloride
Concen: 30.53 ug/L
RT: 7.114 min Scan# 1473
Delta R.T. 0.000 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion:117 Resp: 382

Ion	Ratio	Lower	Upper
117	100		
119	112.0	66.4	126.4

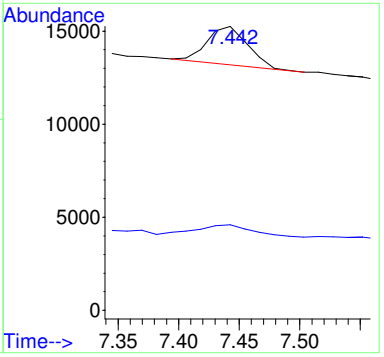


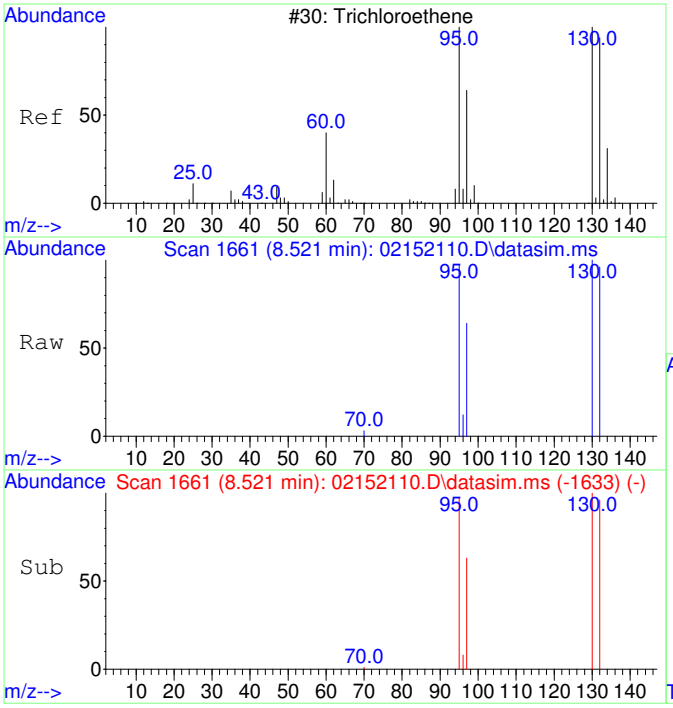


#9
Benzene
Concen: 105.08 ug/L
RT: 7.442 min Scan# 1500
Delta R.T. 0.000 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion: 78 Resp: 4523

Ion	Ratio	Lower	Upper
78	100		
77	51.8	0.0	53.2

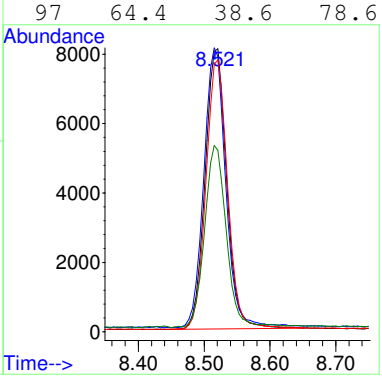


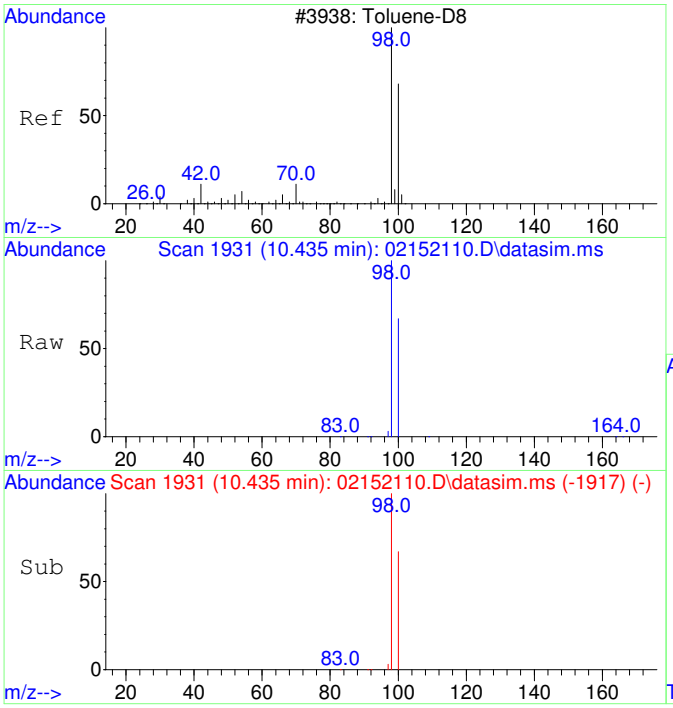


#11
Trichloroethene
Concen: 1620.71 ug/L
RT: 8.521 min Scan# 1661
Delta R.T. 0.000 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion:130 Resp: 18466

Ion	Ratio	Lower	Upper
130	100		
95	99.1	60.7	120.7
132	95.8	76.0	116.0
97	64.4	38.6	78.6

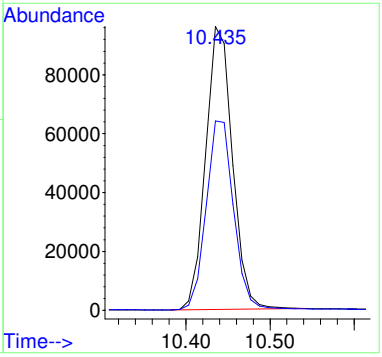


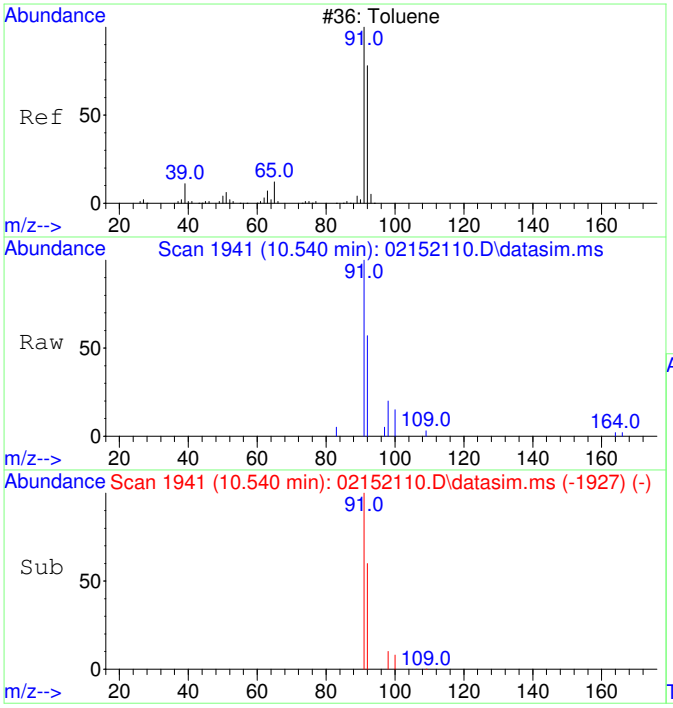


#12
Toluene-d8
Concen: 4874.91 ug/L
RT: 10.435 min Scan# 1931
Delta R.T. 0.000 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion: 98 Resp: 212501

Ion	Ratio	Lower	Upper
98	100		
100	67.9	37.1	97.1

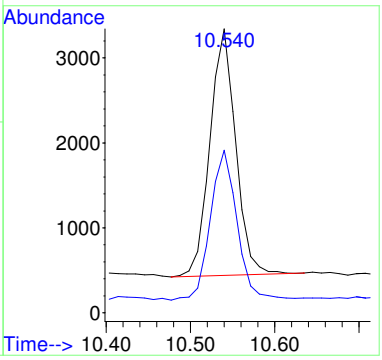


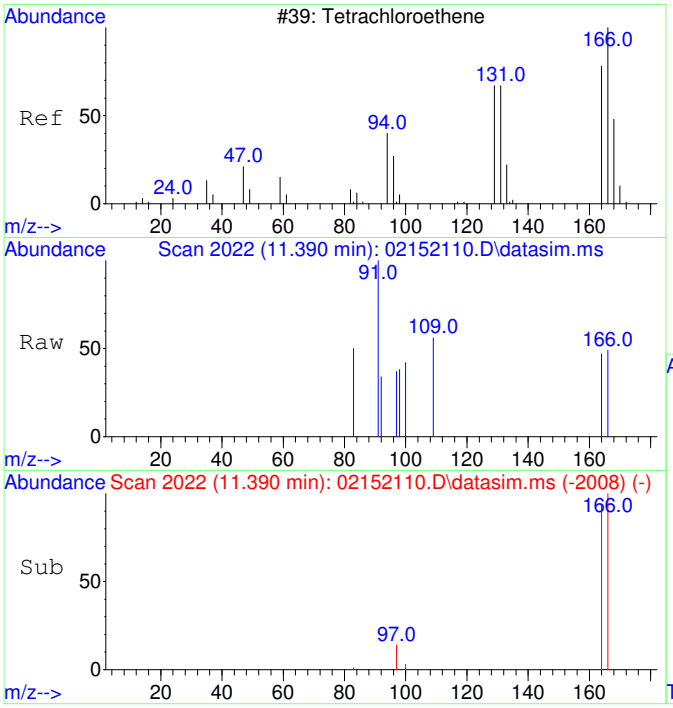


#13
Toluene
Concen: 102.32 ug/L
RT: 10.540 min Scan# 1941
Delta R.T. 0.000 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion: 91 Resp: 6177

Ion	Ratio	Lower	Upper
91	100		
92	61.4	29.9	89.9

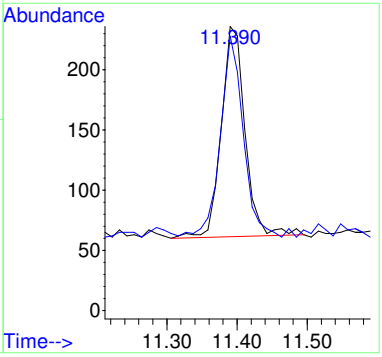


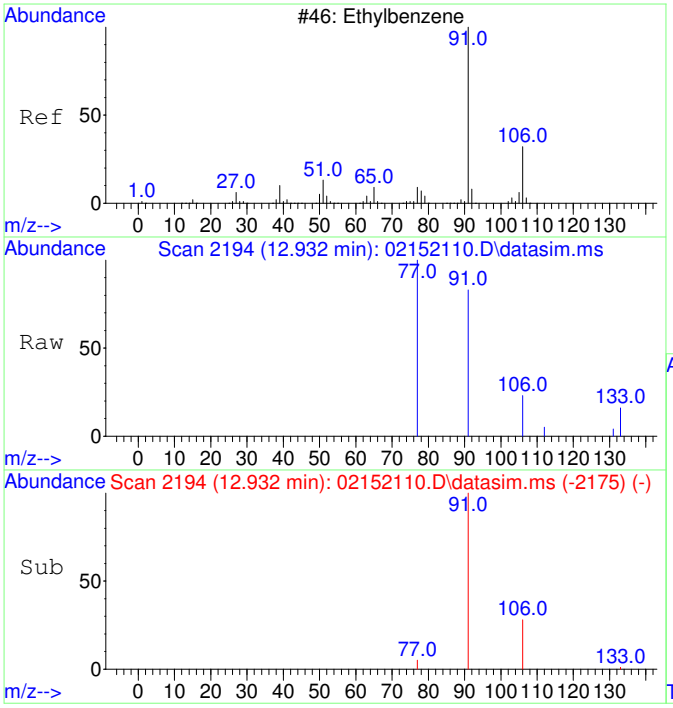


#15
Tetrachloroethene
Concen: 26.13 ug/L
RT: 11.390 min Scan# 2022
Delta R.T. 0.000 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion:166 Resp: 413

Ion	Ratio	Lower	Upper
166	100		
164	91.0	47.8	107.8

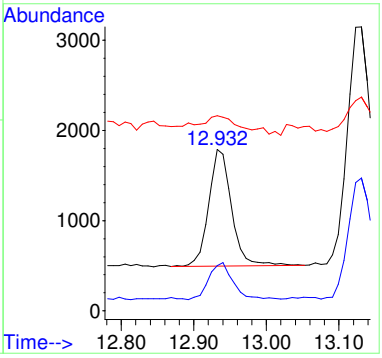


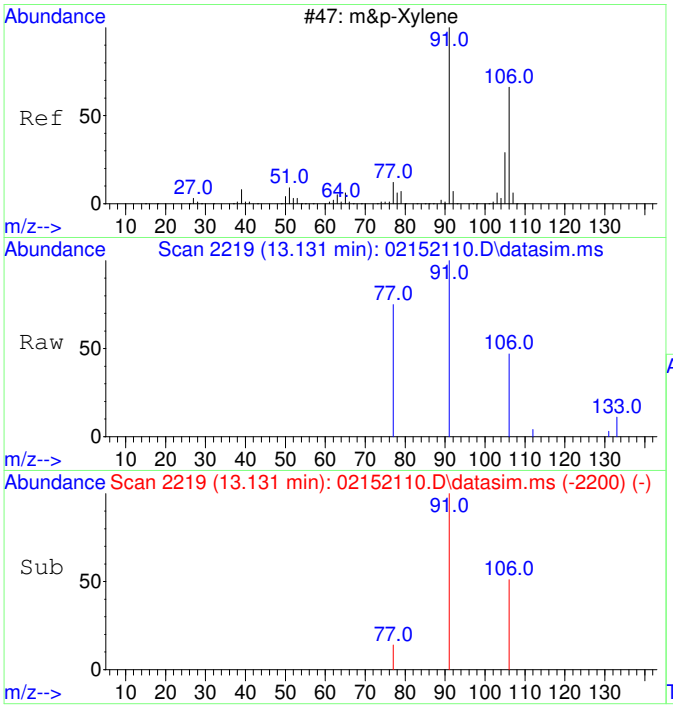


#18
Ethylbenzene
Concen: 37.25 ug/L
RT: 12.932 min Scan# 2194
Delta R.T. 0.000 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion: 91 Resp: 2836

Ion	Ratio	Lower	Upper
91	100		
106	34.1	3.0	63.0
77	30.4	0.0	38.2

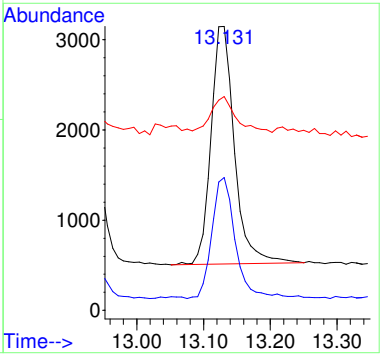


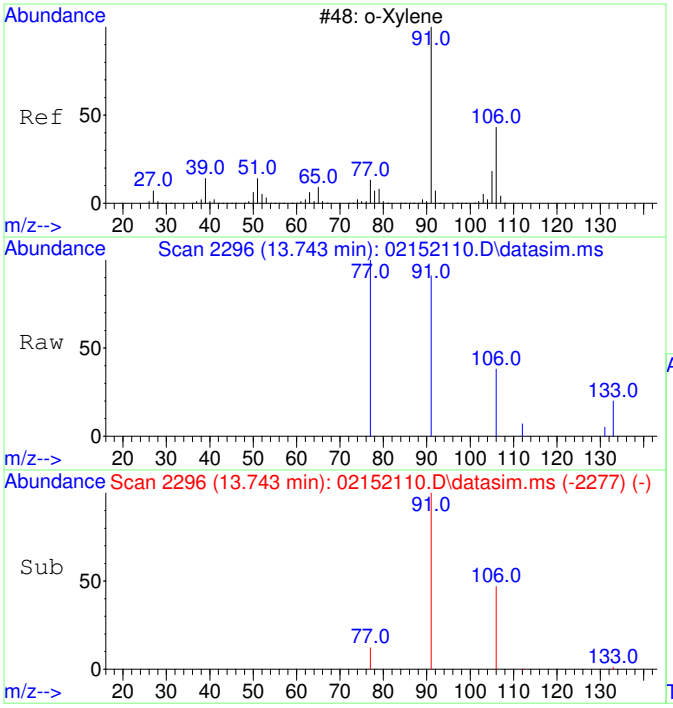


#19
m&p-Xylene
Concen: 107.52 ug/L
RT: 13.131 min Scan# 2219
Delta R.T. 0.000 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion: 91 Resp: 6439

Ion	Ratio	Lower	Upper
91	100		
106	51.6	22.2	82.2
77	16.1	0.0	42.4

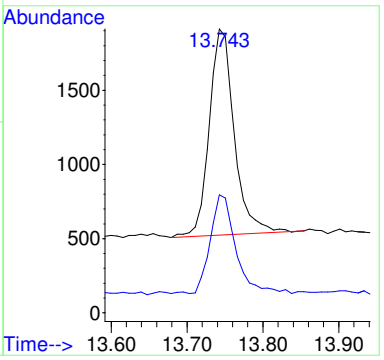


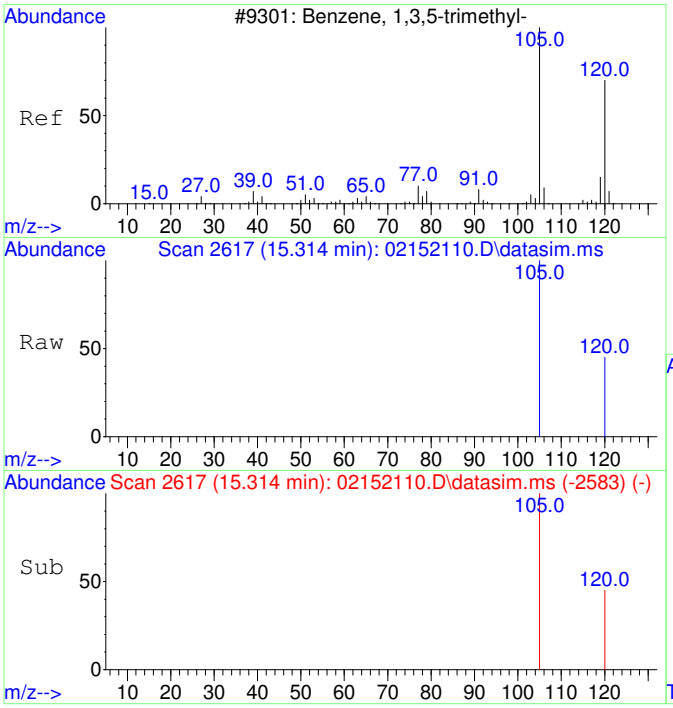


#20
o-Xylene
Concen: 49.10 ug/L
RT: 13.743 min Scan# 2296
Delta R.T. 0.000 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion: 91 Resp: 3185

Ion	Ratio	Lower	Upper
91	100		
106	49.4	19.2	79.2

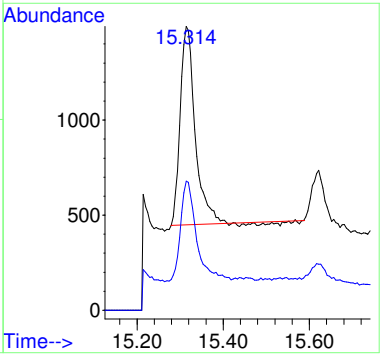


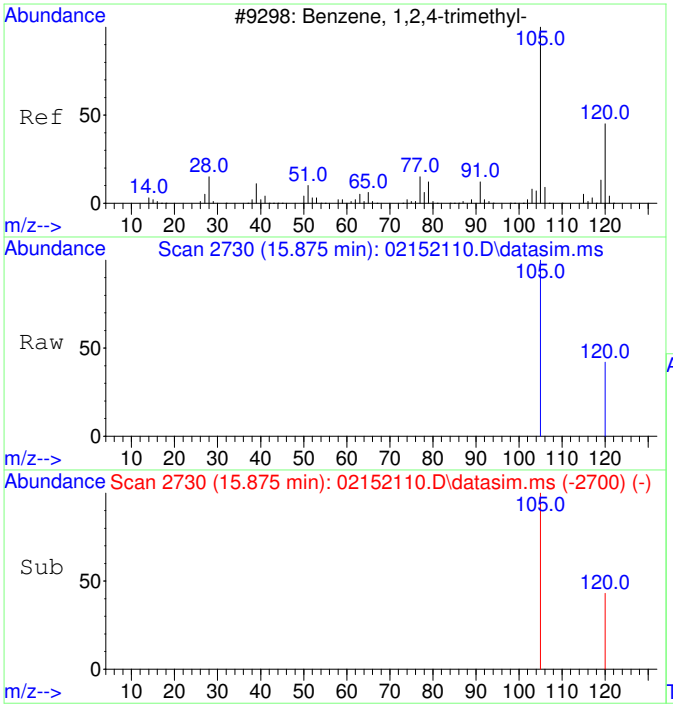


#22
1,3,5-Trimethylbenzene
Concen: 33.94 ug/L
RT: 15.314 min Scan# 2617
Delta R.T. 0.000 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion:105 Resp: 2434

Ion	Ratio	Lower	Upper
105	100		
120	51.9	21.1	81.1

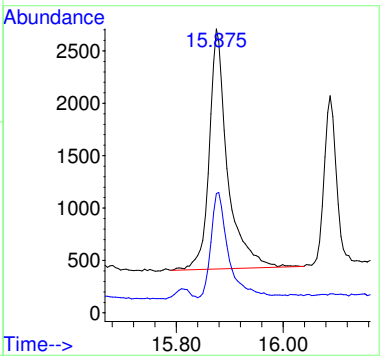


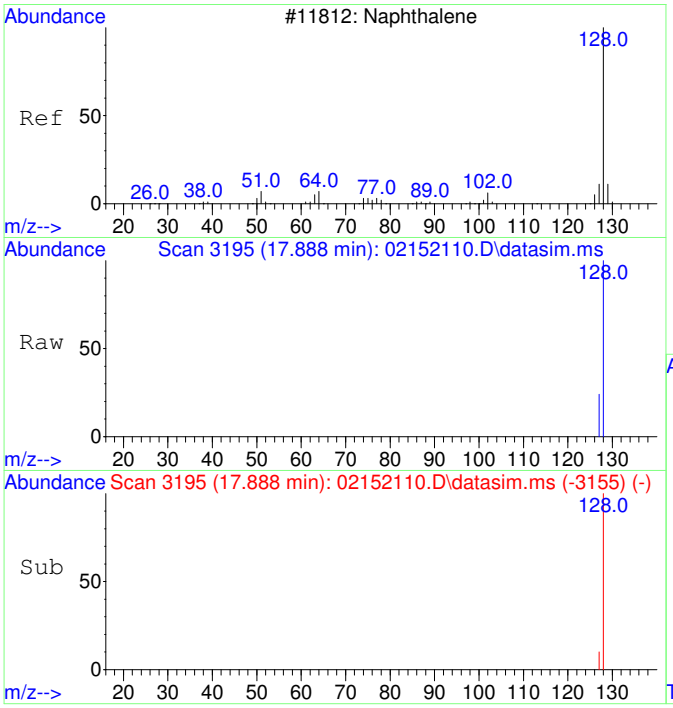


#23
1,2,4-Trimethylbenzene
Concen: 71.50 ug/L
RT: 15.875 min Scan# 2730
Delta R.T. 0.000 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion:105 Resp: 5449

Ion	Ratio	Lower	Upper
105	100		
120	43.6	17.2	77.2

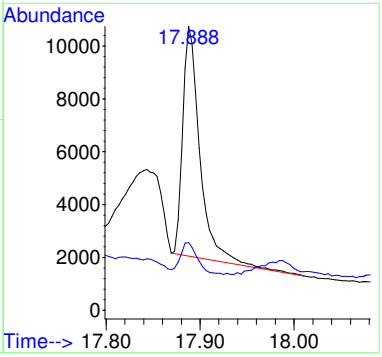


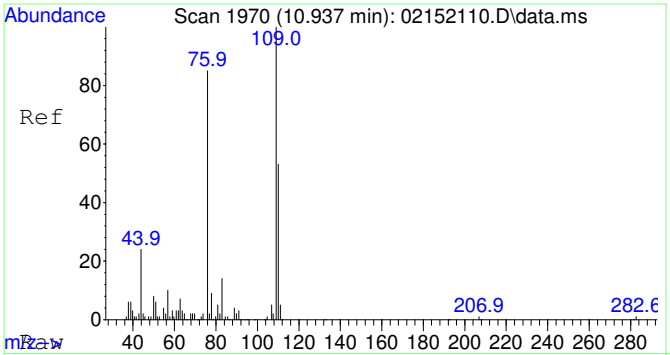


#24
Naphthalene
Concen: 100.21 ug/L
RT: 17.888 min Scan# 3195
Delta R.T. 0.000 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion:128 Resp: 10874

Ion	Ratio	Lower	Upper
128	100		
127	11.1	0.0	42.5

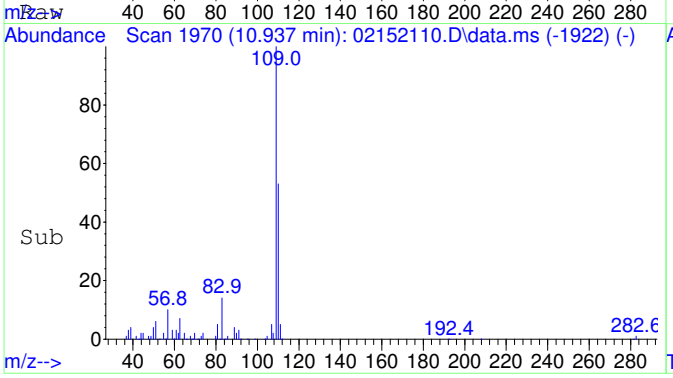


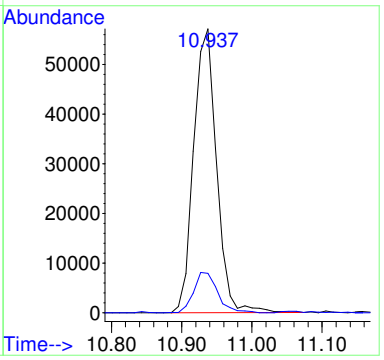


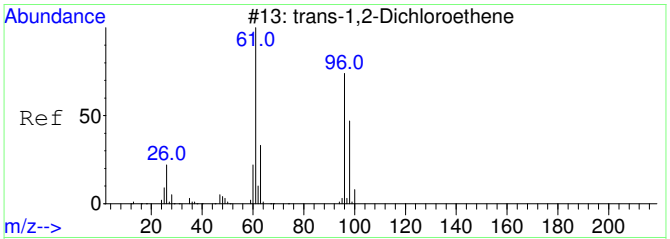
#25
2-Fluorotoluene SCAN
Concen: 4771.46 ug/L
RT: 10.937 min Scan# 1970
Delta R.T. 0.000 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion:109 Resp: 129945

Ion	Ratio	Lower	Upper
109	100		
83	15.0	0.0	43.8



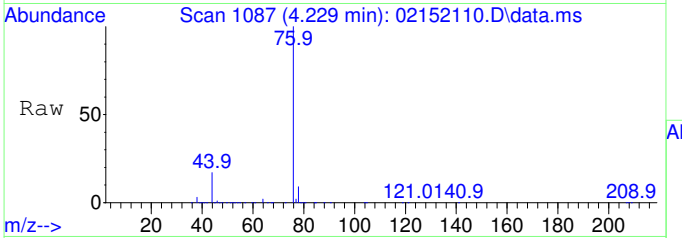


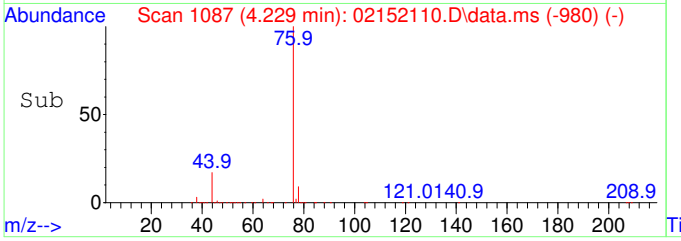


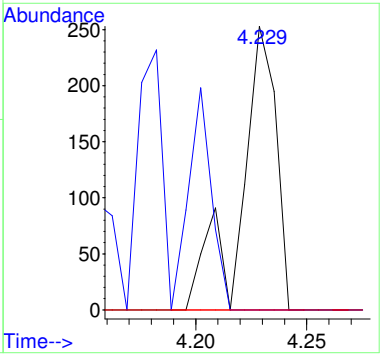
#27
trans-1,2-Dichloroethene SCAN
Concen: 30.69 ug/L
RT: 4.229 min Scan# 1087
Delta R.T. 0.000 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

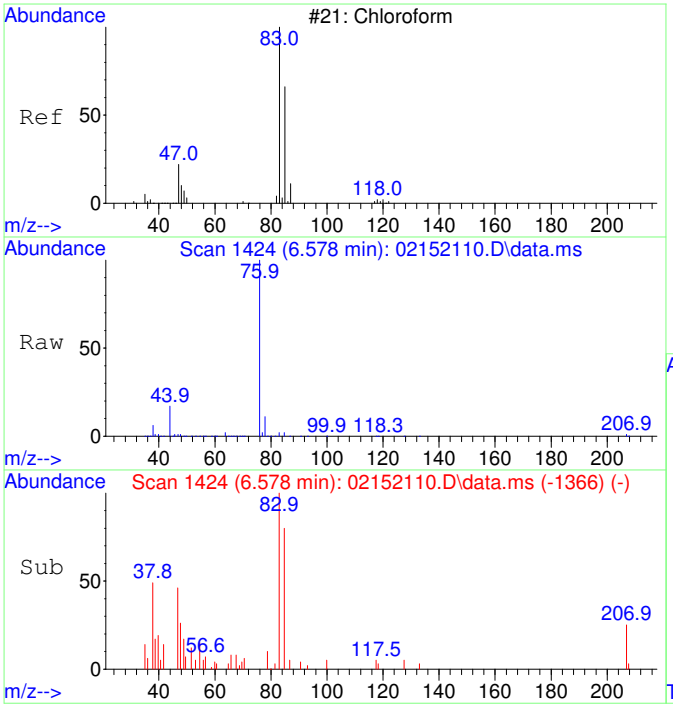
Tgt Ion: 61 Resp: 279

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





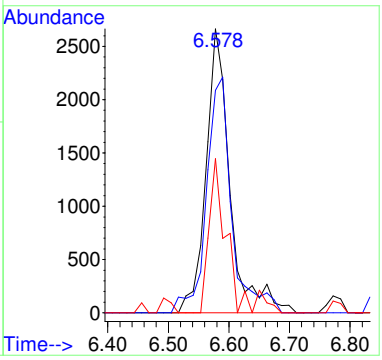


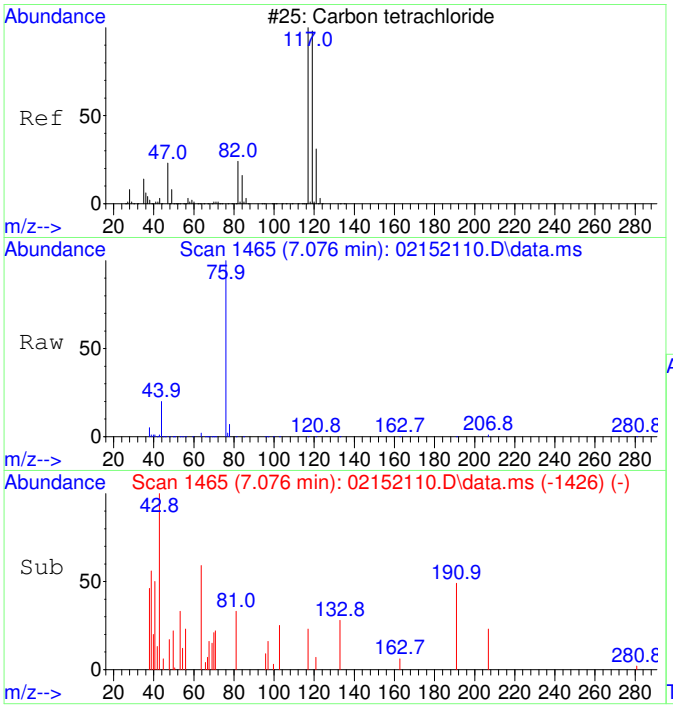


#30
Chloroform SCAN
Concen: 767.42 ug/L
RT: 6.578 min Scan# 1424
Delta R.T. 0.000 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion: 83 Resp: 7323

Ion	Ratio	Lower	Upper
83	100		
85	87.2	34.6	94.6
47	37.8	0.0	53.4

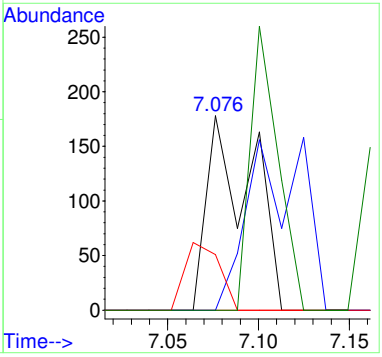


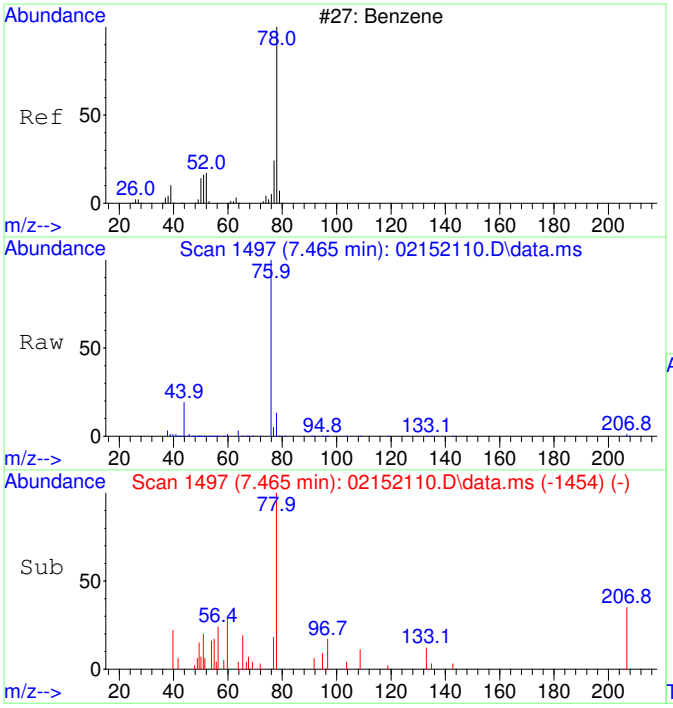


#32
Carbon tetrachloride SCAN
Concen: 38.49 ug/L
RT: 7.076 min Scan# 1465
Delta R.T. -0.024 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion:117 Resp: 304

Ion	Ratio	Lower	Upper
117	100		
119	0.0	75.5	135.5#
121	27.0	0.0	58.8
82	0.0	0.0	59.2

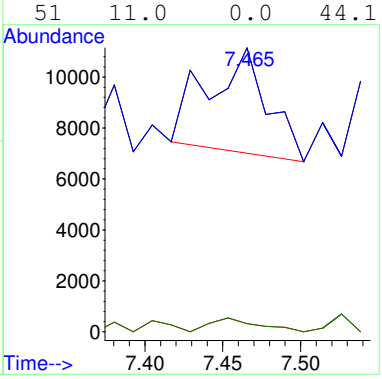


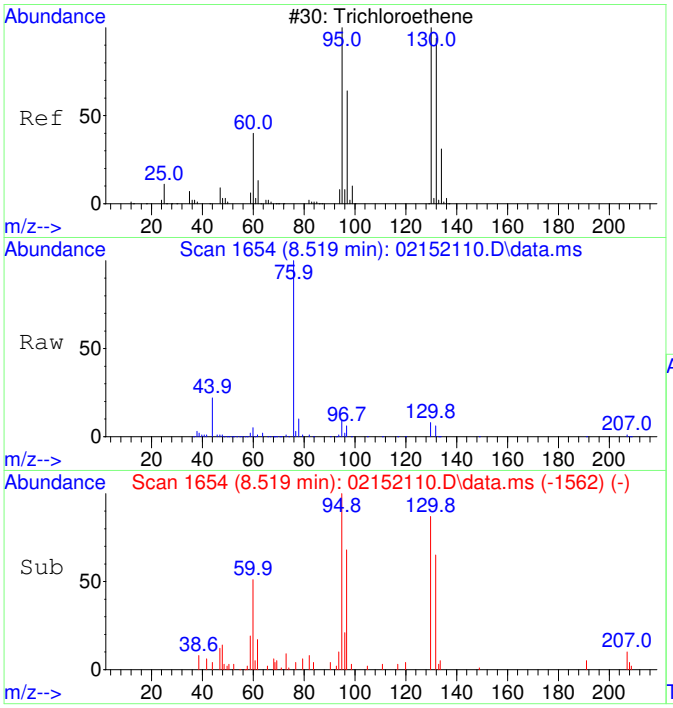


#33
Benzene SCAN
Concen: 391.09 ug/L
RT: 7.465 min Scan# 1497
Delta R.T. 0.024 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion: 78 Resp: 10531

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	11.0	0.0	47.9
51	11.0	0.0	44.1

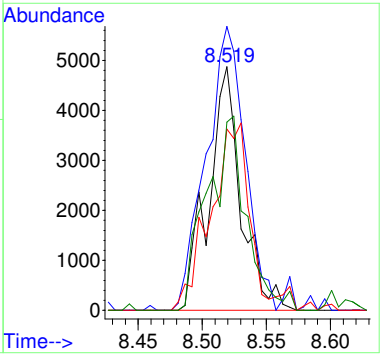


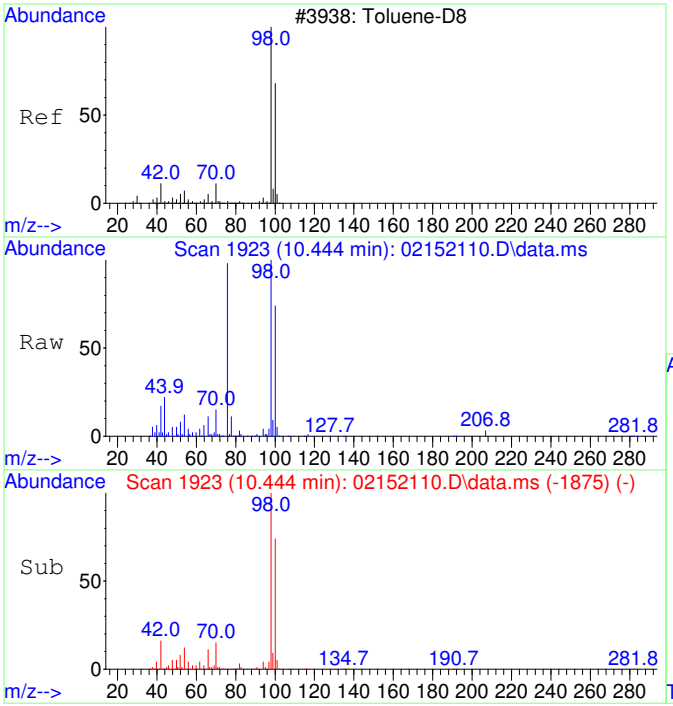


#35
Trichloroethene SCAN
Concen: 1440.57 ug/L
RT: 8.519 min Scan# 1654
Delta R.T. 0.000 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion:130 Resp: 8575

Ion	Ratio	Lower	Upper
130	100		
95	140.7	60.5	120.5#
132	83.9	59.6	119.6
97	95.5	28.2	88.2#

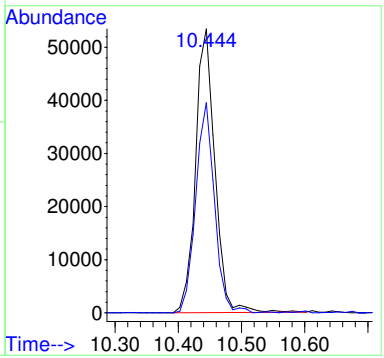


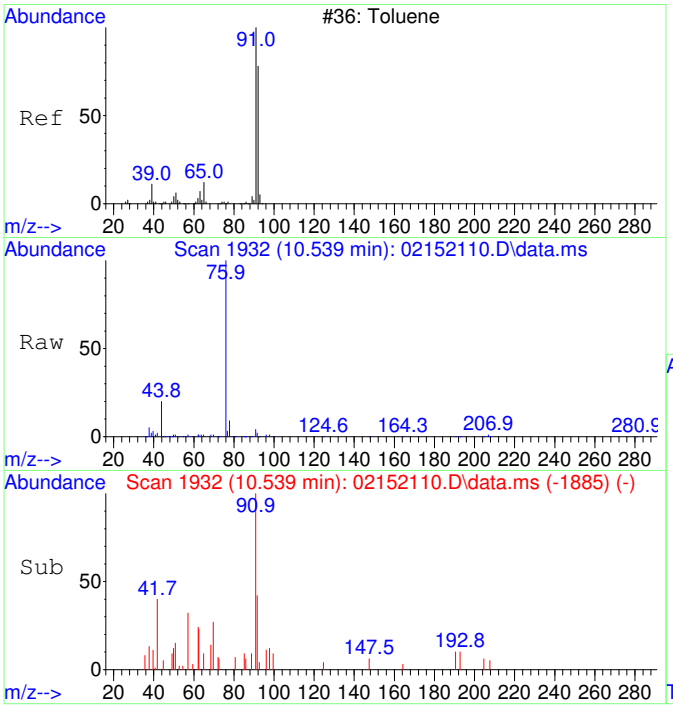


#36
Toluene-d8 SCAN
Concen: 4732.78 ug/L
RT: 10.444 min Scan# 1923
Delta R.T. 0.000 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion: 98 Resp: 113823

Ion	Ratio	Lower	Upper
98	100		
100	71.5	40.0	100.0

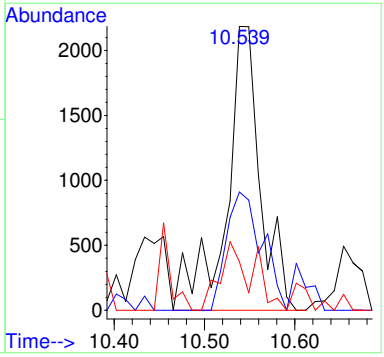


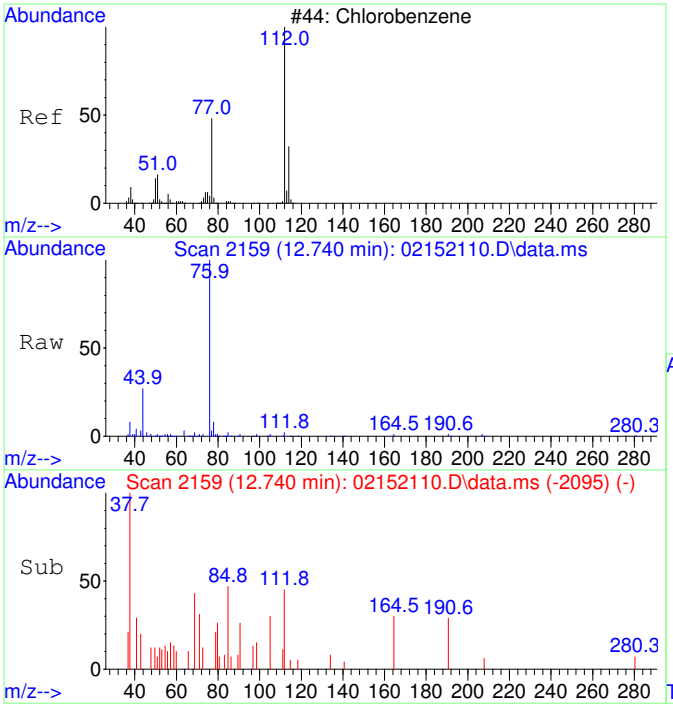


#37
Toluene SCAN
Concen: 166.77 ug/L
RT: 10.539 min Scan# 1932
Delta R.T. -0.010 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion: 91 Resp: 5749

Ion	Ratio	Lower	Upper
91	100		
92	43.7	28.3	88.3
65	23.2	0.0	41.0

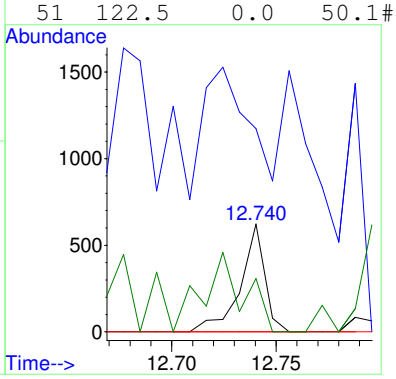


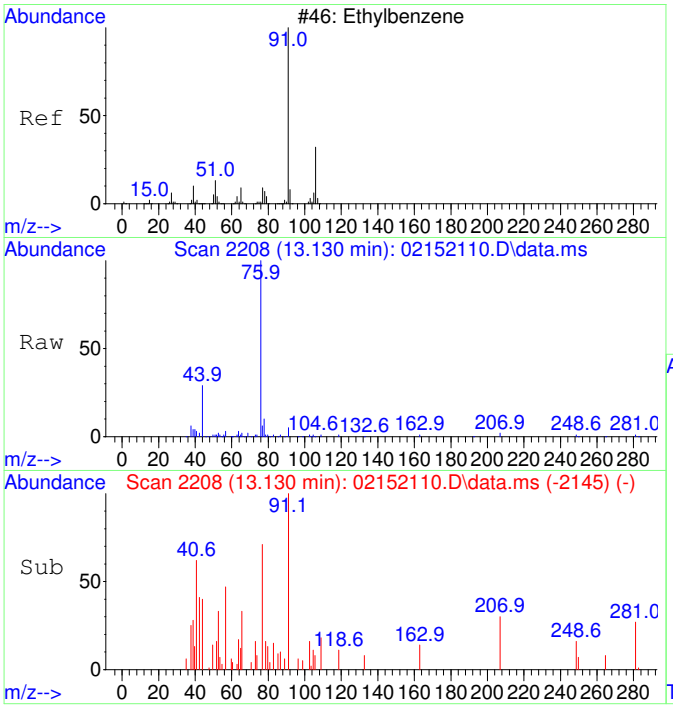


#40
Chlorobenzene SCAN
Concen: 24.00 ug/L
RT: 12.740 min Scan# 2159
Delta R.T. 0.008 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion:112 Resp: 506

Ion	Ratio	Lower	Upper
112	100		
77	417.0	28.2	88.2#
114	0.0	2.3	62.3#
51	122.5	0.0	50.1#

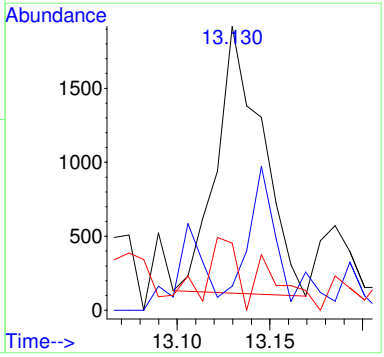


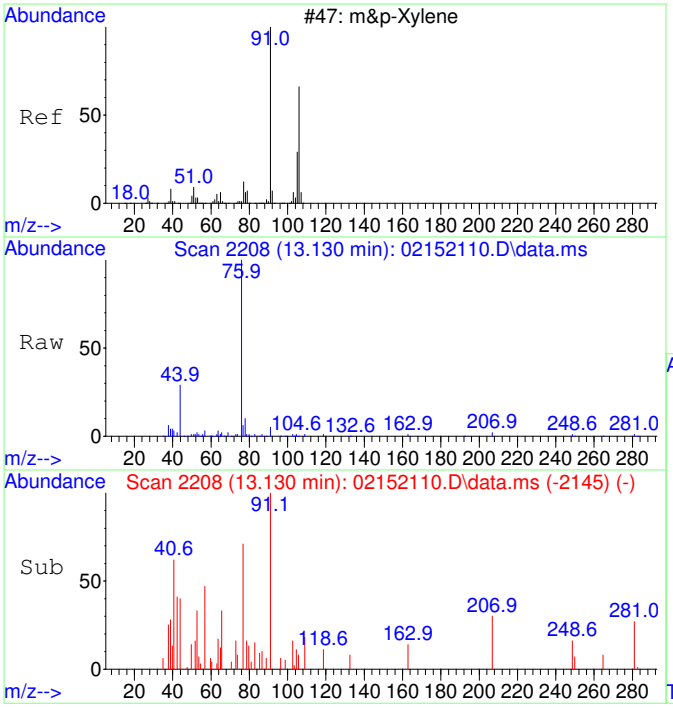


#42
Ethylbenzene SCAN
Concen: 48.47 ug/L
RT: 13.130 min Scan# 2208
Delta R.T. 0.000 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion: 91 Resp: 3099

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.1	83.1#
51	15.2	0.0	40.1

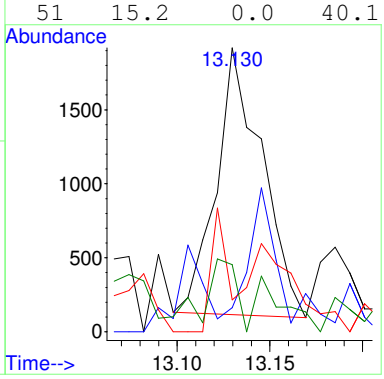


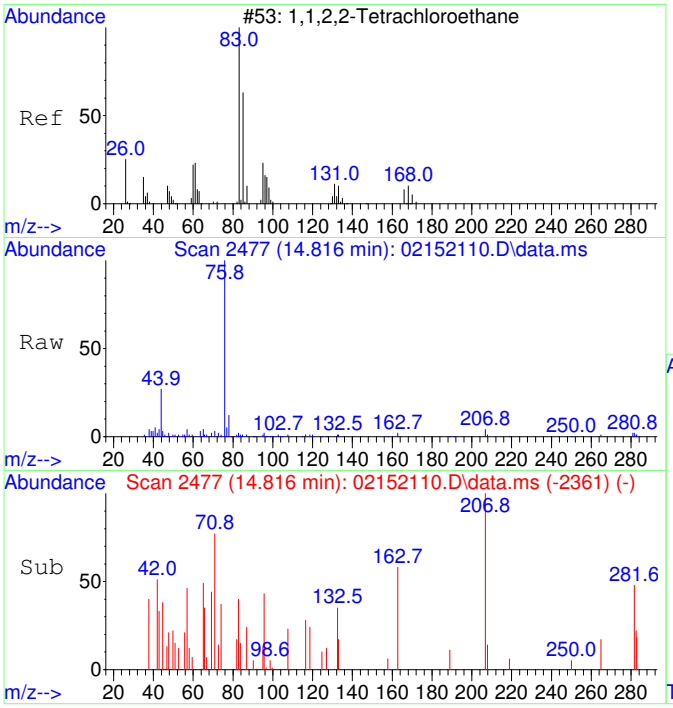


#43
m&p-Xylene SCAN
Concen: 48.47 ug/L
RT: 13.130 min Scan# 2208
Delta R.T. 0.000 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion: 91 Resp: 3099

Ion	Ratio	Lower	Upper
91	100		
106	0.0	23.1	83.1#
105	13.9	0.0	54.7
51	15.2	0.0	40.1

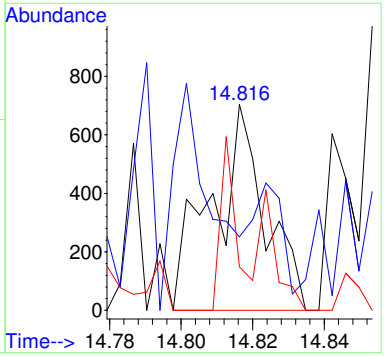


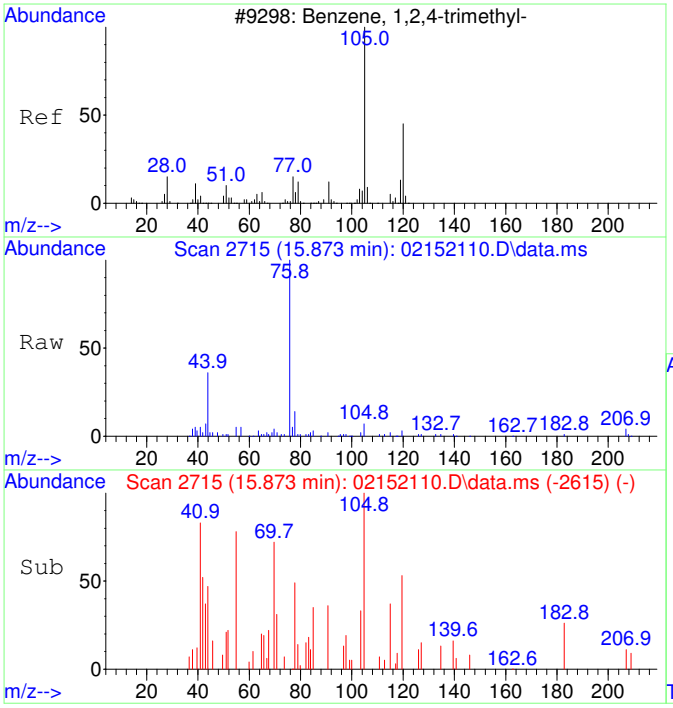


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 44.80 ug/L
RT: 14.816 min Scan# 2477
Delta R.T. -0.026 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion: 83 Resp: 726

Ion	Ratio	Lower	Upper
83	100		
85	55.8	35.9	95.9
95	21.2	0.0	47.4

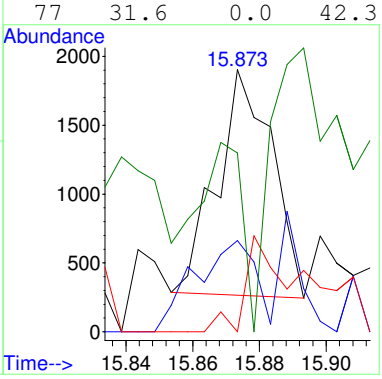


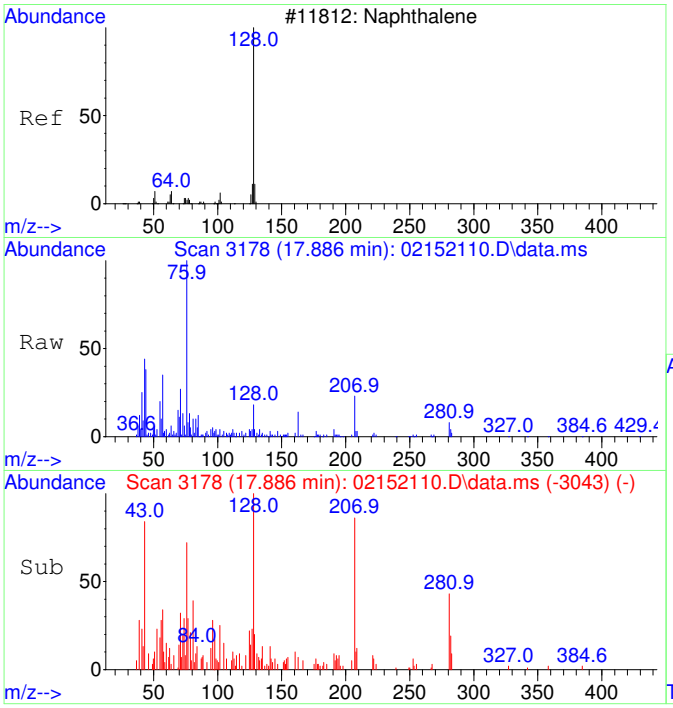


#47
1,2,4-Trimethylbenzene SCAN
Concen: 51.57 ug/L
RT: 15.873 min Scan# 2715
Delta R.T. -0.005 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion:105 Resp: 1875

Ion	Ratio	Lower	Upper
105	100		
120	41.6	16.9	76.9
119	49.1	0.0	41.9#
77	31.6	0.0	42.3

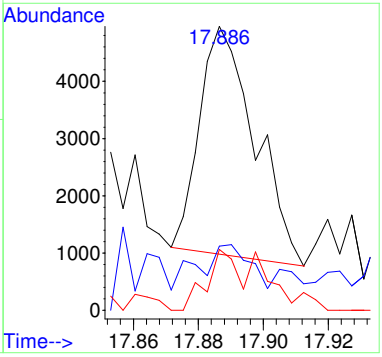




#48
Naphthalene SCAN
Concen: 99.82 ug/L
RT: 17.886 min Scan# 3178
Delta R.T. 0.000 min
Lab File: 02152110.D
Acq: 15 Feb 2021 13:55

Tgt Ion:128 Resp: 4712

Ion	Ratio	Lower	Upper
128	100		
127	18.4	0.0	44.0
129	27.1	0.0	40.8



2102006-08RE1

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152111.D
Acq On : 15 Feb 2021 14:18
InstName : AG5975C
Operator : TD
Sample : 2102006-08RE1
Misc : RA for low surr
ALS Vial : 11 Sample Multiplier: 1

REPORT

Quant Time: Feb 17 15:18:26 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration

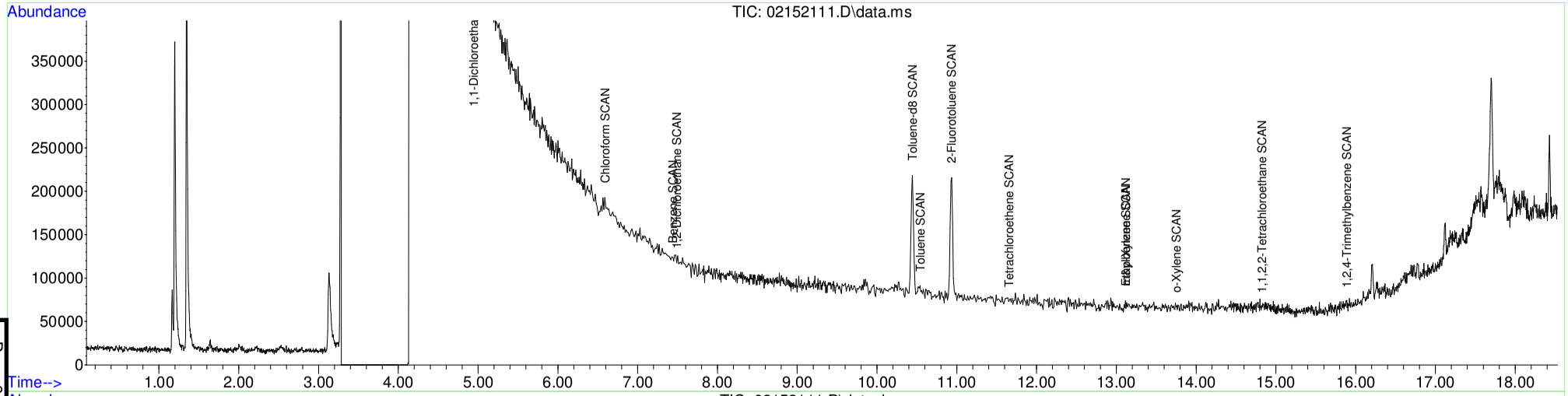
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.928	109	230887	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.435	98	194663	4892.65	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 97.85%			
Target Compounds						Qvalue
6] Chloroform	6.579	83	21264	1478.60	ug/L	98
8] Carbon tetrachloride	7.114	117	374	32.75	ug/L	99
9] Benzene	7.442	78	4557	115.99	ug/L	47
13] Toluene	10.540	91	4812	87.33	ug/L	99
19] m&p-Xylene	13.123	91	3911	71.55	ug/L	95
20] o-Xylene	13.742	91	1808	30.54	ug/L	96
23] 1,2,4-Trimethylbenzene	15.875	105	2721	39.12	ug/L	89
24] Naphthalene	17.851	128	3773	38.09	ug/L #	68
25) 2-Fluorotoluene SCAN	10.937	109	122613	4932.69	ug/L	91
28) 1,1-Dichloroethane SCAN	4.939	63	422	41.08	ug/L #	37
30) Chloroform SCAN	6.590	83	13767	1580.67	ug/L	98
33) Benzene SCAN	7.441	78	4778	194.41	ug/L	95
34) 1,2-Dichloroethane SCAN	7.490	62	600	66.90	ug/L #	59
36) Toluene-d8 SCAN	10.444	98	108029	4921.33	ug/L	97
37) Toluene SCAN	10.539	91	2068	65.73	ug/L #	14
39) Tetrachloroethene SCAN	11.651	166	159	26.00	ug/L #	12
42) Ethylbenzene SCAN	13.114	91	2693	46.14	ug/L	89
43) m&p-Xylene SCAN	13.114	91	2693	46.14	ug/L	82
44) o-Xylene SCAN	13.749	91	1871	58.97	ug/L #	72
45) 1,1,2,2-Tetrachloroeth...	14.824	83	402	27.18	ug/L	77
47) 1,2,4-Trimethylbenzene...	15.883	105	1381	41.61	ug/L #	46

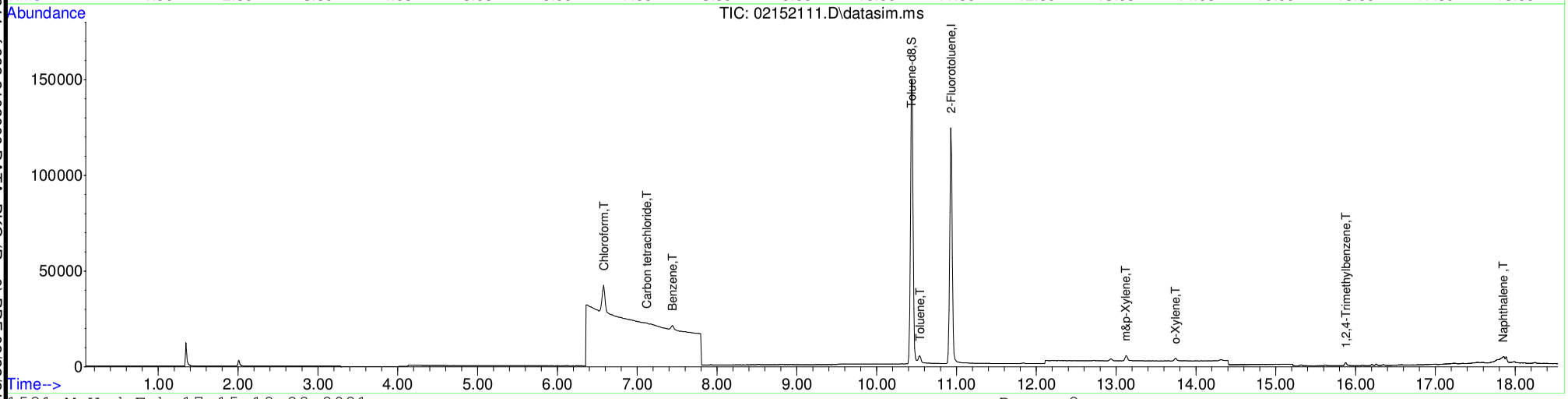
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152111.D
Acq On : 15 Feb 2021 14:18
InstName : AG5975C
Operator : TD
Sample : 2102006-08RE1
Misc : RA for low surr
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 17 15:18:26 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration





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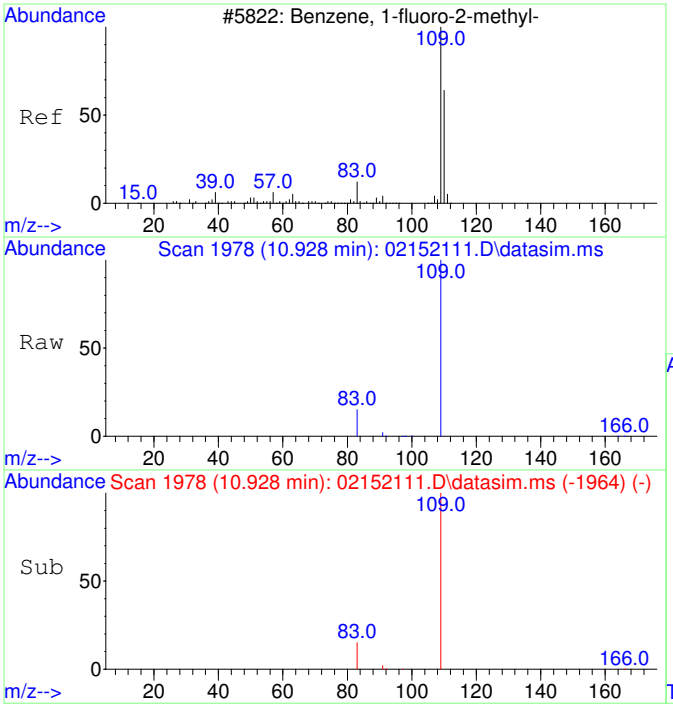
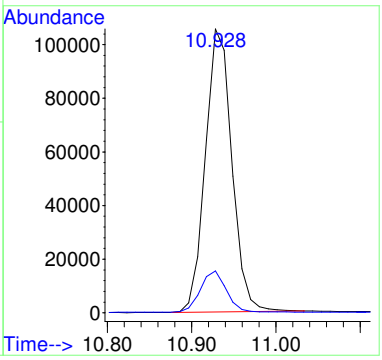
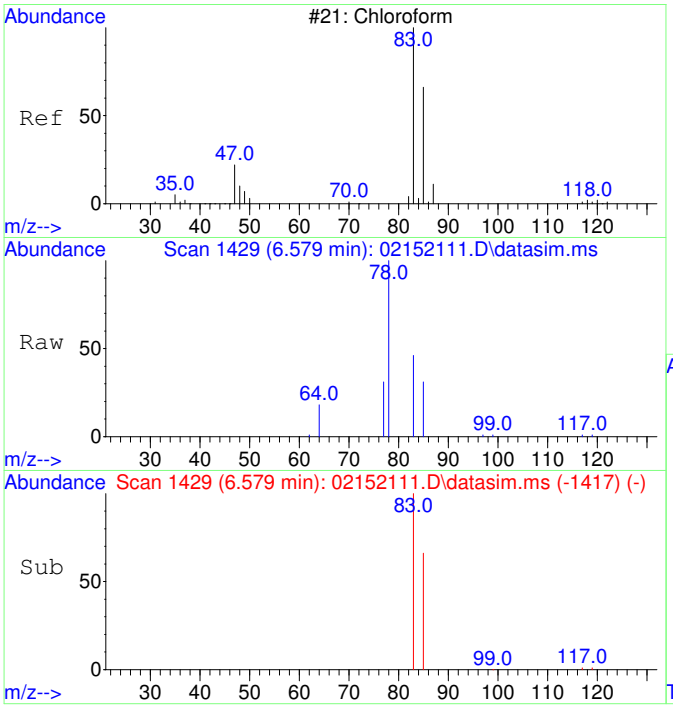


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.928 min Scan# 1978
Delta R.T. 0.000 min
Lab File: 02152111.D
Acq: 15 Feb 2021 14:18

Tgt Ion:109 Resp: 230887

Ion	Ratio	Lower	Upper
109	100		
83	14.2	0.0	42.3

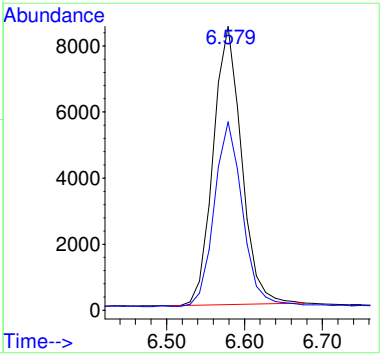


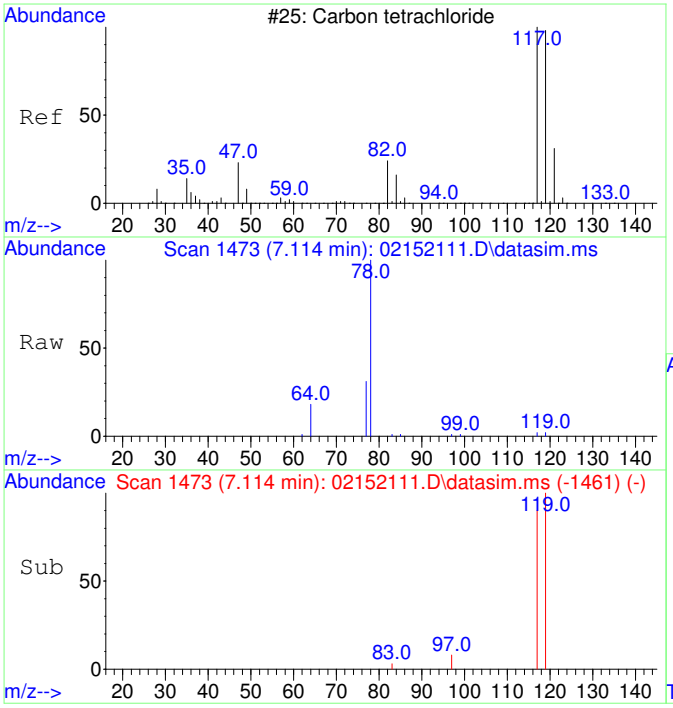


#6
Chloroform
Concen: 1478.60 ug/L
RT: 6.579 min Scan# 1429
Delta R.T. 0.000 min
Lab File: 02152111.D
Acq: 15 Feb 2021 14:18

Tgt Ion: 83 Resp: 21264

Ion	Ratio	Lower	Upper
83	100		
85	66.7	35.1	95.1

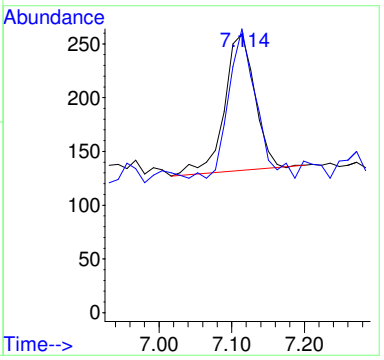


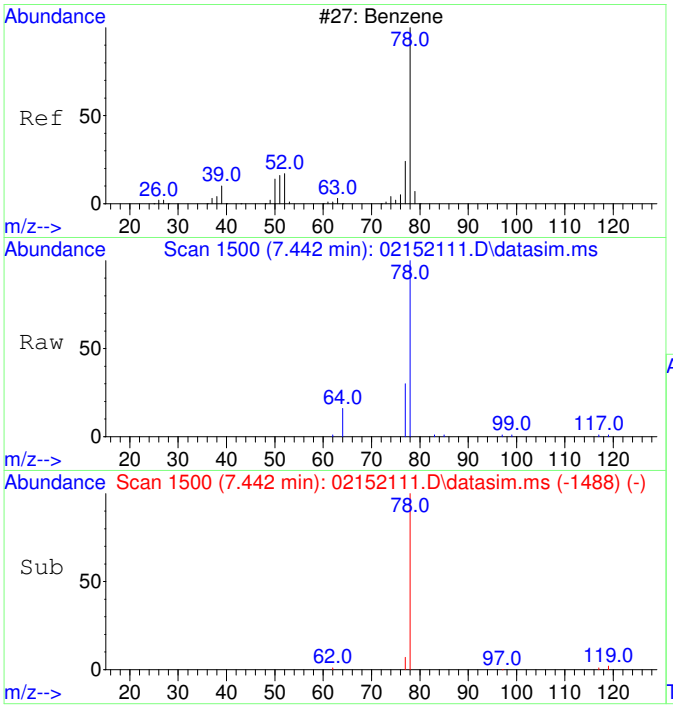


#8
Carbon tetrachloride
Concen: 32.75 ug/L
RT: 7.114 min Scan# 1473
Delta R.T. 0.000 min
Lab File: 02152111.D
Acq: 15 Feb 2021 14:18

Tgt Ion:117 Resp: 374

Ion	Ratio	Lower	Upper
117	100		
119	97.9	66.4	126.4

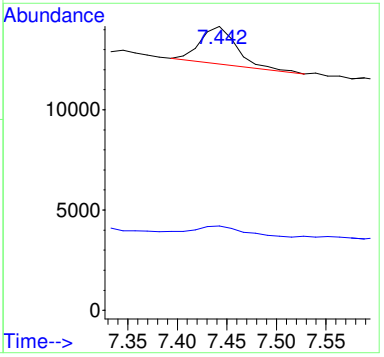


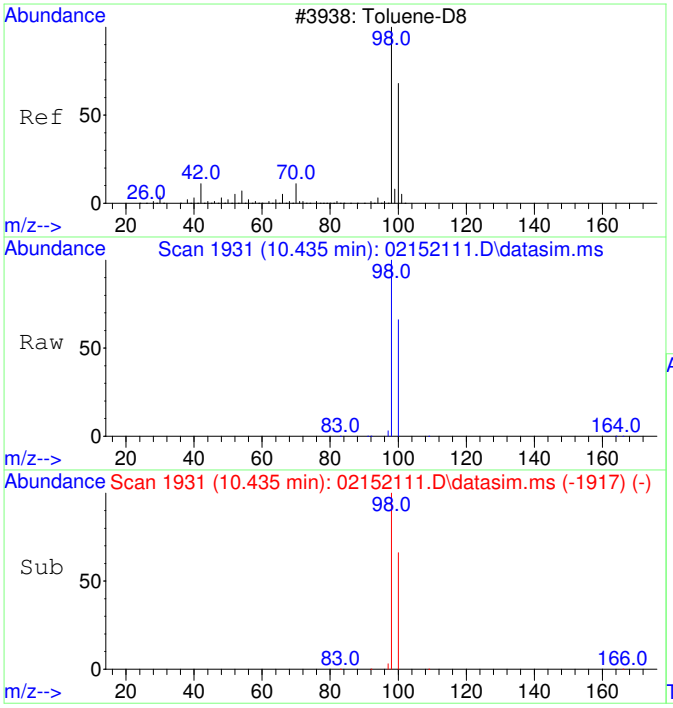


#9
Benzene
Concen: 115.99 ug/L
RT: 7.442 min Scan# 1500
Delta R.T. 0.000 min
Lab File: 02152111.D
Acq: 15 Feb 2021 14:18

Tgt Ion: 78 Resp: 4557

Ion	Ratio	Lower	Upper
78	100		
77	48.9	0.0	53.2

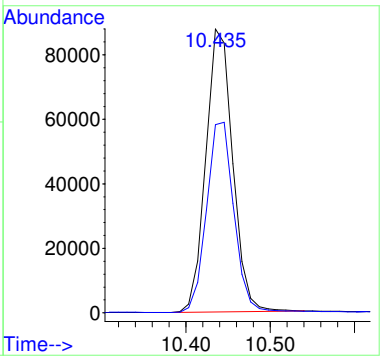


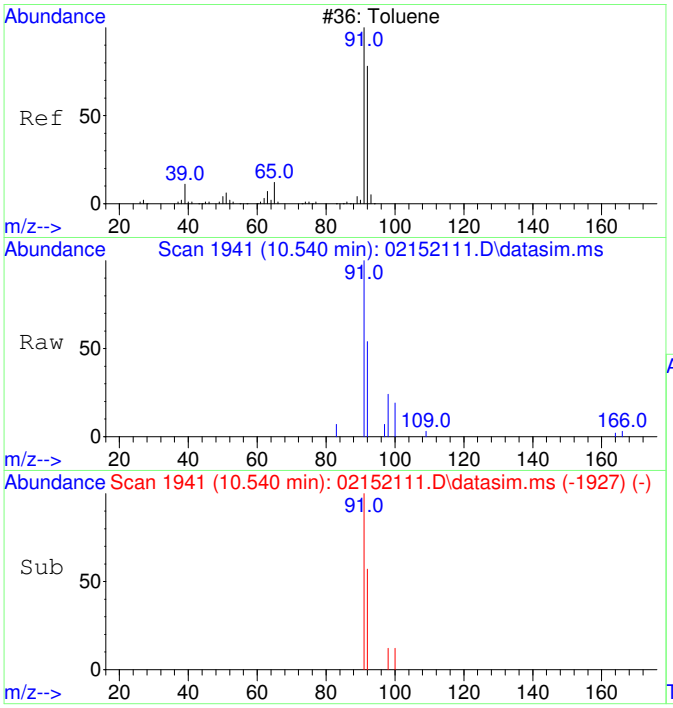


#12
Toluene-d8
Concen: 4892.65 ug/L
RT: 10.435 min Scan# 1931
Delta R.T. 0.000 min
Lab File: 02152111.D
Acq: 15 Feb 2021 14:18

Tgt Ion: 98 Resp: 194663

Ion	Ratio	Lower	Upper
98	100		
100	67.8	37.1	97.1

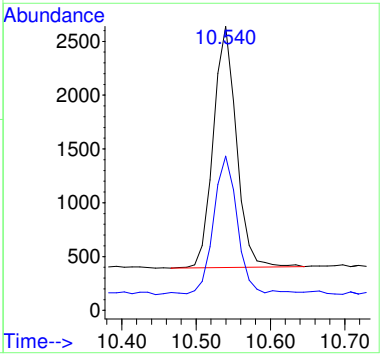


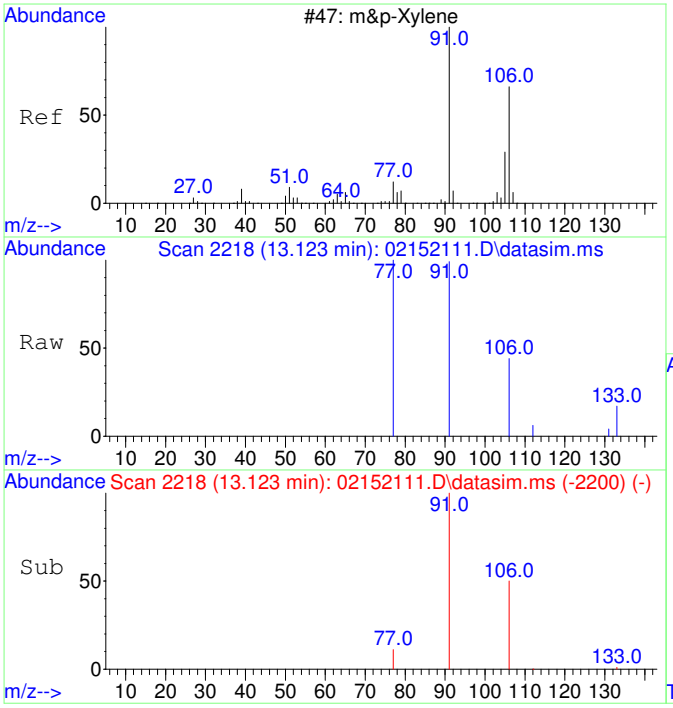


#13
Toluene
Concen: 87.33 ug/L
RT: 10.540 min Scan# 1941
Delta R.T. 0.000 min
Lab File: 02152111.D
Acq: 15 Feb 2021 14:18

Tgt Ion: 91 Resp: 4812

Ion	Ratio	Lower	Upper
91	100		
92	60.7	29.9	89.9

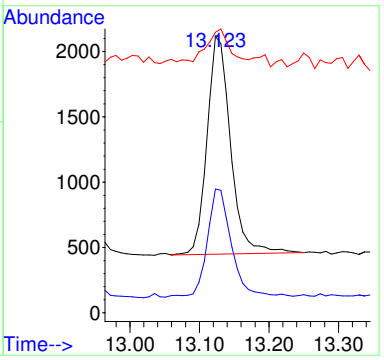


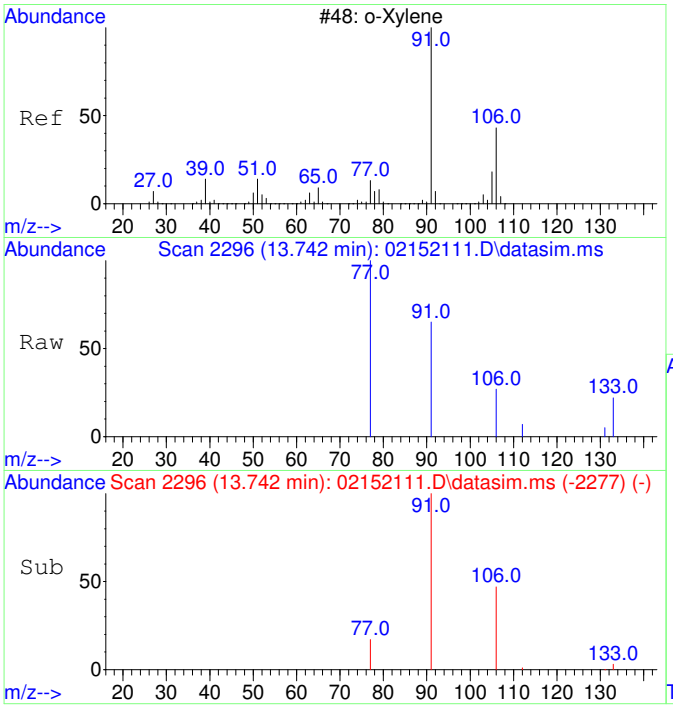


#19
m&p-Xylene
Concen: 71.55 ug/L
RT: 13.123 min Scan# 2218
Delta R.T. -0.008 min
Lab File: 02152111.D
Acq: 15 Feb 2021 14:18

Tgt Ion: 91 Resp: 3911

Ion	Ratio	Lower	Upper
91	100		
106	50.3	22.2	82.2
77	17.9	0.0	42.4

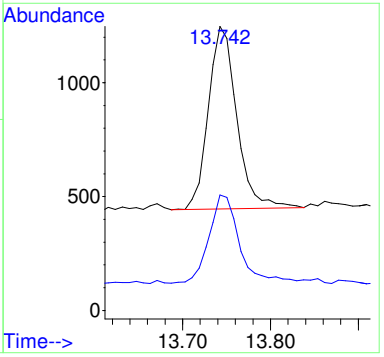


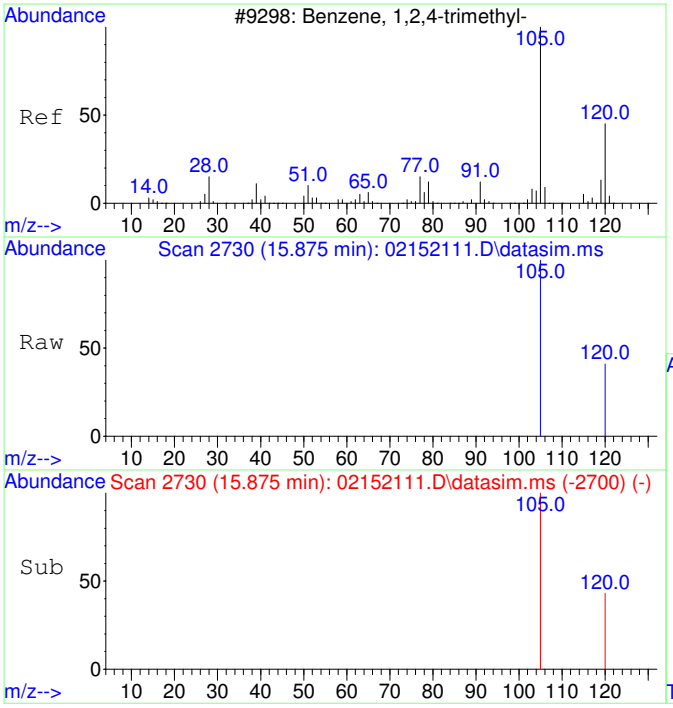


#20
o-Xylene
Concen: 30.54 ug/L
RT: 13.742 min Scan# 2296
Delta R.T. 0.000 min
Lab File: 02152111.D
Acq: 15 Feb 2021 14:18

Tgt Ion: 91 Resp: 1808

Ion	Ratio	Lower	Upper
91	100		
106	51.7	19.2	79.2

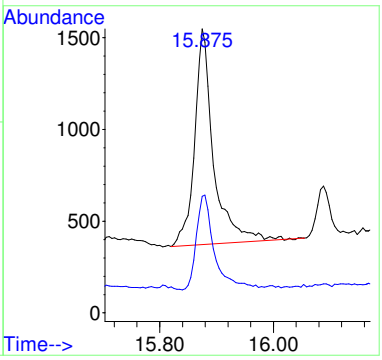


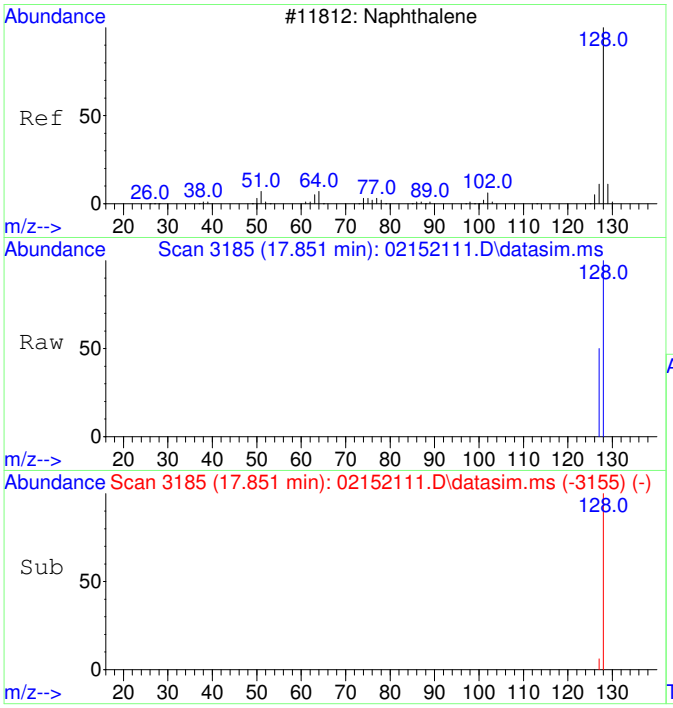


#23
1,2,4-Trimethylbenzene
Concen: 39.12 ug/L
RT: 15.875 min Scan# 2730
Delta R.T. 0.000 min
Lab File: 02152111.D
Acq: 15 Feb 2021 14:18

Tgt Ion:105 Resp: 2721

Ion	Ratio	Lower	Upper
105	100		
120	40.2	17.2	77.2

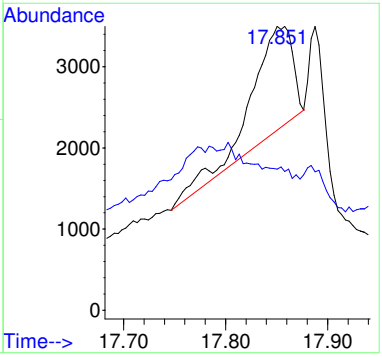


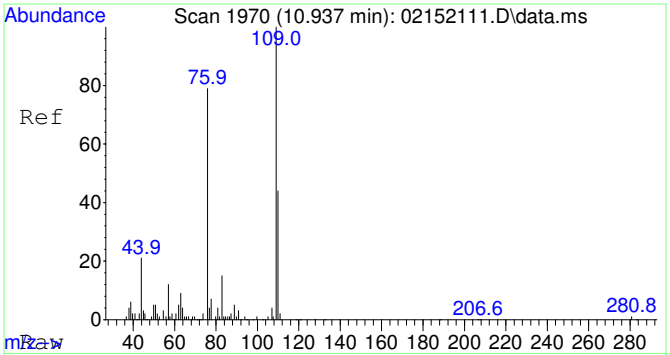


#24
Naphthalene
Concen: 38.09 ug/L
RT: 17.851 min Scan# 3185
Delta R.T. -0.037 min
Lab File: 02152111.D
Acq: 15 Feb 2021 14:18

Tgt Ion:128 Resp: 3773

Ion	Ratio	Lower	Upper
128	100		
127	0.0	0.0	42.5

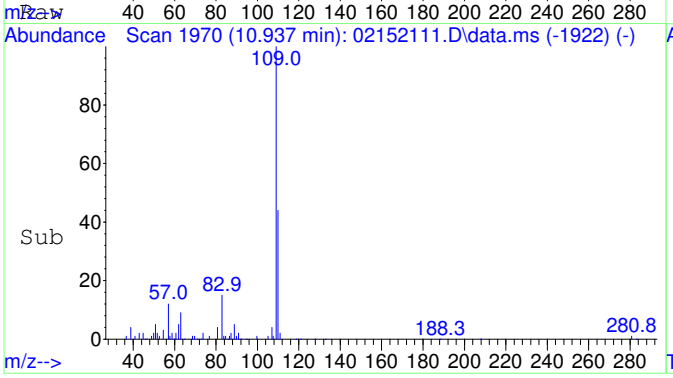


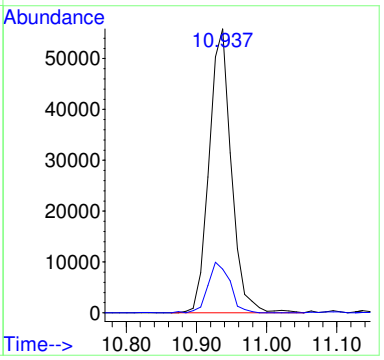


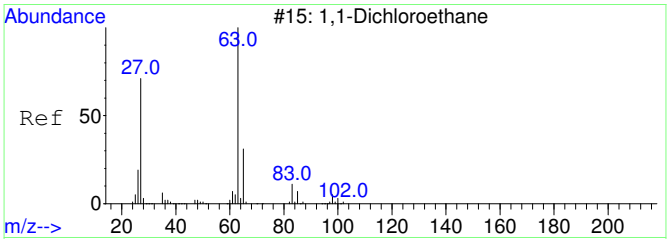
#25
2-Fluorotoluene SCAN
Concen: 4932.69 ug/L
RT: 10.937 min Scan# 1970
Delta R.T. 0.000 min
Lab File: 02152111.D
Acq: 15 Feb 2021 14:18

Tgt Ion:109 Resp: 122613

Ion	Ratio	Lower	Upper
109	100		
83	17.6	0.0	43.8



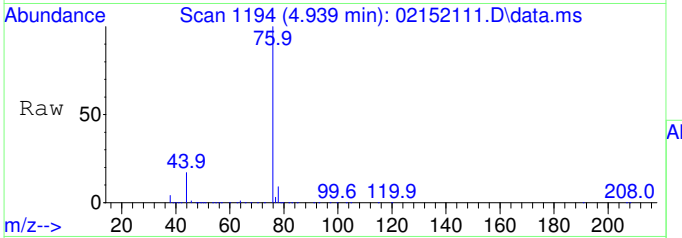


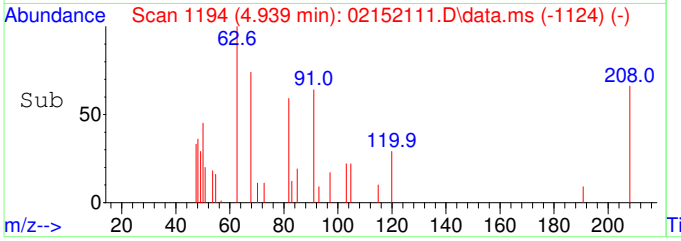


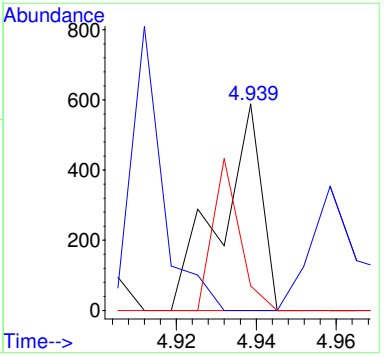
#28
1,1-Dichloroethane SCAN
Concen: 41.08 ug/L
RT: 4.939 min Scan# 1194
Delta R.T. -0.033 min
Lab File: 02152111.D
Acq: 15 Feb 2021 14:18

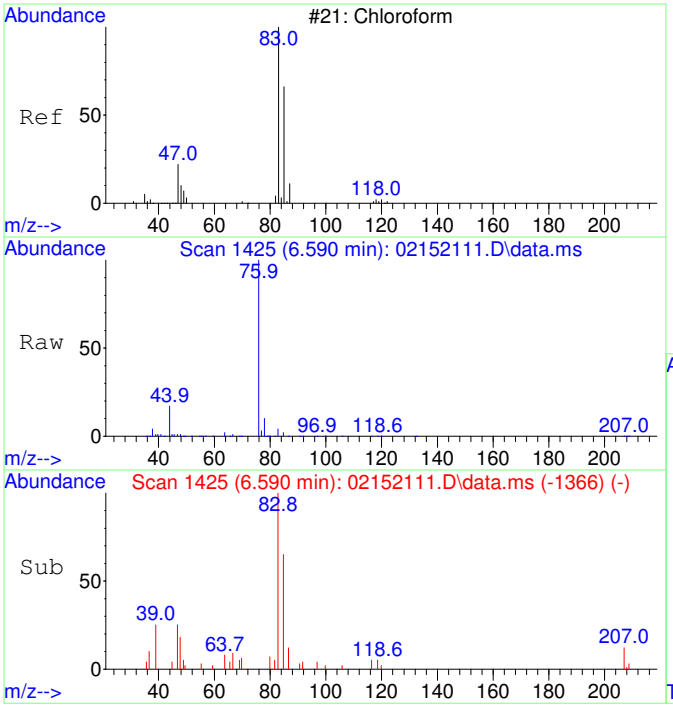
Tgt Ion: 63 Resp: 422

Ion	Ratio	Lower	Upper
63	100		
65	0.0	1.3	61.3#
83	47.4	0.0	45.9#





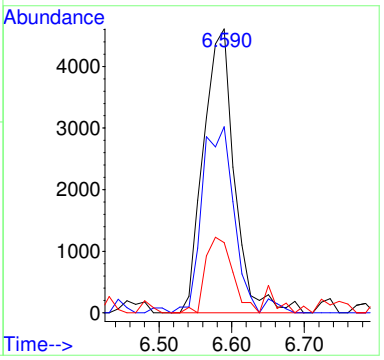


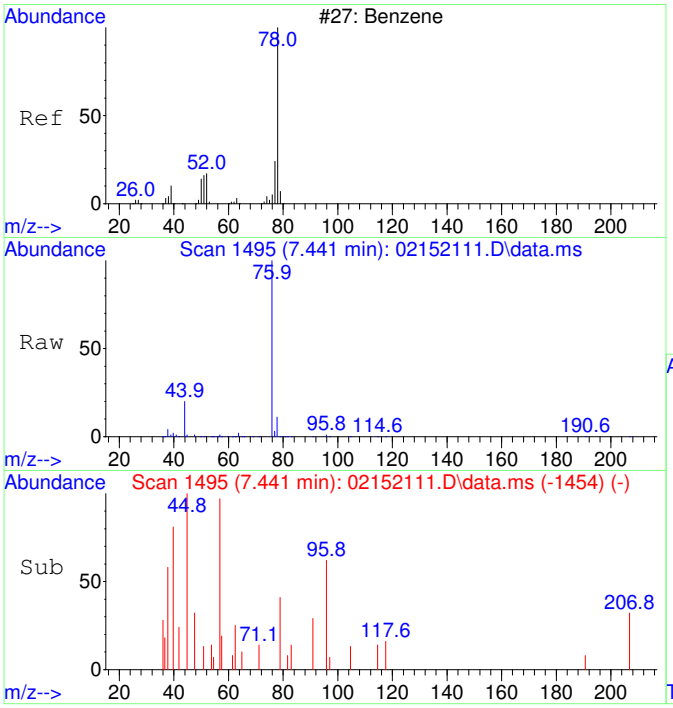


#30
Chloroform SCAN
Concen: 1580.67 ug/L
RT: 6.590 min Scan# 1425
Delta R.T. 0.012 min
Lab File: 02152111.D
Acq: 15 Feb 2021 14:18

Tgt Ion: 83 Resp: 13767

Ion	Ratio	Lower	Upper
83	100		
85	66.3	34.6	94.6
47	23.2	0.0	53.4

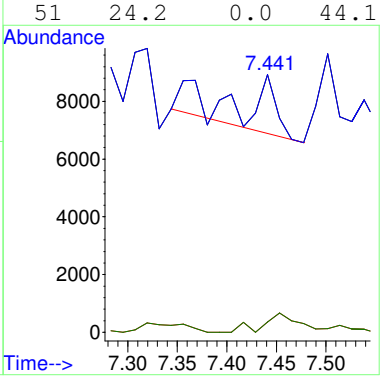


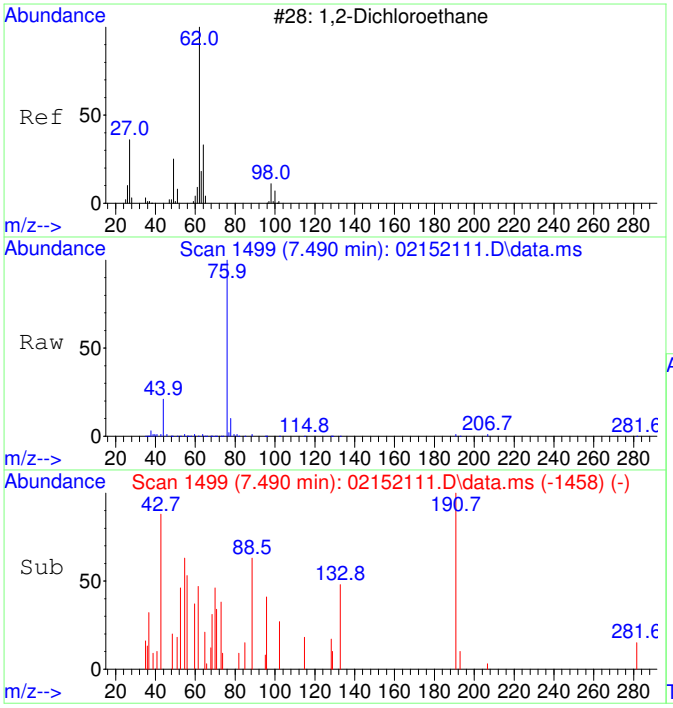


#33
Benzene SCAN
Concen: 194.41 ug/L
RT: 7.441 min Scan# 1495
Delta R.T. 0.000 min
Lab File: 02152111.D
Acq: 15 Feb 2021 14:18

Tgt Ion: 78 Resp: 4778

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	24.2	0.0	47.9
51	24.2	0.0	44.1

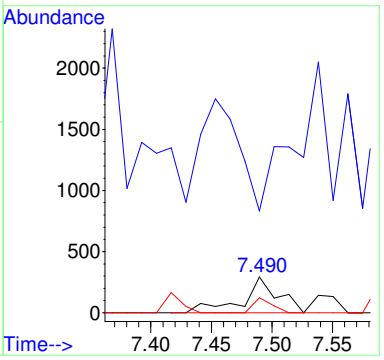


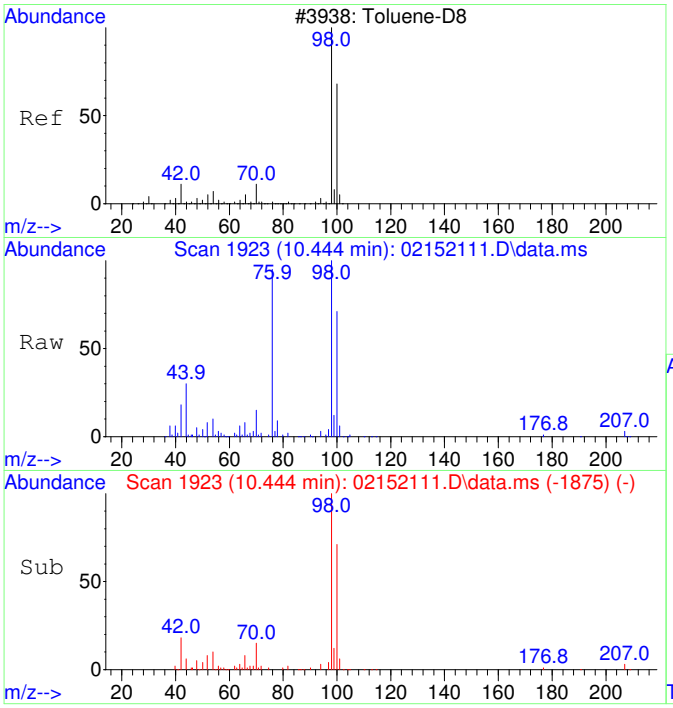


#34
1,2-Dichloroethane SCAN
Concen: 66.90 ug/L
RT: 7.490 min Scan# 1499
Delta R.T. 0.000 min
Lab File: 02152111.D
Acq: 15 Feb 2021 14:18

Tgt Ion: 62 Resp: 600

Ion	Ratio	Lower	Upper
62	100		
64	0.0	5.2	65.2#
49	22.0	3.9	63.9

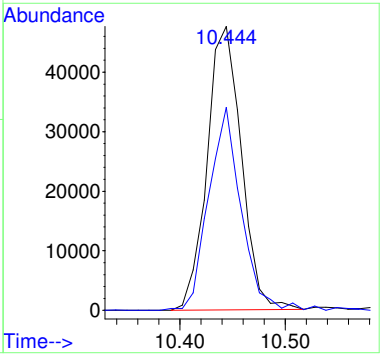


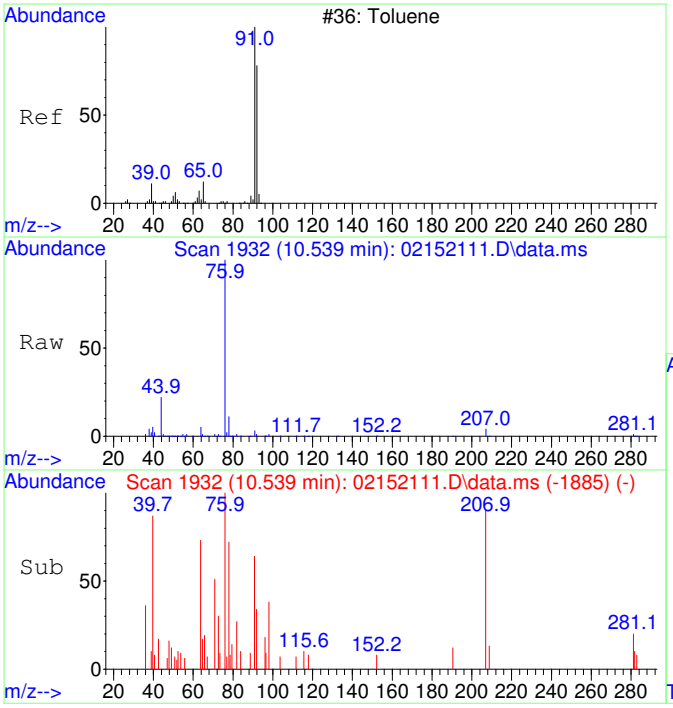


#36
Toluene-d8 SCAN
Concen: 4921.33 ug/L
RT: 10.444 min Scan# 1923
Delta R.T. 0.000 min
Lab File: 02152111.D
Acq: 15 Feb 2021 14:18

Tgt Ion: 98 Resp: 108029

Ion	Ratio	Lower	Upper
98	100		
100	67.8	40.0	100.0

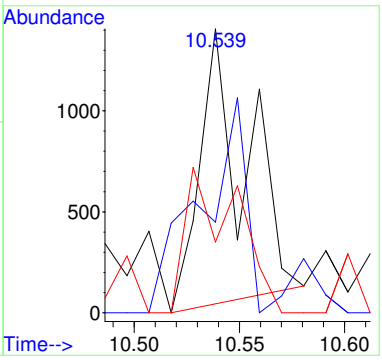


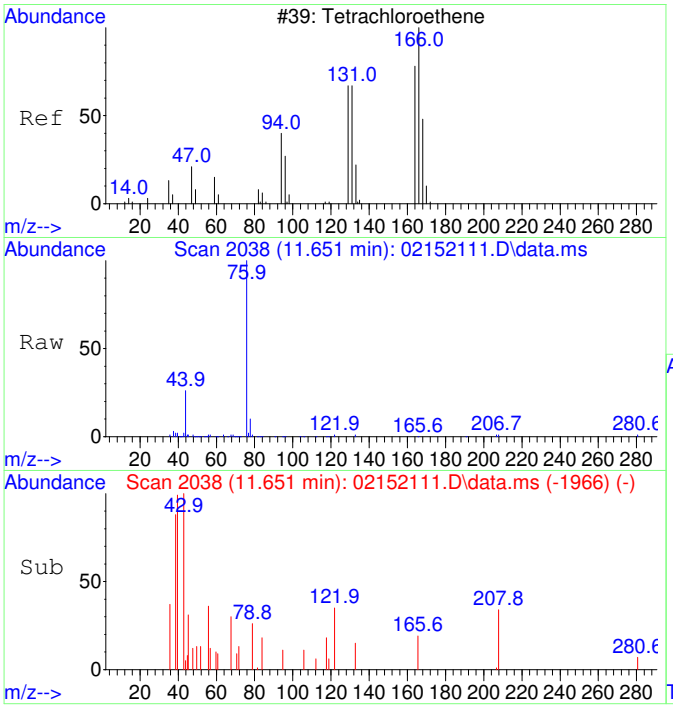


#37
Toluene SCAN
Concen: 65.73 ug/L
RT: 10.539 min Scan# 1932
Delta R.T. -0.010 min
Lab File: 02152111.D
Acq: 15 Feb 2021 14:18

Tgt Ion: 91 Resp: 2068

Ion	Ratio	Lower	Upper
91	100		
92	0.0	28.3	88.3#
65	58.7	0.0	41.0#

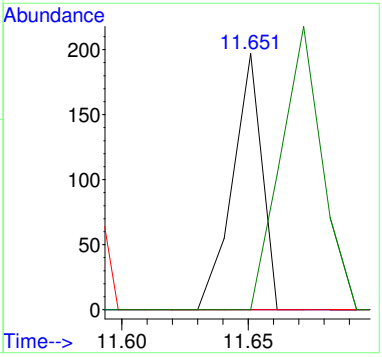


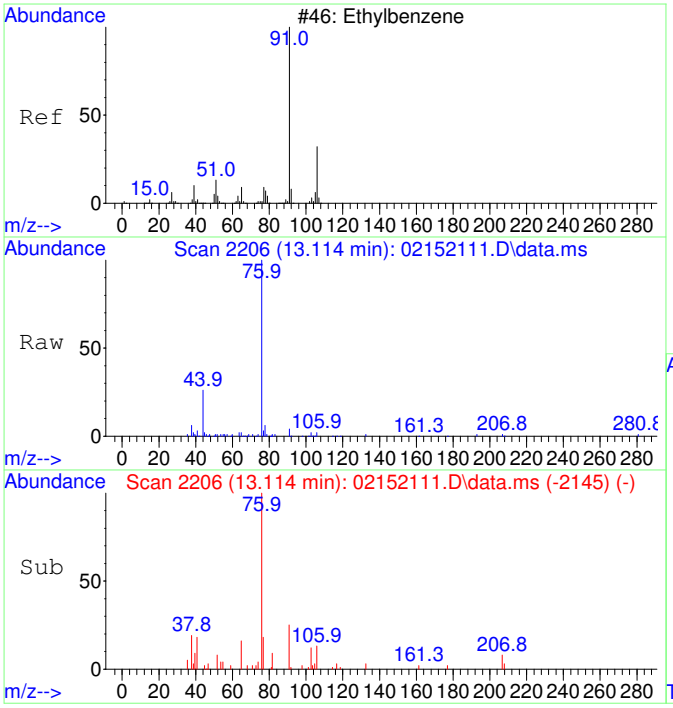


#39
Tetrachloroethene SCAN
Concen: 26.00 ug/L
RT: 11.651 min Scan# 2038
Delta R.T. 0.252 min
Lab File: 02152111.D
Acq: 15 Feb 2021 14:18

Tgt Ion:166 Resp: 159

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

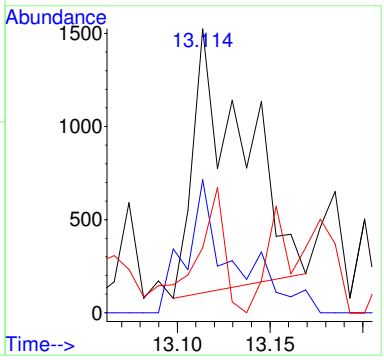


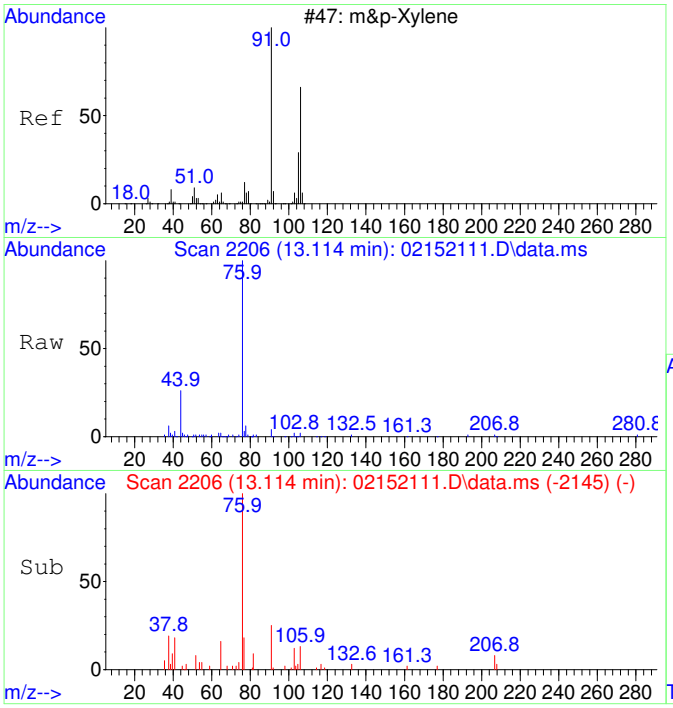


#42
Ethylbenzene SCAN
Concen: 46.14 ug/L
RT: 13.114 min Scan# 2206
Delta R.T. -0.016 min
Lab File: 02152111.D
Acq: 15 Feb 2021 14:18

Tgt Ion: 91 Resp: 2693

Ion	Ratio	Lower	Upper
91	100		
106	46.8	23.1	83.1
51	17.6	0.0	40.1

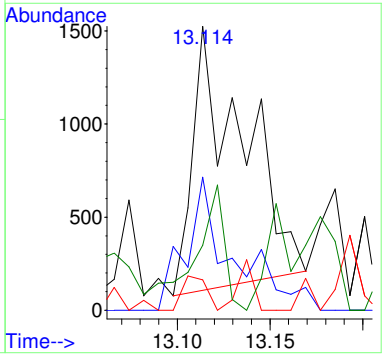


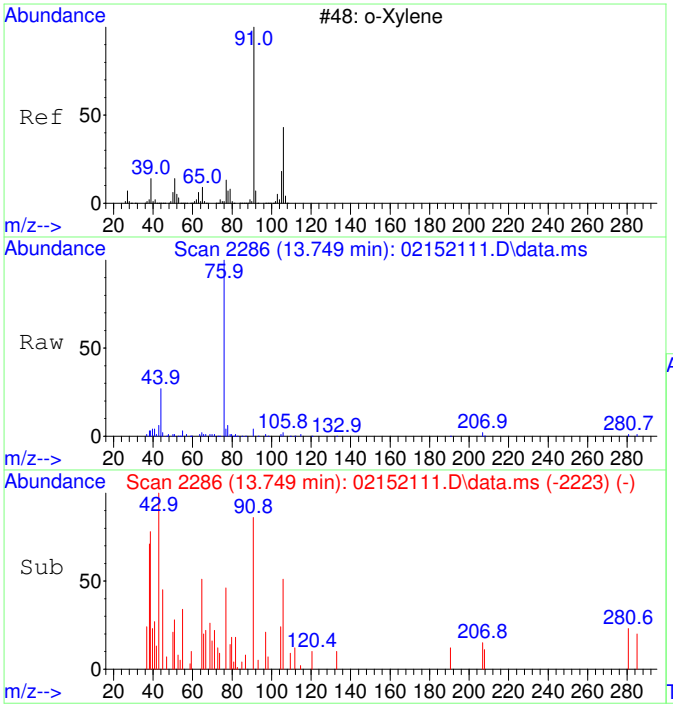


#43
m&p-Xylene SCAN
Concen: 46.14 ug/L
RT: 13.114 min Scan# 2206
Delta R.T. -0.016 min
Lab File: 02152111.D
Acq: 15 Feb 2021 14:18

Tgt Ion: 91 Resp: 2693

Ion	Ratio	Lower	Upper
91	100		
106	46.8	23.1	83.1
105	6.1	0.0	54.7
51	17.6	0.0	40.1

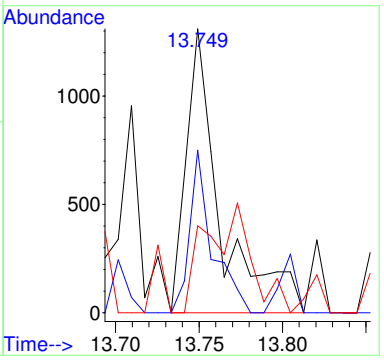


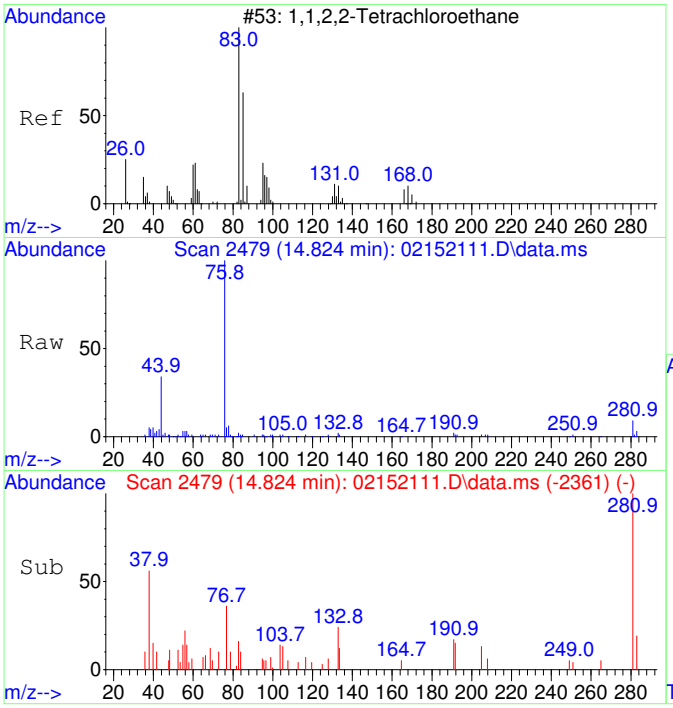


#44
o-Xylene SCAN
Concen: 58.97 ug/L
RT: 13.749 min Scan# 2286
Delta R.T. 0.000 min
Lab File: 02152111.D
Acq: 15 Feb 2021 14:18

Tgt Ion: 91 Resp: 1871

Ion	Ratio	Lower	Upper
91	100		
106	37.9	18.0	78.0
105	0.0	0.0	56.6

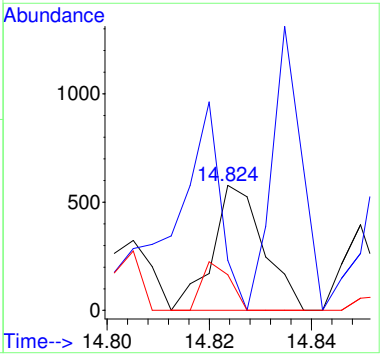


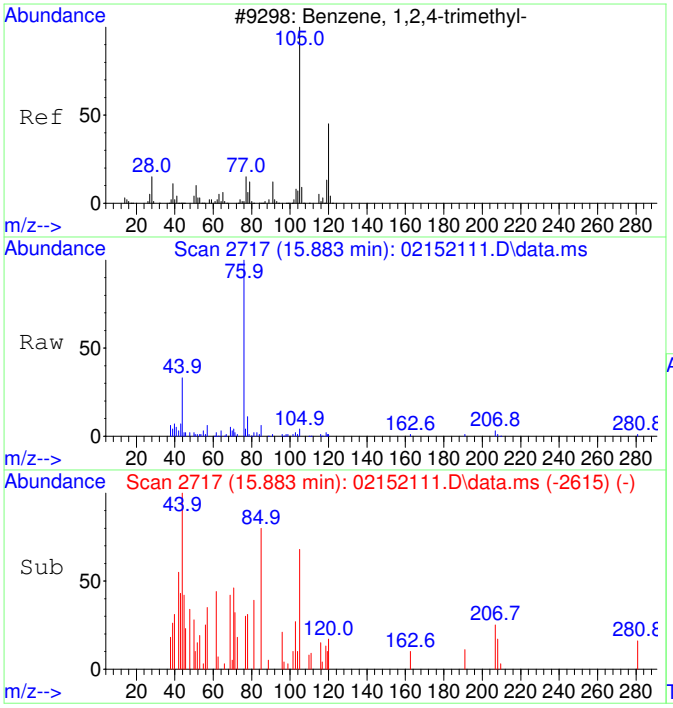


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 27.18 ug/L
RT: 14.824 min Scan# 2479
Delta R.T. -0.018 min
Lab File: 02152111.D
Acq: 15 Feb 2021 14:18

Tgt Ion: 83 Resp: 402

Ion	Ratio	Lower	Upper
83	100		
85	86.6	35.9	95.9
95	21.6	0.0	47.4

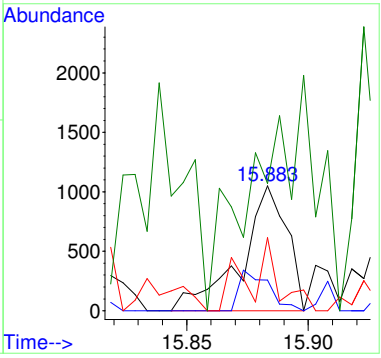




#47
1,2,4-Trimethylbenzene SCAN
Concen: 41.61 ug/L
RT: 15.883 min Scan# 2717
Delta R.T. 0.005 min
Lab File: 02152111.D
Acq: 15 Feb 2021 14:18

Tgt Ion:105 Resp: 1381

Ion	Ratio	Lower	Upper
105	100		
120	0.0	16.9	76.9#
119	18.1	0.0	41.9
77	0.0	0.0	42.3



2102006-10RE1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152120.D
Acq On : 15 Feb 2021 17:51
InstName : AG5975C
Operator : TD
Sample : 2102006-10RE1
Misc : RA for low surr
ALS Vial : 20 Sample Multiplier: 1

REPORT

Quant Time: Feb 16 06:18:43 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration

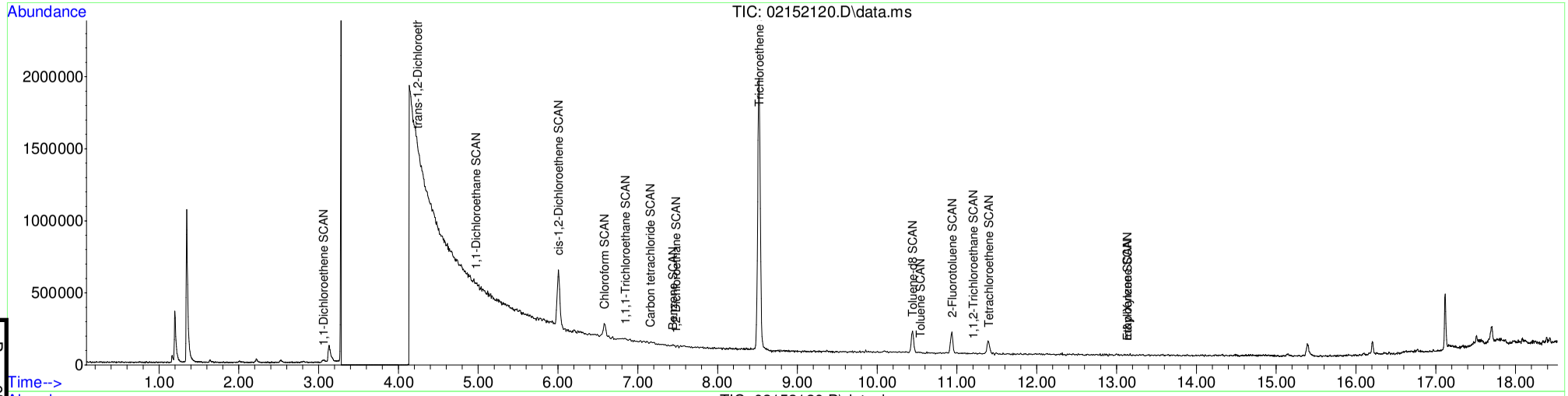
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.928	109	242311	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.435	98	203363	4870.34 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 97.41%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.060	61	24318	2154.60 ug/L	91
3] trans-1,2-Dichloroethene	4.237	61	28383	2380.53 ug/L	98
4] 1,1-Dichloroethane	4.980	63	24329	1694.09 ug/L	100
5] cis-1,2-Dichloroethene	6.002	61	508511	35911.48 ug/L OC	98
6] Chloroform	6.579	83	139633	9251.68 ug/L	99
7] 1,1,1-Trichloroethane	6.834	97	12932	901.66 ug/L	97
8] Carbon tetrachloride	7.114	117	2093	174.63 ug/L	100
9] Benzene	7.442	78	2647	64.20 ug/L #	13
10] 1,2-Dichloroethane	7.479	62	408	31.00 ug/L #	42
11] Trichloroethene	8.521	130	1386413	127030.34 ug/L OC	94
13] Toluene	10.540	91	5226	90.37 ug/L	99
15] Tetrachloroethene	11.390	166	63347	4183.85 ug/L	99
19] m&p-Xylene	13.123	91	2486	43.34 ug/L	96
23] 1,2,4-Trimethylbenzene	15.875	105	3163	43.33 ug/L	90
24] Naphthalene	17.854	128	4551	43.78 ug/L #	68
25) 2-Fluorotoluene SCAN	10.937	109	126842	4862.25 ug/L	95
26) 1,1-Dichloroethene SCAN	3.055	61	12780	1540.83 ug/L	80
27) trans-1,2-Dichloroethe...	4.235	61	17617	2023.26 ug/L	84
28) 1,1-Dichloroethane SCAN	4.972	63	14730	1366.45 ug/L	77
29) cis-1,2-Dichloroethene...	6.007	61	328877	32929.65 ug/L #	81
30) Chloroform SCAN	6.577	83	83132	9094.88 ug/L	85
31) 1,1,1-Trichloroethane ...	6.845	97	7468	794.62 ug/L	82
32) Carbon tetrachloride SCAN	7.161	117	1716	226.81 ug/L #	15
33) Benzene SCAN	7.441	78	5216	202.22 ug/L	98
34) 1,2-Dichloroethane SCAN	7.478	62	342	36.33 ug/L #	63
35) Trichloroethene SCAN	8.519	130	667268	117026.29 ug/L	81
36) Toluene-d8 SCAN	10.444	98	106355	4616.64 ug/L	99
37) Toluene SCAN	10.539	91	3698	111.99 ug/L #	34
38) 1,1,2-Trichloroethane ...	11.200	97	217	33.10 ug/L #	35
39) Tetrachloroethene SCAN	11.399	166	25901	4035.92 ug/L	91
42) Ethylbenzene SCAN	13.130	91	1658	27.07 ug/L	61
43) m&p-Xylene SCAN	13.130	91	1658	27.07 ug/L #	58

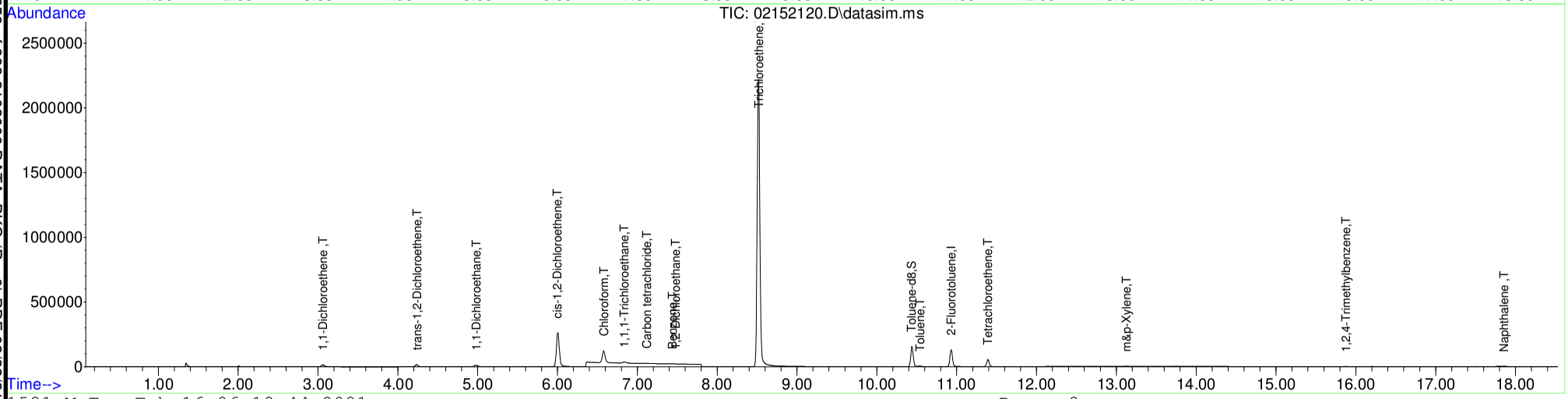
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152120.D
Acq On : 15 Feb 2021 17:51
InstName : AG5975C
Operator : TD
Sample : 2102006-10RE1
Misc : RA for low surr
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 16 06:18:43 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration





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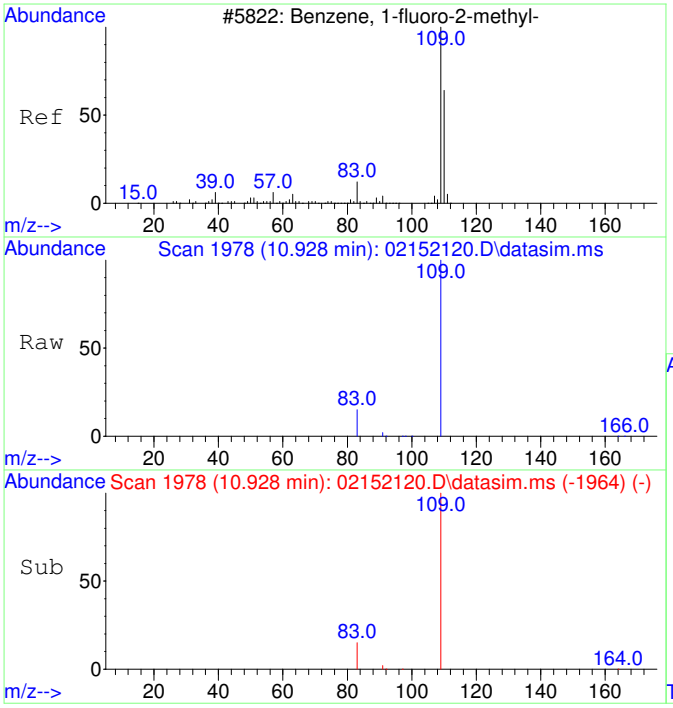
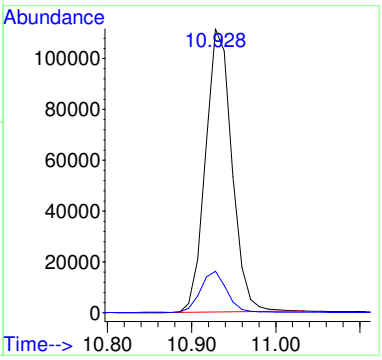
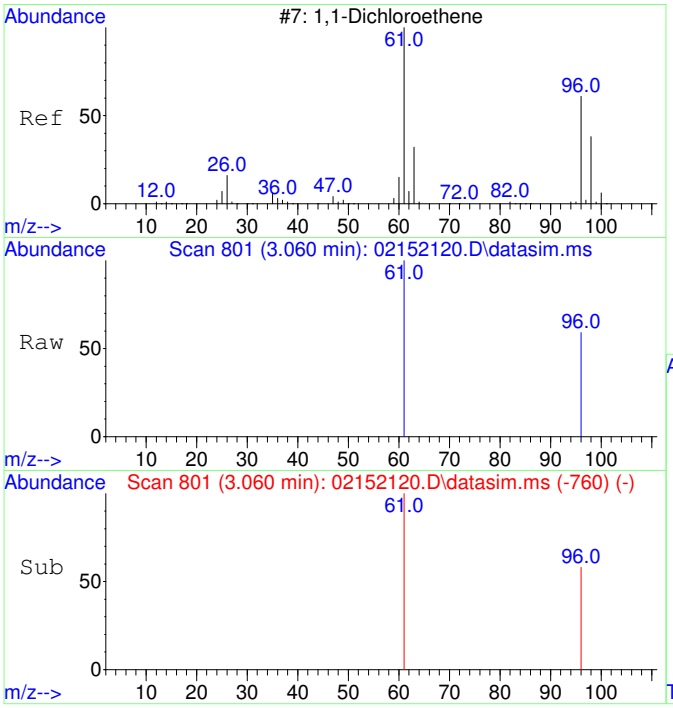


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.928 min Scan# 1978
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion:109 Resp: 242311

Ion	Ratio	Lower	Upper
109	100		
83	14.3	0.0	42.3

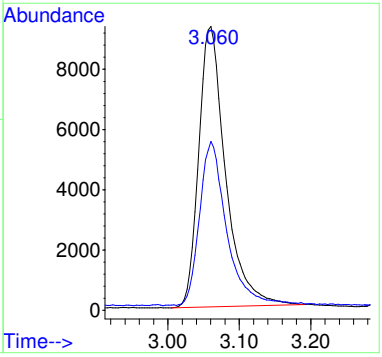


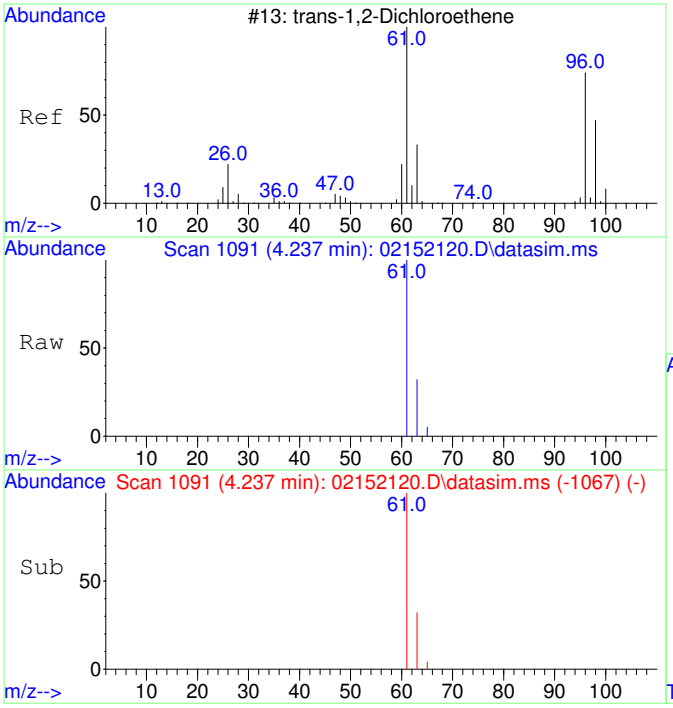


#2
1,1-Dichloroethene
Concen: 2154.60 ug/L
RT: 3.060 min Scan# 801
Delta R.T. 0.004 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 61 Resp: 24318

Ion	Ratio	Lower	Upper
61	100		
96	59.7	37.2	97.2

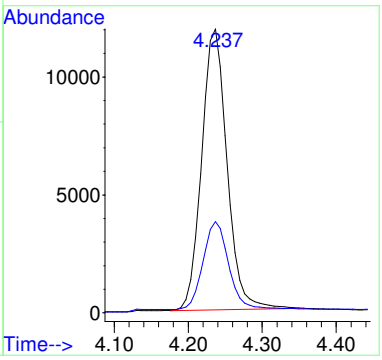


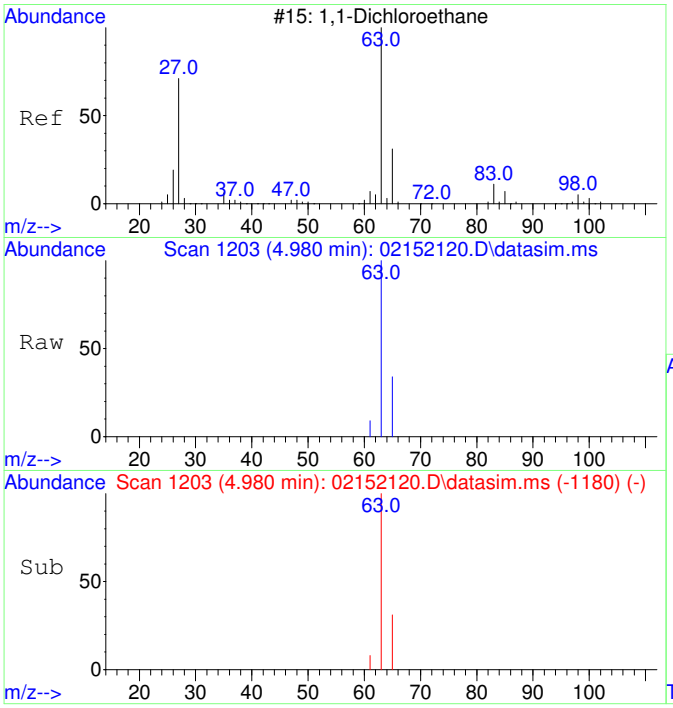


#3
trans-1,2-Dichloroethene
Concen: 2380.53 ug/L
RT: 4.237 min Scan# 1091
Delta R.T. 0.007 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 61 Resp: 28383

Ion	Ratio	Lower	Upper
61	100		
63	31.2	2.4	62.4

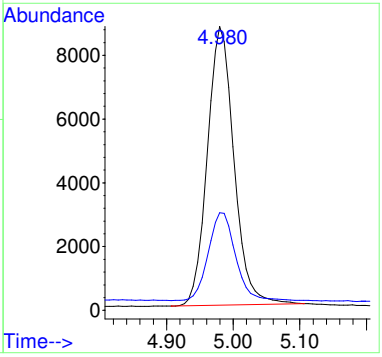


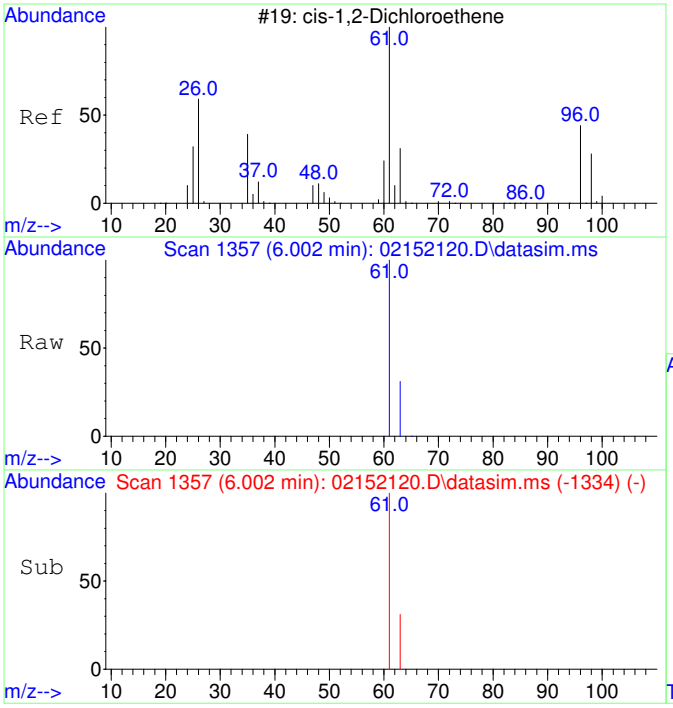


#4
1,1-Dichloroethane
Concen: 1694.09 ug/L
RT: 4.980 min Scan# 1203
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 63 Resp: 24329

Ion	Ratio	Lower	Upper
63	100		
65	32.0	1.8	61.8

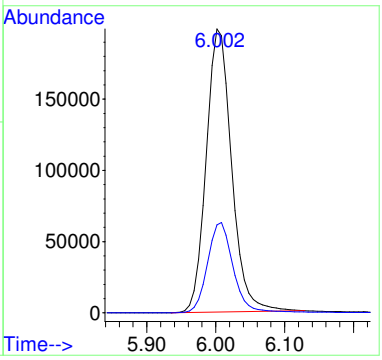


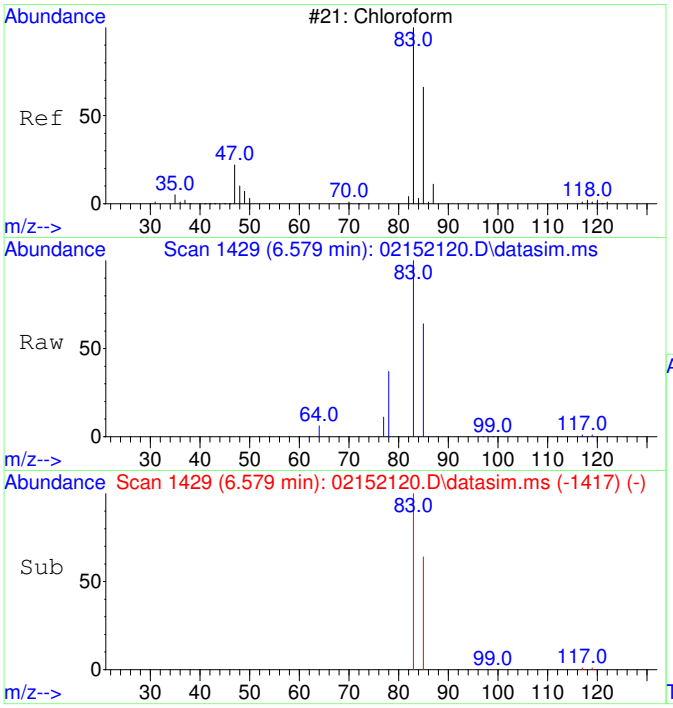


#5
cis-1,2-Dichloroethene
Concen: 35911.48 ug/L
RT: 6.002 min Scan# 1357
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 61 Resp: 508511

Ion	Ratio	Lower	Upper
61	100		
63	31.5	2.5	62.5

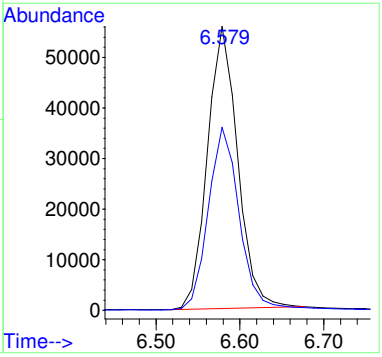


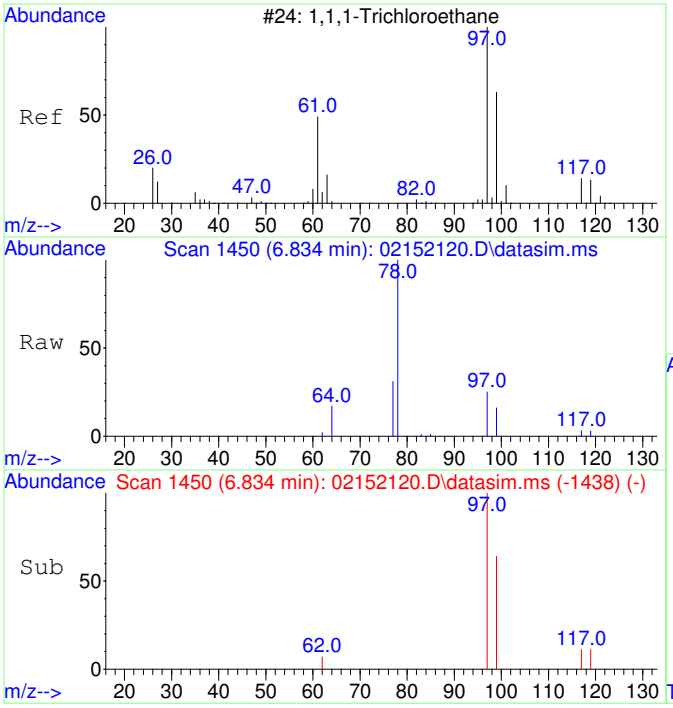


#6
Chloroform
Concen: 9251.68 ug/L
RT: 6.579 min Scan# 1429
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 83 Resp: 139633

Ion	Ratio	Lower	Upper
83	100		
85	66.2	35.1	95.1

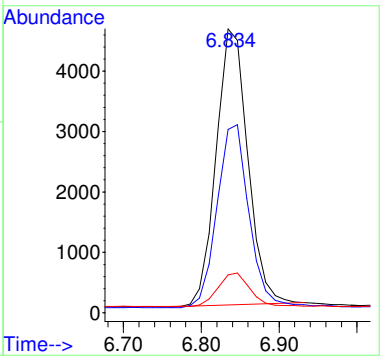


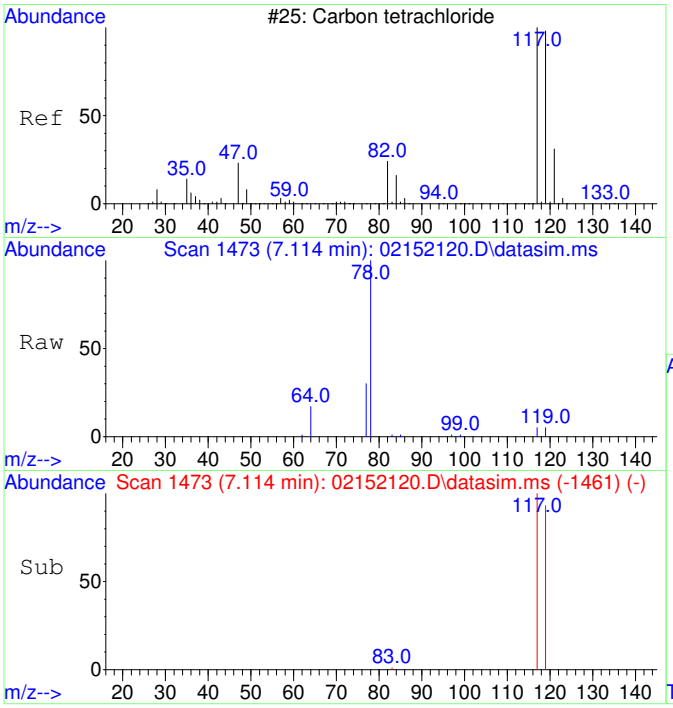


#7
1,1,1-Trichloroethane
Concen: 901.66 ug/L
RT: 6.834 min Scan# 1450
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 97 Resp: 12932

Ion	Ratio	Lower	Upper
97	100		
99	67.3	34.6	94.6
117	12.3	0.0	43.2

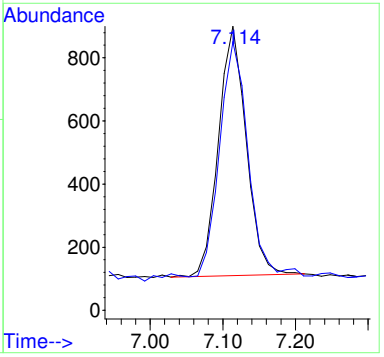


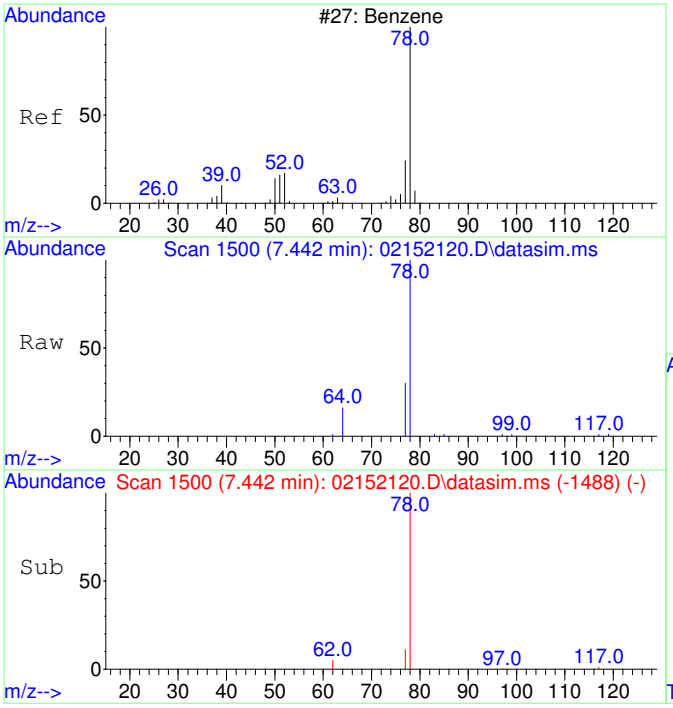


#8
Carbon tetrachloride
Concen: 174.63 ug/L
RT: 7.114 min Scan# 1473
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion:117 Resp: 2093

Ion	Ratio	Lower	Upper
117	100		
119	96.6	66.4	126.4

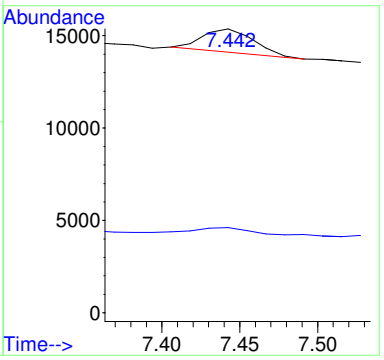


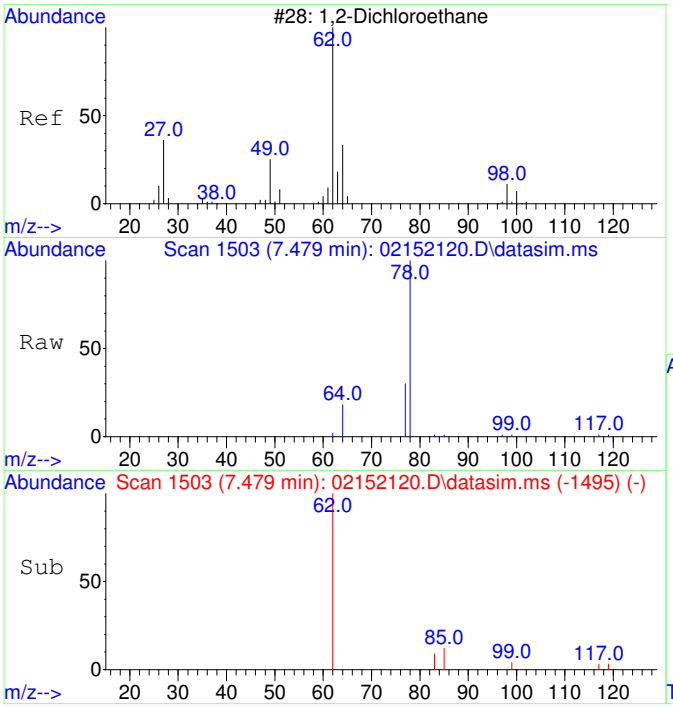


#9
Benzene
Concen: 64.20 ug/L
RT: 7.442 min Scan# 1500
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 78 Resp: 2647

Ion	Ratio	Lower	Upper
78	100		
77	65.5	0.0	53.2#

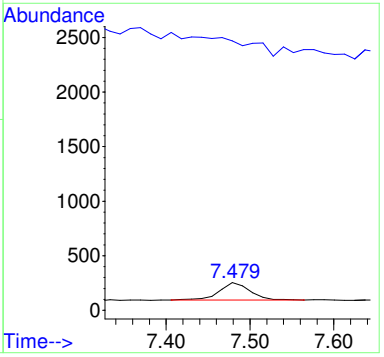


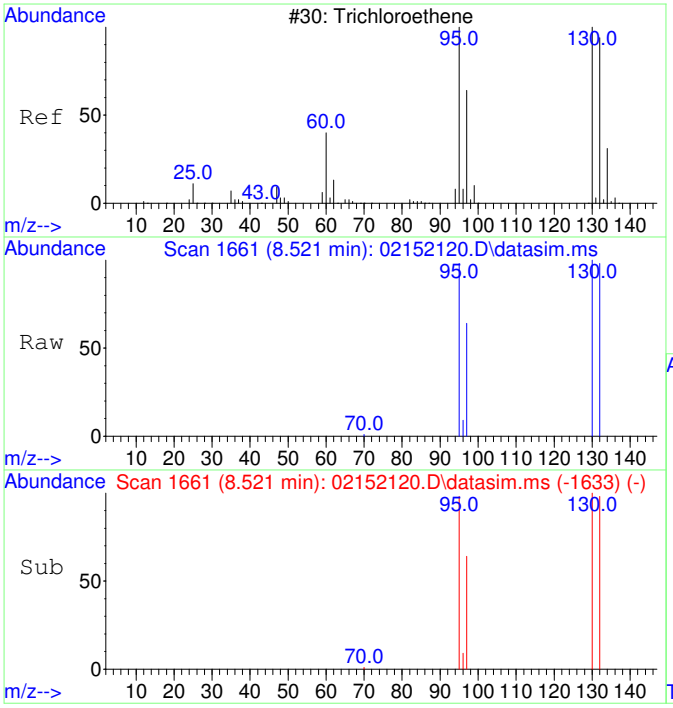


#10
1,2-Dichloroethane
Concen: 31.00 ug/L
RT: 7.479 min Scan# 1503
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 62 Resp: 408

Ion	Ratio	Lower	Upper
62	100		
64	0.0	2.3	62.3#

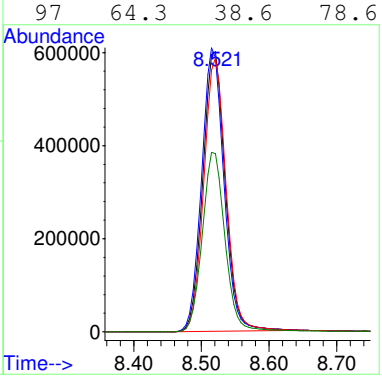


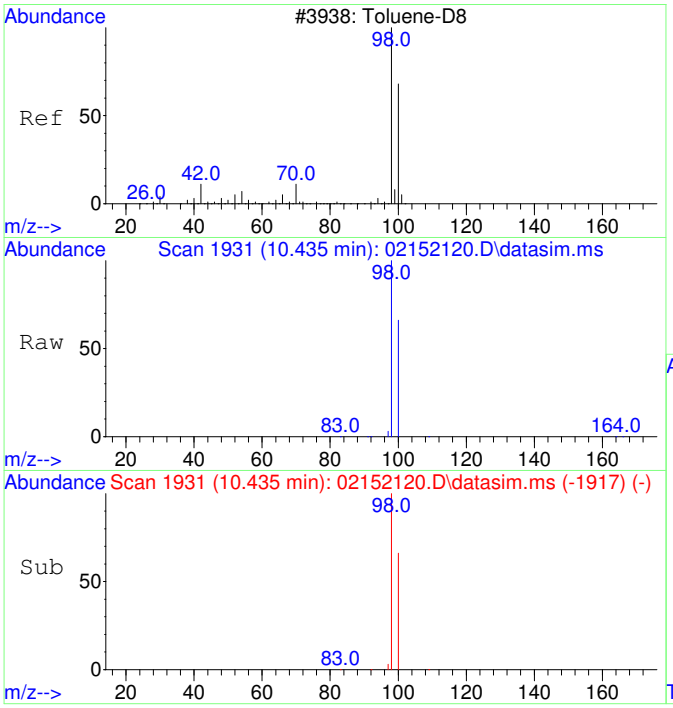


#11
Trichloroethene
Concen: 127030.34 ug/L
RT: 8.521 min Scan# 1661
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion:130 Resp: 1386413

Ion	Ratio	Lower	Upper
130	100		
95	100.8	60.7	120.7
132	96.9	76.0	116.0
97	64.3	38.6	78.6

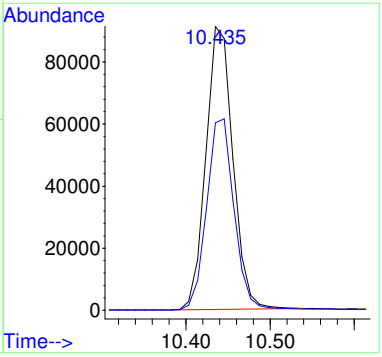


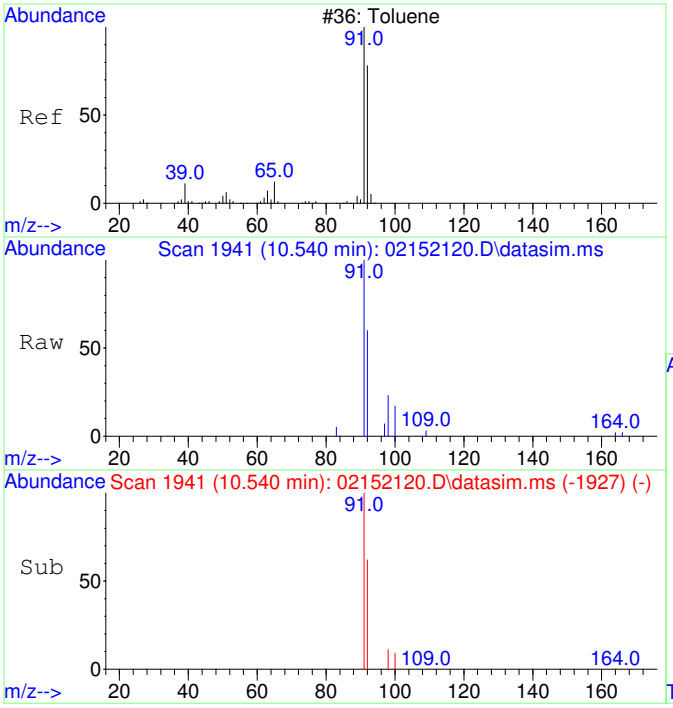


#12
Toluene-d8
Concen: 4870.34 ug/L
RT: 10.435 min Scan# 1931
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 98 Resp: 203363

Ion	Ratio	Lower	Upper
98	100		
100	67.8	37.1	97.1

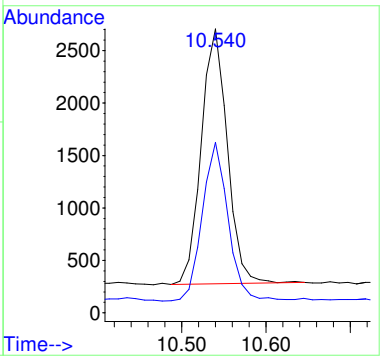


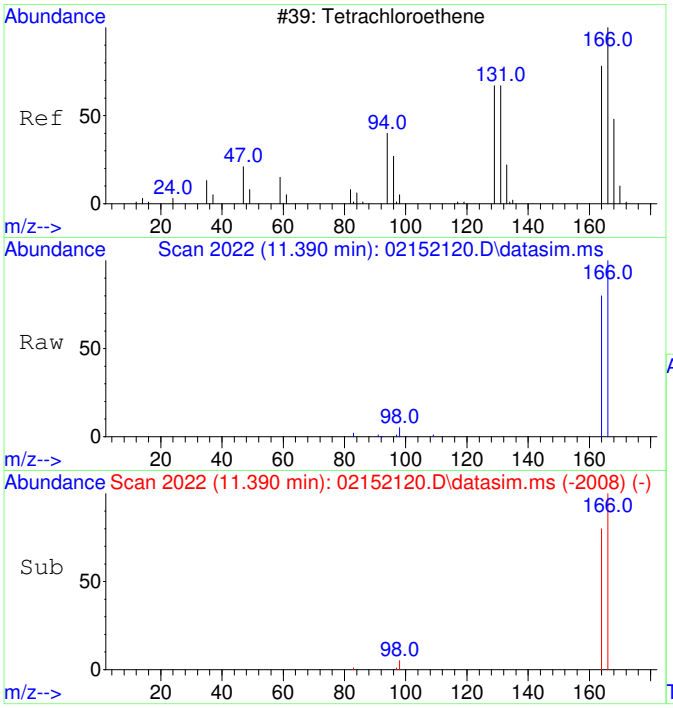


#13
Toluene
Concen: 90.37 ug/L
RT: 10.540 min Scan# 1941
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 91 Resp: 5226

Ion	Ratio	Lower	Upper
91	100		
92	60.6	29.9	89.9

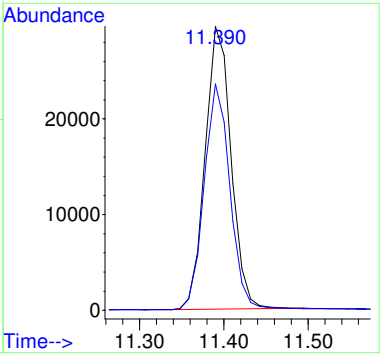


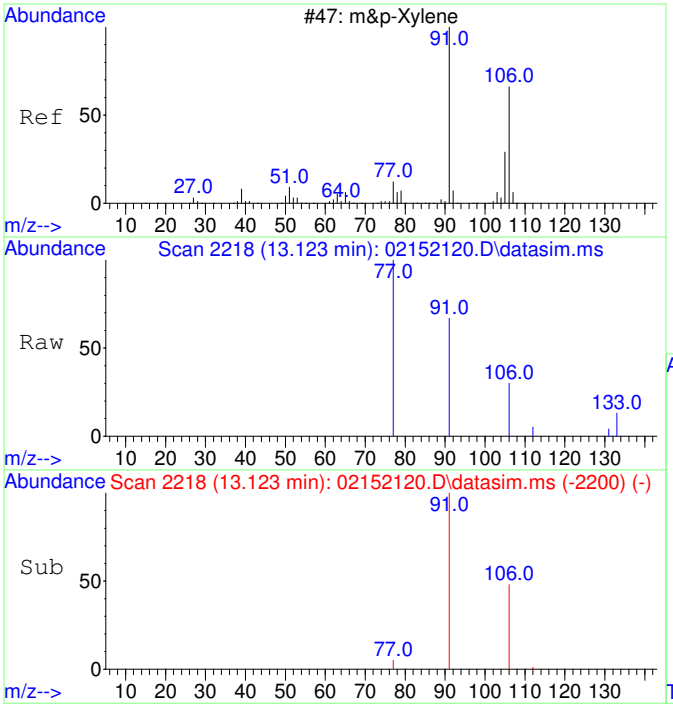


#15
Tetrachloroethene
Concen: 4183.85 ug/L
RT: 11.390 min Scan# 2022
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion:166 Resp: 63347

Ion	Ratio	Lower	Upper
166	100		
164	78.6	47.8	107.8

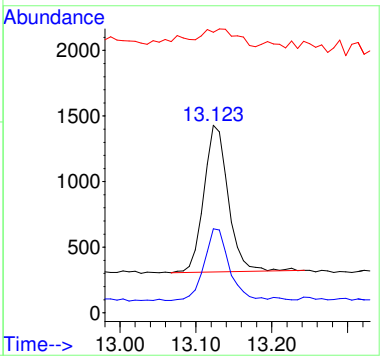


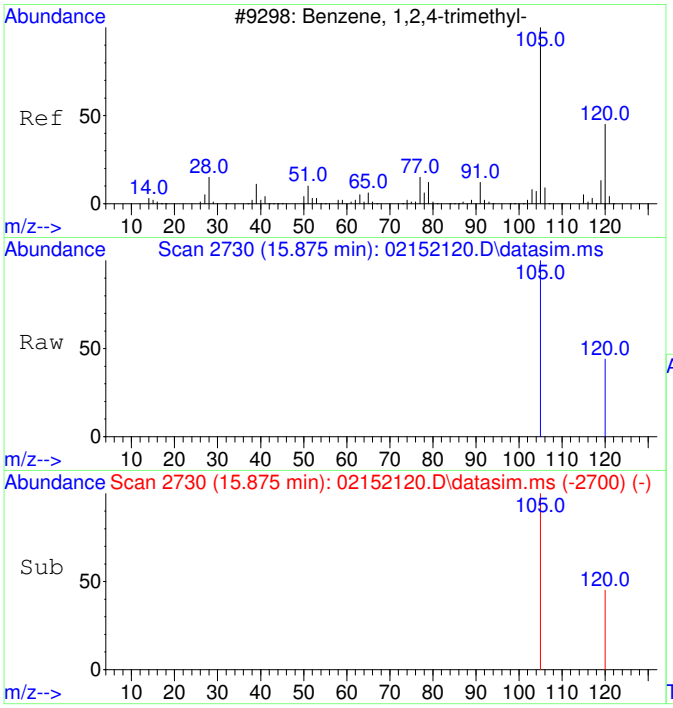


#19
m&p-Xylene
Concen: 43.34 ug/L
RT: 13.123 min Scan# 2218
Delta R.T. -0.008 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 91 Resp: 2486

Ion	Ratio	Lower	Upper
91	100		
106	50.3	22.2	82.2
77	16.0	0.0	42.4

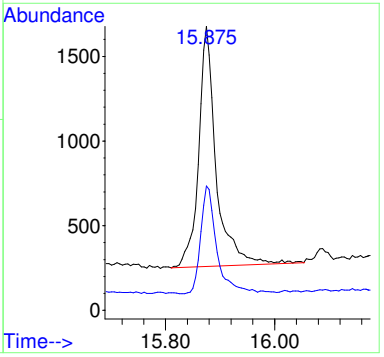


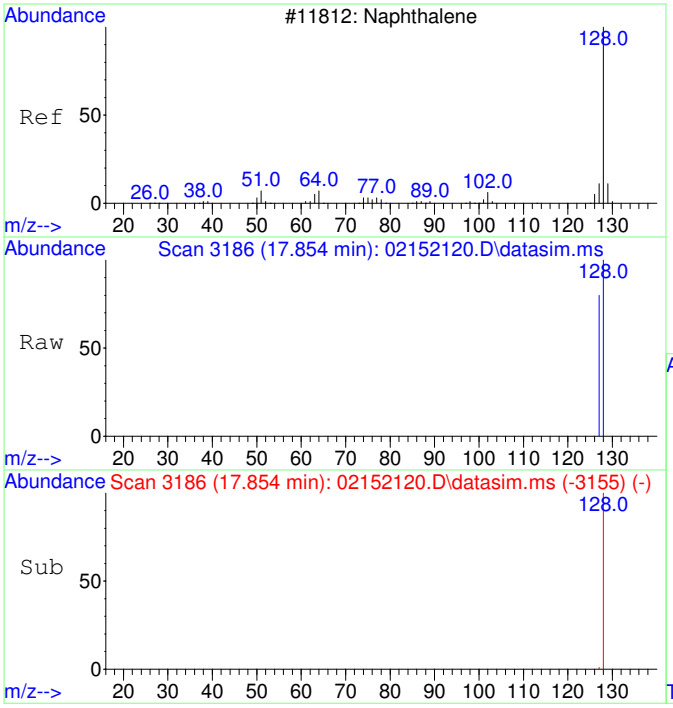


#23
1,2,4-Trimethylbenzene
Concen: 43.33 ug/L
RT: 15.875 min Scan# 2730
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion:105 Resp: 3163

Ion	Ratio	Lower	Upper
105	100		
120	40.8	17.2	77.2

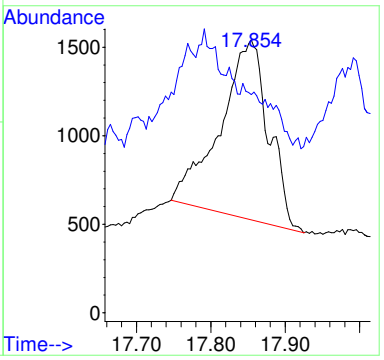


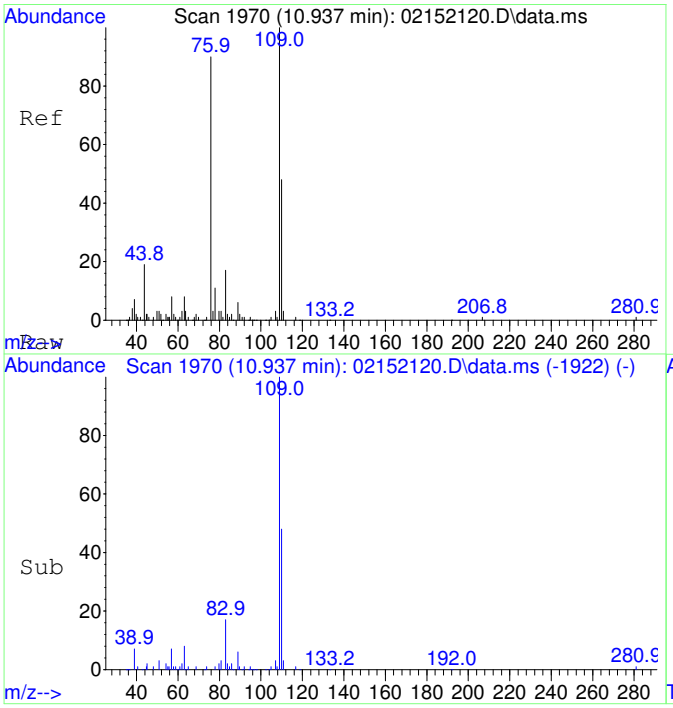


#24
Naphthalene
Concen: 43.78 ug/L
RT: 17.854 min Scan# 3186
Delta R.T. -0.033 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion:128 Resp: 4551

Ion	Ratio	Lower	Upper
128	100		
127	0.0	0.0	42.5

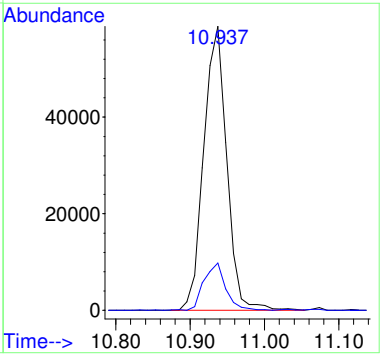


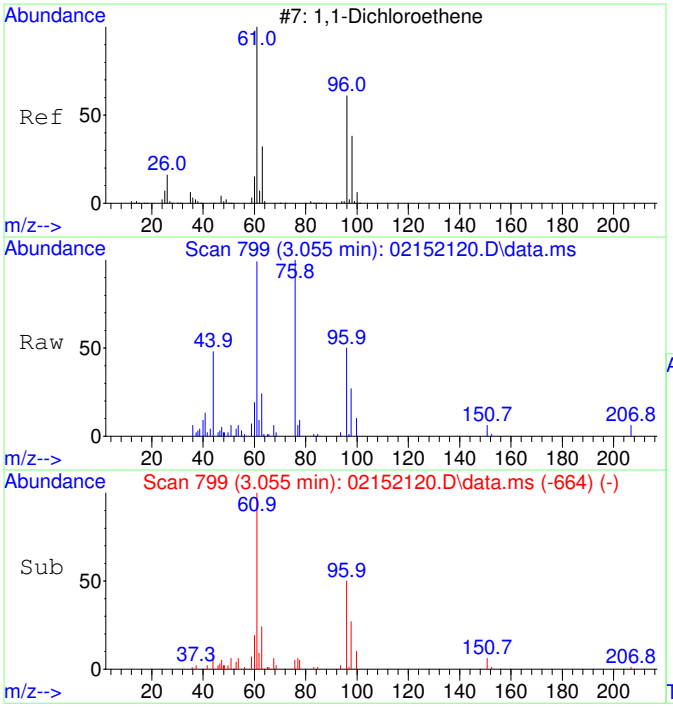


#25
2-Fluorotoluene SCAN
Concen: 4862.25 ug/L
RT: 10.937 min Scan# 1970
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion:109 Resp: 126842

Ion	Ratio	Lower	Upper
109	100		
83	15.9	0.0	43.8

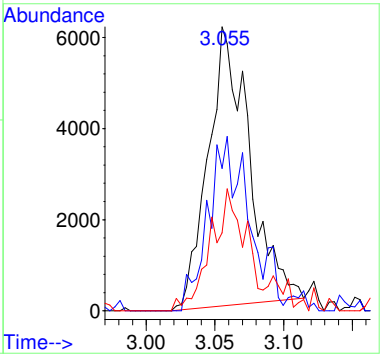


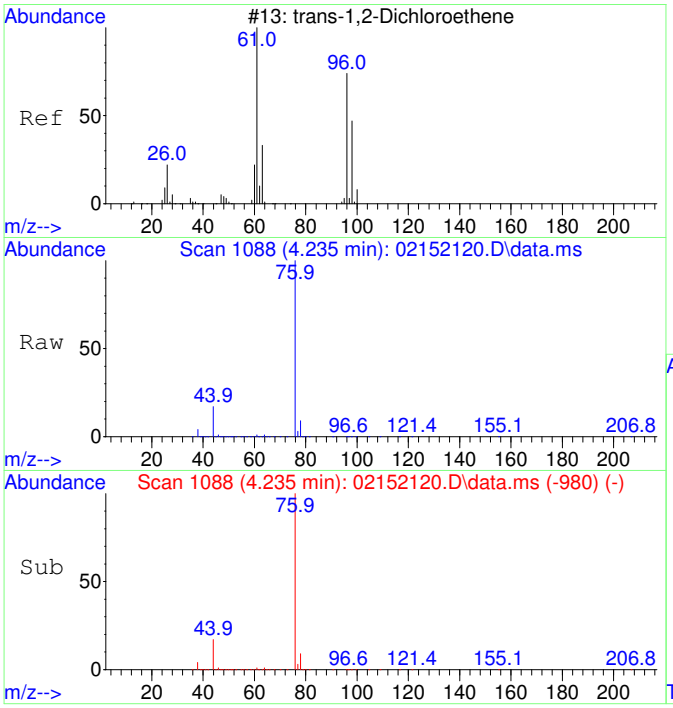


#26
1,1-Dichloroethene SCAN
Concen: 1540.83 ug/L
RT: 3.055 min Scan# 799
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 61 Resp: 12780

Ion	Ratio	Lower	Upper
61	100		
96	46.8	33.1	93.1
98	29.5	11.2	71.2

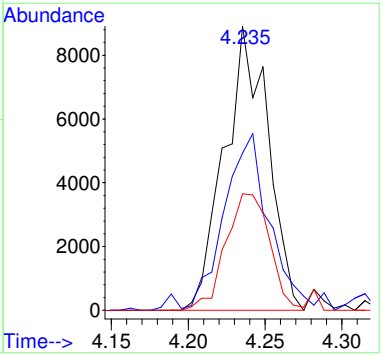


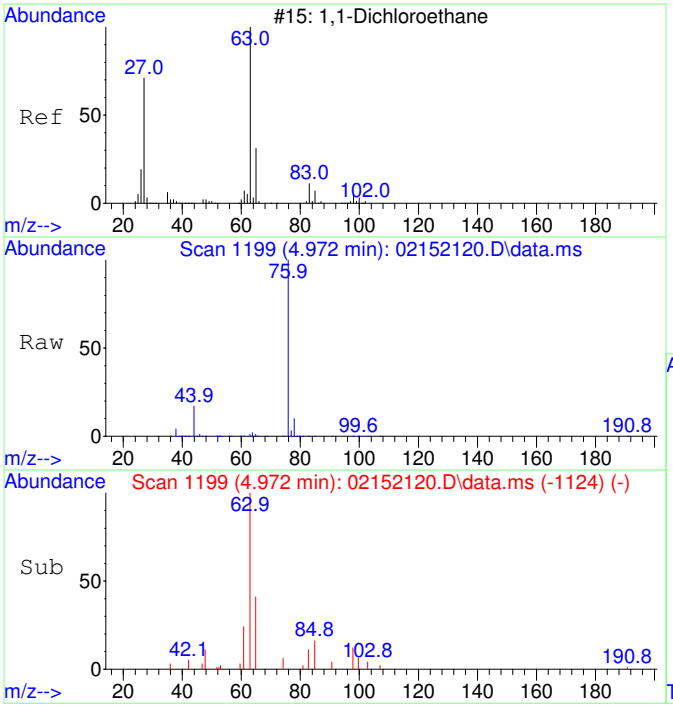


#27
trans-1,2-Dichloroethene SCAN
Concen: 2023.26 ug/L
RT: 4.235 min Scan# 1088
Delta R.T. 0.007 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 61 Resp: 17617

Ion	Ratio	Lower	Upper
61	100		
96	64.2	49.0	109.0
98	39.9	20.5	80.5

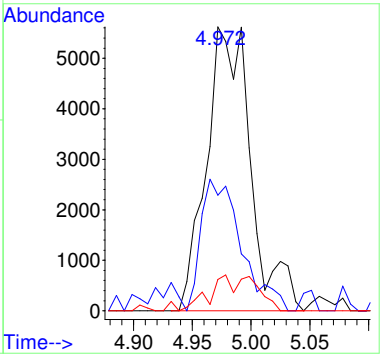


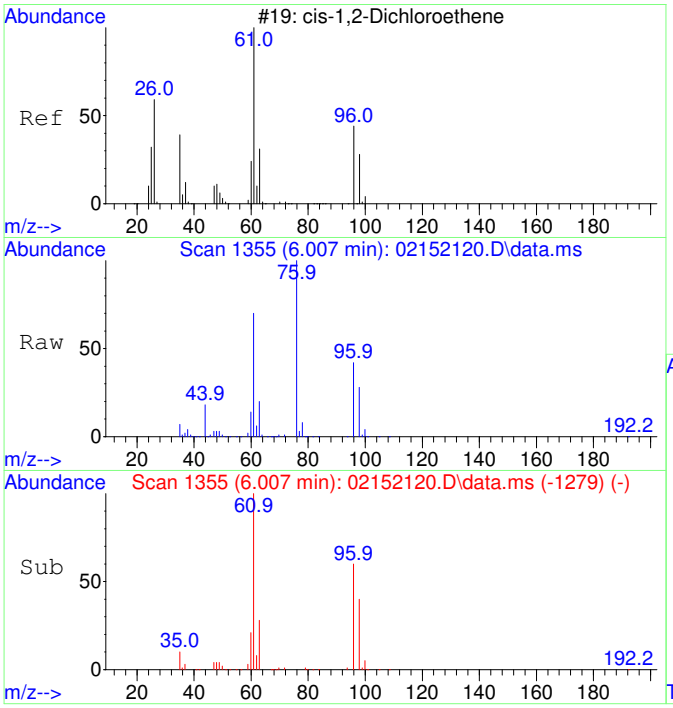


#28
1,1-Dichloroethane SCAN
Concen: 1366.45 ug/L
RT: 4.972 min Scan# 1199
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 63 Resp: 14730

Ion	Ratio	Lower	Upper
63	100		
65	42.0	1.3	61.3
83	2.9	0.0	45.9

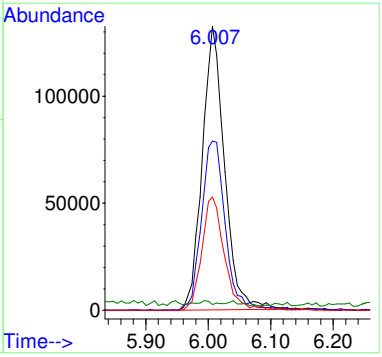


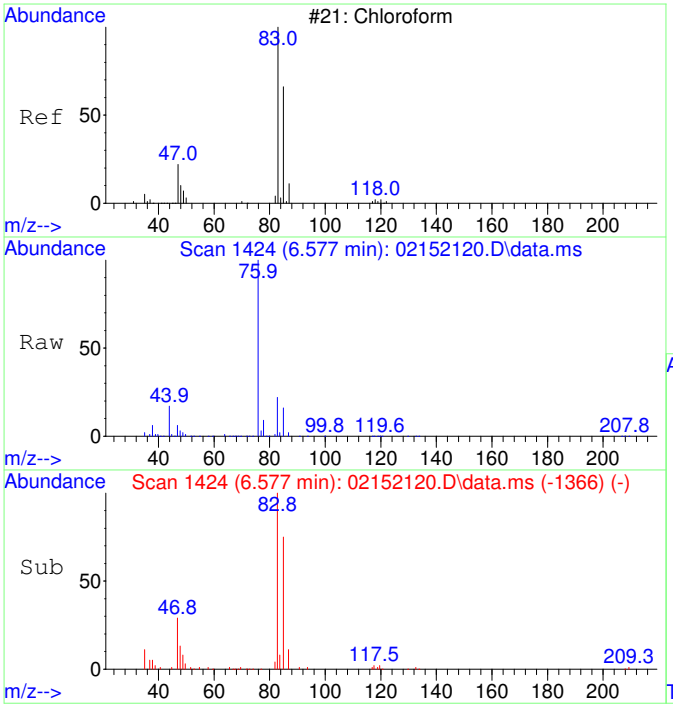


#29
cis-1,2-Dichloroethene SCAN
Concen: 32929.65 ug/L
RT: 6.007 min Scan# 1355
Delta R.T. 0.007 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 61 Resp: 328877

Ion	Ratio	Lower	Upper
61	100		
96	63.2	39.9	99.9
98	40.1	13.5	73.5
64	0.7	4.5	64.5#

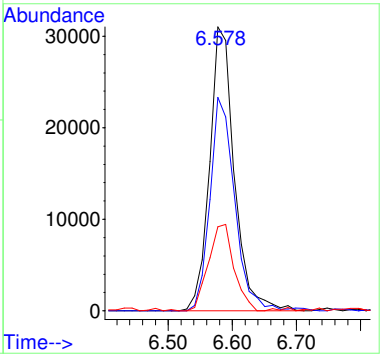


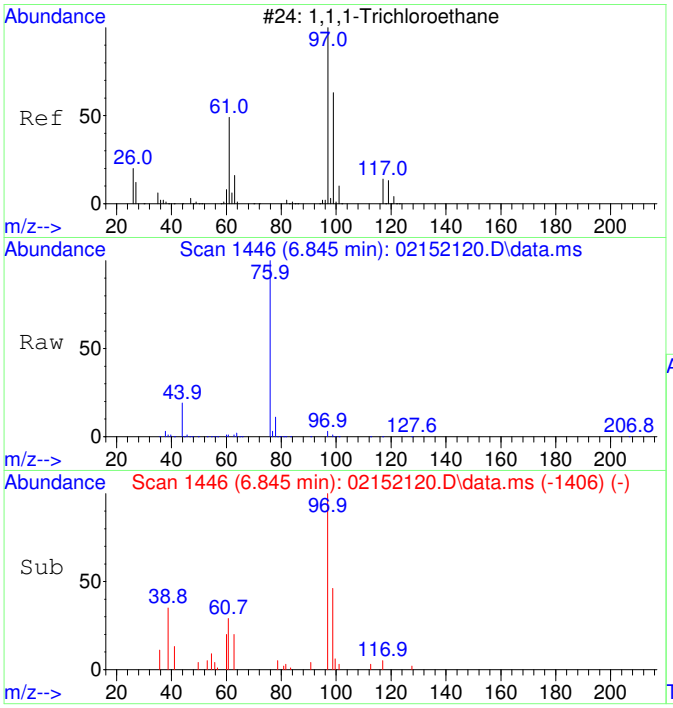


#30
Chloroform SCAN
Concen: 9094.88 ug/L
RT: 6.577 min Scan# 1424
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 83 Resp: 83132

Ion	Ratio	Lower	Upper
83	100		
85	75.5	34.6	94.6
47	31.3	0.0	53.4

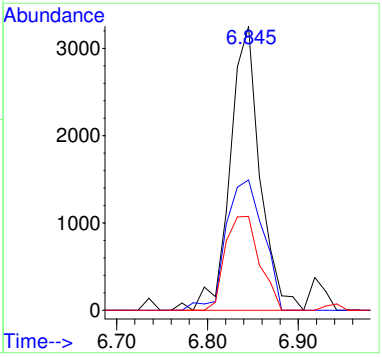


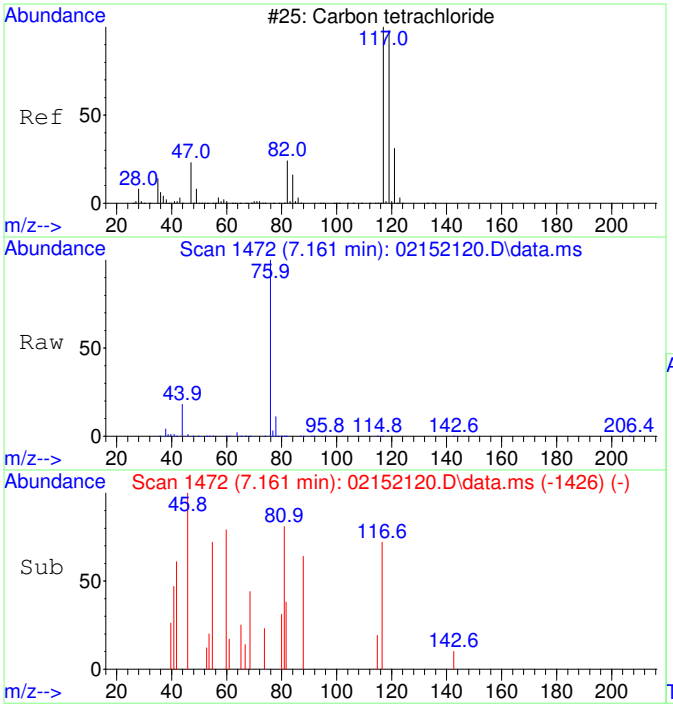


#31
1,1,1-Trichloroethane SCAN
Concen: 794.62 ug/L
RT: 6.845 min Scan# 1446
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 97 Resp: 7468

Ion	Ratio	Lower	Upper
97	100		
99	57.1	43.6	103.6
61	37.7	18.0	78.0

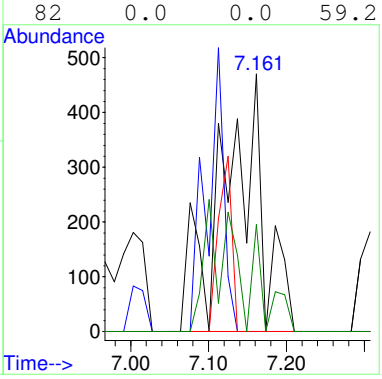


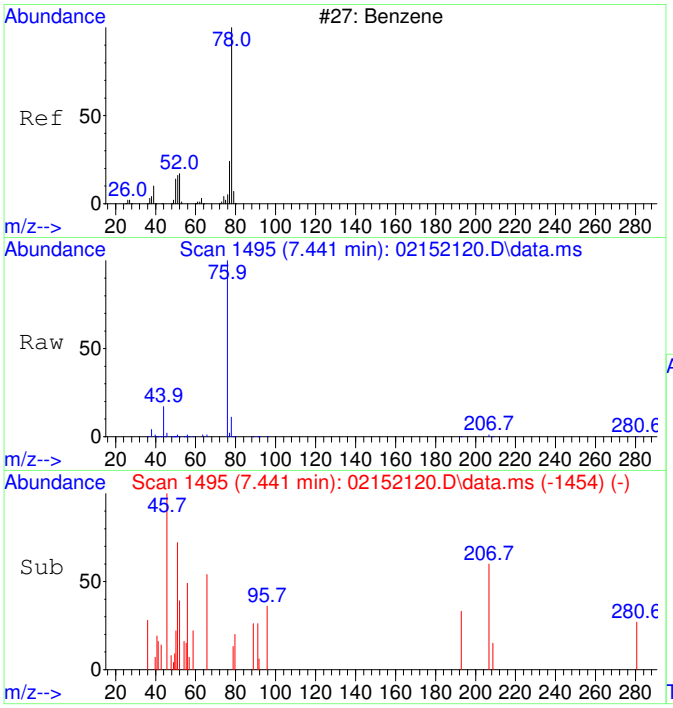


#32
Carbon tetrachloride SCAN
Concen: 226.81 ug/L
RT: 7.161 min Scan# 1472
Delta R.T. 0.061 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion:117 Resp: 1716

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

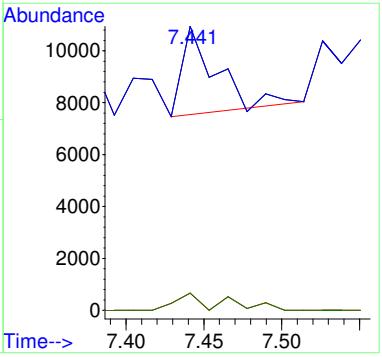


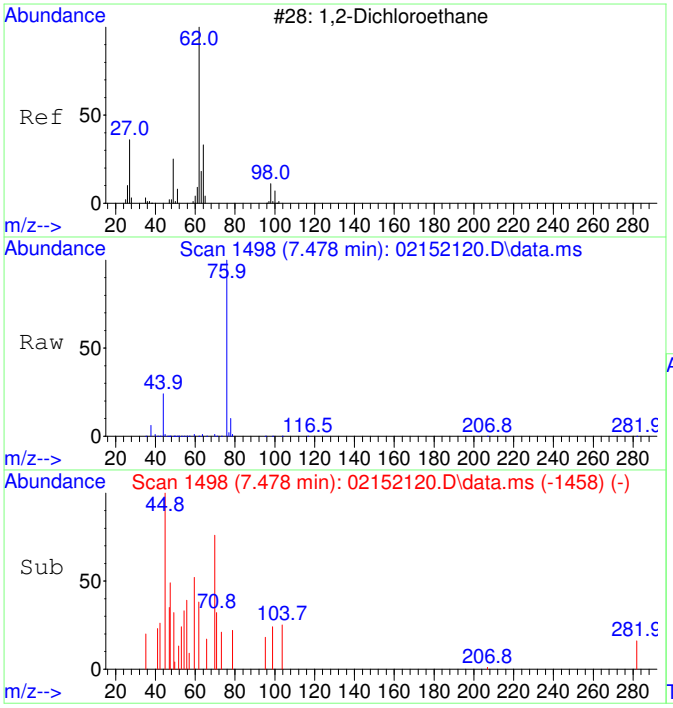


#33
Benzene SCAN
Concen: 202.22 ug/L
RT: 7.441 min Scan# 1495
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 78 Resp: 5216

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	13.1	0.0	47.9
51	13.1	0.0	44.1

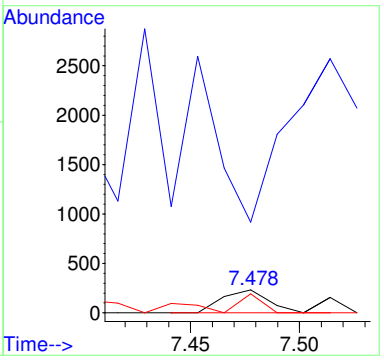


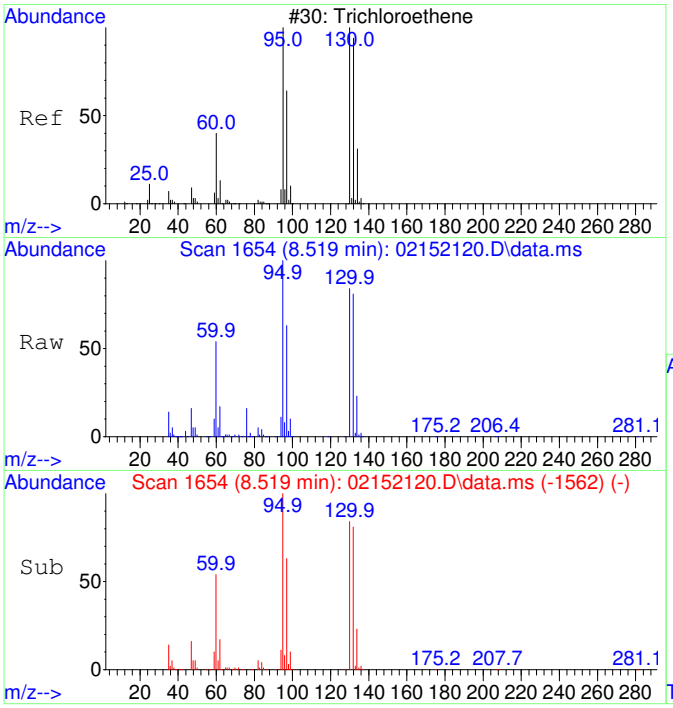


#34
1,2-Dichloroethane SCAN
Concen: 36.33 ug/L
RT: 7.478 min Scan# 1498
Delta R.T. -0.012 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 62 Resp: 342

Ion	Ratio	Lower	Upper
62	100		
64	0.0	5.2	65.2#
49	40.9	3.9	63.9

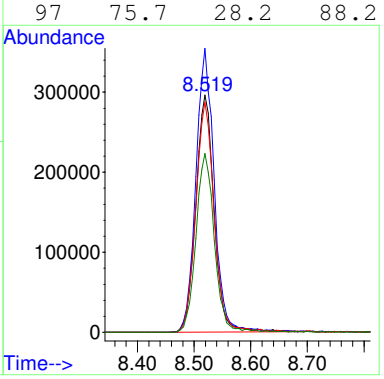


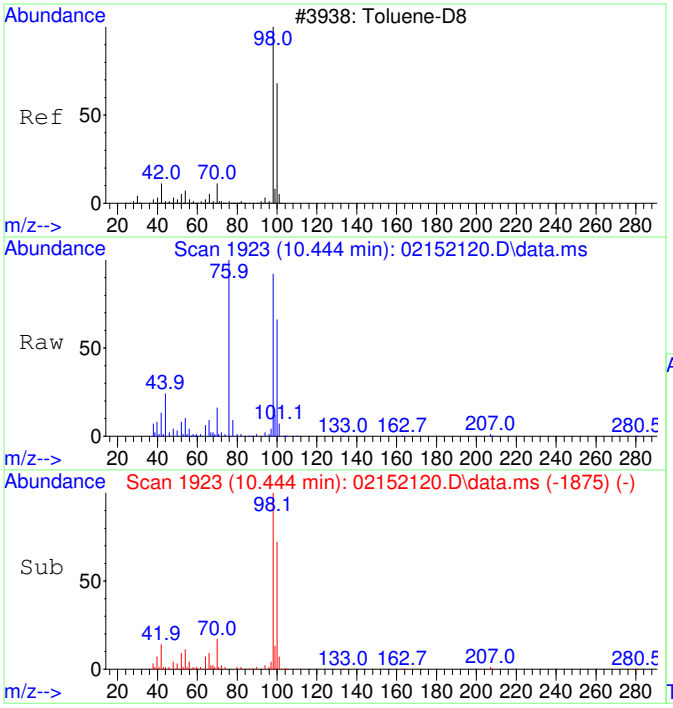


#35
Trichloroethene SCAN
Concen: 117026.29 ug/L
RT: 8.519 min Scan# 1654
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion:130 Resp: 667268

Ion	Ratio	Lower	Upper
130	100		
95	117.9	60.5	120.5
132	96.3	59.6	119.6
97	75.7	28.2	88.2

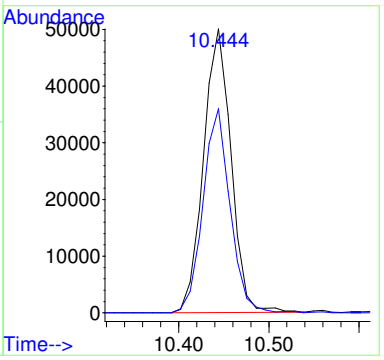


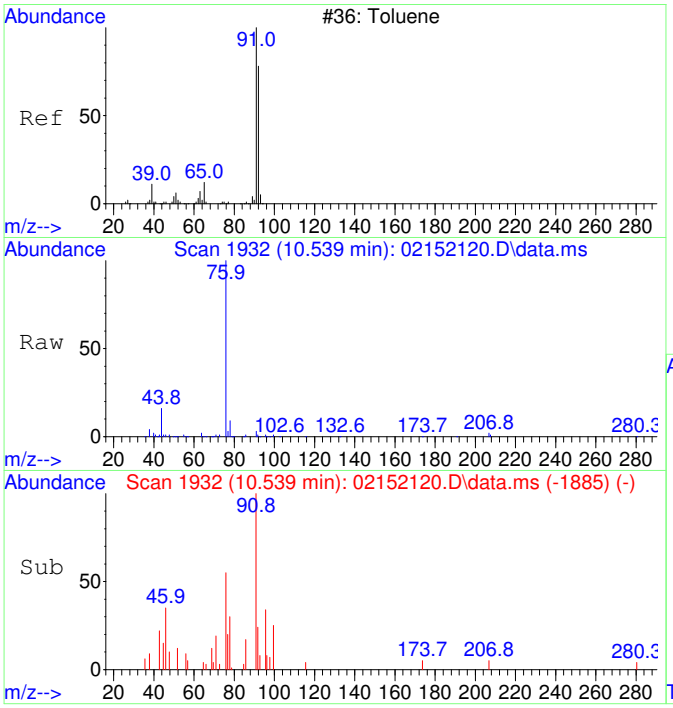


#36
Toluene-d8 SCAN
Concen: 4616.64 ug/L
RT: 10.444 min Scan# 1923
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 98 Resp: 106355

Ion	Ratio	Lower	Upper
98	100		
100	70.6	40.0	100.0

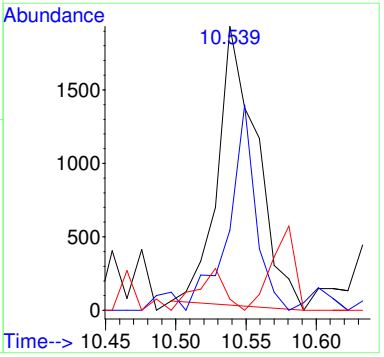


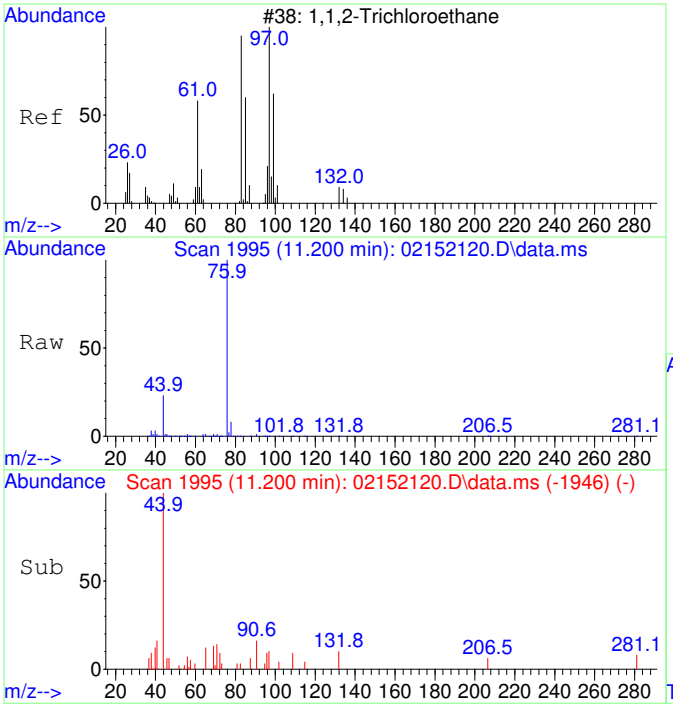


#37
Toluene SCAN
Concen: 111.99 ug/L
RT: 10.539 min Scan# 1932
Delta R.T. -0.010 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 91 Resp: 3698

Ion	Ratio	Lower	Upper
91	100		
92	0.0	28.3	88.3#
65	10.7	0.0	41.0

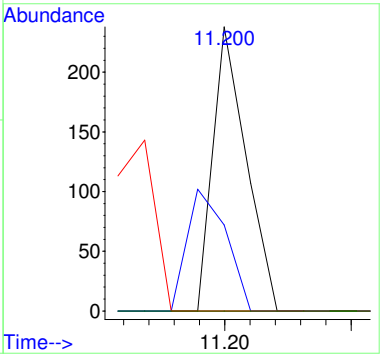


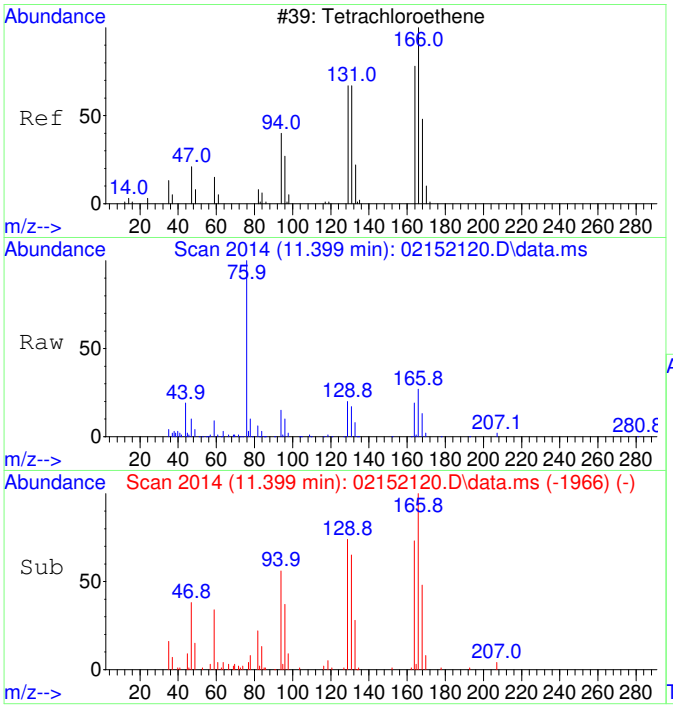


#38
1,1,2-Trichloroethane SCAN
Concen: 33.10 ug/L
RT: 11.200 min Scan# 1995
Delta R.T. 0.011 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 97 Resp: 217

Ion	Ratio	Lower	Upper
97	100		
83	50.7	57.7	117.7#
61	0.0	32.1	92.1#
99	0.0	36.7	96.7#

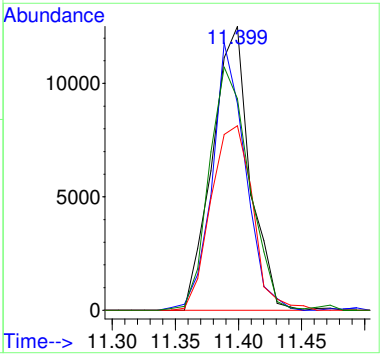


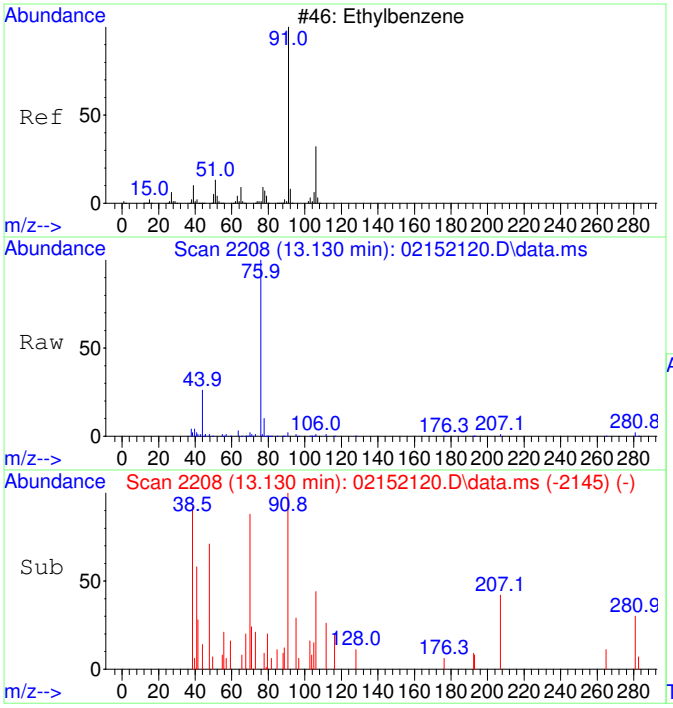


#39
Tetrachloroethene SCAN
Concen: 4035.92 ug/L
RT: 11.399 min Scan# 2014
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion:166 Resp: 25901

Ion	Ratio	Lower	Upper
166	100		
164	83.1	50.9	110.9
131	72.4	38.7	98.7
129	90.1	41.8	101.8

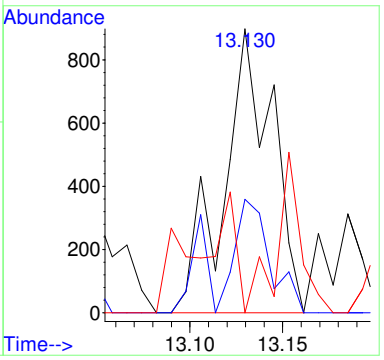


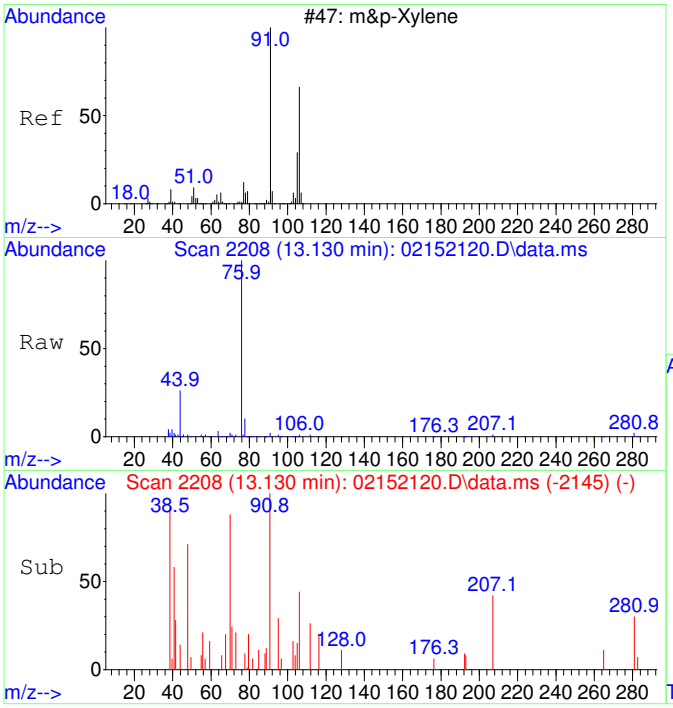


#42
Ethylbenzene SCAN
Concen: 27.07 ug/L
RT: 13.130 min Scan# 2208
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 91 Resp: 1658

Ion	Ratio	Lower	Upper
91	100		
106	29.0	23.1	83.1
51	33.9	0.0	40.1

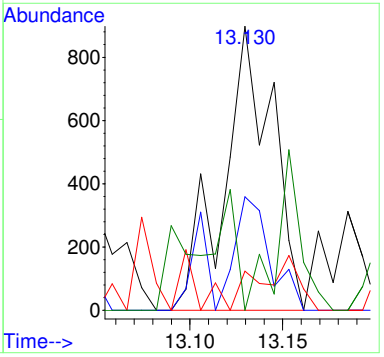




#43
m&p-Xylene SCAN
Concen: 27.07 ug/L
RT: 13.130 min Scan# 2208
Delta R.T. 0.000 min
Lab File: 02152120.D
Acq: 15 Feb 2021 17:51

Tgt Ion: 91 Resp: 1658

Ion	Ratio	Lower	Upper
91	100		
106	29.0	23.1	83.1
105	0.0	0.0	54.7
51	33.9	0.0	40.1



2102006-11RE1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152121.D
Acq On : 15 Feb 2021 18:14
InstName : AG5975C
Operator : TD
Sample : 2102006-11RE1
Misc : RA for low surr
ALS Vial : 21 Sample Multiplier: 1

REPORT

Quant Time: Feb 16 06:18:50 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration

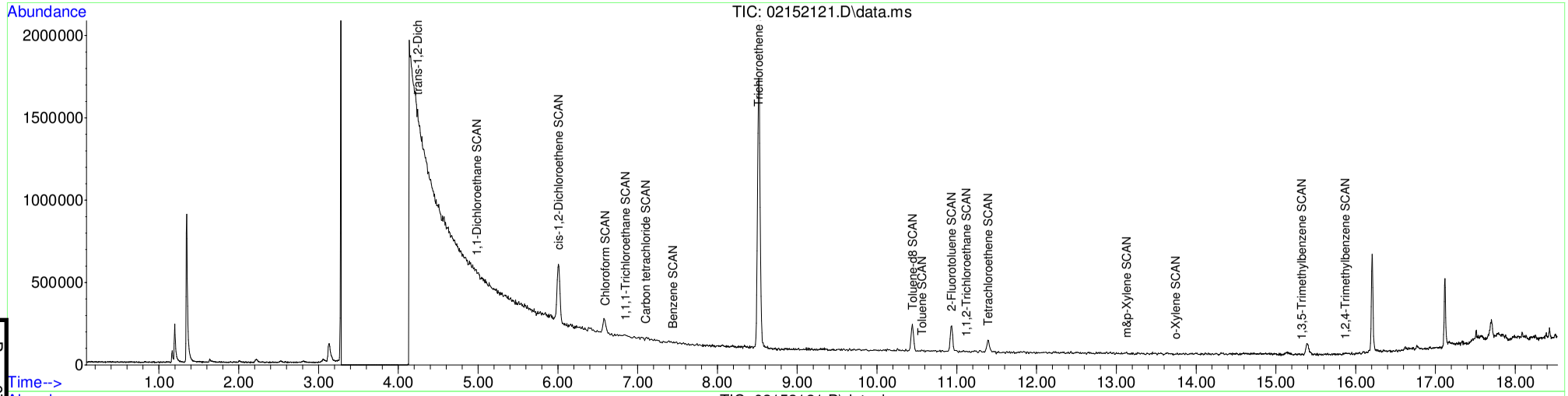
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.928	109	264138	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.435	98	220717	4849.15 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 96.98%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.056	61	23184	1884.38 ug/L	90
3] trans-1,2-Dichloroethene	4.237	61	26213	2016.85 ug/L	98
4] 1,1-Dichloroethane	4.980	63	24636	1573.71 ug/L	100
5] cis-1,2-Dichloroethene	6.001	61	469350	30406.89 ug/L	98
6] Chloroform	6.579	83	146468	8902.61 ug/L	99
7] 1,1,1-Trichloroethane	6.834	97	12215	781.30 ug/L	100
8] Carbon tetrachloride	7.114	117	1946	148.95 ug/L	96
9] Benzene	7.442	78	3513	78.16 ug/L #	34
10] 1,2-Dichloroethane	7.479	62	347	24.19 ug/L #	42
11] Trichloroethene	8.520	130	1247718	104875.37 ug/L **oc**	94
13] Toluene	10.540	91	4287	68.01 ug/L	99
15] Tetrachloroethene	11.390	166	55739	3377.16 ug/L	100
19] m&p-Xylene	13.123	91	2225	35.58 ug/L	90
23] 1,2,4-Trimethylbenzene	15.875	105	3862	48.53 ug/L	91
24] Naphthalene	17.847	128	4451	39.28 ug/L #	68
25) 2-Fluorotoluene SCAN	10.937	109	133261	4686.18 ug/L	96
27) trans-1,2-Dichloroethe...	4.242	61	16268	1713.94 ug/L	80
28) 1,1-Dichloroethane SCAN	4.978	63	15155	1289.70 ug/L	88
29) cis-1,2-Dichloroethene...	6.007	61	284685	26149.32 ug/L #	84
30) Chloroform SCAN	6.590	83	91331	9166.20 ug/L	96
31) 1,1,1-Trichloroethane ...	6.845	97	5886	574.54 ug/L	89
32) Carbon tetrachloride SCAN	7.100	117	978	118.58 ug/L #	15
33) Benzene SCAN	7.441	78	21854	777.26 ug/L	92
35) Trichloroethene SCAN	8.519	130	603859	97154.05 ug/L	80
36) Toluene-d8 SCAN	10.444	98	122241	4867.74 ug/L	99
37) Toluene SCAN	10.560	91	2514	69.84 ug/L #	33
38) 1,1,2-Trichloroethane ...	11.116	97	706	98.78 ug/L #	26
39) Tetrachloroethene SCAN	11.389	166	25392	3629.66 ug/L	93
43) m&p-Xylene SCAN	13.129	91	2231	33.42 ug/L #	61
44) o-Xylene SCAN	13.741	91	1474	40.61 ug/L	65
46) 1,3,5-Trimethylbenzene...	15.317	105	1216	31.80 ug/L #	50
47) 1,2,4-Trimethylbenzene...	15.863	105	953	25.10 ug/L #	23

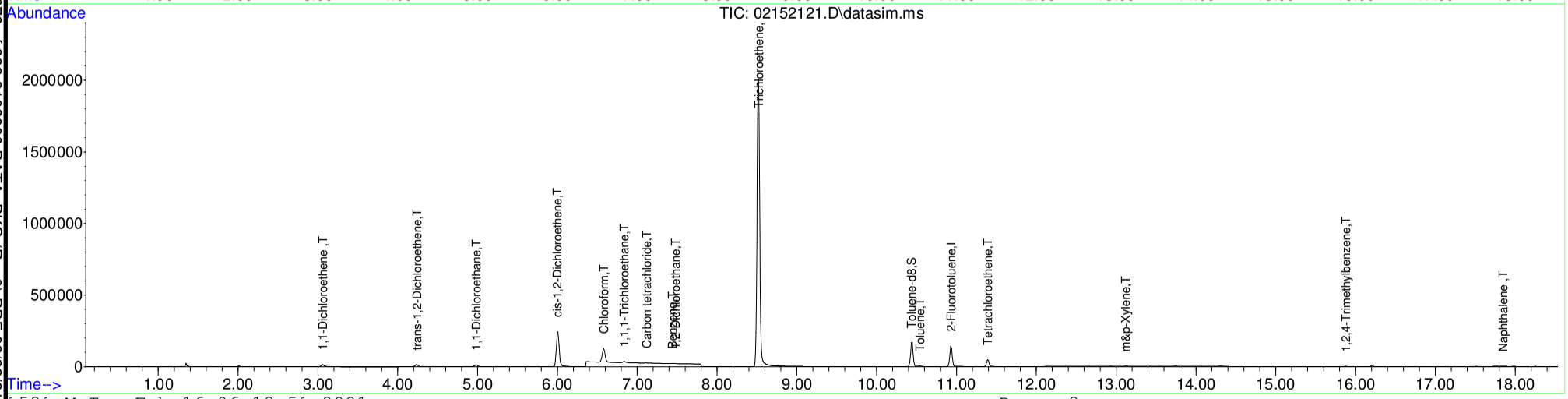
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152121.D
Acq On : 15 Feb 2021 18:14
InstName : AG5975C
Operator : TD
Sample : 2102006-11RE1
Misc : RA for low surr
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 16 06:18:50 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration





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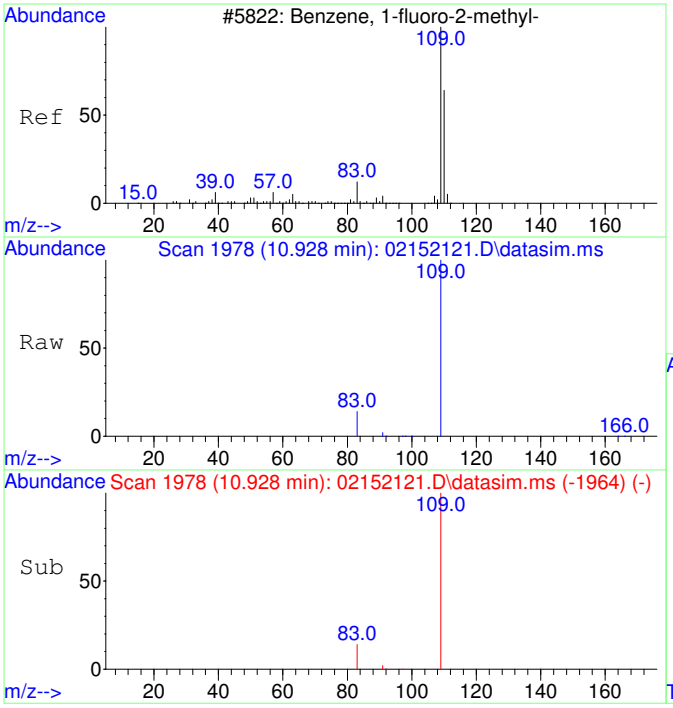
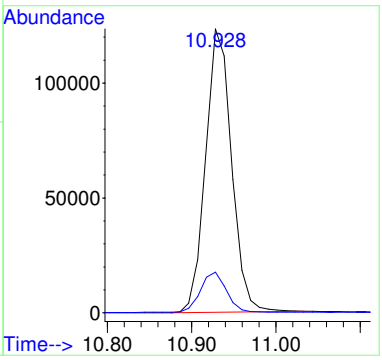
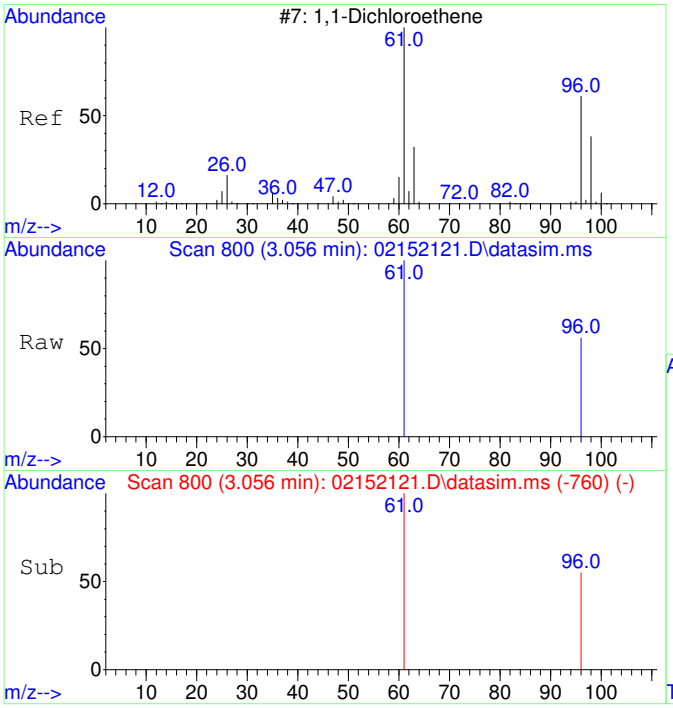


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.928 min Scan# 1978
Delta R.T. 0.000 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion:109 Resp: 264138

Ion	Ratio	Lower	Upper
109	100		
83	14.1	0.0	42.3

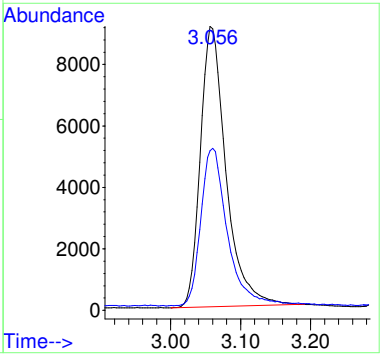


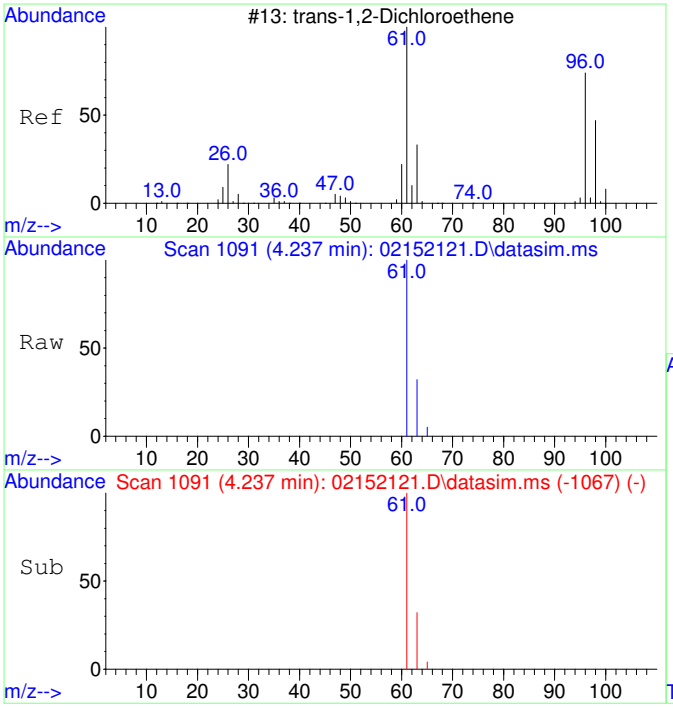


#2
1,1-Dichloroethene
Concen: 1884.38 ug/L
RT: 3.056 min Scan# 800
Delta R.T. 0.000 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion: 61 Resp: 23184

Ion	Ratio	Lower	Upper
61	100		
96	58.9	37.2	97.2

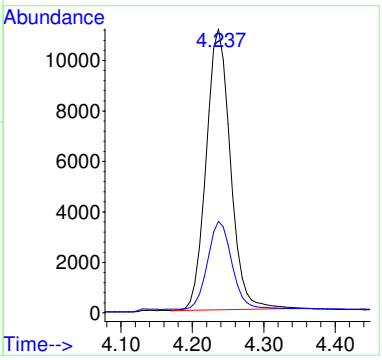


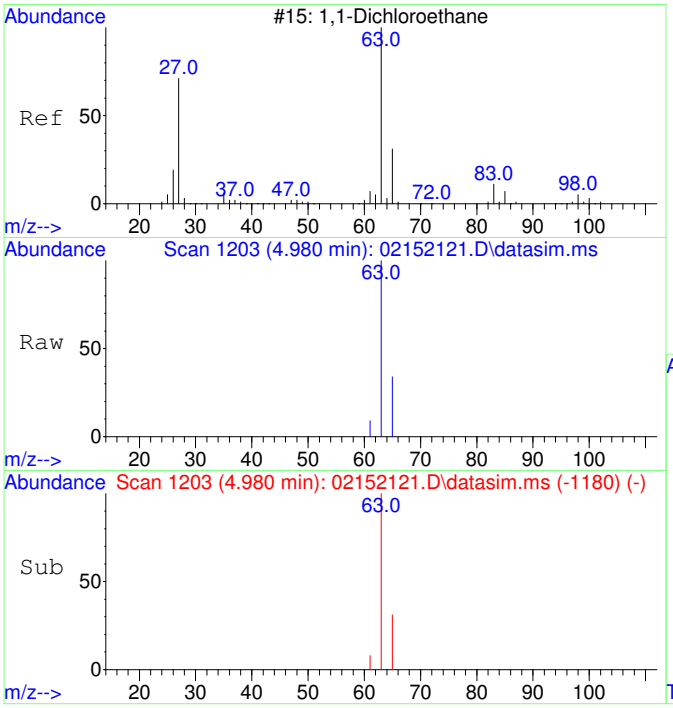


#3
trans-1,2-Dichloroethene
Concen: 2016.85 ug/L
RT: 4.237 min Scan# 1091
Delta R.T. 0.007 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion: 61 Resp: 26213

Ion	Ratio	Lower	Upper
61	100		
63	31.2	2.4	62.4

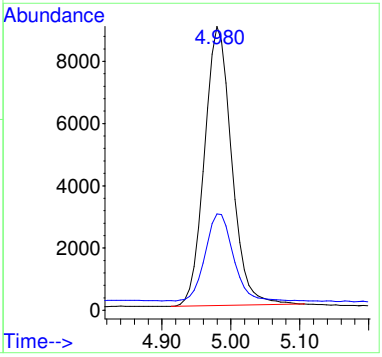


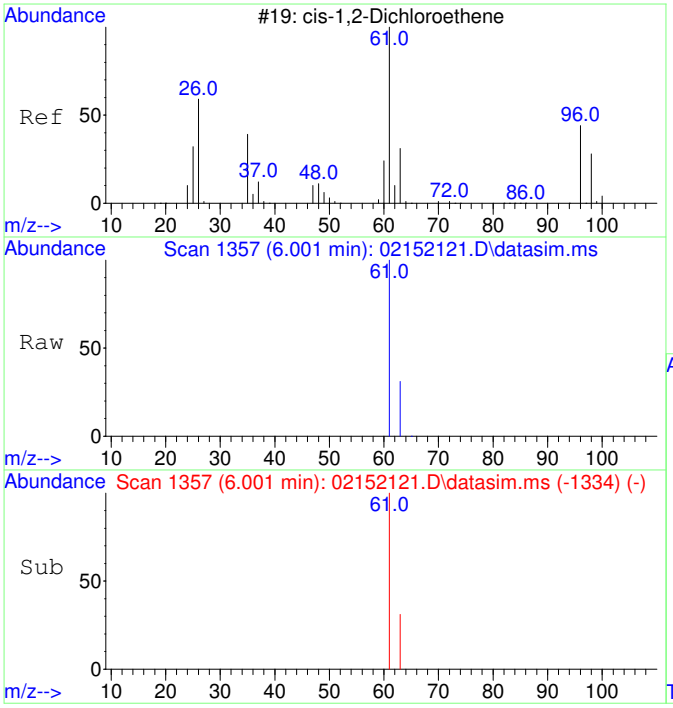


#4
1,1-Dichloroethane
Concen: 1573.71 ug/L
RT: 4.980 min Scan# 1203
Delta R.T. -0.000 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion: 63 Resp: 24636

Ion	Ratio	Lower	Upper
63	100		
65	31.7	1.8	61.8

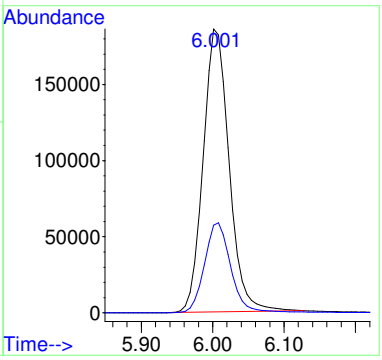


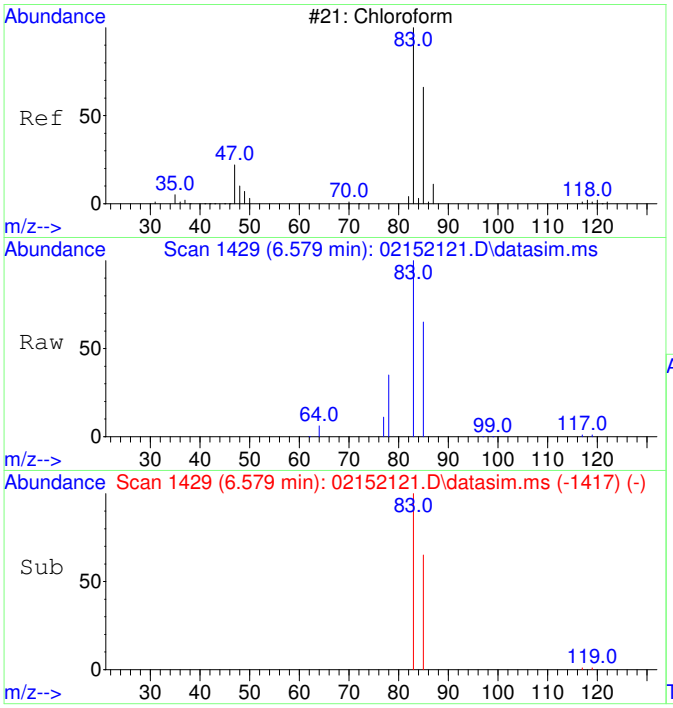


#5
cis-1,2-Dichloroethene
Concen: 30406.89 ug/L
RT: 6.001 min Scan# 1357
Delta R.T. -0.000 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion: 61 Resp: 469350

Ion	Ratio	Lower	Upper
61	100		
63	31.5	2.5	62.5

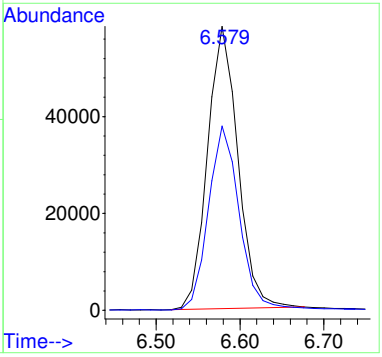


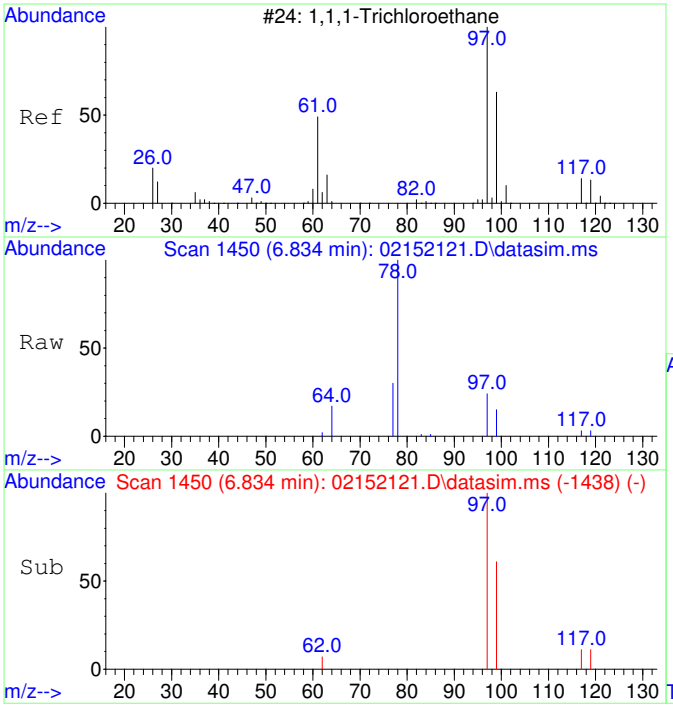


#6
Chloroform
Concen: 8902.61 ug/L
RT: 6.579 min Scan# 1429
Delta R.T. 0.000 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion: 83 Resp: 146468

Ion	Ratio	Lower	Upper
83	100		
85	66.1	35.1	95.1

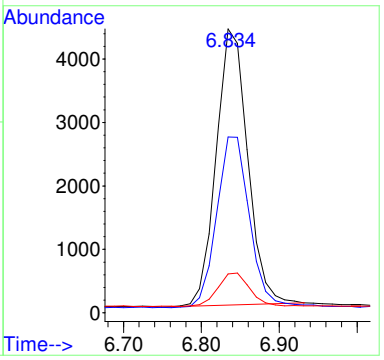


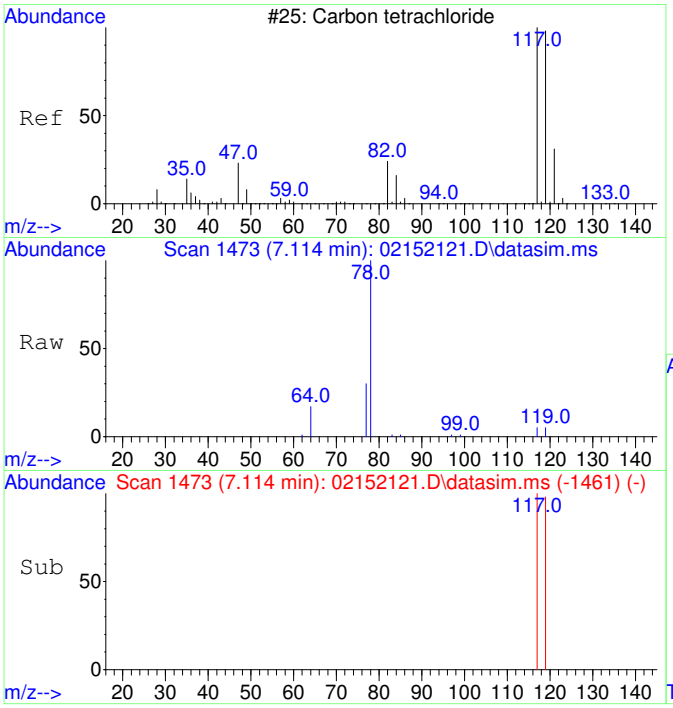


#7
1,1,1-Trichloroethane
Concen: 781.30 ug/L
RT: 6.834 min Scan# 1450
Delta R.T. -0.000 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion: 97 Resp: 12215

Ion	Ratio	Lower	Upper
97	100		
99	64.7	34.6	94.6
117	12.7	0.0	43.2

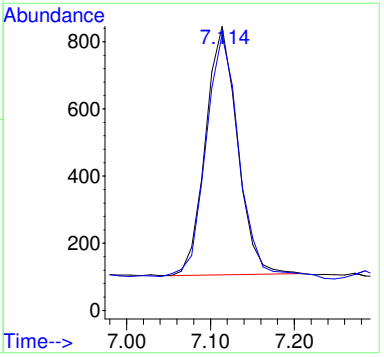


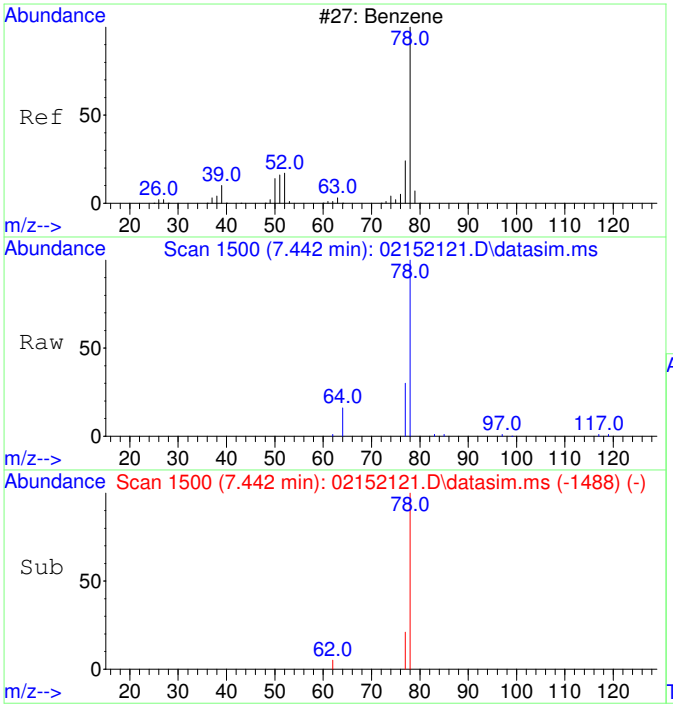


#8
Carbon tetrachloride
Concen: 148.95 ug/L
RT: 7.114 min Scan# 1473
Delta R.T. -0.000 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion:117 Resp: 1946

Ion	Ratio	Lower	Upper
117	100		
119	100.5	66.4	126.4

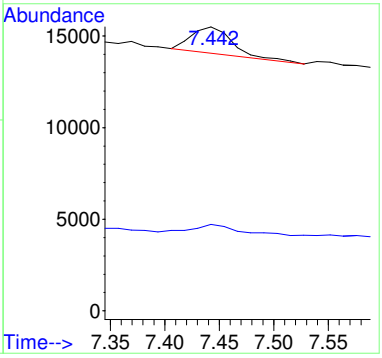


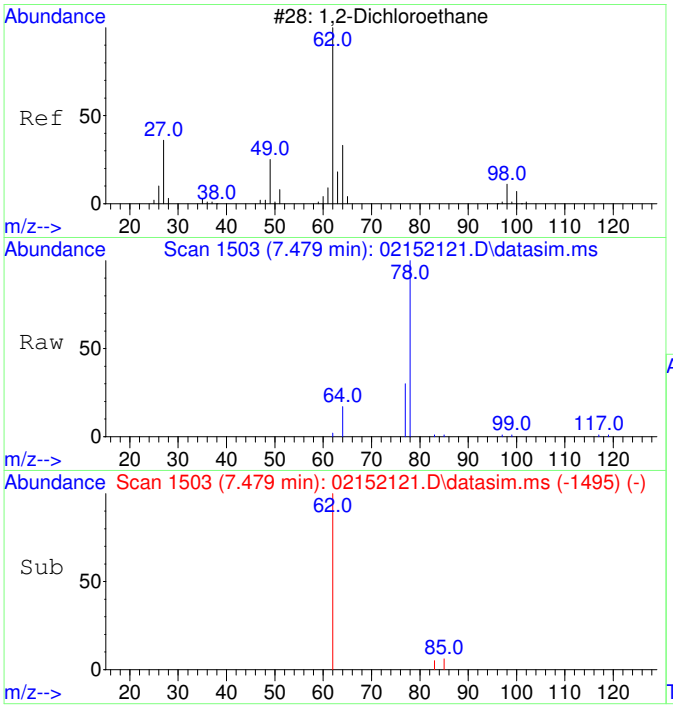


#9
Benzene
Concen: 78.16 ug/L
RT: 7.442 min Scan# 1500
Delta R.T. -0.000 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion: 78 Resp: 3513

Ion	Ratio	Lower	Upper
78	100		
77	55.4	0.0	53.2#

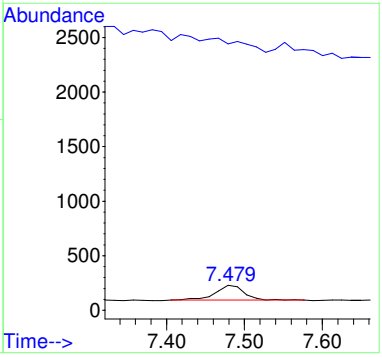


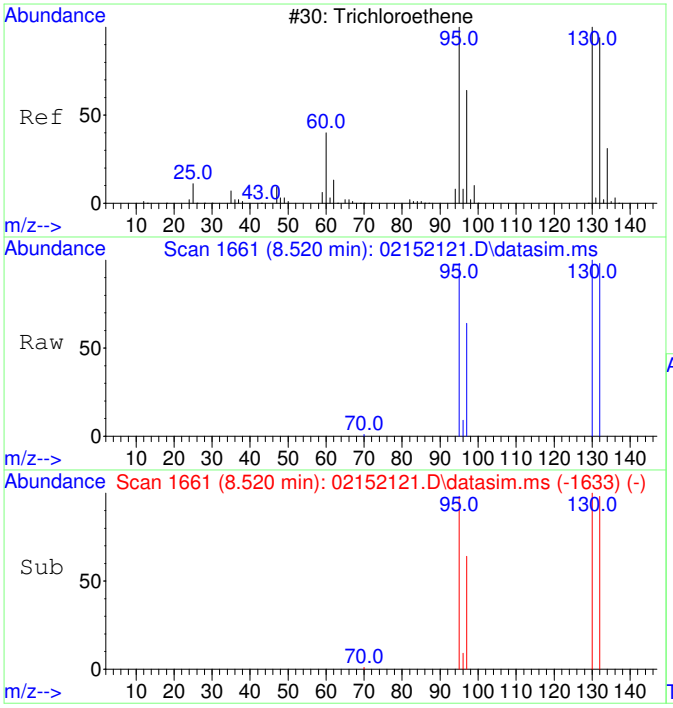


#10
1,2-Dichloroethane
Concen: 24.19 ug/L
RT: 7.479 min Scan# 1503
Delta R.T. -0.000 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion: 62 Resp: 347

Ion	Ratio	Lower	Upper
62	100		
64	0.0	2.3	62.3#

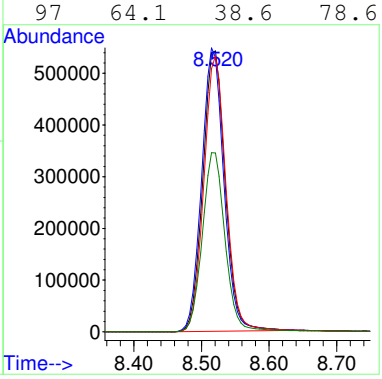


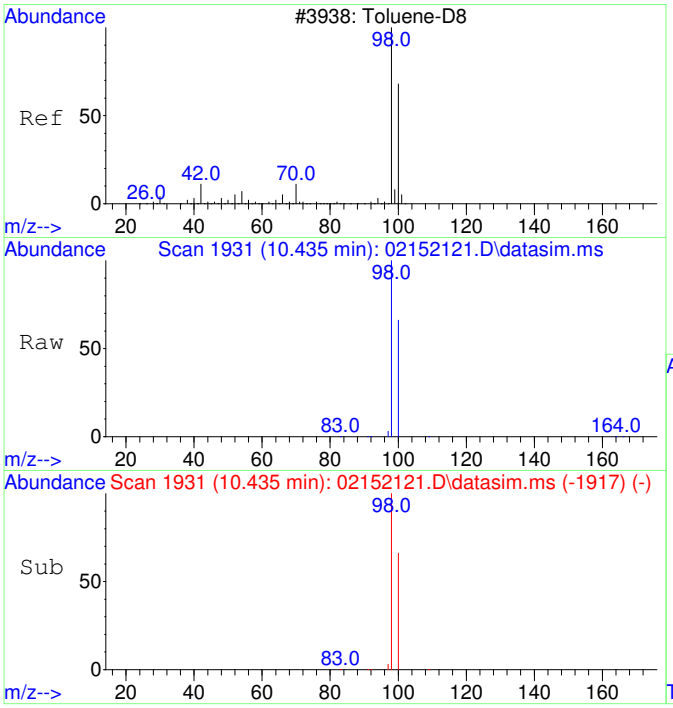


#11
Trichloroethene
Concen: 104875.37 ug/L
RT: 8.520 min Scan# 1661
Delta R.T. -0.000 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion:130 Resp: 1247718

Ion	Ratio	Lower	Upper
130	100		
95	100.3	60.7	120.7
132	96.7	76.0	116.0
97	64.1	38.6	78.6

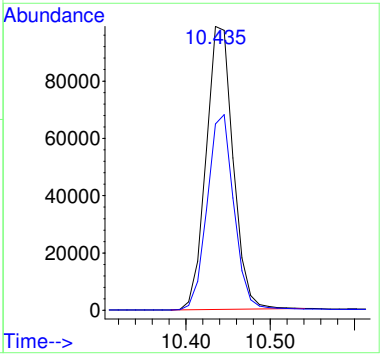


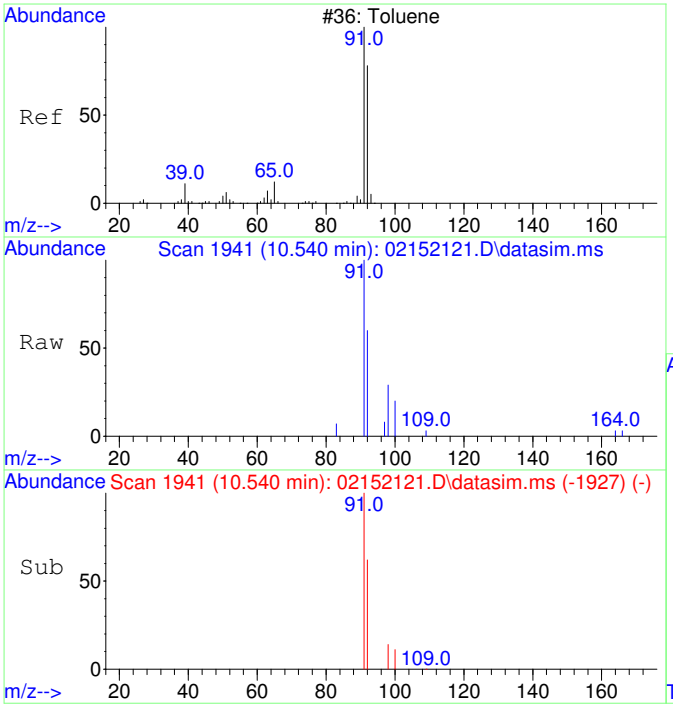


#12
Toluene-d8
Concen: 4849.15 ug/L
RT: 10.435 min Scan# 1931
Delta R.T. -0.000 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion: 98 Resp: 220717

Ion	Ratio	Lower	Upper
98	100		
100	67.7	37.1	97.1

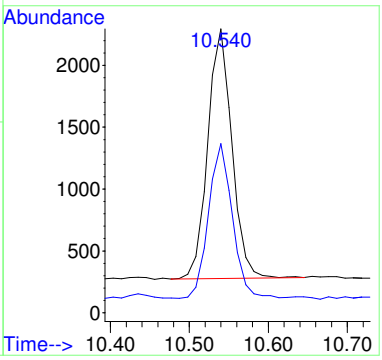


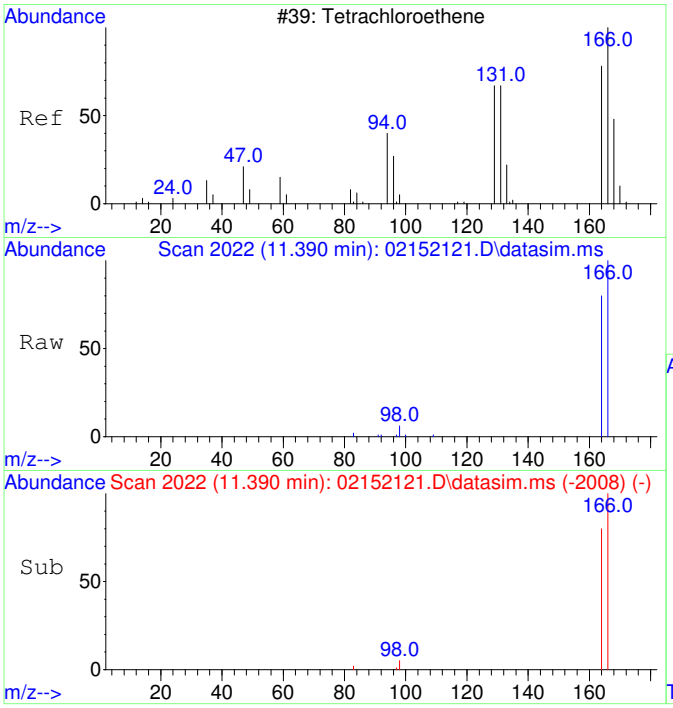


#13
Toluene
Concen: 68.01 ug/L
RT: 10.540 min Scan# 1941
Delta R.T. -0.000 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion: 91 Resp: 4287

Ion	Ratio	Lower	Upper
91	100		
92	60.7	29.9	89.9

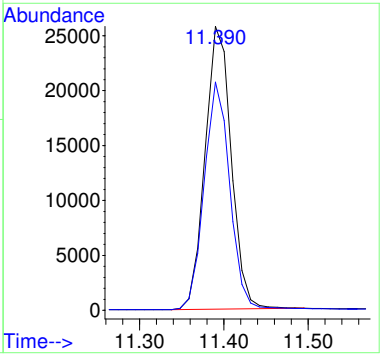


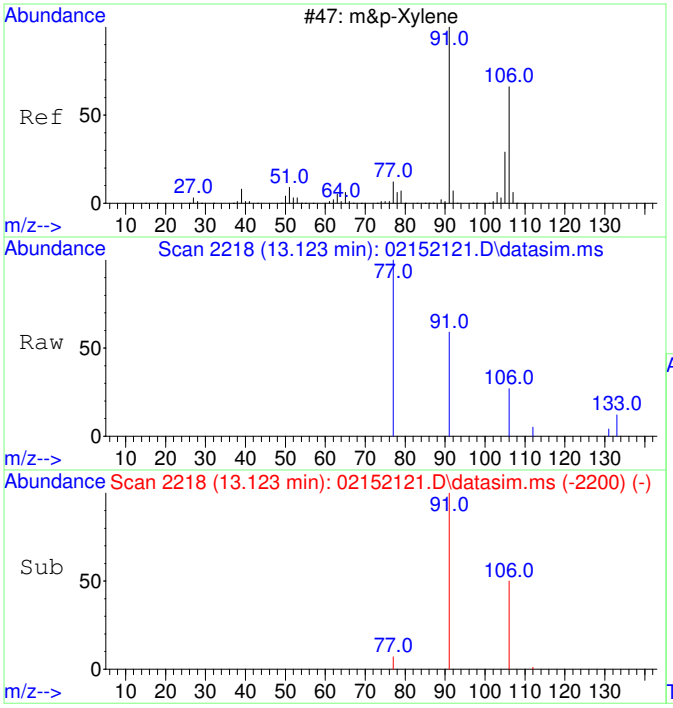


#15
Tetrachloroethene
Concen: 3377.16 ug/L
RT: 11.390 min Scan# 2022
Delta R.T. 0.000 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion:166 Resp: 55739

Ion	Ratio	Lower	Upper
166	100		
164	78.2	47.8	107.8

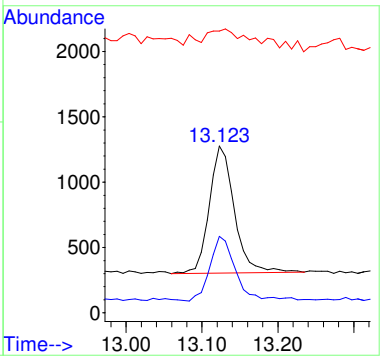


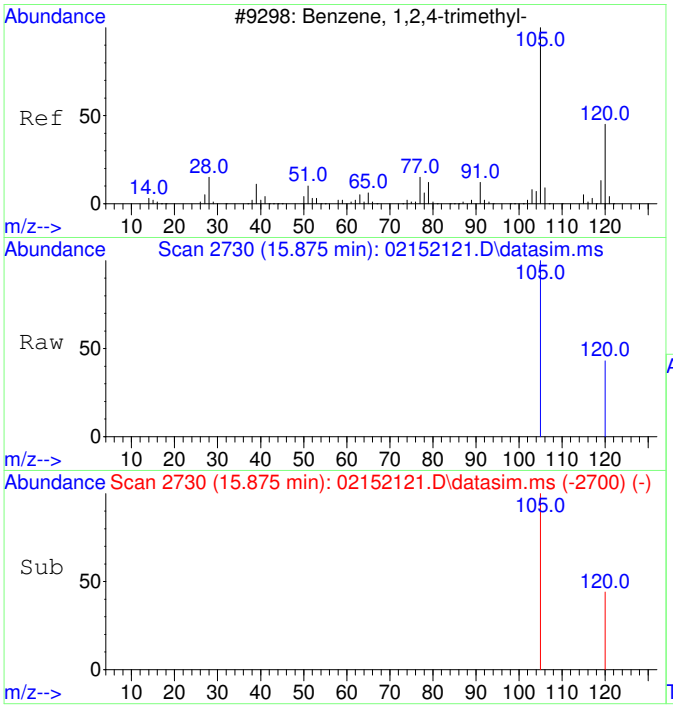


#19
m&p-Xylene
Concen: 35.58 ug/L
RT: 13.123 min Scan# 2218
Delta R.T. -0.008 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion: 91 Resp: 2225

Ion	Ratio	Lower	Upper
91	100		
106	49.3	22.2	82.2
77	25.7	0.0	42.4

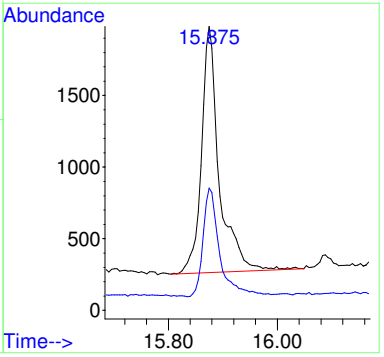


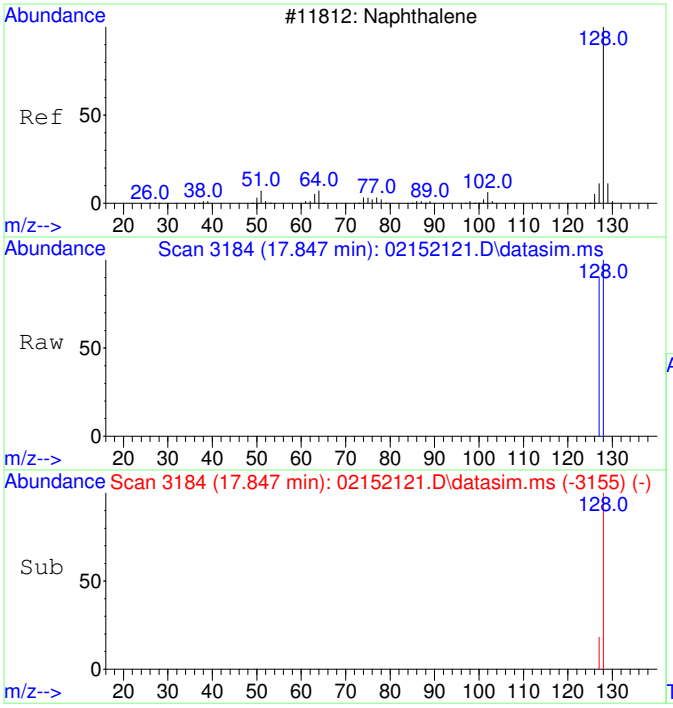


#23
1,2,4-Trimethylbenzene
Concen: 48.53 ug/L
RT: 15.875 min Scan# 2730
Delta R.T. -0.000 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion:105 Resp: 3862

Ion	Ratio	Lower	Upper
105	100		
120	41.3	17.2	77.2

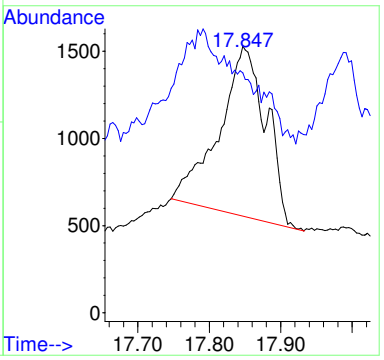


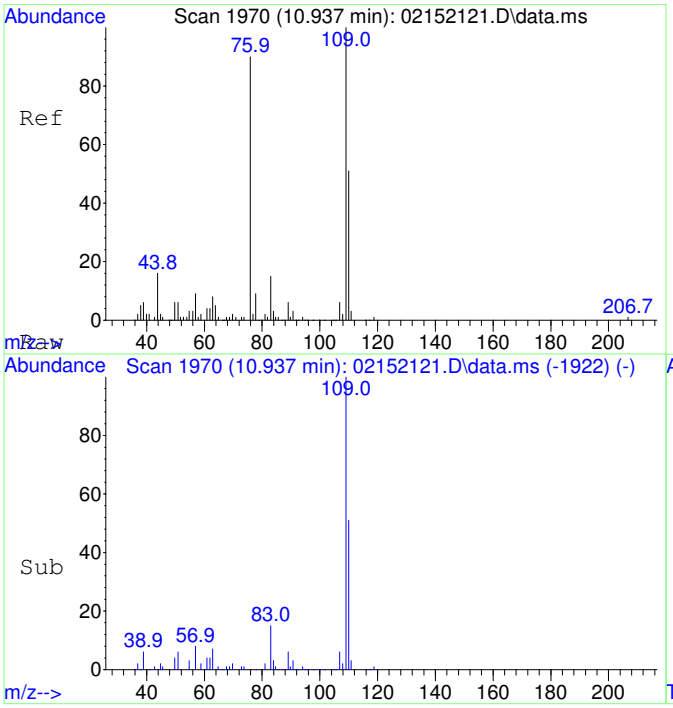


#24
Naphthalene
Concen: 39.28 ug/L
RT: 17.847 min Scan# 3184
Delta R.T. -0.041 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion:128 Resp: 4451

Ion	Ratio	Lower	Upper
128	100		
127	0.0	0.0	42.5

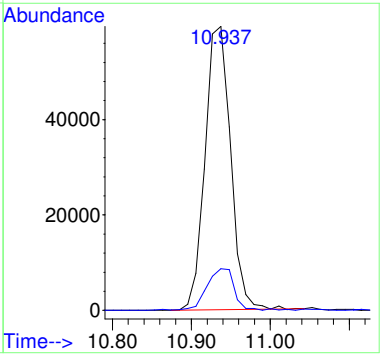


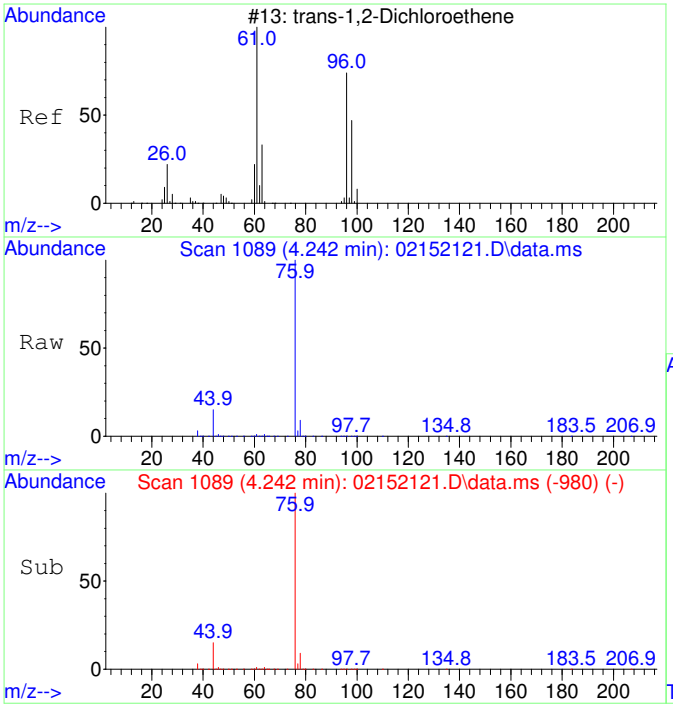


#25
2-Fluorotoluene SCAN
Concen: 4686.18 ug/L
RT: 10.937 min Scan# 1970
Delta R.T. -0.000 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion:109 Resp: 133261

Ion	Ratio	Lower	Upper
109	100		
83	15.4	0.0	43.8

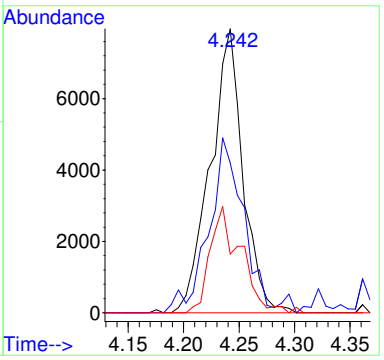


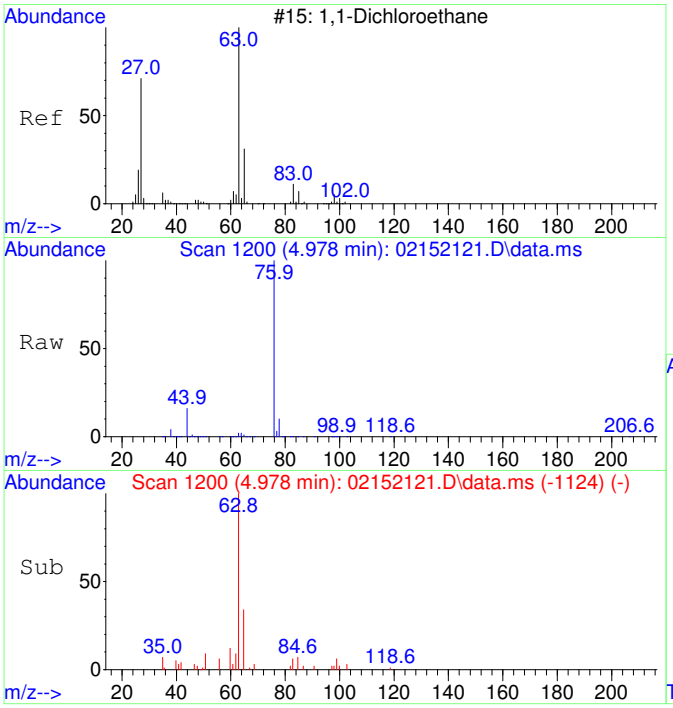


#27
trans-1,2-Dichloroethene SCAN
Concen: 1713.94 ug/L
RT: 4.242 min Scan# 1089
Delta R.T. 0.013 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion: 61 Resp: 16268

Ion	Ratio	Lower	Upper
61	100		
96	62.3	49.0	109.0
98	35.4	20.5	80.5

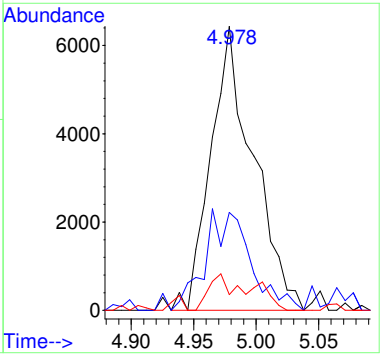


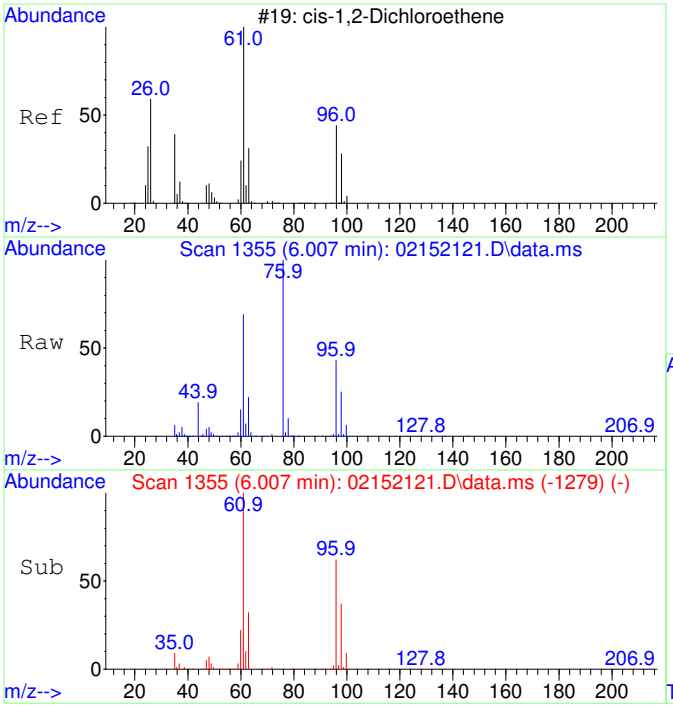


#28
1,1-Dichloroethane SCAN
Concen: 1289.70 ug/L
RT: 4.978 min Scan# 1200
Delta R.T. 0.007 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion: 63 Resp: 15155

Ion	Ratio	Lower	Upper
63	100		
65	38.7	1.3	61.3
83	12.3	0.0	45.9

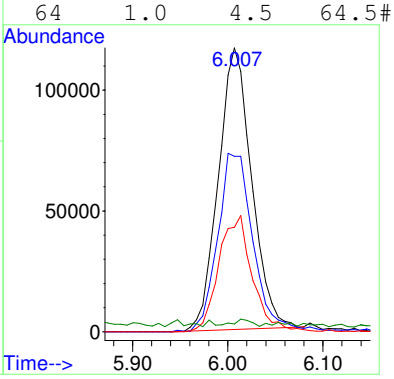


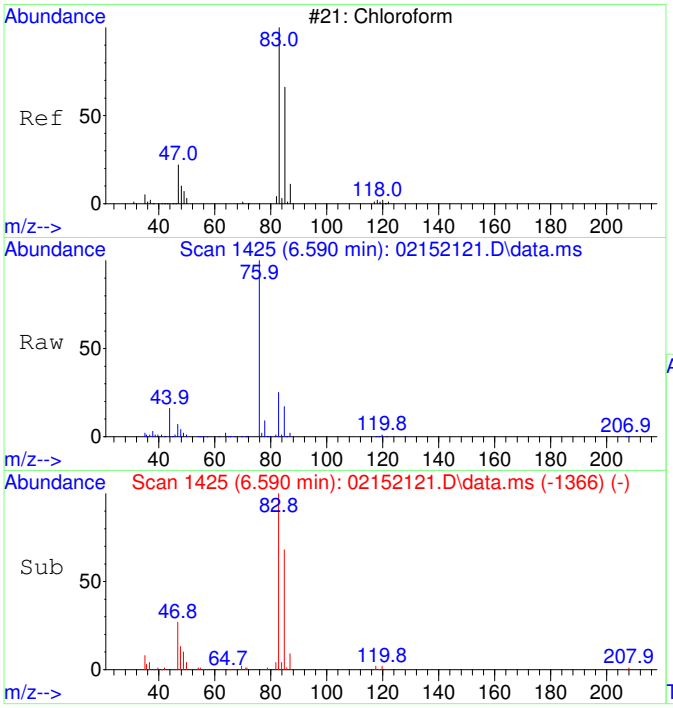


#29
cis-1,2-Dichloroethene SCAN
Concen: 26149.32 ug/L
RT: 6.007 min Scan# 1355
Delta R.T. 0.007 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion: 61 Resp: 284685

Ion	Ratio	Lower	Upper
61	100		
96	66.7	39.9	99.9
98	41.1	13.5	73.5
64	1.0	4.5	64.5#

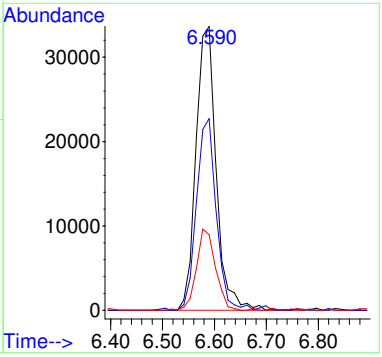


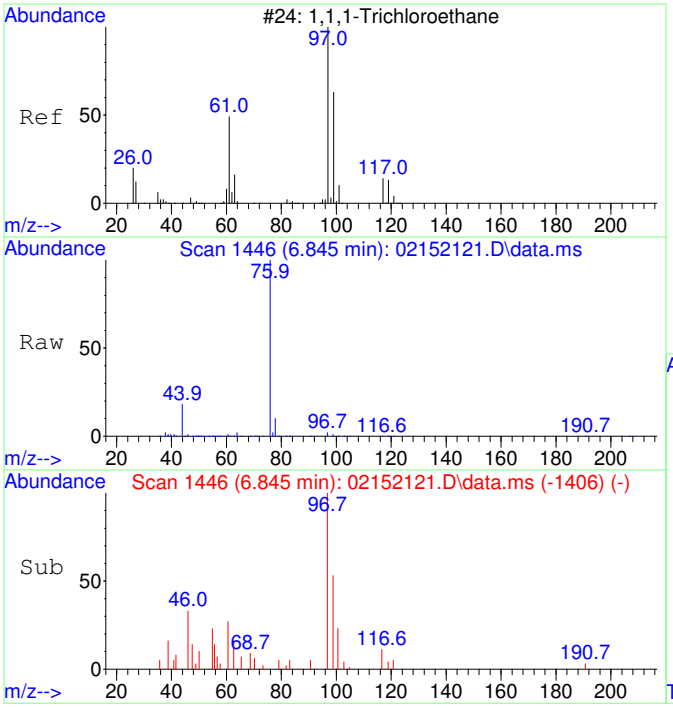


#30
Chloroform SCAN
Concen: 9166.20 ug/L
RT: 6.590 min Scan# 1425
Delta R.T. 0.012 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion: 83 Resp: 91331

Ion	Ratio	Lower	Upper
83	100		
85	66.5	34.6	94.6
47	26.9	0.0	53.4

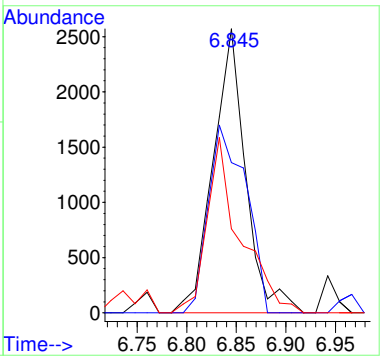


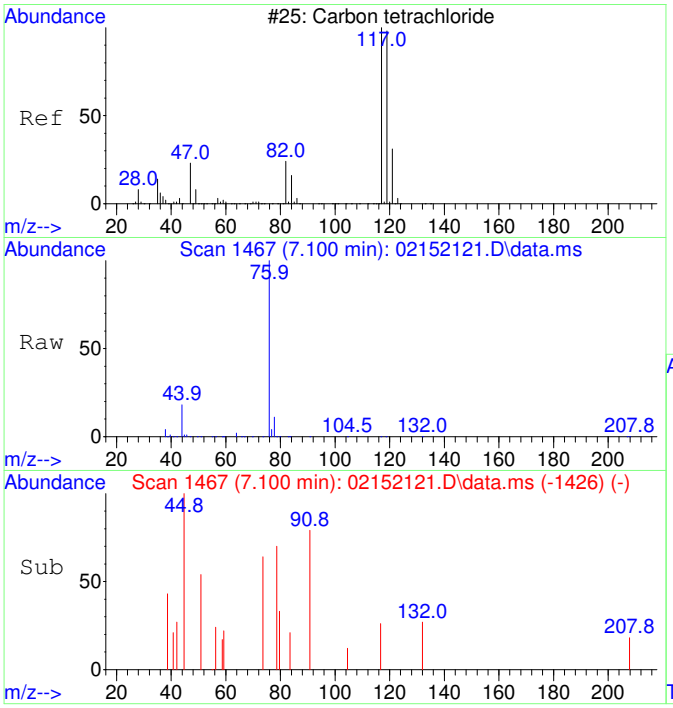


#31
1,1,1-Trichloroethane SCAN
Concen: 574.54 ug/L
RT: 6.845 min Scan# 1446
Delta R.T. -0.000 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion: 97 Resp: 5886

Ion	Ratio	Lower	Upper
97	100		
99	76.5	43.6	103.6
61	62.8	18.0	78.0

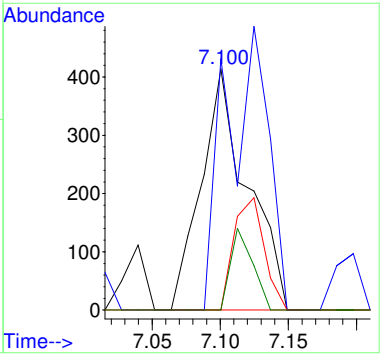


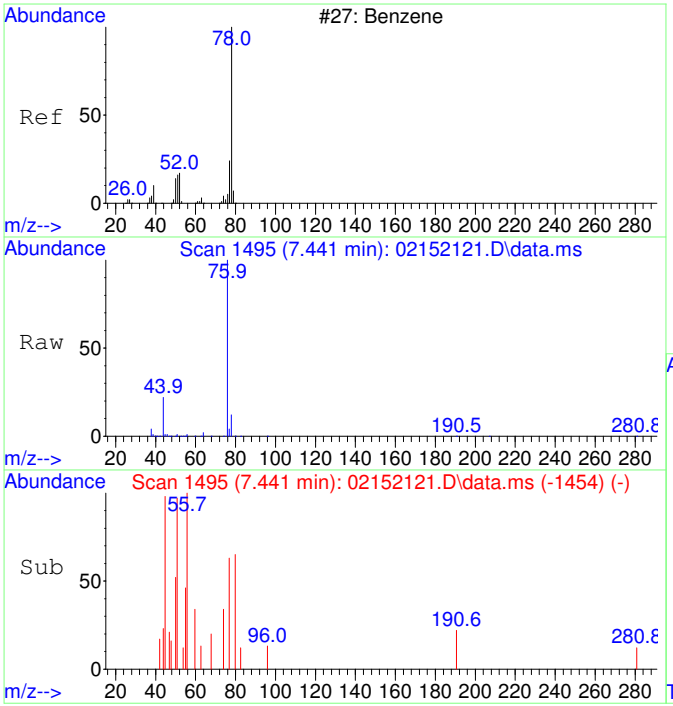


#32
Carbon tetrachloride SCAN
Concen: 118.58 ug/L
RT: 7.100 min Scan# 1467
Delta R.T. -0.000 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion:117 Resp: 978

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

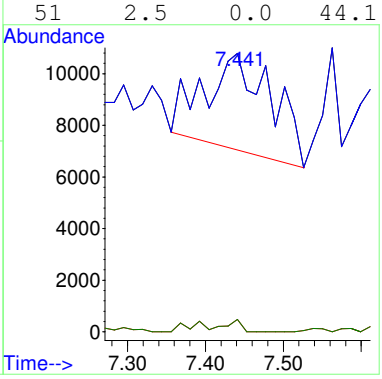


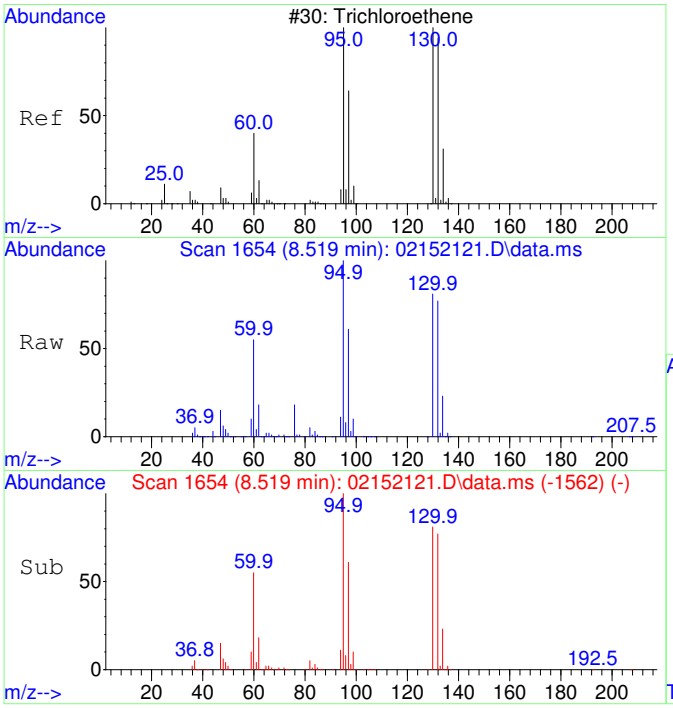


#33
Benzene SCAN
Concen: 777.26 ug/L
RT: 7.441 min Scan# 1495
Delta R.T. -0.000 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion: 78 Resp: 21854

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	2.5	0.0	47.9
51	2.5	0.0	44.1

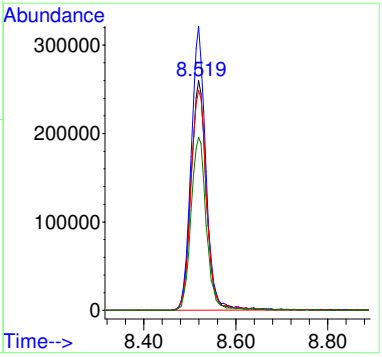


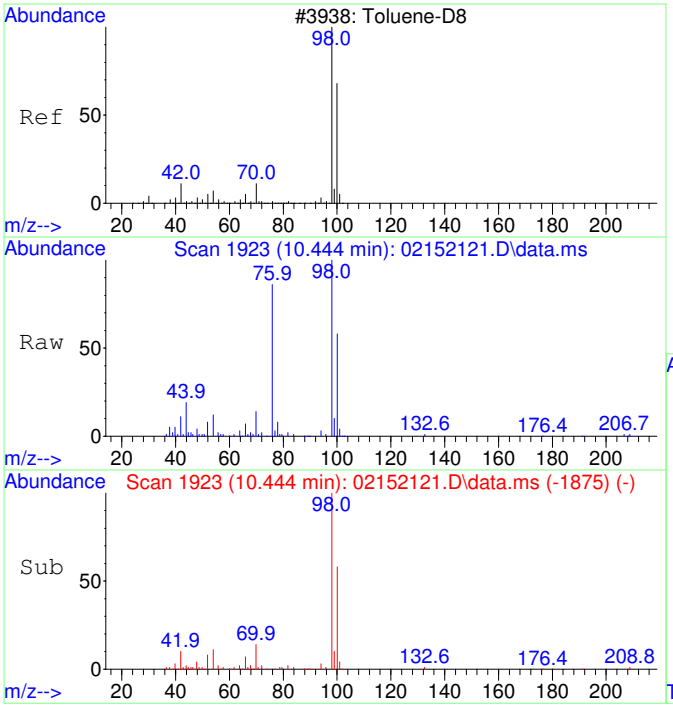


#35
Trichloroethene SCAN
Concen: 97154.05 ug/L
RT: 8.519 min Scan# 1654
Delta R.T. -0.000 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion:130 Resp: 603859

Ion	Ratio	Lower	Upper
130	100		
95	118.3	60.5	120.5
132	97.5	59.6	119.6
97	75.0	28.2	88.2

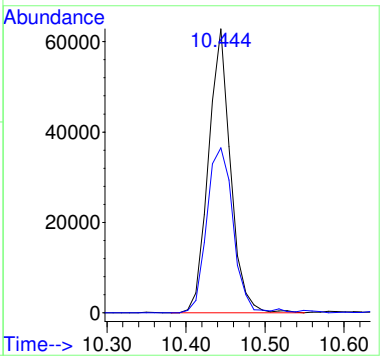


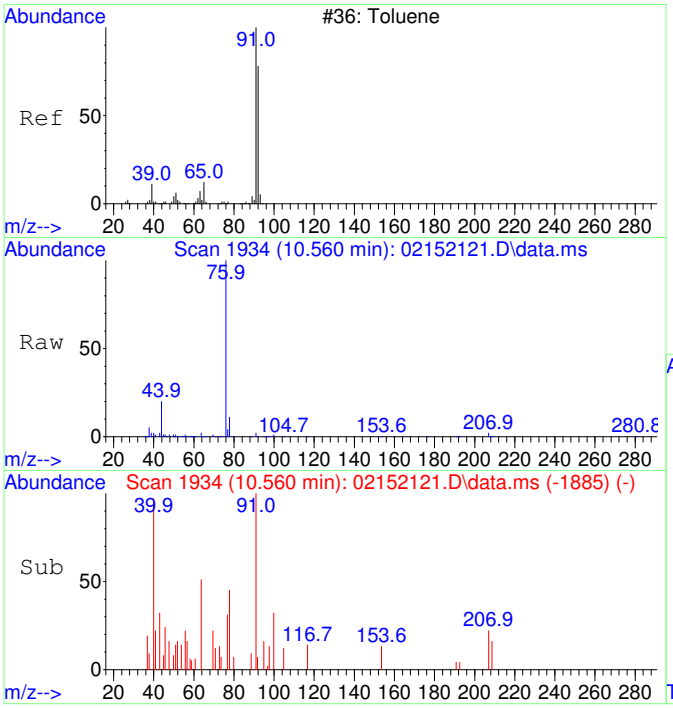


#36
Toluene-d8 SCAN
Concen: 4867.74 ug/L
RT: 10.444 min Scan# 1923
Delta R.T. -0.000 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion: 98 Resp: 122241

Ion	Ratio	Lower	Upper
98	100		
100	68.9	40.0	100.0

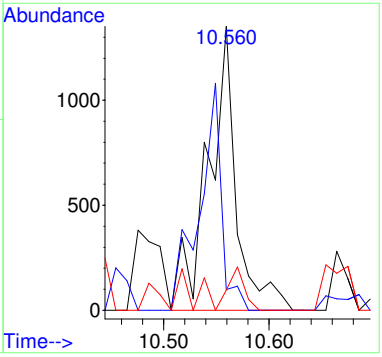


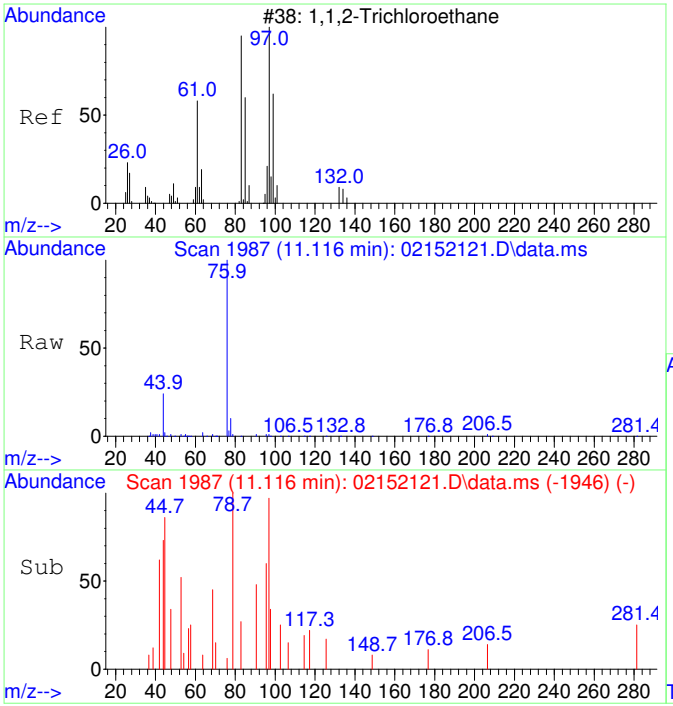


#37
Toluene SCAN
Concen: 69.84 ug/L
RT: 10.560 min Scan# 1934
Delta R.T. 0.010 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion: 91 Resp: 2514

Ion	Ratio	Lower	Upper
91	100		
92	0.0	28.3	88.3#
65	8.9	0.0	41.0

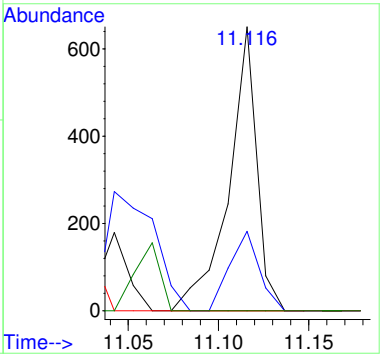


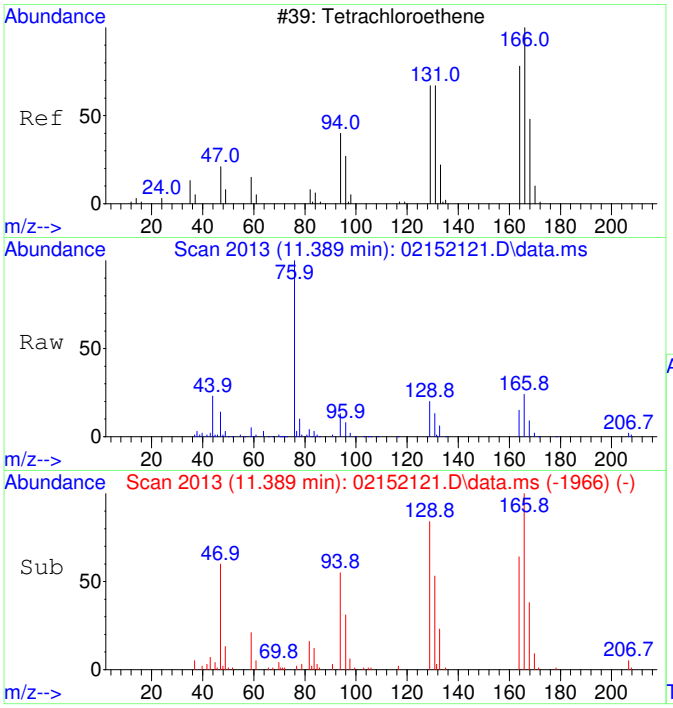


#38
1,1,2-Trichloroethane SCAN
Concen: 98.78 ug/L
RT: 11.116 min Scan# 1987
Delta R.T. -0.073 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion: 97 Resp: 706

Ion	Ratio	Lower	Upper
97	100		
83	29.6	57.7	117.7#
61	0.0	32.1	92.1#
99	0.0	36.7	96.7#

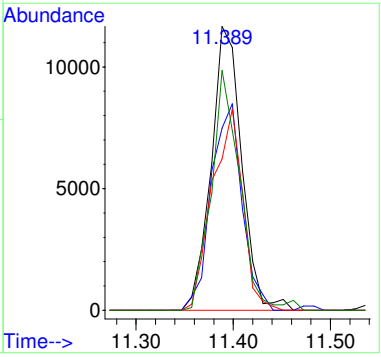


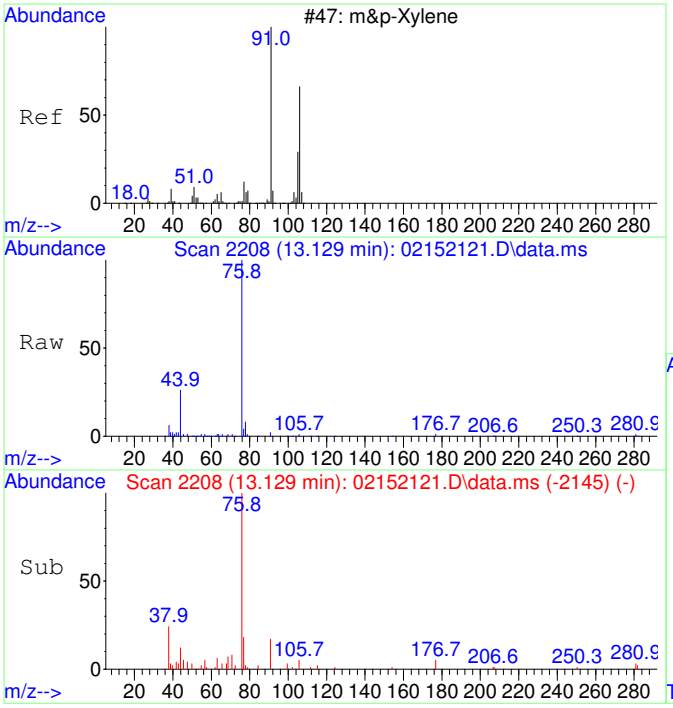


#39
Tetrachloroethene SCAN
Concen: 3629.66 ug/L
RT: 11.389 min Scan# 2013
Delta R.T. -0.011 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion:166 Resp: 25392

Ion	Ratio	Lower	Upper
166	100		
164	73.8	50.9	110.9
131	70.6	38.7	98.7
129	79.4	41.8	101.8

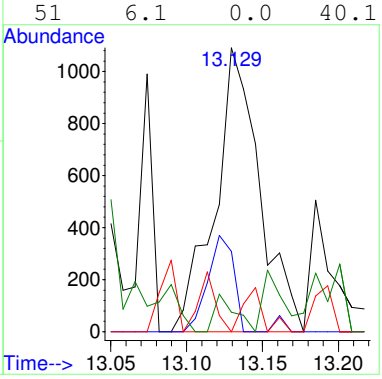


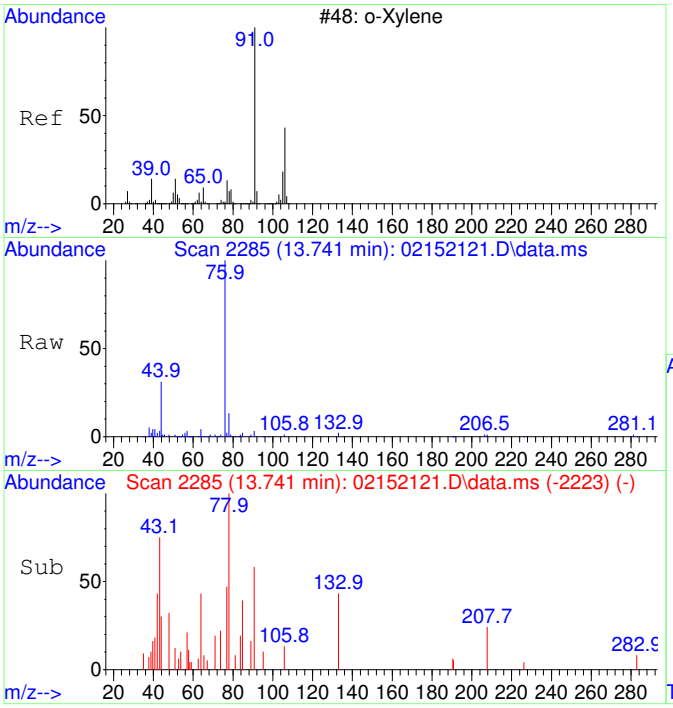


#43
m&p-Xylene SCAN
Concen: 33.42 ug/L
RT: 13.129 min Scan# 2208
Delta R.T. -0.000 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion: 91 Resp: 2231

Ion	Ratio	Lower	Upper
91	100		
106	19.6	23.1	83.1#
105	7.9	0.0	54.7
51	6.1	0.0	40.1

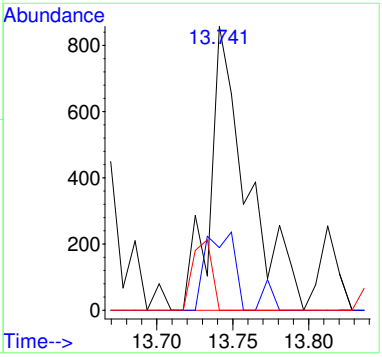


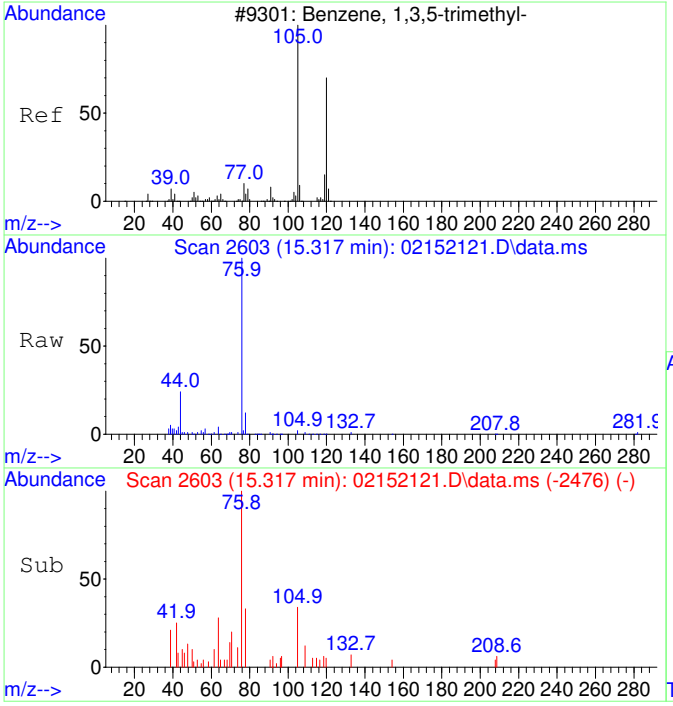


#44
o-Xylene SCAN
Concen: 40.61 ug/L
RT: 13.741 min Scan# 2285
Delta R.T. -0.008 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion: 91 Resp: 1474

Ion	Ratio	Lower	Upper
91	100		
106	21.0	18.0	78.0
105	12.8	0.0	56.6

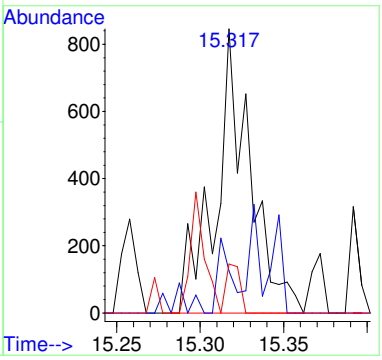


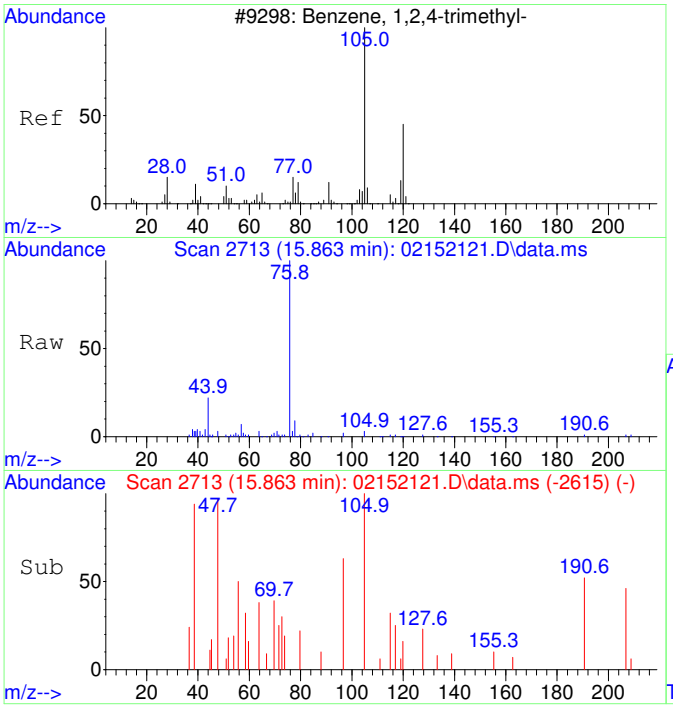


#46
1,3,5-Trimethylbenzene SCAN
Concen: 31.80 ug/L
RT: 15.317 min Scan# 2603
Delta R.T. 0.005 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion:105 Resp: 1216

Ion	Ratio	Lower	Upper
105	100		
120	7.8	18.3	78.3#
119	7.0	0.0	43.1

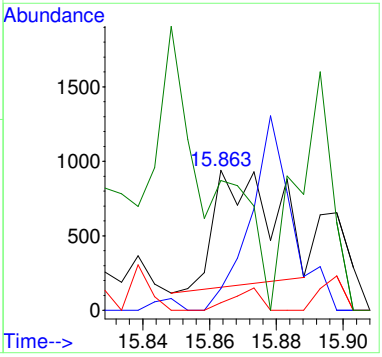




#47
1,2,4-Trimethylbenzene SCAN
Concen: 25.10 ug/L
RT: 15.863 min Scan# 2713
Delta R.T. -0.015 min
Lab File: 02152121.D
Acq: 15 Feb 2021 18:14

Tgt Ion:105 Resp: 953

Ion	Ratio	Lower	Upper
105	100		
120	118.7	16.9	76.9#
119	9.3	0.0	41.9
77	0.0	0.0	42.3



SEQUENCE

S21B047

Sequence Date: 02/16/2021

Instrument: AG5975CV

Sequence Analyses:

VOCs, Passive Samplers

ANALYST / REVIEWER - DATA REVIEW CHECKLIST

BATCH #:	B21B045	SEQUENCE #:	S21B047 02/16/21
BATCH #:		ANALYSIS:	VOA Passive Air. R21S04

	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.	Mon Feb 15 13:33:37 2021			
	Initial Calibration ID (LIMS number):	2102007			
	ICAL within QC criteria?	☐	Y	Y	Chlorobenzene >20%
	SCV within QC criteria?	☐	Y	Y	
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	* SEE COMMENTS
	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 #:	B21B045	SEQUENCE #:	S21B047 02/16/21
BATCH #:		ANALYSIS:	VOA Passive Air. R21S04

	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?	☑			DL ONLY
SAMPLE DATA	Were samples prepared & analyzed within holding time?	☐	Y	Y	
	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?	☐	Y	Y	
	Are problems, anomalies, discrepancies documented in LIMS? Specify if applicable.	☑			
MANUAL INT	Were manual integrations performed and documented? Specify if applicable.	☑			

APPROVALS	ANALYST INITIALS & DATE:	TD 02/17/21
	REVIEWED BY:	ZIYAD RAJABI (Affiliate) Digitally signed by ZIYAD RAJABI (Affiliate) Date: 2021.02.17 16:06:47 -08'00' SIGN HERE

COMMENTS

Custom analyte list.

* CRL1 failed 6 compounds. Samples were RA for cis-1,2-DCE and TCE dilution only.

Injection Log

Operator: TD
Directory: C:\msdchem\1\Ravioli Data\2021\021621\

Vial	File Name	Mult	Sample Info	Misc Info	Date Acquired
1	02162101.D	1	S21B047-IBL1		16 Feb 2021 8:28
2	02162102.D	1	S21B047-TUN1	BFB 2040028	16 Feb 2021 8:49
3	02162103.D	1	S21B047-CCV1	2106039 5 mg/L	16 Feb 2021 8:59
4	02162104.D	1	S21B047-CRL1	2106042 0.05 mg/L	16 Feb 2021 9:23
5	02162105.D	5	2102006-02RE3	5X DL (160-40)	16 Feb 2021 9:47
6	02162106.D	10	2102006-03RE2	10X DL (180-20)	16 Feb 2021 10:10
7	02162107.D	10	2102006-04RE3	10X DL (180-20)	16 Feb 2021 10:34
8	02162108.D	10	2102006-10RE3	10X DL (180-20)	16 Feb 2021 11:39
9	02162109.D	10	2102006-11RE3	10X DL (180-20)	16 Feb 2021 12:02

GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\Ravioli Data\2021\021621\02162102.D
Tune Time : 16 Feb 2021 8:49

Daily Calibration File : C:\msdchem\1\Ravioli Data\2021\021621\02162103.D

File	Sample	Surrogate Recovery %	Internal Standard Responses	
			161155	
02162103.D				
	S21B047-CC	102	161155	
02162104.D				
	S21B047-CR	1*	165475	
02162105.D				
	2102006-02RE3	98	169911	5X DL
02162106.D				
	2102006-03RE2	96	193932	10X DL
02162107.D				
	2102006-04RE3	97	152413	10X DL
02162108.D				
	2102006-10RE3	97	275433	10X DL
02162109.D				
	2102006-11RE3	96	137035	10X DL

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

Created: Tue Feb 16 12:54:57 2021 AG5975C

Analysis Sequence

S21B047

Project: R21S04
Analysis: VOCs, Passive Samplers

Instrument: AG5975CV **Calibration ID:** 2102007 Printed: 02/17/2021 3:35 pm

Lab Number	Sample Name	Order	Analyzed Date	STD ID	ISTD ID	Sequenced By	File ID	Comments
S21B047-IBL1	Instrument Blank	1	2/16/21 8:28			TD	02162101.D	
S21B047-TUN1	BFB	2	2/16/21 8:49	2108011		TD	02162102.D	
S21B047-CCV1	Calibration Check	3	2/16/21 8:59	2106039		TD	02162103.D	
S21B047-CRL1	Instrument RL Check	4	2/16/21 9:23	2106042		TD	02162104.D	
2102006-02RE3 A	F6-031-3ft-2d-R	5	2/16/21 9:47			TD	02162105.D	
2102006-03RE2 A	F6-010-2.5ft-2d-R	6	2/16/21 10:10			TD	02162106.D	
2102006-04RE3 A	F6-006-3ft-2d-R	7	2/16/21 10:34			TD	02162107.D	
2102006-10RE3 A	Classics-MH1-3ft-2d-R	8	2/16/21 11:39			TD	02162108.D	
2102006-11RE3 A	Classics-MH2-2.5ft-2d-R	9	2/16/21 12:02			TD	02162109.D	

Sequence Comments

Reagents

Reagent #	Description

Table of Contents

SEQUENCE DATA

S21B047

S21B047-IBL1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021621\
Data File : 02162101.D
Acq On : 16 Feb 2021 8:28
InstName : AG5975C
Operator : TD
Sample : S21B047-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 16 08:47:21 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021621.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration

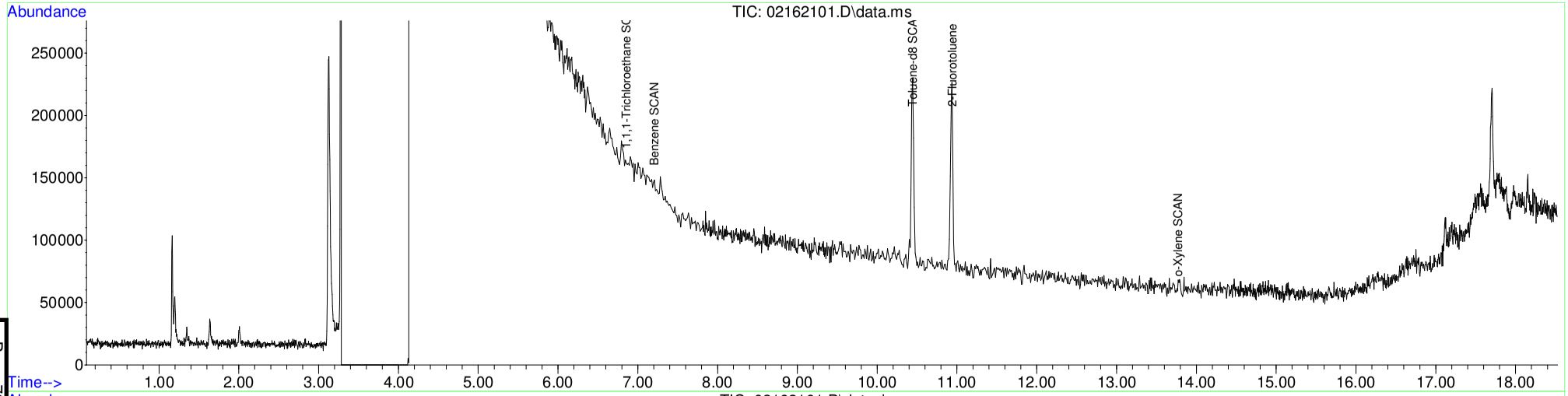
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.928	109	239336	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.435	98	199687	4841.75	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 96.84%			
Target Compounds						Qvalue
3] trans-1,2-Dichloroethene	4.130	61	315	26.75	ug/L	66
9] Benzene	7.442	78	2206	54.17	ug/L #	16
22] 1,3,5-Trimethylbenzene	15.319	105	2361	34.80	ug/L	91
24] Naphthalene	17.854	128	5548	54.04	ug/L #	68
25) 2-Fluorotoluene SCAN	10.937	109	124986	4850.66	ug/L	91
31) 1,1,1-Trichloroethane ...	6.857	97	245	26.39	ug/L #	19
33) Benzene SCAN	7.210	78	7773	305.10	ug/L	95
36) Toluene-d8 SCAN	10.444	98	110679	4864.06	ug/L	97
44) o-Xylene SCAN	13.765	91	850	25.84	ug/L #	36

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021621\
Data File : 02162101.D
Acq On : 16 Feb 2021 8:28
InstName : AG5975C
Operator : TD
Sample : S21B047-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 16 08:47:21 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021621.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration



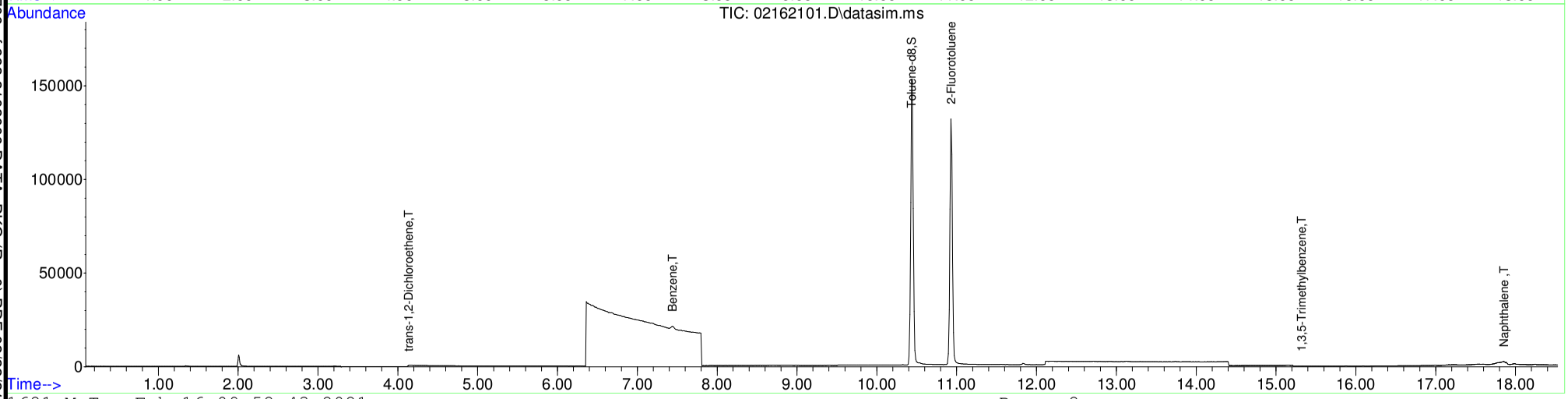


Table of Contents

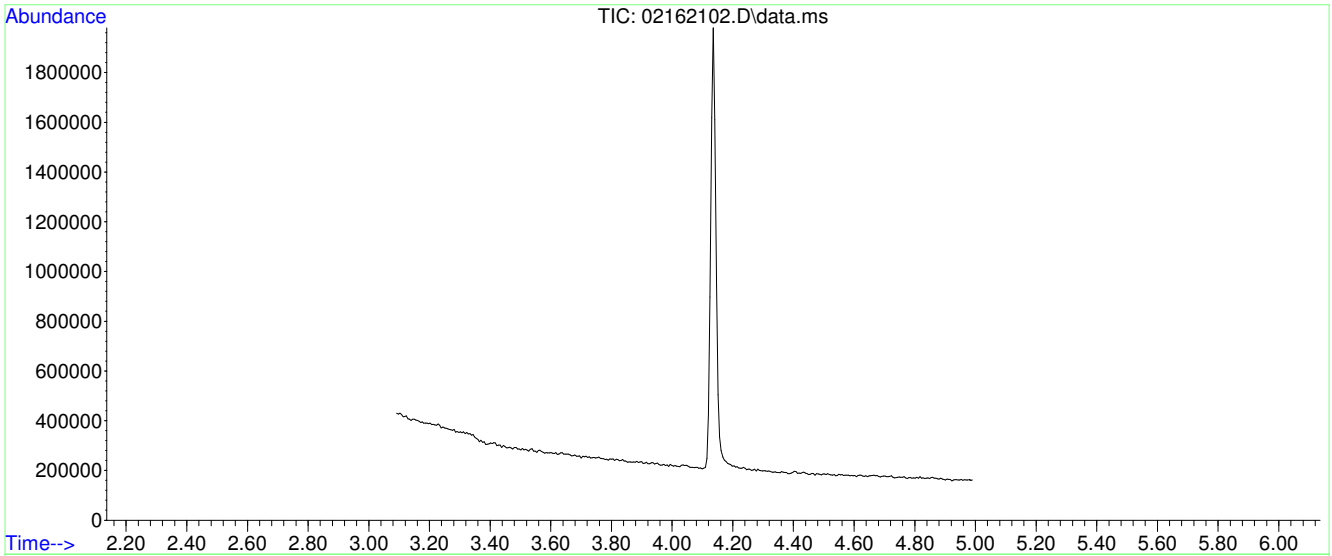
S21B047-TUN1

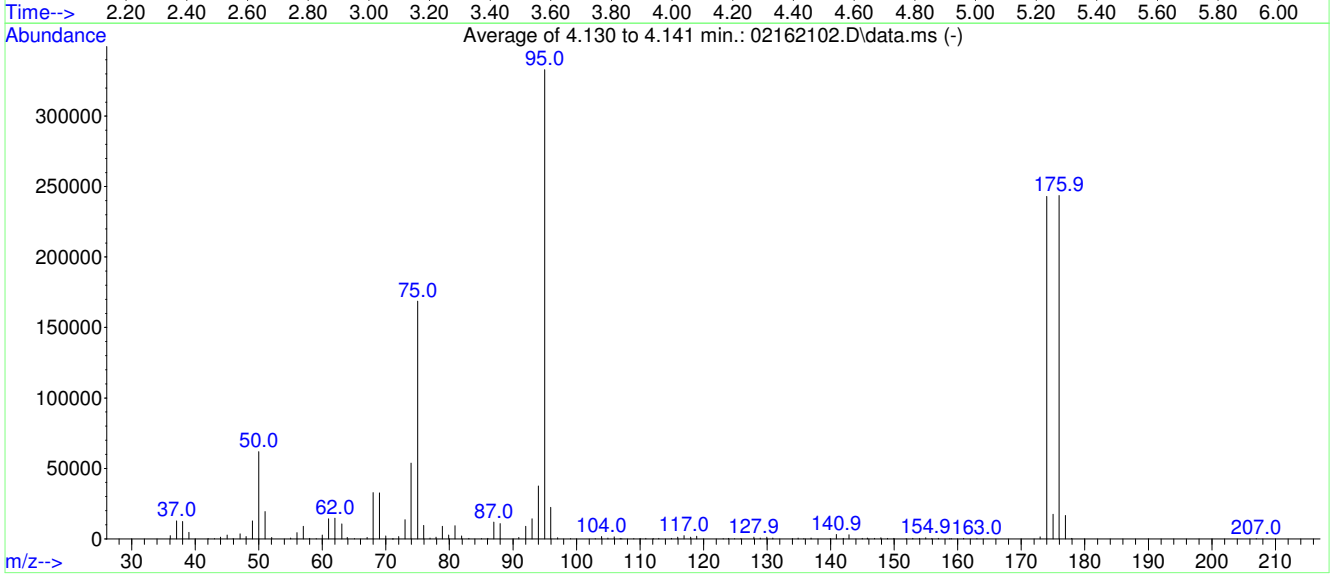
Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2021\021621\
Data File : 02162102.D
Acq On : 16 Feb 2021 8:49
Operator : TD
Sample : S21B047-TUN1
Misc : BFB 2040028
ALS Vial : 2 Sample Multiplier: 1
InstName : AG5975C

Integration File: Ravioli.P

Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021621.M
Title : Volatile Organic Analysis - Passive samplers
Last Update : Mon Feb 15 13:33:37 2021





AutoFind: Scans 199, 200, 201; Background Corrected with Scan 192

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.6	61928	PASS
75	95	30	60	50.7	168629	PASS
95	95	100	100	100.0	332920	PASS
96	95	5	9	6.7	22377	PASS
173	174	0.00	2	0.6	1440	PASS
174	95	50	120	73.0	243051	PASS
175	174	5	9	7.2	17528	PASS
176	174	95	101	100.2	243627	PASS
177	176	5	9	6.8	16648	PASS

Average of 4.130 to 4.141 min.: 02162102.D\data.ms
S21B047-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	2144	49.00	12670	62.00	14669	73.95	53691
37.05	12767	50.00	61928	63.05	10667	75.00	168629
38.00	12250	51.00	19436	63.90	968	75.95	9536
39.00	4624	52.05	1050	65.05	211	76.95	595
42.05	38	55.00	651	67.05	991	77.90	1288
43.05	27	56.00	4335	68.00	32831	78.90	8968
44.00	1243	57.00	8882	69.00	32557	79.90	2619
45.00	2690	58.00	259	70.00	2012	80.90	9367
45.95	61	59.05	73	71.05	8	81.90	2139
47.05	3627	60.00	2610	72.00	1704	83.05	369
48.00	1510	61.00	14225	73.00	13606	85.05	154

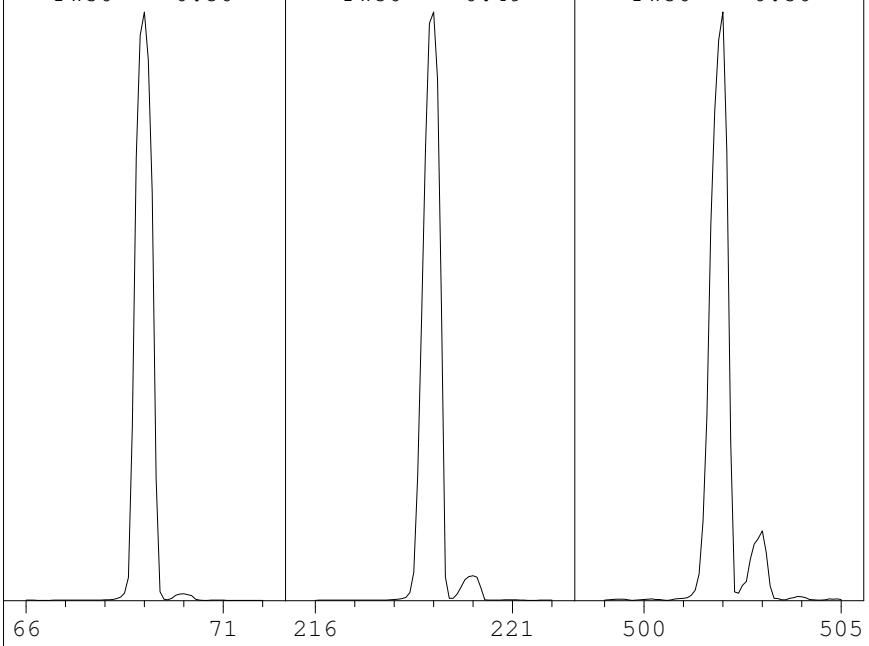
Average of 4.130 to 4.141 min.: 02162102.D\data.ms
S21B047-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
86.05	282	102.95	166	114.95	441	129.95	1092
87.00	11811	103.95	1522	115.95	1272	130.90	549
88.00	10853	104.95	456	116.95	2149	134.00	60
90.90	1064	105.95	1478	117.95	1219	134.90	602
92.00	8988	106.90	240	118.90	1885	135.80	74
93.00	14211	107.10	80	123.10	70	136.90	587
94.00	37547	109.00	52	123.95	290	139.95	214
95.00	332920	110.00	180	124.90	50	140.90	3212
95.95	22377	110.90	340	125.90	62	142.00	279
97.05	679	112.10	86	127.90	1162	142.90	3000
99.05	19	112.95	271	128.90	554	144.95	295

Average of 4.130 to 4.141 min.: 02162102.D\data.ms
S21B047-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
145.80	460	158.75	214				
146.90	355	159.00	105				
147.90	817	160.95	397				
148.95	259	163.00	45				
149.95	312	172.95	1440				
151.90	106	174.00	243051				
152.95	228	175.00	17528				
153.95	292	175.95	243627				
154.95	787	176.95	16648				
155.90	63	177.95	382				
156.95	392	207.00	86				

Mass	69.00	Mass	219.00	Mass	502.00
Ab	846502	Ab	446672	Ab	12864
Pw50	0.50	Pw50	0.49	Pw50	0.50

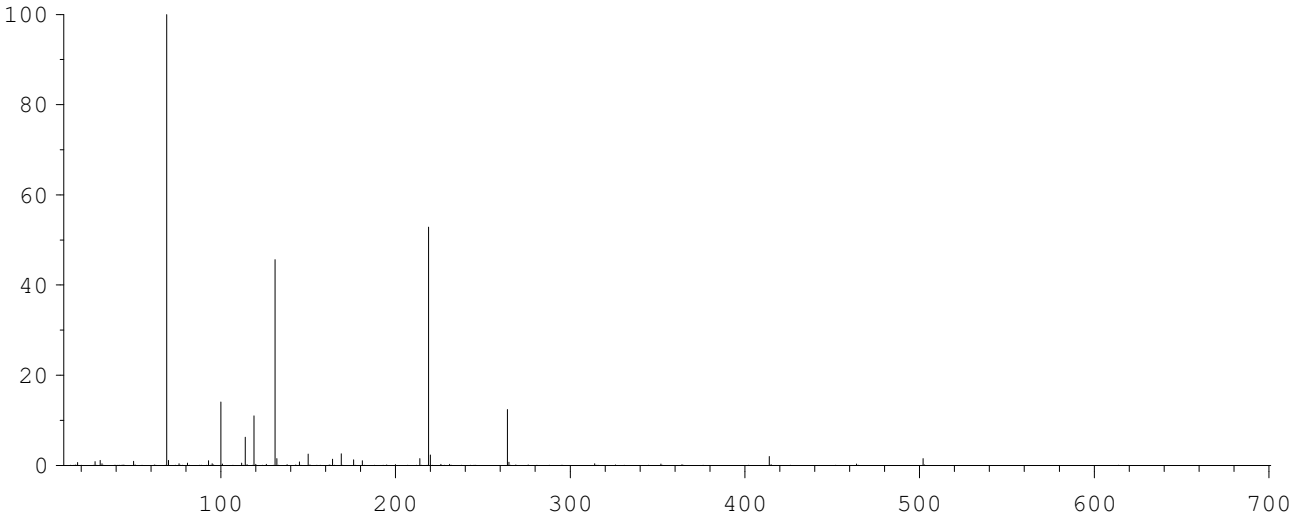


Ion Pol	Pos	MassGain	-1190
		MassOffs	-39
Emission	34.6	AmuGain	973
EIEnrgy	69.9	AmuOffs	129.19
Filament	1	Wid219	-0.003
		DC Pol	Pos
Repeller	27.78		
IonFcus	63.6	HEDEnab	On
EntLens	0.0	EMVolts	1376
EntOffs	Var		
		Samples	8
PFTBA	Open	Averages	3
		Stepsize	0.10

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
137 peaks Base: 69.00 Abundance: 796224



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	796224	100.00	70.00	8913	1.12
219.00	420800	52.85	220.00	18456	4.39
502.00	11889	1.49	503.00	1073	9.03

Air/Water Check: H20~0.64% N2~0.88% O2~0.34% CO2~0.08% N2/H2O~137.50%

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 65830
Repeller Maximum 30 volts using ion 219; Gain Factor 0.66

MassGain Values(Samples): -1175(3) -1167(2) -1149(1) -1108(0) -1056(FS)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset:	129.2	129.2	129.2	129.2	129.2	129.2	129.2
Entrance Lens Offset:	14.1	13.3	13.3	14.3	15.6	16.8	16.8
Target Abund(%):	1.0	100.0	45.0	55.0	2.5	2.0	
Actual Tune Abund(%):	0.9	100.0	45.7	52.8	2.0	1.5	

S21B047-CCV1

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\Ravioli Data\2021\021621\
Data File : 02162103.D
Acq On : 16 Feb 2021 8:59
InstName : AG5975C
Operator : TD
Sample : S21B047-CCV1
Misc : 2106039 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 16 09:18:18 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021621.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
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	76	0.00
2	T	1,1-Dichloroethene	0.233	0.249	-6.9	75	0.00
3	T	trans-1,2-Dichloroethene	0.246	0.261	-6.1	74	0.00
4	T	1,1-Dichloroethane	0.296	0.310	-4.7	75	0.00
5	T	cis-1,2-Dichloroethene	0.292	0.303	-3.8	74	0.00
6	T	Chloroform	0.311	0.307	1.3	74	0.00
7	T	1,1,1-Trichloroethane	0.296	0.295	0.3	73	0.00
8	T	Carbon tetrachloride	0.247	0.244	1.2	72	0.00
9	T	Benzene	0.851	0.789	7.3	74	0.00
10	T	1,2-Dichloroethane	0.272	0.280	-2.9	75	0.00
11	T	Trichloroethene	0.225	0.226	-0.4	73	0.00
12	S	Toluene-d8	0.862	0.880	-2.1	76	0.00
13	T	Toluene	1.193	1.103	7.5	76	0.00
14	T	1,1,2-Trichloroethane	0.235	0.236	-0.4	75	0.00
15	T	Tetrachloroethene	0.312	0.314	-0.6	76	0.00
16	T	Chlorobenzene	0.993	0.875	11.9	78	0.00
17	T	1,1,1,2-Tetrachloroethane	0.242	0.240	0.8	75	0.00
18	T	Ethylbenzene	1.505	1.520	-1.0	78	0.00
19	T	m&p-Xylene	1.184	1.174	0.8	79	0.00
20	T	o-Xylene	1.282	1.278	0.3	79	0.00
21	T	1,1,2,2-Tetrachloroethane	0.521	0.521	0.0	77	0.00
22	T	1,3,5-Trimethylbenzene	1.417	1.504	-6.1	82	0.00
23	T	1,2,4-Trimethylbenzene	1.506	1.548	-2.8	83	0.00
24	T	Naphthalene	2.145	2.645	-23.3	92	0.00
25		2-Fluorotoluene SCAN	0.538	0.520	3.3	73	0.00
26		1,1-Dichloroethene SCAN	0.171	0.137	19.9	61	0.00
27		trans-1,2-Dichloroethene SC	0.180	0.167	7.2	71	0.00
28		1,1-Dichloroethane SCAN	0.222	0.195	12.2	66	0.00
29		cis-1,2-Dichloroethene SCAN	0.206	0.166	19.4	61	0.00
30		Chloroform SCAN	0.189	0.168	11.1	68	0.00
31		1,1,1-Trichloroethane SCAN	0.194	0.175	9.8	68	-0.01
32		Carbon tetrachloride SCAN	0.156	0.139	10.9	67	0.01
33		Benzene SCAN	0.532	0.566	-6.4	81	0.00
34		1,2-Dichloroethane SCAN	0.194	0.180	7.2	70	0.00
35		Trichloroethene SCAN	0.118	0.110	6.8	71	0.00
36		Toluene-d8 SCAN	0.475	0.480	-1.1	77	0.00
37		Toluene SCAN	0.681	0.631	7.3	70	-0.01
38		1,1,2-Trichloroethane SCAN	0.135	0.147	-8.9	82	0.00
39		Tetrachloroethene SCAN	0.132	0.138	-4.5	79	-0.01
40		Chlorobenzene SCAN	0.417	0.441	-5.8	80	0.00
41		1,1,1,2-Tetrachloroethane S	0.134	0.128	4.5	73	0.00
42		Ethylbenzene SCAN	1.264	1.268	-0.3	76	0.00
43		m&p-Xylene SCAN	1.264	1.268	-0.3	76	0.00
44		o-Xylene SCAN	0.687	0.694	-1.0	77	0.00
45		1,1,2,2-Tetrachloroethane S	0.320	0.312	2.5	74	0.00
46		1,3,5-Trimethylbenzene SCAN	0.724	0.749	-3.5	78	0.00
47		1,2,4-Trimethylbenzene SCAN	0.719	0.765	-6.4	81	0.00
48		Naphthalene SCAN	0.933	1.170	-25.4	95	0.00

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021621\
Data File : 02162103.D
Acq On : 16 Feb 2021 8:59
InstName : AG5975C
Operator : TD
Sample : S21B047-CCV1
Misc : 2106039 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 16 09:18:18 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021621.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration

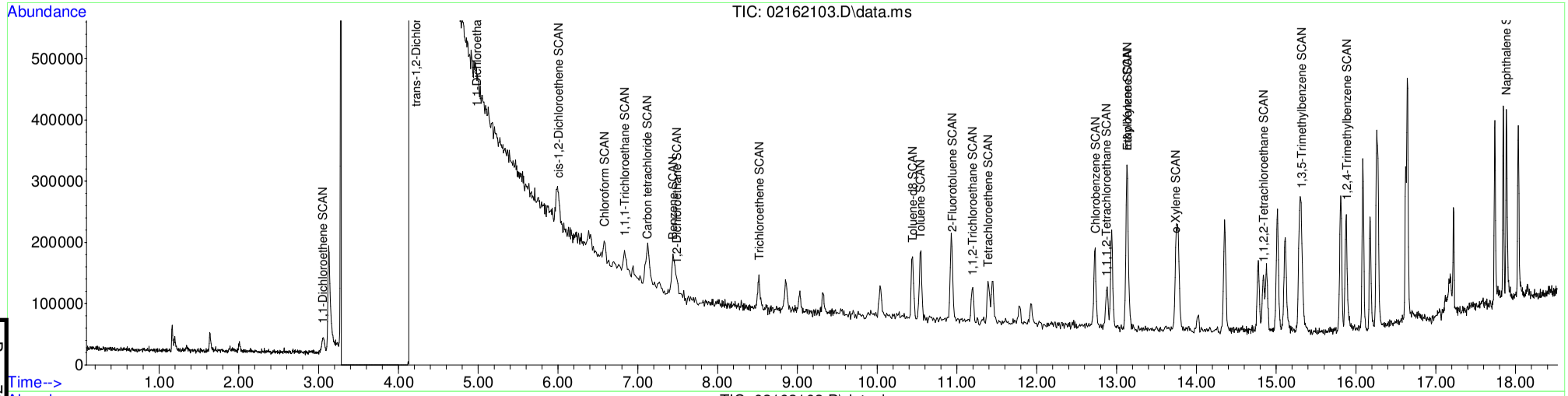
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.928	109	161155	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.435	98	141788	5105.71 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 102.11%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.056	61	40086	5340.24 ug/L	89
3] trans-1,2-Dichloroethene	4.223	61	41992	5295.55 ug/L	98
4] 1,1-Dichloroethane	4.973	63	49899	5224.37 ug/L	99
5] cis-1,2-Dichloroethene	6.001	61	48799	5181.71 ug/L	99
6] Chloroform	6.579	83	49463	4927.68 ug/L	98
7] 1,1,1-Trichloroethane	6.834	97	47507	4980.42 ug/L	97
8] Carbon tetrachloride	7.114	117	39325	4933.56 ug/L	98
9] Benzene	7.442	78	127199	4638.65 ug/L	99
10] 1,2-Dichloroethane	7.479	62	45142	5157.39 ug/L	100
11] Trichloroethene	8.515	130	36427	5018.43 ug/L	94
13] Toluene	10.540	91	177702	4620.29 ug/L	99
14] 1,1,2-Trichloroethane	11.190	97	38055	5023.72 ug/L	97
15] Tetrachloroethene	11.390	166	50651	5029.99 ug/L	99
16] Chlorobenzene	12.726	112	140982	4402.83 ug/L	91
17] 1,1,1,2-Tetrachloroethane	12.876	131	38684	4956.57 ug/L	100
18] Ethylbenzene	12.932	91	244933	5050.17 ug/L	98
19] m&p-Xylene	13.131	91	378418	9918.61 ug/L	96
20] o-Xylene	13.742	91	206000	4984.73 ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.840	83	83988	5000.24 ug/L	99
22] 1,3,5-Trimethylbenzene	15.314	105	242315	5303.93 ug/L	97
23] 1,2,4-Trimethylbenzene	15.874	105	249425	5137.12 ug/L	95
24] Naphthalene	17.888	128	426308	6166.63 ug/L	100
25) 2-Fluorotoluene SCAN	10.937	109	83756	4827.47 ug/L	99
26) 1,1-Dichloroethene SCAN	3.051	61	22126	4011.03 ug/L	89
27) trans-1,2-Dichloroethe...	4.222	61	26982	4659.32 ug/L	80
28) 1,1-Dichloroethane SCAN	4.978	63	31371	4375.70 ug/L	87
29) cis-1,2-Dichloroethene...	6.007	61	26804	4035.36 ug/L	88
30) Chloroform SCAN	6.577	83	27146	4465.44 ug/L	94
31) 1,1,1-Trichloroethane ...	6.833	97	28168	4506.53 ug/L	93
32) Carbon tetrachloride SCAN	7.112	117	22378	4447.20 ug/L	91
33) Benzene SCAN	7.441	78	91206	5316.76 ug/L	96
34) 1,2-Dichloroethane SCAN	7.490	62	28968	4627.45 ug/L	87
35) Trichloroethene SCAN	8.519	130	17679	4661.98 ug/L	81
36) Toluene-d8 SCAN	10.444	98	77408	5052.23 ug/L	98
37) Toluene SCAN	10.538	91	101724	4632.01 ug/L	98
38) 1,1,2-Trichloroethane ...	11.189	97	23629	5418.54 ug/L	89
39) Tetrachloroethene SCAN	11.388	166	22236	5209.70 ug/L	87
40) Chlorobenzene SCAN	12.732	112	70997	5286.87 ug/L	83
41) 1,1,1,2-Tetrachloroeth...	12.875	131	20647	4786.77 ug/L	93
42) Ethylbenzene SCAN	13.129	91	204350	5016.59 ug/L	95
43) m&p-Xylene SCAN	13.129	91	204350	5016.59 ug/L	94
44) o-Xylene SCAN	13.741	91	111907	5053.03 ug/L	95
45) 1,1,2,2-Tetrachloroeth...	14.838	83	50237	4865.90 ug/L	99
46) 1,3,5-Trimethylbenzene...	15.312	105	120781	5176.58 ug/L	98
47) 1,2,4-Trimethylbenzene...	15.878	105	123222	5319.82 ug/L	95
48) Naphthalene SCAN	17.886	128	188609	6272.00 ug/L	95

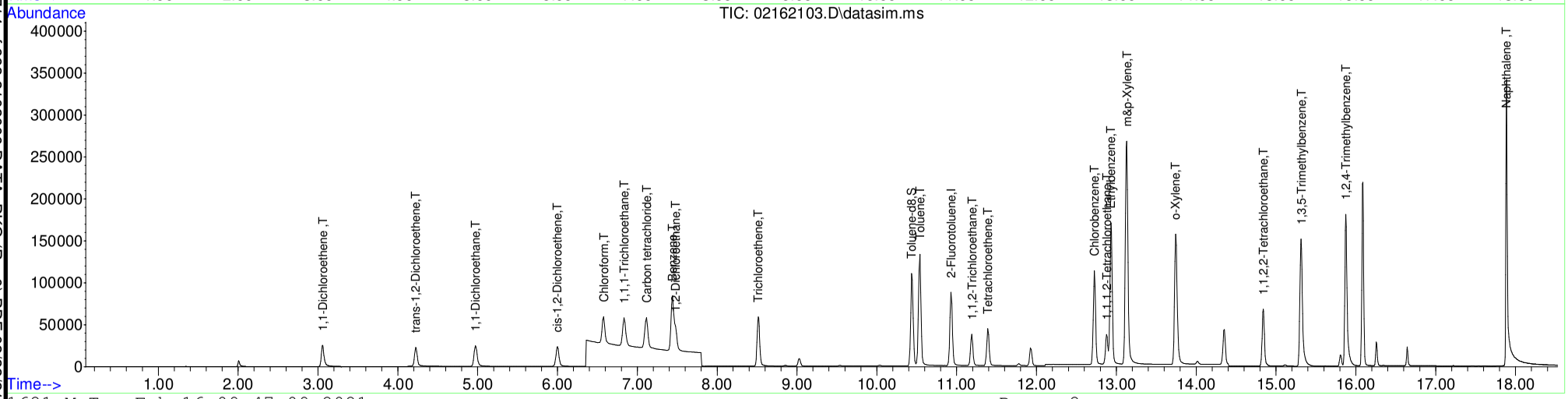
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021621\
Data File : 02162103.D
Acq On : 16 Feb 2021 8:59
InstName : AG5975C
Operator : TD
Sample : S21B047-CCV1
Misc : 2106039 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 16 09:18:18 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021621.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration





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S21B047-CRL1

QLS REPORT

Instrument Name: AG5975C
Sample Name: S21B047-CRL1
Misc Info: 2106042 0.05 mg/L
Date Acquired: 2/16/21 9:23
QLast Update: Mon Feb 15 13:33:37 2021
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.928	5000.0	5000.00	100%	60	140	pass
2)	1,1-Dichloroethene	3.056	50.0	54.88	110%	60	140	pass
3)	trans-1,2-Dichloroethene	4.230	50.0	51.21	102%	60	140	pass
4)	1,1-Dichloroethane	4.980	50.0	54.14	108%	60	140	pass
5)	cis-1,2-Dichloroethene	6.001	50.0	51.29	103%	60	140	pass
6)	Chloroform	6.579	50.0	57.73	115%	60	140	pass
7)	1,1,1-Trichloroethane	6.834	50.0	50.23	100%	60	140	pass
8)	Carbon tetrachloride	7.114	50.0	49.36	99%	60	140	pass
10)	1,2-Dichloroethane	7.479	50.0	56.30	113%	60	140	pass
11)	Trichloroethene	8.520	50.0	52.59	105%	60	140	pass
12)	Toluene-d8	10.435	50.0	58.64	117%	60	140	pass
13)	Toluene	10.540	50.0	66.24	132%	60	140	pass
14)	1,1,2-Trichloroethane	11.190	50.0	52.33	105%	60	140	pass
15)	Tetrachloroethene	11.390	50.0	57.45	115%	60	140	pass
16)	Chlorobenzene	12.726	50.0	84.55	169%	60	140	FAIL
17)	1,1,1,2-Tetrachloroethane	12.877	50.0	52.16	104%	60	140	pass
18)	Ethylbenzene	12.932	50.0	64.16	128%	60	140	pass
19)	m&p-Xylene	13.131	100.0	135.44	135%	60	140	pass
20)	o-Xylene	13.742	50.0	74.66	149%	60	140	FAIL
21)	1,1,2,2-Tetrachloroethane	14.840	50.0	57.58	115%	60	140	pass
22)	1,3,5-Trimethylbenzene	15.314	50.0	79.07	158%	60	140	FAIL
23)	1,2,4-Trimethylbenzene	15.875	50.0	90.26	181%	60	140	FAIL
24)	Naphthalene	17.888	50.0	109.42	219%	60	140	FAIL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021621\
Data File : 02162104.D
Acq On : 16 Feb 2021 9:23
InstName : AG5975C
Operator : TD
Sample : S21B047-CRL1
Misc : 2106042 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 16 09:42:00 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021621.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration

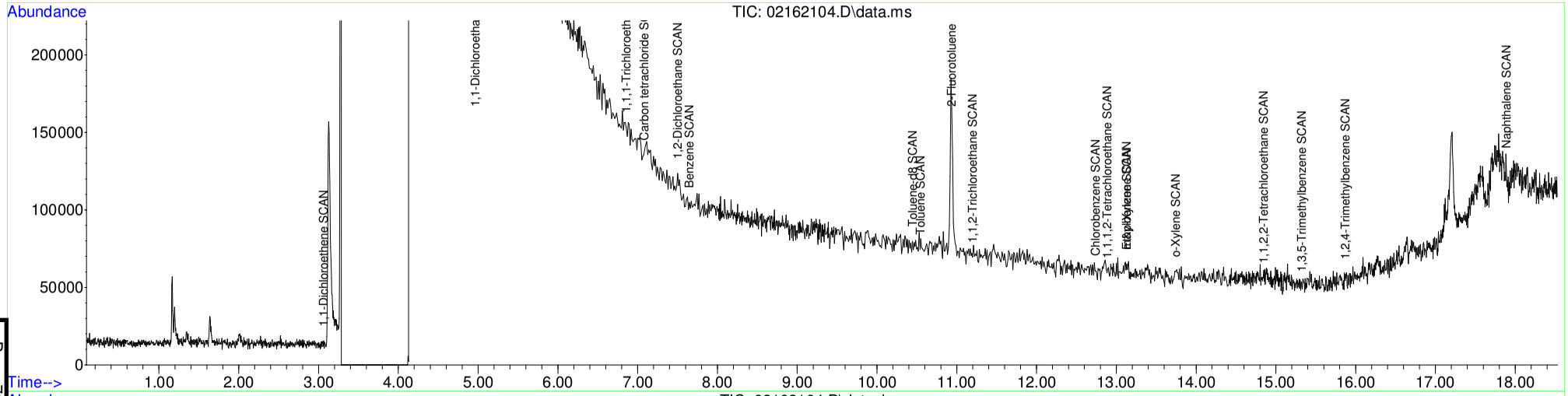
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.928	109	165475	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.435	98	1672	58.64	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 1.17%#			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.056	61	423	54.88	ug/L	99
3] trans-1,2-Dichloroethene	4.230	61	417	51.21	ug/L #	1
4] 1,1-Dichloroethane	4.980	63	531	54.14	ug/L	80
5] cis-1,2-Dichloroethene	6.001	61	496	51.29	ug/L	95
6] Chloroform	6.579	83	595	57.73	ug/L	99
7] 1,1,1-Trichloroethane	6.834	97	492	50.23	ug/L	89
8] Carbon tetrachloride	7.114	117	404	49.36	ug/L	79
9] Benzene	7.430	78	2751	97.70	ug/L #	22
10] 1,2-Dichloroethane	7.479	62	506	56.30	ug/L #	1
11] Trichloroethene	8.515	130	392	52.59	ug/L	86
13] Toluene	10.540	91	2616	66.24	ug/L	99
14] 1,1,2-Trichloroethane	11.190	97	407	52.33	ug/L	73
15] Tetrachloroethene	11.390	166	594	57.45	ug/L	88
16] Chlorobenzene	12.726	112	2780	84.55	ug/L	62
17] 1,1,1,2-Tetrachloroethane	12.877	131	418	52.16	ug/L #	69
18] Ethylbenzene	12.932	91	3195	64.16	ug/L	95
19] m&p-Xylene	13.131	91	5306	135.44	ug/L	97
20] o-Xylene	13.742	91	3168	74.66	ug/L	96
21] 1,1,2,2-Tetrachloroethane	14.840	83	993	57.58	ug/L	95
22] 1,3,5-Trimethylbenzene	15.314	105	3709	79.07	ug/L	93
23] 1,2,4-Trimethylbenzene	15.875	105	4500	90.26	ug/L	92
24] Naphthalene	17.888	128	7767	109.42	ug/L	99
25) 2-Fluorotoluene SCAN	10.927	109	87969	4937.92	ug/L	92
26) 1,1-Dichloroethene SCAN	3.066	61	182	32.13	ug/L #	25
28) 1,1-Dichloroethane SCAN	4.965	63	213	28.93	ug/L #	50
31) 1,1,1-Trichloroethane ...	6.857	97	173	26.96	ug/L #	7
32) Carbon tetrachloride SCAN	7.076	117	145	28.06	ug/L #	15
33) Benzene SCAN	7.648	78	3880	220.28	ug/L	98
34) 1,2-Dichloroethane SCAN	7.502	62	644	100.19	ug/L #	40
36) Toluene-d8 SCAN	10.444	98	976	62.04	ug/L #	10
37) Toluene SCAN	10.539	91	1929	85.54	ug/L	68
38) 1,1,2-Trichloroethane ...	11.200	97	508	113.45	ug/L #	57
40) Chlorobenzene SCAN	12.732	112	1318	95.58	ug/L #	1
41) 1,1,1,2-Tetrachloroeth...	12.883	131	127	28.67	ug/L #	1
42) Ethylbenzene SCAN	13.130	91	3178	75.98	ug/L	80
43) m&p-Xylene SCAN	13.130	91	3178	75.98	ug/L	82
44) o-Xylene SCAN	13.741	91	2281	100.31	ug/L #	53
45) 1,1,2,2-Tetrachloroeth...	14.842	83	412	38.86	ug/L #	74
46) 1,3,5-Trimethylbenzene...	15.327	105	915	38.19	ug/L	89
47) 1,2,4-Trimethylbenzene...	15.873	105	1490	62.65	ug/L #	38
48) Naphthalene SCAN	17.886	128	5376	174.11	ug/L	93

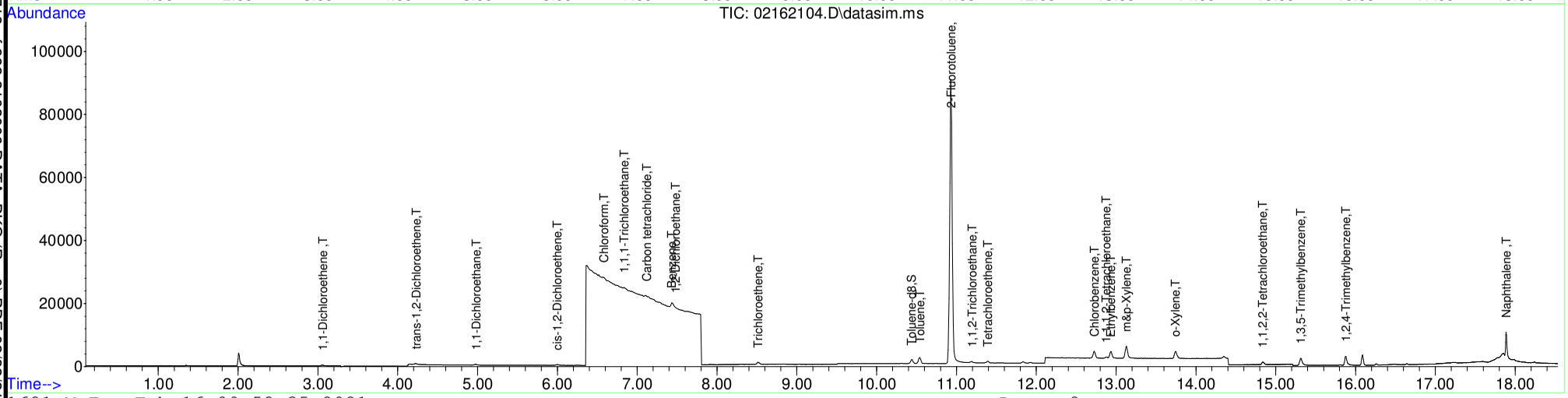
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021621\
Data File : 02162104.D
Acq On : 16 Feb 2021 9:23
InstName : AG5975C
Operator : TD
Sample : S21B047-CRL1
Misc : 2106042 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 16 09:42:00 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021621.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration





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2102006-02RE3

Quantitation Report (Not Reviewed)

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Data Path : C:\msdchem\1\Ravioli Data\2021\021621\
Data File : 02162105.D
Acq On : 16 Feb 2021 9:47
InstName : AG5975C
Operator : TD
Sample : 2102006-02RE3
Misc : 5X DL (160-40)
ALS Vial : 5 Sample Multiplier: 5

Quant Time: Feb 16 10:05:44 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021621.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration

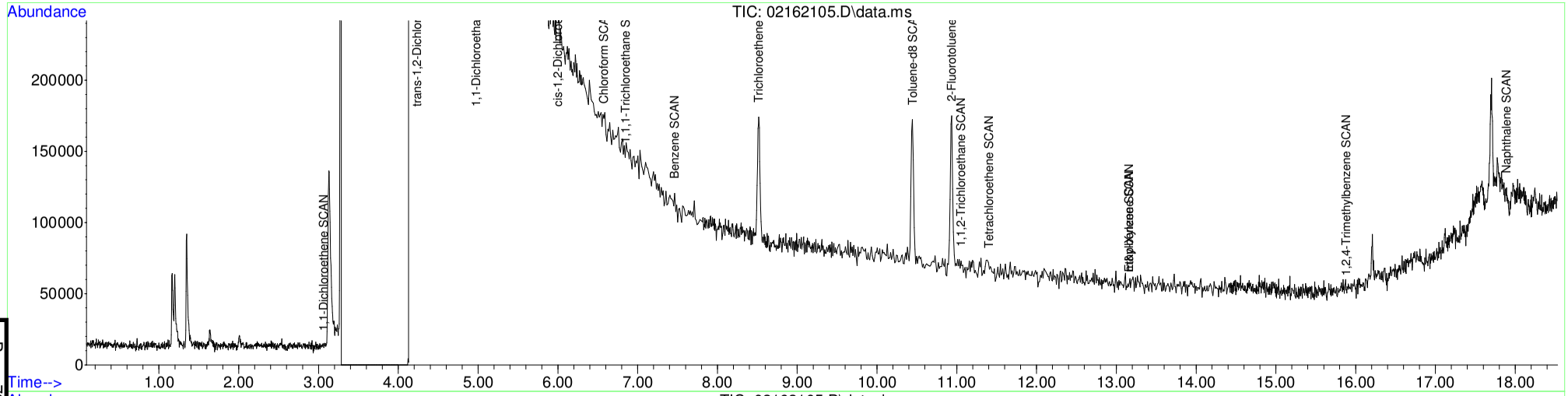
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 2-Fluorotoluene	10.928	109	169911	5000.00	ug/L		0.00
System Monitoring Compounds							
12) Toluene-d8	10.435	98	142993	4883.76	ug/L		0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 97.68%				
Target Compounds							Qvalue
2] 1,1-Dichloroethene	3.057	61	1899	239.95	ug/L		95
3] trans-1,2-Dichloroethene	4.223	61	1900	227.26	ug/L		67
4] 1,1-Dichloroethane	4.973	63	2034	201.98	ug/L		93
5] cis-1,2-Dichloroethene	6.002	61	19965	2010.73	ug/L		98
6] Chloroform	6.579	83	4926	465.46	ug/L		97
7] 1,1,1-Trichloroethane	6.834	97	795	79.05	ug/L		97
9] Benzene	7.442	78	1775	61.39	ug/L	#	1
11] Trichloroethene	8.515	130	60105	7853.75	ug/L	RPT	94
13] Toluene	10.540	91	1165	28.73	ug/L		99
15] Tetrachloroethene	11.390	166	8640	813.80	ug/L		99
23] 1,2,4-Trimethylbenzene	15.875	105	2308	45.09	ug/L		97
24] Naphthalene	17.854	128	2279	31.27	ug/L	#	68
25) 2-Fluorotoluene SCAN	10.938	109	86662	4737.56	ug/L		92
26) 1,1-Dichloroethene SCAN	3.063	61	1009	173.49	ug/L	#	45
27) trans-1,2-Dichloroethe...	4.229	61	1606	263.04	ug/L	#	32
28) 1,1-Dichloroethane SCAN	4.972	63	525	69.45	ug/L	#	32
29) cis-1,2-Dichloroethene...	6.000	61	13297	1898.71	ug/L		86
30) Chloroform SCAN	6.578	83	2262	352.92	ug/L	#	70
31) 1,1,1-Trichloroethane ...	6.845	97	244	37.03	ug/L	#	56
33) Benzene SCAN	7.466	78	6059	335.00	ug/L		94
35) Trichloroethene SCAN	8.519	130	29299	7328.04	ug/L	#	77
36) Toluene-d8 SCAN	10.444	98	76395	4729.17	ug/L		99
38) 1,1,2-Trichloroethane ...	11.053	97	242	52.64	ug/L	#	13
39) Tetrachloroethene SCAN	11.399	166	4312	958.20	ug/L		87
42) Ethylbenzene SCAN	13.154	91	1304	30.36	ug/L	#	42
43) m&p-Xylene SCAN	13.154	91	1304	30.36	ug/L	#	47
47) 1,2,4-Trimethylbenzene...	15.878	105	645	26.41	ug/L	#	21
48) Naphthalene SCAN	17.890	128	765	24.13	ug/L		69

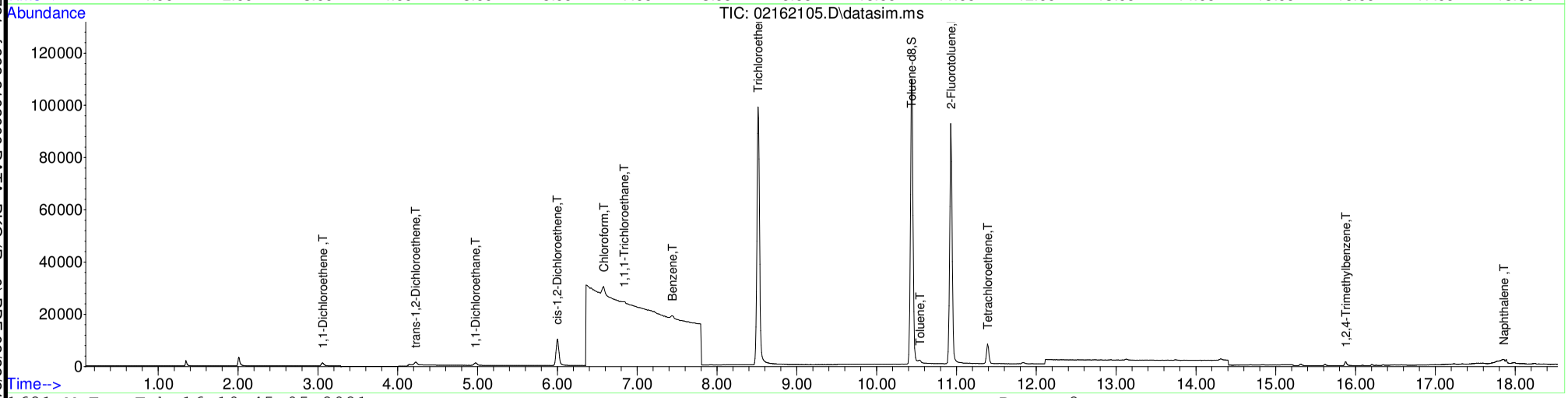
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021621\
Data File : 02162105.D
Acq On : 16 Feb 2021 9:47
InstName : AG5975C
Operator : TD
Sample : 2102006-02RE3
Misc : 5X DL (160-40)
ALS Vial : 5 Sample Multiplier: 5

Quant Time: Feb 16 10:05:44 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021621.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration





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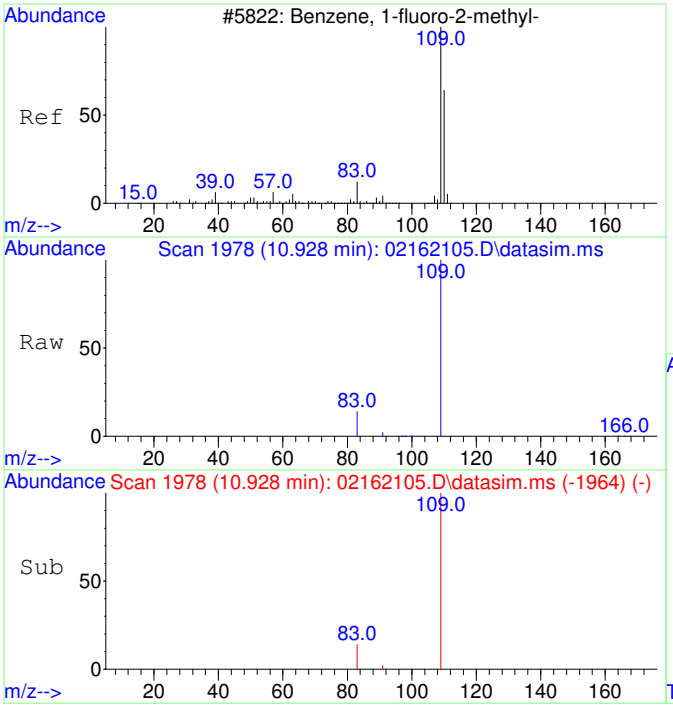
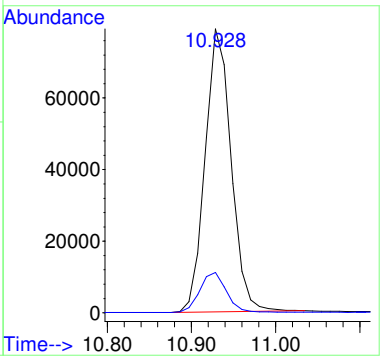
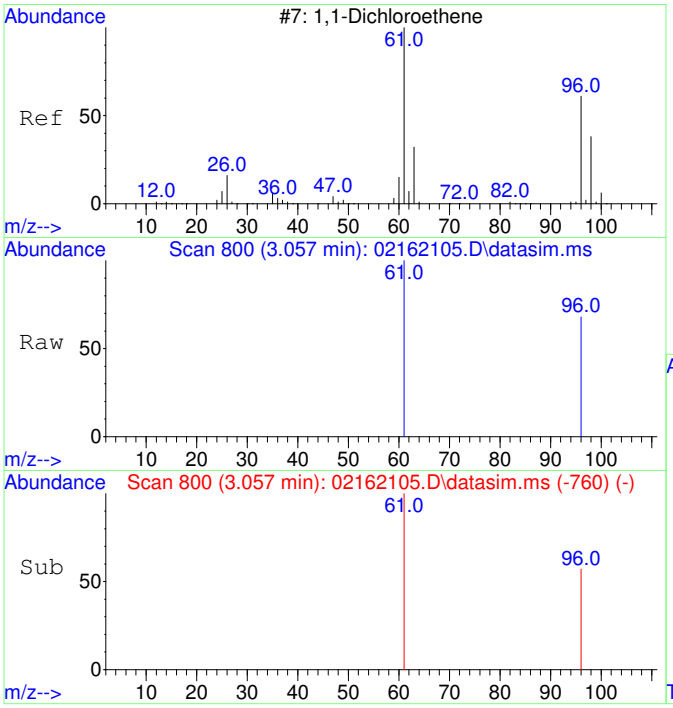


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.928 min Scan# 1978
Delta R.T. 0.000 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion:109 Resp: 169911

Ion	Ratio	Lower	Upper
109	100		
83	14.3	0.0	42.3

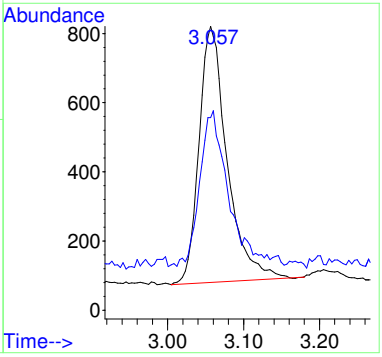


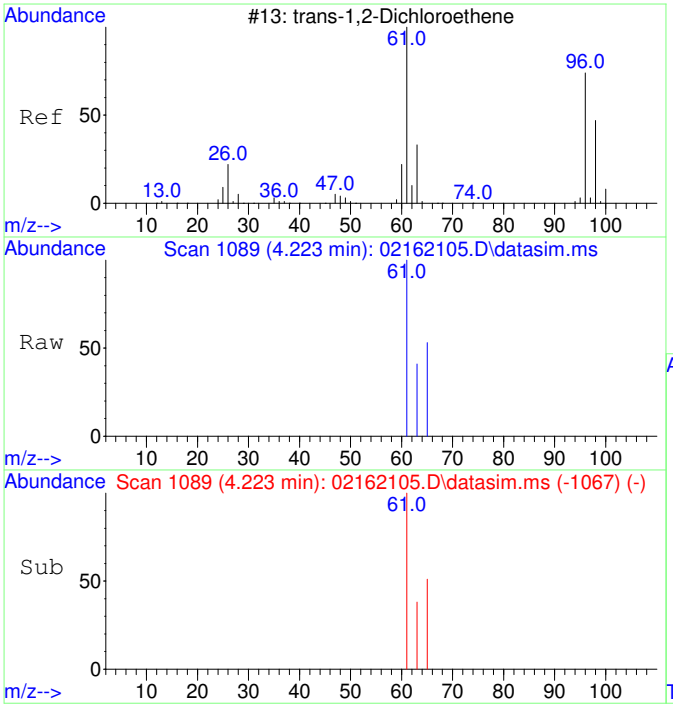


#2
1,1-Dichloroethene
Concen: 239.95 ug/L
RT: 3.057 min Scan# 800
Delta R.T. 0.000 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion: 61 Resp: 1899

Ion	Ratio	Lower	Upper
61	100		
96	63.2	37.2	97.2

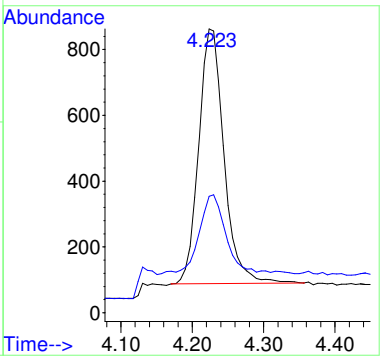


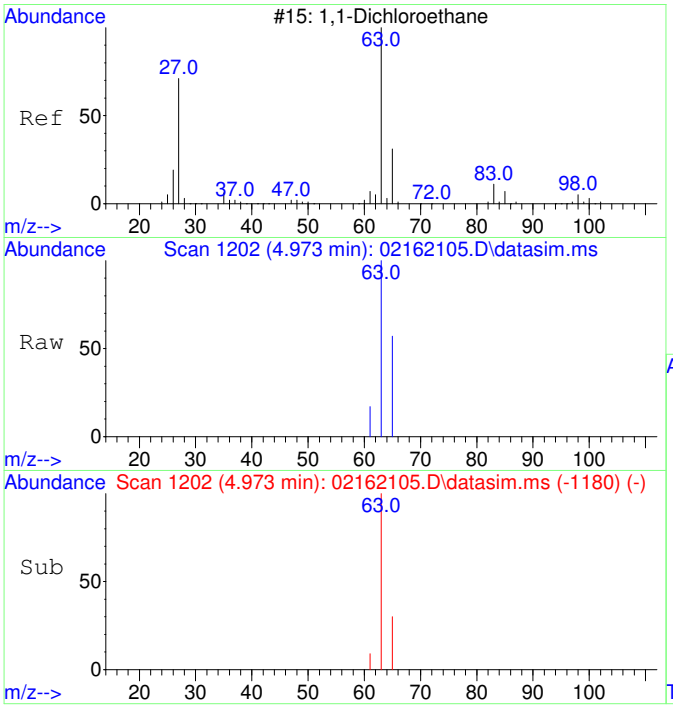


#3
trans-1,2-Dichloroethene
Concen: 227.26 ug/L
RT: 4.223 min Scan# 1089
Delta R.T. -0.006 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion: 61 Resp: 1900

Ion	Ratio	Lower	Upper
61	100		
63	51.2	2.4	62.4

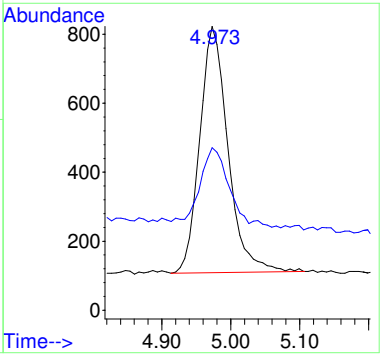


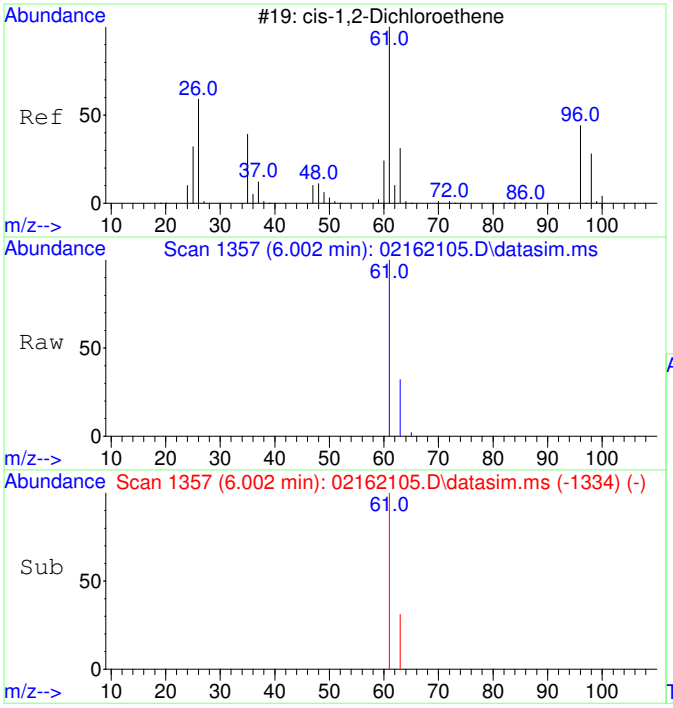


#4
1,1-Dichloroethane
Concen: 201.98 ug/L
RT: 4.973 min Scan# 1202
Delta R.T. -0.006 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion: 63 Resp: 2034

Ion	Ratio	Lower	Upper
63	100		
65	35.7	1.8	61.8

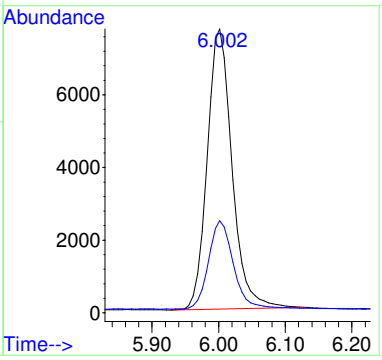


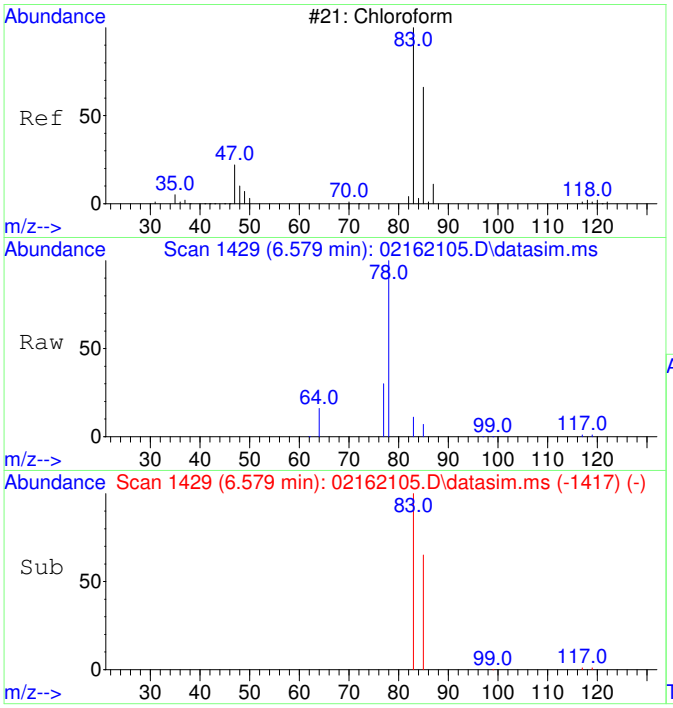


#5
cis-1,2-Dichloroethene
Concen: 2010.73 ug/L
RT: 6.002 min Scan# 1357
Delta R.T. 0.000 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion: 61 Resp: 19965

Ion	Ratio	Lower	Upper
61	100		
63	31.3	2.5	62.5

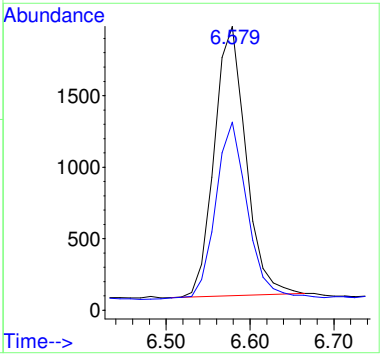


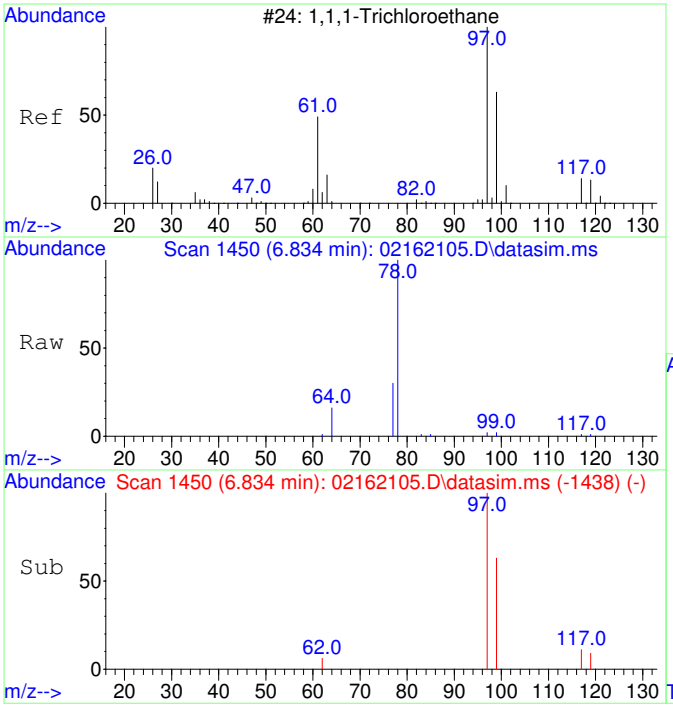


#6
Chloroform
Concen: 465.46 ug/L
RT: 6.579 min Scan# 1429
Delta R.T. 0.000 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion: 83 Resp: 4926

Ion	Ratio	Lower	Upper
83	100		
85	67.4	35.1	95.1

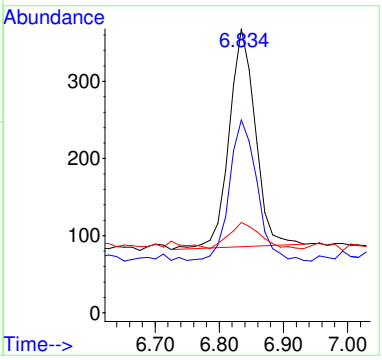


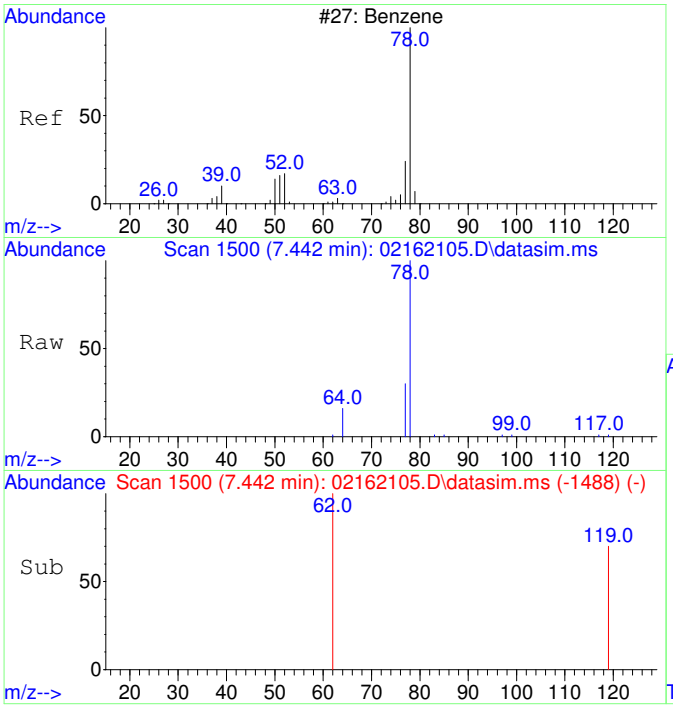


#7
1,1,1-Trichloroethane
Concen: 79.05 ug/L
RT: 6.834 min Scan# 1450
Delta R.T. 0.000 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion: 97 Resp: 795

Ion	Ratio	Lower	Upper
97	100		
99	67.4	34.6	94.6
117	14.3	0.0	43.2

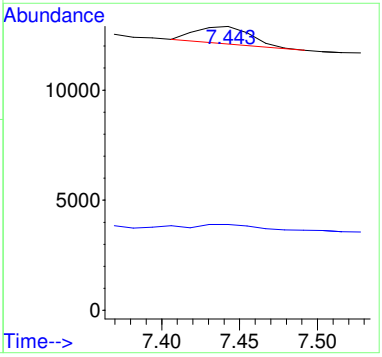


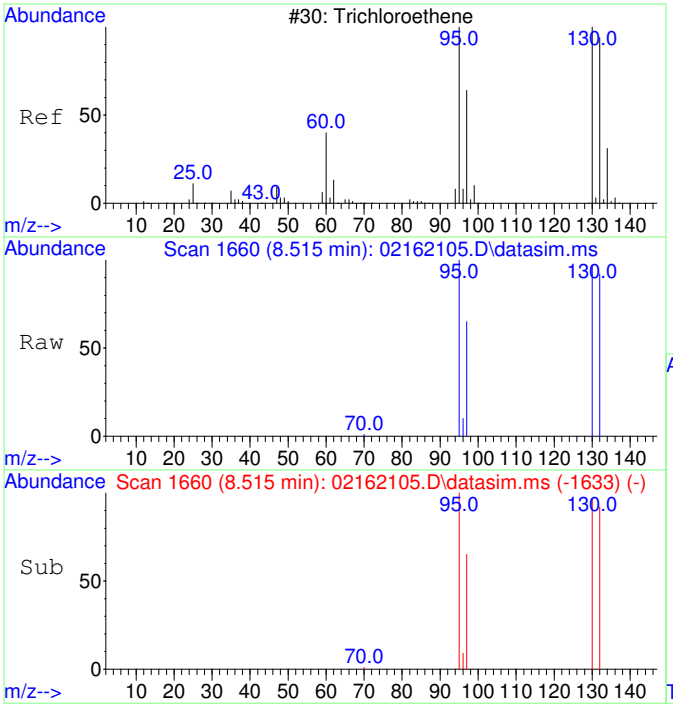


#9
Benzene
Concen: 61.39 ug/L
RT: 7.442 min Scan# 1500
Delta R.T. 0.000 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion: 78 Resp: 1775

Ion	Ratio	Lower	Upper
78	100		
77	124.2	0.0	53.2#

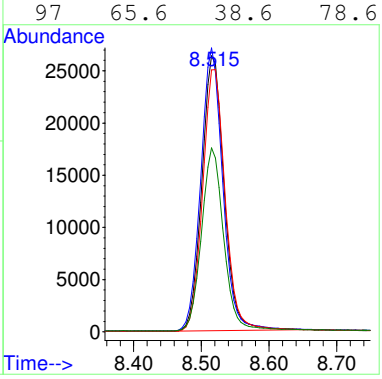


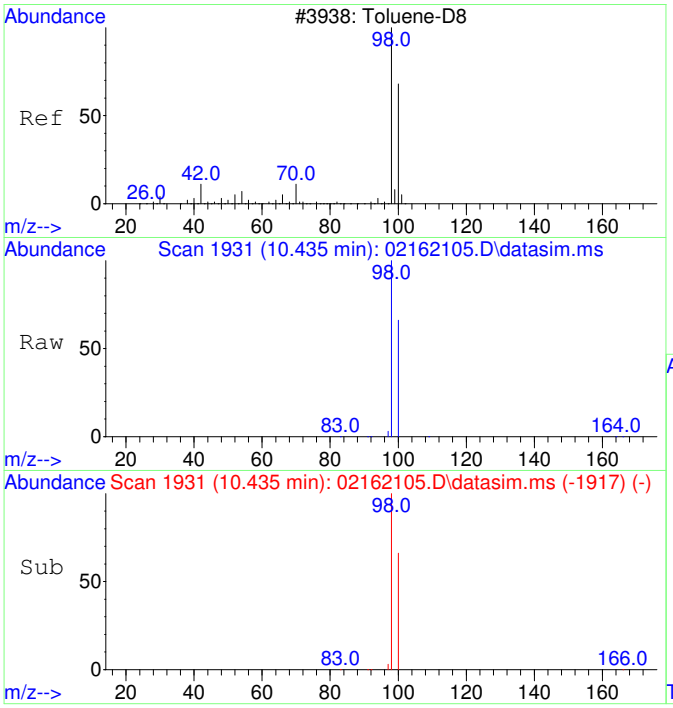


#11
Trichloroethene
Concen: 7853.75 ug/L
RT: 8.515 min Scan# 1660
Delta R.T. -0.005 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion:130 Resp: 60105

Ion	Ratio	Lower	Upper
130	100		
95	101.5	60.7	120.7
132	96.0	76.0	116.0
97	65.6	38.6	78.6

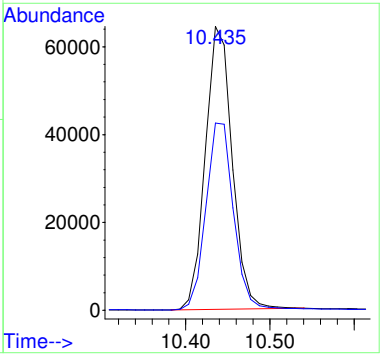


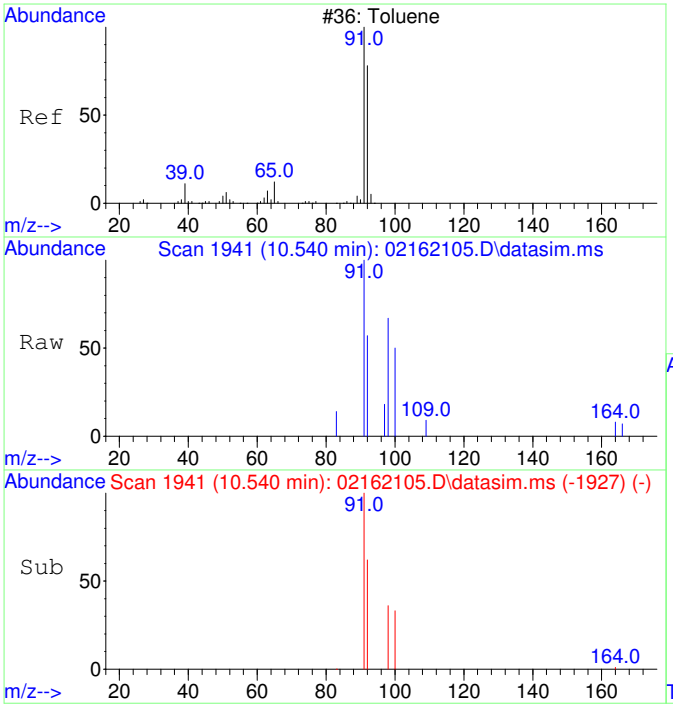


#12
Toluene-d8
Concen: 4883.76 ug/L
RT: 10.435 min Scan# 1931
Delta R.T. 0.000 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion: 98 Resp: 142993

Ion	Ratio	Lower	Upper
98	100		
100	67.2	37.1	97.1

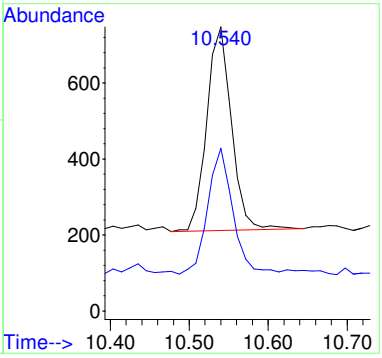


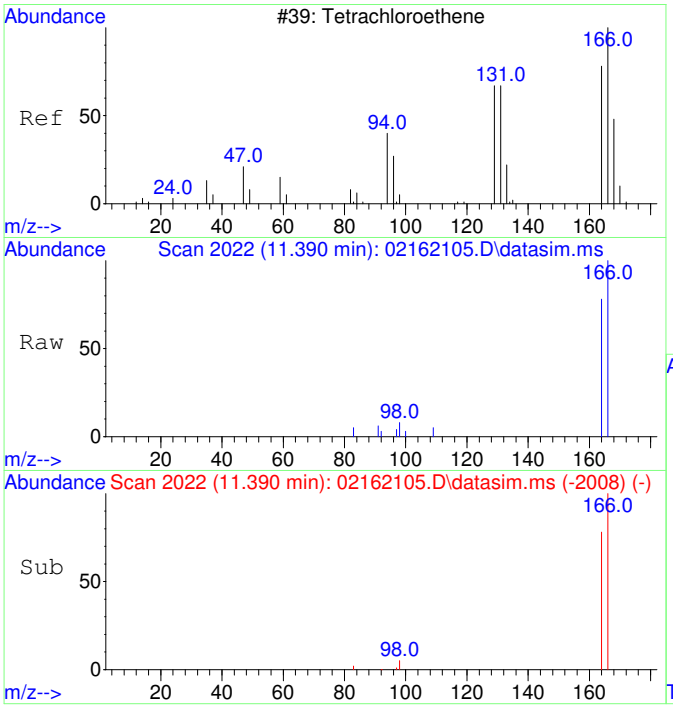


#13
Toluene
Concen: 28.73 ug/L
RT: 10.540 min Scan# 1941
Delta R.T. 0.000 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion: 91 Resp: 1165

Ion	Ratio	Lower	Upper
91	100		
92	60.3	29.9	89.9

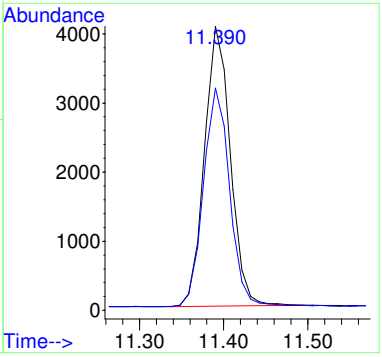


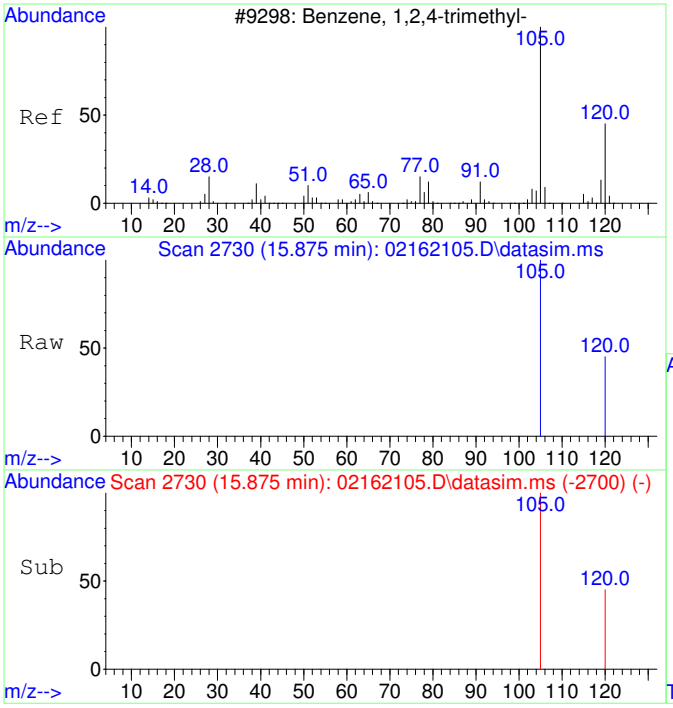


#15
Tetrachloroethene
Concen: 813.80 ug/L
RT: 11.390 min Scan# 2022
Delta R.T. 0.000 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion:166 Resp: 8640

Ion	Ratio	Lower	Upper
166	100		
164	78.5	47.8	107.8

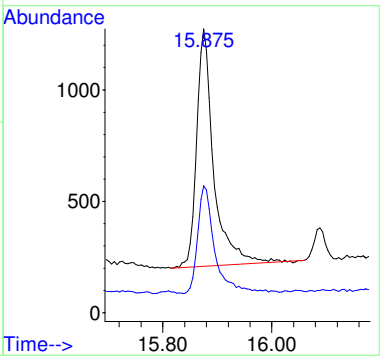


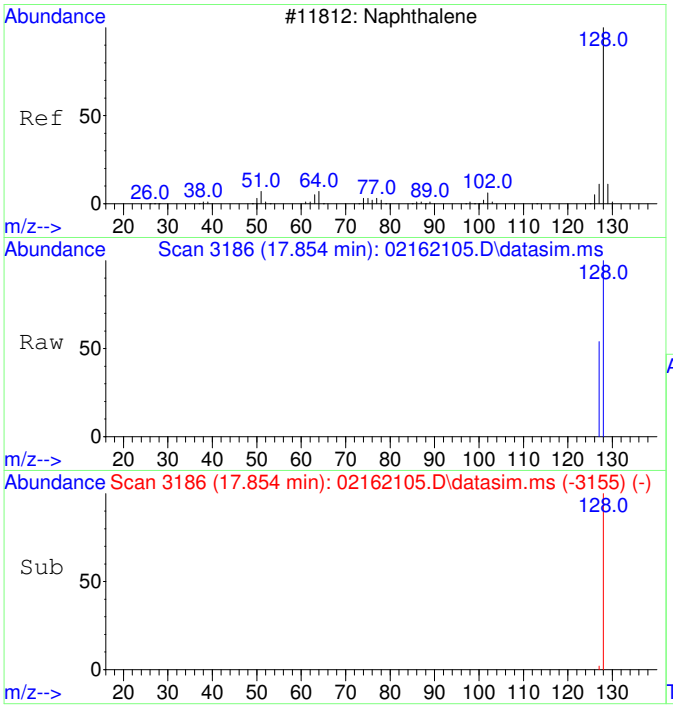


#23
1,2,4-Trimethylbenzene
Concen: 45.09 ug/L
RT: 15.875 min Scan# 2730
Delta R.T. 0.000 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion:105 Resp: 2308

Ion	Ratio	Lower	Upper
105	100		
120	44.9	17.2	77.2

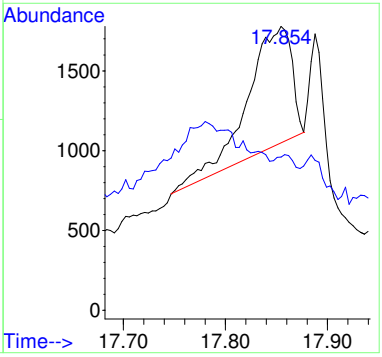


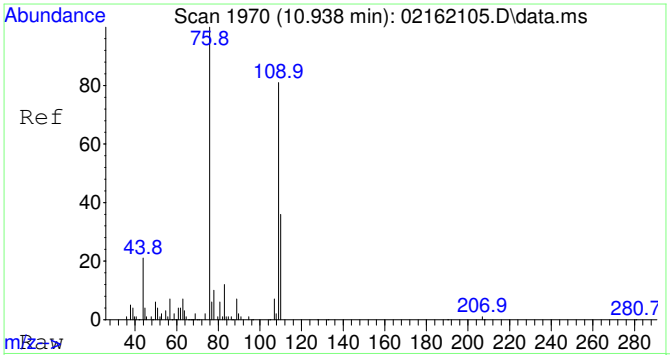


#24
Naphthalene
Concen: 31.27 ug/L
RT: 17.854 min Scan# 3186
Delta R.T. -0.033 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion:128 Resp: 2279

Ion	Ratio	Lower	Upper
128	100		
127	0.0	0.0	42.5

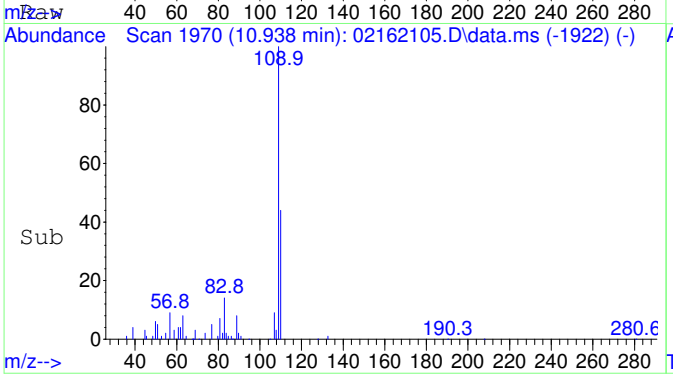


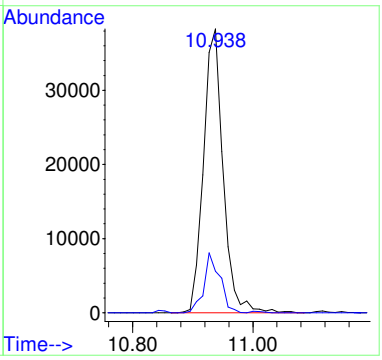


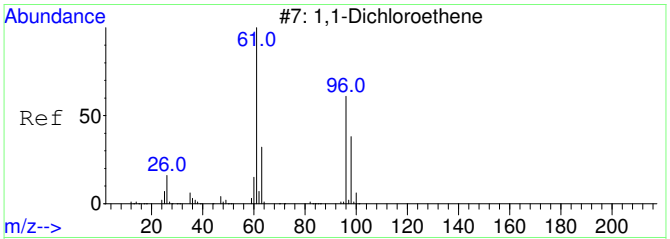
#25
2-Fluorotoluene SCAN
Concen: 4737.56 ug/L
RT: 10.938 min Scan# 1970
Delta R.T. 0.000 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion:109 Resp: 86662

Ion	Ratio	Lower	Upper
109	100		
83	17.2	0.0	43.8



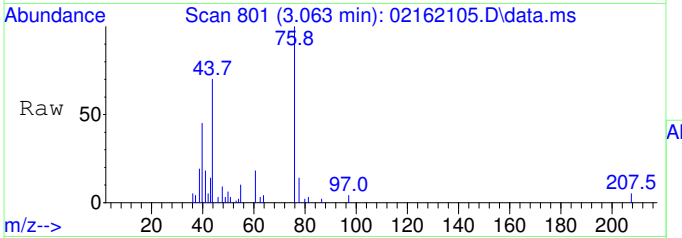


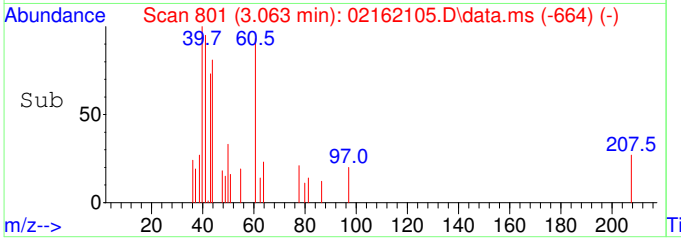


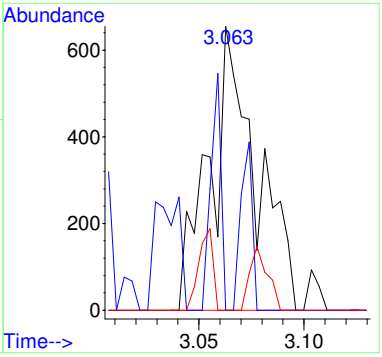
#26
1,1-Dichloroethene SCAN
Concen: 173.49 ug/L
RT: 3.063 min Scan# 801
Delta R.T. 0.008 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

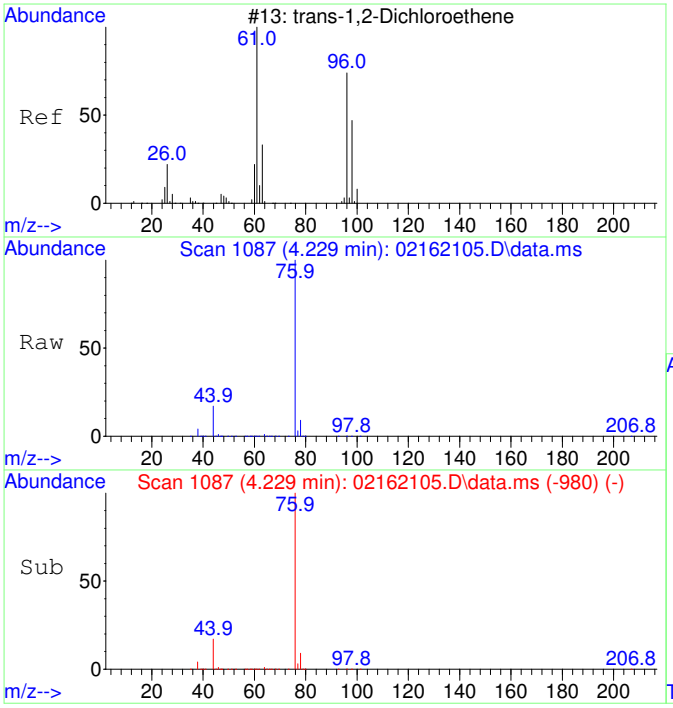
Tgt Ion: 61 Resp: 1009

Ion	Ratio	Lower	Upper
61	100		
96	18.2	33.1	93.1#
98	8.7	11.2	71.2#





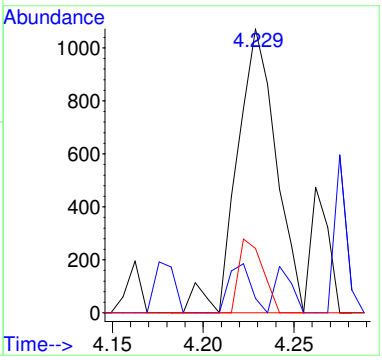


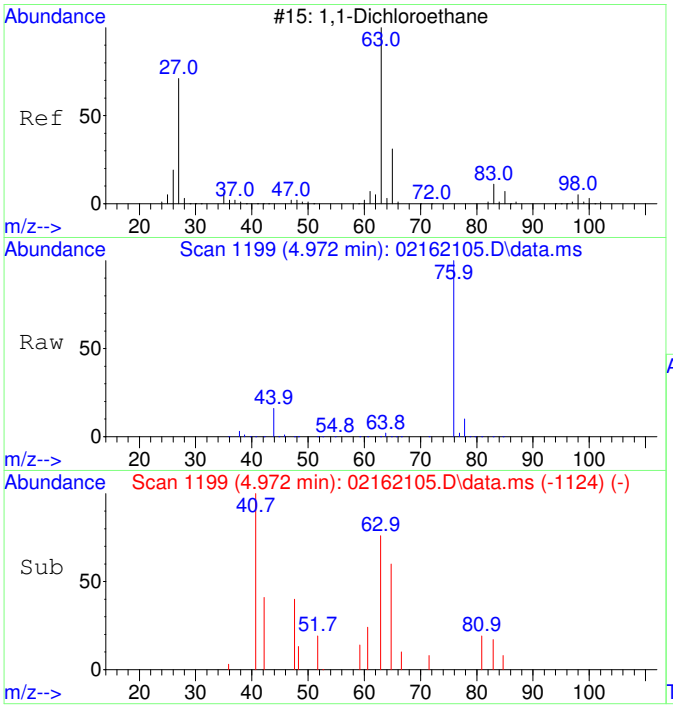


#27
trans-1,2-Dichloroethene SCAN
Concen: 263.04 ug/L
RT: 4.229 min Scan# 1087
Delta R.T. 0.000 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion: 61 Resp: 1606

Ion	Ratio	Lower	Upper
61	100		
96	9.9	49.0	109.0#
98	15.9	20.5	80.5#

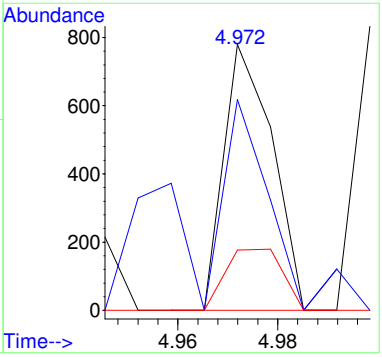


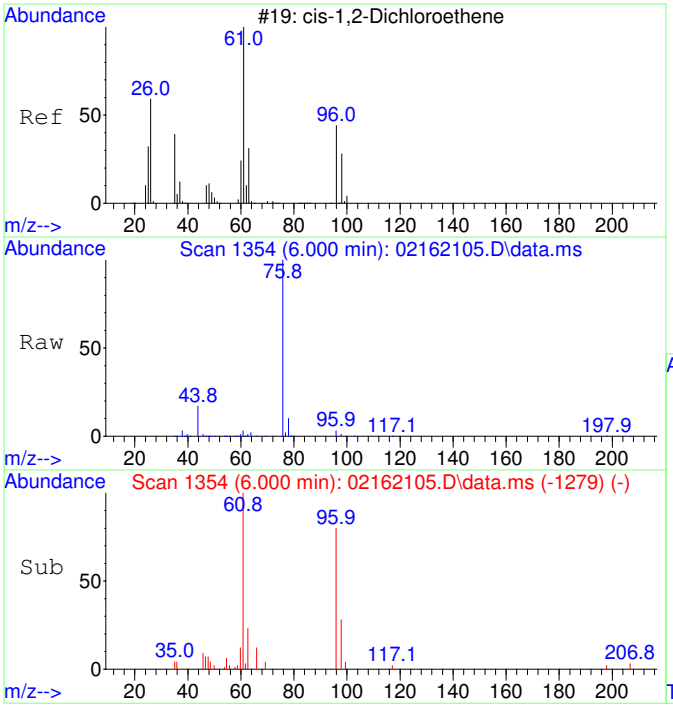


#28
1,1-Dichloroethane SCAN
Concen: 69.45 ug/L
RT: 4.972 min Scan# 1199
Delta R.T. 0.000 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion: 63 Resp: 525

Ion	Ratio	Lower	Upper
63	100		
65	80.6	1.3	61.3#
83	27.0	0.0	45.9

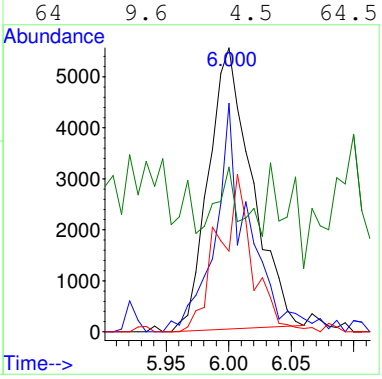


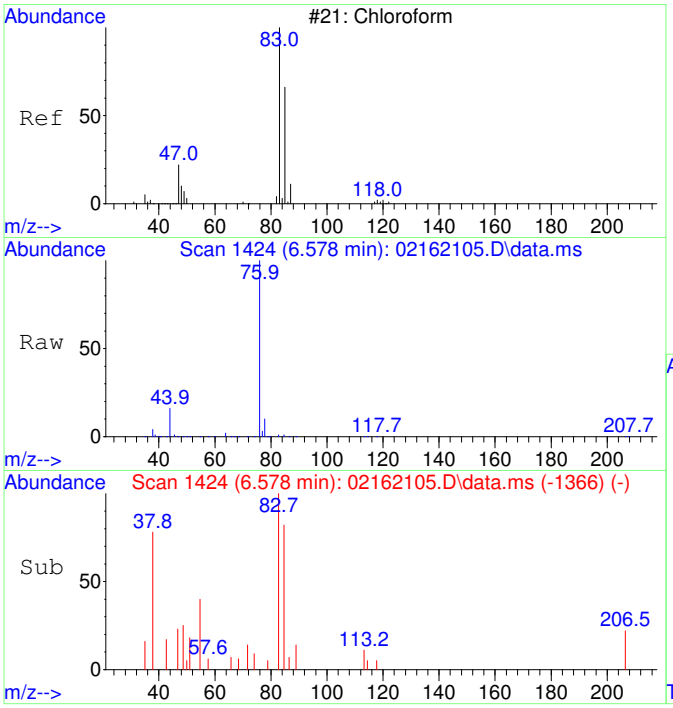


#29
cis-1,2-Dichloroethene SCAN
Concen: 1898.71 ug/L
RT: 6.000 min Scan# 1354
Delta R.T. 0.000 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion: 61 Resp: 13297

Ion	Ratio	Lower	Upper
61	100		
96	63.9	39.9	99.9
98	44.2	13.5	73.5
64	9.6	4.5	64.5

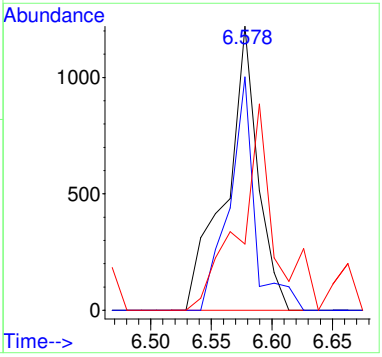


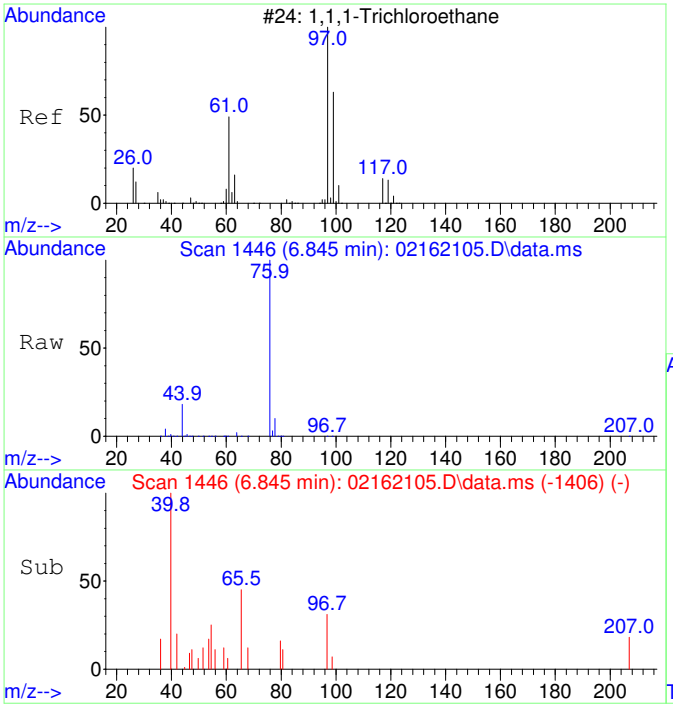


#30
Chloroform SCAN
Concen: 352.92 ug/L
RT: 6.578 min Scan# 1424
Delta R.T. 0.000 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion: 83 Resp: 2262

Ion	Ratio	Lower	Upper
83	100		
85	65.2	34.6	94.6
47	77.4	0.0	53.4#

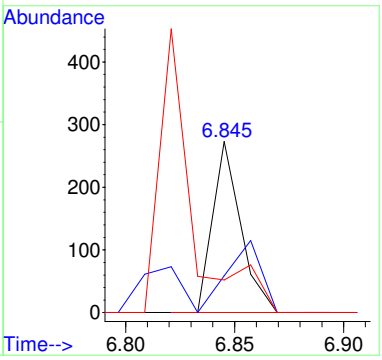


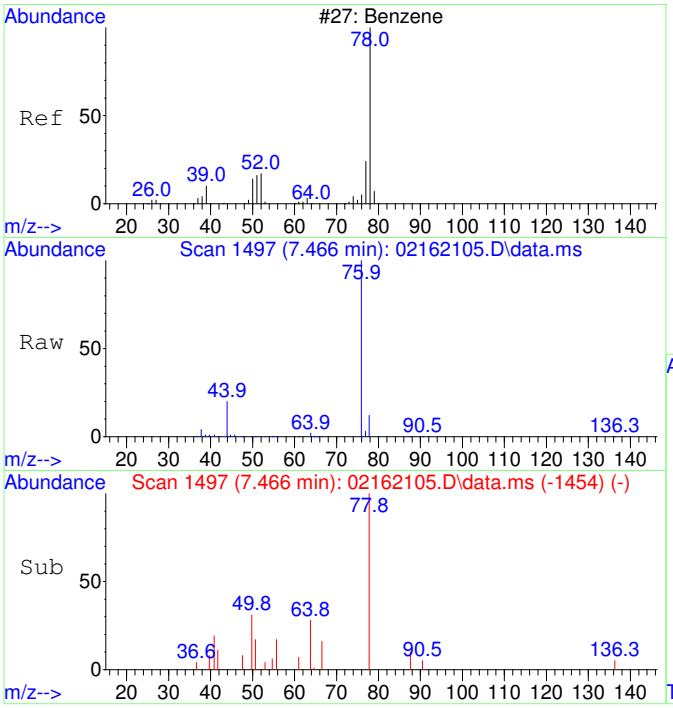


#31
1,1,1-Trichloroethane SCAN
Concen: 37.03 ug/L
RT: 6.845 min Scan# 1446
Delta R.T. 0.000 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion: 97 Resp: 244

Ion	Ratio	Lower	Upper
97	100		
99	52.0	43.6	103.6
61	0.0	18.0	78.0#

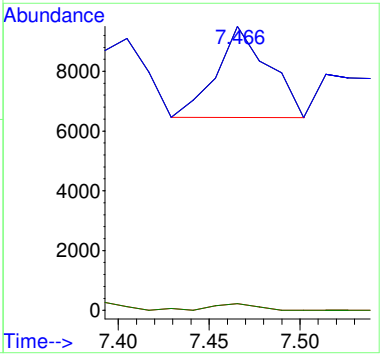


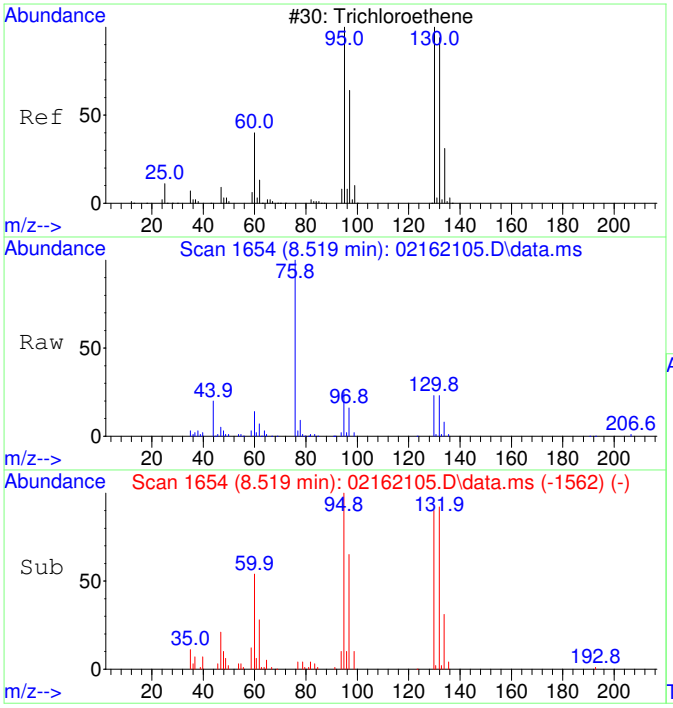


#33
Benzene SCAN
Concen: 335.00 ug/L
RT: 7.466 min Scan# 1497
Delta R.T. 0.025 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion: 78 Resp: 6059

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	5.9	0.0	47.9
51	5.9	0.0	44.1

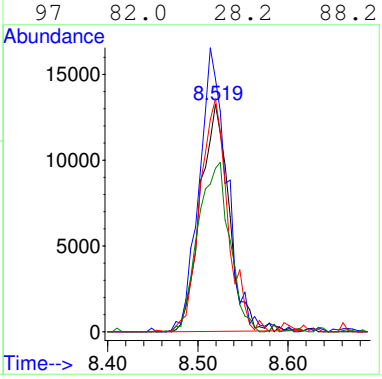


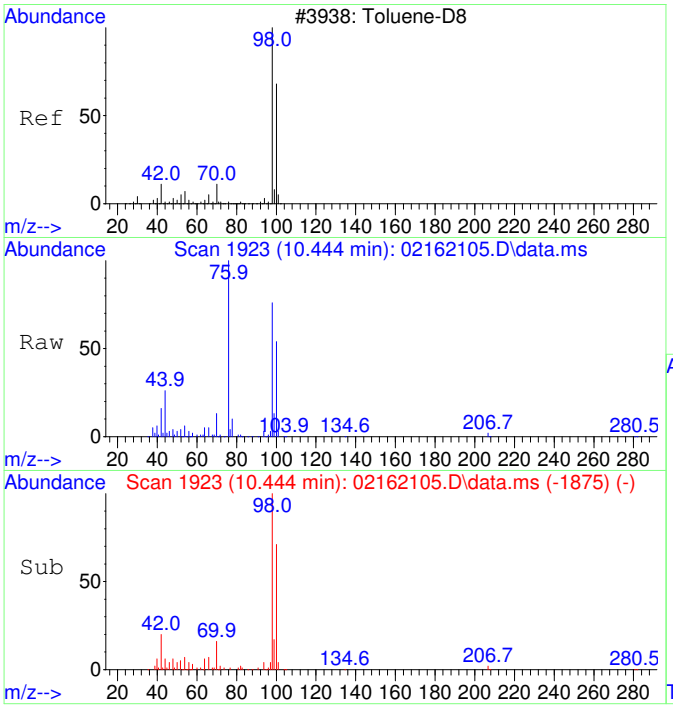


#35
Trichloroethene SCAN
Concen: 7328.04 ug/L
RT: 8.519 min Scan# 1654
Delta R.T. 0.000 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion:130 Resp: 29299

Ion	Ratio	Lower	Upper
130	100		
95	121.4	60.5	120.5#
132	97.1	59.6	119.6
97	82.0	28.2	88.2

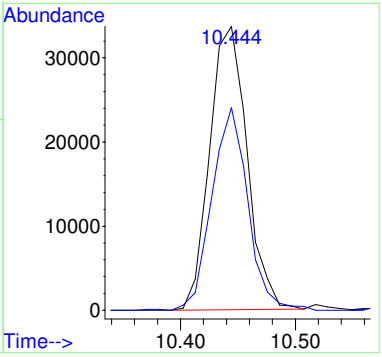


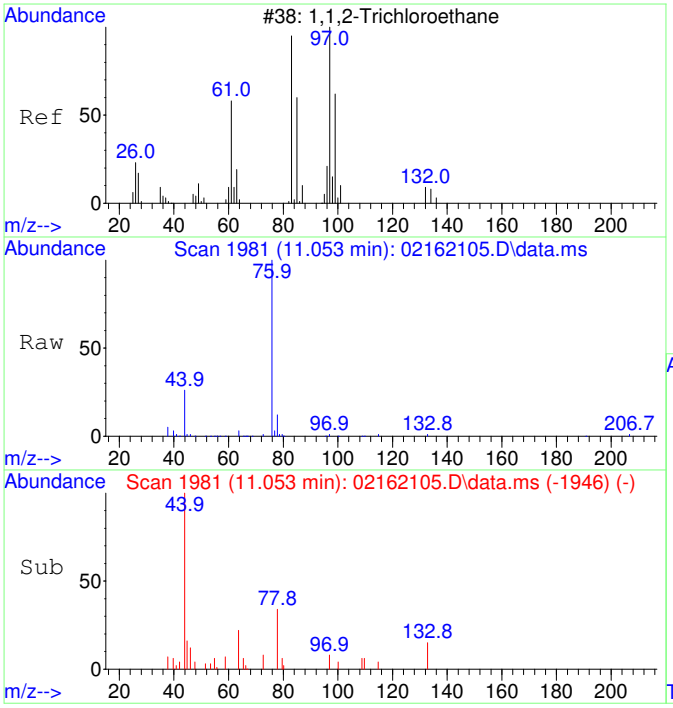


#36
Toluene-d8 SCAN
Concen: 4729.17 ug/L
RT: 10.444 min Scan# 1923
Delta R.T. 0.000 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion: 98 Resp: 76395

Ion	Ratio	Lower	Upper
98	100		
100	68.9	40.0	100.0

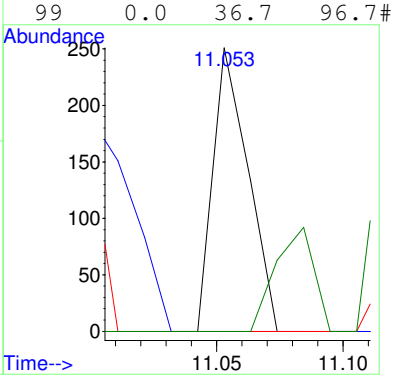


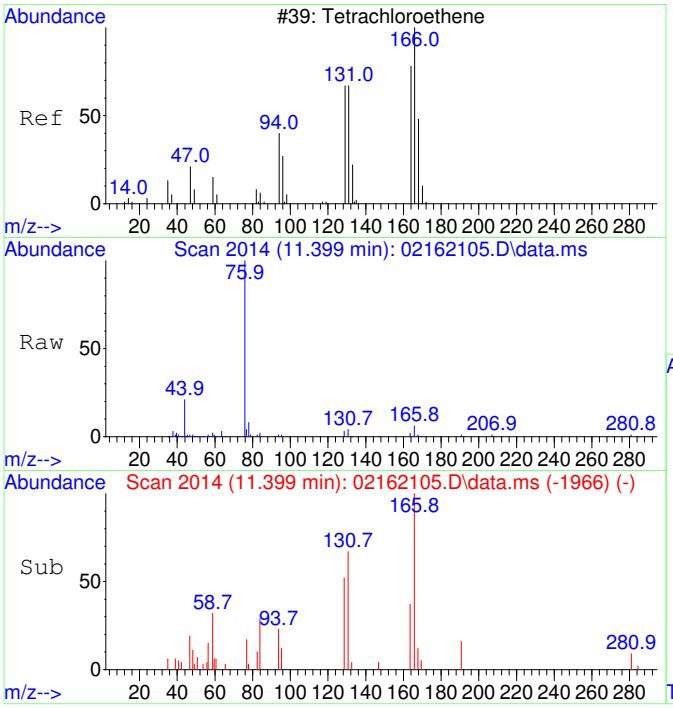


#38
1,1,2-Trichloroethane SCAN
Concen: 52.64 ug/L
RT: 11.053 min Scan# 1981
Delta R.T. -0.136 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion: 97 Resp: 242

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#

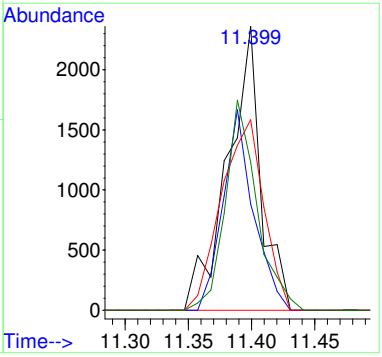


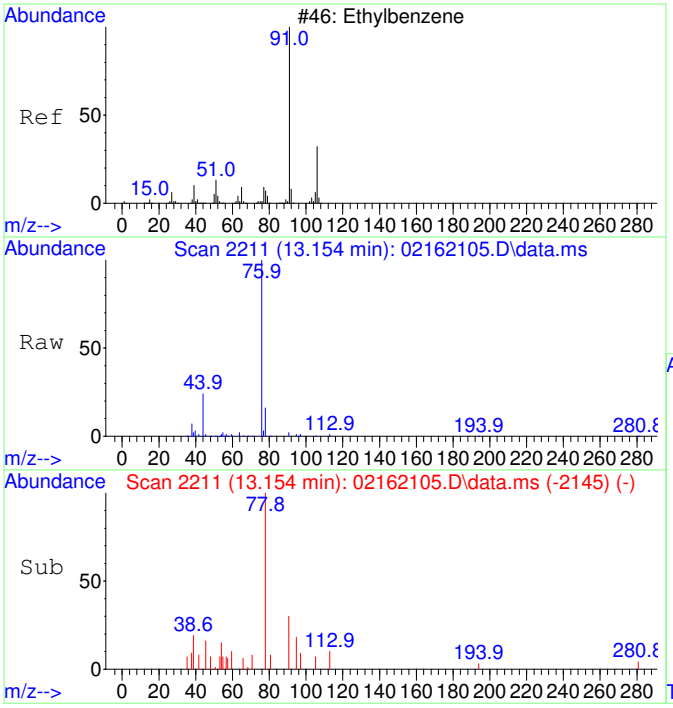


#39
Tetrachloroethene SCAN
Concen: 958.20 ug/L
RT: 11.399 min Scan# 2014
Delta R.T. 0.000 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion:166 Resp: 4312

Ion	Ratio	Lower	Upper
166	100		
164	65.1	50.9	110.9
131	85.8	38.7	98.7
129	70.8	41.8	101.8

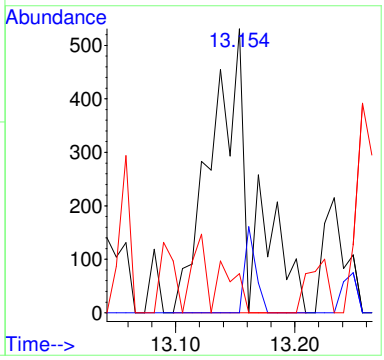


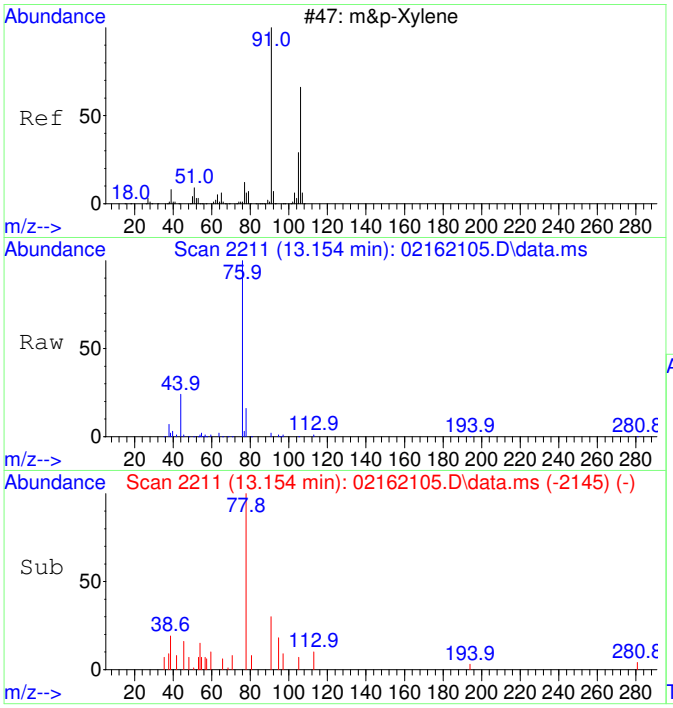


#42
Ethylbenzene SCAN
Concen: 30.36 ug/L
RT: 13.154 min Scan# 2211
Delta R.T. 0.024 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion: 91 Resp: 1304

Ion	Ratio	Lower	Upper
91	100		
106	7.9	23.1	83.1#
51	0.0	0.0	40.1

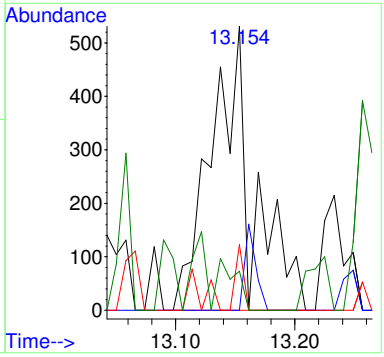


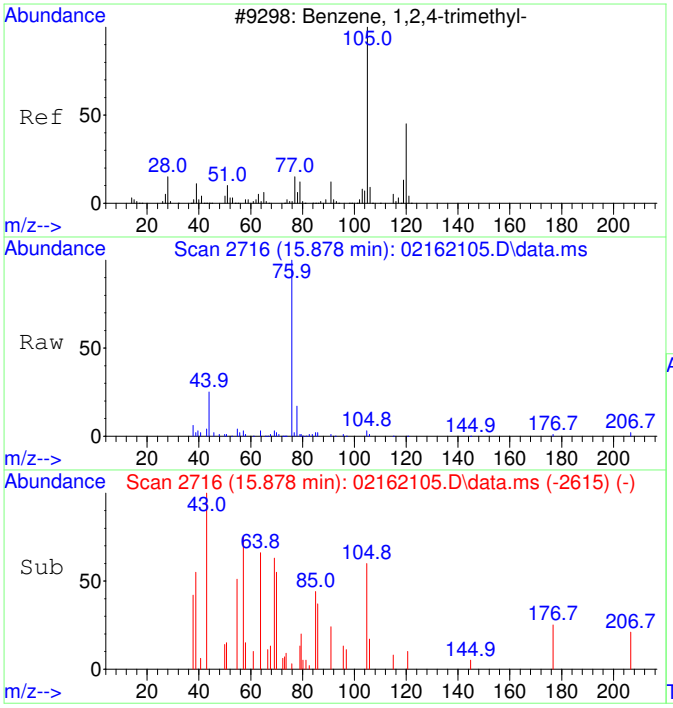


#43
m&p-Xylene SCAN
Concen: 30.36 ug/L
RT: 13.154 min Scan# 2211
Delta R.T. 0.024 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion: 91 Resp: 1304

Ion	Ratio	Lower	Upper
91	100		
106	7.9	23.1	83.1#
105	4.5	0.0	54.7
51	0.0	0.0	40.1

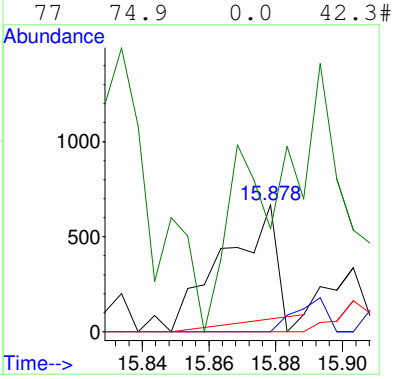


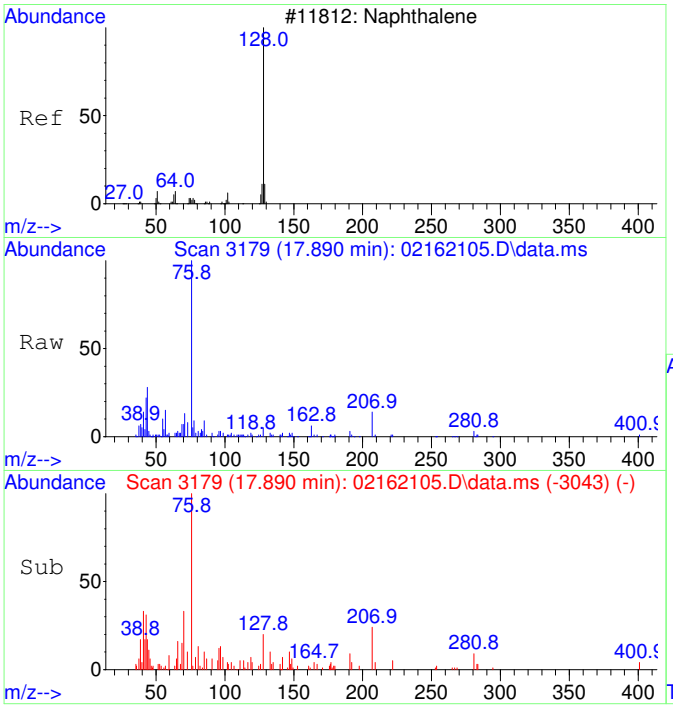


#47
1,2,4-Trimethylbenzene SCAN
Concen: 26.41 ug/L
RT: 15.878 min Scan# 2716
Delta R.T. 0.000 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion:105 Resp: 645

Ion	Ratio	Lower	Upper
105	100		
120	0.0	16.9	76.9#
119	0.0	0.0	41.9
77	74.9	0.0	42.3#

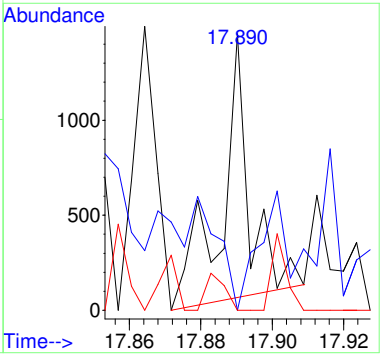




#48
Naphthalene SCAN
Concen: 24.13 ug/L
RT: 17.890 min Scan# 3179
Delta R.T. 0.004 min
Lab File: 02162105.D
Acq: 16 Feb 2021 9:47

Tgt Ion:128 Resp: 765

Ion	Ratio	Lower	Upper
128	100		
127	32.5	0.0	44.0
129	15.2	0.0	40.8



2102006-03RE2

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021621\
Data File : 02162106.D
Acq On : 16 Feb 2021 10:10
InstName : AG5975C
Operator : TD
Sample : 2102006-03RE2
Misc : 10X DL (180-20)
ALS Vial : 6 Sample Multiplier: 10

Quant Time: Feb 16 10:29:21 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021621.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration

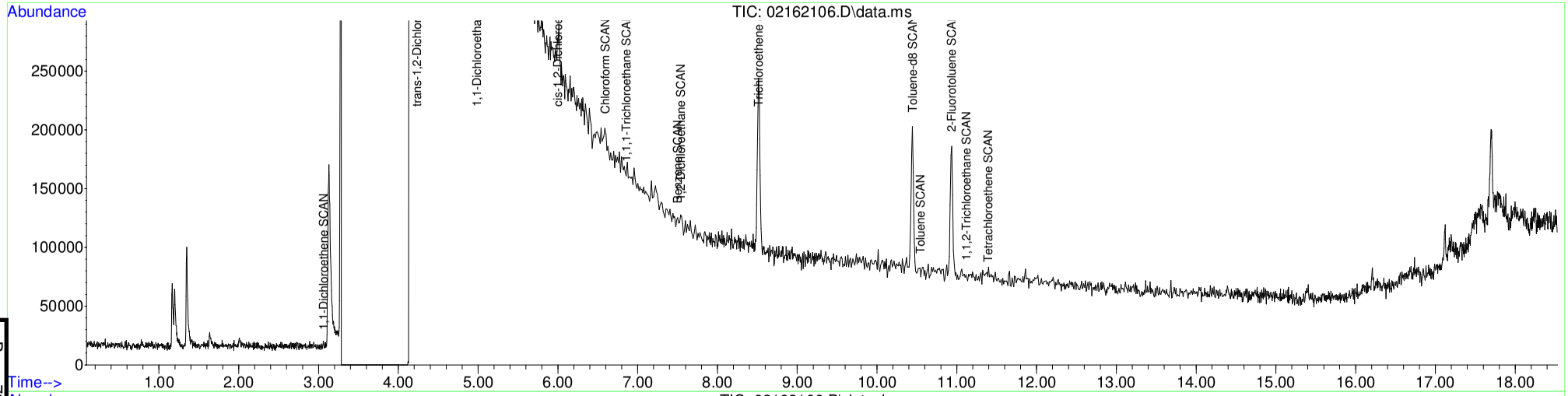
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.928	109	193932	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.435	98	160746	4810.07 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 96.20%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.056	61	1686	186.65 ug/L	93
3] trans-1,2-Dichloroethene	4.230	61	2007	210.32 ug/L	99
4] 1,1-Dichloroethane	4.973	63	1741	151.47 ug/L	86
5] cis-1,2-Dichloroethene	6.002	61	38506	3397.70 ug/L	99
6] Chloroform	6.579	83	12248	1013.96 ug/L	98
7] 1,1,1-Trichloroethane	6.834	97	982	85.55 ug/L	97
9] Benzene	7.442	78	1817	55.06 ug/L #	1
11] Trichloroethene	8.515	130	109867	12577.83 ug/L RPT	94
13] Toluene	10.540	91	1331	28.76 ug/L	96
15] Tetrachloroethene	11.390	166	4723	389.75 ug/L	99
24] Naphthalene	17.847	128	2023	24.32 ug/L #	68
25) 2-Fluorotoluene SCAN	10.937	109	96792	4635.93 ug/L	96
26) 1,1-Dichloroethene SCAN	3.063	61	348	52.42 ug/L	72
27) trans-1,2-Dichloroethe...	4.229	61	1181	169.47 ug/L #	35
28) 1,1-Dichloroethane SCAN	4.978	63	709	82.18 ug/L #	22
29) cis-1,2-Dichloroethene...	6.000	61	24884	3113.13 ug/L	86
30) Chloroform SCAN	6.590	83	8876	1213.30 ug/L	87
31) 1,1,1-Trichloroethane ...	6.857	97	375	49.86 ug/L #	59
33) Benzene SCAN	7.502	78	9066	439.17 ug/L	93
34) 1,2-Dichloroethane SCAN	7.538	62	220	29.20 ug/L #	40
35) Trichloroethene SCAN	8.514	130	55670	12199.11 ug/L	89
36) Toluene-d8 SCAN	10.444	98	93454	5068.62 ug/L	91
37) Toluene SCAN	10.539	91	1107	41.89 ug/L	73
38) 1,1,2-Trichloroethane ...	11.116	97	370	70.51 ug/L #	13
39) Tetrachloroethene SCAN	11.389	166	2237	435.53 ug/L	76

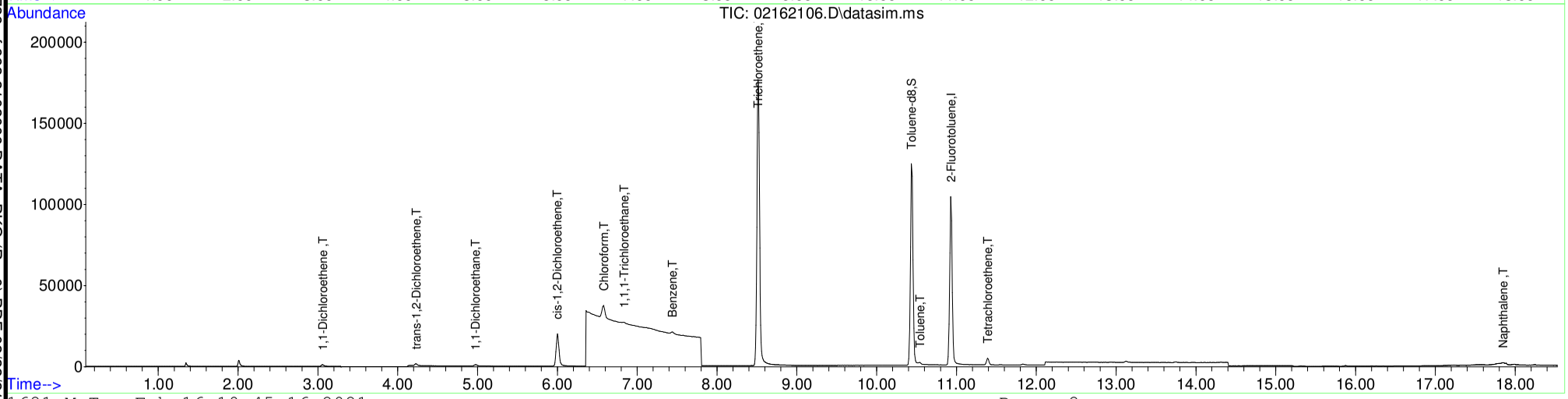
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021621\
Data File : 02162106.D
Acq On : 16 Feb 2021 10:10
InstName : AG5975C
Operator : TD
Sample : 2102006-03RE2
Misc : 10X DL (180-20)
ALS Vial : 6 Sample Multiplier: 10

Quant Time: Feb 16 10:29:21 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021621.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration





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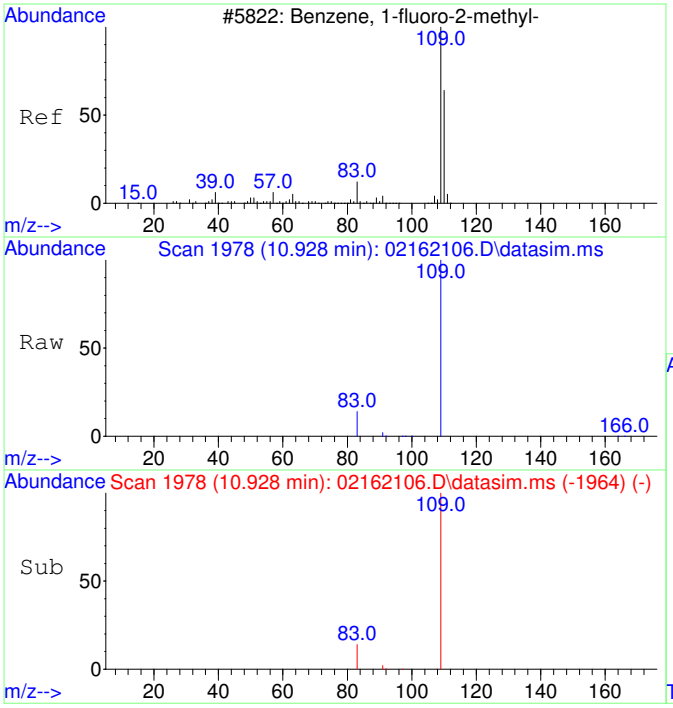
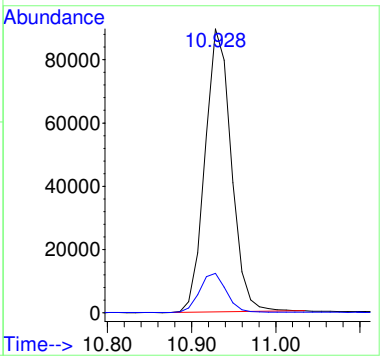
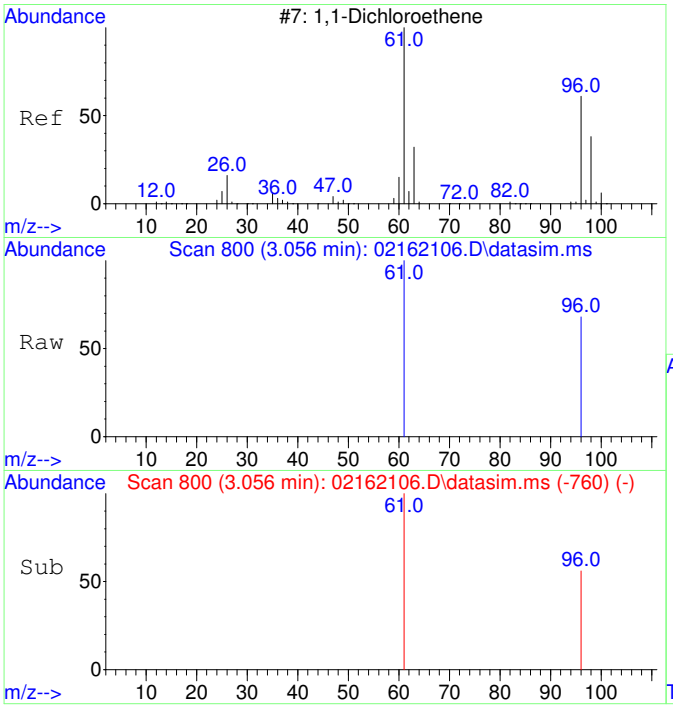


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.928 min Scan# 1978
Delta R.T. 0.000 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion:109 Resp: 193932

Ion	Ratio	Lower	Upper
109	100		
83	14.0	0.0	42.3

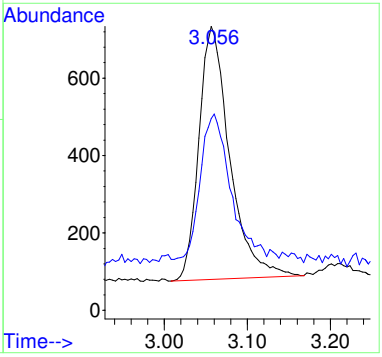


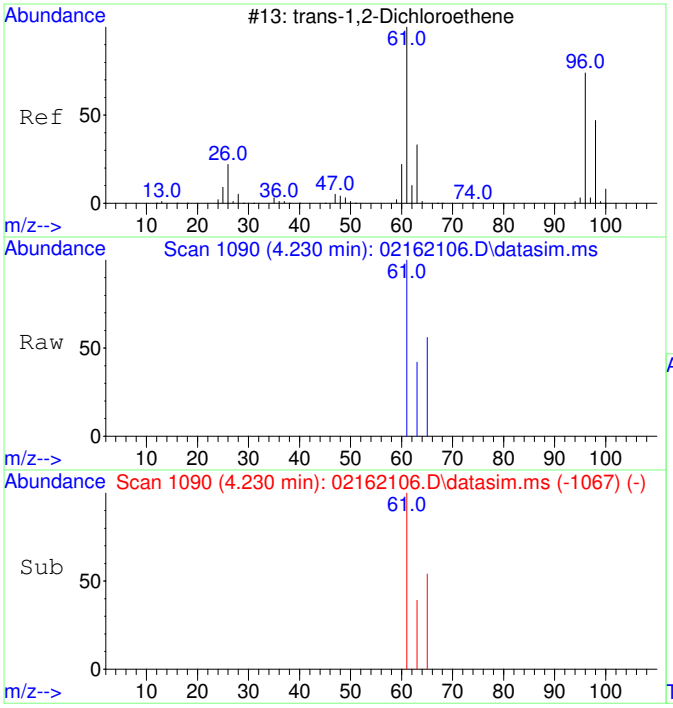


#2
1,1-Dichloroethene
Concen: 186.65 ug/L
RT: 3.056 min Scan# 800
Delta R.T. 0.000 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion: 61 Resp: 1686

Ion	Ratio	Lower	Upper
61	100		
96	62.0	37.2	97.2

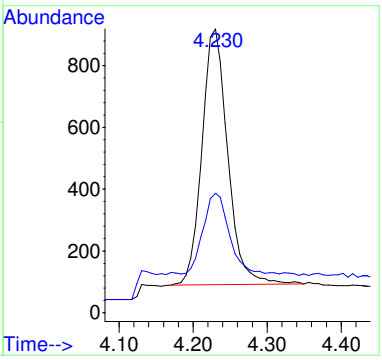


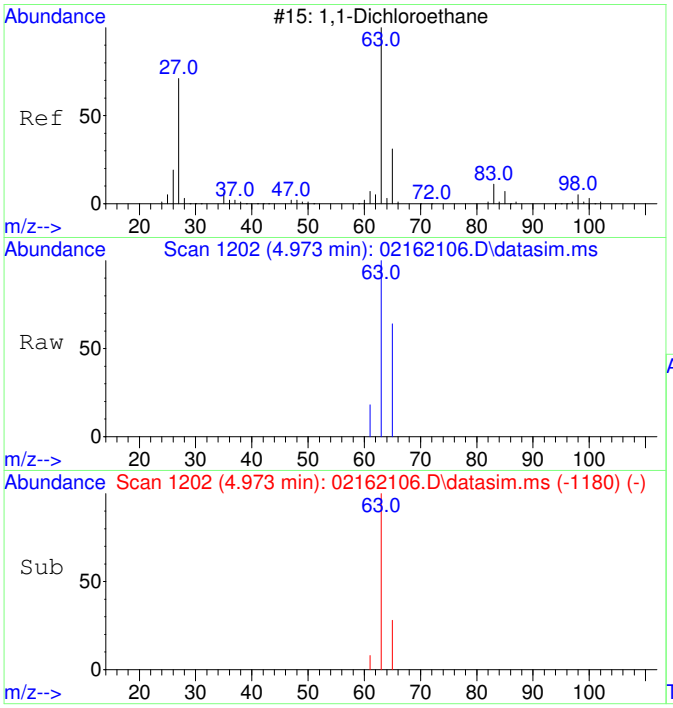


#3
trans-1,2-Dichloroethene
Concen: 210.32 ug/L
RT: 4.230 min Scan# 1090
Delta R.T. 0.000 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion: 61 Resp: 2007

Ion	Ratio	Lower	Upper
61	100		
63	31.6	2.4	62.4

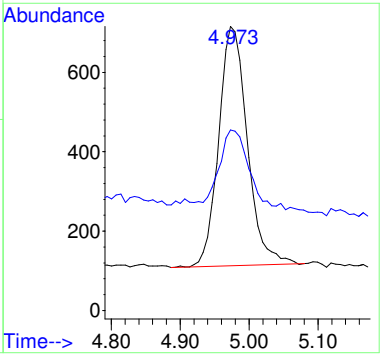


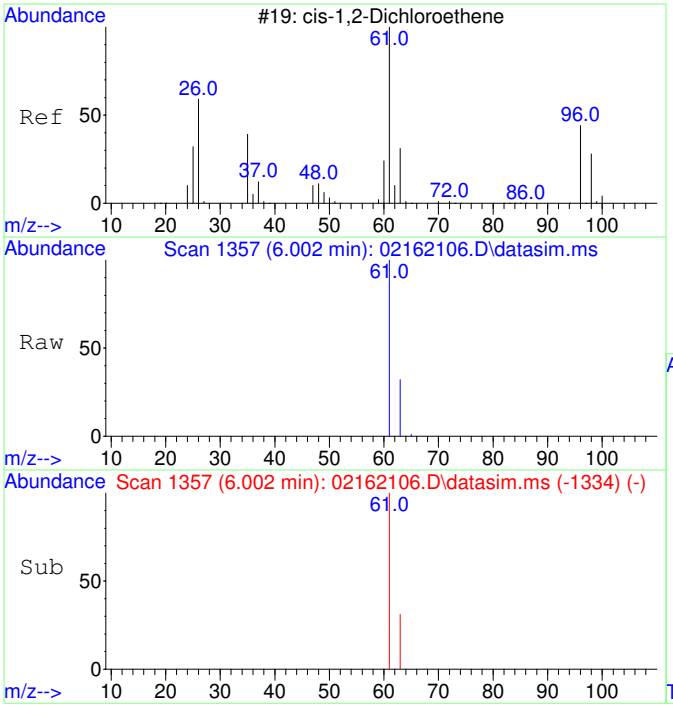


#4
1,1-Dichloroethane
Concen: 151.47 ug/L
RT: 4.973 min Scan# 1202
Delta R.T. -0.007 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion: 63 Resp: 1741

Ion	Ratio	Lower	Upper
63	100		
65	39.4	1.8	61.8

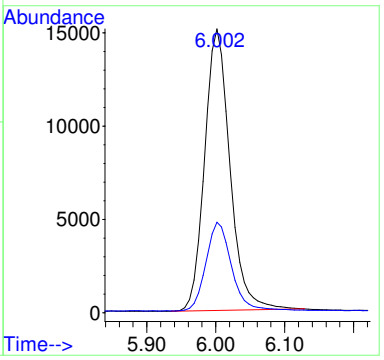


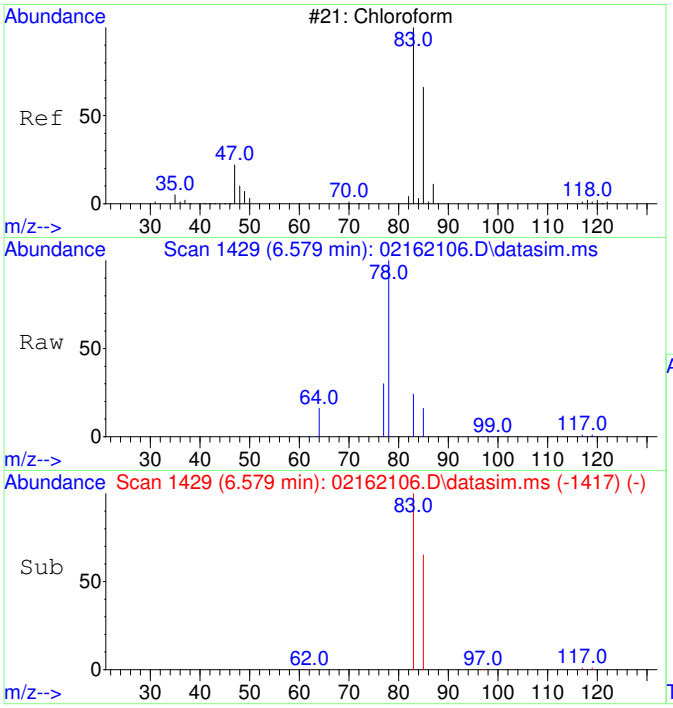


#5
cis-1,2-Dichloroethene
Concen: 3397.70 ug/L
RT: 6.002 min Scan# 1357
Delta R.T. 0.000 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion: 61 Resp: 38506

Ion	Ratio	Lower	Upper
61	100		
63	32.1	2.5	62.5

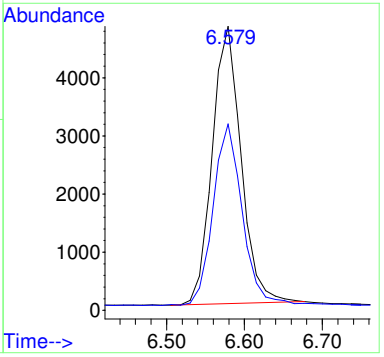


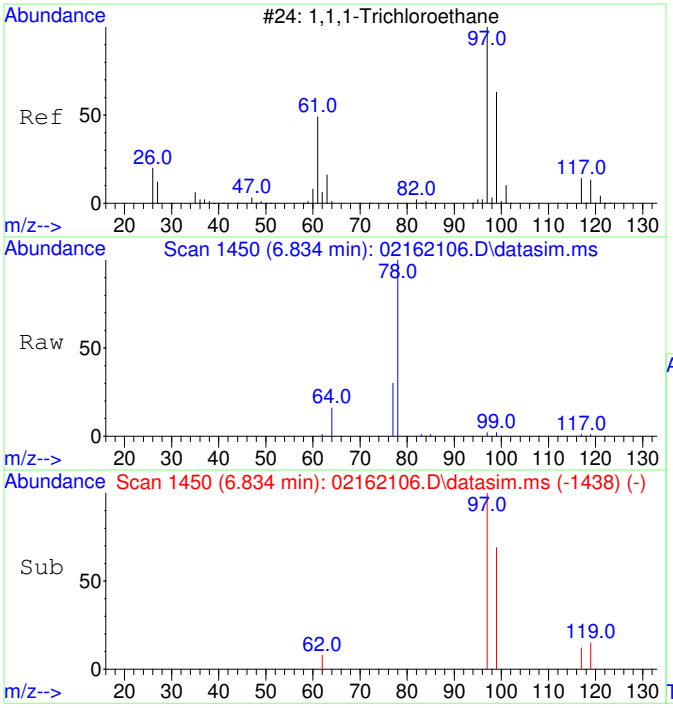


#6
Chloroform
Concen: 1013.96 ug/L
RT: 6.579 min Scan# 1429
Delta R.T. 0.000 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion: 83 Resp: 12248

Ion	Ratio	Lower	Upper
83	100		
85	66.4	35.1	95.1

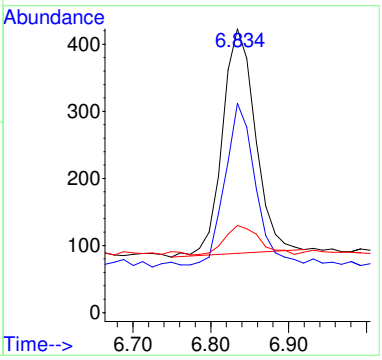


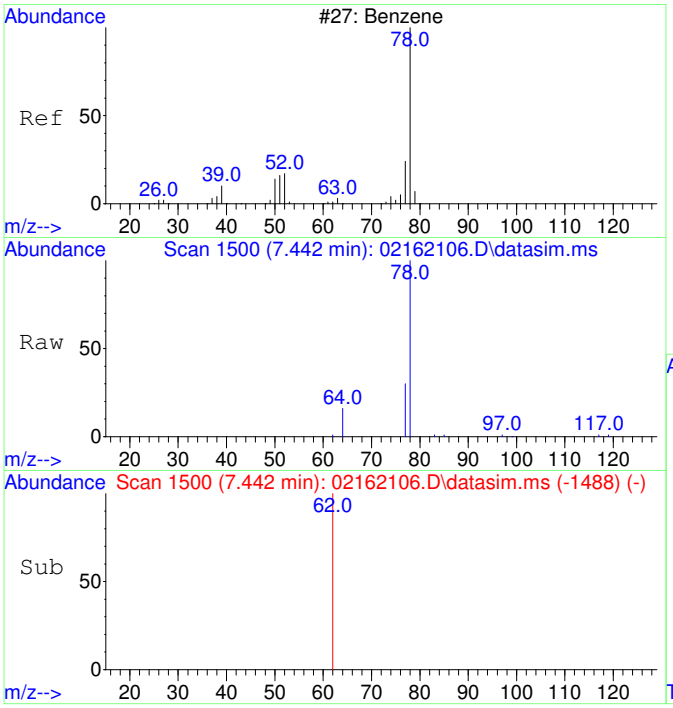


#7
1,1,1-Trichloroethane
Concen: 85.55 ug/L
RT: 6.834 min Scan# 1450
Delta R.T. 0.000 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion: 97 Resp: 982

Ion	Ratio	Lower	Upper
97	100		
99	66.7	34.6	94.6
117	14.1	0.0	43.2

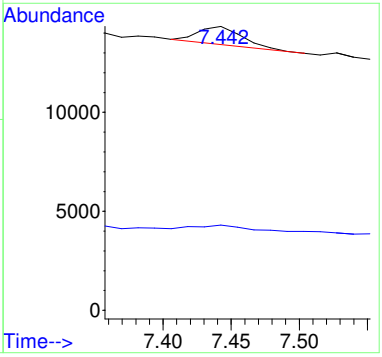


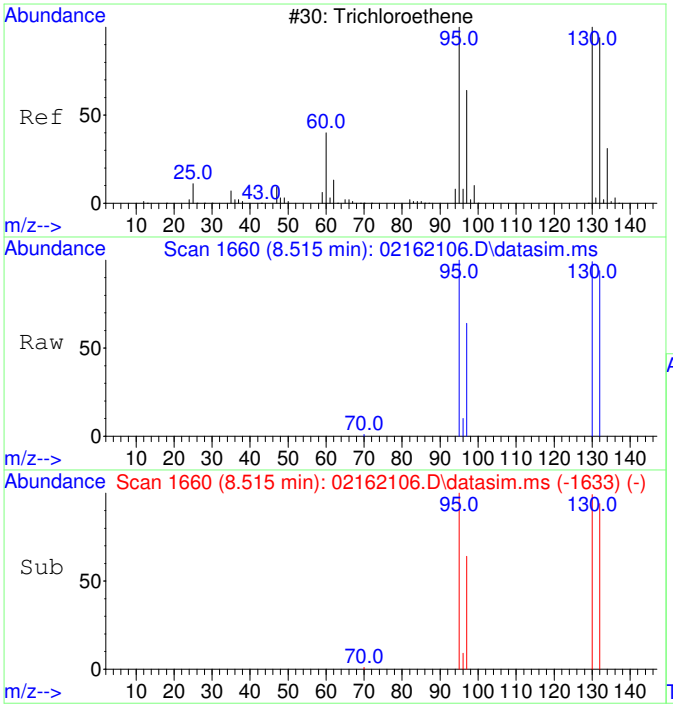


#9
Benzene
Concen: 55.06 ug/L
RT: 7.442 min Scan# 1500
Delta R.T. 0.000 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion: 78 Resp: 1817

Ion	Ratio	Lower	Upper
78	100		
77	110.7	0.0	53.2#

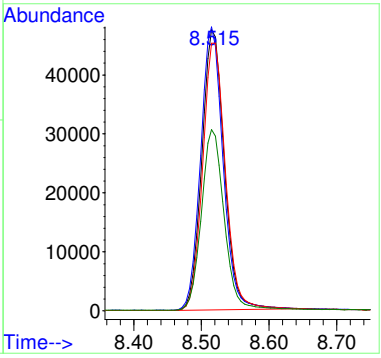


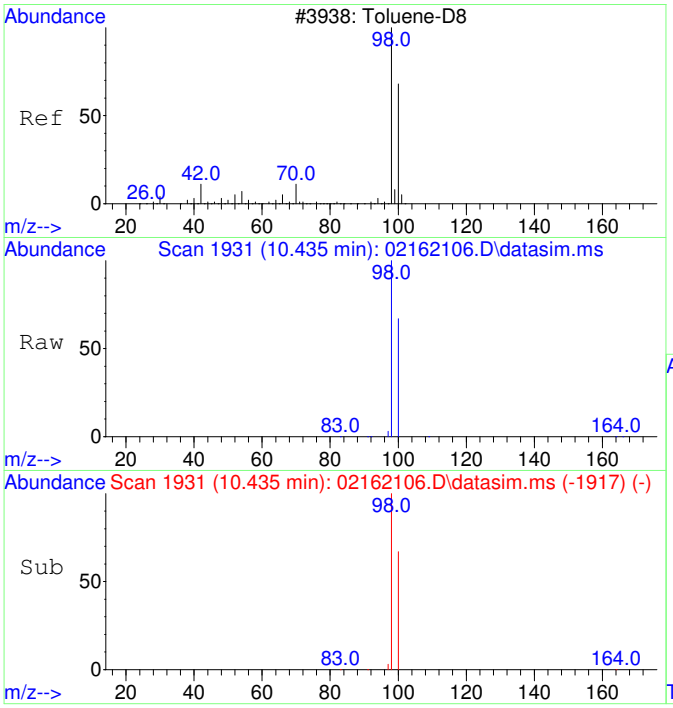


#11
Trichloroethene
Concen: 12577.83 ug/L
RT: 8.515 min Scan# 1660
Delta R.T. -0.005 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion:130 Resp: 109867

Ion	Ratio	Lower	Upper
130	100		
95	100.5	60.7	120.7
132	96.0	76.0	116.0
97	64.5	38.6	78.6

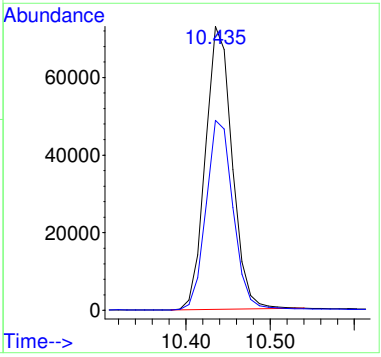


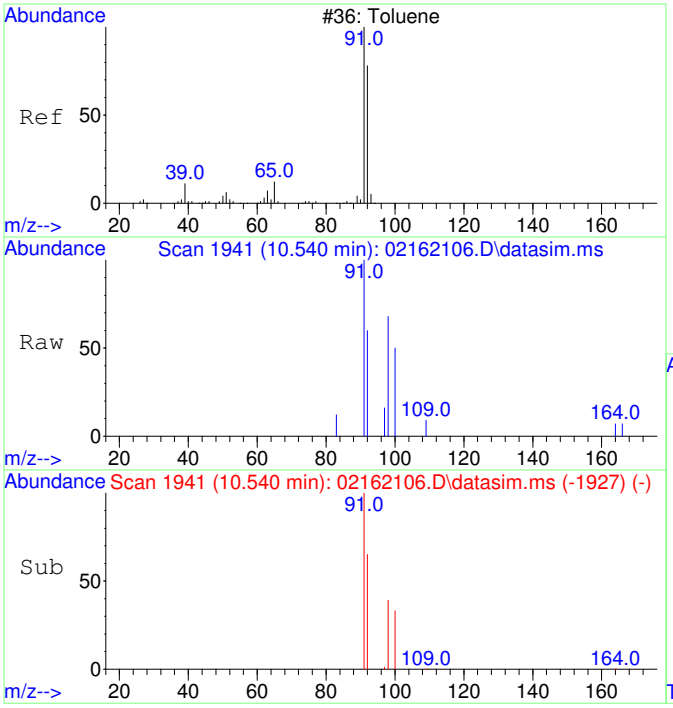


#12
Toluene-d8
Concen: 4810.07 ug/L
RT: 10.435 min Scan# 1931
Delta R.T. 0.000 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion: 98 Resp: 160746

Ion	Ratio	Lower	Upper
98	100		
100	67.4	37.1	97.1

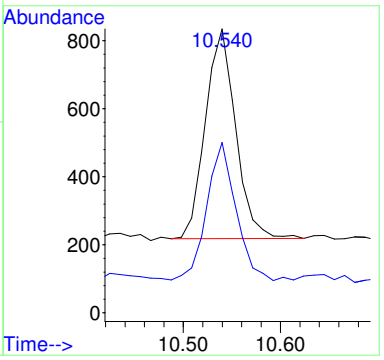


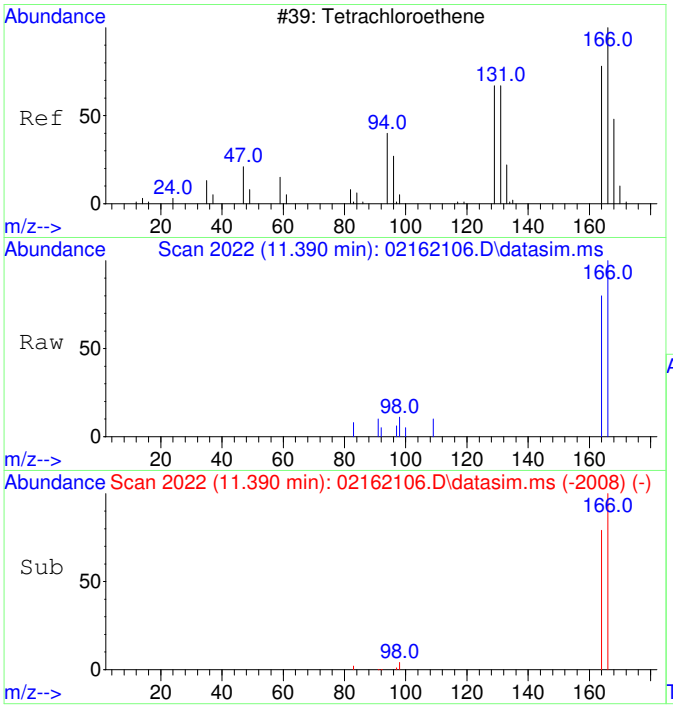


#13
Toluene
Concen: 28.76 ug/L
RT: 10.540 min Scan# 1941
Delta R.T. 0.000 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion: 91 Resp: 1331

Ion	Ratio	Lower	Upper
91	100		
92	62.7	29.9	89.9

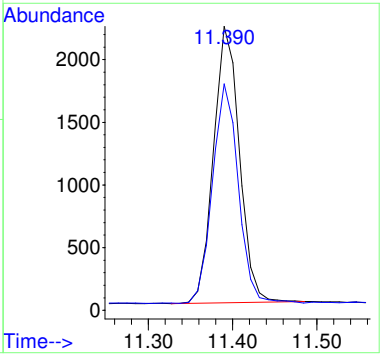


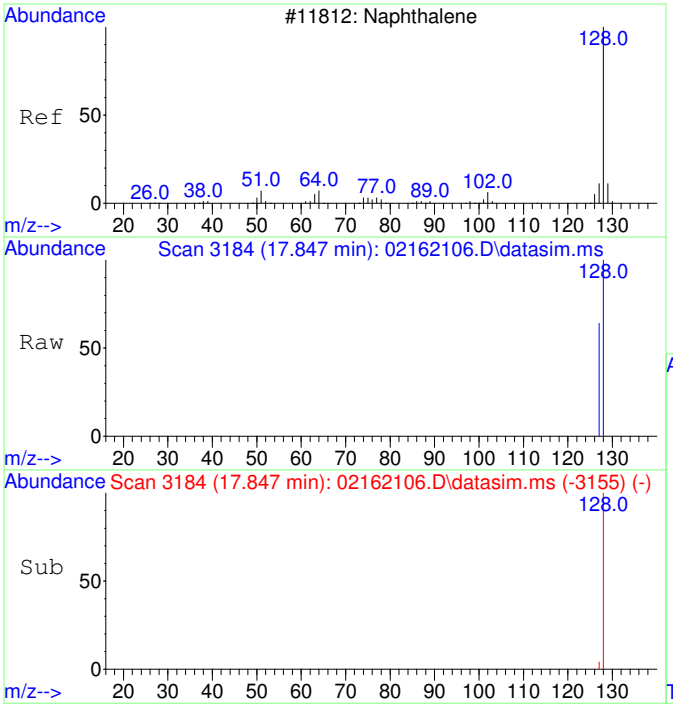


#15
Tetrachloroethene
Concen: 389.75 ug/L
RT: 11.390 min Scan# 2022
Delta R.T. 0.000 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion:166 Resp: 4723

Ion	Ratio	Lower	Upper
166	100		
164	79.0	47.8	107.8

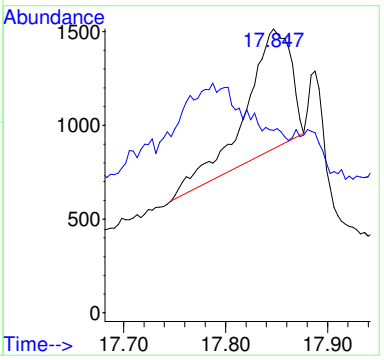


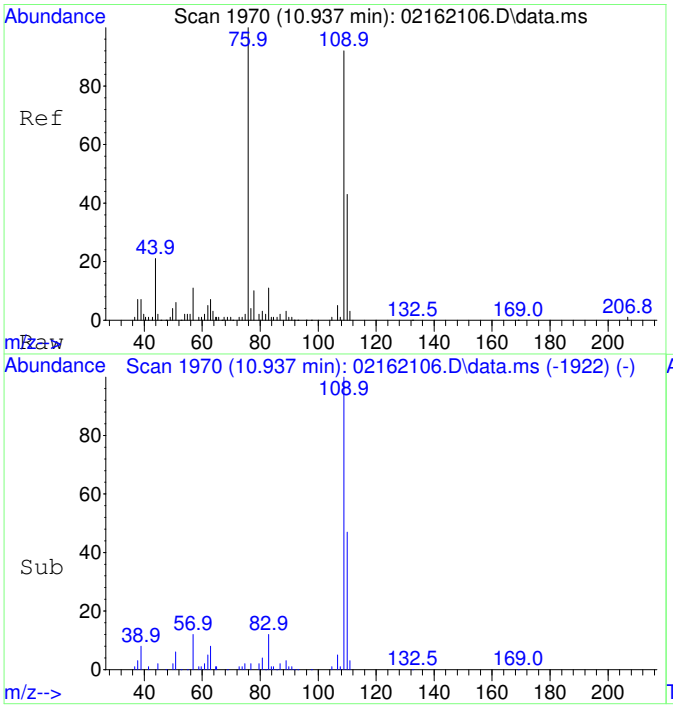


#24
Naphthalene
Concen: 24.32 ug/L
RT: 17.847 min Scan# 3184
Delta R.T. -0.041 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion:128 Resp: 2023

Ion	Ratio	Lower	Upper
128	100		
127	0.0	0.0	42.5

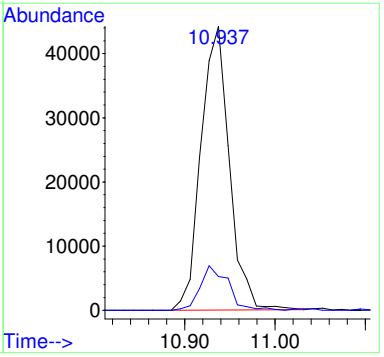


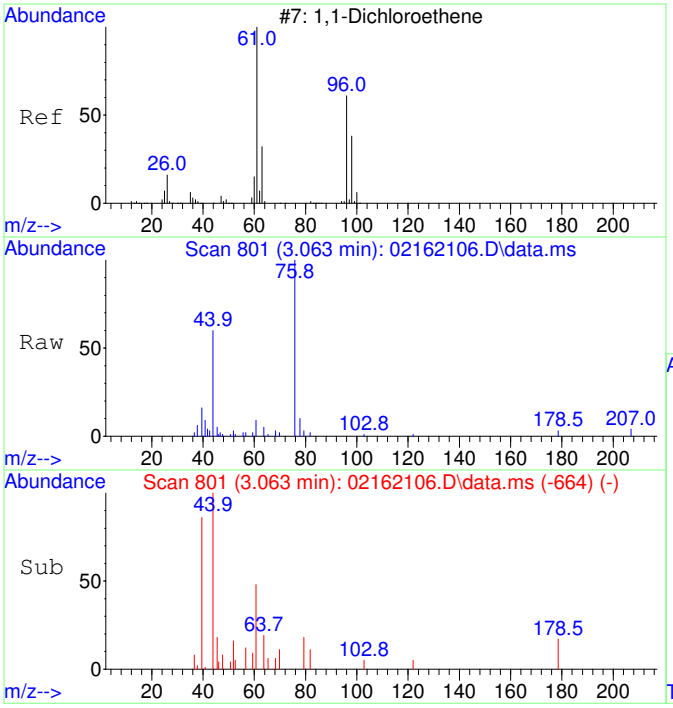


#25
2-Fluorotoluene SCAN
Concen: 4635.93 ug/L
RT: 10.937 min Scan# 1970
Delta R.T. 0.000 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion:109 Resp: 96792

Ion	Ratio	Lower	Upper
109	100		
83	15.5	0.0	43.8

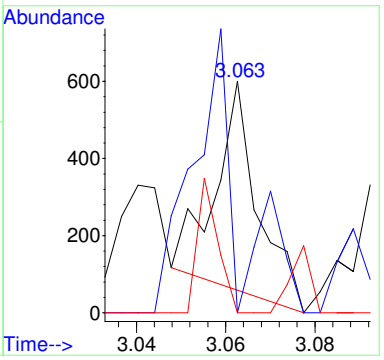


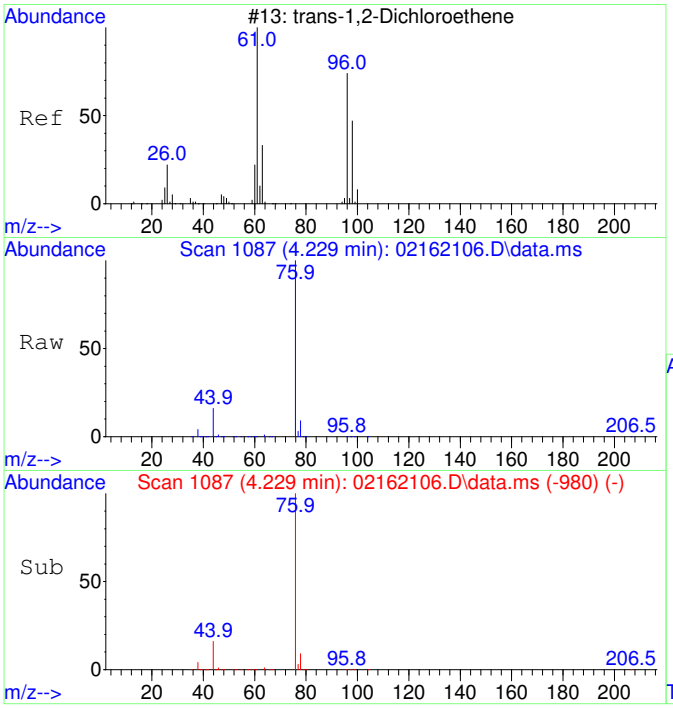


#26
1,1-Dichloroethene SCAN
Concen: 52.42 ug/L
RT: 3.063 min Scan# 801
Delta R.T. 0.008 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion: 61 Resp: 348

Ion	Ratio	Lower	Upper
61	100		
96	91.4	33.1	93.1
98	31.9	11.2	71.2

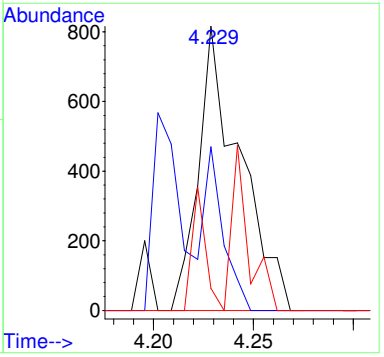


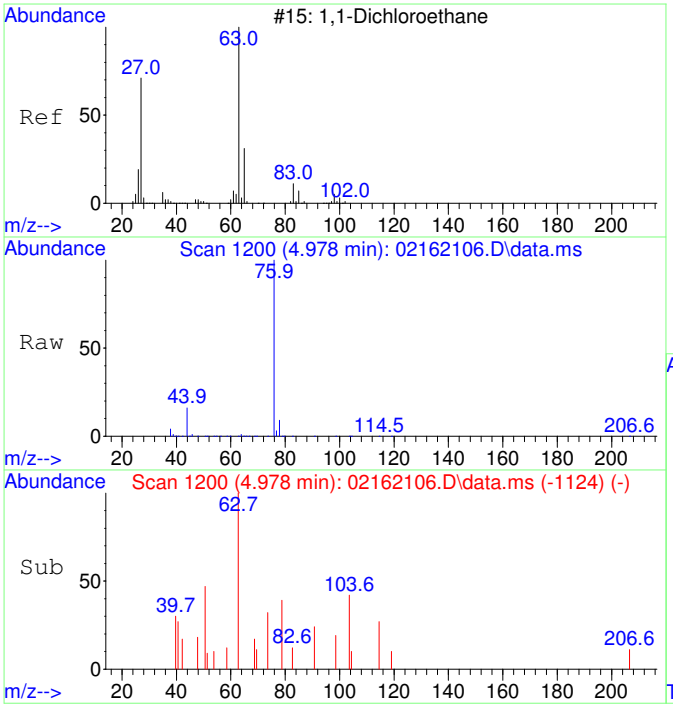


#27
trans-1,2-Dichloroethene SCAN
Concen: 169.47 ug/L
RT: 4.229 min Scan# 1087
Delta R.T. 0.000 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion: 61 Resp: 1181

Ion	Ratio	Lower	Upper
61	100		
96	15.2	49.0	109.0#
98	14.1	20.5	80.5#

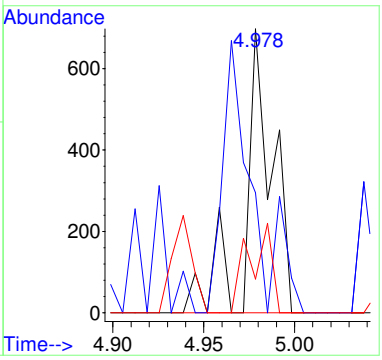


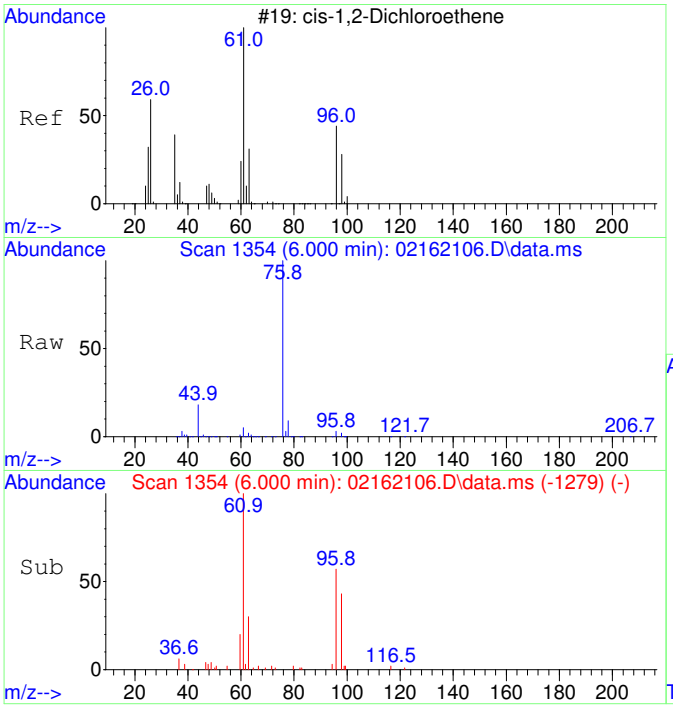


#28
1,1-Dichloroethane SCAN
Concen: 82.18 ug/L
RT: 4.978 min Scan# 1200
Delta R.T. 0.007 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion: 63 Resp: 709

Ion	Ratio	Lower	Upper
63	100		
65	88.6	1.3	61.3#
83	27.4	0.0	45.9

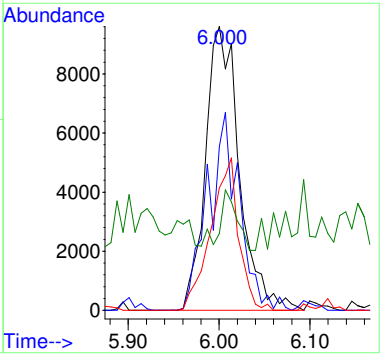


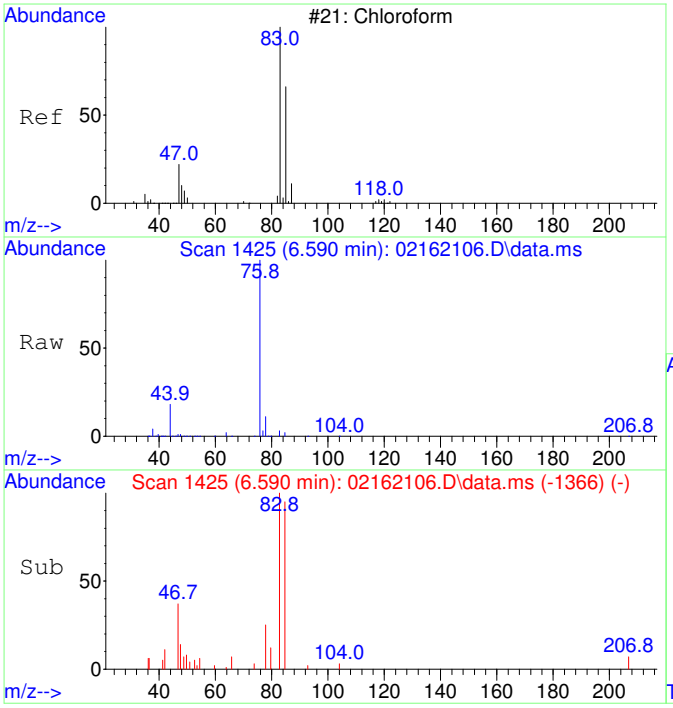


#29
cis-1,2-Dichloroethene SCAN
Concen: 3113.13 ug/L
RT: 6.000 min Scan# 1354
Delta R.T. 0.000 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion: 61 Resp: 24884

Ion	Ratio	Lower	Upper
61	100		
96	64.8	39.9	99.9
98	44.2	13.5	73.5
64	8.5	4.5	64.5

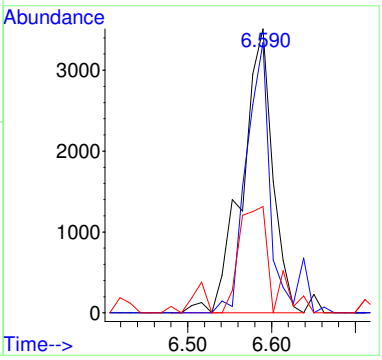


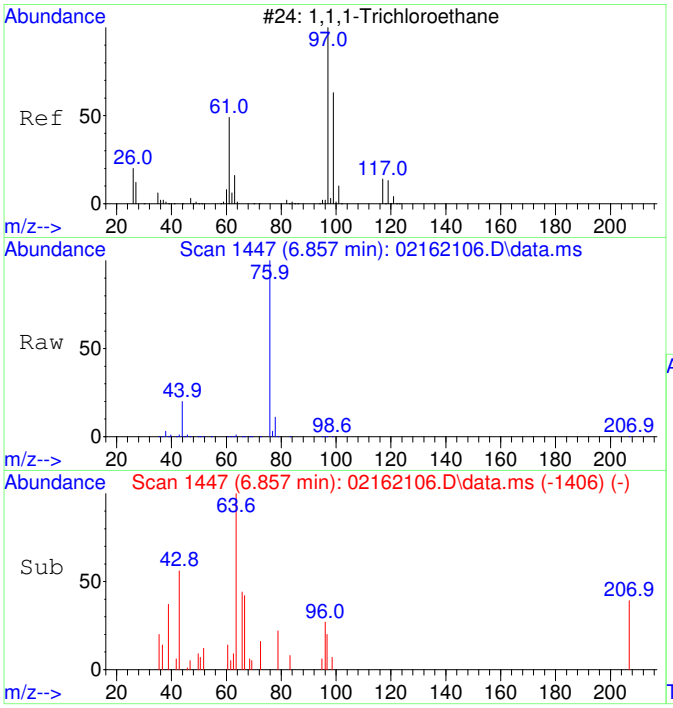


#30
Chloroform SCAN
Concen: 1213.30 ug/L
RT: 6.590 min Scan# 1425
Delta R.T. 0.012 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion: 83 Resp: 8876

Ion	Ratio	Lower	Upper
83	100		
85	68.4	34.6	94.6
47	40.0	0.0	53.4

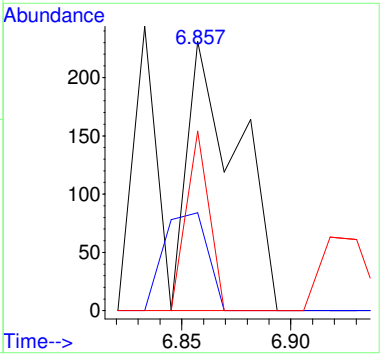


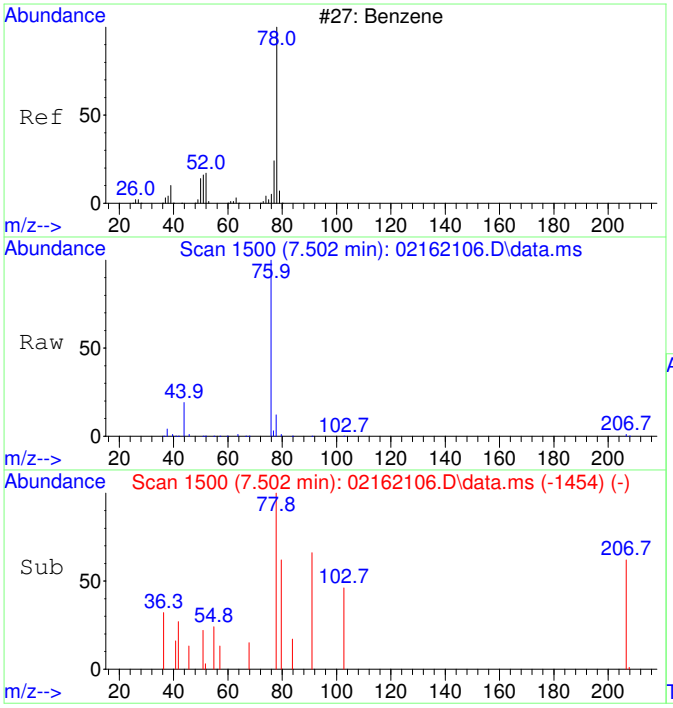


#31
1,1,1-Trichloroethane SCAN
Concen: 49.86 ug/L
RT: 6.857 min Scan# 1447
Delta R.T. 0.012 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion: 97 Resp: 375

Ion	Ratio	Lower	Upper
97	100		
99	31.5	43.6	103.6#
61	29.9	18.0	78.0

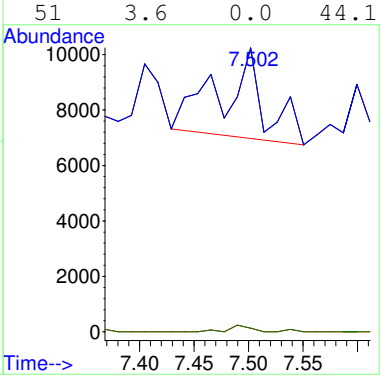


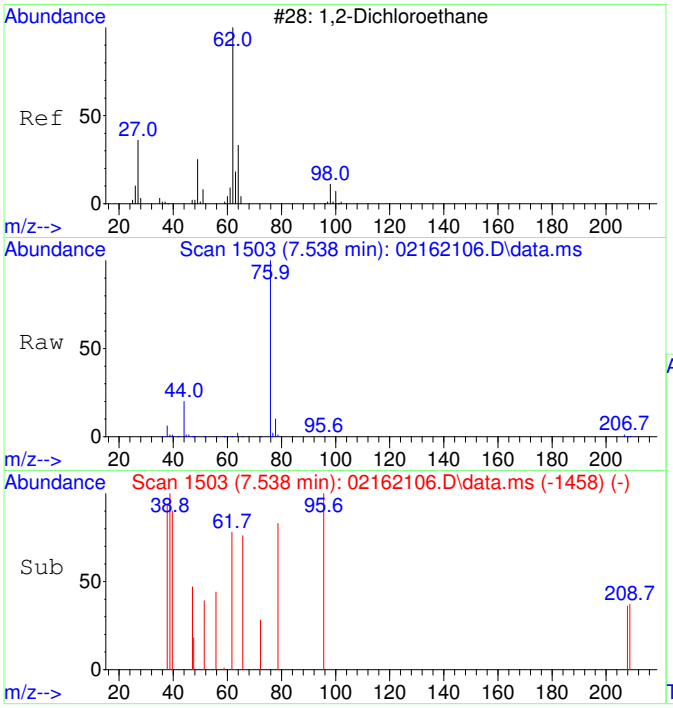


#33
Benzene SCAN
Concen: 439.17 ug/L
RT: 7.502 min Scan# 1500
Delta R.T. 0.061 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion: 78 Resp: 9066

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	3.6	0.0	47.9
51	3.6	0.0	44.1

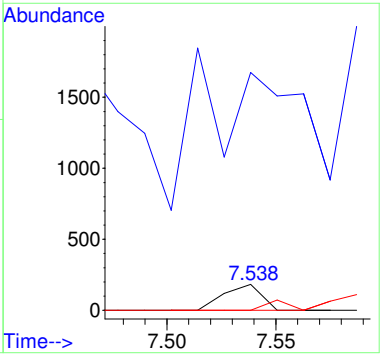


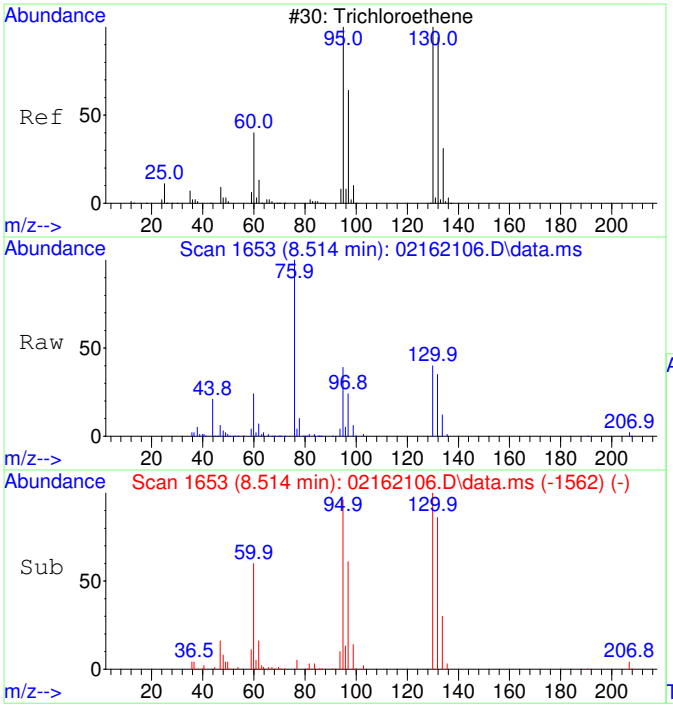


#34
1,2-Dichloroethane SCAN
Concen: 29.20 ug/L
RT: 7.538 min Scan# 1503
Delta R.T. 0.049 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion: 62 Resp: 220

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

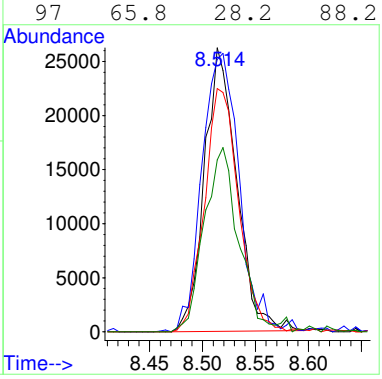


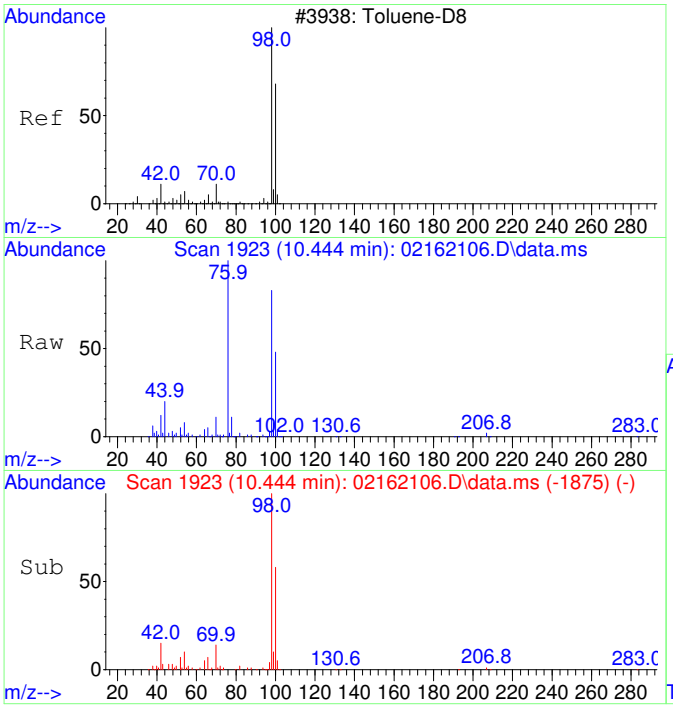


#35
Trichloroethene SCAN
Concen: 12199.11 ug/L
RT: 8.514 min Scan# 1653
Delta R.T. -0.005 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion:130 Resp: 55670

Ion	Ratio	Lower	Upper
130	100		
95	110.8	60.5	120.5
132	91.5	59.6	119.6
97	65.8	28.2	88.2

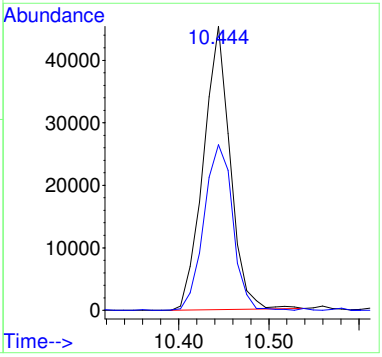


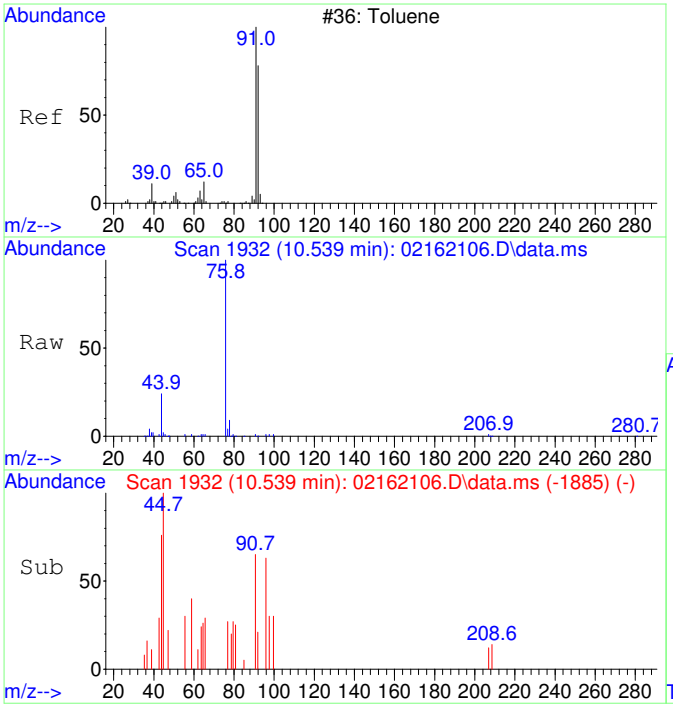


#36
Toluene-d8 SCAN
Concen: 5068.62 ug/L
RT: 10.444 min Scan# 1923
Delta R.T. 0.000 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion: 98 Resp: 93454

Ion	Ratio	Lower	Upper
98	100		
100	63.0	40.0	100.0

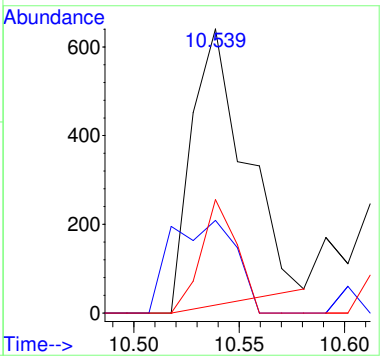


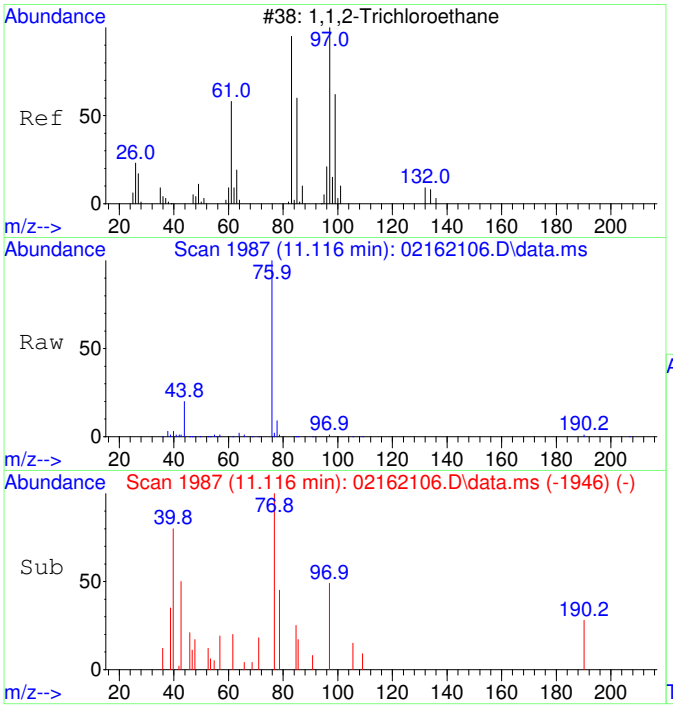


#37
Toluene SCAN
Concen: 41.89 ug/L
RT: 10.539 min Scan# 1932
Delta R.T. -0.010 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion: 91 Resp: 1107

Ion	Ratio	Lower	Upper
91	100		
92	40.7	28.3	88.3
65	27.4	0.0	41.0

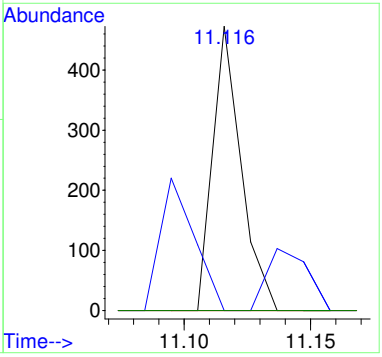


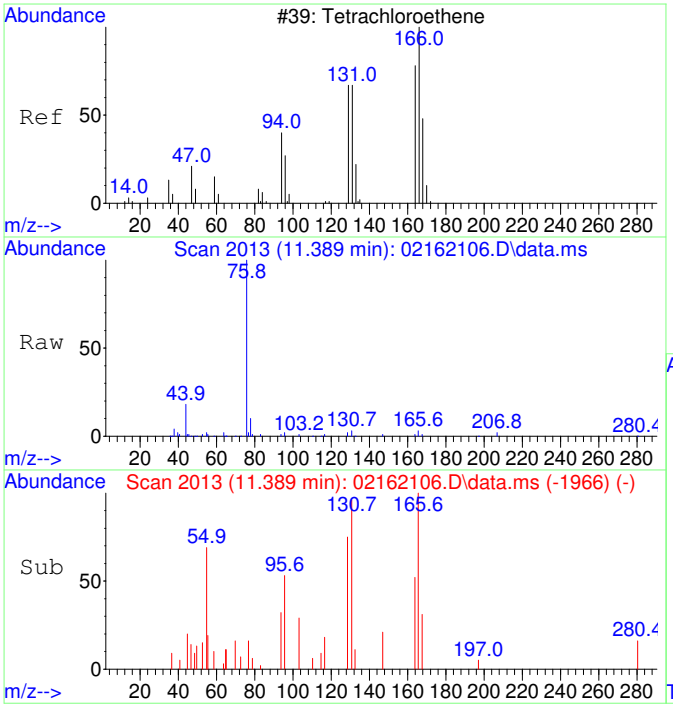


#38
1,1,2-Trichloroethane SCAN
Concen: 70.51 ug/L
RT: 11.116 min Scan# 1987
Delta R.T. -0.073 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion: 97 Resp: 370

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#

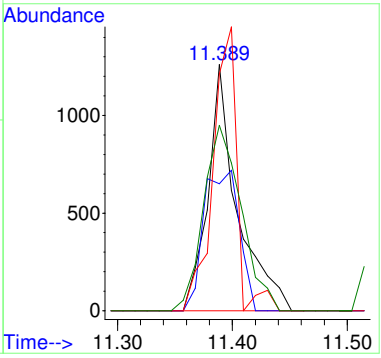




#39
Tetrachloroethene SCAN
Concen: 435.53 ug/L
RT: 11.389 min Scan# 2013
Delta R.T. -0.010 min
Lab File: 02162106.D
Acq: 16 Feb 2021 10:10

Tgt Ion:166 Resp: 2237

Ion	Ratio	Lower	Upper
166	100		
164	69.3	50.9	110.9
131	94.2	38.7	98.7
129	97.2	41.8	101.8



2102006-04RE3

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021621\
Data File : 02162107.D
Acq On : 16 Feb 2021 10:34
InstName : AG5975C
Operator : TD
Sample : 2102006-04RE3
Misc : 10X DL (180-20)
ALS Vial : 7 Sample Multiplier: 10

Quant Time: Feb 16 10:52:59 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021621.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration

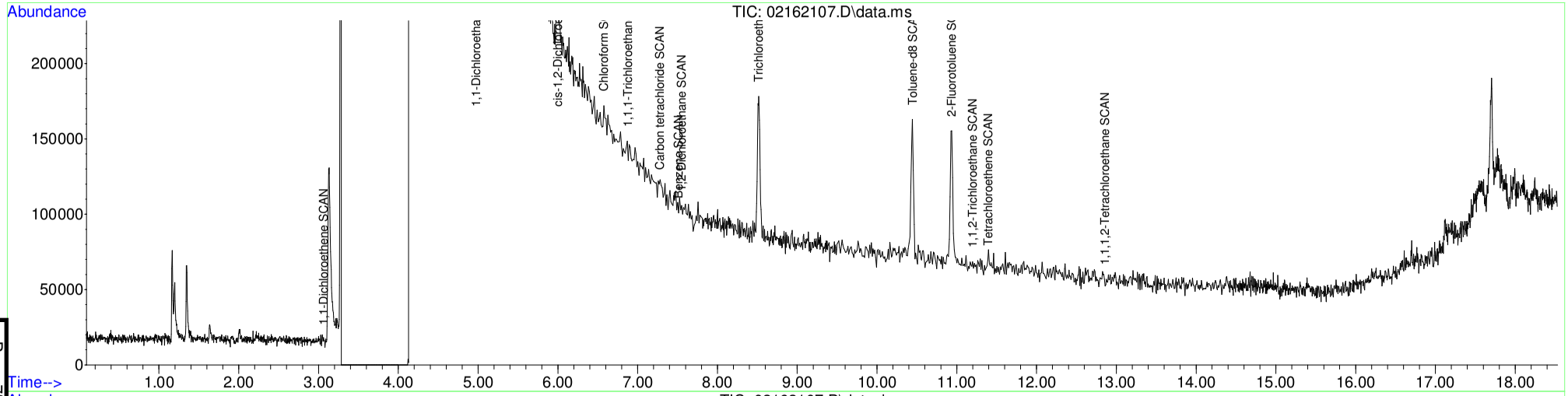
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.928	109	152413	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.435	98	127499	4854.51 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 97.09%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.056	61	1150	161.99 ug/L	87
3] trans-1,2-Dichloroethene	4.223	61	1249	166.54 ug/L	97
4] 1,1-Dichloroethane	4.973	63	1232	136.39 ug/L	90
5] cis-1,2-Dichloroethene	6.001	61	25338	2844.83 ug/L	98
6] Chloroform	6.579	83	6583	693.44 ug/L	96
7] 1,1,1-Trichloroethane	6.834	97	620	68.73 ug/L	96
9] Benzene	7.430	78	1247	48.08 ug/L #	1
11] Trichloroethene	8.515	130	69969	10192.29 ug/L RPT	93
15] Tetrachloroethene	11.390	166	3113	326.87 ug/L	98
22] 1,3,5-Trimethylbenzene	15.314	105	2081	48.16 ug/L	99
24] Naphthalene	17.854	128	3624	55.43 ug/L #	68
25) 2-Fluorotoluene SCAN	10.927	109	78853	4805.55 ug/L	97
26) 1,1-Dichloroethene SCAN	3.059	61	659	126.32 ug/L #	64
28) 1,1-Dichloroethane SCAN	4.972	63	240	35.40 ug/L #	25
29) cis-1,2-Dichloroethene...	6.000	61	17747	2825.07 ug/L	84
30) Chloroform SCAN	6.577	83	3120	542.67 ug/L #	33
31) 1,1,1-Trichloroethane ...	6.869	97	955	161.55 ug/L #	19
32) Carbon tetrachloride SCAN	7.271	117	288	60.52 ug/L #	15
33) Benzene SCAN	7.514	78	3947	243.28 ug/L	94
34) 1,2-Dichloroethane SCAN	7.550	62	159	26.86 ug/L #	1
35) Trichloroethene SCAN	8.519	130	34495	9618.12 ug/L	87
36) Toluene-d8 SCAN	10.444	98	73639	5081.91 ug/L	81
38) 1,1,2-Trichloroethane ...	11.200	97	180	43.64 ug/L #	1
39) Tetrachloroethene SCAN	11.389	166	745	184.56 ug/L #	6
41) 1,1,1,2-Tetrachloroeth...	12.851	131	102	25.00 ug/L #	1

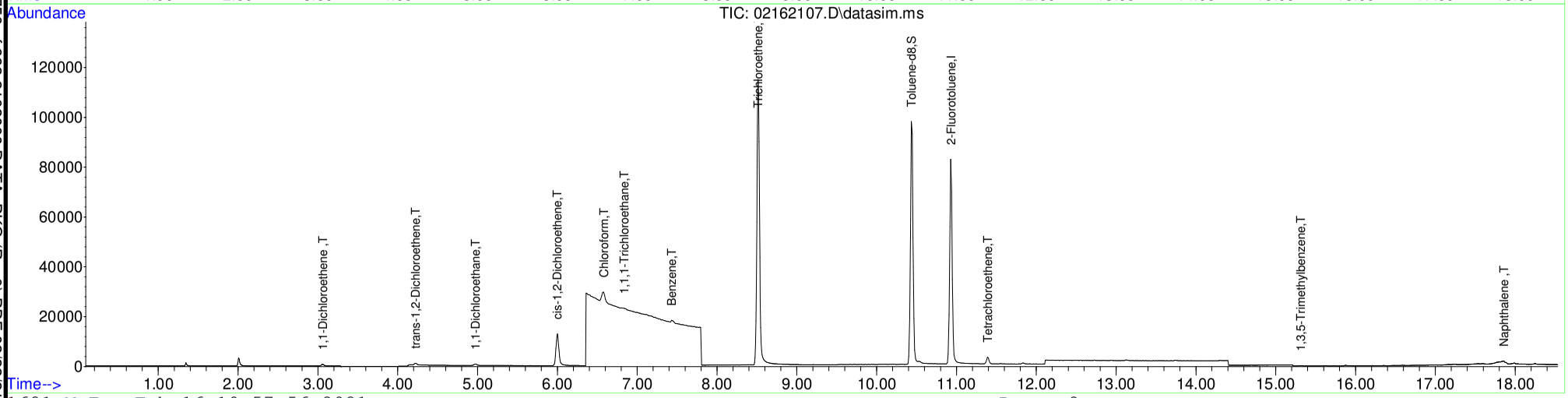
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021621\
Data File : 02162107.D
Acq On : 16 Feb 2021 10:34
InstName : AG5975C
Operator : TD
Sample : 2102006-04RE3
Misc : 10X DL (180-20)
ALS Vial : 7 Sample Multiplier: 10

Quant Time: Feb 16 10:52:59 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021621.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration





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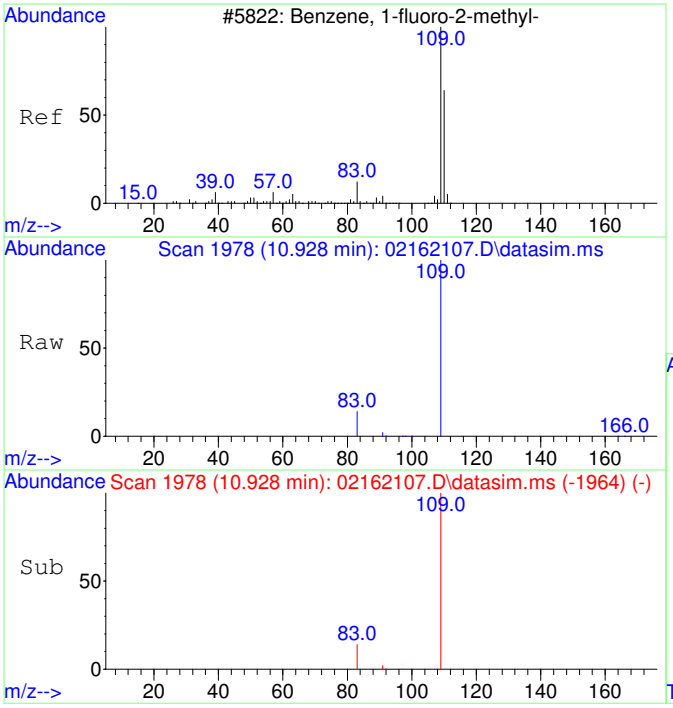
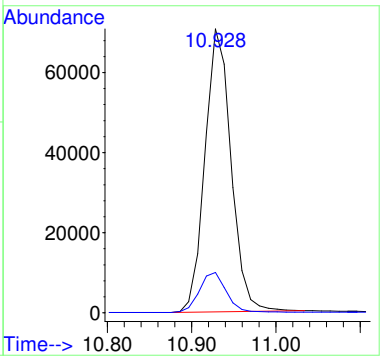
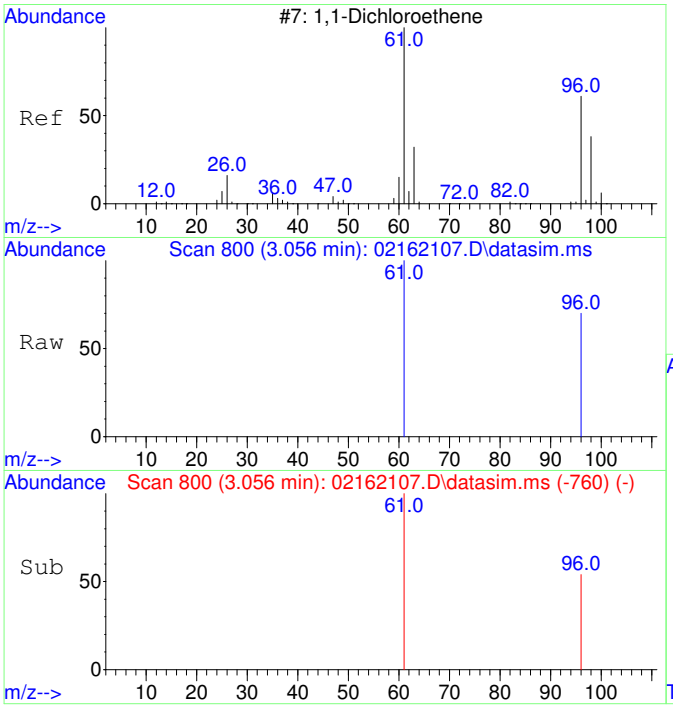


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.928 min Scan# 1978
Delta R.T. 0.000 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion:109 Resp: 152413

Ion	Ratio	Lower	Upper
109	100		
83	14.3	0.0	42.3

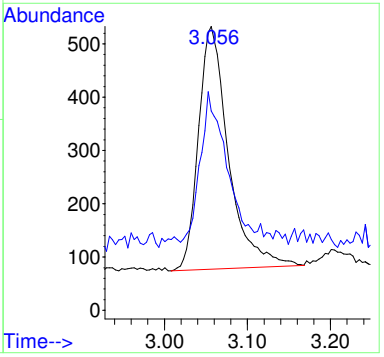


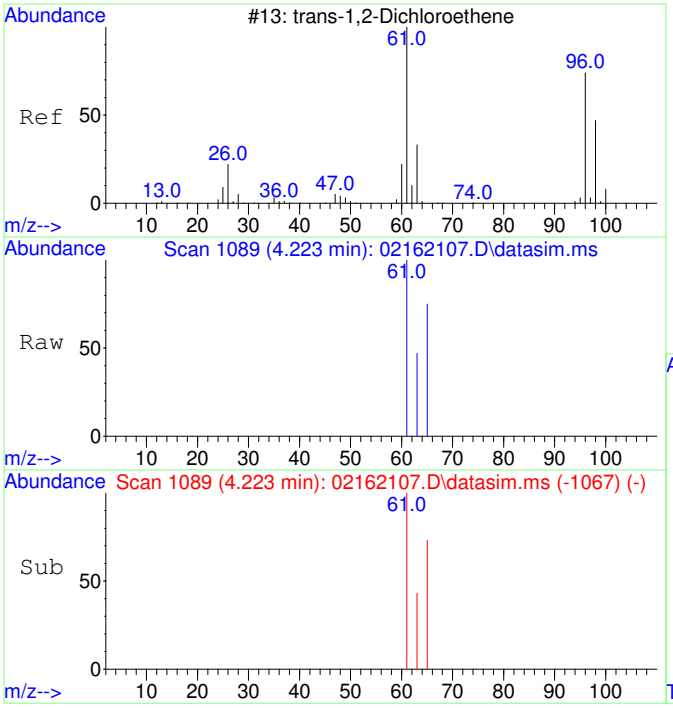


#2
1,1-Dichloroethene
Concen: 161.99 ug/L
RT: 3.056 min Scan# 800
Delta R.T. -0.000 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion: 61 Resp: 1150

Ion	Ratio	Lower	Upper
61	100		
96	57.0	37.2	97.2

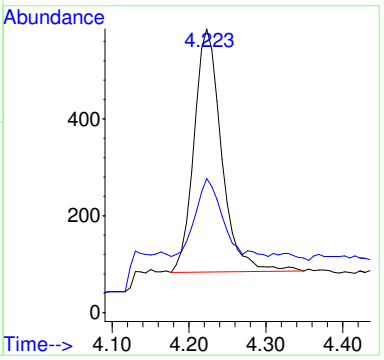


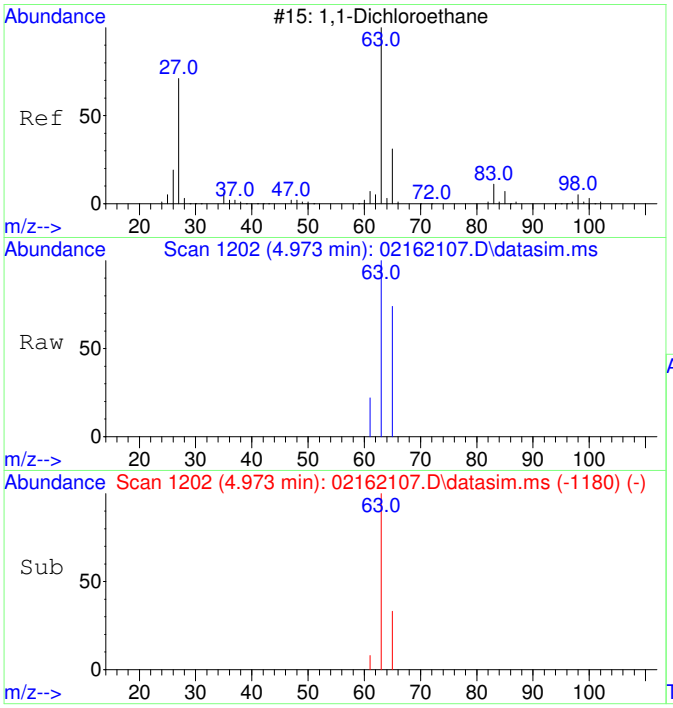


#3
trans-1,2-Dichloroethene
Concen: 166.54 ug/L
RT: 4.223 min Scan# 1089
Delta R.T. -0.007 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion: 61 Resp: 1249

Ion	Ratio	Lower	Upper
61	100		
63	31.0	2.4	62.4

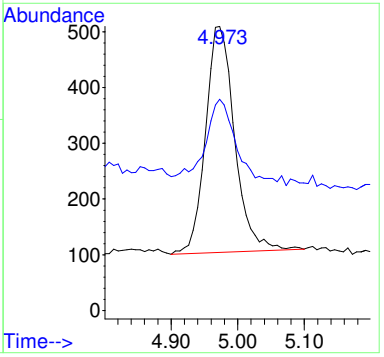


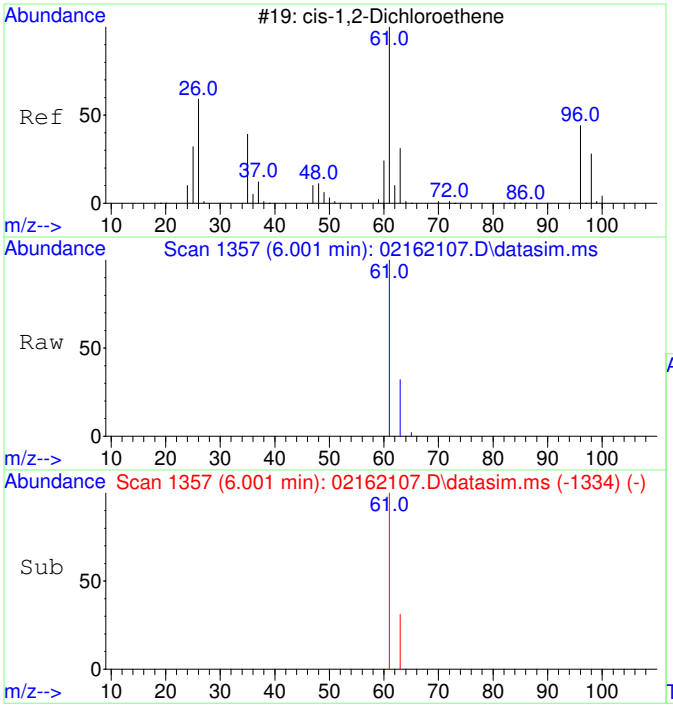


#4
1,1-Dichloroethane
Concen: 136.39 ug/L
RT: 4.973 min Scan# 1202
Delta R.T. -0.007 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion: 63 Resp: 1232

Ion	Ratio	Lower	Upper
63	100		
65	37.3	1.8	61.8

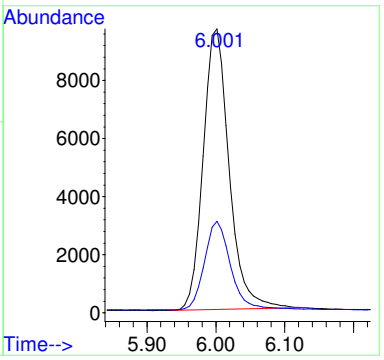


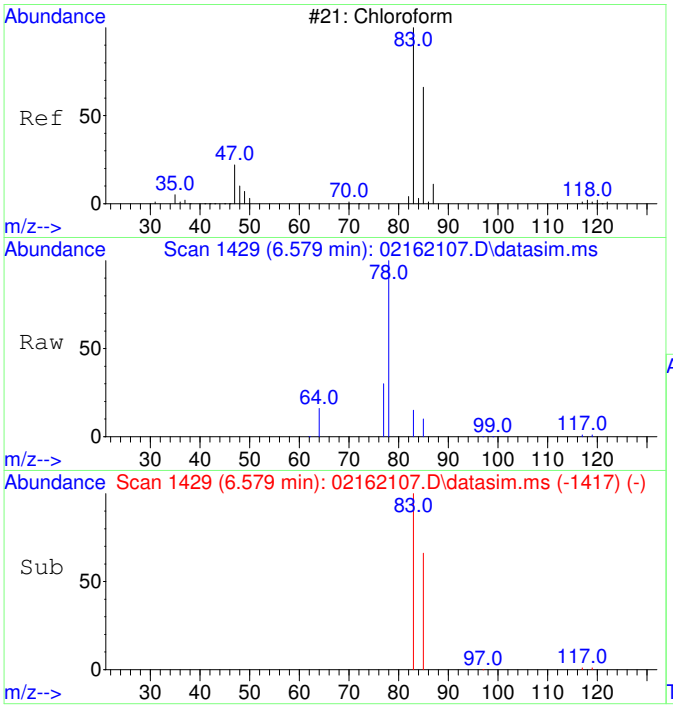


#5
cis-1,2-Dichloroethene
Concen: 2844.83 ug/L
RT: 6.001 min Scan# 1357
Delta R.T. -0.000 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion: 61 Resp: 25338

Ion	Ratio	Lower	Upper
61	100		
63	31.3	2.5	62.5

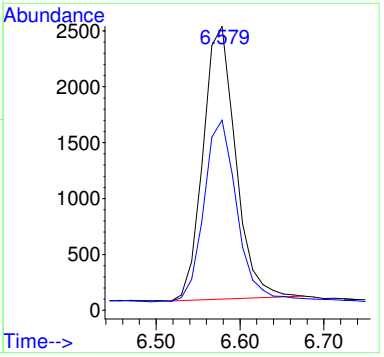


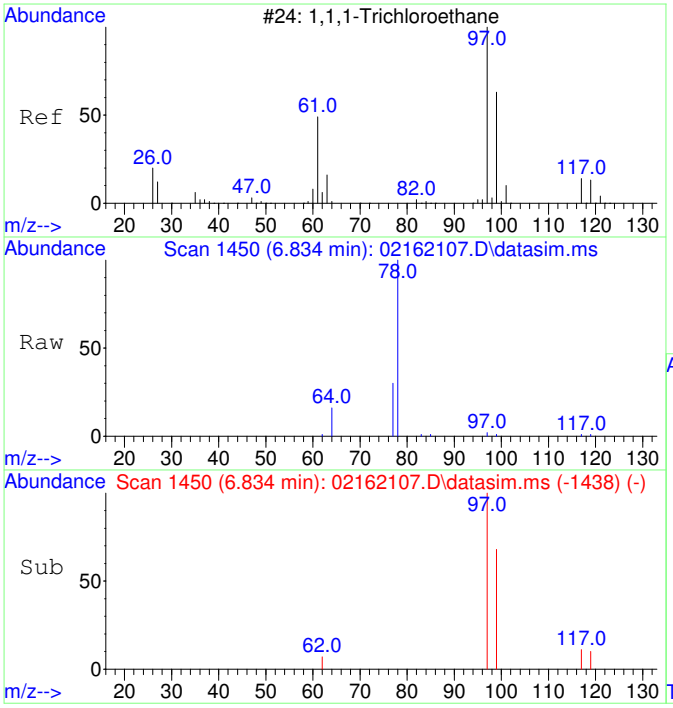


#6
Chloroform
Concen: 693.44 ug/L
RT: 6.579 min Scan# 1429
Delta R.T. -0.000 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion: 83 Resp: 6583

Ion	Ratio	Lower	Upper
83	100		
85	68.2	35.1	95.1

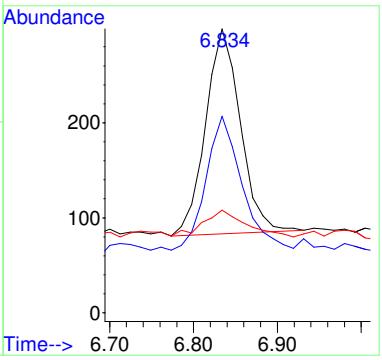


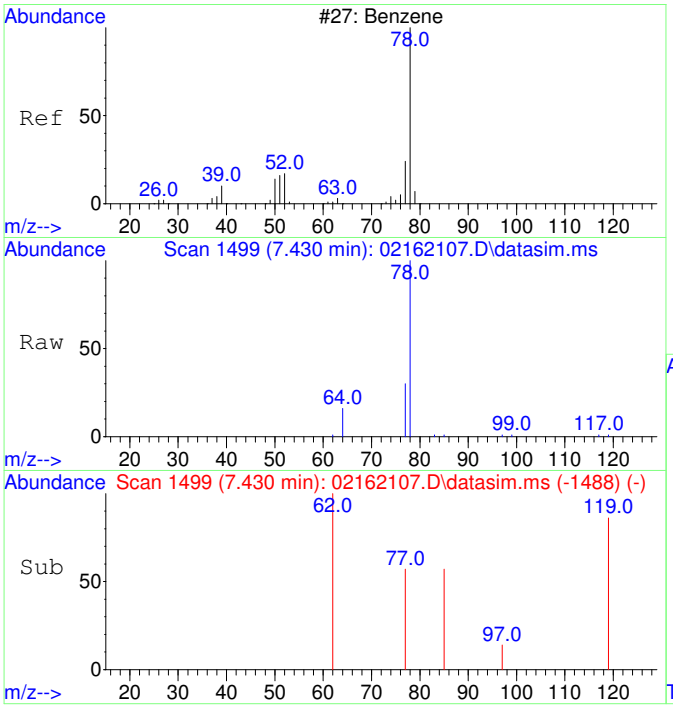


#7
1,1,1-Trichloroethane
Concen: 68.73 ug/L
RT: 6.834 min Scan# 1450
Delta R.T. -0.000 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion: 97 Resp: 620

Ion	Ratio	Lower	Upper
97	100		
99	67.7	34.6	94.6
117	16.0	0.0	43.2

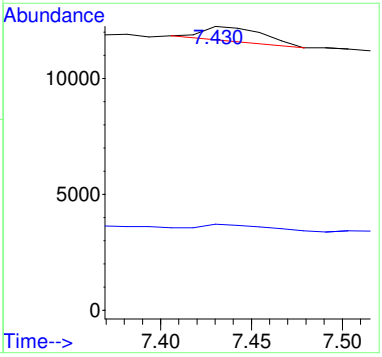


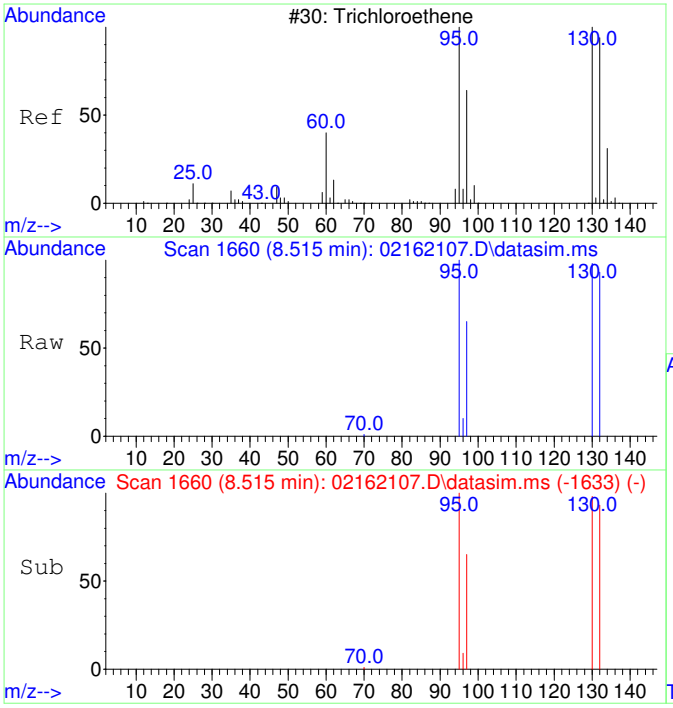


#9
Benzene
Concen: 48.08 ug/L
RT: 7.430 min Scan# 1499
Delta R.T. -0.012 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion: 78 Resp: 1247

Ion	Ratio	Lower	Upper
78	100		
77	71.8	0.0	53.2#

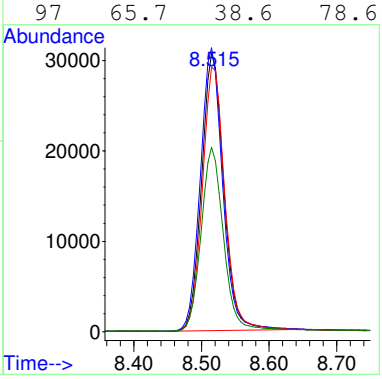


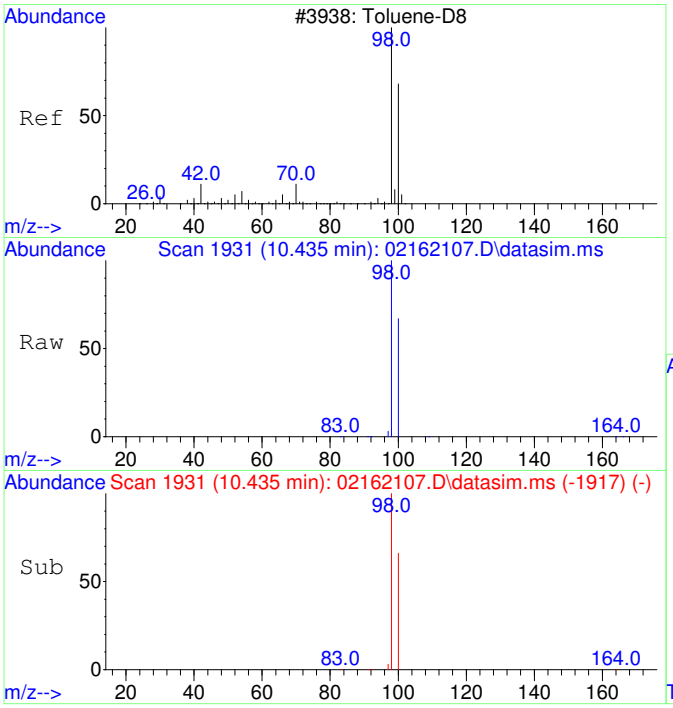


#11
Trichloroethene
Concen: 10192.29 ug/L
RT: 8.515 min Scan# 1660
Delta R.T. -0.006 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion:130 Resp: 69969

Ion	Ratio	Lower	Upper
130	100		
95	102.0	60.7	120.7
132	96.0	76.0	116.0
97	65.7	38.6	78.6

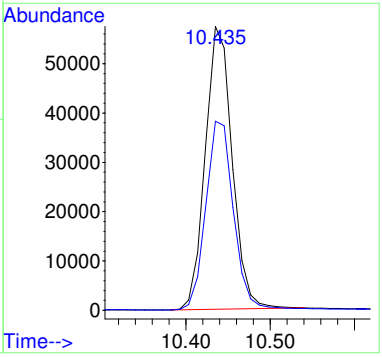


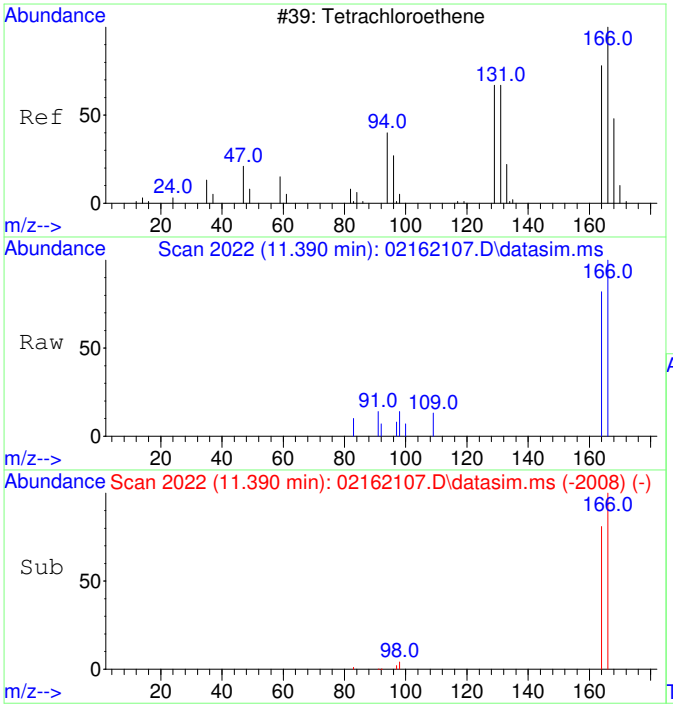


#12
Toluene-d8
Concen: 4854.51 ug/L
RT: 10.435 min Scan# 1931
Delta R.T. -0.000 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion: 98 Resp: 127499

Ion	Ratio	Lower	Upper
98	100		
100	67.7	37.1	97.1

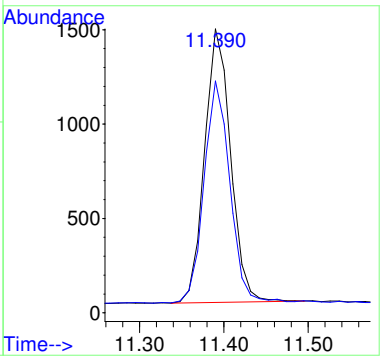


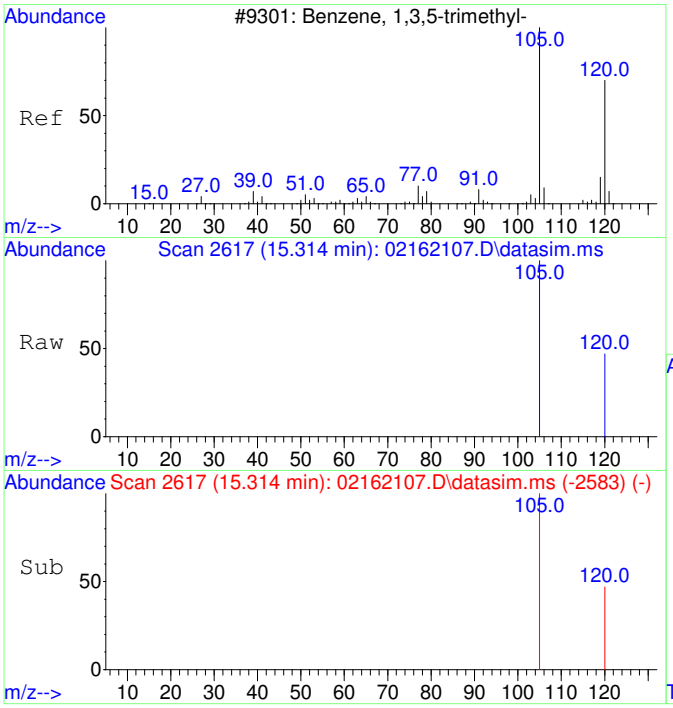


#15
Tetrachloroethene
Concen: 326.87 ug/L
RT: 11.390 min Scan# 2022
Delta R.T. -0.000 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion:166 Resp: 3113

Ion	Ratio	Lower	Upper
166	100		
164	79.9	47.8	107.8

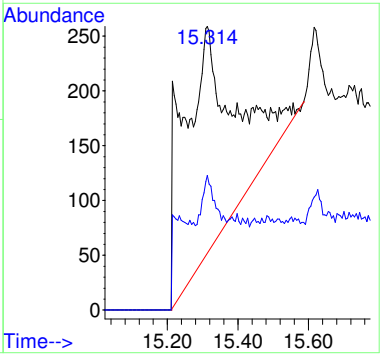


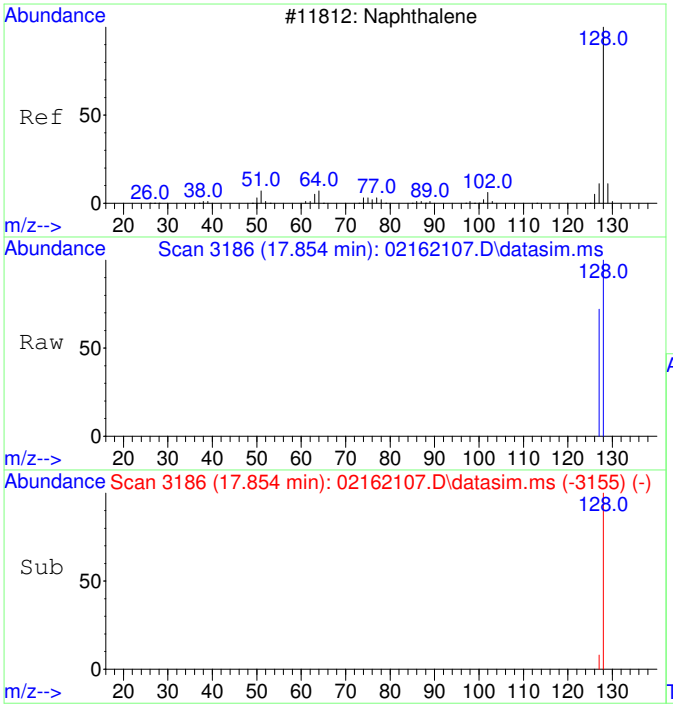


#22
1,3,5-Trimethylbenzene
Concen: 48.16 ug/L
RT: 15.314 min Scan# 2617
Delta R.T. -0.000 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion:105 Resp: 2081

Ion	Ratio	Lower	Upper
105	100		
120	50.6	21.1	81.1

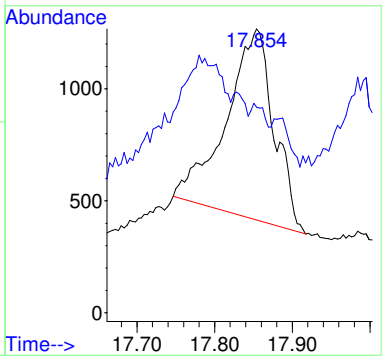


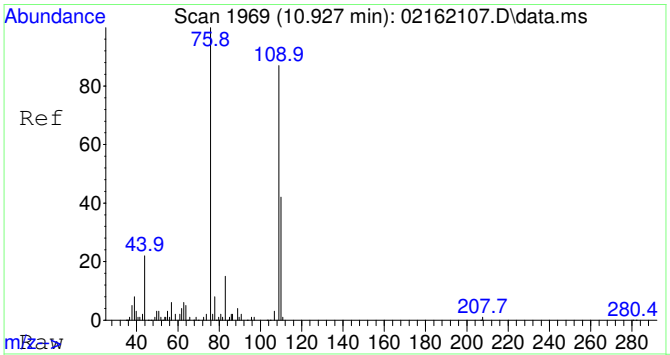


#24
Naphthalene
Concen: 55.43 ug/L
RT: 17.854 min Scan# 3186
Delta R.T. -0.033 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion:128 Resp: 3624

Ion	Ratio	Lower	Upper
128	100		
127	0.0	0.0	42.5

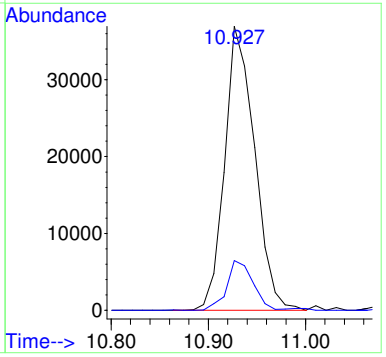


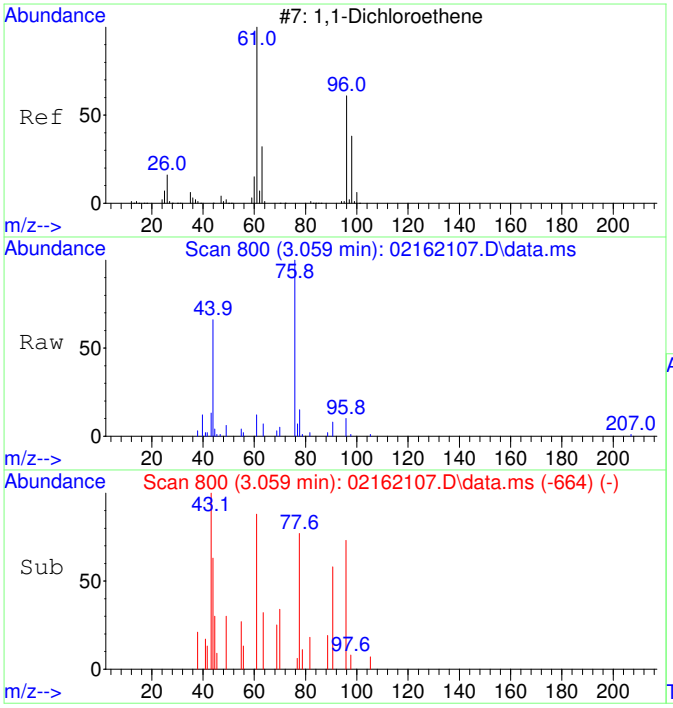


#25
2-Fluorotoluene SCAN
Concen: 4805.55 ug/L
RT: 10.927 min Scan# 1969
Delta R.T. -0.011 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion:109 Resp: 78853

Ion	Ratio	Lower	Upper
109	100		
83	14.9	0.0	43.8

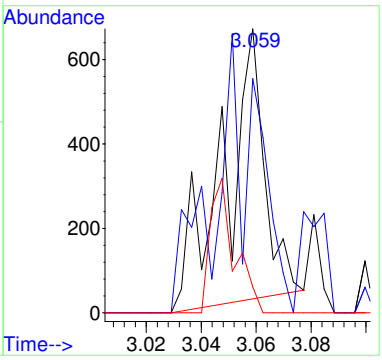


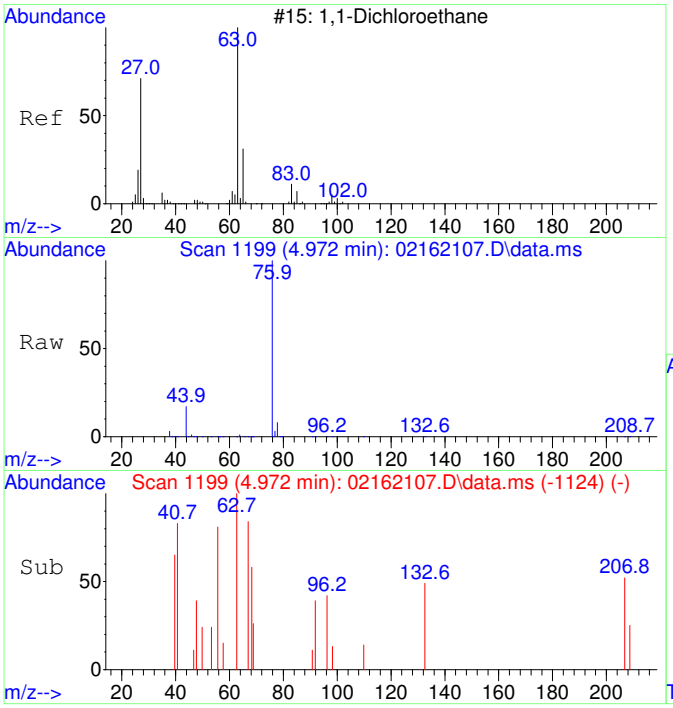


#26
1,1-Dichloroethene SCAN
Concen: 126.32 ug/L
RT: 3.059 min Scan# 800
Delta R.T. 0.004 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion: 61 Resp: 659

Ion	Ratio	Lower	Upper
61	100		
96	25.9	33.1	93.1#
98	29.4	11.2	71.2

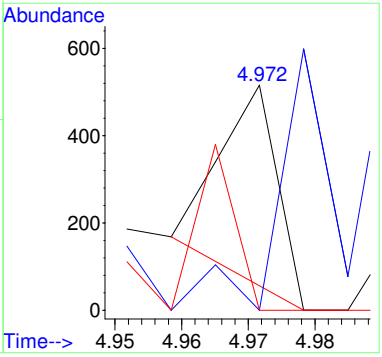


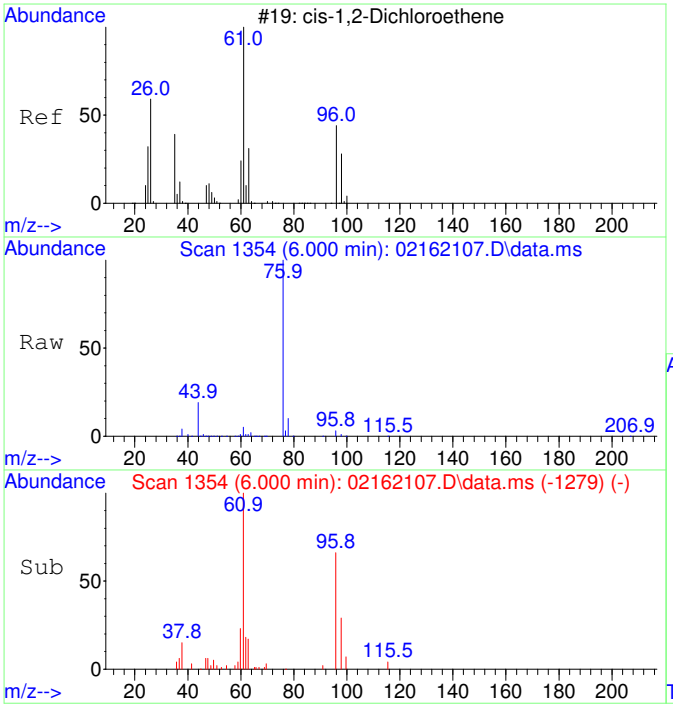


#28
1,1-Dichloroethane SCAN
Concen: 35.40 ug/L
RT: 4.972 min Scan# 1199
Delta R.T. -0.000 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion: 63 Resp: 240

Ion	Ratio	Lower	Upper
63	100		
65	0.0	1.3	61.3#
83	62.9	0.0	45.9#

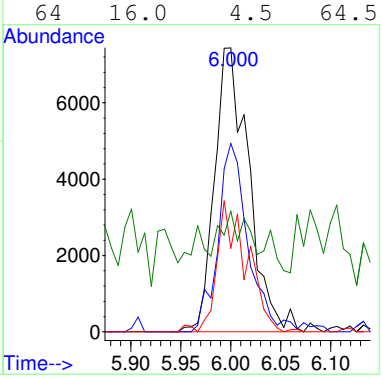


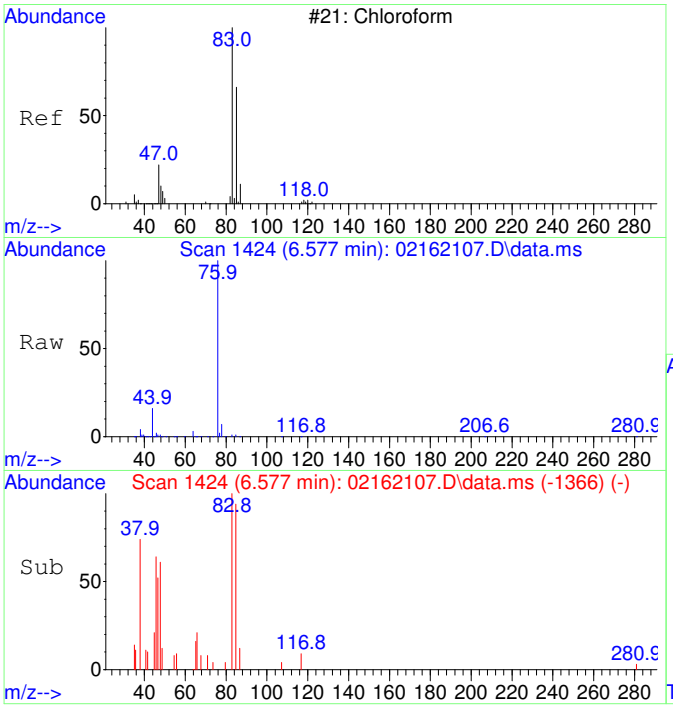


#29
cis-1,2-Dichloroethene SCAN
Concen: 2825.07 ug/L
RT: 6.000 min Scan# 1354
Delta R.T. -0.000 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion: 61 Resp: 17747

Ion	Ratio	Lower	Upper
61	100		
96	57.2	39.9	99.9
98	40.4	13.5	73.5
64	16.0	4.5	64.5

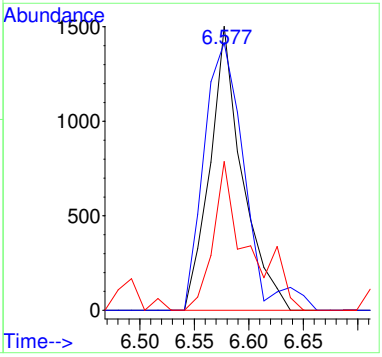


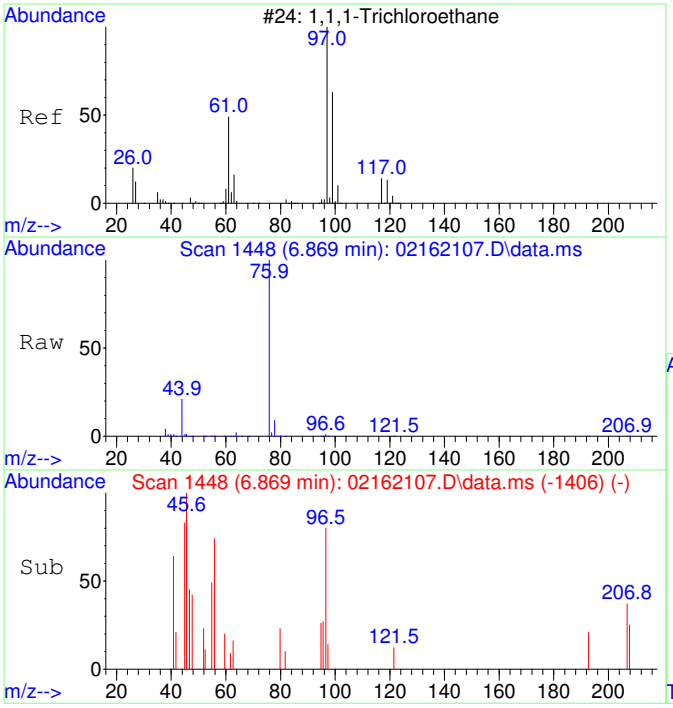


#30
Chloroform SCAN
Concen: 542.67 ug/L
RT: 6.577 min Scan# 1424
Delta R.T. -0.000 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion: 83 Resp: 3120

Ion	Ratio	Lower	Upper
83	100		
85	117.3	34.6	94.6#
47	56.0	0.0	53.4#

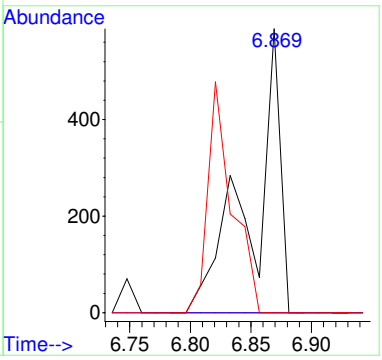


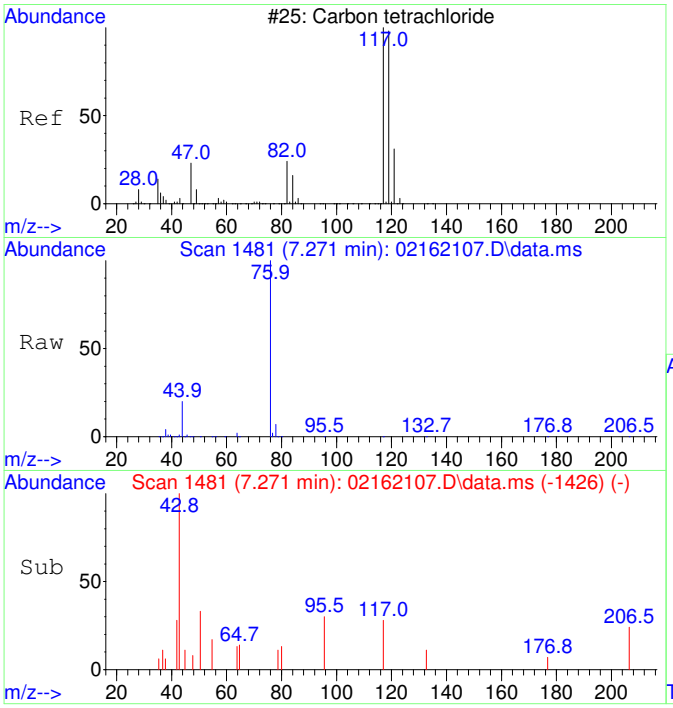


#31
1,1,1-Trichloroethane SCAN
Concen: 161.55 ug/L
RT: 6.869 min Scan# 1448
Delta R.T. 0.024 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion: 97 Resp: 955

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

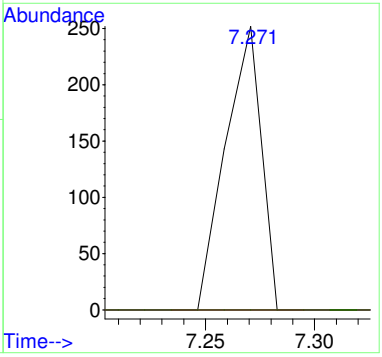


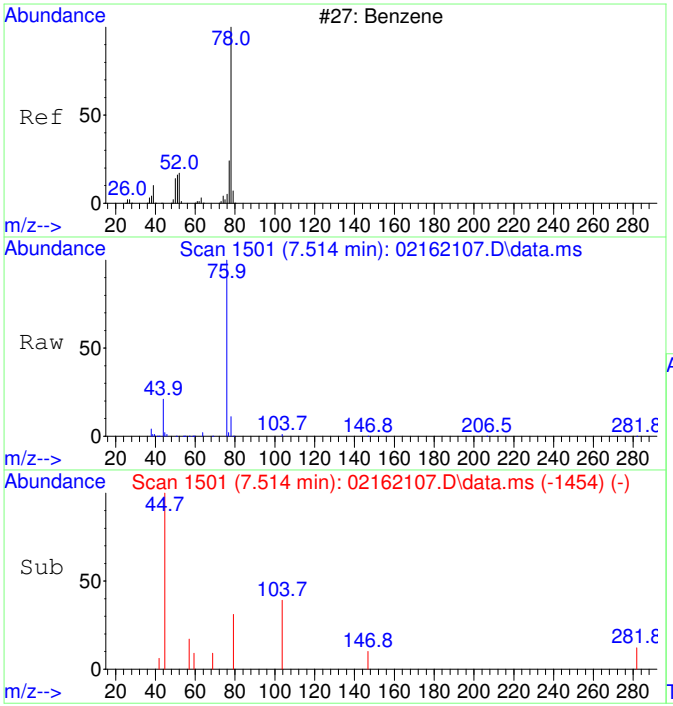


#32
Carbon tetrachloride SCAN
Concen: 60.52 ug/L
RT: 7.271 min Scan# 1481
Delta R.T. 0.170 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion:117 Resp: 288

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

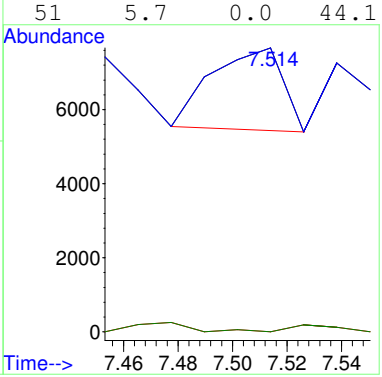


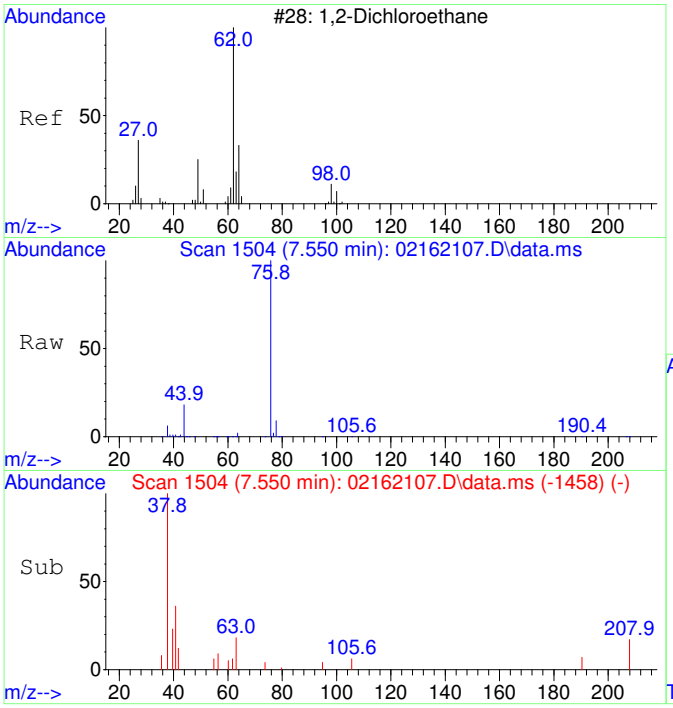


#33
Benzene SCAN
Concen: 243.28 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.073 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion: 78 Resp: 3947

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	5.7	0.0	47.9
51	5.7	0.0	44.1

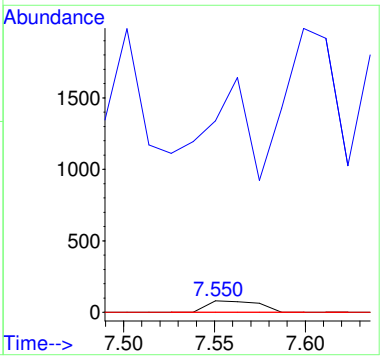


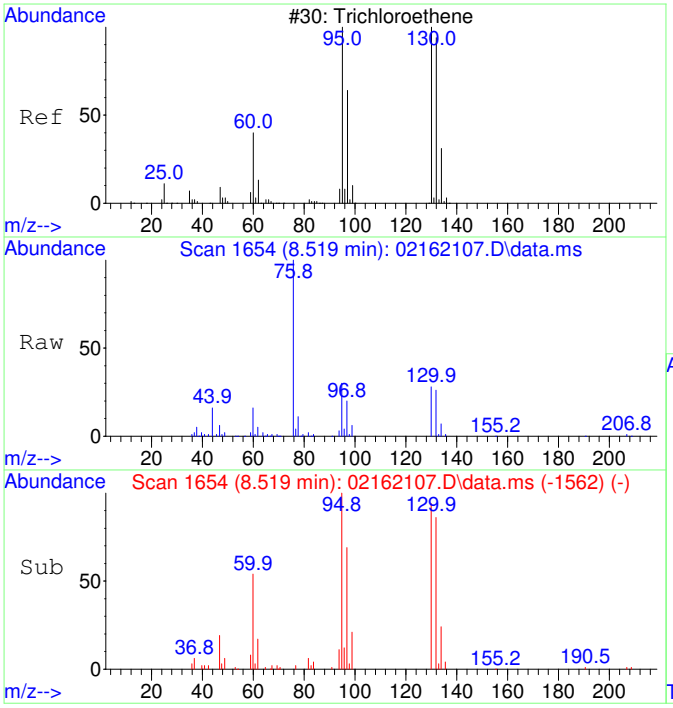


#34
1,2-Dichloroethane SCAN
Concen: 26.86 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. 0.061 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion: 62 Resp: 159

Ion	Ratio	Lower	Upper
62	100		
64	471.7	5.2	65.2#
49	0.0	3.9	63.9#

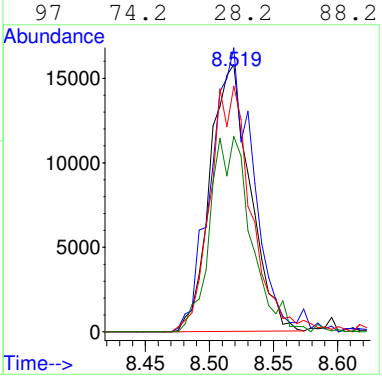


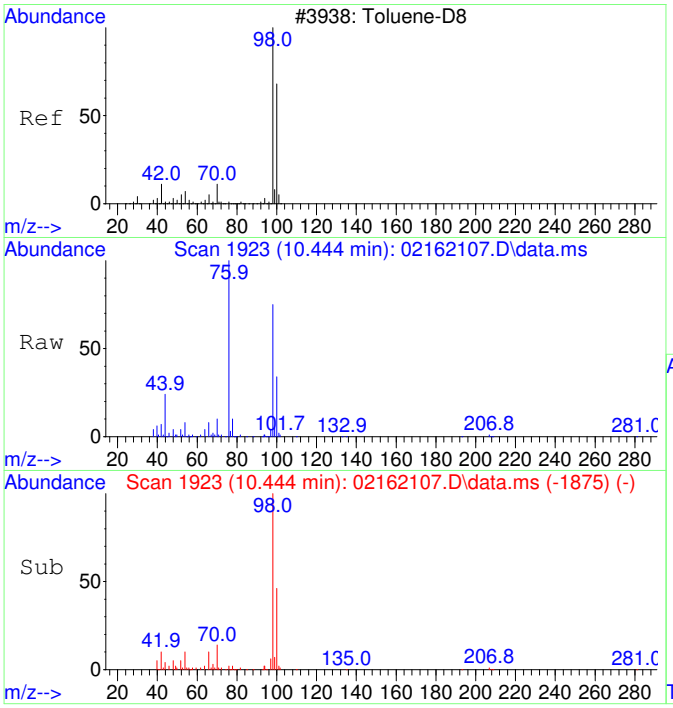


#35
Trichloroethene SCAN
Concen: 9618.12 ug/L
RT: 8.519 min Scan# 1654
Delta R.T. -0.000 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion:130 Resp: 34495

Ion	Ratio	Lower	Upper
130	100		
95	105.2	60.5	120.5
132	94.6	59.6	119.6
97	74.2	28.2	88.2

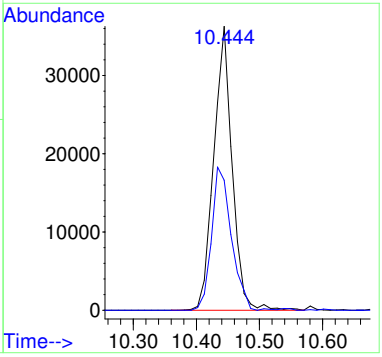


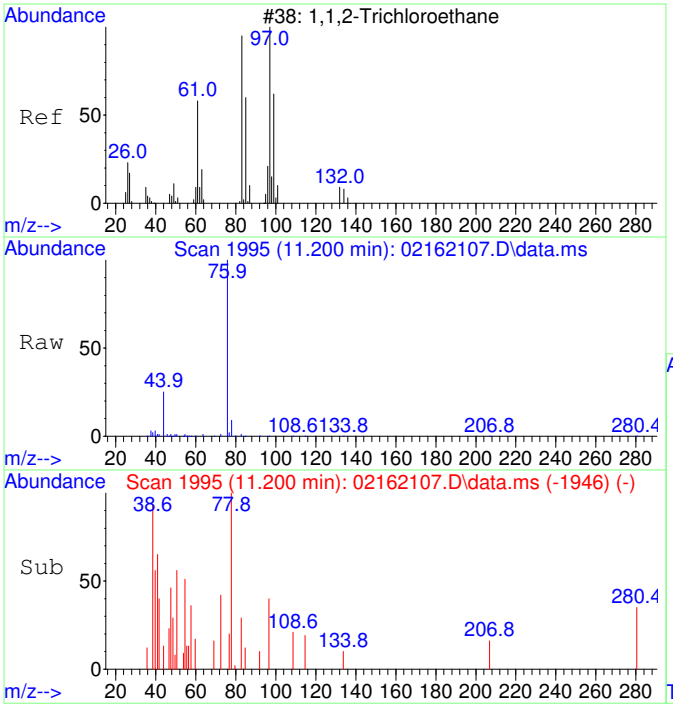


#36
Toluene-d8 SCAN
Concen: 5081.91 ug/L
RT: 10.444 min Scan# 1923
Delta R.T. -0.000 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion: 98 Resp: 73639

Ion	Ratio	Lower	Upper
98	100		
100	54.0	40.0	100.0

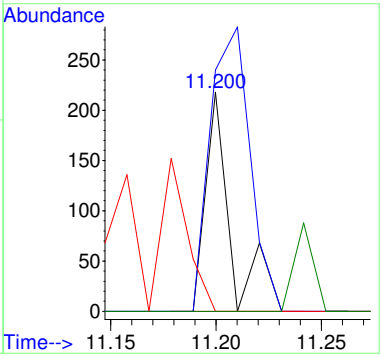


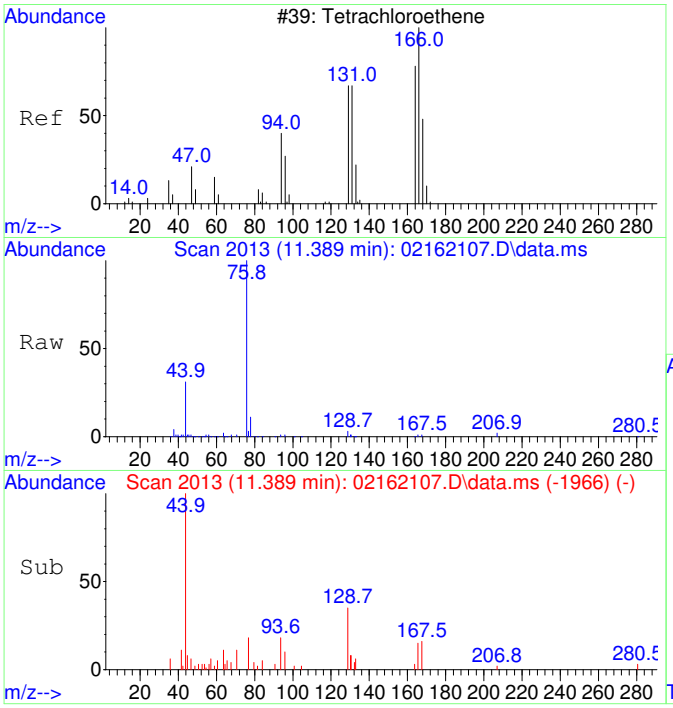


#38
1,1,2-Trichloroethane SCAN
Concen: 43.64 ug/L
RT: 11.200 min Scan# 1995
Delta R.T. 0.010 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion: 97 Resp: 180

Ion	Ratio	Lower	Upper
97	100		
83	207.2	57.7	117.7#
61	0.0	32.1	92.1#
99	0.0	36.7	96.7#

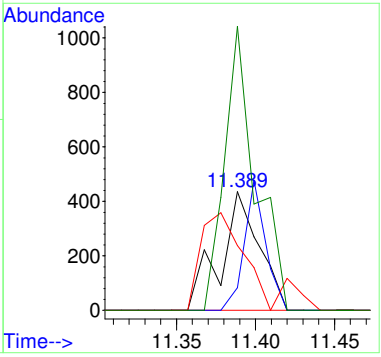


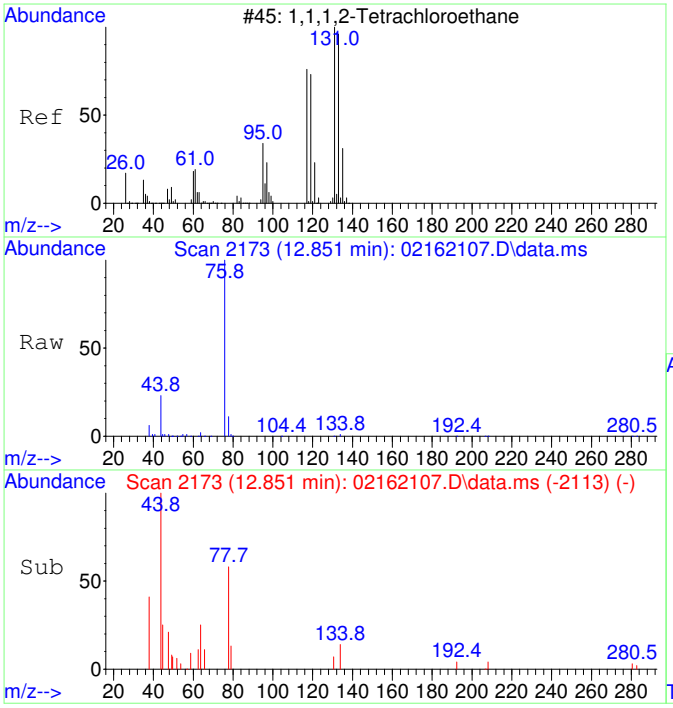


#39
Tetrachloroethene SCAN
Concen: 184.56 ug/L
RT: 11.389 min Scan# 2013
Delta R.T. -0.011 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion:166 Resp: 745

Ion	Ratio	Lower	Upper
166	100		
164	0.0	50.9	110.9#
131	104.7	38.7	98.7#
129	191.4	41.8	101.8#

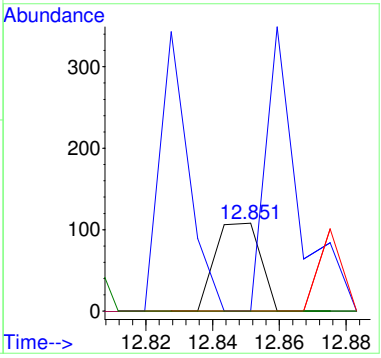




#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 25.00 ug/L
RT: 12.851 min Scan# 2173
Delta R.T. -0.024 min
Lab File: 02162107.D
Acq: 16 Feb 2021 10:34

Tgt Ion:131 Resp: 102

Ion	Ratio	Lower	Upper
131	100		
133	232.4	66.9	126.9#
119	0.0	40.4	100.4#
117	0.0	35.1	95.1#



2102006-10RE3

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021621\
Data File : 02162108.D
Acq On : 16 Feb 2021 11:39
InstName : AG5975C
Operator : TD
Sample : 2102006-10RE3
Misc : 10X DL (180-20)
ALS Vial : 8 Sample Multiplier: 10

Quant Time: Feb 16 11:58:11 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021621.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration

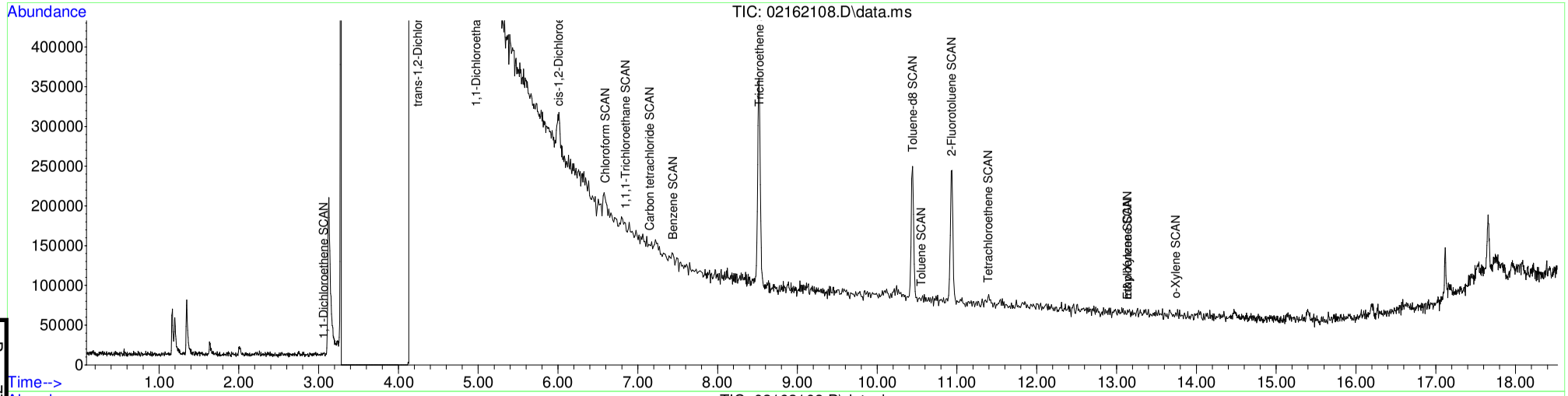
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.928	109	275433	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.435	98	230557	4857.61 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 97.15%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.057	61	2422	188.79 ug/L	87
3] trans-1,2-Dichloroethene	4.237	61	2980	219.88 ug/L	98
4] 1,1-Dichloroethane	4.980	63	2644	161.97 ug/L	97
5] cis-1,2-Dichloroethene	6.002	61	58857	3656.69 ug/L RPT	98
6] Chloroform	6.579	83	16143	940.97 ug/L	99
7] 1,1,1-Trichloroethane	6.834	97	1574	96.55 ug/L	96
9] Benzene	7.442	78	3151	67.23 ug/L	54
11] Trichloroethene	8.521	130	189566	15280.32 ug/L RPT	93
13] Toluene	10.540	91	3013	45.84 ug/L	99
15] Tetrachloroethene	11.390	166	8540	496.21 ug/L	100
19] m&p-Xylene	13.131	91	2558	39.23 ug/L	91
25) 2-Fluorotoluene SCAN	10.927	109	139066	4689.78 ug/L	94
26) 1,1-Dichloroethene SCAN	3.059	61	926	98.22 ug/L #	53
27) trans-1,2-Dichloroethe...	4.242	61	1949	196.92 ug/L #	73
28) 1,1-Dichloroethane SCAN	4.972	63	1208	98.59 ug/L #	75
29) cis-1,2-Dichloroethene...	6.007	61	37922	3340.43 ug/L	89
30) Chloroform SCAN	6.590	83	9693	932.92 ug/L	86
31) 1,1,1-Trichloroethane ...	6.845	97	493	46.15 ug/L #	1
32) Carbon tetrachloride SCAN	7.149	117	221	25.70 ug/L #	46
33) Benzene SCAN	7.441	78	28131	959.48 ug/L	92
35) Trichloroethene SCAN	8.519	130	88170	13603.83 ug/L #	77
36) Toluene-d8 SCAN	10.444	98	123115	4701.50 ug/L	100
37) Toluene SCAN	10.549	91	1400	37.30 ug/L #	27
39) Tetrachloroethene SCAN	11.389	166	4071	558.06 ug/L	77
42) Ethylbenzene SCAN	13.130	91	2221	31.90 ug/L #	60
43) m&p-Xylene SCAN	13.130	91	2221	31.90 ug/L #	71
44) o-Xylene SCAN	13.741	91	949	25.07 ug/L #	36

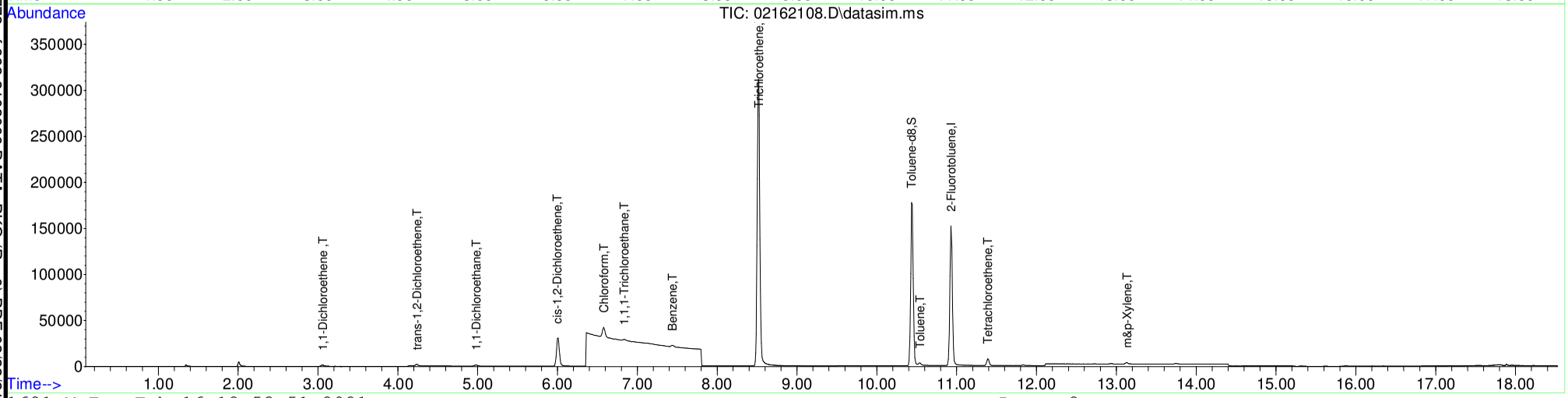
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021621\
Data File : 02162108.D
Acq On : 16 Feb 2021 11:39
InstName : AG5975C
Operator : TD
Sample : 2102006-10RE3
Misc : 10X DL (180-20)
ALS Vial : 8 Sample Multiplier: 10

Quant Time: Feb 16 11:58:11 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021621.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration





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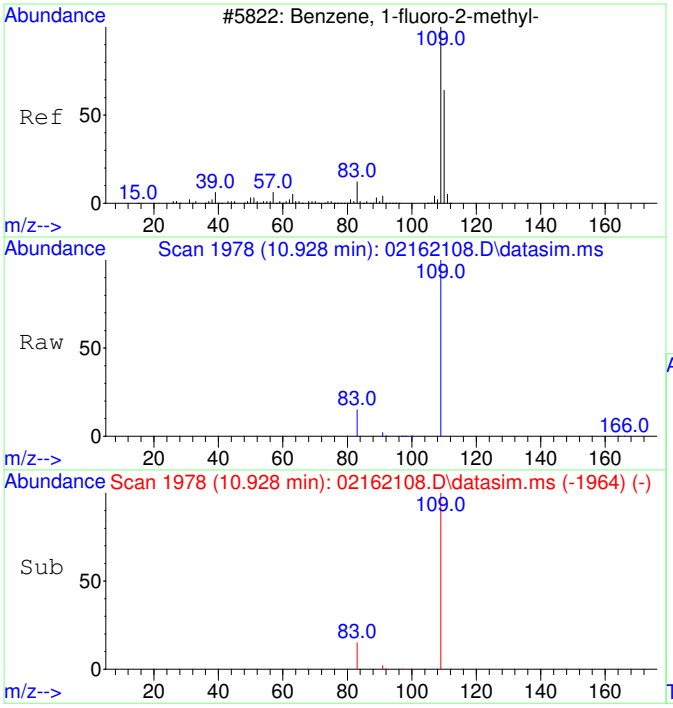
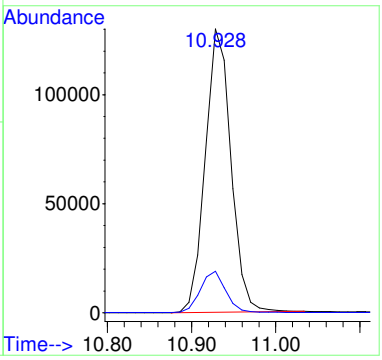
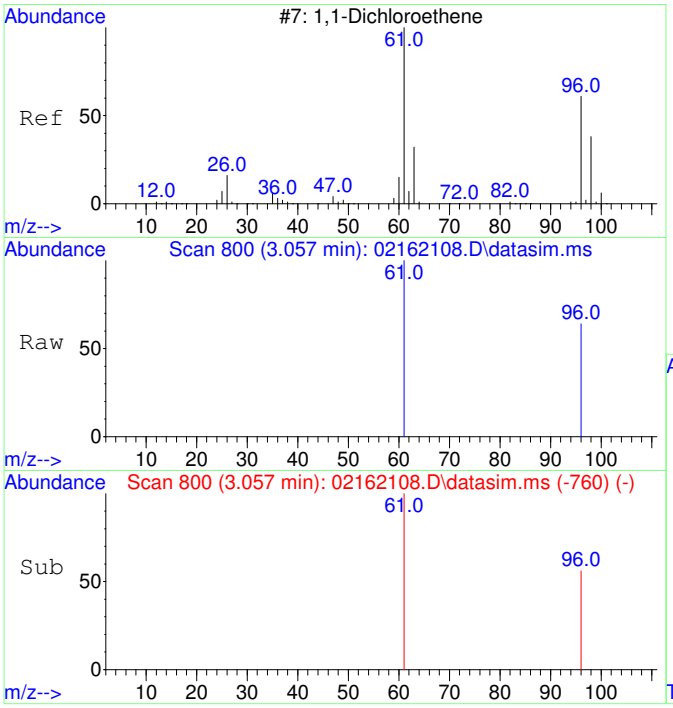


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.928 min Scan# 1978
Delta R.T. 0.000 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion:109 Resp: 275433

Ion	Ratio	Lower	Upper
109	100		
83	14.4	0.0	42.3

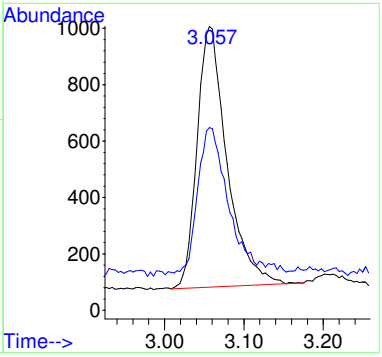


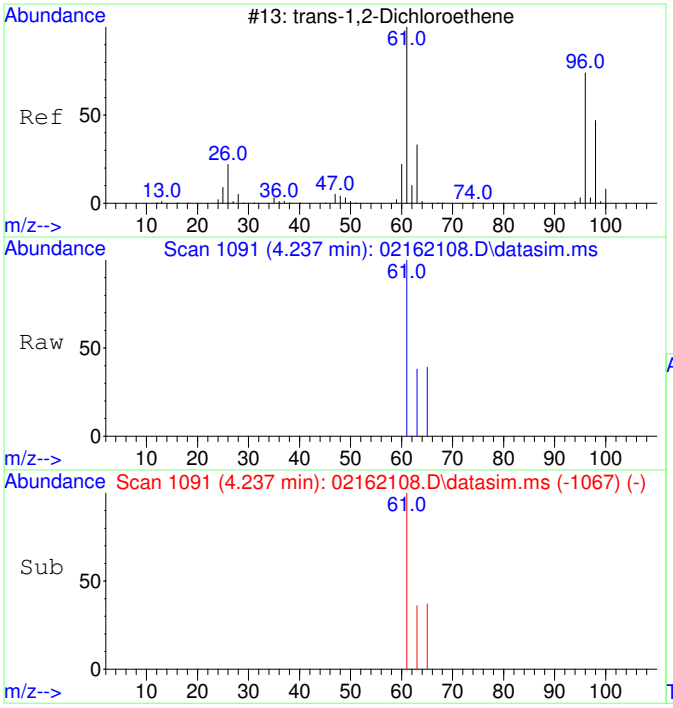


#2
1,1-Dichloroethene
Concen: 188.79 ug/L
RT: 3.057 min Scan# 800
Delta R.T. 0.000 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion: 61 Resp: 2422

Ion	Ratio	Lower	Upper
61	100		
96	56.8	37.2	97.2

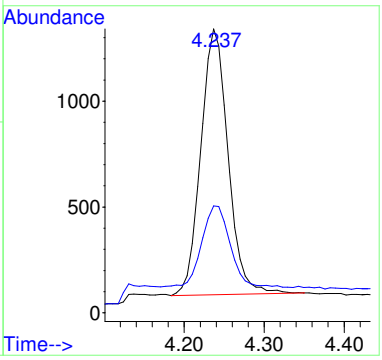


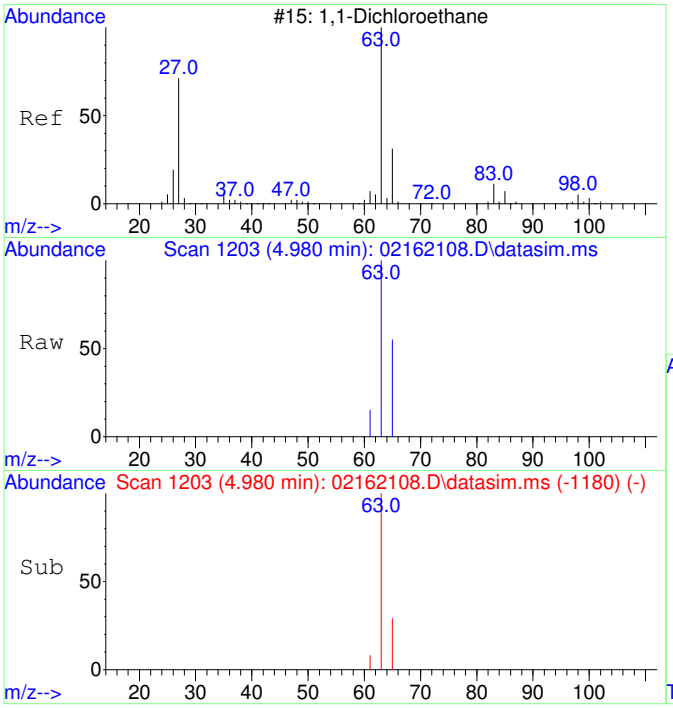


#3
trans-1,2-Dichloroethene
Concen: 219.88 ug/L
RT: 4.237 min Scan# 1091
Delta R.T. 0.007 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion: 61 Resp: 2980

Ion	Ratio	Lower	Upper
61	100		
63	31.5	2.4	62.4

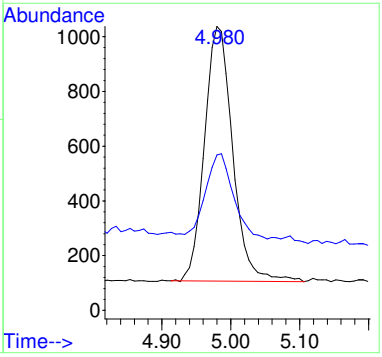


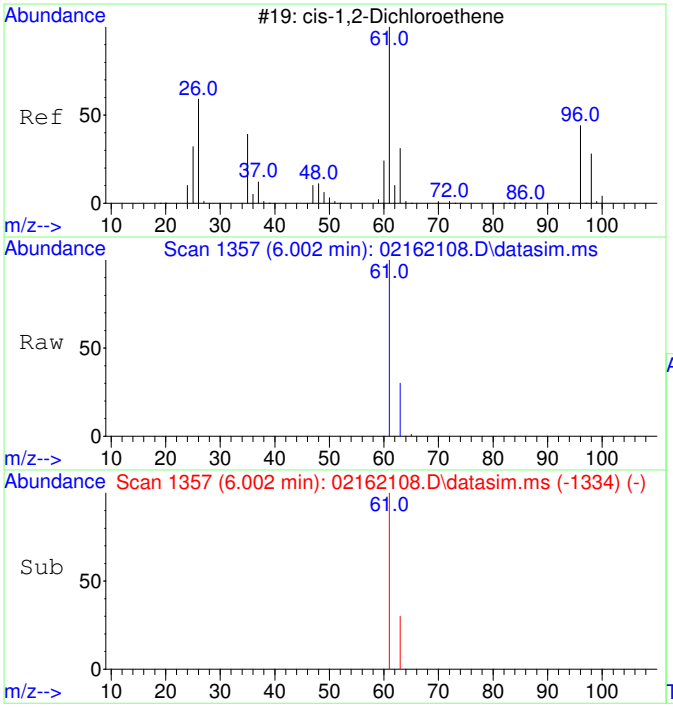


#4
1,1-Dichloroethane
Concen: 161.97 ug/L
RT: 4.980 min Scan# 1203
Delta R.T. 0.000 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion: 63 Resp: 2644

Ion	Ratio	Lower	Upper
63	100		
65	33.6	1.8	61.8

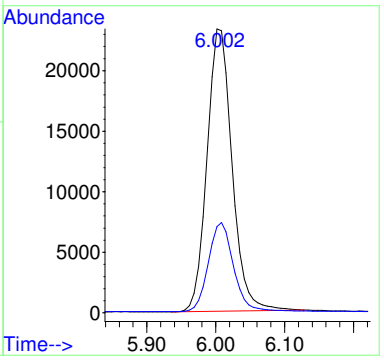


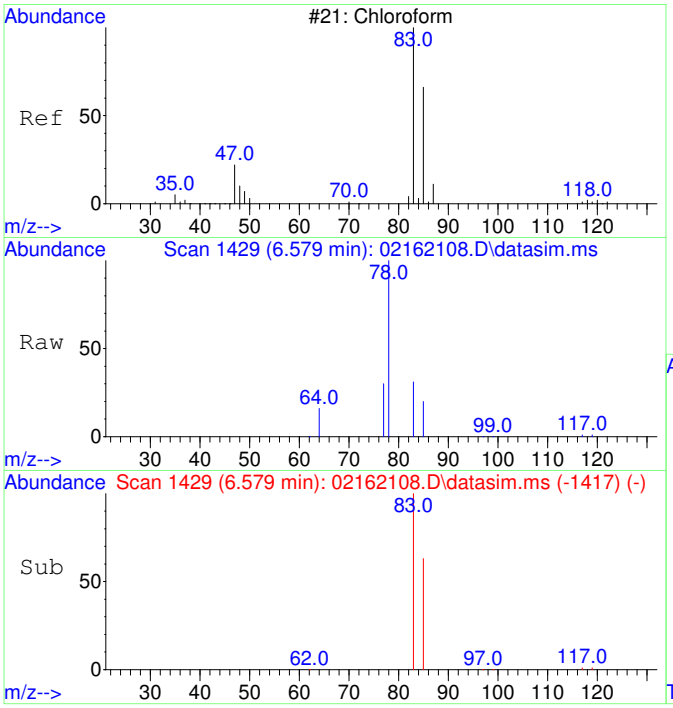


#5
cis-1,2-Dichloroethene
Concen: 3656.69 ug/L
RT: 6.002 min Scan# 1357
Delta R.T. 0.000 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion: 61 Resp: 58857

Ion	Ratio	Lower	Upper
61	100		
63	31.2	2.5	62.5

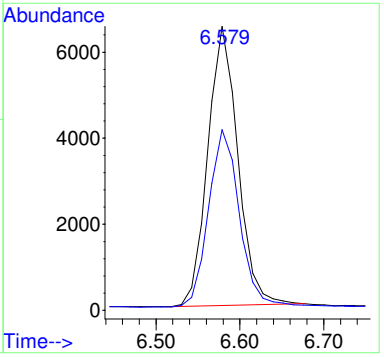


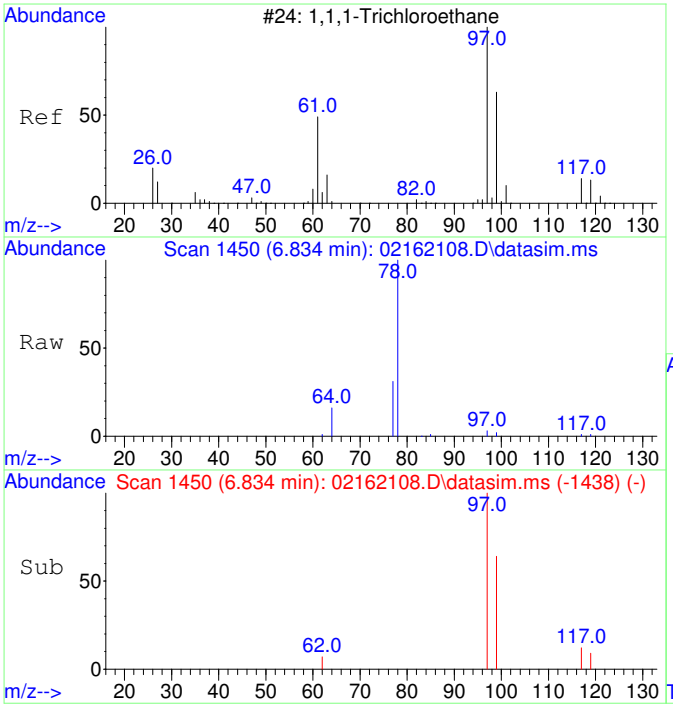


#6
Chloroform
Concen: 940.97 ug/L
RT: 6.579 min Scan# 1429
Delta R.T. 0.000 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion: 83 Resp: 16143

Ion	Ratio	Lower	Upper
83	100		
85	65.9	35.1	95.1

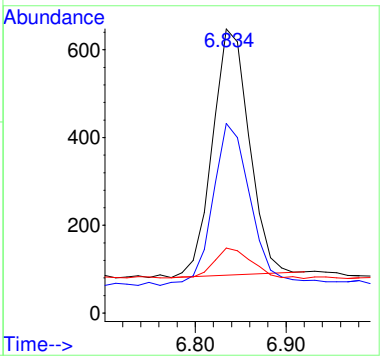


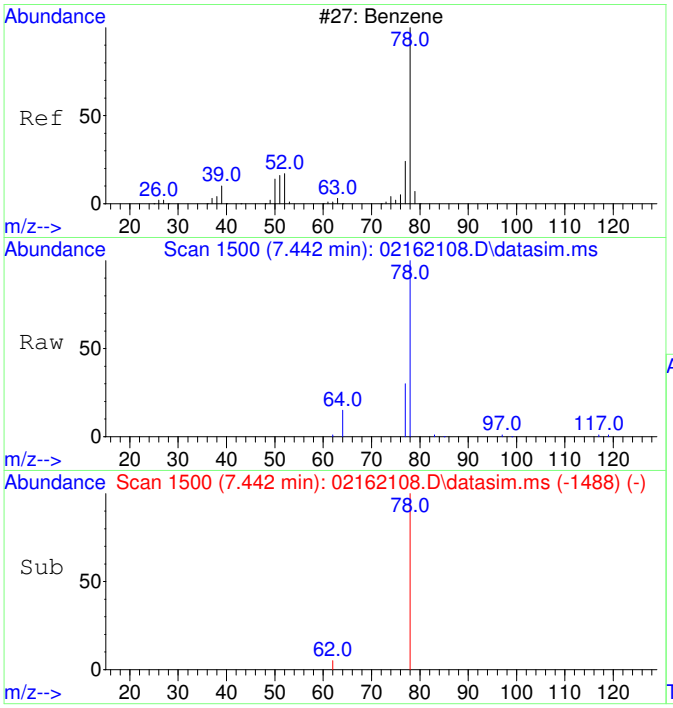


#7
1,1,1-Trichloroethane
Concen: 96.55 ug/L
RT: 6.834 min Scan# 1450
Delta R.T. 0.000 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion: 97 Resp: 1574

Ion	Ratio	Lower	Upper
97	100		
99	67.9	34.6	94.6
117	12.9	0.0	43.2

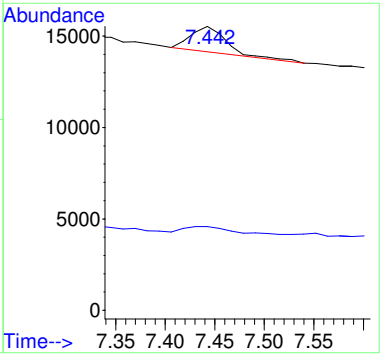


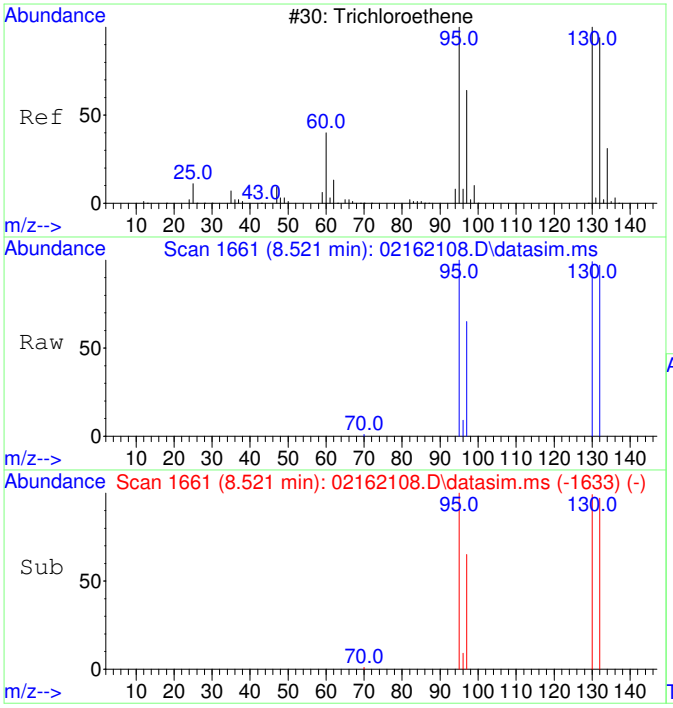


#9
Benzene
Concen: 67.23 ug/L
RT: 7.442 min Scan# 1500
Delta R.T. 0.000 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion: 78 Resp: 3151

Ion	Ratio	Lower	Upper
78	100		
77	45.5	0.0	53.2

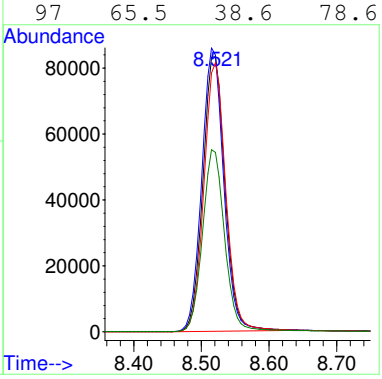


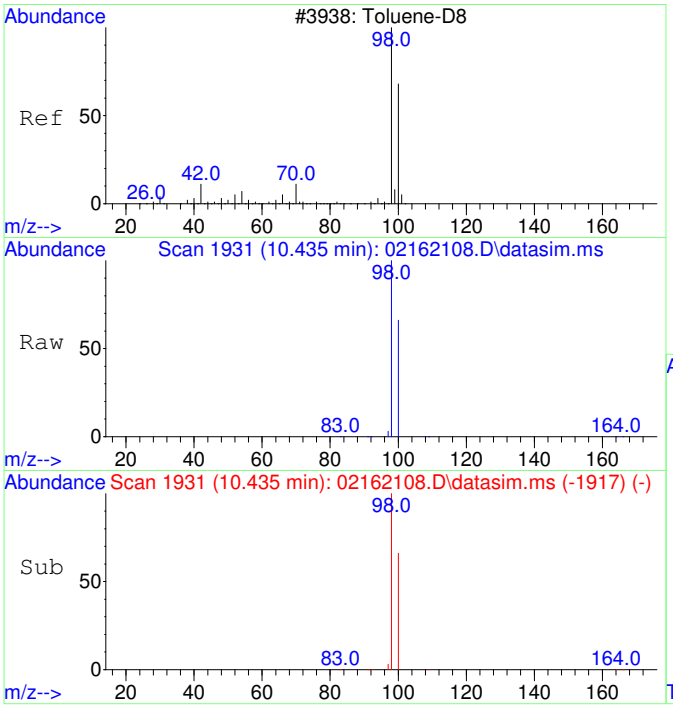


#11
Trichloroethene
Concen: 15280.32 ug/L
RT: 8.521 min Scan# 1661
Delta R.T. 0.000 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion:130 Resp: 189566

Ion	Ratio	Lower	Upper
130	100		
95	102.1	60.7	120.7
132	96.3	76.0	116.0
97	65.5	38.6	78.6

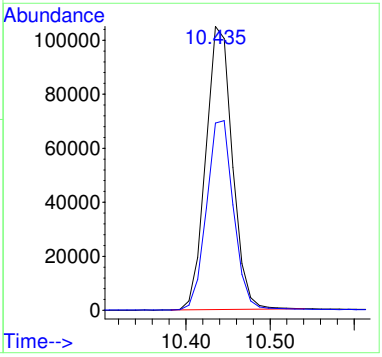


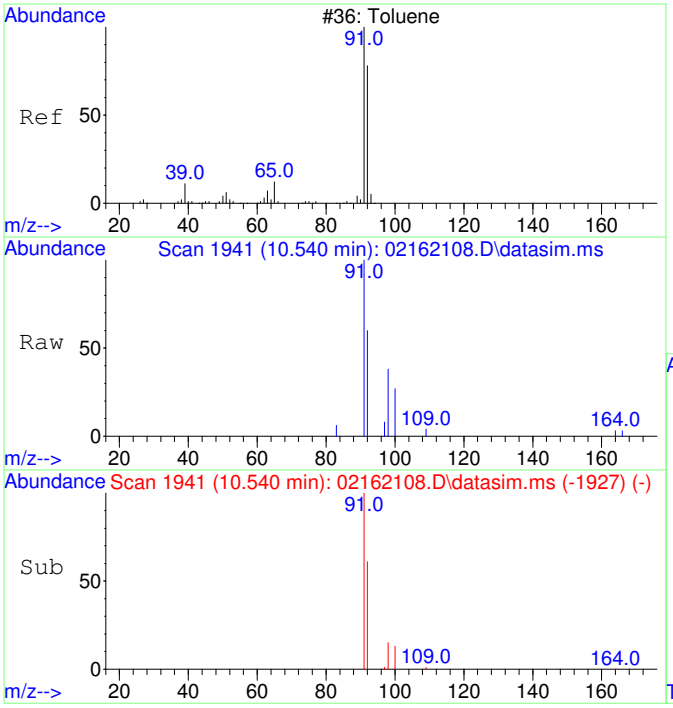


#12
Toluene-d8
Concen: 4857.61 ug/L
RT: 10.435 min Scan# 1931
Delta R.T. 0.000 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion: 98 Resp: 230557

Ion	Ratio	Lower	Upper
98	100		
100	67.5	37.1	97.1

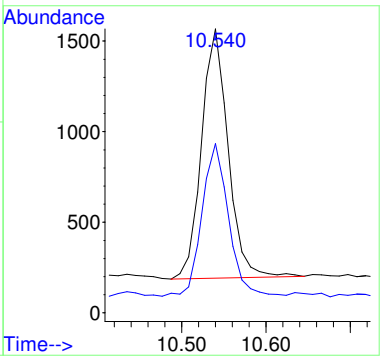


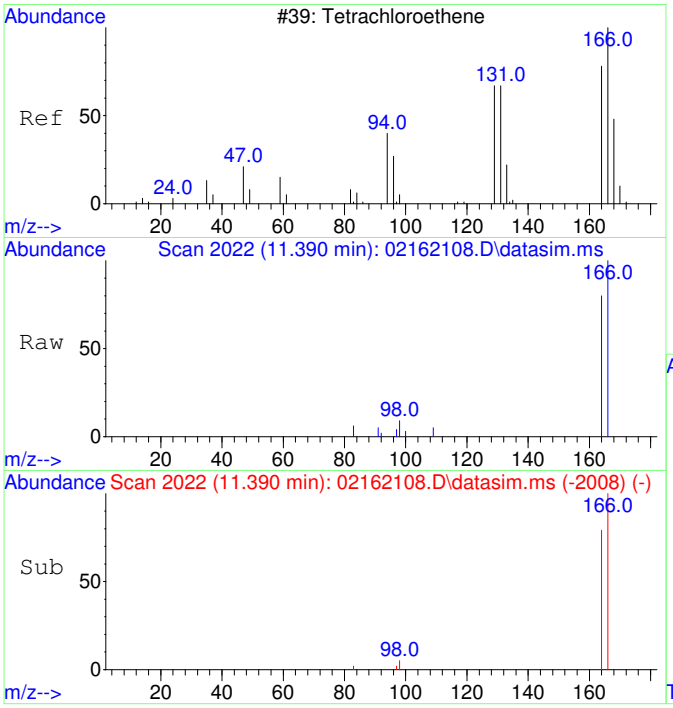


#13
Toluene
Concen: 45.84 ug/L
RT: 10.540 min Scan# 1941
Delta R.T. 0.000 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion: 91 Resp: 3013

Ion	Ratio	Lower	Upper
91	100		
92	60.4	29.9	89.9

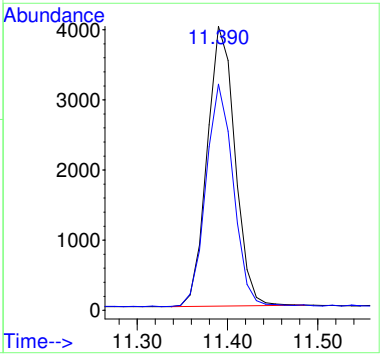


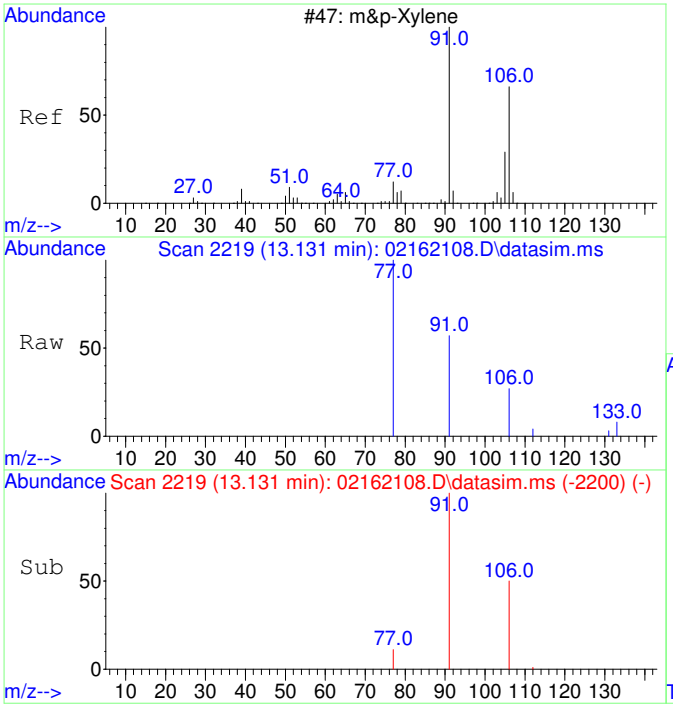


#15
Tetrachloroethene
Concen: 496.21 ug/L
RT: 11.390 min Scan# 2022
Delta R.T. 0.000 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion:166 Resp: 8540

Ion	Ratio	Lower	Upper
166	100		
164	78.1	47.8	107.8

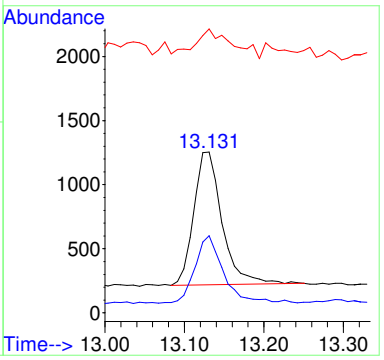


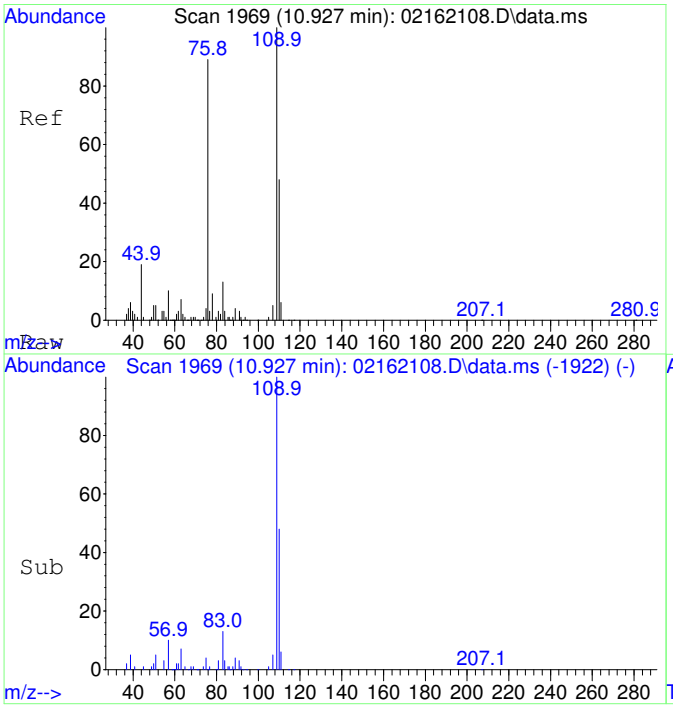


#19
m&p-Xylene
Concen: 39.23 ug/L
RT: 13.131 min Scan# 2219
Delta R.T. 0.000 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion: 91 Resp: 2558

Ion	Ratio	Lower	Upper
91	100		
106	50.9	22.2	82.2
77	28.3	0.0	42.4

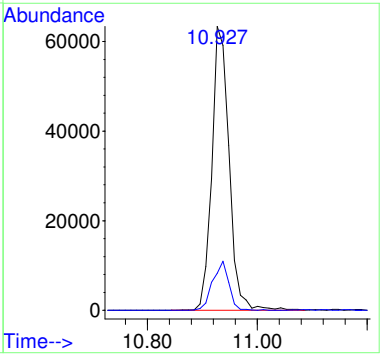


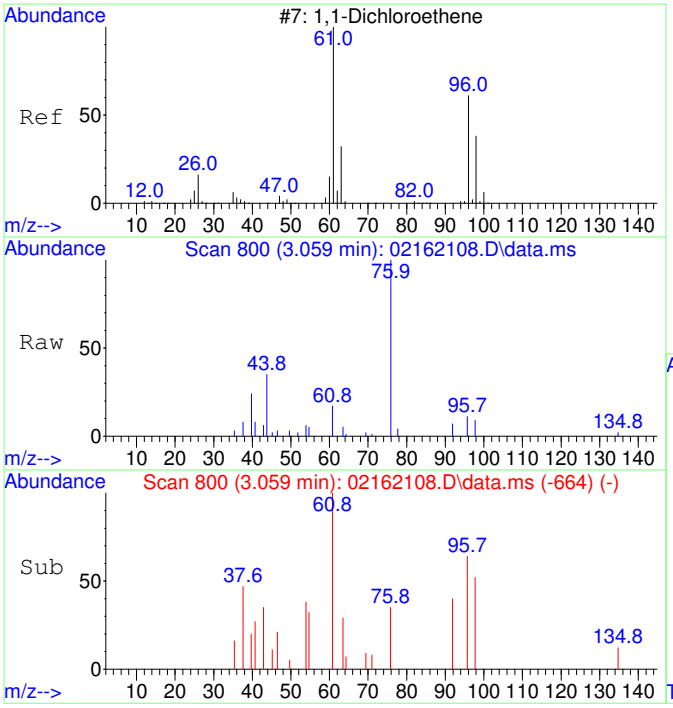


#25
2-Fluorotoluene SCAN
Concen: 4689.78 ug/L
RT: 10.927 min Scan# 1969
Delta R.T. -0.010 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion:109 Resp: 139066

Ion	Ratio	Lower	Upper
109	100		
83	16.2	0.0	43.8

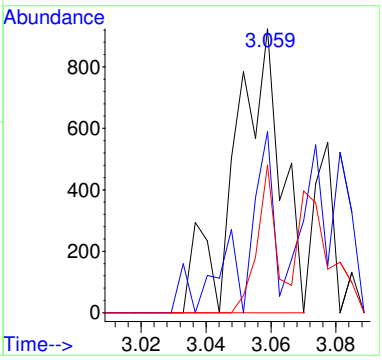


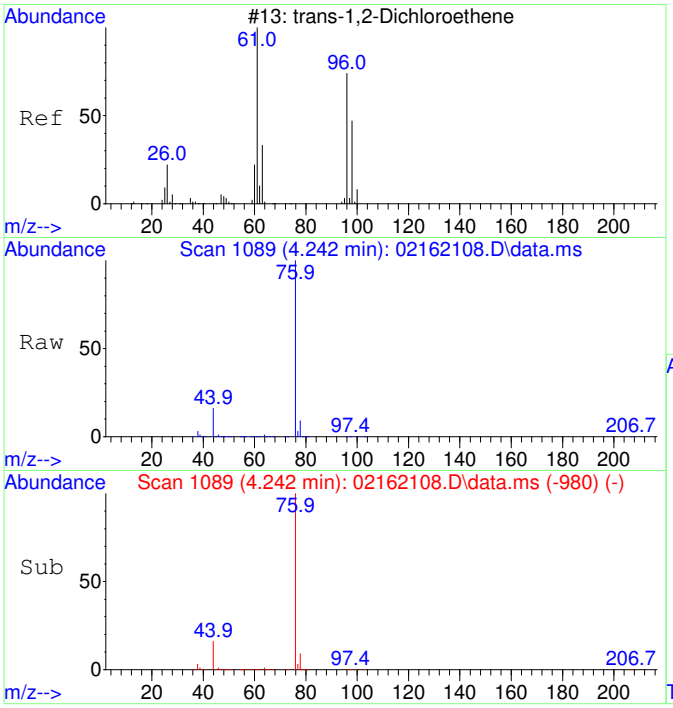


#26
1,1-Dichloroethene SCAN
Concen: 98.22 ug/L
RT: 3.059 min Scan# 800
Delta R.T. 0.004 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion: 61 Resp: 926

Ion	Ratio	Lower	Upper
61	100		
96	22.6	33.1	93.1#
98	16.7	11.2	71.2

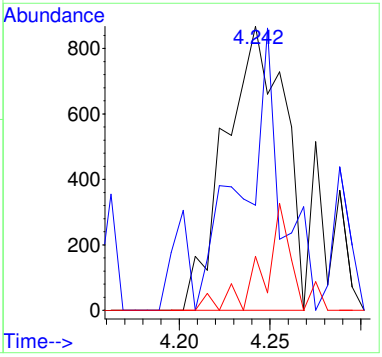


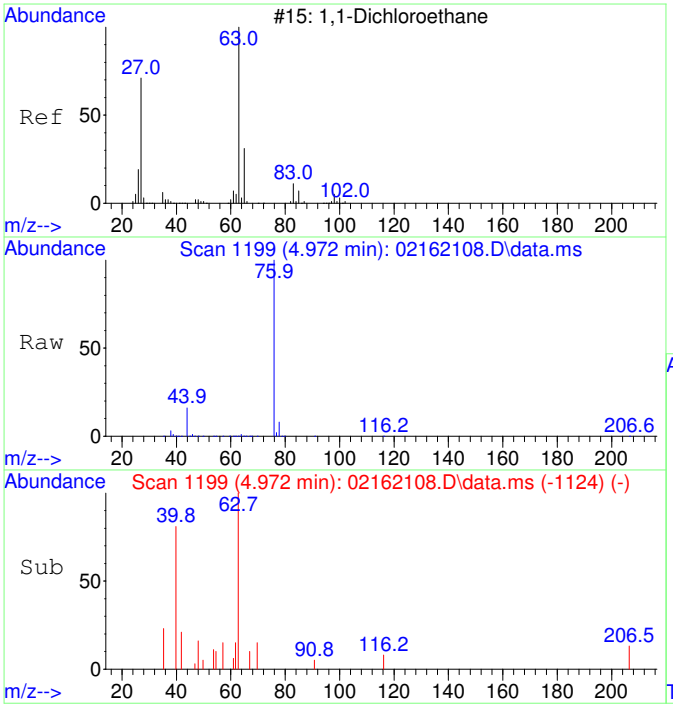


#27
trans-1,2-Dichloroethene SCAN
Concen: 196.92 ug/L
RT: 4.242 min Scan# 1089
Delta R.T. 0.013 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion: 61 Resp: 1949

Ion	Ratio	Lower	Upper
61	100		
96	65.6	49.0	109.0
98	18.8	20.5	80.5#

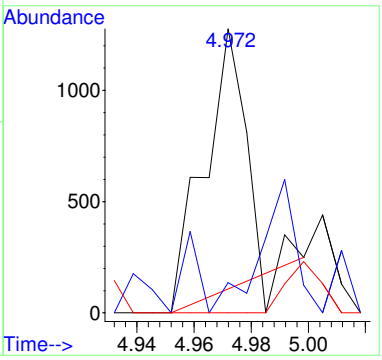


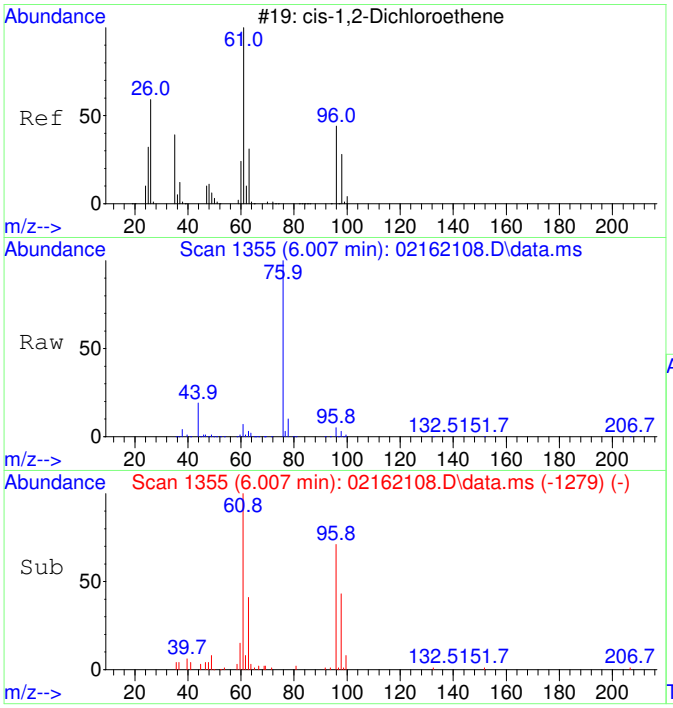


#28
1,1-Dichloroethane SCAN
Concen: 98.59 ug/L
RT: 4.972 min Scan# 1199
Delta R.T. 0.000 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion: 63 Resp: 1208

Ion	Ratio	Lower	Upper
63	100		
65	21.4	1.3	61.3
83	0.0	0.0	45.9

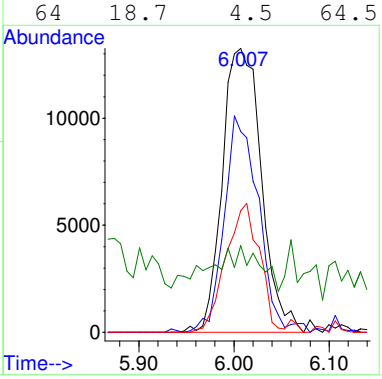


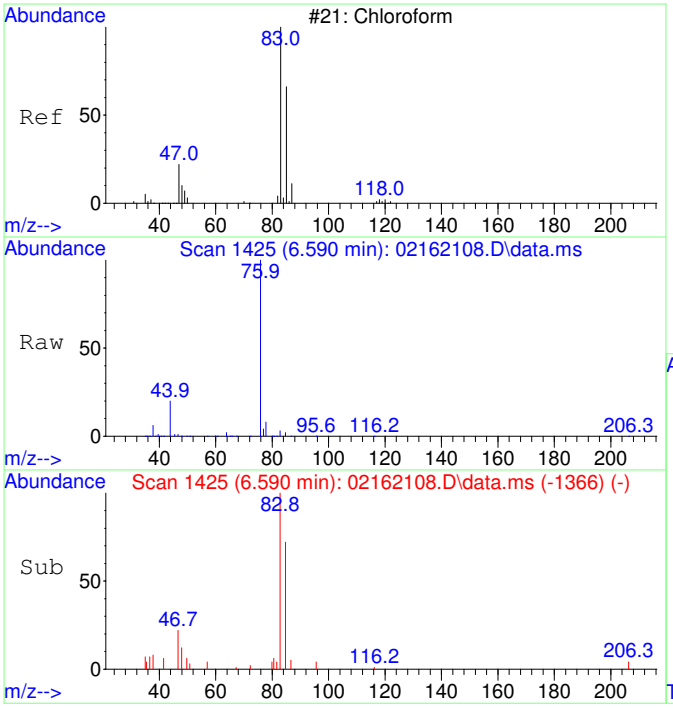


#29
cis-1,2-Dichloroethene SCAN
Concen: 3340.43 ug/L
RT: 6.007 min Scan# 1355
Delta R.T. 0.007 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion: 61 Resp: 37922

Ion	Ratio	Lower	Upper
61	100		
96	66.1	39.9	99.9
98	38.0	13.5	73.5
64	18.7	4.5	64.5

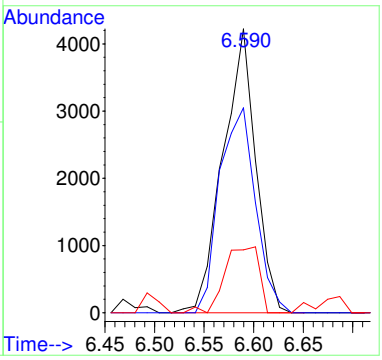


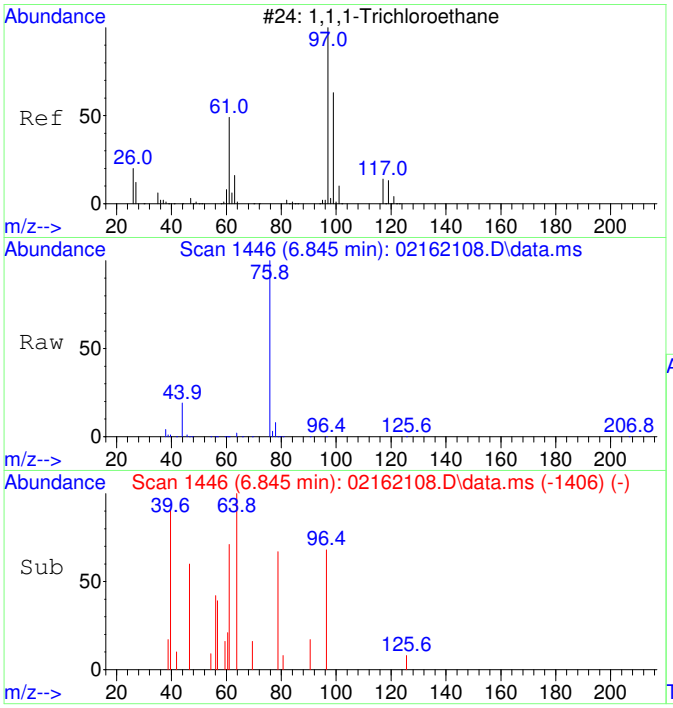


#30
Chloroform SCAN
Concen: 932.92 ug/L
RT: 6.590 min Scan# 1425
Delta R.T. 0.012 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion: 83 Resp: 9693

Ion	Ratio	Lower	Upper
83	100		
85	79.4	34.6	94.6
47	24.6	0.0	53.4

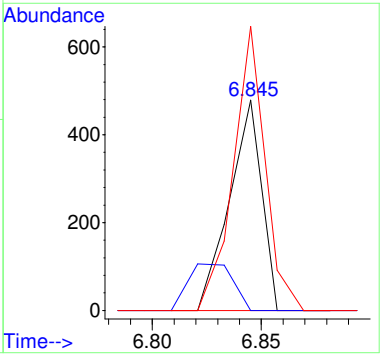


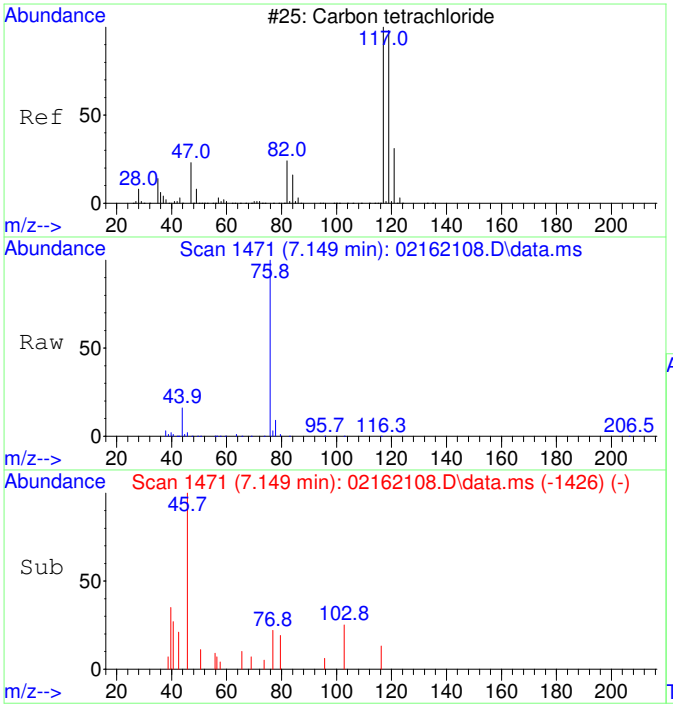


#31
1,1,1-Trichloroethane SCAN
Concen: 46.15 ug/L
RT: 6.845 min Scan# 1446
Delta R.T. 0.000 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion: 97 Resp: 493

Ion	Ratio	Lower	Upper
97	100		
99	0.0	43.6	103.6#
61	132.9	18.0	78.0#

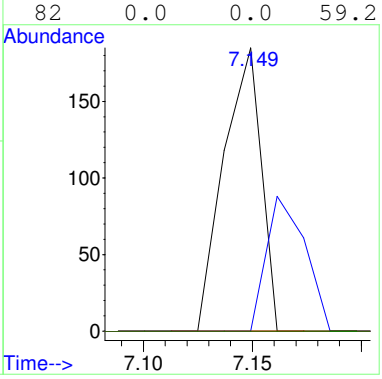


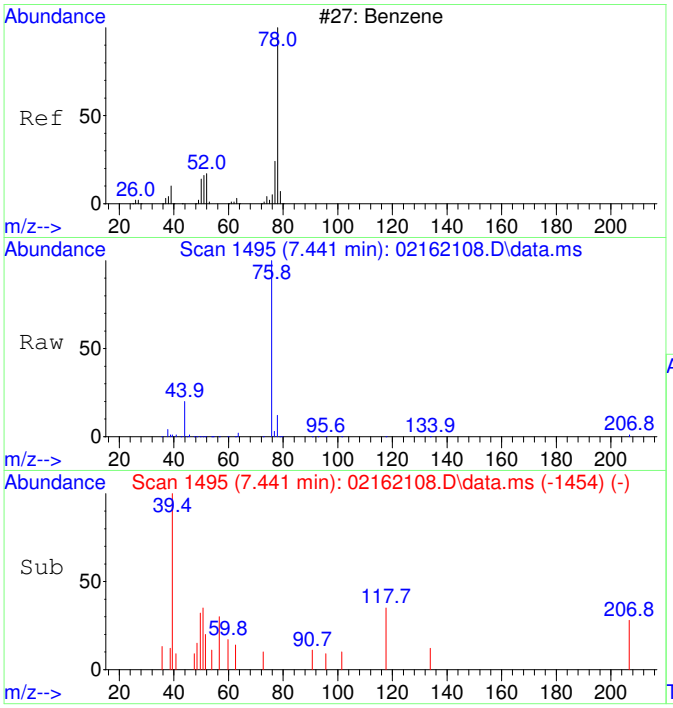


#32
Carbon tetrachloride SCAN
Concen: 25.70 ug/L
RT: 7.149 min Scan# 1471
Delta R.T. 0.049 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion:117 Resp: 221

Ion	Ratio	Lower	Upper
117	100		
119	49.3	75.5	135.5#
121	0.0	0.0	58.8
82	0.0	0.0	59.2

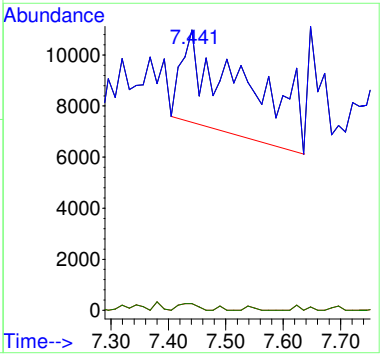


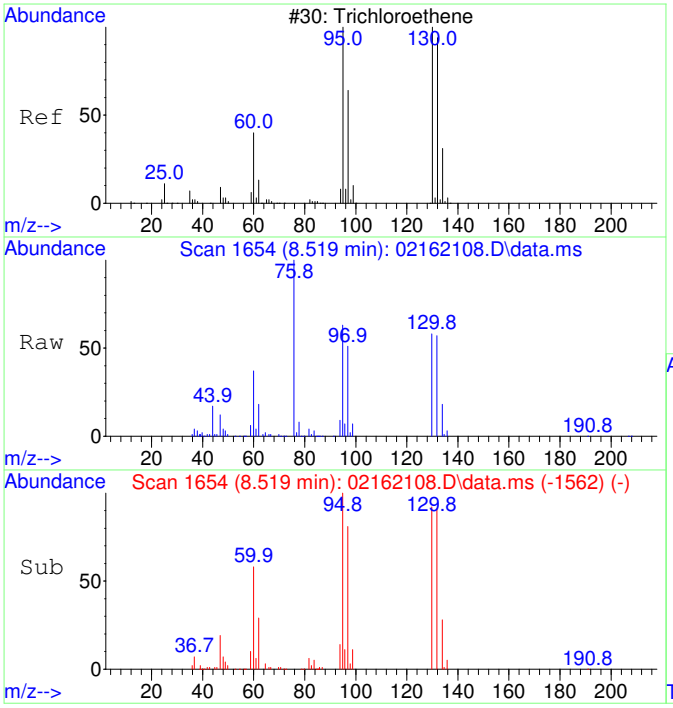


#33
Benzene SCAN
Concen: 959.48 ug/L
RT: 7.441 min Scan# 1495
Delta R.T. 0.000 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion: 78 Resp: 28131

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	2.2	0.0	47.9
51	2.2	0.0	44.1

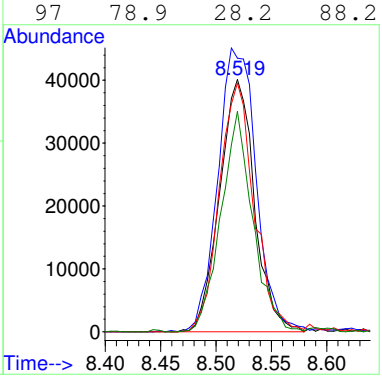


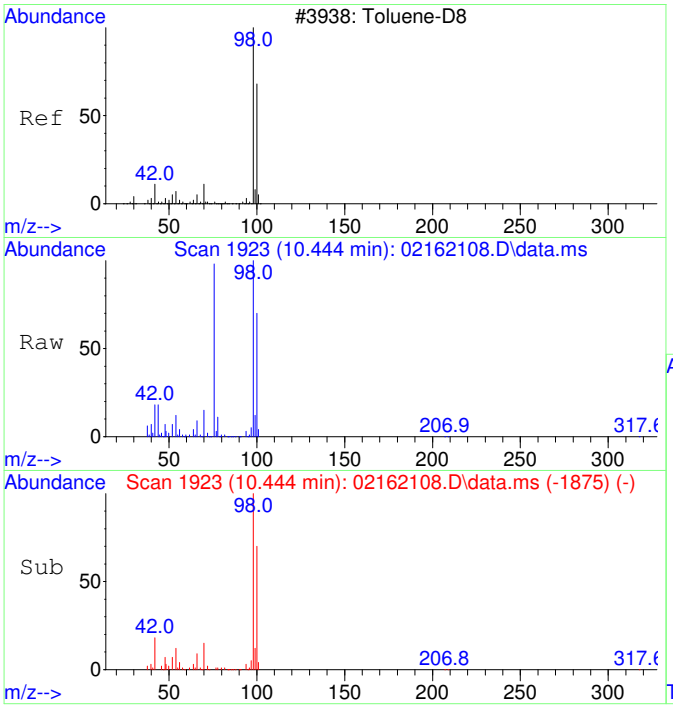


#35
Trichloroethene SCAN
Concen: 13603.83 ug/L
RT: 8.519 min Scan# 1654
Delta R.T. 0.000 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion:130 Resp: 88170

Ion	Ratio	Lower	Upper
130	100		
95	122.8	60.5	120.5#
132	96.8	59.6	119.6
97	78.9	28.2	88.2

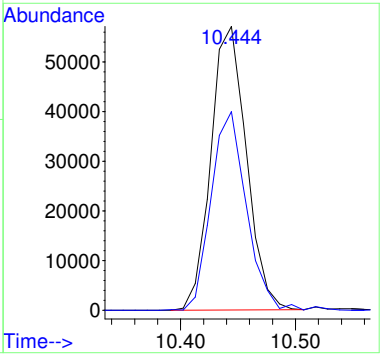


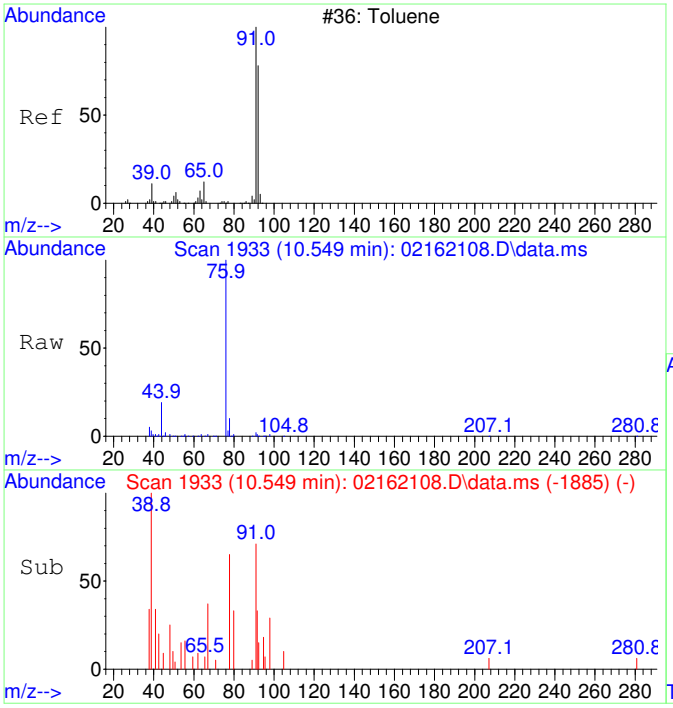


#36
Toluene-d8 SCAN
Concen: 4701.50 ug/L
RT: 10.444 min Scan# 1923
Delta R.T. 0.000 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion: 98 Resp: 123115

Ion	Ratio	Lower	Upper
98	100		
100	69.9	40.0	100.0

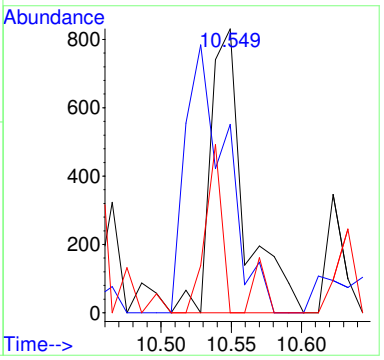


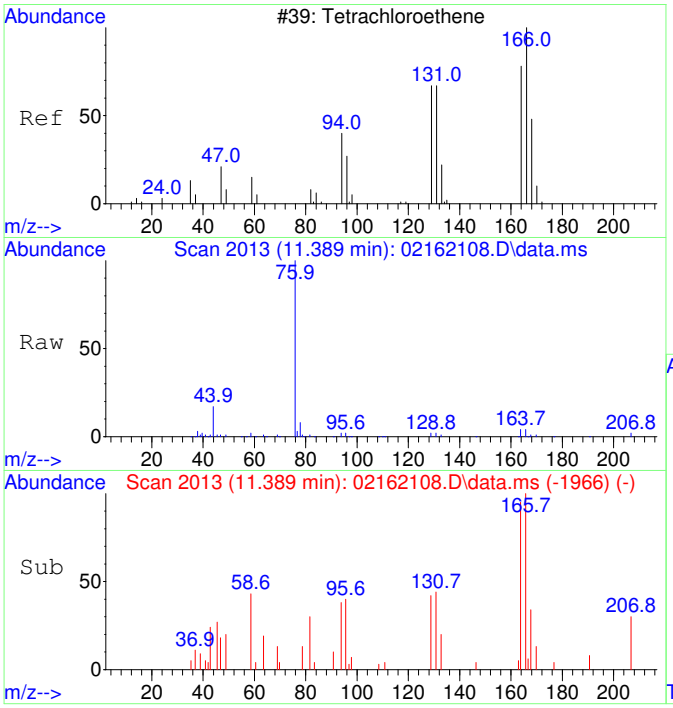


#37
Toluene SCAN
Concen: 37.30 ug/L
RT: 10.549 min Scan# 1933
Delta R.T. 0.000 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion: 91 Resp: 1400

Ion	Ratio	Lower	Upper
91	100		
92	0.0	28.3	88.3#
65	28.4	0.0	41.0

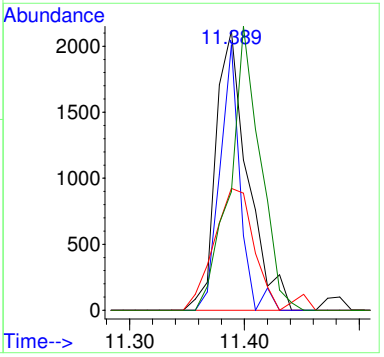


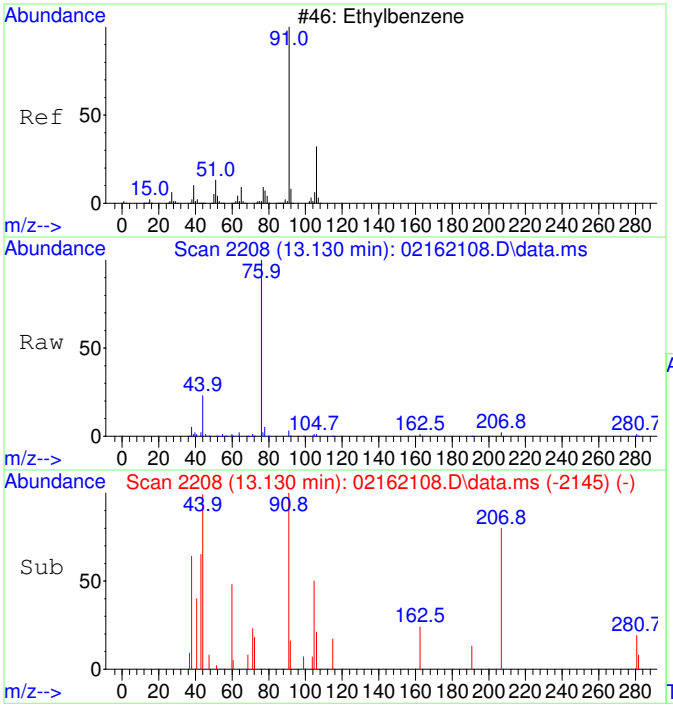


#39
Tetrachloroethene SCAN
Concen: 558.06 ug/L
RT: 11.389 min Scan# 2013
Delta R.T. -0.010 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion:166 Resp: 4071

Ion	Ratio	Lower	Upper
166	100		
164	60.6	50.9	110.9
131	57.6	38.7	98.7
129	97.4	41.8	101.8

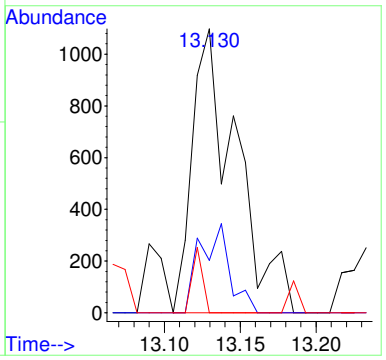


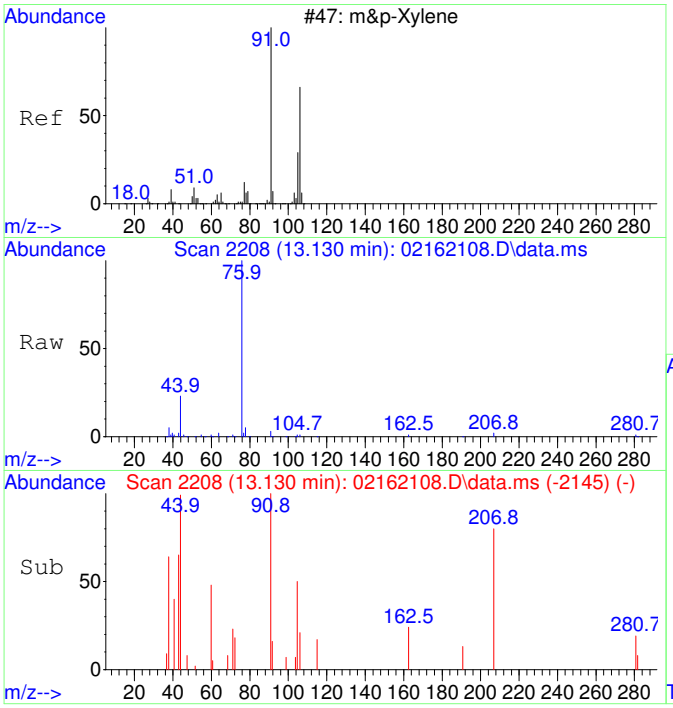


#42
Ethylbenzene SCAN
Concen: 31.90 ug/L
RT: 13.130 min Scan# 2208
Delta R.T. 0.000 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion: 91 Resp: 2221

Ion	Ratio	Lower	Upper
91	100		
106	21.2	23.1	83.1#
51	5.4	0.0	40.1

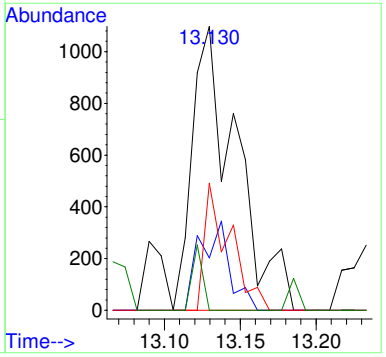


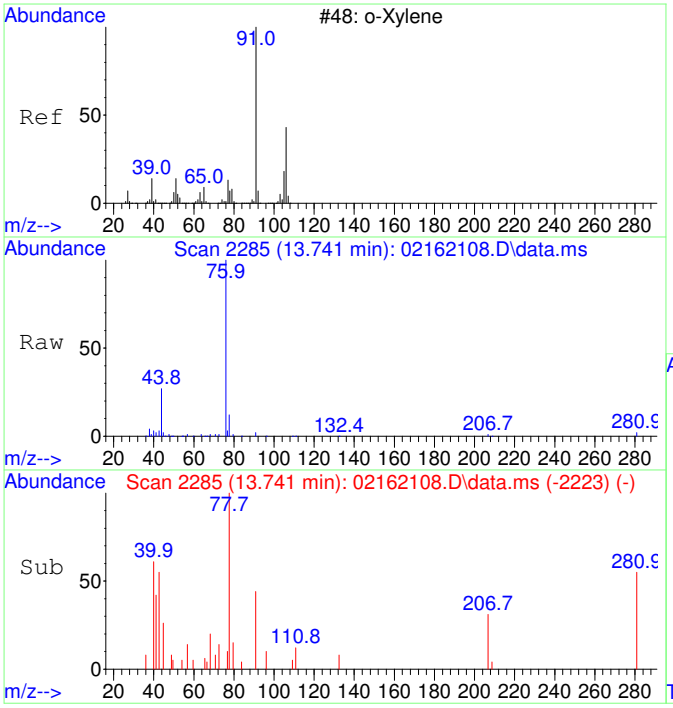


#43
m&p-Xylene SCAN
Concen: 31.90 ug/L
RT: 13.130 min Scan# 2208
Delta R.T. 0.000 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion: 91 Resp: 2221

Ion	Ratio	Lower	Upper
91	100		
106	21.2	23.1	83.1#
105	25.8	0.0	54.7
51	5.4	0.0	40.1

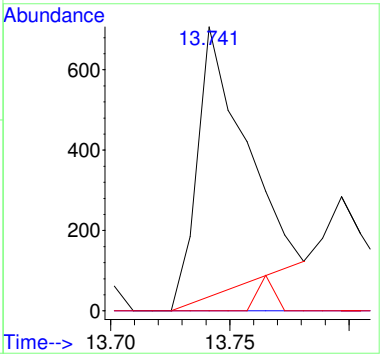




#44
o-Xylene SCAN
Concen: 25.07 ug/L
RT: 13.741 min Scan# 2285
Delta R.T. -0.008 min
Lab File: 02162108.D
Acq: 16 Feb 2021 11:39

Tgt Ion: 91 Resp: 949

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



2102006-11RE3

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021621\
Data File : 02162109.D
Acq On : 16 Feb 2021 12:02
InstName : AG5975C
Operator : TD
Sample : 2102006-11RE3
Misc : 10X DL (180-20)
ALS Vial : 9 Sample Multiplier: 10

Quant Time: Feb 16 12:21:42 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021621.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration

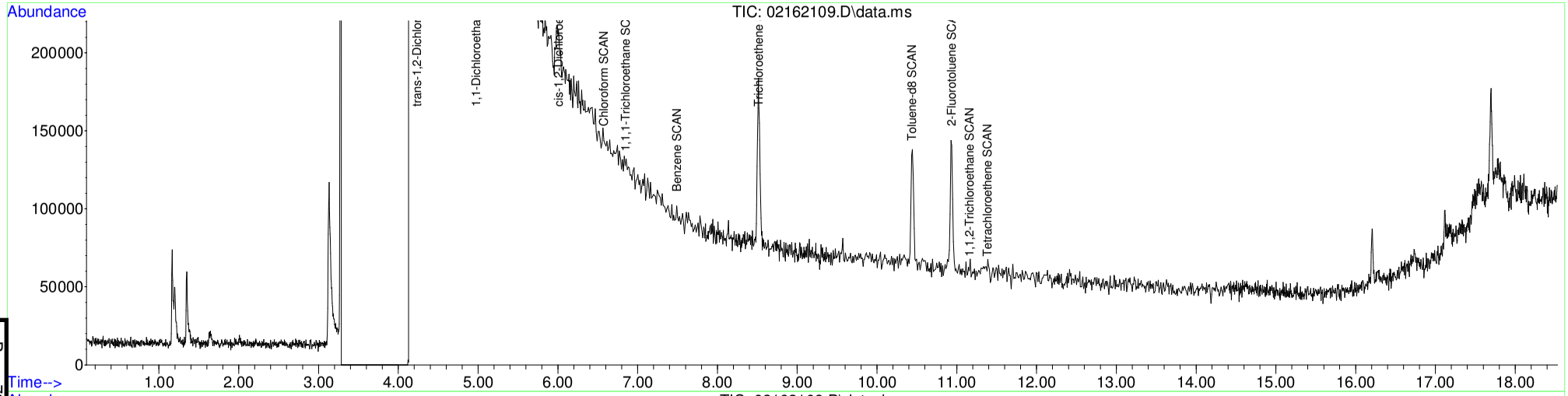
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.928	109	137035	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.435	98	113700	4814.93 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 96.30%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.056	61	1278	200.22 ug/L	93
3] trans-1,2-Dichloroethene	4.223	61	1309	194.13 ug/L	59
4] 1,1-Dichloroethane	4.973	63	1276	157.11 ug/L	91
5] cis-1,2-Dichloroethene	6.001	61	25624	3199.79 ug/L RPT	99
6] Chloroform	6.579	83	7825	916.77 ug/L	99
7] 1,1,1-Trichloroethane	6.834	97	685	84.45 ug/L	98
9] Benzene	7.430	78	1098	47.09 ug/L #	1
11] Trichloroethene	8.515	130	76777	12439.06 ug/L RPT	94
15] Tetrachloroethene	11.390	166	3302	385.63 ug/L	99
22] 1,3,5-Trimethylbenzene	15.314	105	2024	52.10 ug/L	93
24] Naphthalene	17.854	128	3209	54.59 ug/L #	68
25) 2-Fluorotoluene SCAN	10.927	109	71988	4879.50 ug/L	94
27) trans-1,2-Dichloroethe...	4.229	61	524	106.41 ug/L	81
28) 1,1-Dichloroethane SCAN	4.972	63	486	79.72 ug/L #	86
29) cis-1,2-Dichloroethene...	6.007	61	18075	3200.17 ug/L #	81
30) Chloroform SCAN	6.577	83	4173	807.27 ug/L	92
31) 1,1,1-Trichloroethane ...	6.845	97	626	117.78 ug/L #	19
33) Benzene SCAN	7.490	78	7879	540.14 ug/L	92
35) Trichloroethene SCAN	8.514	130	38476	11932.04 ug/L	88
36) Toluene-d8 SCAN	10.434	98	57912	4445.07 ug/L	98
38) 1,1,2-Trichloroethane ...	11.158	97	128	34.52 ug/L #	13
39) Tetrachloroethene SCAN	11.378	166	1194	328.98 ug/L #	12

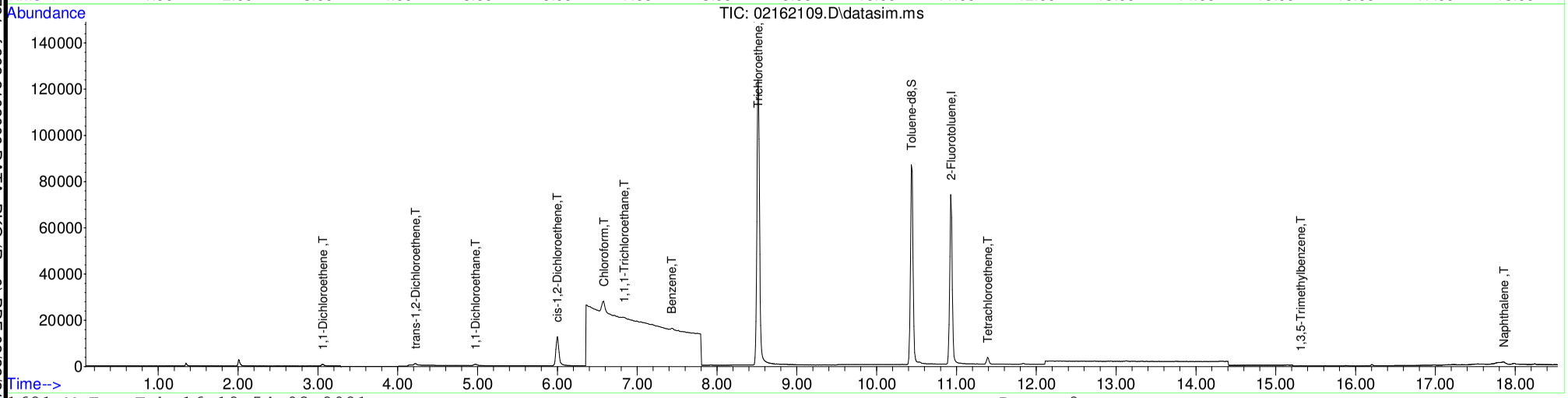
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021621\
Data File : 02162109.D
Acq On : 16 Feb 2021 12:02
InstName : AG5975C
Operator : TD
Sample : 2102006-11RE3
Misc : 10X DL (180-20)
ALS Vial : 9 Sample Multiplier: 10

Quant Time: Feb 16 12:21:42 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021621.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration





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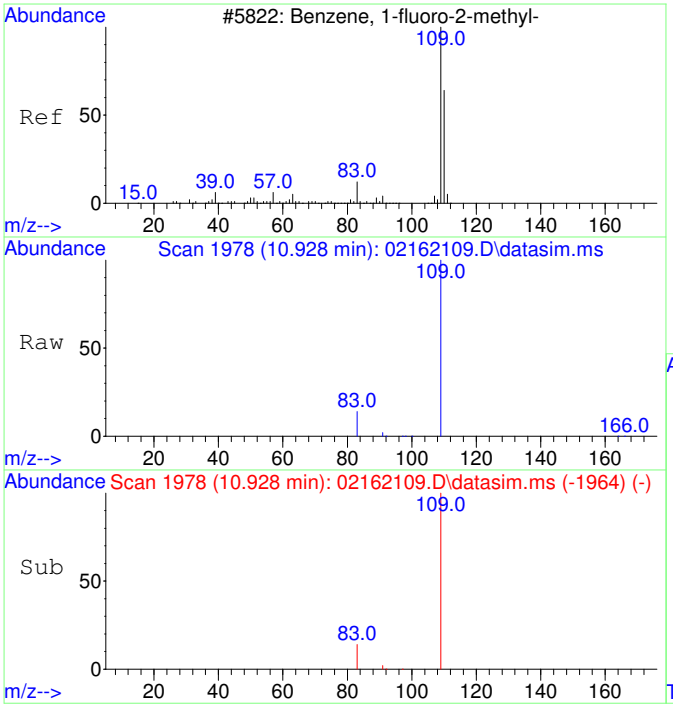
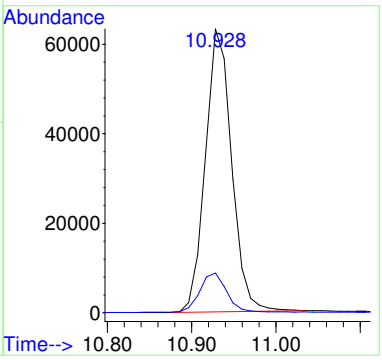
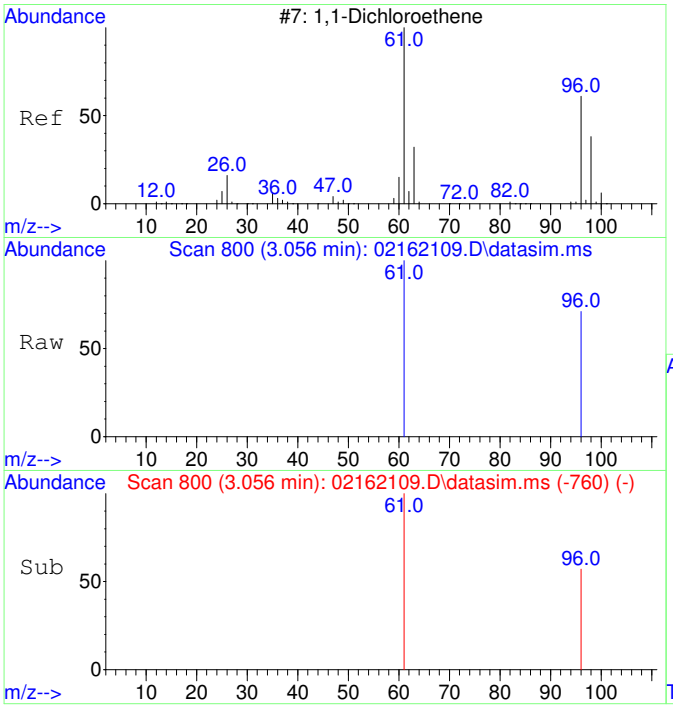


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.928 min Scan# 1978
Delta R.T. 0.000 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion:109 Resp: 137035

Ion	Ratio	Lower	Upper
109	100		
83	14.0	0.0	42.3

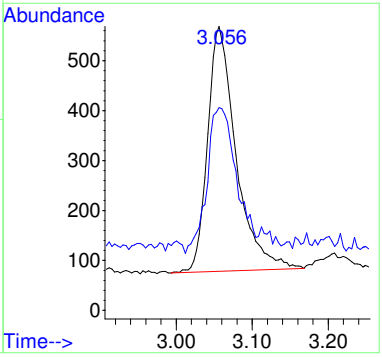


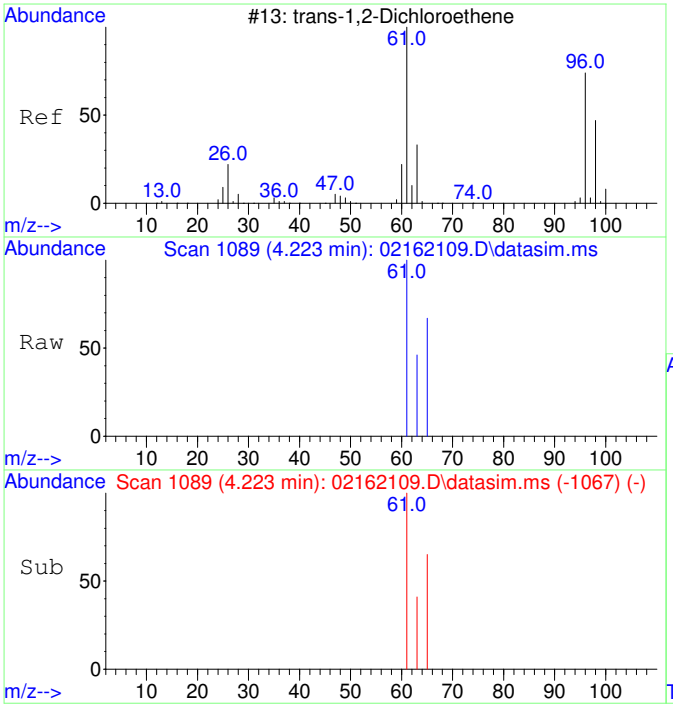


#2
1,1-Dichloroethene
Concen: 200.22 ug/L
RT: 3.056 min Scan# 800
Delta R.T. 0.000 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion: 61 Resp: 1278

Ion	Ratio	Lower	Upper
61	100		
96	61.4	37.2	97.2

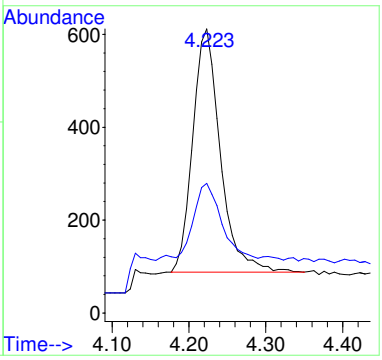


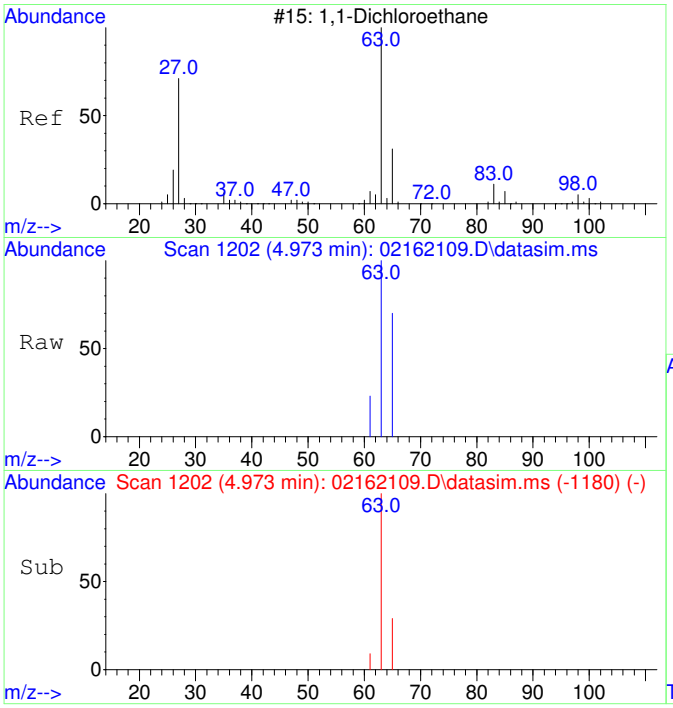


#3
trans-1,2-Dichloroethene
Concen: 194.13 ug/L
RT: 4.223 min Scan# 1089
Delta R.T. -0.007 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion: 61 Resp: 1309

Ion	Ratio	Lower	Upper
61	100		
63	55.5	2.4	62.4

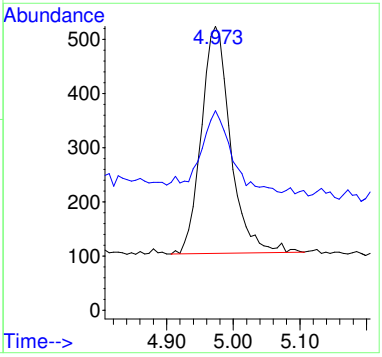


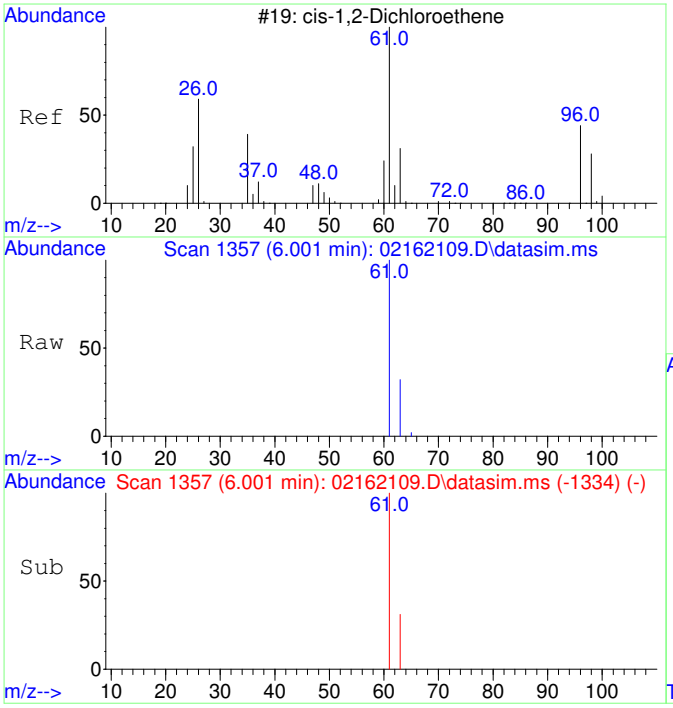


#4
1,1-Dichloroethane
Concen: 157.11 ug/L
RT: 4.973 min Scan# 1202
Delta R.T. -0.007 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion: 63 Resp: 1276

Ion	Ratio	Lower	Upper
63	100		
65	36.9	1.8	61.8

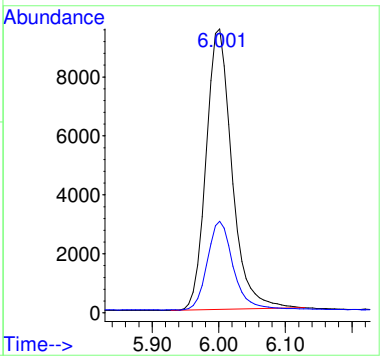


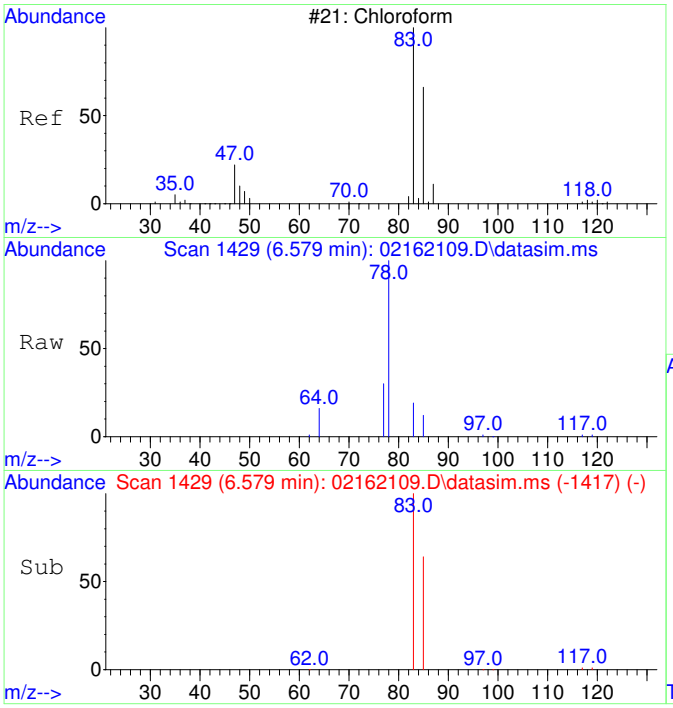


#5
cis-1,2-Dichloroethene
Concen: 3199.79 ug/L
RT: 6.001 min Scan# 1357
Delta R.T. 0.000 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion: 61 Resp: 25624

Ion	Ratio	Lower	Upper
61	100		
63	32.1	2.5	62.5

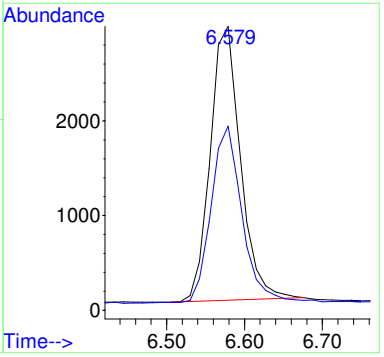


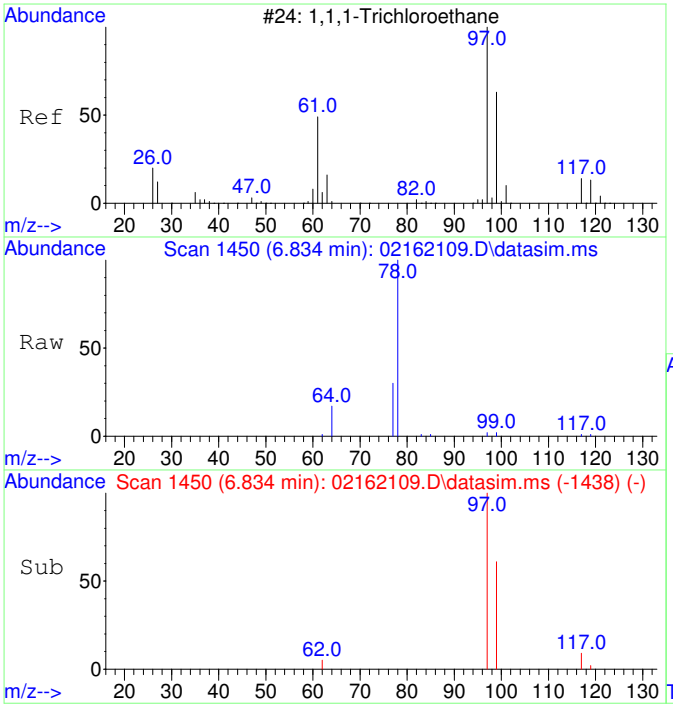


#6
Chloroform
Concen: 916.77 ug/L
RT: 6.579 min Scan# 1429
Delta R.T. 0.000 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion: 83 Resp: 7825

Ion	Ratio	Lower	Upper
83	100		
85	66.1	35.1	95.1

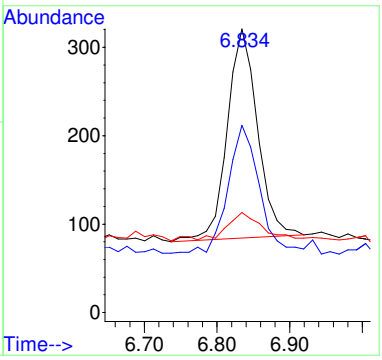


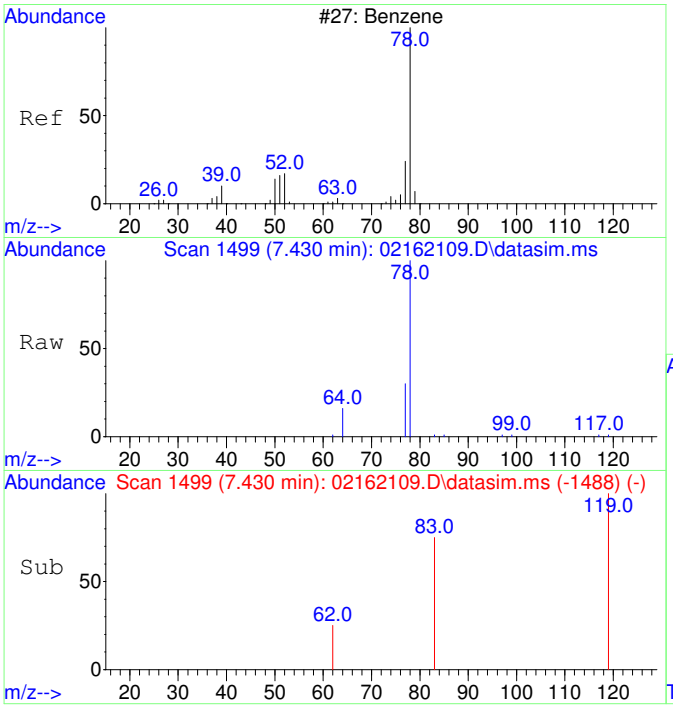


#7
1,1,1-Trichloroethane
Concen: 84.45 ug/L
RT: 6.834 min Scan# 1450
Delta R.T. 0.000 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion: 97 Resp: 685

Ion	Ratio	Lower	Upper
97	100		
99	63.2	34.6	94.6
117	14.9	0.0	43.2

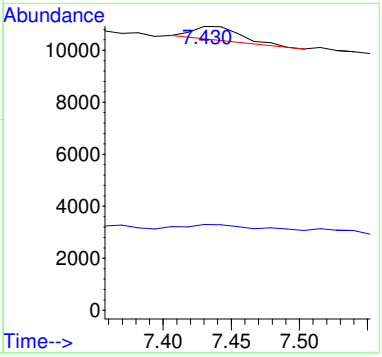


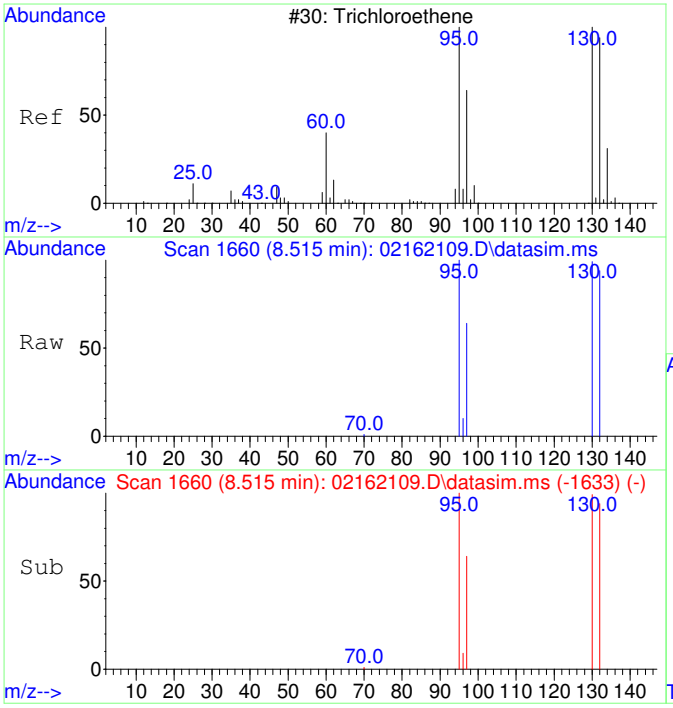


#9
Benzene
Concen: 47.09 ug/L
RT: 7.430 min Scan# 1499
Delta R.T. -0.012 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion: 78 Resp: 1098

Ion	Ratio	Lower	Upper
78	100		
77	75.9	0.0	53.2#

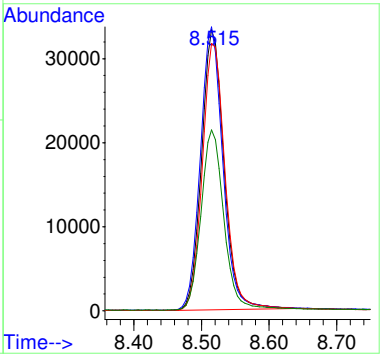


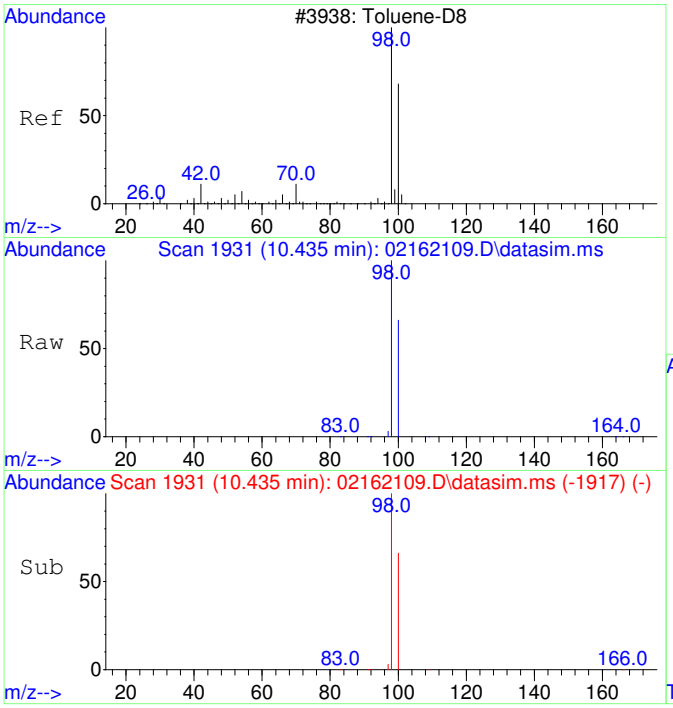


#11
Trichloroethene
Concen: 12439.06 ug/L
RT: 8.515 min Scan# 1660
Delta R.T. -0.005 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion:130 Resp: 76777

Ion	Ratio	Lower	Upper
130	100		
95	101.0	60.7	120.7
132	96.2	76.0	116.0
97	64.8	38.6	78.6

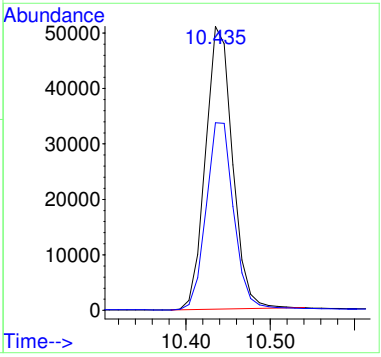


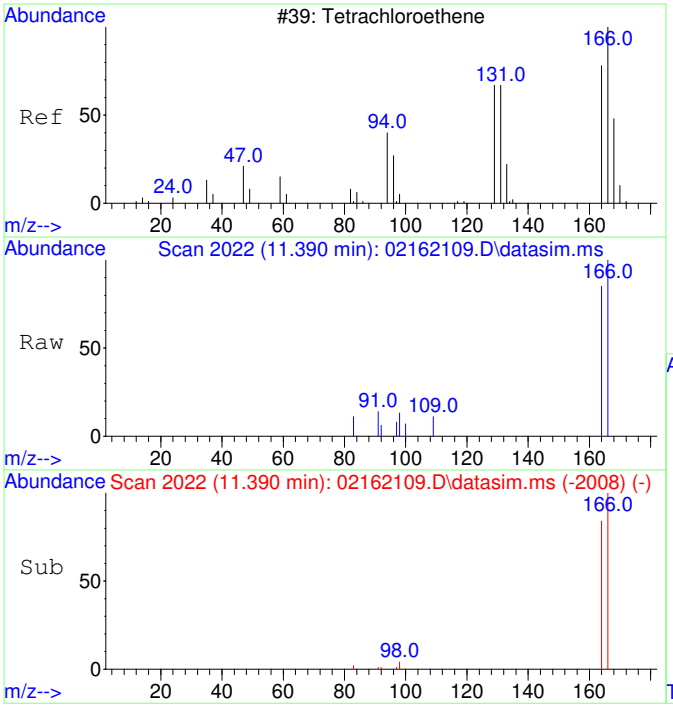


#12
Toluene-d8
Concen: 4814.93 ug/L
RT: 10.435 min Scan# 1931
Delta R.T. 0.000 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion: 98 Resp: 113700

Ion	Ratio	Lower	Upper
98	100		
100	67.3	37.1	97.1

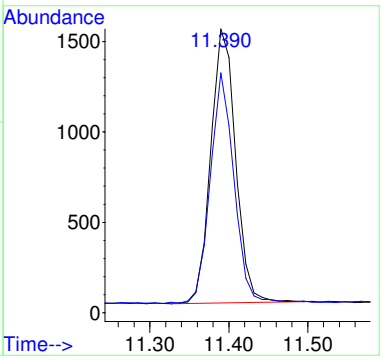


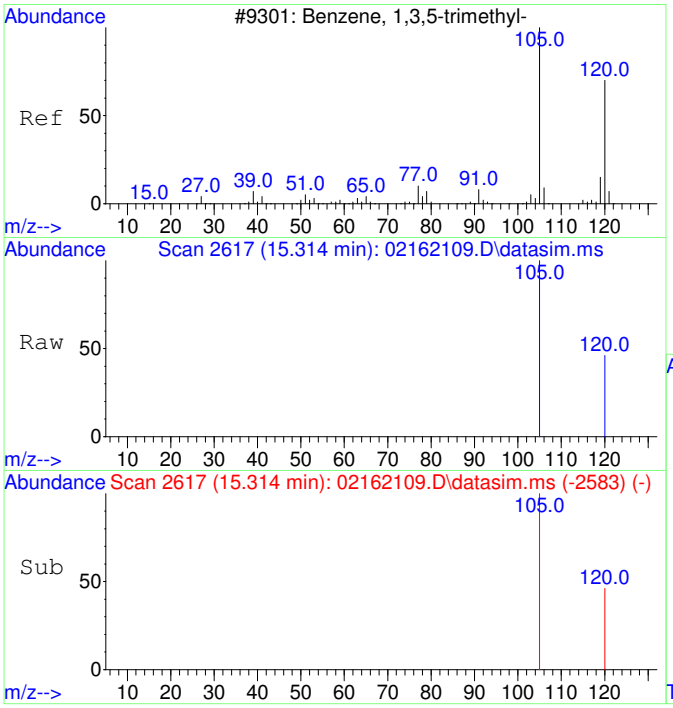


#15
Tetrachloroethene
Concen: 385.63 ug/L
RT: 11.390 min Scan# 2022
Delta R.T. 0.000 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion:166 Resp: 3302

Ion	Ratio	Lower	Upper
166	100		
164	79.0	47.8	107.8

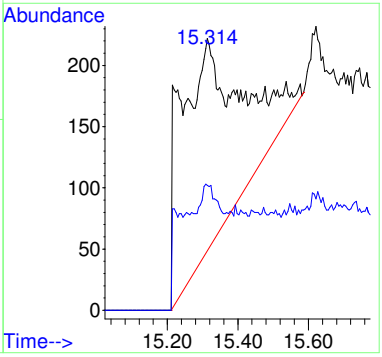


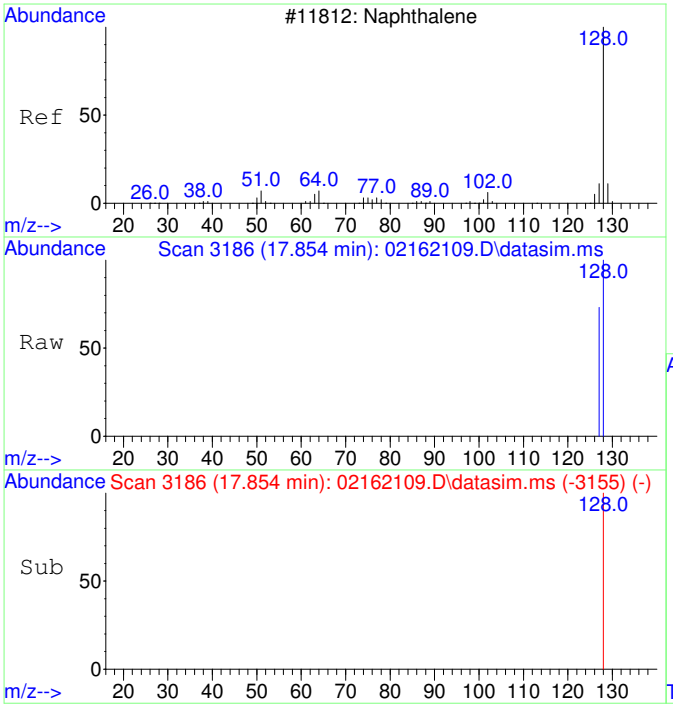


#22
1,3,5-Trimethylbenzene
Concen: 52.10 ug/L
RT: 15.314 min Scan# 2617
Delta R.T. -0.000 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion:105 Resp: 2024

Ion	Ratio	Lower	Upper
105	100		
120	45.9	21.1	81.1

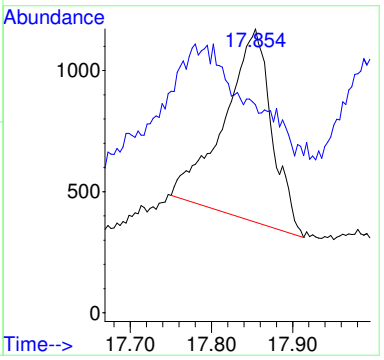


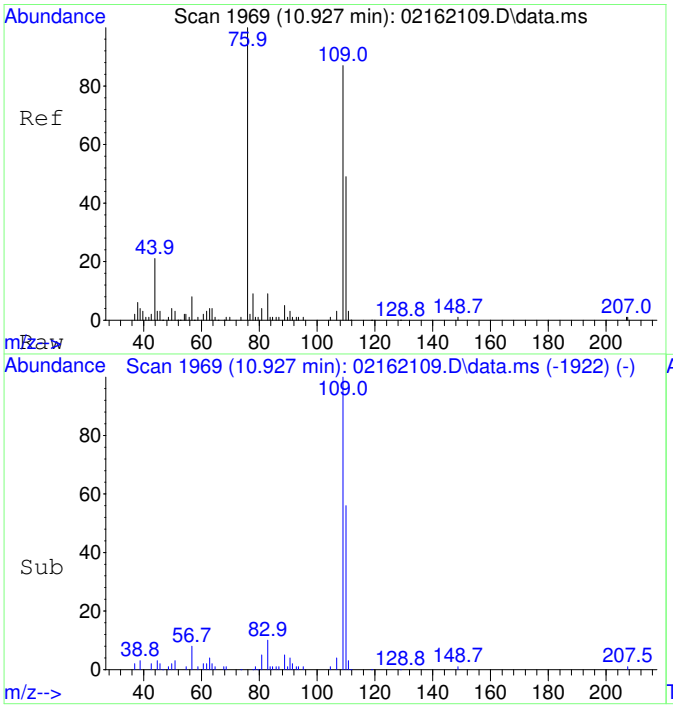


#24
Naphthalene
Concen: 54.59 ug/L
RT: 17.854 min Scan# 3186
Delta R.T. -0.033 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion:128 Resp: 3209

Ion	Ratio	Lower	Upper
128	100		
127	0.0	0.0	42.5

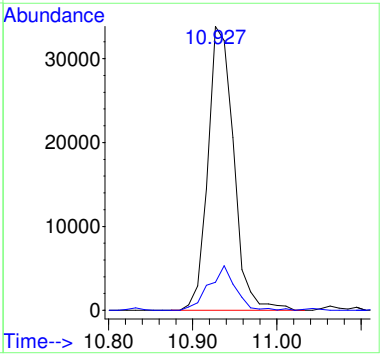


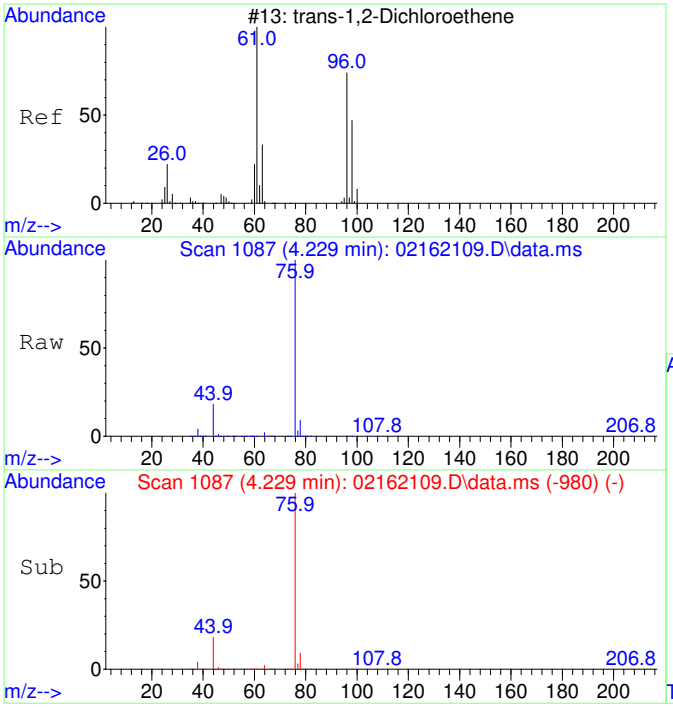


#25
2-Fluorotoluene SCAN
Concen: 4879.50 ug/L
RT: 10.927 min Scan# 1969
Delta R.T. -0.011 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion:109 Resp: 71988

Ion	Ratio	Lower	Upper
109	100		
83	16.2	0.0	43.8

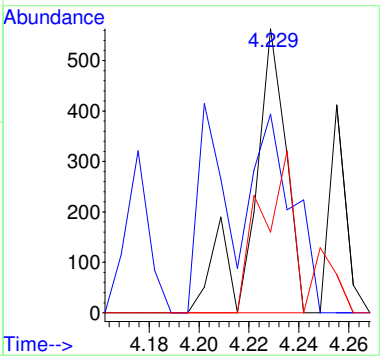


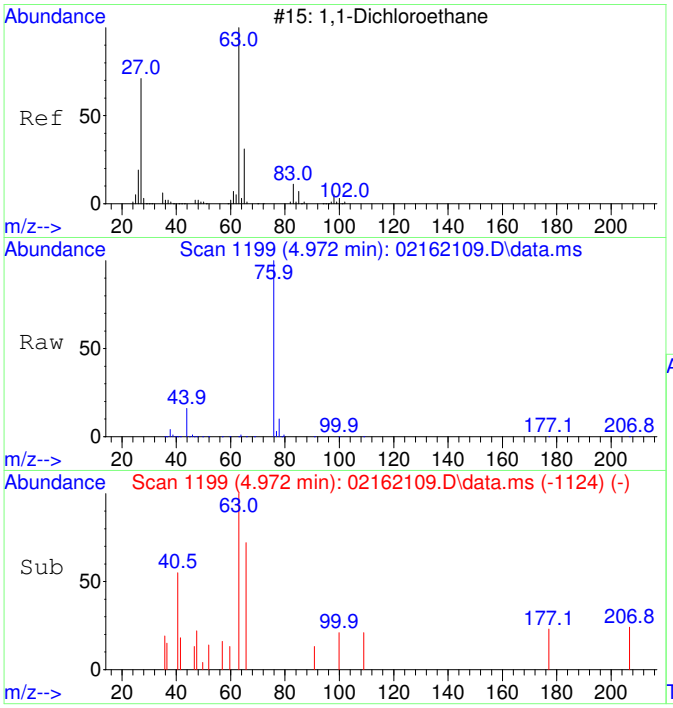


#27
trans-1,2-Dichloroethene SCAN
Concen: 106.41 ug/L
RT: 4.229 min Scan# 1087
Delta R.T. 0.000 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion: 61 Resp: 524

Ion	Ratio	Lower	Upper
61	100		
96	67.2	49.0	109.0
98	69.8	20.5	80.5

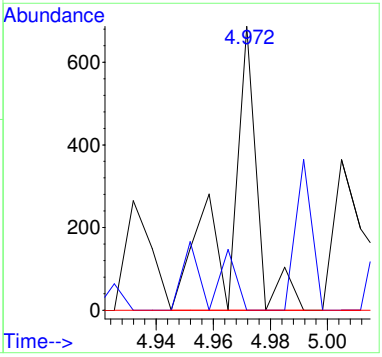


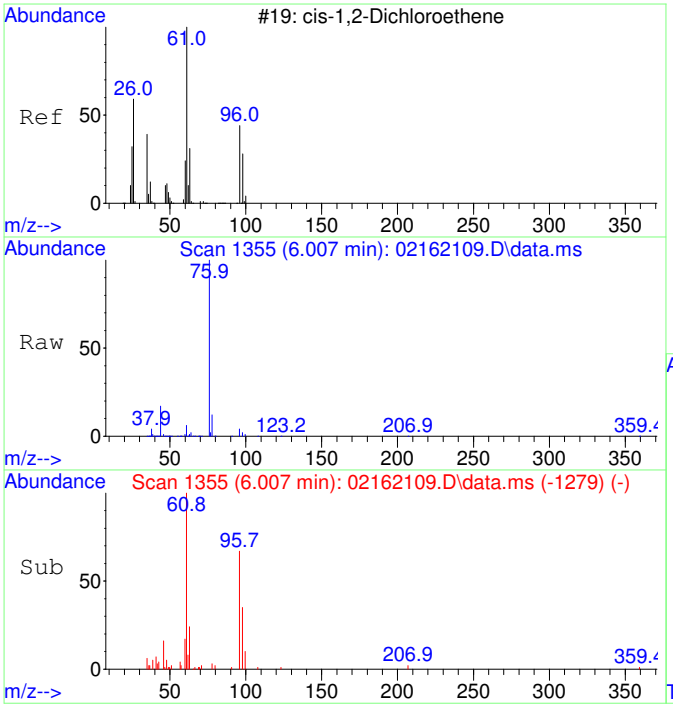


#28
1,1-Dichloroethane SCAN
Concen: 79.72 ug/L
RT: 4.972 min Scan# 1199
Delta R.T. 0.000 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion: 63 Resp: 486

Ion	Ratio	Lower	Upper
63	100		
65	29.8	1.3	61.3
83	0.0	0.0	45.9

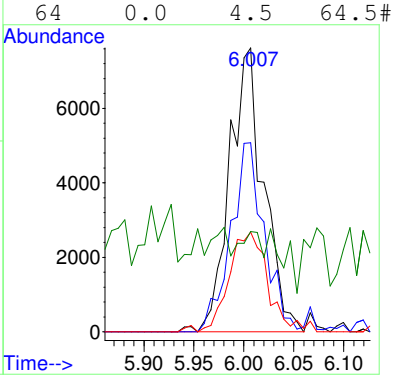


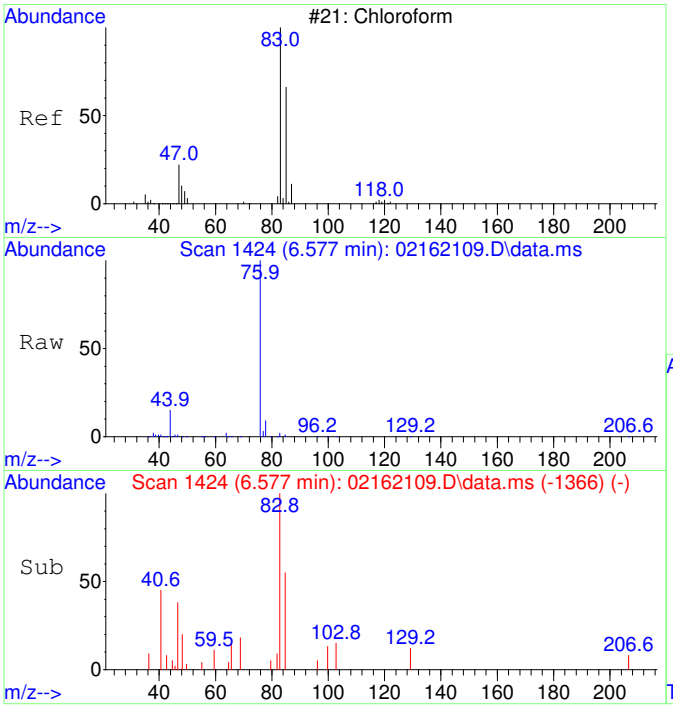


#29
cis-1,2-Dichloroethene SCAN
Concen: 3200.17 ug/L
RT: 6.007 min Scan# 1355
Delta R.T. 0.007 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion: 61 Resp: 18075

Ion	Ratio	Lower	Upper
61	100		
96	63.8	39.9	99.9
98	39.9	13.5	73.5
64	0.0	4.5	64.5#

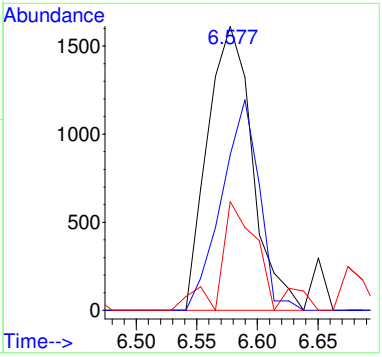


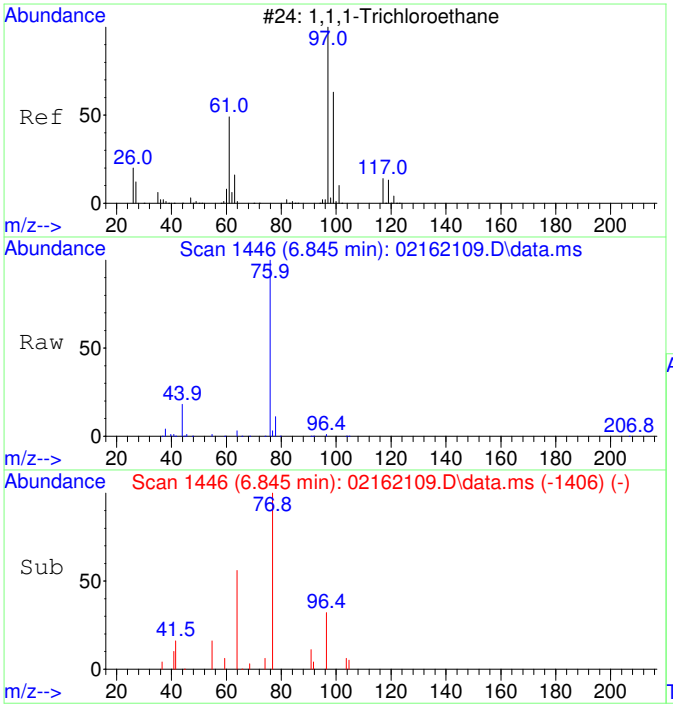


#30
Chloroform SCAN
Concen: 807.27 ug/L
RT: 6.577 min Scan# 1424
Delta R.T. 0.000 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion: 83 Resp: 4173

Ion	Ratio	Lower	Upper
83	100		
85	62.1	34.6	94.6
47	33.8	0.0	53.4

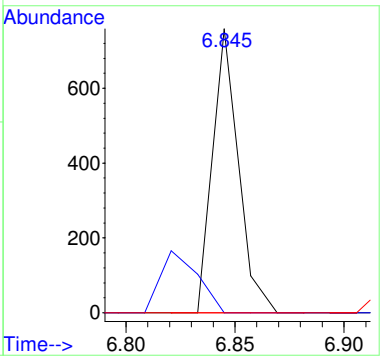


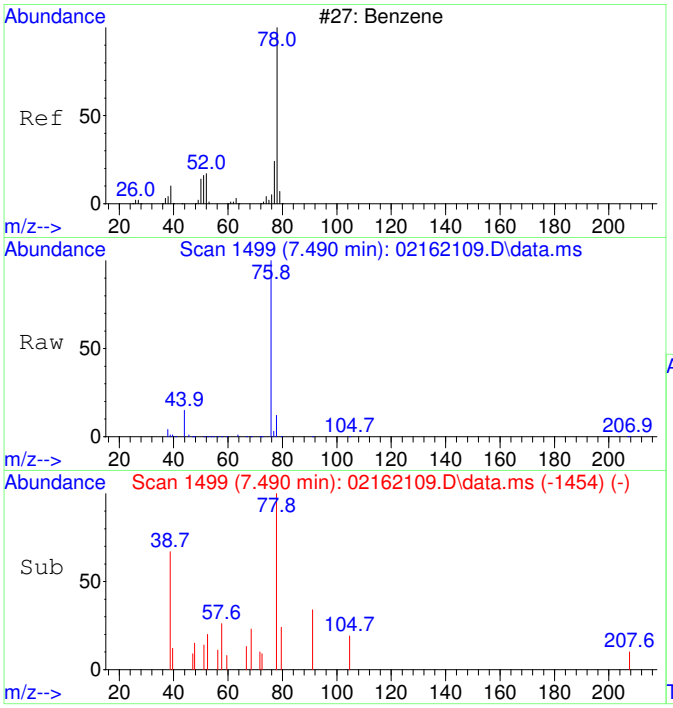


#31
1,1,1-Trichloroethane SCAN
Concen: 117.78 ug/L
RT: 6.845 min Scan# 1446
Delta R.T. 0.000 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion: 97 Resp: 626

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

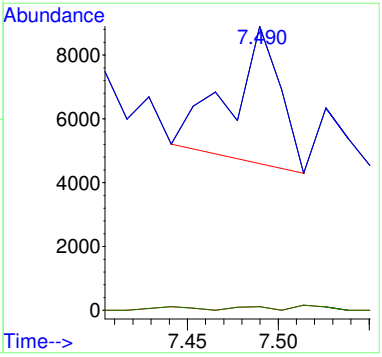


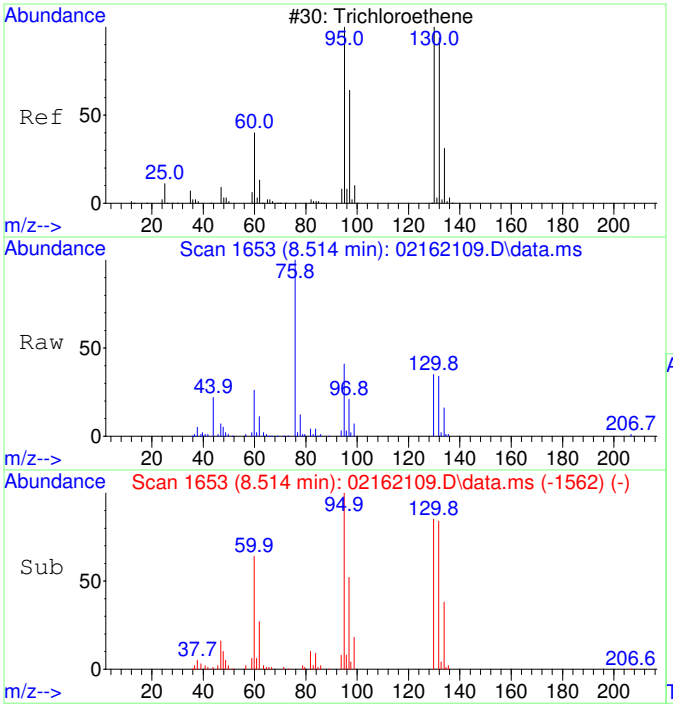


#33
Benzene SCAN
Concen: 540.14 ug/L
RT: 7.490 min Scan# 1499
Delta R.T. 0.049 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion: 78 Resp: 7879

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	2.0	0.0	47.9
51	2.0	0.0	44.1

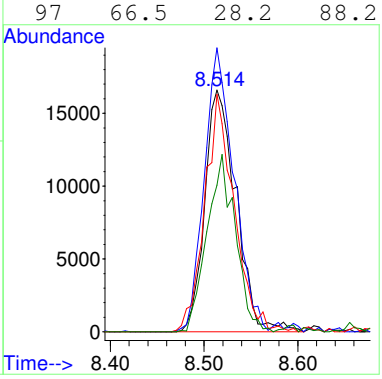


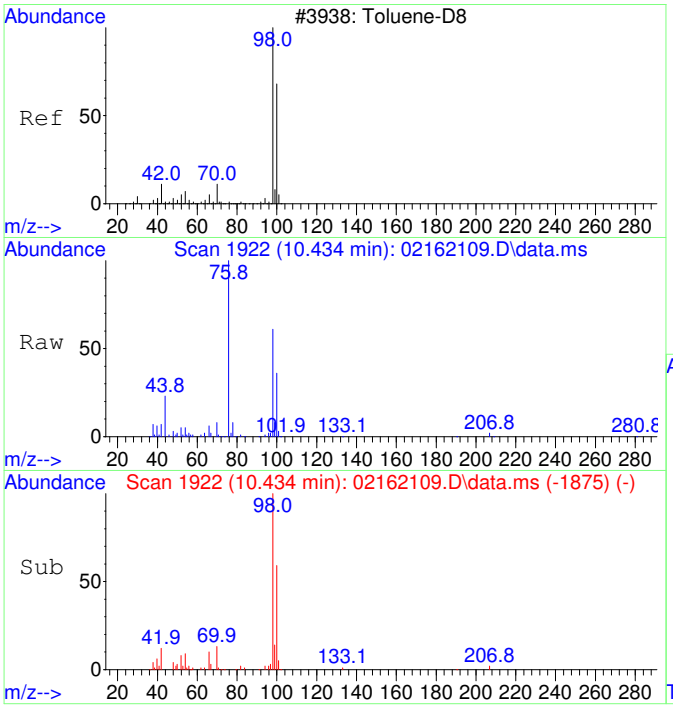


#35
Trichloroethene SCAN
Concen: 11932.04 ug/L
RT: 8.514 min Scan# 1653
Delta R.T. -0.005 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion:130 Resp: 38476

Ion	Ratio	Lower	Upper
130	100		
95	111.0	60.5	120.5
132	92.6	59.6	119.6
97	66.5	28.2	88.2

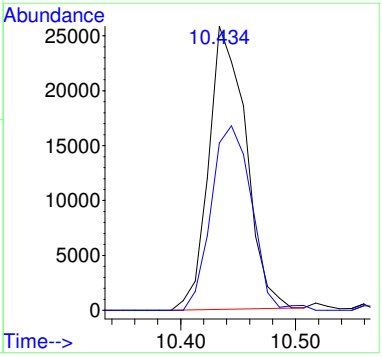


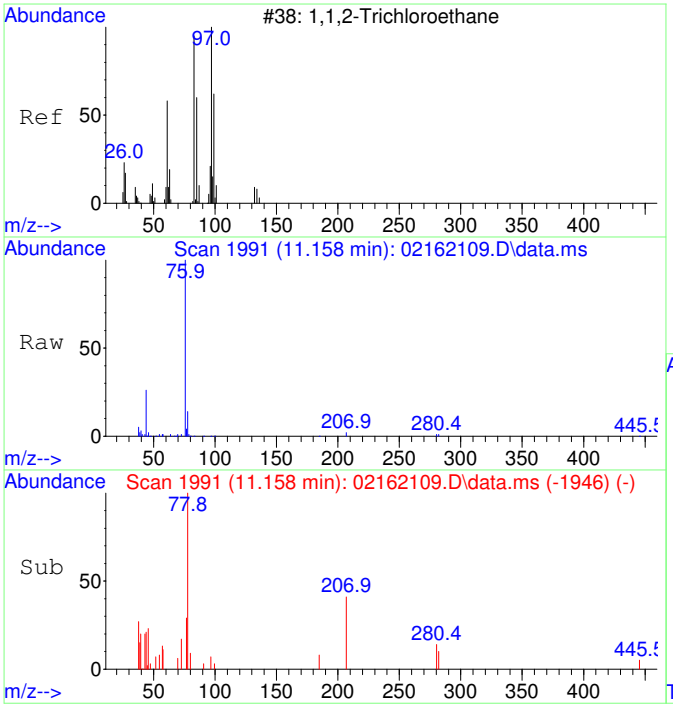


#36
Toluene-d8 SCAN
Concen: 4445.07 ug/L
RT: 10.434 min Scan# 1922
Delta R.T. -0.011 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion: 98 Resp: 57912

Ion	Ratio	Lower	Upper
98	100		
100	71.3	40.0	100.0

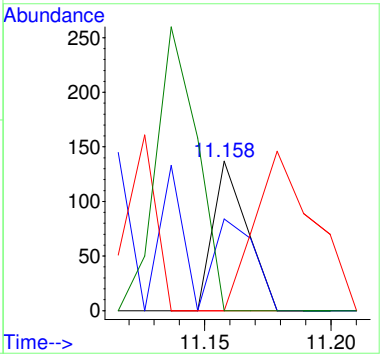


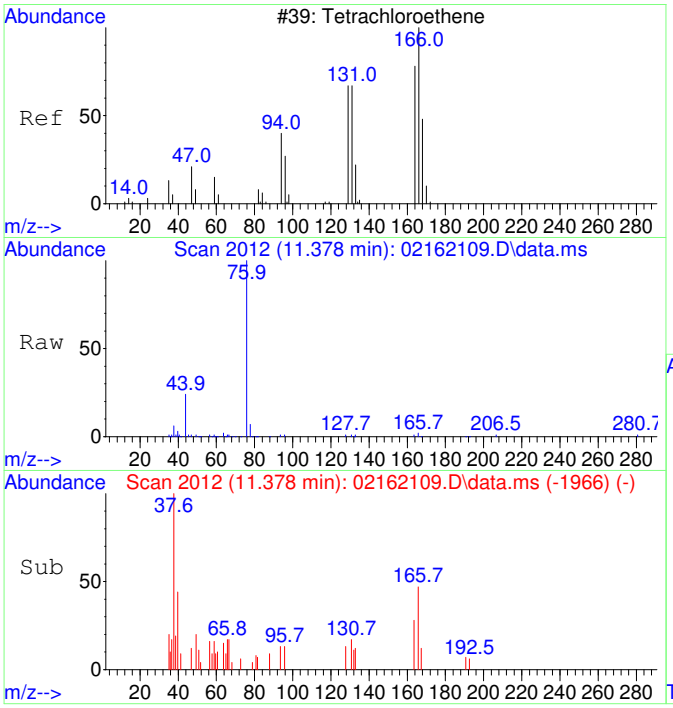


#38
1,1,2-Trichloroethane SCAN
Concen: 34.52 ug/L
RT: 11.158 min Scan# 1991
Delta R.T. -0.031 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion: 97 Resp: 128

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#

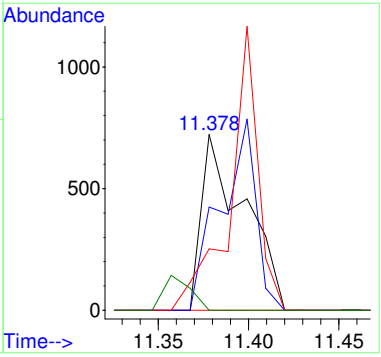




#39
Tetrachloroethene SCAN
Concen: 328.98 ug/L
RT: 11.378 min Scan# 2012
Delta R.T. -0.021 min
Lab File: 02162109.D
Acq: 16 Feb 2021 12:02

Tgt Ion:166 Resp: 1194

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



CRDL STANDARD

Radiello D1

Laboratory: EPA Region 9 Laboratory
SDG: 21039A
Client: California Site Cleanup Section 3
Project: MEW OU1 FY2021 Vapor Intrusion Investigation
Instrument ID: AG5975CV
Calibration: 2012007
Sequence: S21B029

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
B21B045-MRL1	1,1-Dichloroethene	0.131	0.082	63	ug/m³ Air	50 - 150
	trans-1,2-Dichloroethene	0.160	0.109	68	ug/m³ Air	50 - 150
	1,1-Dichloroethane	0.157	0.114	72	ug/m³ Air	50 - 150
	cis-1,2-Dichloroethene	0.160	0.114	71	ug/m³ Air	50 - 150
	Chloroform	0.132	0.111	84	ug/m³ Air	50 - 150
	Trichloroethene	0.144	0.120	83	ug/m³ Air	50 - 150
	Tetrachloroethene	0.168	0.144	86	ug/m³ Air	50 - 150
	Toluene-d8	992	858	86	ug/m³ Air	86 - 118

Quantitation Report (Not Reviewed)

Table of Contents

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102108.D
Acq On : 10 Feb 2021 12:01
InstName : AG5975C
Operator : TD
Sample : B21B045-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 10 12:20:10 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

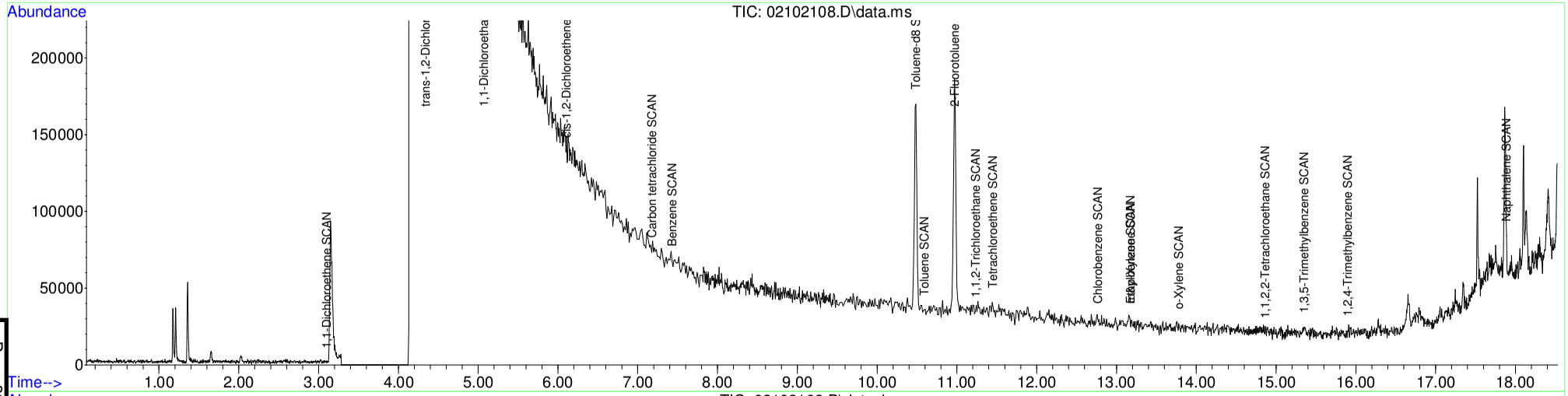
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	193222	5000.00	ug/L	-0.01
System Monitoring Compounds						
12) Toluene-d8	10.477	98	161764	4322.66	ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.45%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.093	61	577	75.31	ug/L #	59
3] trans-1,2-Dichloroethene	4.356	61	329	34.06	ug/L	82
4] 1,1-Dichloroethane	5.079	63	417	36.15	ug/L	77
5] cis-1,2-Dichloroethene	6.081	61	426	35.65	ug/L	98
6] Chloroform	6.652	83	482	42.00	ug/L	94
7] 1,1,1-Trichloroethane	6.907	97	511	41.45	ug/L	96
8] Carbon tetrachloride	7.175	117	506	42.93	ug/L	97
9] Benzene	7.503	78	3437	105.71	ug/L	77
10] 1,2-Dichloroethane	7.539	62	464	41.83	ug/L #	37
11] Trichloroethene	8.564	130	427	41.60	ug/L	94
13] Toluene	10.582	91	2162	46.40	ug/L	95
14] 1,1,2-Trichloroethane	11.232	97	467	43.27	ug/L	90
15] Tetrachloroethene	11.432	166	622	42.86	ug/L	94
16] Chlorobenzene	12.765	112	1458	40.39	ug/L	87
17] 1,1,1,2-Tetrachloroethane	12.916	131	531	42.03	ug/L	100
18] Ethylbenzene	12.972	91	2783	46.76	ug/L	93
19] m&p-Xylene	13.162	91	5123	111.79	ug/L	97
20] o-Xylene	13.782	91	2209	44.88	ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.877	83	896	39.07	ug/L	96
22] 1,3,5-Trimethylbenzene	15.350	105	2354	43.49	ug/L	95
23] 1,2,4-Trimethylbenzene	15.901	105	2796	50.50	ug/L	89
24] Naphthalene	17.904	128	388	4.33	ug/L #	68
25) 2-Fluorotoluene SCAN	10.969	109	118834	5418.13	ug/L	94
26) 1,1-Dichloroethene SCAN	3.096	61	70	13.67	ug/L #	25
27) trans-1,2-Dichloroethe...	4.341	61	192	29.44	ug/L #	17
28) 1,1-Dichloroethane SCAN	5.071	63	173	22.47	ug/L #	75
29) cis-1,2-Dichloroethene...	6.100	61	192	25.37	ug/L #	1
32) Carbon tetrachloride SCAN	7.173	117	337	54.14	ug/L #	15
33) Benzene SCAN	7.429	78	20086	911.54	ug/L #	91
36) Toluene-d8 SCAN	10.486	98	100820	4901.20	ug/L	95
37) Toluene SCAN	10.591	91	1091	43.08	ug/L #	40
38) 1,1,2-Trichloroethane ...	11.231	97	360	56.71	ug/L #	35
39) Tetrachloroethene SCAN	11.441	166	298	52.30	ug/L #	20
40) Chlorobenzene SCAN	12.764	112	1389	76.36	ug/L	79
42) Ethylbenzene SCAN	13.169	91	3043	63.05	ug/L	68
43) m&p-Xylene SCAN	13.169	91	3043	63.05	ug/L	72
44) o-Xylene SCAN	13.781	91	2515	95.43	ug/L	88
45) 1,1,2,2-Tetrachloroeth...	14.864	83	148	10.80	ug/L #	26
46) 1,3,5-Trimethylbenzene...	15.353	105	2524	90.78	ug/L	87
47) 1,2,4-Trimethylbenzene...	15.899	105	2077	73.11	ug/L #	94
48) Naphthalene SCAN	17.888	128	275	6.45	ug/L #	68

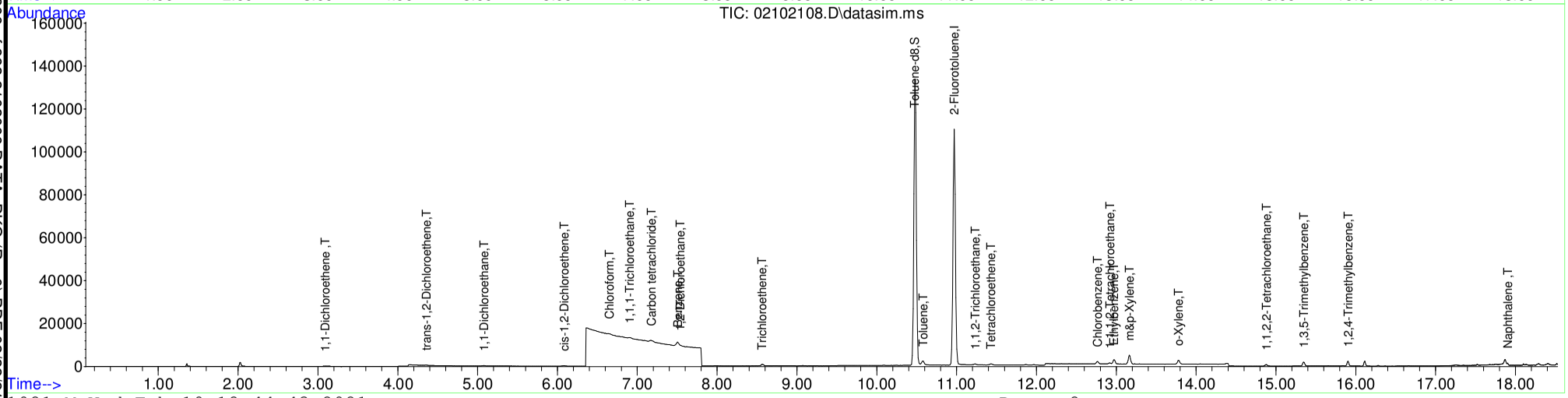
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102108.D
Acq On : 10 Feb 2021 12:01
InstName : AG5975C
Operator : TD
Sample : B21B045-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 10 12:20:10 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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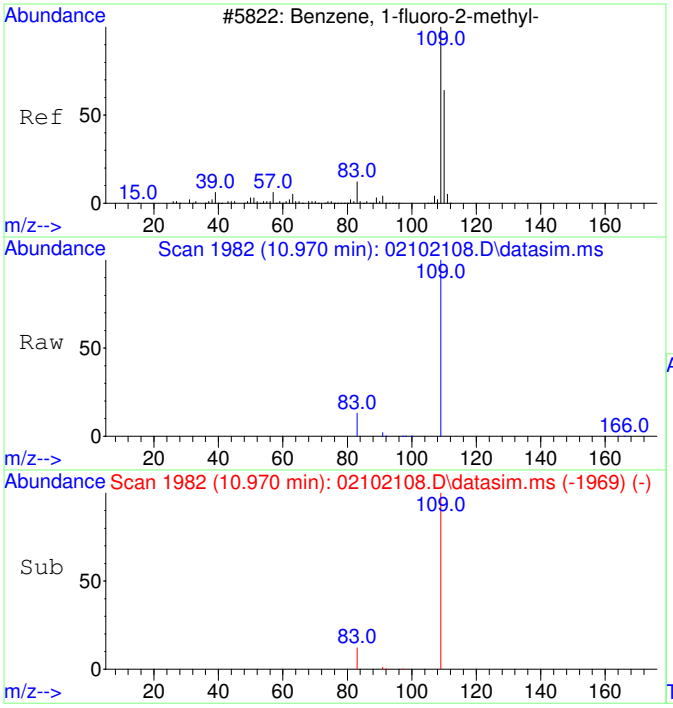
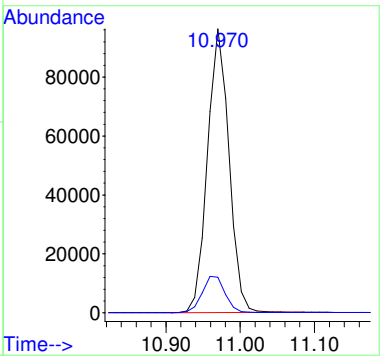
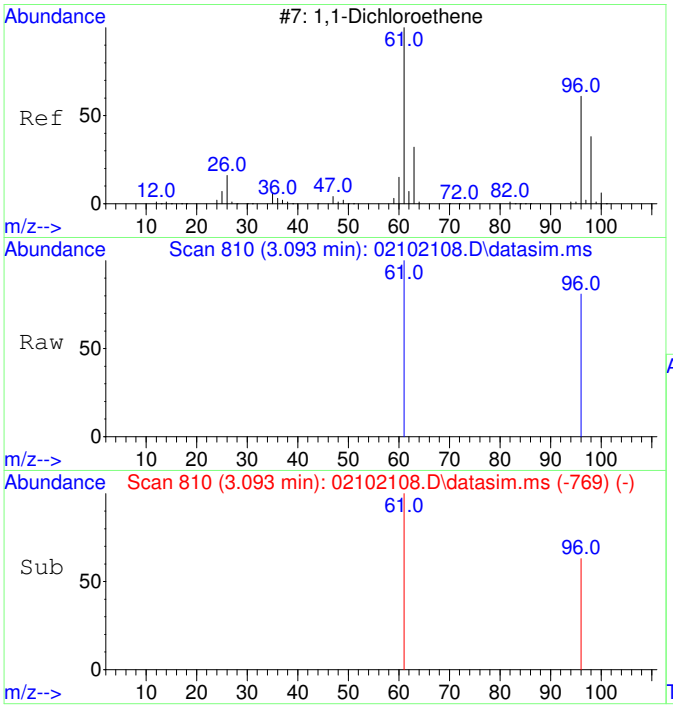


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:109 Resp: 193222

Ion	Ratio	Lower	Upper
109	100		
83	13.6	0.0	42.3

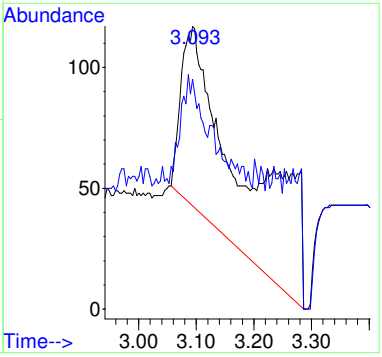




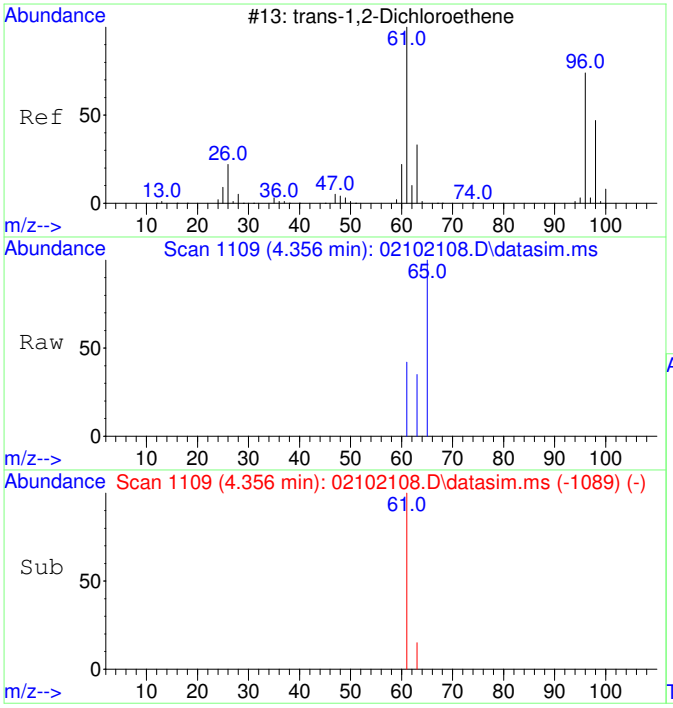
#2
1,1-Dichloroethene
Concen: 75.31 ug/L
RT: 3.093 min Scan# 810
Delta R.T. 0.004 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 61 Resp: 577

Ion	Ratio	Lower	Upper
61	100		
96	34.0	37.2	97.2#



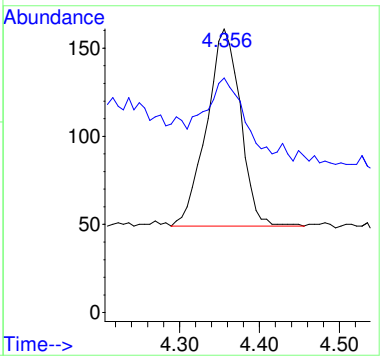
Before MI:
IMPROPER
BASELINE

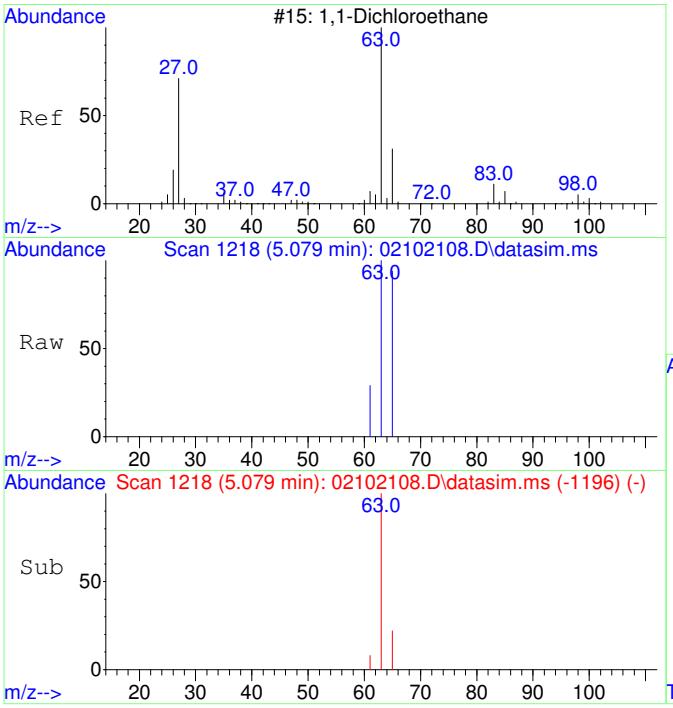


#3
trans-1,2-Dichloroethene
Concen: 34.06 ug/L
RT: 4.356 min Scan# 1109
Delta R.T. -0.020 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 61 Resp: 329

Ion	Ratio	Lower	Upper
61	100		
63	42.6	2.4	62.4

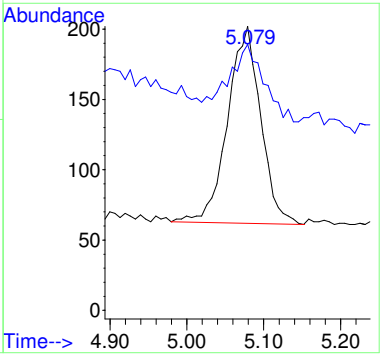


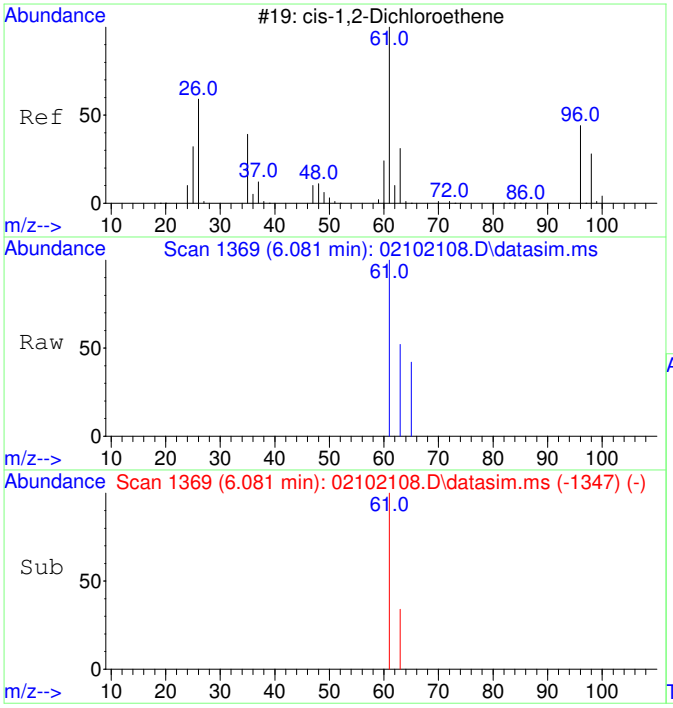


#4
1,1-Dichloroethane
Concen: 36.15 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.007 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 63 Resp: 417

Ion	Ratio	Lower	Upper
63	100		
65	44.6	1.8	61.8

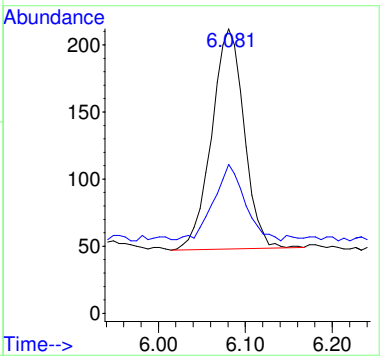


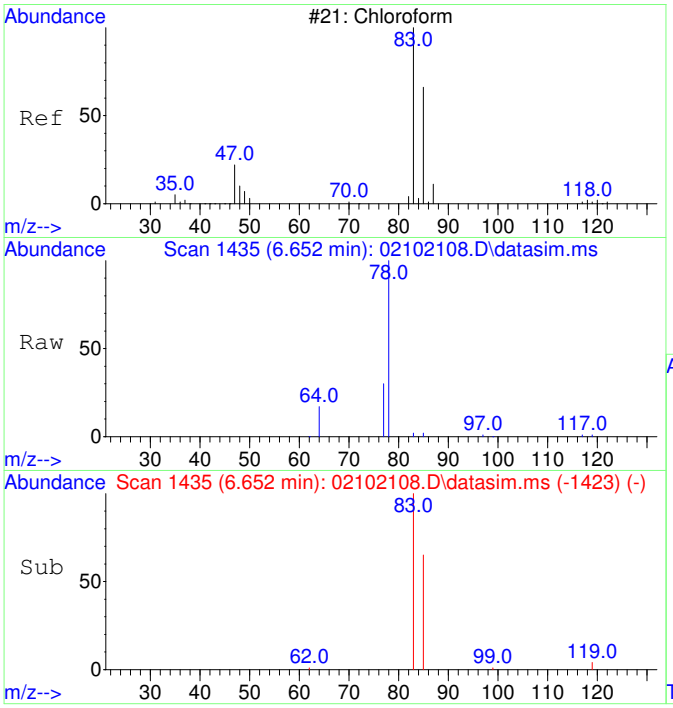


#5
cis-1,2-Dichloroethene
Concen: 35.65 ug/L
RT: 6.081 min Scan# 1369
Delta R.T. -0.007 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 61 Resp: 426

Ion	Ratio	Lower	Upper
61	100		
63	33.6	2.5	62.5

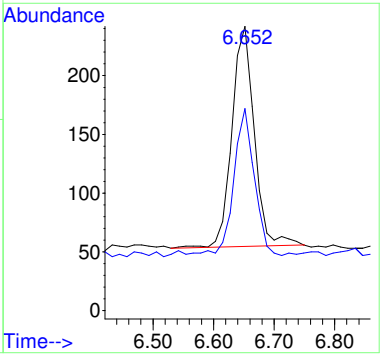


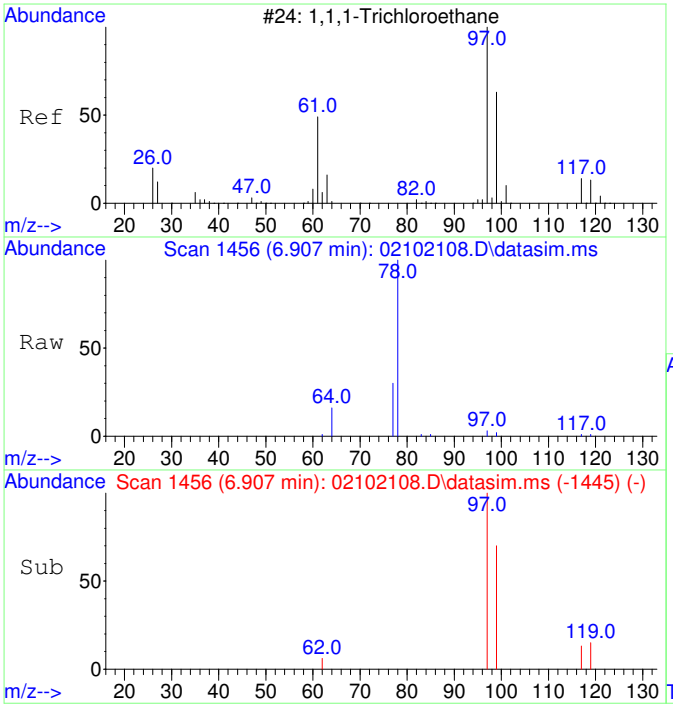


#6
Chloroform
Concen: 42.00 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 83 Resp: 482

Ion	Ratio	Lower	Upper
83	100		
85	60.4	35.1	95.1

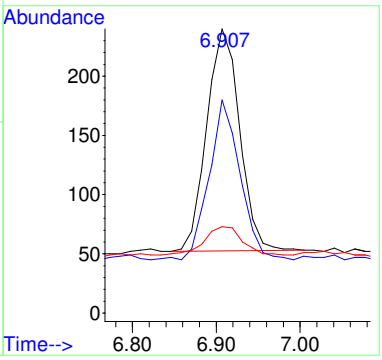


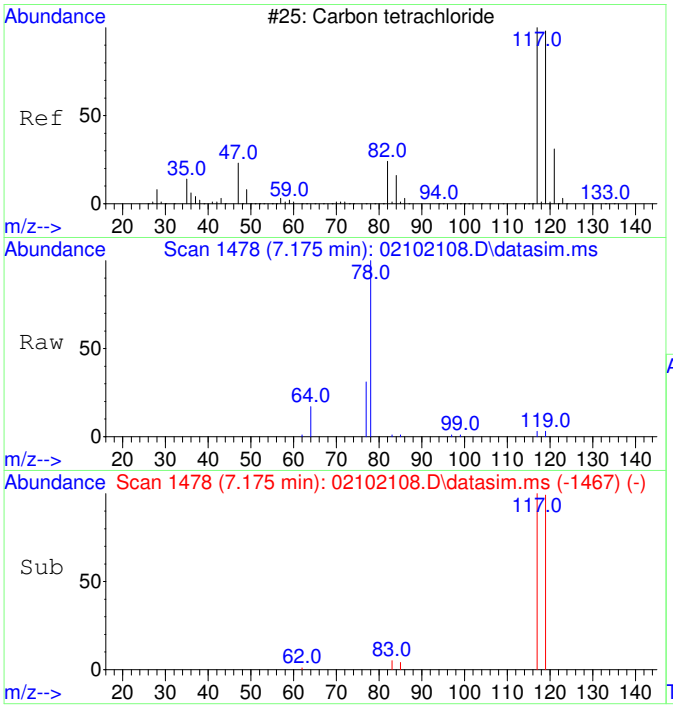


#7
1,1,1-Trichloroethane
Concen: 41.45 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 97 Resp: 511

Ion	Ratio	Lower	Upper
97	100		
99	67.9	34.6	94.6
117	14.5	0.0	43.2

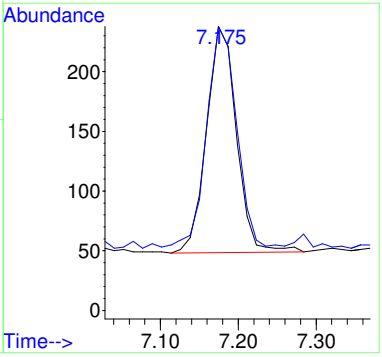


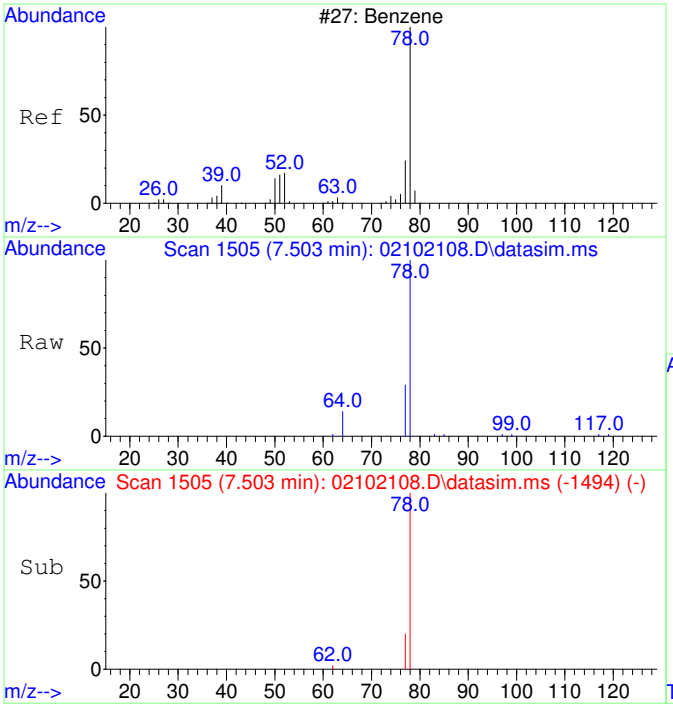


#8
Carbon tetrachloride
Concen: 42.93 ug/L
RT: 7.175 min Scan# 1478
Delta R.T. -0.012 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:117 Resp: 506

Ion	Ratio	Lower	Upper
117	100		
119	99.8	66.4	126.4

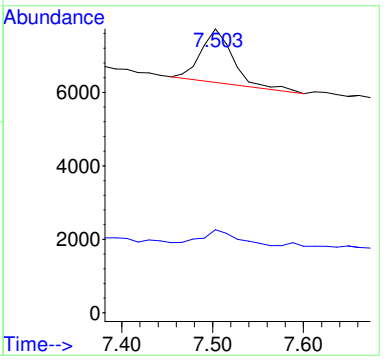


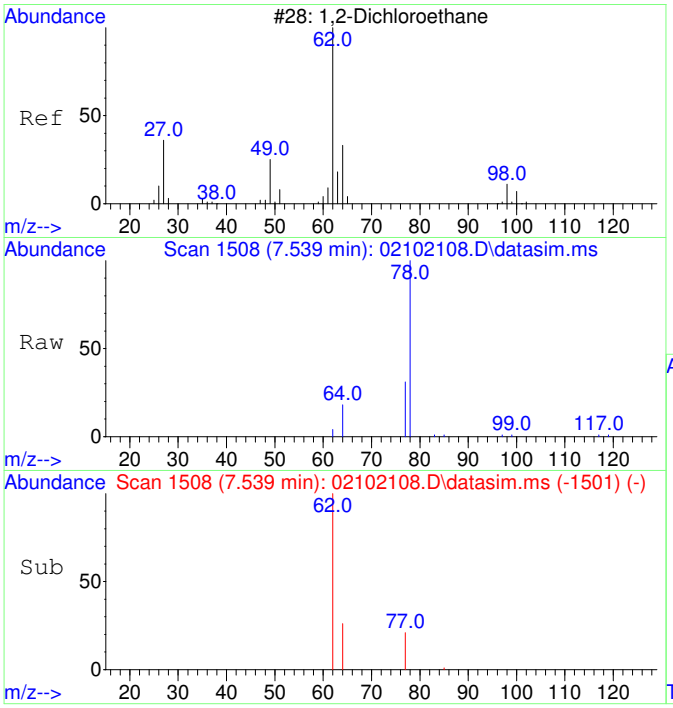


#9
Benzene
Concen: 105.71 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 78 Resp: 3437

Ion	Ratio	Lower	Upper
78	100		
77	34.6	0.0	53.2

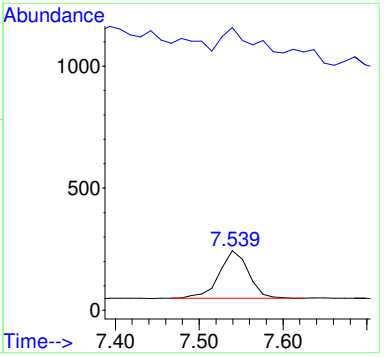


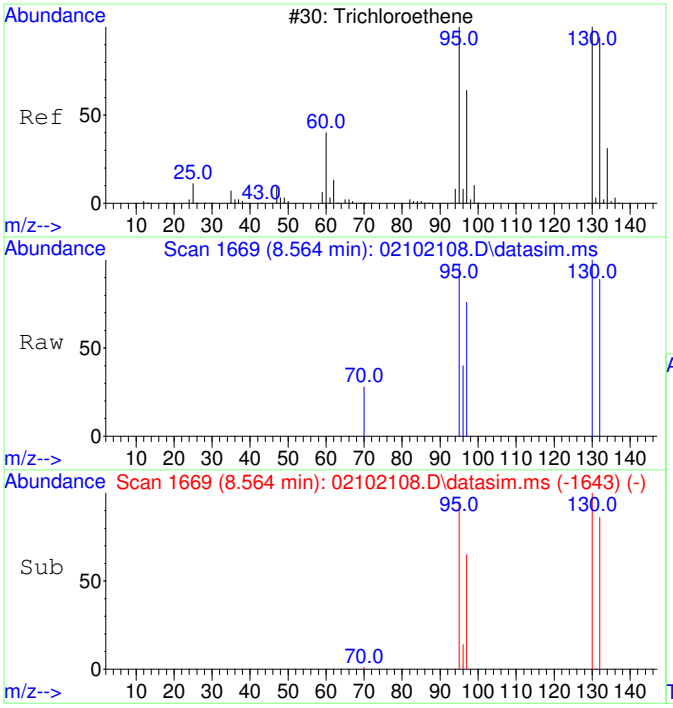


#10
1,2-Dichloroethane
Concen: 41.83 ug/L
RT: 7.539 min Scan# 1508
Delta R.T. -0.012 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 62 Resp: 464

Ion	Ratio	Lower	Upper
62	100		
64	67.7	2.3	62.3#

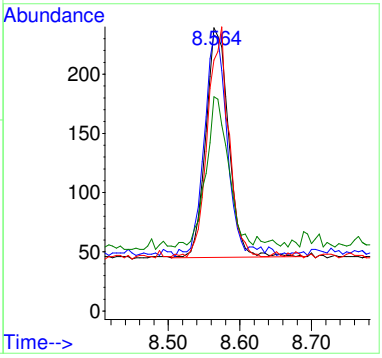


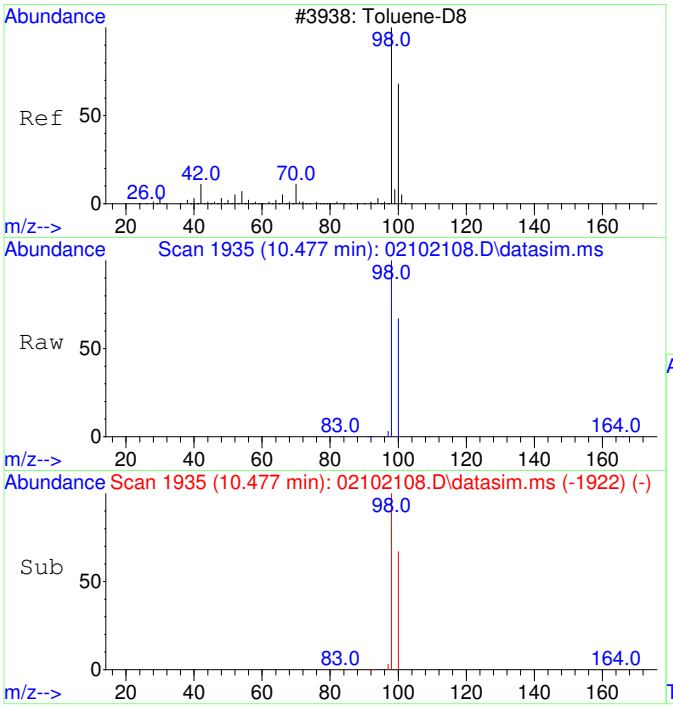


#11
Trichloroethene
Concen: 41.60 ug/L
RT: 8.564 min Scan# 1669
Delta R.T. -0.011 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:130 Resp: 427

Ion	Ratio	Lower	Upper
130	100		
95	96.7	60.7	120.7
132	91.1	76.0	116.0
97	64.6	38.6	78.6

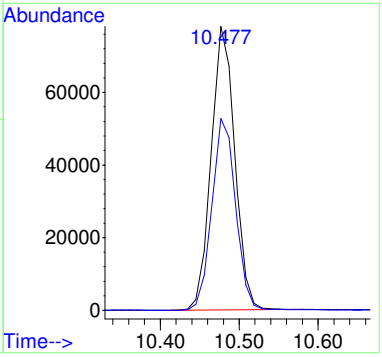


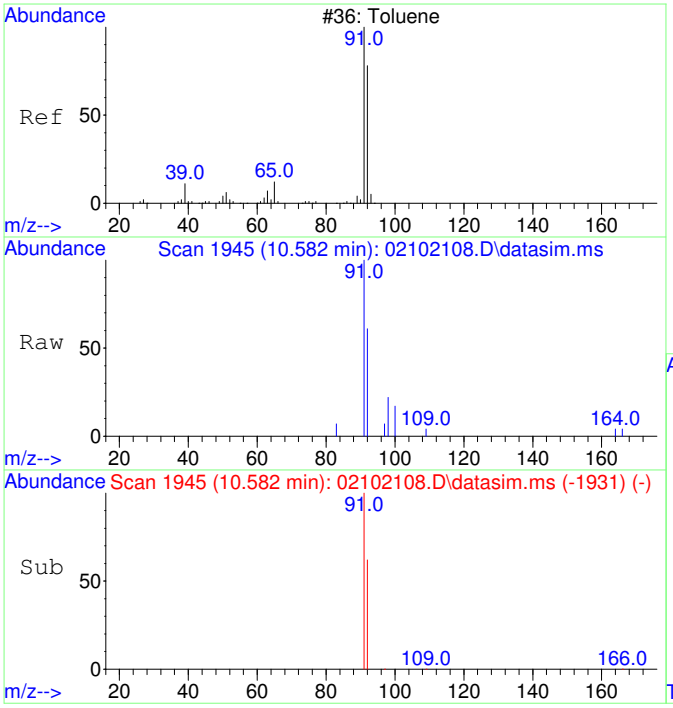


#12
Toluene-d8
Concen: 4322.66 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.011 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 98 Resp: 161764

Ion	Ratio	Lower	Upper
98	100		
100	67.8	37.1	97.1

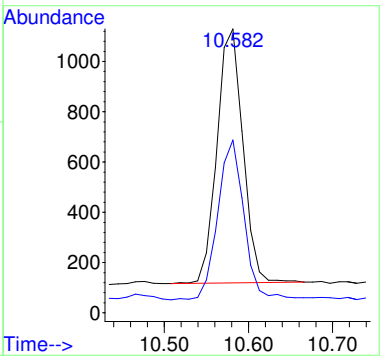


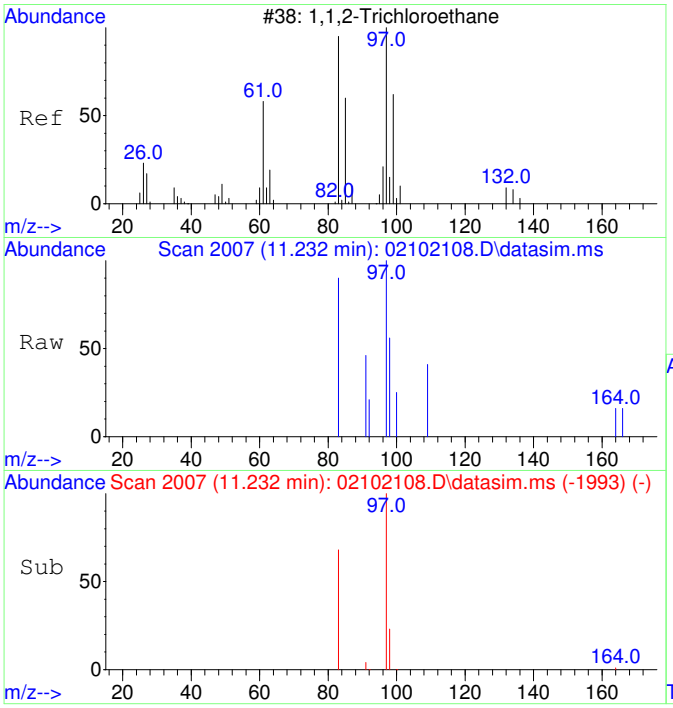


#13
Toluene
Concen: 46.40 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 2162

Ion	Ratio	Lower	Upper
91	100		
92	63.7	29.9	89.9

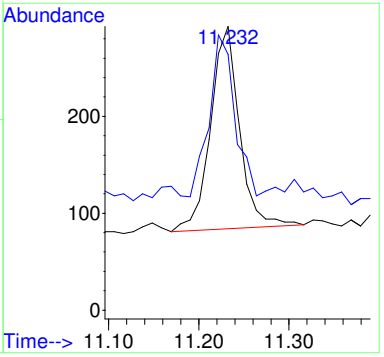


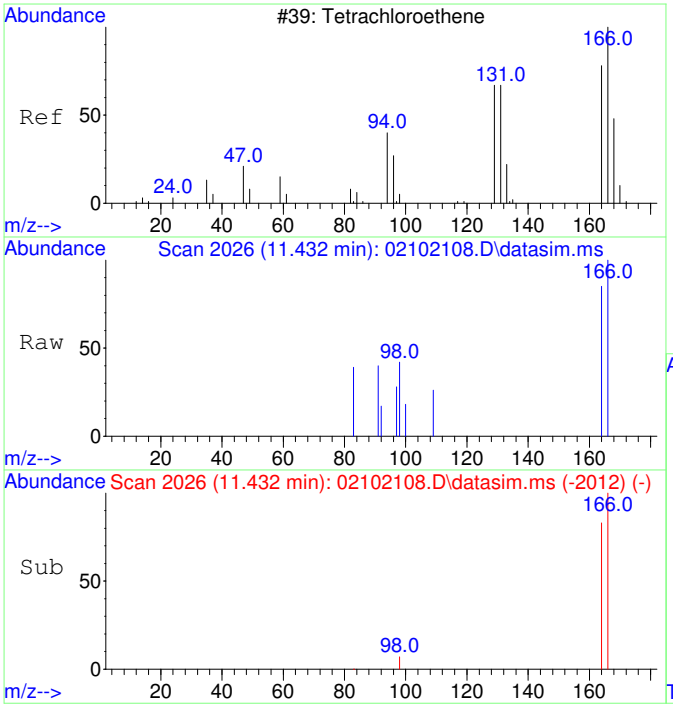


#14
1,1,2-Trichloroethane
Concen: 43.27 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 97 Resp: 467

Ion	Ratio	Lower	Upper
97	100		
83	71.9	51.2	111.2

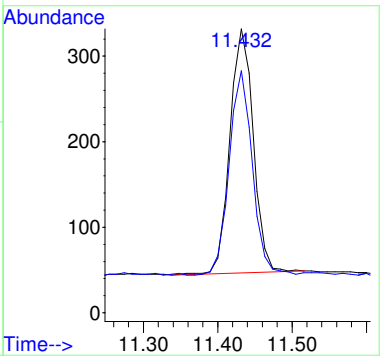


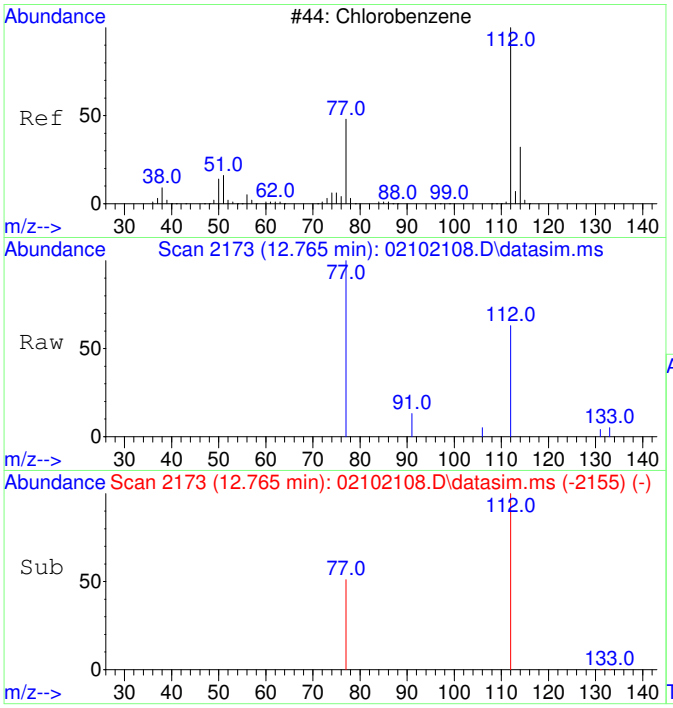


#15
Tetrachloroethene
Concen: 42.86 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:166 Resp: 622

Ion	Ratio	Lower	Upper
166	100		
164	82.6	47.8	107.8

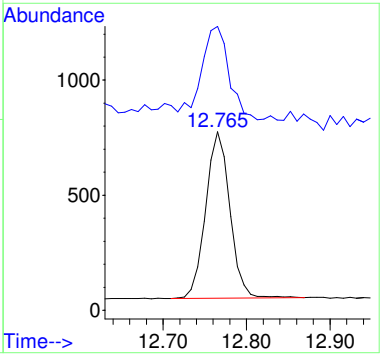


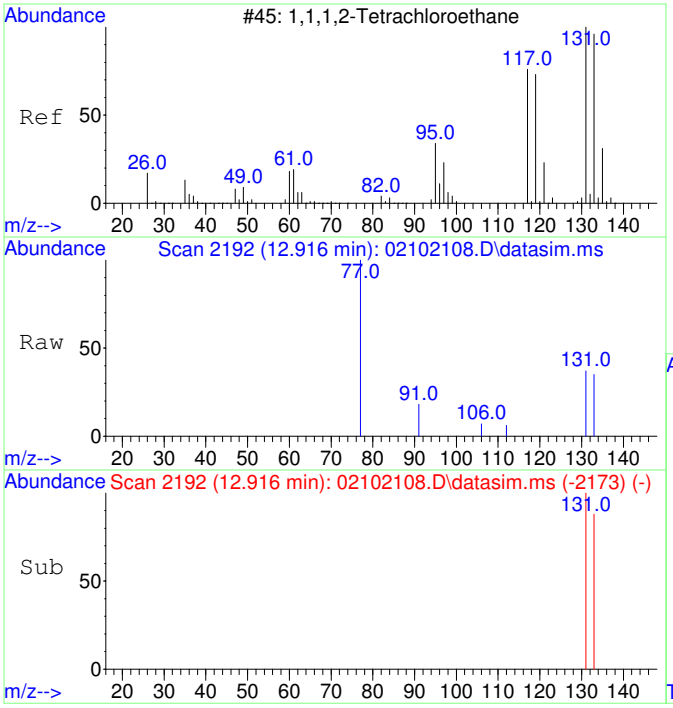


#16
Chlorobenzene
Concen: 40.39 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:112 Resp: 1458

Ion	Ratio	Lower	Upper
112	100		
77	62.8	23.6	83.6

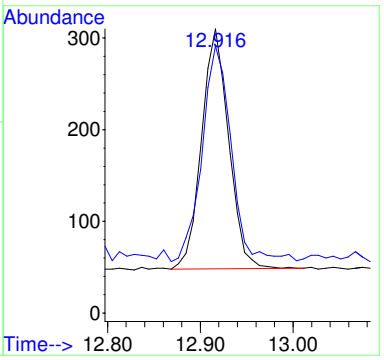


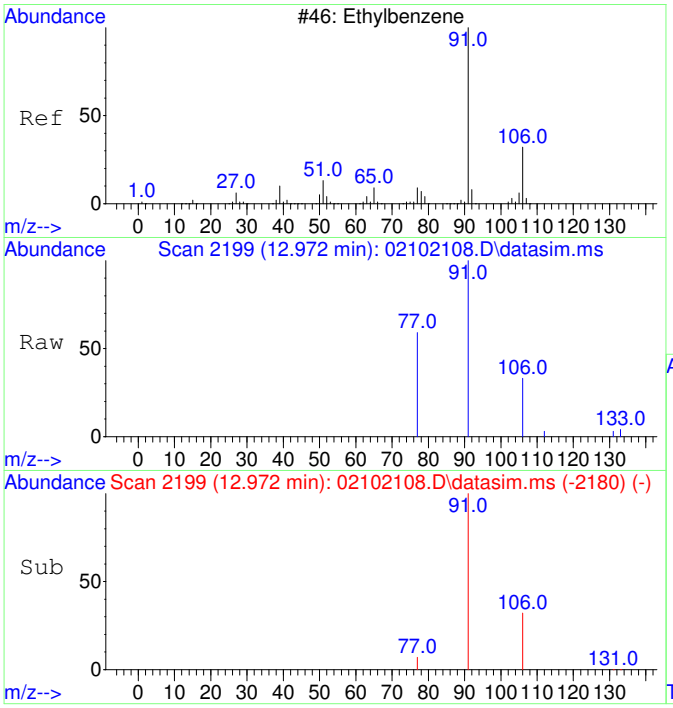


#17
1,1,1,2-Tetrachloroethane
Concen: 42.03 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:131 Resp: 531

Ion	Ratio	Lower	Upper
131	100		
133	96.4	66.3	126.3

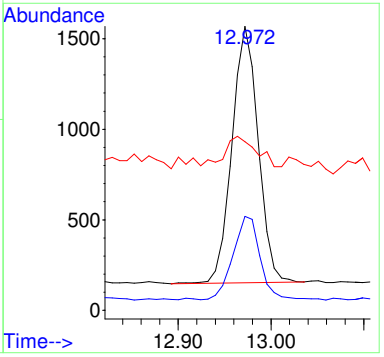


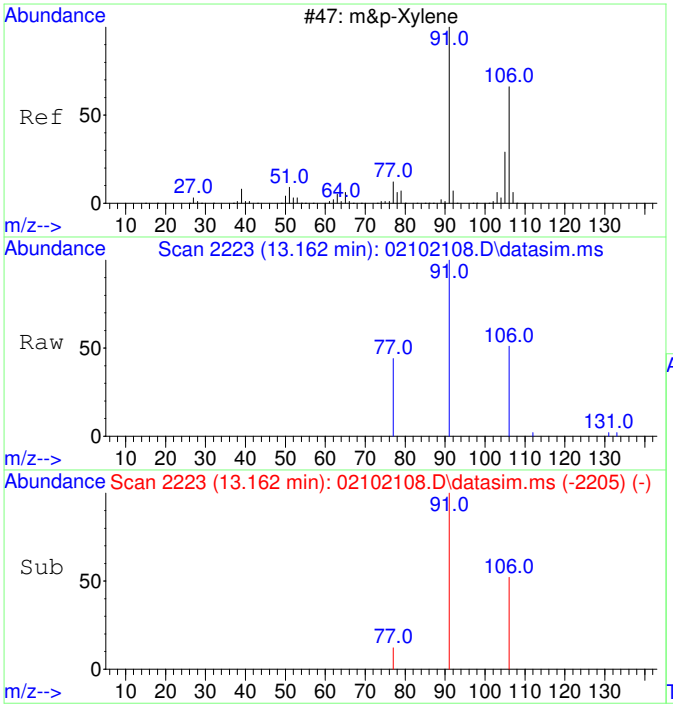


#18
Ethylbenzene
Concen: 46.76 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 2783

Ion	Ratio	Lower	Upper
91	100		
106	33.8	3.0	63.0
77	18.8	0.0	38.2

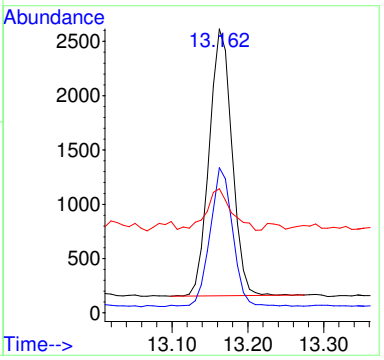


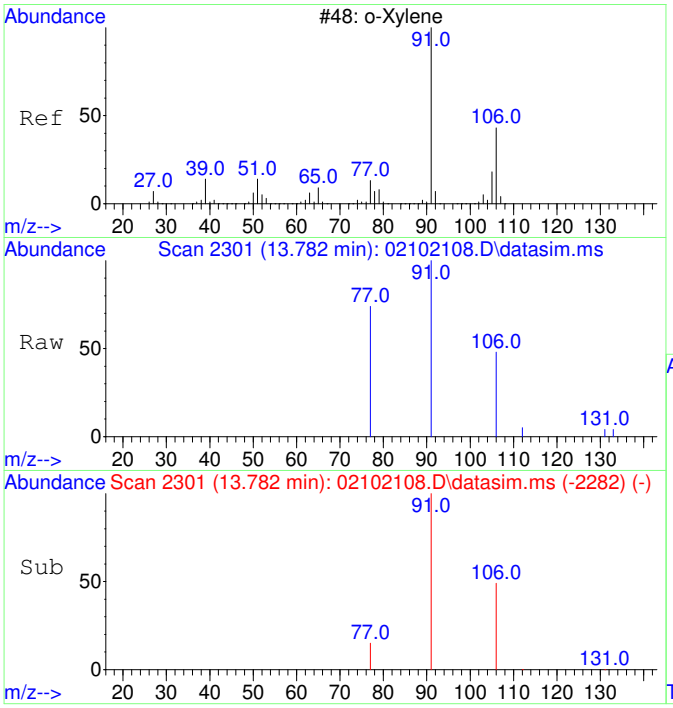


#19
m&p-Xylene
Concen: 111.79 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 5123

Ion	Ratio	Lower	Upper
91	100		
106	51.6	22.2	82.2
77	16.6	0.0	42.4

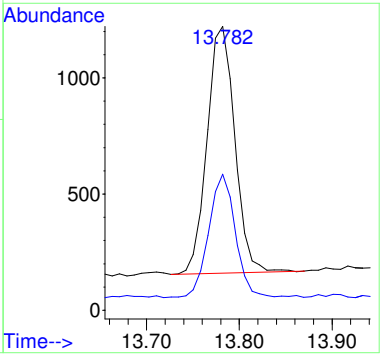


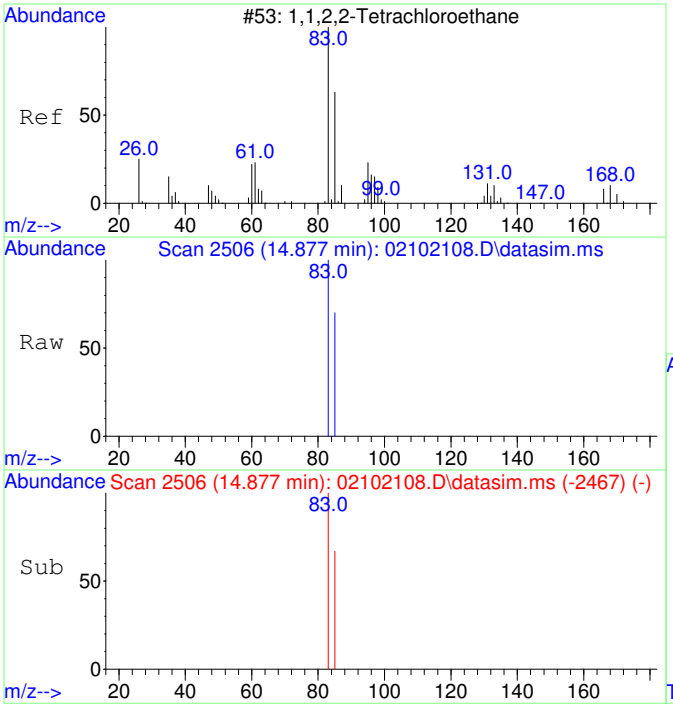


#20
o-Xylene
Concen: 44.88 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 2209

Ion	Ratio	Lower	Upper
91	100		
106	47.3	19.2	79.2

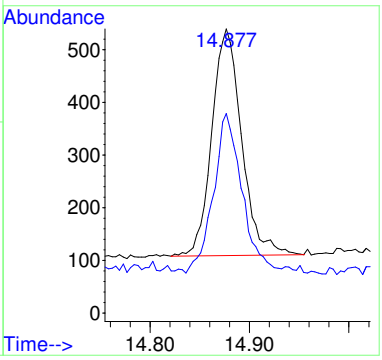


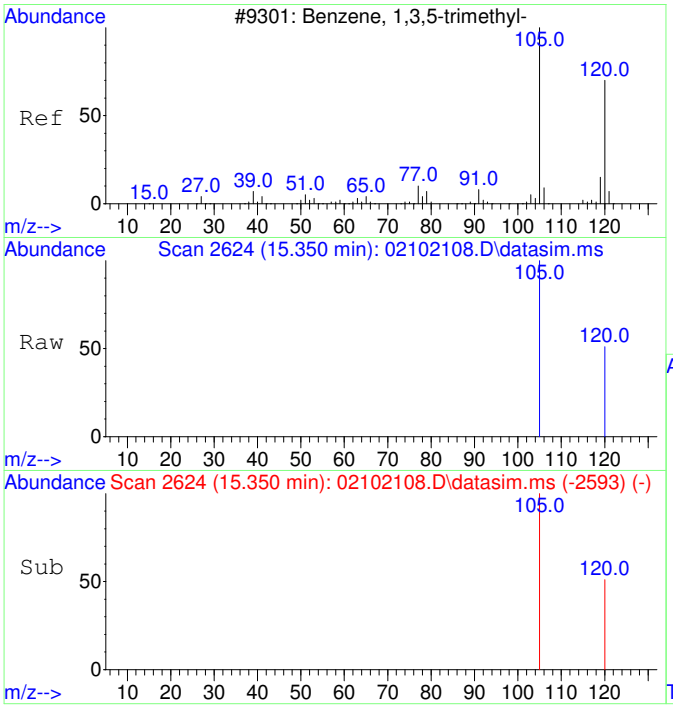


#21
1,1,2,2-Tetrachloroethane
Concen: 39.07 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. -0.004 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 83 Resp: 896

Ion	Ratio	Lower	Upper
83	100		
85	67.9	34.8	94.8

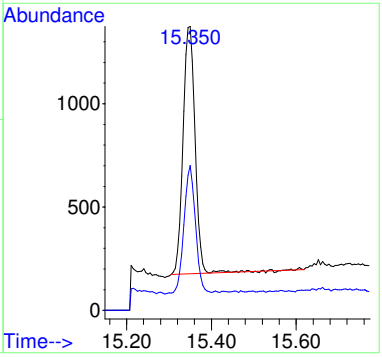


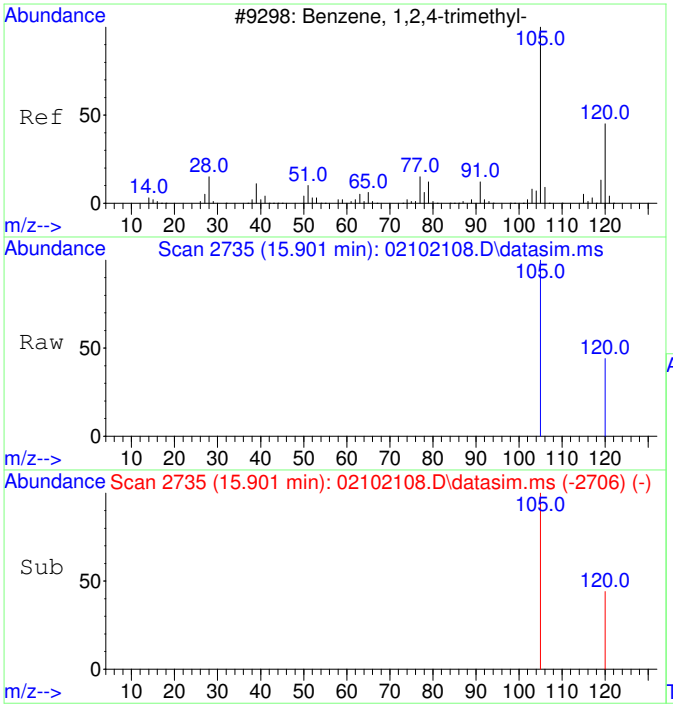


#22
1,3,5-Trimethylbenzene
Concen: 43.49 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:105 Resp: 2354

Ion	Ratio	Lower	Upper
105	100		
120	47.6	21.1	81.1

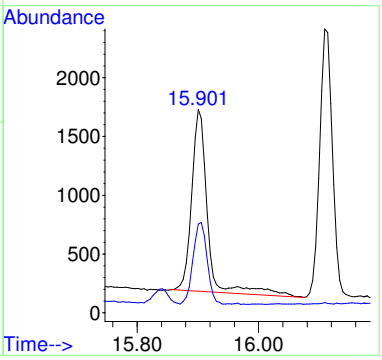


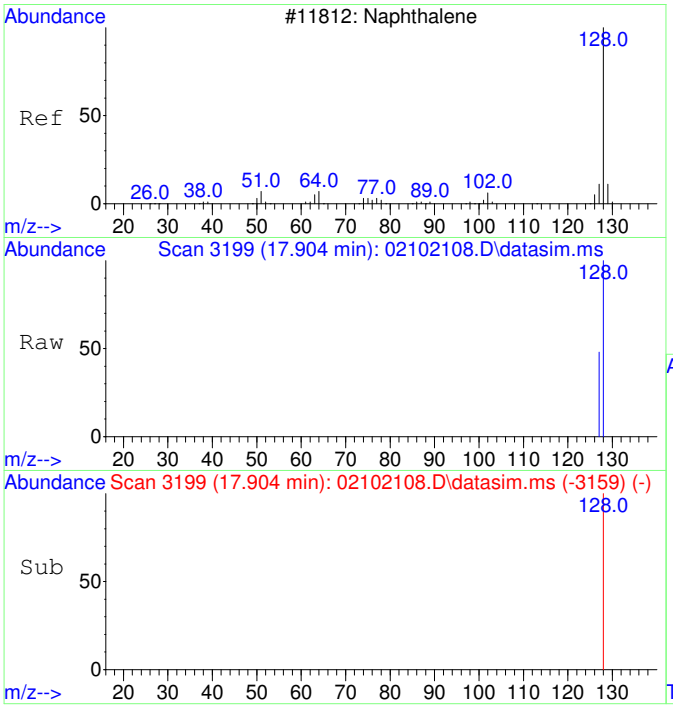


#23
1,2,4-Trimethylbenzene
Concen: 50.50 ug/L
RT: 15.901 min Scan# 2735
Delta R.T. -0.005 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:105 Resp: 2796

Ion	Ratio	Lower	Upper
105	100		
120	39.9	17.2	77.2

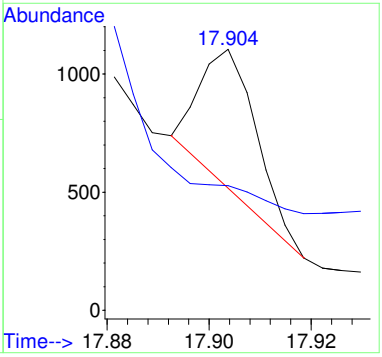


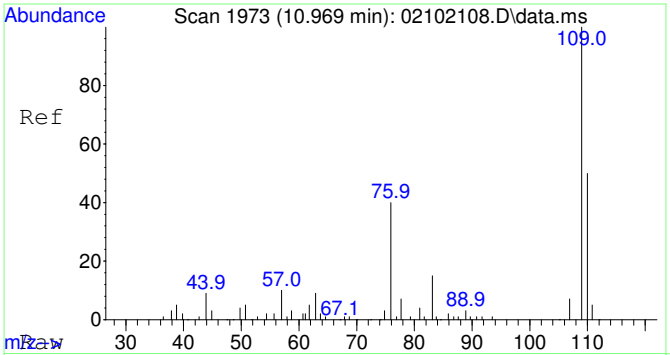


#24
Naphthalene
Concen: 4.33 ug/L
RT: 17.904 min Scan# 3199
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:128 Resp: 388

Ion	Ratio	Lower	Upper
128	100		
127	0.0	0.0	42.5

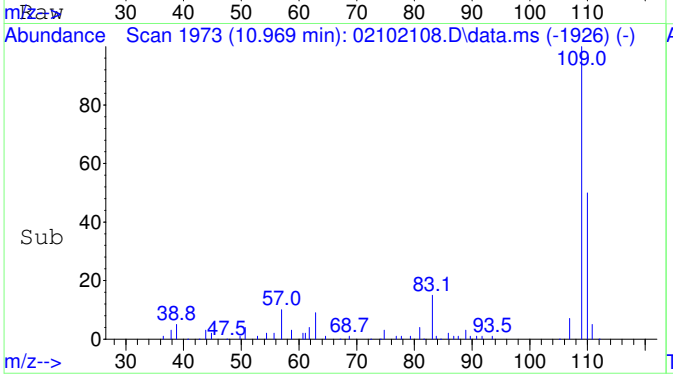


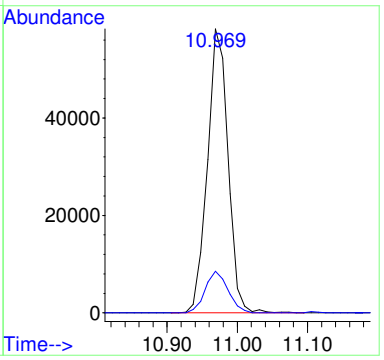


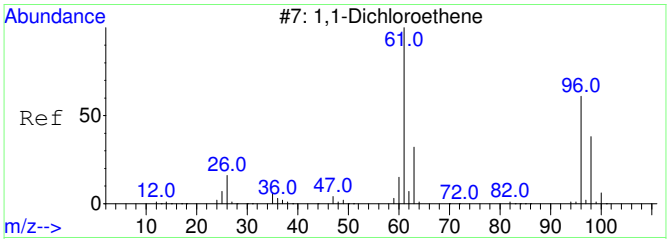
#25
2-Fluorotoluene SCAN
Concen: 5418.13 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

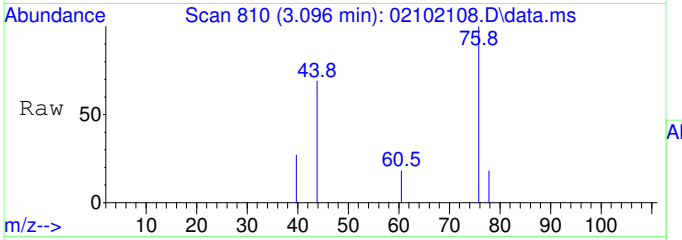
Tgt Ion:109 Resp: 118834

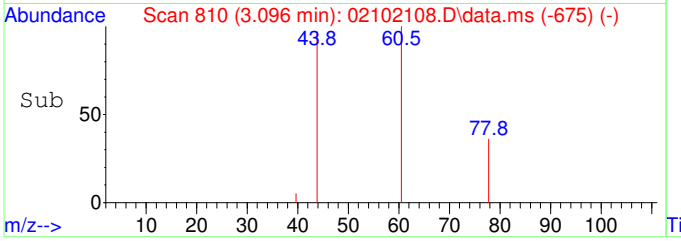
Ion	Ratio	Lower	Upper
109	100		
83	16.2	0.0	43.8







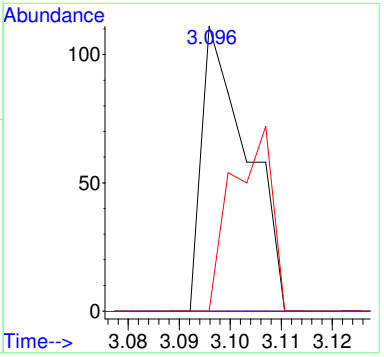


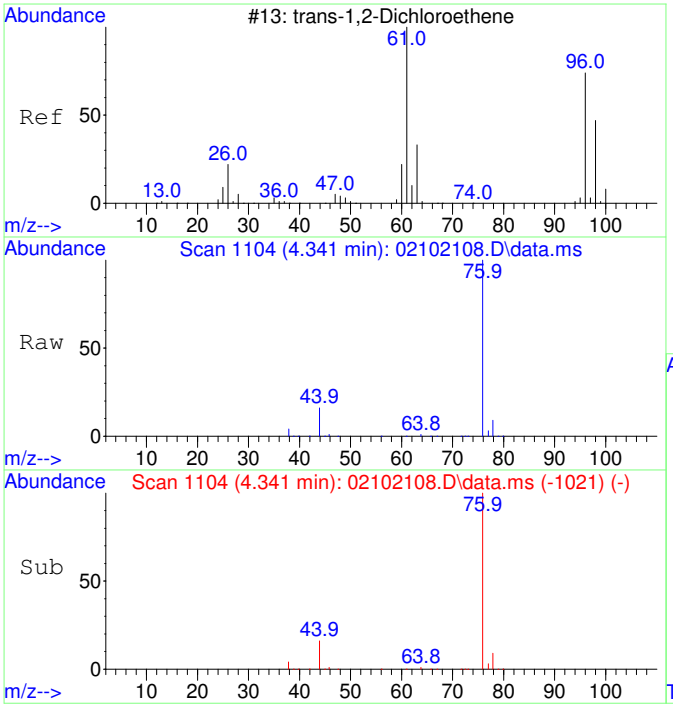


#26
1,1-Dichloroethene SCAN
Concen: 13.67 ug/L
RT: 3.096 min Scan# 810
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 61 Resp: 70

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

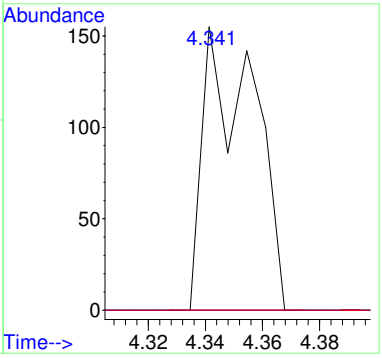


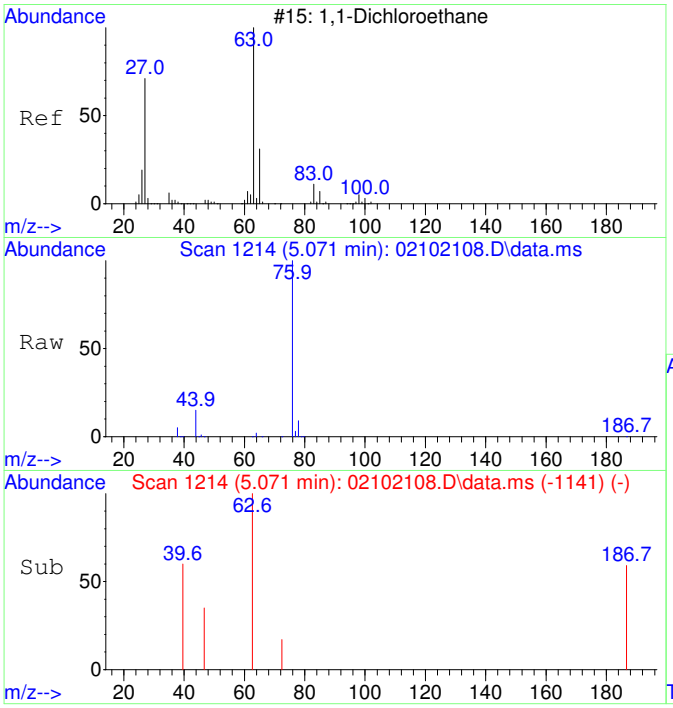


#27
trans-1,2-Dichloroethene SCAN
Concen: 29.44 ug/L
RT: 4.341 min Scan# 1104
Delta R.T. -0.040 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 61 Resp: 192

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

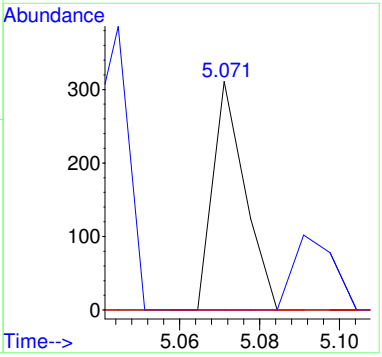


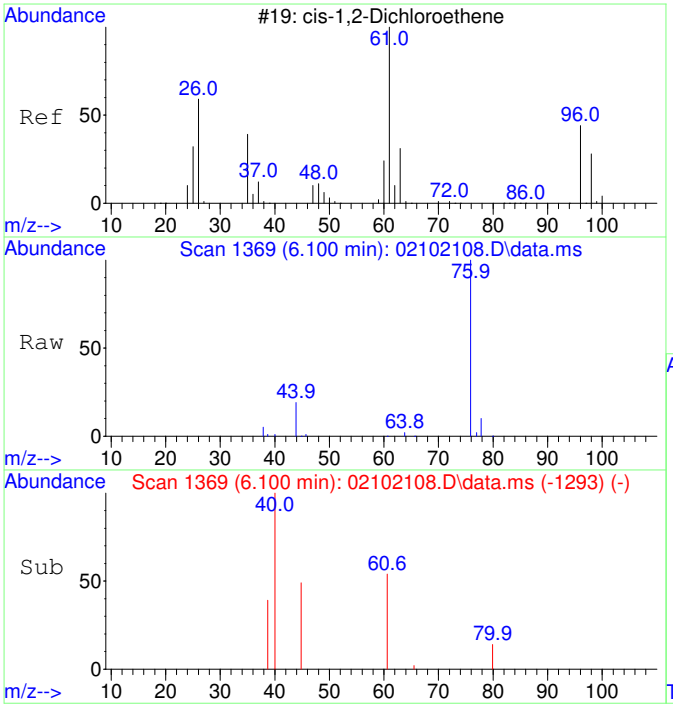


#28
1,1-Dichloroethane SCAN
Concen: 22.47 ug/L
RT: 5.071 min Scan# 1214
Delta R.T. -0.013 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 63 Resp: 173

Ion	Ratio	Lower	Upper
63	100		
65	41.6	1.3	61.3
83	0.0	0.0	45.9

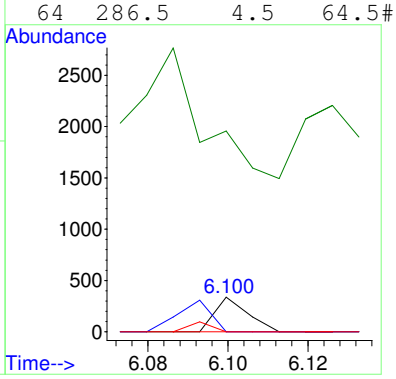


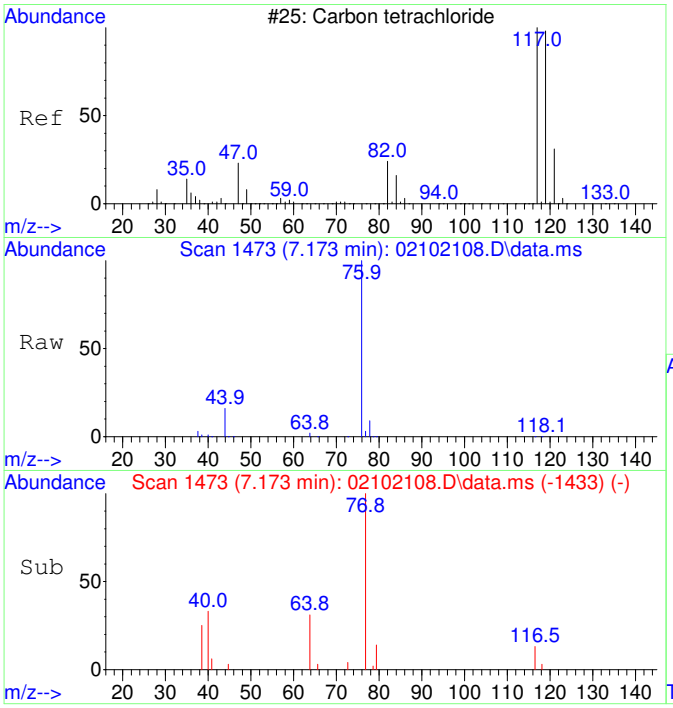


#29
cis-1,2-Dichloroethene SCAN
Concen: 25.37 ug/L
RT: 6.100 min Scan# 1369
Delta R.T. 0.007 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 61 Resp: 192

Ion	Ratio	Lower	Upper
61	100		
96	93.8	39.9	99.9
98	0.0	13.5	73.5#
64	286.5	4.5	64.5#

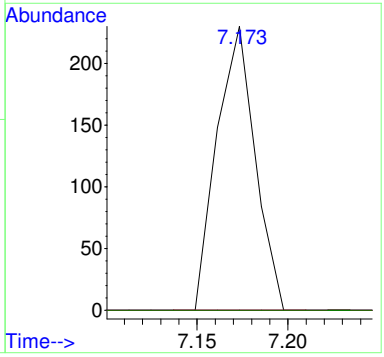


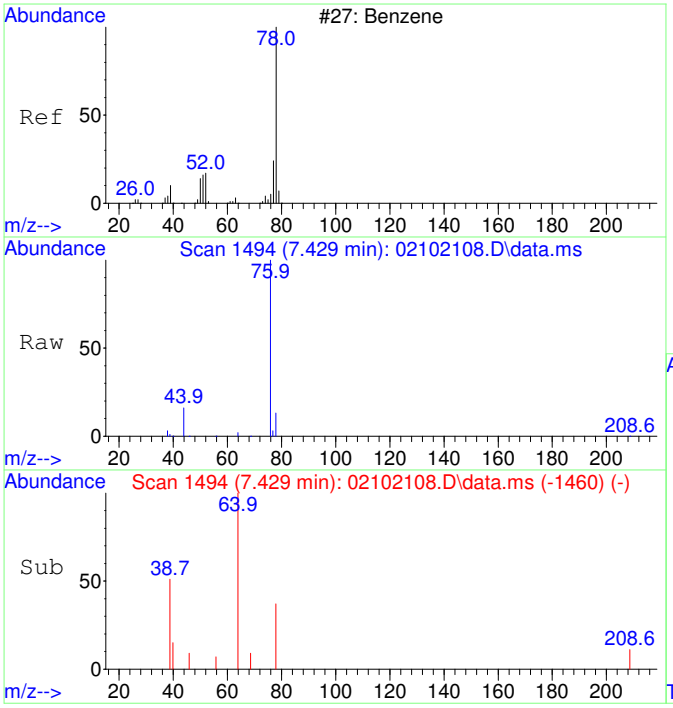


#32
Carbon tetrachloride SCAN
Concen: 54.14 ug/L
RT: 7.173 min Scan# 1473
Delta R.T. -0.012 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:117 Resp: 337

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

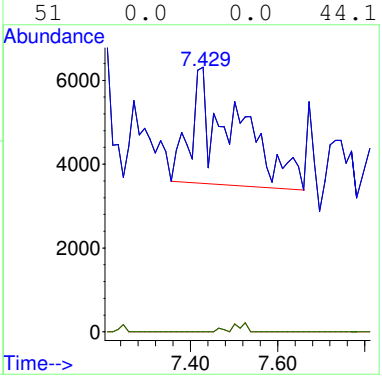


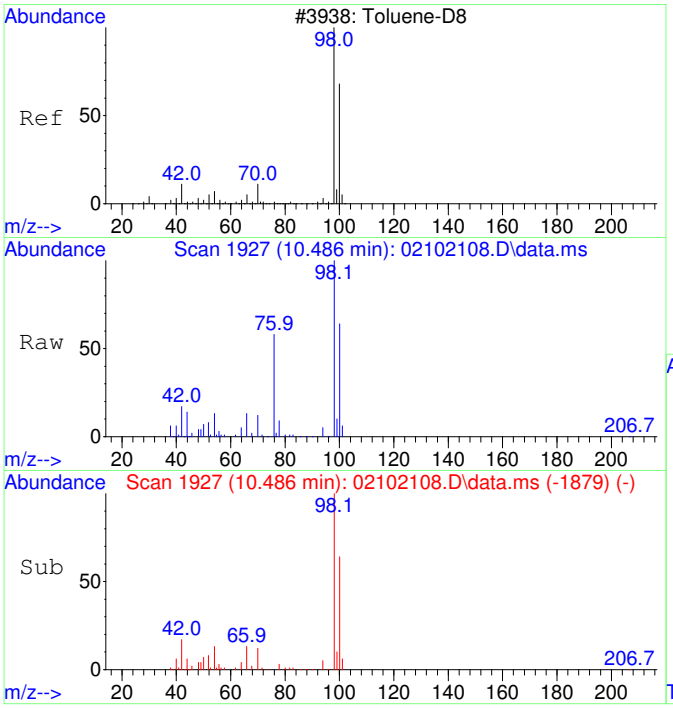


#33
Benzene SCAN
Concen: 911.54 ug/L
RT: 7.429 min Scan# 1494
Delta R.T. -0.085 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 78 Resp: 20086

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

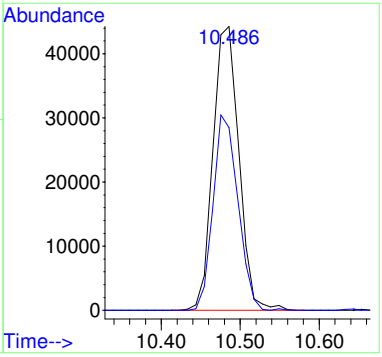


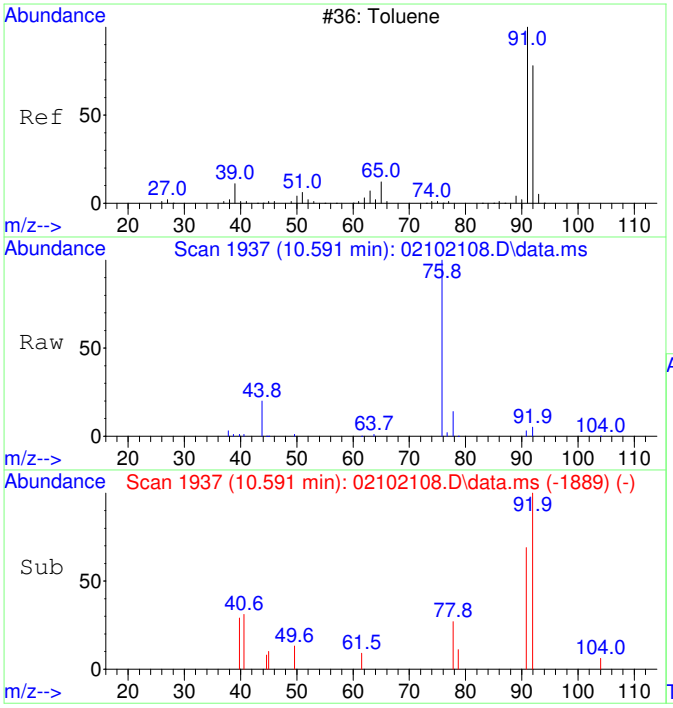


#36
Toluene-d8 SCAN
Concen: 4901.20 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 98 Resp: 100820

Ion	Ratio	Lower	Upper
98	100		
100	65.8	40.0	100.0

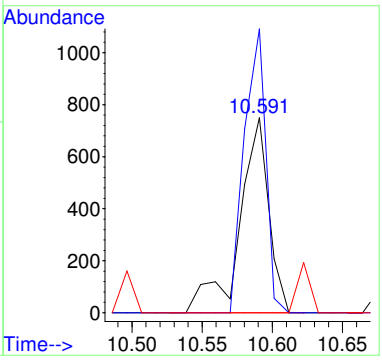


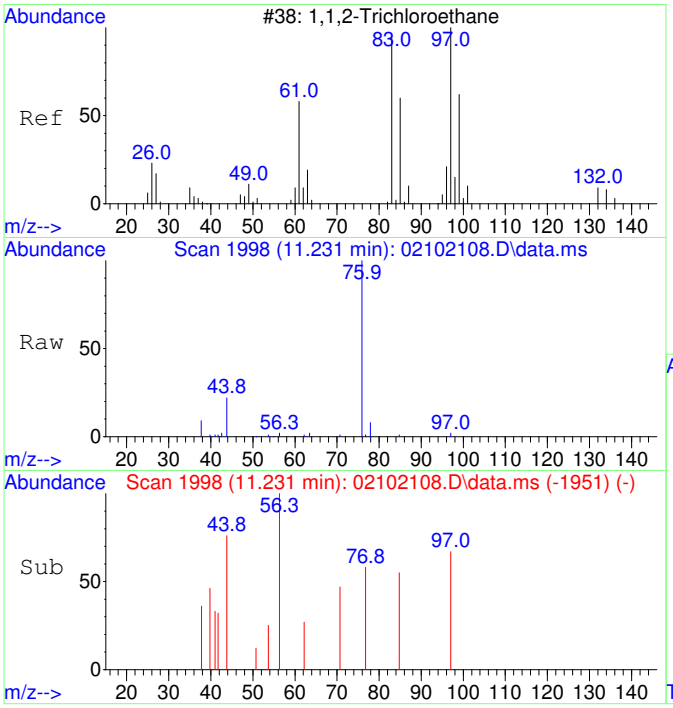


#37
Toluene SCAN
Concen: 43.08 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 1091

Ion	Ratio	Lower	Upper
91	100		
92	107.1	28.3	88.3#
65	0.0	0.0	41.0

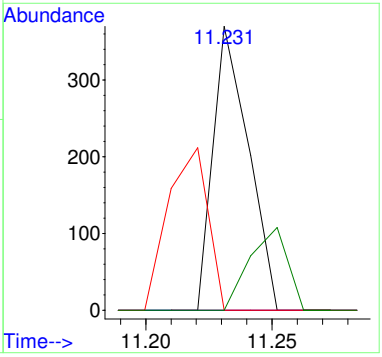


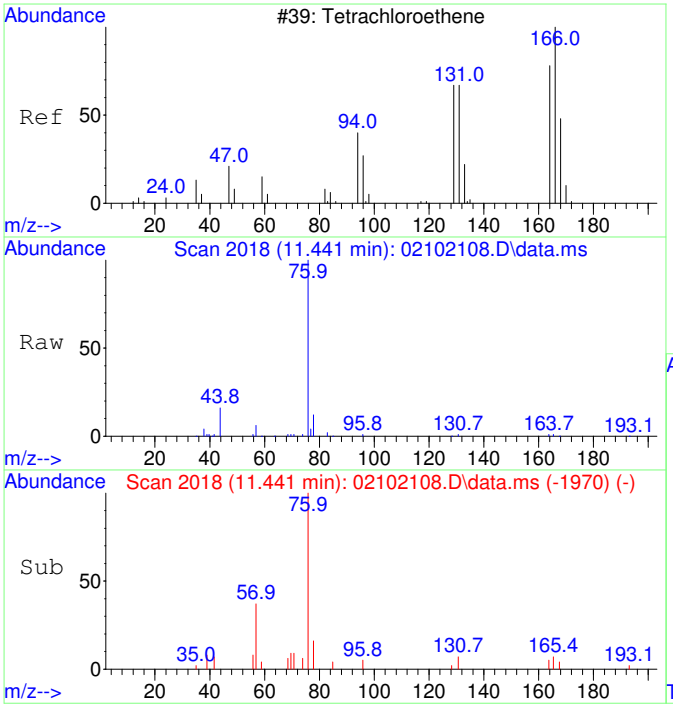


#38
1,1,2-Trichloroethane SCAN
Concen: 56.71 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. -0.011 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 97 Resp: 360

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	65.0	32.1	92.1
99	0.0	36.7	96.7#

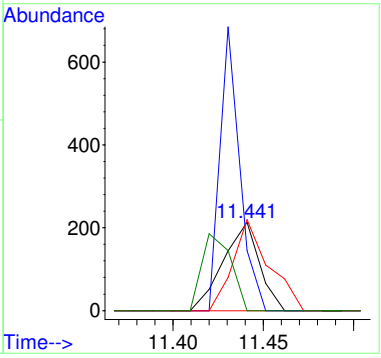


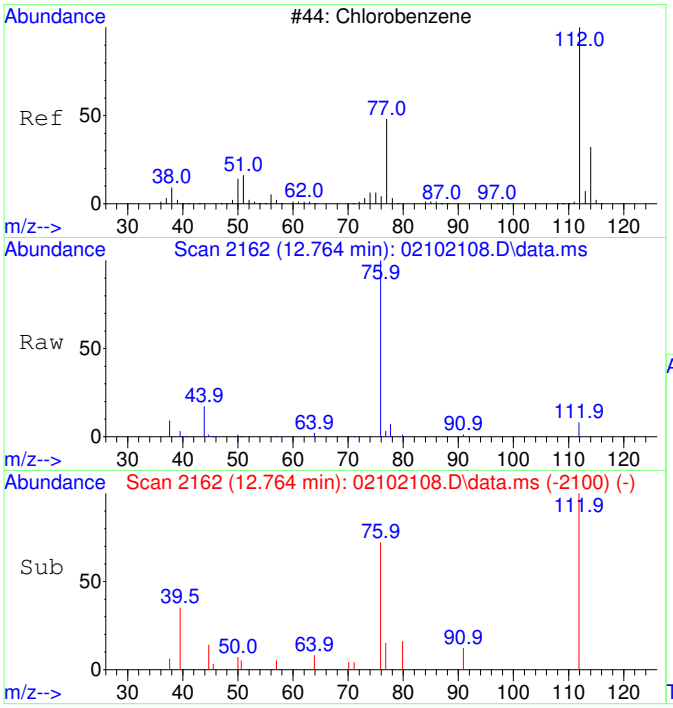


#39
Tetrachloroethene SCAN
Concen: 52.30 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:166 Resp: 298

Ion	Ratio	Lower	Upper
166	100		
164	175.5	50.9	110.9#
131	103.0	38.7	98.7#
129	0.0	41.8	101.8#

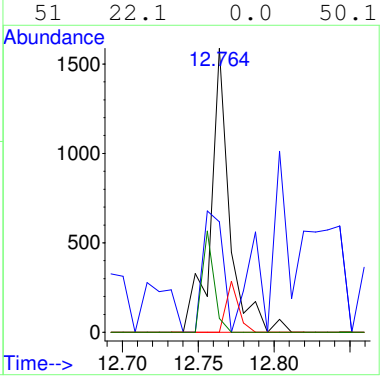


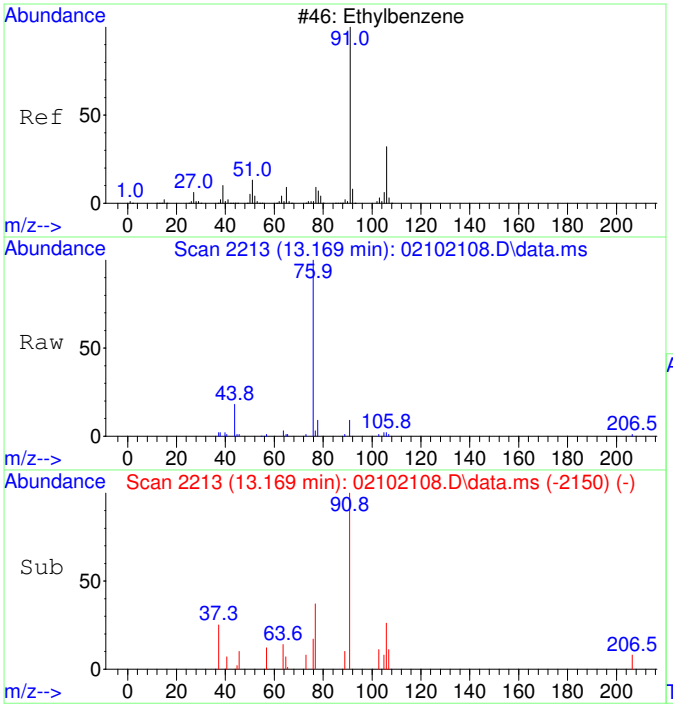


#40
Chlorobenzene SCAN
Concen: 76.36 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. -0.008 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:112 Resp: 1389

Ion	Ratio	Lower	Upper
112	100		
77	44.5	28.2	88.2
114	11.5	2.3	62.3
51	22.1	0.0	50.1

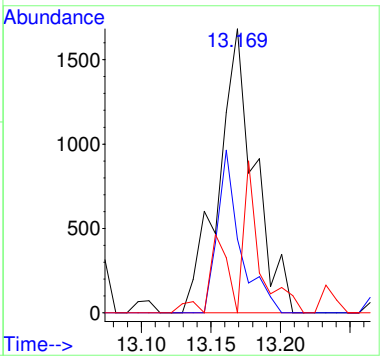


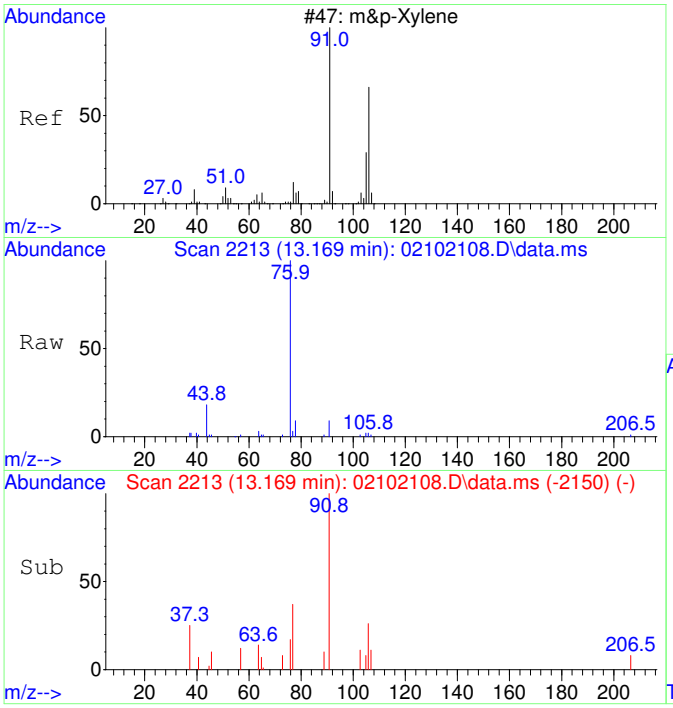


#42
Ethylbenzene SCAN
Concen: 63.05 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 3043

Ion	Ratio	Lower	Upper
91	100		
106	36.1	23.1	83.1
51	37.8	0.0	40.1

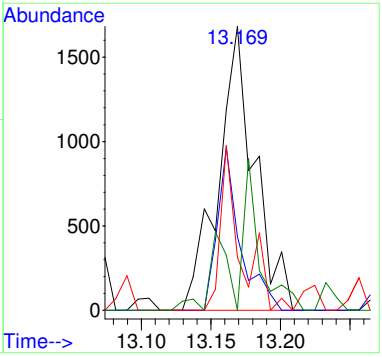


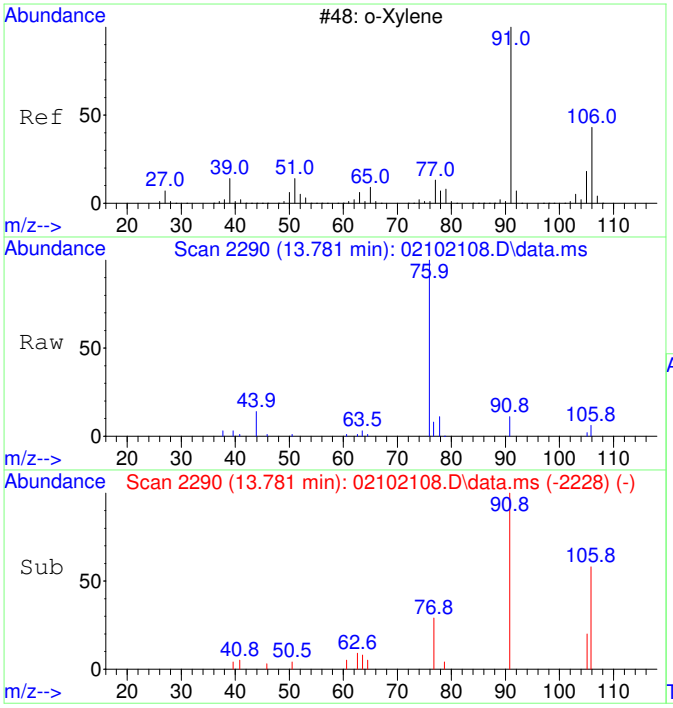


#43
m&p-Xylene SCAN
Concen: 63.05 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 3043

Ion	Ratio	Lower	Upper
91	100		
106	36.1	23.1	83.1
105	32.7	0.0	54.7
51	37.8	0.0	40.1

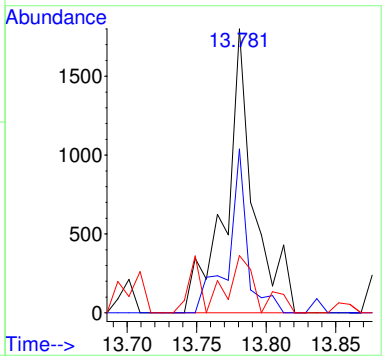


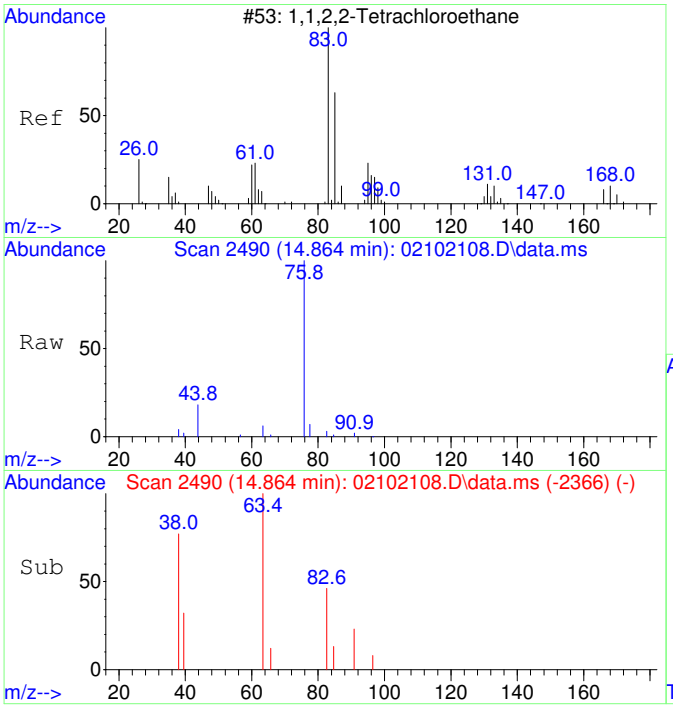


#44
o-Xylene SCAN
Concen: 95.43 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.008 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 2515

Ion	Ratio	Lower	Upper
91	100		
106	39.0	18.0	78.0
105	22.3	0.0	56.6

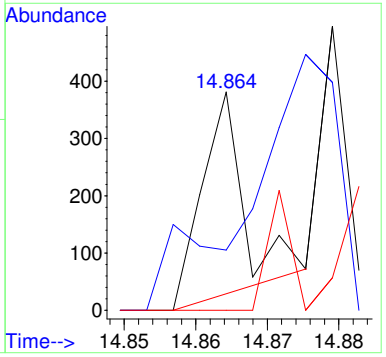


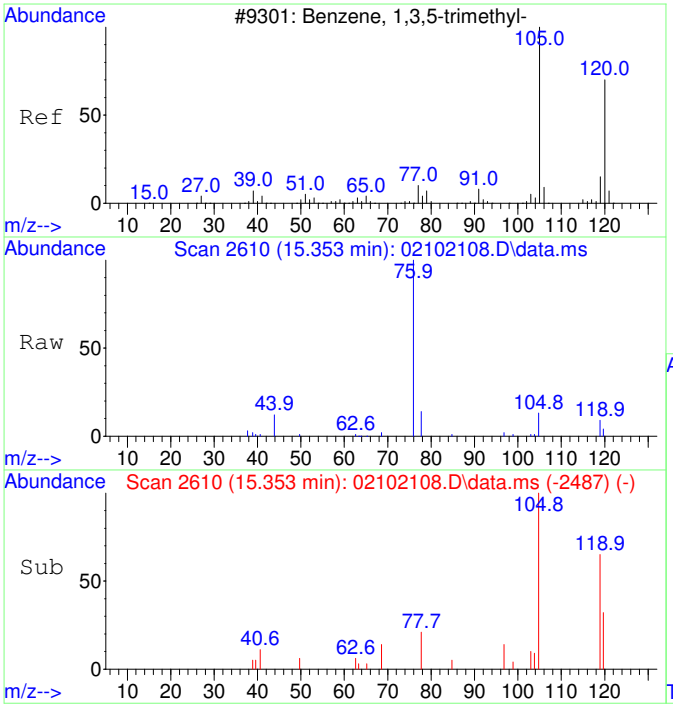


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 10.80 ug/L
RT: 14.864 min Scan# 2490
Delta R.T. -0.019 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 83 Resp: 148

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

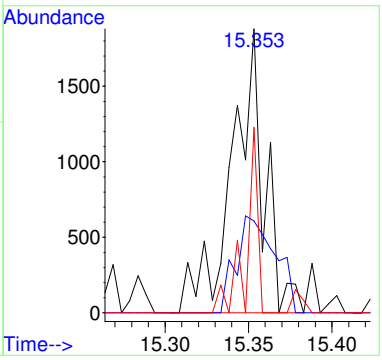


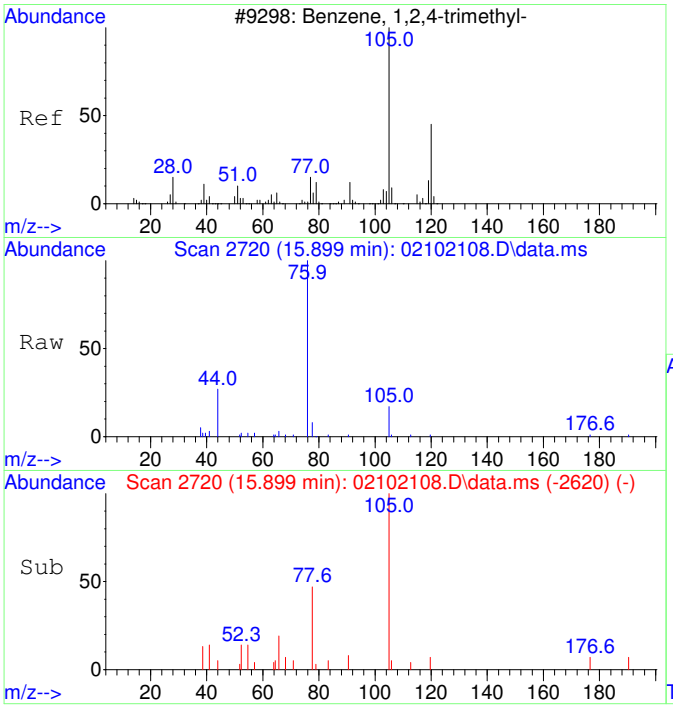


#46
1,3,5-Trimethylbenzene SCAN
Concen: 90.78 ug/L
RT: 15.353 min Scan# 2610
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:105 Resp: 2524

Ion	Ratio	Lower	Upper
105	100		
120	41.4	18.3	78.3
119	22.3	0.0	43.1

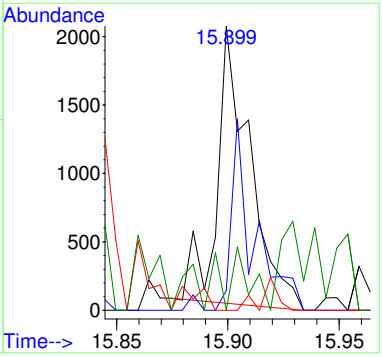


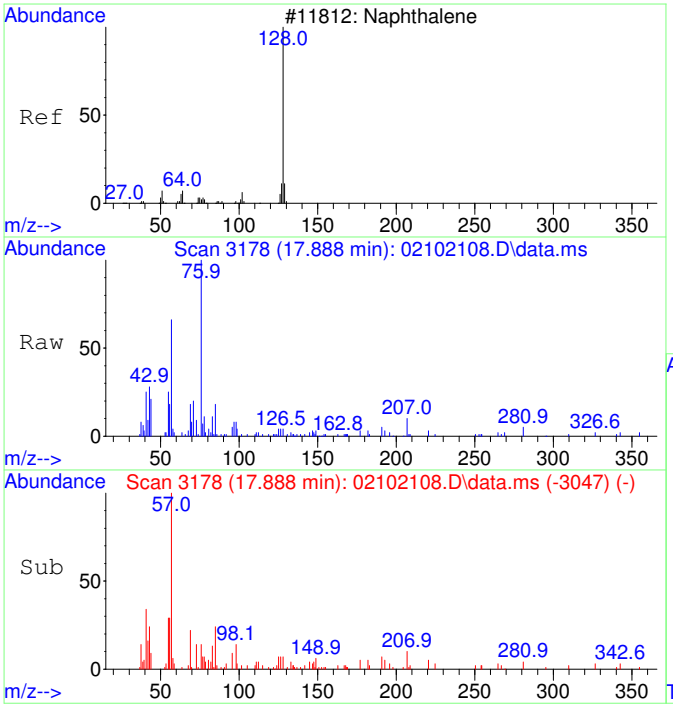


#47
1,2,4-Trimethylbenzene SCAN
Concen: 73.11 ug/L
RT: 15.899 min Scan# 2720
Delta R.T. -0.005 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:105 Resp: 2077

Ion	Ratio	Lower	Upper
105	100		
120	45.7	16.9	76.9
119	0.0	0.0	41.9
77	12.1	0.0	42.3

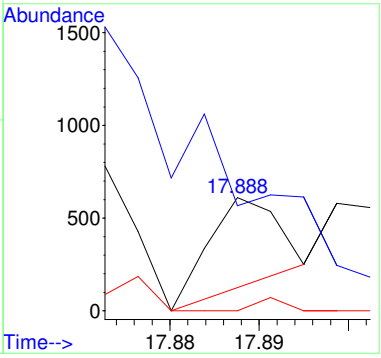




#48
Naphthalene SCAN
Concen: 6.45 ug/L
RT: 17.888 min Scan# 3178
Delta R.T. -0.015 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:128 Resp: 275

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



Quantitation Report (QT Reviewed)

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Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102108.D
Acq On : 10 Feb 2021 12:01
InstName : AG5975C
Operator : TD
Sample : B21B045-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

M.I. Performed By:
TD at 12:47 pm, Feb 10, 2021

M.I. Approved By:
Kathy O'Brien at 12:08 pm, Fe

Quant Time: Feb 10 12:20:10 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

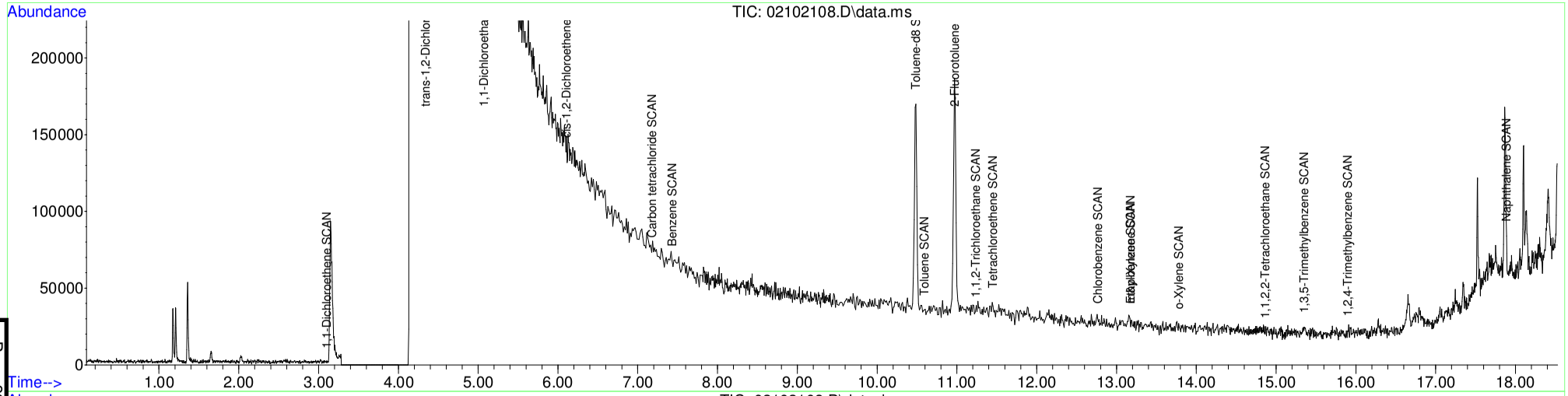
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	193222	5000.00 ug/L	-0.01
System Monitoring Compounds					
12) Toluene-d8	10.477	98	161764	4322.66 ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.45%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.093	61	242m	31.59 ug/L	
3] trans-1,2-Dichloroethene	4.356	61	329	34.06 ug/L	82
4] 1,1-Dichloroethane	5.079	63	417	36.15 ug/L	77
5] cis-1,2-Dichloroethene	6.081	61	426	35.65 ug/L	98
6] Chloroform	6.652	83	482	42.00 ug/L	94
7] 1,1,1-Trichloroethane	6.907	97	511	41.45 ug/L	96
8] Carbon tetrachloride	7.175	117	506	42.93 ug/L	97
9] Benzene	7.503	78	3437	105.71 ug/L	77
10] 1,2-Dichloroethane	7.539	62	464	41.83 ug/L #	37
11] Trichloroethene	8.564	130	427	41.60 ug/L	94
13] Toluene	10.582	91	2162	46.40 ug/L	95
14] 1,1,2-Trichloroethane	11.232	97	467	43.27 ug/L	90
15] Tetrachloroethene	11.432	166	622	42.86 ug/L	94
16] Chlorobenzene	12.765	112	1458	40.39 ug/L	87
17] 1,1,1,2-Tetrachloroethane	12.916	131	531	42.03 ug/L	100
18] Ethylbenzene	12.972	91	2783	46.76 ug/L	93
19] m&p-Xylene	13.162	91	5123	111.79 ug/L	97
20] o-Xylene	13.782	91	2209	44.88 ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.877	83	896	39.07 ug/L	96
22] 1,3,5-Trimethylbenzene	15.350	105	2354	43.49 ug/L	95
23] 1,2,4-Trimethylbenzene	15.901	105	2796	50.50 ug/L	89
24] Naphthalene	17.904	128	388	4.33 ug/L #	68
25) 2-Fluorotoluene SCAN	10.969	109	118834	5418.13 ug/L	94
26) 1,1-Dichloroethene SCAN	3.096	61	70	13.67 ug/L #	25
27) trans-1,2-Dichloroethe...	4.341	61	192	29.44 ug/L #	17
28) 1,1-Dichloroethane SCAN	5.071	63	173	22.47 ug/L #	75
29) cis-1,2-Dichloroethene...	6.100	61	192	25.37 ug/L #	1
32) Carbon tetrachloride SCAN	7.173	117	337	54.14 ug/L #	15
33) Benzene SCAN	7.429	78	20086	911.54 ug/L #	91
36) Toluene-d8 SCAN	10.486	98	100820	4901.20 ug/L	95
37) Toluene SCAN	10.591	91	1091	43.08 ug/L #	40
38) 1,1,2-Trichloroethane ...	11.231	97	360	56.71 ug/L #	35
39) Tetrachloroethene SCAN	11.441	166	298	52.30 ug/L #	20
40) Chlorobenzene SCAN	12.764	112	1389	76.36 ug/L	79
42) Ethylbenzene SCAN	13.169	91	3043	63.05 ug/L	68
43) m&p-Xylene SCAN	13.169	91	3043	63.05 ug/L	72
44) o-Xylene SCAN	13.781	91	2515	95.43 ug/L	88
45) 1,1,2,2-Tetrachloroeth...	14.864	83	148	10.80 ug/L #	26
46) 1,3,5-Trimethylbenzene...	15.353	105	2524	90.78 ug/L	87
47) 1,2,4-Trimethylbenzene...	15.899	105	2077	73.11 ug/L #	94
48) Naphthalene SCAN	17.888	128	275	6.45 ug/L #	68

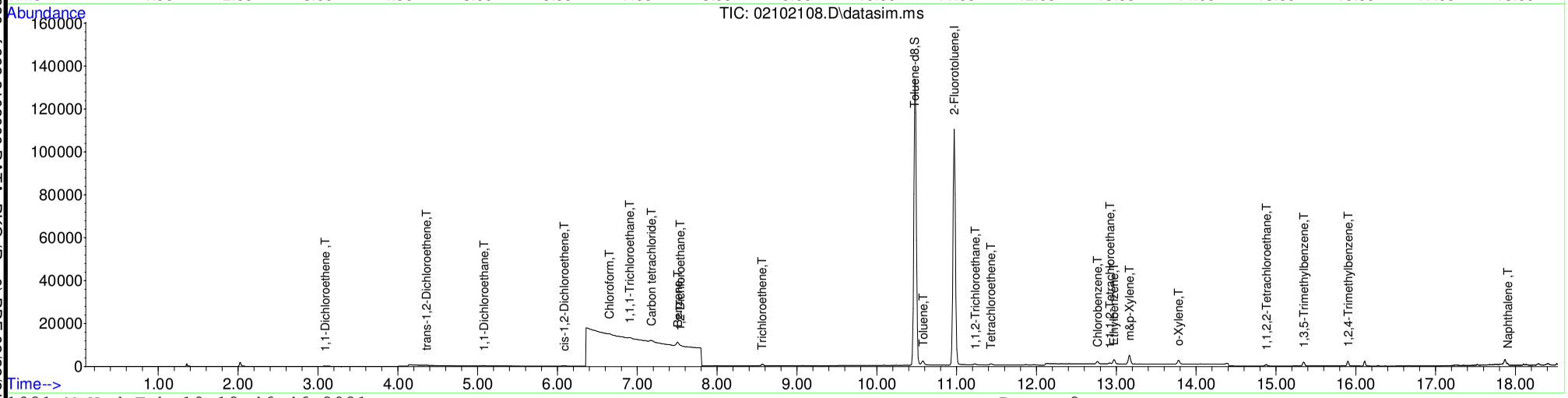
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102108.D
Acq On : 10 Feb 2021 12:01
InstName : AG5975C
Operator : TD
Sample : B21B045-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 10 12:20:10 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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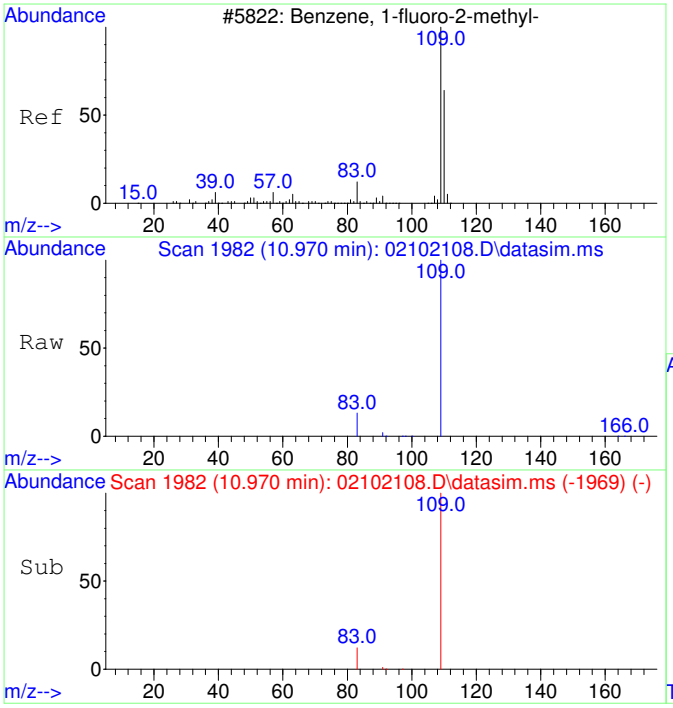
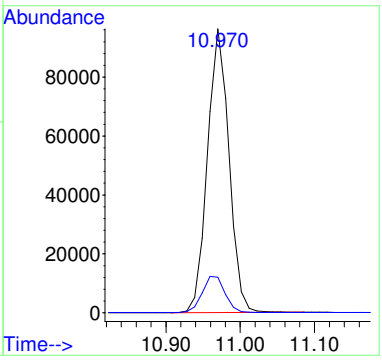
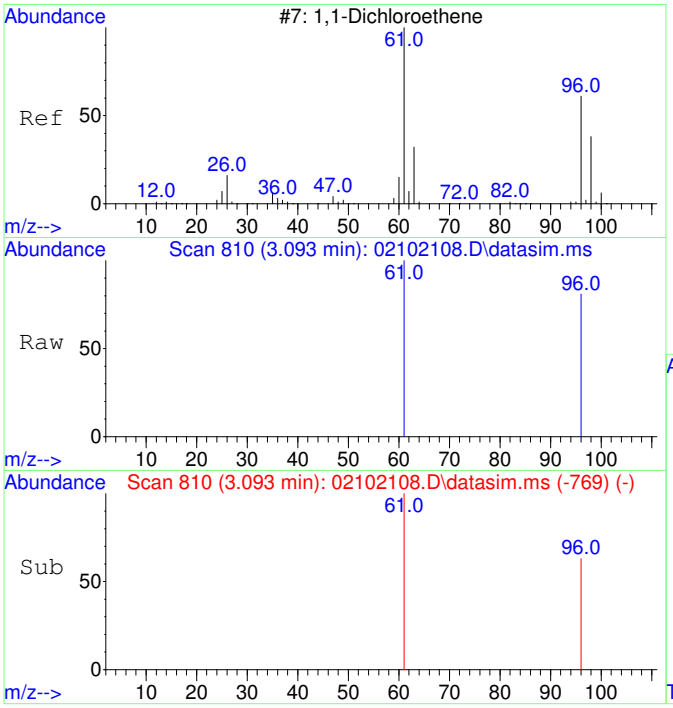


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:109 Resp: 193222

Ion	Ratio	Lower	Upper
109	100		
83	13.6	0.0	42.3

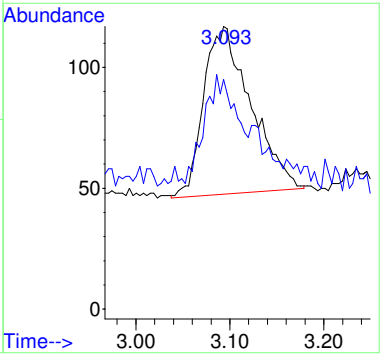


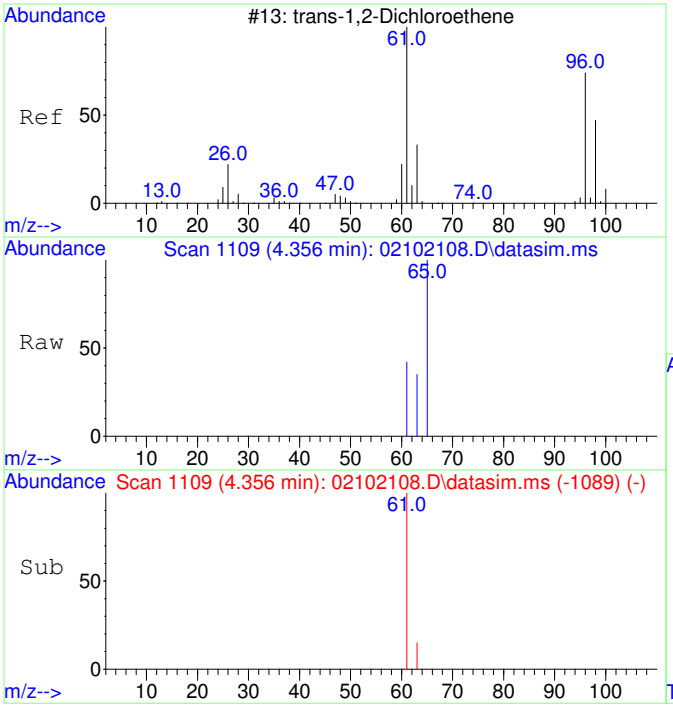


#2
1,1-Dichloroethene
Concen: 31.59 ug/L m
RT: 3.093 min Scan# 810
Delta R.T. 0.004 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 61 Resp: 242

Ion	Ratio	Lower	Upper
61	100		
96	81.0	37.2	97.2

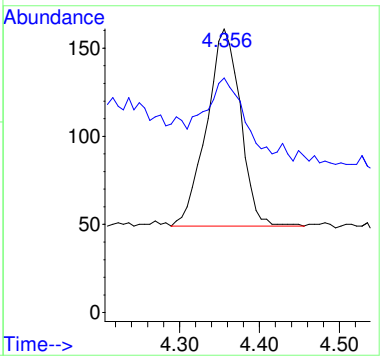


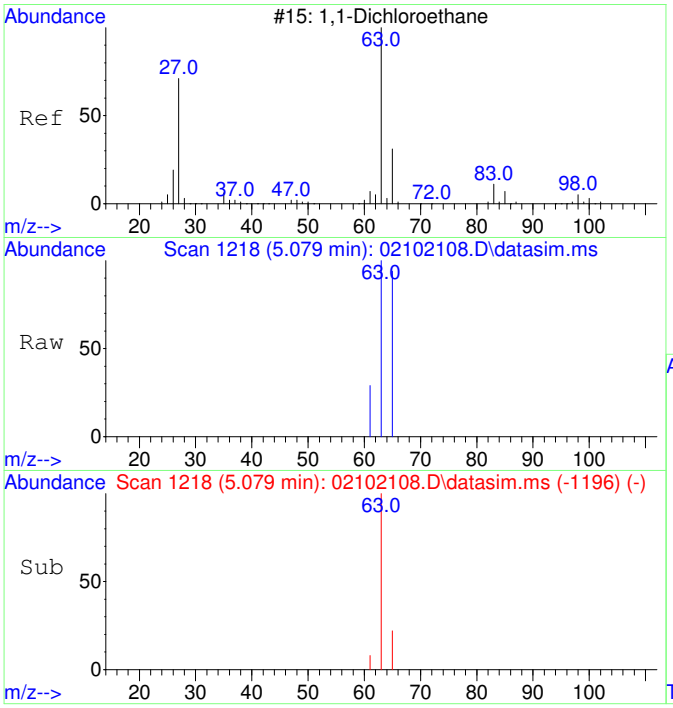


#3
trans-1,2-Dichloroethene
Concen: 34.06 ug/L
RT: 4.356 min Scan# 1109
Delta R.T. -0.020 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 61 Resp: 329

Ion	Ratio	Lower	Upper
61	100		
63	42.6	2.4	62.4

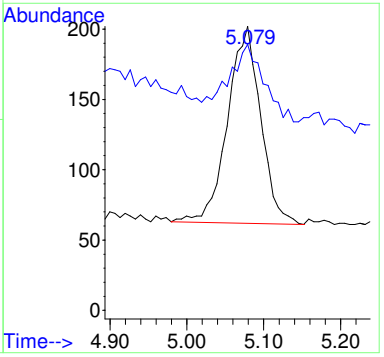


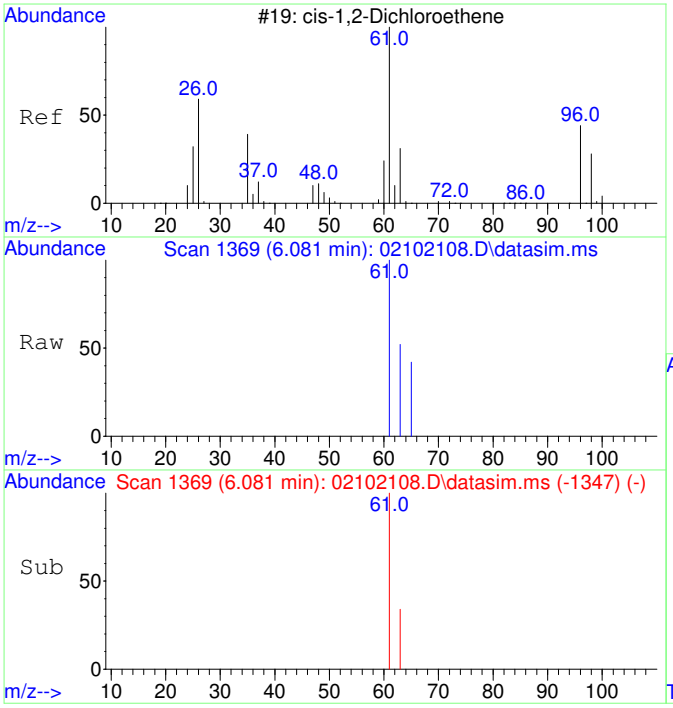


#4
1,1-Dichloroethane
Concen: 36.15 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.007 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 63 Resp: 417

Ion	Ratio	Lower	Upper
63	100		
65	44.6	1.8	61.8

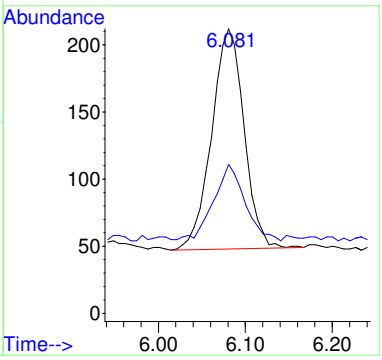


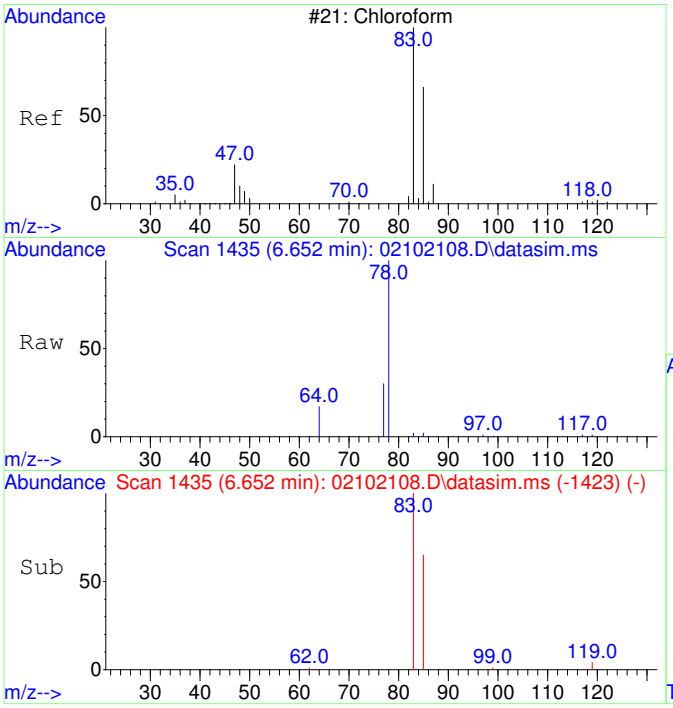


#5
cis-1,2-Dichloroethene
Concen: 35.65 ug/L
RT: 6.081 min Scan# 1369
Delta R.T. -0.007 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 61 Resp: 426

Ion	Ratio	Lower	Upper
61	100		
63	33.6	2.5	62.5

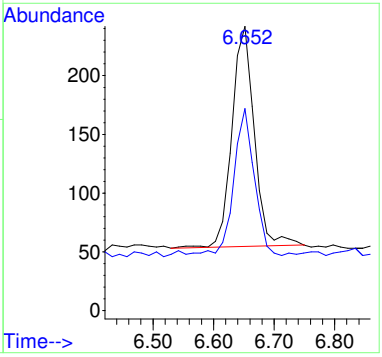


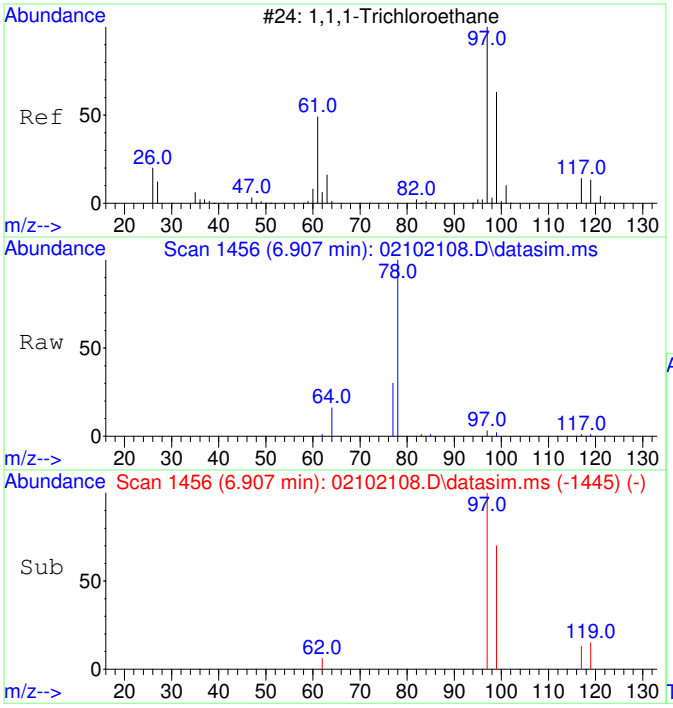


#6
Chloroform
Concen: 42.00 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 83 Resp: 482

Ion	Ratio	Lower	Upper
83	100		
85	60.4	35.1	95.1

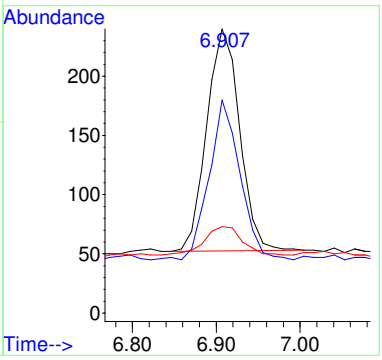


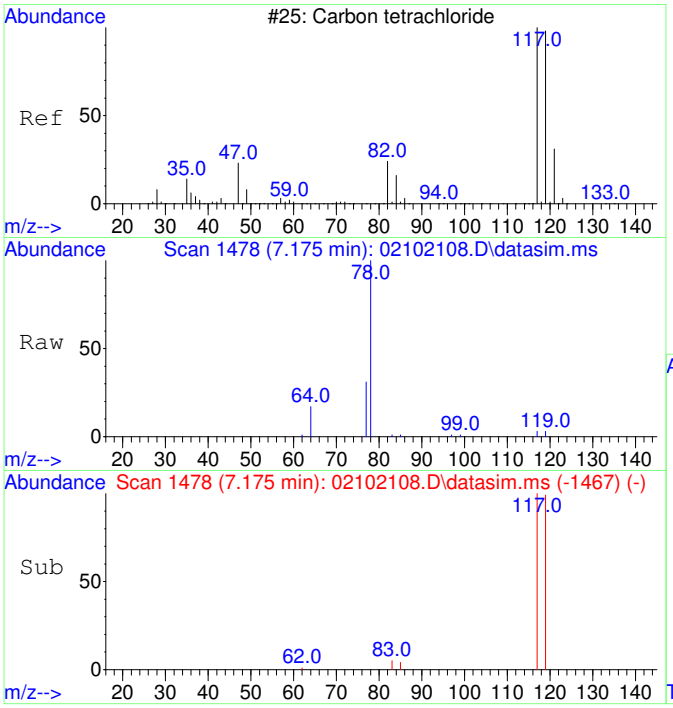


#7
1,1,1-Trichloroethane
Concen: 41.45 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 97 Resp: 511

Ion	Ratio	Lower	Upper
97	100		
99	67.9	34.6	94.6
117	14.5	0.0	43.2

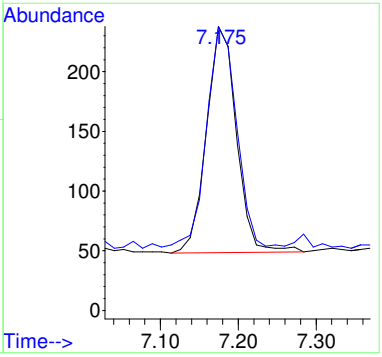


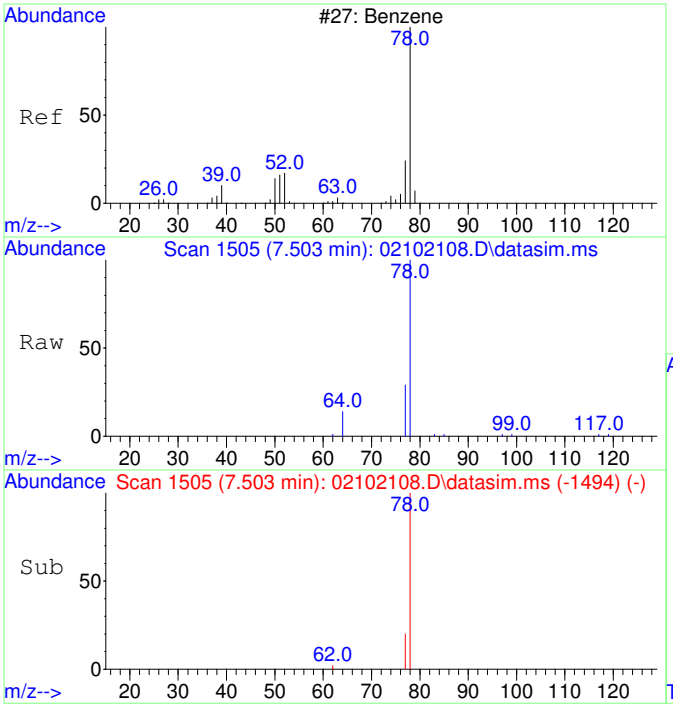


#8
Carbon tetrachloride
Concen: 42.93 ug/L
RT: 7.175 min Scan# 1478
Delta R.T. -0.012 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:117 Resp: 506

Ion	Ratio	Lower	Upper
117	100		
119	99.8	66.4	126.4

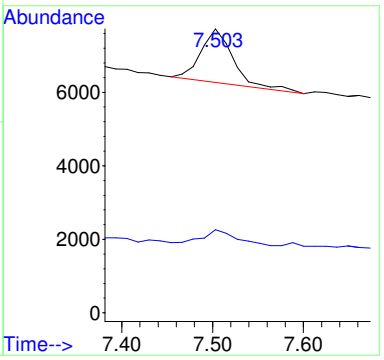


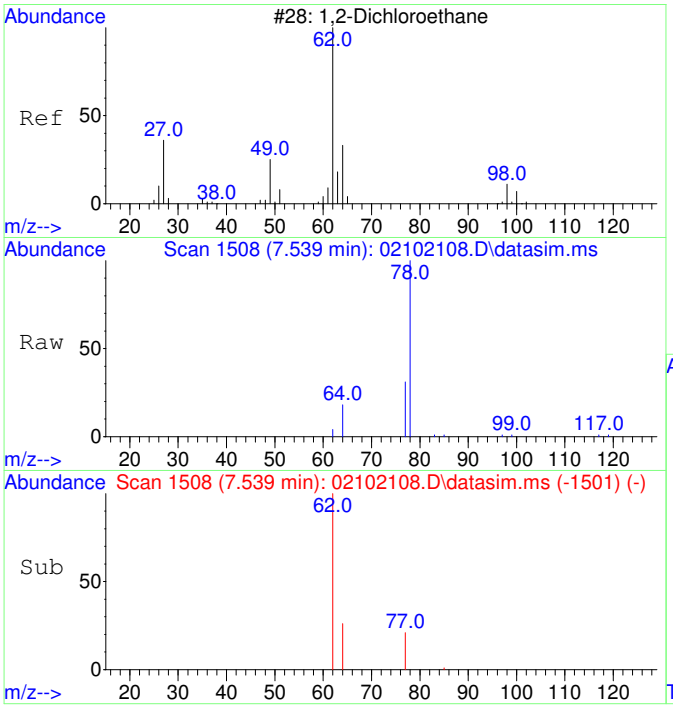


#9
Benzene
Concen: 105.71 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 78 Resp: 3437

Ion	Ratio	Lower	Upper
78	100		
77	34.6	0.0	53.2

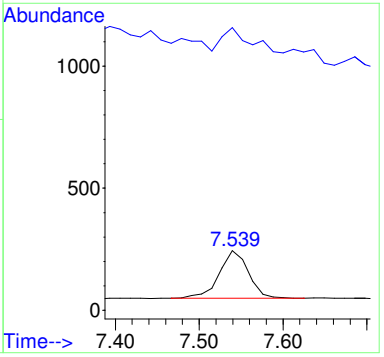


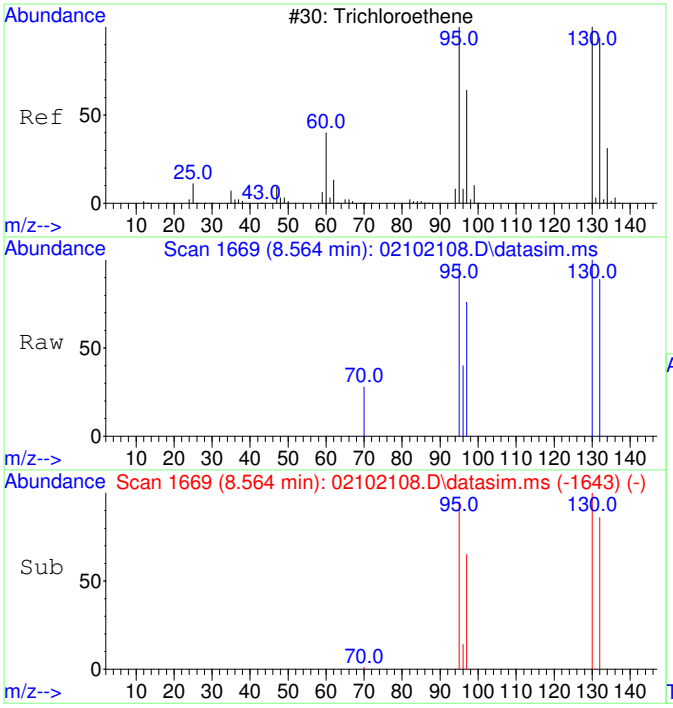


#10
1,2-Dichloroethane
Concen: 41.83 ug/L
RT: 7.539 min Scan# 1508
Delta R.T. -0.012 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 62 Resp: 464

Ion	Ratio	Lower	Upper
62	100		
64	67.7	2.3	62.3#

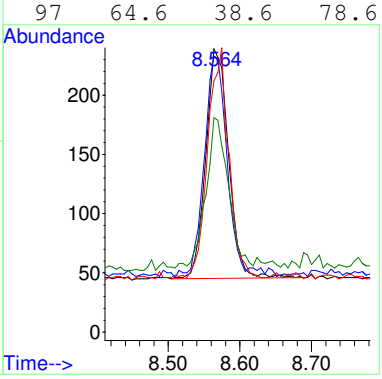


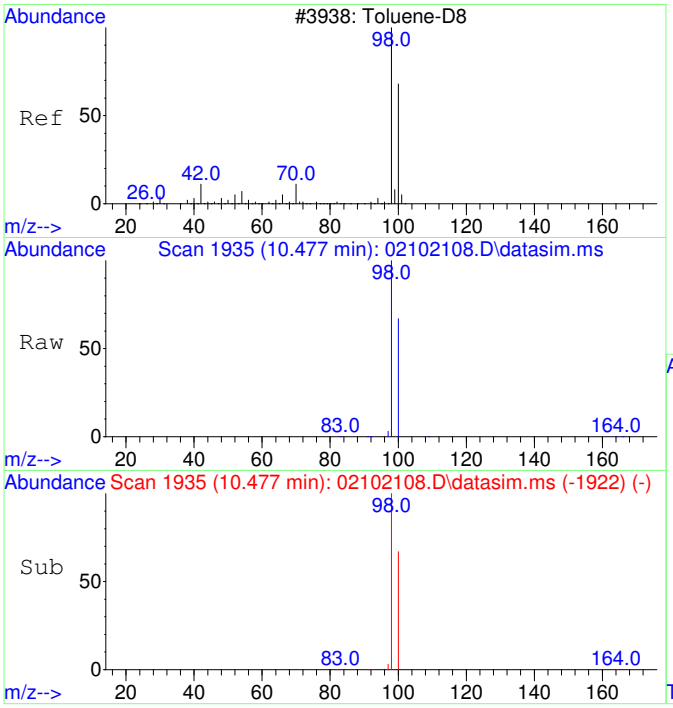


#11
Trichloroethene
Concen: 41.60 ug/L
RT: 8.564 min Scan# 1669
Delta R.T. -0.011 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:130 Resp: 427

Ion	Ratio	Lower	Upper
130	100		
95	96.7	60.7	120.7
132	91.1	76.0	116.0
97	64.6	38.6	78.6

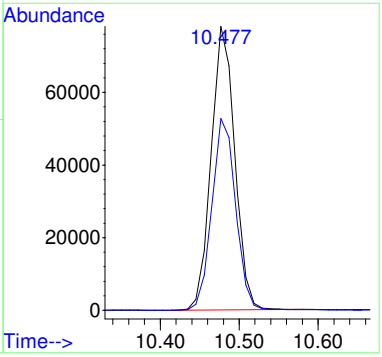


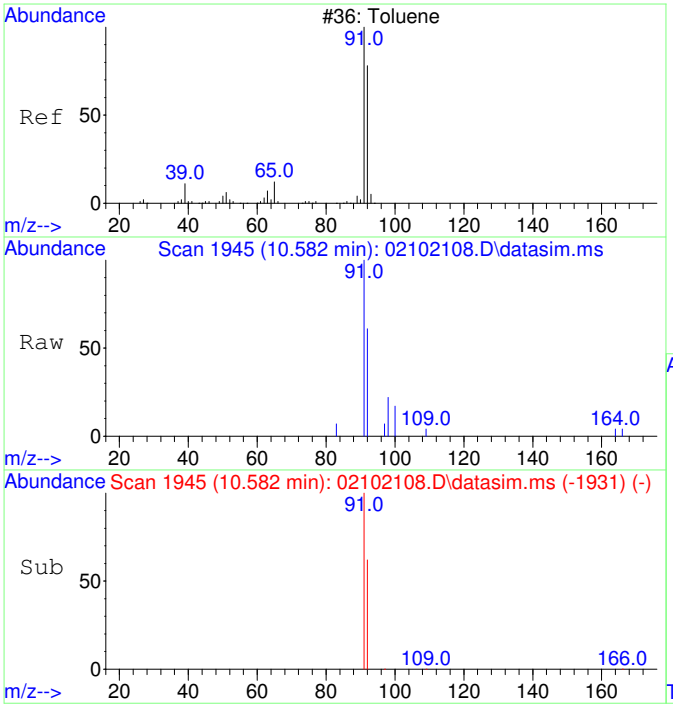


#12
Toluene-d8
Concen: 4322.66 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.011 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 98 Resp: 161764

Ion	Ratio	Lower	Upper
98	100		
100	67.8	37.1	97.1

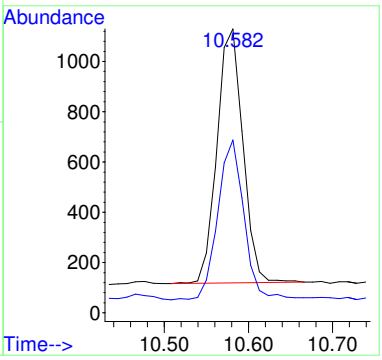


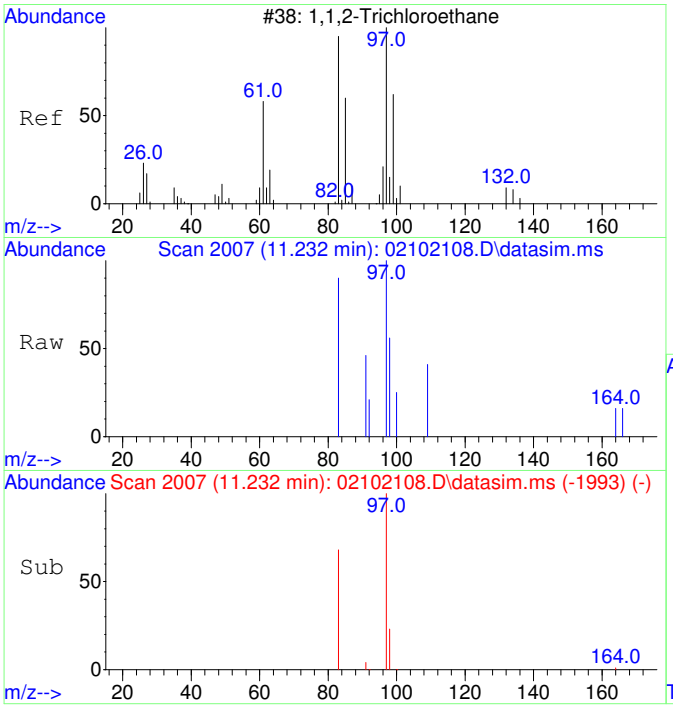


#13
Toluene
Concen: 46.40 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 2162

Ion	Ratio	Lower	Upper
91	100		
92	63.7	29.9	89.9

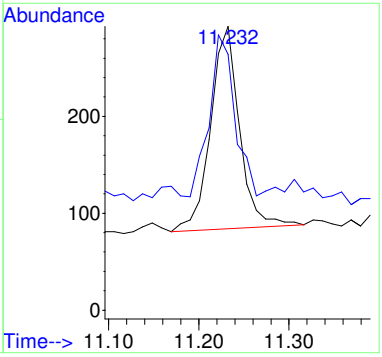


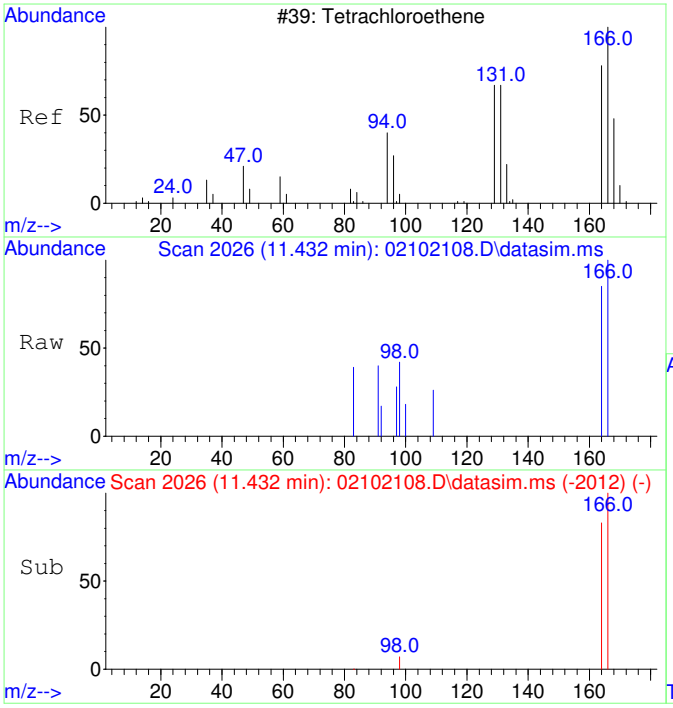


#14
1,1,2-Trichloroethane
Concen: 43.27 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 97 Resp: 467

Ion	Ratio	Lower	Upper
97	100		
83	71.9	51.2	111.2

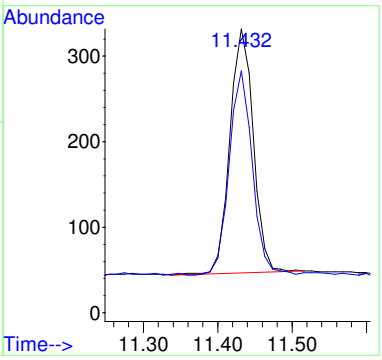


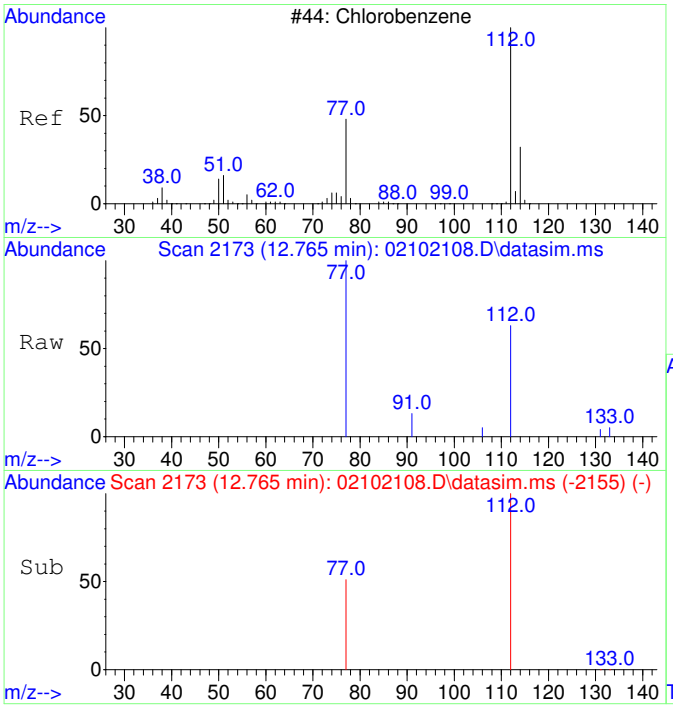


#15
Tetrachloroethene
Concen: 42.86 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:166 Resp: 622

Ion	Ratio	Lower	Upper
166	100		
164	82.6	47.8	107.8

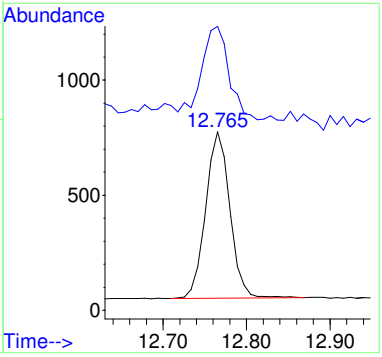


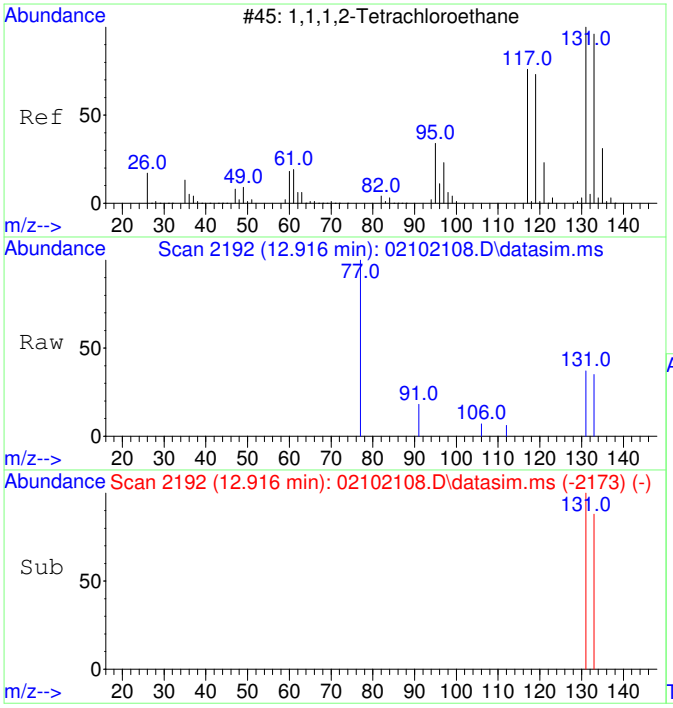


#16
Chlorobenzene
Concen: 40.39 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:112 Resp: 1458

Ion	Ratio	Lower	Upper
112	100		
77	62.8	23.6	83.6

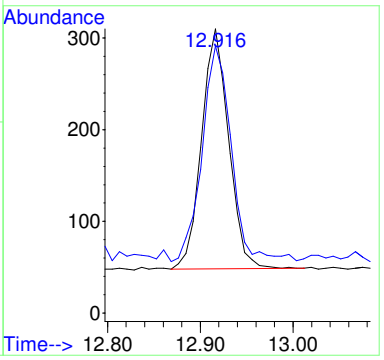


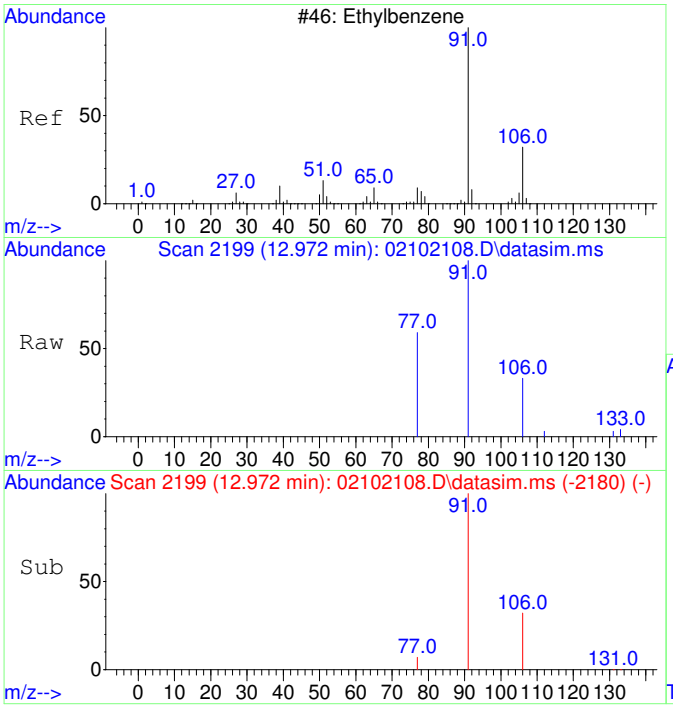


#17
1,1,1,2-Tetrachloroethane
Concen: 42.03 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:131 Resp: 531

Ion	Ratio	Lower	Upper
131	100		
133	96.4	66.3	126.3

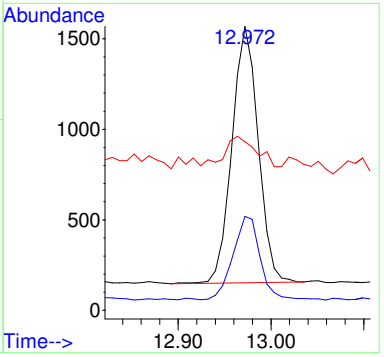


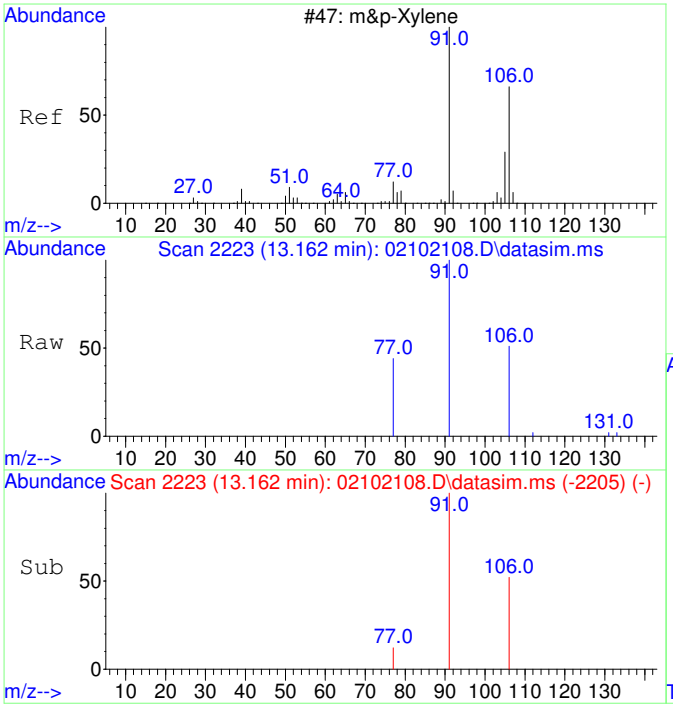


#18
Ethylbenzene
Concen: 46.76 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 2783

Ion	Ratio	Lower	Upper
91	100		
106	33.8	3.0	63.0
77	18.8	0.0	38.2

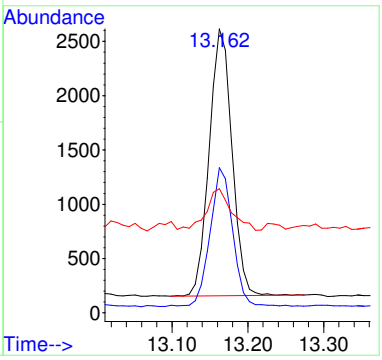


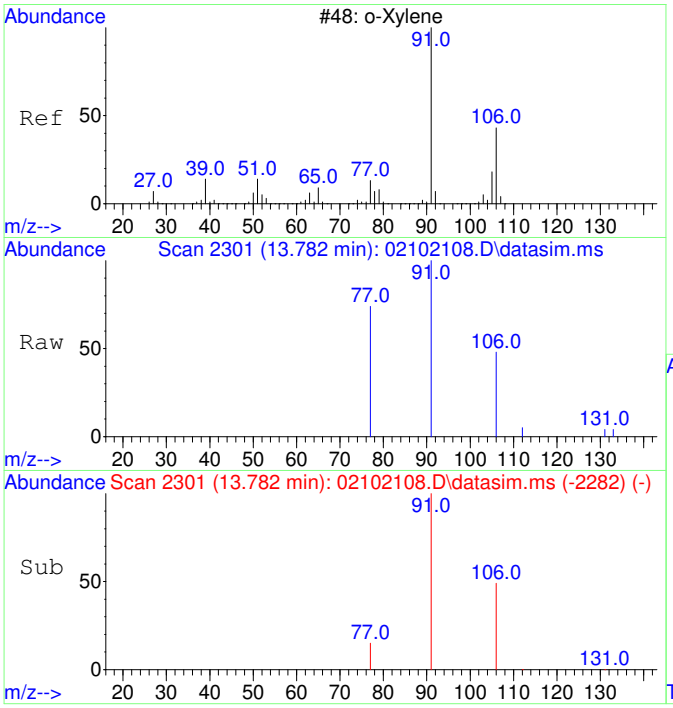


#19
m&p-Xylene
Concen: 111.79 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 5123

Ion	Ratio	Lower	Upper
91	100		
106	51.6	22.2	82.2
77	16.6	0.0	42.4

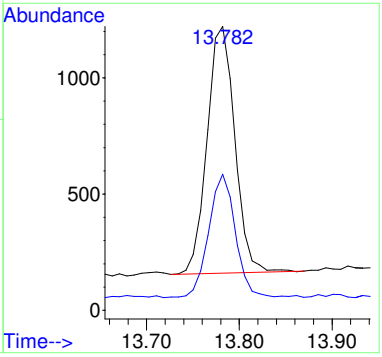


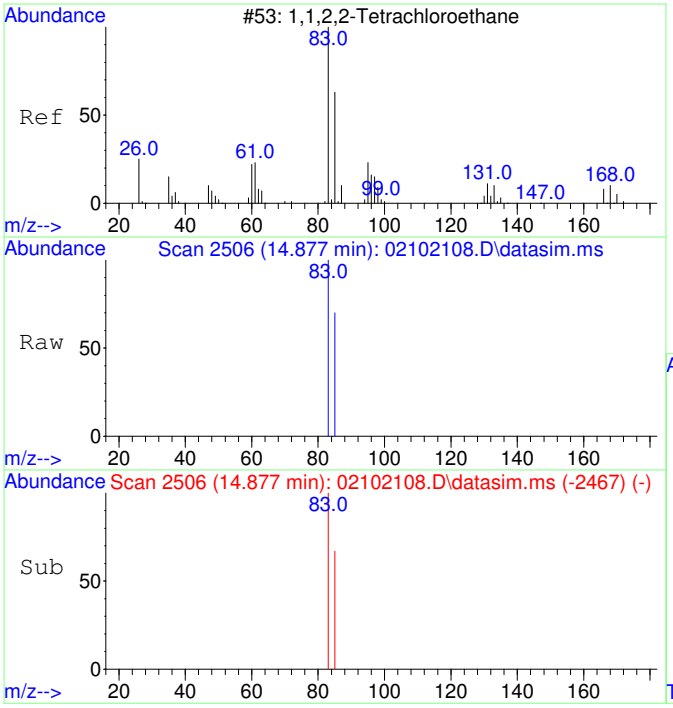


#20
o-Xylene
Concen: 44.88 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 2209

Ion	Ratio	Lower	Upper
91	100		
106	47.3	19.2	79.2

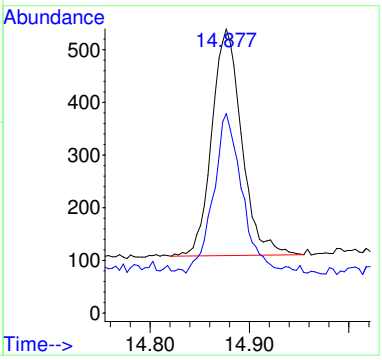


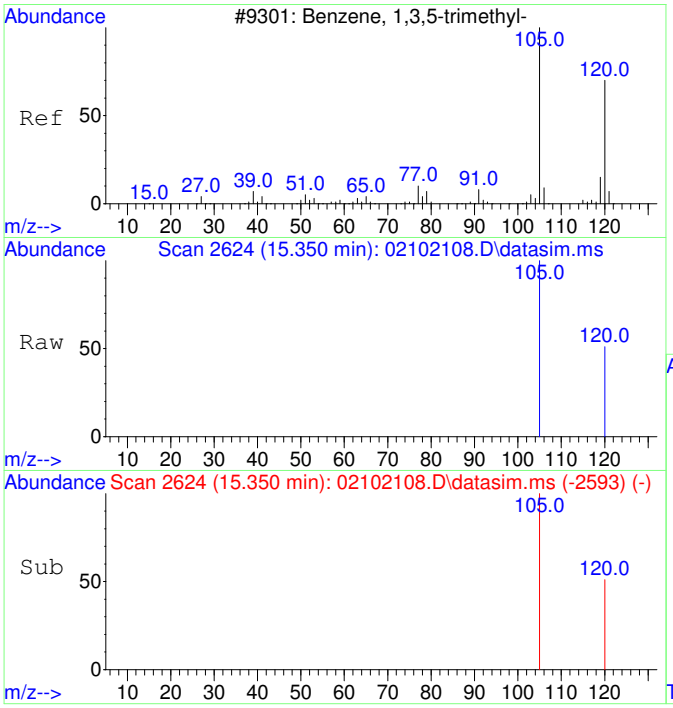


#21
1,1,2,2-Tetrachloroethane
Concen: 39.07 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. -0.004 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 83 Resp: 896

Ion	Ratio	Lower	Upper
83	100		
85	67.9	34.8	94.8

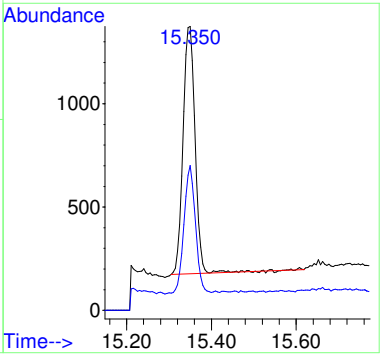


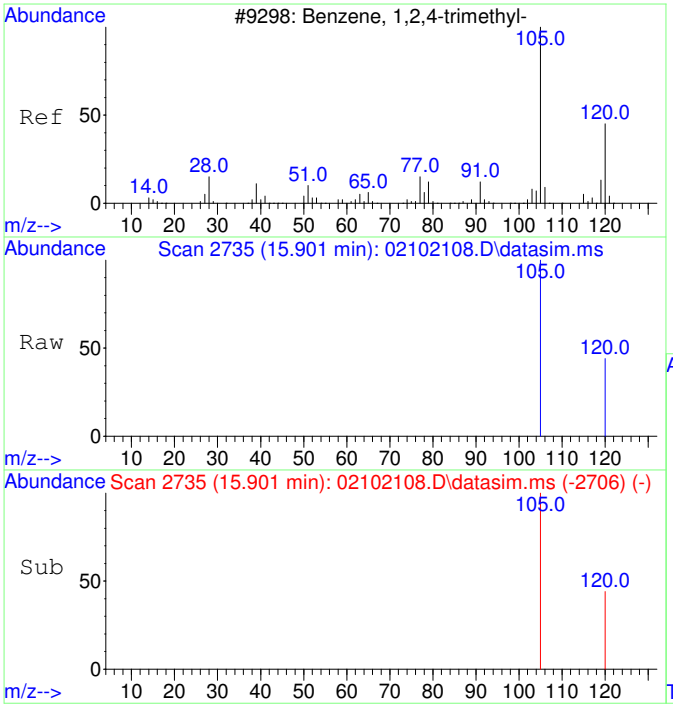


#22
1,3,5-Trimethylbenzene
Concen: 43.49 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:105 Resp: 2354

Ion	Ratio	Lower	Upper
105	100		
120	47.6	21.1	81.1

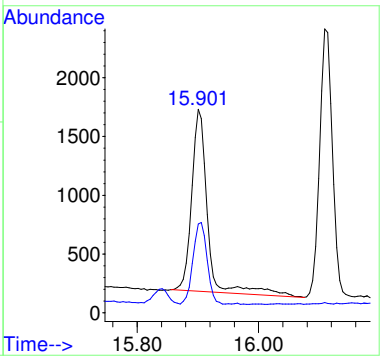


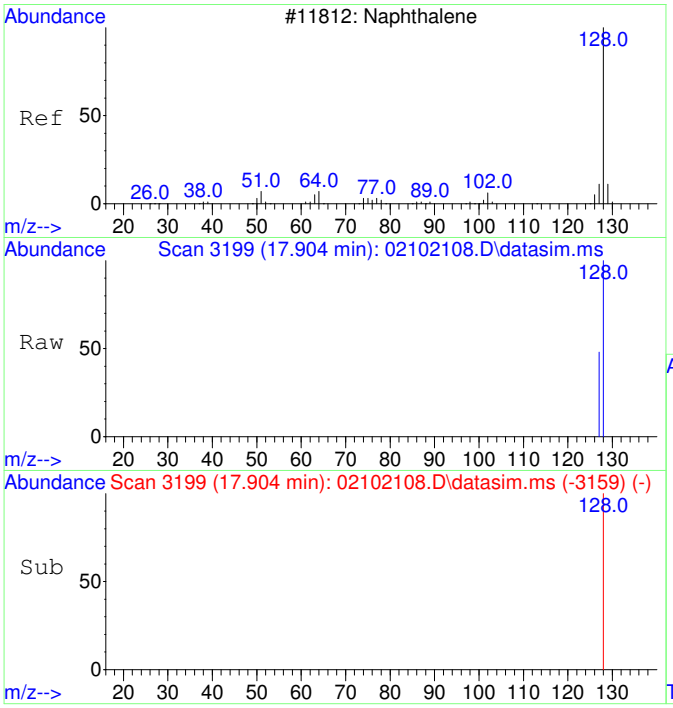


#23
1,2,4-Trimethylbenzene
Concen: 50.50 ug/L
RT: 15.901 min Scan# 2735
Delta R.T. -0.005 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:105 Resp: 2796

Ion	Ratio	Lower	Upper
105	100		
120	39.9	17.2	77.2

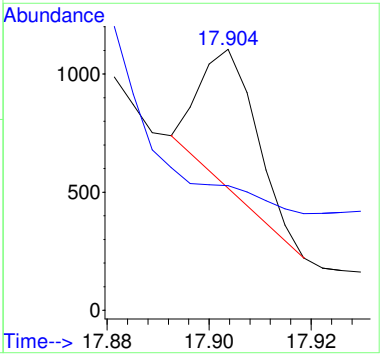


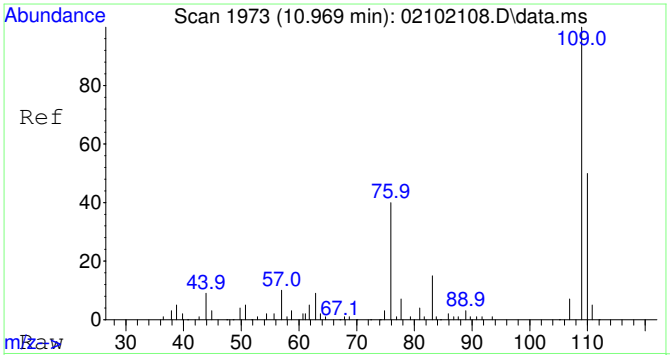


#24
Naphthalene
Concen: 4.33 ug/L
RT: 17.904 min Scan# 3199
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:128 Resp: 388

Ion	Ratio	Lower	Upper
128	100		
127	0.0	0.0	42.5

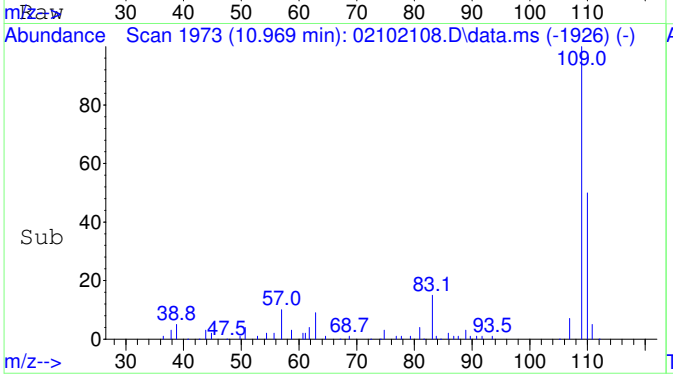


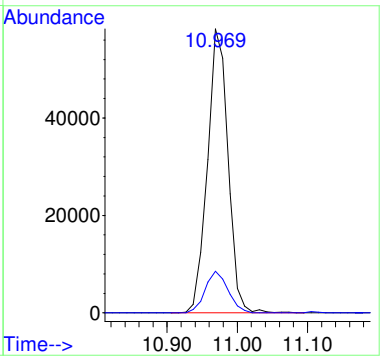


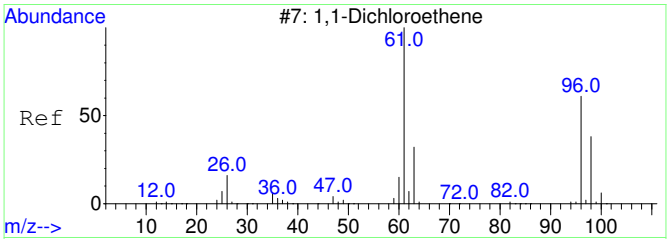
#25
2-Fluorotoluene SCAN
Concen: 5418.13 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:109 Resp: 118834

Ion	Ratio	Lower	Upper
109	100		
83	16.2	0.0	43.8



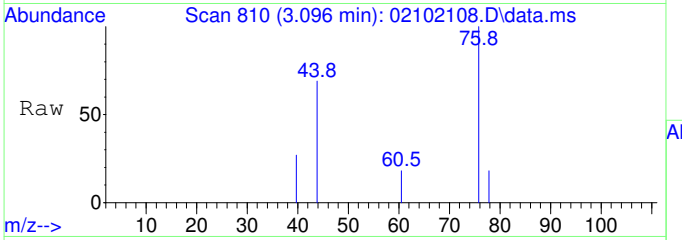


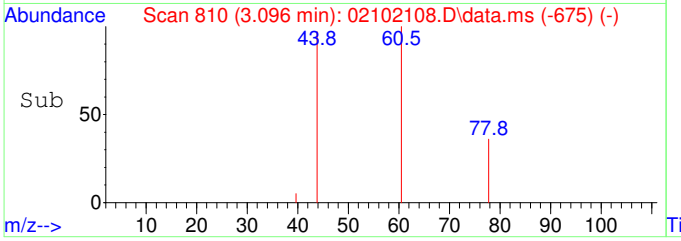


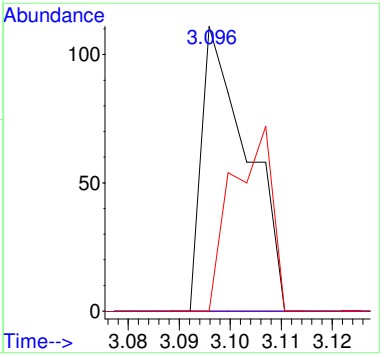
#26
1,1-Dichloroethene SCAN
Concen: 13.67 ug/L
RT: 3.096 min Scan# 810
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

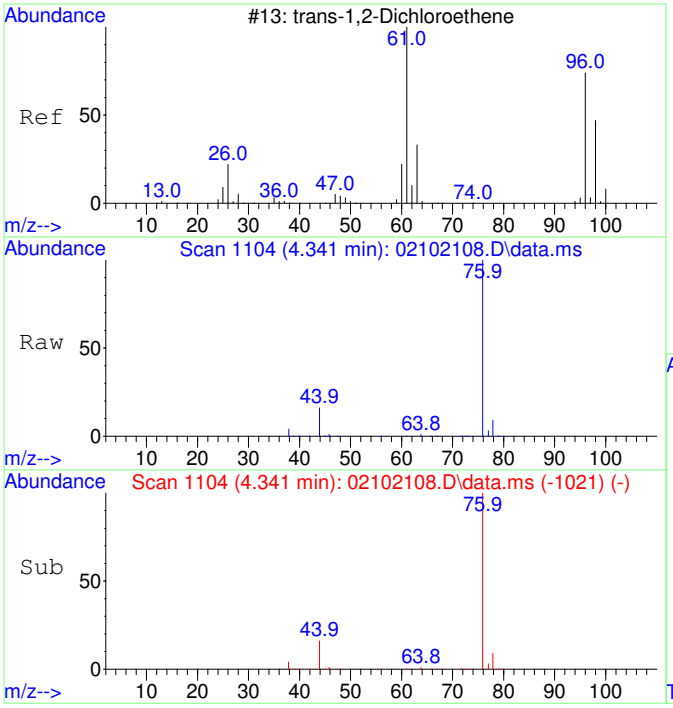
Tgt Ion: 61 Resp: 70

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





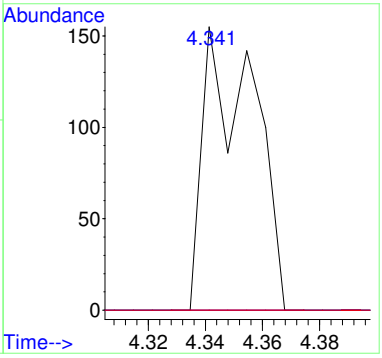


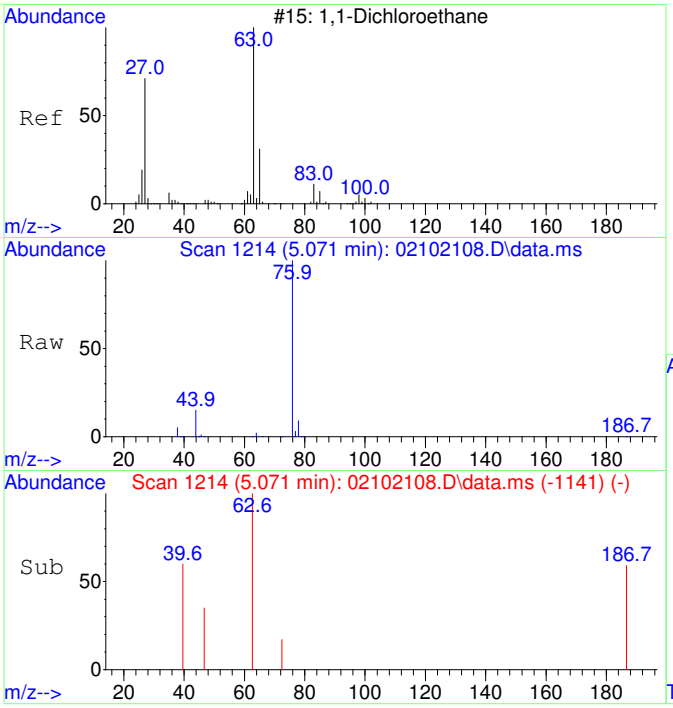


#27
trans-1,2-Dichloroethene SCAN
Concen: 29.44 ug/L
RT: 4.341 min Scan# 1104
Delta R.T. -0.040 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 61 Resp: 192

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

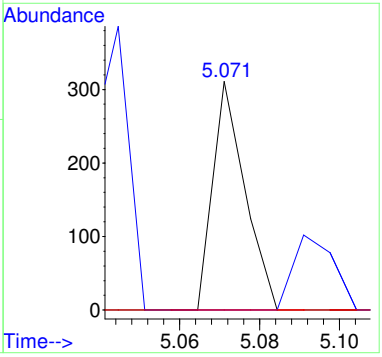


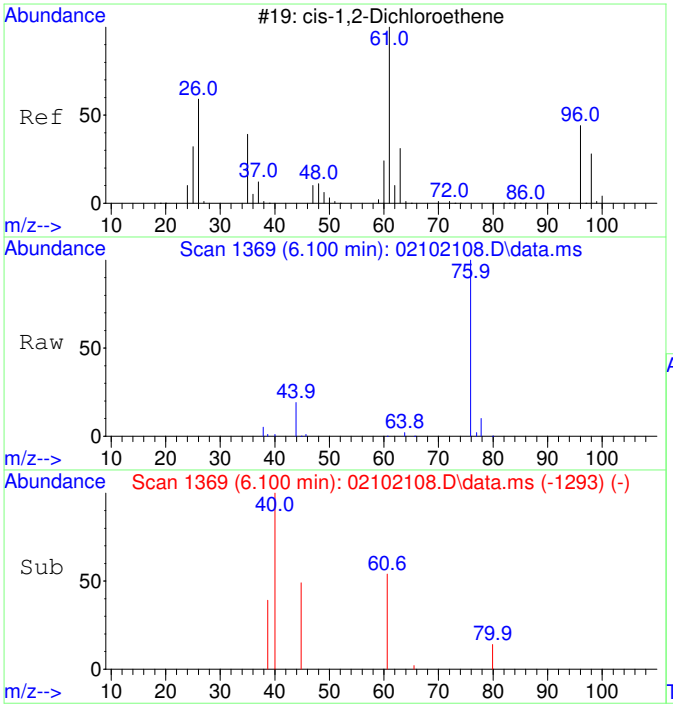


#28
1,1-Dichloroethane SCAN
Concen: 22.47 ug/L
RT: 5.071 min Scan# 1214
Delta R.T. -0.013 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 63 Resp: 173

Ion	Ratio	Lower	Upper
63	100		
65	41.6	1.3	61.3
83	0.0	0.0	45.9

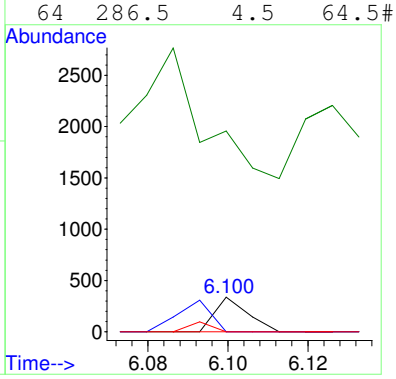


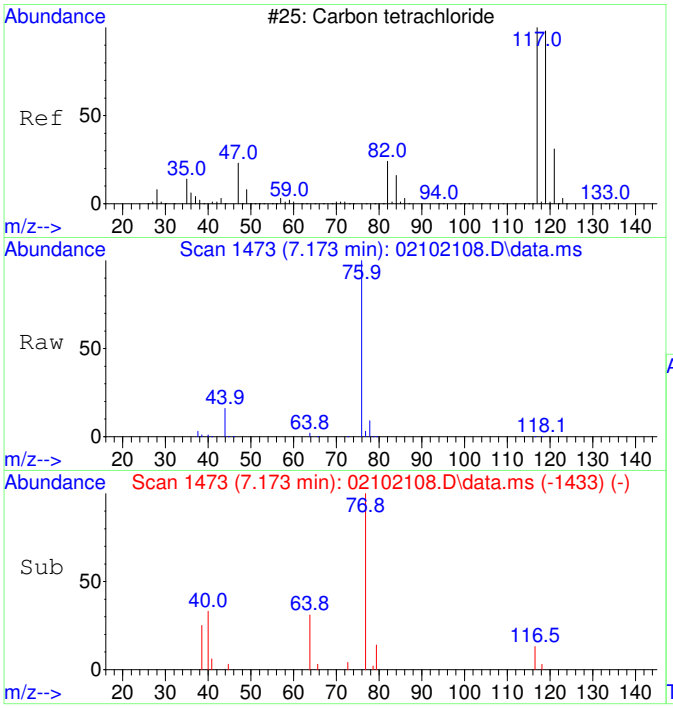


#29
cis-1,2-Dichloroethene SCAN
Concen: 25.37 ug/L
RT: 6.100 min Scan# 1369
Delta R.T. 0.007 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 61 Resp: 192

Ion	Ratio	Lower	Upper
61	100		
96	93.8	39.9	99.9
98	0.0	13.5	73.5#
64	286.5	4.5	64.5#

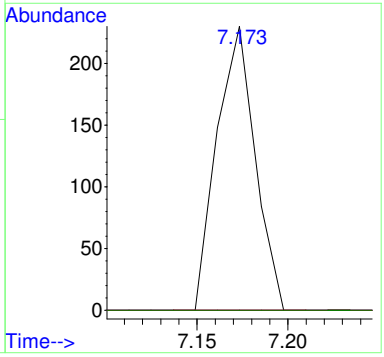


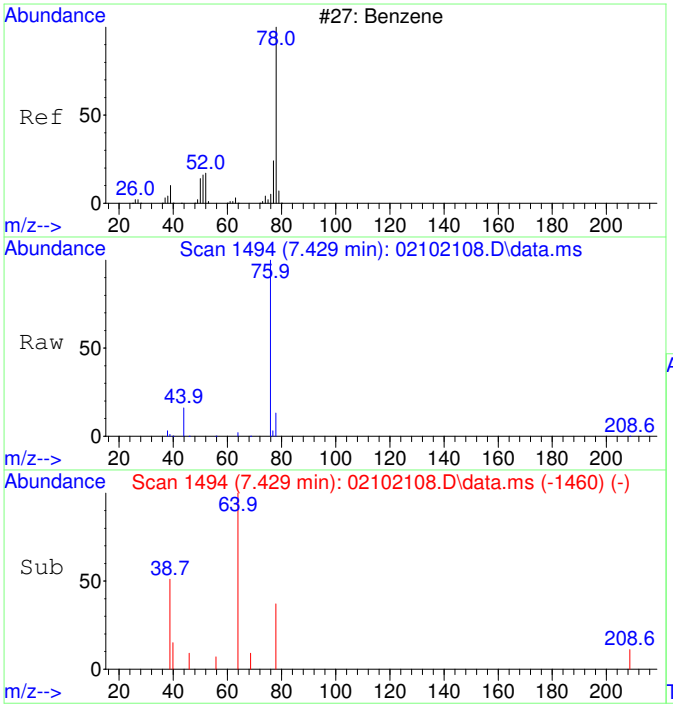


#32
Carbon tetrachloride SCAN
Concen: 54.14 ug/L
RT: 7.173 min Scan# 1473
Delta R.T. -0.012 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:117 Resp: 337

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

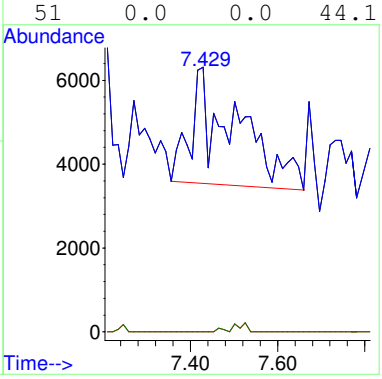


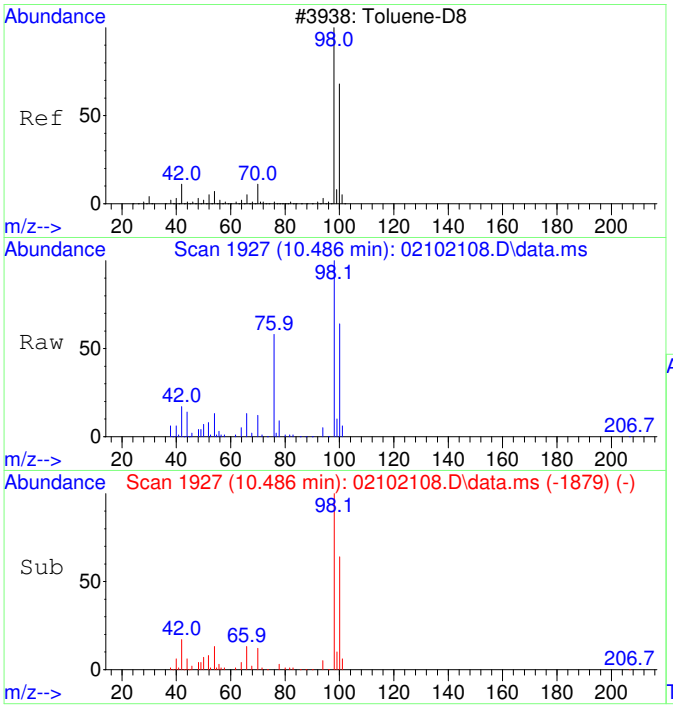


#33
Benzene SCAN
Concen: 911.54 ug/L
RT: 7.429 min Scan# 1494
Delta R.T. -0.085 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 78 Resp: 20086

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

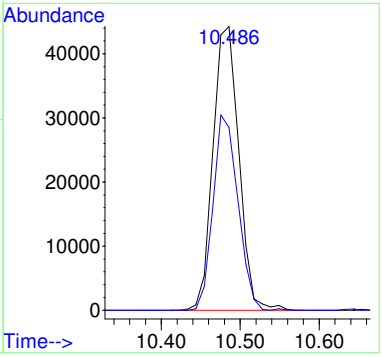


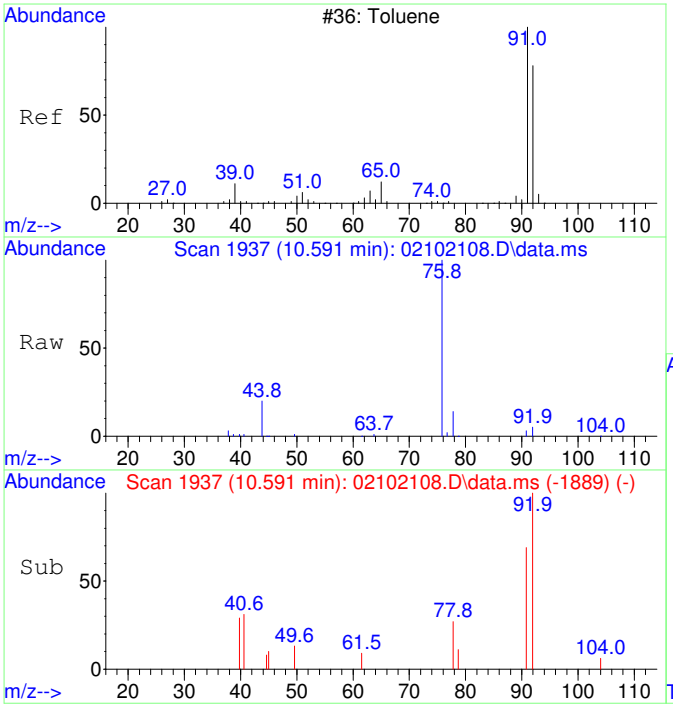


#36
Toluene-d8 SCAN
Concen: 4901.20 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 98 Resp: 100820

Ion	Ratio	Lower	Upper
98	100		
100	65.8	40.0	100.0

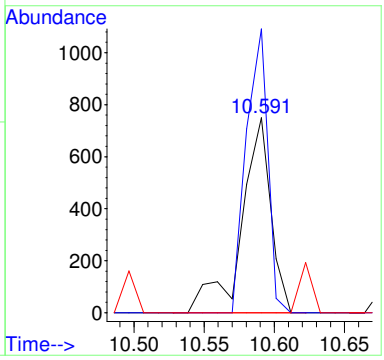


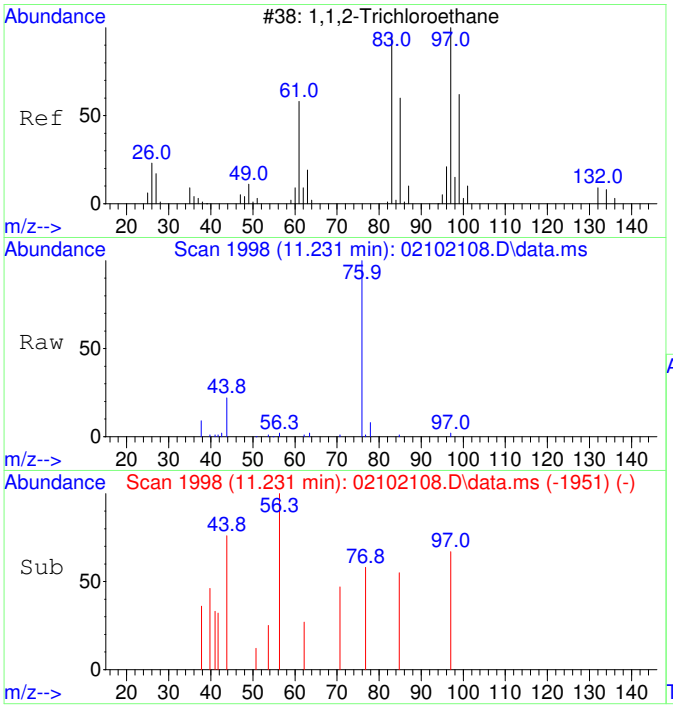


#37
Toluene SCAN
Concen: 43.08 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 1091

Ion	Ratio	Lower	Upper
91	100		
92	107.1	28.3	88.3#
65	0.0	0.0	41.0

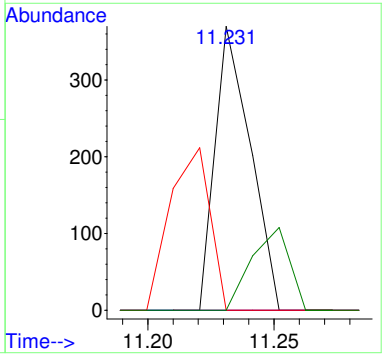


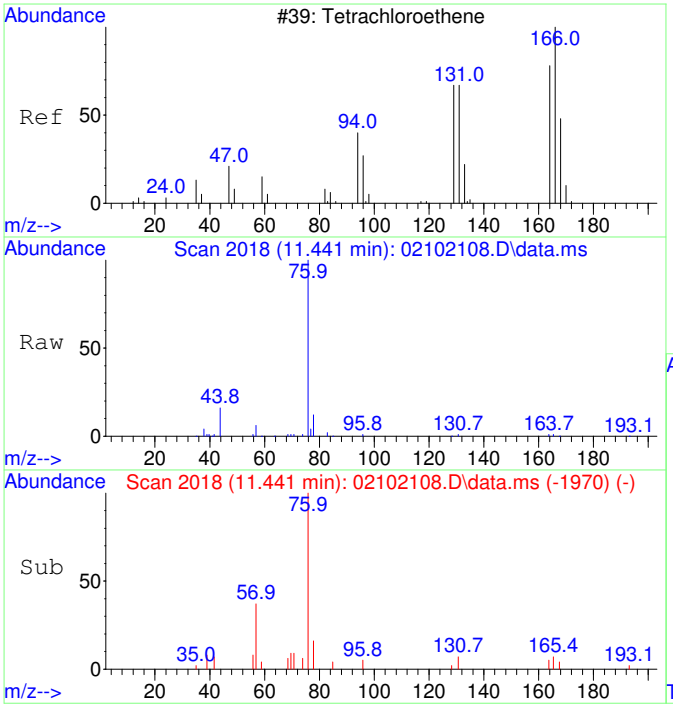


#38
1,1,2-Trichloroethane SCAN
Concen: 56.71 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. -0.011 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 97 Resp: 360

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	65.0	32.1	92.1
99	0.0	36.7	96.7#

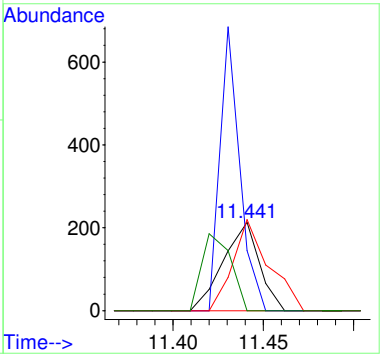


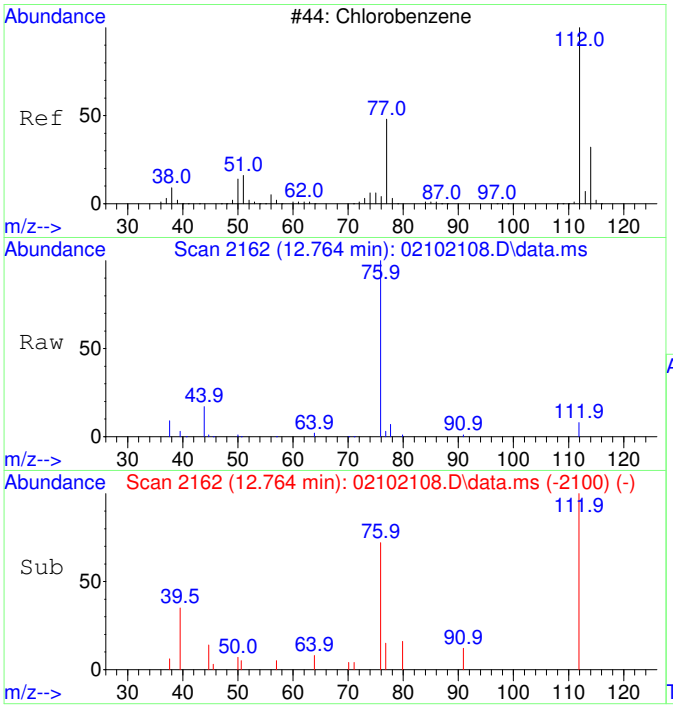


#39
Tetrachloroethene SCAN
Concen: 52.30 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:166 Resp: 298

Ion	Ratio	Lower	Upper
166	100		
164	175.5	50.9	110.9#
131	103.0	38.7	98.7#
129	0.0	41.8	101.8#

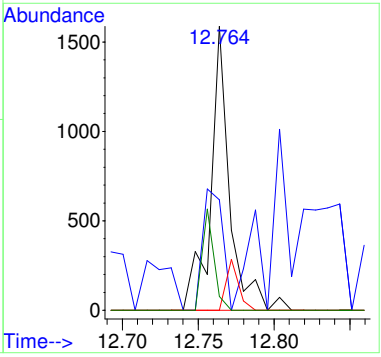


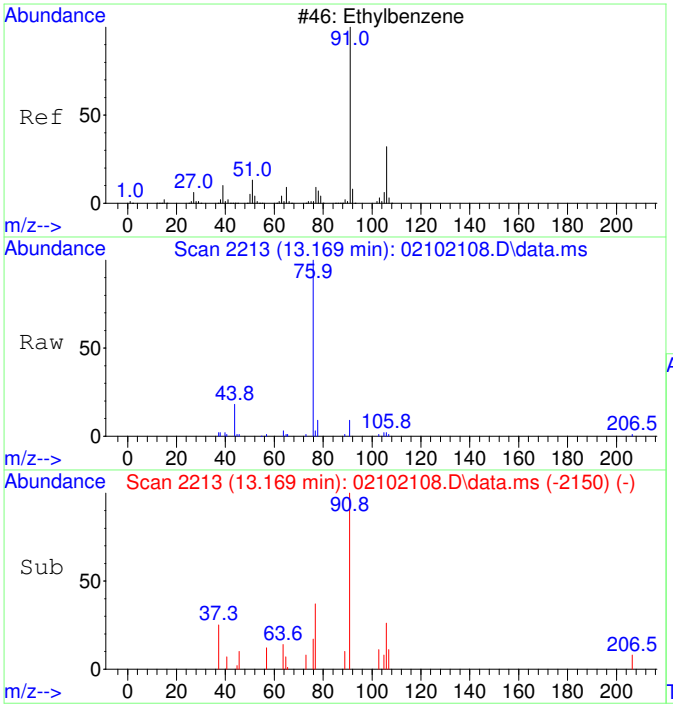


#40
Chlorobenzene SCAN
Concen: 76.36 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. -0.008 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:112 Resp: 1389

Ion	Ratio	Lower	Upper
112	100		
77	44.5	28.2	88.2
114	11.5	2.3	62.3
51	22.1	0.0	50.1

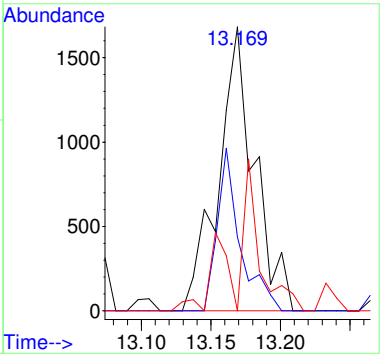


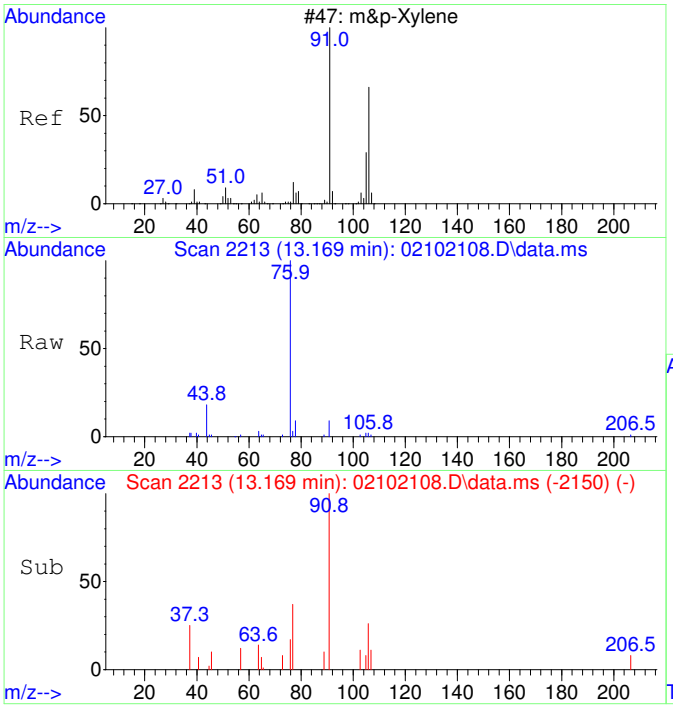


#42
Ethylbenzene SCAN
Concen: 63.05 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 3043

Ion	Ratio	Lower	Upper
91	100		
106	36.1	23.1	83.1
51	37.8	0.0	40.1

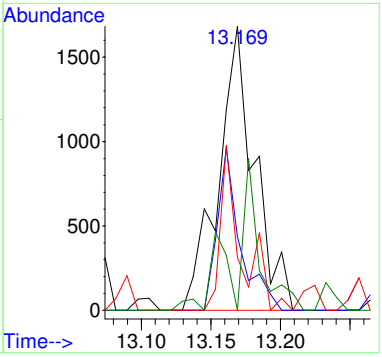


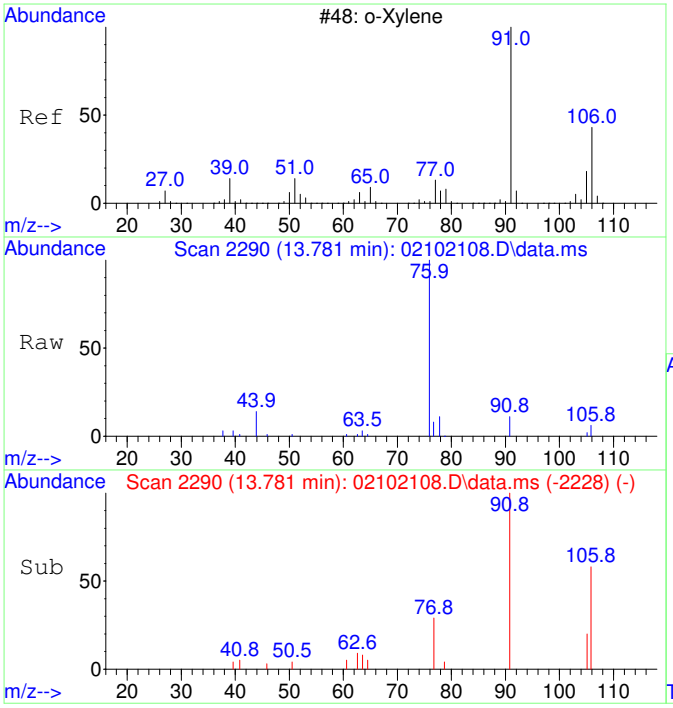


#43
m&p-Xylene SCAN
Concen: 63.05 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 3043

Ion	Ratio	Lower	Upper
91	100		
106	36.1	23.1	83.1
105	32.7	0.0	54.7
51	37.8	0.0	40.1

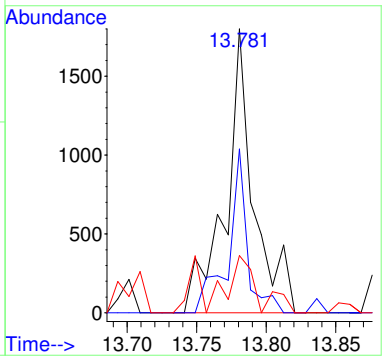


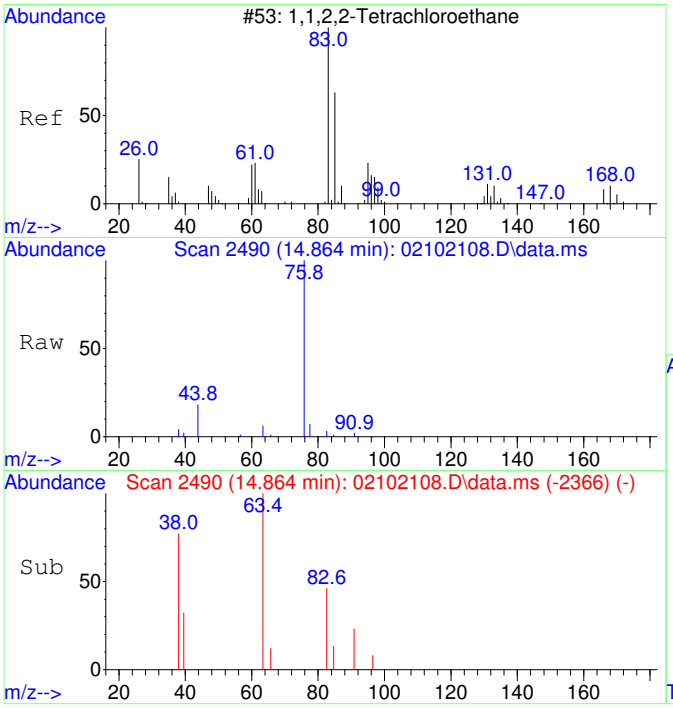


#44
o-Xylene SCAN
Concen: 95.43 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.008 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 91 Resp: 2515

Ion	Ratio	Lower	Upper
91	100		
106	39.0	18.0	78.0
105	22.3	0.0	56.6

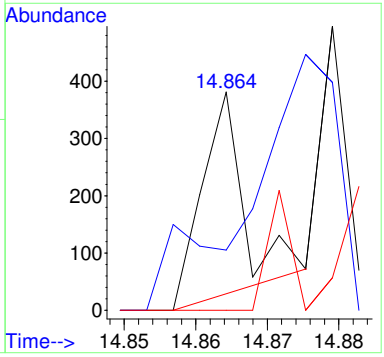


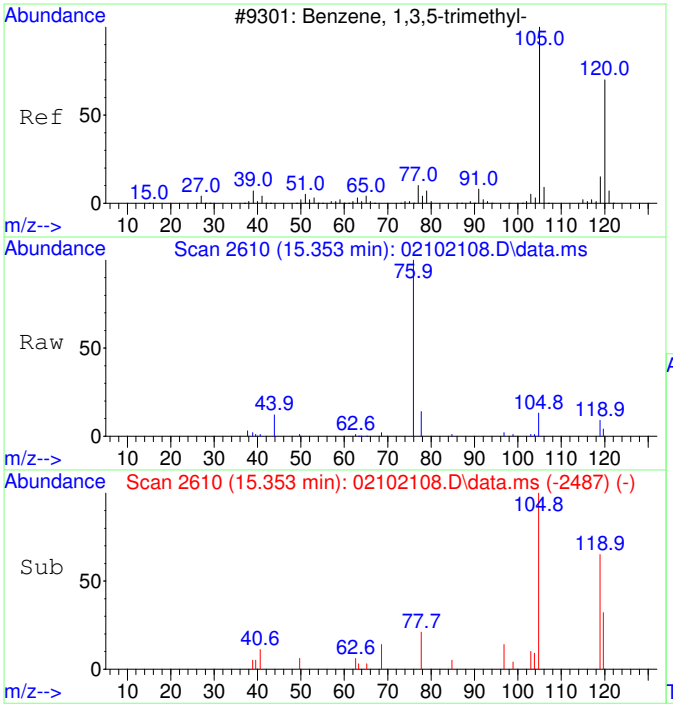


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 10.80 ug/L
RT: 14.864 min Scan# 2490
Delta R.T. -0.019 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion: 83 Resp: 148

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

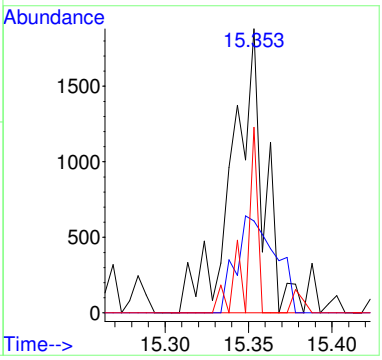


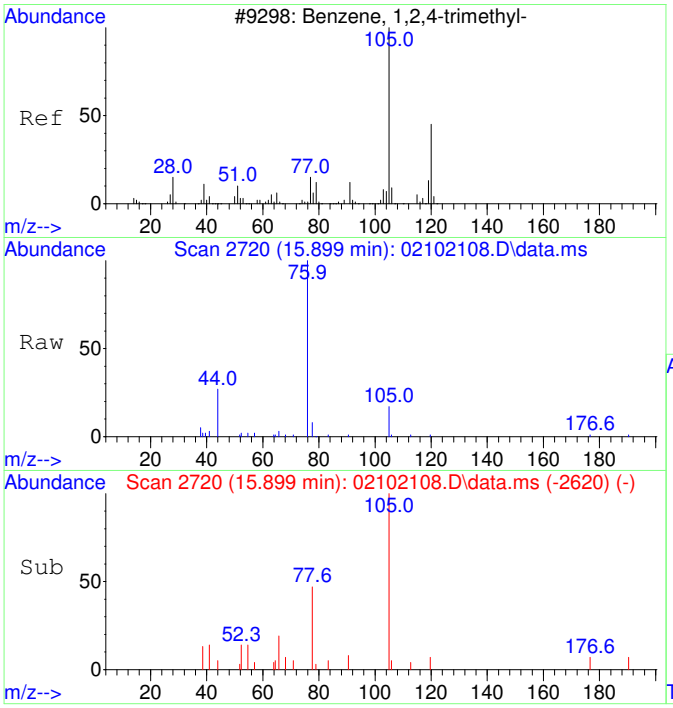


#46
1,3,5-Trimethylbenzene SCAN
Concen: 90.78 ug/L
RT: 15.353 min Scan# 2610
Delta R.T. -0.000 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:105 Resp: 2524

Ion	Ratio	Lower	Upper
105	100		
120	41.4	18.3	78.3
119	22.3	0.0	43.1

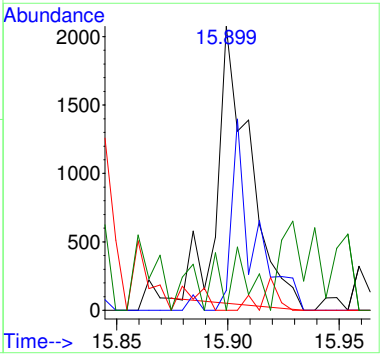


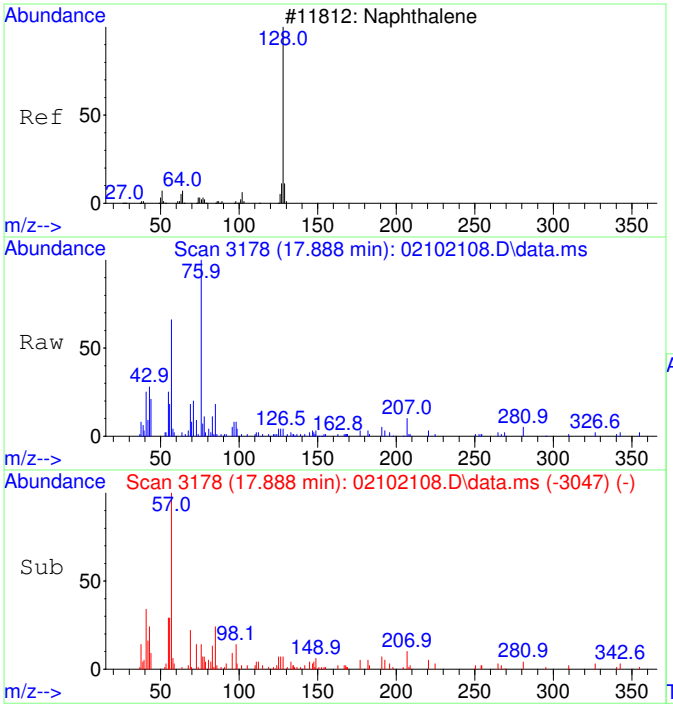


#47
1,2,4-Trimethylbenzene SCAN
Concen: 73.11 ug/L
RT: 15.899 min Scan# 2720
Delta R.T. -0.005 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:105 Resp: 2077

Ion	Ratio	Lower	Upper
105	100		
120	45.7	16.9	76.9
119	0.0	0.0	41.9
77	12.1	0.0	42.3

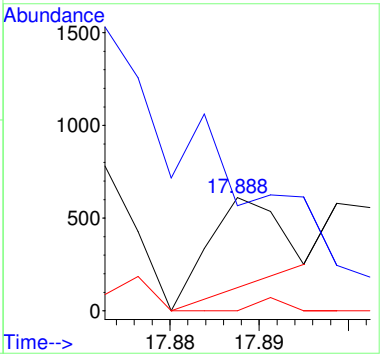




#48
Naphthalene SCAN
Concen: 6.45 ug/L
RT: 17.888 min Scan# 3178
Delta R.T. -0.015 min
Lab File: 02102108.D
Acq: 10 Feb 2021 12:01

Tgt Ion:128 Resp: 275

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



CRDL STANDARD

Radiello D1

Laboratory: EPA Region 9 Laboratory
SDG: 21039A
Client: California Site Cleanup Section 3
Project: MEW OU1 FY2021 Vapor Intrusion Investigation
Instrument ID: AG5975CV
Calibration: 2012007
Sequence: S21B029

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
S21B029-CRL1	1,1-Dichloroethene	50.0	46.8	94	ug/L	60 - 140
	trans-1,2-Dichloroethene	50.0	43.2	86	ug/L	60 - 140
	1,1-Dichloroethane	50.0	43.2	86	ug/L	60 - 140
	cis-1,2-Dichloroethene	50.0	42.5	85	ug/L	60 - 140
	Chloroform	50.0	50.0	100	ug/L	60 - 140
	Trichloroethene	50.0	43.0	86	ug/L	60 - 140
	Tetrachloroethene	50.0	44.9	90	ug/L	60 - 140
	Toluene-d8	50.0	43.2	86	ug/L	60 - 140

QLS REPORT

Instrument Name: AG5975C
Sample Name: S21B029-CRL1
Misc Info: 2106042 0.05 mg/L
Date Acquired: 2/10/21 10:03
QLast Update: Tue Dec 08 06:26:34 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.980	5000.0	5000.00	100%	60	140	pass
2)	1,1-Dichloroethene	3.090	50.0	46.77	94%	60	140	pass
3)	trans-1,2-Dichloroethene	4.376	50.0	43.24	86%	60	140	pass
4)	1,1-Dichloroethane	5.086	50.0	43.20	86%	60	140	pass
5)	cis-1,2-Dichloroethene	6.088	50.0	42.47	85%	60	140	pass
6)	Chloroform	6.652	50.0	50.03	100%	60	140	pass
7)	1,1,1-Trichloroethane	6.919	50.0	45.43	91%	60	140	pass
8)	Carbon tetrachloride	7.187	50.0	45.42	91%	60	140	pass
10)	1,2-Dichloroethane	7.552	50.0	48.12	96%	60	140	pass
11)	Trichloroethene	8.575	50.0	43.01	86%	60	140	pass
12)	Toluene-d8	10.487	50.0	43.16	86%	60	140	pass
13)	Toluene	10.582	50.0	49.99	100%	60	140	pass
14)	1,1,2-Trichloroethane	11.232	50.0	41.06	82%	60	140	pass
15)	Tetrachloroethene	11.432	50.0	44.89	90%	60	140	pass
16)	Chlorobenzene	12.773	50.0	75.67	151%	60	140	FAIL
17)	1,1,1,2-Tetrachloroethane	12.916	50.0	43.49	87%	60	140	pass
18)	Ethylbenzene	12.972	50.0	45.80	92%	60	140	pass
19)	m&p-Xylene	13.170	100.0	94.00	94%	60	140	pass
20)	o-Xylene	13.782	50.0	45.58	91%	60	140	pass
21)	1,1,2,2-Tetrachloroethane	14.880	50.0	42.99	86%	60	140	pass
22)	1,3,5-Trimethylbenzene	15.350	50.0	44.93	90%	60	140	pass
23)	1,2,4-Trimethylbenzene	15.906	50.0	51.06	102%	60	140	pass
24)	Naphthalene	17.904	50.0	44.43	89%	60	140	pass

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102104.D
Acq On : 10 Feb 2021 10:03
InstName : AG5975C
Operator : TD
Sample : S21B029-CRL1
Misc : 2106042 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 10 10:22:03 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

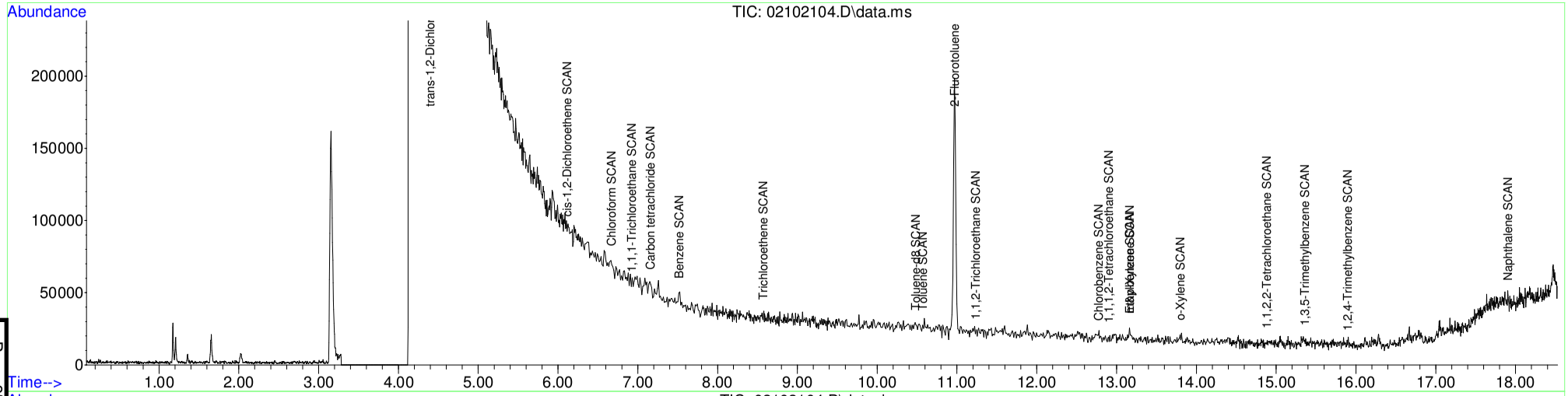
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	234587	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	1961	43.16	ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 0.86%#			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.090	61	770	82.78	ug/L #	54
3] trans-1,2-Dichloroethene	4.389	61	507	43.24	ug/L	58
4] 1,1-Dichloroethane	5.092	63	605	43.20	ug/L	76
5] cis-1,2-Dichloroethene	6.088	61	616	42.47	ug/L	99
6] Chloroform	6.652	83	697	50.03	ug/L	98
7] 1,1,1-Trichloroethane	6.919	97	680	45.43	ug/L	95
8] Carbon tetrachloride	7.187	117	650	45.42	ug/L	96
9] Benzene	7.503	78	3888	98.49	ug/L	71
10] 1,2-Dichloroethane	7.552	62	648	48.12	ug/L	48
11] Trichloroethene	8.570	130	536	43.01	ug/L	93
13] Toluene	10.582	91	2828	49.99	ug/L	99
14] 1,1,2-Trichloroethane	11.233	97	538	41.06	ug/L	97
15] Tetrachloroethene	11.432	166	791	44.89	ug/L	94
16] Chlorobenzene	12.765	112	3316	75.67	ug/L	89
17] 1,1,1,2-Tetrachloroethane	12.916	131	667	43.49	ug/L	94
18] Ethylbenzene	12.972	91	3309	45.80	ug/L	94
19] m&p-Xylene	13.163	91	5230	94.00	ug/L	97
20] o-Xylene	13.782	91	2724	45.58	ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.873	83	1197	42.99	ug/L	99
22] 1,3,5-Trimethylbenzene	15.345	105	2953	44.93	ug/L	96
23] 1,2,4-Trimethylbenzene	15.901	105	3432	51.06	ug/L	91
24] Naphthalene	17.903	128	4839	44.43	ug/L	99
25) 2-Fluorotoluene SCAN	10.969	109	138532	5202.49	ug/L	99
27) trans-1,2-Dichloroethe...	4.395	61	220	27.79	ug/L	90
29) cis-1,2-Dichloroethene...	6.113	61	357	38.86	ug/L #	1
30) Chloroform SCAN	6.663	83	403	47.03	ug/L #	83
31) 1,1,1-Trichloroethane ...	6.918	97	363	41.05	ug/L	84
32) Carbon tetrachloride SCAN	7.161	117	281	37.19	ug/L #	15
33) Benzene SCAN	7.514	78	5720	213.81	ug/L	94
35) Trichloroethene SCAN	8.574	130	273	46.80	ug/L #	61
36) Toluene-d8 SCAN	10.486	98	1556	62.30	ug/L #	15
37) Toluene SCAN	10.570	91	1930	62.77	ug/L #	78
38) 1,1,2-Trichloroethane ...	11.231	97	884	114.70	ug/L #	18
40) Chlorobenzene SCAN	12.772	112	2312	104.68	ug/L	72
41) 1,1,1,2-Tetrachloroeth...	12.899	131	347	45.54	ug/L #	57
42) Ethylbenzene SCAN	13.161	91	5049	86.16	ug/L	79
43) m&p-Xylene SCAN	13.161	91	5049	86.16	ug/L	77
44) o-Xylene SCAN	13.797	91	2117	66.16	ug/L #	58
45) 1,1,2,2-Tetrachloroeth...	14.879	83	734	44.12	ug/L #	61
46) 1,3,5-Trimethylbenzene...	15.358	105	2537	75.16	ug/L	89
47) 1,2,4-Trimethylbenzene...	15.895	105	2189	63.47	ug/L	89
48) Naphthalene SCAN	17.905	128	3273	63.22	ug/L	90

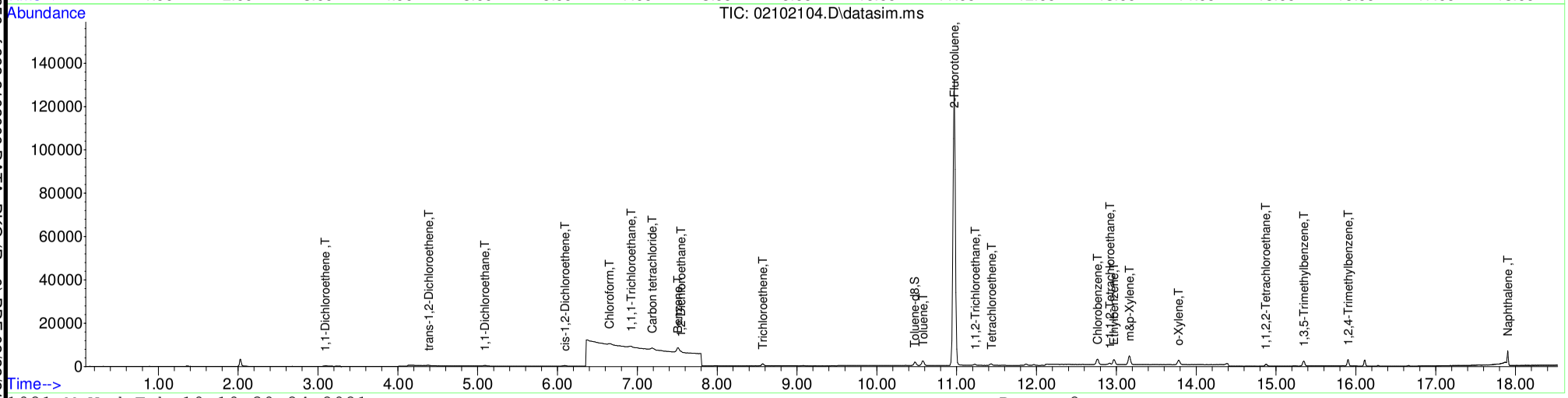
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102104.D
Acq On : 10 Feb 2021 10:03
InstName : AG5975C
Operator : TD
Sample : S21B029-CRL1
Misc : 2106042 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 10 10:22:03 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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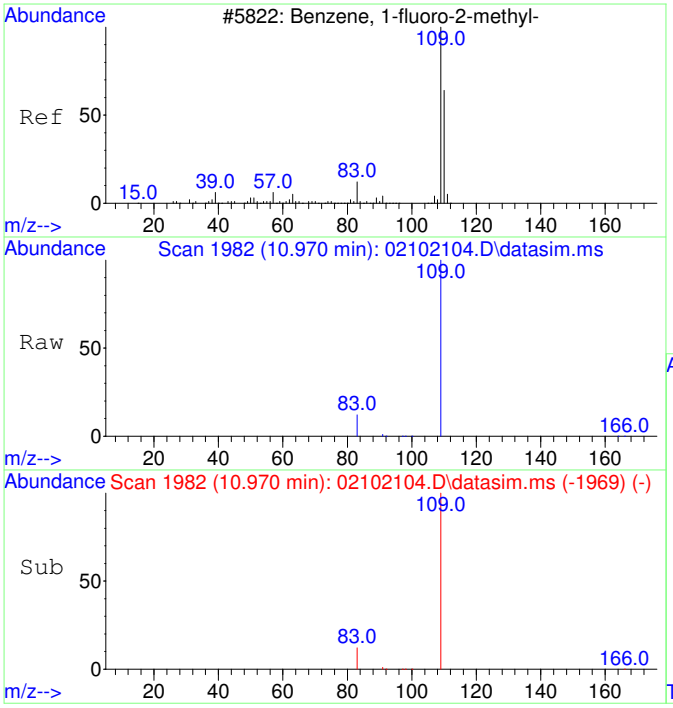
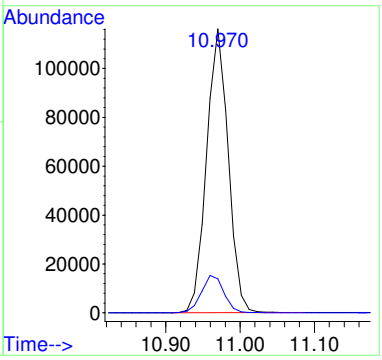
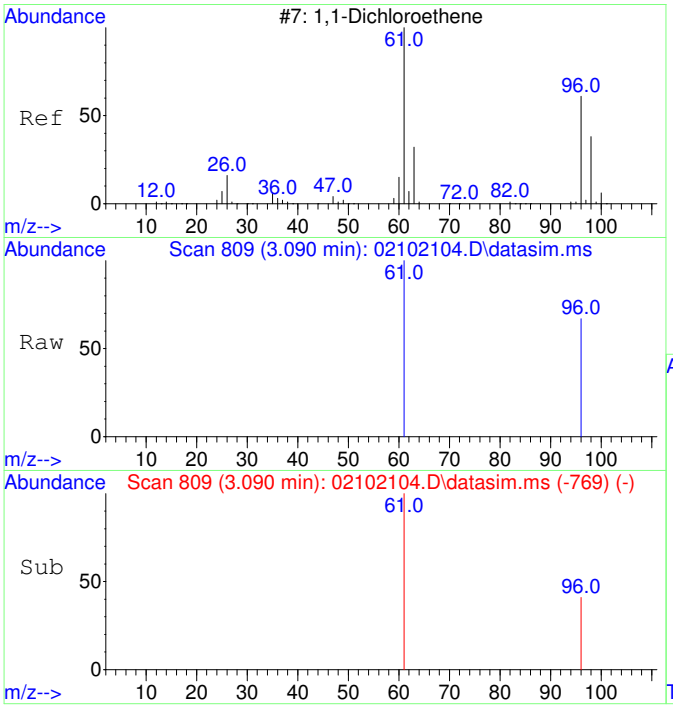


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:109 Resp: 234587

Ion	Ratio	Lower	Upper
109	100		
83	13.6	0.0	42.3

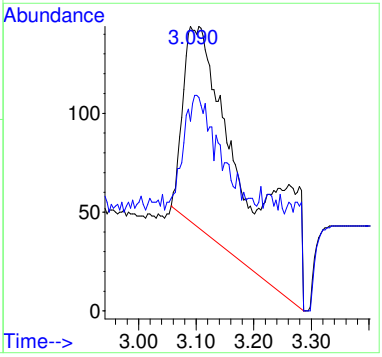




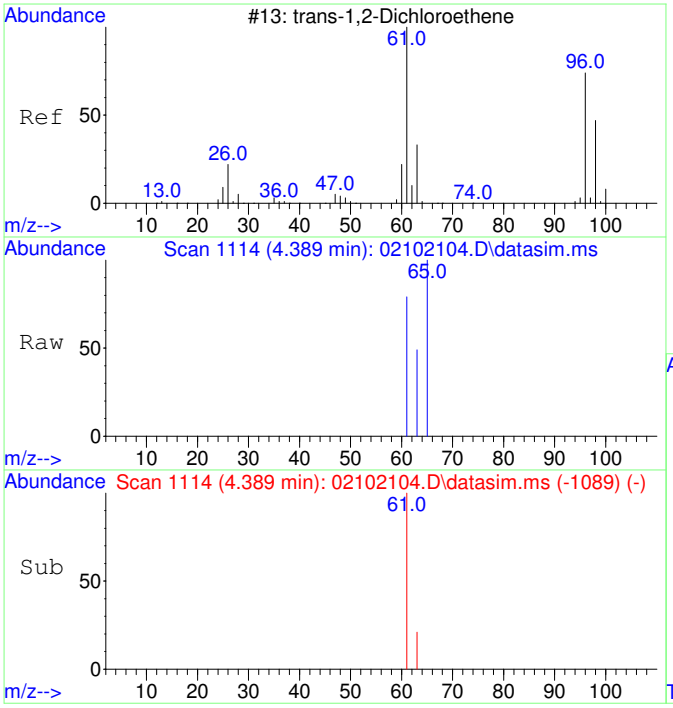
#2
1,1-Dichloroethene
Concen: 82.78 ug/L
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 61 Resp: 770

Ion	Ratio	Lower	Upper
61	100		
96	30.0	37.2	97.2#



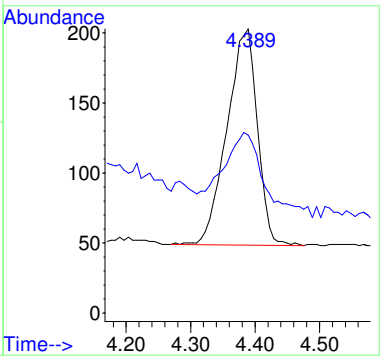
Before MI:
IMPROPER
BASELINE

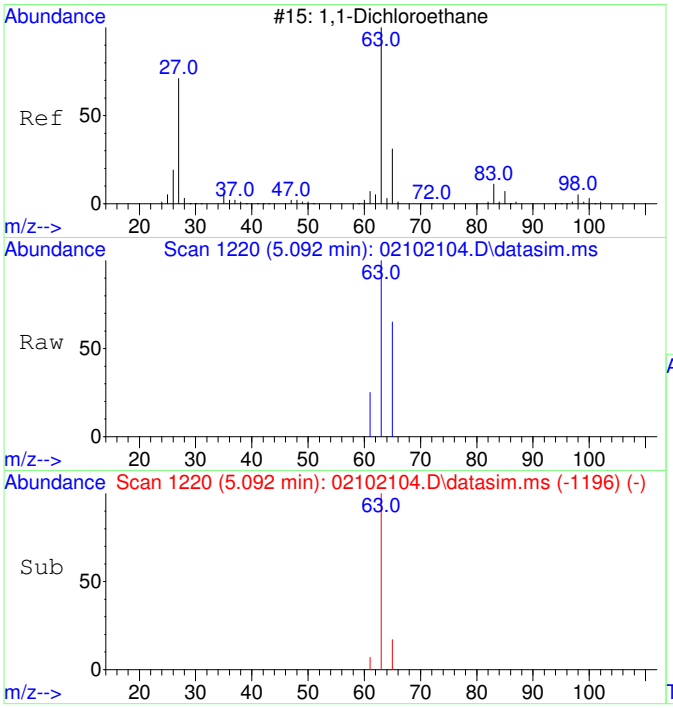


#3
trans-1,2-Dichloroethene
Concen: 43.24 ug/L
RT: 4.389 min Scan# 1114
Delta R.T. 0.013 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 61 Resp: 507

Ion	Ratio	Lower	Upper
61	100		
63	56.2	2.4	62.4

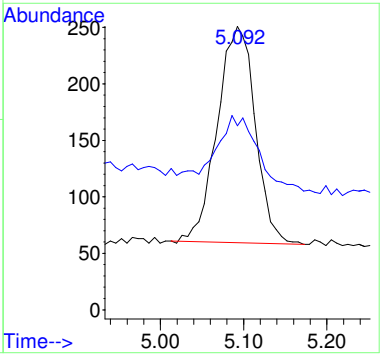


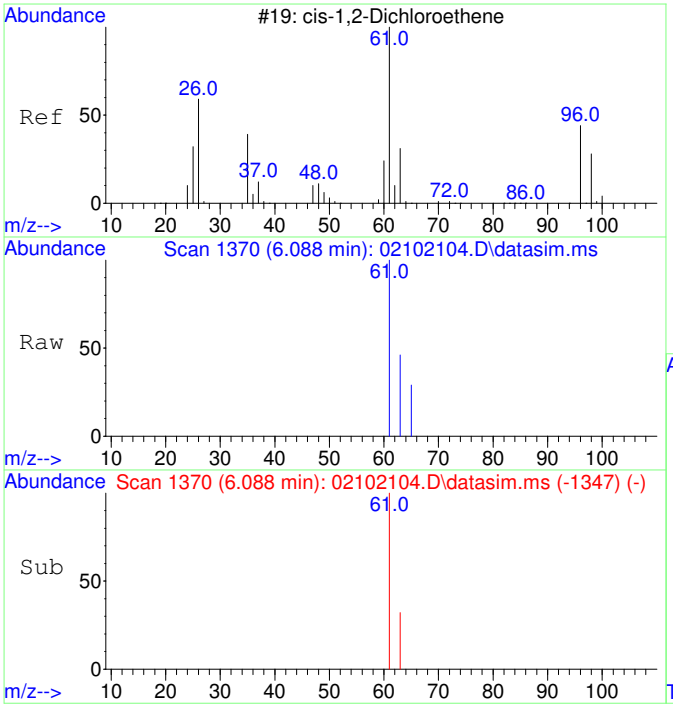


#4
1,1-Dichloroethane
Concen: 43.20 ug/L
RT: 5.092 min Scan# 1220
Delta R.T. 0.007 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 63 Resp: 605

Ion	Ratio	Lower	Upper
63	100		
65	45.3	1.8	61.8

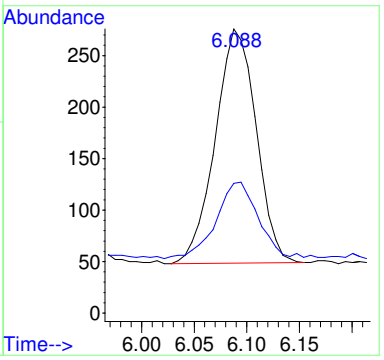


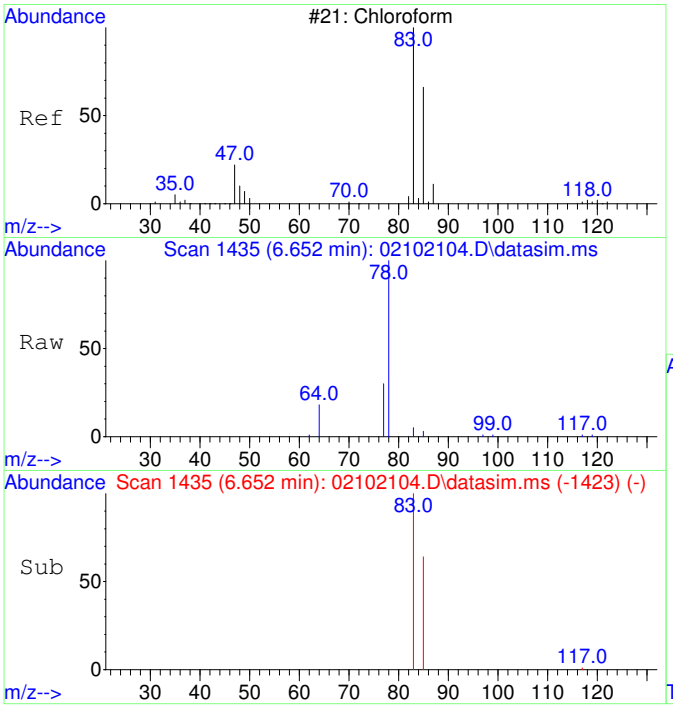


#5
cis-1,2-Dichloroethene
Concen: 42.47 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 61 Resp: 616

Ion	Ratio	Lower	Upper
61	100		
63	33.1	2.5	62.5

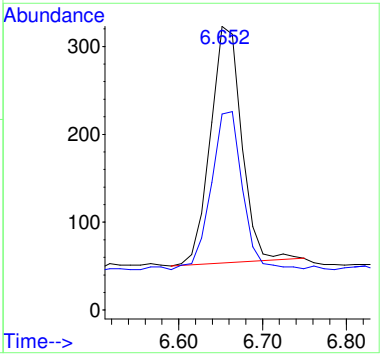


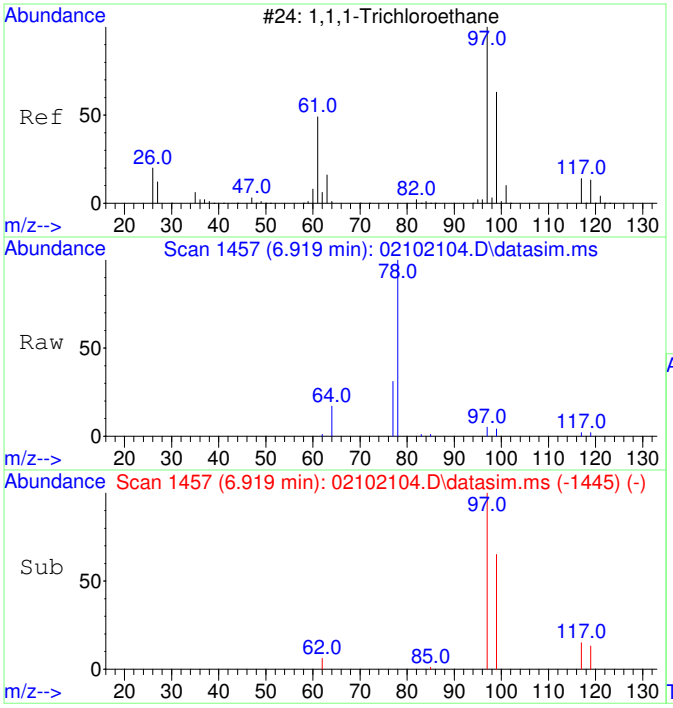


#6
Chloroform
Concen: 50.03 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 83 Resp: 697

Ion	Ratio	Lower	Upper
83	100		
85	66.4	35.1	95.1

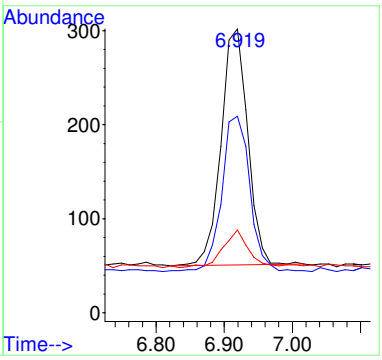


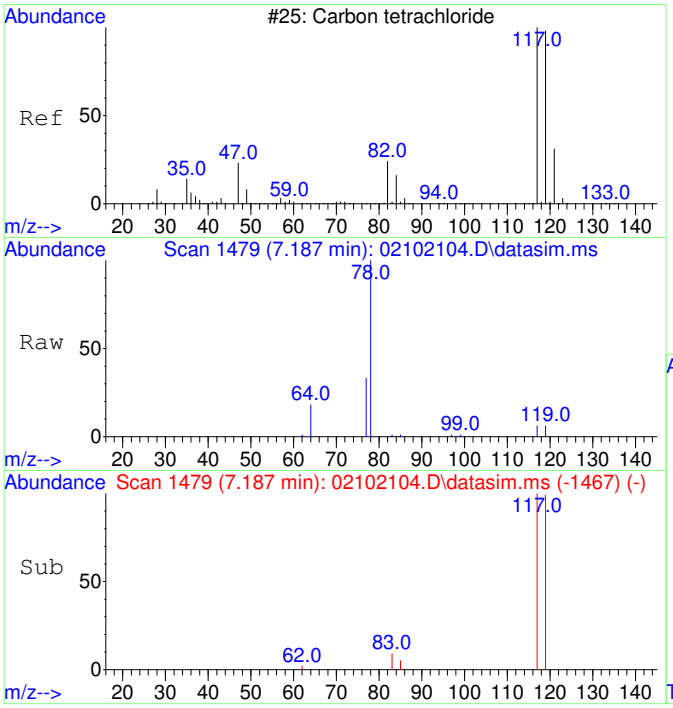


#7
1,1,1-Trichloroethane
Concen: 45.43 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 97 Resp: 680

Ion	Ratio	Lower	Upper
97	100		
99	68.5	34.6	94.6
117	15.6	0.0	43.2

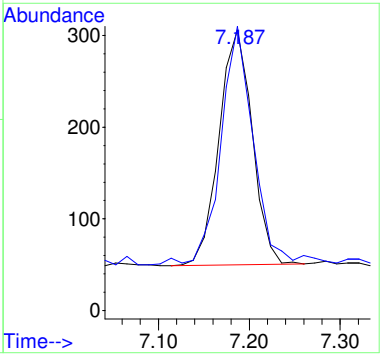


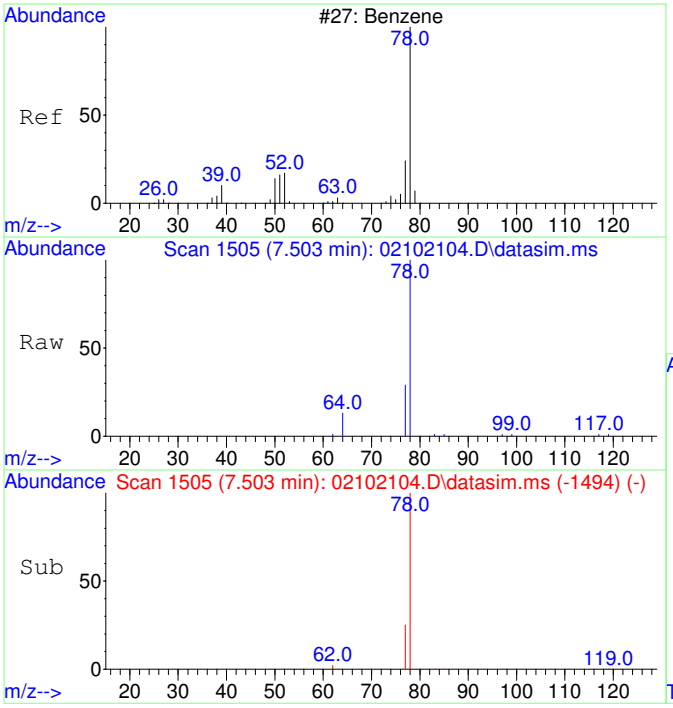


#8
Carbon tetrachloride
Concen: 45.42 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:117 Resp: 650

Ion	Ratio	Lower	Upper
117	100		
119	100.8	66.4	126.4

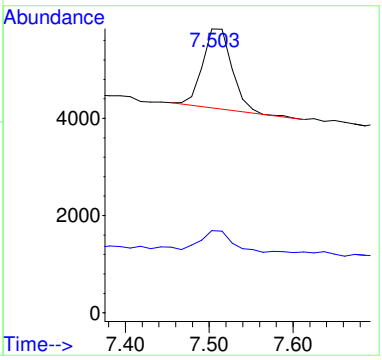


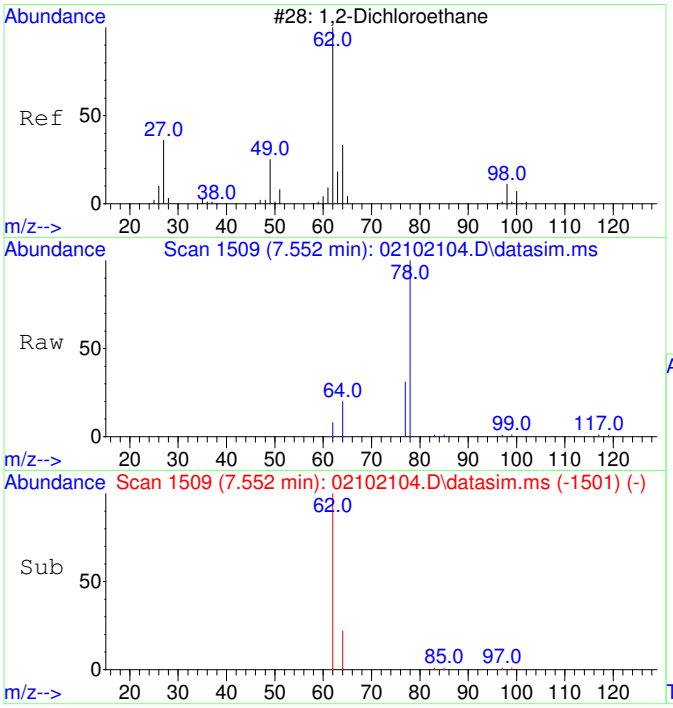


#9
Benzene
Concen: 98.49 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 78 Resp: 3888

Ion	Ratio	Lower	Upper
78	100		
77	37.5	0.0	53.2

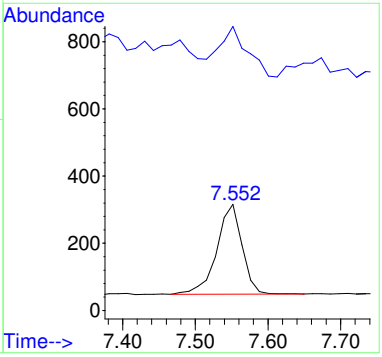


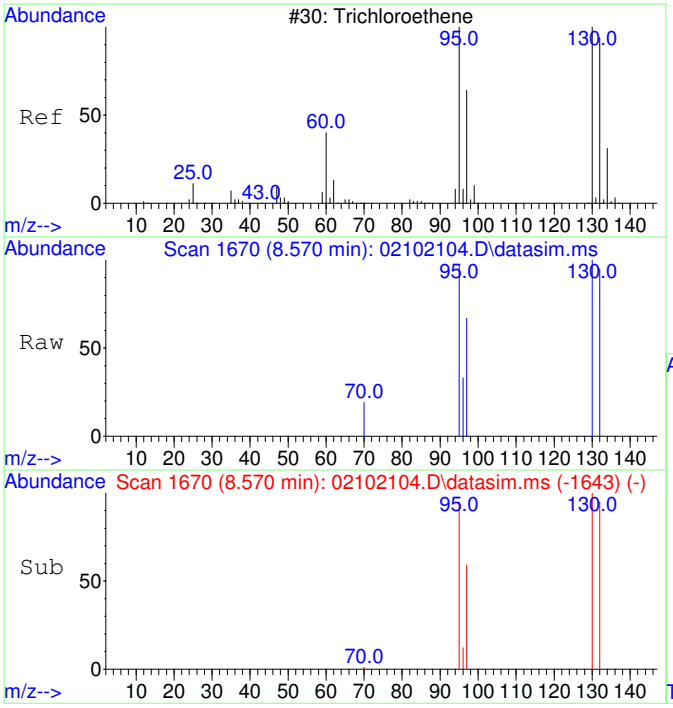


#10
1,2-Dichloroethane
Concen: 48.12 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 62 Resp: 648

Ion	Ratio	Lower	Upper
62	100		
64	61.3	2.3	62.3

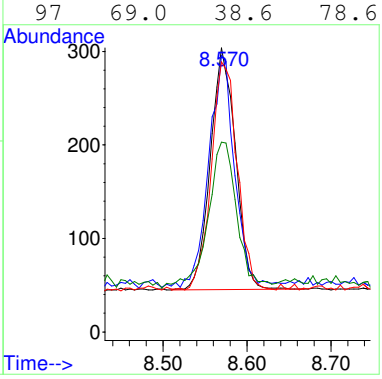


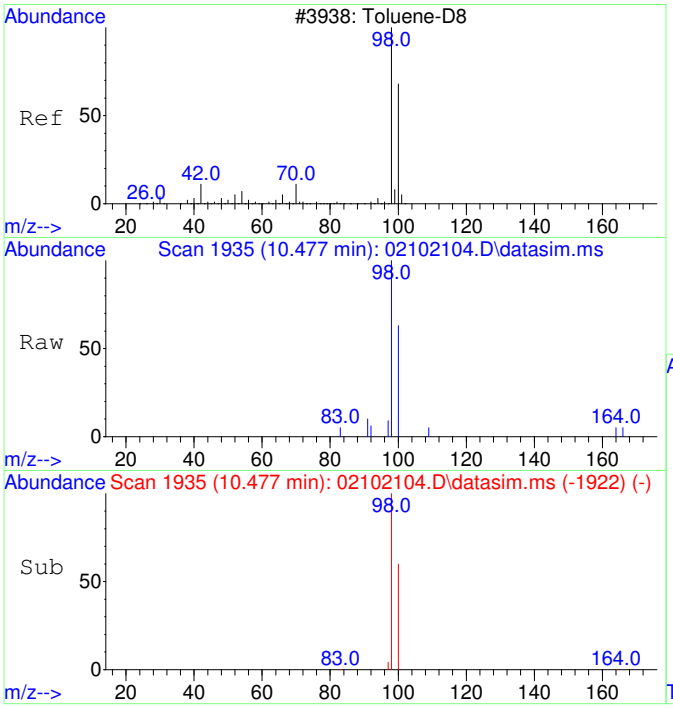


#11
Trichloroethene
Concen: 43.01 ug/L
RT: 8.570 min Scan# 1670
Delta R.T. -0.005 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:130 Resp: 536

Ion	Ratio	Lower	Upper
130	100		
95	98.9	60.7	120.7
132	97.0	76.0	116.0
97	69.0	38.6	78.6

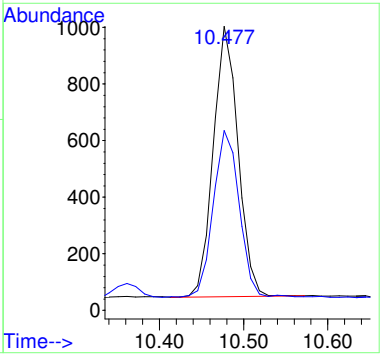


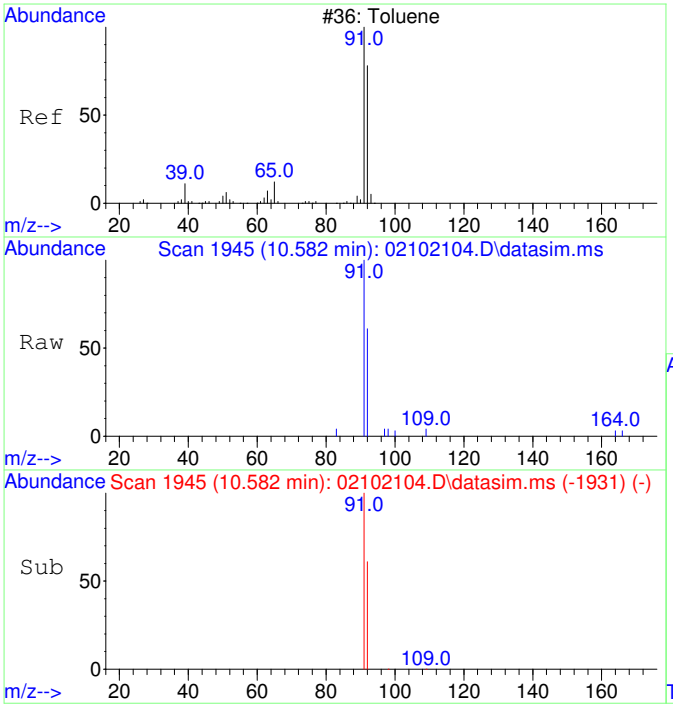


#12
Toluene-d8
Concen: 43.16 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 98 Resp: 1961

Ion	Ratio	Lower	Upper
98	100		
100	64.1	37.1	97.1

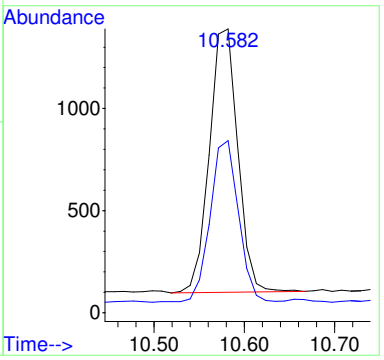


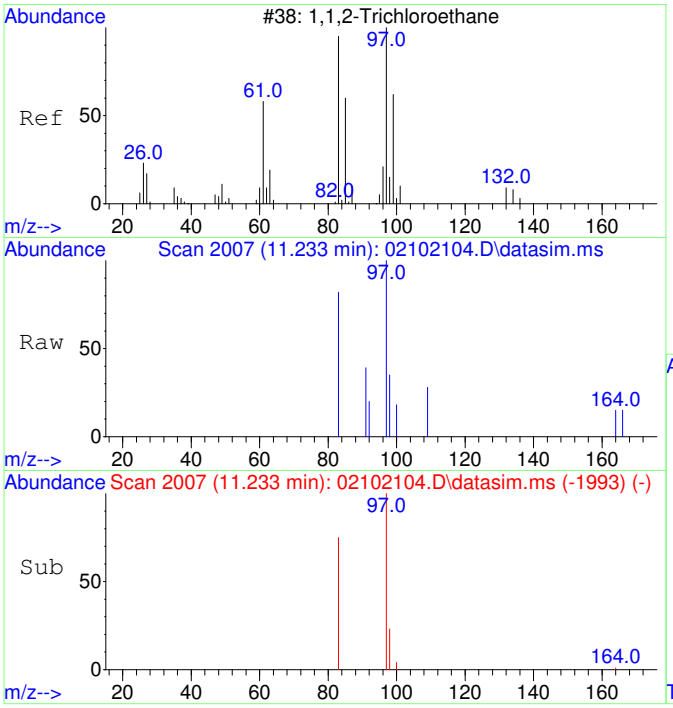


#13
Toluene
Concen: 49.99 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 2828

Ion	Ratio	Lower	Upper
91	100		
92	60.5	29.9	89.9

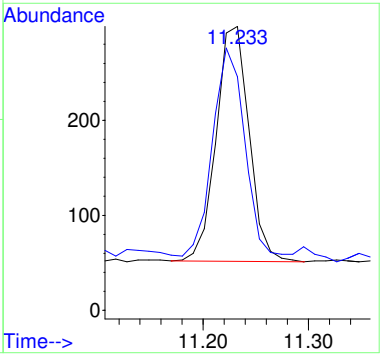


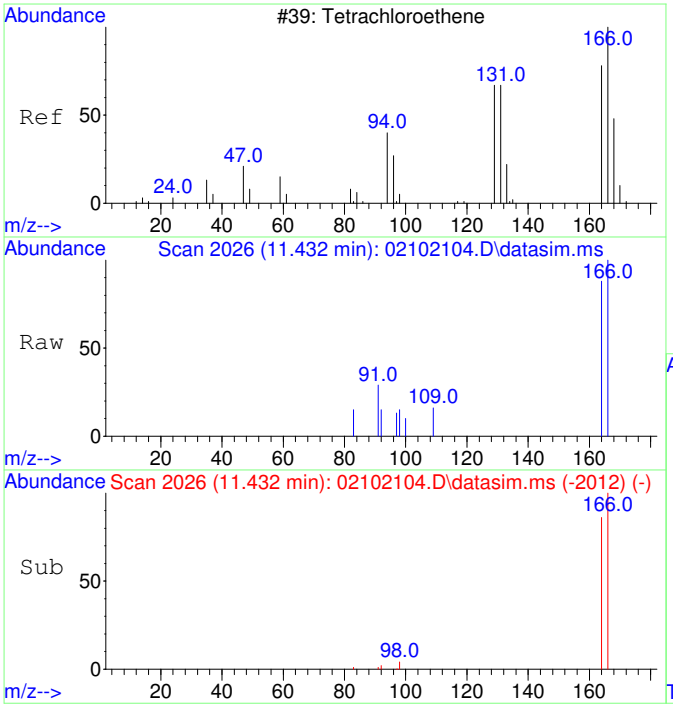


#14
1,1,2-Trichloroethane
Concen: 41.06 ug/L
RT: 11.233 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 97 Resp: 538

Ion	Ratio	Lower	Upper
97	100		
83	84.2	51.2	111.2

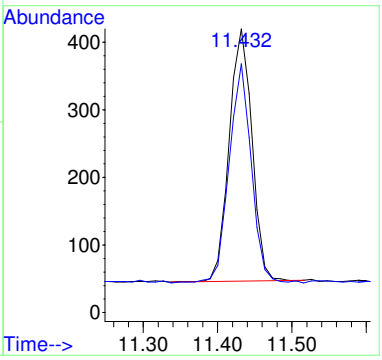


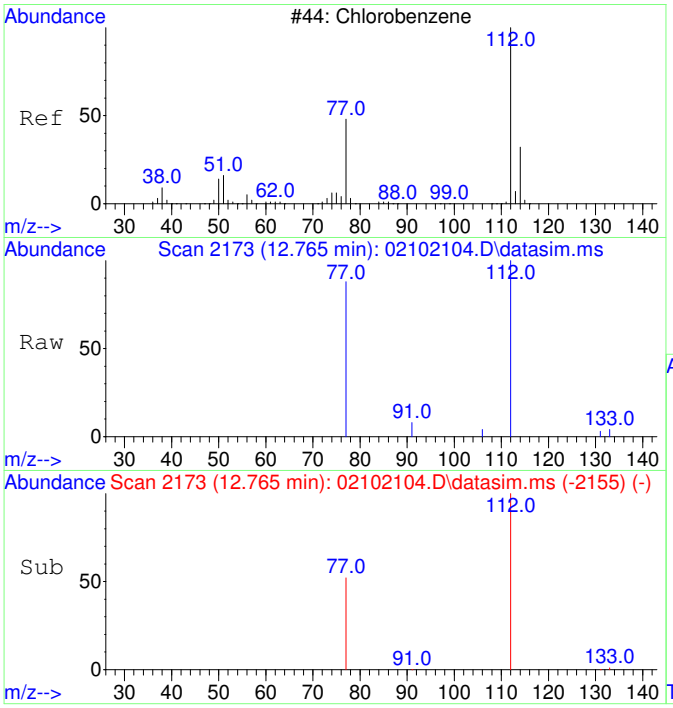


#15
Tetrachloroethene
Concen: 44.89 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:166 Resp: 791

Ion	Ratio	Lower	Upper
166	100		
164	83.2	47.8	107.8

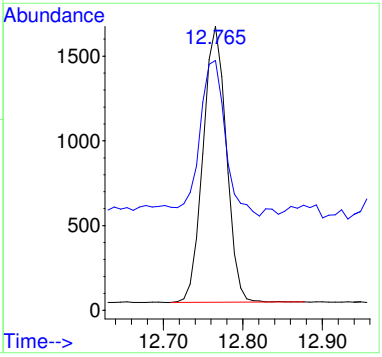


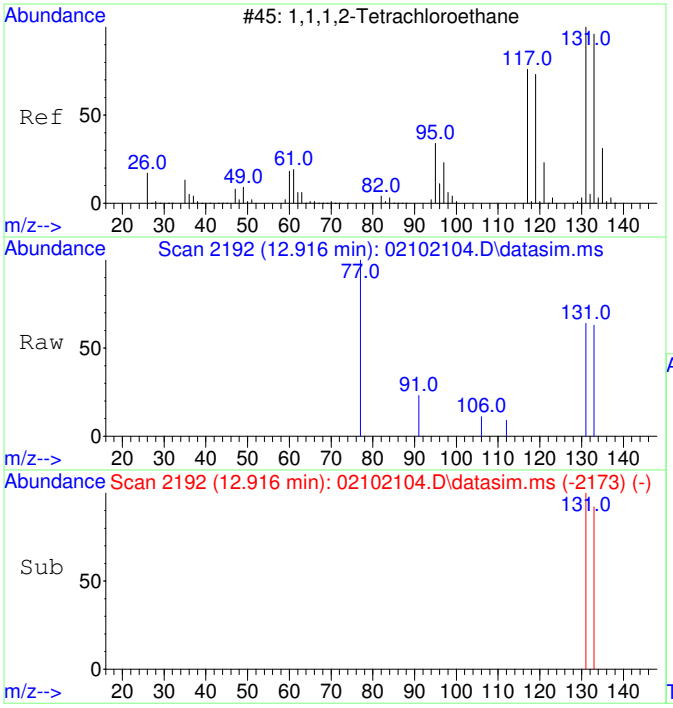


#16
Chlorobenzene
Concen: 75.67 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:112 Resp: 3316

Ion	Ratio	Lower	Upper
112	100		
77	61.3	23.6	83.6

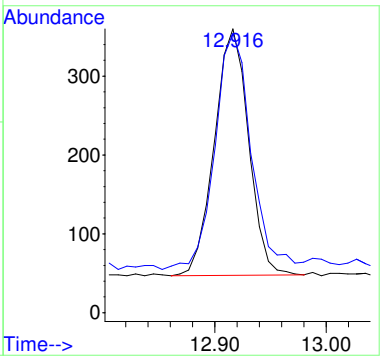


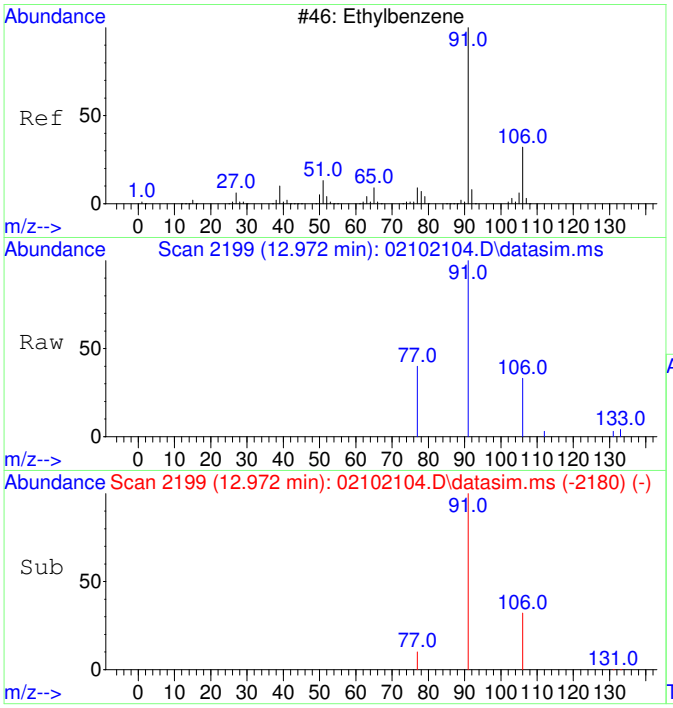


#17
1,1,1,2-Tetrachloroethane
Concen: 43.49 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:131 Resp: 667

Ion	Ratio	Lower	Upper
131	100		
133	101.8	66.3	126.3

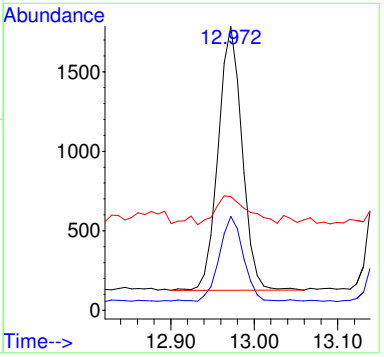


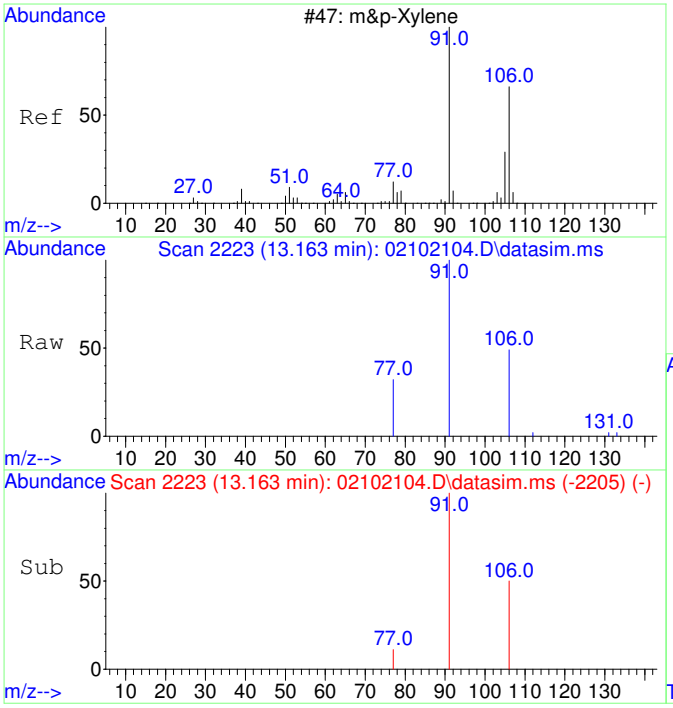


#18
Ethylbenzene
Concen: 45.80 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 3309

Ion	Ratio	Lower	Upper
91	100		
106	31.6	3.0	63.0
77	14.9	0.0	38.2

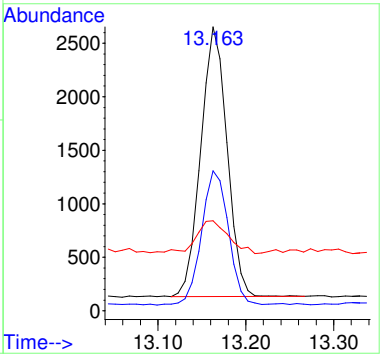


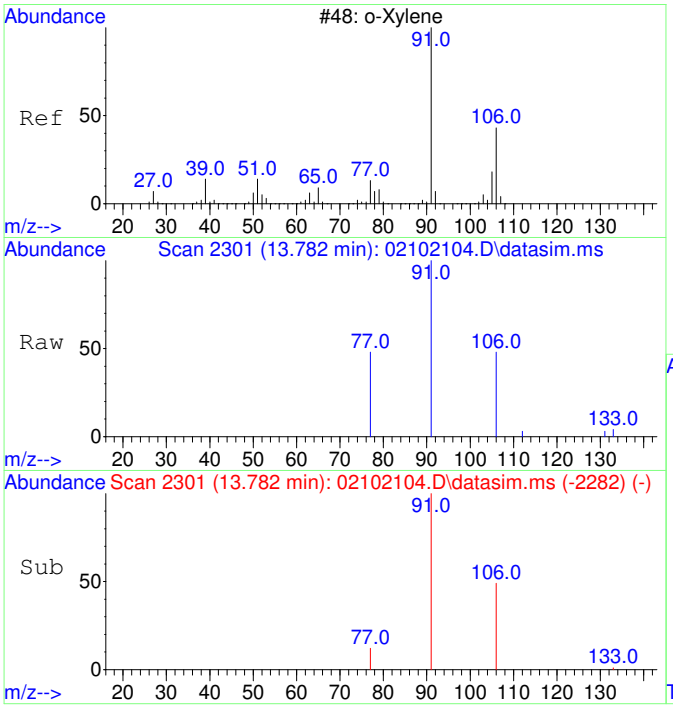


#19
m&p-Xylene
Concen: 94.00 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 5230

Ion	Ratio	Lower	Upper
91	100		
106	50.6	22.2	82.2
77	14.5	0.0	42.4

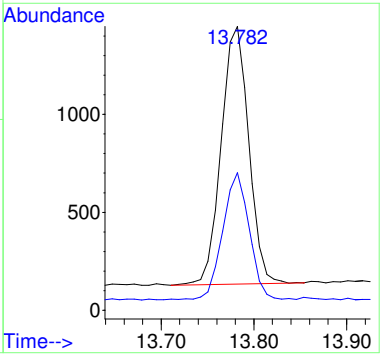


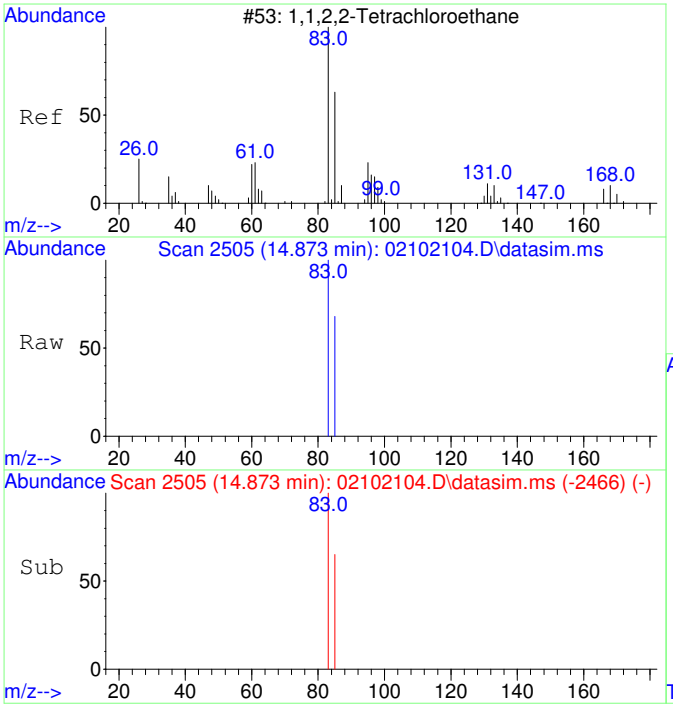


#20
o-Xylene
Concen: 45.58 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 2724

Ion	Ratio	Lower	Upper
91	100		
106	47.4	19.2	79.2

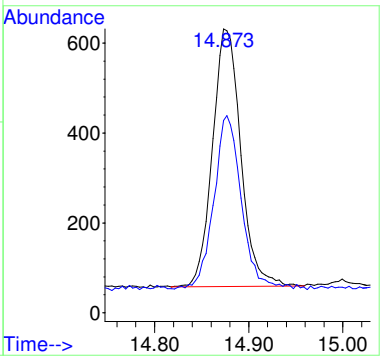


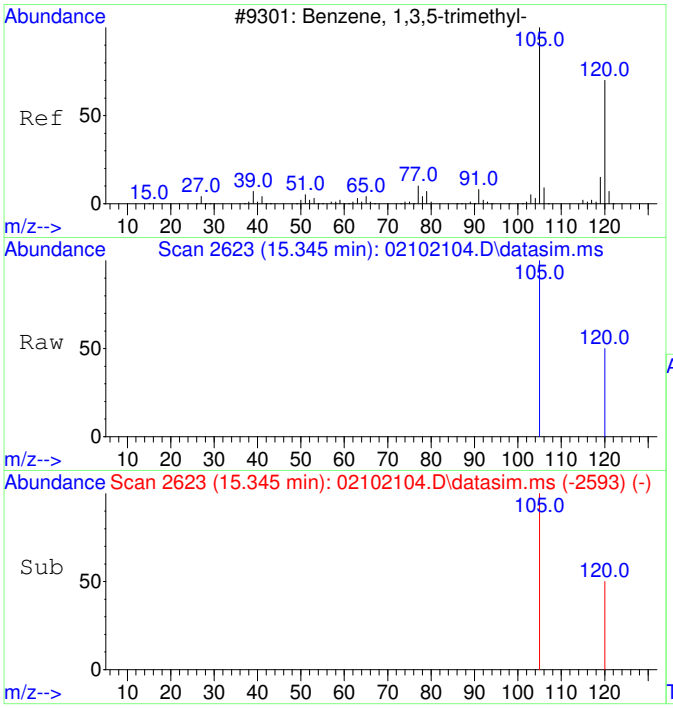


#21
1,1,2,2-Tetrachloroethane
Concen: 42.99 ug/L
RT: 14.873 min Scan# 2505
Delta R.T. -0.007 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 83 Resp: 1197

Ion	Ratio	Lower	Upper
83	100		
85	65.3	34.8	94.8

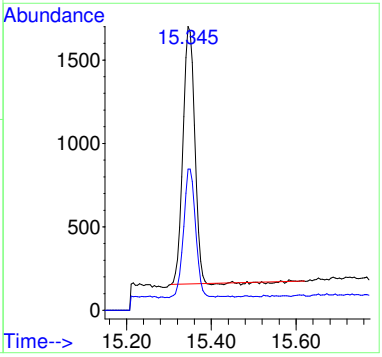


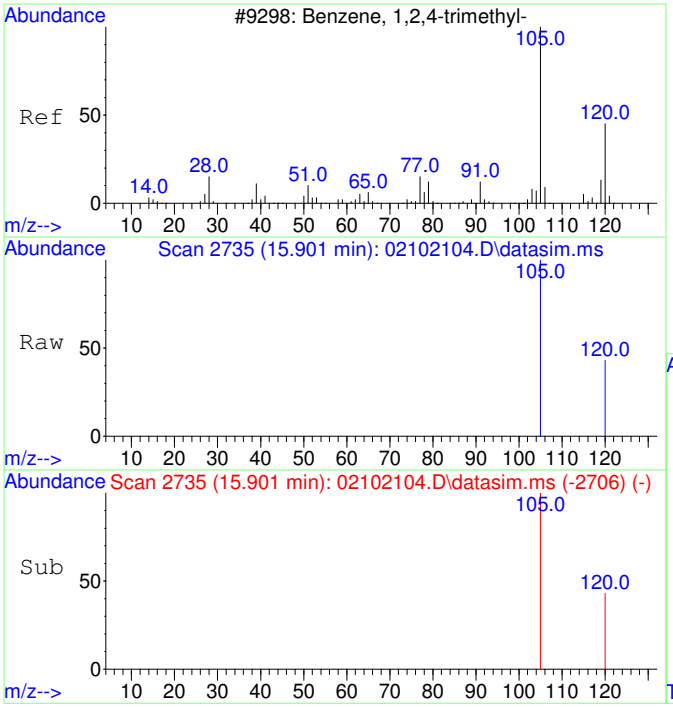


#22
1,3,5-Trimethylbenzene
Concen: 44.93 ug/L
RT: 15.345 min Scan# 2623
Delta R.T. -0.005 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:105 Resp: 2953

Ion	Ratio	Lower	Upper
105	100		
120	48.1	21.1	81.1

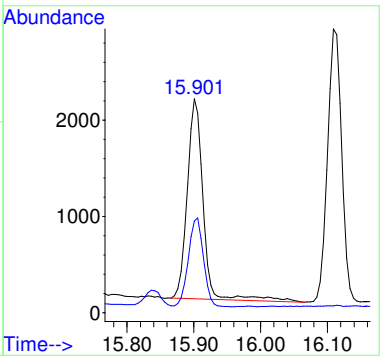


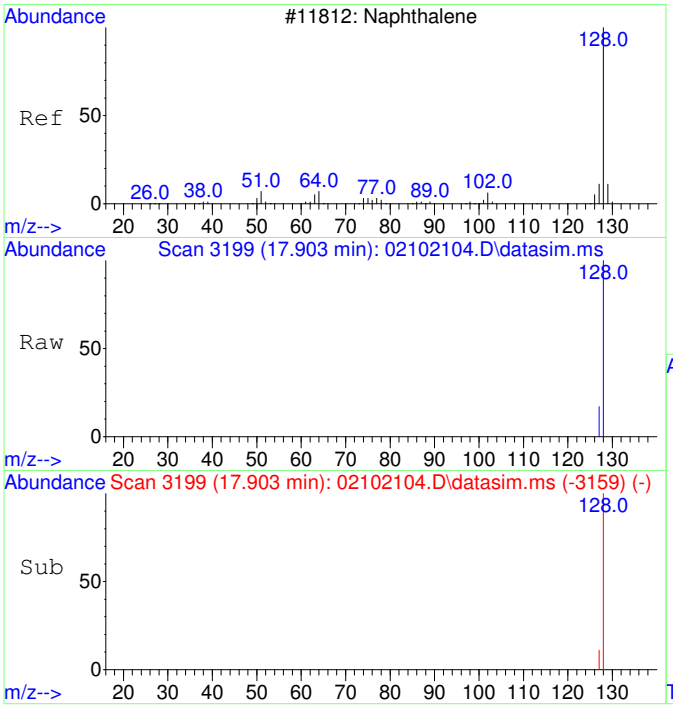


#23
1,2,4-Trimethylbenzene
Concen: 51.06 ug/L
RT: 15.901 min Scan# 2735
Delta R.T. -0.005 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:105 Resp: 3432

Ion	Ratio	Lower	Upper
105	100		
120	41.3	17.2	77.2

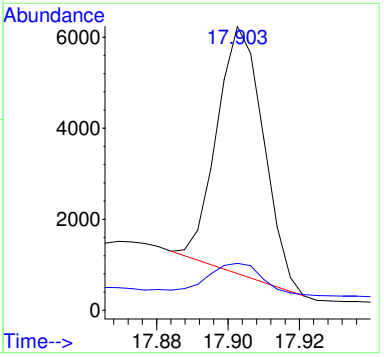


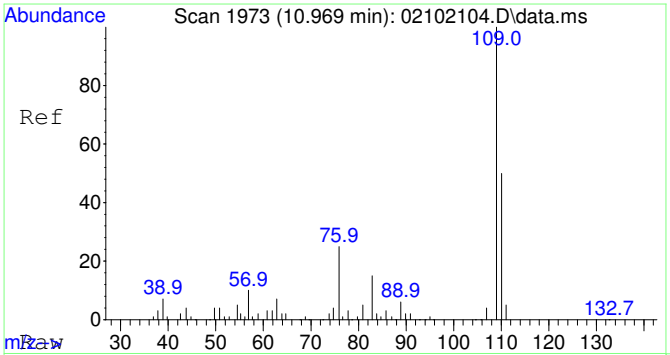


#24
Naphthalene
Concen: 44.43 ug/L
RT: 17.903 min Scan# 3199
Delta R.T. -0.001 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:128 Resp: 4839

Ion	Ratio	Lower	Upper
128	100		
127	13.0	0.0	42.5

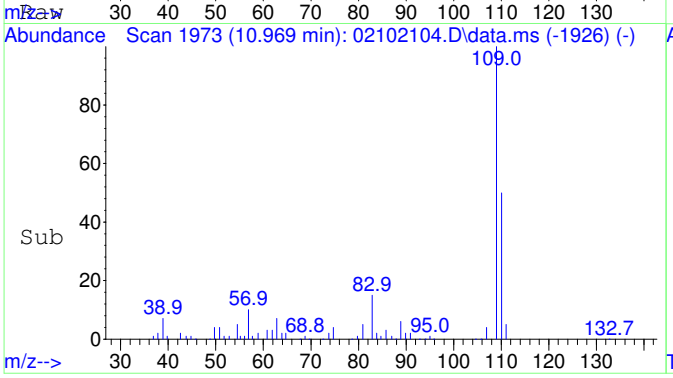


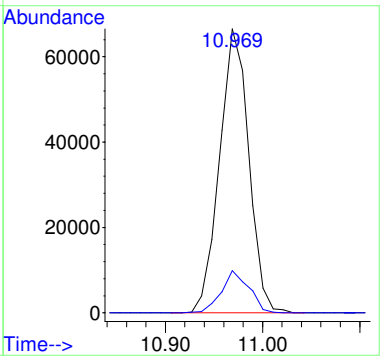


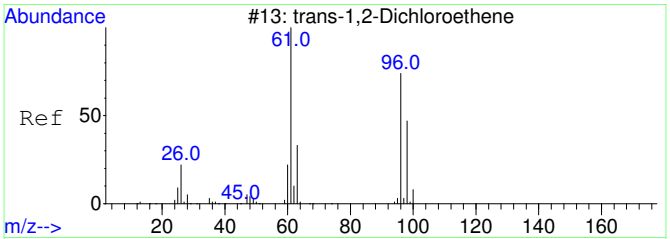
#25
2-Fluorotoluene SCAN
Concen: 5202.49 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:109 Resp: 138532

Ion	Ratio	Lower	Upper
109	100		
83	14.1	0.0	43.8



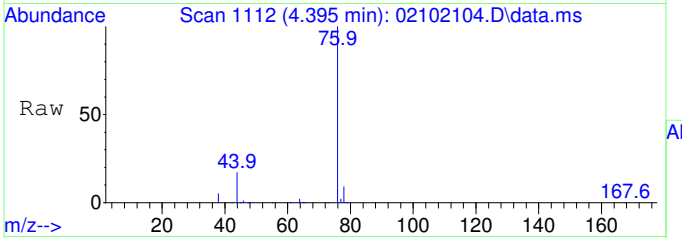


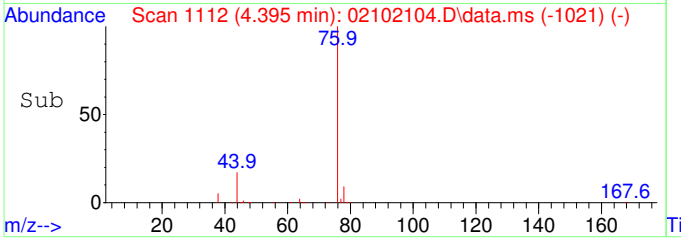


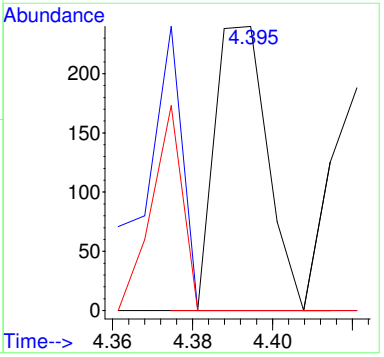
#27
trans-1,2-Dichloroethene SCAN
Concen: 27.79 ug/L
RT: 4.395 min Scan# 1112
Delta R.T. 0.013 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

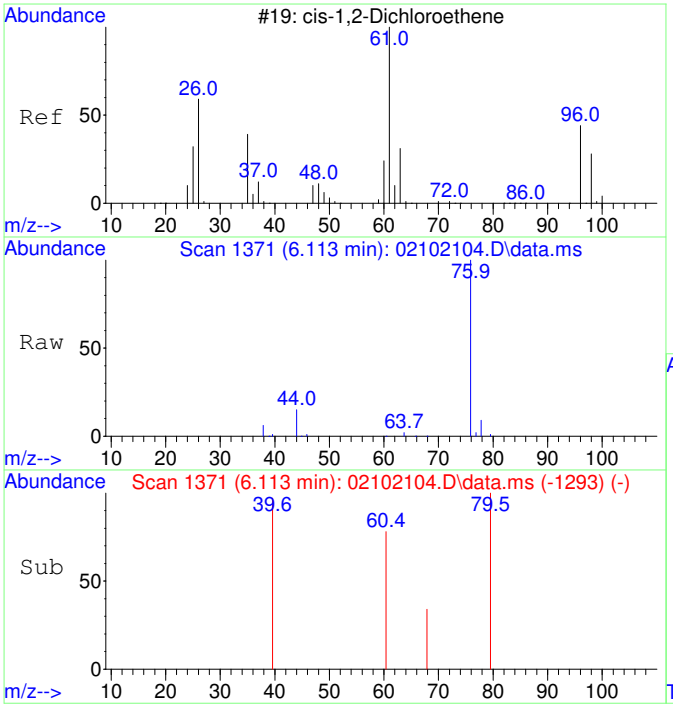
Tgt Ion: 61 Resp: 220

Ion	Ratio	Lower	Upper
61	100		
96	70.9	49.0	109.0
98	42.3	20.5	80.5





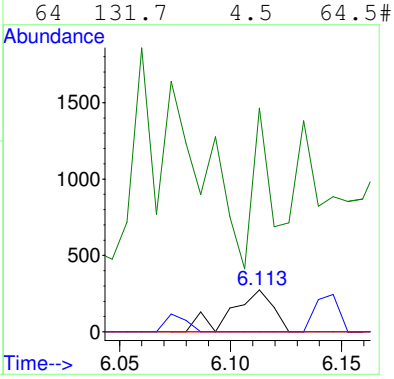


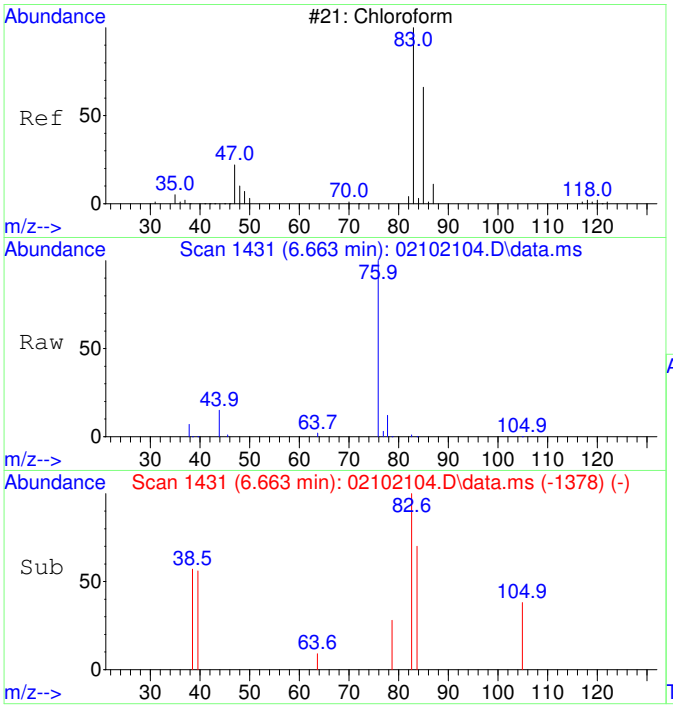


#29
cis-1,2-Dichloroethene SCAN
Concen: 38.86 ug/L
RT: 6.113 min Scan# 1371
Delta R.T. 0.020 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 61 Resp: 357

Ion	Ratio	Lower	Upper
61	100		
96	0.0	39.9	99.9#
98	0.0	13.5	73.5#
64	131.7	4.5	64.5#

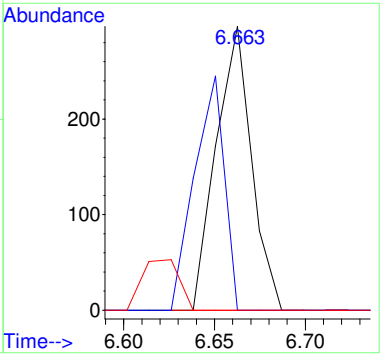


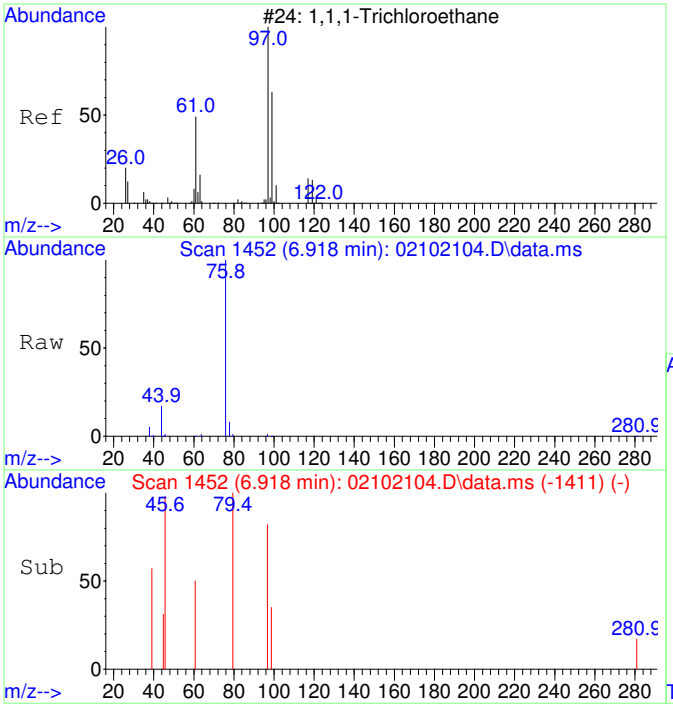


#30
Chloroform SCAN
Concen: 47.03 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 83 Resp: 403

Ion	Ratio	Lower	Upper
83	100		
85	69.5	34.6	94.6
47	0.0	0.0	53.4

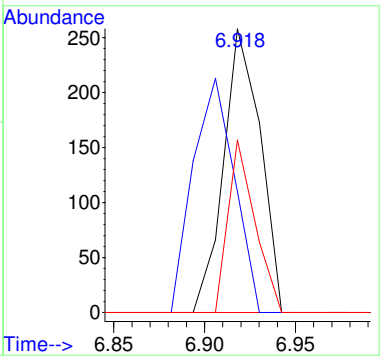


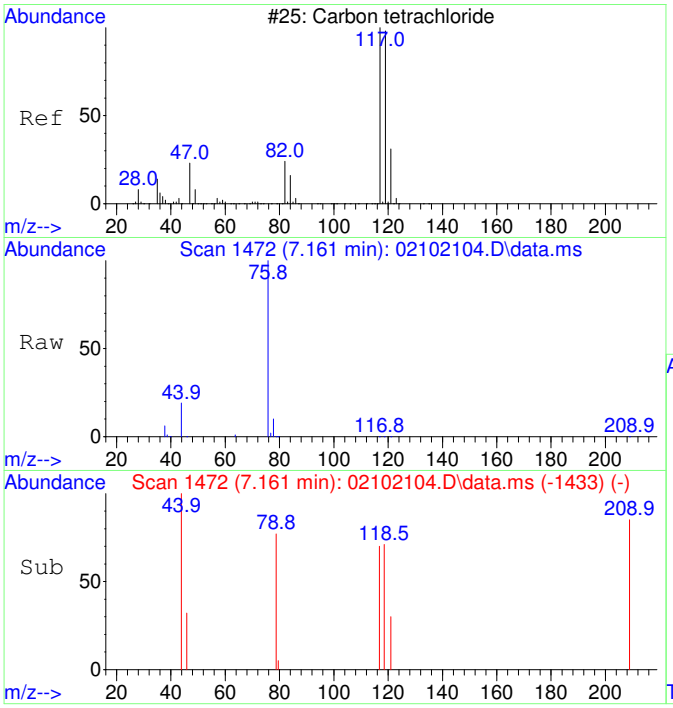


#31
1,1,1-Trichloroethane SCAN
Concen: 41.05 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 97 Resp: 363

Ion	Ratio	Lower	Upper
97	100		
99	92.6	43.6	103.6
61	44.4	18.0	78.0

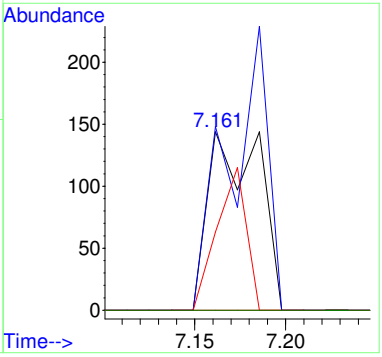


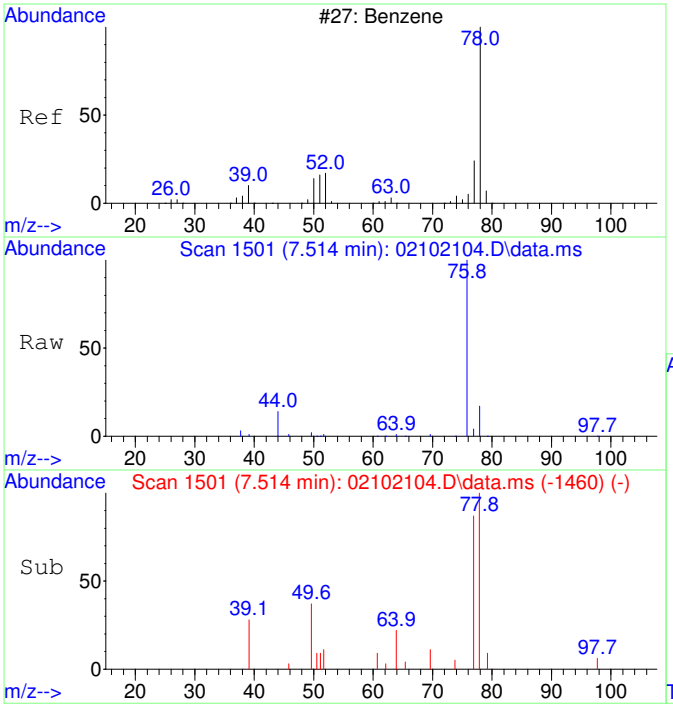


#32
Carbon tetrachloride SCAN
Concen: 37.19 ug/L
RT: 7.161 min Scan# 1472
Delta R.T. -0.024 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:117 Resp: 281

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

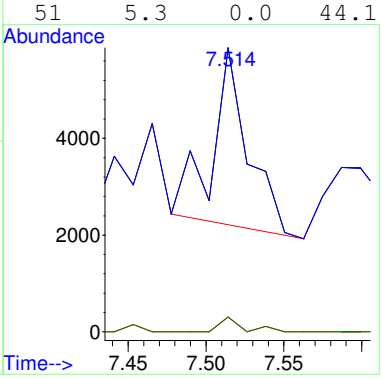


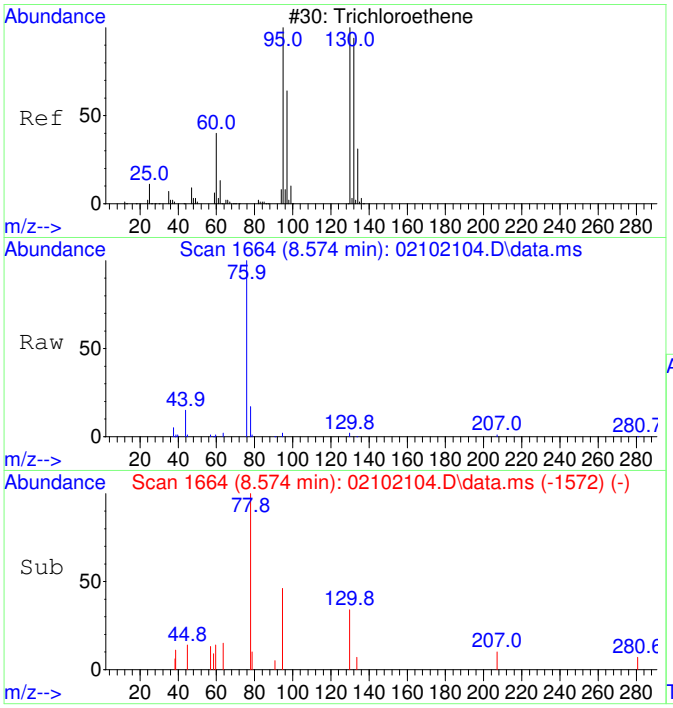


#33
Benzene SCAN
Concen: 213.81 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 78 Resp: 5720

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	5.3	0.0	47.9
51	5.3	0.0	44.1

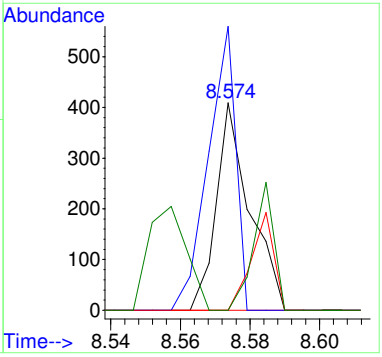


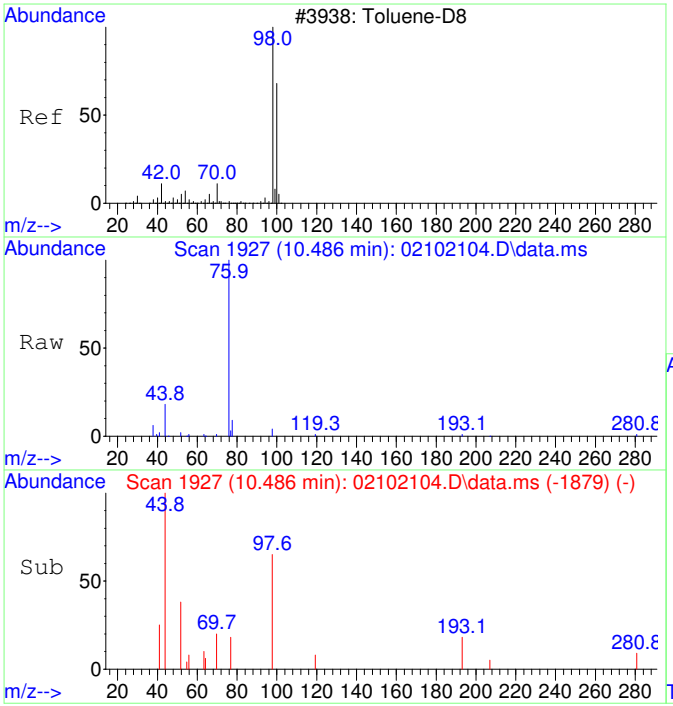


#35
Trichloroethene SCAN
Concen: 46.80 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:130 Resp: 273

Ion	Ratio	Lower	Upper
130	100		
95	112.5	60.5	120.5
132	31.9	59.6	119.6#
97	38.1	28.2	88.2

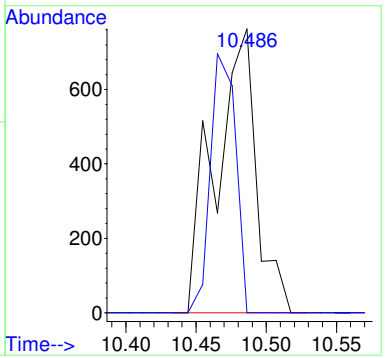


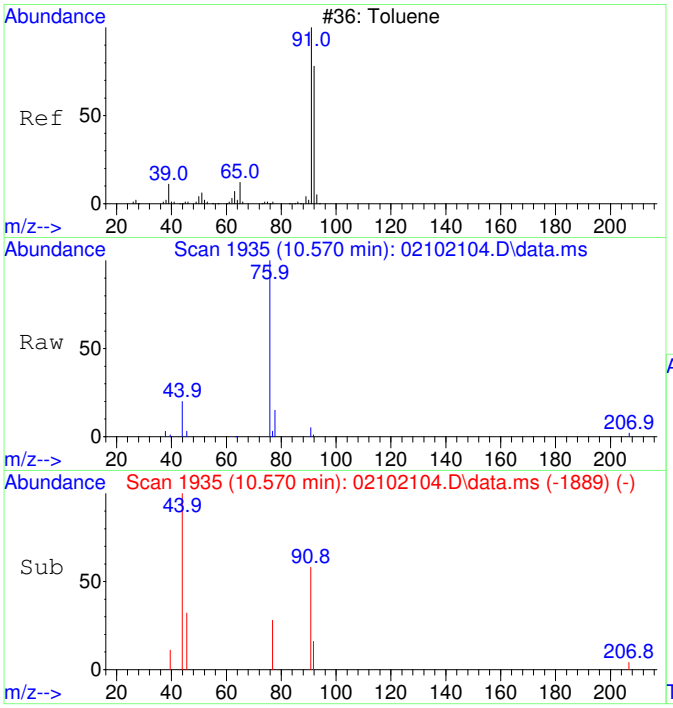


#36
Toluene-d8 SCAN
Concen: 62.30 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 98 Resp: 1556

Ion	Ratio	Lower	Upper
98	100		
100	0.0	40.0	100.0#

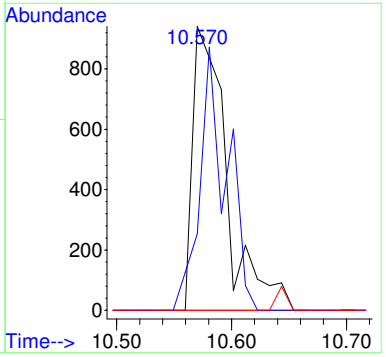


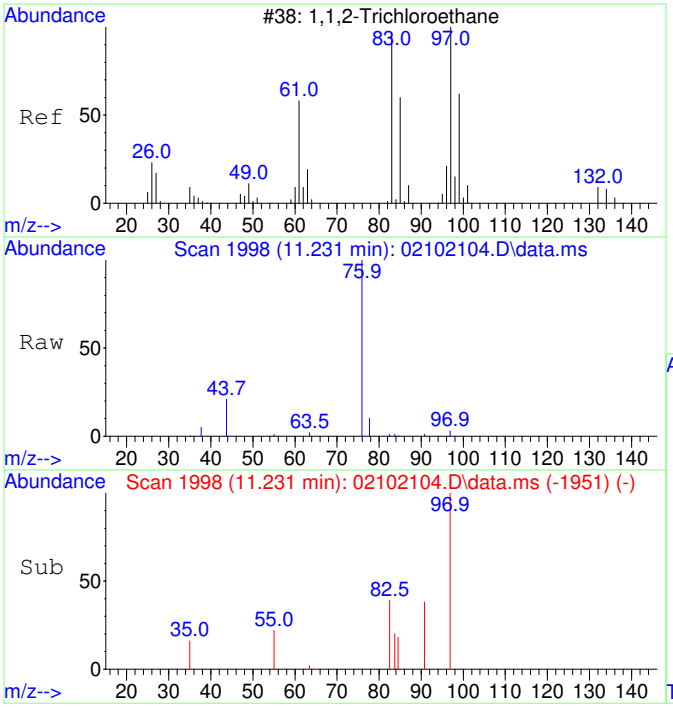


#37
Toluene SCAN
Concen: 62.77 ug/L
RT: 10.570 min Scan# 1935
Delta R.T. -0.021 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 1930

Ion	Ratio	Lower	Upper
91	100		
92	73.6	28.3	88.3
65	0.0	0.0	41.0

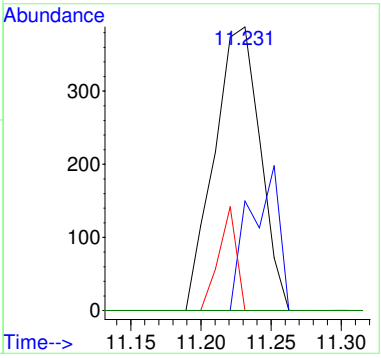


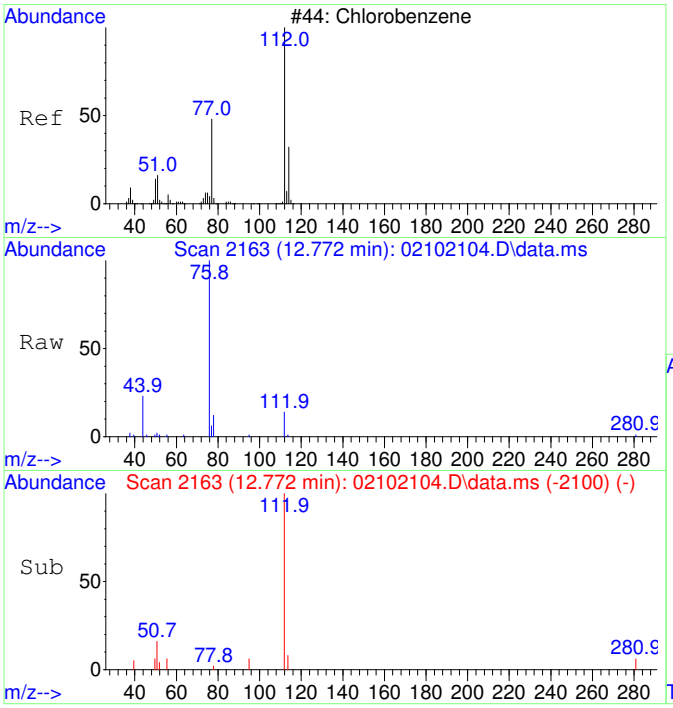


#38
1,1,2-Trichloroethane SCAN
Concen: 114.70 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. -0.010 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 97 Resp: 884

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	14.1	32.1	92.1#
99	0.0	36.7	96.7#

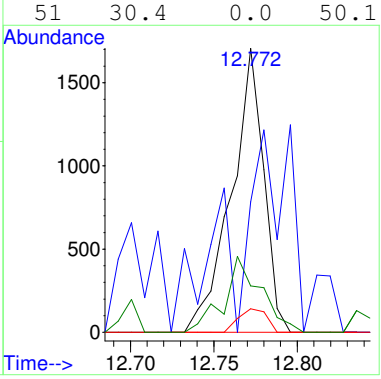


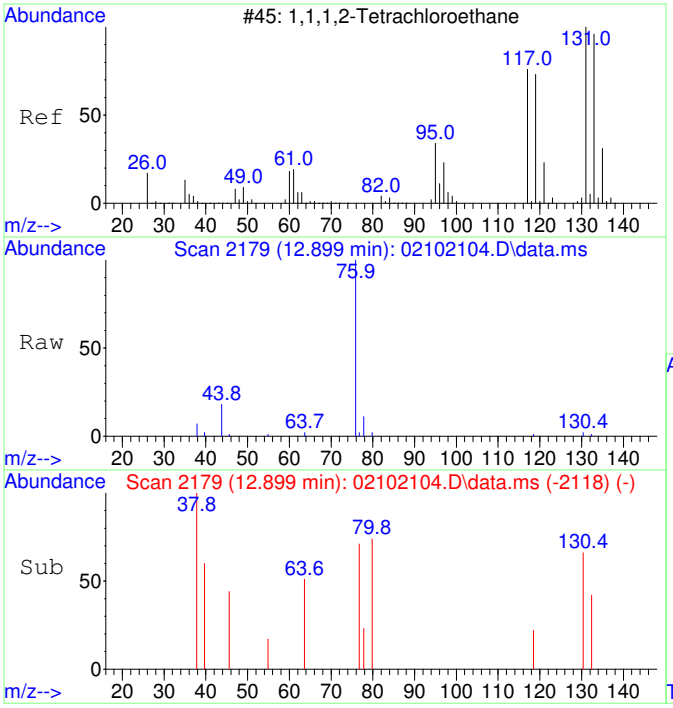


#40
Chlorobenzene SCAN
Concen: 104.68 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:112 Resp: 2312

Ion	Ratio	Lower	Upper
112	100		
77	42.6	28.2	88.2
114	7.2	2.3	62.3
51	30.4	0.0	50.1

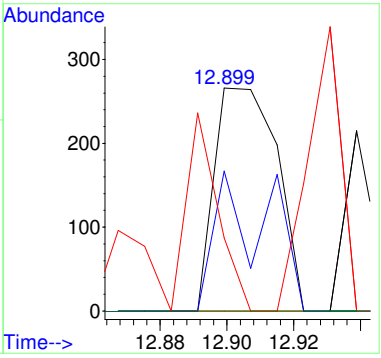


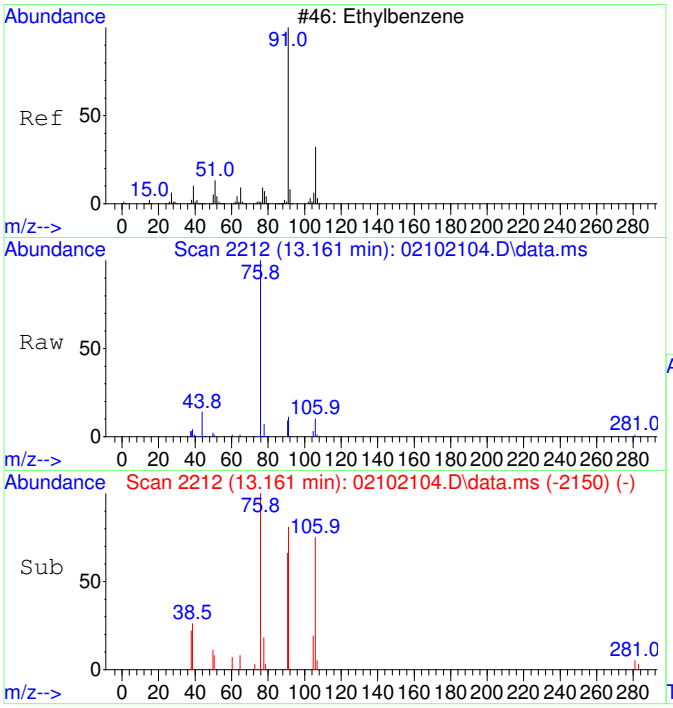


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 45.54 ug/L
RT: 12.899 min Scan# 2179
Delta R.T. -0.016 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:131 Resp: 347

Ion	Ratio	Lower	Upper
131	100		
133	52.4	66.9	126.9#
119	68.0	40.4	100.4
117	0.0	35.1	95.1#

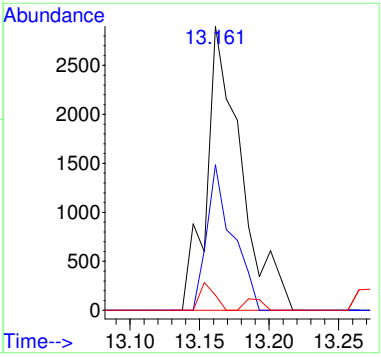


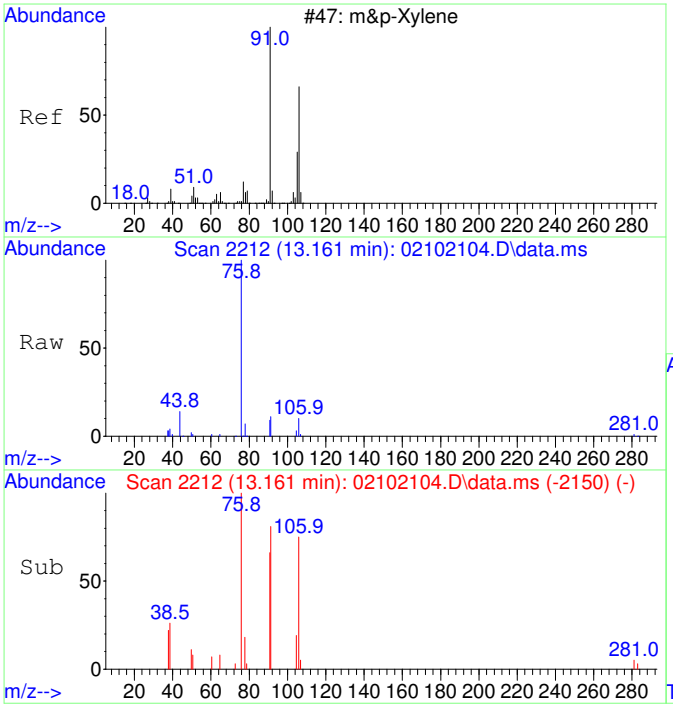


#42
Ethylbenzene SCAN
Concen: 86.16 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.008 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 5049

Ion	Ratio	Lower	Upper
91	100		
106	37.9	23.1	83.1
51	4.1	0.0	40.1

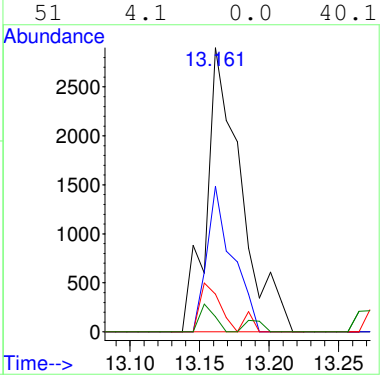


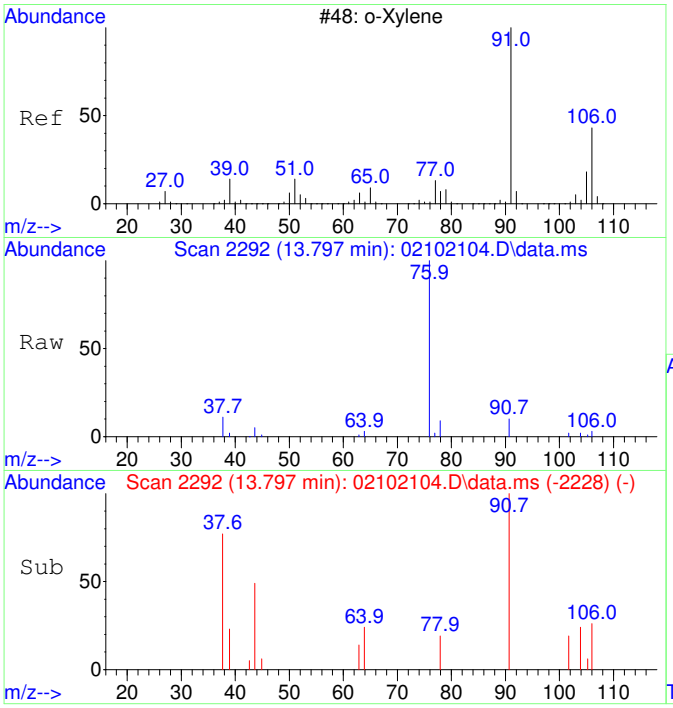


#43
m&p-Xylene SCAN
Concen: 86.16 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.008 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 5049

Ion	Ratio	Lower	Upper
91	100		
106	37.9	23.1	83.1
105	9.7	0.0	54.7
51	4.1	0.0	40.1

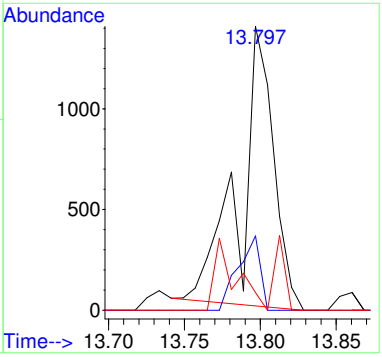


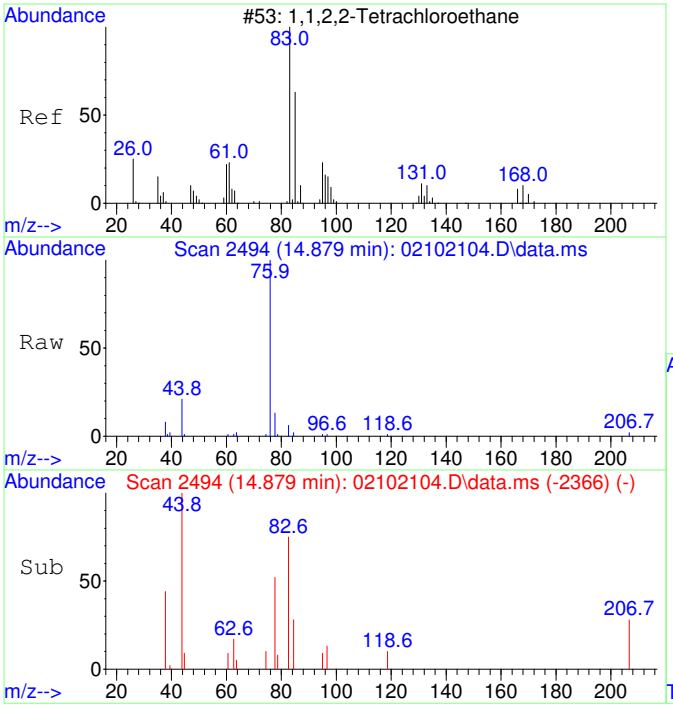


#44
o-Xylene SCAN
Concen: 66.16 ug/L
RT: 13.797 min Scan# 2292
Delta R.T. 0.008 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 2117

Ion	Ratio	Lower	Upper
91	100		
106	17.7	18.0	78.0#
105	8.4	0.0	56.6

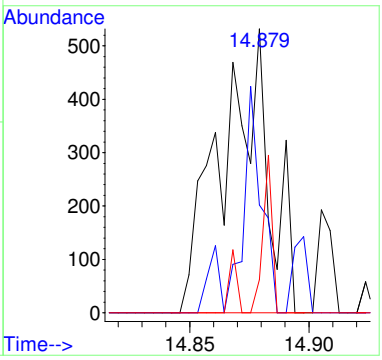


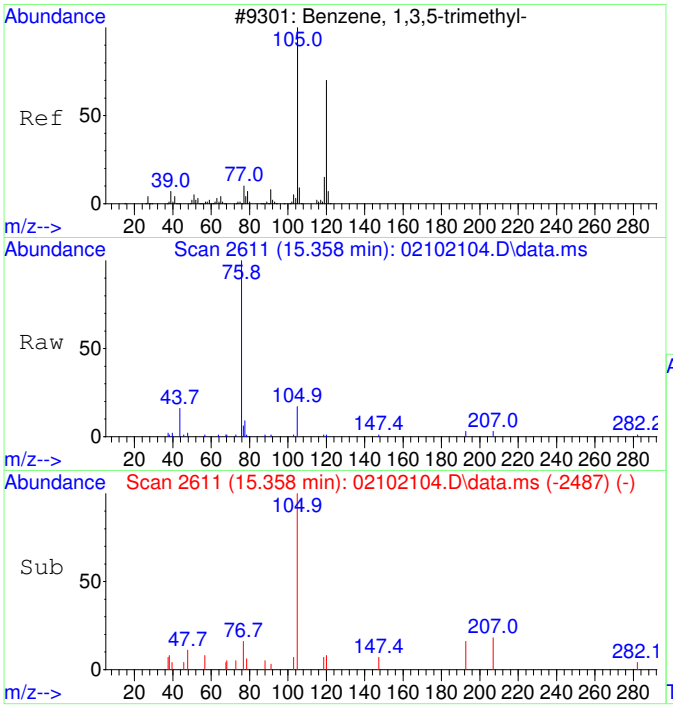


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 44.12 ug/L
RT: 14.879 min Scan# 2494
Delta R.T. -0.004 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 83 Resp: 734

Ion	Ratio	Lower	Upper
83	100		
85	30.0	35.9	95.9#
95	10.8	0.0	47.4

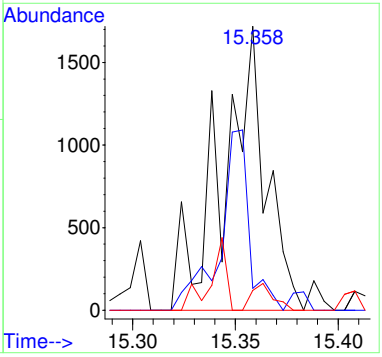


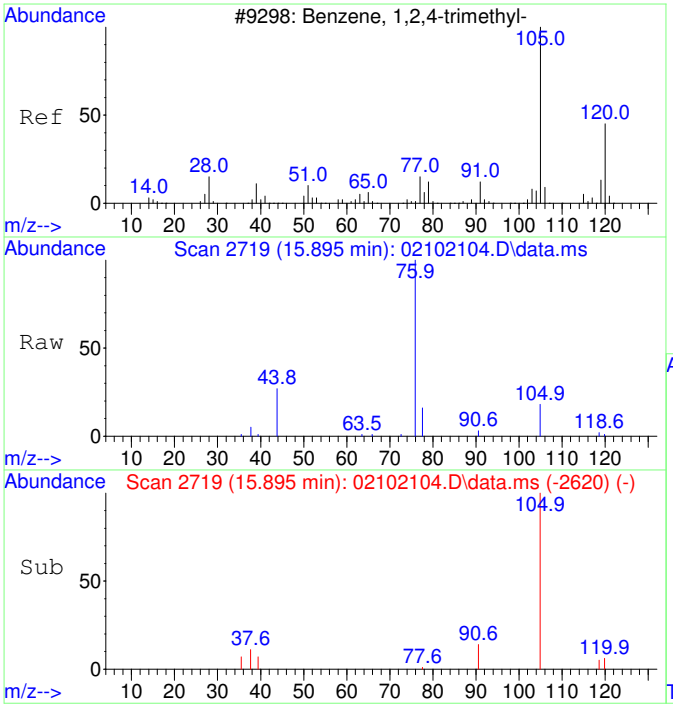


#46
1,3,5-Trimethylbenzene SCAN
Concen: 75.16 ug/L
RT: 15.358 min Scan# 2611
Delta R.T. 0.005 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:105 Resp: 2537

Ion	Ratio	Lower	Upper
105	100		
120	42.6	18.3	78.3
119	4.7	0.0	43.1

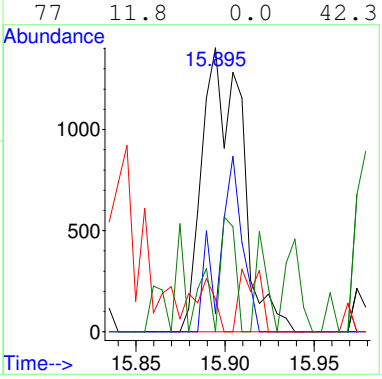


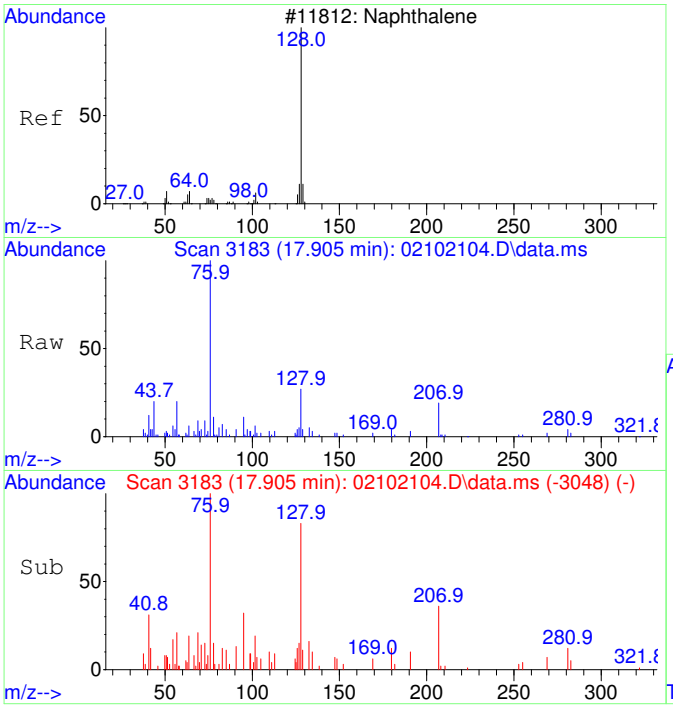


#47
1,2,4-Trimethylbenzene SCAN
Concen: 63.47 ug/L
RT: 15.895 min Scan# 2719
Delta R.T. -0.010 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:105 Resp: 2189

Ion	Ratio	Lower	Upper
105	100		
120	36.5	16.9	76.9
119	11.1	0.0	41.9
77	11.8	0.0	42.3

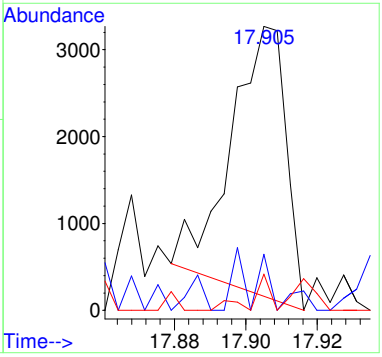




#48
Naphthalene SCAN
Concen: 63.22 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.003 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:128 Resp: 3273

Ion	Ratio	Lower	Upper
128	100		
127	12.1	0.0	44.0
129	4.2	0.0	40.8



Quantitation Report (QT Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102104.D
Acq On : 10 Feb 2021 10:03
InstName : AG5975C
Operator : TD
Sample : S21B029-CRL1
Misc : 2106042 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

M.I. Performed By:
TD at 10:35 am, Feb 10, 2021

M.I. Approved By:
Kathy O'Brien at 12:06 pm, Fe

Quant Time: Feb 10 10:22:03 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

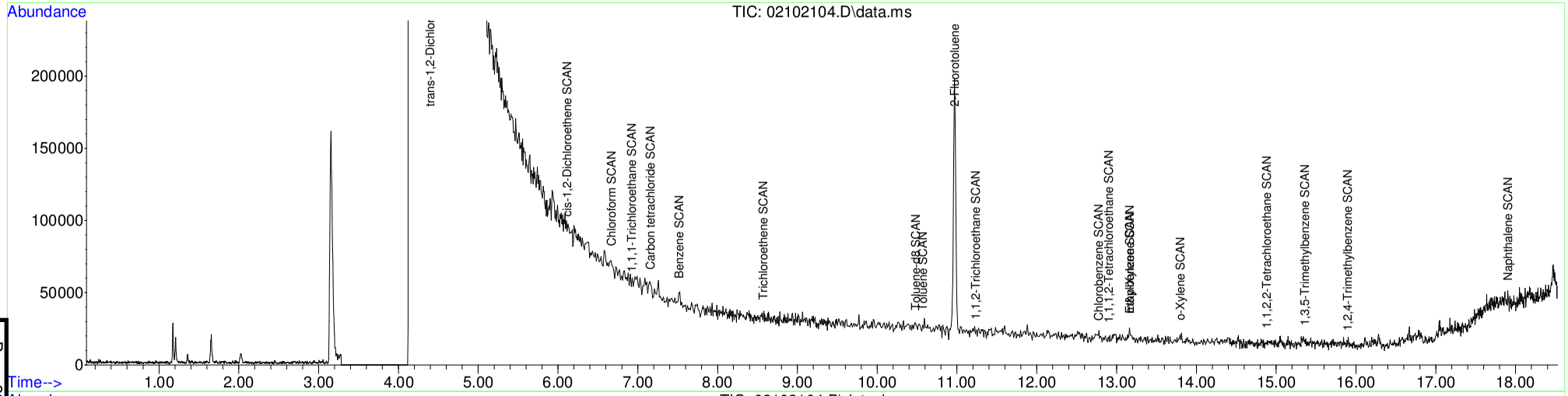
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	234587	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	1961	43.16 ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery =	0.86%#	
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	435m	46.77 ug/L	
3] trans-1,2-Dichloroethene	4.389	61	507	43.24 ug/L	58
4] 1,1-Dichloroethane	5.092	63	605	43.20 ug/L	76
5] cis-1,2-Dichloroethene	6.088	61	616	42.47 ug/L	99
6] Chloroform	6.652	83	697	50.03 ug/L	98
7] 1,1,1-Trichloroethane	6.919	97	680	45.43 ug/L	95
8] Carbon tetrachloride	7.187	117	650	45.42 ug/L	96
9] Benzene	7.503	78	3888	98.49 ug/L	71
10] 1,2-Dichloroethane	7.552	62	648	48.12 ug/L	48
11] Trichloroethene	8.570	130	536	43.01 ug/L	93
13] Toluene	10.582	91	2828	49.99 ug/L	99
14] 1,1,2-Trichloroethane	11.233	97	538	41.06 ug/L	97
15] Tetrachloroethene	11.432	166	791	44.89 ug/L	94
16] Chlorobenzene	12.765	112	3316	75.67 ug/L	89
17] 1,1,1,2-Tetrachloroethane	12.916	131	667	43.49 ug/L	94
18] Ethylbenzene	12.972	91	3309	45.80 ug/L	94
19] m&p-Xylene	13.163	91	5230	94.00 ug/L	97
20] o-Xylene	13.782	91	2724	45.58 ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.873	83	1197	42.99 ug/L	99
22] 1,3,5-Trimethylbenzene	15.345	105	2953	44.93 ug/L	96
23] 1,2,4-Trimethylbenzene	15.901	105	3432	51.06 ug/L	91
24] Naphthalene	17.903	128	4839	44.43 ug/L	99
25) 2-Fluorotoluene SCAN	10.969	109	138532	5202.49 ug/L	99
27) trans-1,2-Dichloroethe...	4.395	61	220	27.79 ug/L	90
29) cis-1,2-Dichloroethene...	6.113	61	357	38.86 ug/L #	1
30) Chloroform SCAN	6.663	83	403	47.03 ug/L #	83
31) 1,1,1-Trichloroethane ...	6.918	97	363	41.05 ug/L	84
32) Carbon tetrachloride SCAN	7.161	117	281	37.19 ug/L #	15
33) Benzene SCAN	7.514	78	5720	213.81 ug/L	94
35) Trichloroethene SCAN	8.574	130	273	46.80 ug/L #	61
36) Toluene-d8 SCAN	10.486	98	1556	62.30 ug/L #	15
37) Toluene SCAN	10.570	91	1930	62.77 ug/L #	78
38) 1,1,2-Trichloroethane ...	11.231	97	884	114.70 ug/L #	18
40) Chlorobenzene SCAN	12.772	112	2312	104.68 ug/L	72
41) 1,1,1,2-Tetrachloroeth...	12.899	131	347	45.54 ug/L #	57
42) Ethylbenzene SCAN	13.161	91	5049	86.16 ug/L	79
43) m&p-Xylene SCAN	13.161	91	5049	86.16 ug/L	77
44) o-Xylene SCAN	13.797	91	2117	66.16 ug/L #	58
45) 1,1,2,2-Tetrachloroeth...	14.879	83	734	44.12 ug/L #	61
46) 1,3,5-Trimethylbenzene...	15.358	105	2537	75.16 ug/L	89
47) 1,2,4-Trimethylbenzene...	15.895	105	2189	63.47 ug/L	89
48) Naphthalene SCAN	17.905	128	3273	63.22 ug/L	90

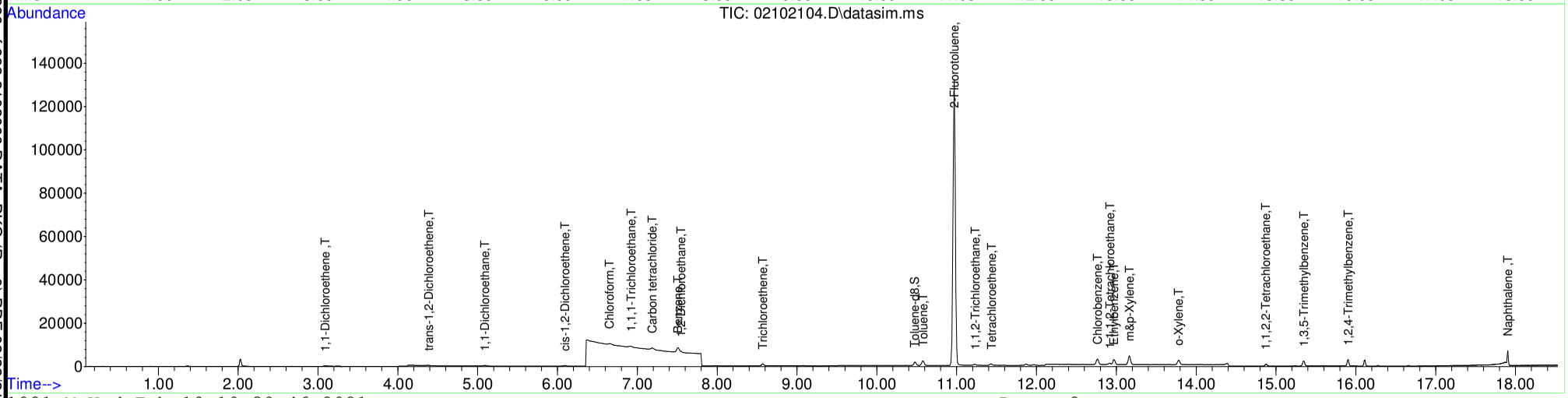
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021021\
Data File : 02102104.D
Acq On : 10 Feb 2021 10:03
InstName : AG5975C
Operator : TD
Sample : S21B029-CRL1
Misc : 2106042 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 10 10:22:03 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021021.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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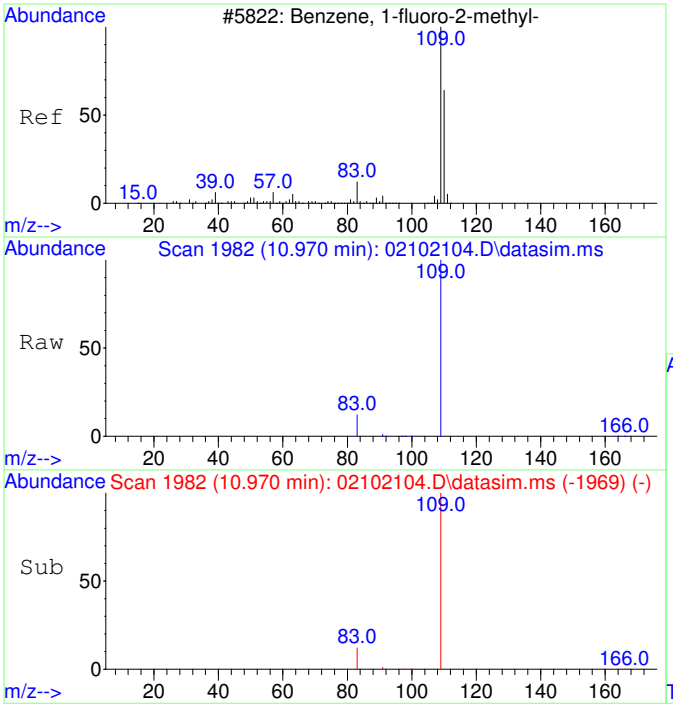
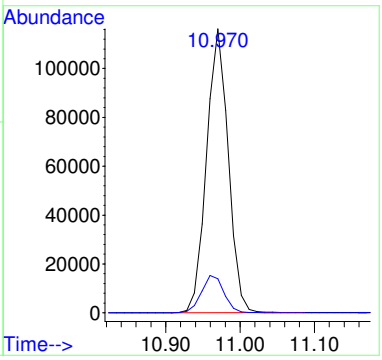
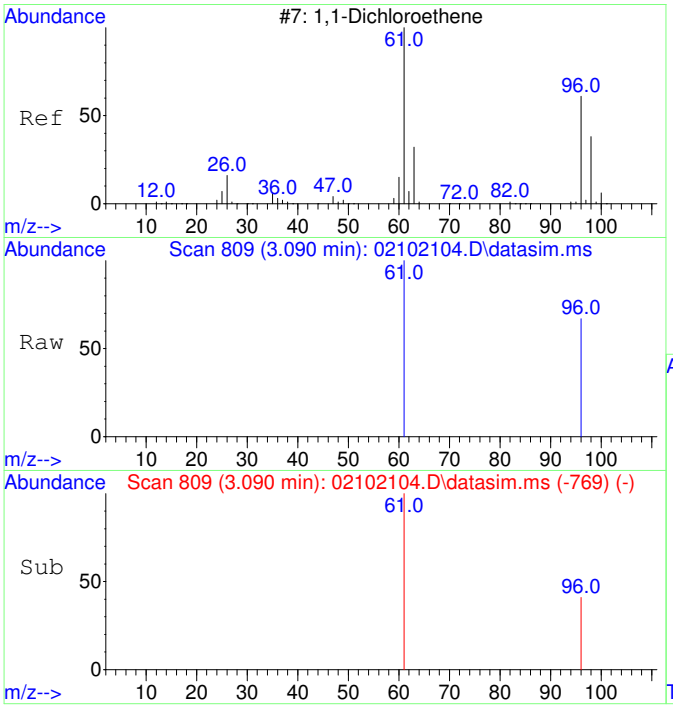


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:109 Resp: 234587

Ion	Ratio	Lower	Upper
109	100		
83	13.6	0.0	42.3

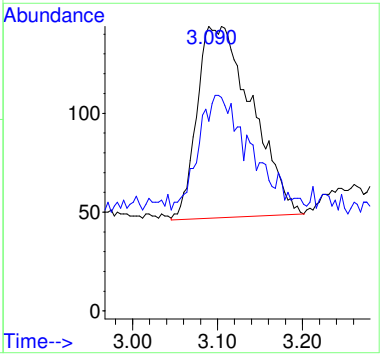


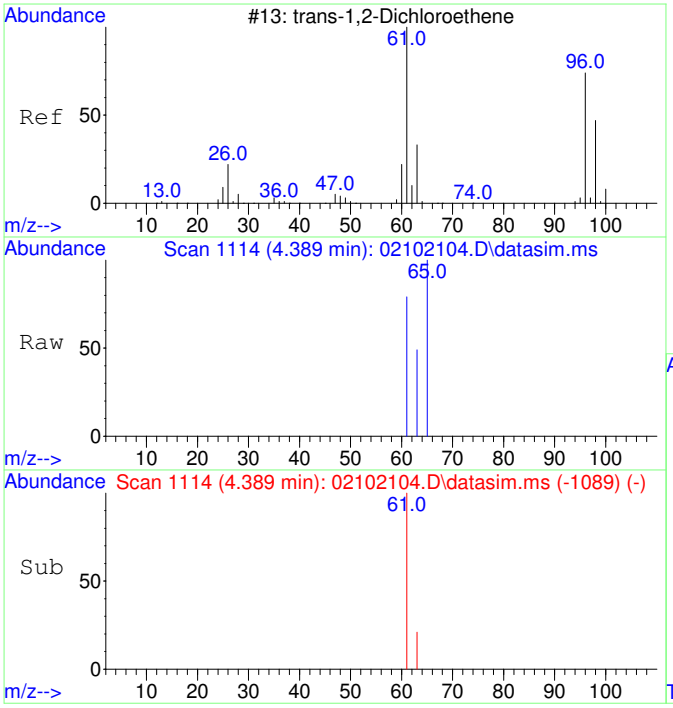


#2
1,1-Dichloroethene
Concen: 46.77 ug/L m
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 61 Resp: 435

Ion	Ratio	Lower	Upper
61	100		
96	53.1	37.2	97.2

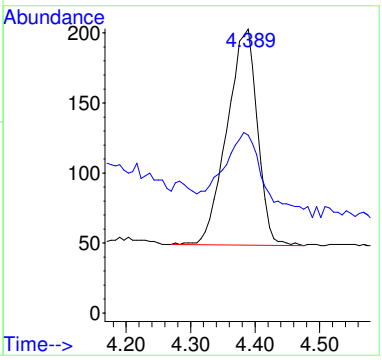


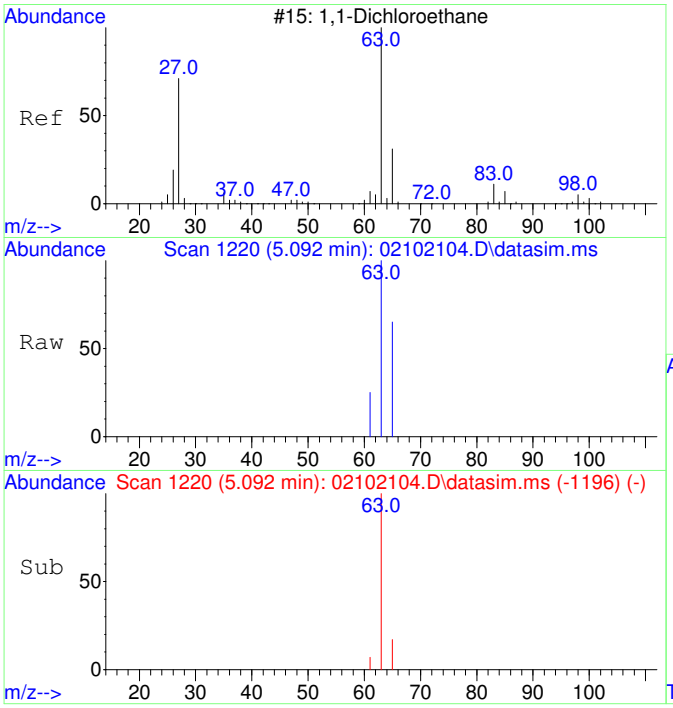


#3
trans-1,2-Dichloroethene
Concen: 43.24 ug/L
RT: 4.389 min Scan# 1114
Delta R.T. 0.013 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 61 Resp: 507

Ion	Ratio	Lower	Upper
61	100		
63	56.2	2.4	62.4

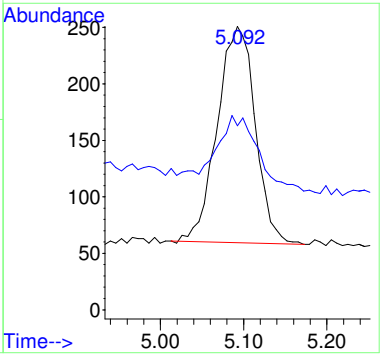


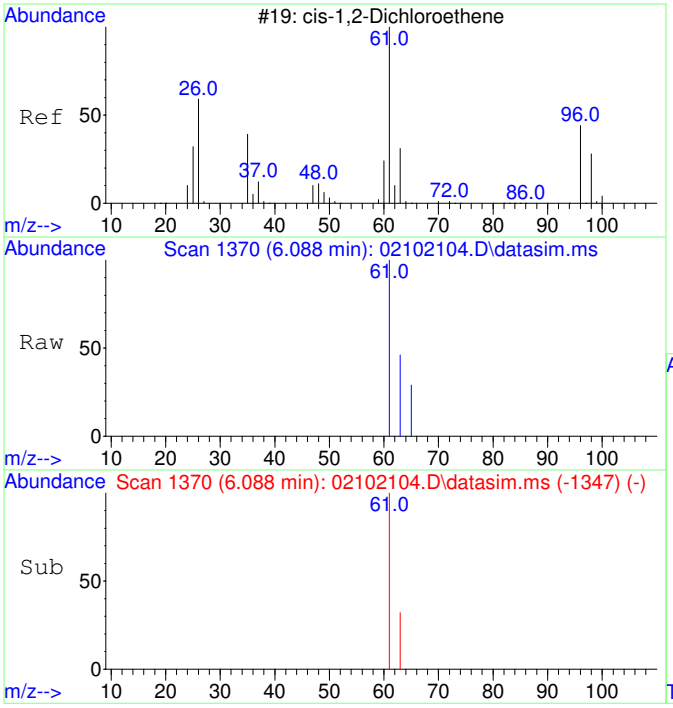


#4
1,1-Dichloroethane
Concen: 43.20 ug/L
RT: 5.092 min Scan# 1220
Delta R.T. 0.007 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 63 Resp: 605

Ion	Ratio	Lower	Upper
63	100		
65	45.3	1.8	61.8

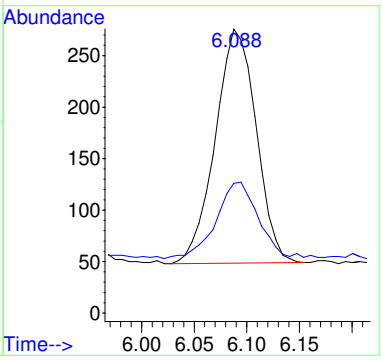


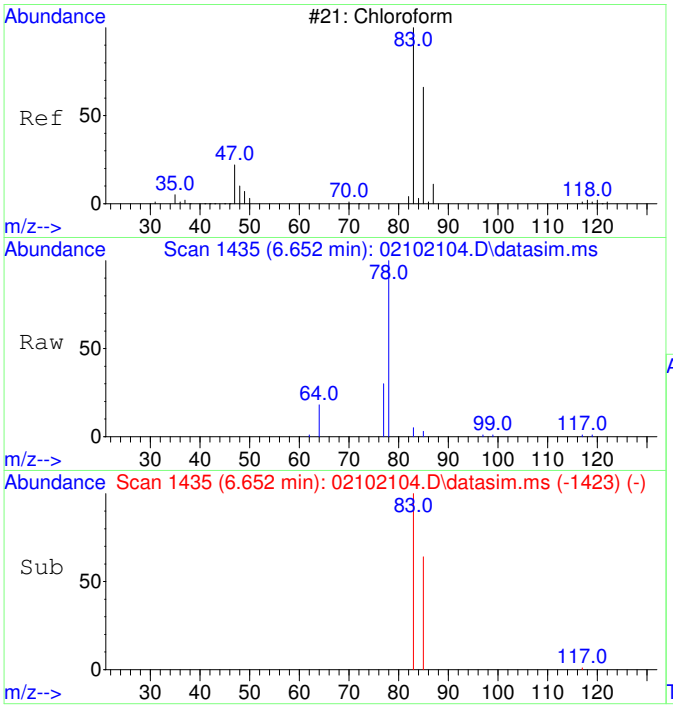


#5
cis-1,2-Dichloroethene
Concen: 42.47 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 61 Resp: 616

Ion	Ratio	Lower	Upper
61	100		
63	33.1	2.5	62.5

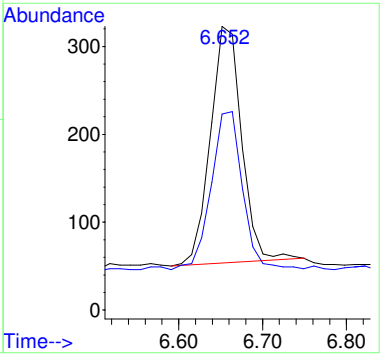


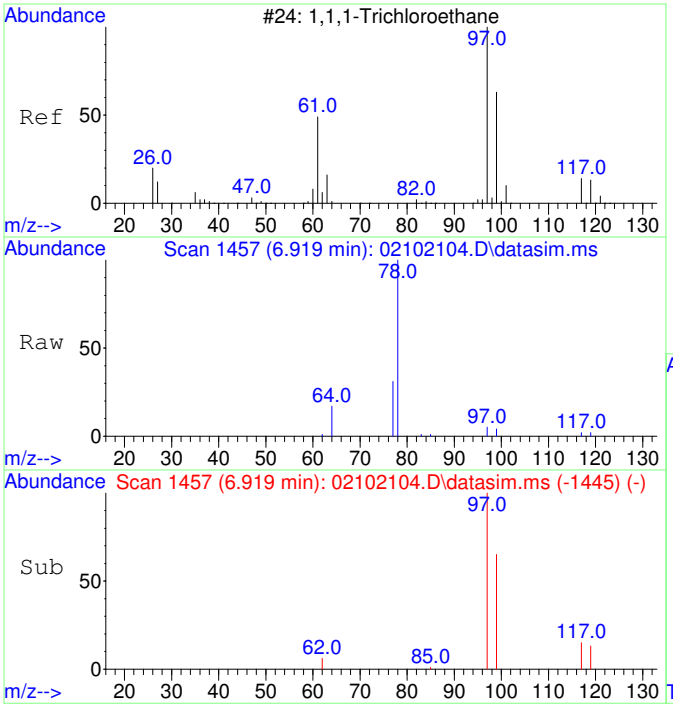


#6
Chloroform
Concen: 50.03 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 83 Resp: 697

Ion	Ratio	Lower	Upper
83	100		
85	66.4	35.1	95.1

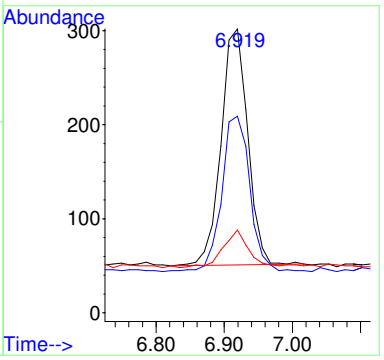


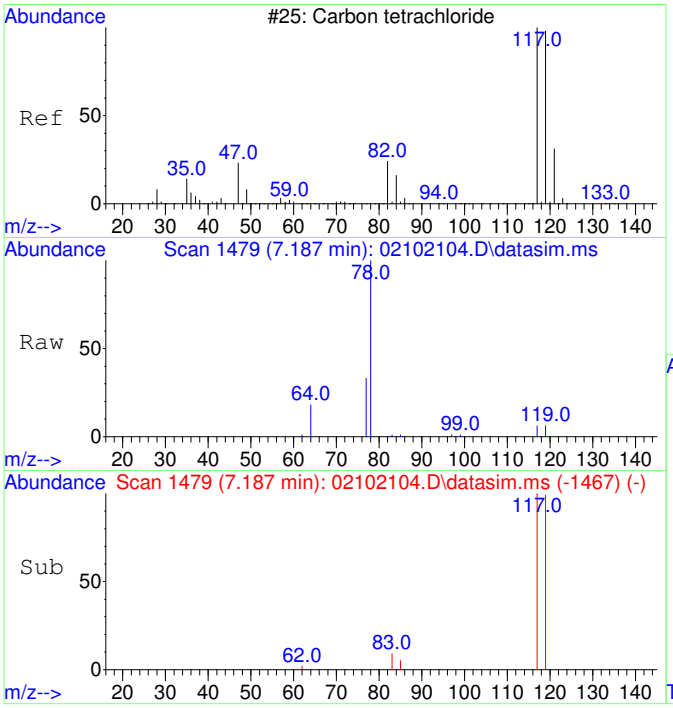


#7
1,1,1-Trichloroethane
Concen: 45.43 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 97 Resp: 680

Ion	Ratio	Lower	Upper
97	100		
99	68.5	34.6	94.6
117	15.6	0.0	43.2

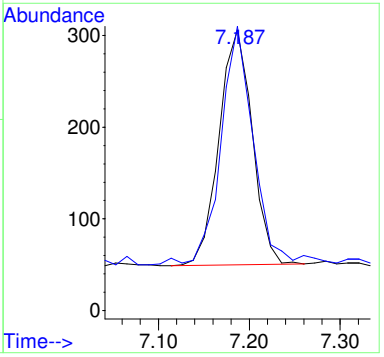


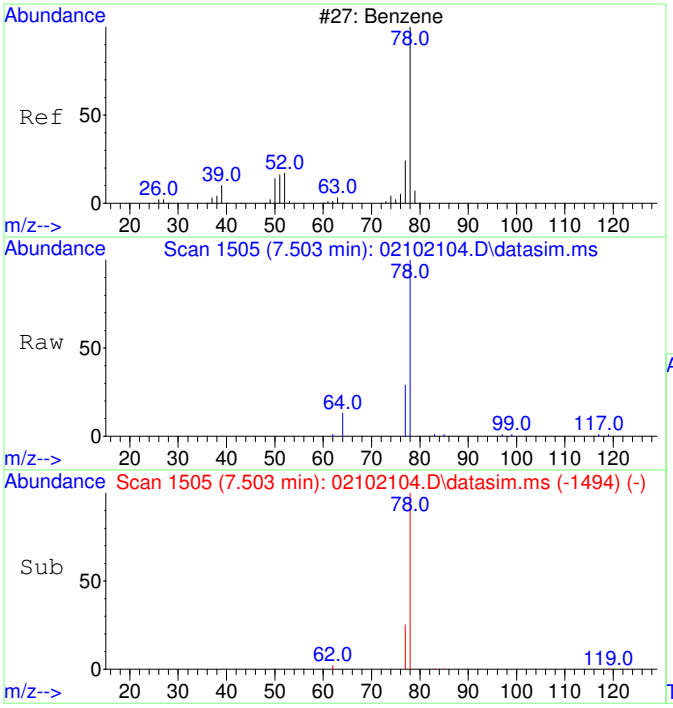


#8
Carbon tetrachloride
Concen: 45.42 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:117 Resp: 650

Ion	Ratio	Lower	Upper
117	100		
119	100.8	66.4	126.4

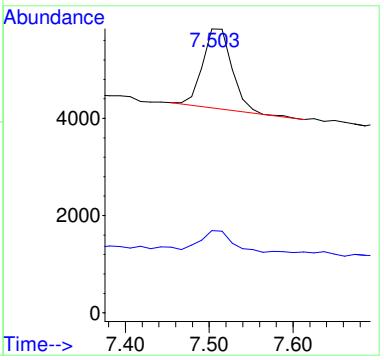


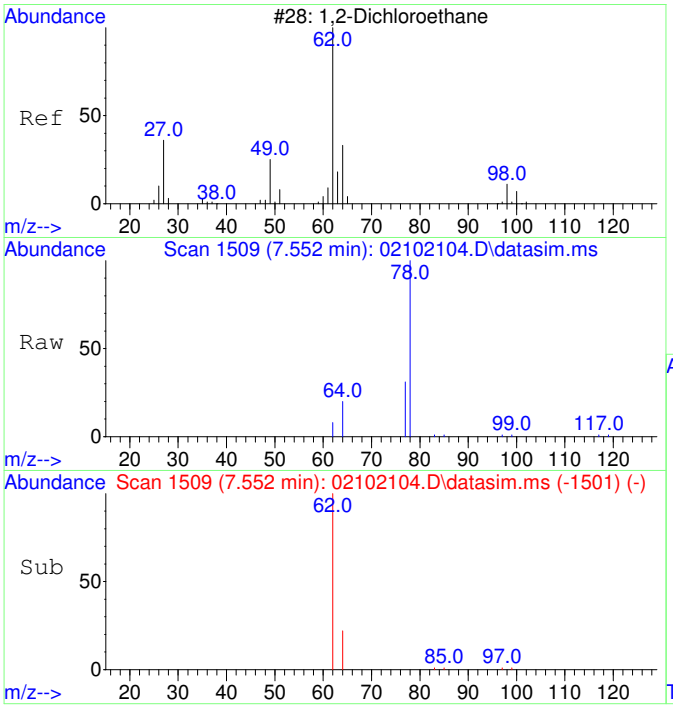


#9
Benzene
Concen: 98.49 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 78 Resp: 3888

Ion	Ratio	Lower	Upper
78	100		
77	37.5	0.0	53.2

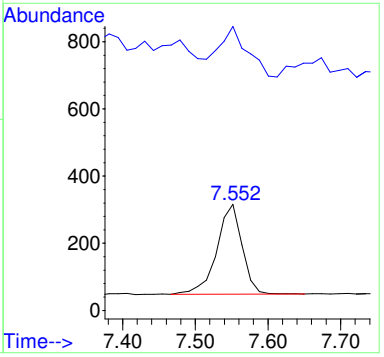


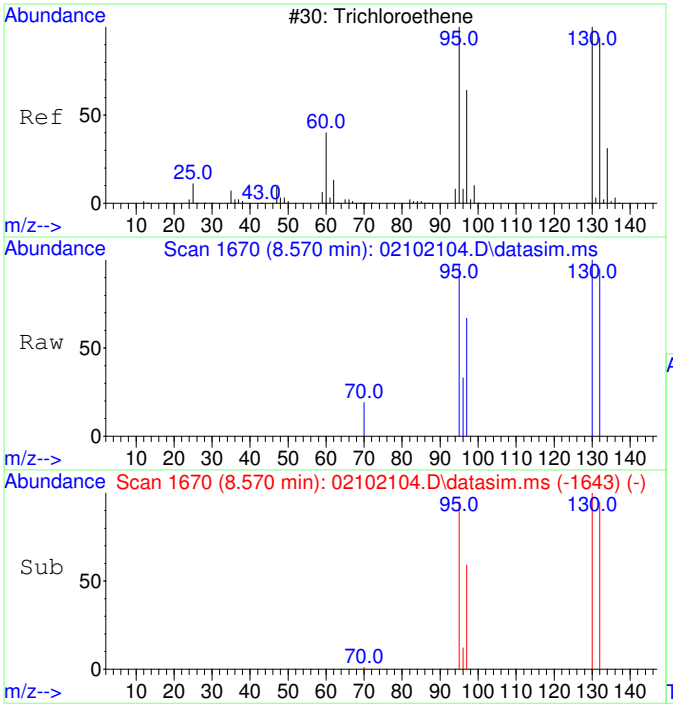


#10
1,2-Dichloroethane
Concen: 48.12 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 62 Resp: 648

Ion	Ratio	Lower	Upper
62	100		
64	61.3	2.3	62.3

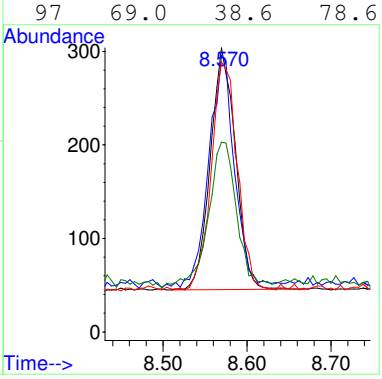


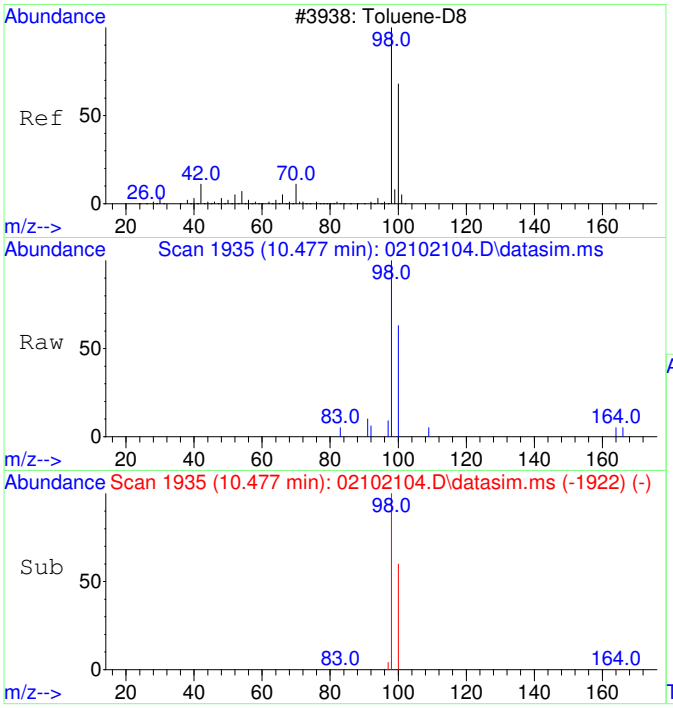


#11
Trichloroethene
Concen: 43.01 ug/L
RT: 8.570 min Scan# 1670
Delta R.T. -0.005 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:130 Resp: 536

Ion	Ratio	Lower	Upper
130	100		
95	98.9	60.7	120.7
132	97.0	76.0	116.0
97	69.0	38.6	78.6

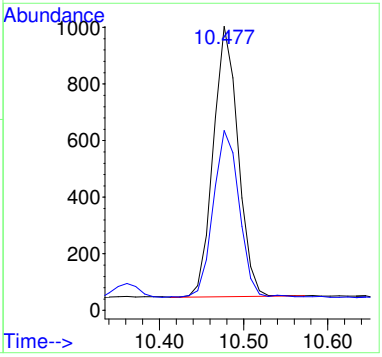


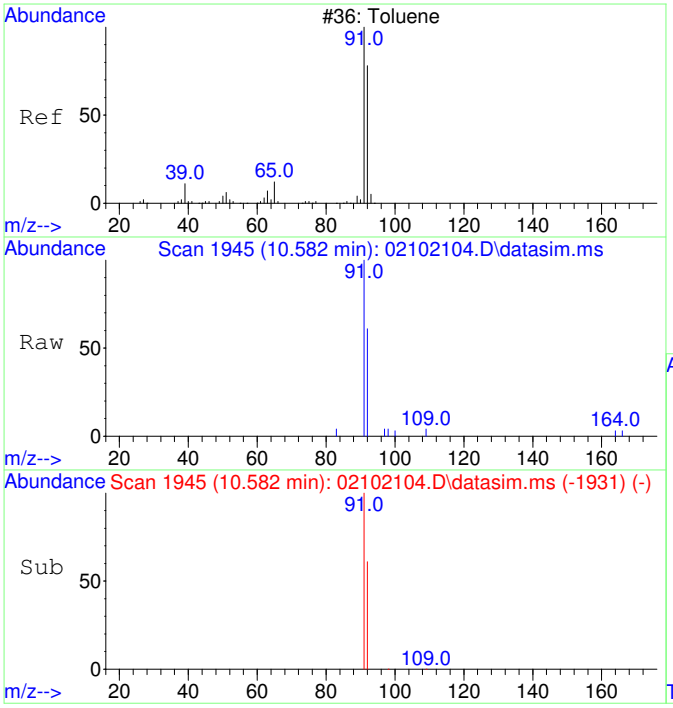


#12
Toluene-d8
Concen: 43.16 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 98 Resp: 1961

Ion	Ratio	Lower	Upper
98	100		
100	64.1	37.1	97.1

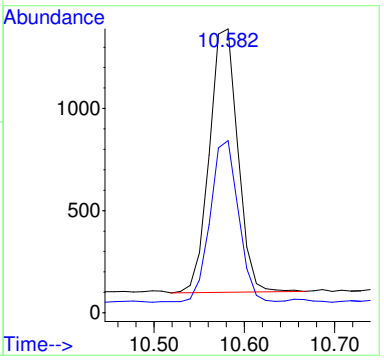


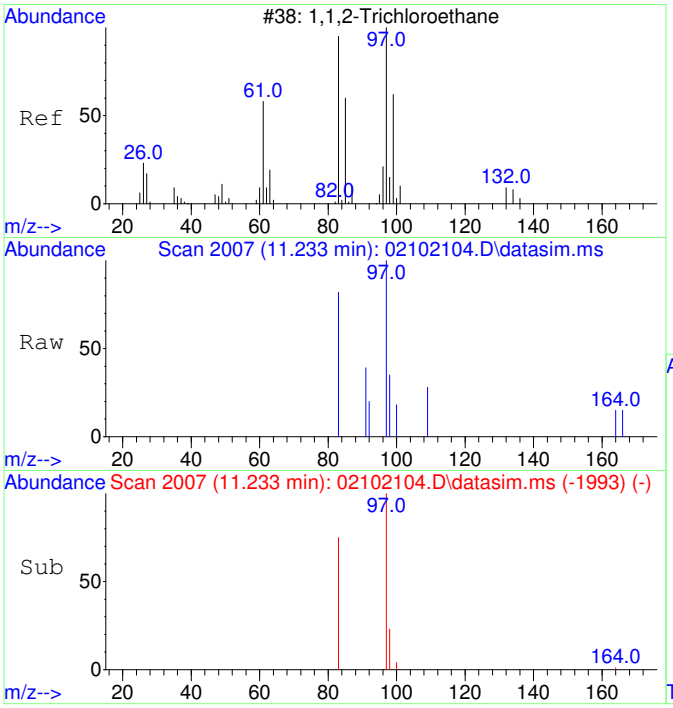


#13
Toluene
Concen: 49.99 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 2828

Ion	Ratio	Lower	Upper
91	100		
92	60.5	29.9	89.9

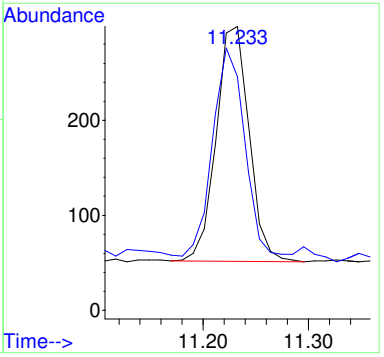


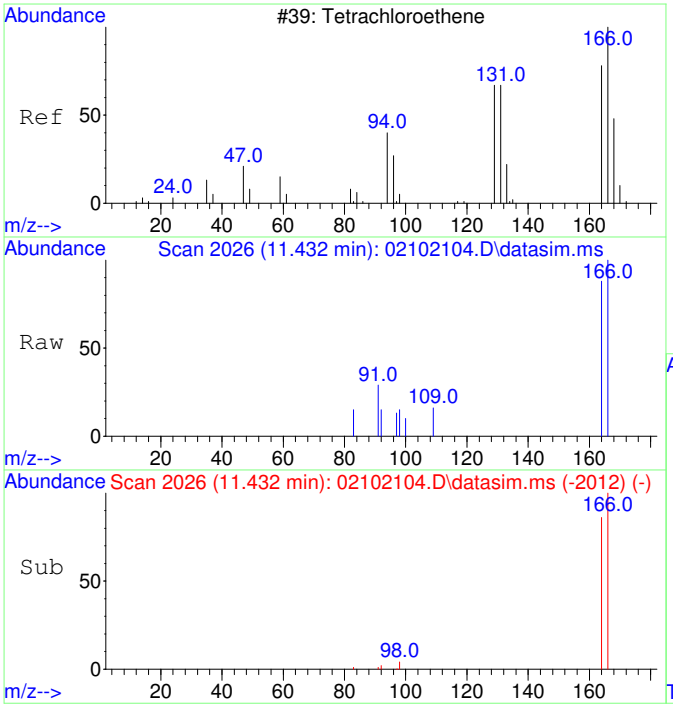


#14
1,1,2-Trichloroethane
Concen: 41.06 ug/L
RT: 11.233 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 97 Resp: 538

Ion	Ratio	Lower	Upper
97	100		
83	84.2	51.2	111.2

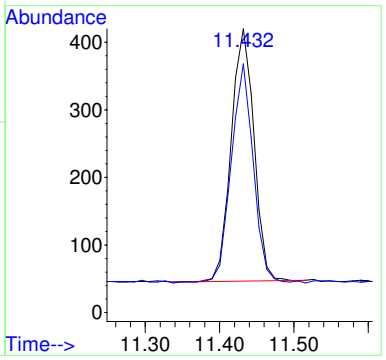


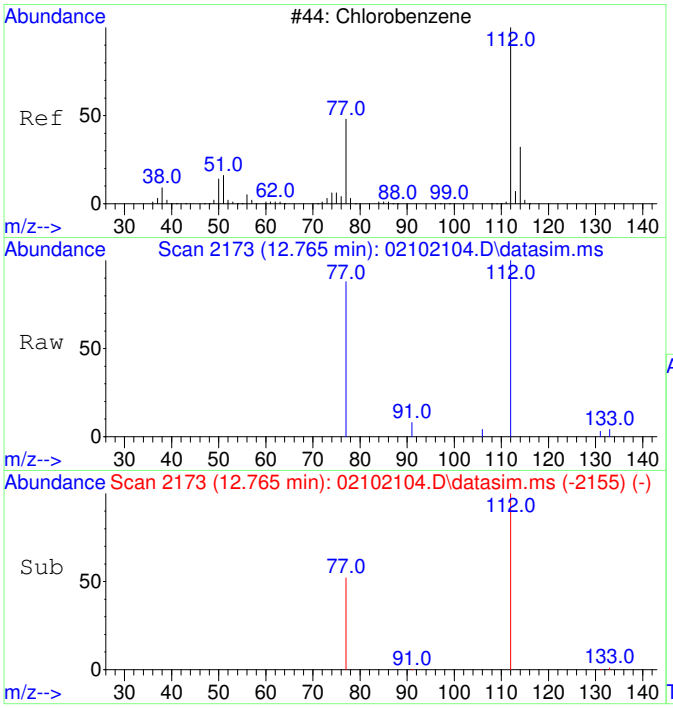


#15
Tetrachloroethene
Concen: 44.89 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:166 Resp: 791

Ion	Ratio	Lower	Upper
166	100		
164	83.2	47.8	107.8

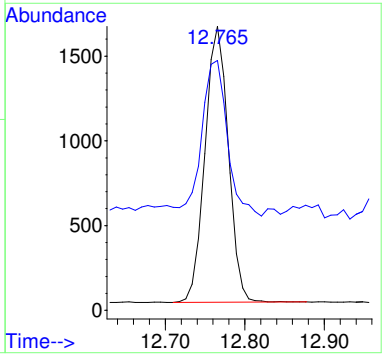


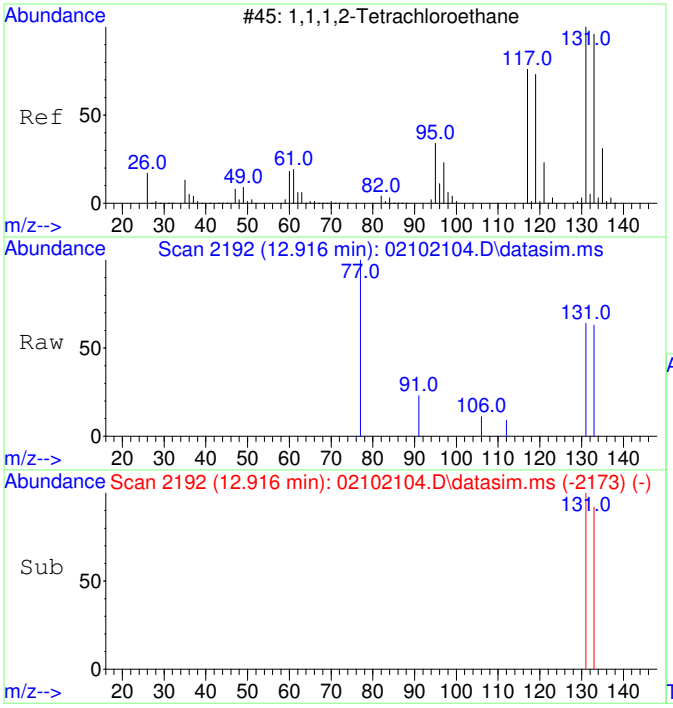


#16
Chlorobenzene
Concen: 75.67 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:112 Resp: 3316

Ion	Ratio	Lower	Upper
112	100		
77	61.3	23.6	83.6

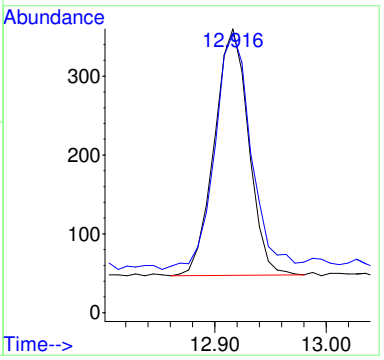


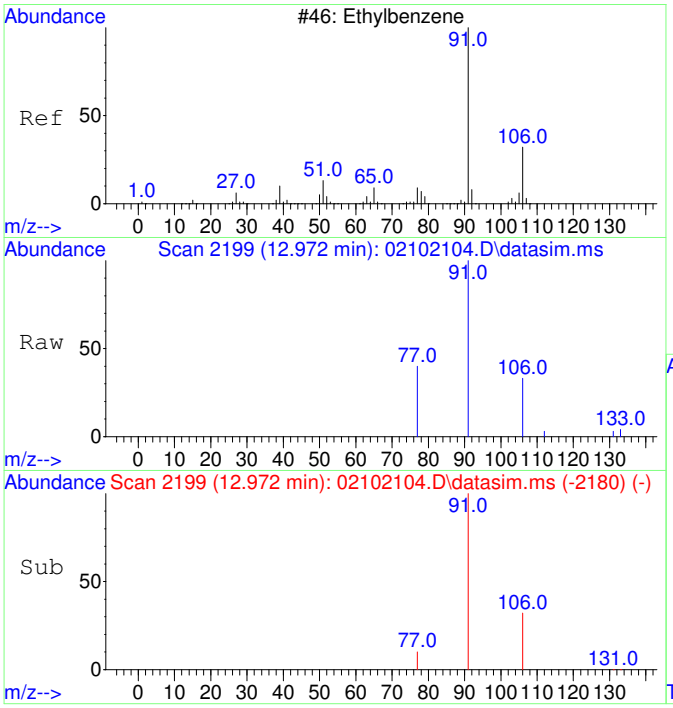


#17
1,1,1,2-Tetrachloroethane
Concen: 43.49 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:131 Resp: 667

Ion	Ratio	Lower	Upper
131	100		
133	101.8	66.3	126.3

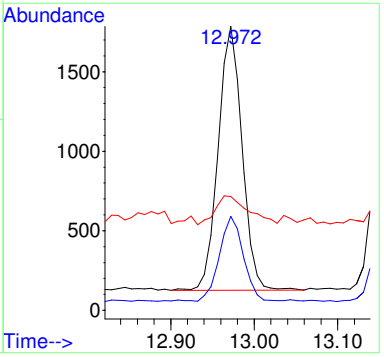


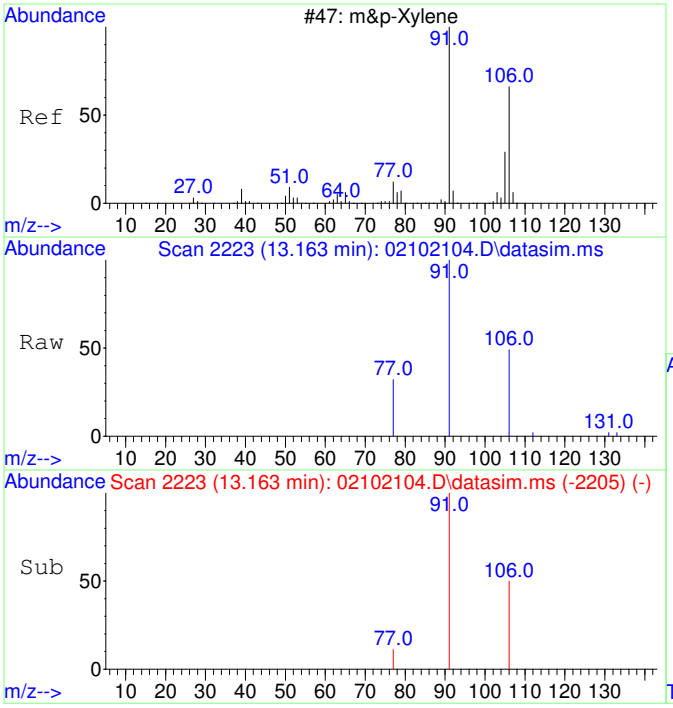


#18
Ethylbenzene
Concen: 45.80 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 3309

Ion	Ratio	Lower	Upper
91	100		
106	31.6	3.0	63.0
77	14.9	0.0	38.2

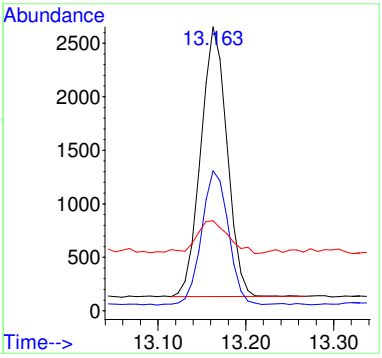


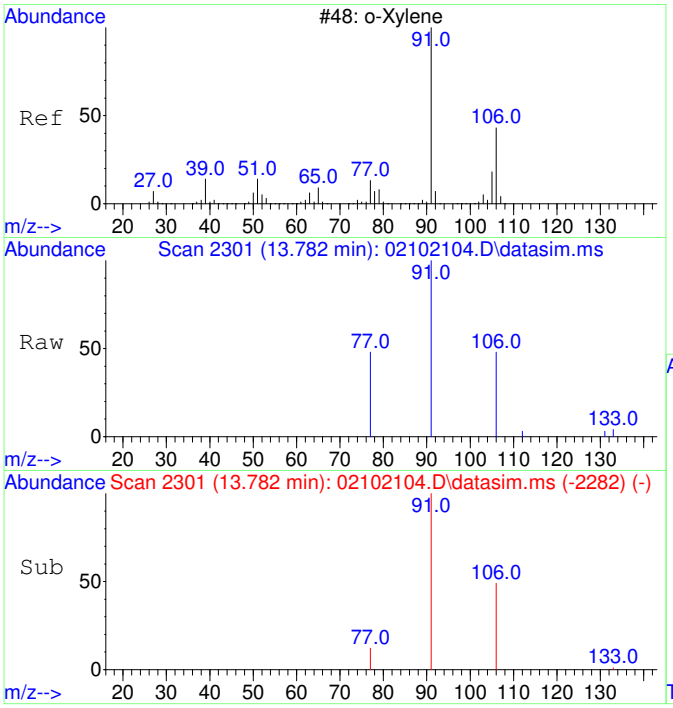


#19
m&p-Xylene
Concen: 94.00 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 5230

Ion	Ratio	Lower	Upper
91	100		
106	50.6	22.2	82.2
77	14.5	0.0	42.4

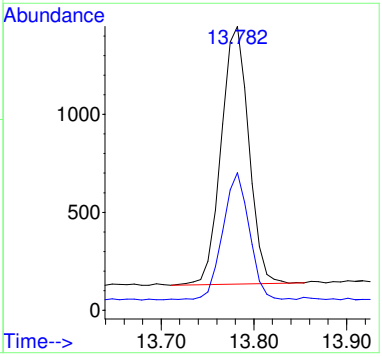


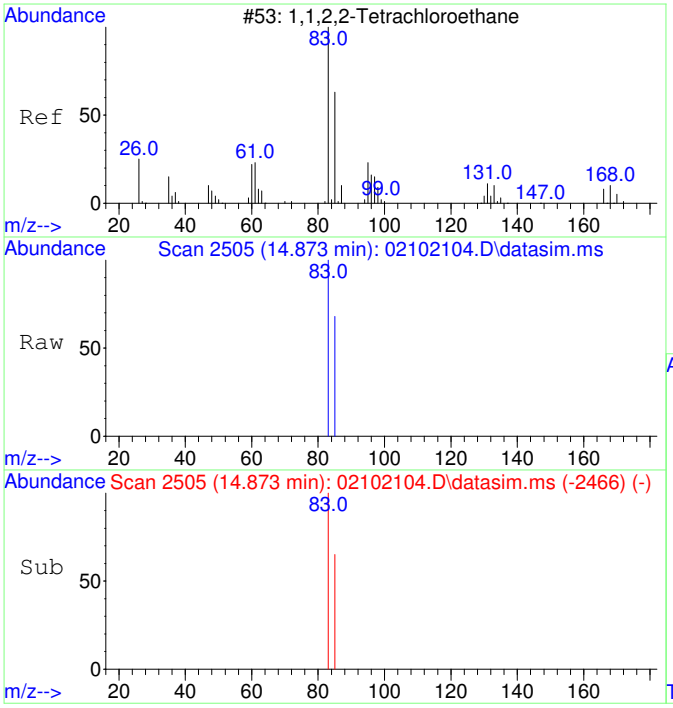


#20
o-Xylene
Concen: 45.58 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 2724

Ion	Ratio	Lower	Upper
91	100		
106	47.4	19.2	79.2

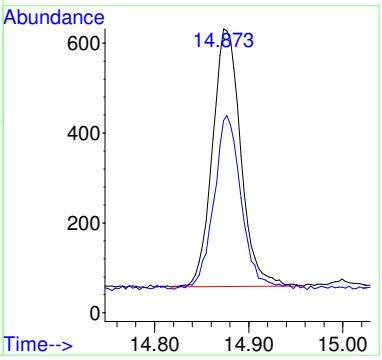


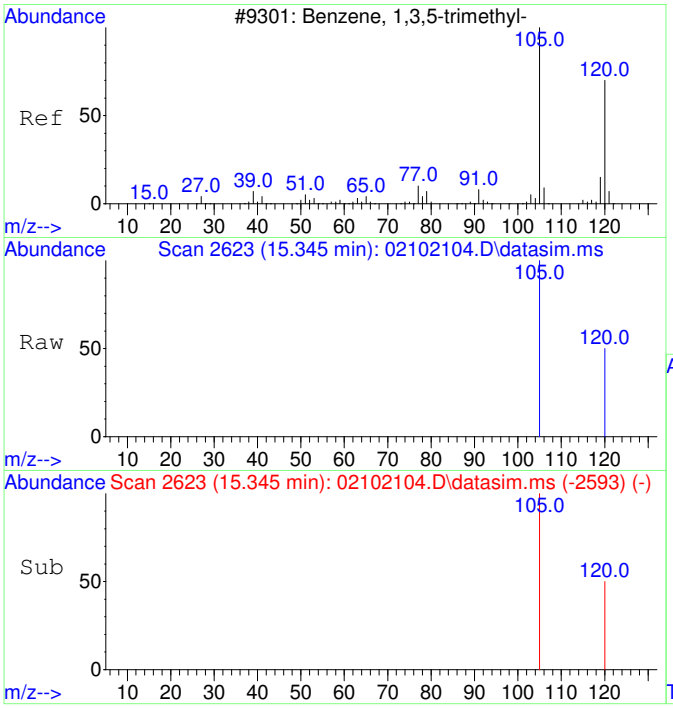


#21
1,1,2,2-Tetrachloroethane
Concen: 42.99 ug/L
RT: 14.873 min Scan# 2505
Delta R.T. -0.007 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 83 Resp: 1197

Ion	Ratio	Lower	Upper
83	100		
85	65.3	34.8	94.8

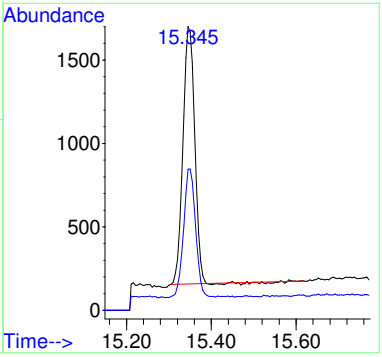


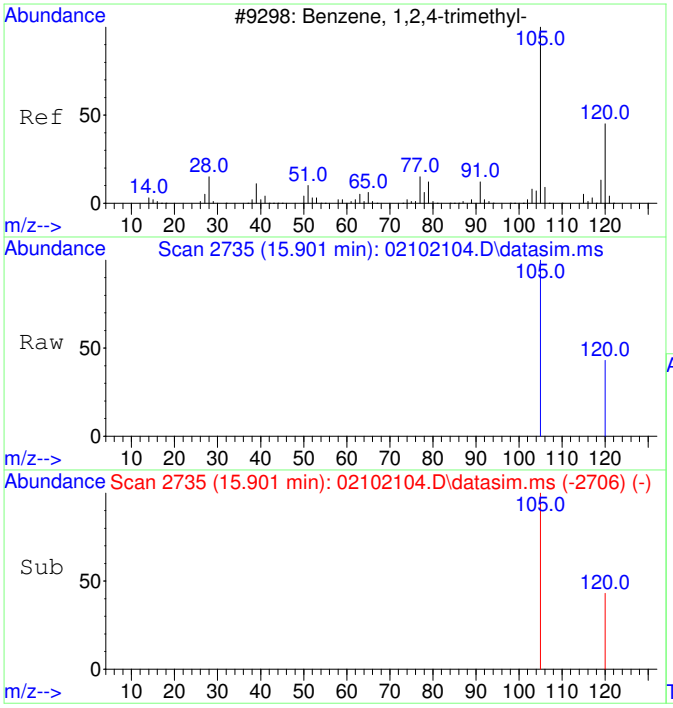


#22
1,3,5-Trimethylbenzene
Concen: 44.93 ug/L
RT: 15.345 min Scan# 2623
Delta R.T. -0.005 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:105 Resp: 2953

Ion	Ratio	Lower	Upper
105	100		
120	48.1	21.1	81.1

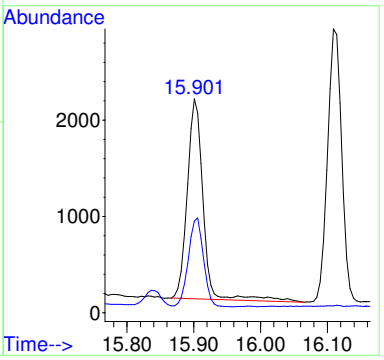


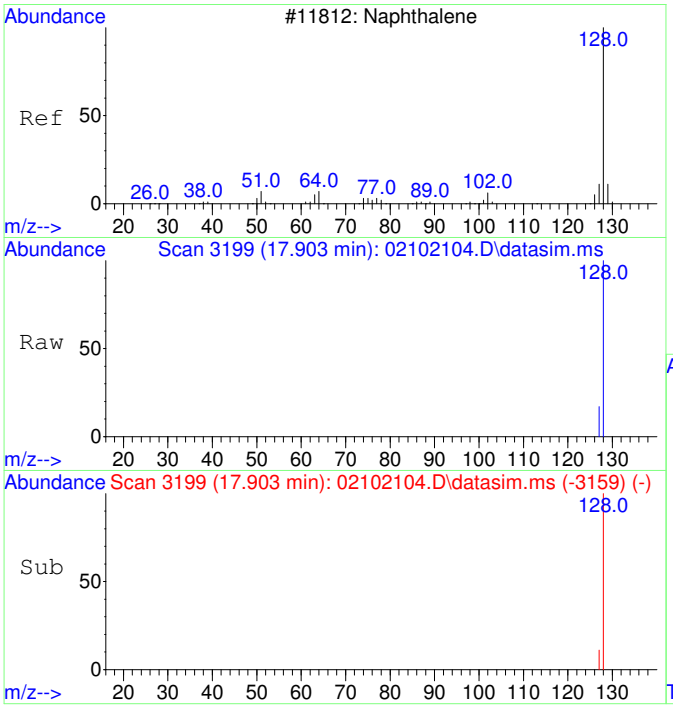


#23
1,2,4-Trimethylbenzene
Concen: 51.06 ug/L
RT: 15.901 min Scan# 2735
Delta R.T. -0.005 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:105 Resp: 3432

Ion	Ratio	Lower	Upper
105	100		
120	41.3	17.2	77.2

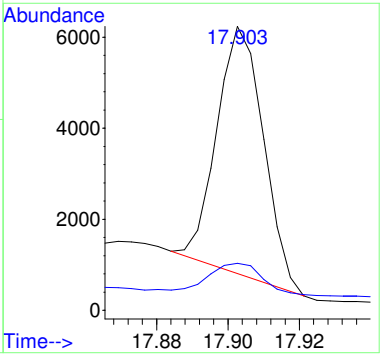


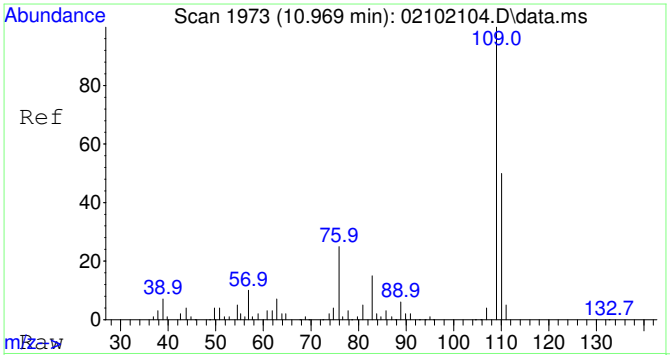


#24
Naphthalene
Concen: 44.43 ug/L
RT: 17.903 min Scan# 3199
Delta R.T. -0.001 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:128 Resp: 4839

Ion	Ratio	Lower	Upper
128	100		
127	13.0	0.0	42.5

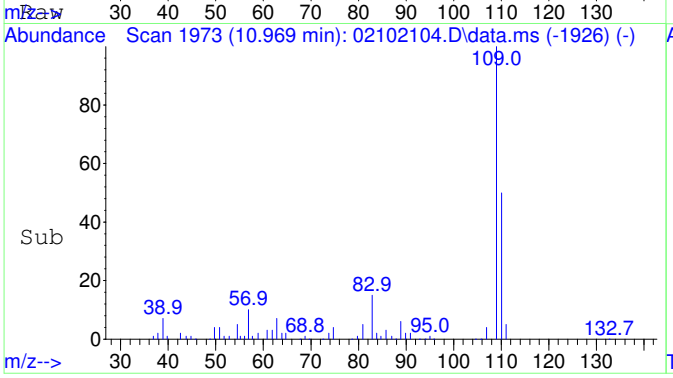


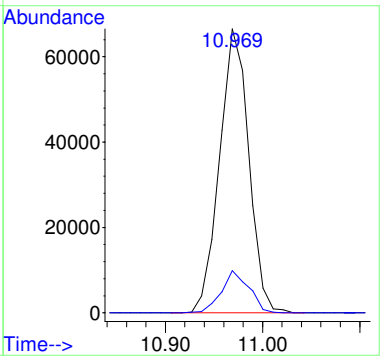


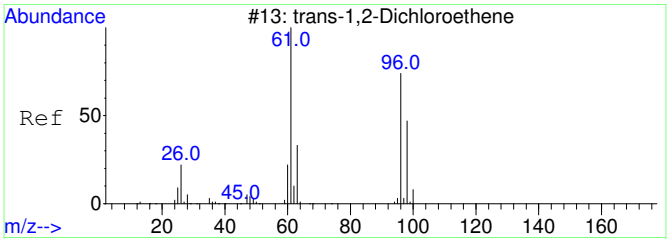
#25
2-Fluorotoluene SCAN
Concen: 5202.49 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

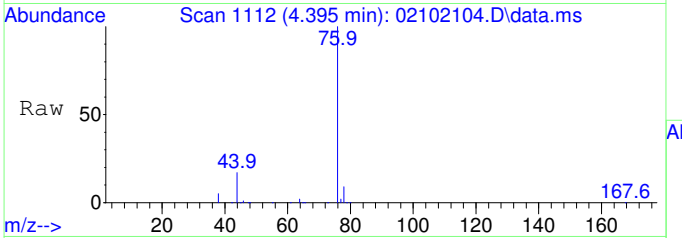
Tgt Ion:109 Resp: 138532

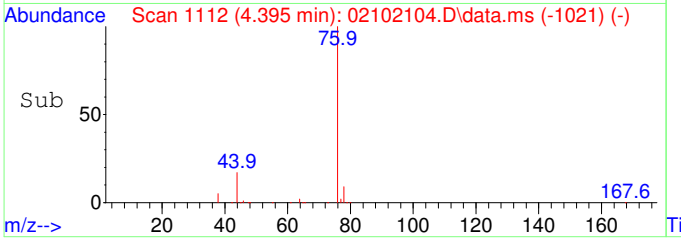
Ion	Ratio	Lower	Upper
109	100		
83	14.1	0.0	43.8







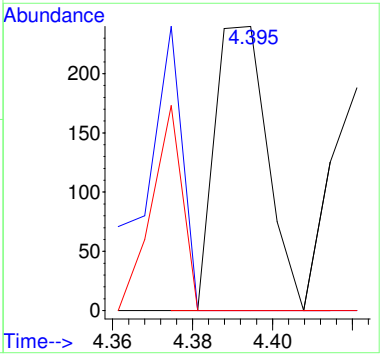


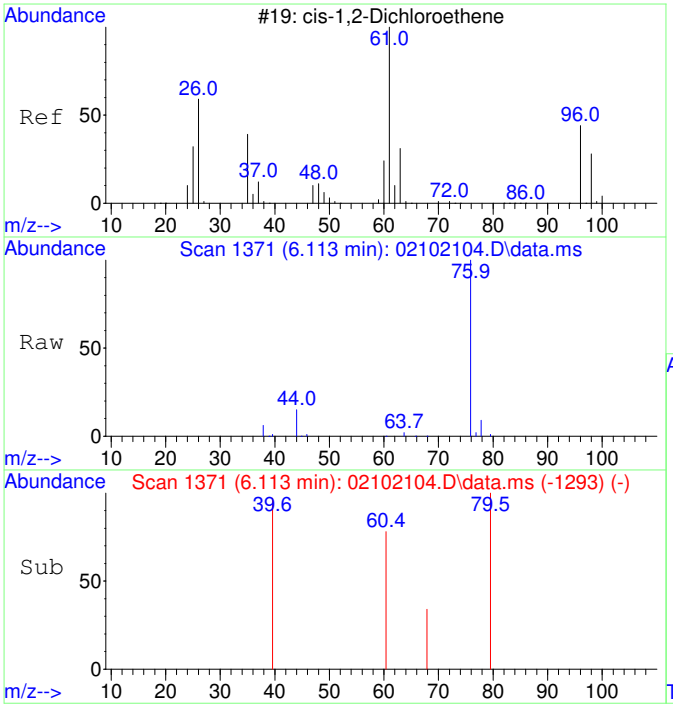


#27
trans-1,2-Dichloroethene SCAN
Concen: 27.79 ug/L
RT: 4.395 min Scan# 1112
Delta R.T. 0.013 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 61 Resp: 220

Ion	Ratio	Lower	Upper
61	100		
96	70.9	49.0	109.0
98	42.3	20.5	80.5

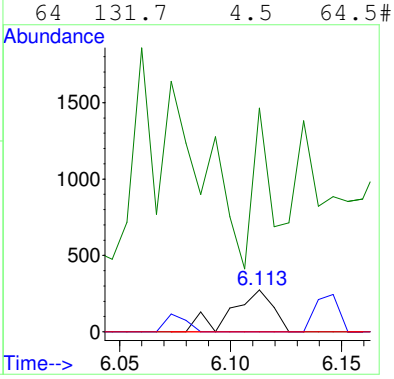


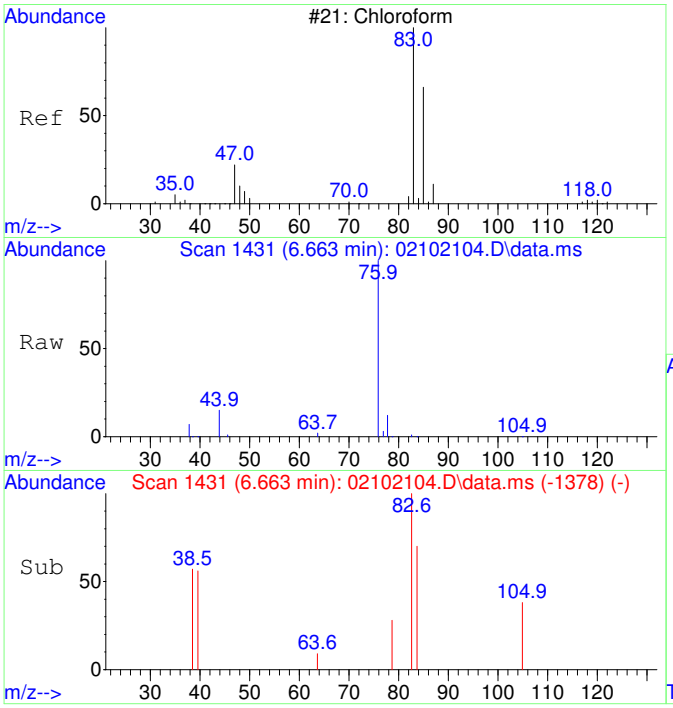


#29
cis-1,2-Dichloroethene SCAN
Concen: 38.86 ug/L
RT: 6.113 min Scan# 1371
Delta R.T. 0.020 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 61 Resp: 357

Ion	Ratio	Lower	Upper
61	100		
96	0.0	39.9	99.9#
98	0.0	13.5	73.5#
64	131.7	4.5	64.5#

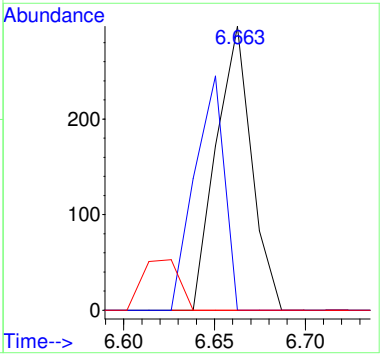


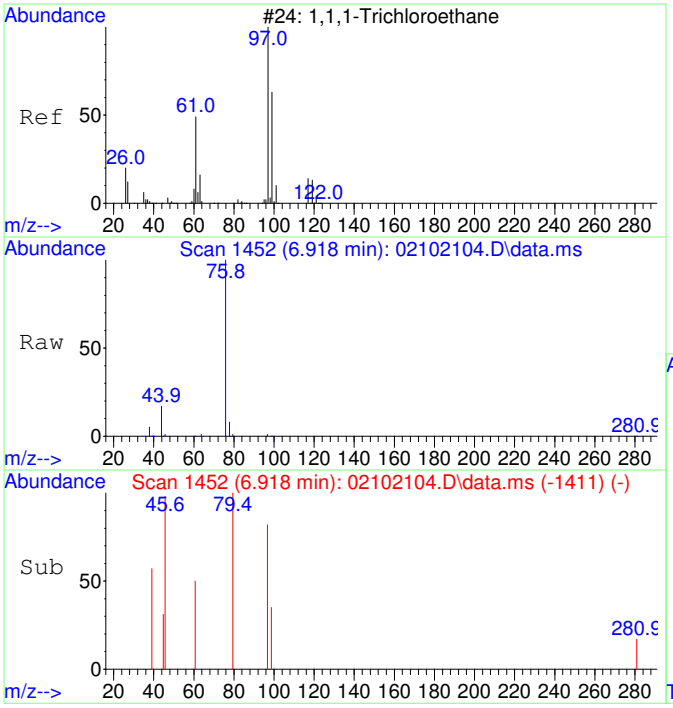


#30
Chloroform SCAN
Concen: 47.03 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 83 Resp: 403

Ion	Ratio	Lower	Upper
83	100		
85	69.5	34.6	94.6
47	0.0	0.0	53.4

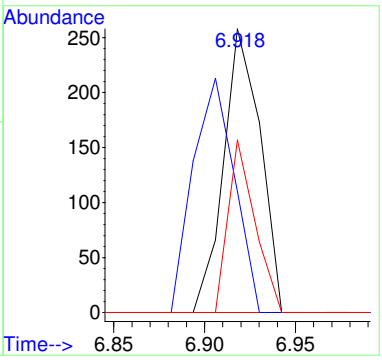


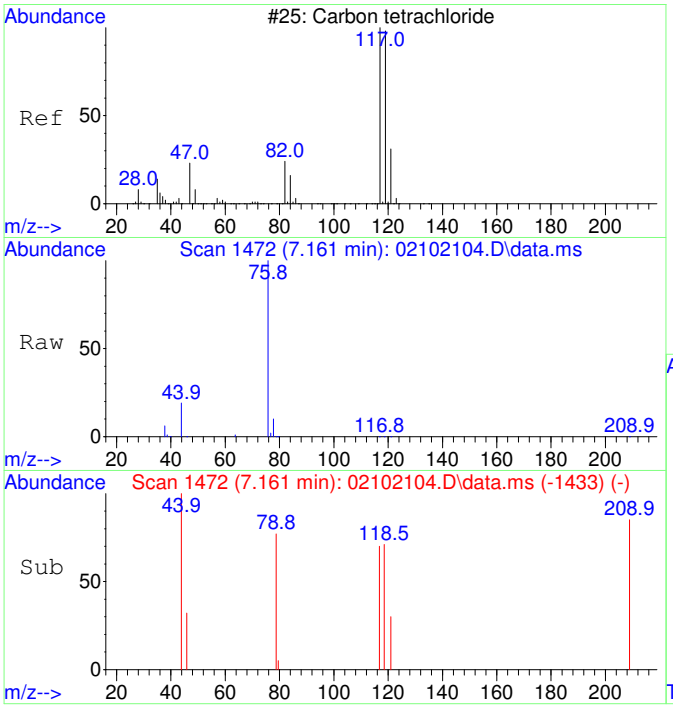


#31
1,1,1-Trichloroethane SCAN
Concen: 41.05 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 97 Resp: 363

Ion	Ratio	Lower	Upper
97	100		
99	92.6	43.6	103.6
61	44.4	18.0	78.0

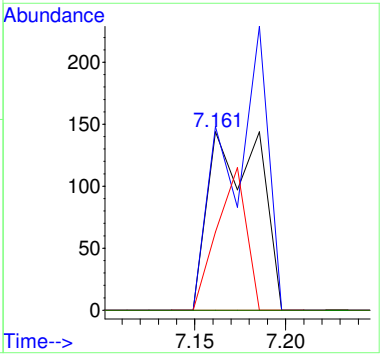


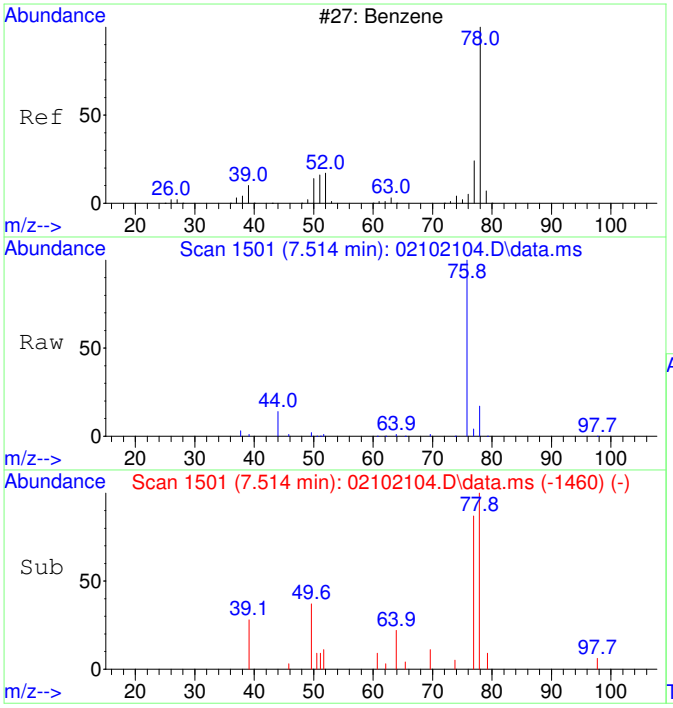


#32
Carbon tetrachloride SCAN
Concen: 37.19 ug/L
RT: 7.161 min Scan# 1472
Delta R.T. -0.024 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:117 Resp: 281

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

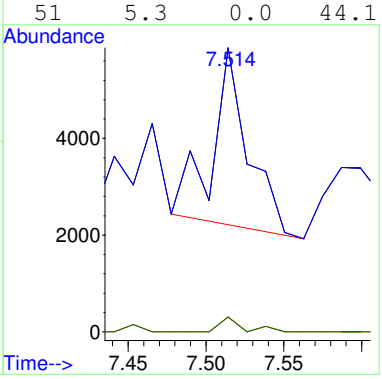


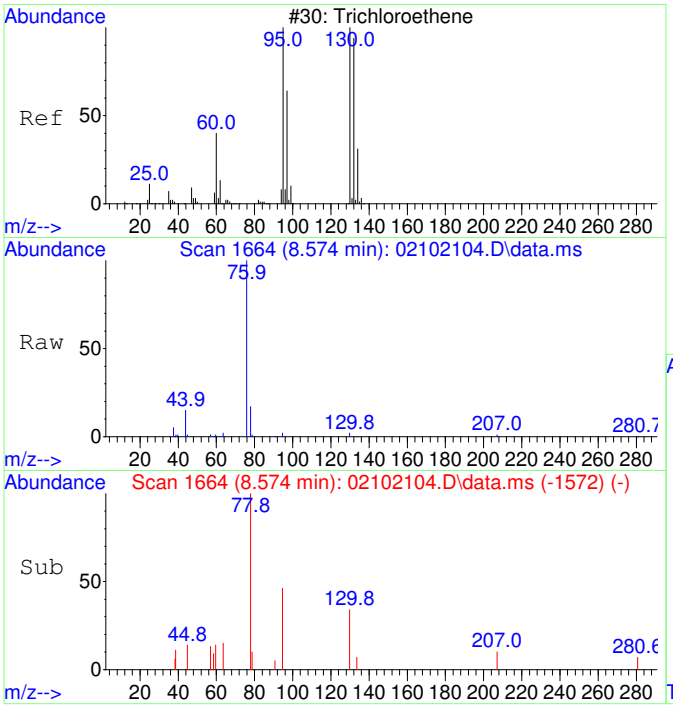


#33
Benzene SCAN
Concen: 213.81 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 78 Resp: 5720

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	5.3	0.0	47.9
51	5.3	0.0	44.1

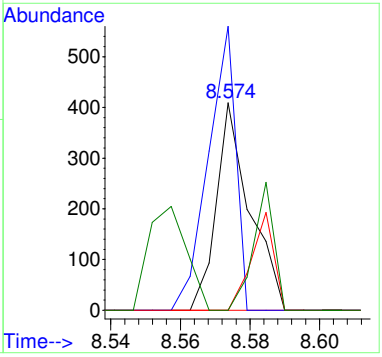


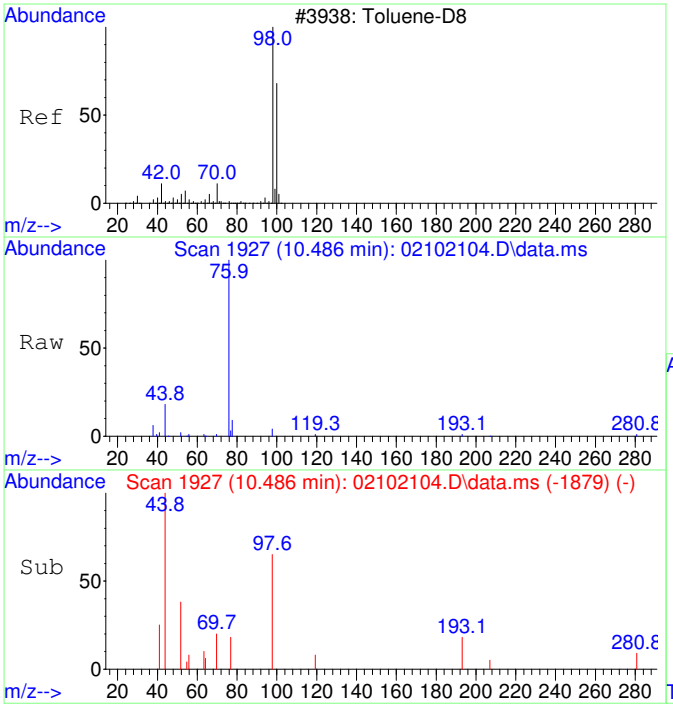


#35
Trichloroethene SCAN
Concen: 46.80 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:130 Resp: 273

Ion	Ratio	Lower	Upper
130	100		
95	112.5	60.5	120.5
132	31.9	59.6	119.6#
97	38.1	28.2	88.2

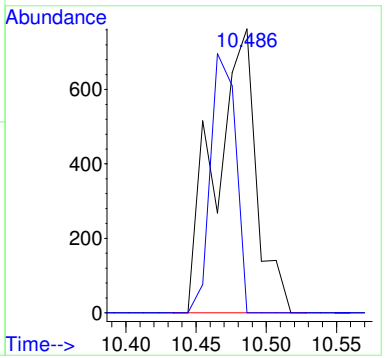


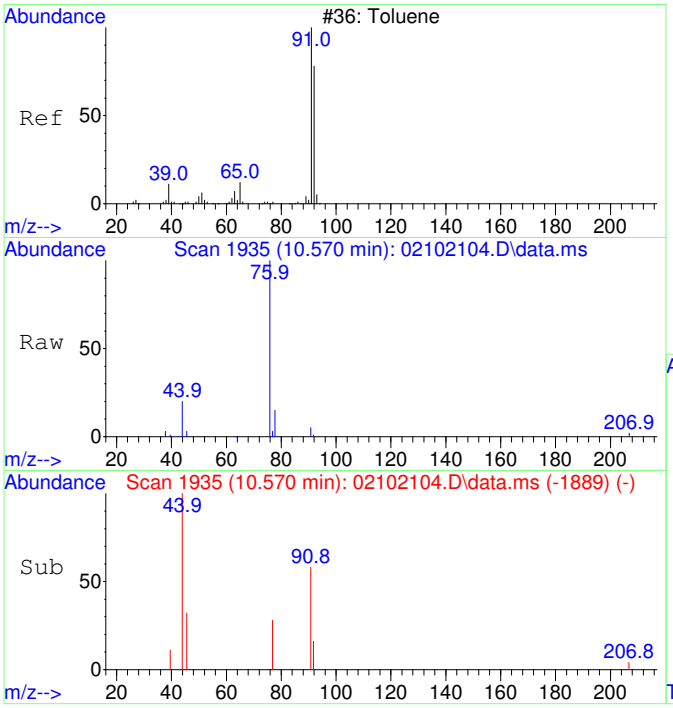


#36
Toluene-d8 SCAN
Concen: 62.30 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 98 Resp: 1556

Ion	Ratio	Lower	Upper
98	100		
100	0.0	40.0	100.0#

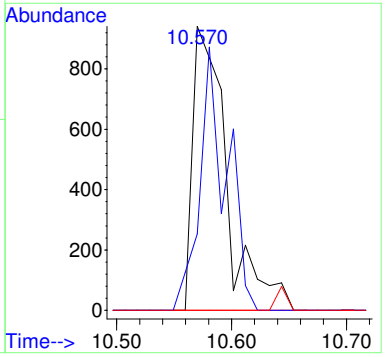


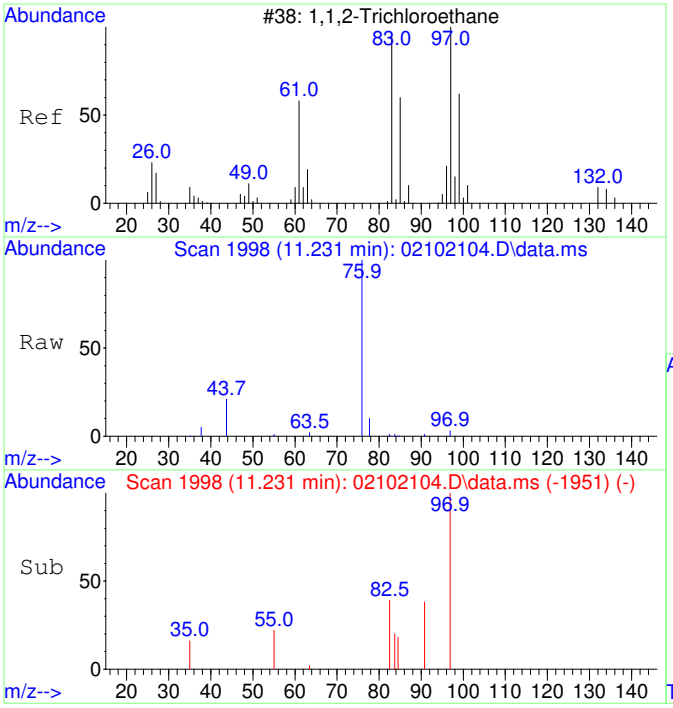


#37
Toluene SCAN
Concen: 62.77 ug/L
RT: 10.570 min Scan# 1935
Delta R.T. -0.021 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 1930

Ion	Ratio	Lower	Upper
91	100		
92	73.6	28.3	88.3
65	0.0	0.0	41.0

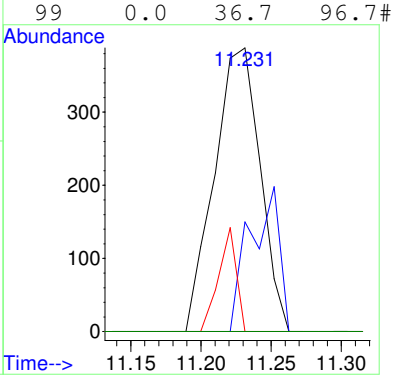


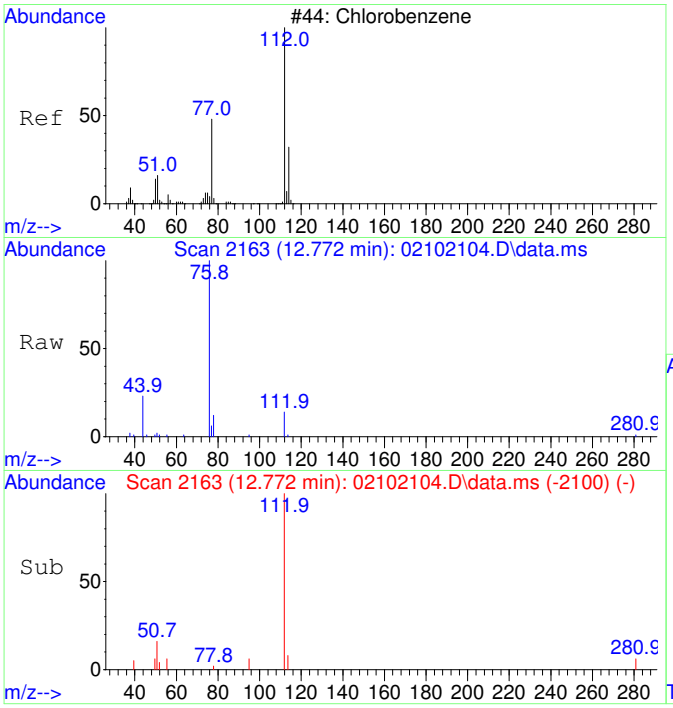


#38
1,1,2-Trichloroethane SCAN
Concen: 114.70 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. -0.010 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 97 Resp: 884

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	14.1	32.1	92.1#
99	0.0	36.7	96.7#

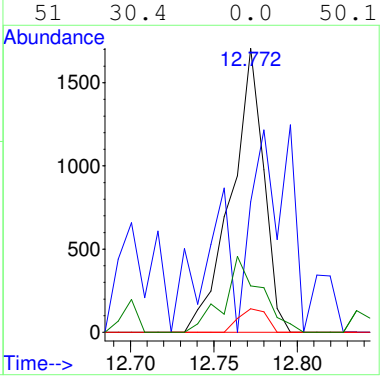


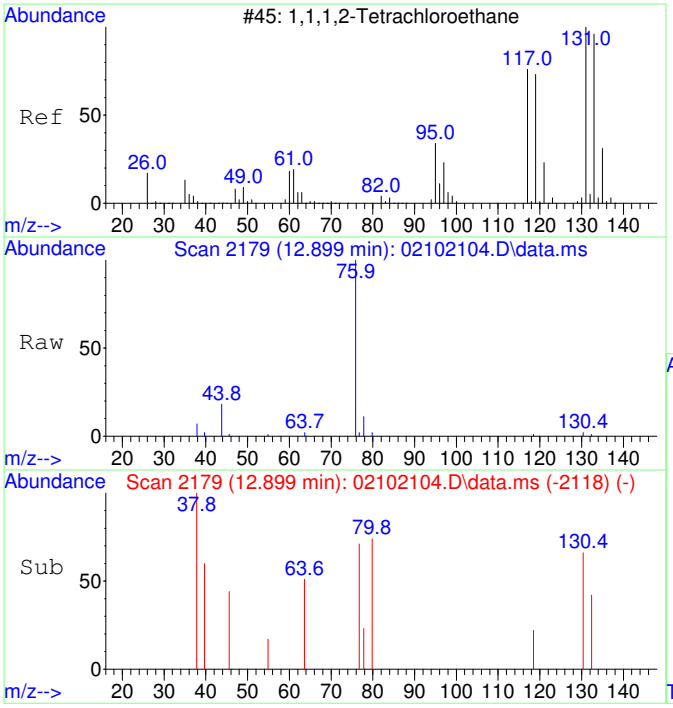


#40
Chlorobenzene SCAN
Concen: 104.68 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.000 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:112 Resp: 2312

Ion	Ratio	Lower	Upper
112	100		
77	42.6	28.2	88.2
114	7.2	2.3	62.3
51	30.4	0.0	50.1

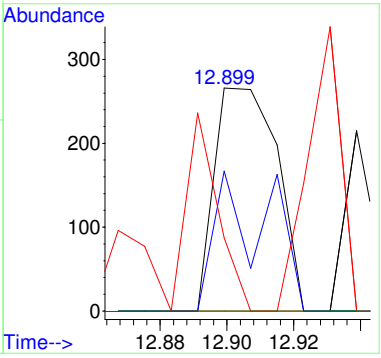


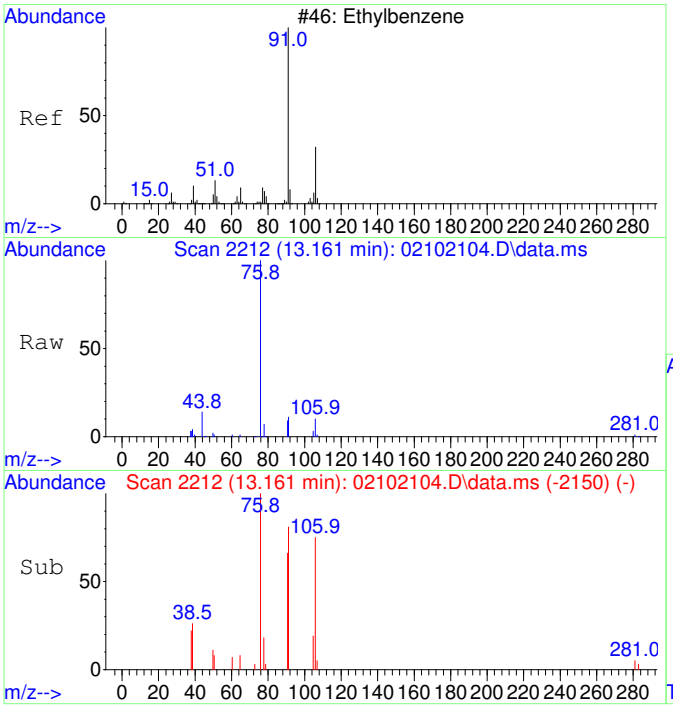


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 45.54 ug/L
RT: 12.899 min Scan# 2179
Delta R.T. -0.016 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:131 Resp: 347

Ion	Ratio	Lower	Upper
131	100		
133	52.4	66.9	126.9#
119	68.0	40.4	100.4
117	0.0	35.1	95.1#

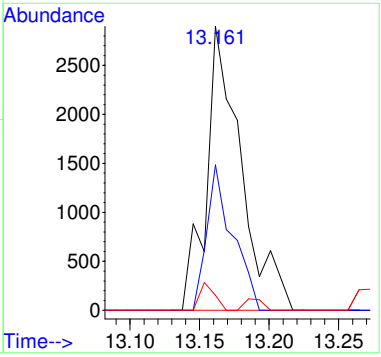


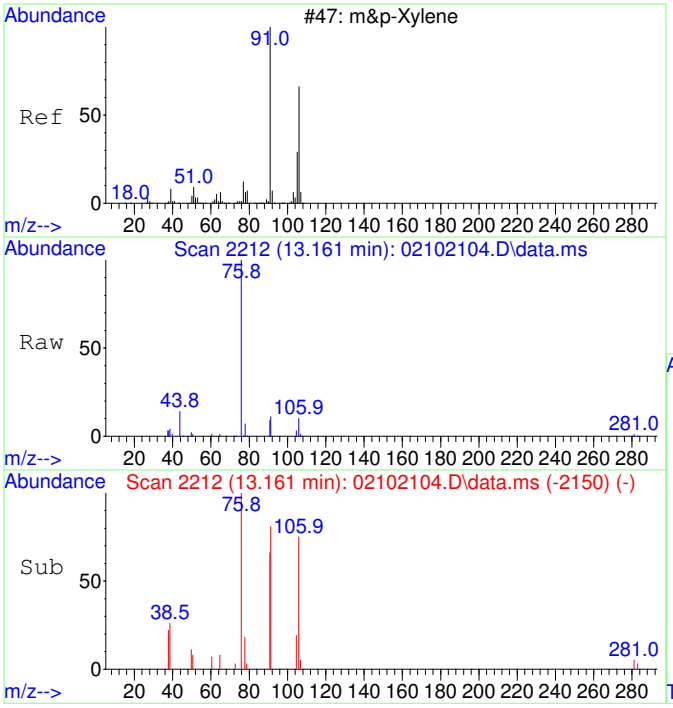


#42
Ethylbenzene SCAN
Concen: 86.16 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.008 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 5049

Ion	Ratio	Lower	Upper
91	100		
106	37.9	23.1	83.1
51	4.1	0.0	40.1

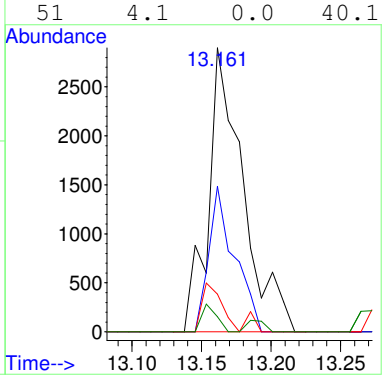


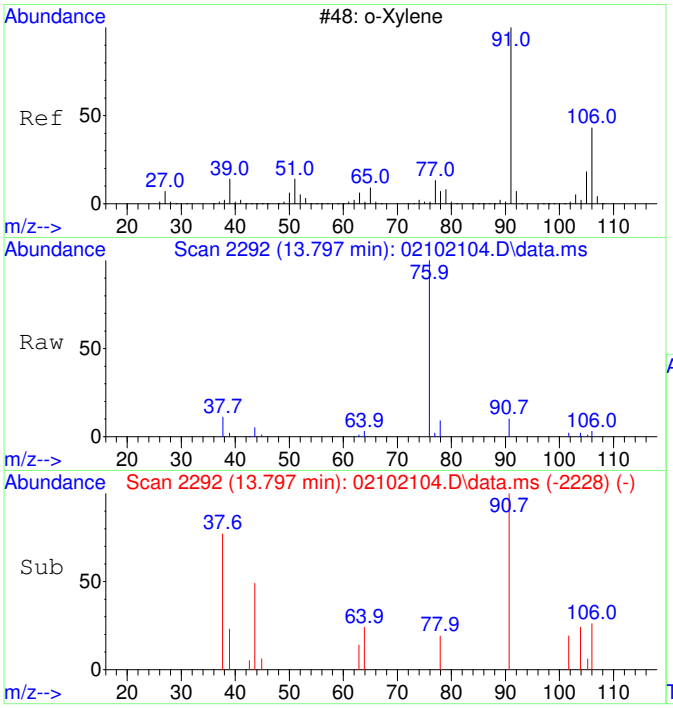


#43
m&p-Xylene SCAN
Concen: 86.16 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.008 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 5049

Ion	Ratio	Lower	Upper
91	100		
106	37.9	23.1	83.1
105	9.7	0.0	54.7
51	4.1	0.0	40.1

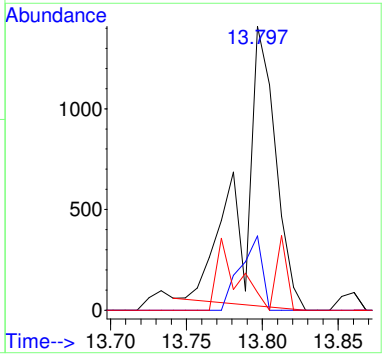


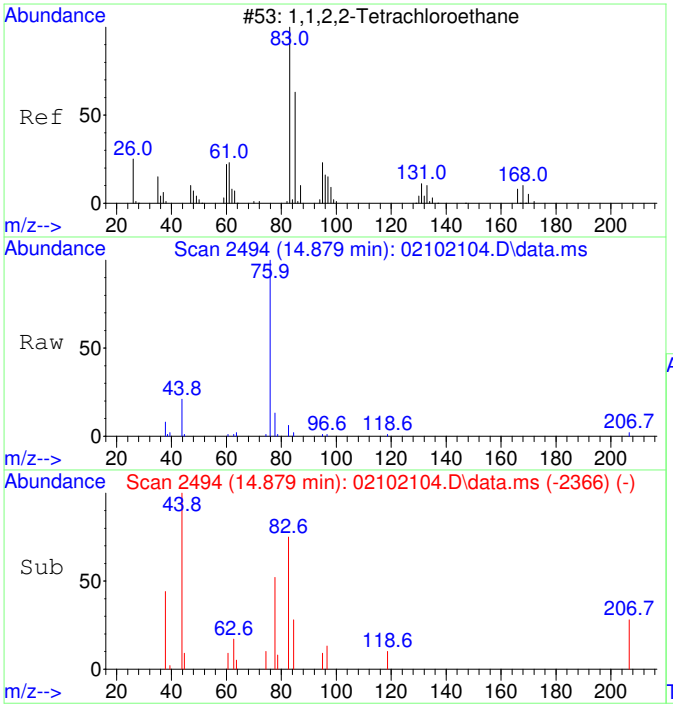


#44
o-Xylene SCAN
Concen: 66.16 ug/L
RT: 13.797 min Scan# 2292
Delta R.T. 0.008 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 91 Resp: 2117

Ion	Ratio	Lower	Upper
91	100		
106	17.7	18.0	78.0#
105	8.4	0.0	56.6

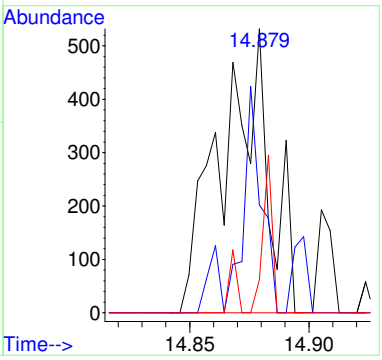


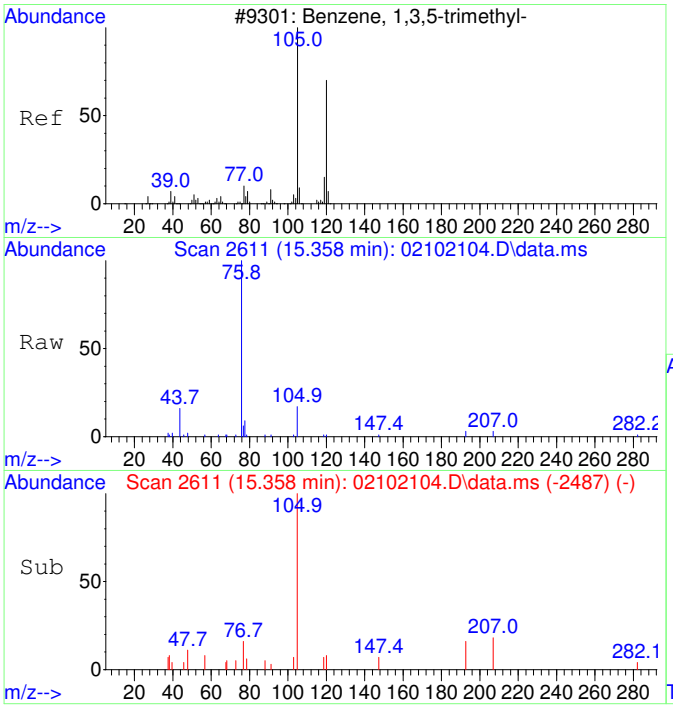


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 44.12 ug/L
RT: 14.879 min Scan# 2494
Delta R.T. -0.004 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion: 83 Resp: 734

Ion	Ratio	Lower	Upper
83	100		
85	30.0	35.9	95.9#
95	10.8	0.0	47.4

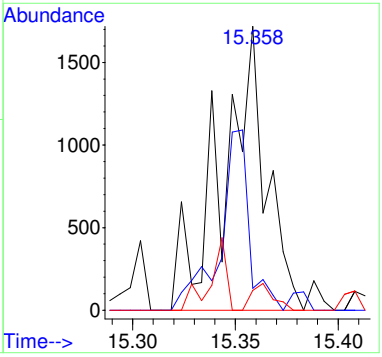


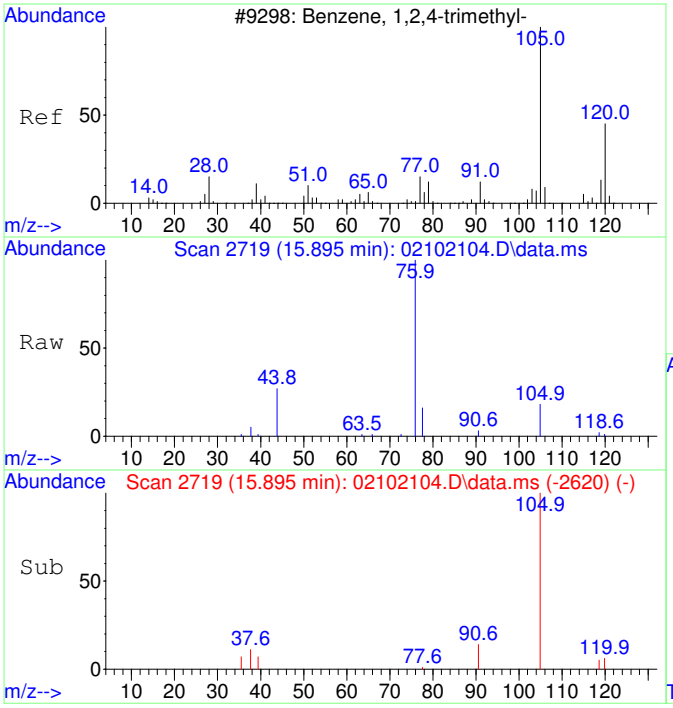


#46
1,3,5-Trimethylbenzene SCAN
Concen: 75.16 ug/L
RT: 15.358 min Scan# 2611
Delta R.T. 0.005 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:105 Resp: 2537

Ion	Ratio	Lower	Upper
105	100		
120	42.6	18.3	78.3
119	4.7	0.0	43.1

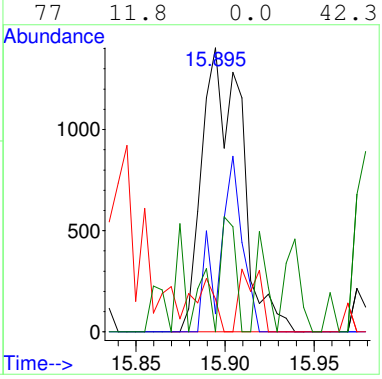


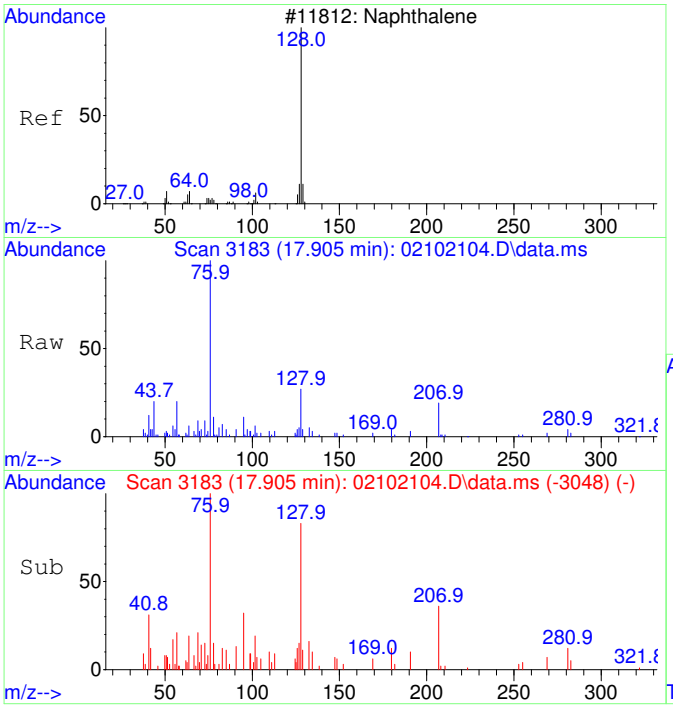


#47
1,2,4-Trimethylbenzene SCAN
Concen: 63.47 ug/L
RT: 15.895 min Scan# 2719
Delta R.T. -0.010 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:105 Resp: 2189

Ion	Ratio	Lower	Upper
105	100		
120	36.5	16.9	76.9
119	11.1	0.0	41.9
77	11.8	0.0	42.3

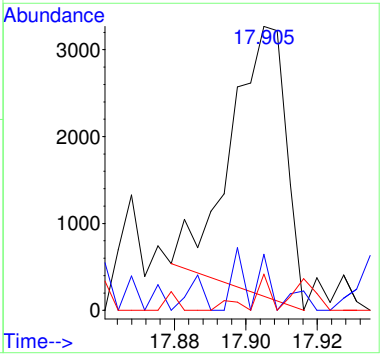




#48
Naphthalene SCAN
Concen: 63.22 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.003 min
Lab File: 02102104.D
Acq: 10 Feb 2021 10:03

Tgt Ion:128 Resp: 3273

Ion	Ratio	Lower	Upper
128	100		
127	12.1	0.0	44.0
129	4.2	0.0	40.8



CRDL STANDARD

Radiello D1

Laboratory: EPA Region 9 Laboratory
SDG: 21039A
Client: California Site Cleanup Section 3
Project: MEW OU1 FY2021 Vapor Intrusion Investigation
Instrument ID: AG5975CV
Calibration: 2102007
Sequence: S21B047

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
S21B047-CRL1	1,1-Dichloroethene	50.0	54.9	110	ug/L	60 - 140
	trans-1,2-Dichloroethene	50.0	51.2	102	ug/L	60 - 140
	1,1-Dichloroethane	50.0	54.1	108	ug/L	60 - 140
	cis-1,2-Dichloroethene	50.0	51.3	103	ug/L	60 - 140
	Chloroform	50.0	57.7	115	ug/L	60 - 140
	Trichloroethene	50.0	52.6	105	ug/L	60 - 140
	Tetrachloroethene	50.0	57.4	115	ug/L	60 - 140
	Toluene-d8	50.0	58.6	117	ug/L	60 - 140

QLS REPORT

Instrument Name: AG5975C
Sample Name: S21B047-CRL1
Misc Info: 2106042 0.05 mg/L
Date Acquired: 2/16/21 9:23
QLast Update: Mon Feb 15 13:33:37 2021
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.928	5000.0	5000.00	100%	60	140	pass
2)	1,1-Dichloroethene	3.056	50.0	54.88	110%	60	140	pass
3)	trans-1,2-Dichloroethene	4.230	50.0	51.21	102%	60	140	pass
4)	1,1-Dichloroethane	4.980	50.0	54.14	108%	60	140	pass
5)	cis-1,2-Dichloroethene	6.001	50.0	51.29	103%	60	140	pass
6)	Chloroform	6.579	50.0	57.73	115%	60	140	pass
7)	1,1,1-Trichloroethane	6.834	50.0	50.23	100%	60	140	pass
8)	Carbon tetrachloride	7.114	50.0	49.36	99%	60	140	pass
10)	1,2-Dichloroethane	7.479	50.0	56.30	113%	60	140	pass
11)	Trichloroethene	8.520	50.0	52.59	105%	60	140	pass
12)	Toluene-d8	10.435	50.0	58.64	117%	60	140	pass
13)	Toluene	10.540	50.0	66.24	132%	60	140	pass
14)	1,1,2-Trichloroethane	11.190	50.0	52.33	105%	60	140	pass
15)	Tetrachloroethene	11.390	50.0	57.45	115%	60	140	pass
16)	Chlorobenzene	12.726	50.0	84.55	169%	60	140	FAIL
17)	1,1,1,2-Tetrachloroethane	12.877	50.0	52.16	104%	60	140	pass
18)	Ethylbenzene	12.932	50.0	64.16	128%	60	140	pass
19)	m&p-Xylene	13.131	100.0	135.44	135%	60	140	pass
20)	o-Xylene	13.742	50.0	74.66	149%	60	140	FAIL
21)	1,1,2,2-Tetrachloroethane	14.840	50.0	57.58	115%	60	140	pass
22)	1,3,5-Trimethylbenzene	15.314	50.0	79.07	158%	60	140	FAIL
23)	1,2,4-Trimethylbenzene	15.875	50.0	90.26	181%	60	140	FAIL
24)	Naphthalene	17.888	50.0	109.42	219%	60	140	FAIL

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021621\
Data File : 02162104.D
Acq On : 16 Feb 2021 9:23
InstName : AG5975C
Operator : TD
Sample : S21B047-CRL1
Misc : 2106042 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 16 09:42:00 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021621.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration

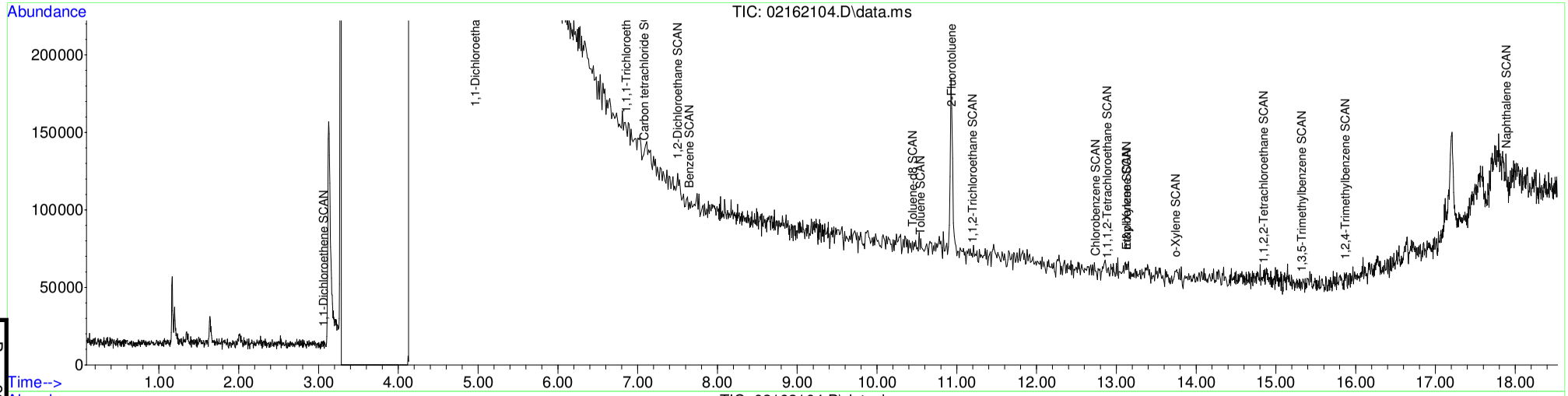
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.928	109	165475	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.435	98	1672	58.64	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 1.17%#			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.056	61	423	54.88	ug/L	99
3] trans-1,2-Dichloroethene	4.230	61	417	51.21	ug/L #	1
4] 1,1-Dichloroethane	4.980	63	531	54.14	ug/L	80
5] cis-1,2-Dichloroethene	6.001	61	496	51.29	ug/L	95
6] Chloroform	6.579	83	595	57.73	ug/L	99
7] 1,1,1-Trichloroethane	6.834	97	492	50.23	ug/L	89
8] Carbon tetrachloride	7.114	117	404	49.36	ug/L	79
9] Benzene	7.430	78	2751	97.70	ug/L #	22
10] 1,2-Dichloroethane	7.479	62	506	56.30	ug/L #	1
11] Trichloroethene	8.515	130	392	52.59	ug/L	86
13] Toluene	10.540	91	2616	66.24	ug/L	99
14] 1,1,2-Trichloroethane	11.190	97	407	52.33	ug/L	73
15] Tetrachloroethene	11.390	166	594	57.45	ug/L	88
16] Chlorobenzene	12.726	112	2780	84.55	ug/L	62
17] 1,1,1,2-Tetrachloroethane	12.877	131	418	52.16	ug/L #	69
18] Ethylbenzene	12.932	91	3195	64.16	ug/L	95
19] m&p-Xylene	13.131	91	5306	135.44	ug/L	97
20] o-Xylene	13.742	91	3168	74.66	ug/L	96
21] 1,1,2,2-Tetrachloroethane	14.840	83	993	57.58	ug/L	95
22] 1,3,5-Trimethylbenzene	15.314	105	3709	79.07	ug/L	93
23] 1,2,4-Trimethylbenzene	15.875	105	4500	90.26	ug/L	92
24] Naphthalene	17.888	128	7767	109.42	ug/L	99
25) 2-Fluorotoluene SCAN	10.927	109	87969	4937.92	ug/L	92
26) 1,1-Dichloroethene SCAN	3.066	61	182	32.13	ug/L #	25
28) 1,1-Dichloroethane SCAN	4.965	63	213	28.93	ug/L #	50
31) 1,1,1-Trichloroethane ...	6.857	97	173	26.96	ug/L #	7
32) Carbon tetrachloride SCAN	7.076	117	145	28.06	ug/L #	15
33) Benzene SCAN	7.648	78	3880	220.28	ug/L	98
34) 1,2-Dichloroethane SCAN	7.502	62	644	100.19	ug/L #	40
36) Toluene-d8 SCAN	10.444	98	976	62.04	ug/L #	10
37) Toluene SCAN	10.539	91	1929	85.54	ug/L	68
38) 1,1,2-Trichloroethane ...	11.200	97	508	113.45	ug/L #	57
40) Chlorobenzene SCAN	12.732	112	1318	95.58	ug/L #	1
41) 1,1,1,2-Tetrachloroeth...	12.883	131	127	28.67	ug/L #	1
42) Ethylbenzene SCAN	13.130	91	3178	75.98	ug/L	80
43) m&p-Xylene SCAN	13.130	91	3178	75.98	ug/L	82
44) o-Xylene SCAN	13.741	91	2281	100.31	ug/L #	53
45) 1,1,2,2-Tetrachloroeth...	14.842	83	412	38.86	ug/L #	74
46) 1,3,5-Trimethylbenzene...	15.327	105	915	38.19	ug/L	89
47) 1,2,4-Trimethylbenzene...	15.873	105	1490	62.65	ug/L #	38
48) Naphthalene SCAN	17.886	128	5376	174.11	ug/L	93

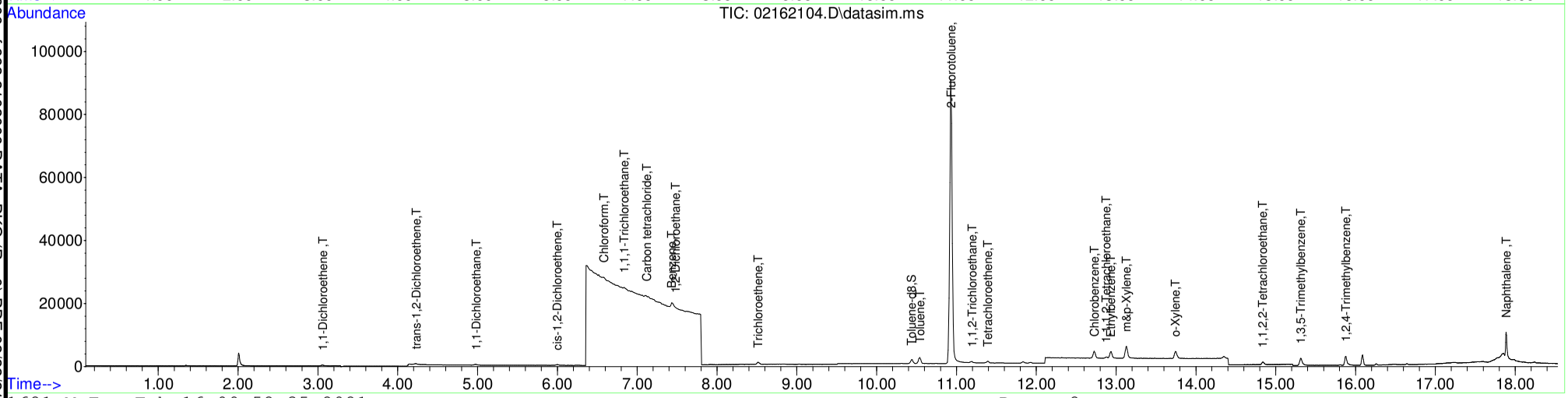
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021621\
Data File : 02162104.D
Acq On : 16 Feb 2021 9:23
InstName : AG5975C
Operator : TD
Sample : S21B047-CRL1
Misc : 2106042 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 16 09:42:00 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021621.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration





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SECOND SOURCE CALIBRATION CHECK

Radiello D1

Laboratory:	EPA Region 9 Laboratory	SDG:	21039A
Client:	California Site Cleanup Section 3	Project:	MEW OU1 FY2021 Vapor Intrusion Investigation
Instrument ID:	AG5975CV	Calibration:	2012007
Lab File ID:	12072009.D	Calibration Date:	12/07/20 08:54
Sequence:	S20L021	Injection Date:	12/07/20
Lab Sample ID:	S20L021-SCV1	Injection Time:	15:07

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	SCV	ICAL	SCV	MIN (#)	SCV	LIMIT (#)
1,1-Dichloroethene	L	5000	4700	0.1982577	0.1862658		-6.0	30
trans-1,2-Dichloroethene	L	5000	4320	0.2499405	0.2158574		-13.6	30
1,1-Dichloroethane	L	5000	4220	0.2985216	0.2520923		-15.6	30
cis-1,2-Dichloroethene	L	5000	4270	0.3091786	0.2640148		-14.6	30
Chloroform	L	5000	4260	0.2969683	0.2531433		-14.8	30
1,1,1-Trichloroethane	L	5000	4310	0.3190104	0.274891		-13.8	30
Carbon tetrachloride	L	5000	4350	0.3049925	0.265437		-13.0	30
1,2-Dichloroethane	L	5000	4300	0.287022	0.2467458		-14.0	30
Trichloroethene	L	5000	4340	0.2656418	0.2306146		-13.2	30
Toluene	L	5000	4260	1.205713	1.027335		-14.8	30
1,1,2-Trichloroethane	L	5000	4330	0.2792661	0.2418428		-13.4	30
Tetrachloroethene	L	5000	4350	0.3755505	0.3265148		-13.1	30
Chlorobenzene	L	5000	4280	0.934068	0.7998544		-14.4	30
1,1,1,2-Tetrachloroethane	L	5000	4340	0.3269185	0.283593		-13.3	30
Ethylbenzene	L	5000	4710	1.392025	1.176402		-5.8	30
m&p-Xylene	L	10000	8400	1.185909	0.9967		-16.0	30
o-Xylene	L	5000	4220	1.27376	1.075382		-15.6	30
1,1,2,2-Tetrachloroethane	L	5000	4190	0.59351	0.4970254		-16.3	30
1,3,5-Trimethylbenzene	L	5000	4200	1.400752	1.177337		-15.9	30
1,2,4-Trimethylbenzene	L	5000	4080	1.432724	1.170077		-18.3	30
Toluene-d8	L	5000	4350	0.9683759	0.8422362		-13.0	30

Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072009.D
Acq On : 7 Dec 2020 15:07
InstName : AG5975C
Operator : TD
Sample : S20L021-SCV1
Misc : 2050006 5 mg/L
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 08 06:27:44 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

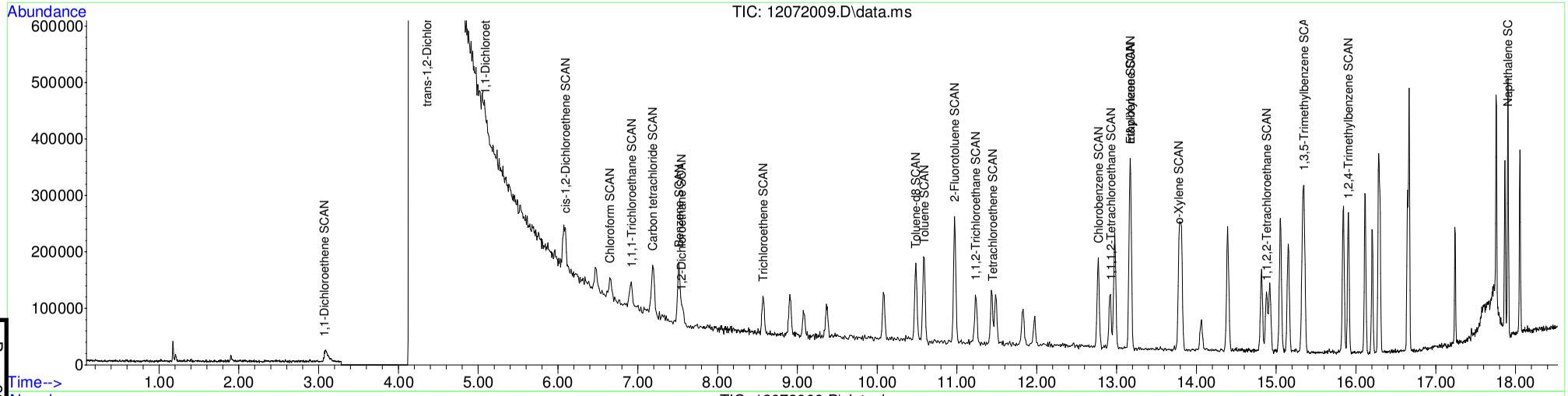
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	207424	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	174700	4348.70 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.97%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	38636	4697.57 ug/L	83
3] trans-1,2-Dichloroethene	4.363	61	44774	4318.17 ug/L	98
4] 1,1-Dichloroethane	5.079	63	52290	4222.35 ug/L	96
5] cis-1,2-Dichloroethene	6.081	61	54763	4269.62 ug/L	98
6] Chloroform	6.652	83	52508	4262.13 ug/L	100
7] 1,1,1-Trichloroethane	6.907	97	57019	4308.50 ug/L	100
8] Carbon tetrachloride	7.187	117	55058	4351.53 ug/L	100
9] Benzene	7.503	78	146674	4202.26 ug/L	99
10] 1,2-Dichloroethane	7.540	62	51181	4298.38 ug/L	99
11] Trichloroethene	8.569	130	47835	4340.71 ug/L	97
13] Toluene	10.582	91	213094	4260.28 ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	50164	4329.97 ug/L	99
15] Tetrachloroethene	11.432	166	67727	4347.15 ug/L	100
16] Chlorobenzene	12.765	112	165909	4281.56 ug/L	97
17] 1,1,1,2-Tetrachloroethane	12.916	131	58824	4337.37 ug/L	99
18] Ethylbenzene	12.972	91	271921	4256.29 ug/L	99
19] m&p-Xylene	13.170	91	413479	8404.52 ug/L	98
20] o-Xylene	13.782	91	223060	4221.29 ug/L	98
21] 1,1,2,2-Tetrachloroethane	14.880	83	103095	4187.17 ug/L	100
22] 1,3,5-Trimethylbenzene	15.348	105	244208	4202.52 ug/L	97
23] 1,2,4-Trimethylbenzene	15.904	105	242702	4083.40 ug/L	97
24] Naphthalene	17.906	128	383301	3980.40 ug/L	99
25) 2-Fluorotoluene SCAN	10.969	109	113839	4835.01 ug/L	95
26) 1,1-Dichloroethene SCAN	3.074	61	23589	4291.60 ug/L #	25
27) trans-1,2-Dichloroethe...	4.355	61	31153	4449.79 ug/L	75
28) 1,1-Dichloroethane SCAN	5.085	63	34885	4221.49 ug/L	98
29) cis-1,2-Dichloroethene...	6.086	61	39559	4869.56 ug/L	73
30) Chloroform SCAN	6.650	83	31690	4182.31 ug/L	83
31) 1,1,1-Trichloroethane ...	6.918	97	35723	4568.77 ug/L	94
32) Carbon tetrachloride SCAN	7.186	117	30391	4548.43 ug/L	87
33) Benzene SCAN	7.514	78	90391	3821.24 ug/L	92
34) 1,2-Dichloroethane SCAN	7.550	62	33773	4564.44 ug/L	93
35) Trichloroethene SCAN	8.568	130	23933	4640.02 ug/L	80
36) Toluene-d8 SCAN	10.486	98	104677	4740.29 ug/L	97
37) Toluene SCAN	10.591	91	124623	4583.66 ug/L	91
38) 1,1,2-Trichloroethane ...	11.231	97	30637	4495.59 ug/L	90
39) Tetrachloroethene SCAN	11.441	166	28525	4663.66 ug/L	89
40) Chlorobenzene SCAN	12.772	112	86547	4431.87 ug/L	86
41) 1,1,1,2-Tetrachloroeth...	12.923	131	32613	4840.63 ug/L	93
42) Ethylbenzene SCAN	13.169	91	244014	4709.58 ug/L	91
43) m&p-Xylene SCAN	13.169	91	244014	4709.58 ug/L	92
44) o-Xylene SCAN	13.781	91	136107	4810.72 ug/L	94
45) 1,1,2,2-Tetrachloroeth...	14.876	83	66354	4510.62 ug/L	94
46) 1,3,5-Trimethylbenzene...	15.347	105	134206	4496.33 ug/L	98
47) 1,2,4-Trimethylbenzene...	15.903	105	131912	4325.59 ug/L	97
48) Naphthalene SCAN	17.905	128	192878	4213.67 ug/L	99

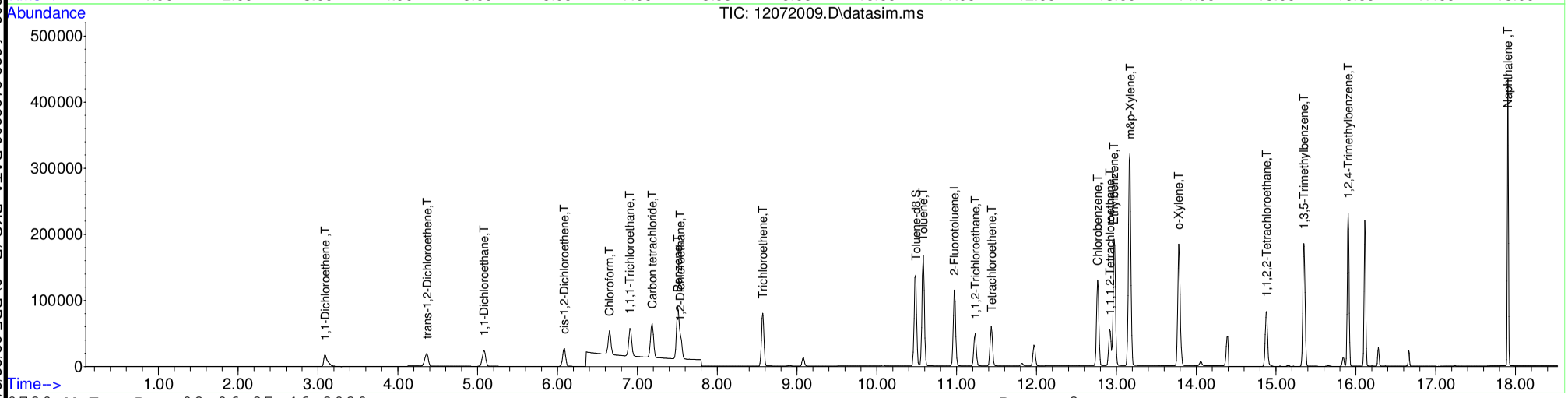
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072009.D
Acq On : 7 Dec 2020 15:07
InstName : AG5975C
Operator : TD
Sample : S20L021-SCV1
Misc : 2050006 5 mg/L
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 08 06:27:44 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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SECOND SOURCE CALIBRATION CHECK

Radiello D1

Laboratory:	EPA Region 9 Laboratory	SDG:	21039A
Client:	California Site Cleanup Section 3	Project:	MEW OU1 FY2021 Vapor Intrusion Investigation
Instrument ID:	AG5975CV	Calibration:	2102007
Lab File ID:	02152109.D	Calibration Date:	02/15/21 13:56
Sequence:	S21B036	Injection Date:	02/15/21
Lab Sample ID:	S21B036-SCV1	Injection Time:	13:27

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	SCV	ICAL	SCV	MIN (#)	SCV	LIMIT (#)
1,1-Dichloroethene	L	5000	5070	0.232894	0.2362737		1.5	30
trans-1,2-Dichloroethene	L	5000	4910	0.2460266	0.2416109		-1.8	30
1,1-Dichloroethane	L	5000	4930	0.2963357	0.2922026		-1.4	30
cis-1,2-Dichloroethene	L	5000	4910	0.292189	0.2869291		-1.8	30
Chloroform	L	5000	4790	0.3114329	0.2981313		-4.3	30
1,1,1-Trichloroethane	L	5000	4940	0.2959494	0.2924074		-1.2	30
Carbon tetrachloride	L	5000	4960	0.2473061	0.2454693		-0.7	30
1,2-Dichloroethane	L	5000	4980	0.2715669	0.2704126		-0.4	30
Trichloroethene	L	5000	5010	0.2252071	0.2256858		0.2	30
Toluene	L	5000	4540	1.193299	1.084194		-9.1	30
1,1,2-Trichloroethane	L	5000	4970	0.2350241	0.2335209		-0.6	30
Tetrachloroethene	L	5000	4930	0.3124258	0.3083052		-1.3	30
Chlorobenzene	L	5000	4260	0.9934767	0.8468598		-14.8	30
1,1,1,2-Tetrachloroethane	L	5000	4960	0.2421455	0.2402004		-0.8	30
Ethylbenzene	L	5000	4880	1.282095	1.469667		-2.3	30
m&p-Xylene	L	10000	9480	1.183715	1.122057		-5.2	30
o-Xylene	L	5000	4760	1.282188	1.221149		-4.8	30
1,1,2,2-Tetrachloroethane	L	5000	4850	0.5211376	0.5057763		-2.9	30
1,3,5-Trimethylbenzene	L	5000	4940	1.417455	1.400621		-1.2	30
1,2,4-Trimethylbenzene	L	5000	4670	1.50642	1.40816		-6.5	30
Toluene-d8	L	5000	4840	0.8616074	0.8341425		-3.2	30

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152109.D
Acq On : 15 Feb 2021 13:27
InstName : AG5975C
Operator : TD
Sample : S21B036-SCV1
Misc : 2106043 5 mg/L
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 15 13:46:08 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration

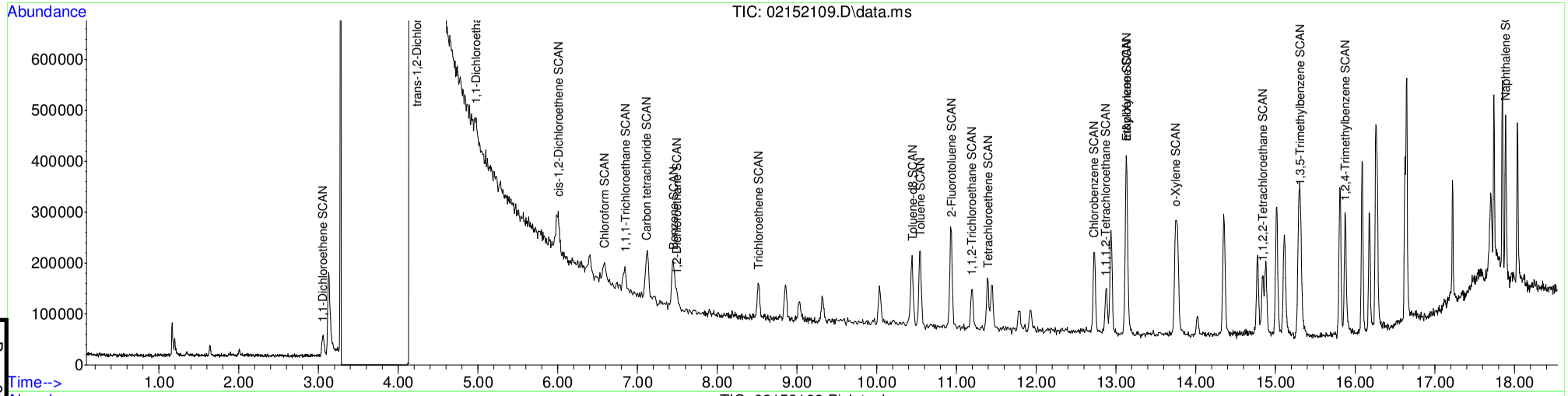
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.928	109	219779	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.435	98	183327	4840.62	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 96.81%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.056	61	51928	5072.56	ug/L	90
3] trans-1,2-Dichloroethene	4.230	61	53101	4910.26	ug/L	98
4] 1,1-Dichloroethane	4.980	63	64220	4930.26	ug/L	100
5] cis-1,2-Dichloroethene	6.002	61	63061	4909.99	ug/L	98
6] Chloroform	6.579	83	65523	4786.45	ug/L	99
7] 1,1,1-Trichloroethane	6.834	97	64265	4940.16	ug/L	98
8] Carbon tetrachloride	7.114	117	53949	4962.86	ug/L	98
9] Benzene	7.442	78	169450	4531.13	ug/L	99
10] 1,2-Dichloroethane	7.479	62	59431	4978.75	ug/L	100
11] Trichloroethene	8.521	130	49601	5010.63	ug/L	94
13] Toluene	10.540	91	238283	4542.84	ug/L	99
14] 1,1,2-Trichloroethane	11.191	97	51323	4968.02	ug/L	96
15] Tetrachloroethene	11.390	166	67759	4934.05	ug/L	100
16] Chlorobenzene	12.726	112	186122	4262.10	ug/L	91
17] 1,1,1,2-Tetrachloroethane	12.877	131	52791	4959.84	ug/L	99
18] Ethylbenzene	12.932	91	323002	4883.39	ug/L	98
19] m&p-Xylene	13.131	91	493209	9479.11	ug/L	97
20] o-Xylene	13.743	91	268383	4761.98	ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.840	83	111159	4852.62	ug/L	99
22] 1,3,5-Trimethylbenzene	15.314	105	307827	4940.62	ug/L	97
23] 1,2,4-Trimethylbenzene	15.875	105	309484	4673.86	ug/L	96
24] Naphthalene	17.888	128	455860	4835.19	ug/L	100
25) 2-Fluorotoluene SCAN	10.937	109	111046	4693.14	ug/L	91
26) 1,1-Dichloroethene SCAN	3.051	61	34013	4521.22	ug/L #	72
27) trans-1,2-Dichloroethe...	4.235	61	34039	4310.06	ug/L	81
28) 1,1-Dichloroethane SCAN	4.978	63	42453	4341.96	ug/L	97
29) cis-1,2-Dichloroethene...	6.007	61	41240	4552.60	ug/L #	78
30) Chloroform SCAN	6.590	83	37401	4511.27	ug/L	88
31) 1,1,1-Trichloroethane ...	6.845	97	42139	4943.43	ug/L	84
32) Carbon tetrachloride SCAN	7.113	117	30567	4454.26	ug/L	84
33) Benzene SCAN	7.453	78	100728	4305.57	ug/L	94
34) 1,2-Dichloroethane SCAN	7.490	62	39496	4626.30	ug/L	92
35) Trichloroethene SCAN	8.519	130	24310	4700.62	ug/L	86
36) Toluene-d8 SCAN	10.444	98	101842	4873.96	ug/L	96
37) Toluene SCAN	10.549	91	132125	4411.52	ug/L	97
38) 1,1,2-Trichloroethane ...	11.189	97	28407	4776.62	ug/L	92
39) Tetrachloroethene SCAN	11.399	166	27784	4773.18	ug/L	89
40) Chlorobenzene SCAN	12.724	112	99357	5425.18	ug/L	88
41) 1,1,1,2-Tetrachloroeth...	12.875	131	24635	4187.90	ug/L	93
42) Ethylbenzene SCAN	13.130	91	266242	4792.57	ug/L	93
43) m&p-Xylene SCAN	13.130	91	266242	4792.57	ug/L	93
44) o-Xylene SCAN	13.749	91	148359	4912.08	ug/L	94
45) 1,1,2,2-Tetrachloroeth...	14.842	83	65698	4666.05	ug/L	95
46) 1,3,5-Trimethylbenzene...	15.312	105	155595	4889.87	ug/L	98
47) 1,2,4-Trimethylbenzene...	15.878	105	161884	5124.72	ug/L	91
48) Naphthalene SCAN	17.886	128	218845	5336.27	ug/L	97

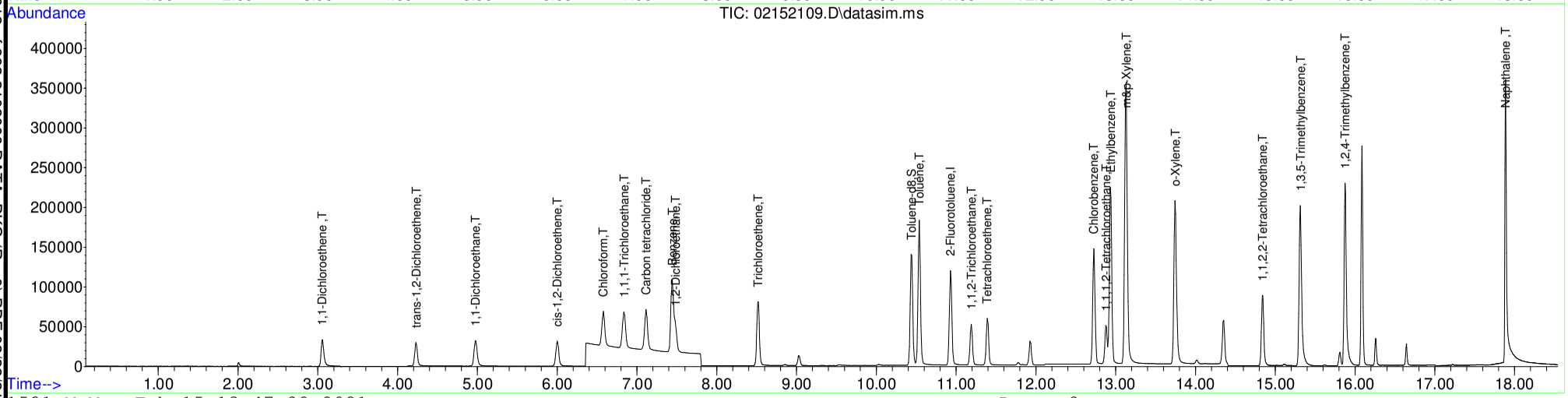
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2021\021521ICAL\
Data File : 02152109.D
Acq On : 15 Feb 2021 13:27
InstName : AG5975C
Operator : TD
Sample : S21B036-SCV1
Misc : 2106043 5 mg/L
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 15 13:46:08 2021
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2021\021521.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Mon Feb 15 13:33:37 2021
Response via : Initial Calibration





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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

1920045

Description:	Toluene-d8	**Expires:**	01/22/21
Standard Type:	Other Solution	**Prepared:**	05/15/19
Solvent:	na	**Prepared By:**	** Vendor **
Final Volume (mls):	0.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	10/21/20 11:28 by ZAR
Vendor:	Cambridge Isotope Lab.	**Lot Numbe**	I-21928

Part # DLM-5-10X1; POS #: 18C-262, bar code #AU0010913

Expiration date changed, neat standard, per ZAR

Analyte	CAS Number	Concentration (ppm)
Toluene-d8	2037-26-5	1000000

CERTIFICATE OF ANALYSIS

FROM VENDOR

IS NOT AVAILABLE.

Analytical Standard Record

EPA Region 9 Laboratory

1920046

Description:	Toluene-d8	**Expires:**	03/23/29
Standard Type:	Other Solution	**Prepared:**	05/15/19
Solvent:	na	**Prepared By:**	** Vendor **
Final Volume (mls):	0.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	10/21/20 11:22 by ZAR
Vendor:	Cambridge Isotope Lab.	**Lot Numbe**	I-21928

Part # DLM-5-10X1; POS #: 18C-262, bar code #AU0010914

Expiration date changed, neat standard, per ZAR

Analyte	CAS Number	Concentration (ppm)
Toluene-d8	2037-26-5	1000000

CERTIFICATE OF ANALYSIS

FROM VENDOR

IS NOT AVAILABLE.

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)

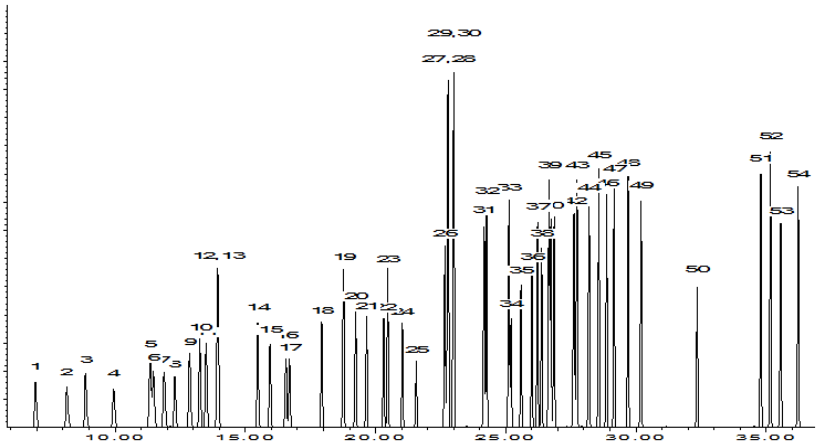
Carrier Gas:
helium-constant pressure 30 psi

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

2006155

Description:	VOA 502.2 CAL 2000 MEGA MIX, Stock	**Expires:**	07/31/21
Standard Type:	Other Solution	**Prepared:**	07/16/19
Solvent:	MeOH	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/06/20 16:36 by EM
Vendor:	Restek	**Lot Numbe**	A0150913

RESTEK, catalog # 30431, Barcode AU011648

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

2006155

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® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

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.:** A0150913

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 : July 31, 2021 **Storage:** 0°C or colder

A0011645 646 647 648 649 650 651 652

2006152 6153 6154 6155 ~~6156~~ 6157 ~~6157~~ 6158 ~~6158~~ 6159 ~~6159~~ 616

3/10/20

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)[1]	Expanded Uncertainty (95% C.L., K=2)	
1	1,1-dichloroethene CAS # 75-35-4 (Lot SHBG8609V) Purity 99%	2,001.7 µg/mL	+/- 12.6162 µg/mL +/- 90.2903 µg/mL +/- 100.1609 µg/mL	Gravimetric Unstressed Stressed
2	Methylene chloride (dichloromethane) CAS # 75-09-2 (Lot SHBK5095) Purity 99%	2,002.3 µg/mL	+/- 12.6195 µg/mL +/- 90.3140 µg/mL +/- 100.1872 µg/mL	Gravimetric Unstressed Stressed
3	trans-1,2-Dichloroethene CAS # 156-60-5 (Lot MKBH9850V) Purity 99%	2,001.7 µg/mL	+/- 12.6157 µg/mL +/- 90.2870 µg/mL +/- 100.1572 µg/mL	Gravimetric Unstressed Stressed
4	1,1-Dichloroethane CAS # 75-34-3 (Lot 462600) Purity 99%	2,001.3 µg/mL	+/- 12.6135 µg/mL +/- 90.2712 µg/mL +/- 100.1396 µg/mL	Gravimetric Unstressed Stressed
5	2,2-Dichloropropane CAS # 594-20-7 (Lot BCBW4162) Purity 98%	2,008.0 µg/mL	+/- 12.7321 µg/mL +/- 90.5850 µg/mL +/- 100.4855 µg/mL	Gravimetric Unstressed Stressed
6	cis-1,2-Dichloroethene CAS # 156-59-2 (Lot MKBX5945V) Purity 99%	2,001.5 µg/mL	+/- 12.6910 µg/mL +/- 90.2924 µg/mL +/- 100.1609 µg/mL	Gravimetric Unstressed Stressed
7	chloroform CAS # 67-66-3 (Lot SHBJ9076) Purity 99%	2,005.2 µg/mL	+/- 12.6381 µg/mL +/- 90.4471 µg/mL +/- 100.3348 µg/mL	Gravimetric Unstressed Stressed

8	Bromochloromethane		2,015.5	µg/mL	+/-	12.7795	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)			+/-	90.9224	µg/mL	Unstressed
	Purity 98%				+/-	100.8599	µg/mL	Stressed
9	1,1,1-trichloroethane		2,002.9	µg/mL	+/-	12.6236	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot 190123CG)			+/-	90.3433	µg/mL	Unstressed
	Purity 98%				+/-	100.2197	µg/mL	Stressed
10	1,1-Dichloropropene		2,013.5	µg/mL	+/-	12.7669	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot 180531JLM)			+/-	90.8322	µg/mL	Unstressed
	Purity 99%				+/-	100.7598	µg/mL	Stressed
11	carbon tetrachloride		2,005.4	µg/mL	+/-	12.6395	µg/mL	Gravimetric
	CAS # 56-23-5	(Lot SHBG8938V)			+/-	90.4572	µg/mL	Unstressed
	Purity 99%				+/-	100.3460	µg/mL	Stressed
12	1,2-Dichloroethane		2,004.9	µg/mL	+/-	12.6359	µg/mL	Gravimetric
	CAS # 107-06-2	(Lot SHBJ6510)			+/-	90.4313	µg/mL	Unstressed
	Purity 99%				+/-	100.3173	µg/mL	Stressed
13	Benzene		2,005.0	µg/mL	+/-	12.7130	µg/mL	Gravimetric
	CAS # 71-43-2	(Lot SHBK7357)			+/-	90.4487	µg/mL	Unstressed
	Purity 99%				+/-	100.3344	µg/mL	Stressed
14	Trichloroethene		2,006.1	µg/mL	+/-	12.6436	µg/mL	Gravimetric
	CAS # 79-01-6	(Lot SHBH1955V)			+/-	90.4866	µg/mL	Unstressed
	Purity 99%				+/-	100.3786	µg/mL	Stressed
15	1,2-Dichloropropane		2,001.0	µg/mL	+/-	12.6113	µg/mL	Gravimetric
	CAS # 78-87-5	(Lot BCBR0882V)			+/-	90.2554	µg/mL	Unstressed
	Purity 99%				+/-	100.1221	µg/mL	Stressed
16	bromodichloromethane		2,006.7	µg/mL	+/-	12.6476	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKCJ0238)			+/-	90.5148	µg/mL	Unstressed
	Purity 99%				+/-	100.4098	µg/mL	Stressed
17	Dibromomethane		2,011.9	µg/mL	+/-	12.7567	µg/mL	Gravimetric
	CAS # 74-95-3	(Lot 10201030)			+/-	90.7600	µg/mL	Unstressed
	Purity 99%				+/-	100.6797	µg/mL	Stressed
18	cis-1,3-Dichloropropene		2,002.7	µg/mL	+/-	12.6223	µg/mL	Gravimetric
	CAS # 10061-01-5	(Lot 25649)			+/-	90.3343	µg/mL	Unstressed
	Purity 99%				+/-	100.2097	µg/mL	Stressed
19	Toluene		2,003.6	µg/mL	+/-	12.7043	µg/mL	Gravimetric
	CAS # 108-88-3	(Lot SHBK3737)			+/-	90.3871	µg/mL	Unstressed
	Purity 99%				+/-	100.2660	µg/mL	Stressed
20	trans-1,3-Dichloropropene		2,002.2	µg/mL	+/-	12.6189	µg/mL	Gravimetric
	CAS # 10061-02-6	(Lot 19160070-D19056)			+/-	90.3095	µg/mL	Unstressed
	Purity 99%				+/-	100.1822	µg/mL	Stressed
21	1,1,2-Trichloroethane		2,000.6	µg/mL	+/-	12.6088	µg/mL	Gravimetric
	CAS # 79-00-5	(Lot FGB01)			+/-	90.2373	µg/mL	Unstressed
	Purity 99%				+/-	100.1021	µg/mL	Stressed
22	1,3-Dichloropropane		2,001.6	µg/mL	+/-	12.6912	µg/mL	Gravimetric
	CAS # 142-28-9	(Lot BCBC6265)			+/-	90.2939	µg/mL	Unstressed
	Purity 99%				+/-	100.1626	µg/mL	Stressed
23	Tetrachloroethene		2,003.4	µg/mL	+/-	12.6268	µg/mL	Gravimetric
	CAS # 127-18-4	(Lot SHBJ7422)			+/-	90.3659	µg/mL	Unstressed
	Purity 99%				+/-	100.2447	µg/mL	Stressed

40	2-Chlorotoluene			2,011.5	µg/mL	+/-	12.7544	µg/mL	Gravimetric
	CAS #	95-49-8	(Lot MKBW5554V)			+/-	90.7435	µg/mL	Unstressed
	Purity	99%				+/-	100.6613	µg/mL	Stressed
41	4-Chlorotoluene			2,006.2	µg/mL	+/-	12.7206	µg/mL	Gravimetric
	CAS #	106-43-4	(Lot MKBL7753V)			+/-	90.5029	µg/mL	Unstressed
	Purity	99%				+/-	100.3944	µg/mL	Stressed
42	tert-Butylbenzene			2,010.9	µg/mL	+/-	12.7502	µg/mL	Gravimetric
	CAS #	98-06-6	(Lot STBD6954V)			+/-	90.7134	µg/mL	Unstressed
	Purity	99%				+/-	100.6280	µg/mL	Stressed
43	1,2,4-Trimethylbenzene			2,007.3	µg/mL	+/-	12.7278	µg/mL	Gravimetric
	CAS #	95-63-6	(Lot WXBC4246V)			+/-	90.5540	µg/mL	Unstressed
	Purity	99%				+/-	100.4512	µg/mL	Stressed
44	sec-Butylbenzene			2,011.4	µg/mL	+/-	12.7533	µg/mL	Gravimetric
	CAS #	135-98-8	(Lot MKCG5431)			+/-	90.7359	µg/mL	Unstressed
	Purity	99%				+/-	100.6530	µg/mL	Stressed
45	p-Isopropyltoluene (p-Cymene)			2,010.8	µg/mL	+/-	12.7500	µg/mL	Gravimetric
	CAS #	99-87-6	(Lot MKCB7536)			+/-	90.7119	µg/mL	Unstressed
	Purity	99%				+/-	100.6263	µg/mL	Stressed
46	1,3-Dichlorobenzene			2,005.6	µg/mL	+/-	12.6406	µg/mL	Gravimetric
	CAS #	541-73-1	(Lot BCBQ7100V)			+/-	90.4651	µg/mL	Unstressed
	Purity	99%				+/-	100.3548	µg/mL	Stressed
47	1,4-Dichlorobenzene			2,008.0	µg/mL	+/-	12.6558	µg/mL	Gravimetric
	CAS #	106-46-7	(Lot MKBS4401V)			+/-	90.5734	µg/mL	Unstressed
	Purity	99%				+/-	100.4749	µg/mL	Stressed
48	n-Butylbenzene			2,006.9	µg/mL	+/-	12.7252	µg/mL	Gravimetric
	CAS #	104-51-8	(Lot 09804AE)			+/-	90.5360	µg/mL	Unstressed
	Purity	99%				+/-	100.4311	µg/mL	Stressed
49	1,2-Dichlorobenzene			2,007.2	µg/mL	+/-	12.6509	µg/mL	Gravimetric
	CAS #	95-50-1	(Lot SHBG3111V)			+/-	90.5384	µg/mL	Unstressed
	Purity	99%				+/-	100.4361	µg/mL	Stressed
50	1,2-Dibromo-3-chloropropane			2,001.3	µg/mL	+/-	12.6897	µg/mL	Gravimetric
	CAS #	96-12-8	(Lot FBL01)			+/-	90.2835	µg/mL	Unstressed
	Purity	97%				+/-	100.1511	µg/mL	Stressed
51	1,2,4-Trichlorobenzene			2,011.9	µg/mL	+/-	12.7567	µg/mL	Gravimetric
	CAS #	120-82-1	(Lot SHBJ9215)			+/-	90.7600	µg/mL	Unstressed
	Purity	99%				+/-	100.6797	µg/mL	Stressed
52	Hexachlorobutadiene			2,005.5	µg/mL	+/-	12.7163	µg/mL	Gravimetric
	CAS #	87-68-3	(Lot J31X013)			+/-	90.4728	µg/mL	Unstressed
	Purity	99%				+/-	100.3611	µg/mL	Stressed
53	Naphthalene			2,003.1	µg/mL	+/-	12.7009	µg/mL	Gravimetric
	CAS #	91-20-3	(Lot MKBZ8680V)			+/-	90.3630	µg/mL	Unstressed
	Purity	99%				+/-	100.2393	µg/mL	Stressed
54	1,2,3-Trichlorobenzene			2,004.8	µg/mL	+/-	12.7119	µg/mL	Gravimetric
	CAS #	87-61-6	(Lot MKBX7627V)			+/-	90.4412	µg/mL	Unstressed
	Purity	99%				+/-	100.3261	µg/mL	Stressed

24	dibromochloromethane			2,004.8	µg/mL	+/-	12.6358	µg/mL	Gravimetric
	CAS #	124-48-1	(Lot MKCJ3856)			+/-	90.4306	µg/mL	Unstressed
	Purity	98%				+/-	100.3165	µg/mL	Stressed
25	1,2-Dibromoethane (EDB)			2,002.8	µg/mL	+/-	12.6990	µg/mL	Gravimetric
	CAS #	106-93-4	(Lot BCBP2268V)			+/-	90.3495	µg/mL	Unstressed
	Purity	99%				+/-	100.2243	µg/mL	Stressed
26	Chlorobenzene			2,003.2	µg/mL	+/-	12.6252	µg/mL	Gravimetric
	CAS #	108-90-7	(Lot SHBJ0839)			+/-	90.3546	µg/mL	Unstressed
	Purity	99%				+/-	100.2322	µg/mL	Stressed
27	1,1,1,2-Tetrachloroethane			2,007.3	µg/mL	+/-	12.7275	µg/mL	Gravimetric
	CAS #	630-20-6	(Lot MKBS3769V)			+/-	90.5525	µg/mL	Unstressed
	Purity	99%				+/-	100.4495	µg/mL	Stressed
28	Ethylbenzene			2,003.7	µg/mL	+/-	12.7045	µg/mL	Gravimetric
	CAS #	100-41-4	(Lot SHBJ4278)			+/-	90.3886	µg/mL	Unstressed
	Purity	99%				+/-	100.2677	µg/mL	Stressed
29	m-Xylene			2,006.0	µg/mL	+/-	12.7195	µg/mL	Gravimetric
	CAS #	108-38-3	(Lot SHBJ8743)			+/-	90.4954	µg/mL	Unstressed
	Purity	99%				+/-	100.3861	µg/mL	Stressed
30	p-Xylene			2,013.1	µg/mL	+/-	12.7645	µg/mL	Gravimetric
	CAS #	106-42-3	(Lot SHBJ7329)			+/-	90.8156	µg/mL	Unstressed
	Purity	99%				+/-	100.7414	µg/mL	Stressed
31	o-Xylene			2,007.6	µg/mL	+/-	12.7295	µg/mL	Gravimetric
	CAS #	95-47-6	(Lot SHBK7739)			+/-	90.5660	µg/mL	Unstressed
	Purity	99%				+/-	100.4645	µg/mL	Stressed
32	Styrene			2,012.8	µg/mL	+/-	12.7624	µg/mL	Gravimetric
	CAS #	100-42-5	(Lot MKCC9766)			+/-	90.8006	µg/mL	Unstressed
	Purity	99%				+/-	100.7247	µg/mL	Stressed
33	Isopropylbenzene (cumene)			2,007.2	µg/mL	+/-	12.7271	µg/mL	Gravimetric
	CAS #	98-82-8	(Lot P15E008)			+/-	90.5495	µg/mL	Unstressed
	Purity	99%				+/-	100.4462	µg/mL	Stressed
34	bromoform			2,009.4	µg/mL	+/-	12.6644	µg/mL	Gravimetric
	CAS #	75-25-2	(Lot SHBJ4835)			+/-	90.6354	µg/mL	Unstressed
	Purity	99%				+/-	100.5437	µg/mL	Stressed
35	1,1,2,2-Tetrachloroethane			2,008.7	µg/mL	+/-	12.6600	µg/mL	Gravimetric
	CAS #	79-34-5	(Lot CFA4D)			+/-	90.6038	µg/mL	Unstressed
	Purity	99%				+/-	100.5087	µg/mL	Stressed
36	1,2,3-Trichloropropane			2,010.2	µg/mL	+/-	12.7461	µg/mL	Gravimetric
	CAS #	96-18-4	(Lot BCBH8722V)			+/-	90.6848	µg/mL	Unstressed
	Purity	99%				+/-	100.5963	µg/mL	Stressed
37	n-Propylbenzene			2,005.1	µg/mL	+/-	12.7134	µg/mL	Gravimetric
	CAS #	103-65-1	(Lot WXBC5978V)			+/-	90.4517	µg/mL	Unstressed
	Purity	99%				+/-	100.3377	µg/mL	Stressed
38	Bromobenzene			2,010.9	µg/mL	+/-	12.7504	µg/mL	Gravimetric
	CAS #	108-86-1	(Lot MKBD4032V)			+/-	90.7149	µg/mL	Unstressed
	Purity	99%				+/-	100.6296	µg/mL	Stressed
39	1,3,5-Trimethylbenzene			2,008.1	µg/mL	+/-	12.7326	µg/mL	Gravimetric
	CAS #	108-67-8	(Lot BCBZ6781)			+/-	90.5886	µg/mL	Unstressed
	Purity	99%				+/-	100.4895	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)

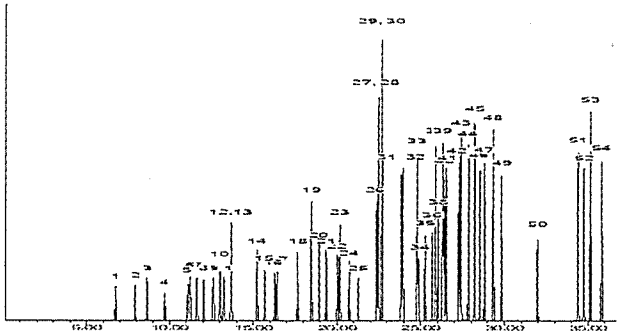
Carrier Gas:
helium-constant pressure 30 psi

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.

Cydnei L. Crust - Mix Technician

Date Mixed: 16-Jul-2019 **Balance:** B707717271

Justine Albertson - Operations Tech-ARM QC

Date Passed: 19-Jul-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

2006158

Description:	VOA 502.2 CAL 2000 MEGA MIX, Stock	**Expires:**	07/31/21
Standard Type:	Other Solution	**Prepared:**	07/16/19
Solvent:	MeOH	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/06/20 16:38 by EM
Vendor:	Restek	**Lot Numbe**	A0150913

RESTEK, catalog # 30431, Barcode AU011650

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

2006158

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® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

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.:** A0150913

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 : July 31, 2021 **Storage:** 0°C or colder

A0011645 646 647 648 649 650 651 652

2006152 6153 6154 6155 ~~6156~~ 6157 ~~6157~~ 6158 ~~6158~~ 6159 ~~6159~~ 616

3/10/20

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)[1]		Expanded Uncertainty (95% C.L., K=2)		
1	1,1-dichloroethene		2,001.7 µg/mL	+/- 12.6162	µg/mL	Gravimetric
	CAS # 75-35-4	(Lot SHBG8609V)		+/- 90.2903	µg/mL	Unstressed
	Purity 99%			+/- 100.1609	µg/mL	Stressed
2	Methylene chloride (dichloromethane)		2,002.3 µg/mL	+/- 12.6195	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBK5095)		+/- 90.3140	µg/mL	Unstressed
	Purity 99%			+/- 100.1872	µg/mL	Stressed
3	trans-1,2-Dichloroethene		2,001.7 µg/mL	+/- 12.6157	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)		+/- 90.2870	µg/mL	Unstressed
	Purity 99%			+/- 100.1572	µg/mL	Stressed
4	1,1-Dichloroethane		2,001.3 µg/mL	+/- 12.6135	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 462600)		+/- 90.2712	µg/mL	Unstressed
	Purity 99%			+/- 100.1396	µg/mL	Stressed
5	2,2-Dichloropropane		2,008.0 µg/mL	+/- 12.7321	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBW4162)		+/- 90.5850	µg/mL	Unstressed
	Purity 98%			+/- 100.4855	µg/mL	Stressed
6	cis-1,2-Dichloroethene		2,001.5 µg/mL	+/- 12.6910	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBX5945V)		+/- 90.2924	µg/mL	Unstressed
	Purity 99%			+/- 100.1609	µg/mL	Stressed
7	chloroform		2,005.2 µg/mL	+/- 12.6381	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBJ9076)		+/- 90.4471	µg/mL	Unstressed
	Purity 99%			+/- 100.3348	µg/mL	Stressed

8	Bromochloromethane			2,015.5	µg/mL	+/-	12.7795	µg/mL	Gravimetric
	CAS #	74-97-5	(Lot 00008541)			+/-	90.9224	µg/mL	Unstressed
	Purity	98%				+/-	100.8599	µg/mL	Stressed
9	1,1,1-trichloroethane			2,002.9	µg/mL	+/-	12.6236	µg/mL	Gravimetric
	CAS #	71-55-6	(Lot 190123CG)			+/-	90.3433	µg/mL	Unstressed
	Purity	98%				+/-	100.2197	µg/mL	Stressed
10	1,1-Dichloropropene			2,013.5	µg/mL	+/-	12.7669	µg/mL	Gravimetric
	CAS #	563-58-6	(Lot 180531JLM)			+/-	90.8322	µg/mL	Unstressed
	Purity	99%				+/-	100.7598	µg/mL	Stressed
11	carbon tetrachloride			2,005.4	µg/mL	+/-	12.6395	µg/mL	Gravimetric
	CAS #	56-23-5	(Lot SHBG8938V)			+/-	90.4572	µg/mL	Unstressed
	Purity	99%				+/-	100.3460	µg/mL	Stressed
12	1,2-Dichloroethane			2,004.9	µg/mL	+/-	12.6359	µg/mL	Gravimetric
	CAS #	107-06-2	(Lot SHBJ6510)			+/-	90.4313	µg/mL	Unstressed
	Purity	99%				+/-	100.3173	µg/mL	Stressed
13	Benzene			2,005.0	µg/mL	+/-	12.7130	µg/mL	Gravimetric
	CAS #	71-43-2	(Lot SHBK7357)			+/-	90.4487	µg/mL	Unstressed
	Purity	99%				+/-	100.3344	µg/mL	Stressed
14	Trichloroethene			2,006.1	µg/mL	+/-	12.6436	µg/mL	Gravimetric
	CAS #	79-01-6	(Lot SHBH1955V)			+/-	90.4866	µg/mL	Unstressed
	Purity	99%				+/-	100.3786	µg/mL	Stressed
15	1,2-Dichloropropane			2,001.0	µg/mL	+/-	12.6113	µg/mL	Gravimetric
	CAS #	78-87-5	(Lot BCBR0882V)			+/-	90.2554	µg/mL	Unstressed
	Purity	99%				+/-	100.1221	µg/mL	Stressed
16	bromodichloromethane			2,006.7	µg/mL	+/-	12.6476	µg/mL	Gravimetric
	CAS #	75-27-4	(Lot MKCJ0238)			+/-	90.5148	µg/mL	Unstressed
	Purity	99%				+/-	100.4098	µg/mL	Stressed
17	Dibromomethane			2,011.9	µg/mL	+/-	12.7567	µg/mL	Gravimetric
	CAS #	74-95-3	(Lot 10201030)			+/-	90.7600	µg/mL	Unstressed
	Purity	99%				+/-	100.6797	µg/mL	Stressed
18	cis-1,3-Dichloropropene			2,002.7	µg/mL	+/-	12.6223	µg/mL	Gravimetric
	CAS #	10061-01-5	(Lot 25649)			+/-	90.3343	µg/mL	Unstressed
	Purity	99%				+/-	100.2097	µg/mL	Stressed
19	Toluene			2,003.6	µg/mL	+/-	12.7043	µg/mL	Gravimetric
	CAS #	108-88-3	(Lot SHBK3737)			+/-	90.3871	µg/mL	Unstressed
	Purity	99%				+/-	100.2660	µg/mL	Stressed
20	trans-1,3-Dichloropropene			2,002.2	µg/mL	+/-	12.6189	µg/mL	Gravimetric
	CAS #	10061-02-6	(Lot 19160070-D19056)			+/-	90.3095	µg/mL	Unstressed
	Purity	99%				+/-	100.1822	µg/mL	Stressed
21	1,1,2-Trichloroethane			2,000.6	µg/mL	+/-	12.6088	µg/mL	Gravimetric
	CAS #	79-00-5	(Lot FGB01)			+/-	90.2373	µg/mL	Unstressed
	Purity	99%				+/-	100.1021	µg/mL	Stressed
22	1,3-Dichloropropane			2,001.6	µg/mL	+/-	12.6912	µg/mL	Gravimetric
	CAS #	142-28-9	(Lot BCBC6265)			+/-	90.2939	µg/mL	Unstressed
	Purity	99%				+/-	100.1626	µg/mL	Stressed
23	Tetrachloroethene			2,003.4	µg/mL	+/-	12.6268	µg/mL	Gravimetric
	CAS #	127-18-4	(Lot SHBJ7422)			+/-	90.3659	µg/mL	Unstressed
	Purity	99%				+/-	100.2447	µg/mL	Stressed

40	2-Chlorotoluene			2,011.5	µg/mL	+/-	12.7544	µg/mL	Gravimetric
	CAS #	95-49-8	(Lot MKBW5554V)			+/-	90.7435	µg/mL	Unstressed
	Purity	99%				+/-	100.6613	µg/mL	Stressed
41	4-Chlorotoluene			2,006.2	µg/mL	+/-	12.7206	µg/mL	Gravimetric
	CAS #	106-43-4	(Lot MKBL7753V)			+/-	90.5029	µg/mL	Unstressed
	Purity	99%				+/-	100.3944	µg/mL	Stressed
42	tert-Butylbenzene			2,010.9	µg/mL	+/-	12.7502	µg/mL	Gravimetric
	CAS #	98-06-6	(Lot STBD6954V)			+/-	90.7134	µg/mL	Unstressed
	Purity	99%				+/-	100.6280	µg/mL	Stressed
43	1,2,4-Trimethylbenzene			2,007.3	µg/mL	+/-	12.7278	µg/mL	Gravimetric
	CAS #	95-63-6	(Lot WXBC4246V)			+/-	90.5540	µg/mL	Unstressed
	Purity	99%				+/-	100.4512	µg/mL	Stressed
44	sec-Butylbenzene			2,011.4	µg/mL	+/-	12.7533	µg/mL	Gravimetric
	CAS #	135-98-8	(Lot MKCG5431)			+/-	90.7359	µg/mL	Unstressed
	Purity	99%				+/-	100.6530	µg/mL	Stressed
45	p-Isopropyltoluene (p-Cymene)			2,010.8	µg/mL	+/-	12.7500	µg/mL	Gravimetric
	CAS #	99-87-6	(Lot MKCB7536)			+/-	90.7119	µg/mL	Unstressed
	Purity	99%				+/-	100.6263	µg/mL	Stressed
46	1,3-Dichlorobenzene			2,005.6	µg/mL	+/-	12.6406	µg/mL	Gravimetric
	CAS #	541-73-1	(Lot BCBQ7100V)			+/-	90.4651	µg/mL	Unstressed
	Purity	99%				+/-	100.3548	µg/mL	Stressed
47	1,4-Dichlorobenzene			2,008.0	µg/mL	+/-	12.6558	µg/mL	Gravimetric
	CAS #	106-46-7	(Lot MKBS4401V)			+/-	90.5734	µg/mL	Unstressed
	Purity	99%				+/-	100.4749	µg/mL	Stressed
48	n-Butylbenzene			2,006.9	µg/mL	+/-	12.7252	µg/mL	Gravimetric
	CAS #	104-51-8	(Lot 09804AE)			+/-	90.5360	µg/mL	Unstressed
	Purity	99%				+/-	100.4311	µg/mL	Stressed
49	1,2-Dichlorobenzene			2,007.2	µg/mL	+/-	12.6509	µg/mL	Gravimetric
	CAS #	95-50-1	(Lot SHBG3111V)			+/-	90.5384	µg/mL	Unstressed
	Purity	99%				+/-	100.4361	µg/mL	Stressed
50	1,2-Dibromo-3-chloropropane			2,001.3	µg/mL	+/-	12.6897	µg/mL	Gravimetric
	CAS #	96-12-8	(Lot FBL01)			+/-	90.2835	µg/mL	Unstressed
	Purity	97%				+/-	100.1511	µg/mL	Stressed
51	1,2,4-Trichlorobenzene			2,011.9	µg/mL	+/-	12.7567	µg/mL	Gravimetric
	CAS #	120-82-1	(Lot SHBJ9215)			+/-	90.7600	µg/mL	Unstressed
	Purity	99%				+/-	100.6797	µg/mL	Stressed
52	Hexachlorobutadiene			2,005.5	µg/mL	+/-	12.7163	µg/mL	Gravimetric
	CAS #	87-68-3	(Lot J31X013)			+/-	90.4728	µg/mL	Unstressed
	Purity	99%				+/-	100.3611	µg/mL	Stressed
53	Naphthalene			2,003.1	µg/mL	+/-	12.7009	µg/mL	Gravimetric
	CAS #	91-20-3	(Lot MKBZ8680V)			+/-	90.3630	µg/mL	Unstressed
	Purity	99%				+/-	100.2393	µg/mL	Stressed
54	1,2,3-Trichlorobenzene			2,004.8	µg/mL	+/-	12.7119	µg/mL	Gravimetric
	CAS #	87-61-6	(Lot MKBX7627V)			+/-	90.4412	µg/mL	Unstressed
	Purity	99%				+/-	100.3261	µg/mL	Stressed

24	dibromochloromethane			2,004.8	µg/mL	+/-	12.6358	µg/mL	Gravimetric
	CAS #	124-48-1	(Lot MKCJ3856)			+/-	90.4306	µg/mL	Unstressed
	Purity	98%				+/-	100.3165	µg/mL	Stressed
25	1,2-Dibromoethane (EDB)			2,002.8	µg/mL	+/-	12.6990	µg/mL	Gravimetric
	CAS #	106-93-4	(Lot BCBP2268V)			+/-	90.3495	µg/mL	Unstressed
	Purity	99%				+/-	100.2243	µg/mL	Stressed
26	Chlorobenzene			2,003.2	µg/mL	+/-	12.6252	µg/mL	Gravimetric
	CAS #	108-90-7	(Lot SHBJ0839)			+/-	90.3546	µg/mL	Unstressed
	Purity	99%				+/-	100.2322	µg/mL	Stressed
27	1,1,1,2-Tetrachloroethane			2,007.3	µg/mL	+/-	12.7275	µg/mL	Gravimetric
	CAS #	630-20-6	(Lot MKBS3769V)			+/-	90.5525	µg/mL	Unstressed
	Purity	99%				+/-	100.4495	µg/mL	Stressed
28	Ethylbenzene			2,003.7	µg/mL	+/-	12.7045	µg/mL	Gravimetric
	CAS #	100-41-4	(Lot SHBJ4278)			+/-	90.3886	µg/mL	Unstressed
	Purity	99%				+/-	100.2677	µg/mL	Stressed
29	m-Xylene			2,006.0	µg/mL	+/-	12.7195	µg/mL	Gravimetric
	CAS #	108-38-3	(Lot SHBJ8743)			+/-	90.4954	µg/mL	Unstressed
	Purity	99%				+/-	100.3861	µg/mL	Stressed
30	p-Xylene			2,013.1	µg/mL	+/-	12.7645	µg/mL	Gravimetric
	CAS #	106-42-3	(Lot SHBJ7329)			+/-	90.8156	µg/mL	Unstressed
	Purity	99%				+/-	100.7414	µg/mL	Stressed
31	o-Xylene			2,007.6	µg/mL	+/-	12.7295	µg/mL	Gravimetric
	CAS #	95-47-6	(Lot SHBK7739)			+/-	90.5660	µg/mL	Unstressed
	Purity	99%				+/-	100.4645	µg/mL	Stressed
32	Styrene			2,012.8	µg/mL	+/-	12.7624	µg/mL	Gravimetric
	CAS #	100-42-5	(Lot MKCC9766)			+/-	90.8006	µg/mL	Unstressed
	Purity	99%				+/-	100.7247	µg/mL	Stressed
33	Isopropylbenzene (cumene)			2,007.2	µg/mL	+/-	12.7271	µg/mL	Gravimetric
	CAS #	98-82-8	(Lot P15E008)			+/-	90.5495	µg/mL	Unstressed
	Purity	99%				+/-	100.4462	µg/mL	Stressed
34	bromoform			2,009.4	µg/mL	+/-	12.6644	µg/mL	Gravimetric
	CAS #	75-25-2	(Lot SHBJ4835)			+/-	90.6354	µg/mL	Unstressed
	Purity	99%				+/-	100.5437	µg/mL	Stressed
35	1,1,2,2-Tetrachloroethane			2,008.7	µg/mL	+/-	12.6600	µg/mL	Gravimetric
	CAS #	79-34-5	(Lot CFA4D)			+/-	90.6038	µg/mL	Unstressed
	Purity	99%				+/-	100.5087	µg/mL	Stressed
36	1,2,3-Trichloropropane			2,010.2	µg/mL	+/-	12.7461	µg/mL	Gravimetric
	CAS #	96-18-4	(Lot BCBH8722V)			+/-	90.6848	µg/mL	Unstressed
	Purity	99%				+/-	100.5963	µg/mL	Stressed
37	n-Propylbenzene			2,005.1	µg/mL	+/-	12.7134	µg/mL	Gravimetric
	CAS #	103-65-1	(Lot WXBC5978V)			+/-	90.4517	µg/mL	Unstressed
	Purity	99%				+/-	100.3377	µg/mL	Stressed
38	Bromobenzene			2,010.9	µg/mL	+/-	12.7504	µg/mL	Gravimetric
	CAS #	108-86-1	(Lot MKBD4032V)			+/-	90.7149	µg/mL	Unstressed
	Purity	99%				+/-	100.6296	µg/mL	Stressed
39	1,3,5-Trimethylbenzene			2,008.1	µg/mL	+/-	12.7326	µg/mL	Gravimetric
	CAS #	108-67-8	(Lot BCBZ6781)			+/-	90.5886	µg/mL	Unstressed
	Purity	99%				+/-	100.4895	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)

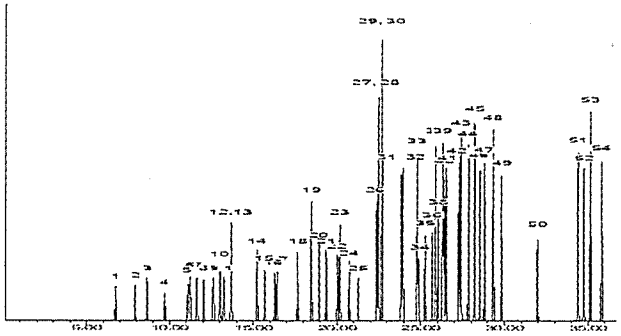
Carrier Gas:
helium-constant pressure 30 psi

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.

Cydnei L. Crust - Mix Technician

Date Mixed: 16-Jul-2019 **Balance:** B707717271

Justine Albertson - Operations Tech-ARM QC

Date Passed: 19-Jul-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.

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- 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

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

EPA Region 9 Laboratory

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

EPA Region 9 Laboratory

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

Analytical Standard Record

EPA Region 9 Laboratory

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

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)

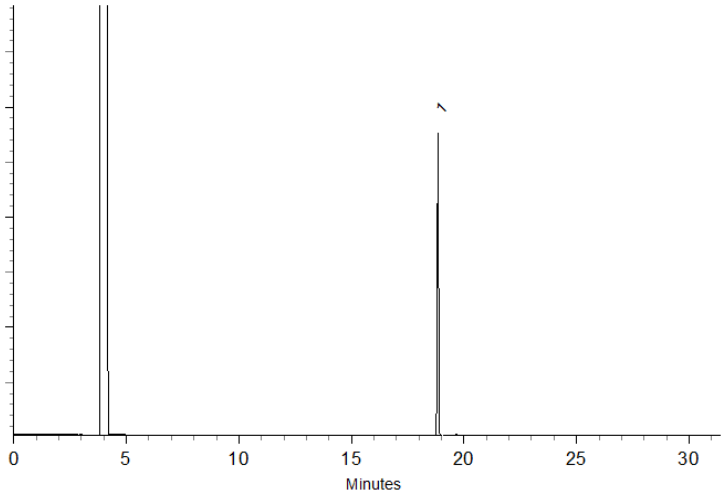
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Analytical Standard Record

EPA Region 9 Laboratory

2045061

Description:	VOA 502/524 VOC Mix, Stock	**Expires:**	09/01/22
Standard Type:	Other Solution	**Prepared:**	09/01/20
Solvent:	MeOH	**Prepared By:**	** Vendor **
Final Volume (mls):	1.15	**Department:**	Volatiles
Vials:	1	**Last Edit:**	11/04/20 11:15 by EM
Vendor:	Sigma Aldrich	**Lot Numbe**	LRAC7008

Sigma-Aldrich (Supelco), Cat # 502111, Lot# LRAC7008, bar code AU012216

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

2045061

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

EPA 502/524 Volatiles Organic Calibration Mix (without gases)

Certified Reference Material

Description

Product ID 502111
Lot **LRAC7008**
Expiration Date September 2022
Manufacturing Date September 2018
Storage Conditions Freeze
Solvent/Matrix METHANOL

2045060 / AU012215
2045061 / AU012216
2045062 / AU012217
2045063 / AU012218
2045064 / AU012219

Certified Values

Analyte	*Units*	*Certified Value* [1,4]	*Raw Material Purity,%*	*Analytical Value* [6]	*Elution order*	*Raw Material Lot*	*CAS*
1,1-DICHLOROETHYLENE	µg/ml	2000 ± 170	99.9998	2120	1	LC08188	75-35-4
DICHLOROMETHANE	µg/ml	2000 ± 140	99.99	2040	2	SHBK1353	75-09-2
TRANS-1,2-DICHLOROETHYLENE	µg/ml	2000 ± 140	99.7	2040	3	MKBH9850V	156-60-5
1,1-DICHLOROETHANE	µg/ml	2001 ± 130	99.9	1980	4	LB68167	75-34-3
2,2-DICHLOROPROPANE	µg/ml	2000 ± 135	98.4	2010	5	BCBR0622V	594-20-7
CIS-1,2-DICHLOROETHYLENE	µg/ml	2001 ± 130	99.9	2010	6	LB73428	156-59-2
CHLOROFORM	µg/ml	2000 ± 120	99.94	2000	7	MKBV7632V	67-66-3
BROMOCHLOROMETHANE	µg/ml	2001 ± 110	98.9	1990	8	LB39040	74-97-5
1,1,1-TRICHLOROETHANE	µg/ml	2000 ± 140	97.2	2020	9	LC06533	71-55-6
1,1-DICHLOROPROPYLENE	µg/ml	2001 ± 125	99.5	1990	10	7738900	563-58-6
CARBON TETRACHLORIDE	µg/ml	2000 ± 140	99.97	1990	11	02041MB	56-23-5
1,2-DICHLOROETHANE	µg/ml	2001 ± 110	99.9	2010	12	LB74294	107-06-02
BENZENE	µg/ml	2000 ± 120	99.99	1970	13	SHBJ5344	71-43-2
TRICHLOROETHYLENE	µg/ml	2001 ± 110	98.6	2010	14	LB86674	79-01-6
1,2-DICHLOROPROPANE	µg/ml	2001 ± 120	99.9	1980	15	LC14320	78-87-5
BROMODICHLOROMETHANE	µg/ml	2001 ± 120	97.9	1980	16	MKCF8470	75-27-4
DIBROMOMETHANE	µg/ml	2001 ± 110	98.8	2030	17	LB81118	74-95-3
TRANS 1,3-DICHLOROPROPENE	µg/ml	2002 ± 120	99	1970	18	ZDMSLEK	10061-02-06
TOLUENE	µg/ml	2000 ± 110	99.98	2010	19	MKCF0747	108-88-3
CIS 1,3-DICHLOROPROPENE	µg/ml	2001 ± 120	99.3	1990	20	MKBZ5000V	10061-01-5
1,1,2-TRICHLOROETHANE	µg/ml	2000 ± 110	99.9	2010	21	LB87978	79-00-5
1,3-DICHLOROPROPANE	µg/ml	2000 ± 110	99.9	1990	22	LC10811	142-28-9
TETRACHLOROETHYLENE	µg/ml	2000 ± 110	99.9	2010	23	LB67182	127-18-4
DIBROMOCHLOROMETHANE	µg/ml	2000 ± 120	96.5	2020	24	LB89245	124-48-1
1,2-DIBROMOETHANE	µg/ml	2003 ± 110	99.1	2020	25	LB42792	106-93-4
CHLOROBENZENE	µg/ml	2000 ± 94	99.9	1990	26	LB93949	108-90-7

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

SIGMA-ALDRICH®
2931 Soldier Springs Rd. Laramie, Wyoming 82070 USA
800-325-5832
TechService@milliporesigma.com www.sigma-aldrich.com

Description

Lot **LRAC7008**
Expiration Date September 2022
Manufacturing Date September 2018
Storage Conditions Freeze
Solvent/Matrix METHANOL

1,1,1,2-TETRACHLOROETHANE	µg/ml	2000 ± 110	99.9	1980	27	LC14810	630-20-6
ETHYLBENZENE	µg/ml	2000 ± 110	99.87	1980	28	SHBK2389	100-41-4
M-XYLENE	µg/ml	2002 ± 110	99.8	2000	29	LB87531	108-38-3
P-XYLENE	µg/ml	2000 ± 110	99.9	2000	29	LB73203	106-42-3
O-XYLENE	µg/ml	2000 ± 110	99.5	2000	30	LB92424	95-47-6
STYRENE	µg/ml	2000 ± 98	99.9	1990	31	LC17632	100-42-5
CUMENE	µg/ml	2000 ± 99	99.9	2010	32	LB89580	98-82-8
BROMOFORM	µg/ml	2001 ± 120	96.1	2050	33	67996PJ	75-25-2
1,1,2,2-TETRACHLOROETHANE	µg/ml	2000 ± 100	99.9	1990	34	LB51327	79-34-5
1,2,3-TRICHLOROPROPANE	µg/ml	2001 ± 99	99	2020	35	BCBH8722V	96-18-4
N-PROPYLBENZENE	µg/ml	2000 ± 100	99.9	1990	36	T2HFC	103-65-1
BROMOBENZENE	µg/ml	2001 ± 98	99.5	1980	37	LB99843	108-86-1
1,2,4-TRIMETHYLBENZENE	µg/ml	2000 ± 100	98.9	2020	38	LB97224	95-63-6
2-CHLOROTOLUENE	µg/ml	2001 ± 98	99.9	2010	39	LC01464	95-49-8
4-CHLOROTOLUENE	µg/ml	2001 ± 92	99.9	2000	40	LC02742	106-43-4
TERT-BUTYLBENZENE	µg/ml	2000 ± 93	99.9	2000	41	LB40373	98-06-6
1,3,5-TRIMETHYLBENZENE	µg/ml	2000 ± 94	99.3	1980	42	LB82157	108-67-8
SEC-BUTYLBENZENE	µg/ml	2000 ± 93	99.4	1990	43	LB77150	135-98-8
P-ISOPROPYLTOLUENE	µg/ml	2000 ± 88	98.7	1960	44	LB40003	99-87-6
1,4-DICHLOROBENZENE	µg/ml	2000 ± 88	99.9	2000	45	LB90630	106-46-7
1,3-DICHLOROBENZENE	µg/ml	2001 ± 94	99.9	2010	46	LC17654	541-73-1
N-BUTYLBENZENE	µg/ml	2000 ± 91	99.9	2010	47	LB81630	104-51-8
1,2-DICHLOROBENZENE	µg/ml	2001 ± 82	99.4	2010	48	LB58923	95-50-1
1,2-DIBROMO-3-CHLOROPROPANE	µg/ml	2000 ± 89	96.8	2060	49	LB06608	96-12-8
1,2,3-TRICHLOROBENZENE	µg/ml	2000 ± 73	99.9	2010	50	LC20450	87-61-6
HEXACHLOROBUTADIENE	µg/ml	2000 ± 81	97.4	2060	51	MKCD4346	87-68-3
NAPHTHALENE	µg/ml	2000 ± 81	99.9	1990	52	16412TN	91-20-3
1,2,4-TRICHLOROBENZENE	µg/ml	2001 ± 67	99.4	2020	53	LB48083	120-82-1

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

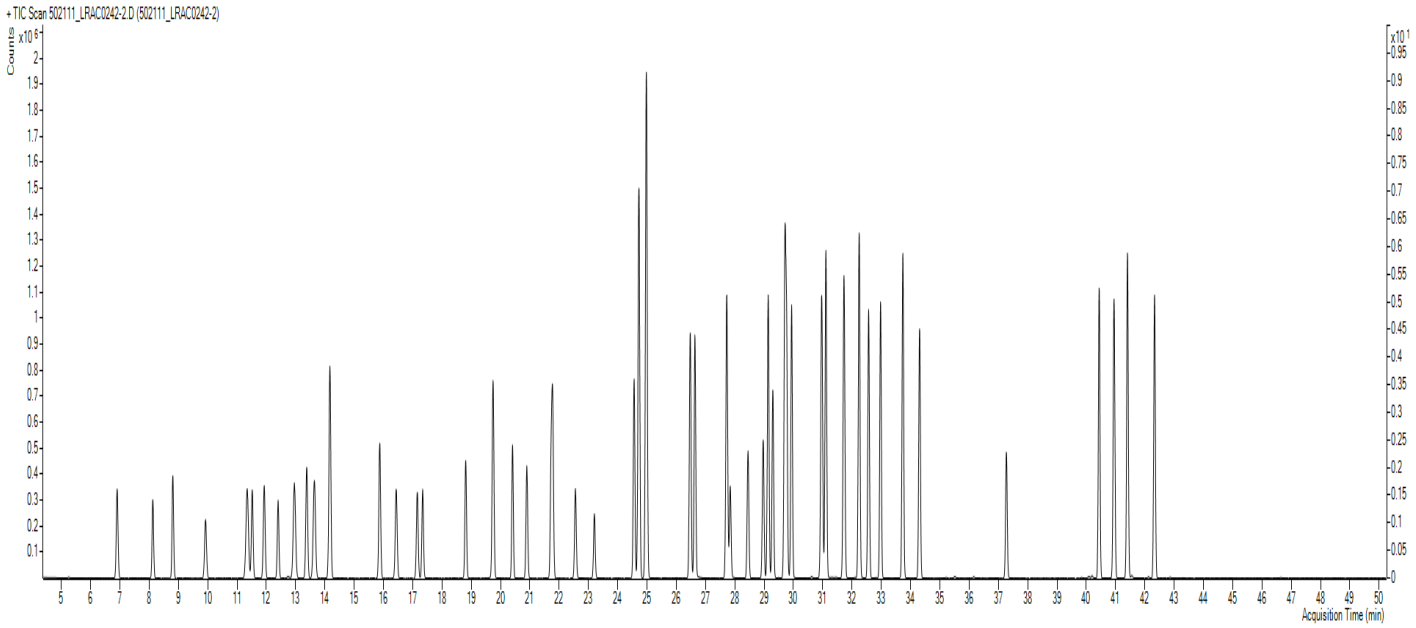
Certificate of Analysis

EPA 502/524 Volatiles Organic Calibration Mix (without gases)

Certified Reference Material

Description

Product ID	502111
Lot	**LRAC7008**
Expiration Date	September 2022
Manufacturing Date	September 2018
Storage Conditions	Freeze
Solvent/Matrix	METHANOL



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

SIGMA-ALDRICH®
2931 Soldier Springs Rd. Laramie, Wyoming 82070 USA
800-325-5832
TechService@milliporesigma.com www.sigma-aldrich.com

Description

Lot	**LRAC7008**
Expiration Date	September 2022
Manufacturing Date	September 2018
Storage Conditions	Freeze
Solvent/Matrix	METHANOL

1 **Metrological traceability:** Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.
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. K=2 unless specified. 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:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

***k*:** Coverage factor derived from a t-distribution table, based on the degrees of freedom of the data set. Assume 2.0 for a **Confidence interval = 95%**

6 Analytical Value- For QC verification of the certified value only- not to be used in calculations. Represents the analytical data obtained by comparison to a standard as analyzed by the method described in the CoA or another acceptable method. The result may differ from the certified value and UCRM based on method uncertainty as well as the uncertainty associated with the standard used for comparison.

Traceability: The standard was manufactured under an ISO/IEC 17025:2017 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 17034:2016. 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.

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.

THIS PRODUCT WAS DESIGNED, PRODUCED AND VERIFIED FOR ACCURACY AND STABILITY IN ACCORDANCE WITH **ISO/IEC 17025:2017 (ANAB Cert AT-1467)** and **ISO 17034:2016 (ANAB Cert AR-1470).**

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Certification Date	September 30, 2020
Version	0-9302020

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Analytical Standard Record

EPA Region 9 Laboratory

2047001

Description:	Passive indoor air MRL Spike	**Expires:**	05/16/21
Standard Type:	Analyte Spike	**Prepared:**	11/16/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	2	**Department:**	Volatiles
Vials:	1	**Last Edit:**	11/16/20 06:20 by TD
Vendor:	*Prepared*	**Lot Numbe**	A0150913

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

2047001

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)
2006155	VOA 502.2 CAL 2000 MEGA MIX, St	07/16/19	** Vendor **	05/31/21	11/16/20 06:17 by TD	0.02

Analytical Standard Record

EPA Region 9 Laboratory

2050006

Description:	Passive indoor air SCV	Expires:	01/22/21
Standard Type:	Calibration Standa	Prepared:	12/07/20
Solvent:	CS2	Prepared By:	Tatyana Dadiomov
Final Volume (mls):	2	Department:	Volatiles
Vials:	1	Last Edit:	12/07/20 09:36 by TD

Analyte	CAS Number	Concentration	Units
1,2-Dibromoethane (EDB)	106-93-4	5	ug/mL
1,1,1,2-Tetrachloroethane	630-20-6	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
Bromochloromethane	74-97-5	5	ug/mL
1,2-Dichlorobenzene	95-50-1	5	ug/mL
Bromodichloromethane	75-27-4	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-Trimethylbenzene	526-73-8	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

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2050006

trans-1,2-Dichloroethene	156-60-5	5	ug/mL
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
Bromobenzene	108-86-1	5	ug/mL
m&p-Xylene	179601-23-1	10	ug/mL
Trichloroethene	79-01-6	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
Bromoform	75-25-2	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)
2045061	VOA 502/524 VOC Mix, Stock	09/01/20	** Vendor **	06/07/21	12/07/20 09:28 by TD	0.005
2030067	Passive air Surrogate/I.S. Working solu	07/22/20	Tatyana Dadiomov	01/22/21	10/21/20 11:28 by ZAR	0.05

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2106033

Description:	Passive indoor air Internal Standard Stock	**Expires:**	08/02/21
Standard Type:	Other Solution	**Prepared:**	02/02/21
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	2	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/02/21 07:39 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	(ml
1639096	2-Fluorotoluene	09/22/16	** Vendor **	12/31/29	09/22/17 11:57 by TD	0.(

Analytical Standard Record

EPA Region 9 Laboratory

2106034

Description:	Passive indoor air stock std 50	**Expires:**	07/31/21
Standard Type:	Analyte Spike	**Prepared:**	02/02/21
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	20	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/02/21 07:43 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
Toluene-d8	2037-26-5	50
Toluene	108-88-3	50
Tetrachloroethene	127-18-4	50

Analytical Standard Record

EPA Region 9 Laboratory

2106034

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	(ml
2006158	VOA 502.2 CAL 2000 MEGA MIX, St	07/16/19	** Vendor **	07/31/21	02/02/21 07:42 by TD	0
2106032	Passive indoor air Surrogate Stock	02/02/21	Tatyana Dadiomov	08/02/21	02/02/21 07:36 by TD	0

Analytical Standard Record

EPA Region 9 Laboratory

2106036

Description:	Passive air Surrogate/I.S. Working solutio	**Expires:**	08/02/21
Standard Type:	Surrogate Spike	**Prepared:**	02/02/21
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	25	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/02/21 07:45 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	(ml
2106032	Passive indoor air Surrogate Stock	02/02/21	Tatyana Dadiomov	08/02/21	02/02/21 07:36 by TD	0
2106033	Passive indoor air Internal Standard Sto	02/02/21	Tatyana Dadiomov	08/02/21	02/02/21 07:39 by TD	0

Analytical Standard Record

EPA Region 9 Laboratory

2106037

Description:	Passive indoor air 25	**Expires:**	07/31/21
Standard Type:	Other Solution	**Prepared:**	02/02/21
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/02/21 07:46 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
Toluene-d8	2037-26-5	25
Toluene	108-88-3	25
Tetrachloroethene	127-18-4	25

Analytical Standard Record

EPA Region 9 Laboratory

2106037

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	(ml
2106034	Passive indoor air stock std 50	02/02/21	Tatyana Dadiomov	07/31/21	02/02/21 07:43 by TD	
2106033	Passive indoor air Internal Standard Sto	02/02/21	Tatyana Dadiomov	08/02/21	02/02/21 07:39 by TD	0.0(

Analytical Standard Record

EPA Region 9 Laboratory

2106038

Description:	Passive indoor air 10	**Expires:**	07/31/21
Standard Type:	Other Solution	**Prepared:**	02/02/21
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/02/21 07:47 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
Toluene-d8	2037-26-5	10
Toluene	108-88-3	10
Tetrachloroethene	127-18-4	10

Analytical Standard Record

EPA Region 9 Laboratory

2106038

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	(ml
2106034	Passive indoor air stock std 50	02/02/21	Tatyana Dadiomov	07/31/21	02/02/21 07:43 by TD	
2106033	Passive indoor air Internal Standard Sto	02/02/21	Tatyana Dadiomov	08/02/21	02/02/21 07:39 by TD	0.0(

Analytical Standard Record

EPA Region 9 Laboratory

2106039

Description:	Passive indoor air 5	**Expires:**	07/31/21
Standard Type:	Other Solution	**Prepared:**	02/02/21
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/02/21 07:48 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
Toluene-d8	2037-26-5	5
Toluene	108-88-3	5
Tetrachloroethene	127-18-4	5

Analytical Standard Record

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2106039

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	(ml
2106034	Passive indoor air stock std 50	02/02/21	Tatyana Dadiomov	07/31/21	02/02/21 07:43 by TD	
2106033	Passive indoor air Internal Standard Sto	02/02/21	Tatyana Dadiomov	08/02/21	02/02/21 07:39 by TD	0.0(

Analytical Standard Record

EPA Region 9 Laboratory

2106040

Description:	Passive indoor air 1	**Expires:**	07/31/21
Standard Type:	Other Solution	**Prepared:**	02/02/21
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/02/21 07:49 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
Toluene-d8	2037-26-5	1
Toluene	108-88-3	1
Tetrachloroethene	127-18-4	1

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2106040

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	(ml
2106034	Passive indoor air stock std 50	02/02/21	Tatyana Dadiomov	07/31/21	02/02/21 07:43 by TD	0
2106033	Passive indoor air Internal Standard Sto	02/02/21	Tatyana Dadiomov	08/02/21	02/02/21 07:39 by TD	0.0(

Analytical Standard Record

EPA Region 9 Laboratory

2106041

Description:	Passive indoor air 0.15	**Expires:**	07/31/21
Standard Type:	Other Solution	**Prepared:**	02/02/21
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/02/21 07:49 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
Toluene-d8	2037-26-5	0.15
Toluene	108-88-3	0.15
Tetrachloroethene	127-18-4	0.15

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EPA Region 9 Laboratory

2106041

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	(ml
2106034	Passive indoor air stock std 50	02/02/21	Tatyana Dadiomov	07/31/21	02/02/21 07:43 by TD	0.0
2106033	Passive indoor air Internal Standard Sto	02/02/21	Tatyana Dadiomov	08/02/21	02/02/21 07:39 by TD	0.00

Analytical Standard Record

EPA Region 9 Laboratory

2106042

Description:	Passive indoor air 0.05	**Expires:**	07/31/21
Standard Type:	Other Solution	**Prepared:**	02/02/21
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/02/21 07:50 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
Toluene-d8	2037-26-5	0.05
Toluene	108-88-3	0.05
Tetrachloroethene	127-18-4	0.05

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2106042

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	(ml
2106033	Passive indoor air Internal Standard Sto	02/02/21	Tatyana Dadiomov	08/02/21	02/02/21 07:39 by TD	0.0(
2106034	Passive indoor air stock std 50	02/02/21	Tatyana Dadiomov	07/31/21	02/02/21 07:43 by TD	0.(

Analytical Standard Record

EPA Region 9 Laboratory

2106043

Description:	Passive indoor air SCV	**Expires:**	06/07/21
Standard Type:	Other Solution	**Prepared:**	02/02/21
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	2	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/02/21 07:51 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
trans-1,2-Dichloroethene	156-60-5	5
Toluene-d8	2037-26-5	5
Toluene	108-88-3	5

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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	(ml
2045061	VOA 502/524 VOC Mix, Stock	09/01/20	** Vendor **	06/07/21	12/07/20 09:28 by TD	0.00
2106036	Passive air Surrogate/I.S. Working solu	02/02/21	Tatyana Dadiomov	08/02/21	02/02/21 07:45 by TD	0.0

Analytical Standard Record

EPA Region 9 Laboratory

2108011

Description:	passive air WORKING BFB 50 mg/L	**Expires:**	03/30/21
Standard Type:	Other Solution	**Prepared:**	02/15/21
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	5	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/15/21 12:50 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	(ml
2039024	VOA BFB tuning mix, stock STD.	09/24/20	** Vendor **	03/30/21	10/05/20 08:44 by TD	0.0