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United States Environmental Protection Agency
Region 9 Laboratory

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

Date: **10/14/2020**

Subject: **Analytical Testing Results - Project R20S18**
WorkOrder **2009033**

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

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

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

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

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

Analyses included in this report:

Volatile Organic Compounds by GC/MS

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

Project Manager: Alana Lee	**California Site Cleanup Section 3**	**WorkOrder: 2009033**
Project Number: R20S18	**75 Hawthorne Street**	**Reported:** 10/14/20 12:39
Project: MEW OU1 FY2020 Vapor Intrusion Investigation	**San Francisco CA, 94105**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
Classics-WT-MH1-2ft-6d-R	2009033-01	Radiello 130	09/24/20 15:47	09/30/20 08:37
Classics-WT-MH2-2ft-6d-R	2009033-02	Radiello 130	09/24/20 15:52	09/30/20 08:37
Classics-WT-MH3-2ft-6d-R	2009033-03	Radiello 130	09/24/20 16:00	09/30/20 08:37
Classics-WT-MH4-2ft-6d-R	2009033-04	Radiello 130	09/24/20 16:05	09/30/20 08:37
Classics-186WT-SC-1ft-6d-R	2009033-05	Radiello 130	09/24/20 16:15	09/30/20 08:37
Classics-198WT-SC-1ft-6d-R	2009033-06	Radiello 130	09/24/20 16:09	09/30/20 08:37

Work Order 2009033
Sample Receiving:

Samples Classics-WT-MH1-2ft-6d-R, Classics-WT-MH2-2ft-6d-R, and Classics-WT-MH3-2ft-6d-R have 09/22/20 for an end date on the chain of custody and an end date on the containers as 09/24/20. The end date was logged in per the containers as 09/24/20.

Per 09/30/20 communications from Alana Lee, Classics-198WT-SC-1ft-6d-R is a 6-day sample with a start date of 9/18/20 16:15 and an end date of 9/24/20 16:15.

United States Environmental Protection Agency
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Project Manager: Alana Lee
Project Number: R20S18
Project: MEW OU1 FY2020 Vapor Intrusion Investigation

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

WorkOrder: 2009033
Reported: 10/14/20 12:39

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 2009033-01									**Radiello 130 - Sampled: 09/24/20 15:47**
Sample ID: Classics-WT-MH1-2ft-6d-R					**Volatile Organic Compounds Collected on Passive Air Sampling Devices**				
1,1-Dichloroethene		3.4		0.16	ug/m³ Air	B20I024	09/30/20	09/30/20	Radiello D1
trans-1,2-Dichloroethene		6.1		0.19	"	"	"	"	Radiello D1
1,1-Dichloroethane		3.5		0.19	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		76		0.19	"	"	"	"	Radiello D1
Chloroform		25		0.16	"	"	"	"	Radiello D1
Trichloroethene	RE1	390		1.7	"	"	"	10/01/20	Radiello D1
Tetrachloroethene		15		0.20	"	"	"	09/30/20	Radiello D1
Surrogate: Toluene-d8			86 %	*86-118%*		"	"	"	
Lab ID: 2009033-02									**Radiello 130 - Sampled: 09/24/20 15:52**
Sample ID: Classics-WT-MH2-2ft-6d-R					**Volatile Organic Compounds Collected on Passive Air Sampling Devices**				
1,1-Dichloroethene		2.8		0.16	ug/m³ Air	B20I024	09/30/20	09/30/20	Radiello D1
trans-1,2-Dichloroethene		8.4		0.19	"	"	"	"	Radiello D1
1,1-Dichloroethane		2.5		0.19	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene	RE1	120		1.9	"	"	"	10/01/20	Radiello D1
Chloroform		29		0.16	"	"	"	09/30/20	Radiello D1
Trichloroethene	RE1	680		1.7	"	"	"	10/01/20	Radiello D1
Tetrachloroethene		35		0.20	"	"	"	09/30/20	Radiello D1
Surrogate: Toluene-d8			87 %	*86-118%*		"	"	"	
Lab ID: 2009033-03									**Radiello 130 - Sampled: 09/24/20 16:00**
Sample ID: Classics-WT-MH3-2ft-6d-R					**Volatile Organic Compounds Collected on Passive Air Sampling Devices**				
1,1-Dichloroethene	RE1	ND	U	0.16	ug/m³ Air	B20I024	09/30/20	10/01/20	Radiello D1
trans-1,2-Dichloroethene	RE1	ND	U	0.19	"	"	"	"	Radiello D1
1,1-Dichloroethane	RE1	ND	U	0.19	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene	RE1	ND	U	0.19	"	"	"	"	Radiello D1
Chloroform	RE1	2.1		0.16	"	"	"	"	Radiello D1
Trichloroethene	RE1	ND	U	0.17	"	"	"	"	Radiello D1
Tetrachloroethene	RE1	0.56		0.20	"	"	"	"	Radiello D1
Surrogate: Toluene-d8	*RE1*		89 %	*86-118%*		"	"	"	
Lab ID: 2009033-04									**Radiello 130 - Sampled: 09/24/20 16:05**
Sample ID: Classics-WT-MH4-2ft-6d-R					**Volatile Organic Compounds Collected on Passive Air Sampling Devices**				
1,1-Dichloroethene		ND	U	0.16	ug/m³ Air	B20I024	09/30/20	09/30/20	Radiello D1
trans-1,2-Dichloroethene		ND	U	0.19	"	"	"	"	Radiello D1
1,1-Dichloroethane		ND	U	0.19	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		ND	U	0.19	"	"	"	"	Radiello D1
Chloroform		0.67		0.16	"	"	"	"	Radiello D1
Trichloroethene		ND	U	0.17	"	"	"	"	Radiello D1
Tetrachloroethene		ND	U	0.20	"	"	"	"	Radiello D1

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: 2009033**
Project Number: R20S18	**75 Hawthorne Street**	**Reported:** 10/14/20 12:39
Project: MEW OU1 FY2020 Vapor Intrusion Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 2009033-04									**Radiello 130 - Sampled: 09/24/20 16:05**
Sample ID: Classics-WT-MH4-2ft-6d-R						**Volatile Organic Compounds Collected on Passive Air Sampling Devices**			
Surrogate: Toluene-d8			89 %	*86-118%*		*B20I024*	*09/30/20*	*09/30/20*	
Lab ID: 2009033-05									**Radiello 130 - Sampled: 09/24/20 16:15**
Sample ID: Classics-186WT-SC-1ft-6d-R						**Volatile Organic Compounds Collected on Passive Air Sampling Devices**			
1,1-Dichloroethene		1.4		0.16	ug/m³ Air	B20I024	09/30/20	09/30/20	Radiello D1
trans-1,2-Dichloroethene		2.2		0.19	"	"	"	"	Radiello D1
1,1-Dichloroethane		1.3		0.19	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		26		0.19	"	"	"	"	Radiello D1
Chloroform		15		0.16	"	"	"	"	Radiello D1
Trichloroethene	RE1	110		0.87	"	"	"	10/01/20	Radiello D1
Tetrachloroethene		4.7		0.20	"	"	"	09/30/20	Radiello D1
Surrogate: Toluene-d8			87 %	*86-118%*		*"*	*"*	*"*	
Lab ID: 2009033-06									**Radiello 130 - Sampled: 09/24/20 16:09**
Sample ID: Classics-198WT-SC-1ft-6d-R						**Volatile Organic Compounds Collected on Passive Air Sampling Devices**			
1,1-Dichloroethene		ND	U	0.16	ug/m³ Air	B20I024	09/30/20	09/30/20	Radiello D1
trans-1,2-Dichloroethene		ND	U	0.19	"	"	"	"	Radiello D1
1,1-Dichloroethane		ND	U	0.19	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		0.17	C1, J	0.19	"	"	"	"	Radiello D1
Chloroform		1.0		0.16	"	"	"	"	Radiello D1
Trichloroethene		0.99		0.17	"	"	"	"	Radiello D1
Tetrachloroethene		ND	U	0.20	"	"	"	"	Radiello D1
Surrogate: Toluene-d8			89 %	*86-118%*		*"*	*"*	*"*	

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Project Manager: Alana Lee	**California Site Cleanup Section 3**	**WorkOrder: 2009033**
Project Number: R20S18	**75 Hawthorne Street**	**Reported:** 10/14/20 12:39
Project: MEW OU1 FY2020 Vapor Intrusion Investigation	**San Francisco CA, 94105**	

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

EPA Region 9 Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B20I024 - Passive Air Sampler										
Blank (B20I024-BLK1)				Prepared & Analyzed: 09/30/20						
1,1-Dichloroethene	ND	0.13	ug/m³ Air							U
trans-1,2-Dichloroethene	ND	0.16	ug/m³ Air							U
1,1-Dichloroethane	ND	0.16	ug/m³ Air							U
cis-1,2-Dichloroethene	ND	0.16	ug/m³ Air							U
Chloroform	ND	0.13	ug/m³ Air							U
Trichloroethene	ND	0.14	ug/m³ Air							U
Tetrachloroethene	ND	0.17	ug/m³ Air							U
Surrogate: Toluene-d8	*879*		ug/m³ Air	*992*		*89*	*86-118*			
LCS (B20I024-BS1)				Prepared & Analyzed: 09/30/20						
1,1-Dichloroethene	8.77	0.13	ug/m³ Air	13.1		67	22-143			
trans-1,2-Dichloroethene	10.6	0.16	ug/m³ Air	16.0		66	35-133			
1,1-Dichloroethane	10.9	0.16	ug/m³ Air	15.7		69	43-140			
cis-1,2-Dichloroethene	11.0	0.16	ug/m³ Air	16.0		69	49-134			
Chloroform	8.90	0.13	ug/m³ Air	13.2		67	56-132			
Trichloroethene	9.08	0.14	ug/m³ Air	14.4		63	69-124			
Tetrachloroethene	10.3	0.17	ug/m³ Air	16.8		61	69-124			
Surrogate: Toluene-d8	*879*		ug/m³ Air	*992*		*89*	*86-118*			
LCS (B20I024-BS2)				Prepared: 09/30/20 Analyzed: 10/01/20						
1,1-Dichloroethene	12.4	0.13	ug/m³ Air	13.1		95	22-143			
trans-1,2-Dichloroethene	14.7	0.16	ug/m³ Air	16.0		92	35-133			
1,1-Dichloroethane	14.7	0.16	ug/m³ Air	15.7		93	43-140			
cis-1,2-Dichloroethene	14.7	0.16	ug/m³ Air	16.0		92	49-134			
Chloroform	11.8	0.13	ug/m³ Air	13.2		89	56-132			
Trichloroethene	12.6	0.14	ug/m³ Air	14.4		88	69-124			
Tetrachloroethene	14.3	0.17	ug/m³ Air	16.8		85	69-124			
Surrogate: Toluene-d8	*890*		ug/m³ Air	*992*		*90*	*86-118*			

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Project Manager: Alana Lee	**California Site Cleanup Section 3**	**WorkOrder: 2009033**
Project Number: R20S18	**75 Hawthorne Street**	**Reported:** 10/14/20 12:39
Project: MEW OU1 FY2020 Vapor Intrusion Investigation	**San Francisco CA, 94105**	

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

EPA Region 9 Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B20I024 - Passive Air Sampler										
LCS Dup (B20I024-BSD1)				Prepared & Analyzed: 09/30/20						
1,1-Dichloroethene	9.75	0.13	ug/m³ Air	13.1		75	22-143	11	62	
trans-1,2-Dichloroethene	12.1	0.16	ug/m³ Air	16.0		76	35-133	13	53	
1,1-Dichloroethane	12.5	0.16	ug/m³ Air	15.7		79	43-140	14	44	
cis-1,2-Dichloroethene	12.8	0.16	ug/m³ Air	16.0		80	49-134	15	39	
Chloroform	10.4	0.13	ug/m³ Air	13.2		79	56-132	16	41	
1,1,1-Trichloroethane	12.2	0.16	ug/m³ Air	16.0		76	58-131	18	31	
Trichloroethene	10.9	0.14	ug/m³ Air	14.4		76	69-124	19	20	
Tetrachloroethene	12.6	0.17	ug/m³ Air	16.8		75	69-124	20	20	
Chlorobenzene	10.3	0.15	ug/m³ Air	14.6		71	64-122	18	23	
1,1,1,2-Tetrachloroethane	13.3	0.17	ug/m³ Air	16.5		81	68-130	20	23	
1,1,2,2-Tetrachloroethane	12.3	0.17	ug/m³ Air	16.5		74	55-132	16	41	
Surrogate: Toluene-d8	*896*		ug/m³ Air	*992*		*90*	*86-118*			
LCS Dup (B20I024-BSD2)				Prepared & Analyzed: 09/30/20						
1,1-Dichloroethene	9.75	0.13	ug/m³ Air	13.1		75	22-143	24	62	
trans-1,2-Dichloroethene	12.1	0.16	ug/m³ Air	16.0		76	35-133	19	53	
1,1-Dichloroethane	12.5	0.16	ug/m³ Air	15.7		79	43-140	17	44	
cis-1,2-Dichloroethene	12.8	0.16	ug/m³ Air	16.0		80	49-134	14	39	
Chloroform	10.4	0.13	ug/m³ Air	13.2		79	56-132	12	41	
Trichloroethene	10.9	0.14	ug/m³ Air	14.4		76	69-124	14	20	
Tetrachloroethene	12.6	0.17	ug/m³ Air	16.8		75	69-124	13	20	
Surrogate: Toluene-d8	*896*		ug/m³ Air	*992*		*90*	*86-118*			
Batch S20I029 - B20I024										
Instrument Blank (S20I029-IBL1)				Prepared & Analyzed: 09/30/20						
1,1-Dichloroethene	ND	0.0	ug/L							U
trans-1,2-Dichloroethene	ND	0.0	ug/L							U
1,1-Dichloroethane	ND	0.0	ug/L							U
cis-1,2-Dichloroethene	ND	0.0	ug/L							U
Chloroform	ND	0.0	ug/L							U
1,1,1-Trichloroethane	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
1,1,1,2-Tetrachloroethane	ND	0.0	ug/L							U
1,1,2,2-Tetrachloroethane	ND	0.0	ug/L							U
Surrogate: Toluene-d8	*4330*		ug/L	*200000*		*2*	*86-118*			

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Project Manager: Alana Lee	**California Site Cleanup Section 3**	**WorkOrder: 2009033**
Project Number: R20S18	**75 Hawthorne Street**	**Reported:** 10/14/20 12:39
Project: MEW OU1 FY2020 Vapor Intrusion Investigation	**San Francisco CA, 94105**	

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

EPA Region 9 Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch S20J003 - B20I024										
Instrument Blank (S20J003-IBL1)				Prepared & Analyzed: 10/01/20						
1,1-Dichloroethene	ND	0.0	ug/L							U
trans-1,2-Dichloroethene	ND	0.0	ug/L							U
1,1-Dichloroethane	ND	0.0	ug/L							U
cis-1,2-Dichloroethene	ND	0.0	ug/L							U
Chloroform	ND	0.0	ug/L							U
Trichloroethene	ND	0.0	ug/L							U
Tetrachloroethene	ND	0.0	ug/L							U
Surrogate: Toluene-d8	*4310*		ug/L	*200000*		*2*	*86-118*			

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Project Manager: Alana Lee	**California Site Cleanup Section 3**	**WorkOrder: 2009033**
Project Number: R20S18	**75 Hawthorne Street**	**Reported:** 10/14/20 12:39
Project: MEW OU1 FY2020 Vapor Intrusion Investigation	**San Francisco CA, 94105**	

Qualifiers and Comments

Q1	The internal standard associated with this analyte did not meet area count criteria.
J	The reported result for this analyte should be considered an estimated value.
C1	The reported concentration for this analyte is below the quantitation limit.
U	Not Detected
NR	Not Reported
RE1, RE2, etc:	Result is from a sample re-analysis.

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Project Manager: Alana Lee	**California Site Cleanup Section 3**	**WorkOrder: 2009033**
Project Number: R20S18	**75 Hawthorne Street**	**Reported:** 10/14/20 12:39
Project: MEW OU1 FY2020 Vapor Intrusion Investigation	**San Francisco CA, 94105**	

Sample Receiving:

Samples: Classics -WT-MH1-2ft-6d-R, Classics -WT-MH2-2ft-6d-R, and Classics -WT-MH3-2ft-6d-R have 09/22/20 for end date on COC , date on containers 09/24/20. Logged in per container.TD 09/30/20

As per Alana Lee: Classics-198WT-SC-1ft-6d-R is a 6-day sample. Start date should be 9/18/20 16:15 / End date 9/24/20 16:15.

Radiello: BS1 fails low Trichloroethene, Tetrachloroethene . BS1 was re-run as BS2 with good %R. BSD2 was added to the batch so LIMS could link them. Samples 2009033-01RE1,-02RE1 failed surrogate for 10X DL. RE2 were with QC limits. Surrogate not reported from 10X dl. TD 10/02/20

Bauer, Richard

From: Lee, Alana
Sent: Wednesday, September 30, 2020 3:47 PM
To: Bauer, Richard
Subject: RE: Sample log discrepancies for second and third sample submissions

Good catch. Classics-198WT-SC-1ft-6d-R is incorrect on COC and label. It should be Start date 9/18/20 15:03 / End date 9/24/20 16:09. Classics-186WT-SC-1ft-6d-R is correct with start and end times are both 1615. .

I also corrected in red in my email below.

From: Bauer, Richard <Bauer.Richard@epa.gov>
Sent: Wednesday, September 30, 2020 2:00 PM
To: Lee, Alana <lee.alana@epa.gov>
Subject: RE: Sample log discrepancies for second and third sample submissions

Confirming that sample start and end times for Classics-198WT-SC-1ft-6d-R are both 1615. In other words, exactly the same times as for Classics-186WT-SC-1ft-6d-R.

_____
Richard Bauer
US EPA Region 9 Laboratory
1337 South 46th Street, Building 201
Richmond, CA 94804
(510) 412-2312
_____

From: Lee, Alana <lee.alana@epa.gov>
Sent: Wednesday, September 30, 2020 1:00 PM
To: Bauer, Richard <Bauer.Richard@epa.gov>
Subject: RE: Sample log discrepancies for second and third sample submissions

Thanks Rich.
My response are below in blue.
Please let me know if any questions.
Alana

From: Bauer, Richard <Bauer.Richard@epa.gov>
Sent: Wednesday, September 30, 2020 12:30 PM
To: Lee, Alana <lee.alana@epa.gov>
Subject: Sample log discrepancies for second and third sample submissions

I am in the lab now and have reviewed the log-in for the remaining MEW work orders. The comments for work order 2009030 are for your information and do not require a response. For the rest, please verify whether or not we have logged in the samples correctly. Note that in some cases the samples were logged in using the label info and in some cases the COC info.

Work order 2009029:

Sample ID listed on COC = Classiscs-185WT-Test Amb. Sample ID on canister label = 185WT-SCTest Amb. Logged in per canister label ID. Yes, use cam label ID.

Work order 2009030: Understood. Thank you.

Canister ID for sample F6-031-3ft is listed as 867 on COC. The actual can # is 887. Logged in as 887.

Cans 896 (2009030-01); 1991 (2009030-03); 887 (2009030-05); 884 (2009030-06); 1595 (2009030-07) were certified more than 6 months prior to sampling.

Sample 2009030-01 can #896 with ID: F6-010-3ft was received at zero psi, sample is cancelled.

Work order 2009031:

No issues.

Work order 2009032:

No issues.

Work order 2009033:

Samples Classics -WT-MH1-2ft-6d-R, Classics -WT-MH2-2ft-6d-R, and Classics -WT-MH3-2ft-6d-R have 09/22/20 listed for the end date on COC , date on containers 09/24/20. Logged in per container. Correct, should be 9/24/20

Also note that all sample IDs include "-6d-" imbedded in sample name but sample Classics-198WT-SC-1ft-6d-R has a sampling duration of 3 days. Is the sample ID incorrect or is the sample start date (9/21/20) incorrect? This is important for the final result calculation. Classics-198WT-SC-1ft-6d-R sample ID is correct as it is a 6-day sample. Start date 9/18/20 15:03 / End date 9/24/20 16:09. This radiello sample is co-located with Beacon sample 1094519 which has same sample deployment and collection date/time.

Work order 2009034:

Sample 6Sixty-A8-SC-1ft-3d-R container label has start time 18:27 and end time 18:02. COC start time 17:01 and end 18:18. Logged in per COC. Yes COC start time 17:01 and end 18:18 is correct for Sample 6Sixty-A8-SC-1ft-3d-R (L980I) though I have a cross out on my notes from L987I. Please let me know if there is another container labeled L987I

Sample 6Sixty-B12-SC-1ft-3d-R end time on container label 18:36. COC end time 18:26. Logged in per COC. Yes. COC end time 18:26 is correct for Sample 6Sixty-B12-SC-1ft-3d-R (982I).

Work order 2009035

Sample Waverly-SF-RR-B2-6d has end 19:22 on container, COC end time 19:26. Logged in per COC. The COC is correct. For clarification: "Waverly-SF3-RR2-BZ-6d" (1704T) should have start time 9/18/20 19:29 and end date/time: 9/24/20 19:22 and : "Waverly-SF3-RR1-BZ-6d" (1705T) should have start time 9/18/20 19:36 and end date/time: 9/24/20 19:26.

Thanks.

_____

Richard Bauer

US EPA Region 9 Laboratory
1337 South 46th Street, Building 201
Richmond, CA 94804
(510) 412-2312

_____

WORK ORDER

Printed: 10/13/2020 8:00:50AM

2009033

EPA Region 9 Laboratory

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

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

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

Shipping Containers	Description	Temp C	Custody Seals?	Containers Intact?	Labels COC Agree?	Preservation Confirmed?	Received on Ice?	Comments
Modified COVID-19	Modified COVID-19	5	No	Yes	No	No	No	

Date Due:	10/14/20 17:00 (14 day TAT)	SDG:	20274A
Received By:	Tatyana Dadiomov	Date Received:	09/30/20 08:37
Logged In By:	Tatyana Dadiomov	Date Logged In:	09/30/20 09:23

Analysis	Hold Time Expires	Comments
2009033-01 Classics-WT-MH1-2ft-6d-R [Radiello 130] Sampled 09/24/20 15:47 (GMT-08:00) Pacific Time (US &		**L398A 5-day TAT**
VOCs, Passive Samplers	03/23/21	check COC for requested analytes
2009033-02 Classics-WT-MH2-2ft-6d-R [Radiello 130] Sampled 09/24/20 15:52 (GMT-08:00) Pacific Time (US &		**L399A 5-day TAT**
VOCs, Passive Samplers	03/23/21	check COC for requested analytes
2009033-03 Classics-WT-MH3-2ft-6d-R [Radiello 130] Sampled 09/24/20 16:00 (GMT-08:00) Pacific Time (US &		**L400A 5-day TAT**
VOCs, Passive Samplers	03/23/21	check COC for requested analytes
2009033-04 Classics-WT-MH4-2ft-6d-R [Radiello 130] Sampled 09/24/20 16:05 (GMT-08:00) Pacific Time (US &		**L401A 5-day TAT**
VOCs, Passive Samplers	03/23/21	check COC for requested analytes
2009033-05 Classics-186WT-SC-1ft-6d-R [Radiello 130] Sampled 09/24/20 16:15 (GMT-08:00) Pacific Time (US &		**L402A 5-day TAT**
VOCs, Passive Samplers	03/23/21	check COC for requested analytes
2009033-06 Classics-198WT-SC-1ft-6d-R [Radiello 130] Sampled 09/24/20 16:09 (GMT-08:00) Pacific Time (US &		**L403A 5-day TAT**
VOCs, Passive Samplers	03/23/21	check COC for requested analytes

Reviewed By _____ Date _____

WORK ORDER

Printed: 10/13/2020 8:00:50AM

2009033

EPA Region 9 Laboratory

Client: **California Site Cleanup Section 3** **Project Number:** **R20S18**

Project: **MEW OU1 FY2020 Vapor Intrusion Investigation**

Reviewed By

Date

U.S. Environmental Protection Agency

CHAIN OF CUSTODY RECORD

EPA REGION 9
75 Hawthorne Street
San Francisco, California 94105

Project / Case Number: R20S18
MEW (M6) OU1

FY20 MEW OU1 Vapor Intrusion and Sewer Pathway

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

Laboratory: EPA
R9 Richmond

Samplers: *Ray Chavira / Michael Schulman*

Analysis: TCE, cis & trans 1,2-DCE, PCE, 1,1 DCE, 1,1-DCA, chloroform
(5 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 if available	
09/18/2020 09/22/2020	15:58 15:47	AIR	X		Classics-WT-MH1-2ft-6d-R	L398A	1	65	65	50-800	B-1093706
09/18/2020 09/22/2020	15:36 15:52	AIR	X		Classics-WT-MH2-2ft-6d-R	L399A	1	65	65	200-600	B-1095223
09/18/2020 09/22/2020	15:52 16:00	AIR	X		Classics-WT-MH3-2ft-6d-R	L400A	1	65	65	<100	B-1094340
09/18/2020 09/24/2020	15:20 16:05	AIR	X		Classics-WT-MH4-2ft-6d-R	L401A	1	65	65	<100	B-1093080
09/18/2020 09/24/2020	16:15 16:15	AIR	X		Classics-186WT-SC-1ft-6d-R	L402A	1	65	65	560	B-1094146
09/21/2020 09/24/2020	15:03 16:09	AIR	X		Classics-198WT-SC-1ft-6d-R	L403A	1	65	65	20	B-1094519

Relinquished by: *(Signature)* Date/Time

Received by: *(Signature)* Date/Time

Relinquished by: *(Signature)* Date/Time

Received for Laboratory by: *(Signature)* Date/Time
[illegible] 9-30-20 8:37

Temp

Seals Intact? (Y/N)

Conditions / Remarks

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Cooler/Box/Env 1 of 1

1337 South 46th Street
Richmond, CA 94804

U.S. Environmental Protection Agency
Region 9 Richmond Laboratory

Sample Receipt Checklist

Note in WO memo any items outside acceptable limits.

Project No: R20W18 Work Order No(s): 2009033 Date: 9/30/20 by DZ

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

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

TEMPERATURE 5 °C

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

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

☐ Provided Temp Blank was not used because

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

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

SAMPLE CONTAINERS Are Intact? ☒ Yes ☐ No

Check if applies and identify sample IDs in comments:

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

☐ Other

CHAIN OF CUSTODY

COC forms are present? ☒ Yes ☐ No

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

Check if applies: ☐ Missing "relinquished by" signature

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

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

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

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

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

PRESERVATION / FILTRATION

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

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

Check if applies: ☐ Analyst to filter

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

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

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

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

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

Check if verified:

☐ Sulfide: pH >9 NaOH/Zinc acetate

☐ Cyanide: pH >12 NaOH

☐ Metals: pH <2 HNO_3

☐ Ferrous Iron: pH <2 HCl

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

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

☐ Other:

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

Samples disinfected using 2% bleach
Samples classics-WT-MH1-2ft-6d-P,
classics-WT-MH2-2ft-6d-P and classics-WT-MH3-2ft-6d-P
end dates on COC 09-22-20 containers have
09-24-20. Logged in per container.

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

Exposure Time in Minutes

	Sample number	Retrieved Date (XX/XX/XXXX)	Retrieved Time	Deployed Date	Deployed Time	Minutes	Start temp C	End temp C	Avg temp K	Plate #
1	Classics-WT-MH1-2ft-6d-R	9/24/2020	15:47	9/18/2020	15:58	8629	18.3	18.3	291.3	L398A
	Classics-WT-MH2-2ft-6d-R	9/24/2020	15:52	9/18/2020	15:36	8656	18.3	18.3	291.3	L399A
	Classics-WT-MH3-2ft-6d-R	9/24/2020	16:00	9/18/2020	15:52	8648	18.3	18.3	291.3	L400A
	Classics-WT-MH4-2ft-6d-R	9/24/2020	16:05	9/18/2020	15:20	8685	18.3	18.3	291.3	L401A
	Classics-186WT-SC-1ft-6d-R	9/24/2020	16:15	9/18/2020	16:15	8640	18.3	18.3	291.3	L402A
	Classics-198WT-SC-1ft-6d-R	9/24/2020	16:09	9/18/2020	15:03	8706	18.3	18.3	291.3	L403A

BATCH

B20I024

Batch Date: 09/30/2020

Batch Matrix: Radiello 130

Batch Analyses:

VOCs, Passive Samplers

PREPARATION BENCH SHEET

B20I024

EPA Region 9 Laboratory

Project: R20S18

Printed: 10/2/2020 2:49:34PM

Matrix: Radiello 13 **Analysis: VOCs, Passive Sampler** **Prepared using: Volatiles - Passive Air Sampler** **Surrogate used: 2030067**

Lab Number	SampleName	Prepared	Initial (Tube)	Final (mL)	Source ID	Spike ID 1	ul Spike 1	ul Surrogate			Ext pH	Prepared by	Extraction Comments
2009032-01 A	RES79-RR1-BZ-10d	09/30/20 11:51	1	2				50				TD	check COC for requested analytes
2009032-02 A	RES79-LNDRY1-BZ-10d	09/30/20 11:51	1	2				50				TD	check COC for requested analytes
2009032-03 A	RES79-RR2-PP-10d	09/30/20 11:51	1	2				50				TD	check COC for requested analytes
2009032-04 A	RES79-K2-Counter-BZ-10d	09/30/20 11:51	1	2				50				TD	check COC for requested analytes
2009032-05 A	RES79-OUT-10d	09/30/20 11:51	1	2				50				TD	check COC for requested analytes
2009033-01 A	Classics-WT-MH1-2ft-6d-R	09/30/20 11:51	1	2				50				TD	check COC for requested analytes
2009033-01RE1 A	Classics-WT-MH1-2ft-6d-R	09/30/20 11:51	1	2				50				TD	check COC for requested analytes
2009033-01RE2 A	Classics-WT-MH1-2ft-6d-R	09/30/20 11:51	1	2				50				TD	Added 10/2/2020 by TD
2009033-02 A	Classics-WT-MH2-2ft-6d-R	09/30/20 11:51	1	2				50				TD	check COC for requested analytes
2009033-02RE1 A	Classics-WT-MH2-2ft-6d-R	09/30/20 11:51	1	2				50				TD	check COC for requested analytes
2009033-02RE2 A	Classics-WT-MH2-2ft-6d-R	09/30/20 11:51	1	2				50				TD	Added 10/2/2020 by TD
2009033-03 A	Classics-WT-MH3-2ft-6d-R	09/30/20 11:51	1	2				50				TD	check COC for requested analytes
2009033-03RE1 A	Classics-WT-MH3-2ft-6d-R	09/30/20 11:51	1	2				50				TD	Added 10/2/2020 by TD
2009033-04 A	Classics-WT-MH4-2ft-6d-R	09/30/20 11:51	1	2				50				TD	check COC for requested analytes

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PREPARATION BENCH SHEET

B20I024

EPA Region 9 Laboratory

Project: R20S18

Printed: 10/2/2020 2:49:34PM

Matrix: Radiello 13 **Analysis: VOCs, Passive Sampler** **Prepared using: Volatiles - Passive Air Sampler** **Surrogate used: 2030067**

Lab Number	SampleName	Prepared	Initial (Tube)	Final (mL)	Source ID	Spike ID 1	ul Spike 1	ul Surrogate			Ext pH	Prepared by	Extraction Comments
2009033-05 A	Classics-186WT-SC-1ft-6d-R	09/30/20 11:51	1	2				50				TD	check COC for requested analytes
2009033-05RE1 A	Classics-186WT-SC-1ft-6d-R	09/30/20 11:51	1	2				50				TD	Added 10/2/2020 by TD
2009033-06 A	Classics-198WT-SC-1ft-6d-R	09/30/20 11:51	1	2				50				TD	check COC for requested analytes
2009034-01 A	6Sixty-MH3-2ft-3d-R	09/30/20 11:51	1	2				50				TD	check COC for requested analytes
2009034-01RE1 A	6Sixty-MH3-2ft-3d-R	09/30/20 11:51	1	2				50				TD	Added 10/2/2020 by TD
2009034-02 A	6Sixty-MH4-2ft-3d-R	09/30/20 11:51	1	2				50				TD	check COC for requested analytes
2009034-03 A	6Sixty-MH11-2ft-3d-R	09/30/20 11:51	1	2				50				TD	check COC for requested analytes
2009034-04 A	6Sixty-A2-SC-1ft-3d-R	09/30/20 11:51	1	2				50				TD	check COC for requested analytes
2009034-06 A	6Sixty-A9-SC-1ft-3d-R	09/30/20 11:51	1	2				50				TD	check COC for requested analytes
2009034-07 A	6Sixty-B12-SC-1ft-3d-R	09/30/20 11:51	1	2				50				TD	check COC for requested analytes
B20I024-BLK1	Blank	09/30/20 11:51	1	2				50				TD	
B20I024-BS1	LCS	09/30/20 11:51	1	2		1937062	5	50				TD	
B20I024-BS2	LCS	09/30/20 11:51	1	2		1937062	5	50				TD	Added 10/2/2020 by TD
B20I024-BSD1	LCS Dup	09/30/20 11:51	1	2		1937062	5	50				TD	
B20I024-BSD2	LCS Dup	09/30/20 11:51	1	2		1937062	5	50				TD	
B20I024-MRL1	MRL Check	09/30/20 11:51	1	2		2020011	5	50				TD	

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PREPARATION BENCH SHEET

B20I024

EPA Region 9 Laboratory

Project: R20S18

Printed: 10/2/2020 2:49:34PM

Matrix: Radiello 13 **Analysis: QC** **Prepared using: Volatiles - Passive Air Sampler** **Surrogate used: 2030067**

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

Batch Comments

Reagents

Reagent #	Description
2026065	passive air Radiello tubes
2040027	Carbon disulfide

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Calibration

2007003

Calibration Date: 07/06/2020

Instrument: AG5975CV

Calibration Analyses:

VOCs, Passive Samplers

Response Factor Report AG5975C

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

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

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

Page 24 of 815 2009033 DATA_PKG (Rev0).PDF 10/14/20 12:46:45

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Response Factor Report AG5975C

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

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

(#) = Out of Range

Page 25 of 815 2009033 DATA_PKG (Rev0).PDF 10/14/20 12:46:45

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

Total Cpnds : 48

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

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

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

CHEMSTATION AREA COUNT REPORT

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

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

CHEMSTATION CONCENTRATION REPORT

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

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

SCV REPORT

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

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

SEQUENCE

S20H039

Sequence Date: 08/19/2020

Instrument: AG5975CV

Sequence Analyses:

VOCs, Passive Samplers

ANALYST / REVIEWER - DATA REVIEW CHECKLIST

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

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

ANALYST / REVIEWER - DATA REVIEW CHECKLIST

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

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

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

COMMENTS

Custom analyte list.

Injection Log

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

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

GC/MS QA-QC Check Report

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

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

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

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

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

Analysis Sequence

S20H039

Project:
Analysis:

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

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

Sequence Comments

Reagents

Reagent #	Description

Table of Contents

SEQUENCE DATA

S20H039

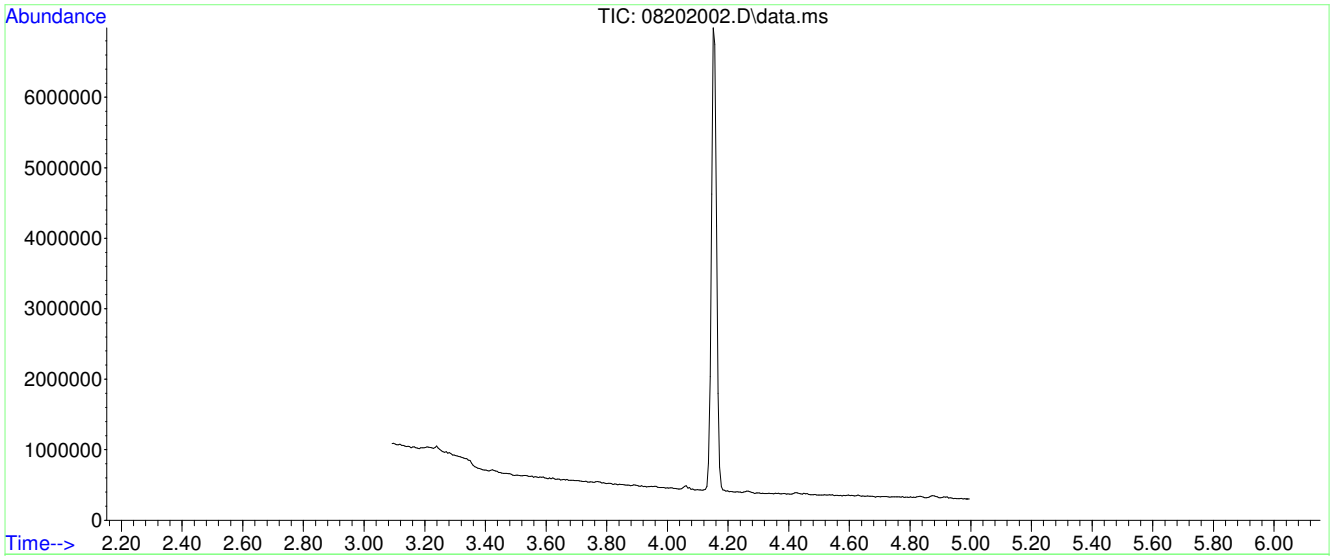
S20H039-TUN1

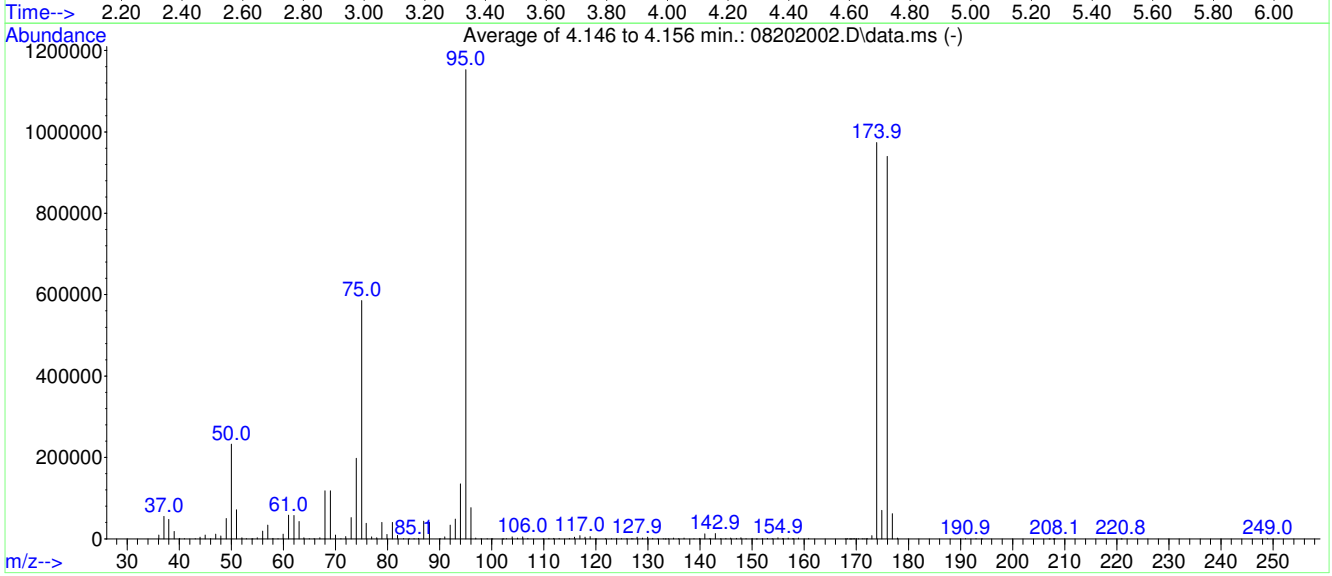
Table of Contents

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

Integration File: Ravioli.P

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





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

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

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

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

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

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

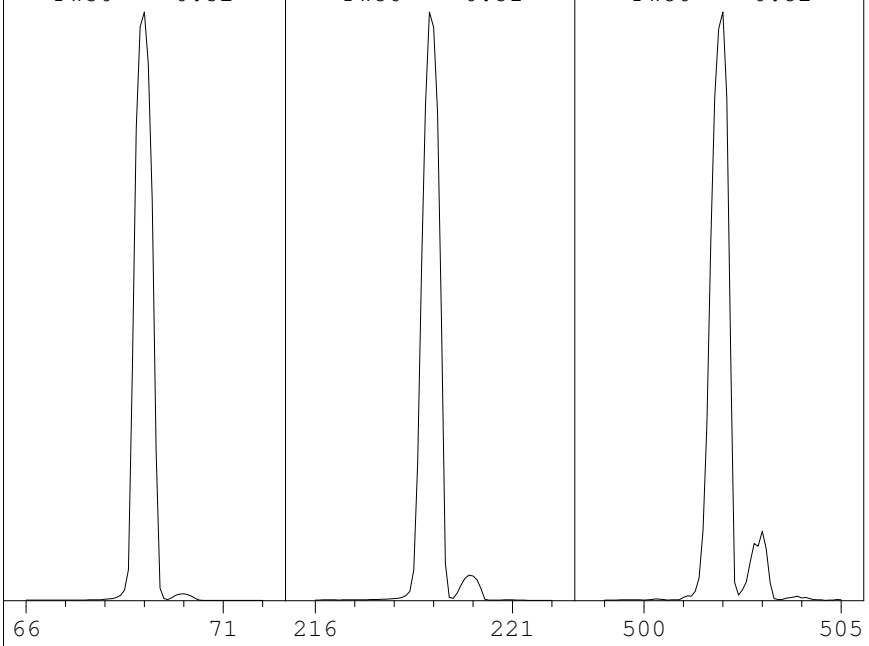
Average of 4.146 to 4.156 min.: 08202002.D\data.ms
S20H039-TUN1
Modified:subtracted

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

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

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

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

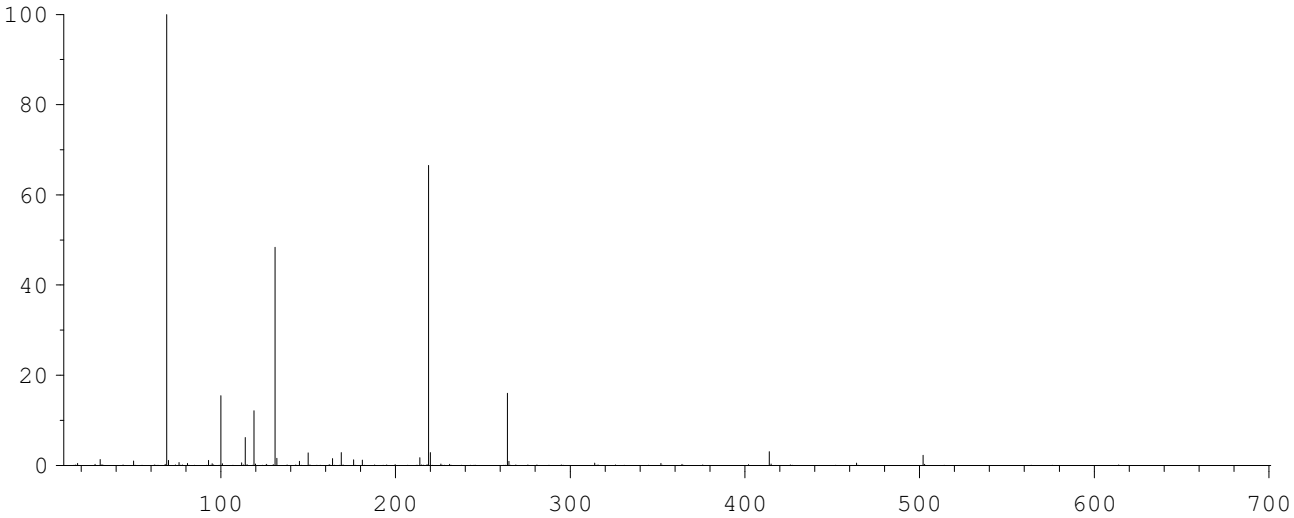


Ion Pol	Pos	MassGain	-1191
		MassOffs	-38
Emission	34.6	AmuGain	978
EIEnrgy	69.9	AmuOffs	127.94
Filament	1	Wid219	-0.003
		DC Pol	Pos
Repeller	29.79		
IonFcus	69.3	HEDEnab	On
EntLens	0.0	EMVolts	1329
EntOffs	Var		
		Samples	8
PFTBA	Open	Averages	3
		Stepsize	0.10

Temperatures and Pressures:

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

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



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

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

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

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

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

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

S20H039-CAL1

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

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

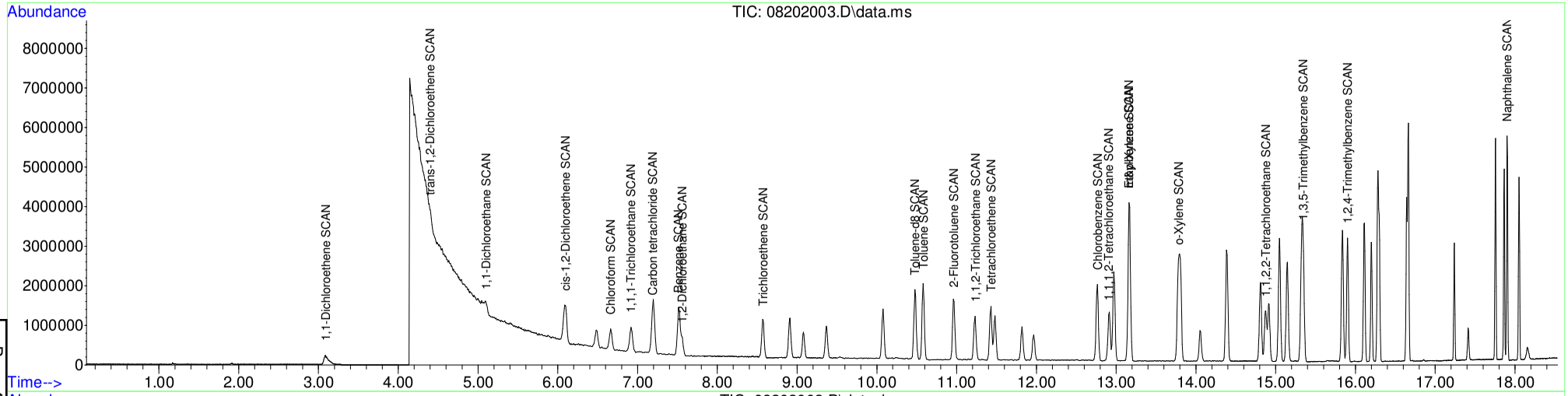
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	648237	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	2550057	20095.11 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 401.90%#		
Target Compounds					Qvalue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

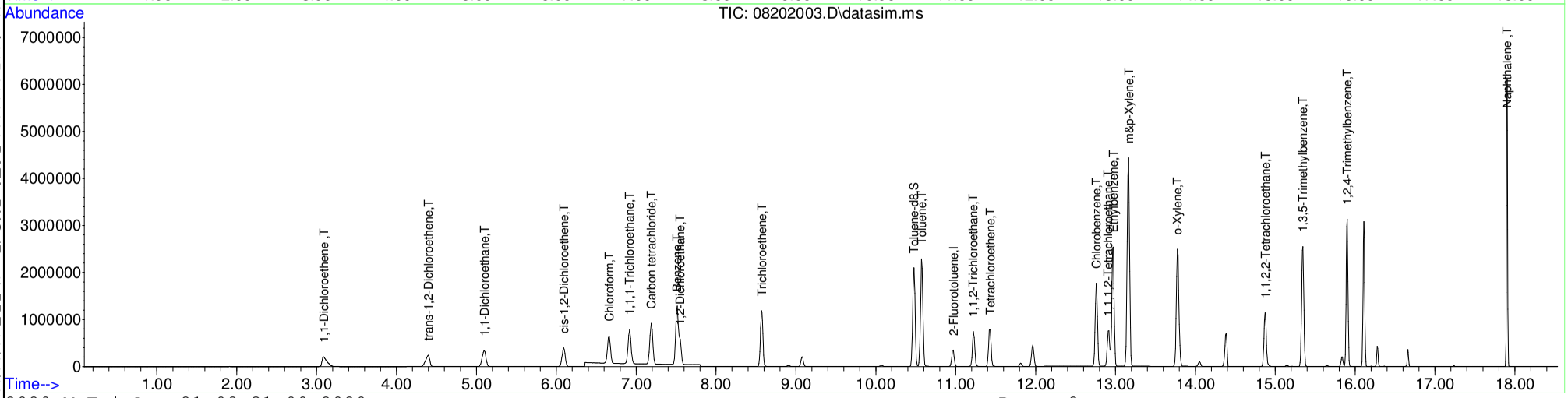
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

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

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





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S20H039-CAL2

Quantitation Report (Not Reviewed)

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

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

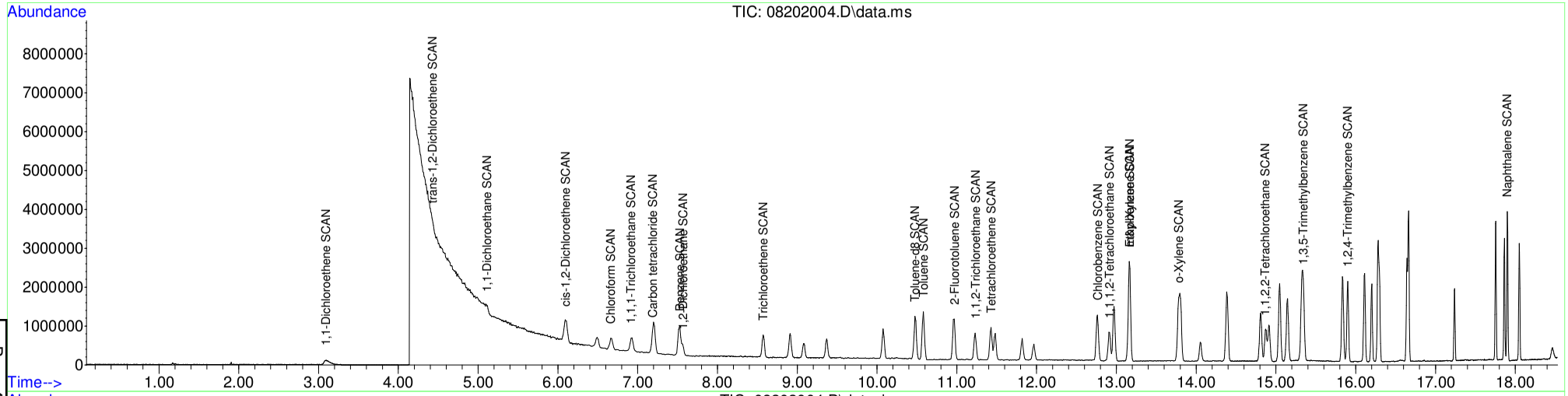
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	658265	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	1598935	12408.08 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 248.16%#		
Target Compounds					Qvalue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

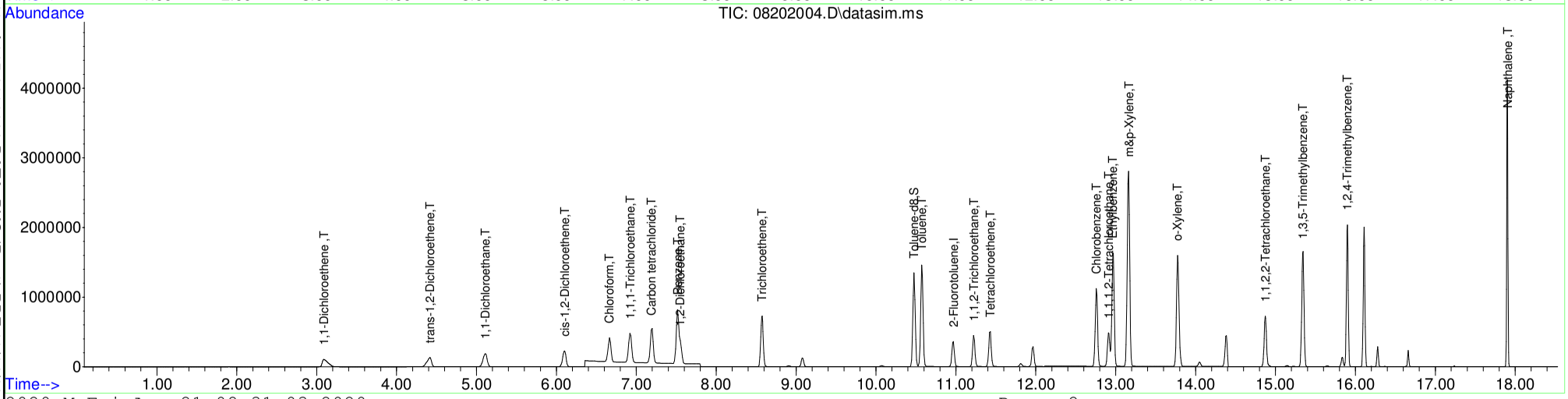
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

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

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





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S20H039-CAL3

Quantitation Report (Not Reviewed)

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

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

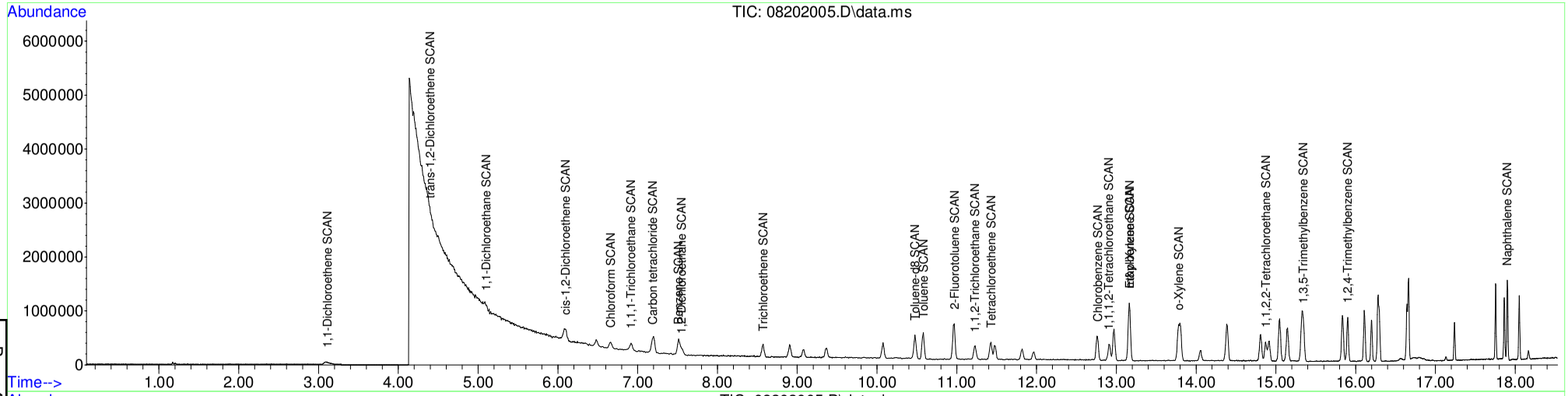
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	673233	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	629076	4773.23	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 95.46%			
Target Compounds						Qvalue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

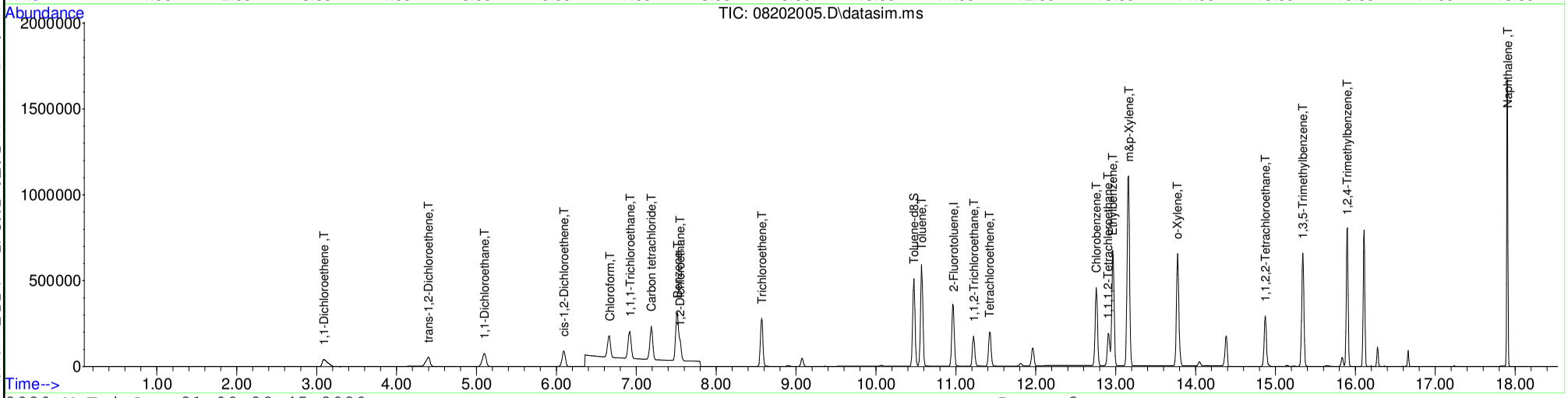
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

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

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





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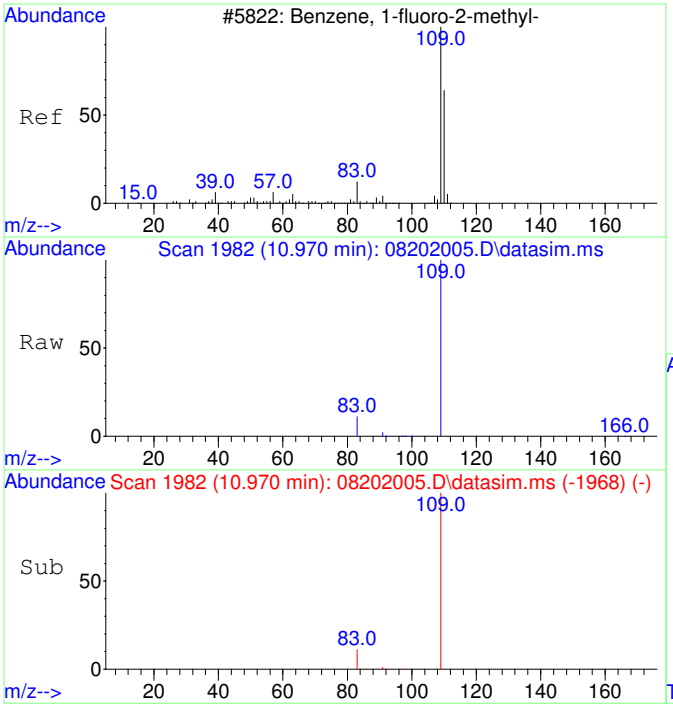
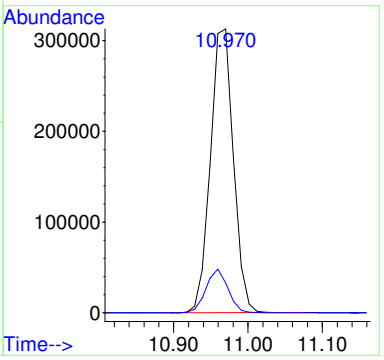
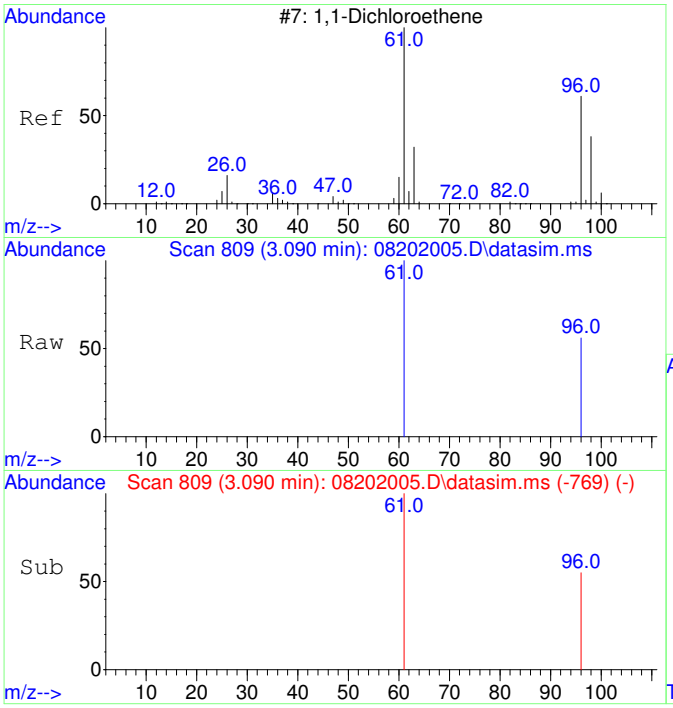


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:109 Resp: 673233

Ion	Ratio	Lower	Upper
109	100		
83	14.5	0.0	42.3

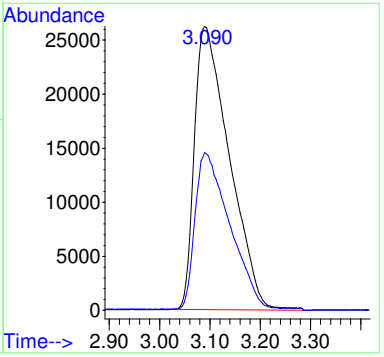


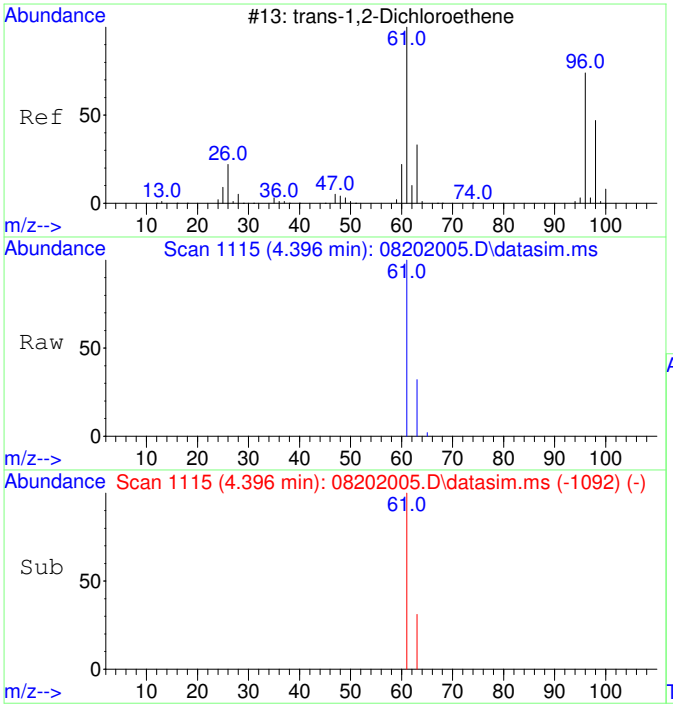


#2
1,1-Dichloroethene
Concen: 4282.69 ug/L
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 61 Resp: 126761

Ion	Ratio	Lower	Upper
61	100		
96	54.2	37.2	97.2

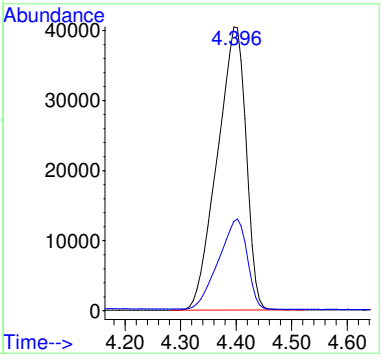


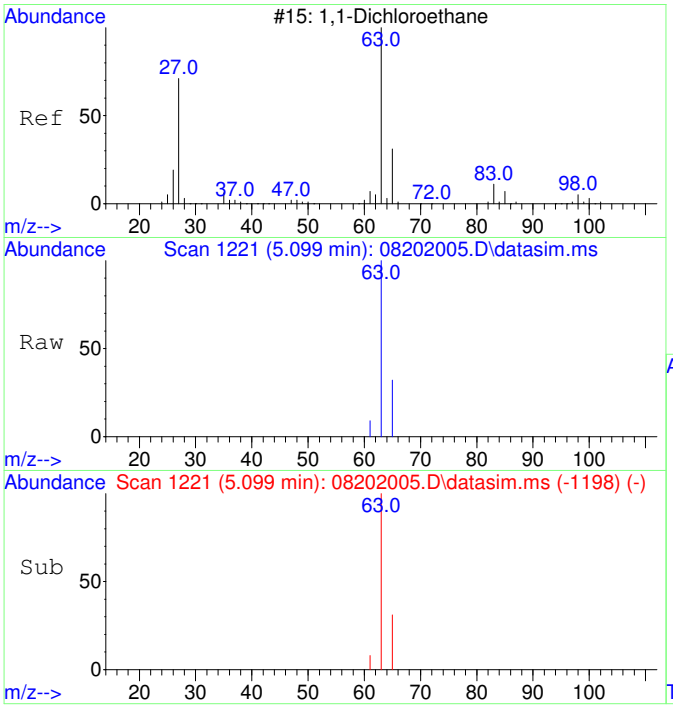


#3
trans-1,2-Dichloroethene
Concen: 4680.82 ug/L
RT: 4.396 min Scan# 1115
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 61 Resp: 145387

Ion	Ratio	Lower	Upper
61	100		
63	31.6	2.4	62.4

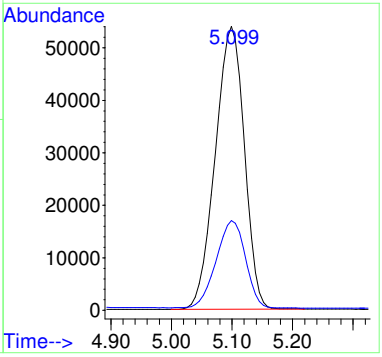


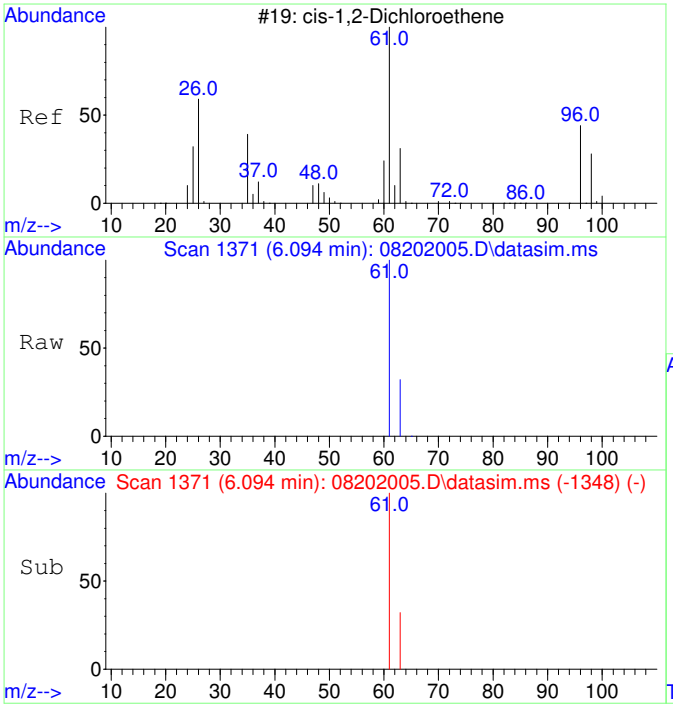


#4
1,1-Dichloroethane
Concen: 4656.26 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 63 Resp: 180029

Ion	Ratio	Lower	Upper
63	100		
65	30.9	1.8	61.8

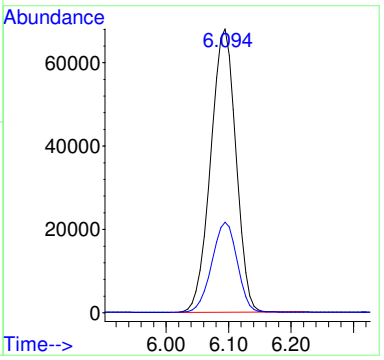


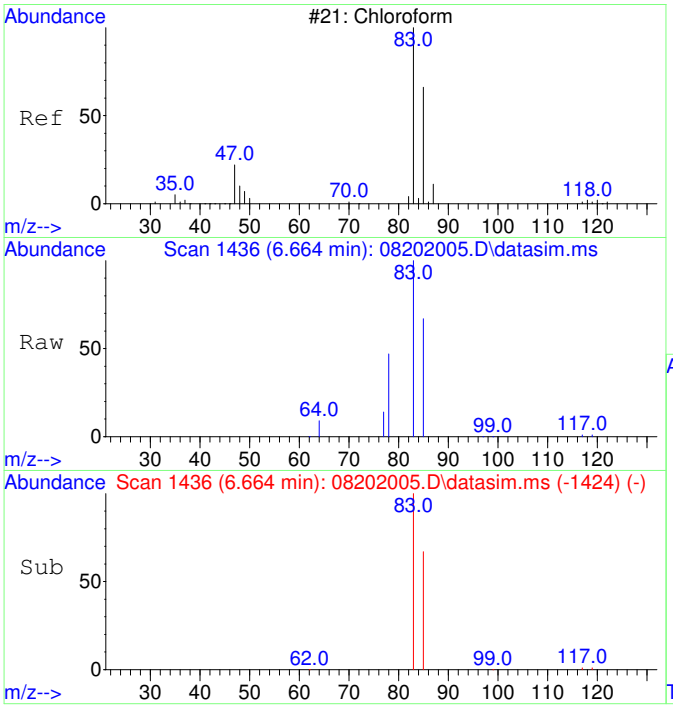


#5
cis-1,2-Dichloroethene
Concen: 4669.00 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 61 Resp: 190553

Ion	Ratio	Lower	Upper
61	100		
63	31.9	2.5	62.5

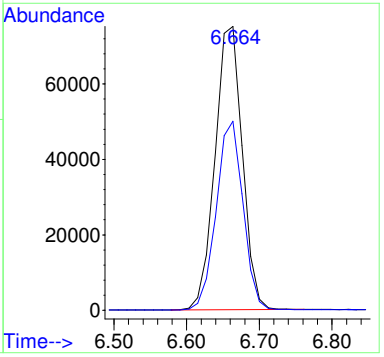


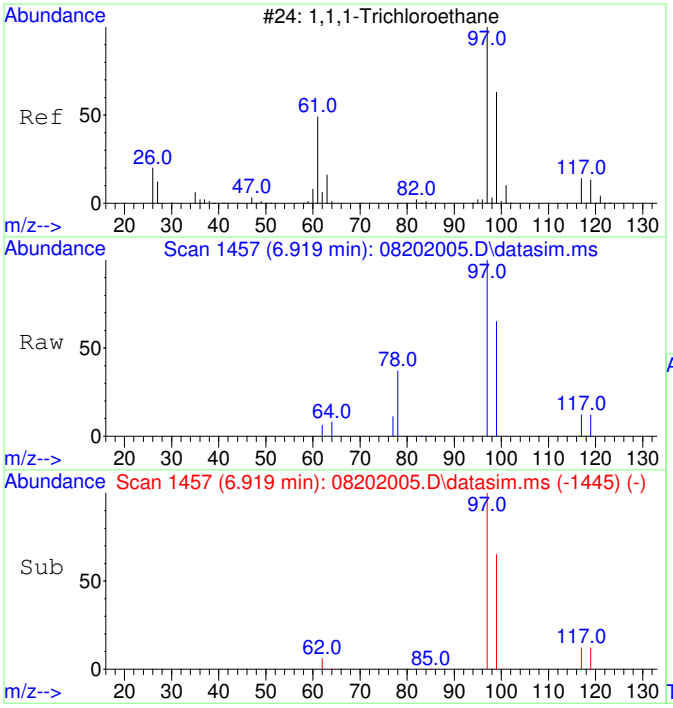


#6
Chloroform
Concen: 4702.98 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 83 Resp: 196458

Ion	Ratio	Lower	Upper
83	100		
85	65.0	35.1	95.1

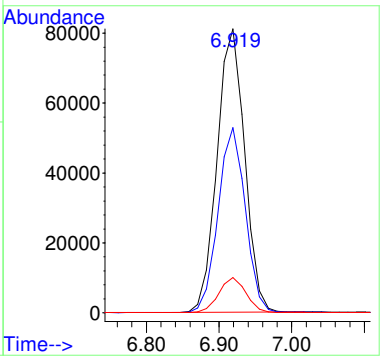


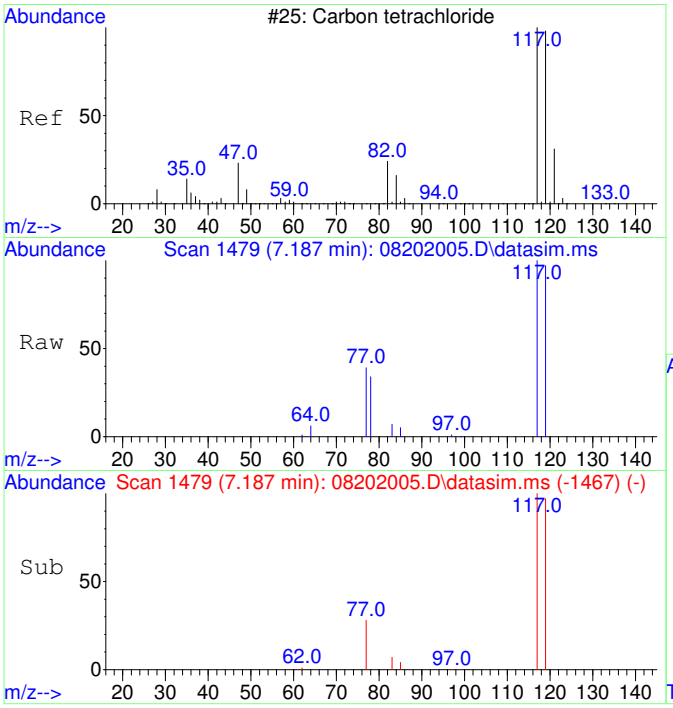


#7
1,1,1-Trichloroethane
Concen: 4717.26 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 97 Resp: 214003

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

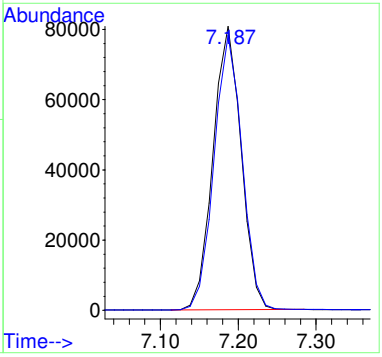


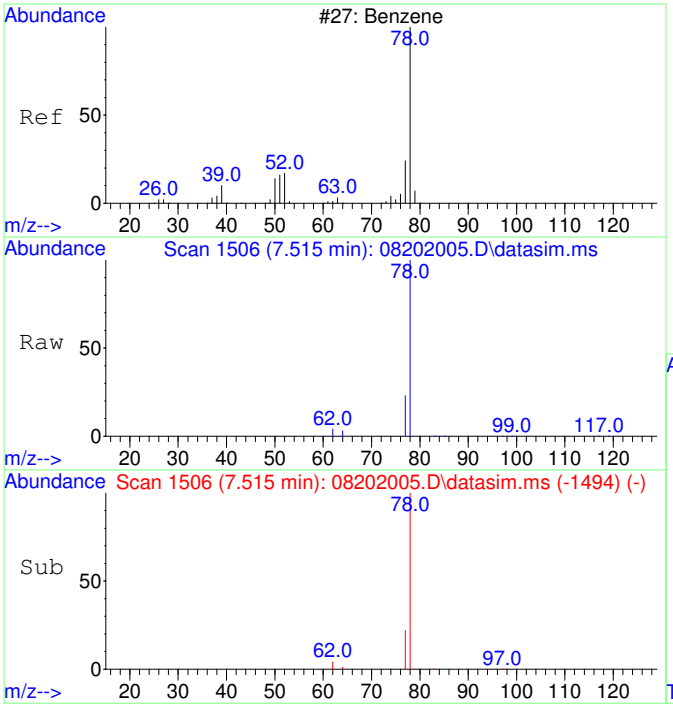


#8
Carbon tetrachloride
Concen: 4746.70 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:117 Resp: 202678

Ion	Ratio	Lower	Upper
117	100		
119	96.0	66.4	126.4

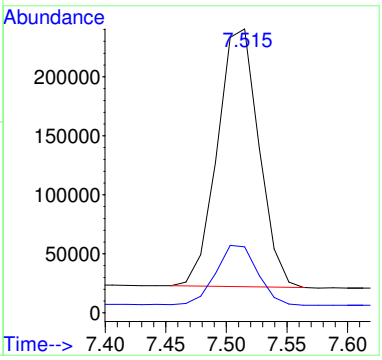


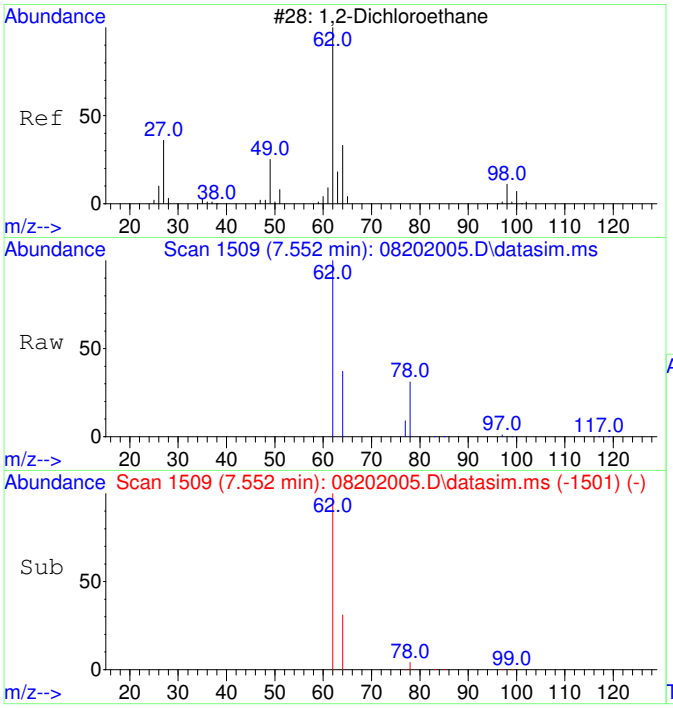


#9
Benzene
Concen: 4573.72 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 78 Resp: 523170

Ion	Ratio	Lower	Upper
78	100		
77	23.9	0.0	53.2

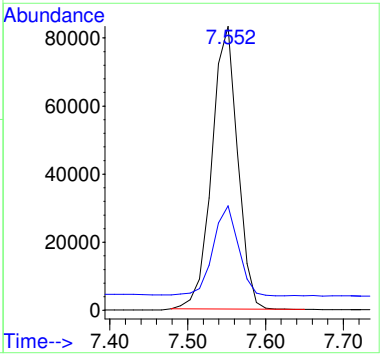


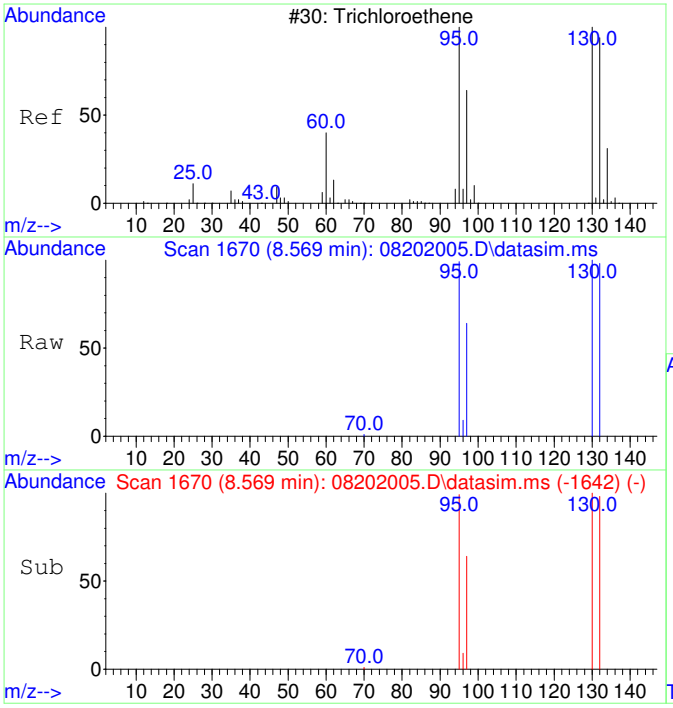


#10
1,2-Dichloroethane
Concen: 4681.08 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 62 Resp: 191144

Ion	Ratio	Lower	Upper
62	100		
64	31.3	2.3	62.3

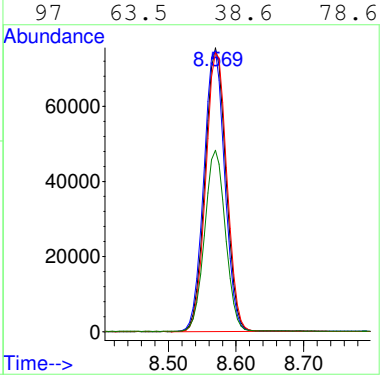


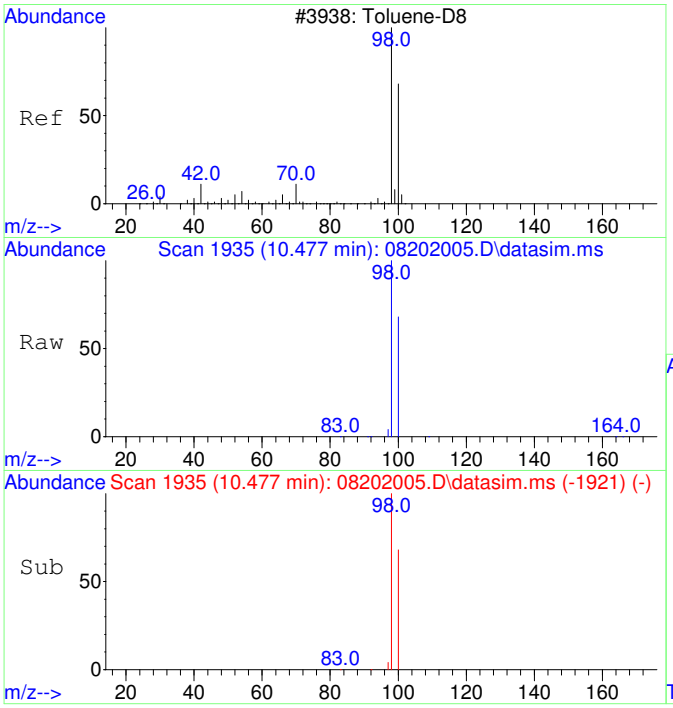


#11
Trichloroethene
Concen: 4696.35 ug/L
RT: 8.569 min Scan# 1670
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:130 Resp: 161743

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

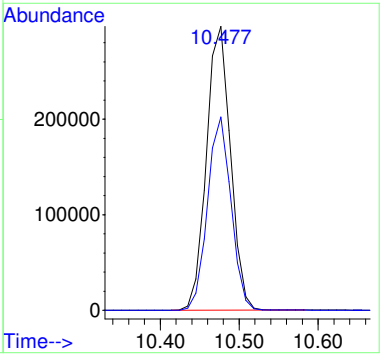


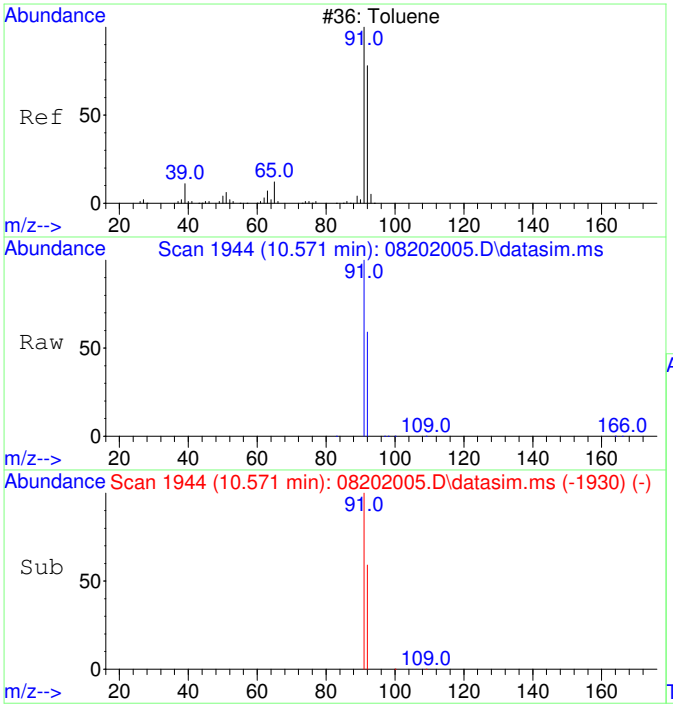


#12
Toluene-d8
Concen: 4773.23 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 98 Resp: 629076

Ion	Ratio	Lower	Upper
98	100		
100	66.4	37.1	97.1

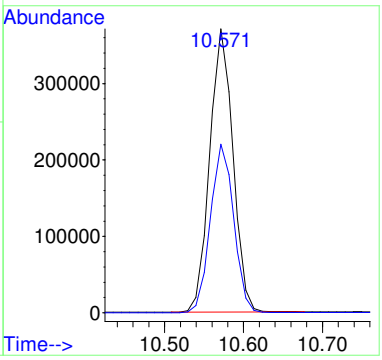


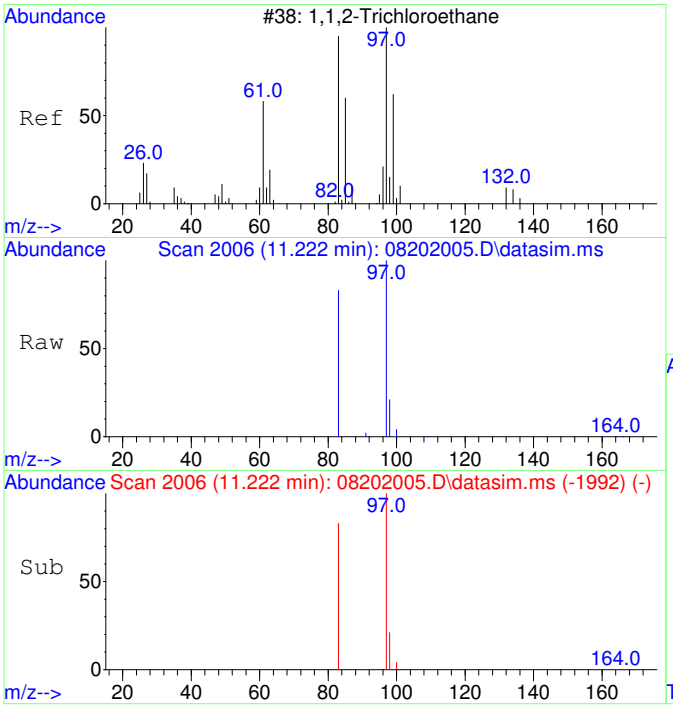


#13
Toluene
Concen: 4497.26 ug/L
RT: 10.571 min Scan# 1944
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 91 Resp: 755646

Ion	Ratio	Lower	Upper
91	100		
92	59.7	29.9	89.9

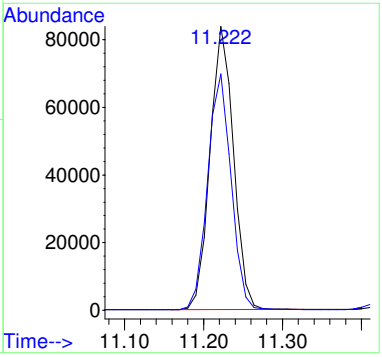


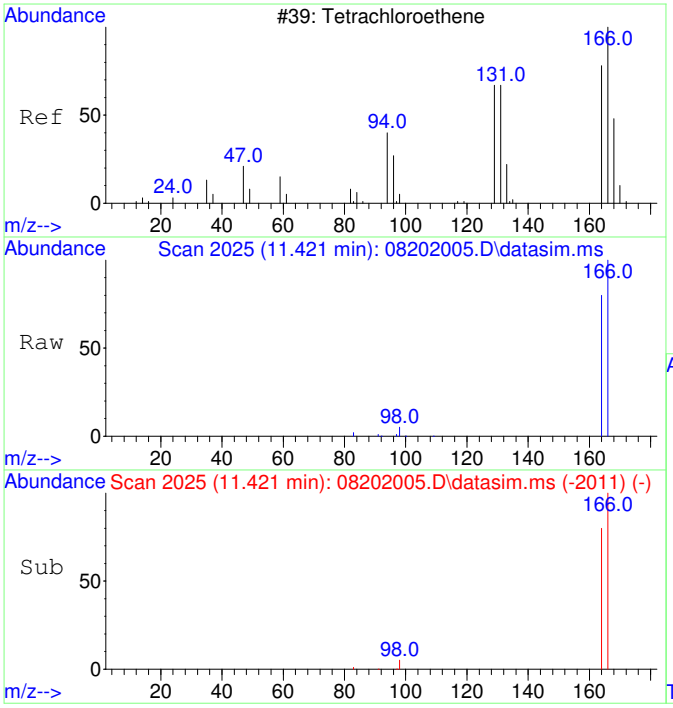


#14
1,1,2-Trichloroethane
Concen: 4706.83 ug/L
RT: 11.222 min Scan# 2006
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 97 Resp: 172328

Ion	Ratio	Lower	Upper
97	100		
83	83.4	51.2	111.2

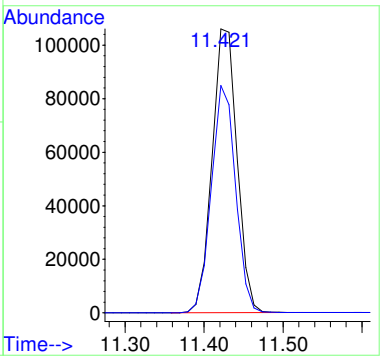


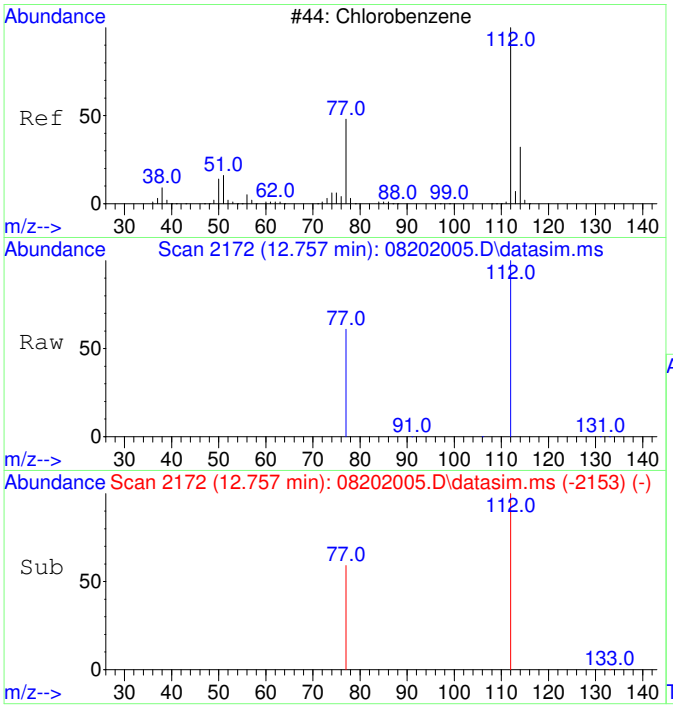


#15
Tetrachloroethene
Concen: 4787.68 ug/L
RT: 11.421 min Scan# 2025
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:166 Resp: 232804

Ion	Ratio	Lower	Upper
166	100		
164	77.7	47.8	107.8

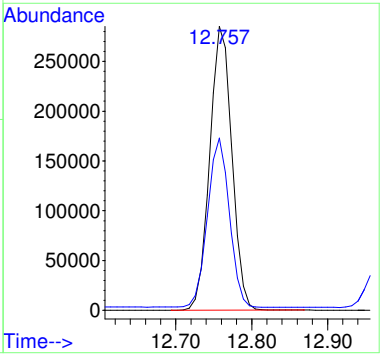


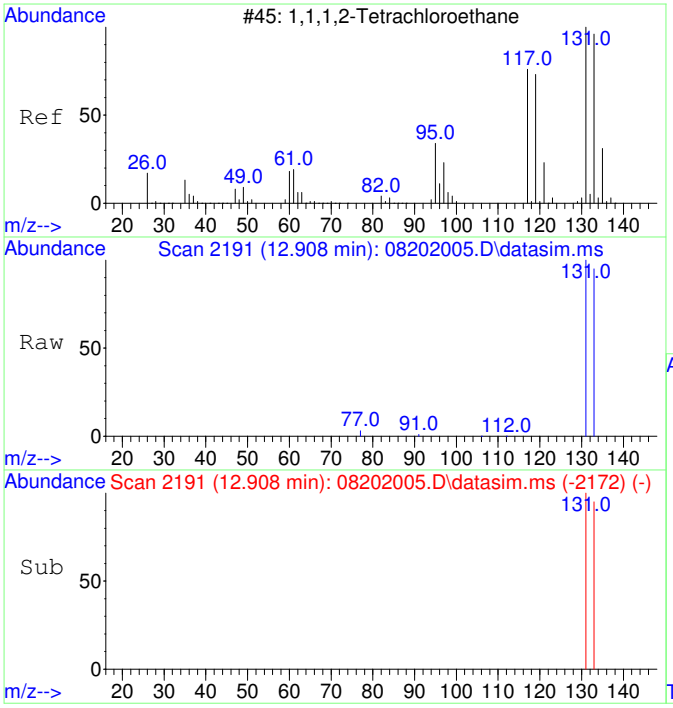


#16
Chlorobenzene
Concen: 4800.33 ug/L
RT: 12.757 min Scan# 2172
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:112 Resp: 577532

Ion	Ratio	Lower	Upper
112	100		
77	58.8	23.6	83.6

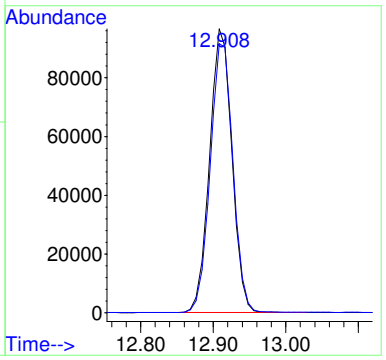


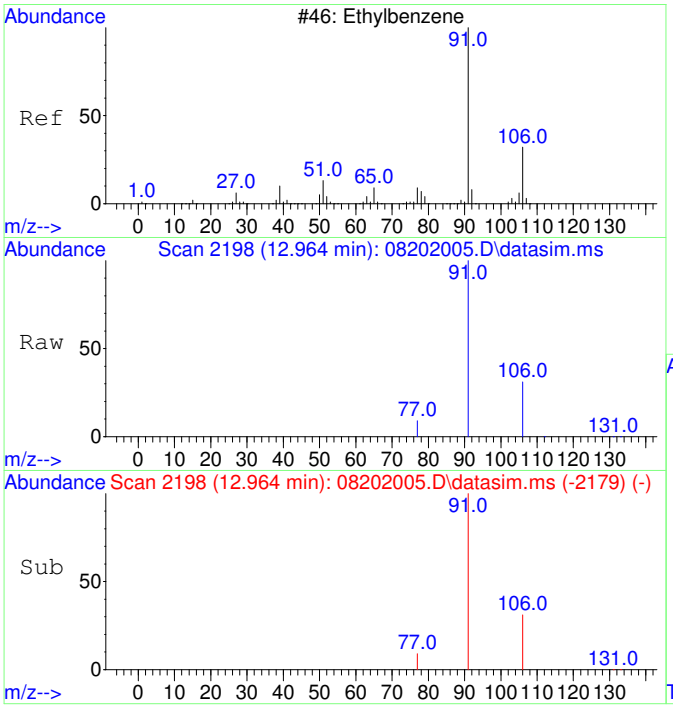


#17
1,1,1,2-Tetrachloroethane
Concen: 4804.79 ug/L
RT: 12.908 min Scan# 2191
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:131 Resp: 207134

Ion	Ratio	Lower	Upper
131	100		
133	96.4	66.3	126.3

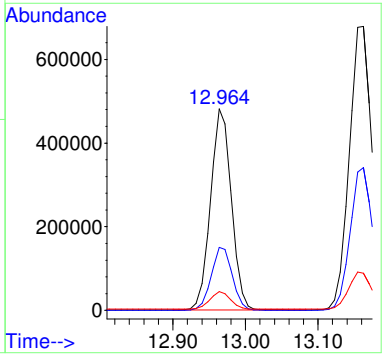


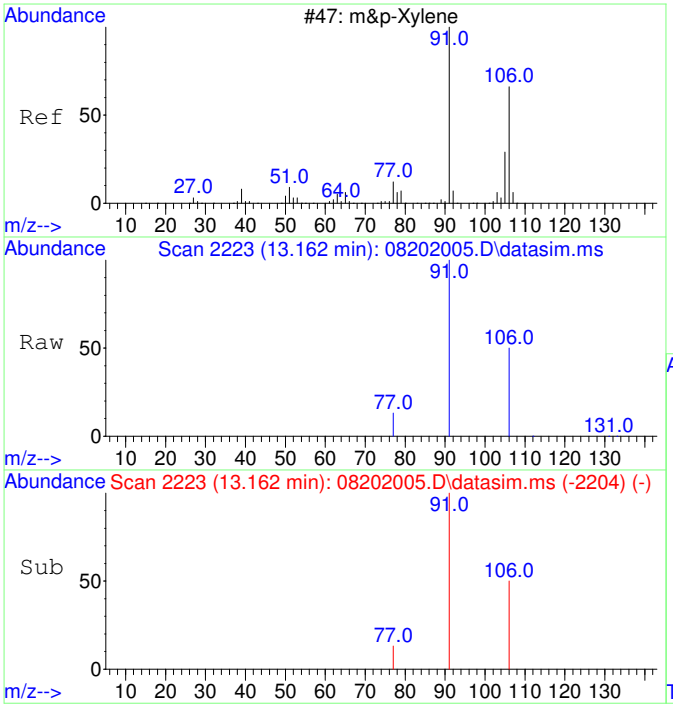


#18
Ethylbenzene
Concen: 4683.98 ug/L
RT: 12.964 min Scan# 2198
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 91 Resp: 957968

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

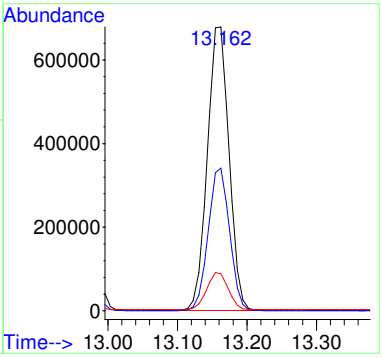


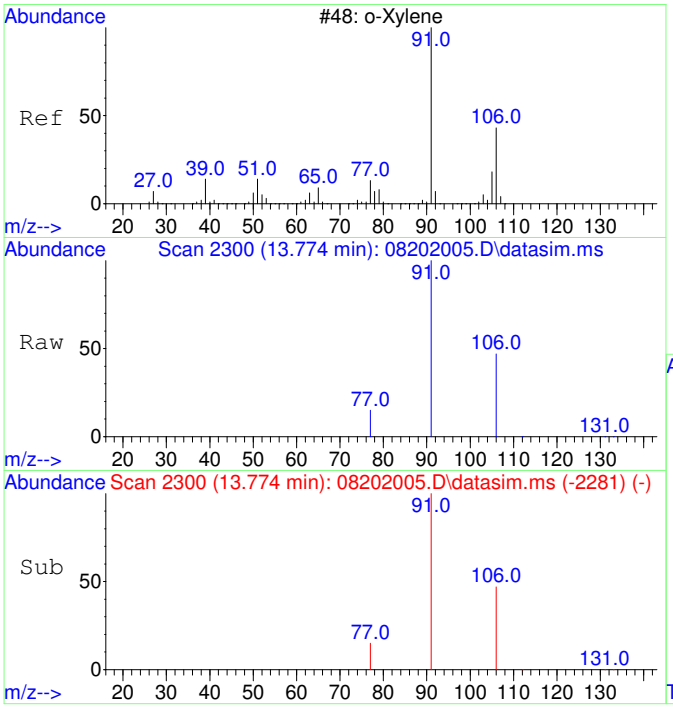


#19
m&p-Xylene
Concen: 9186.69 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 91 Resp: 1468448

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

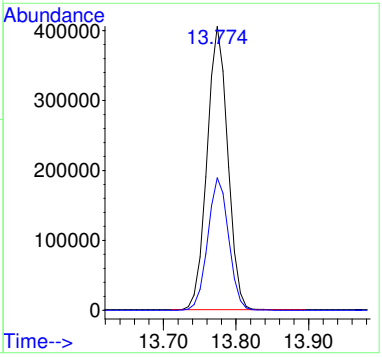


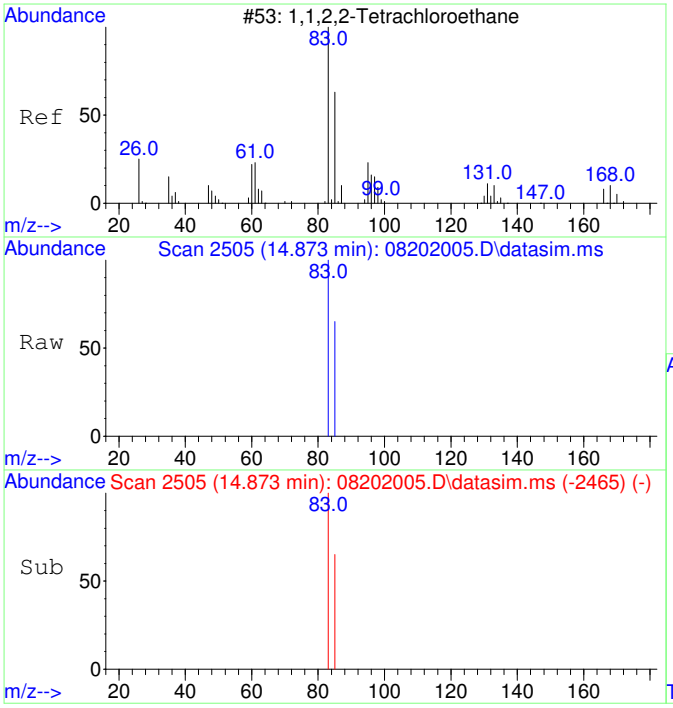


#20
o-Xylene
Concen: 4712.38 ug/L
RT: 13.774 min Scan# 2300
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 91 Resp: 804751

Ion	Ratio	Lower	Upper
91	100		
106	47.0	19.2	79.2

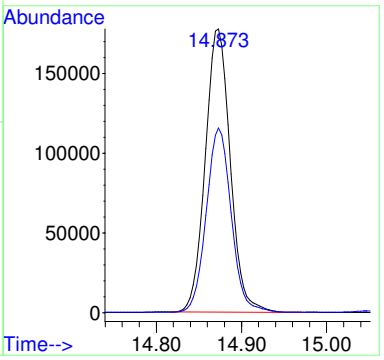


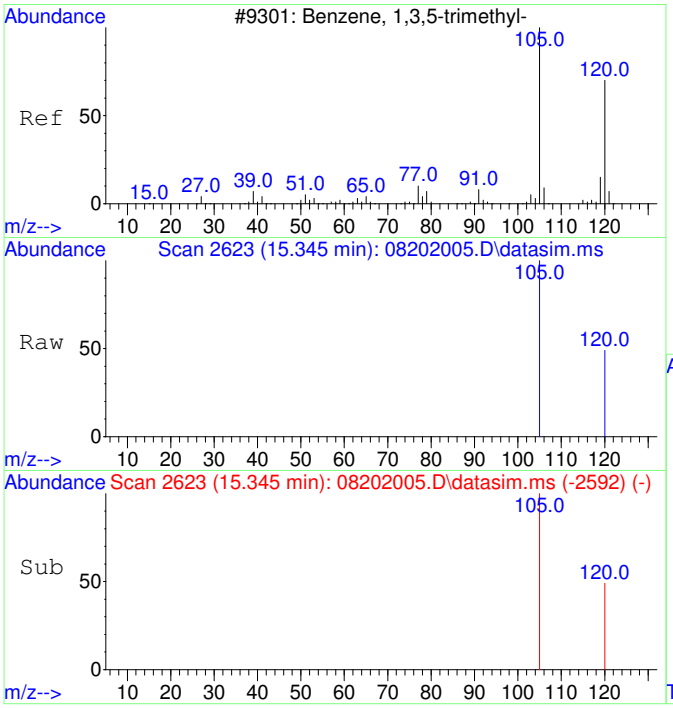


#21
1,1,2,2-Tetrachloroethane
Concen: 4781.00 ug/L
RT: 14.873 min Scan# 2505
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 83 Resp: 361853

Ion	Ratio	Lower	Upper
83	100		
85	64.8	34.8	94.8

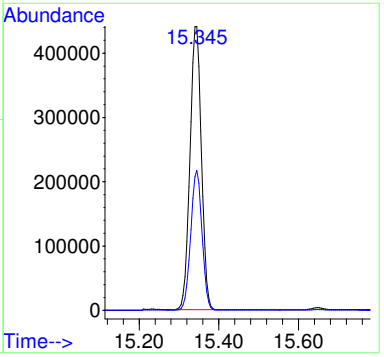


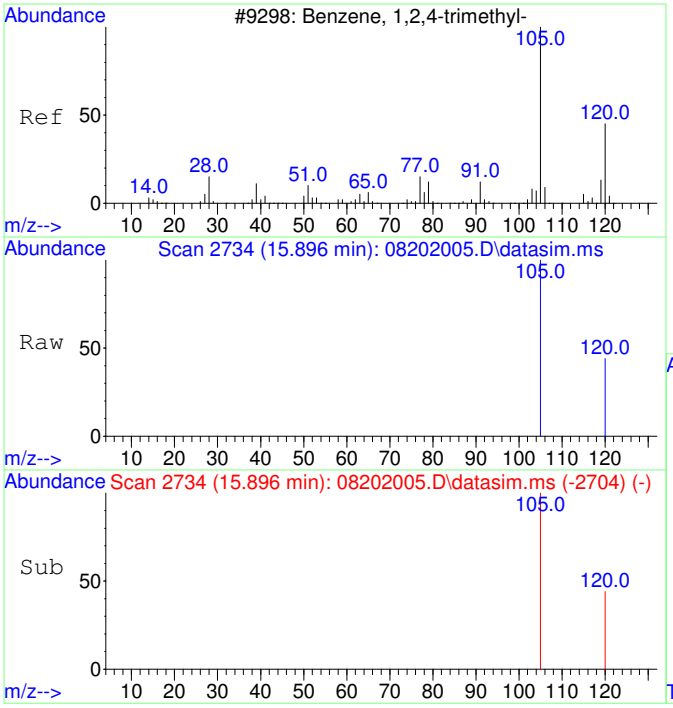


#22
1,3,5-Trimethylbenzene
Concen: 4814.24 ug/L
RT: 15.345 min Scan# 2623
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:105 Resp: 875077

Ion	Ratio	Lower	Upper
105	100		
120	48.6	21.1	81.1

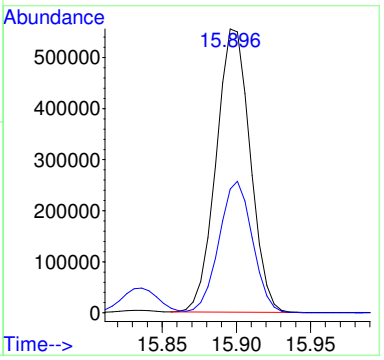


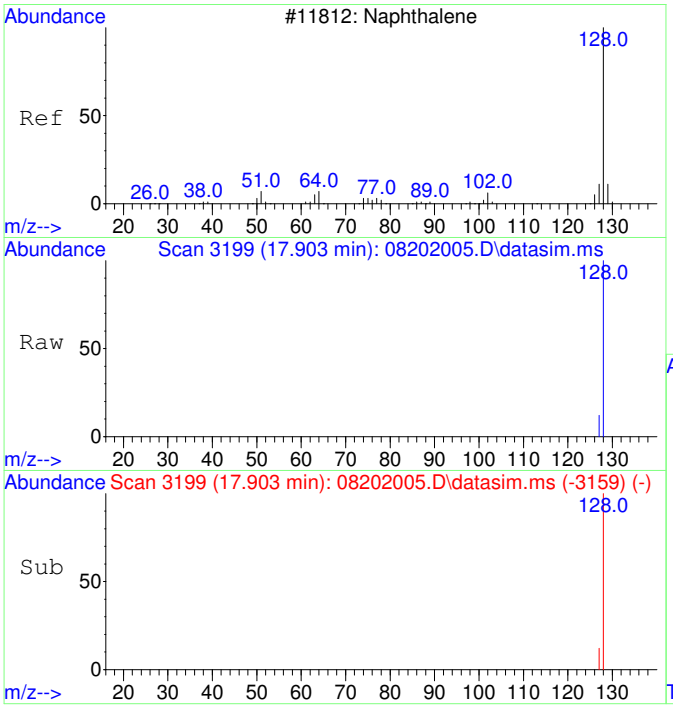


#23
1,2,4-Trimethylbenzene
Concen: 4689.02 ug/L
RT: 15.896 min Scan# 2734
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:105 Resp: 885300

Ion	Ratio	Lower	Upper
105	100		
120	44.9	17.2	77.2

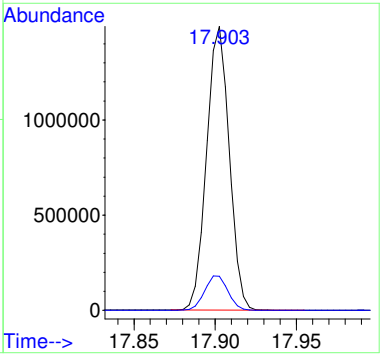


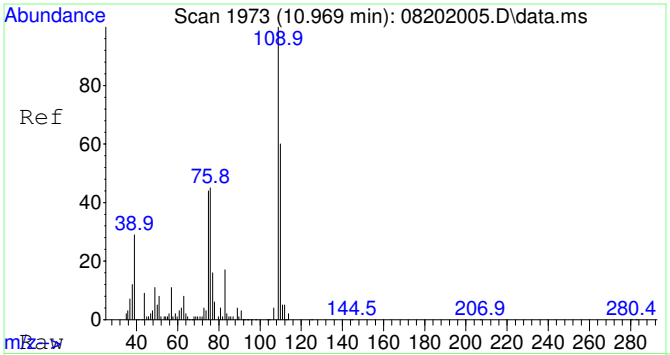


#24
Naphthalene
Concen: 4849.29 ug/L
RT: 17.903 min Scan# 3199
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:128 Resp: 1447043

Ion	Ratio	Lower	Upper
128	100		
127	12.4	0.0	42.5

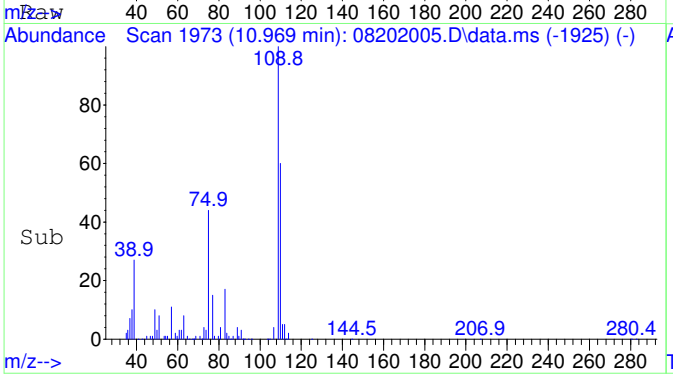


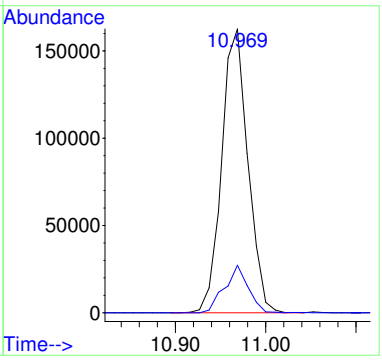


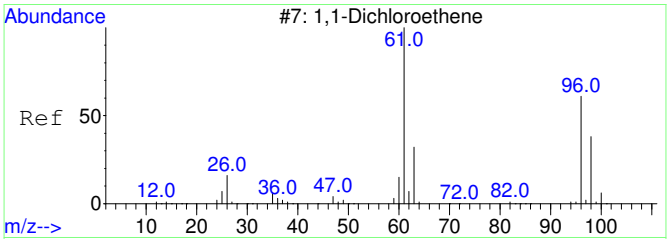
#25
2-Fluorotoluene SCAN
Concen: 5000.00 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:109 Resp: 328139

Ion	Ratio	Lower	Upper
109	100		
83	15.1	0.0	43.8



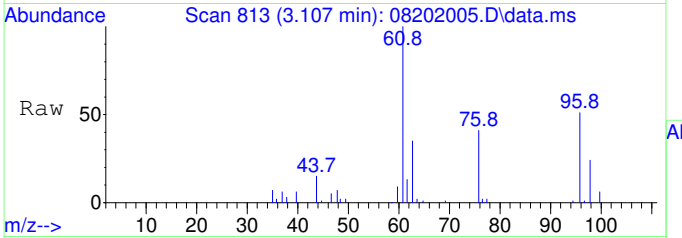


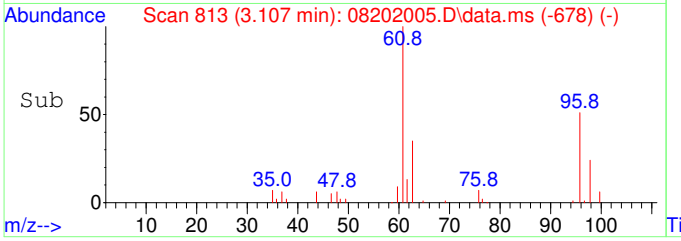


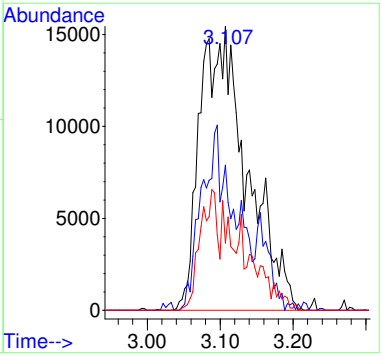
#26
1,1-Dichloroethene SCAN
Concen: 5000.00 ug/L
RT: 3.107 min Scan# 813
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

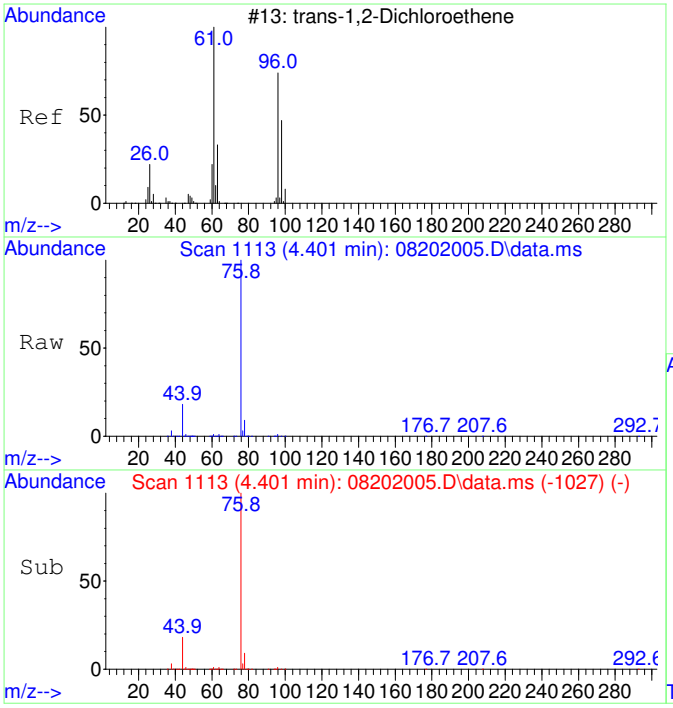
Tgt Ion: 61 Resp: 69687

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





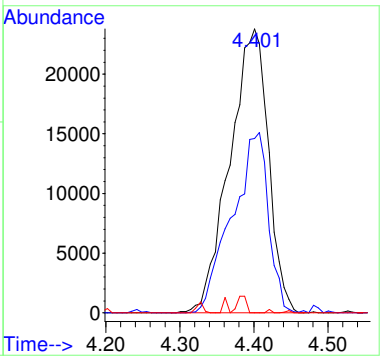


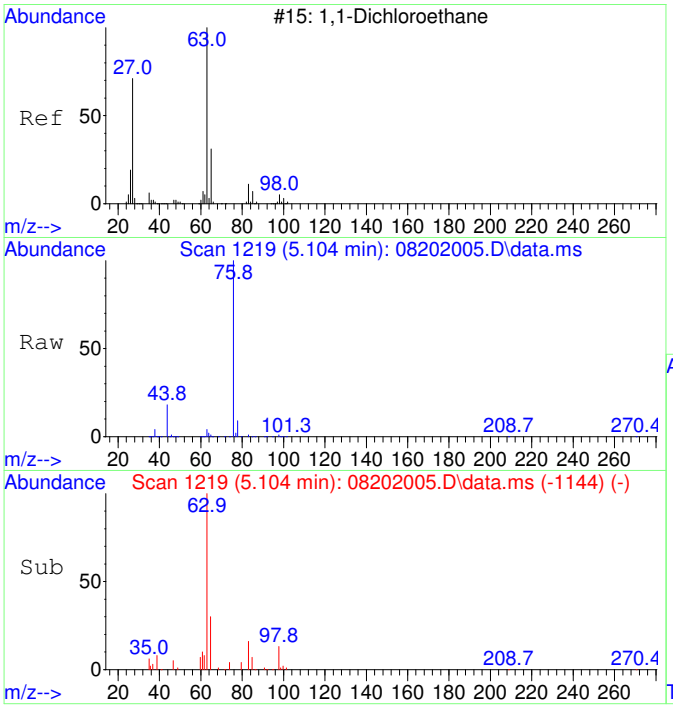


#27
trans-1,2-Dichloroethene SCAN
Concen: 5000.00 ug/L
RT: 4.401 min Scan# 1113
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 61 Resp: 86233

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

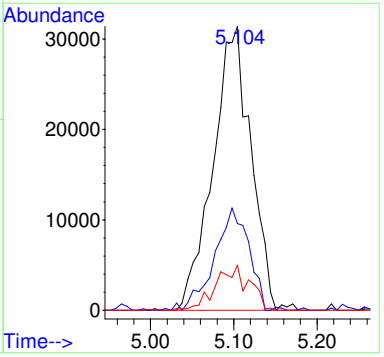


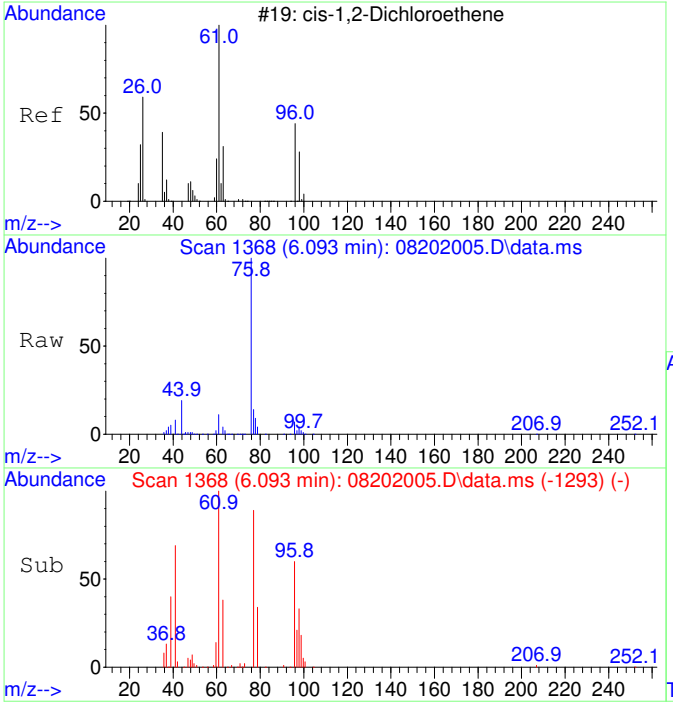


#28
1,1-Dichloroethane SCAN
Concen: 5000.00 ug/L
RT: 5.104 min Scan# 1219
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 63 Resp: 99798

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

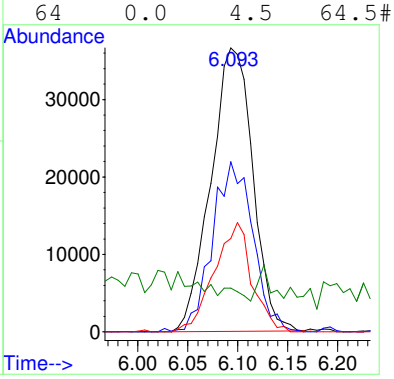


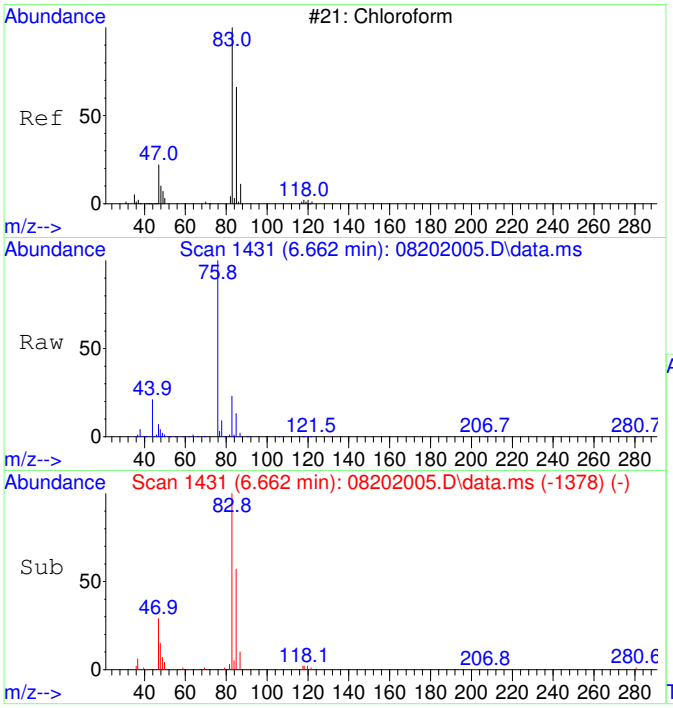


#29
cis-1,2-Dichloroethene SCAN
Concen: 5000.00 ug/L
RT: 6.093 min Scan# 1368
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 61 Resp: 106924

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

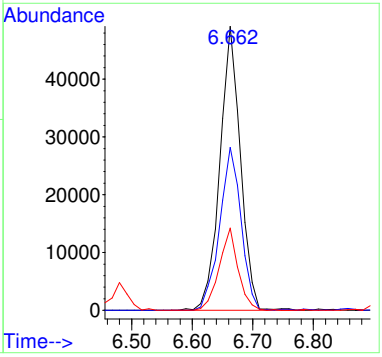


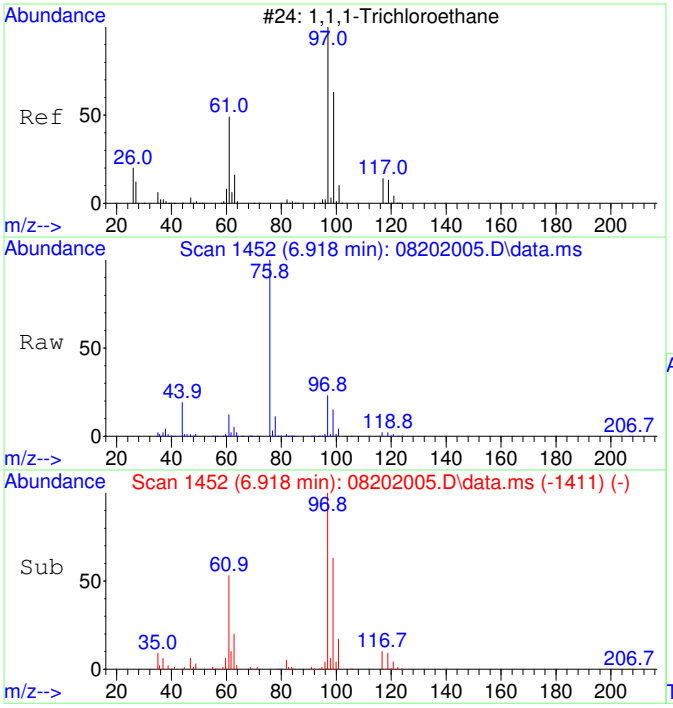


#30
Chloroform SCAN
Concen: 5000.00 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 83 Resp: 115974

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

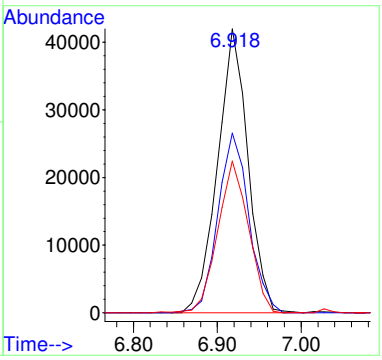


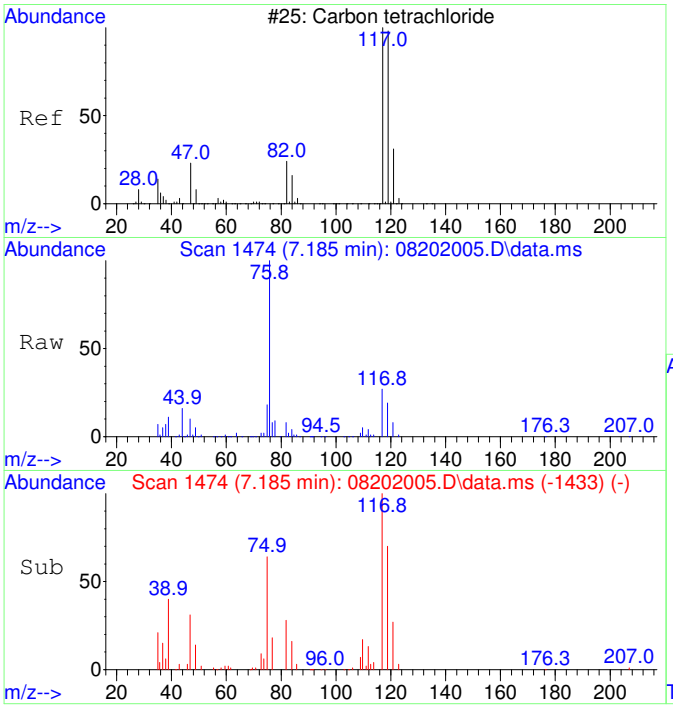


#31
1,1,1-Trichloroethane SCAN
Concen: 5000.00 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 97 Resp: 105685

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

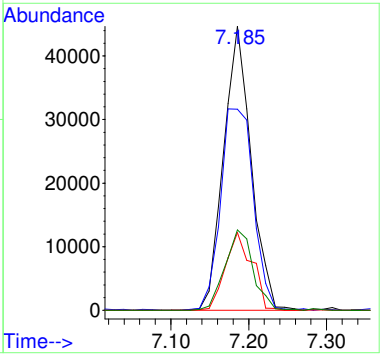


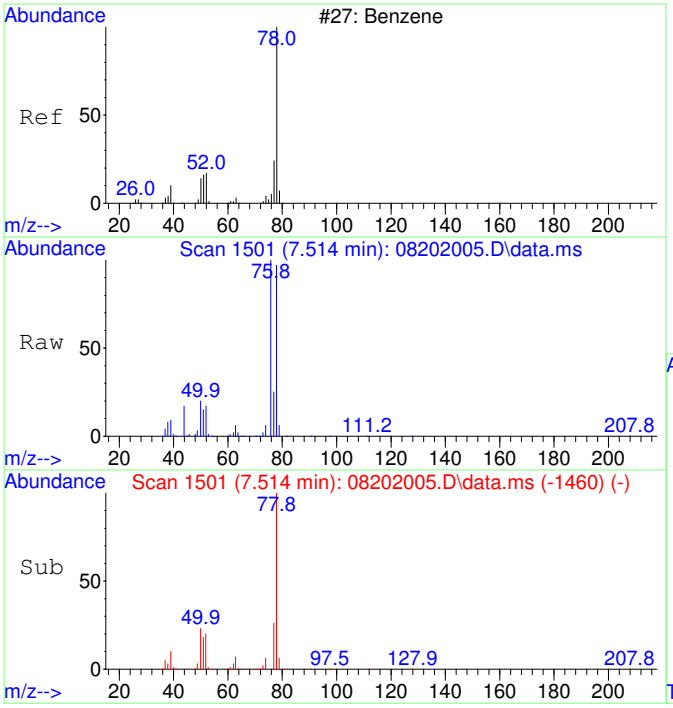


#32
Carbon tetrachloride SCAN
Concen: 5000.00 ug/L
RT: 7.185 min Scan# 1474
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:117 Resp: 110241

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

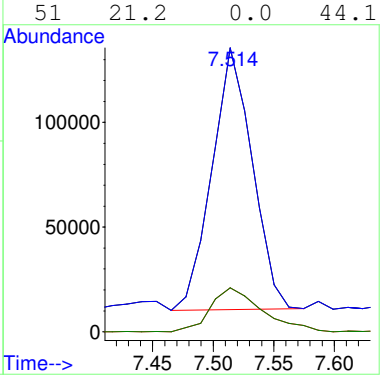


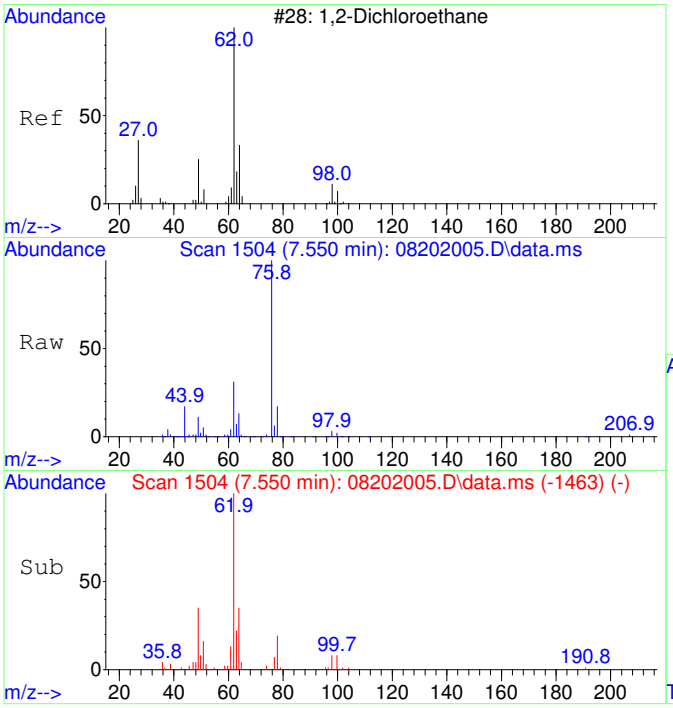


#33
Benzene SCAN
Concen: 5000.00 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 78 Resp: 290990

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

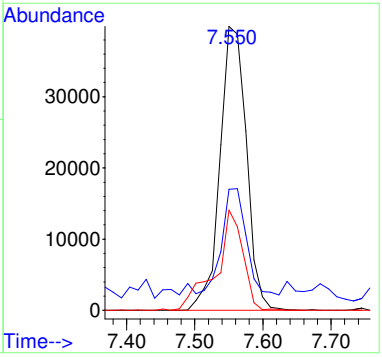


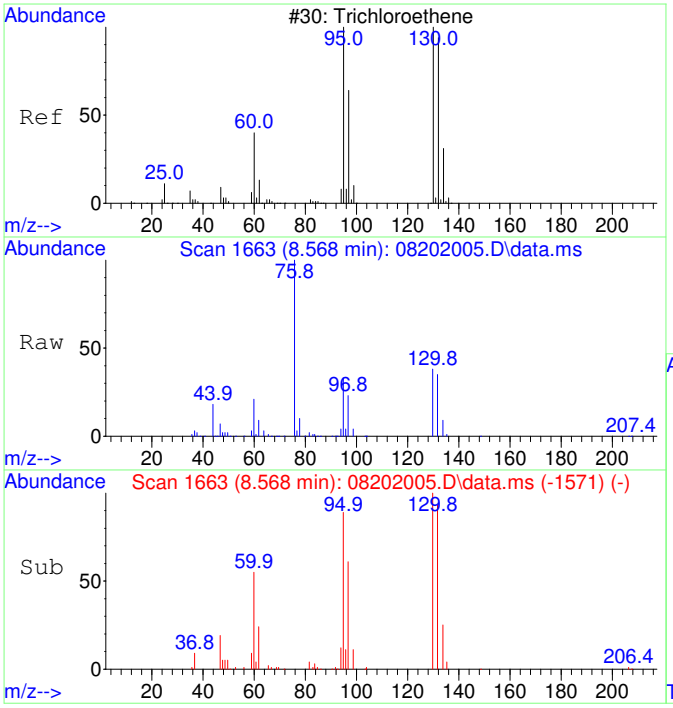


#34
1,2-Dichloroethane SCAN
Concen: 5000.00 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 62 Resp: 107449

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

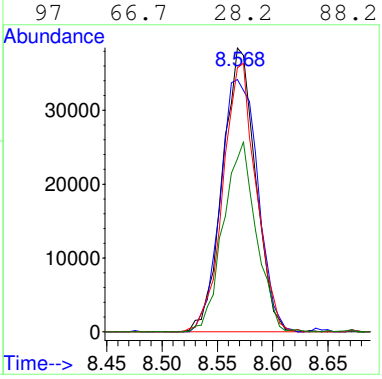


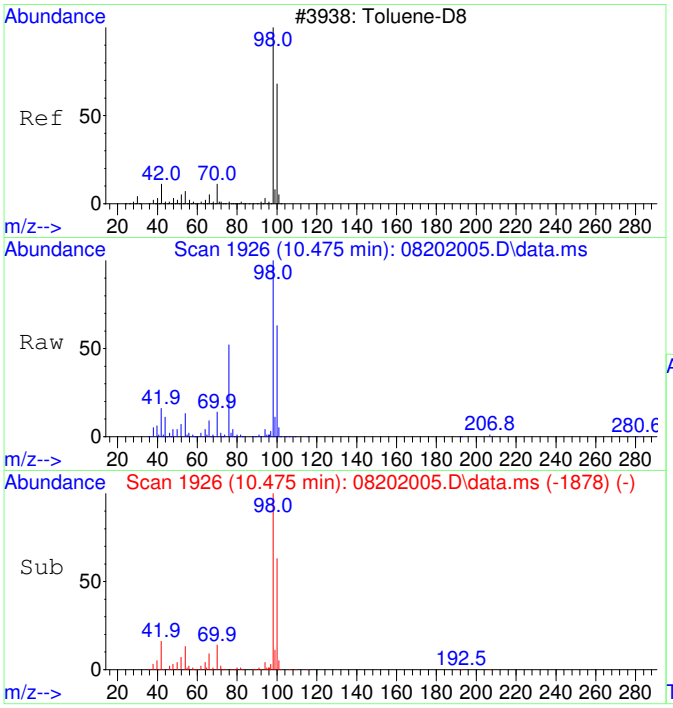


#35
Trichloroethene SCAN
Concen: 5000.00 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:130 Resp: 79966

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

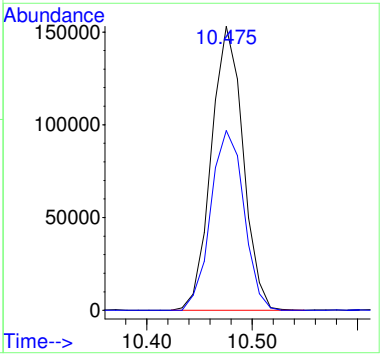


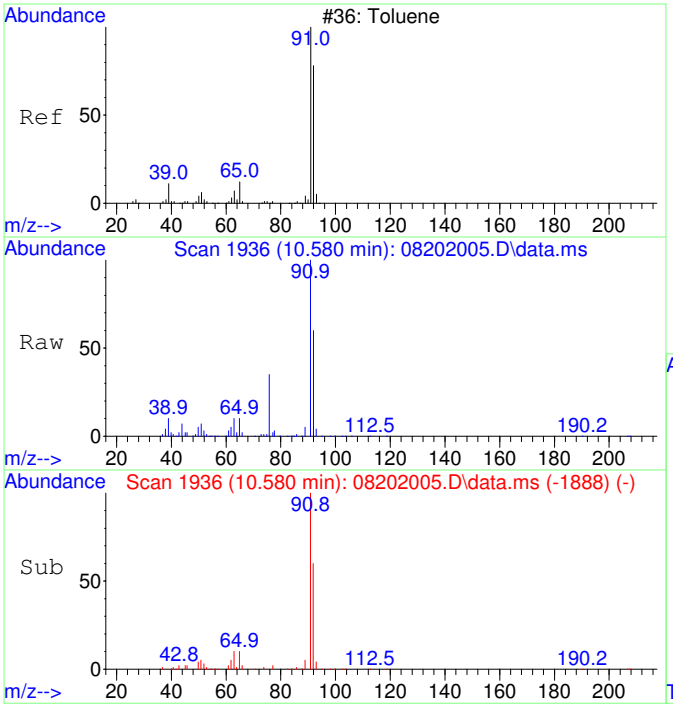


#36
Toluene-d8 SCAN
Concen: 5000.00 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 98 Resp: 320910

Ion	Ratio	Lower	Upper
98	100		
100	66.2	40.0	100.0

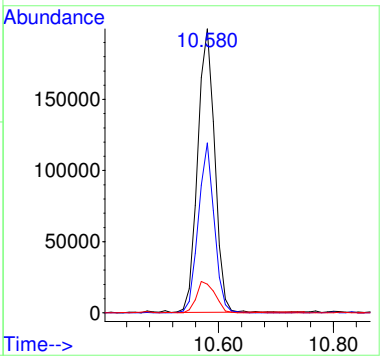


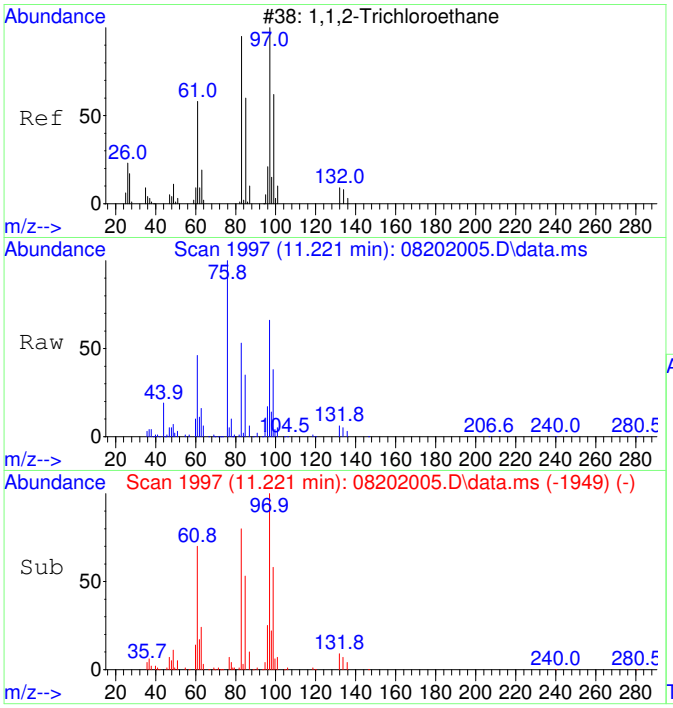


#37
Toluene SCAN
Concen: 5000.00 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 91 Resp: 410973

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

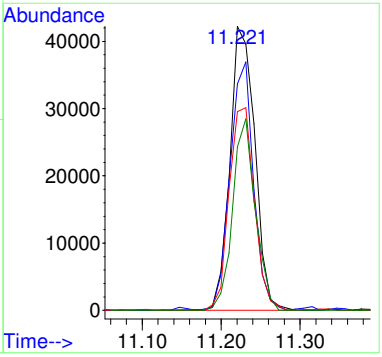


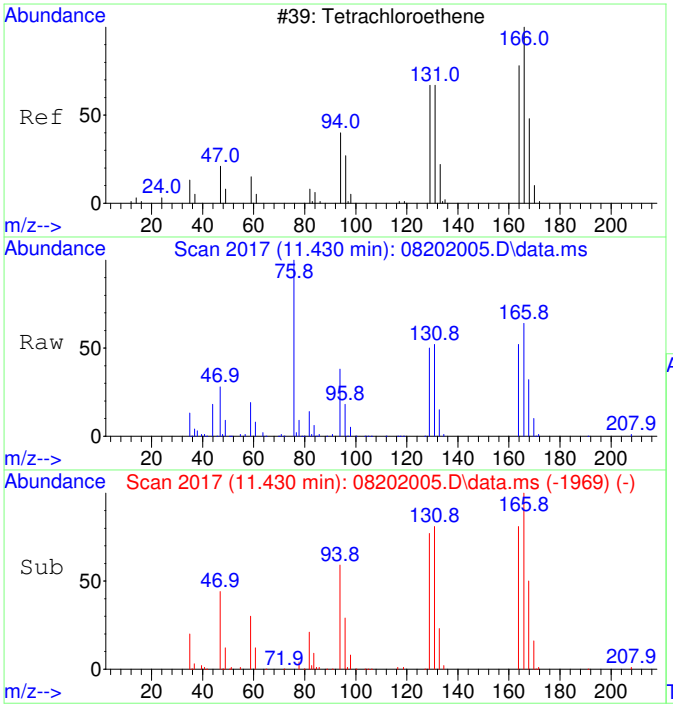


#38
1,1,2-Trichloroethane SCAN
Concen: 5000.00 ug/L
RT: 11.221 min Scan# 1997
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 97 Resp: 92246

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

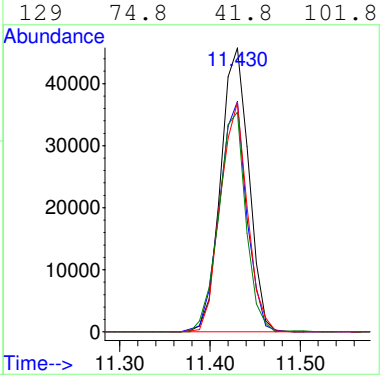


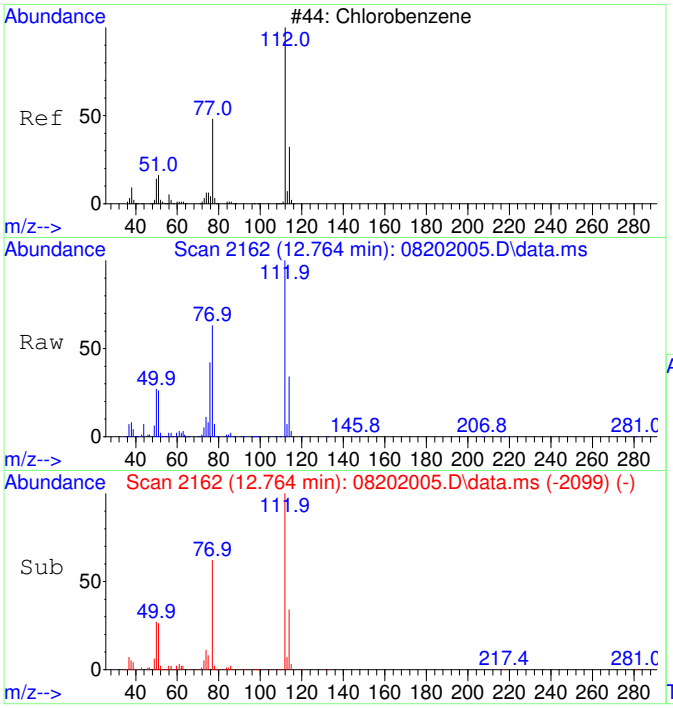


#39
Tetrachloroethene SCAN
Concen: 5000.00 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:166 Resp: 98735

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

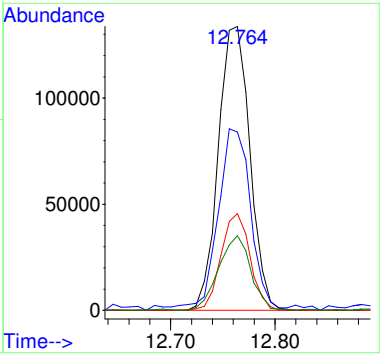


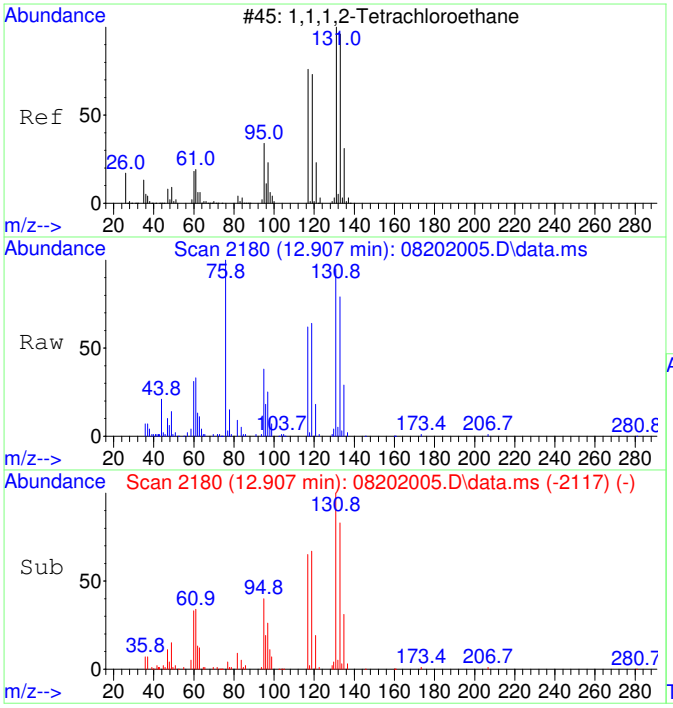


#40
Chlorobenzene SCAN
Concen: 5000.00 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:112 Resp: 280827

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

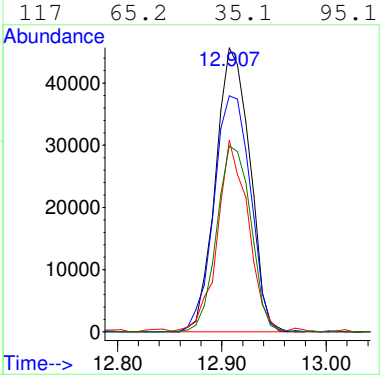


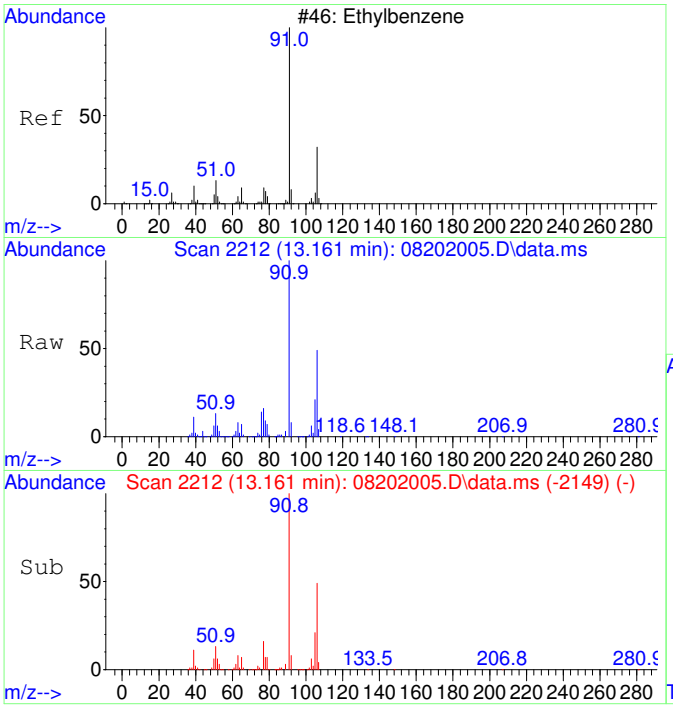


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 5000.00 ug/L
RT: 12.907 min Scan# 2180
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:131 Resp: 103928

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

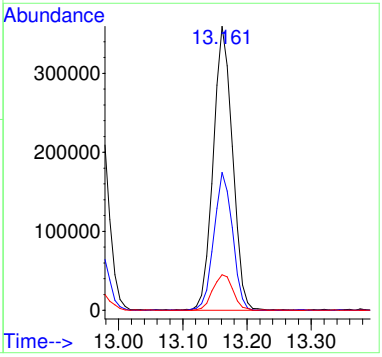


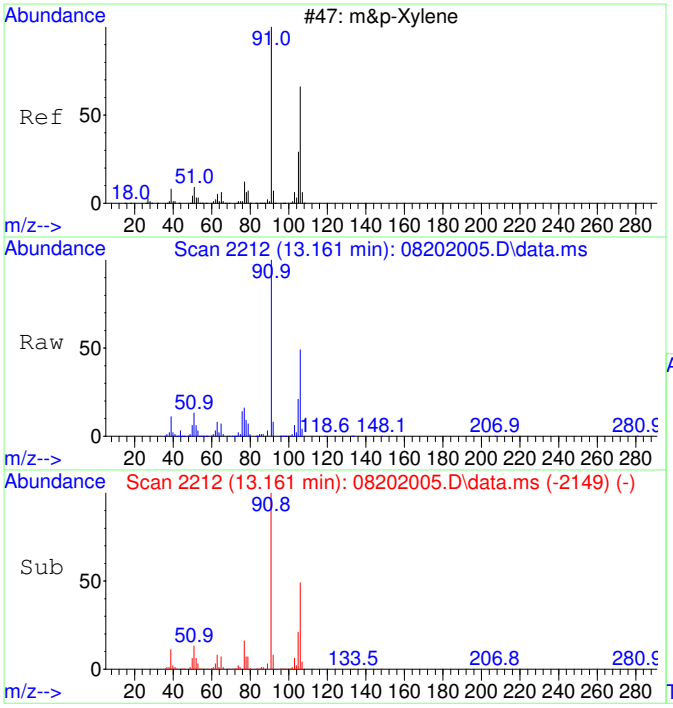


#42
Ethylbenzene SCAN
Concen: 5000.00 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 91 Resp: 748721

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

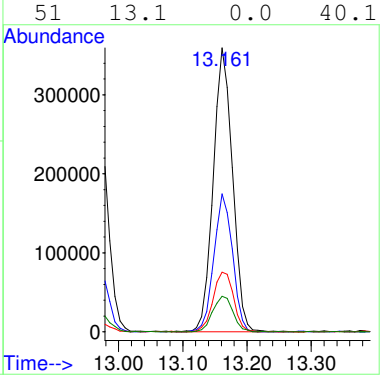


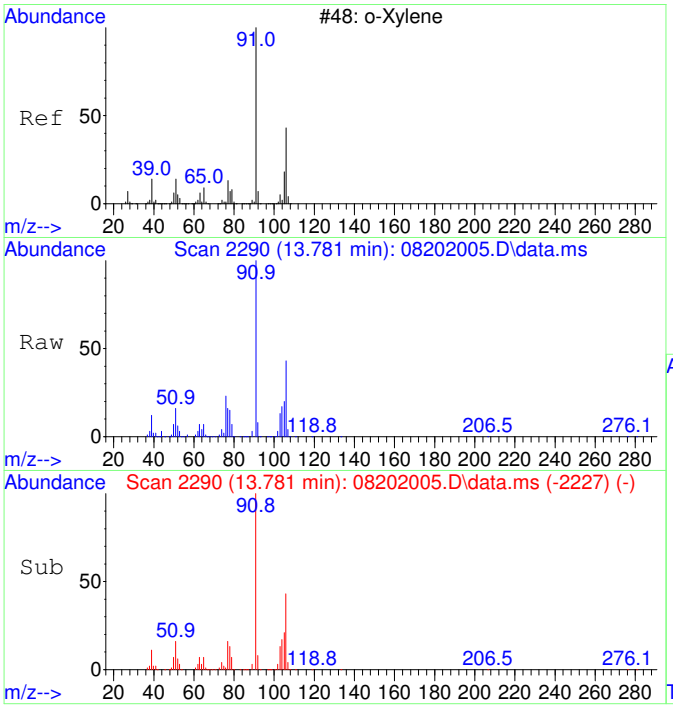


#43
m&p-Xylene SCAN
Concen: 5000.00 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 91 Resp: 748721

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

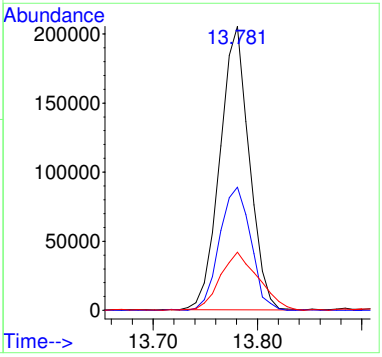


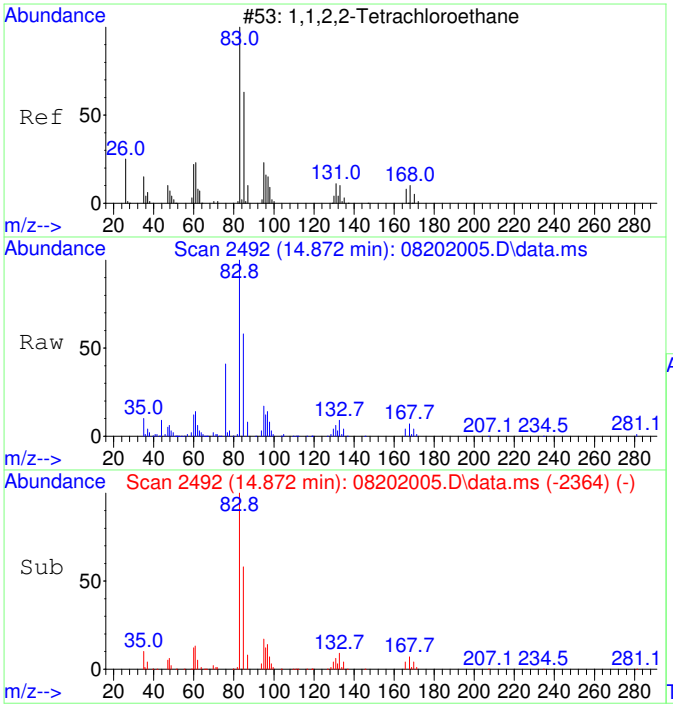


#44
o-Xylene SCAN
Concen: 5000.00 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 91 Resp: 400772

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

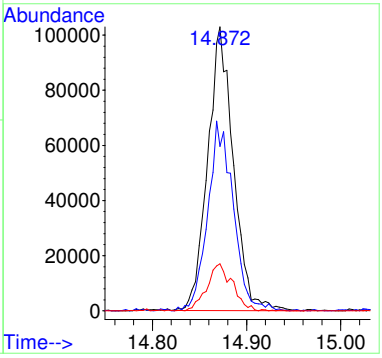


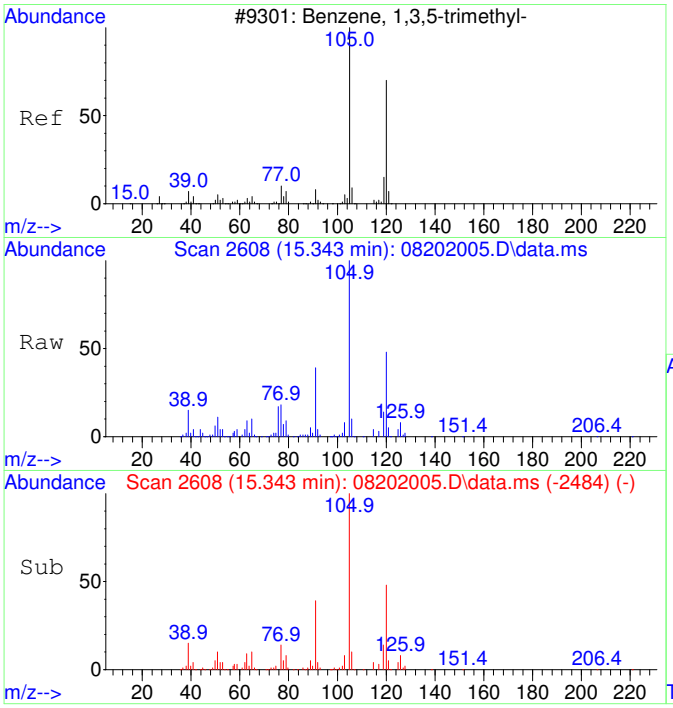


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 5000.00 ug/L
RT: 14.872 min Scan# 2492
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion: 83 Resp: 195422

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

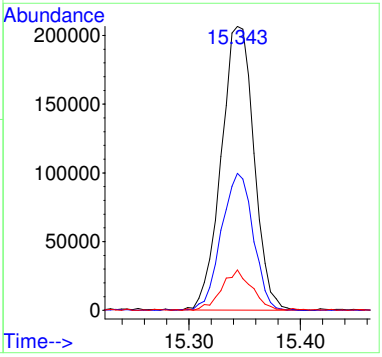


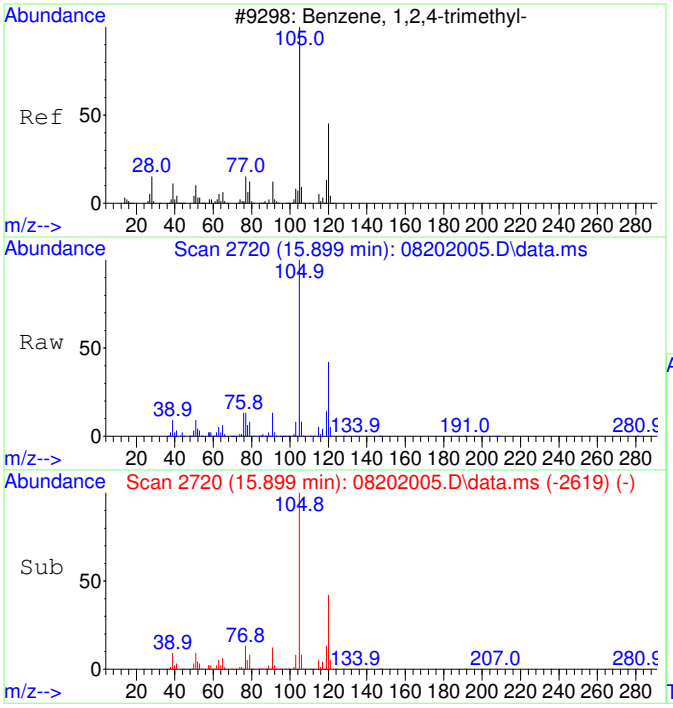


#46
1,3,5-Trimethylbenzene SCAN
Concen: 5000.00 ug/L
RT: 15.343 min Scan# 2608
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:105 Resp: 422373

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

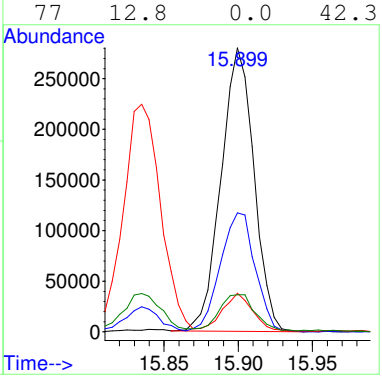


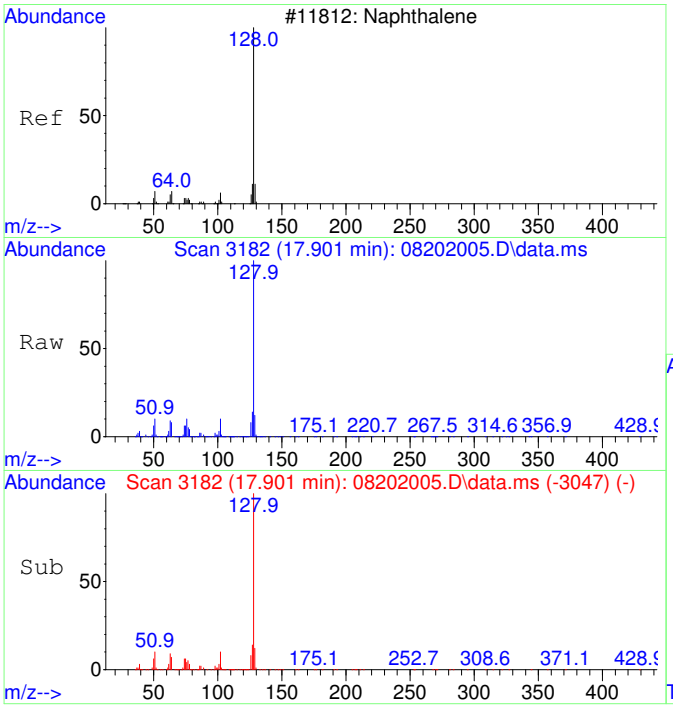


#47
1,2,4-Trimethylbenzene SCAN
Concen: 5000.00 ug/L
RT: 15.899 min Scan# 2720
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:105 Resp: 432181

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

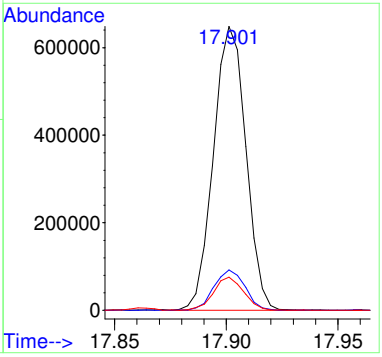




#48
Naphthalene SCAN
Concen: 5000.00 ug/L
RT: 17.901 min Scan# 3182
Delta R.T. 0.000 min
Lab File: 08202005.D
Acq: 20 Aug 2020 16:13

Tgt Ion:128 Resp: 653960

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



S20H039-CAL4

Quantitation Report (Not Reviewed)

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

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

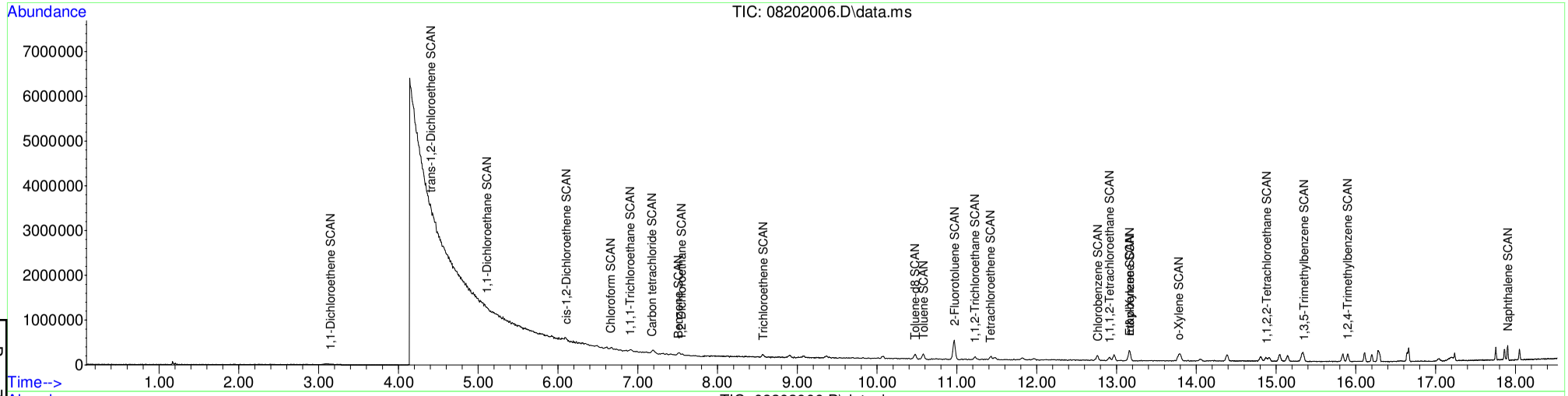
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.959	109	620555	5000.00	ug/L	-0.01
System Monitoring Compounds						
12) Toluene-d8	10.477	98	134499	1107.17	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 22.14%#			
Target Compounds						Qvalue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

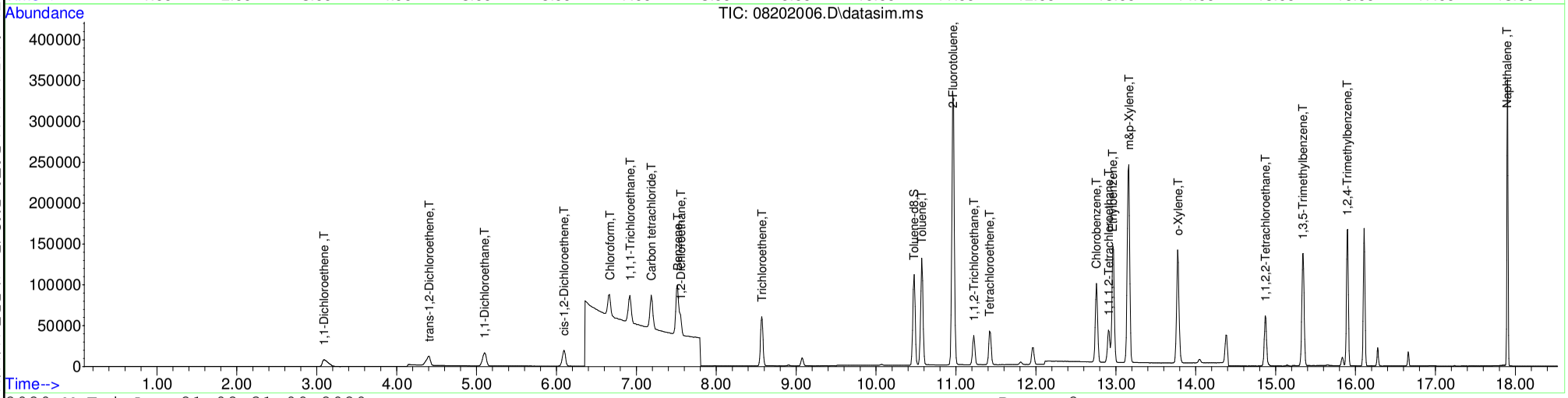
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

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

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





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S20H039-CAL5

Quantitation Report (Not Reviewed)

Before Manual Integration

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

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

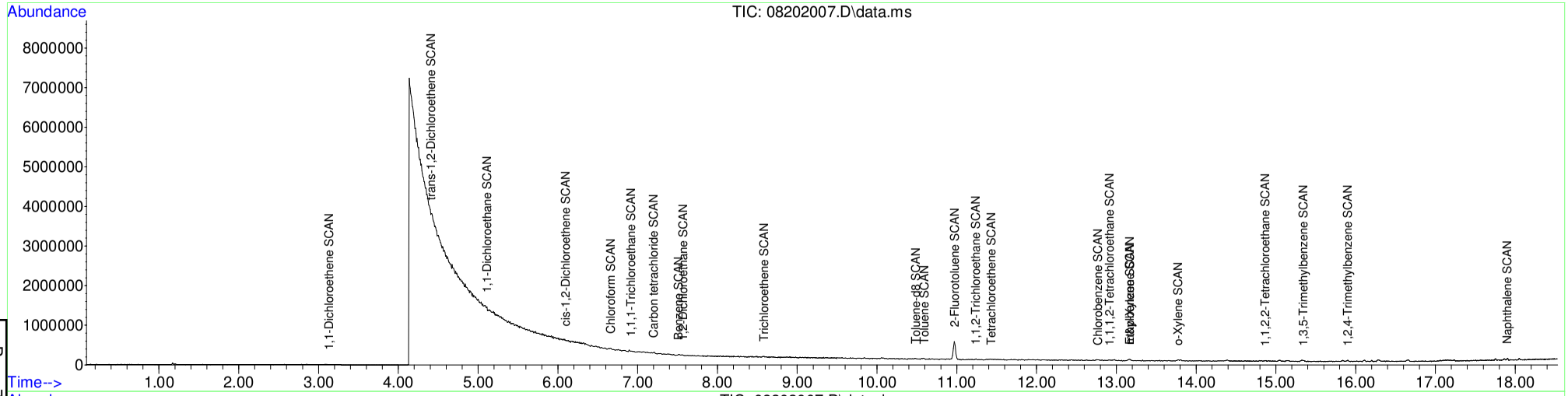
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	687675	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	18291	135.87 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery =	2.72%#	
Target Compounds					Qvalue
2] 1,1-Dichloroethene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

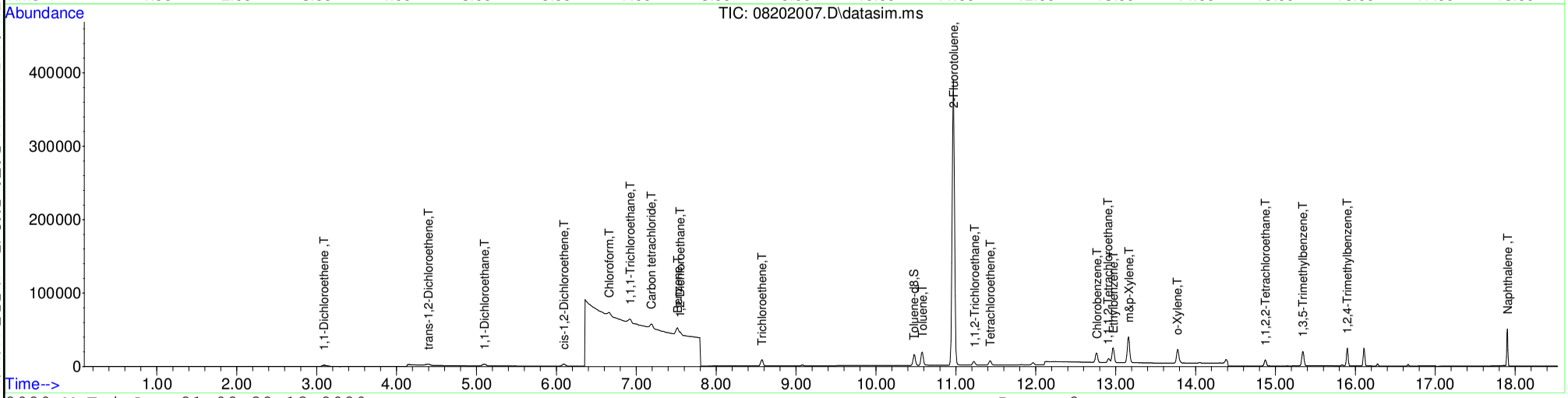
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

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

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





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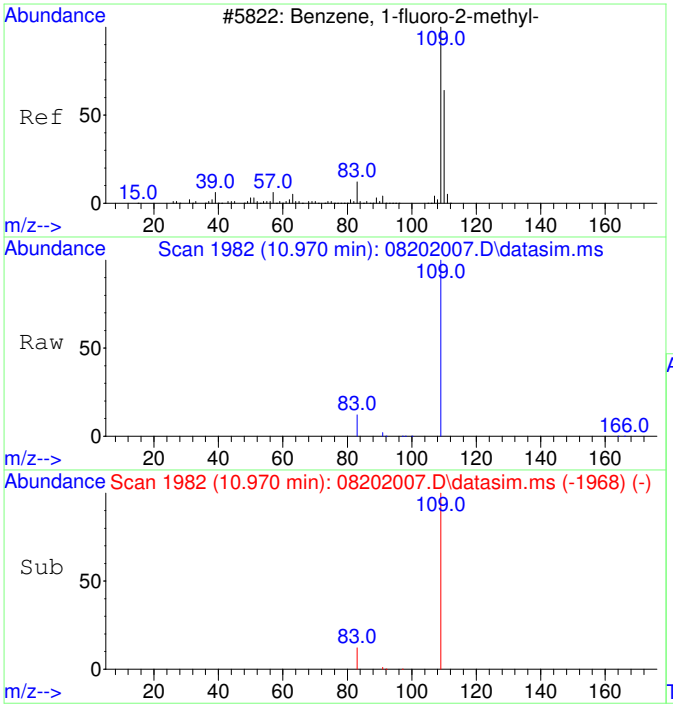
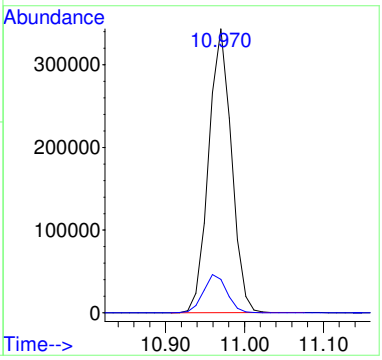
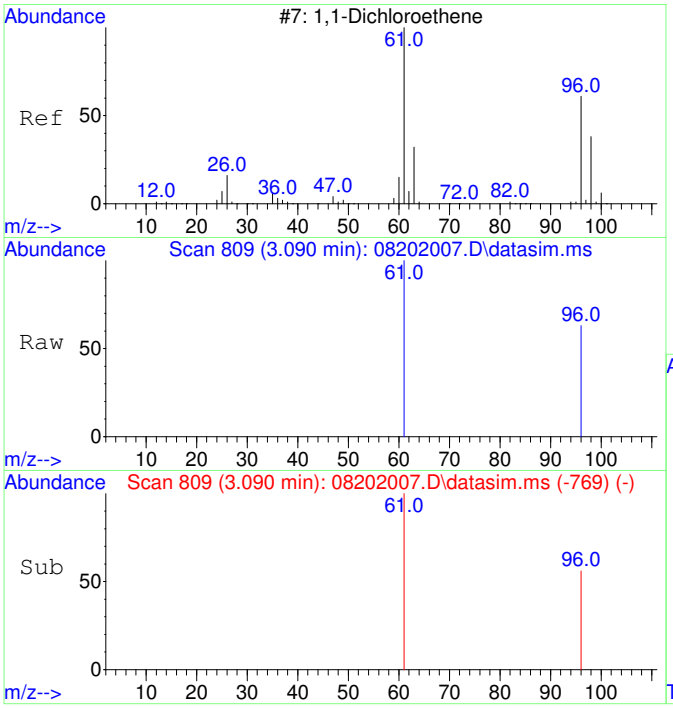


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:109 Resp: 687675

Ion	Ratio	Lower	Upper
109	100		
83	13.7	0.0	42.3

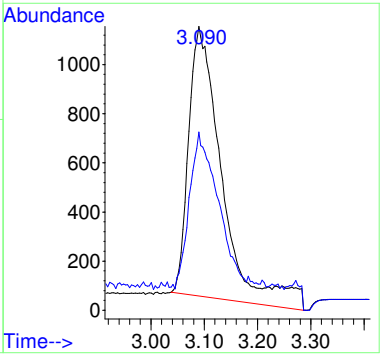




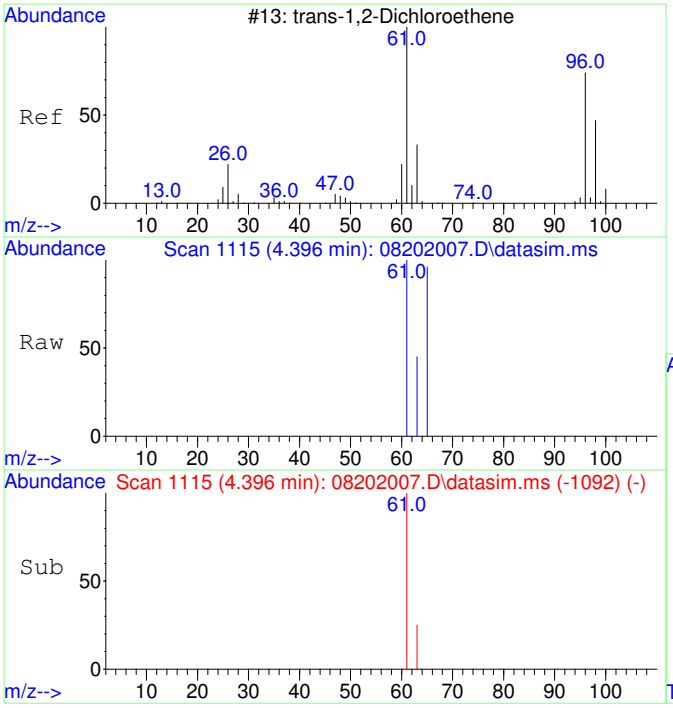
#2
1,1-Dichloroethene
Concen: 156.65 ug/L
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 61 Resp: 4736

Ion	Ratio	Lower	Upper
61	100		
96	56.8	37.2	97.2



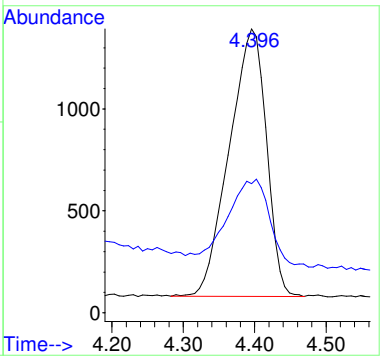
Before MI:
IMPROPER
BASELINE

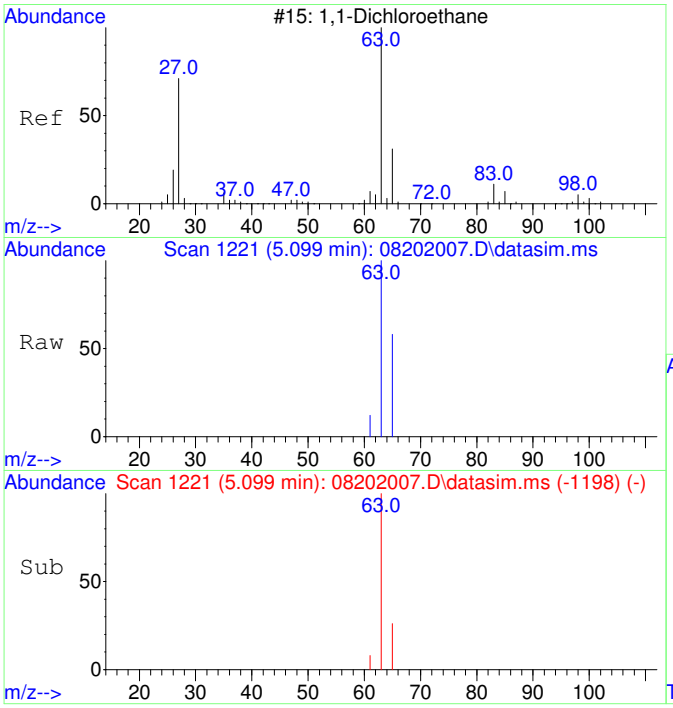


#3
trans-1,2-Dichloroethene
Concen: 149.50 ug/L
RT: 4.396 min Scan# 1115
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 61 Resp: 4743

Ion	Ratio	Lower	Upper
61	100		
63	39.2	2.4	62.4

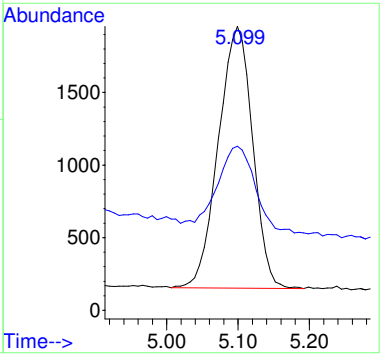


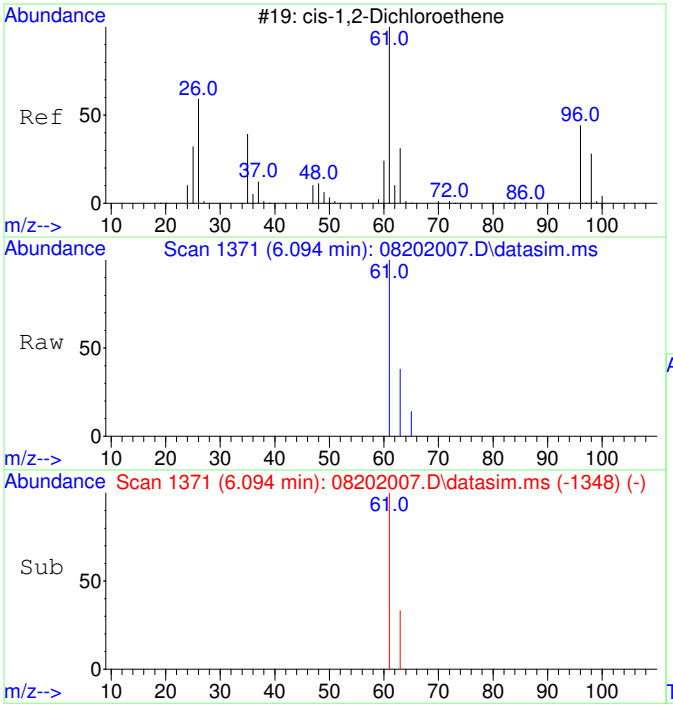


#4
1,1-Dichloroethane
Concen: 152.35 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 63 Resp: 6017

Ion	Ratio	Lower	Upper
63	100		
65	39.7	1.8	61.8

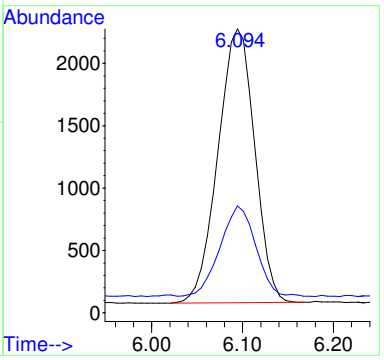


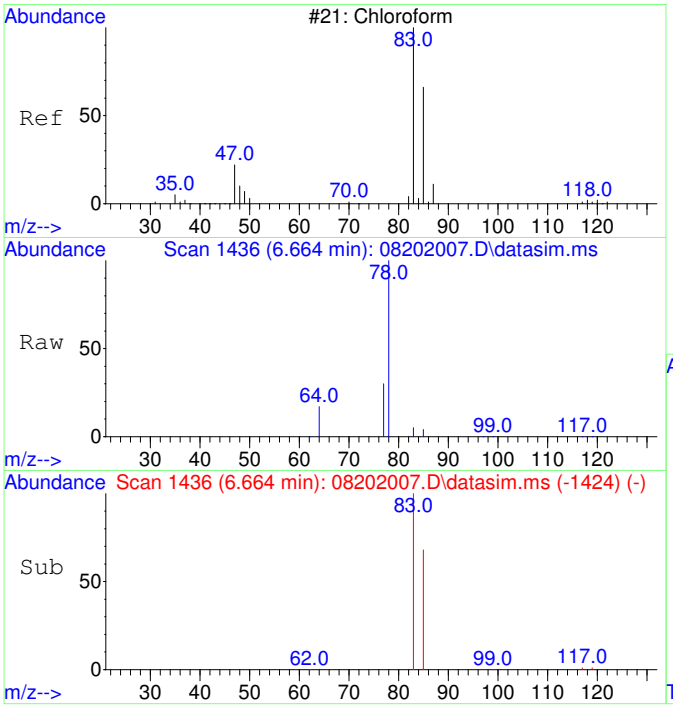


#5
cis-1,2-Dichloroethene
Concen: 148.27 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 61 Resp: 6181

Ion	Ratio	Lower	Upper
61	100		
63	32.0	2.5	62.5

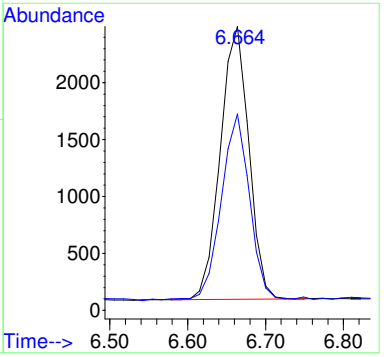


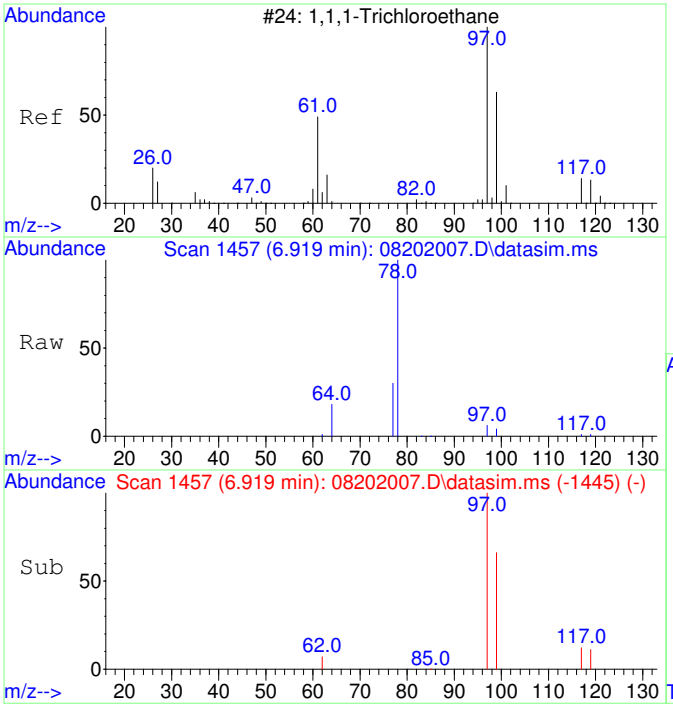


#6
Chloroform
Concen: 142.98 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 83 Resp: 6101

Ion	Ratio	Lower	Upper
83	100		
85	69.0	35.1	95.1

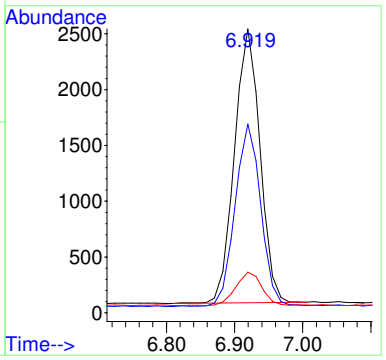


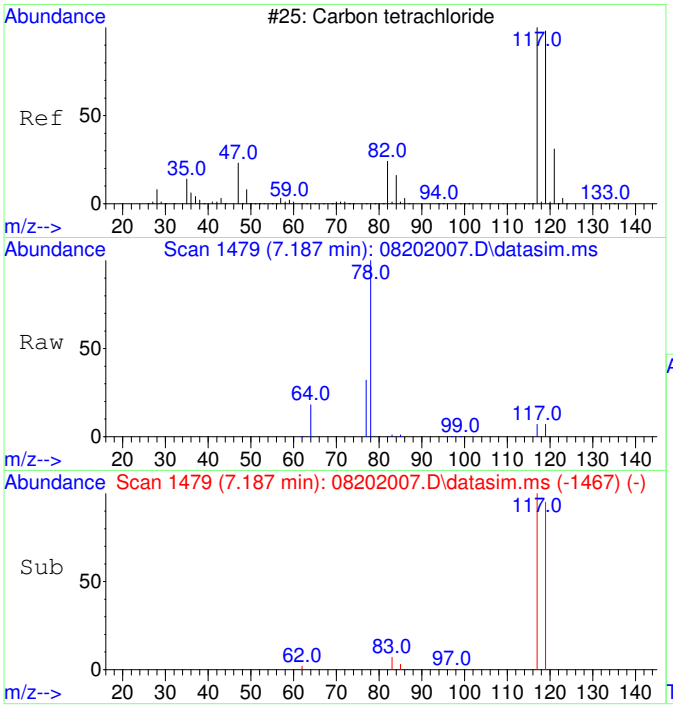


#7
1,1,1-Trichloroethane
Concen: 137.55 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 97 Resp: 6374

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

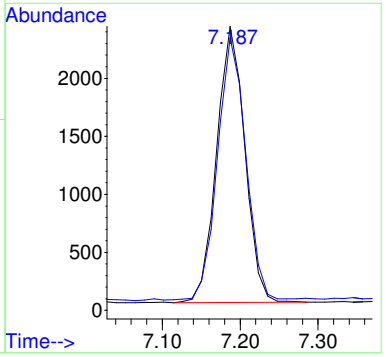


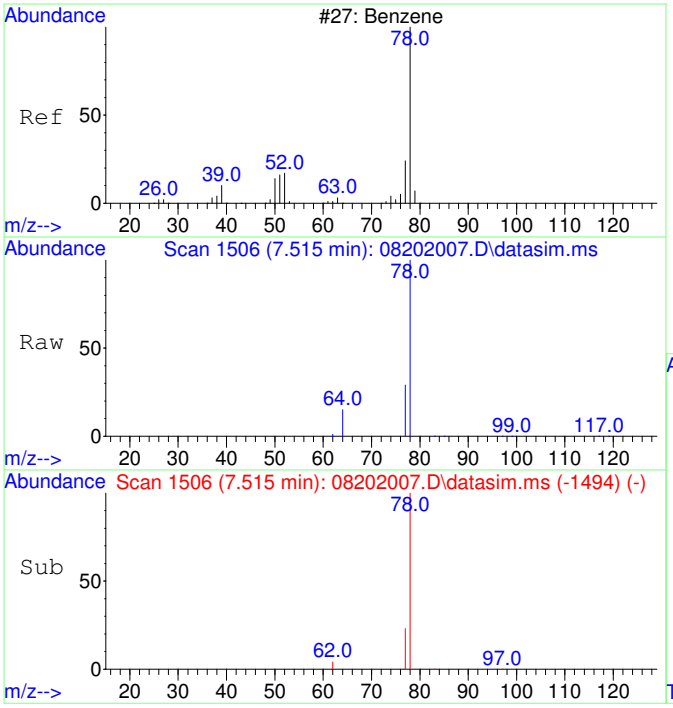


#8
Carbon tetrachloride
Concen: 137.06 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:117 Resp: 5978

Ion	Ratio	Lower	Upper
117	100		
119	94.6	66.4	126.4

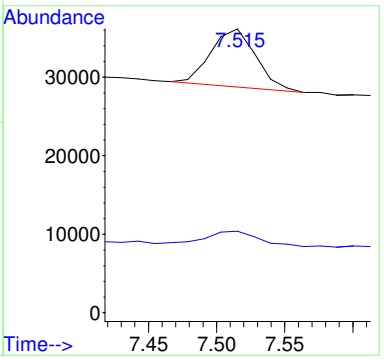


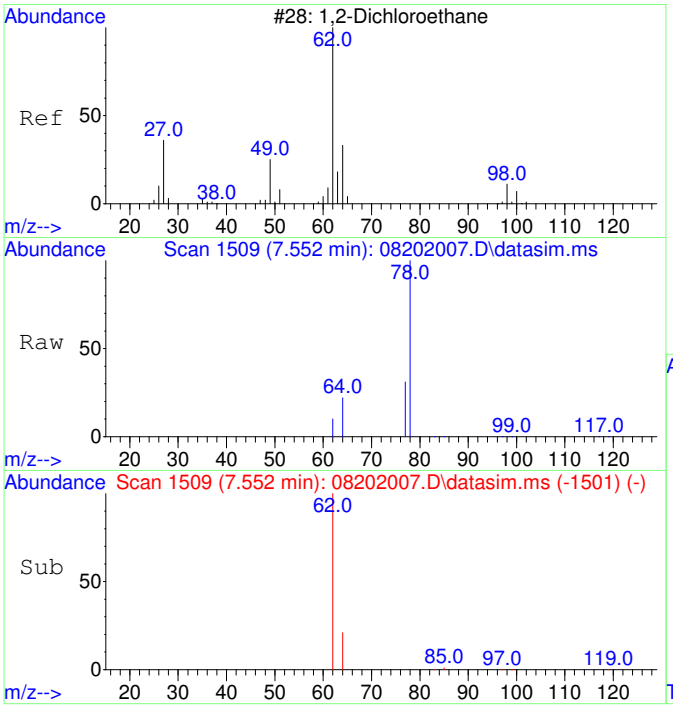


#9
Benzene
Concen: 140.33 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 78 Resp: 16396

Ion	Ratio	Lower	Upper
78	100		
77	35.6	0.0	53.2

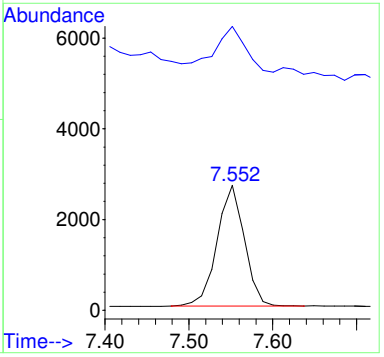


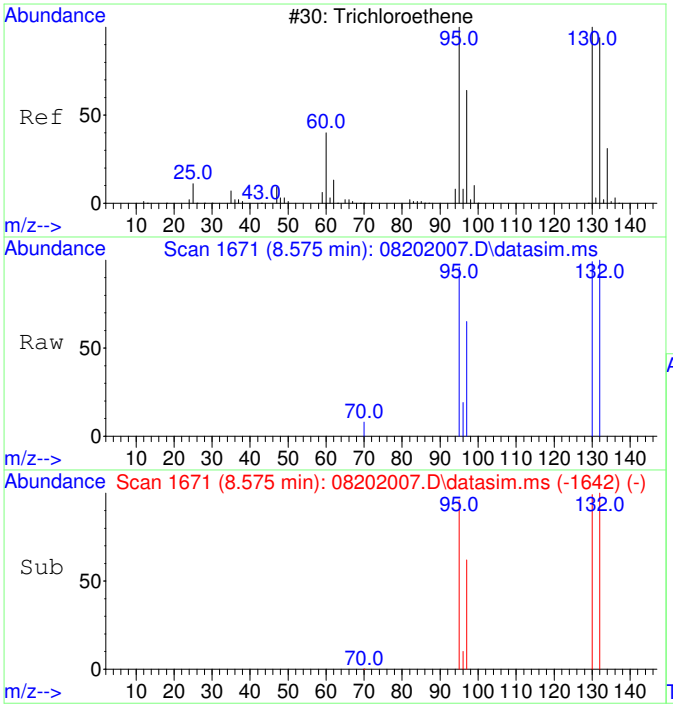


#10
1,2-Dichloroethane
Concen: 144.21 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 62 Resp: 6015

Ion	Ratio	Lower	Upper
62	100		
64	43.6	2.3	62.3

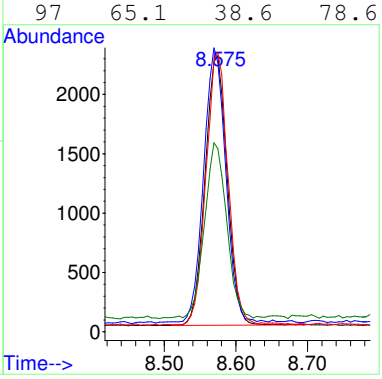


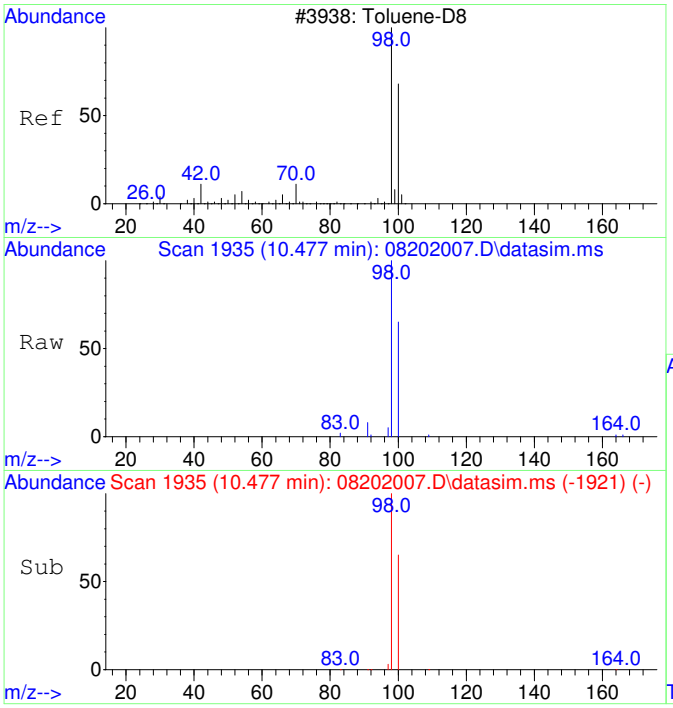


#11
Trichloroethene
Concen: 138.83 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:130 Resp: 4884

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

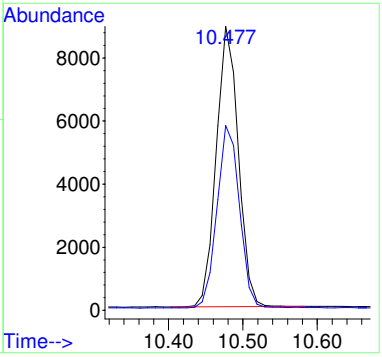


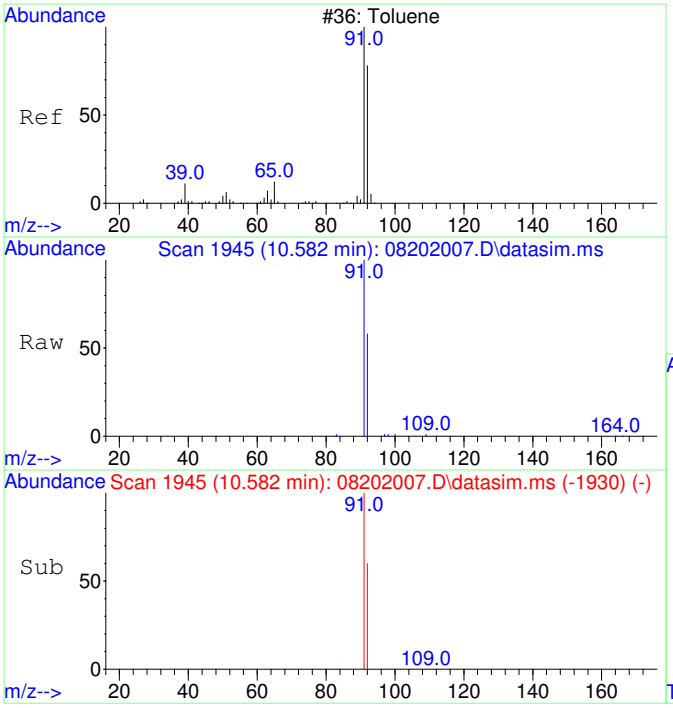


#12
Toluene-d8
Concen: 135.87 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 98 Resp: 18291

Ion	Ratio	Lower	Upper
98	100		
100	65.9	37.1	97.1

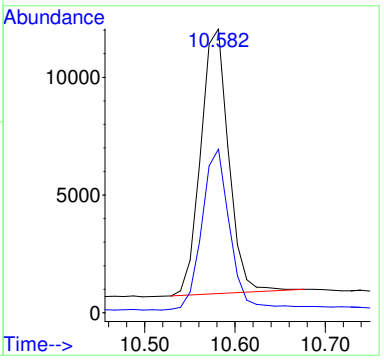


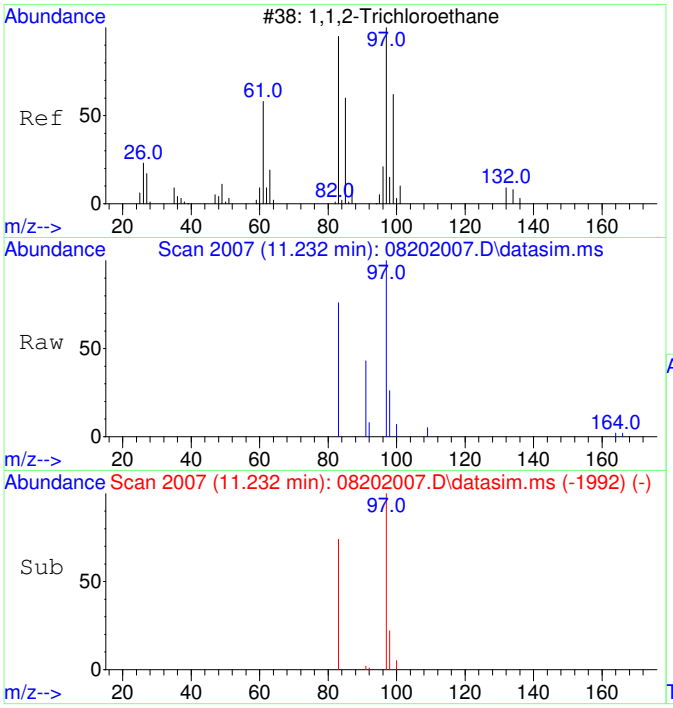


#13
Toluene
Concen: 141.38 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 24264

Ion	Ratio	Lower	Upper
91	100		
92	61.5	29.9	89.9

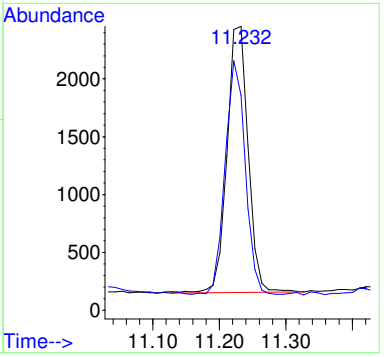


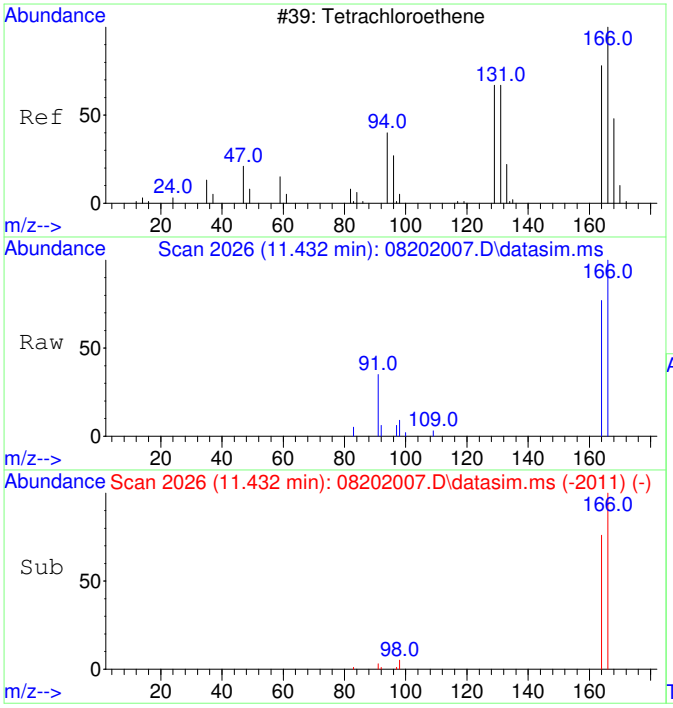


#14
1,1,2-Trichloroethane
Concen: 135.38 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 97 Resp: 5063

Ion	Ratio	Lower	Upper
97	100		
83	83.5	51.2	111.2

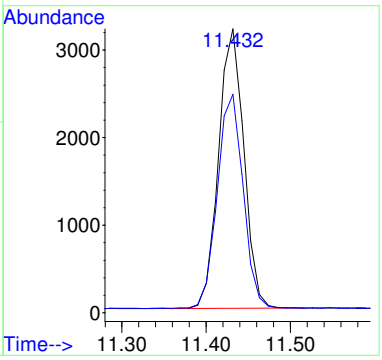


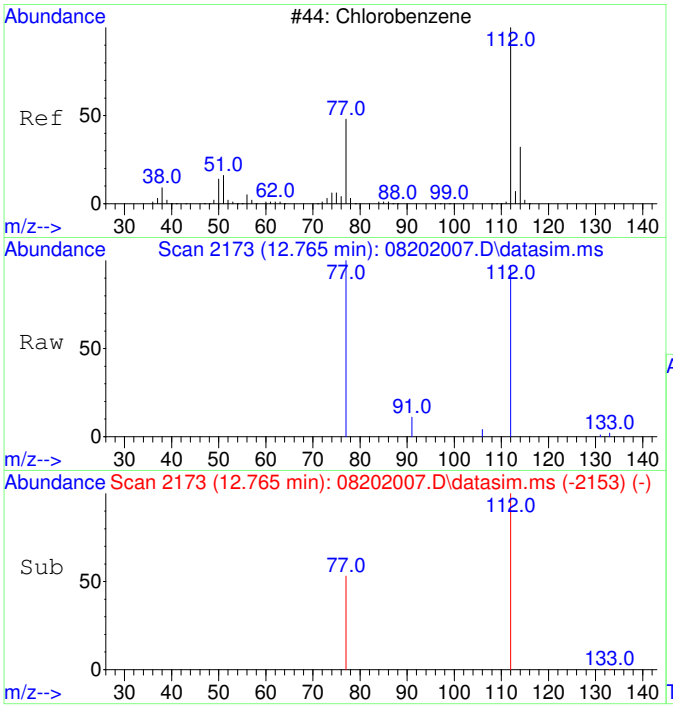


#15
Tetrachloroethene
Concen: 133.89 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:166 Resp: 6650

Ion	Ratio	Lower	Upper
166	100		
164	78.5	47.8	107.8

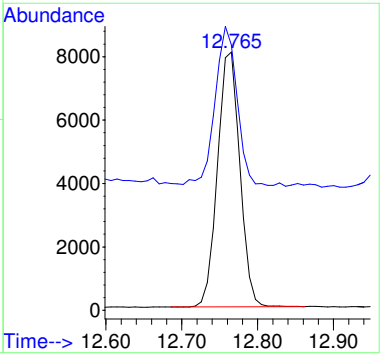


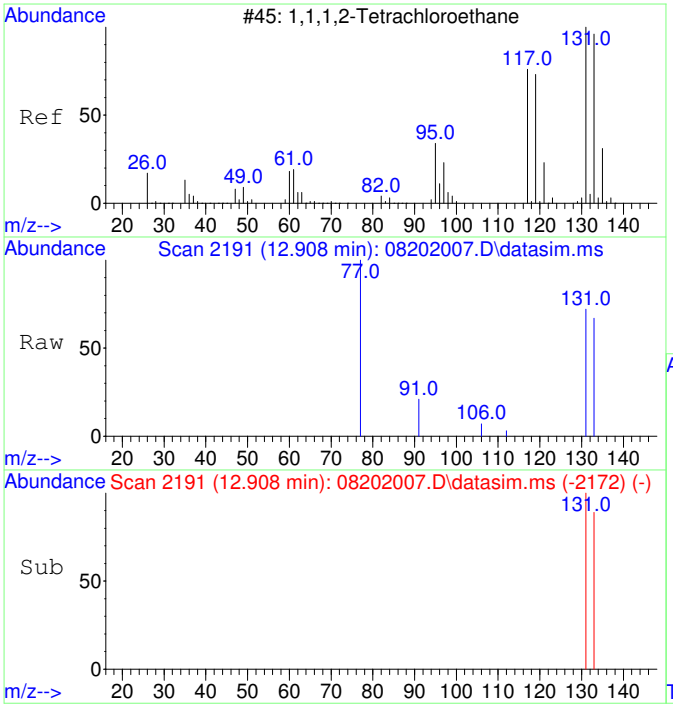


#16
Chlorobenzene
Concen: 133.98 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. 0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:112 Resp: 16465

Ion	Ratio	Lower	Upper
112	100		
77	60.1	23.6	83.6

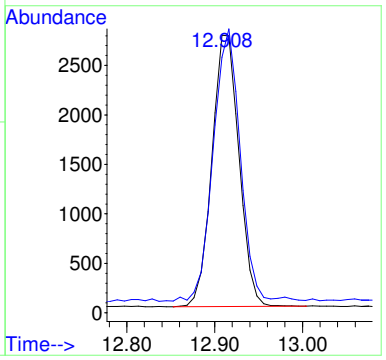


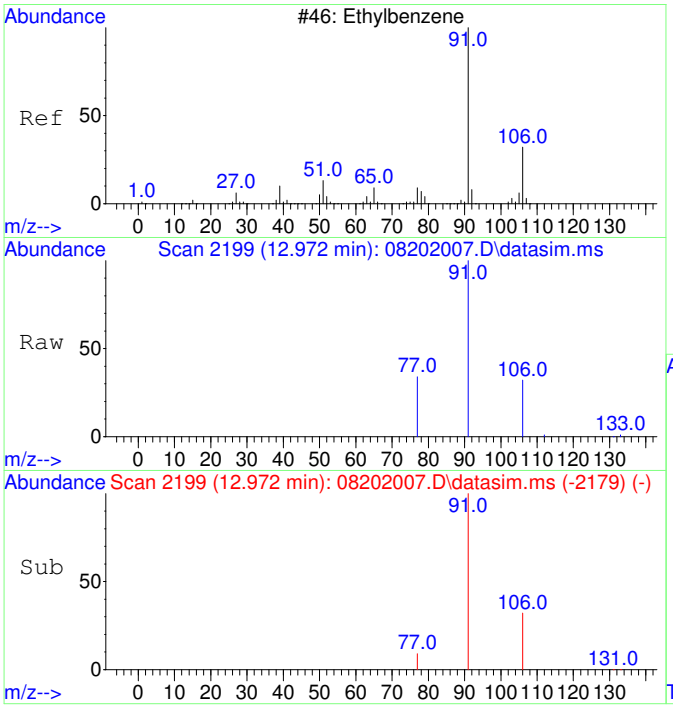


#17
1,1,1,2-Tetrachloroethane
Concen: 133.44 ug/L
RT: 12.908 min Scan# 2191
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:131 Resp: 5876

Ion	Ratio	Lower	Upper
131	100		
133	97.8	66.3	126.3

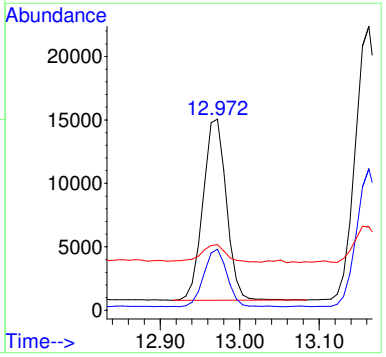


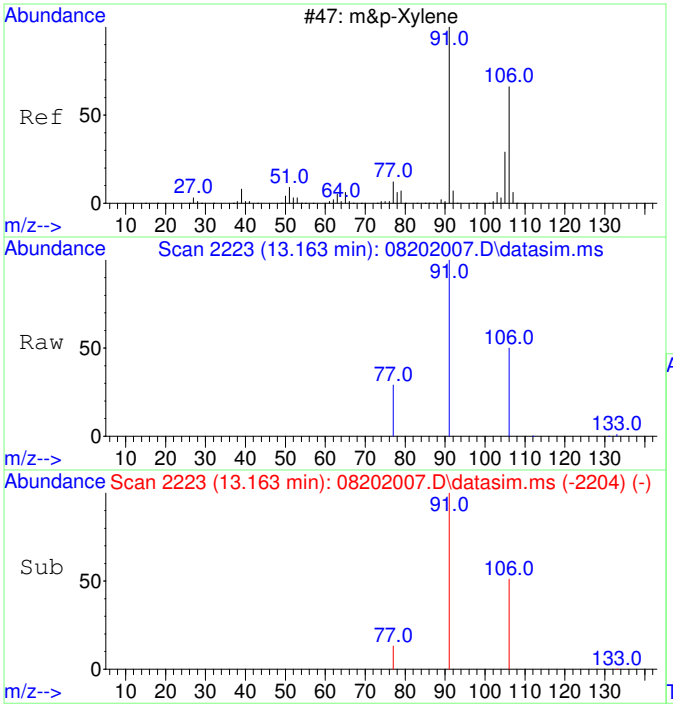


#18
Ethylbenzene
Concen: 139.19 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 29078

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

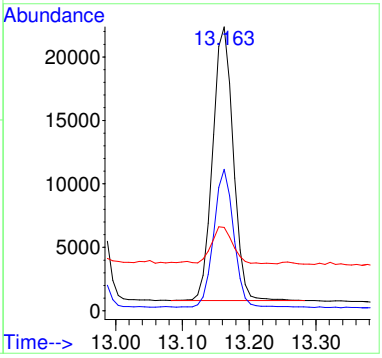


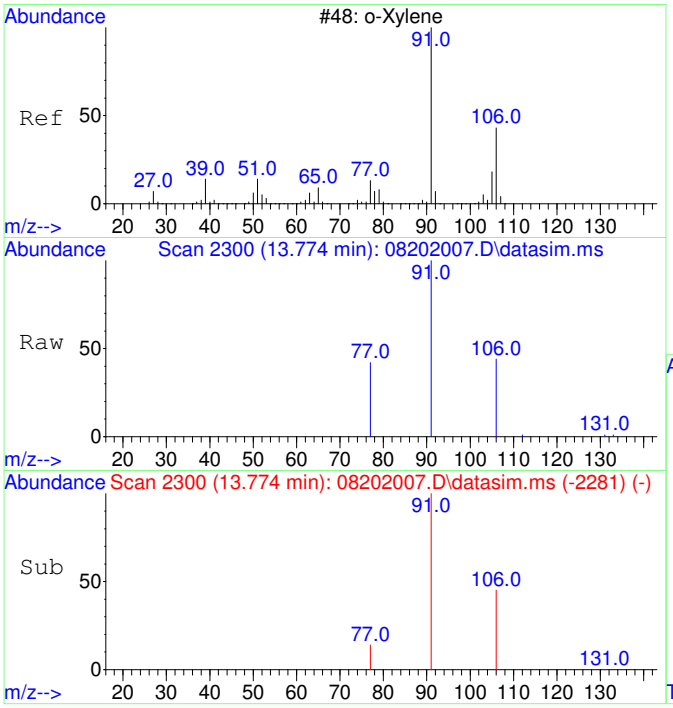


#19
m&p-Xylene
Concen: 281.41 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 45947

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

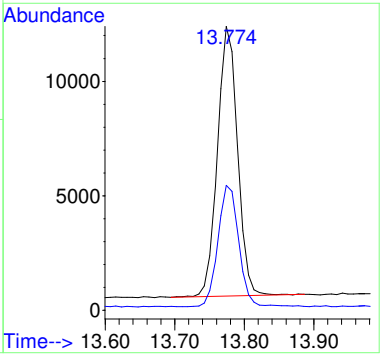


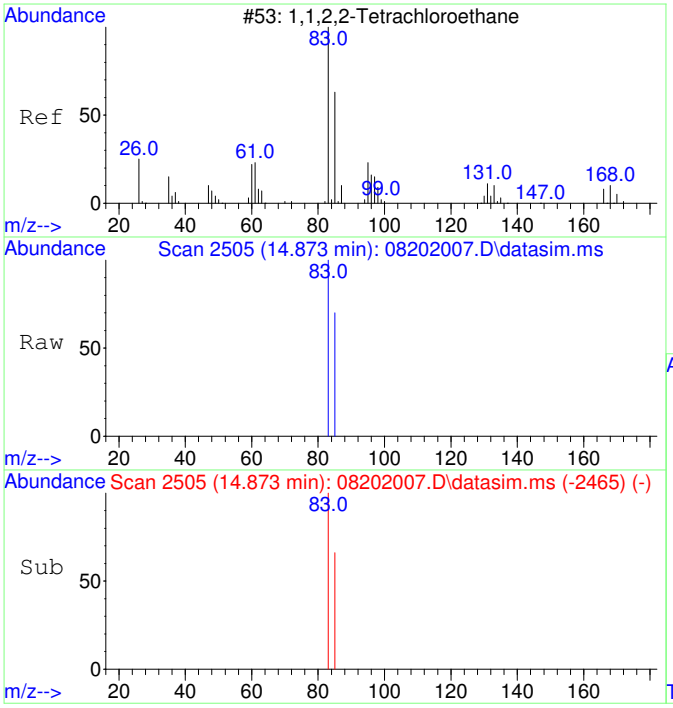


#20
o-Xylene
Concen: 135.47 ug/L
RT: 13.774 min Scan# 2300
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 23631

Ion	Ratio	Lower	Upper
91	100		
106	46.7	19.2	79.2

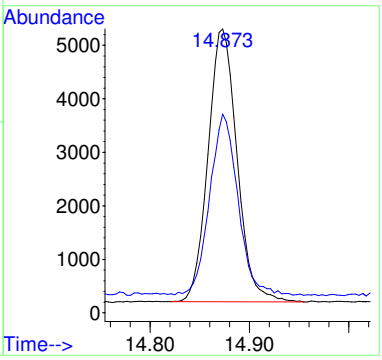


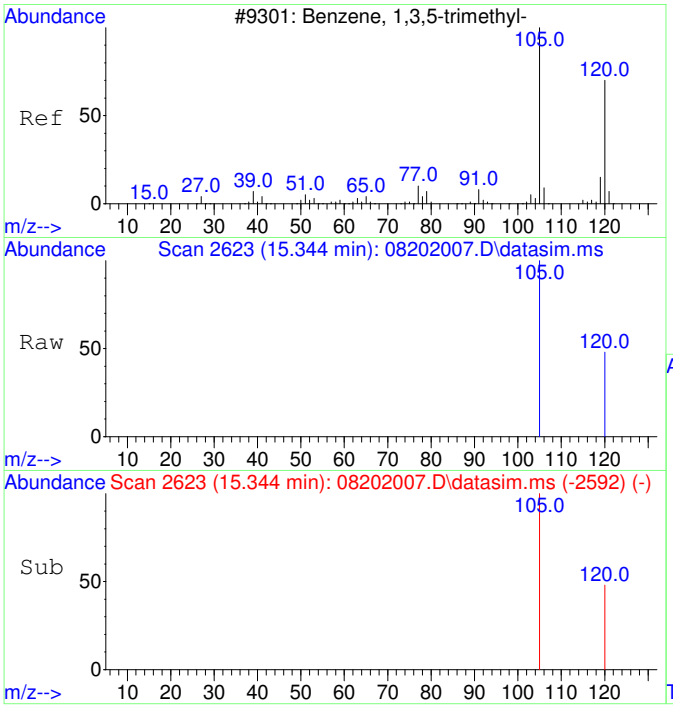


#21
1,1,2,2-Tetrachloroethane
Concen: 133.61 ug/L
RT: 14.873 min Scan# 2505
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 83 Resp: 10329

Ion	Ratio	Lower	Upper
83	100		
85	64.3	34.8	94.8

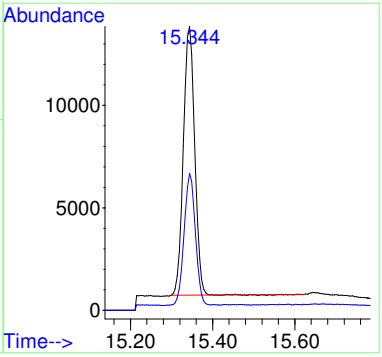


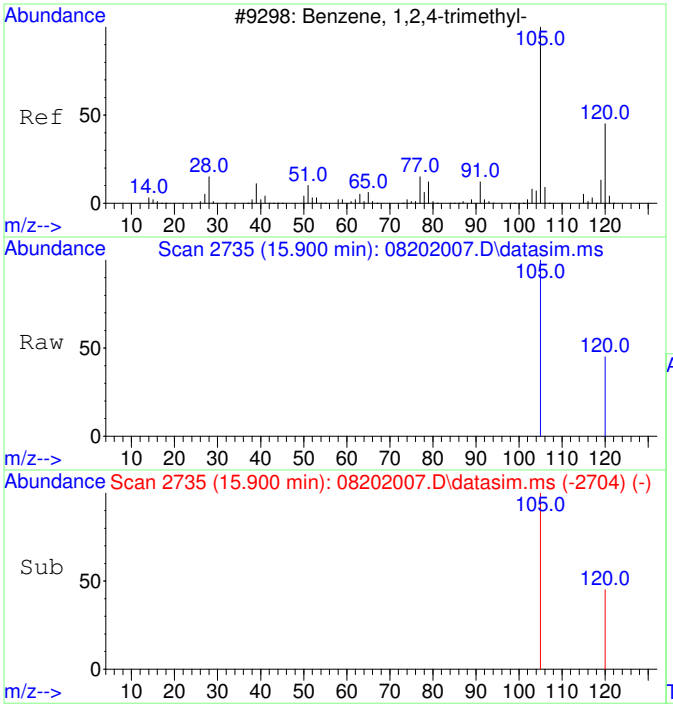


#22
1,3,5-Trimethylbenzene
Concen: 134.37 ug/L
RT: 15.344 min Scan# 2623
Delta R.T. -0.001 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:105 Resp: 24949

Ion	Ratio	Lower	Upper
105	100		
120	48.8	21.1	81.1

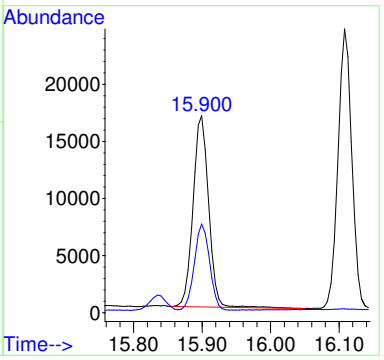


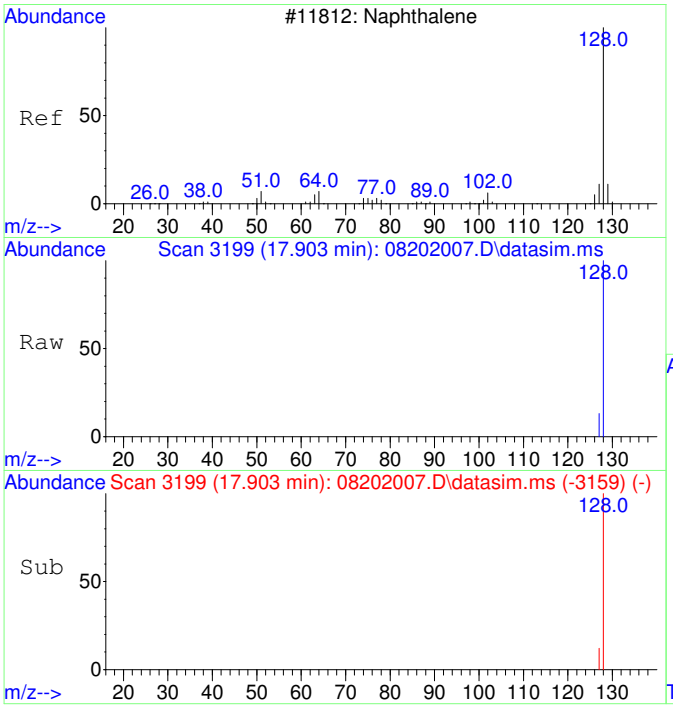


#23
1,2,4-Trimethylbenzene
Concen: 137.33 ug/L
RT: 15.900 min Scan# 2735
Delta R.T. 0.004 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:105 Resp: 26485

Ion	Ratio	Lower	Upper
105	100		
120	43.4	17.2	77.2

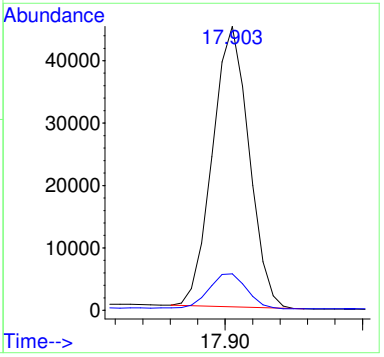


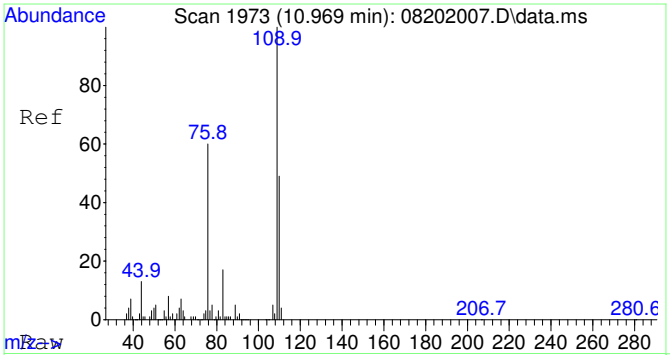


#24
Naphthalene
Concen: 135.77 ug/L
RT: 17.903 min Scan# 3199
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:128 Resp: 41384

Ion	Ratio	Lower	Upper
128	100		
127	12.6	0.0	42.5

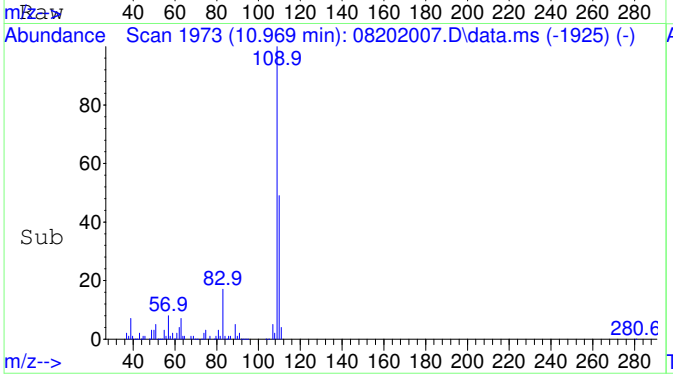


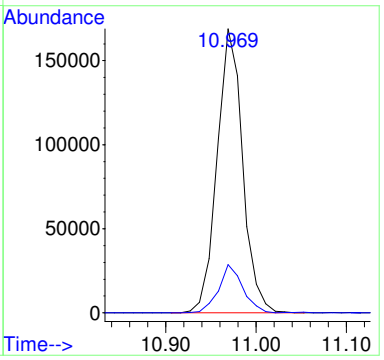


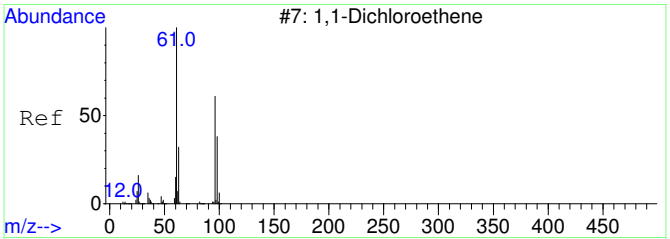
#25
2-Fluorotoluene SCAN
Concen: 4966.84 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:109 Resp: 332955

Ion	Ratio	Lower	Upper
109	100		
83	15.9	0.0	43.8



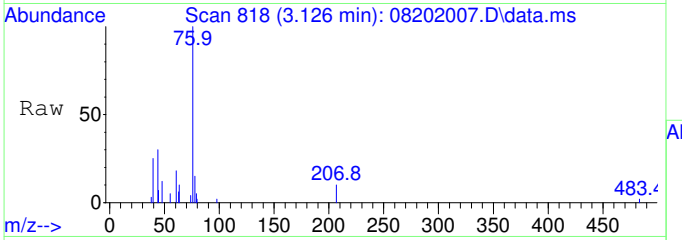


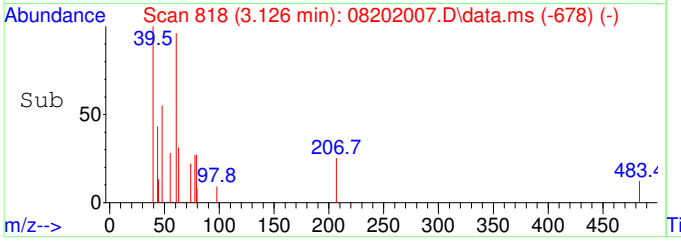


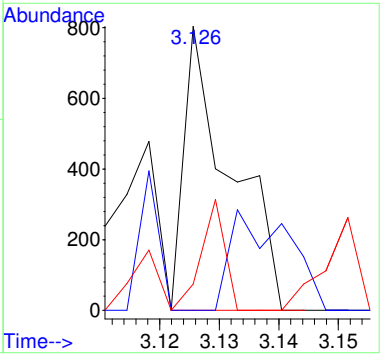
#26
1,1-Dichloroethene SCAN
Concen: 30.49 ug/L
RT: 3.126 min Scan# 818
Delta R.T. 0.019 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

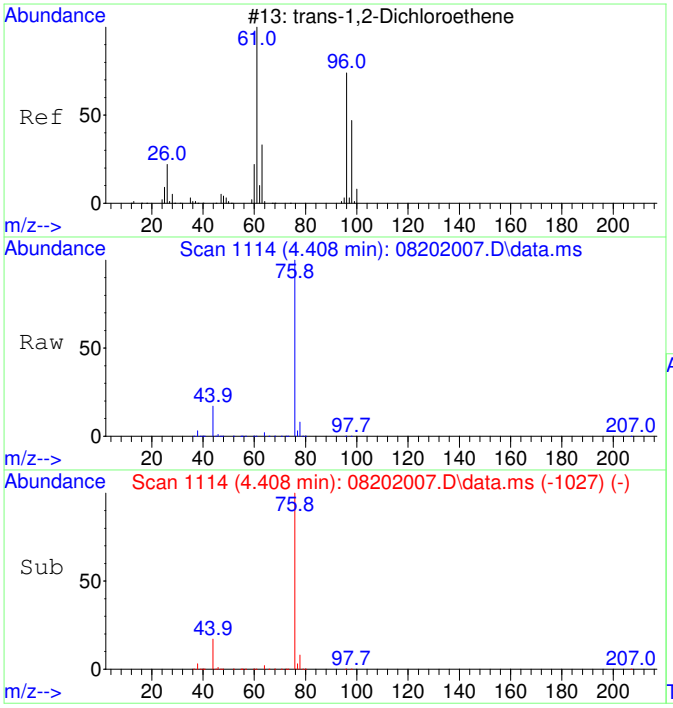
Tgt Ion: 61 Resp: 434

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





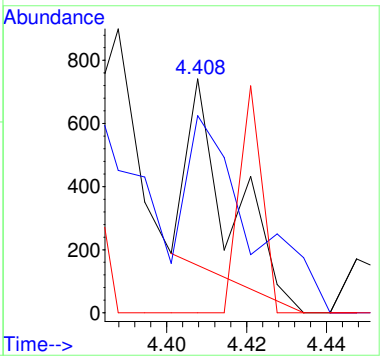


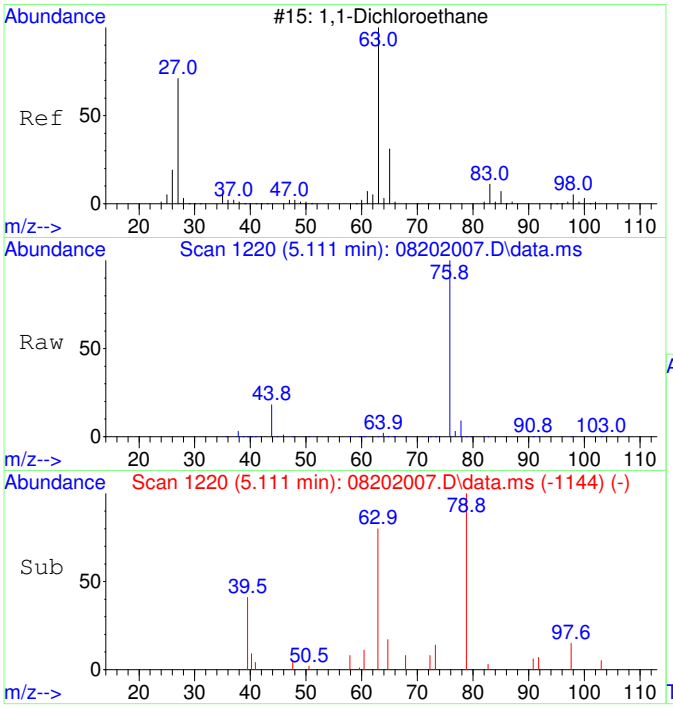


#27
trans-1,2-Dichloroethene SCAN
Concen: 22.42 ug/L
RT: 4.408 min Scan# 1114
Delta R.T. 0.007 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 61 Resp: 395

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

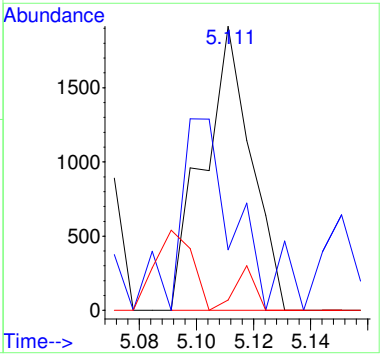


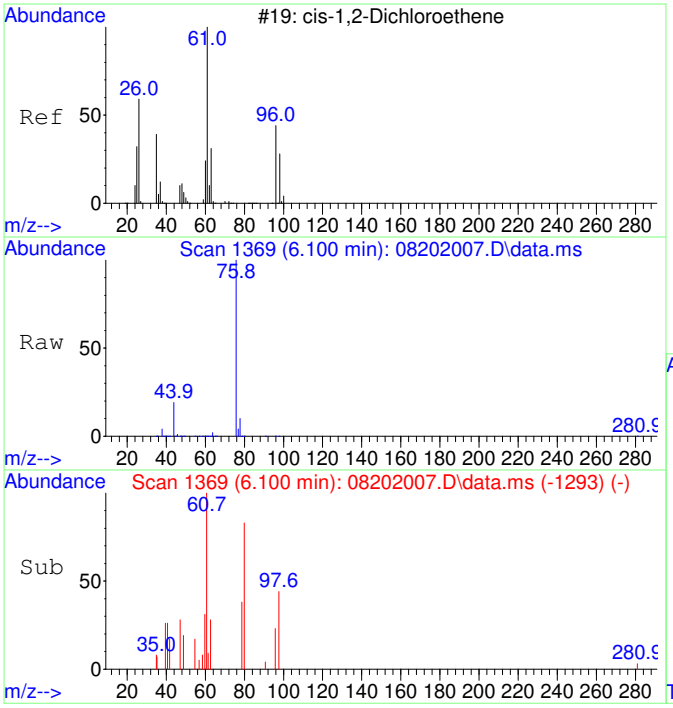


#28
1,1-Dichloroethane SCAN
Concen: 109.38 ug/L
RT: 5.111 min Scan# 1220
Delta R.T. 0.007 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 63 Resp: 2230

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

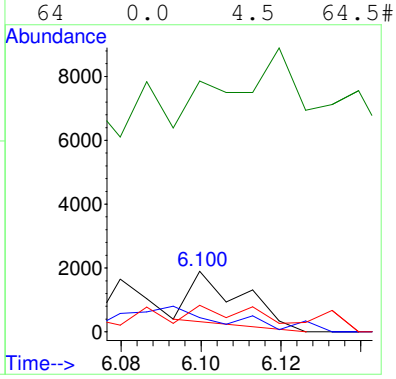


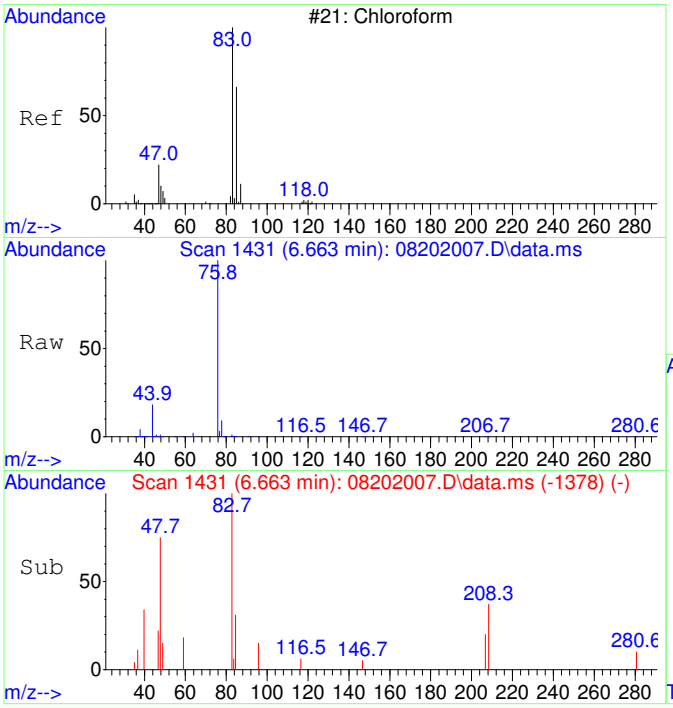


#29
cis-1,2-Dichloroethene SCAN
Concen: 63.68 ug/L
RT: 6.100 min Scan# 1369
Delta R.T. 0.007 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 61 Resp: 1391

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

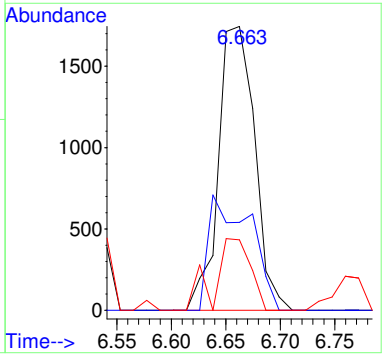


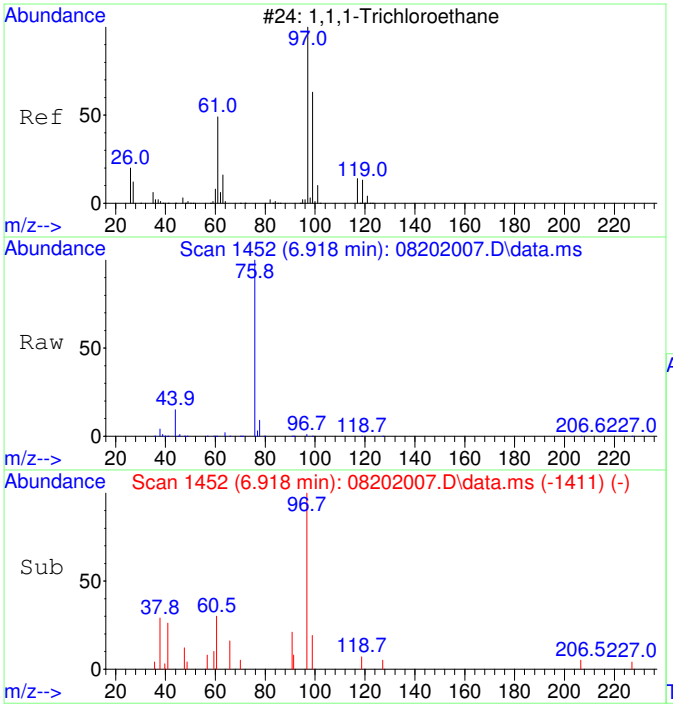


#30
Chloroform SCAN
Concen: 171.15 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 83 Resp: 4055

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

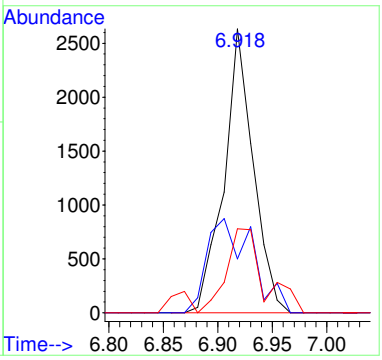


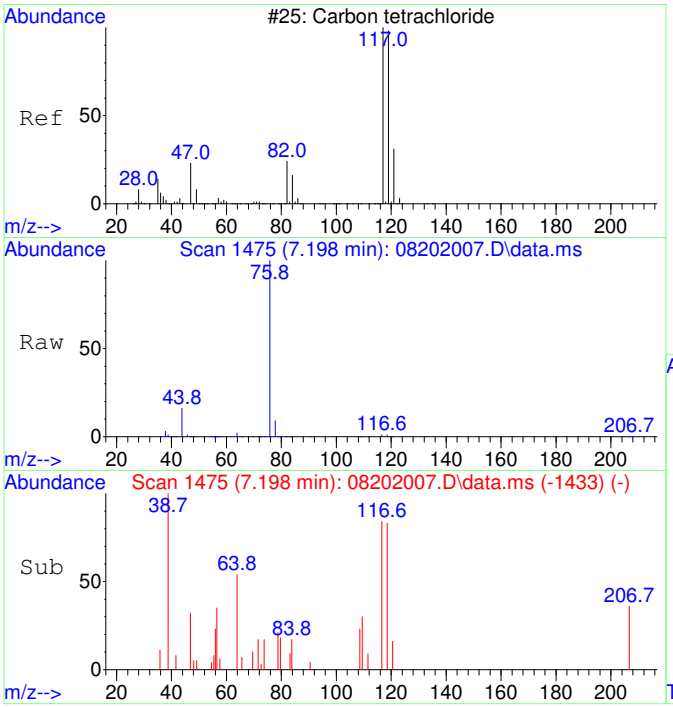


#31
1,1,1-Trichloroethane SCAN
Concen: 228.30 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 97 Resp: 4929

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

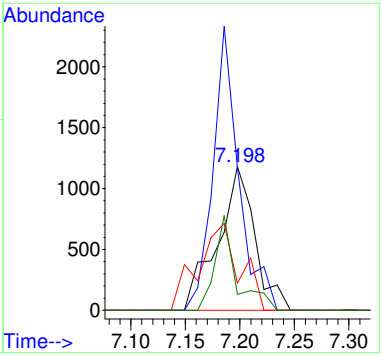


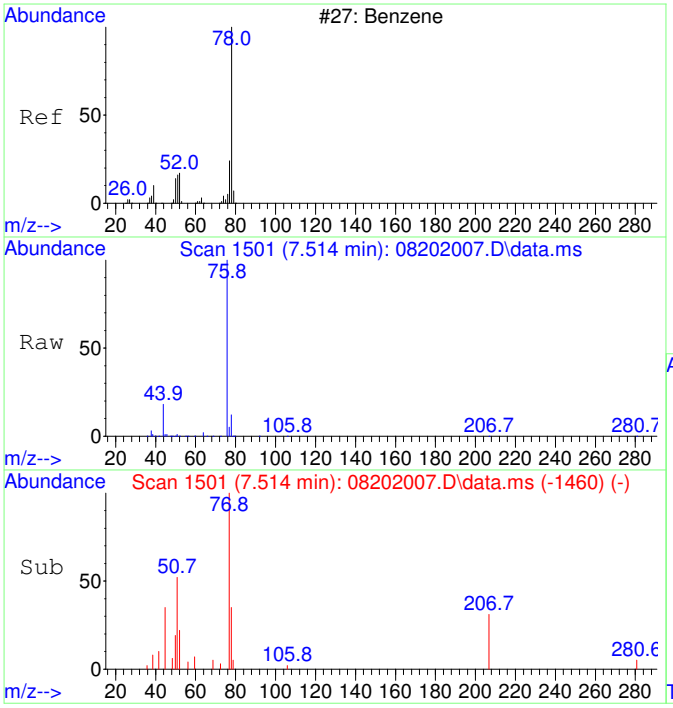


#32
Carbon tetrachloride SCAN
Concen: 124.33 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:117 Resp: 2800

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

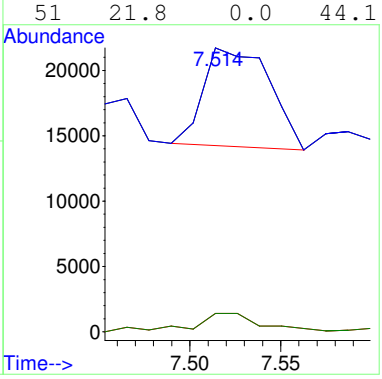


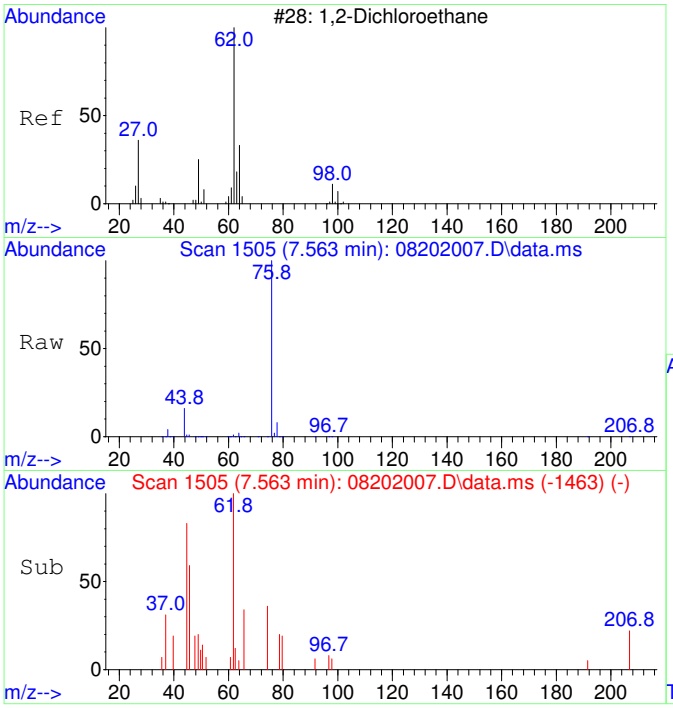


#33
Benzene SCAN
Concen: 317.45 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 78 Resp: 18871

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

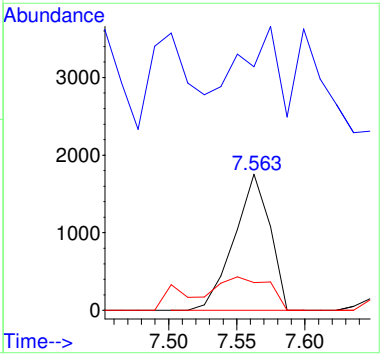


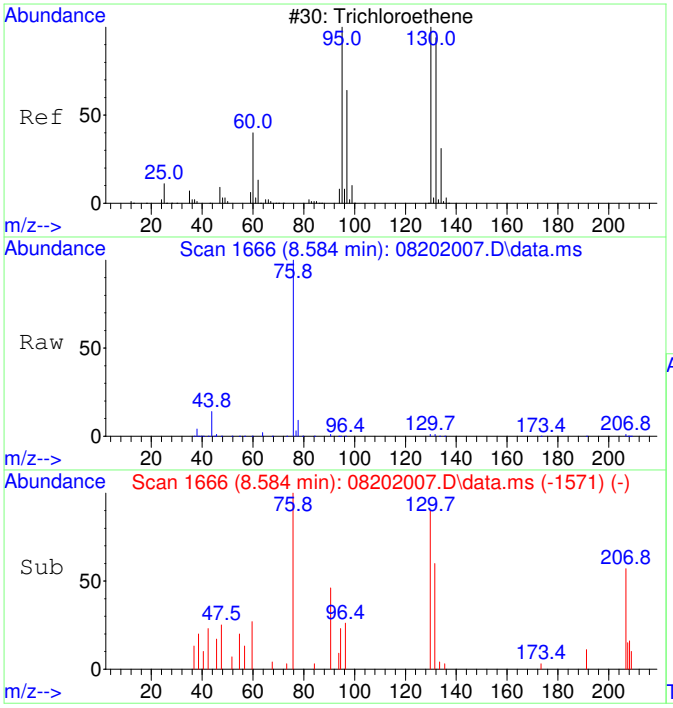


#34
1,2-Dichloroethane SCAN
Concen: 146.10 ug/L
RT: 7.563 min Scan# 1505
Delta R.T. 0.012 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 62 Resp: 3207

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

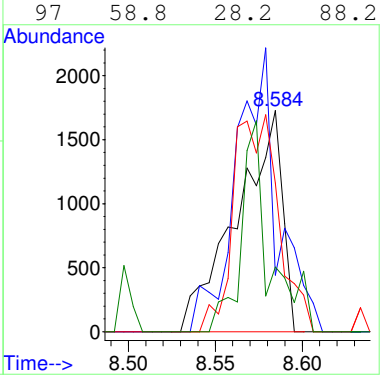


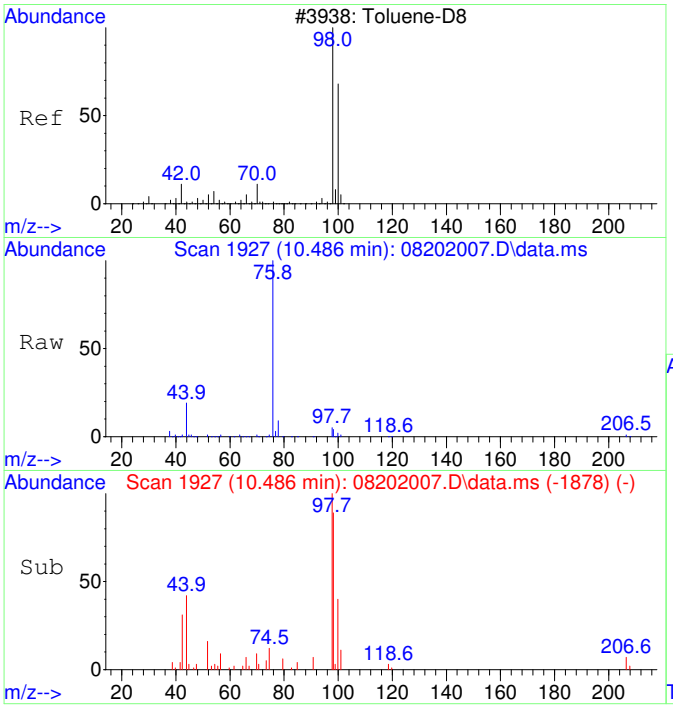


#35
Trichloroethene SCAN
Concen: 193.80 ug/L
RT: 8.584 min Scan# 1666
Delta R.T. 0.016 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:130 Resp: 3166

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

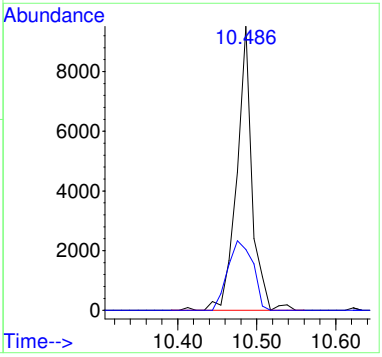


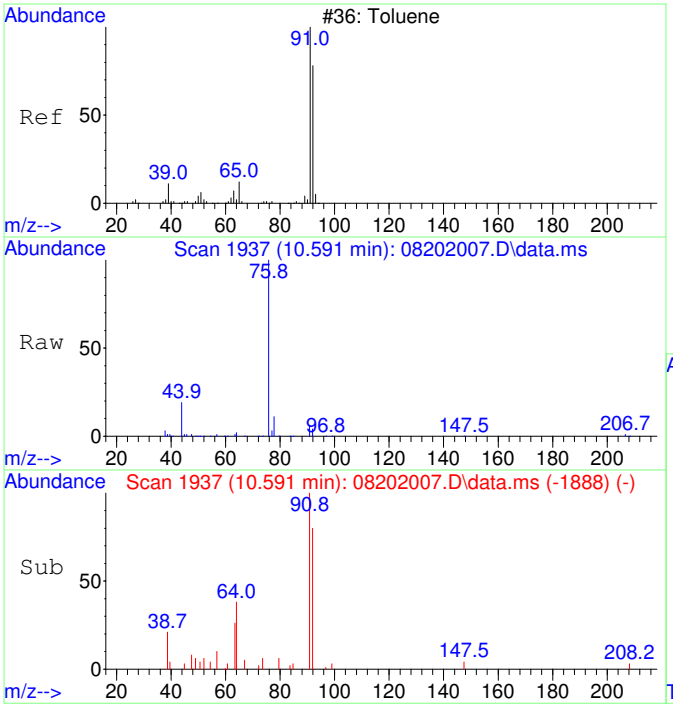


#36
Toluene-d8 SCAN
Concen: 194.45 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 98 Resp: 12748

Ion	Ratio	Lower	Upper
98	100		
100	40.3	40.0	100.0

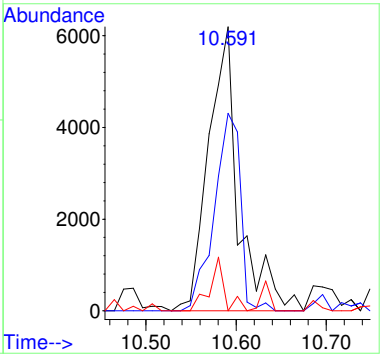


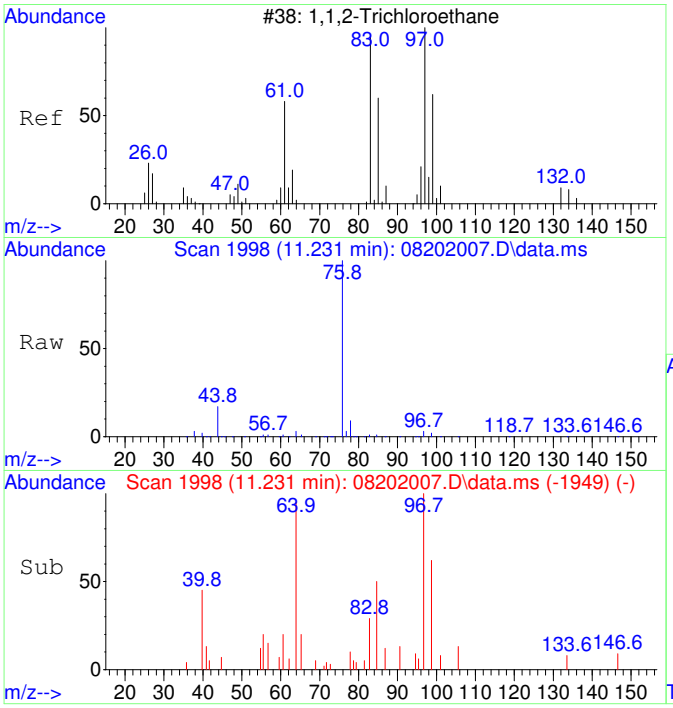


#37
Toluene SCAN
Concen: 171.17 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 14371

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

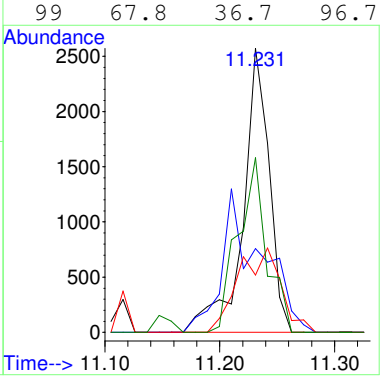


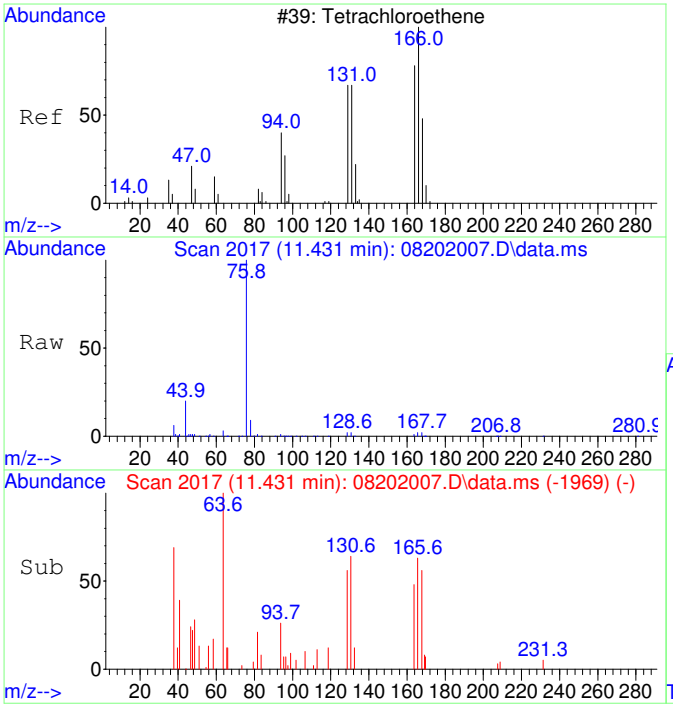


#38
1,1,2-Trichloroethane SCAN
Concen: 216.66 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 97 Resp: 4083

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

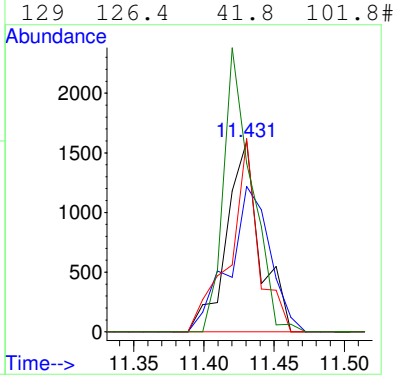


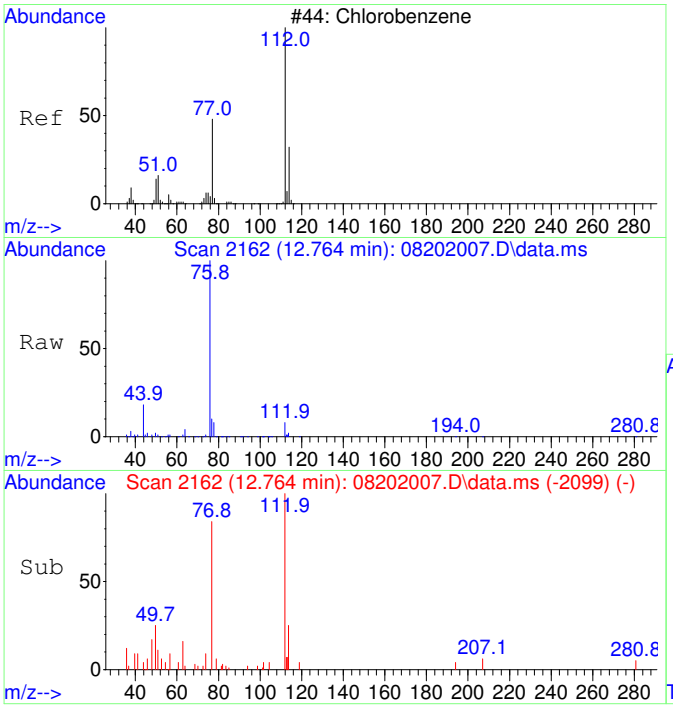


#39
Tetrachloroethene SCAN
Concen: 131.18 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:166 Resp: 2646

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

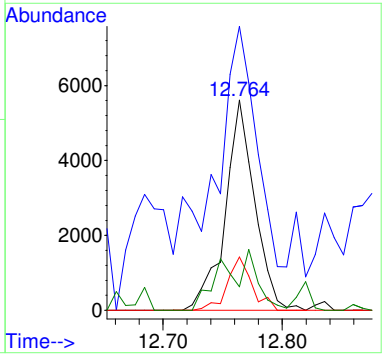


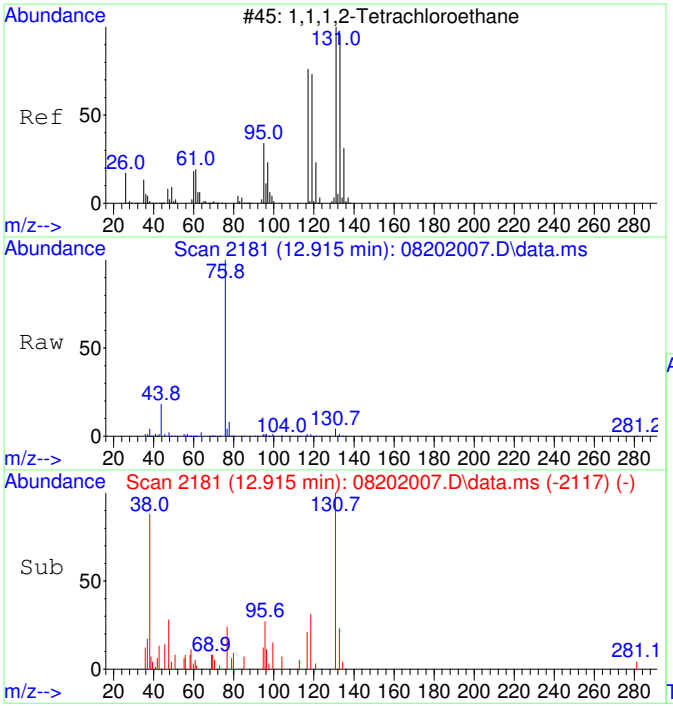


#40
Chlorobenzene SCAN
Concen: 169.04 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:112 Resp: 9698

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

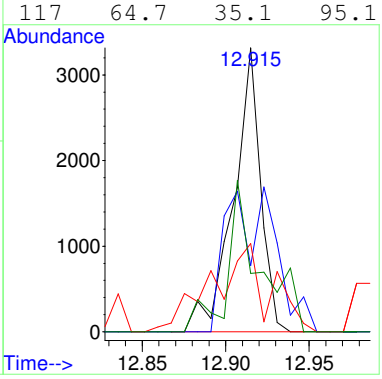


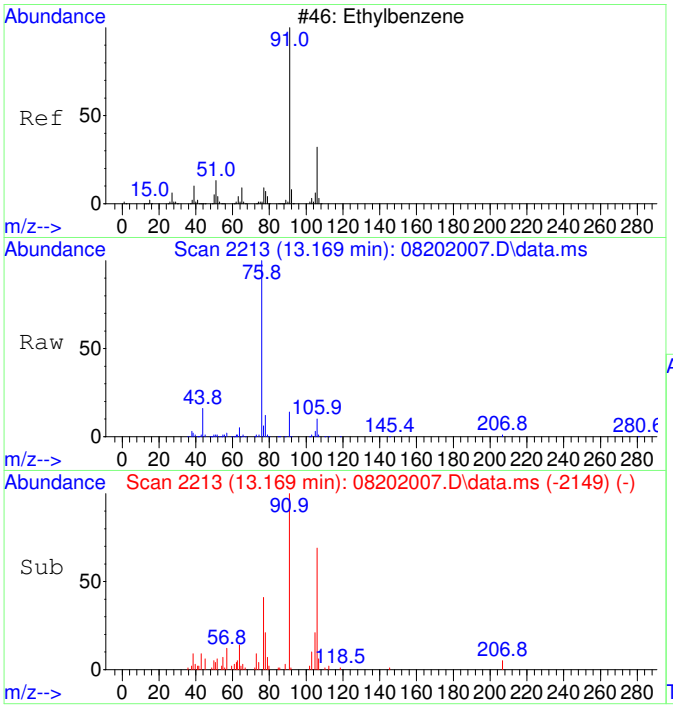


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 177.14 ug/L
RT: 12.915 min Scan# 2181
Delta R.T. 0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:131 Resp: 3761

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

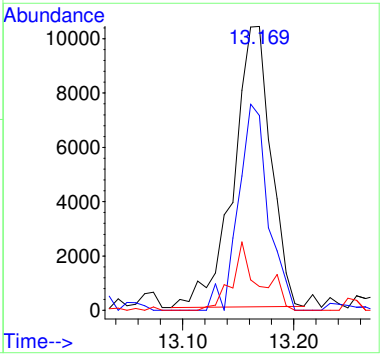


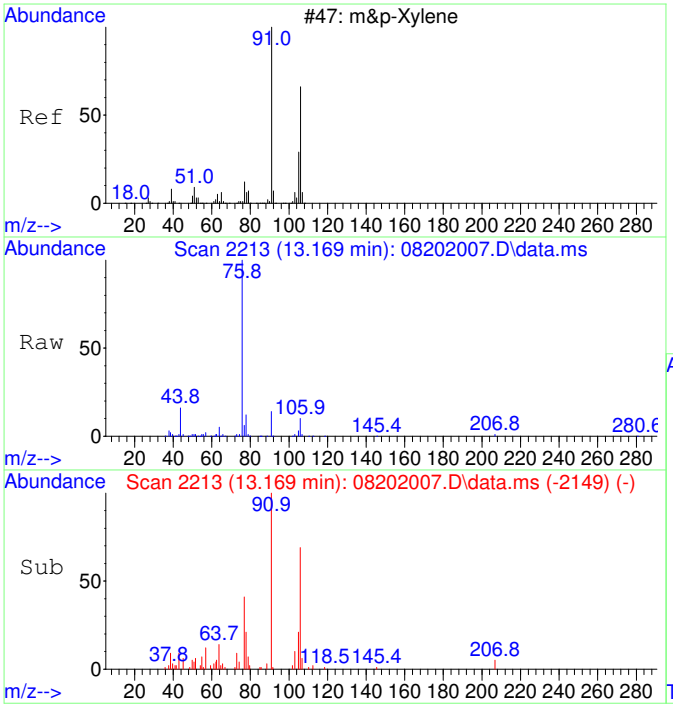


#42
Ethylbenzene SCAN
Concen: 158.20 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 24198

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

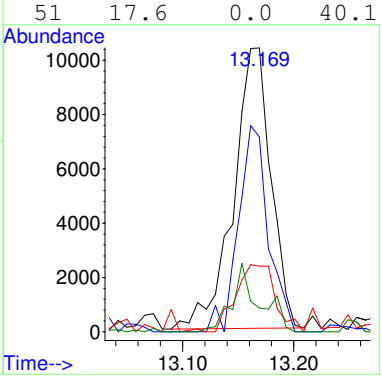


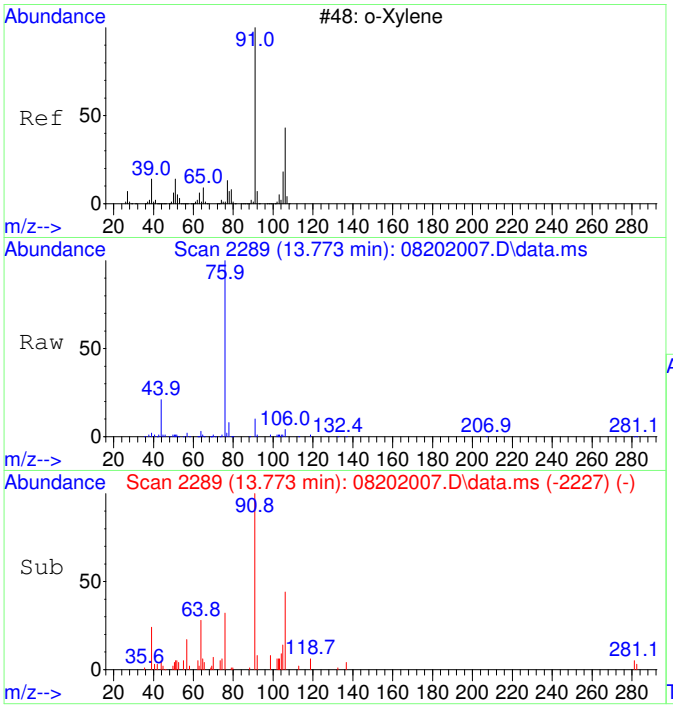


#43
m&p-Xylene SCAN
Concen: 158.20 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 24198

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

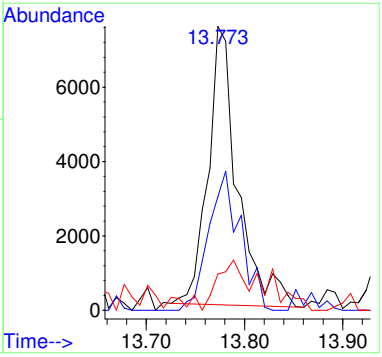


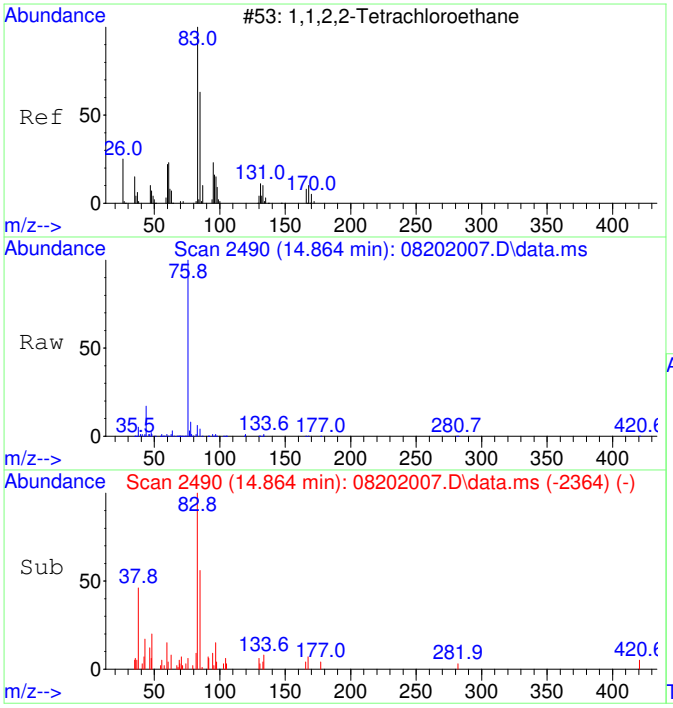


#44
o-Xylene SCAN
Concen: 190.48 ug/L
RT: 13.773 min Scan# 2289
Delta R.T. -0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 15595

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

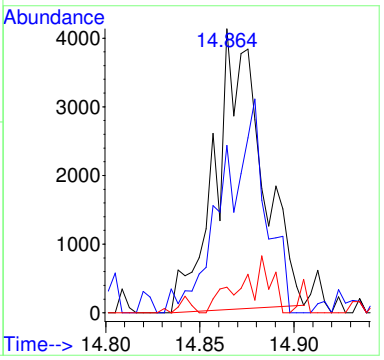


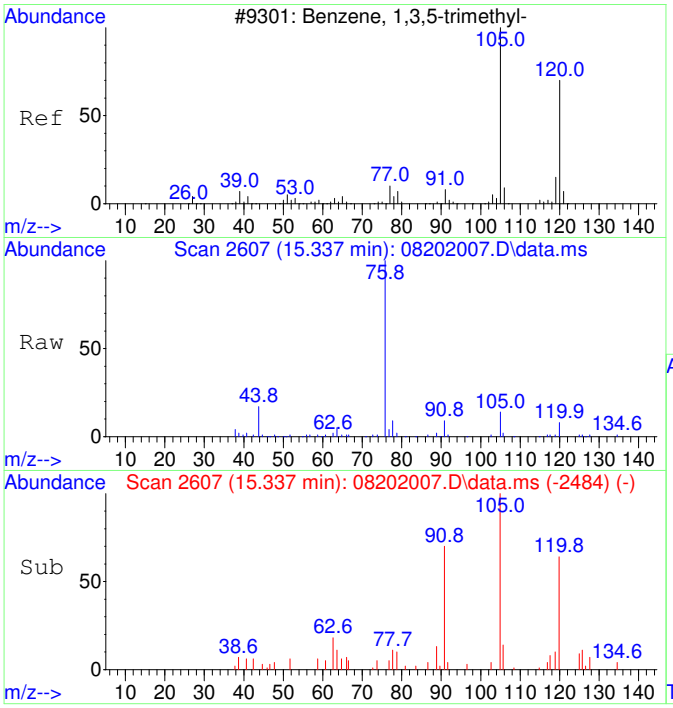


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 177.39 ug/L
RT: 14.864 min Scan# 2490
Delta R.T. -0.007 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 83 Resp: 7082

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

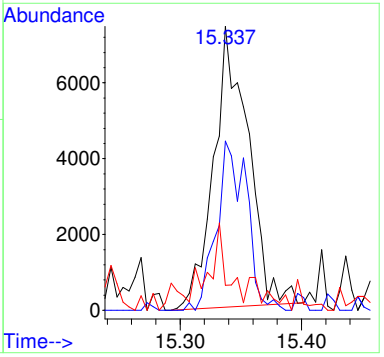


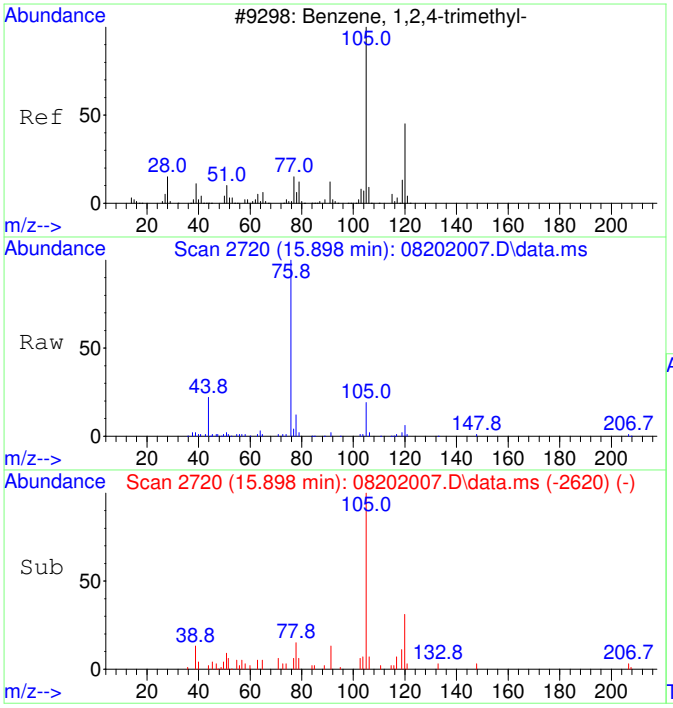


#46
1,3,5-Trimethylbenzene SCAN
Concen: 170.06 ug/L
RT: 15.337 min Scan# 2607
Delta R.T. -0.006 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:105 Resp: 14674

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

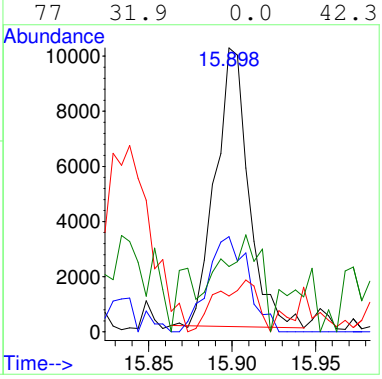


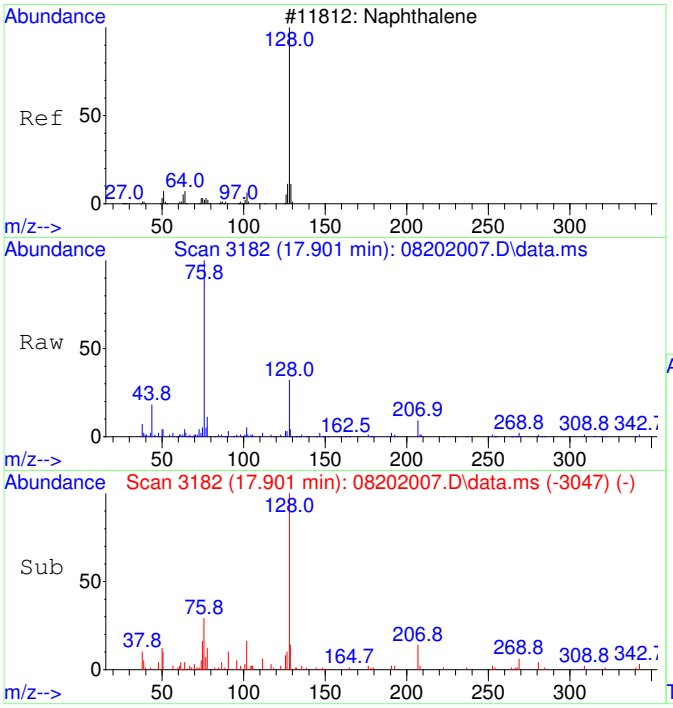


#47
1,2,4-Trimethylbenzene SCAN
Concen: 157.88 ug/L
RT: 15.898 min Scan# 2720
Delta R.T. -0.001 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:105 Resp: 13939

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

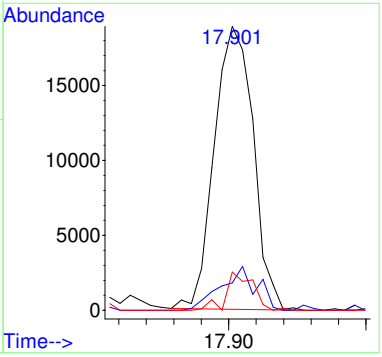




#48
Naphthalene SCAN
Concen: 138.89 ug/L
RT: 17.901 min Scan# 3182
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:128 Resp: 18555

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



Quantitation Report (QT Reviewed)

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

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

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

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

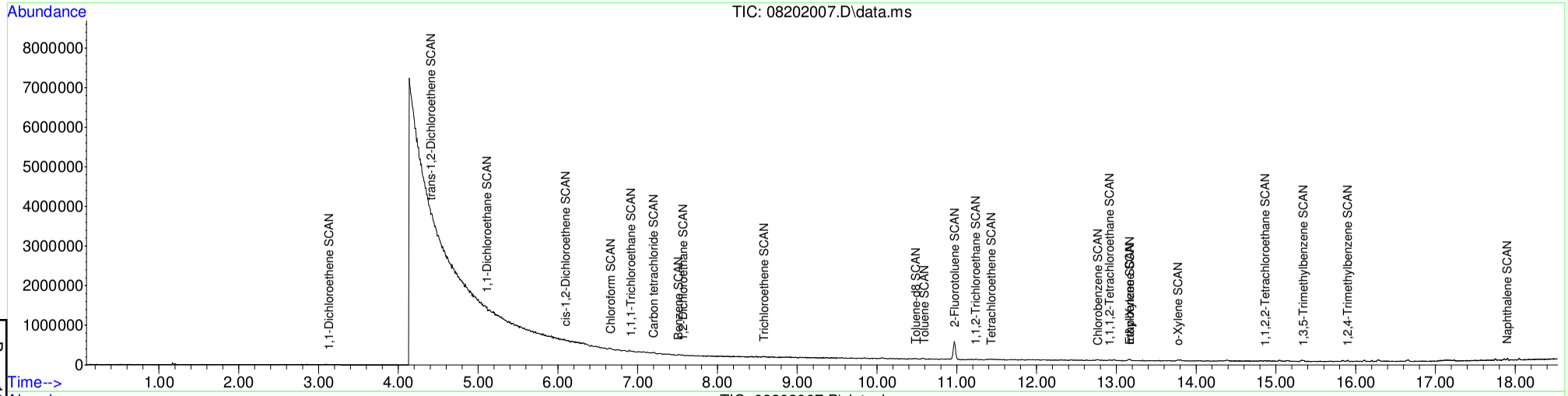
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 2-Fluorotoluene	10.970	109	687675	5000.00	ug/L		0.00
System Monitoring Compounds							
12) Toluene-d8	10.477	98	18291	135.87	ug/L		0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 2.72%#				
Target Compounds							Qvalue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

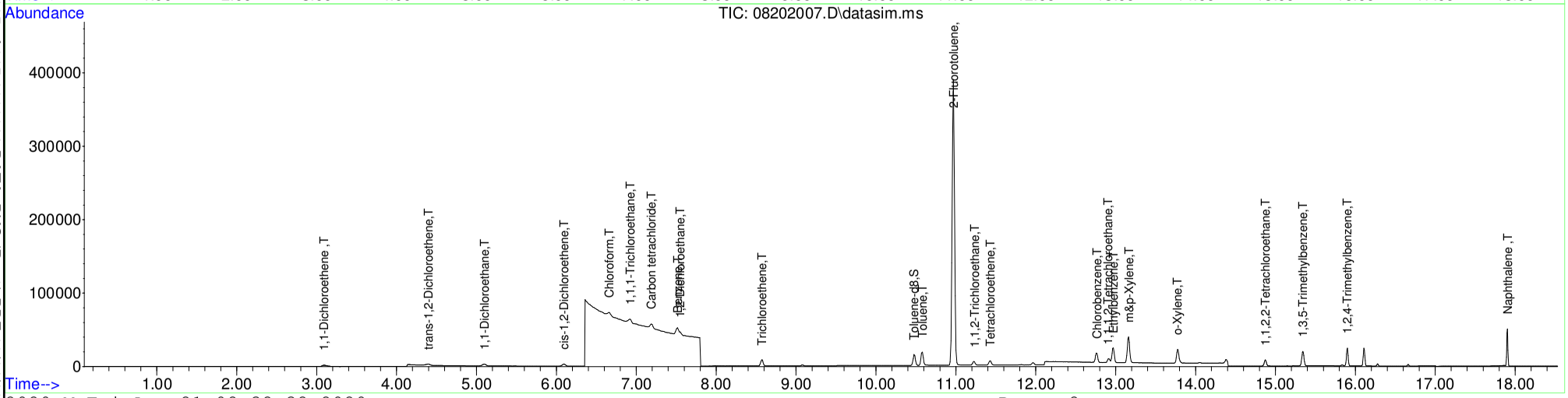
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

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

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





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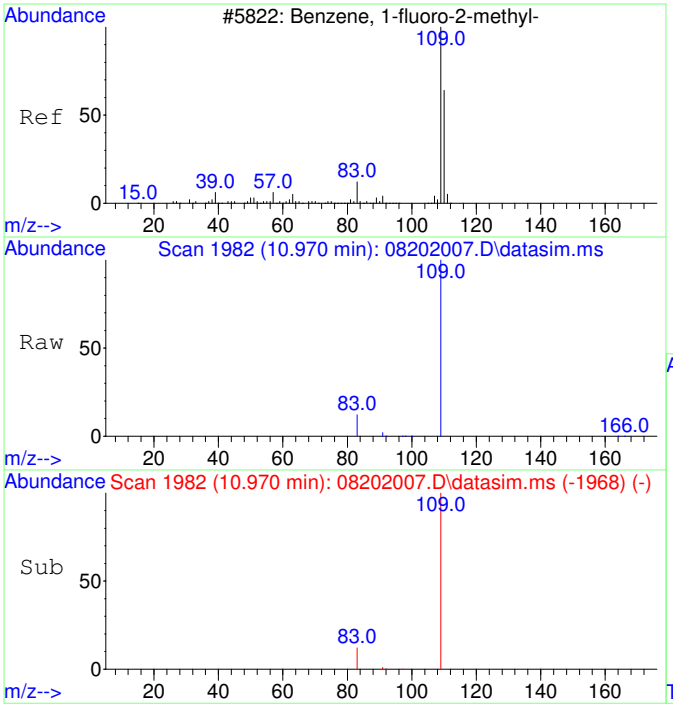
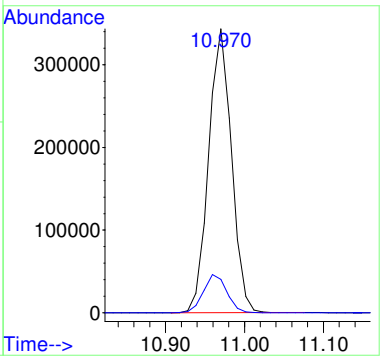
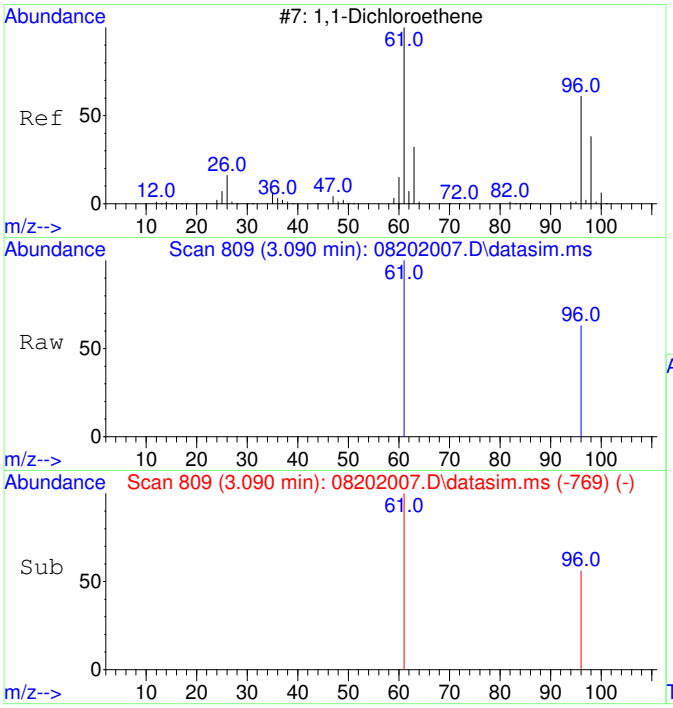


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:109 Resp: 687675

Ion	Ratio	Lower	Upper
109	100		
83	13.7	0.0	42.3

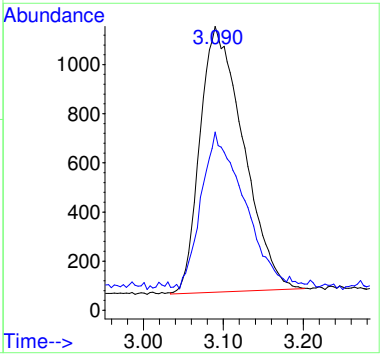


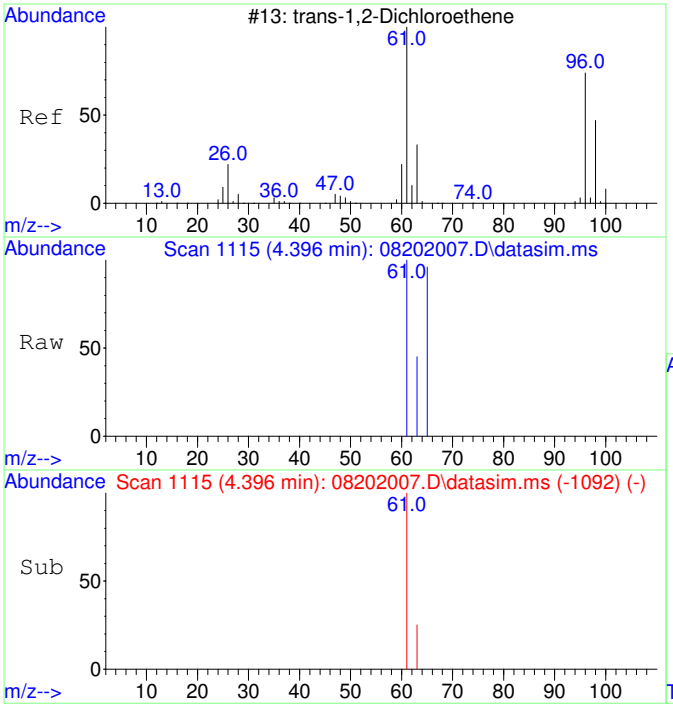


#2
1,1-Dichloroethene
Concen: 134.88 ug/L m
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 61 Resp: 4078

Ion	Ratio	Lower	Upper
61	100		
96	66.0	37.2	97.2

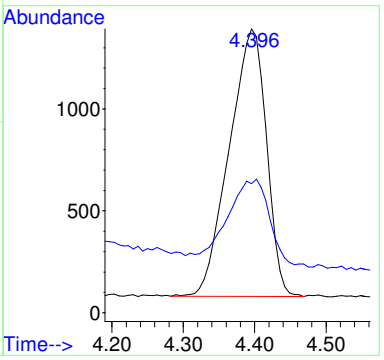


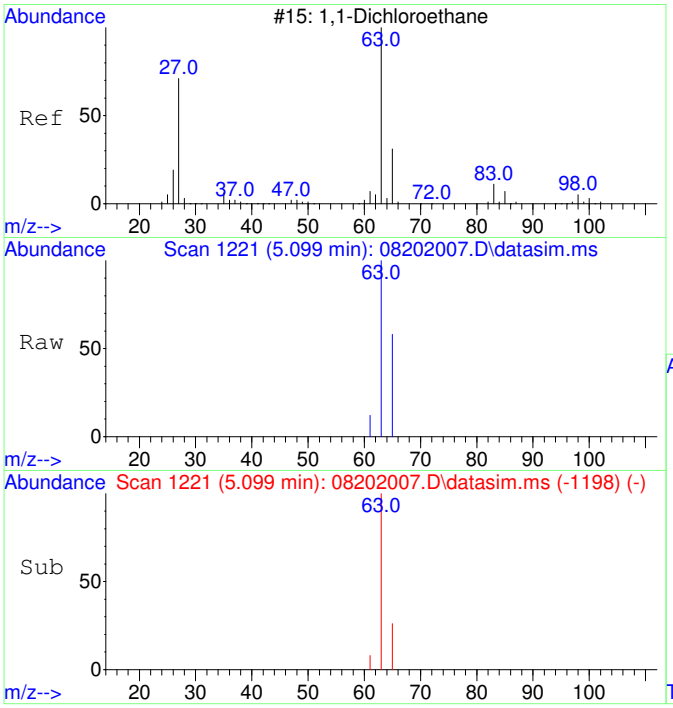


#3
trans-1,2-Dichloroethene
Concen: 149.50 ug/L
RT: 4.396 min Scan# 1115
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 61 Resp: 4743

Ion	Ratio	Lower	Upper
61	100		
63	39.2	2.4	62.4

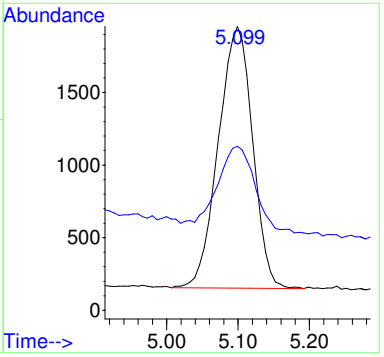


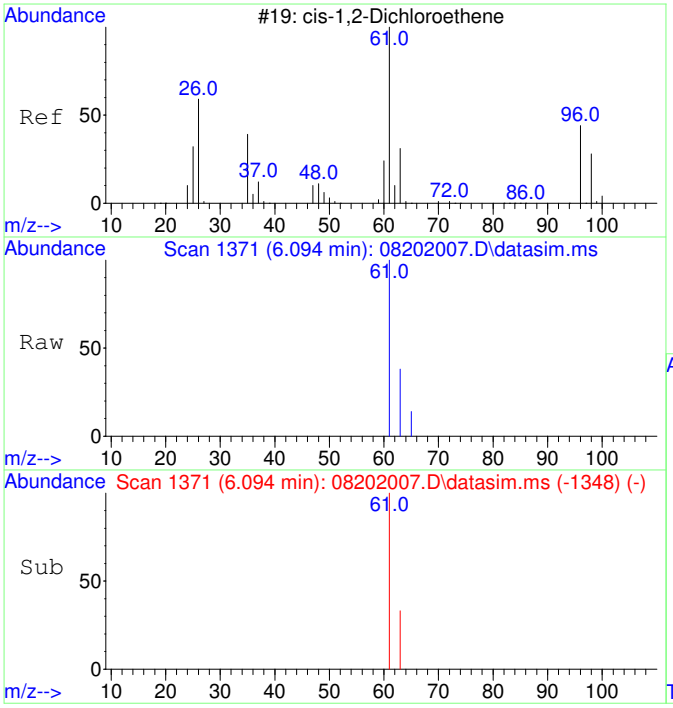


#4
1,1-Dichloroethane
Concen: 152.35 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 63 Resp: 6017

Ion	Ratio	Lower	Upper
63	100		
65	39.7	1.8	61.8

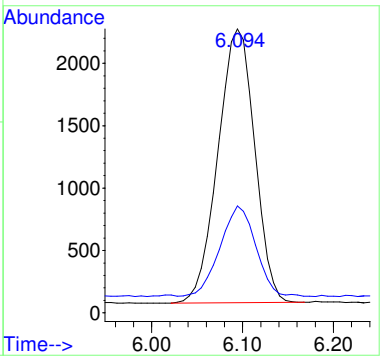


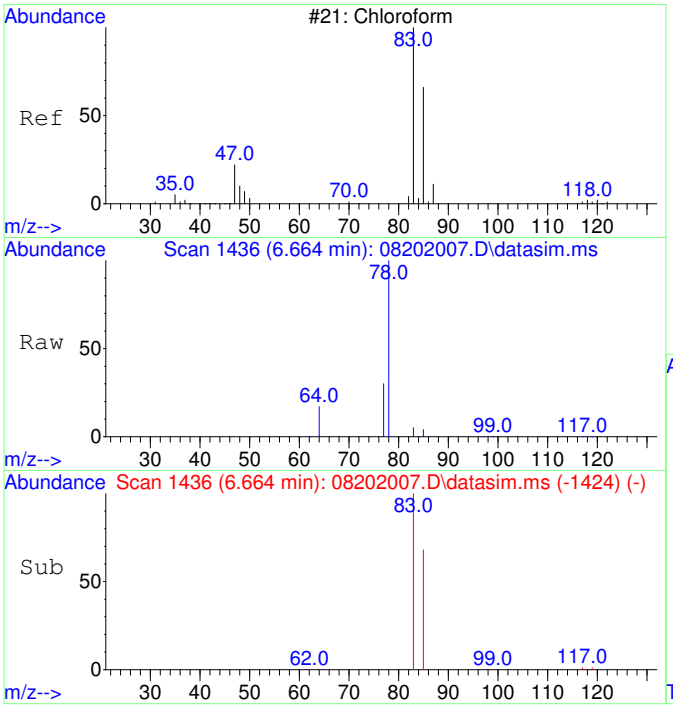


#5
cis-1,2-Dichloroethene
Concen: 148.27 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 61 Resp: 6181

Ion	Ratio	Lower	Upper
61	100		
63	32.0	2.5	62.5

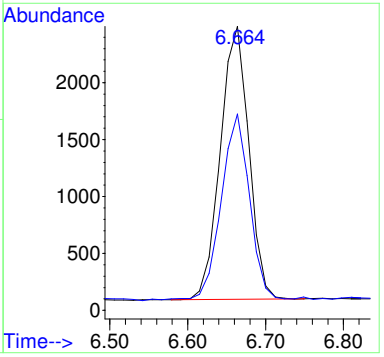


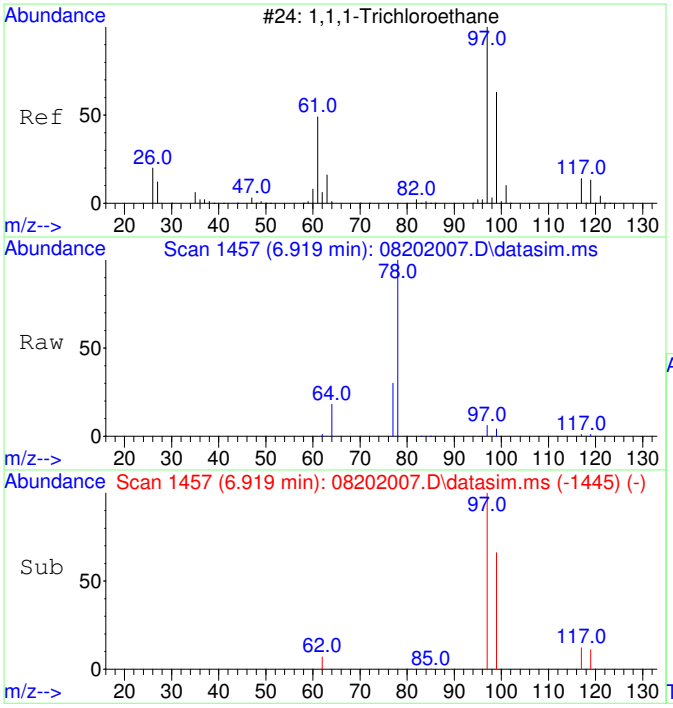


#6
Chloroform
Concen: 142.98 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 83 Resp: 6101

Ion	Ratio	Lower	Upper
83	100		
85	69.0	35.1	95.1

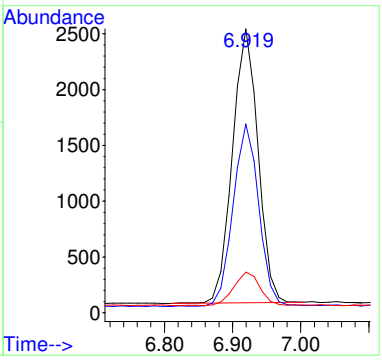


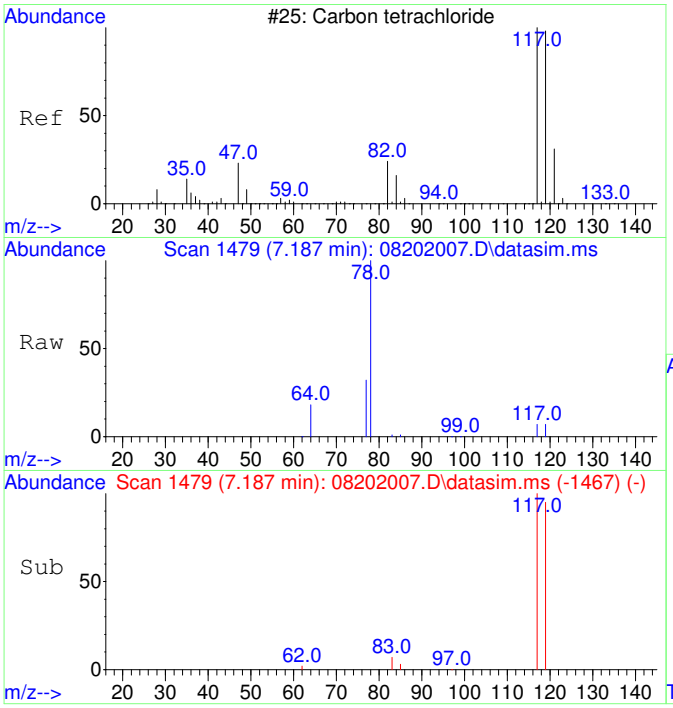


#7
1,1,1-Trichloroethane
Concen: 137.55 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 97 Resp: 6374

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

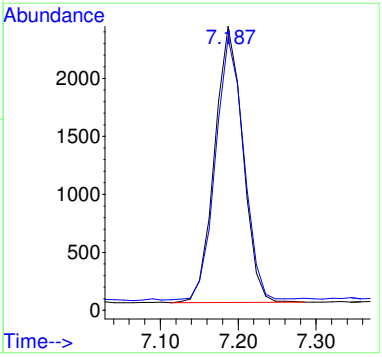


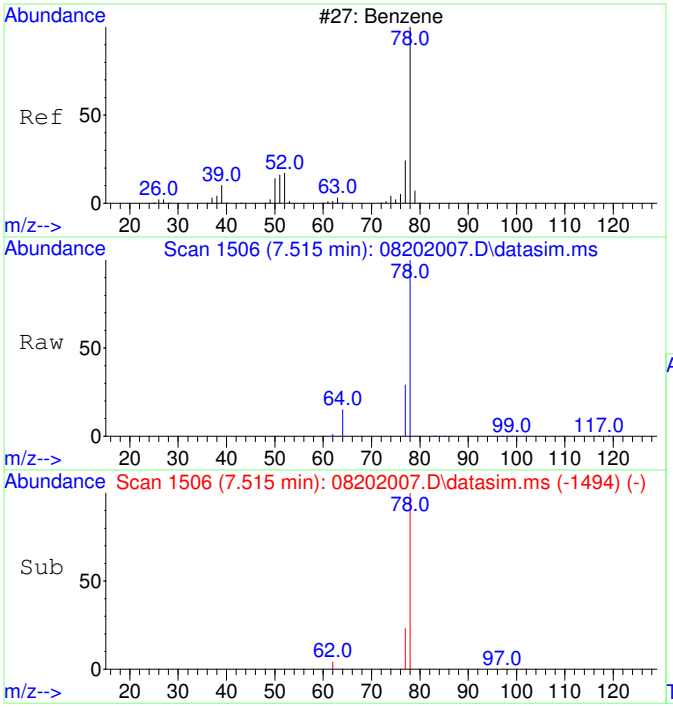


#8
Carbon tetrachloride
Concen: 137.06 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:117 Resp: 5978

Ion	Ratio	Lower	Upper
117	100		
119	94.6	66.4	126.4

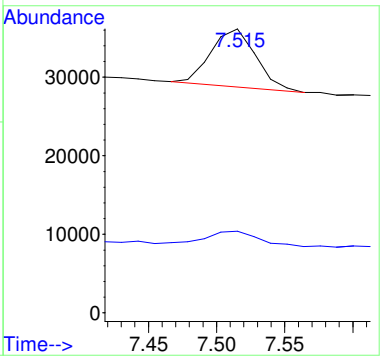


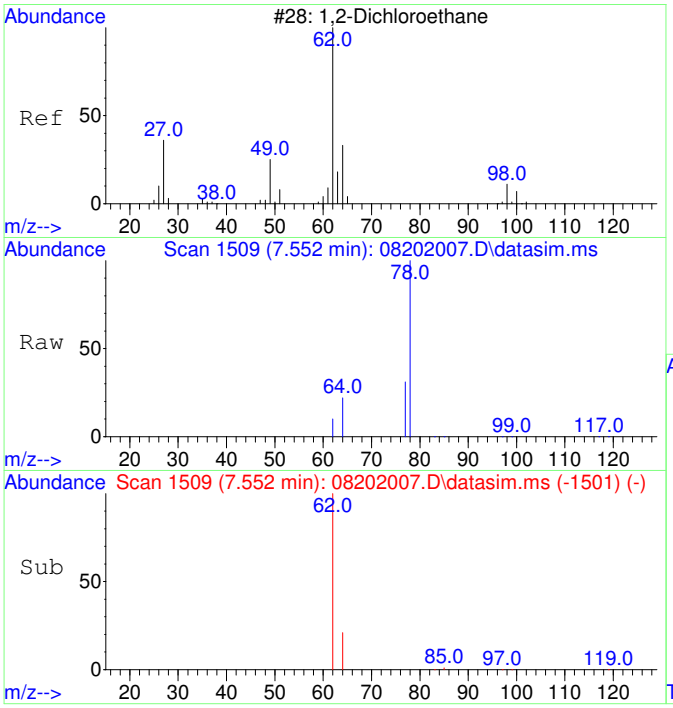


#9
Benzene
Concen: 140.33 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 78 Resp: 16396

Ion	Ratio	Lower	Upper
78	100		
77	35.6	0.0	53.2

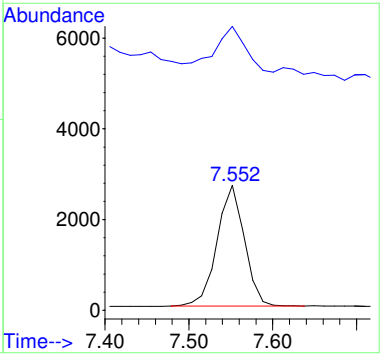


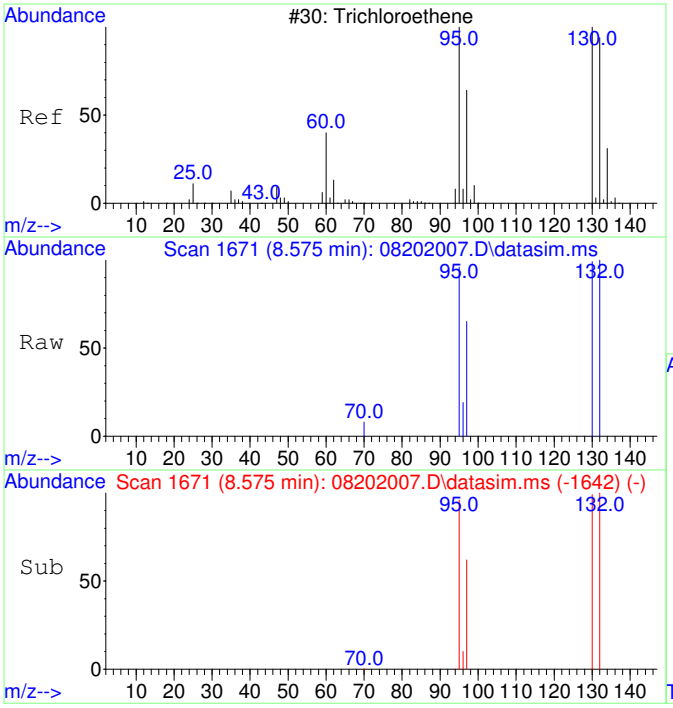


#10
1,2-Dichloroethane
Concen: 144.21 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 62 Resp: 6015

Ion	Ratio	Lower	Upper
62	100		
64	43.6	2.3	62.3

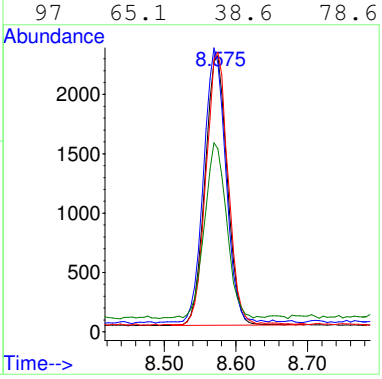


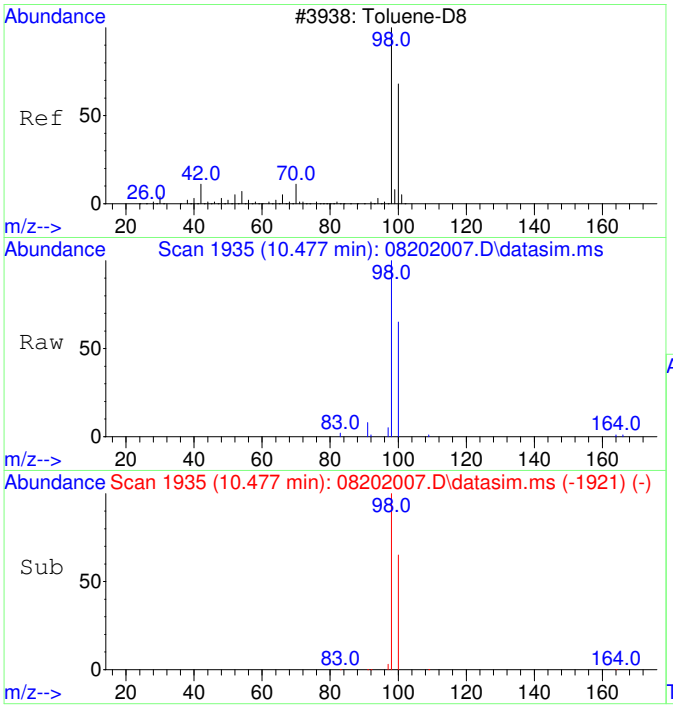


#11
Trichloroethene
Concen: 138.83 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:130 Resp: 4884

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

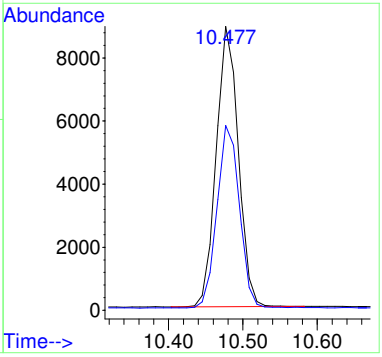


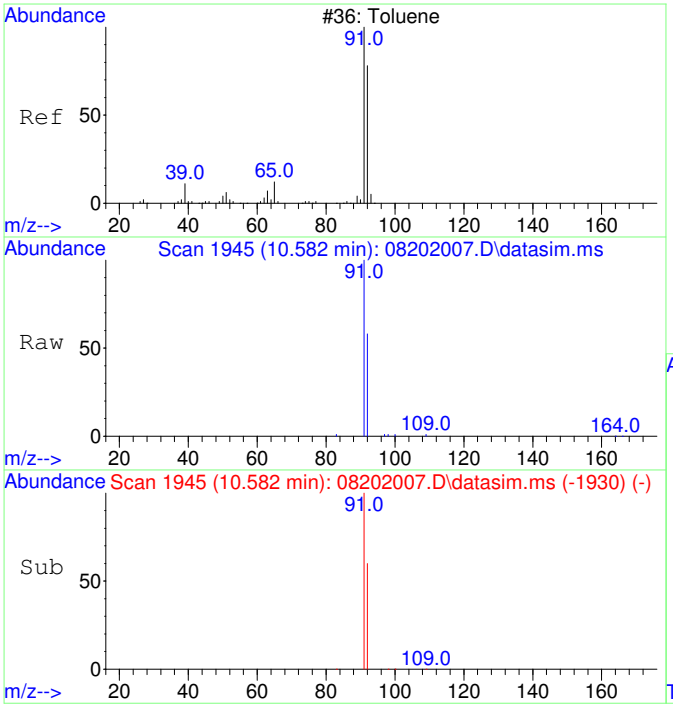


#12
Toluene-d8
Concen: 135.87 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 98 Resp: 18291

Ion	Ratio	Lower	Upper
98	100		
100	65.9	37.1	97.1

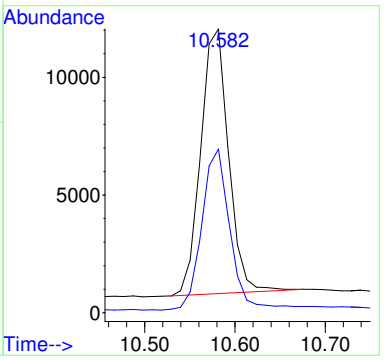


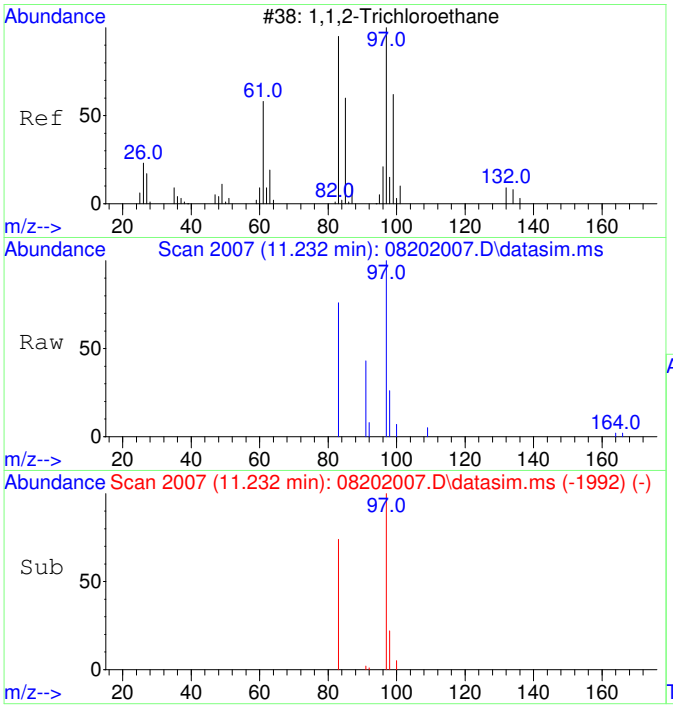


#13
Toluene
Concen: 141.38 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 24264

Ion	Ratio	Lower	Upper
91	100		
92	61.5	29.9	89.9

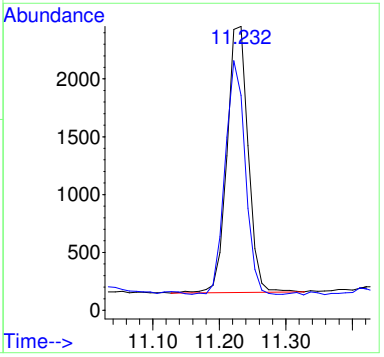


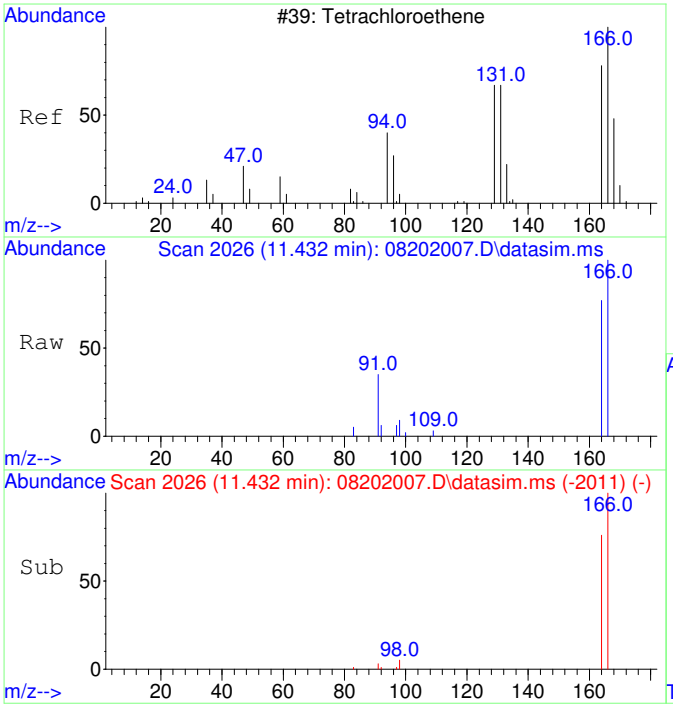


#14
1,1,2-Trichloroethane
Concen: 135.38 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 97 Resp: 5063

Ion	Ratio	Lower	Upper
97	100		
83	83.5	51.2	111.2

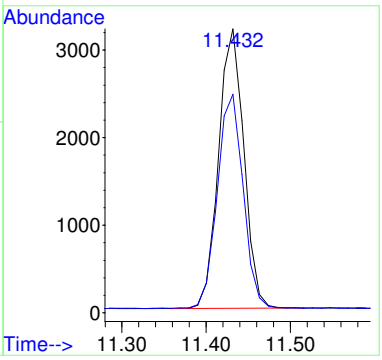


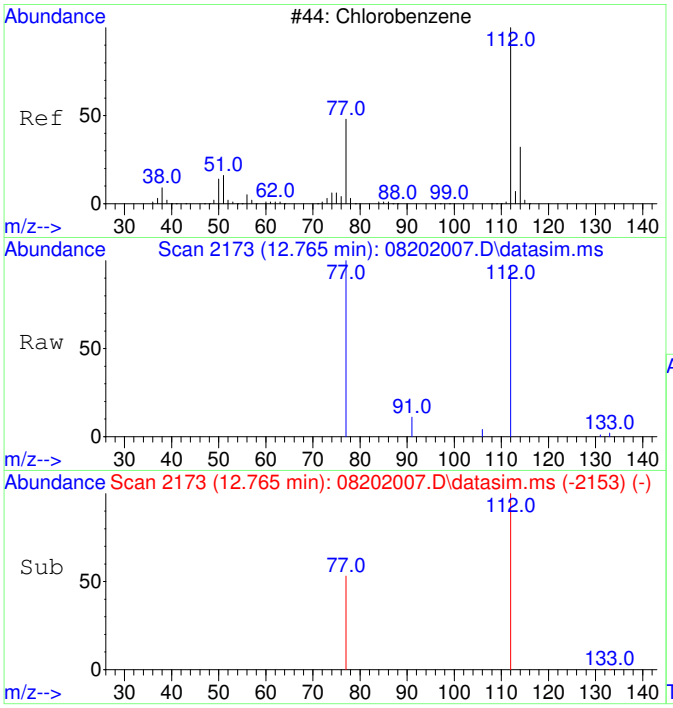


#15
Tetrachloroethene
Concen: 133.89 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:166 Resp: 6650

Ion	Ratio	Lower	Upper
166	100		
164	78.5	47.8	107.8

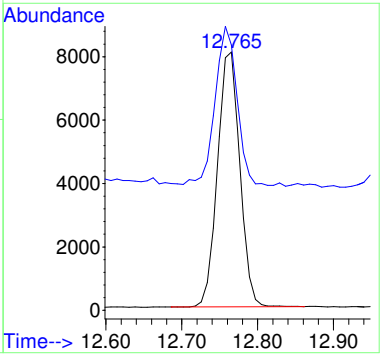


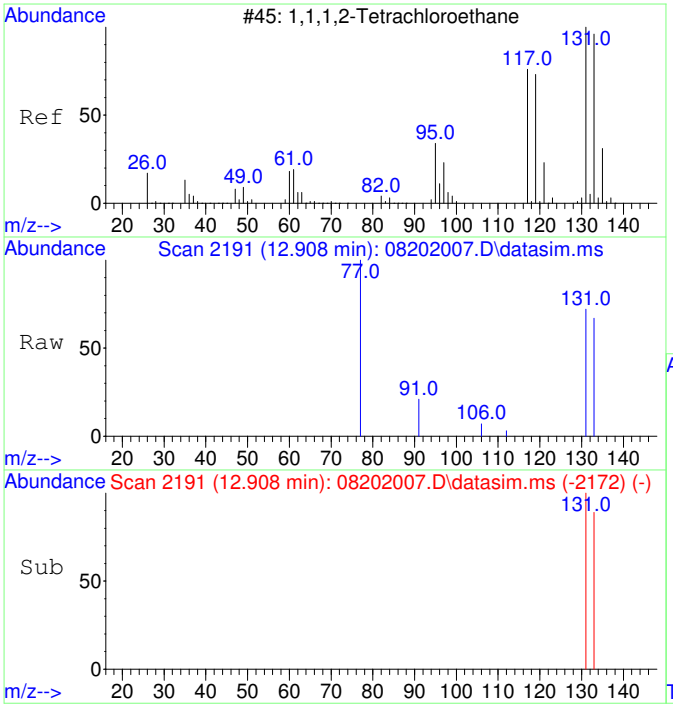


#16
Chlorobenzene
Concen: 133.98 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. 0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:112 Resp: 16465

Ion	Ratio	Lower	Upper
112	100		
77	60.1	23.6	83.6

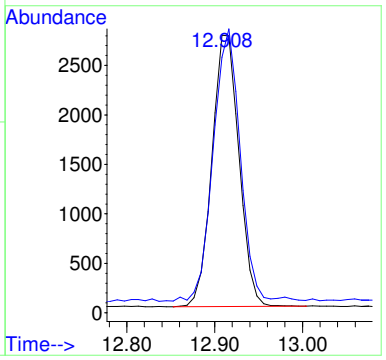


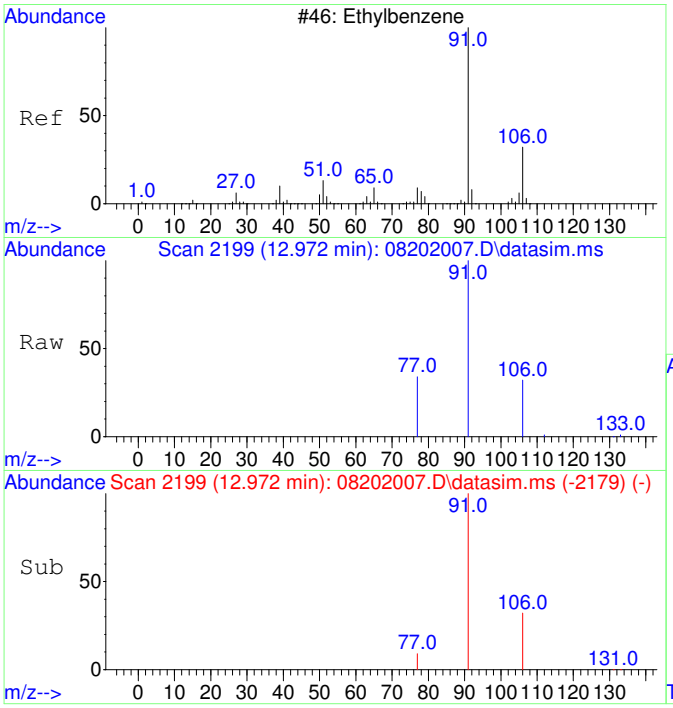


#17
1,1,1,2-Tetrachloroethane
Concen: 133.44 ug/L
RT: 12.908 min Scan# 2191
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:131 Resp: 5876

Ion	Ratio	Lower	Upper
131	100		
133	97.8	66.3	126.3

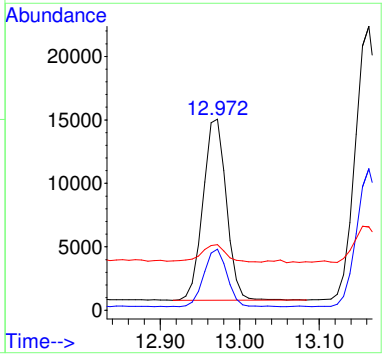


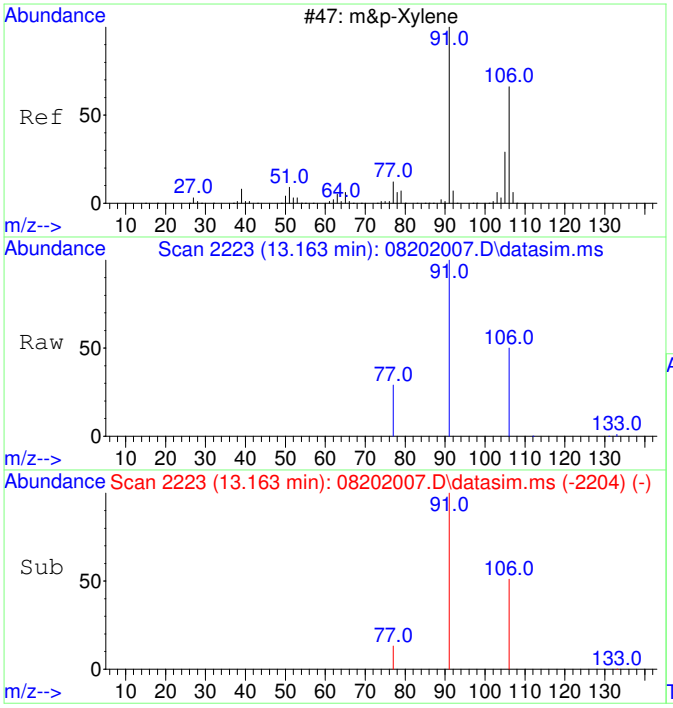


#18
Ethylbenzene
Concen: 139.19 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 29078

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

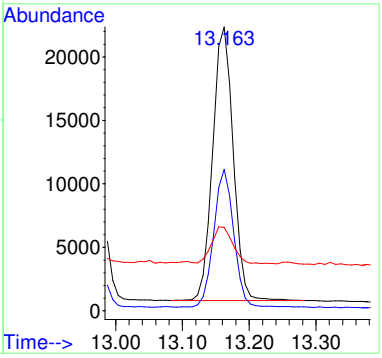


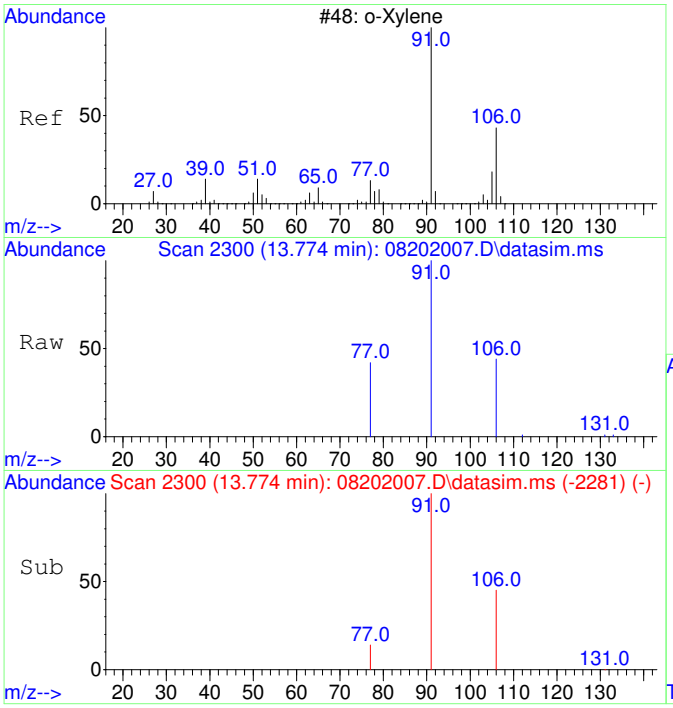


#19
m&p-Xylene
Concen: 281.41 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 45947

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

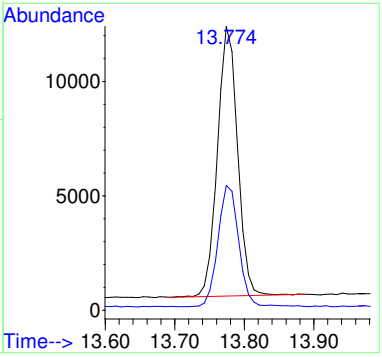


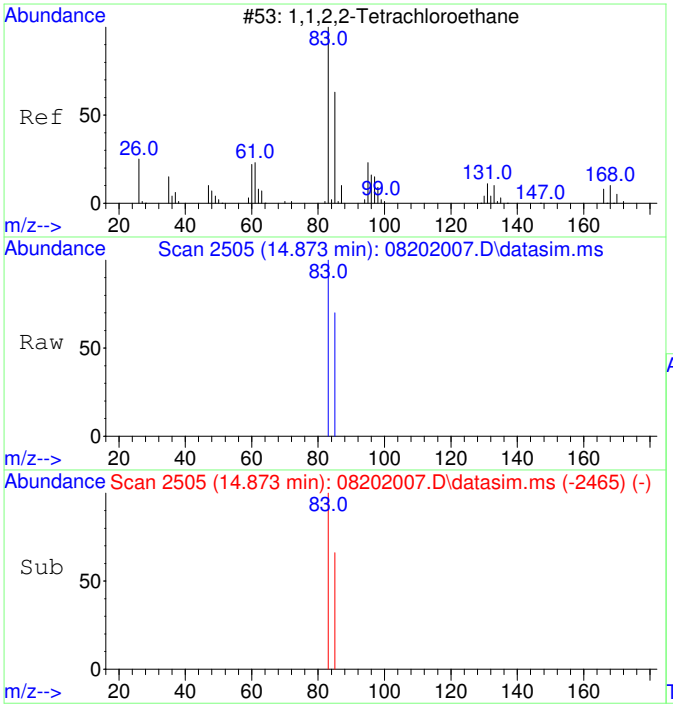


#20
o-Xylene
Concen: 135.47 ug/L
RT: 13.774 min Scan# 2300
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 23631

Ion	Ratio	Lower	Upper
91	100		
106	46.7	19.2	79.2

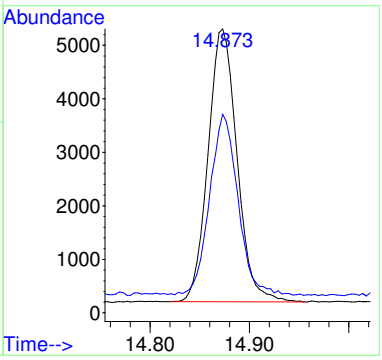


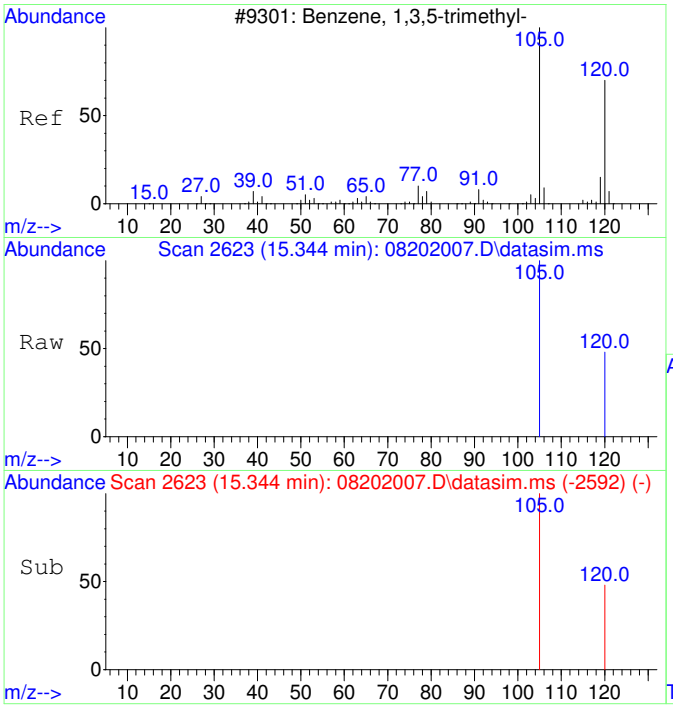


#21
1,1,2,2-Tetrachloroethane
Concen: 133.61 ug/L
RT: 14.873 min Scan# 2505
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 83 Resp: 10329

Ion	Ratio	Lower	Upper
83	100		
85	64.3	34.8	94.8

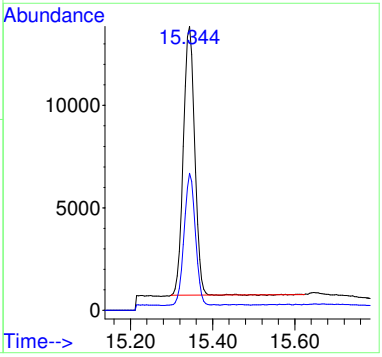


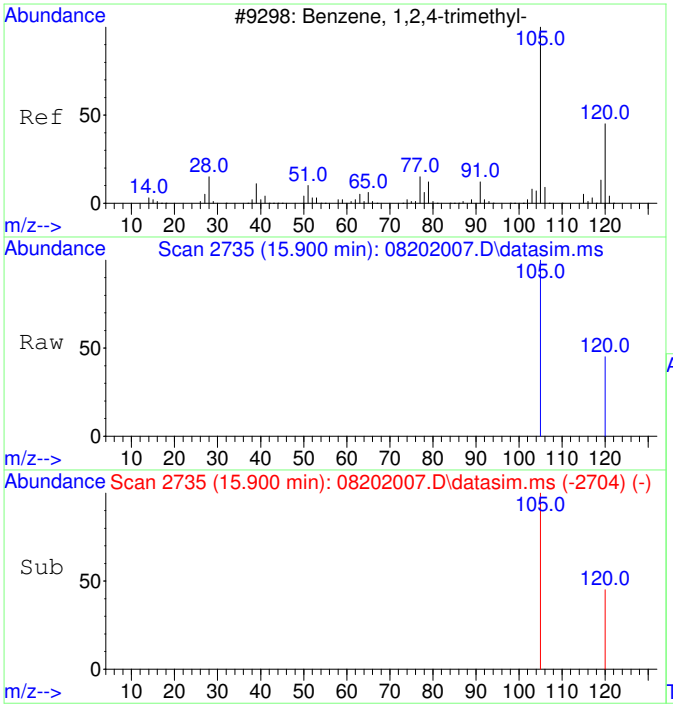


#22
1,3,5-Trimethylbenzene
Concen: 134.37 ug/L
RT: 15.344 min Scan# 2623
Delta R.T. -0.001 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:105 Resp: 24949

Ion	Ratio	Lower	Upper
105	100		
120	48.8	21.1	81.1

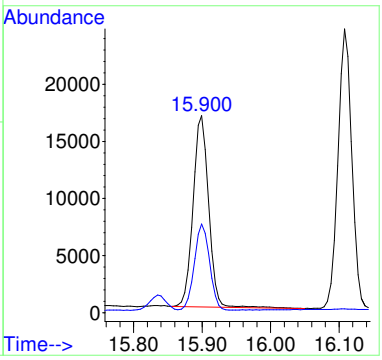


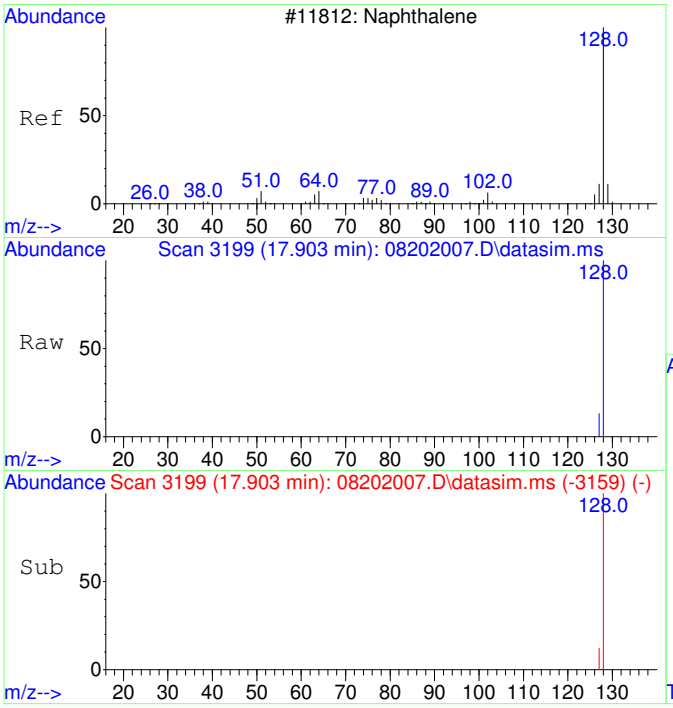


#23
1,2,4-Trimethylbenzene
Concen: 137.33 ug/L
RT: 15.900 min Scan# 2735
Delta R.T. 0.004 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:105 Resp: 26485

Ion	Ratio	Lower	Upper
105	100		
120	43.4	17.2	77.2

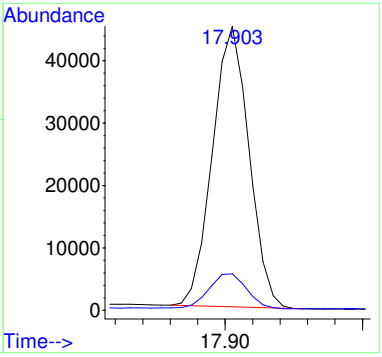


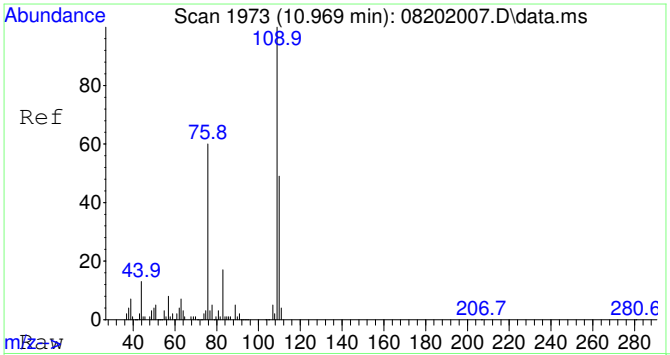


#24
Naphthalene
Concen: 135.77 ug/L
RT: 17.903 min Scan# 3199
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:128 Resp: 41384

Ion	Ratio	Lower	Upper
128	100		
127	12.6	0.0	42.5

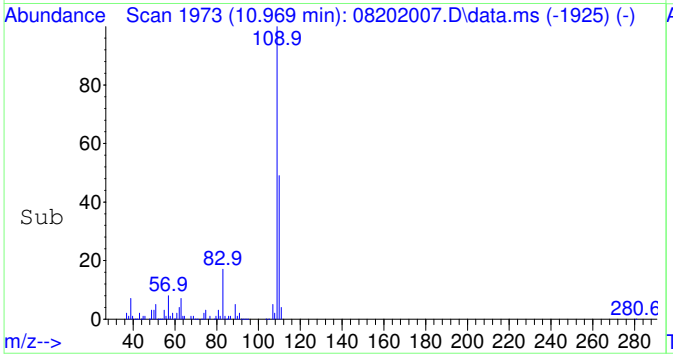


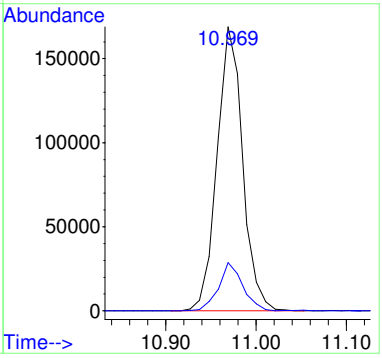


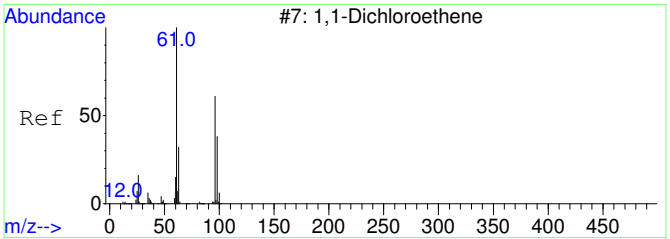
#25
2-Fluorotoluene SCAN
Concen: 4966.84 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:109 Resp: 332955

Ion	Ratio	Lower	Upper
109	100		
83	15.9	0.0	43.8



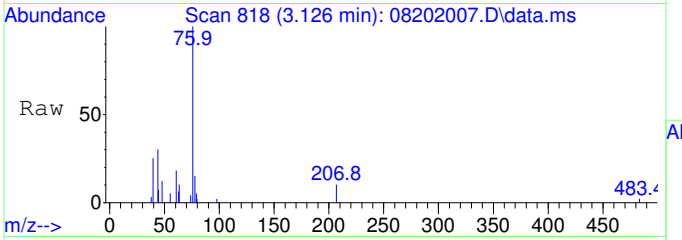


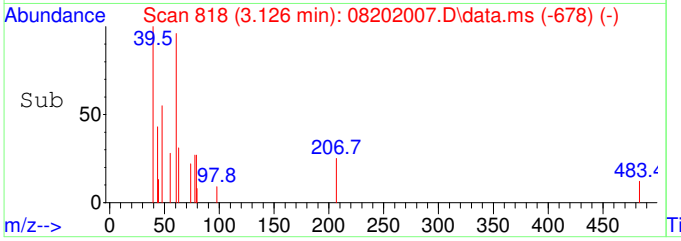


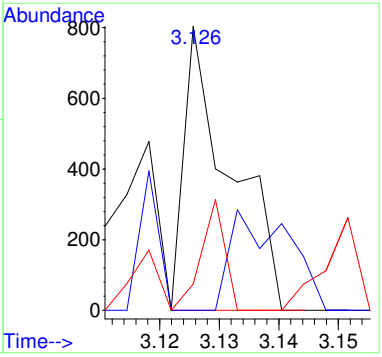
#26
1,1-Dichloroethene SCAN
Concen: 30.49 ug/L
RT: 3.126 min Scan# 818
Delta R.T. 0.019 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

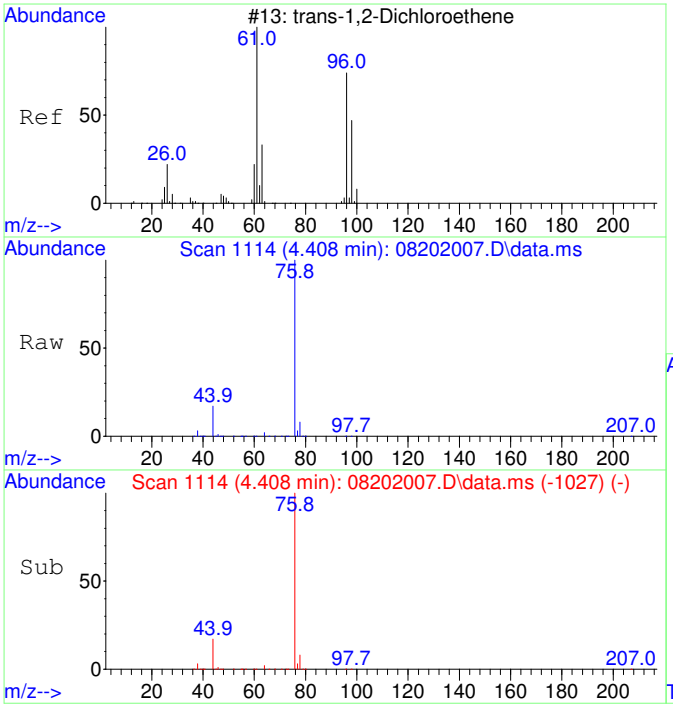
Tgt Ion: 61 Resp: 434

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





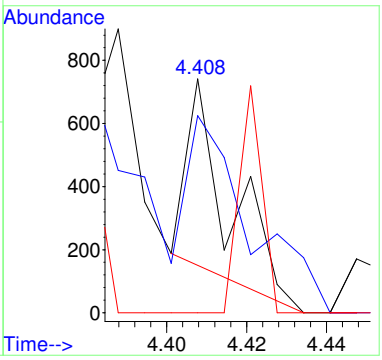


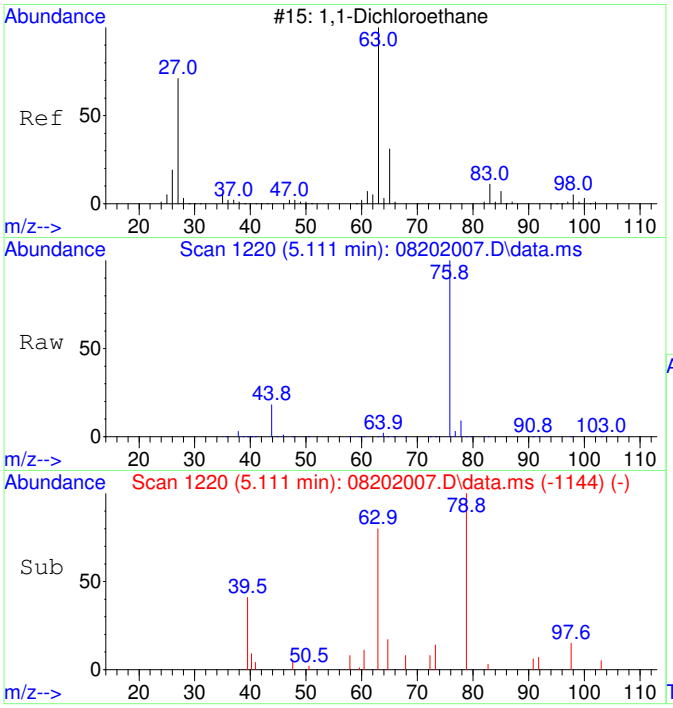


#27
trans-1,2-Dichloroethene SCAN
Concen: 22.42 ug/L
RT: 4.408 min Scan# 1114
Delta R.T. 0.007 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 61 Resp: 395

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

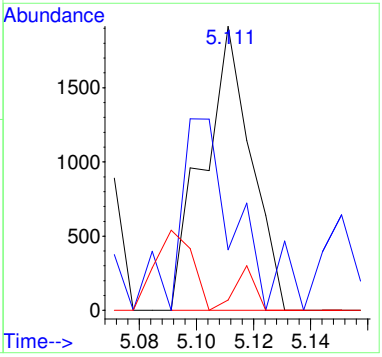


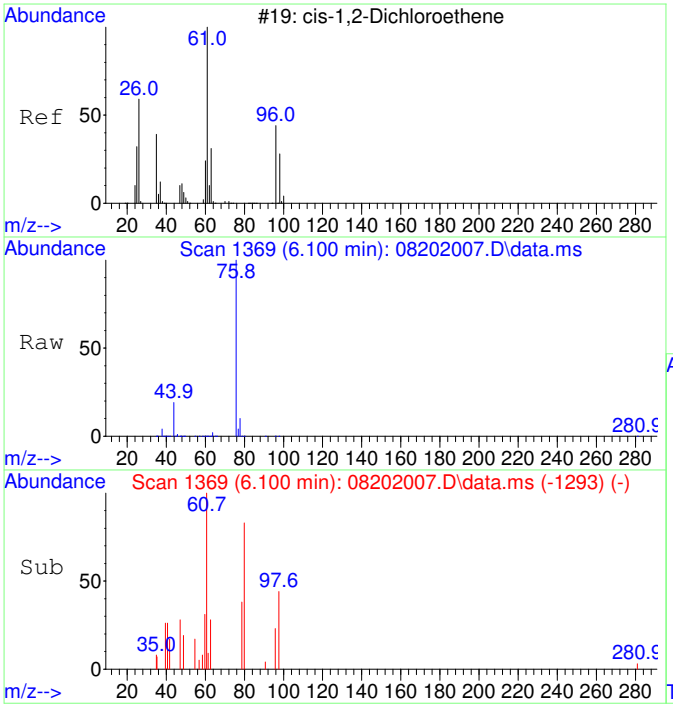


#28
1,1-Dichloroethane SCAN
Concen: 109.38 ug/L
RT: 5.111 min Scan# 1220
Delta R.T. 0.007 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 63 Resp: 2230

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

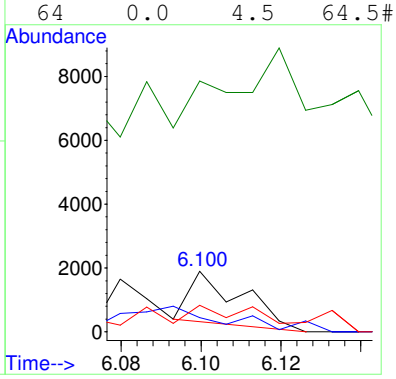


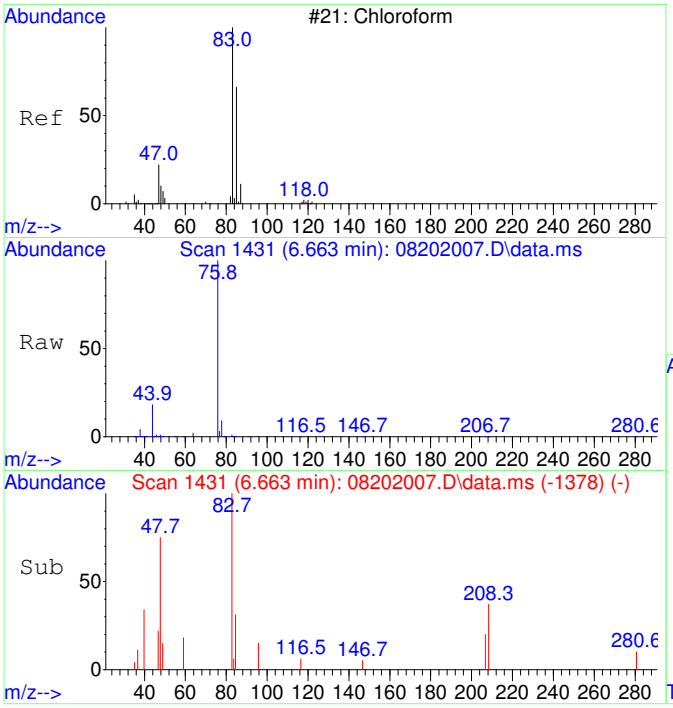


#29
cis-1,2-Dichloroethene SCAN
Concen: 63.68 ug/L
RT: 6.100 min Scan# 1369
Delta R.T. 0.007 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 61 Resp: 1391

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

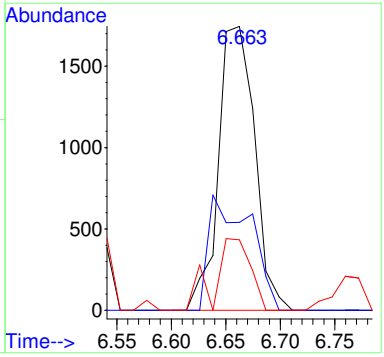


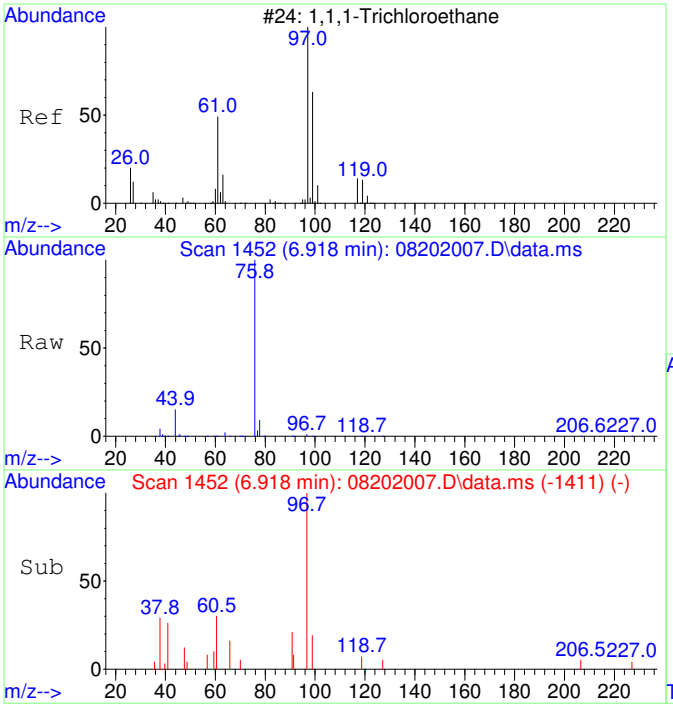


#30
Chloroform SCAN
Concen: 171.15 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 83 Resp: 4055

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

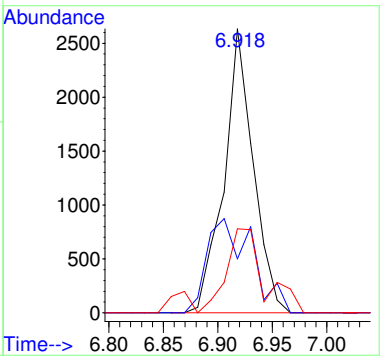


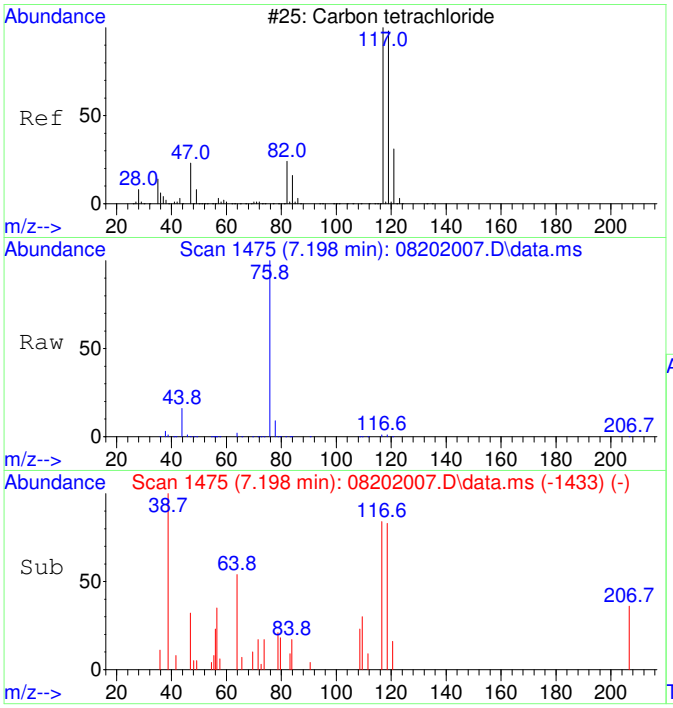


#31
1,1,1-Trichloroethane SCAN
Concen: 228.30 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 97 Resp: 4929

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

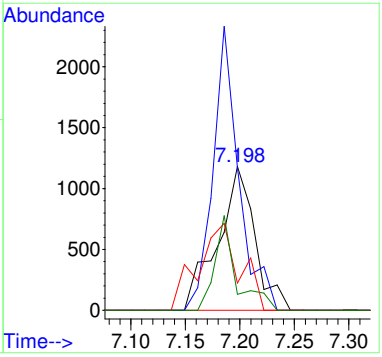


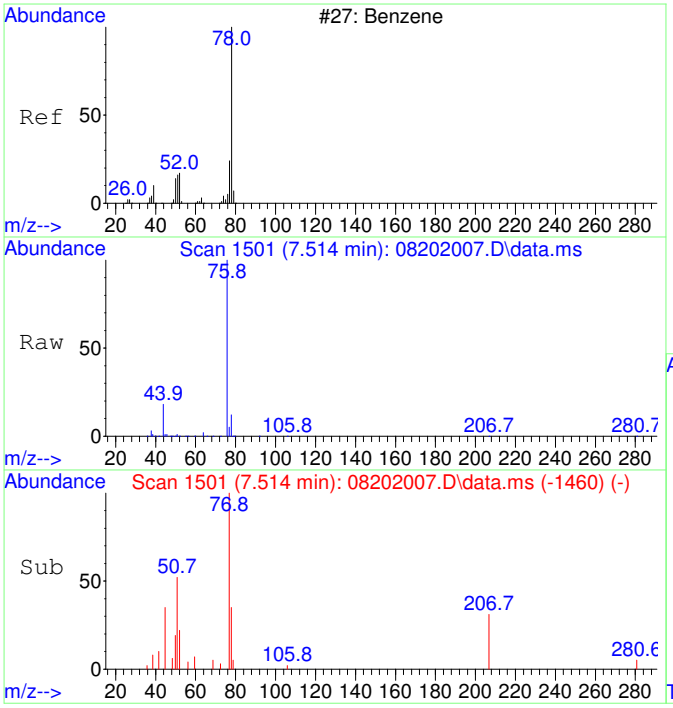


#32
Carbon tetrachloride SCAN
Concen: 124.33 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:117 Resp: 2800

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

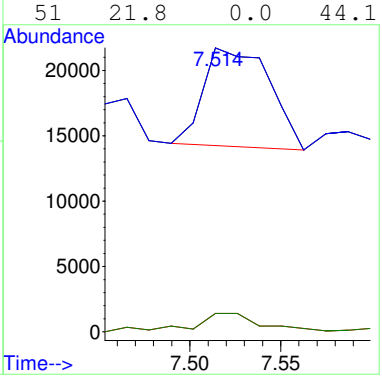


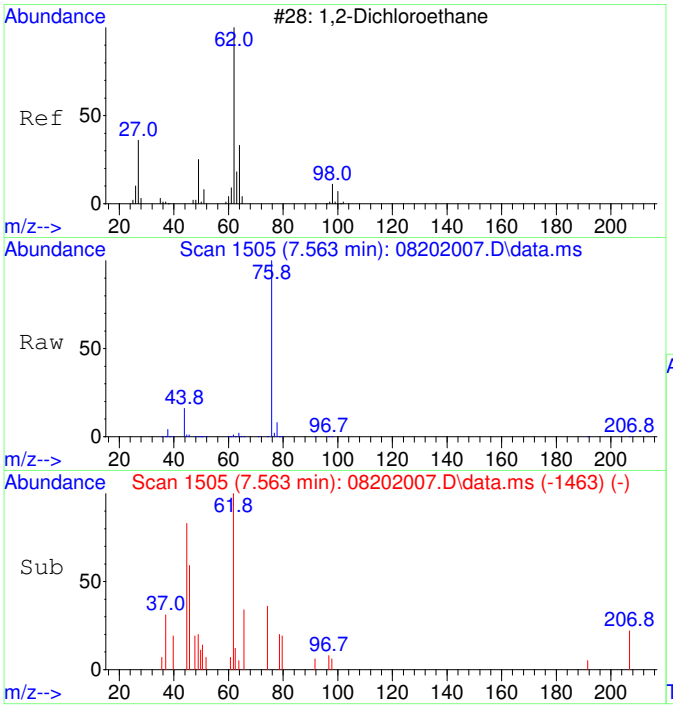


#33
Benzene SCAN
Concen: 317.45 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 78 Resp: 18871

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

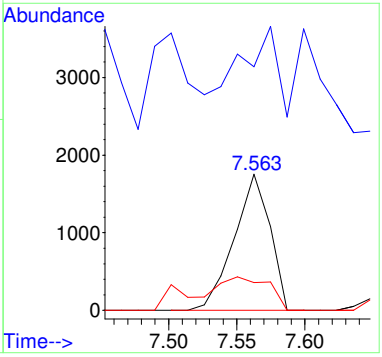


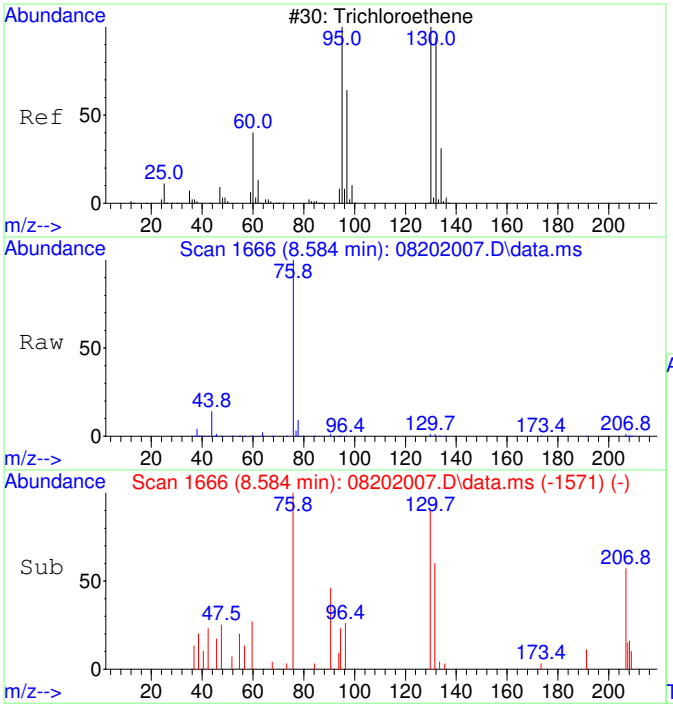


#34
1,2-Dichloroethane SCAN
Concen: 146.10 ug/L
RT: 7.563 min Scan# 1505
Delta R.T. 0.012 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 62 Resp: 3207

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

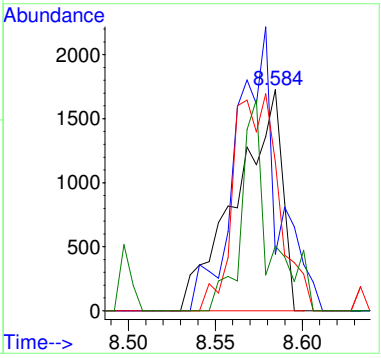


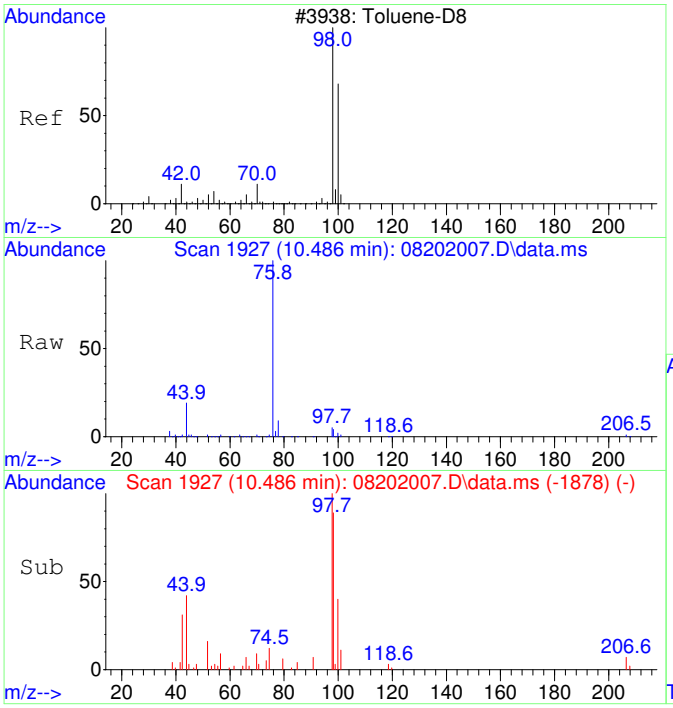


#35
Trichloroethene SCAN
Concen: 193.80 ug/L
RT: 8.584 min Scan# 1666
Delta R.T. 0.016 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:130 Resp: 3166

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

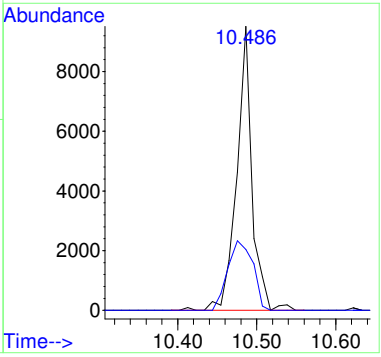


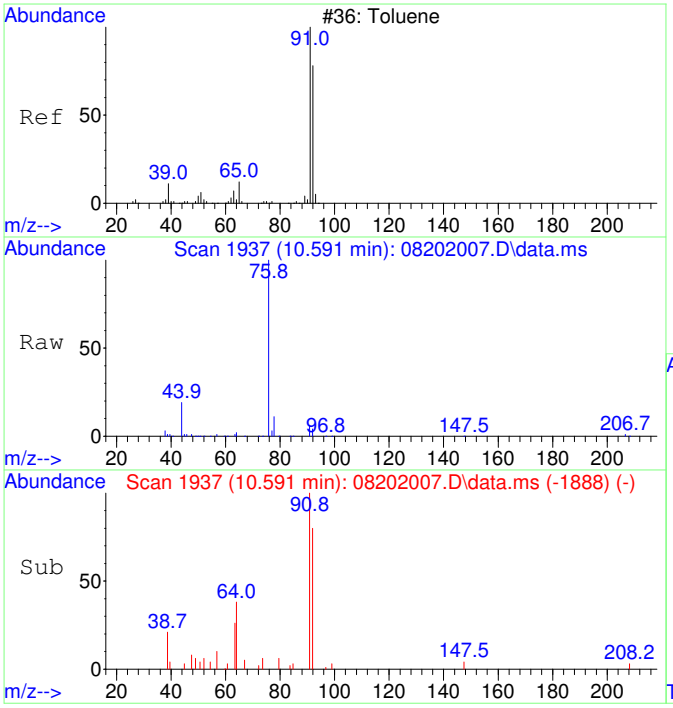


#36
Toluene-d8 SCAN
Concen: 194.45 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 98 Resp: 12748

Ion	Ratio	Lower	Upper
98	100		
100	40.3	40.0	100.0

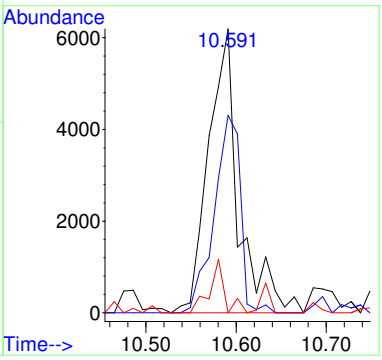


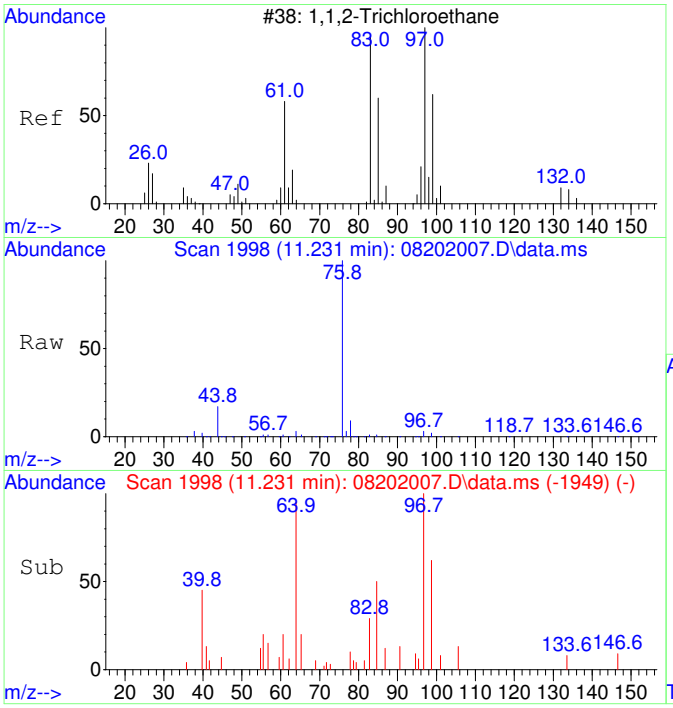


#37
Toluene SCAN
Concen: 171.17 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 14371

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

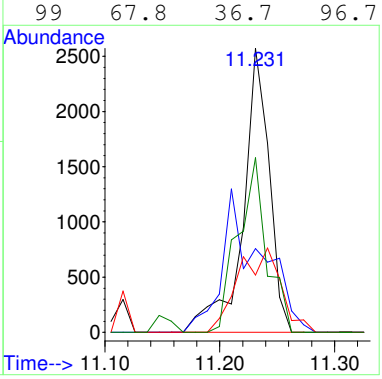


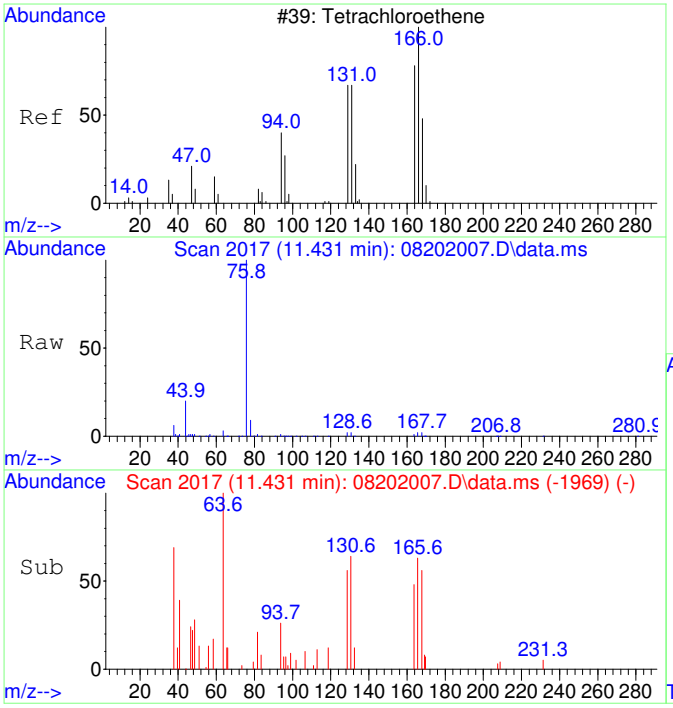


#38
1,1,2-Trichloroethane SCAN
Concen: 216.66 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. 0.011 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 97 Resp: 4083

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

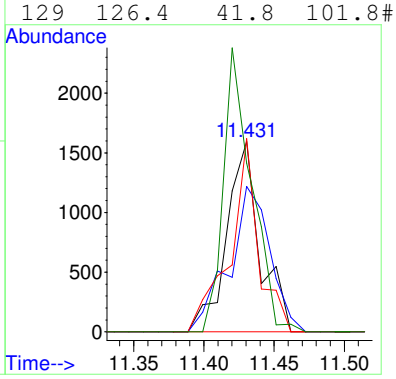


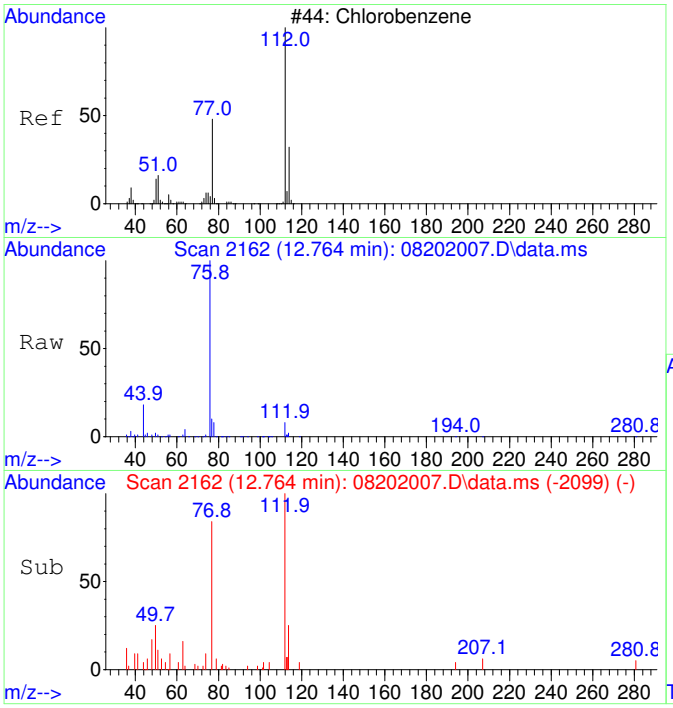


#39
Tetrachloroethene SCAN
Concen: 131.18 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:166 Resp: 2646

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

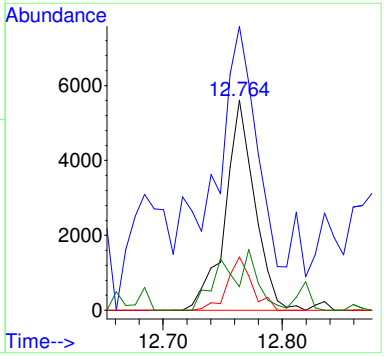


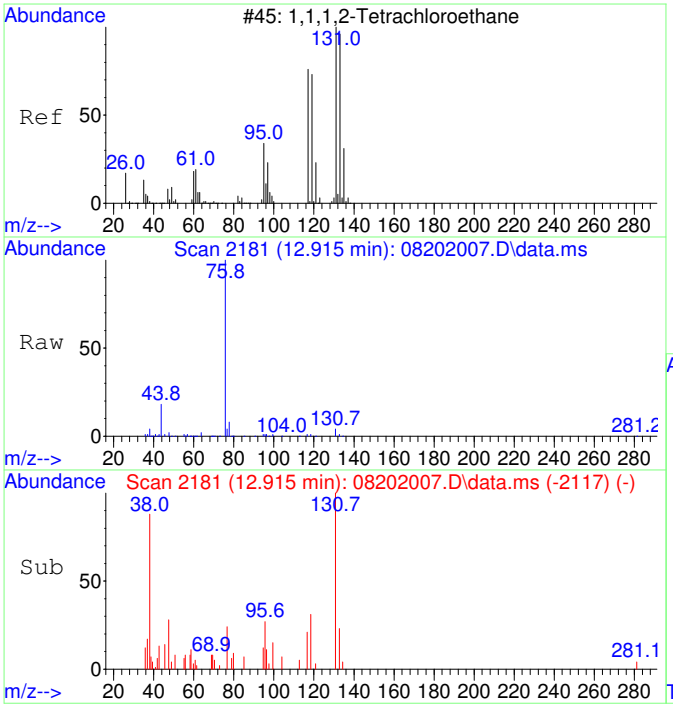


#40
Chlorobenzene SCAN
Concen: 169.04 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:112 Resp: 9698

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

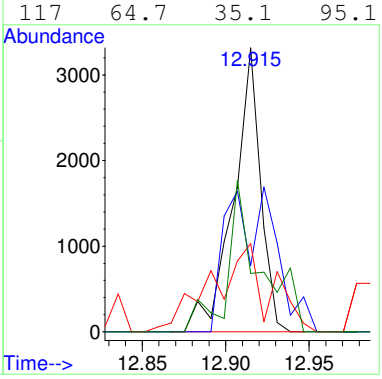


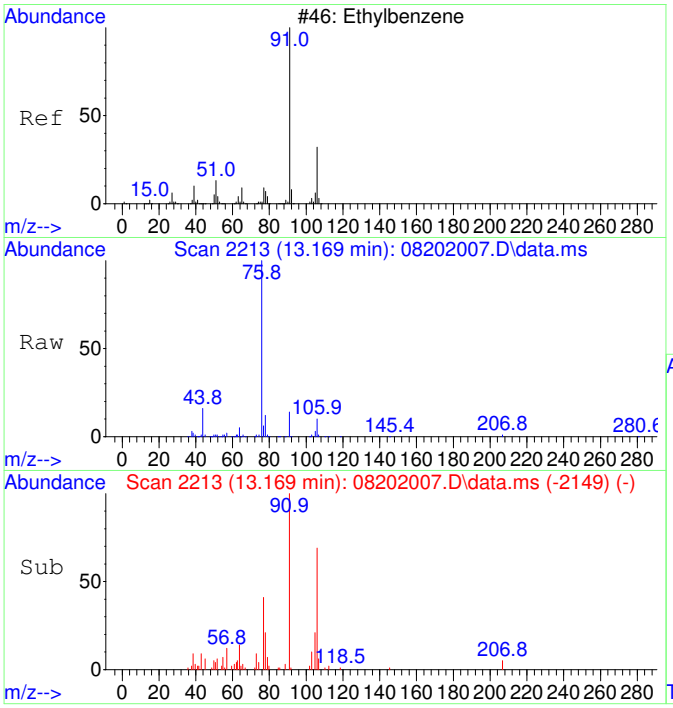


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 177.14 ug/L
RT: 12.915 min Scan# 2181
Delta R.T. 0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:131 Resp: 3761

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

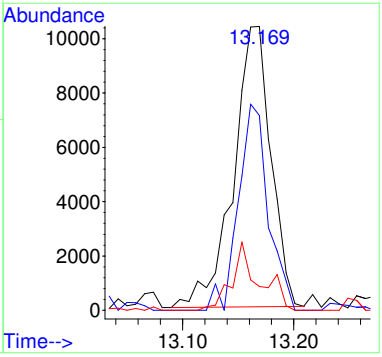


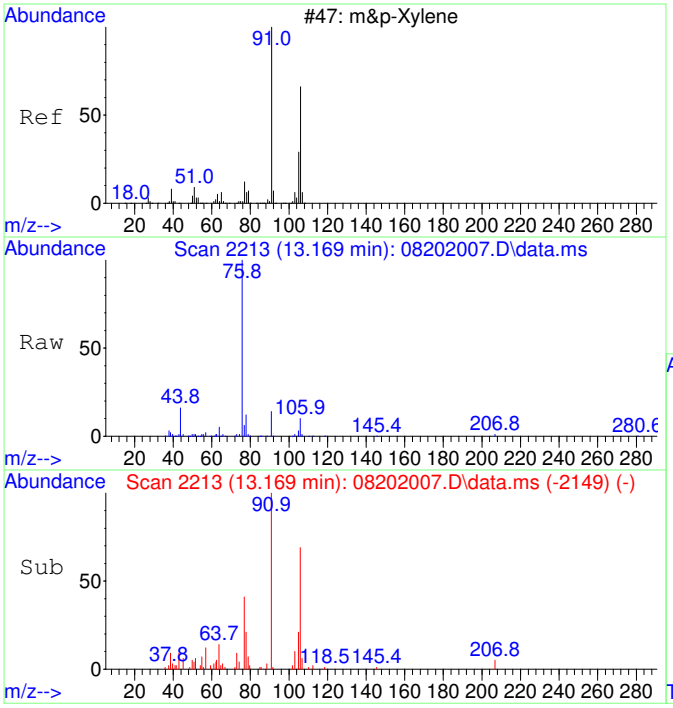


#42
Ethylbenzene SCAN
Concen: 158.20 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 24198

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

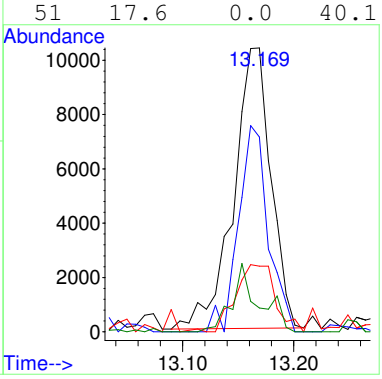


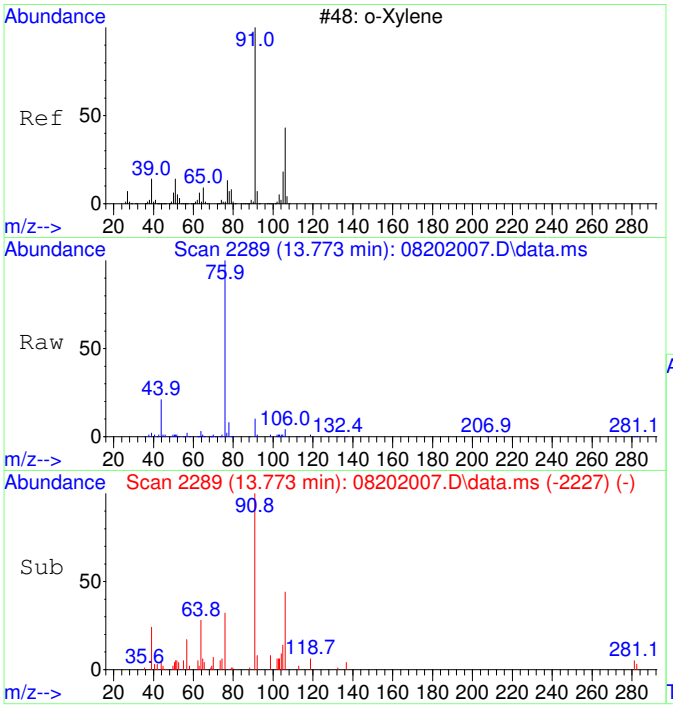


#43
m&p-Xylene SCAN
Concen: 158.20 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 24198

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

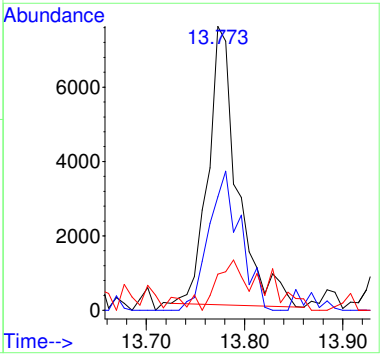


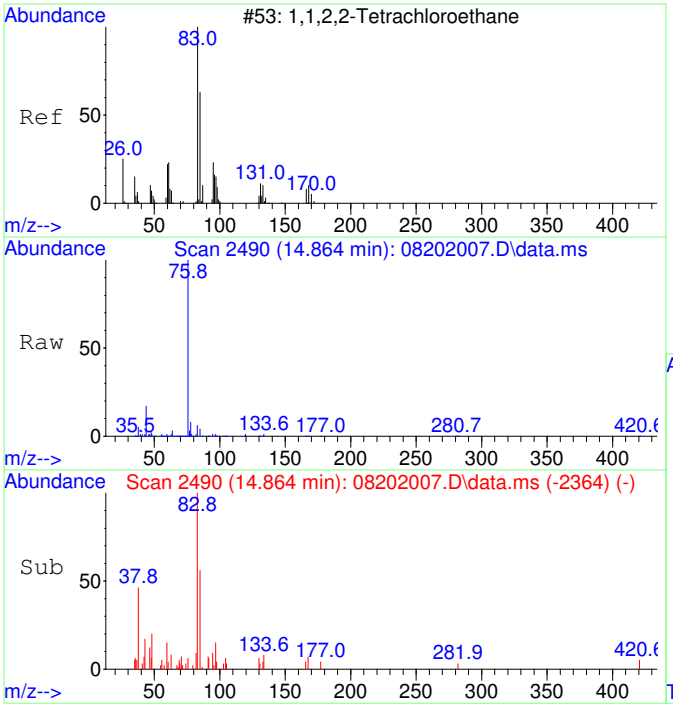


#44
o-Xylene SCAN
Concen: 190.48 ug/L
RT: 13.773 min Scan# 2289
Delta R.T. -0.008 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 91 Resp: 15595

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

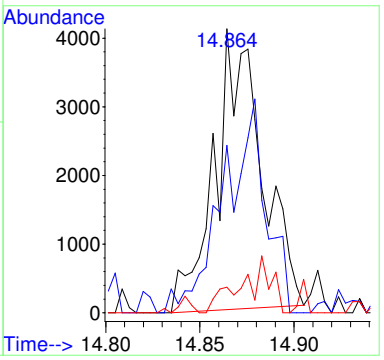


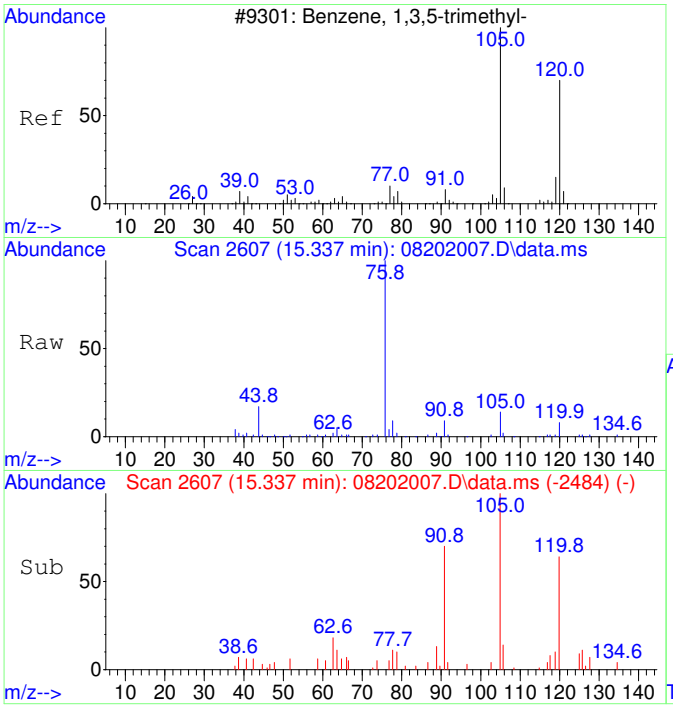


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 177.39 ug/L
RT: 14.864 min Scan# 2490
Delta R.T. -0.007 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion: 83 Resp: 7082

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

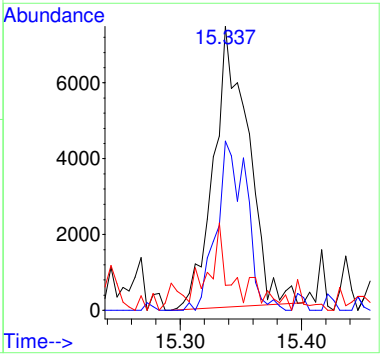


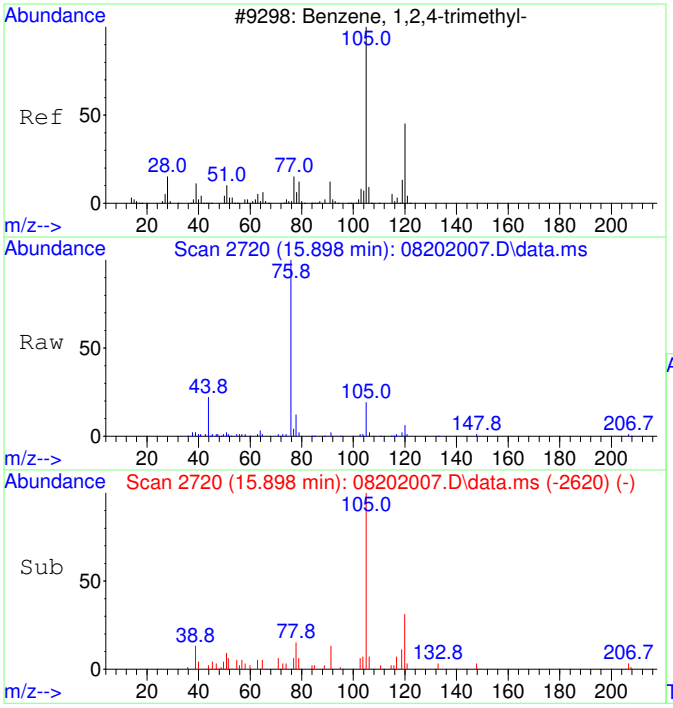


#46
1,3,5-Trimethylbenzene SCAN
Concen: 170.06 ug/L
RT: 15.337 min Scan# 2607
Delta R.T. -0.006 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:105 Resp: 14674

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

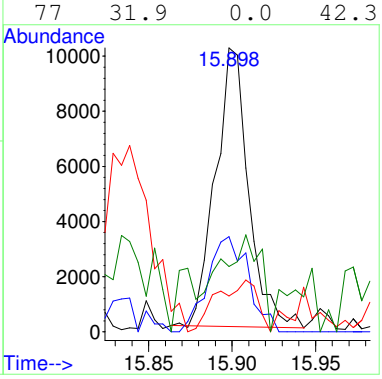


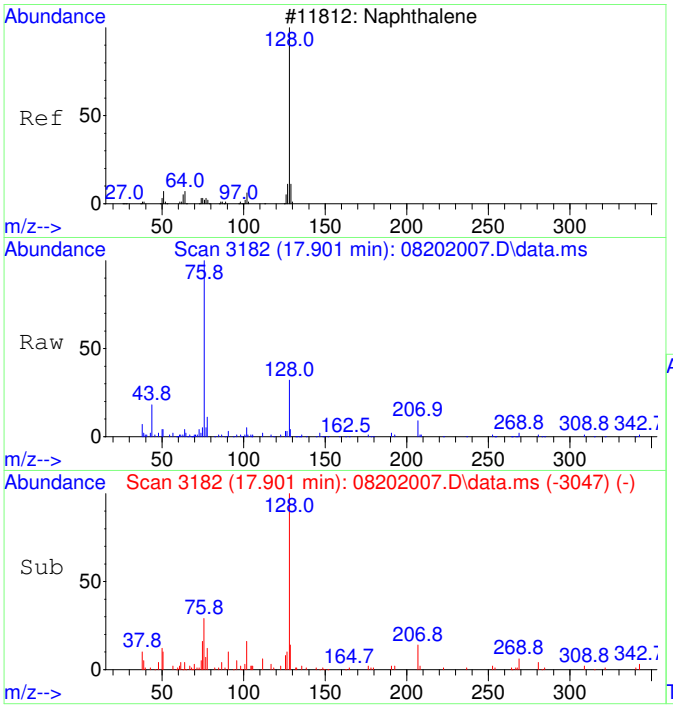


#47
1,2,4-Trimethylbenzene SCAN
Concen: 157.88 ug/L
RT: 15.898 min Scan# 2720
Delta R.T. -0.001 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:105 Resp: 13939

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

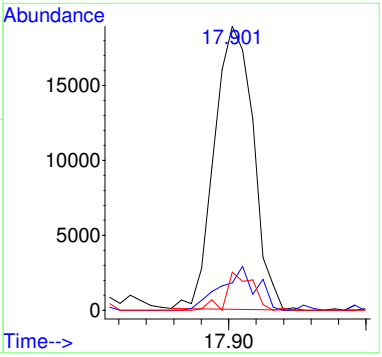




#48
Naphthalene SCAN
Concen: 138.89 ug/L
RT: 17.901 min Scan# 3182
Delta R.T. 0.000 min
Lab File: 08202007.D
Acq: 20 Aug 2020 17:01

Tgt Ion:128 Resp: 18555

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



S20H039-CAL6

Quantitation Report (Not Reviewed)

Table of Contents

Before Manual Integration

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

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

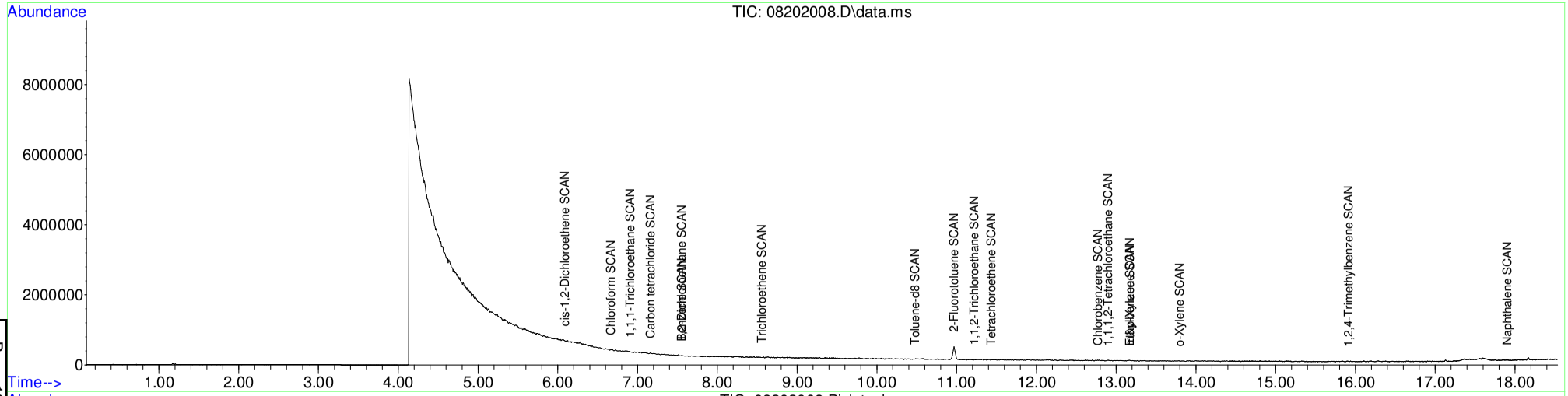
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	604968	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	5849	49.39	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 0.99%#			
Target Compounds						Qvalue
2] 1,1-Dichloroethene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

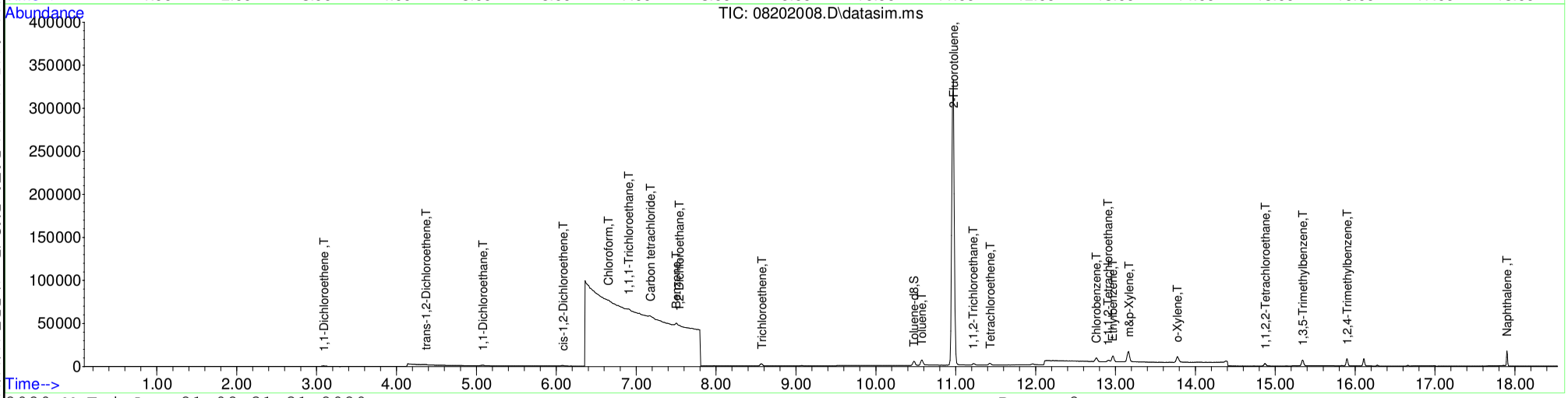
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

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

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





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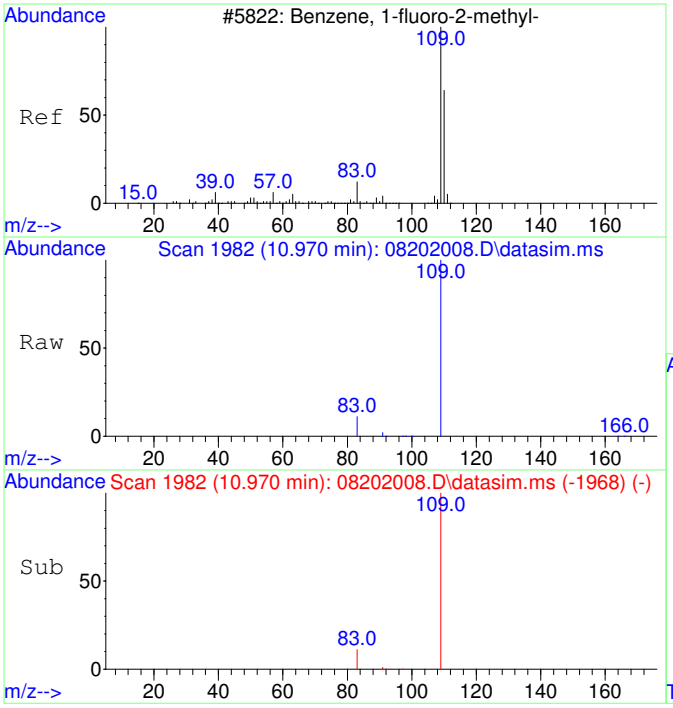
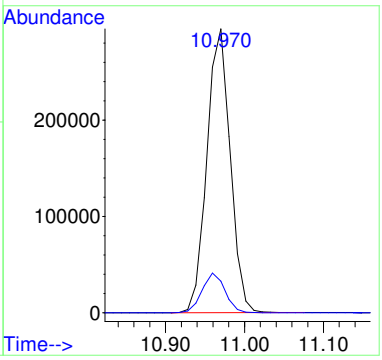
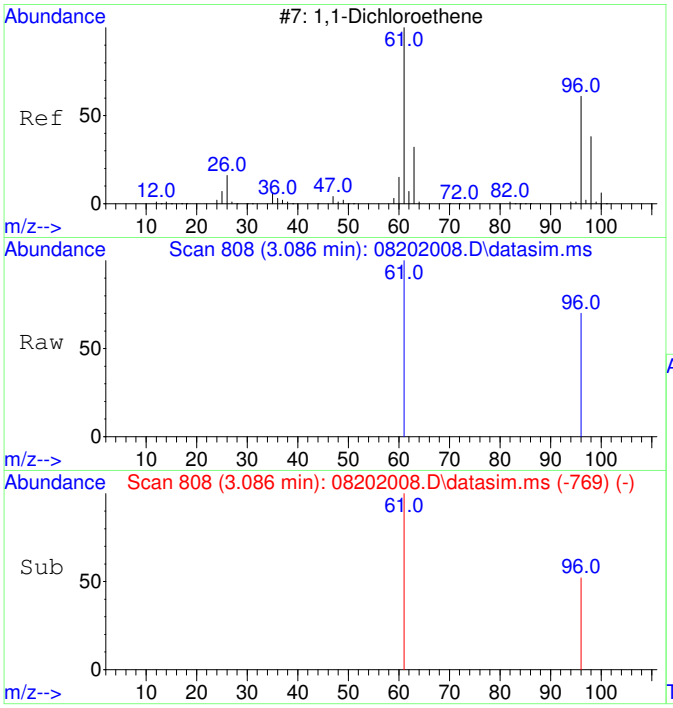


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:109 Resp: 604968

Ion	Ratio	Lower	Upper
109	100		
83	13.7	0.0	42.3

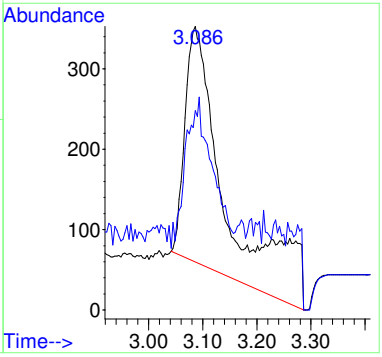




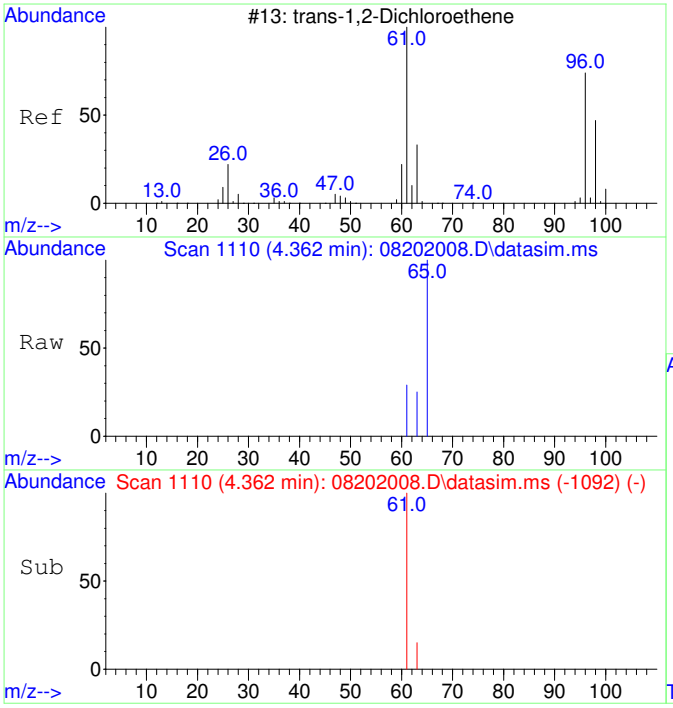
#2
1,1-Dichloroethene
Concen: 56.74 ug/L
RT: 3.086 min Scan# 808
Delta R.T. -0.004 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 61 Resp: 1509

Ion	Ratio	Lower	Upper
61	100		
96	55.2	37.2	97.2



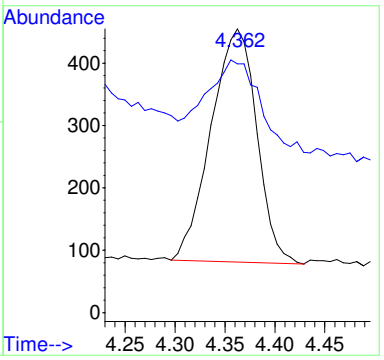
Before MI:
IMPROPER
BASELINE

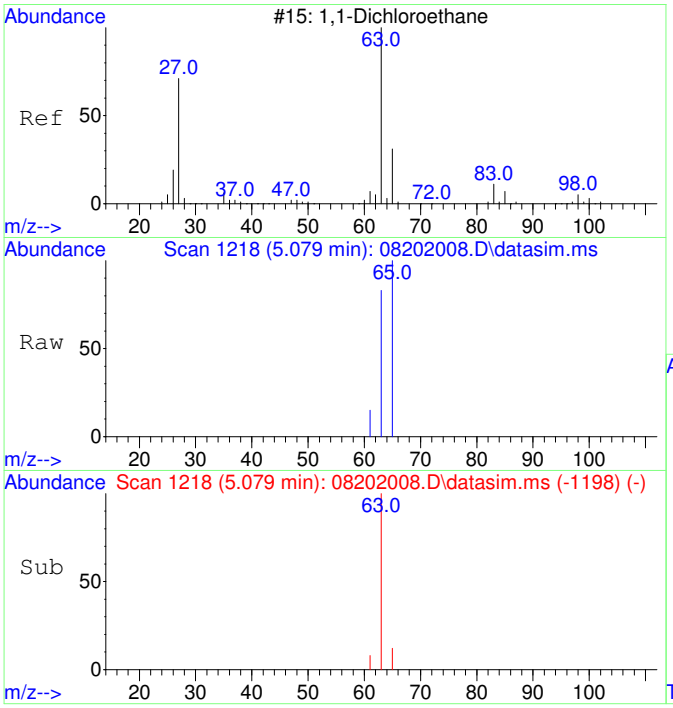


#3
trans-1,2-Dichloroethene
Concen: 42.71 ug/L
RT: 4.362 min Scan# 1110
Delta R.T. -0.033 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 61 Resp: 1192

Ion	Ratio	Lower	Upper
61	100		
63	48.7	2.4	62.4

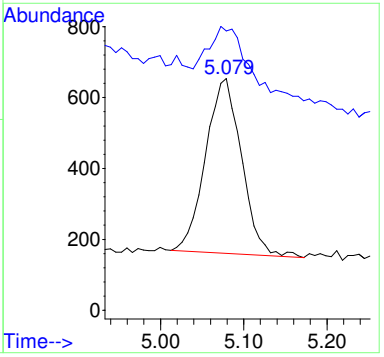


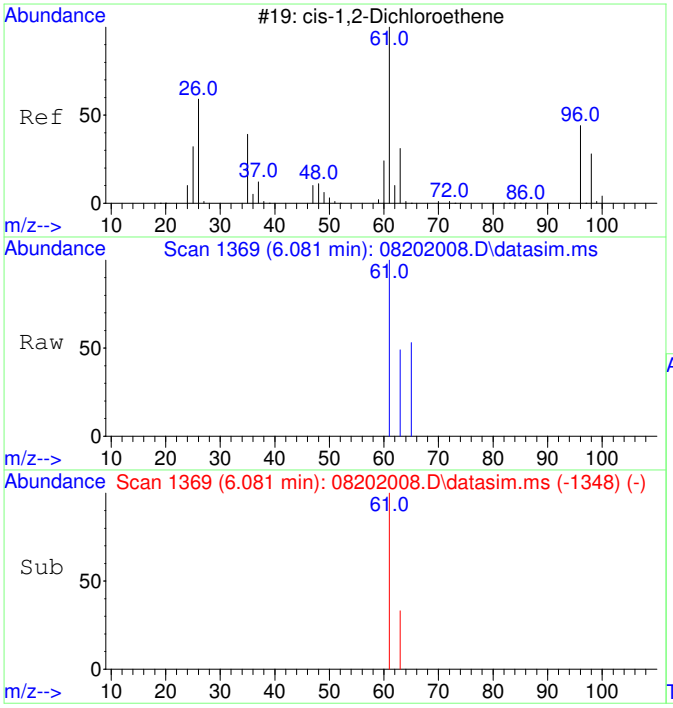


#4
1,1-Dichloroethane
Concen: 42.45 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.020 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 63 Resp: 1475

Ion	Ratio	Lower	Upper
63	100		
65	76.1	1.8	61.8#

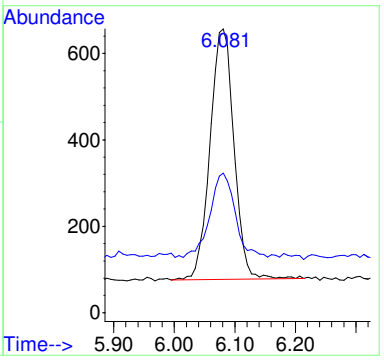


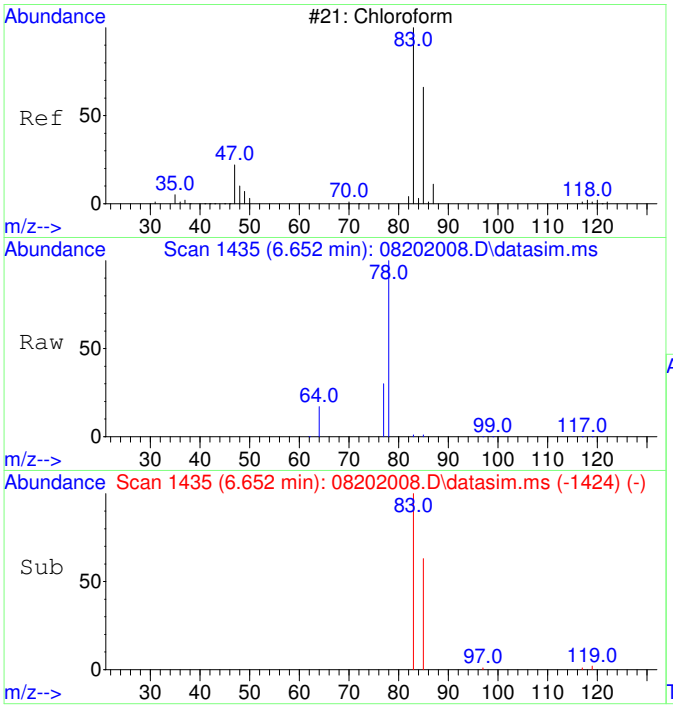


#5
cis-1,2-Dichloroethene
Concen: 43.46 ug/L
RT: 6.081 min Scan# 1369
Delta R.T. -0.013 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 61 Resp: 1594

Ion	Ratio	Lower	Upper
61	100		
63	35.1	2.5	62.5

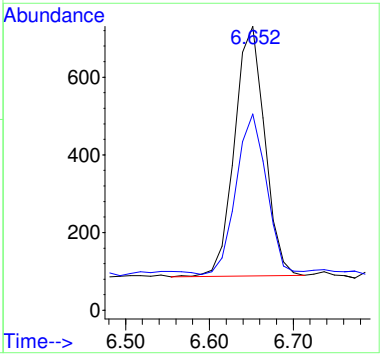


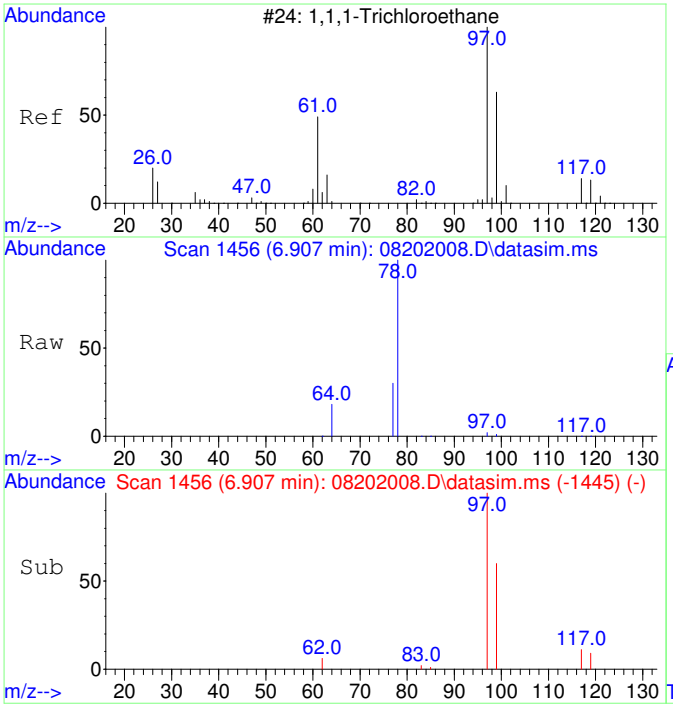


#6
Chloroform
Concen: 42.78 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 83 Resp: 1606

Ion	Ratio	Lower	Upper
83	100		
85	64.9	35.1	95.1

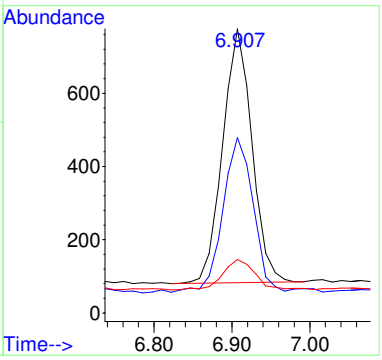


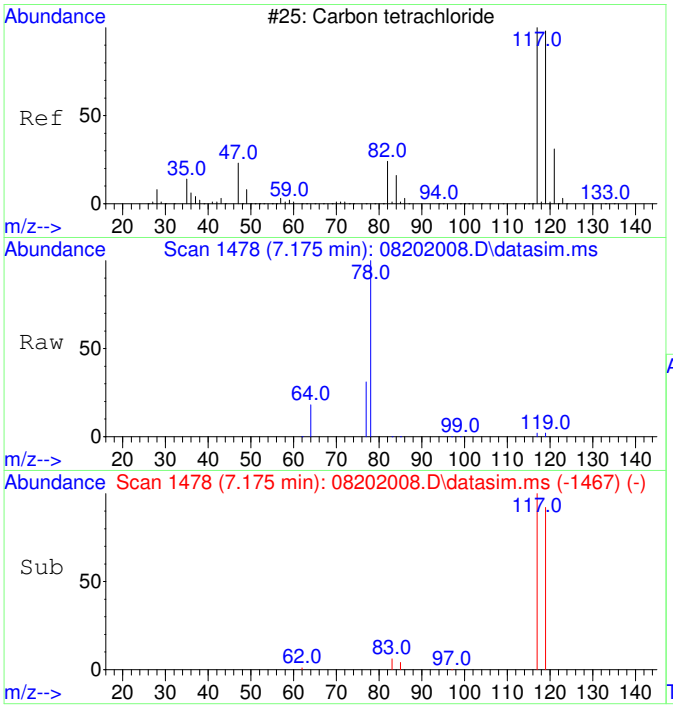


#7
1,1,1-Trichloroethane
Concen: 44.60 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 97 Resp: 1818

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

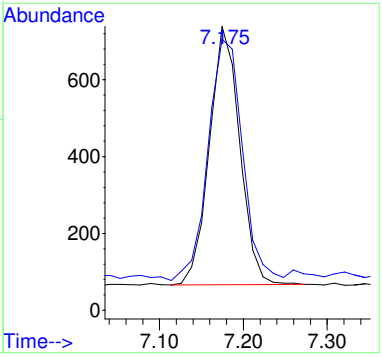


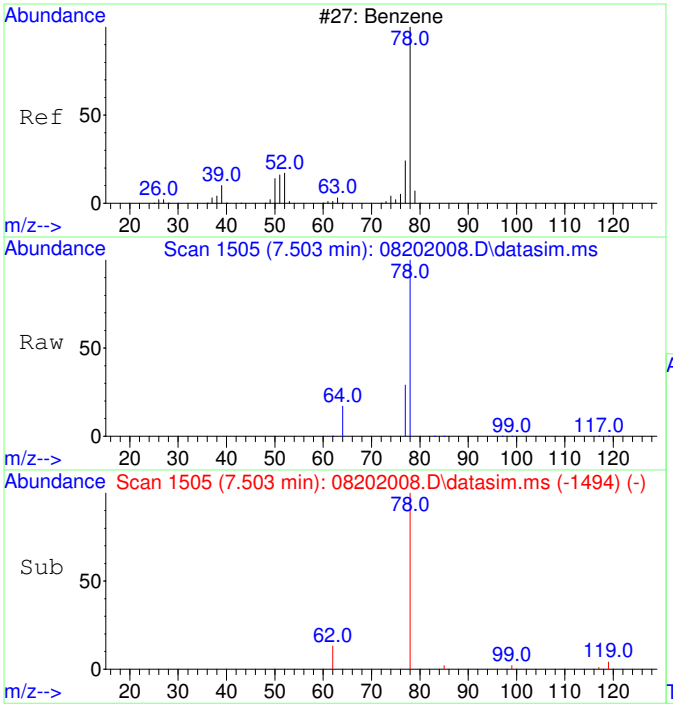


#8
Carbon tetrachloride
Concen: 43.79 ug/L
RT: 7.175 min Scan# 1478
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:117 Resp: 1680

Ion	Ratio	Lower	Upper
117	100		
119	105.9	66.4	126.4

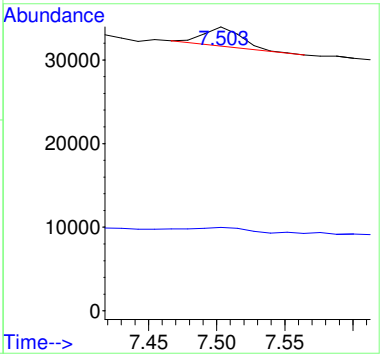


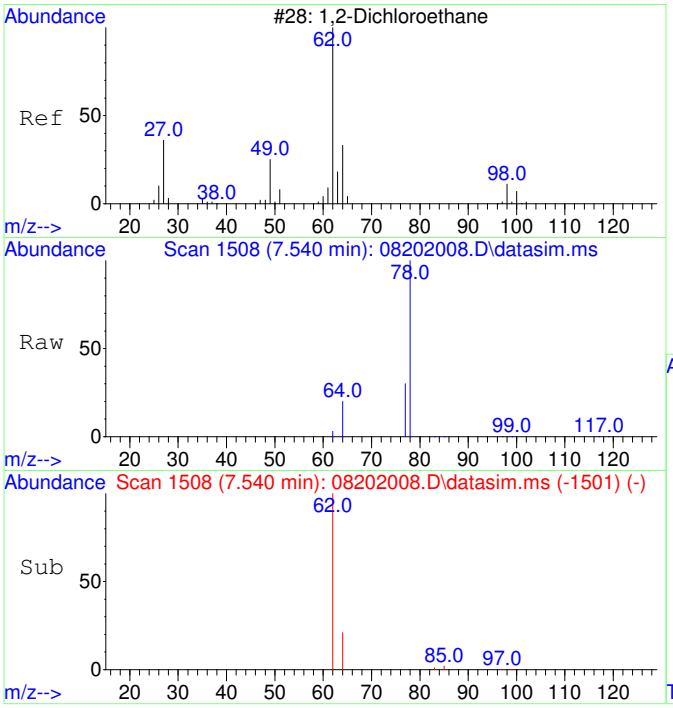


#9
Benzene
Concen: 37.10 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 78 Resp: 3813

Ion	Ratio	Lower	Upper
78	100		
77	99.1	0.0	53.2#

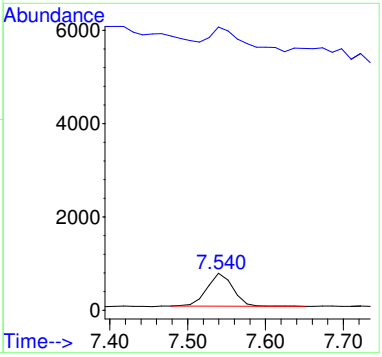


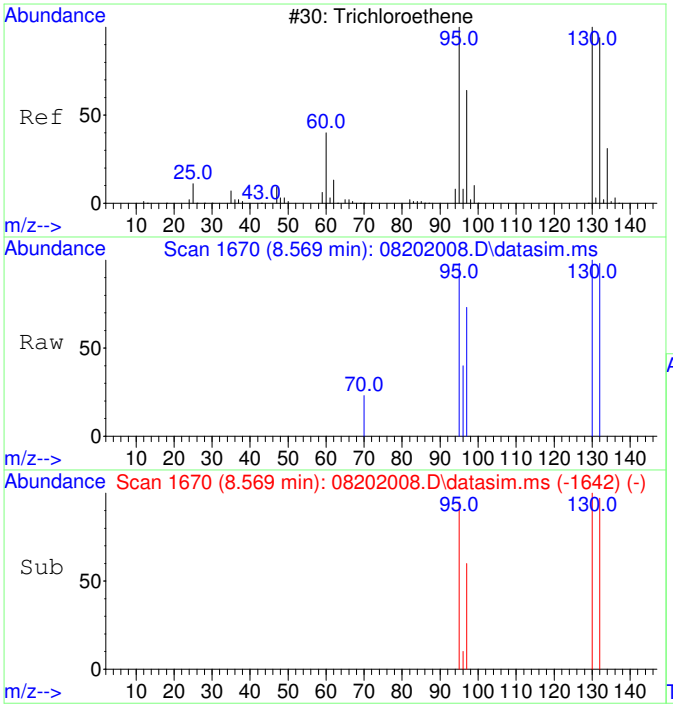


#10
1,2-Dichloroethane
Concen: 43.69 ug/L
RT: 7.540 min Scan# 1508
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 62 Resp: 1603

Ion	Ratio	Lower	Upper
62	100		
64	90.9	2.3	62.3#

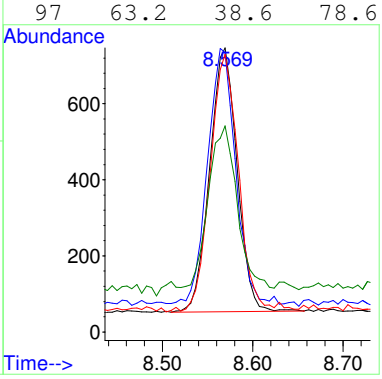


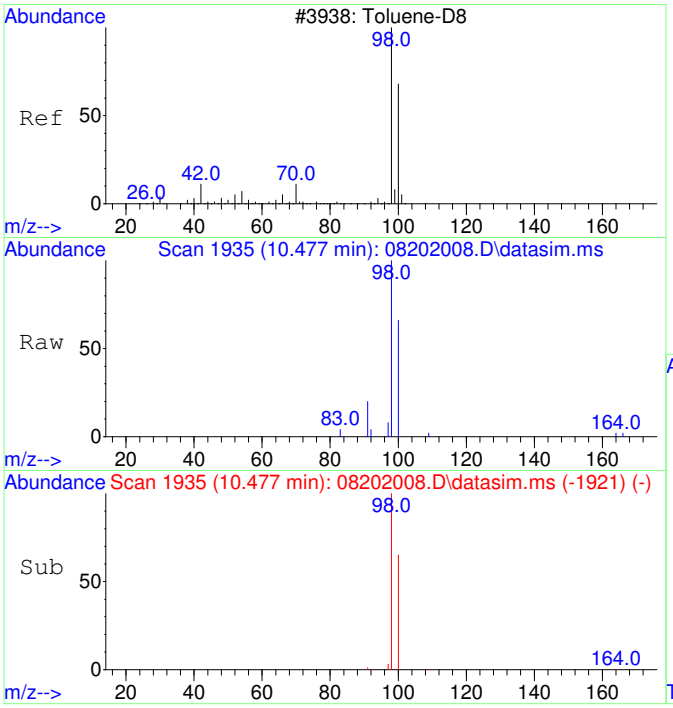


#11
Trichloroethene
Concen: 47.31 ug/L
RT: 8.569 min Scan# 1670
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:130 Resp: 1464

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

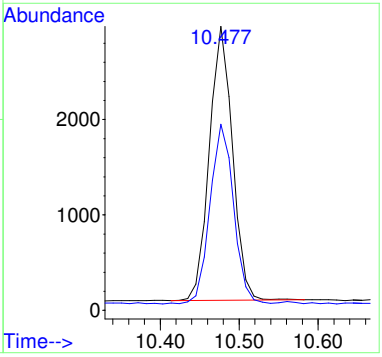


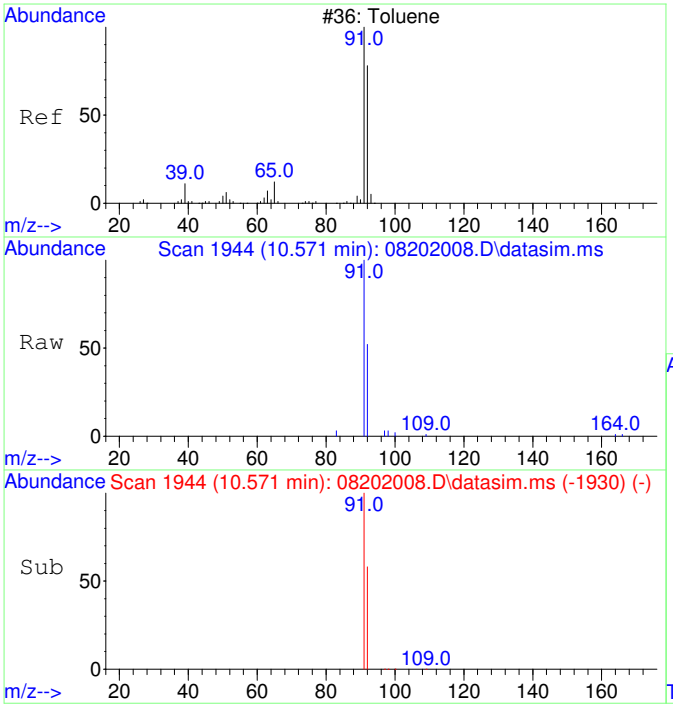


#12
Toluene-d8
Concen: 49.39 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 98 Resp: 5849

Ion	Ratio	Lower	Upper
98	100		
100	66.4	37.1	97.1

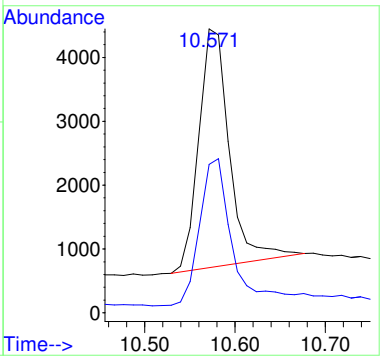


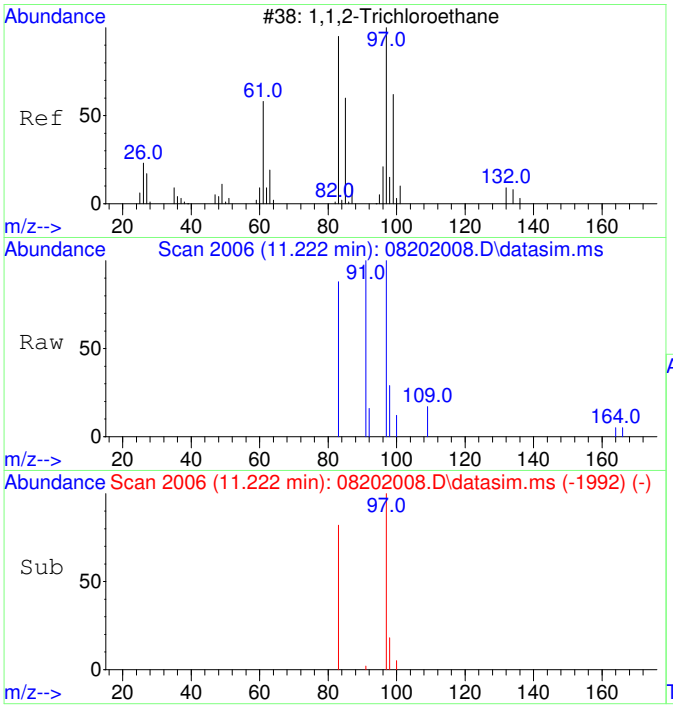


#13
Toluene
Concen: 58.81 ug/L
RT: 10.571 min Scan# 1944
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 8880

Ion	Ratio	Lower	Upper
91	100		
92	66.5	29.9	89.9

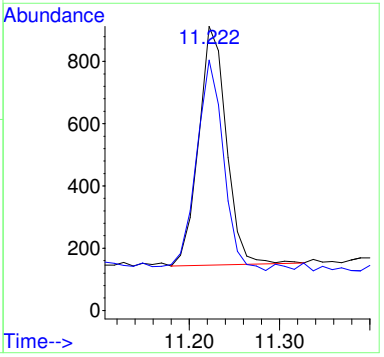


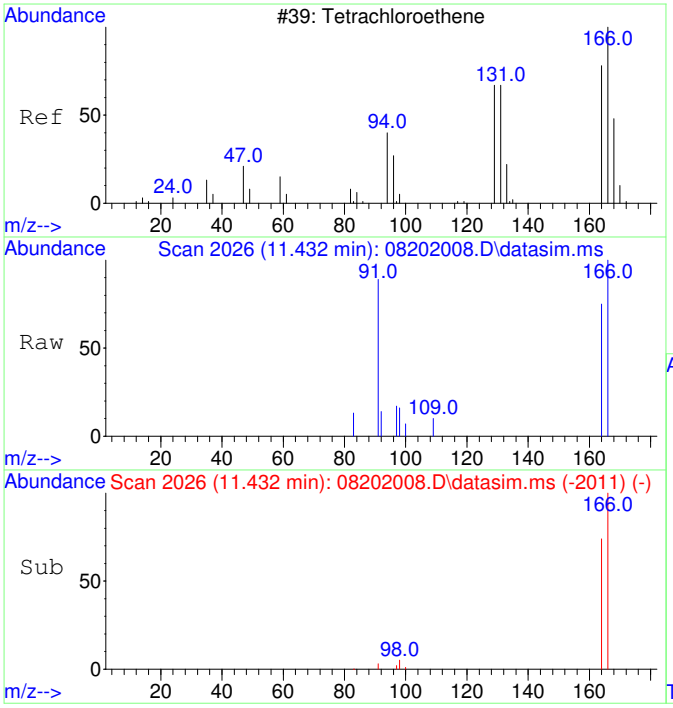


#14
1,1,2-Trichloroethane
Concen: 49.61 ug/L
RT: 11.222 min Scan# 2006
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 97 Resp: 1632

Ion	Ratio	Lower	Upper
97	100		
83	87.4	51.2	111.2

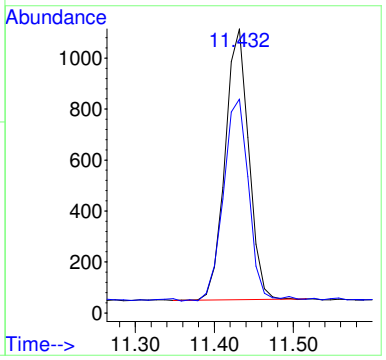


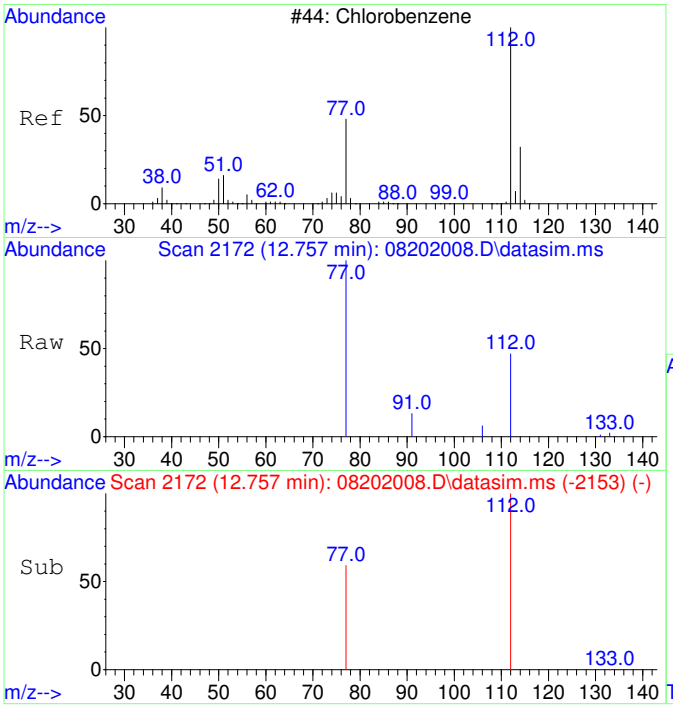


#15
Tetrachloroethene
Concen: 50.49 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.011 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:166 Resp: 2206

Ion	Ratio	Lower	Upper
166	100		
164	78.9	47.8	107.8

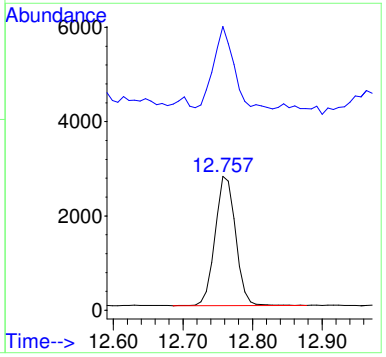


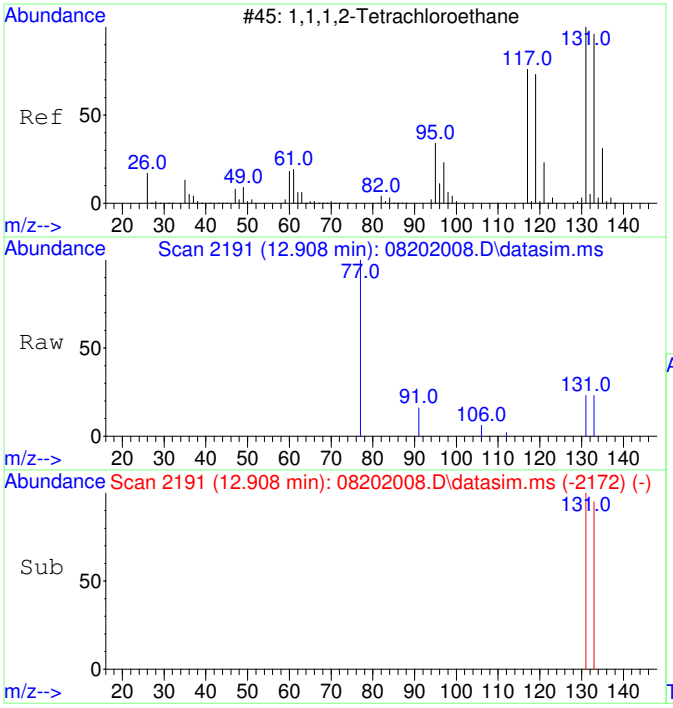


#16
Chlorobenzene
Concen: 51.95 ug/L
RT: 12.757 min Scan# 2172
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:112 Resp: 5616

Ion	Ratio	Lower	Upper
112	100		
77	63.2	23.6	83.6

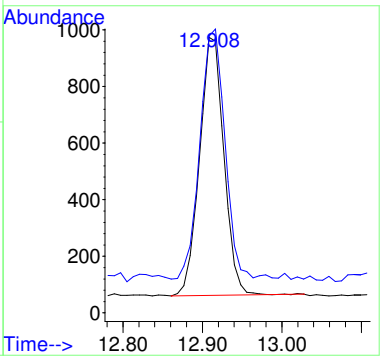


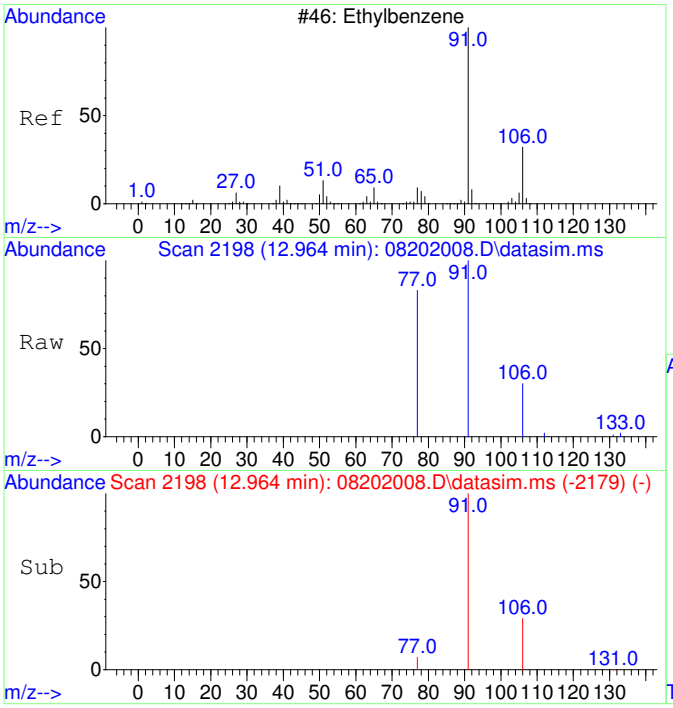


#17
1,1,1,2-Tetrachloroethane
Concen: 49.98 ug/L
RT: 12.908 min Scan# 2191
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:131 Resp: 1936

Ion	Ratio	Lower	Upper
131	100		
133	99.2	66.3	126.3

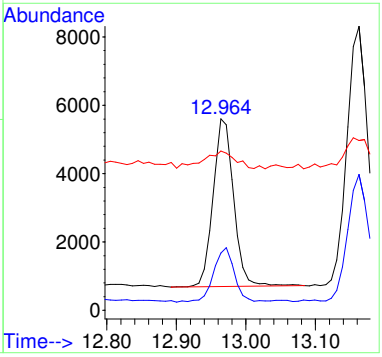


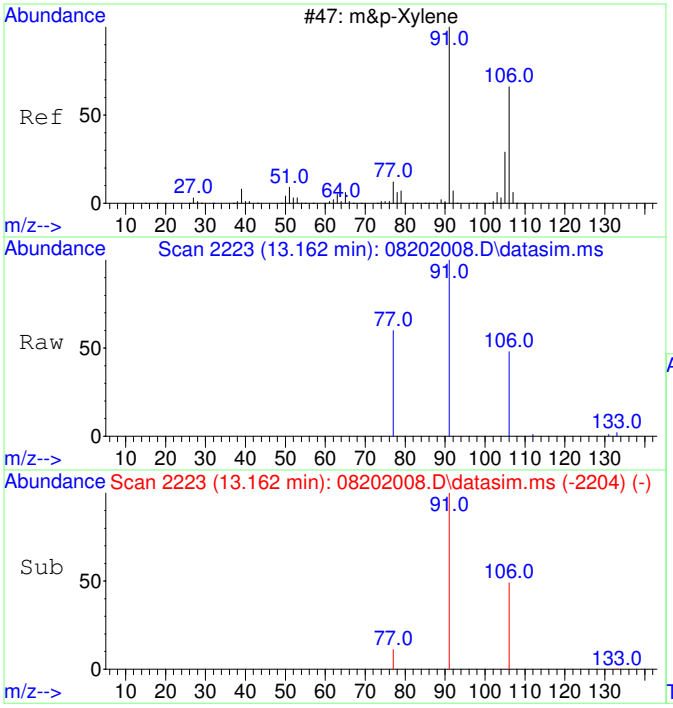


#18
Ethylbenzene
Concen: 54.85 ug/L
RT: 12.964 min Scan# 2198
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 10080

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

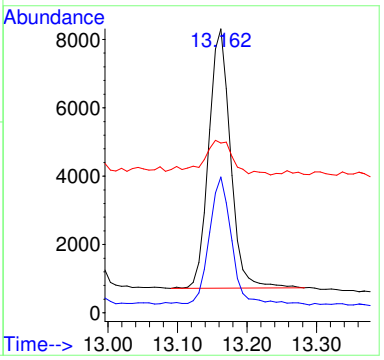


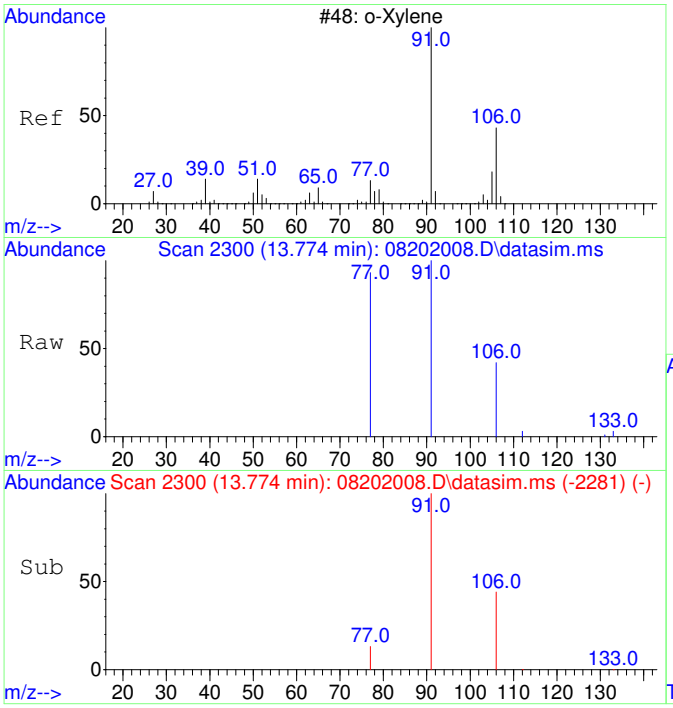


#19
m&p-Xylene
Concen: 114.72 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 16478

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

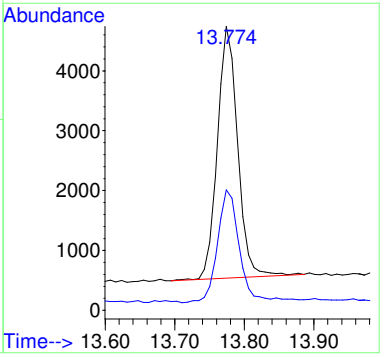


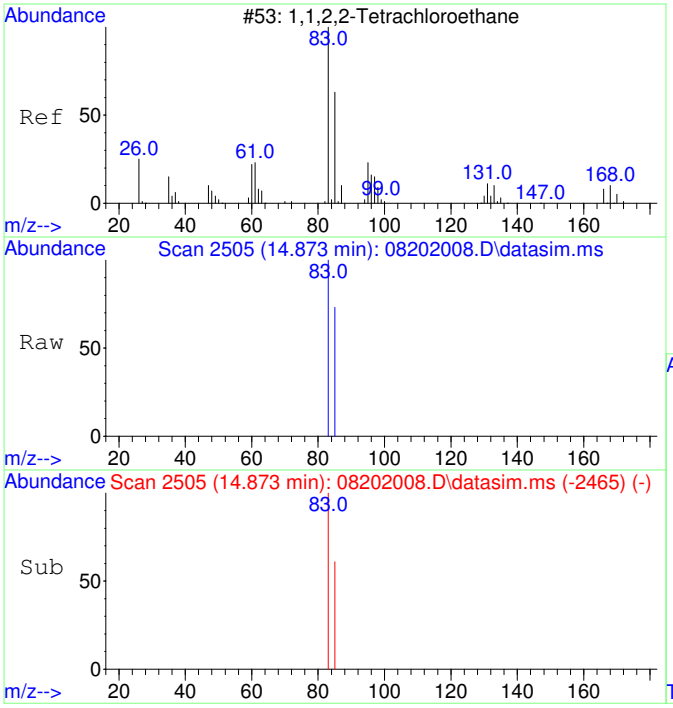


#20
o-Xylene
Concen: 55.46 ug/L
RT: 13.774 min Scan# 2300
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 8511

Ion	Ratio	Lower	Upper
91	100		
106	47.6	19.2	79.2

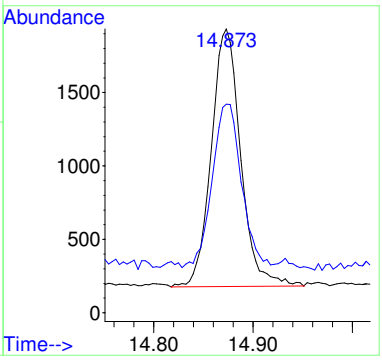


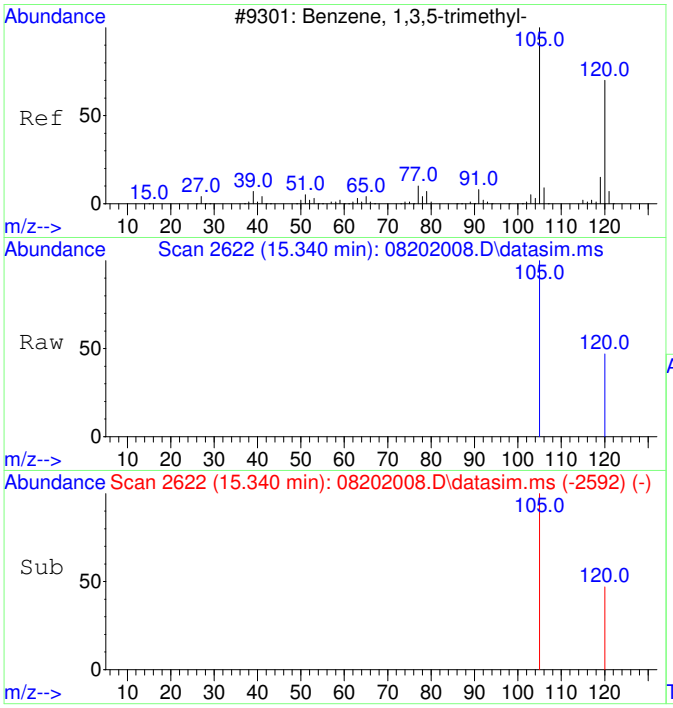


#21
1,1,2,2-Tetrachloroethane
Concen: 52.99 ug/L
RT: 14.873 min Scan# 2505
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 83 Resp: 3604

Ion	Ratio	Lower	Upper
83	100		
85	63.3	34.8	94.8

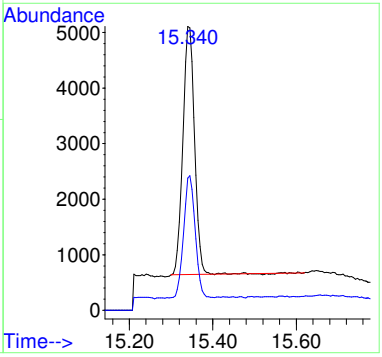


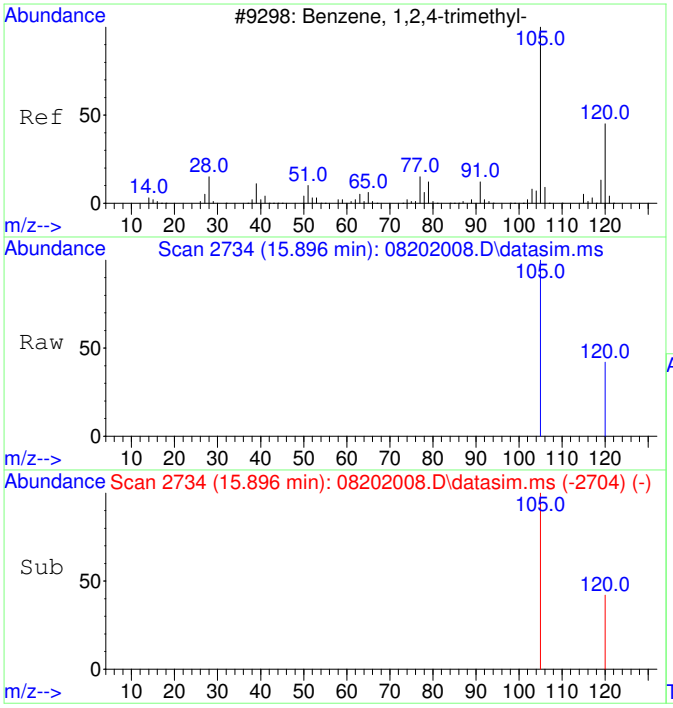


#22
1,3,5-Trimethylbenzene
Concen: 52.84 ug/L
RT: 15.340 min Scan# 2622
Delta R.T. -0.005 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:105 Resp: 8630

Ion	Ratio	Lower	Upper
105	100		
120	47.6	21.1	81.1

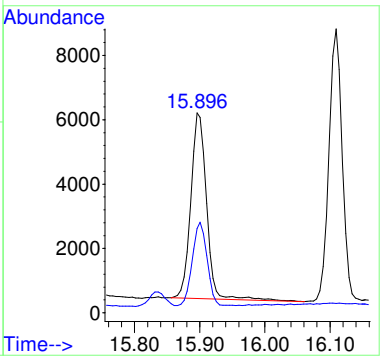


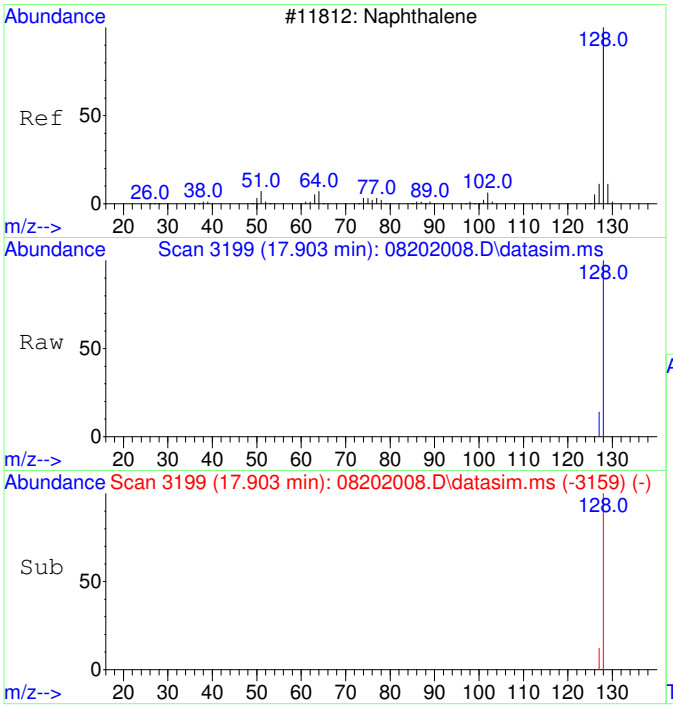


#23
1,2,4-Trimethylbenzene
Concen: 56.95 ug/L
RT: 15.896 min Scan# 2734
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:105 Resp: 9662

Ion	Ratio	Lower	Upper
105	100		
120	41.8	17.2	77.2

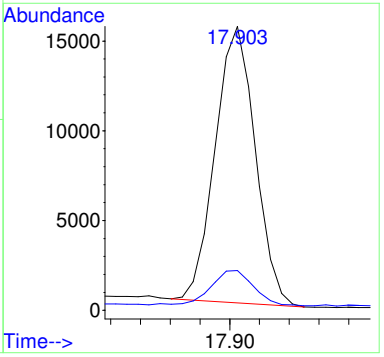


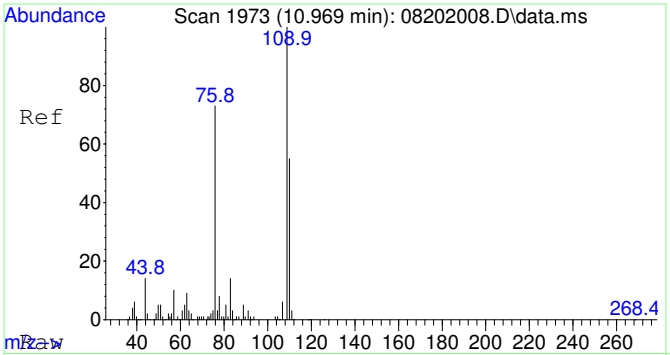


#24
Naphthalene
Concen: 53.59 ug/L
RT: 17.903 min Scan# 3199
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:128 Resp: 14370

Ion	Ratio	Lower	Upper
128	100		
127	13.4	0.0	42.5

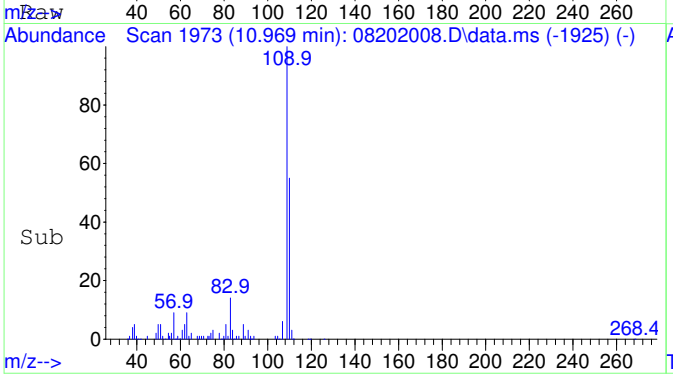


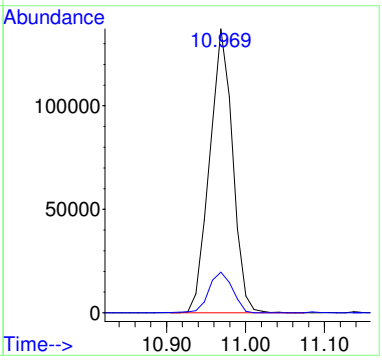


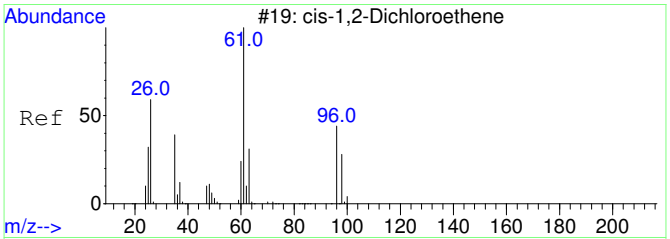
#25
2-Fluorotoluene SCAN
Concen: 4686.70 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:109 Resp: 276390

Ion	Ratio	Lower	Upper
109	100		
83	14.8	0.0	43.8



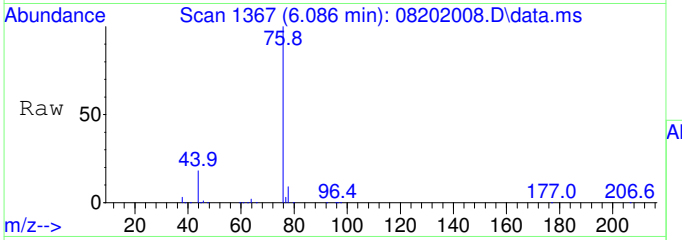


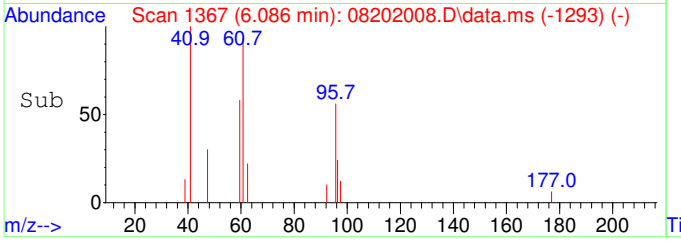


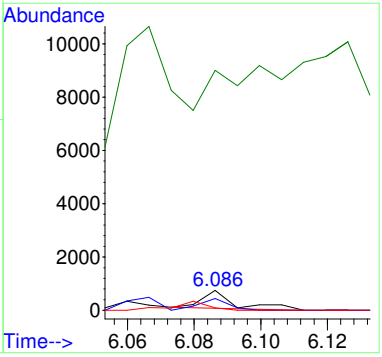
#29
cis-1,2-Dichloroethene SCAN
Concen: 23.21 ug/L
RT: 6.086 min Scan# 1367
Delta R.T. -0.007 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

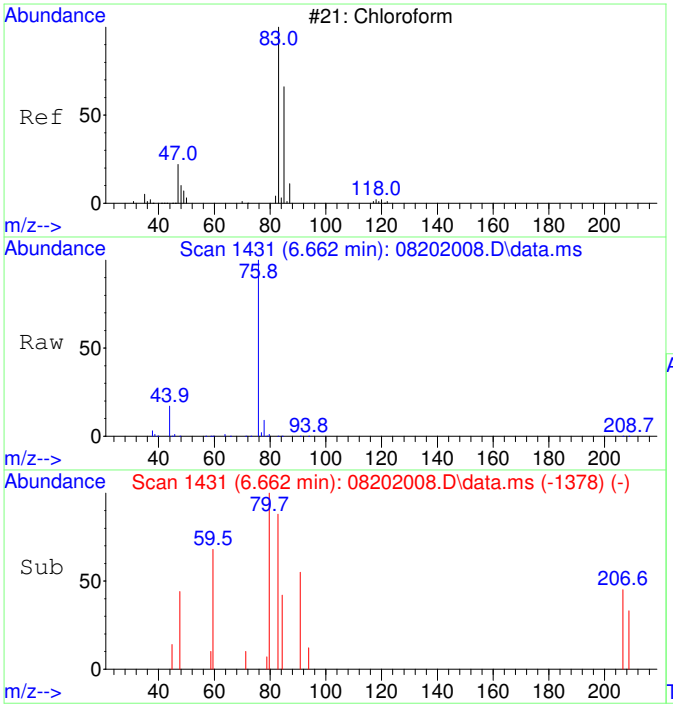
Tgt Ion: 61 Resp: 446

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





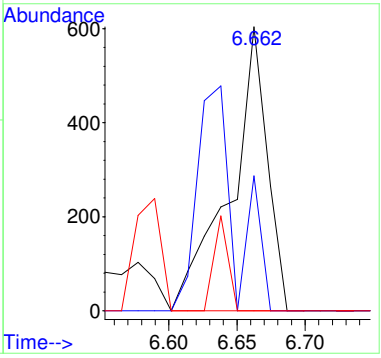


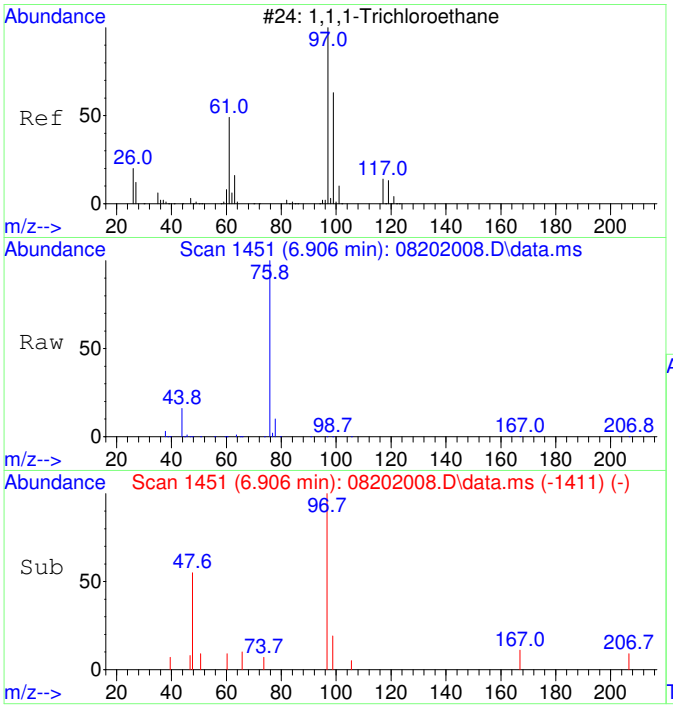


#30
Chloroform SCAN
Concen: 54.98 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 83 Resp: 1146

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

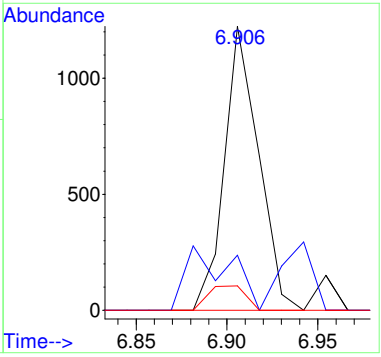


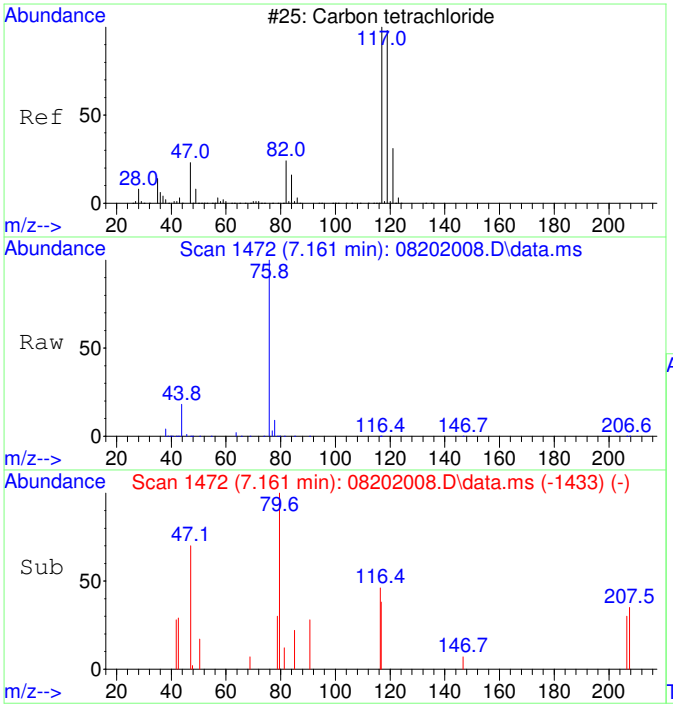


#31
1,1,1-Trichloroethane SCAN
Concen: 84.55 ug/L
RT: 6.906 min Scan# 1451
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 97 Resp: 1606

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

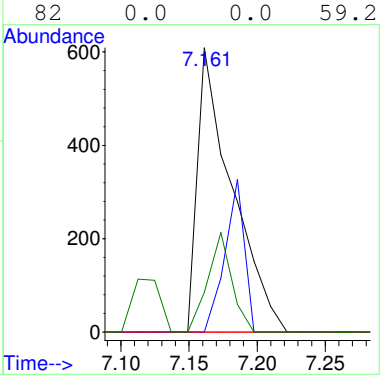


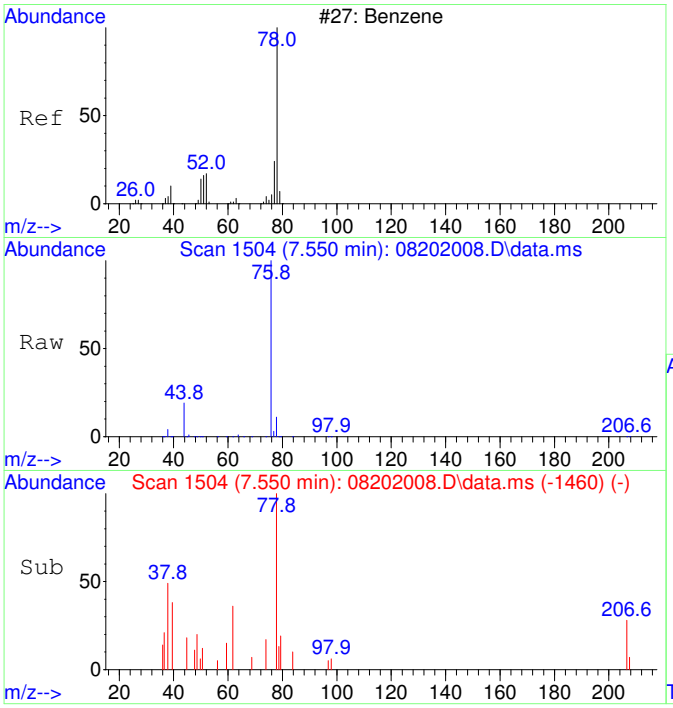


#32
Carbon tetrachloride SCAN
Concen: 54.36 ug/L
RT: 7.161 min Scan# 1472
Delta R.T. -0.024 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:117 Resp: 1077

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

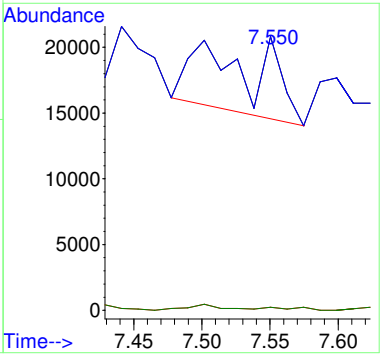


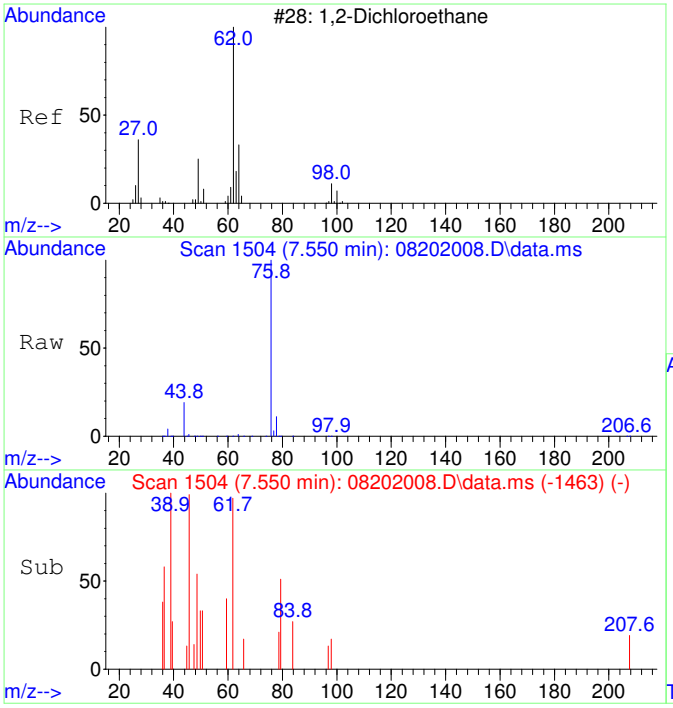


#33
Benzene SCAN
Concen: 320.23 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. 0.037 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 78 Resp: 16747

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

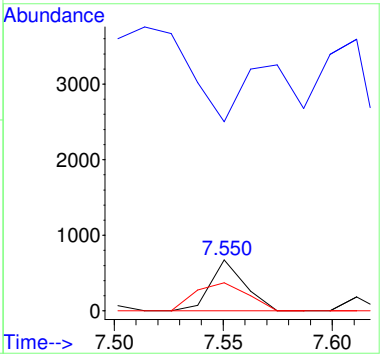


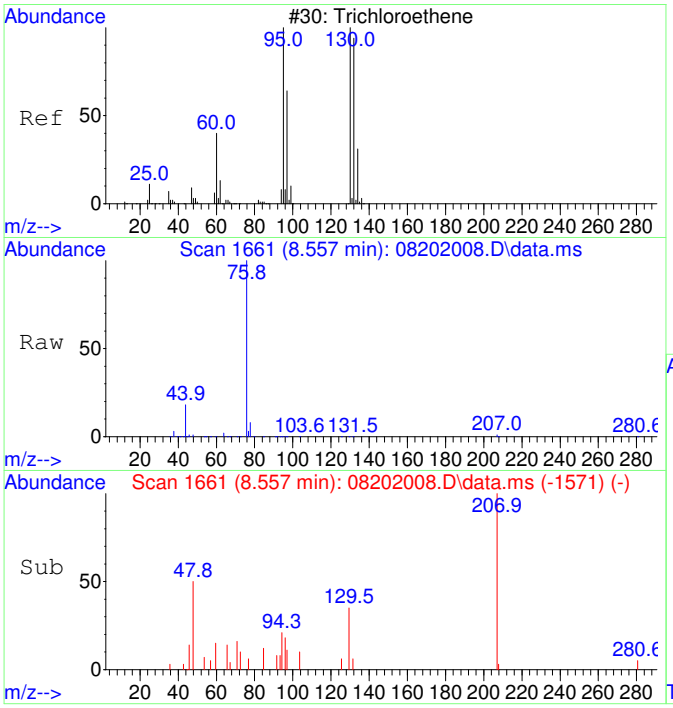


#34
1,2-Dichloroethane SCAN
Concen: 37.96 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 62 Resp: 733

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

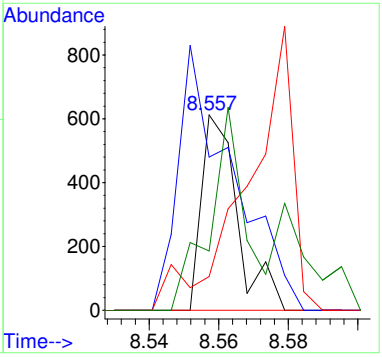


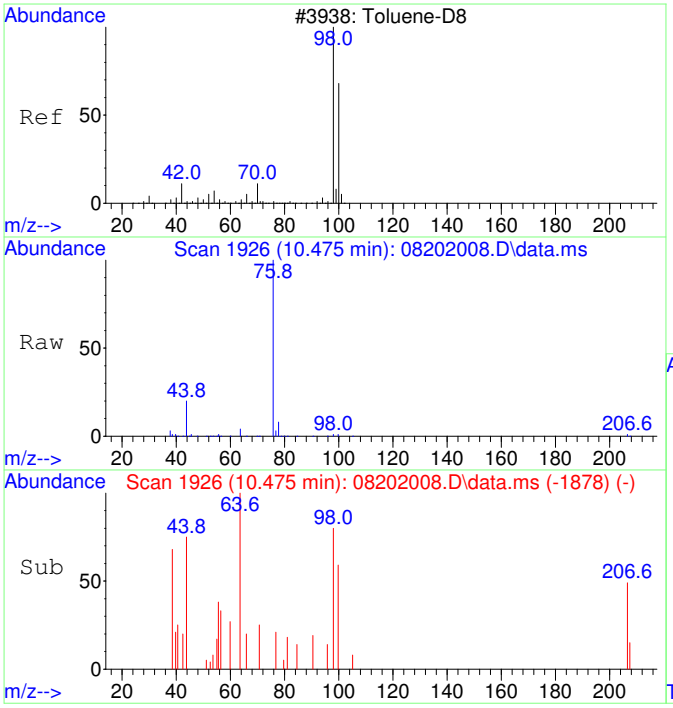


#35
Trichloroethene SCAN
Concen: 30.48 ug/L
RT: 8.557 min Scan# 1661
Delta R.T. -0.011 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:130 Resp: 438

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

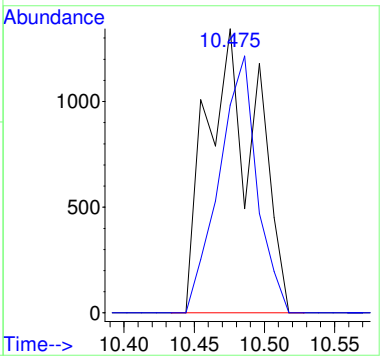


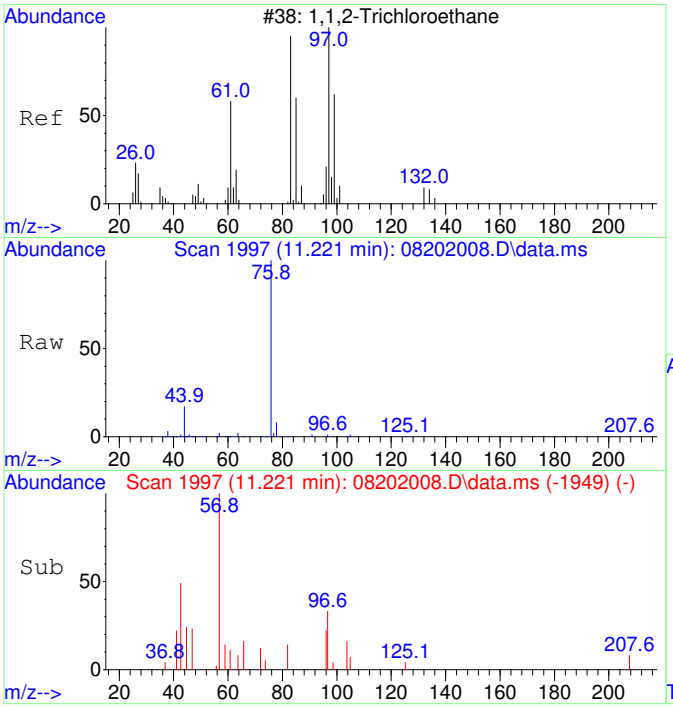


#36
Toluene-d8 SCAN
Concen: 57.48 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 98 Resp: 3315

Ion	Ratio	Lower	Upper
98	100		
100	69.2	40.0	100.0

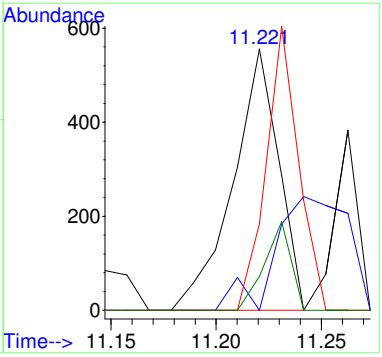


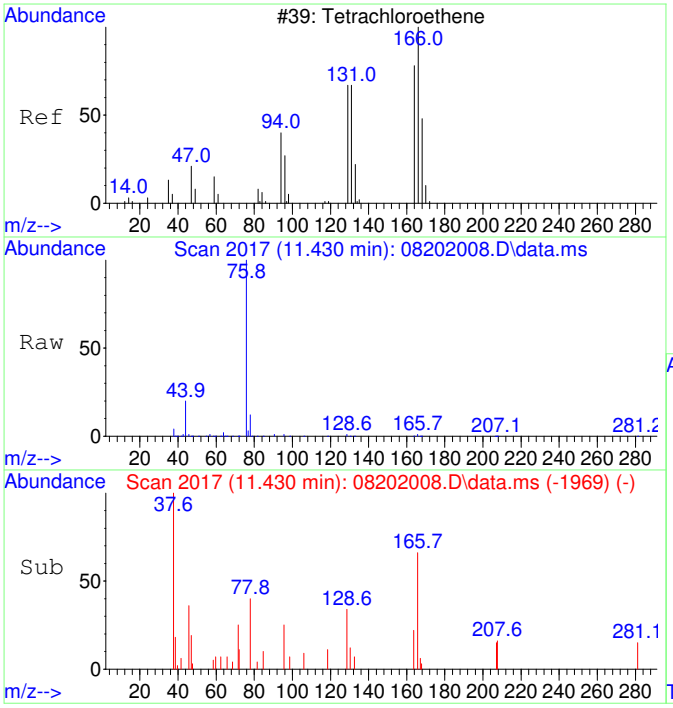


#38
1,1,2-Trichloroethane SCAN
Concen: 50.61 ug/L
RT: 11.221 min Scan# 1997
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 97 Resp: 839

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

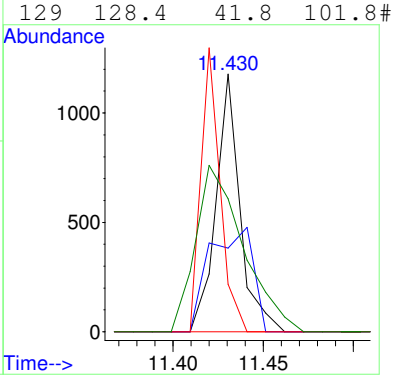


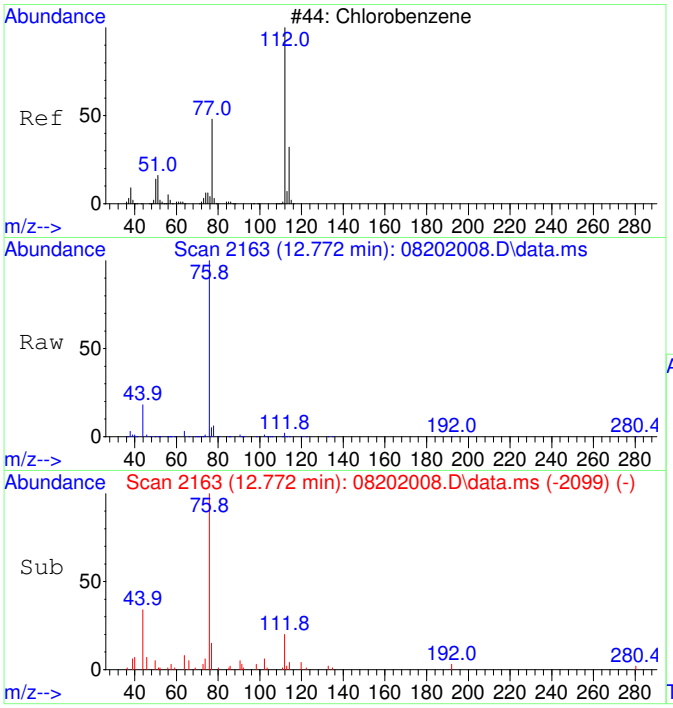


#39
Tetrachloroethene SCAN
Concen: 61.37 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:166 Resp: 1089

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

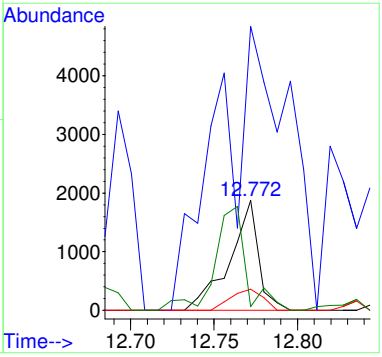


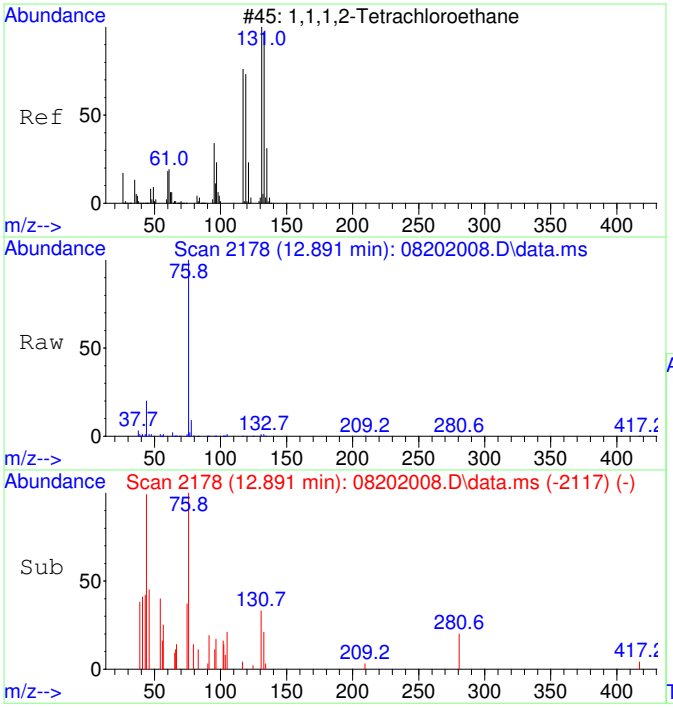


#40
Chlorobenzene SCAN
Concen: 44.78 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.008 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:112 Resp: 2260

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

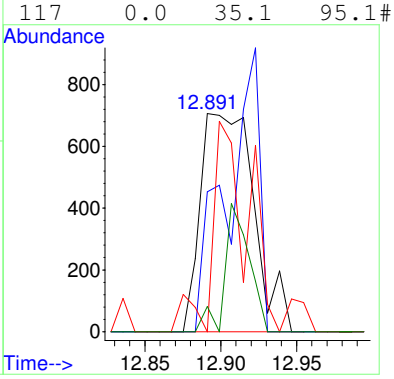


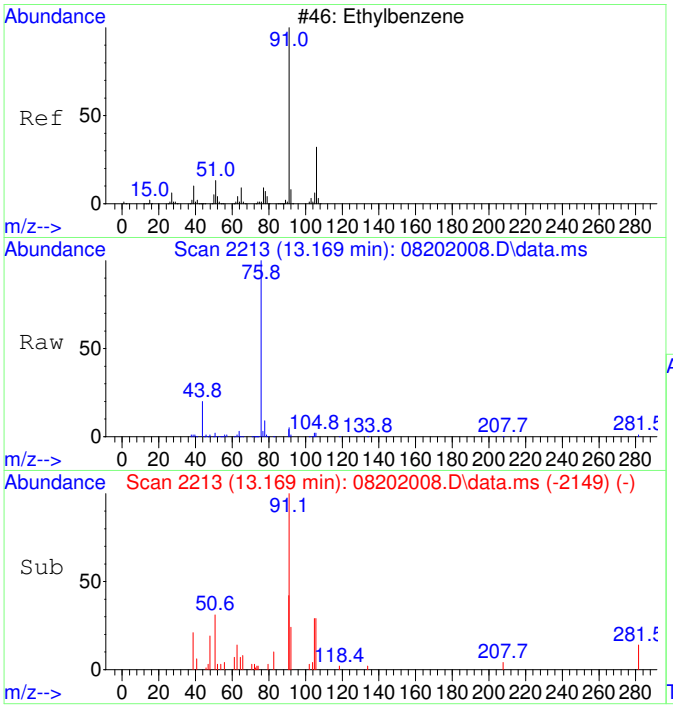


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 93.05 ug/L
RT: 12.891 min Scan# 2178
Delta R.T. -0.016 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:131 Resp: 1738

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

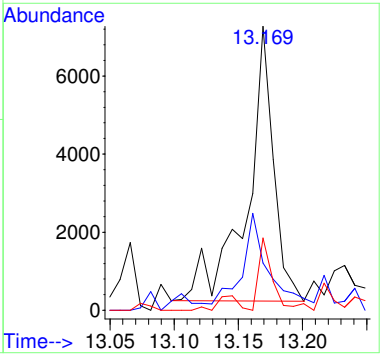


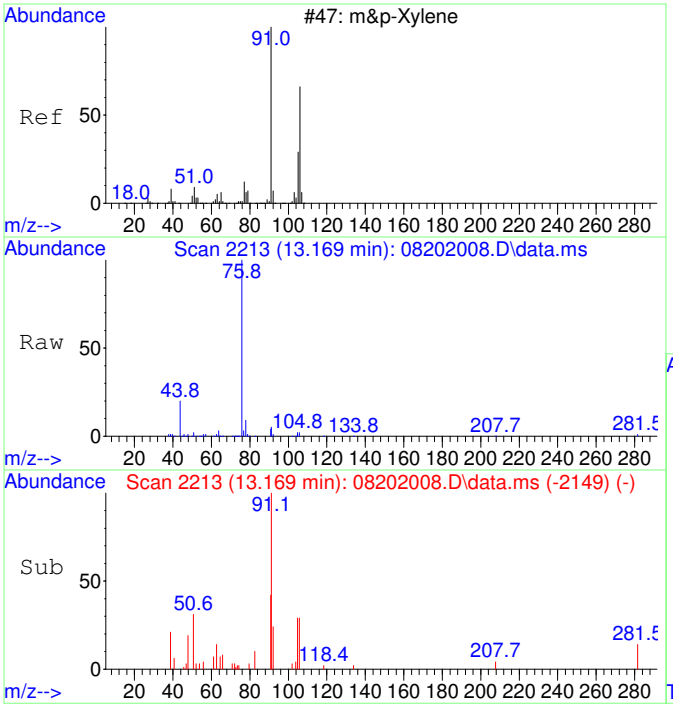


#42
Ethylbenzene SCAN
Concen: 75.40 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 10146

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

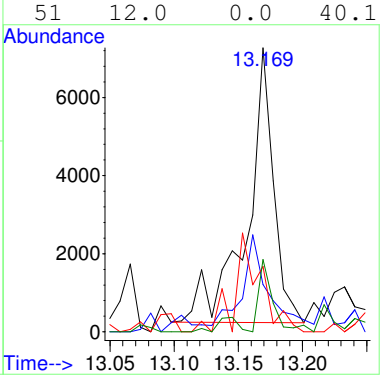


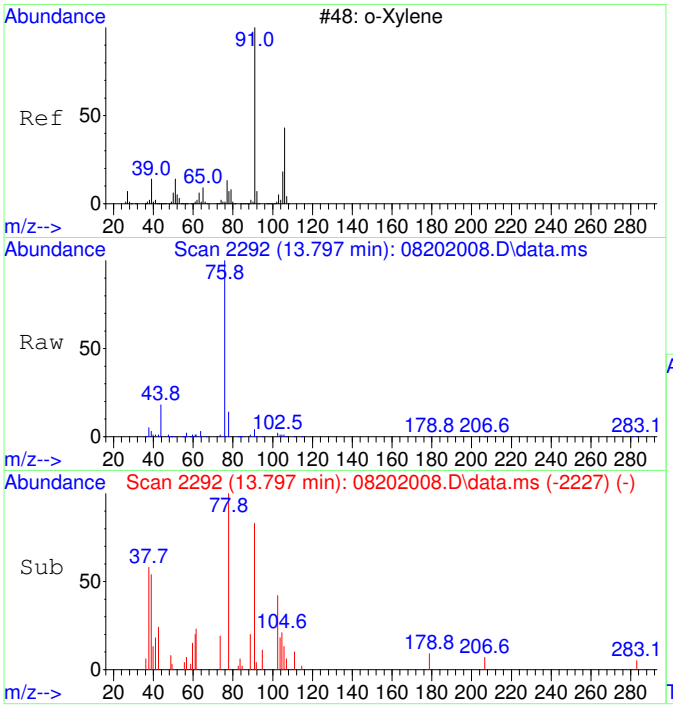


#43
m&p-Xylene SCAN
Concen: 75.40 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 10146

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

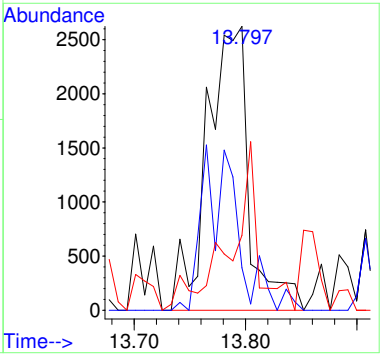


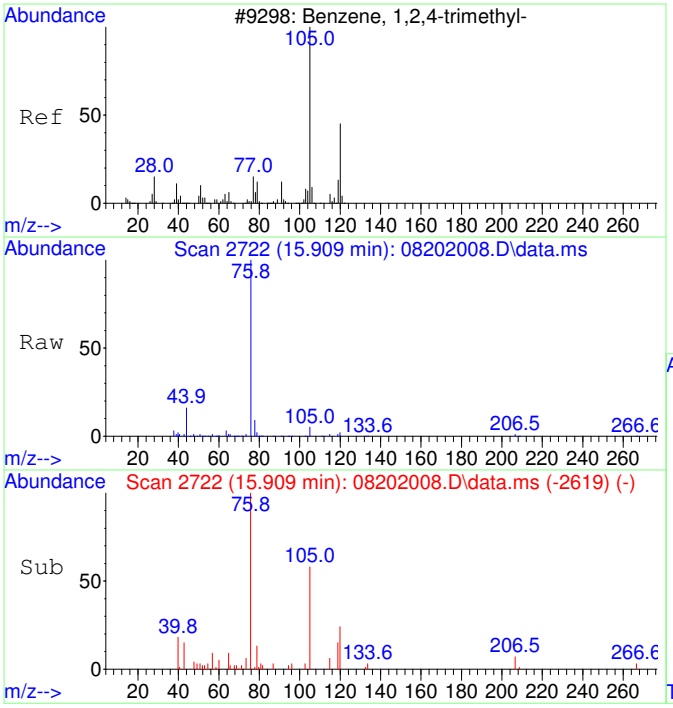


#44
o-Xylene SCAN
Concen: 95.26 ug/L
RT: 13.797 min Scan# 2292
Delta R.T. 0.016 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 6861

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

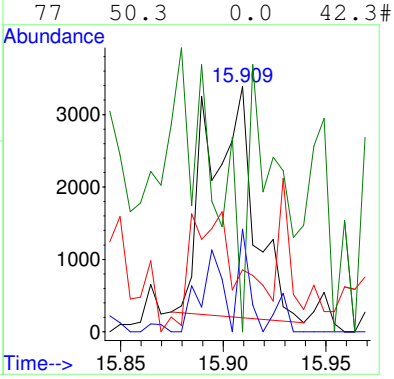


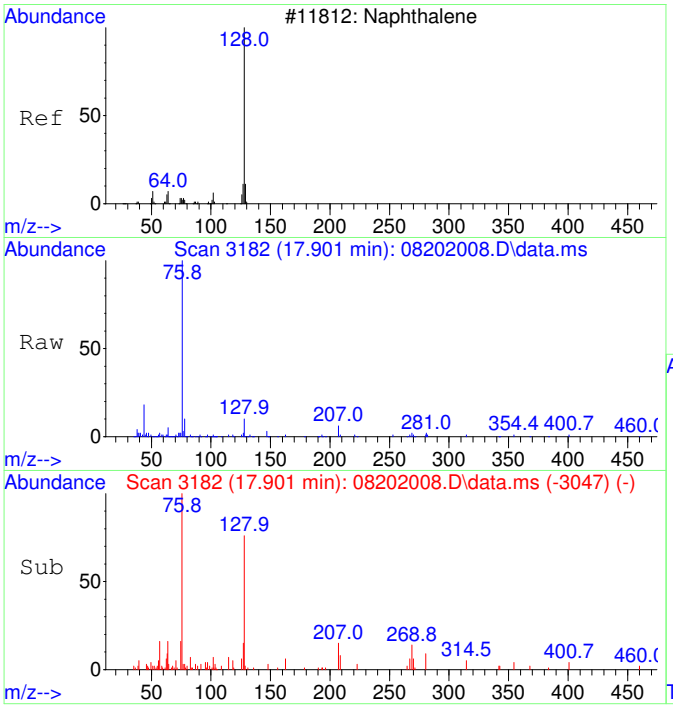


#47
1,2,4-Trimethylbenzene SCAN
Concen: 63.32 ug/L
RT: 15.909 min Scan# 2722
Delta R.T. 0.010 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:105 Resp: 4918

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

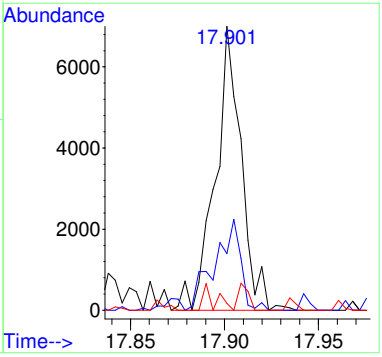




#48
Naphthalene SCAN
Concen: 57.30 ug/L
RT: 17.901 min Scan# 3182
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:128 Resp: 6734

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



Quantitation Report (QT Reviewed)

Table of Contents

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

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

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

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

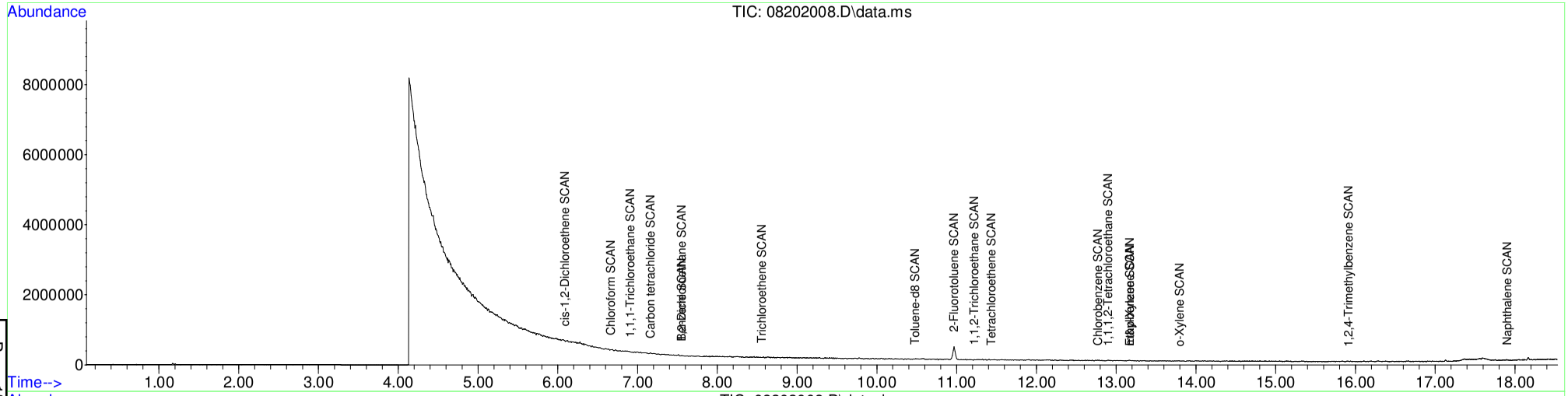
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	604968	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	5849	49.39 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 0.99%#		
Target Compounds					Qvalue
2] 1,1-Dichloroethene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

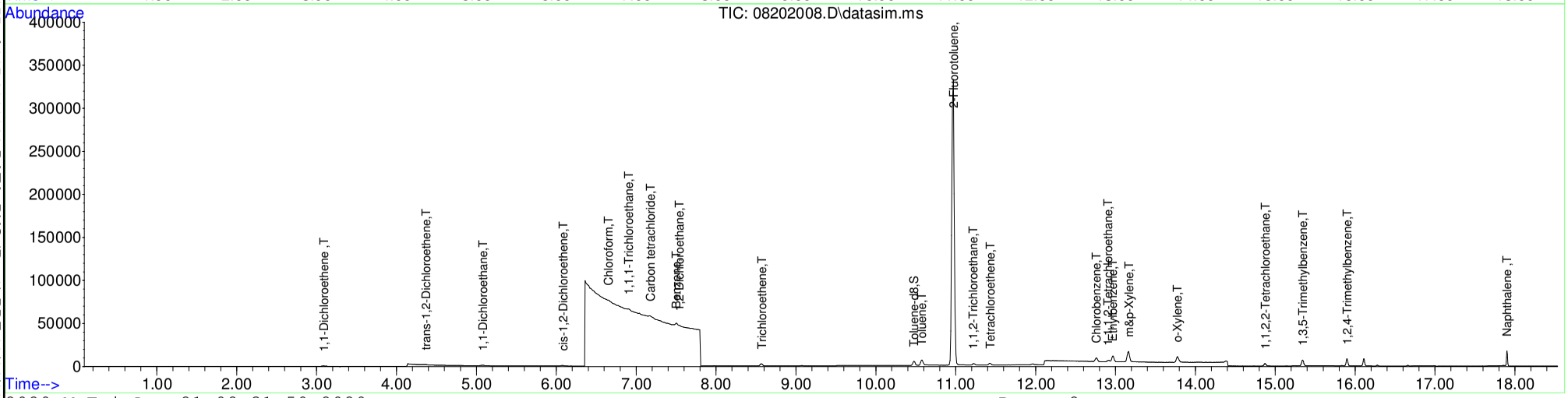
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

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

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





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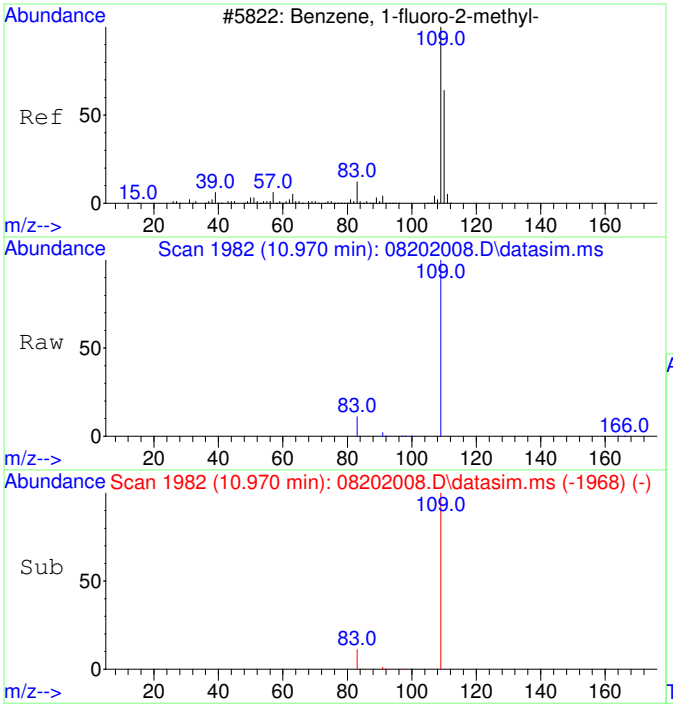
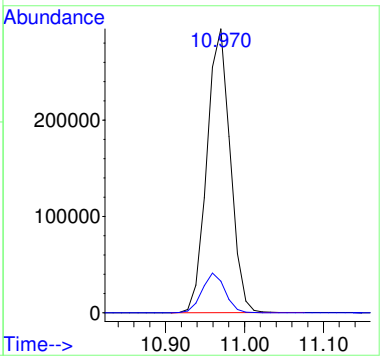
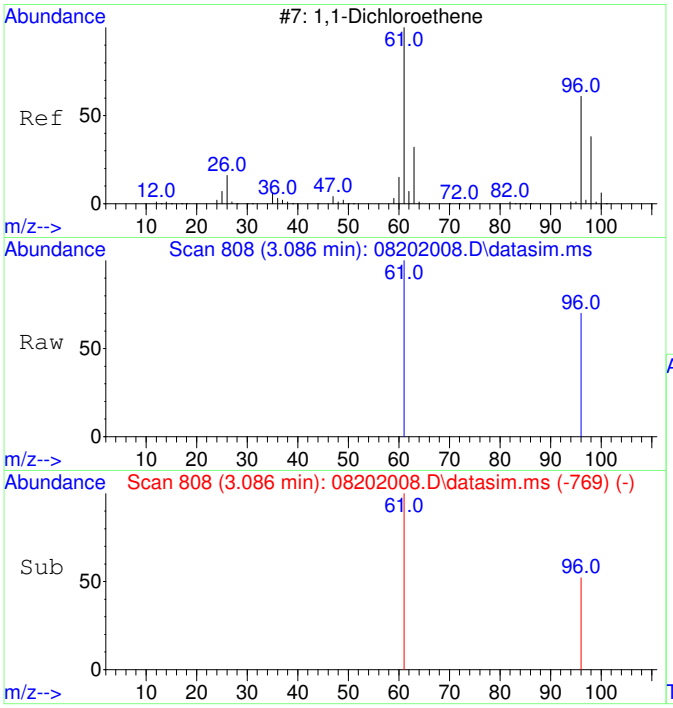


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:109 Resp: 604968

Ion	Ratio	Lower	Upper
109	100		
83	13.7	0.0	42.3

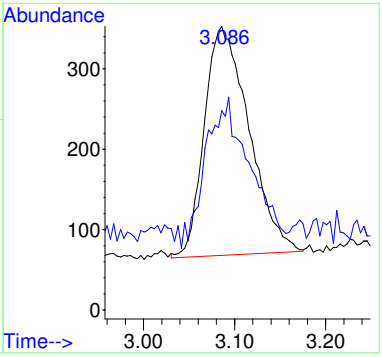


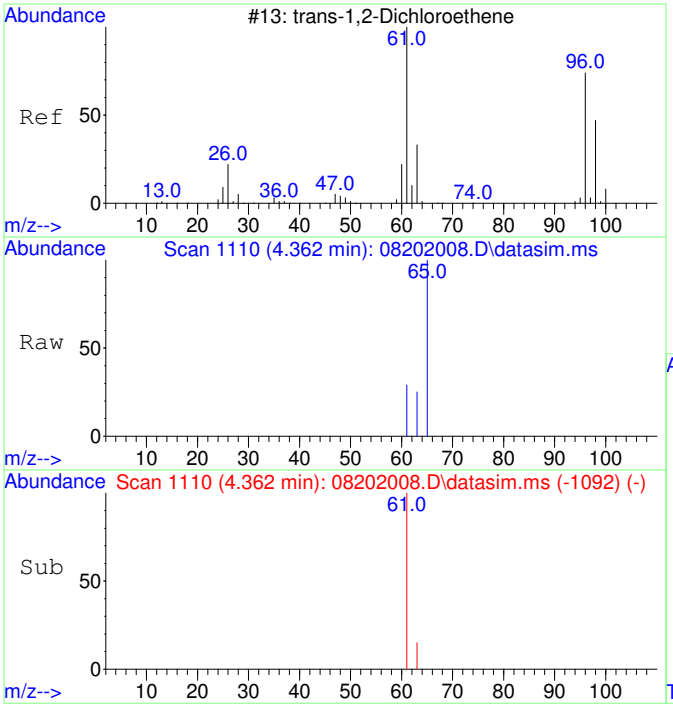


#2
1,1-Dichloroethene
Concen: 36.47 ug/L m
RT: 3.086 min Scan# 808
Delta R.T. -0.004 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 61 Resp: 970

Ion	Ratio	Lower	Upper
61	100		
96	85.9	37.2	97.2

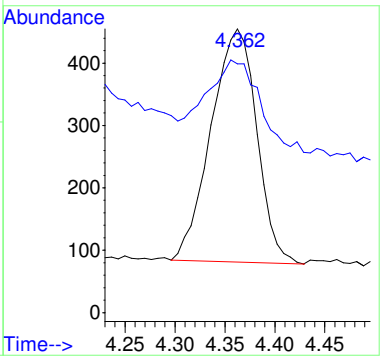


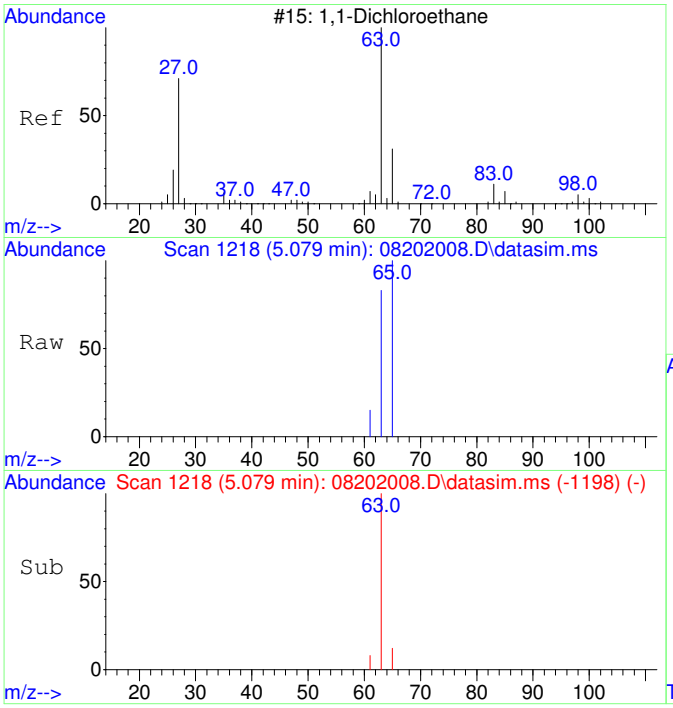


#3
trans-1,2-Dichloroethene
Concen: 42.71 ug/L
RT: 4.362 min Scan# 1110
Delta R.T. -0.033 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 61 Resp: 1192

Ion	Ratio	Lower	Upper
61	100		
63	48.7	2.4	62.4

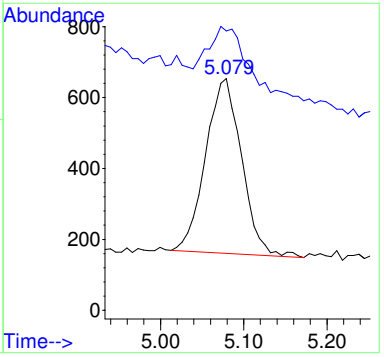


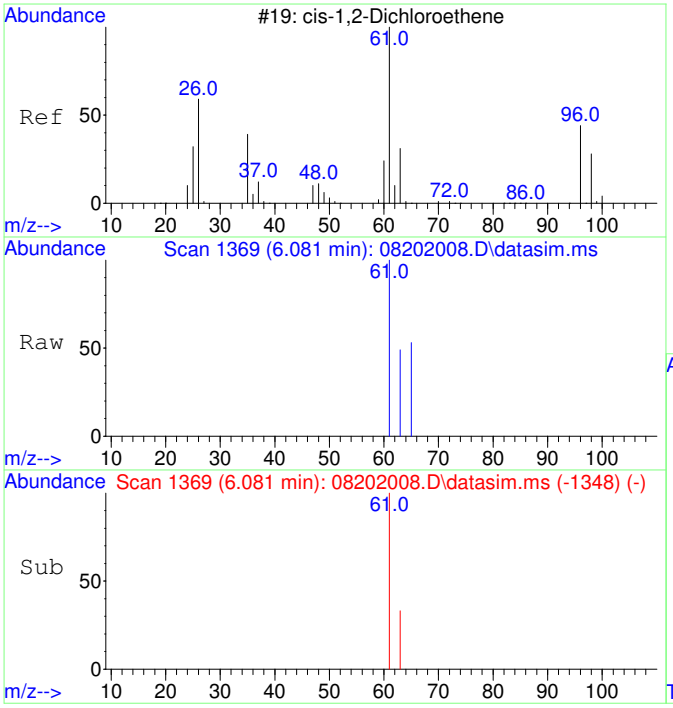


#4
1,1-Dichloroethane
Concen: 42.45 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.020 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 63 Resp: 1475

Ion	Ratio	Lower	Upper
63	100		
65	76.1	1.8	61.8#

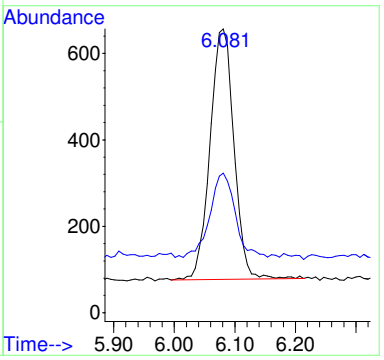


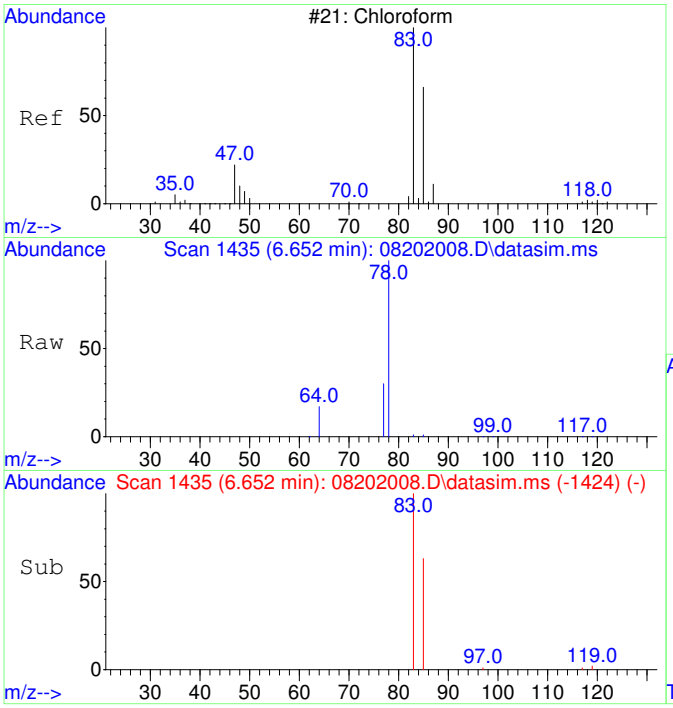


#5
cis-1,2-Dichloroethene
Concen: 43.46 ug/L
RT: 6.081 min Scan# 1369
Delta R.T. -0.013 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 61 Resp: 1594

Ion	Ratio	Lower	Upper
61	100		
63	35.1	2.5	62.5

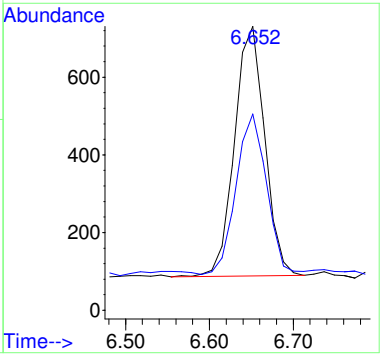


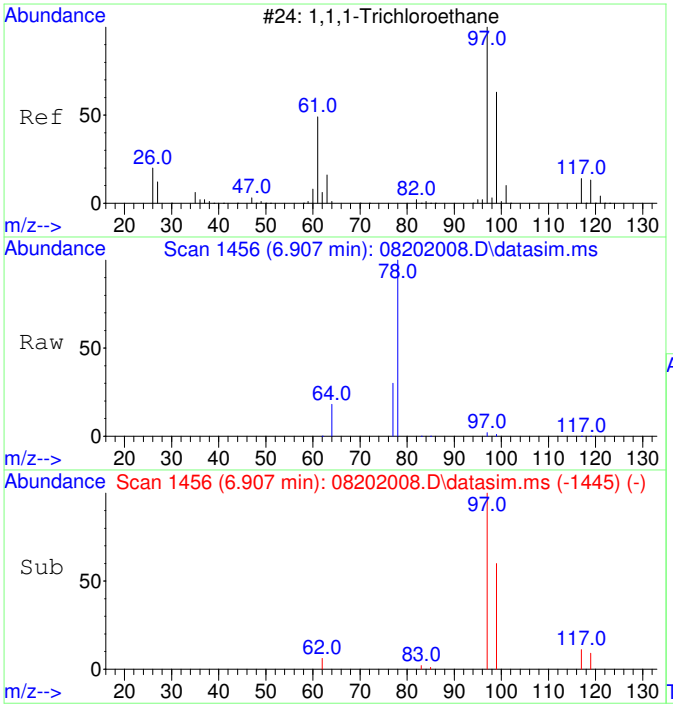


#6
Chloroform
Concen: 42.78 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 83 Resp: 1606

Ion	Ratio	Lower	Upper
83	100		
85	64.9	35.1	95.1

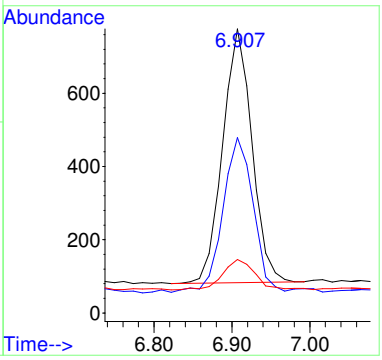


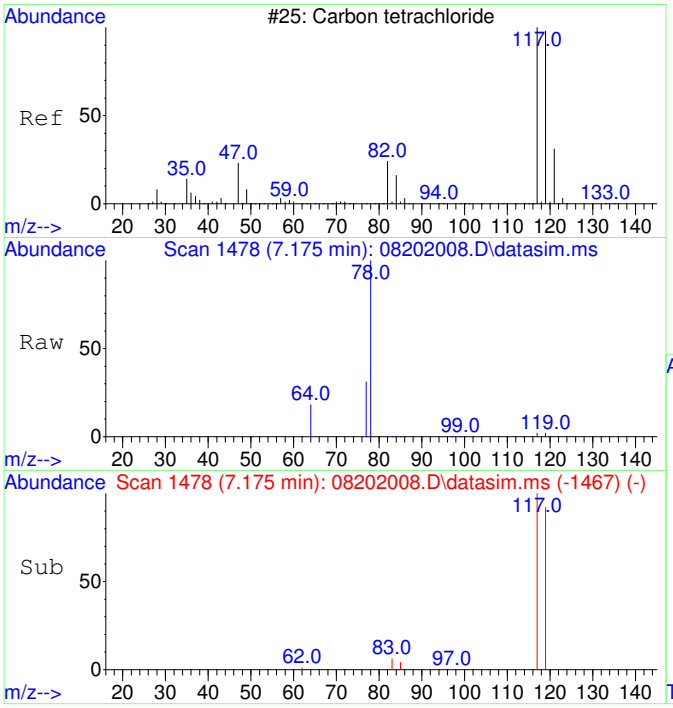


#7
1,1,1-Trichloroethane
Concen: 44.60 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 97 Resp: 1818

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

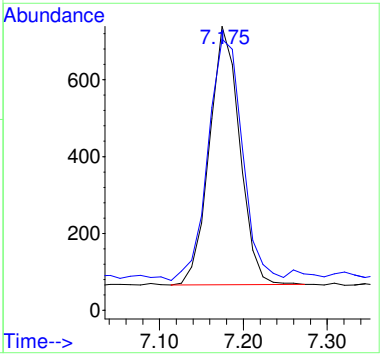


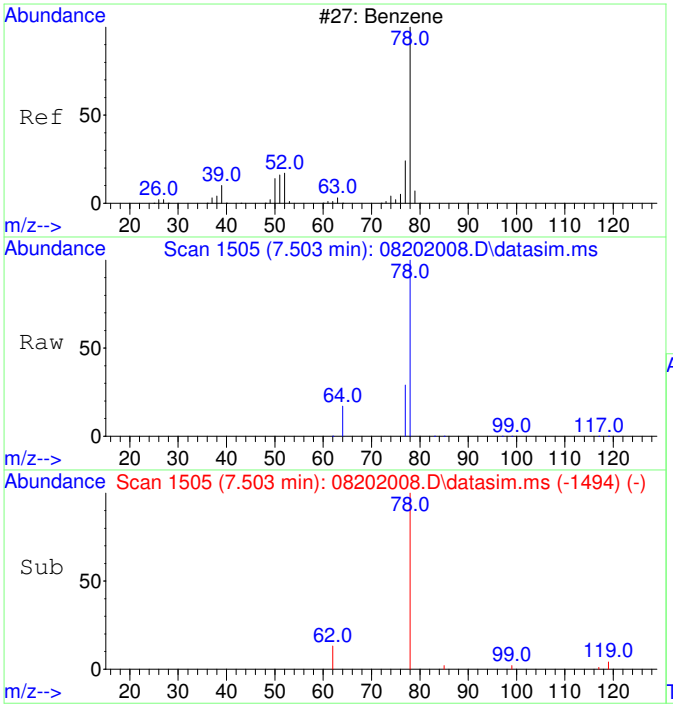


#8
Carbon tetrachloride
Concen: 43.79 ug/L
RT: 7.175 min Scan# 1478
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:117 Resp: 1680

Ion	Ratio	Lower	Upper
117	100		
119	105.9	66.4	126.4

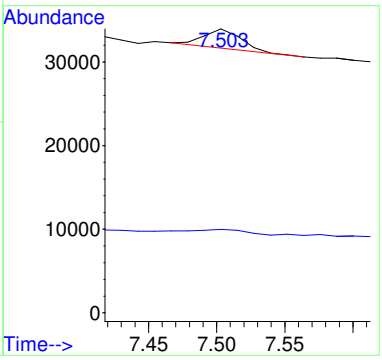


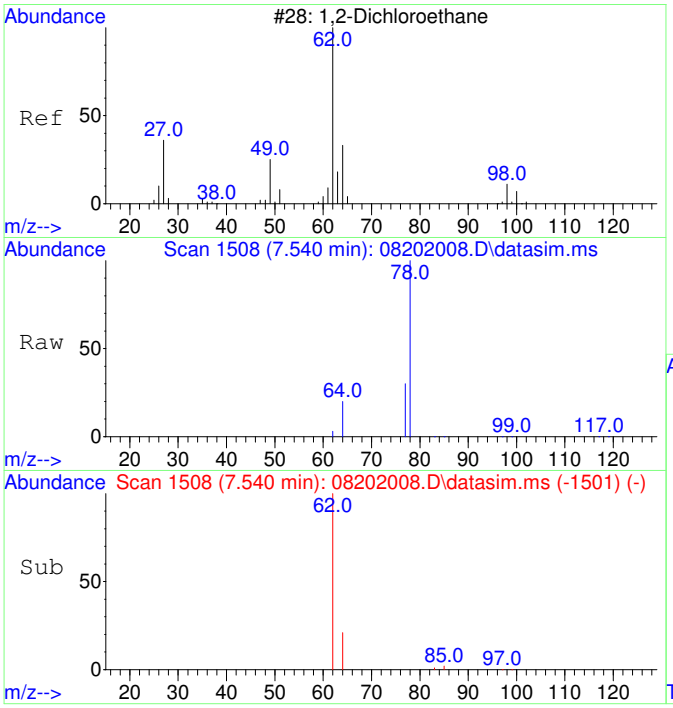


#9
Benzene
Concen: 37.10 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 78 Resp: 3813

Ion	Ratio	Lower	Upper
78	100		
77	99.1	0.0	53.2#

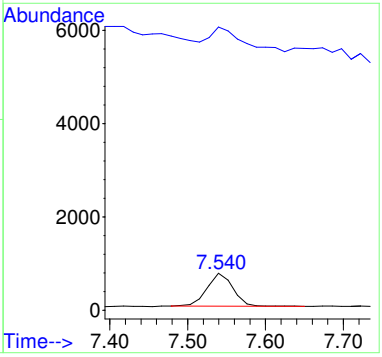


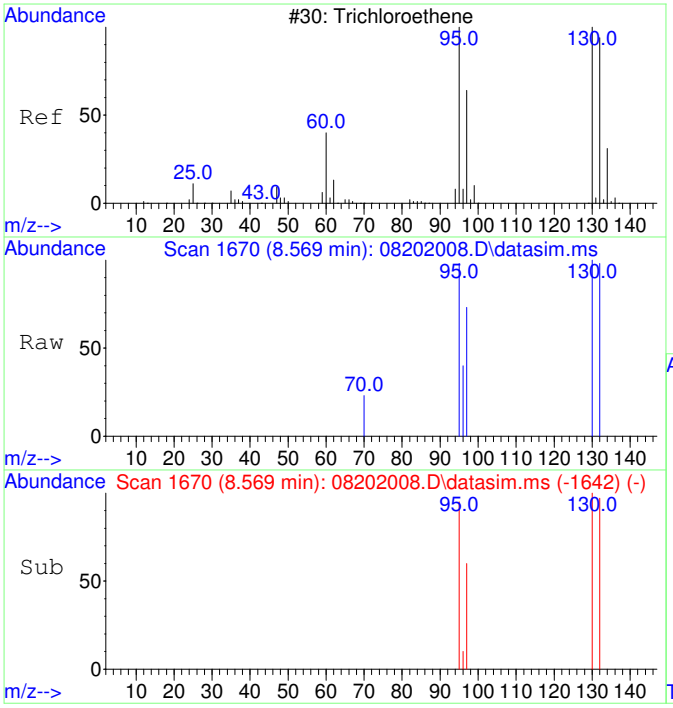


#10
1,2-Dichloroethane
Concen: 43.69 ug/L
RT: 7.540 min Scan# 1508
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 62 Resp: 1603

Ion	Ratio	Lower	Upper
62	100		
64	90.9	2.3	62.3#

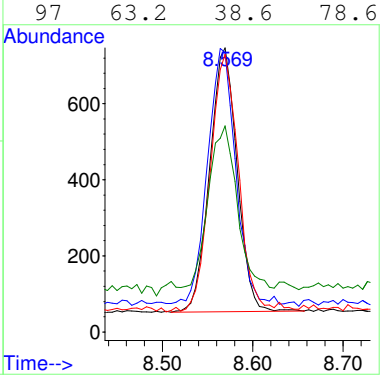


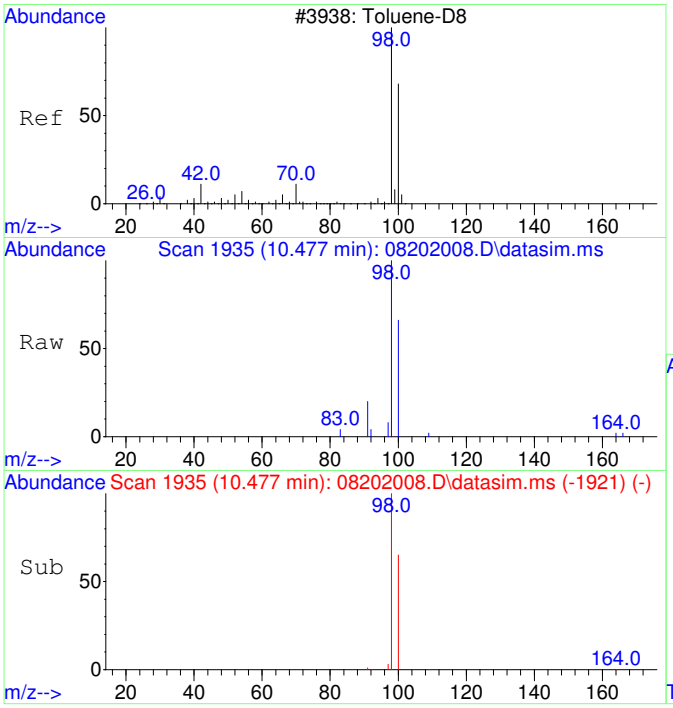


#11
Trichloroethene
Concen: 47.31 ug/L
RT: 8.569 min Scan# 1670
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:130 Resp: 1464

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

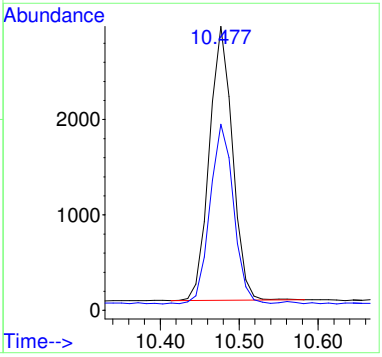


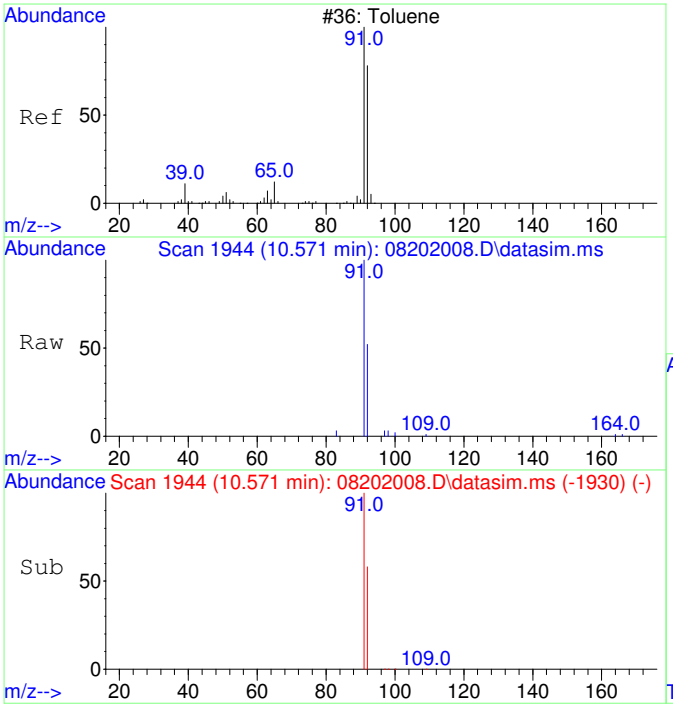


#12
Toluene-d8
Concen: 49.39 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 98 Resp: 5849

Ion	Ratio	Lower	Upper
98	100		
100	66.4	37.1	97.1

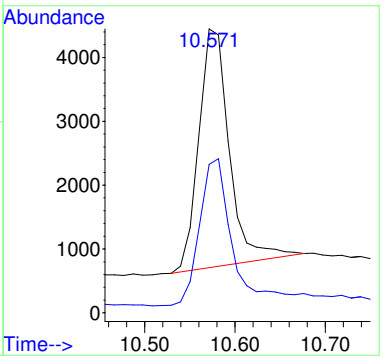


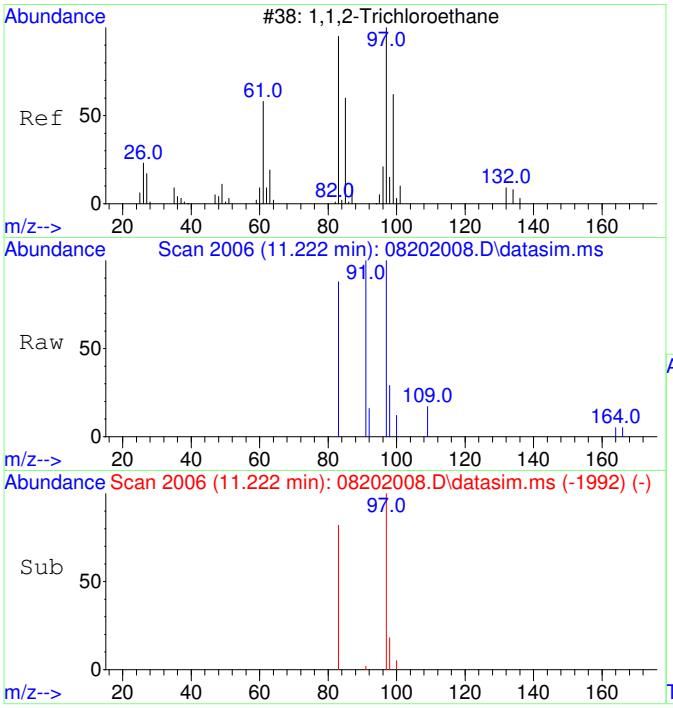


#13
Toluene
Concen: 58.81 ug/L
RT: 10.571 min Scan# 1944
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 8880

Ion	Ratio	Lower	Upper
91	100		
92	66.5	29.9	89.9

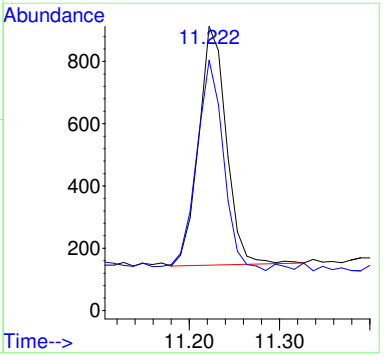


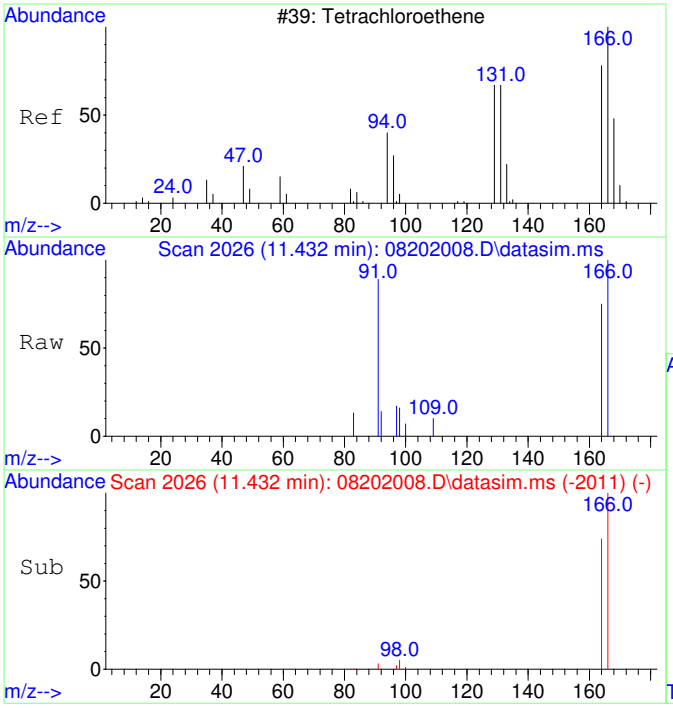


#14
1,1,2-Trichloroethane
Concen: 49.61 ug/L
RT: 11.222 min Scan# 2006
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 97 Resp: 1632

Ion	Ratio	Lower	Upper
97	100		
83	87.4	51.2	111.2

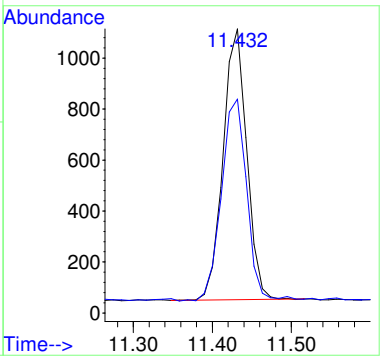


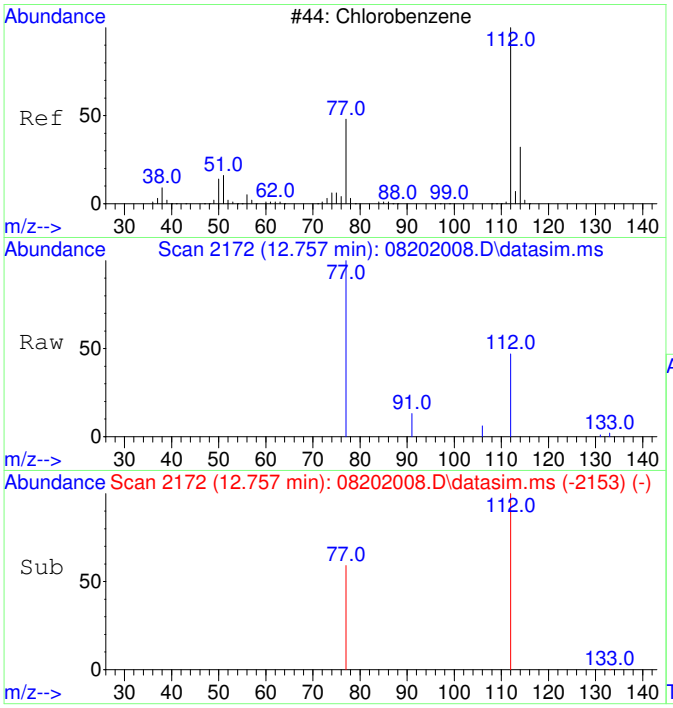


#15
Tetrachloroethene
Concen: 50.49 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.011 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:166 Resp: 2206

Ion	Ratio	Lower	Upper
166	100		
164	78.9	47.8	107.8

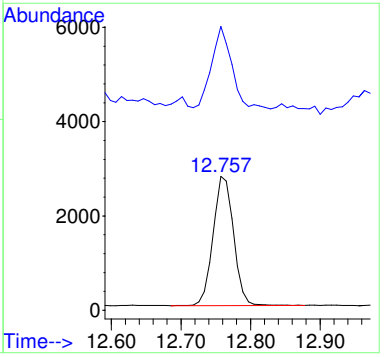


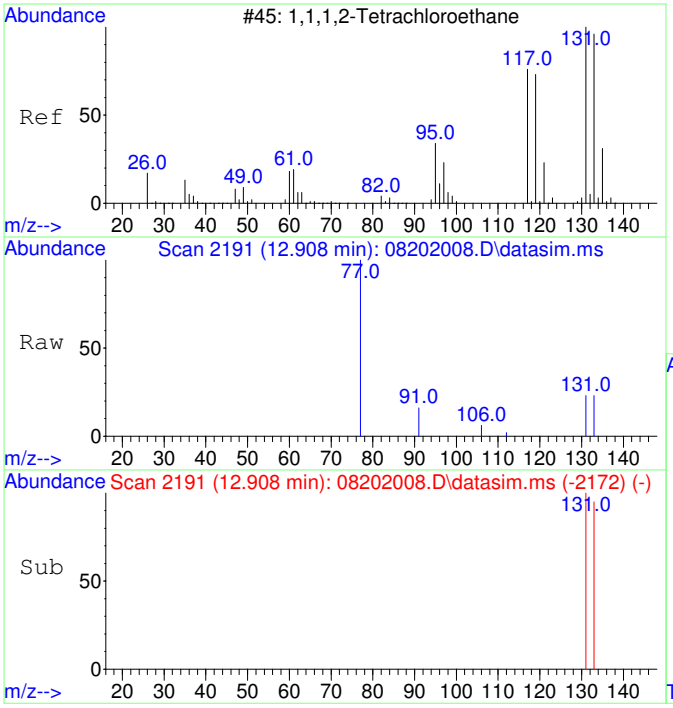


#16
Chlorobenzene
Concen: 51.95 ug/L
RT: 12.757 min Scan# 2172
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:112 Resp: 5616

Ion	Ratio	Lower	Upper
112	100		
77	63.2	23.6	83.6

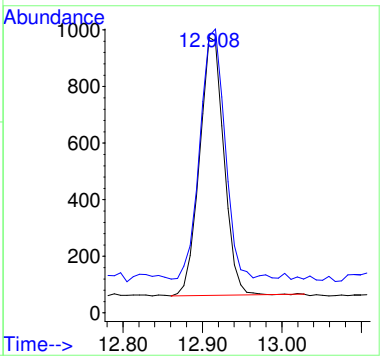


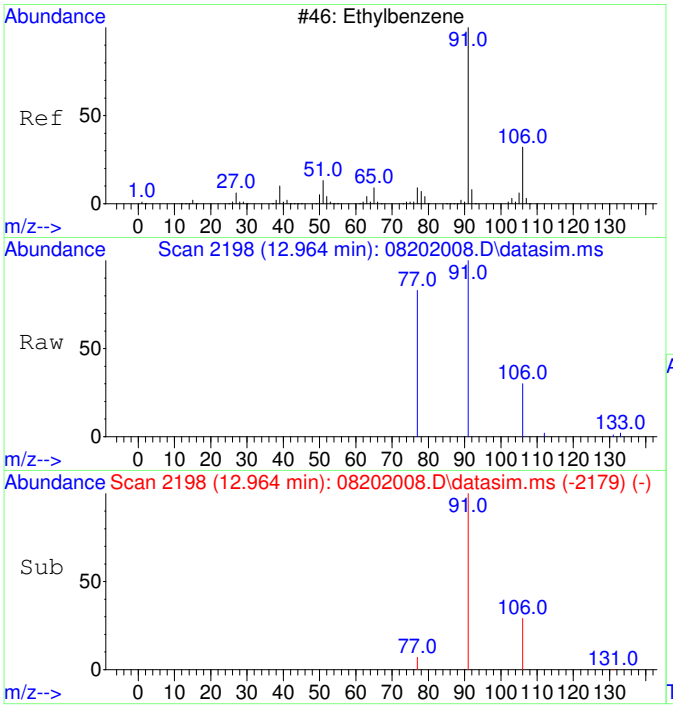


#17
1,1,1,2-Tetrachloroethane
Concen: 49.98 ug/L
RT: 12.908 min Scan# 2191
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:131 Resp: 1936

Ion	Ratio	Lower	Upper
131	100		
133	99.2	66.3	126.3

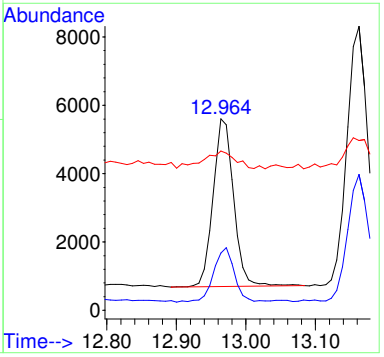


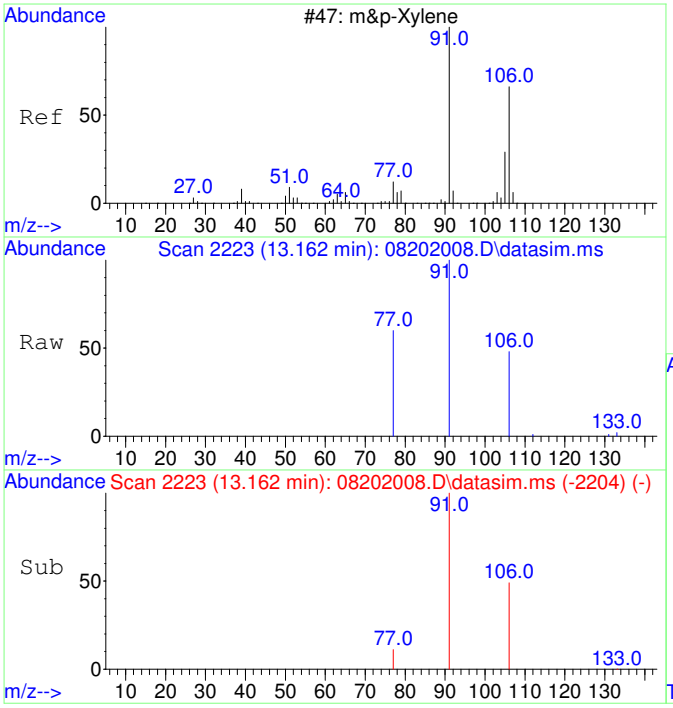


#18
Ethylbenzene
Concen: 54.85 ug/L
RT: 12.964 min Scan# 2198
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 10080

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

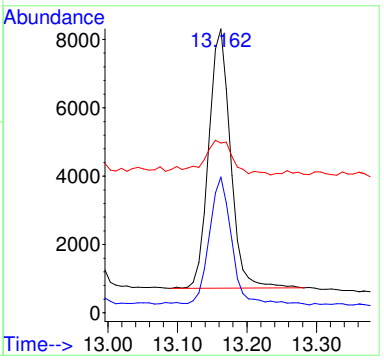


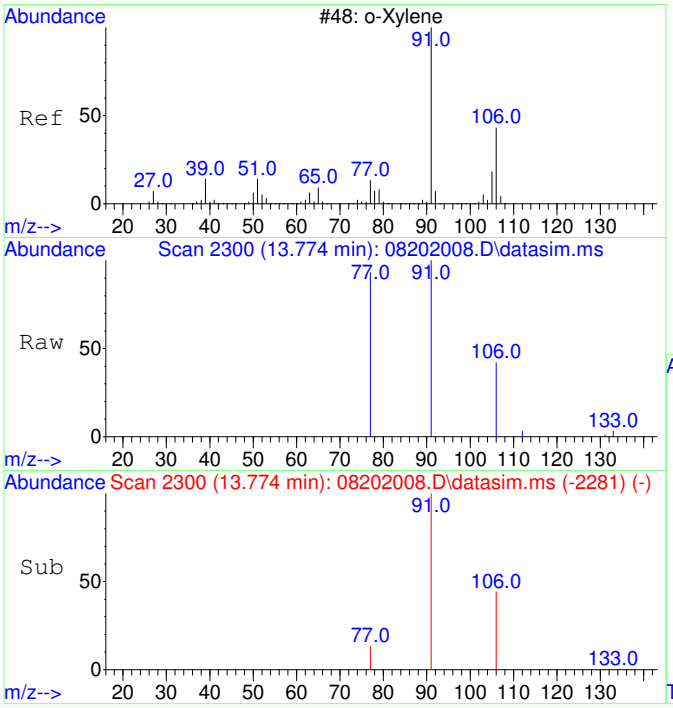


#19
m&p-Xylene
Concen: 114.72 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 16478

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

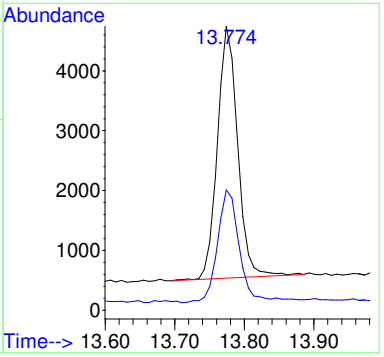


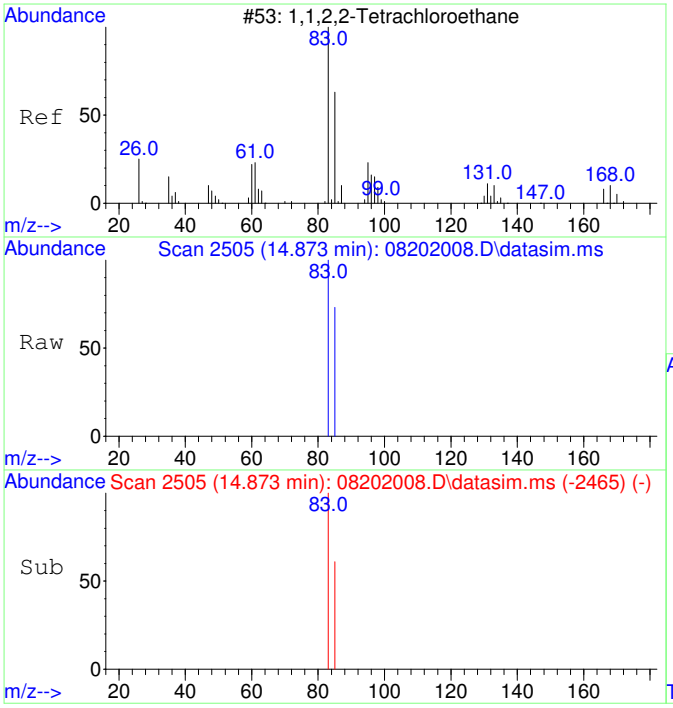


#20
o-Xylene
Concen: 55.46 ug/L
RT: 13.774 min Scan# 2300
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 8511

Ion	Ratio	Lower	Upper
91	100		
106	47.6	19.2	79.2

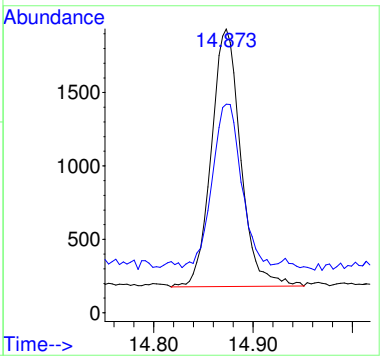


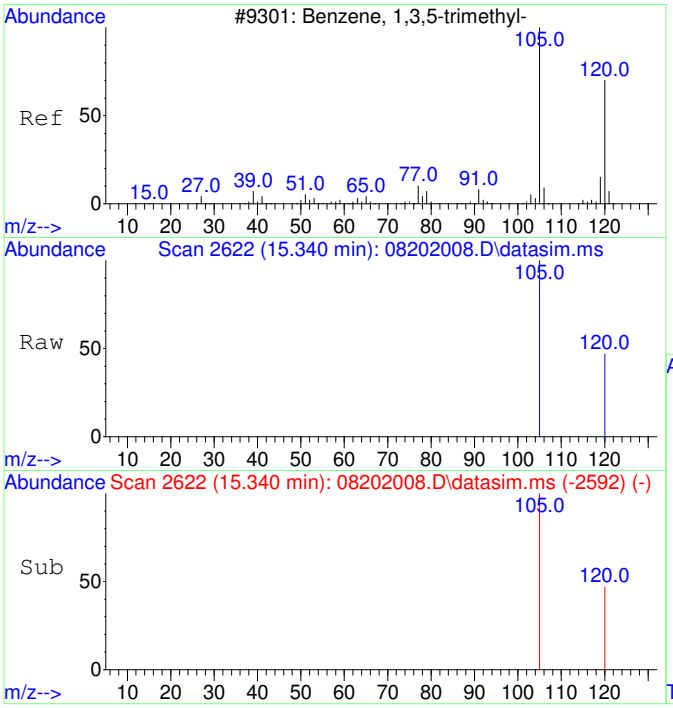


#21
1,1,2,2-Tetrachloroethane
Concen: 52.99 ug/L
RT: 14.873 min Scan# 2505
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 83 Resp: 3604

Ion	Ratio	Lower	Upper
83	100		
85	63.3	34.8	94.8

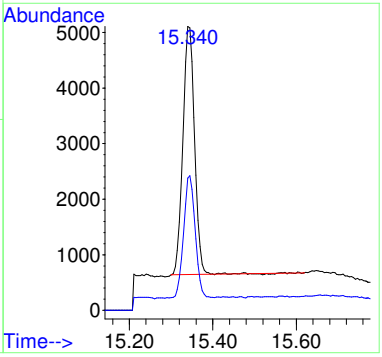


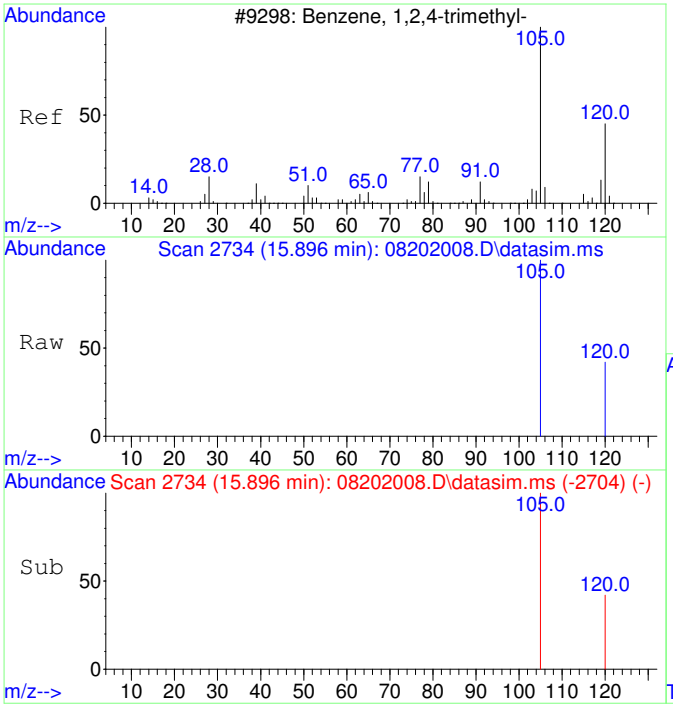


#22
1,3,5-Trimethylbenzene
Concen: 52.84 ug/L
RT: 15.340 min Scan# 2622
Delta R.T. -0.005 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:105 Resp: 8630

Ion	Ratio	Lower	Upper
105	100		
120	47.6	21.1	81.1

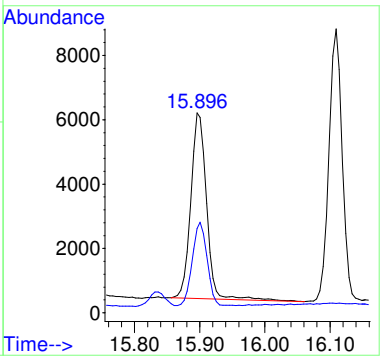


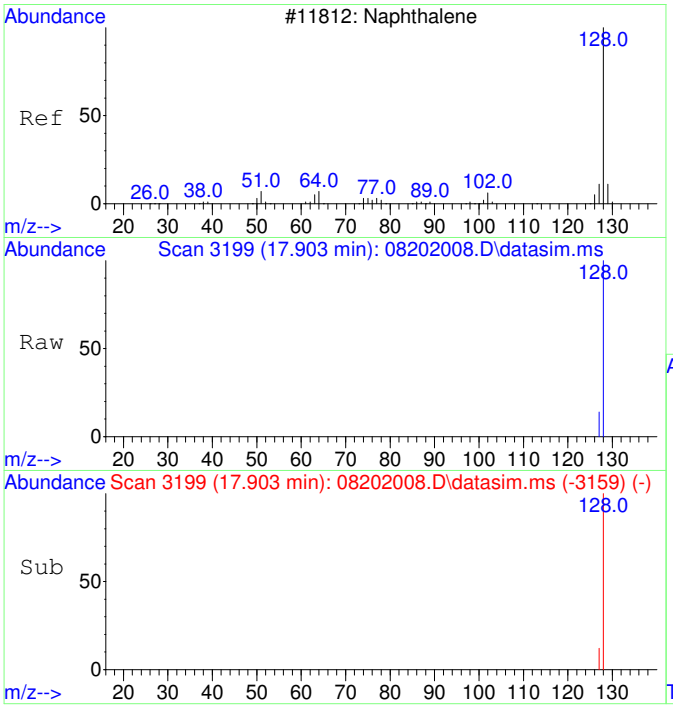


#23
1,2,4-Trimethylbenzene
Concen: 56.95 ug/L
RT: 15.896 min Scan# 2734
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:105 Resp: 9662

Ion	Ratio	Lower	Upper
105	100		
120	41.8	17.2	77.2

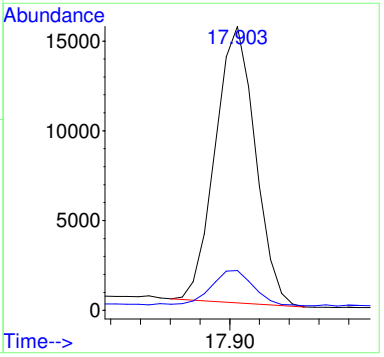


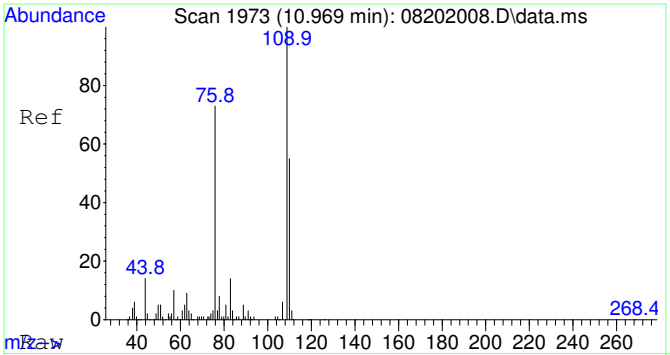


#24
Naphthalene
Concen: 53.59 ug/L
RT: 17.903 min Scan# 3199
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:128 Resp: 14370

Ion	Ratio	Lower	Upper
128	100		
127	13.4	0.0	42.5

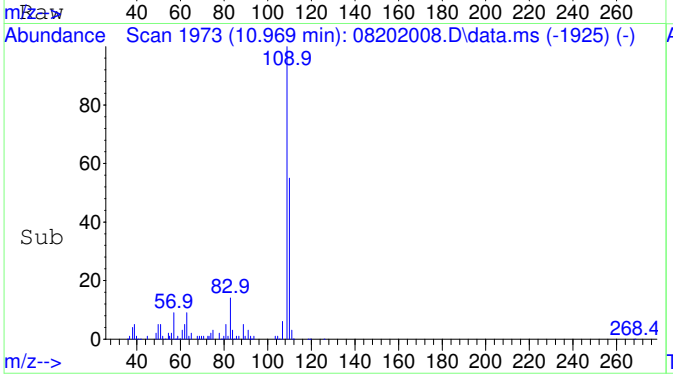


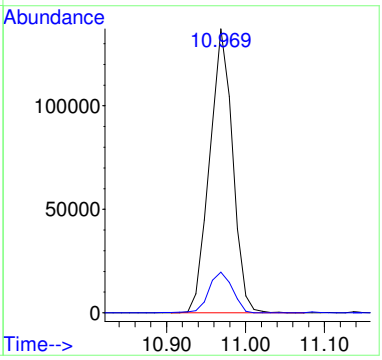


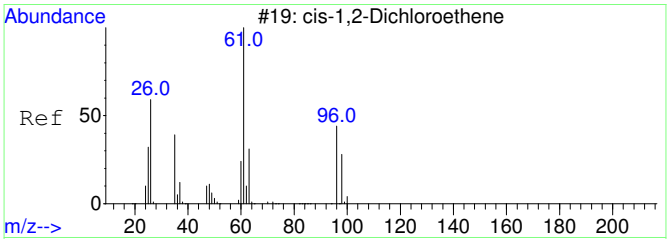
#25
2-Fluorotoluene SCAN
Concen: 4686.70 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:109 Resp: 276390

Ion	Ratio	Lower	Upper
109	100		
83	14.8	0.0	43.8



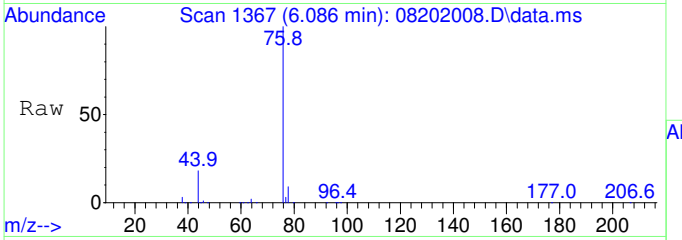


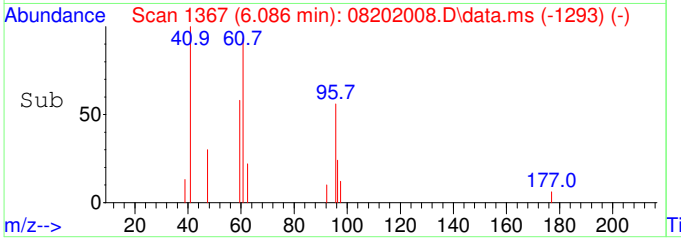


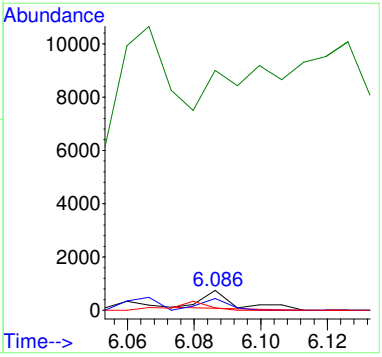
#29
cis-1,2-Dichloroethene SCAN
Concen: 23.21 ug/L
RT: 6.086 min Scan# 1367
Delta R.T. -0.007 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

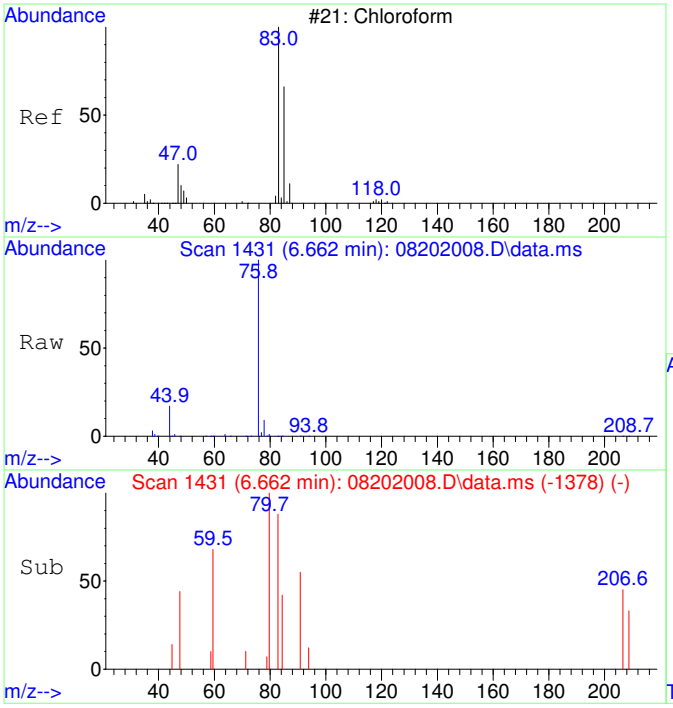
Tgt Ion: 61 Resp: 446

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





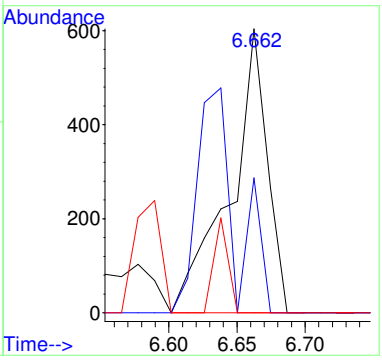


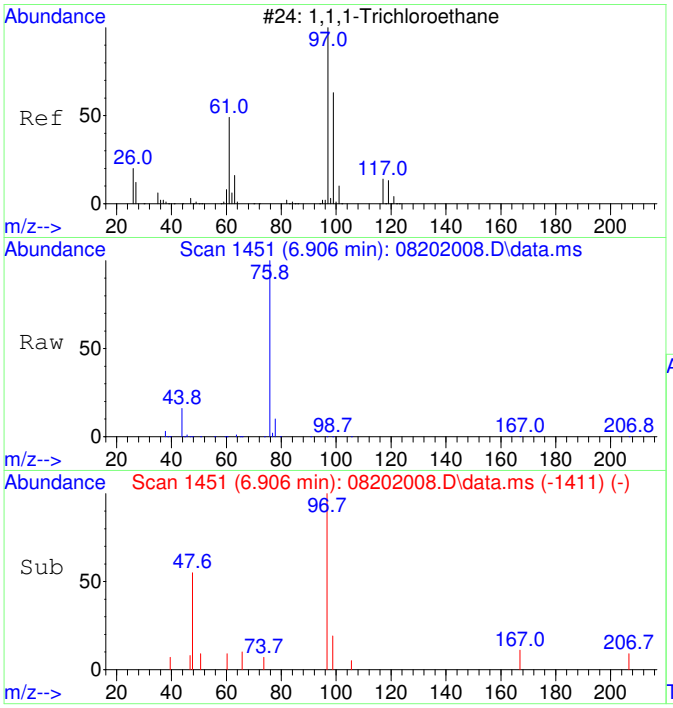


#30
Chloroform SCAN
Concen: 54.98 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 83 Resp: 1146

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

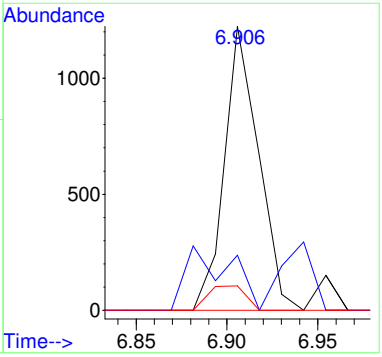


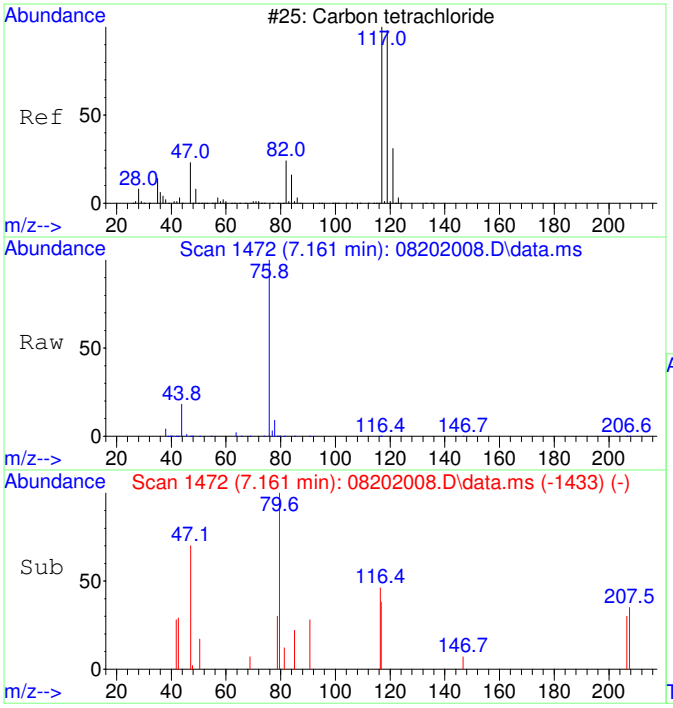


#31
1,1,1-Trichloroethane SCAN
Concen: 84.55 ug/L
RT: 6.906 min Scan# 1451
Delta R.T. -0.012 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 97 Resp: 1606

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

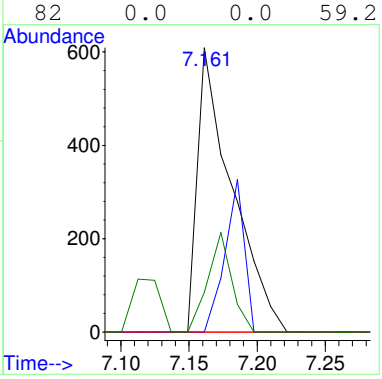


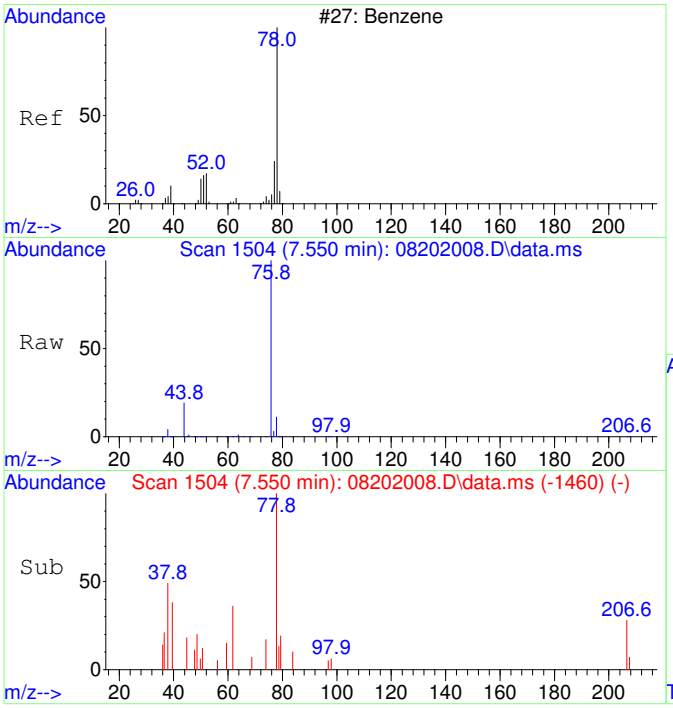


#32
Carbon tetrachloride SCAN
Concen: 54.36 ug/L
RT: 7.161 min Scan# 1472
Delta R.T. -0.024 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:117 Resp: 1077

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

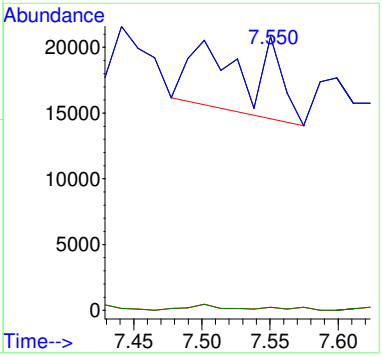


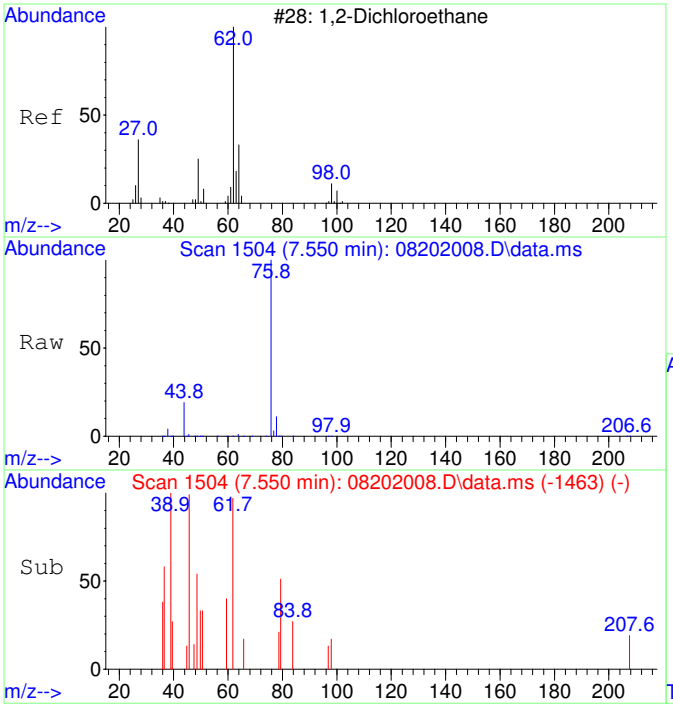


#33
Benzene SCAN
Concen: 320.23 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. 0.037 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 78 Resp: 16747

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

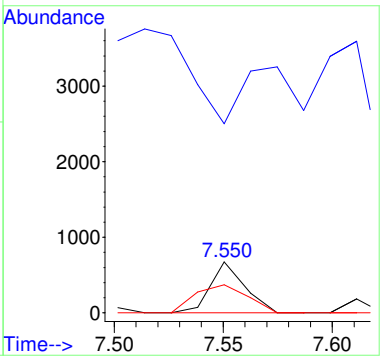


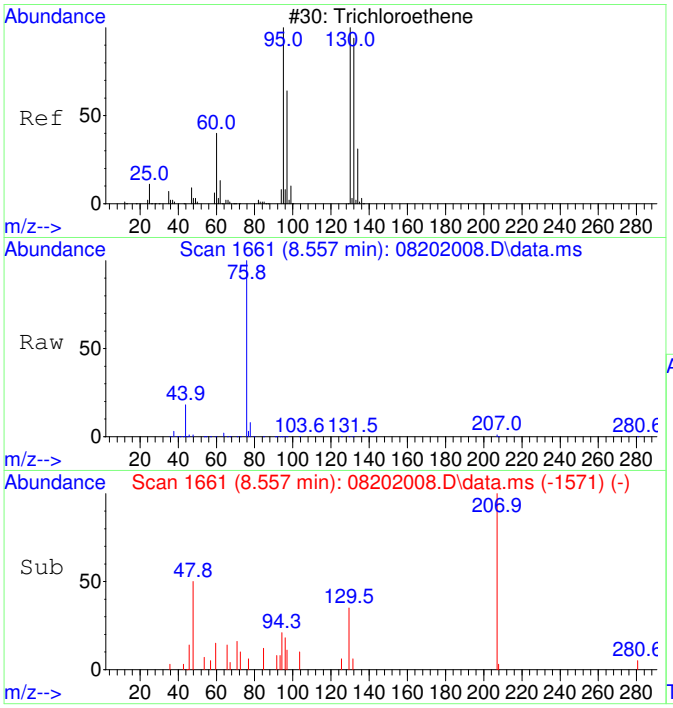


#34
1,2-Dichloroethane SCAN
Concen: 37.96 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 62 Resp: 733

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

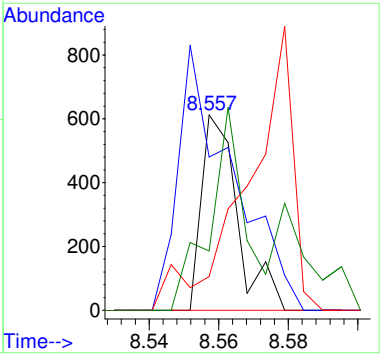


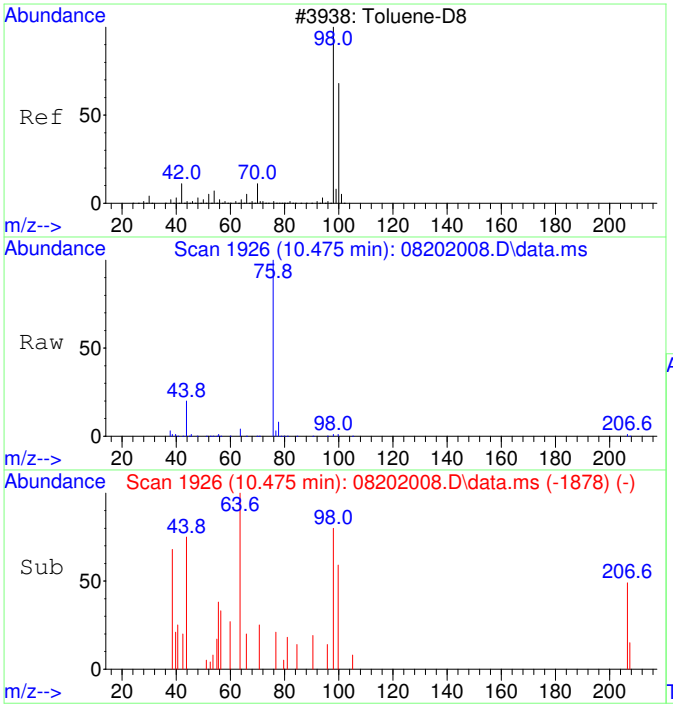


#35
Trichloroethene SCAN
Concen: 30.48 ug/L
RT: 8.557 min Scan# 1661
Delta R.T. -0.011 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:130 Resp: 438

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

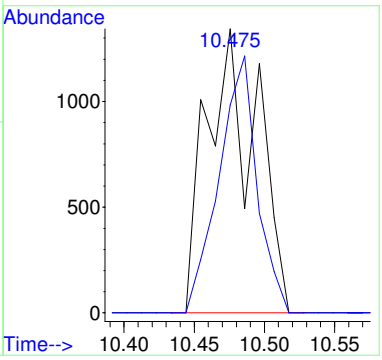


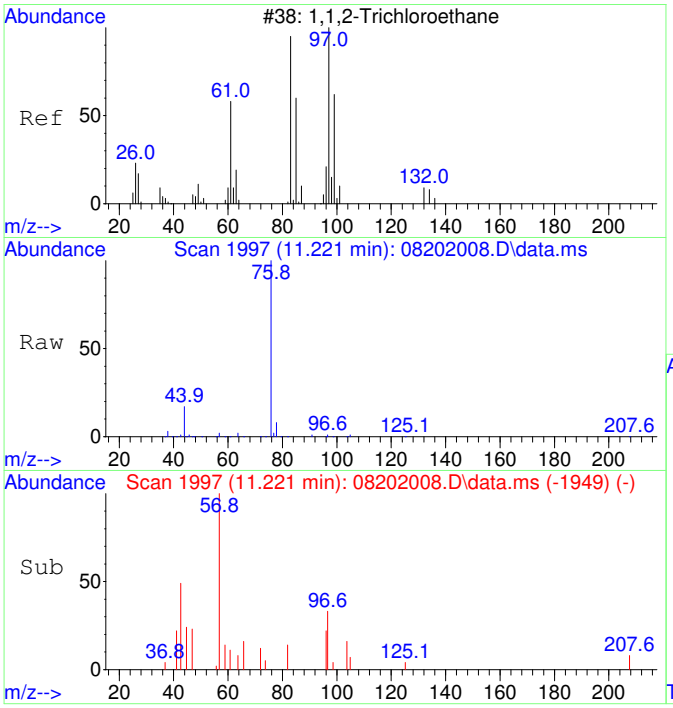


#36
Toluene-d8 SCAN
Concen: 57.48 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 98 Resp: 3315

Ion	Ratio	Lower	Upper
98	100		
100	69.2	40.0	100.0

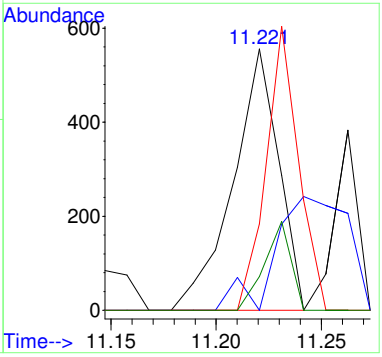


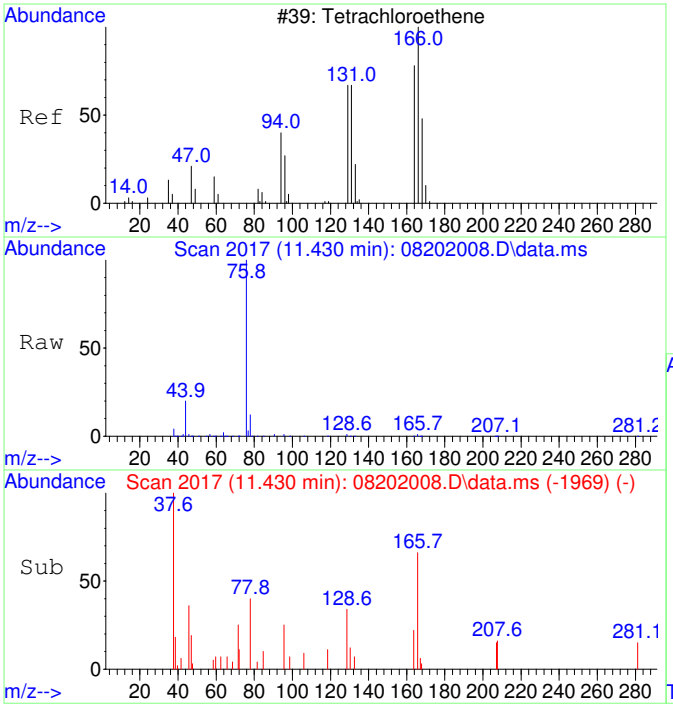


#38
1,1,2-Trichloroethane SCAN
Concen: 50.61 ug/L
RT: 11.221 min Scan# 1997
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 97 Resp: 839

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

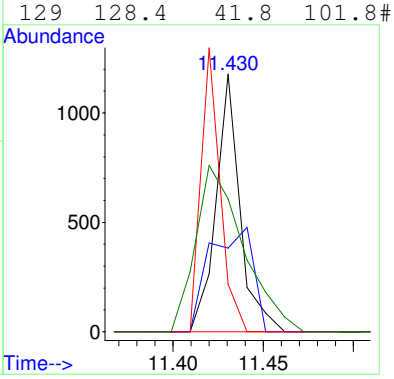


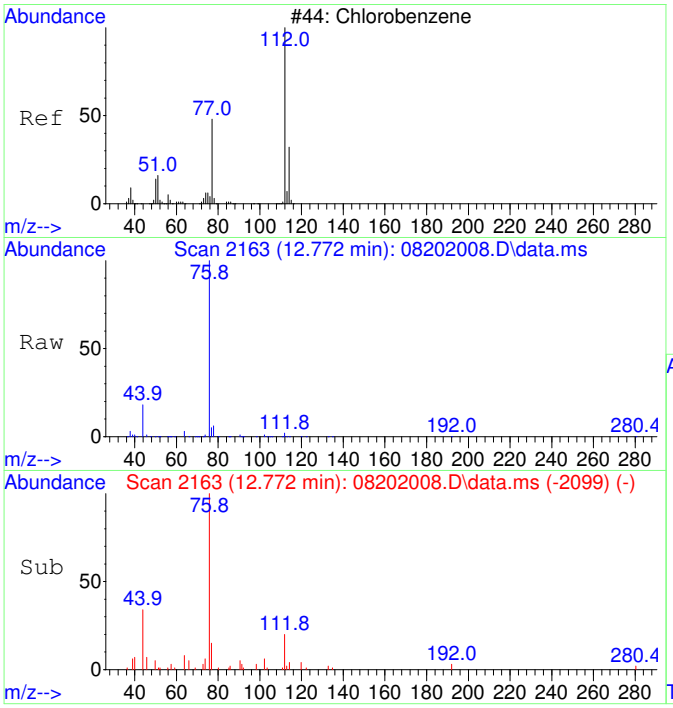


#39
Tetrachloroethene SCAN
Concen: 61.37 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:166 Resp: 1089

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

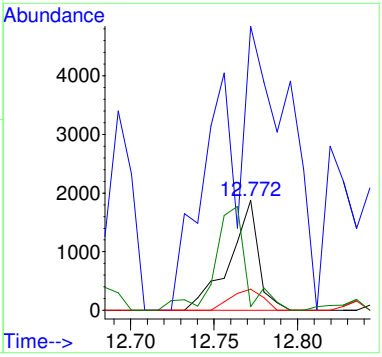


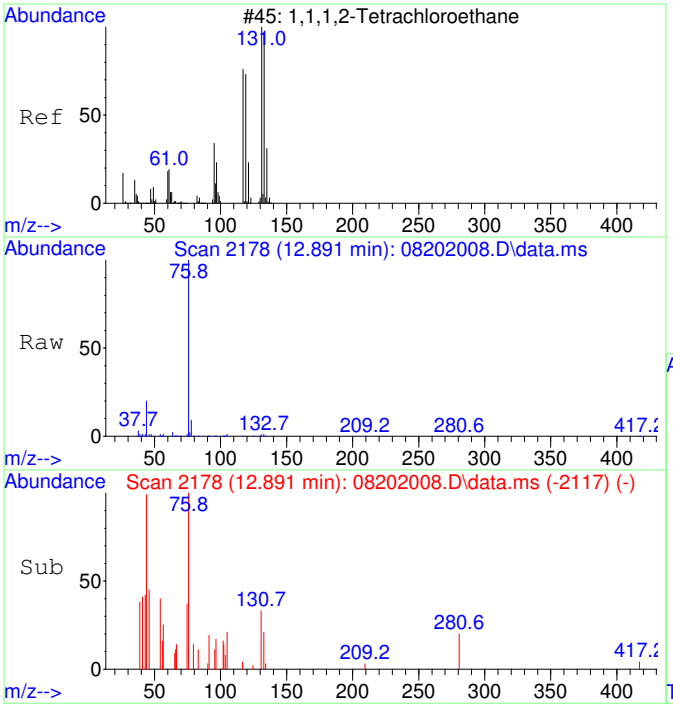


#40
Chlorobenzene SCAN
Concen: 44.78 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.008 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:112 Resp: 2260

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

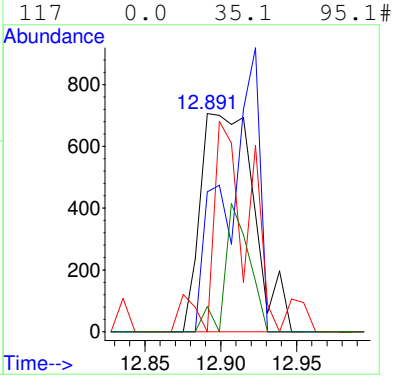


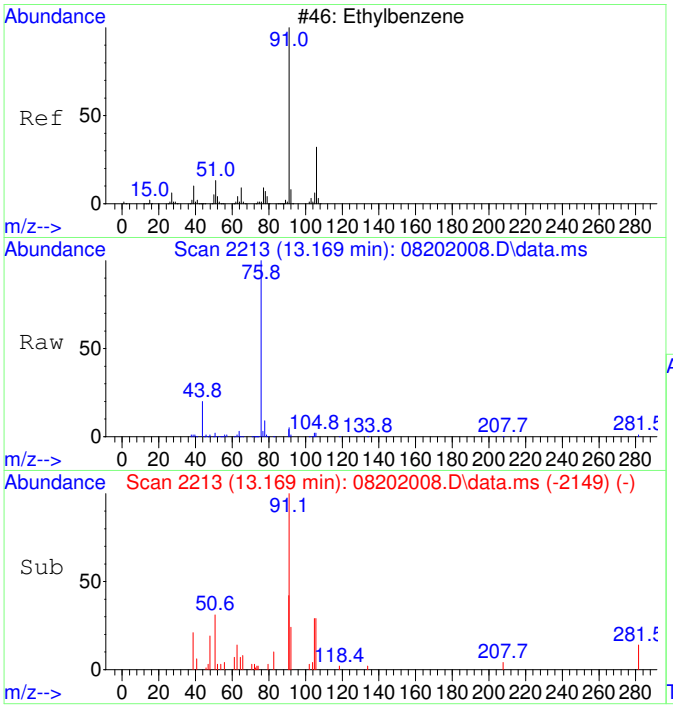


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 93.05 ug/L
RT: 12.891 min Scan# 2178
Delta R.T. -0.016 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:131 Resp: 1738

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

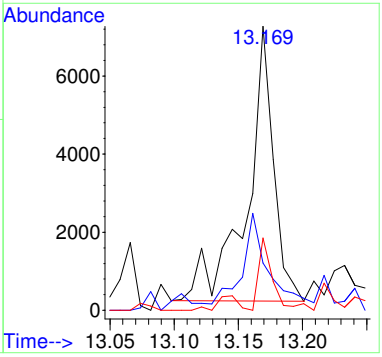


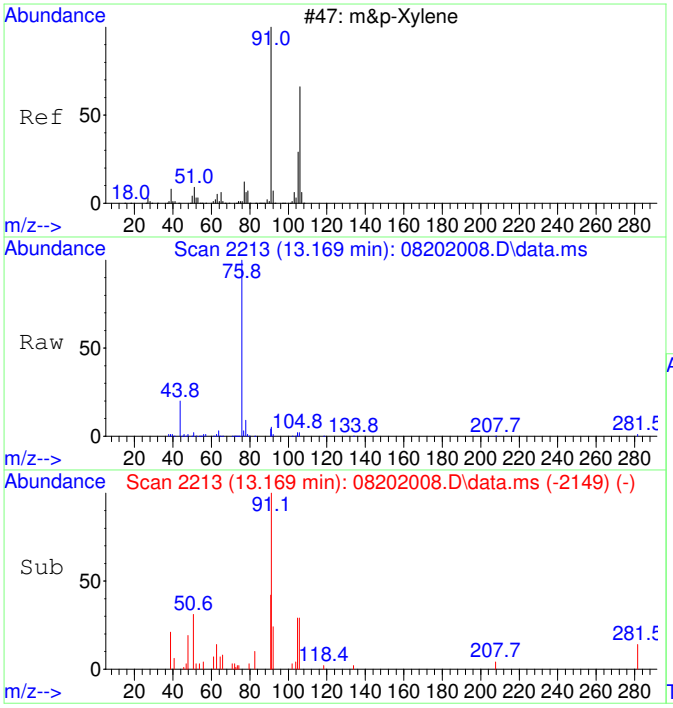


#42
Ethylbenzene SCAN
Concen: 75.40 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 10146

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

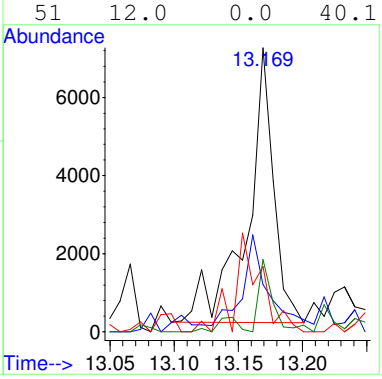


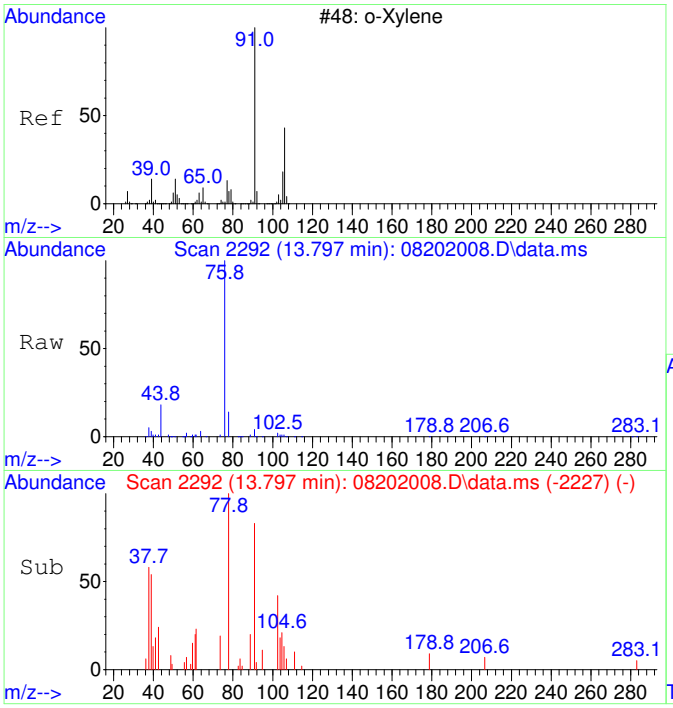


#43
m&p-Xylene SCAN
Concen: 75.40 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 10146

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

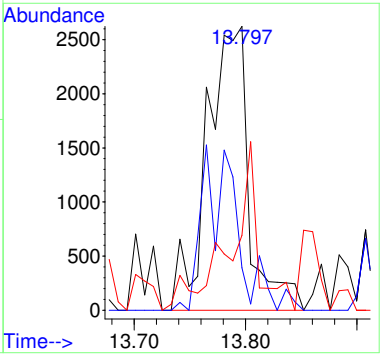


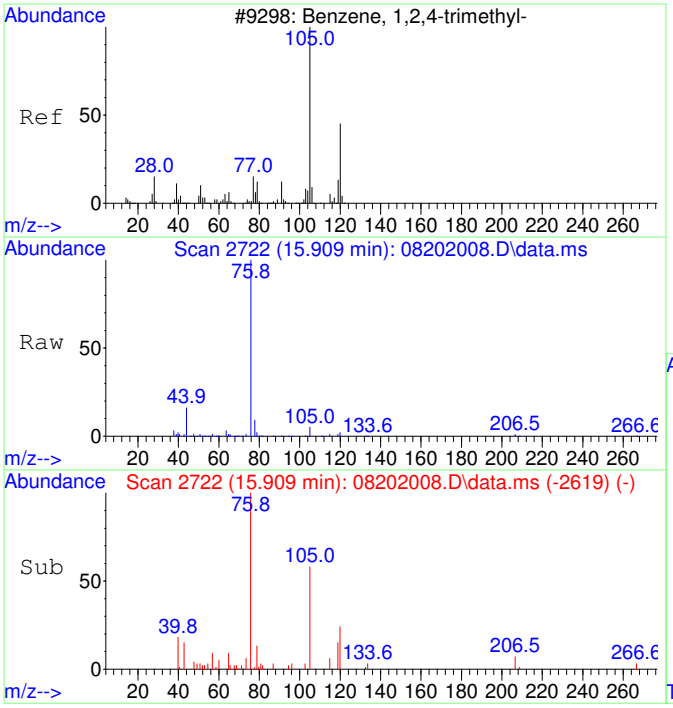


#44
o-Xylene SCAN
Concen: 95.26 ug/L
RT: 13.797 min Scan# 2292
Delta R.T. 0.016 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion: 91 Resp: 6861

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

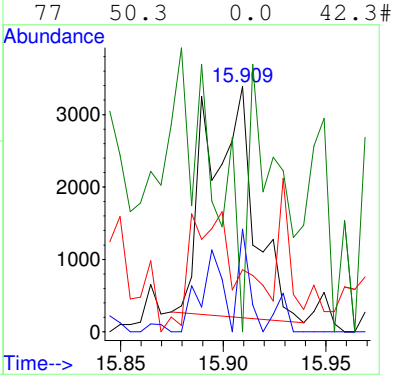


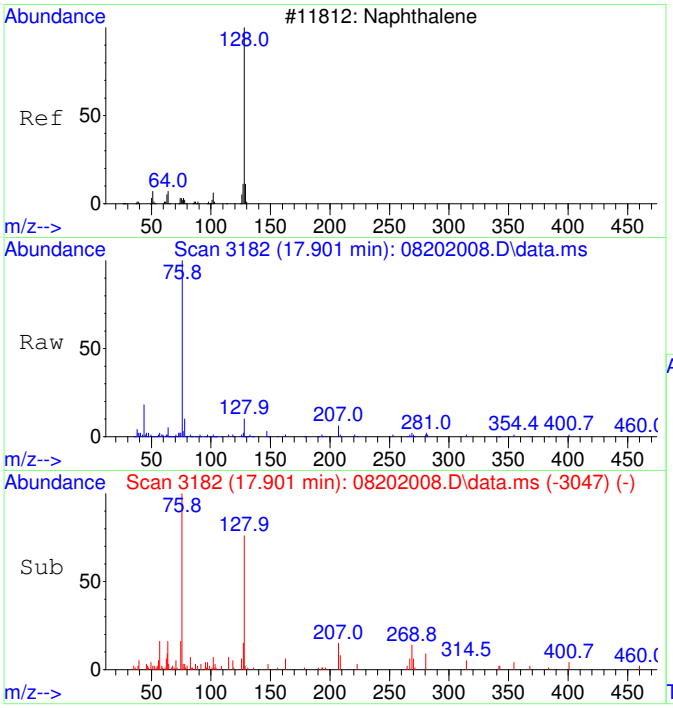


#47
1,2,4-Trimethylbenzene SCAN
Concen: 63.32 ug/L
RT: 15.909 min Scan# 2722
Delta R.T. 0.010 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:105 Resp: 4918

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

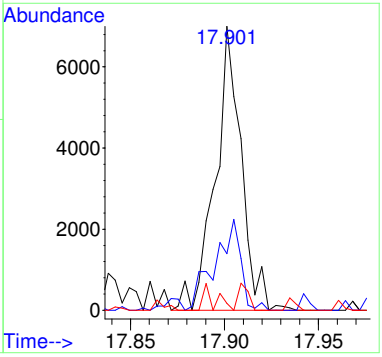




#48
Naphthalene SCAN
Concen: 57.30 ug/L
RT: 17.901 min Scan# 3182
Delta R.T. 0.000 min
Lab File: 08202008.D
Acq: 20 Aug 2020 17:25

Tgt Ion:128 Resp: 6734

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



S20H039-SCV1

Quantitation Report (Not Reviewed)

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

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

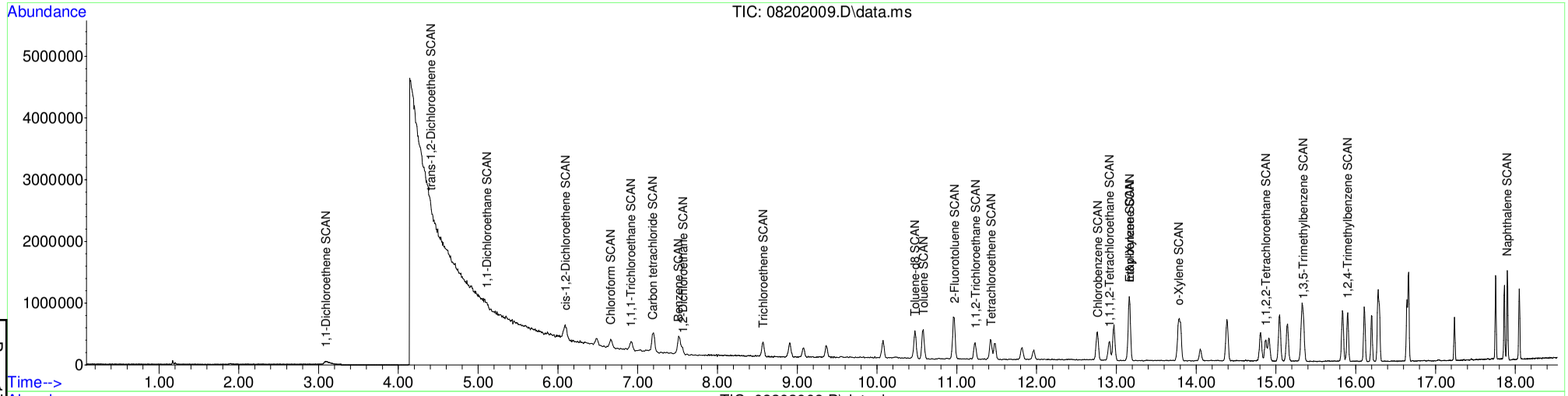
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.959	109	757040	5000.00 ug/L	-0.01
System Monitoring Compounds					
12) Toluene-d8	10.477	98	641391	4327.91 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.56%		
Target Compounds					Qvalue
2]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

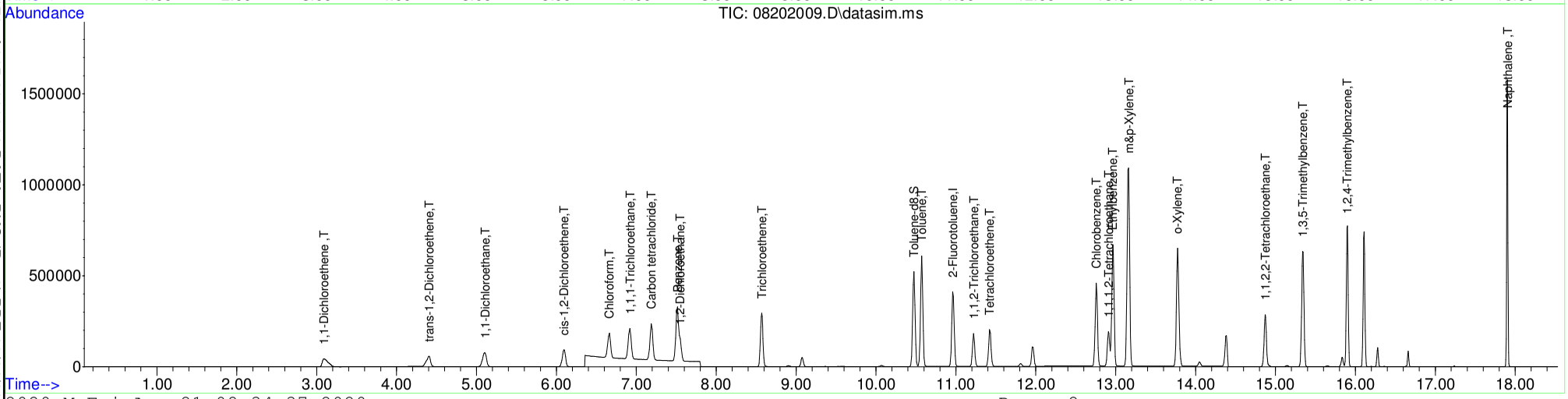
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

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

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





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Calibration

2008017

Calibration Date: 08/20/2020

Instrument: AG5975CV

Calibration Analyses:

VOCs, Passive Samplers

Response Factor Report AG5975C

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

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

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

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Response Factor Report AG5975C

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

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

(#) = Out of Range

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Table of Contents

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

Total Cpnds : 48

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

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

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

CHEMSTATION AREA COUNT REPORT

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

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

CHEMSTATION CONCENTRATION REPORT

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

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

SCV REPORT

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

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

SEQUENCE

S20I029

Sequence Date: 09/30/2020

Instrument: AG5975CV

Sequence Analyses:

VOCs, Passive Samplers

ANALYST / REVIEWER - DATA REVIEW CHECKLIST

BATCH #:	B20I024	SEQUENCE #:	S20I029 09/30/20
BATCH #:		ANALYSIS:	VOA Passive Air.

	CHECKLIST ITEM	N/A	ANALYST Y/N	REVIEWER Y/N	IDENTIFY OUTLIERS / COMMENTS
DOCUMENTATION	ANALYST: Bench sheet(s) attached? REVIEWER: Bench sheet(s) reviewed?	☐	Y	Y	
	ANALYST: Sequence log(s) attached? REVIEWER: Sequence log(s) reviewed?	☐	Y	Y	
	ANALYST: Every run has a PDF in LIMS? REVIEWER: Every PDF reviewed?	☐	Y	Y	
INITIAL CALIBRATION	Date of Initial Calibration used: If applicable, note date of "Last Update" in Comments.	Fri Aug 21 08:33:54 2020			
	Initial Calibration ID (LIMS number):	2008017			
	ICAL within QC criteria?	✔			
	SCV within QC criteria?	✔			
INSTRUMENT / QC CHECKS	Tune or degradation checks within QC criteria?	☐	Y	Y	
	CCV(s) within QC criteria?	☐	Y	Y	
	QLS(s) within QC criteria?	☐	Y	Y	
	CB(s) or storage blank(s) within QC criteria?	✔			
	Other instrument checks within QC criteria? Specify if applicable.	✔			
BATCH QCs	Method blanks < 1/2 QL?	☐	Y	Y	
	LCS(s) or SRM(s) within QC criteria?	☐	Y	Y	*BS1 fails low Trichloroethene, Tetrachloroethene
	MSs/MSDs and/or DUPs within QC criteria?	✔			
	Other method-specific QCs within QC criteria? Specify if applicable.	✔			

ANALYST / REVIEWER - DATA REVIEW CHECKLIST

BATCH #:	B20I024	SEQUENCE #:	S20I029 09/30/20
BATCH #:		ANALYSIS:	VOA Passive Air.

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

APPROVALS	ANALYST INITIALS & DATE:	TD 10/02/20
	REVIEWED BY:	Rajabi, Ziyad Digitally signed by Rajabi, Ziyad Date: 2020.10.02 16:13:14 -07'00' SIGN HERE

COMMENTS

Custom analyte list.

Injection Log

Operator: TD
Directory: C:\msdchem\1\Ravioli Data\2020\093020\

Vial	File Name	Mult	Sample Info	Misc Info	Date Acquired
1	09302001.D	1	S20I029-IBL1		30 Sep 2020 13:36
2	09302002.D	1	S20I029-TUN1	BFB 2040028	30 Sep 2020 13:57
3	09302003.D	1	S20I029-CCV1	2030070 5 mg/L	30 Sep 2020 14:07
4	09302004.D	1	S20I029-CRL1	2030073 0.05 mg/L	30 Sep 2020 14:31
5	09302005.D	1	B20I024-BLK1		30 Sep 2020 14:59
6	09302006.D	1	B20I024-BS1		30 Sep 2020 15:22
7	09302007.D	1	B20I024-BSD1		30 Sep 2020 15:46
8	09302008.D	1	B20I024-MRL1		30 Sep 2020 16:10
9	09302009.D	1	2009032-01		30 Sep 2020 16:33
10	09302010.D	1	2009032-02		30 Sep 2020 16:57
11	09302011.D	1	2009032-03		30 Sep 2020 17:20
12	09302012.D	1	2009032-04		30 Sep 2020 17:44
13	09302013.D	1	2009032-05		30 Sep 2020 18:08
14	09302014.D	1	2009033-01 OC		30 Sep 2020 18:31
15	09302015.D	1	OC 2009033-02		30 Sep 2020 18:55
16	09302016.D	1	2009033-03		30 Sep 2020 19:19
17	09302017.D	1	2009033-04		30 Sep 2020 19:42
18	09302018.D	1	2009033-05 OC		30 Sep 2020 20:06
19	09302019.D	1	2009033-06		30 Sep 2020 20:29
20	09302020.D	1	2009034-01 OC		30 Sep 2020 20:53
21	09302021.D	1	2009034-02		30 Sep 2020 21:17
22	09302022.D	1	2009034-03		30 Sep 2020 21:40
23	09302023.D	1	2009034-04		30 Sep 2020 22:04
24	09302024.D	1	~~2009038-05~~ OC Cancelled		30 Sep 2020 22:27
25	09302025.D	1	2009034-06		30 Sep 2020 22:51
26	09302026.D	1	2009034-07		30 Sep 2020 23:15

GC/MS QA-QC Check Report

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Tune File : C:\msdchem\1\Ravioli Data\2020\093020\09302002.D
Tune Time : 30 Sep 2020 13:57

Daily Calibration File : C:\msdchem\1\Ravioli Data\2020\093020\09302003.D

File	Sample	Surrogate Recovery %	Internal Standard Responses
			497332
09302003.D	S20I029-CC	97	497332
09302004.D	S20I029-CR	1*	681597
09302005.D	B20I024-BL	89	662649
09302006.D	B20I024-BS	89	686229
09302007.D	B20I024-BSD	90	553975
09302008.D	B20I024-MRL1	86*	1041272*
09302009.D	2009032-01	88	639856
09302010.D	2009032-02	89	592780
09302011.D	2009032-03	90	594144
09302012.D	2009032-04	89	693393
09302013.D	2009032-05	88	702530
09302014.D	2009033-01	86	601566
09302015.D	2009033-02	87	609311
09302016.D	2009033-03	88	658392
09302017.D	2009033-04	89	621614
09302018.D	2009033-05	87	624758
09302019.D	2009033-06	89	641024
09302020.D	2009034-01	87	613537
09302021.D	2009034-02	87	499147
09302022.D	2009034-03	88	603565
09302023.D	2009034-04	88	634806

09302024.D
~~2009038-05~~ ~~87~~ ~~440879~~ Cancelled

09302025.D
2009034-06 88 632643

09302026.D
2009034-07 88 598884

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

Created: Thu Oct 01 11:39:45 2020 AG5975C

Analysis Sequence

S20I029

Project: R20S18
Analysis: VOCs, Passive Samplers

Instrument: AG5975CV **Calibration ID:** 2008017 Printed: 10/02/2020 2:18 pm

Lab Number	Sample Name	Order	Analyzed Date	STD ID	ISTD ID	Sequenced By	File ID	Comments
S20I029-IBL1	Instrument Blank	1	9/30/20 13:36		2030067	TD	09302001.D	
S20I029-TUN1	BFB	2	9/30/20 13:57	2040028		TD	09302002.D	
S20I029-CCV1	Calibration Check	3	9/30/20 14:07	2030070		TD	09302003.D	
S20I029-CRL1	Instrument RL Check	4	9/30/20 14:31	2030073		TD	09302004.D	
B20I024-BLK1	Blank	5	9/30/20 14:59			TD	09302005.D	
B20I024-BS1	LCS	6	9/30/20 15:22			TD	09302006.D	
B20I024-BSD1	LCS Dup	7	9/30/20 15:46			TD	09302007.D	
B20I024-MRL1	MRL Check	8	9/30/20 16:10			TD	09302008.D	
2009032-01 A	RES79-RR1-BZ-10d	9	9/30/20 16:33			TD	09302009.D	
2009032-02 A	RES79-LNDRY1-BZ-10d	10	9/30/20 16:57			TD	09302010.D	
2009032-03 A	RES79-RR2-PP-10d	11	9/30/20 17:20			TD	09302011.D	
2009032-04 A	RES79-K2-Counter-BZ-10d	12	9/30/20 17:44			TD	09302012.D	
2009032-05 A	RES79-OUT-10d	13	9/30/20 18:08			TD	09302013.D	
2009033-01 A	Classics-WT-MH1-2ft-6d-R	14	9/30/20 18:31			TD	09302014.D	
2009033-02 A	Classics-WT-MH2-2ft-6d-R	15	9/30/20 18:55			TD	09302015.D	
2009033-03 A	Classics-WT-MH3-2ft-6d-R	16	9/30/20 19:19			TD	09302016.D	
2009033-04 A	Classics-WT-MH4-2ft-6d-R	17	9/30/20 19:42			TD	09302017.D	
2009033-05 A	Classics-186WT-SC-1ft-6d-R	18	9/30/20 20:06			TD	09302018.D	
2009033-06 A	Classics-198WT-SC-1ft-6d-R	19	9/30/20 20:29			TD	09302019.D	
2009034-01 A	6Sixty-MH3-2ft-3d-R	20	9/30/20 20:53			TD	09302020.D	
2009034-02 A	6Sixty-MH4-2ft-3d-R	21	9/30/20 21:17			TD	09302021.D	
2009034-03 A	6Sixty-MH11-2ft-3d-R	22	9/30/20 21:40			TD	09302022.D	

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Analysis Sequence

S20I029

(Continued)

Project: R20S18
Analysis: VOCs, Passive Samplers

Instrument: AG5975CV **Calibration ID:** 2008017 Printed: 10/02/2020 2:18 pm

Lab Number	Sample Name	Order	Analyzed Date	STD ID	ISTD ID	Sequenced By	File ID	Comments
2009034-04 A	6Sixty-A2-SC-1ft-3d-R	23	9/30/20 22:04			TD	09302023.D	
2009034-06 A	6Sixty-A9-SC-1ft-3d-R	24	9/30/20 22:51			TD	09302025.D	
2009034-07 A	6Sixty-B12-SC-1ft-3d-R	25	9/30/20 23:15			TD	09302026.D	

Sequence Comments

Reagents

Reagent #	Description

SEQUENCE DATA

S20I029

S20I029-IBL1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302001.D
Acq On : 30 Sep 2020 13:36
InstName : AG5975C
Operator : TD
Sample : S20I029-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 30 13:55:23 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

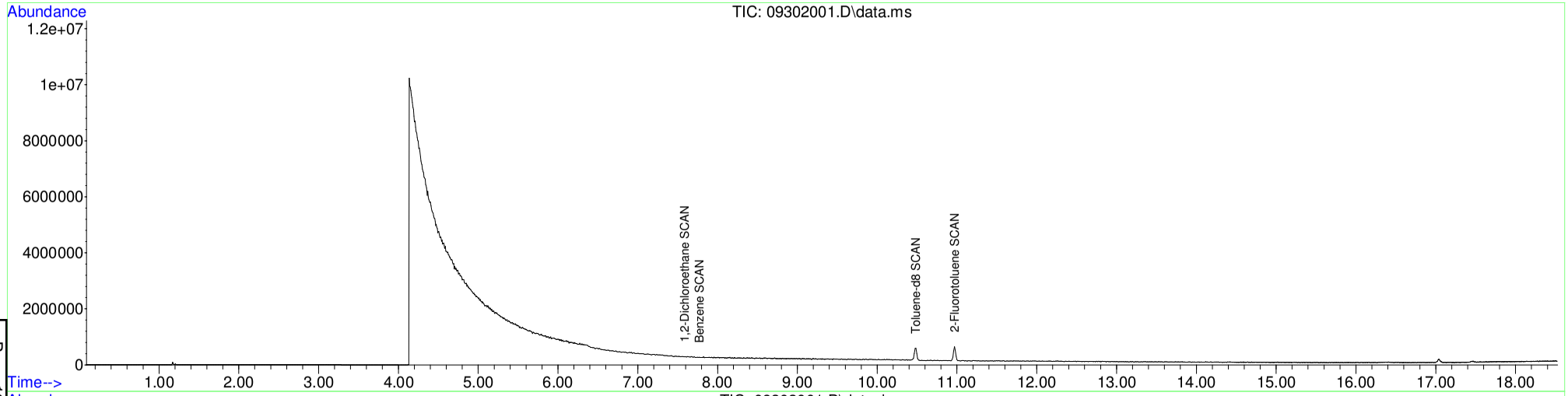
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	764000	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	647994	4332.63	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.65%			
Target Compounds						Qvalue
25) 2-Fluorotoluene SCAN	10.969	109	376628	5057.04	ug/L	98
33) Benzene SCAN	7.769	78	11915	180.41	ug/L	92
34) 1,2-Dichloroethane SCAN	7.587	62	582	23.87	ug/L #	40
36) Toluene-d8 SCAN	10.486	98	352338	4837.47	ug/L	91

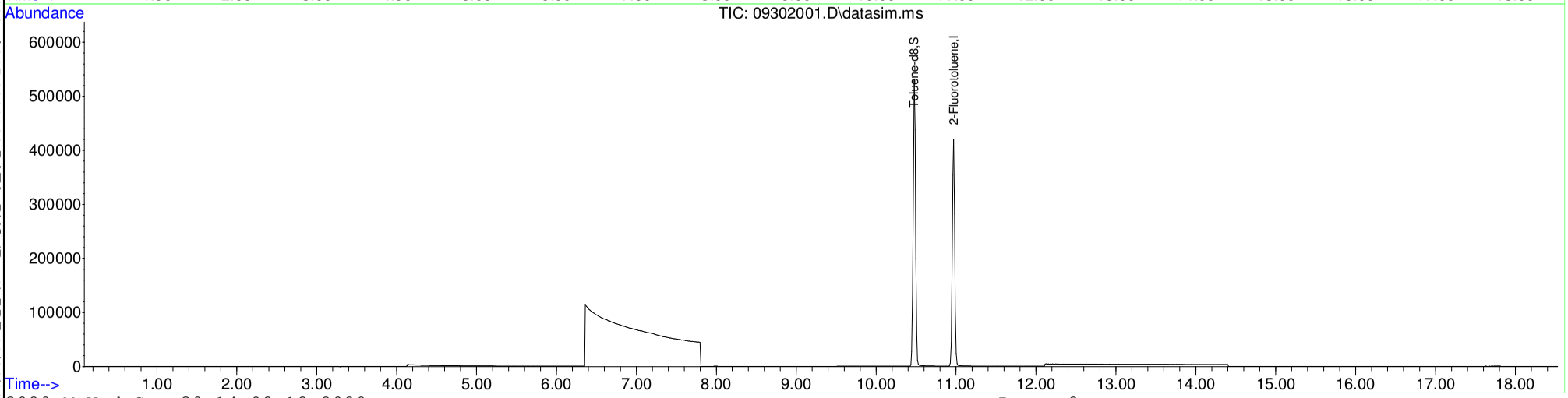
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302001.D
Acq On : 30 Sep 2020 13:36
InstName : AG5975C
Operator : TD
Sample : S20I029-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 30 13:55:23 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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S20I029-TUN1

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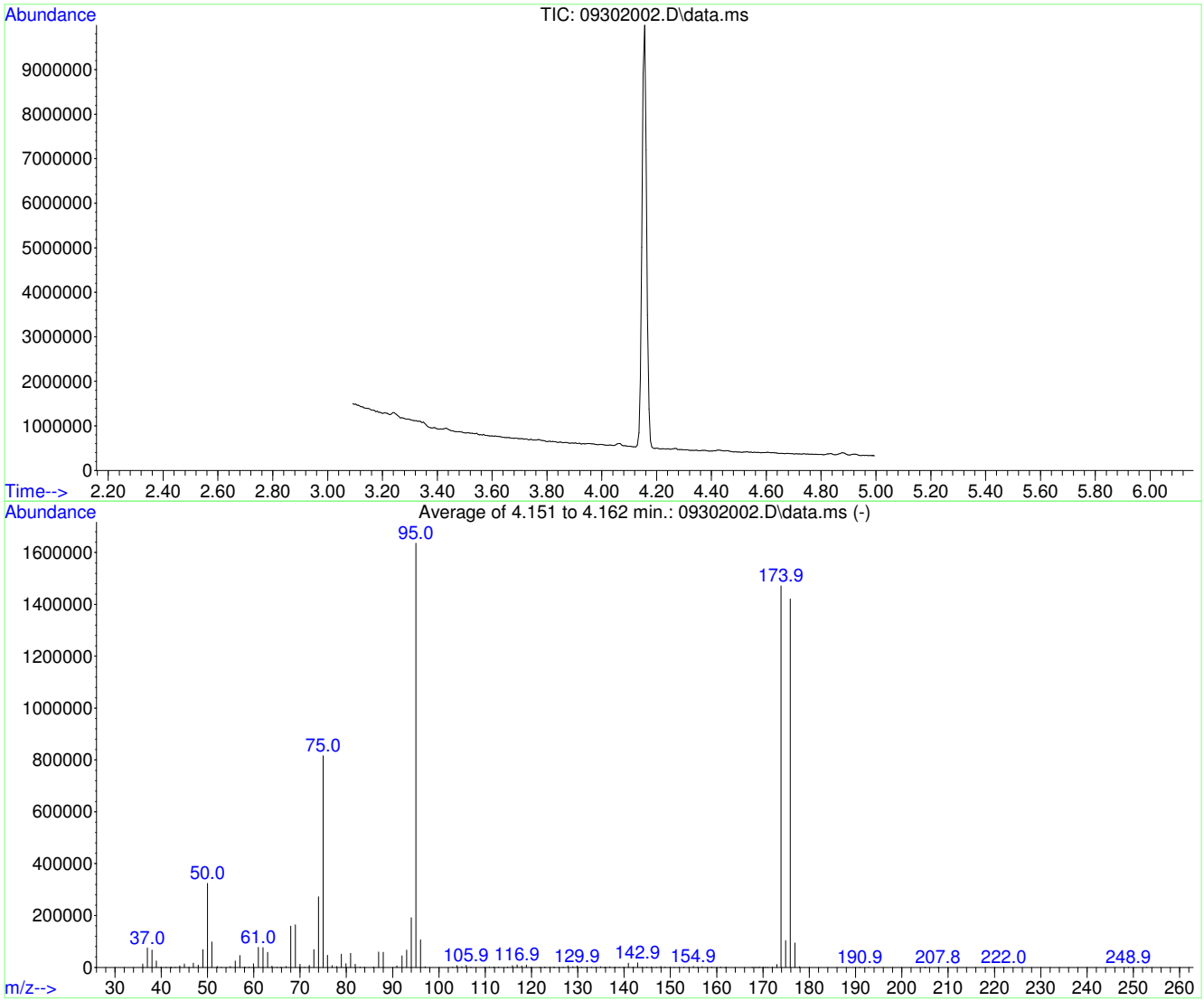
Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302002.D
Acq On : 30 Sep 2020 13:57
Operator : TD
Sample : S20I029-TUN1
Misc : BFB 2040028
ALS Vial : 2 Sample Multiplier: 1
InstName : AG5975C

Integration File: Ravioli.P

Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Title : Volatile Organic Analysis - Passive samplers
Last Update : Fri Aug 21 08:33:54 2020



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

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.8	323584	PASS
75	95	30	60	49.9	816610	PASS
95	95	100	100	100.0	1635669	PASS
96	95	5	9	6.5	106987	PASS
173	174	0.00	2	0.7	10929	PASS
174	95	50	120	89.9	1471147	PASS
175	174	5	9	7.0	102979	PASS
176	174	95	101	96.6	1420971	PASS
177	176	5	9	6.6	94480	PASS

Average of 4.151 to 4.162 min.: 09302002.D\data.ms
S20I029-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	13446	46.95	16478	59.00	134	70.00	12552
37.00	75192	48.00	9369	59.95	14362	71.00	675
38.00	66692	49.00	68517	61.00	77637	72.00	7863
38.95	25174	50.00	323584	62.00	75811	73.00	68795
39.95	931	50.95	98430	63.00	58731	74.00	272840
41.05	71	52.10	4152	63.95	4782	75.00	816610
42.10	63	53.00	238	65.00	770	75.90	46720
43.05	407	54.95	4090	65.90	139	76.90	7197
44.00	5595	56.00	24995	67.00	3796	77.90	3413
45.00	13478	57.00	45638	68.00	159488	78.90	51250
46.00	459	58.05	1814	69.00	164741	79.90	14562

Average of 4.151 to 4.162 min.: 09302002.D\data.ms
S20I029-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
80.90	54536	95.00	1.63567e+006	112.90	1659	124.80	139
81.90	11677	96.00	106987	114.85	1589	124.95	355
82.95	1291	97.00	2740	115.90	6362	125.95	810
83.90	65	102.95	751	116.90	10313	126.80	583
85.85	1474	103.90	7410	117.90	6269	127.90	5606
87.00	59587	104.95	2247	118.90	8731	128.95	2687
87.95	57795	105.90	7614	119.95	444	129.90	5663
90.90	6270	106.90	1749	121.85	360	130.90	2122
92.00	45125	109.90	1058	122.80	157	131.95	342
93.00	66709	110.90	1449	122.95	381	133.00	182
94.00	191552	111.85	1197	123.95	1010	133.95	401

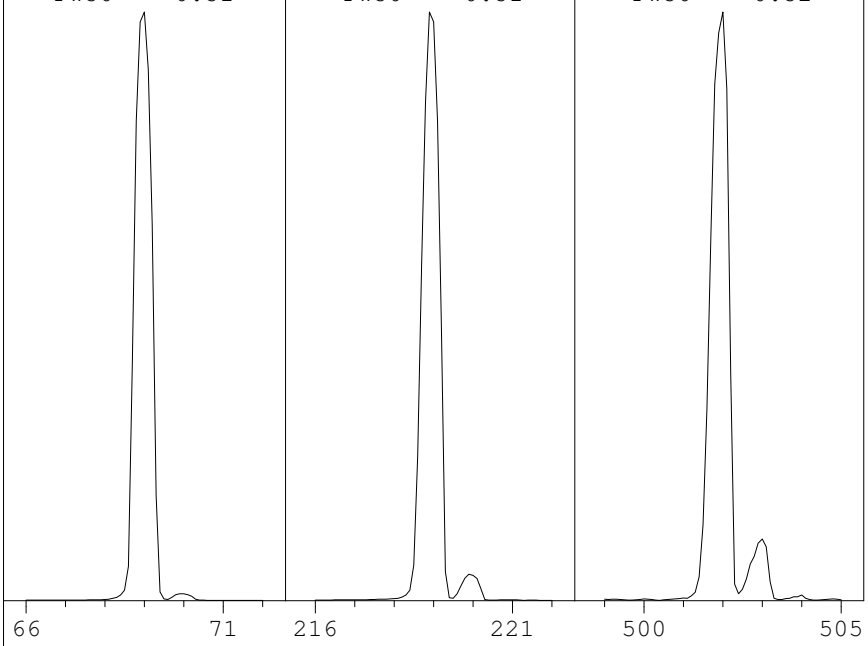
Average of 4.151 to 4.162 min.: 09302002.D\data.ms
S20I029-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
134.90	2908	144.90	1369	155.90	652	170.55	331
135.80	260	145.85	2113	156.85	2920	171.05	357
136.00	261	146.95	638	157.90	298	172.00	1165
136.90	3041	147.90	4068	158.90	1936	173.00	10929
137.90	54	148.85	1235	160.85	1800	173.90	1.47115e+006
138.95	433	149.90	1774	161.90	50	174.90	102979
139.95	1075	150.85	171	167.65	189	175.90	1.42097e+006
140.90	16811	151.85	758	168.40	73	176.90	94480
141.95	1945	152.90	1334	168.95	234	177.90	2635
142.90	17577	153.95	846	169.30	103	190.95	181
143.85	1051	154.95	3858	170.00	385	192.80	181

Average of 4.151 to 4.162 min.: 09302002.D\data.ms
S20I029-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
204.90	55						
207.80	60						
222.00	72						
248.95	160						
252.90	111						

Mass	69.00	Mass	218.90	Mass	502.00
Ab	642317	Ab	405857	Ab	12128
Pw50	0.51	Pw50	0.51	Pw50	0.52

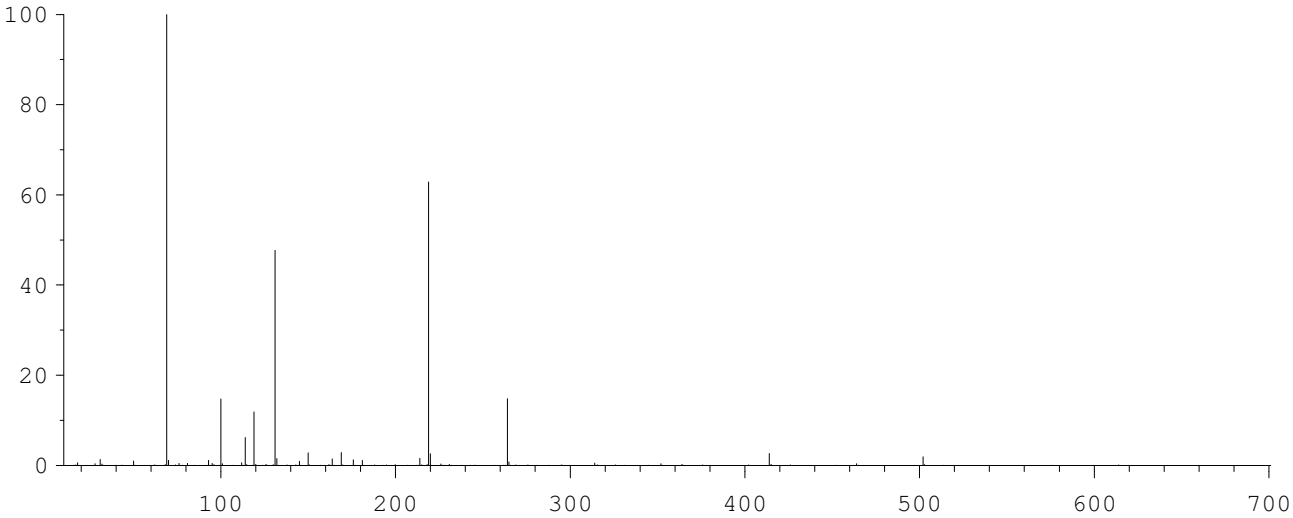


Ion Pol	Pos	MassGain	-1190
		MassOffs	-39
Emission	34.6	AmuGain	978
EIEnrgy	69.9	AmuOffs	127.94
Filament	1	Wid219	-0.003
		DC Pol	Pos
Repeller	29.79		
IonFcus	69.3	HEDEnab	On
EntLens	0.0	EMVolts	1329
EntOffs	Var		
		Samples	8
PFTBA	Open	Averages	3
		Stepsize	0.10

Temperatures and Pressures:

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

Scan: 10.00 - 701.00 Samples: 8 Thresh: 100 Step: 0.10
120 peaks Base: 69.00 Abundance: 608704



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	608704	100.00	70.00	6629	1.09
219.00	382528	62.84	220.00	15730	4.11
502.00	11397	1.87	503.00	1045	9.17

Air/Water Check: H20~0.58% N2~0.37% O2~0.28% CO2~0.05% N2/H2O~63.45%

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 53051
Repeller Maximum 30 volts using ion 219; Gain Factor 0.53

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

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset:	127.9	127.9	127.9	127.9	127.9	127.9	127.9
Entrance Lens Offset:	16.8	14.1	14.3	15.6	16.1	16.8	16.8
Target Abund(%):	1.0	100.0	45.0	55.0	2.5	2.0	
Actual Tune Abund(%):	1.0	100.0	47.7	62.8	2.6	1.9	

S20I029-CCV1

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302003.D
Acq On : 30 Sep 2020 14:07
InstName : AG5975C
Operator : TD
Sample : S20I029-CCV1
Misc : 2030070 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 30 14:26:20 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	2-Fluorotoluene	1.000	1.000	0.0	74	0.00
2	T	1,1-Dichloroethene	0.200	0.232	-16.0	91	0.00
3	T	trans-1,2-Dichloroethene	0.231	0.258	-11.7	88	-0.01
4	T	1,1-Dichloroethane	0.287	0.317	-10.5	88	0.00
5	T	cis-1,2-Dichloroethene	0.303	0.330	-8.9	86	0.00
6	T	Chloroform	0.310	0.323	-4.2	82	-0.01
7	T	1,1,1-Trichloroethane	0.337	0.344	-2.1	80	0.00
8	T	Carbon tetrachloride	0.317	0.317	0.0	78	0.00
9	T	Benzene	0.850	0.834	1.9	79	0.00
10	T	1,2-Dichloroethane	0.303	0.316	-4.3	82	0.00
11	T	Trichloroethene	0.256	0.253	1.2	78	0.00
12	S	Toluene-d8	0.979	0.948	3.2	75	0.00
13	T	Toluene	1.248	1.129	9.5	74	0.01
14	T	1,1,2-Trichloroethane	0.272	0.262	3.7	76	0.01
15	T	Tetrachloroethene	0.361	0.334	7.5	71	0.01
16	T	Chlorobenzene	0.894	0.824	7.8	71	0.00
17	T	1,1,1,2-Tetrachloroethane	0.320	0.299	6.6	72	0.00
18	T	Ethylbenzene	1.519	1.349	11.2	70	0.00
19	T	m&p-Xylene	1.187	1.028	13.4	70	0.00
20	T	o-Xylene	1.268	1.108	12.6	68	0.00
21	T	1,1,2,2-Tetrachloroethane	0.562	0.508	9.6	70	0.00
22	T	1,3,5-Trimethylbenzene	1.350	1.191	11.8	68	0.00
23	T	1,2,4-Trimethylbenzene	1.402	1.199	14.5	67	0.00
24	T	Naphthalene	2.216	2.018	8.9	69	0.00
25		2-Fluorotoluene SCAN	0.487	0.499	-2.5	76	0.00
26		1,1-Dichloroethene SCAN	0.104	0.131	-26.0	94	-0.02
27		trans-1,2-Dichloroethene SC	0.128	0.154	-20.3	89	-0.01
28		1,1-Dichloroethane SCAN	0.148	0.191	-29.1	95	0.00
29		cis-1,2-Dichloroethene SCAN	0.159	0.196	-23.3	91	0.00
30		Chloroform SCAN	0.172	0.185	-7.6	79	0.00
31		1,1,1-Trichloroethane SCAN	0.157	0.176	-12.1	83	0.00
32		Carbon tetrachloride SCAN	0.164	0.160	2.4	72	0.00
33		Benzene SCAN	0.432	0.467	-8.1	80	0.00
34		1,2-Dichloroethane SCAN	0.160	0.180	-12.5	83	0.01
35		Trichloroethene SCAN	0.119	0.126	-5.9	79	0.00
36		Toluene-d8 SCAN	0.477	0.509	-6.7	79	0.01
37		Toluene SCAN	0.610	0.607	0.5	73	0.00
38		1,1,2-Trichloroethane SCAN	0.137	0.144	-5.1	78	0.01
39		Tetrachloroethene SCAN	0.147	0.151	-2.7	76	0.00
40		Chlorobenzene SCAN	0.417	0.410	1.7	73	0.00
41		1,1,1,2-Tetrachloroethane S	0.154	0.143	7.1	68	0.00
42		Ethylbenzene SCAN	1.112	1.068	4.0	71	0.00
43		m&p-Xylene SCAN	1.112	1.068	4.0	71	0.00
44		o-Xylene SCAN	0.595	0.595	0.0	74	0.00
45		1,1,2,2-Tetrachloroethane S	0.290	0.299	-3.1	76	0.00
46		1,3,5-Trimethylbenzene SCAN	0.627	0.598	4.6	70	0.00
47		1,2,4-Trimethylbenzene SCAN	0.642	0.600	6.5	69	0.00
48		Naphthalene SCAN	0.971	0.921	5.1	70	0.00

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302003.D
Acq On : 30 Sep 2020 14:07
InstName : AG5975C
Operator : TD
Sample : S20I029-CCV1
Misc : 2030070 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 30 14:26:20 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

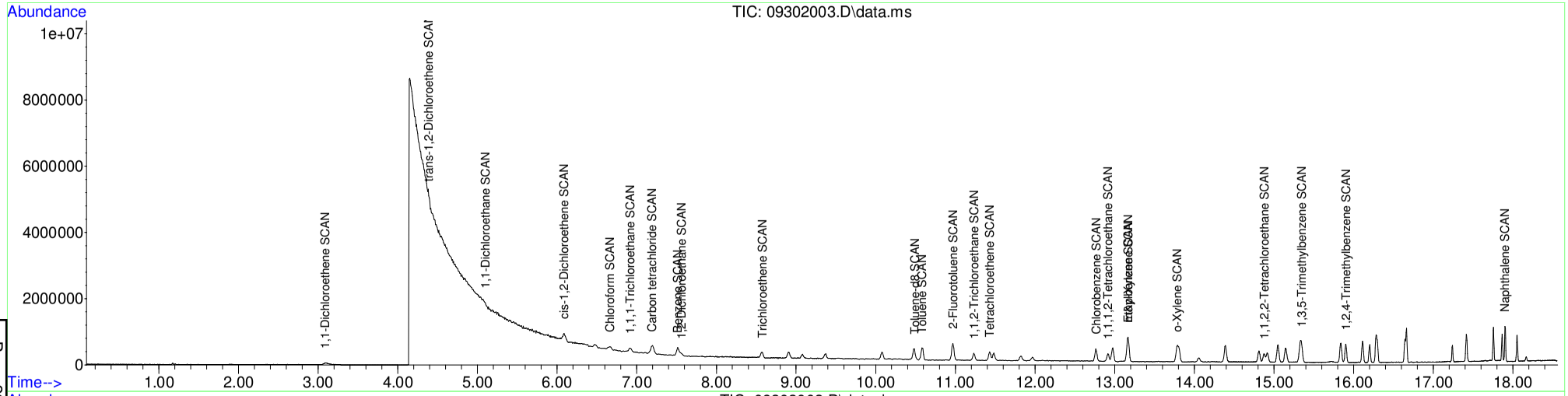
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	497332	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	471371	4841.62	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 96.83%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.093	61	115152	5798.40	ug/L	82
3] trans-1,2-Dichloroethene	4.382	61	128482	5599.61	ug/L	98
4] 1,1-Dichloroethane	5.092	63	157832	5525.97	ug/L	98
5] cis-1,2-Dichloroethene	6.088	61	163925	5437.16	ug/L	99
6] Chloroform	6.651	83	160779	5210.17	ug/L	99
7] 1,1,1-Trichloroethane	6.919	97	171167	5107.51	ug/L	99
8] Carbon tetrachloride	7.187	117	157869	5004.96	ug/L	100
9] Benzene	7.515	78	414666	4907.32	ug/L	98
10] 1,2-Dichloroethane	7.552	62	157083	5207.55	ug/L	98
11] Trichloroethene	8.569	130	125943	4950.26	ug/L	93
13] Toluene	10.582	91	561294	4522.09	ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	130296	4817.51	ug/L	96
15] Tetrachloroethene	11.432	166	165946	4619.77	ug/L	100
16] Chlorobenzene	12.765	112	409877	4611.77	ug/L	92
17] 1,1,1,2-Tetrachloroethane	12.916	131	148494	4662.84	ug/L	99
18] Ethylbenzene	12.972	91	671141	4442.19	ug/L	98
19] m&p-Xylene	13.162	91	1022990	8663.45	ug/L	97
20] o-Xylene	13.782	91	550843	4366.42	ug/L	96
21] 1,1,2,2-Tetrachloroethane	14.877	83	252441	4515.08	ug/L	100
22] 1,3,5-Trimethylbenzene	15.345	105	592138	4409.84	ug/L	96
23] 1,2,4-Trimethylbenzene	15.901	105	596238	4274.94	ug/L	96
24] Naphthalene	17.902	128	1003840	4553.87	ug/L	100
25) 2-Fluorotoluene SCAN	10.969	109	248011	5115.66	ug/L	96
26) 1,1-Dichloroethene SCAN	3.088	61	65203	6332.93	ug/L #	40
27) trans-1,2-Dichloroethe...	4.388	61	76417	5997.99	ug/L	80
28) 1,1-Dichloroethane SCAN	5.098	63	94831	6431.58	ug/L	97
29) cis-1,2-Dichloroethene...	6.086	61	97539	6174.36	ug/L	76
30) Chloroform SCAN	6.662	83	91930	5365.20	ug/L	89
31) 1,1,1-Trichloroethane ...	6.918	97	87722	5618.03	ug/L	88
32) Carbon tetrachloride SCAN	7.185	117	79782	4898.36	ug/L	90
33) Benzene SCAN	7.514	78	232495	5407.85	ug/L	94
34) 1,2-Dichloroethane SCAN	7.562	62	89399	5631.44	ug/L	97
35) Trichloroethene SCAN	8.573	130	62786	5314.30	ug/L	87
36) Toluene-d8 SCAN	10.486	98	253257	5341.55	ug/L	92
37) Toluene SCAN	10.580	91	301702	4968.83	ug/L	97
38) 1,1,2-Trichloroethane ...	11.231	97	71657	5257.75	ug/L	89
39) Tetrachloroethene SCAN	11.430	166	74865	5132.12	ug/L	94
40) Chlorobenzene SCAN	12.764	112	203808	4912.15	ug/L	89
41) 1,1,1,2-Tetrachloroeth...	12.915	131	70877	4615.96	ug/L	96
42) Ethylbenzene SCAN	13.169	91	530973	4800.00	ug/L	91
43) m&p-Xylene SCAN	13.169	91	530973	4800.00	ug/L	92
44) o-Xylene SCAN	13.781	91	296105	5000.78	ug/L	94
45) 1,1,2,2-Tetrachloroeth...	14.875	83	148465	5142.09	ug/L	97
46) 1,3,5-Trimethylbenzene...	15.343	105	297510	4767.54	ug/L	98
47) 1,2,4-Trimethylbenzene...	15.904	105	298181	4669.85	ug/L	94
48) Naphthalene SCAN	17.901	128	457902	4739.26	ug/L	99

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302003.D
Acq On : 30 Sep 2020 14:07
InstName : AG5975C
Operator : TD
Sample : S20I029-CCV1
Misc : 2030070 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 30 14:26:20 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration



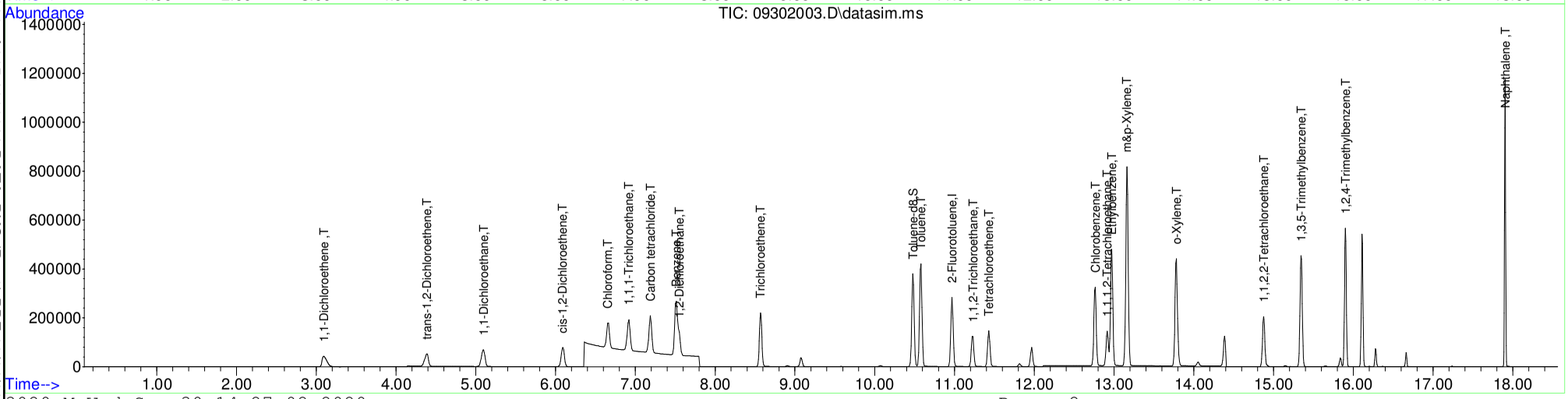


Table of Contents

S20I029-CRL1

QLS REPORT

Instrument Name: AG5975C
Sample Name: S20I029-CRL1
Misc Info: 2030073 0.05 mg/L
Date Acquired: 9/30/20 14:31
QLast Update: Fri Aug 21 08:33:54 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.970	5000.0	5000.00	100%	60	140	pass
2)	1,1-Dichloroethene	3.090	50.0	51.66	103%	60	140	pass
3)	trans-1,2-Dichloroethene	4.396	50.0	51.83	104%	60	140	pass
4)	1,1-Dichloroethane	5.099	50.0	51.45	103%	60	140	pass
5)	cis-1,2-Dichloroethene	6.094	50.0	51.62	103%	60	140	pass
6)	Chloroform	6.664	50.0	47.88	96%	60	140	pass
7)	1,1,1-Trichloroethane	6.919	50.0	46.92	94%	60	140	pass
8)	Carbon tetrachloride	7.187	50.0	45.99	92%	60	140	pass
10)	1,2-Dichloroethane	7.552	50.0	49.49	99%	60	140	pass
11)	Trichloroethene	8.569	50.0	48.78	98%	60	140	pass
12)	Toluene-d8	10.477	50.0	50.93	102%	60	140	pass
13)	Toluene	10.571	50.0	50.87	102%	60	140	pass
14)	1,1,2-Trichloroethane	11.222	50.0	48.51	97%	60	140	pass
15)	Tetrachloroethene	11.421	50.0	49.02	98%	60	140	pass
16)	Chlorobenzene	12.757	50.0	52.02	104%	60	140	pass
17)	1,1,1,2-Tetrachloroethane	12.908	50.0	51.23	102%	60	140	pass
18)	Ethylbenzene	12.964	50.0	52.06	104%	60	140	pass
19)	m&p-Xylene	13.162	100.0	103.84	104%	60	140	pass
20)	o-Xylene	13.774	50.0	50.90	102%	60	140	pass
21)	1,1,2,2-Tetrachloroethane	14.873	50.0	52.58	105%	60	140	pass
22)	1,3,5-Trimethylbenzene	15.345	50.0	52.98	106%	60	140	pass
23)	1,2,4-Trimethylbenzene	15.896	50.0	52.53	105%	60	140	pass
24)	Naphthalene	17.903	50.0	51.70	103%	60	140	pass

Quantitation Report (Not Reviewed)

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302004.D
Acq On : 30 Sep 2020 14:31
InstName : AG5975C
Operator : TD
Sample : S20I029-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 30 14:49:56 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

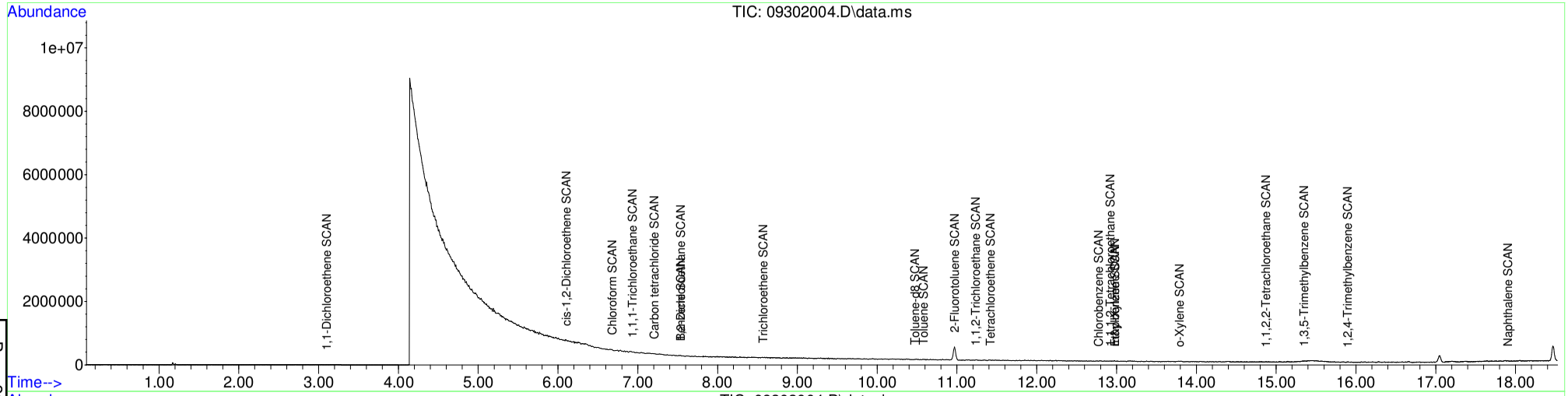
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	681597	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	6795	50.93 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery =	1.02%#	
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.093	61	1852	68.05 ug/L #	56
3] trans-1,2-Dichloroethene	4.422	61	1630	51.83 ug/L	71
4] 1,1-Dichloroethane	5.112	63	2014	51.45 ug/L	67
5] cis-1,2-Dichloroethene	6.101	61	2133	51.62 ug/L	98
6] Chloroform	6.664	83	2025	47.88 ug/L	99
7] 1,1,1-Trichloroethane	6.919	97	2155	46.92 ug/L	99
8] Carbon tetrachloride	7.199	117	1988	45.99 ug/L	99
9] Benzene	7.515	78	5721	49.40 ug/L #	22
10] 1,2-Dichloroethane	7.552	62	2046	49.49 ug/L #	7
11] Trichloroethene	8.575	130	1701	48.78 ug/L	93
13] Toluene	10.571	91	8653	50.87 ug/L	98
14] 1,1,2-Trichloroethane	11.222	97	1798	48.51 ug/L	97
15] Tetrachloroethene	11.432	166	2413	49.02 ug/L	97
16] Chlorobenzene	12.765	112	6336	52.02 ug/L	91
17] 1,1,1,2-Tetrachloroethane	12.916	131	2236	51.23 ug/L	99
18] Ethylbenzene	12.972	91	10780	52.06 ug/L	96
19] m&p-Xylene	13.162	91	16804	103.84 ug/L	93
20] o-Xylene	13.782	91	8801	50.90 ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.877	83	4029	52.58 ug/L	99
22] 1,3,5-Trimethylbenzene	15.345	105	9750	52.98 ug/L	96
23] 1,2,4-Trimethylbenzene	15.901	105	10041	52.53 ug/L	93
24] Naphthalene	17.902	128	15619	51.70 ug/L	99
25) 2-Fluorotoluene SCAN	10.969	109	330598	4975.65 ug/L	94
26) 1,1-Dichloroethene SCAN	3.103	61	372	26.36 ug/L #	39
29) cis-1,2-Dichloroethene...	6.106	61	1158	53.49 ug/L #	53
30) Chloroform SCAN	6.675	83	1521	64.77 ug/L	83
31) 1,1,1-Trichloroethane ...	6.930	97	1026	47.94 ug/L #	38
32) Carbon tetrachloride SCAN	7.210	117	1170	52.41 ug/L #	20
33) Benzene SCAN	7.538	78	13597	230.77 ug/L #	91
34) 1,2-Dichloroethane SCAN	7.538	62	723	33.23 ug/L #	1
35) Trichloroethene SCAN	8.574	130	485	29.95 ug/L #	19
36) Toluene-d8 SCAN	10.475	98	3472	53.43 ug/L	90
37) Toluene SCAN	10.580	91	4822	57.95 ug/L #	53
38) 1,1,2-Trichloroethane ...	11.231	97	663	35.50 ug/L #	18
39) Tetrachloroethene SCAN	11.420	166	1081	54.07 ug/L #	57
40) Chlorobenzene SCAN	12.772	112	3248	57.12 ug/L #	42
41) 1,1,1,2-Tetrachloroeth...	12.915	131	1262	59.97 ug/L	79
42) Ethylbenzene SCAN	12.978	91	5384	35.51 ug/L	88
43) m&p-Xylene SCAN	12.978	91	5384	35.51 ug/L	83
44) o-Xylene SCAN	13.789	91	4448	54.81 ug/L	95
45) 1,1,2,2-Tetrachloroeth...	14.872	83	1266	31.99 ug/L	72
46) 1,3,5-Trimethylbenzene...	15.343	105	3959	46.29 ug/L	75
47) 1,2,4-Trimethylbenzene...	15.894	105	5286	60.40 ug/L #	30
48) Naphthalene SCAN	17.905	128	7044	53.20 ug/L	93

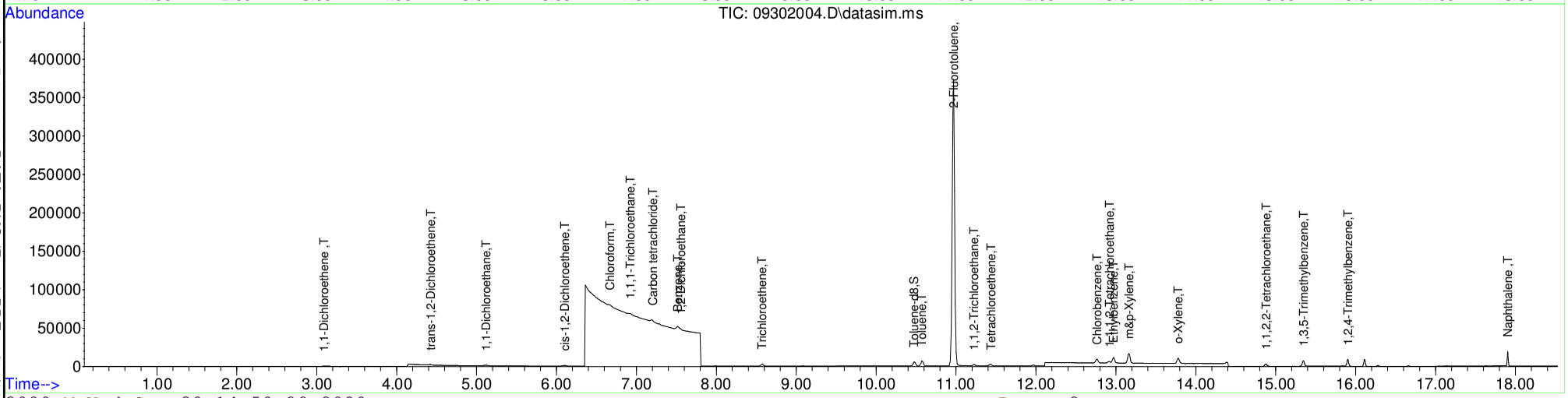
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302004.D
Acq On : 30 Sep 2020 14:31
InstName : AG5975C
Operator : TD
Sample : S20I029-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 30 14:49:56 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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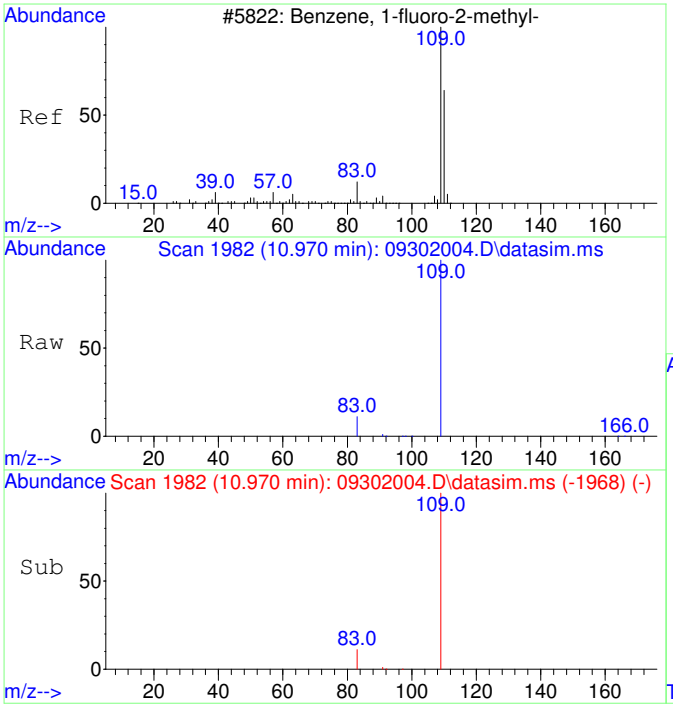
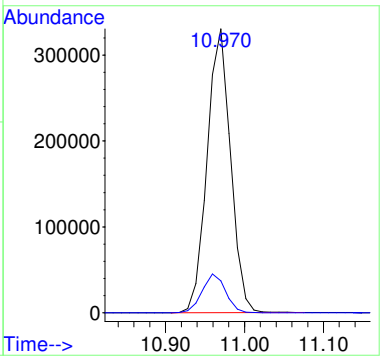
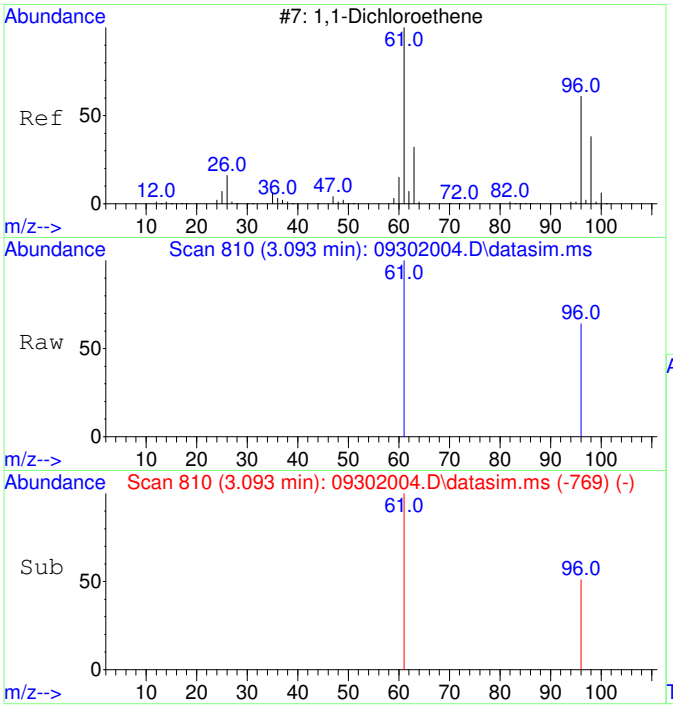


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:109 Resp: 681597

Ion	Ratio	Lower	Upper
109	100		
83	13.7	0.0	42.3

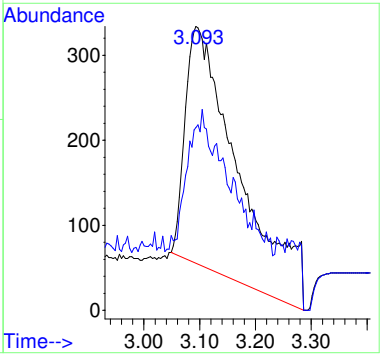




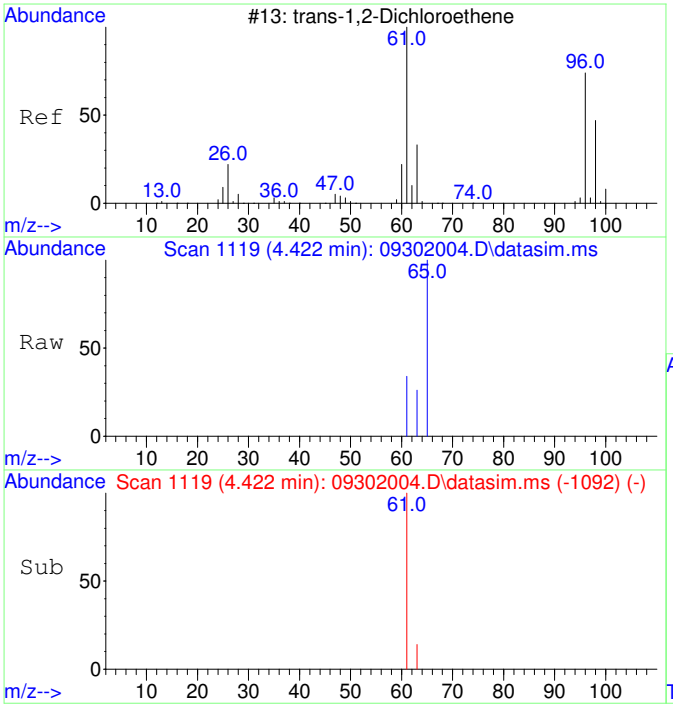
#2
1,1-Dichloroethene
Concen: 68.05 ug/L
RT: 3.093 min Scan# 810
Delta R.T. 0.004 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 61 Resp: 1852

Ion	Ratio	Lower	Upper
61	100		
96	31.7	37.2	97.2#



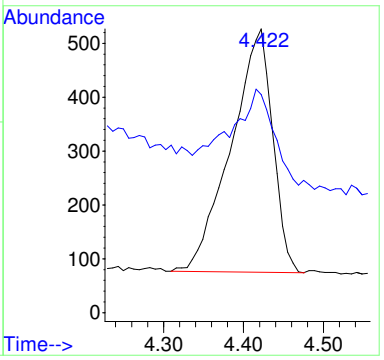
Before MI:
IMPROPER
BASELINE

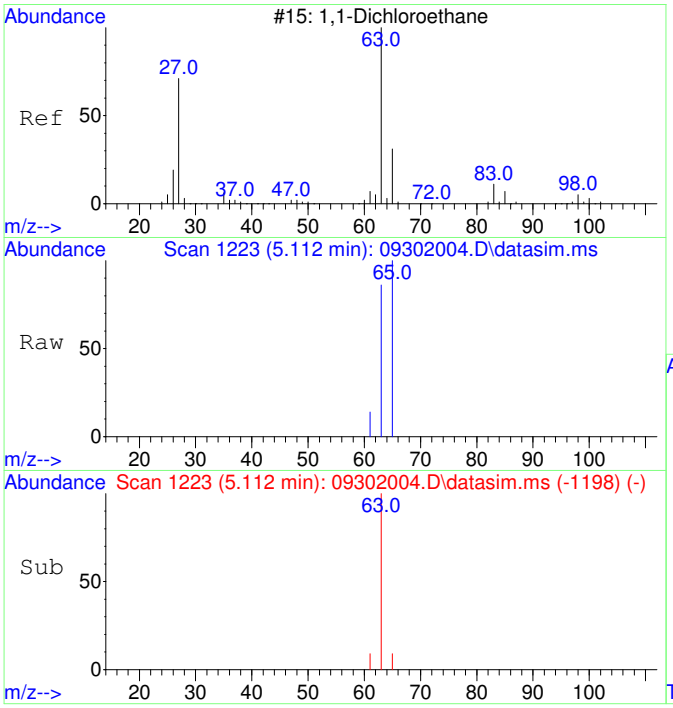


#3
trans-1,2-Dichloroethene
Concen: 51.83 ug/L
RT: 4.422 min Scan# 1119
Delta R.T. 0.027 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 61 Resp: 1630

Ion	Ratio	Lower	Upper
61	100		
63	48.8	2.4	62.4

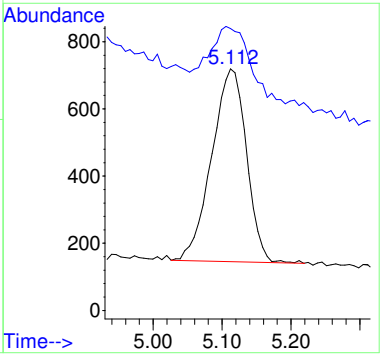


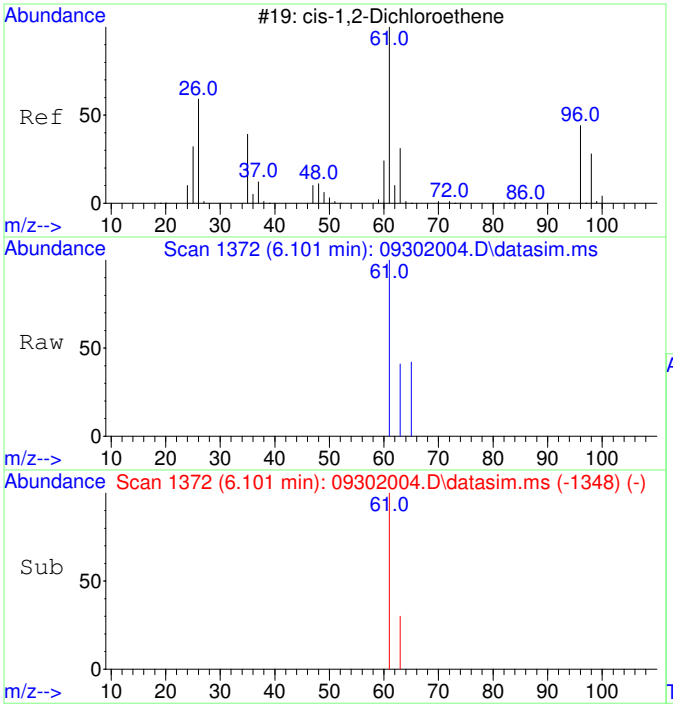


#4
1,1-Dichloroethane
Concen: 51.45 ug/L
RT: 5.112 min Scan# 1223
Delta R.T. 0.013 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 63 Resp: 2014

Ion	Ratio	Lower	Upper
63	100		
65	50.2	1.8	61.8

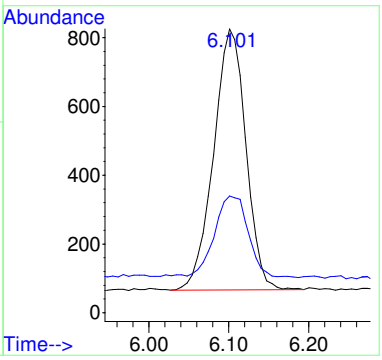


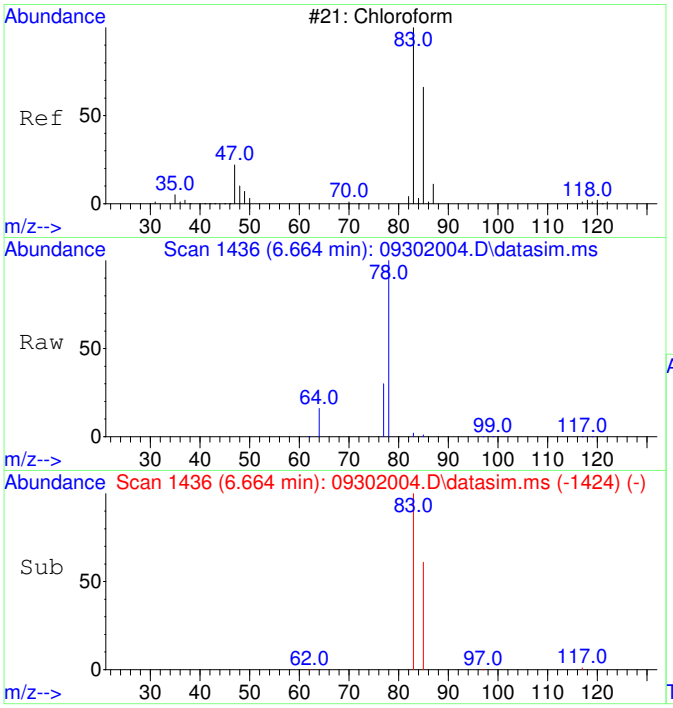


#5
cis-1,2-Dichloroethene
Concen: 51.62 ug/L
RT: 6.101 min Scan# 1372
Delta R.T. 0.007 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 61 Resp: 2133

Ion	Ratio	Lower	Upper
61	100		
63	33.6	2.5	62.5

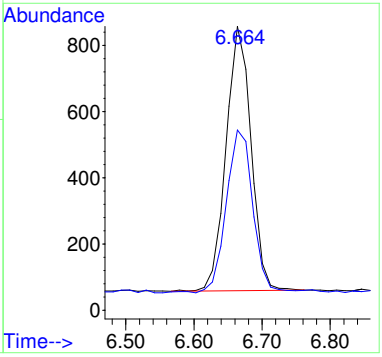


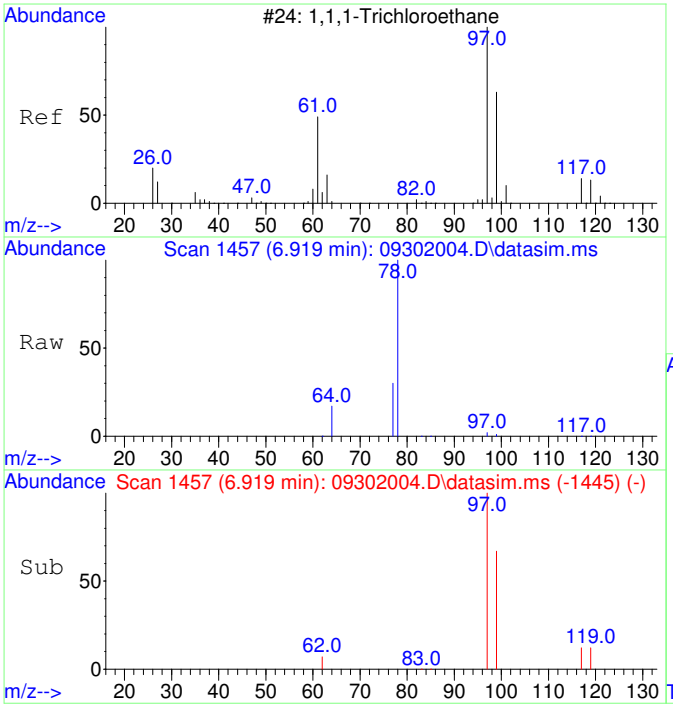


#6
Chloroform
Concen: 47.88 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 83 Resp: 2025

Ion	Ratio	Lower	Upper
83	100		
85	65.6	35.1	95.1

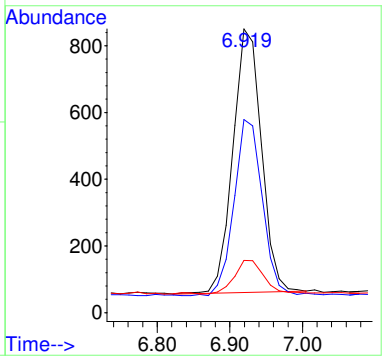


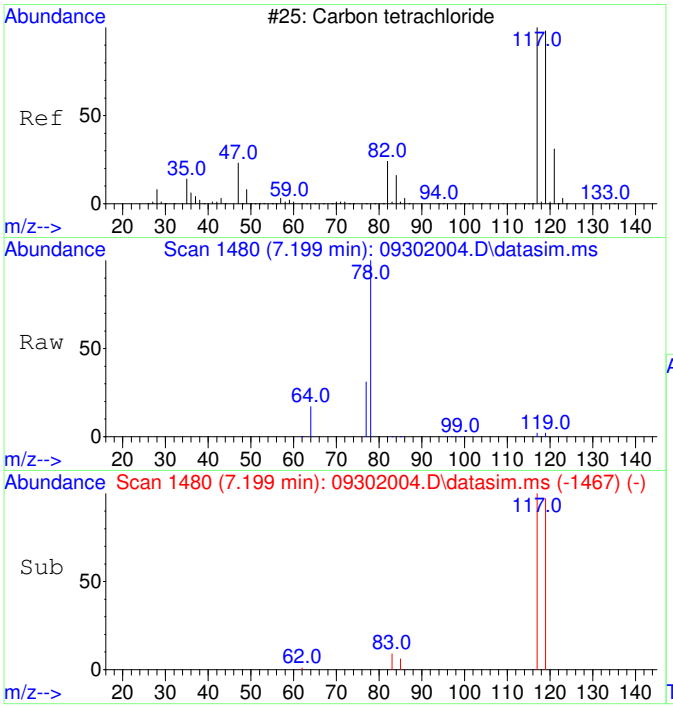


#7
1,1,1-Trichloroethane
Concen: 46.92 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 97 Resp: 2155

Ion	Ratio	Lower	Upper
97	100		
99	65.6	34.6	94.6
117	13.5	0.0	43.2

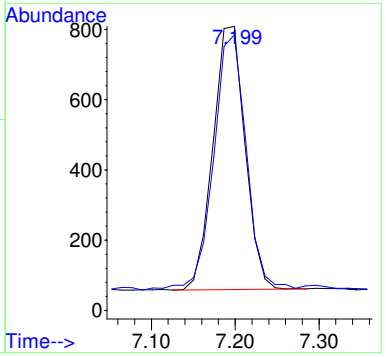


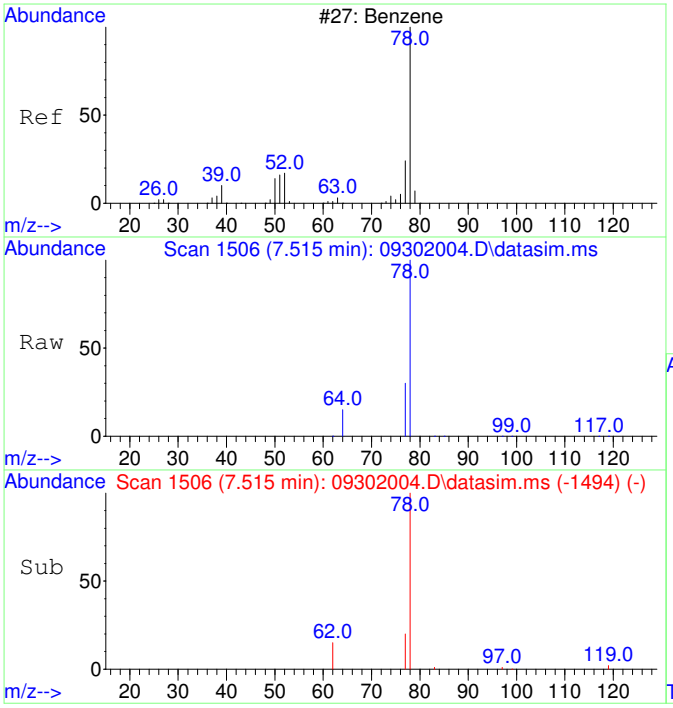


#8
Carbon tetrachloride
Concen: 45.99 ug/L
RT: 7.199 min Scan# 1480
Delta R.T. 0.012 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:117 Resp: 1988

Ion	Ratio	Lower	Upper
117	100		
119	97.6	66.4	126.4

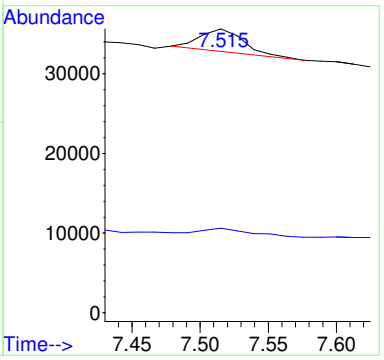


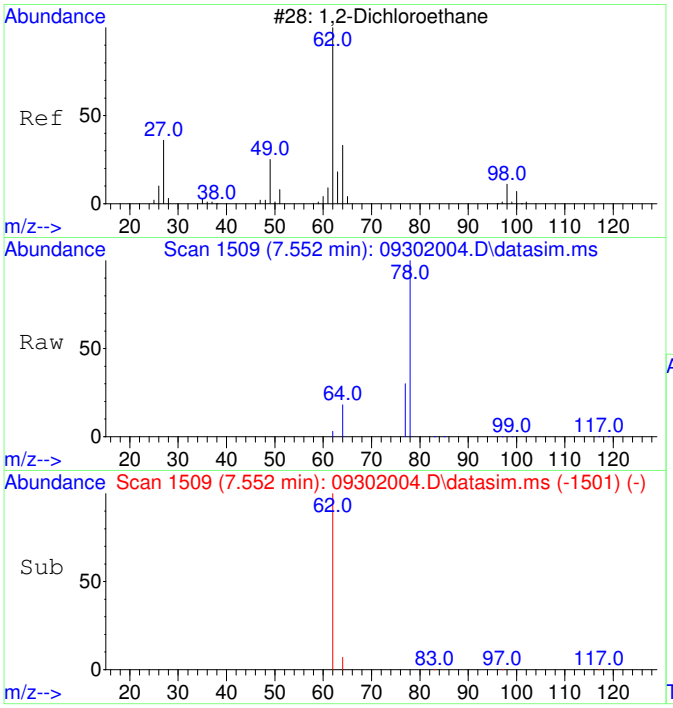


#9
Benzene
Concen: 49.40 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 78 Resp: 5721

Ion	Ratio	Lower	Upper
78	100		
77	61.2	0.0	53.2#

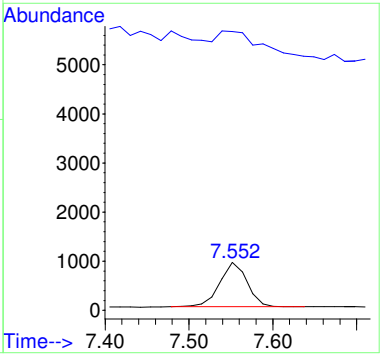


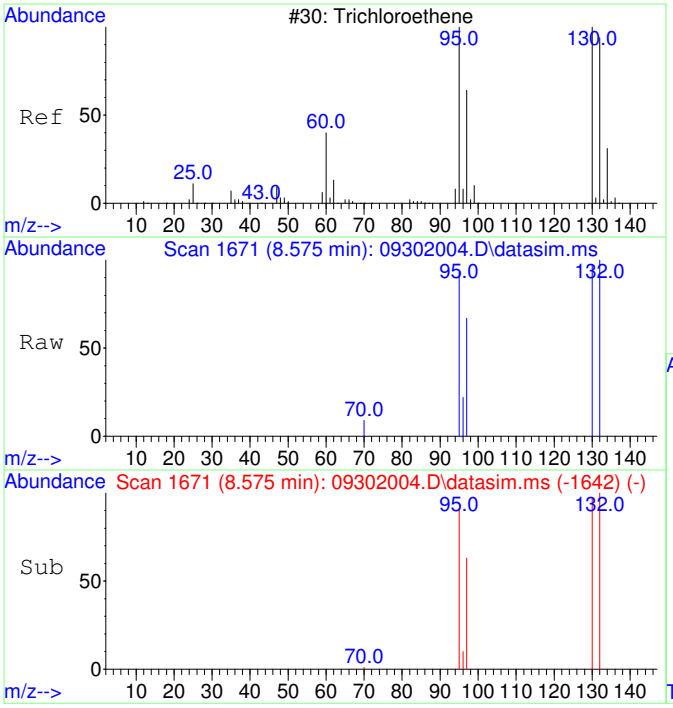


#10
1,2-Dichloroethane
Concen: 49.49 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 62 Resp: 2046

Ion	Ratio	Lower	Upper
62	100		
64	84.5	2.3	62.3#

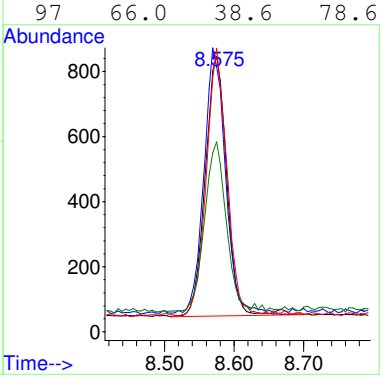


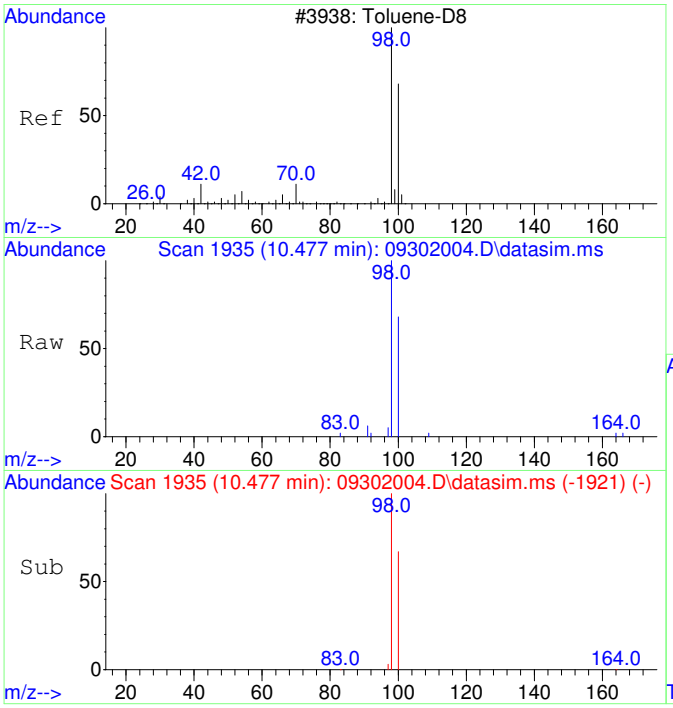


#11
Trichloroethene
Concen: 48.78 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:130 Resp: 1701

Ion	Ratio	Lower	Upper
130	100		
95	101.2	60.7	120.7
132	97.7	76.0	116.0
97	66.0	38.6	78.6

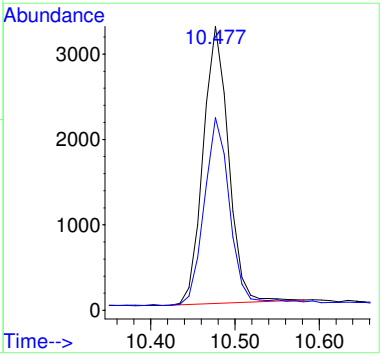


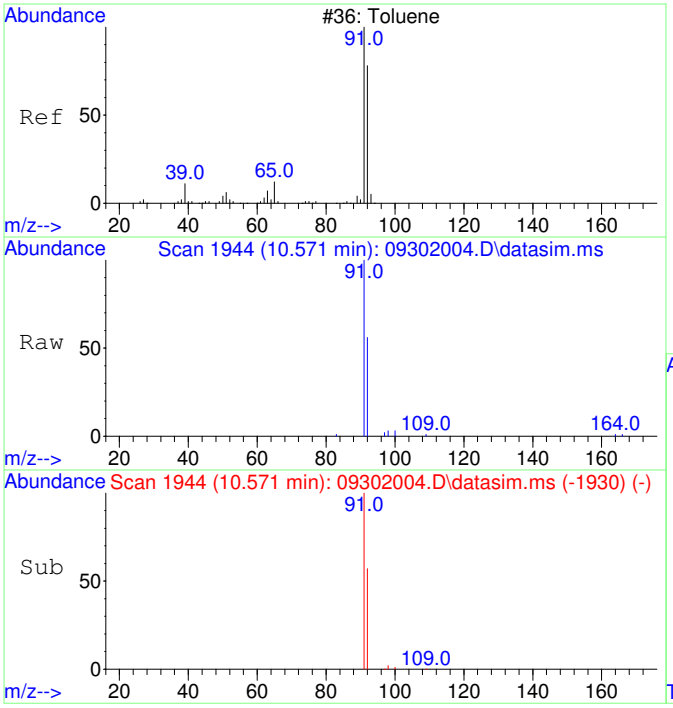


#12
Toluene-d8
Concen: 50.93 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 98 Resp: 6795

Ion	Ratio	Lower	Upper
98	100		
100	69.9	37.1	97.1

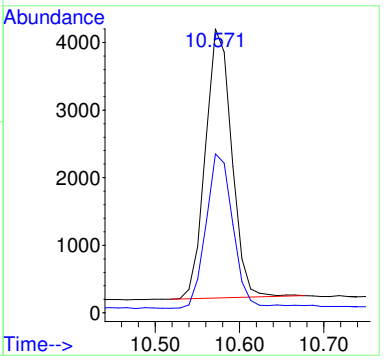


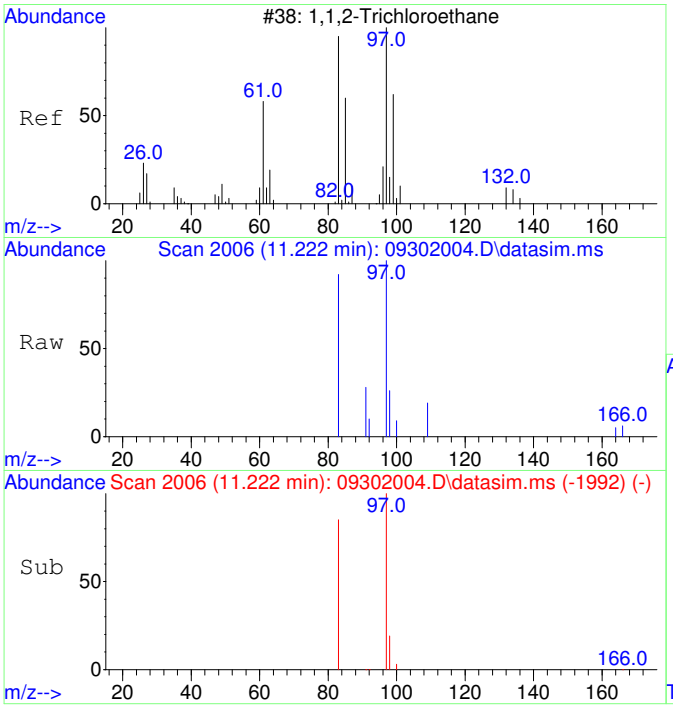


#13
Toluene
Concen: 50.87 ug/L
RT: 10.571 min Scan# 1944
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 8653

Ion	Ratio	Lower	Upper
91	100		
92	58.4	29.9	89.9

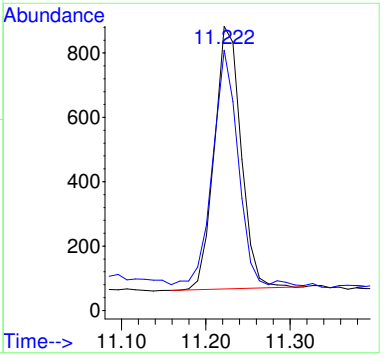


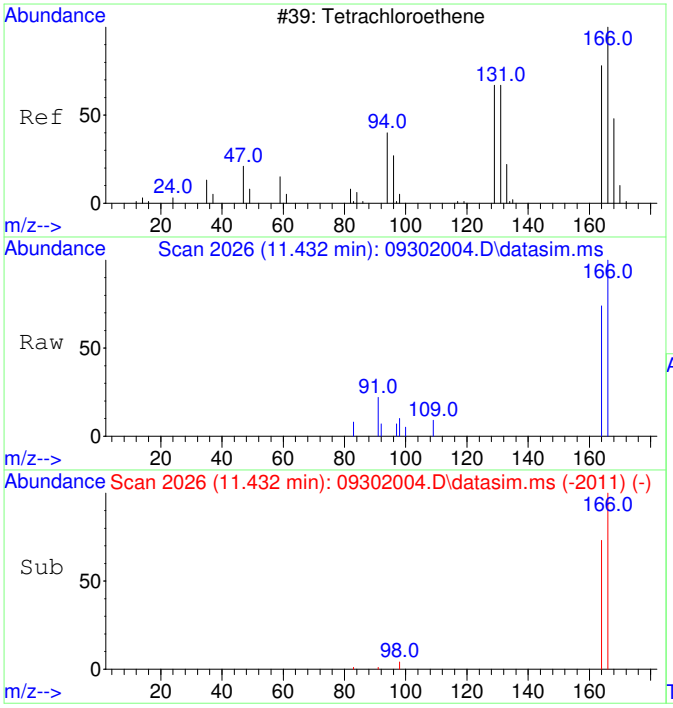


#14
1,1,2-Trichloroethane
Concen: 48.51 ug/L
RT: 11.222 min Scan# 2006
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 97 Resp: 1798

Ion	Ratio	Lower	Upper
97	100		
83	83.4	51.2	111.2

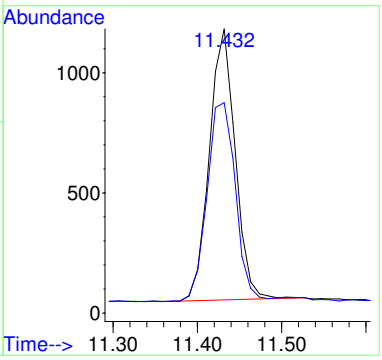


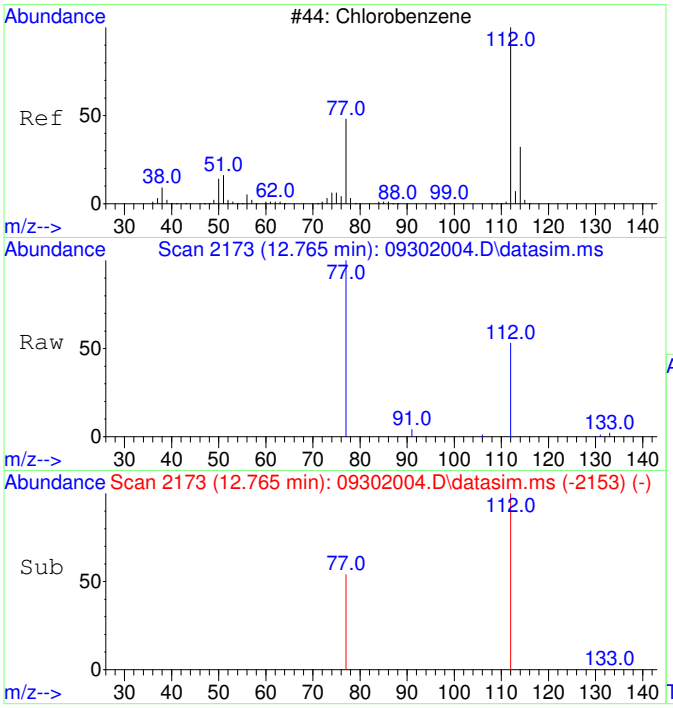


#15
Tetrachloroethene
Concen: 49.02 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:166 Resp: 2413

Ion	Ratio	Lower	Upper
166	100		
164	80.7	47.8	107.8

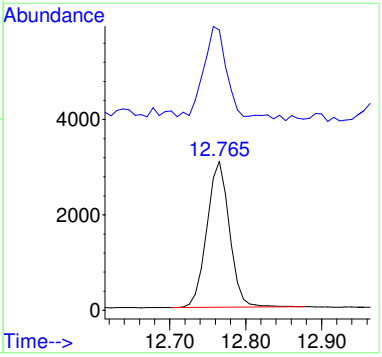


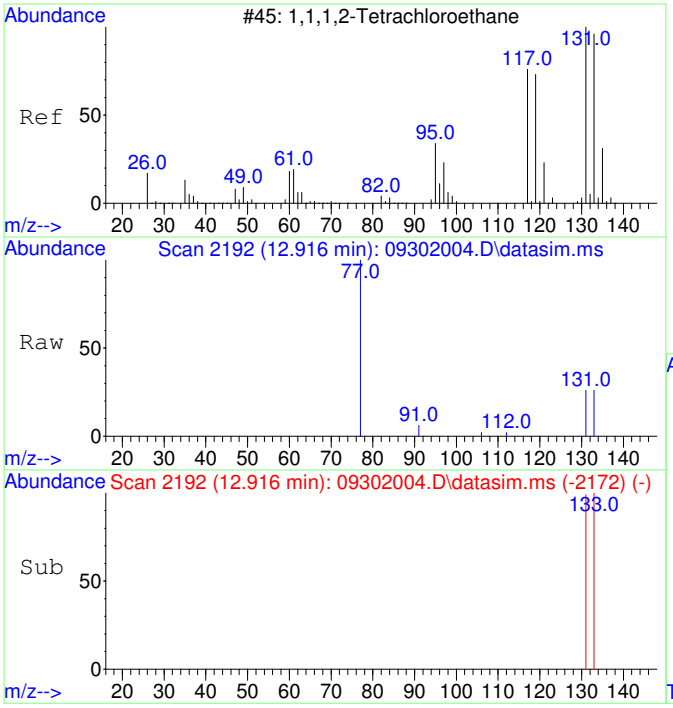


#16
Chlorobenzene
Concen: 52.02 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:112 Resp: 6336

Ion	Ratio	Lower	Upper
112	100		
77	60.1	23.6	83.6

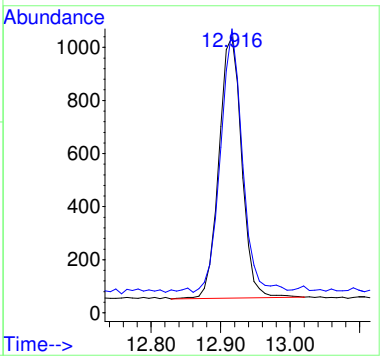


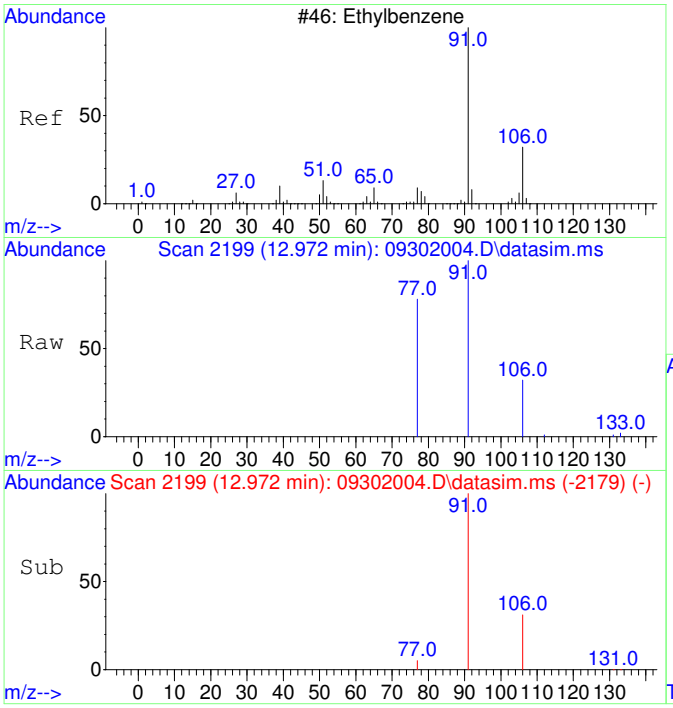


#17
1,1,1,2-Tetrachloroethane
Concen: 51.23 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:131 Resp: 2236

Ion	Ratio	Lower	Upper
131	100		
133	95.6	66.3	126.3

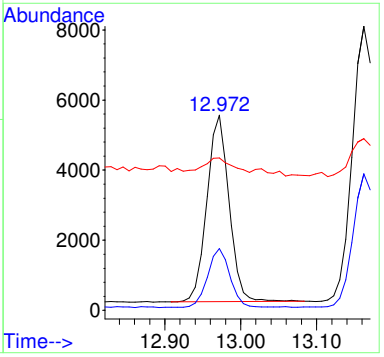


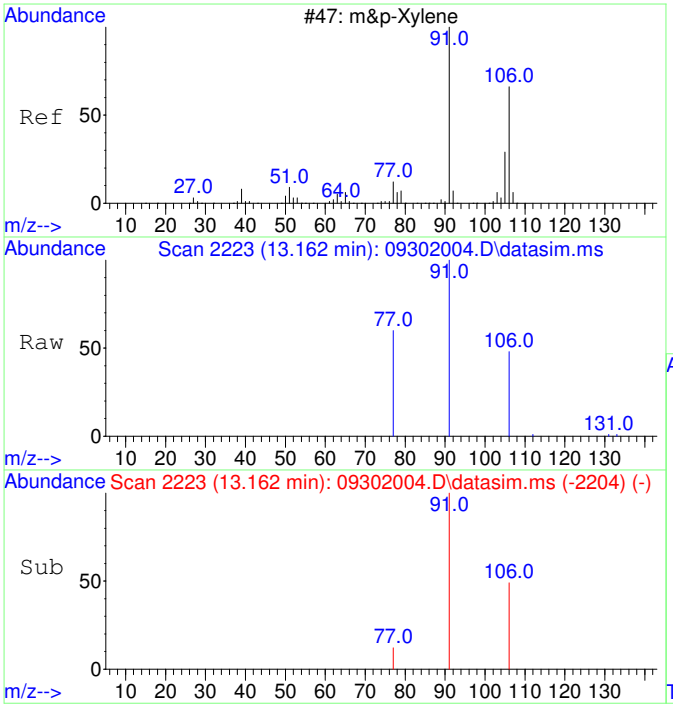


#18
Ethylbenzene
Concen: 52.06 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 10780

Ion	Ratio	Lower	Upper
91	100		
106	31.2	3.0	63.0
77	9.9	0.0	38.2

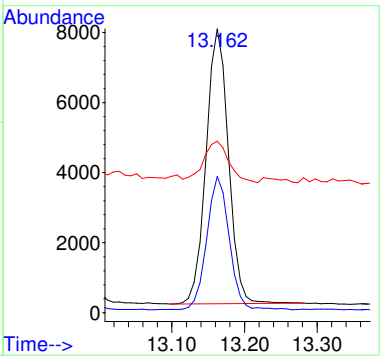


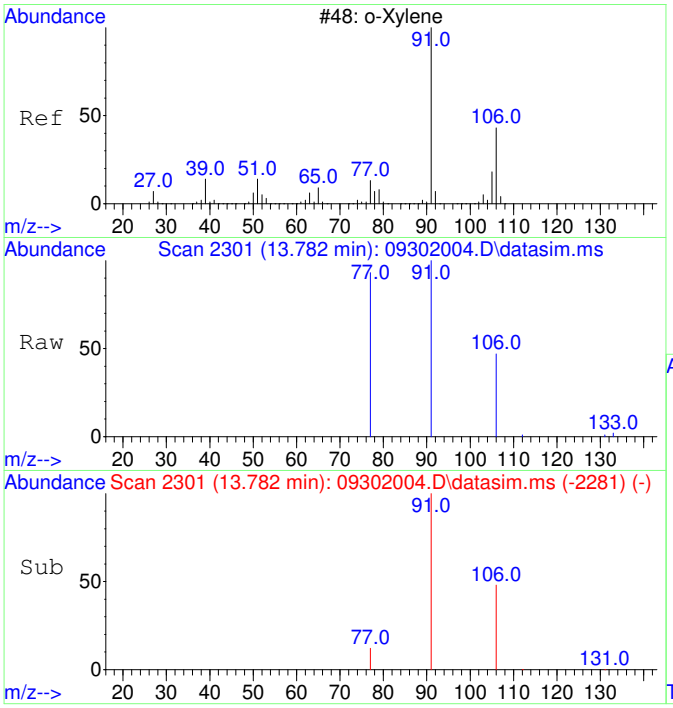


#19
m&p-Xylene
Concen: 103.84 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 16804

Ion	Ratio	Lower	Upper
91	100		
106	48.5	22.2	82.2
77	17.3	0.0	42.4

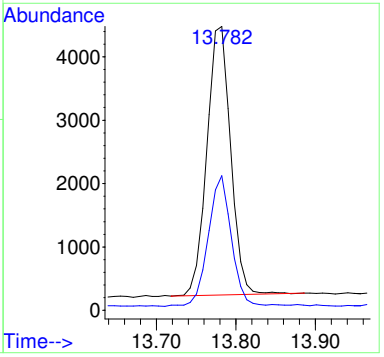


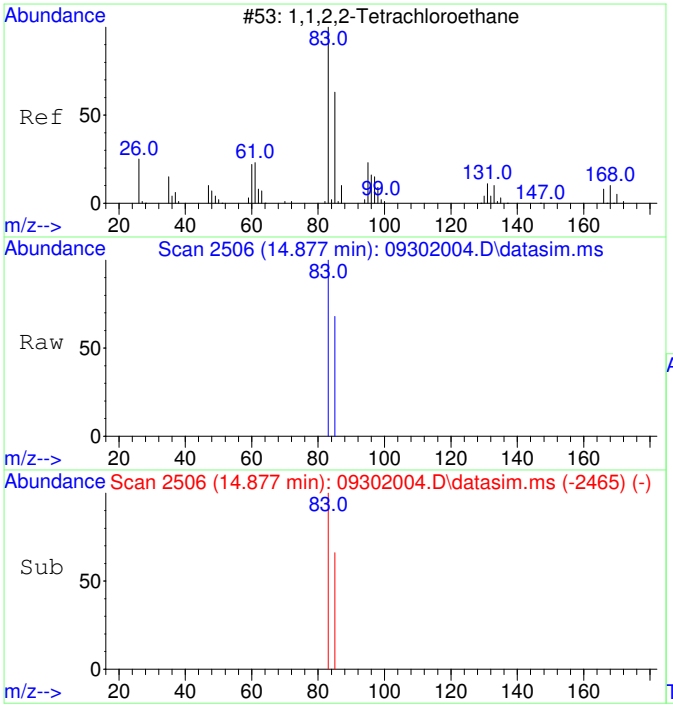


#20
o-Xylene
Concen: 50.90 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 8801

Ion	Ratio	Lower	Upper
91	100		
106	47.2	19.2	79.2

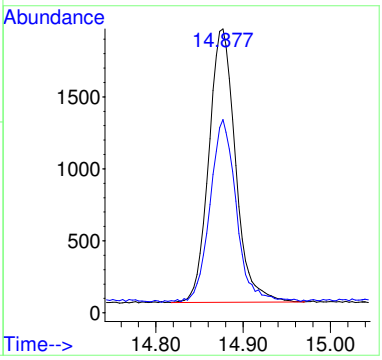


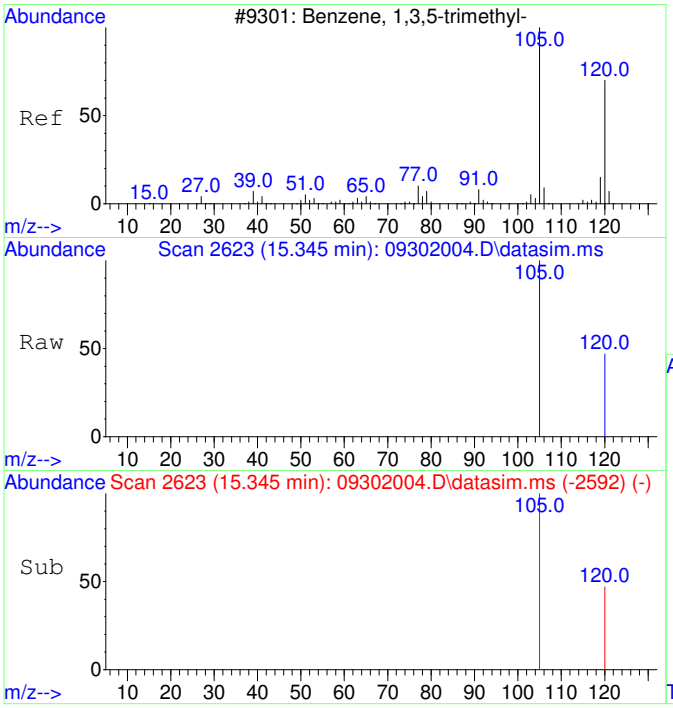


#21
1,1,2,2-Tetrachloroethane
Concen: 52.58 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. 0.004 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 83 Resp: 4029

Ion	Ratio	Lower	Upper
83	100		
85	65.7	34.8	94.8

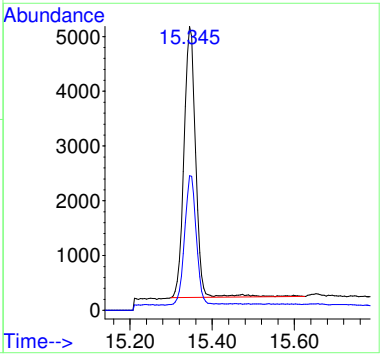


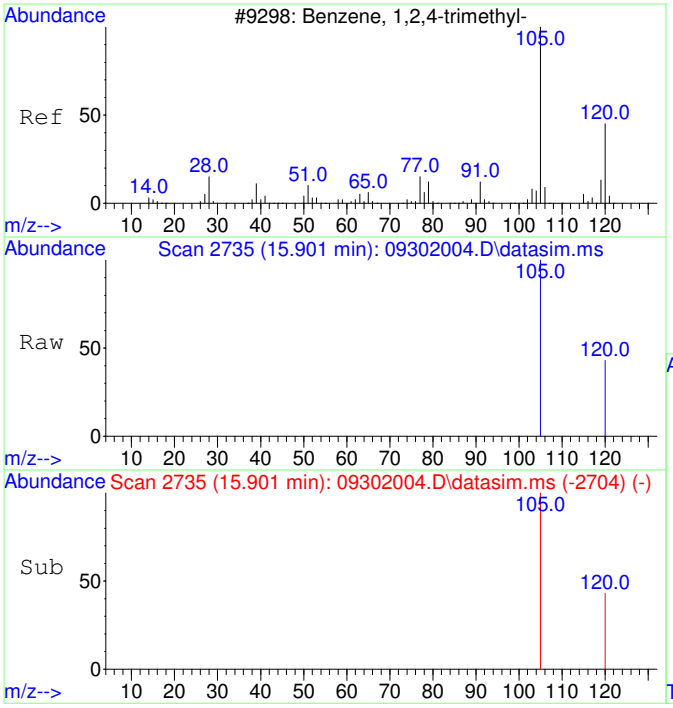


#22
1,3,5-Trimethylbenzene
Concen: 52.98 ug/L
RT: 15.345 min Scan# 2623
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:105 Resp: 9750

Ion	Ratio	Lower	Upper
105	100		
120	48.0	21.1	81.1

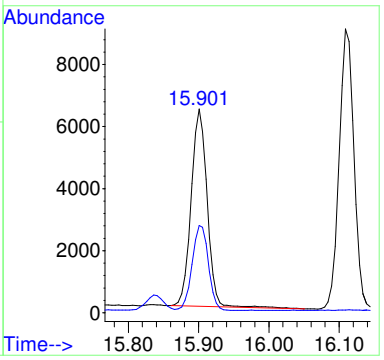


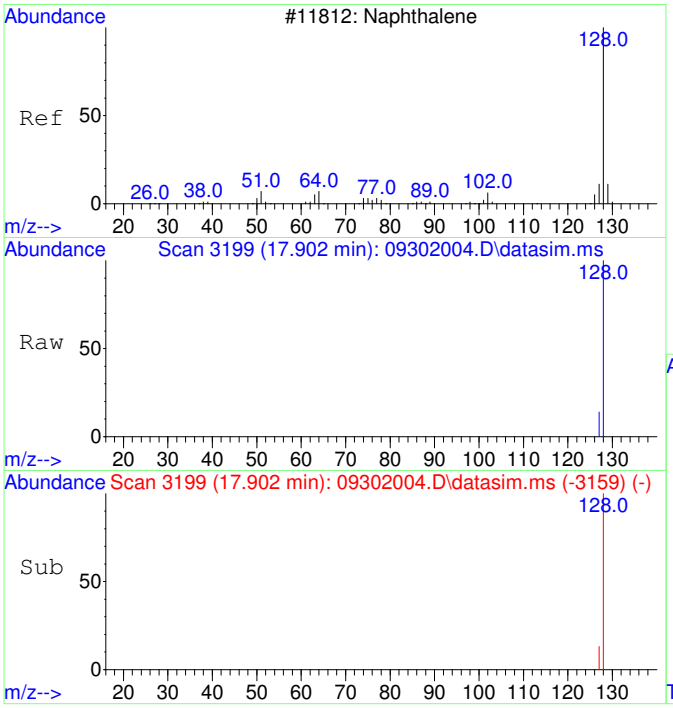


#23
1,2,4-Trimethylbenzene
Concen: 52.53 ug/L
RT: 15.901 min Scan# 2735
Delta R.T. 0.005 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:105 Resp: 10041

Ion	Ratio	Lower	Upper
105	100		
120	42.8	17.2	77.2

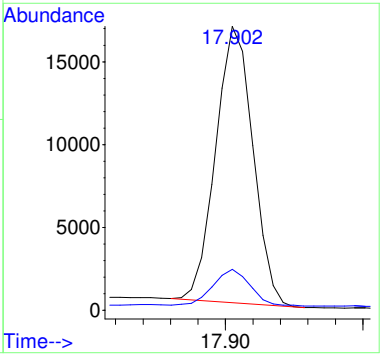


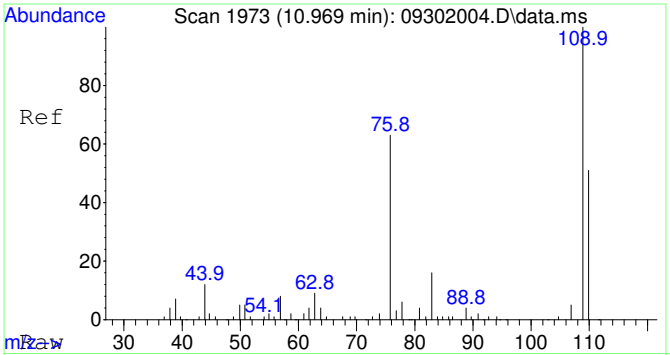


#24
Naphthalene
Concen: 51.70 ug/L
RT: 17.902 min Scan# 3199
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:128 Resp: 15619

Ion	Ratio	Lower	Upper
128	100		
127	13.0	0.0	42.5

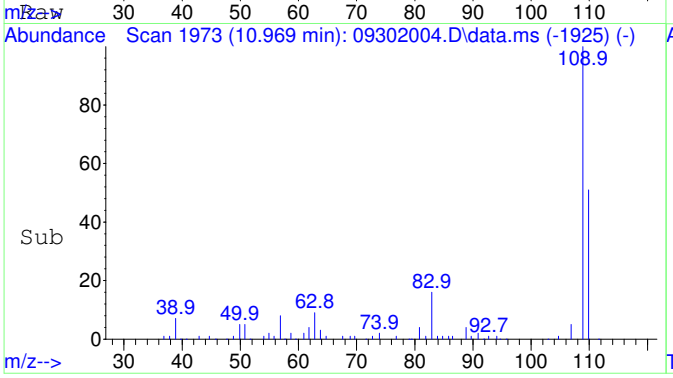


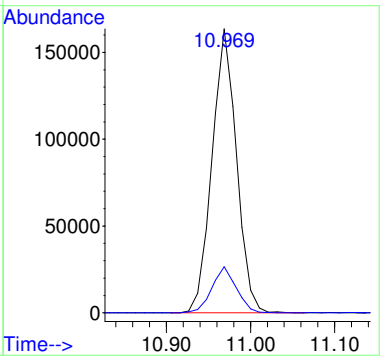


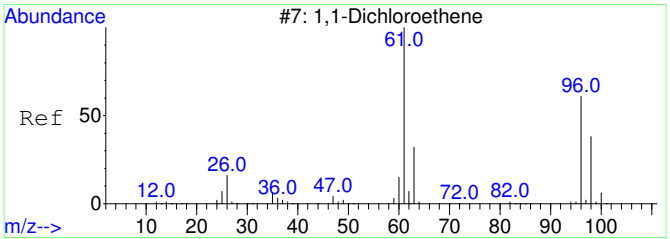
#25
2-Fluorotoluene SCAN
Concen: 4975.65 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:109 Resp: 330598

Ion	Ratio	Lower	Upper
109	100		
83	16.2	0.0	43.8



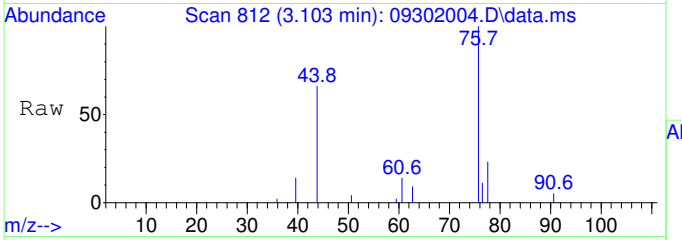


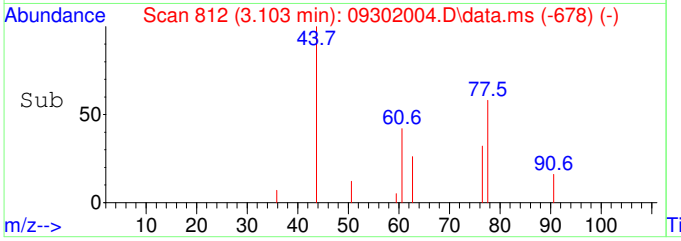


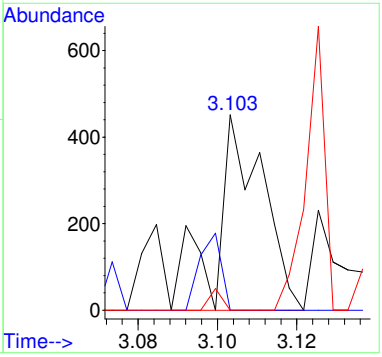
#26
1,1-Dichloroethene SCAN
Concen: 26.36 ug/L
RT: 3.103 min Scan# 812
Delta R.T. -0.004 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

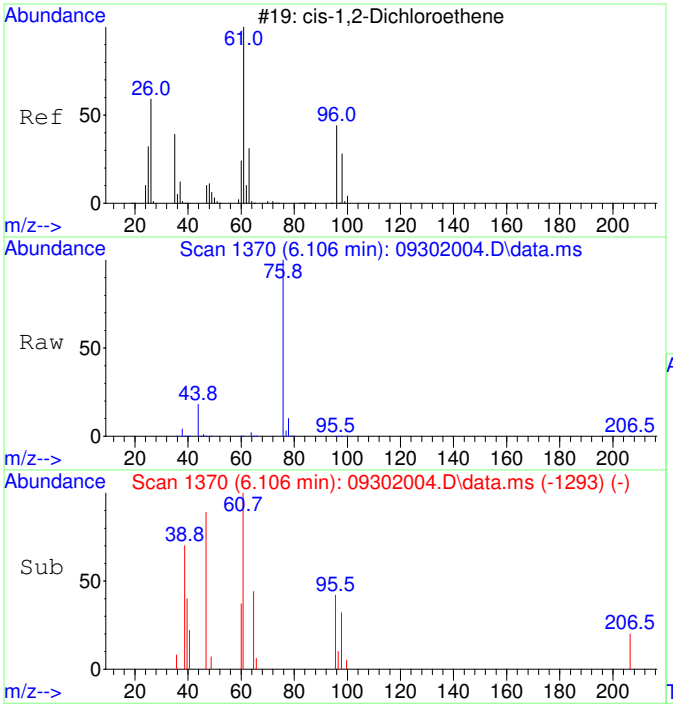
Tgt Ion: 61 Resp: 372

Ion	Ratio	Lower	Upper
61	100		
96	18.3	33.1	93.1#
98	0.0	11.2	71.2#





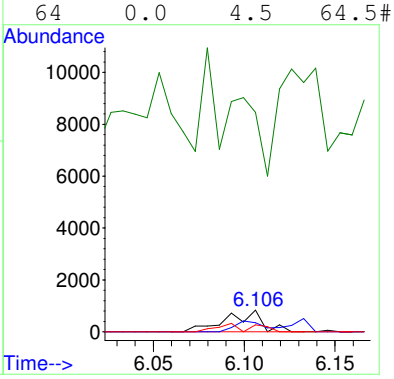


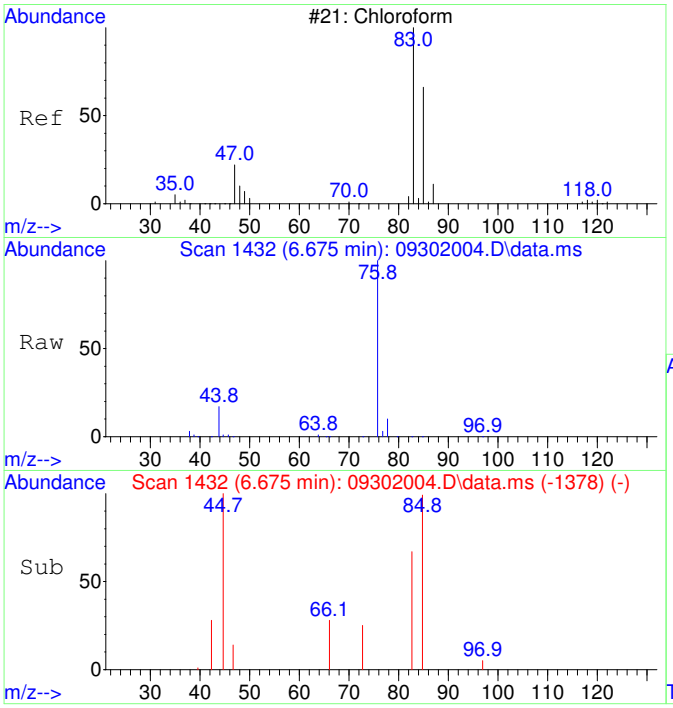


#29
cis-1,2-Dichloroethene SCAN
Concen: 53.49 ug/L
RT: 6.106 min Scan# 1370
Delta R.T. 0.013 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 61 Resp: 1158

Ion	Ratio	Lower	Upper
61	100		
96	29.5	39.9	99.9#
98	21.5	13.5	73.5
64	0.0	4.5	64.5#

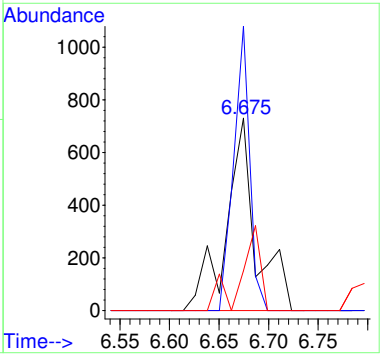


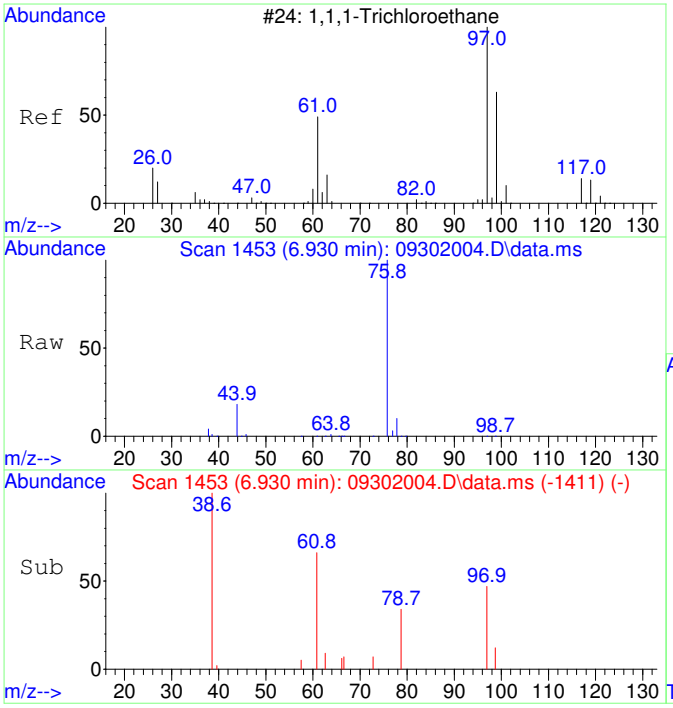


#30
Chloroform SCAN
Concen: 64.77 ug/L
RT: 6.675 min Scan# 1432
Delta R.T. 0.012 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 83 Resp: 1521

Ion	Ratio	Lower	Upper
83	100		
85	79.8	34.6	94.6
47	29.3	0.0	53.4

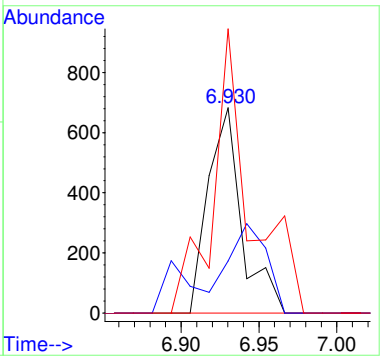


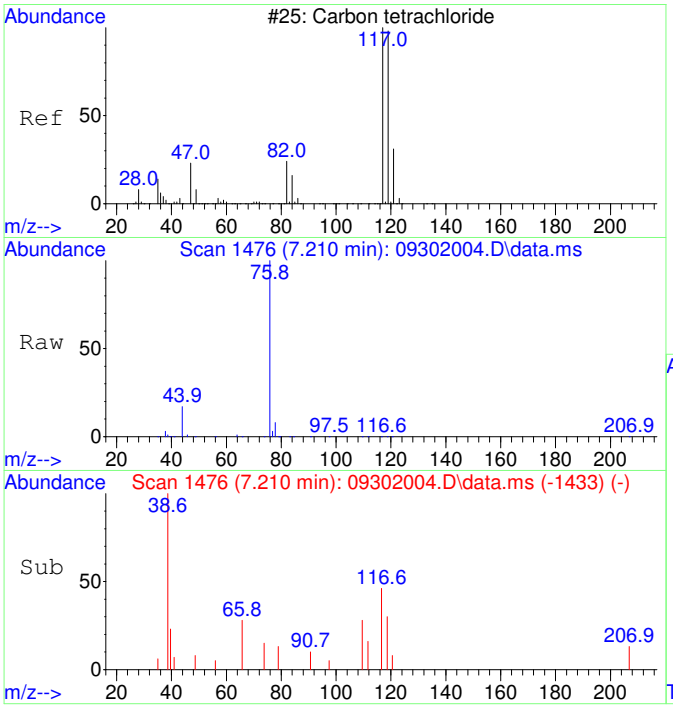


#31
1,1,1-Trichloroethane SCAN
Concen: 47.94 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. 0.012 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 97 Resp: 1026

Ion	Ratio	Lower	Upper
97	100		
99	72.4	43.6	103.6
61	153.2	18.0	78.0#

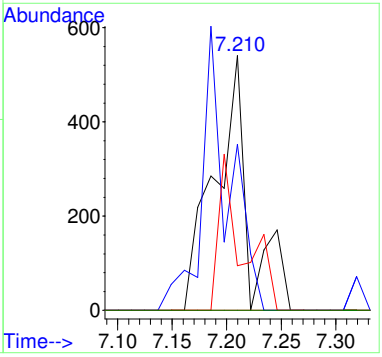


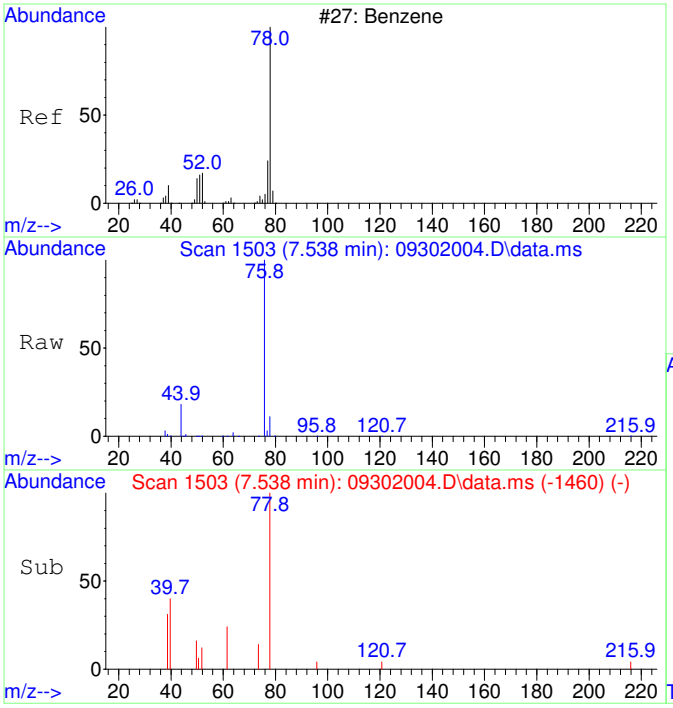


#32
Carbon tetrachloride SCAN
Concen: 52.41 ug/L
RT: 7.210 min Scan# 1476
Delta R.T. 0.024 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:117 Resp: 1170

Ion	Ratio	Lower	Upper
117	100		
119	0.0	75.5	135.5#
121	43.0	0.0	58.8
82	0.0	0.0	59.2

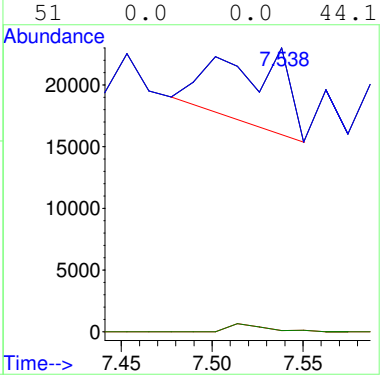


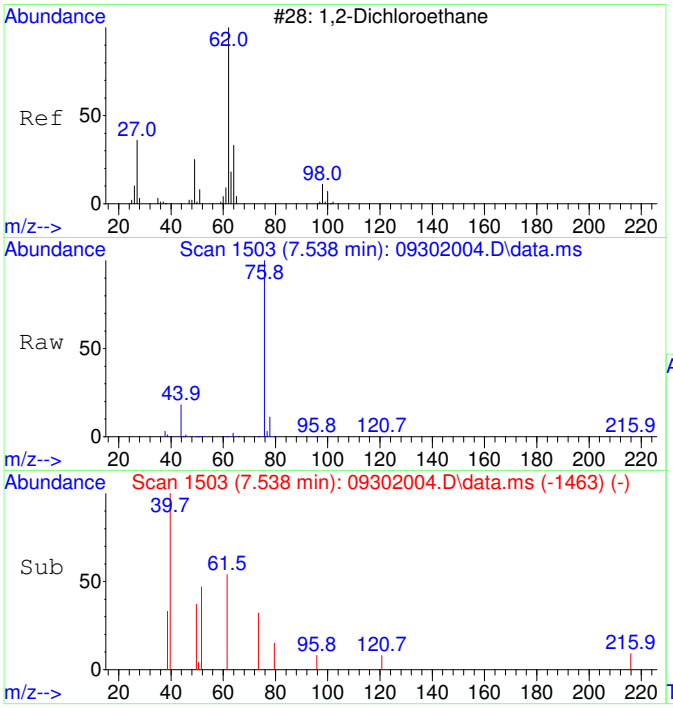


#33
Benzene SCAN
Concen: 230.77 ug/L
RT: 7.538 min Scan# 1503
Delta R.T. 0.024 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 78 Resp: 13597

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

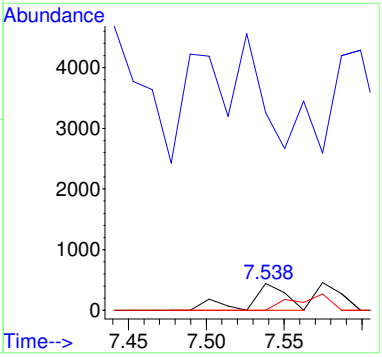


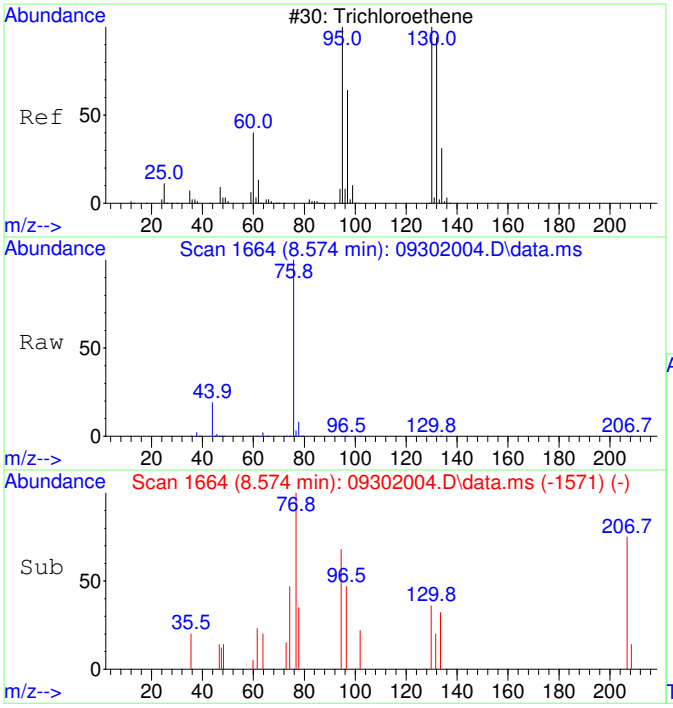


#34
1,2-Dichloroethane SCAN
Concen: 33.23 ug/L
RT: 7.538 min Scan# 1503
Delta R.T. -0.012 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 62 Resp: 723

Ion	Ratio	Lower	Upper
62	100		
64	688.4	5.2	65.2#
49	0.0	3.9	63.9#

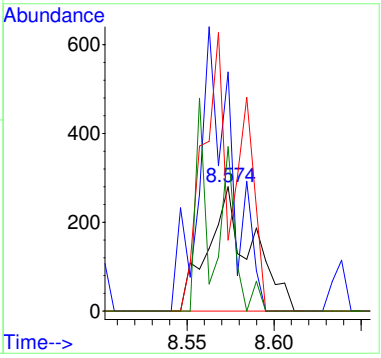


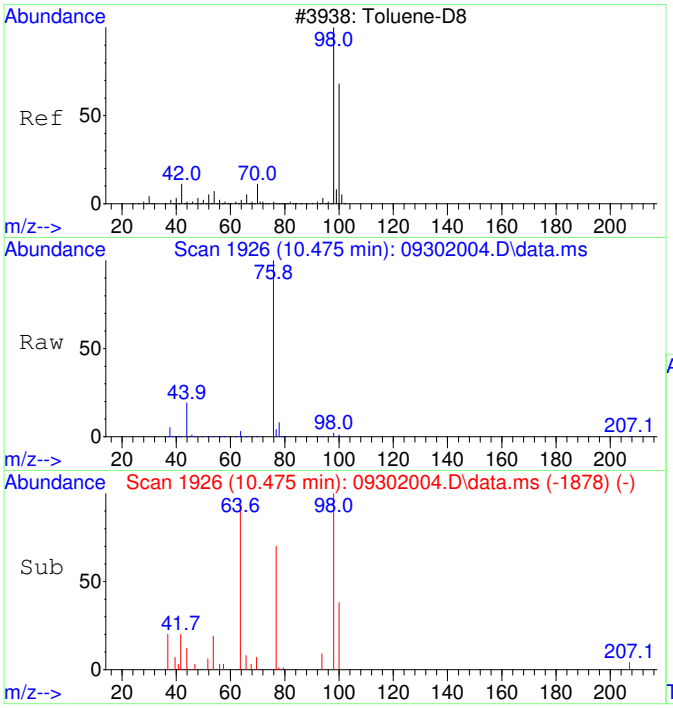


#35
Trichloroethene SCAN
Concen: 29.95 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.005 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:130 Resp: 485

Ion	Ratio	Lower	Upper
130	100		
95	170.9	60.5	120.5#
132	179.2	59.6	119.6#
97	19.6	28.2	88.2#

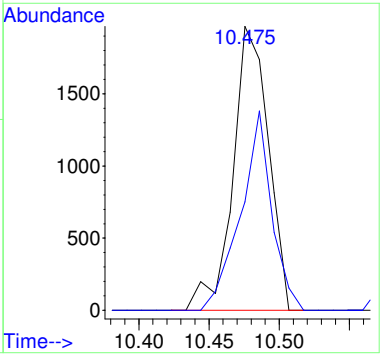


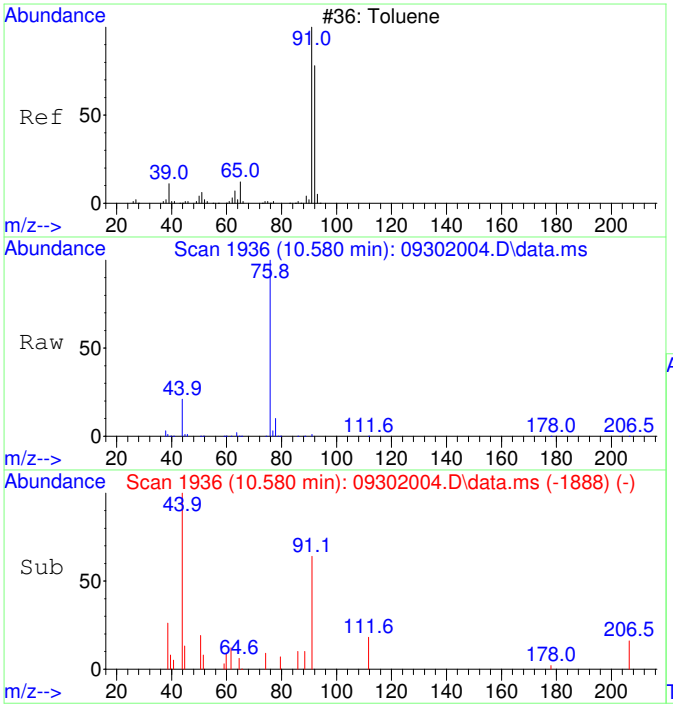


#36
Toluene-d8 SCAN
Concen: 53.43 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 98 Resp: 3472

Ion	Ratio	Lower	Upper
98	100		
100	61.5	40.0	100.0

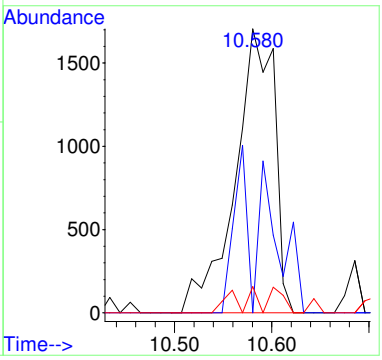


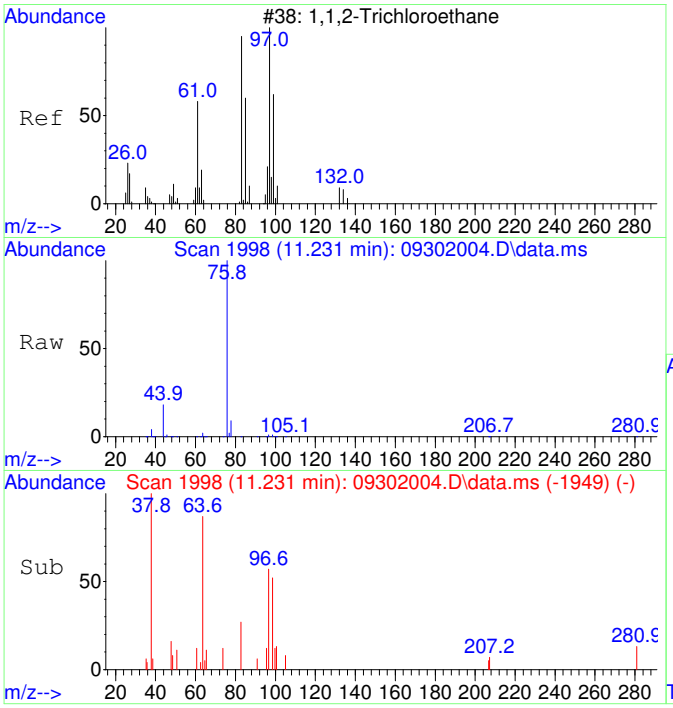


#37
Toluene SCAN
Concen: 57.95 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 4822

Ion	Ratio	Lower	Upper
91	100		
92	19.7	28.3	88.3#
65	2.1	0.0	41.0

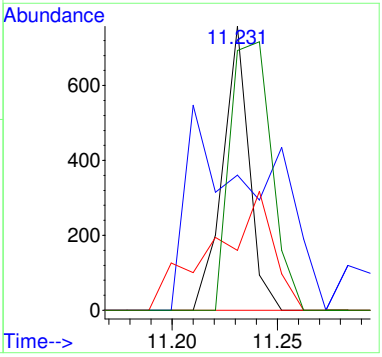


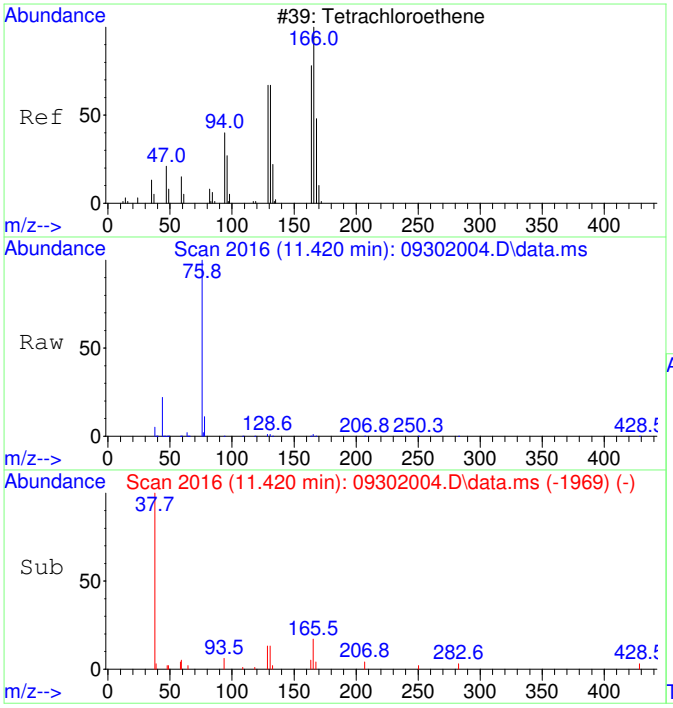


#38
1,1,2-Trichloroethane SCAN
Concen: 35.50 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. 0.010 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 97 Resp: 663

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	94.4	32.1	92.1#
99	149.2	36.7	96.7#

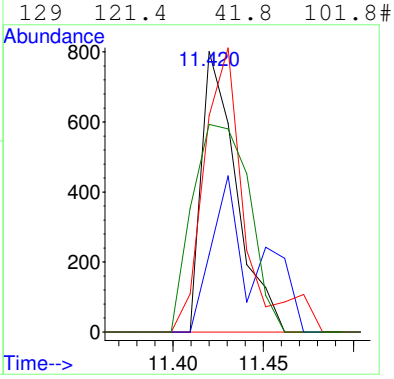


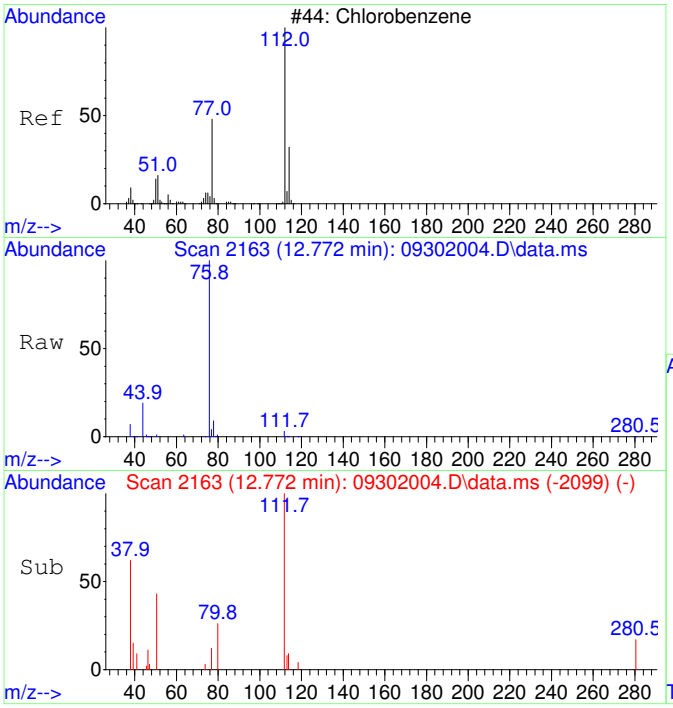


#39
Tetrachloroethene SCAN
Concen: 54.07 ug/L
RT: 11.420 min Scan# 2016
Delta R.T. -0.011 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:166 Resp: 1081

Ion	Ratio	Lower	Upper
166	100		
164	70.1	50.9	110.9
131	118.7	38.7	98.7#
129	121.4	41.8	101.8#

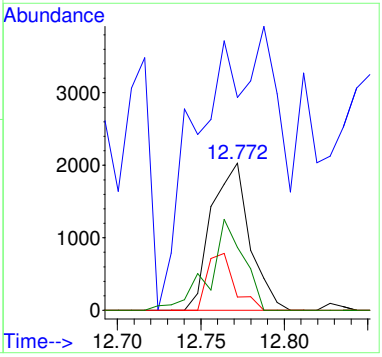


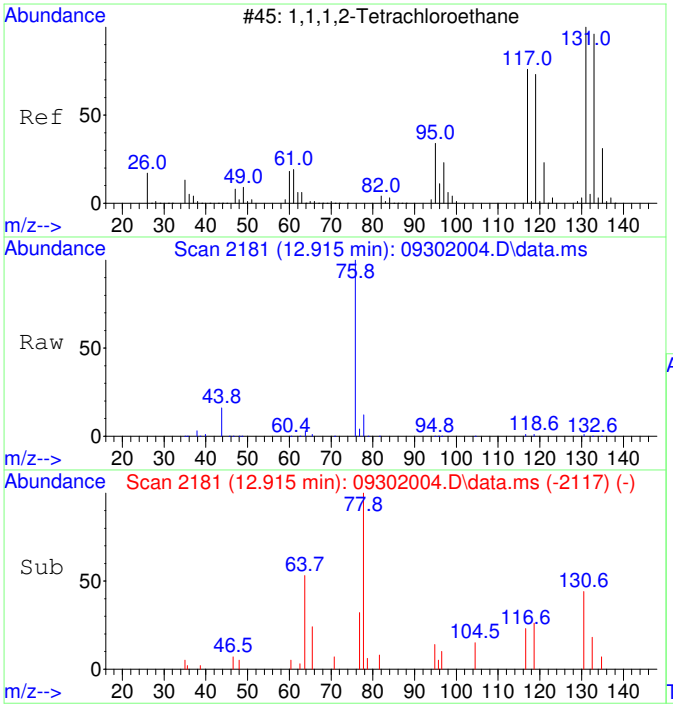


#40
Chlorobenzene SCAN
Concen: 57.12 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:112 Resp: 3248

Ion	Ratio	Lower	Upper
112	100		
77	0.0	28.2	88.2#
114	27.4	2.3	62.3
51	55.2	0.0	50.1#

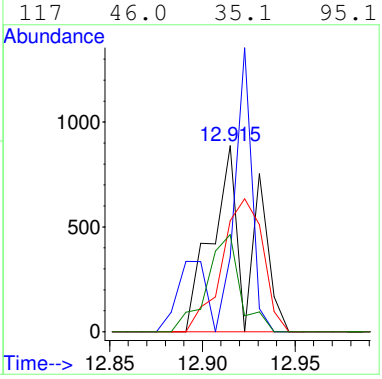


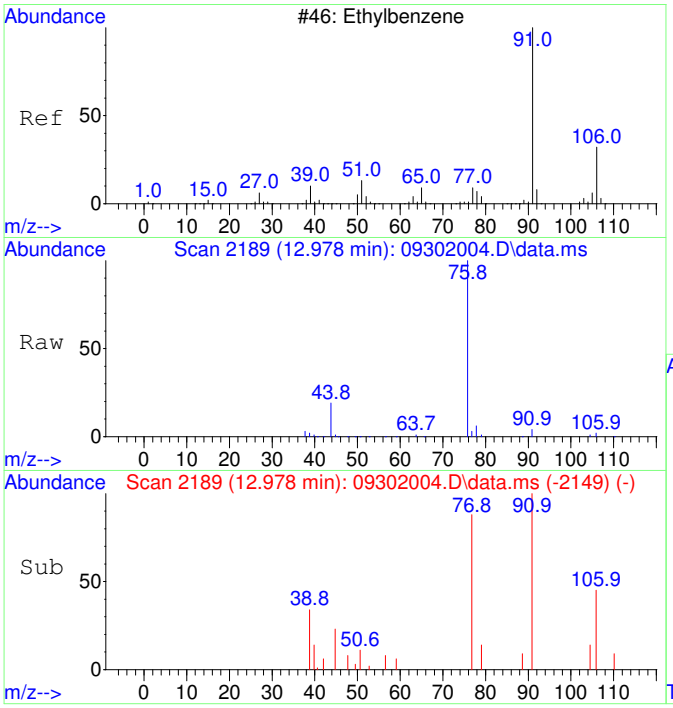


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 59.97 ug/L
RT: 12.915 min Scan# 2181
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:131 Resp: 1262

Ion	Ratio	Lower	Upper
131	100		
133	68.8	66.9	126.9
119	77.7	40.4	100.4
117	46.0	35.1	95.1

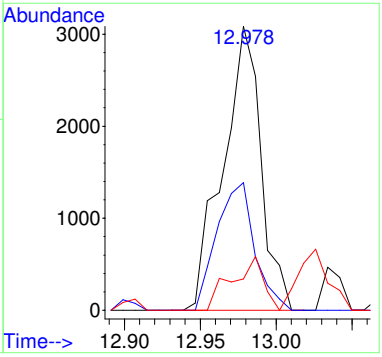


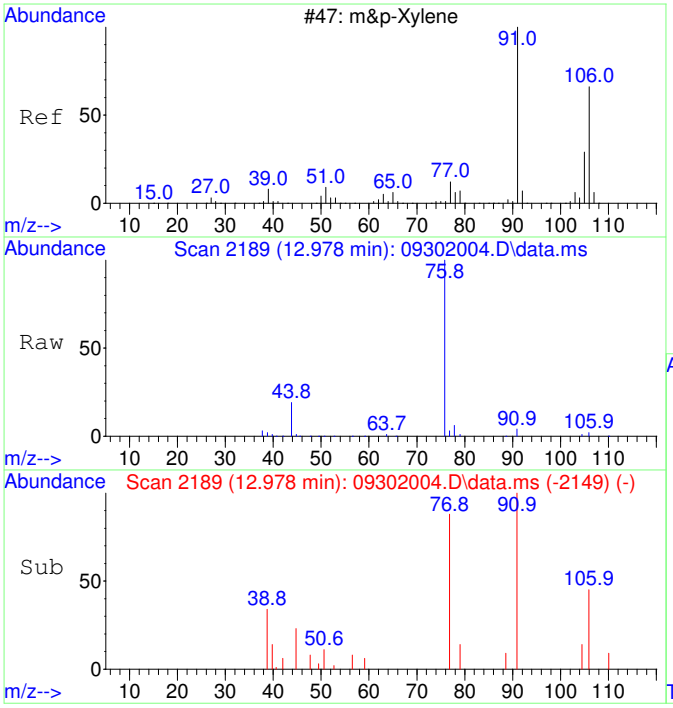


#42
Ethylbenzene SCAN
Concen: 35.51 ug/L
RT: 12.978 min Scan# 2189
Delta R.T. -0.183 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 5384

Ion	Ratio	Lower	Upper
91	100		
106	44.8	23.1	83.1
51	15.8	0.0	40.1

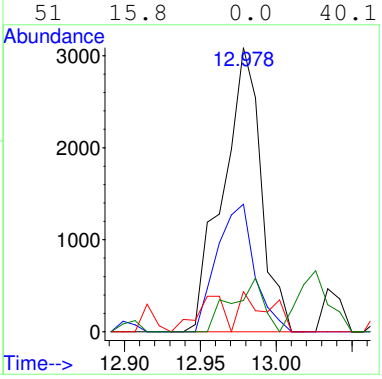


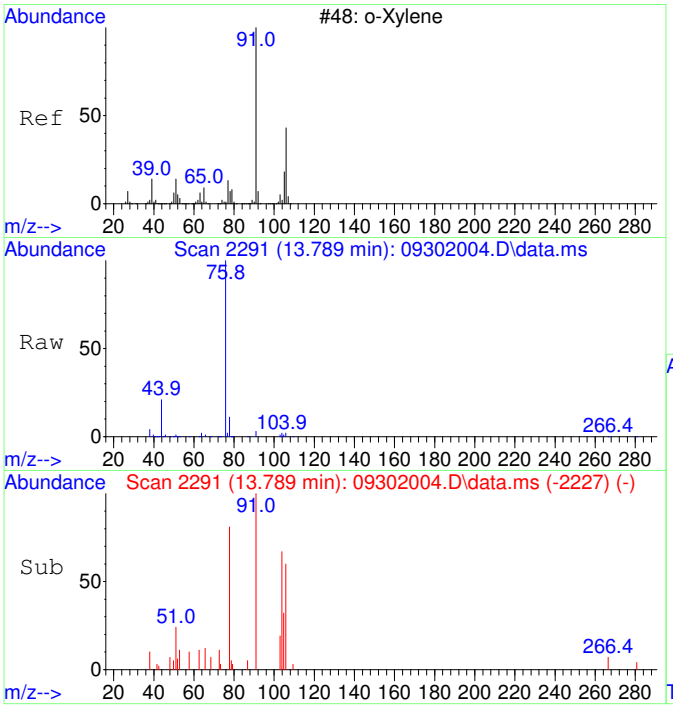


#43
m&p-Xylene SCAN
Concen: 35.51 ug/L
RT: 12.978 min Scan# 2189
Delta R.T. -0.183 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 5384

Ion	Ratio	Lower	Upper
91	100		
106	44.8	23.1	83.1
105	10.9	0.0	54.7
51	15.8	0.0	40.1

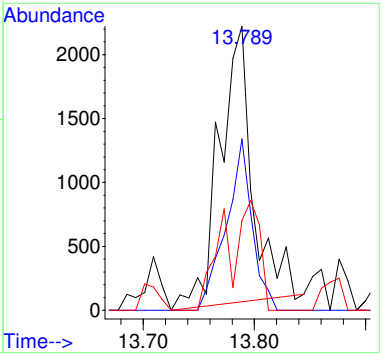


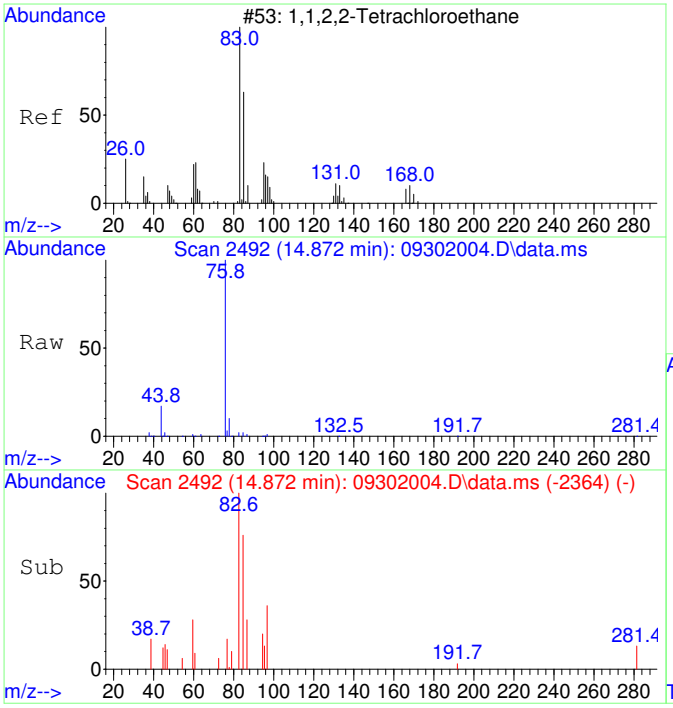


#44
o-Xylene SCAN
Concen: 54.81 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 4448

Ion	Ratio	Lower	Upper
91	100		
106	48.7	18.0	78.0
105	20.1	0.0	56.6

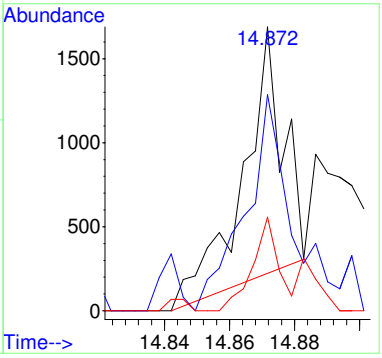


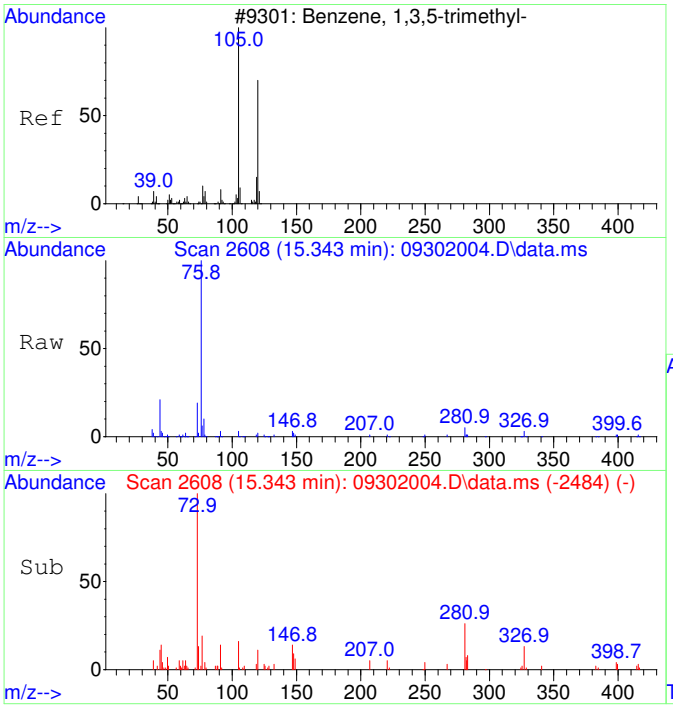


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 31.99 ug/L
RT: 14.872 min Scan# 2492
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 83 Resp: 1266

Ion	Ratio	Lower	Upper
83	100		
85	92.8	35.9	95.9
95	19.9	0.0	47.4

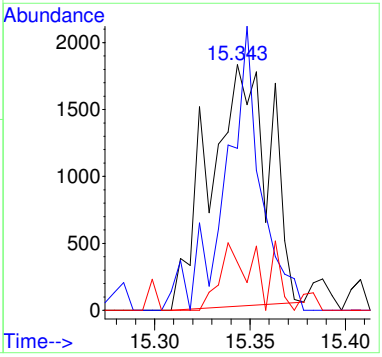


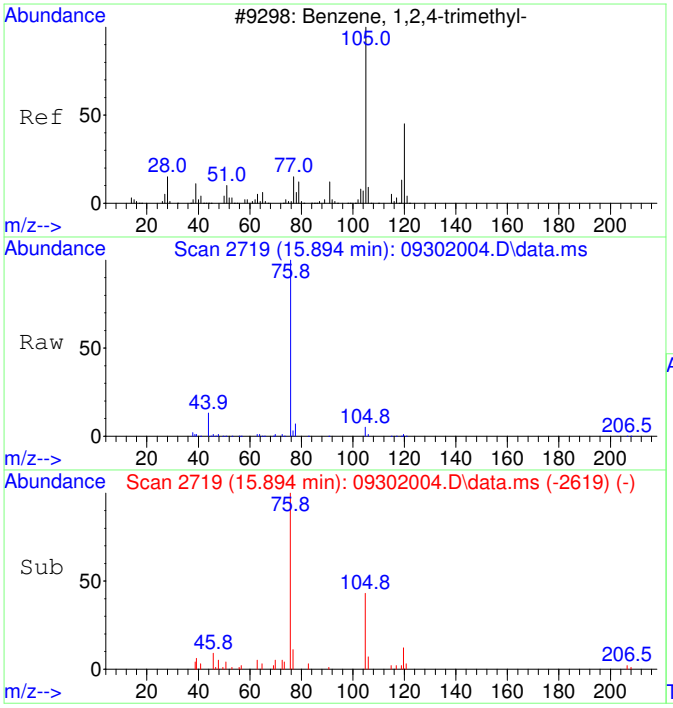


#46
1,3,5-Trimethylbenzene SCAN
Concen: 46.29 ug/L
RT: 15.343 min Scan# 2608
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:105 Resp: 3959

Ion	Ratio	Lower	Upper
105	100		
120	69.1	18.3	78.3
119	14.1	0.0	43.1

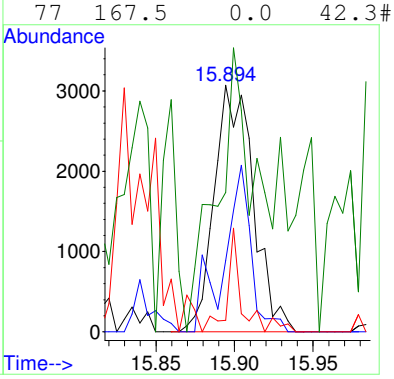


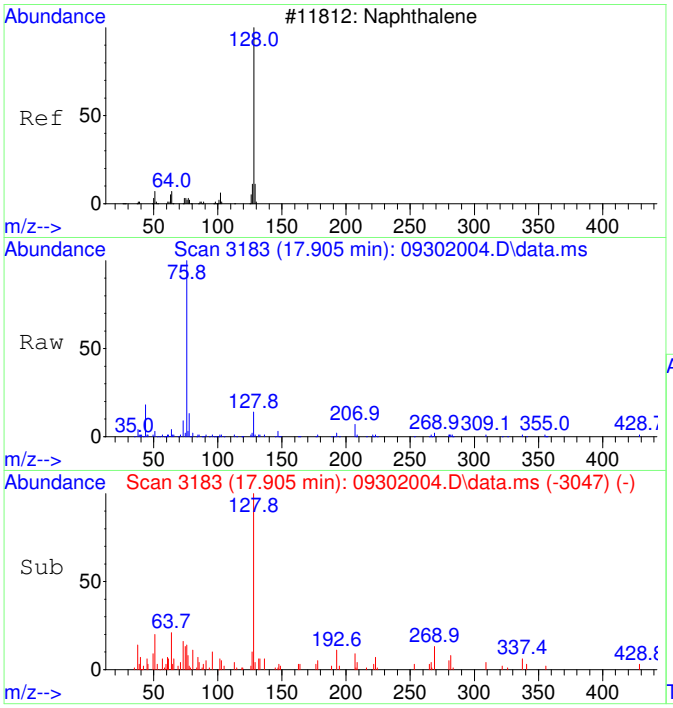


#47
1,2,4-Trimethylbenzene SCAN
Concen: 60.40 ug/L
RT: 15.894 min Scan# 2719
Delta R.T. -0.005 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:105 Resp: 5286

Ion	Ratio	Lower	Upper
105	100		
120	47.4	16.9	76.9
119	13.5	0.0	41.9
77	167.5	0.0	42.3#

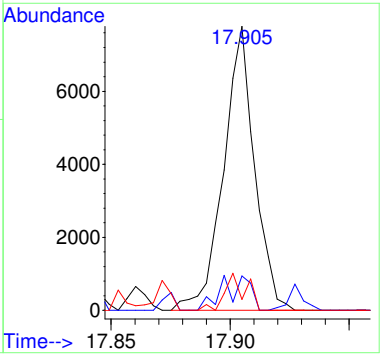




#48
Naphthalene SCAN
Concen: 53.20 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.004 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:128 Resp: 7044

Ion	Ratio	Lower	Upper
128	100		
127	10.8	0.0	44.0
129	8.9	0.0	40.8



Quantitation Report (QT Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302004.D
Acq On : 30 Sep 2020 14:31
InstName : AG5975C
Operator : TD
Sample : S20I029-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

M.I. Performed By:
TD at 2:53 pm, Sep 30, 2020

M.I. Approved By:
ZR at 3:58 pm, Oct 02, 2020

Quant Time: Sep 30 14:49:56 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

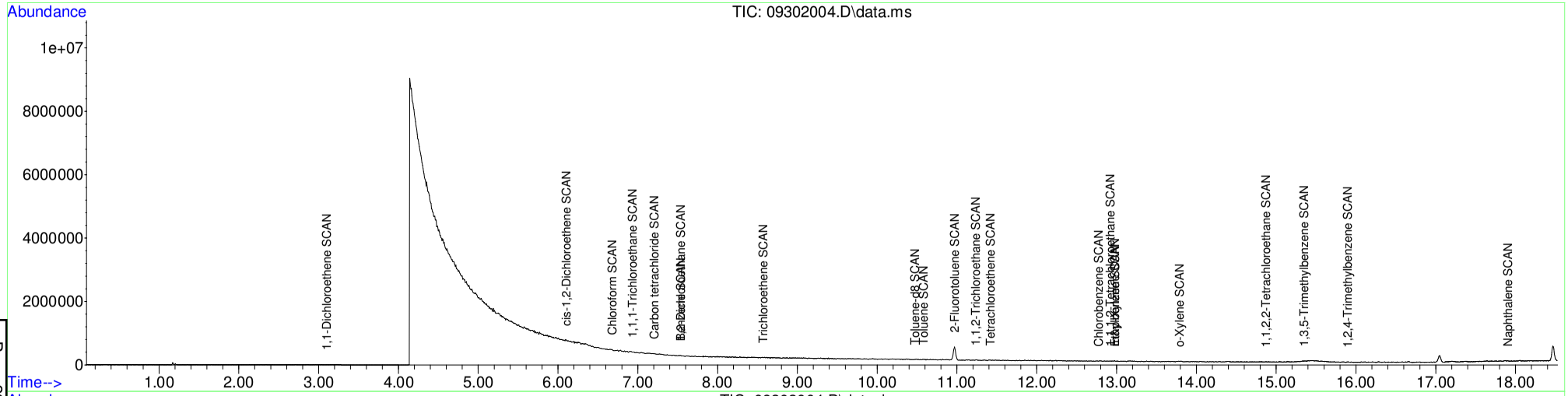
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	681597	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	6795	50.93	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery =	1.02%#		
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.093	61	1406m	51.66	ug/L	
3] trans-1,2-Dichloroethene	4.422	61	1630	51.83	ug/L	71
4] 1,1-Dichloroethane	5.112	63	2014	51.45	ug/L	67
5] cis-1,2-Dichloroethene	6.101	61	2133	51.62	ug/L	98
6] Chloroform	6.664	83	2025	47.88	ug/L	99
7] 1,1,1-Trichloroethane	6.919	97	2155	46.92	ug/L	99
8] Carbon tetrachloride	7.199	117	1988	45.99	ug/L	99
9] Benzene	7.515	78	5721	49.40	ug/L #	22
10] 1,2-Dichloroethane	7.552	62	2046	49.49	ug/L #	7
11] Trichloroethene	8.575	130	1701	48.78	ug/L	93
13] Toluene	10.571	91	8653	50.87	ug/L	98
14] 1,1,2-Trichloroethane	11.222	97	1798	48.51	ug/L	97
15] Tetrachloroethene	11.432	166	2413	49.02	ug/L	97
16] Chlorobenzene	12.765	112	6336	52.02	ug/L	91
17] 1,1,1,2-Tetrachloroethane	12.916	131	2236	51.23	ug/L	99
18] Ethylbenzene	12.972	91	10780	52.06	ug/L	96
19] m&p-Xylene	13.162	91	16804	103.84	ug/L	93
20] o-Xylene	13.782	91	8801	50.90	ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.877	83	4029	52.58	ug/L	99
22] 1,3,5-Trimethylbenzene	15.345	105	9750	52.98	ug/L	96
23] 1,2,4-Trimethylbenzene	15.901	105	10041	52.53	ug/L	93
24] Naphthalene	17.902	128	15619	51.70	ug/L	99
25) 2-Fluorotoluene SCAN	10.969	109	330598	4975.65	ug/L	94
26) 1,1-Dichloroethene SCAN	3.103	61	372	26.36	ug/L #	39
29) cis-1,2-Dichloroethene...	6.106	61	1158	53.49	ug/L #	53
30) Chloroform SCAN	6.675	83	1521	64.77	ug/L	83
31) 1,1,1-Trichloroethane ...	6.930	97	1026	47.94	ug/L #	38
32) Carbon tetrachloride SCAN	7.210	117	1170	52.41	ug/L #	20
33) Benzene SCAN	7.538	78	13597	230.77	ug/L #	91
34) 1,2-Dichloroethane SCAN	7.538	62	723	33.23	ug/L #	1
35) Trichloroethene SCAN	8.574	130	485	29.95	ug/L #	19
36) Toluene-d8 SCAN	10.475	98	3472	53.43	ug/L	90
37) Toluene SCAN	10.580	91	4822	57.95	ug/L #	53
38) 1,1,2-Trichloroethane ...	11.231	97	663	35.50	ug/L #	18
39) Tetrachloroethene SCAN	11.420	166	1081	54.07	ug/L #	57
40) Chlorobenzene SCAN	12.772	112	3248	57.12	ug/L #	42
41) 1,1,1,2-Tetrachloroeth...	12.915	131	1262	59.97	ug/L	79
42) Ethylbenzene SCAN	12.978	91	5384	35.51	ug/L	88
43) m&p-Xylene SCAN	12.978	91	5384	35.51	ug/L	83
44) o-Xylene SCAN	13.789	91	4448	54.81	ug/L	95
45) 1,1,2,2-Tetrachloroeth...	14.872	83	1266	31.99	ug/L	72
46) 1,3,5-Trimethylbenzene...	15.343	105	3959	46.29	ug/L	75
47) 1,2,4-Trimethylbenzene...	15.894	105	5286	60.40	ug/L #	30
48) Naphthalene SCAN	17.905	128	7044	53.20	ug/L	93

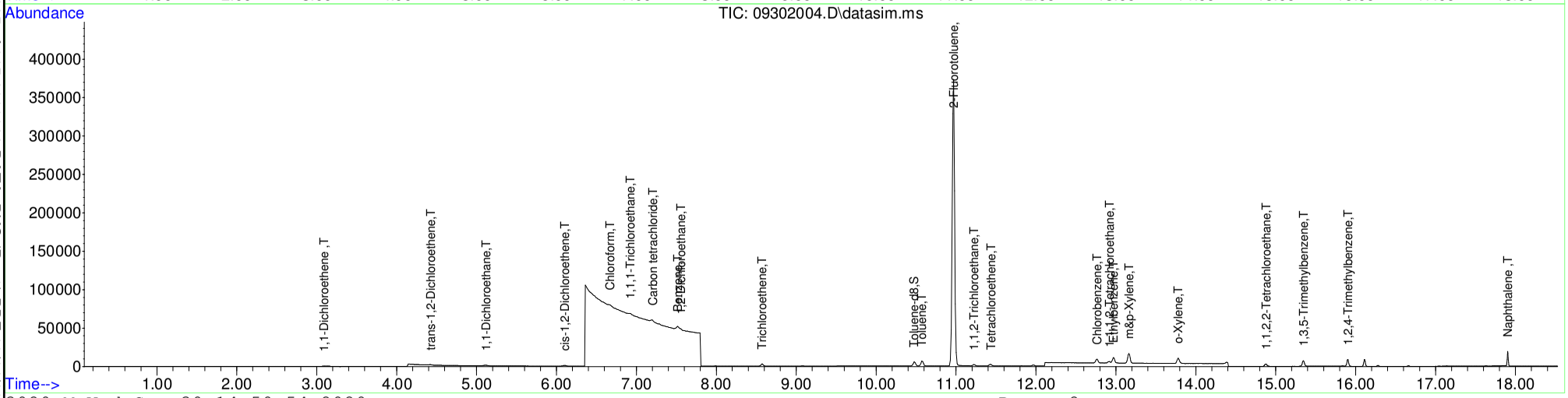
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302004.D
Acq On : 30 Sep 2020 14:31
InstName : AG5975C
Operator : TD
Sample : S20I029-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 30 14:49:56 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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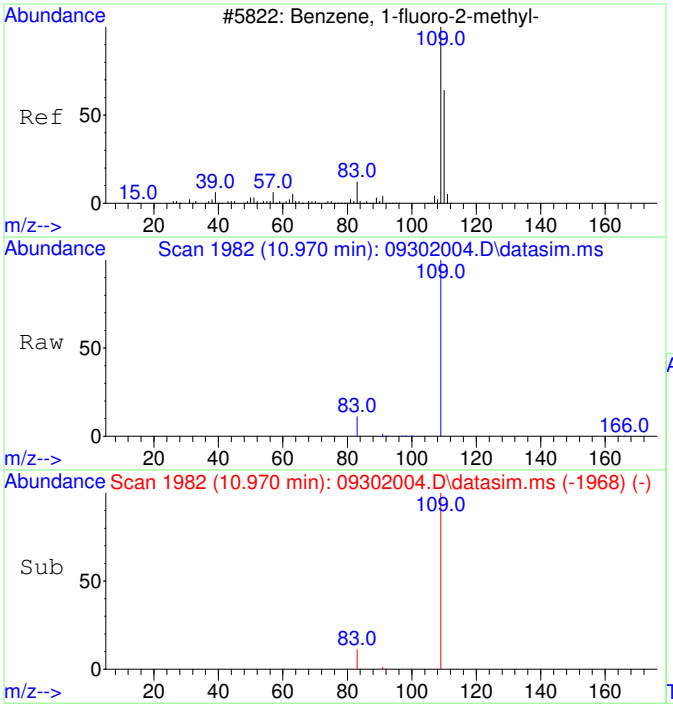
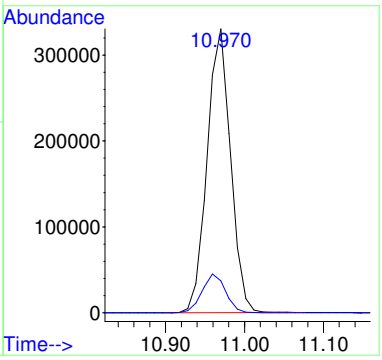
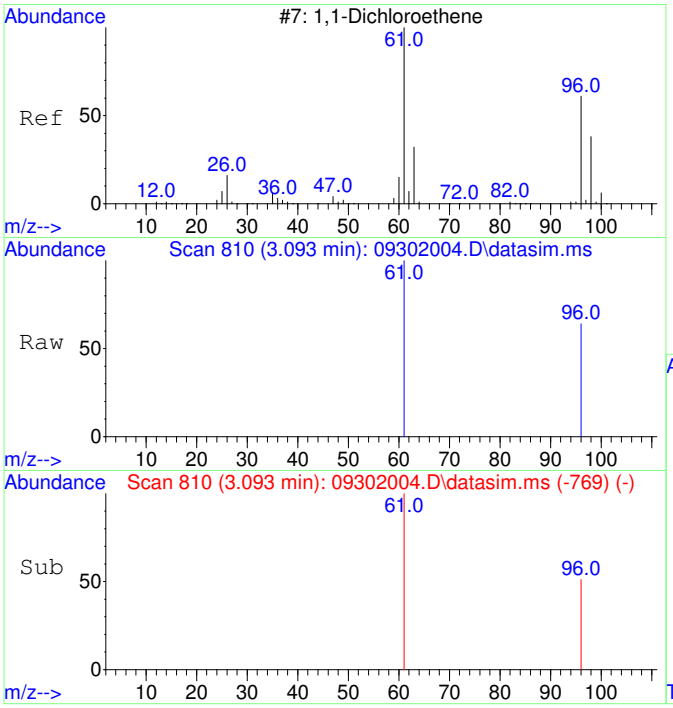


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:109 Resp: 681597

Ion	Ratio	Lower	Upper
109	100		
83	13.7	0.0	42.3

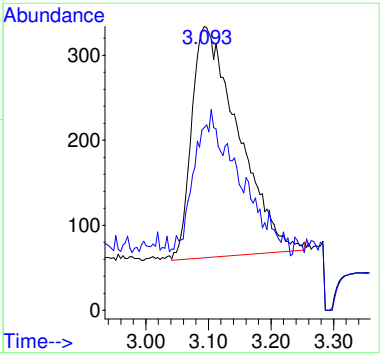


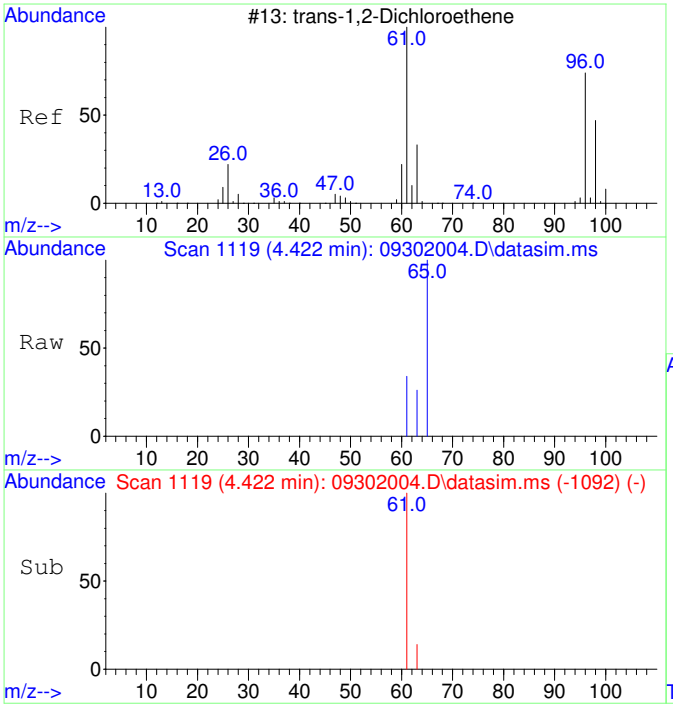


#2
1,1-Dichloroethene
Concen: 51.66 ug/L m
RT: 3.093 min Scan# 810
Delta R.T. 0.004 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 61 Resp: 1406

Ion	Ratio	Lower	Upper
61	100		
96	41.8	37.2	97.2

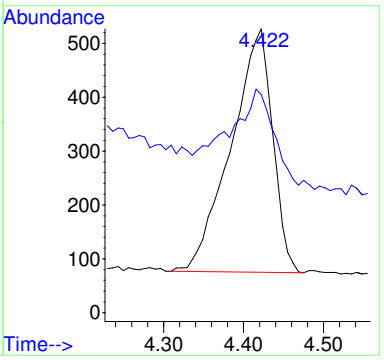


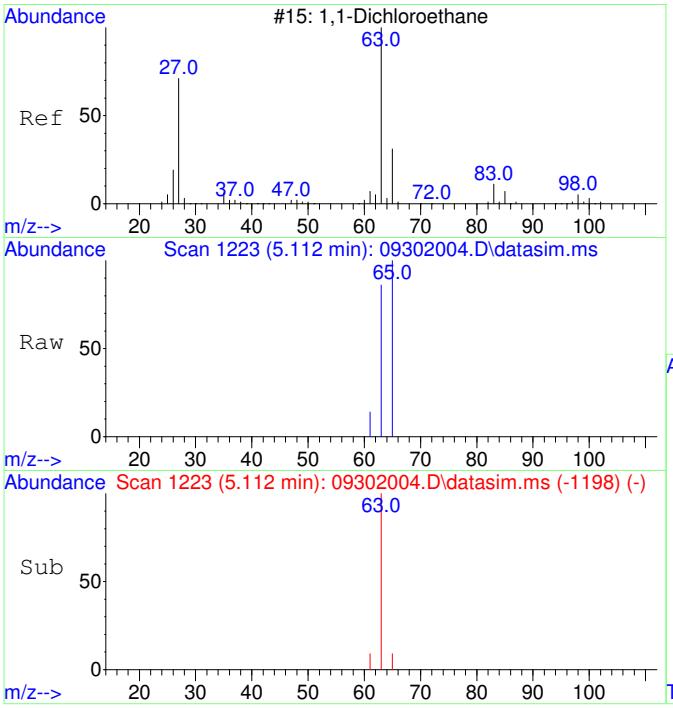


#3
trans-1,2-Dichloroethene
Concen: 51.83 ug/L
RT: 4.422 min Scan# 1119
Delta R.T. 0.027 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 61 Resp: 1630

Ion	Ratio	Lower	Upper
61	100		
63	48.8	2.4	62.4

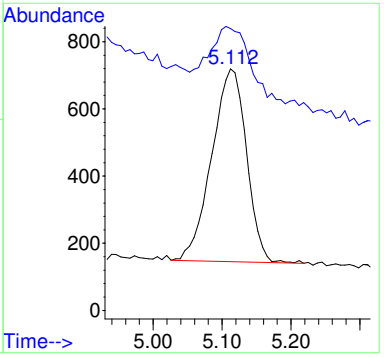


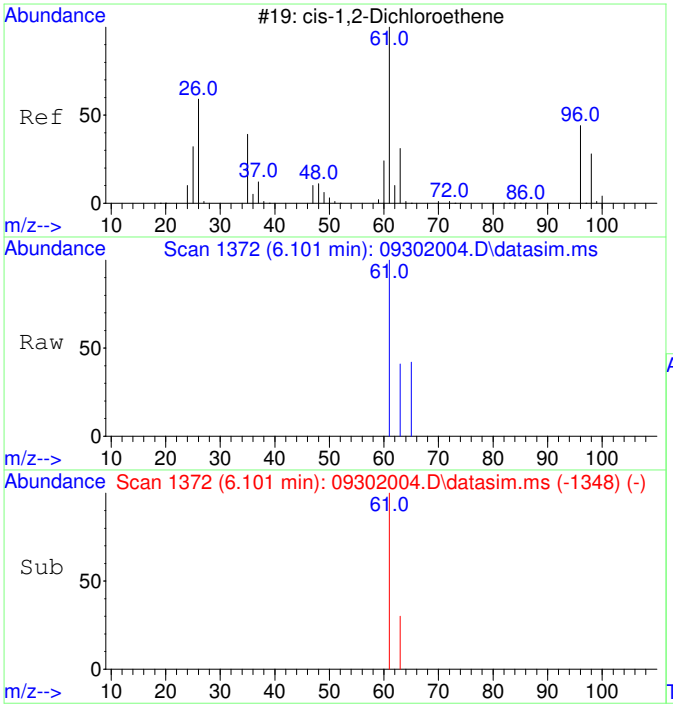


#4
1,1-Dichloroethane
Concen: 51.45 ug/L
RT: 5.112 min Scan# 1223
Delta R.T. 0.013 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 63 Resp: 2014

Ion	Ratio	Lower	Upper
63	100		
65	50.2	1.8	61.8

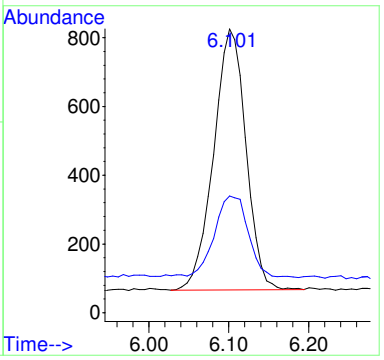


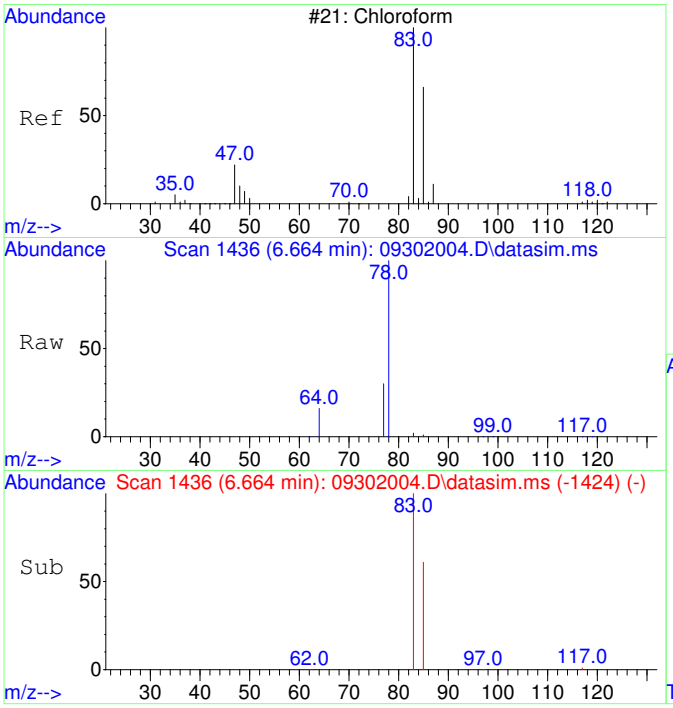


#5
cis-1,2-Dichloroethene
Concen: 51.62 ug/L
RT: 6.101 min Scan# 1372
Delta R.T. 0.007 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 61 Resp: 2133

Ion	Ratio	Lower	Upper
61	100		
63	33.6	2.5	62.5

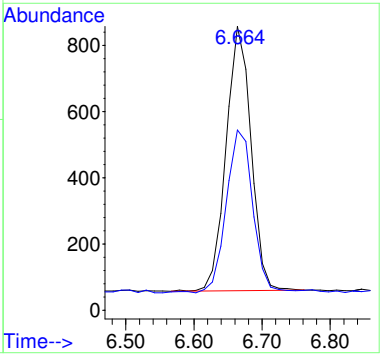


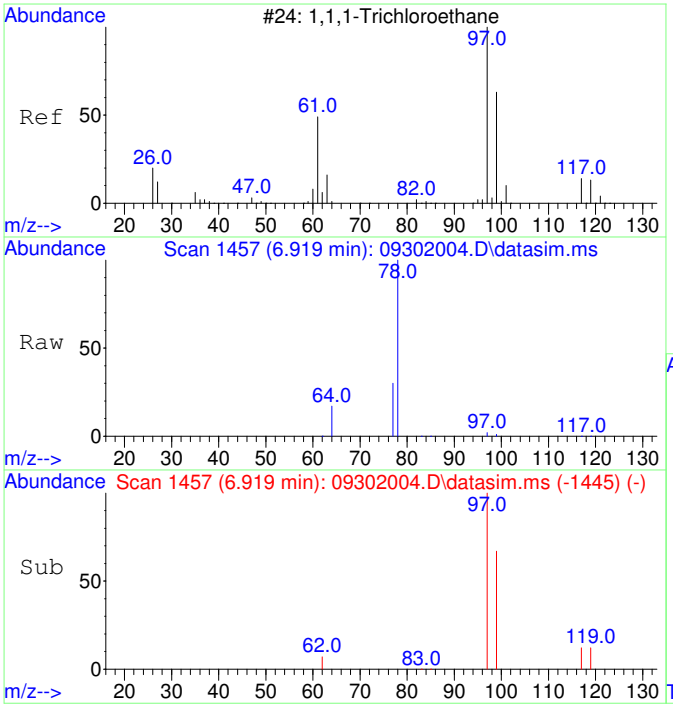


#6
Chloroform
Concen: 47.88 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 83 Resp: 2025

Ion	Ratio	Lower	Upper
83	100		
85	65.6	35.1	95.1

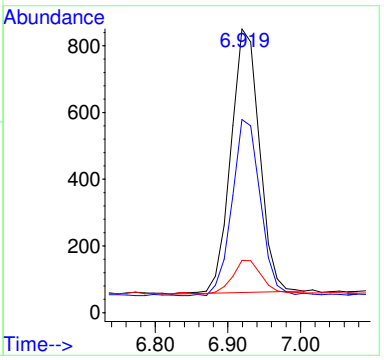


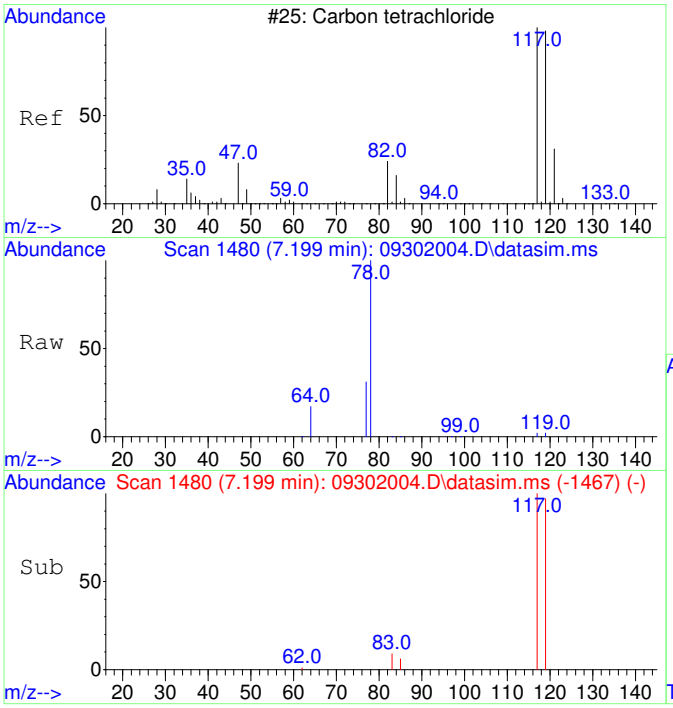


#7
1,1,1-Trichloroethane
Concen: 46.92 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 97 Resp: 2155

Ion	Ratio	Lower	Upper
97	100		
99	65.6	34.6	94.6
117	13.5	0.0	43.2

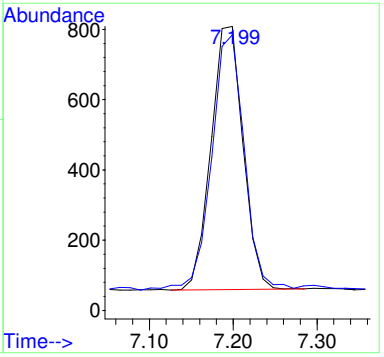


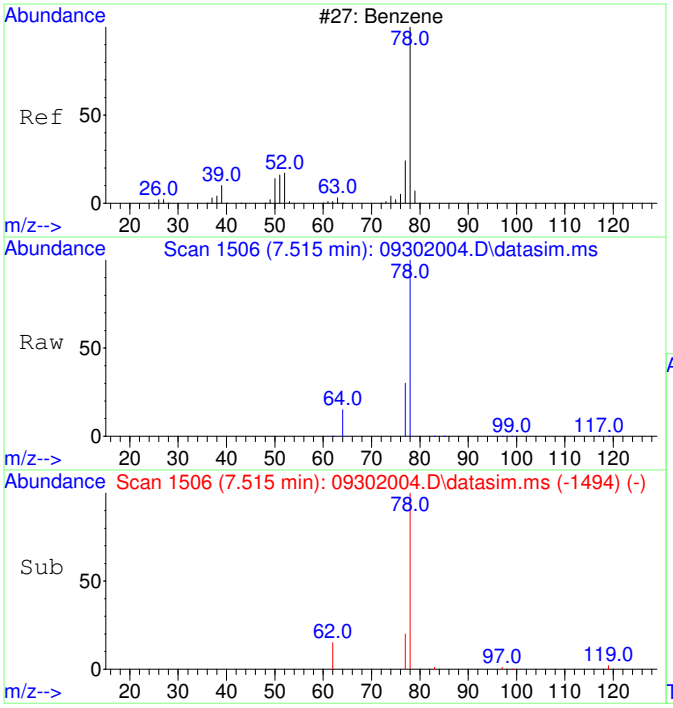


#8
Carbon tetrachloride
Concen: 45.99 ug/L
RT: 7.199 min Scan# 1480
Delta R.T. 0.012 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:117 Resp: 1988

Ion	Ratio	Lower	Upper
117	100		
119	97.6	66.4	126.4

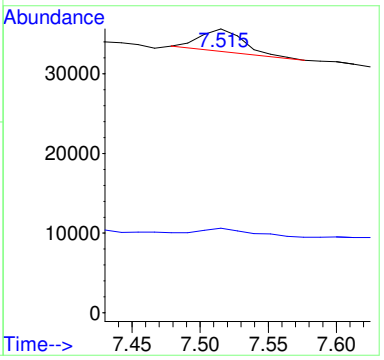


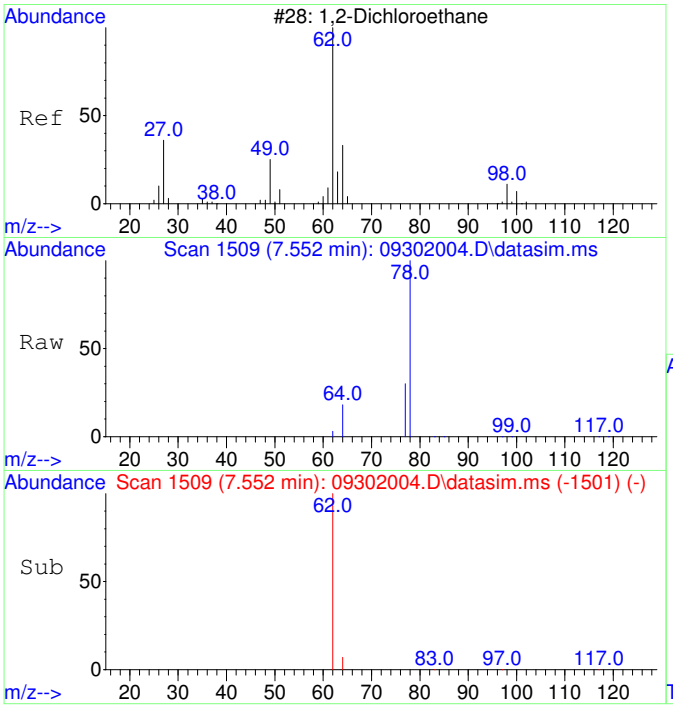


#9
Benzene
Concen: 49.40 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 78 Resp: 5721

Ion	Ratio	Lower	Upper
78	100		
77	61.2	0.0	53.2#

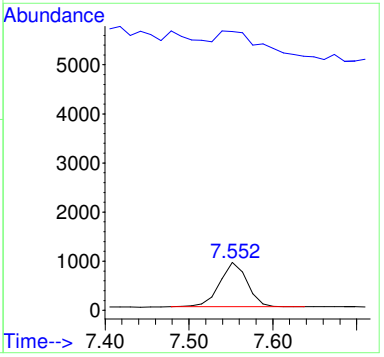


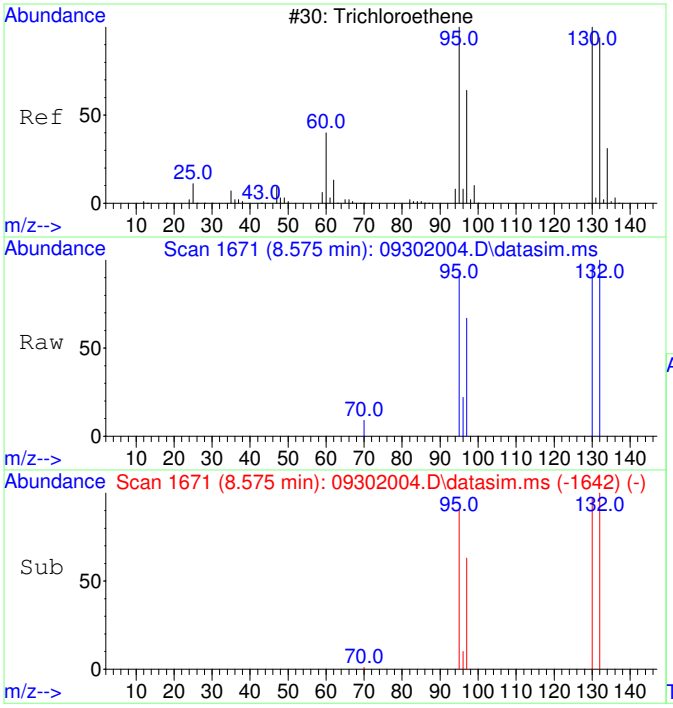


#10
1,2-Dichloroethane
Concen: 49.49 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 62 Resp: 2046

Ion	Ratio	Lower	Upper
62	100		
64	84.5	2.3	62.3#

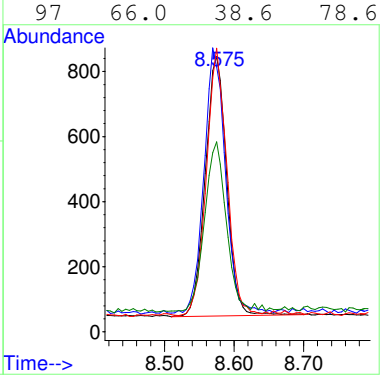


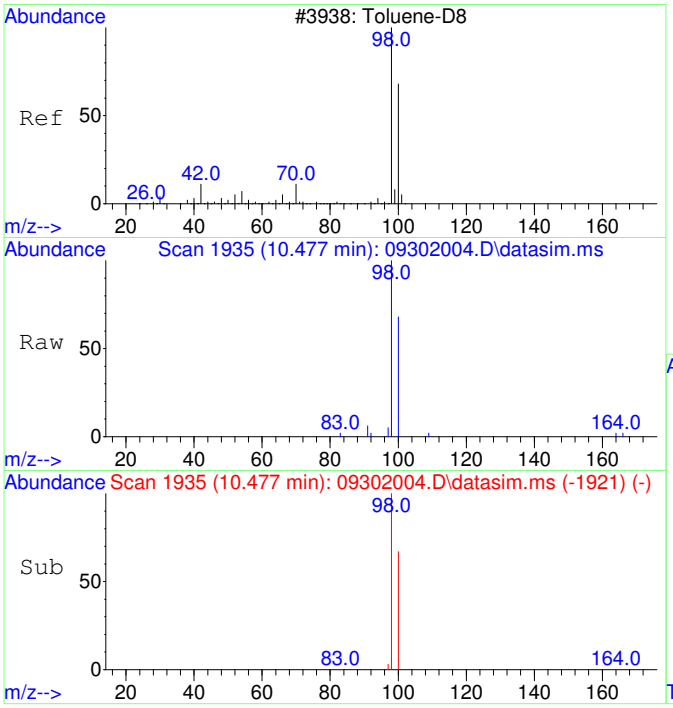


#11
Trichloroethene
Concen: 48.78 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:130 Resp: 1701

Ion	Ratio	Lower	Upper
130	100		
95	101.2	60.7	120.7
132	97.7	76.0	116.0
97	66.0	38.6	78.6

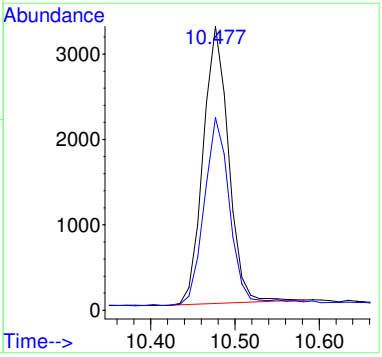


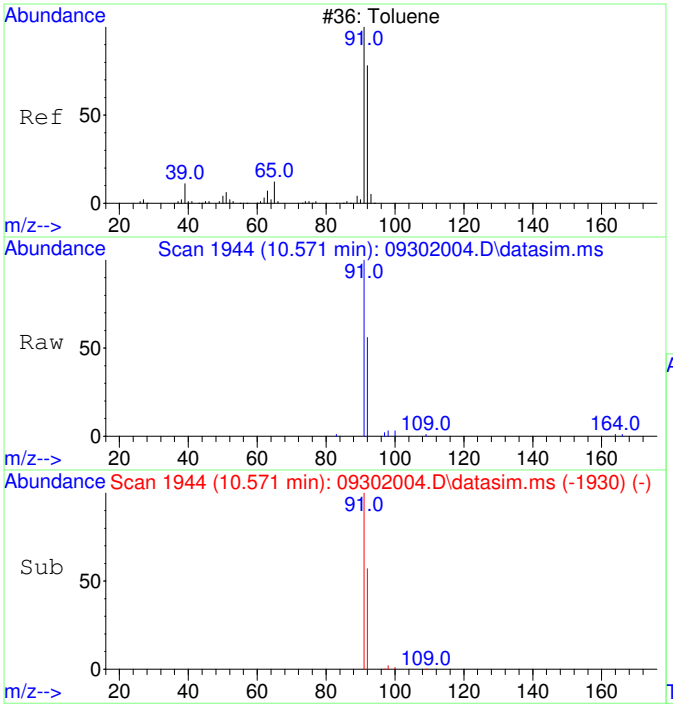


#12
Toluene-d8
Concen: 50.93 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 98 Resp: 6795

Ion	Ratio	Lower	Upper
98	100		
100	69.9	37.1	97.1

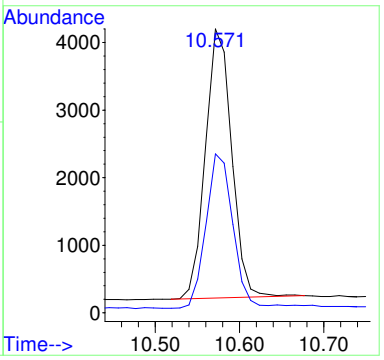


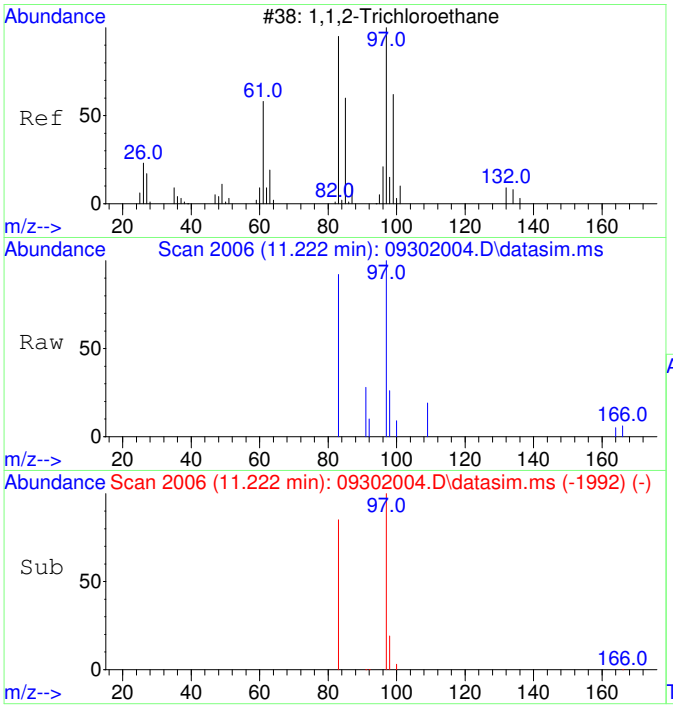


#13
Toluene
Concen: 50.87 ug/L
RT: 10.571 min Scan# 1944
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 8653

Ion	Ratio	Lower	Upper
91	100		
92	58.4	29.9	89.9

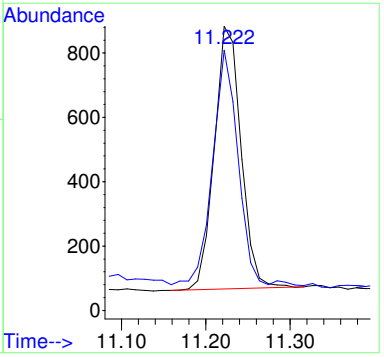


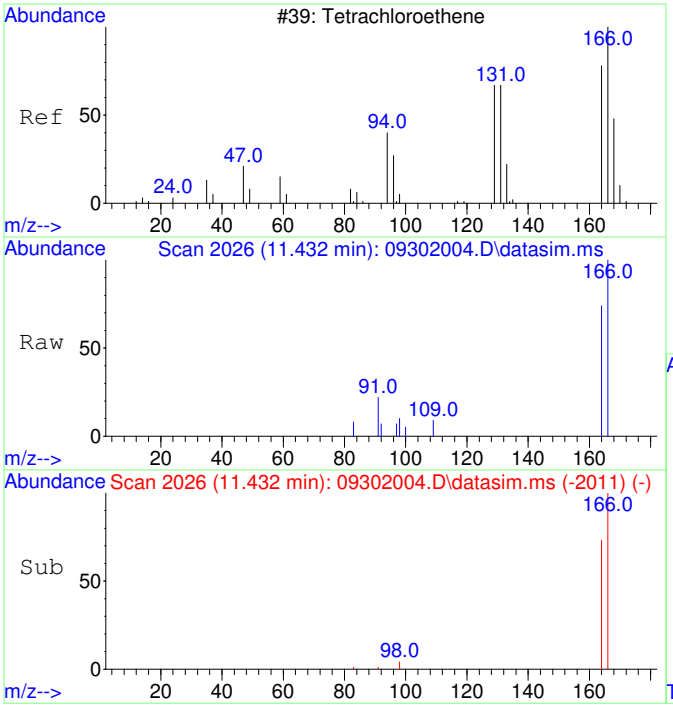


#14
1,1,2-Trichloroethane
Concen: 48.51 ug/L
RT: 11.222 min Scan# 2006
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 97 Resp: 1798

Ion	Ratio	Lower	Upper
97	100		
83	83.4	51.2	111.2

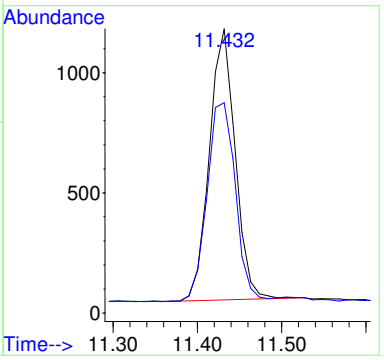


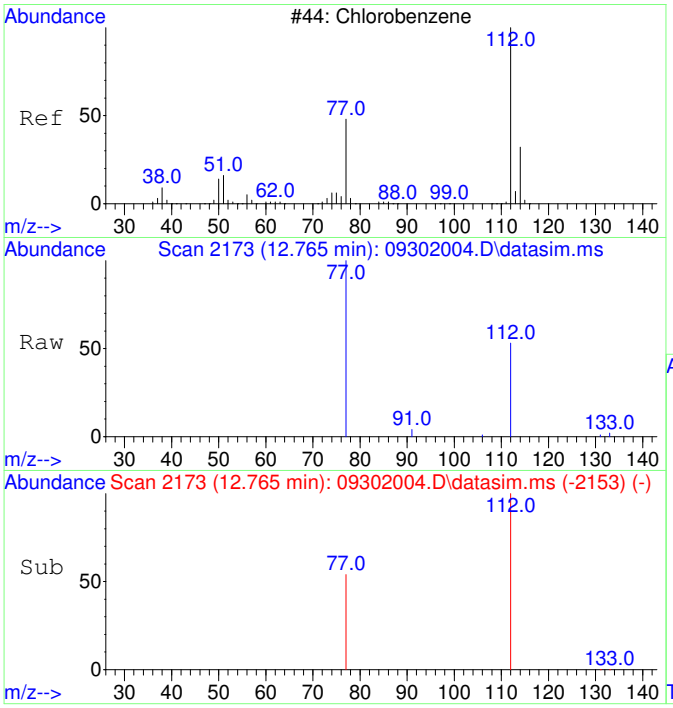


#15
Tetrachloroethene
Concen: 49.02 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:166 Resp: 2413

Ion	Ratio	Lower	Upper
166	100		
164	80.7	47.8	107.8

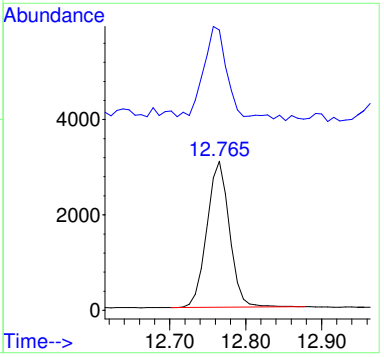


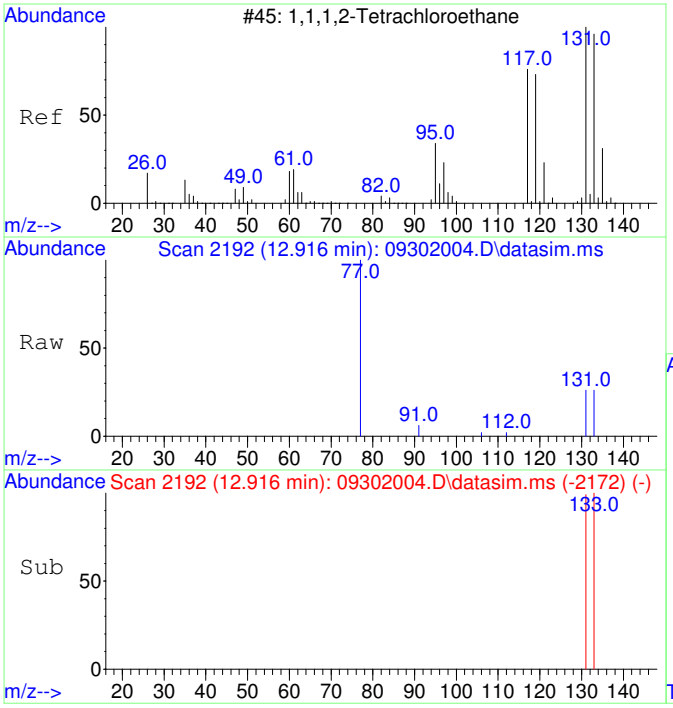


#16
Chlorobenzene
Concen: 52.02 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:112 Resp: 6336

Ion	Ratio	Lower	Upper
112	100		
77	60.1	23.6	83.6

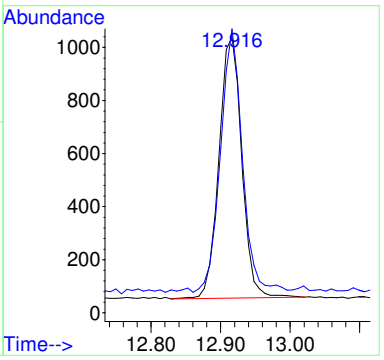


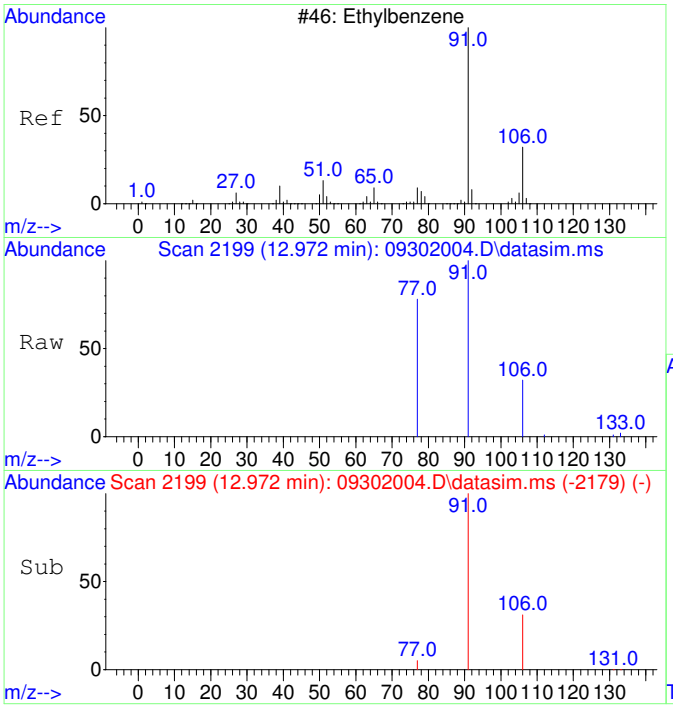


#17
1,1,1,2-Tetrachloroethane
Concen: 51.23 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:131 Resp: 2236

Ion	Ratio	Lower	Upper
131	100		
133	95.6	66.3	126.3

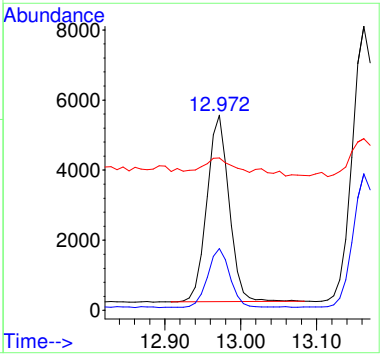


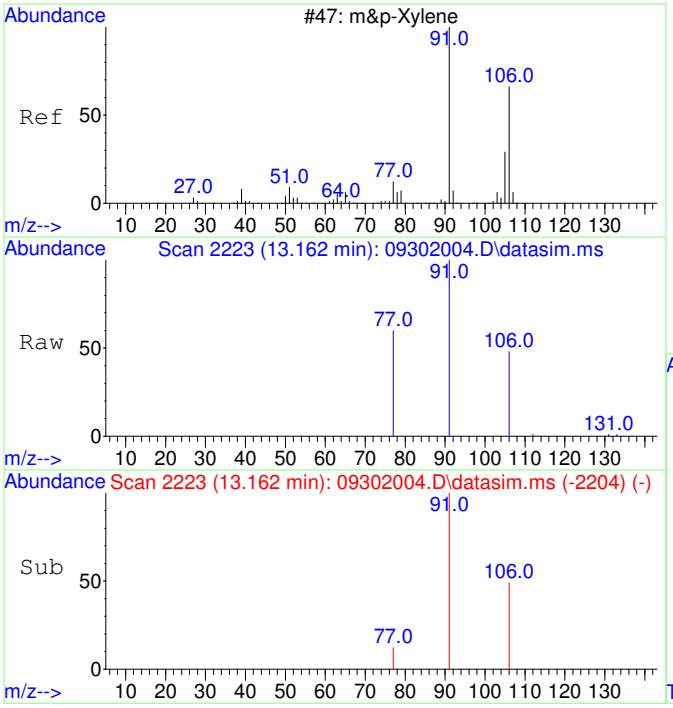


#18
Ethylbenzene
Concen: 52.06 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 10780

Ion	Ratio	Lower	Upper
91	100		
106	31.2	3.0	63.0
77	9.9	0.0	38.2

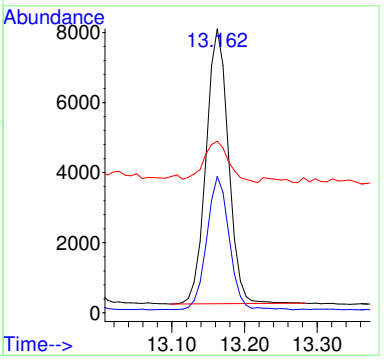


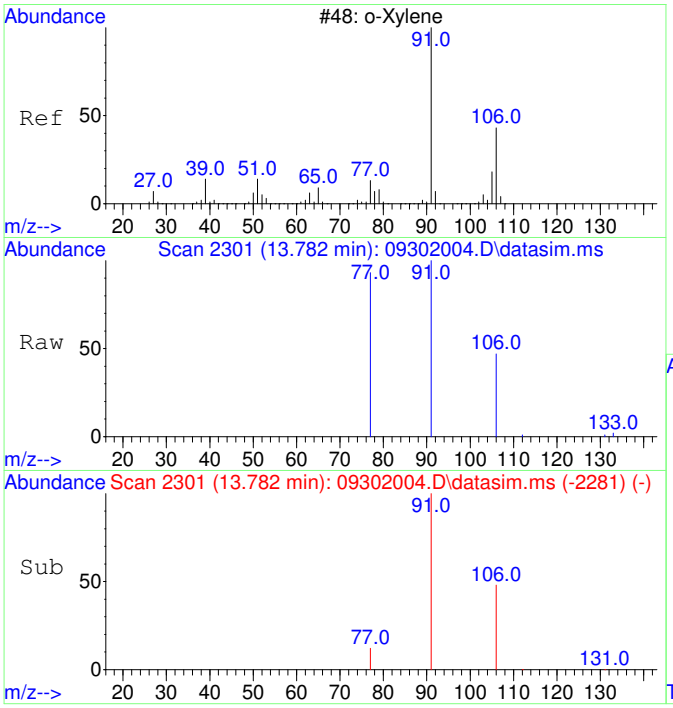


#19
m&p-Xylene
Concen: 103.84 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 16804

Ion	Ratio	Lower	Upper
91	100		
106	48.5	22.2	82.2
77	17.3	0.0	42.4

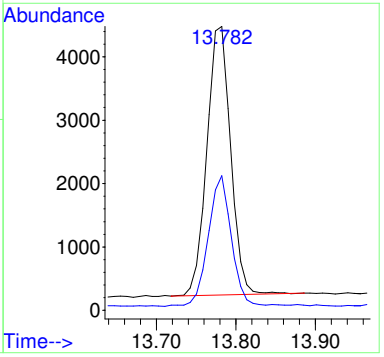


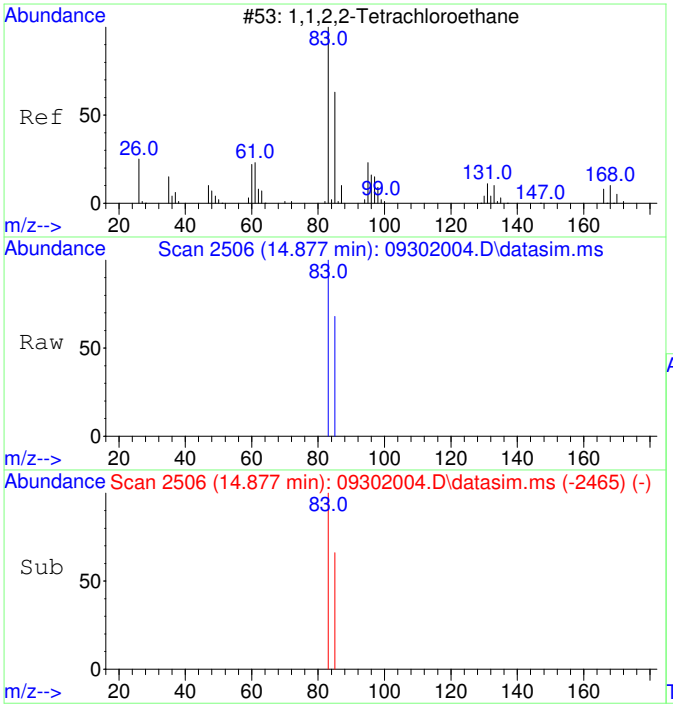


#20
o-Xylene
Concen: 50.90 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 8801

Ion	Ratio	Lower	Upper
91	100		
106	47.2	19.2	79.2

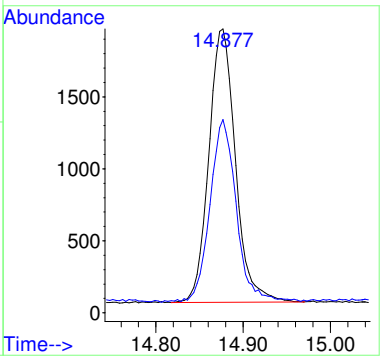


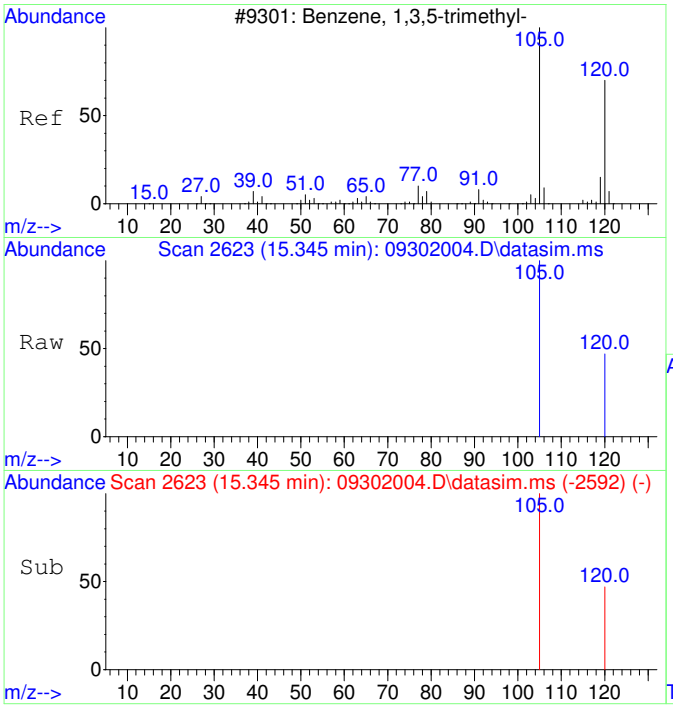


#21
1,1,2,2-Tetrachloroethane
Concen: 52.58 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. 0.004 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 83 Resp: 4029

Ion	Ratio	Lower	Upper
83	100		
85	65.7	34.8	94.8

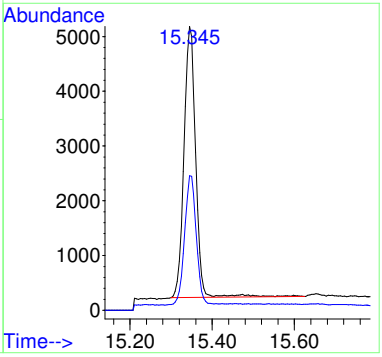


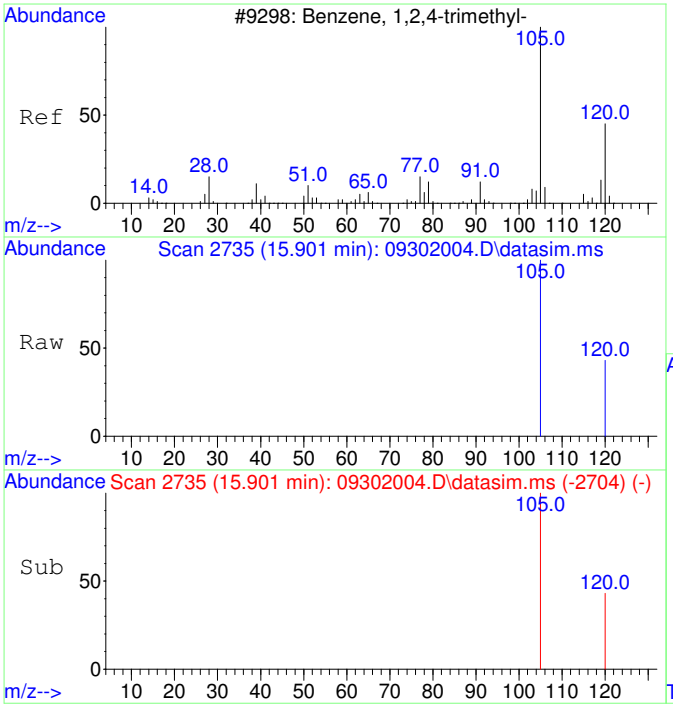


#22
1,3,5-Trimethylbenzene
Concen: 52.98 ug/L
RT: 15.345 min Scan# 2623
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:105 Resp: 9750

Ion	Ratio	Lower	Upper
105	100		
120	48.0	21.1	81.1

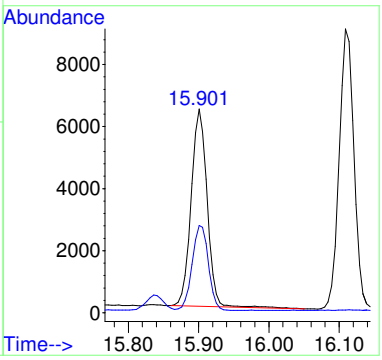


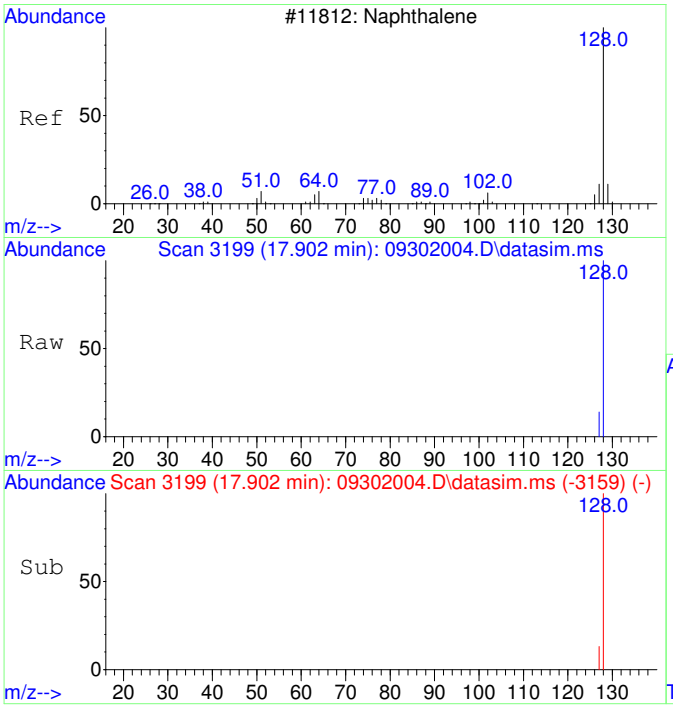


#23
1,2,4-Trimethylbenzene
Concen: 52.53 ug/L
RT: 15.901 min Scan# 2735
Delta R.T. 0.005 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:105 Resp: 10041

Ion	Ratio	Lower	Upper
105	100		
120	42.8	17.2	77.2

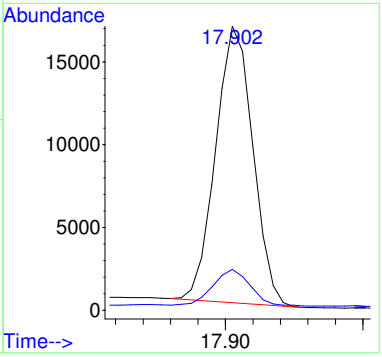


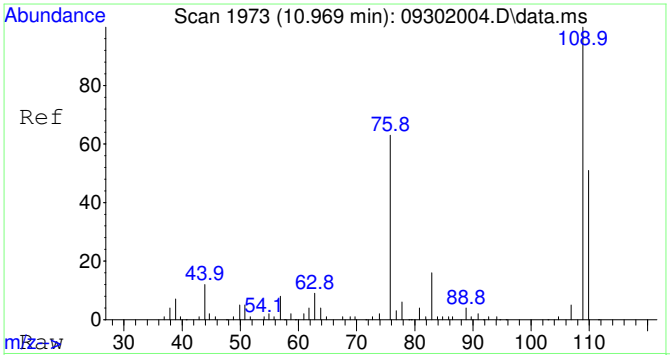


#24
Naphthalene
Concen: 51.70 ug/L
RT: 17.902 min Scan# 3199
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:128 Resp: 15619

Ion	Ratio	Lower	Upper
128	100		
127	13.0	0.0	42.5

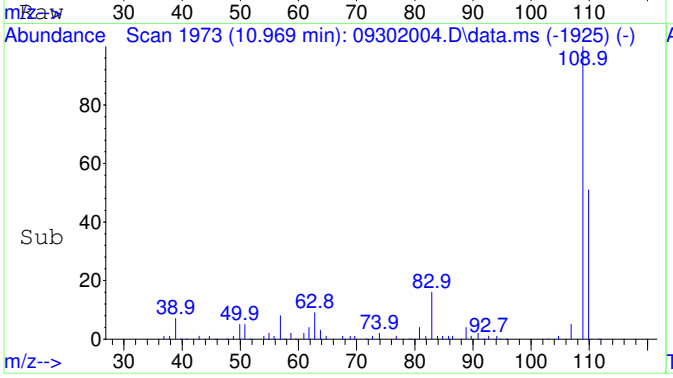


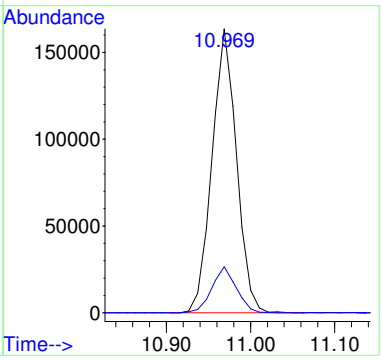


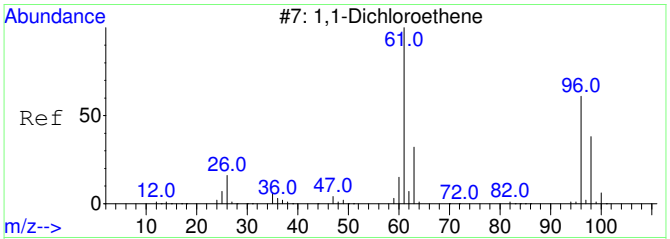
#25
2-Fluorotoluene SCAN
Concen: 4975.65 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:109 Resp: 330598

Ion	Ratio	Lower	Upper
109	100		
83	16.2	0.0	43.8



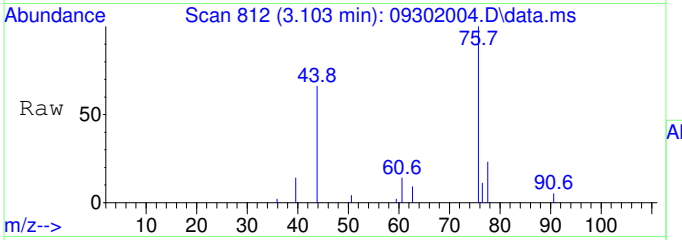


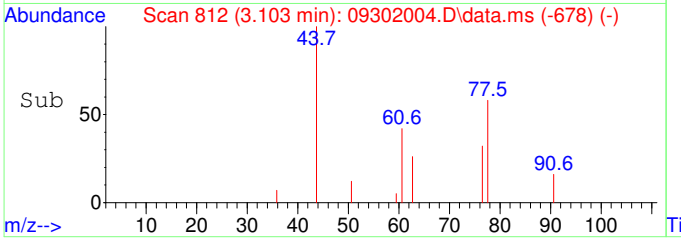


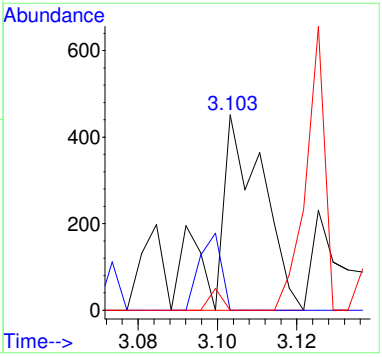
#26
1,1-Dichloroethene SCAN
Concen: 26.36 ug/L
RT: 3.103 min Scan# 812
Delta R.T. -0.004 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

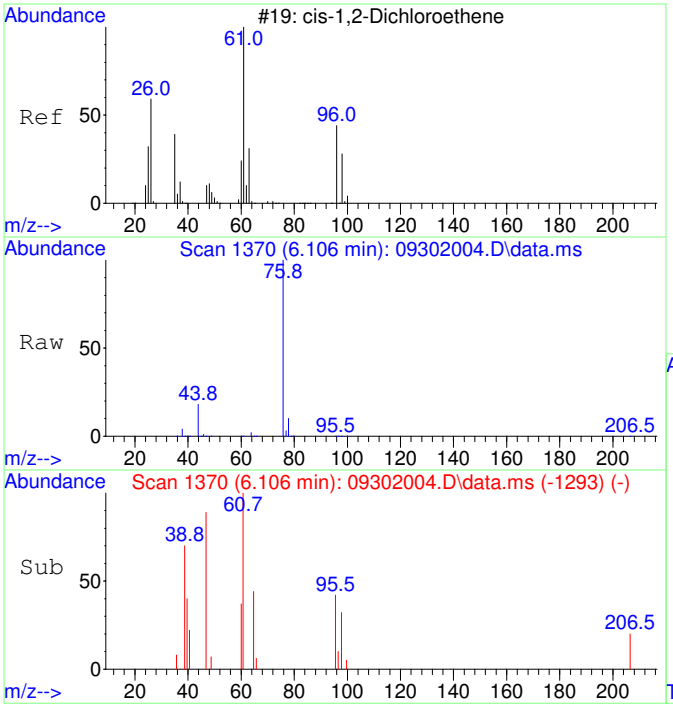
Tgt Ion: 61 Resp: 372

Ion	Ratio	Lower	Upper
61	100		
96	18.3	33.1	93.1#
98	0.0	11.2	71.2#





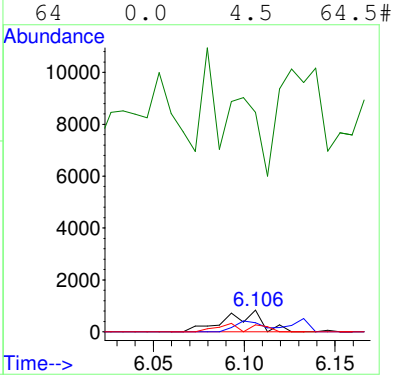


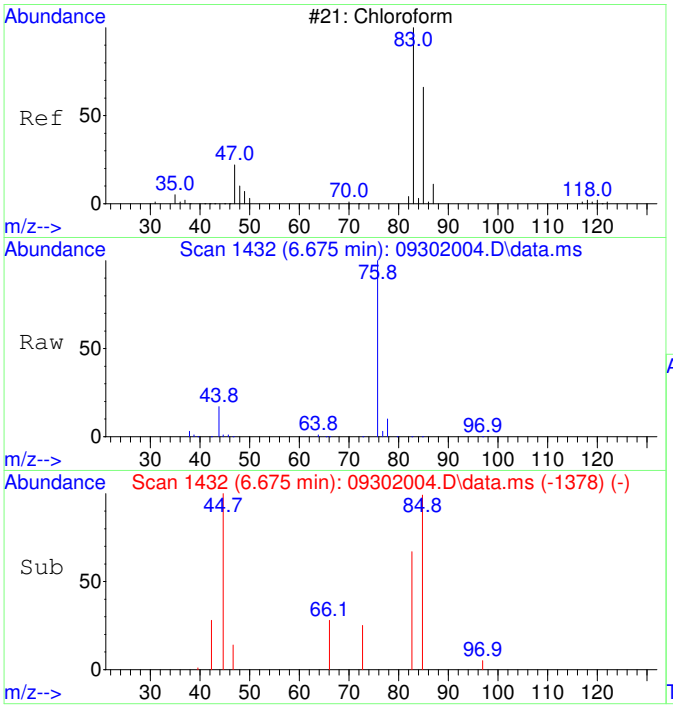


#29
cis-1,2-Dichloroethene SCAN
Concen: 53.49 ug/L
RT: 6.106 min Scan# 1370
Delta R.T. 0.013 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 61 Resp: 1158

Ion	Ratio	Lower	Upper
61	100		
96	29.5	39.9	99.9#
98	21.5	13.5	73.5
64	0.0	4.5	64.5#

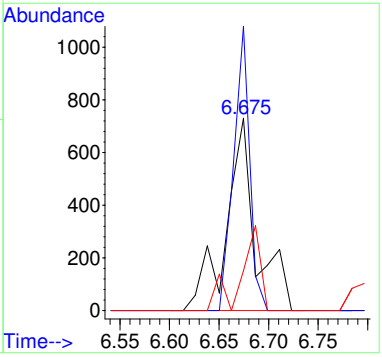


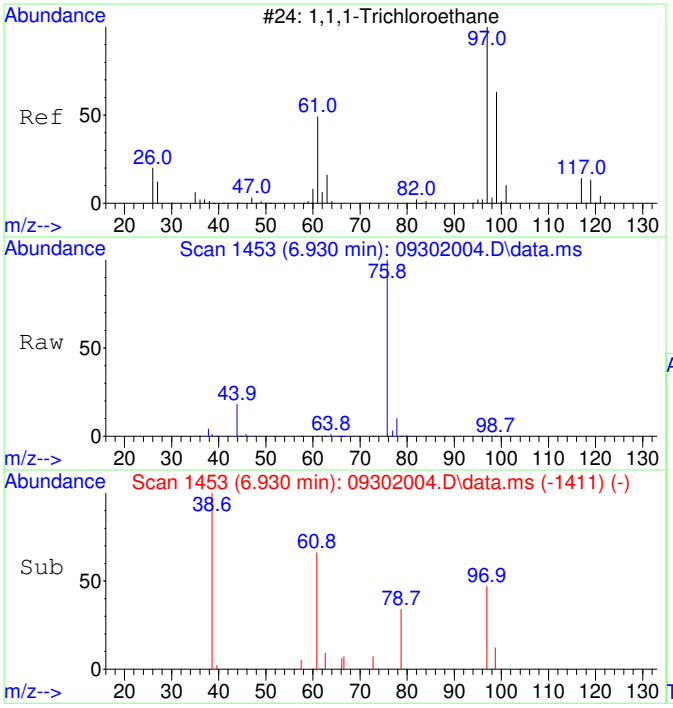


#30
Chloroform SCAN
Concen: 64.77 ug/L
RT: 6.675 min Scan# 1432
Delta R.T. 0.012 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 83 Resp: 1521

Ion	Ratio	Lower	Upper
83	100		
85	79.8	34.6	94.6
47	29.3	0.0	53.4

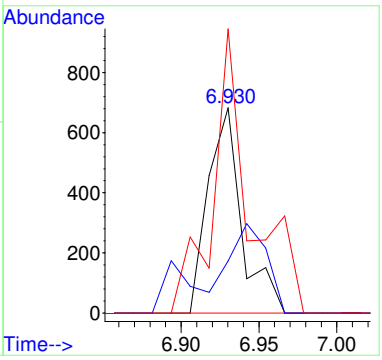


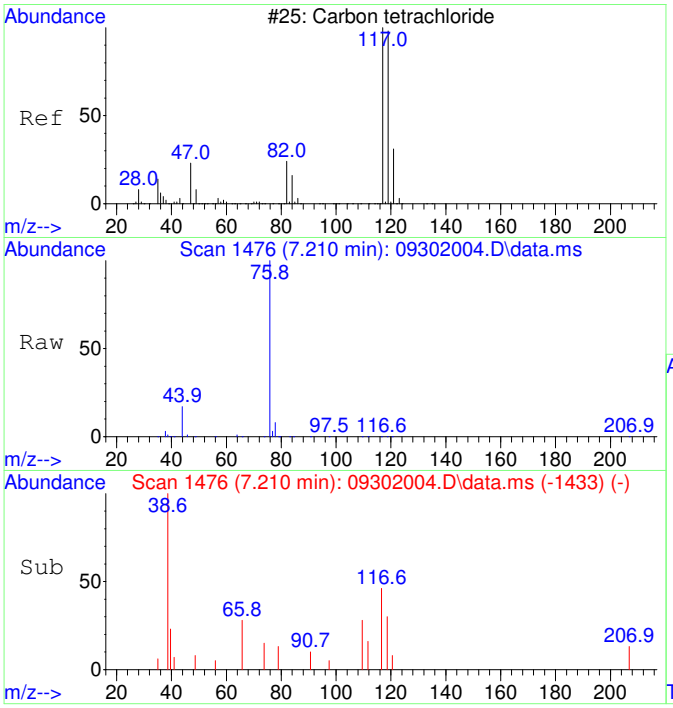


#31
1,1,1-Trichloroethane SCAN
Concen: 47.94 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. 0.012 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 97 Resp: 1026

Ion	Ratio	Lower	Upper
97	100		
99	72.4	43.6	103.6
61	153.2	18.0	78.0#

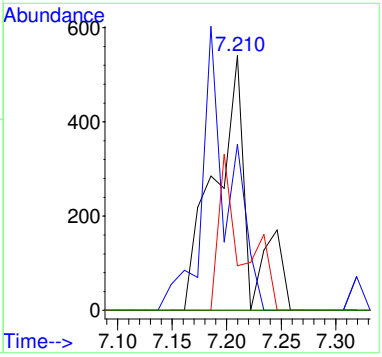


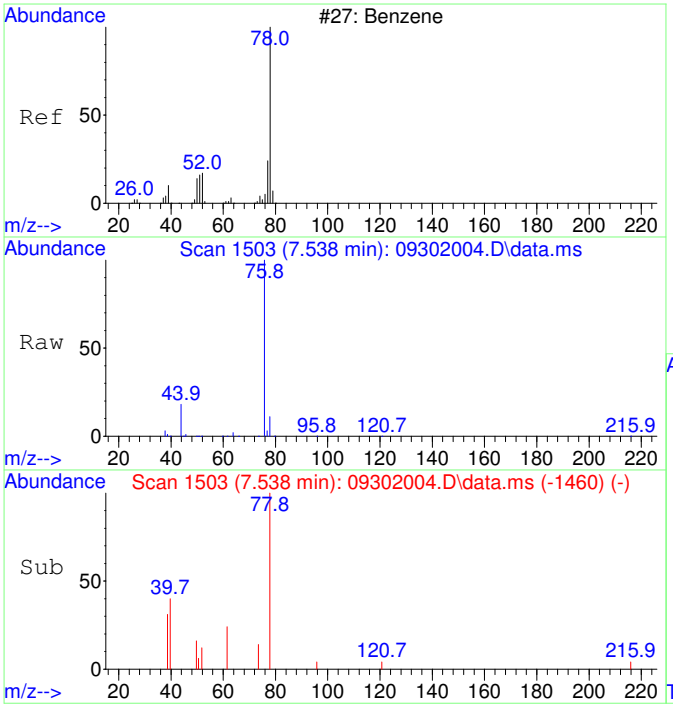


#32
Carbon tetrachloride SCAN
Concen: 52.41 ug/L
RT: 7.210 min Scan# 1476
Delta R.T. 0.024 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:117 Resp: 1170

Ion	Ratio	Lower	Upper
117	100		
119	0.0	75.5	135.5#
121	43.0	0.0	58.8
82	0.0	0.0	59.2

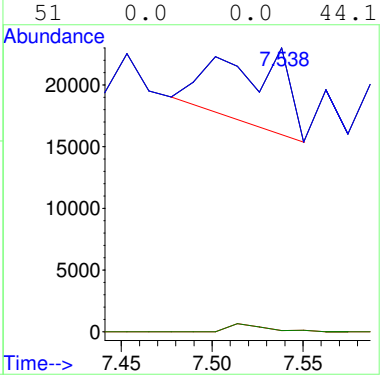


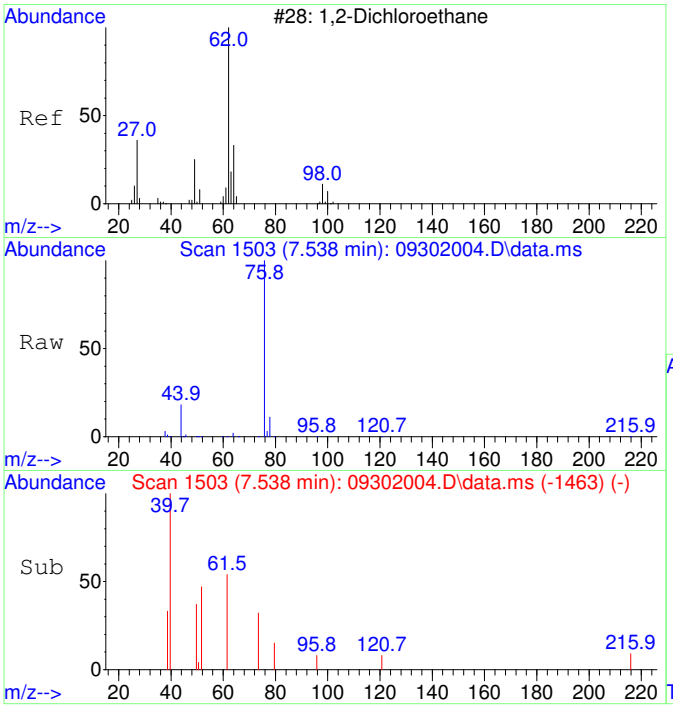


#33
Benzene SCAN
Concen: 230.77 ug/L
RT: 7.538 min Scan# 1503
Delta R.T. 0.024 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 78 Resp: 13597

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

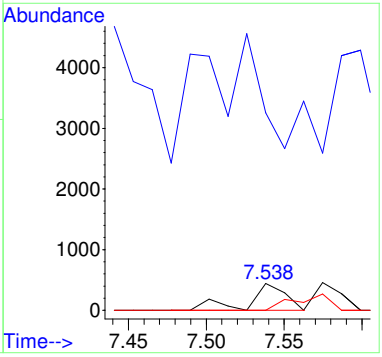


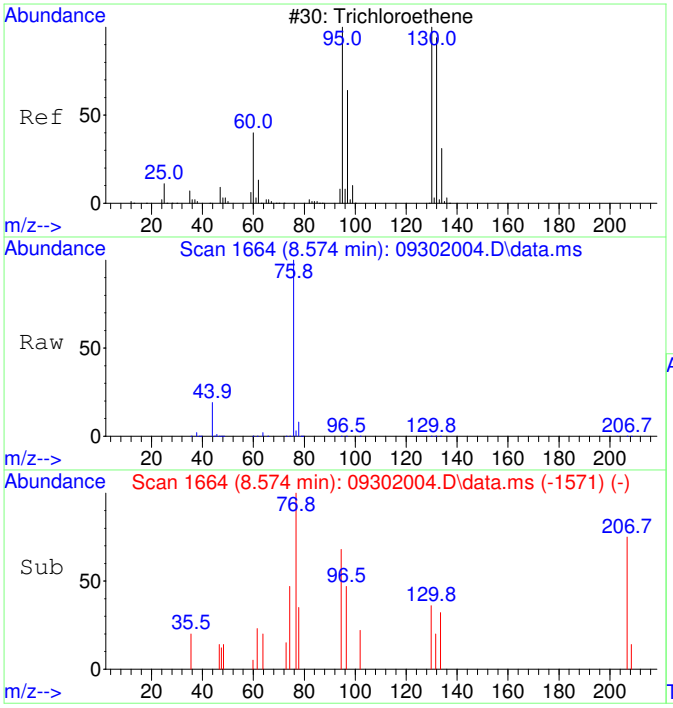


#34
1,2-Dichloroethane SCAN
Concen: 33.23 ug/L
RT: 7.538 min Scan# 1503
Delta R.T. -0.012 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 62 Resp: 723

Ion	Ratio	Lower	Upper
62	100		
64	688.4	5.2	65.2#
49	0.0	3.9	63.9#

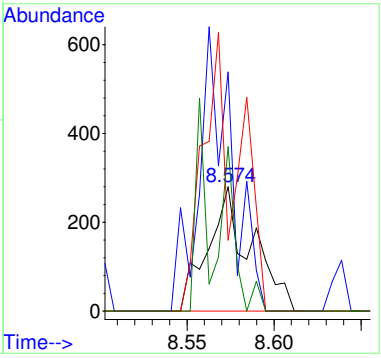


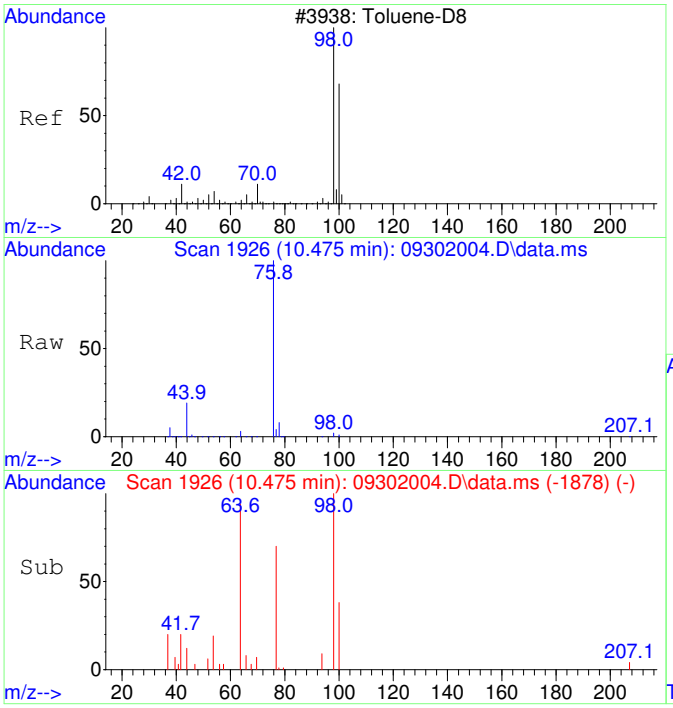


#35
Trichloroethene SCAN
Concen: 29.95 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.005 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:130 Resp: 485

Ion	Ratio	Lower	Upper
130	100		
95	170.9	60.5	120.5#
132	179.2	59.6	119.6#
97	19.6	28.2	88.2#

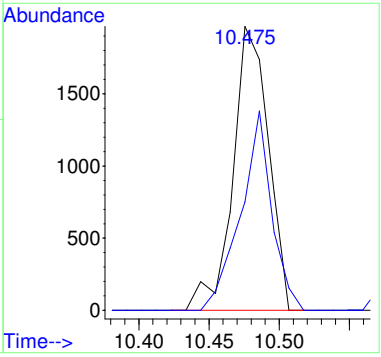


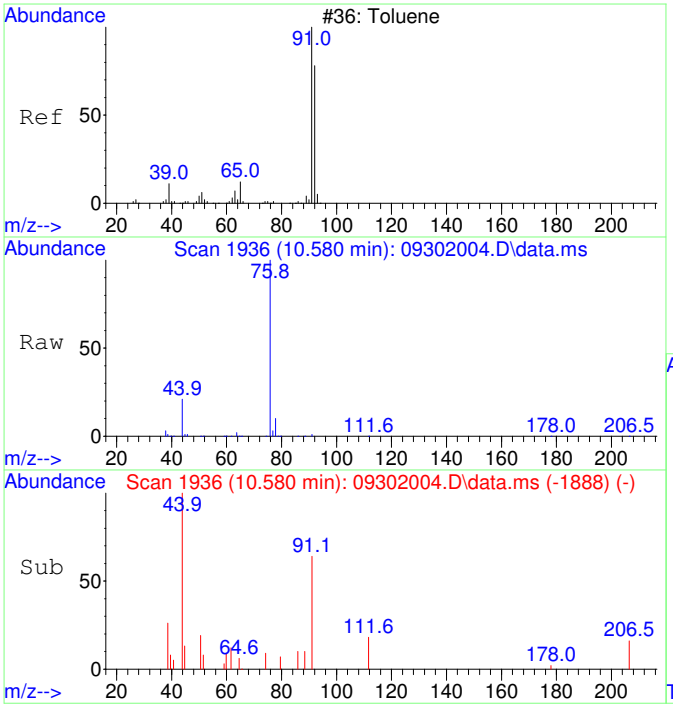


#36
Toluene-d8 SCAN
Concen: 53.43 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 98 Resp: 3472

Ion	Ratio	Lower	Upper
98	100		
100	61.5	40.0	100.0

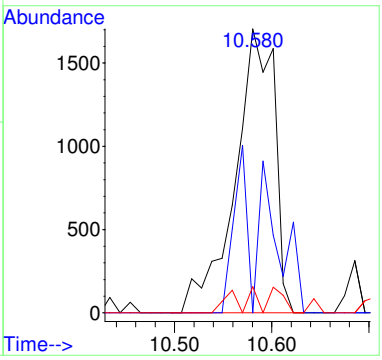


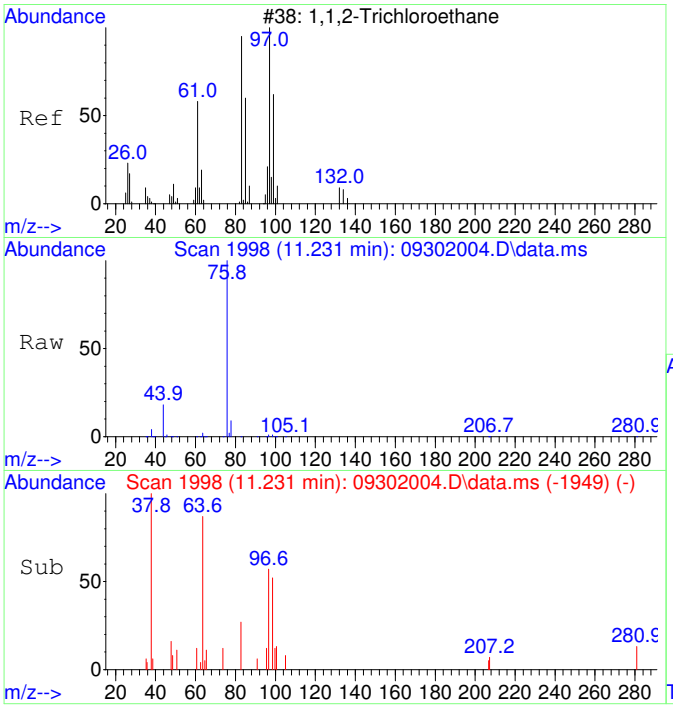


#37
Toluene SCAN
Concen: 57.95 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 4822

Ion	Ratio	Lower	Upper
91	100		
92	19.7	28.3	88.3#
65	2.1	0.0	41.0

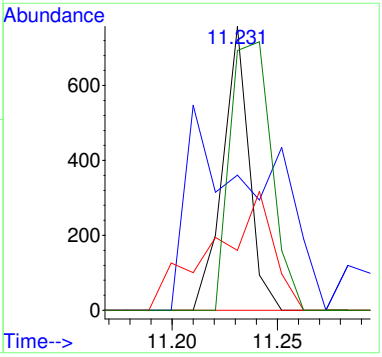


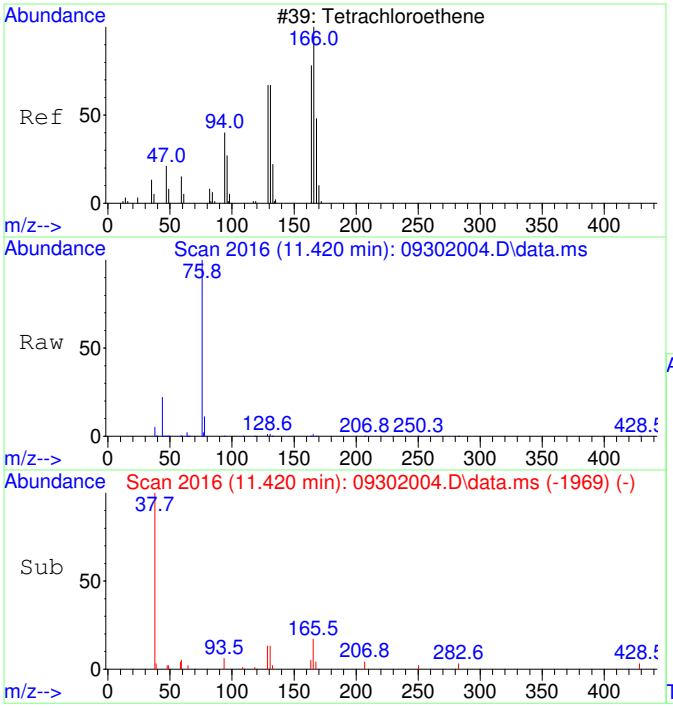


#38
1,1,2-Trichloroethane SCAN
Concen: 35.50 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. 0.010 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 97 Resp: 663

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	94.4	32.1	92.1#
99	149.2	36.7	96.7#

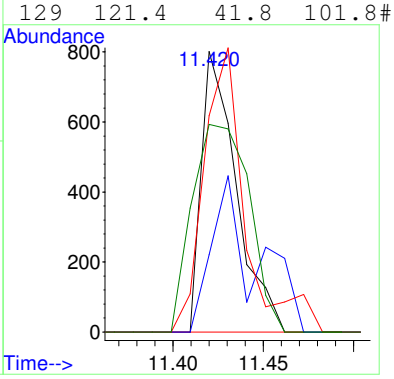


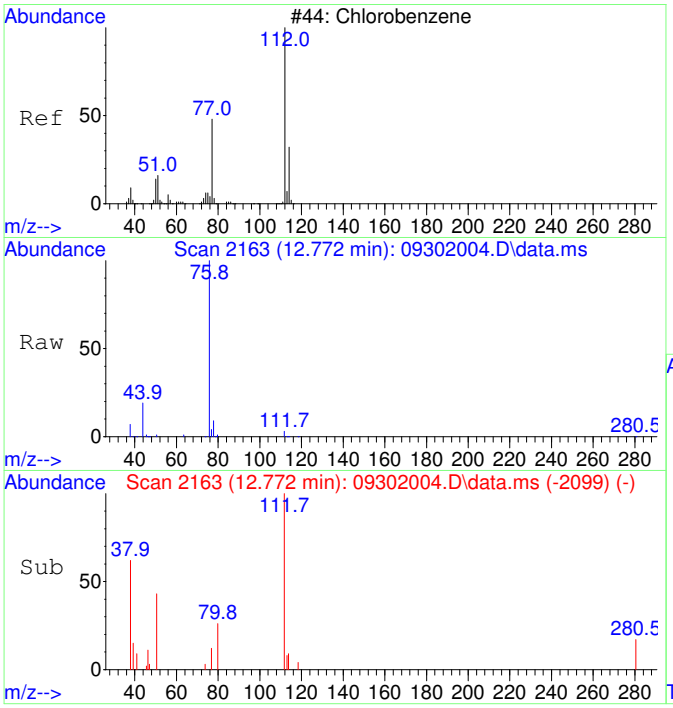


#39
Tetrachloroethene SCAN
Concen: 54.07 ug/L
RT: 11.420 min Scan# 2016
Delta R.T. -0.011 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:166 Resp: 1081

Ion	Ratio	Lower	Upper
166	100		
164	70.1	50.9	110.9
131	118.7	38.7	98.7#
129	121.4	41.8	101.8#

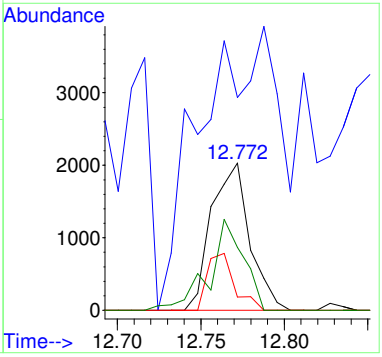


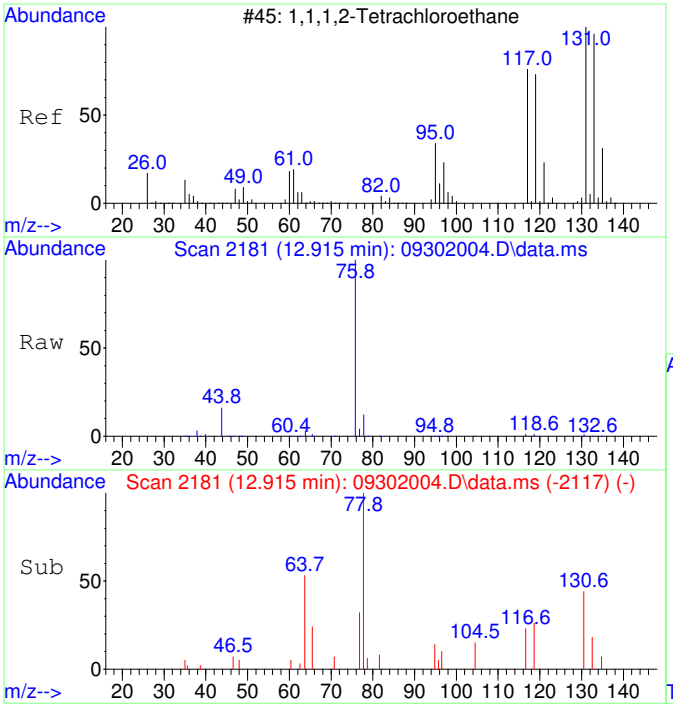


#40
Chlorobenzene SCAN
Concen: 57.12 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:112 Resp: 3248

Ion	Ratio	Lower	Upper
112	100		
77	0.0	28.2	88.2#
114	27.4	2.3	62.3
51	55.2	0.0	50.1#

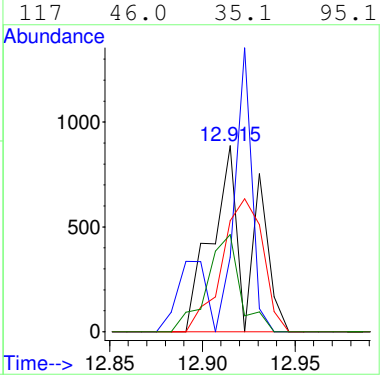


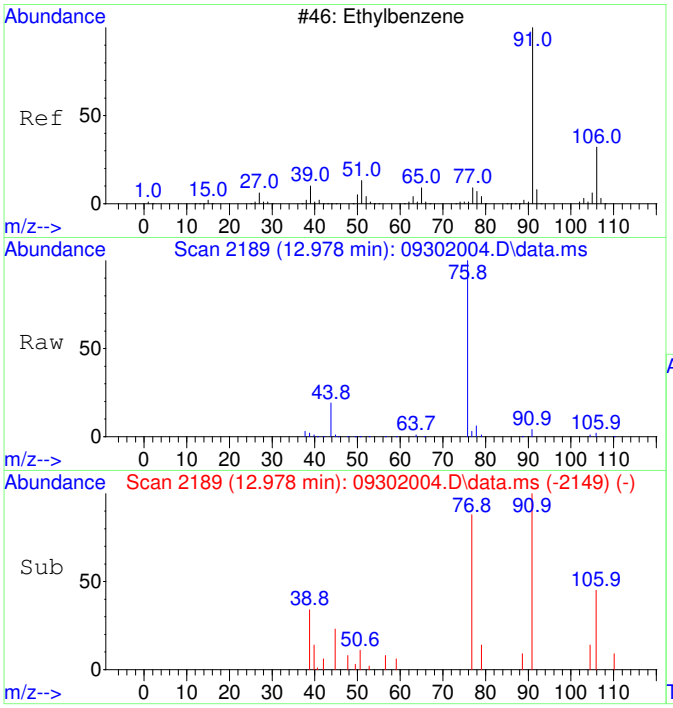


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 59.97 ug/L
RT: 12.915 min Scan# 2181
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:131 Resp: 1262

Ion	Ratio	Lower	Upper
131	100		
133	68.8	66.9	126.9
119	77.7	40.4	100.4
117	46.0	35.1	95.1

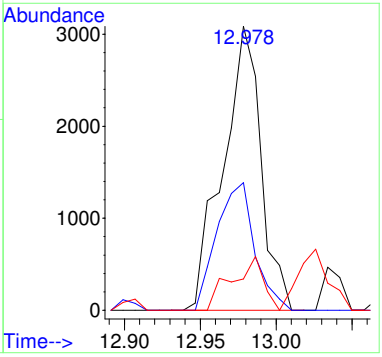


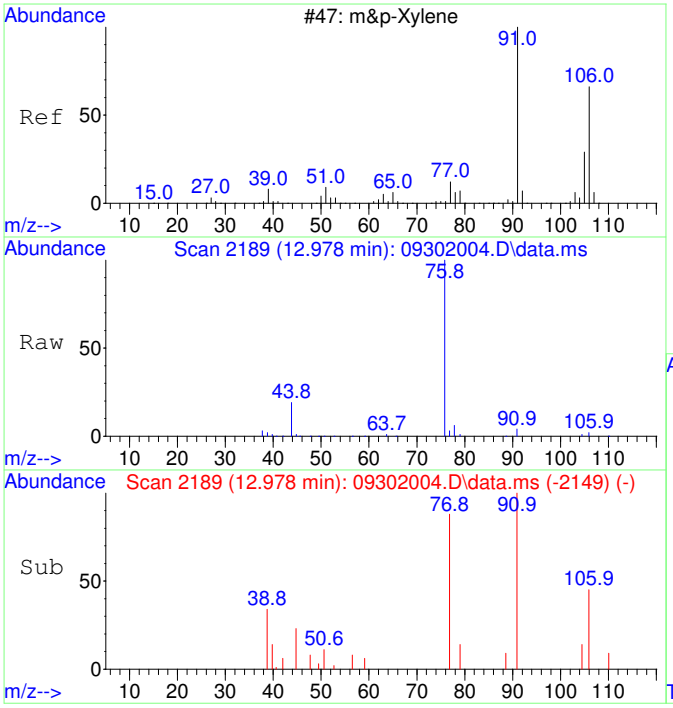


#42
Ethylbenzene SCAN
Concen: 35.51 ug/L
RT: 12.978 min Scan# 2189
Delta R.T. -0.183 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 5384

Ion	Ratio	Lower	Upper
91	100		
106	44.8	23.1	83.1
51	15.8	0.0	40.1

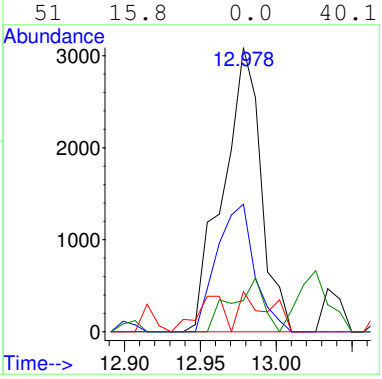


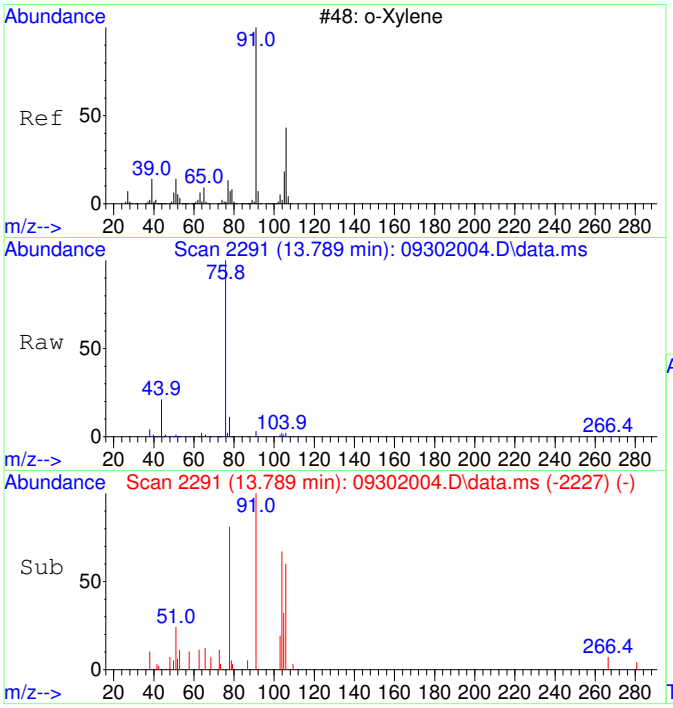


#43
m&p-Xylene SCAN
Concen: 35.51 ug/L
RT: 12.978 min Scan# 2189
Delta R.T. -0.183 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 5384

Ion	Ratio	Lower	Upper
91	100		
106	44.8	23.1	83.1
105	10.9	0.0	54.7
51	15.8	0.0	40.1

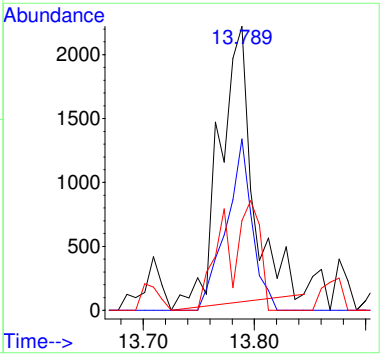


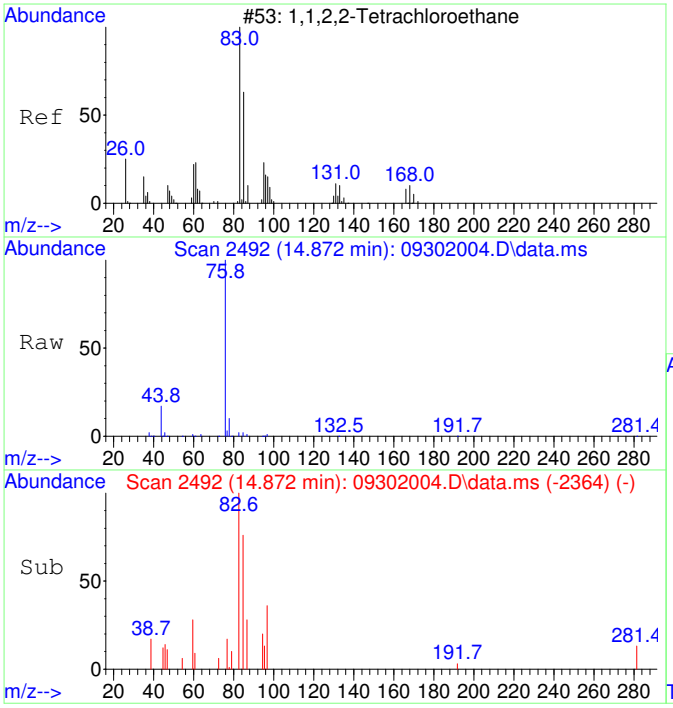


#44
o-Xylene SCAN
Concen: 54.81 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 4448

Ion	Ratio	Lower	Upper
91	100		
106	48.7	18.0	78.0
105	20.1	0.0	56.6

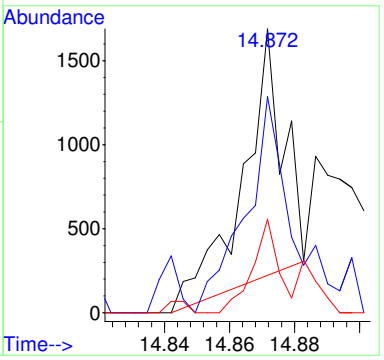


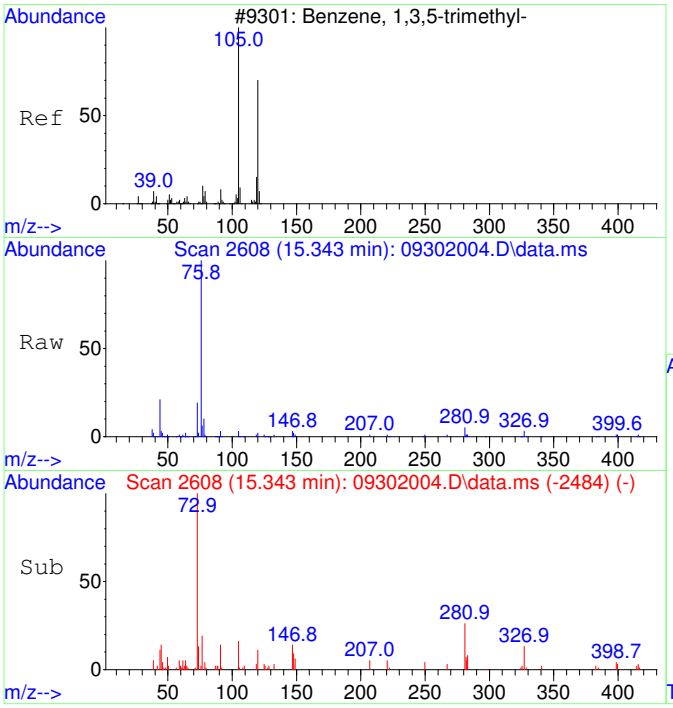


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 31.99 ug/L
RT: 14.872 min Scan# 2492
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 83 Resp: 1266

Ion	Ratio	Lower	Upper
83	100		
85	92.8	35.9	95.9
95	19.9	0.0	47.4

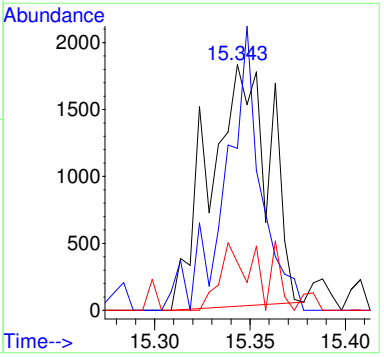


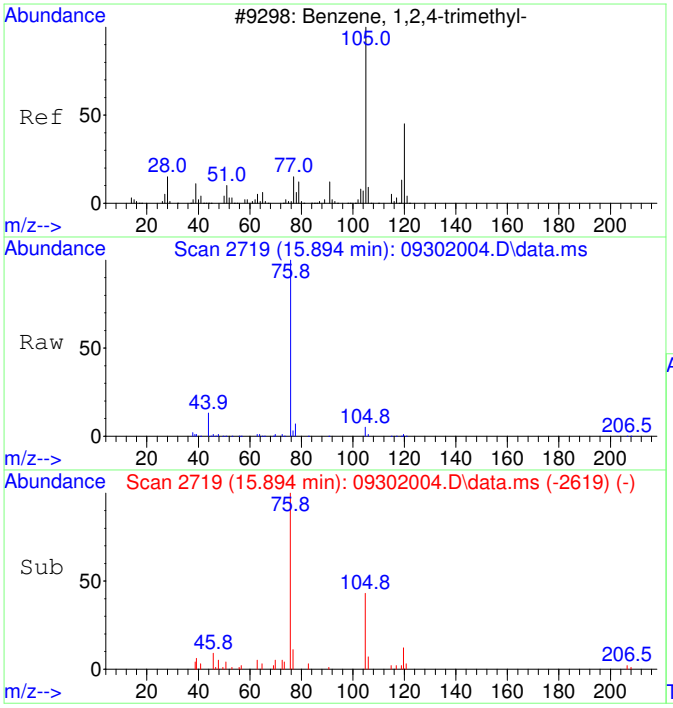


#46
1,3,5-Trimethylbenzene SCAN
Concen: 46.29 ug/L
RT: 15.343 min Scan# 2608
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:105 Resp: 3959

Ion	Ratio	Lower	Upper
105	100		
120	69.1	18.3	78.3
119	14.1	0.0	43.1

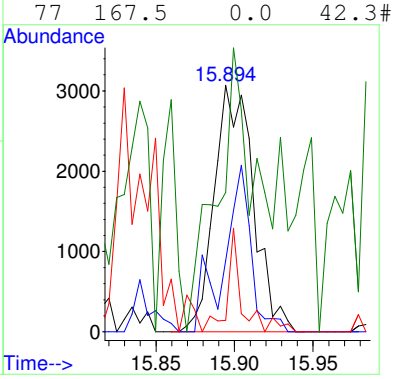


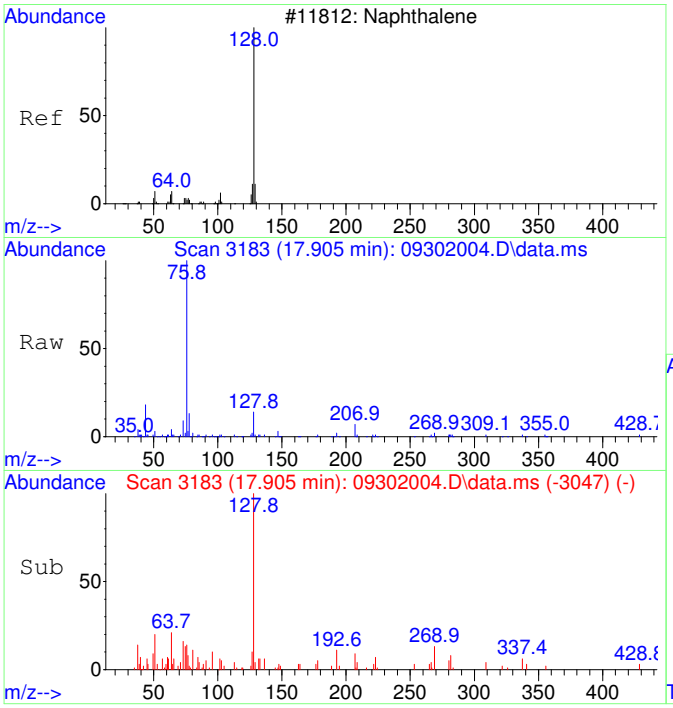


#47
1,2,4-Trimethylbenzene SCAN
Concen: 60.40 ug/L
RT: 15.894 min Scan# 2719
Delta R.T. -0.005 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:105 Resp: 5286

Ion	Ratio	Lower	Upper
105	100		
120	47.4	16.9	76.9
119	13.5	0.0	41.9
77	167.5	0.0	42.3#

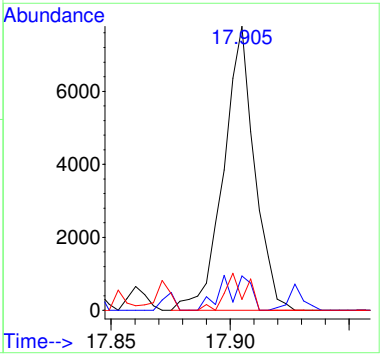




#48
Naphthalene SCAN
Concen: 53.20 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.004 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:128 Resp: 7044

Ion	Ratio	Lower	Upper
128	100		
127	10.8	0.0	44.0
129	8.9	0.0	40.8



B20I024-BLK1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302005.D
Acq On : 30 Sep 2020 14:59
InstName : AG5975C
Operator : TD
Sample : B20I024-BLK1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 30 15:18:02 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

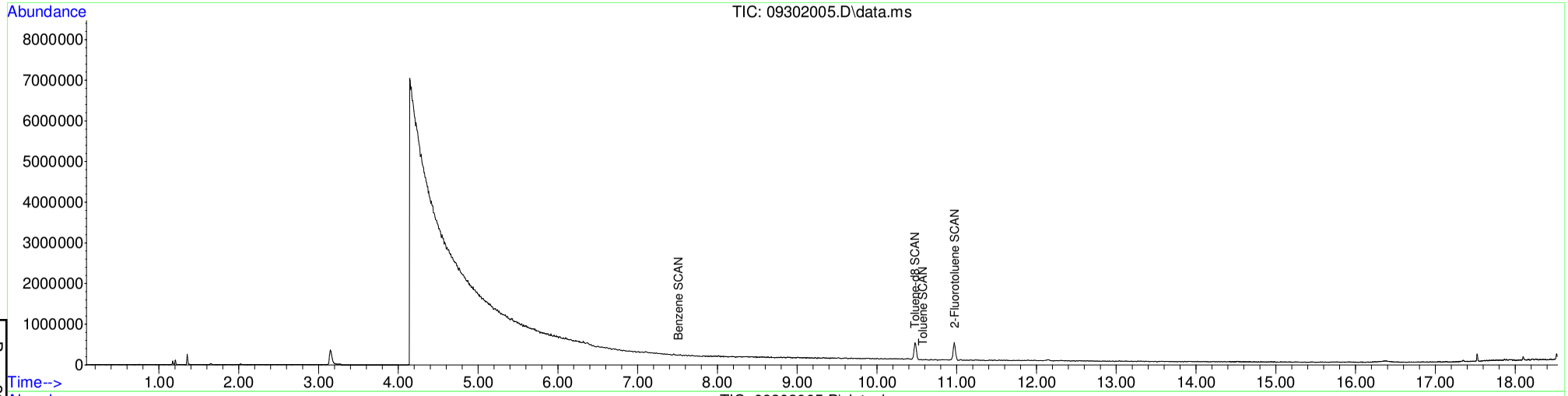
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	662649	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	574900	4431.83	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 88.64%			
Target Compounds						Qvalue
9] Benzene	7.515	78	6744	59.90	ug/L #	1
25) 2-Fluorotoluene SCAN	10.969	109	324103	5017.38	ug/L	94
33) Benzene SCAN	7.514	78	5287	92.30	ug/L	99
36) Toluene-d8 SCAN	10.475	98	327532	5184.68	ug/L	89
37) Toluene SCAN	10.570	91	1783	22.04	ug/L #	31

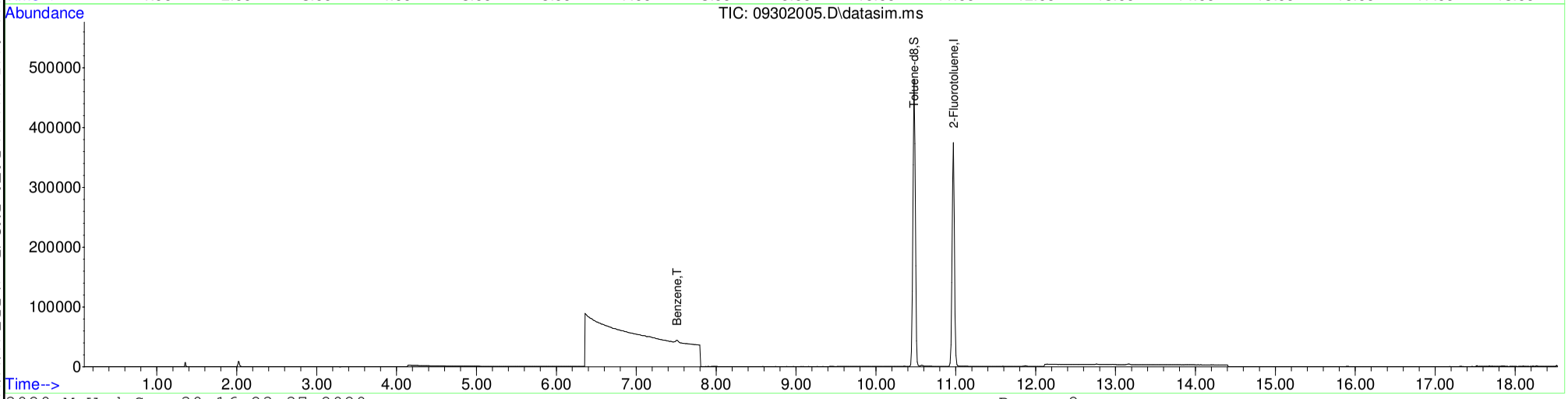
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302005.D
Acq On : 30 Sep 2020 14:59
InstName : AG5975C
Operator : TD
Sample : B20I024-BLK1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 30 15:18:02 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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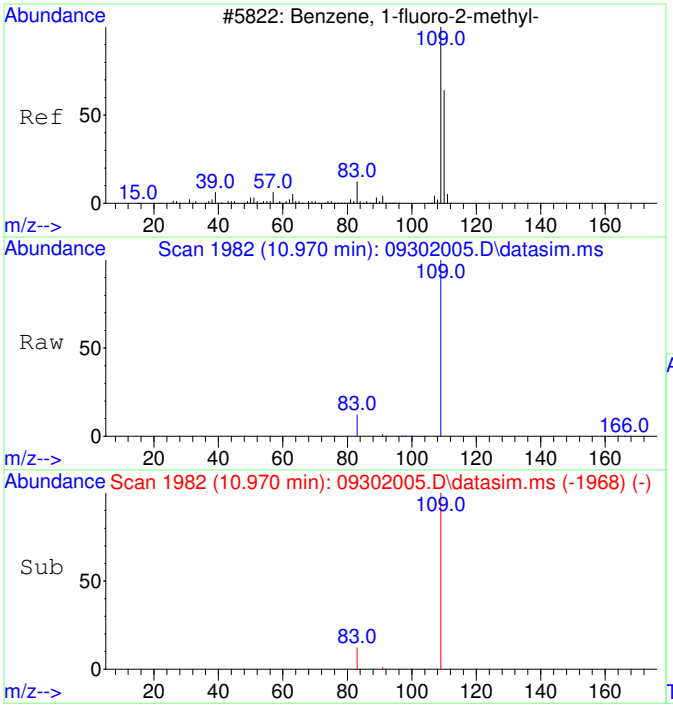
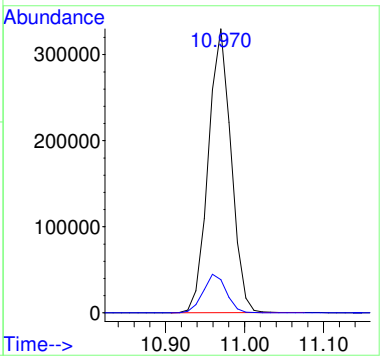
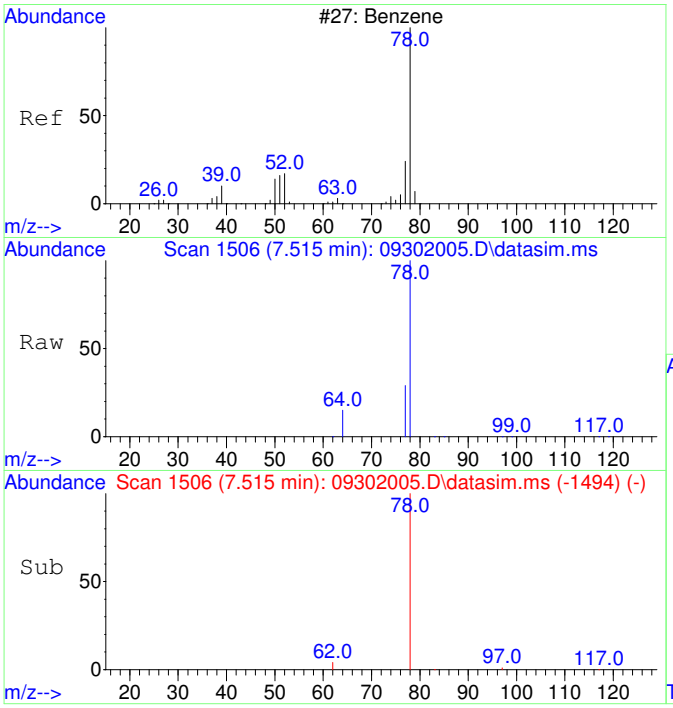


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 09302005.D
Acq: 30 Sep 2020 14:59

Tgt Ion:109 Resp: 662649

Ion	Ratio	Lower	Upper
109	100		
83	13.8	0.0	42.3

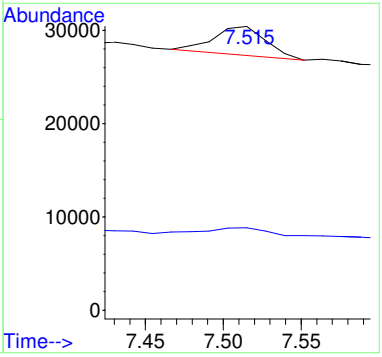


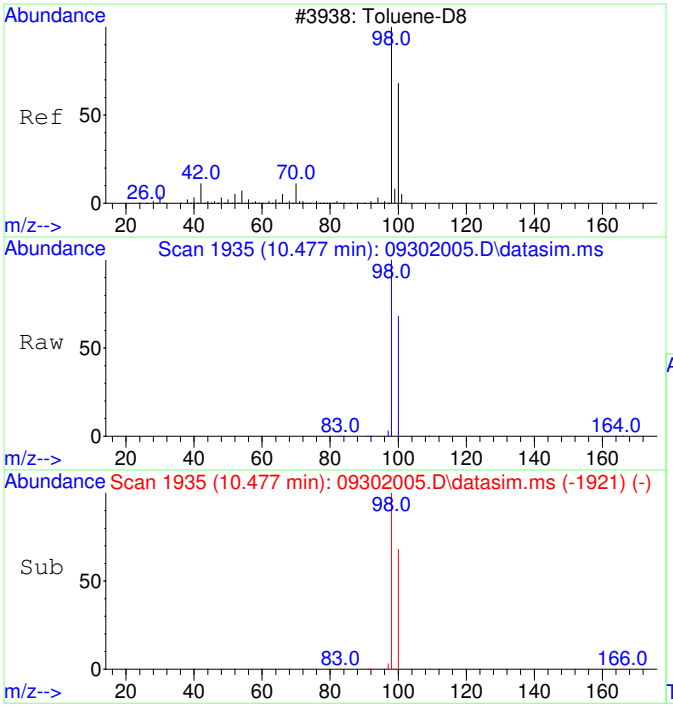


#9
Benzene
Concen: 59.90 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. -0.000 min
Lab File: 09302005.D
Acq: 30 Sep 2020 14:59

Tgt Ion: 78 Resp: 6744

Ion	Ratio	Lower	Upper
78	100		
77	72.7	0.0	53.2#

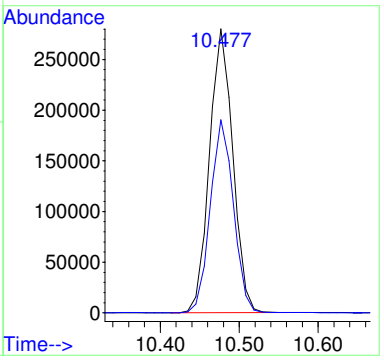


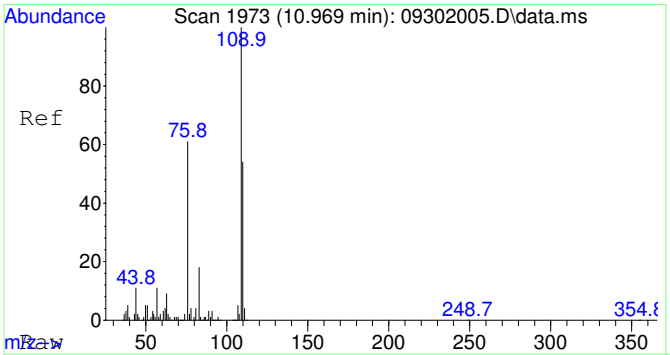


#12
Toluene-d8
Concen: 4431.83 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.000 min
Lab File: 09302005.D
Acq: 30 Sep 2020 14:59

Tgt Ion: 98 Resp: 574900

Ion	Ratio	Lower	Upper
98	100		
100	67.1	37.1	97.1

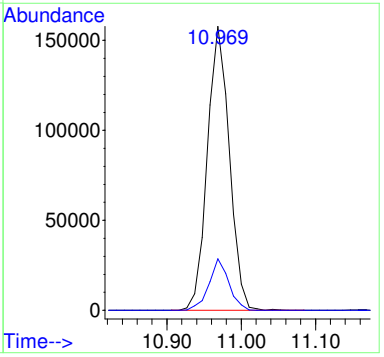


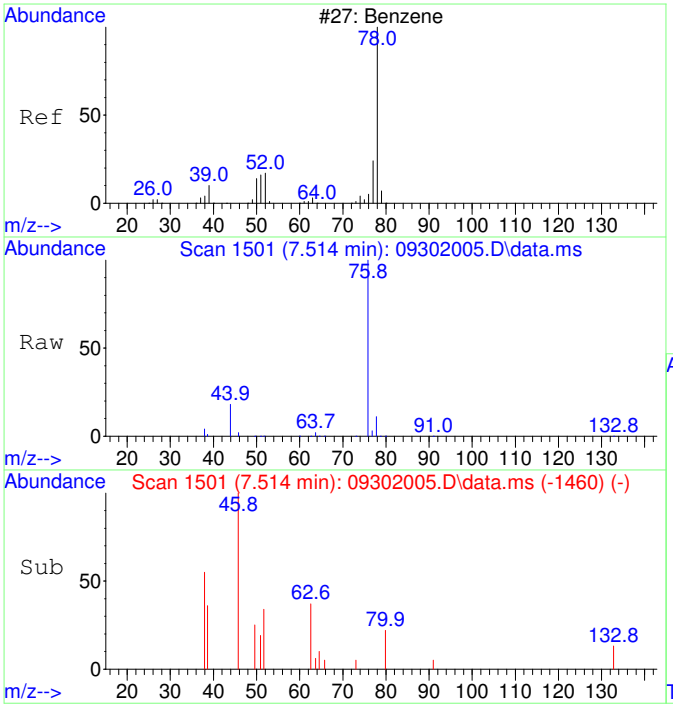


#25
2-Fluorotoluene SCAN
Concen: 5017.38 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.000 min
Lab File: 09302005.D
Acq: 30 Sep 2020 14:59

Tgt Ion:109 Resp: 324103

Ion	Ratio	Lower	Upper
109	100		
83	16.4	0.0	43.8

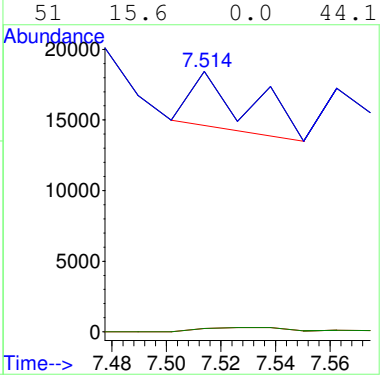


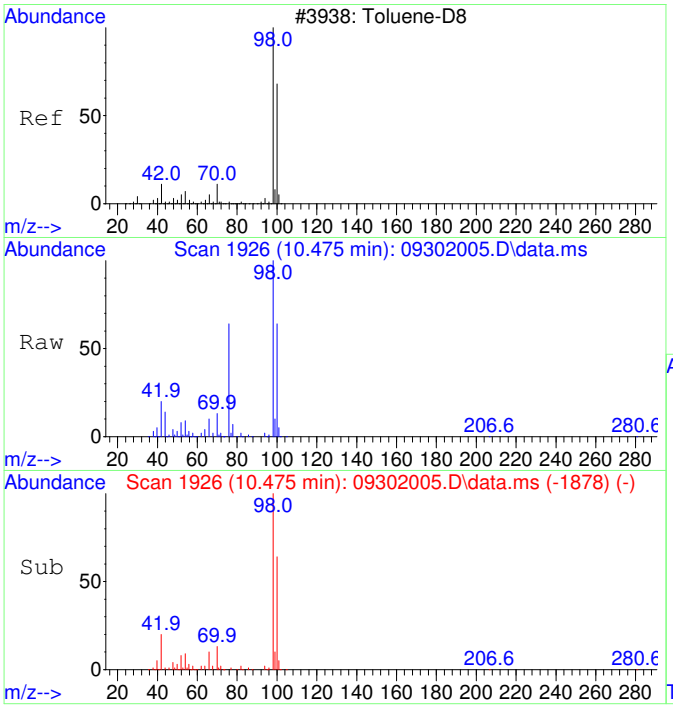


#33
Benzene SCAN
Concen: 92.30 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. -0.000 min
Lab File: 09302005.D
Acq: 30 Sep 2020 14:59

Tgt Ion: 78 Resp: 5287

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	15.6	0.0	47.9
51	15.6	0.0	44.1

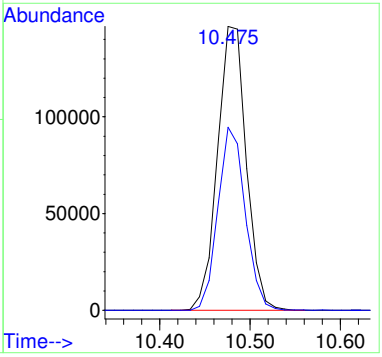


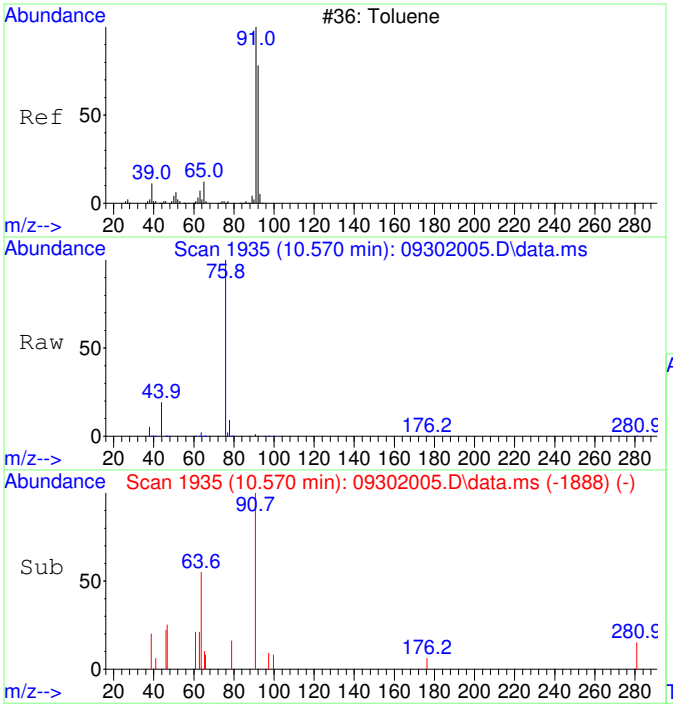


#36
Toluene-d8 SCAN
Concen: 5184.68 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. -0.000 min
Lab File: 09302005.D
Acq: 30 Sep 2020 14:59

Tgt Ion: 98 Resp: 327532

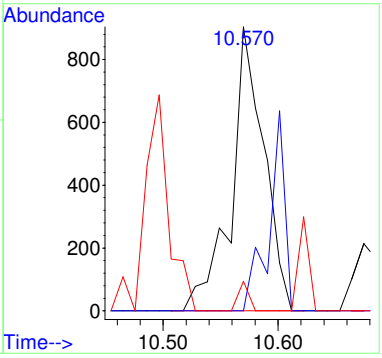
Ion	Ratio	Lower	Upper
98	100		
100	61.2	40.0	100.0






```
#37
Toluene SCAN
Concen:   22.04 ug/L
RT:  10.570 min  Scan# 1935
Delta R.T.  -0.011 min
Lab File:   09302005.D
Acq: 30 Sep 2020  14:59

Tgt Ion: 91 Resp:    1783
Ion  Ratio  Lower  Upper
 91  100
 92    0.0   28.3   88.3#
 65    3.3    0.0   41.0
```



B20I024-BS1

NOT REPORTED

Blanks Spike or Blank Spike Duplicate

Instrument Name: AG5975C
Sample Name: B20I024-BS1
Misc Info: 0
Date Acquired: 9/30/2020
QLast Update: Fri Aug 21 08:33:54 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.970	5000	5000.00	100%	70	130	pass
2)	**1,1-Dichloroethene**	**3.090**	**5000**	**3358.74**	**67%**	**22**	**143**	**pass**
3)	**trans-1,2-Dichloroethene**	**4.396**	**5000**	**3313.83**	**66%**	**35**	**133**	**pass**
4)	**1,1-Dichloroethane**	**5.099**	**5000**	**3453.47**	**69%**	**43**	**140**	**pass**
5)	**cis-1,2-Dichloroethene**	**6.094**	**5000**	**3452.31**	**69%**	**49**	**134**	**pass**
6)	**Chloroform**	**6.664**	**5000**	**3363.99**	**67%**	**56**	**132**	**pass**
7)	**1,1,1-Trichloroethane**	**6.919**	**5000**	**3184.25**	**64%**	**58**	**131**	pass
8)	Carbon tetrachloride	7.187	5000	3097.63	62%	60	126	pass
9)	Benzene	7.515	5000	3030.92	61%	63	121	FAIL
10)	1,2-Dichloroethane	7.552	5000	3367.87	67%	57	128	pass
11)	**Trichloroethene**	**8.569**	**5000**	**3158.30**	**63%**	**69**	**124**	**FAIL** ←
12)	Toluene-d8	10.477	5000	4428.69	89%	70	130	pass
13)	Toluene	10.571	5000	2931.90	59%	77	111	FAIL
14)	1,1,2-Trichloroethane	11.222	5000	3257.26	65%	76	115	FAIL
15)	**Tetrachloroethene**	**11.421**	**5000**	**3059.78**	**61%**	**69**	**124**	**FAIL** ←
16)	Chlorobenzene	12.757	5000	2961.16	59%	64	122	FAIL
17)	1,1,1,2-Tetrachloroethane	12.908	5000	3301.23	66%	68	130	**FAIL**
18)	Ethylbenzene	12.964	5000	3148.90	63%	70	130	FAIL
19)	m&p-Xylene	13.162	10000	5992.63	60%	66	129	FAIL
20)	o-Xylene	13.774	5000	2876.54	58%	63	121	FAIL
21)	1,1,2,2-Tetrachloroethane	14.873	5000	3167.14	63%	55	132	pass
22)	1,3,5-Trimethylbenzene	15.345	5000	3188.92	64%	61	140	pass
23)	1,2,4-Trimethylbenzene	15.896	5000	2953.20	59%	54	143	pass
25)	2-Fluorotoluene SCAN	10.969	5000	4873.36	97%	20	110	pass
27)	trans-1,2-Dichloroethene SCAN	4.401	5000	3409.76	68%	83	110	FAIL
29)	cis-1,2-Dichloroethene SCAN	6.093	5000	3673.48	73%	58	118	pass
31)	1,1,1-Trichloroethane SCAN	6.918	5000	3591.59	72%	59	119	pass
33)	Benzene SCAN	7.514	5000	3380.33	68%	69	129	FAIL
35)	Trichloroethene SCAN	8.568	5000	3498.97	70%	69	129	pass
37)	Toluene SCAN	10.580	5000	3146.28	63%	66	126	FAIL
39)	Tetrachloroethene SCAN	11.430	5000	3363.99	67%	59	119	pass
41)	1,1,1,2-Tetrachloroethane SCAN	12.907	5000	3297.14	66%	62	122	pass
43)	m&p-Xylene SCAN	13.161	5000	3337.62	67%	68	128	FAIL
45)	1,1,2,2-Tetrachloroethane SCAN	14.872	5000	3466.44	69%	63	123	pass
47)	1,2,4-Trimethylbenzene SCAN	15.899	5000	3174.83	63%	20	110	pass

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302006.D
Acq On : 30 Sep 2020 15:22
InstName : AG5975C
Operator : TD
Sample : B20I024-BS1
Misc :
ALS Vial : 6 Sample Multiplier: 1

NOT REPORTED

Quant Time: Sep 30 15:41:39 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

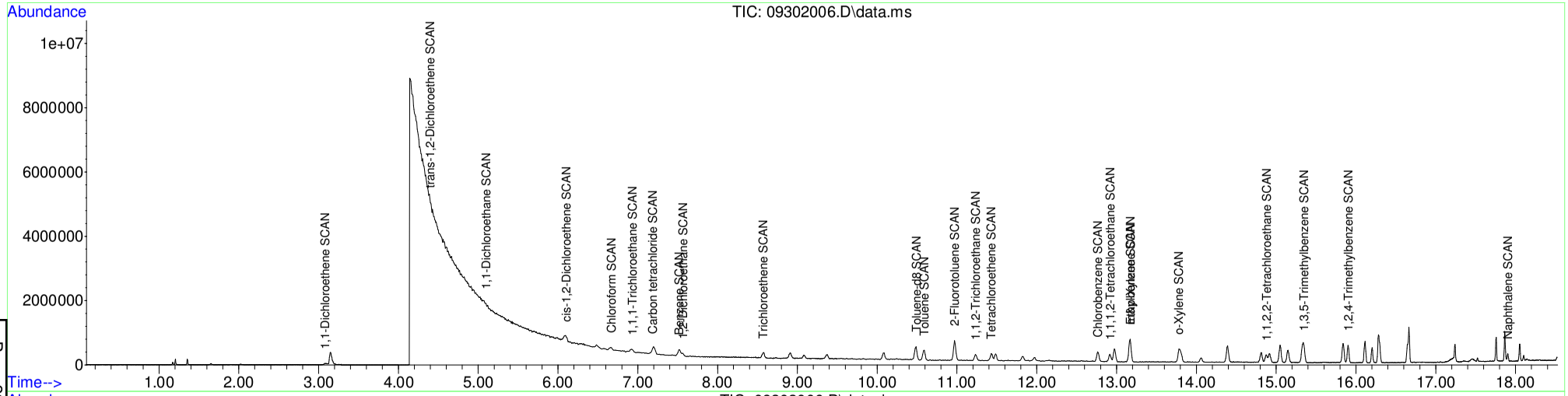
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	686229	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	594935	4428.69 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 88.57%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	92037	3358.74 ug/L	82
3] trans-1,2-Dichloroethene	4.396	61	104915	3313.83 ug/L	98
4] 1,1-Dichloroethane	5.099	63	136102	3453.47 ug/L	98
5] cis-1,2-Dichloroethene	6.094	61	143617	3452.31 ug/L	98
6] Chloroform	6.664	83	143237	3363.99 ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	147245	3184.25 ug/L	99
8] Carbon tetrachloride	7.187	117	134818	3097.63 ug/L	100
9] Benzene	7.515	78	353387	3030.92 ug/L	97
10] 1,2-Dichloroethane	7.552	62	140176	3367.87 ug/L	99
11] Trichloroethene	8.575	130	110872	3158.30 ug/L	93
13] Toluene	10.582	91	502137	2931.90 ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	121558	3257.26 ug/L	97
15] Tetrachloroethene	11.432	166	151656	3059.78 ug/L	100
16] Chlorobenzene	12.765	112	363137	2961.16 ug/L	92
17] 1,1,1,2-Tetrachloroethane	12.916	131	145063	3301.23 ug/L	100
18] Ethylbenzene	12.972	91	656444	3148.90 ug/L	98
19] m&p-Xylene	13.162	91	976383	5992.63 ug/L	96
20] o-Xylene	13.782	91	500721	2876.54 ug/L	96
21] 1,1,2,2-Tetrachloroethane	14.877	83	244334	3167.14 ug/L	100
22] 1,3,5-Trimethylbenzene	15.345	105	590835	3188.92 ug/L	97
23] 1,2,4-Trimethylbenzene	15.901	105	568336	2953.20 ug/L	96
24] Naphthalene	17.902	128	212243	697.79 ug/L	98
25) 2-Fluorotoluene SCAN	10.969	109	326002	4873.36 ug/L	93
26) 1,1-Dichloroethene SCAN	3.077	61	52715	3710.64 ug/L #	41
27) trans-1,2-Dichloroethe...	4.401	61	59942	3409.76 ug/L	71
28) 1,1-Dichloroethane SCAN	5.098	63	82254	4042.98 ug/L	95
29) cis-1,2-Dichloroethene...	6.100	61	80073	3673.48 ug/L #	76
30) Chloroform SCAN	6.662	83	84771	3585.53 ug/L	93
31) 1,1,1-Trichloroethane ...	6.930	97	77381	3591.59 ug/L	95
32) Carbon tetrachloride SCAN	7.185	117	70675	3144.77 ug/L	87
33) Benzene SCAN	7.514	78	200526	3380.33 ug/L	95
34) 1,2-Dichloroethane SCAN	7.563	62	79278	3619.23 ug/L	90
35) Trichloroethene SCAN	8.568	130	57040	3498.97 ug/L	86
36) Toluene-d8 SCAN	10.486	98	301493	4608.51 ug/L	99
37) Toluene SCAN	10.591	91	263599	3146.28 ug/L	98
38) 1,1,2-Trichloroethane ...	11.231	97	63587	3381.33 ug/L	92
39) Tetrachloroethene SCAN	11.430	166	67711	3363.99 ug/L	88
40) Chlorobenzene SCAN	12.764	112	179052	3127.57 ug/L	84
41) 1,1,1,2-Tetrachloroeth...	12.915	131	69856	3297.14 ug/L	95
42) Ethylbenzene SCAN	13.169	91	509437	3337.62 ug/L	91
43) m&p-Xylene SCAN	13.169	91	509437	3337.62 ug/L	91
44) o-Xylene SCAN	13.781	91	254216	3111.51 ug/L	96
45) 1,1,2,2-Tetrachloroeth...	14.879	83	138099	3466.44 ug/L	94
46) 1,3,5-Trimethylbenzene...	15.348	105	298916	3471.52 ug/L	97
47) 1,2,4-Trimethylbenzene...	15.899	105	279718	3174.83 ug/L	96
48) Naphthalene SCAN	17.901	128	97188	729.00 ug/L	97

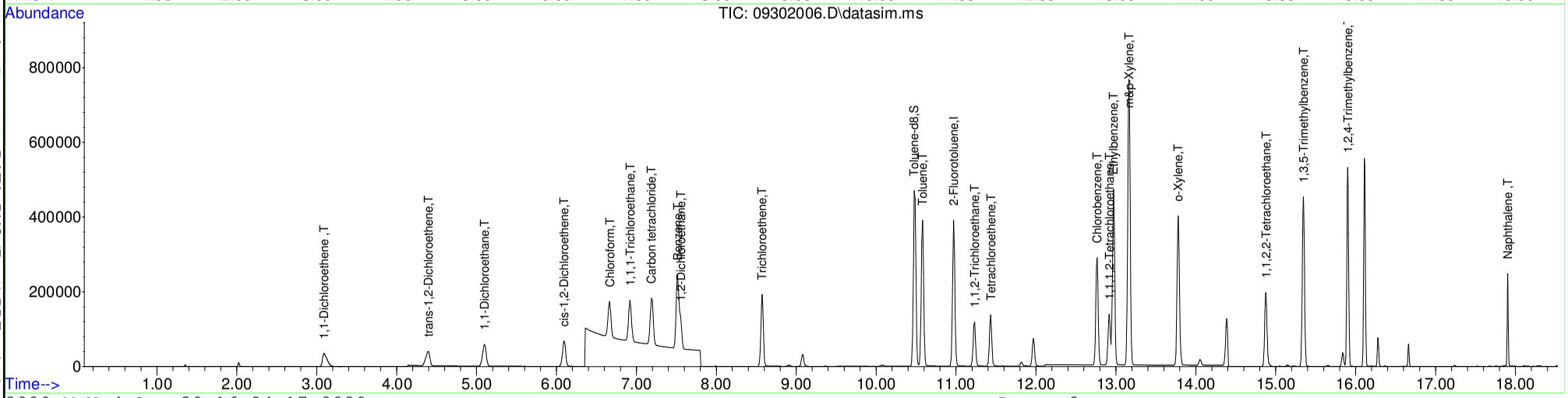
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302006.D
Acq On : 30 Sep 2020 15:22
InstName : AG5975C
Operator : TD
Sample : B20I024-BS1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 30 15:41:39 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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B20I024-BSD1

Blanks Spike or Blank Spike Duplicate

Instrument Name: AG5975C
Sample Name: B20I024-BSD1 also as B20I024-BSD2
Misc Info: 0
Date Acquired: 9/30/2020
QLast Update: Fri Aug 21 08:33:54 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.970	5000	5000.00	100%	70	130	pass
2)	**1,1-Dichloroethene**	**3.090**	**5000**	**3735.03**	**75%**	**22**	**143**	**pass**
3)	**trans-1,2-Dichloroethene**	**4.396**	**5000**	**3793.17**	**76%**	**35**	**133**	**pass**
4)	**1,1-Dichloroethane**	**5.099**	**5000**	**3958.30**	**79%**	**43**	**140**	**pass**
5)	**cis-1,2-Dichloroethene**	**6.094**	**5000**	**4000.80**	**80%**	**49**	**134**	**pass**
6)	**Chloroform**	**6.664**	**5000**	**3946.93**	**79%**	**56**	**132**	**pass**
7)	**1,1,1-Trichloroethane**	**6.919**	**5000**	**3806.11**	**76%**	**58**	**131**	pass
8)	Carbon tetrachloride	7.187	5000	3727.82	75%	60	126	pass
9)	Benzene	7.515	5000	3584.86	72%	63	121	pass
10)	1,2-Dichloroethane	7.552	5000	3965.27	79%	57	128	pass
11)	**Trichloroethene**	**8.569**	**5000**	**3802.31**	**76%**	**69**	**124**	**pass**
12)	Toluene-d8	10.477	5000	4515.98	90%	70	130	pass
13)	Toluene	10.571	5000	3598.70	72%	77	111	FAIL
14)	1,1,2-Trichloroethane	11.222	5000	3961.80	79%	76	115	pass
15)	**Tetrachloroethene**	**11.421**	**5000**	**3749.90**	**75%**	**69**	**124**	**pass**
16)	Chlorobenzene	12.757	5000	3529.27	71%	64	122	pass
17)	1,1,1,2-Tetrachloroethane	12.908	5000	4029.76	81%	68	130	**pass**
18)	Ethylbenzene	12.964	5000	3866.82	77%	70	130	pass
19)	m&p-Xylene	13.162	10000	7283.87	73%	66	129	pass
20)	o-Xylene	13.774	5000	3418.35	68%	63	121	pass
21)	1,1,2,2-Tetrachloroethane	14.873	5000	3708.55	74%	55	132	pass
22)	1,3,5-Trimethylbenzene	15.345	5000	3820.78	76%	61	140	pass
23)	1,2,4-Trimethylbenzene	15.896	5000	3468.45	69%	54	143	pass
25)	2-Fluorotoluene SCAN	10.969	5000	5188.27	104%	20	110	pass
27)	trans-1,2-Dichloroethene SCAN	4.401	5000	4142.13	83%	83	110	FAIL
29)	cis-1,2-Dichloroethene SCAN	6.093	5000	4711.98	94%	58	118	pass
31)	1,1,1-Trichloroethane SCAN	6.918	5000	4347.16	87%	59	119	pass
33)	Benzene SCAN	7.514	5000	4336.98	87%	69	129	pass
35)	Trichloroethene SCAN	8.568	5000	4153.53	83%	69	129	pass
37)	Toluene SCAN	10.580	5000	3934.55	79%	66	126	pass
39)	Tetrachloroethene SCAN	11.430	5000	3978.22	80%	59	119	pass
41)	1,1,1,2-Tetrachloroethane SCAN	12.907	5000	4316.34	86%	62	122	pass
43)	m&p-Xylene SCAN	13.161	5000	3995.88	80%	68	128	pass
45)	1,1,2,2-Tetrachloroethane SCAN	14.872	5000	4292.76	86%	63	123	pass
47)	1,2,4-Trimethylbenzene SCAN	15.899	5000	3801.15	76%	20	110	pass

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302007.D
Acq On : 30 Sep 2020 15:46
InstName : AG5975C
Operator : TD
Sample : B20I024-BSD1 also as B20I024-BSD2
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 30 16:05:14 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

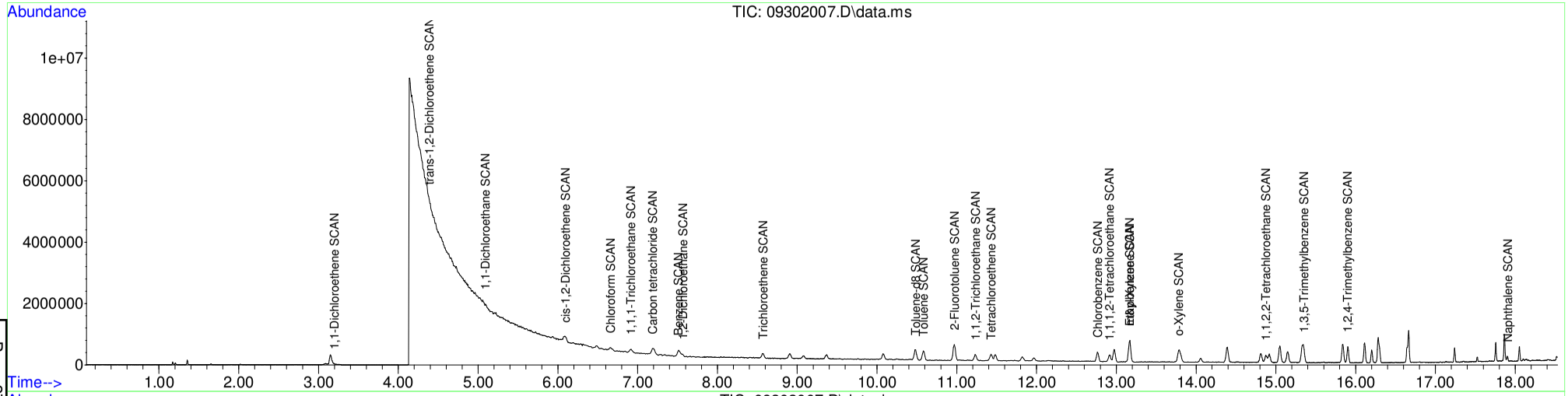
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	553975	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	489743	4515.98	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 90.32%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.090	61	82623	3735.03	ug/L	82
3] trans-1,2-Dichloroethene	4.389	61	96946	3793.17	ug/L	98
4] 1,1-Dichloroethane	5.092	63	125933	3958.30	ug/L	98
5] cis-1,2-Dichloroethene	6.094	61	134358	4000.80	ug/L	99
6] Chloroform	6.664	83	135669	3946.93	ug/L	99
7] 1,1,1-Trichloroethane	6.919	97	142081	3806.11	ug/L	99
8] Carbon tetrachloride	7.187	117	130977	3727.82	ug/L	99
9] Benzene	7.515	78	337419	3584.86	ug/L	96
10] 1,2-Dichloroethane	7.552	62	133233	3965.27	ug/L	100
11] Trichloroethene	8.569	130	107755	3802.31	ug/L	93
13] Toluene	10.582	91	497554	3598.70	ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	119356	3961.80	ug/L	97
15] Tetrachloroethene	11.432	166	150041	3749.90	ug/L	100
16] Chlorobenzene	12.765	112	349394	3529.27	ug/L	92
17] 1,1,1,2-Tetrachloroethane	12.916	131	142949	4029.76	ug/L	100
18] Ethylbenzene	12.972	91	650750	3866.82	ug/L	98
19] m&p-Xylene	13.162	91	958046	7283.87	ug/L	96
20] o-Xylene	13.782	91	480355	3418.35	ug/L	96
21] 1,1,2,2-Tetrachloroethane	14.877	83	230963	3708.55	ug/L	100
22] 1,3,5-Trimethylbenzene	15.345	105	571473	3820.78	ug/L	96
23] 1,2,4-Trimethylbenzene	15.901	105	538850	3468.45	ug/L	96
24] Naphthalene	17.903	128	145648	593.17	ug/L	98
25) 2-Fluorotoluene SCAN	10.969	109	280179	5188.27	ug/L	99
26) 1,1-Dichloroethene SCAN	3.200	61	392	34.18	ug/L	85
27) trans-1,2-Dichloroethe...	4.388	61	58783	4142.13	ug/L #	63
28) 1,1-Dichloroethane SCAN	5.091	63	73224	4458.38	ug/L	94
29) cis-1,2-Dichloroethene...	6.100	61	82915	4711.98	ug/L #	72
30) Chloroform SCAN	6.662	83	76423	4004.13	ug/L	94
31) 1,1,1-Trichloroethane ...	6.918	97	75609	4347.16	ug/L	86
32) Carbon tetrachloride SCAN	7.185	117	65448	3607.43	ug/L	91
33) Benzene SCAN	7.514	78	207692	4336.98	ug/L	95
34) 1,2-Dichloroethane SCAN	7.563	62	72291	4088.15	ug/L	90
35) Trichloroethene SCAN	8.568	130	54661	4153.53	ug/L	86
36) Toluene-d8 SCAN	10.486	98	261653	4954.36	ug/L	94
37) Toluene SCAN	10.580	91	266111	3934.55	ug/L	98
38) 1,1,2-Trichloroethane ...	11.231	97	69461	4575.50	ug/L	93
39) Tetrachloroethene SCAN	11.430	166	64642	3978.22	ug/L	92
40) Chlorobenzene SCAN	12.764	112	175001	3786.58	ug/L	90
41) 1,1,1,2-Tetrachloroeth...	12.915	131	73825	4316.34	ug/L	90
42) Ethylbenzene SCAN	13.169	91	492365	3995.88	ug/L	91
43) m&p-Xylene SCAN	13.169	91	492365	3995.88	ug/L	92
44) o-Xylene SCAN	13.781	91	261585	3966.07	ug/L	90
45) 1,1,2,2-Tetrachloroeth...	14.875	83	138059	4292.76	ug/L	96
46) 1,3,5-Trimethylbenzene...	15.348	105	278950	4013.06	ug/L	99
47) 1,2,4-Trimethylbenzene...	15.899	105	270356	3801.15	ug/L	94
48) Naphthalene SCAN	17.905	128	66973	622.29	ug/L	99

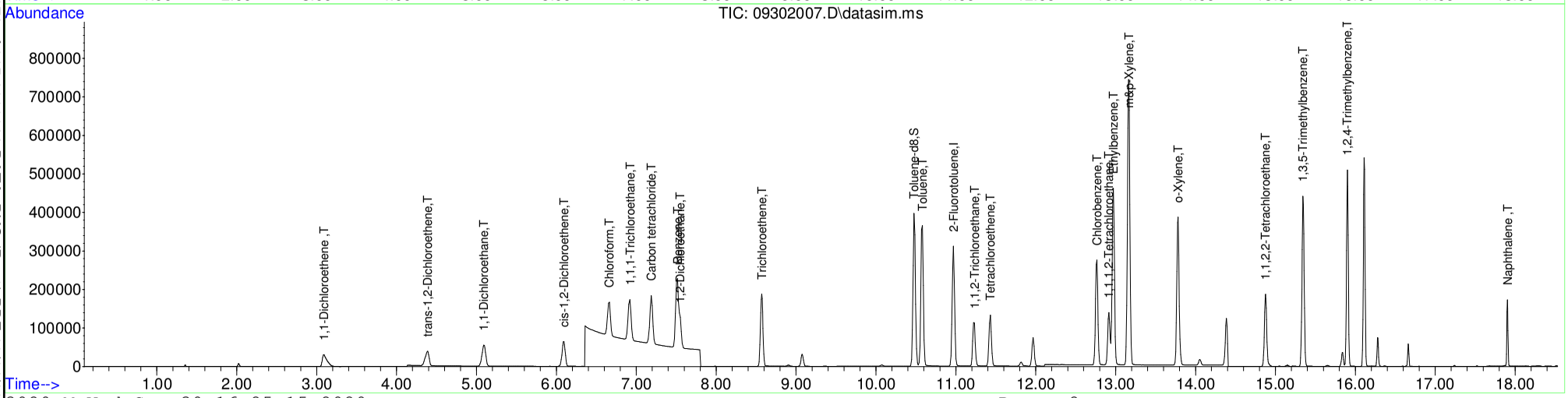
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302007.D
Acq On : 30 Sep 2020 15:46
InstName : AG5975C
Operator : TD
Sample : B20I024-BSD1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 30 16:05:14 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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B20I024-MRL1

Quantitation Report (Not Reviewed)

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Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302008.D
Acq On : 30 Sep 2020 16:10
InstName : AG5975C
Operator : TD
Sample : B20I024-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 30 16:28:47 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

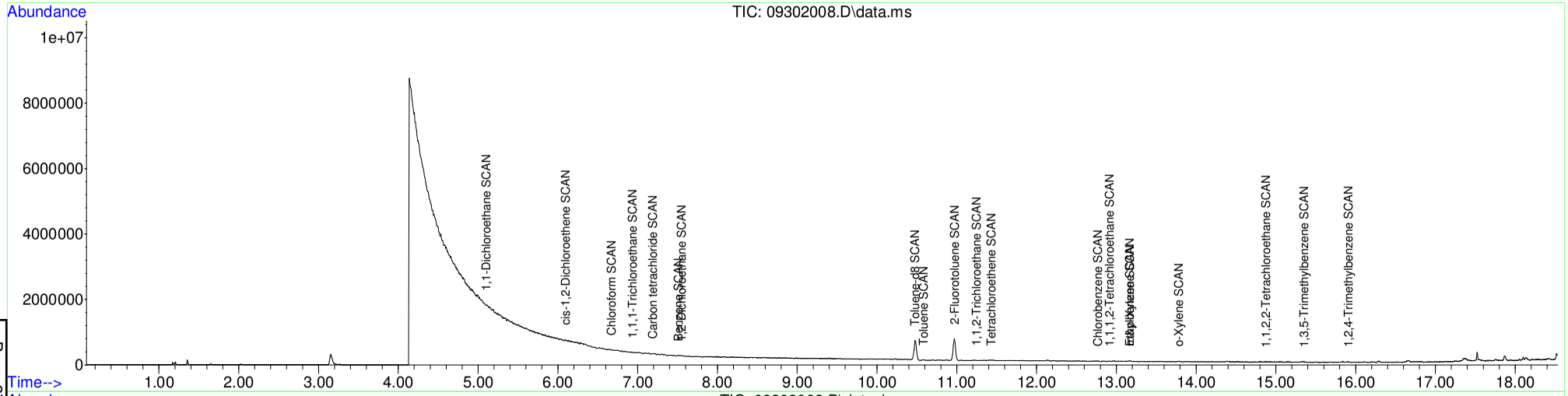
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)	
Internal Standards						
1) 2-Fluorotoluene	10.970	109	1041272	5000.00 ug/L	0.00	IS ↑
System Monitoring Compounds						
12) Toluene-d8	10.477	98	876494	4299.91 ug/L	0.00	
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.00%#			
Target Compounds					Qvalue	
2] 1,1-Dichloroethene	3.090	61	2301	55.34 ug/L	89	
3] trans-1,2-Dichloroethene	4.402	61	2186	45.50 ug/L	67	
4] 1,1-Dichloroethane	5.099	63	2777	46.44 ug/L	71	
5] cis-1,2-Dichloroethene	6.094	61	2972	47.08 ug/L	98	
6] Chloroform	6.664	83	3179	49.20 ug/L	100	
7] 1,1,1-Trichloroethane	6.919	97	3126	44.55 ug/L	98	
8] Carbon tetrachloride	7.187	117	2941	44.53 ug/L	100	
9] Benzene	7.515	78	14464	81.76 ug/L	64	
10] 1,2-Dichloroethane	7.552	62	3050	48.29 ug/L #	16	
11] Trichloroethene	8.569	130	2531	47.51 ug/L	93	
13] Toluene	10.571	91	13276	51.09 ug/L	98	
14] 1,1,2-Trichloroethane	11.222	97	2597	45.86 ug/L	97	
15] Tetrachloroethene	11.432	166	3542	47.10 ug/L	97	
16] Chlorobenzene	12.765	112	10147	54.53 ug/L	87	
17] 1,1,1,2-Tetrachloroethane	12.916	131	3310	49.64 ug/L	100	
18] Ethylbenzene	12.972	91	16900	53.43 ug/L	96	
19] m&p-Xylene	13.162	91	27000	109.21 ug/L	93	
20] o-Xylene	13.782	91	13211	50.02 ug/L	95	
21] 1,1,2,2-Tetrachloroethane	14.877	83	6028	51.49 ug/L	99	
22] 1,3,5-Trimethylbenzene	15.343	105	14392	51.19 ug/L	97	
23] 1,2,4-Trimethylbenzene	15.899	105	15985	54.74 ug/L	93	
25) 2-Fluorotoluene SCAN	10.969	109	522467	5147.21 ug/L	98	
28) 1,1-Dichloroethane SCAN	5.098	63	1460	47.29 ug/L	73	
29) cis-1,2-Dichloroethene...	6.093	61	1473	44.53 ug/L #	28	
30) Chloroform SCAN	6.675	83	1693	47.19 ug/L #	27	
31) 1,1,1-Trichloroethane ...	6.930	97	1704	52.12 ug/L #	34	
32) Carbon tetrachloride SCAN	7.185	117	2163	63.43 ug/L #	65	
33) Benzene SCAN	7.514	78	13461	149.54 ug/L	99	
34) 1,2-Dichloroethane SCAN	7.550	62	1644	49.46 ug/L #	61	
36) Toluene-d8 SCAN	10.475	98	465915	4693.48 ug/L	94	
37) Toluene SCAN	10.580	91	10112	79.54 ug/L	92	
38) 1,1,2-Trichloroethane ...	11.242	97	1505	52.74 ug/L #	46	
39) Tetrachloroethene SCAN	11.430	166	2691	88.11 ug/L #	41	
40) Chlorobenzene SCAN	12.764	112	5361	61.71 ug/L #	54	
41) 1,1,1,2-Tetrachloroeth...	12.915	131	2103	65.42 ug/L #	47	
42) Ethylbenzene SCAN	13.169	91	14879	64.24 ug/L	97	
43) m&p-Xylene SCAN	13.169	91	14879	64.24 ug/L	95	
44) o-Xylene SCAN	13.781	91	9905	79.90 ug/L	76	
45) 1,1,2,2-Tetrachloroeth...	14.872	83	4227	69.92 ug/L	86	
46) 1,3,5-Trimethylbenzene...	15.352	105	8028	61.44 ug/L	96	
47) 1,2,4-Trimethylbenzene...	15.903	105	7976	59.66 ug/L #	93	

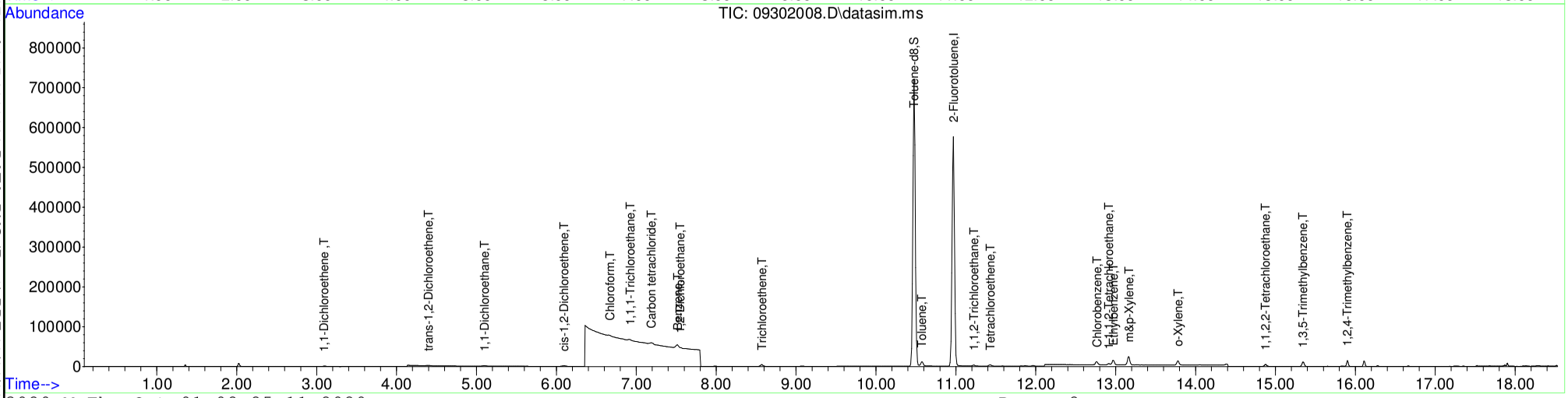
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302008.D
Acq On : 30 Sep 2020 16:10
InstName : AG5975C
Operator : TD
Sample : B20I024-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 30 16:28:47 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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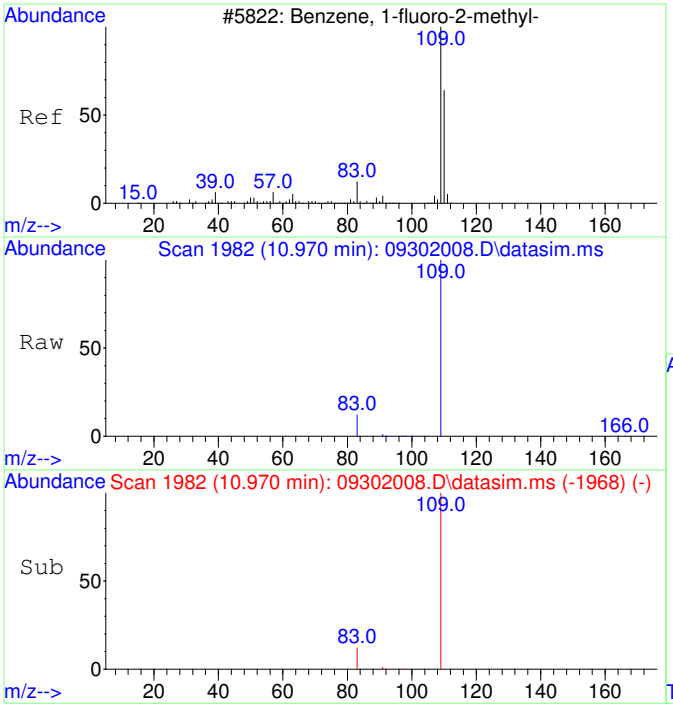
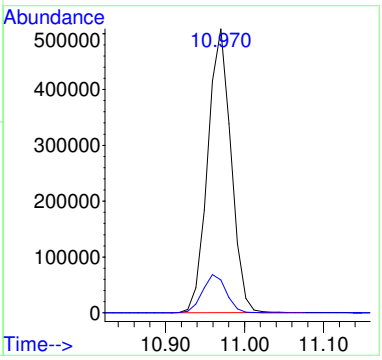
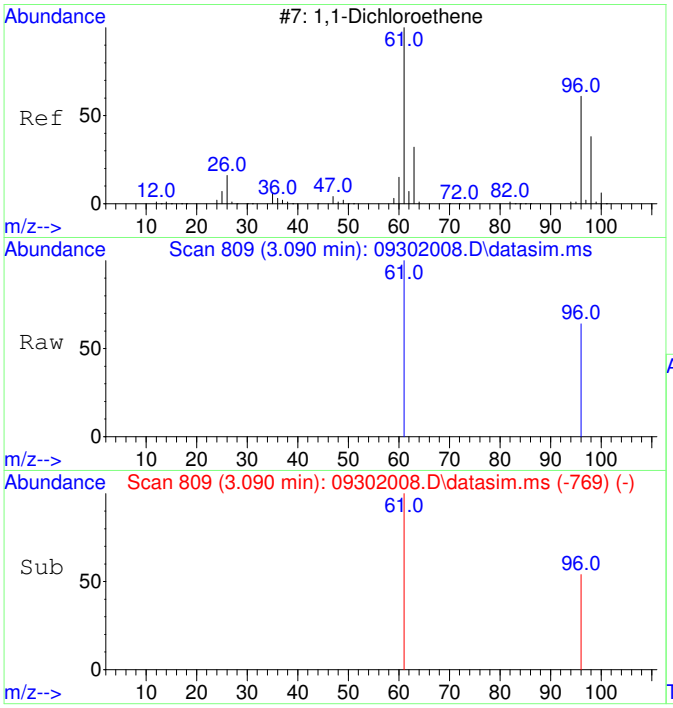


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:109 Resp: 1041272

Ion	Ratio	Lower	Upper
109	100		
83	13.7	0.0	42.3

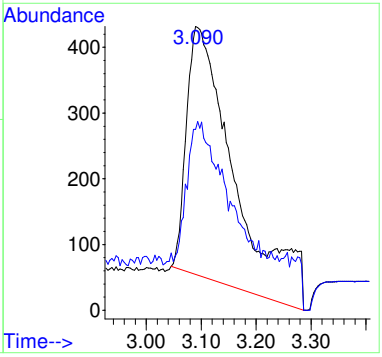




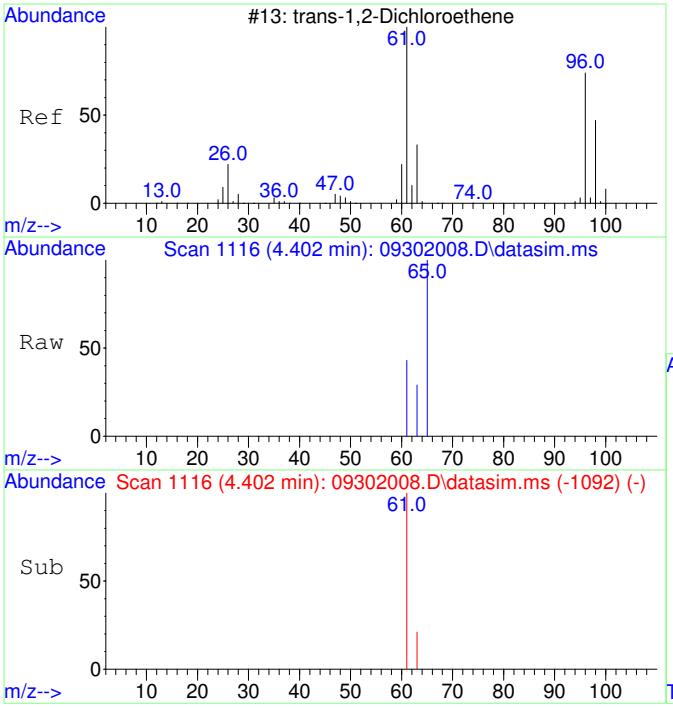
#2
1,1-Dichloroethene
Concen: 55.34 ug/L
RT: 3.090 min Scan# 809
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 61 Resp: 2301

Ion	Ratio	Lower	Upper
61	100		
96	58.7	37.2	97.2



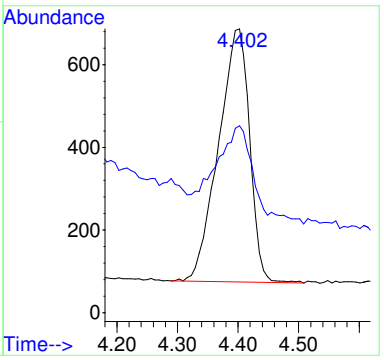
Before MI:
IMPROPER
BASELINE

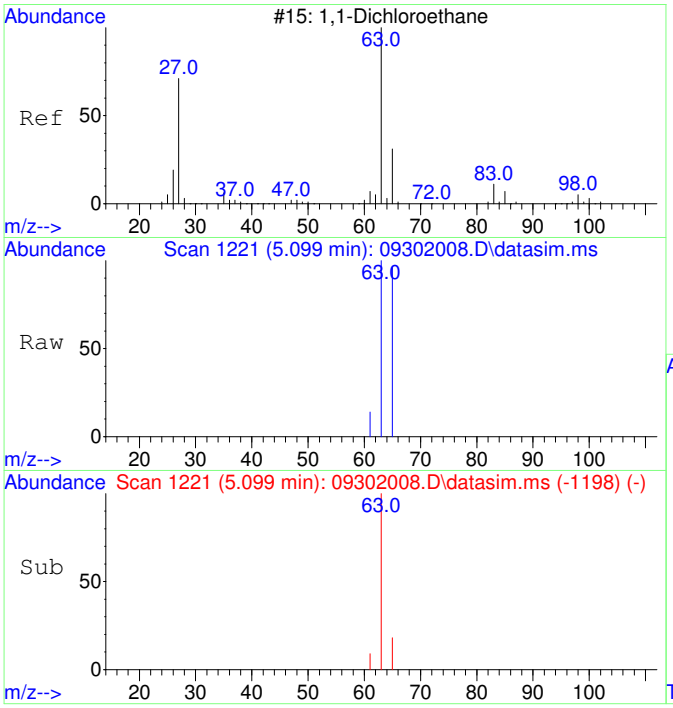


#3
trans-1,2-Dichloroethene
Concen: 45.50 ug/L
RT: 4.402 min Scan# 1116
Delta R.T. 0.007 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 61 Resp: 2186

Ion	Ratio	Lower	Upper
61	100		
63	51.0	2.4	62.4

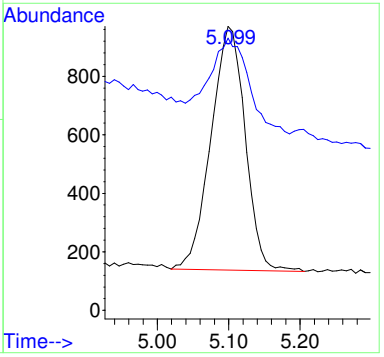


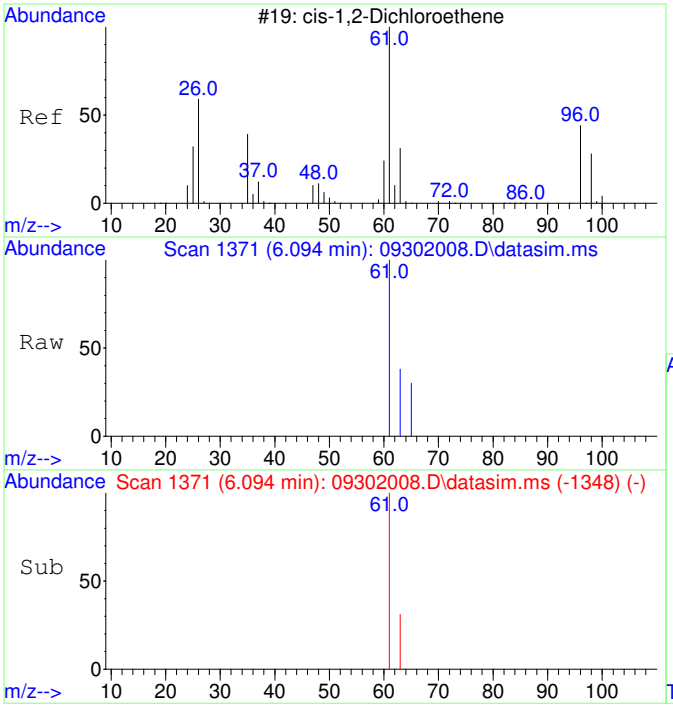


#4
1,1-Dichloroethane
Concen: 46.44 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 63 Resp: 2777

Ion	Ratio	Lower	Upper
63	100		
65	48.2	1.8	61.8

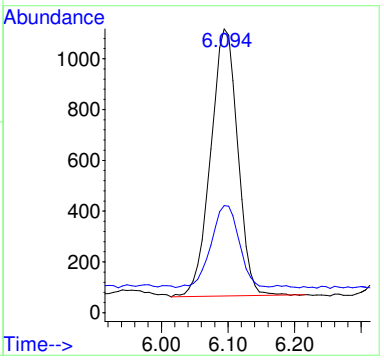


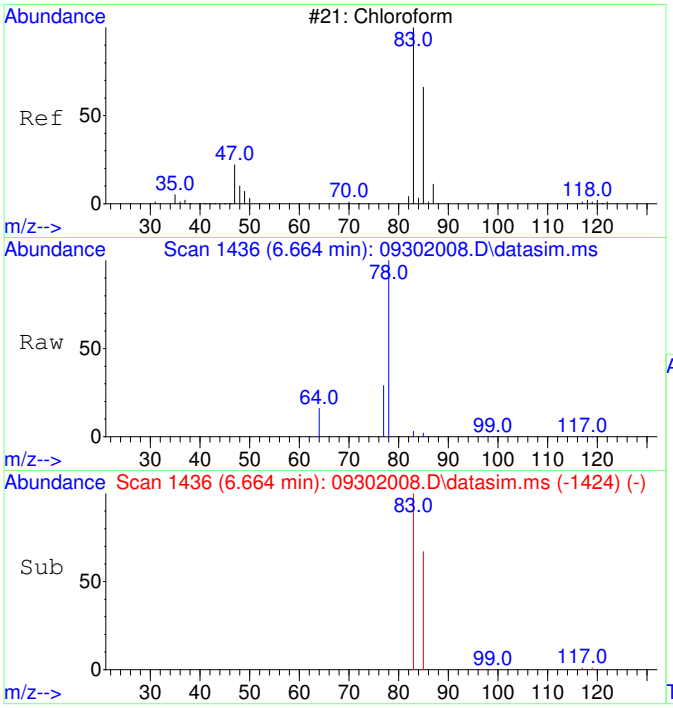


#5
cis-1,2-Dichloroethene
Concen: 47.08 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 61 Resp: 2972

Ion	Ratio	Lower	Upper
61	100		
63	31.4	2.5	62.5

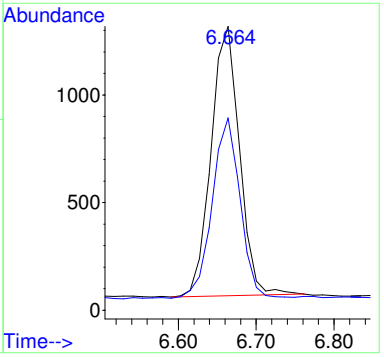


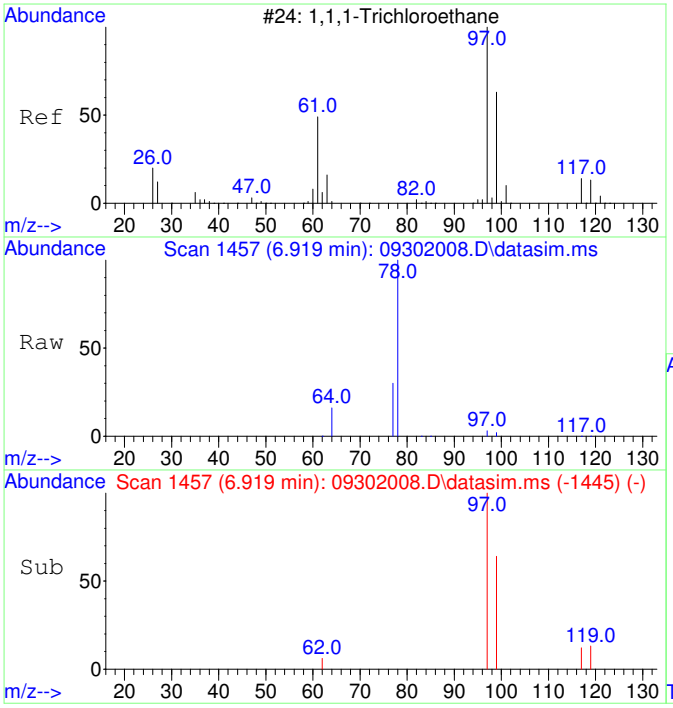


#6
Chloroform
Concen: 49.20 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 83 Resp: 3179

Ion	Ratio	Lower	Upper
83	100		
85	64.9	35.1	95.1

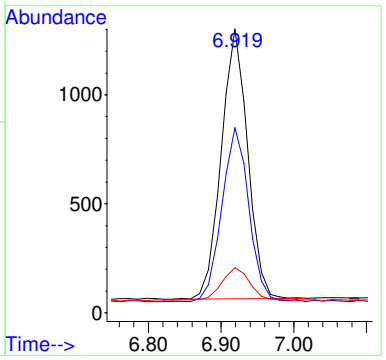


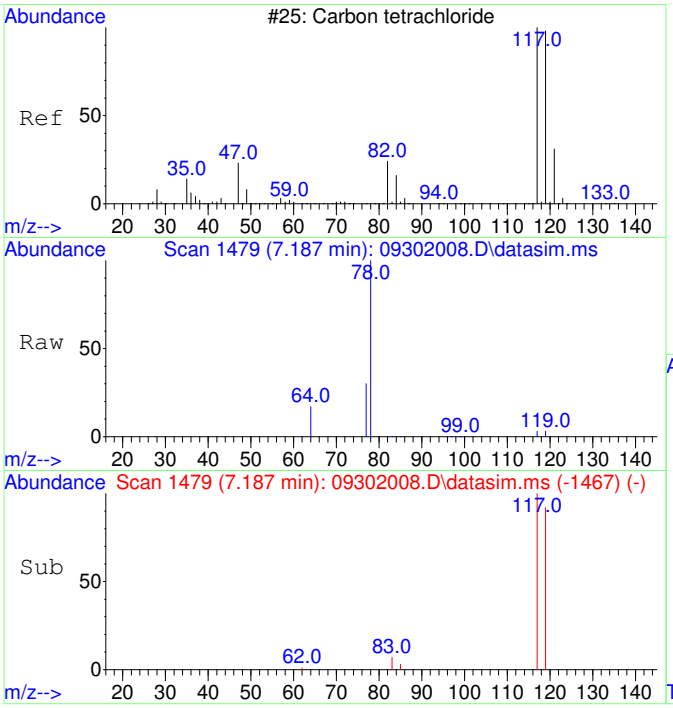


#7
1,1,1-Trichloroethane
Concen: 44.55 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 97 Resp: 3126

Ion	Ratio	Lower	Upper
97	100		
99	66.0	34.6	94.6
117	13.3	0.0	43.2

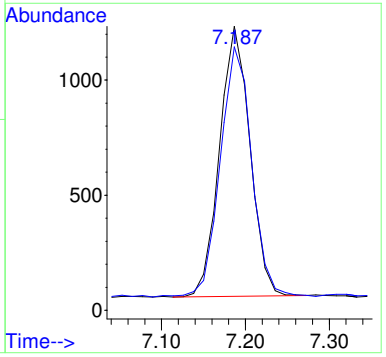


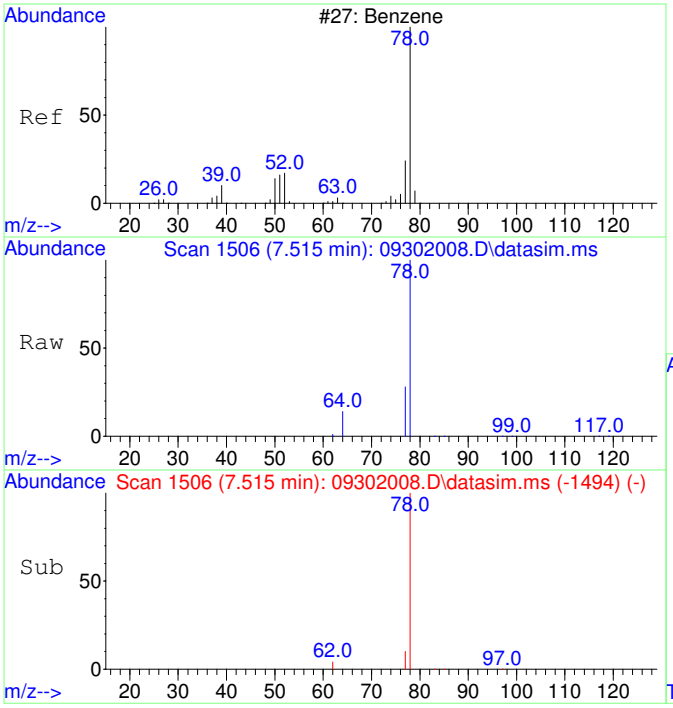


#8
Carbon tetrachloride
Concen: 44.53 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:117 Resp: 2941

Ion	Ratio	Lower	Upper
117	100		
119	96.0	66.4	126.4

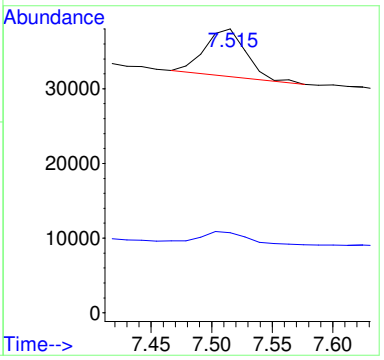


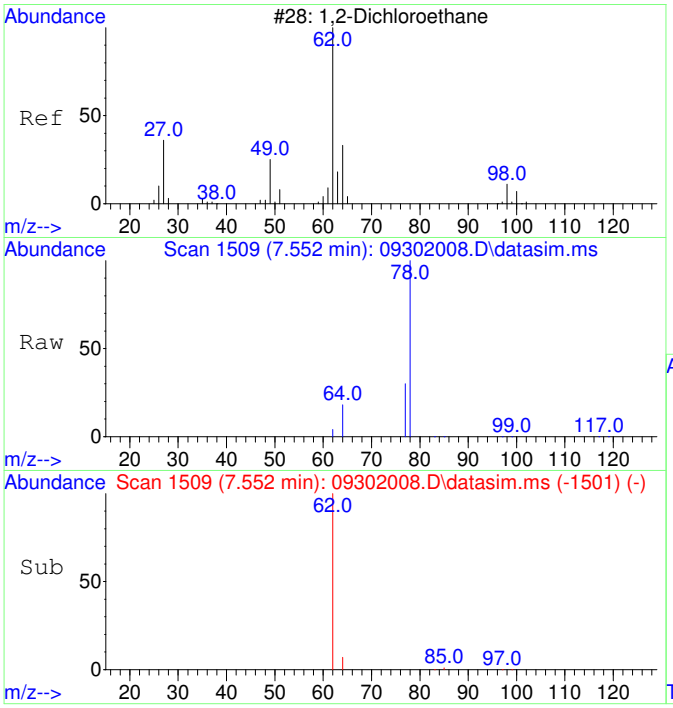


#9
Benzene
Concen: 81.76 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 78 Resp: 14464

Ion	Ratio	Lower	Upper
78	100		
77	40.8	0.0	53.2

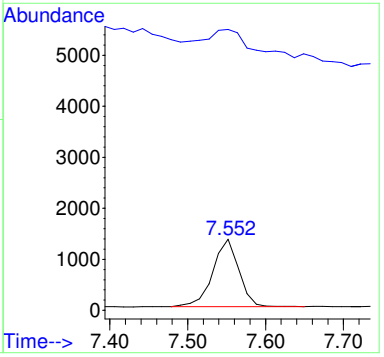


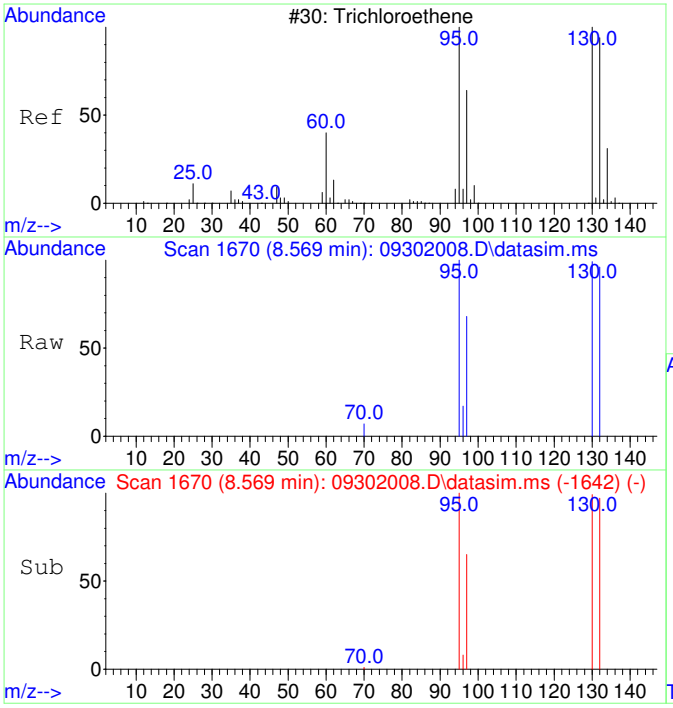


#10
1,2-Dichloroethane
Concen: 48.29 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 62 Resp: 3050

Ion	Ratio	Lower	Upper
62	100		
64	79.1	2.3	62.3#

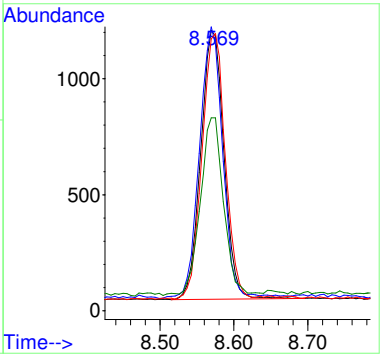


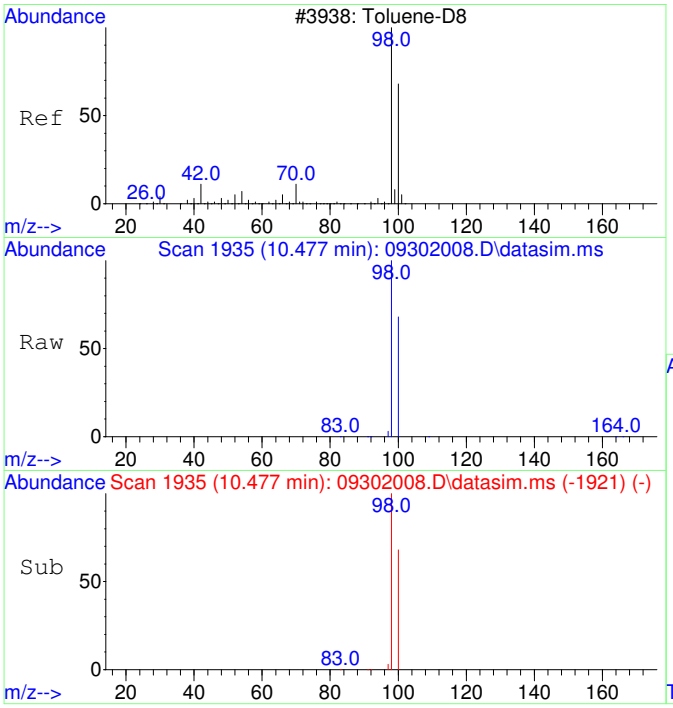


#11
Trichloroethene
Concen: 47.51 ug/L
RT: 8.569 min Scan# 1670
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:130 Resp: 2531

Ion	Ratio	Lower	Upper
130	100		
95	100.7	60.7	120.7
132	98.1	76.0	116.0
97	66.0	38.6	78.6

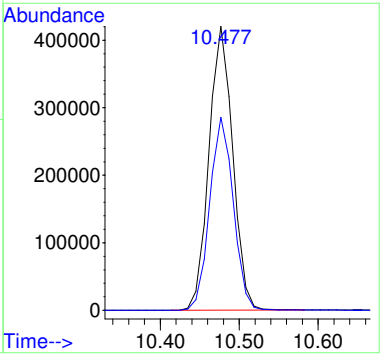


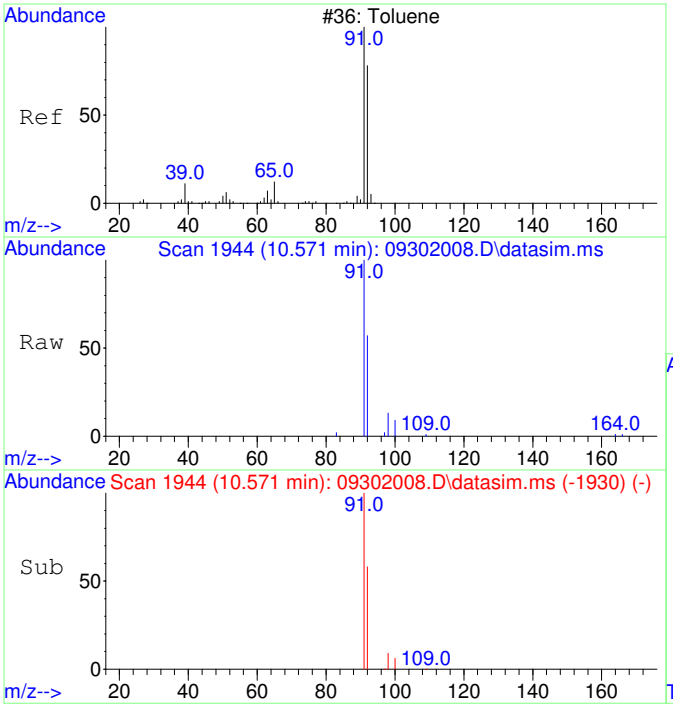


#12
Toluene-d8
Concen: 4299.91 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 98 Resp: 876494

Ion	Ratio	Lower	Upper
98	100		
100	67.3	37.1	97.1

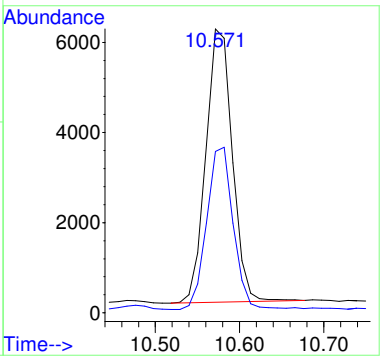


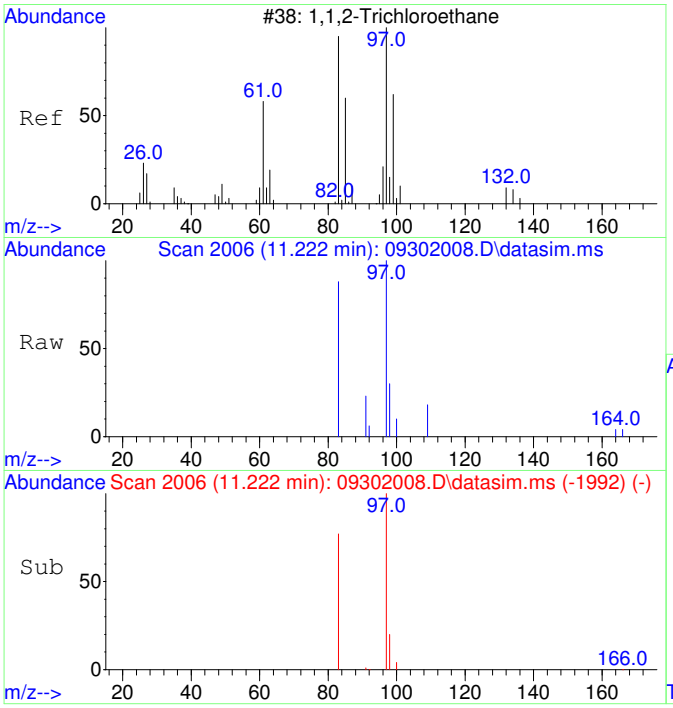


#13
Toluene
Concen: 51.09 ug/L
RT: 10.571 min Scan# 1944
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 13276

Ion	Ratio	Lower	Upper
91	100		
92	58.5	29.9	89.9

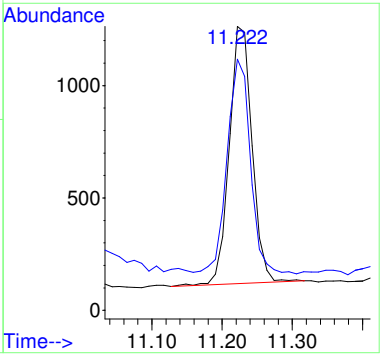


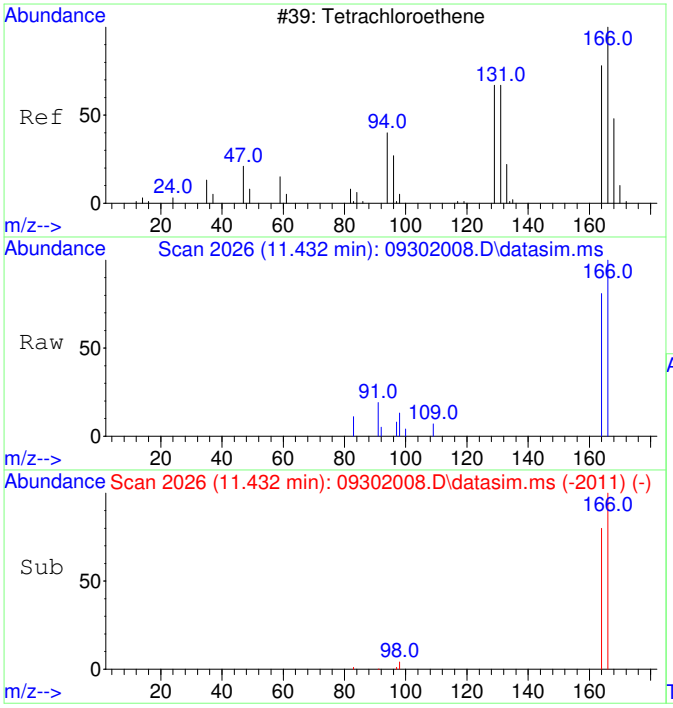


#14
1,1,2-Trichloroethane
Concen: 45.86 ug/L
RT: 11.222 min Scan# 2006
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 97 Resp: 2597

Ion	Ratio	Lower	Upper
97	100		
83	83.9	51.2	111.2

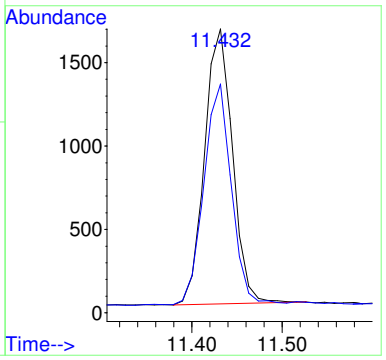


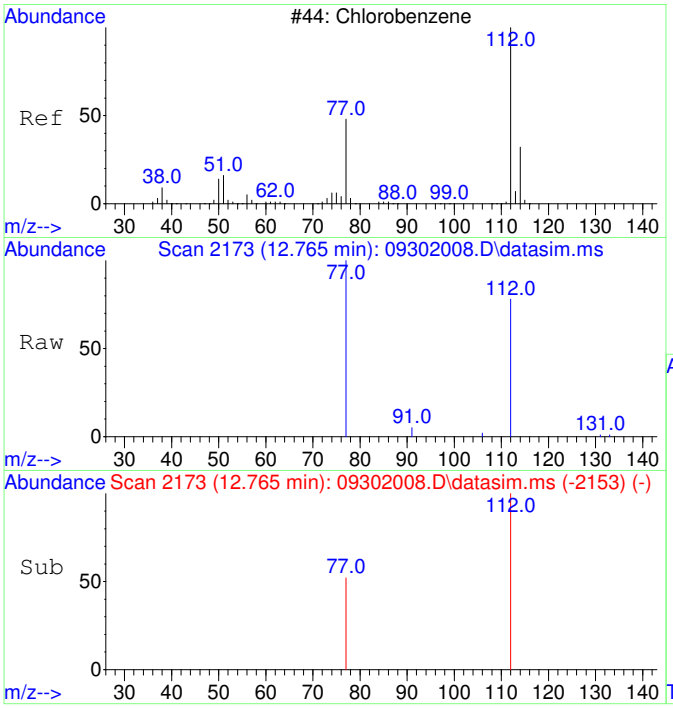


#15
Tetrachloroethene
Concen: 47.10 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:166 Resp: 3542

Ion	Ratio	Lower	Upper
166	100		
164	80.4	47.8	107.8

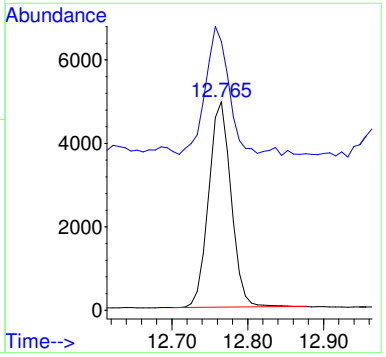


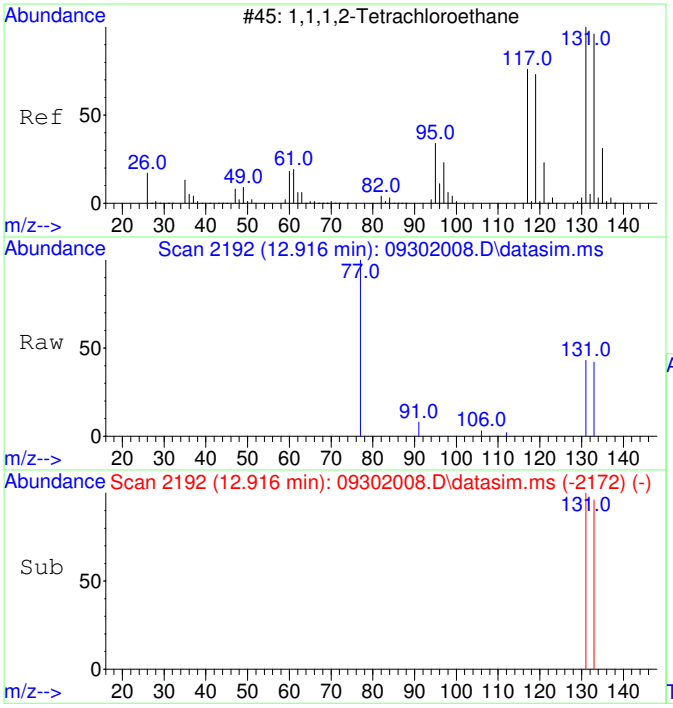


#16
Chlorobenzene
Concen: 54.53 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:112 Resp: 10147

Ion	Ratio	Lower	Upper
112	100		
77	63.2	23.6	83.6

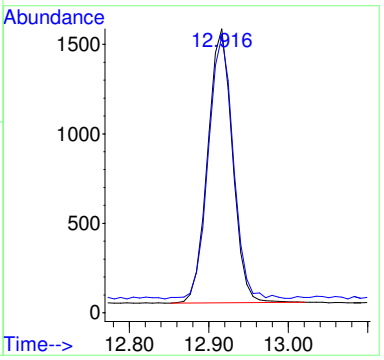


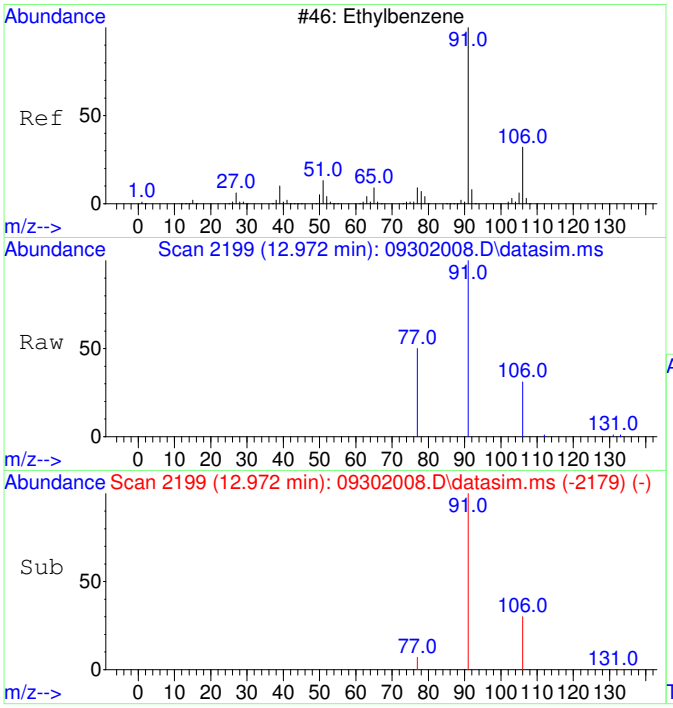


#17
1,1,1,2-Tetrachloroethane
Concen: 49.64 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:131 Resp: 3310

Ion	Ratio	Lower	Upper
131	100		
133	96.0	66.3	126.3

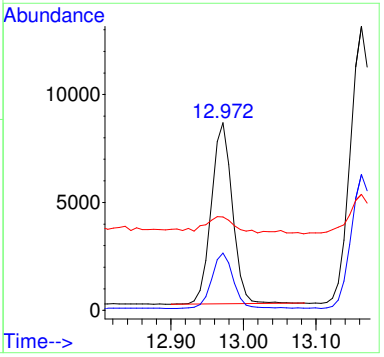


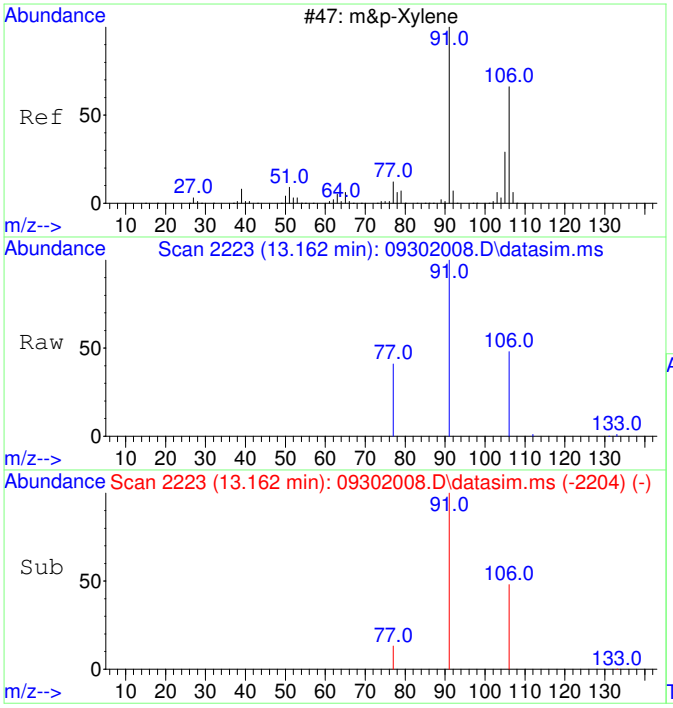


#18
Ethylbenzene
Concen: 53.43 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 16900

Ion	Ratio	Lower	Upper
91	100		
106	31.5	3.0	63.0
77	12.2	0.0	38.2

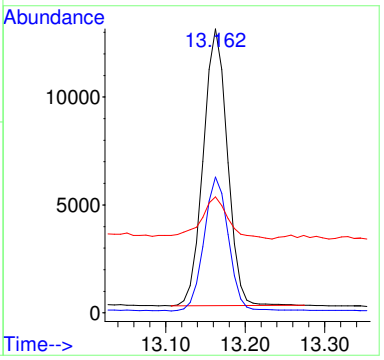


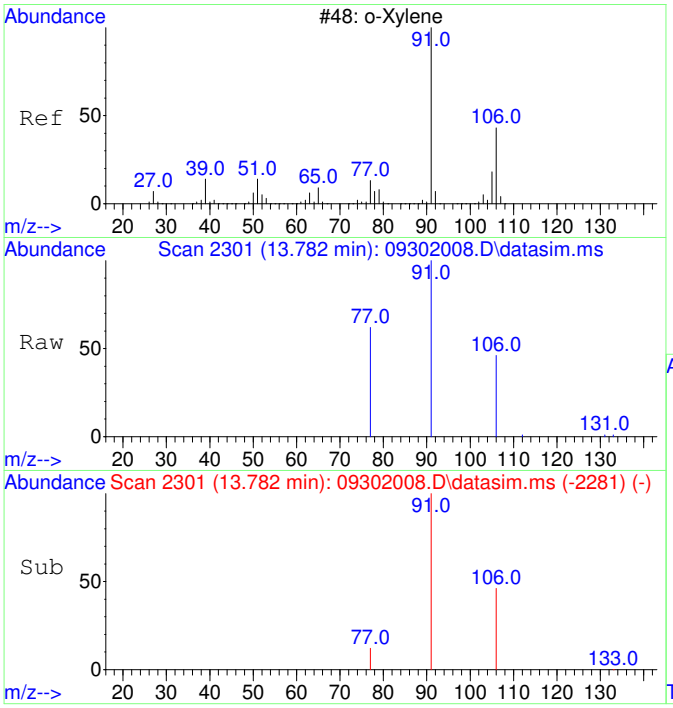


#19
m&p-Xylene
Concen: 109.21 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 27000

Ion	Ratio	Lower	Upper
91	100		
106	48.8	22.2	82.2
77	18.4	0.0	42.4

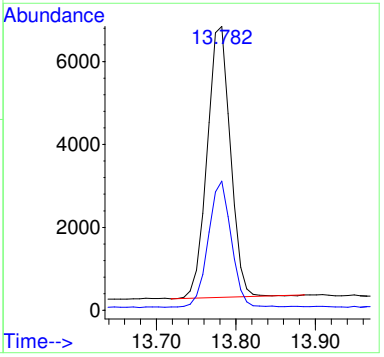


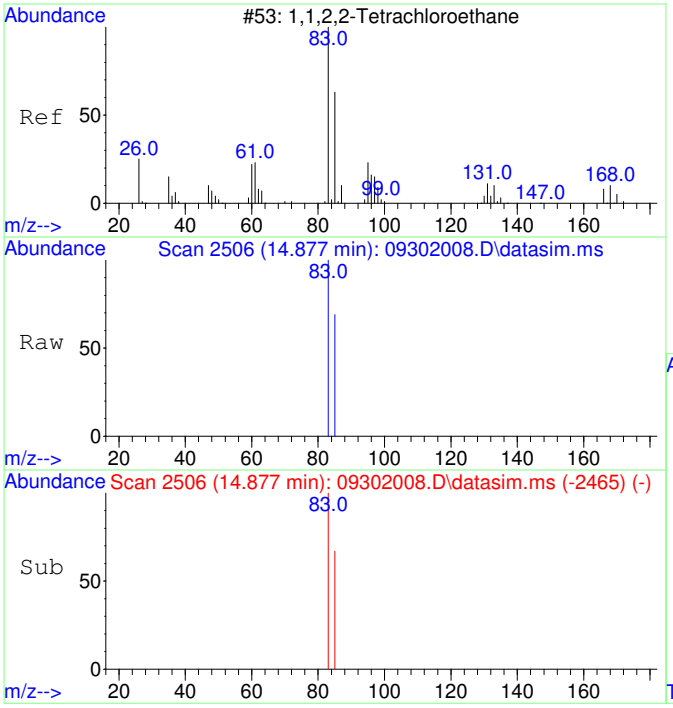


#20
o-Xylene
Concen: 50.02 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 13211

Ion	Ratio	Lower	Upper
91	100		
106	45.9	19.2	79.2

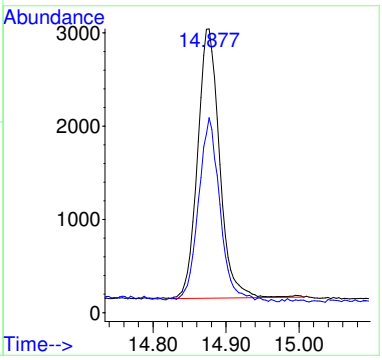


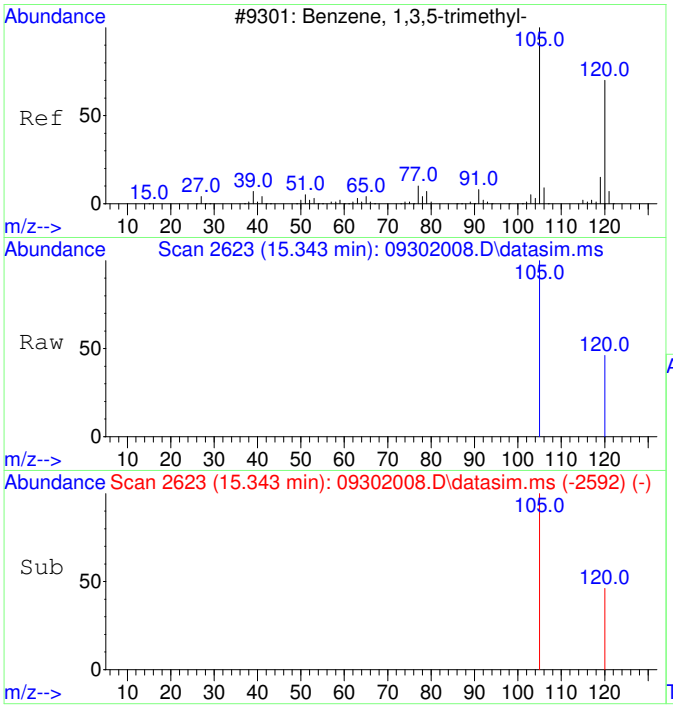


#21
1,1,2,2-Tetrachloroethane
Concen: 51.49 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. 0.004 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 83 Resp: 6028

Ion	Ratio	Lower	Upper
83	100		
85	64.2	34.8	94.8

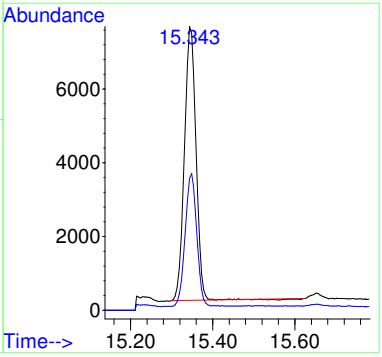


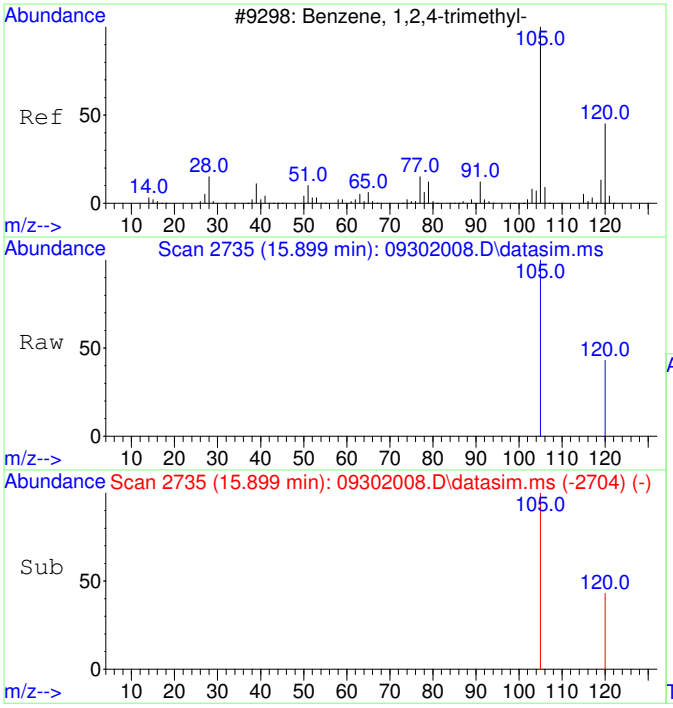


#22
1,3,5-Trimethylbenzene
Concen: 51.19 ug/L
RT: 15.343 min Scan# 2623
Delta R.T. -0.001 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:105 Resp: 14392

Ion	Ratio	Lower	Upper
105	100		
120	48.7	21.1	81.1

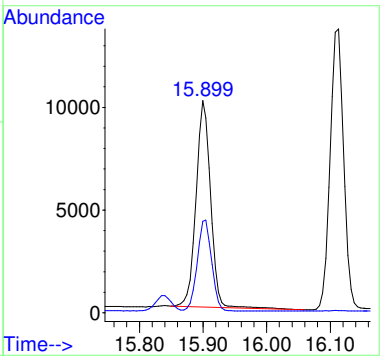


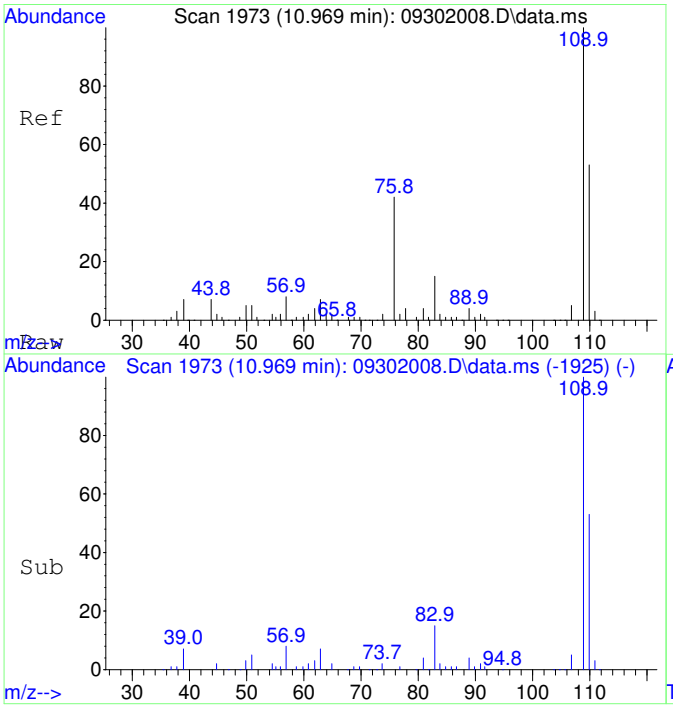


#23
1,2,4-Trimethylbenzene
Concen: 54.74 ug/L
RT: 15.899 min Scan# 2735
Delta R.T. 0.004 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:105 Resp: 15985

Ion	Ratio	Lower	Upper
105	100		
120	42.3	17.2	77.2

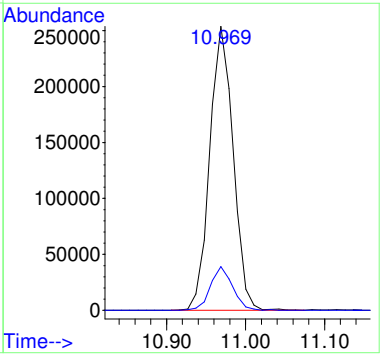


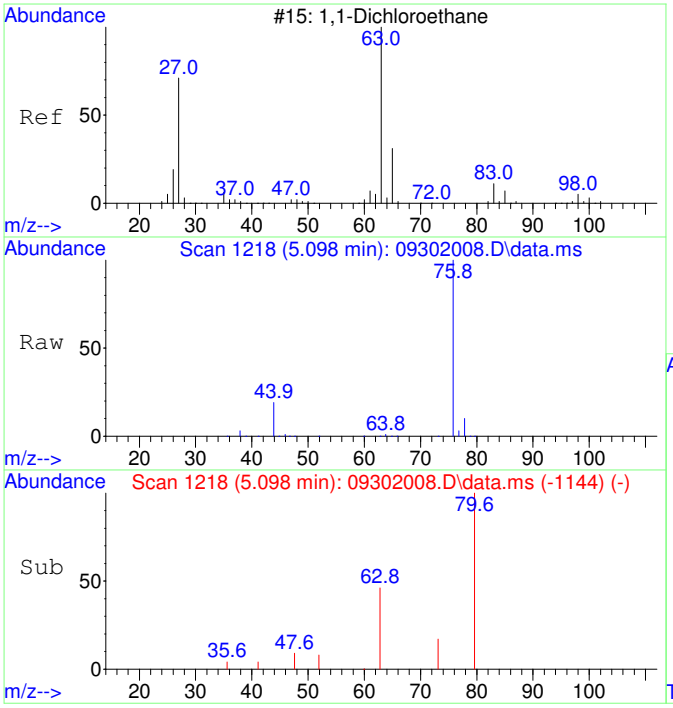


#25
2-Fluorotoluene SCAN
Concen: 5147.21 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:109 Resp: 522467

Ion	Ratio	Lower	Upper
109	100		
83	14.6	0.0	43.8

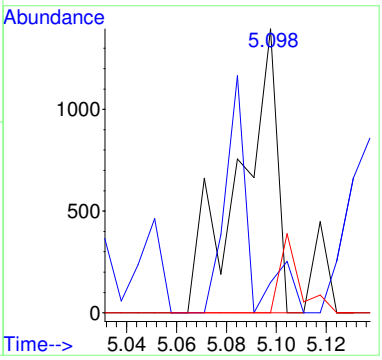


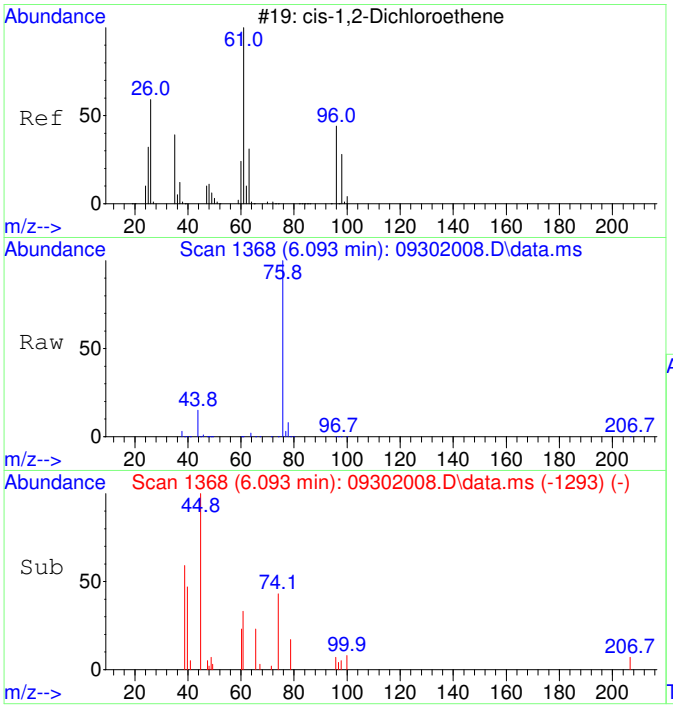


#28
1,1-Dichloroethane SCAN
Concen: 47.29 ug/L
RT: 5.098 min Scan# 1218
Delta R.T. -0.007 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 63 Resp: 1460

Ion	Ratio	Lower	Upper
63	100		
65	53.2	1.3	61.3
83	14.5	0.0	45.9

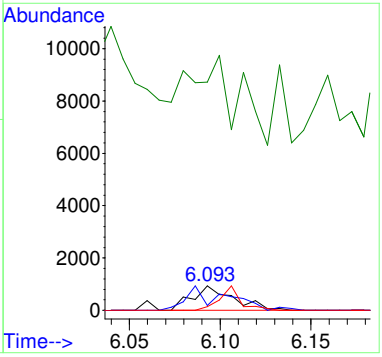


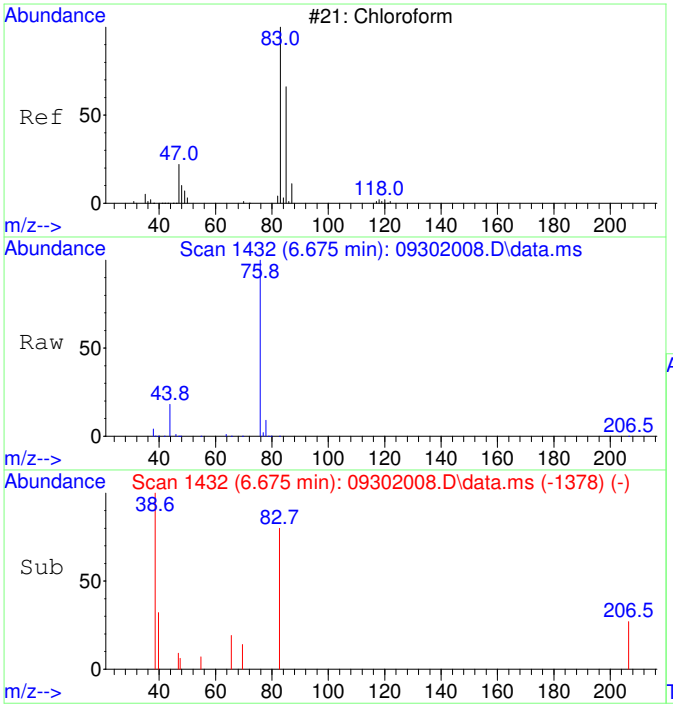


#29
cis-1,2-Dichloroethene SCAN
Concen: 44.53 ug/L
RT: 6.093 min Scan# 1368
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 61 Resp: 1473

Ion	Ratio	Lower	Upper
61	100		
96	97.9	39.9	99.9
98	49.5	13.5	73.5
64	165.0	4.5	64.5#

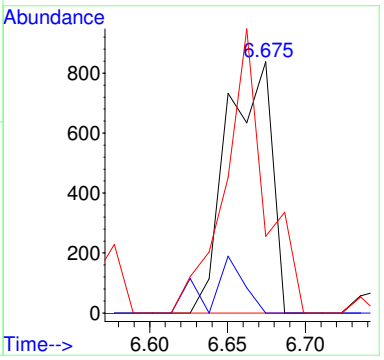


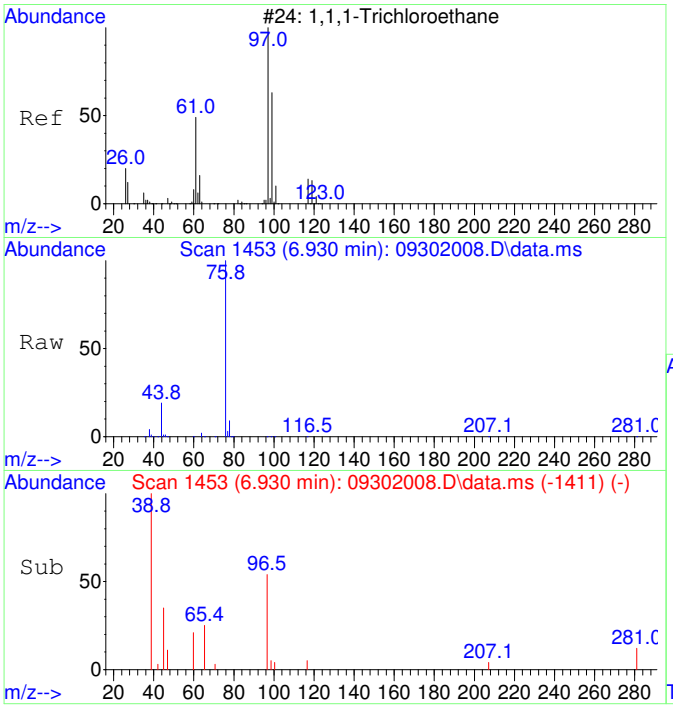


#30
Chloroform SCAN
Concen: 47.19 ug/L
RT: 6.675 min Scan# 1432
Delta R.T. 0.012 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 83 Resp: 1693

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

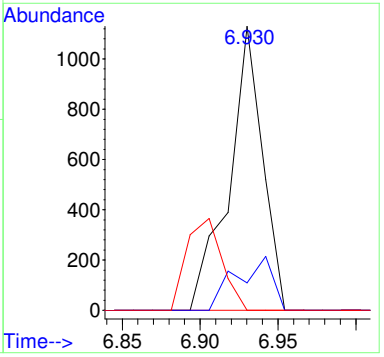


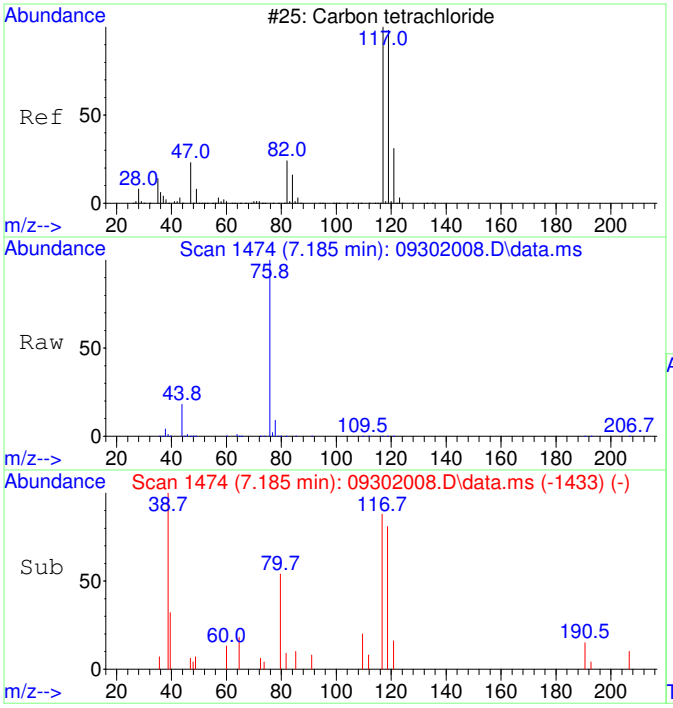


#31
1,1,1-Trichloroethane SCAN
Concen: 52.12 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. 0.012 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 97 Resp: 1704

Ion	Ratio	Lower	Upper
97	100		
99	20.5	43.6	103.6#
61	0.0	18.0	78.0#

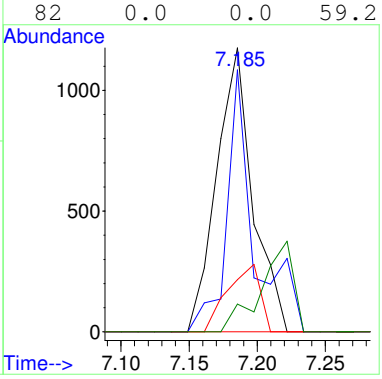


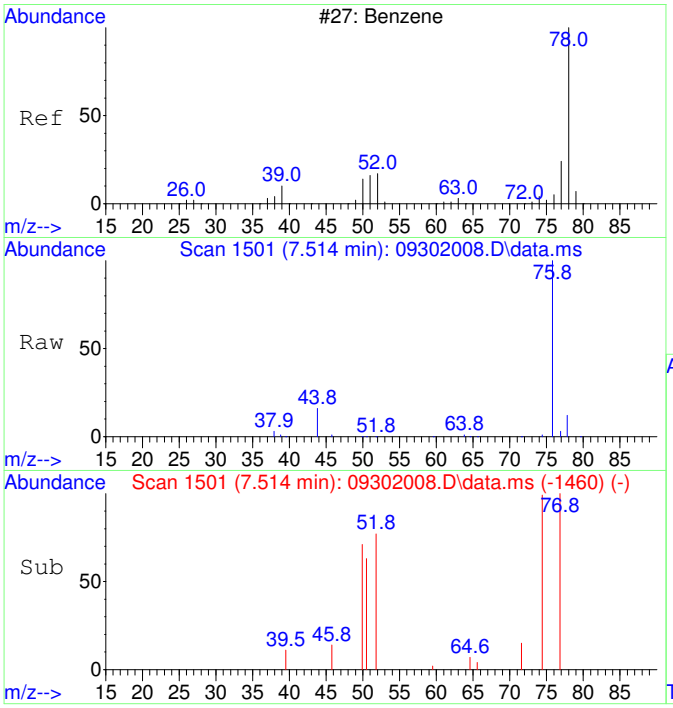


#32
Carbon tetrachloride SCAN
Concen: 63.43 ug/L
RT: 7.185 min Scan# 1474
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:117 Resp: 2163

Ion	Ratio	Lower	Upper
117	100		
119	69.7	75.5	135.5#
121	21.5	0.0	58.8
82	0.0	0.0	59.2

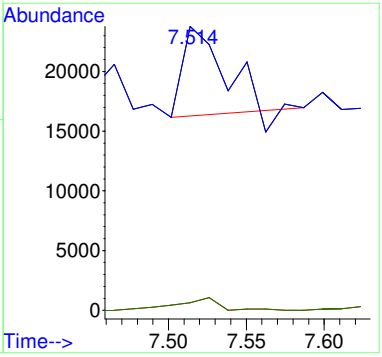


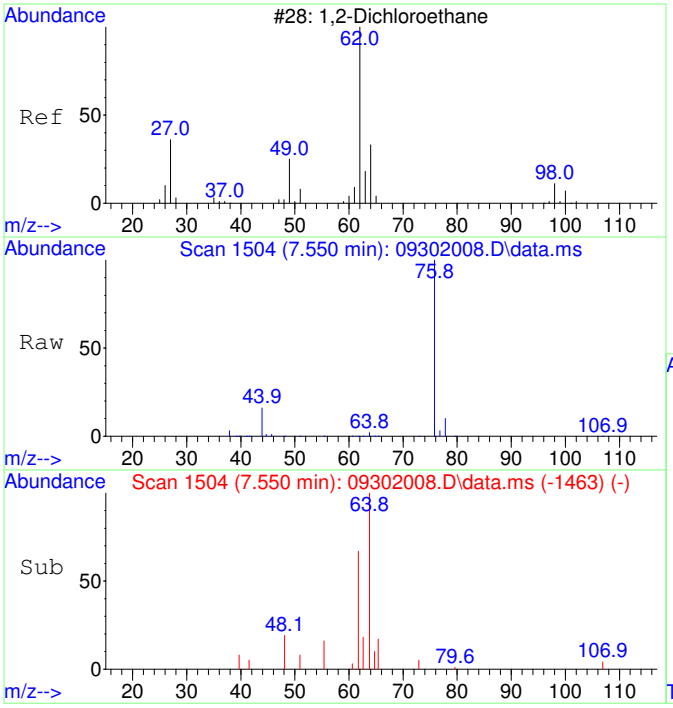


#33
Benzene SCAN
Concen: 149.54 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 78 Resp: 13461

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	15.0	0.0	47.9
51	15.0	0.0	44.1

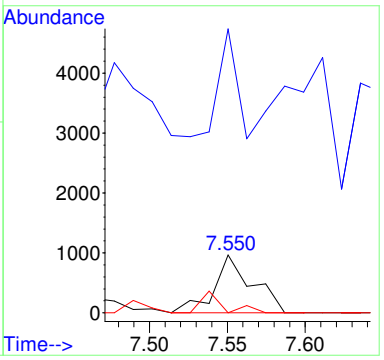


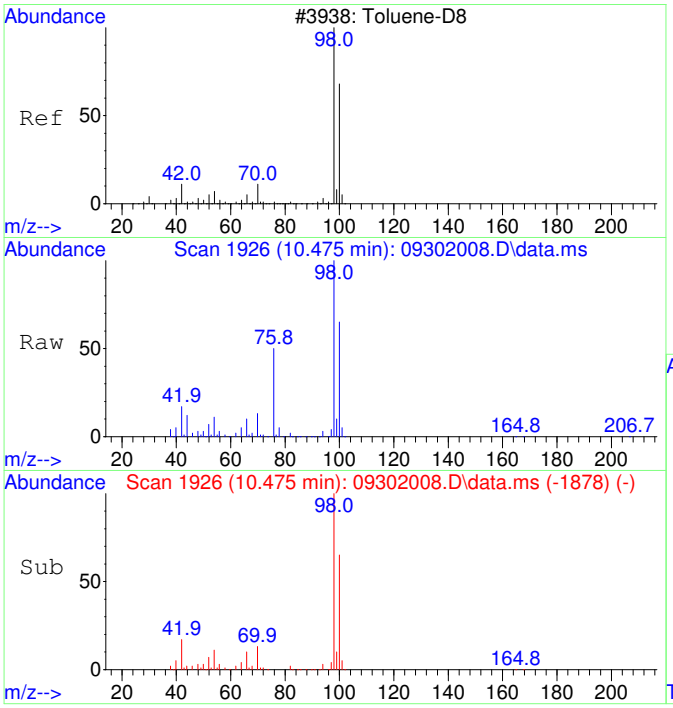


#34
1,2-Dichloroethane SCAN
Concen: 49.46 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 62 Resp: 1644

Ion	Ratio	Lower	Upper
62	100		
64	67.0	5.2	65.2#
49	21.4	3.9	63.9

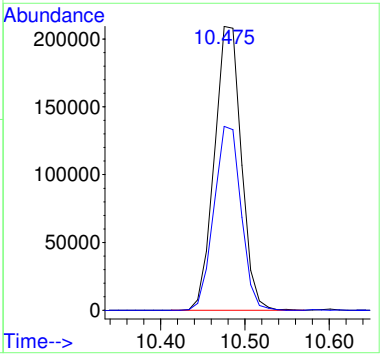


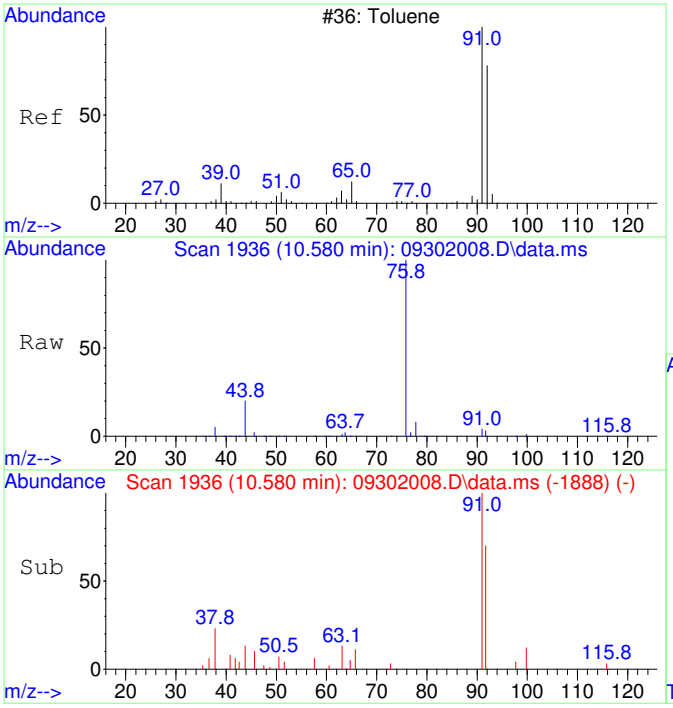


#36
Toluene-d8 SCAN
Concen: 4693.48 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 98 Resp: 465915

Ion	Ratio	Lower	Upper
98	100		
100	65.3	40.0	100.0

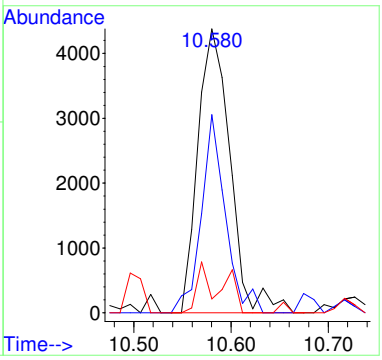


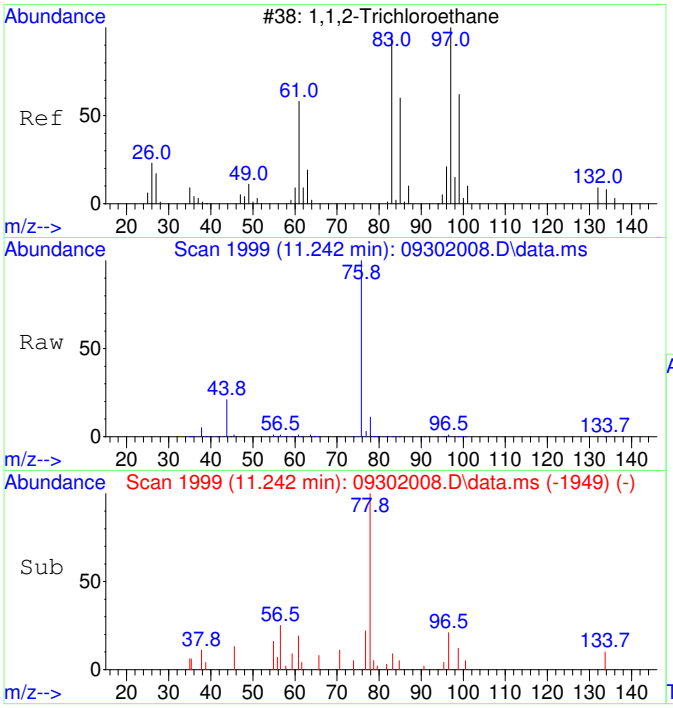


#37
Toluene SCAN
Concen: 79.54 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 10112

Ion	Ratio	Lower	Upper
91	100		
92	52.1	28.3	88.3
65	13.1	0.0	41.0

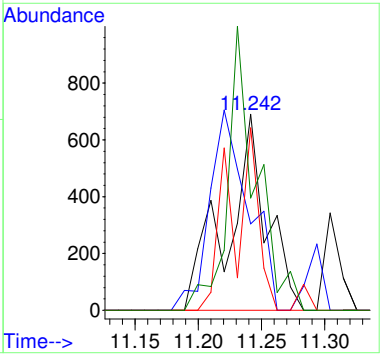


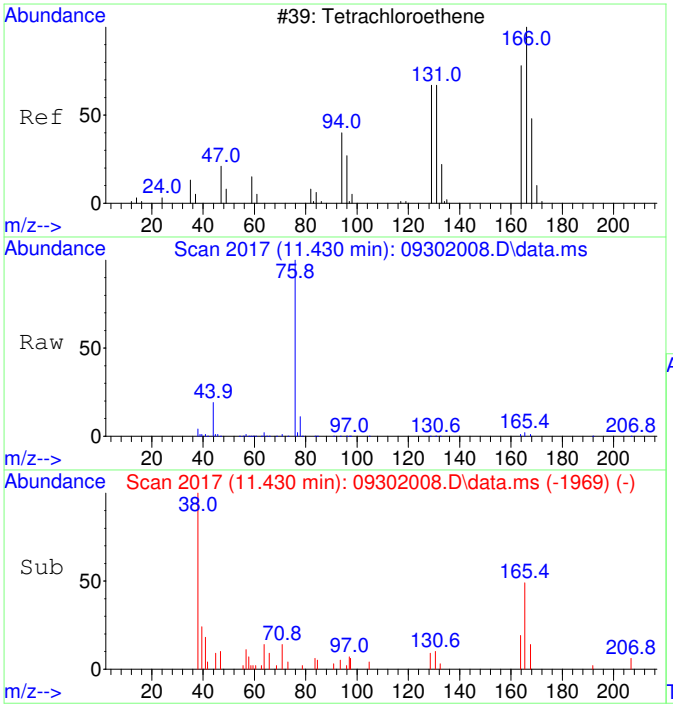


#38
1,1,2-Trichloroethane SCAN
Concen: 52.74 ug/L
RT: 11.242 min Scan# 1999
Delta R.T. 0.021 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 97 Resp: 1505

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	64.5	32.1	92.1
99	104.3	36.7	96.7#

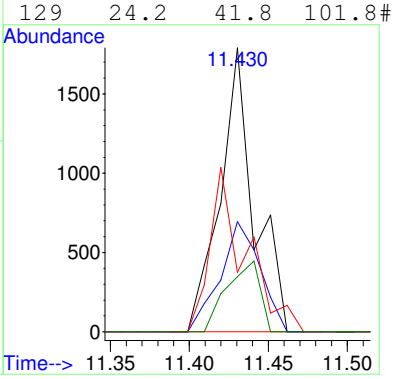


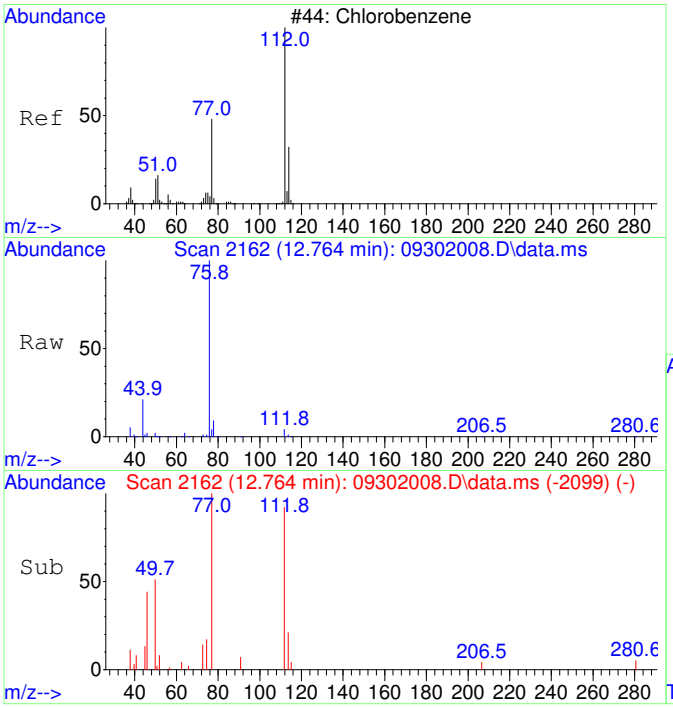


#39
Tetrachloroethene SCAN
Concen: 88.11 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:166 Resp: 2691

Ion	Ratio	Lower	Upper
166	100		
164	45.3	50.9	110.9#
131	0.0	38.7	98.7#
129	24.2	41.8	101.8#

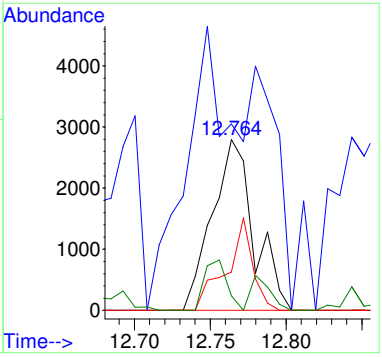


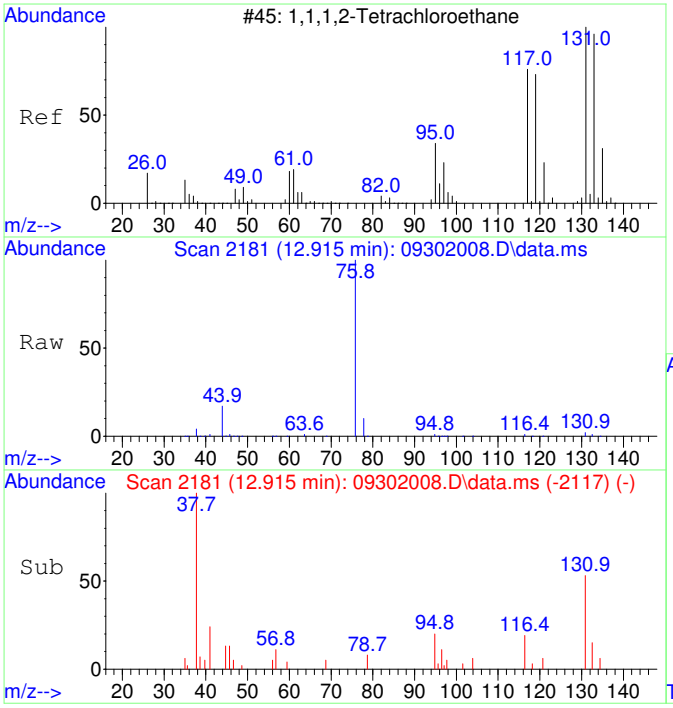


#40
Chlorobenzene SCAN
Concen: 61.71 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:112 Resp: 5361

Ion	Ratio	Lower	Upper
112	100		
77	0.0	28.2	88.2#
114	33.9	2.3	62.3
51	9.4	0.0	50.1

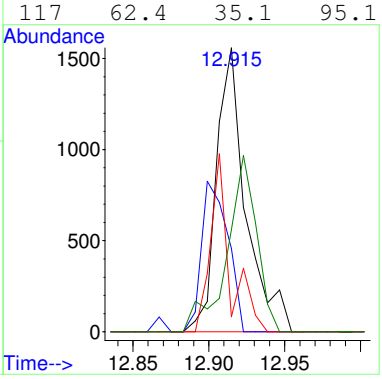


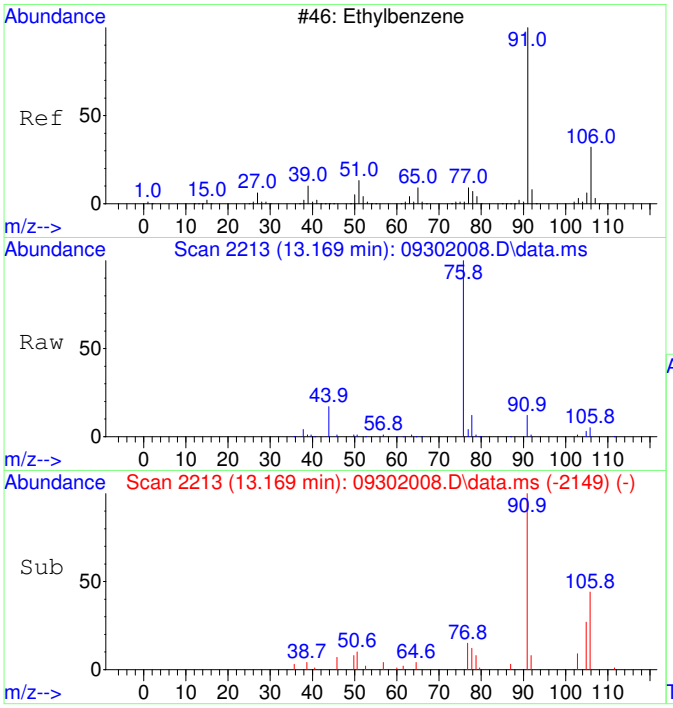


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 65.42 ug/L
RT: 12.915 min Scan# 2181
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:131 Resp: 2103

Ion	Ratio	Lower	Upper
131	100		
133	0.0	66.9	126.9#
119	41.2	40.4	100.4
117	62.4	35.1	95.1

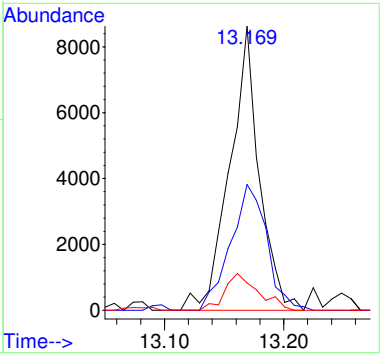


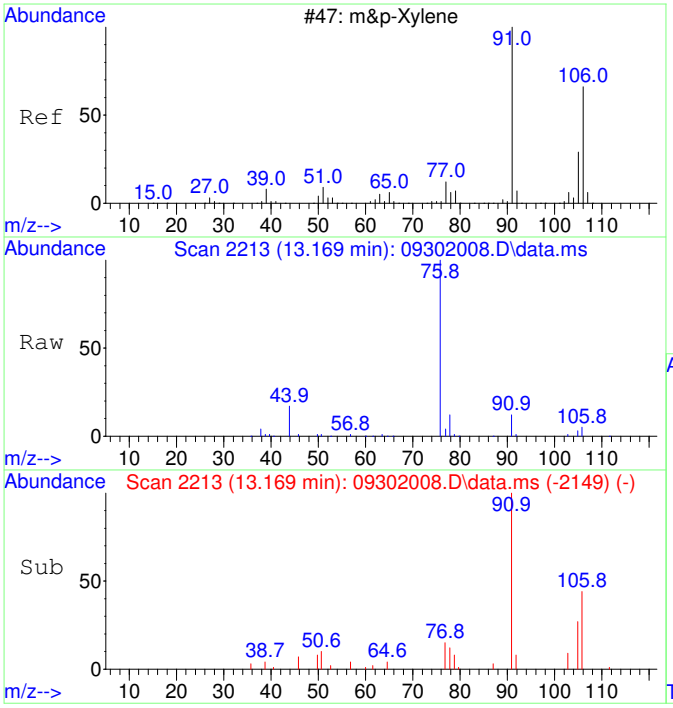


#42
Ethylbenzene SCAN
Concen: 64.24 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 14879

Ion	Ratio	Lower	Upper
91	100		
106	54.3	23.1	83.1
51	14.6	0.0	40.1

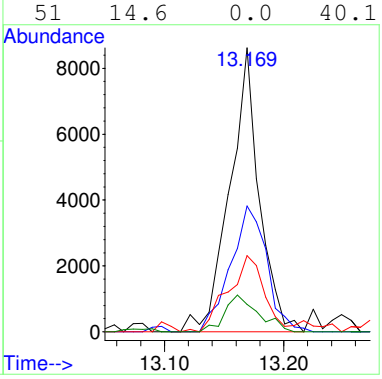


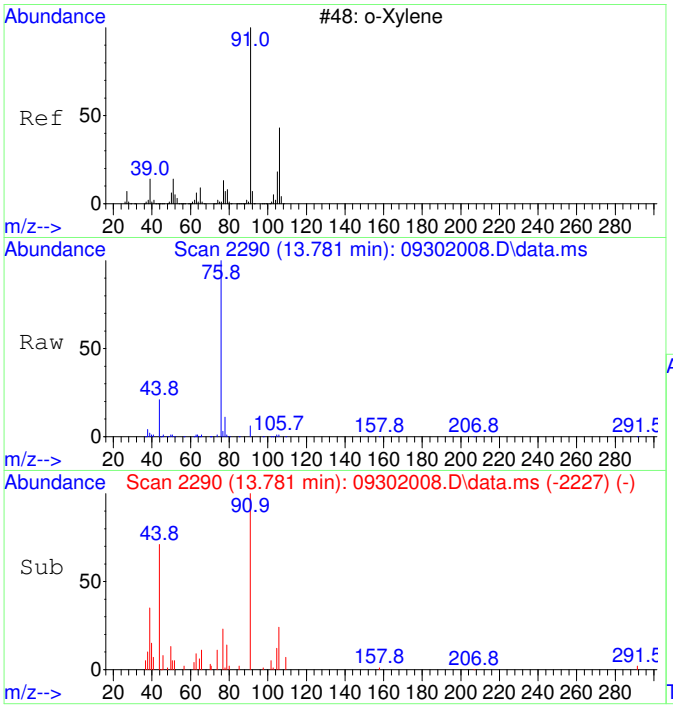


#43
m&p-Xylene SCAN
Concen: 64.24 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 14879

Ion	Ratio	Lower	Upper
91	100		
106	54.3	23.1	83.1
105	30.0	0.0	54.7
51	14.6	0.0	40.1

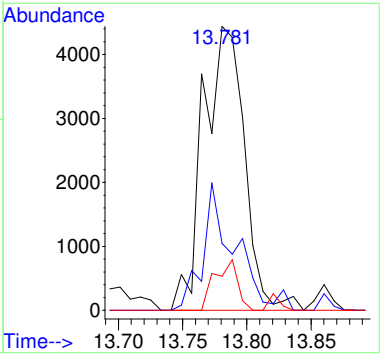


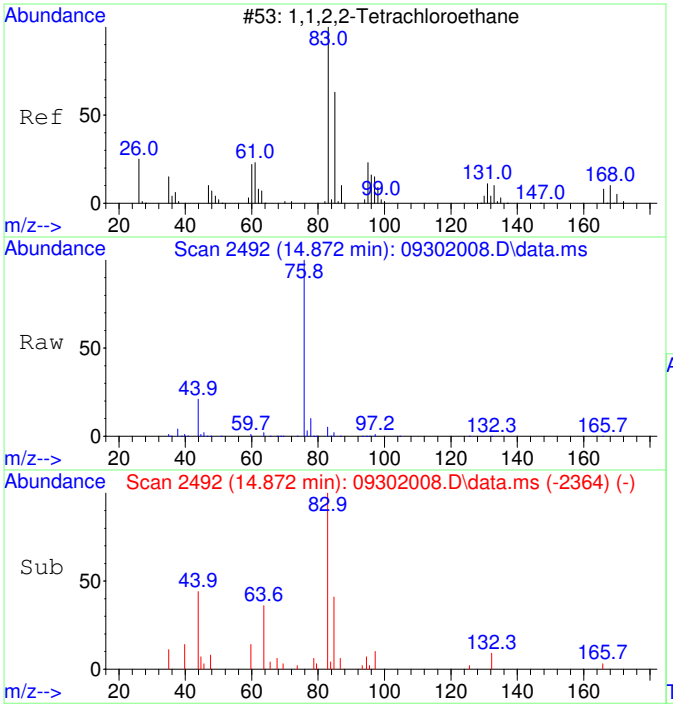


#44
o-Xylene SCAN
Concen: 79.90 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 9905

Ion	Ratio	Lower	Upper
91	100		
106	34.9	18.0	78.0
105	9.9	0.0	56.6

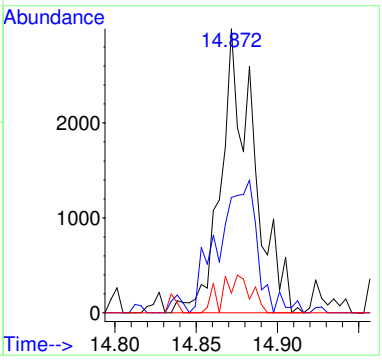


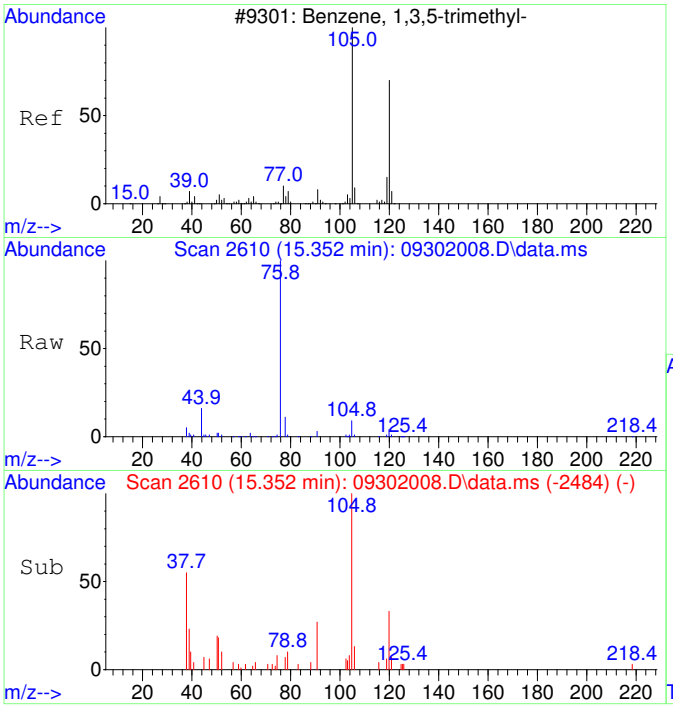


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 69.92 ug/L
RT: 14.872 min Scan# 2492
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 83 Resp: 4227

Ion	Ratio	Lower	Upper
83	100		
85	55.8	35.9	95.9
95	9.7	0.0	47.4

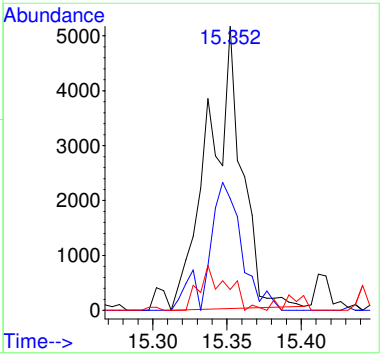


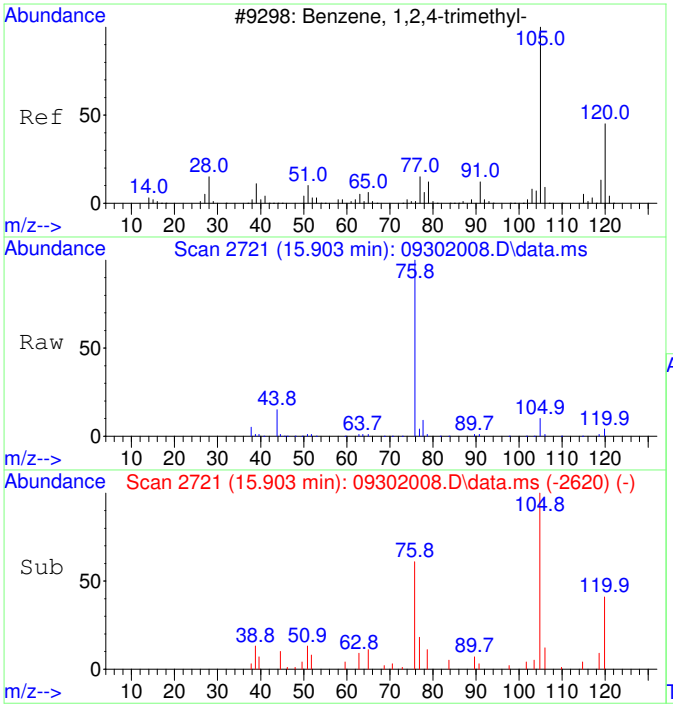


#46
1,3,5-Trimethylbenzene SCAN
Concen: 61.44 ug/L
RT: 15.352 min Scan# 2610
Delta R.T. 0.009 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:105 Resp: 8028

Ion	Ratio	Lower	Upper
105	100		
120	45.1	18.3	78.3
119	13.3	0.0	43.1

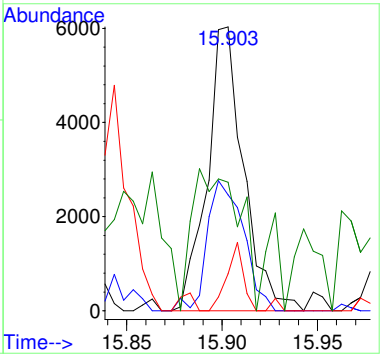




#47
1,2,4-Trimethylbenzene SCAN
Concen: 59.66 ug/L
RT: 15.903 min Scan# 2721
Delta R.T. 0.004 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:105 Resp: 7976

Ion	Ratio	Lower	Upper
105	100		
120	46.0	16.9	76.9
119	10.8	0.0	41.9
77	0.0	0.0	42.3



Quantitation Report (QT Reviewed)

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M.I. Performed By:

TD at 9:38 am, Oct 01, 2020

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302008.D
Acq On : 30 Sep 2020 16:10
InstName : AG5975C
Operator : TD
Sample : B20I024-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 30 16:28:47 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

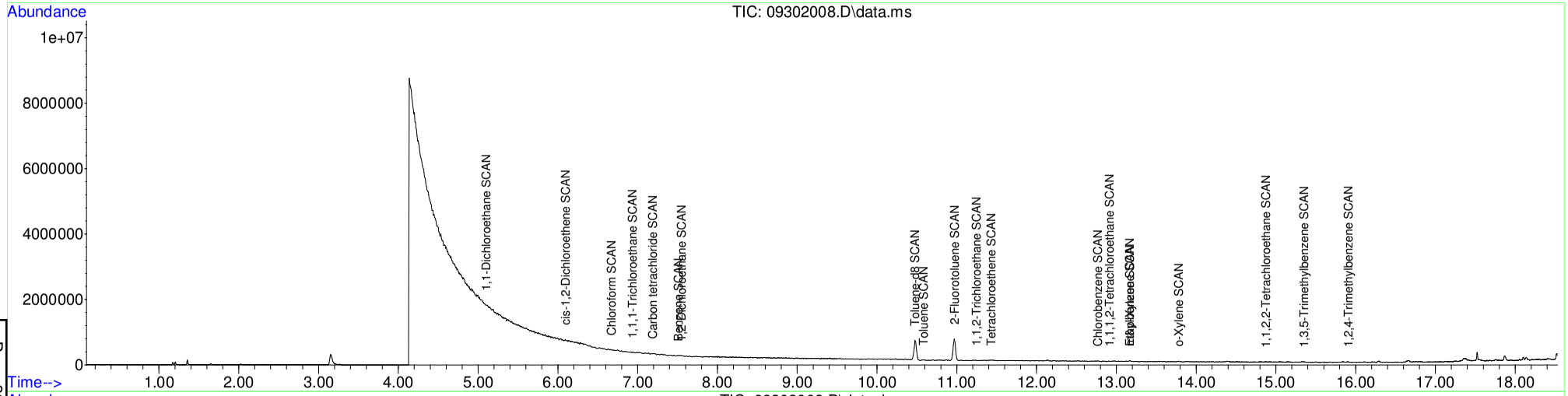
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)	
Internal Standards						
1) 2-Fluorotoluene	10.970	109	1041272	5000.00 ug/L	0.00	IS ↑
System Monitoring Compounds						
12) Toluene-d8	10.477	98	876494	4299.91 ug/L	0.00	
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.00%#			
Target Compounds					Qvalue	
2] 1,1-Dichloroethene	3.090	61	1754m	42.18 ug/L		
3] trans-1,2-Dichloroethene	4.402	61	2186	45.50 ug/L	67	
4] 1,1-Dichloroethane	5.099	63	2777	46.44 ug/L	71	
5] cis-1,2-Dichloroethene	6.094	61	2972	47.08 ug/L	98	
6] Chloroform	6.664	83	3179	49.20 ug/L	100	
7] 1,1,1-Trichloroethane	6.919	97	3126	44.55 ug/L	98	
8] Carbon tetrachloride	7.187	117	2941	44.53 ug/L	100	
9] Benzene	7.515	78	14464	81.76 ug/L	64	
10] 1,2-Dichloroethane	7.552	62	3050	48.29 ug/L #	16	
11] Trichloroethene	8.569	130	2531	47.51 ug/L	93	
13] Toluene	10.571	91	13276	51.09 ug/L	98	
14] 1,1,2-Trichloroethane	11.222	97	2597	45.86 ug/L	97	
15] Tetrachloroethene	11.432	166	3542	47.10 ug/L	97	
16] Chlorobenzene	12.765	112	10147	54.53 ug/L	87	
17] 1,1,1,2-Tetrachloroethane	12.916	131	3310	49.64 ug/L	100	
18] Ethylbenzene	12.972	91	16900	53.43 ug/L	96	
19] m&p-Xylene	13.162	91	27000	109.21 ug/L	93	
20] o-Xylene	13.782	91	13211	50.02 ug/L	95	
21] 1,1,2,2-Tetrachloroethane	14.877	83	6028	51.49 ug/L	99	
22] 1,3,5-Trimethylbenzene	15.343	105	14392	51.19 ug/L	97	
23] 1,2,4-Trimethylbenzene	15.899	105	15985	54.74 ug/L	93	
25) 2-Fluorotoluene SCAN	10.969	109	522467	5147.21 ug/L	98	
28) 1,1-Dichloroethane SCAN	5.098	63	1460	47.29 ug/L	73	
29) cis-1,2-Dichloroethene...	6.093	61	1473	44.53 ug/L #	28	
30) Chloroform SCAN	6.675	83	1693	47.19 ug/L #	27	
31) 1,1,1-Trichloroethane ...	6.930	97	1704	52.12 ug/L #	34	
32) Carbon tetrachloride SCAN	7.185	117	2163	63.43 ug/L #	65	
33) Benzene SCAN	7.514	78	13461	149.54 ug/L	99	
34) 1,2-Dichloroethane SCAN	7.550	62	1644	49.46 ug/L #	61	
36) Toluene-d8 SCAN	10.475	98	465915	4693.48 ug/L	94	
37) Toluene SCAN	10.580	91	10112	79.54 ug/L	92	
38) 1,1,2-Trichloroethane ...	11.242	97	1505	52.74 ug/L #	46	
39) Tetrachloroethene SCAN	11.430	166	2691	88.11 ug/L #	41	
40) Chlorobenzene SCAN	12.764	112	5361	61.71 ug/L #	54	
41) 1,1,1,2-Tetrachloroeth...	12.915	131	2103	65.42 ug/L #	47	
42) Ethylbenzene SCAN	13.169	91	14879	64.24 ug/L	97	
43) m&p-Xylene SCAN	13.169	91	14879	64.24 ug/L	95	
44) o-Xylene SCAN	13.781	91	9905	79.90 ug/L	76	
45) 1,1,2,2-Tetrachloroeth...	14.872	83	4227	69.92 ug/L	86	
46) 1,3,5-Trimethylbenzene...	15.352	105	8028	61.44 ug/L	96	
47) 1,2,4-Trimethylbenzene...	15.903	105	7976	59.66 ug/L #	93	

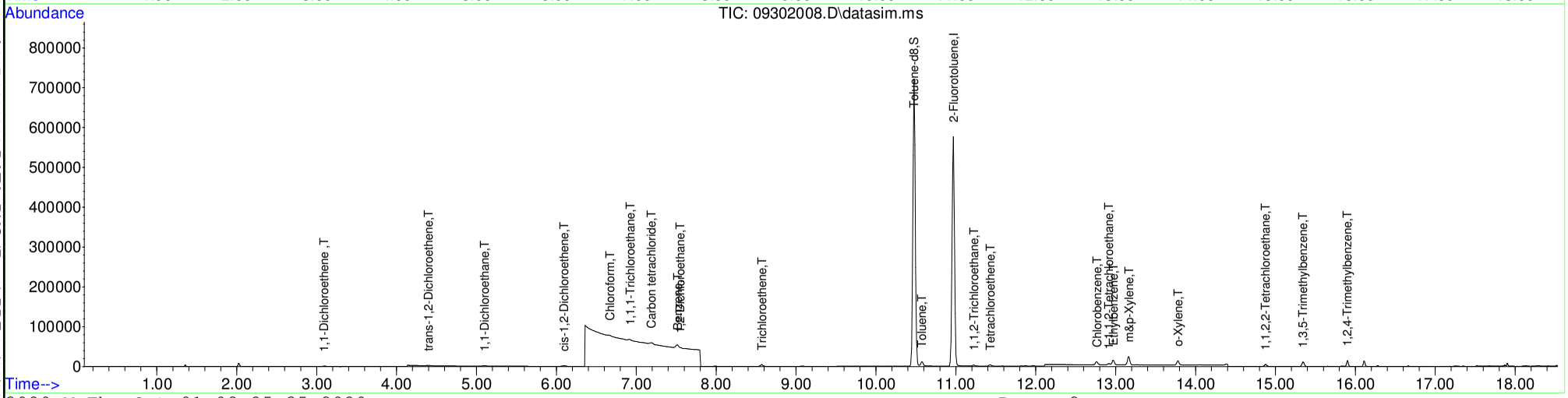
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302008.D
Acq On : 30 Sep 2020 16:10
InstName : AG5975C
Operator : TD
Sample : B20I024-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 30 16:28:47 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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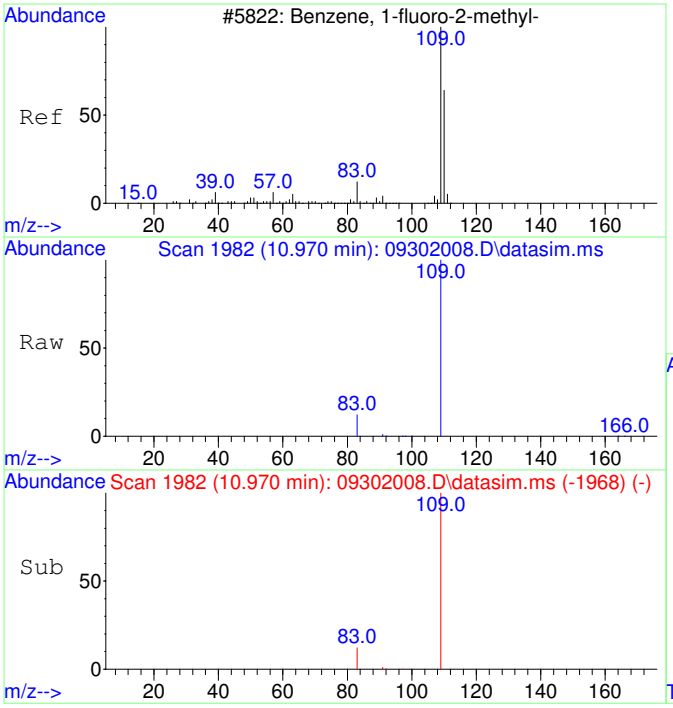
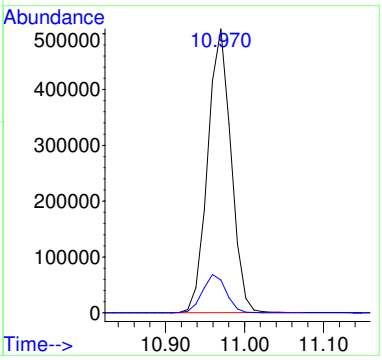
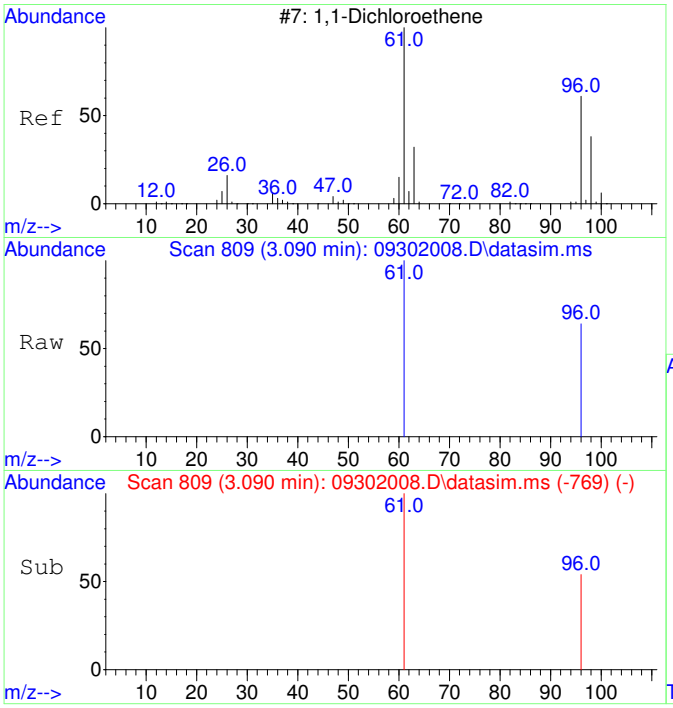


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:109 Resp: 1041272

Ion	Ratio	Lower	Upper
109	100		
83	13.7	0.0	42.3

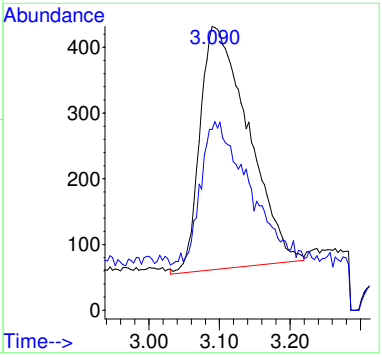


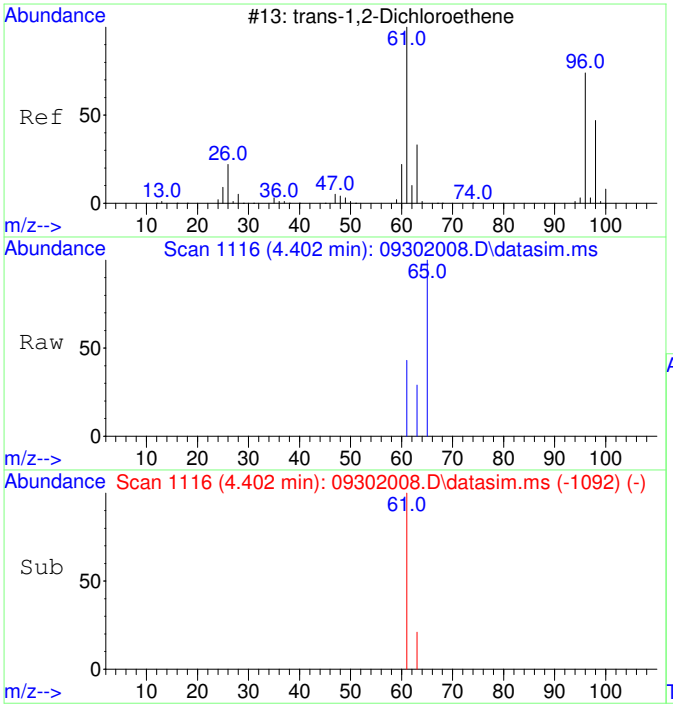


#2
1,1-Dichloroethene
Concen: 42.18 ug/L m
RT: 3.090 min Scan# 809
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 61 Resp: 1754

Ion	Ratio	Lower	Upper
61	100		
96	77.0	37.2	97.2

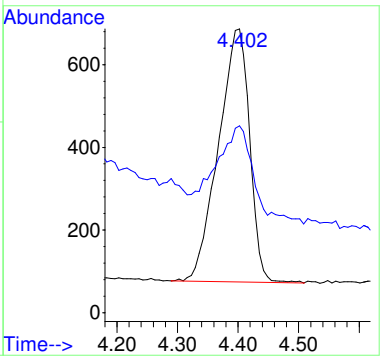


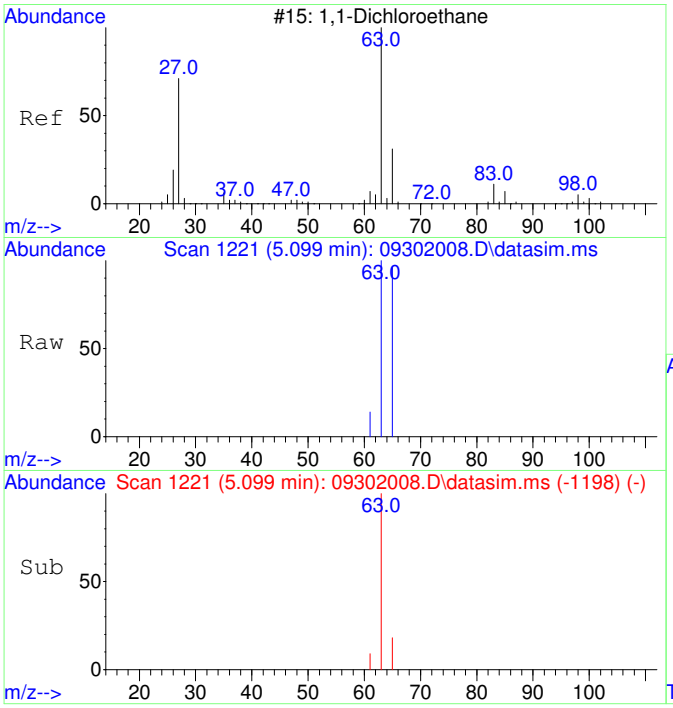


#3
trans-1,2-Dichloroethene
Concen: 45.50 ug/L
RT: 4.402 min Scan# 1116
Delta R.T. 0.007 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 61 Resp: 2186

Ion	Ratio	Lower	Upper
61	100		
63	51.0	2.4	62.4

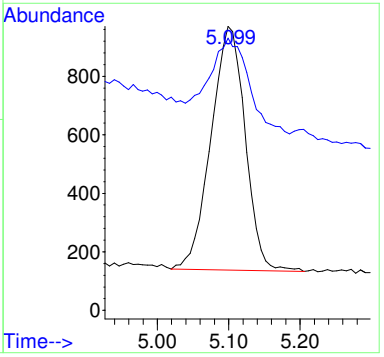


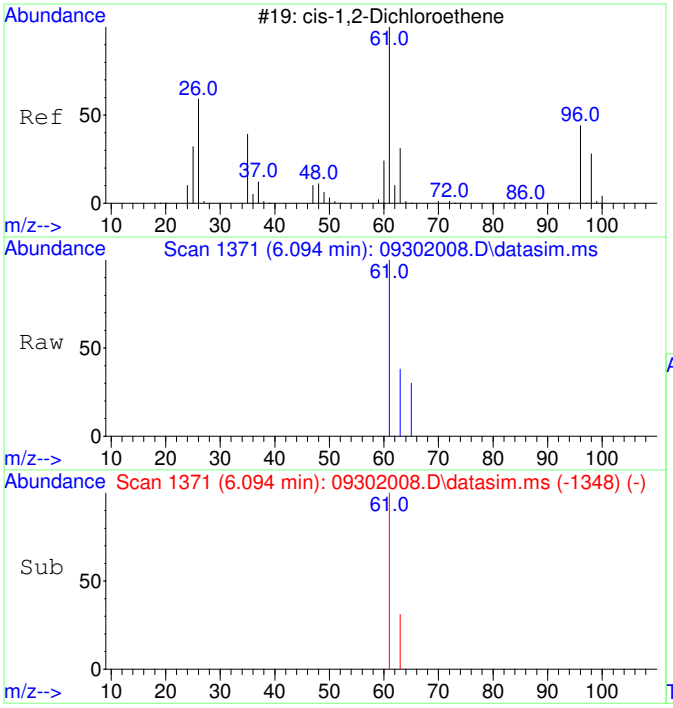


#4
1,1-Dichloroethane
Concen: 46.44 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 63 Resp: 2777

Ion	Ratio	Lower	Upper
63	100		
65	48.2	1.8	61.8

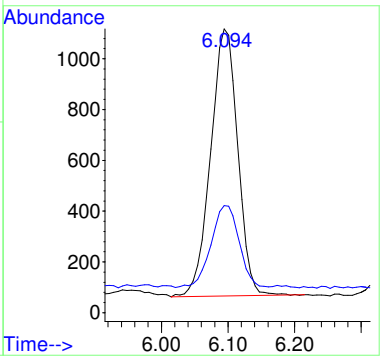


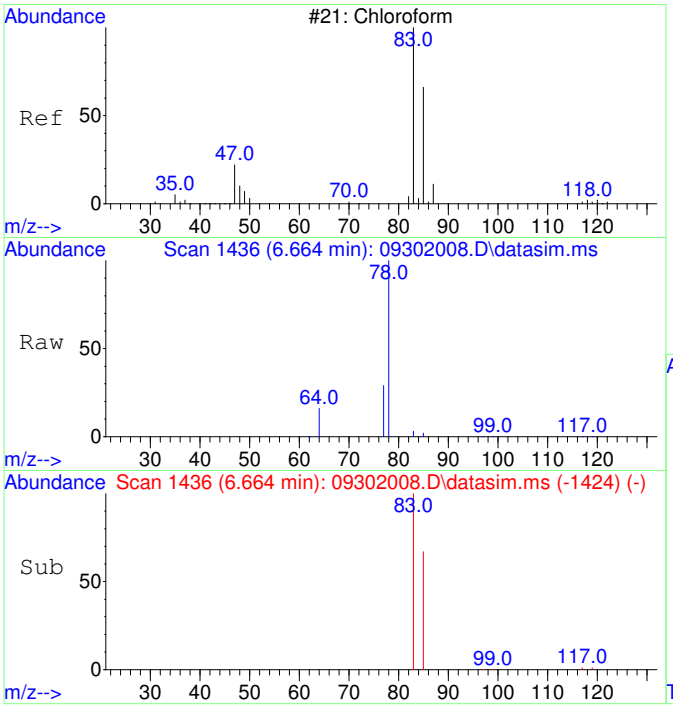


#5
cis-1,2-Dichloroethene
Concen: 47.08 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 61 Resp: 2972

Ion	Ratio	Lower	Upper
61	100		
63	31.4	2.5	62.5

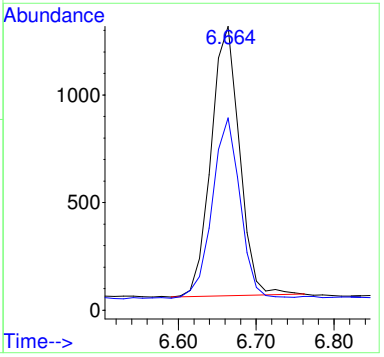


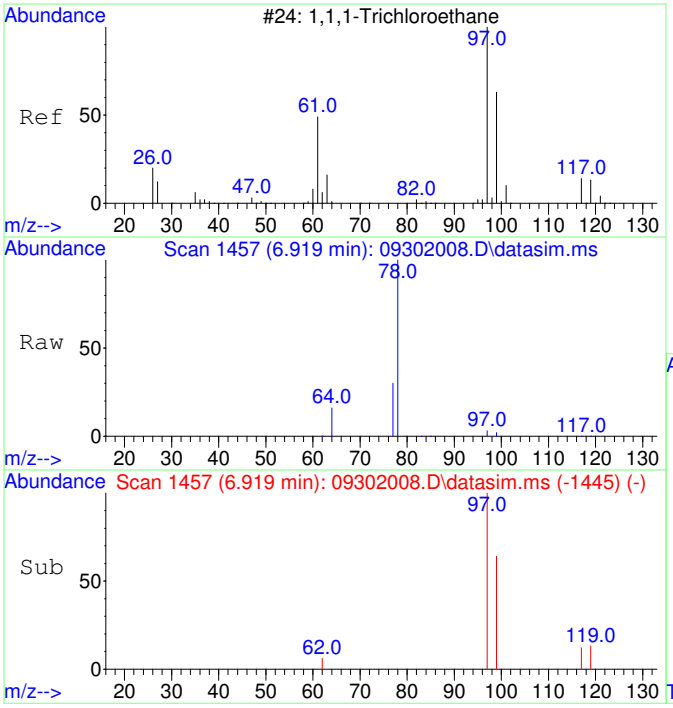


#6
Chloroform
Concen: 49.20 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 83 Resp: 3179

Ion	Ratio	Lower	Upper
83	100		
85	64.9	35.1	95.1

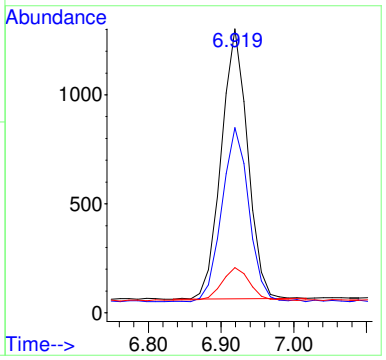


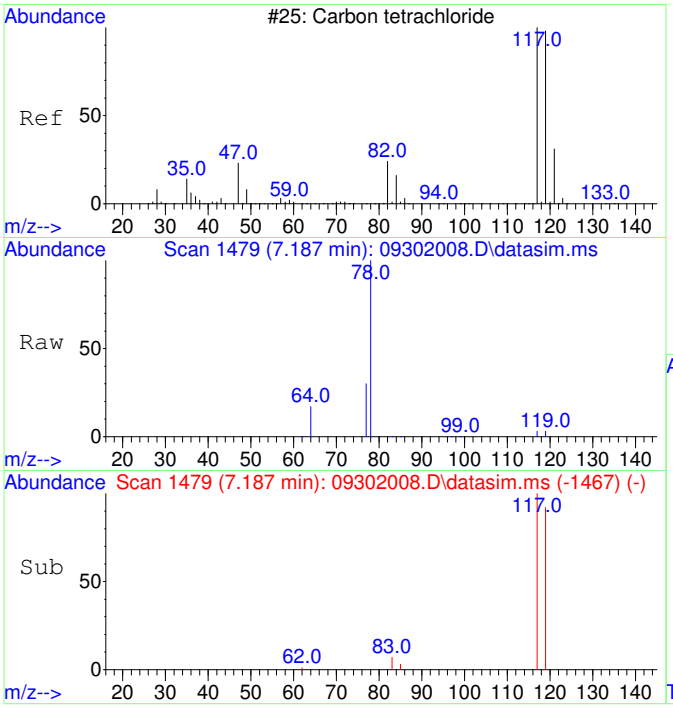


#7
1,1,1-Trichloroethane
Concen: 44.55 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 97 Resp: 3126

Ion	Ratio	Lower	Upper
97	100		
99	66.0	34.6	94.6
117	13.3	0.0	43.2

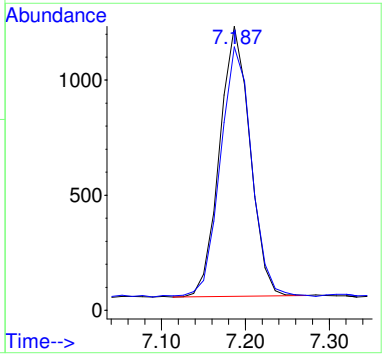


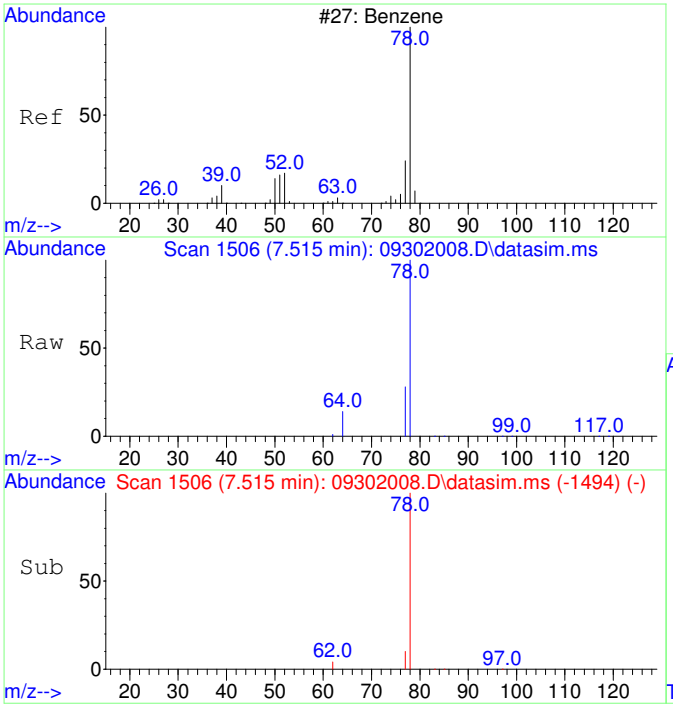


#8
Carbon tetrachloride
Concen: 44.53 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:117 Resp: 2941

Ion	Ratio	Lower	Upper
117	100		
119	96.0	66.4	126.4

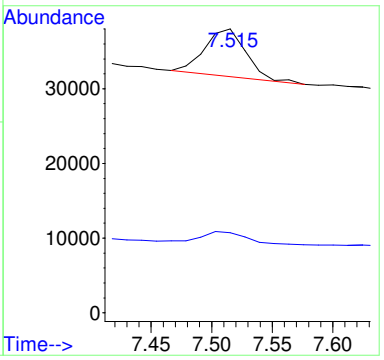


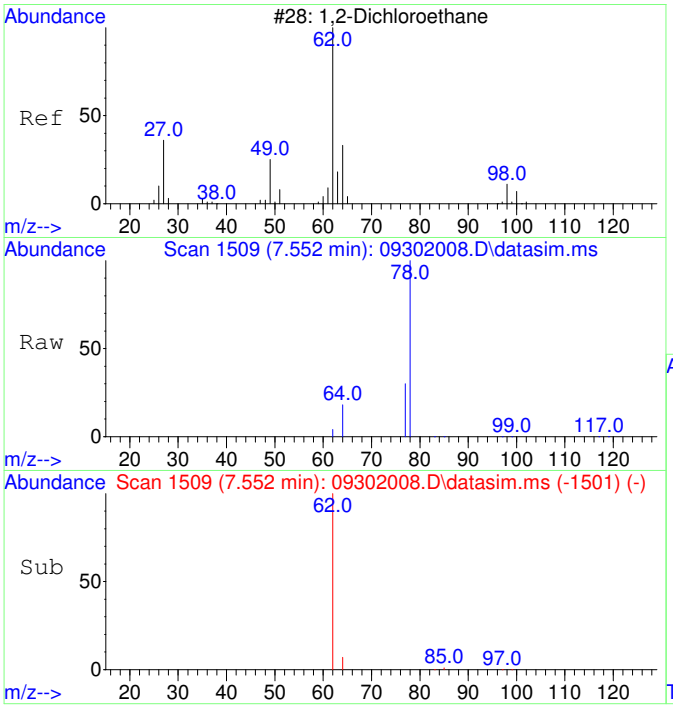


#9
Benzene
Concen: 81.76 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 78 Resp: 14464

Ion	Ratio	Lower	Upper
78	100		
77	40.8	0.0	53.2

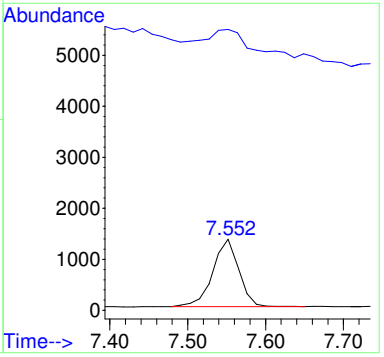


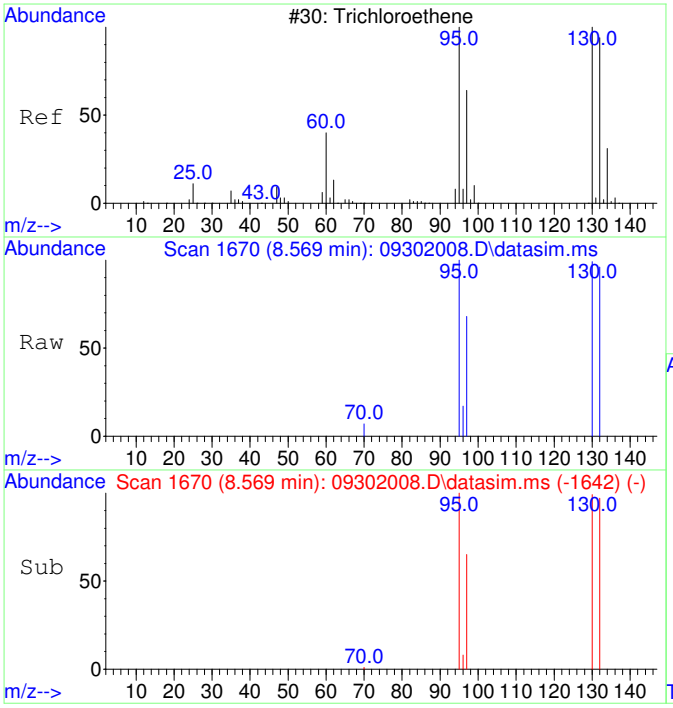


#10
1,2-Dichloroethane
Concen: 48.29 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 62 Resp: 3050

Ion	Ratio	Lower	Upper
62	100		
64	79.1	2.3	62.3#

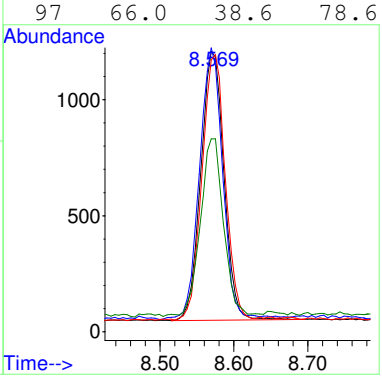


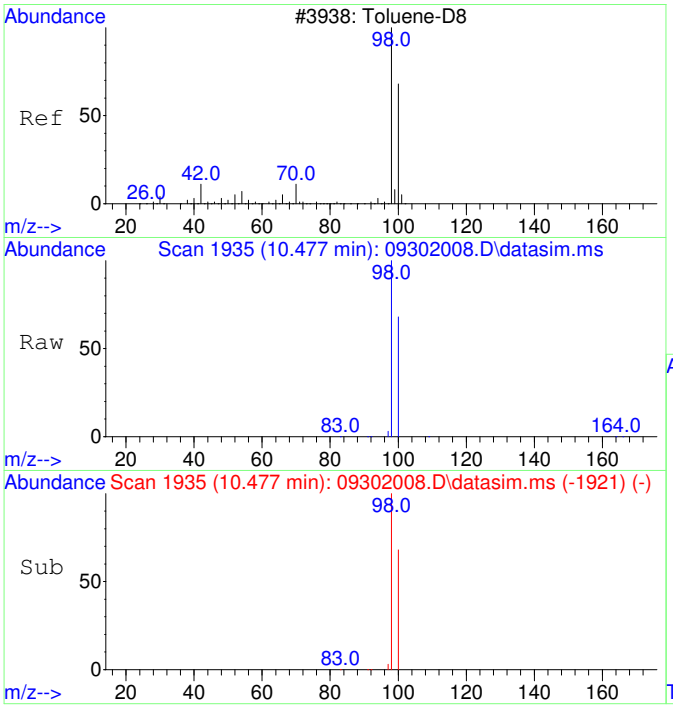


#11
Trichloroethene
Concen: 47.51 ug/L
RT: 8.569 min Scan# 1670
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:130 Resp: 2531

Ion	Ratio	Lower	Upper
130	100		
95	100.7	60.7	120.7
132	98.1	76.0	116.0
97	66.0	38.6	78.6

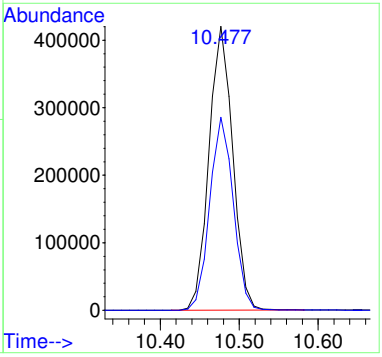


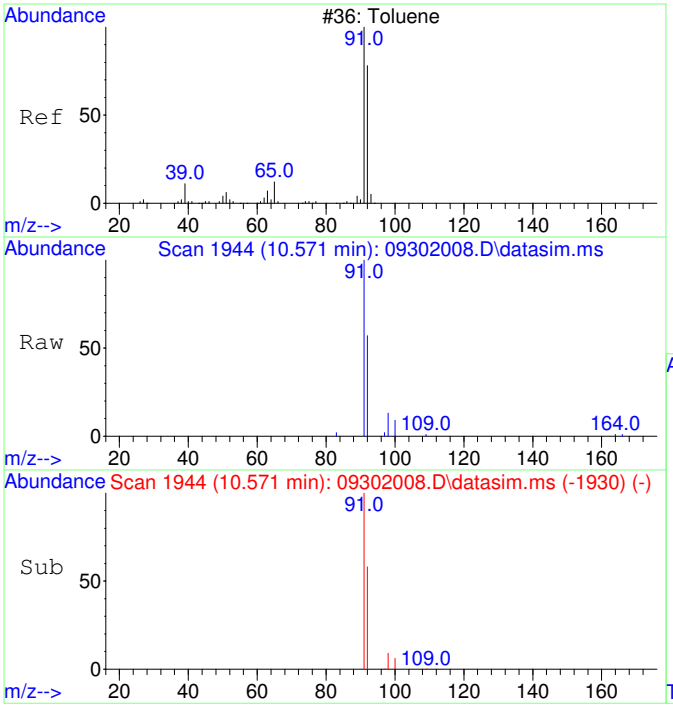


#12
Toluene-d8
Concen: 4299.91 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 98 Resp: 876494

Ion	Ratio	Lower	Upper
98	100		
100	67.3	37.1	97.1

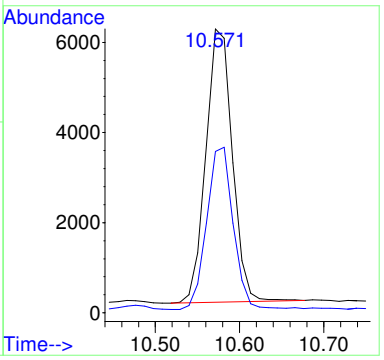


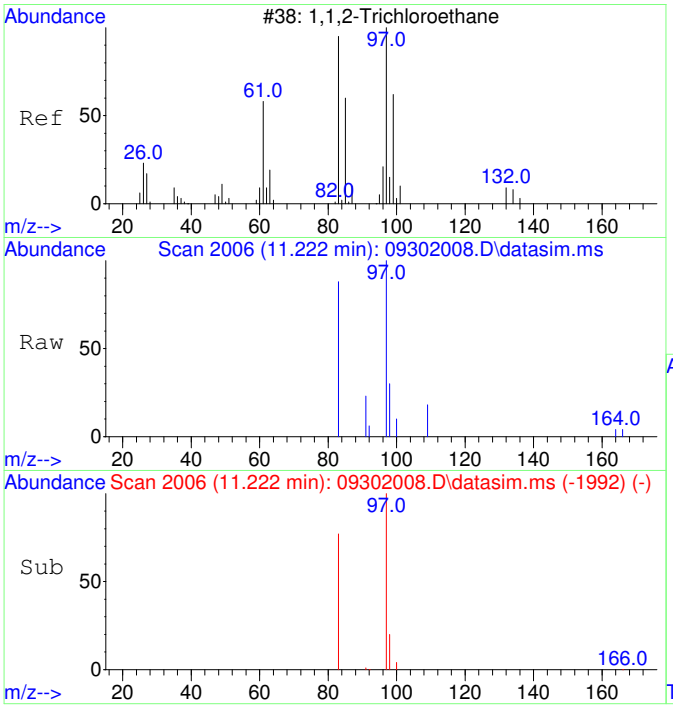


#13
Toluene
Concen: 51.09 ug/L
RT: 10.571 min Scan# 1944
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 13276

Ion	Ratio	Lower	Upper
91	100		
92	58.5	29.9	89.9

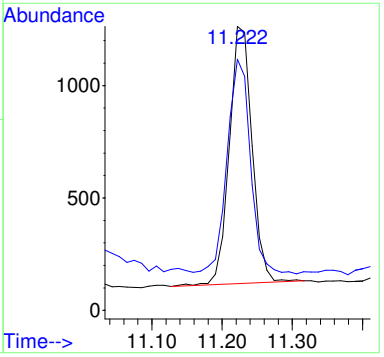


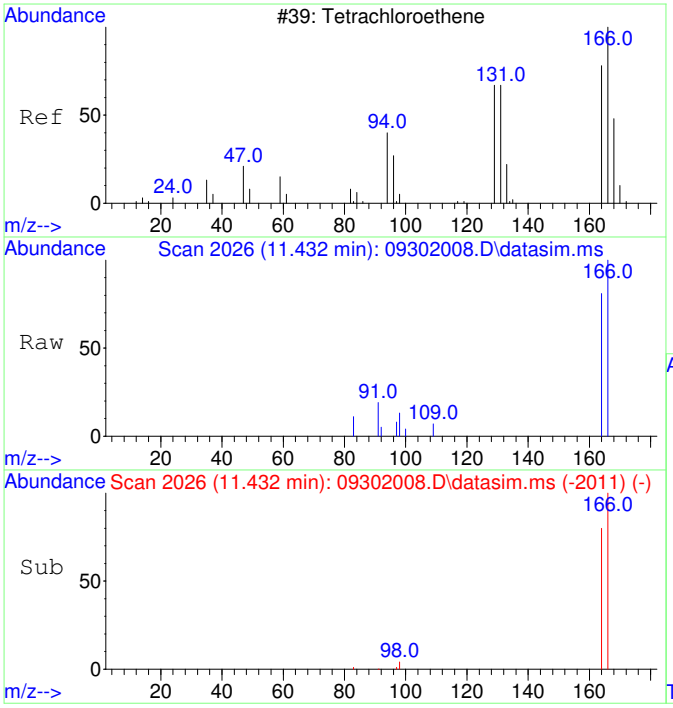


#14
1,1,2-Trichloroethane
Concen: 45.86 ug/L
RT: 11.222 min Scan# 2006
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 97 Resp: 2597

Ion	Ratio	Lower	Upper
97	100		
83	83.9	51.2	111.2

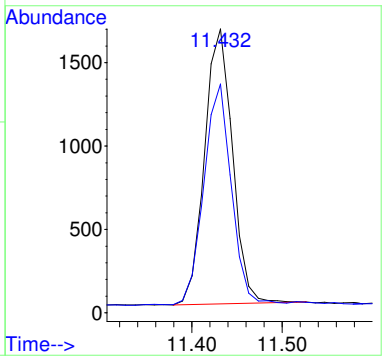


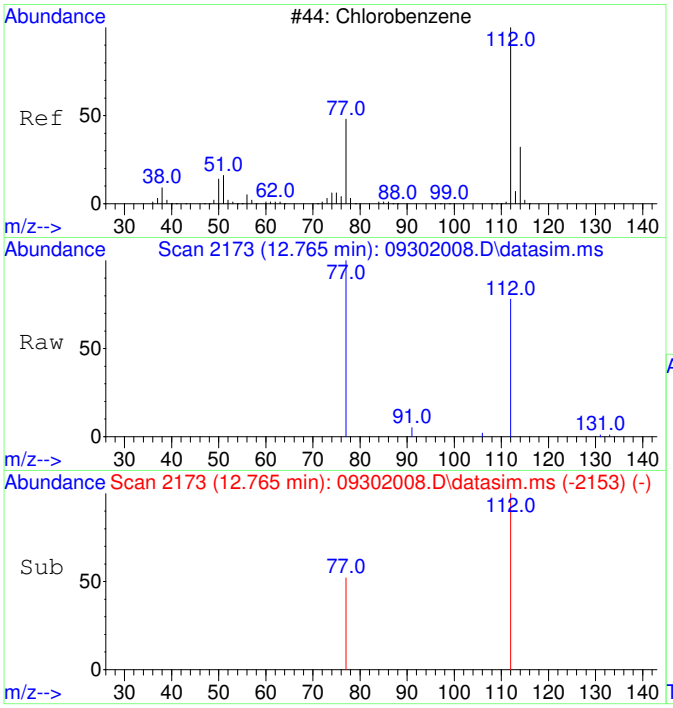


#15
Tetrachloroethene
Concen: 47.10 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:166 Resp: 3542

Ion	Ratio	Lower	Upper
166	100		
164	80.4	47.8	107.8

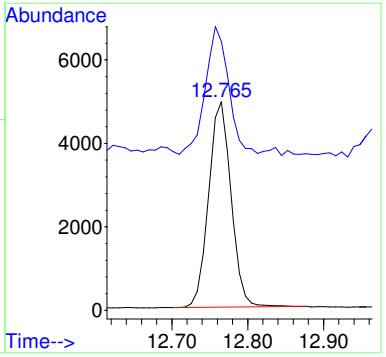


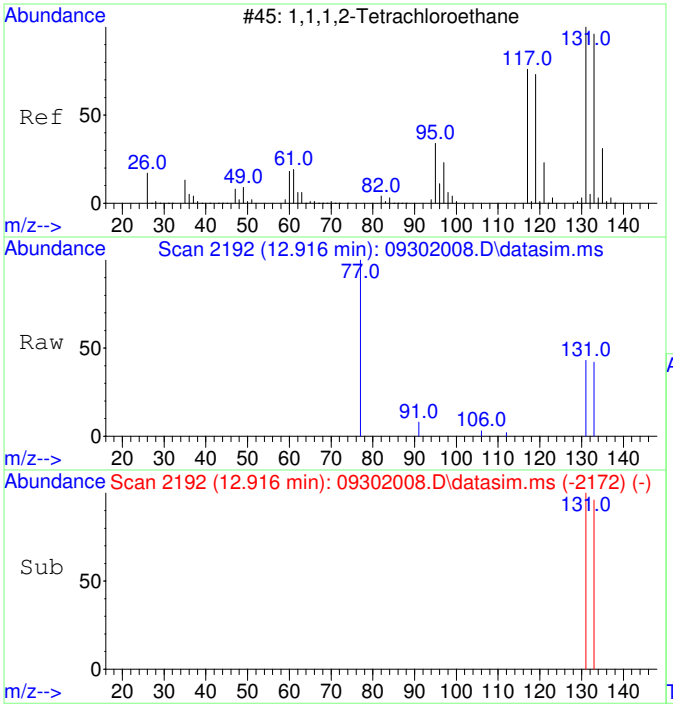


#16
Chlorobenzene
Concen: 54.53 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:112 Resp: 10147

Ion	Ratio	Lower	Upper
112	100		
77	63.2	23.6	83.6

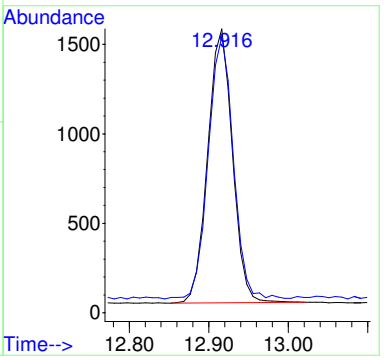


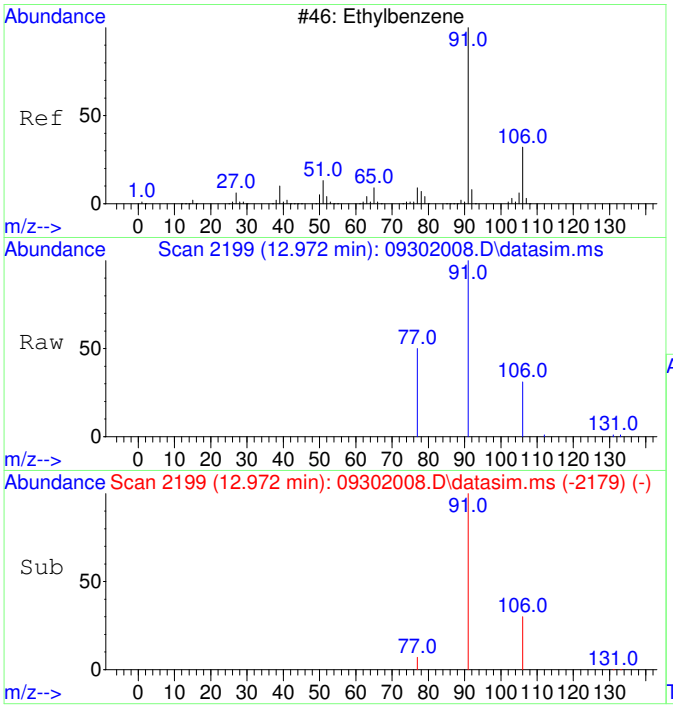


#17
1,1,1,2-Tetrachloroethane
Concen: 49.64 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:131 Resp: 3310

Ion	Ratio	Lower	Upper
131	100		
133	96.0	66.3	126.3

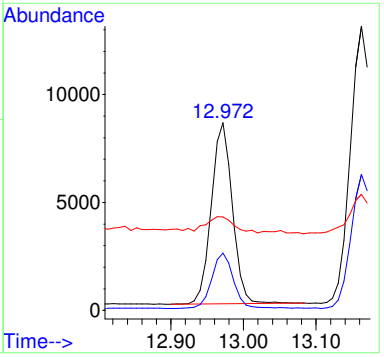


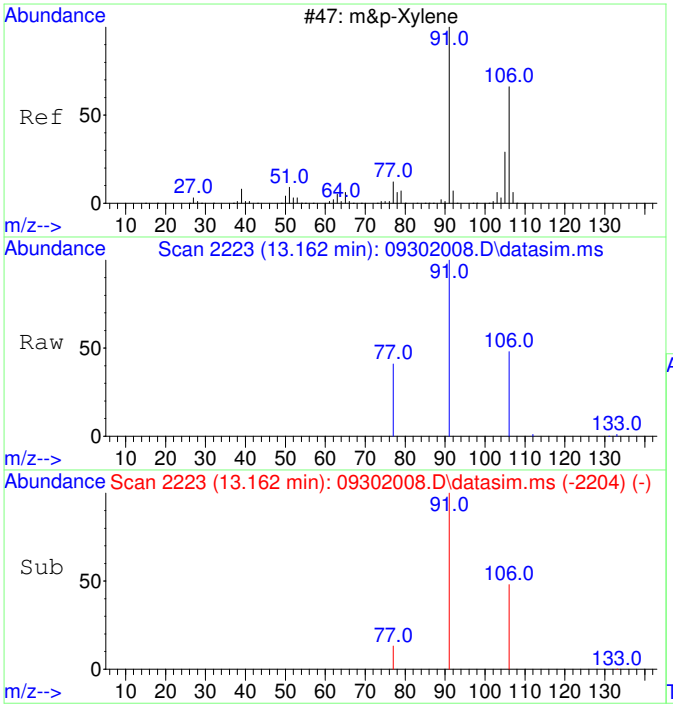


#18
Ethylbenzene
Concen: 53.43 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 16900

Ion	Ratio	Lower	Upper
91	100		
106	31.5	3.0	63.0
77	12.2	0.0	38.2

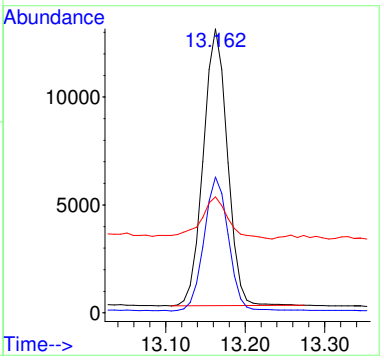


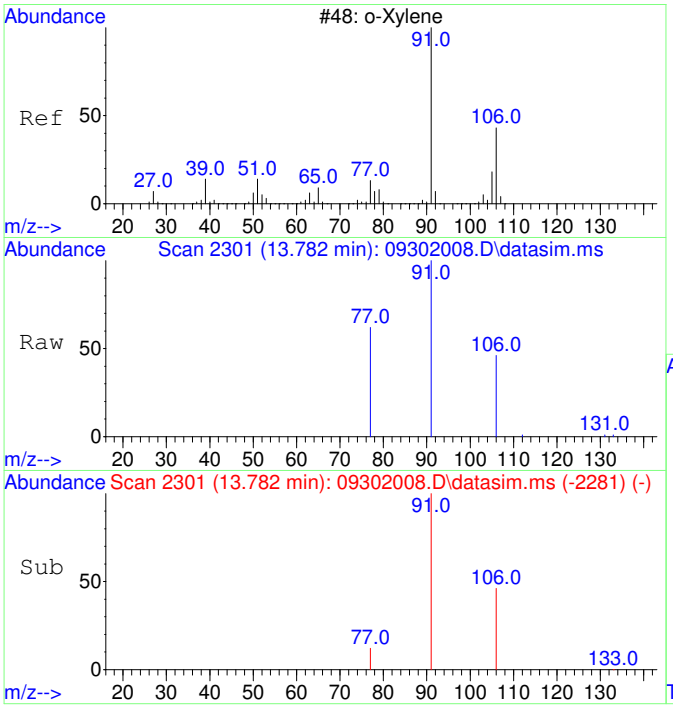


#19
m&p-Xylene
Concen: 109.21 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 27000

Ion	Ratio	Lower	Upper
91	100		
106	48.8	22.2	82.2
77	18.4	0.0	42.4

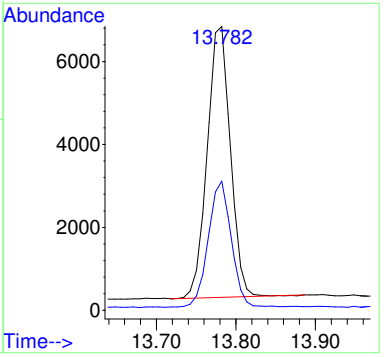


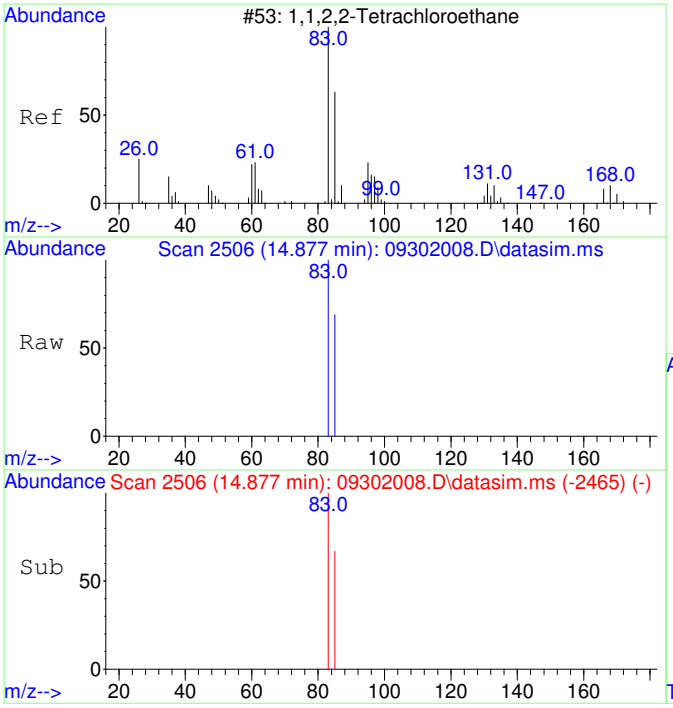


#20
o-Xylene
Concen: 50.02 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 13211

Ion	Ratio	Lower	Upper
91	100		
106	45.9	19.2	79.2

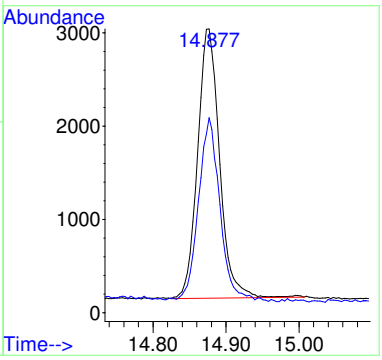


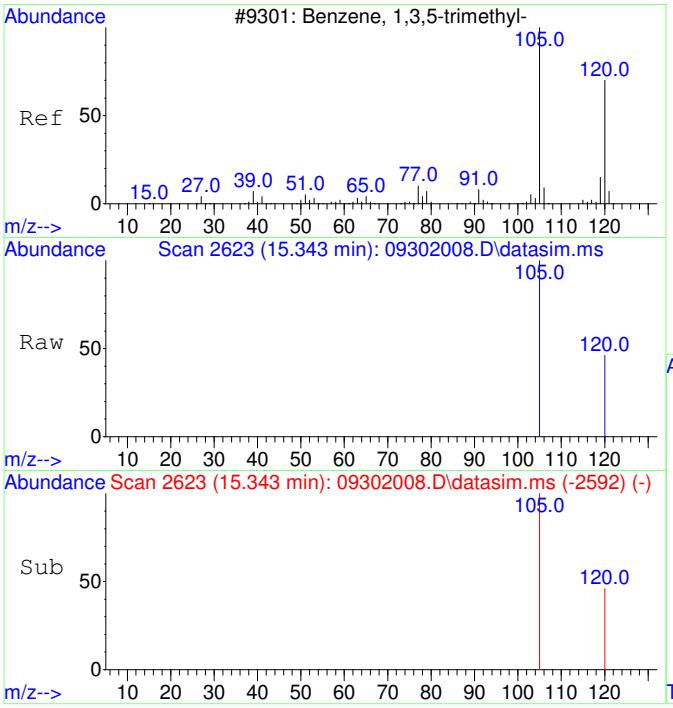


#21
1,1,2,2-Tetrachloroethane
Concen: 51.49 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. 0.004 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 83 Resp: 6028

Ion	Ratio	Lower	Upper
83	100		
85	64.2	34.8	94.8

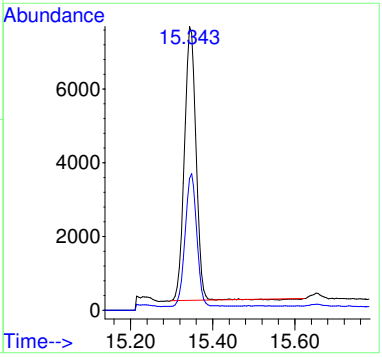


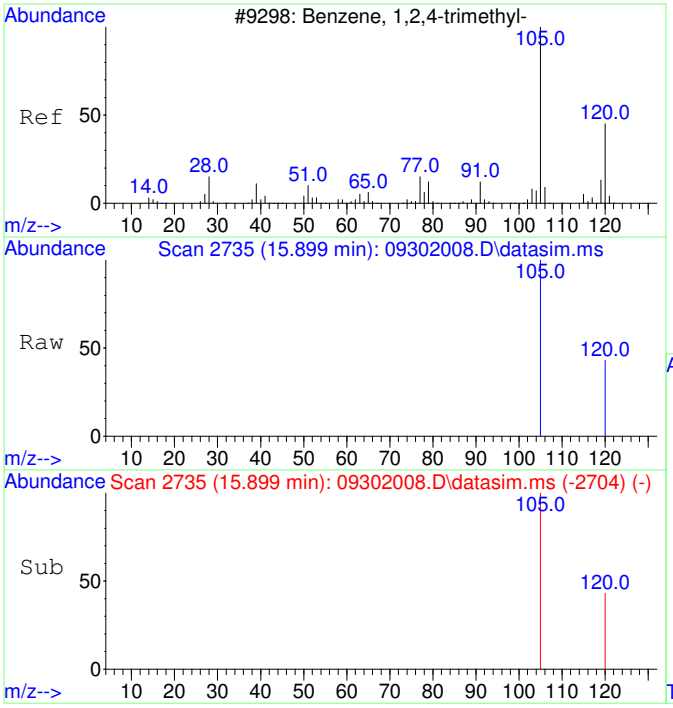


#22
1,3,5-Trimethylbenzene
Concen: 51.19 ug/L
RT: 15.343 min Scan# 2623
Delta R.T. -0.001 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:105 Resp: 14392

Ion	Ratio	Lower	Upper
105	100		
120	48.7	21.1	81.1

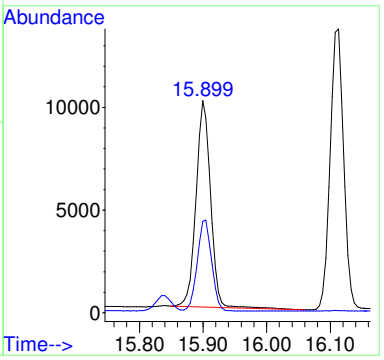


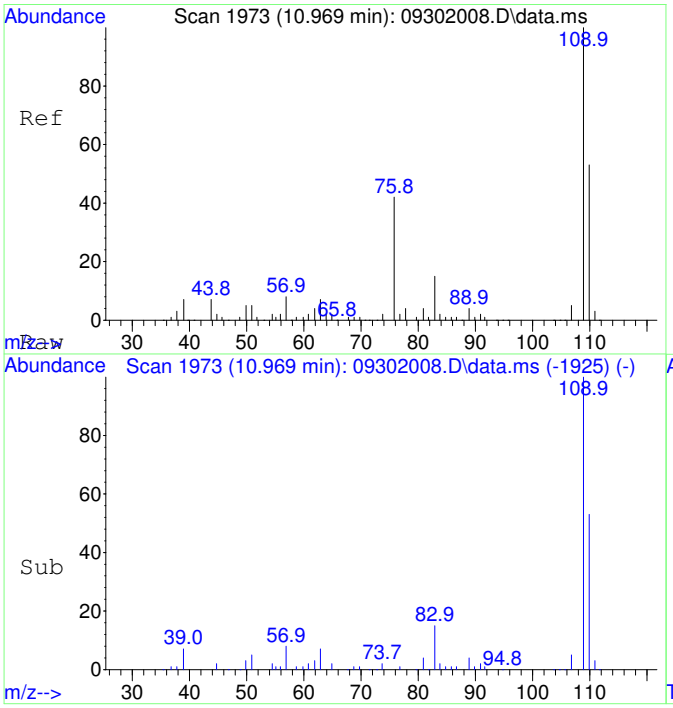


#23
1,2,4-Trimethylbenzene
Concen: 54.74 ug/L
RT: 15.899 min Scan# 2735
Delta R.T. 0.004 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:105 Resp: 15985

Ion	Ratio	Lower	Upper
105	100		
120	42.3	17.2	77.2

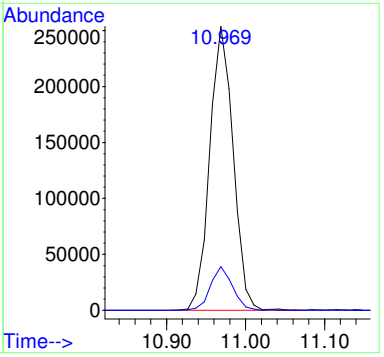


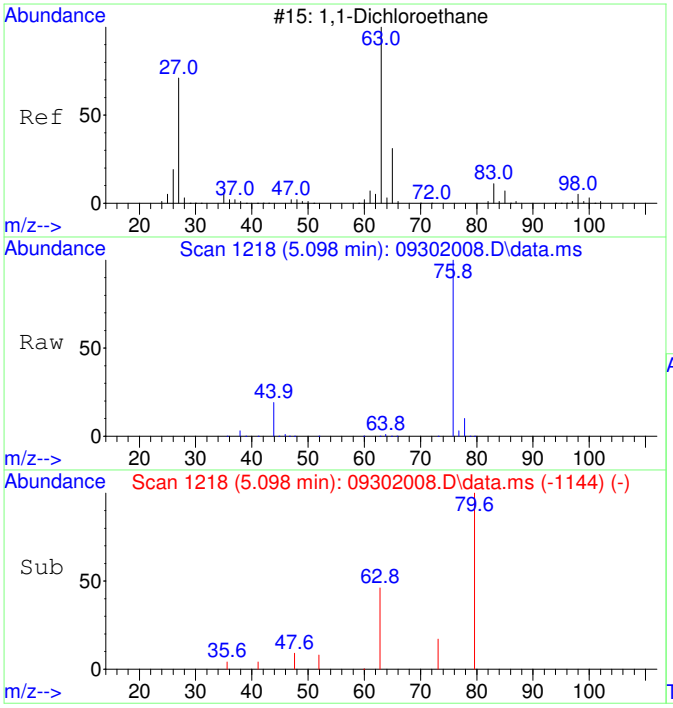


#25
2-Fluorotoluene SCAN
Concen: 5147.21 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:109 Resp: 522467

Ion	Ratio	Lower	Upper
109	100		
83	14.6	0.0	43.8

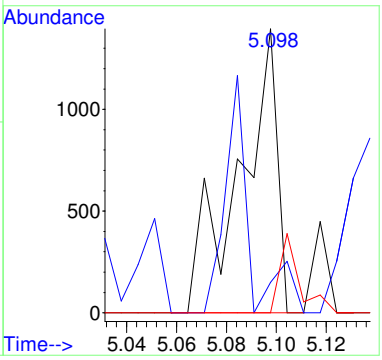


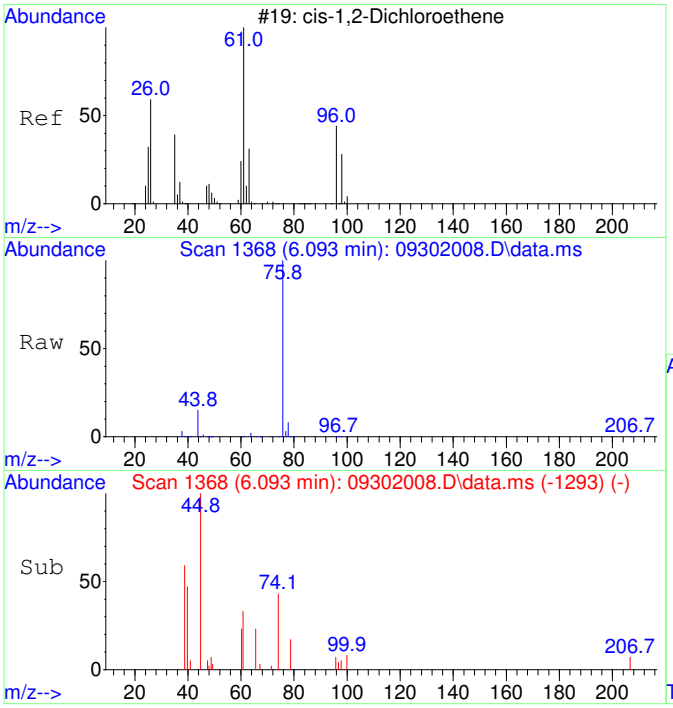


#28
1,1-Dichloroethane SCAN
Concen: 47.29 ug/L
RT: 5.098 min Scan# 1218
Delta R.T. -0.007 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 63 Resp: 1460

Ion	Ratio	Lower	Upper
63	100		
65	53.2	1.3	61.3
83	14.5	0.0	45.9

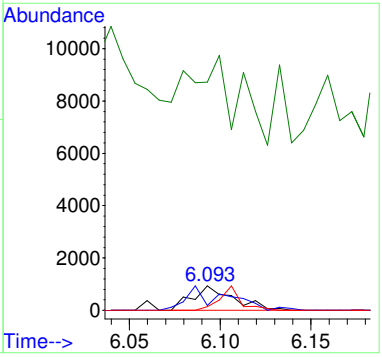


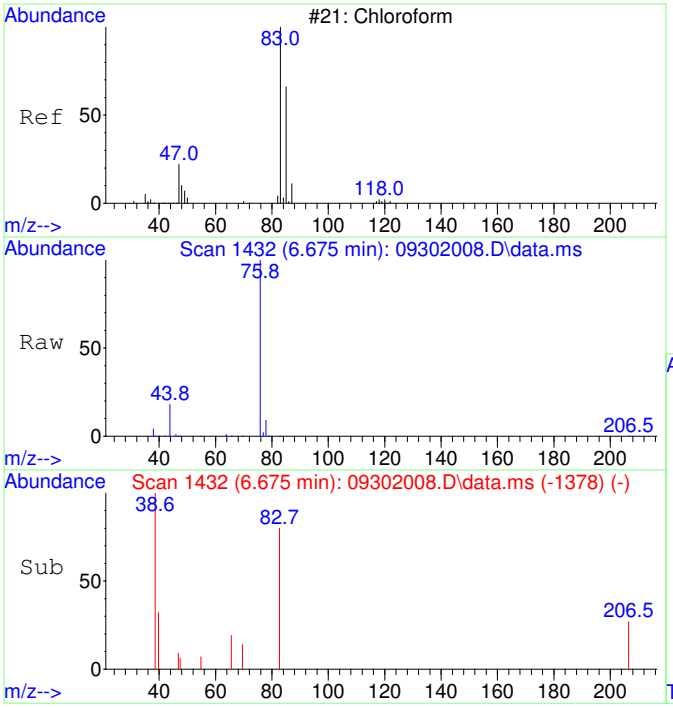


#29
cis-1,2-Dichloroethene SCAN
Concen: 44.53 ug/L
RT: 6.093 min Scan# 1368
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 61 Resp: 1473

Ion	Ratio	Lower	Upper
61	100		
96	97.9	39.9	99.9
98	49.5	13.5	73.5
64	165.0	4.5	64.5#

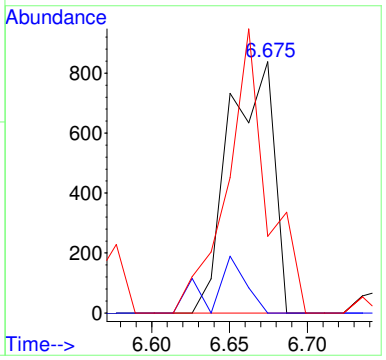


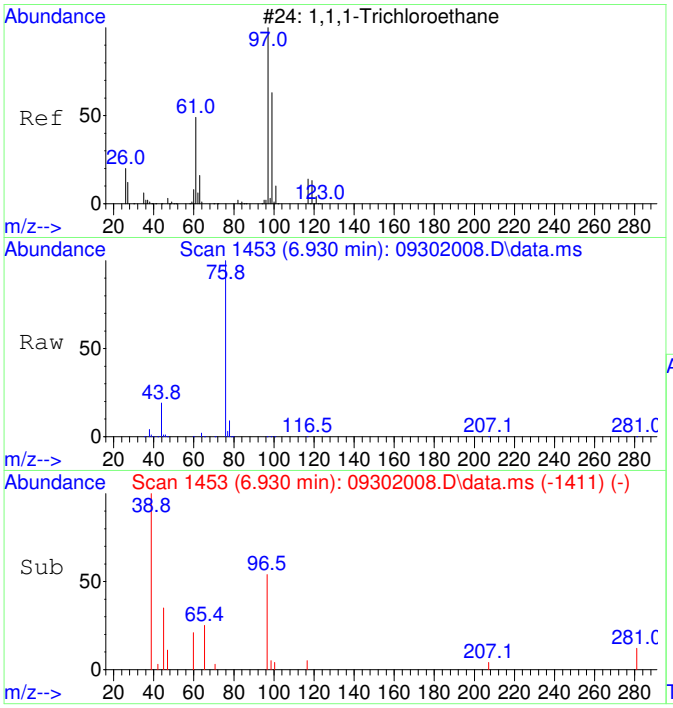


#30
Chloroform SCAN
Concen: 47.19 ug/L
RT: 6.675 min Scan# 1432
Delta R.T. 0.012 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 83 Resp: 1693

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

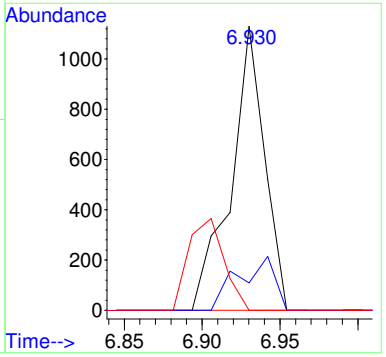


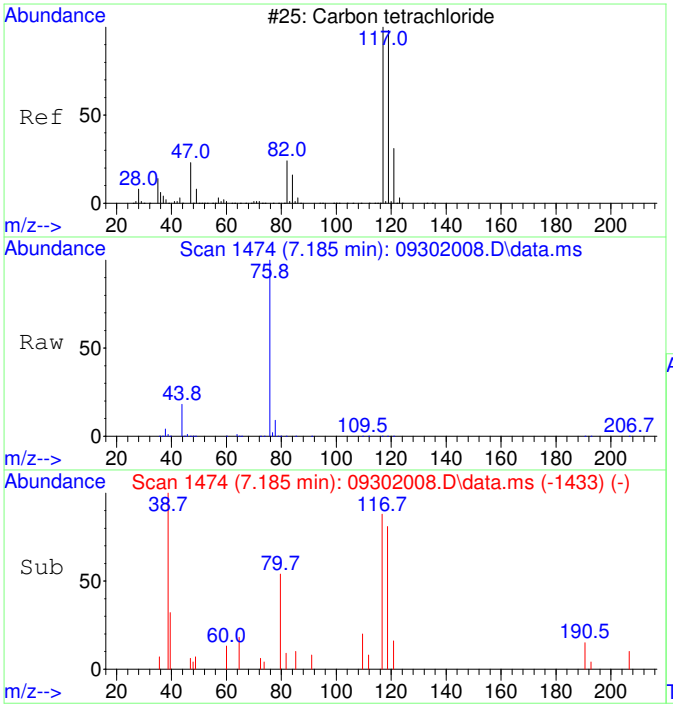


#31
1,1,1-Trichloroethane SCAN
Concen: 52.12 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. 0.012 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 97 Resp: 1704

Ion	Ratio	Lower	Upper
97	100		
99	20.5	43.6	103.6#
61	0.0	18.0	78.0#

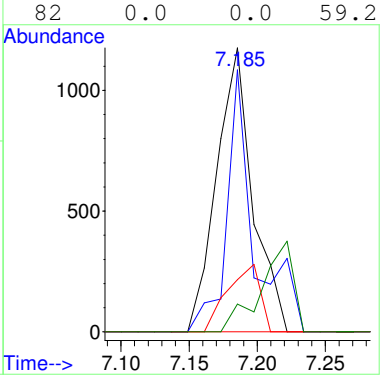


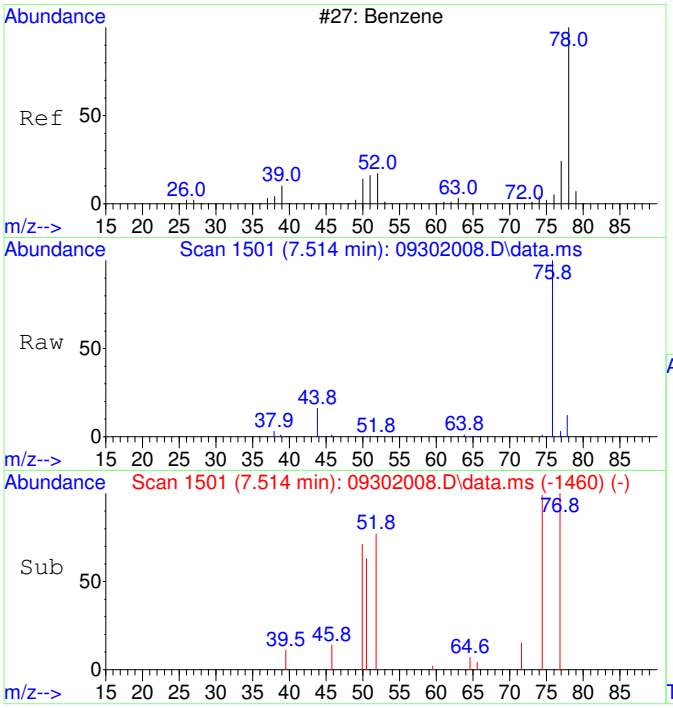


#32
Carbon tetrachloride SCAN
Concen: 63.43 ug/L
RT: 7.185 min Scan# 1474
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:117 Resp: 2163

Ion	Ratio	Lower	Upper
117	100		
119	69.7	75.5	135.5#
121	21.5	0.0	58.8
82	0.0	0.0	59.2

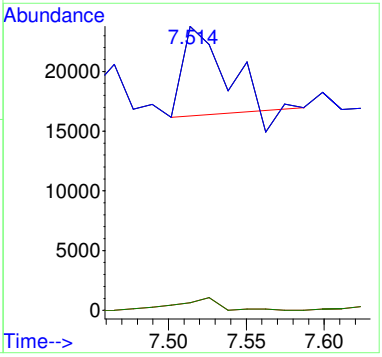


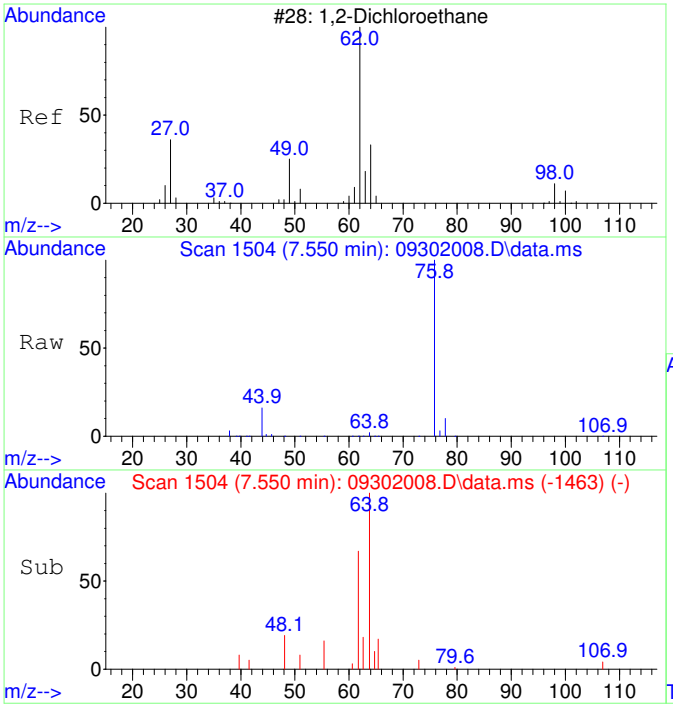


#33
Benzene SCAN
Concen: 149.54 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 78 Resp: 13461

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	15.0	0.0	47.9
51	15.0	0.0	44.1

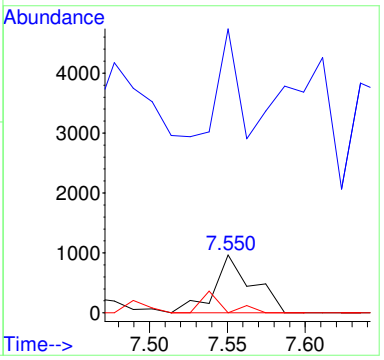


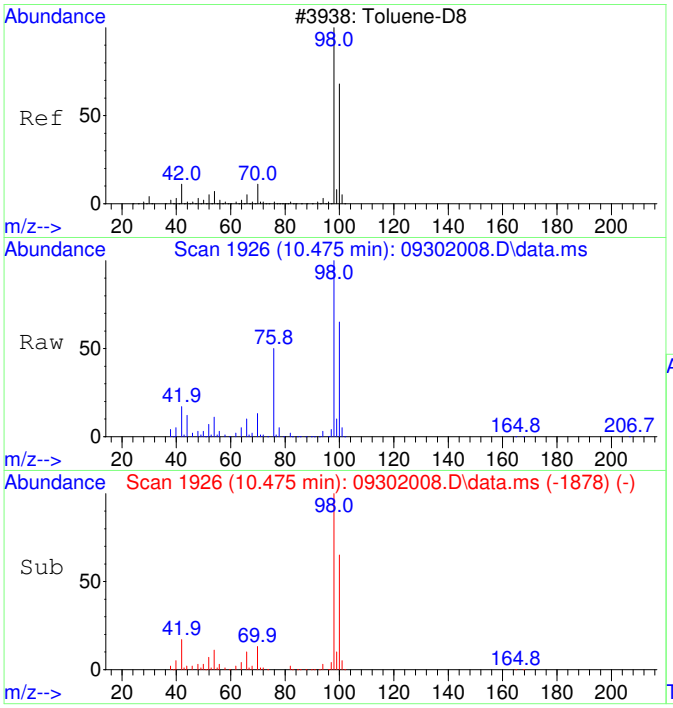


#34
1,2-Dichloroethane SCAN
Concen: 49.46 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 62 Resp: 1644

Ion	Ratio	Lower	Upper
62	100		
64	67.0	5.2	65.2#
49	21.4	3.9	63.9

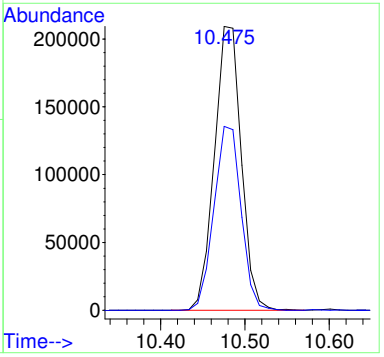


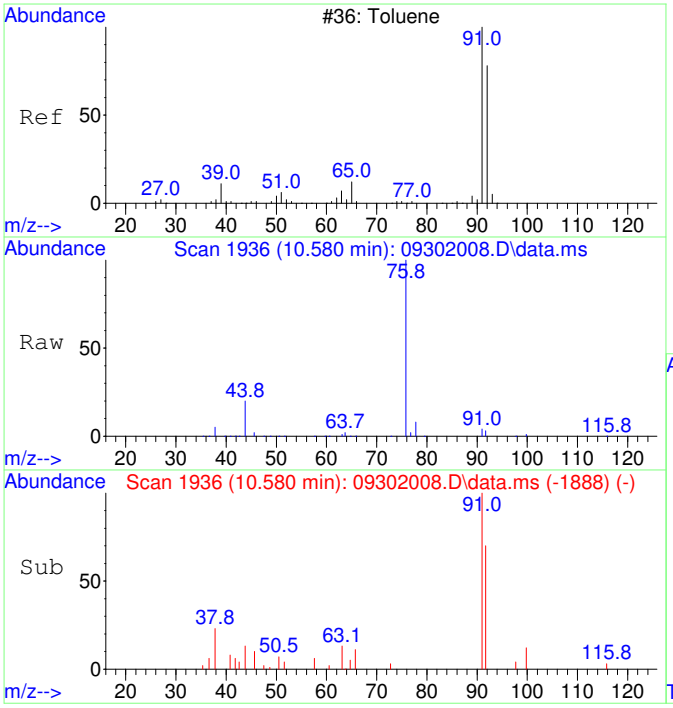


#36
Toluene-d8 SCAN
Concen: 4693.48 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 98 Resp: 465915

Ion	Ratio	Lower	Upper
98	100		
100	65.3	40.0	100.0

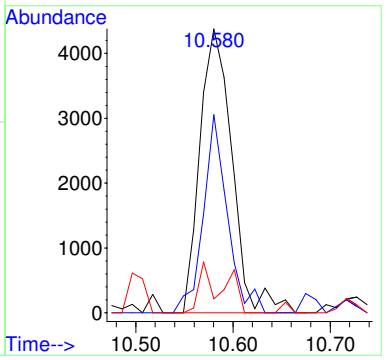


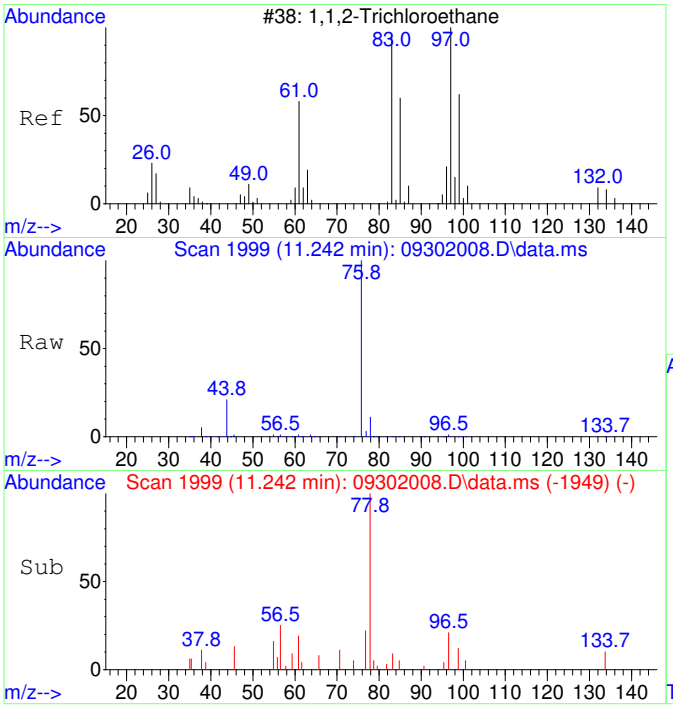


#37
Toluene SCAN
Concen: 79.54 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 10112

Ion	Ratio	Lower	Upper
91	100		
92	52.1	28.3	88.3
65	13.1	0.0	41.0

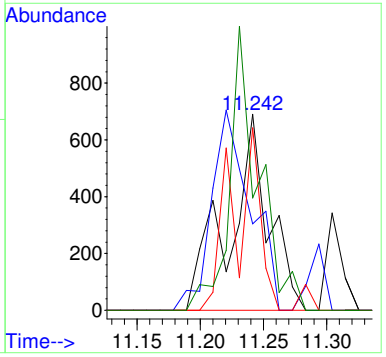


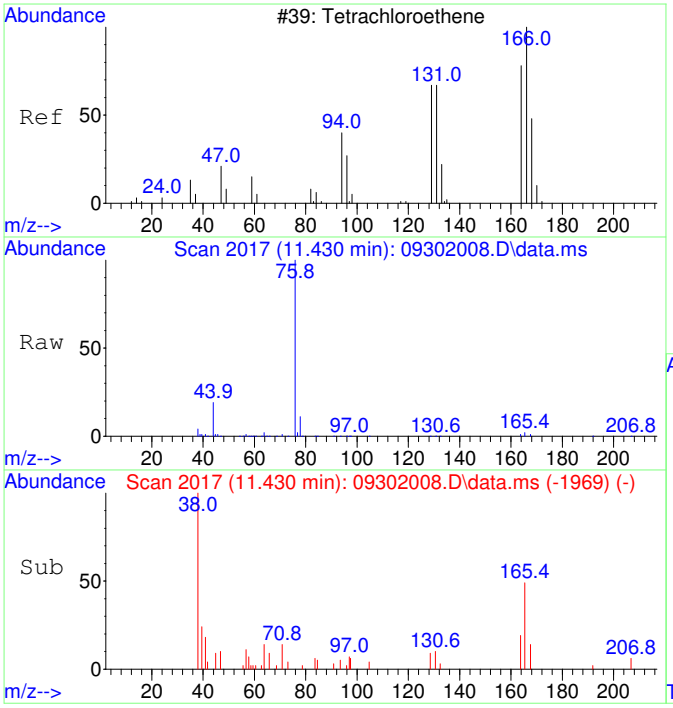


#38
1,1,2-Trichloroethane SCAN
Concen: 52.74 ug/L
RT: 11.242 min Scan# 1999
Delta R.T. 0.021 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 97 Resp: 1505

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	64.5	32.1	92.1
99	104.3	36.7	96.7#

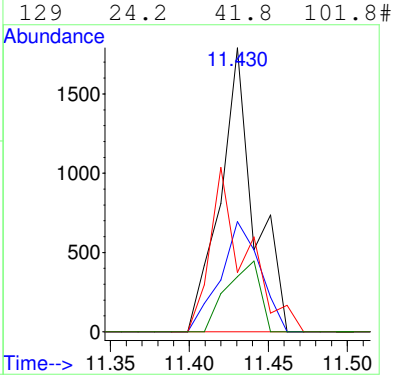


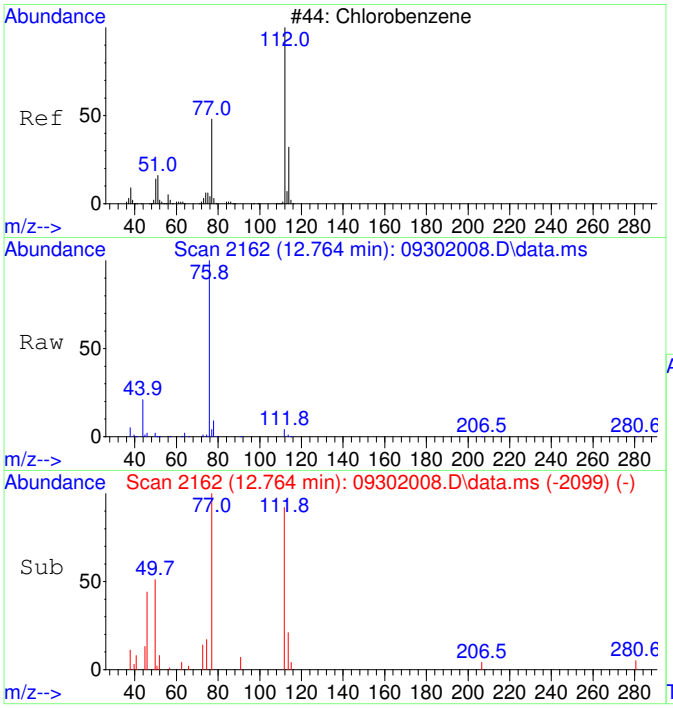


#39
Tetrachloroethene SCAN
Concen: 88.11 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:166 Resp: 2691

Ion	Ratio	Lower	Upper
166	100		
164	45.3	50.9	110.9#
131	0.0	38.7	98.7#
129	24.2	41.8	101.8#

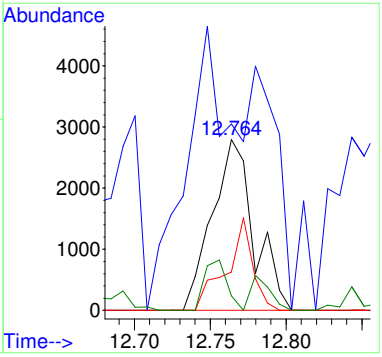


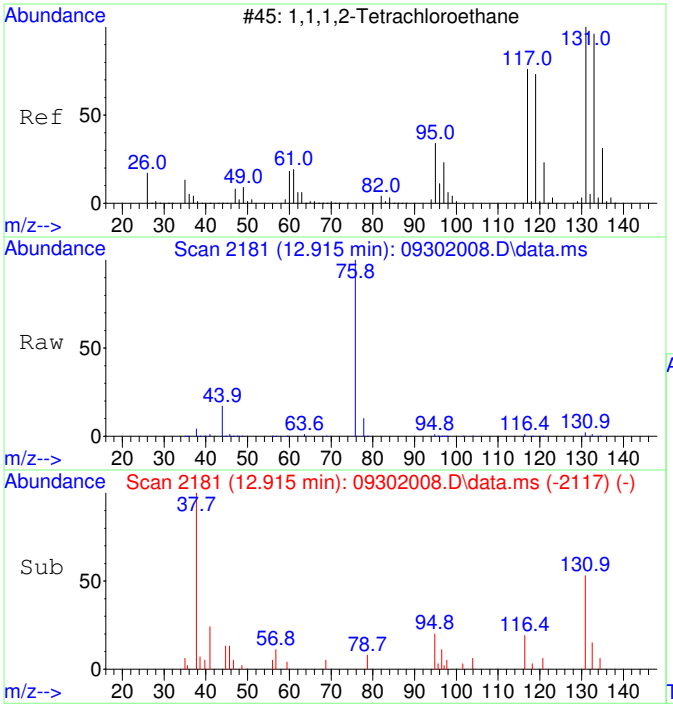


#40
Chlorobenzene SCAN
Concen: 61.71 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:112 Resp: 5361

Ion	Ratio	Lower	Upper
112	100		
77	0.0	28.2	88.2#
114	33.9	2.3	62.3
51	9.4	0.0	50.1

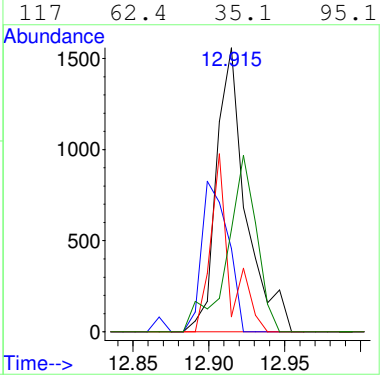


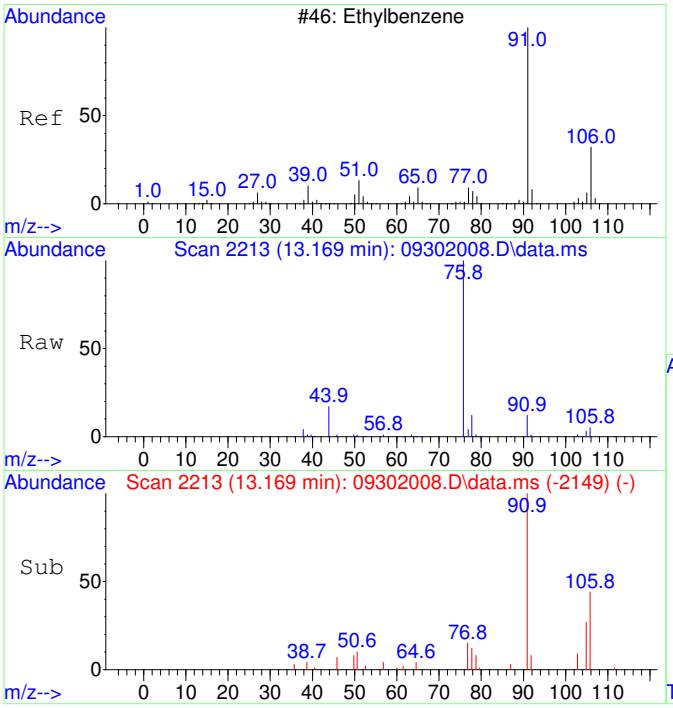


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 65.42 ug/L
RT: 12.915 min Scan# 2181
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:131 Resp: 2103

Ion	Ratio	Lower	Upper
131	100		
133	0.0	66.9	126.9#
119	41.2	40.4	100.4
117	62.4	35.1	95.1

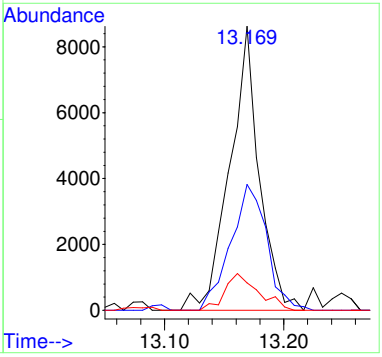


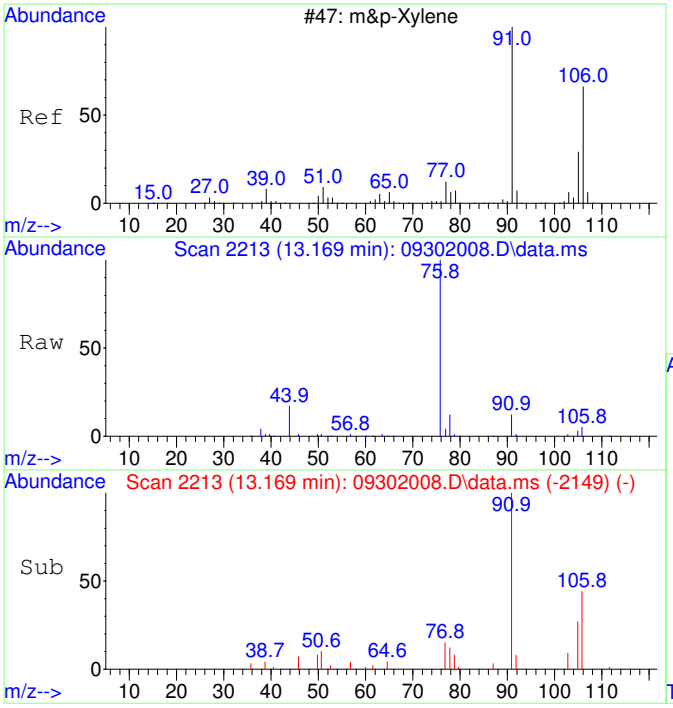


#42
Ethylbenzene SCAN
Concen: 64.24 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 14879

Ion	Ratio	Lower	Upper
91	100		
106	54.3	23.1	83.1
51	14.6	0.0	40.1

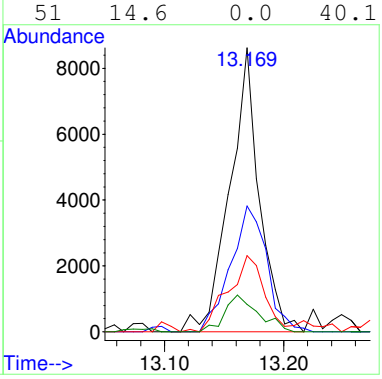


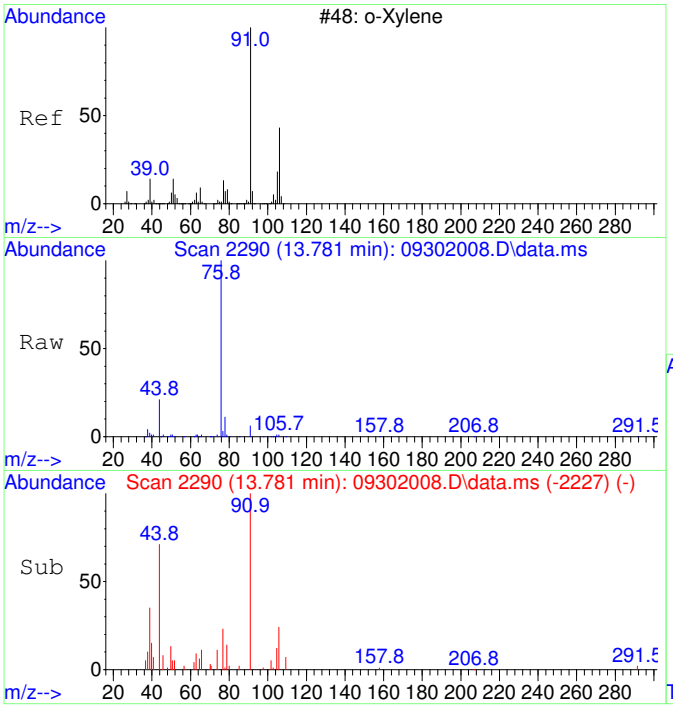


#43
m&p-Xylene SCAN
Concen: 64.24 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 14879

Ion	Ratio	Lower	Upper
91	100		
106	54.3	23.1	83.1
105	30.0	0.0	54.7
51	14.6	0.0	40.1

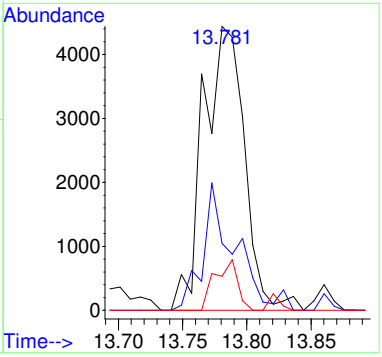


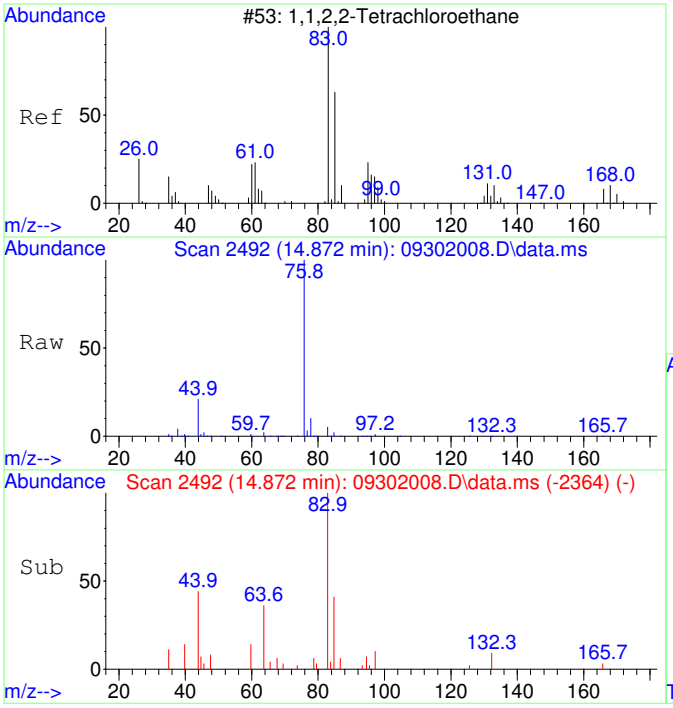


#44
o-Xylene SCAN
Concen: 79.90 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 9905

Ion	Ratio	Lower	Upper
91	100		
106	34.9	18.0	78.0
105	9.9	0.0	56.6

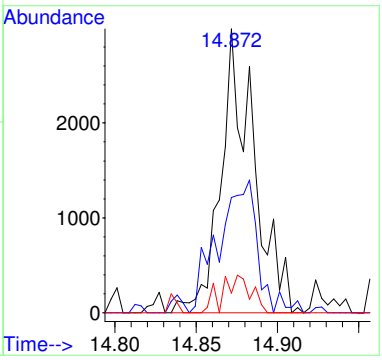


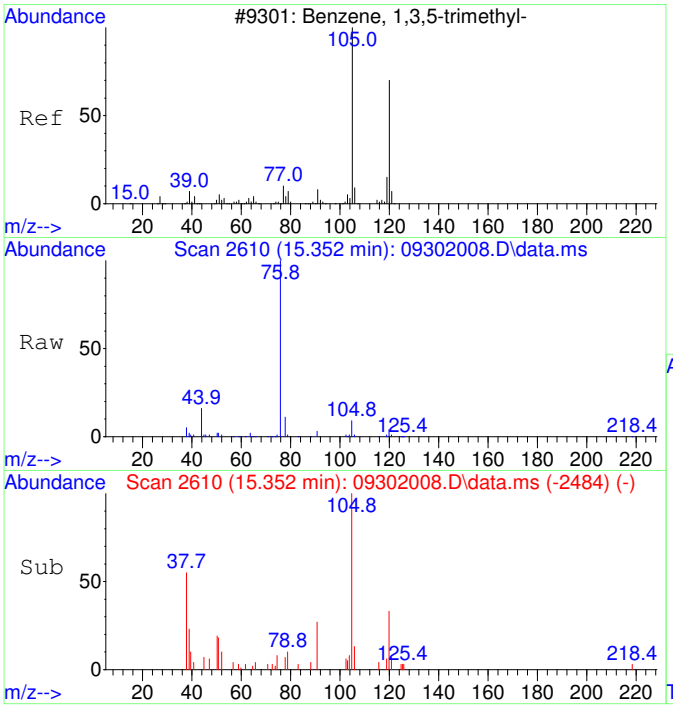


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 69.92 ug/L
RT: 14.872 min Scan# 2492
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 83 Resp: 4227

Ion	Ratio	Lower	Upper
83	100		
85	55.8	35.9	95.9
95	9.7	0.0	47.4

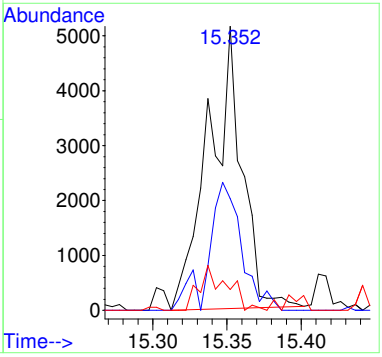


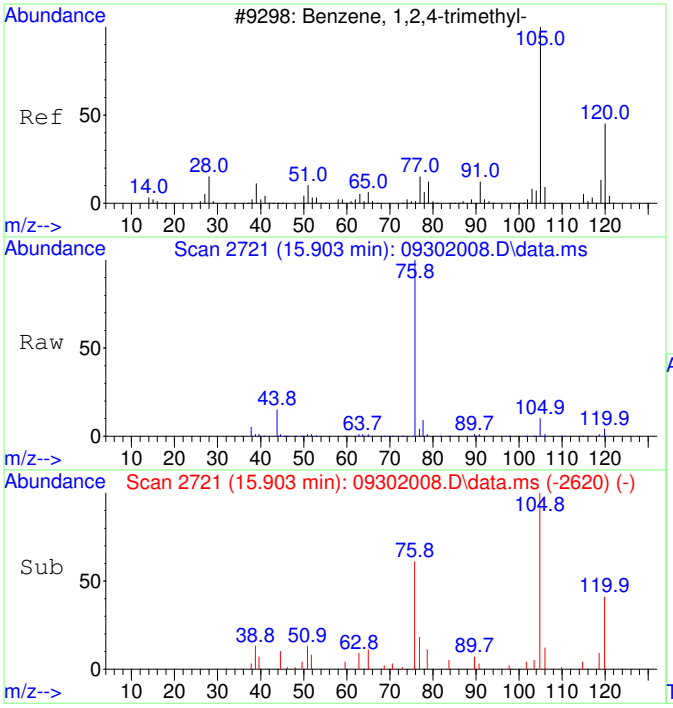


#46
1,3,5-Trimethylbenzene SCAN
Concen: 61.44 ug/L
RT: 15.352 min Scan# 2610
Delta R.T. 0.009 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:105 Resp: 8028

Ion	Ratio	Lower	Upper
105	100		
120	45.1	18.3	78.3
119	13.3	0.0	43.1

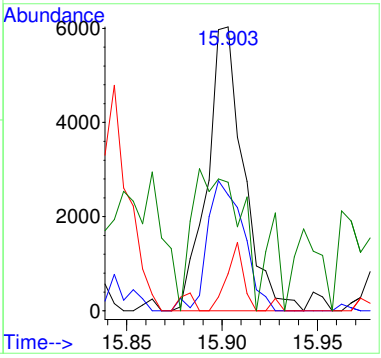




#47
1,2,4-Trimethylbenzene SCAN
Concen: 59.66 ug/L
RT: 15.903 min Scan# 2721
Delta R.T. 0.004 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:105 Resp: 7976

Ion	Ratio	Lower	Upper
105	100		
120	46.0	16.9	76.9
119	10.8	0.0	41.9
77	0.0	0.0	42.3



2009033-01

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302014.D
Acq On : 30 Sep 2020 18:31
InstName : AG5975C
Operator : TD
Sample : 2009033-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 01 08:59:16 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

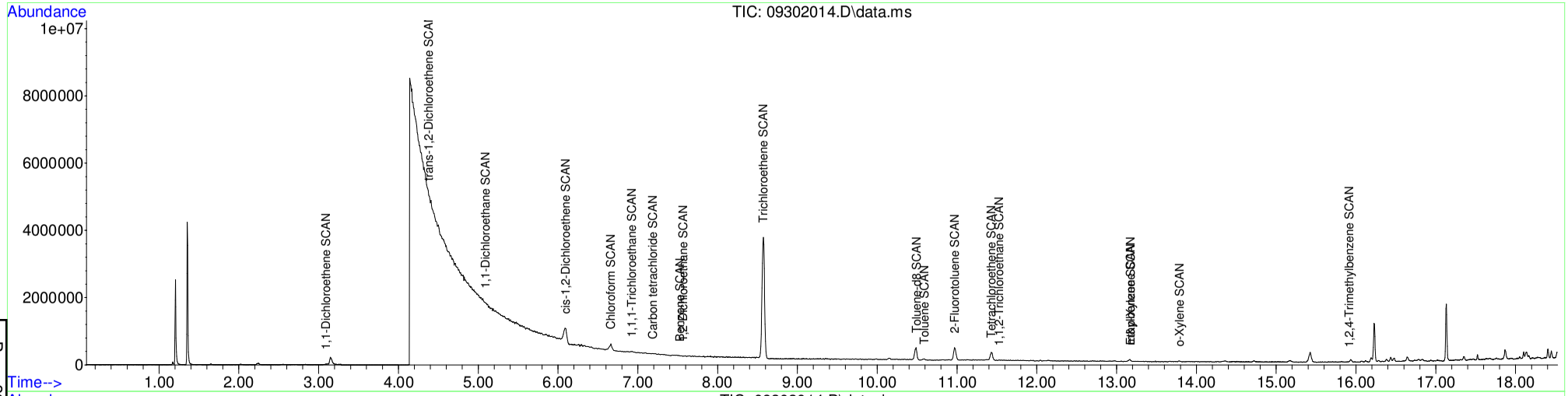
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	601566	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	509024	4322.44 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.45%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.089	61	25903	1078.33 ug/L	81
3] trans-1,2-Dichloroethene	4.376	61	43474	1566.42 ug/L	99
4] 1,1-Dichloroethane	5.086	63	31797	920.37 ug/L	98
5] cis-1,2-Dichloroethene	6.087	61	714446	19591.12 ug/L	99
6] Chloroform	6.651	83	287795	7710.26 ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	27964	689.85 ug/L	99
8] Carbon tetrachloride	7.187	117	3742	98.08 ug/L	97
9] Benzene	7.503	78	14729	144.11 ug/L	66
10] 1,2-Dichloroethane	7.552	62	805	22.06 ug/L #	1
11] Trichloroethene	8.575	130	2589857	84157.54 ug/L OC	93
13] Toluene	10.582	91	38343	255.39 ug/L	99
15] Tetrachloroethene	11.432	166	162975	3750.92 ug/L	100
18] Ethylbenzene	12.972	91	22317	122.12 ug/L	97
19] m&p-Xylene	13.162	91	69389	485.82 ug/L	95
20] o-Xylene	13.782	91	24275	159.08 ug/L	95
23] 1,2,4-Trimethylbenzene	15.901	105	7730	45.82 ug/L	85
25) 2-Fluorotoluene SCAN	10.969	109	305872	5215.96 ug/L	97
26) 1,1-Dichloroethene SCAN	3.088	61	14988	1203.49 ug/L #	46
27) trans-1,2-Dichloroethe...	4.381	61	27157	1762.22 ug/L	77
28) 1,1-Dichloroethane SCAN	5.091	63	20354	1141.25 ug/L	81
29) cis-1,2-Dichloroethene...	6.093	61	402510	21064.62 ug/L #	81
30) Chloroform SCAN	6.662	83	165343	7977.69 ug/L	94
31) 1,1,1-Trichloroethane ...	6.918	97	15219	805.80 ug/L	93
32) Carbon tetrachloride SCAN	7.185	117	1063	53.96 ug/L #	62
33) Benzene SCAN	7.526	78	8871	170.59 ug/L	89
34) 1,2-Dichloroethane SCAN	7.562	62	531	27.65 ug/L #	1
35) Trichloroethene SCAN	8.573	130	1294275	90567.69 ug/L	86
36) Toluene-d8 SCAN	10.486	98	267101	4657.41 ug/L	93
37) Toluene SCAN	10.591	91	22112	301.07 ug/L	93
38) 1,1,2-Trichloroethane ...	11.525	97	465	28.21 ug/L	77
39) Tetrachloroethene SCAN	11.430	166	73385	4158.99 ug/L	94
42) Ethylbenzene SCAN	13.169	91	36700	274.28 ug/L	93
43) m&p-Xylene SCAN	13.169	91	36700	274.28 ug/L	94
44) o-Xylene SCAN	13.789	91	14316	199.88 ug/L	92
47) 1,2,4-Trimethylbenzene...	15.909	105	3891	50.38 ug/L #	30

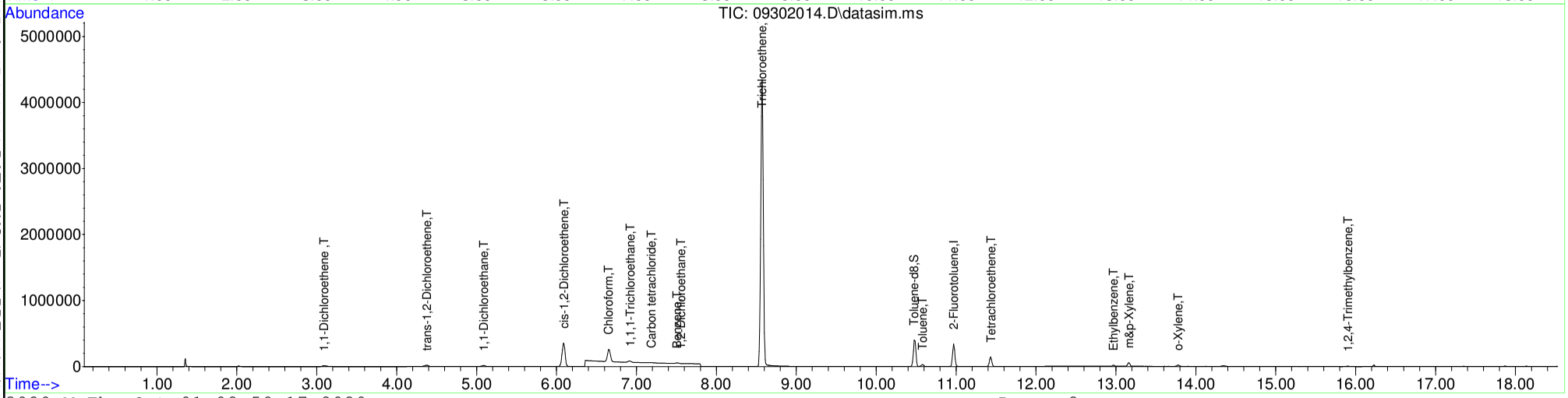
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302014.D
Acq On : 30 Sep 2020 18:31
InstName : AG5975C
Operator : TD
Sample : 2009033-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 01 08:59:16 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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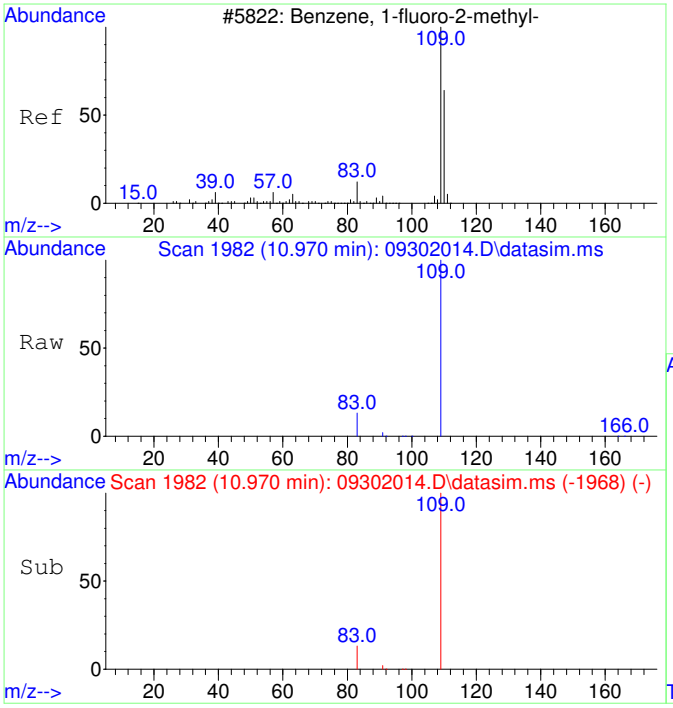
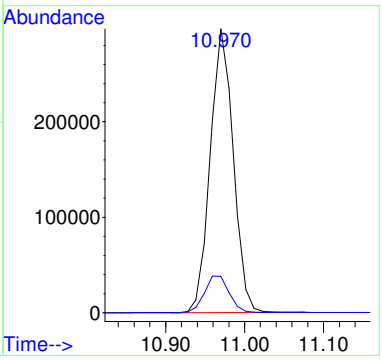
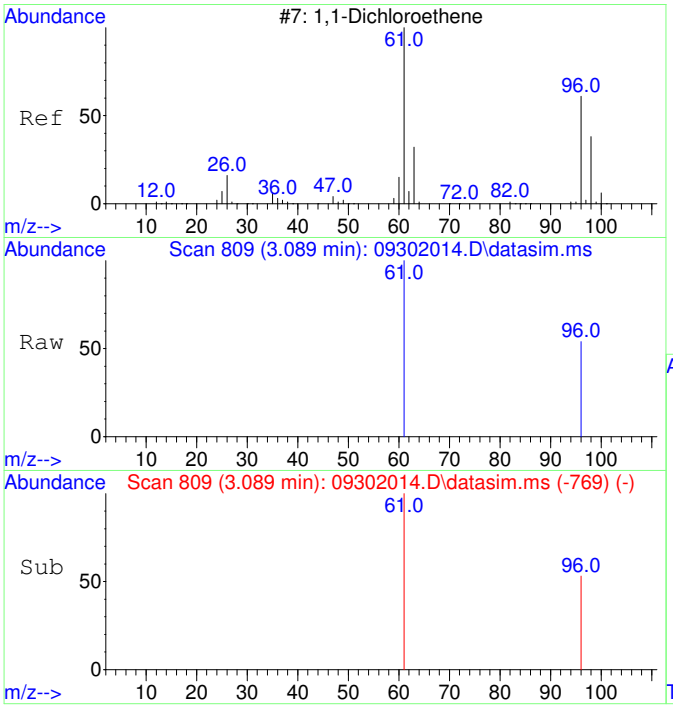


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion:109 Resp: 601566

Ion	Ratio	Lower	Upper
109	100		
83	13.7	0.0	42.3

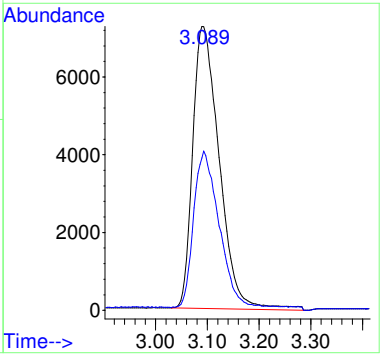


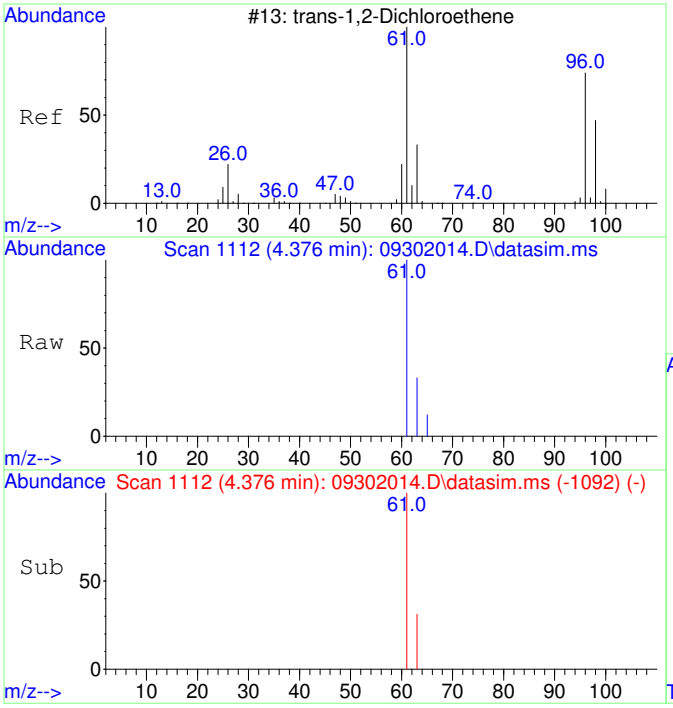


#2
1,1-Dichloroethene
Concen: 1078.33 ug/L
RT: 3.089 min Scan# 809
Delta R.T. -0.000 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 61 Resp: 25903

Ion	Ratio	Lower	Upper
61	100		
96	52.1	37.2	97.2

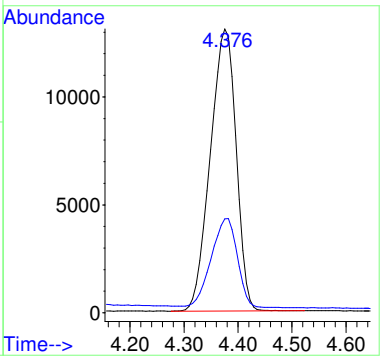


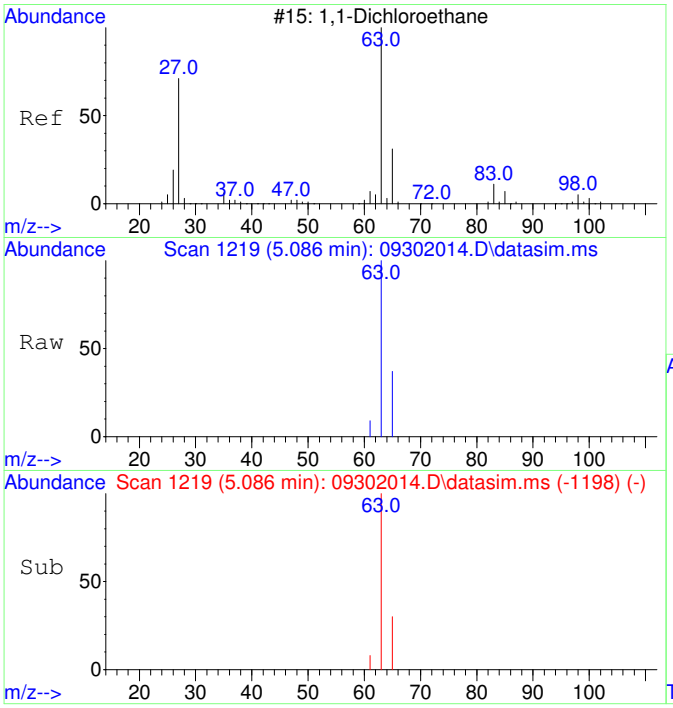


#3
trans-1,2-Dichloroethene
Concen: 1566.42 ug/L
RT: 4.376 min Scan# 1112
Delta R.T. -0.020 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 61 Resp: 43474

Ion	Ratio	Lower	Upper
61	100		
63	31.9	2.4	62.4

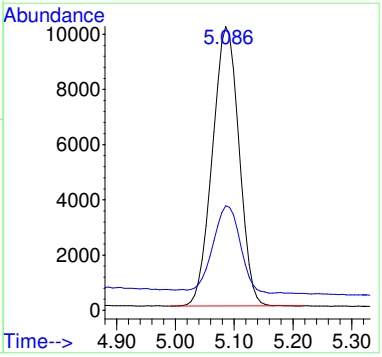


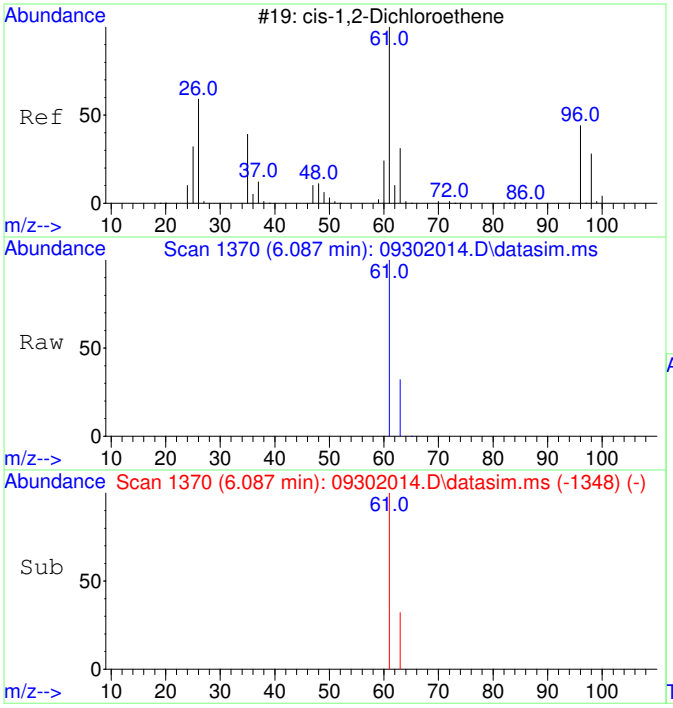


#4
1,1-Dichloroethane
Concen: 920.37 ug/L
RT: 5.086 min Scan# 1219
Delta R.T. -0.013 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 63 Resp: 31797

Ion	Ratio	Lower	Upper
63	100		
65	32.8	1.8	61.8

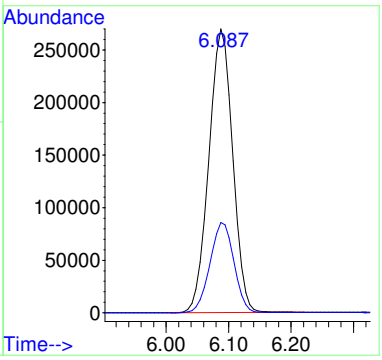


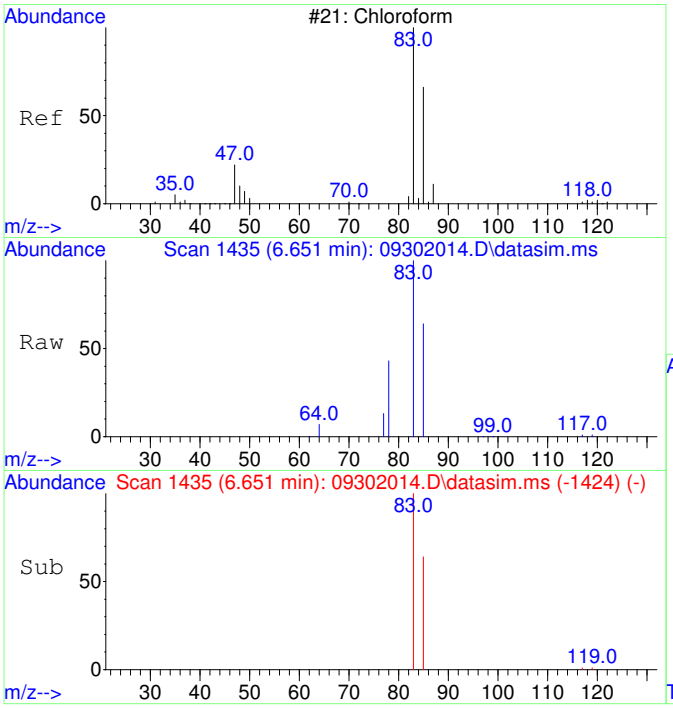


#5
cis-1,2-Dichloroethene
Concen: 19591.12 ug/L
RT: 6.087 min Scan# 1370
Delta R.T. -0.007 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 61 Resp: 714446

Ion	Ratio	Lower	Upper
61	100		
63	32.0	2.5	62.5

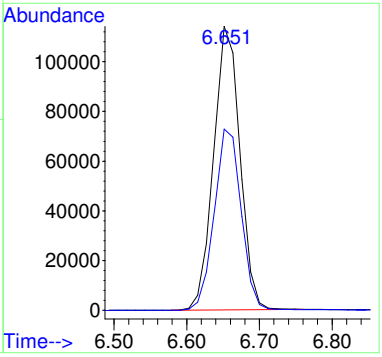


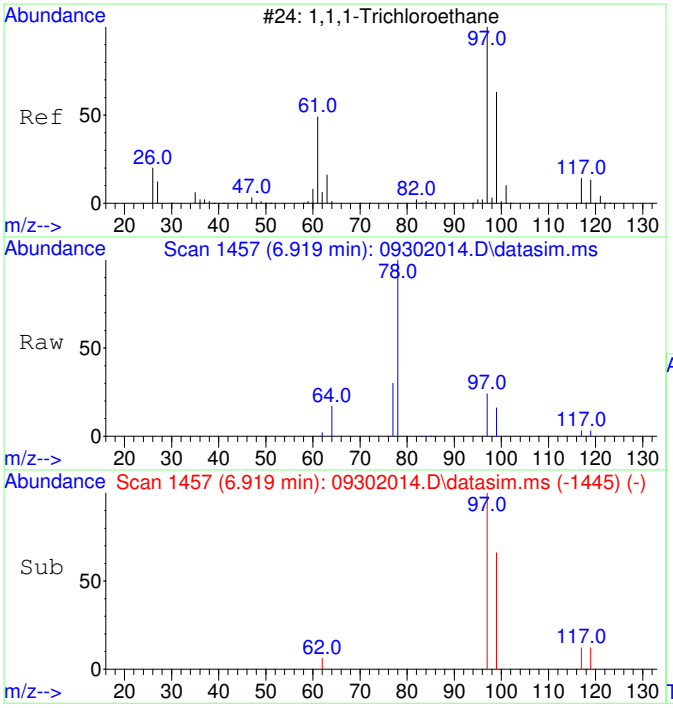


#6
Chloroform
Concen: 7710.26 ug/L
RT: 6.651 min Scan# 1435
Delta R.T. -0.012 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 83 Resp: 287795

Ion	Ratio	Lower	Upper
83	100		
85	64.9	35.1	95.1

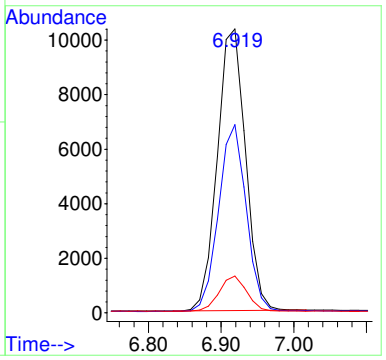


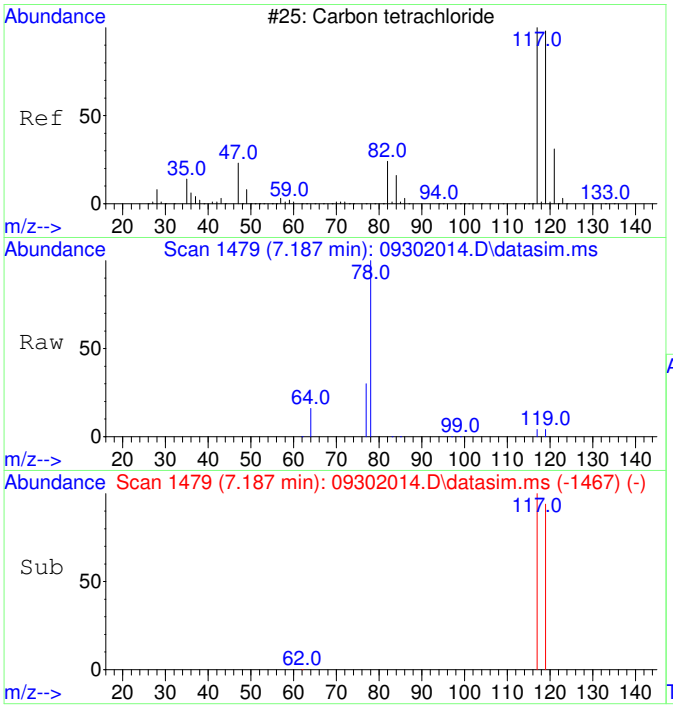


#7
1,1,1-Trichloroethane
Concen: 689.85 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 97 Resp: 27964

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

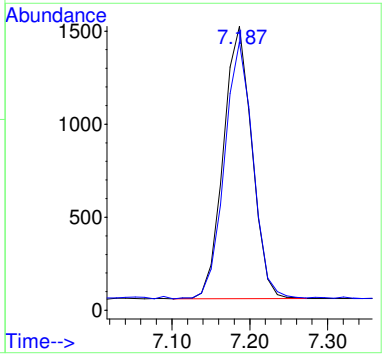


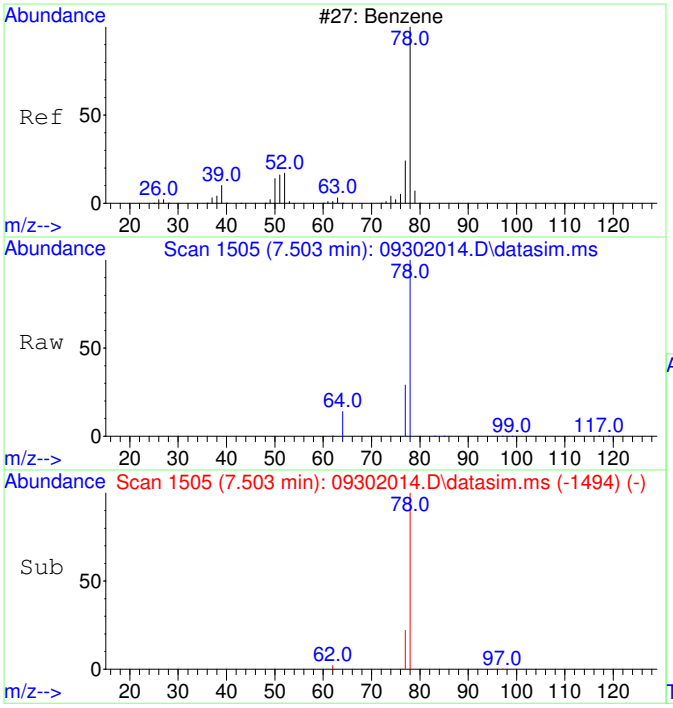


#8
Carbon tetrachloride
Concen: 98.08 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion:117 Resp: 3742

Ion	Ratio	Lower	Upper
117	100		
119	93.8	66.4	126.4

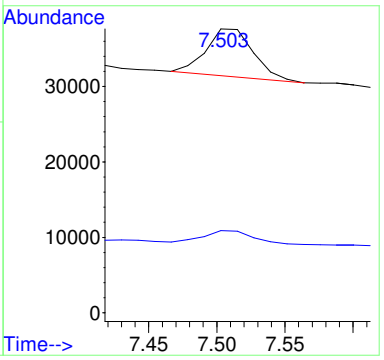


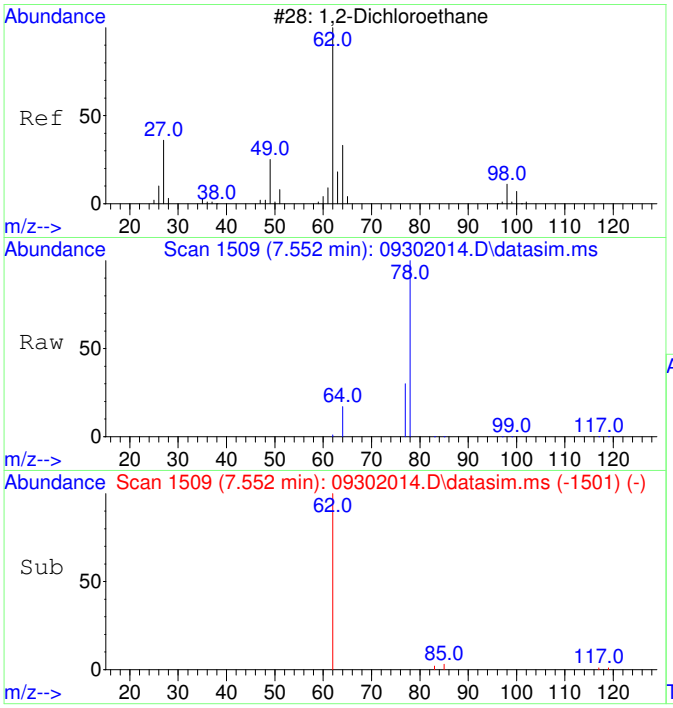


#9
Benzene
Concen: 144.11 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 78 Resp: 14729

Ion	Ratio	Lower	Upper
78	100		
77	39.8	0.0	53.2

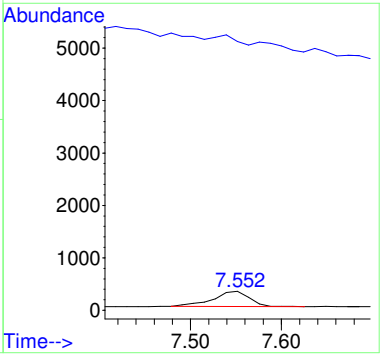


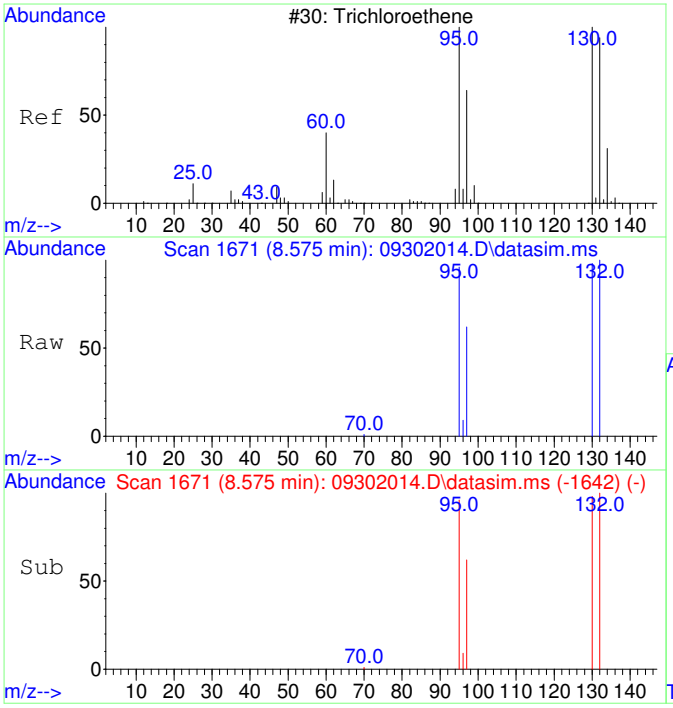


#10
1,2-Dichloroethane
Concen: 22.06 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. -0.000 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 62 Resp: 805

Ion	Ratio	Lower	Upper
62	100		
64	131.2	2.3	62.3#

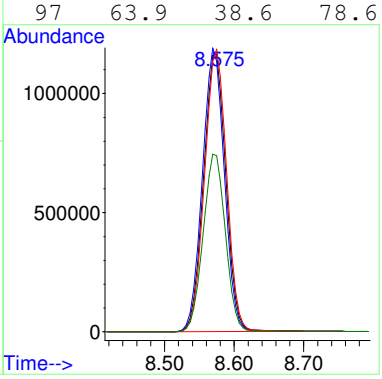


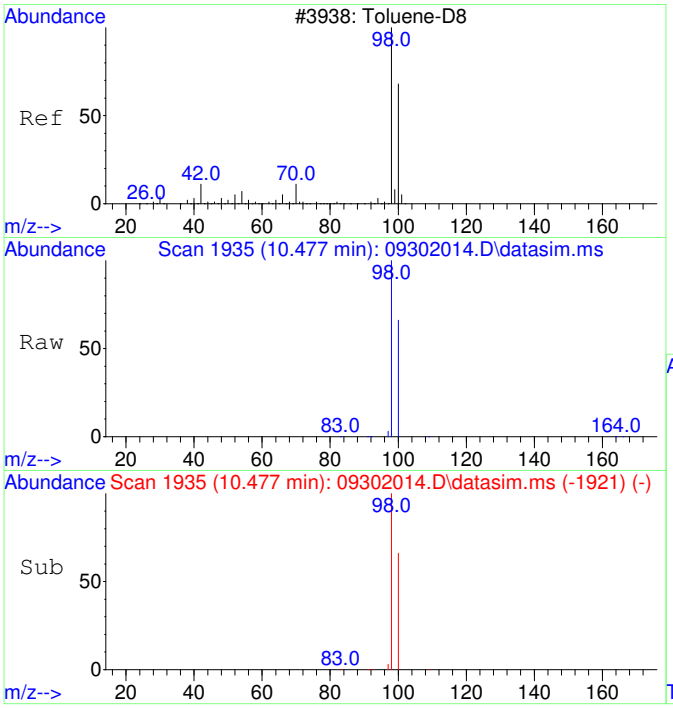


#11
Trichloroethene
Concen: 84157.54 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion:130 Resp: 2589857

Ion	Ratio	Lower	Upper
130	100		
95	100.5	60.7	120.7
132	100.6	76.0	116.0
97	63.9	38.6	78.6

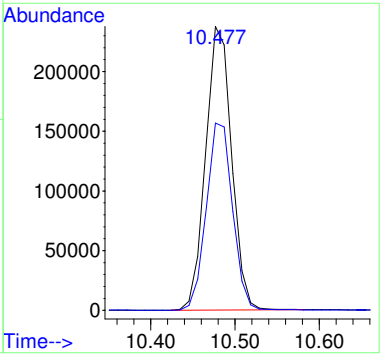


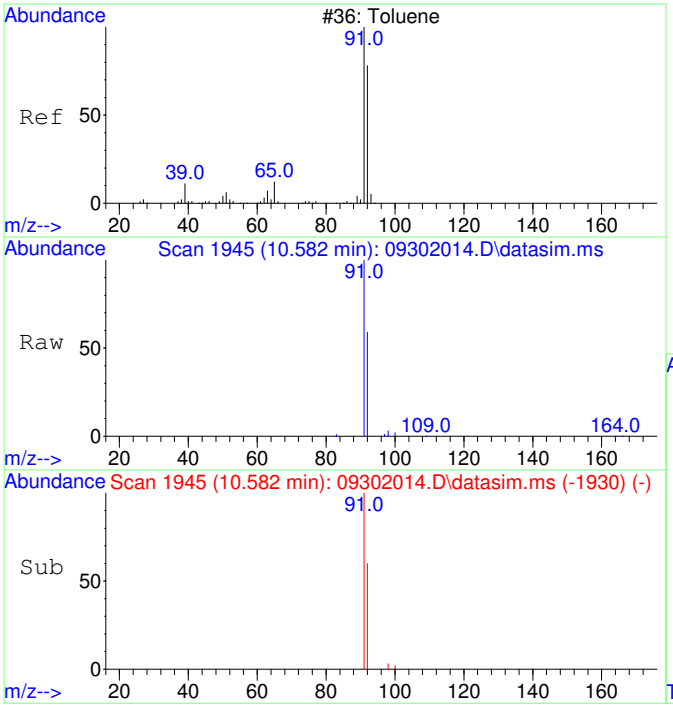


#12
Toluene-d8
Concen: 4322.44 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.000 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 98 Resp: 509024

Ion	Ratio	Lower	Upper
98	100		
100	66.7	37.1	97.1

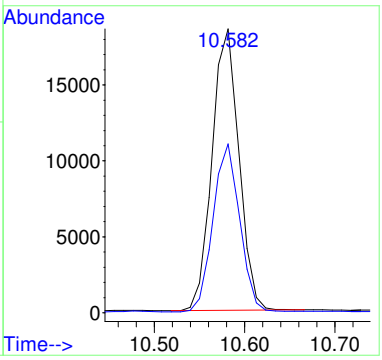


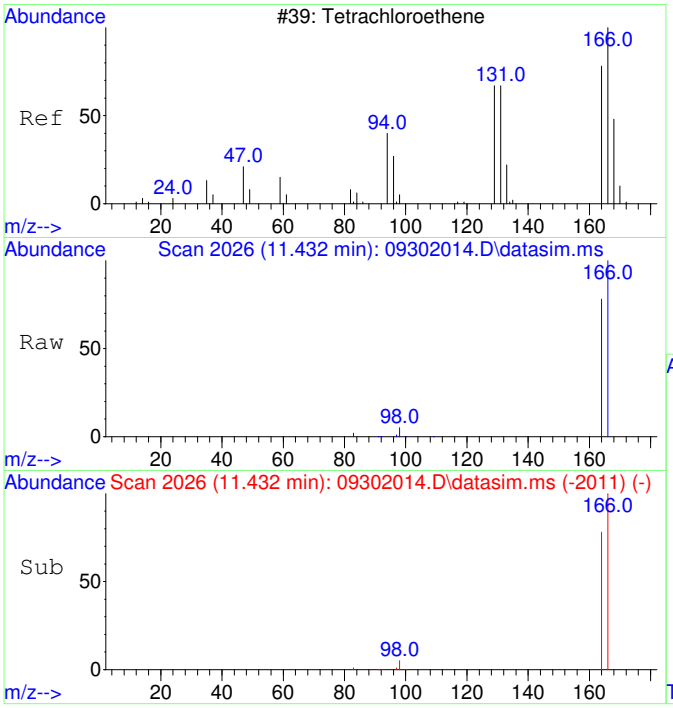


#13
Toluene
Concen: 255.39 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.010 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 91 Resp: 38343

Ion	Ratio	Lower	Upper
91	100		
92	58.9	29.9	89.9

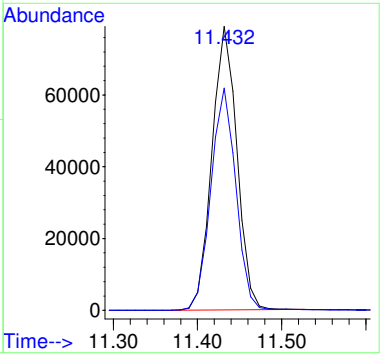


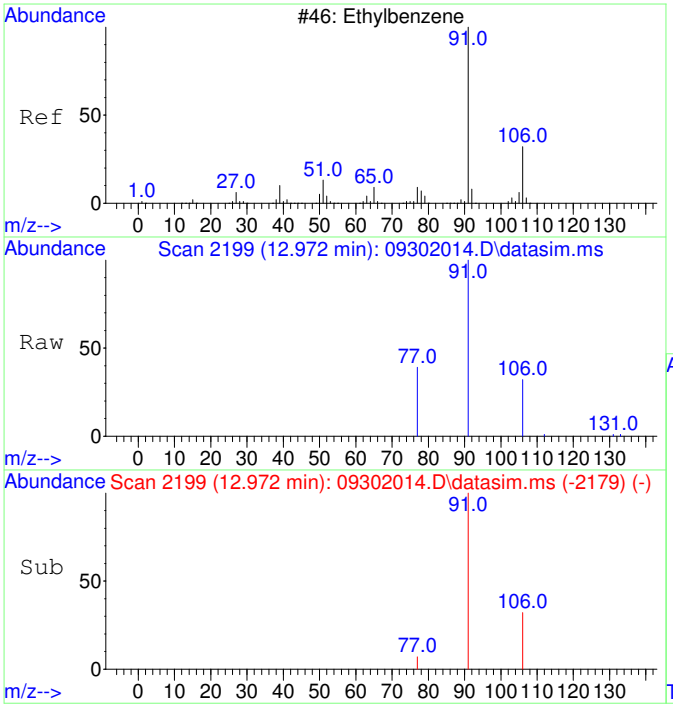


#15
Tetrachloroethene
Concen: 3750.92 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion:166 Resp: 162975

Ion	Ratio	Lower	Upper
166	100		
164	77.9	47.8	107.8

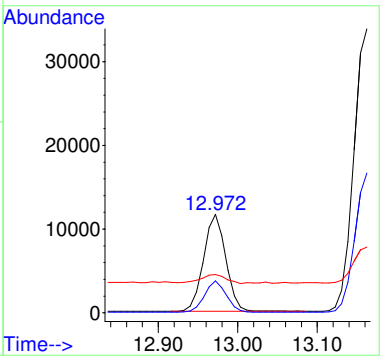


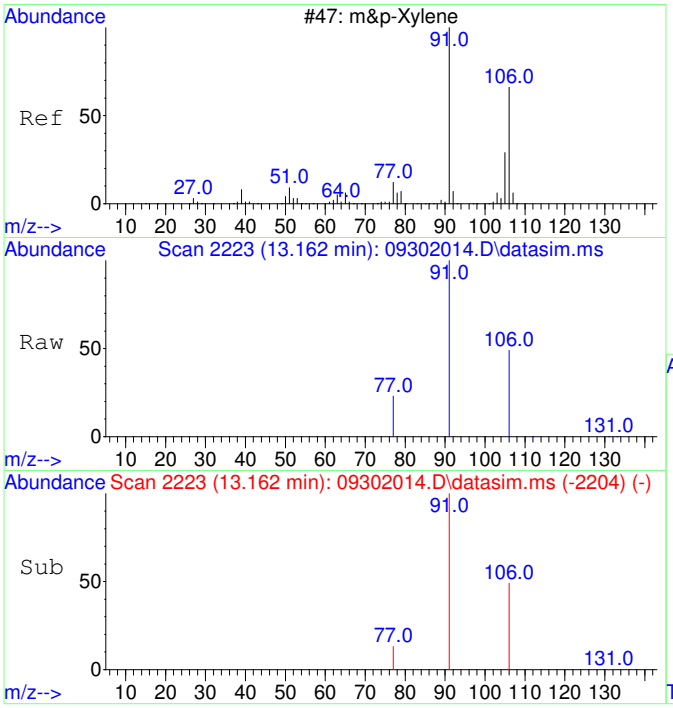


#18
Ethylbenzene
Concen: 122.12 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.008 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 91 Resp: 22317

Ion	Ratio	Lower	Upper
91	100		
106	31.4	3.0	63.0
77	9.5	0.0	38.2

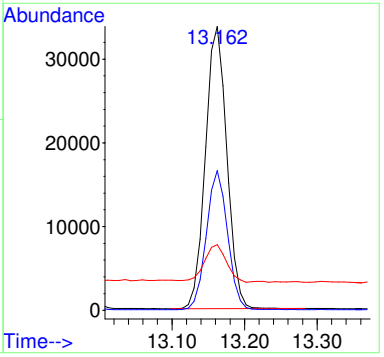


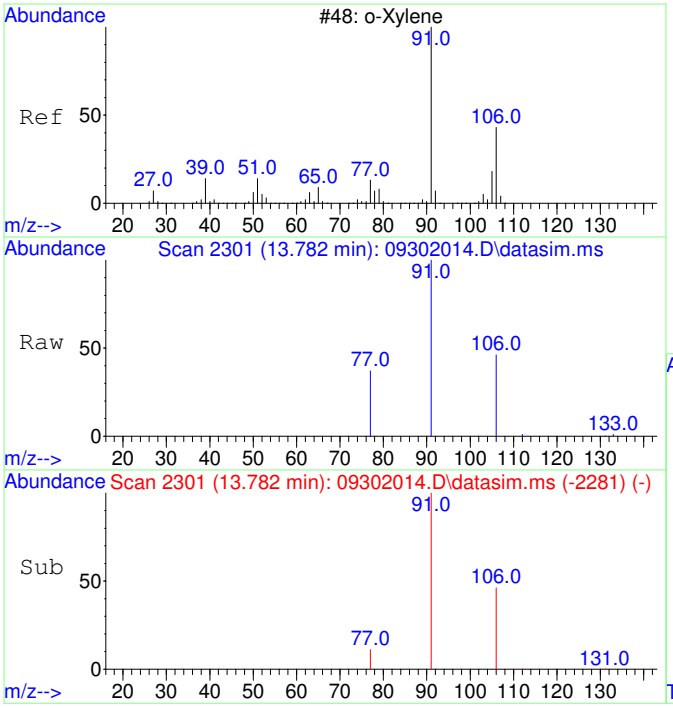


#19
m&p-Xylene
Concen: 485.82 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.000 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 91 Resp: 69389

Ion	Ratio	Lower	Upper
91	100		
106	48.6	22.2	82.2
77	13.3	0.0	42.4

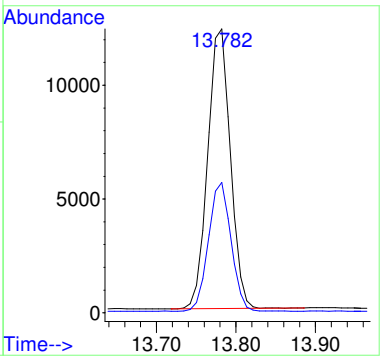


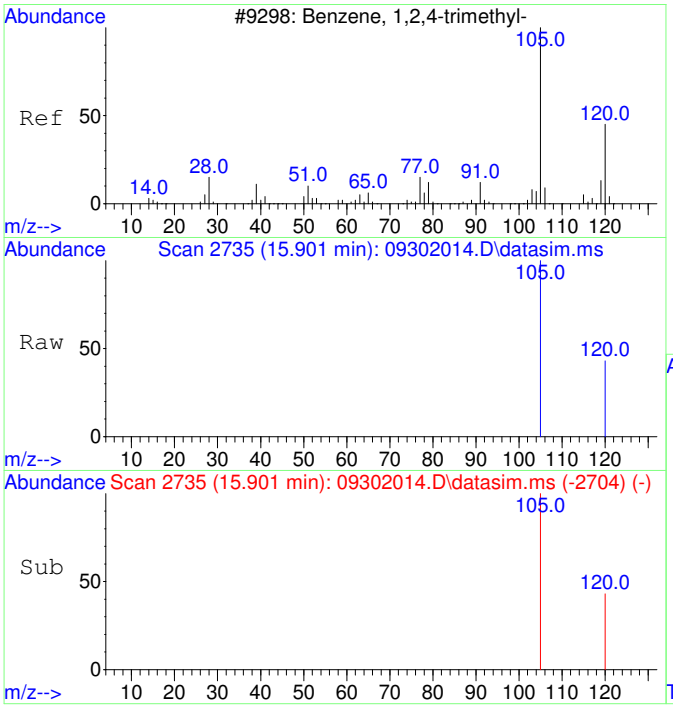


#20
o-Xylene
Concen: 159.08 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 91 Resp: 24275

Ion	Ratio	Lower	Upper
91	100		
106	45.8	19.2	79.2

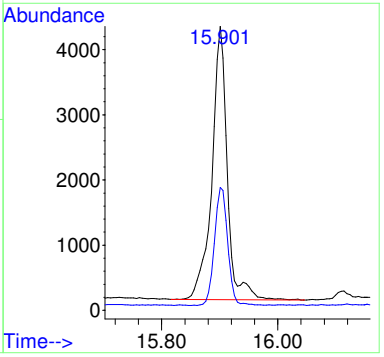


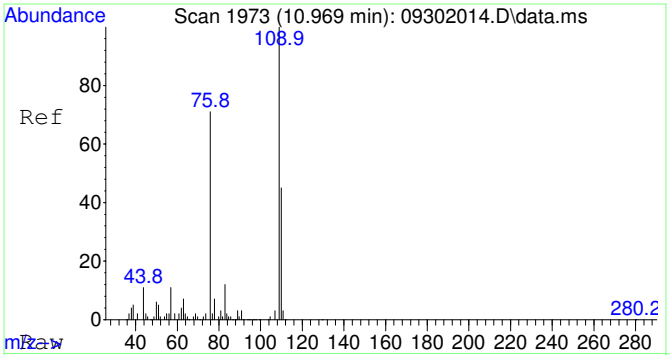


#23
1,2,4-Trimethylbenzene
Concen: 45.82 ug/L
RT: 15.901 min Scan# 2735
Delta R.T. 0.005 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion:105 Resp: 7730

Ion	Ratio	Lower	Upper
105	100		
120	37.0	17.2	77.2

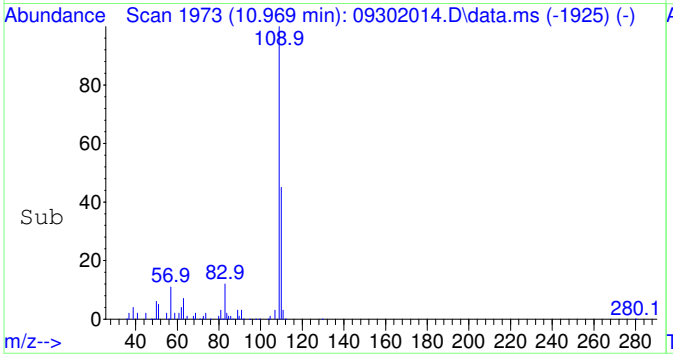


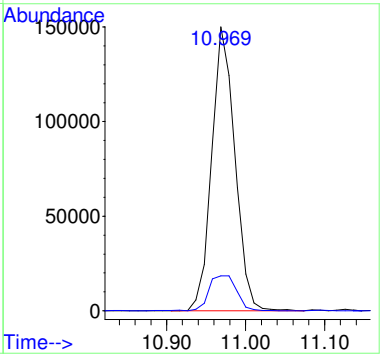


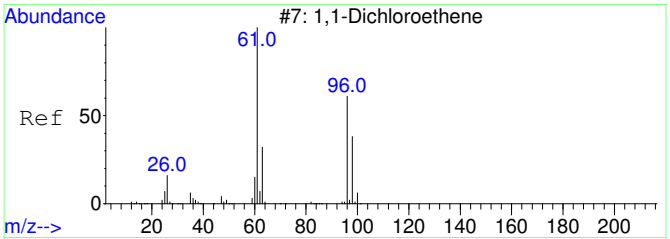
#25
2-Fluorotoluene SCAN
Concen: 5215.96 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.000 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

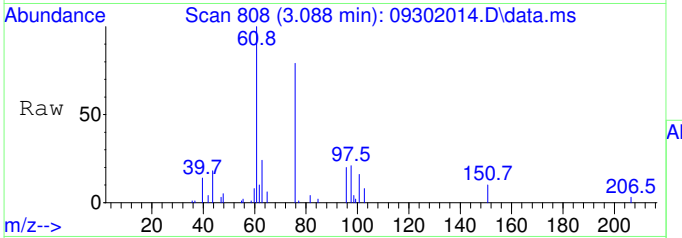
Tgt Ion:109 Resp: 305872

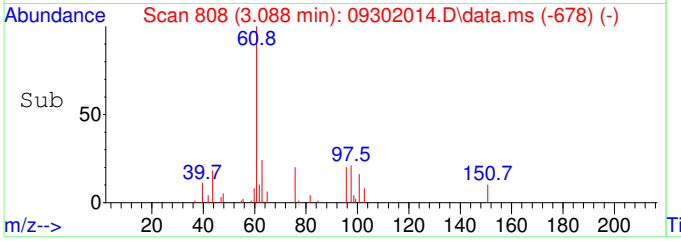
Ion	Ratio	Lower	Upper
109	100		
83	14.9	0.0	43.8







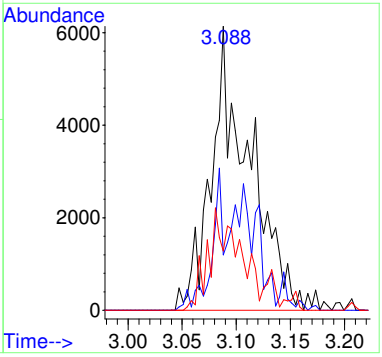


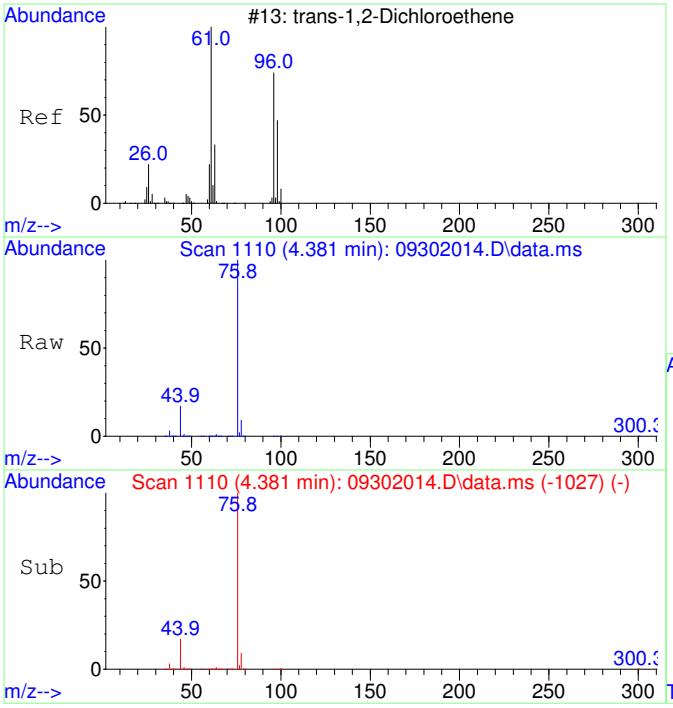


#26
1,1-Dichloroethene SCAN
Concen: 1203.49 ug/L
RT: 3.088 min Scan# 808
Delta R.T. -0.019 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 61 Resp: 14988

Ion	Ratio	Lower	Upper
61	100		
96	6.0	33.1	93.1#
98	26.3	11.2	71.2

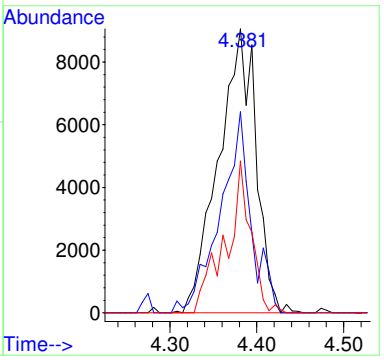


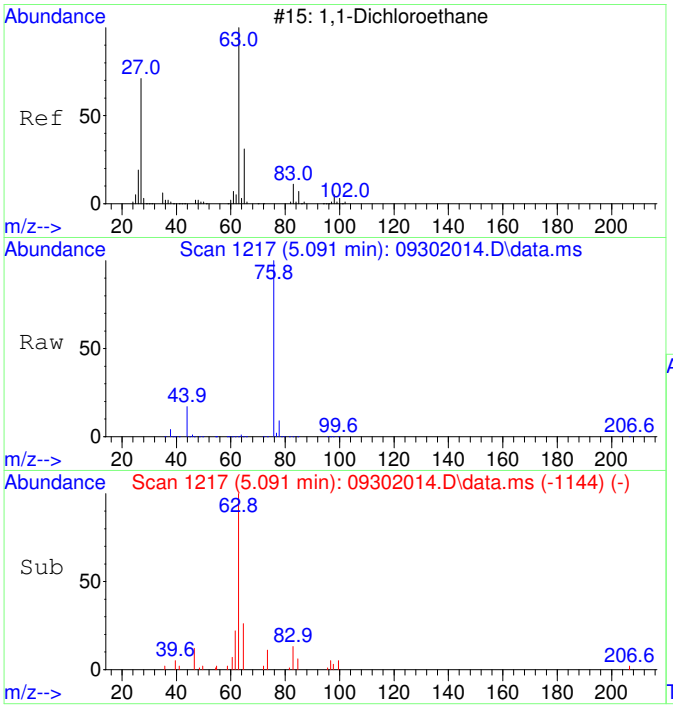


#27
trans-1,2-Dichloroethene SCAN
Concen: 1762.22 ug/L
RT: 4.381 min Scan# 1110
Delta R.T. -0.020 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 61 Resp: 27157

Ion	Ratio	Lower	Upper
61	100		
96	58.4	49.0	109.0
98	35.8	20.5	80.5

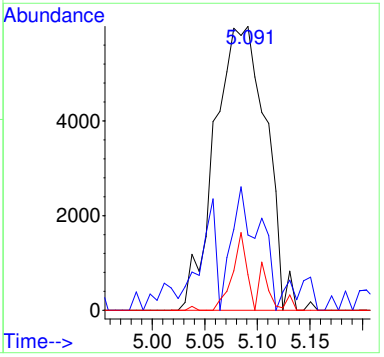


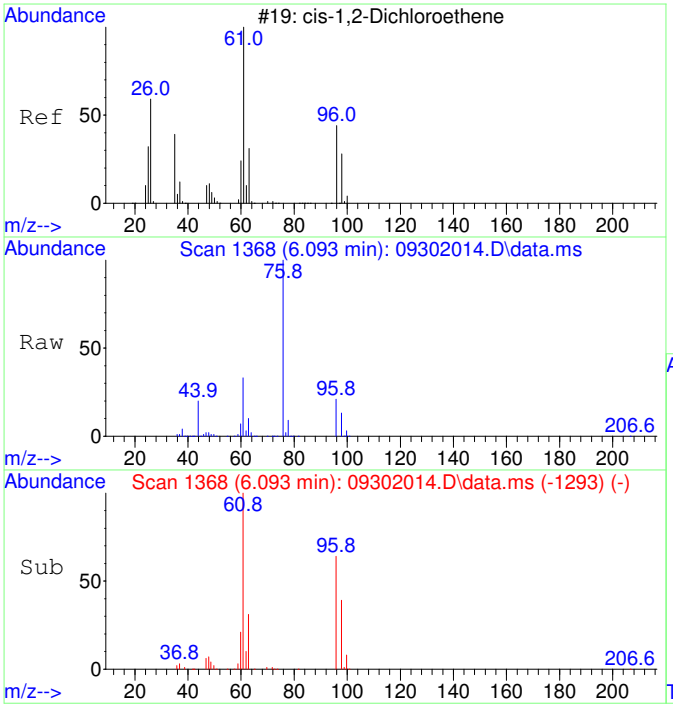


#28
1,1-Dichloroethane SCAN
Concen: 1141.25 ug/L
RT: 5.091 min Scan# 1217
Delta R.T. -0.013 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 63 Resp: 20354

Ion	Ratio	Lower	Upper
63	100		
65	20.9	1.3	61.3
83	7.5	0.0	45.9

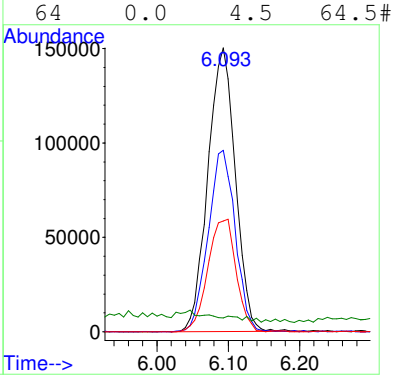


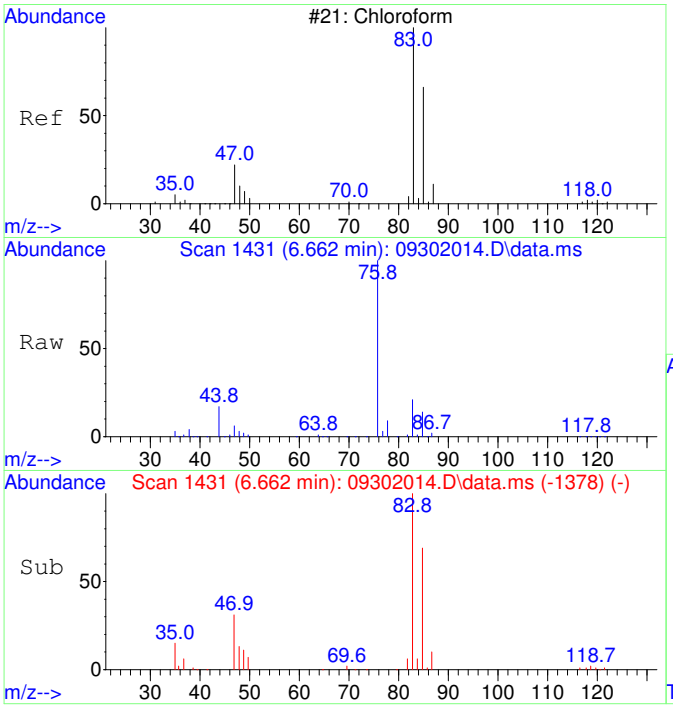


#29
cis-1,2-Dichloroethene SCAN
Concen: 21064.62 ug/L
RT: 6.093 min Scan# 1368
Delta R.T. -0.000 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 61 Resp: 402510

Ion	Ratio	Lower	Upper
61	100		
96	62.9	39.9	99.9
98	40.7	13.5	73.5
64	0.0	4.5	64.5#

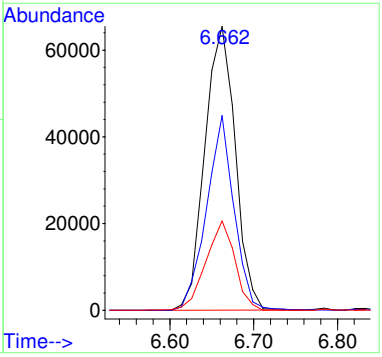


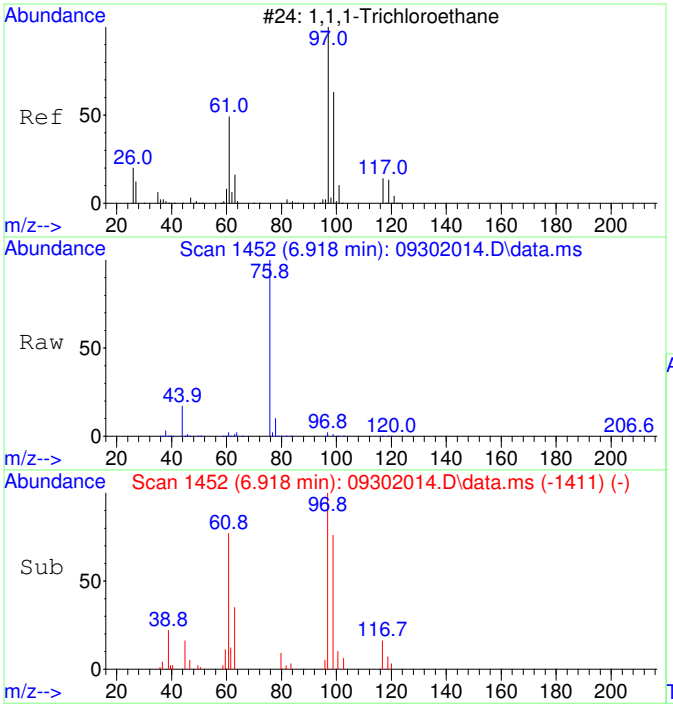


#30
Chloroform SCAN
Concen: 7977.69 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. -0.000 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 83 Resp: 165343

Ion	Ratio	Lower	Upper
83	100		
85	62.0	34.6	94.6
47	30.1	0.0	53.4

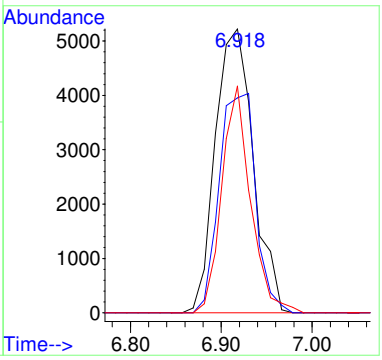


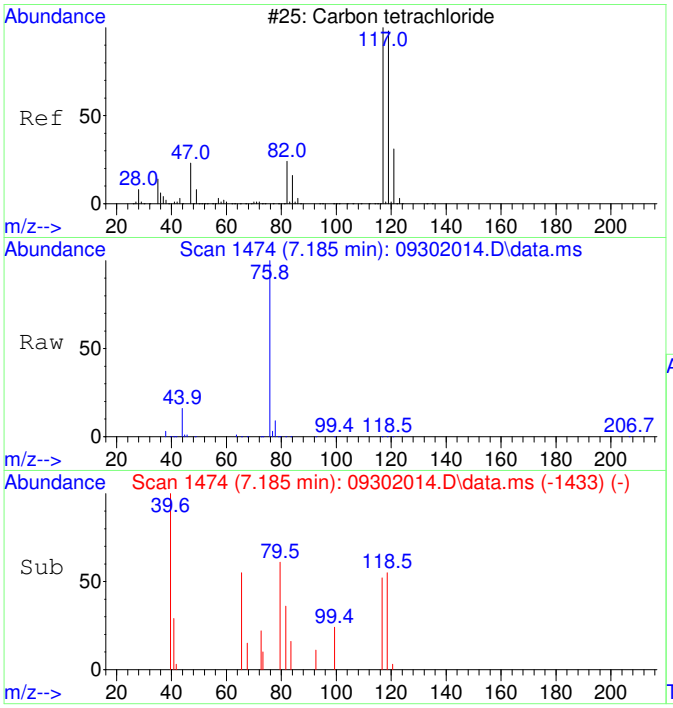


#31
1,1,1-Trichloroethane SCAN
Concen: 805.80 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. -0.000 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 97 Resp: 15219

Ion	Ratio	Lower	Upper
97	100		
99	74.1	43.6	103.6
61	60.2	18.0	78.0

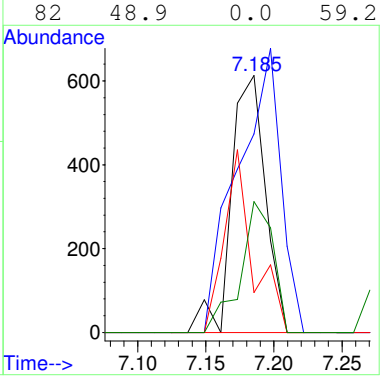


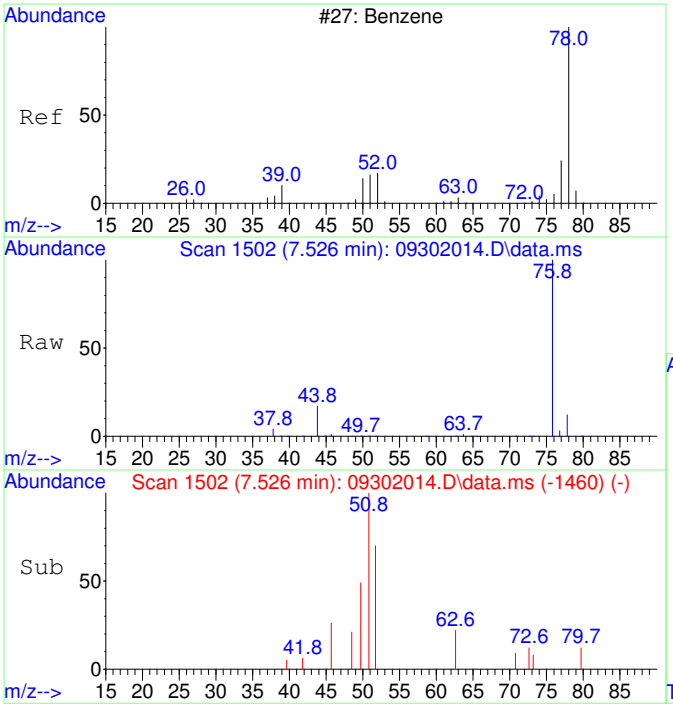


#32
Carbon tetrachloride SCAN
Concen: 53.96 ug/L
RT: 7.185 min Scan# 1474
Delta R.T. -0.000 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion:117 Resp: 1063

Ion	Ratio	Lower	Upper
117	100		
119	140.4	75.5	135.5#
121	0.0	0.0	58.8
82	48.9	0.0	59.2

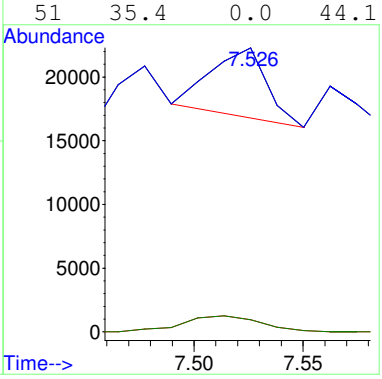


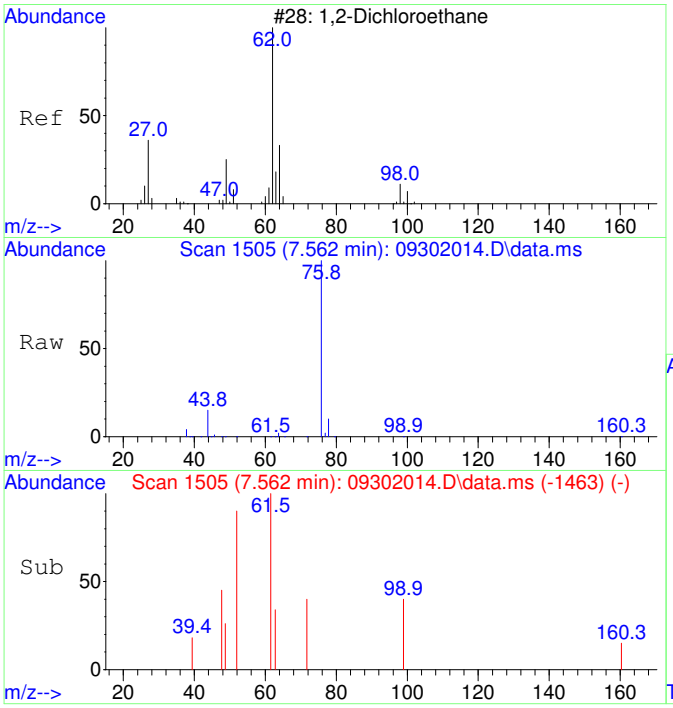


#33
Benzene SCAN
Concen: 170.59 ug/L
RT: 7.526 min Scan# 1502
Delta R.T. 0.012 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 78 Resp: 8871

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	35.4	0.0	47.9
51	35.4	0.0	44.1

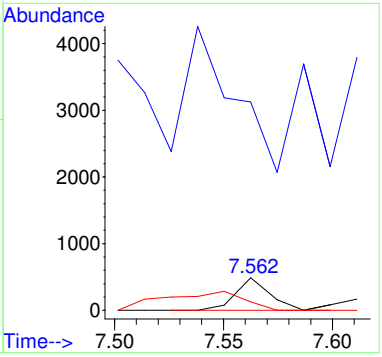


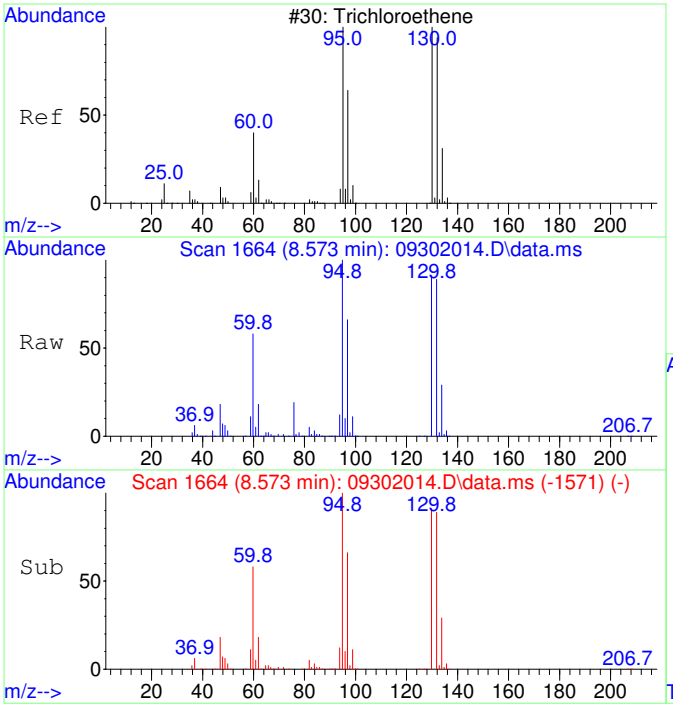


#34
1,2-Dichloroethane SCAN
Concen: 27.65 ug/L
RT: 7.562 min Scan# 1505
Delta R.T. 0.012 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 62 Resp: 531

Ion	Ratio	Lower	Upper
62	100		
64	0.0	5.2	65.2#
49	135.8	3.9	63.9#

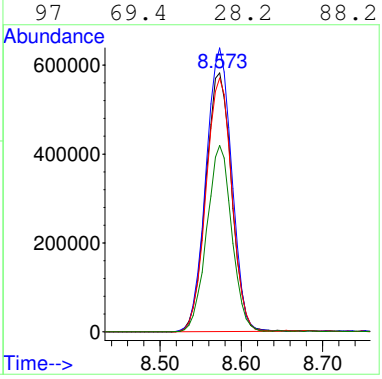


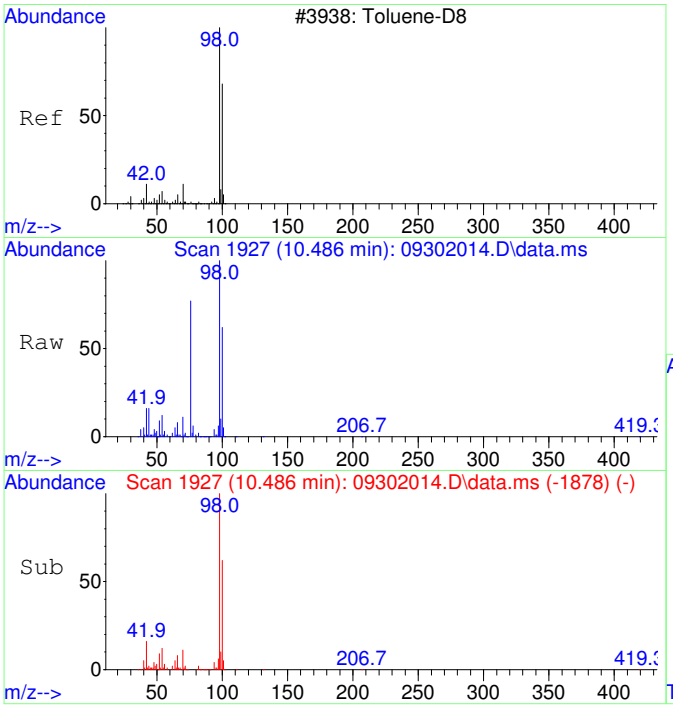


#35
Trichloroethene SCAN
Concen: 90567.69 ug/L
RT: 8.573 min Scan# 1664
Delta R.T. 0.005 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion:130 Resp: 1294275

Ion	Ratio	Lower	Upper
130	100		
95	108.7	60.5	120.5
132	97.6	59.6	119.6
97	69.4	28.2	88.2

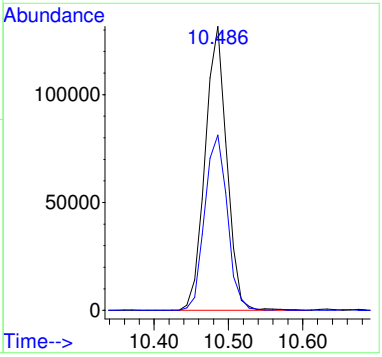


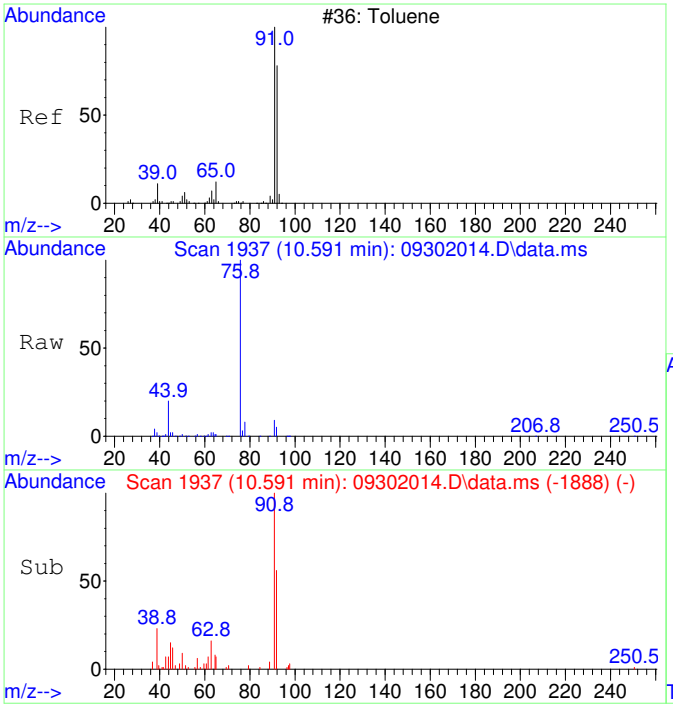


#36
Toluene-d8 SCAN
Concen: 4657.41 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.010 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 98 Resp: 267101

Ion	Ratio	Lower	Upper
98	100		
100	64.1	40.0	100.0

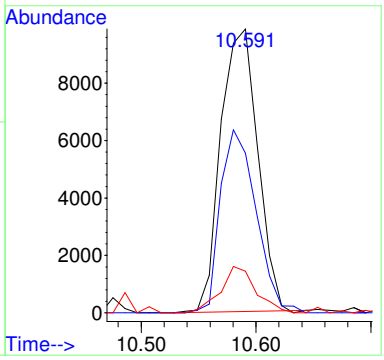


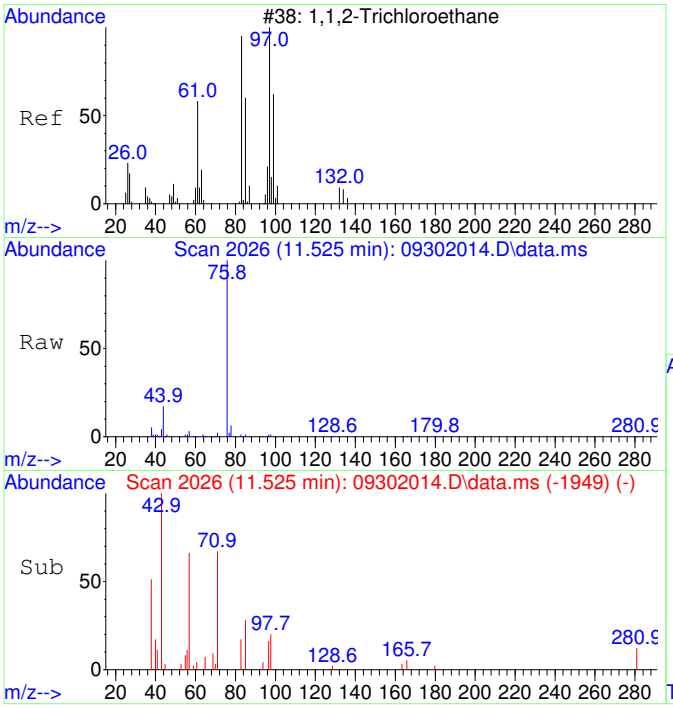


#37
Toluene SCAN
Concen: 301.07 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.010 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 91 Resp: 22112

Ion	Ratio	Lower	Upper
91	100		
92	62.5	28.3	88.3
65	15.6	0.0	41.0

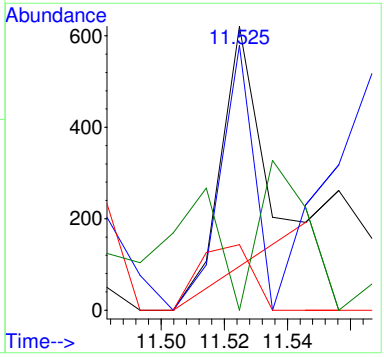


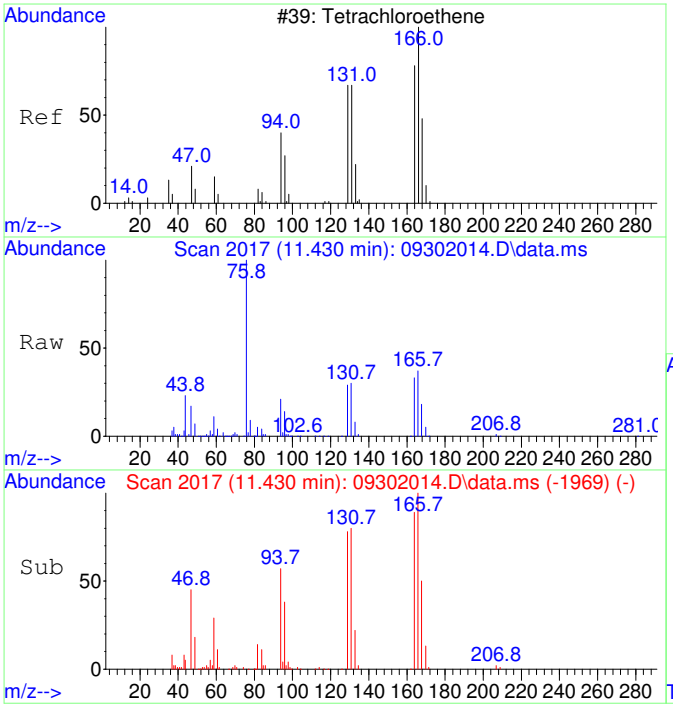


#38
1,1,2-Trichloroethane SCAN
Concen: 28.21 ug/L
RT: 11.525 min Scan# 2026
Delta R.T. 0.304 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 97 Resp: 465

Ion	Ratio	Lower	Upper
97	100		
83	91.8	57.7	117.7
61	36.3	32.1	92.1
99	37.8	36.7	96.7

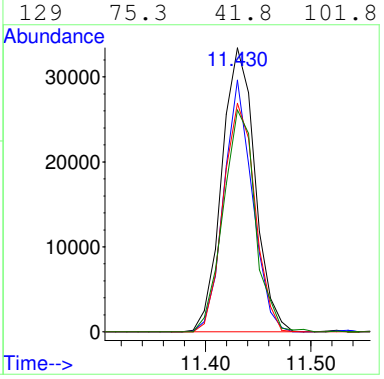


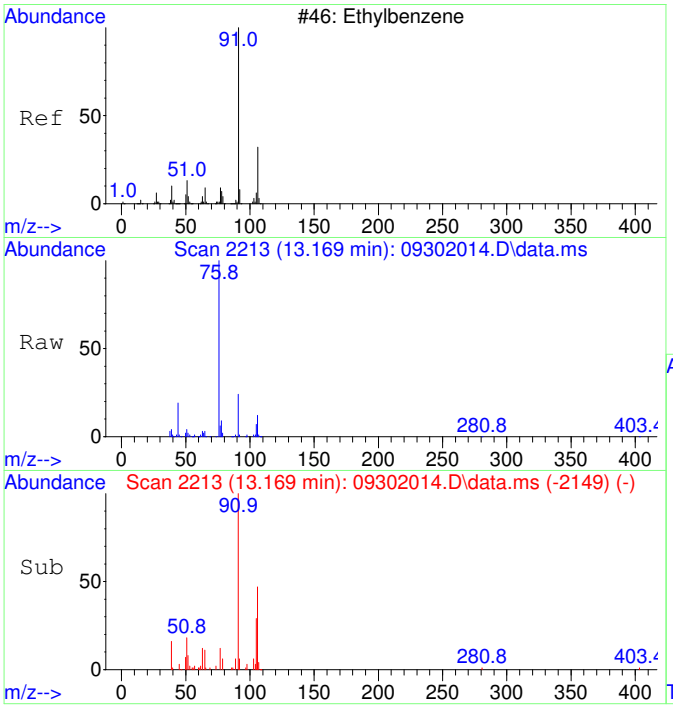


#39
Tetrachloroethene SCAN
Concen: 4158.99 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. -0.000 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion:166 Resp: 73385

Ion	Ratio	Lower	Upper
166	100		
164	76.3	50.9	110.9
131	76.9	38.7	98.7
129	75.3	41.8	101.8

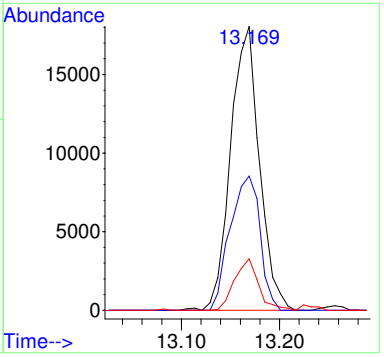


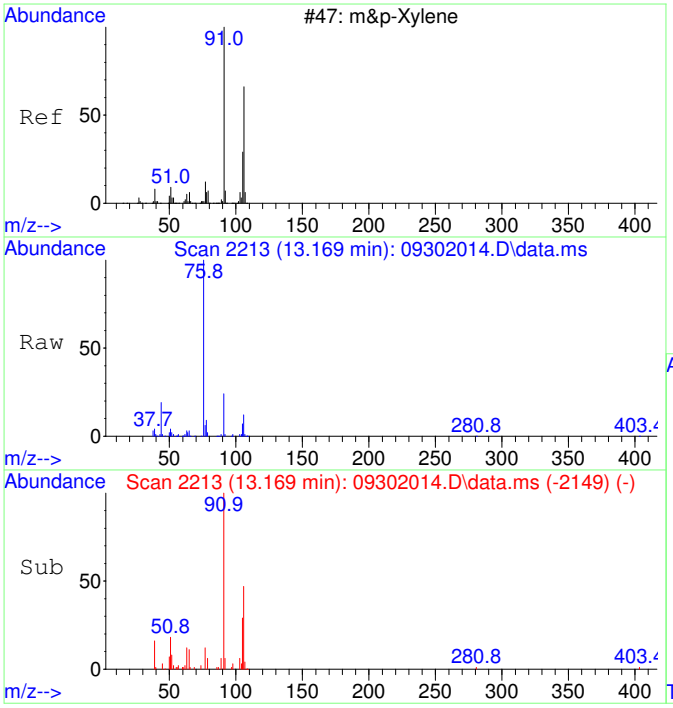


#42
Ethylbenzene SCAN
Concen: 274.28 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 91 Resp: 36700

Ion	Ratio	Lower	Upper
91	100		
106	49.0	23.1	83.1
51	15.1	0.0	40.1

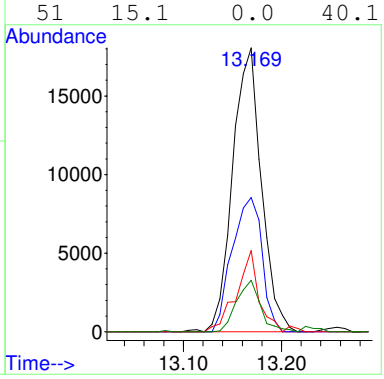


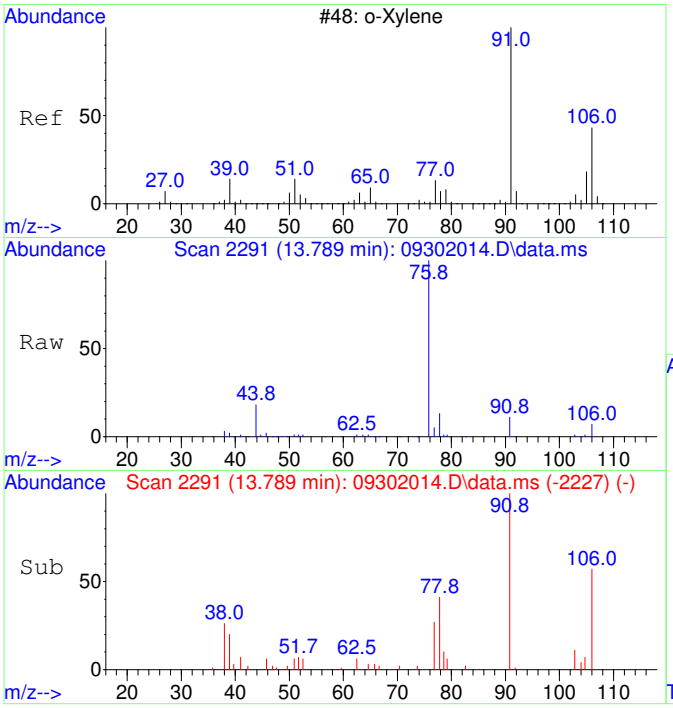


#43
m&p-Xylene SCAN
Concen: 274.28 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 91 Resp: 36700

Ion	Ratio	Lower	Upper
91	100		
106	49.0	23.1	83.1
105	22.8	0.0	54.7
51	15.1	0.0	40.1

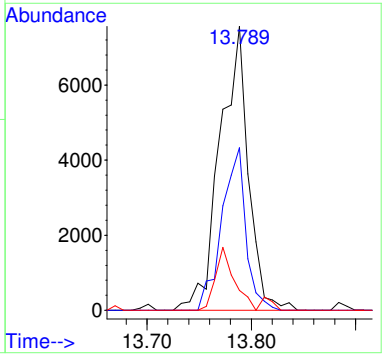


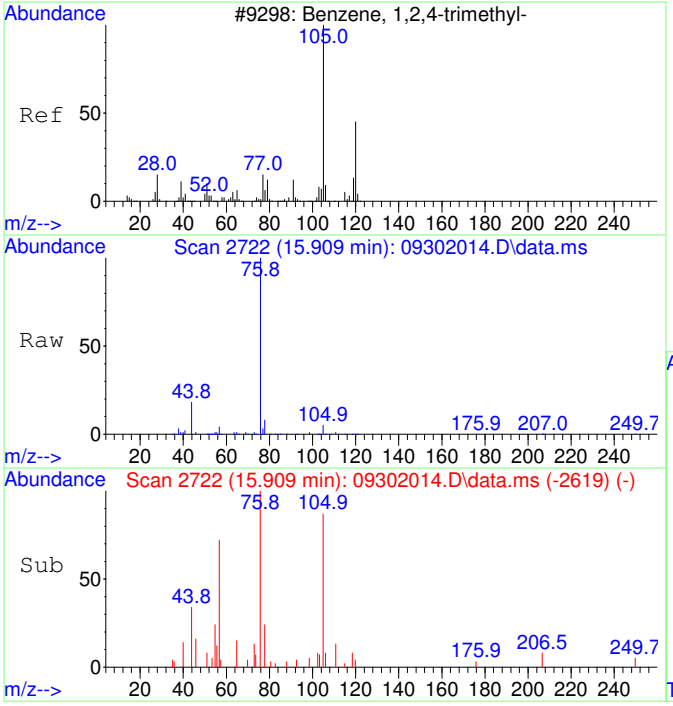


#44
o-Xylene SCAN
Concen: 199.88 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.008 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion: 91 Resp: 14316

Ion	Ratio	Lower	Upper
91	100		
106	48.2	18.0	78.0
105	14.7	0.0	56.6

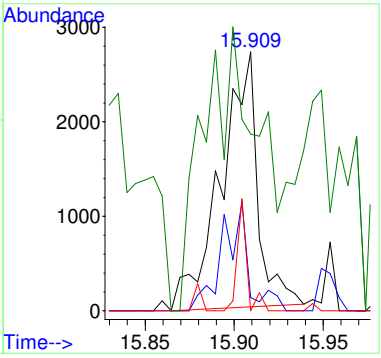




#47
1,2,4-Trimethylbenzene SCAN
Concen: 50.38 ug/L
RT: 15.909 min Scan# 2722
Delta R.T. 0.010 min
Lab File: 09302014.D
Acq: 30 Sep 2020 18:31

Tgt Ion:105 Resp: 3891

Ion	Ratio	Lower	Upper
105	100		
120	24.4	16.9	76.9
119	11.4	0.0	41.9
77	118.7	0.0	42.3#



2009033-02

Quantitation Report (Not Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302015.D
Acq On : 30 Sep 2020 18:55
InstName : AG5975C
Operator : TD
Sample : 2009033-02
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 01 08:59:22 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

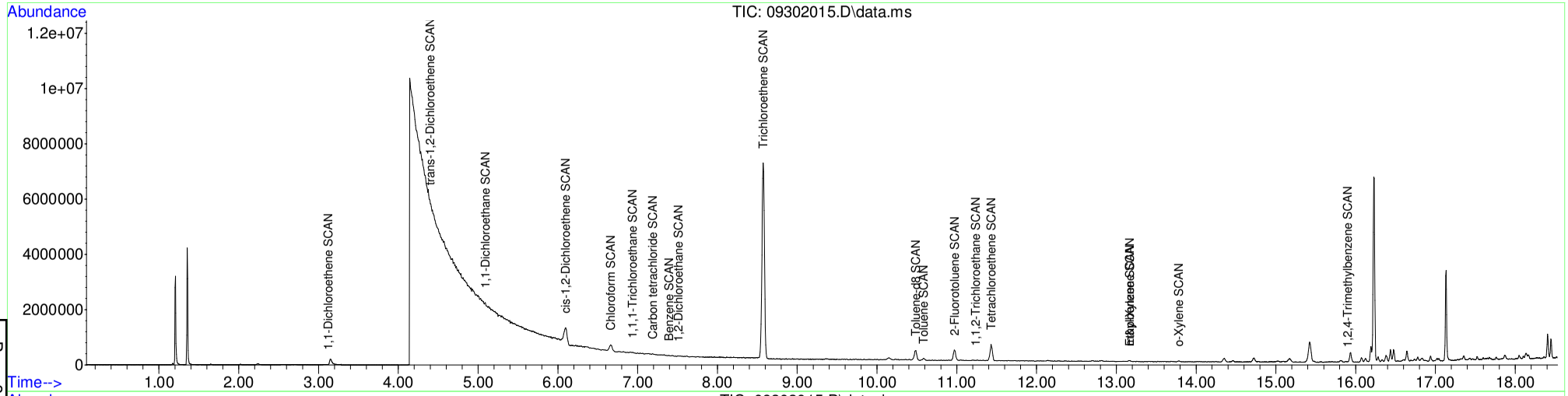
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	609311	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	520543	4364.07 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 87.28%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.086	61	21930	901.33 ug/L	84
3] trans-1,2-Dichloroethene	4.389	61	61011	2170.36 ug/L	100
4] 1,1-Dichloroethane	5.099	63	23071	659.31 ug/L	94
5] cis-1,2-Dichloroethene	6.094	61	949424	25703.63 ug/L OC	99
6] Chloroform	6.664	83	347763	9198.42 ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	39328	957.85 ug/L	99
8] Carbon tetrachloride	7.187	117	11111	287.52 ug/L	99
9] Benzene	7.515	78	12712	122.79 ug/L	40
10] 1,2-Dichloroethane	7.552	62	901	24.38 ug/L #	42
11] Trichloroethene	8.575	130	4947881	158737.94 ug/L OC	93
13] Toluene	10.582	91	100511	660.95 ug/L	98
15] Tetrachloroethene	11.432	166	376463	8554.27 ug/L	100
18] Ethylbenzene	12.972	91	6649	35.92 ug/L	94
19] m&p-Xylene	13.162	91	38007	262.72 ug/L	95
20] o-Xylene	13.782	91	32442	209.90 ug/L	95
23] 1,2,4-Trimethylbenzene	15.901	105	6184	36.19 ug/L	94
25) 2-Fluorotoluene SCAN	10.969	109	317186	5340.14 ug/L	99
26) 1,1-Dichloroethene SCAN	3.122	61	258	20.45 ug/L #	64
27) trans-1,2-Dichloroethe...	4.394	61	36631	2346.78 ug/L	79
28) 1,1-Dichloroethane SCAN	5.091	63	9378	519.14 ug/L	91
29) cis-1,2-Dichloroethene...	6.100	61	542289	28018.96 ug/L #	82
30) Chloroform SCAN	6.662	83	194545	9267.36 ug/L	94
31) 1,1,1-Trichloroethane ...	6.930	97	23284	1217.14 ug/L	85
32) Carbon tetrachloride SCAN	7.185	117	6891	345.33 ug/L	83
33) Benzene SCAN	7.392	78	14346	272.36 ug/L	91
34) 1,2-Dichloroethane SCAN	7.514	62	461	23.70 ug/L #	1
35) Trichloroethene SCAN	8.574	130	2473676	170896.76 ug/L	84
36) Toluene-d8 SCAN	10.486	98	266332	4584.97 ug/L	94
37) Toluene SCAN	10.580	91	53966	725.44 ug/L	97
38) 1,1,2-Trichloroethane ...	11.231	97	1100	65.88 ug/L #	29
39) Tetrachloroethene SCAN	11.430	166	178409	9982.56 ug/L	93
42) Ethylbenzene SCAN	13.169	91	20756	153.15 ug/L	93
43) m&p-Xylene SCAN	13.169	91	20756	153.15 ug/L	95
44) o-Xylene SCAN	13.781	91	17735	244.47 ug/L	94
47) 1,2,4-Trimethylbenzene...	15.899	105	3933	50.28 ug/L #	42

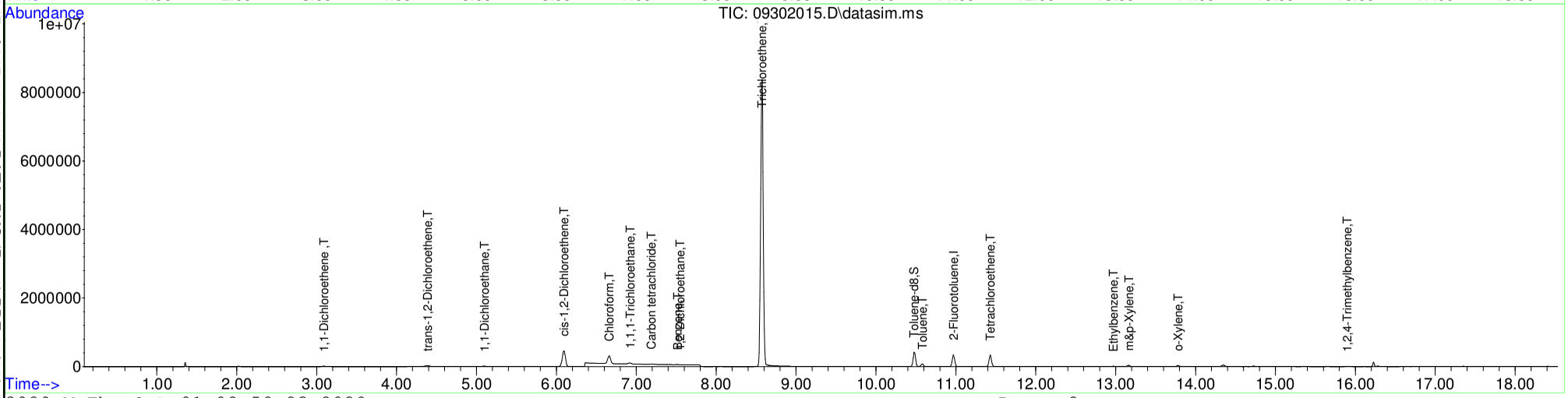
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302015.D
Acq On : 30 Sep 2020 18:55
InstName : AG5975C
Operator : TD
Sample : 2009033-02
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 01 08:59:22 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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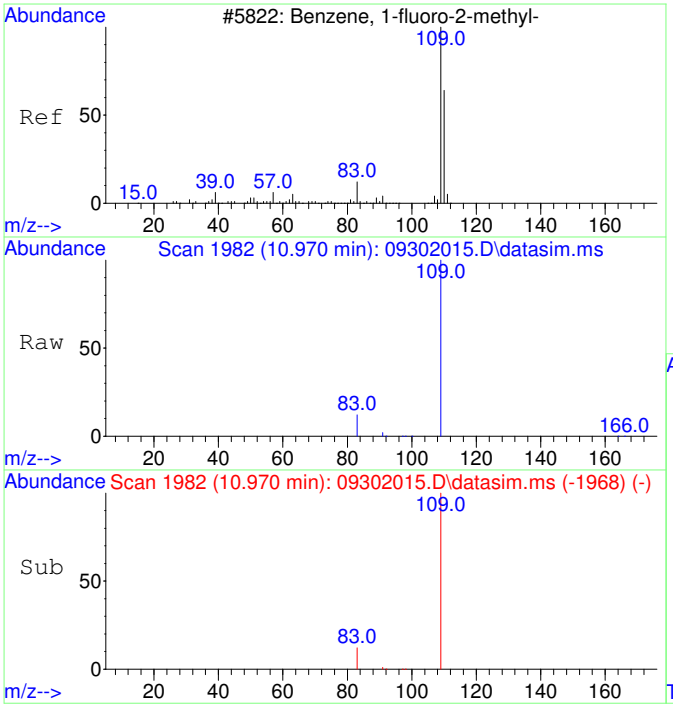
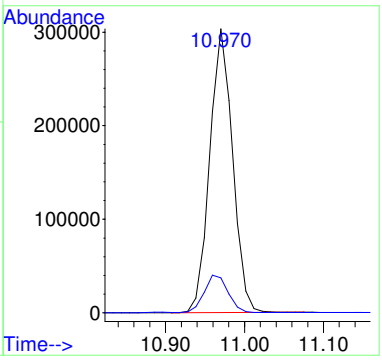
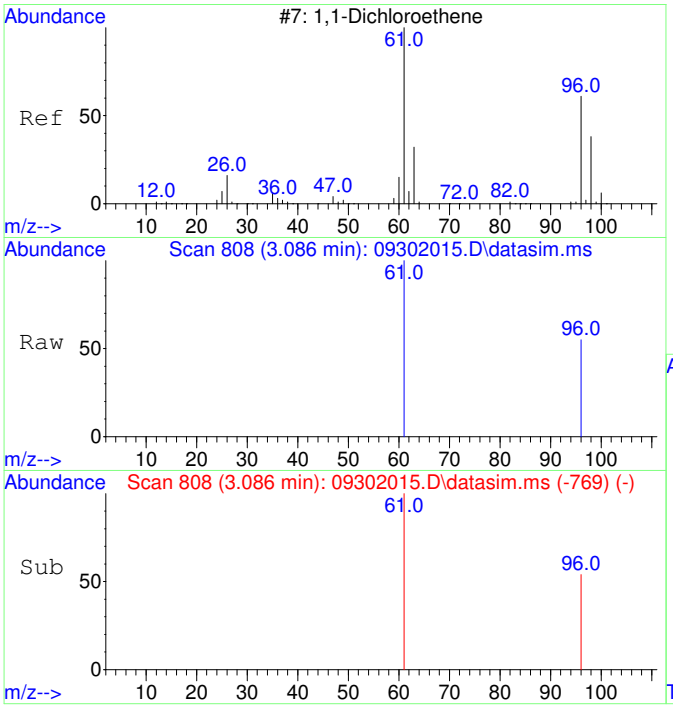


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion:109 Resp: 609311

Ion	Ratio	Lower	Upper
109	100		
83	13.7	0.0	42.3

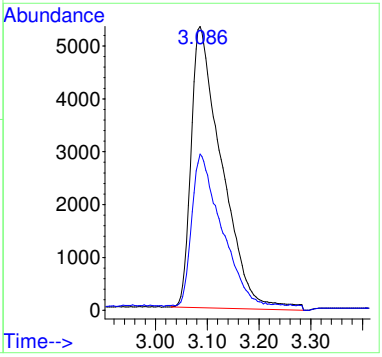


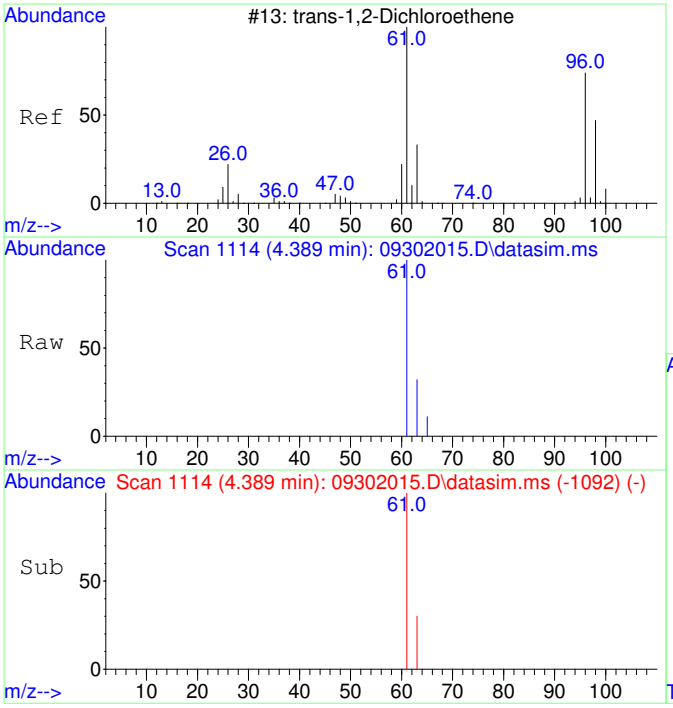


#2
1,1-Dichloroethene
Concen: 901.33 ug/L
RT: 3.086 min Scan# 808
Delta R.T. -0.004 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 61 Resp: 21930

Ion	Ratio	Lower	Upper
61	100		
96	54.3	37.2	97.2

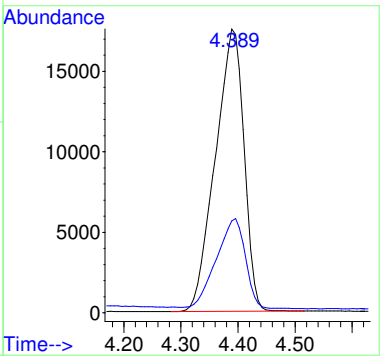


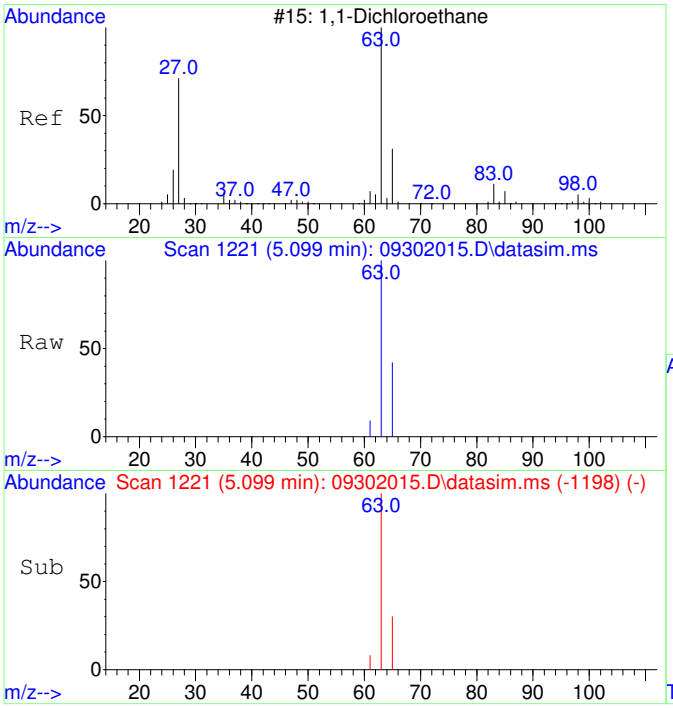


#3
trans-1,2-Dichloroethene
Concen: 2170.36 ug/L
RT: 4.389 min Scan# 1114
Delta R.T. -0.007 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 61 Resp: 61011

Ion	Ratio	Lower	Upper
61	100		
63	32.6	2.4	62.4

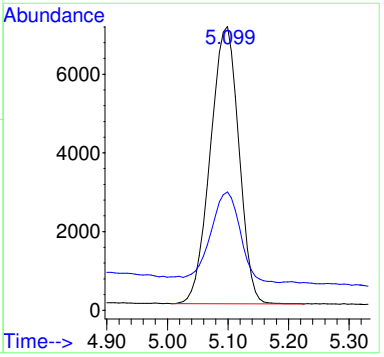


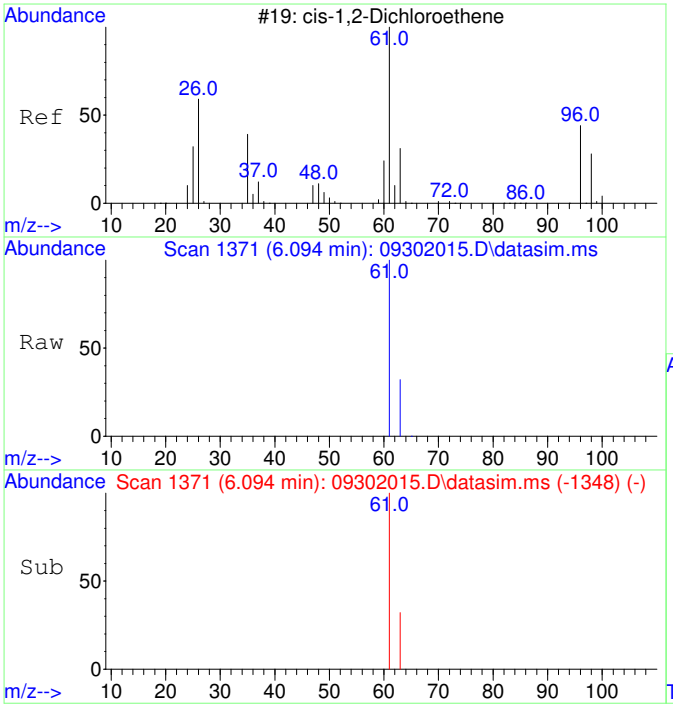


#4
1,1-Dichloroethane
Concen: 659.31 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. 0.000 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 63 Resp: 23071

Ion	Ratio	Lower	Upper
63	100		
65	35.2	1.8	61.8

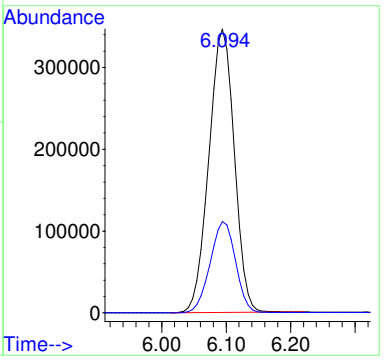


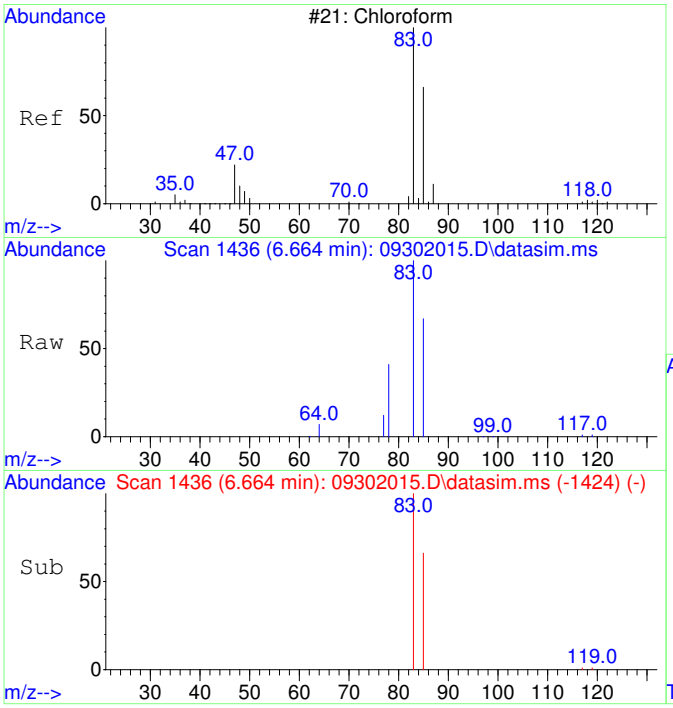


#5
cis-1,2-Dichloroethene
Concen: 25703.63 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. 0.000 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 61 Resp: 949424

Ion	Ratio	Lower	Upper
61	100		
63	32.0	2.5	62.5

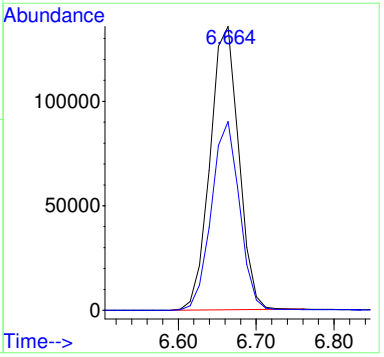


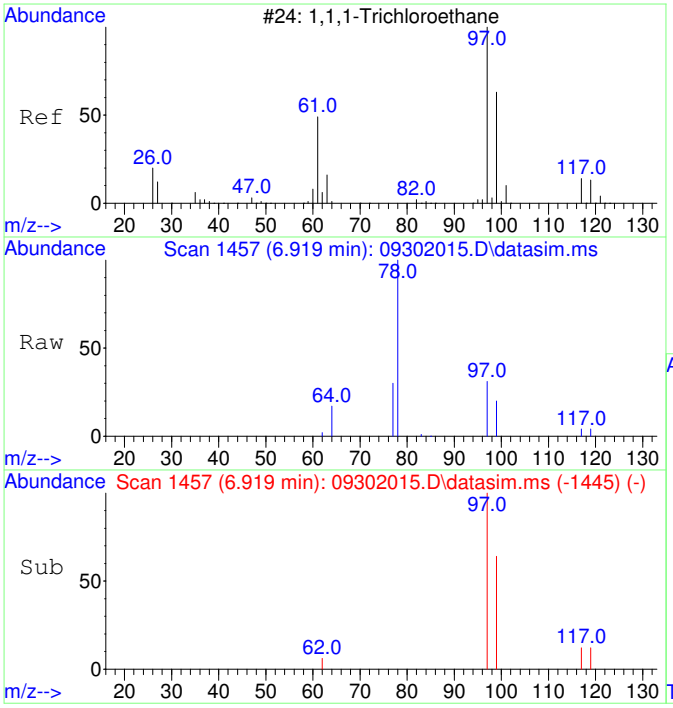


#6
Chloroform
Concen: 9198.42 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. 0.000 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 83 Resp: 347763

Ion	Ratio	Lower	Upper
83	100		
85	65.0	35.1	95.1

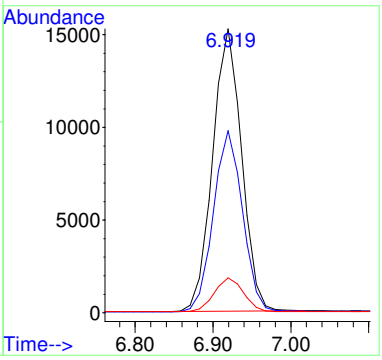


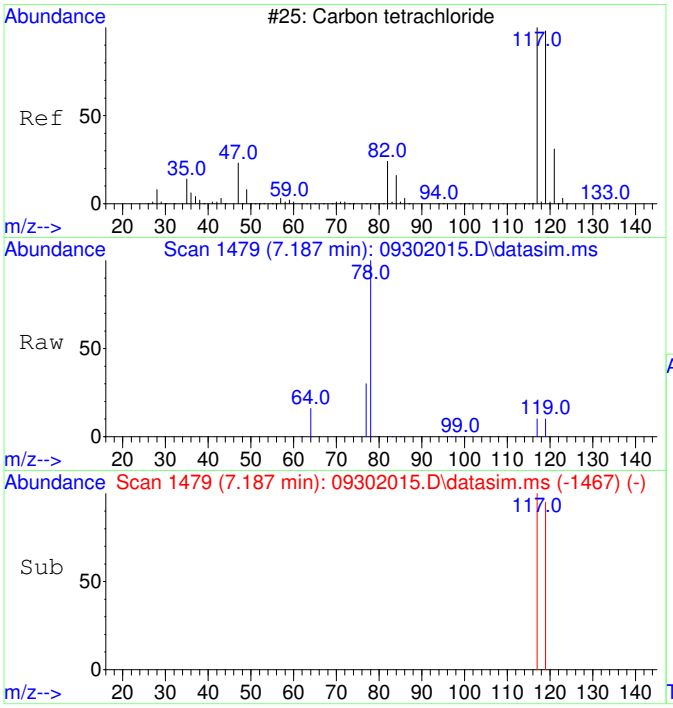


#7
1,1,1-Trichloroethane
Concen: 957.85 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 97 Resp: 39328

Ion	Ratio	Lower	Upper
97	100		
99	64.1	34.6	94.6
117	12.1	0.0	43.2

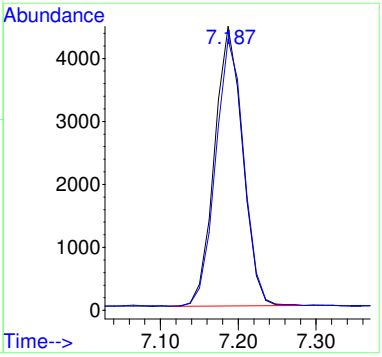


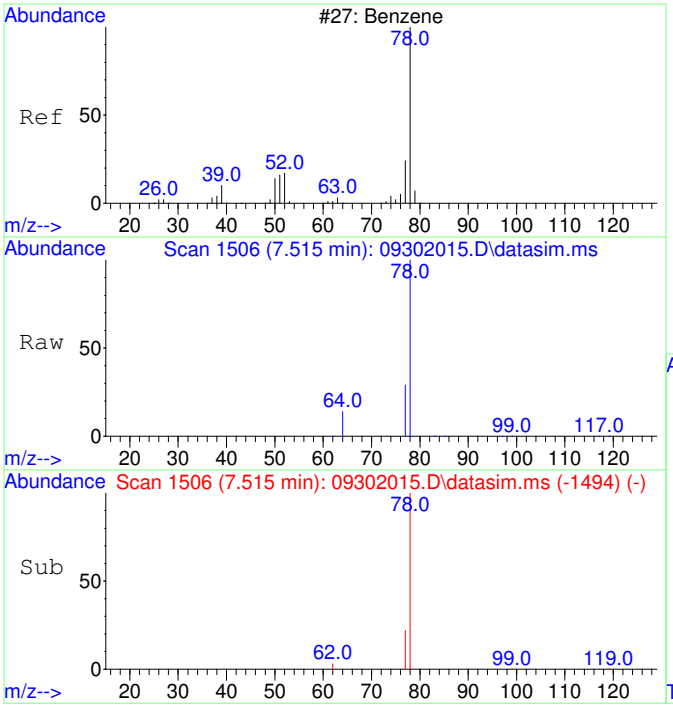


#8
Carbon tetrachloride
Concen: 287.52 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion:117 Resp: 11111

Ion	Ratio	Lower	Upper
117	100		
119	95.8	66.4	126.4

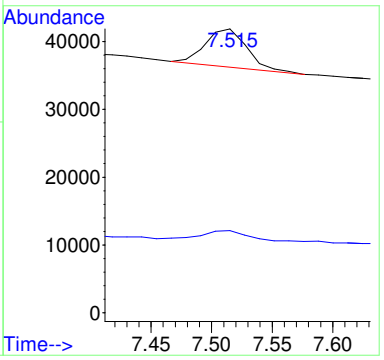


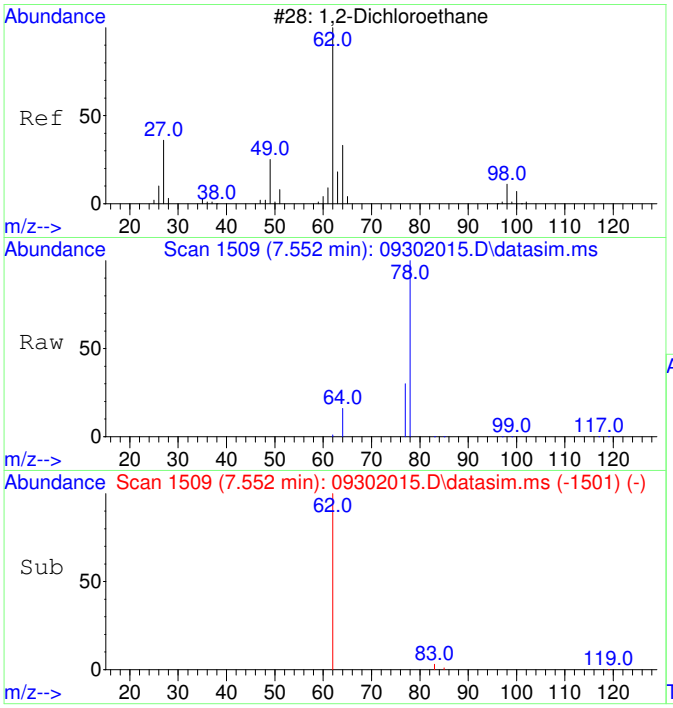


#9
Benzene
Concen: 122.79 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 78 Resp: 12712

Ion	Ratio	Lower	Upper
78	100		
77	52.5	0.0	53.2

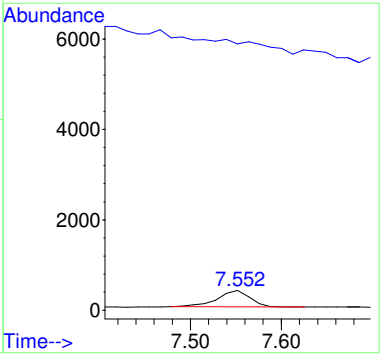


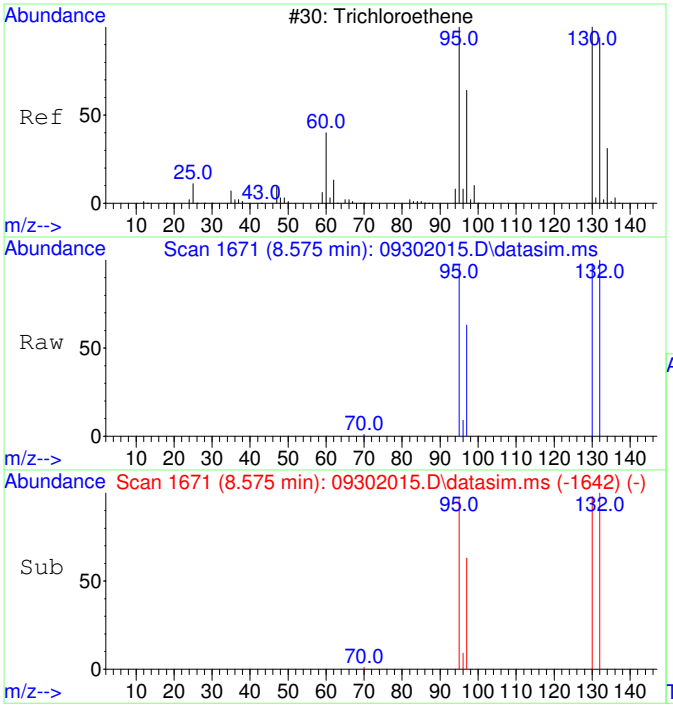


#10
1,2-Dichloroethane
Concen: 24.38 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 62 Resp: 901

Ion	Ratio	Lower	Upper
62	100		
64	0.0	2.3	62.3#

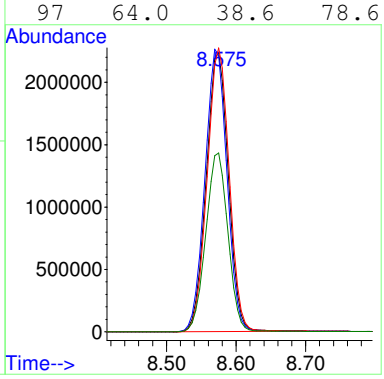


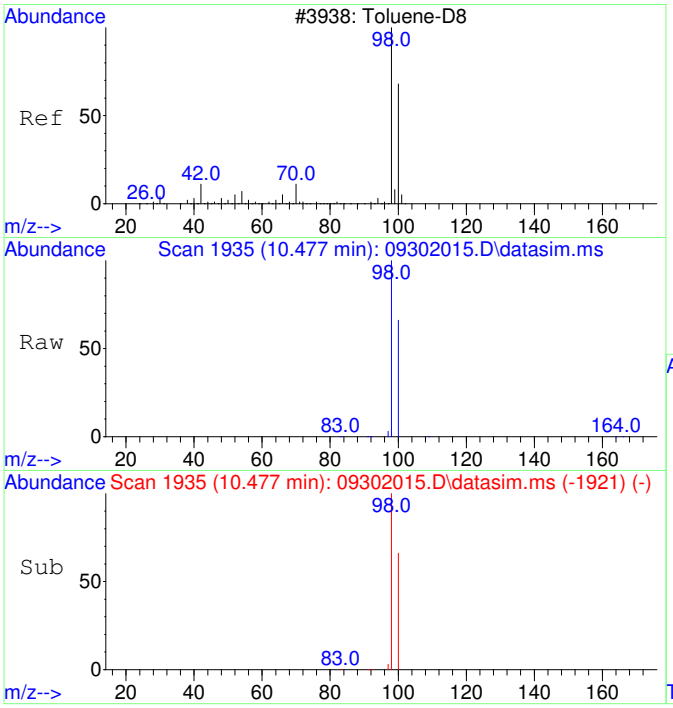


#11
Trichloroethene
Concen: 158737.94 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion:130 Resp: 4947881

Ion	Ratio	Lower	Upper
130	100		
95	100.6	60.7	120.7
132	100.8	76.0	116.0
97	64.0	38.6	78.6

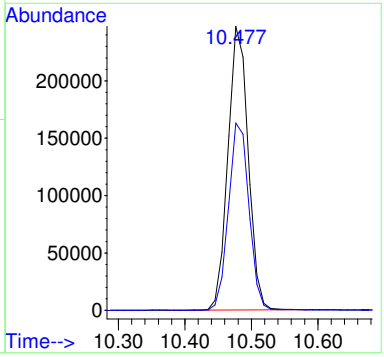


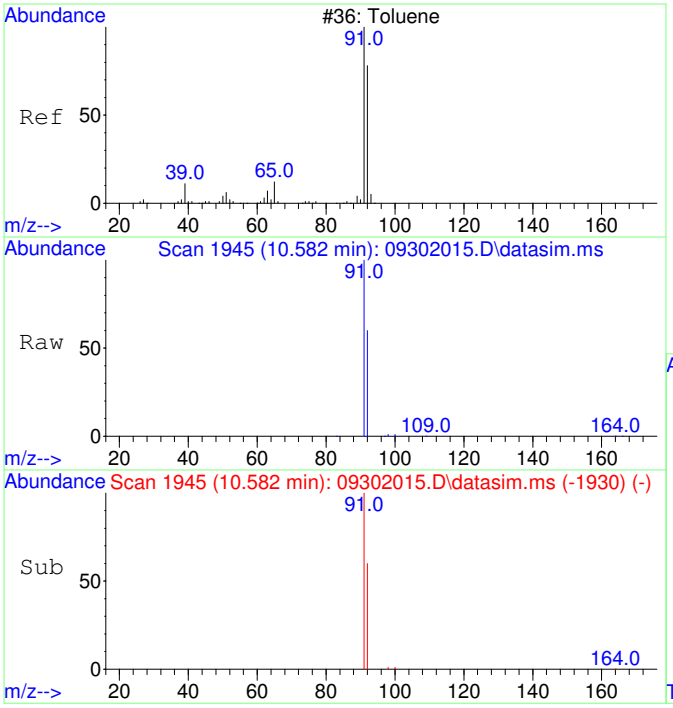


#12
Toluene-d8
Concen: 4364.07 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. 0.000 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 98 Resp: 520543

Ion	Ratio	Lower	Upper
98	100		
100	66.7	37.1	97.1

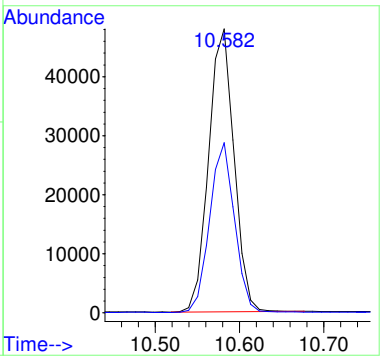


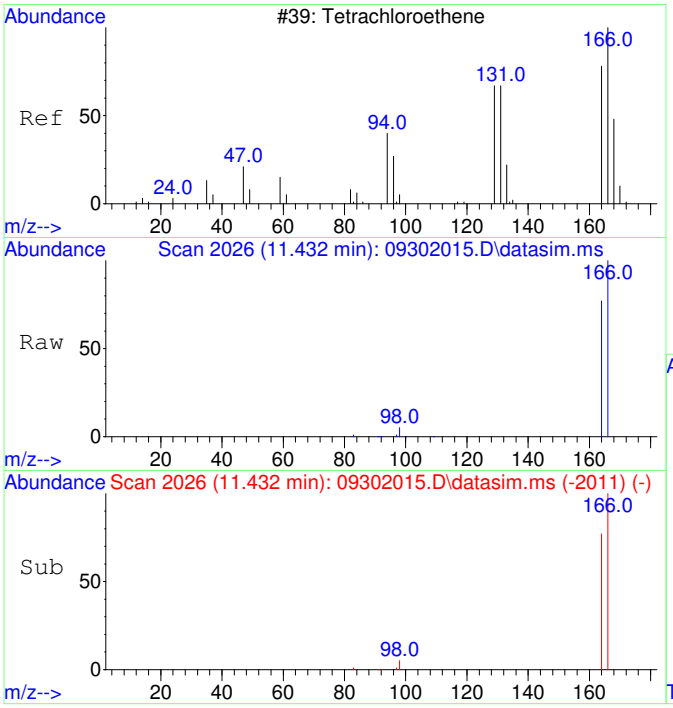


#13
Toluene
Concen: 660.95 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.011 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 91 Resp: 100511

Ion	Ratio	Lower	Upper
91	100		
92	58.6	29.9	89.9

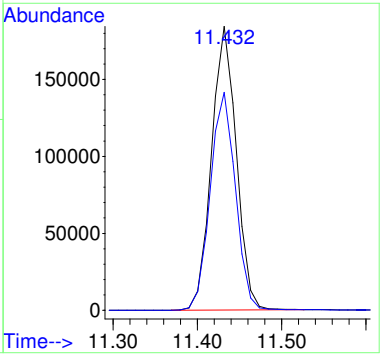


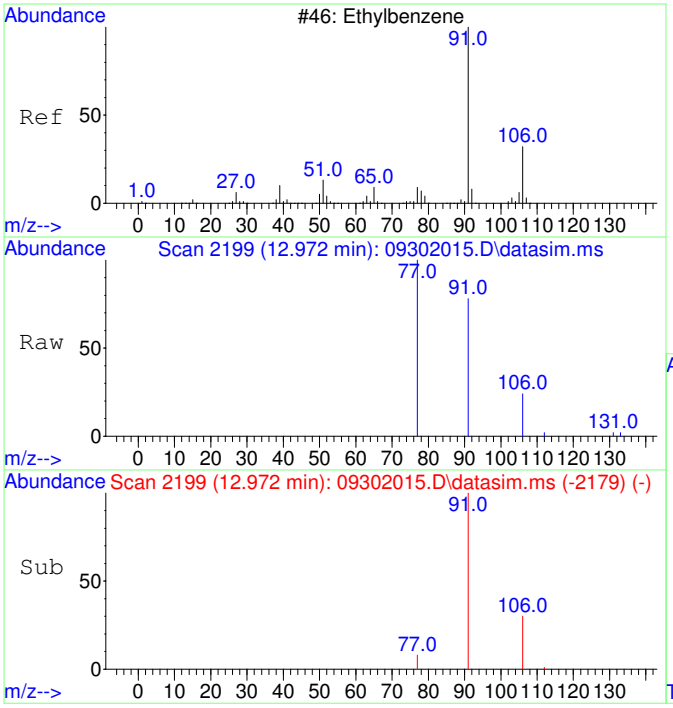


#15
Tetrachloroethene
Concen: 8554.27 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion:166 Resp: 376463

Ion	Ratio	Lower	Upper
166	100		
164	77.8	47.8	107.8

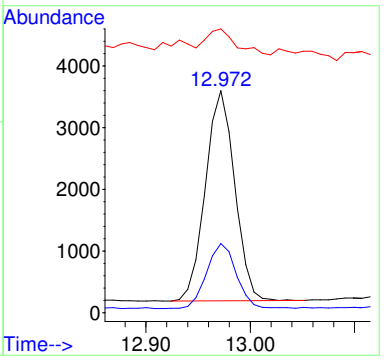


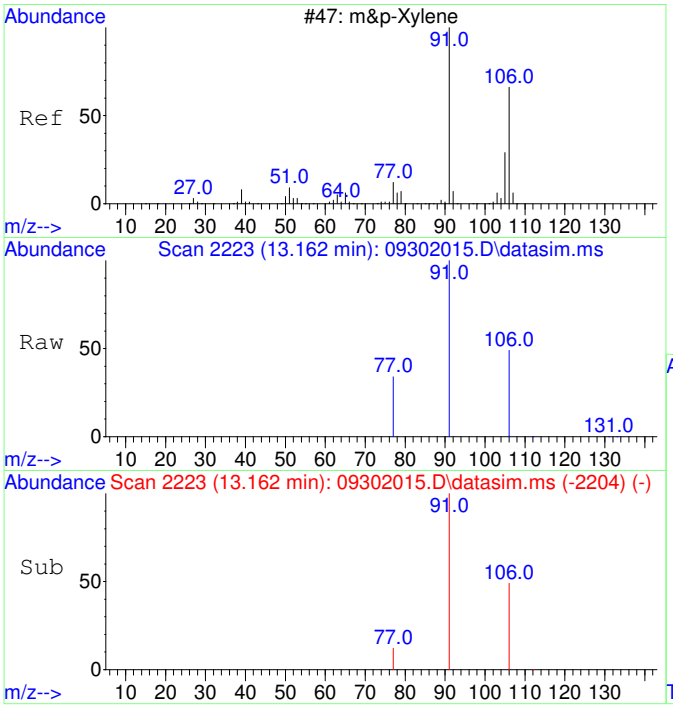


#18
Ethylbenzene
Concen: 35.92 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.008 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 91 Resp: 6649

Ion	Ratio	Lower	Upper
91	100		
106	31.1	3.0	63.0
77	13.4	0.0	38.2

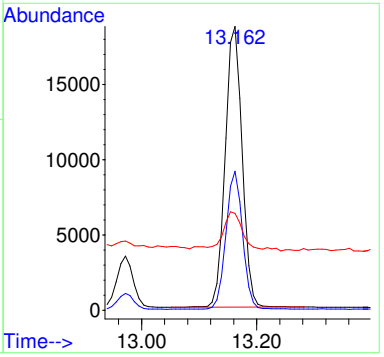


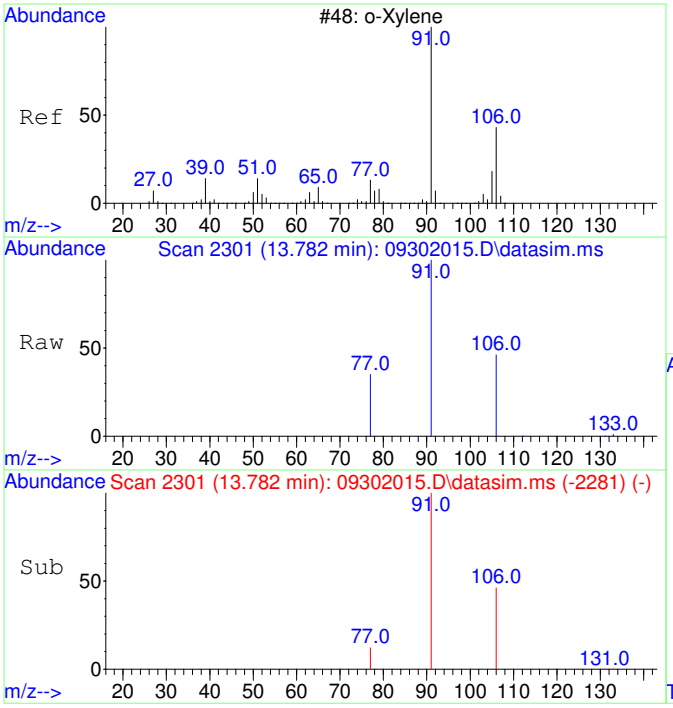


#19
m&p-Xylene
Concen: 262.72 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. 0.000 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 91 Resp: 38007

Ion	Ratio	Lower	Upper
91	100		
106	48.1	22.2	82.2
77	14.0	0.0	42.4

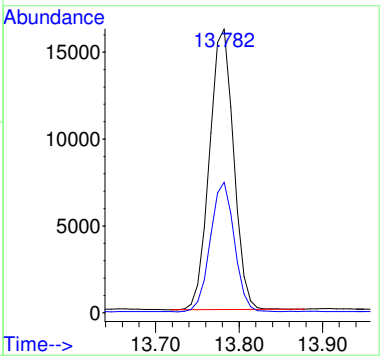


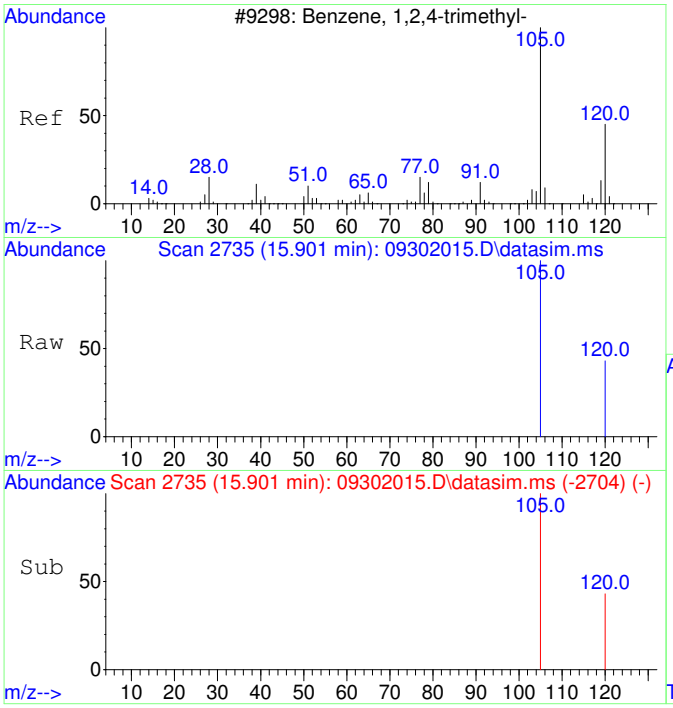


#20
o-Xylene
Concen: 209.90 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 91 Resp: 32442

Ion	Ratio	Lower	Upper
91	100		
106	45.8	19.2	79.2

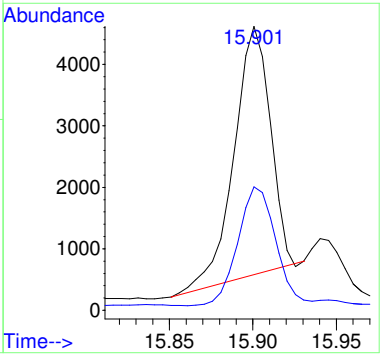


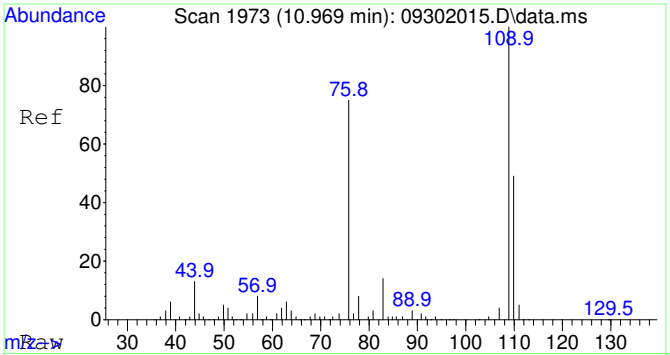


#23
1,2,4-Trimethylbenzene
Concen: 36.19 ug/L
RT: 15.901 min Scan# 2735
Delta R.T. 0.005 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion:105 Resp: 6184

Ion	Ratio	Lower	Upper
105	100		
120	50.9	17.2	77.2

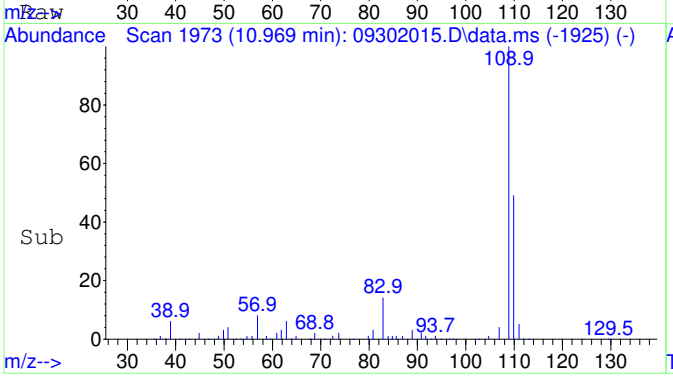


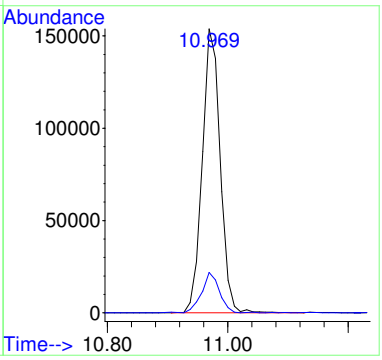


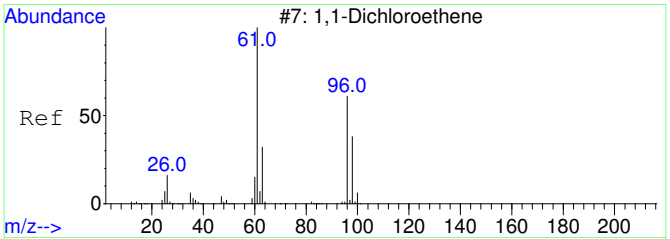
#25
2-Fluorotoluene SCAN
Concen: 5340.14 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. 0.000 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion:109 Resp: 317186

Ion	Ratio	Lower	Upper
109	100		
83	14.2	0.0	43.8



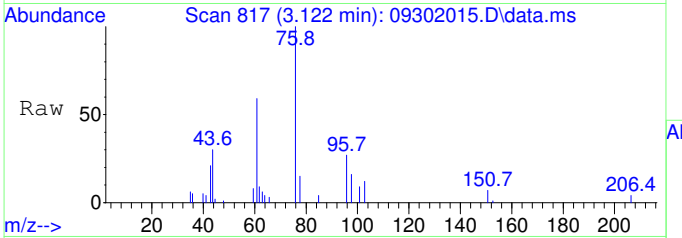


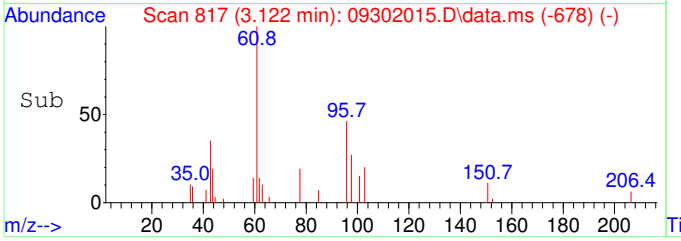


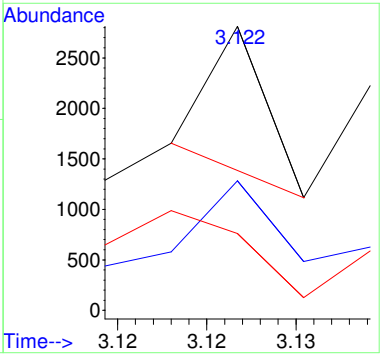
#26
1,1-Dichloroethene SCAN
Concen: 20.45 ug/L
RT: 3.122 min Scan# 817
Delta R.T. 0.015 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

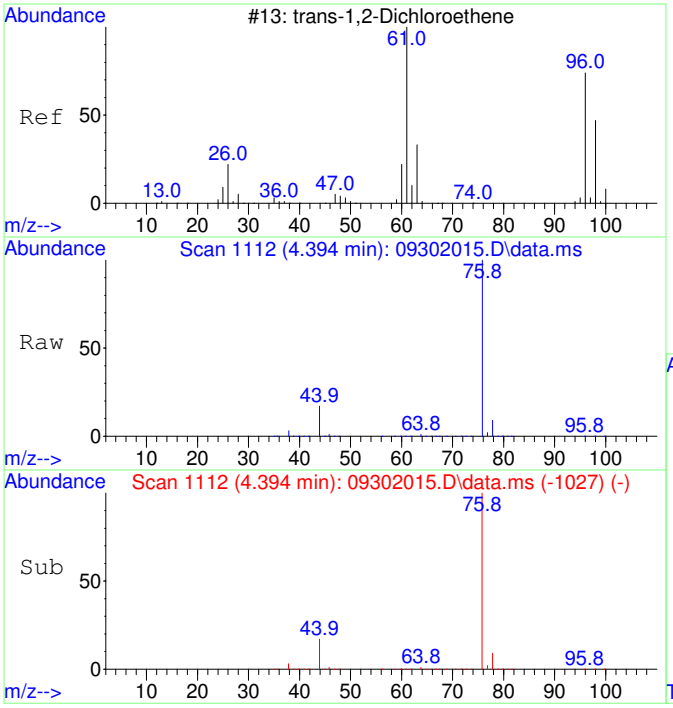
Tgt Ion: 61 Resp: 258

Ion	Ratio	Lower	Upper
61	100		
96	50.4	33.1	93.1
98	0.0	11.2	71.2#





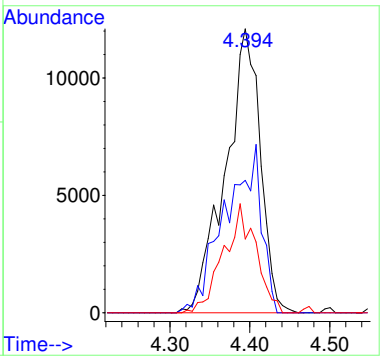


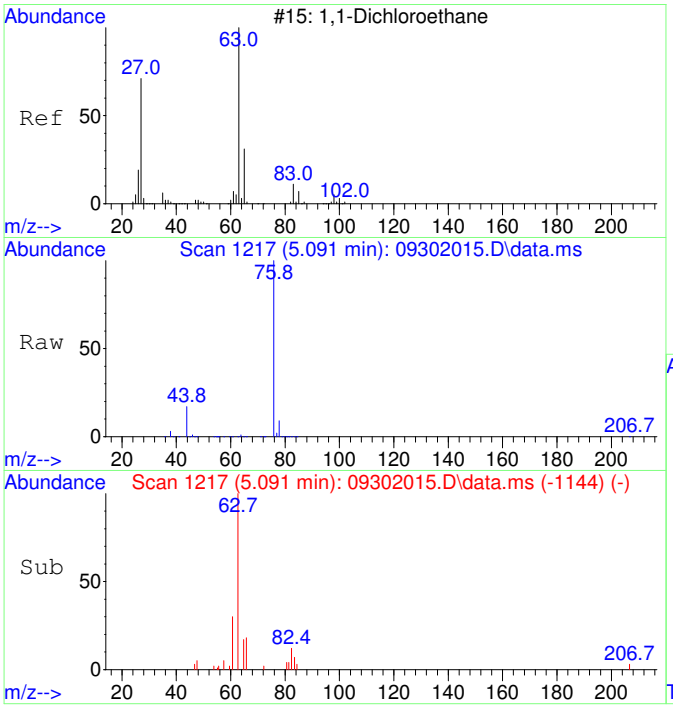


#27
trans-1,2-Dichloroethene SCAN
Concen: 2346.78 ug/L
RT: 4.394 min Scan# 1112
Delta R.T. -0.007 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 61 Resp: 36631

Ion	Ratio	Lower	Upper
61	100		
96	61.6	49.0	109.0
98	35.4	20.5	80.5

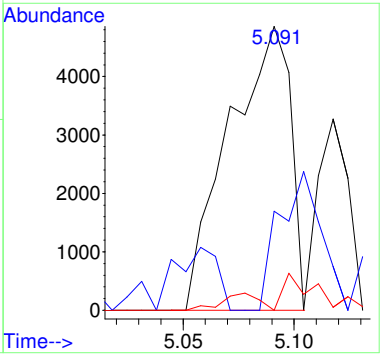


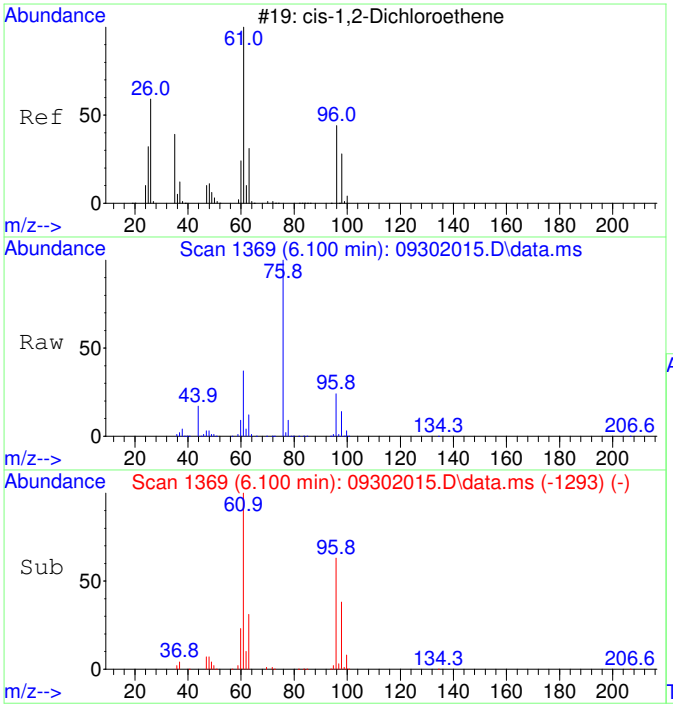


#28
1,1-Dichloroethane SCAN
Concen: 519.14 ug/L
RT: 5.091 min Scan# 1217
Delta R.T. -0.013 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 63 Resp: 9378

Ion	Ratio	Lower	Upper
63	100		
65	33.3	1.3	61.3
83	7.2	0.0	45.9

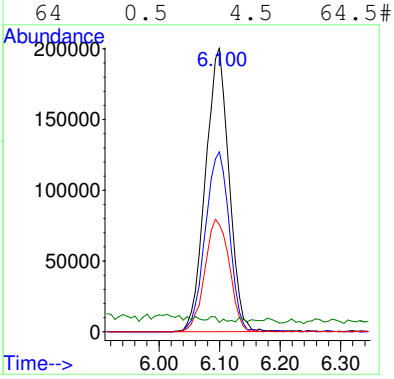


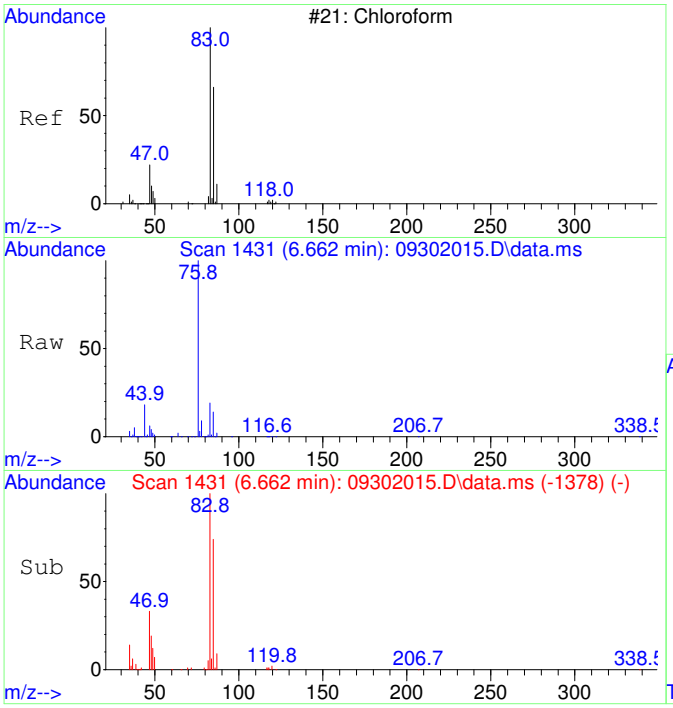


#29
cis-1,2-Dichloroethene SCAN
Concen: 28018.96 ug/L
RT: 6.100 min Scan# 1369
Delta R.T. 0.007 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 61 Resp: 542289

Ion	Ratio	Lower	Upper
61	100		
96	64.6	39.9	99.9
98	41.2	13.5	73.5
64	0.5	4.5	64.5#

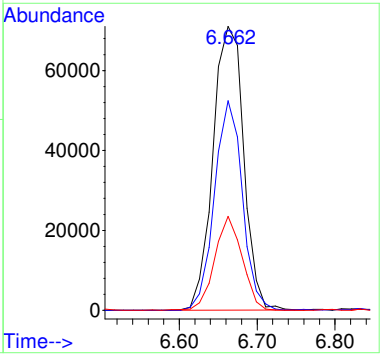


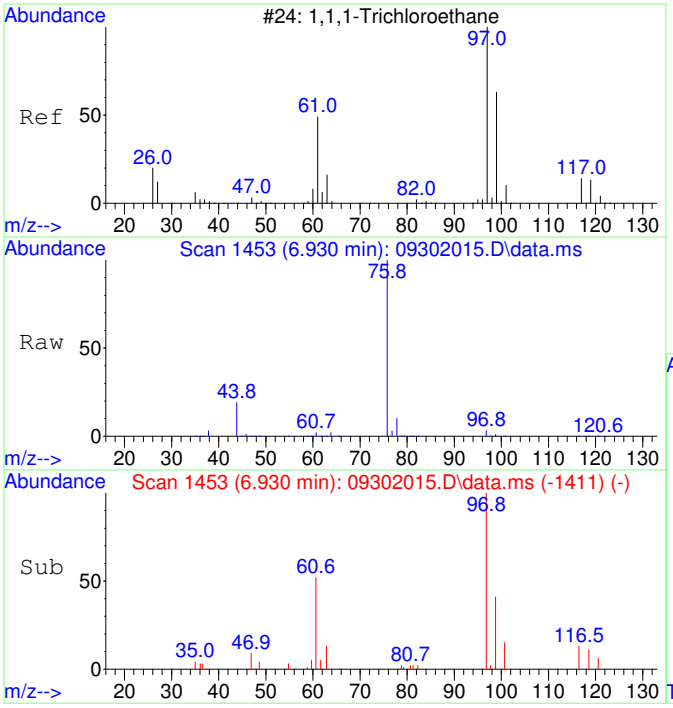


#30
Chloroform SCAN
Concen: 9267.36 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 83 Resp: 194545

Ion	Ratio	Lower	Upper
83	100		
85	67.2	34.6	94.6
47	29.8	0.0	53.4

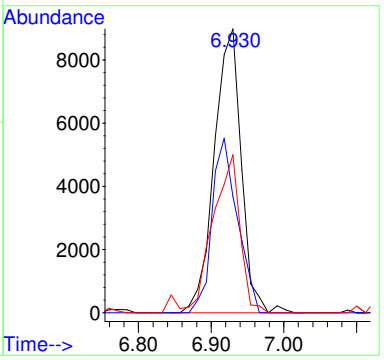


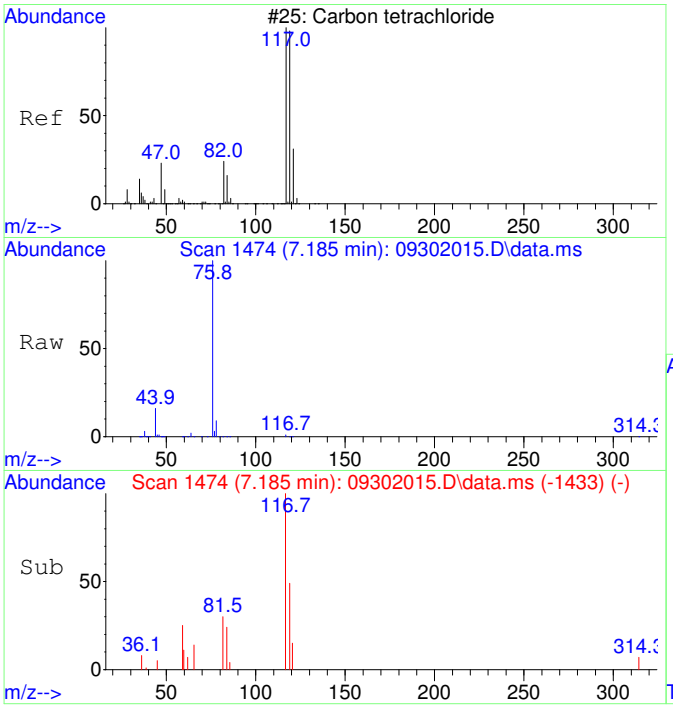


#31
1,1,1-Trichloroethane SCAN
Concen: 1217.14 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. 0.012 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 97 Resp: 23284

Ion	Ratio	Lower	Upper
97	100		
99	57.7	43.6	103.6
61	53.4	18.0	78.0

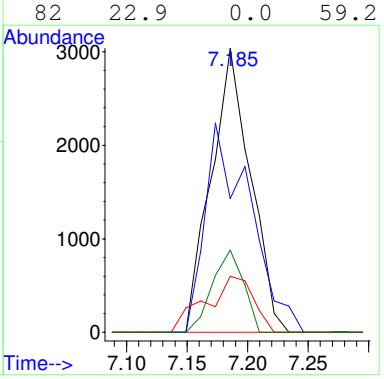


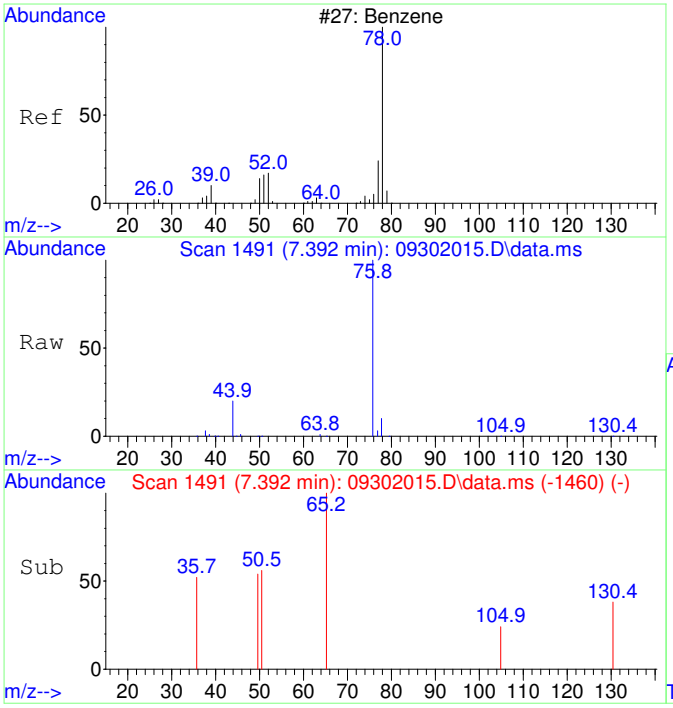


#32
Carbon tetrachloride SCAN
Concen: 345.33 ug/L
RT: 7.185 min Scan# 1474
Delta R.T. 0.000 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion:117 Resp: 6891

Ion	Ratio	Lower	Upper
117	100		
119	83.7	75.5	135.5
121	23.9	0.0	58.8
82	22.9	0.0	59.2

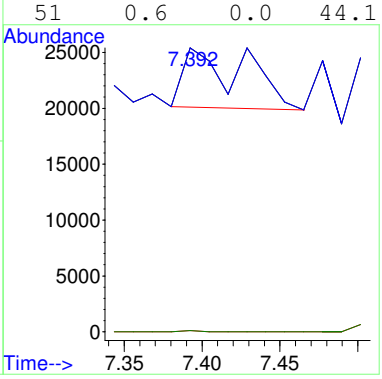


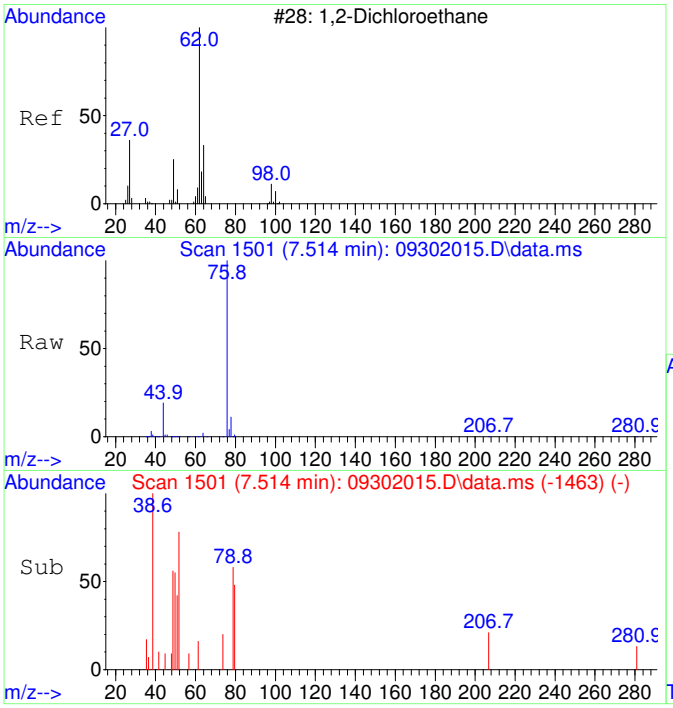


#33
Benzene SCAN
Concen: 272.36 ug/L
RT: 7.392 min Scan# 1491
Delta R.T. -0.122 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 78 Resp: 14346

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	0.6	0.0	47.9
51	0.6	0.0	44.1

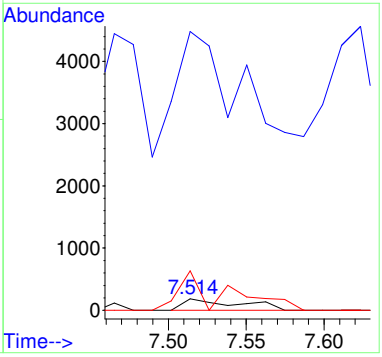


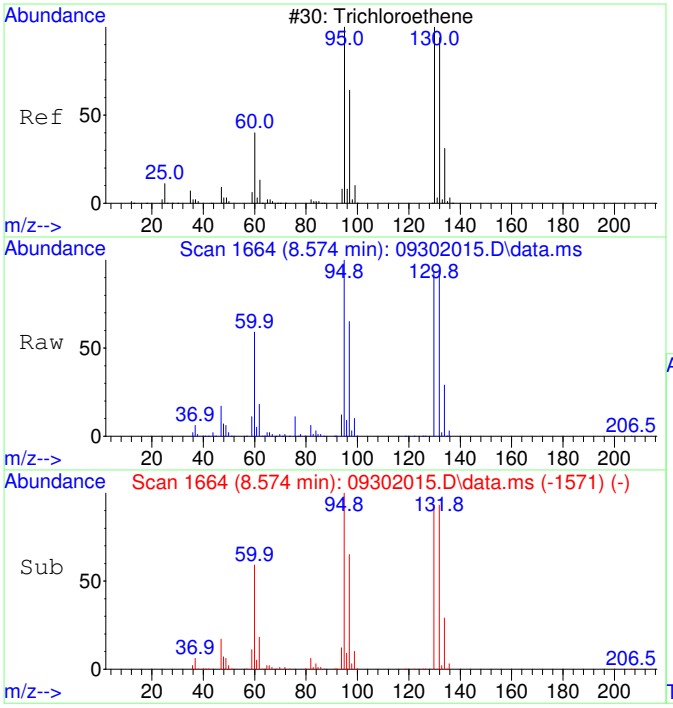


#34
1,2-Dichloroethane SCAN
Concen: 23.70 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. -0.036 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 62 Resp: 461

Ion	Ratio	Lower	Upper
62	100		
64	1069.4	5.2	65.2#
49	124.5	3.9	63.9#

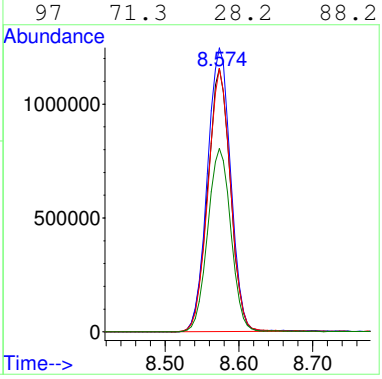


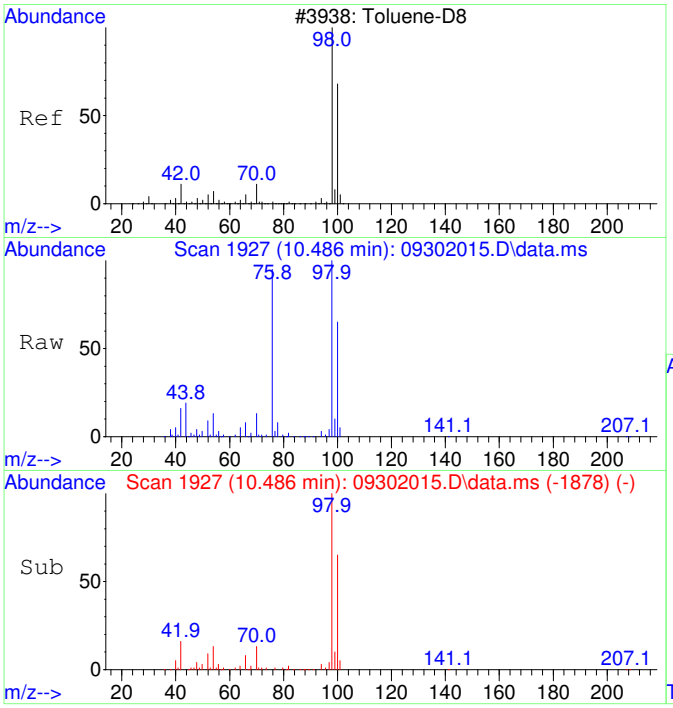


#35
Trichloroethene SCAN
Concen: 170896.76 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.005 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion:130 Resp: 2473676

Ion	Ratio	Lower	Upper
130	100		
95	110.5	60.5	120.5
132	99.9	59.6	119.6
97	71.3	28.2	88.2

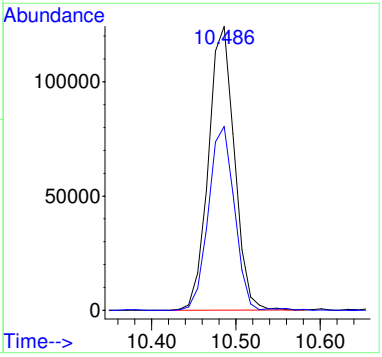


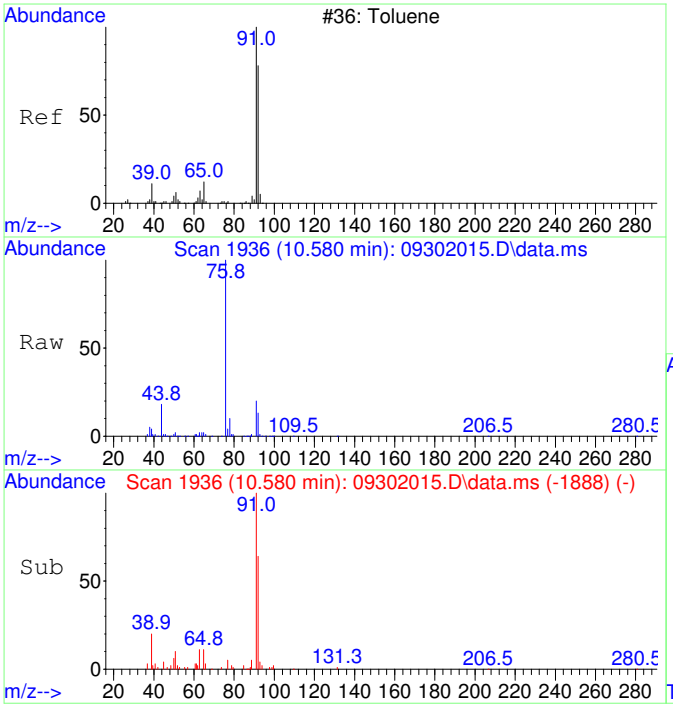


#36
Toluene-d8 SCAN
Concen: 4584.97 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.011 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 98 Resp: 266332

Ion	Ratio	Lower	Upper
98	100		
100	65.2	40.0	100.0

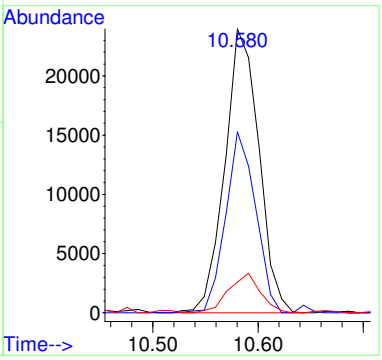


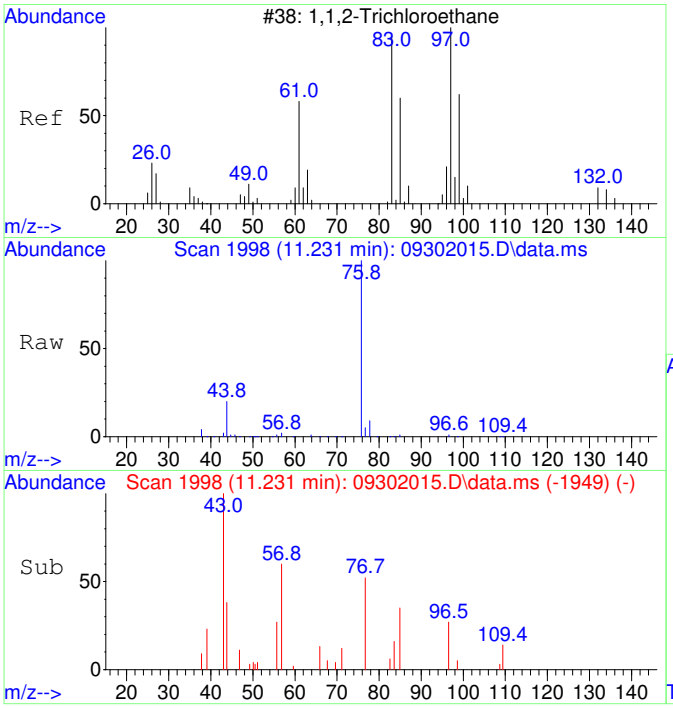


#37
Toluene SCAN
Concen: 725.44 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 91 Resp: 53966

Ion	Ratio	Lower	Upper
91	100		
92	56.1	28.3	88.3
65	13.0	0.0	41.0

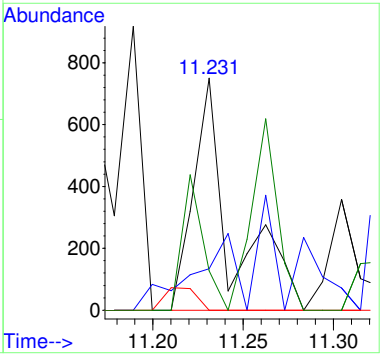


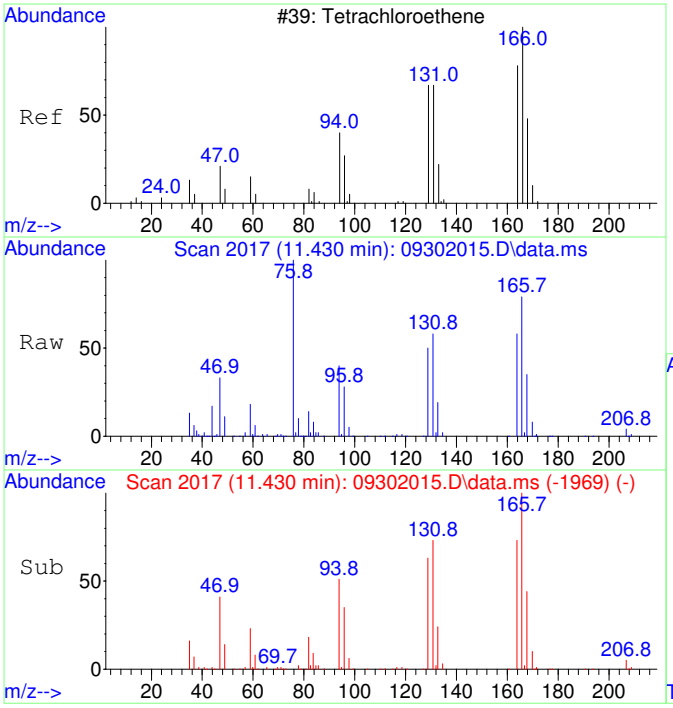


#38
1,1,2-Trichloroethane SCAN
Concen: 65.88 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. 0.011 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 97 Resp: 1100

Ion	Ratio	Lower	Upper
97	100		
83	36.8	57.7	117.7#
61	0.0	32.1	92.1#
99	0.0	36.7	96.7#

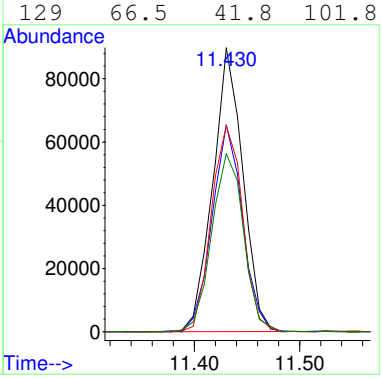


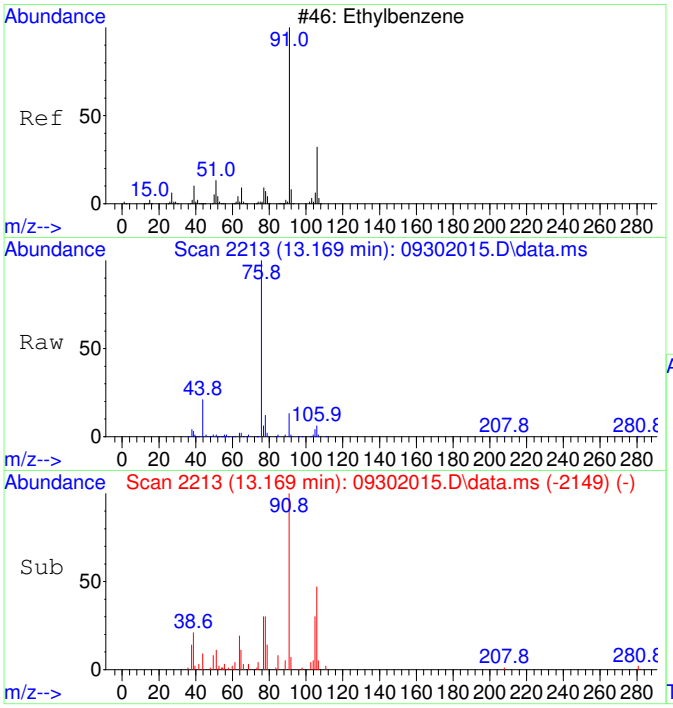


#39
Tetrachloroethene SCAN
Concen: 9982.56 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. 0.000 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion:166 Resp: 178409

Ion	Ratio	Lower	Upper
166	100		
164	74.5	50.9	110.9
131	75.1	38.7	98.7
129	66.5	41.8	101.8

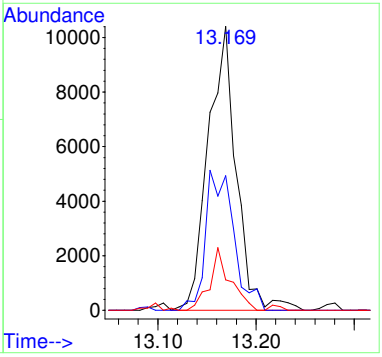


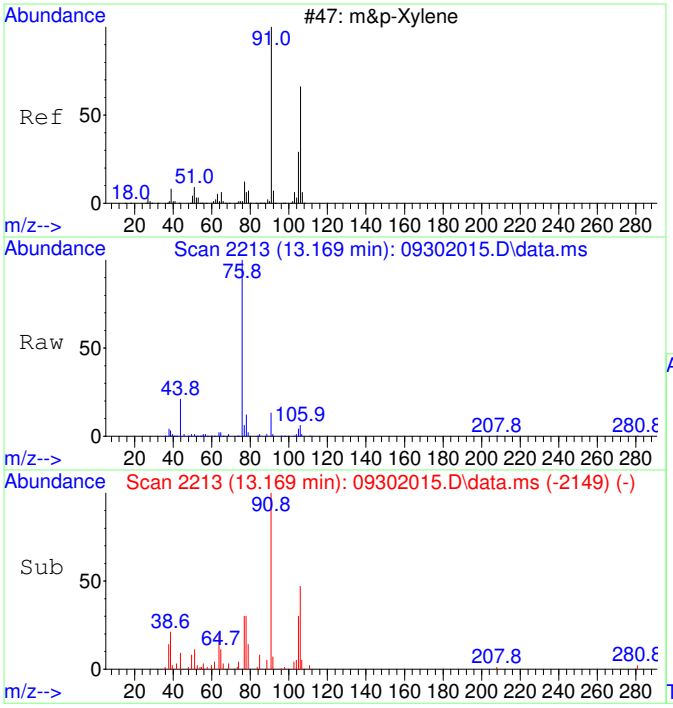


#42
Ethylbenzene SCAN
Concen: 153.15 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 91 Resp: 20756

Ion	Ratio	Lower	Upper
91	100		
106	49.1	23.1	83.1
51	15.9	0.0	40.1

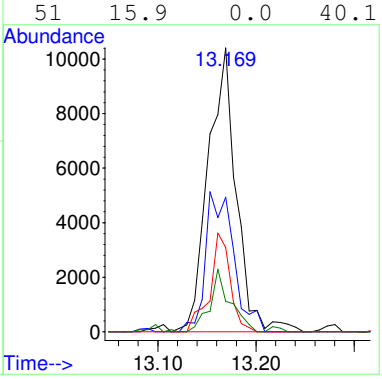


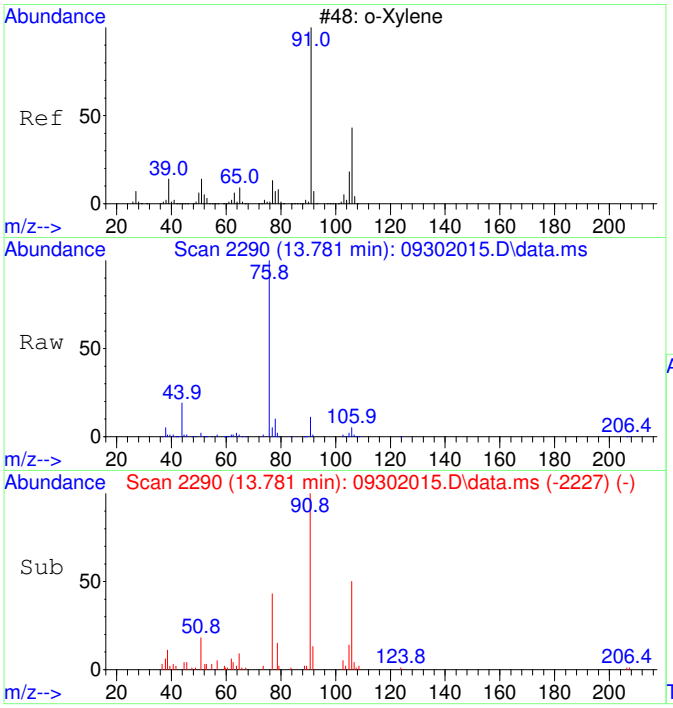


#43
m&p-Xylene SCAN
Concen: 153.15 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 91 Resp: 20756

Ion	Ratio	Lower	Upper
91	100		
106	49.1	23.1	83.1
105	25.2	0.0	54.7
51	15.9	0.0	40.1

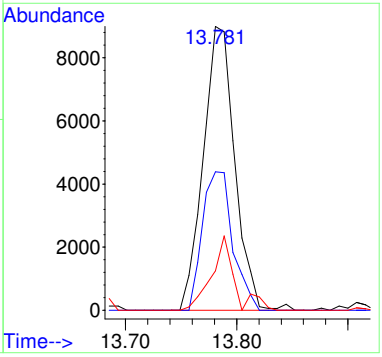


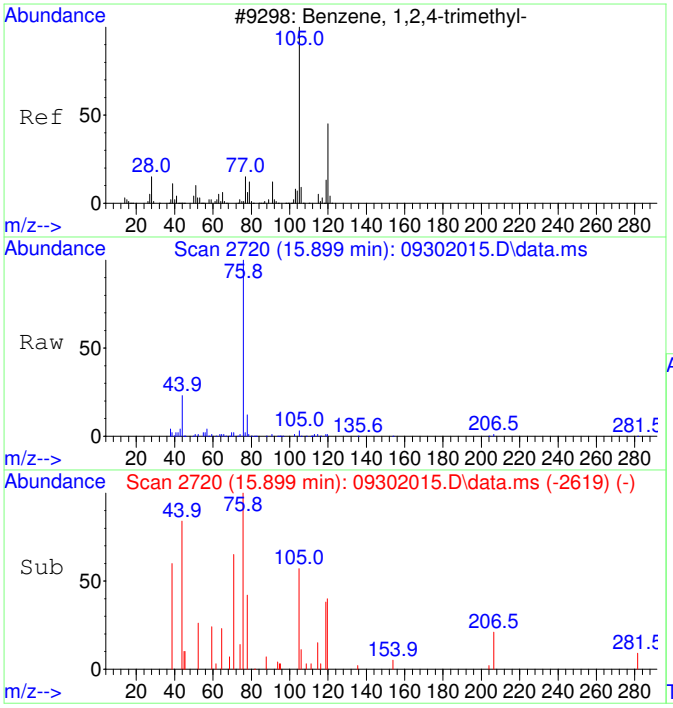


#44
o-Xylene SCAN
Concen: 244.47 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. 0.000 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion: 91 Resp: 17735

Ion	Ratio	Lower	Upper
91	100		
106	46.9	18.0	78.0
105	19.2	0.0	56.6

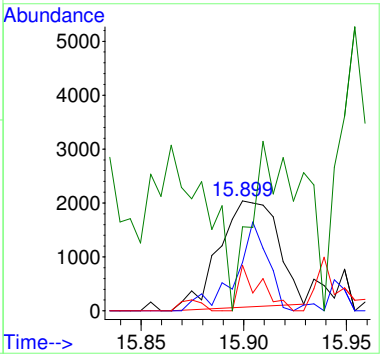




#47
1,2,4-Trimethylbenzene SCAN
Concen: 50.28 ug/L
RT: 15.899 min Scan# 2720
Delta R.T. -0.000 min
Lab File: 09302015.D
Acq: 30 Sep 2020 18:55

Tgt Ion:105 Resp: 3933

Ion	Ratio	Lower	Upper
105	100		
120	45.8	16.9	76.9
119	16.2	0.0	41.9
77	137.8	0.0	42.3#



2009033-04

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302017.D
Acq On : 30 Sep 2020 19:42
InstName : AG5975C
Operator : TD
Sample : 2009033-04
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 01 08:59:33 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

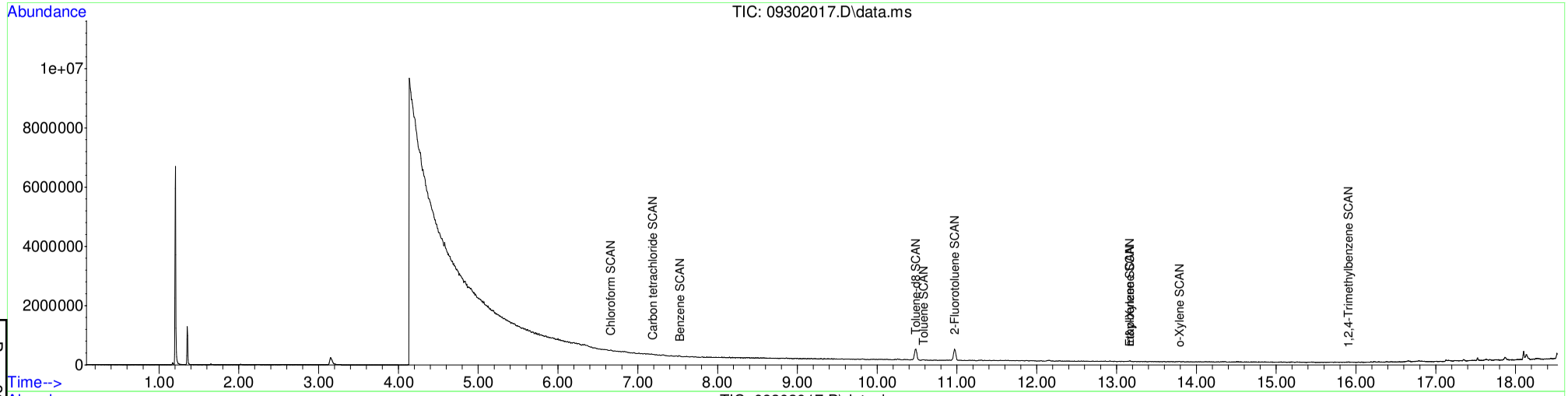
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	621614	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	540237	4439.54	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 88.79%			
Target Compounds						Qvalue
6] Chloroform	6.664	83	8180	212.08	ug/L	99
8] Carbon tetrachloride	7.187	117	3239	82.16	ug/L	98
9] Benzene	7.515	78	21190	200.63	ug/L	68
13] Toluene	10.582	91	29597	190.78	ug/L	98
18] Ethylbenzene	12.972	91	9480	50.20	ug/L	95
19] m&p-Xylene	13.163	91	25354	171.79	ug/L	94
20] o-Xylene	13.782	91	8241	52.26	ug/L	96
23] 1,2,4-Trimethylbenzene	15.899	105	8740	50.14	ug/L	88
25) 2-Fluorotoluene SCAN	10.969	109	302668	4994.86	ug/L	99
30) Chloroform SCAN	6.662	83	4347	202.98	ug/L	76
32) Carbon tetrachloride SCAN	7.186	117	1962	96.38	ug/L #	78
33) Benzene SCAN	7.526	78	30274	563.39	ug/L	95
36) Toluene-d8 SCAN	10.486	98	279531	4716.95	ug/L	96
37) Toluene SCAN	10.580	91	15145	199.56	ug/L	80
42) Ethylbenzene SCAN	13.161	91	11512	83.26	ug/L	94
43) m&p-Xylene SCAN	13.161	91	11512	83.26	ug/L	93
44) o-Xylene SCAN	13.789	91	4658	62.94	ug/L	79
47) 1,2,4-Trimethylbenzene...	15.903	105	4715	59.08	ug/L #	71

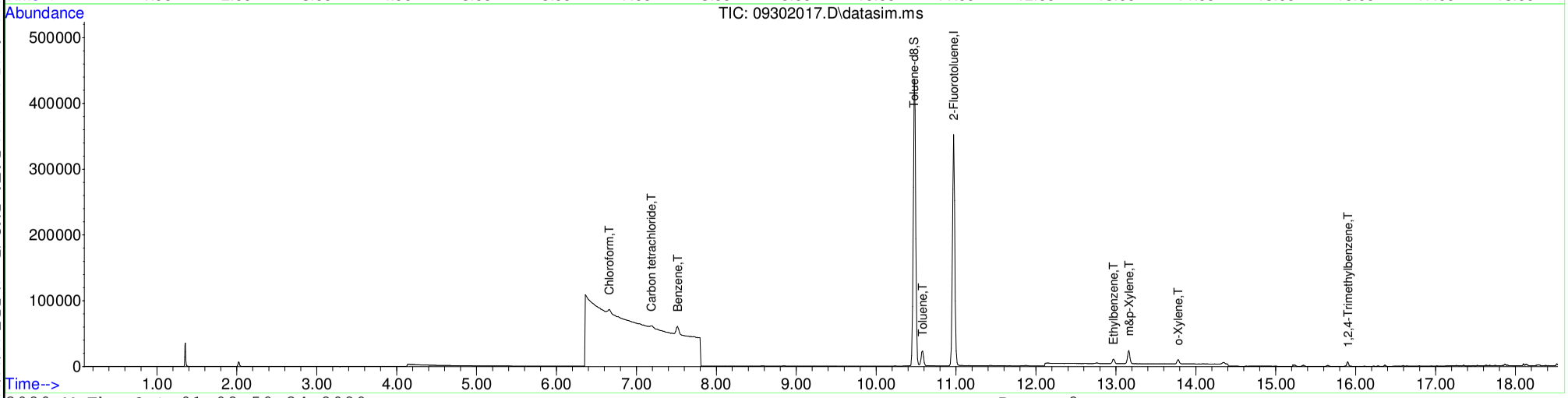
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302017.D
Acq On : 30 Sep 2020 19:42
InstName : AG5975C
Operator : TD
Sample : 2009033-04
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 01 08:59:33 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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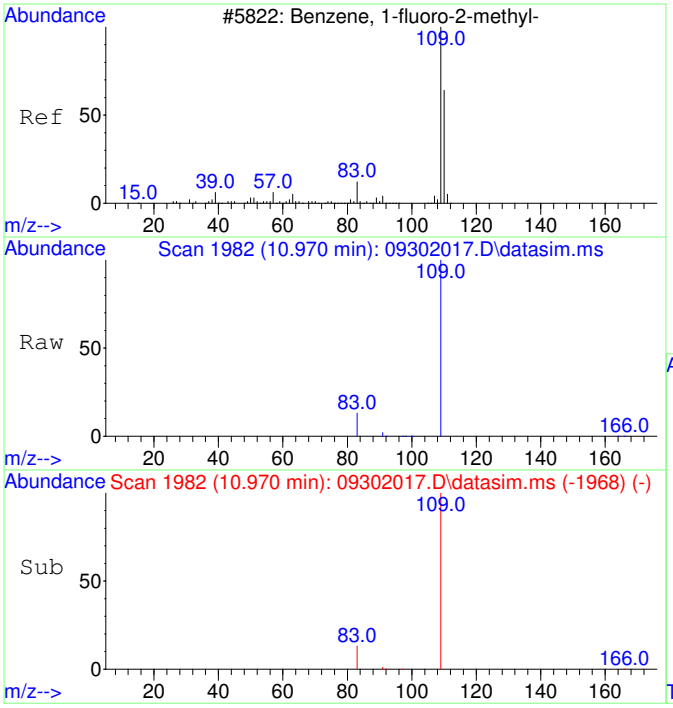
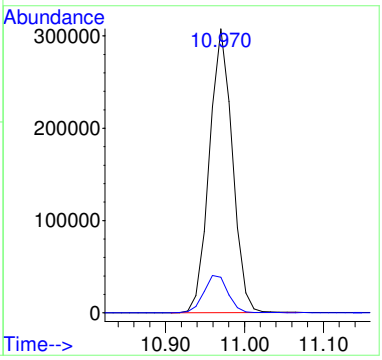
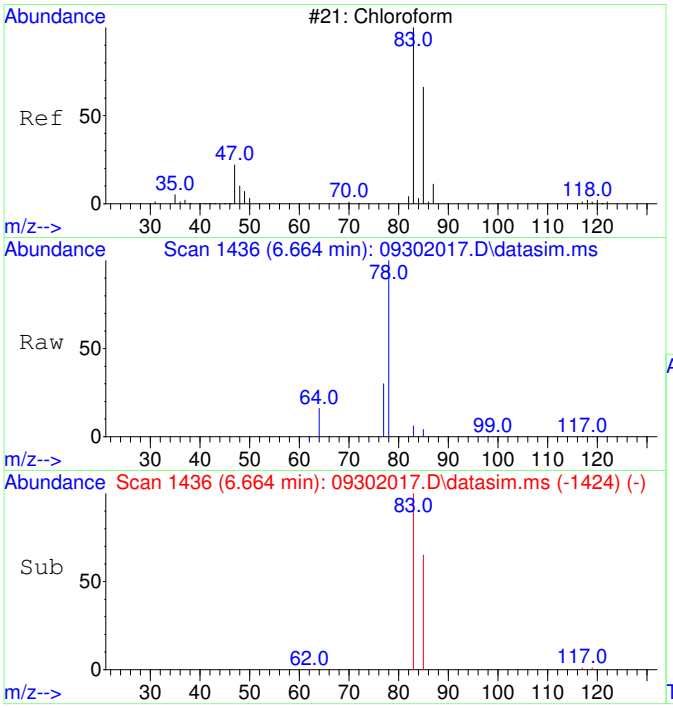


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. 0.000 min
Lab File: 09302017.D
Acq: 30 Sep 2020 19:42

Tgt Ion:109 Resp: 621614

Ion	Ratio	Lower	Upper
109	100		
83	13.8	0.0	42.3

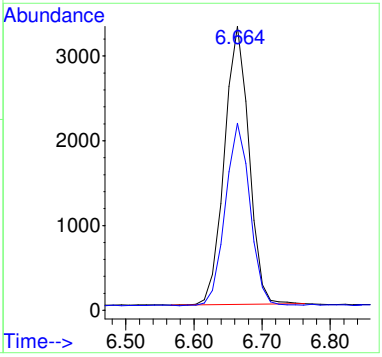


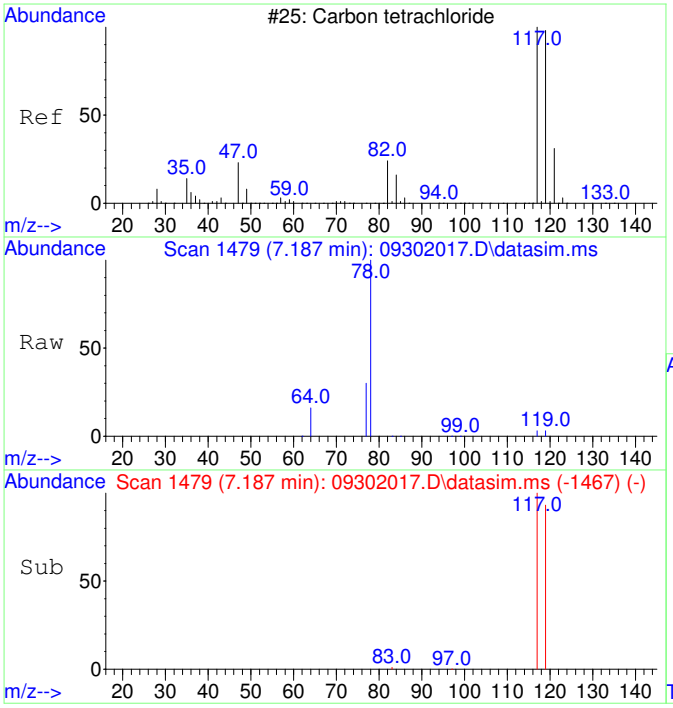


#6
Chloroform
Concen: 212.08 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. 0.000 min
Lab File: 09302017.D
Acq: 30 Sep 2020 19:42

Tgt Ion: 83 Resp: 8180

Ion	Ratio	Lower	Upper
83	100		
85	65.7	35.1	95.1

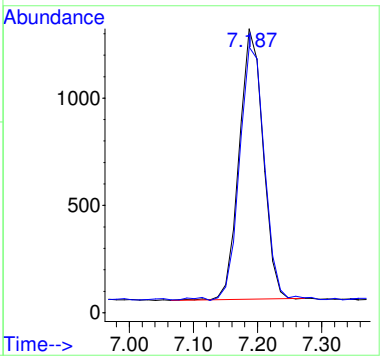


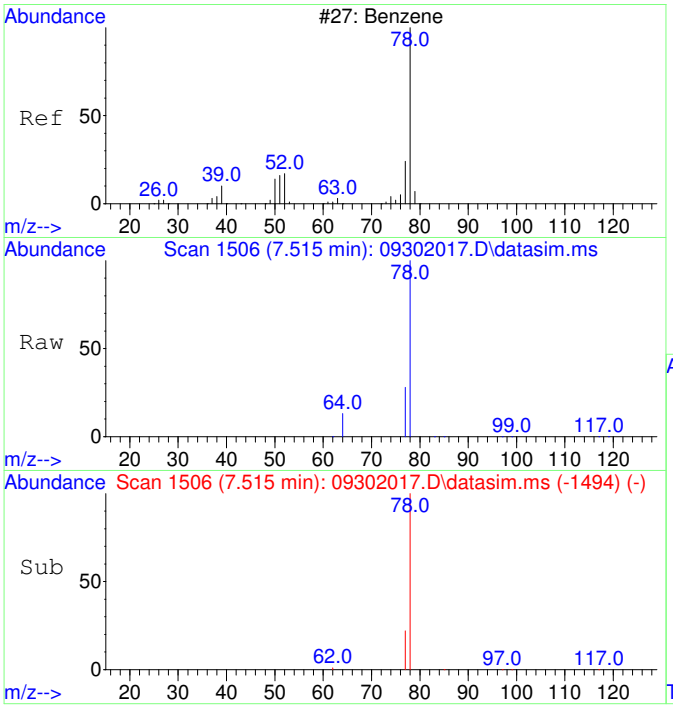


#8
Carbon tetrachloride
Concen: 82.16 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 09302017.D
Acq: 30 Sep 2020 19:42

Tgt Ion:117 Resp: 3239

Ion	Ratio	Lower	Upper
117	100		
119	98.1	66.4	126.4

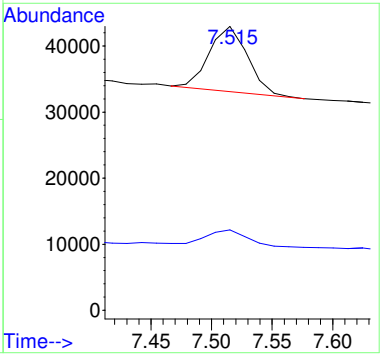


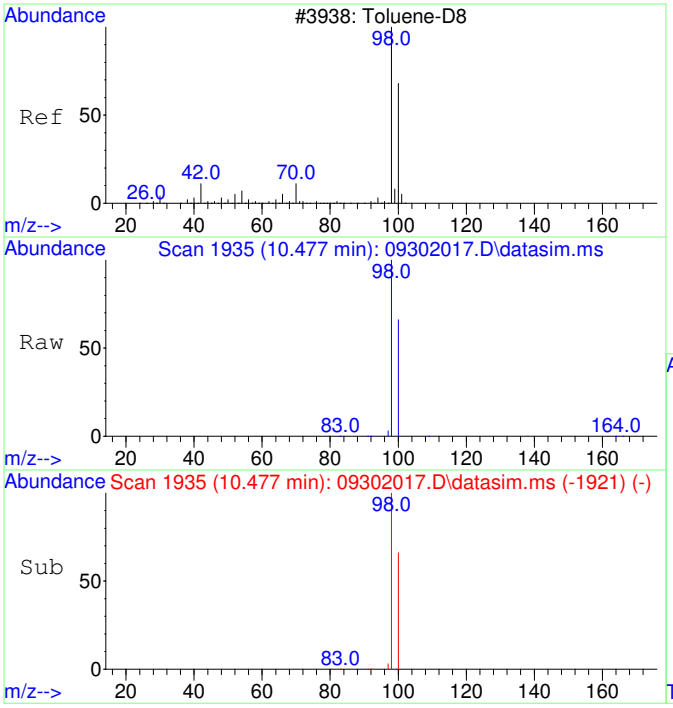


#9
Benzene
Concen: 200.63 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 09302017.D
Acq: 30 Sep 2020 19:42

Tgt Ion: 78 Resp: 21190

Ion	Ratio	Lower	Upper
78	100		
77	38.7	0.0	53.2

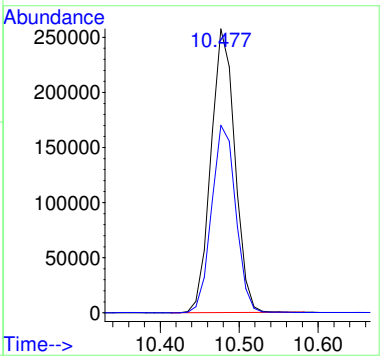


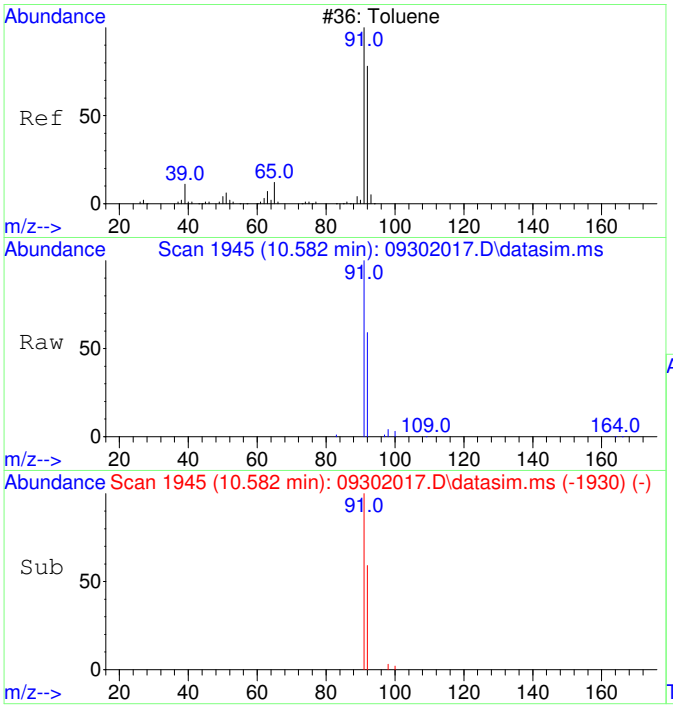


#12
Toluene-d8
Concen: 4439.54 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. 0.000 min
Lab File: 09302017.D
Acq: 30 Sep 2020 19:42

Tgt Ion: 98 Resp: 540237

Ion	Ratio	Lower	Upper
98	100		
100	66.7	37.1	97.1

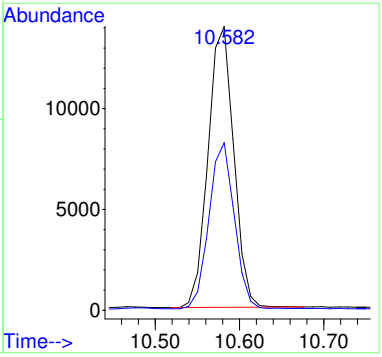


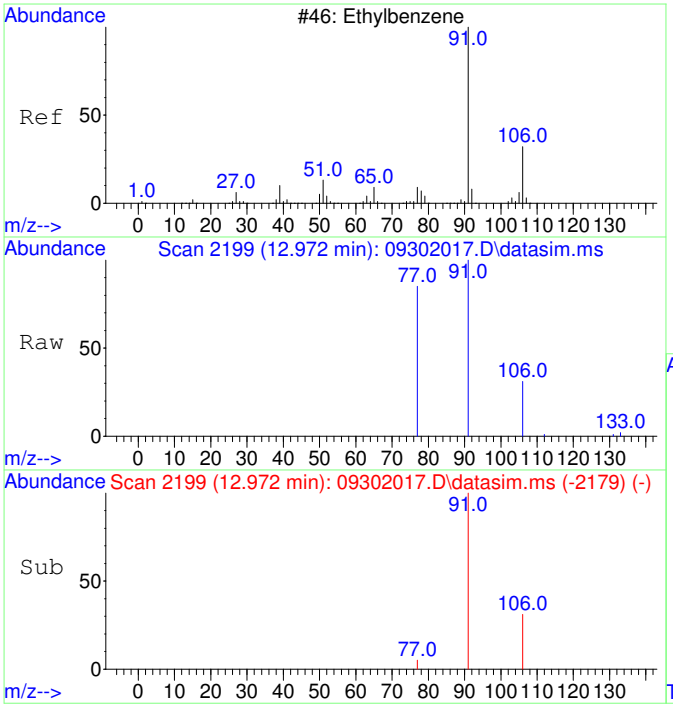


#13
Toluene
Concen: 190.78 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.011 min
Lab File: 09302017.D
Acq: 30 Sep 2020 19:42

Tgt Ion: 91 Resp: 29597

Ion	Ratio	Lower	Upper
91	100		
92	58.1	29.9	89.9

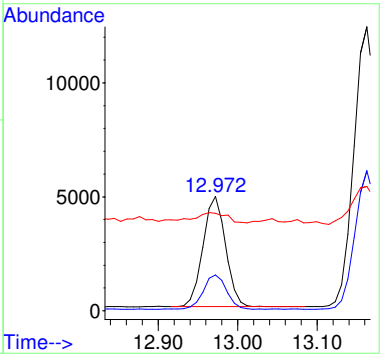


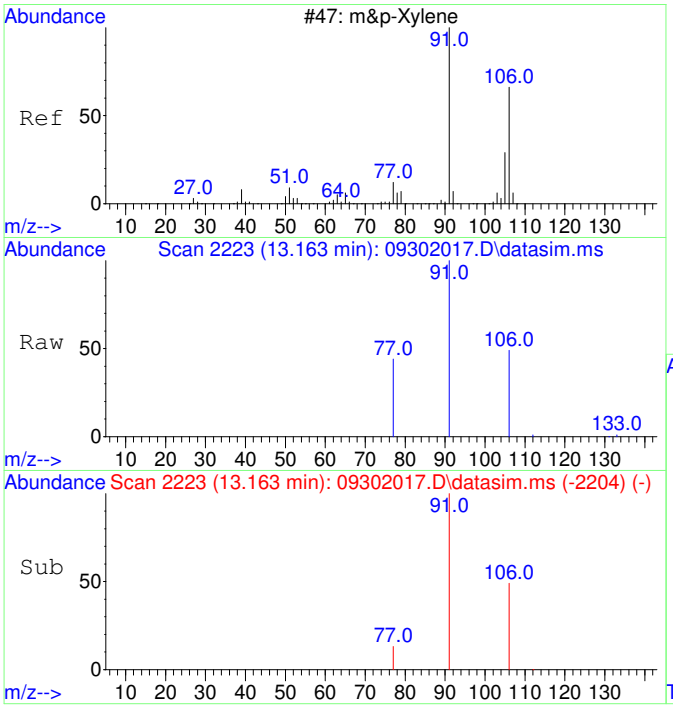


#18
Ethylbenzene
Concen: 50.20 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.008 min
Lab File: 09302017.D
Acq: 30 Sep 2020 19:42

Tgt Ion: 91 Resp: 9480

Ion	Ratio	Lower	Upper
91	100		
106	31.7	3.0	63.0
77	14.3	0.0	38.2

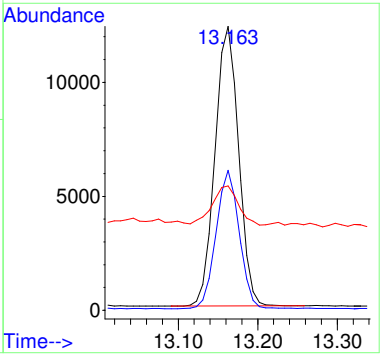


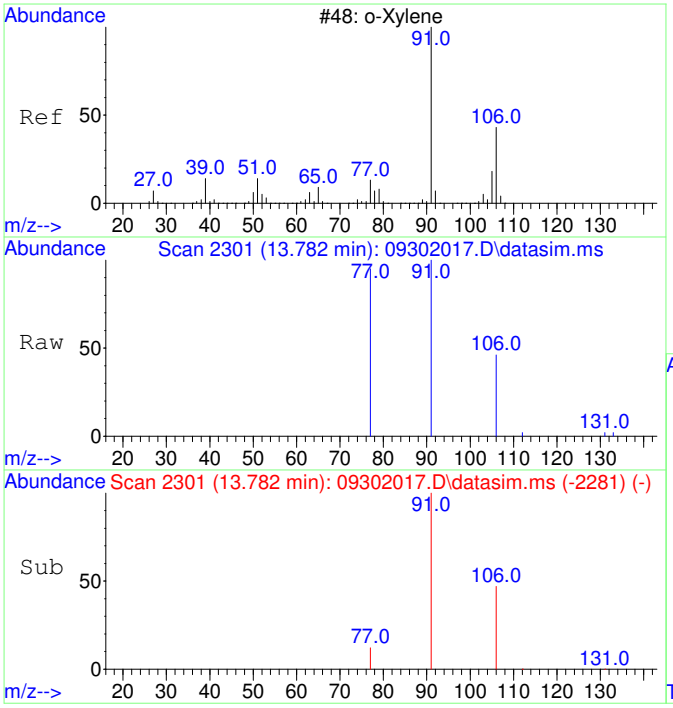


#19
m&p-Xylene
Concen: 171.79 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. 0.000 min
Lab File: 09302017.D
Acq: 30 Sep 2020 19:42

Tgt Ion: 91 Resp: 25354

Ion	Ratio	Lower	Upper
91	100		
106	48.5	22.2	82.2
77	15.4	0.0	42.4

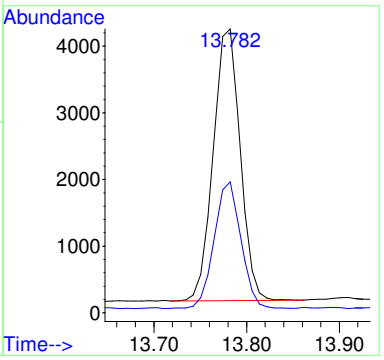


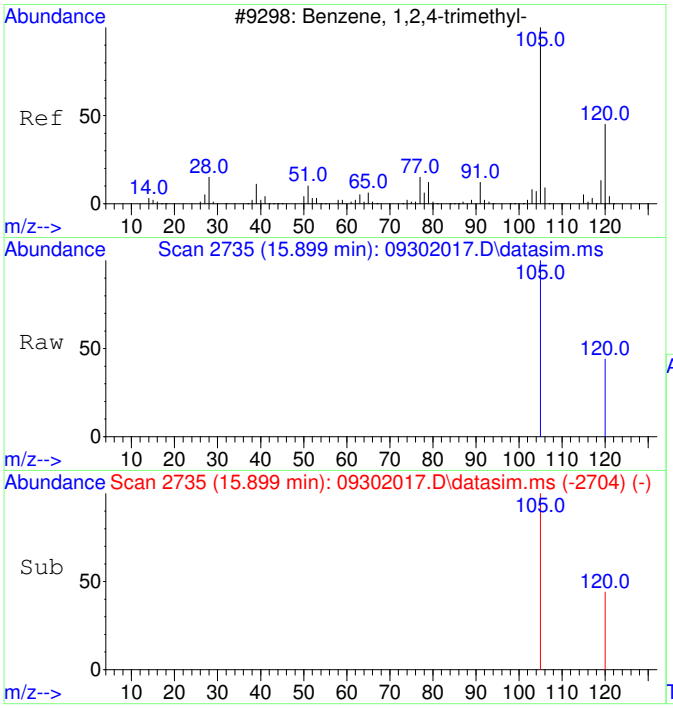


#20
o-Xylene
Concen: 52.26 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 09302017.D
Acq: 30 Sep 2020 19:42

Tgt Ion: 91 Resp: 8241

Ion	Ratio	Lower	Upper
91	100		
106	46.1	19.2	79.2

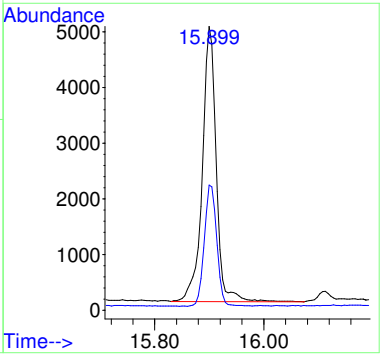


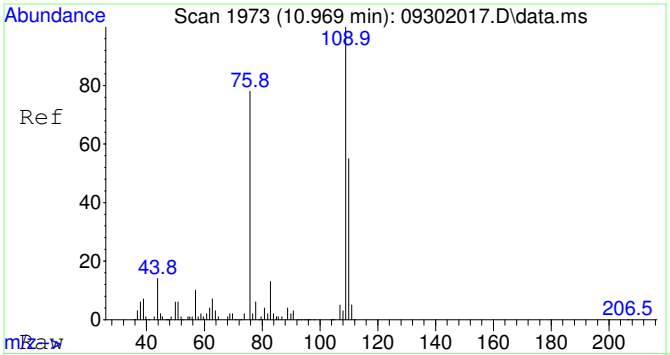


#23
1,2,4-Trimethylbenzene
Concen: 50.14 ug/L
RT: 15.899 min Scan# 2735
Delta R.T. 0.004 min
Lab File: 09302017.D
Acq: 30 Sep 2020 19:42

Tgt Ion:105 Resp: 8740

Ion	Ratio	Lower	Upper
105	100		
120	39.4	17.2	77.2

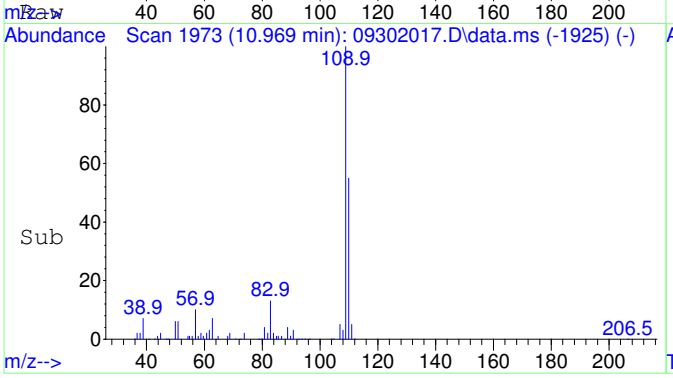


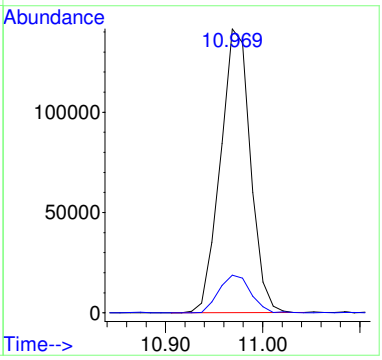


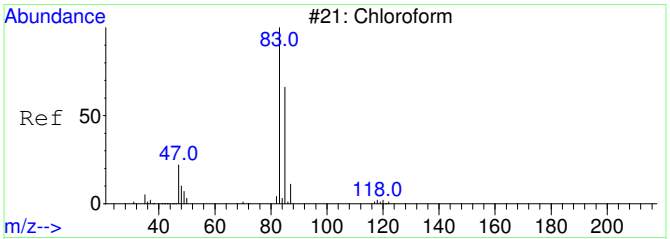
#25
2-Fluorotoluene SCAN
Concen: 4994.86 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. 0.000 min
Lab File: 09302017.D
Acq: 30 Sep 2020 19:42

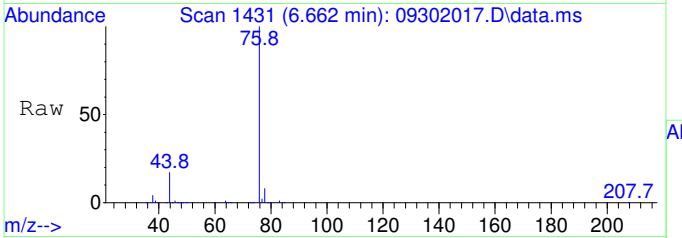
Tgt Ion:109 Resp: 302668

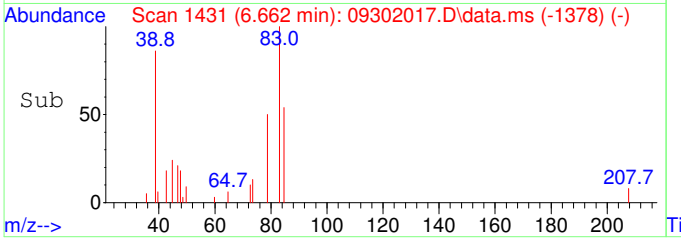
Ion	Ratio	Lower	Upper
109	100		
83	14.0	0.0	43.8







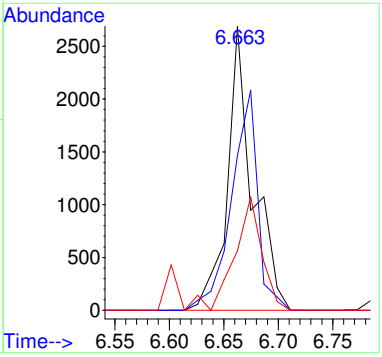


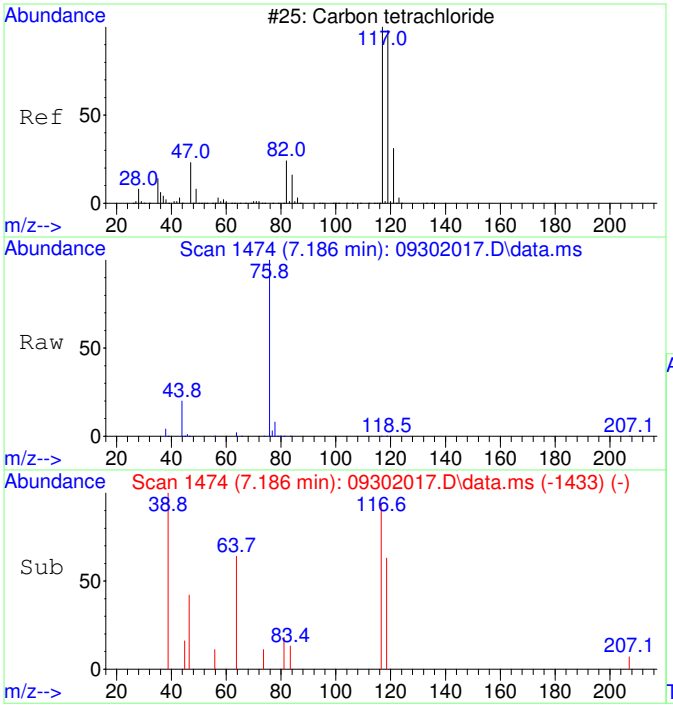


#30
Chloroform SCAN
Concen: 202.98 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 09302017.D
Acq: 30 Sep 2020 19:42

Tgt Ion: 83 Resp: 4347

Ion	Ratio	Lower	Upper
83	100		
85	79.9	34.6	94.6
47	41.4	0.0	53.4

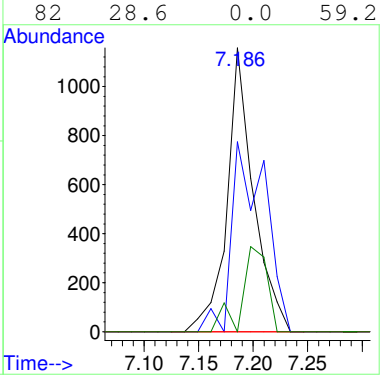


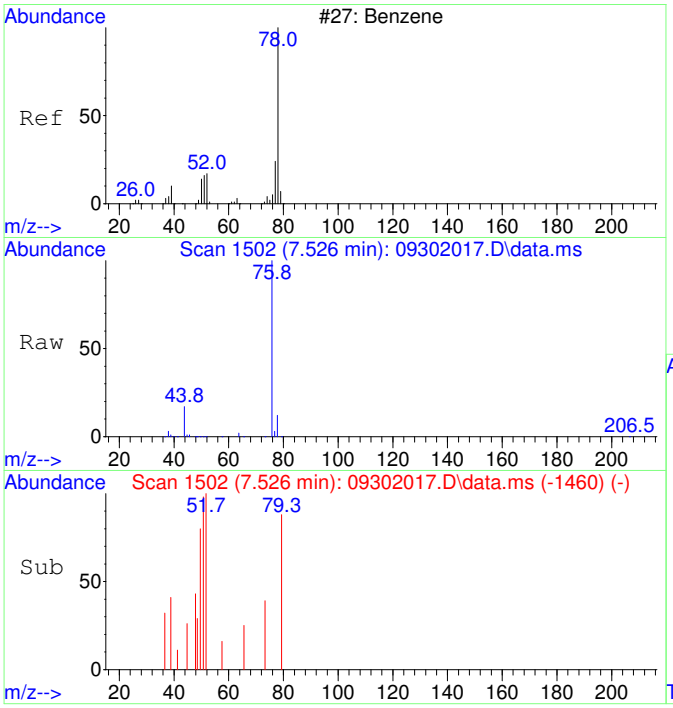


#32
Carbon tetrachloride SCAN
Concen: 96.38 ug/L
RT: 7.186 min Scan# 1474
Delta R.T. 0.000 min
Lab File: 09302017.D
Acq: 30 Sep 2020 19:42

Tgt Ion:117 Resp: 1962

Ion	Ratio	Lower	Upper
117	100		
119	85.1	75.5	135.5
121	0.0	0.0	58.8
82	28.6	0.0	59.2

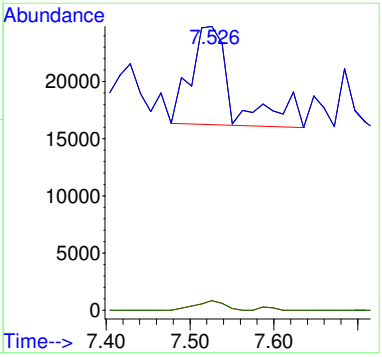


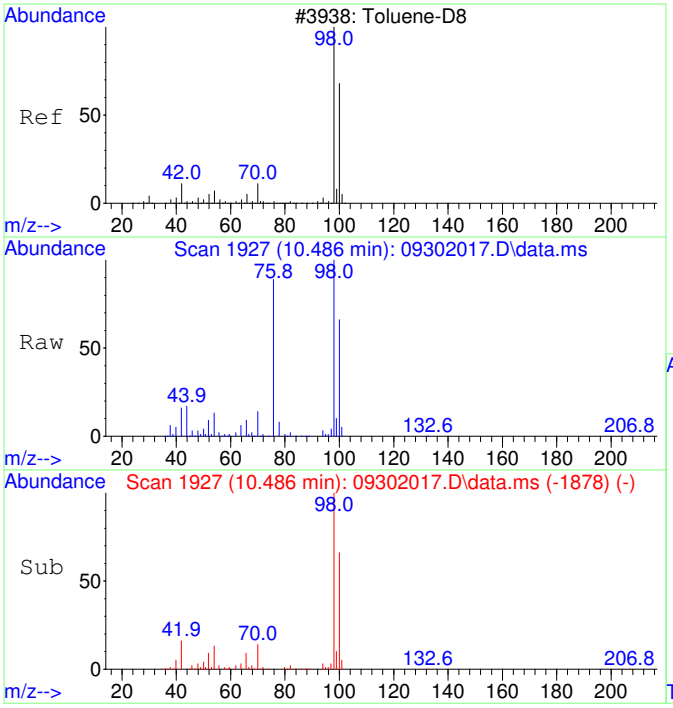


#33
Benzene SCAN
Concen: 563.39 ug/L
RT: 7.526 min Scan# 1502
Delta R.T. 0.012 min
Lab File: 09302017.D
Acq: 30 Sep 2020 19:42

Tgt Ion: 78 Resp: 30274

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	6.6	0.0	47.9
51	6.6	0.0	44.1

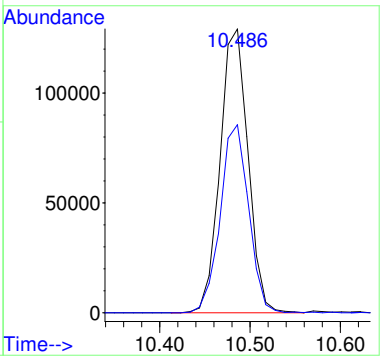


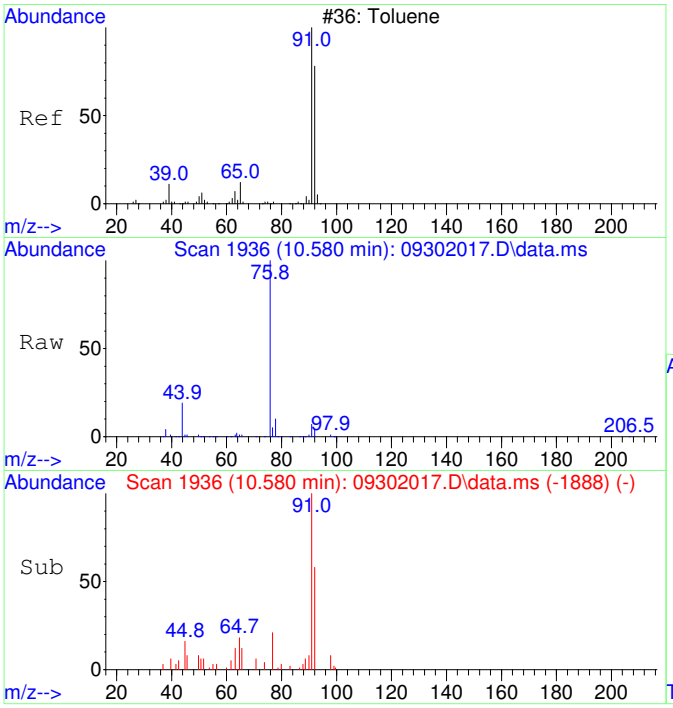


#36
Toluene-d8 SCAN
Concen: 4716.95 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.011 min
Lab File: 09302017.D
Acq: 30 Sep 2020 19:42

Tgt Ion: 98 Resp: 279531

Ion	Ratio	Lower	Upper
98	100		
100	67.0	40.0	100.0

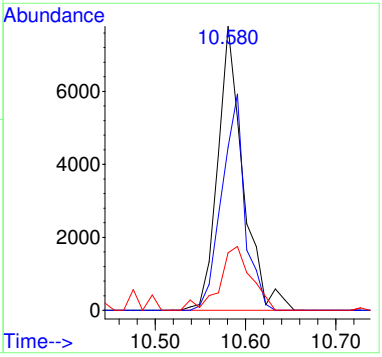


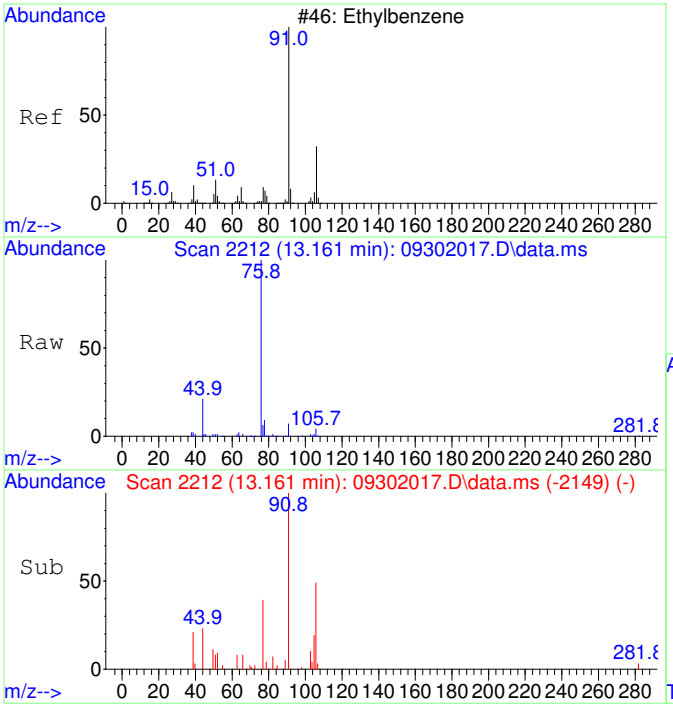


#37
Toluene SCAN
Concen: 199.56 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 09302017.D
Acq: 30 Sep 2020 19:42

Tgt Ion: 91 Resp: 15145

Ion	Ratio	Lower	Upper
91	100		
92	69.6	28.3	88.3
65	27.9	0.0	41.0

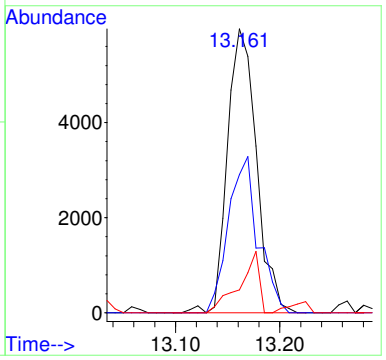


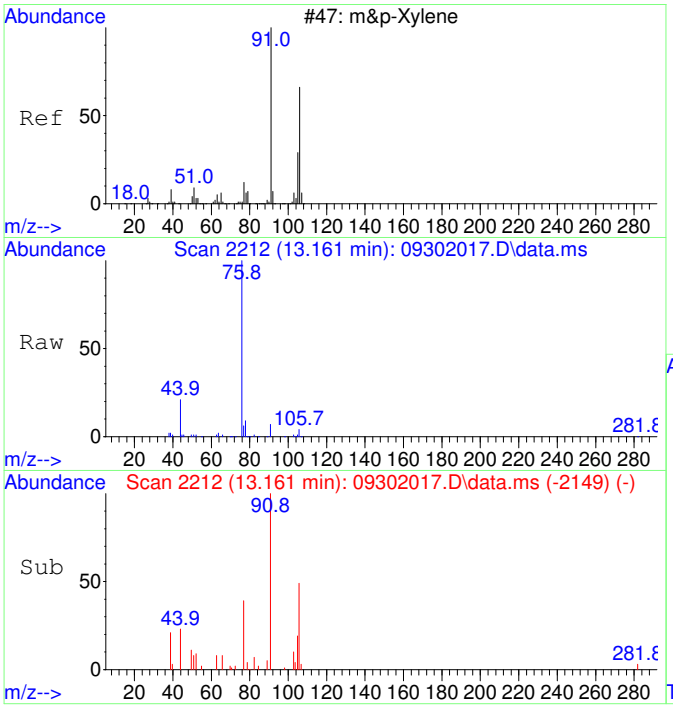


#42
Ethylbenzene SCAN
Concen: 83.26 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. 0.000 min
Lab File: 09302017.D
Acq: 30 Sep 2020 19:42

Tgt Ion: 91 Resp: 11512

Ion	Ratio	Lower	Upper
91	100		
106	56.5	23.1	83.1
51	14.7	0.0	40.1

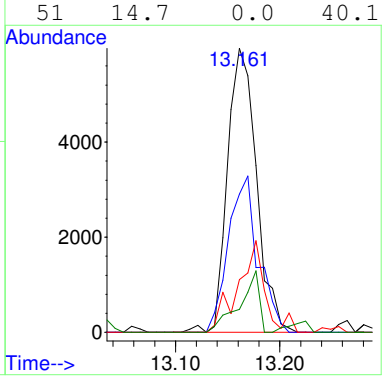


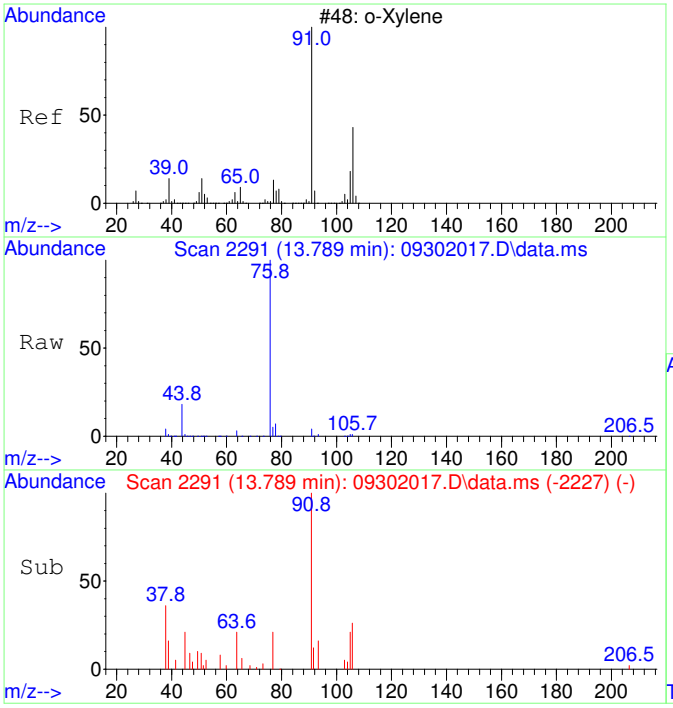


#43
m&p-Xylene SCAN
Concen: 83.26 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. 0.000 min
Lab File: 09302017.D
Acq: 30 Sep 2020 19:42

Tgt Ion: 91 Resp: 11512

Ion	Ratio	Lower	Upper
91	100		
106	56.5	23.1	83.1
105	30.2	0.0	54.7
51	14.7	0.0	40.1

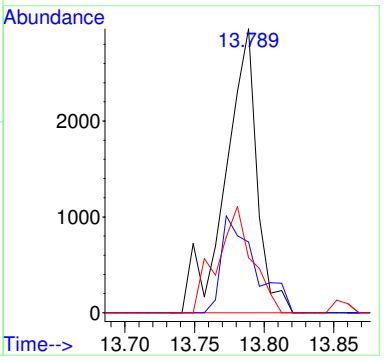


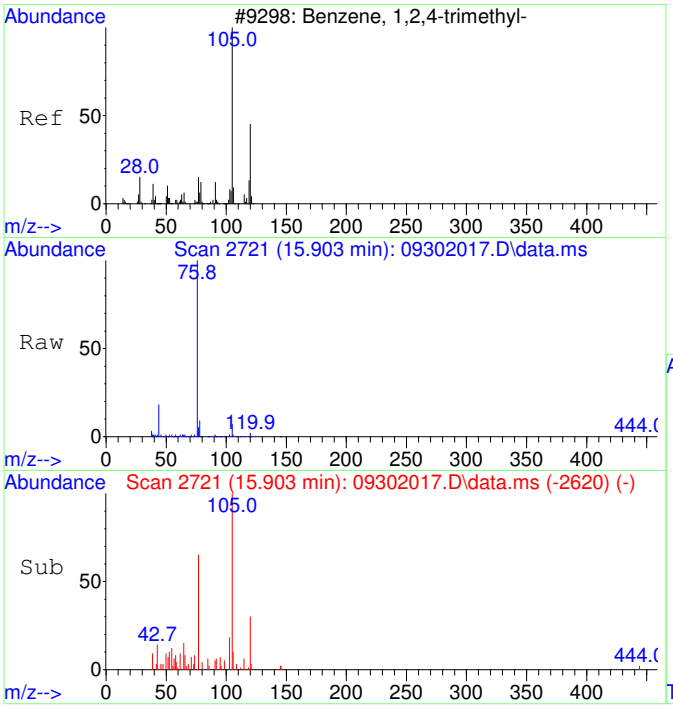


#44
o-Xylene SCAN
Concen: 62.94 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.008 min
Lab File: 09302017.D
Acq: 30 Sep 2020 19:42

Tgt Ion: 91 Resp: 4658

Ion	Ratio	Lower	Upper
91	100		
106	36.7	18.0	78.0
105	41.9	0.0	56.6

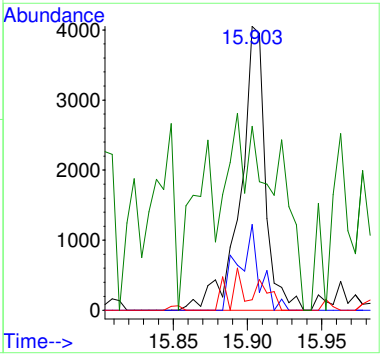




#47
1,2,4-Trimethylbenzene SCAN
Concen: 59.08 ug/L
RT: 15.903 min Scan# 2721
Delta R.T. 0.004 min
Lab File: 09302017.D
Acq: 30 Sep 2020 19:42

Tgt Ion:105 Resp: 4715

Ion	Ratio	Lower	Upper
105	100		
120	26.5	16.9	76.9
119	4.1	0.0	41.9
77	0.0	0.0	42.3



2009033-05

Quantitation Report (Not Reviewed)

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302018.D
Acq On : 30 Sep 2020 20:06
InstName : AG5975C
Operator : TD
Sample : 2009033-05
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 01 08:59:38 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

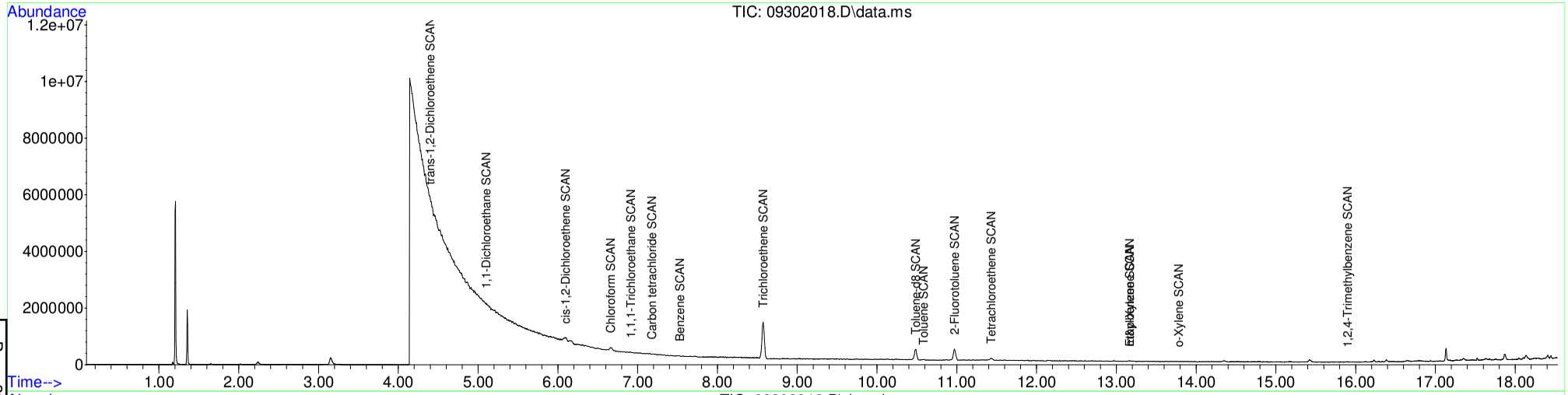
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	624758	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	532482	4353.79 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 87.08%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	11245	450.74 ug/L	80
3] trans-1,2-Dichloroethene	4.396	61	16321	566.24 ug/L	97
4] 1,1-Dichloroethane	5.099	63	12344	344.04 ug/L	89
5] cis-1,2-Dichloroethene	6.094	61	259159	6842.70 ug/L	99
6] Chloroform	6.664	83	178542	4605.72 ug/L	99
7] 1,1,1-Trichloroethane	6.919	97	9562	227.13 ug/L	100
8] Carbon tetrachloride	7.187	117	3828	96.61 ug/L	98
9] Benzene	7.515	78	19456	183.29 ug/L	71
11] Trichloroethene	8.575	130	890839	27873.27 ug/L OC	93
13] Toluene	10.582	91	32494	208.39 ug/L	98
15] Tetrachloroethene	11.432	166	51714	1146.03 ug/L	99
18] Ethylbenzene	12.972	91	14632	77.09 ug/L	95
19] m&p-Xylene	13.162	91	15841	106.79 ug/L	93
20] o-Xylene	13.782	91	7113	44.88 ug/L	95
23] 1,2,4-Trimethylbenzene	15.899	105	6750	38.53 ug/L	88
25) 2-Fluorotoluene SCAN	10.969	109	310399	5096.66 ug/L	96
27) trans-1,2-Dichloroethe...	4.401	61	4213	263.23 ug/L #	30
28) 1,1-Dichloroethane SCAN	5.104	63	4185	225.94 ug/L #	60
29) cis-1,2-Dichloroethene...	6.100	61	149602	7538.51 ug/L #	83
30) Chloroform SCAN	6.662	83	101840	4731.31 ug/L	93
31) 1,1,1-Trichloroethane ...	6.918	97	5357	273.11 ug/L #	45
32) Carbon tetrachloride SCAN	7.173	117	2056	100.49 ug/L #	15
33) Benzene SCAN	7.526	78	27380	506.97 ug/L	96
35) Trichloroethene SCAN	8.573	130	434184	29254.46 ug/L	84
36) Toluene-d8 SCAN	10.486	98	283516	4760.12 ug/L	95
37) Toluene SCAN	10.580	91	20148	264.14 ug/L	92
39) Tetrachloroethene SCAN	11.430	166	24864	1356.82 ug/L	93
42) Ethylbenzene SCAN	13.161	91	7843	56.44 ug/L	93
43) m&p-Xylene SCAN	13.161	91	7843	56.44 ug/L	93
44) o-Xylene SCAN	13.781	91	3697	49.70 ug/L	94
47) 1,2,4-Trimethylbenzene...	15.898	105	3502	43.66 ug/L #	48

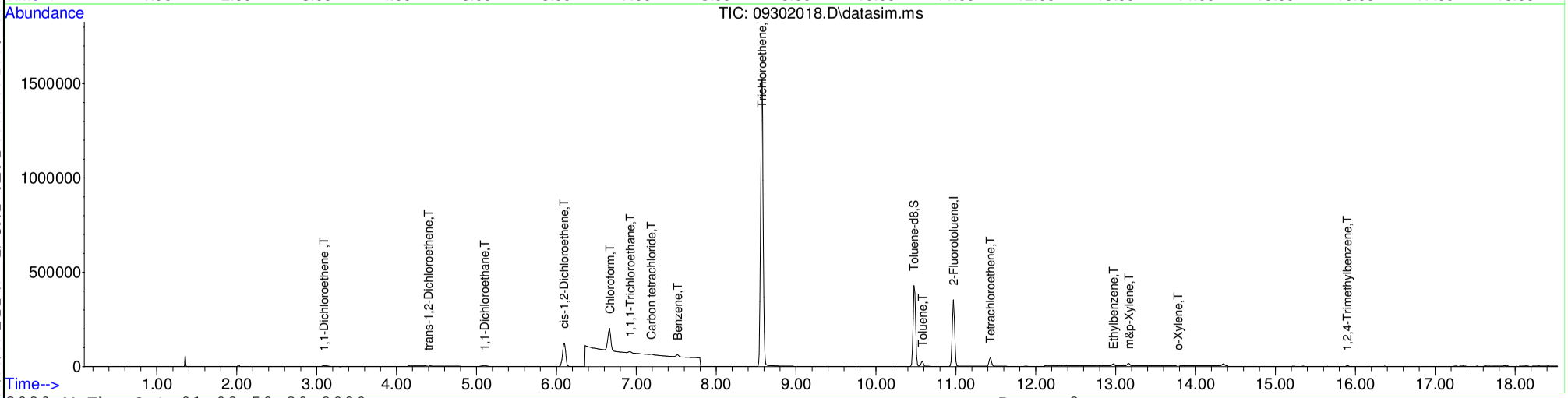
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302018.D
Acq On : 30 Sep 2020 20:06
InstName : AG5975C
Operator : TD
Sample : 2009033-05
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 01 08:59:38 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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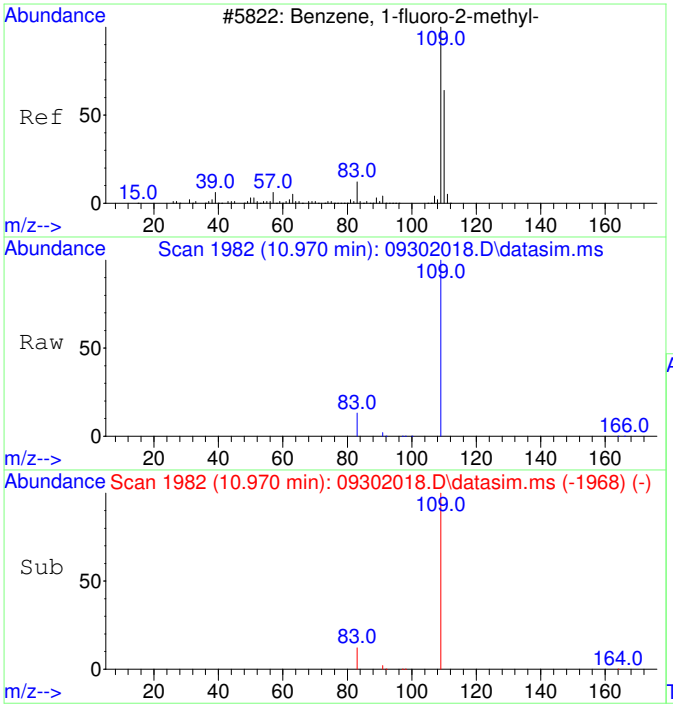
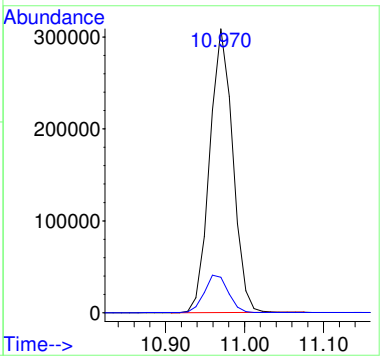
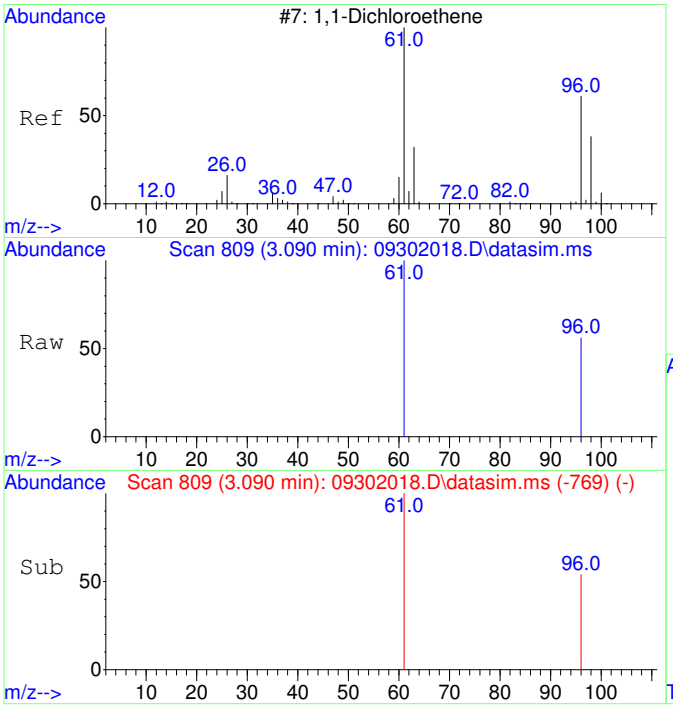


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion:109 Resp: 624758

Ion	Ratio	Lower	Upper
109	100		
83	13.7	0.0	42.3

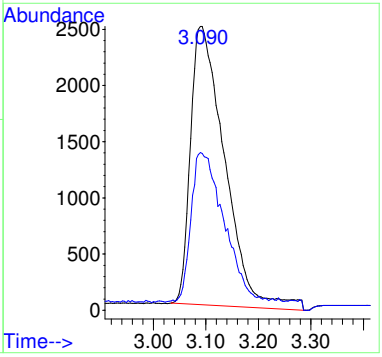




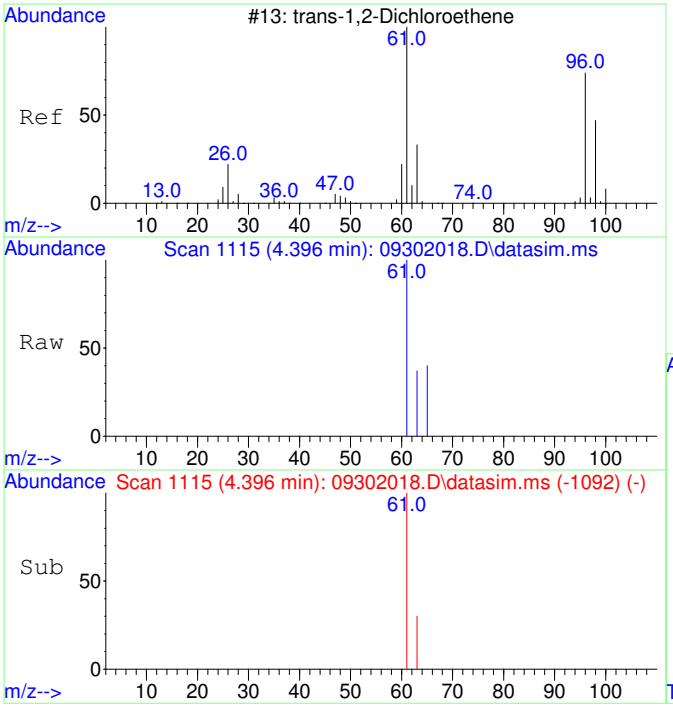
#2
1,1-Dichloroethene
Concen: 450.74 ug/L
RT: 3.090 min Scan# 809
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 61 Resp: 11245

Ion	Ratio	Lower	Upper
61	100		
96	50.8	37.2	97.2



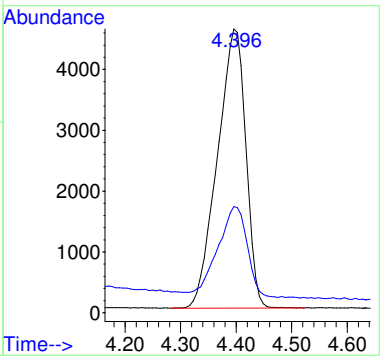
Before MI:
IMPROPER
BASELINE

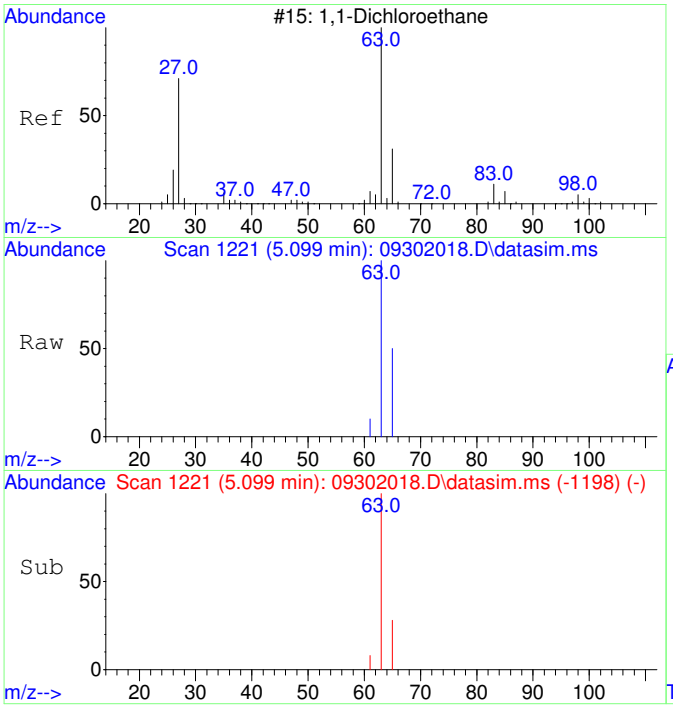


#3
trans-1,2-Dichloroethene
Concen: 566.24 ug/L
RT: 4.396 min Scan# 1115
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 61 Resp: 16321

Ion	Ratio	Lower	Upper
61	100		
63	34.2	2.4	62.4

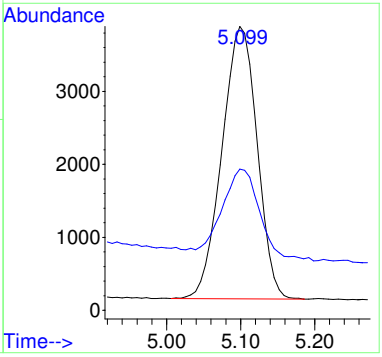


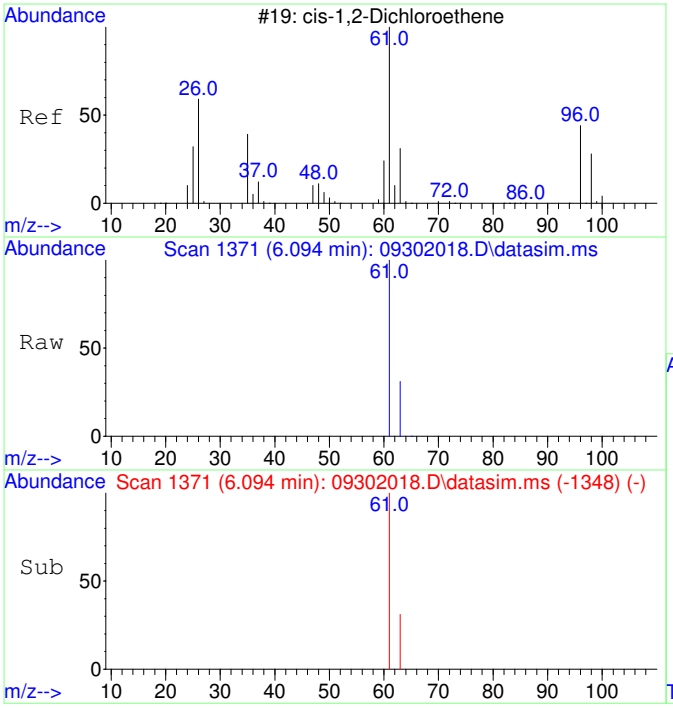


#4
1,1-Dichloroethane
Concen: 344.04 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 63 Resp: 12344

Ion	Ratio	Lower	Upper
63	100		
65	38.0	1.8	61.8

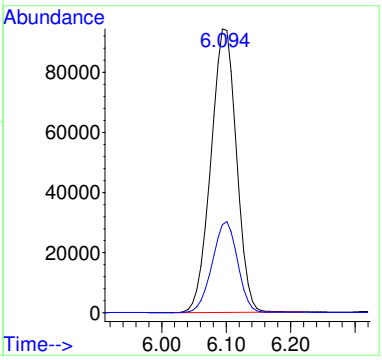


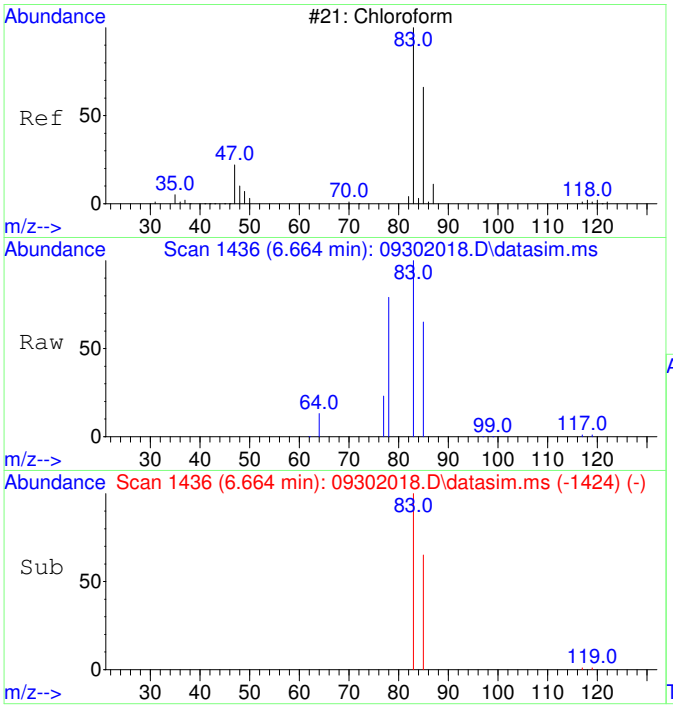


#5
cis-1,2-Dichloroethene
Concen: 6842.70 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 61 Resp: 259159

Ion	Ratio	Lower	Upper
61	100		
63	31.7	2.5	62.5

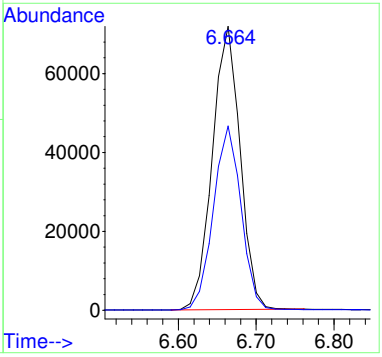


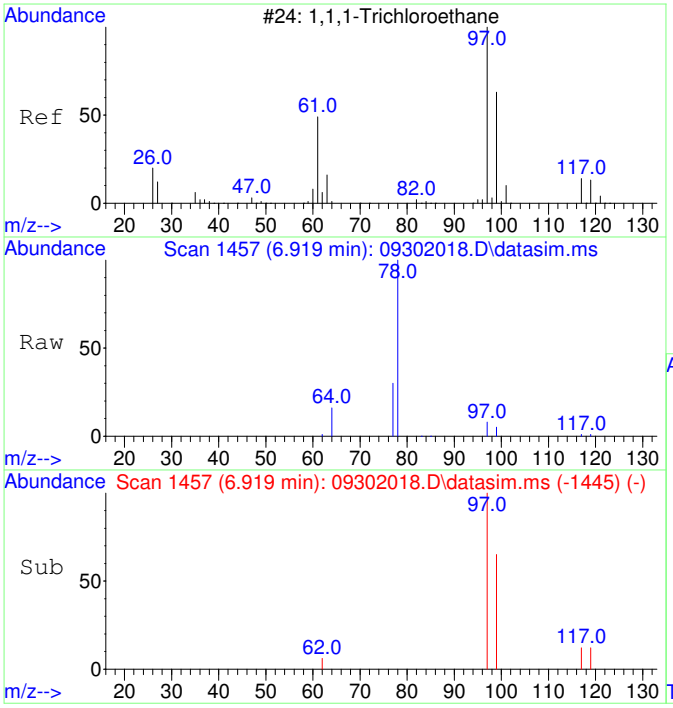


#6
Chloroform
Concen: 4605.72 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 83 Resp: 178542

Ion	Ratio	Lower	Upper
83	100		
85	64.5	35.1	95.1

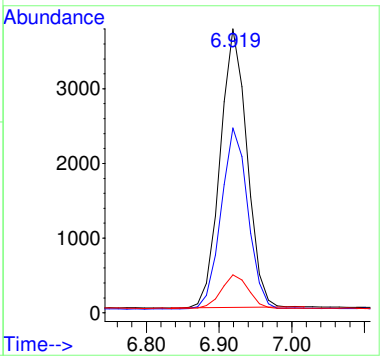


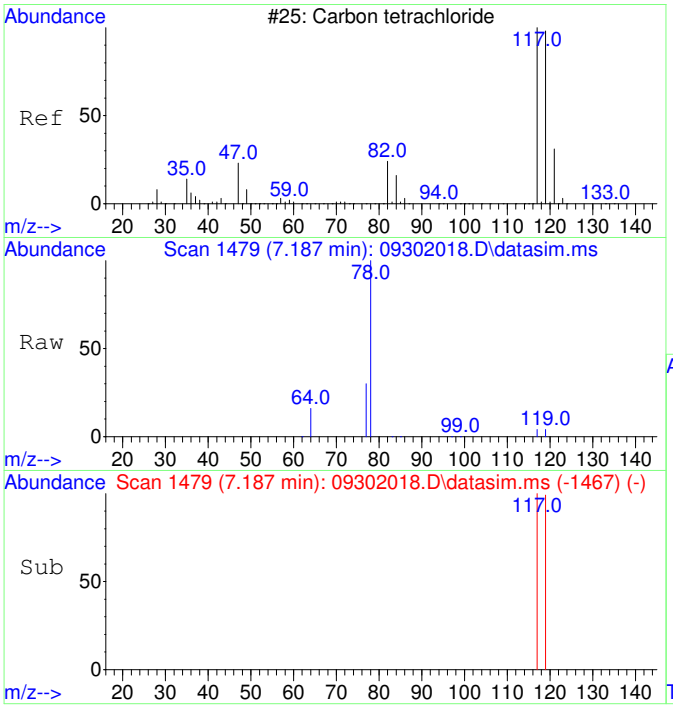


#7
1,1,1-Trichloroethane
Concen: 227.13 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 97 Resp: 9562

Ion	Ratio	Lower	Upper
97	100		
99	64.6	34.6	94.6
117	12.2	0.0	43.2

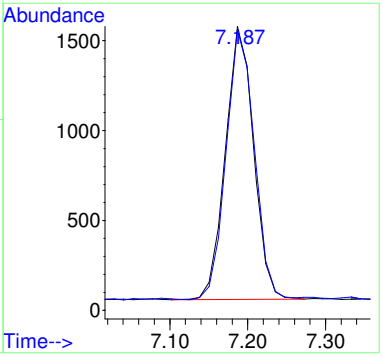


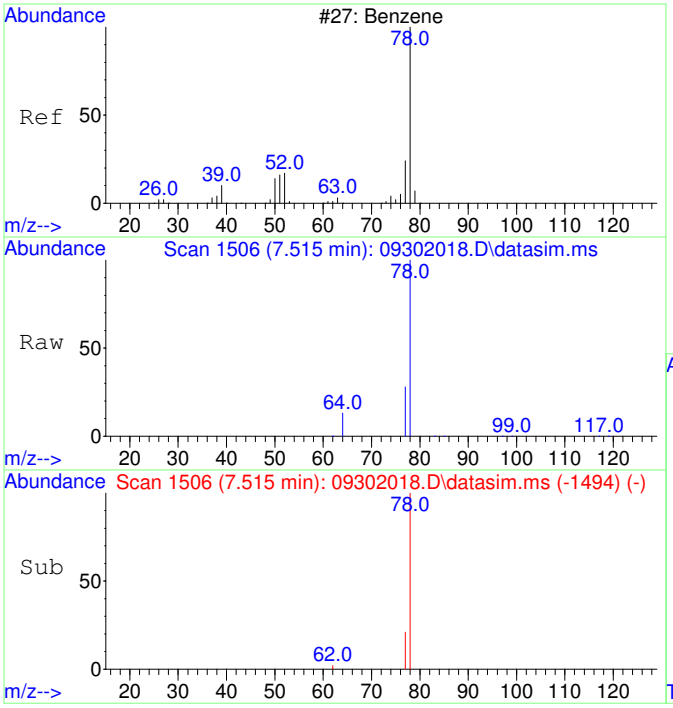


#8
Carbon tetrachloride
Concen: 96.61 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion:117 Resp: 3828

Ion	Ratio	Lower	Upper
117	100		
119	98.0	66.4	126.4

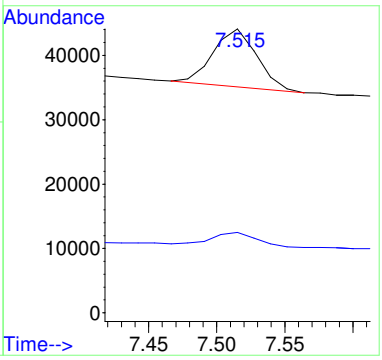


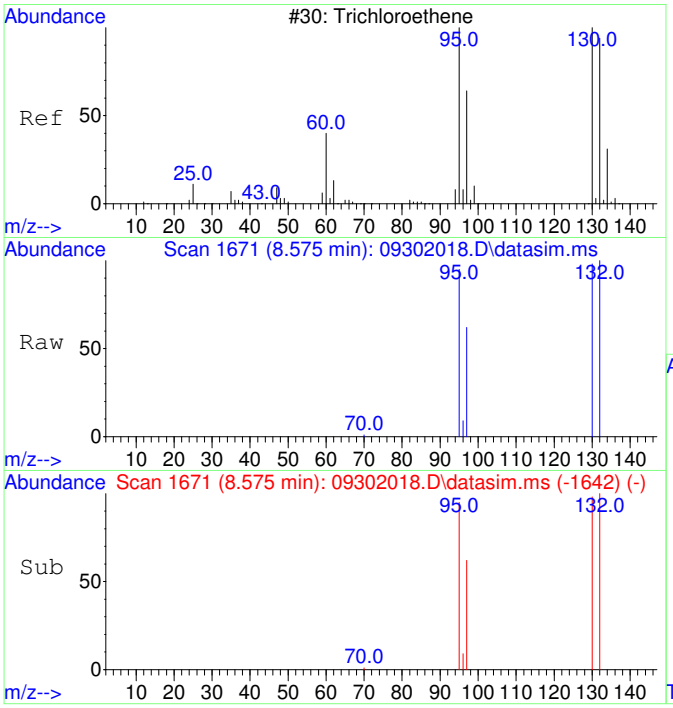


#9
Benzene
Concen: 183.29 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 78 Resp: 19456

Ion	Ratio	Lower	Upper
78	100		
77	37.2	0.0	53.2

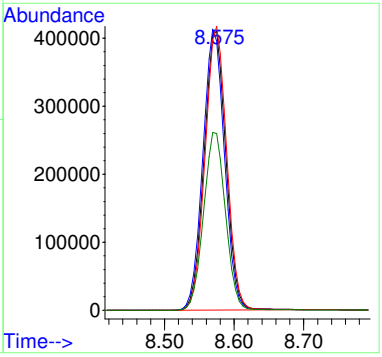


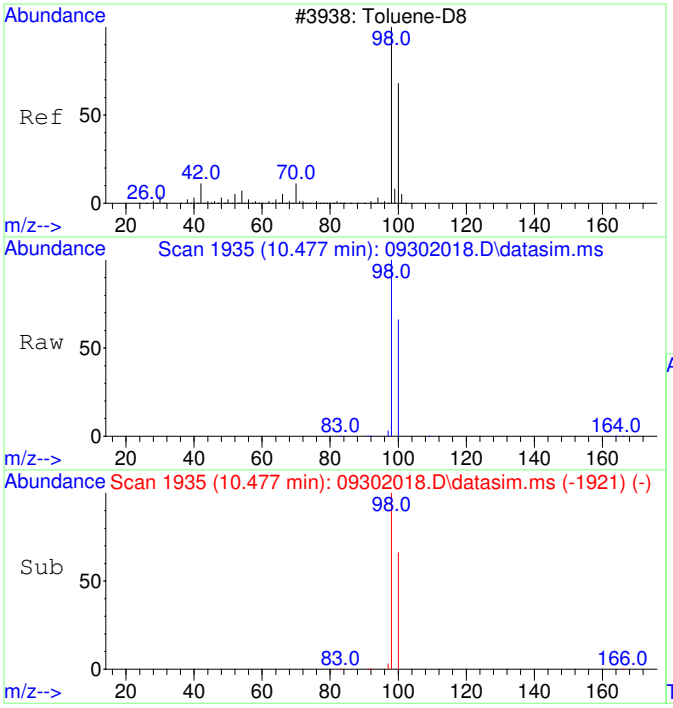


#11
Trichloroethene
Concen: 27873.27 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion:130 Resp: 890839

Ion	Ratio	Lower	Upper
130	100		
95	99.8	60.7	120.7
132	100.5	76.0	116.0
97	63.9	38.6	78.6

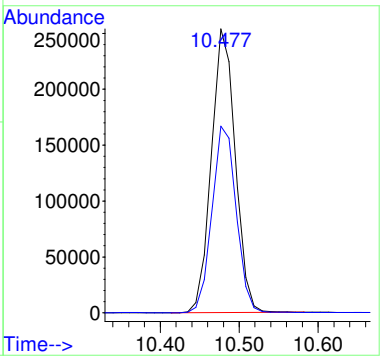


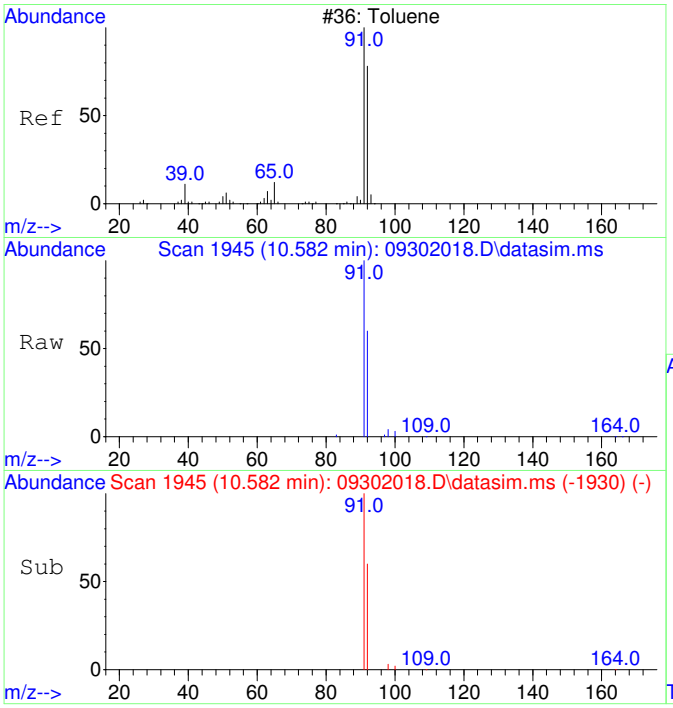


#12
Toluene-d8
Concen: 4353.79 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 98 Resp: 532482

Ion	Ratio	Lower	Upper
98	100		
100	66.5	37.1	97.1

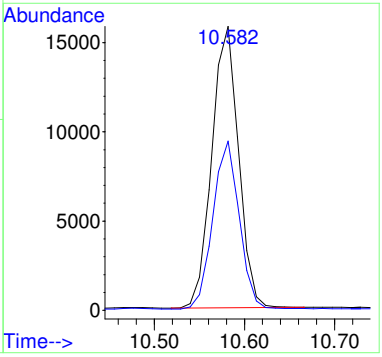


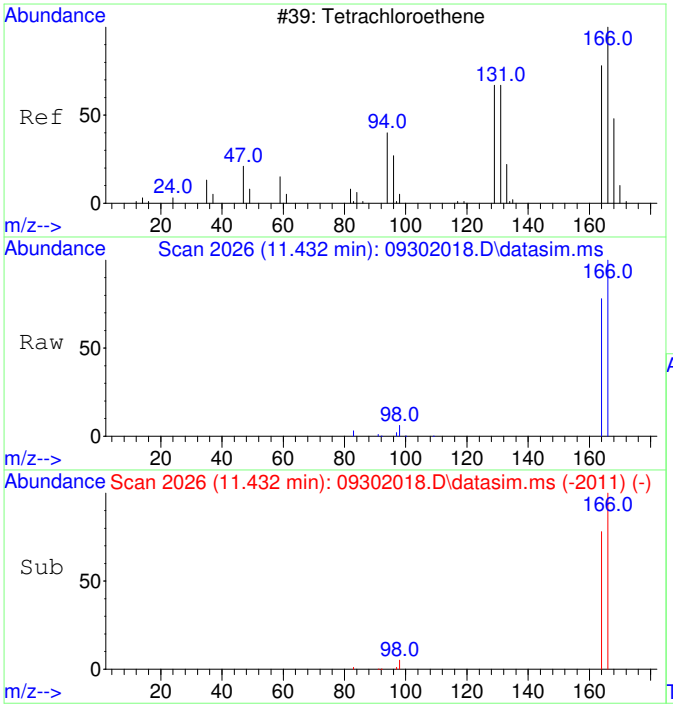


#13
Toluene
Concen: 208.39 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.010 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 91 Resp: 32494

Ion	Ratio	Lower	Upper
91	100		
92	58.6	29.9	89.9

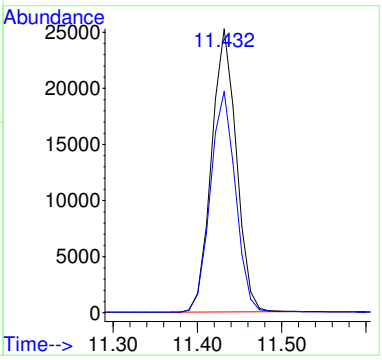


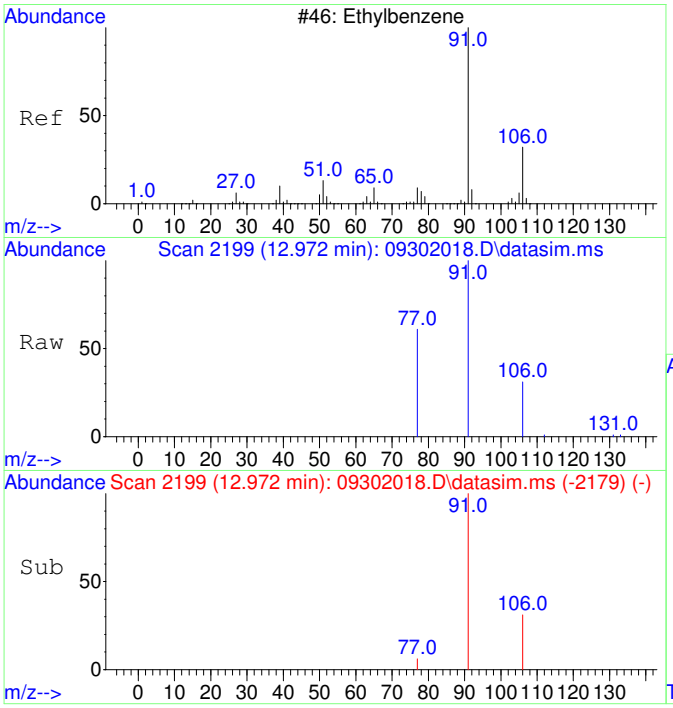


#15
Tetrachloroethene
Concen: 1146.03 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion:166 Resp: 51714

Ion	Ratio	Lower	Upper
166	100		
164	78.5	47.8	107.8

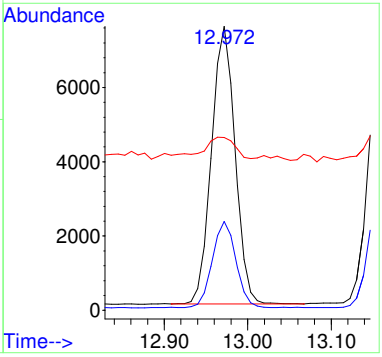


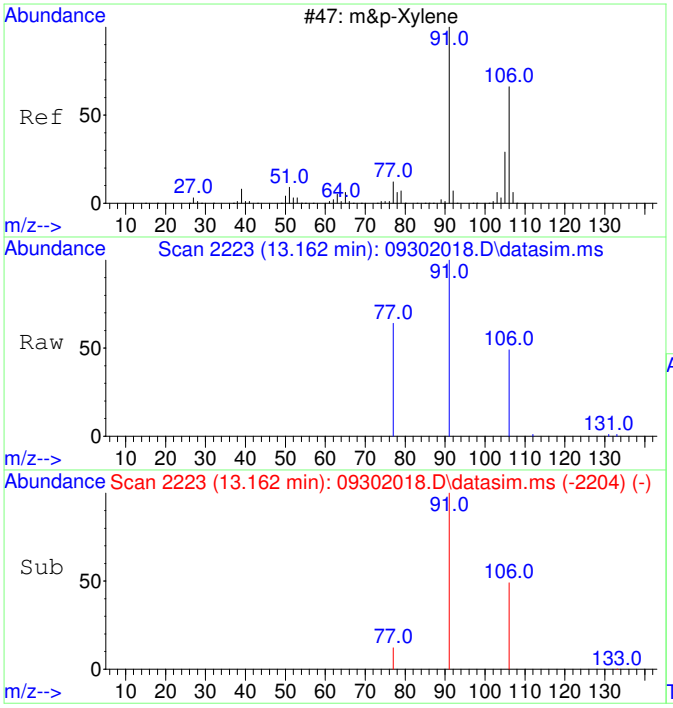


#18
Ethylbenzene
Concen: 77.09 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.008 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 91 Resp: 14632

Ion	Ratio	Lower	Upper
91	100		
106	31.3	3.0	63.0
77	13.3	0.0	38.2

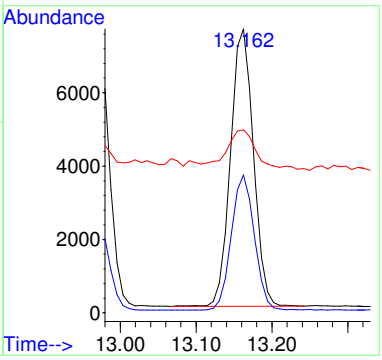


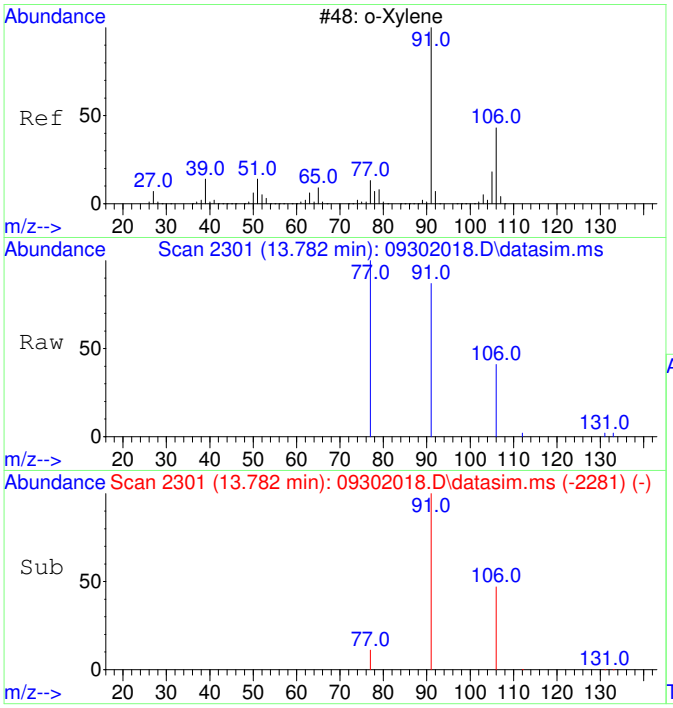


#19
m&p-Xylene
Concen: 106.79 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 91 Resp: 15841

Ion	Ratio	Lower	Upper
91	100		
106	49.0	22.2	82.2
77	19.7	0.0	42.4

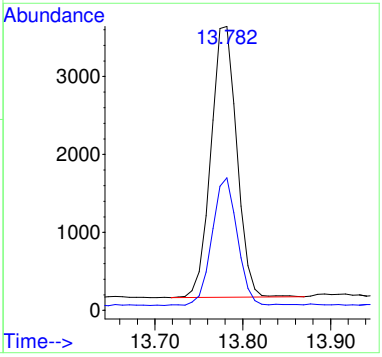


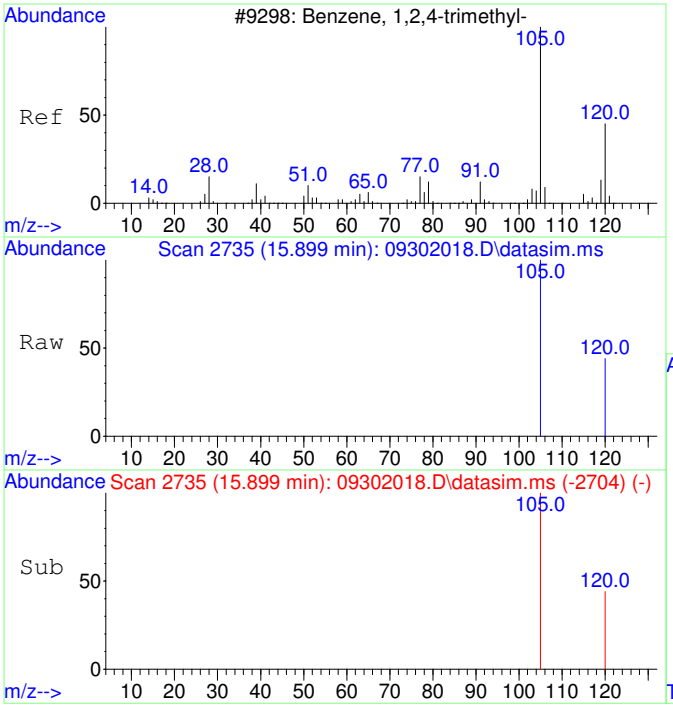


#20
o-Xylene
Concen: 44.88 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 91 Resp: 7113

Ion	Ratio	Lower	Upper
91	100		
106	45.8	19.2	79.2

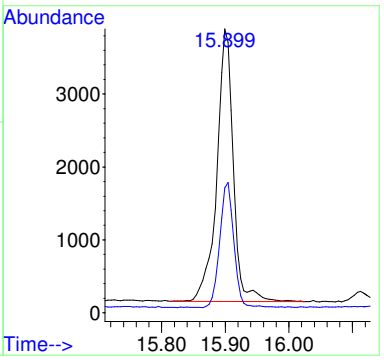


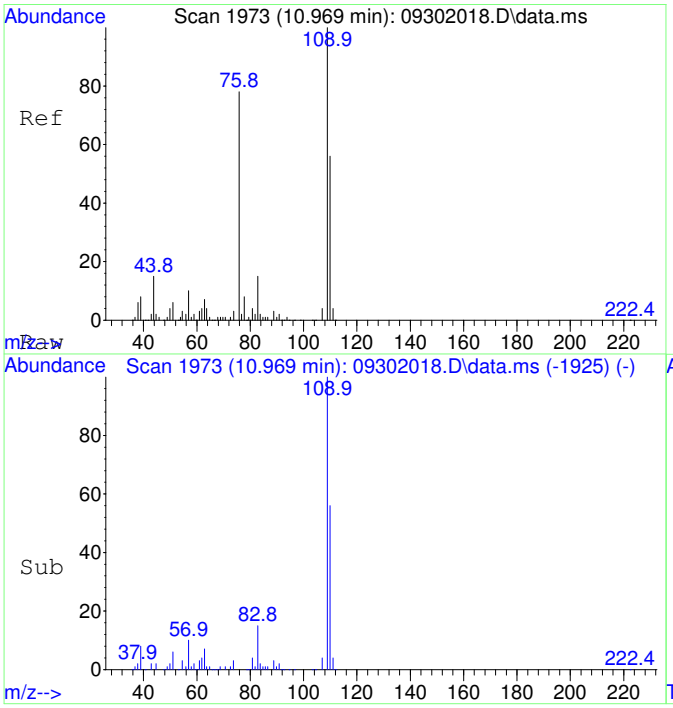


#23
1,2,4-Trimethylbenzene
Concen: 38.53 ug/L
RT: 15.899 min Scan# 2735
Delta R.T. 0.003 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion:105 Resp: 6750

Ion	Ratio	Lower	Upper
105	100		
120	39.0	17.2	77.2

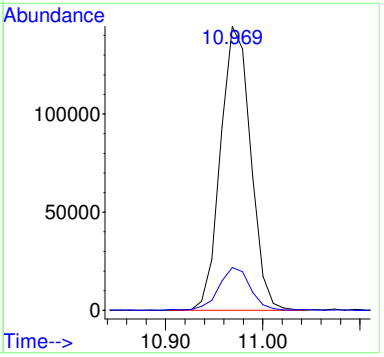


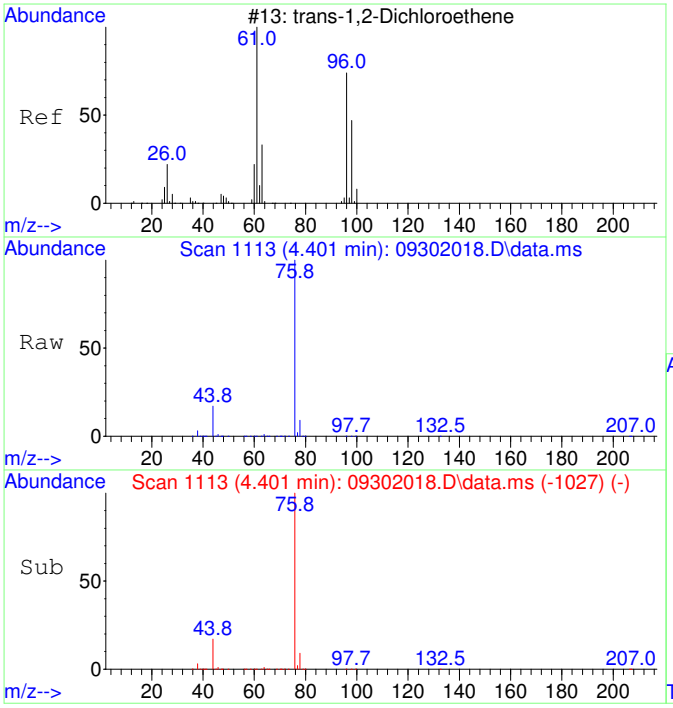


#25
2-Fluorotoluene SCAN
Concen: 5096.66 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion:109 Resp: 310399

Ion	Ratio	Lower	Upper
109	100		
83	15.6	0.0	43.8

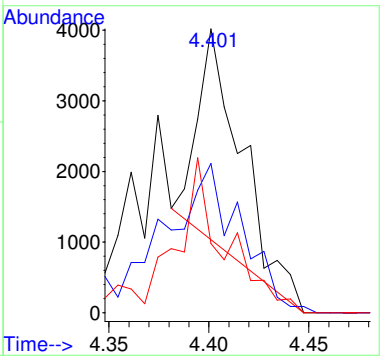


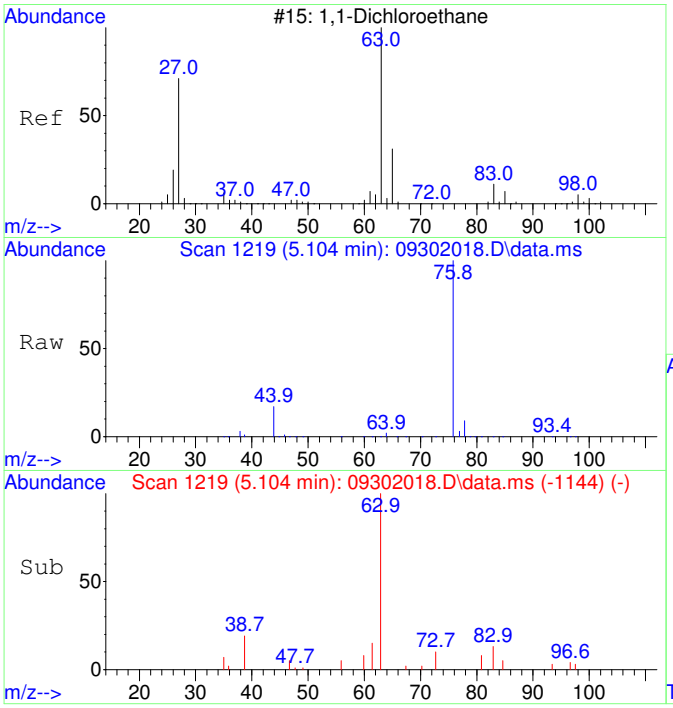


#27
trans-1,2-Dichloroethene SCAN
Concen: 263.23 ug/L
RT: 4.401 min Scan# 1113
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 61 Resp: 4213

Ion	Ratio	Lower	Upper
61	100		
96	142.8	49.0	109.0#
98	96.3	20.5	80.5#

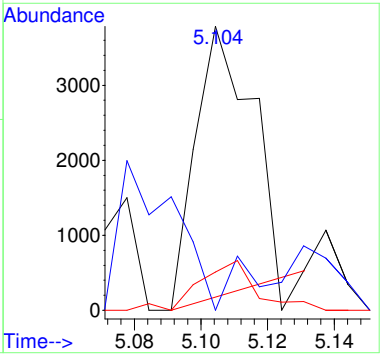


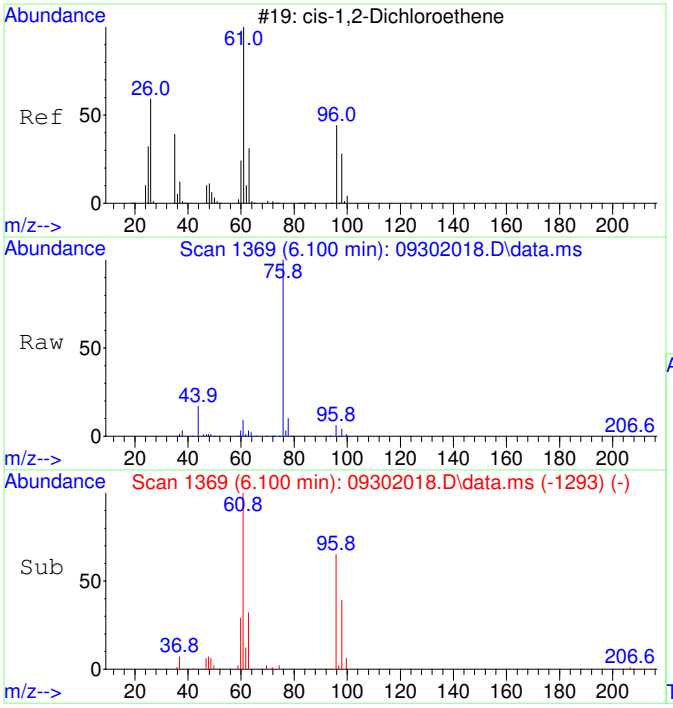


#28
1,1-Dichloroethane SCAN
Concen: 225.94 ug/L
RT: 5.104 min Scan# 1219
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 63 Resp: 4185

Ion	Ratio	Lower	Upper
63	100		
65	0.0	1.3	61.3#
83	18.9	0.0	45.9

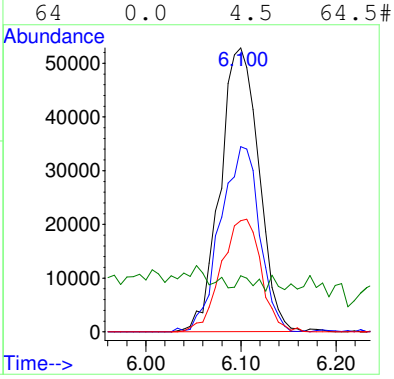


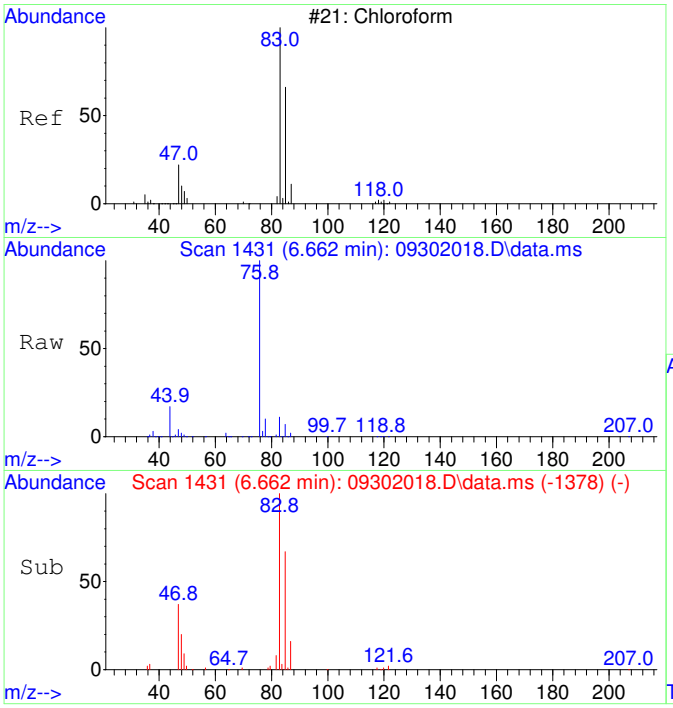


#29
cis-1,2-Dichloroethene SCAN
Concen: 7538.51 ug/L
RT: 6.100 min Scan# 1369
Delta R.T. 0.007 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 61 Resp: 149602

Ion	Ratio	Lower	Upper
61	100		
96	66.6	39.9	99.9
98	41.1	13.5	73.5
64	0.0	4.5	64.5#

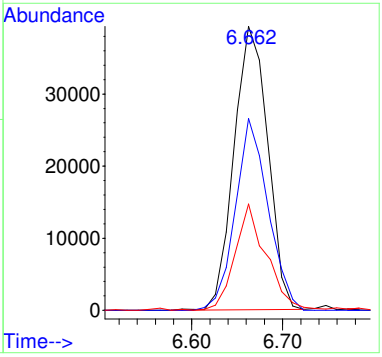


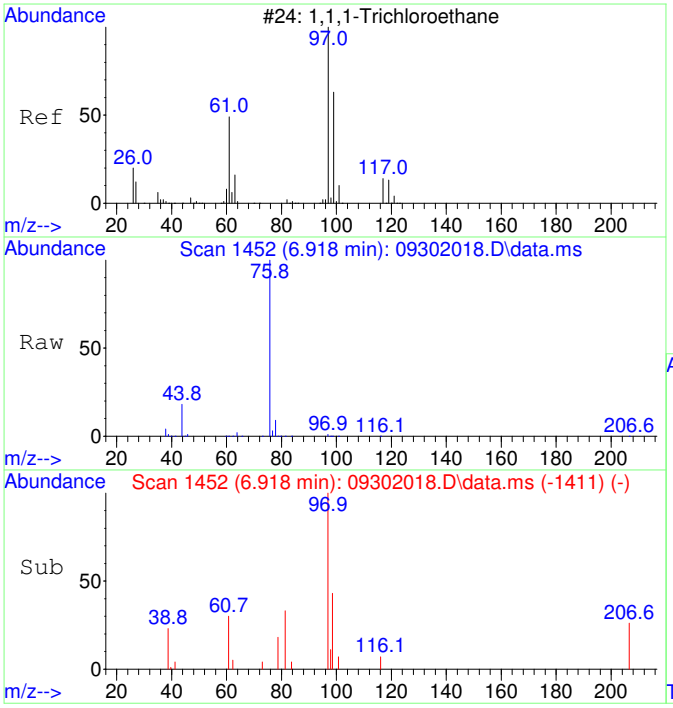


#30
Chloroform SCAN
Concen: 4731.31 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 83 Resp: 101840

Ion	Ratio	Lower	Upper
83	100		
85	65.7	34.6	94.6
47	34.2	0.0	53.4

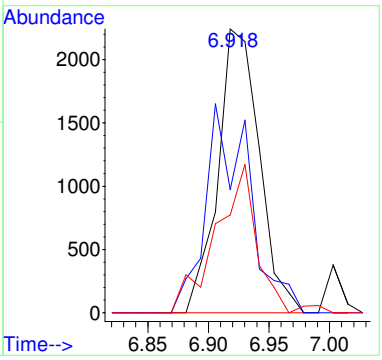


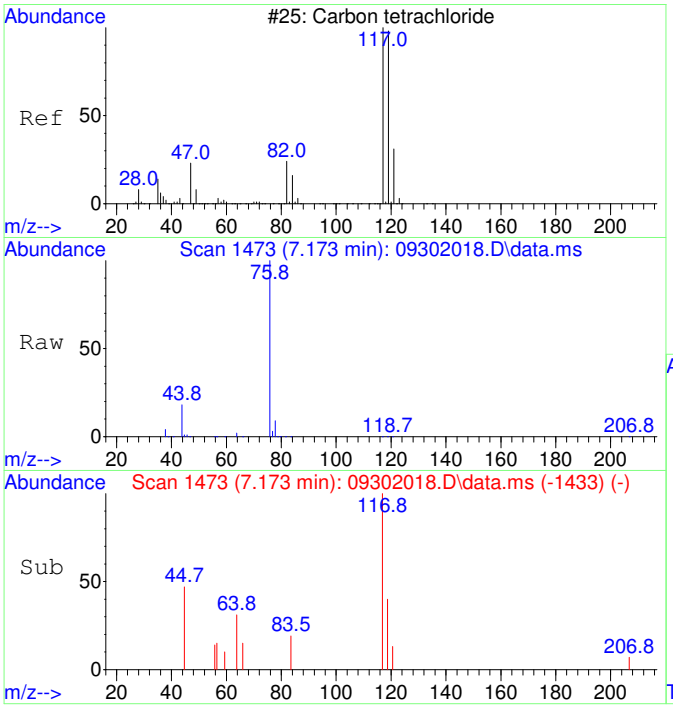


#31
1,1,1-Trichloroethane SCAN
Concen: 273.11 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 97 Resp: 5357

Ion	Ratio	Lower	Upper
97	100		
99	0.0	43.6	103.6#
61	52.3	18.0	78.0

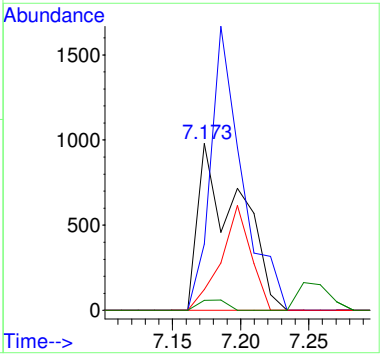


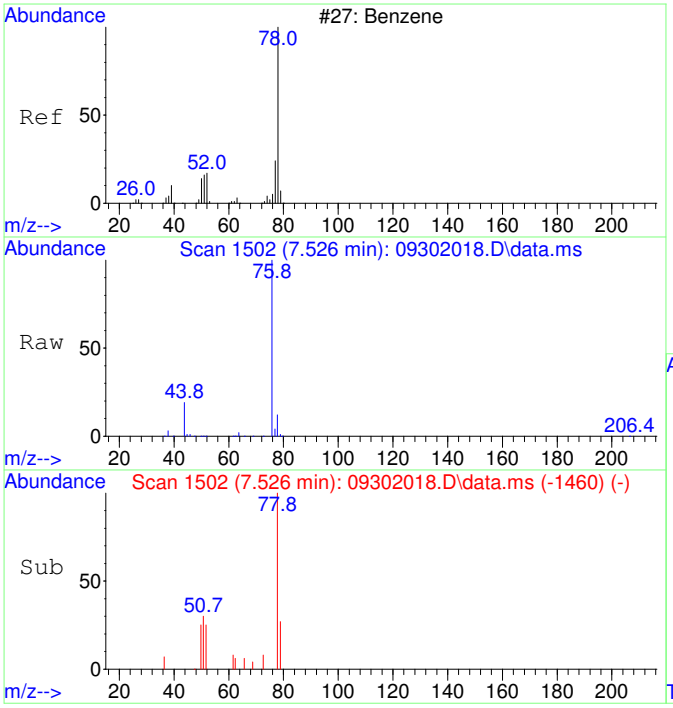


#32
Carbon tetrachloride SCAN
Concen: 100.49 ug/L
RT: 7.173 min Scan# 1473
Delta R.T. -0.012 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion:117 Resp: 2056

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

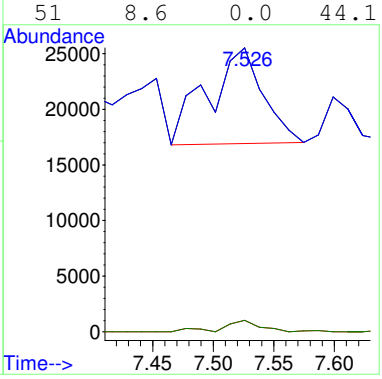


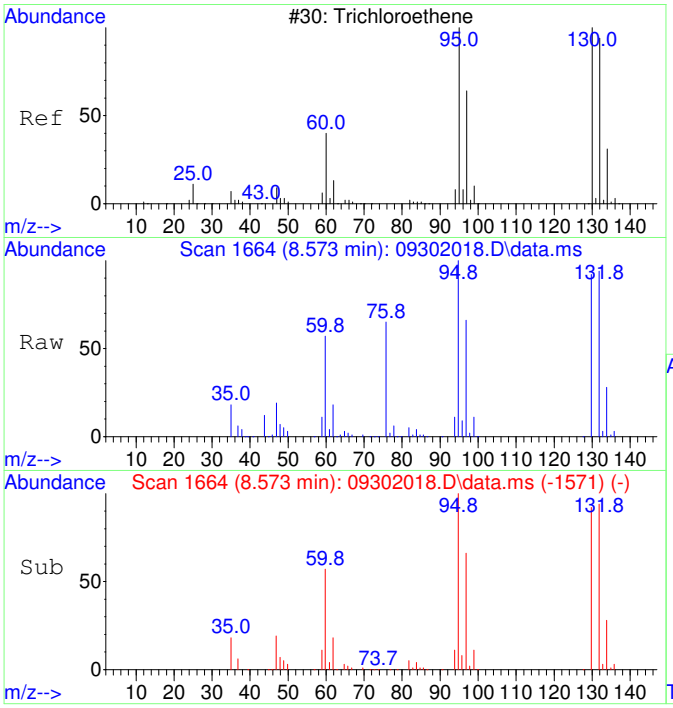


#33
Benzene SCAN
Concen: 506.97 ug/L
RT: 7.526 min Scan# 1502
Delta R.T. 0.012 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 78 Resp: 27380

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	8.6	0.0	47.9
51	8.6	0.0	44.1

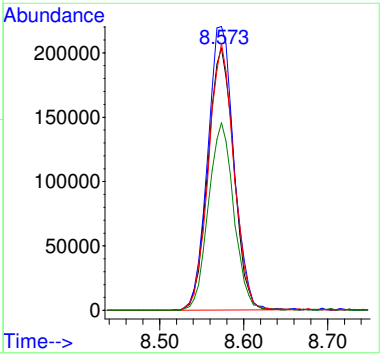


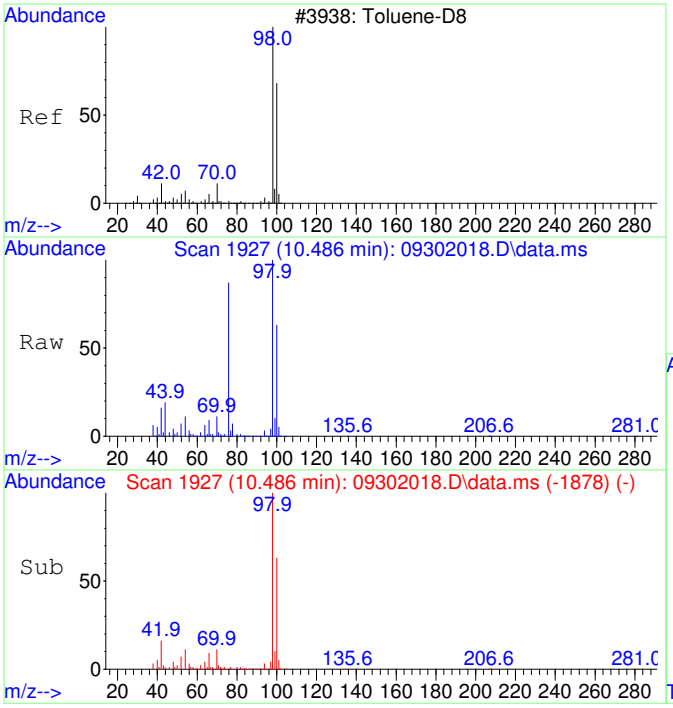


#35
Trichloroethene SCAN
Concen: 29254.46 ug/L
RT: 8.573 min Scan# 1664
Delta R.T. 0.005 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion:130 Resp: 434184

Ion	Ratio	Lower	Upper
130	100		
95	110.1	60.5	120.5
132	99.8	59.6	119.6
97	70.1	28.2	88.2

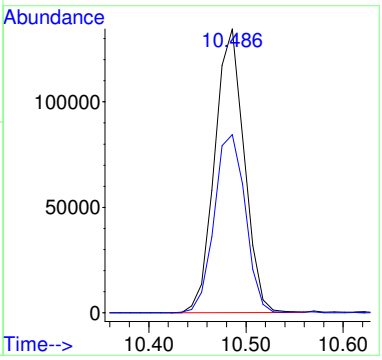


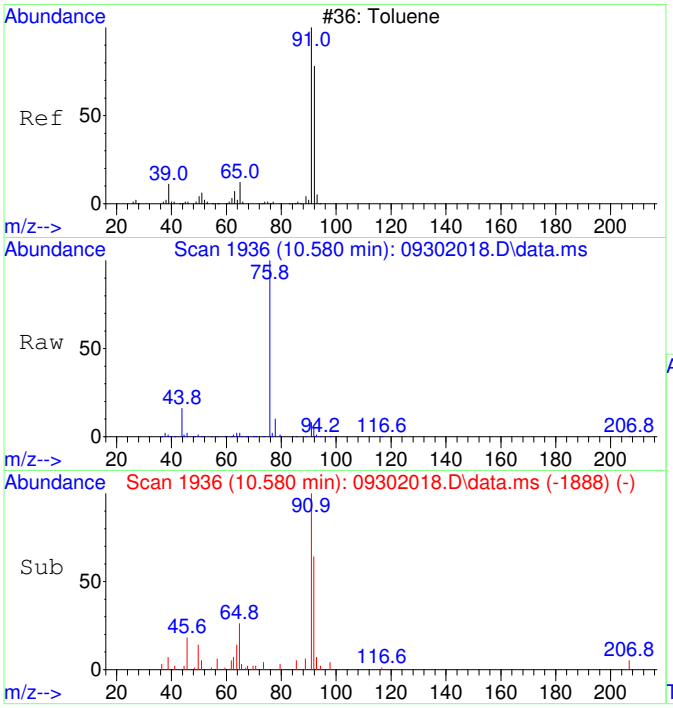


#36
Toluene-d8 SCAN
Concen: 4760.12 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.010 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 98 Resp: 283516

Ion	Ratio	Lower	Upper
98	100		
100	65.7	40.0	100.0

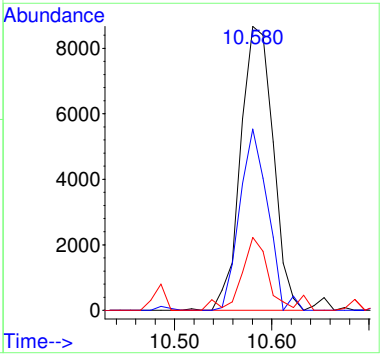


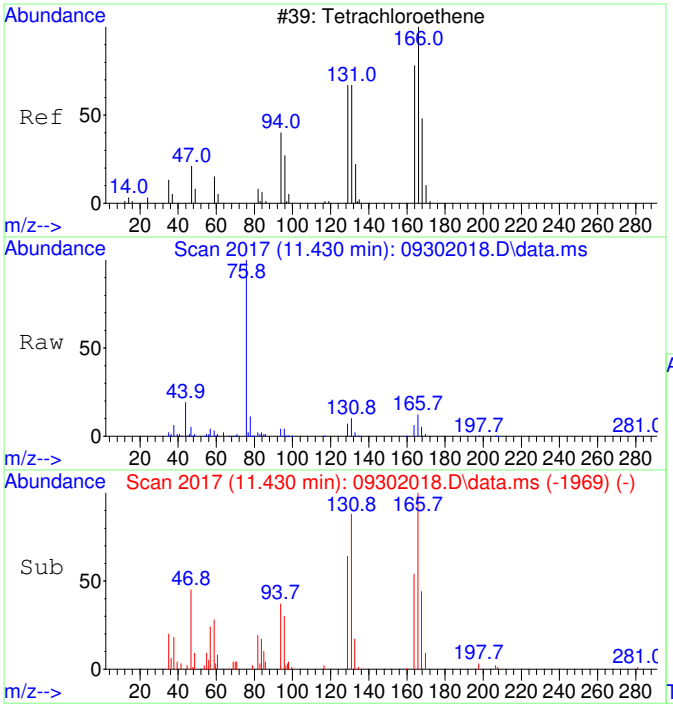


#37
Toluene SCAN
Concen: 264.14 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 91 Resp: 20148

Ion	Ratio	Lower	Upper
91	100		
92	55.0	28.3	88.3
65	22.2	0.0	41.0

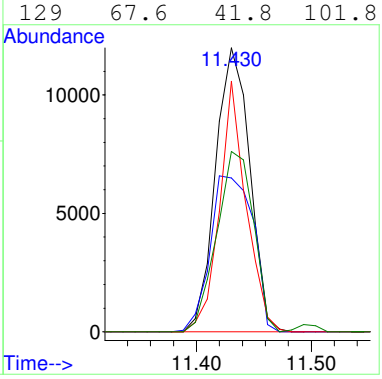


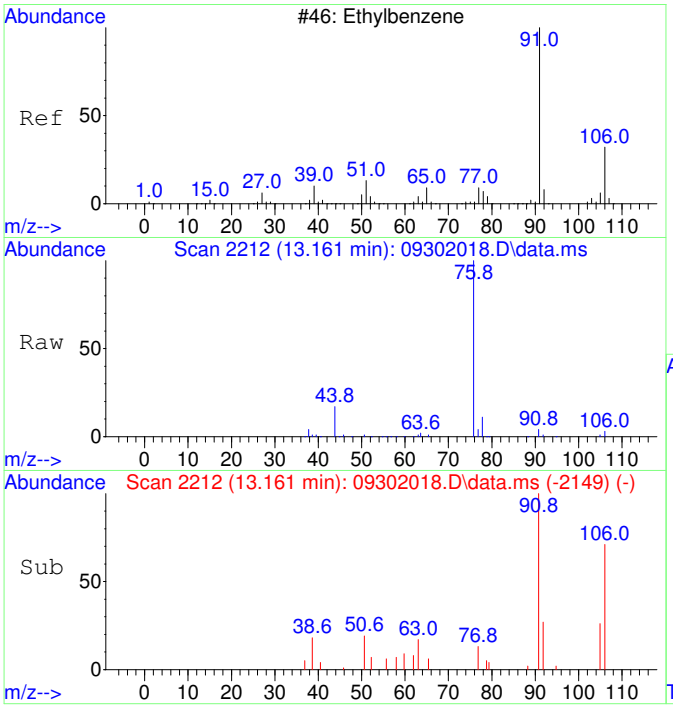


#39
Tetrachloroethene SCAN
Concen: 1356.82 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion:166 Resp: 24864

Ion	Ratio	Lower	Upper
166	100		
164	68.8	50.9	110.9
131	68.8	38.7	98.7
129	67.6	41.8	101.8

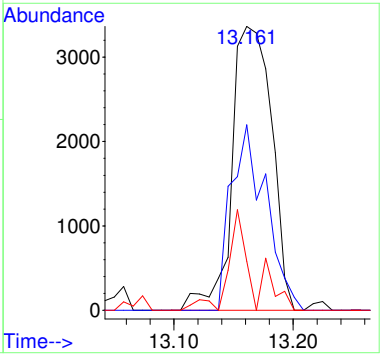


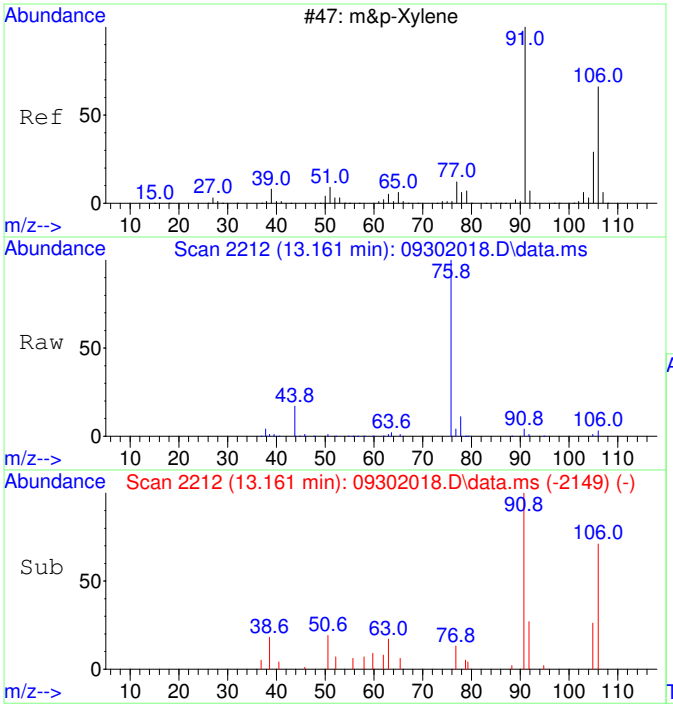


#42
Ethylbenzene SCAN
Concen: 56.44 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 91 Resp: 7843

Ion	Ratio	Lower	Upper
91	100		
106	57.1	23.1	83.1
51	15.5	0.0	40.1

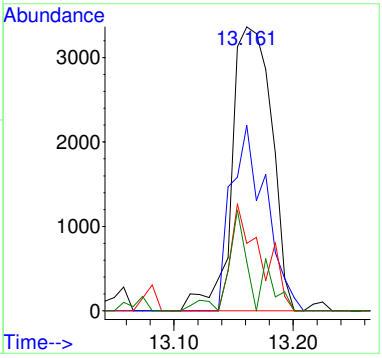


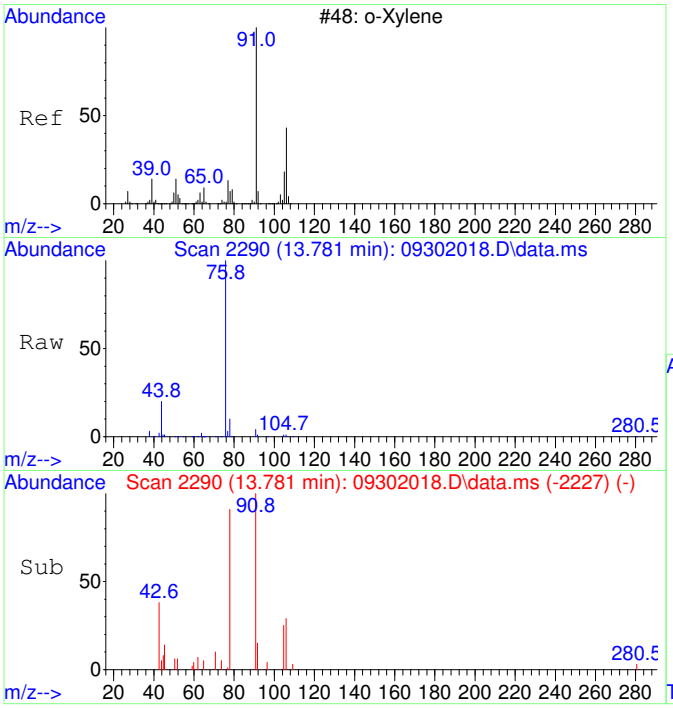


#43
m&p-Xylene SCAN
Concen: 56.44 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 91 Resp: 7843

Ion	Ratio	Lower	Upper
91	100		
106	57.1	23.1	83.1
105	28.9	0.0	54.7
51	15.5	0.0	40.1

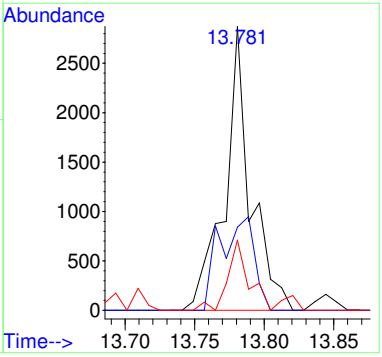


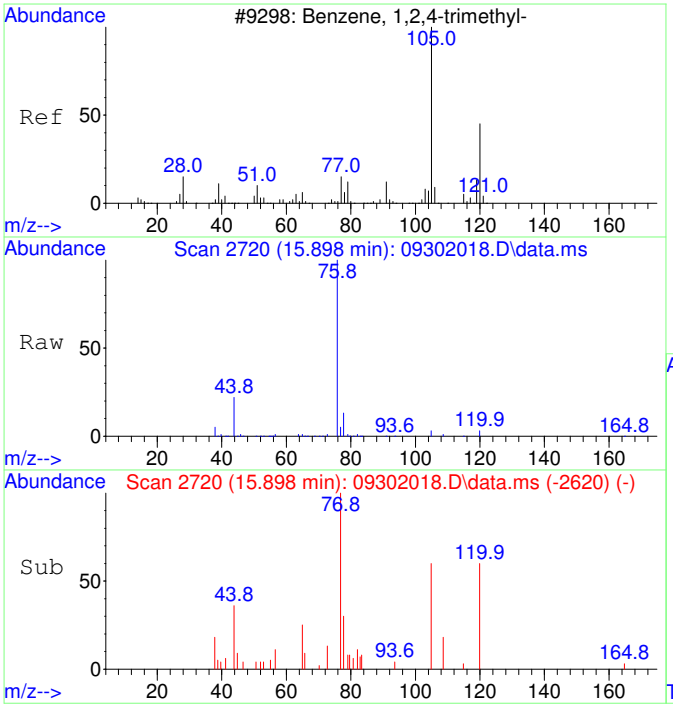


#44
o-Xylene SCAN
Concen: 49.70 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 91 Resp: 3697

Ion	Ratio	Lower	Upper
91	100		
106	44.3	18.0	78.0
105	23.3	0.0	56.6

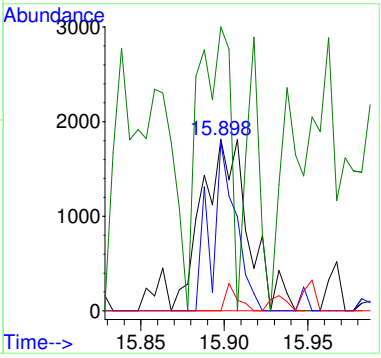




#47
1,2,4-Trimethylbenzene SCAN
Concen: 43.66 ug/L
RT: 15.898 min Scan# 2720
Delta R.T. -0.002 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion:105 Resp: 3502

Ion	Ratio	Lower	Upper
105	100		
120	51.6	16.9	76.9
119	4.1	0.0	41.9
77	112.6	0.0	42.3#



Quantitation Report (QT Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302018.D
Acq On : 30 Sep 2020 20:06
InstName : AG5975C
Operator : TD
Sample : 2009033-05
Misc :
ALS Vial : 18 Sample Multiplier: 1

M.I. Performed By:
TD at 10:01 am, Oct 01, 2020

M.I. Approved By:
ZR at 4:04 pm, Oct 02, 2020

Quant Time: Oct 01 08:59:38 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

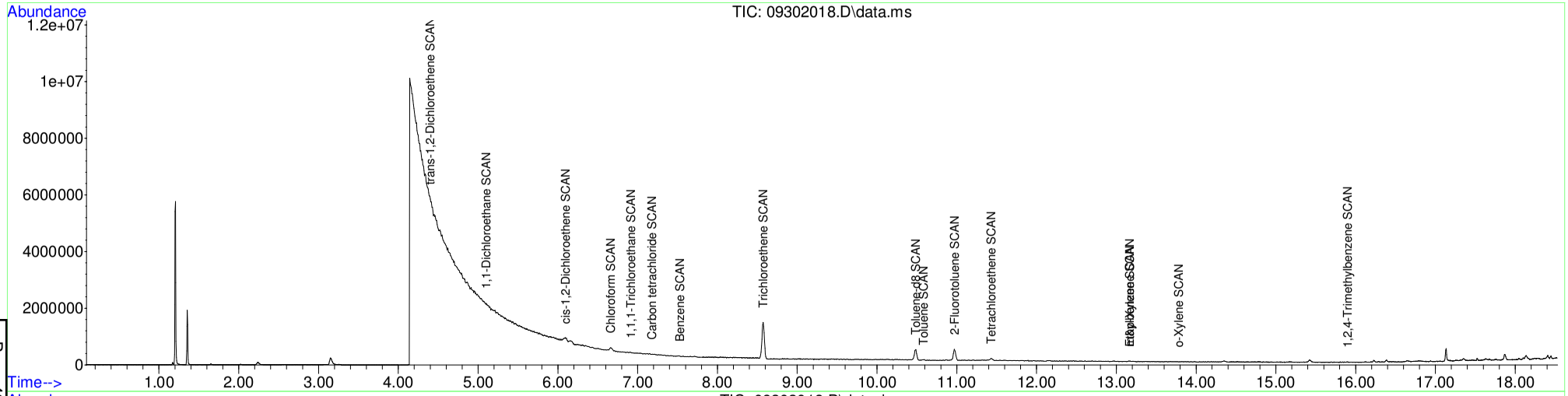
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	624758	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	532482	4353.79 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 87.08%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	10748m	430.82 ug/L	
3] trans-1,2-Dichloroethene	4.396	61	16321	566.24 ug/L	97
4] 1,1-Dichloroethane	5.099	63	12344	344.04 ug/L	89
5] cis-1,2-Dichloroethene	6.094	61	259159	6842.70 ug/L	99
6] Chloroform	6.664	83	178542	4605.72 ug/L	99
7] 1,1,1-Trichloroethane	6.919	97	9562	227.13 ug/L	100
8] Carbon tetrachloride	7.187	117	3828	96.61 ug/L	98
9] Benzene	7.515	78	19456	183.29 ug/L	71
11] Trichloroethene	8.575	130	890839	27873.27 ug/L **oc**	93
13] Toluene	10.582	91	32494	208.39 ug/L	98
15] Tetrachloroethene	11.432	166	51714	1146.03 ug/L	99
18] Ethylbenzene	12.972	91	14632	77.09 ug/L	95
19] m&p-Xylene	13.162	91	15841	106.79 ug/L	93
20] o-Xylene	13.782	91	7113	44.88 ug/L	95
23] 1,2,4-Trimethylbenzene	15.899	105	6750	38.53 ug/L	88
25) 2-Fluorotoluene SCAN	10.969	109	310399	5096.66 ug/L	96
27) trans-1,2-Dichloroethe...	4.401	61	4213	263.23 ug/L #	30
28) 1,1-Dichloroethane SCAN	5.104	63	4185	225.94 ug/L #	60
29) cis-1,2-Dichloroethene...	6.100	61	149602	7538.51 ug/L #	83
30) Chloroform SCAN	6.662	83	101840	4731.31 ug/L	93
31) 1,1,1-Trichloroethane ...	6.918	97	5357	273.11 ug/L #	45
32) Carbon tetrachloride SCAN	7.173	117	2056	100.49 ug/L #	15
33) Benzene SCAN	7.526	78	27380	506.97 ug/L	96
35) Trichloroethene SCAN	8.573	130	434184	29254.46 ug/L	84
36) Toluene-d8 SCAN	10.486	98	283516	4760.12 ug/L	95
37) Toluene SCAN	10.580	91	20148	264.14 ug/L	92
39) Tetrachloroethene SCAN	11.430	166	24864	1356.82 ug/L	93
42) Ethylbenzene SCAN	13.161	91	7843	56.44 ug/L	93
43) m&p-Xylene SCAN	13.161	91	7843	56.44 ug/L	93
44) o-Xylene SCAN	13.781	91	3697	49.70 ug/L	94
47) 1,2,4-Trimethylbenzene...	15.898	105	3502	43.66 ug/L #	48

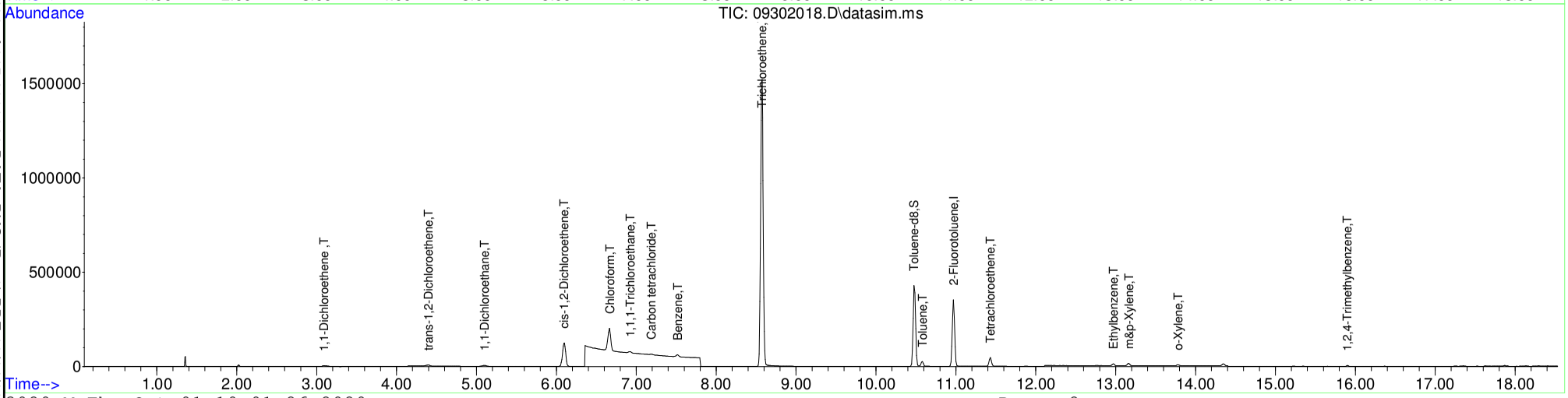
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302018.D
Acq On : 30 Sep 2020 20:06
InstName : AG5975C
Operator : TD
Sample : 2009033-05
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 01 08:59:38 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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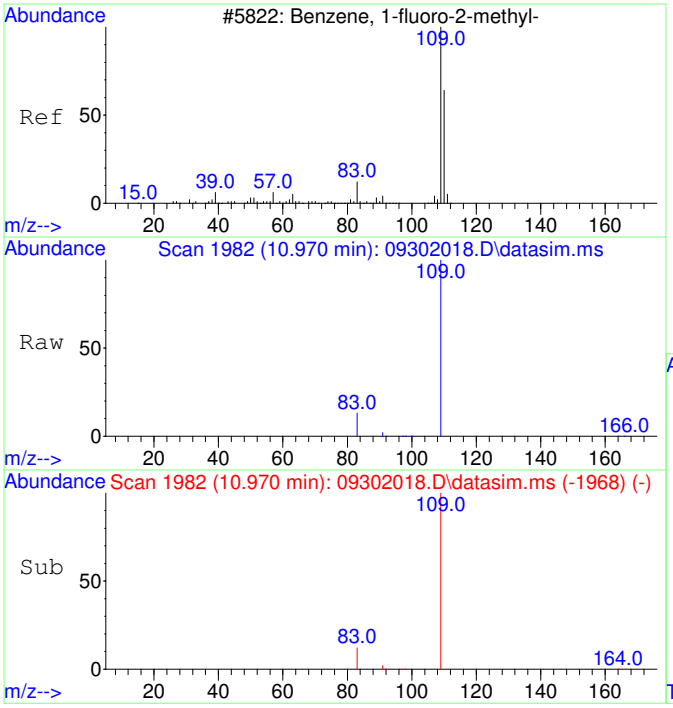
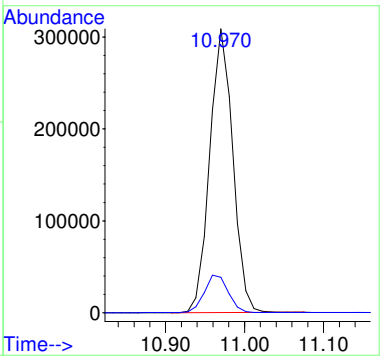
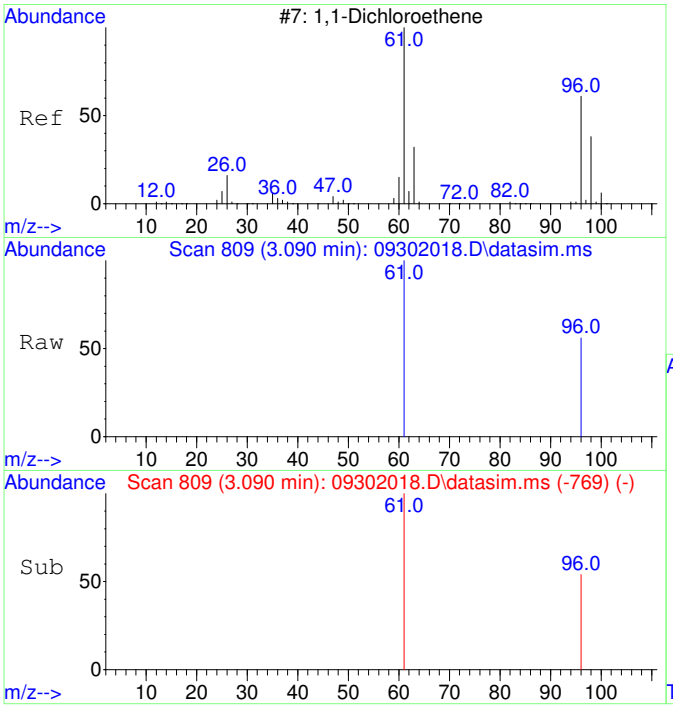


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion:109 Resp: 624758

Ion	Ratio	Lower	Upper
109	100		
83	13.7	0.0	42.3

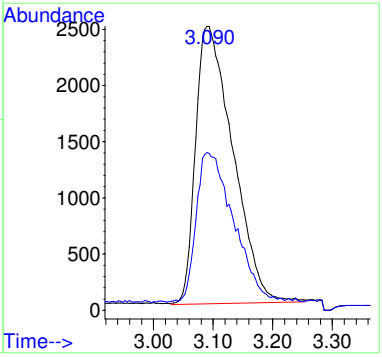


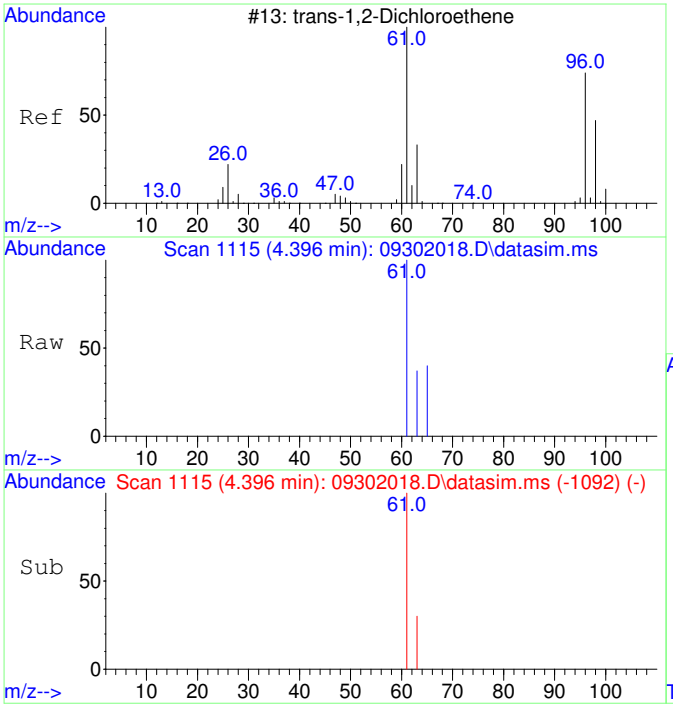


#2
1,1-Dichloroethene
Concen: 430.82 ug/L m
RT: 3.090 min Scan# 809
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 61 Resp: 10748

Ion	Ratio	Lower	Upper
61	100		
96	53.2	37.2	97.2

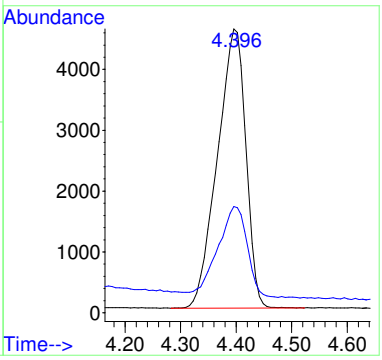


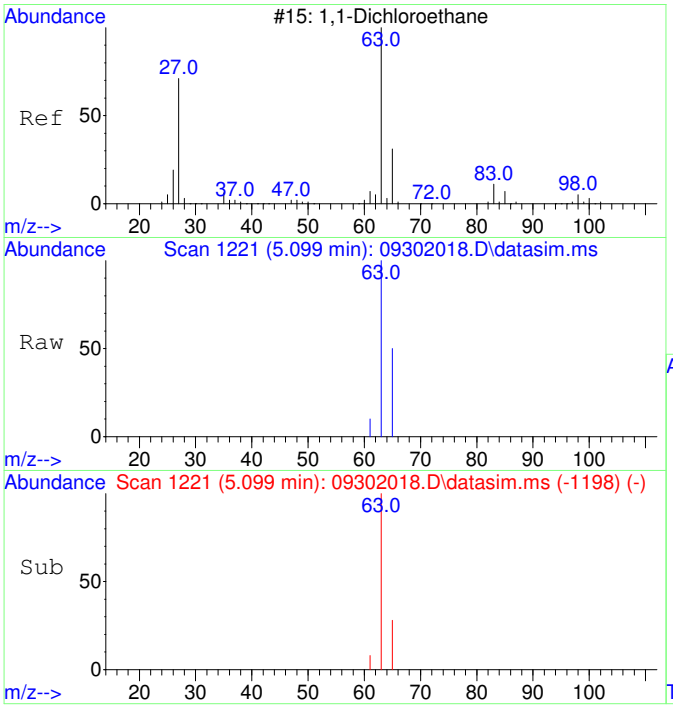


#3
trans-1,2-Dichloroethene
Concen: 566.24 ug/L
RT: 4.396 min Scan# 1115
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 61 Resp: 16321

Ion	Ratio	Lower	Upper
61	100		
63	34.2	2.4	62.4

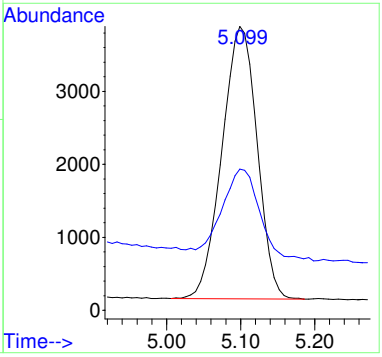


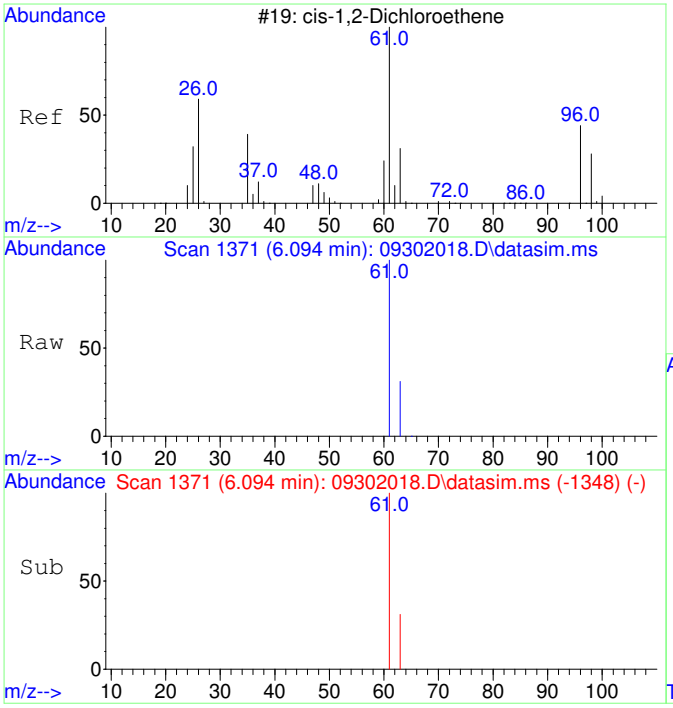


#4
1,1-Dichloroethane
Concen: 344.04 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 63 Resp: 12344

Ion	Ratio	Lower	Upper
63	100		
65	38.0	1.8	61.8

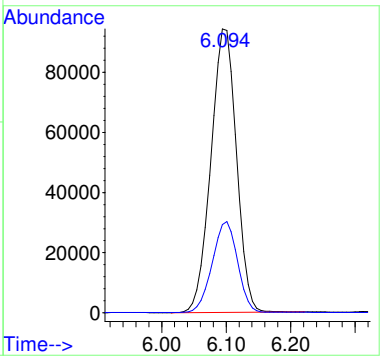


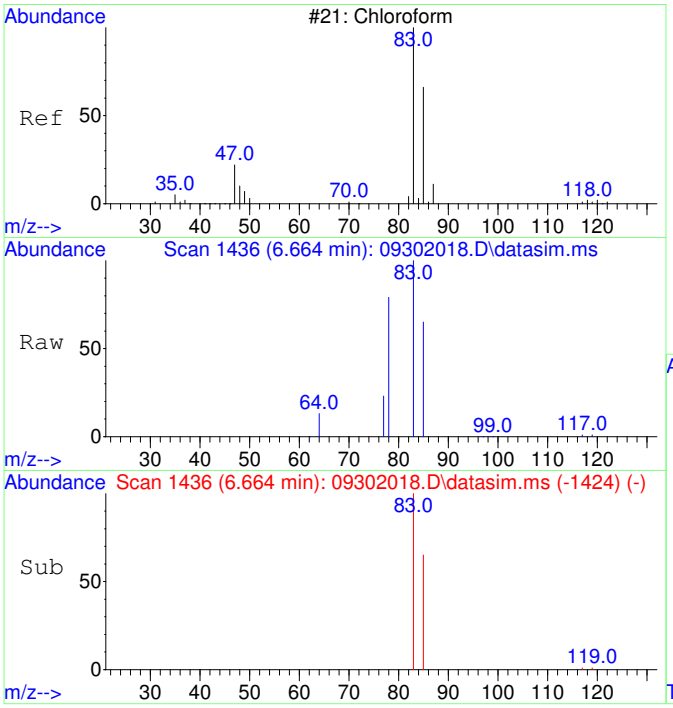


#5
cis-1,2-Dichloroethene
Concen: 6842.70 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 61 Resp: 259159

Ion	Ratio	Lower	Upper
61	100		
63	31.7	2.5	62.5

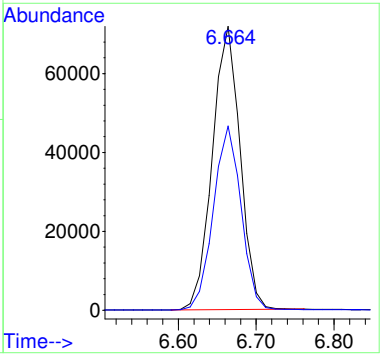


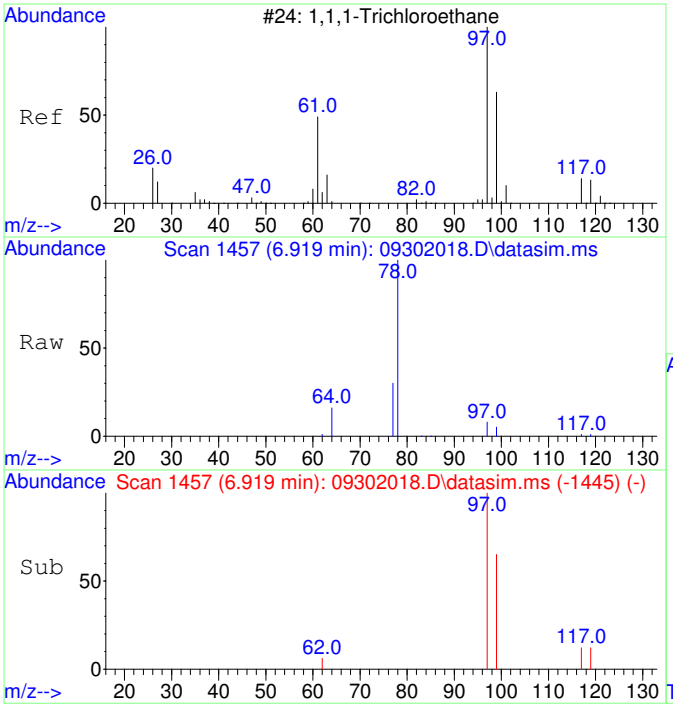


#6
Chloroform
Concen: 4605.72 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 83 Resp: 178542

Ion	Ratio	Lower	Upper
83	100		
85	64.5	35.1	95.1

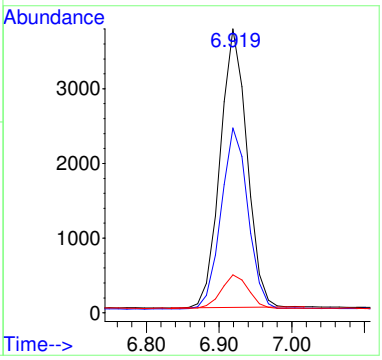


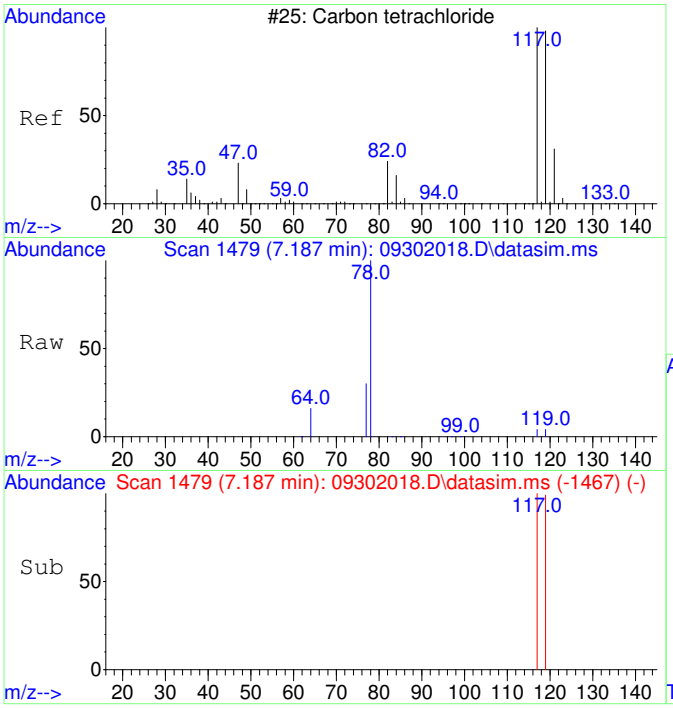


#7
1,1,1-Trichloroethane
Concen: 227.13 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 97 Resp: 9562

Ion	Ratio	Lower	Upper
97	100		
99	64.6	34.6	94.6
117	12.2	0.0	43.2

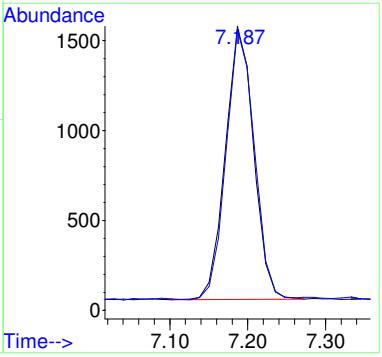


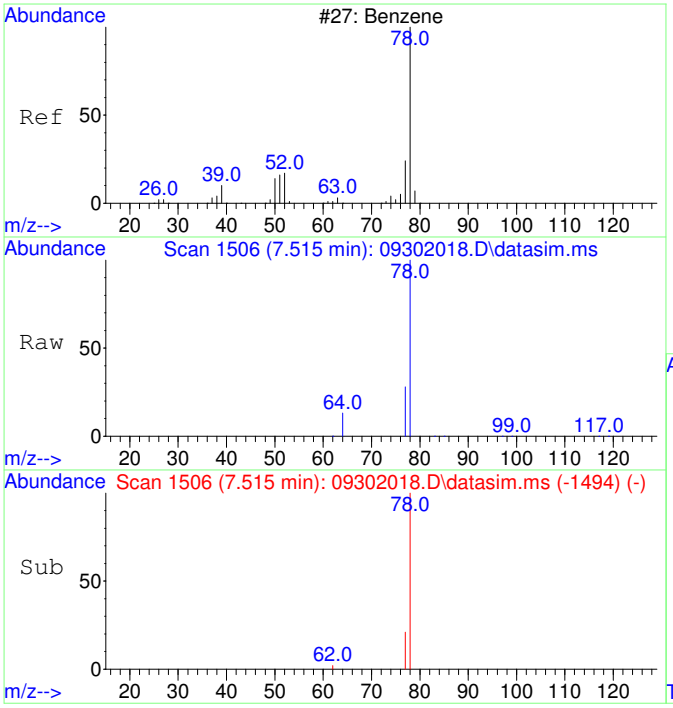


#8
Carbon tetrachloride
Concen: 96.61 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion:117 Resp: 3828

Ion	Ratio	Lower	Upper
117	100		
119	98.0	66.4	126.4

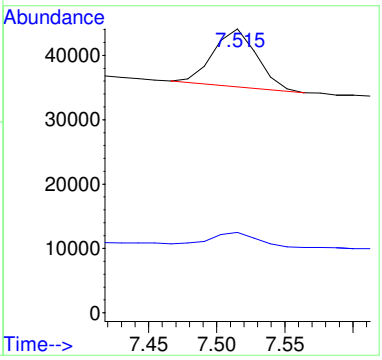


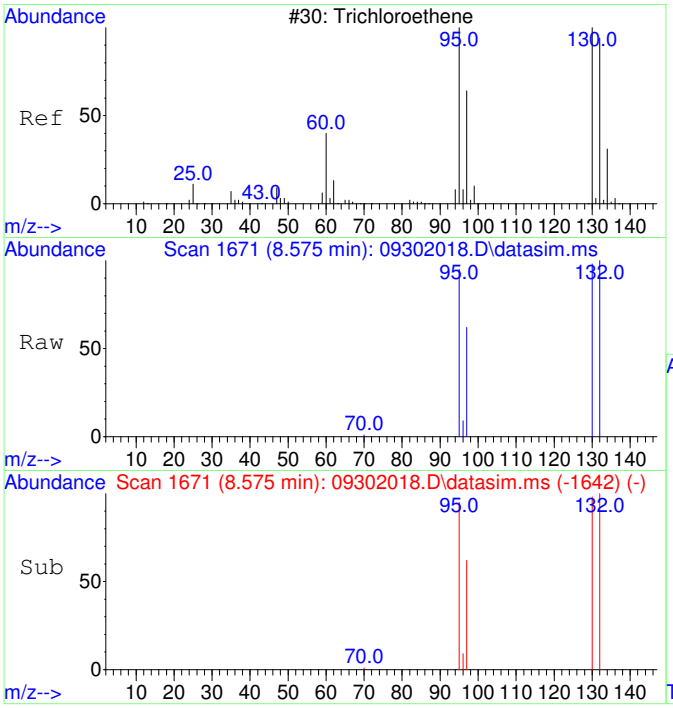


#9
Benzene
Concen: 183.29 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 78 Resp: 19456

Ion	Ratio	Lower	Upper
78	100		
77	37.2	0.0	53.2

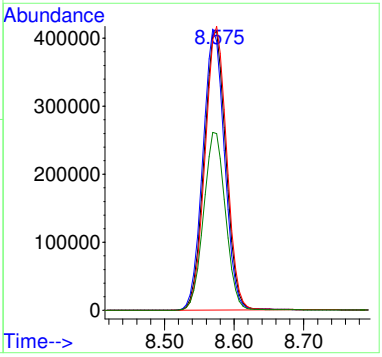


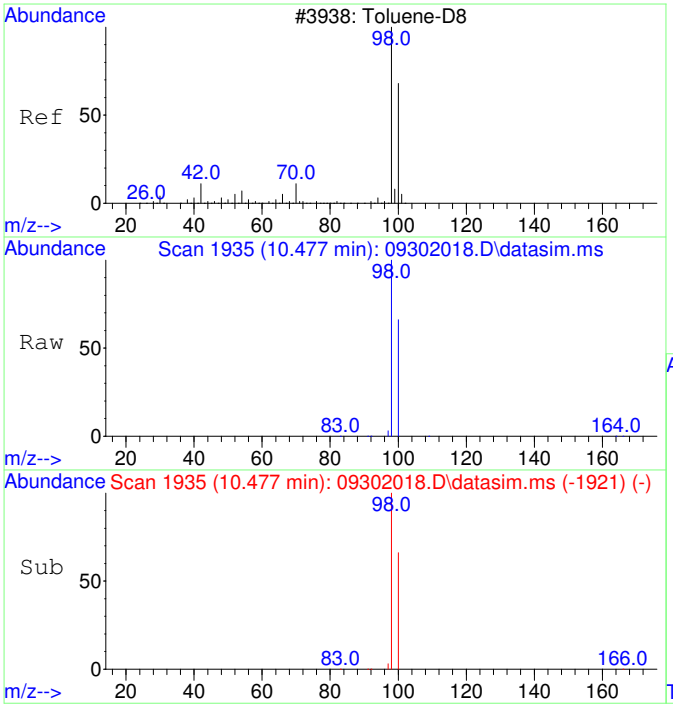


#11
Trichloroethene
Concen: 27873.27 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion:130 Resp: 890839

Ion	Ratio	Lower	Upper
130	100		
95	99.8	60.7	120.7
132	100.5	76.0	116.0
97	63.9	38.6	78.6

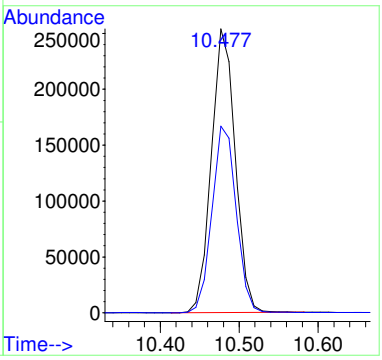


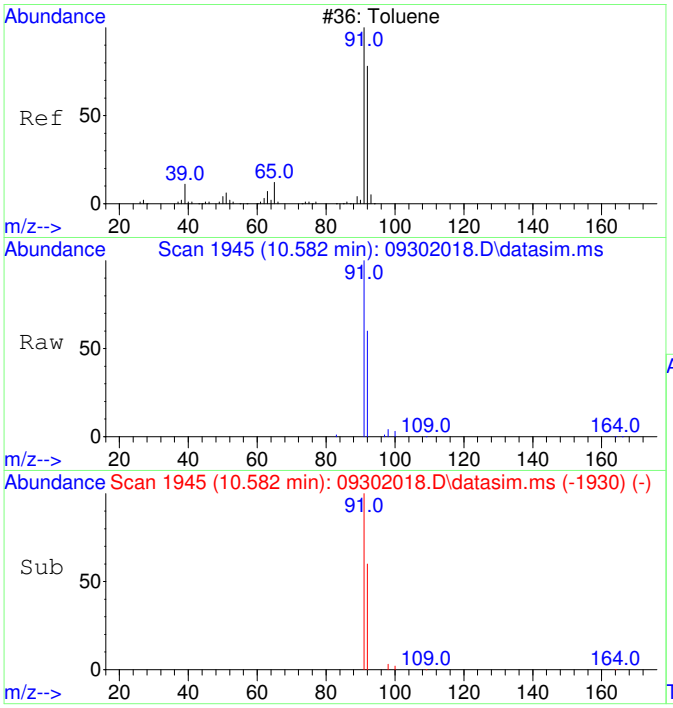


#12
Toluene-d8
Concen: 4353.79 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 98 Resp: 532482

Ion	Ratio	Lower	Upper
98	100		
100	66.5	37.1	97.1

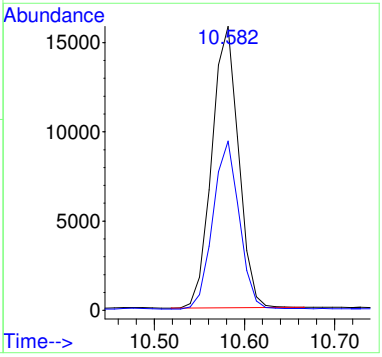


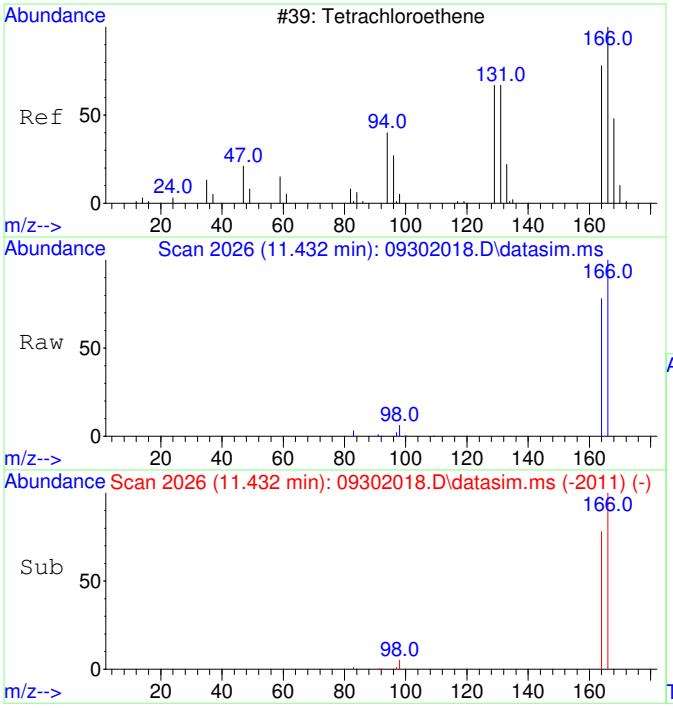


#13
Toluene
Concen: 208.39 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.010 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 91 Resp: 32494

Ion	Ratio	Lower	Upper
91	100		
92	58.6	29.9	89.9

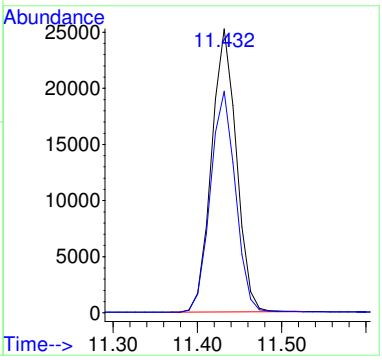


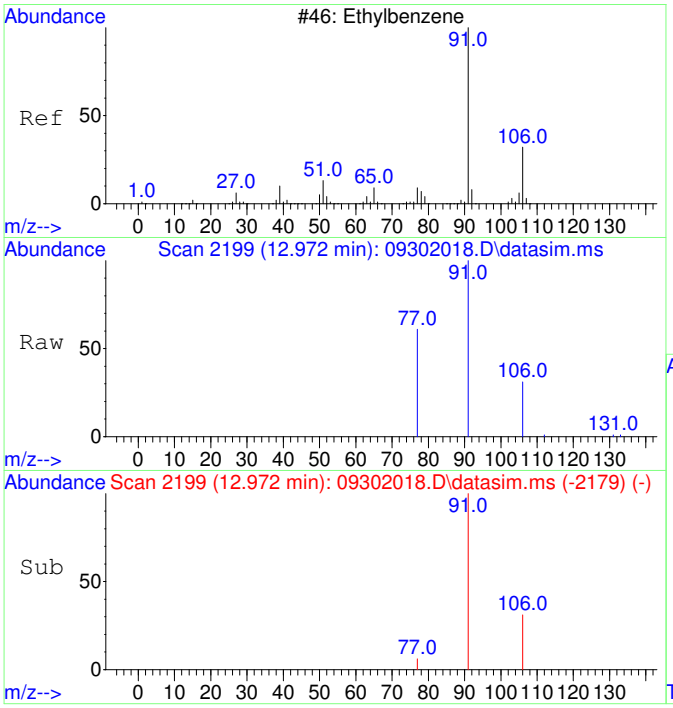


#15
Tetrachloroethene
Concen: 1146.03 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion:166 Resp: 51714

Ion	Ratio	Lower	Upper
166	100		
164	78.5	47.8	107.8

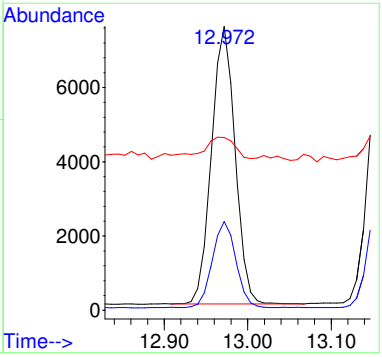


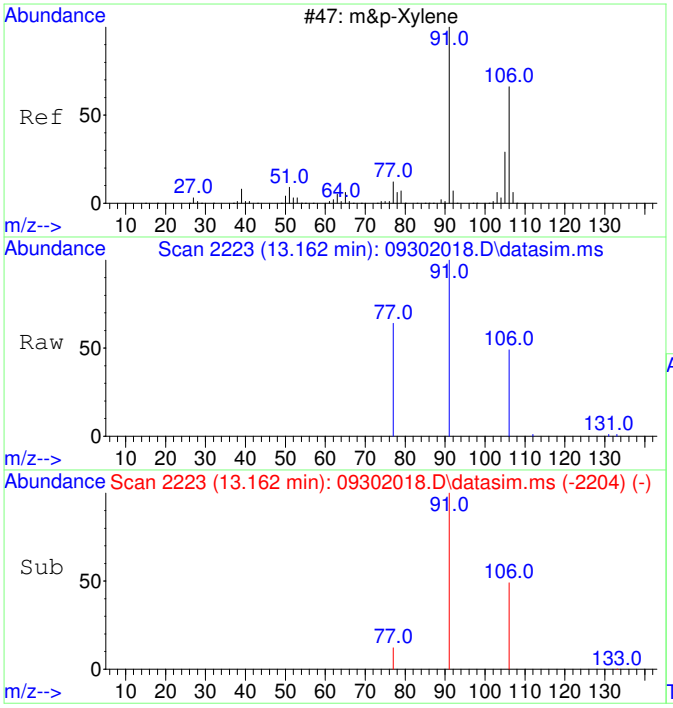


#18
Ethylbenzene
Concen: 77.09 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.008 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 91 Resp: 14632

Ion	Ratio	Lower	Upper
91	100		
106	31.3	3.0	63.0
77	13.3	0.0	38.2

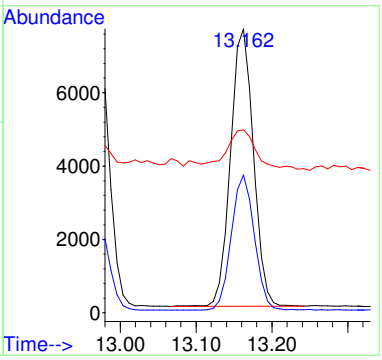


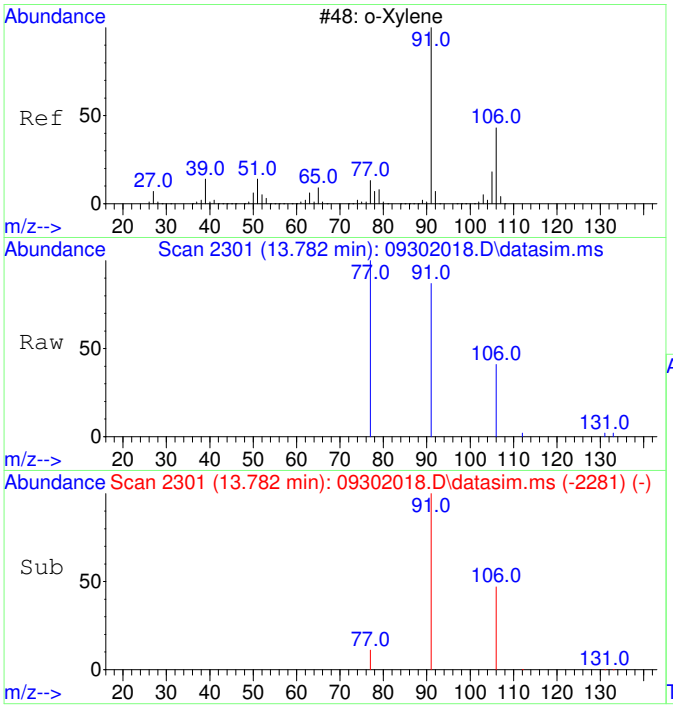


#19
m&p-Xylene
Concen: 106.79 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 91 Resp: 15841

Ion	Ratio	Lower	Upper
91	100		
106	49.0	22.2	82.2
77	19.7	0.0	42.4

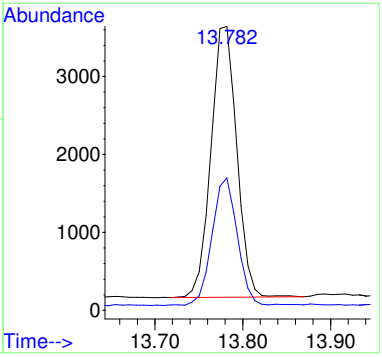


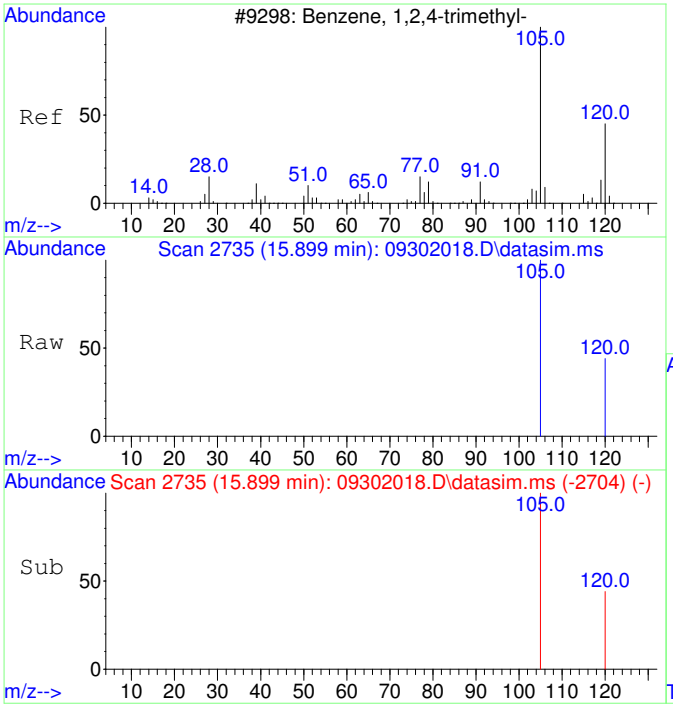


#20
o-Xylene
Concen: 44.88 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 91 Resp: 7113

Ion	Ratio	Lower	Upper
91	100		
106	45.8	19.2	79.2

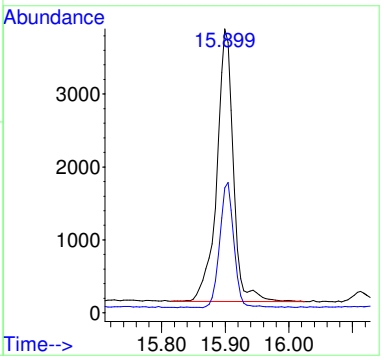


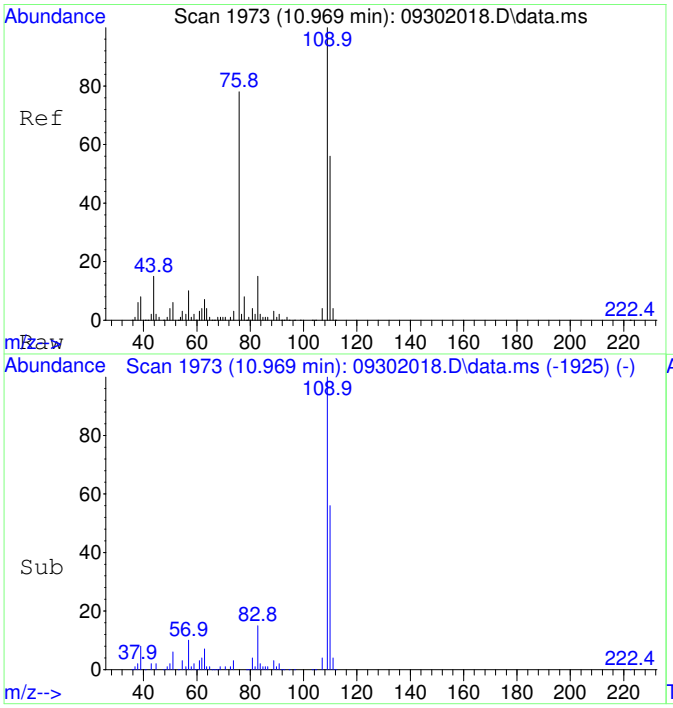


#23
1,2,4-Trimethylbenzene
Concen: 38.53 ug/L
RT: 15.899 min Scan# 2735
Delta R.T. 0.003 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion:105 Resp: 6750

Ion	Ratio	Lower	Upper
105	100		
120	39.0	17.2	77.2

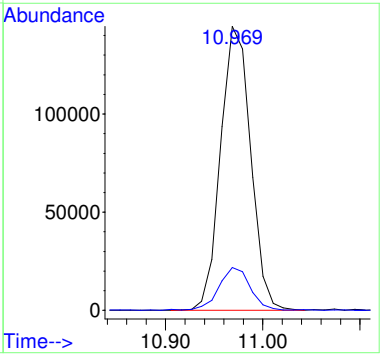


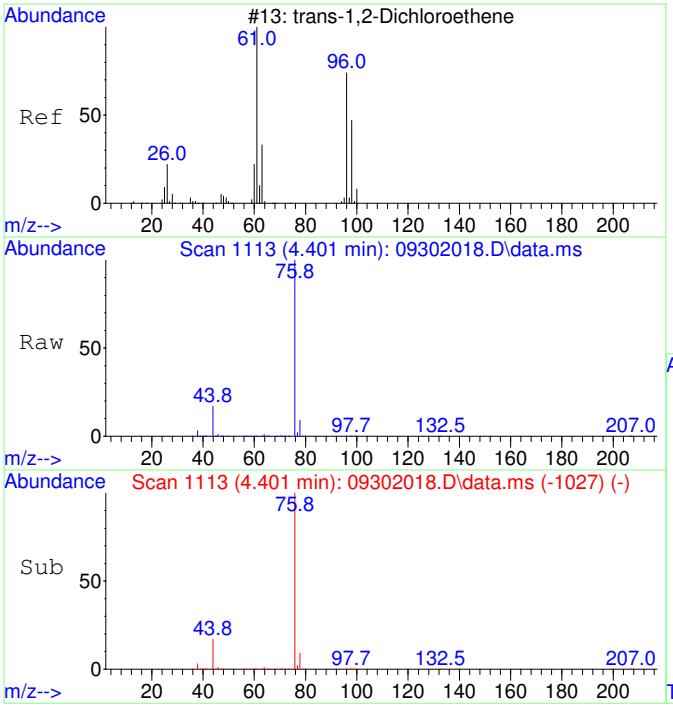


#25
2-Fluorotoluene SCAN
Concen: 5096.66 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion:109 Resp: 310399

Ion	Ratio	Lower	Upper
109	100		
83	15.6	0.0	43.8

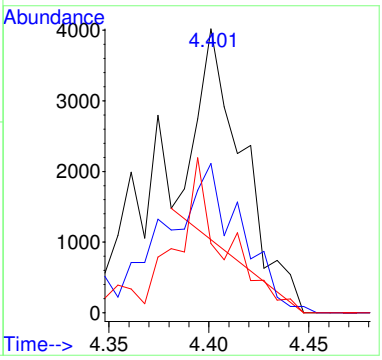


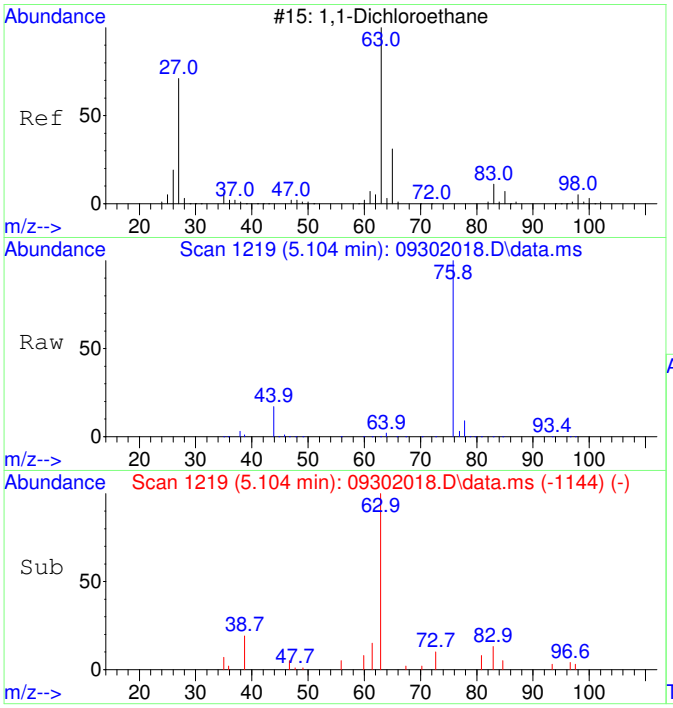


#27
trans-1,2-Dichloroethene SCAN
Concen: 263.23 ug/L
RT: 4.401 min Scan# 1113
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 61 Resp: 4213

Ion	Ratio	Lower	Upper
61	100		
96	142.8	49.0	109.0#
98	96.3	20.5	80.5#

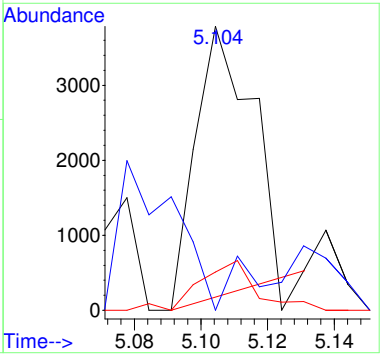


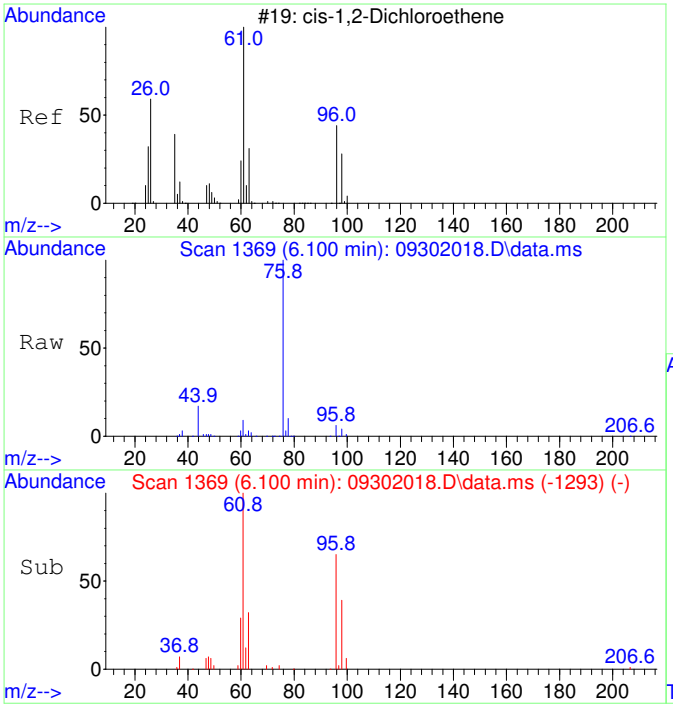


#28
1,1-Dichloroethane SCAN
Concen: 225.94 ug/L
RT: 5.104 min Scan# 1219
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 63 Resp: 4185

Ion	Ratio	Lower	Upper
63	100		
65	0.0	1.3	61.3#
83	18.9	0.0	45.9

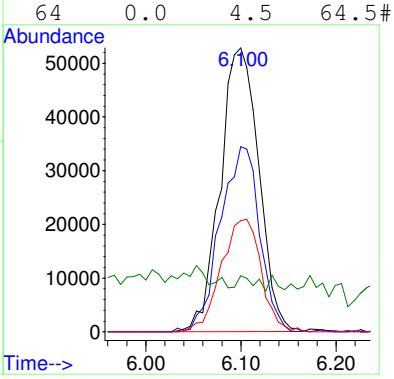


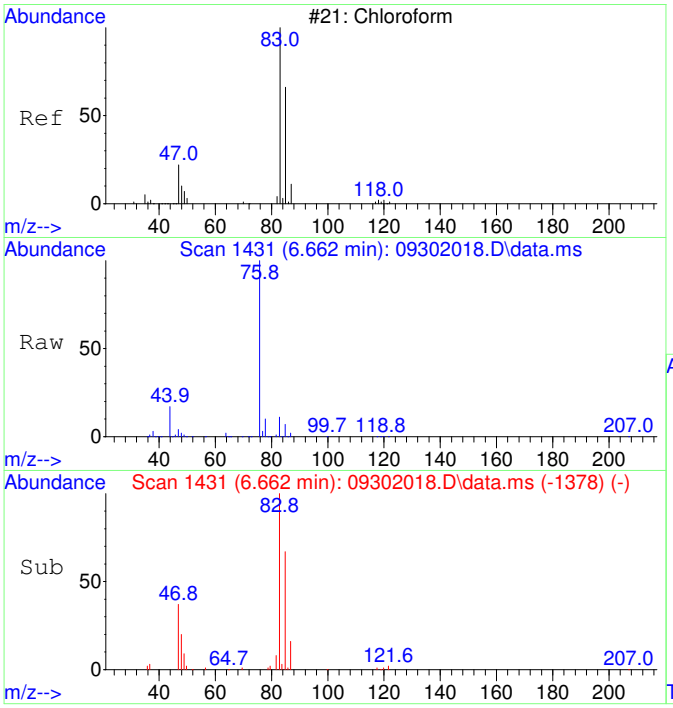


#29
cis-1,2-Dichloroethene SCAN
Concen: 7538.51 ug/L
RT: 6.100 min Scan# 1369
Delta R.T. 0.007 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 61 Resp: 149602

Ion	Ratio	Lower	Upper
61	100		
96	66.6	39.9	99.9
98	41.1	13.5	73.5
64	0.0	4.5	64.5#

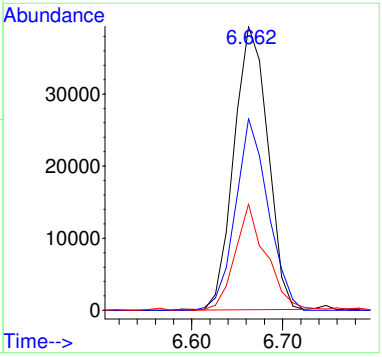


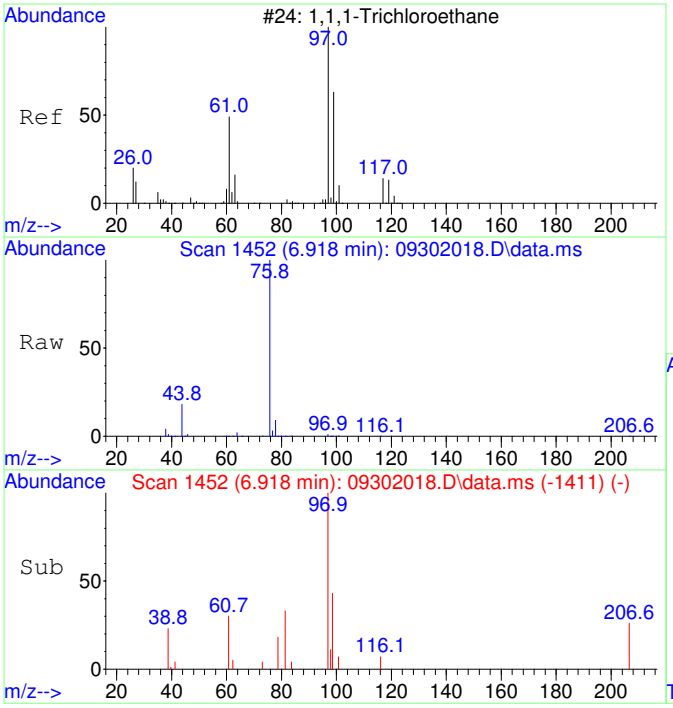


#30
Chloroform SCAN
Concen: 4731.31 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 83 Resp: 101840

Ion	Ratio	Lower	Upper
83	100		
85	65.7	34.6	94.6
47	34.2	0.0	53.4

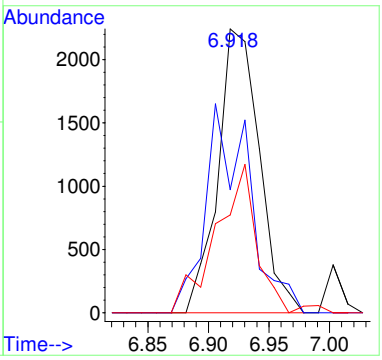


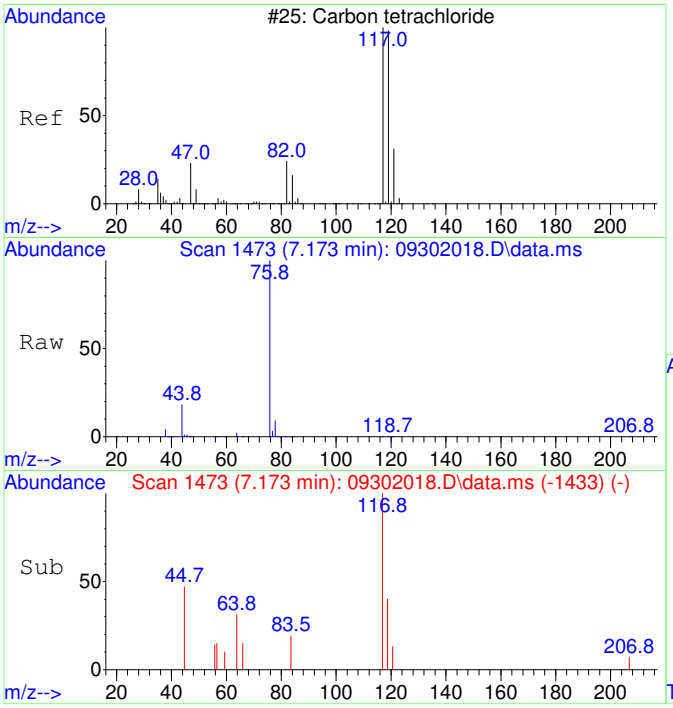


#31
1,1,1-Trichloroethane SCAN
Concen: 273.11 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 97 Resp: 5357

Ion	Ratio	Lower	Upper
97	100		
99	0.0	43.6	103.6#
61	52.3	18.0	78.0

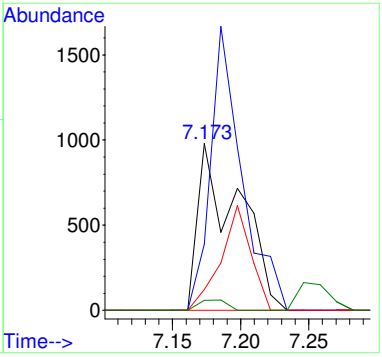


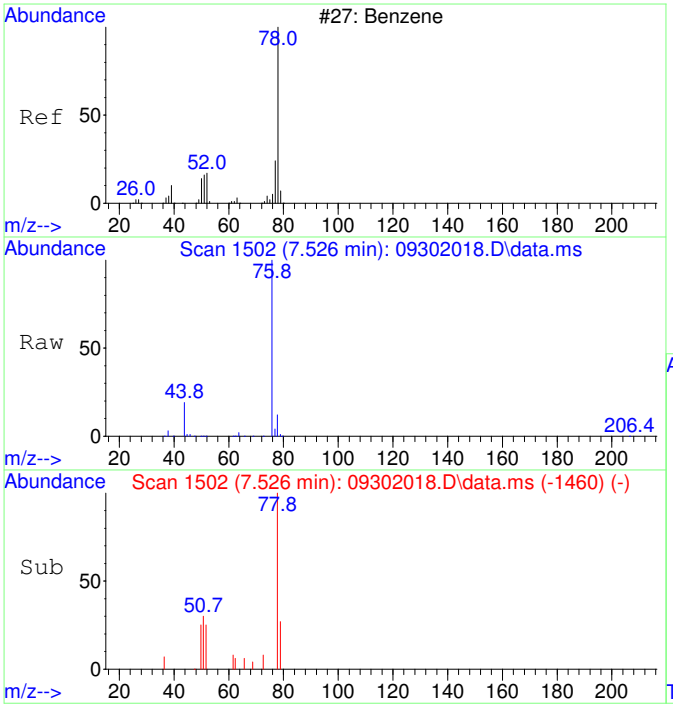


#32
Carbon tetrachloride SCAN
Concen: 100.49 ug/L
RT: 7.173 min Scan# 1473
Delta R.T. -0.012 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion:117 Resp: 2056

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

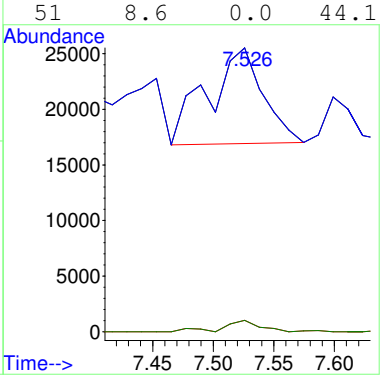


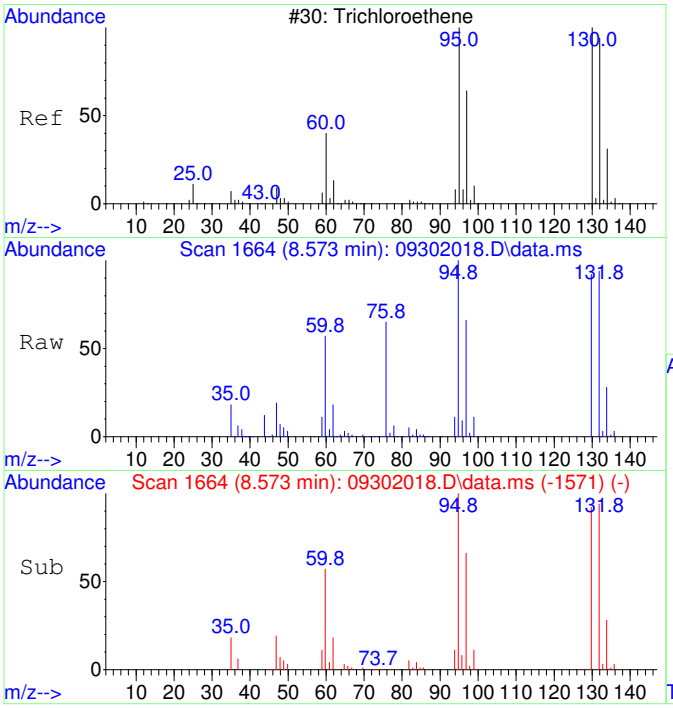


#33
Benzene SCAN
Concen: 506.97 ug/L
RT: 7.526 min Scan# 1502
Delta R.T. 0.012 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 78 Resp: 27380

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	8.6	0.0	47.9
51	8.6	0.0	44.1

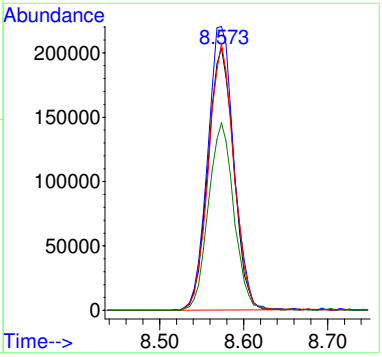


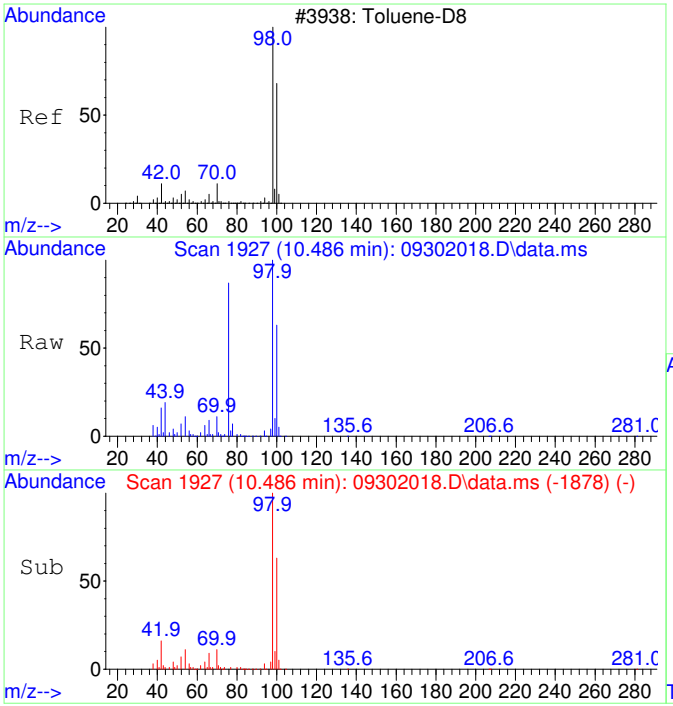


#35
Trichloroethene SCAN
Concen: 29254.46 ug/L
RT: 8.573 min Scan# 1664
Delta R.T. 0.005 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion:130 Resp: 434184

Ion	Ratio	Lower	Upper
130	100		
95	110.1	60.5	120.5
132	99.8	59.6	119.6
97	70.1	28.2	88.2

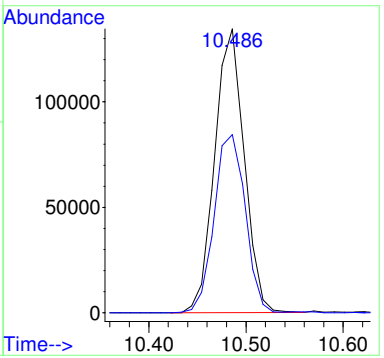


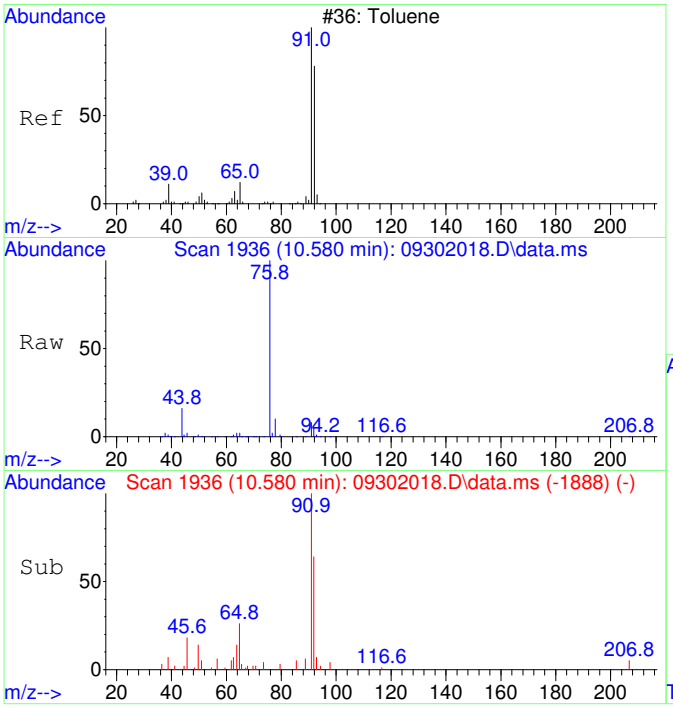


#36
Toluene-d8 SCAN
Concen: 4760.12 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.010 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 98 Resp: 283516

Ion	Ratio	Lower	Upper
98	100		
100	65.7	40.0	100.0

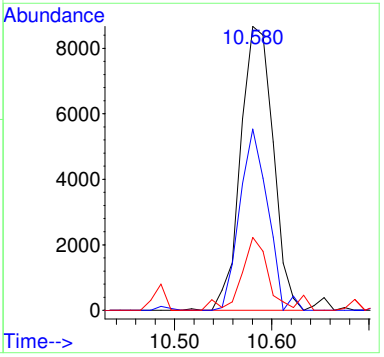


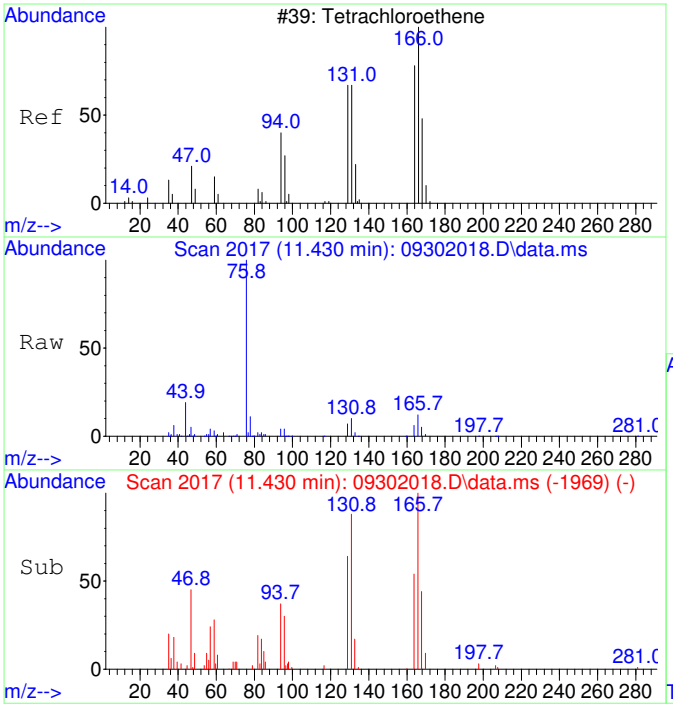


#37
Toluene SCAN
Concen: 264.14 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 91 Resp: 20148

Ion	Ratio	Lower	Upper
91	100		
92	55.0	28.3	88.3
65	22.2	0.0	41.0

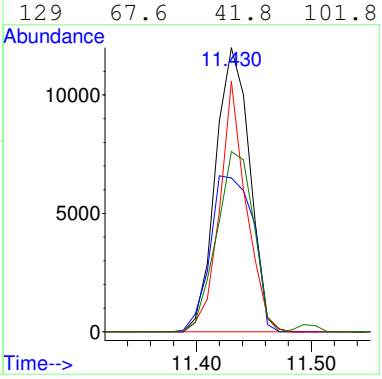


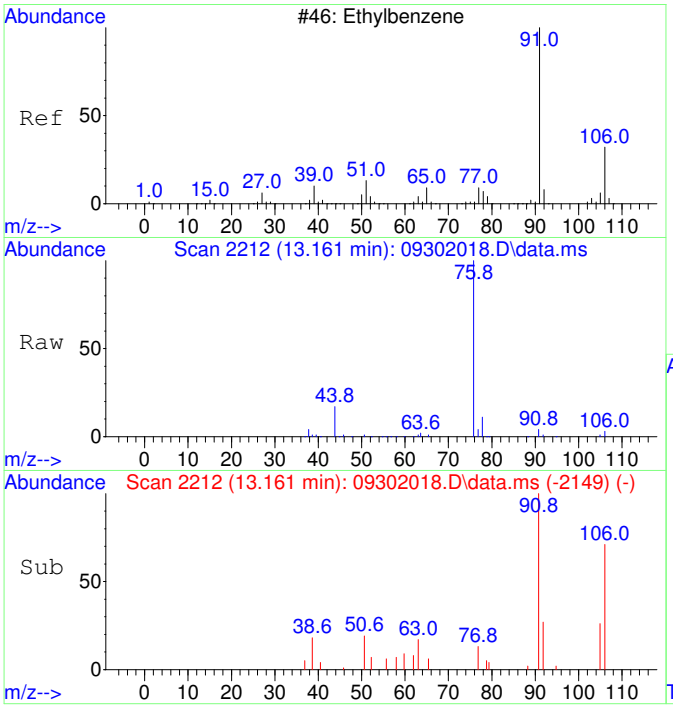


#39
Tetrachloroethene SCAN
Concen: 1356.82 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion:166 Resp: 24864

Ion	Ratio	Lower	Upper
166	100		
164	68.8	50.9	110.9
131	68.8	38.7	98.7
129	67.6	41.8	101.8

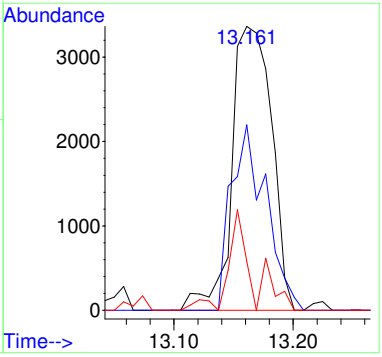


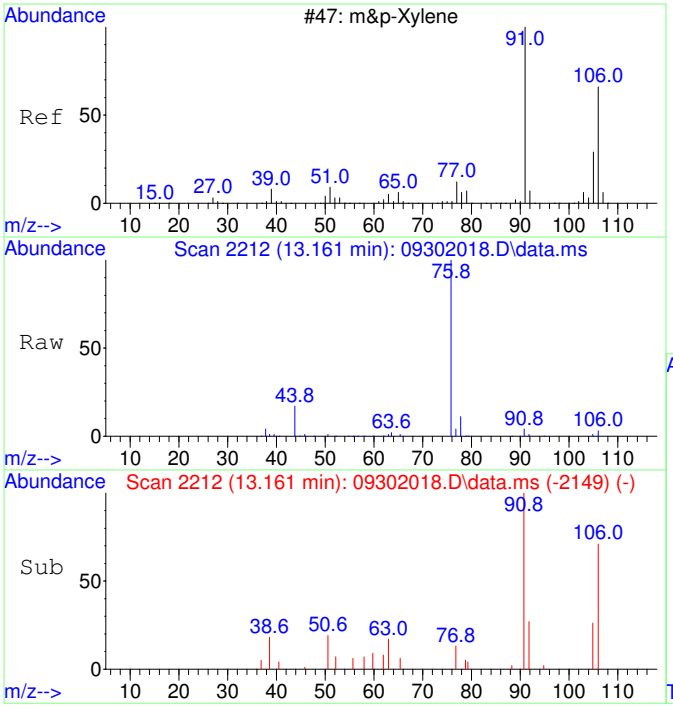


#42
Ethylbenzene SCAN
Concen: 56.44 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 91 Resp: 7843

Ion	Ratio	Lower	Upper
91	100		
106	57.1	23.1	83.1
51	15.5	0.0	40.1

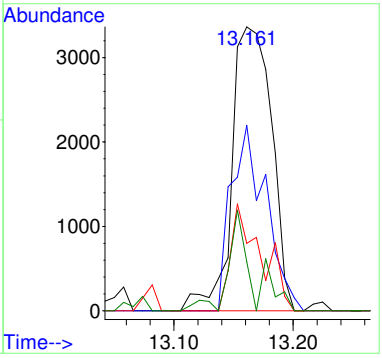


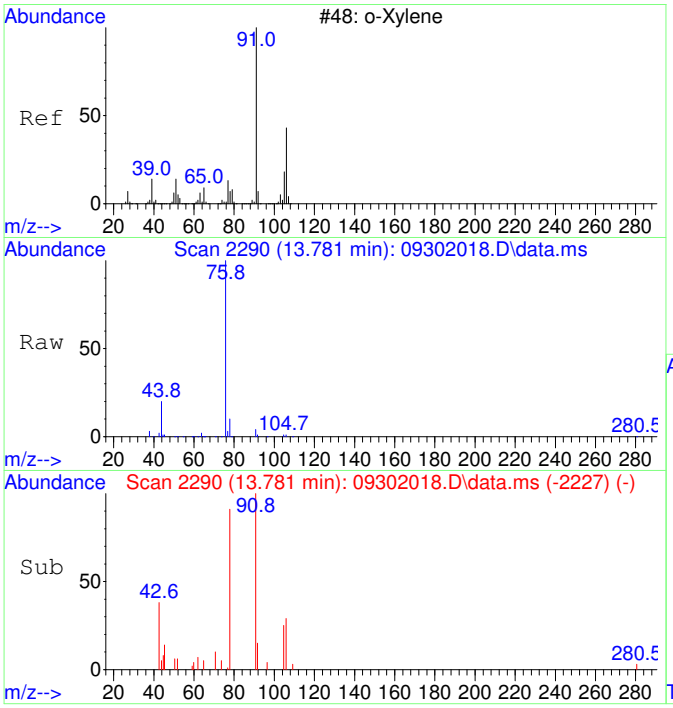


#43
m&p-Xylene SCAN
Concen: 56.44 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 91 Resp: 7843

Ion	Ratio	Lower	Upper
91	100		
106	57.1	23.1	83.1
105	28.9	0.0	54.7
51	15.5	0.0	40.1

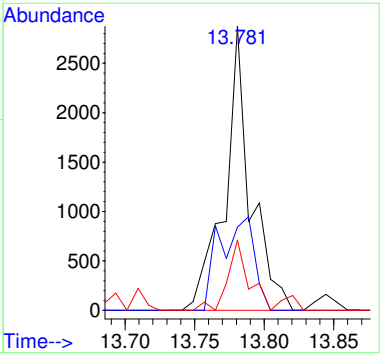


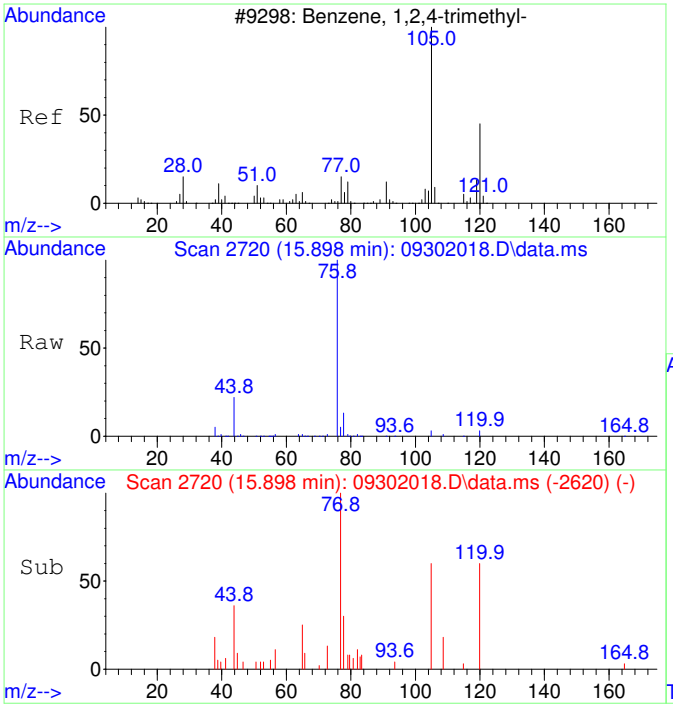


#44
o-Xylene SCAN
Concen: 49.70 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.000 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 91 Resp: 3697

Ion	Ratio	Lower	Upper
91	100		
106	44.3	18.0	78.0
105	23.3	0.0	56.6

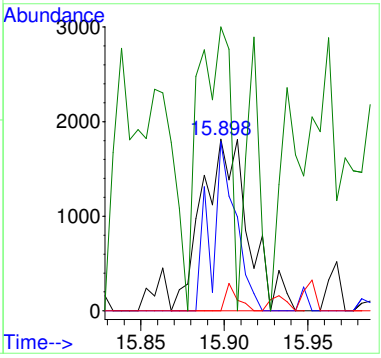




#47
1,2,4-Trimethylbenzene SCAN
Concen: 43.66 ug/L
RT: 15.898 min Scan# 2720
Delta R.T. -0.002 min
Lab File: 09302018.D
Acq: 30 Sep 2020 20:06

Tgt Ion:105 Resp: 3502

Ion	Ratio	Lower	Upper
105	100		
120	51.6	16.9	76.9
119	4.1	0.0	41.9
77	112.6	0.0	42.3#



2009033-06

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302019.D
Acq On : 30 Sep 2020 20:29
InstName : AG5975C
Operator : TD
Sample : 2009033-06
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 01 08:59:44 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

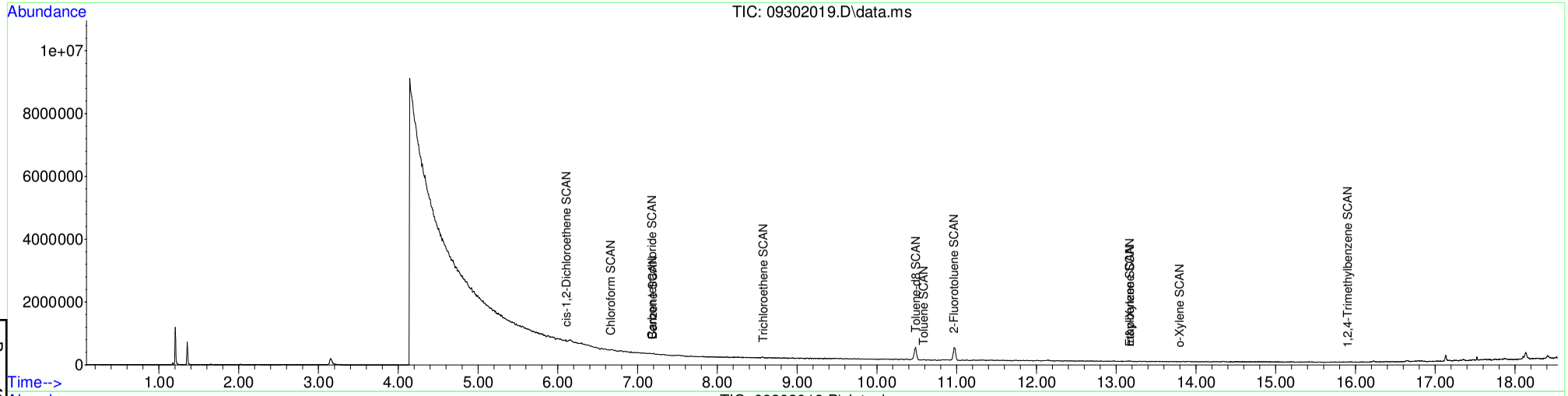
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	641024	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	555402	4425.96	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 88.52%			
Target Compounds						Qvalue
5] cis-1,2-Dichloroethene	6.094	61	1697	43.67	ug/L	96
6] Chloroform	6.652	83	12600	316.79	ug/L	99
8] Carbon tetrachloride	7.187	117	2768	68.08	ug/L	99
9] Benzene	7.515	78	18356	168.54	ug/L	61
11] Trichloroethene	8.575	130	9419	287.23	ug/L	93
13] Toluene	10.582	91	24207	151.31	ug/L	98
18] Ethylbenzene	12.972	91	10830	55.61	ug/L	94
19] m&p-Xylene	13.163	91	14844	97.53	ug/L	94
20] o-Xylene	13.782	91	5604	34.46	ug/L	95
23] 1,2,4-Trimethylbenzene	15.901	105	7435	41.36	ug/L	84
25) 2-Fluorotoluene SCAN	10.969	109	317161	5075.55	ug/L	99
29) cis-1,2-Dichloroethene...	6.106	61	648	31.82	ug/L #	1
30) Chloroform SCAN	6.662	83	7192	325.65	ug/L #	85
32) Carbon tetrachloride SCAN	7.173	117	1457	69.40	ug/L #	75
33) Benzene SCAN	7.186	78	63140	1139.43	ug/L	91
35) Trichloroethene SCAN	8.568	130	5883	386.33	ug/L #	76
36) Toluene-d8 SCAN	10.486	98	294548	4819.85	ug/L	94
37) Toluene SCAN	10.580	91	13692	174.95	ug/L	94
42) Ethylbenzene SCAN	13.169	91	9209	64.59	ug/L	89
43) m&p-Xylene SCAN	13.169	91	9209	64.59	ug/L	86
44) o-Xylene SCAN	13.789	91	2939	38.51	ug/L	94
47) 1,2,4-Trimethylbenzene...	15.899	105	4149	50.41	ug/L #	45

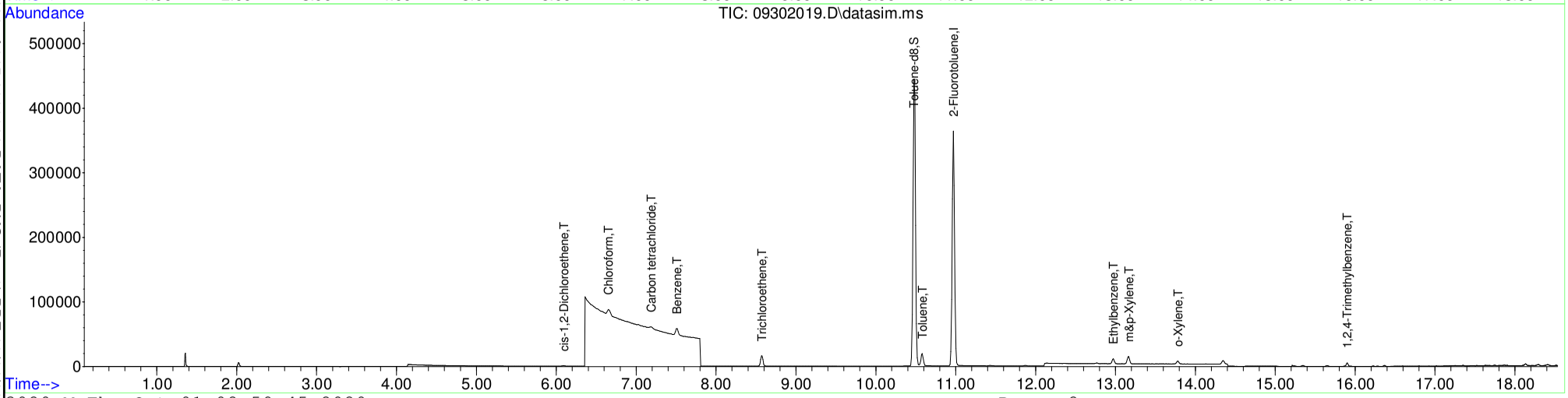
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302019.D
Acq On : 30 Sep 2020 20:29
InstName : AG5975C
Operator : TD
Sample : 2009033-06
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 01 08:59:44 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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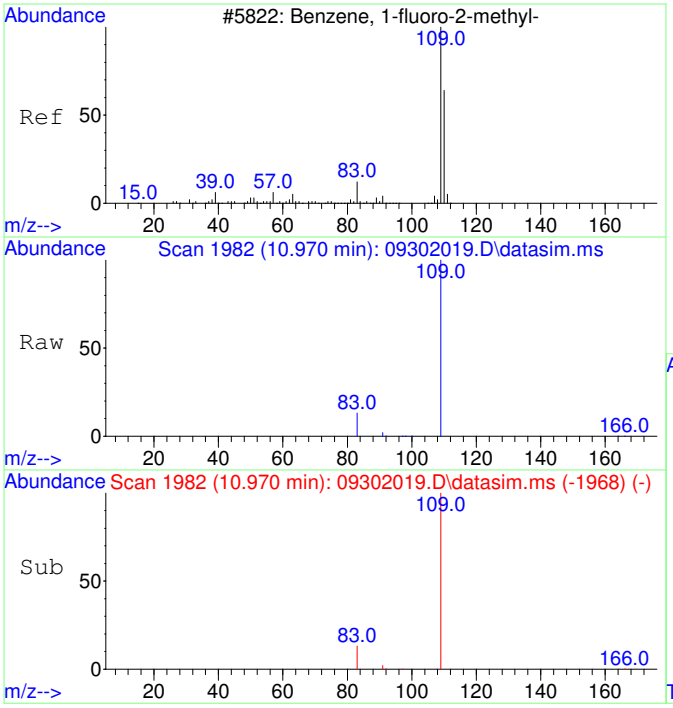
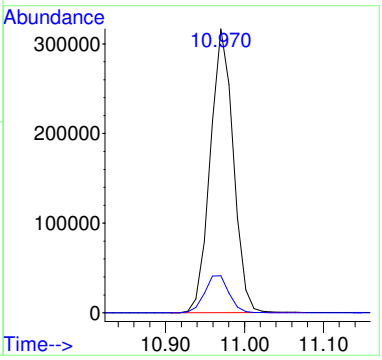
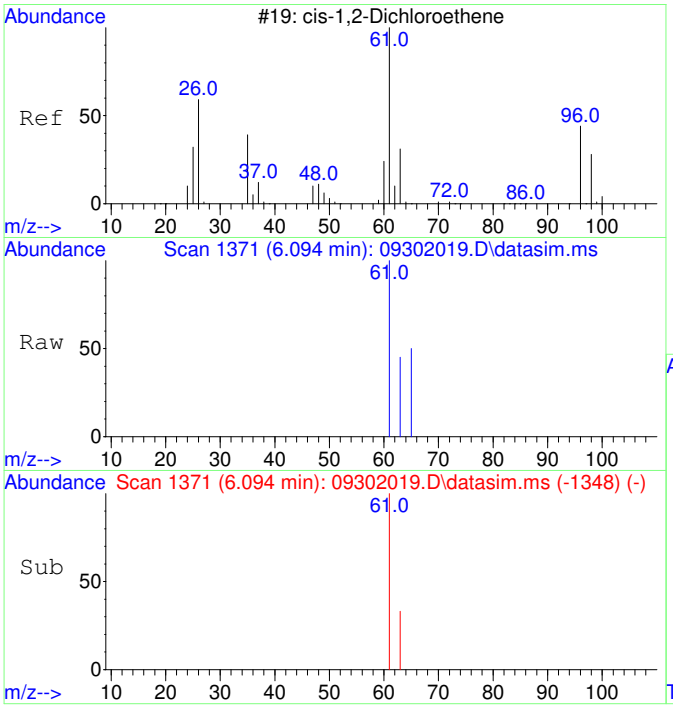


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. 0.000 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

Tgt Ion:109 Resp: 641024

Ion	Ratio	Lower	Upper
109	100		
83	13.8	0.0	42.3

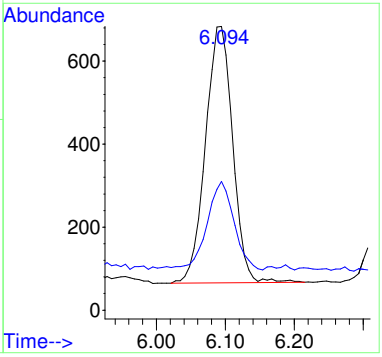


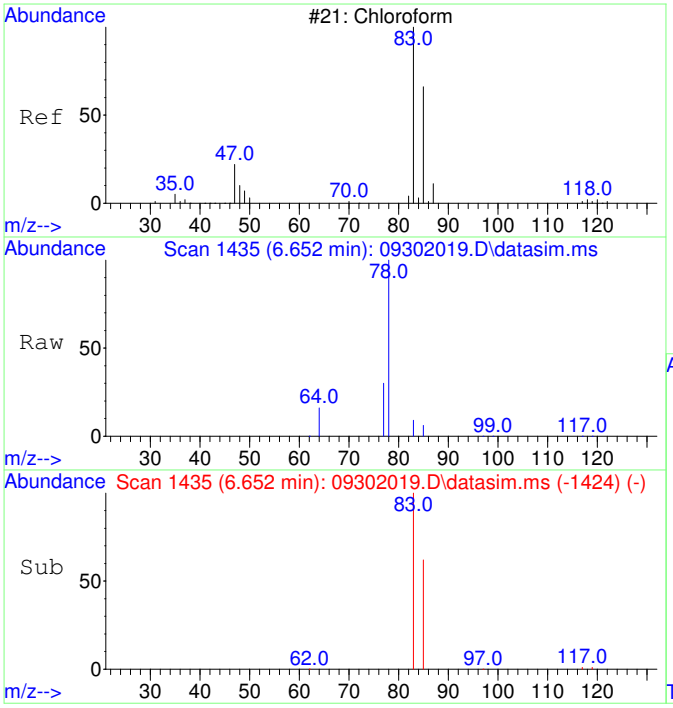


#5
cis-1,2-Dichloroethene
Concen: 43.67 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. 0.000 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

Tgt Ion: 61 Resp: 1697

Ion	Ratio	Lower	Upper
61	100		
63	34.6	2.5	62.5

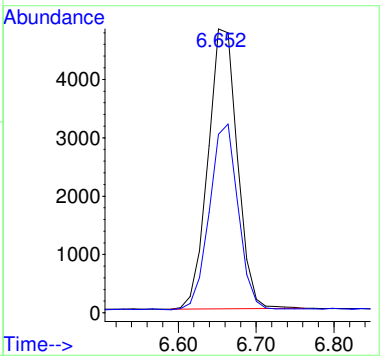


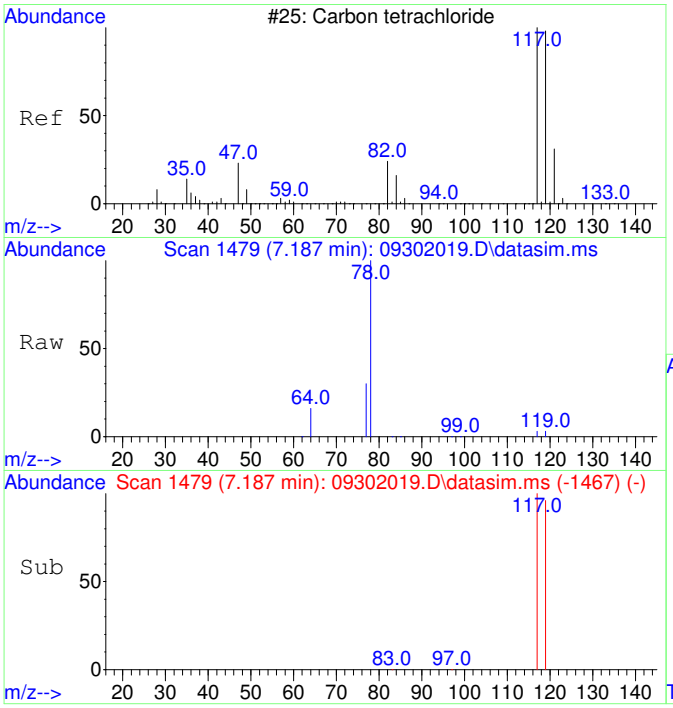


#6
Chloroform
Concen: 316.79 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. -0.012 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

Tgt Ion: 83 Resp: 12600

Ion	Ratio	Lower	Upper
83	100		
85	64.3	35.1	95.1

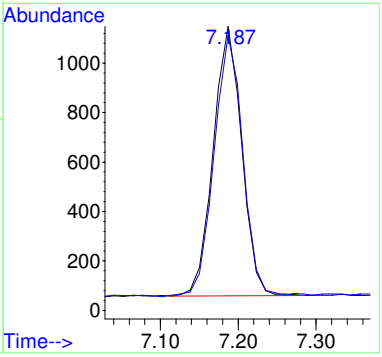


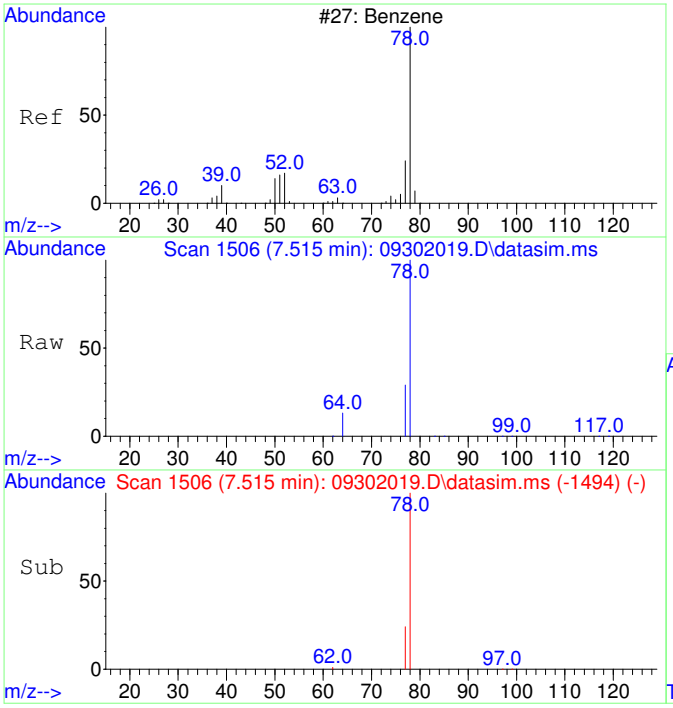


#8
Carbon tetrachloride
Concen: 68.08 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

Tgt Ion:117 Resp: 2768

Ion	Ratio	Lower	Upper
117	100		
119	97.2	66.4	126.4

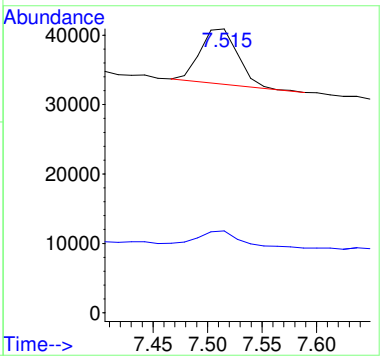


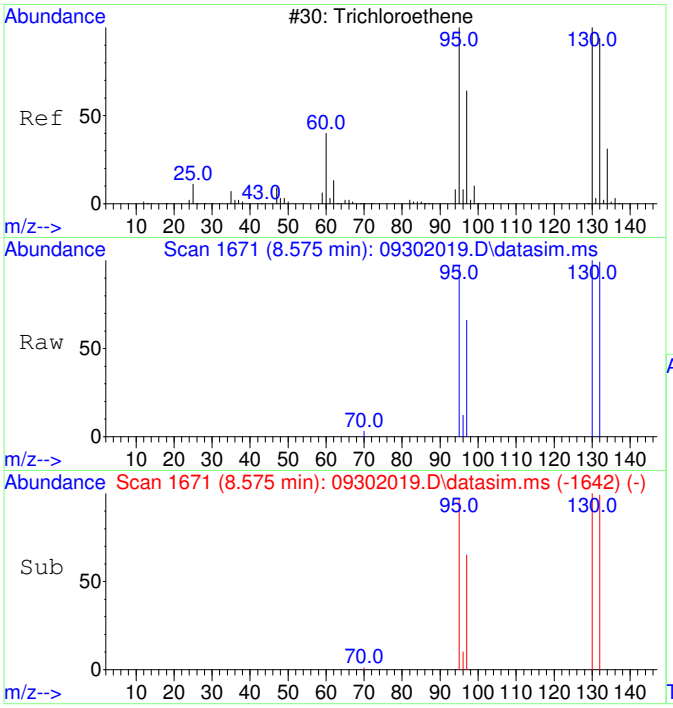


#9
Benzene
Concen: 168.54 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

Tgt Ion: 78 Resp: 18356

Ion	Ratio	Lower	Upper
78	100		
77	42.2	0.0	53.2

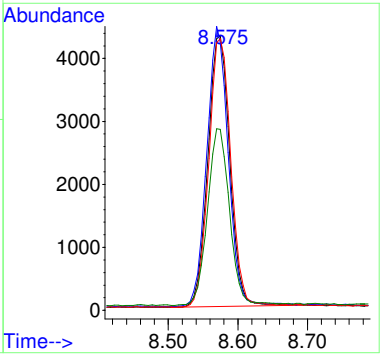


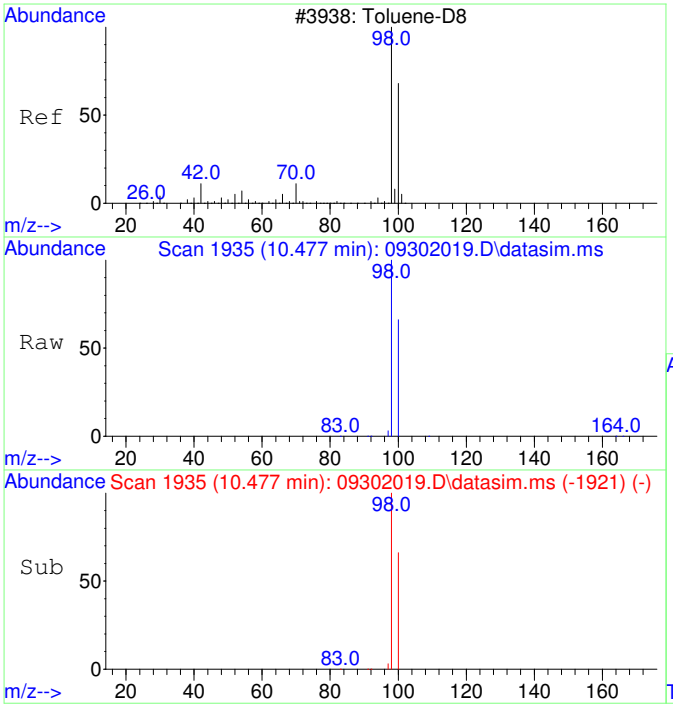


#11
Trichloroethene
Concen: 287.23 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

Tgt Ion:130 Resp: 9419

Ion	Ratio	Lower	Upper
130	100		
95	99.1	60.7	120.7
132	100.4	76.0	116.0
97	64.7	38.6	78.6

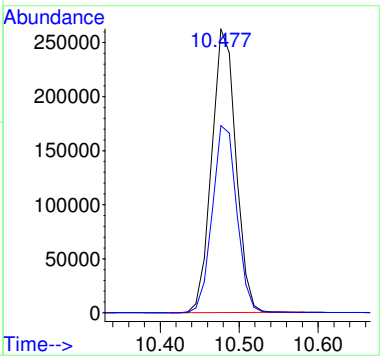


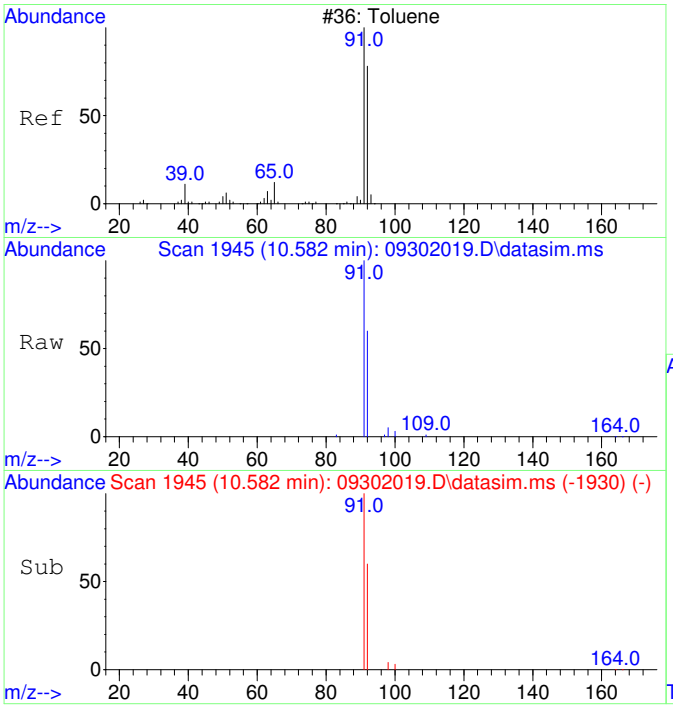


#12
Toluene-d8
Concen: 4425.96 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. 0.000 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

Tgt Ion: 98 Resp: 555402

Ion	Ratio	Lower	Upper
98	100		
100	66.7	37.1	97.1

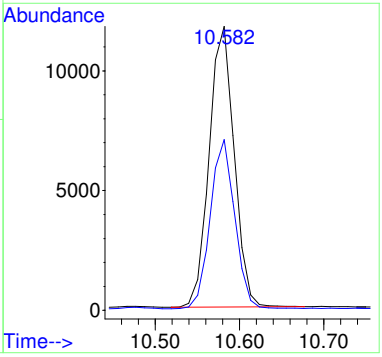


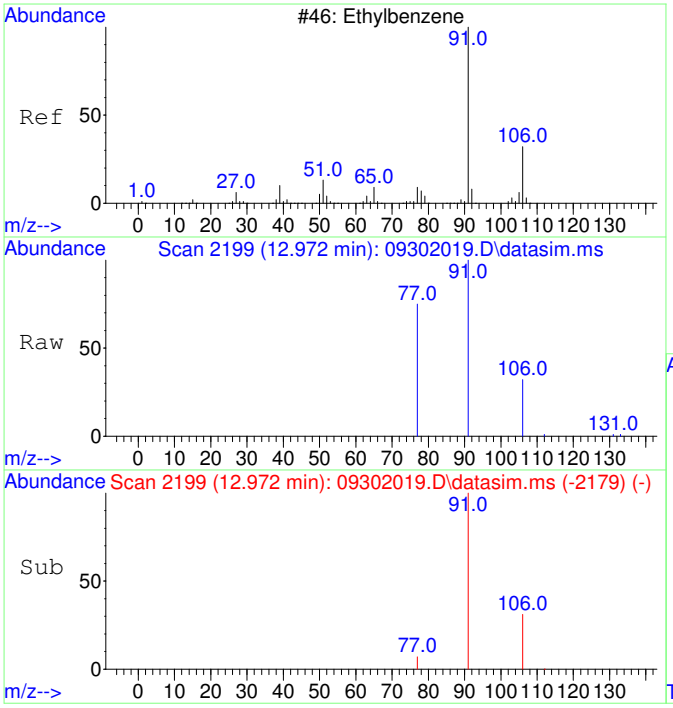


#13
Toluene
Concen: 151.31 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.011 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

Tgt Ion: 91 Resp: 24207

Ion	Ratio	Lower	Upper
91	100		
92	58.8	29.9	89.9

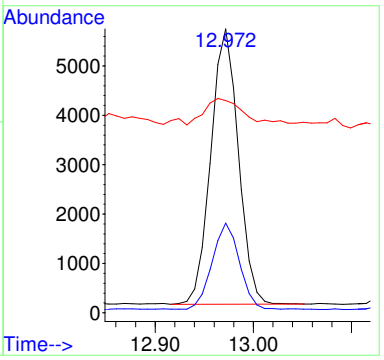


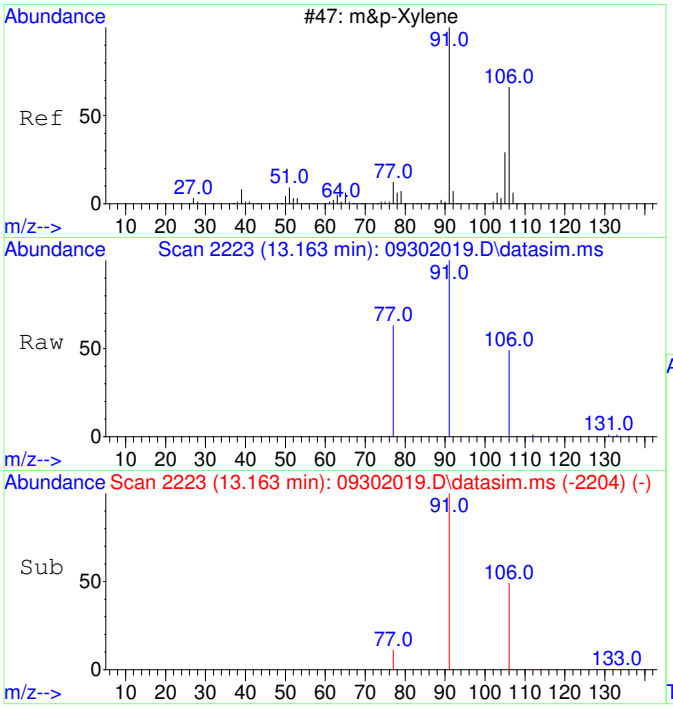


#18
Ethylbenzene
Concen: 55.61 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.008 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

Tgt Ion: 91 Resp: 10830

Ion	Ratio	Lower	Upper
91	100		
106	31.1	3.0	63.0
77	13.7	0.0	38.2

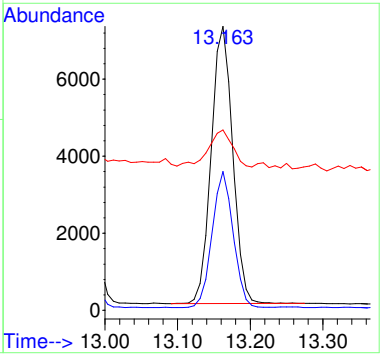


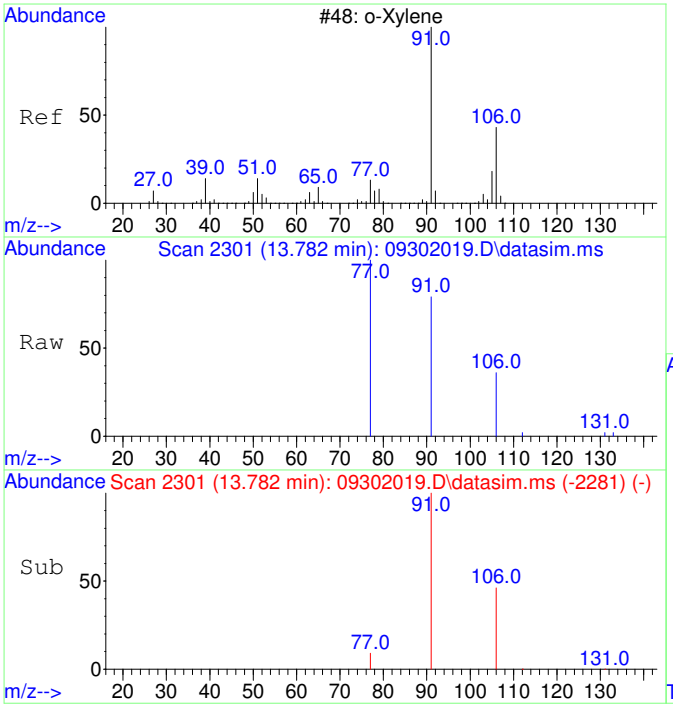


#19
m&p-Xylene
Concen: 97.53 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. 0.000 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

Tgt Ion: 91 Resp: 14844

Ion	Ratio	Lower	Upper
91	100		
106	47.8	22.2	82.2
77	14.8	0.0	42.4

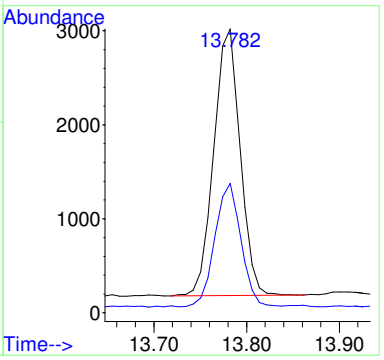


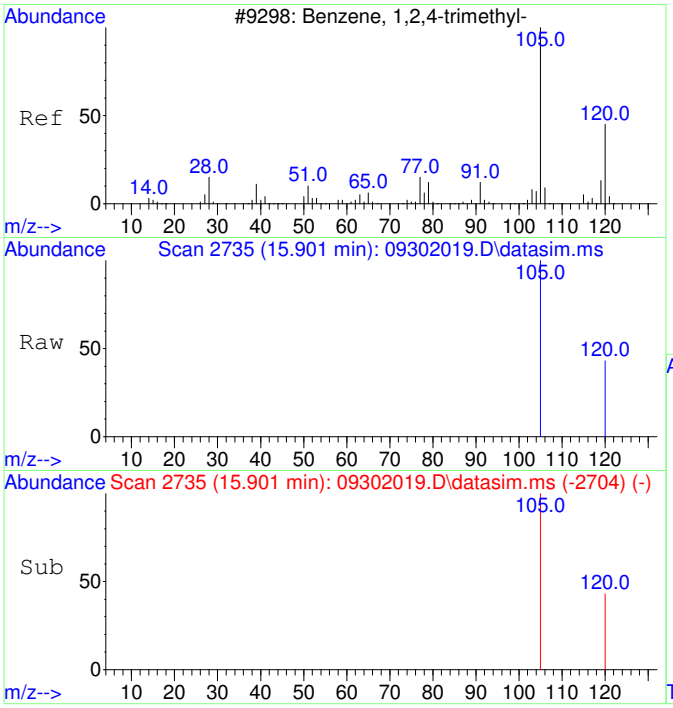


#20
o-Xylene
Concen: 34.46 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

Tgt Ion: 91 Resp: 5604

Ion	Ratio	Lower	Upper
91	100		
106	45.6	19.2	79.2

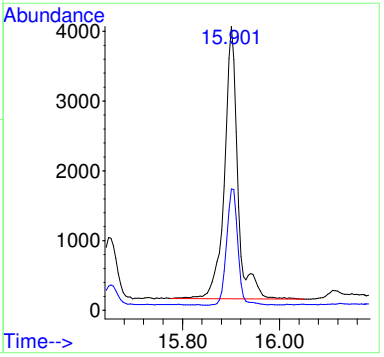


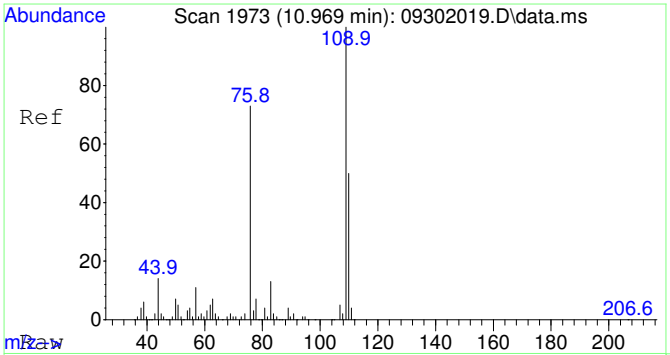


#23
1,2,4-Trimethylbenzene
Concen: 41.36 ug/L
RT: 15.901 min Scan# 2735
Delta R.T. 0.005 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

Tgt Ion:105 Resp: 7435

Ion	Ratio	Lower	Upper
105	100		
120	36.2	17.2	77.2

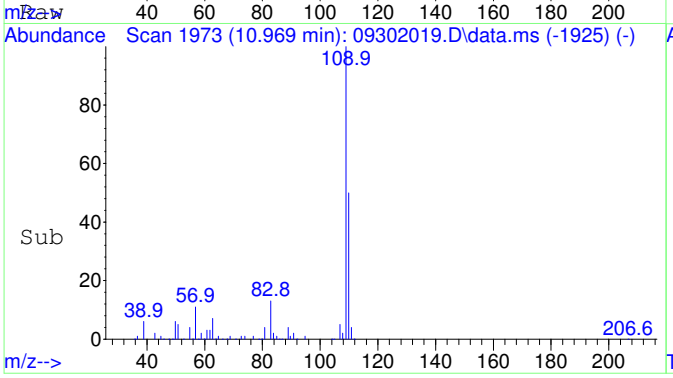


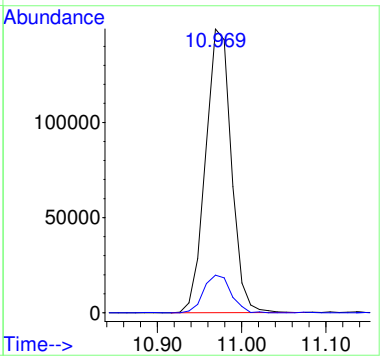


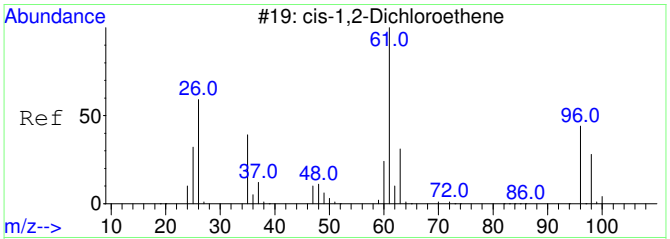
#25
2-Fluorotoluene SCAN
Concen: 5075.55 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. 0.000 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

Tgt Ion:109 Resp: 317161

Ion	Ratio	Lower	Upper
109	100		
83	14.1	0.0	43.8



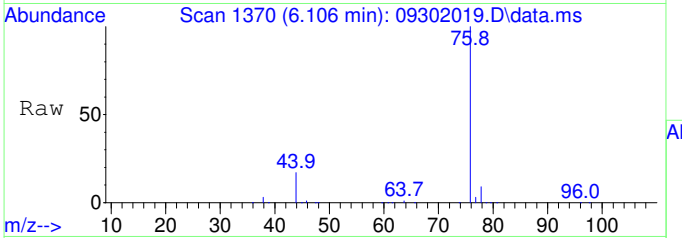


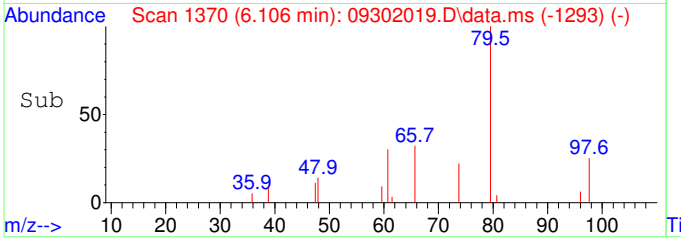


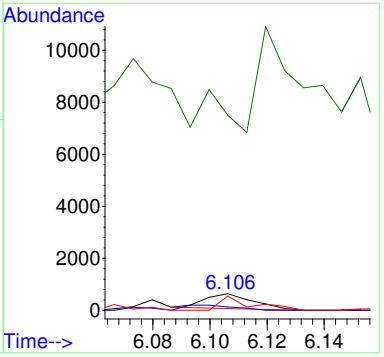
#29
cis-1,2-Dichloroethene SCAN
Concen: 31.82 ug/L
RT: 6.106 min Scan# 1370
Delta R.T. 0.013 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

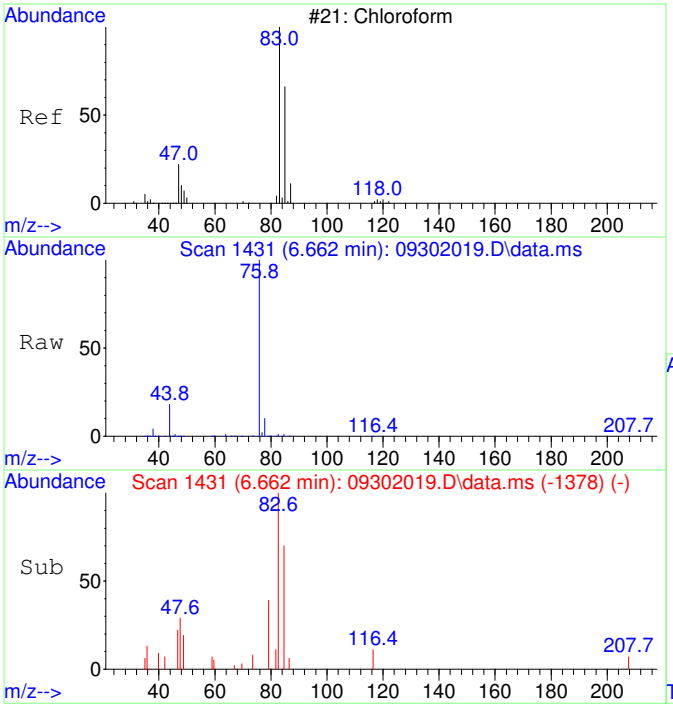
Tgt Ion: 61 Resp: 648

Ion	Ratio	Lower	Upper
61	100		
96	49.7	39.9	99.9
98	64.2	13.5	73.5
64	1027.6	4.5	64.5#





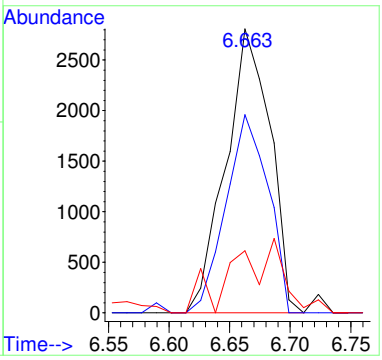


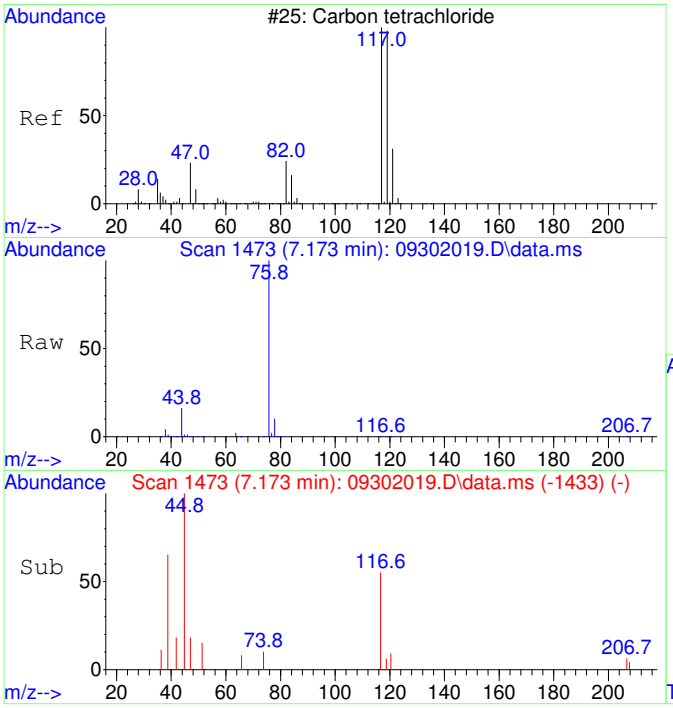


#30
Chloroform SCAN
Concen: 325.65 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

Tgt Ion: 83 Resp: 7192

Ion	Ratio	Lower	Upper
83	100		
85	66.5	34.6	94.6
47	0.0	0.0	53.4

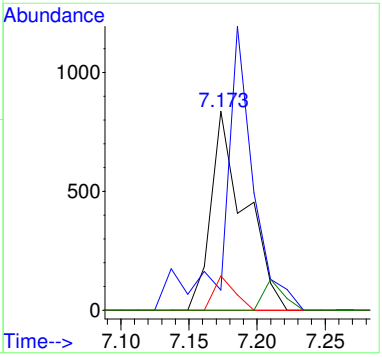


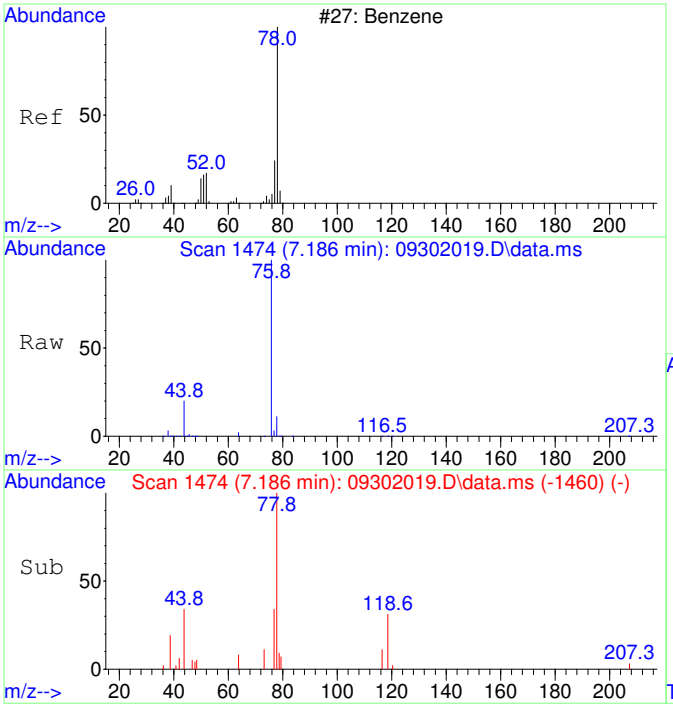


#32
Carbon tetrachloride SCAN
Concen: 69.40 ug/L
RT: 7.173 min Scan# 1473
Delta R.T. -0.012 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

Tgt Ion:117 Resp: 1457

Ion	Ratio	Lower	Upper
117	100		
119	120.1	75.5	135.5
121	10.5	0.0	58.8
82	0.0	0.0	59.2

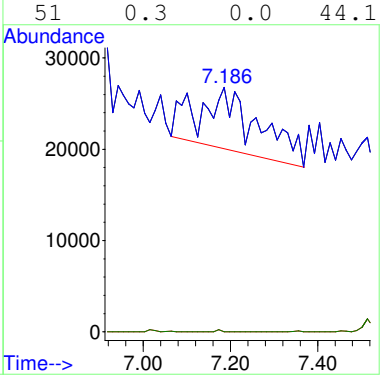


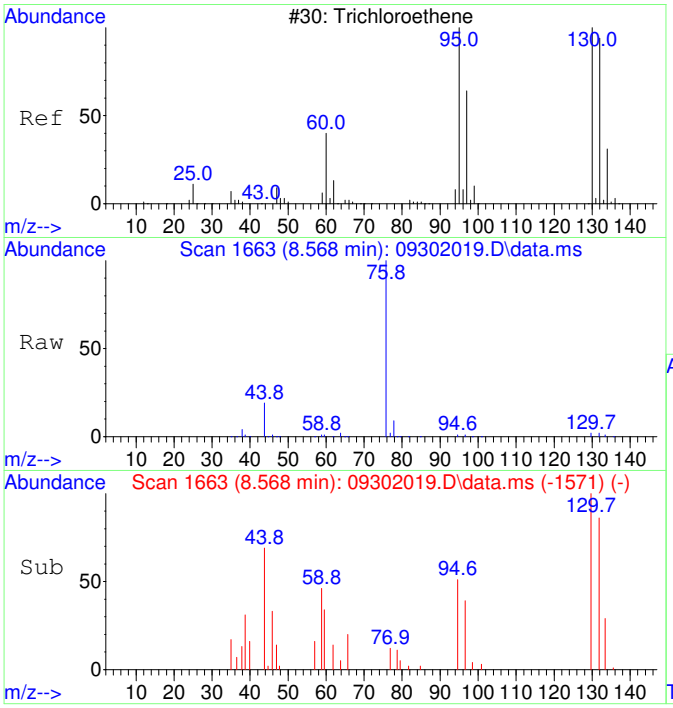


#33
Benzene SCAN
Concen: 1139.43 ug/L
RT: 7.186 min Scan# 1474
Delta R.T. -0.328 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

Tgt Ion: 78 Resp: 63140

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	0.3	0.0	47.9
51	0.3	0.0	44.1

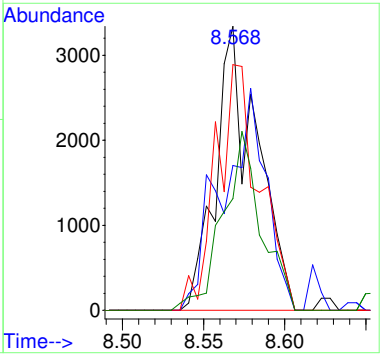


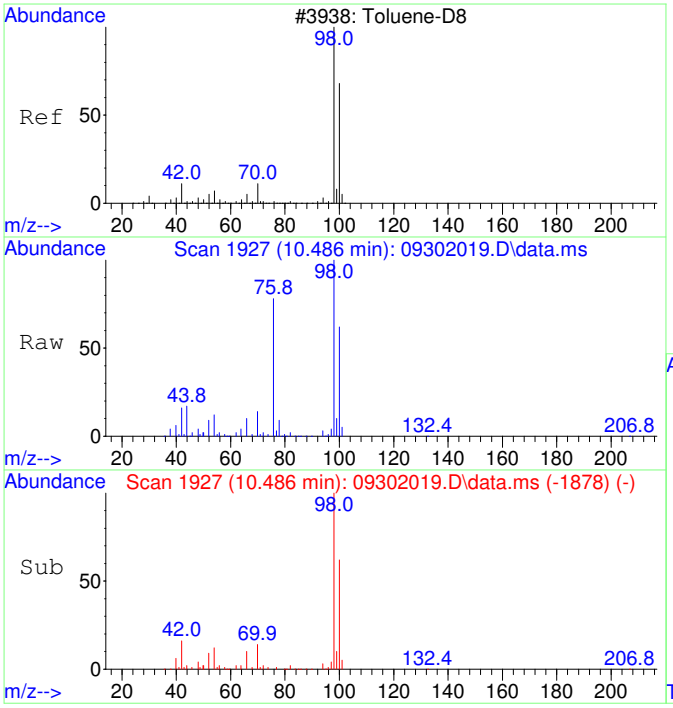


#35
Trichloroethene SCAN
Concen: 386.33 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. 0.000 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

Tgt Ion:130 Resp: 5883

Ion	Ratio	Lower	Upper
130	100		
95	31.5	60.5	120.5#
132	90.3	59.6	119.6
97	58.3	28.2	88.2

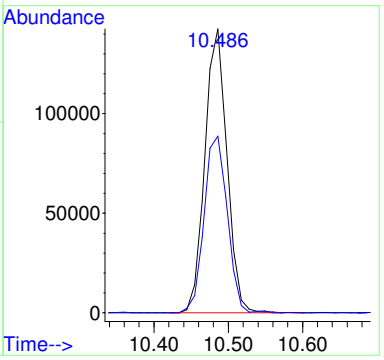


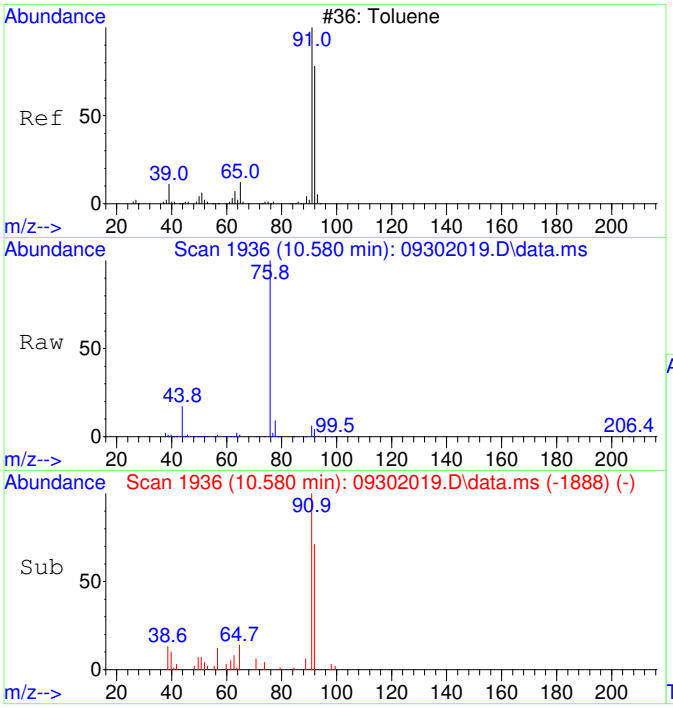


#36
Toluene-d8 SCAN
Concen: 4819.85 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.011 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

Tgt Ion: 98 Resp: 294548

Ion	Ratio	Lower	Upper
98	100		
100	65.3	40.0	100.0

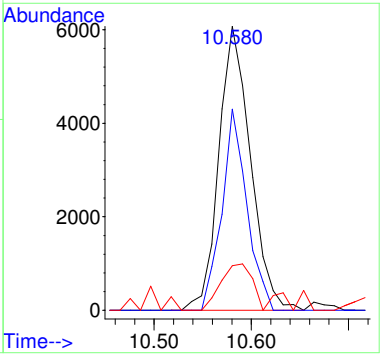


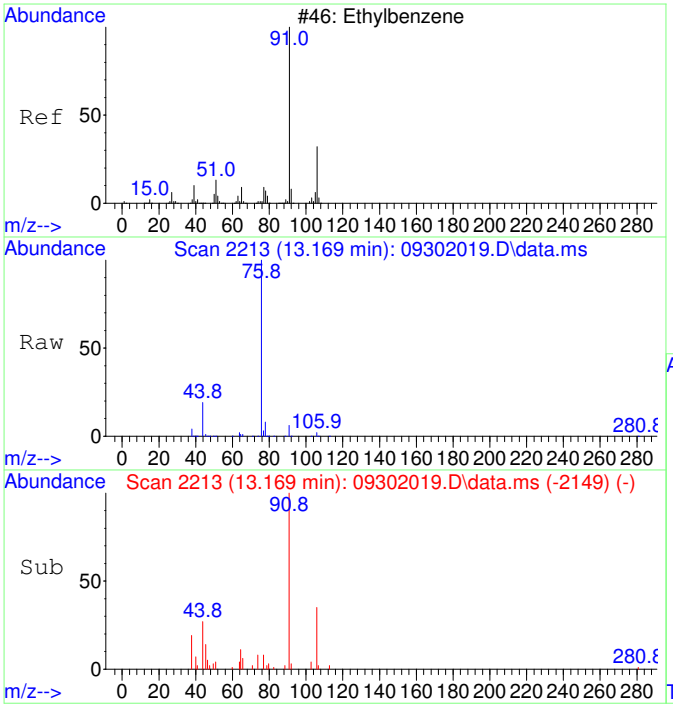


#37
Toluene SCAN
Concen: 174.95 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

Tgt Ion: 91 Resp: 13692

Ion	Ratio	Lower	Upper
91	100		
92	55.9	28.3	88.3
65	19.4	0.0	41.0

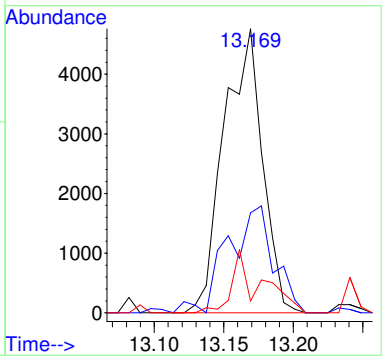


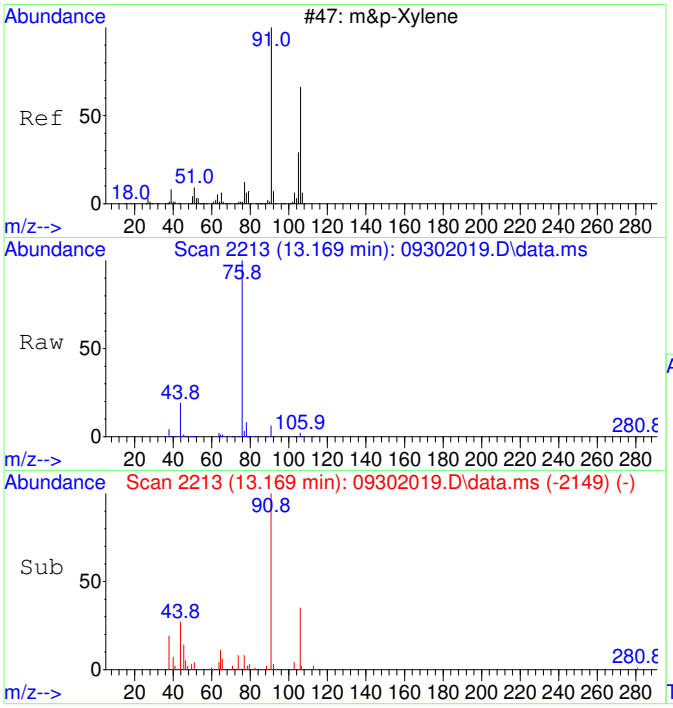


#42
Ethylbenzene SCAN
Concen: 64.59 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

Tgt Ion: 91 Resp: 9209

Ion	Ratio	Lower	Upper
91	100		
106	45.7	23.1	83.1
51	16.4	0.0	40.1

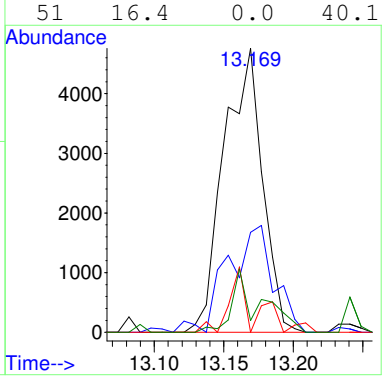


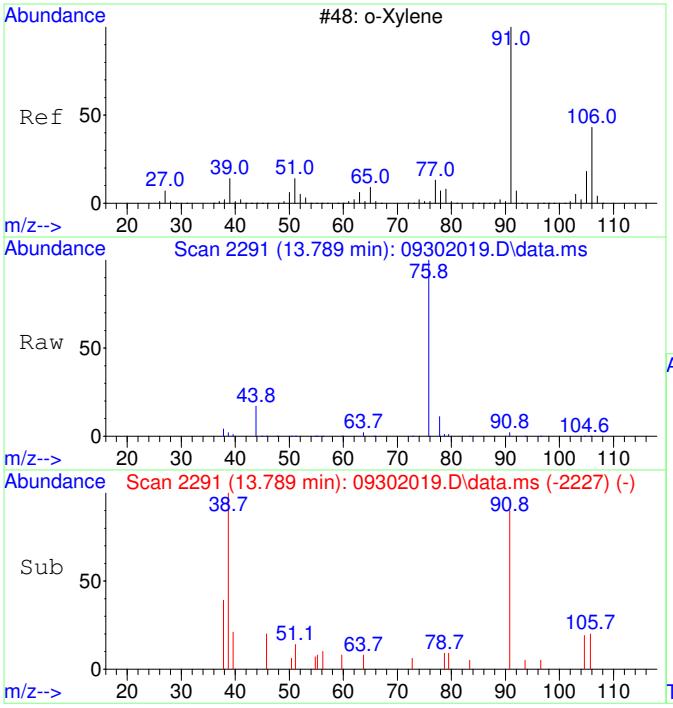


#43
m&p-Xylene SCAN
Concen: 64.59 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

Tgt Ion: 91 Resp: 9209

Ion	Ratio	Lower	Upper
91	100		
106	45.7	23.1	83.1
105	15.3	0.0	54.7
51	16.4	0.0	40.1

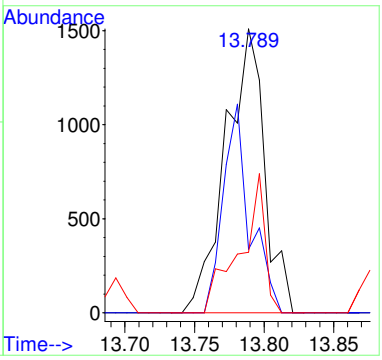


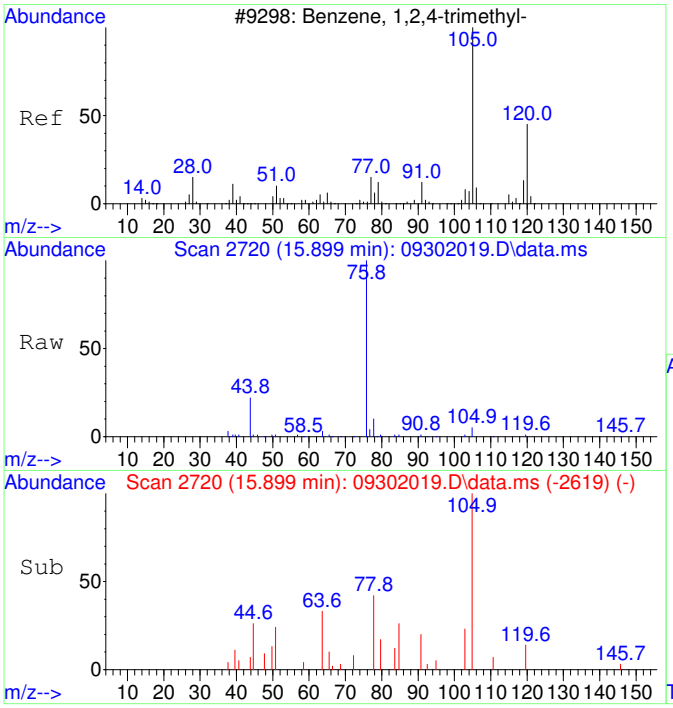


#44
o-Xylene SCAN
Concen: 38.51 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.008 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

Tgt Ion: 91 Resp: 2939

Ion	Ratio	Lower	Upper
91	100		
106	50.6	18.0	78.0
105	31.2	0.0	56.6

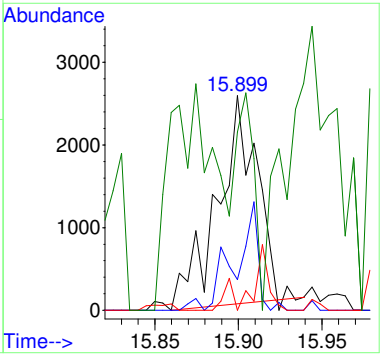




#47
1,2,4-Trimethylbenzene SCAN
Concen: 50.41 ug/L
RT: 15.899 min Scan# 2720
Delta R.T. -0.000 min
Lab File: 09302019.D
Acq: 30 Sep 2020 20:29

Tgt Ion:105 Resp: 4149

Ion	Ratio	Lower	Upper
105	100		
120	0.0	16.9	76.9#
119	3.6	0.0	41.9
77	0.0	0.0	42.3



SEQUENCE

S20J003

Sequence Date: 10/01/2020

Instrument: AG5975CV

Sequence Analyses:

VOCs, Passive Samplers

ANALYST / REVIEWER - DATA REVIEW CHECKLIST

BATCH #:	B20I024	SEQUENCE #:	S20j003 10/01/20
BATCH #:		ANALYSIS:	VOA Passive Air.

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

ANALYST / REVIEWER - DATA REVIEW CHECKLIST

BATCH #:	B20I024	SEQUENCE #:	S20j003 10/01/20
BATCH #:		ANALYSIS:	VOA Passive Air.

	CHECKLIST ITEM	N/A	ANALYST Y/N	REVIEWER Y/N	IDENTIFY OUTLIERS / COMMENTS
IS / SS	Internal standards within QC criteria?	☐	Y	Y	
	Surrogates within QC criteria?	☐	Y	Y	** 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	
	Do any samples need to be re-digested or re-extracted?	✔			
	Were all data qualifiers appropriately applied?	✔			
	Are problems, anomalies, discrepancies documented in LIMS? Specify if applicable.	✔			
MANUAL INT	Were manual integrations performed and documented? Specify if applicable.	☐	Y	Y	

APPROVALS	ANALYST INITIALS & DATE:	TD 10/02/20
	REVIEWED BY:	Rajabi, Ziyad Digitally signed by Rajabi, Ziyad Date: 2020.10.07 15:50:27 -07'00' SIGN HERE

COMMENTS

Custom analyte list.

* BS1 fails low Trichloroethene, Tetrachloroethene . BS1 was re-run as BS2 with good %R. BSD2 was added to the batch so LIMS could link them.

** Samples 2009033-01RE1,-02RE1 failed surrogate for 10X DL. RE2 were with QC limits.

Injection Log

Operator: TD
Directory: C:\msdchem\1\Ravioli Data\2020\100120\

Vial	File Name	Mult	Sample Info	Misc Info	Date Acquired
1	10012001.D	1	S20J003-IBL1		1 Oct 2020 12:01
2	10012002.D	1	S20J003-TUN1	BFB 2040028	1 Oct 2020 12:23
3	10012003.D	1	S20J003-CCV1	2030070 5 mg/L	1 Oct 2020 12:32
4	10012004.D	1	S20J003-CRL1	2030073 0.05 mg/L	1 Oct 2020 12:56
5	10012005.D	1	B20I024-BS2		1 Oct 2020 13:22
6	10012006.D	10	2009033-01RE1	10X DL (90-10)	1 Oct 2020 13:46
7	10012007.D	10	2009033-02RE1	10X DL (90uL-10uL)	1 Oct 2020 14:10
8	10012008.D	1	2009033-03RE1	RA for CO	1 Oct 2020 14:35
9	10012009.D	5	2009033-05RE1	5X DL (80uL-20uL)	1 Oct 2020 14:59
10	10012010.D	5	2009034-01RE1	5X DL (80uL-20uL)	1 Oct 2020 15:23
2	10012011.D	10	2009033-01RE2	90uL-10uL) RA for low Surr	1 Oct 2020 15:50
3	10012012.D	10	2009033-02RE2	90uL-10uL) RA for low Surr	1 Oct 2020 16:14

GC/MS QA-QC Check Report

Table of Contents

Tune File : C:\msdchem\1\Ravioli Data\2020\100120\10012002.D
Tune Time : 1 Oct 2020 12:23

Daily Calibration File : C:\msdchem\1\Ravioli Data\2020\100120\10012003.D

510190

File	Sample	Surrogate Recovery %	Internal Standard Responses	
10012003.D				
	S20J003-CC	97	510190	
10012004.D				
	S20J003-CR	1*	603773	
10012005.D				
	B20I024-BS2	90	630084	RA for low %R
10012006.D				
	2009033-01RE1	85*	597318	10X DL
10012007.D				
	2009033-02RE1	85*	609944	10X DL
10012008.D				
	2009033-03RE1	89	601793	RA for CO
10012009.D				
	2009033-05RE1	86	513727	5X DL
10012010.D				
	2009034-01RE1	86	546885	5X DL
10012011.D				
	2009033-01RE2	86	571892	10X DL RA for low surr
10012012.D				
	2009033-02RE2	86	486174	10X DL RA for low surr

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

Created: Fri Oct 02 08:28:01 2020 AG5975C

Analysis Sequence

S20J003

Project: R20S18
Analysis: VOCs, Passive Samplers

Instrument: AG5975CV **Calibration ID:** 2008017 Printed: 10/02/2020 2:24 pm

Lab Number	Sample Name	Order	Analyzed Date	STD ID	ISTD ID	Sequenced By	File ID	Comments
S20J003-IBL1	Instrument Blank	1	10/1/20 12:01		2030067	TD	10012001.D	
S20J003-TUN1	BFB	2	10/1/20 12:23	2040028		TD	10012002.D	
S20J003-CCV1	Calibration Check	3	10/1/20 12:32	2030070		TD	10012003.D	
S20J003-CRL1	Instrument RL Check	4	10/1/20 12:56	2030073		TD	10012004.D	
B20I024-BS2	LCS	5	9/30/20 15:22			TD	09302006.D	
B20I024-BS2	LCS	5	10/1/20 13:22			TD	10012005.D	
B20I024-BSD2	LCS Dup	6	9/30/20 15:46			TD	09302007.D	
2009033-02RE1 A	Classics-WT-MH2-2ft-6d-R	7	10/1/20 14:10			TD	10012007.D	
2009033-01RE1 A	Classics-WT-MH1-2ft-6d-R	8	10/1/20 13:46			TD	10012006.D	
2009033-03RE1 A	Classics-WT-MH3-2ft-6d-R	9	10/1/20 14:35			TD	10012008.D	
2009033-05RE1 A	Classics-186WT-SC-1ft-6d-R	10	10/1/20 14:59			TD	10012009.D	
2009034-01RE1 A	6Sixty-MH3-2ft-3d-R	11	10/1/20 15:23			TD	10012010.D	
2009033-01RE2 A	Classics-WT-MH1-2ft-6d-R	12	10/1/20 15:50			TD	10012011.D	
2009033-02RE2 A	Classics-WT-MH2-2ft-6d-R	13	10/1/20 16:14			TD	10012012.D	

Sequence Comments

Reagents

Reagent #	Description

Analysis Sequence

S20J003

(Continued)

Project: R20S18
Analysis: VOCs, Passive Samplers

Instrument: AG5975CV **Calibration ID:** 2008017 Printed: 10/02/2020 2:24 pm

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

SEQUENCE DATA

S20J003

S20J003-IBL1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012001.D
Acq On : 1 Oct 2020 12:01
InstName : AG5975C
Operator : TD
Sample : S20J003-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 01 12:20:31 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

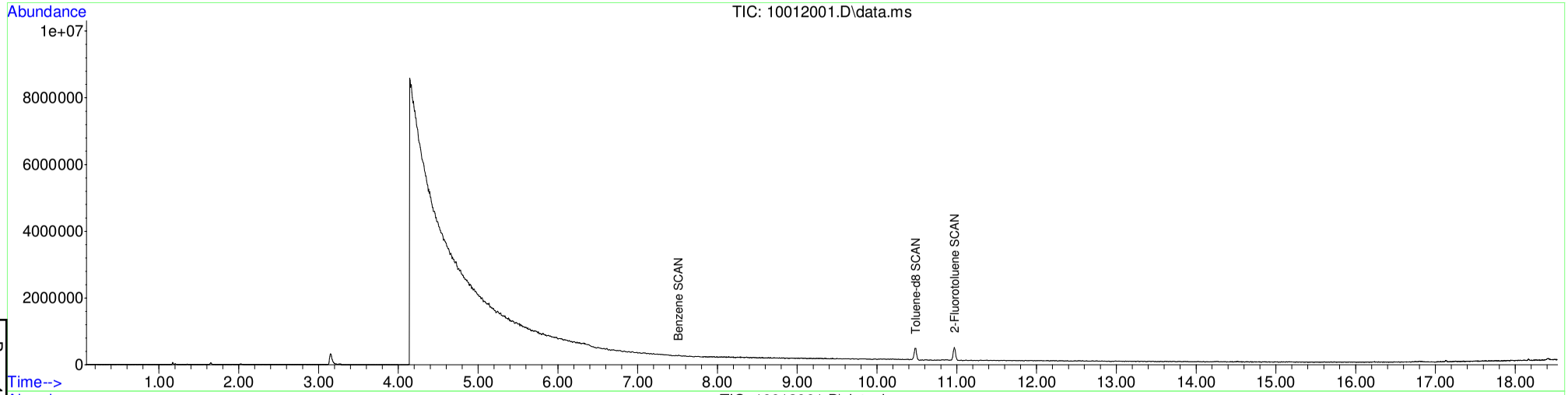
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	601027	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	506693	4306.51	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.13%			
Target Compounds						Qvalue
9] Benzene	7.503	78	4563	44.68	ug/L #	1
25) 2-Fluorotoluene SCAN	10.969	109	303298	5176.70	ug/L	98
33) Benzene SCAN	7.514	78	15646	301.14	ug/L	96
36) Toluene-d8 SCAN	10.486	98	266678	4654.20	ug/L	97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012001.D
Acq On : 1 Oct 2020 12:01
InstName : AG5975C
Operator : TD
Sample : S20J003-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 01 12:20:31 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration



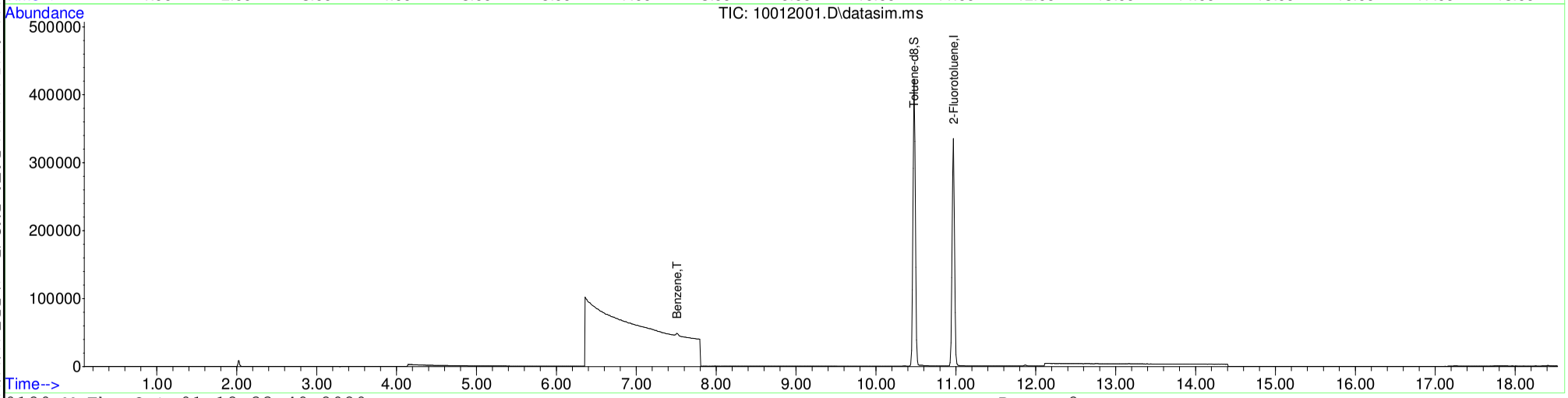


Table of Contents

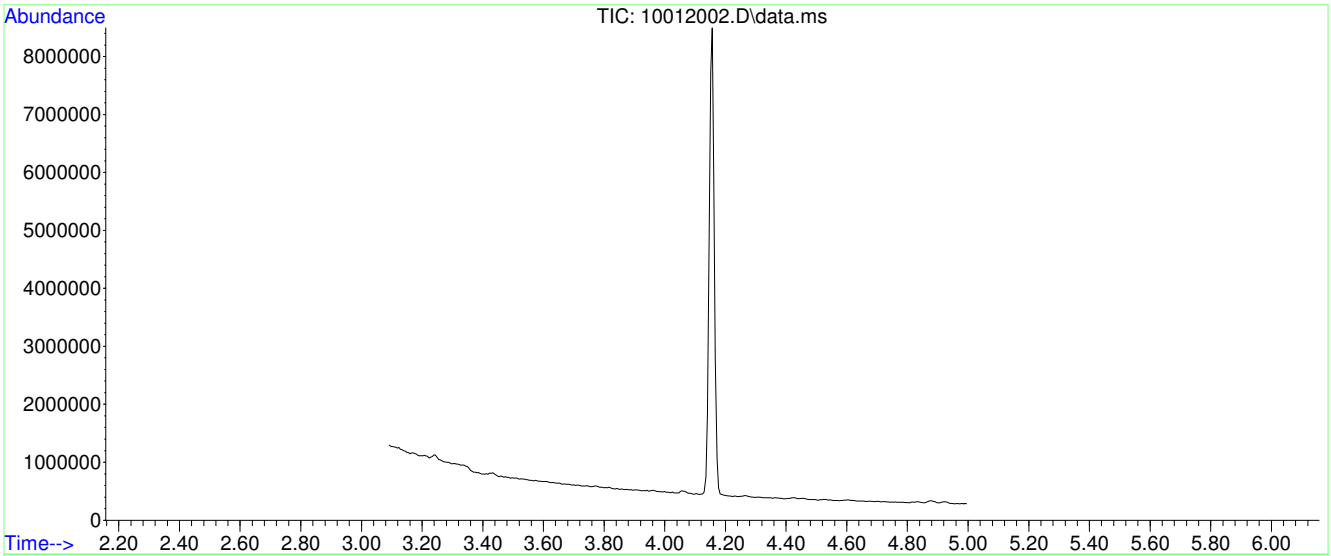
S20J003-TUN1

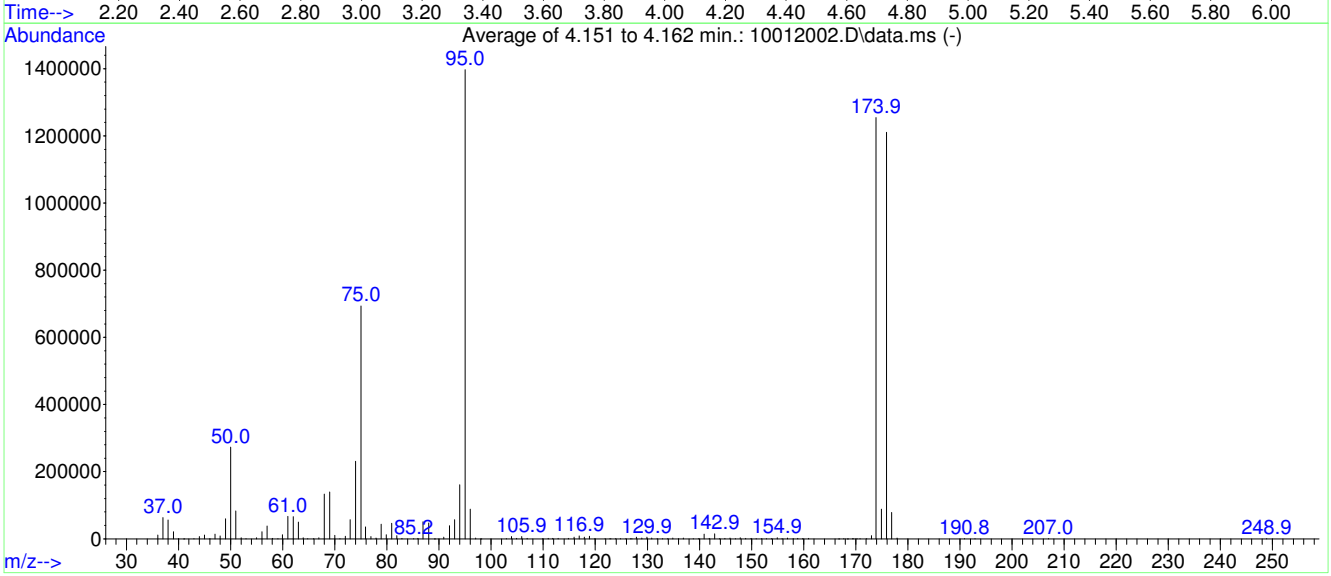
Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012002.D
Acq On : 1 Oct 2020 12:23
Operator : TD
Sample : S20J003-TUN1
Misc : BFB2040028
ALS Vial : 2 Sample Multiplier: 1
InstName : AG5975C

Integration File: Ravioli.P

Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Title : Volatile Organic Analysis - Passive samplers
Last Update : Fri Aug 21 08:33:54 2020





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

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.5	272683	PASS
75	95	30	60	49.7	693782	PASS
95	95	100	100	100.0	1396736	PASS
96	95	5	9	6.4	88704	PASS
173	174	0.00	2	0.7	9138	PASS
174	95	50	120	89.8	1254571	PASS
175	174	5	9	7.1	88501	PASS
176	174	95	101	96.5	1210709	PASS
177	176	5	9	6.5	78840	PASS

Average of 4.151 to 4.162 min.: 10012002.D\data.ms
S20J003-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	11044	48.00	8409	59.95	12510	70.95	133
37.00	63469	49.00	59280	61.00	66512	72.00	7515
38.00	55807	50.00	272683	62.00	65600	72.95	57313
39.00	21462	51.00	82877	63.00	49867	74.00	231275
40.00	708	52.00	3548	63.95	3304	75.00	693782
41.00	23	52.95	149	64.80	212	75.90	35221
42.95	427	55.00	3432	65.90	220	76.90	6762
44.00	6853	56.00	21308	66.95	3107	77.90	2693
44.95	11073	57.00	38147	68.00	132744	78.90	43789
46.00	729	58.05	1730	69.00	139047	79.90	12554
47.00	13970	59.10	338	70.00	10219	80.90	46173

Average of 4.151 to 4.162 min.: 10012002.D\data.ms
S20J003-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
81.90	9661	95.00	1.39674e+006	111.80	1025	123.90	780
82.90	1097	96.00	88704	112.85	1541	124.85	359
85.15	144	97.05	2520	114.85	1414	125.85	519
85.95	1314	98.00	57	115.90	4999	126.80	335
86.95	50261	102.90	574	116.90	8681	127.00	92
88.00	47413	103.90	6397	117.90	5220	127.90	4981
89.10	60	104.90	1759	118.90	7350	128.95	2162
90.90	4862	105.90	6520	119.90	286	129.90	5029
92.00	39437	106.90	1359	121.90	241	130.85	2057
93.00	56699	109.90	932	122.80	139	131.85	163
94.00	161208	110.95	1366	122.95	211	132.90	274

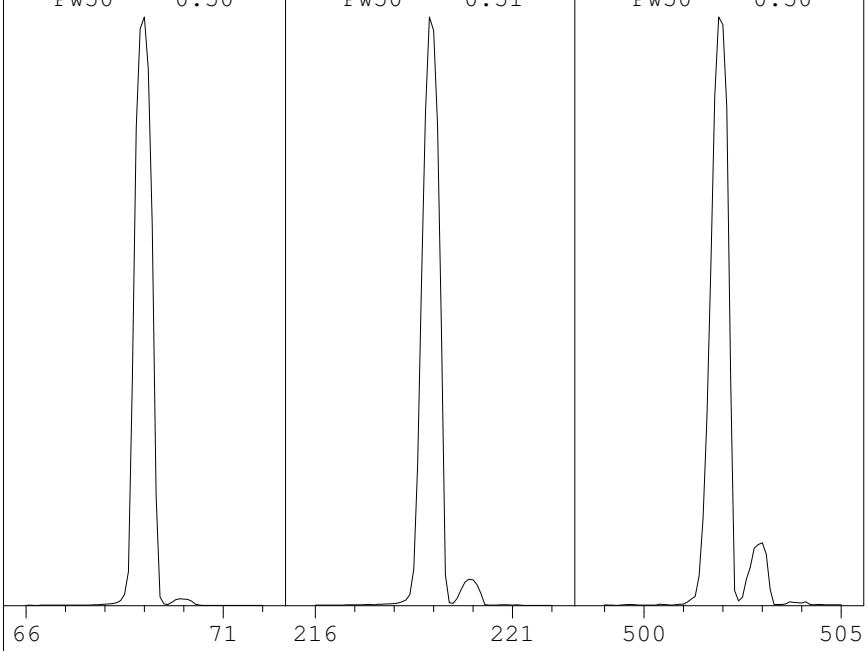
Average of 4.151 to 4.162 min.: 10012002.D\data.ms
S20J003-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
133.90	360	145.85	1942	156.90	2377	170.80	517
134.90	2529	146.90	944	158.00	353	172.10	366
135.95	292	147.85	3261	158.85	1687	173.00	9138
136.90	2642	148.85	1035	159.80	138	173.90	1.25457e+006
138.80	500	149.90	1538	160.95	1459	174.90	88501
139.80	863	150.90	108	166.70	62	175.90	1.21071e+006
140.90	14371	151.95	781	167.70	72	176.90	78840
141.85	1492	152.85	959	168.40	50	177.95	2106
142.90	14714	153.85	946	169.40	170	190.85	139
143.85	919	154.90	3132	169.60	90	192.90	81
144.85	1377	155.85	512	170.25	353	207.00	69

Average of 4.151 to 4.162 min.: 10012002.D\data.ms
S20J003-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
248.90	101						

Mass	69.00	Mass	218.90	Mass	501.90
Ab	592632	Ab	378486	Ab	11449
Pw50	0.50	Pw50	0.51	Pw50	0.50

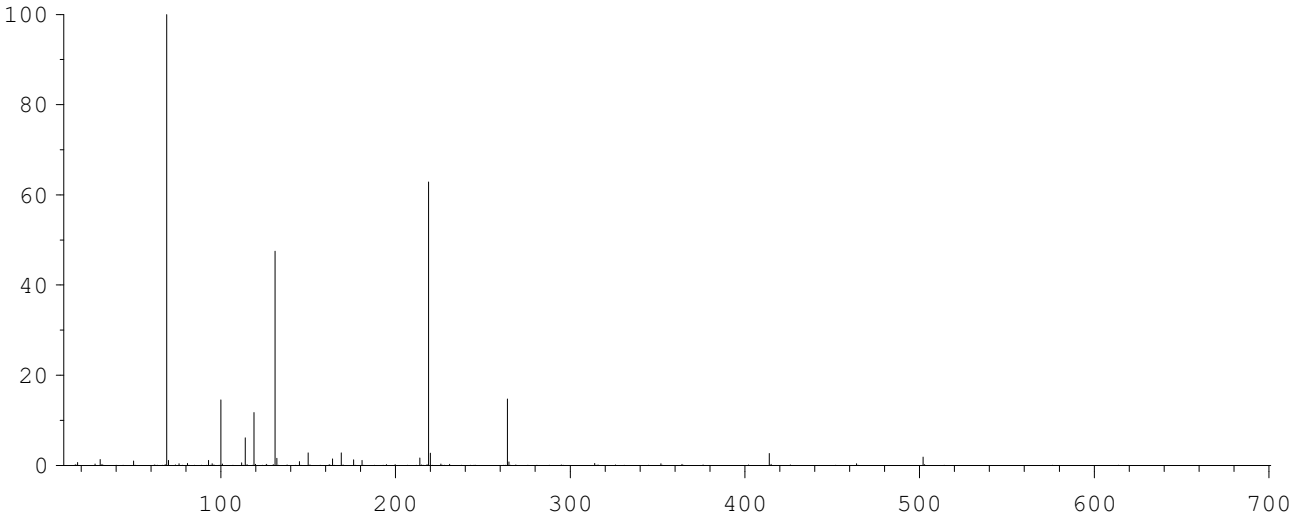


Ion Pol	Pos	MassGain	-1190
		MassOffs	-39
Emission	34.6	AmuGain	978
EIEnrgy	69.9	AmuOffs	127.94
Filament	1	Wid219	-0.003
		DC Pol	Pos
Repeller	29.79		
IonFcus	69.3	HEDEnab	On
EntLens	0.0	EMVolts	1329
EntOffs	Var		
		Samples	8
PFTBA	Open	Averages	3
		Stepsize	0.10

Temperatures and Pressures:

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

Scan: 10.00 - 701.00 Samples: 8 Thresh: 100 Step: 0.10
120 peaks Base: 69.00 Abundance: 563776



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	563776	100.00	70.00	6442	1.14
219.00	354432	62.87	220.00	15482	4.37
502.00	10516	1.87	503.00	1000	9.51

Air/Water Check: H20~0.66% N2~0.31% O2~0.23% CO2~0.03% N2/H2O~46.41%

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 51756
Repeller Maximum 30 volts using ion 219; Gain Factor 0.52

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

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset:	127.9	127.9	127.9	127.9	127.9	127.9	127.9
Entrance Lens Offset:	16.8	14.1	14.3	15.6	16.1	16.8	16.8
Target Abund(%):	1.0	100.0	45.0	55.0	2.5	2.0	
Actual Tune Abund(%):	1.0	100.0	47.5	62.9	2.7	1.9	

S20J003-CCV1

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012003.D
Acq On : 1 Oct 2020 12:32
InstName : AG5975C
Operator : TD
Sample : S20J003-CCV1
Misc : 2030070 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 01 12:51:25 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	2-Fluorotoluene	1.000	1.000	0.0	76	0.00
2	T	1,1-Dichloroethene	0.200	0.226	-13.0	91	0.00
3	T	trans-1,2-Dichloroethene	0.231	0.249	-7.8	87	0.00
4	T	1,1-Dichloroethane	0.287	0.305	-6.3	86	0.00
5	T	cis-1,2-Dichloroethene	0.303	0.317	-4.6	85	0.00
6	T	Chloroform	0.310	0.311	-0.3	81	-0.01
7	T	1,1,1-Trichloroethane	0.337	0.334	0.9	80	0.00
8	T	Carbon tetrachloride	0.317	0.310	2.2	78	0.00
9	T	Benzene	0.850	0.816	4.0	80	0.00
10	T	1,2-Dichloroethane	0.303	0.304	-0.3	81	0.00
11	T	Trichloroethene	0.256	0.248	3.1	78	0.00
12	S	Toluene-d8	0.979	0.949	3.1	77	0.00
13	T	Toluene	1.248	1.136	9.0	77	0.00
14	T	1,1,2-Trichloroethane	0.272	0.260	4.4	77	0.01
15	T	Tetrachloroethene	0.361	0.330	8.6	72	0.01
16	T	Chlorobenzene	0.894	0.825	7.7	73	0.00
17	T	1,1,1,2-Tetrachloroethane	0.320	0.297	7.2	73	0.00
18	T	Ethylbenzene	1.519	1.360	10.5	72	0.00
19	T	m&p-Xylene	1.187	1.032	13.1	72	0.00
20	T	o-Xylene	1.268	1.113	12.2	71	0.00
21	T	1,1,2,2-Tetrachloroethane	0.562	0.506	10.0	71	0.00
22	T	1,3,5-Trimethylbenzene	1.350	1.182	12.4	69	0.00
23	T	1,2,4-Trimethylbenzene	1.402	1.186	15.4	68	0.00
24	T	Naphthalene	2.216	1.894	14.5	67	0.00
25		2-Fluorotoluene SCAN	0.487	0.495	-1.6	77	0.00
26		1,1-Dichloroethene SCAN	0.104	0.127	-22.1	93	-0.02
27		trans-1,2-Dichloroethene SC	0.128	0.145	-13.3	86	0.00
28		1,1-Dichloroethane SCAN	0.148	0.174	-17.6	89	-0.01
29		cis-1,2-Dichloroethene SCAN	0.159	0.183	-15.1	87	0.00
30		Chloroform SCAN	0.172	0.181	-5.2	80	0.00
31		1,1,1-Trichloroethane SCAN	0.157	0.175	-11.5	84	0.00
32		Carbon tetrachloride SCAN	0.164	0.159	3.0	73	0.00
33		Benzene SCAN	0.432	0.446	-3.2	78	0.00
34		1,2-Dichloroethane SCAN	0.160	0.177	-10.6	84	0.01
35		Trichloroethene SCAN	0.119	0.122	-2.5	78	0.00
36		Toluene-d8 SCAN	0.477	0.488	-2.3	78	0.00
37		Toluene SCAN	0.610	0.583	4.4	72	0.00
38		1,1,2-Trichloroethane SCAN	0.137	0.143	-4.4	79	0.01
39		Tetrachloroethene SCAN	0.147	0.152	-3.4	78	0.00
40		Chlorobenzene SCAN	0.417	0.414	0.7	75	0.00
41		1,1,1,2-Tetrachloroethane S	0.154	0.137	11.0	67	0.00
42		Ethylbenzene SCAN	1.112	1.060	4.7	72	0.00
43		m&p-Xylene SCAN	1.112	1.060	4.7	72	0.00
44		o-Xylene SCAN	0.595	0.573	3.7	73	0.00
45		1,1,2,2-Tetrachloroethane S	0.290	0.281	3.1	73	0.00
46		1,3,5-Trimethylbenzene SCAN	0.627	0.586	6.5	71	0.00
47		1,2,4-Trimethylbenzene SCAN	0.642	0.580	9.7	68	0.00
48		Naphthalene SCAN	0.971	0.852	12.3	66	0.00

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012003.D
Acq On : 1 Oct 2020 12:32
InstName : AG5975C
Operator : TD
Sample : S20J003-CCV1
Misc : 2030070 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 01 12:51:25 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

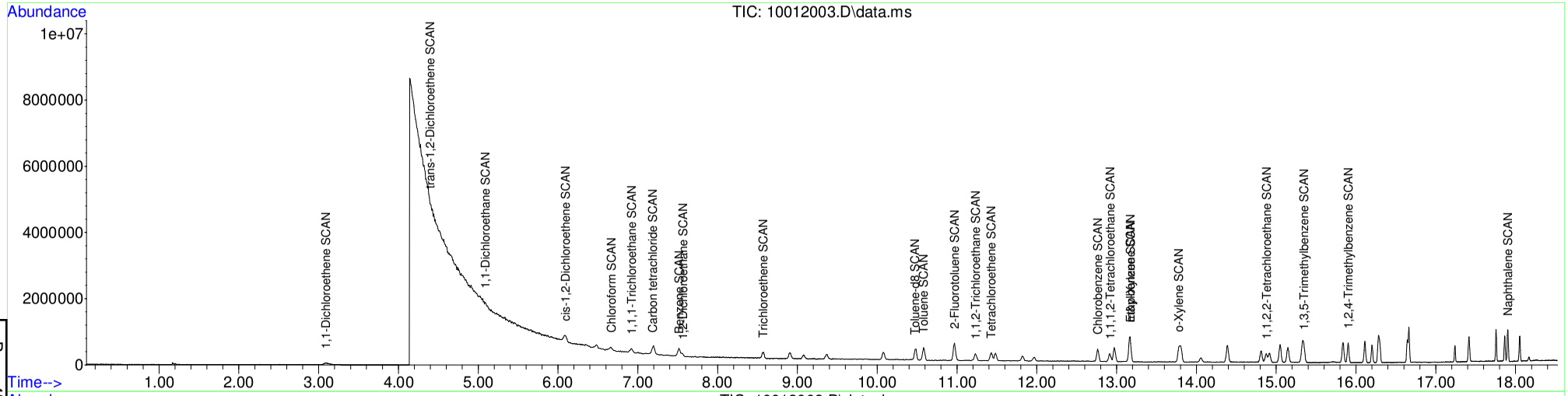
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	510190	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	484035	4846.40 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 96.93%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.089	61	115414	5665.13 ug/L	83
3] trans-1,2-Dichloroethene	4.389	61	126859	5389.54 ug/L	98
4] 1,1-Dichloroethane	5.092	63	155424	5304.52 ug/L	98
5] cis-1,2-Dichloroethene	6.094	61	161504	5221.85 ug/L	99
6] Chloroform	6.651	83	158607	5010.25 ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	170257	4952.32 ug/L	99
8] Carbon tetrachloride	7.187	117	158022	4883.56 ug/L	100
9] Benzene	7.515	78	416279	4802.25 ug/L	98
10] 1,2-Dichloroethane	7.552	62	155148	5013.78 ug/L	100
11] Trichloroethene	8.569	130	126472	4845.77 ug/L	93
13] Toluene	10.571	91	579403	4550.34 ug/L	100
14] 1,1,2-Trichloroethane	11.232	97	132628	4780.15 ug/L	97
15] Tetrachloroethene	11.432	166	168611	4575.66 ug/L	100
16] Chlorobenzene	12.765	112	421005	4617.59 ug/L	92
17] 1,1,1,2-Tetrachloroethane	12.916	131	151298	4631.16 ug/L	99
18] Ethylbenzene	12.972	91	694096	4478.34 ug/L	98
19] m&p-Xylene	13.162	91	1053140	8694.01 ug/L	97
20] o-Xylene	13.774	91	567903	4388.20 ug/L	96
21] 1,1,2,2-Tetrachloroethane	14.873	83	258278	4503.06 ug/L	100
22] 1,3,5-Trimethylbenzene	15.343	105	603055	4377.96 ug/L	96
23] 1,2,4-Trimethylbenzene	15.899	105	604840	4227.33 ug/L	96
24] Naphthalene	17.902	128	966349	4273.31 ug/L	100
25) 2-Fluorotoluene SCAN	10.969	109	252632	5079.65 ug/L	94
26) 1,1-Dichloroethene SCAN	3.088	61	64681	6123.90 ug/L	88
27) trans-1,2-Dichloroethe...	4.394	61	74056	5666.18 ug/L	80
28) 1,1-Dichloroethane SCAN	5.091	63	89005	5884.32 ug/L	96
29) cis-1,2-Dichloroethene...	6.093	61	93329	5758.97 ug/L #	72
30) Chloroform SCAN	6.662	83	92302	5251.14 ug/L	88
31) 1,1,1-Trichloroethane ...	6.918	97	89118	5563.60 ug/L	93
32) Carbon tetrachloride SCAN	7.185	117	80924	4843.26 ug/L	95
33) Benzene SCAN	7.514	78	227622	5161.07 ug/L	95
34) 1,2-Dichloroethane SCAN	7.562	62	90460	5554.66 ug/L	99
35) Trichloroethene SCAN	8.573	130	62258	5136.81 ug/L	87
36) Toluene-d8 SCAN	10.475	98	248809	5115.48 ug/L	97
37) Toluene SCAN	10.580	91	297545	4776.86 ug/L	92
38) 1,1,2-Trichloroethane ...	11.231	97	72822	5208.57 ug/L	93
39) Tetrachloroethene SCAN	11.430	166	77478	5177.39 ug/L	95
40) Chlorobenzene SCAN	12.764	112	211201	4962.04 ug/L	88
41) 1,1,1,2-Tetrachloroeth...	12.915	131	69858	4434.93 ug/L	96
42) Ethylbenzene SCAN	13.169	91	540585	4763.73 ug/L	92
43) m&p-Xylene SCAN	13.169	91	540585	4763.73 ug/L	93
44) o-Xylene SCAN	13.781	91	292284	4811.84 ug/L	95
45) 1,1,2,2-Tetrachloroeth...	14.875	83	143235	4835.92 ug/L	98
46) 1,3,5-Trimethylbenzene...	15.347	105	299072	4671.79 ug/L	97
47) 1,2,4-Trimethylbenzene...	15.903	105	295786	4515.60 ug/L	97
48) Naphthalene SCAN	17.905	128	434813	4386.87 ug/L	99

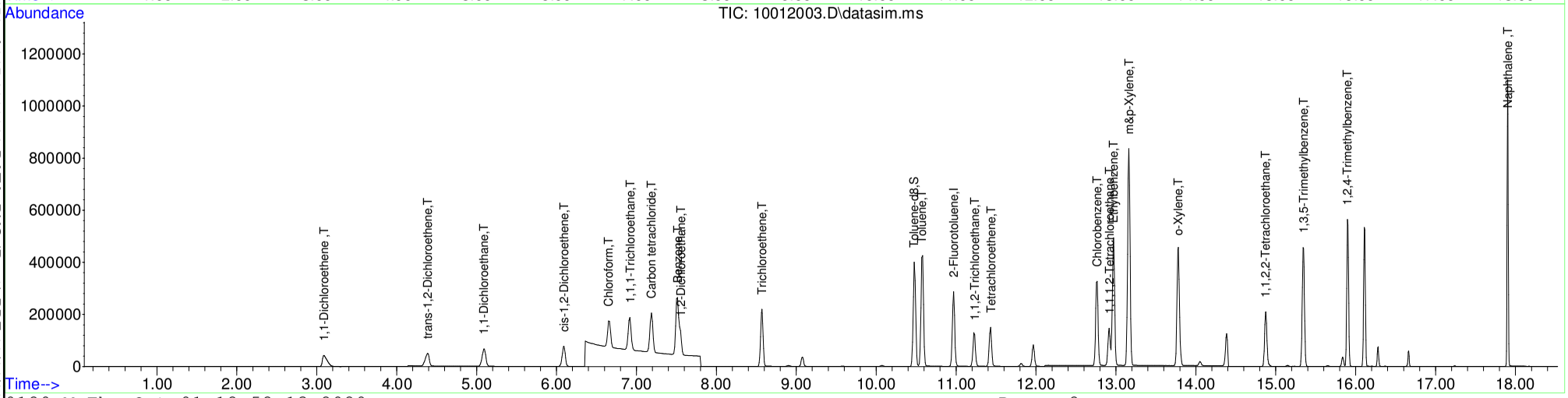
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012003.D
Acq On : 1 Oct 2020 12:32
InstName : AG5975C
Operator : TD
Sample : S20J003-CCV1
Misc : 2030070 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 01 12:51:25 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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S20J003-CRL1

QLS REPORT

Instrument Name: AG5975C
Sample Name: S20J003-CRL1
Misc Info: 2030073 0.05 mg/L
Date Acquired: 10/1/20 12:56
QLast Update: Fri Aug 21 08:33:54 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.970	5000.0	5000.00	100%	60	140	pass
2)	1,1-Dichloroethene	3.090	50.0	44.84	90%	60	140	pass
3)	trans-1,2-Dichloroethene	4.396	50.0	47.57	95%	60	140	pass
4)	1,1-Dichloroethane	5.099	50.0	47.93	96%	60	140	pass
5)	cis-1,2-Dichloroethene	6.094	50.0	47.87	96%	60	140	pass
6)	Chloroform	6.664	50.0	44.68	89%	60	140	pass
7)	1,1,1-Trichloroethane	6.919	50.0	44.49	89%	60	140	pass
8)	Carbon tetrachloride	7.187	50.0	44.50	89%	60	140	pass
10)	1,2-Dichloroethane	7.552	50.0	47.41	95%	60	140	pass
11)	Trichloroethene	8.569	50.0	46.91	94%	60	140	pass
12)	Toluene-d8	10.477	50.0	50.47	101%	60	140	pass
13)	Toluene	10.571	50.0	51.21	102%	60	140	pass
14)	1,1,2-Trichloroethane	11.222	50.0	49.76	100%	60	140	pass
15)	Tetrachloroethene	11.421	50.0	49.26	99%	60	140	pass
16)	Chlorobenzene	12.757	50.0	52.98	106%	60	140	pass
17)	1,1,1,2-Tetrachloroethane	12.908	50.0	51.06	102%	60	140	pass
18)	Ethylbenzene	12.964	50.0	53.81	108%	60	140	pass
19)	m&p-Xylene	13.162	100.0	107.97	108%	60	140	pass
20)	o-Xylene	13.774	50.0	52.91	106%	60	140	pass
21)	1,1,2,2-Tetrachloroethane	14.873	50.0	53.86	108%	60	140	pass
22)	1,3,5-Trimethylbenzene	15.345	50.0	56.18	112%	60	140	pass
23)	1,2,4-Trimethylbenzene	15.896	50.0	55.77	112%	60	140	pass
24)	Naphthalene	17.903	50.0	53.45	107%	60	140	pass

Quantitation Report (Not Reviewed)

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Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012004.D
Acq On : 1 Oct 2020 12:56
InstName : AG5975C
Operator : TD
Sample : S20J003-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 01 13:14:58 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

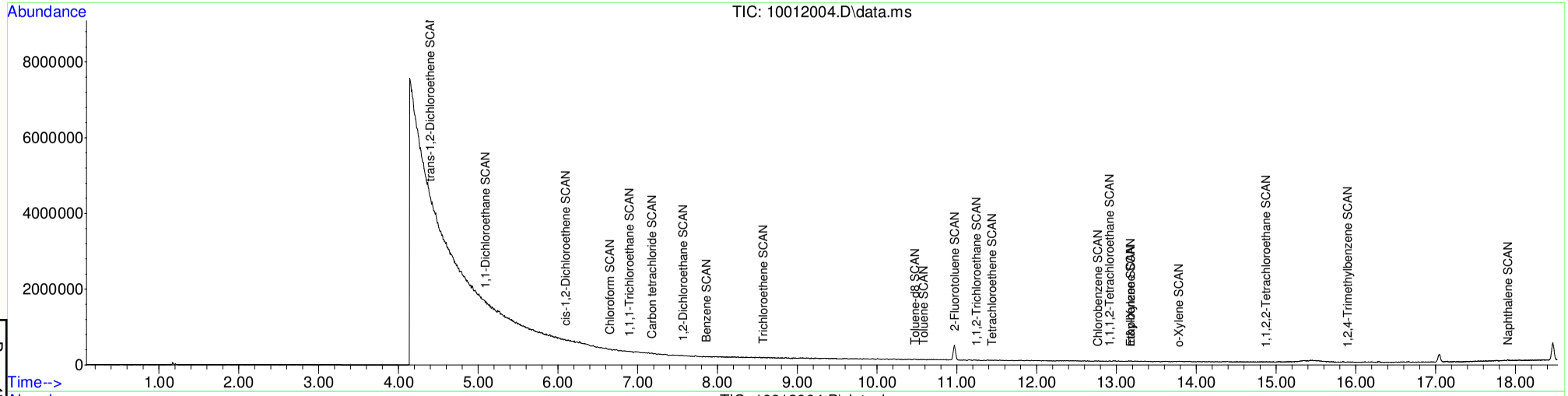
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	603773	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	5965	50.47	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 1.01%#			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.101	61	1517	62.92	ug/L	95
3] trans-1,2-Dichloroethene	4.389	61	1325	47.57	ug/L	70
4] 1,1-Dichloroethane	5.092	63	1662	47.93	ug/L	53
5] cis-1,2-Dichloroethene	6.088	61	1752	47.87	ug/L	99
6] Chloroform	6.651	83	1674	44.68	ug/L	99
7] 1,1,1-Trichloroethane	6.919	97	1810	44.49	ug/L	100
8] Carbon tetrachloride	7.187	117	1704	44.50	ug/L	97
9] Benzene	7.503	78	5164	50.34	ug/L #	1
10] 1,2-Dichloroethane	7.552	62	1736	47.41	ug/L #	1
11] Trichloroethene	8.569	130	1449	46.91	ug/L	91
13] Toluene	10.571	91	7716	51.21	ug/L	98
14] 1,1,2-Trichloroethane	11.222	97	1634	49.76	ug/L	92
15] Tetrachloroethene	11.432	166	2148	49.26	ug/L	97
16] Chlorobenzene	12.765	112	5716	52.98	ug/L	74
17] 1,1,1,2-Tetrachloroethane	12.916	131	1974	51.06	ug/L	100
18] Ethylbenzene	12.972	91	9869	53.81	ug/L	94
19] m&p-Xylene	13.162	91	15478	107.97	ug/L	93
20] o-Xylene	13.774	91	8103	52.91	ug/L	96
21] 1,1,2,2-Tetrachloroethane	14.877	83	3656	53.86	ug/L	100
22] 1,3,5-Trimethylbenzene	15.345	105	9158	56.18	ug/L	95
23] 1,2,4-Trimethylbenzene	15.901	105	9443	55.77	ug/L	94
24] Naphthalene	17.904	128	14305	53.45	ug/L	89
25) 2-Fluorotoluene SCAN	10.969	109	302650	5142.15	ug/L	97
27) trans-1,2-Dichloroethe...	4.394	61	593	38.34	ug/L #	32
28) 1,1-Dichloroethane SCAN	5.091	63	414	23.13	ug/L #	38
29) cis-1,2-Dichloroethene...	6.093	61	390	20.34	ug/L #	61
30) Chloroform SCAN	6.650	83	449	21.58	ug/L #	27
31) 1,1,1-Trichloroethane ...	6.893	97	2047	107.99	ug/L #	19
32) Carbon tetrachloride SCAN	7.173	117	625	31.61	ug/L #	15
33) Benzene SCAN	7.860	78	1960	37.55	ug/L	93
34) 1,2-Dichloroethane SCAN	7.562	62	1492	77.42	ug/L #	1
35) Trichloroethene SCAN	8.568	130	606	42.25	ug/L #	41
36) Toluene-d8 SCAN	10.475	98	2676	46.49	ug/L	98
37) Toluene SCAN	10.580	91	6871	93.21	ug/L	78
38) 1,1,2-Trichloroethane ...	11.241	97	479	28.95	ug/L #	38
39) Tetrachloroethene SCAN	11.441	166	1049	59.23	ug/L #	22
40) Chlorobenzene SCAN	12.764	112	3421	67.92	ug/L #	90
41) 1,1,1,2-Tetrachloroeth...	12.907	131	710	38.09	ug/L #	16
42) Ethylbenzene SCAN	13.177	91	10015	74.57	ug/L	81
43) m&p-Xylene SCAN	13.177	91	10015	74.57	ug/L	84
44) o-Xylene SCAN	13.781	91	5154	71.70	ug/L	92
45) 1,1,2,2-Tetrachloroeth...	14.872	83	2194	62.59	ug/L #	29
47) 1,2,4-Trimethylbenzene...	15.899	105	5213	67.25	ug/L #	88
48) Naphthalene SCAN	17.903	128	8107	69.11	ug/L	80

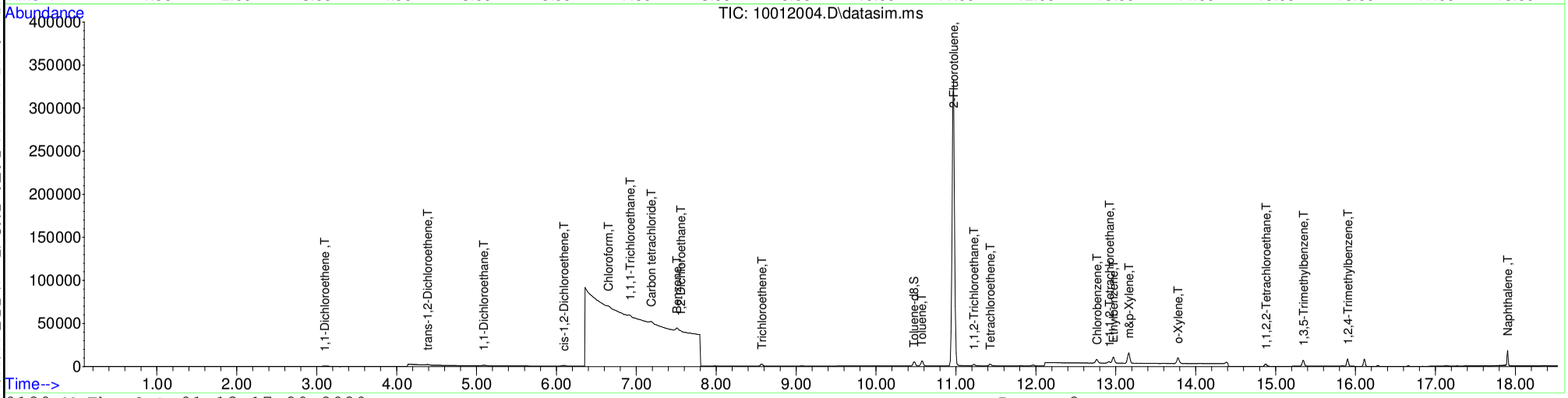
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012004.D
Acq On : 1 Oct 2020 12:56
InstName : AG5975C
Operator : TD
Sample : S20J003-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 01 13:14:58 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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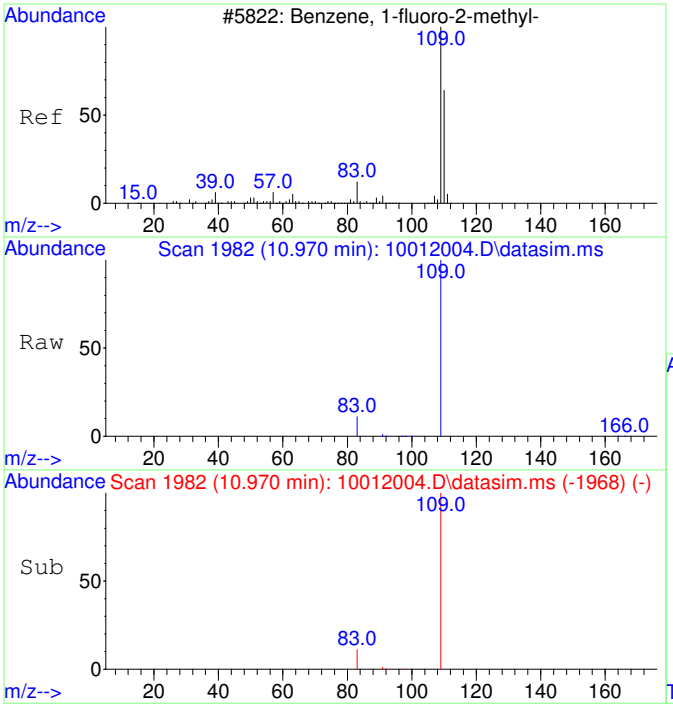
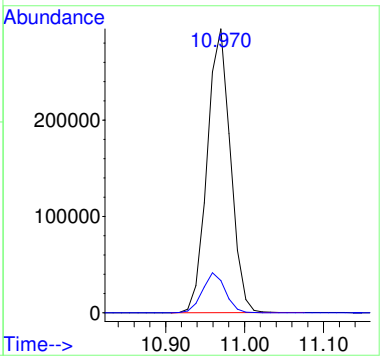
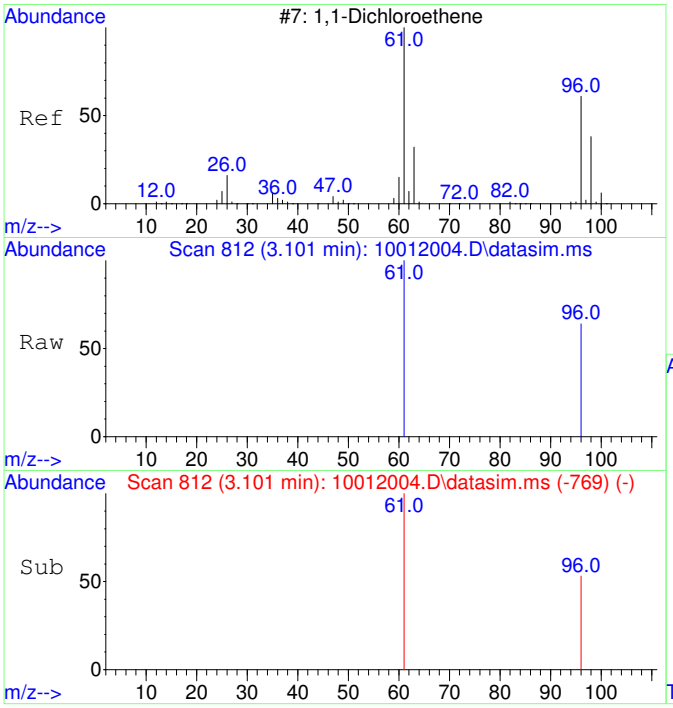


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:109 Resp: 603773

Ion	Ratio	Lower	Upper
109	100		
83	13.8	0.0	42.3

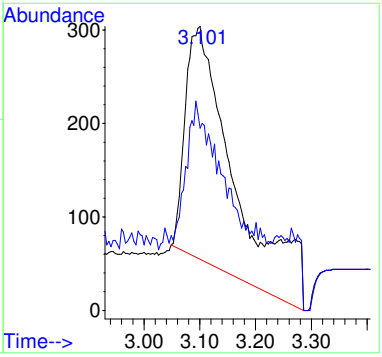




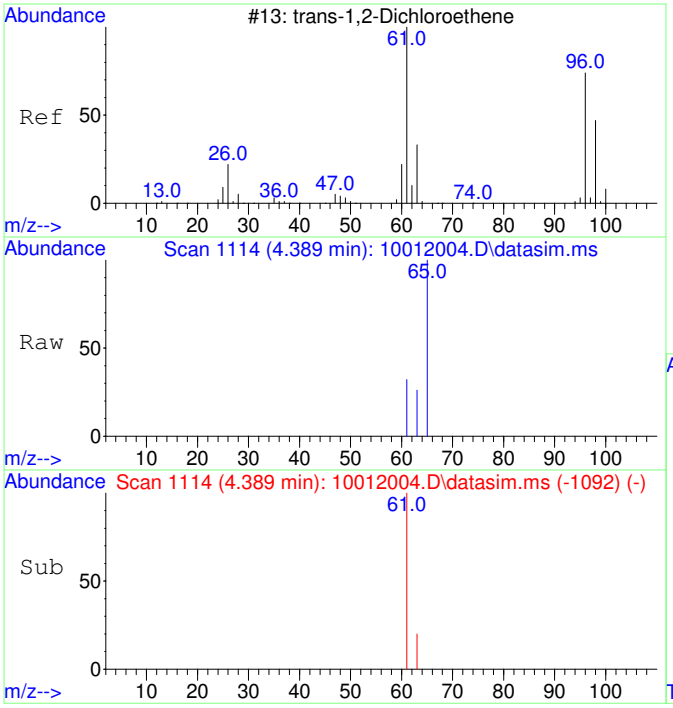
#2
1,1-Dichloroethene
Concen: 62.92 ug/L
RT: 3.101 min Scan# 812
Delta R.T. 0.011 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 61 Resp: 1517

Ion	Ratio	Lower	Upper
61	100		
96	63.2	37.2	97.2



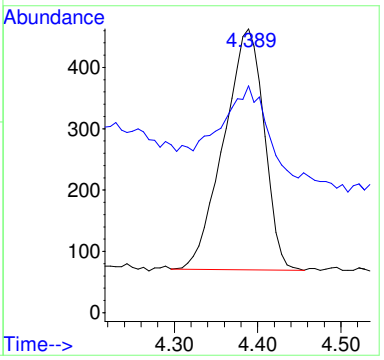
Before MI:
IMPROPER
BASELINE

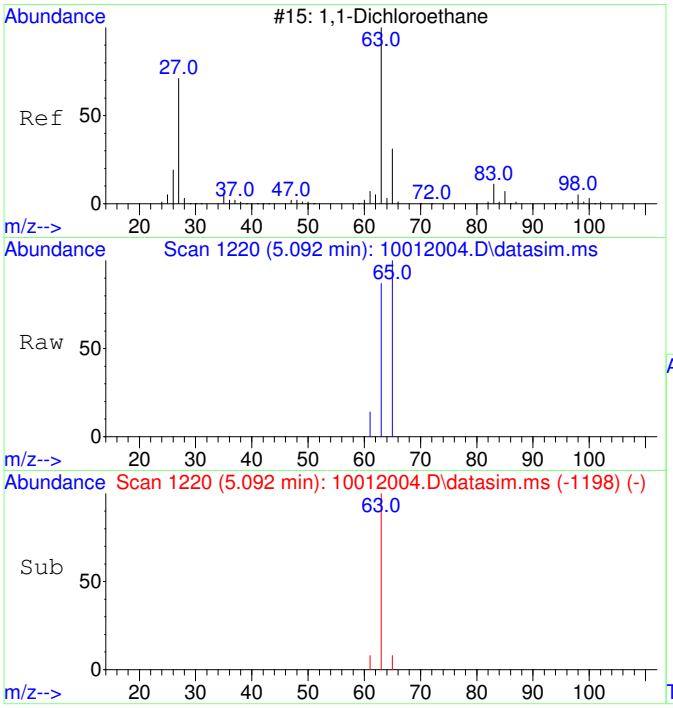


#3
trans-1,2-Dichloroethene
Concen: 47.57 ug/L
RT: 4.389 min Scan# 1114
Delta R.T. -0.007 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 61 Resp: 1325

Ion	Ratio	Lower	Upper
61	100		
63	49.4	2.4	62.4

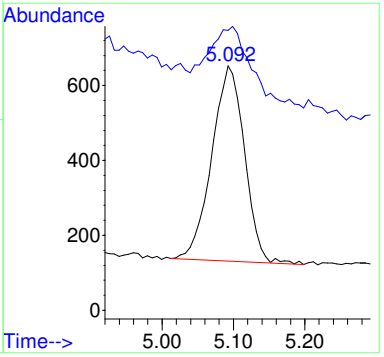


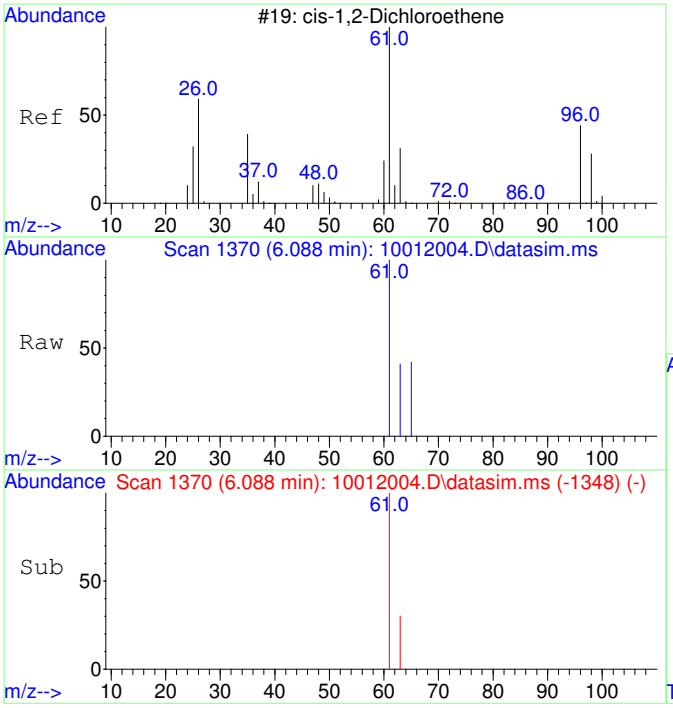


#4
1,1-Dichloroethane
Concen: 47.93 ug/L
RT: 5.092 min Scan# 1220
Delta R.T. -0.007 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 63 Resp: 1662

Ion	Ratio	Lower	Upper
63	100		
65	58.1	1.8	61.8

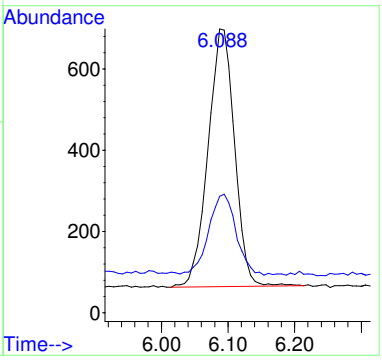


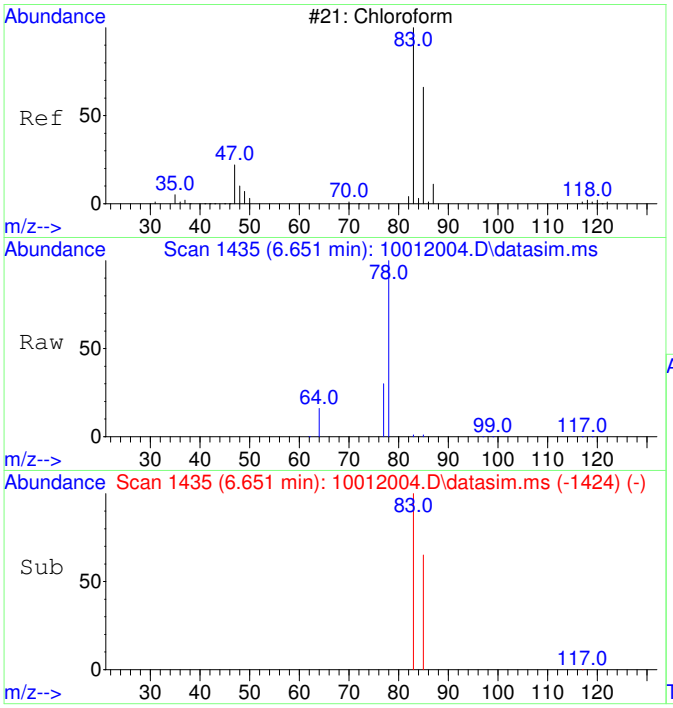


#5
cis-1,2-Dichloroethene
Concen: 47.87 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. -0.007 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 61 Resp: 1752

Ion	Ratio	Lower	Upper
61	100		
63	32.1	2.5	62.5

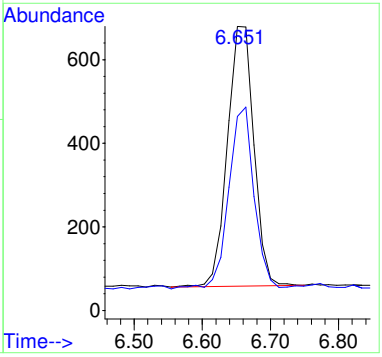


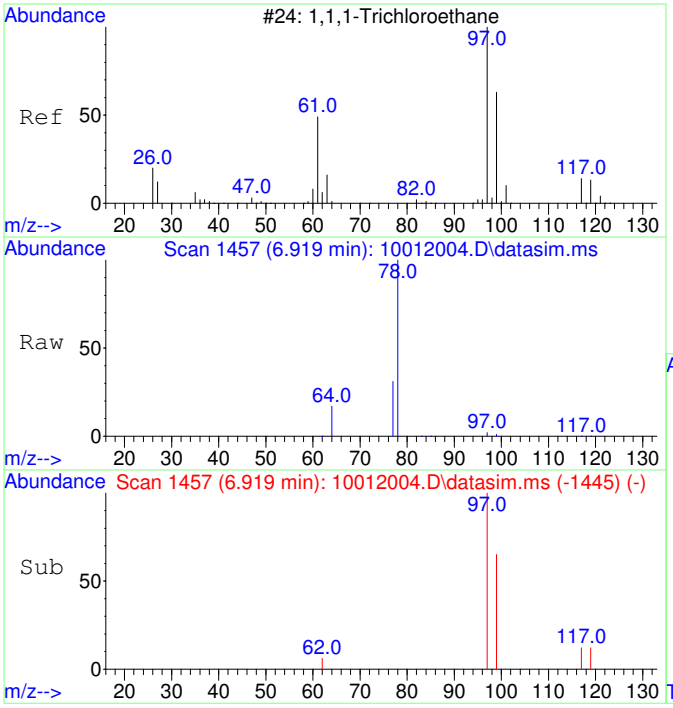


#6
Chloroform
Concen: 44.68 ug/L
RT: 6.651 min Scan# 1435
Delta R.T. -0.012 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 83 Resp: 1674

Ion	Ratio	Lower	Upper
83	100		
85	65.9	35.1	95.1

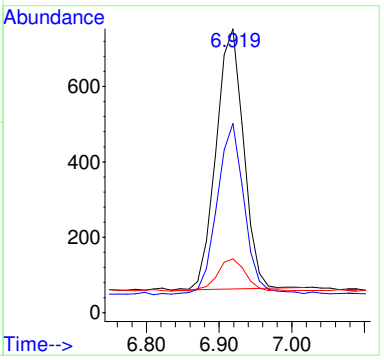


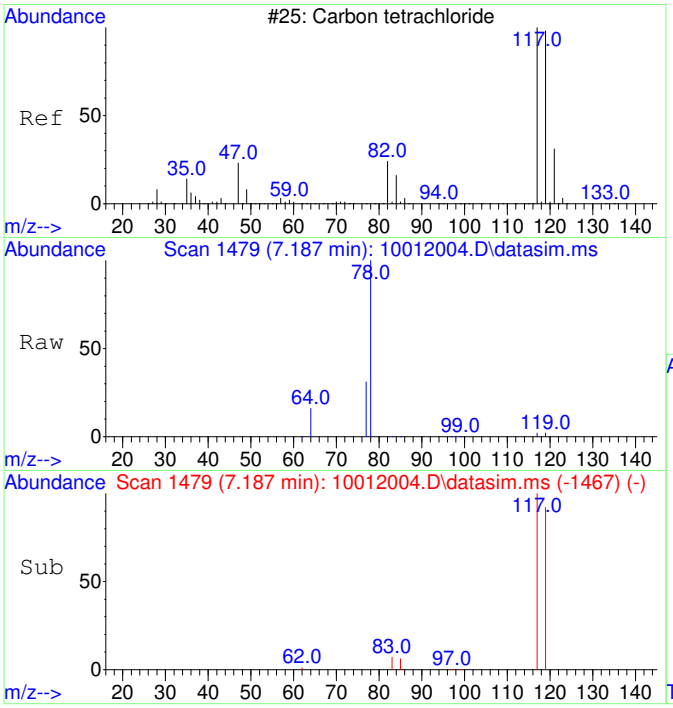


#7
1,1,1-Trichloroethane
Concen: 44.49 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 97 Resp: 1810

Ion	Ratio	Lower	Upper
97	100		
99	64.5	34.6	94.6
117	13.2	0.0	43.2

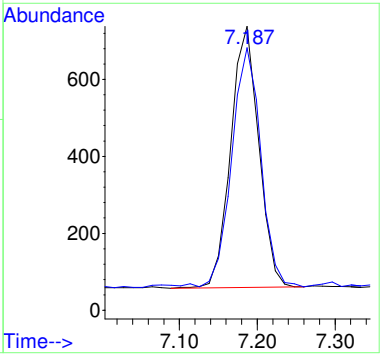


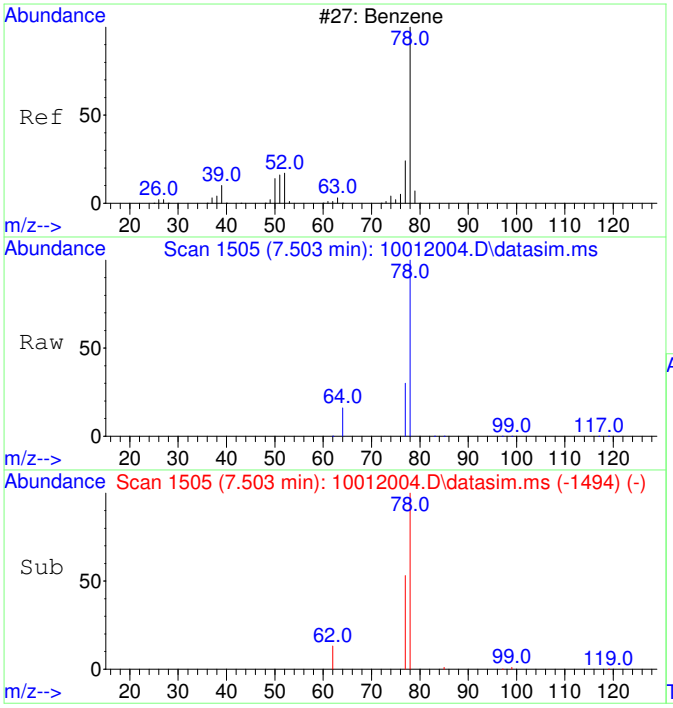


#8
Carbon tetrachloride
Concen: 44.50 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:117 Resp: 1704

Ion	Ratio	Lower	Upper
117	100		
119	93.8	66.4	126.4

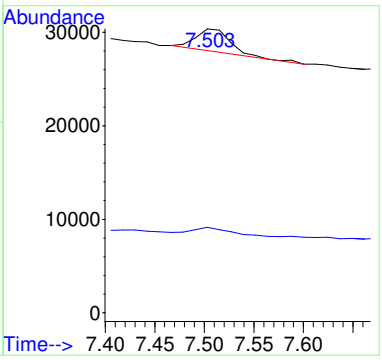


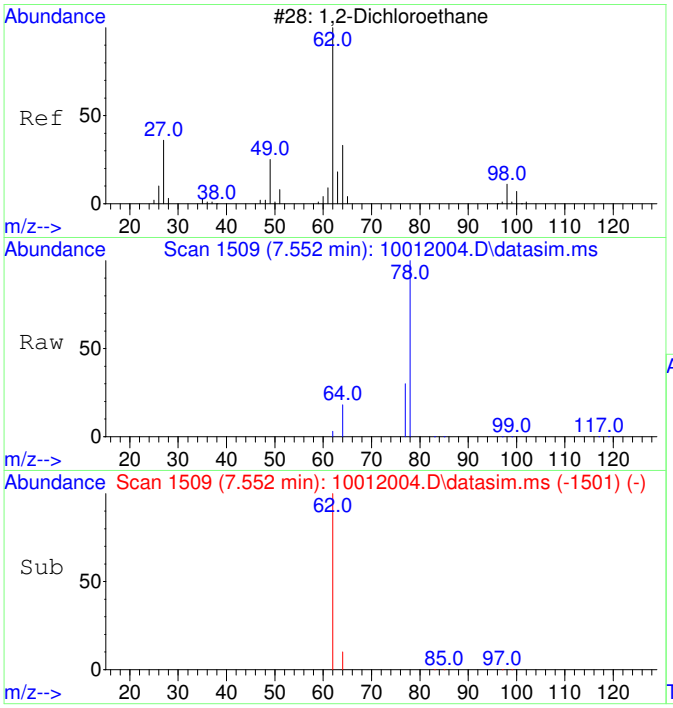


#9
Benzene
Concen: 50.34 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 78 Resp: 5164

Ion	Ratio	Lower	Upper
78	100		
77	71.2	0.0	53.2#

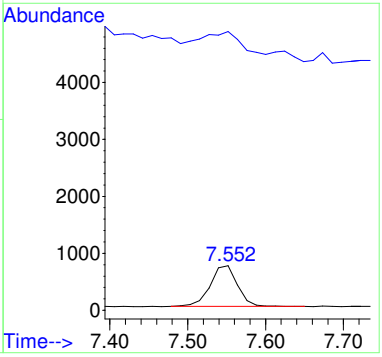


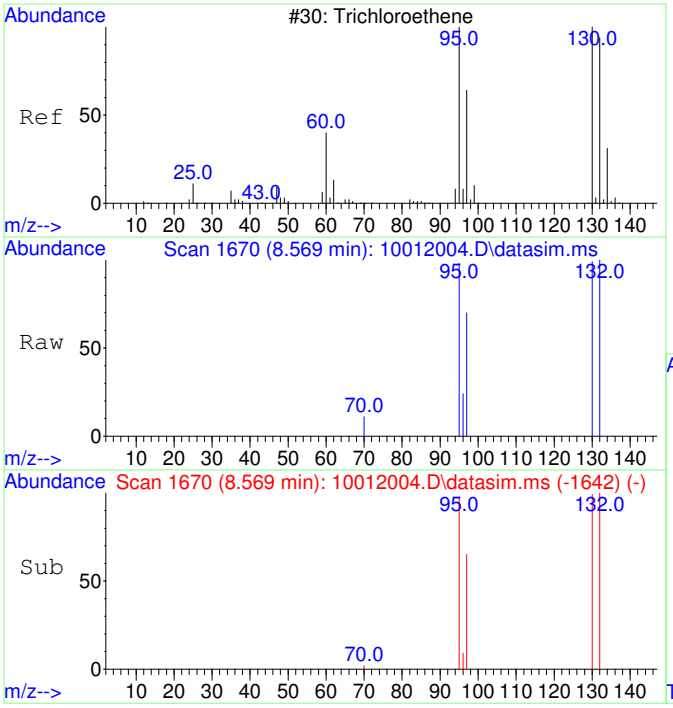


#10
1,2-Dichloroethane
Concen: 47.41 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 62 Resp: 1736

Ion	Ratio	Lower	Upper
62	100		
64	88.6	2.3	62.3#

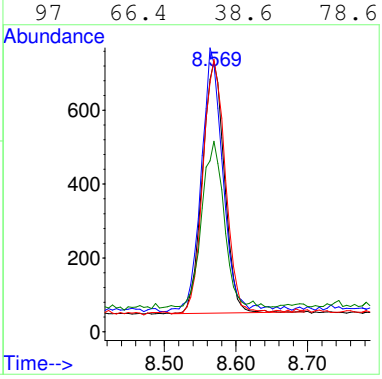


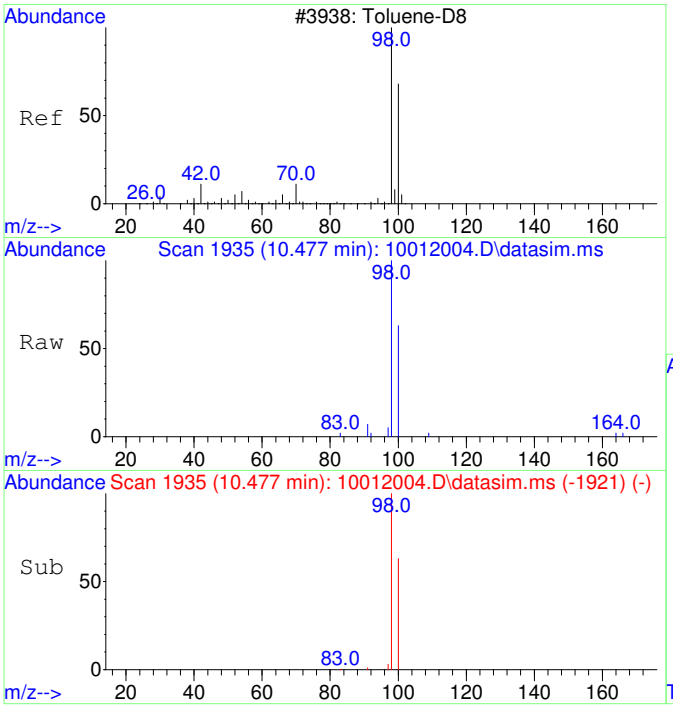


#11
Trichloroethene
Concen: 46.91 ug/L
RT: 8.569 min Scan# 1670
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:130 Resp: 1449

Ion	Ratio	Lower	Upper
130	100		
95	101.4	60.7	120.7
132	101.9	76.0	116.0
97	66.4	38.6	78.6

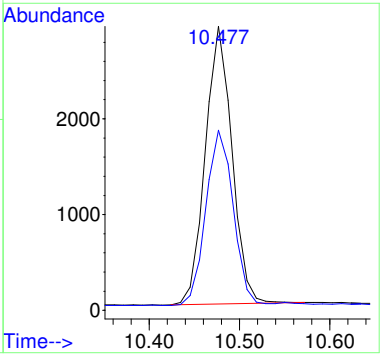


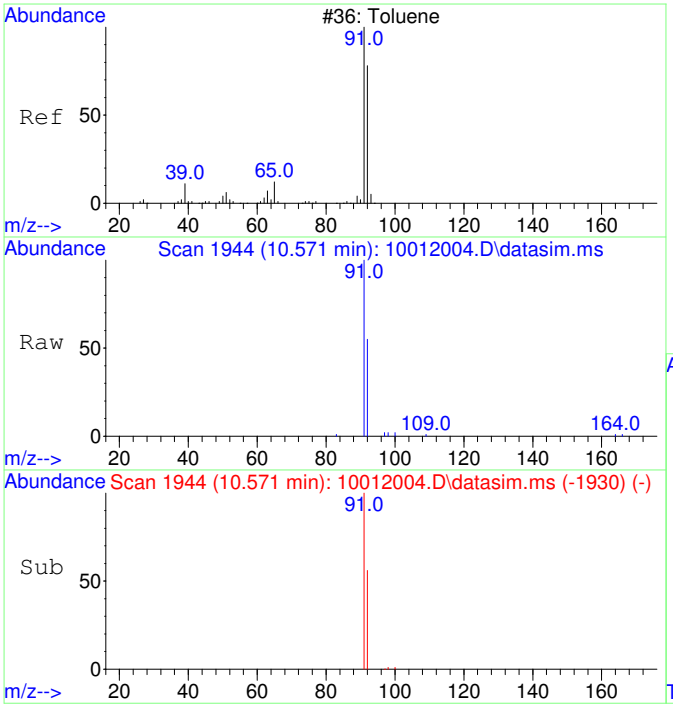


#12
Toluene-d8
Concen: 50.47 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 98 Resp: 5965

Ion	Ratio	Lower	Upper
98	100		
100	64.9	37.1	97.1

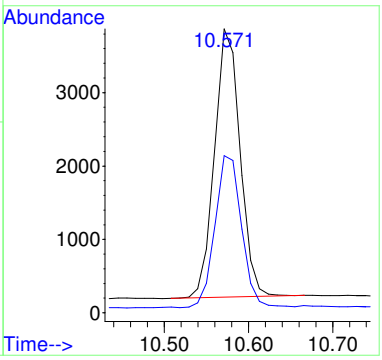


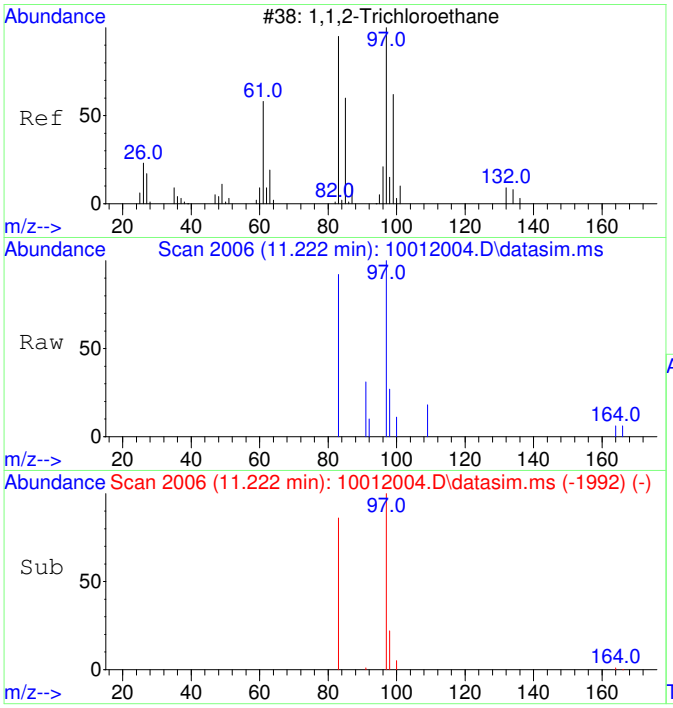


#13
Toluene
Concen: 51.21 ug/L
RT: 10.571 min Scan# 1944
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 7716

Ion	Ratio	Lower	Upper
91	100		
92	58.4	29.9	89.9

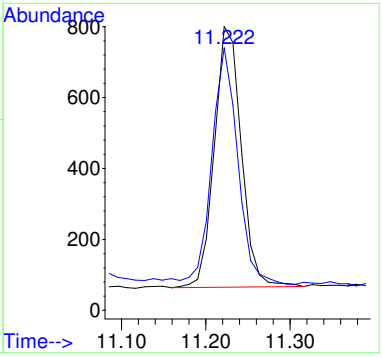


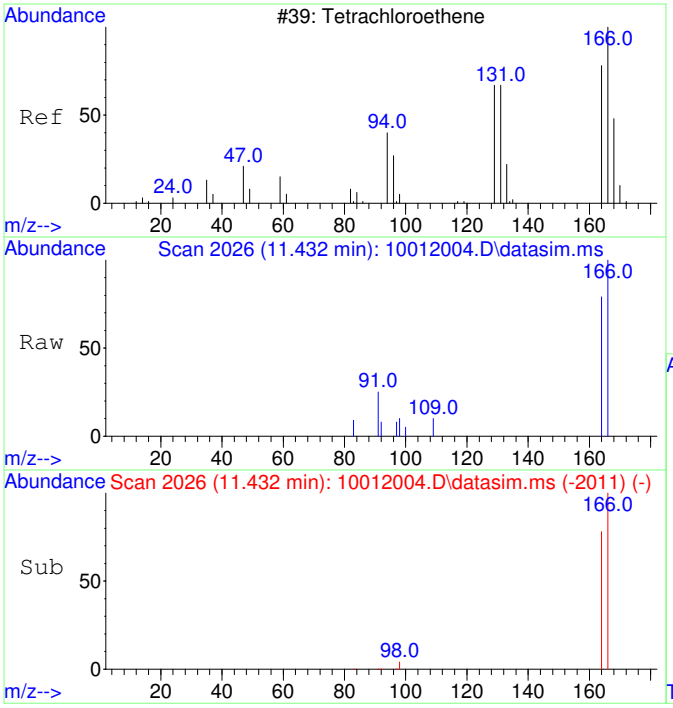


#14
1,1,2-Trichloroethane
Concen: 49.76 ug/L
RT: 11.222 min Scan# 2006
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 97 Resp: 1634

Ion	Ratio	Lower	Upper
97	100		
83	88.1	51.2	111.2

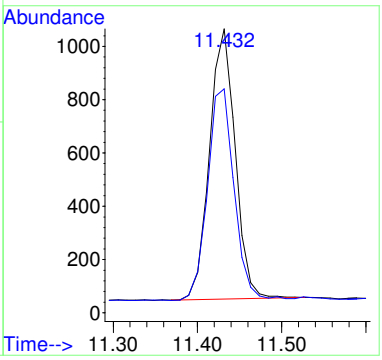


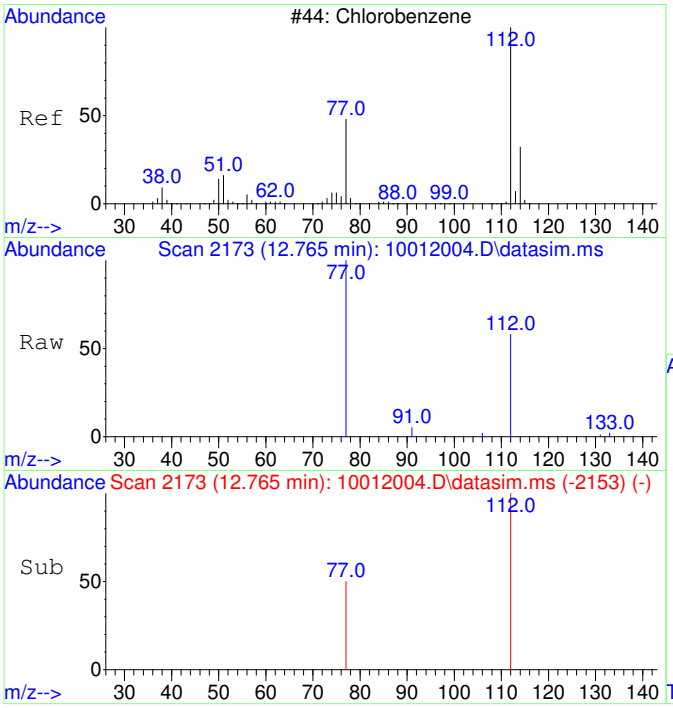


#15
Tetrachloroethene
Concen: 49.26 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:166 Resp: 2148

Ion	Ratio	Lower	Upper
166	100		
164	80.2	47.8	107.8

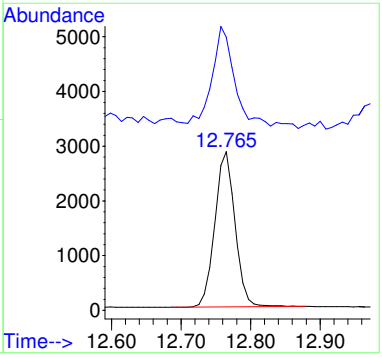


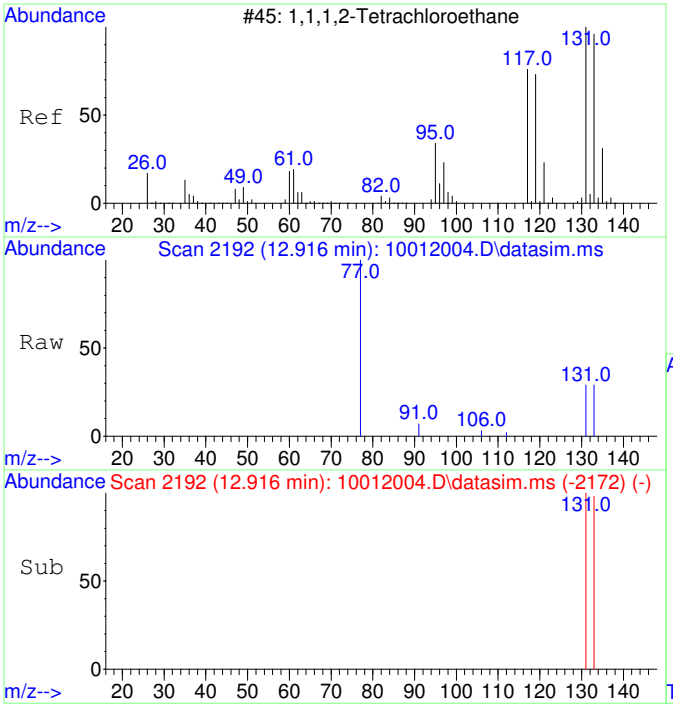


#16
Chlorobenzene
Concen: 52.98 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. 0.008 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:112 Resp: 5716

Ion	Ratio	Lower	Upper
112	100		
77	72.4	23.6	83.6

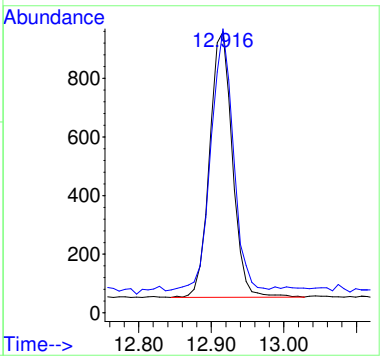


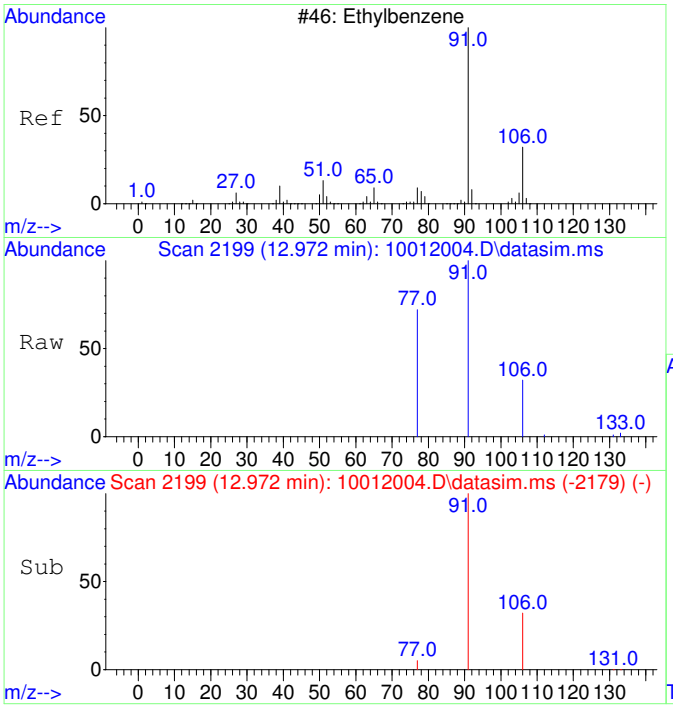


#17
1,1,1,2-Tetrachloroethane
Concen: 51.06 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.008 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:131 Resp: 1974

Ion	Ratio	Lower	Upper
131	100		
133	96.3	66.3	126.3

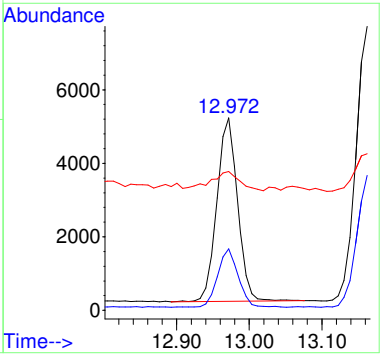


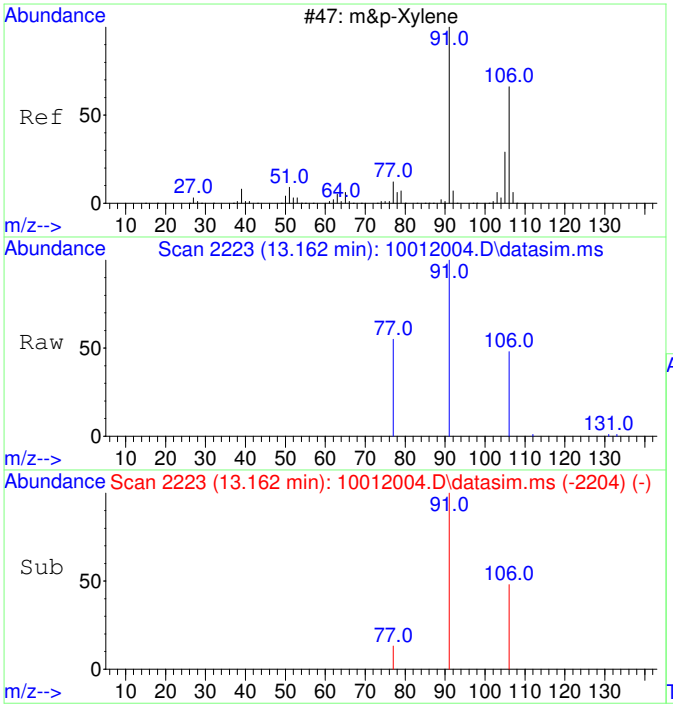


#18
Ethylbenzene
Concen: 53.81 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.008 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 9869

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

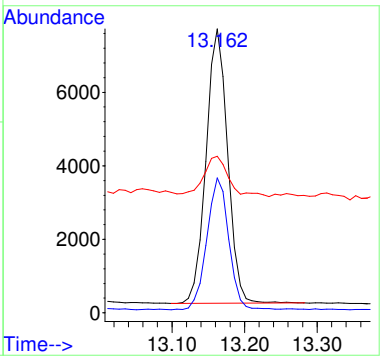


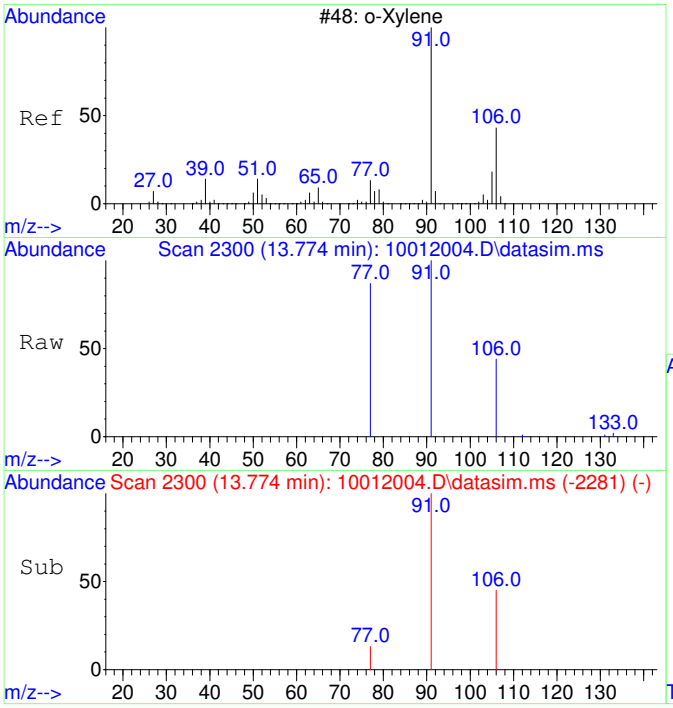


#19
m&p-Xylene
Concen: 107.97 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 15478

Ion	Ratio	Lower	Upper
91	100		
106	48.3	22.2	82.2
77	17.2	0.0	42.4

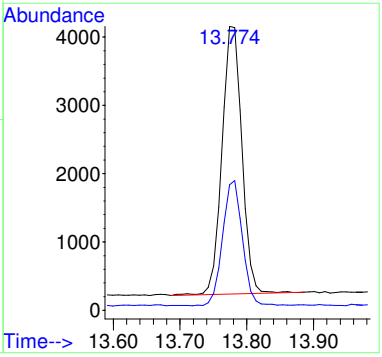


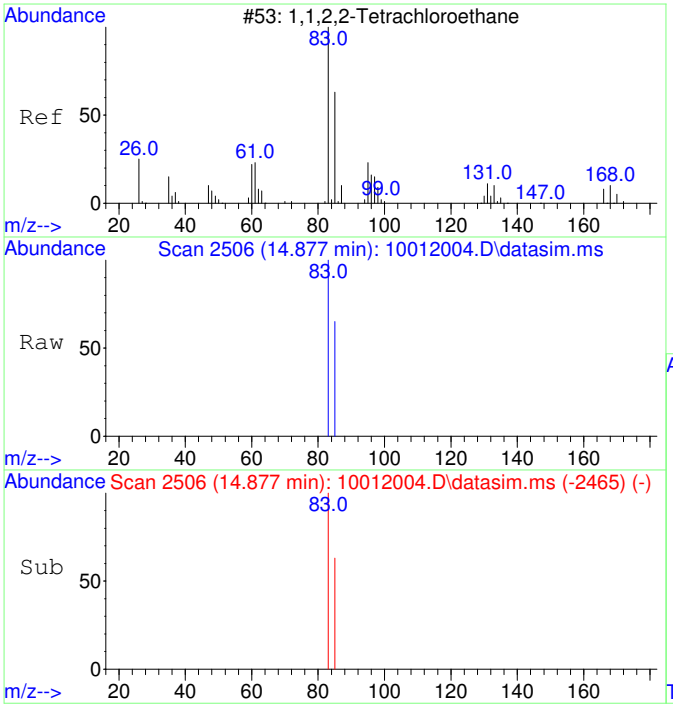


#20
o-Xylene
Concen: 52.91 ug/L
RT: 13.774 min Scan# 2300
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 8103

Ion	Ratio	Lower	Upper
91	100		
106	46.3	19.2	79.2

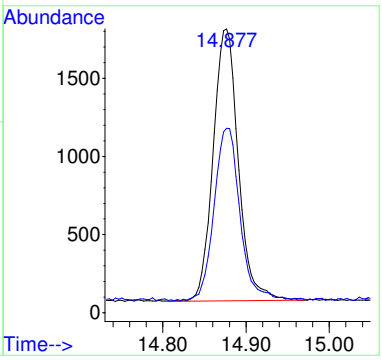


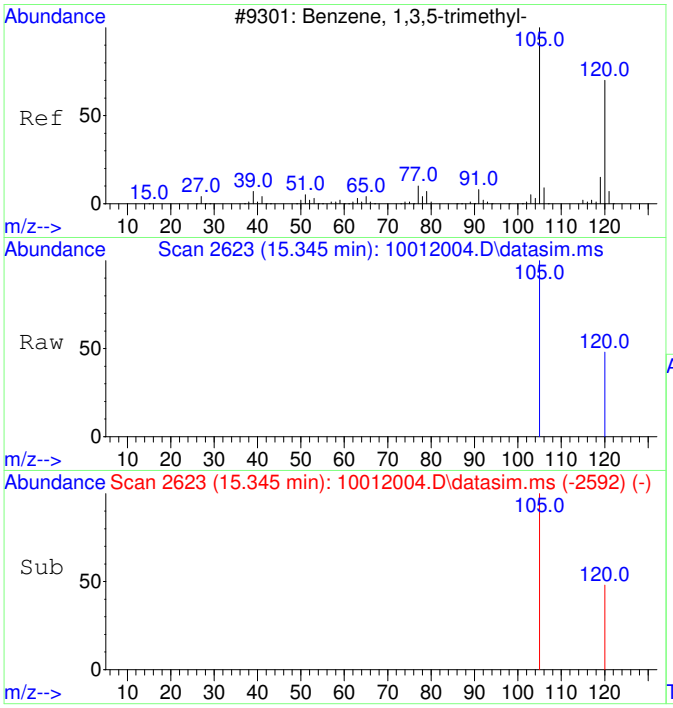


#21
1,1,2,2-Tetrachloroethane
Concen: 53.86 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. 0.004 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 83 Resp: 3656

Ion	Ratio	Lower	Upper
83	100		
85	64.4	34.8	94.8

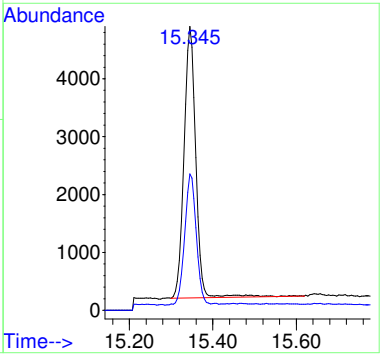


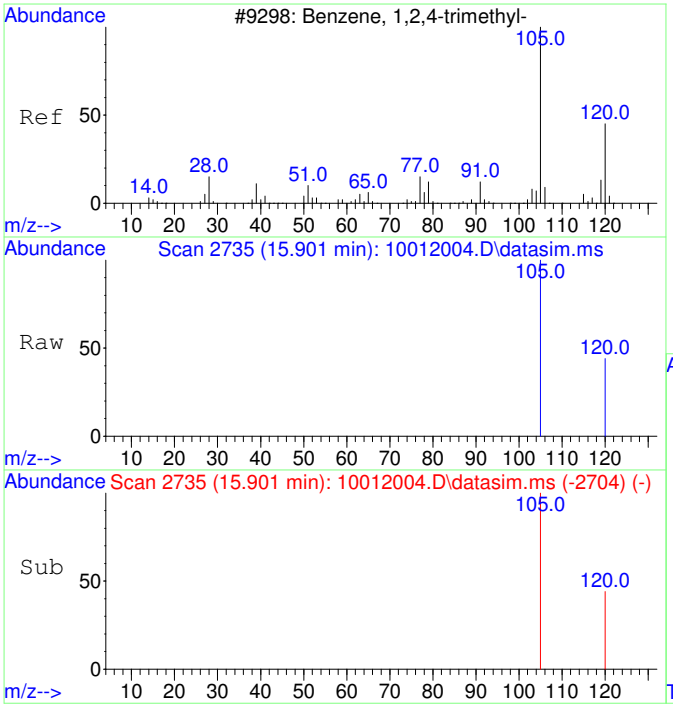


#22
1,3,5-Trimethylbenzene
Concen: 56.18 ug/L
RT: 15.345 min Scan# 2623
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:105 Resp: 9158

Ion	Ratio	Lower	Upper
105	100		
120	47.4	21.1	81.1

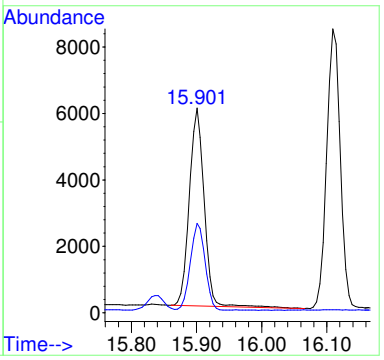


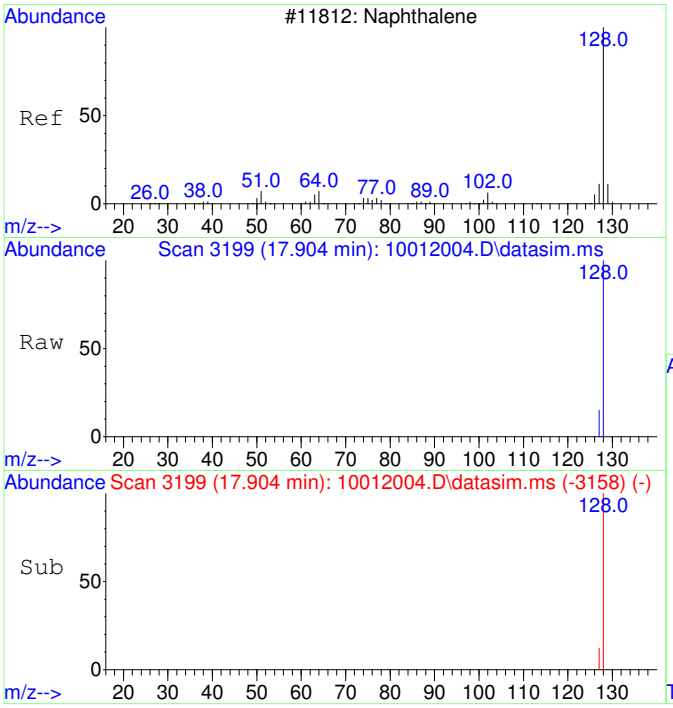


#23
1,2,4-Trimethylbenzene
Concen: 55.77 ug/L
RT: 15.901 min Scan# 2735
Delta R.T. 0.005 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:105 Resp: 9443

Ion	Ratio	Lower	Upper
105	100		
120	42.9	17.2	77.2

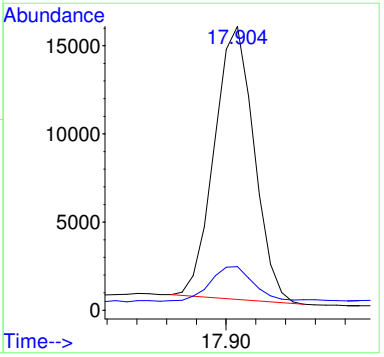


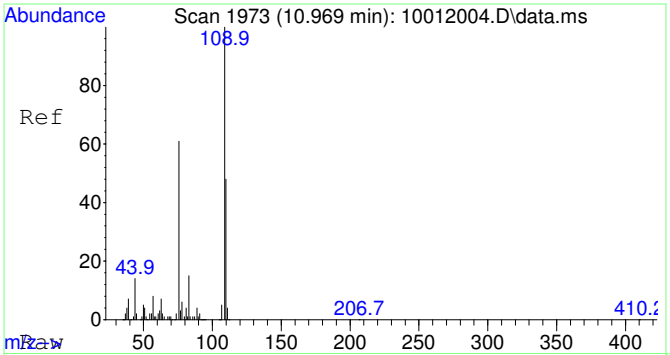


#24
Naphthalene
Concen: 53.45 ug/L
RT: 17.904 min Scan# 3199
Delta R.T. 0.001 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:128 Resp: 14305

Ion	Ratio	Lower	Upper
128	100		
127	17.0	0.0	42.5

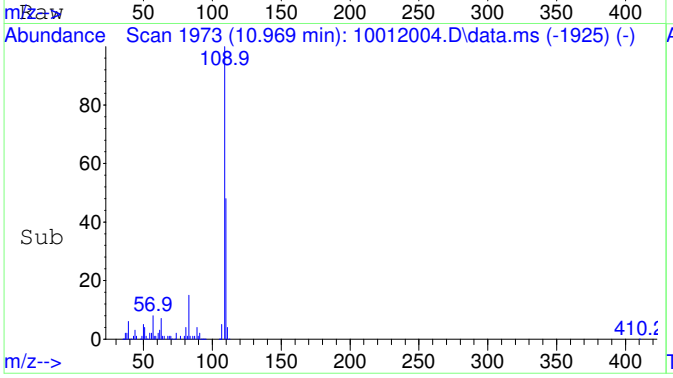


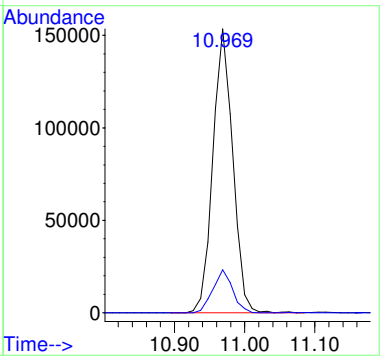


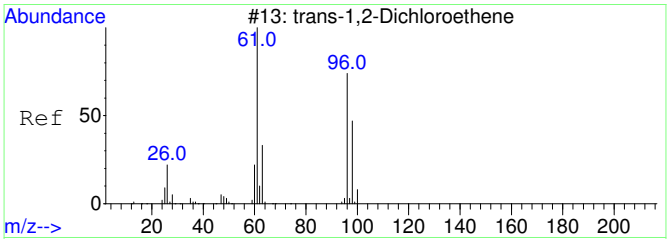
#25
2-Fluorotoluene SCAN
Concen: 5142.15 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

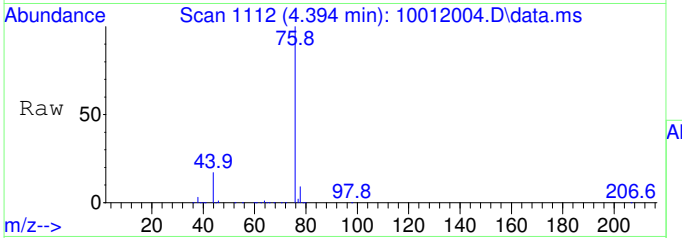
Tgt Ion:109 Resp: 302650

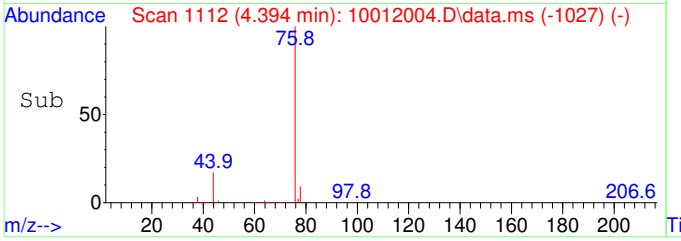
Ion	Ratio	Lower	Upper
109	100		
83	15.0	0.0	43.8







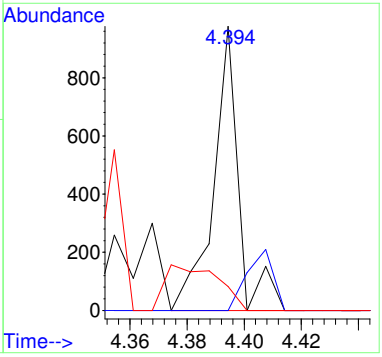


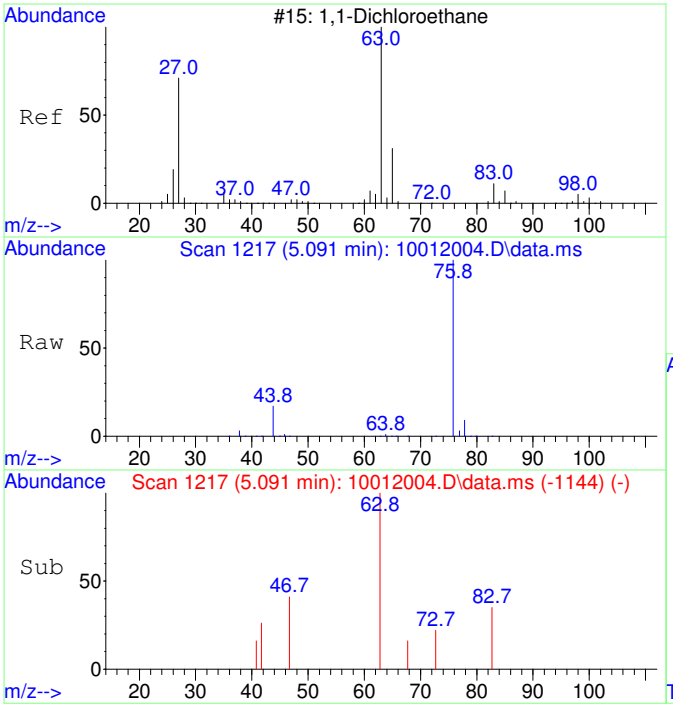


#27
trans-1,2-Dichloroethene SCAN
Concen: 38.34 ug/L
RT: 4.394 min Scan# 1112
Delta R.T. -0.007 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 61 Resp: 593

Ion	Ratio	Lower	Upper
61	100		
96	22.8	49.0	109.0#
98	0.0	20.5	80.5#

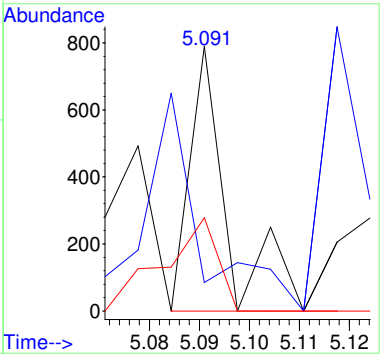


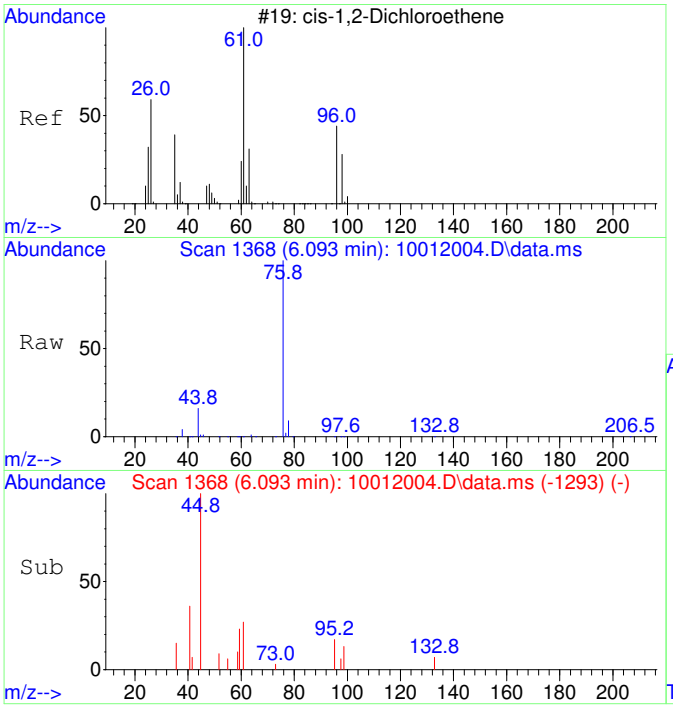


#28
1,1-Dichloroethane SCAN
Concen: 23.13 ug/L
RT: 5.091 min Scan# 1217
Delta R.T. -0.013 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 63 Resp: 414

Ion	Ratio	Lower	Upper
63	100		
65	59.4	1.3	61.3
83	51.4	0.0	45.9#

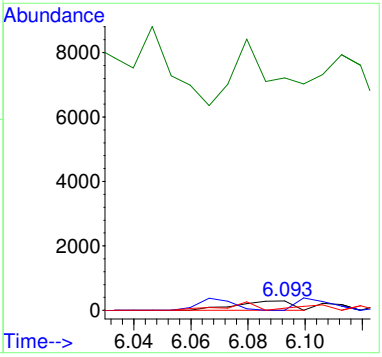


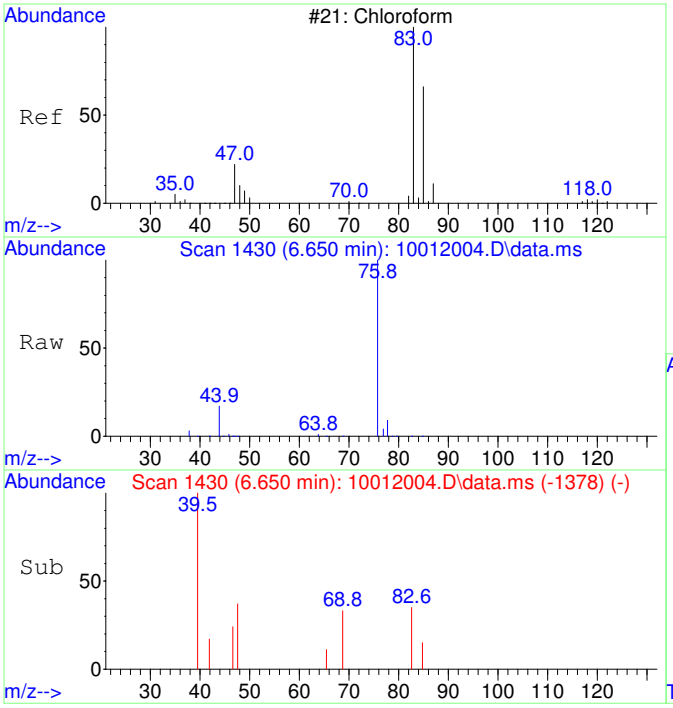


#29
cis-1,2-Dichloroethene SCAN
Concen: 20.34 ug/L
RT: 6.093 min Scan# 1368
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 61 Resp: 390

Ion	Ratio	Lower	Upper
61	100		
96	94.6	39.9	99.9
98	20.0	13.5	73.5
64	0.0	4.5	64.5#

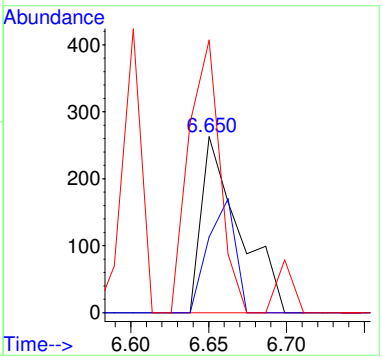


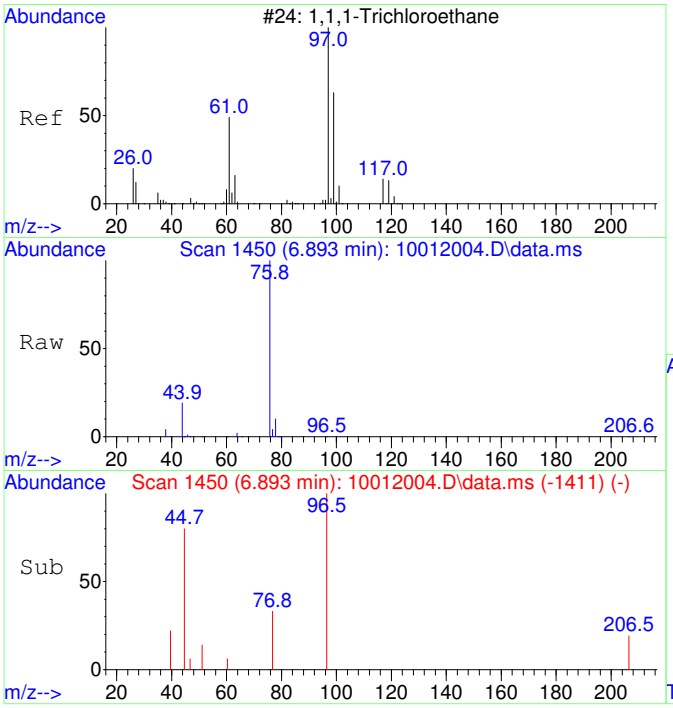


#30
Chloroform SCAN
Concen: 21.58 ug/L
RT: 6.650 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 83 Resp: 449

Ion	Ratio	Lower	Upper
83	100		
85	46.1	34.6	94.6
47	126.5	0.0	53.4#

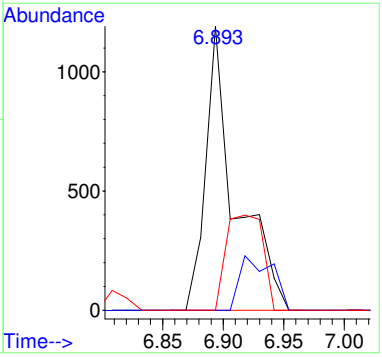


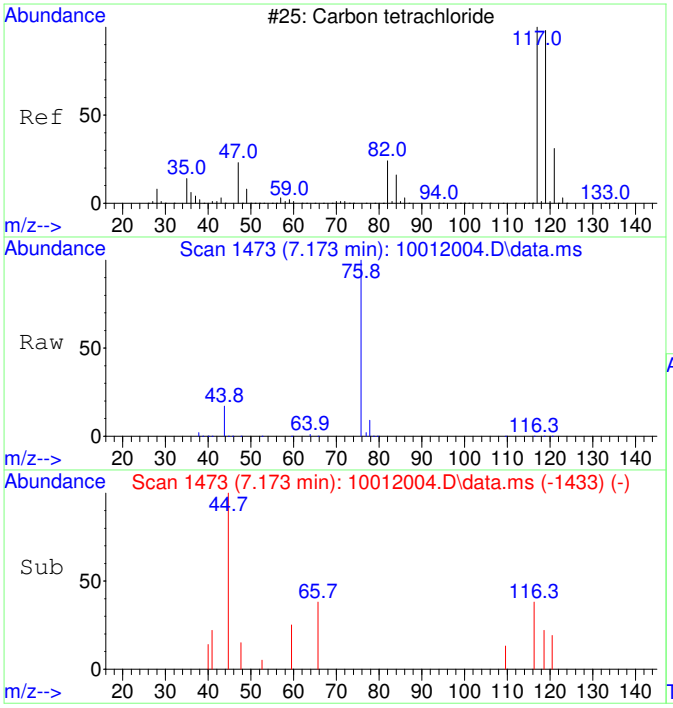


#31
1,1,1-Trichloroethane SCAN
Concen: 107.99 ug/L
RT: 6.893 min Scan# 1450
Delta R.T. -0.024 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 97 Resp: 2047

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

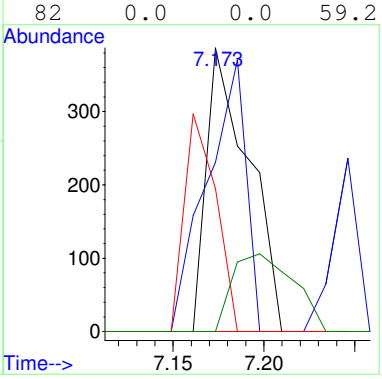


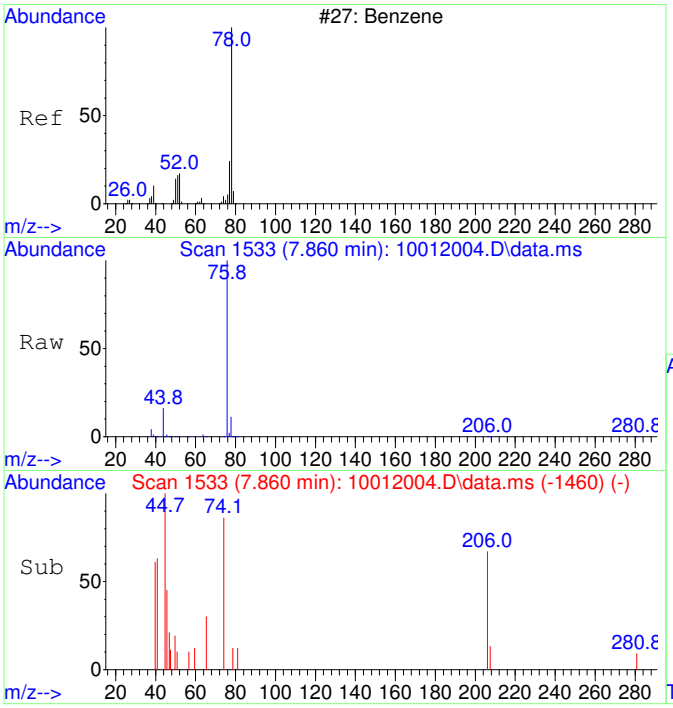


#32
Carbon tetrachloride SCAN
Concen: 31.61 ug/L
RT: 7.173 min Scan# 1473
Delta R.T. -0.012 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:117 Resp: 625

Ion	Ratio	Lower	Upper
117	100		
119	0.0	75.5	135.5#
121	57.4	0.0	58.8
82	0.0	0.0	59.2

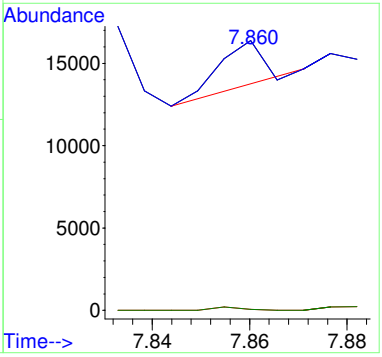


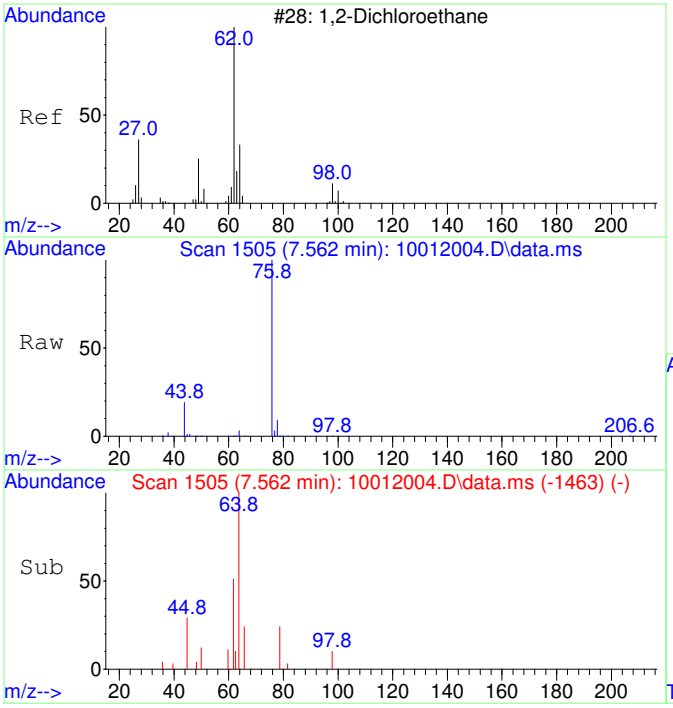


#33
Benzene SCAN
Concen: 37.55 ug/L
RT: 7.860 min Scan# 1533
Delta R.T. 0.346 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 78 Resp: 1960

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	4.4	0.0	47.9
51	4.4	0.0	44.1

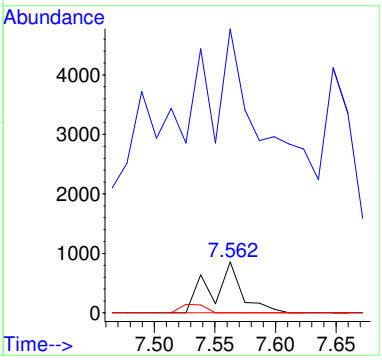


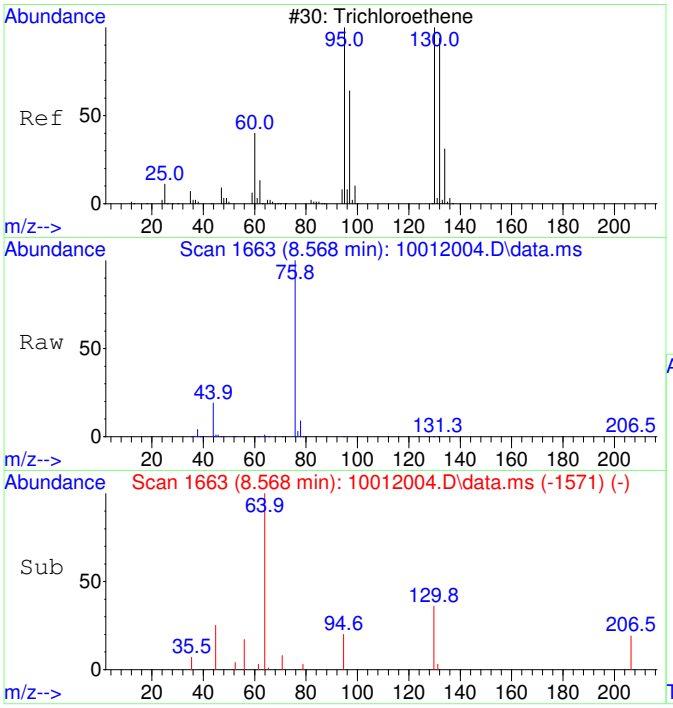


#34
1,2-Dichloroethane SCAN
Concen: 77.42 ug/L
RT: 7.562 min Scan# 1505
Delta R.T. 0.012 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 62 Resp: 1492

Ion	Ratio	Lower	Upper
62	100		
64	306.0	5.2	65.2#
49	0.0	3.9	63.9#

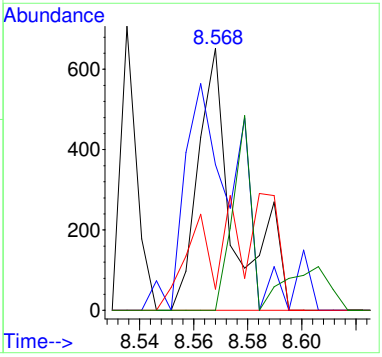


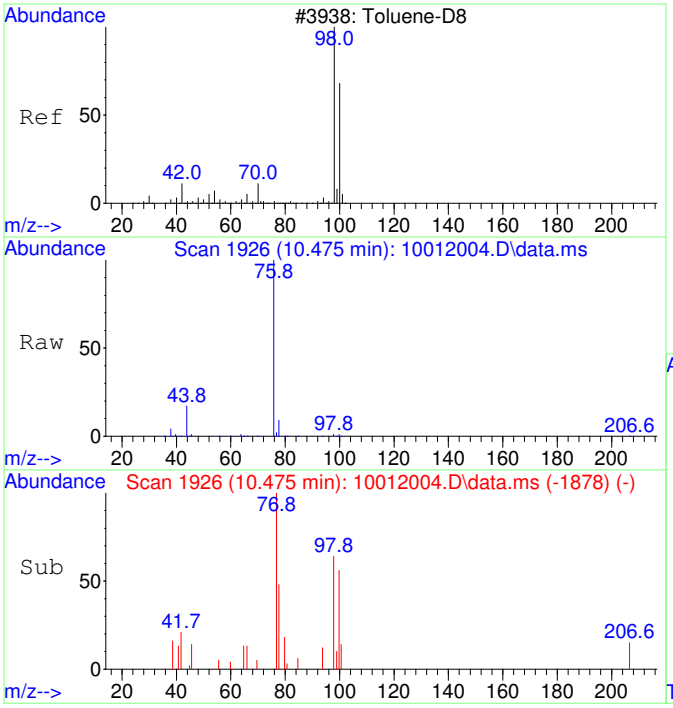


#35
Trichloroethene SCAN
Concen: 42.25 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:130 Resp: 606

Ion	Ratio	Lower	Upper
130	100		
95	120.5	60.5	120.5
132	20.5	59.6	119.6#
97	0.0	28.2	88.2#

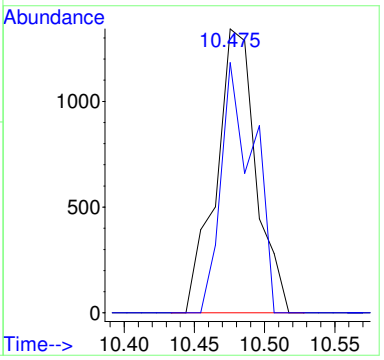


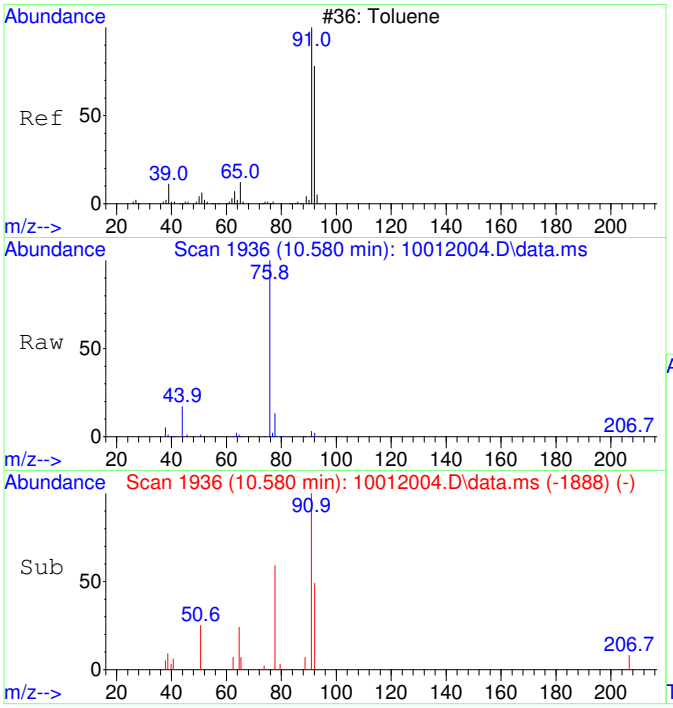


#36
Toluene-d8 SCAN
Concen: 46.49 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 98 Resp: 2676

Ion	Ratio	Lower	Upper
98	100		
100	71.7	40.0	100.0

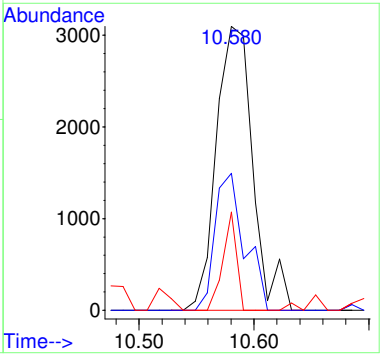


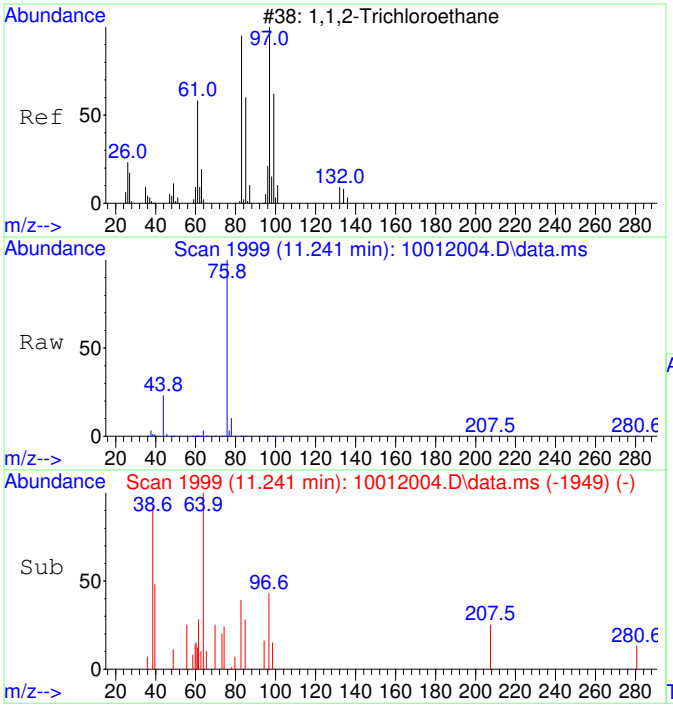


#37
Toluene SCAN
Concen: 93.21 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 6871

Ion	Ratio	Lower	Upper
91	100		
92	39.2	28.3	88.3
65	12.8	0.0	41.0

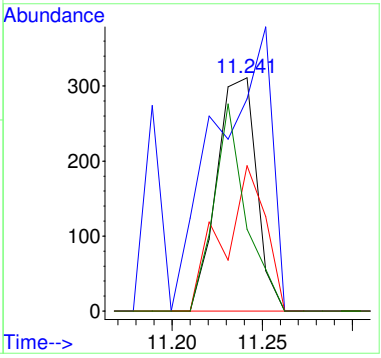


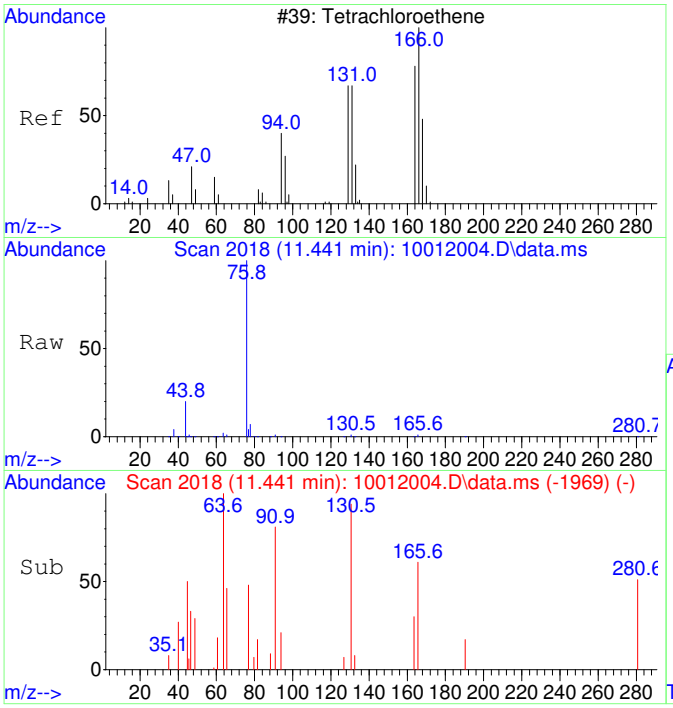


#38
1,1,2-Trichloroethane SCAN
Concen: 28.95 ug/L
RT: 11.241 min Scan# 1999
Delta R.T. 0.021 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 97 Resp: 479

Ion	Ratio	Lower	Upper
97	100		
83	167.6	57.7	117.7#
61	66.6	32.1	92.1
99	0.0	36.7	96.7#

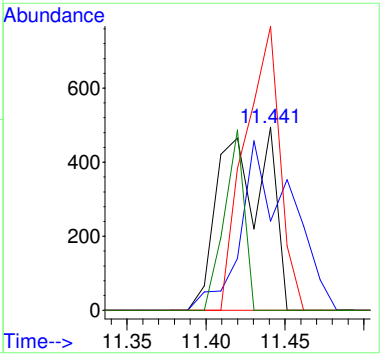


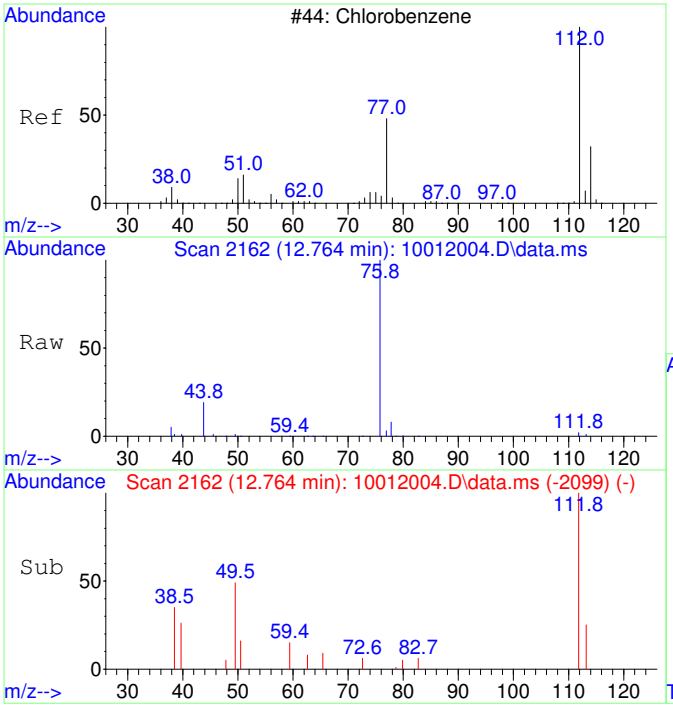


#39
Tetrachloroethene SCAN
Concen: 59.23 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.010 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:166 Resp: 1049

Ion	Ratio	Lower	Upper
166	100		
164	0.0	50.9	110.9#
131	113.1	38.7	98.7#
129	0.0	41.8	101.8#

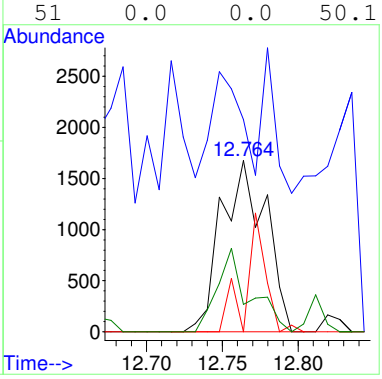


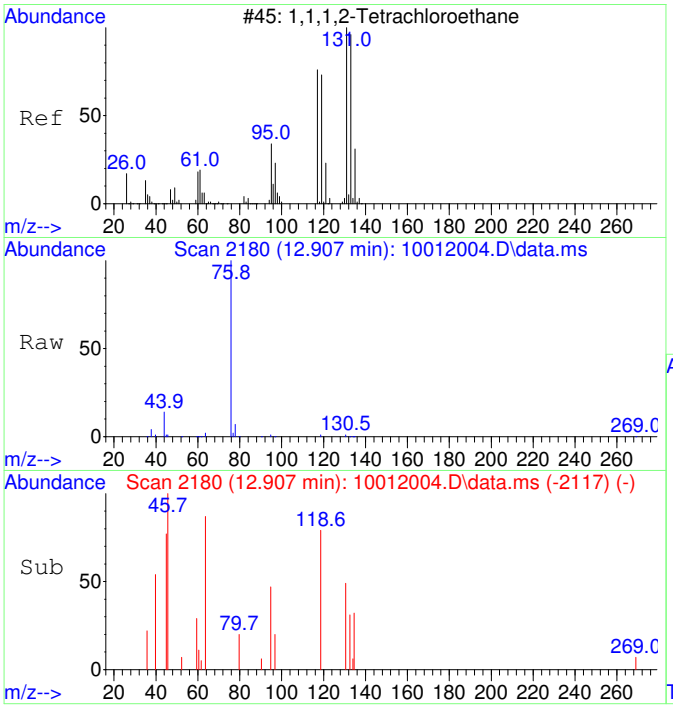


#40
Chlorobenzene SCAN
Concen: 67.92 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:112 Resp: 3421

Ion	Ratio	Lower	Upper
112	100		
77	56.1	28.2	88.2
114	31.0	2.3	62.3
51	0.0	0.0	50.1

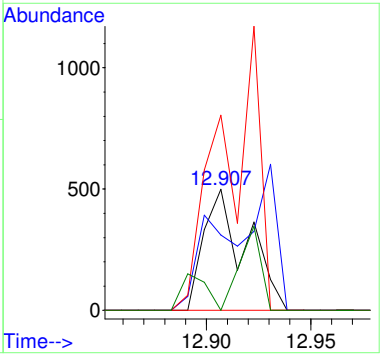


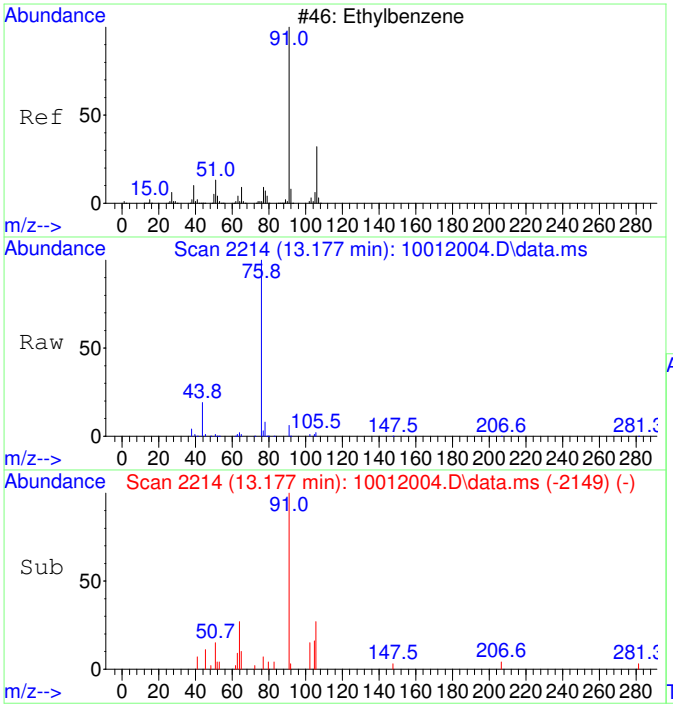


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 38.09 ug/L
RT: 12.907 min Scan# 2180
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:131 Resp: 710

Ion	Ratio	Lower	Upper
131	100		
133	0.0	66.9	126.9#
119	0.0	40.4	100.4#
117	17.9	35.1	95.1#

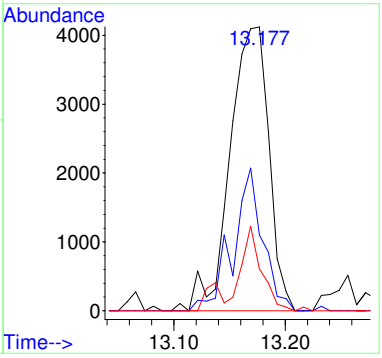


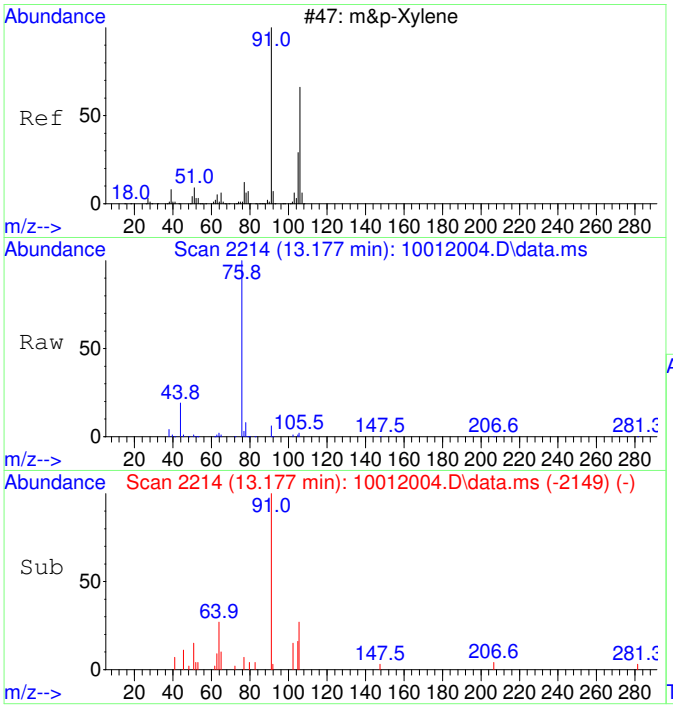


#42
Ethylbenzene SCAN
Concen: 74.57 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 10015

Ion	Ratio	Lower	Upper
91	100		
106	38.5	23.1	83.1
51	13.3	0.0	40.1

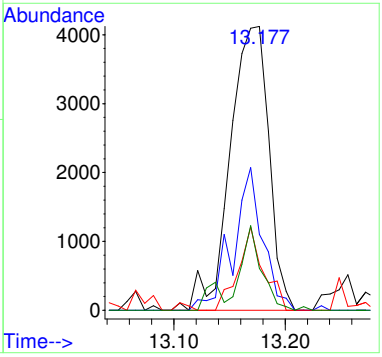


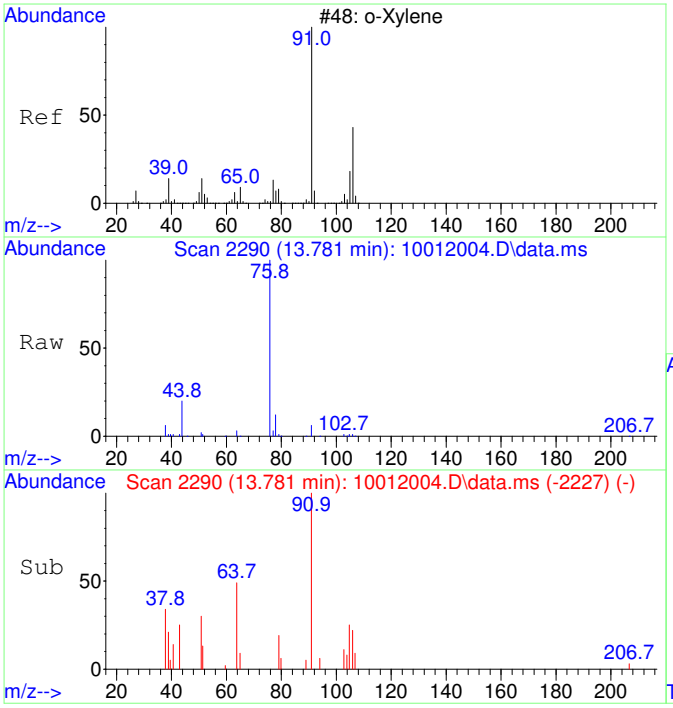


#43
m&p-Xylene SCAN
Concen: 74.57 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 10015

Ion	Ratio	Lower	Upper
91	100		
106	38.5	23.1	83.1
105	19.3	0.0	54.7
51	13.3	0.0	40.1

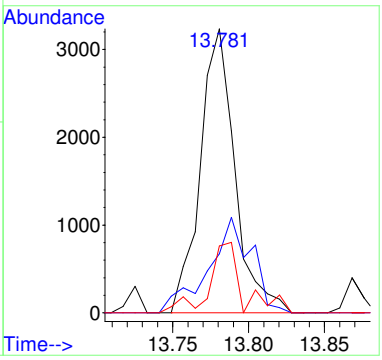


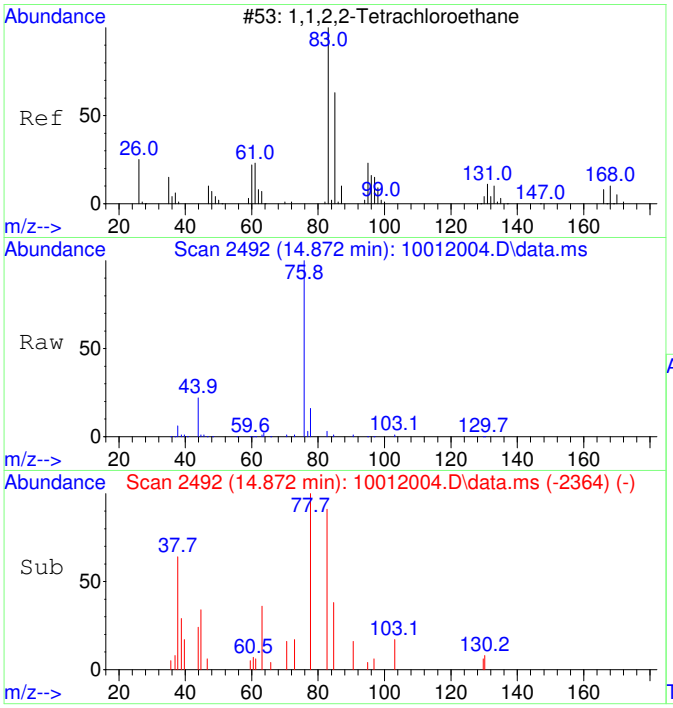


#44
o-Xylene SCAN
Concen: 71.70 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 5154

Ion	Ratio	Lower	Upper
91	100		
106	41.5	18.0	78.0
105	23.8	0.0	56.6

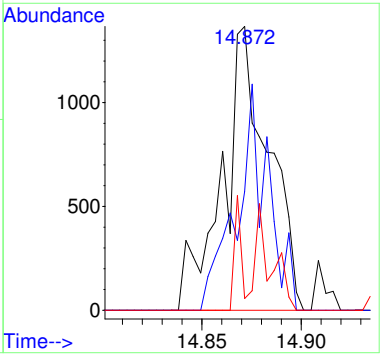


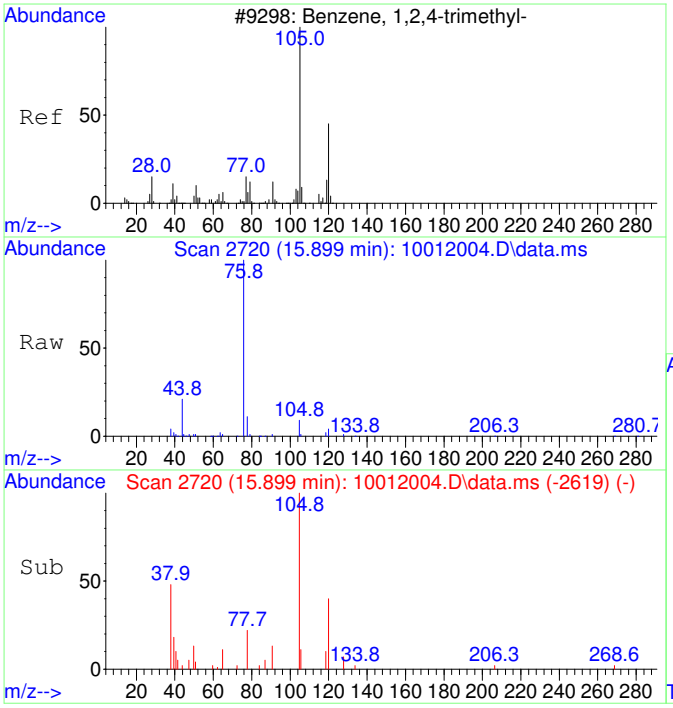


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 62.59 ug/L
RT: 14.872 min Scan# 2492
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 83 Resp: 2194

Ion	Ratio	Lower	Upper
83	100		
85	0.0	35.9	95.9#
95	5.7	0.0	47.4

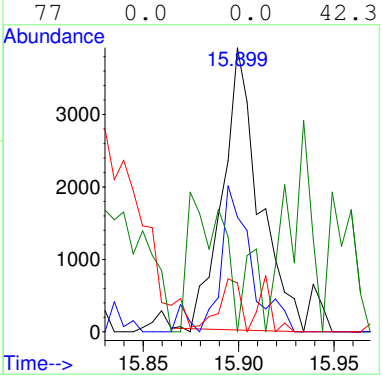


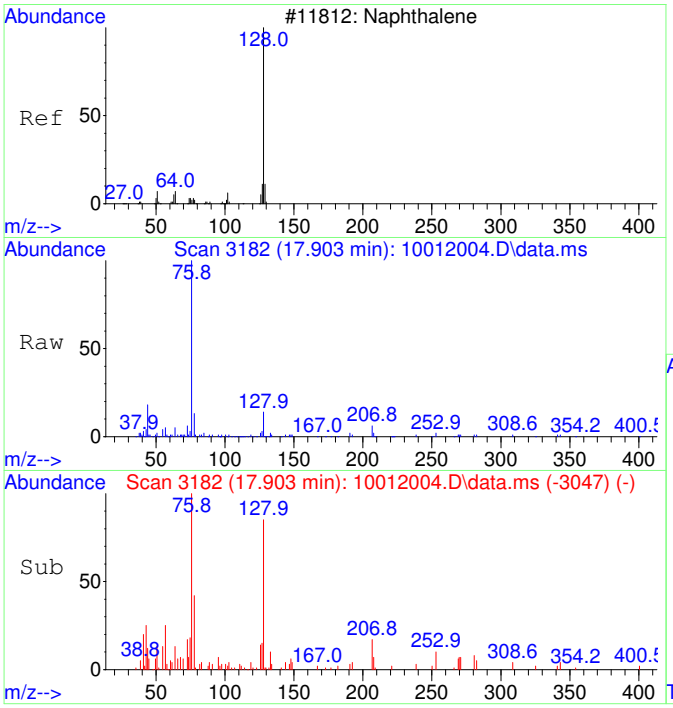


#47
1,2,4-Trimethylbenzene SCAN
Concen: 67.25 ug/L
RT: 15.899 min Scan# 2720
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:105 Resp: 5213

Ion	Ratio	Lower	Upper
105	100		
120	41.5	16.9	76.9
119	9.5	0.0	41.9
77	0.0	0.0	42.3

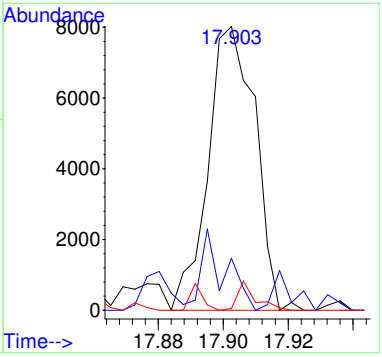




#48
Naphthalene SCAN
Concen: 69.11 ug/L
RT: 17.903 min Scan# 3182
Delta R.T. 0.001 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:128 Resp: 8107

Ion	Ratio	Lower	Upper
128	100		
127	5.6	0.0	44.0
129	3.9	0.0	40.8



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012004.D
Acq On : 1 Oct 2020 12:56
InstName : AG5975C
Operator : TD
Sample : S20J003-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

M.I. Performed By:
TD at 1:24 pm, Oct 01, 2020

M.I. Approved By:
ZR at 3:32 pm, Oct 07, 2020

Quant Time: Oct 01 13:14:58 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

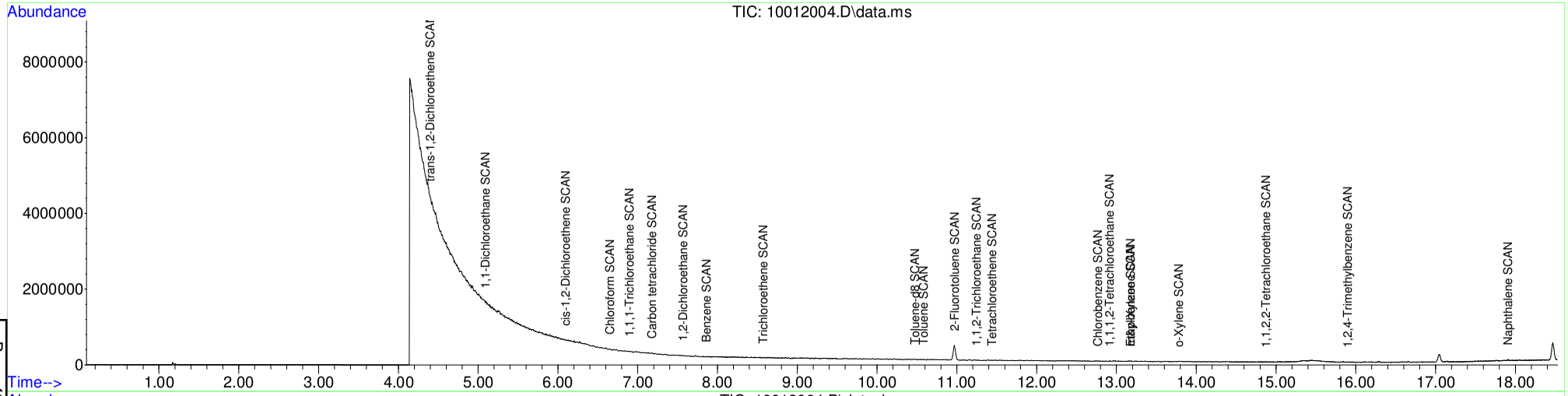
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	603773	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	5965	50.47 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery =	1.01%#	
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.101	61	1081m	44.84 ug/L	
3] trans-1,2-Dichloroethene	4.389	61	1325	47.57 ug/L	70
4] 1,1-Dichloroethane	5.092	63	1662	47.93 ug/L	53
5] cis-1,2-Dichloroethene	6.088	61	1752	47.87 ug/L	99
6] Chloroform	6.651	83	1674	44.68 ug/L	99
7] 1,1,1-Trichloroethane	6.919	97	1810	44.49 ug/L	100
8] Carbon tetrachloride	7.187	117	1704	44.50 ug/L	97
9] Benzene	7.503	78	5164	50.34 ug/L #	1
10] 1,2-Dichloroethane	7.552	62	1736	47.41 ug/L #	1
11] Trichloroethene	8.569	130	1449	46.91 ug/L	91
13] Toluene	10.571	91	7716	51.21 ug/L	98
14] 1,1,2-Trichloroethane	11.222	97	1634	49.76 ug/L	92
15] Tetrachloroethene	11.432	166	2148	49.26 ug/L	97
16] Chlorobenzene	12.765	112	5716	52.98 ug/L	74
17] 1,1,1,2-Tetrachloroethane	12.916	131	1974	51.06 ug/L	100
18] Ethylbenzene	12.972	91	9869	53.81 ug/L	94
19] m&p-Xylene	13.162	91	15478	107.97 ug/L	93
20] o-Xylene	13.774	91	8103	52.91 ug/L	96
21] 1,1,2,2-Tetrachloroethane	14.877	83	3656	53.86 ug/L	100
22] 1,3,5-Trimethylbenzene	15.345	105	9158	56.18 ug/L	95
23] 1,2,4-Trimethylbenzene	15.901	105	9443	55.77 ug/L	94
24] Naphthalene	17.904	128	14305	53.45 ug/L	89
25) 2-Fluorotoluene SCAN	10.969	109	302650	5142.15 ug/L	97
27) trans-1,2-Dichloroethe...	4.394	61	593	38.34 ug/L #	32
28) 1,1-Dichloroethane SCAN	5.091	63	414	23.13 ug/L #	38
29) cis-1,2-Dichloroethene...	6.093	61	390	20.34 ug/L #	61
30) Chloroform SCAN	6.650	83	449	21.58 ug/L #	27
31) 1,1,1-Trichloroethane ...	6.893	97	2047	107.99 ug/L #	19
32) Carbon tetrachloride SCAN	7.173	117	625	31.61 ug/L #	15
33) Benzene SCAN	7.860	78	1960	37.55 ug/L	93
34) 1,2-Dichloroethane SCAN	7.562	62	1492	77.42 ug/L #	1
35) Trichloroethene SCAN	8.568	130	606	42.25 ug/L #	41
36) Toluene-d8 SCAN	10.475	98	2676	46.49 ug/L	98
37) Toluene SCAN	10.580	91	6871	93.21 ug/L	78
38) 1,1,2-Trichloroethane ...	11.241	97	479	28.95 ug/L #	38
39) Tetrachloroethene SCAN	11.441	166	1049	59.23 ug/L #	22
40) Chlorobenzene SCAN	12.764	112	3421	67.92 ug/L #	90
41) 1,1,1,2-Tetrachloroeth...	12.907	131	710	38.09 ug/L #	16
42) Ethylbenzene SCAN	13.177	91	10015	74.57 ug/L	81
43) m&p-Xylene SCAN	13.177	91	10015	74.57 ug/L	84
44) o-Xylene SCAN	13.781	91	5154	71.70 ug/L	92
45) 1,1,2,2-Tetrachloroeth...	14.872	83	2194	62.59 ug/L #	29
47) 1,2,4-Trimethylbenzene...	15.899	105	5213	67.25 ug/L #	88
48) Naphthalene SCAN	17.903	128	8107	69.11 ug/L	80

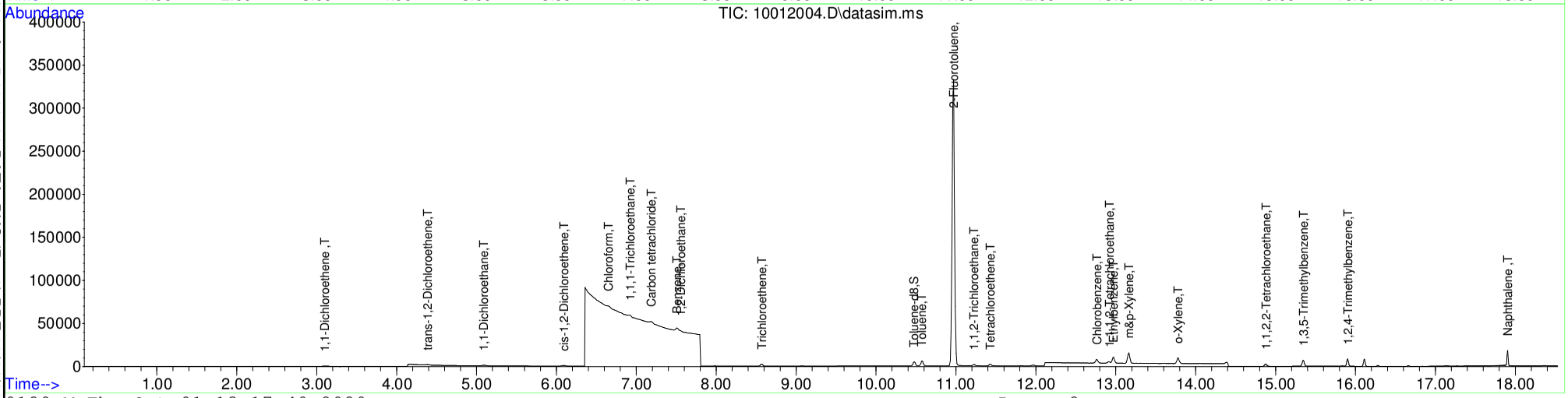
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012004.D
Acq On : 1 Oct 2020 12:56
InstName : AG5975C
Operator : TD
Sample : S20J003-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 01 13:14:58 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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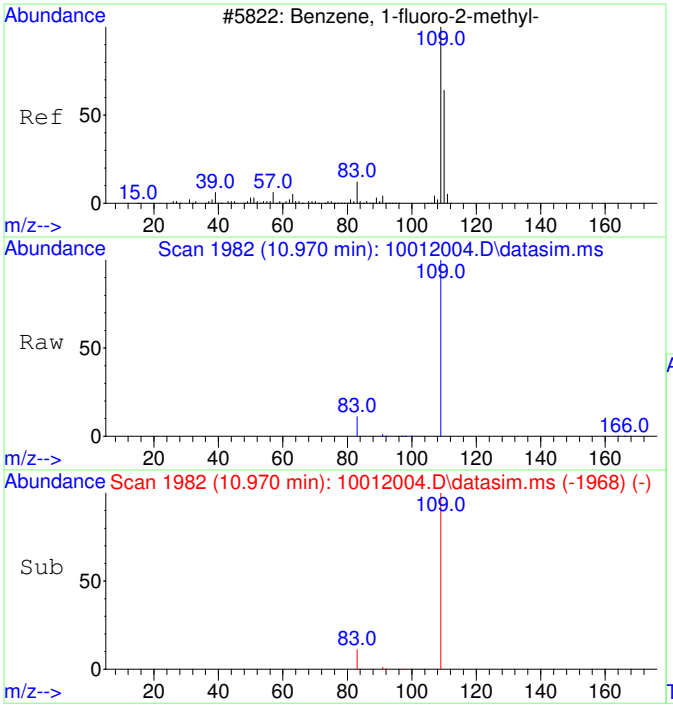
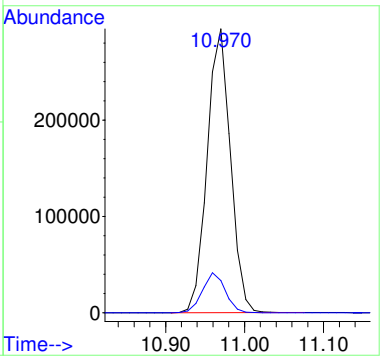
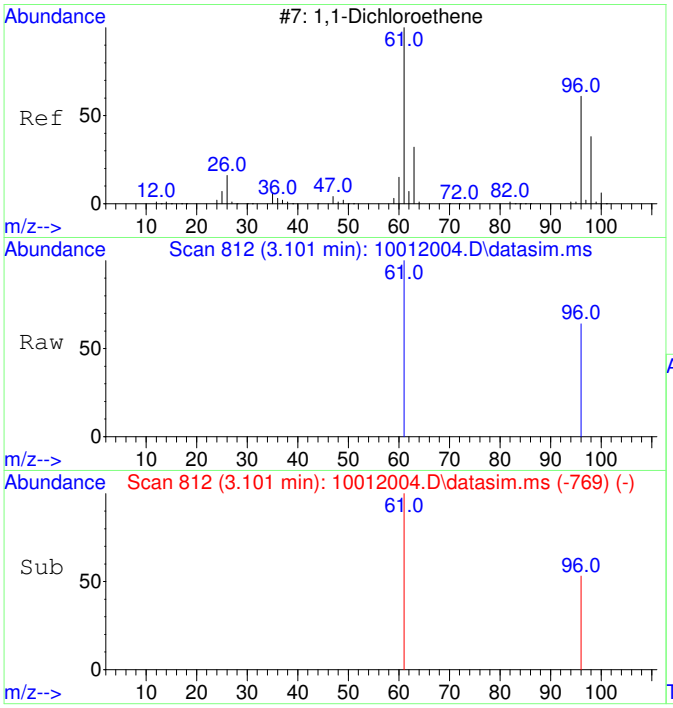


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:109 Resp: 603773

Ion	Ratio	Lower	Upper
109	100		
83	13.8	0.0	42.3

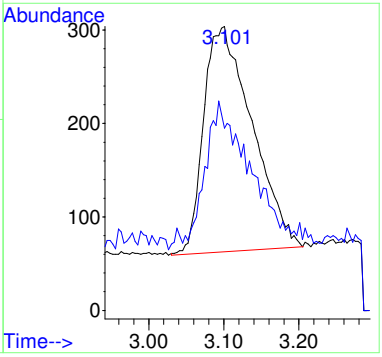


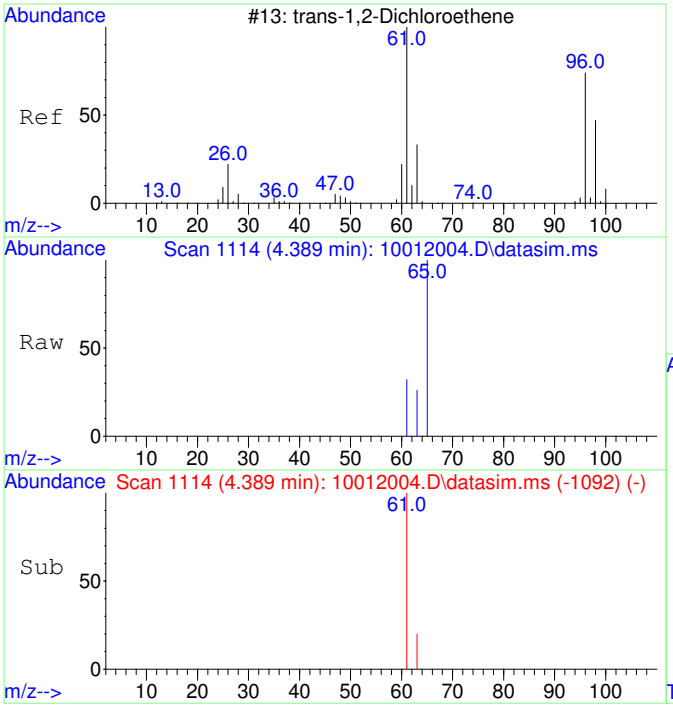


#2
1,1-Dichloroethene
Concen: 44.84 ug/L m
RT: 3.101 min Scan# 812
Delta R.T. 0.011 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 61 Resp: 1081

Ion	Ratio	Lower	Upper
61	100		
96	88.7	37.2	97.2

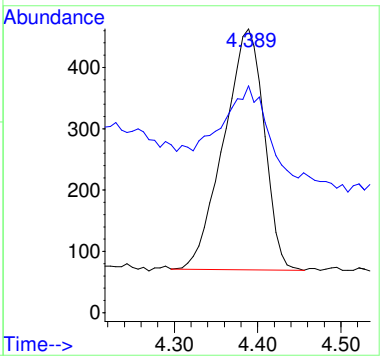


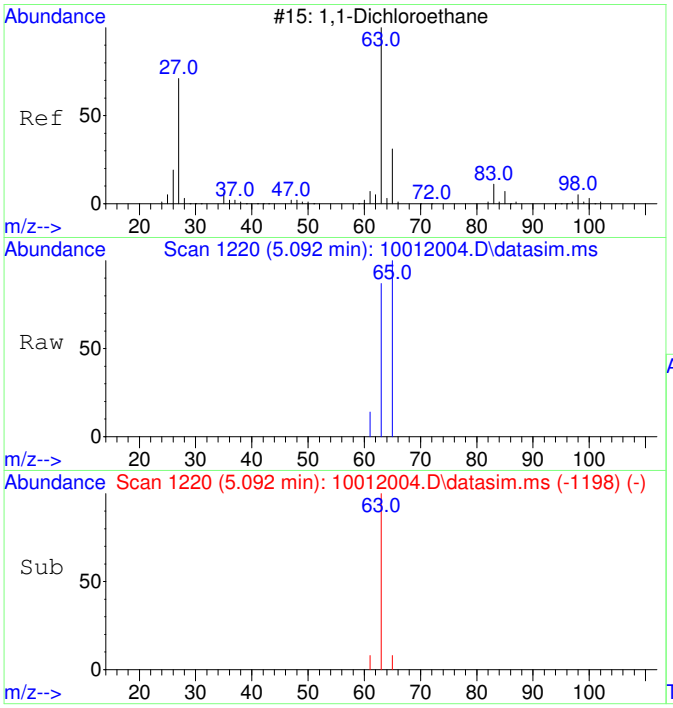


#3
trans-1,2-Dichloroethene
Concen: 47.57 ug/L
RT: 4.389 min Scan# 1114
Delta R.T. -0.007 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 61 Resp: 1325

Ion	Ratio	Lower	Upper
61	100		
63	49.4	2.4	62.4

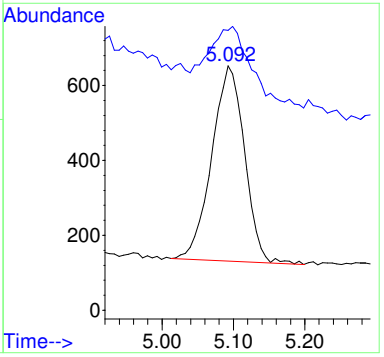


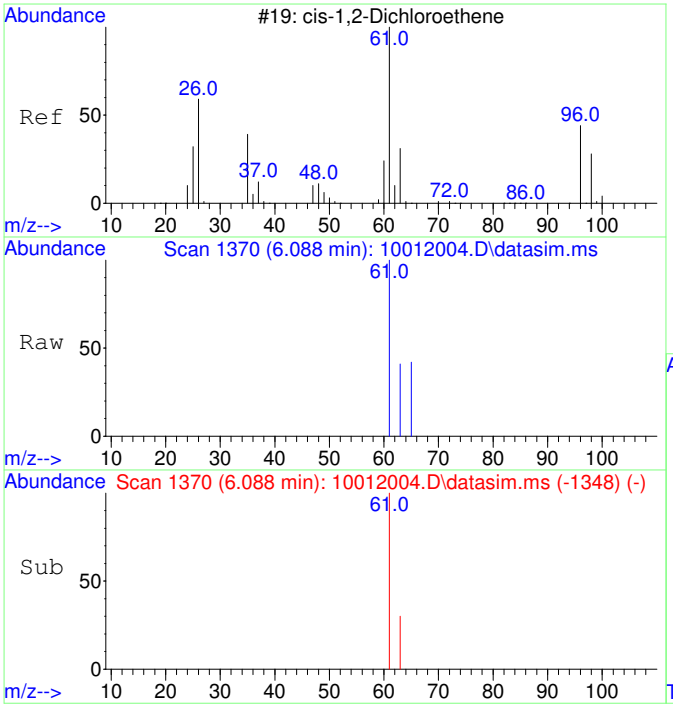


#4
1,1-Dichloroethane
Concen: 47.93 ug/L
RT: 5.092 min Scan# 1220
Delta R.T. -0.007 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 63 Resp: 1662

Ion	Ratio	Lower	Upper
63	100		
65	58.1	1.8	61.8

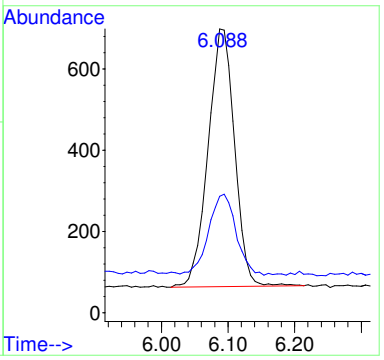


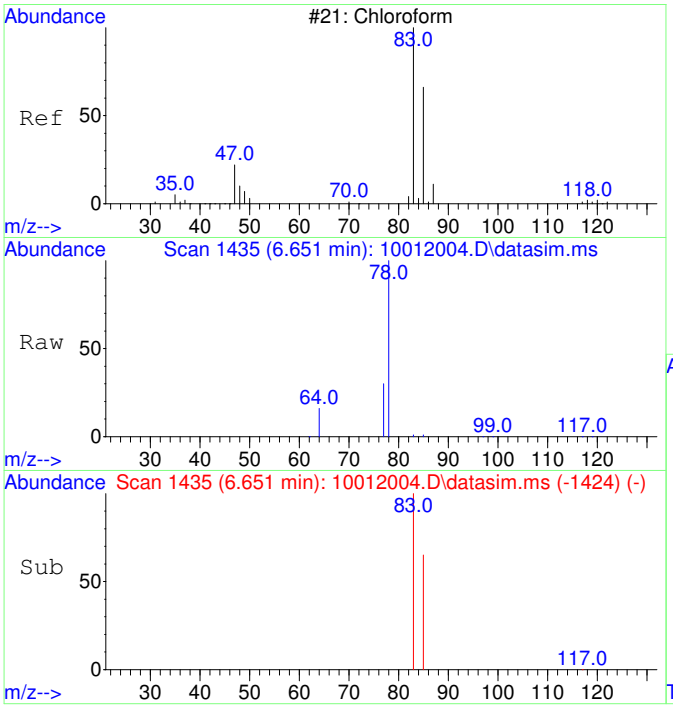


#5
cis-1,2-Dichloroethene
Concen: 47.87 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. -0.007 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 61 Resp: 1752

Ion	Ratio	Lower	Upper
61	100		
63	32.1	2.5	62.5

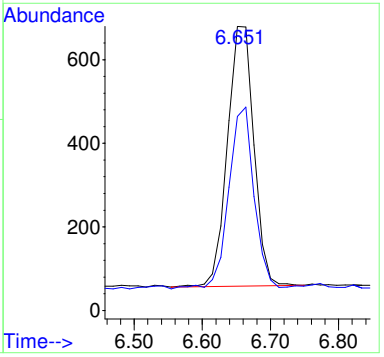


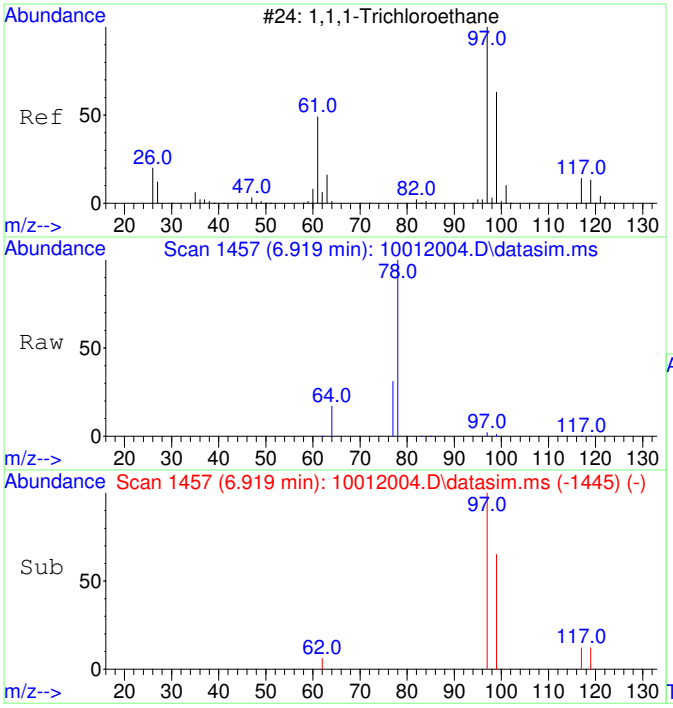


#6
Chloroform
Concen: 44.68 ug/L
RT: 6.651 min Scan# 1435
Delta R.T. -0.012 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 83 Resp: 1674

Ion	Ratio	Lower	Upper
83	100		
85	65.9	35.1	95.1

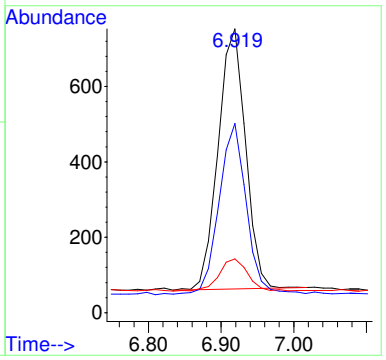


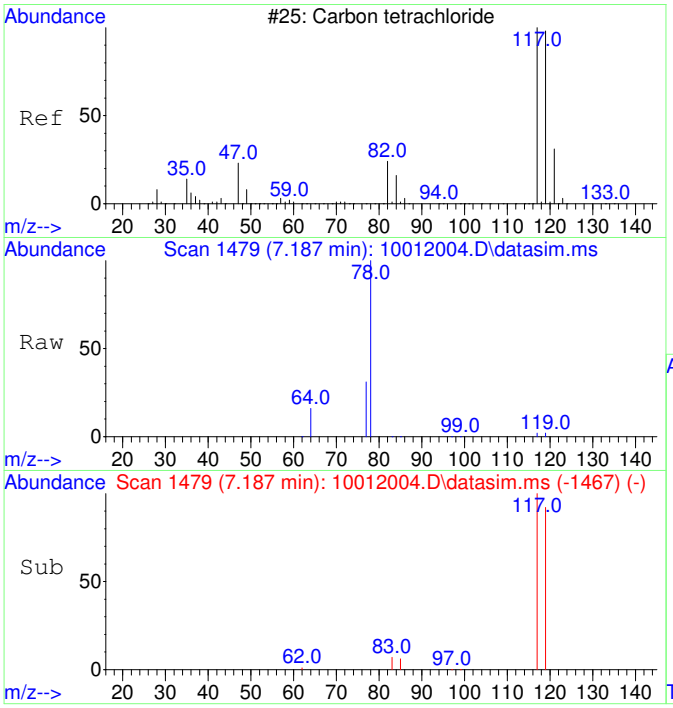


#7
1,1,1-Trichloroethane
Concen: 44.49 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 97 Resp: 1810

Ion	Ratio	Lower	Upper
97	100		
99	64.5	34.6	94.6
117	13.2	0.0	43.2

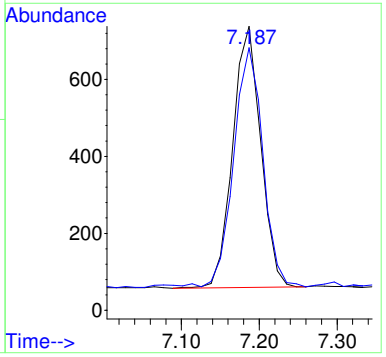


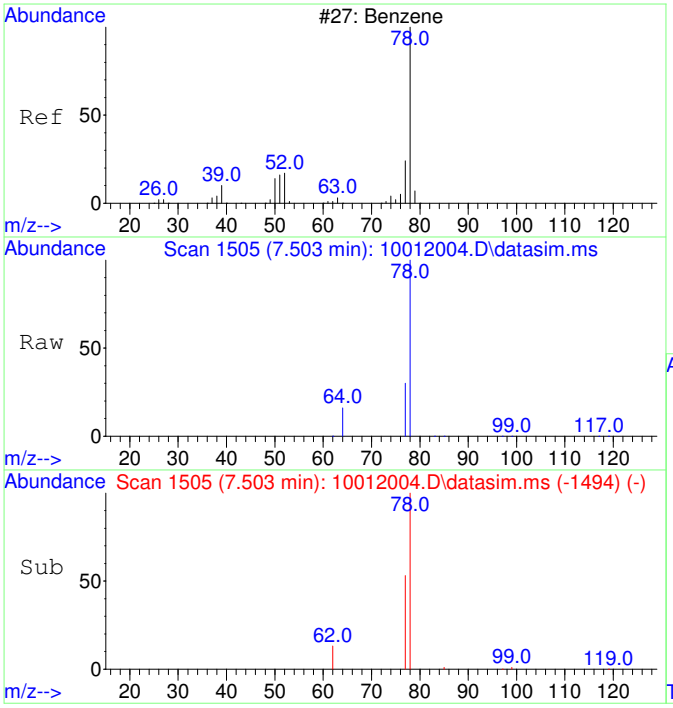


#8
Carbon tetrachloride
Concen: 44.50 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:117 Resp: 1704

Ion	Ratio	Lower	Upper
117	100		
119	93.8	66.4	126.4

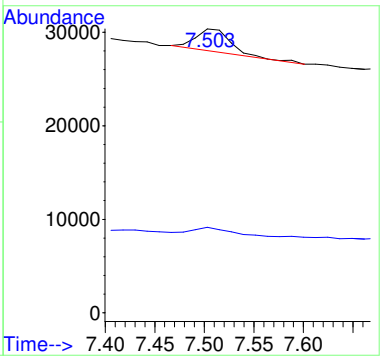


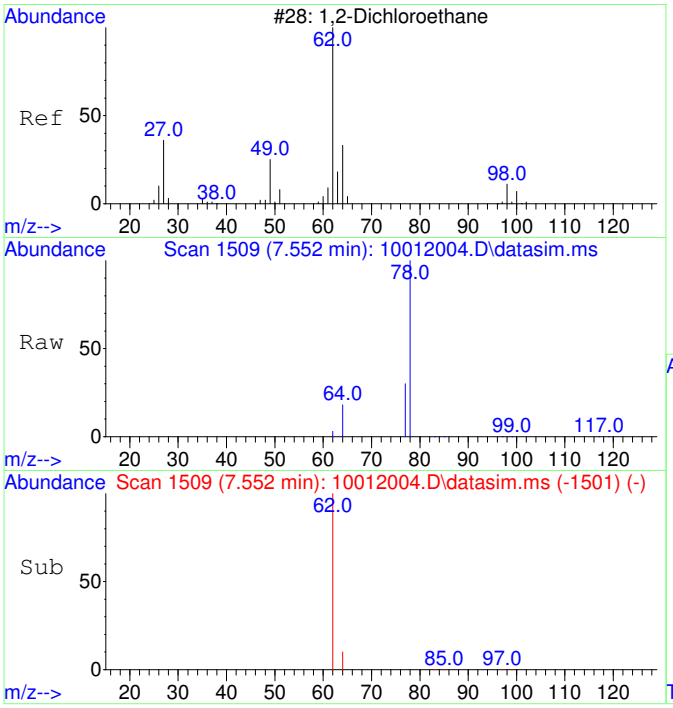


#9
Benzene
Concen: 50.34 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 78 Resp: 5164

Ion	Ratio	Lower	Upper
78	100		
77	71.2	0.0	53.2#

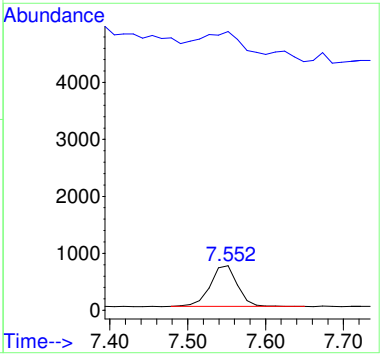


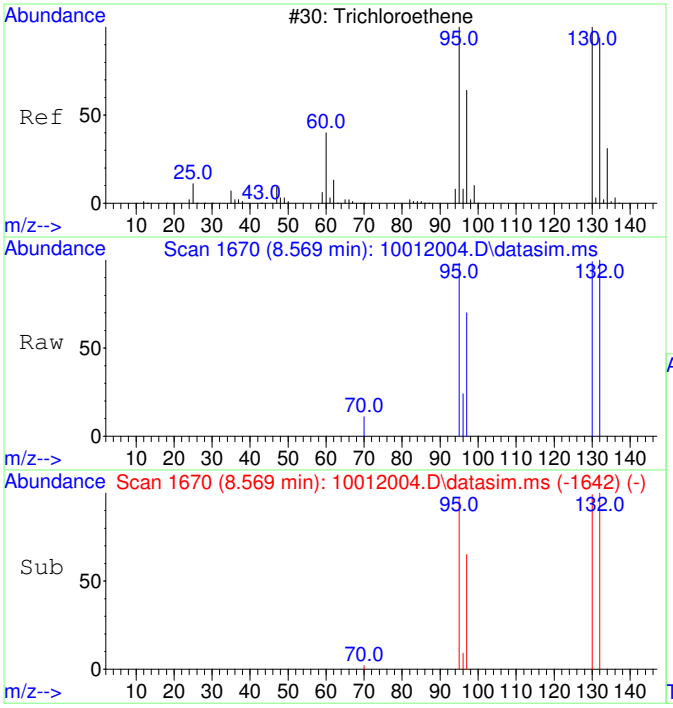


#10
1,2-Dichloroethane
Concen: 47.41 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 62 Resp: 1736

Ion	Ratio	Lower	Upper
62	100		
64	88.6	2.3	62.3#

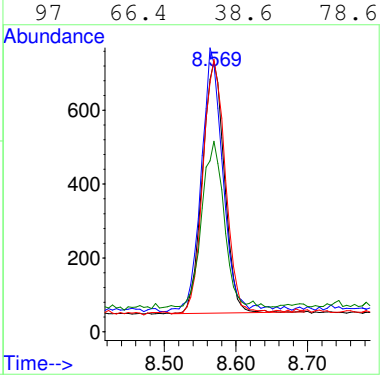


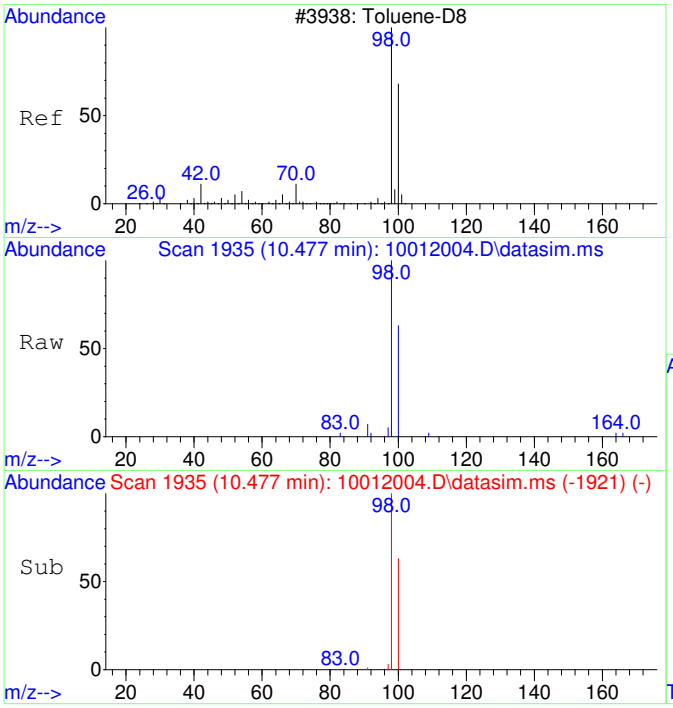


#11
Trichloroethene
Concen: 46.91 ug/L
RT: 8.569 min Scan# 1670
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:130 Resp: 1449

Ion	Ratio	Lower	Upper
130	100		
95	101.4	60.7	120.7
132	101.9	76.0	116.0
97	66.4	38.6	78.6

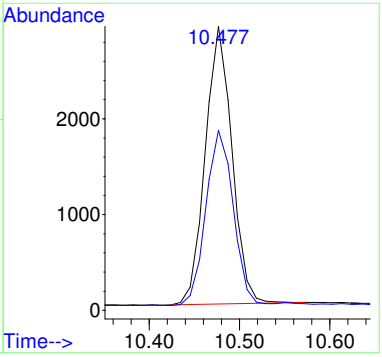


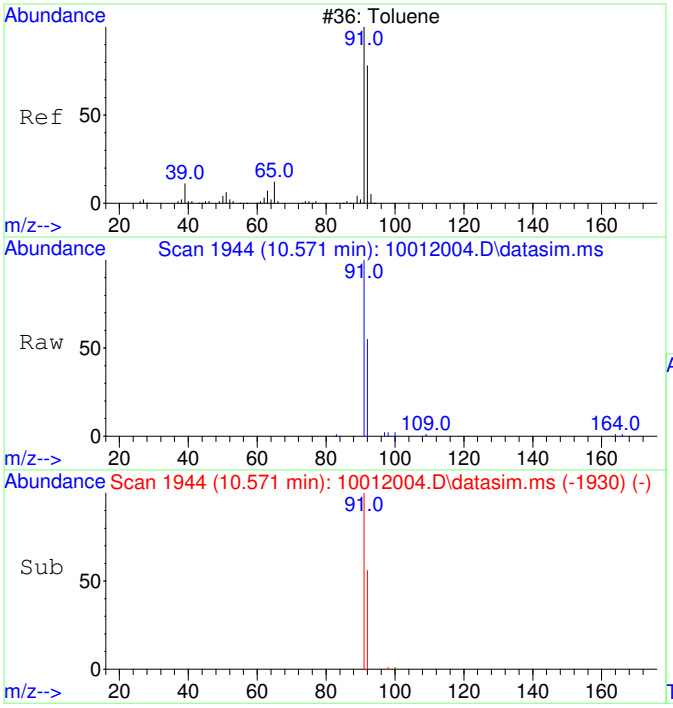


#12
Toluene-d8
Concen: 50.47 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 98 Resp: 5965

Ion	Ratio	Lower	Upper
98	100		
100	64.9	37.1	97.1

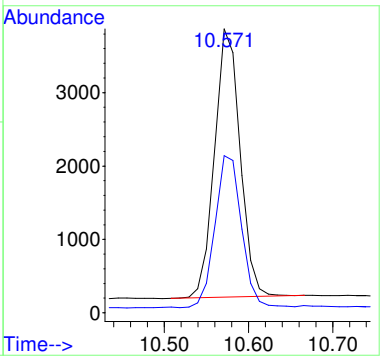


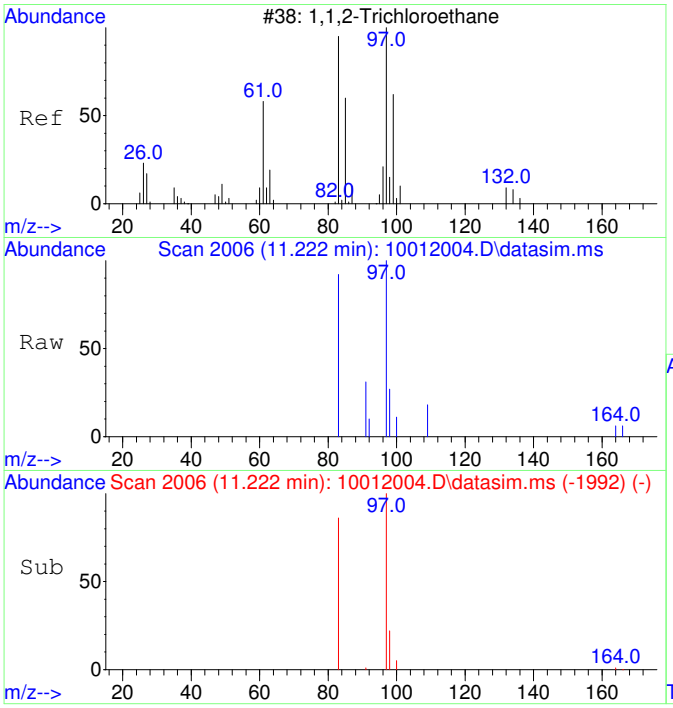


#13
Toluene
Concen: 51.21 ug/L
RT: 10.571 min Scan# 1944
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 7716

Ion	Ratio	Lower	Upper
91	100		
92	58.4	29.9	89.9

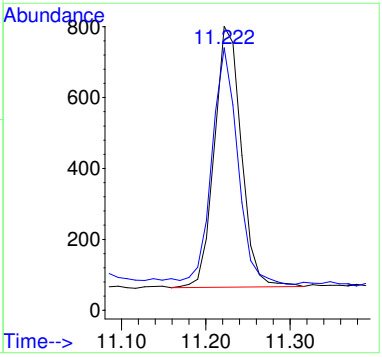


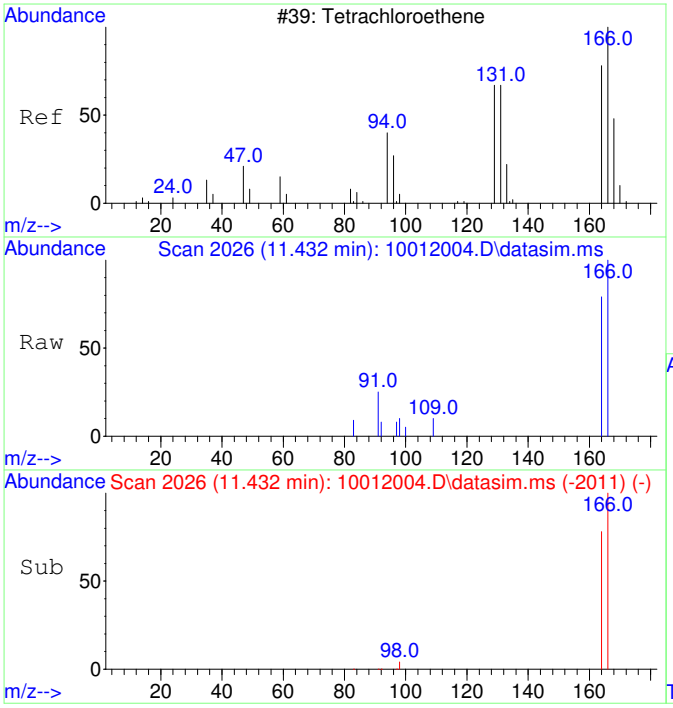


#14
1,1,2-Trichloroethane
Concen: 49.76 ug/L
RT: 11.222 min Scan# 2006
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 97 Resp: 1634

Ion	Ratio	Lower	Upper
97	100		
83	88.1	51.2	111.2

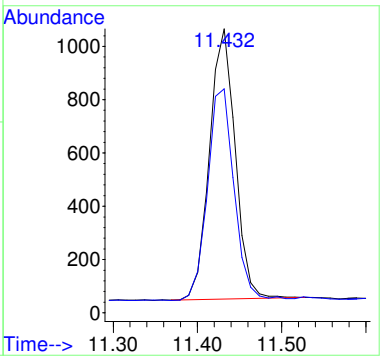


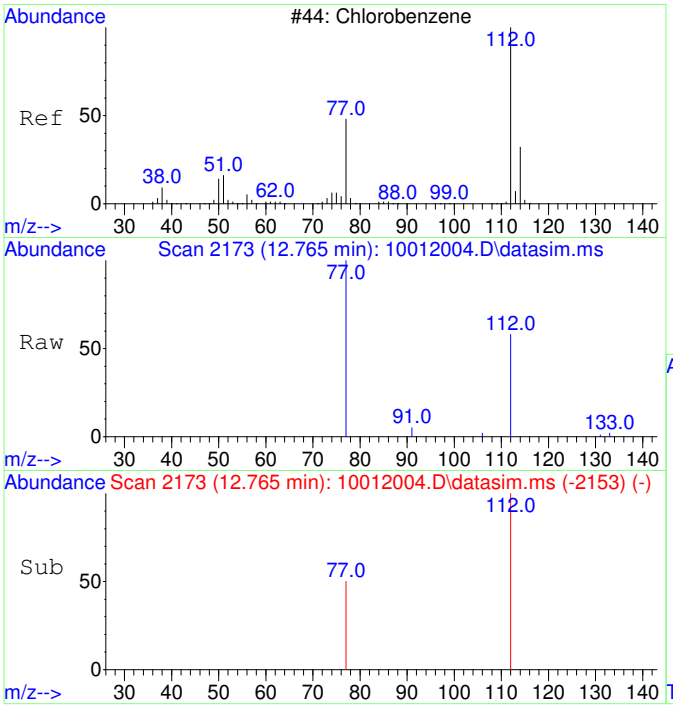


#15
Tetrachloroethene
Concen: 49.26 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:166 Resp: 2148

Ion	Ratio	Lower	Upper
166	100		
164	80.2	47.8	107.8

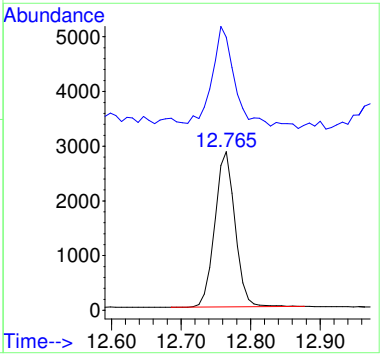


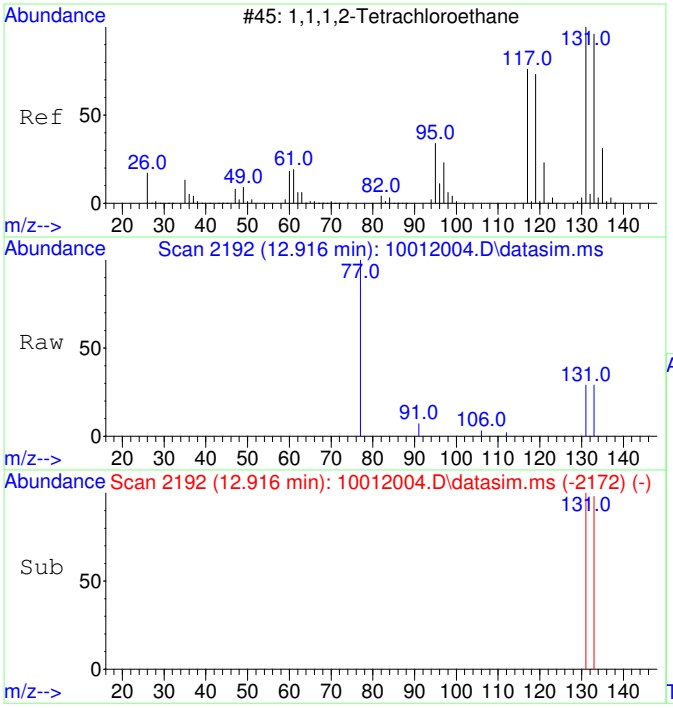


#16
Chlorobenzene
Concen: 52.98 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. 0.008 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:112 Resp: 5716

Ion	Ratio	Lower	Upper
112	100		
77	72.4	23.6	83.6

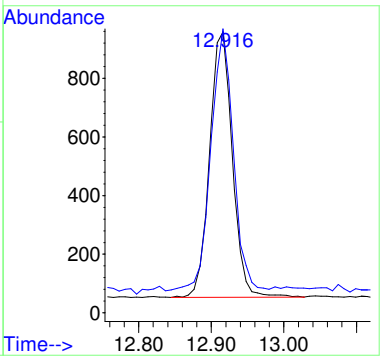


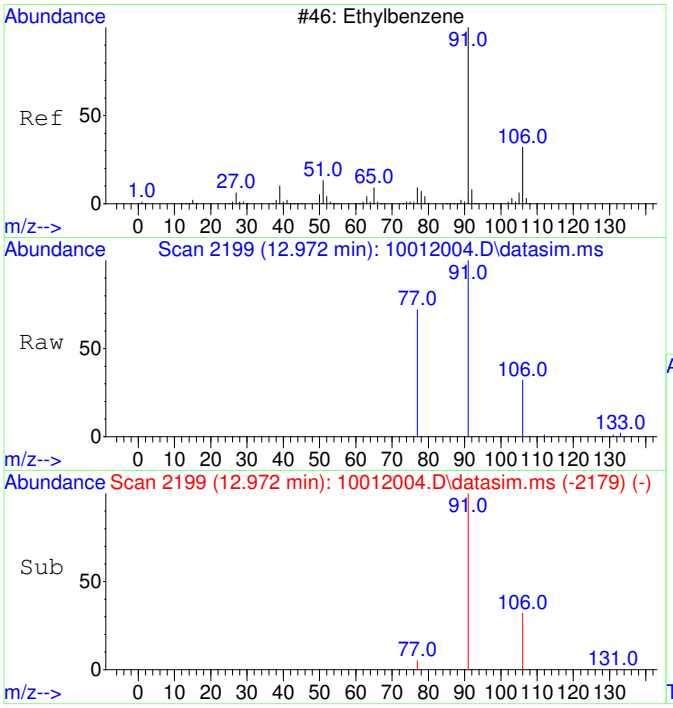


#17
1,1,1,2-Tetrachloroethane
Concen: 51.06 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.008 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:131 Resp: 1974

Ion	Ratio	Lower	Upper
131	100		
133	96.3	66.3	126.3

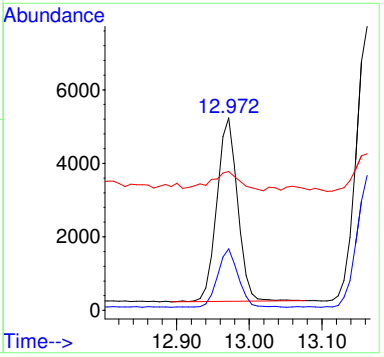


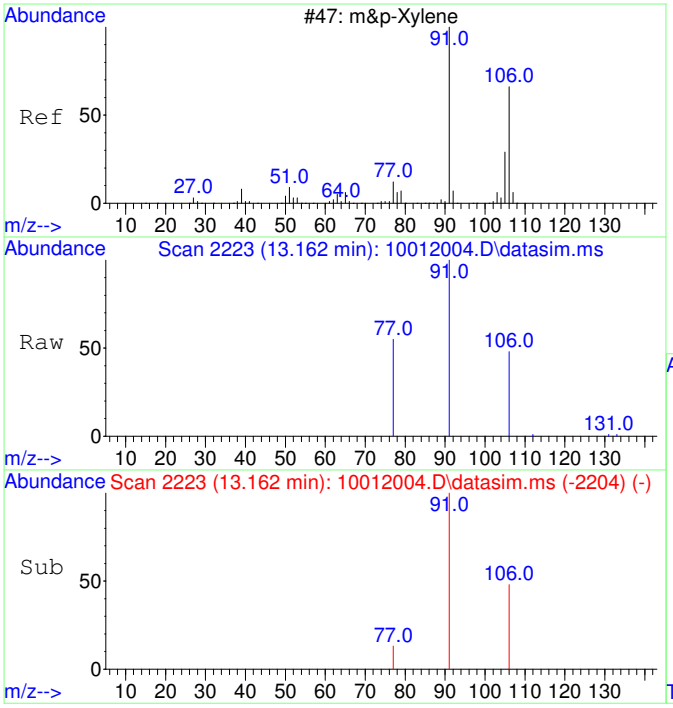


#18
Ethylbenzene
Concen: 53.81 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.008 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 9869

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

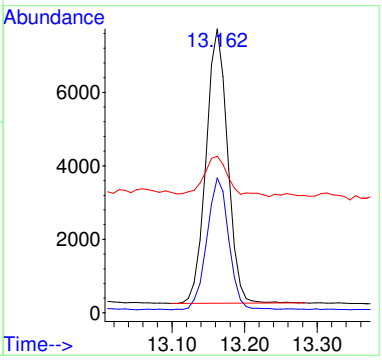


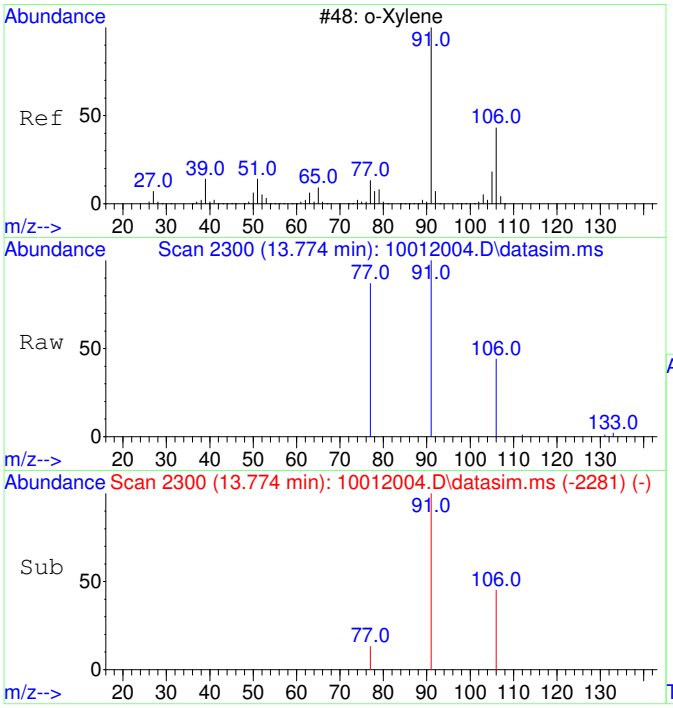


#19
m&p-Xylene
Concen: 107.97 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 15478

Ion	Ratio	Lower	Upper
91	100		
106	48.3	22.2	82.2
77	17.2	0.0	42.4

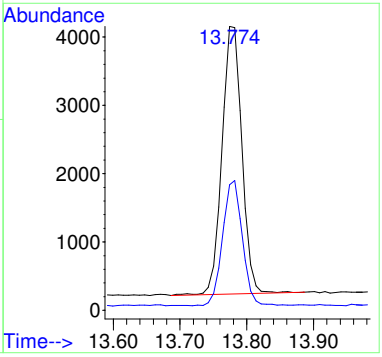


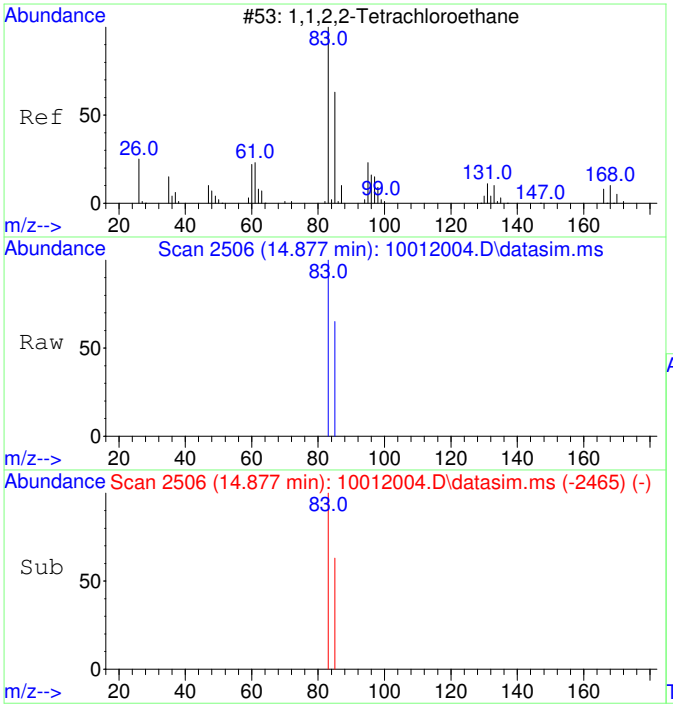


#20
o-Xylene
Concen: 52.91 ug/L
RT: 13.774 min Scan# 2300
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 8103

Ion	Ratio	Lower	Upper
91	100		
106	46.3	19.2	79.2

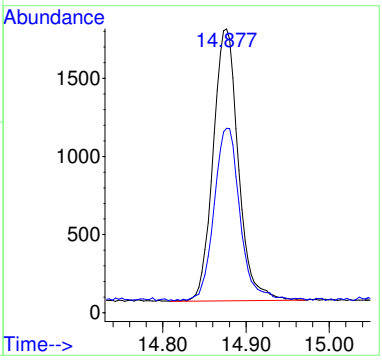


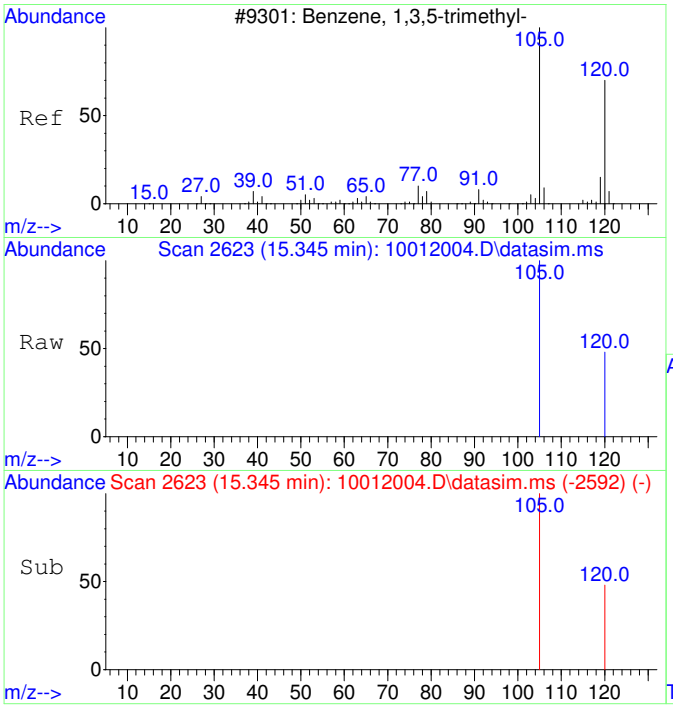


#21
1,1,2,2-Tetrachloroethane
Concen: 53.86 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. 0.004 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 83 Resp: 3656

Ion	Ratio	Lower	Upper
83	100		
85	64.4	34.8	94.8

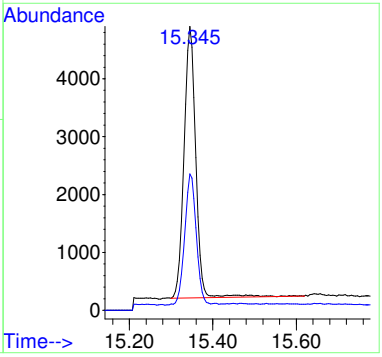


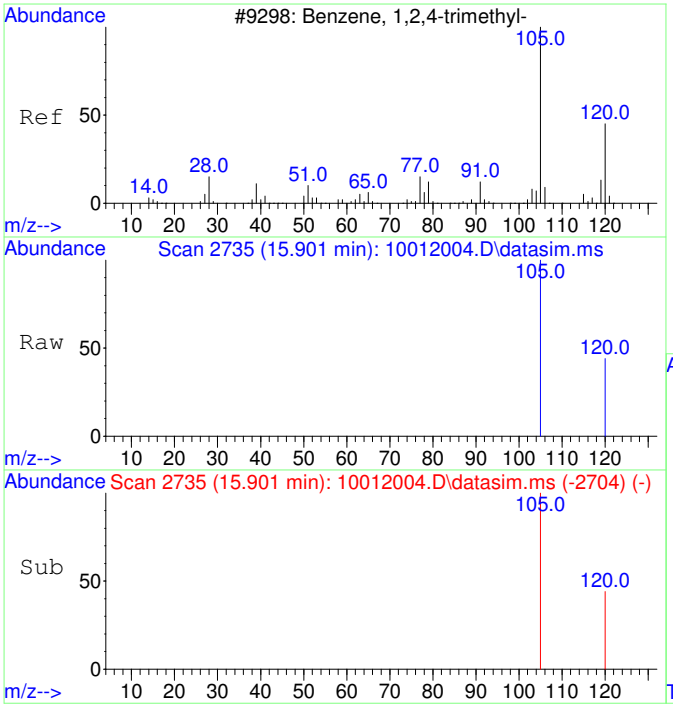


#22
1,3,5-Trimethylbenzene
Concen: 56.18 ug/L
RT: 15.345 min Scan# 2623
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:105 Resp: 9158

Ion	Ratio	Lower	Upper
105	100		
120	47.4	21.1	81.1

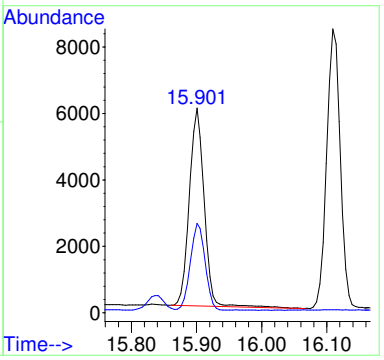


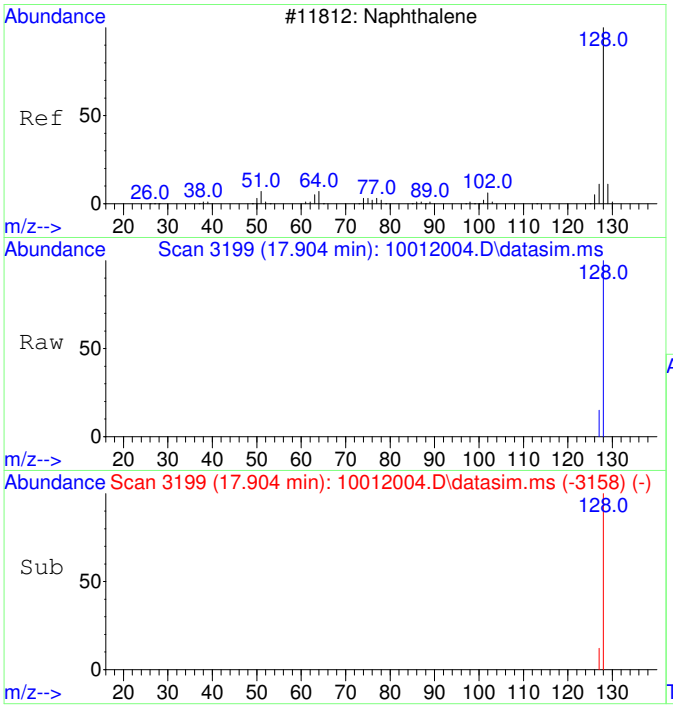


#23
1,2,4-Trimethylbenzene
Concen: 55.77 ug/L
RT: 15.901 min Scan# 2735
Delta R.T. 0.005 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:105 Resp: 9443

Ion	Ratio	Lower	Upper
105	100		
120	42.9	17.2	77.2

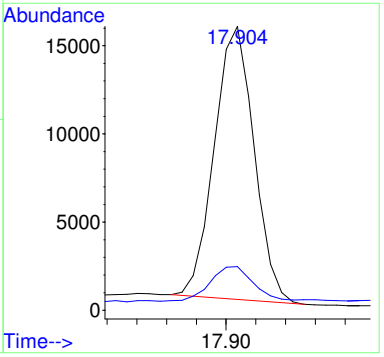


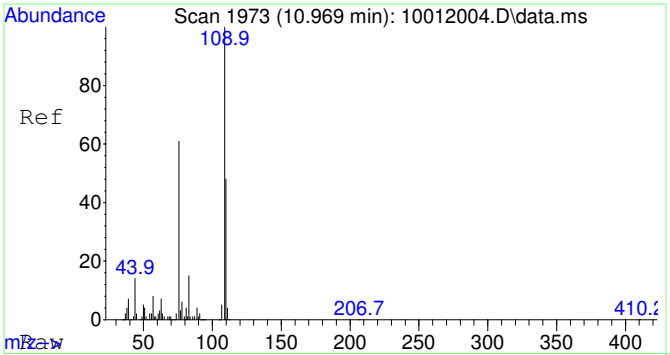


#24
Naphthalene
Concen: 53.45 ug/L
RT: 17.904 min Scan# 3199
Delta R.T. 0.001 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:128 Resp: 14305

Ion	Ratio	Lower	Upper
128	100		
127	17.0	0.0	42.5

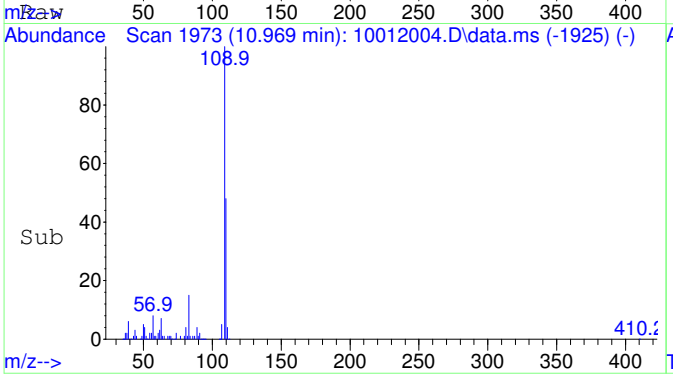


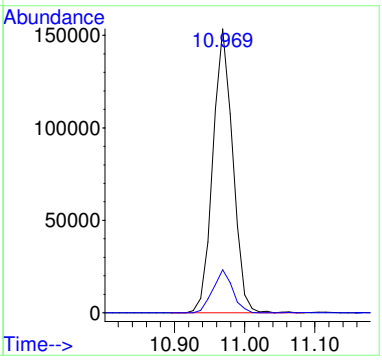


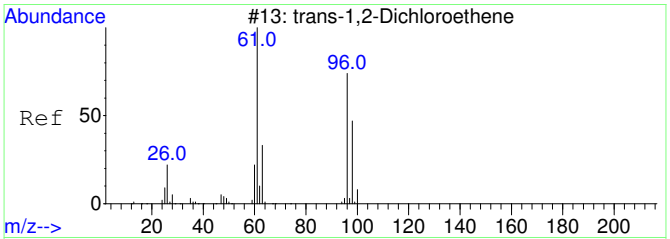
#25
2-Fluorotoluene SCAN
Concen: 5142.15 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

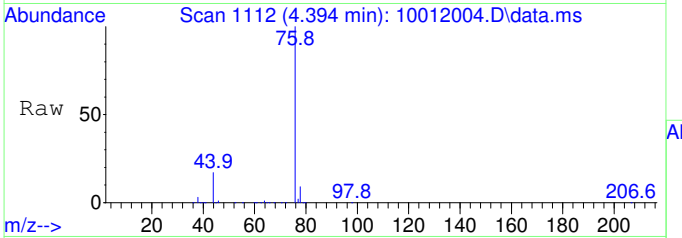
Tgt Ion:109 Resp: 302650

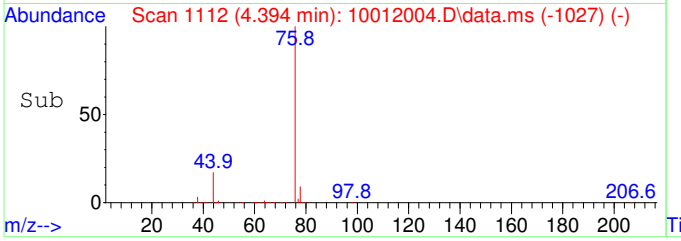
Ion	Ratio	Lower	Upper
109	100		
83	15.0	0.0	43.8







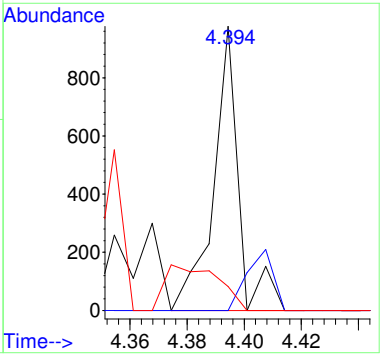


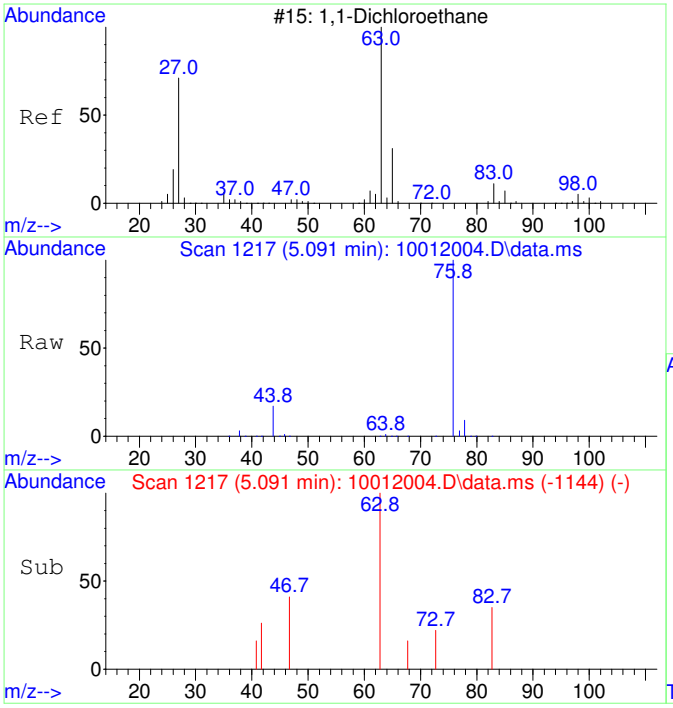


#27
trans-1,2-Dichloroethene SCAN
Concen: 38.34 ug/L
RT: 4.394 min Scan# 1112
Delta R.T. -0.007 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 61 Resp: 593

Ion	Ratio	Lower	Upper
61	100		
96	22.8	49.0	109.0#
98	0.0	20.5	80.5#

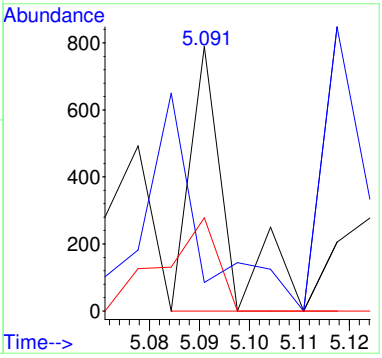


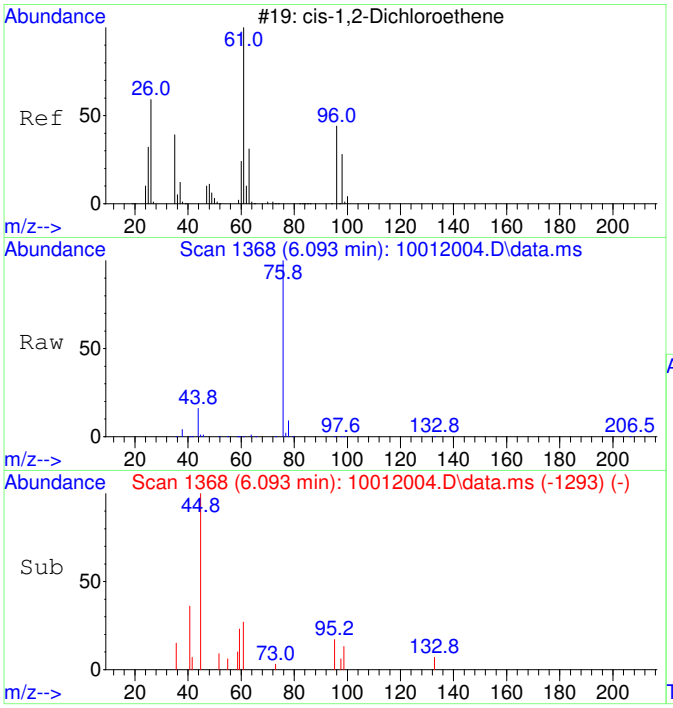


#28
1,1-Dichloroethane SCAN
Concen: 23.13 ug/L
RT: 5.091 min Scan# 1217
Delta R.T. -0.013 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 63 Resp: 414

Ion	Ratio	Lower	Upper
63	100		
65	59.4	1.3	61.3
83	51.4	0.0	45.9#

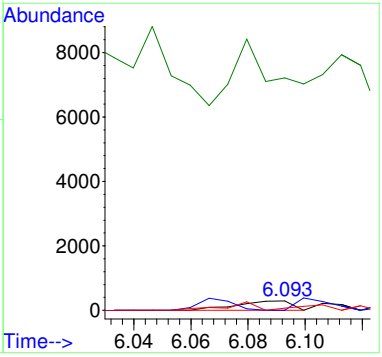


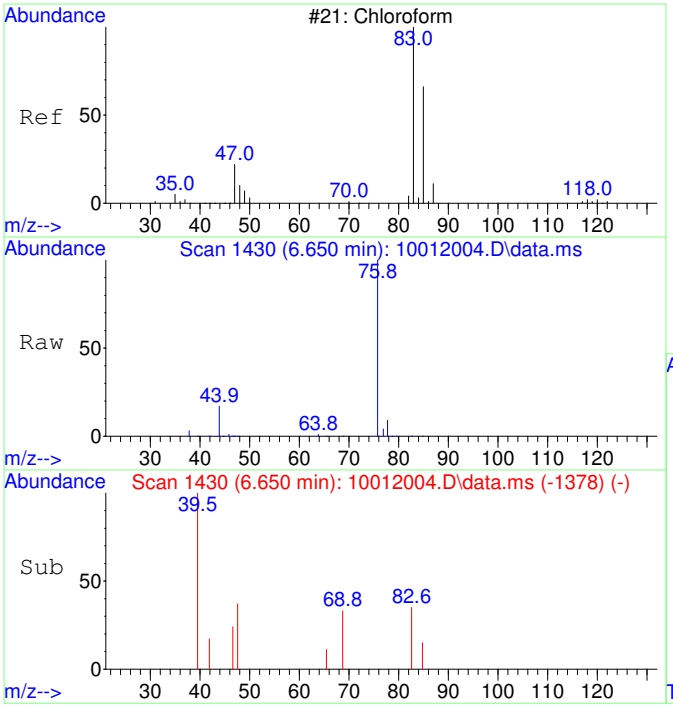


#29
cis-1,2-Dichloroethene SCAN
Concen: 20.34 ug/L
RT: 6.093 min Scan# 1368
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 61 Resp: 390

Ion	Ratio	Lower	Upper
61	100		
96	94.6	39.9	99.9
98	20.0	13.5	73.5
64	0.0	4.5	64.5#

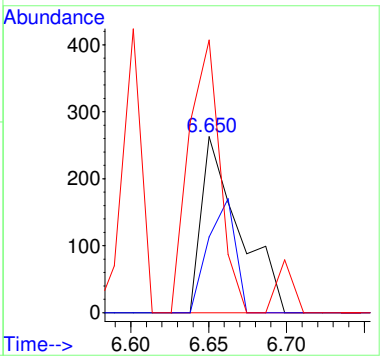


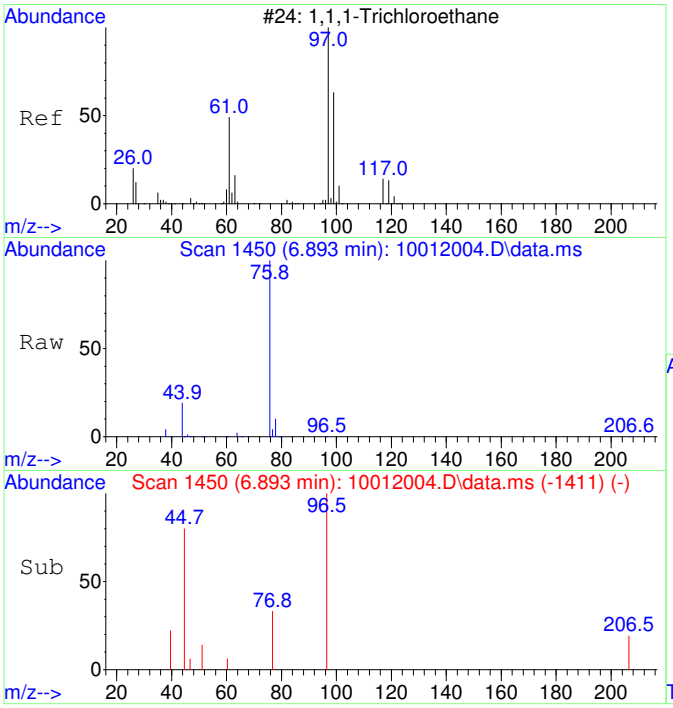


#30
Chloroform SCAN
Concen: 21.58 ug/L
RT: 6.650 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 83 Resp: 449

Ion	Ratio	Lower	Upper
83	100		
85	46.1	34.6	94.6
47	126.5	0.0	53.4#

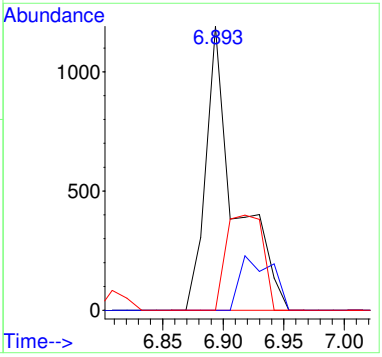


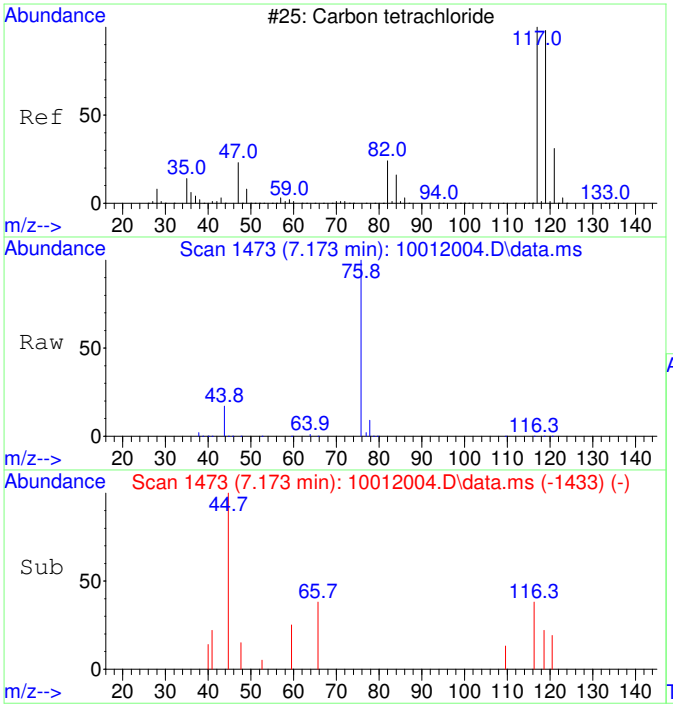


#31
1,1,1-Trichloroethane SCAN
Concen: 107.99 ug/L
RT: 6.893 min Scan# 1450
Delta R.T. -0.024 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 97 Resp: 2047

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

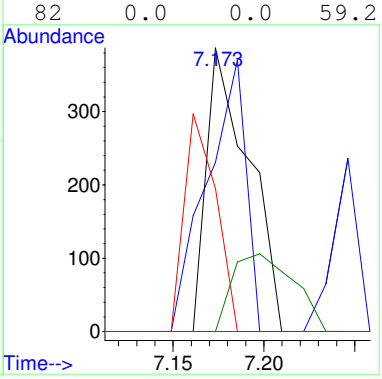


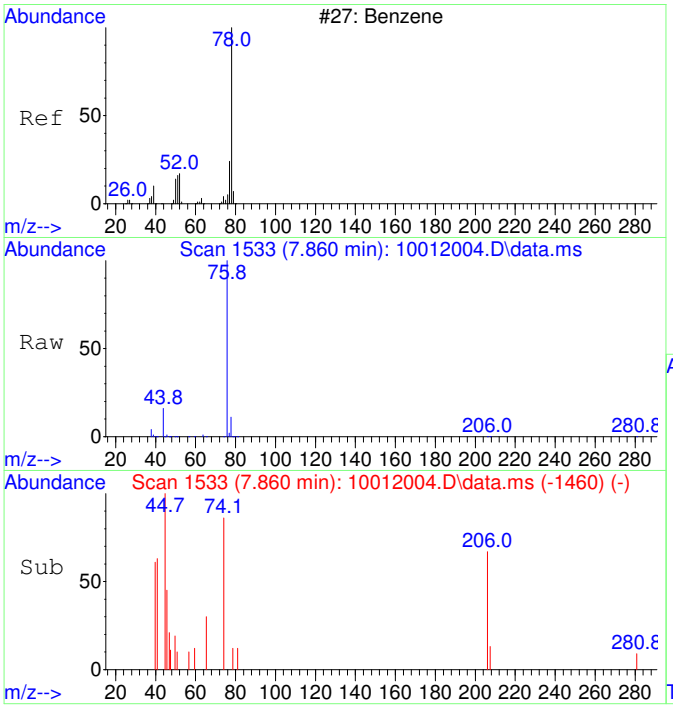


#32
Carbon tetrachloride SCAN
Concen: 31.61 ug/L
RT: 7.173 min Scan# 1473
Delta R.T. -0.012 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:117 Resp: 625

Ion	Ratio	Lower	Upper
117	100		
119	0.0	75.5	135.5#
121	57.4	0.0	58.8
82	0.0	0.0	59.2

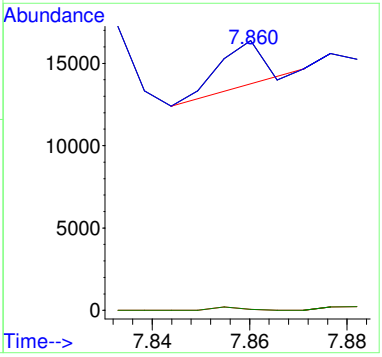


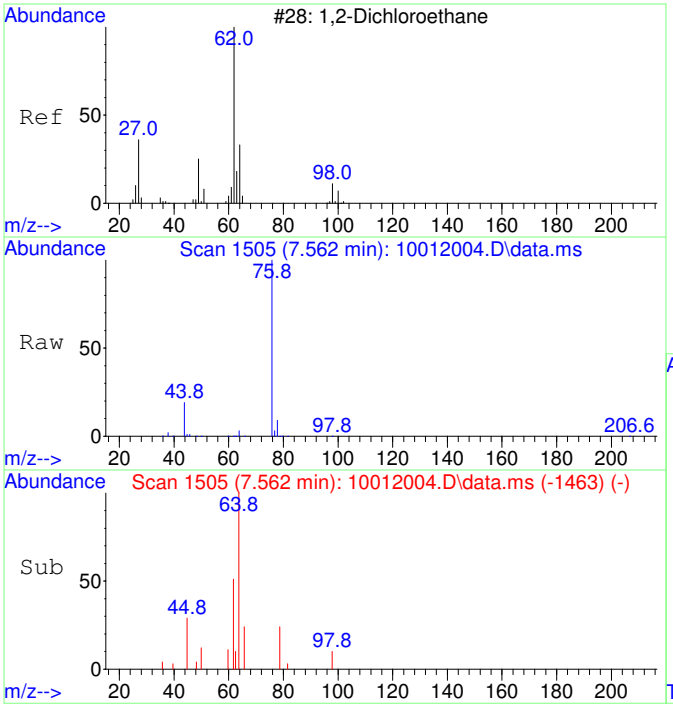


#33
Benzene SCAN
Concen: 37.55 ug/L
RT: 7.860 min Scan# 1533
Delta R.T. 0.346 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 78 Resp: 1960

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	4.4	0.0	47.9
51	4.4	0.0	44.1

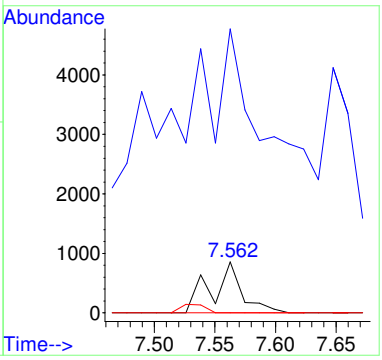


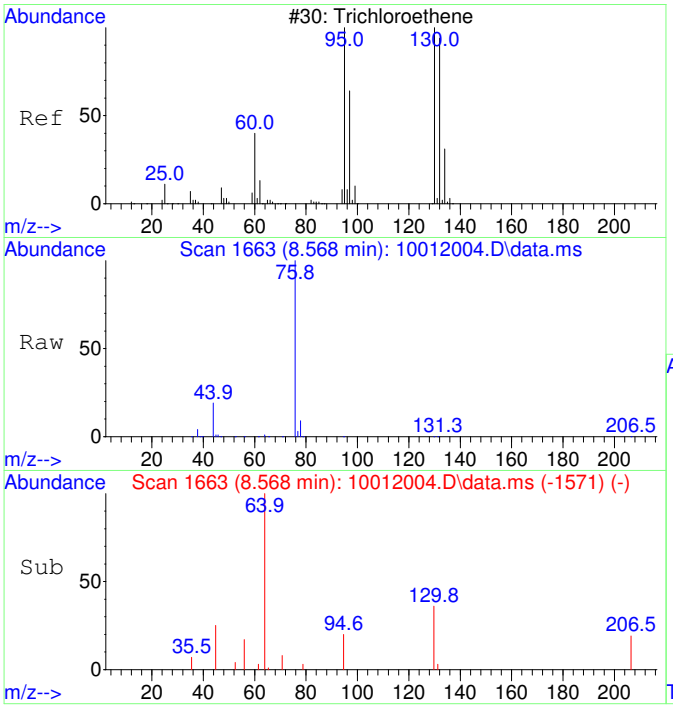


#34
1,2-Dichloroethane SCAN
Concen: 77.42 ug/L
RT: 7.562 min Scan# 1505
Delta R.T. 0.012 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 62 Resp: 1492

Ion	Ratio	Lower	Upper
62	100		
64	306.0	5.2	65.2#
49	0.0	3.9	63.9#

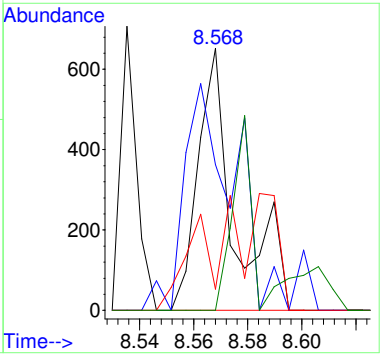


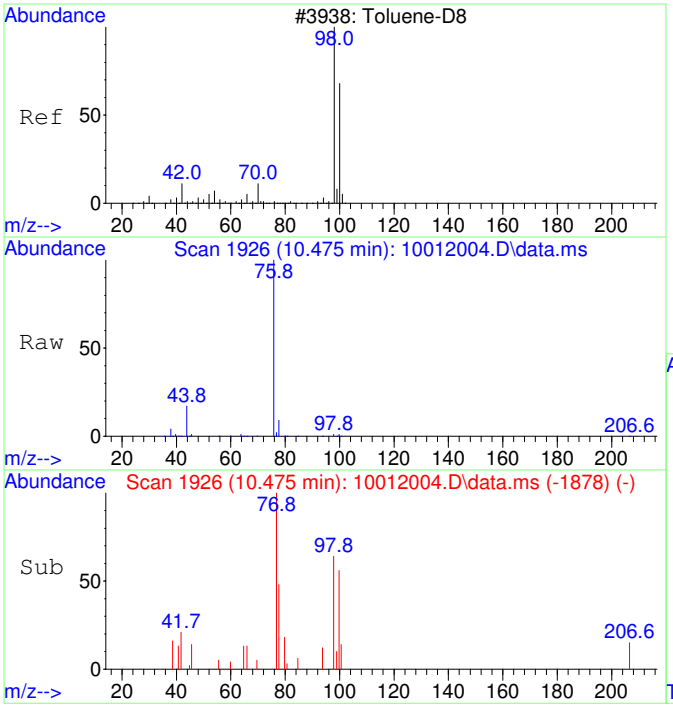


#35
Trichloroethene SCAN
Concen: 42.25 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:130 Resp: 606

Ion	Ratio	Lower	Upper
130	100		
95	120.5	60.5	120.5
132	20.5	59.6	119.6#
97	0.0	28.2	88.2#

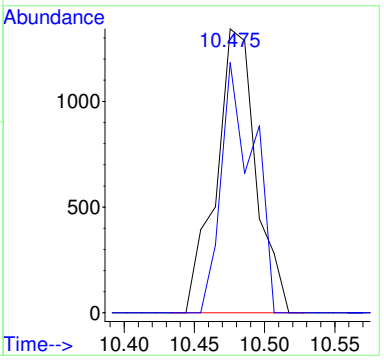


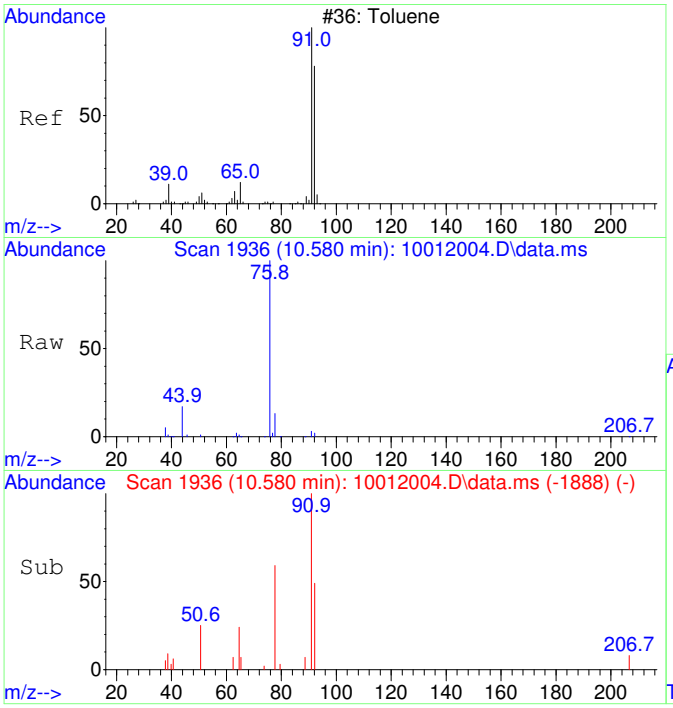


#36
Toluene-d8 SCAN
Concen: 46.49 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 98 Resp: 2676

Ion	Ratio	Lower	Upper
98	100		
100	71.7	40.0	100.0

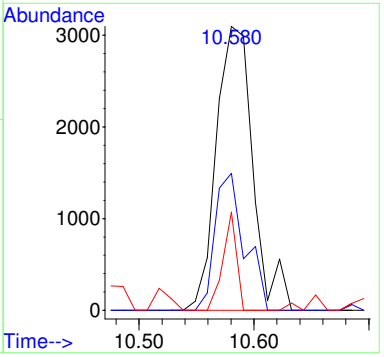


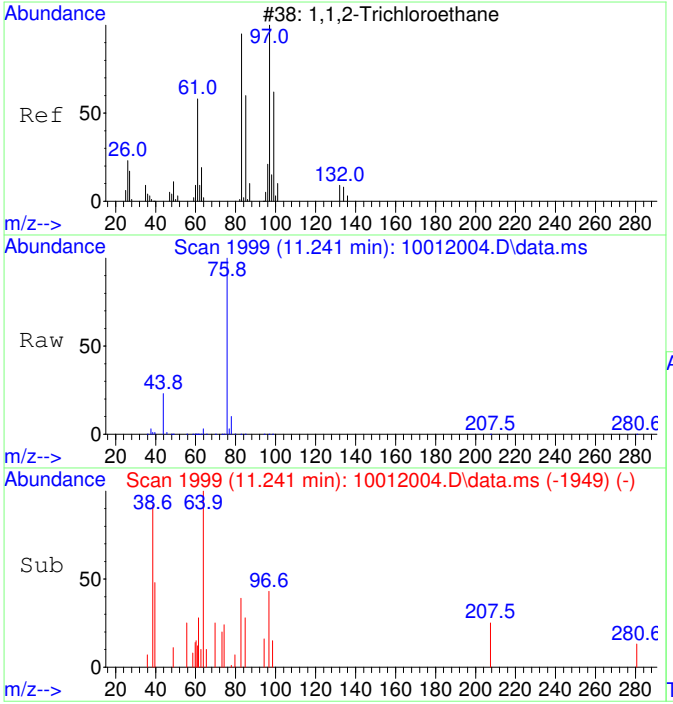


#37
Toluene SCAN
Concen: 93.21 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 6871

Ion	Ratio	Lower	Upper
91	100		
92	39.2	28.3	88.3
65	12.8	0.0	41.0

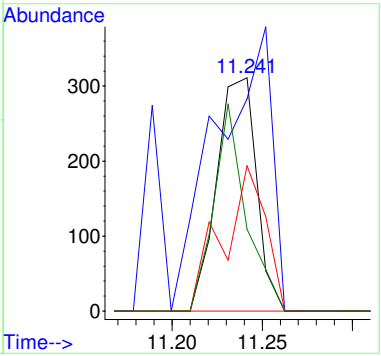


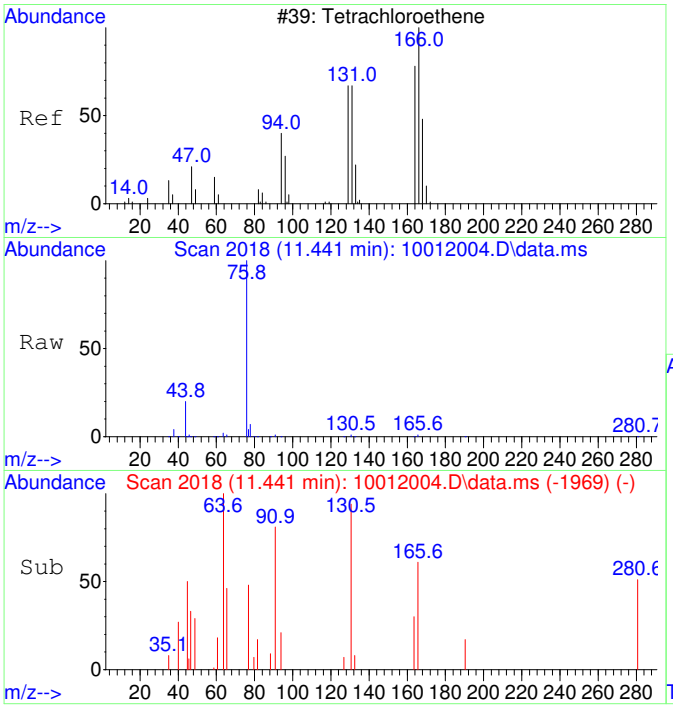


#38
1,1,2-Trichloroethane SCAN
Concen: 28.95 ug/L
RT: 11.241 min Scan# 1999
Delta R.T. 0.021 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 97 Resp: 479

Ion	Ratio	Lower	Upper
97	100		
83	167.6	57.7	117.7#
61	66.6	32.1	92.1
99	0.0	36.7	96.7#

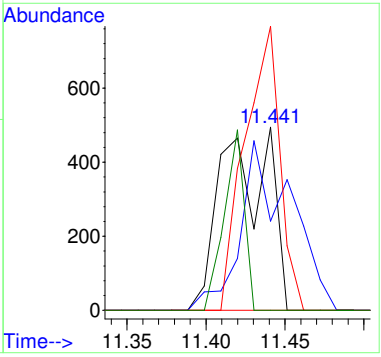


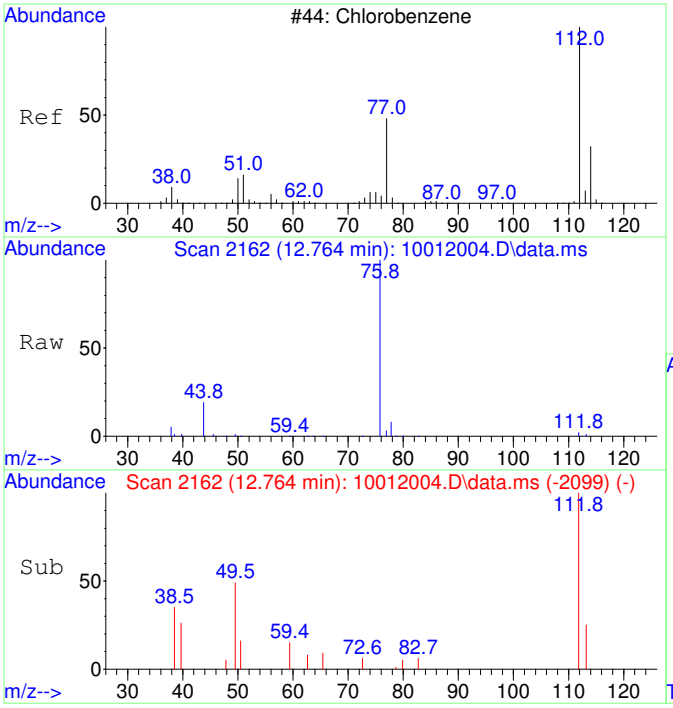


#39
Tetrachloroethene SCAN
Concen: 59.23 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.010 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:166 Resp: 1049

Ion	Ratio	Lower	Upper
166	100		
164	0.0	50.9	110.9#
131	113.1	38.7	98.7#
129	0.0	41.8	101.8#

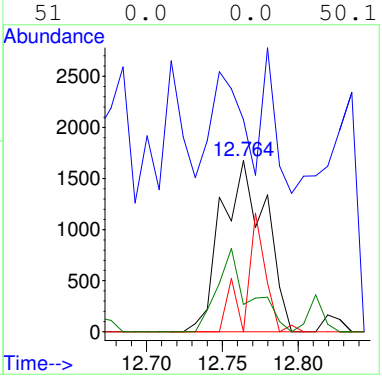


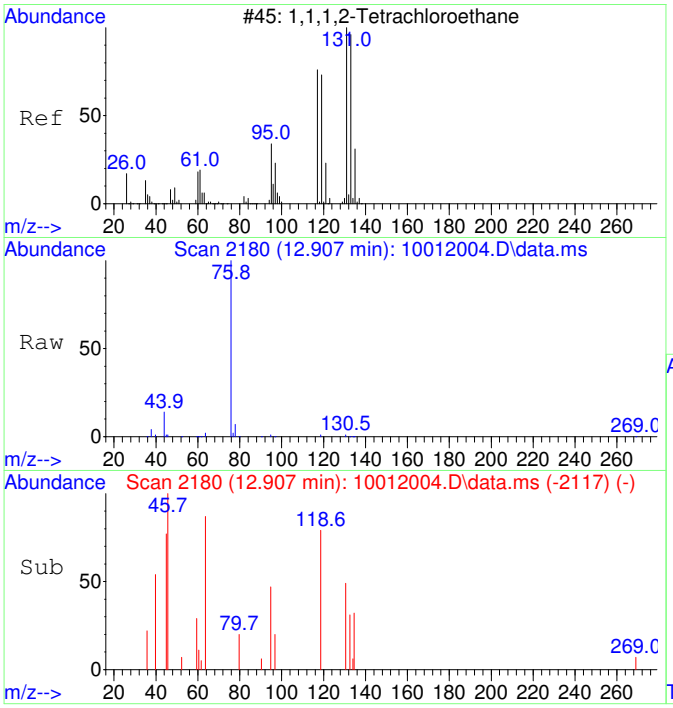


#40
Chlorobenzene SCAN
Concen: 67.92 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:112 Resp: 3421

Ion	Ratio	Lower	Upper
112	100		
77	56.1	28.2	88.2
114	31.0	2.3	62.3
51	0.0	0.0	50.1

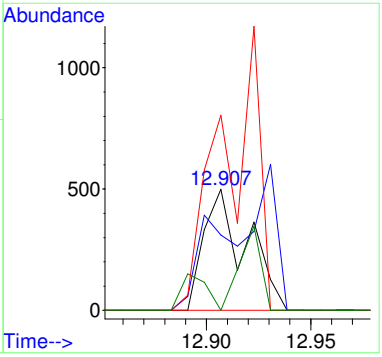


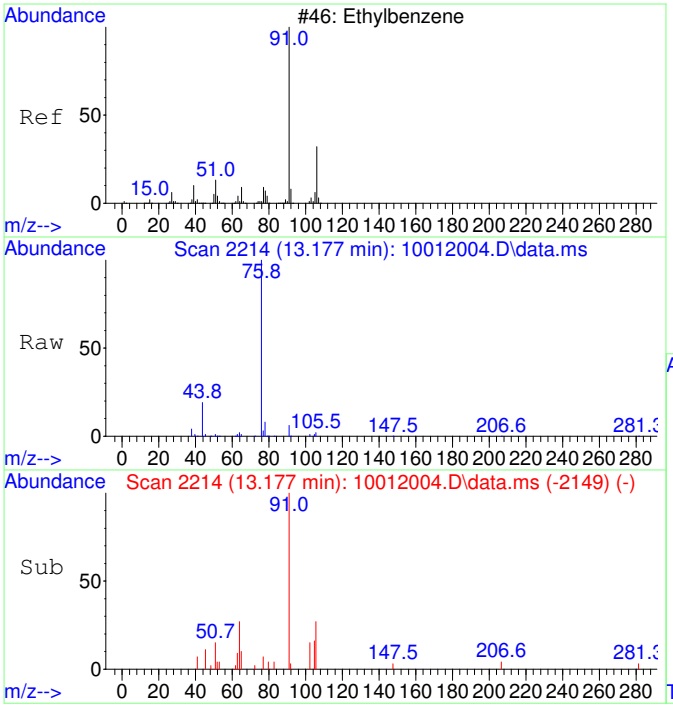


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 38.09 ug/L
RT: 12.907 min Scan# 2180
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:131 Resp: 710

Ion	Ratio	Lower	Upper
131	100		
133	0.0	66.9	126.9#
119	0.0	40.4	100.4#
117	17.9	35.1	95.1#

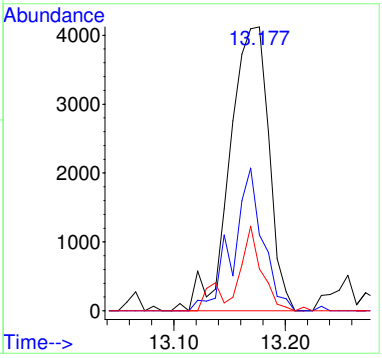


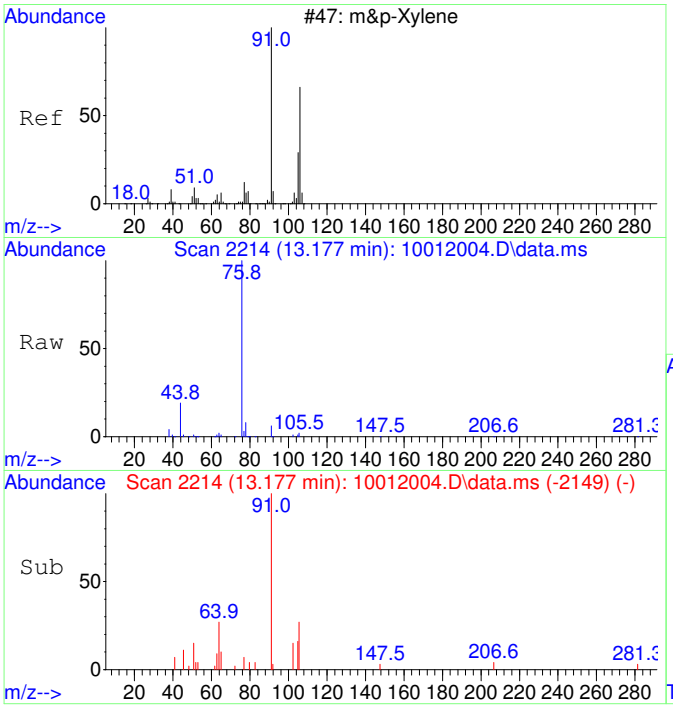


#42
Ethylbenzene SCAN
Concen: 74.57 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 10015

Ion	Ratio	Lower	Upper
91	100		
106	38.5	23.1	83.1
51	13.3	0.0	40.1

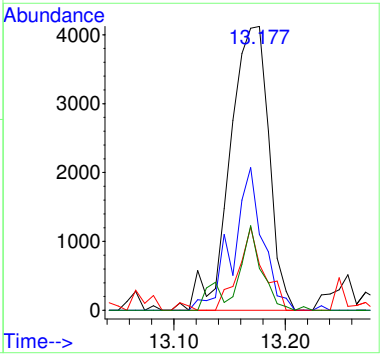


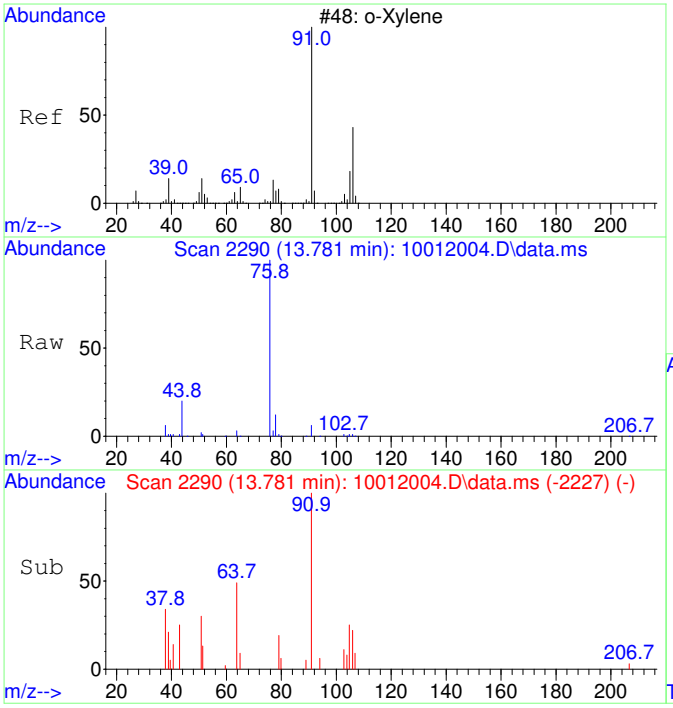


#43
m&p-Xylene SCAN
Concen: 74.57 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 10015

Ion	Ratio	Lower	Upper
91	100		
106	38.5	23.1	83.1
105	19.3	0.0	54.7
51	13.3	0.0	40.1

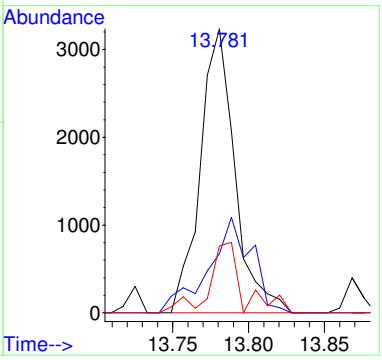


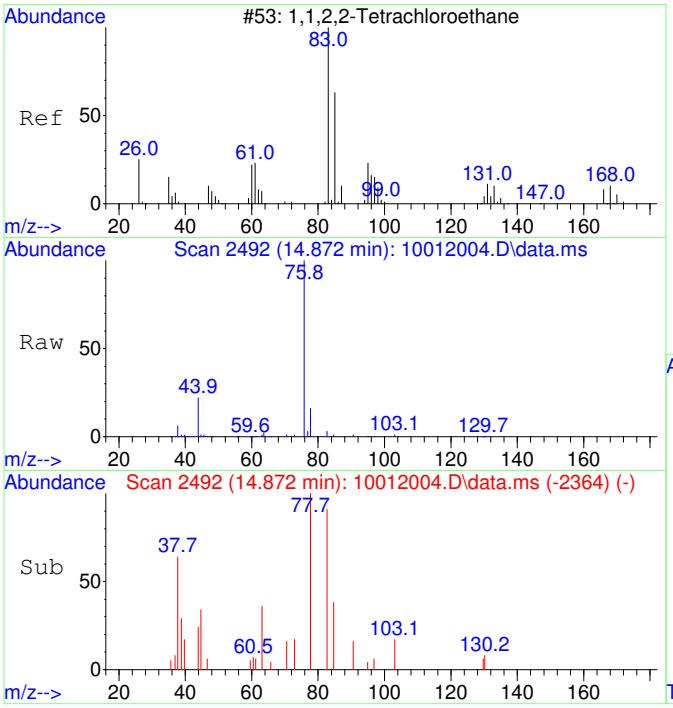


#44
o-Xylene SCAN
Concen: 71.70 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 5154

Ion	Ratio	Lower	Upper
91	100		
106	41.5	18.0	78.0
105	23.8	0.0	56.6

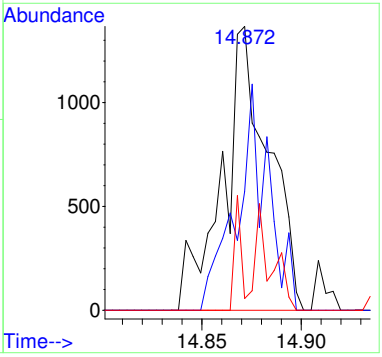


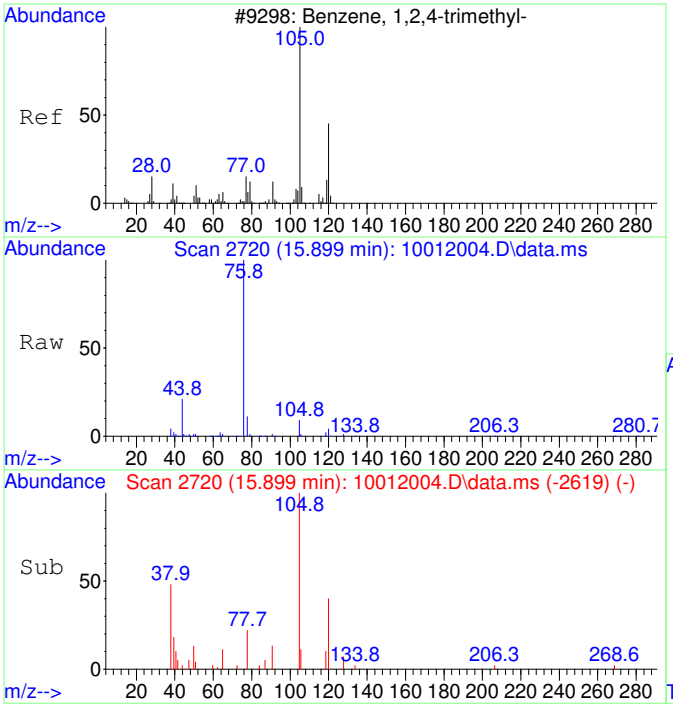


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 62.59 ug/L
RT: 14.872 min Scan# 2492
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 83 Resp: 2194

Ion	Ratio	Lower	Upper
83	100		
85	0.0	35.9	95.9#
95	5.7	0.0	47.4

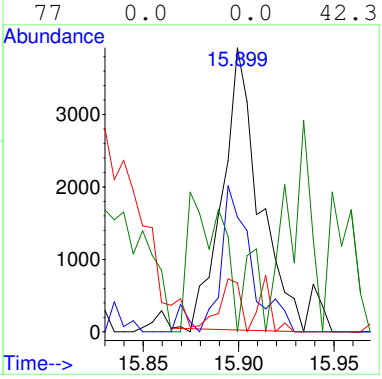


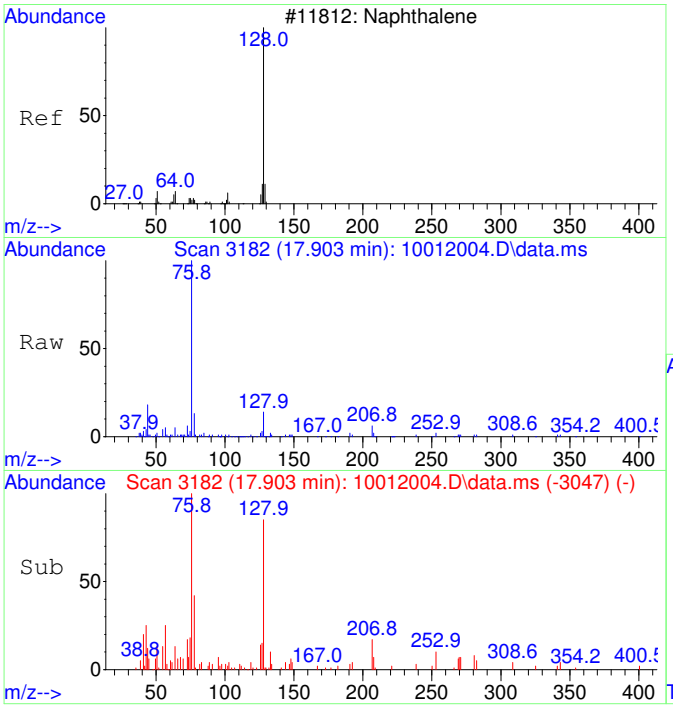


#47
1,2,4-Trimethylbenzene SCAN
Concen: 67.25 ug/L
RT: 15.899 min Scan# 2720
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:105 Resp: 5213

Ion	Ratio	Lower	Upper
105	100		
120	41.5	16.9	76.9
119	9.5	0.0	41.9
77	0.0	0.0	42.3

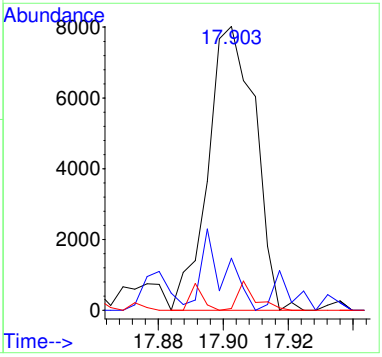




#48
Naphthalene SCAN
Concen: 69.11 ug/L
RT: 17.903 min Scan# 3182
Delta R.T. 0.001 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:128 Resp: 8107

Ion	Ratio	Lower	Upper
128	100		
127	5.6	0.0	44.0
129	3.9	0.0	40.8



B20I024-BS2

Blanks Spike or Blank Spike Duplicate

Instrument Name: AG5975C
Sample Name: B20I024-BS2
Misc Info: 0
Date Acquired: 10/1/2020
QLast Update: Fri Aug 21 08:33:54 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.970	5000	5000.00	100%	70	130	pass
2)	**1,1-Dichloroethene**	**3.090**	**5000**	**4757.94**	**95%**	**22**	**143**	**pass**
3)	**trans-1,2-Dichloroethene**	**4.396**	**5000**	**4597.17**	**92%**	**35**	**133**	**pass**
4)	**1,1-Dichloroethane**	**5.099**	**5000**	**4672.77**	**93%**	**43**	**140**	**pass**
5)	**cis-1,2-Dichloroethene**	**6.094**	**5000**	**4600.77**	**92%**	**49**	**134**	**pass**
6)	**Chloroform**	**6.664**	**5000**	**4473.02**	**89%**	**56**	**132**	**pass**
7)	**1,1,1-Trichloroethane**	**6.919**	**5000**	**4532.09**	**91%**	**58**	**131**	pass
8)	Carbon tetrachloride	7.187	5000	4477.72	90%	60	126	pass
9)	Benzene	7.515	5000	4270.57	85%	63	121	pass
10)	1,2-Dichloroethane	7.552	5000	4503.25	90%	57	128	pass
11)	**Trichloroethene**	**8.569**	**5000**	**4384.39**	**88%**	**69**	**124**	**pass**
12)	Toluene-d8	10.477	5000	4487.82	90%	70	130	pass
13)	Toluene	10.571	5000	4100.49	82%	77	111	pass
14)	1,1,2-Trichloroethane	11.222	5000	4382.19	88%	76	115	pass
15)	**Tetrachloroethene**	**11.421**	**5000**	**4260.64**	**85%**	**69**	**124**	**pass**
16)	Chlorobenzene	12.757	5000	4015.51	80%	64	122	pass
17)	1,1,1,2-Tetrachloroethane	12.908	5000	4433.50	89%	68	130	**pass**
18)	Ethylbenzene	12.964	5000	4329.00	87%	70	130	pass
19)	m&p-Xylene	13.162	10000	8176.16	82%	66	129	pass
20)	o-Xylene	13.774	5000	3906.23	78%	63	121	pass
21)	1,1,2,2-Tetrachloroethane	14.873	5000	4130.73	83%	55	132	pass
22)	1,3,5-Trimethylbenzene	15.345	5000	4269.99	85%	61	140	pass
23)	1,2,4-Trimethylbenzene	15.896	5000	3921.37	78%	54	143	pass
25)	2-Fluorotoluene SCAN	10.969	5000	5009.64	100%	20	110	pass
27)	trans-1,2-Dichloroethene SCAN	4.401	5000	4847.96	97%	83	110	pass
29)	cis-1,2-Dichloroethene SCAN	6.093	5000	5220.59	104%	58	118	pass
31)	1,1,1-Trichloroethane SCAN	6.918	5000	5060.79	101%	59	119	pass
33)	Benzene SCAN	7.514	5000	4759.24	95%	69	129	pass
35)	Trichloroethene SCAN	8.568	5000	4594.22	92%	69	129	pass
37)	Toluene SCAN	10.580	5000	4517.95	90%	66	126	pass
39)	Tetrachloroethene SCAN	11.430	5000	5017.48	100%	59	119	pass
41)	1,1,1,2-Tetrachloroethane SCAN	12.907	5000	4286.76	86%	62	122	pass
43)	m&p-Xylene SCAN	13.161	5000	4513.64	90%	68	128	pass
45)	1,1,2,2-Tetrachloroethane SCAN	14.872	5000	4577.66	92%	63	123	pass
47)	1,2,4-Trimethylbenzene SCAN	15.899	5000	4151.34	83%	20	110	pass

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012005.D
Acq On : 1 Oct 2020 13:22
InstName : AG5975C
Operator : TD
Sample : B20I024-BS2
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 01 13:41:15 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

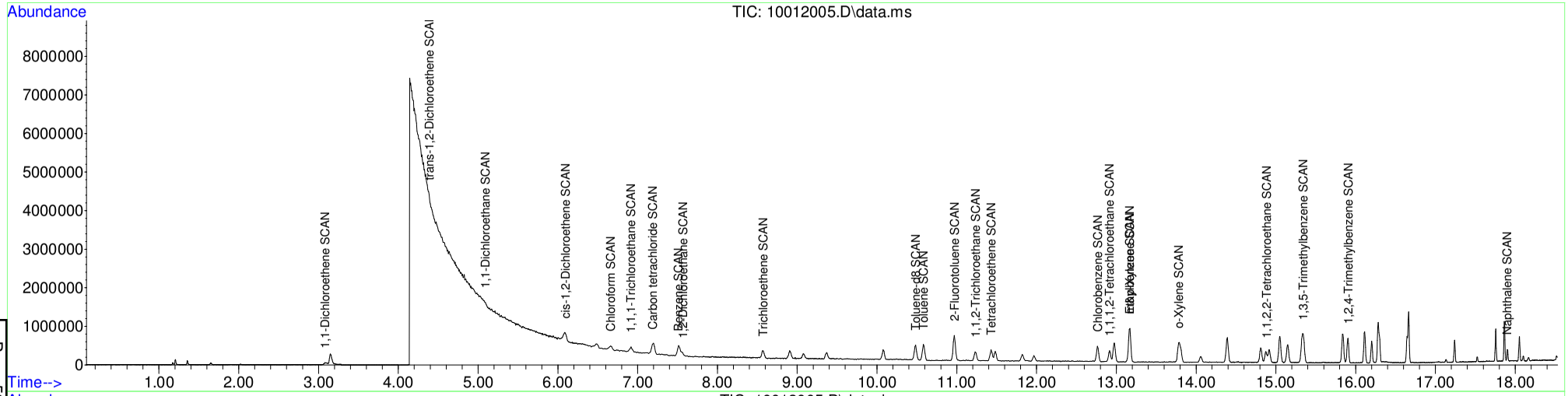
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	630084	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	553553	4487.82 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 89.76%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	119711	4757.94 ug/L	82
3] trans-1,2-Dichloroethene	4.382	61	133637	4597.17 ug/L	98
4] 1,1-Dichloroethane	5.092	63	169088	4672.77 ug/L	98
5] cis-1,2-Dichloroethene	6.088	61	175734	4600.77 ug/L	99
6] Chloroform	6.652	83	174876	4473.02 ug/L	99
7] 1,1,1-Trichloroethane	6.919	97	192425	4532.09 ug/L	99
8] Carbon tetrachloride	7.187	117	178939	4477.72 ug/L	100
9] Benzene	7.515	78	457185	4270.57 ug/L	99
10] 1,2-Dichloroethane	7.552	62	172097	4503.25 ug/L	98
11] Trichloroethene	8.569	130	141321	4384.39 ug/L	93
13] Toluene	10.582	91	644820	4100.49 ug/L	100
14] 1,1,2-Trichloroethane	11.232	97	150159	4382.19 ug/L	97
15] Tetrachloroethene	11.432	166	193898	4260.64 ug/L	100
16] Chlorobenzene	12.765	112	452146	4015.51 ug/L	92
17] 1,1,1,2-Tetrachloroethane	12.916	131	178878	4433.50 ug/L	100
18] Ethylbenzene	12.972	91	828621	4329.00 ug/L	98
19] m&p-Xylene	13.162	91	1223156	8176.16 ug/L	97
20] o-Xylene	13.782	91	624327	3906.23 ug/L	96
21] 1,1,2,2-Tetrachloroethane	14.873	83	292599	4130.73 ug/L	100
22] 1,3,5-Trimethylbenzene	15.345	105	726404	4269.99 ug/L	97
23] 1,2,4-Trimethylbenzene	15.901	105	692914	3921.37 ug/L	96
24] Naphthalene	17.902	128	282279	1010.75 ug/L	100
25) 2-Fluorotoluene SCAN	10.969	109	307700	5009.64 ug/L	93
26) 1,1-Dichloroethene SCAN	3.081	61	69229	5307.30 ug/L	82
27) trans-1,2-Dichloroethe...	4.388	61	78252	4847.96 ug/L	81
28) 1,1-Dichloroethane SCAN	5.091	63	94232	5044.45 ug/L	94
29) cis-1,2-Dichloroethene...	6.093	61	104486	5220.59 ug/L	77
30) Chloroform SCAN	6.662	83	99636	4589.79 ug/L	94
31) 1,1,1-Trichloroethane ...	6.918	97	100114	5060.79 ug/L	92
32) Carbon tetrachloride SCAN	7.185	117	90088	4365.77 ug/L	92
33) Benzene SCAN	7.514	78	259226	4759.24 ug/L	96
34) 1,2-Dichloroethane SCAN	7.563	62	92890	4618.53 ug/L	91
35) Trichloroethene SCAN	8.573	130	68767	4594.22 ug/L	84
36) Toluene-d8 SCAN	10.486	98	287962	4793.90 ug/L	92
37) Toluene SCAN	10.580	91	347550	4517.95 ug/L	98
38) 1,1,2-Trichloroethane ...	11.231	97	80584	4667.00 ug/L	93
39) Tetrachloroethene SCAN	11.430	166	92730	5017.48 ug/L	97
40) Chlorobenzene SCAN	12.764	112	233865	4449.01 ug/L	93
41) 1,1,1,2-Tetrachloroeth...	12.915	131	83392	4286.76 ug/L	96
42) Ethylbenzene SCAN	13.169	91	632572	4513.64 ug/L	89
43) m&p-Xylene SCAN	13.169	91	632572	4513.64 ug/L	90
44) o-Xylene SCAN	13.781	91	322011	4292.50 ug/L	93
45) 1,1,2,2-Tetrachloroeth...	14.879	83	167448	4577.66 ug/L	96
46) 1,3,5-Trimethylbenzene...	15.343	105	350903	4438.41 ug/L	98
47) 1,2,4-Trimethylbenzene...	15.904	105	335828	4151.34 ug/L	95
48) Naphthalene SCAN	17.901	128	126421	1032.77 ug/L	99

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012005.D
Acq On : 1 Oct 2020 13:22
InstName : AG5975C
Operator : TD
Sample : B20I024-BS2
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 01 13:41:15 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration



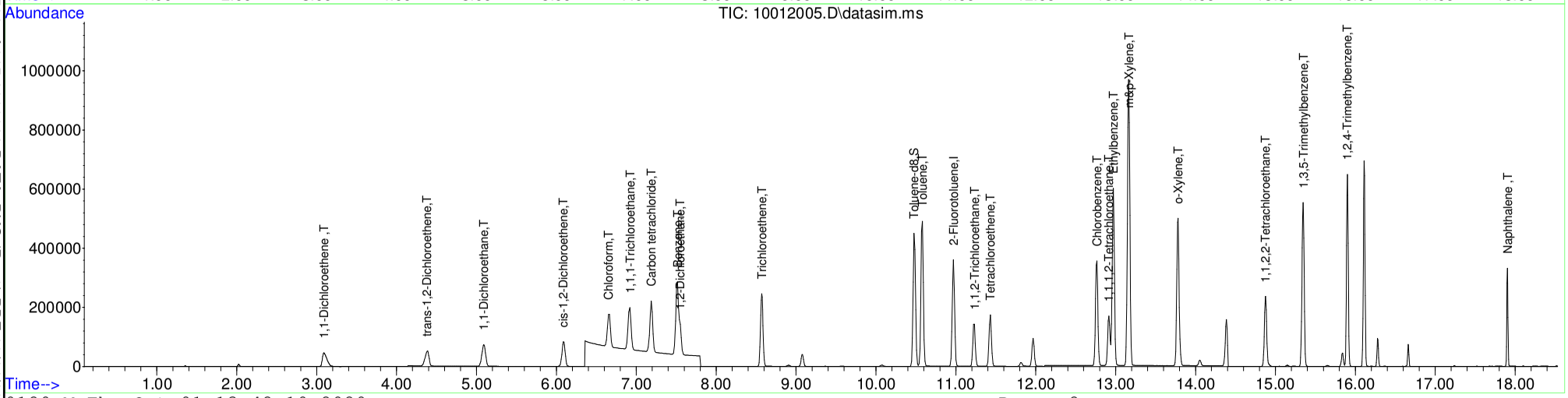


Table of Contents

B20I024-BSD2

Blanks Spike or Blank Spike Duplicate

Instrument Name: AG5975C
Sample Name: B20I024-BSD1 also as B20I024-BSD2
Misc Info: 0
Date Acquired: 9/30/2020
QLast Update: Fri Aug 21 08:33:54 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.970	5000	5000.00	100%	70	130	pass
2)	**1,1-Dichloroethene**	**3.090**	**5000**	**3735.03**	**75%**	**22**	**143**	**pass**
3)	**trans-1,2-Dichloroethene**	**4.396**	**5000**	**3793.17**	**76%**	**35**	**133**	**pass**
4)	**1,1-Dichloroethane**	**5.099**	**5000**	**3958.30**	**79%**	**43**	**140**	**pass**
5)	**cis-1,2-Dichloroethene**	**6.094**	**5000**	**4000.80**	**80%**	**49**	**134**	**pass**
6)	**Chloroform**	**6.664**	**5000**	**3946.93**	**79%**	**56**	**132**	**pass**
7)	**1,1,1-Trichloroethane**	**6.919**	**5000**	**3806.11**	**76%**	**58**	**131**	pass
8)	Carbon tetrachloride	7.187	5000	3727.82	75%	60	126	pass
9)	Benzene	7.515	5000	3584.86	72%	63	121	pass
10)	1,2-Dichloroethane	7.552	5000	3965.27	79%	57	128	pass
11)	**Trichloroethene**	**8.569**	**5000**	**3802.31**	**76%**	**69**	**124**	**pass**
12)	Toluene-d8	10.477	5000	4515.98	90%	70	130	pass
13)	Toluene	10.571	5000	3598.70	72%	77	111	FAIL
14)	1,1,2-Trichloroethane	11.222	5000	3961.80	79%	76	115	pass
15)	**Tetrachloroethene**	**11.421**	**5000**	**3749.90**	**75%**	**69**	**124**	**pass**
16)	Chlorobenzene	12.757	5000	3529.27	71%	64	122	pass
17)	1,1,1,2-Tetrachloroethane	12.908	5000	4029.76	81%	68	130	**pass**
18)	Ethylbenzene	12.964	5000	3866.82	77%	70	130	pass
19)	m&p-Xylene	13.162	10000	7283.87	73%	66	129	pass
20)	o-Xylene	13.774	5000	3418.35	68%	63	121	pass
21)	1,1,2,2-Tetrachloroethane	14.873	5000	3708.55	74%	55	132	pass
22)	1,3,5-Trimethylbenzene	15.345	5000	3820.78	76%	61	140	pass
23)	1,2,4-Trimethylbenzene	15.896	5000	3468.45	69%	54	143	pass
25)	2-Fluorotoluene SCAN	10.969	5000	5188.27	104%	20	110	pass
27)	trans-1,2-Dichloroethene SCAN	4.401	5000	4142.13	83%	83	110	FAIL
29)	cis-1,2-Dichloroethene SCAN	6.093	5000	4711.98	94%	58	118	pass
31)	1,1,1-Trichloroethane SCAN	6.918	5000	4347.16	87%	59	119	pass
33)	Benzene SCAN	7.514	5000	4336.98	87%	69	129	pass
35)	Trichloroethene SCAN	8.568	5000	4153.53	83%	69	129	pass
37)	Toluene SCAN	10.580	5000	3934.55	79%	66	126	pass
39)	Tetrachloroethene SCAN	11.430	5000	3978.22	80%	59	119	pass
41)	1,1,1,2-Tetrachloroethane SCAN	12.907	5000	4316.34	86%	62	122	pass
43)	m&p-Xylene SCAN	13.161	5000	3995.88	80%	68	128	pass
45)	1,1,2,2-Tetrachloroethane SCAN	14.872	5000	4292.76	86%	63	123	pass
47)	1,2,4-Trimethylbenzene SCAN	15.899	5000	3801.15	76%	20	110	pass

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302007.D
Acq On : 30 Sep 2020 15:46
InstName : AG5975C
Operator : TD
Sample : B20I024-BSD1 also as B20I024-BSD2
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 30 16:05:14 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

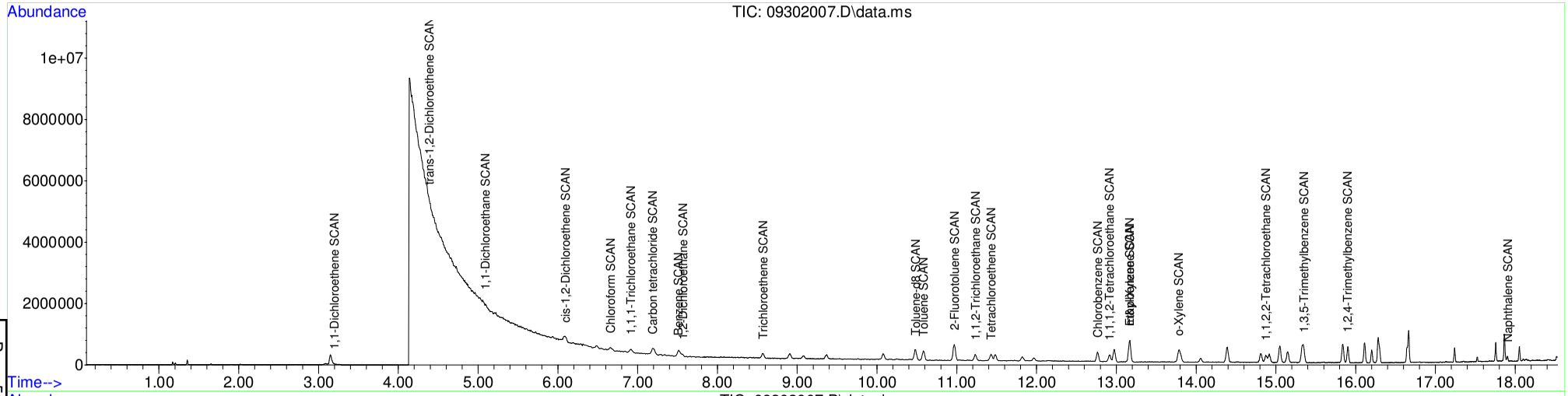
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	553975	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	489743	4515.98	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 90.32%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.090	61	82623	3735.03	ug/L	82
3] trans-1,2-Dichloroethene	4.389	61	96946	3793.17	ug/L	98
4] 1,1-Dichloroethane	5.092	63	125933	3958.30	ug/L	98
5] cis-1,2-Dichloroethene	6.094	61	134358	4000.80	ug/L	99
6] Chloroform	6.664	83	135669	3946.93	ug/L	99
7] 1,1,1-Trichloroethane	6.919	97	142081	3806.11	ug/L	99
8] Carbon tetrachloride	7.187	117	130977	3727.82	ug/L	99
9] Benzene	7.515	78	337419	3584.86	ug/L	96
10] 1,2-Dichloroethane	7.552	62	133233	3965.27	ug/L	100
11] Trichloroethene	8.569	130	107755	3802.31	ug/L	93
13] Toluene	10.582	91	497554	3598.70	ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	119356	3961.80	ug/L	97
15] Tetrachloroethene	11.432	166	150041	3749.90	ug/L	100
16] Chlorobenzene	12.765	112	349394	3529.27	ug/L	92
17] 1,1,1,2-Tetrachloroethane	12.916	131	142949	4029.76	ug/L	100
18] Ethylbenzene	12.972	91	650750	3866.82	ug/L	98
19] m&p-Xylene	13.162	91	958046	7283.87	ug/L	96
20] o-Xylene	13.782	91	480355	3418.35	ug/L	96
21] 1,1,2,2-Tetrachloroethane	14.877	83	230963	3708.55	ug/L	100
22] 1,3,5-Trimethylbenzene	15.345	105	571473	3820.78	ug/L	96
23] 1,2,4-Trimethylbenzene	15.901	105	538850	3468.45	ug/L	96
24] Naphthalene	17.903	128	145648	593.17	ug/L	98
25) 2-Fluorotoluene SCAN	10.969	109	280179	5188.27	ug/L	99
26) 1,1-Dichloroethene SCAN	3.200	61	392	34.18	ug/L	85
27) trans-1,2-Dichloroethe...	4.388	61	58783	4142.13	ug/L #	63
28) 1,1-Dichloroethane SCAN	5.091	63	73224	4458.38	ug/L	94
29) cis-1,2-Dichloroethene...	6.100	61	82915	4711.98	ug/L #	72
30) Chloroform SCAN	6.662	83	76423	4004.13	ug/L	94
31) 1,1,1-Trichloroethane ...	6.918	97	75609	4347.16	ug/L	86
32) Carbon tetrachloride SCAN	7.185	117	65448	3607.43	ug/L	91
33) Benzene SCAN	7.514	78	207692	4336.98	ug/L	95
34) 1,2-Dichloroethane SCAN	7.563	62	72291	4088.15	ug/L	90
35) Trichloroethene SCAN	8.568	130	54661	4153.53	ug/L	86
36) Toluene-d8 SCAN	10.486	98	261653	4954.36	ug/L	94
37) Toluene SCAN	10.580	91	266111	3934.55	ug/L	98
38) 1,1,2-Trichloroethane ...	11.231	97	69461	4575.50	ug/L	93
39) Tetrachloroethene SCAN	11.430	166	64642	3978.22	ug/L	92
40) Chlorobenzene SCAN	12.764	112	175001	3786.58	ug/L	90
41) 1,1,1,2-Tetrachloroeth...	12.915	131	73825	4316.34	ug/L	90
42) Ethylbenzene SCAN	13.169	91	492365	3995.88	ug/L	91
43) m&p-Xylene SCAN	13.169	91	492365	3995.88	ug/L	92
44) o-Xylene SCAN	13.781	91	261585	3966.07	ug/L	90
45) 1,1,2,2-Tetrachloroeth...	14.875	83	138059	4292.76	ug/L	96
46) 1,3,5-Trimethylbenzene...	15.348	105	278950	4013.06	ug/L	99
47) 1,2,4-Trimethylbenzene...	15.899	105	270356	3801.15	ug/L	94
48) Naphthalene SCAN	17.905	128	66973	622.29	ug/L	99

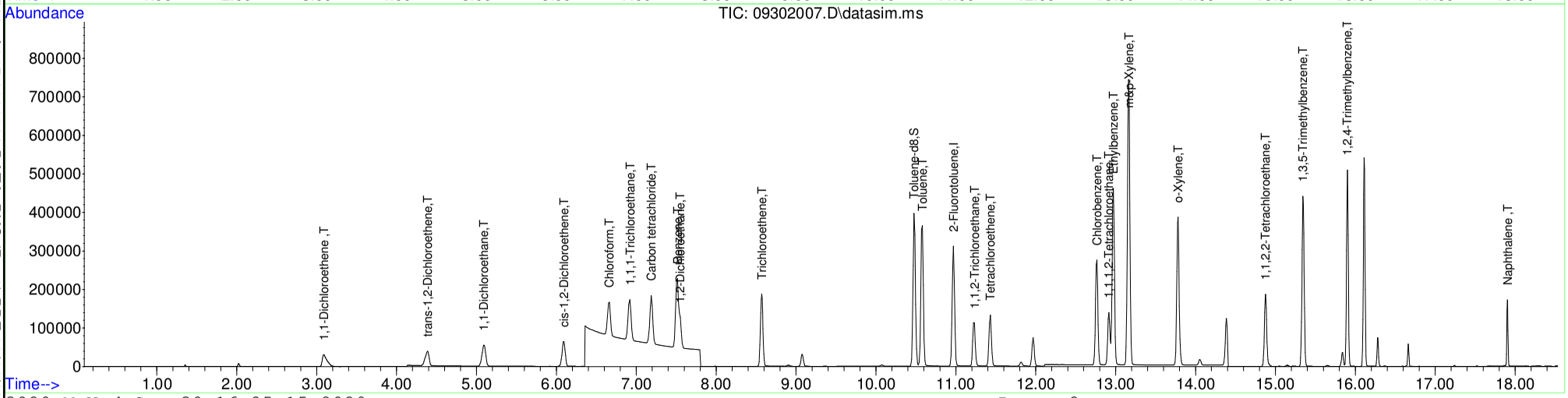
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302007.D
Acq On : 30 Sep 2020 15:46
InstName : AG5975C
Operator : TD
Sample : B20I024-BSD1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 30 16:05:14 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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2009033-02RE1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012007.D
Acq On : 1 Oct 2020 14:10
InstName : AG5975C
Operator : TD
Sample: 2009033-02RE1 (Sig #1);
Misc : 10X DL (90uL-10uL)
ALS Vial : 7 Sample Multiplier: 10

Quant Time: Oct 01 14:33:04 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

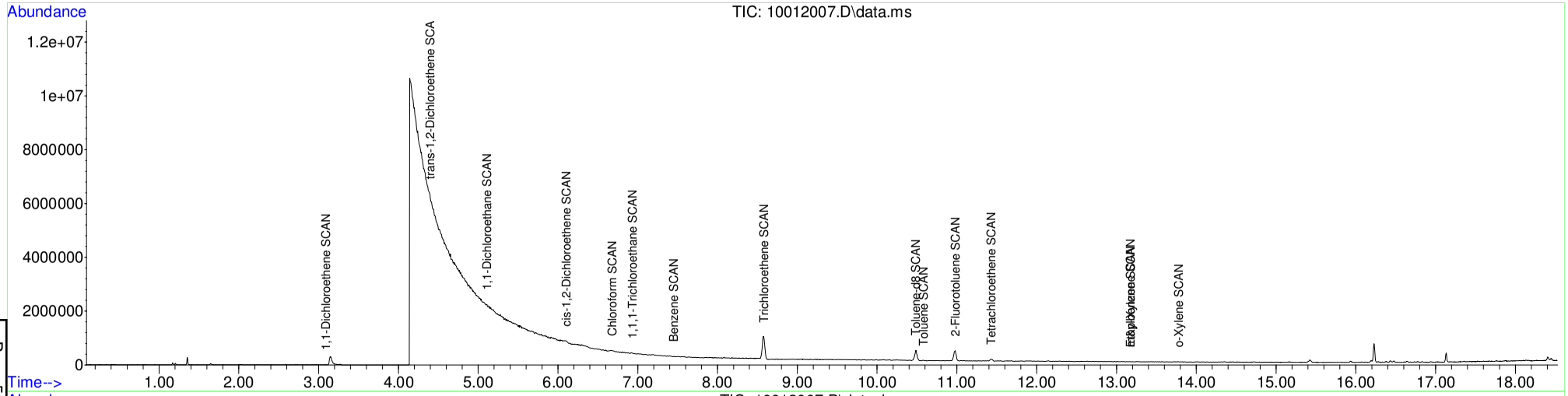
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	609944	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	509484	4266.92 ug/L	0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 85.34%#		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.089	61	2932	120.38 ug/L	87
3] trans-1,2-Dichloroethene	4.402	61	6582	233.90 ug/L	89
4] 1,1-Dichloroethane	5.106	63	2531	72.25 ug/L	74
5] cis-1,2-Dichloroethene	6.101	61	112542	3043.67 ug/L PRT	99
6] Chloroform	6.664	83	38384	1014.21 ug/L	99
7] 1,1,1-Trichloroethane	6.919	97	4232	102.97 ug/L	99
8] Carbon tetrachloride	7.187	117	1193	30.84 ug/L	98
9] Benzene	7.515	78	4899	47.27 ug/L #	1
11] Trichloroethene	8.575	130	614342	19688.87 ug/L PRT	93
13] Toluene	10.582	91	11247	73.88 ug/L	100
15] Tetrachloroethene	11.432	166	41971	952.71 ug/L	99
19] m&p-Xylene	13.162	91	4435	30.62 ug/L	95
20] o-Xylene	13.782	91	3608	23.32 ug/L	99
25) 2-Fluorotoluene SCAN	10.979	109	302976	5095.61 ug/L	98
26) 1,1-Dichloroethene SCAN	3.092	61	291	23.05 ug/L #	1
27) trans-1,2-Dichloroethe...	4.394	61	3781	241.98 ug/L #	61
28) 1,1-Dichloroethane SCAN	5.111	63	378	20.90 ug/L #	13
29) cis-1,2-Dichloroethene...	6.099	61	63981	3302.34 ug/L #	85
30) Chloroform SCAN	6.675	83	24199	1151.55 ug/L	84
31) 1,1,1-Trichloroethane ...	6.930	97	1790	93.47 ug/L #	69
33) Benzene SCAN	7.453	78	15206	288.39 ug/L	92
35) Trichloroethene SCAN	8.579	130	298138	20575.83 ug/L	84
36) Toluene-d8 SCAN	10.486	98	267562	4601.36 ug/L	95
37) Toluene SCAN	10.580	91	6487	87.11 ug/L	97
39) Tetrachloroethene SCAN	11.430	166	19150	1070.39 ug/L	90
42) Ethylbenzene SCAN	13.169	91	3044	22.44 ug/L	72
43) m&p-Xylene SCAN	13.169	91	3044	22.44 ug/L	73
44) o-Xylene SCAN	13.781	91	2099	28.90 ug/L	79

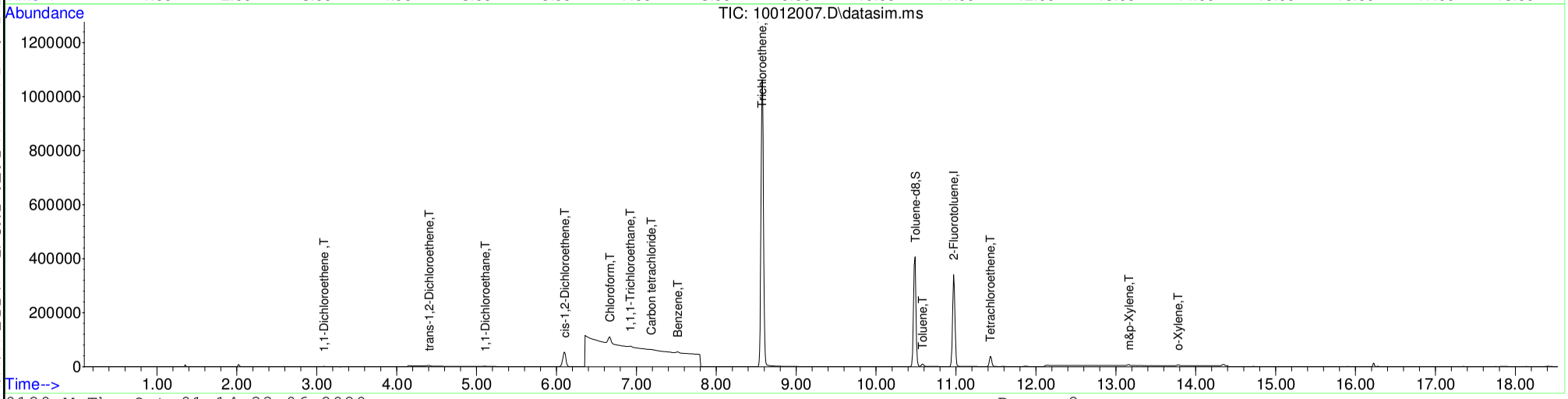
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012007.D
Acq On : 1 Oct 2020 14:10
InstName : AG5975C
Operator : TD
Sample: 2009033-02RE1 (Sig #1);
Misc : 10X DL (90uL-10uL)
ALS Vial : 7 Sample Multiplier: 10

Quant Time: Oct 01 14:33:04 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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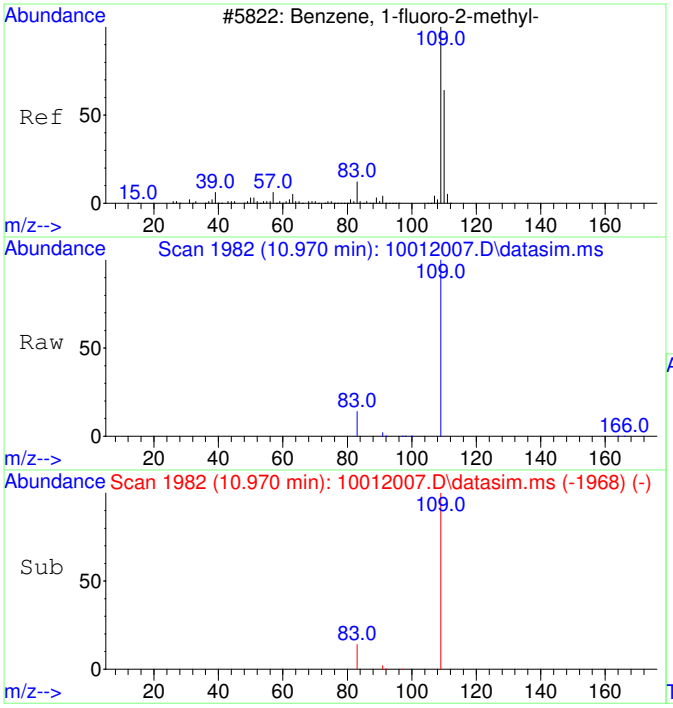
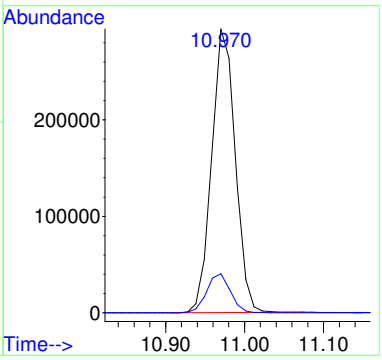
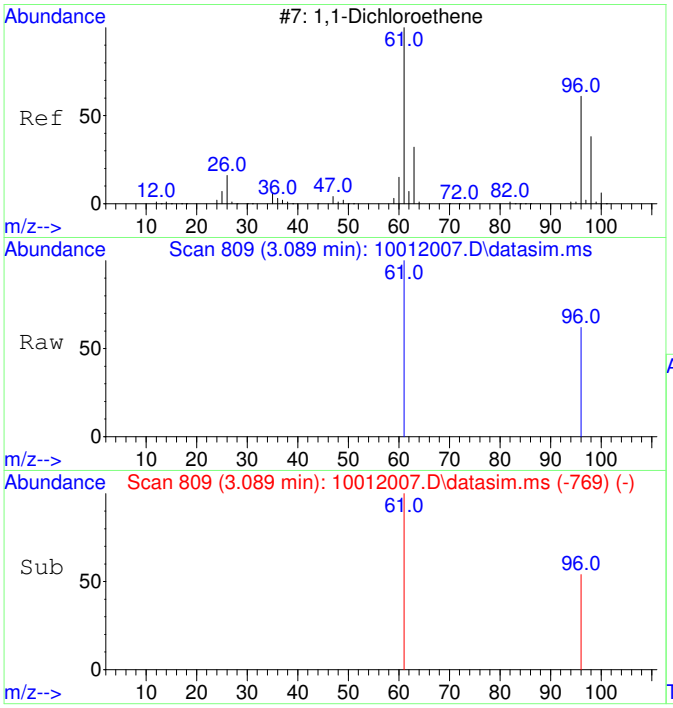


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion:109 Resp: 609944

Ion	Ratio	Lower	Upper
109	100		
83	13.8	0.0	42.3

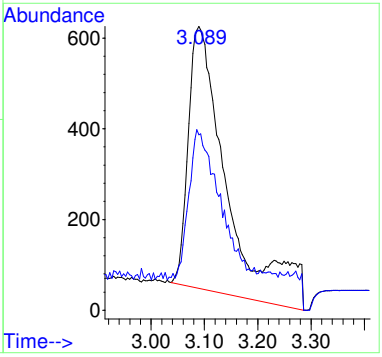


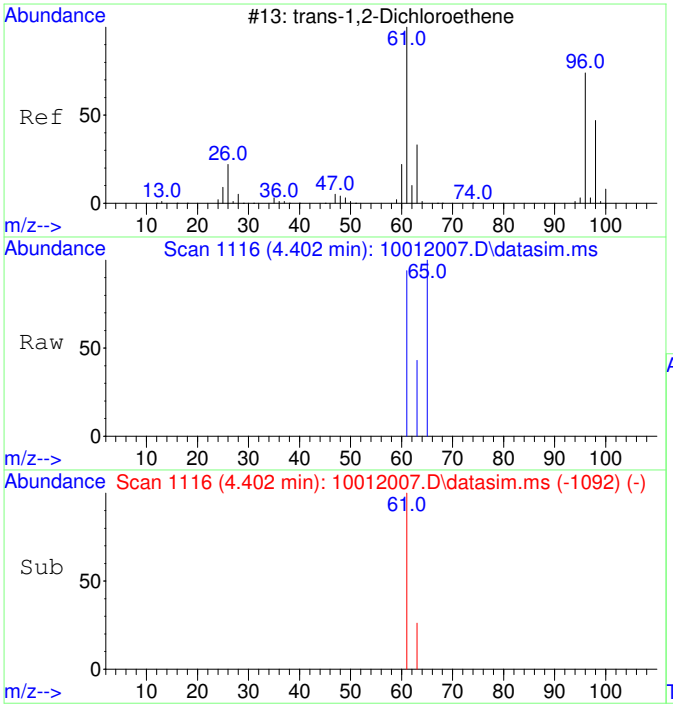


#2
1,1-Dichloroethene
Concen: 120.38 ug/L
RT: 3.089 min Scan# 809
Delta R.T. -0.000 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion: 61 Resp: 2932

Ion	Ratio	Lower	Upper
61	100		
96	56.8	37.2	97.2

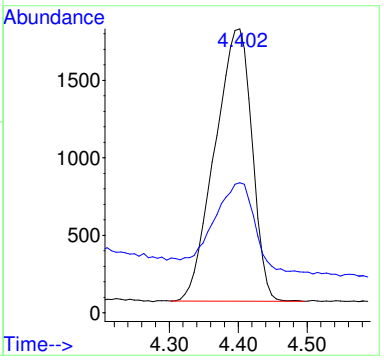


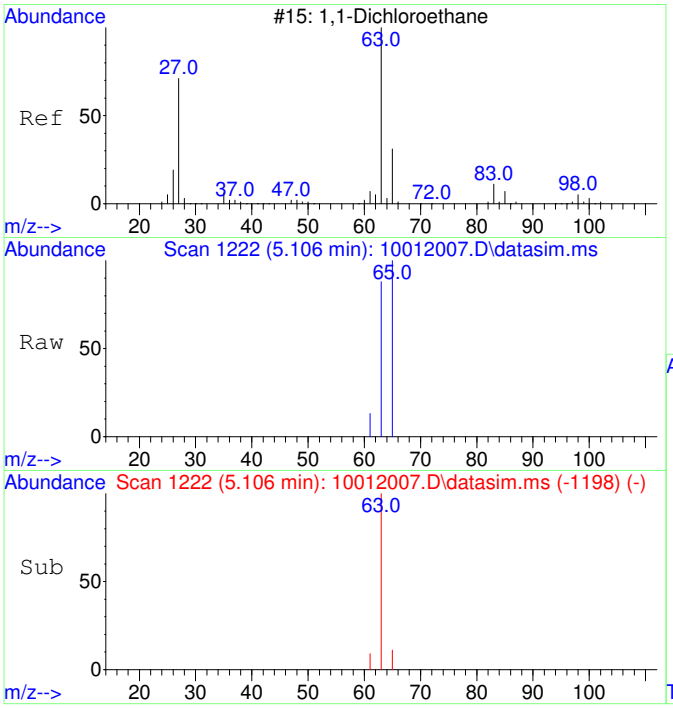


#3
trans-1,2-Dichloroethene
Concen: 233.90 ug/L
RT: 4.402 min Scan# 1116
Delta R.T. 0.007 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion: 61 Resp: 6582

Ion	Ratio	Lower	Upper
61	100		
63	38.7	2.4	62.4

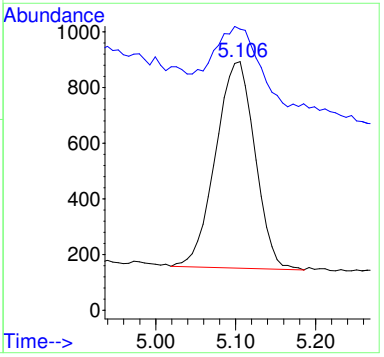


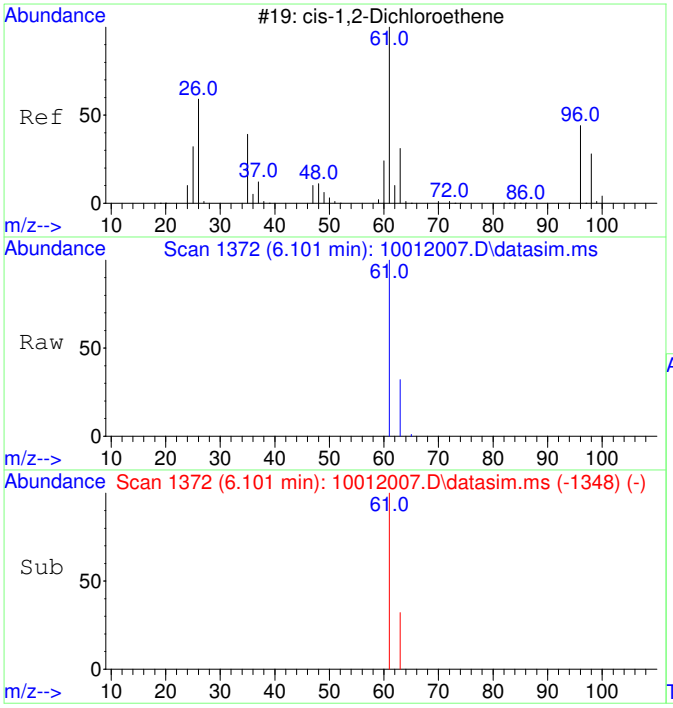


#4
1,1-Dichloroethane
Concen: 72.25 ug/L
RT: 5.106 min Scan# 1222
Delta R.T. 0.007 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion: 63 Resp: 2531

Ion	Ratio	Lower	Upper
63	100		
65	46.3	1.8	61.8

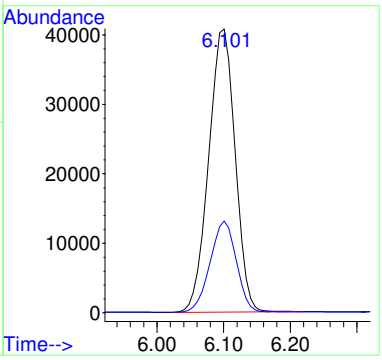


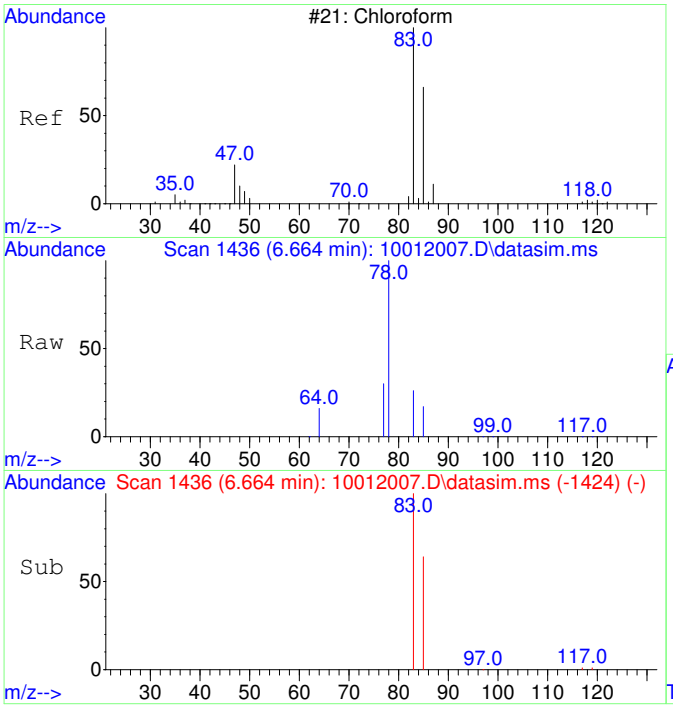


#5
cis-1,2-Dichloroethene
Concen: 3043.67 ug/L
RT: 6.101 min Scan# 1372
Delta R.T. 0.007 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion: 61 Resp: 112542

Ion	Ratio	Lower	Upper
61	100		
63	31.8	2.5	62.5

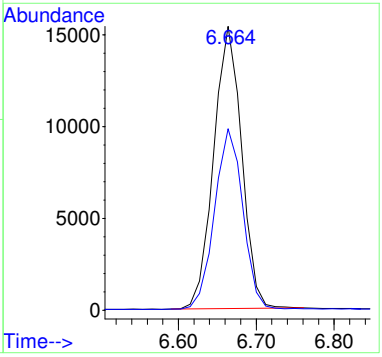


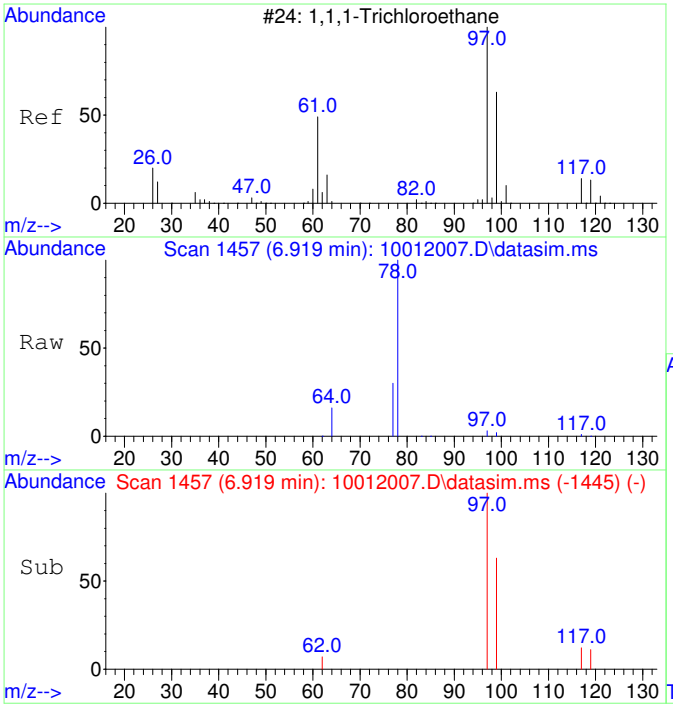


#6
Chloroform
Concen: 1014.21 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion: 83 Resp: 38384

Ion	Ratio	Lower	Upper
83	100		
85	64.1	35.1	95.1

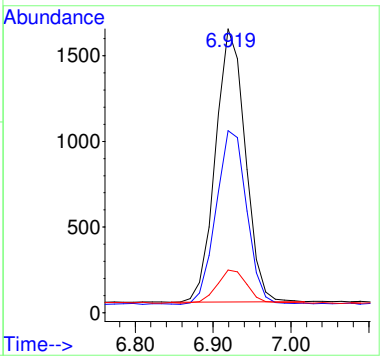


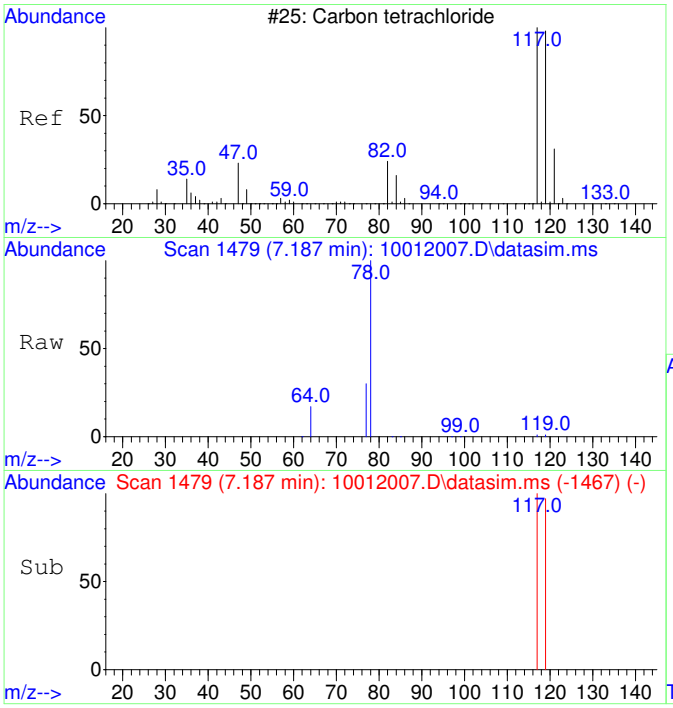


#7
1,1,1-Trichloroethane
Concen: 102.97 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion: 97 Resp: 4232

Ion	Ratio	Lower	Upper
97	100		
99	65.1	34.6	94.6
117	12.2	0.0	43.2

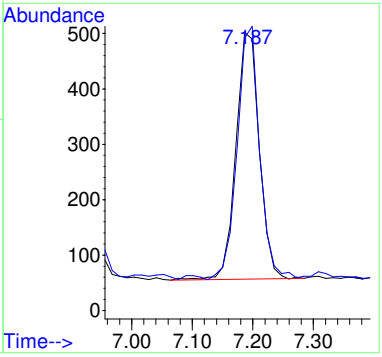


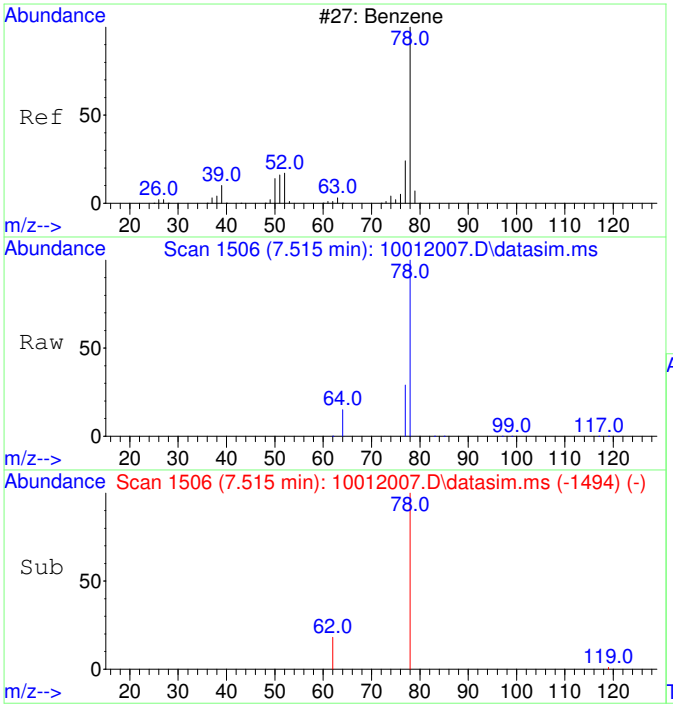


#8
Carbon tetrachloride
Concen: 30.84 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion:117 Resp: 1193

Ion	Ratio	Lower	Upper
117	100		
119	98.2	66.4	126.4

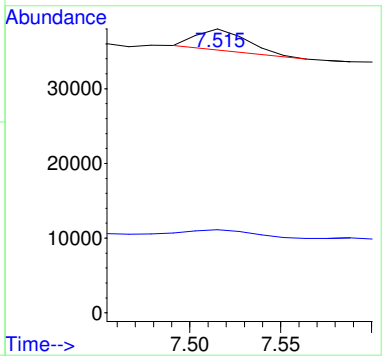


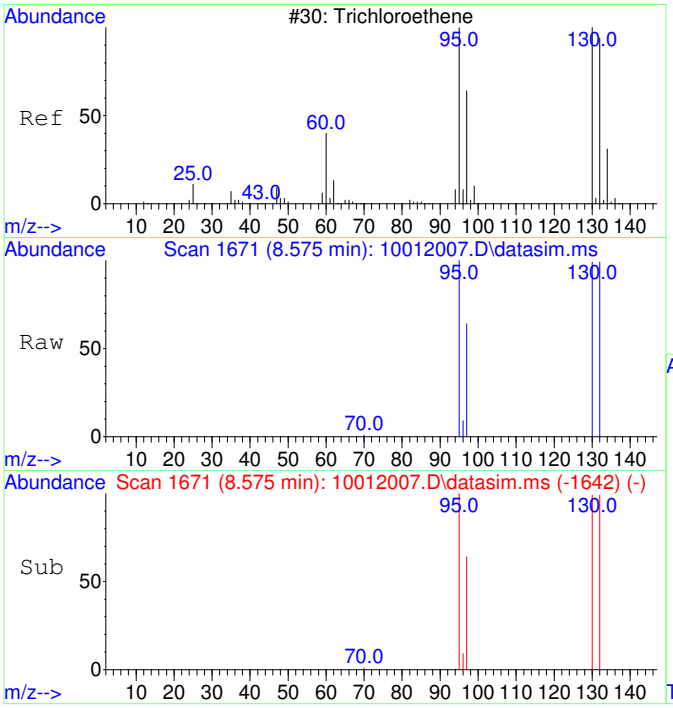


#9
Benzene
Concen: 47.27 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. -0.000 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion: 78 Resp: 4899

Ion	Ratio	Lower	Upper
78	100		
77	94.1	0.0	53.2#

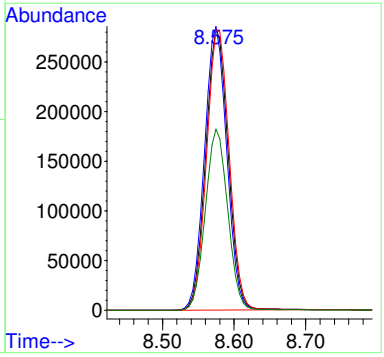


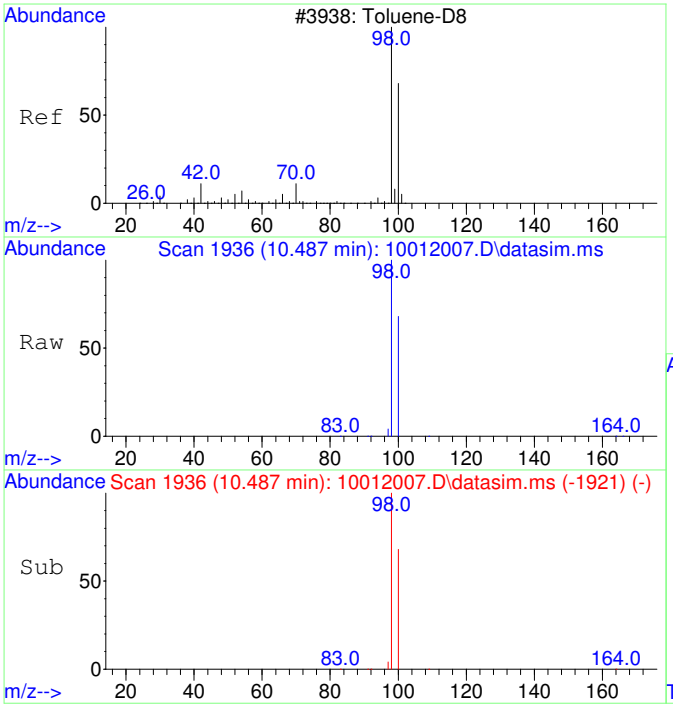


#11
Trichloroethene
Concen: 19688.87 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion:130 Resp: 614342

Ion	Ratio	Lower	Upper
130	100		
95	100.4	60.7	120.7
132	100.4	76.0	116.0
97	64.1	38.6	78.6

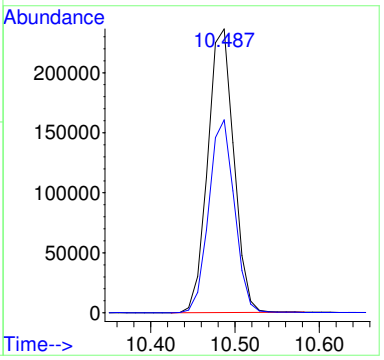


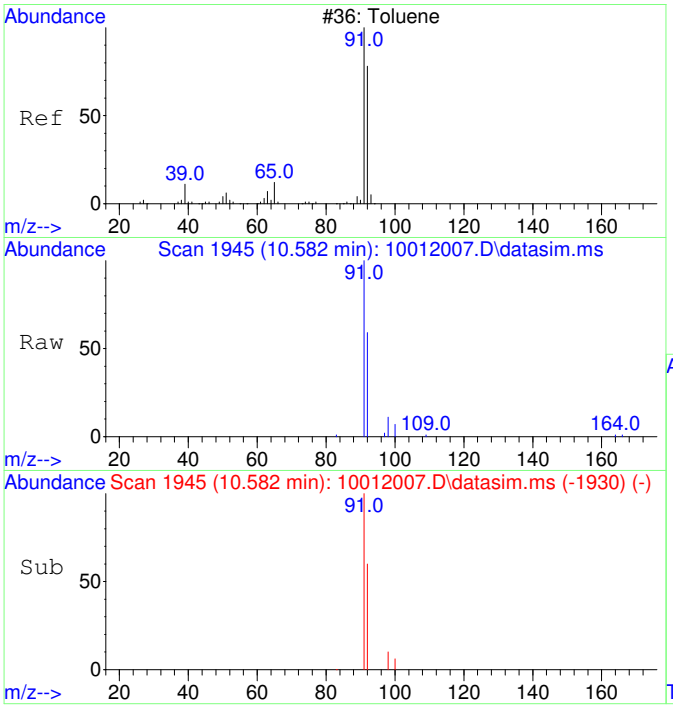


#12
Toluene-d8
Concen: 4266.92 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.010 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion: 98 Resp: 509484

Ion	Ratio	Lower	Upper
98	100		
100	66.7	37.1	97.1

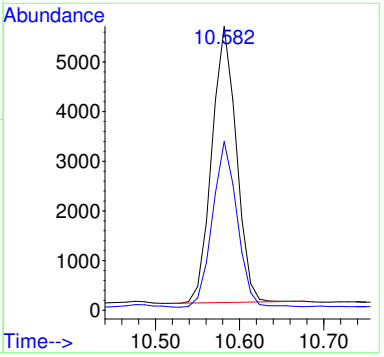


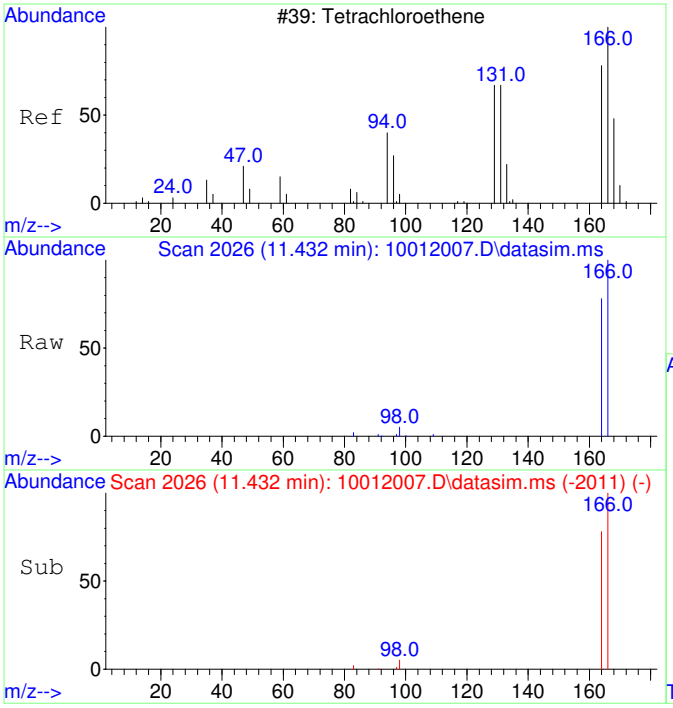


#13
Toluene
Concen: 73.88 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.010 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion: 91 Resp: 11247

Ion	Ratio	Lower	Upper
91	100		
92	59.9	29.9	89.9

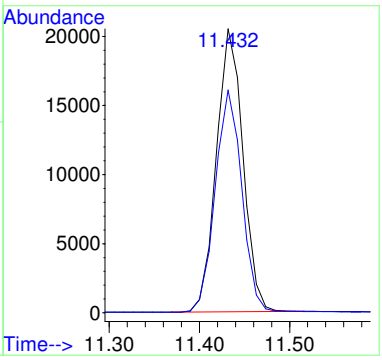


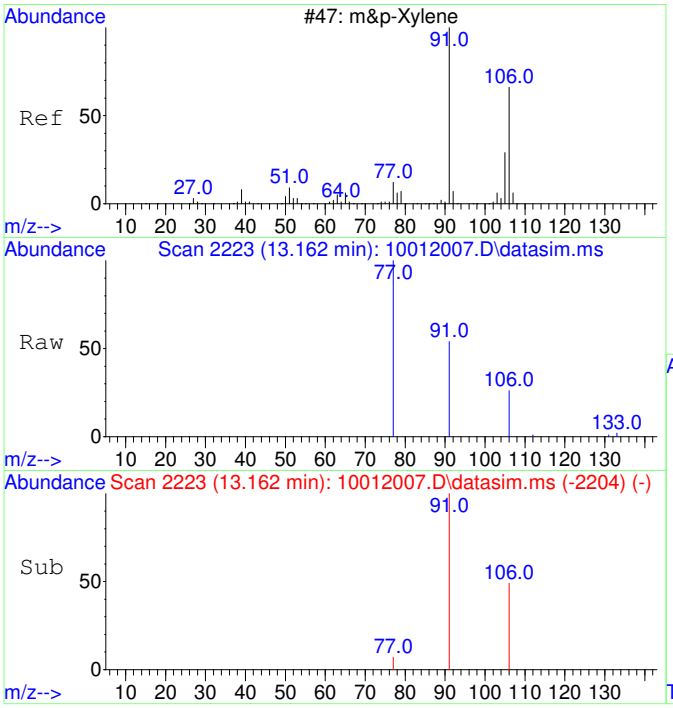


#15
Tetrachloroethene
Concen: 952.71 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion:166 Resp: 41971

Ion	Ratio	Lower	Upper
166	100		
164	78.3	47.8	107.8

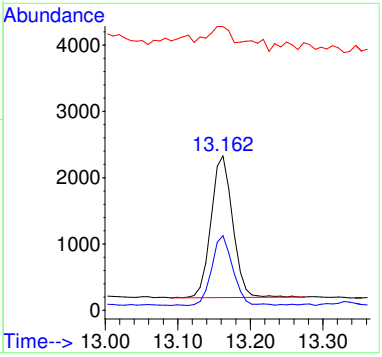


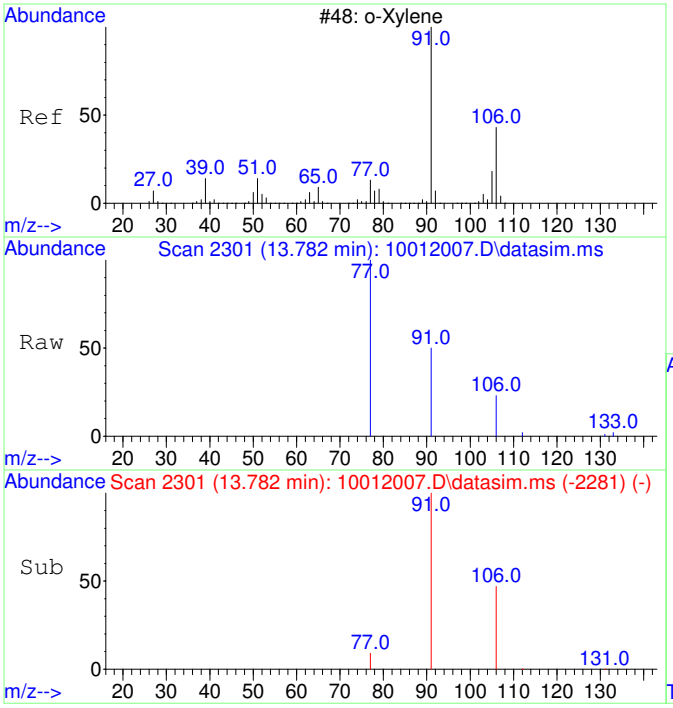


#19
m&p-Xylene
Concen: 30.62 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.000 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion: 91 Resp: 4435

Ion	Ratio	Lower	Upper
91	100		
106	47.7	22.2	82.2
77	12.8	0.0	42.4

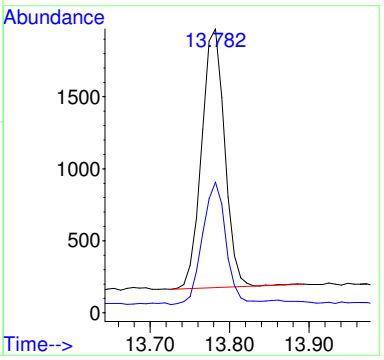


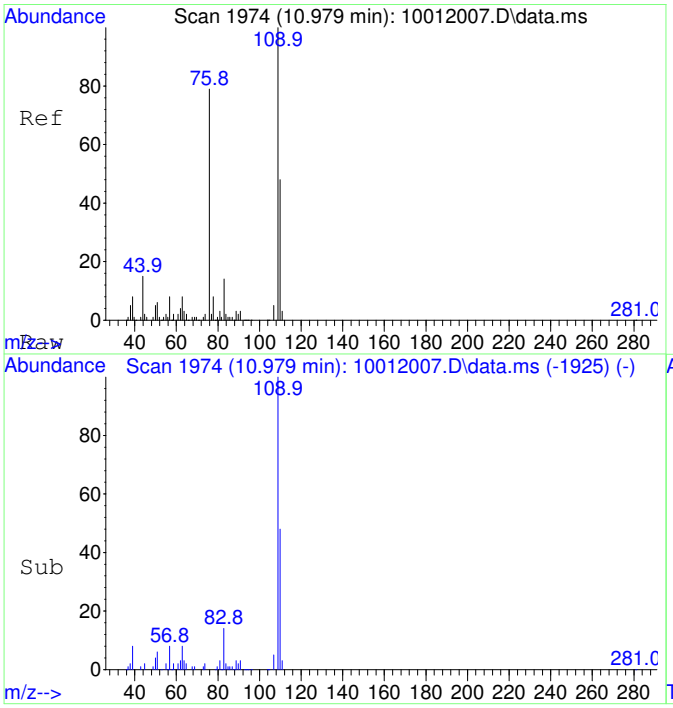


#20
o-Xylene
Concen: 23.32 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion: 91 Resp: 3608

Ion	Ratio	Lower	Upper
91	100		
106	48.6	19.2	79.2

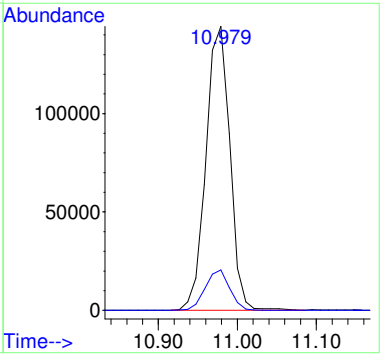


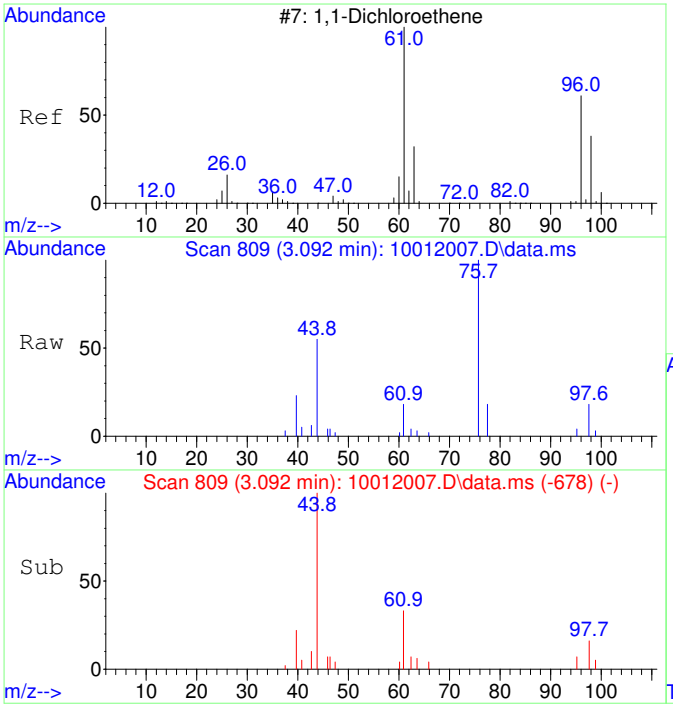


#25
2-Fluorotoluene SCAN
Concen: 5095.61 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.010 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion:109 Resp: 302976

Ion	Ratio	Lower	Upper
109	100		
83	14.5	0.0	43.8

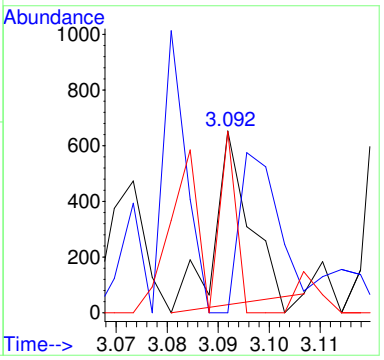


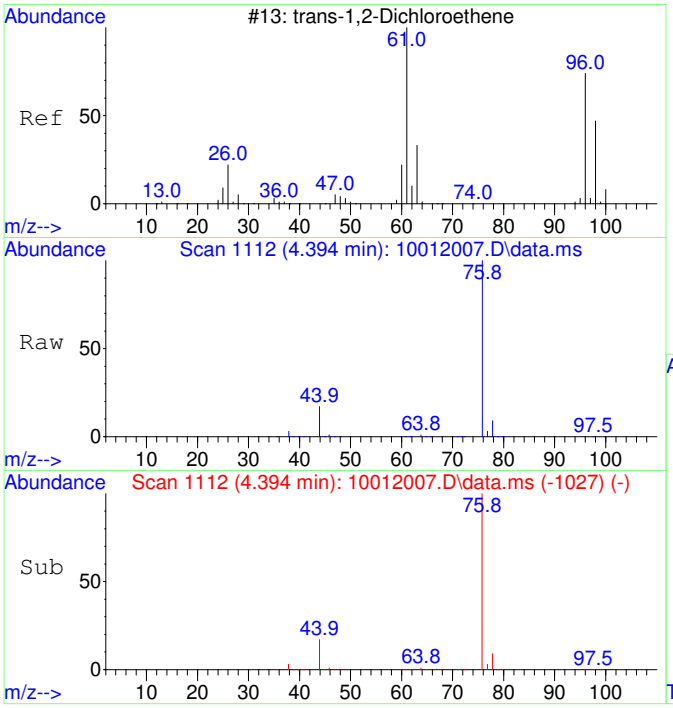


#26
1,1-Dichloroethene SCAN
Concen: 23.05 ug/L
RT: 3.092 min Scan# 809
Delta R.T. -0.015 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion: 61 Resp: 291

Ion	Ratio	Lower	Upper
61	100		
96	141.2	33.1	93.1#
98	127.1	11.2	71.2#

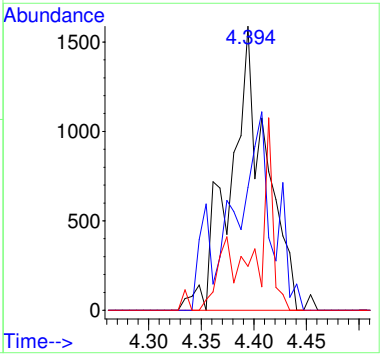


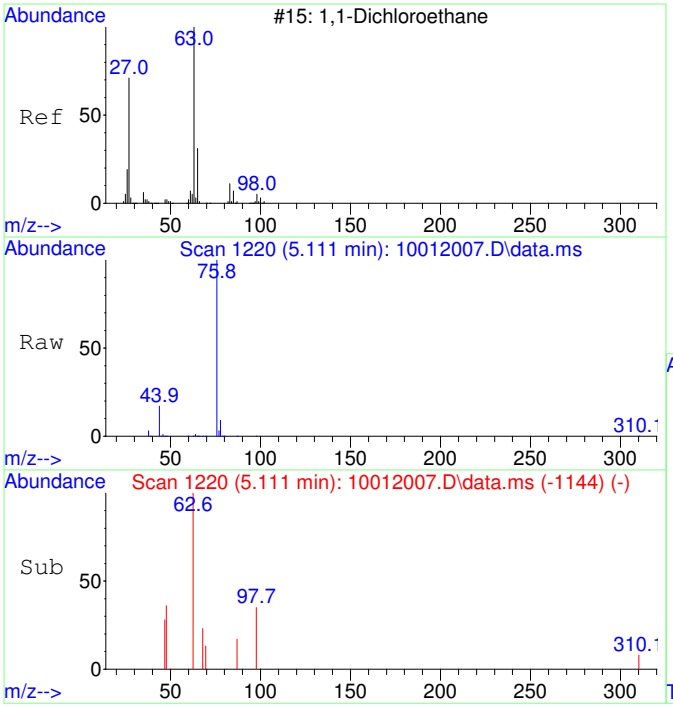


#27
trans-1,2-Dichloroethene SCAN
Concen: 241.98 ug/L
RT: 4.394 min Scan# 1112
Delta R.T. -0.007 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion: 61 Resp: 3781

Ion	Ratio	Lower	Upper
61	100		
96	55.6	49.0	109.0
98	10.8	20.5	80.5#

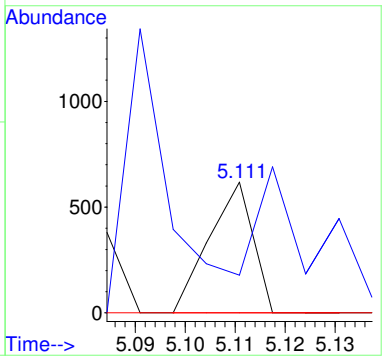


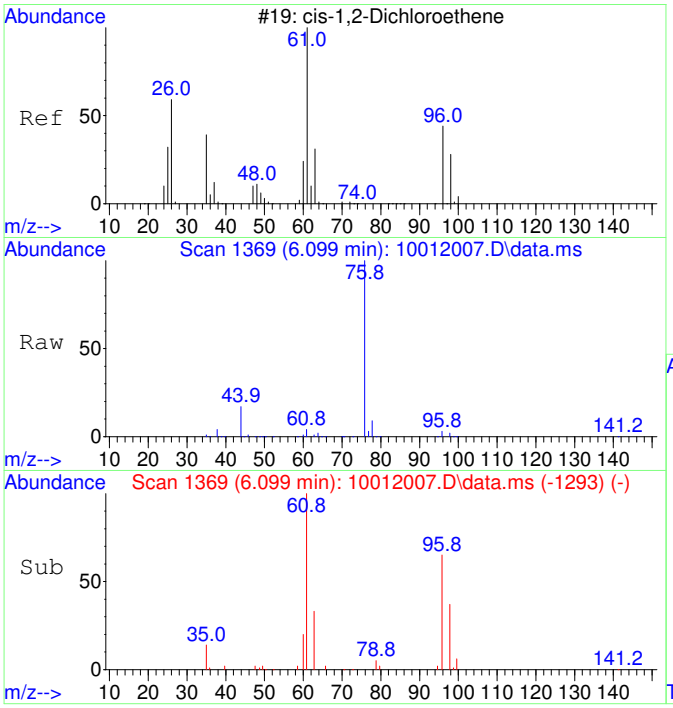


#28
1,1-Dichloroethane SCAN
Concen: 20.90 ug/L
RT: 5.111 min Scan# 1220
Delta R.T. 0.007 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion: 63 Resp: 378

Ion	Ratio	Lower	Upper
63	100		
65	93.4	1.3	61.3#
83	0.0	0.0	45.9

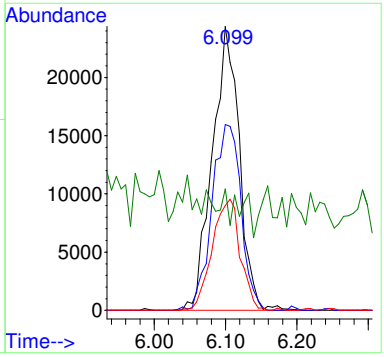


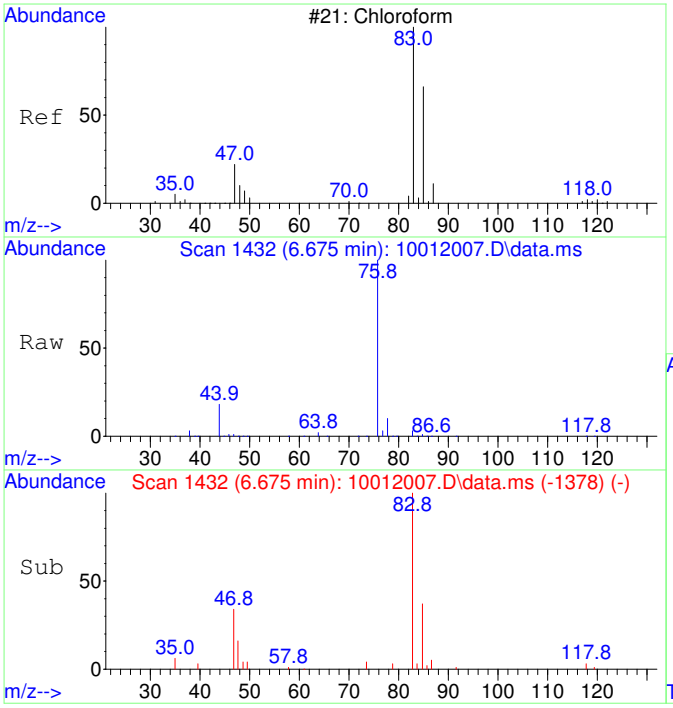


#29
cis-1,2-Dichloroethene SCAN
Concen: 3302.34 ug/L
RT: 6.099 min Scan# 1369
Delta R.T. 0.007 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion: 61 Resp: 63981

Ion	Ratio	Lower	Upper
61	100		
96	70.4	39.9	99.9
98	40.7	13.5	73.5
64	0.0	4.5	64.5#

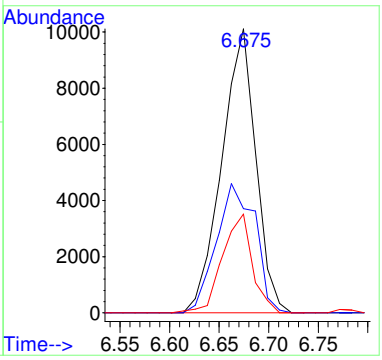


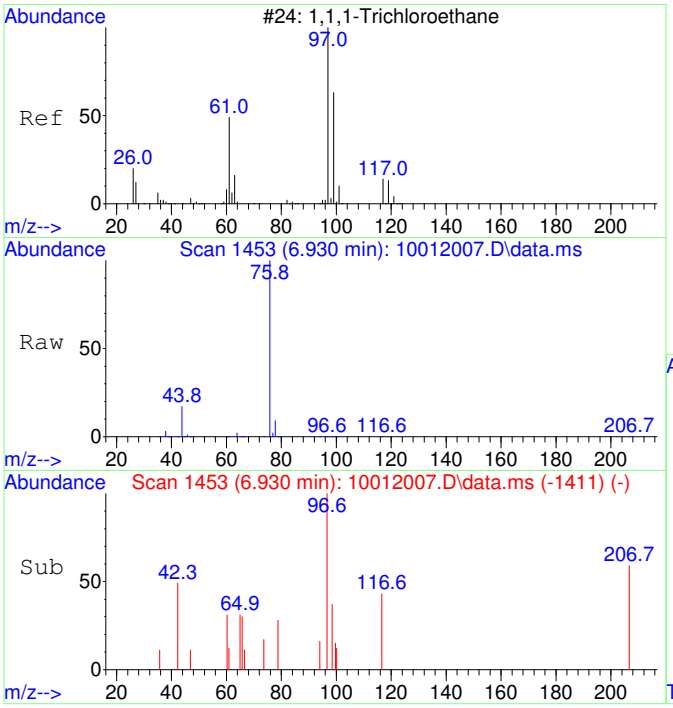


#30
Chloroform SCAN
Concen: 1151.55 ug/L
RT: 6.675 min Scan# 1432
Delta R.T. 0.012 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion: 83 Resp: 24199

Ion	Ratio	Lower	Upper
83	100		
85	51.9	34.6	94.6
47	30.5	0.0	53.4

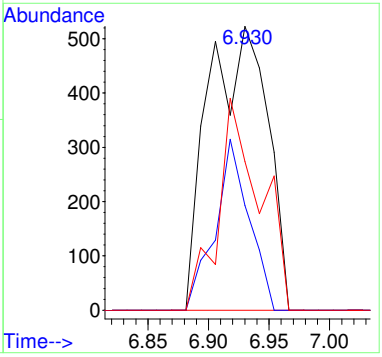


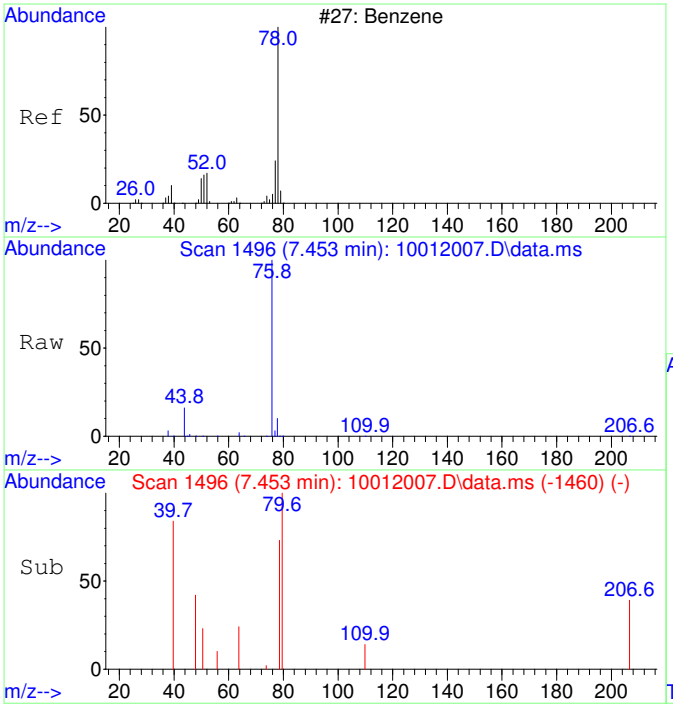


#31
1,1,1-Trichloroethane SCAN
Concen: 93.47 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. 0.012 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion: 97 Resp: 1790

Ion	Ratio	Lower	Upper
97	100		
99	34.2	43.6	103.6#
61	52.5	18.0	78.0

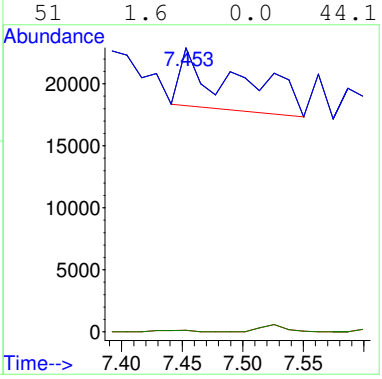


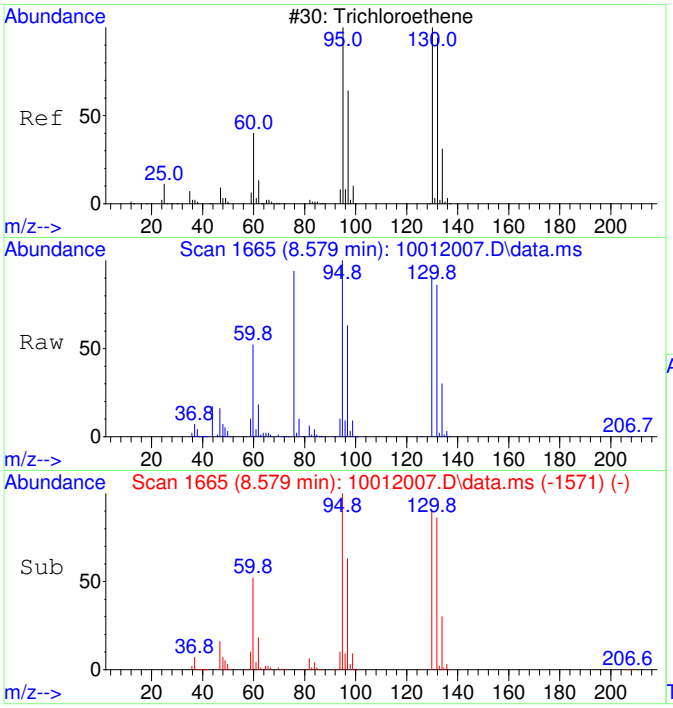


#33
Benzene SCAN
Concen: 288.39 ug/L
RT: 7.453 min Scan# 1496
Delta R.T. -0.061 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion: 78 Resp: 15206

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

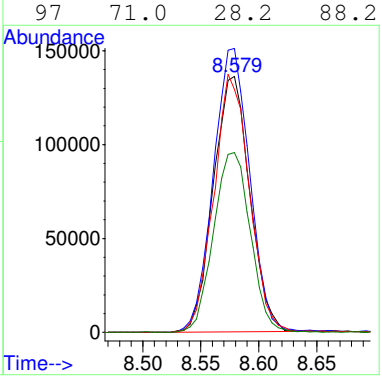


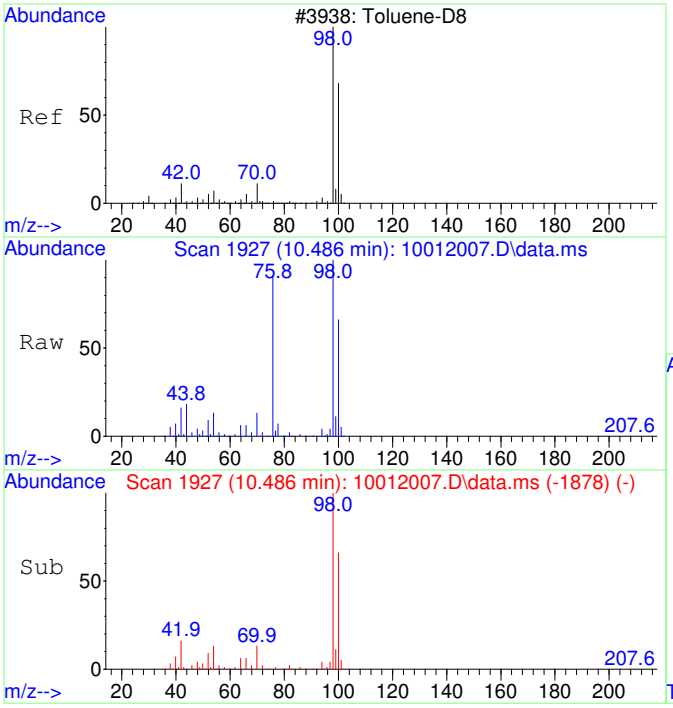


#35
Trichloroethene SCAN
Concen: 20575.83 ug/L
RT: 8.579 min Scan# 1665
Delta R.T. 0.011 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion:130 Resp: 298138

Ion	Ratio	Lower	Upper
130	100		
95	111.9	60.5	120.5
132	98.1	59.6	119.6
97	71.0	28.2	88.2

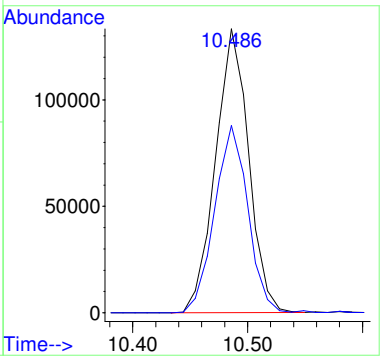


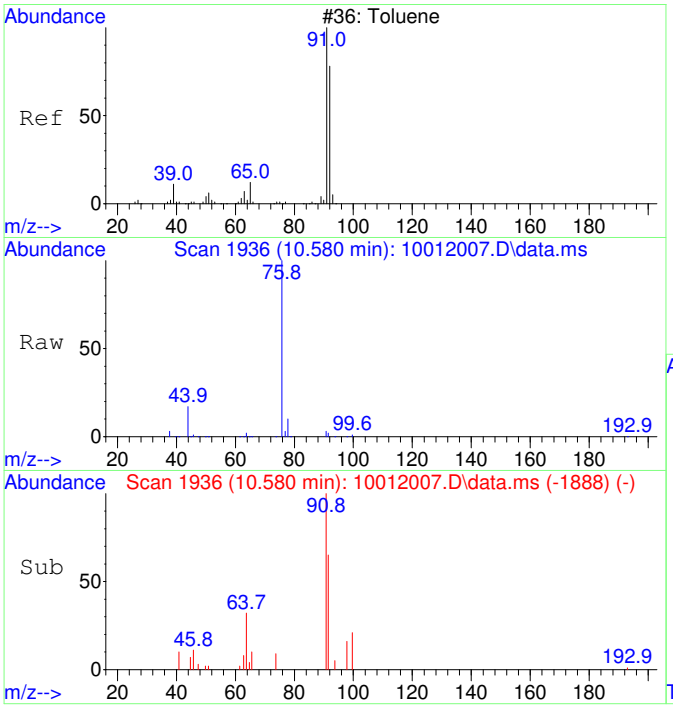


#36
Toluene-d8 SCAN
Concen: 4601.36 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.010 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion: 98 Resp: 267562

Ion	Ratio	Lower	Upper
98	100		
100	66.1	40.0	100.0

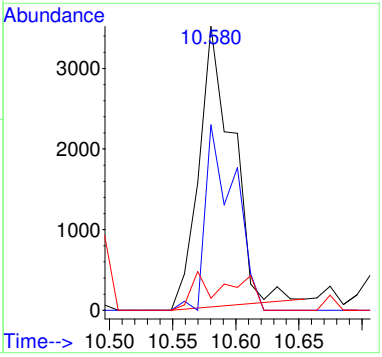


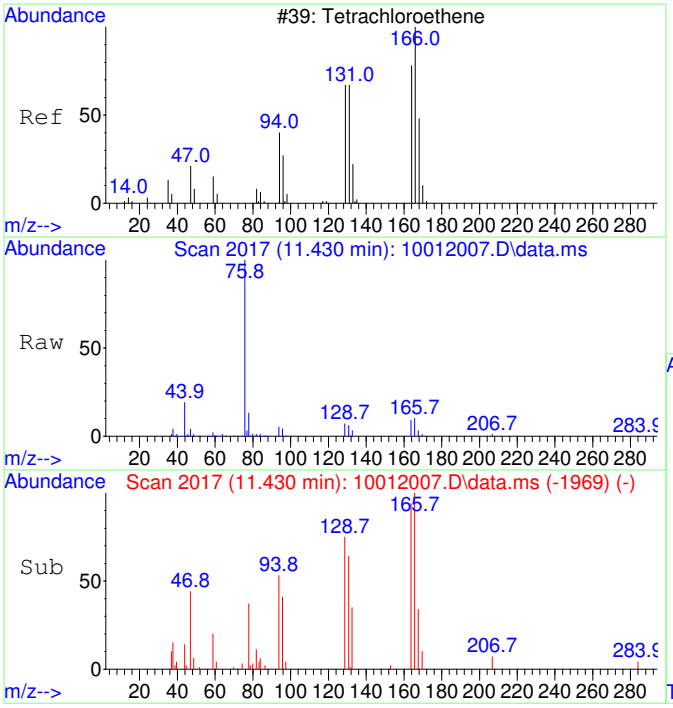


#37
Toluene SCAN
Concen: 87.11 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.000 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion: 91 Resp: 6487

Ion	Ratio	Lower	Upper
91	100		
92	57.7	28.3	88.3
65	4.6	0.0	41.0

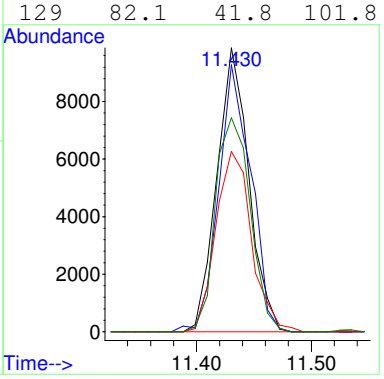


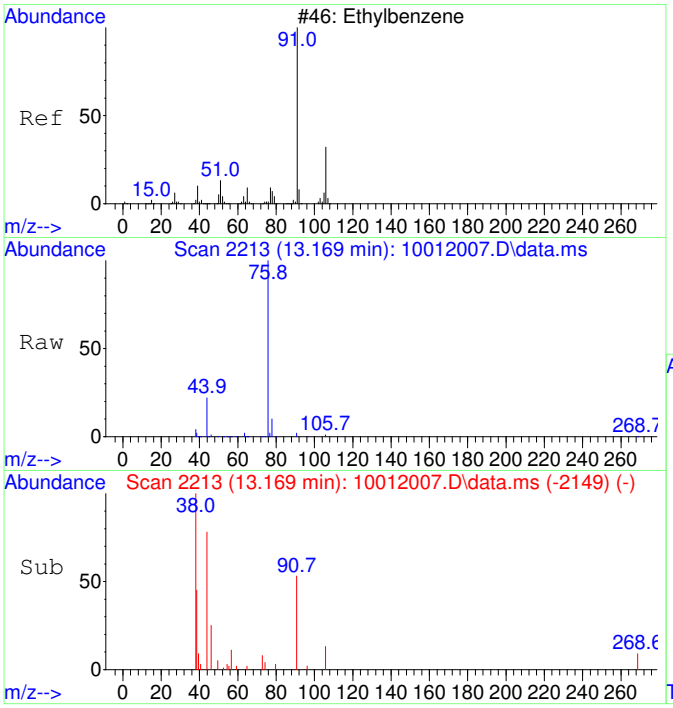


#39
Tetrachloroethene SCAN
Concen: 1070.39 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. -0.000 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion:166 Resp: 19150

Ion	Ratio	Lower	Upper
166	100		
164	94.7	50.9	110.9
131	70.6	38.7	98.7
129	82.1	41.8	101.8

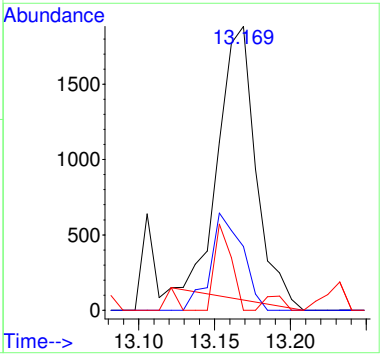


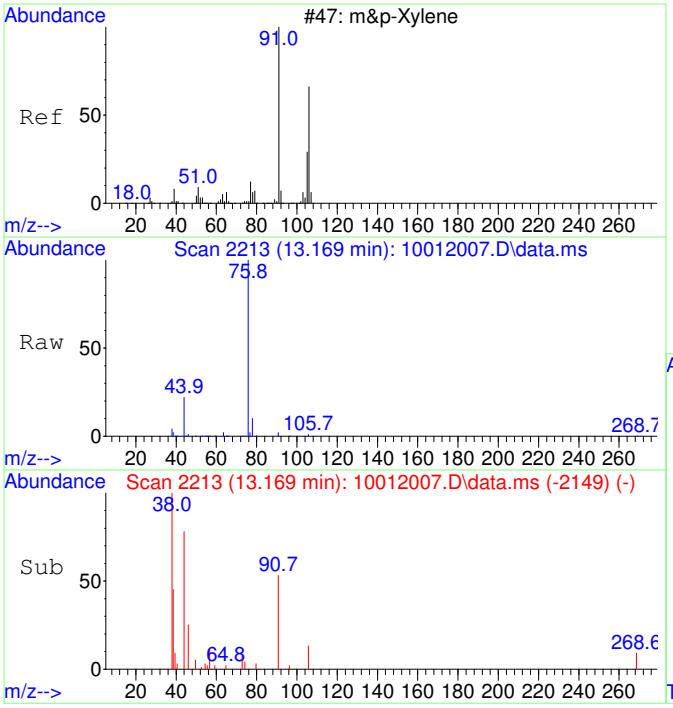


#42
Ethylbenzene SCAN
Concen: 22.44 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion: 91 Resp: 3044

Ion	Ratio	Lower	Upper
91	100		
106	31.1	23.1	83.1
51	14.4	0.0	40.1

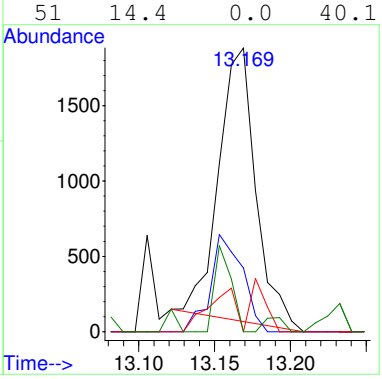


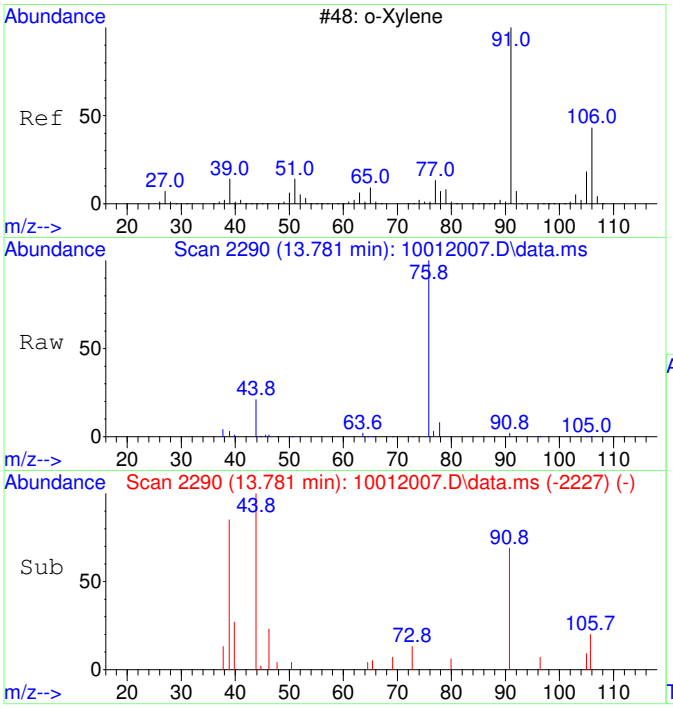


#43
m&p-Xylene SCAN
Concen: 22.44 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion: 91 Resp: 3044

Ion	Ratio	Lower	Upper
91	100		
106	31.1	23.1	83.1
105	12.2	0.0	54.7
51	14.4	0.0	40.1

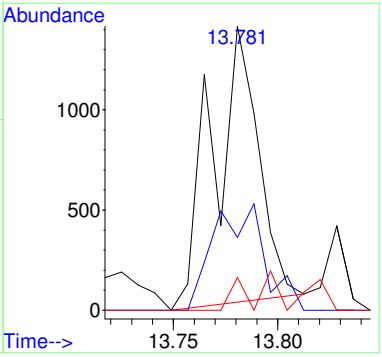




#44
o-Xylene SCAN
Concen: 28.90 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.000 min
Lab File: 10012007.D
Acq: 1 Oct 2020 14:10

Tgt Ion: 91 Resp: 2099

Ion	Ratio	Lower	Upper
91	100		
106	42.9	18.0	78.0
105	3.7	0.0	56.6



2009033-01RE1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012006.D
Acq On : 1 Oct 2020 13:46
InstName : AG5975C
Operator : TD
Sample: 2009033-01RE1 (Sig #1);
Misc : 10X DL (90-10) (Sig #1);
ALS Vial : 6 Sample Multiplier: 10

Quant Time: Oct 01 14:24:50 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

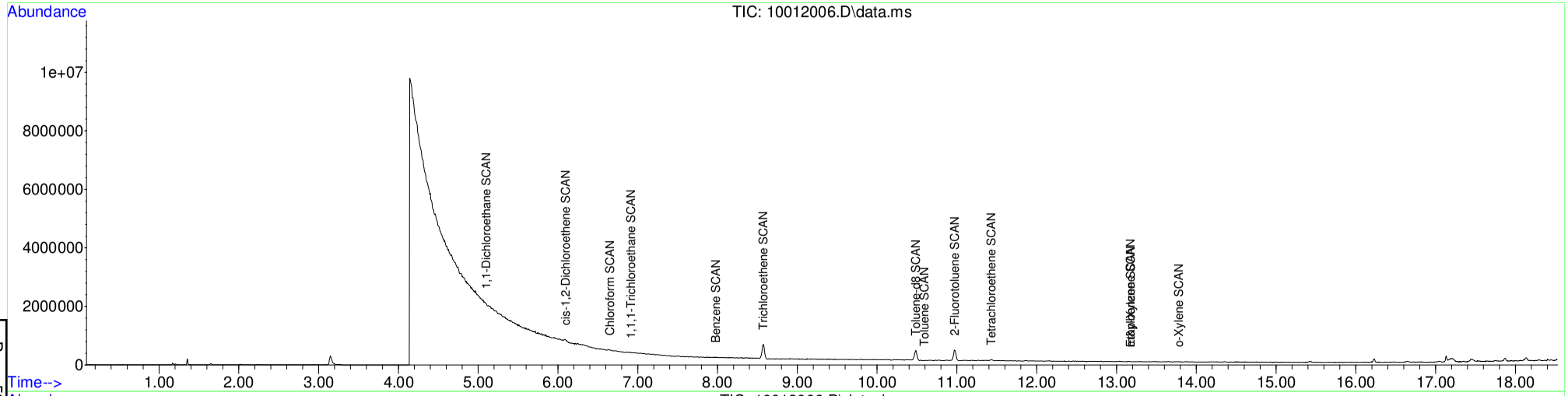
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	597318	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	499699	4273.44 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 85.47%#		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.089	61	3402	142.63 ug/L	85
3] trans-1,2-Dichloroethene	4.389	61	4927	178.79 ug/L	92
4] 1,1-Dichloroethane	5.092	63	3643	106.20 ug/L	74
5] cis-1,2-Dichloroethene	6.094	61	89383	2468.44 ug/L	98
6] Chloroform	6.664	83	34234	923.68 ug/L	98
7] 1,1,1-Trichloroethane	6.919	97	3295	81.86 ug/L	99
9] Benzene	7.515	78	5264	51.87 ug/L #	1
11] Trichloroethene	8.575	130	344668	11279.66 ug/L PRT	93
13] Toluene	10.581	91	4929	33.06 ug/L	99
15] Tetrachloroethene	11.432	166	19177	444.50 ug/L	100
19] m&p-Xylene	13.162	91	8586	60.54 ug/L	95
20] o-Xylene	13.782	91	3054	20.16 ug/L	97
25) 2-Fluorotoluene SCAN	10.968	109	300417	5159.37 ug/L	99
28) 1,1-Dichloroethane SCAN	5.097	63	620	35.01 ug/L #	50
29) cis-1,2-Dichloroethene...	6.093	61	51952	2738.15 ug/L #	84
30) Chloroform SCAN	6.650	83	22013	1069.67 ug/L #	27
31) 1,1,1-Trichloroethane ...	6.918	97	1530	81.58 ug/L	78
33) Benzene SCAN	7.974	78	2292	44.39 ug/L	95
35) Trichloroethene SCAN	8.573	130	172699	12170.66 ug/L	87
36) Toluene-d8 SCAN	10.486	98	257052	4514.06 ug/L	97
37) Toluene SCAN	10.591	91	3105	42.58 ug/L	85
39) Tetrachloroethene SCAN	11.430	166	9764	557.30 ug/L	90
42) Ethylbenzene SCAN	13.177	91	5271	39.67 ug/L	97
43) m&p-Xylene SCAN	13.177	91	5271	39.67 ug/L	94
44) o-Xylene SCAN	13.773	91	1768	24.86 ug/L	80

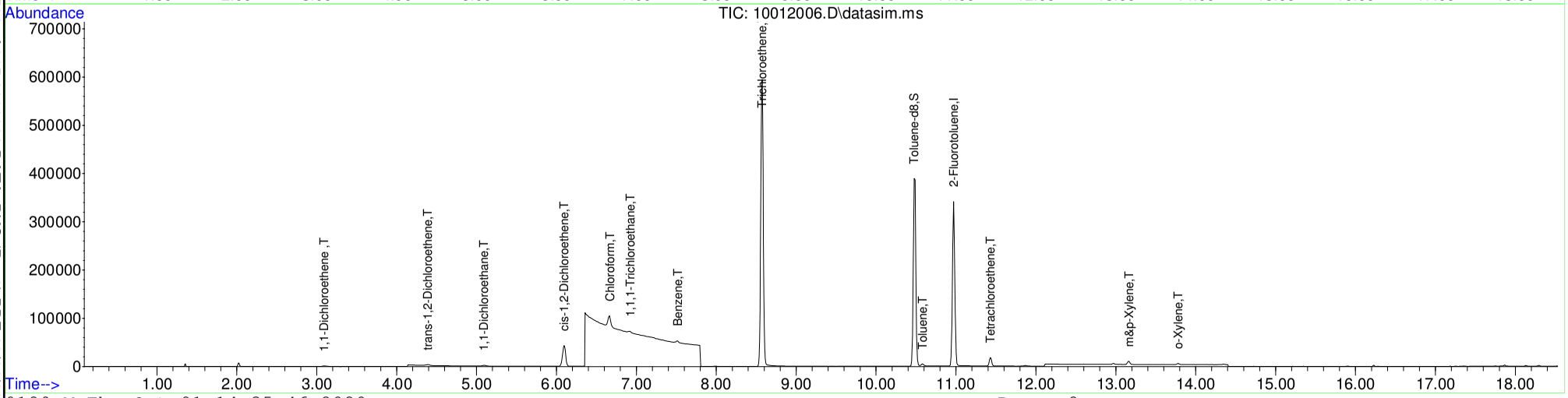
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012006.D
Acq On : 1 Oct 2020 13:46
InstName : AG5975C
Operator : TD
Sample: 2009033-01RE1 (Sig #1);
Misc : 10X DL (90-10) (Sig #1);
ALS Vial : 6 Sample Multiplier: 10

Quant Time: Oct 01 14:24:50 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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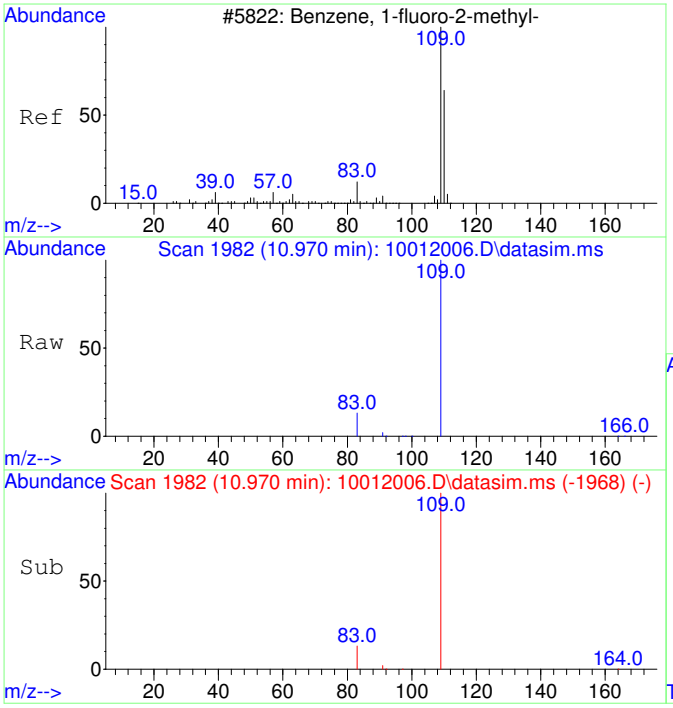
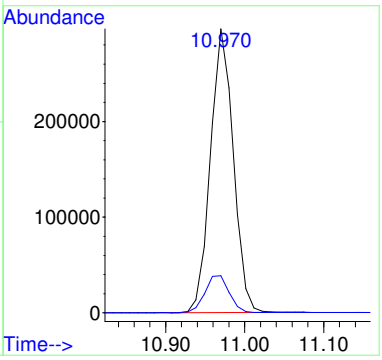
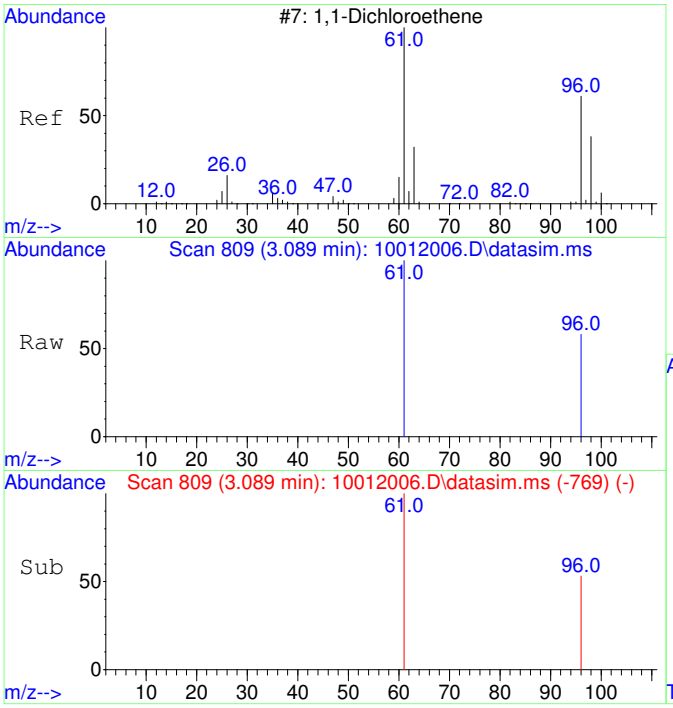


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion:109 Resp: 597318

Ion	Ratio	Lower	Upper
109	100		
83	13.9	0.0	42.3

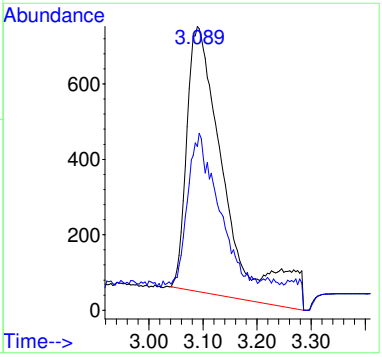


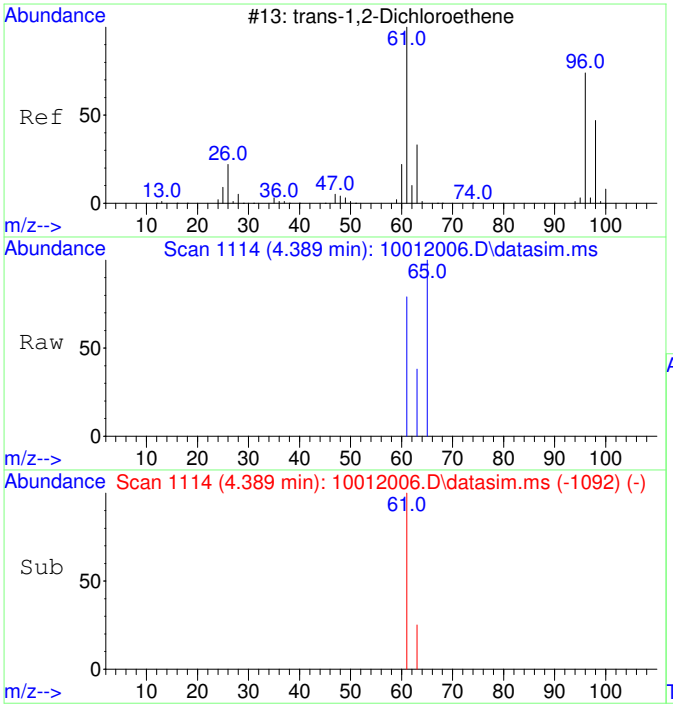


#2
1,1-Dichloroethene
Concen: 142.63 ug/L
RT: 3.089 min Scan# 809
Delta R.T. -0.000 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion: 61 Resp: 3402

Ion	Ratio	Lower	Upper
61	100		
96	55.4	37.2	97.2

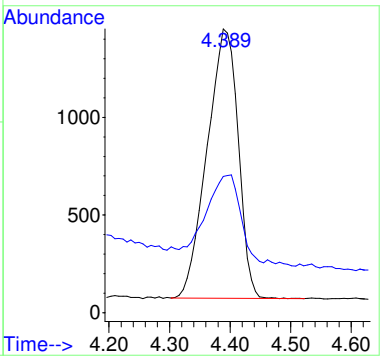


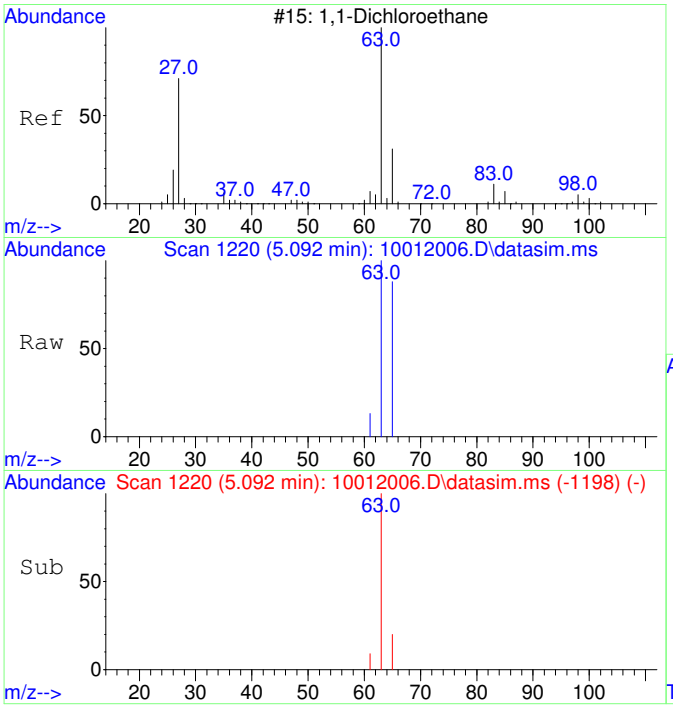


#3
trans-1,2-Dichloroethene
Concen: 178.79 ug/L
RT: 4.389 min Scan# 1114
Delta R.T. -0.007 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion: 61 Resp: 4927

Ion	Ratio	Lower	Upper
61	100		
63	36.8	2.4	62.4

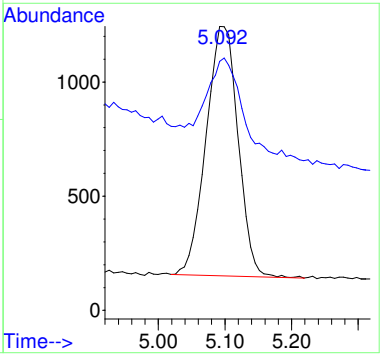


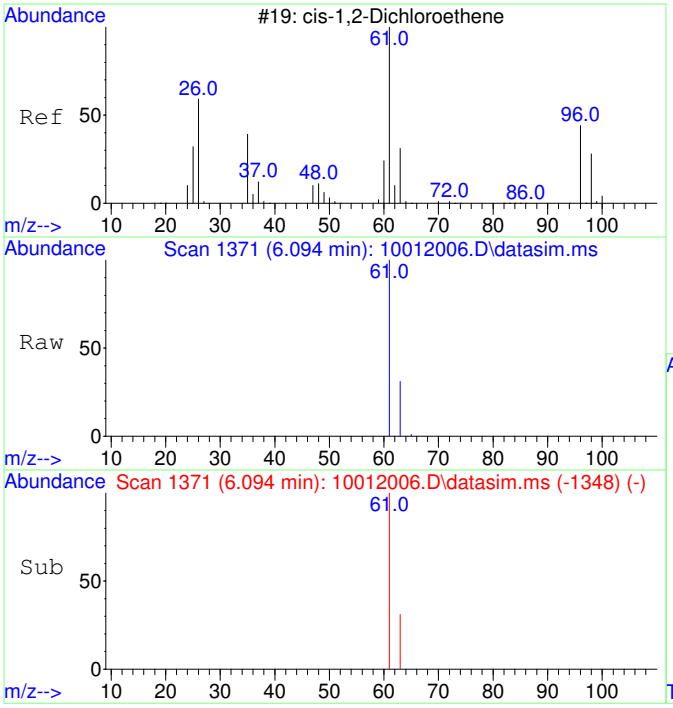


#4
1,1-Dichloroethane
Concen: 106.20 ug/L
RT: 5.092 min Scan# 1220
Delta R.T. -0.007 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion: 63 Resp: 3643

Ion	Ratio	Lower	Upper
63	100		
65	46.3	1.8	61.8

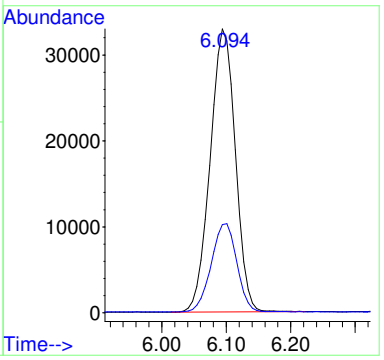


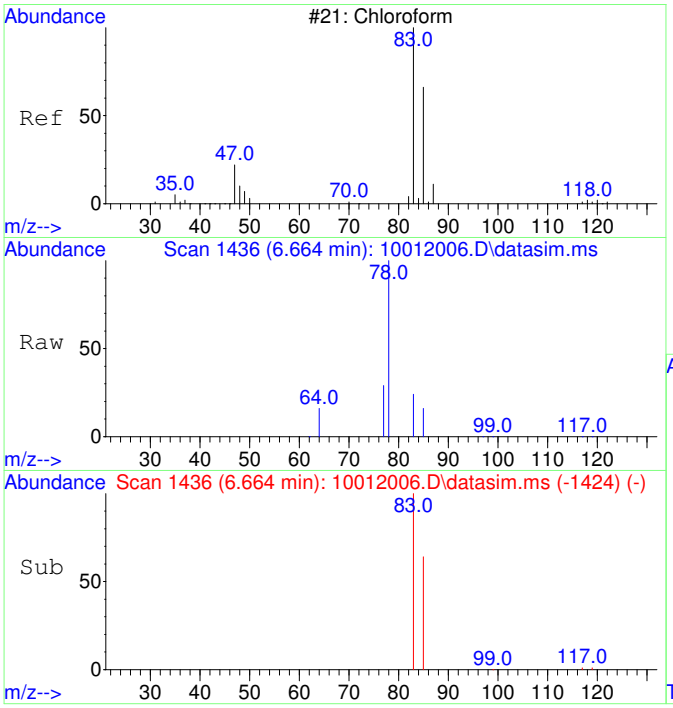


#5
cis-1,2-Dichloroethene
Concen: 2468.44 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. -0.000 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion: 61 Resp: 89383

Ion	Ratio	Lower	Upper
61	100		
63	31.5	2.5	62.5

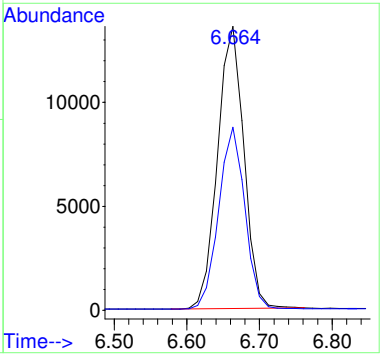


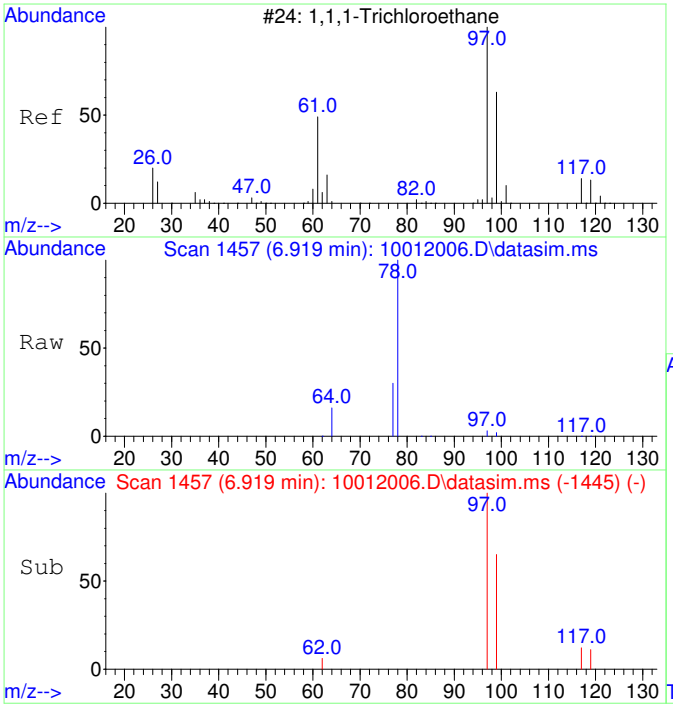


#6
Chloroform
Concen: 923.68 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion: 83 Resp: 34234

Ion	Ratio	Lower	Upper
83	100		
85	63.7	35.1	95.1

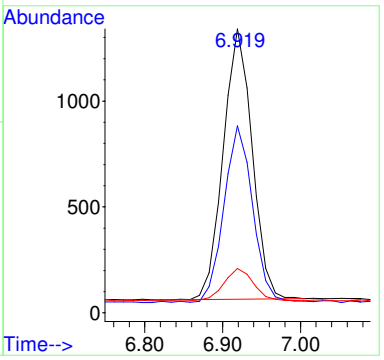


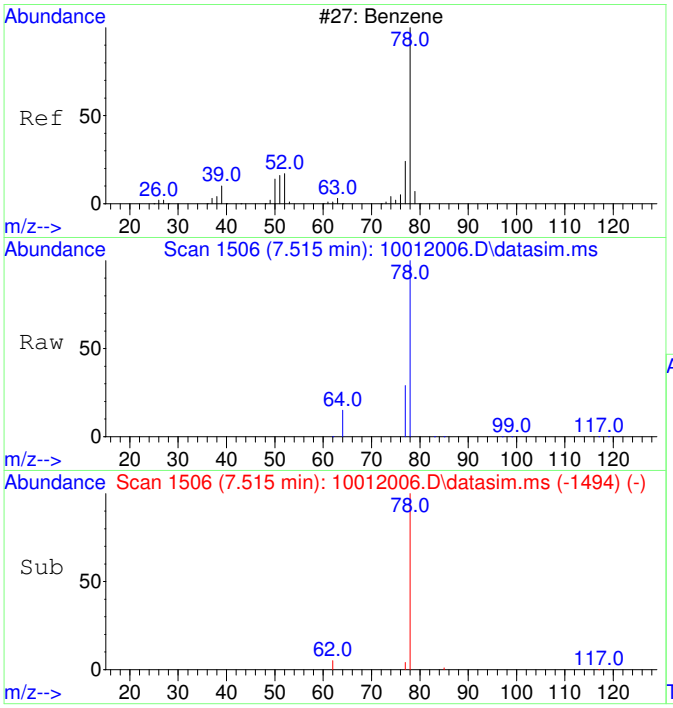


#7
1,1,1-Trichloroethane
Concen: 81.86 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion: 97 Resp: 3295

Ion	Ratio	Lower	Upper
97	100		
99	64.3	34.6	94.6
117	12.3	0.0	43.2

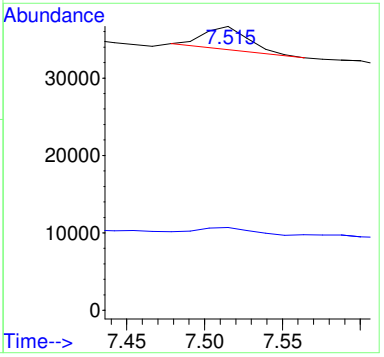


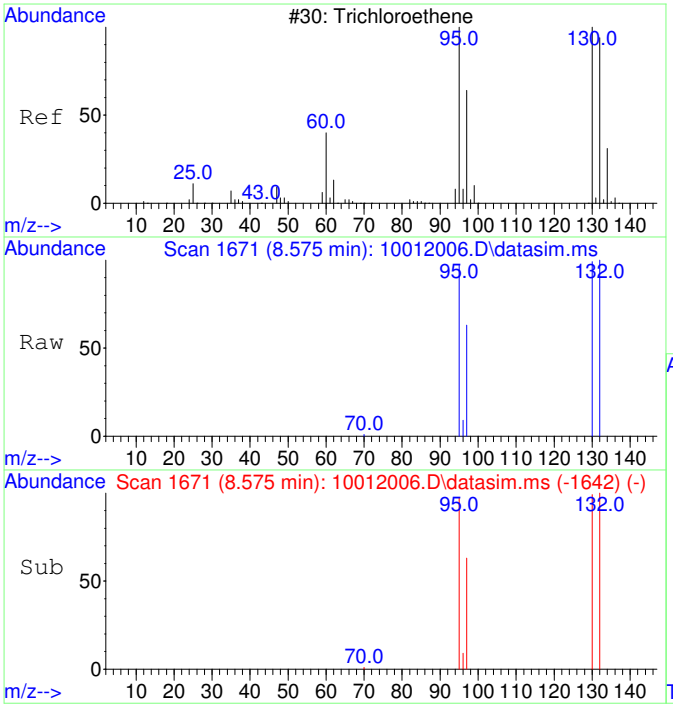


#9
Benzene
Concen: 51.87 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. -0.000 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion: 78 Resp: 5264

Ion	Ratio	Lower	Upper
78	100		
77	86.2	0.0	53.2#

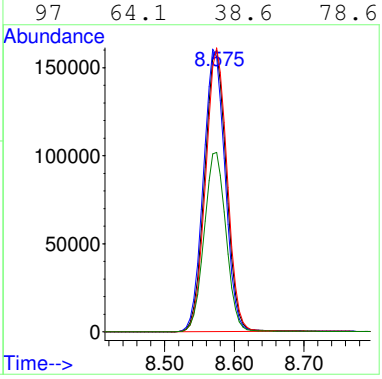


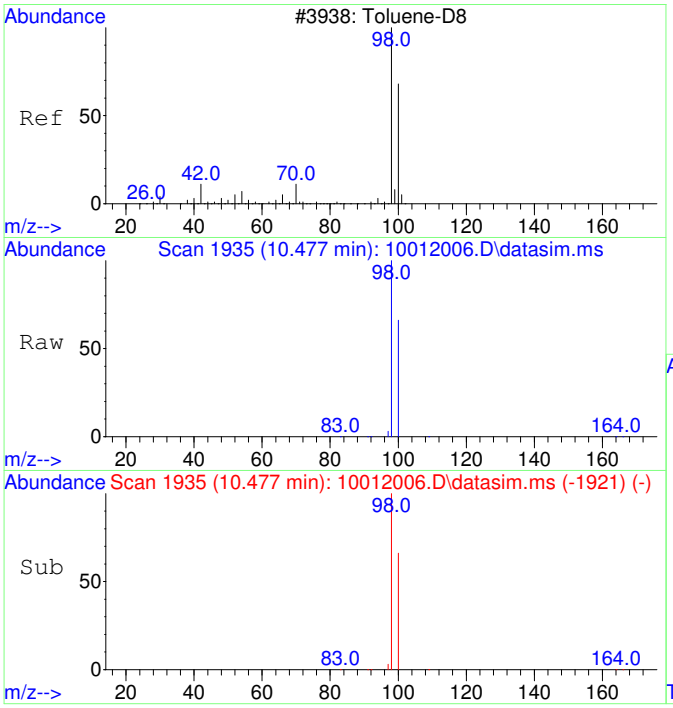


#11
Trichloroethene
Concen: 11279.66 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion:130 Resp: 344668

Ion	Ratio	Lower	Upper
130	100		
95	100.0	60.7	120.7
132	99.7	76.0	116.0
97	64.1	38.6	78.6

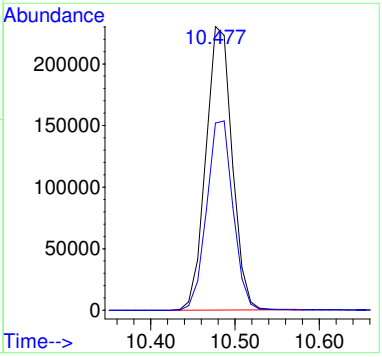


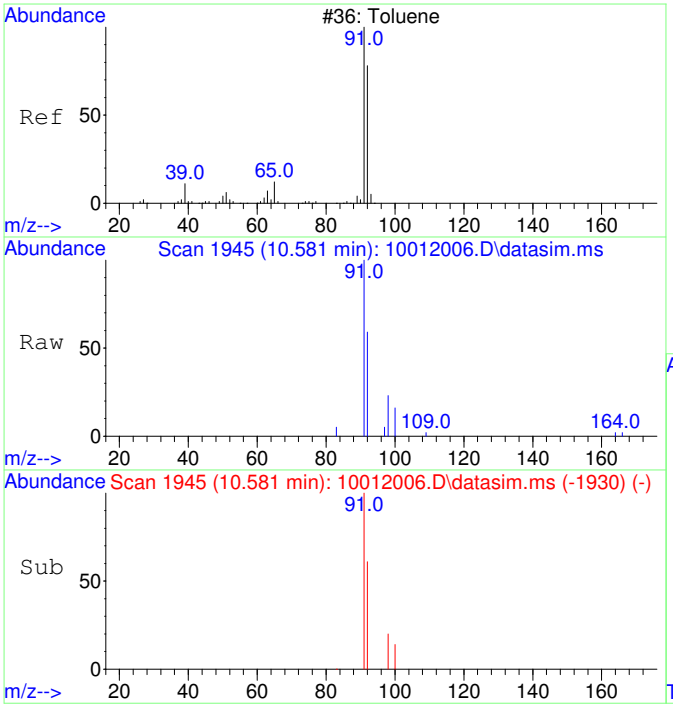


#12
Toluene-d8
Concen: 4273.44 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.000 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion: 98 Resp: 499699

Ion	Ratio	Lower	Upper
98	100		
100	66.7	37.1	97.1

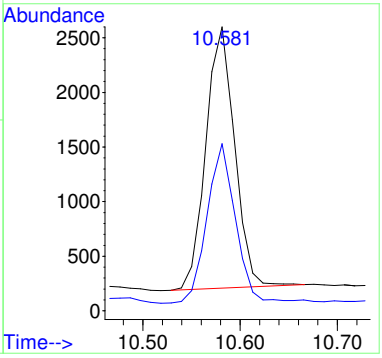


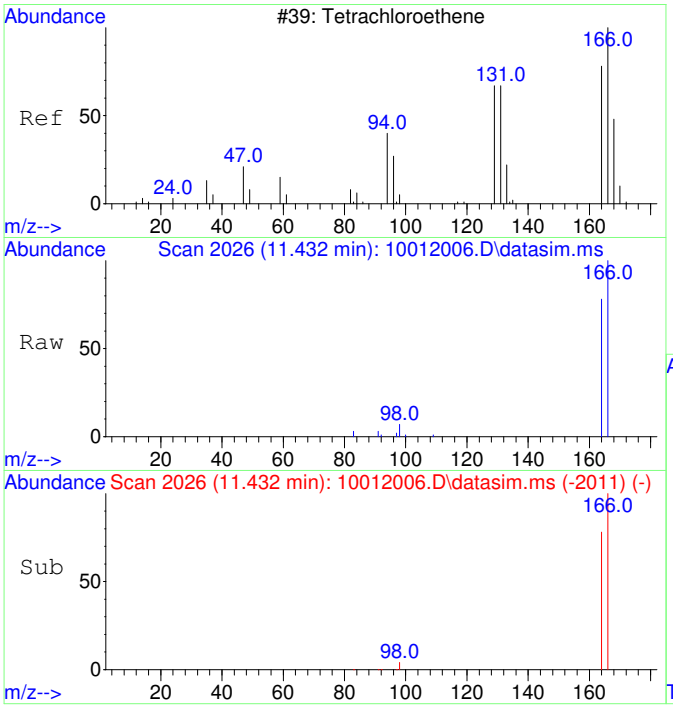


#13
Toluene
Concen: 33.06 ug/L
RT: 10.581 min Scan# 1945
Delta R.T. 0.010 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion: 91 Resp: 4929

Ion	Ratio	Lower	Upper
91	100		
92	61.0	29.9	89.9

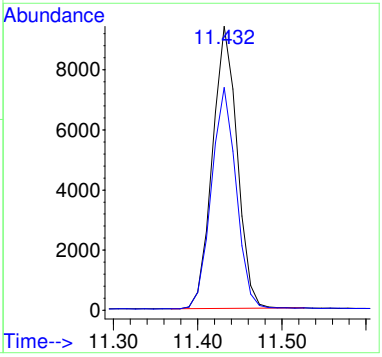


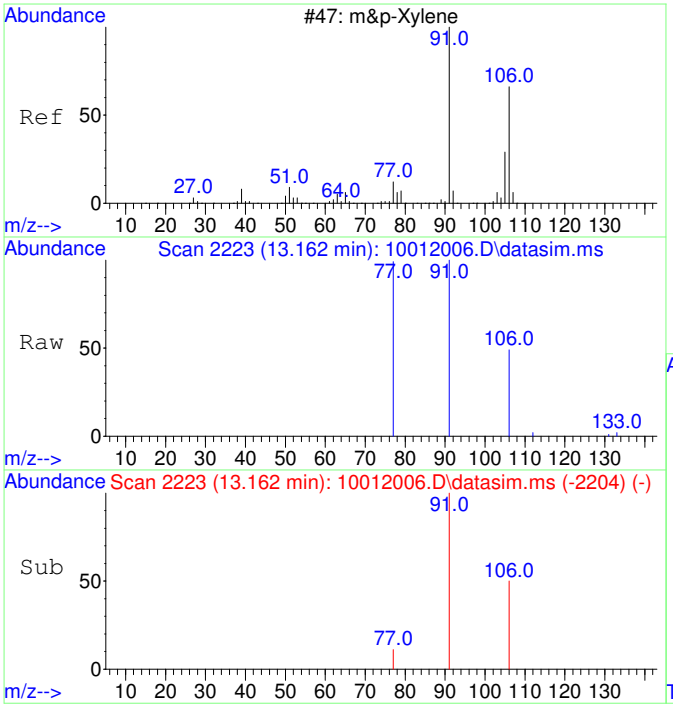


#15
Tetrachloroethene
Concen: 444.50 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion:166 Resp: 19177

Ion	Ratio	Lower	Upper
166	100		
164	78.0	47.8	107.8

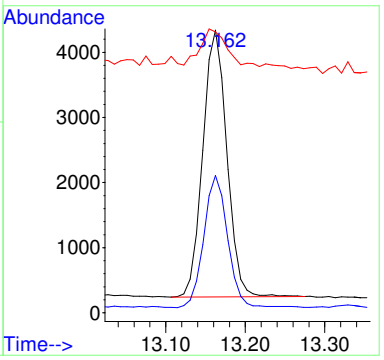


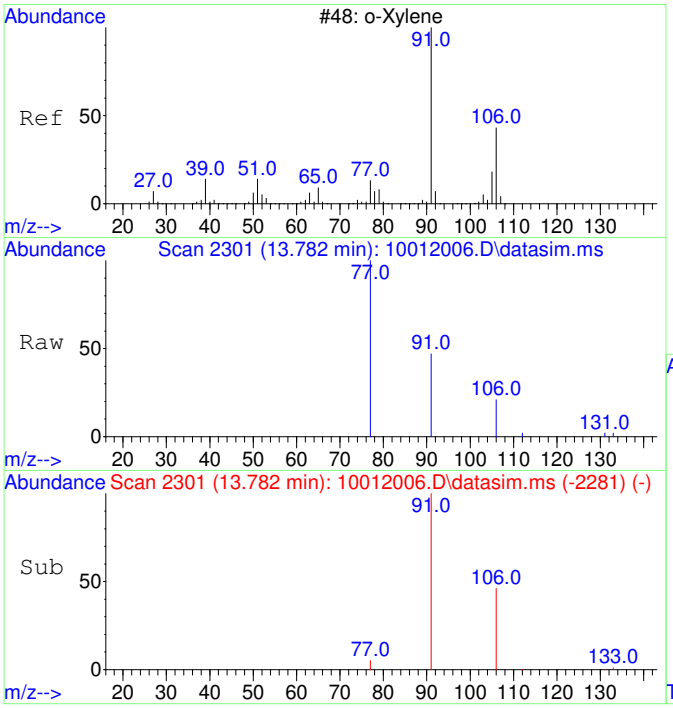


#19
m&p-Xylene
Concen: 60.54 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.000 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion: 91 Resp: 8586

Ion	Ratio	Lower	Upper
91	100		
106	49.1	22.2	82.2
77	16.0	0.0	42.4

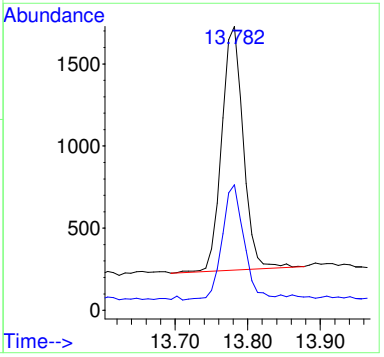


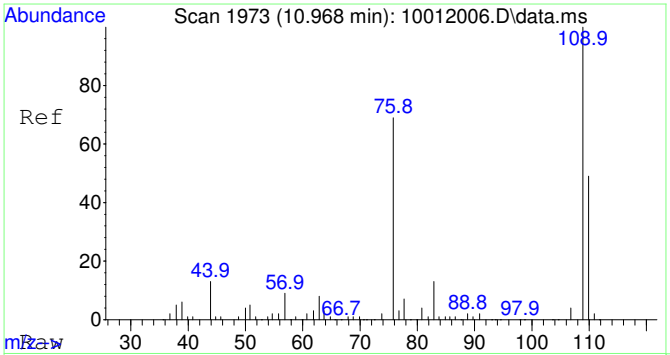


#20
o-Xylene
Concen: 20.16 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion: 91 Resp: 3054

Ion	Ratio	Lower	Upper
91	100		
106	46.8	19.2	79.2

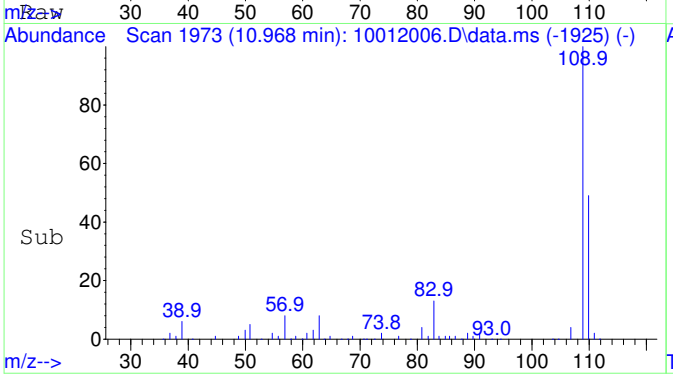


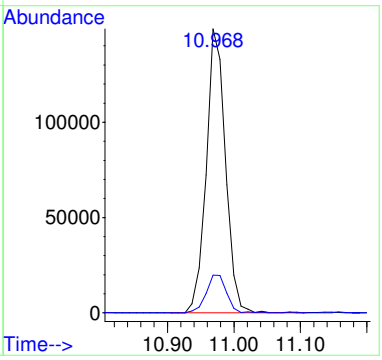


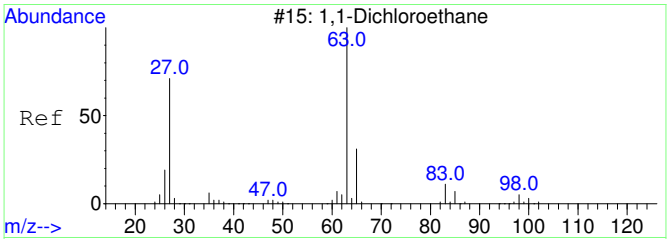
#25
2-Fluorotoluene SCAN
Concen: 5159.37 ug/L
RT: 10.968 min Scan# 1973
Delta R.T. -0.000 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion:109 Resp: 300417

Ion	Ratio	Lower	Upper
109	100		
83	14.3	0.0	43.8



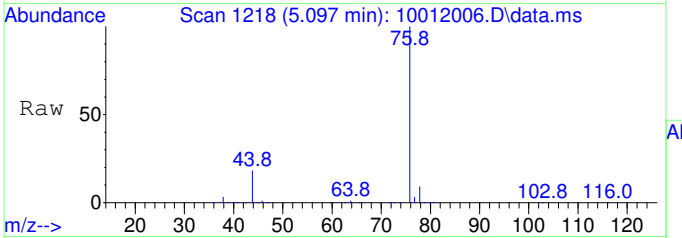


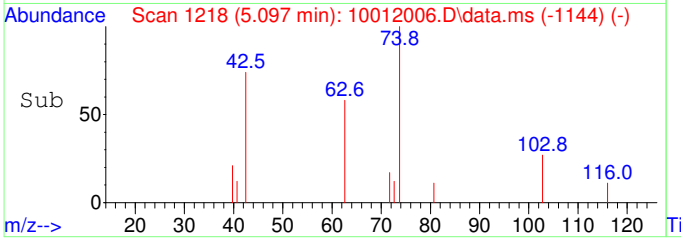


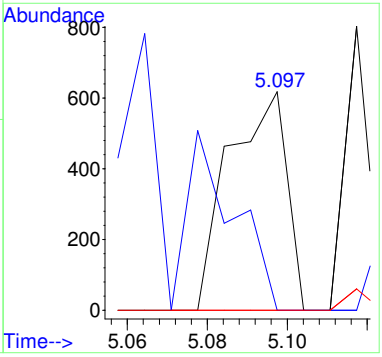
#28
1,1-Dichloroethane SCAN
Concen: 35.01 ug/L
RT: 5.097 min Scan# 1218
Delta R.T. -0.007 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

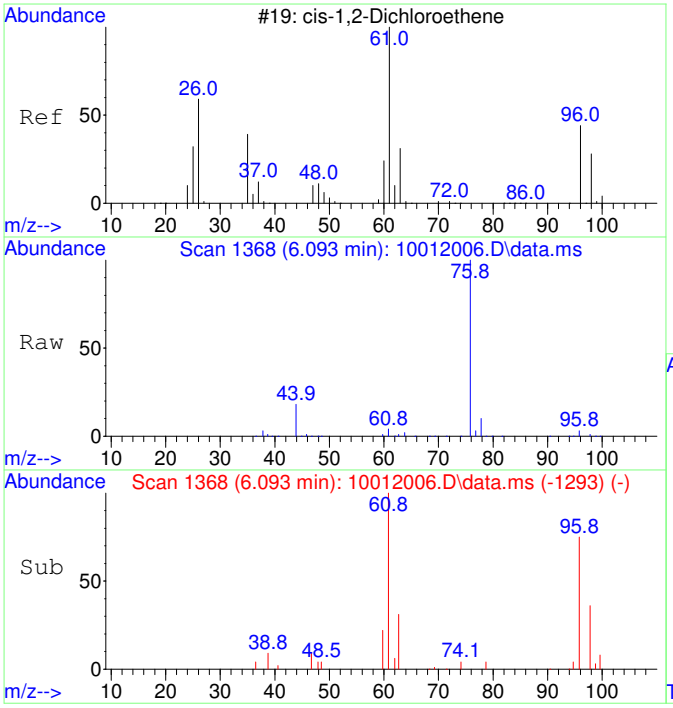
Tgt Ion: 63 Resp: 620

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





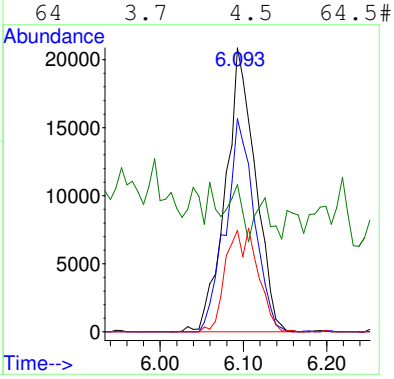


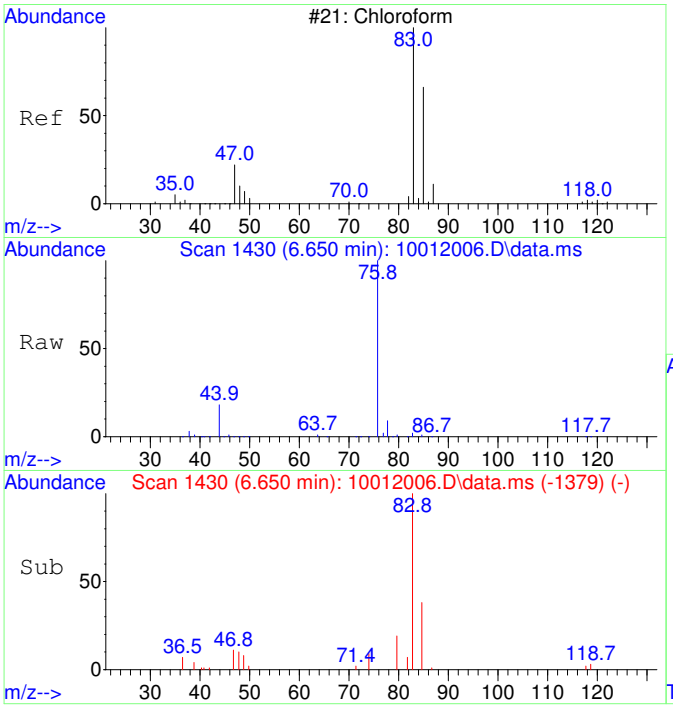


#29
cis-1,2-Dichloroethene SCAN
Concen: 2738.15 ug/L
RT: 6.093 min Scan# 1368
Delta R.T. -0.000 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion: 61 Resp: 51952

Ion	Ratio	Lower	Upper
61	100		
96	72.4	39.9	99.9
98	39.1	13.5	73.5
64	3.7	4.5	64.5#

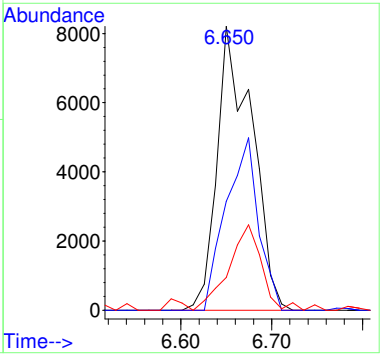


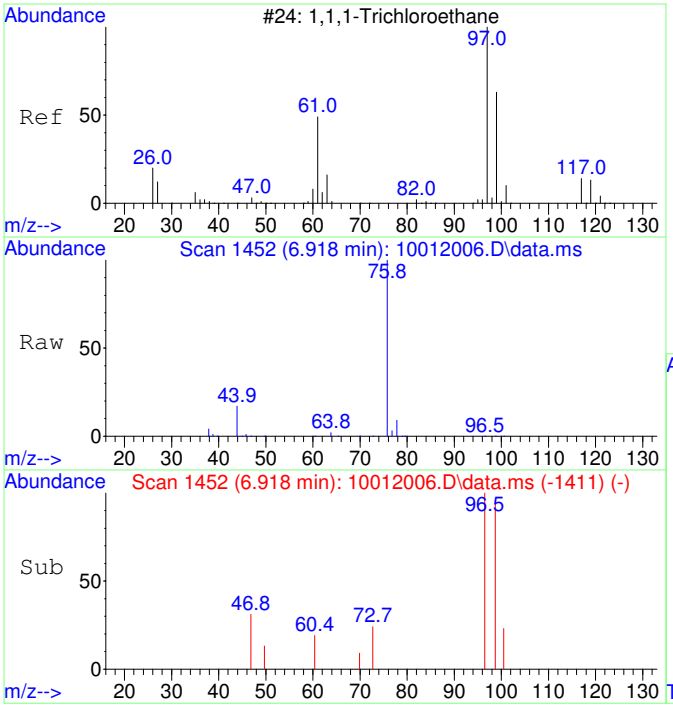


#30
Chloroform SCAN
Concen: 1069.67 ug/L
RT: 6.650 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion: 83 Resp: 22013

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

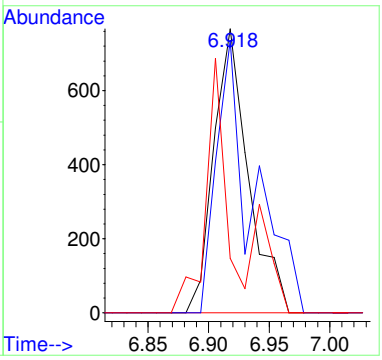


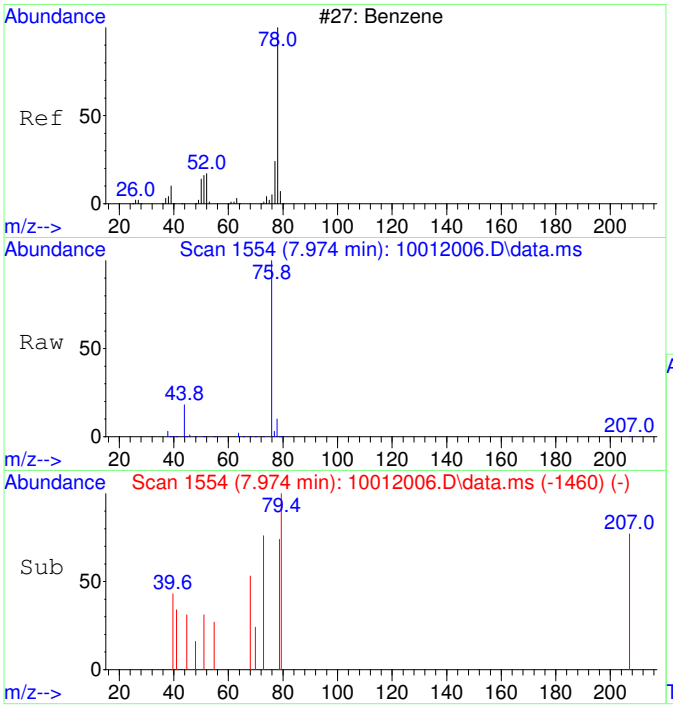


#31
1,1,1-Trichloroethane SCAN
Concen: 81.58 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. -0.000 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion: 97 Resp: 1530

Ion	Ratio	Lower	Upper
97	100		
99	100.5	43.6	103.6
61	43.7	18.0	78.0

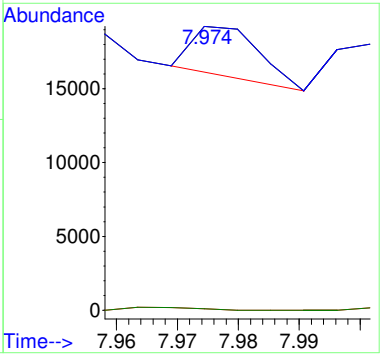


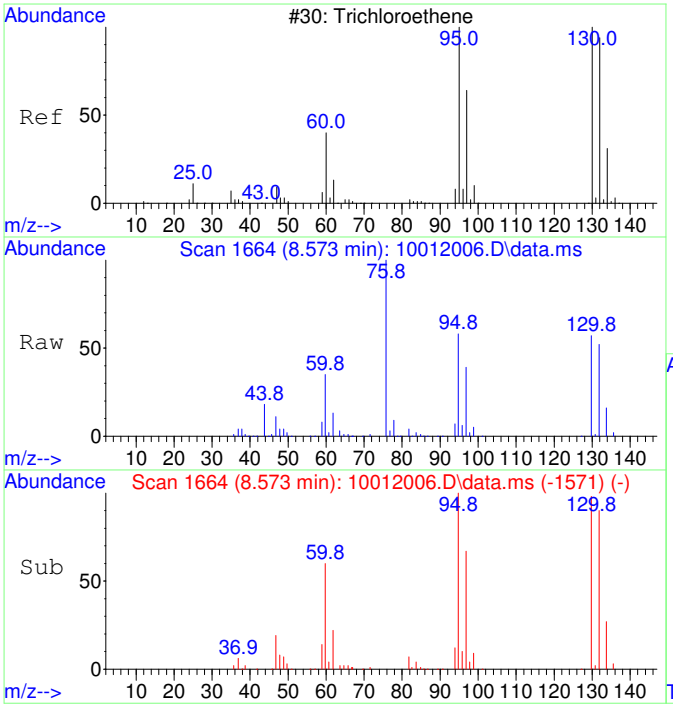


#33
Benzene SCAN
Concen: 44.39 ug/L
RT: 7.974 min Scan# 1554
Delta R.T. 0.460 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion: 78 Resp: 2292

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

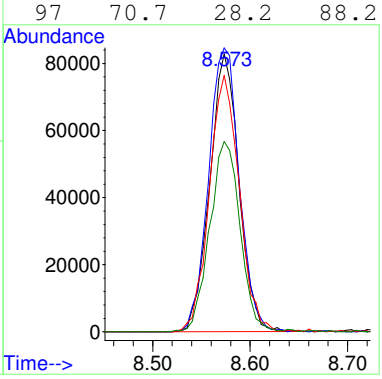


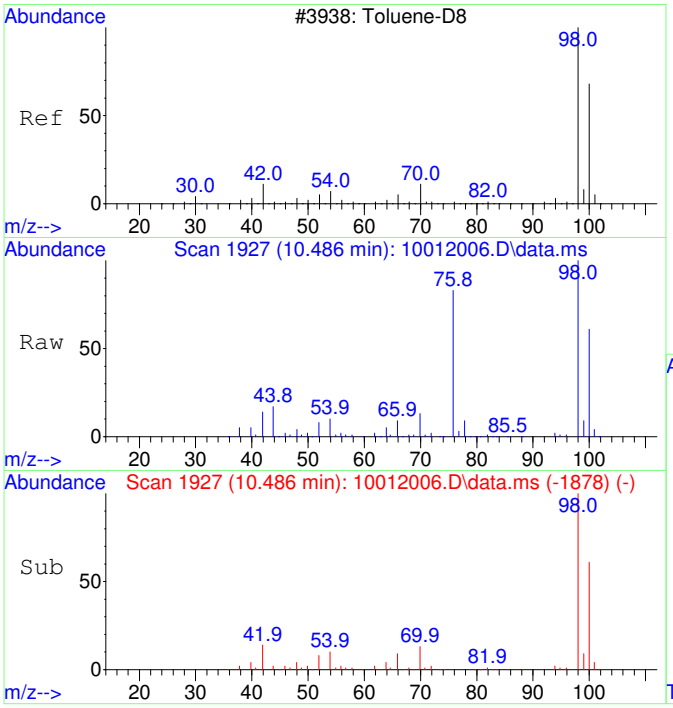


#35
Trichloroethene SCAN
Concen: 12170.66 ug/L
RT: 8.573 min Scan# 1664
Delta R.T. 0.005 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion:130 Resp: 172699

Ion	Ratio	Lower	Upper
130	100		
95	107.7	60.5	120.5
132	94.2	59.6	119.6
97	70.7	28.2	88.2

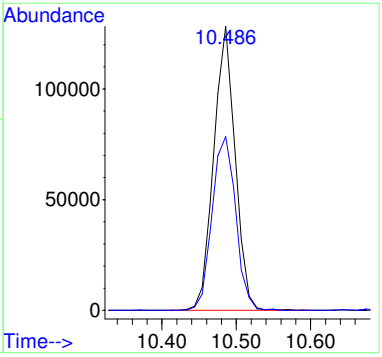


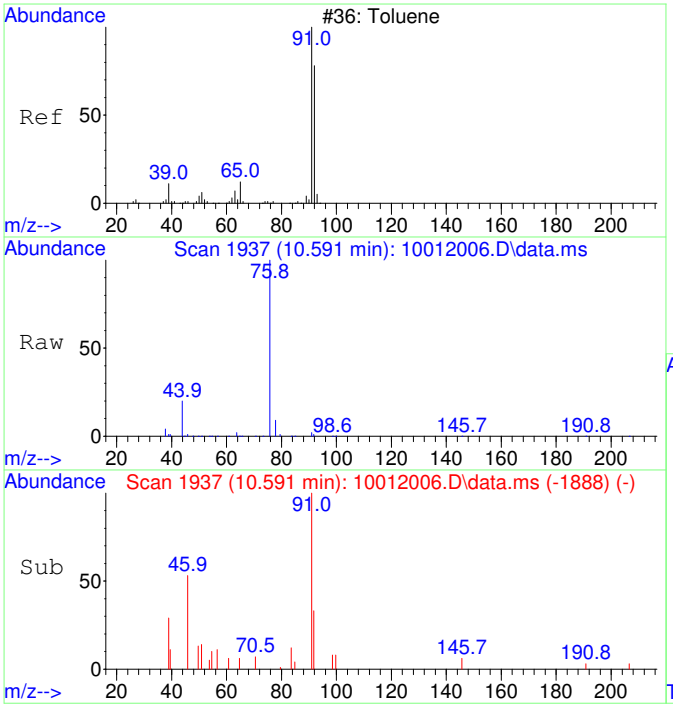


#36
Toluene-d8 SCAN
Concen: 4514.06 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.010 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion: 98 Resp: 257052

Ion	Ratio	Lower	Upper
98	100		
100	67.1	40.0	100.0

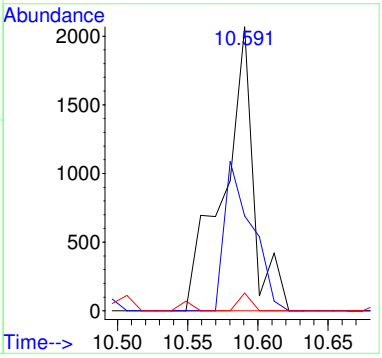


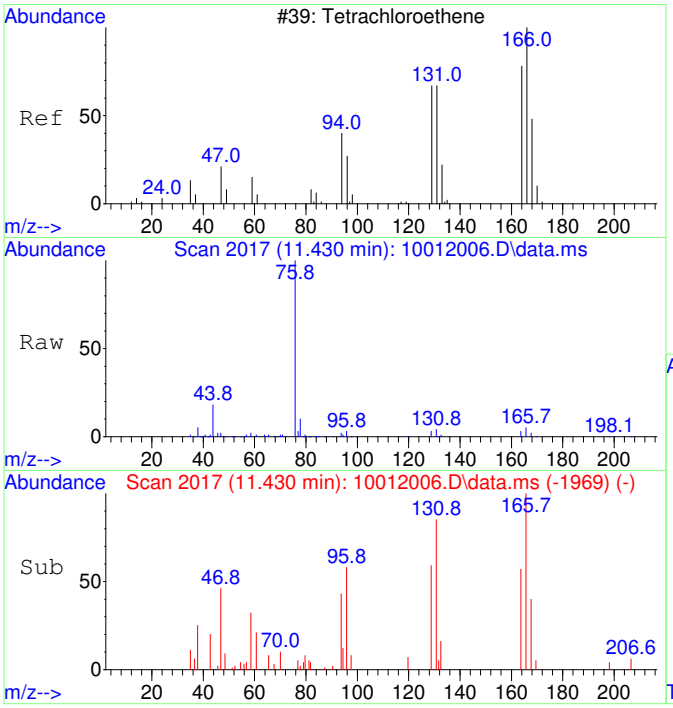


#37
Toluene SCAN
Concen: 42.58 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.010 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion: 91 Resp: 3105

Ion	Ratio	Lower	Upper
91	100		
92	48.4	28.3	88.3
65	2.6	0.0	41.0

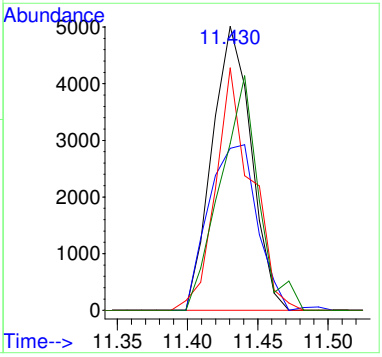


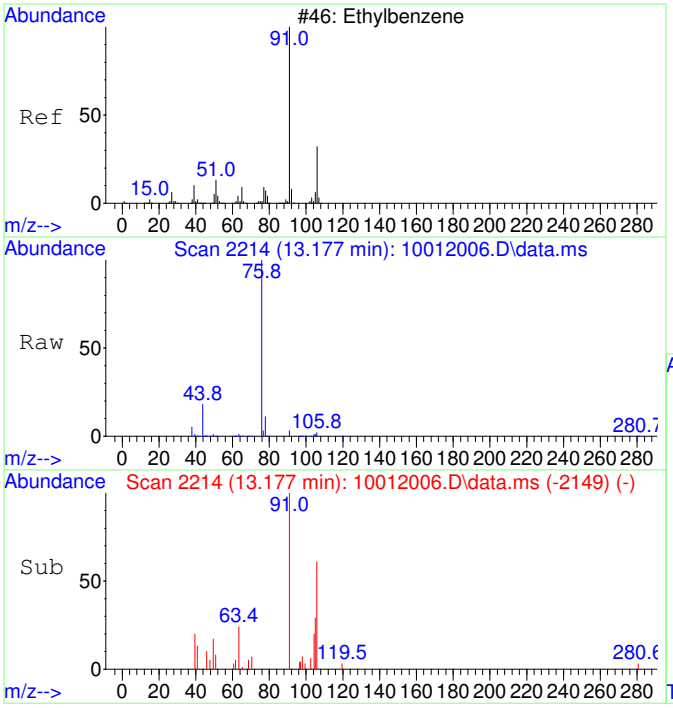


#39
Tetrachloroethene SCAN
Concen: 557.30 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. -0.000 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion:166 Resp: 9764

Ion	Ratio	Lower	Upper
166	100		
164	73.5	50.9	110.9
131	78.4	38.7	98.7
129	80.8	41.8	101.8

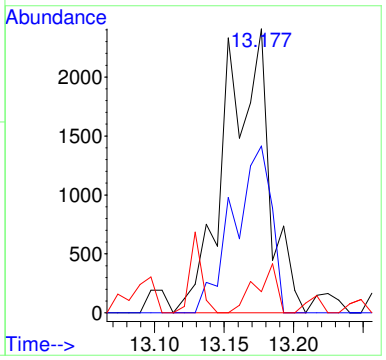


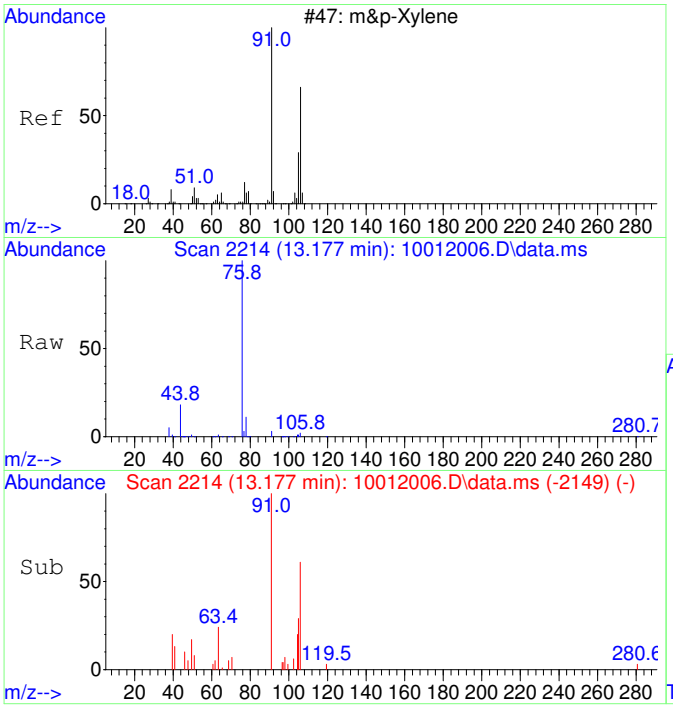


#42
Ethylbenzene SCAN
Concen: 39.67 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion: 91 Resp: 5271

Ion	Ratio	Lower	Upper
91	100		
106	51.0	23.1	83.1
51	8.4	0.0	40.1

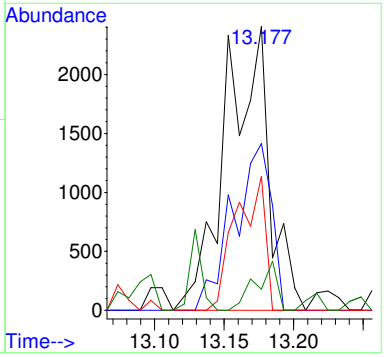


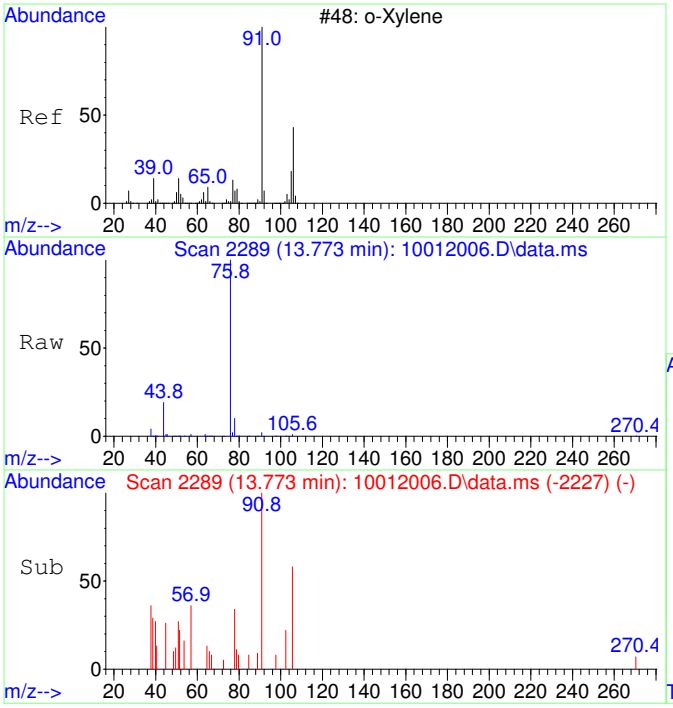


#43
m&p-Xylene SCAN
Concen: 39.67 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion: 91 Resp: 5271

Ion	Ratio	Lower	Upper
91	100		
106	51.0	23.1	83.1
105	31.7	0.0	54.7
51	8.4	0.0	40.1

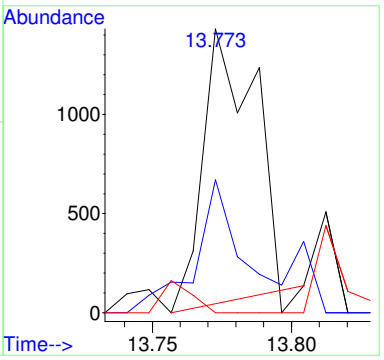




#44
o-Xylene SCAN
Concen: 24.86 ug/L
RT: 13.773 min Scan# 2289
Delta R.T. -0.008 min
Lab File: 10012006.D
Acq: 1 Oct 2020 13:46

Tgt Ion: 91 Resp: 1768

Ion	Ratio	Lower	Upper
91	100		
106	55.0	18.0	78.0
105	6.7	0.0	56.6



2009033-03RE1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012008.D
Acq On : 1 Oct 2020 14:35
InstName : AG5975C
Operator : TD
Sample : 2009033-03RE1
Misc : RA for CO
ALS Vial : 8 Sample Multiplier: 1

REPORT

Quant Time: Oct 01 14:54:41 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

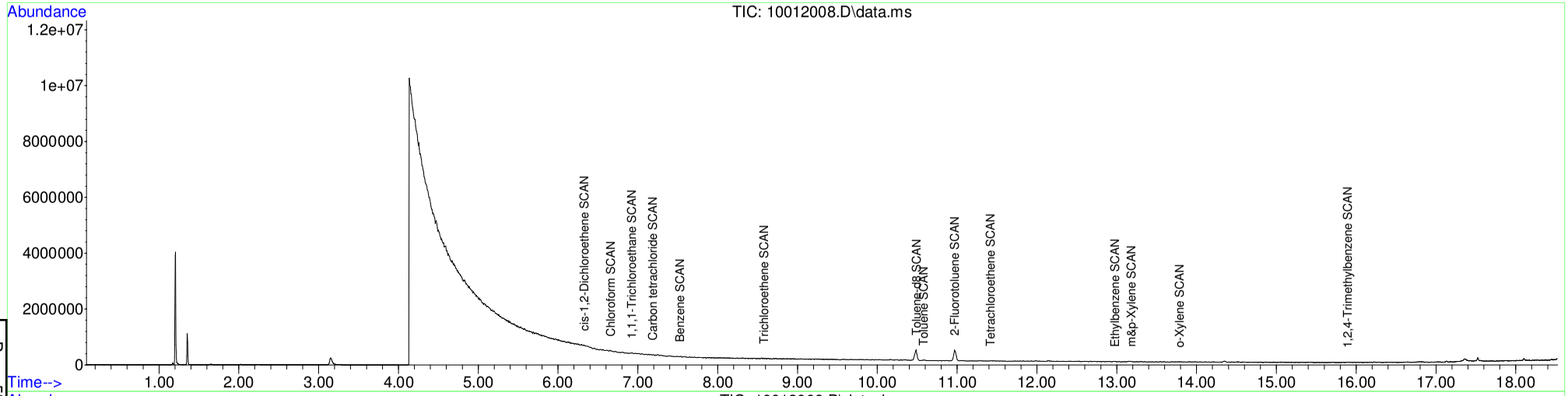
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	601793	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	521369	4425.60 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 88.51%		
Target Compounds					Qvalue
6] Chloroform	6.664	83	24575	658.14 ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	1129	27.84 ug/L	93
8] Carbon tetrachloride	7.187	117	2282	59.79 ug/L	99
9] Benzene	7.515	78	16080	157.26 ug/L	48
13] Toluene	10.582	91	21061	140.23 ug/L	98
15] Tetrachloroethene	11.432	166	5991	137.83 ug/L	99
18] Ethylbenzene	12.972	91	8795	48.11 ug/L	95
19] m&p-Xylene	13.163	91	24594	172.13 ug/L	95
20] o-Xylene	13.774	91	8071	52.87 ug/L	94
23] 1,2,4-Trimethylbenzene	15.900	105	9450	55.99 ug/L	90
25) 2-Fluorotoluene SCAN	10.969	109	305915	5214.72 ug/L	98
29) cis-1,2-Dichloroethene...	6.325	61	469	24.53 ug/L #	1
30) Chloroform SCAN	6.663	83	14322	690.77 ug/L	96
31) 1,1,1-Trichloroethane ...	6.918	97	879	46.52 ug/L	88
32) Carbon tetrachloride SCAN	7.186	117	1039	52.72 ug/L #	65
33) Benzene SCAN	7.526	78	11316	217.52 ug/L	95
35) Trichloroethene SCAN	8.579	130	338	23.64 ug/L #	42
36) Toluene-d8 SCAN	10.486	98	279823	4877.40 ug/L	94
37) Toluene SCAN	10.580	91	13559	184.55 ug/L	94
39) Tetrachloroethene SCAN	11.420	166	2291	129.79 ug/L	92
42) Ethylbenzene SCAN	12.979	91	5618	41.97 ug/L	70
43) m&p-Xylene SCAN	13.177	91	12492	93.33 ug/L #	88
44) o-Xylene SCAN	13.781	91	5012	69.95 ug/L	91
47) 1,2,4-Trimethylbenzene...	15.893	105	4971	64.34 ug/L #	52

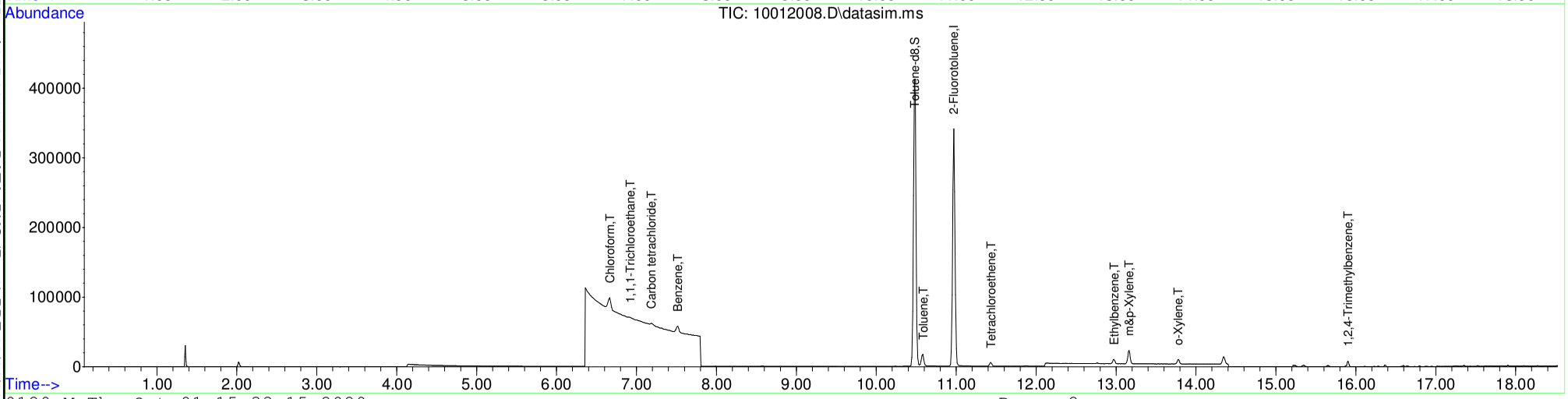
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012008.D
Acq On : 1 Oct 2020 14:35
InstName : AG5975C
Operator : TD
Sample : 2009033-03RE1
Misc : RA for CO
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 01 14:54:41 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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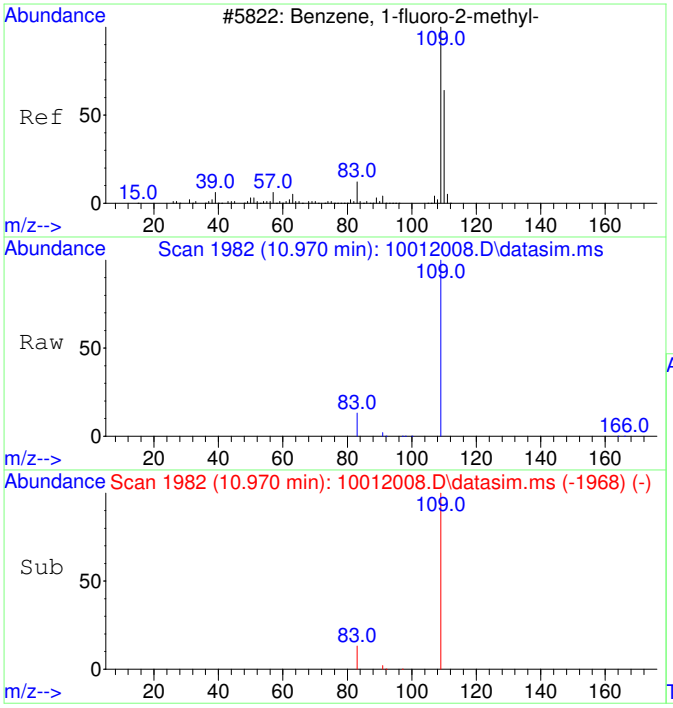
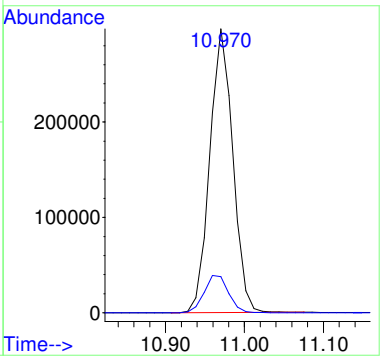
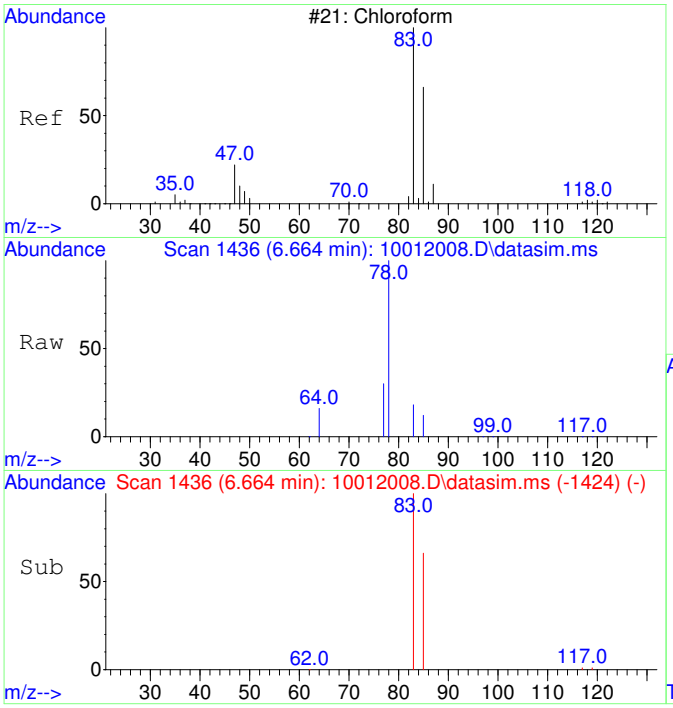


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. 0.000 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion:109 Resp: 601793

Ion	Ratio	Lower	Upper
109	100		
83	13.9	0.0	42.3

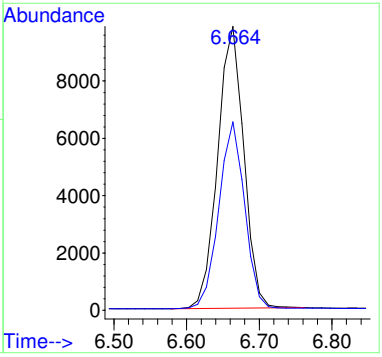


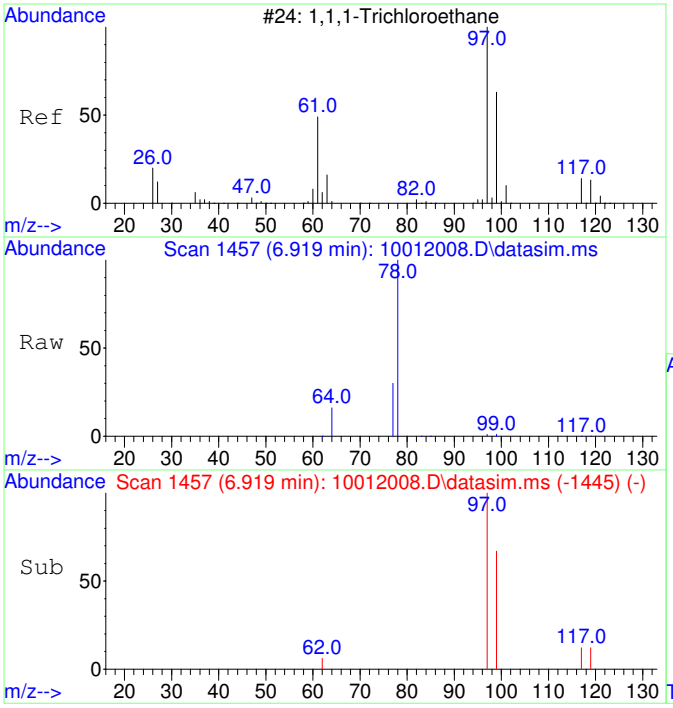


#6
Chloroform
Concen: 658.14 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. 0.000 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion: 83 Resp: 24575

Ion	Ratio	Lower	Upper
83	100		
85	65.2	35.1	95.1

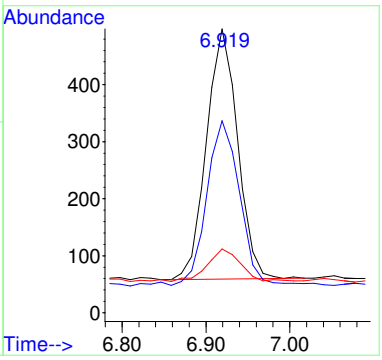


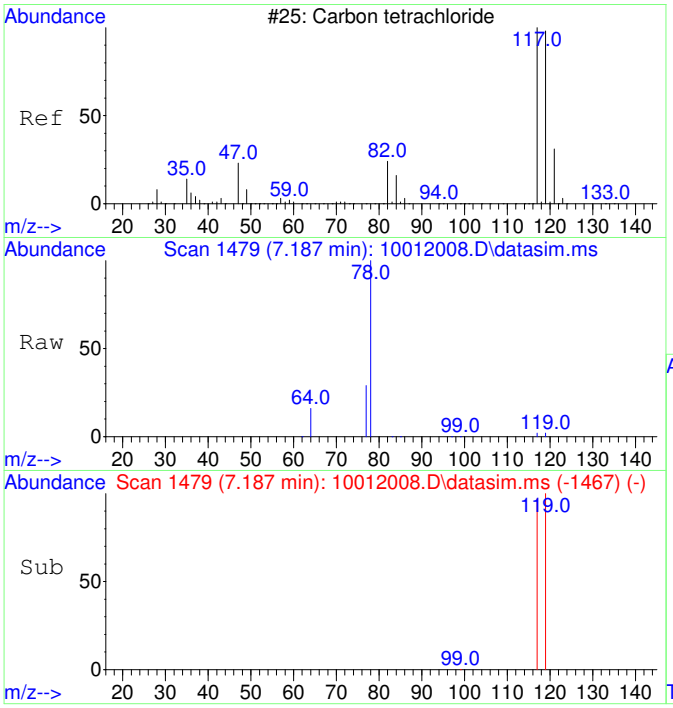


#7
1,1,1-Trichloroethane
Concen: 27.84 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion: 97 Resp: 1129

Ion	Ratio	Lower	Upper
97	100		
99	71.0	34.6	94.6
117	14.3	0.0	43.2

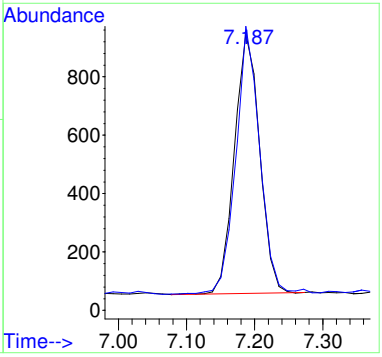


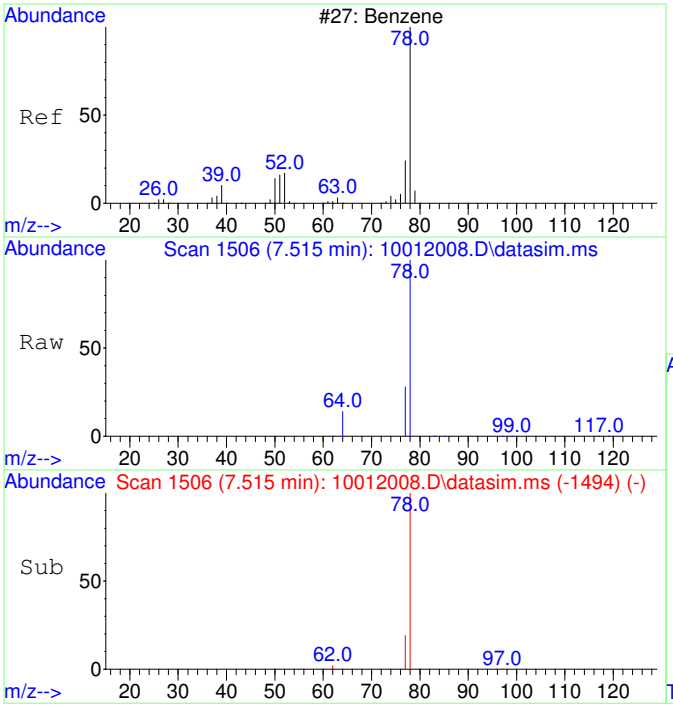


#8
Carbon tetrachloride
Concen: 59.79 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion:117 Resp: 2282

Ion	Ratio	Lower	Upper
117	100		
119	97.1	66.4	126.4

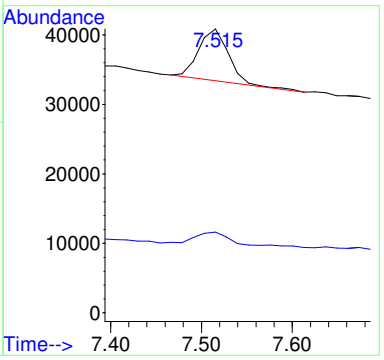


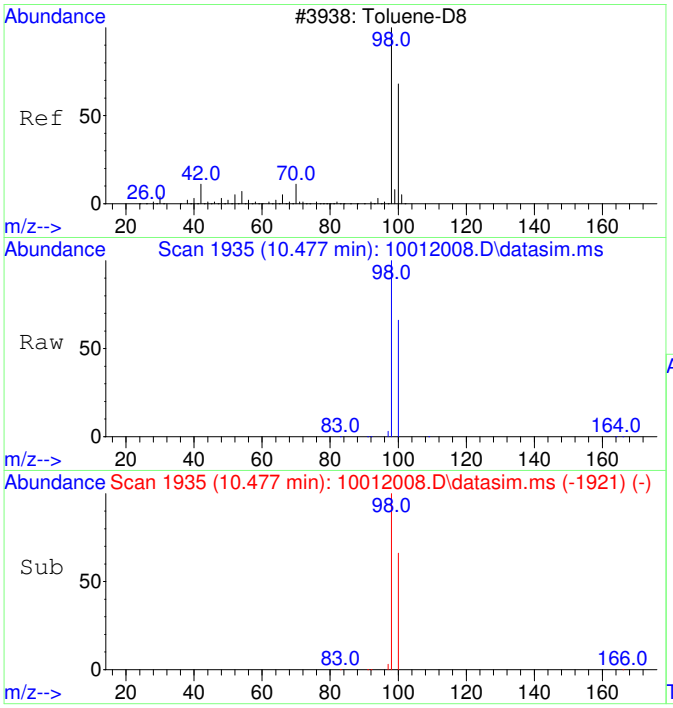


#9
Benzene
Concen: 157.26 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion: 78 Resp: 16080

Ion	Ratio	Lower	Upper
78	100		
77	48.4	0.0	53.2

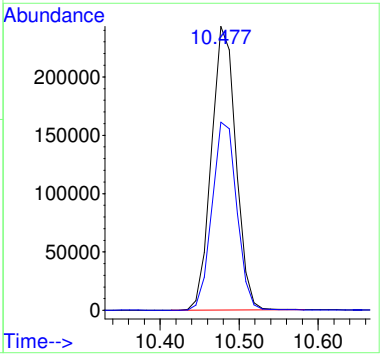


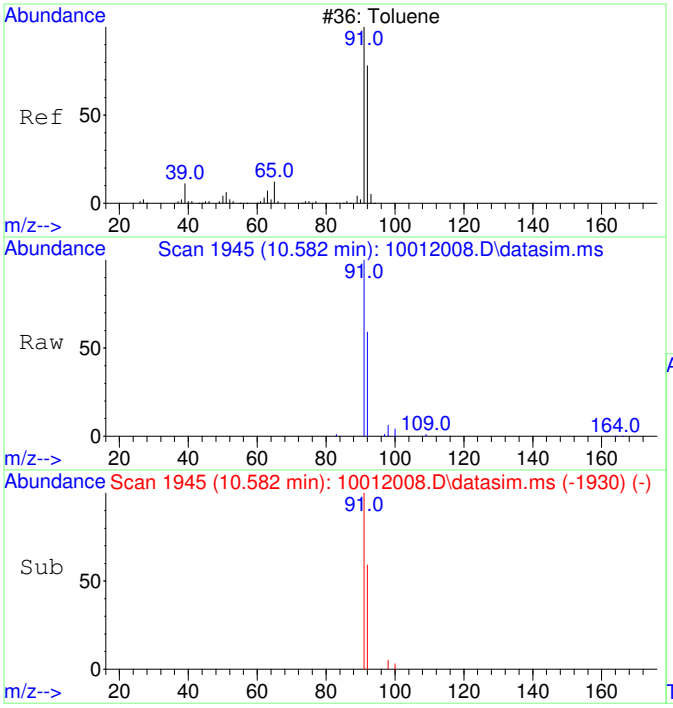


#12
Toluene-d8
Concen: 4425.60 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. 0.000 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion: 98 Resp: 521369

Ion	Ratio	Lower	Upper
98	100		
100	67.0	37.1	97.1

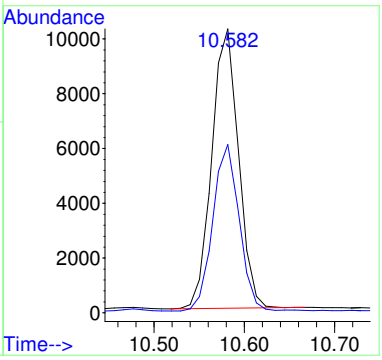


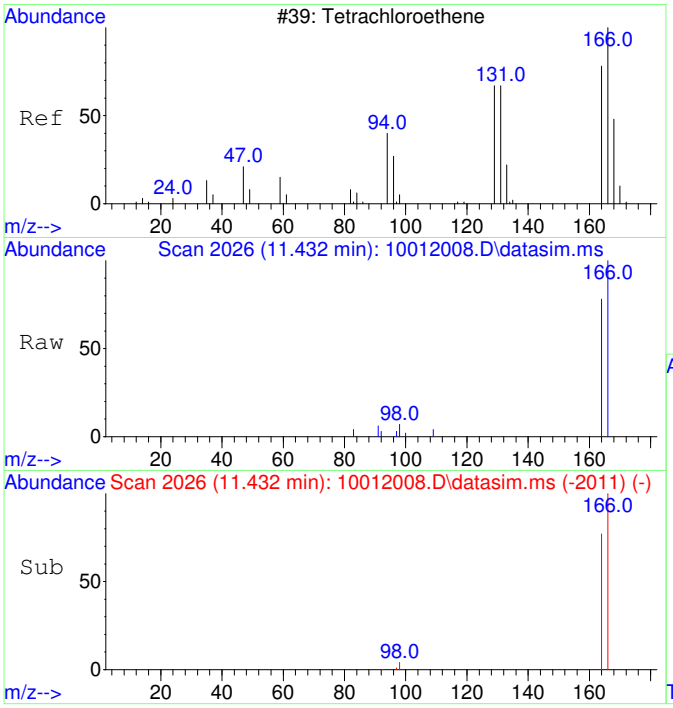


#13
Toluene
Concen: 140.23 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.011 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion: 91 Resp: 21061

Ion	Ratio	Lower	Upper
91	100		
92	58.7	29.9	89.9

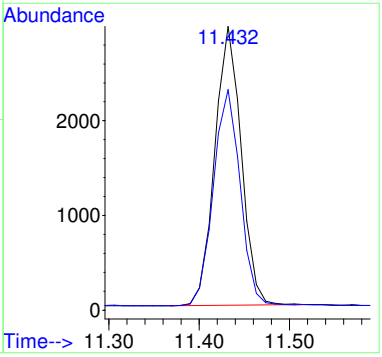


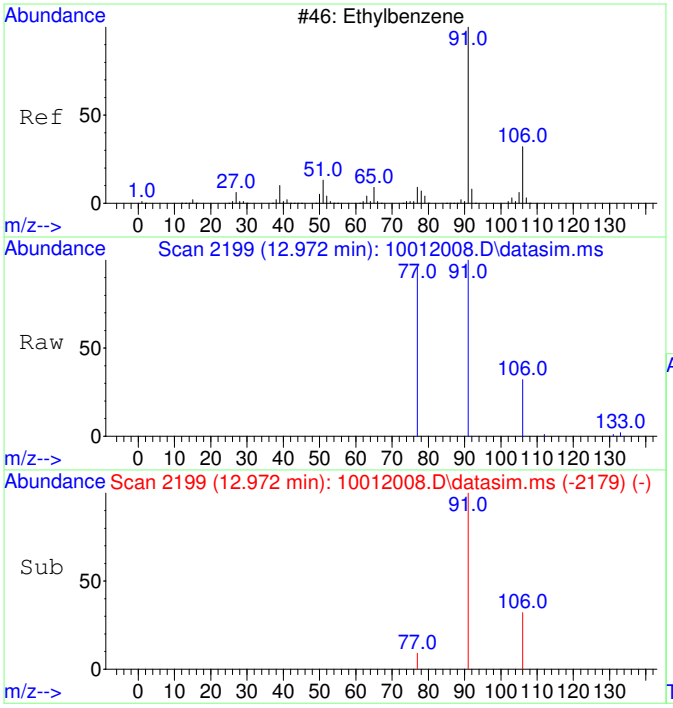


#15
Tetrachloroethene
Concen: 137.83 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.011 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion:166 Resp: 5991

Ion	Ratio	Lower	Upper
166	100		
164	78.3	47.8	107.8

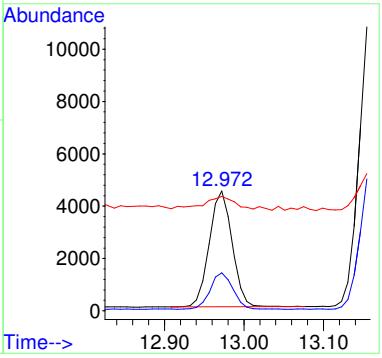


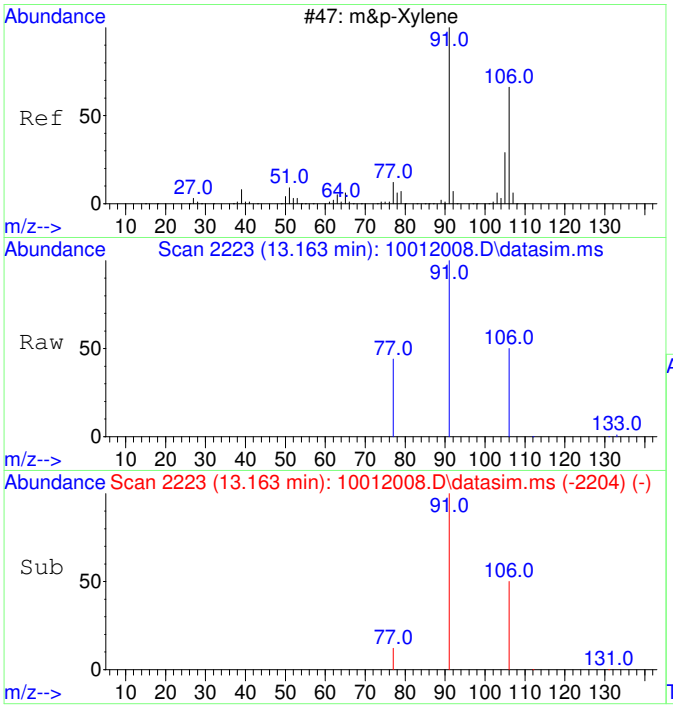


#18
Ethylbenzene
Concen: 48.11 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.008 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion: 91 Resp: 8795

Ion	Ratio	Lower	Upper
91	100		
106	31.4	3.0	63.0
77	13.4	0.0	38.2

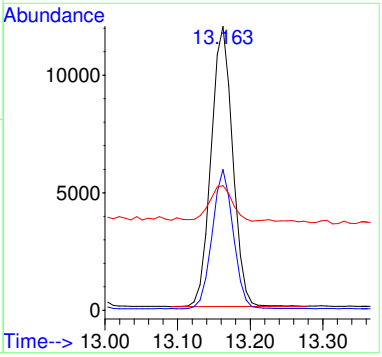


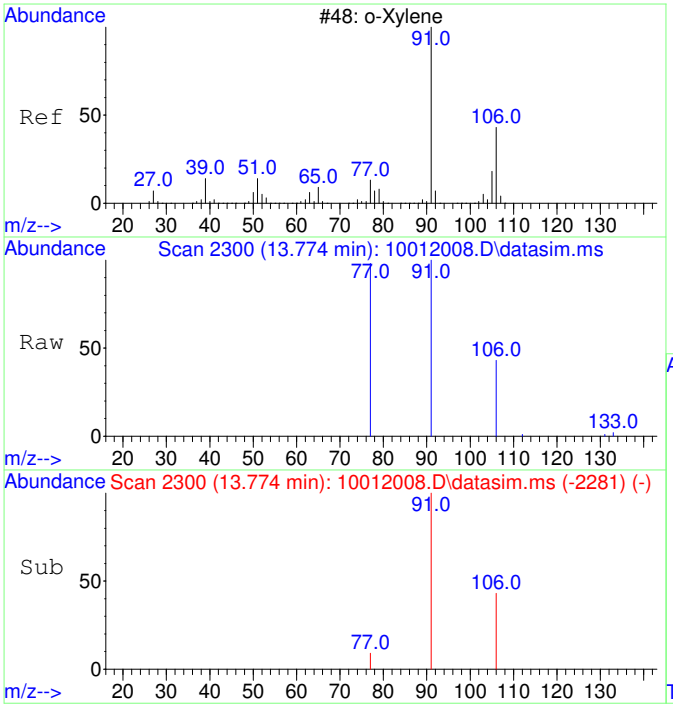


#19
m&p-Xylene
Concen: 172.13 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. 0.000 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion: 91 Resp: 24594

Ion	Ratio	Lower	Upper
91	100		
106	48.5	22.2	82.2
77	13.6	0.0	42.4

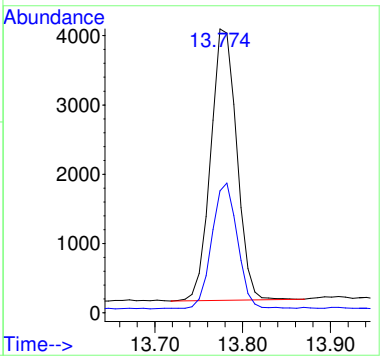


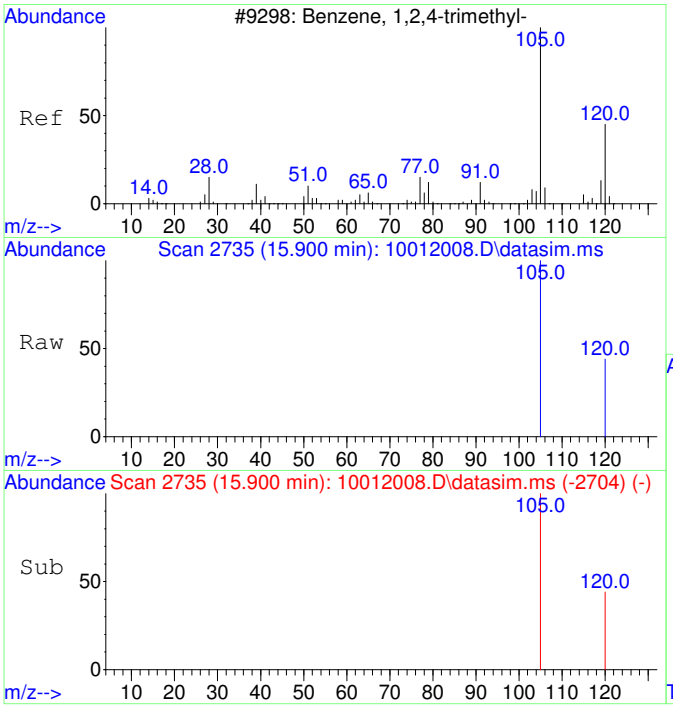


#20
o-Xylene
Concen: 52.87 ug/L
RT: 13.774 min Scan# 2300
Delta R.T. 0.000 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion: 91 Resp: 8071

Ion	Ratio	Lower	Upper
91	100		
106	45.3	19.2	79.2

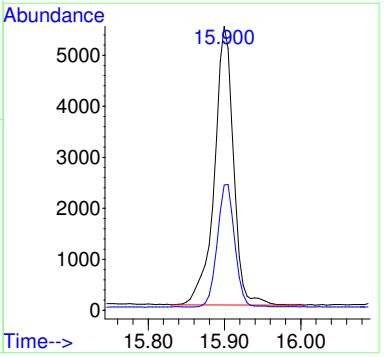


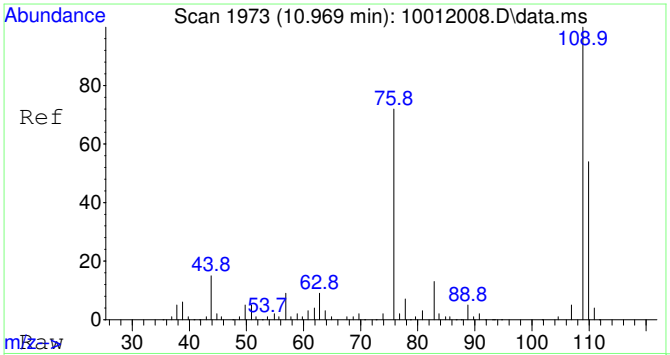


#23
1,2,4-Trimethylbenzene
Concen: 55.99 ug/L
RT: 15.900 min Scan# 2735
Delta R.T. 0.004 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion:105 Resp: 9450

Ion	Ratio	Lower	Upper
105	100		
120	40.2	17.2	77.2

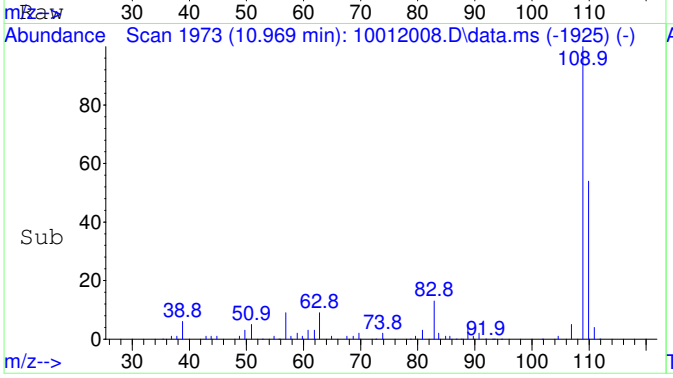


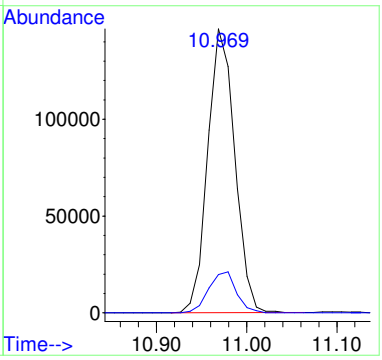


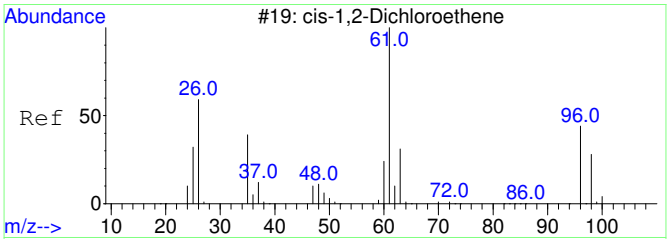
#25
2-Fluorotoluene SCAN
Concen: 5214.72 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. 0.000 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion:109 Resp: 305915

Ion	Ratio	Lower	Upper
109	100		
83	14.8	0.0	43.8



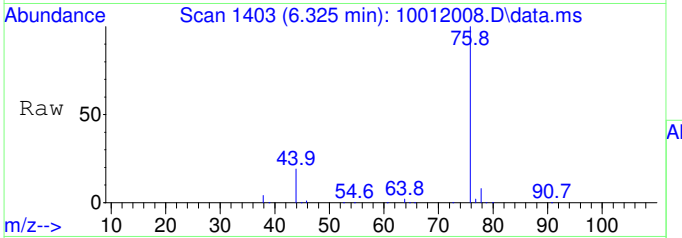


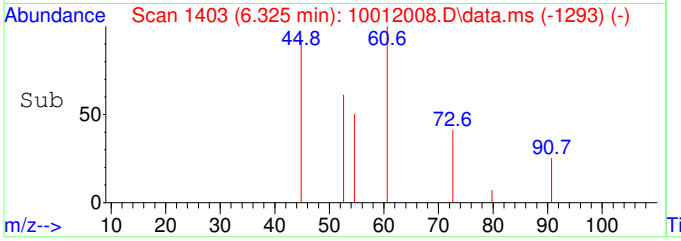


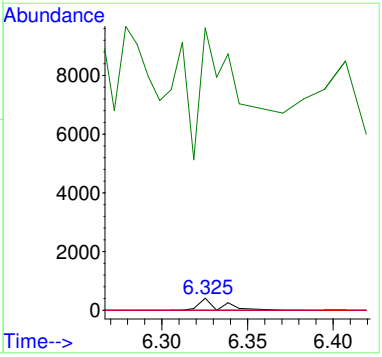
#29
cis-1,2-Dichloroethene SCAN
Concen: 24.53 ug/L
RT: 6.325 min Scan# 1403
Delta R.T. 0.232 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

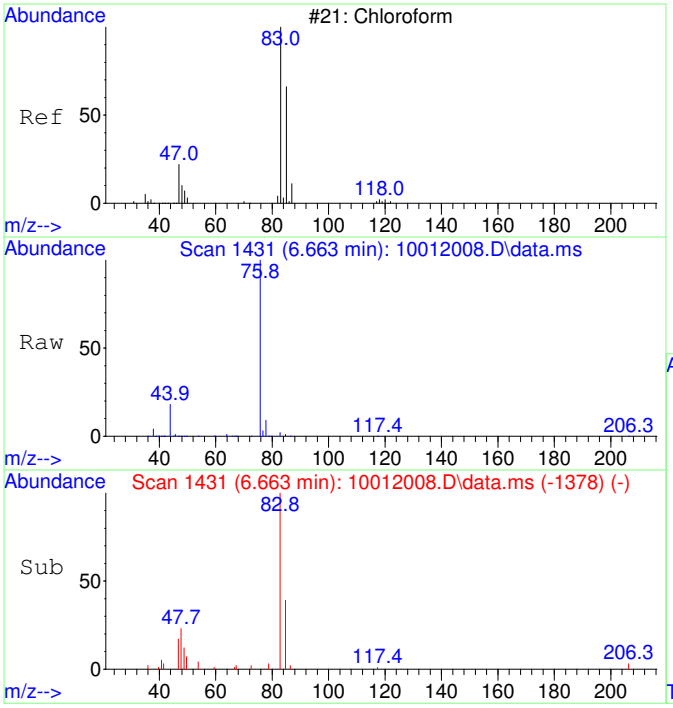
Tgt Ion: 61 Resp: 469

Ion	Ratio	Lower	Upper
61	100		
96	0.0	39.9	99.9#
98	0.0	13.5	73.5#
64	1385.7	4.5	64.5#





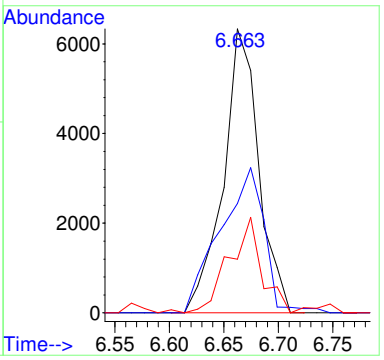


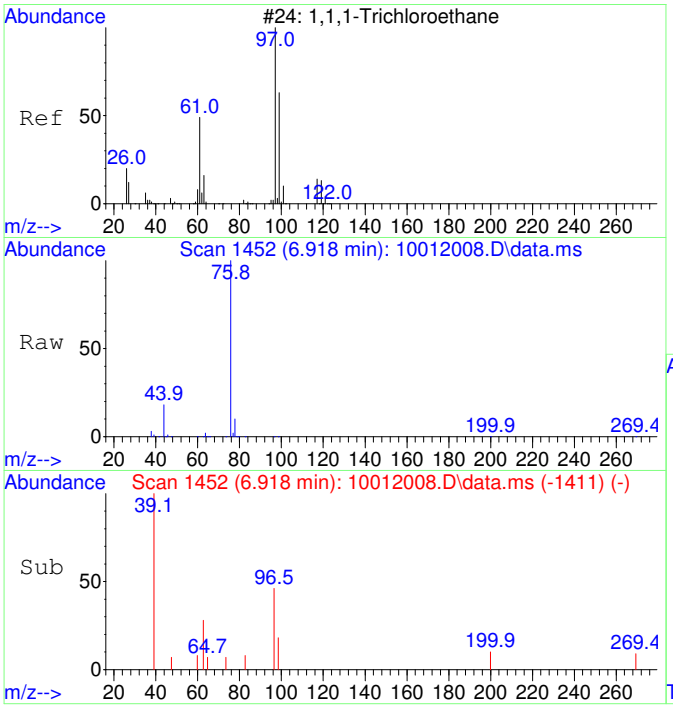


#30
Chloroform SCAN
Concen: 690.77 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion: 83 Resp: 14322

Ion	Ratio	Lower	Upper
83	100		
85	64.0	34.6	94.6
47	29.3	0.0	53.4

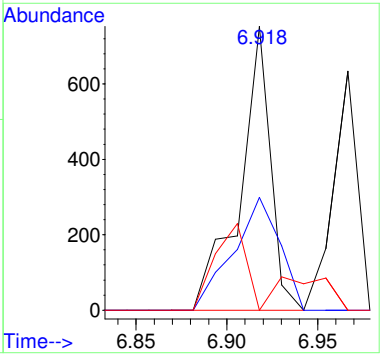


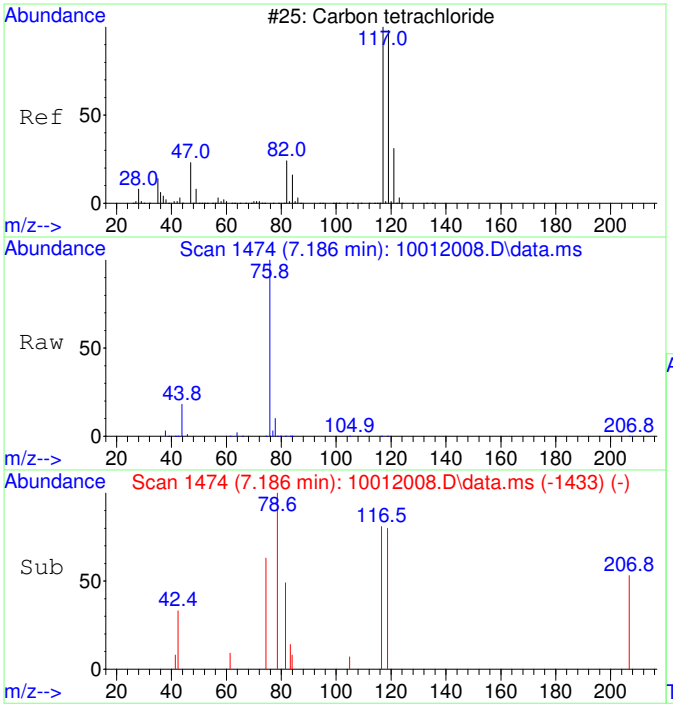


#31
1,1,1-Trichloroethane SCAN
Concen: 46.52 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion: 97 Resp: 879

Ion	Ratio	Lower	Upper
97	100		
99	60.6	43.6	103.6
61	51.8	18.0	78.0

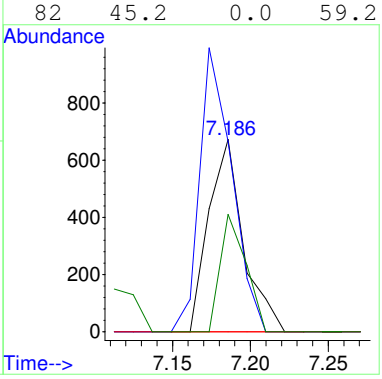


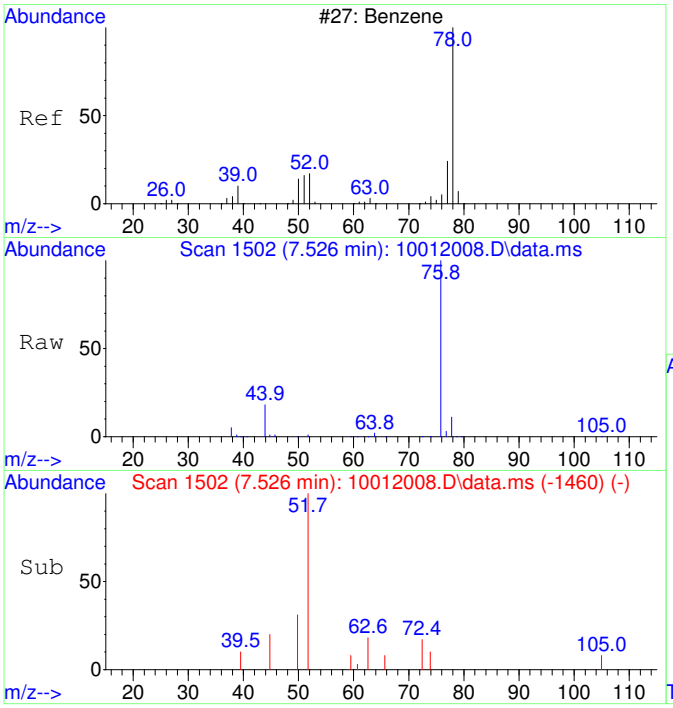


#32
Carbon tetrachloride SCAN
Concen: 52.72 ug/L
RT: 7.186 min Scan# 1474
Delta R.T. 0.000 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion:117 Resp: 1039

Ion	Ratio	Lower	Upper
117	100		
119	137.5	75.5	135.5#
121	0.0	0.0	58.8
82	45.2	0.0	59.2

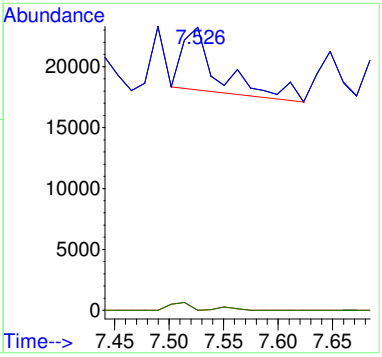


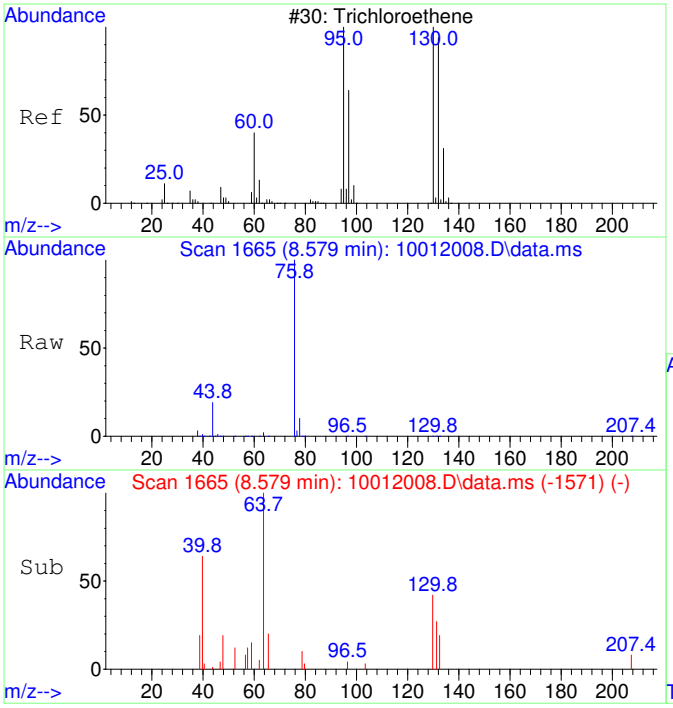


#33
Benzene SCAN
Concen: 217.52 ug/L
RT: 7.526 min Scan# 1502
Delta R.T. 0.012 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion: 78 Resp: 11316

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	7.1	0.0	47.9
51	7.1	0.0	44.1

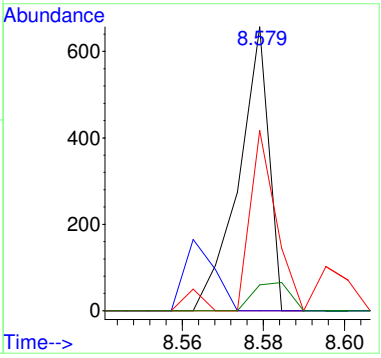


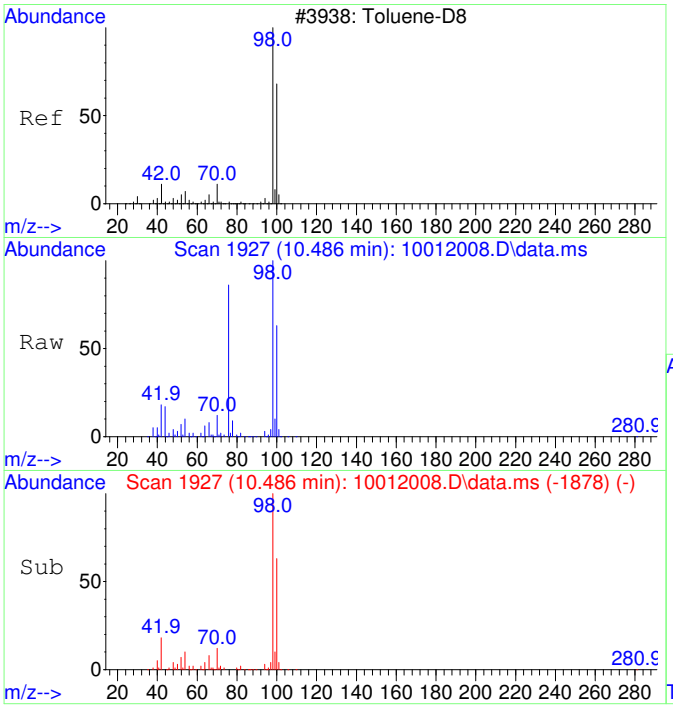


#35
Trichloroethene SCAN
Concen: 23.64 ug/L
RT: 8.579 min Scan# 1665
Delta R.T. 0.011 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion:130 Resp: 338

Ion	Ratio	Lower	Upper
130	100		
95	25.1	60.5	120.5#
132	59.2	59.6	119.6#
97	0.0	28.2	88.2#

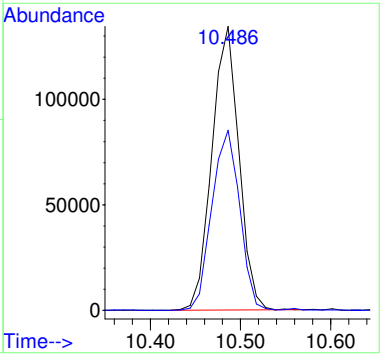


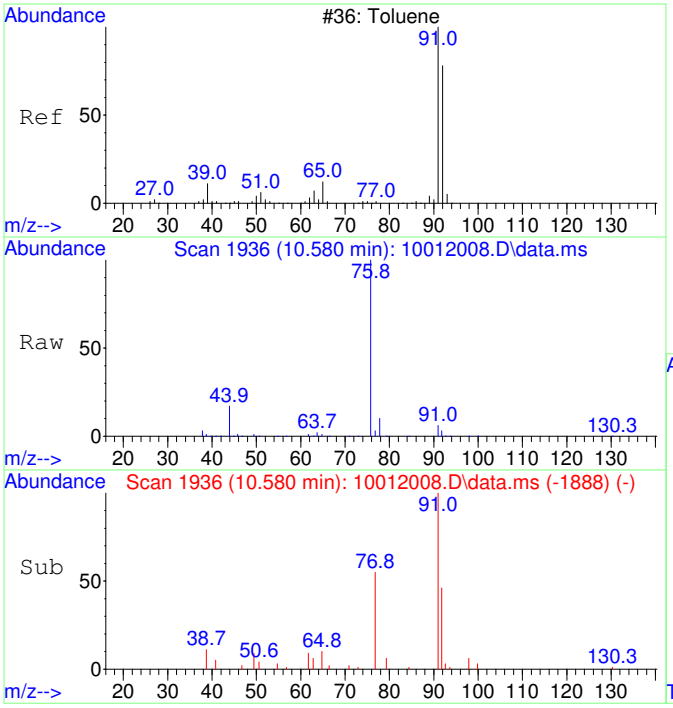


#36
Toluene-d8 SCAN
Concen: 4877.40 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.011 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion: 98 Resp: 279823

Ion	Ratio	Lower	Upper
98	100		
100	65.1	40.0	100.0

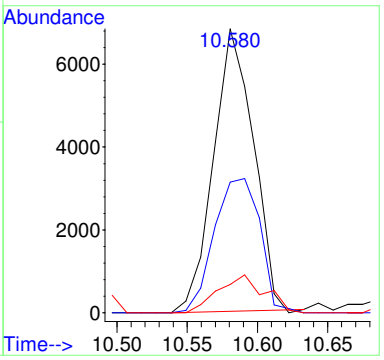


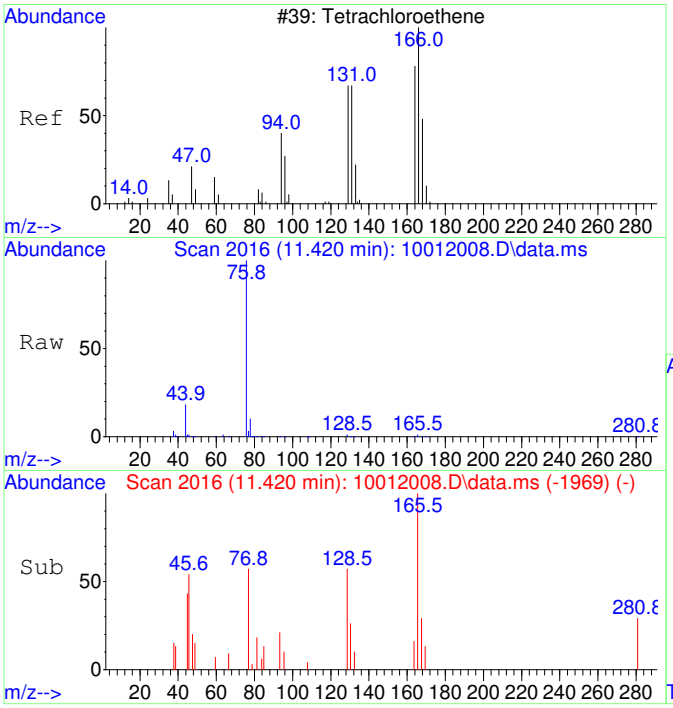


#37
Toluene SCAN
Concen: 184.55 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion: 91 Resp: 13559

Ion	Ratio	Lower	Upper
91	100		
92	54.6	28.3	88.3
65	15.6	0.0	41.0

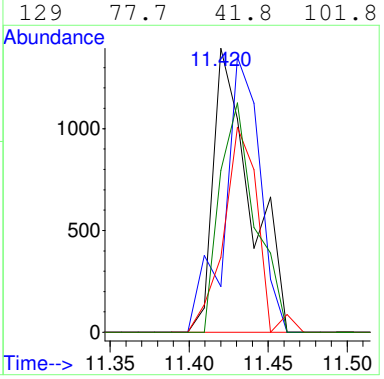


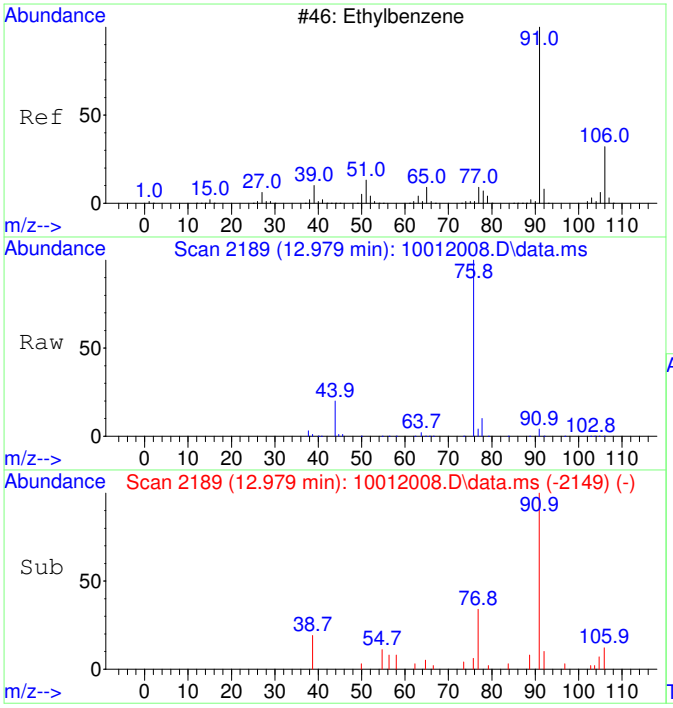


#39
Tetrachloroethene SCAN
Concen: 129.79 ug/L
RT: 11.420 min Scan# 2016
Delta R.T. -0.010 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion:166 Resp: 2291

Ion	Ratio	Lower	Upper
166	100		
164	91.8	50.9	110.9
131	66.0	38.7	98.7
129	77.7	41.8	101.8

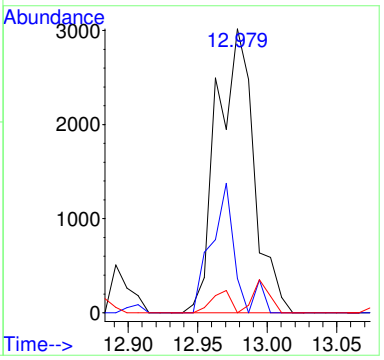


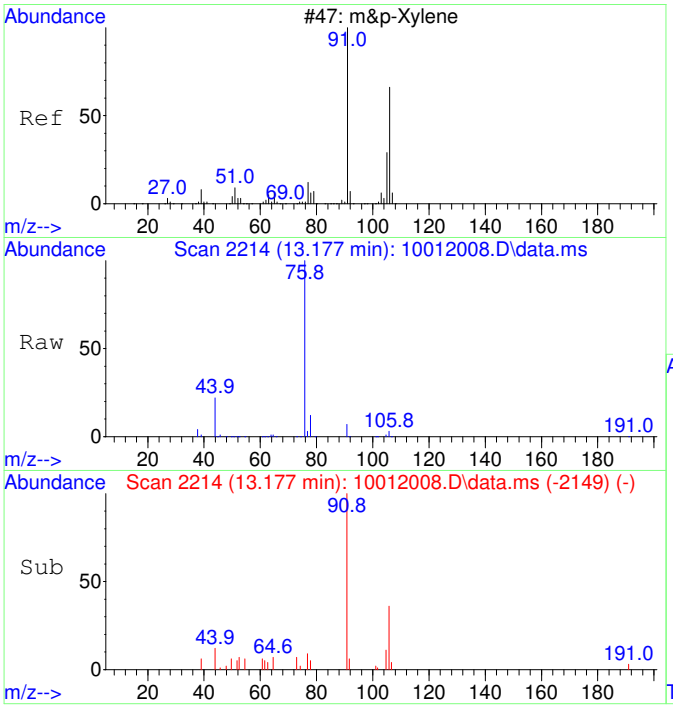


#42
Ethylbenzene SCAN
Concen: 41.97 ug/L
RT: 12.979 min Scan# 2189
Delta R.T. -0.183 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion: 91 Resp: 5618

Ion	Ratio	Lower	Upper
91	100		
106	29.8	23.1	83.1
51	4.0	0.0	40.1

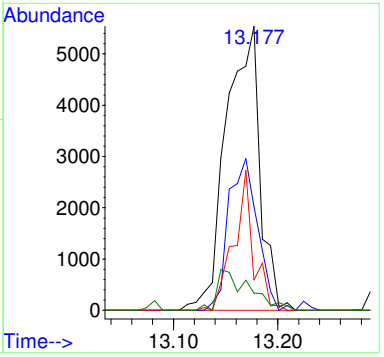


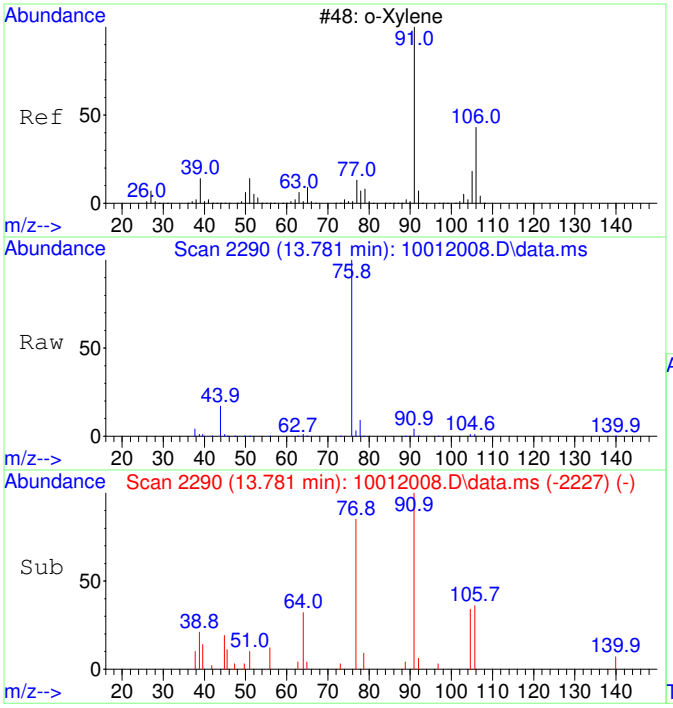


#43
m&p-Xylene SCAN
Concen: 93.33 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion: 91 Resp: 12492

Ion	Ratio	Lower	Upper
91	100		
106	45.8	23.1	83.1
105	28.7	0.0	54.7
51	0.0	0.0	40.1

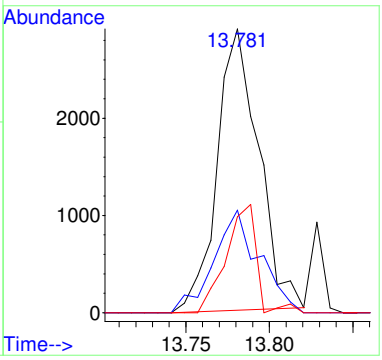


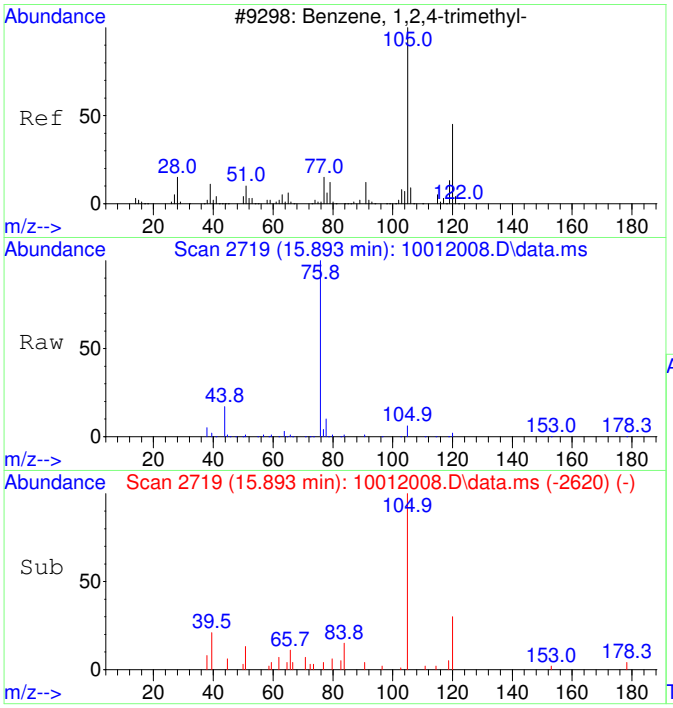


#44
o-Xylene SCAN
Concen: 69.95 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. 0.000 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion: 91 Resp: 5012

Ion	Ratio	Lower	Upper
91	100		
106	39.9	18.0	78.0
105	28.3	0.0	56.6

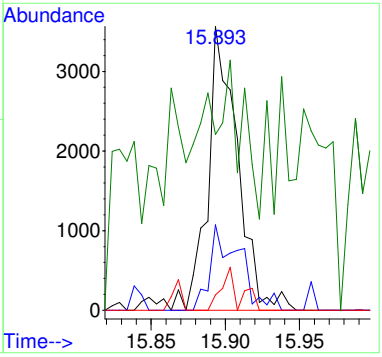




#47
1,2,4-Trimethylbenzene SCAN
Concen: 64.34 ug/L
RT: 15.893 min Scan# 2719
Delta R.T. -0.006 min
Lab File: 10012008.D
Acq: 1 Oct 2020 14:35

Tgt Ion:105 Resp: 4971

Ion	Ratio	Lower	Upper
105	100		
120	30.1	16.9	76.9
119	9.2	0.0	41.9
77	79.7	0.0	42.3#



2009033-05RE1

Quantitation Report (Not Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012009.D
Acq On : 1 Oct 2020 14:59
InstName : AG5975C
Operator : TD
Sample : 2009033-05RE1
Misc : 5X DL (80uL-20uL)
ALS Vial : 9 Sample Multiplier: 5

Quant Time: Oct 01 15:18:17 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

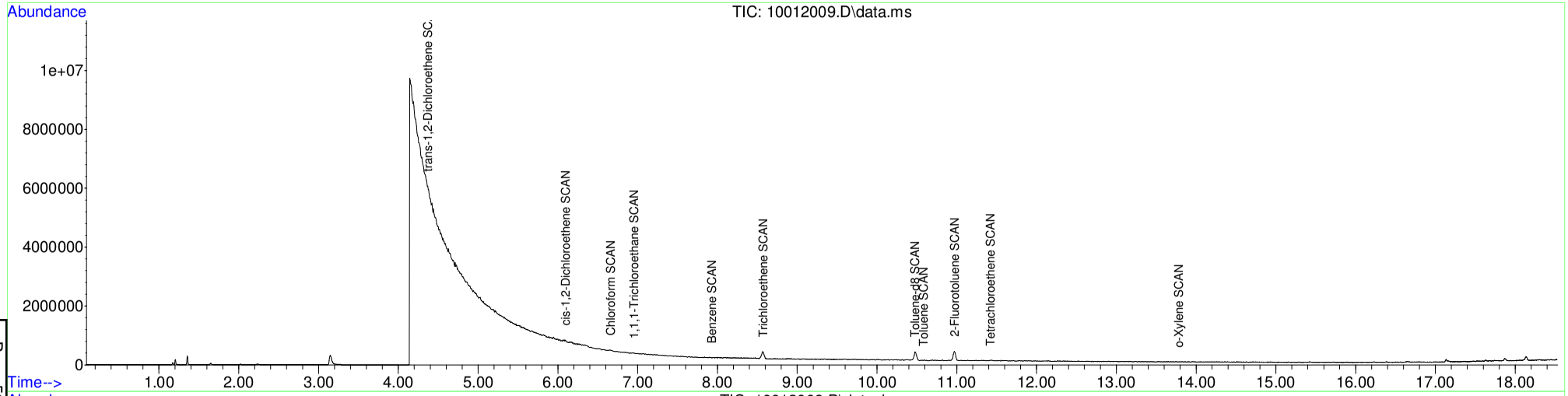
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)		Qvalue	
Internal Standards									
1) 2-Fluorotoluene	10.970	109	513727	5000.00	ug/L	0.00			
System Monitoring Compounds									
12) Toluene-d8	10.477	98	433404	4309.58	ug/L	0.00			
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.19%						
Target Compounds								Qvalue	
2] 1,1-Dichloroethene	3.086	61	2469	120.36	ug/L			87	
3] trans-1,2-Dichloroethene	4.382	61	2889	121.89	ug/L			81	
4] 1,1-Dichloroethane	5.086	63	2205	74.74	ug/L		#	35	
5] cis-1,2-Dichloroethene	6.088	61	47510	1525.55	ug/L			99	
6] Chloroform	6.652	83	31880	1000.13	ug/L			99	
7] 1,1,1-Trichloroethane	6.919	97	1698	49.05	ug/L			99	
8] Carbon tetrachloride	7.187	117	681	20.90	ug/L			100	
9] Benzene	7.503	78	5555	63.64	ug/L		#	1	
11] Trichloroethene	8.569	130	172031	6545.98	ug/L			93	RPT
13] Toluene	10.571	91	6129	47.80	ug/L			99	
15] Tetrachloroethene	11.432	166	9285	250.24	ug/L			98	
19] m&p-Xylene	13.162	91	3072	25.19	ug/L			90	
25) 2-Fluorotoluene SCAN	10.969	109	250078	4993.68	ug/L			96	
27) trans-1,2-Dichloroethe...	4.361	61	2073	157.52	ug/L		#	28	
29) cis-1,2-Dichloroethene...	6.093	61	27582	1690.26	ug/L			87	
30) Chloroform SCAN	6.662	83	18968	1071.68	ug/L			90	
31) 1,1,1-Trichloroethane ...	6.954	97	444	27.53	ug/L		#	19	
33) Benzene SCAN	7.926	78	2149	48.39	ug/L			94	
35) Trichloroethene SCAN	8.574	130	82348	6747.62	ug/L			83	
36) Toluene-d8 SCAN	10.475	98	218855	4468.65	ug/L			100	
37) Toluene SCAN	10.580	91	4367	69.63	ug/L			70	
39) Tetrachloroethene SCAN	11.420	166	5547	368.12	ug/L		#	40	
44) o-Xylene SCAN	13.781	91	1280	20.93	ug/L			69	

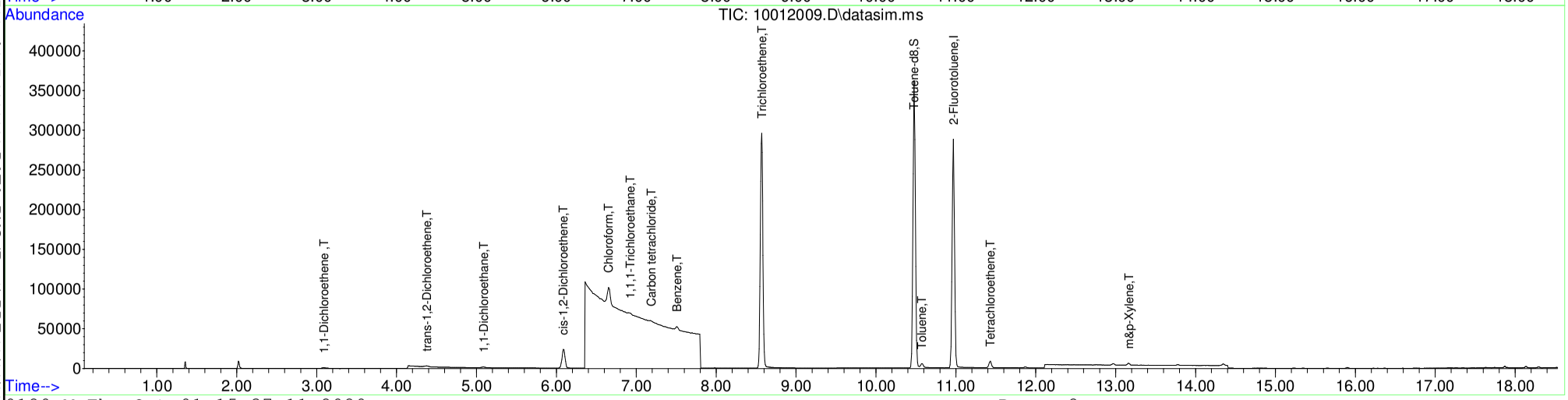
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012009.D
Acq On : 1 Oct 2020 14:59
InstName : AG5975C
Operator : TD
Sample : 2009033-05RE1
Misc : 5X DL (80uL-20uL)
ALS Vial : 9 Sample Multiplier: 5

Quant Time: Oct 01 15:18:17 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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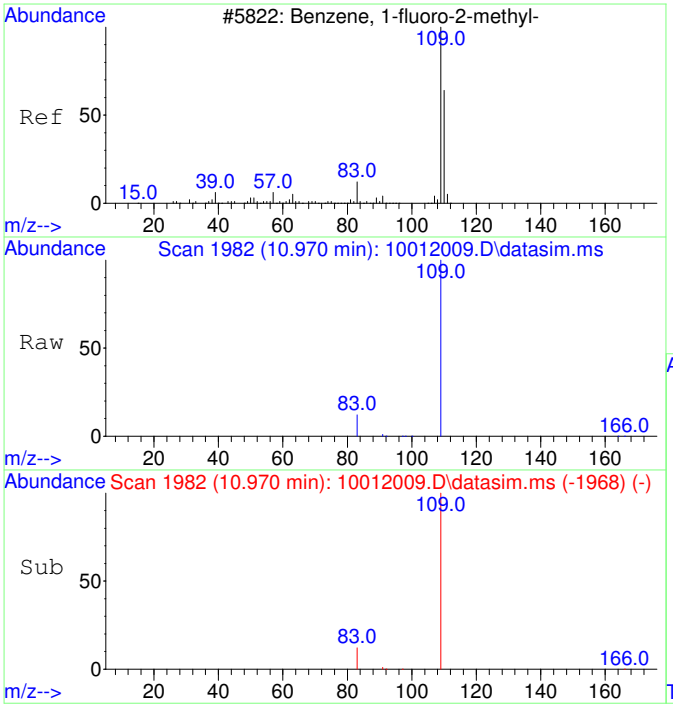
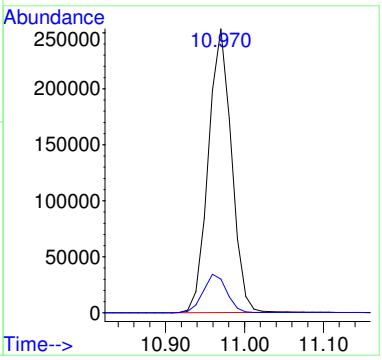
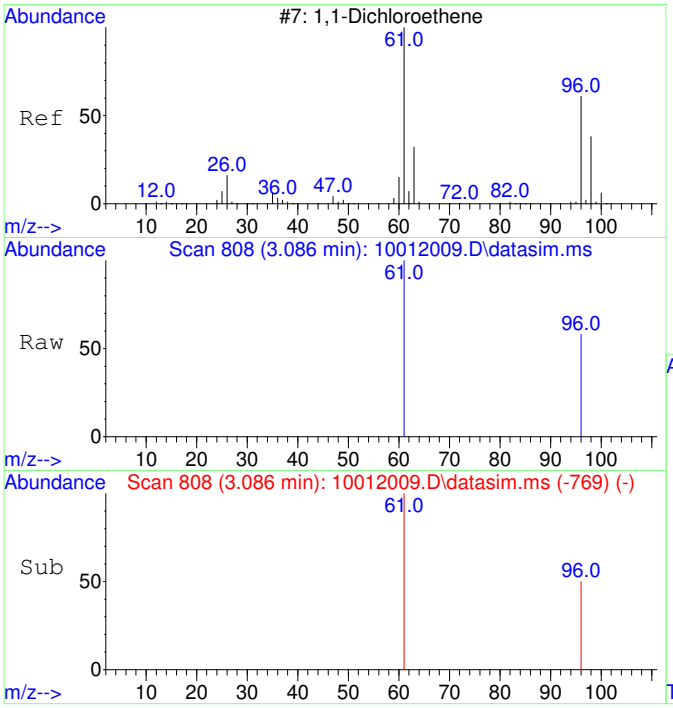


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. 0.000 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

Tgt Ion:109 Resp: 513727

Ion	Ratio	Lower	Upper
109	100		
83	13.8	0.0	42.3

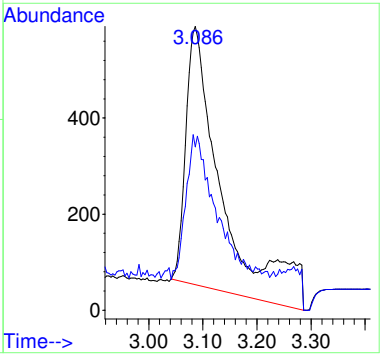


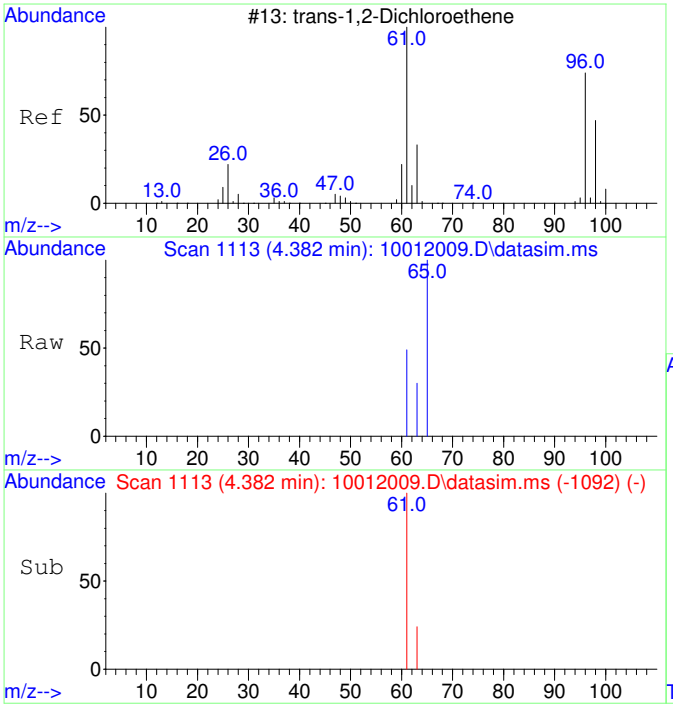


#2
1,1-Dichloroethene
Concen: 120.36 ug/L
RT: 3.086 min Scan# 808
Delta R.T. -0.004 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

Tgt Ion: 61 Resp: 2469

Ion	Ratio	Lower	Upper
61	100		
96	56.5	37.2	97.2

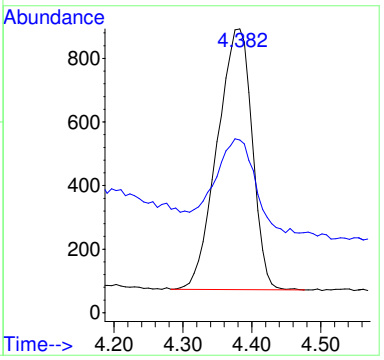


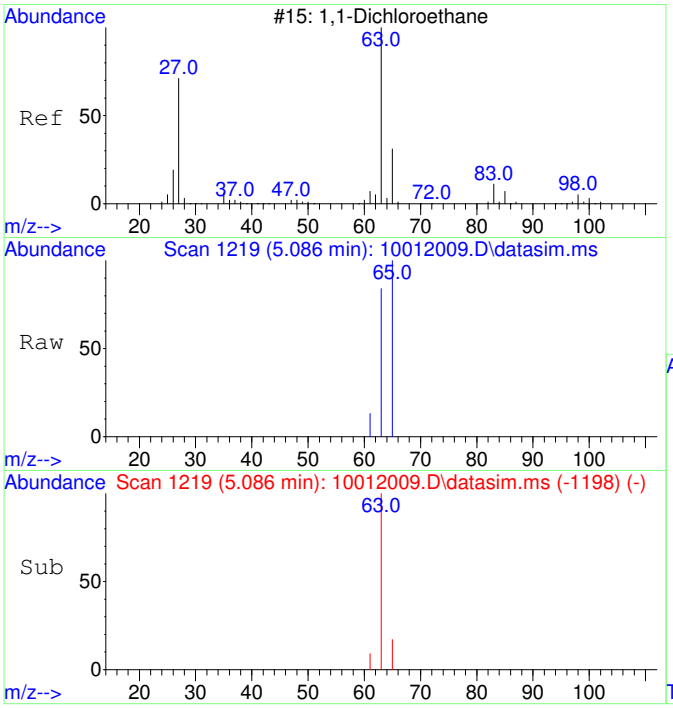


#3
trans-1,2-Dichloroethene
Concen: 121.89 ug/L
RT: 4.382 min Scan# 1113
Delta R.T. -0.013 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

Tgt Ion: 61 Resp: 2889

Ion	Ratio	Lower	Upper
61	100		
63	43.0	2.4	62.4

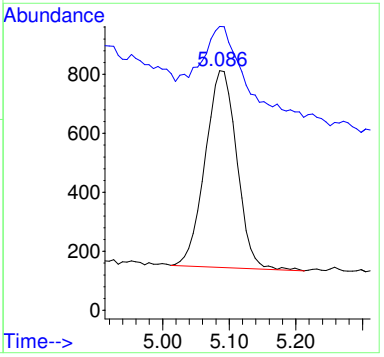


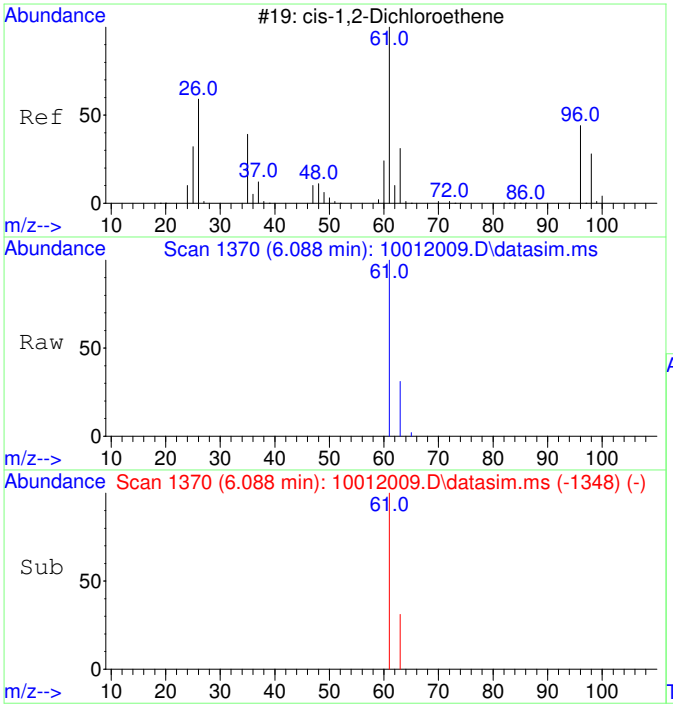


#4
1,1-Dichloroethane
Concen: 74.74 ug/L
RT: 5.086 min Scan# 1219
Delta R.T. -0.013 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

Tgt Ion: 63 Resp: 2205

Ion	Ratio	Lower	Upper
63	100		
65	68.2	1.8	61.8#

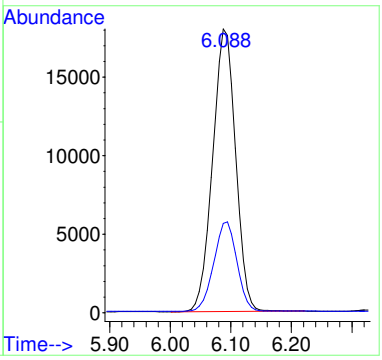


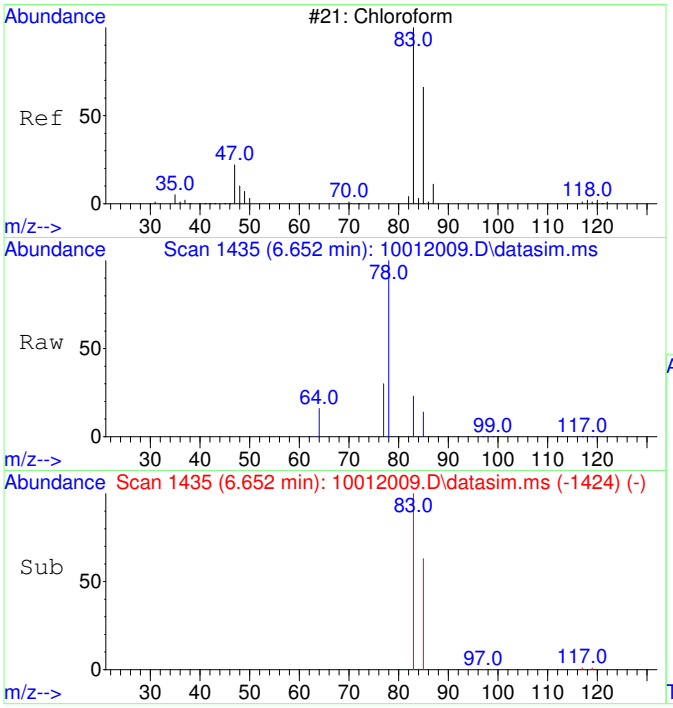


#5
cis-1,2-Dichloroethene
Concen: 1525.55 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. -0.007 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

Tgt Ion: 61 Resp: 47510

Ion	Ratio	Lower	Upper
61	100		
63	31.7	2.5	62.5

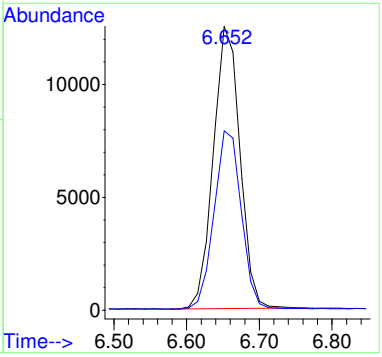


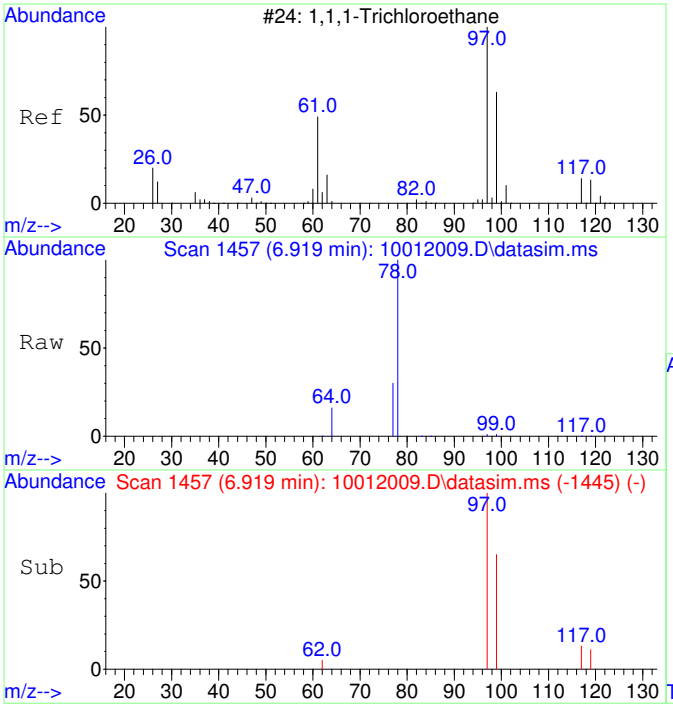


#6
Chloroform
Concen: 1000.13 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. -0.012 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

Tgt Ion: 83 Resp: 31880

Ion	Ratio	Lower	Upper
83	100		
85	64.0	35.1	95.1

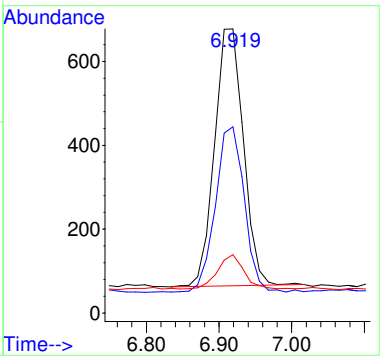


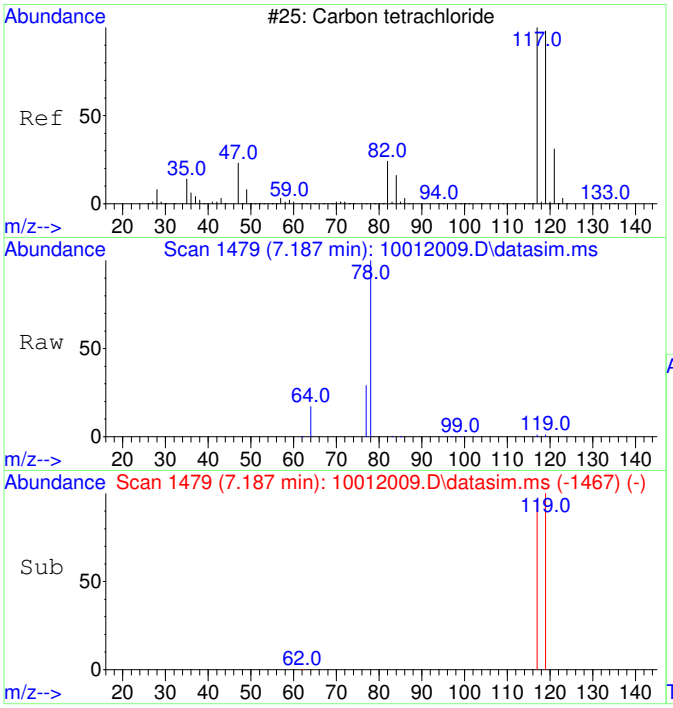


#7
1,1,1-Trichloroethane
Concen: 49.05 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

Tgt Ion: 97 Resp: 1698

Ion	Ratio	Lower	Upper
97	100		
99	64.3	34.6	94.6
117	12.4	0.0	43.2

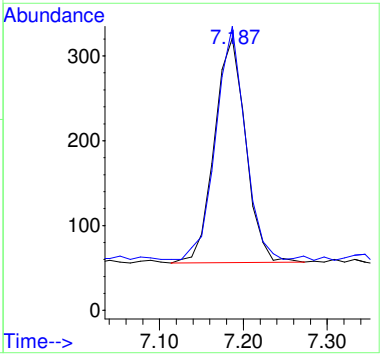


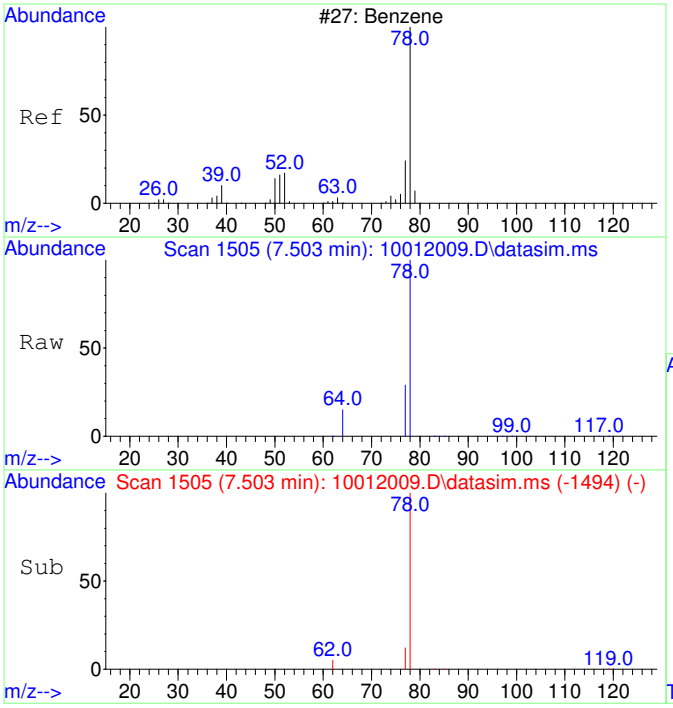


#8
Carbon tetrachloride
Concen: 20.90 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

Tgt Ion:117 Resp: 681

Ion	Ratio	Lower	Upper
117	100		
119	96.8	66.4	126.4

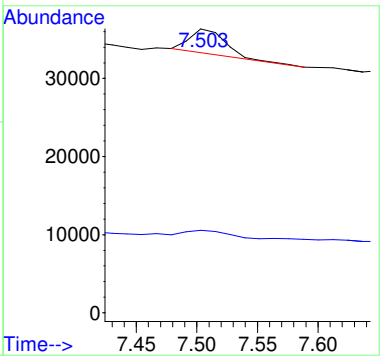


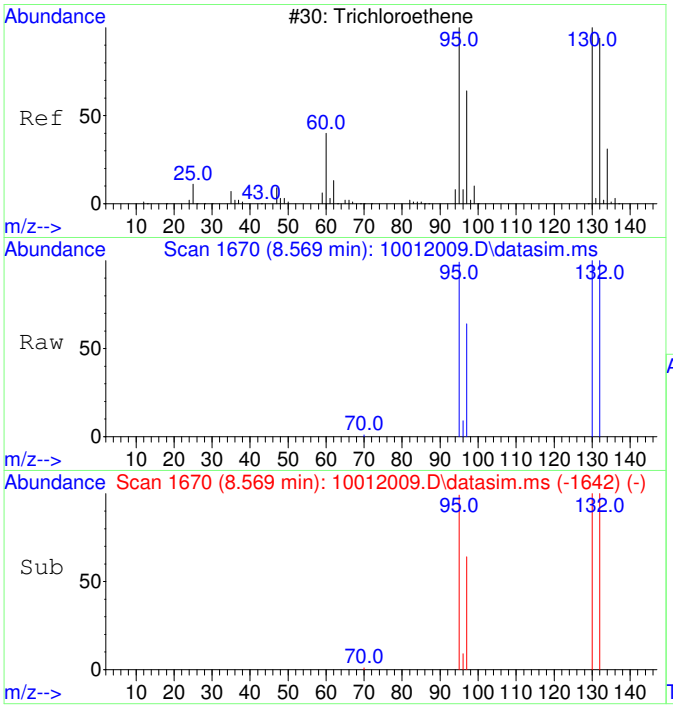


#9
Benzene
Concen: 63.64 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

Tgt Ion: 78 Resp: 5555

Ion	Ratio	Lower	Upper
78	100		
77	82.7	0.0	53.2#

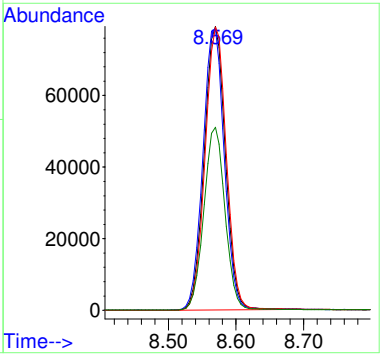


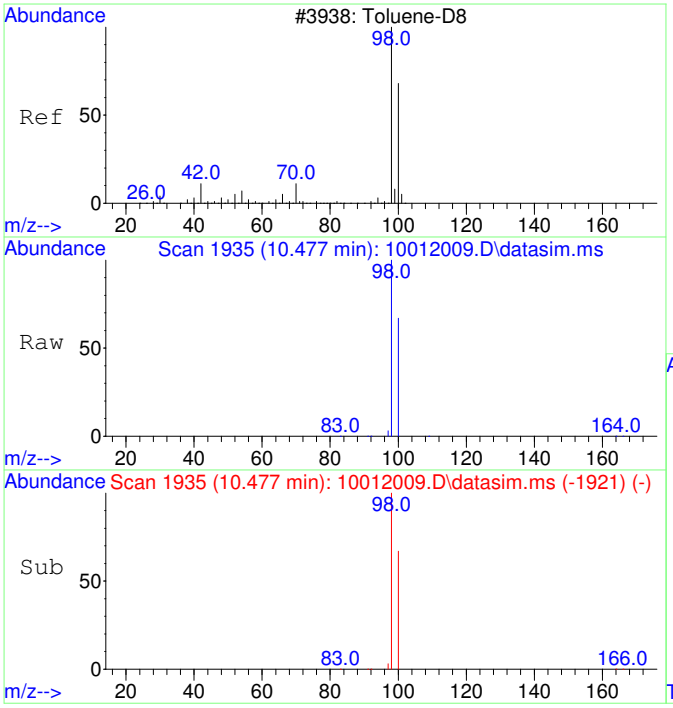


#11
Trichloroethene
Concen: 6545.98 ug/L
RT: 8.569 min Scan# 1670
Delta R.T. 0.000 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

Tgt Ion:130 Resp: 172031

Ion	Ratio	Lower	Upper
130	100		
95	100.1	60.7	120.7
132	99.9	76.0	116.0
97	64.2	38.6	78.6

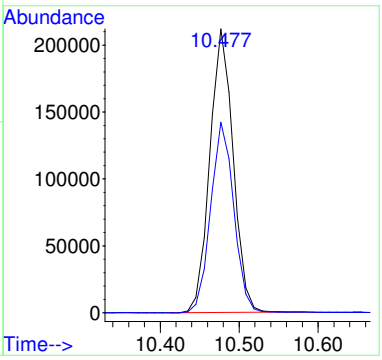


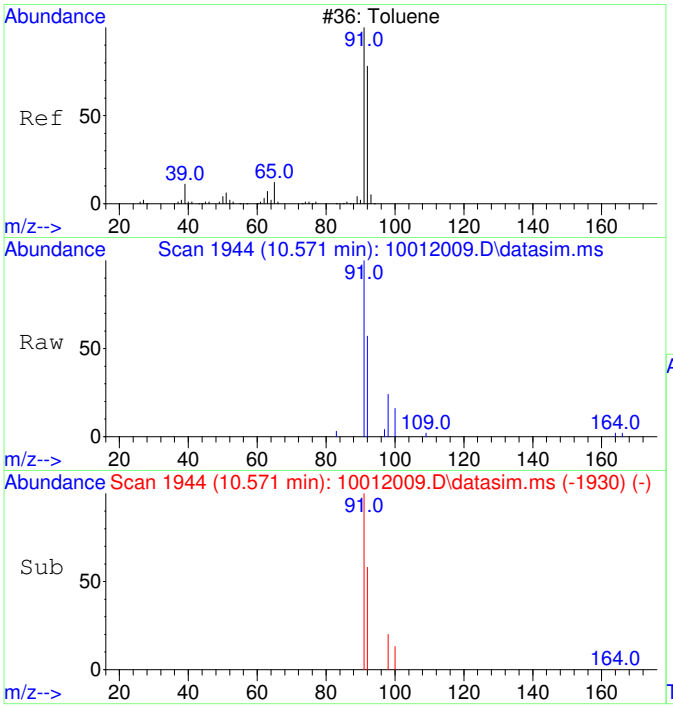


#12
Toluene-d8
Concen: 4309.58 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. 0.000 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

Tgt Ion: 98 Resp: 433404

Ion	Ratio	Lower	Upper
98	100		
100	66.6	37.1	97.1

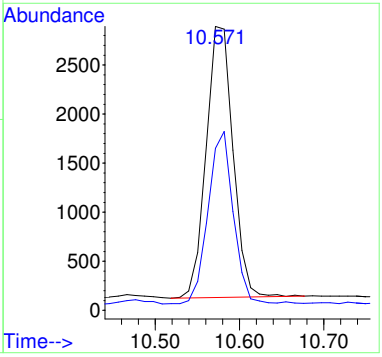


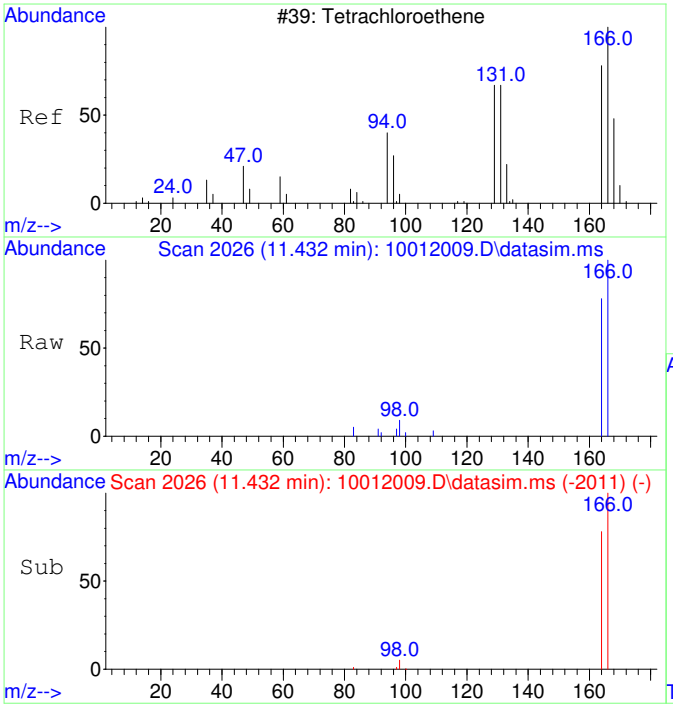


#13
Toluene
Concen: 47.80 ug/L
RT: 10.571 min Scan# 1944
Delta R.T. 0.000 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

Tgt Ion: 91 Resp: 6129

Ion	Ratio	Lower	Upper
91	100		
92	58.9	29.9	89.9

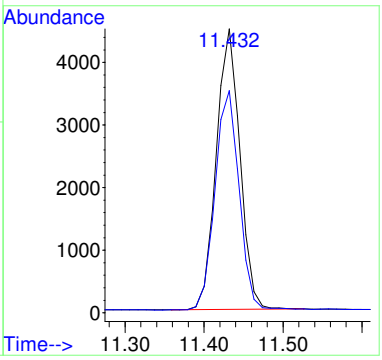


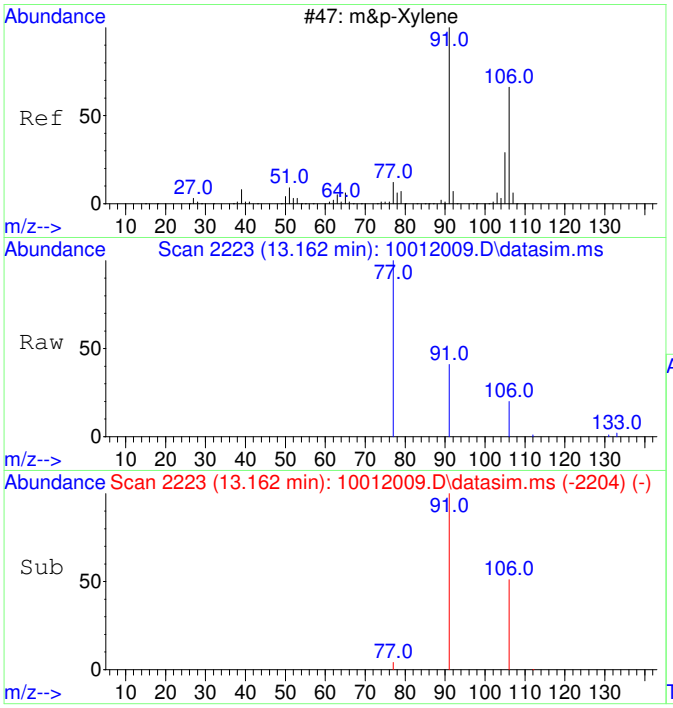


#15
Tetrachloroethene
Concen: 250.24 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

Tgt Ion:166 Resp: 9285

Ion	Ratio	Lower	Upper
166	100		
164	79.2	47.8	107.8

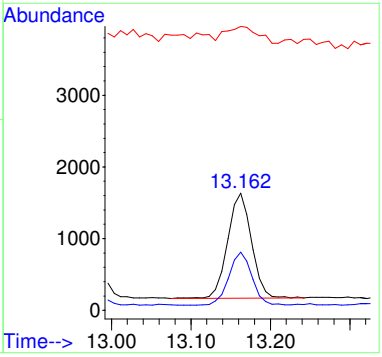


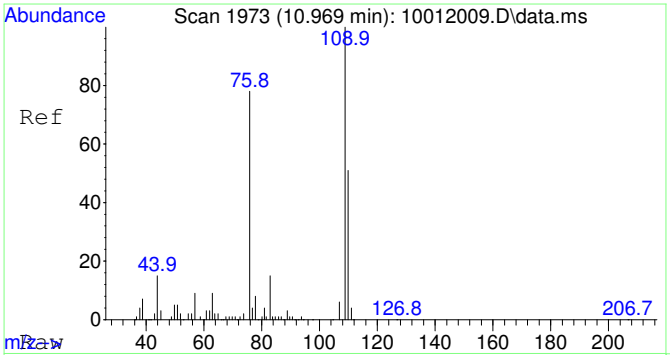


#19
m&p-Xylene
Concen: 25.19 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. 0.000 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

Tgt Ion: 91 Resp: 3072

Ion	Ratio	Lower	Upper
91	100		
106	48.5	22.2	82.2
77	24.6	0.0	42.4

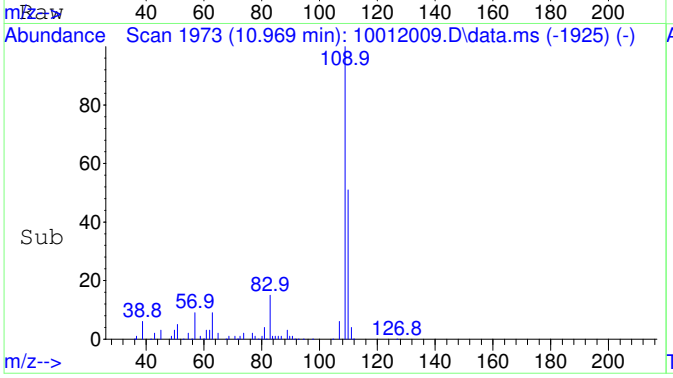


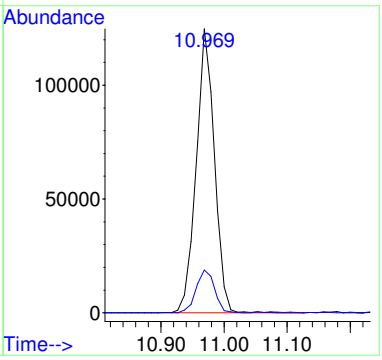


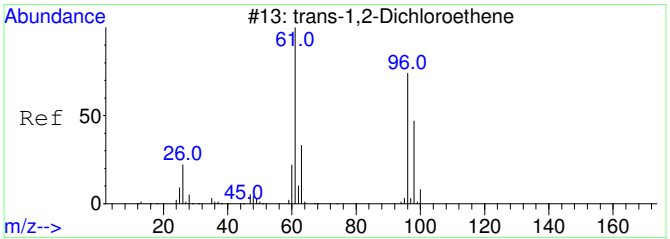
#25
2-Fluorotoluene SCAN
Concen: 4993.68 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. 0.000 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

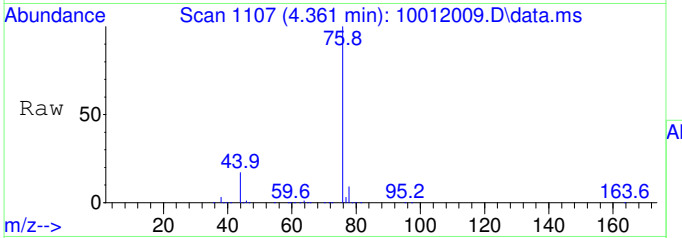
Tgt Ion:109 Resp: 250078

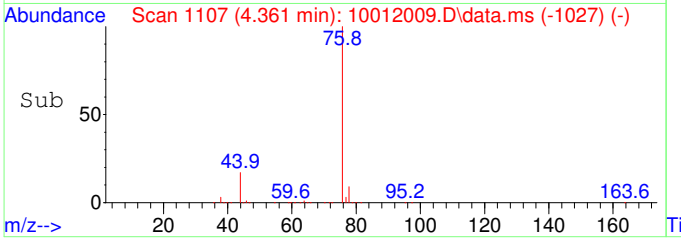
Ion	Ratio	Lower	Upper
109	100		
83	15.4	0.0	43.8







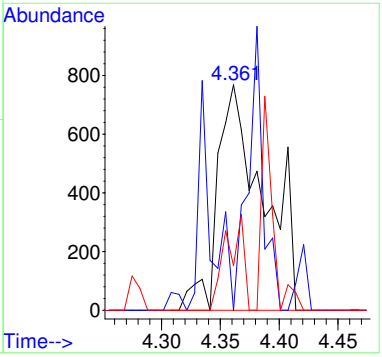


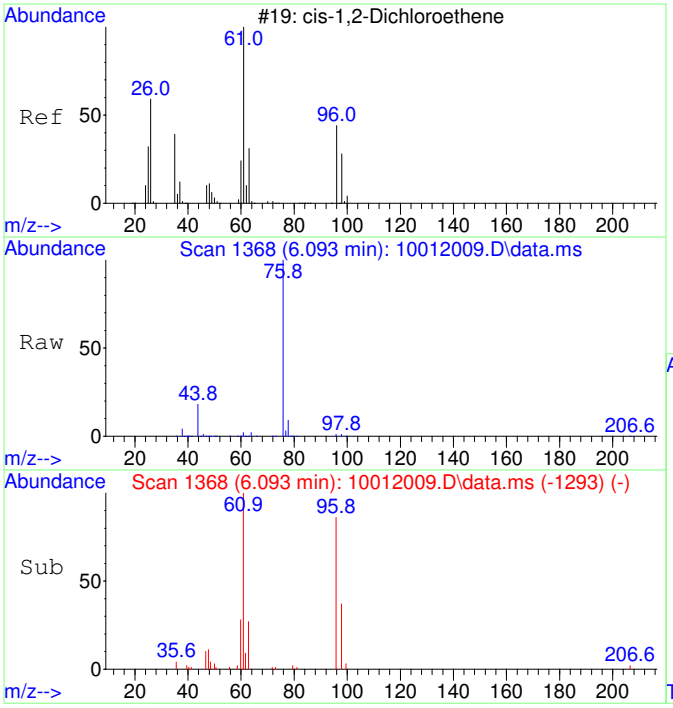


#27
trans-1,2-Dichloroethene SCAN
Concen: 157.52 ug/L
RT: 4.361 min Scan# 1107
Delta R.T. -0.040 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

Tgt Ion: 61 Resp: 2073

Ion	Ratio	Lower	Upper
61	100		
96	3.7	49.0	109.0#
98	16.4	20.5	80.5#

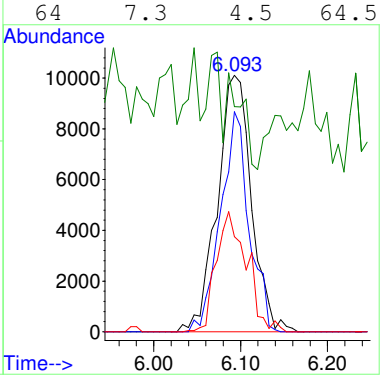


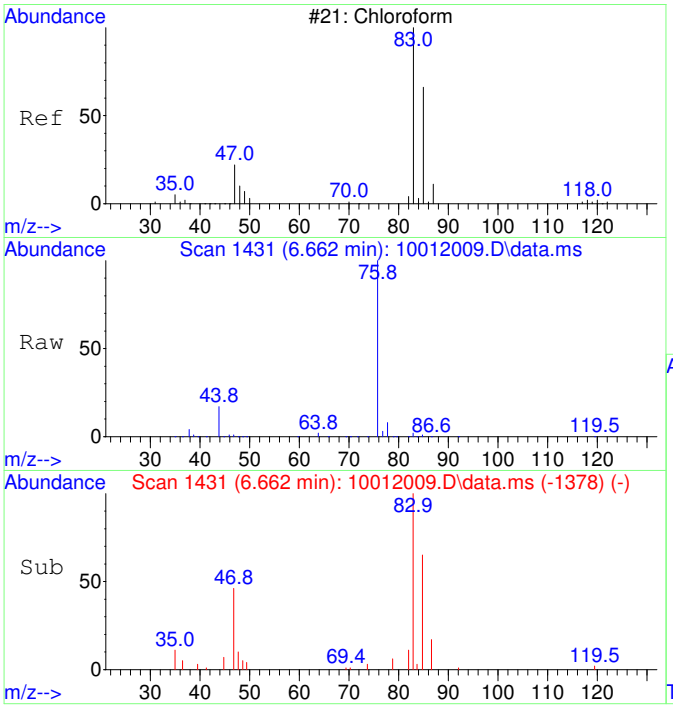


#29
cis-1,2-Dichloroethene SCAN
Concen: 1690.26 ug/L
RT: 6.093 min Scan# 1368
Delta R.T. 0.000 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

Tgt Ion: 61 Resp: 27582

Ion	Ratio	Lower	Upper
61	100		
96	71.6	39.9	99.9
98	42.0	13.5	73.5
64	7.3	4.5	64.5

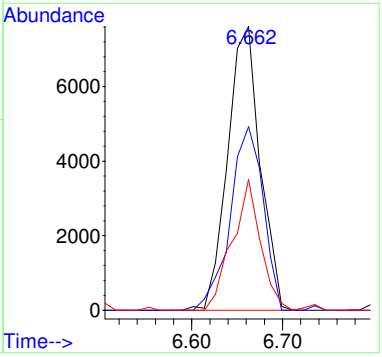


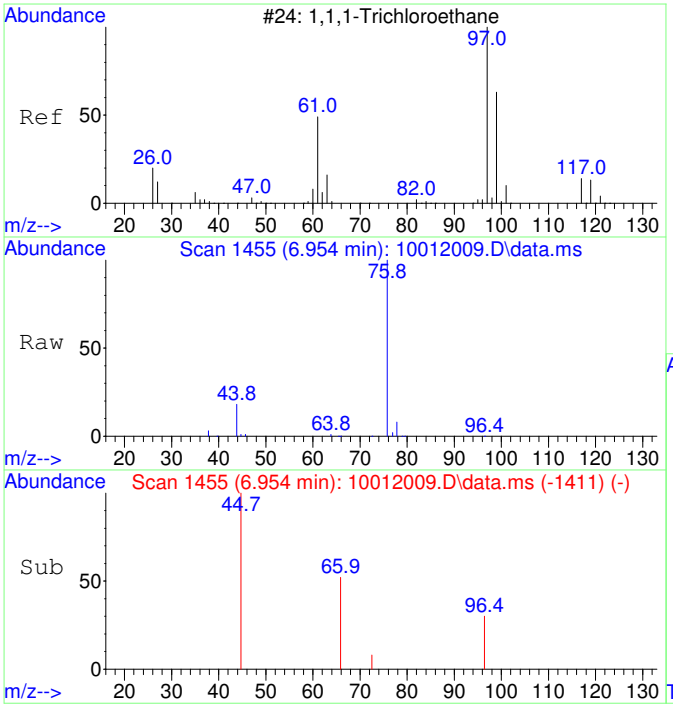


#30
Chloroform SCAN
Concen: 1071.68 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

Tgt Ion: 83 Resp: 18968

Ion	Ratio	Lower	Upper
83	100		
85	65.5	34.6	94.6
47	40.1	0.0	53.4

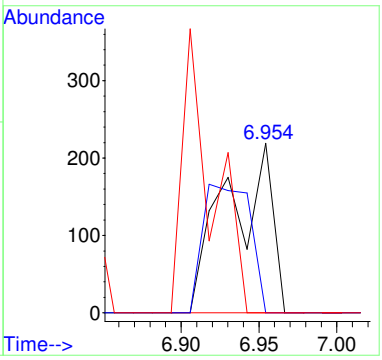


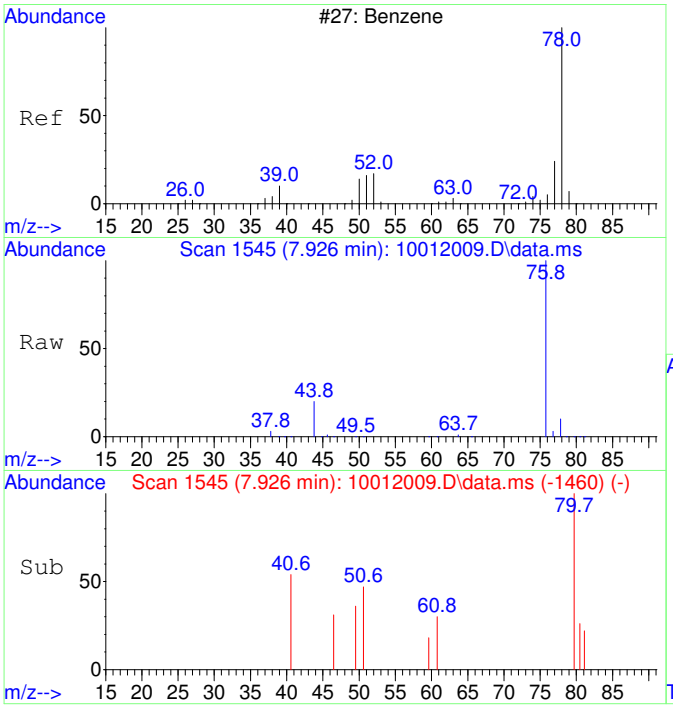


#31
1,1,1-Trichloroethane SCAN
Concen: 27.53 ug/L
RT: 6.954 min Scan# 1455
Delta R.T. 0.037 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

Tgt Ion: 97 Resp: 444

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

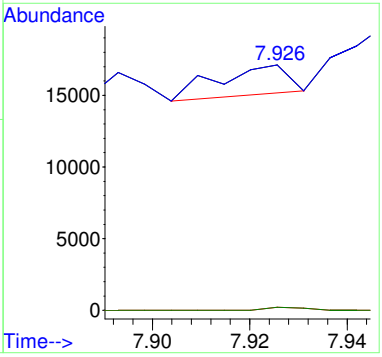


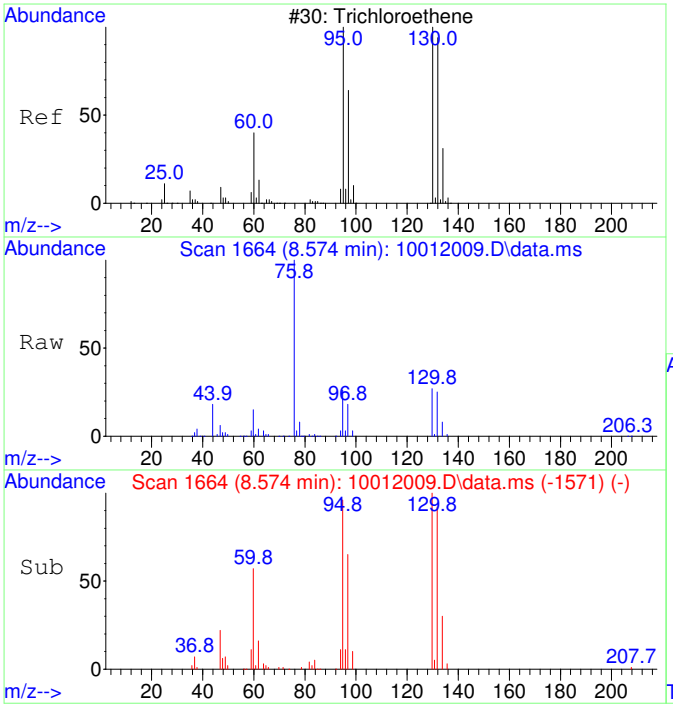


#33
Benzene SCAN
Concen: 48.39 ug/L
RT: 7.926 min Scan# 1545
Delta R.T. 0.412 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

Tgt Ion: 78 Resp: 2149

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	5.4	0.0	47.9
51	5.4	0.0	44.1

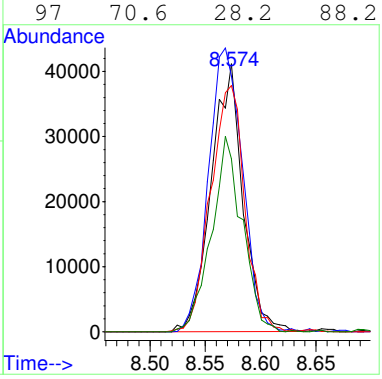


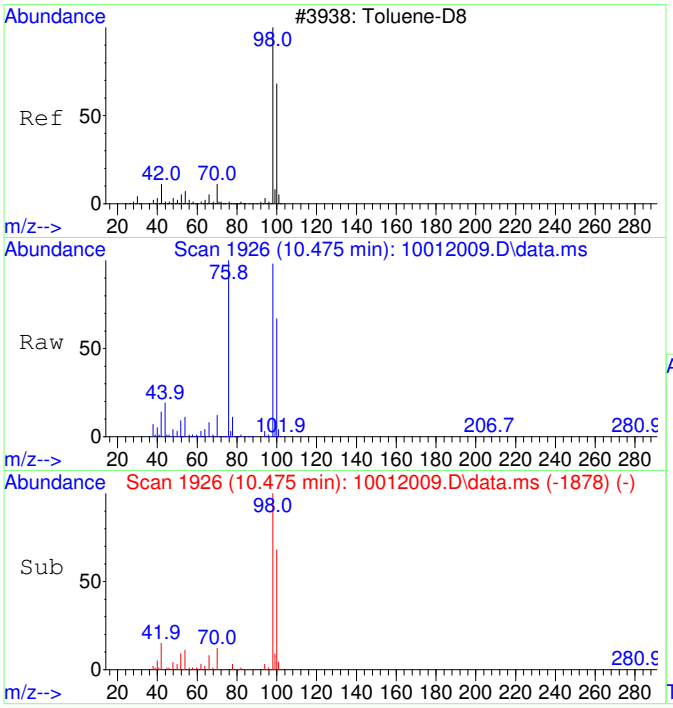


#35
Trichloroethene SCAN
Concen: 6747.62 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.005 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

Tgt Ion:130 Resp: 82348

Ion	Ratio	Lower	Upper
130	100		
95	113.6	60.5	120.5
132	98.0	59.6	119.6
97	70.6	28.2	88.2

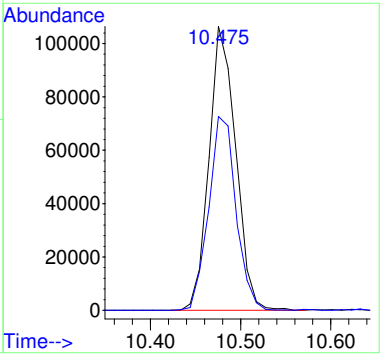


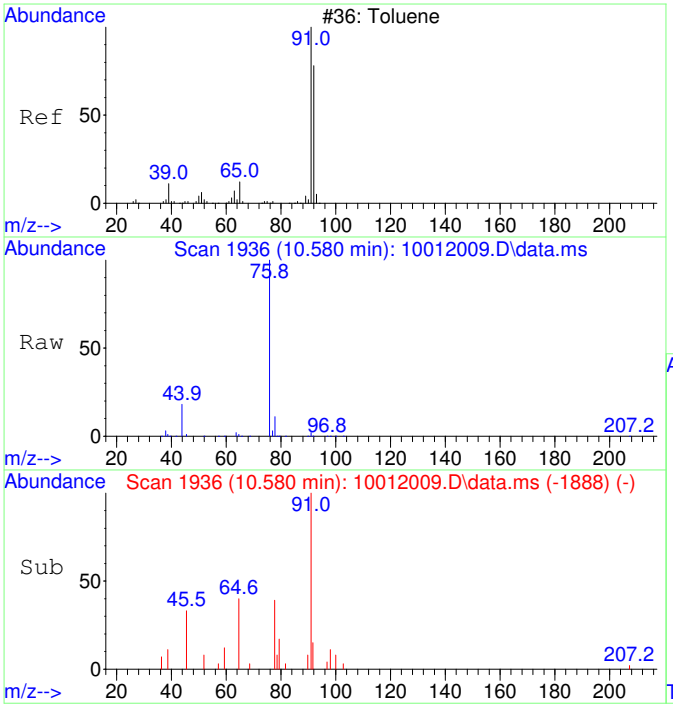


#36
Toluene-d8 SCAN
Concen: 4468.65 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. 0.000 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

Tgt Ion: 98 Resp: 218855

Ion	Ratio	Lower	Upper
98	100		
100	69.9	40.0	100.0

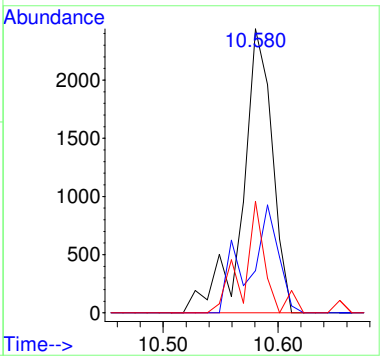


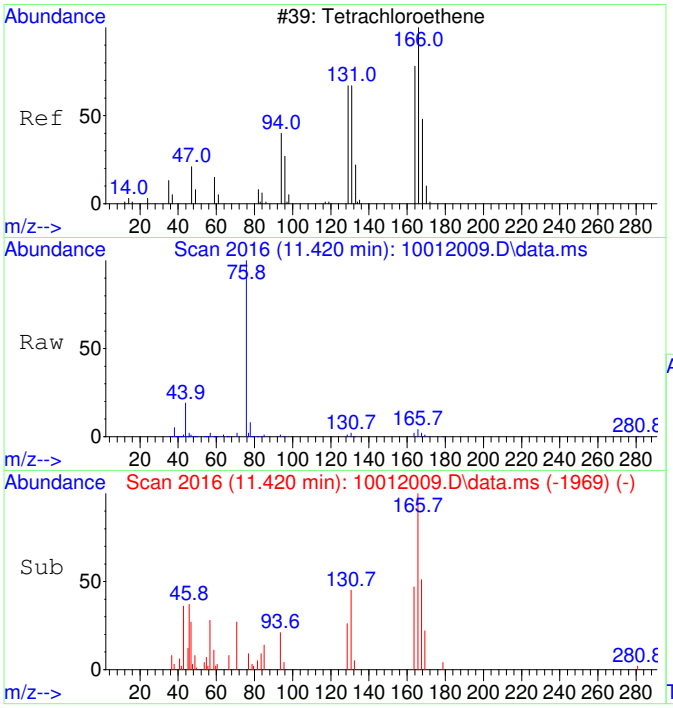


#37
Toluene SCAN
Concen: 69.63 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

Tgt Ion: 91 Resp: 4367

Ion	Ratio	Lower	Upper
91	100		
92	38.7	28.3	88.3
65	29.8	0.0	41.0

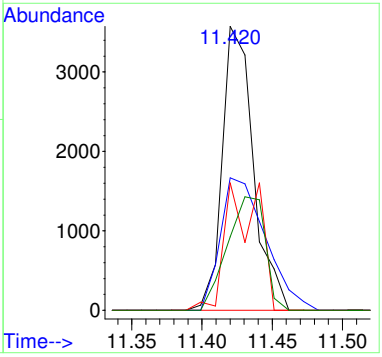


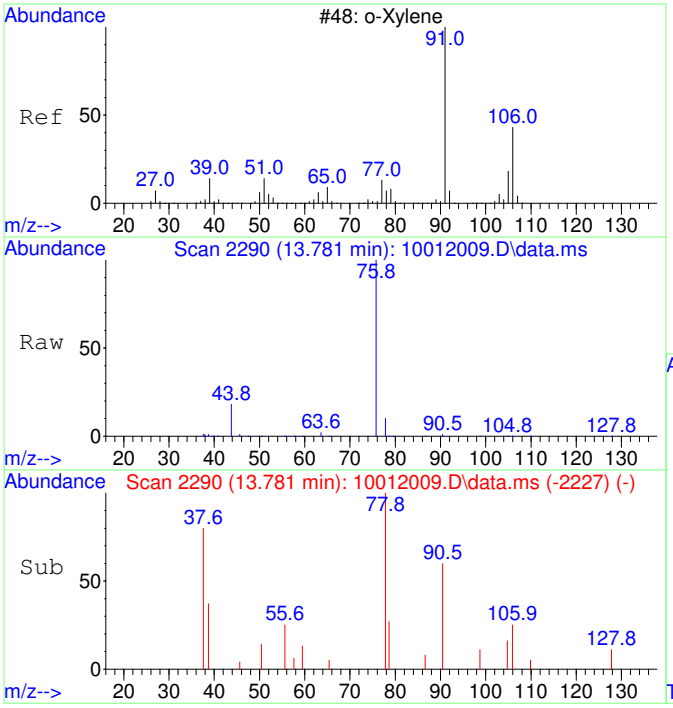


#39
Tetrachloroethene SCAN
Concen: 368.12 ug/L
RT: 11.420 min Scan# 2016
Delta R.T. -0.010 min
Lab File: 10012009.D
Acq: 1 Oct 2020 14:59

Tgt Ion:166 Resp: 5547

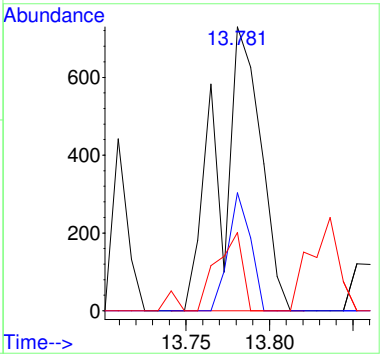
Ion	Ratio	Lower	Upper
166	100		
164	67.6	50.9	110.9
131	0.0	38.7	98.7#
129	0.0	41.8	101.8#






```
#44
o-Xylene SCAN
Concen:   20.93 ug/L
RT:  13.781 min  Scan# 2290
Delta R.T.  0.000 min
Lab File:   10012009.D
Acq:  1 Oct 2020  14:59

Tgt Ion: 91 Resp:    1280
Ion  Ratio  Lower  Upper
 91  100
106   22.0   18.0   78.0
105   17.0    0.0   56.6
```



CRDL STANDARD

Radiello D1

Laboratory: EPA Region 9 Laboratory
SDG: 20274A
Client: California Site Cleanup Section 3
Project: MEW OU1 FY2020 Vapor Intrusion Investigation
Instrument ID: AG5975CV
Calibration: 2008017
Sequence: S20I029

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
B20I024-MRL1	1,1-Dichloroethene	0.131	0.110	84	ug/m³ Air	50 - 150
	trans-1,2-Dichloroethene	0.160	0.146	91	ug/m³ Air	50 - 150
	1,1-Dichloroethane	0.157	0.146	93	ug/m³ Air	50 - 150
	cis-1,2-Dichloroethene	0.160	0.151	94	ug/m³ Air	50 - 150
	Chloroform	0.132	0.130	98	ug/m³ Air	50 - 150
	Trichloroethene	0.144	0.137	95	ug/m³ Air	50 - 150
	Tetrachloroethene	0.168	0.158	94	ug/m³ Air	50 - 150
	Toluene-d8	992	853	86	ug/m³ Air	86 - 118

Quantitation Report (Not Reviewed)

Table of Contents

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302008.D
Acq On : 30 Sep 2020 16:10
InstName : AG5975C
Operator : TD
Sample : B20I024-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 30 16:28:47 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

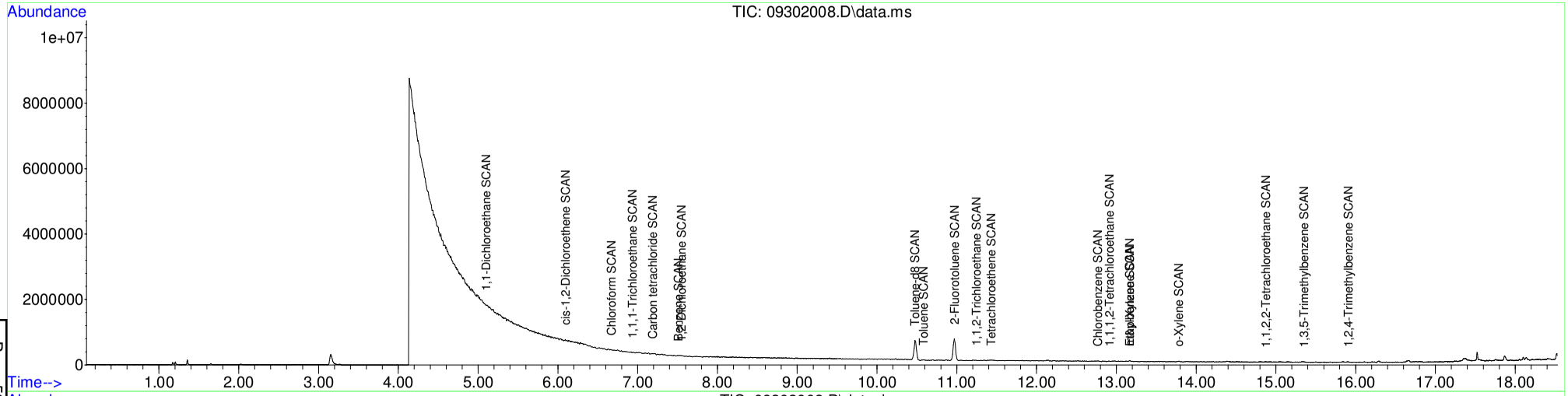
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)	
Internal Standards						
1) 2-Fluorotoluene	10.970	109	1041272	5000.00 ug/L	0.00	IS ↑
System Monitoring Compounds						
12) Toluene-d8	10.477	98	876494	4299.91 ug/L	0.00	
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.00%#			
Target Compounds					Qvalue	
2] 1,1-Dichloroethene	3.090	61	2301	55.34 ug/L	89	
3] trans-1,2-Dichloroethene	4.402	61	2186	45.50 ug/L	67	
4] 1,1-Dichloroethane	5.099	63	2777	46.44 ug/L	71	
5] cis-1,2-Dichloroethene	6.094	61	2972	47.08 ug/L	98	
6] Chloroform	6.664	83	3179	49.20 ug/L	100	
7] 1,1,1-Trichloroethane	6.919	97	3126	44.55 ug/L	98	
8] Carbon tetrachloride	7.187	117	2941	44.53 ug/L	100	
9] Benzene	7.515	78	14464	81.76 ug/L	64	
10] 1,2-Dichloroethane	7.552	62	3050	48.29 ug/L #	16	
11] Trichloroethene	8.569	130	2531	47.51 ug/L	93	
13] Toluene	10.571	91	13276	51.09 ug/L	98	
14] 1,1,2-Trichloroethane	11.222	97	2597	45.86 ug/L	97	
15] Tetrachloroethene	11.432	166	3542	47.10 ug/L	97	
16] Chlorobenzene	12.765	112	10147	54.53 ug/L	87	
17] 1,1,1,2-Tetrachloroethane	12.916	131	3310	49.64 ug/L	100	
18] Ethylbenzene	12.972	91	16900	53.43 ug/L	96	
19] m&p-Xylene	13.162	91	27000	109.21 ug/L	93	
20] o-Xylene	13.782	91	13211	50.02 ug/L	95	
21] 1,1,2,2-Tetrachloroethane	14.877	83	6028	51.49 ug/L	99	
22] 1,3,5-Trimethylbenzene	15.343	105	14392	51.19 ug/L	97	
23] 1,2,4-Trimethylbenzene	15.899	105	15985	54.74 ug/L	93	
25) 2-Fluorotoluene SCAN	10.969	109	522467	5147.21 ug/L	98	
28) 1,1-Dichloroethane SCAN	5.098	63	1460	47.29 ug/L	73	
29) cis-1,2-Dichloroethene...	6.093	61	1473	44.53 ug/L #	28	
30) Chloroform SCAN	6.675	83	1693	47.19 ug/L #	27	
31) 1,1,1-Trichloroethane ...	6.930	97	1704	52.12 ug/L #	34	
32) Carbon tetrachloride SCAN	7.185	117	2163	63.43 ug/L #	65	
33) Benzene SCAN	7.514	78	13461	149.54 ug/L	99	
34) 1,2-Dichloroethane SCAN	7.550	62	1644	49.46 ug/L #	61	
36) Toluene-d8 SCAN	10.475	98	465915	4693.48 ug/L	94	
37) Toluene SCAN	10.580	91	10112	79.54 ug/L	92	
38) 1,1,2-Trichloroethane ...	11.242	97	1505	52.74 ug/L #	46	
39) Tetrachloroethene SCAN	11.430	166	2691	88.11 ug/L #	41	
40) Chlorobenzene SCAN	12.764	112	5361	61.71 ug/L #	54	
41) 1,1,1,2-Tetrachloroeth...	12.915	131	2103	65.42 ug/L #	47	
42) Ethylbenzene SCAN	13.169	91	14879	64.24 ug/L	97	
43) m&p-Xylene SCAN	13.169	91	14879	64.24 ug/L	95	
44) o-Xylene SCAN	13.781	91	9905	79.90 ug/L	76	
45) 1,1,2,2-Tetrachloroeth...	14.872	83	4227	69.92 ug/L	86	
46) 1,3,5-Trimethylbenzene...	15.352	105	8028	61.44 ug/L	96	
47) 1,2,4-Trimethylbenzene...	15.903	105	7976	59.66 ug/L #	93	

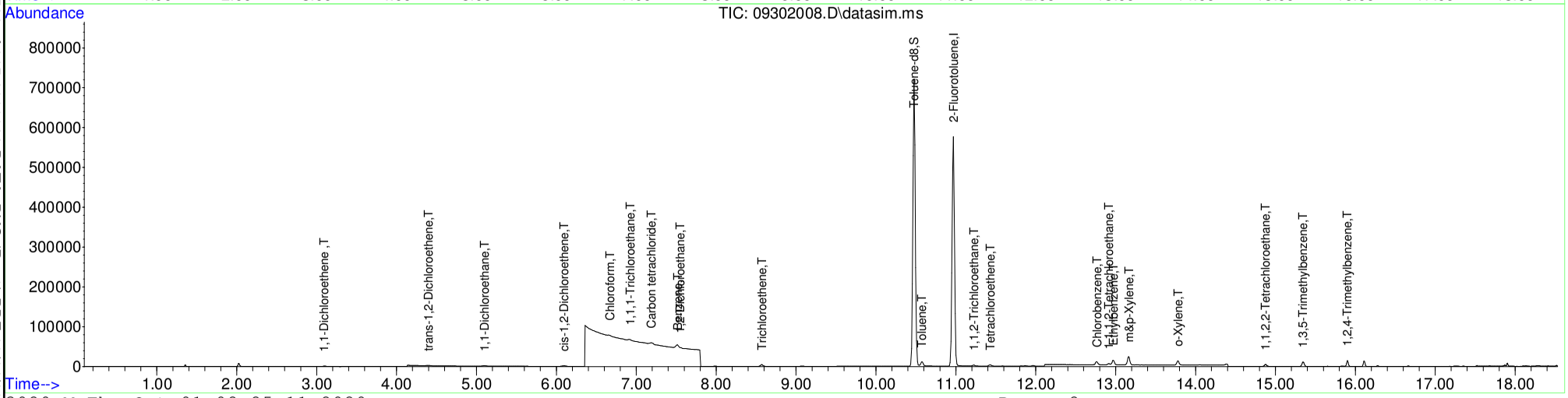
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302008.D
Acq On : 30 Sep 2020 16:10
InstName : AG5975C
Operator : TD
Sample : B20I024-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 30 16:28:47 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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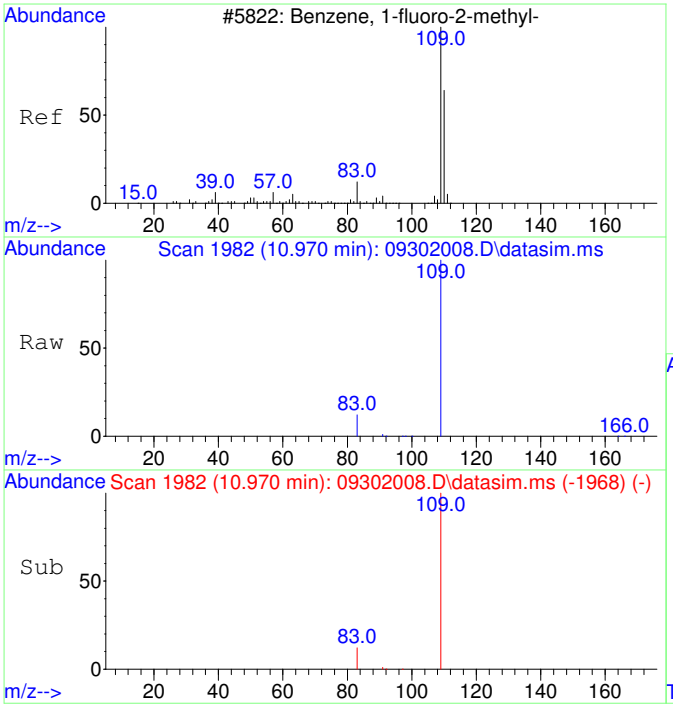
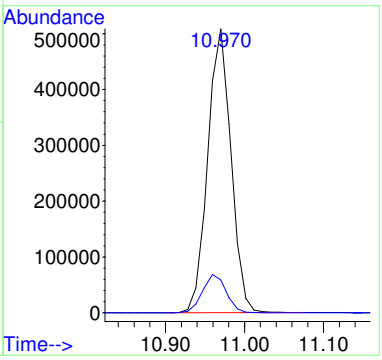
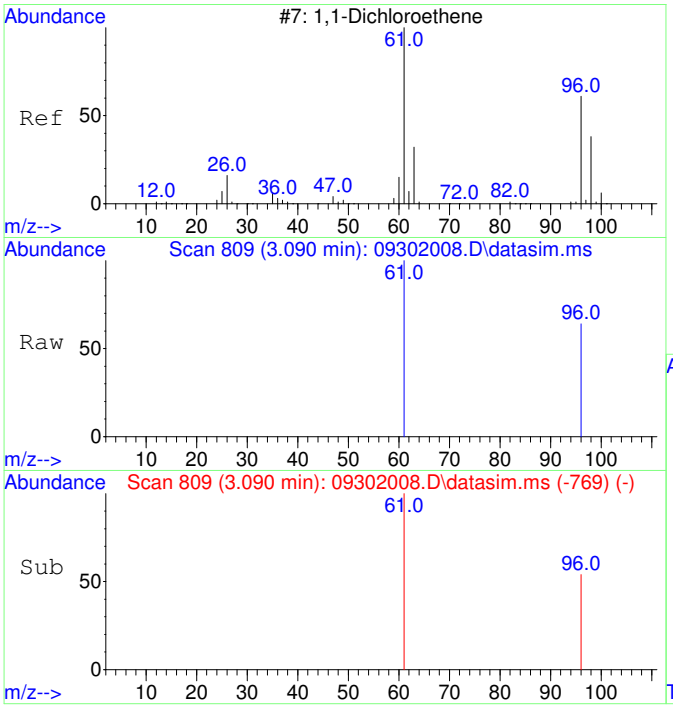


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:109 Resp: 1041272

Ion	Ratio	Lower	Upper
109	100		
83	13.7	0.0	42.3

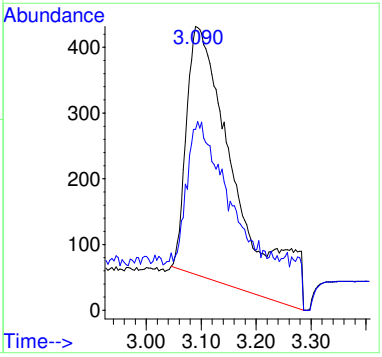




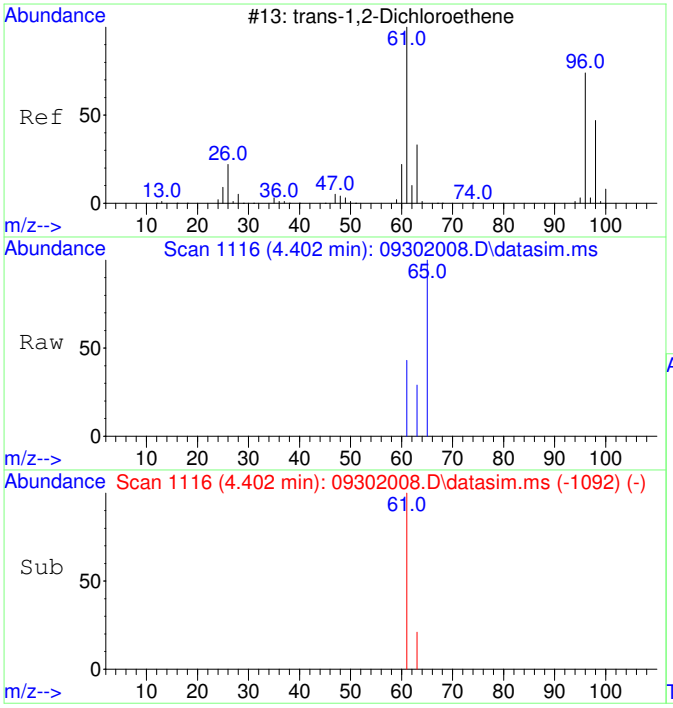
#2
1,1-Dichloroethene
Concen: 55.34 ug/L
RT: 3.090 min Scan# 809
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 61 Resp: 2301

Ion	Ratio	Lower	Upper
61	100		
96	58.7	37.2	97.2



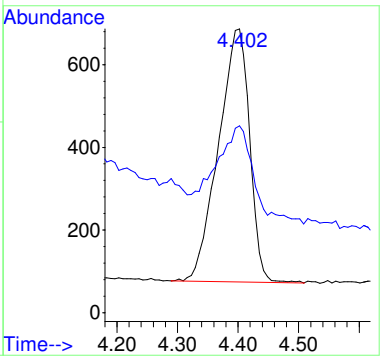
Before MI:
IMPROPER
BASELINE

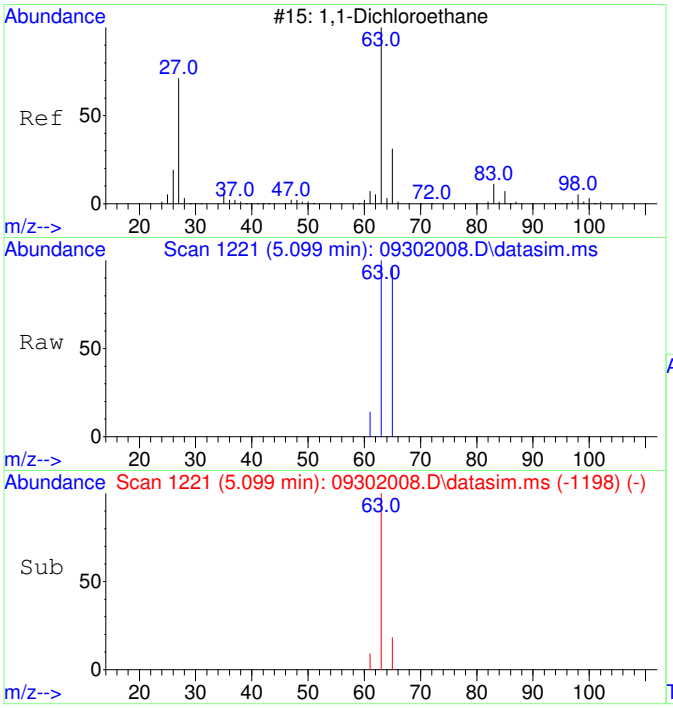


#3
trans-1,2-Dichloroethene
Concen: 45.50 ug/L
RT: 4.402 min Scan# 1116
Delta R.T. 0.007 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 61 Resp: 2186

Ion	Ratio	Lower	Upper
61	100		
63	51.0	2.4	62.4

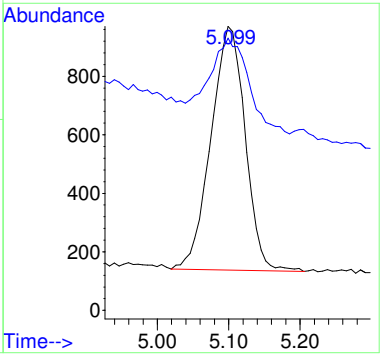


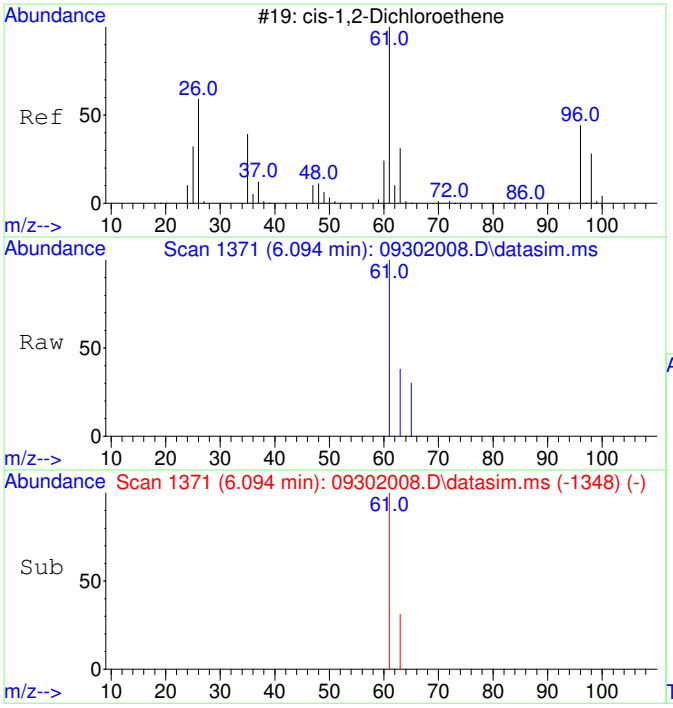


#4
1,1-Dichloroethane
Concen: 46.44 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 63 Resp: 2777

Ion	Ratio	Lower	Upper
63	100		
65	48.2	1.8	61.8

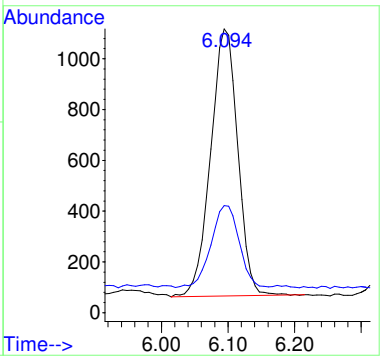


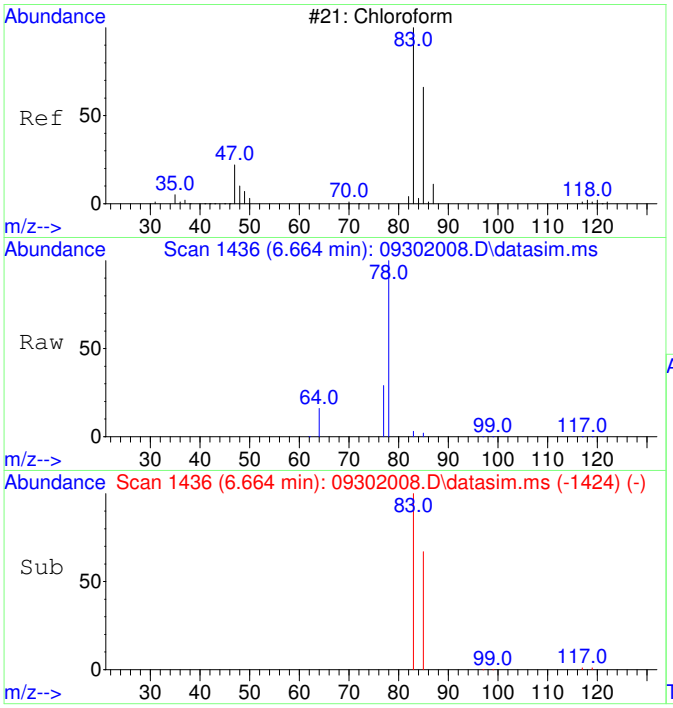


#5
cis-1,2-Dichloroethene
Concen: 47.08 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 61 Resp: 2972

Ion	Ratio	Lower	Upper
61	100		
63	31.4	2.5	62.5

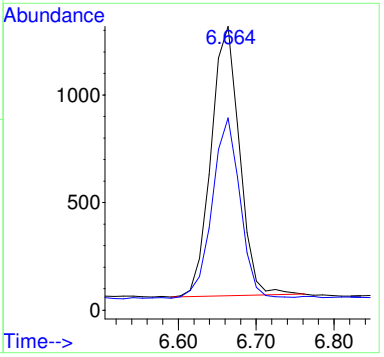


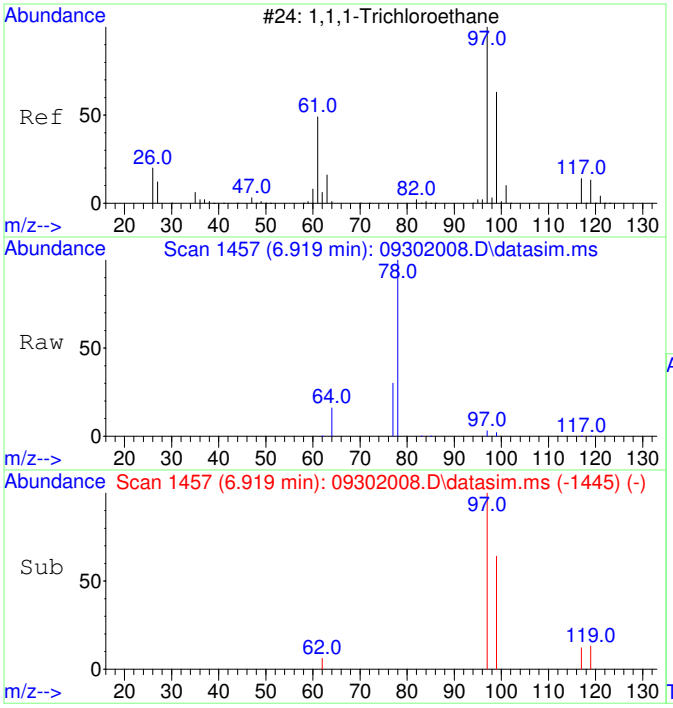


#6
Chloroform
Concen: 49.20 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 83 Resp: 3179

Ion	Ratio	Lower	Upper
83	100		
85	64.9	35.1	95.1

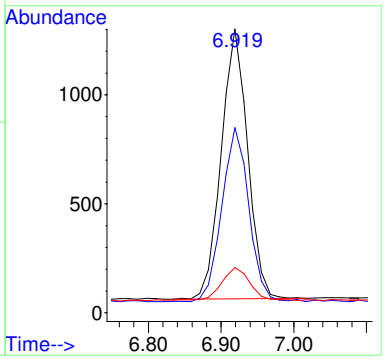


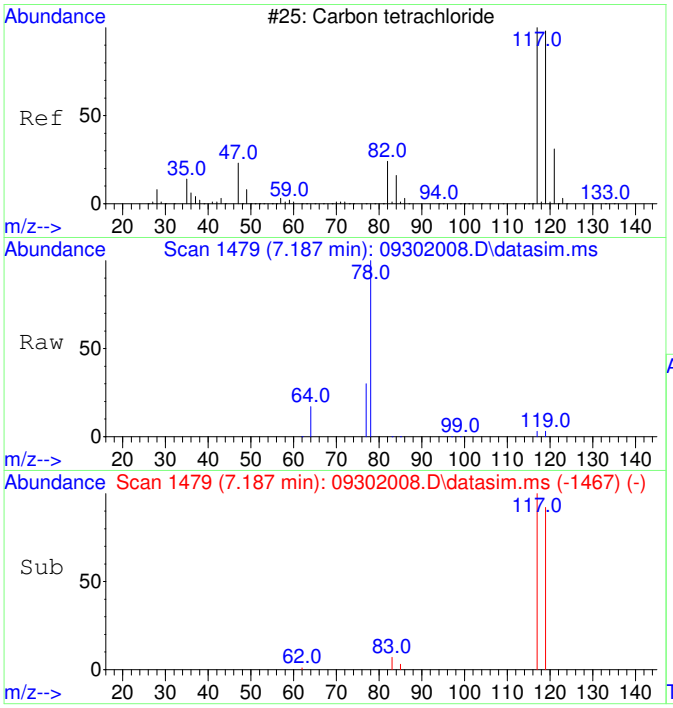


#7
1,1,1-Trichloroethane
Concen: 44.55 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 97 Resp: 3126

Ion	Ratio	Lower	Upper
97	100		
99	66.0	34.6	94.6
117	13.3	0.0	43.2

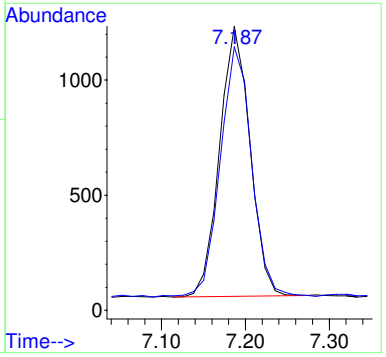


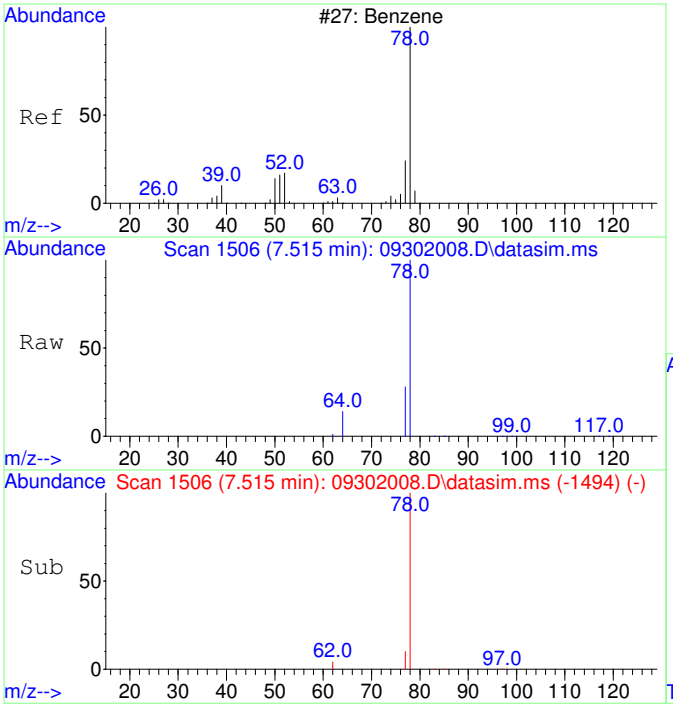


#8
Carbon tetrachloride
Concen: 44.53 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:117 Resp: 2941

Ion	Ratio	Lower	Upper
117	100		
119	96.0	66.4	126.4

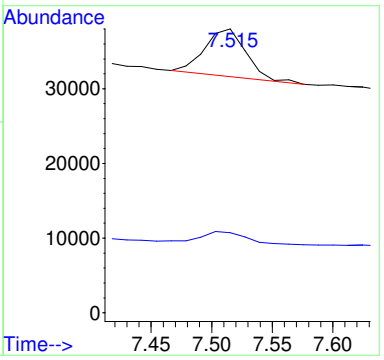


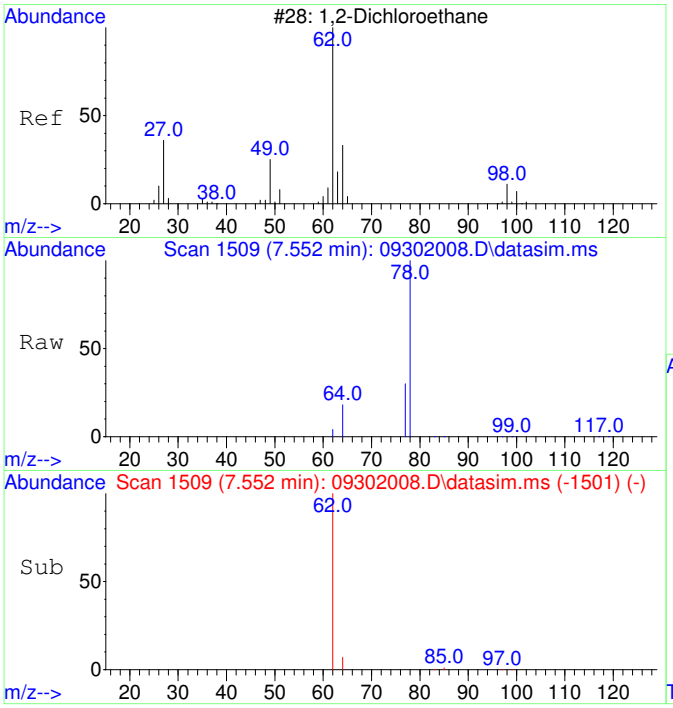


#9
Benzene
Concen: 81.76 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 78 Resp: 14464

Ion	Ratio	Lower	Upper
78	100		
77	40.8	0.0	53.2

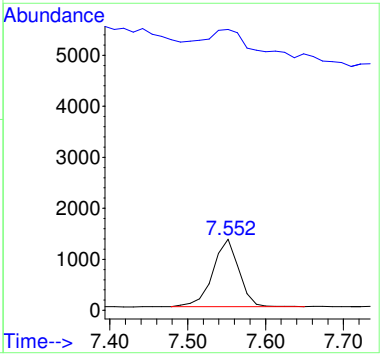


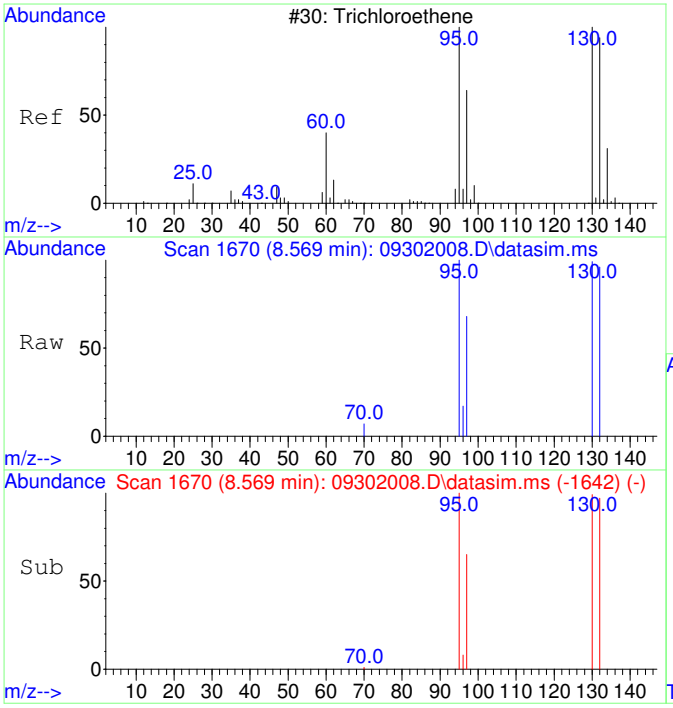


#10
1,2-Dichloroethane
Concen: 48.29 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 62 Resp: 3050

Ion	Ratio	Lower	Upper
62	100		
64	79.1	2.3	62.3#

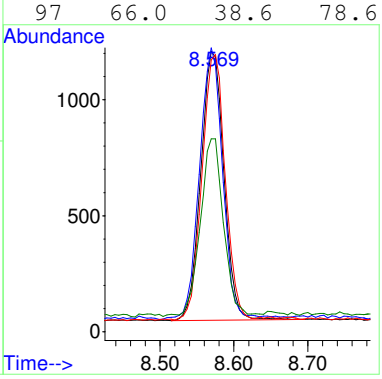


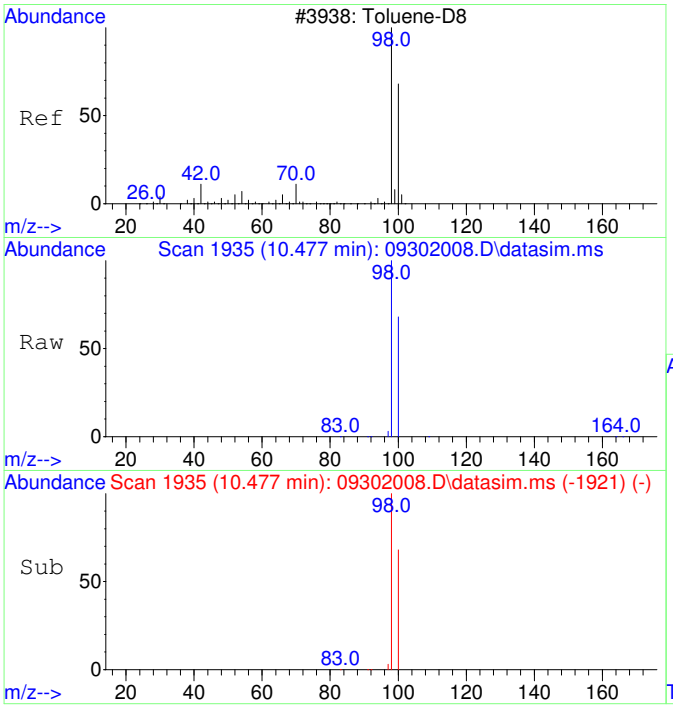


#11
Trichloroethene
Concen: 47.51 ug/L
RT: 8.569 min Scan# 1670
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:130 Resp: 2531

Ion	Ratio	Lower	Upper
130	100		
95	100.7	60.7	120.7
132	98.1	76.0	116.0
97	66.0	38.6	78.6

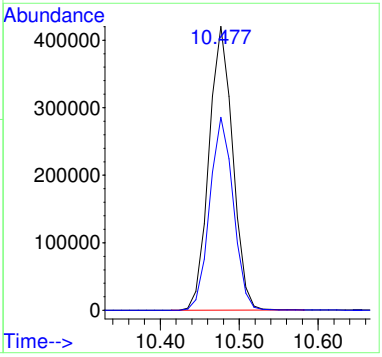


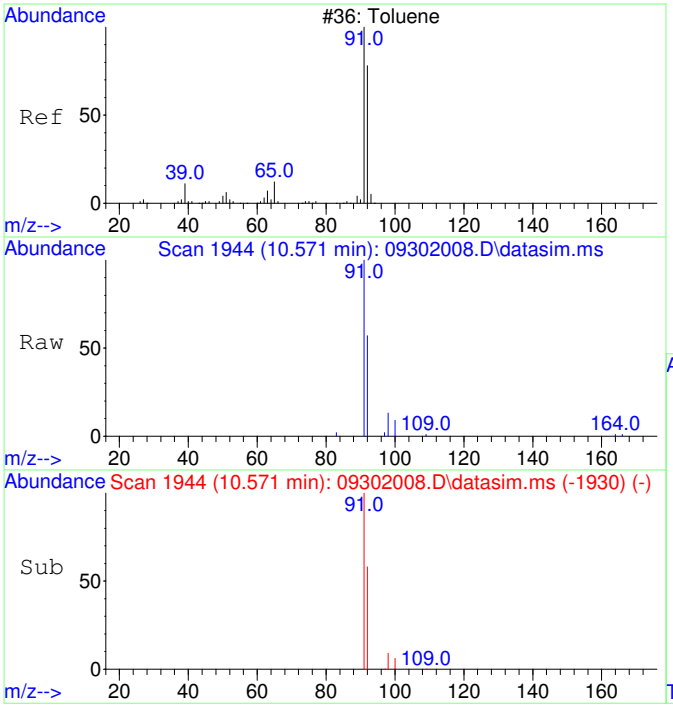


#12
Toluene-d8
Concen: 4299.91 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 98 Resp: 876494

Ion	Ratio	Lower	Upper
98	100		
100	67.3	37.1	97.1

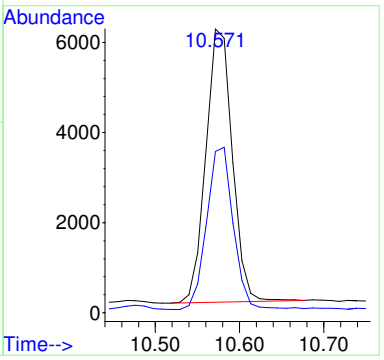


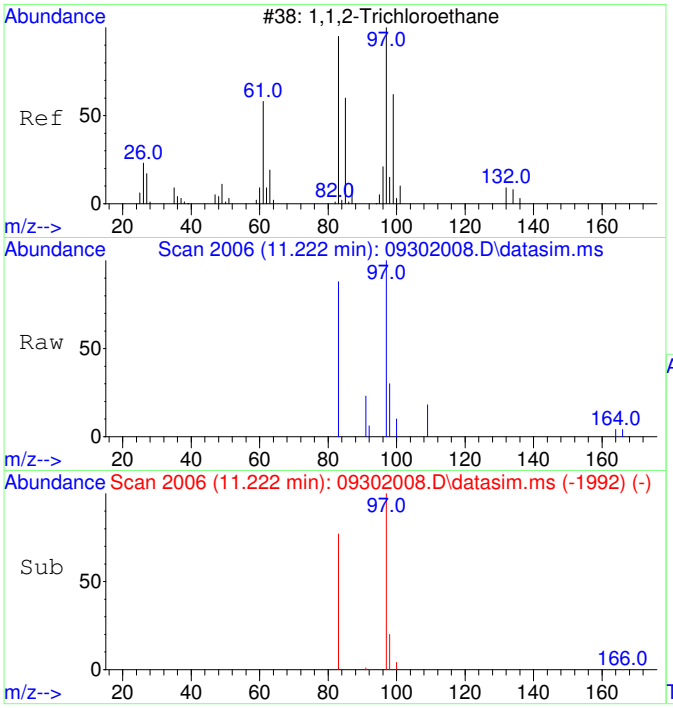


#13
Toluene
Concen: 51.09 ug/L
RT: 10.571 min Scan# 1944
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 13276

Ion	Ratio	Lower	Upper
91	100		
92	58.5	29.9	89.9

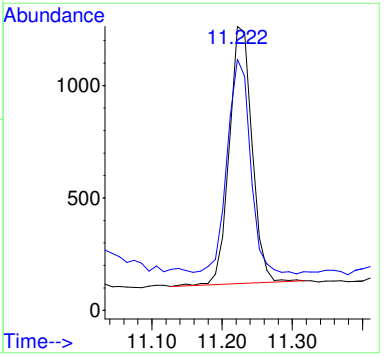


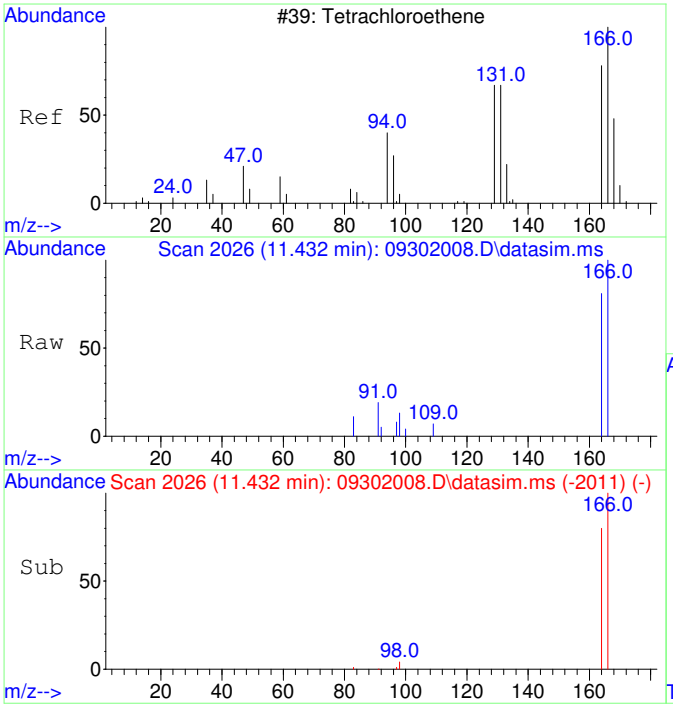


#14
1,1,2-Trichloroethane
Concen: 45.86 ug/L
RT: 11.222 min Scan# 2006
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 97 Resp: 2597

Ion	Ratio	Lower	Upper
97	100		
83	83.9	51.2	111.2

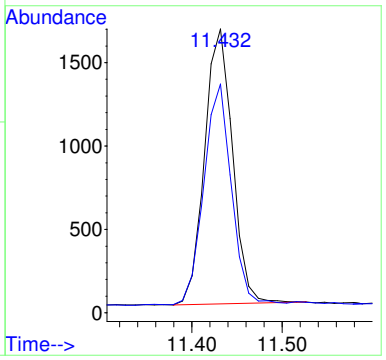


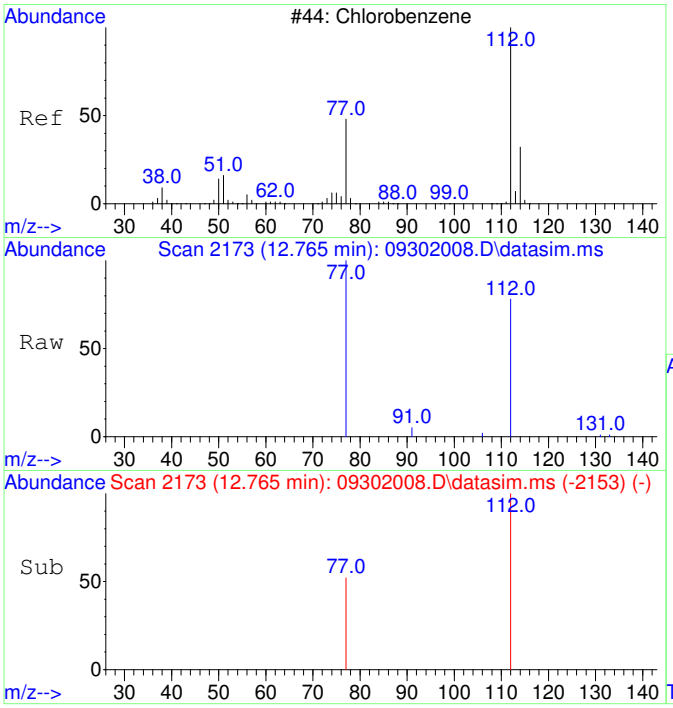


#15
Tetrachloroethene
Concen: 47.10 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:166 Resp: 3542

Ion	Ratio	Lower	Upper
166	100		
164	80.4	47.8	107.8

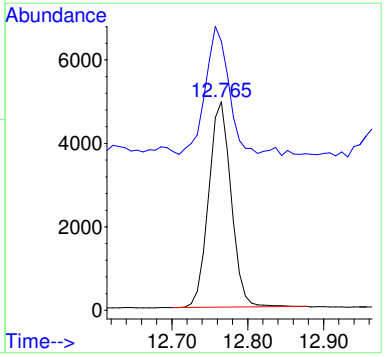


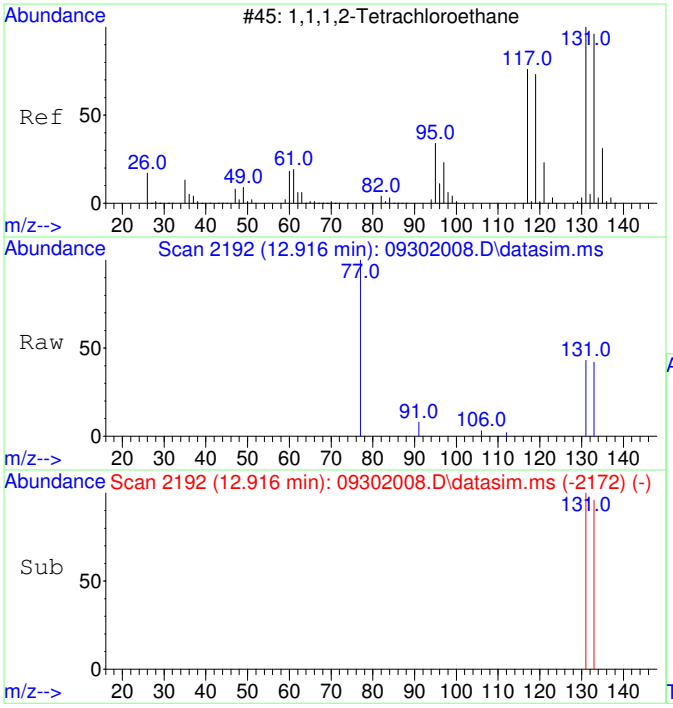


#16
Chlorobenzene
Concen: 54.53 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:112 Resp: 10147

Ion	Ratio	Lower	Upper
112	100		
77	63.2	23.6	83.6

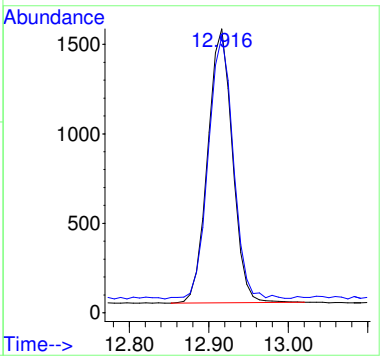


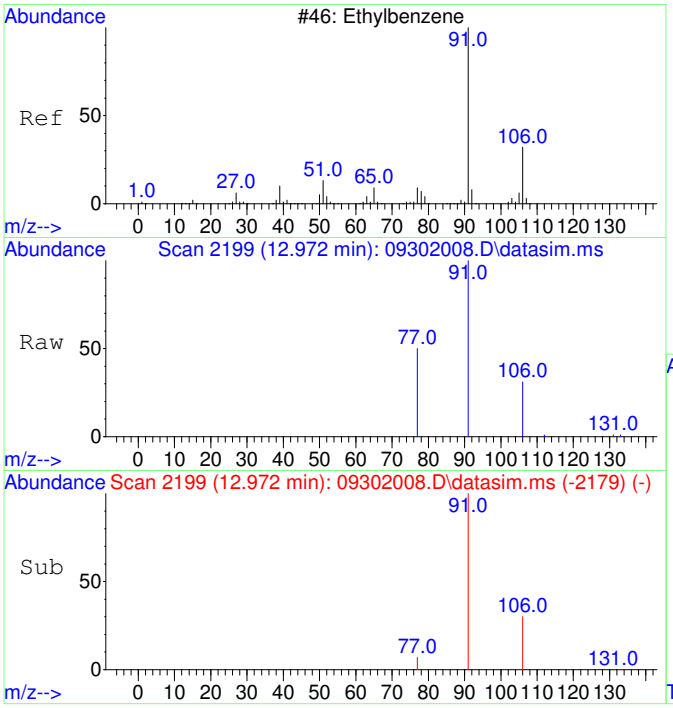


#17
1,1,1,2-Tetrachloroethane
Concen: 49.64 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:131 Resp: 3310

Ion	Ratio	Lower	Upper
131	100		
133	96.0	66.3	126.3

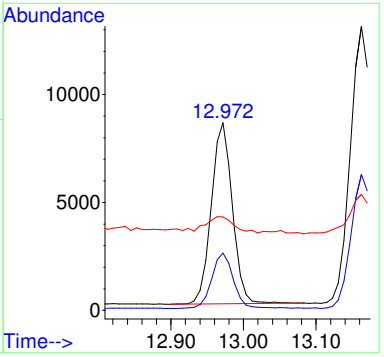


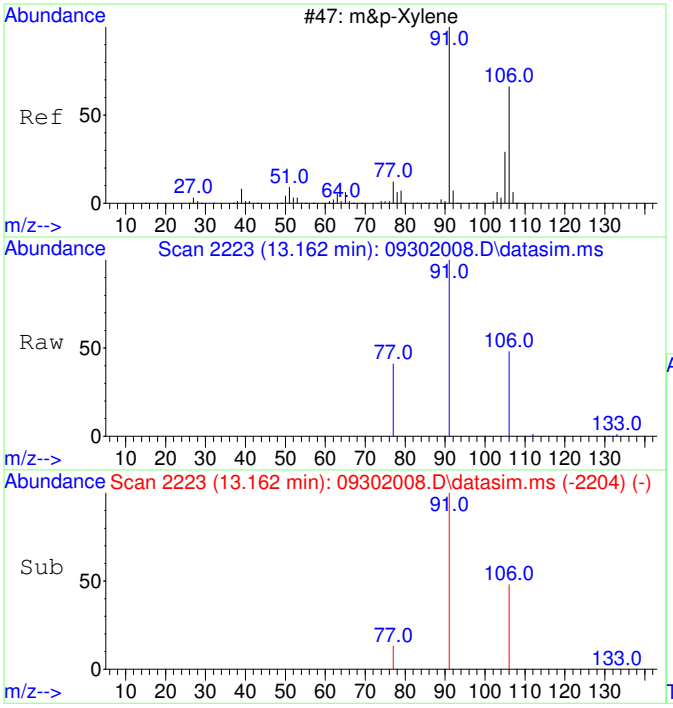


#18
Ethylbenzene
Concen: 53.43 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 16900

Ion	Ratio	Lower	Upper
91	100		
106	31.5	3.0	63.0
77	12.2	0.0	38.2

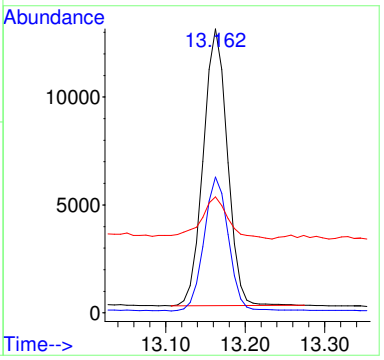


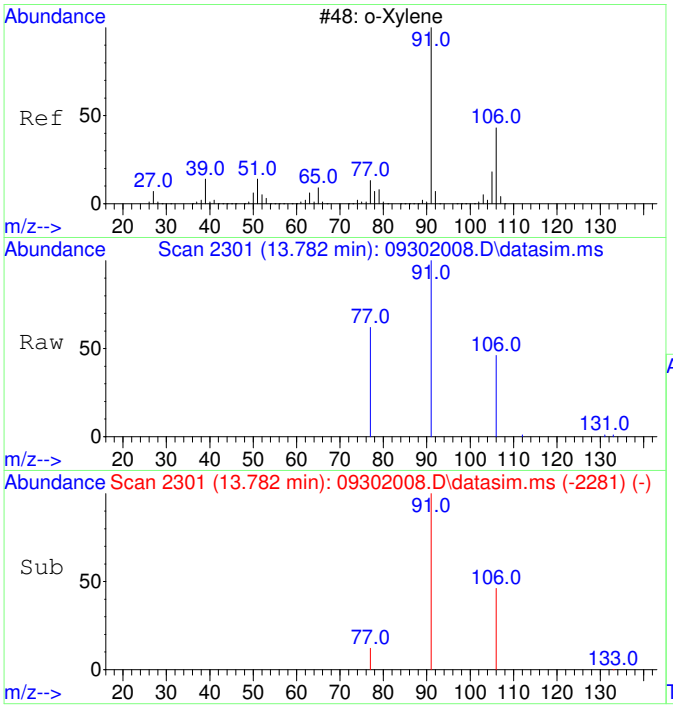


#19
m&p-Xylene
Concen: 109.21 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 27000

Ion	Ratio	Lower	Upper
91	100		
106	48.8	22.2	82.2
77	18.4	0.0	42.4

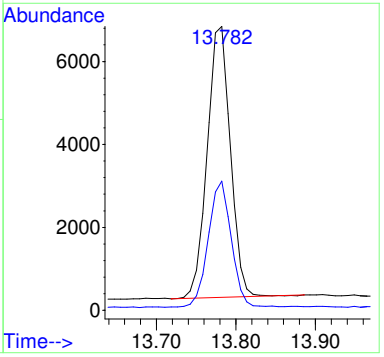


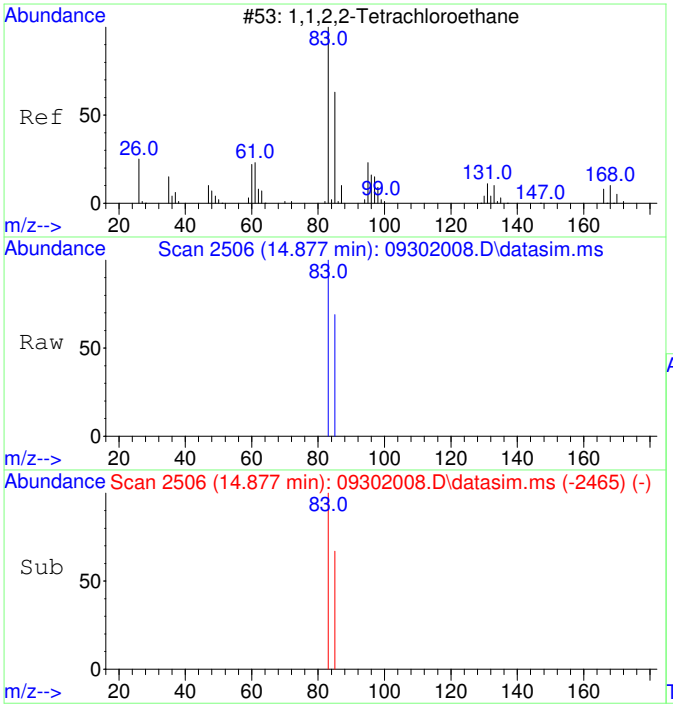


#20
o-Xylene
Concen: 50.02 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 13211

Ion	Ratio	Lower	Upper
91	100		
106	45.9	19.2	79.2

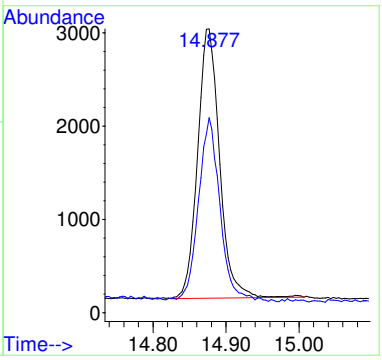


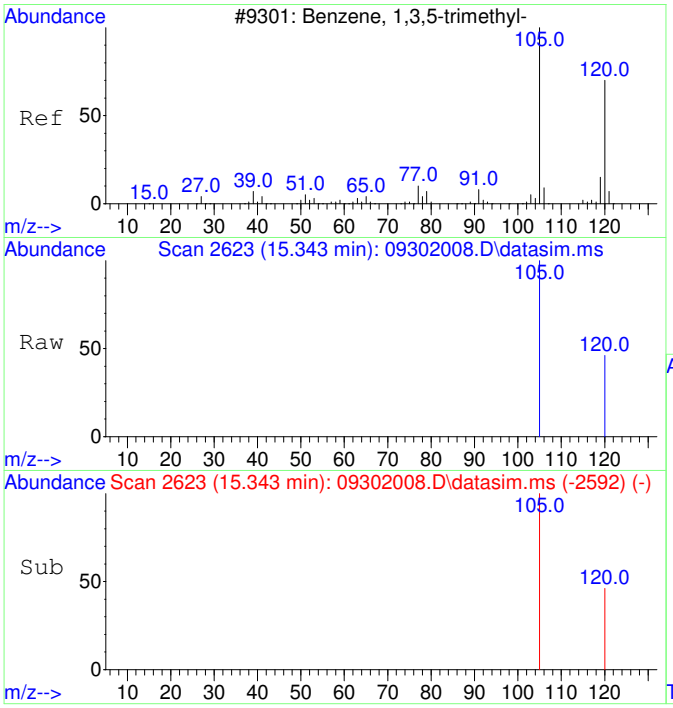


#21
1,1,2,2-Tetrachloroethane
Concen: 51.49 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. 0.004 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 83 Resp: 6028

Ion	Ratio	Lower	Upper
83	100		
85	64.2	34.8	94.8

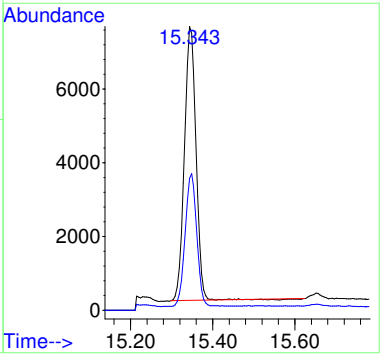


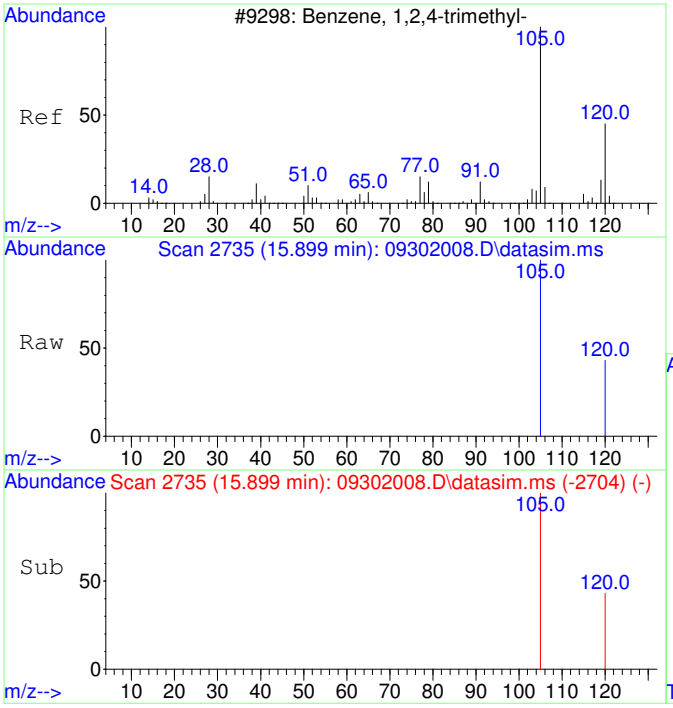


#22
1,3,5-Trimethylbenzene
Concen: 51.19 ug/L
RT: 15.343 min Scan# 2623
Delta R.T. -0.001 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:105 Resp: 14392

Ion	Ratio	Lower	Upper
105	100		
120	48.7	21.1	81.1

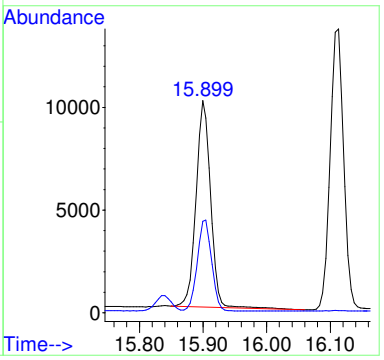


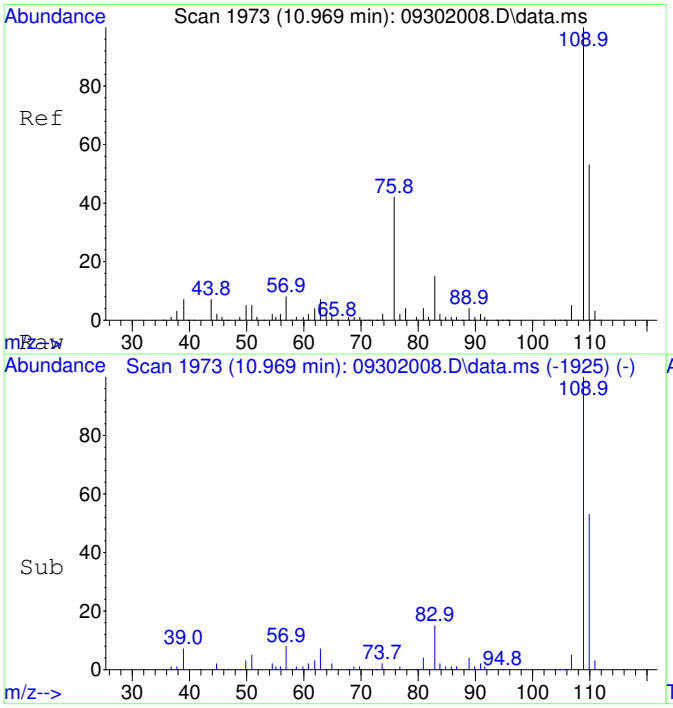


#23
1,2,4-Trimethylbenzene
Concen: 54.74 ug/L
RT: 15.899 min Scan# 2735
Delta R.T. 0.004 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:105 Resp: 15985

Ion	Ratio	Lower	Upper
105	100		
120	42.3	17.2	77.2

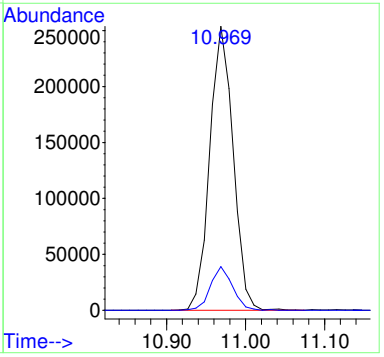


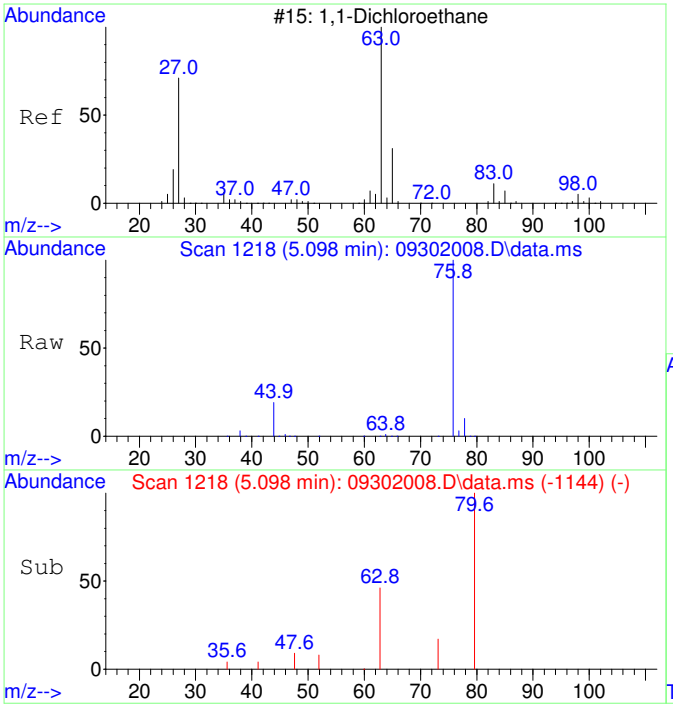


#25
2-Fluorotoluene SCAN
Concen: 5147.21 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:109 Resp: 522467

Ion	Ratio	Lower	Upper
109	100		
83	14.6	0.0	43.8

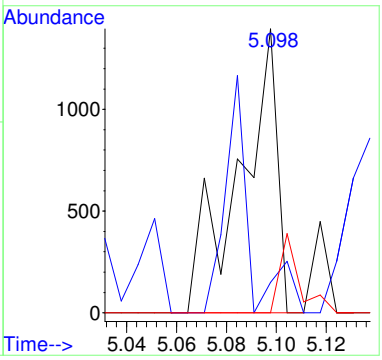


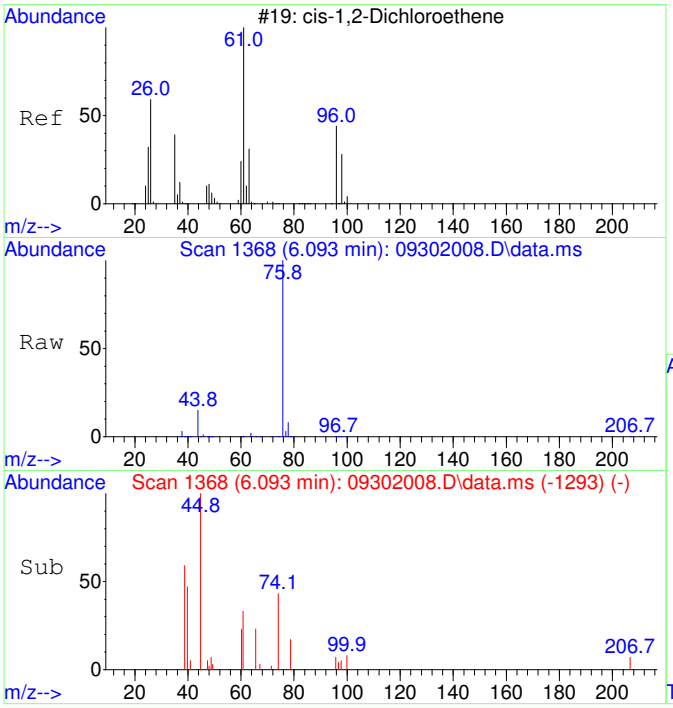


#28
1,1-Dichloroethane SCAN
Concen: 47.29 ug/L
RT: 5.098 min Scan# 1218
Delta R.T. -0.007 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 63 Resp: 1460

Ion	Ratio	Lower	Upper
63	100		
65	53.2	1.3	61.3
83	14.5	0.0	45.9

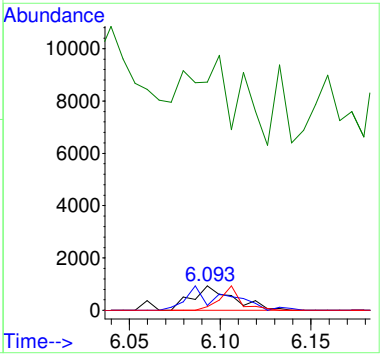


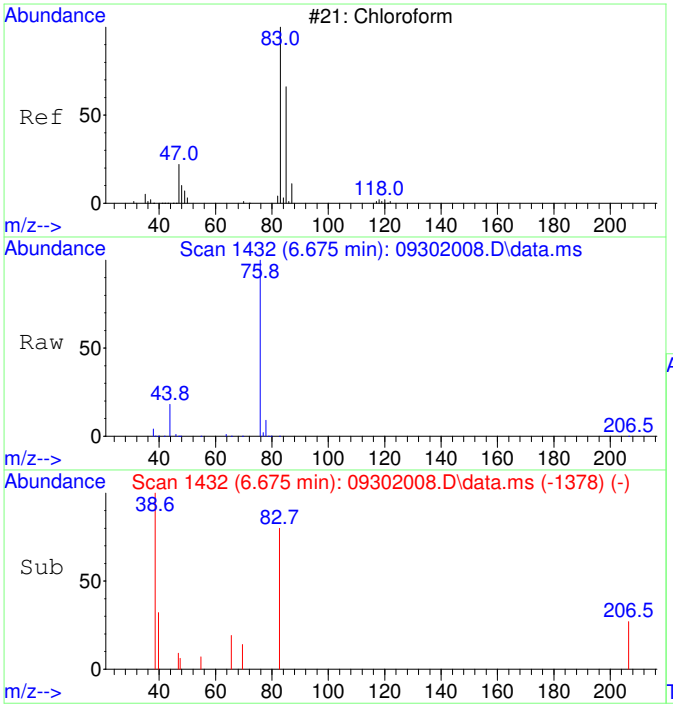


#29
cis-1,2-Dichloroethene SCAN
Concen: 44.53 ug/L
RT: 6.093 min Scan# 1368
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 61 Resp: 1473

Ion	Ratio	Lower	Upper
61	100		
96	97.9	39.9	99.9
98	49.5	13.5	73.5
64	165.0	4.5	64.5#

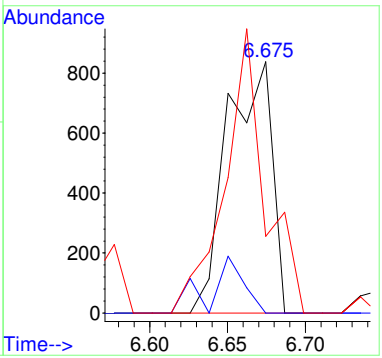


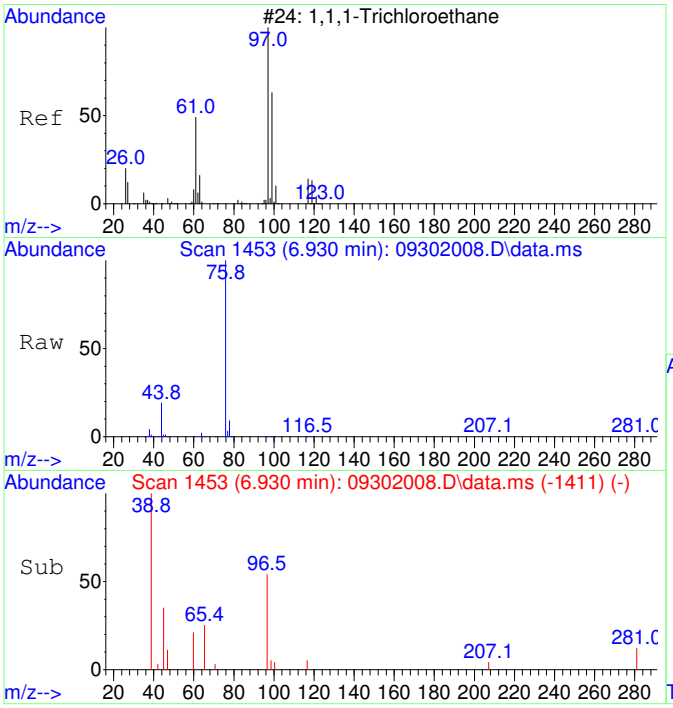


#30
Chloroform SCAN
Concen: 47.19 ug/L
RT: 6.675 min Scan# 1432
Delta R.T. 0.012 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 83 Resp: 1693

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

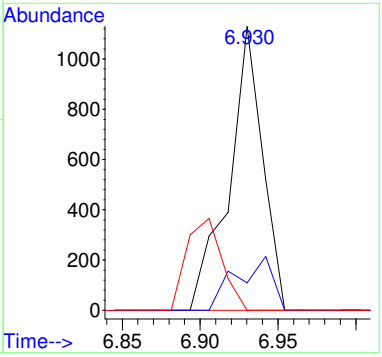


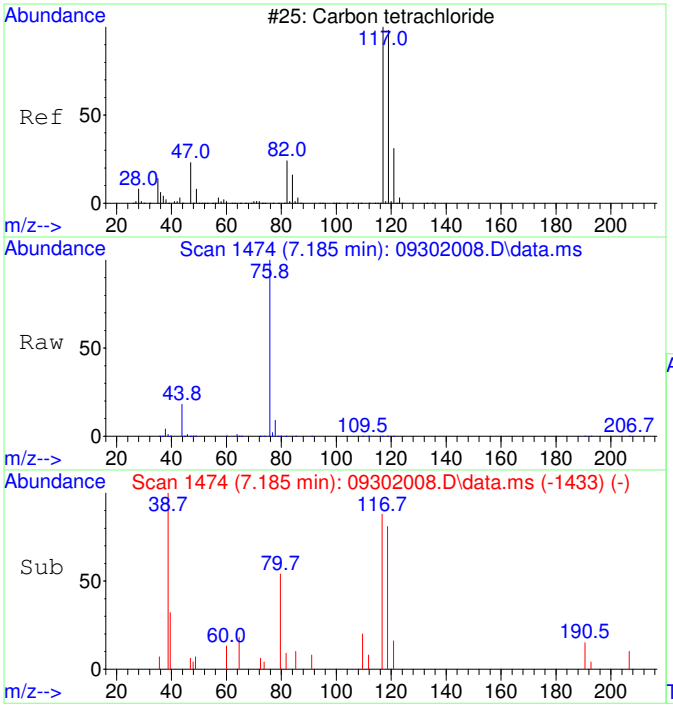


#31
1,1,1-Trichloroethane SCAN
Concen: 52.12 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. 0.012 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 97 Resp: 1704

Ion	Ratio	Lower	Upper
97	100		
99	20.5	43.6	103.6#
61	0.0	18.0	78.0#

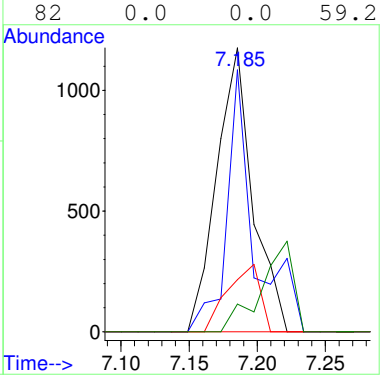


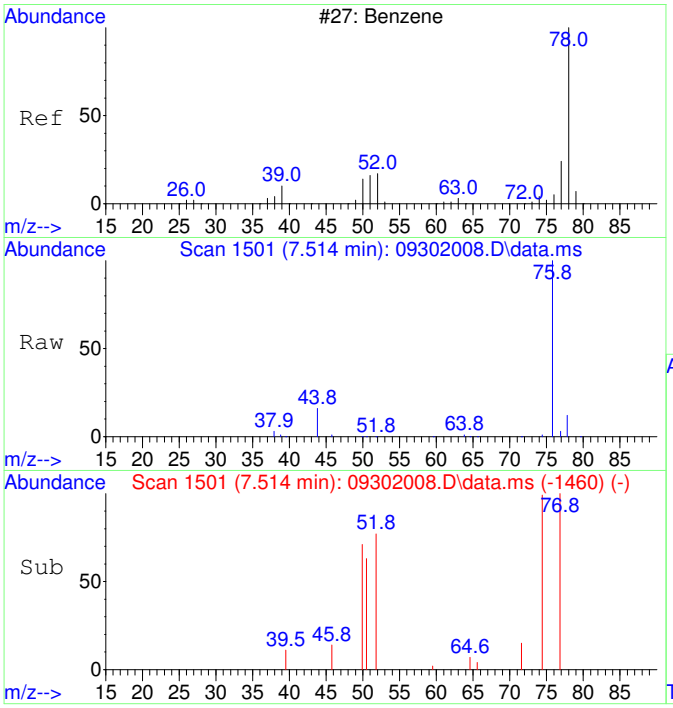


#32
Carbon tetrachloride SCAN
Concen: 63.43 ug/L
RT: 7.185 min Scan# 1474
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:117 Resp: 2163

Ion	Ratio	Lower	Upper
117	100		
119	69.7	75.5	135.5#
121	21.5	0.0	58.8
82	0.0	0.0	59.2

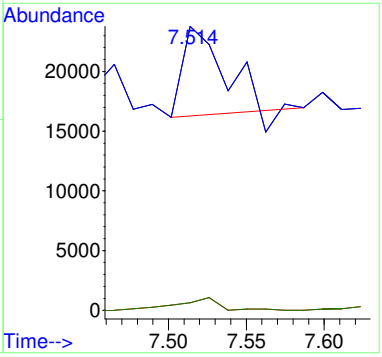


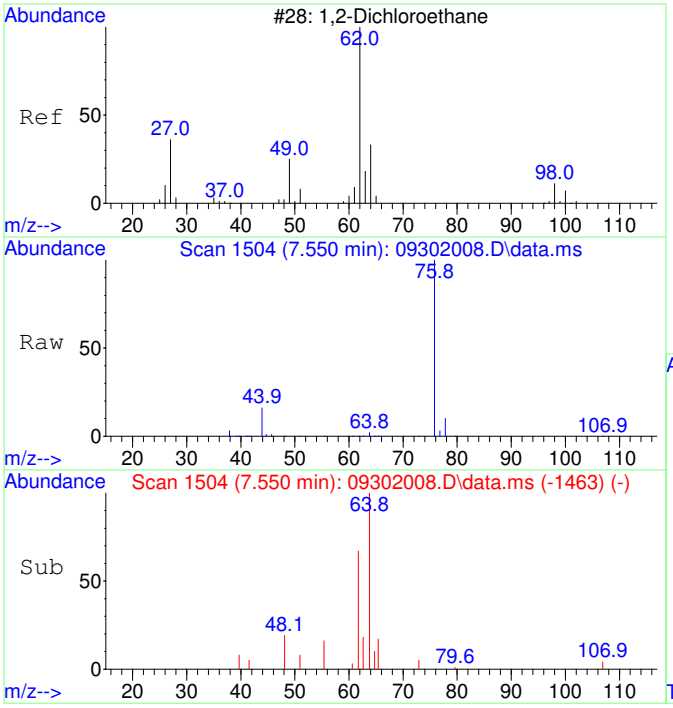


#33
Benzene SCAN
Concen: 149.54 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 78 Resp: 13461

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	15.0	0.0	47.9
51	15.0	0.0	44.1

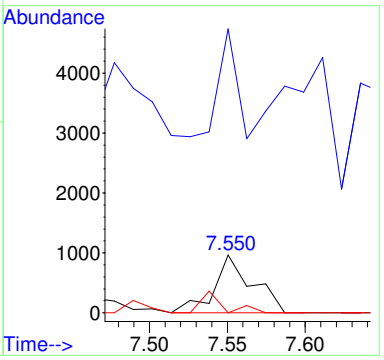


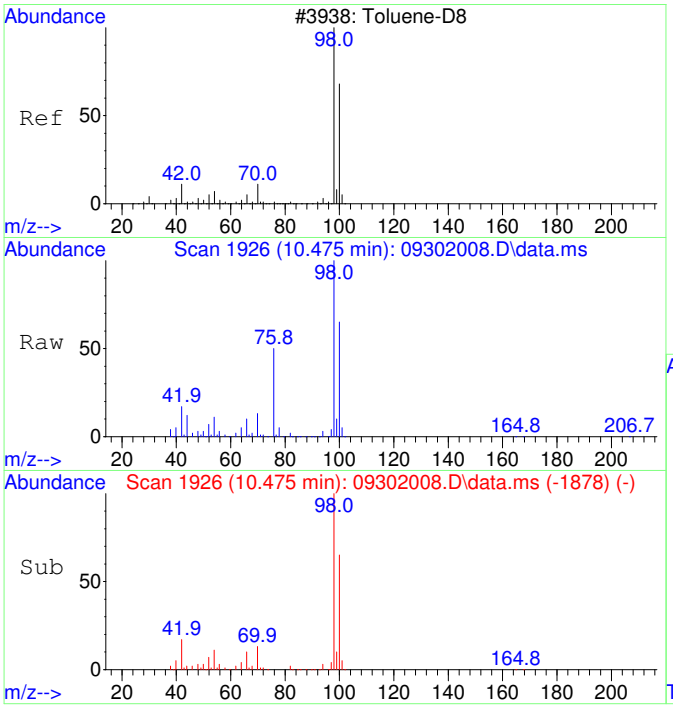


#34
1,2-Dichloroethane SCAN
Concen: 49.46 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 62 Resp: 1644

Ion	Ratio	Lower	Upper
62	100		
64	67.0	5.2	65.2#
49	21.4	3.9	63.9

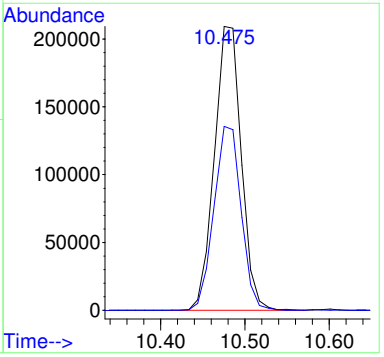


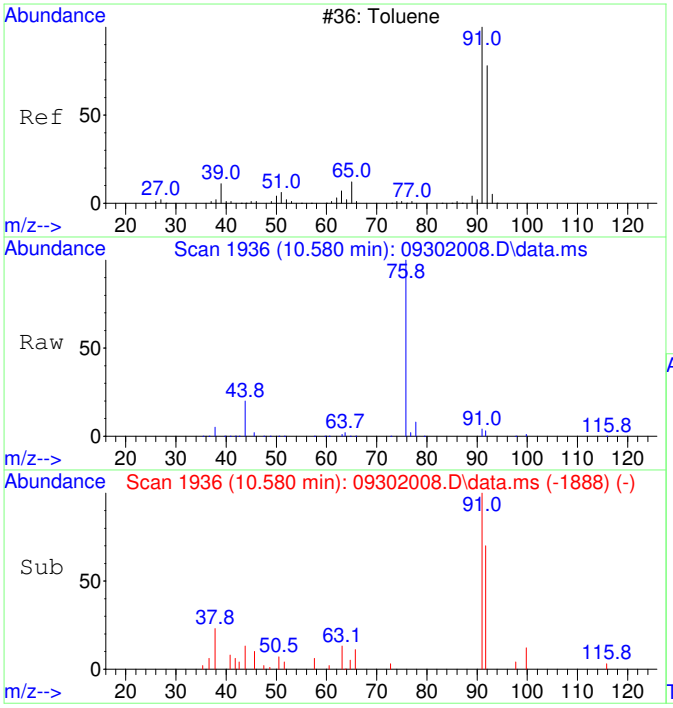


#36
Toluene-d8 SCAN
Concen: 4693.48 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 98 Resp: 465915

Ion	Ratio	Lower	Upper
98	100		
100	65.3	40.0	100.0

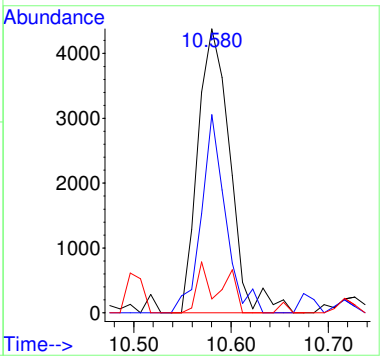


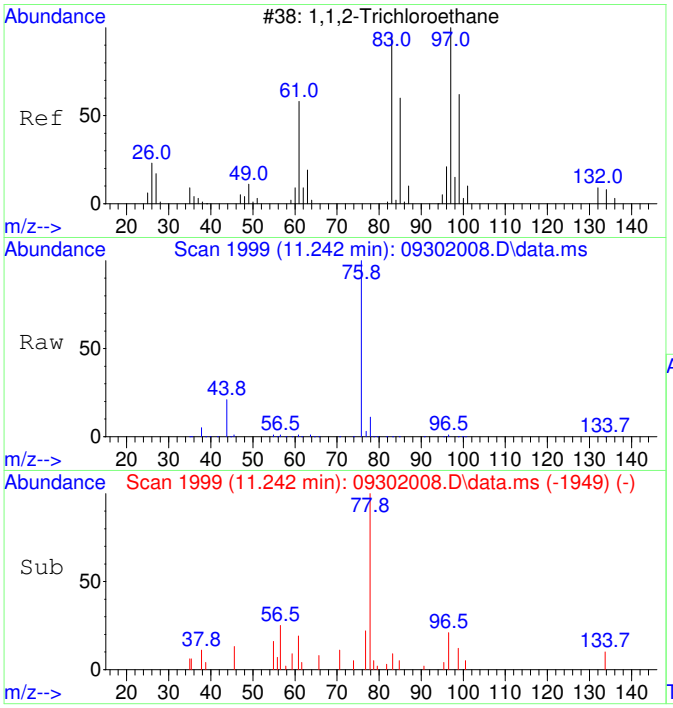


#37
Toluene SCAN
Concen: 79.54 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 10112

Ion	Ratio	Lower	Upper
91	100		
92	52.1	28.3	88.3
65	13.1	0.0	41.0

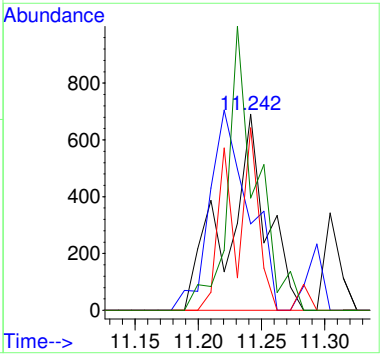


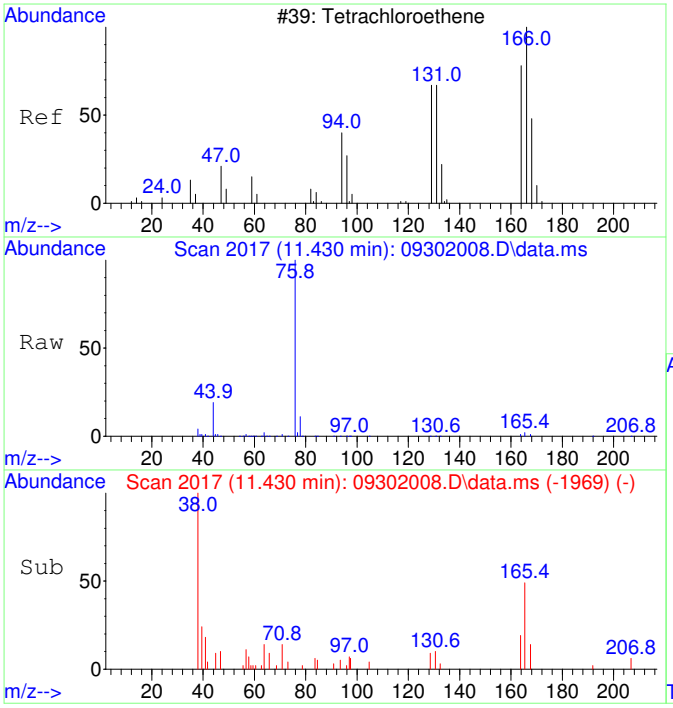


#38
1,1,2-Trichloroethane SCAN
Concen: 52.74 ug/L
RT: 11.242 min Scan# 1999
Delta R.T. 0.021 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 97 Resp: 1505

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	64.5	32.1	92.1
99	104.3	36.7	96.7#

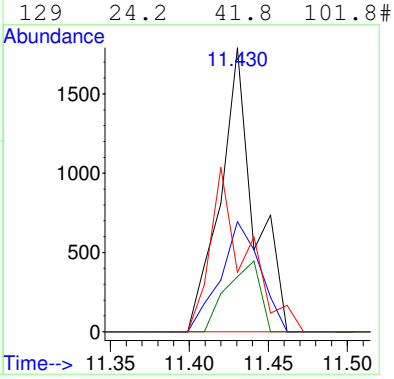


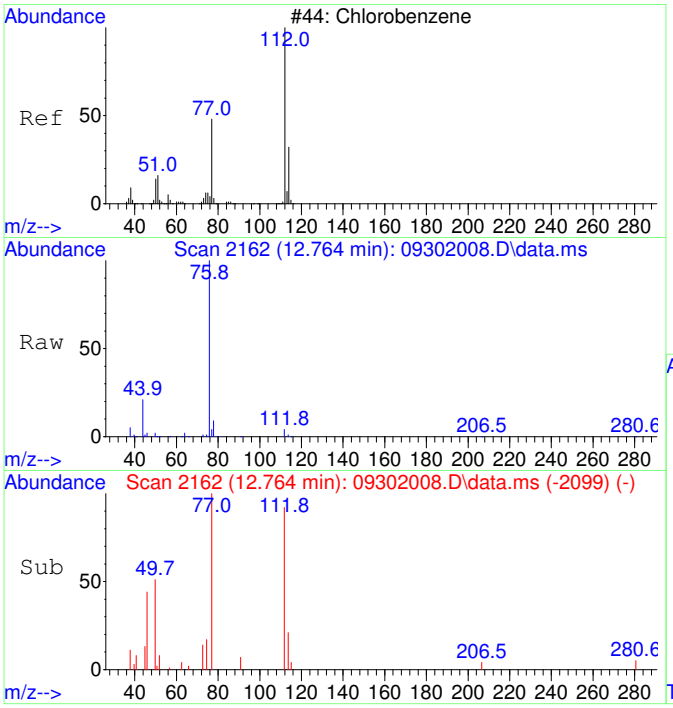


#39
Tetrachloroethene SCAN
Concen: 88.11 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:166 Resp: 2691

Ion	Ratio	Lower	Upper
166	100		
164	45.3	50.9	110.9#
131	0.0	38.7	98.7#
129	24.2	41.8	101.8#

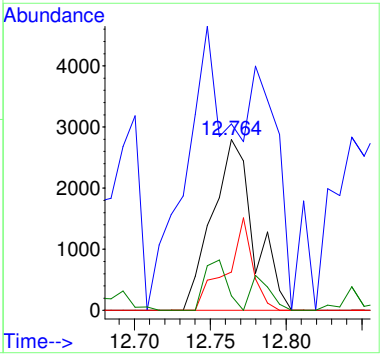


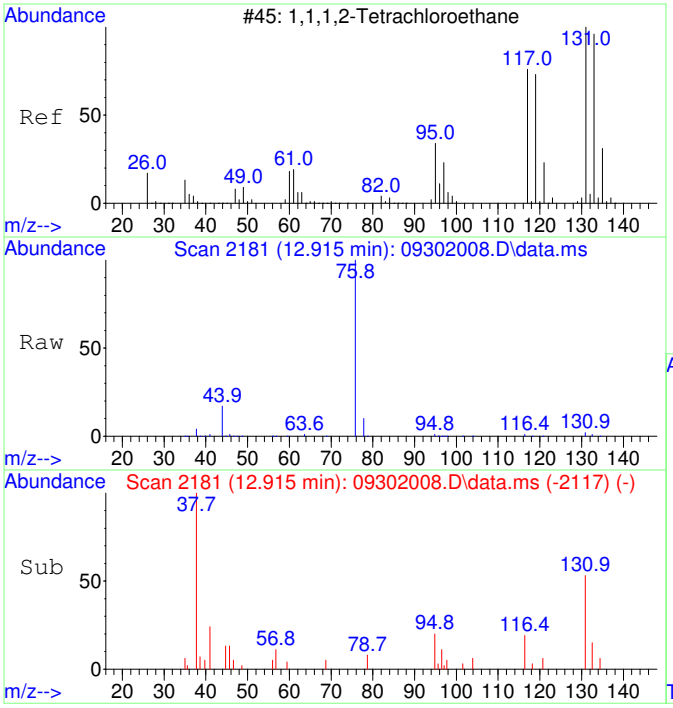


#40
Chlorobenzene SCAN
Concen: 61.71 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:112 Resp: 5361

Ion	Ratio	Lower	Upper
112	100		
77	0.0	28.2	88.2#
114	33.9	2.3	62.3
51	9.4	0.0	50.1

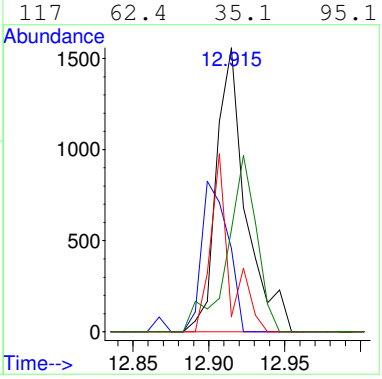


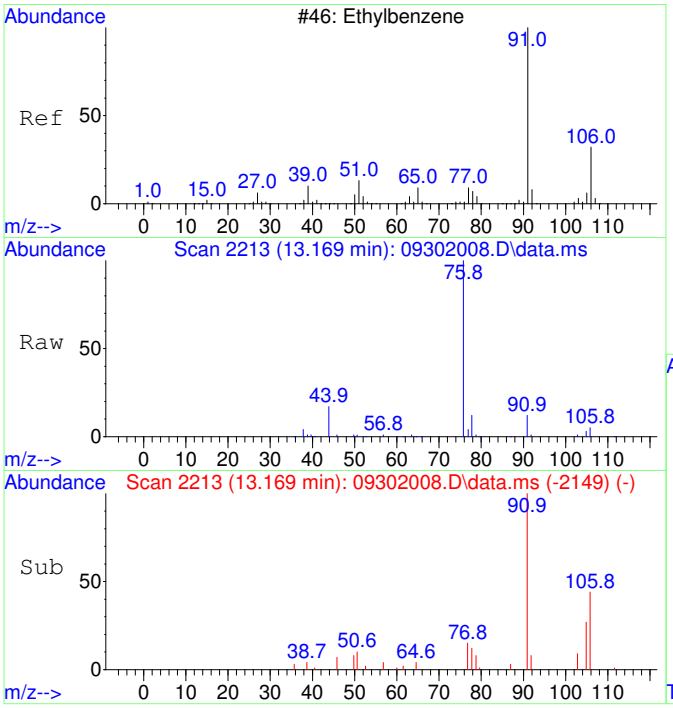


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 65.42 ug/L
RT: 12.915 min Scan# 2181
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:131 Resp: 2103

Ion	Ratio	Lower	Upper
131	100		
133	0.0	66.9	126.9#
119	41.2	40.4	100.4
117	62.4	35.1	95.1

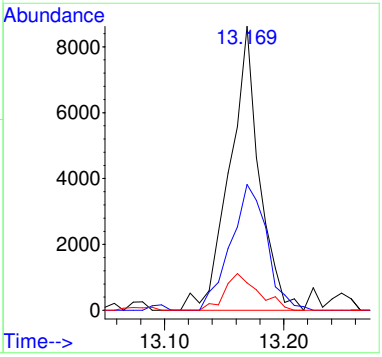


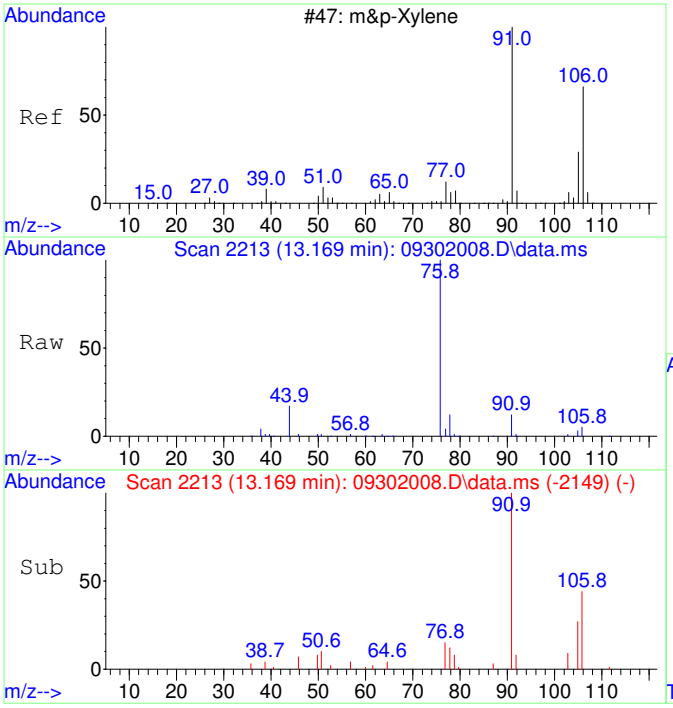


#42
Ethylbenzene SCAN
Concen: 64.24 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 14879

Ion	Ratio	Lower	Upper
91	100		
106	54.3	23.1	83.1
51	14.6	0.0	40.1

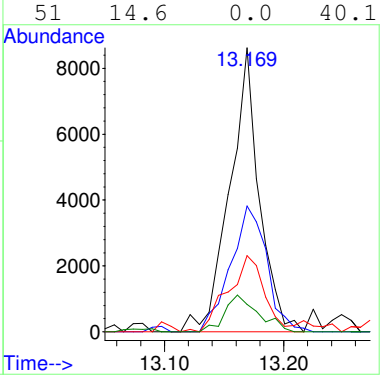


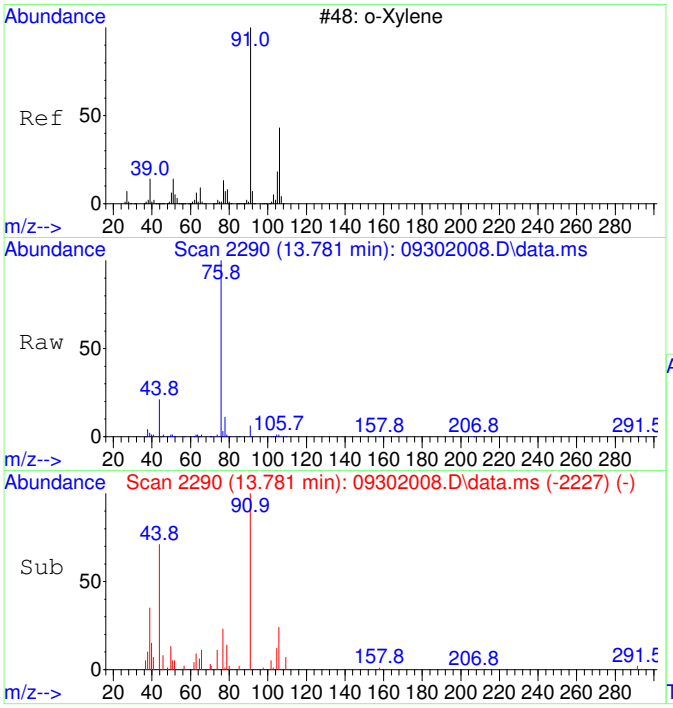


#43
m&p-Xylene SCAN
Concen: 64.24 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 14879

Ion	Ratio	Lower	Upper
91	100		
106	54.3	23.1	83.1
105	30.0	0.0	54.7
51	14.6	0.0	40.1

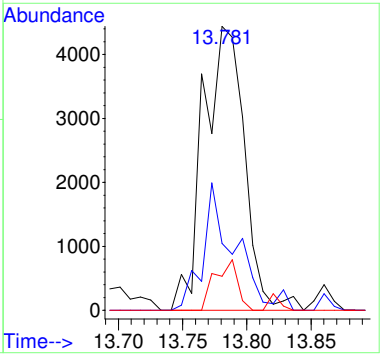


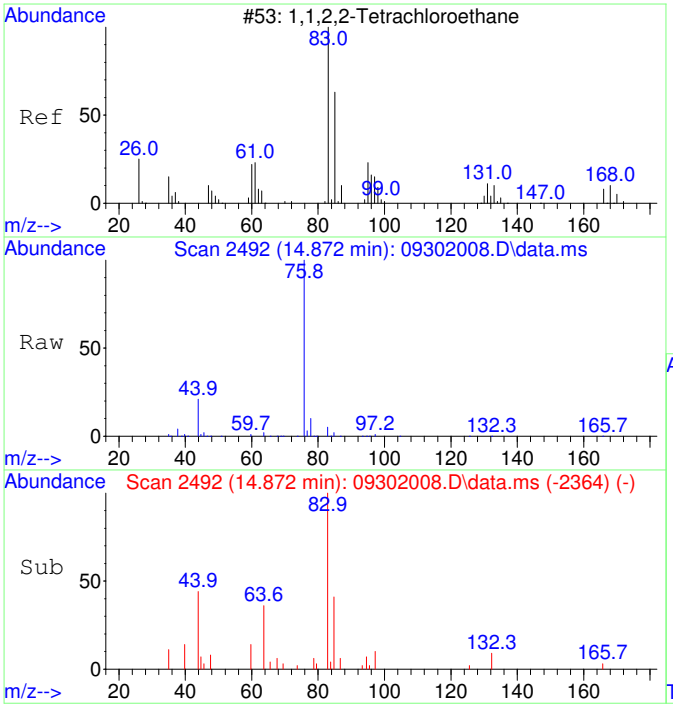


#44
o-Xylene SCAN
Concen: 79.90 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 9905

Ion	Ratio	Lower	Upper
91	100		
106	34.9	18.0	78.0
105	9.9	0.0	56.6

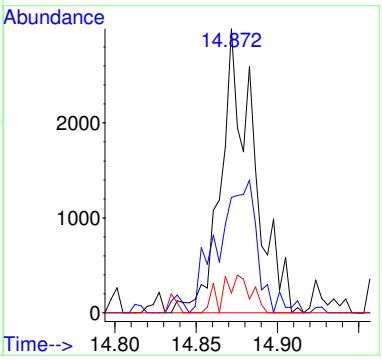


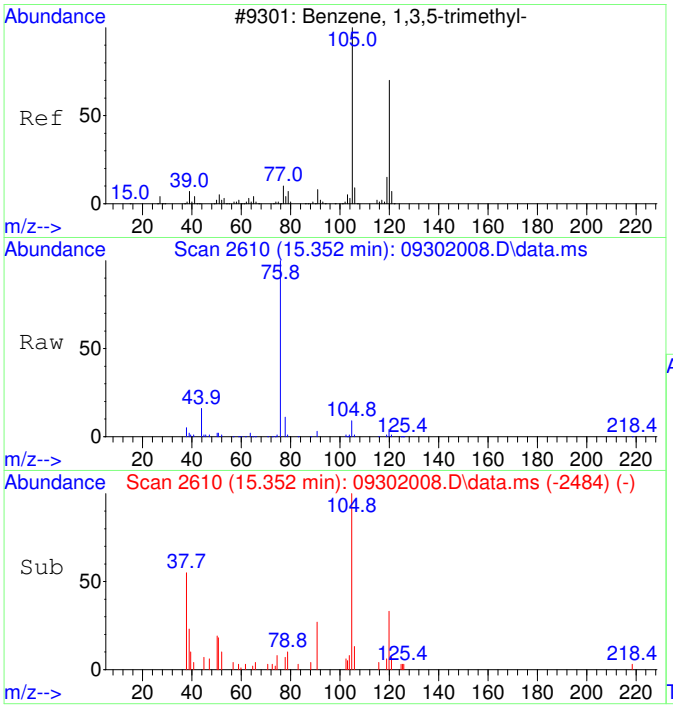


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 69.92 ug/L
RT: 14.872 min Scan# 2492
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 83 Resp: 4227

Ion	Ratio	Lower	Upper
83	100		
85	55.8	35.9	95.9
95	9.7	0.0	47.4

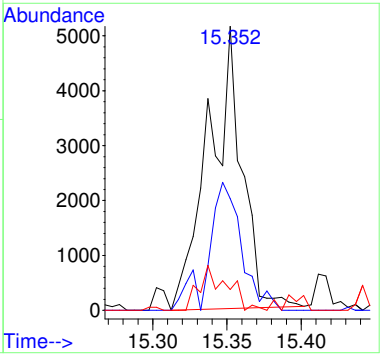


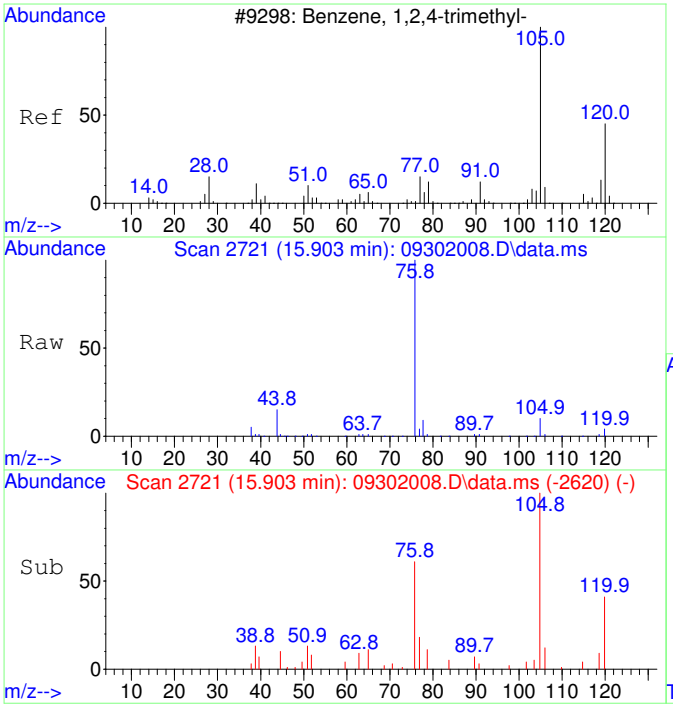


#46
1,3,5-Trimethylbenzene SCAN
Concen: 61.44 ug/L
RT: 15.352 min Scan# 2610
Delta R.T. 0.009 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:105 Resp: 8028

Ion	Ratio	Lower	Upper
105	100		
120	45.1	18.3	78.3
119	13.3	0.0	43.1

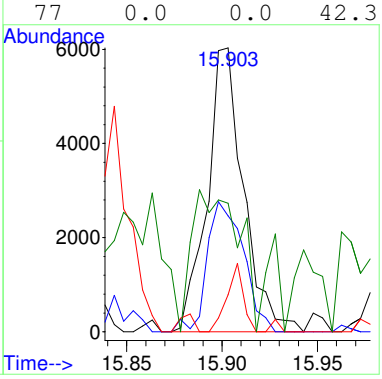




#47
1,2,4-Trimethylbenzene SCAN
Concen: 59.66 ug/L
RT: 15.903 min Scan# 2721
Delta R.T. 0.004 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:105 Resp: 7976

Ion	Ratio	Lower	Upper
105	100		
120	46.0	16.9	76.9
119	10.8	0.0	41.9
77	0.0	0.0	42.3



Quantitation Report (QT Reviewed)

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M.I. Performed By:

TD at 9:38 am, Oct 01, 2020

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302008.D
Acq On : 30 Sep 2020 16:10
InstName : AG5975C
Operator : TD
Sample : B20I024-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 30 16:28:47 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

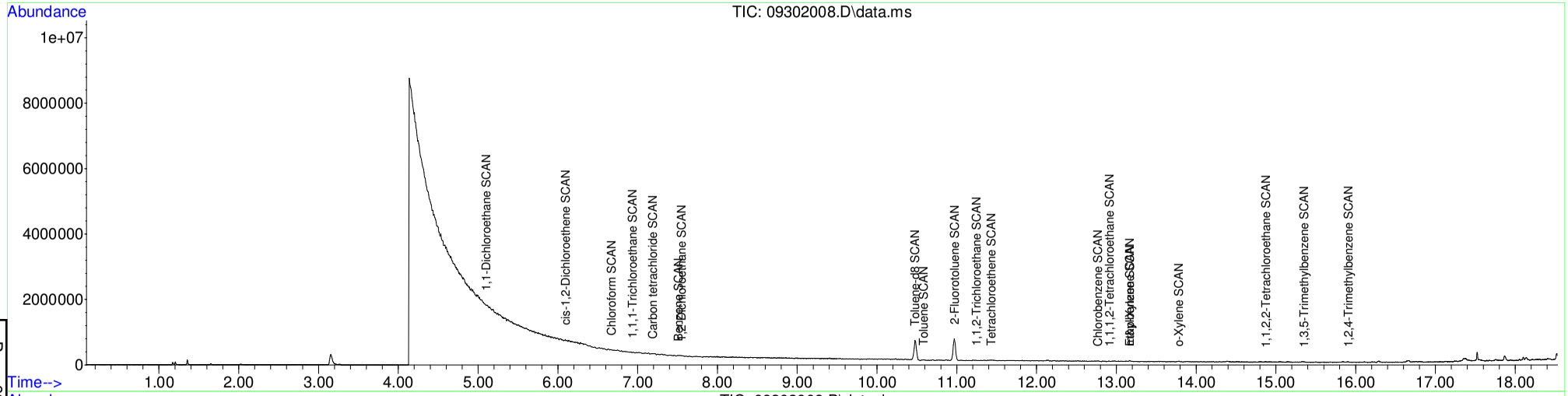
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)	
Internal Standards						
1) 2-Fluorotoluene	10.970	109	1041272	5000.00 ug/L	0.00	IS ↑
System Monitoring Compounds						
12) Toluene-d8	10.477	98	876494	4299.91 ug/L	0.00	
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.00%#			
Target Compounds					Qvalue	
2] 1,1-Dichloroethene	3.090	61	1754m	42.18 ug/L		
3] trans-1,2-Dichloroethene	4.402	61	2186	45.50 ug/L	67	
4] 1,1-Dichloroethane	5.099	63	2777	46.44 ug/L	71	
5] cis-1,2-Dichloroethene	6.094	61	2972	47.08 ug/L	98	
6] Chloroform	6.664	83	3179	49.20 ug/L	100	
7] 1,1,1-Trichloroethane	6.919	97	3126	44.55 ug/L	98	
8] Carbon tetrachloride	7.187	117	2941	44.53 ug/L	100	
9] Benzene	7.515	78	14464	81.76 ug/L	64	
10] 1,2-Dichloroethane	7.552	62	3050	48.29 ug/L #	16	
11] Trichloroethene	8.569	130	2531	47.51 ug/L	93	
13] Toluene	10.571	91	13276	51.09 ug/L	98	
14] 1,1,2-Trichloroethane	11.222	97	2597	45.86 ug/L	97	
15] Tetrachloroethene	11.432	166	3542	47.10 ug/L	97	
16] Chlorobenzene	12.765	112	10147	54.53 ug/L	87	
17] 1,1,1,2-Tetrachloroethane	12.916	131	3310	49.64 ug/L	100	
18] Ethylbenzene	12.972	91	16900	53.43 ug/L	96	
19] m&p-Xylene	13.162	91	27000	109.21 ug/L	93	
20] o-Xylene	13.782	91	13211	50.02 ug/L	95	
21] 1,1,2,2-Tetrachloroethane	14.877	83	6028	51.49 ug/L	99	
22] 1,3,5-Trimethylbenzene	15.343	105	14392	51.19 ug/L	97	
23] 1,2,4-Trimethylbenzene	15.899	105	15985	54.74 ug/L	93	
25) 2-Fluorotoluene SCAN	10.969	109	522467	5147.21 ug/L	98	
28) 1,1-Dichloroethane SCAN	5.098	63	1460	47.29 ug/L	73	
29) cis-1,2-Dichloroethene...	6.093	61	1473	44.53 ug/L #	28	
30) Chloroform SCAN	6.675	83	1693	47.19 ug/L #	27	
31) 1,1,1-Trichloroethane ...	6.930	97	1704	52.12 ug/L #	34	
32) Carbon tetrachloride SCAN	7.185	117	2163	63.43 ug/L #	65	
33) Benzene SCAN	7.514	78	13461	149.54 ug/L	99	
34) 1,2-Dichloroethane SCAN	7.550	62	1644	49.46 ug/L #	61	
36) Toluene-d8 SCAN	10.475	98	465915	4693.48 ug/L	94	
37) Toluene SCAN	10.580	91	10112	79.54 ug/L	92	
38) 1,1,2-Trichloroethane ...	11.242	97	1505	52.74 ug/L #	46	
39) Tetrachloroethene SCAN	11.430	166	2691	88.11 ug/L #	41	
40) Chlorobenzene SCAN	12.764	112	5361	61.71 ug/L #	54	
41) 1,1,1,2-Tetrachloroeth...	12.915	131	2103	65.42 ug/L #	47	
42) Ethylbenzene SCAN	13.169	91	14879	64.24 ug/L	97	
43) m&p-Xylene SCAN	13.169	91	14879	64.24 ug/L	95	
44) o-Xylene SCAN	13.781	91	9905	79.90 ug/L	76	
45) 1,1,2,2-Tetrachloroeth...	14.872	83	4227	69.92 ug/L	86	
46) 1,3,5-Trimethylbenzene...	15.352	105	8028	61.44 ug/L	96	
47) 1,2,4-Trimethylbenzene...	15.903	105	7976	59.66 ug/L #	93	

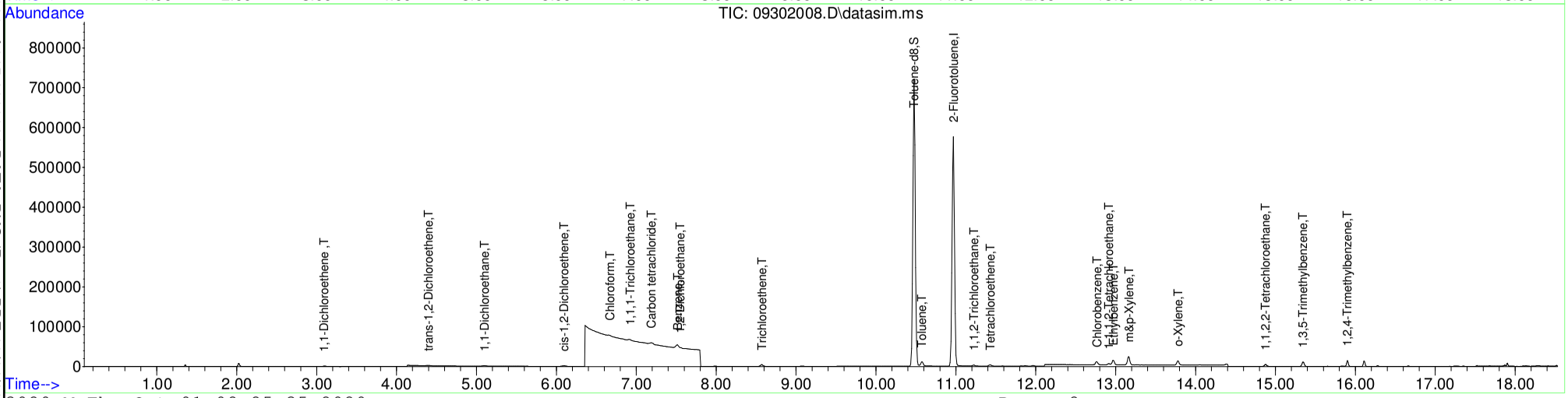
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302008.D
Acq On : 30 Sep 2020 16:10
InstName : AG5975C
Operator : TD
Sample : B20I024-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 30 16:28:47 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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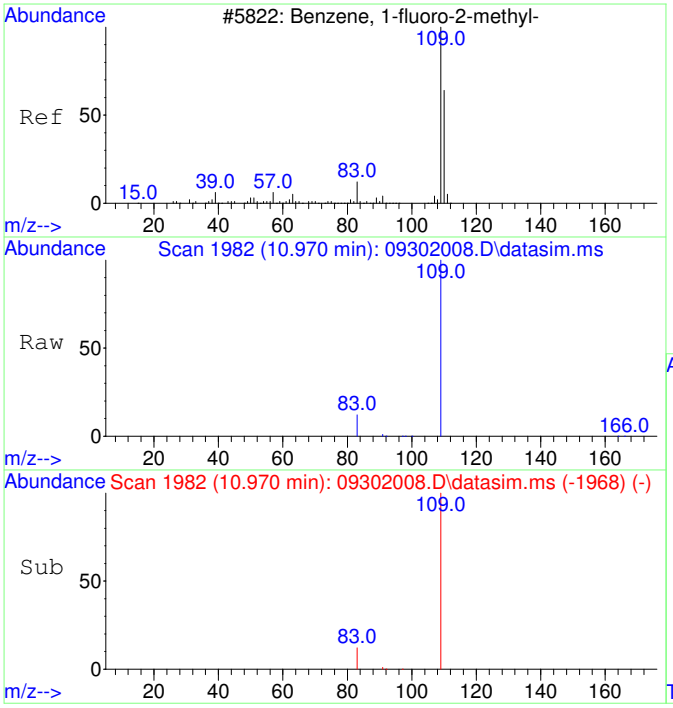
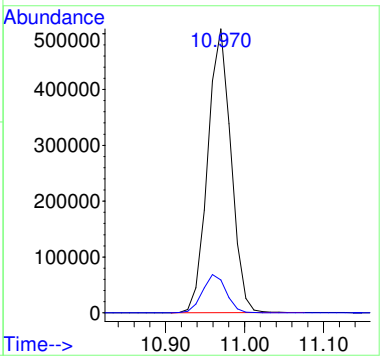
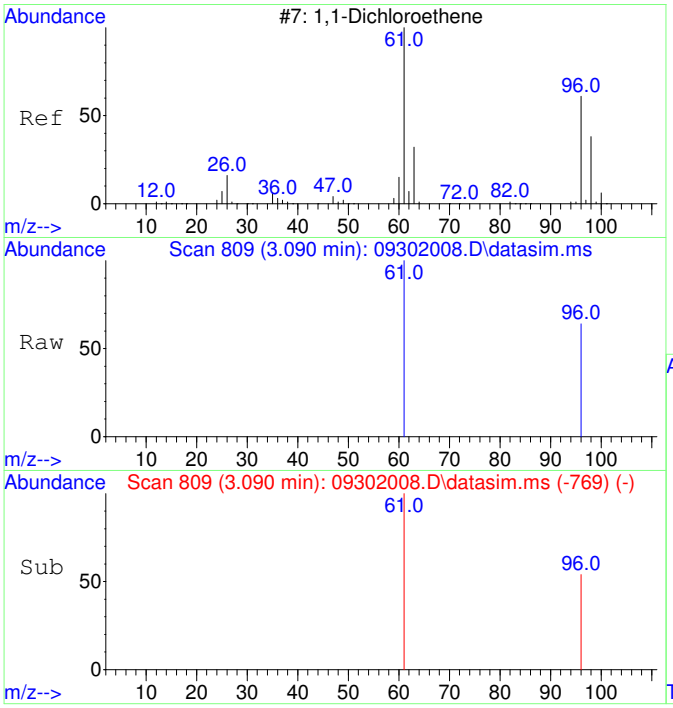


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:109 Resp: 1041272

Ion	Ratio	Lower	Upper
109	100		
83	13.7	0.0	42.3

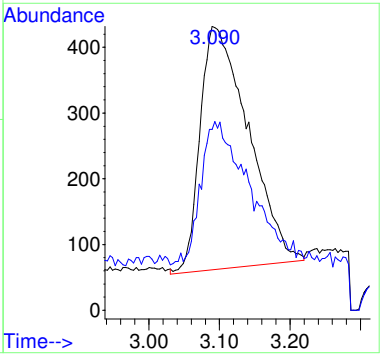


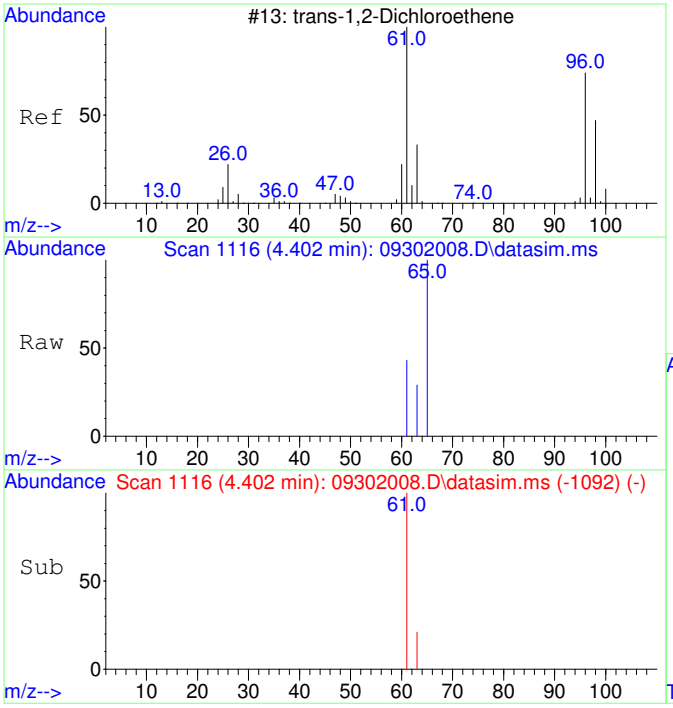


#2
1,1-Dichloroethene
Concen: 42.18 ug/L m
RT: 3.090 min Scan# 809
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 61 Resp: 1754

Ion	Ratio	Lower	Upper
61	100		
96	77.0	37.2	97.2

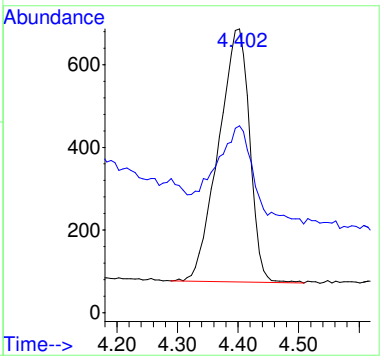


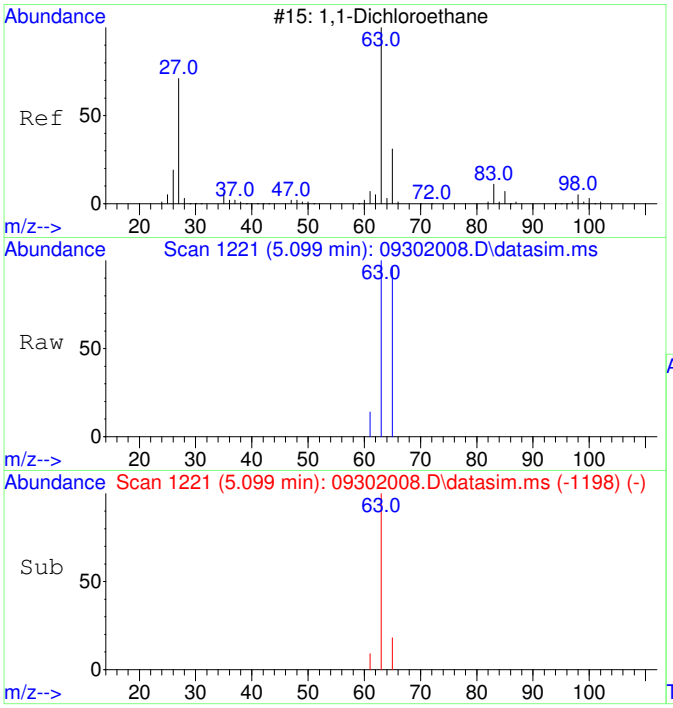


#3
trans-1,2-Dichloroethene
Concen: 45.50 ug/L
RT: 4.402 min Scan# 1116
Delta R.T. 0.007 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 61 Resp: 2186

Ion	Ratio	Lower	Upper
61	100		
63	51.0	2.4	62.4

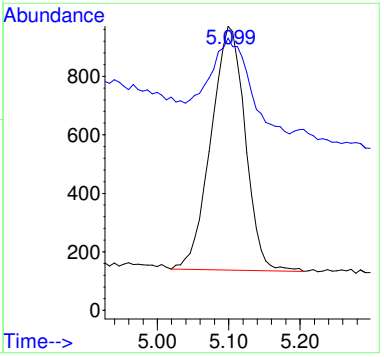


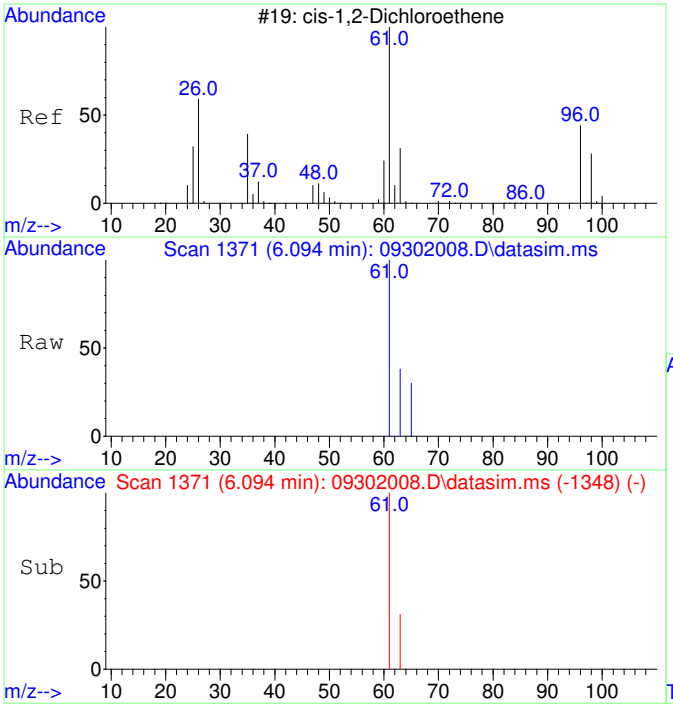


#4
1,1-Dichloroethane
Concen: 46.44 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 63 Resp: 2777

Ion	Ratio	Lower	Upper
63	100		
65	48.2	1.8	61.8

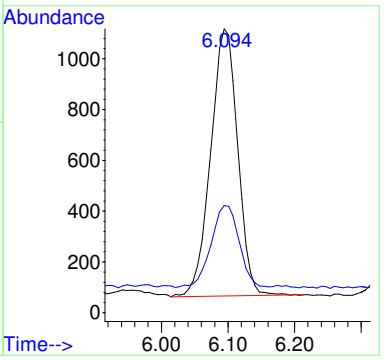


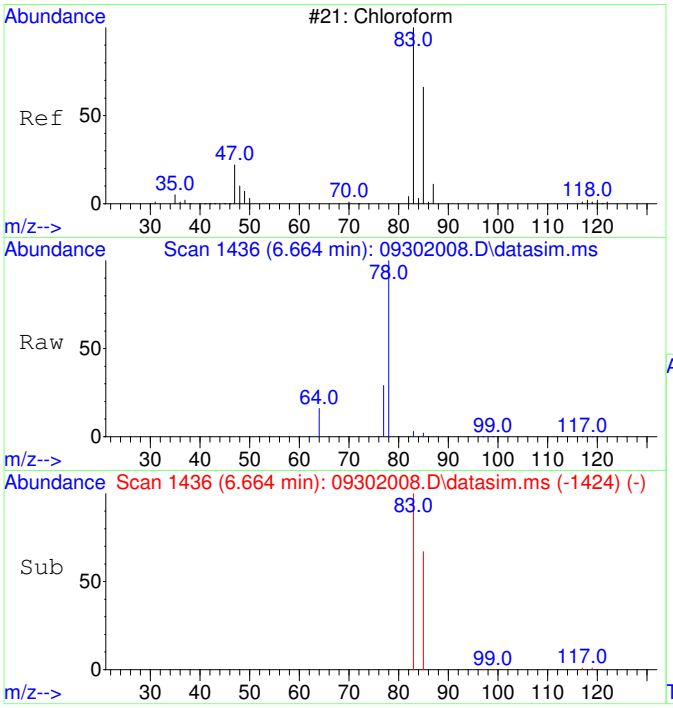


#5
cis-1,2-Dichloroethene
Concen: 47.08 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 61 Resp: 2972

Ion	Ratio	Lower	Upper
61	100		
63	31.4	2.5	62.5

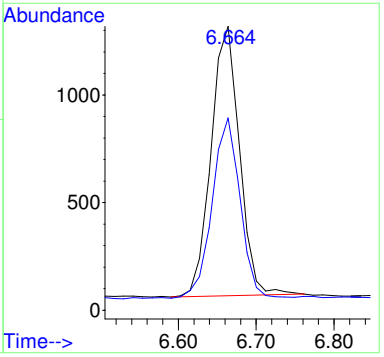


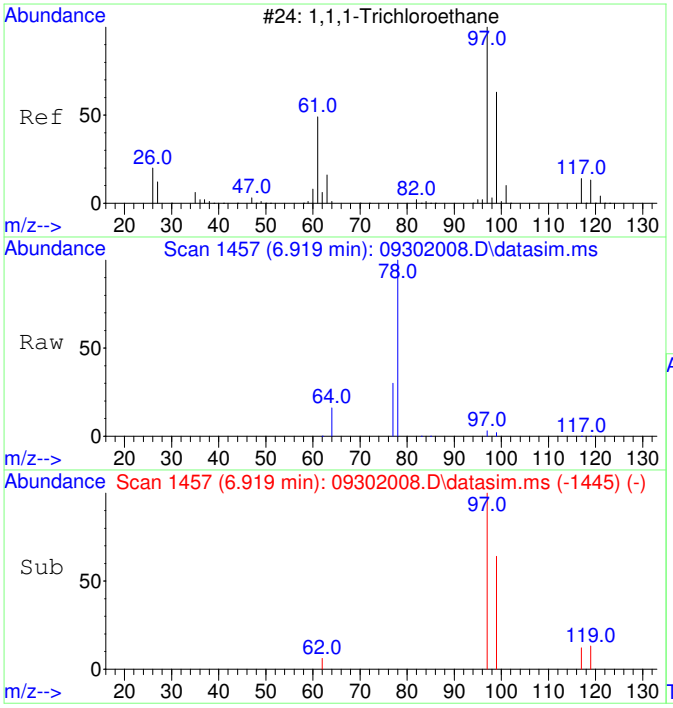


#6
Chloroform
Concen: 49.20 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 83 Resp: 3179

Ion	Ratio	Lower	Upper
83	100		
85	64.9	35.1	95.1

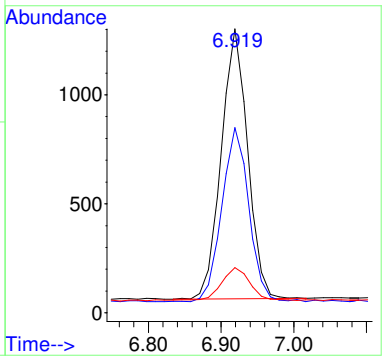


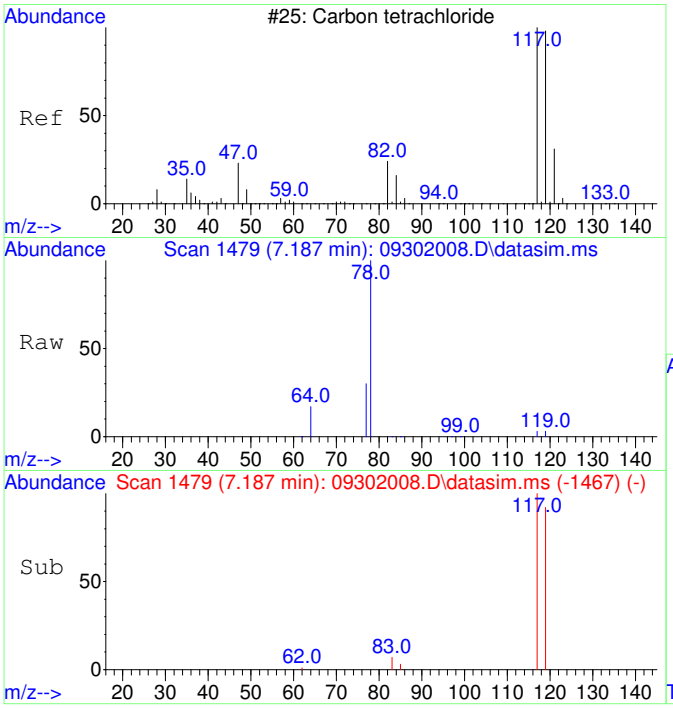


#7
1,1,1-Trichloroethane
Concen: 44.55 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 97 Resp: 3126

Ion	Ratio	Lower	Upper
97	100		
99	66.0	34.6	94.6
117	13.3	0.0	43.2

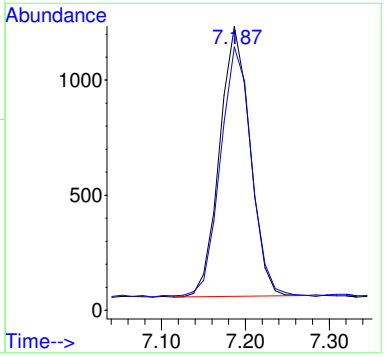


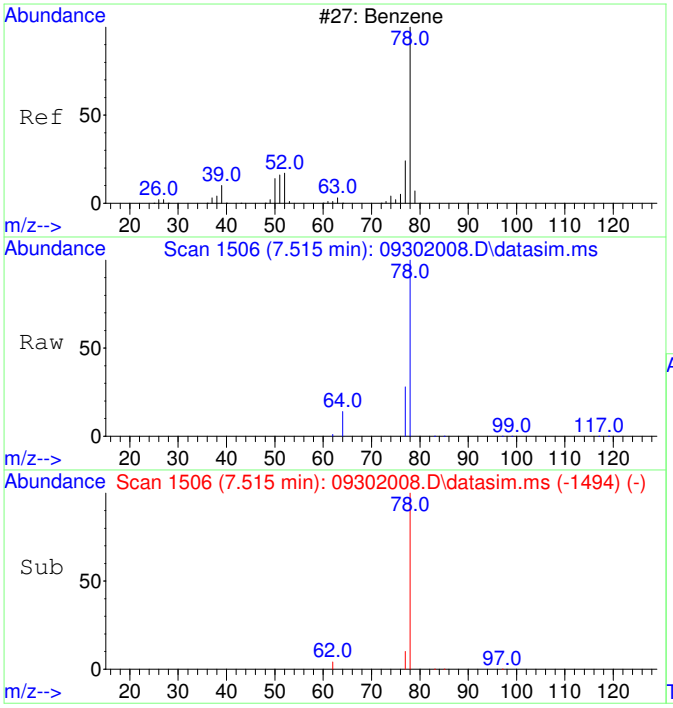


#8
Carbon tetrachloride
Concen: 44.53 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:117 Resp: 2941

Ion	Ratio	Lower	Upper
117	100		
119	96.0	66.4	126.4

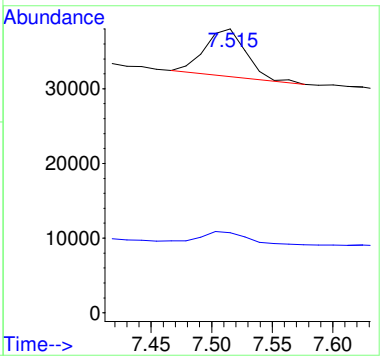


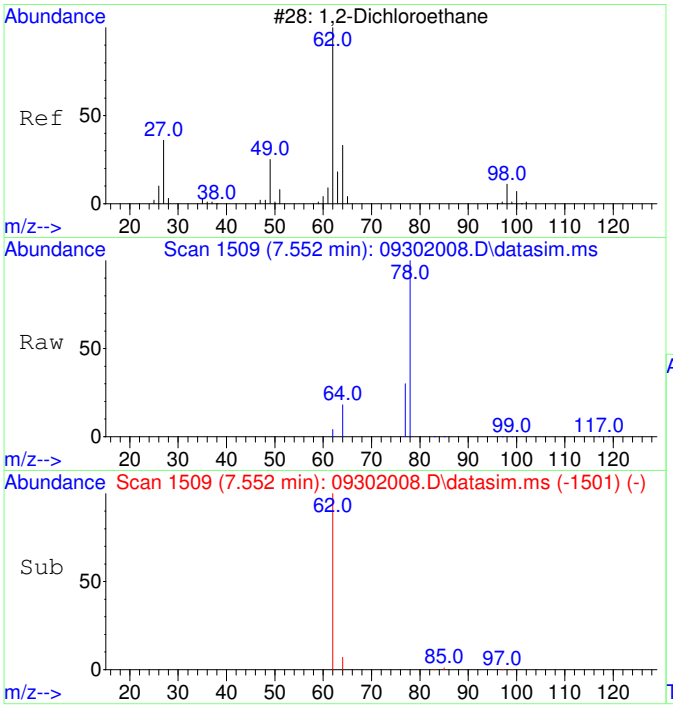


#9
Benzene
Concen: 81.76 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 78 Resp: 14464

Ion	Ratio	Lower	Upper
78	100		
77	40.8	0.0	53.2

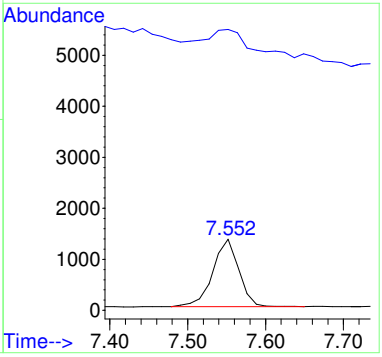


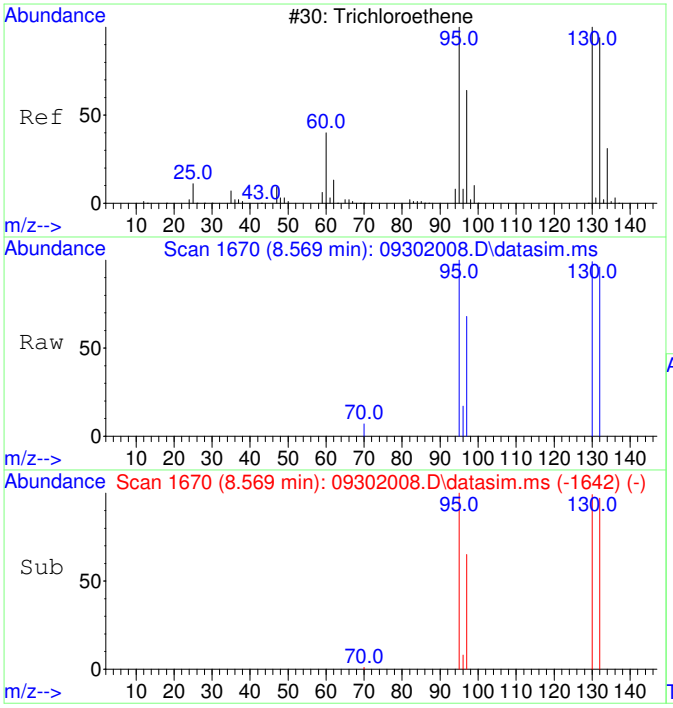


#10
1,2-Dichloroethane
Concen: 48.29 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 62 Resp: 3050

Ion	Ratio	Lower	Upper
62	100		
64	79.1	2.3	62.3#

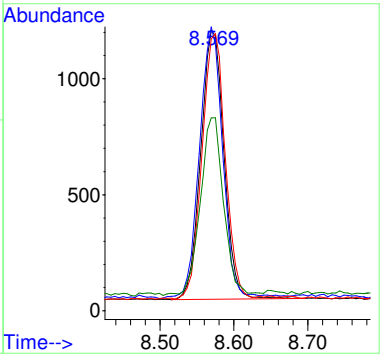


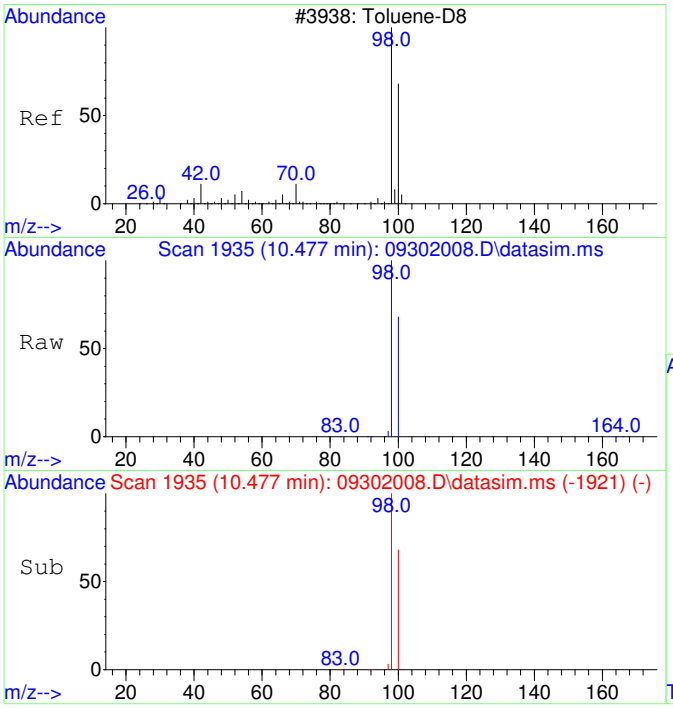


#11
Trichloroethene
Concen: 47.51 ug/L
RT: 8.569 min Scan# 1670
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:130 Resp: 2531

Ion	Ratio	Lower	Upper
130	100		
95	100.7	60.7	120.7
132	98.1	76.0	116.0
97	66.0	38.6	78.6

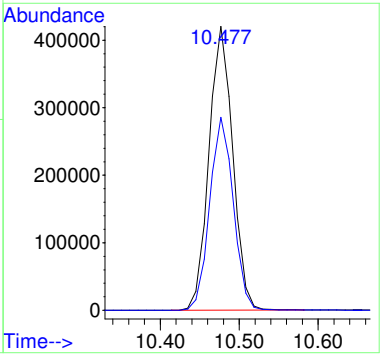


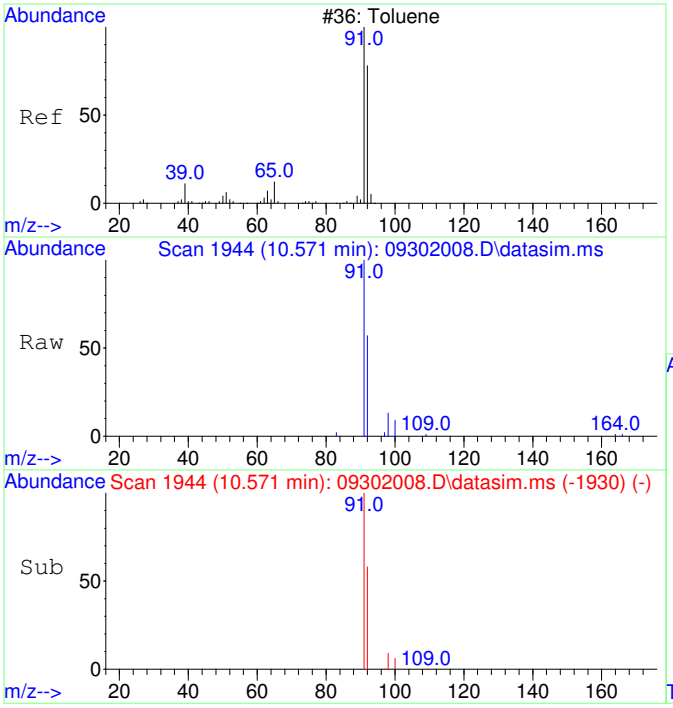


#12
Toluene-d8
Concen: 4299.91 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 98 Resp: 876494

Ion	Ratio	Lower	Upper
98	100		
100	67.3	37.1	97.1

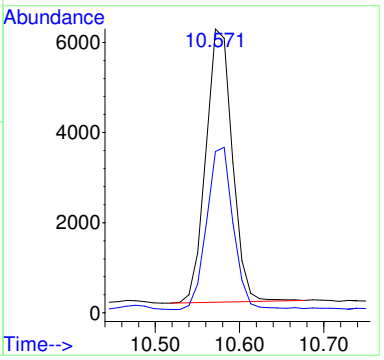


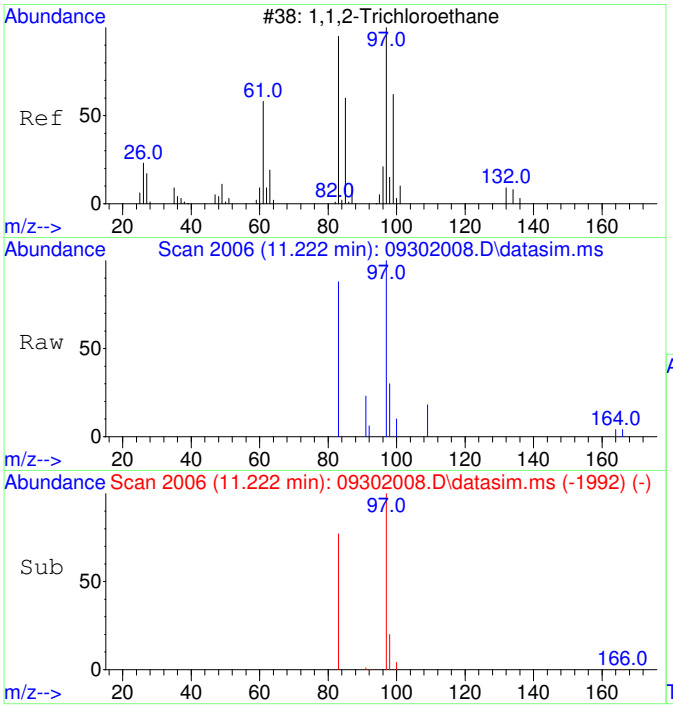


#13
Toluene
Concen: 51.09 ug/L
RT: 10.571 min Scan# 1944
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 13276

Ion	Ratio	Lower	Upper
91	100		
92	58.5	29.9	89.9

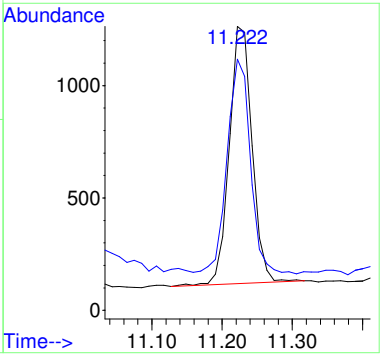


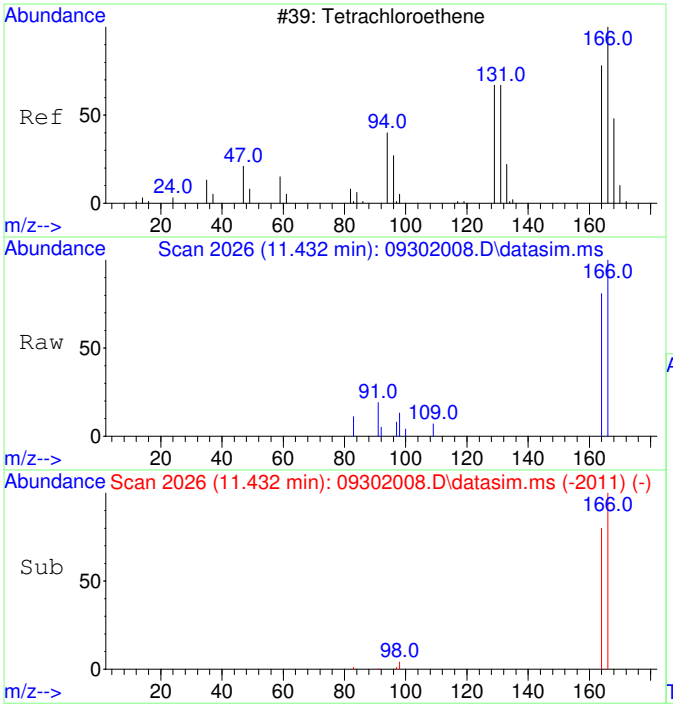


#14
1,1,2-Trichloroethane
Concen: 45.86 ug/L
RT: 11.222 min Scan# 2006
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 97 Resp: 2597

Ion	Ratio	Lower	Upper
97	100		
83	83.9	51.2	111.2

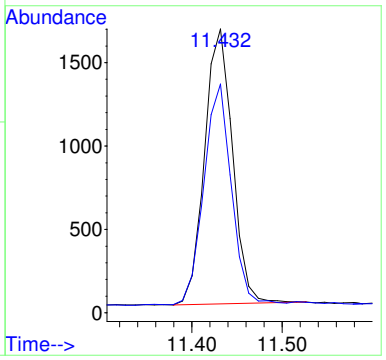


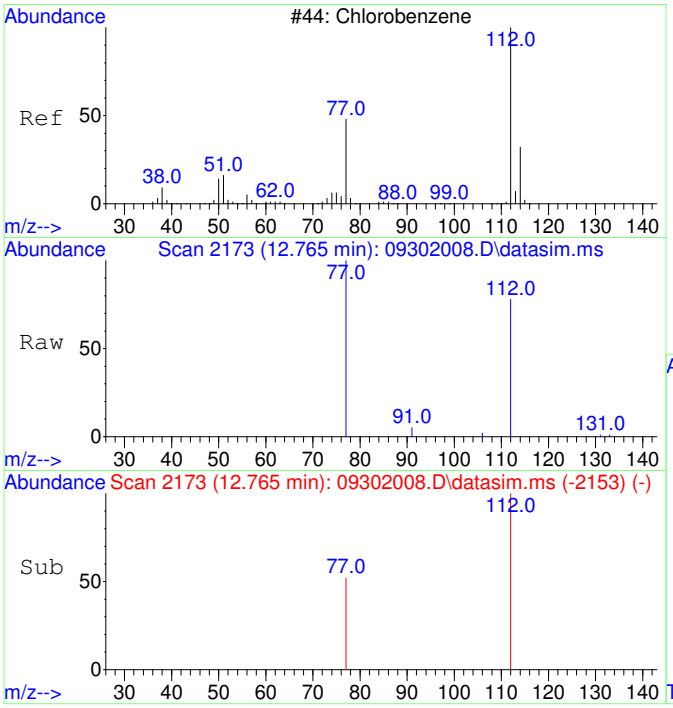


#15
Tetrachloroethene
Concen: 47.10 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:166 Resp: 3542

Ion	Ratio	Lower	Upper
166	100		
164	80.4	47.8	107.8

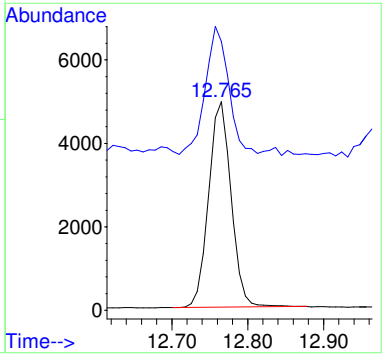


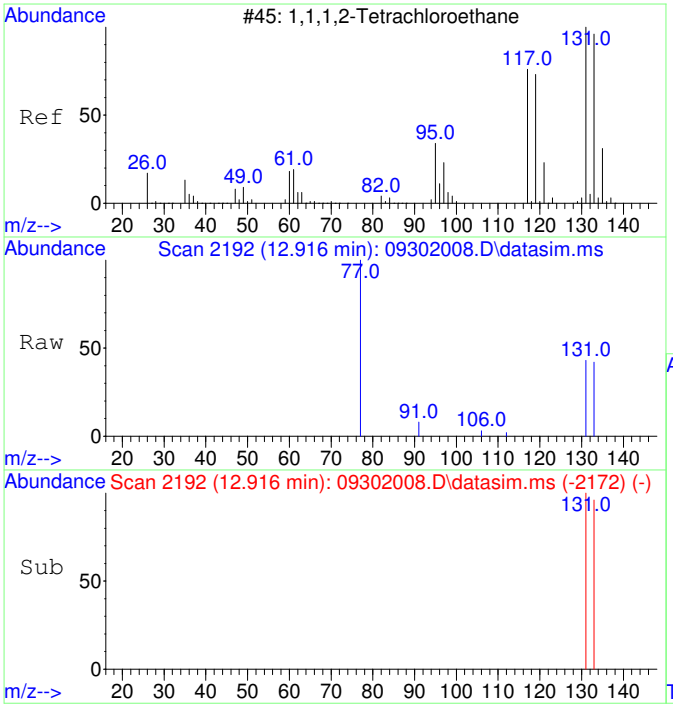


#16
Chlorobenzene
Concen: 54.53 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:112 Resp: 10147

Ion	Ratio	Lower	Upper
112	100		
77	63.2	23.6	83.6

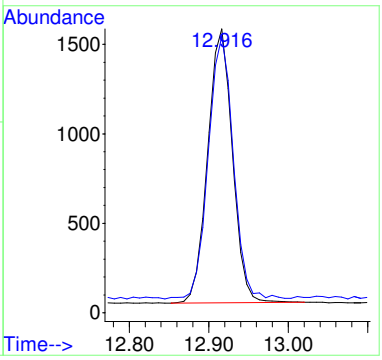


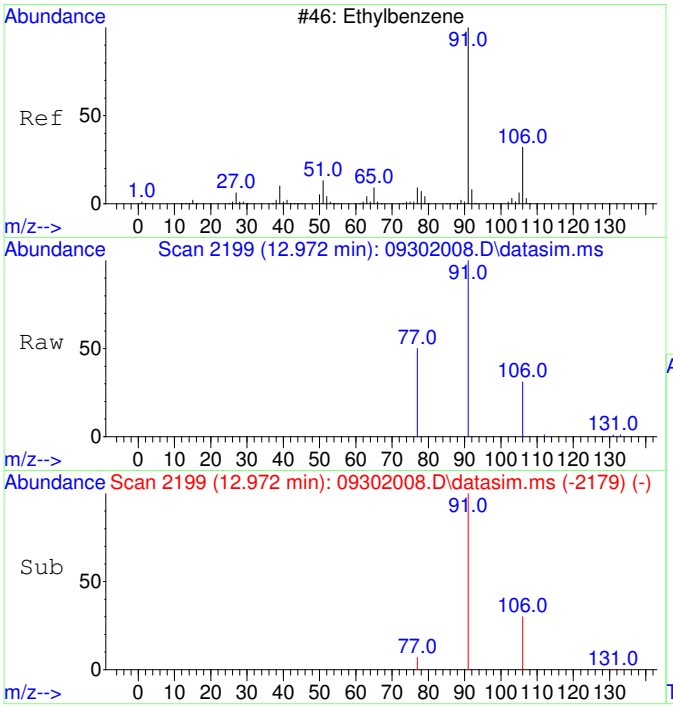


#17
1,1,1,2-Tetrachloroethane
Concen: 49.64 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:131 Resp: 3310

Ion	Ratio	Lower	Upper
131	100		
133	96.0	66.3	126.3

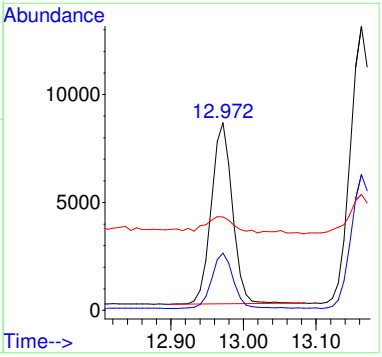


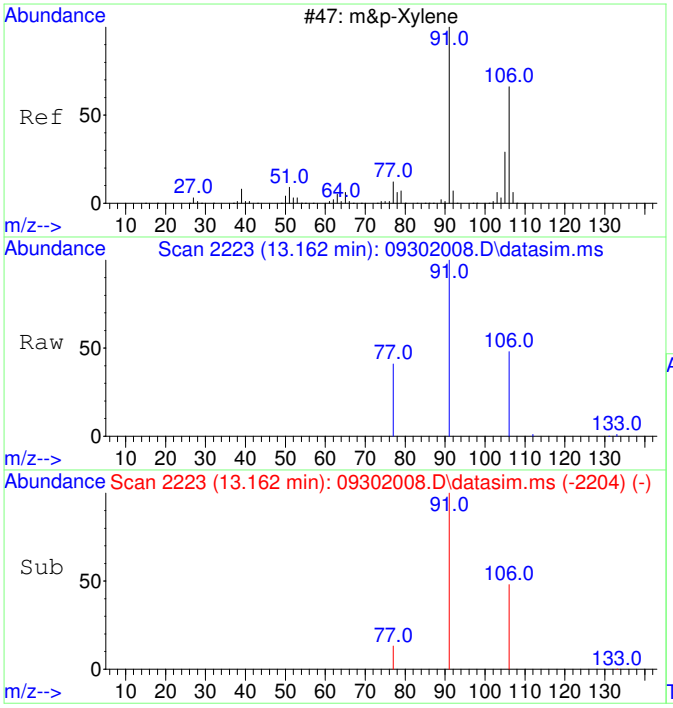


#18
Ethylbenzene
Concen: 53.43 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 16900

Ion	Ratio	Lower	Upper
91	100		
106	31.5	3.0	63.0
77	12.2	0.0	38.2

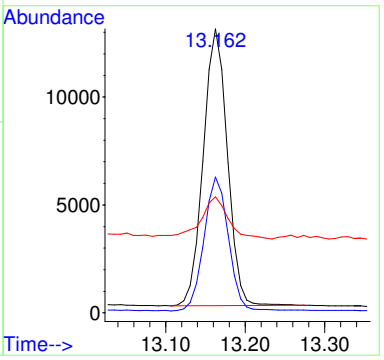


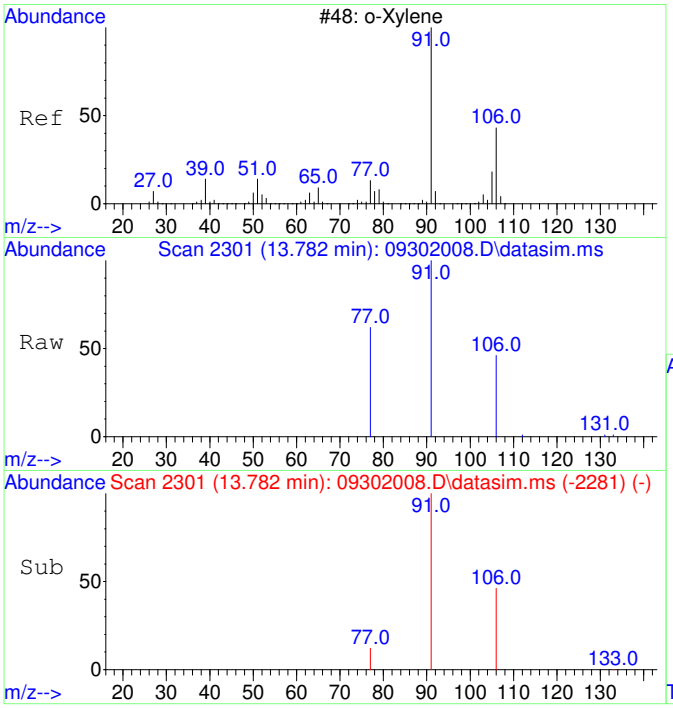


#19
m&p-Xylene
Concen: 109.21 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 27000

Ion	Ratio	Lower	Upper
91	100		
106	48.8	22.2	82.2
77	18.4	0.0	42.4

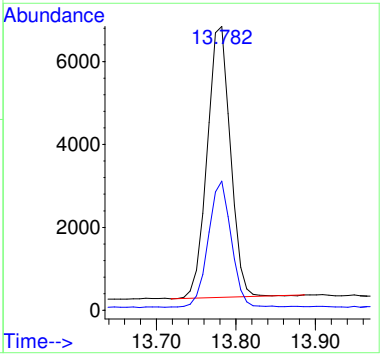


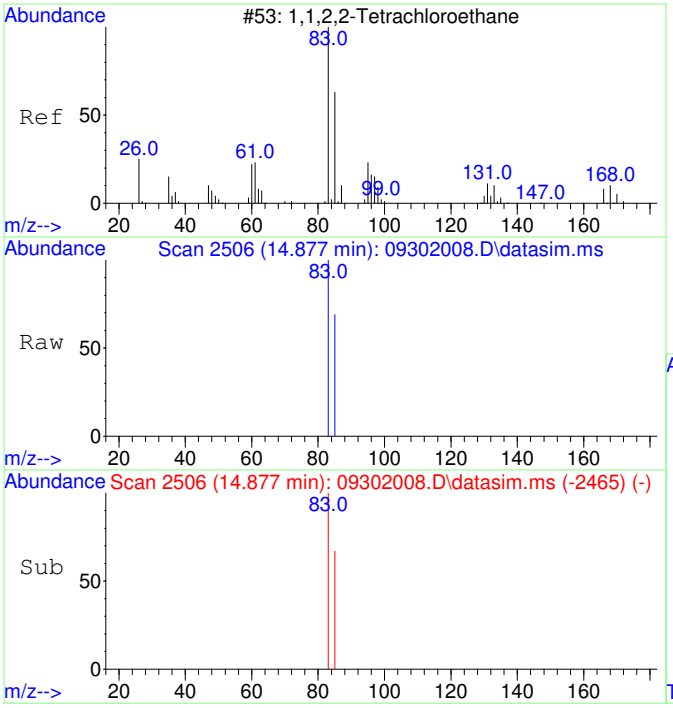


#20
o-Xylene
Concen: 50.02 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 13211

Ion	Ratio	Lower	Upper
91	100		
106	45.9	19.2	79.2

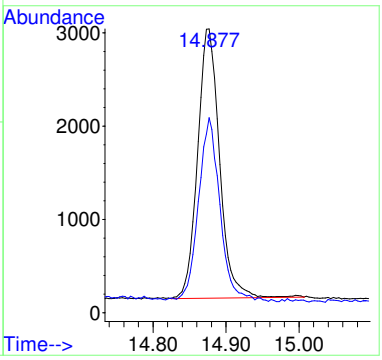


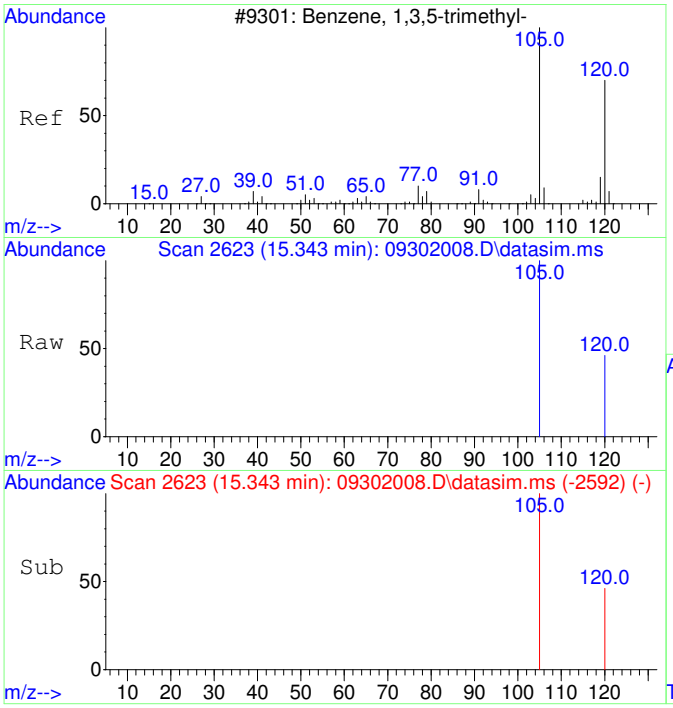


#21
1,1,2,2-Tetrachloroethane
Concen: 51.49 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. 0.004 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 83 Resp: 6028

Ion	Ratio	Lower	Upper
83	100		
85	64.2	34.8	94.8

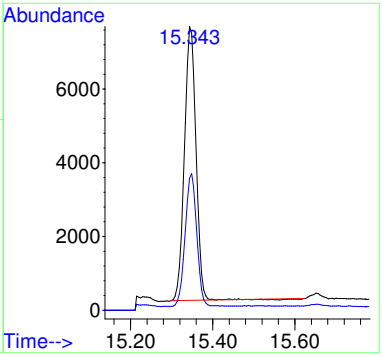


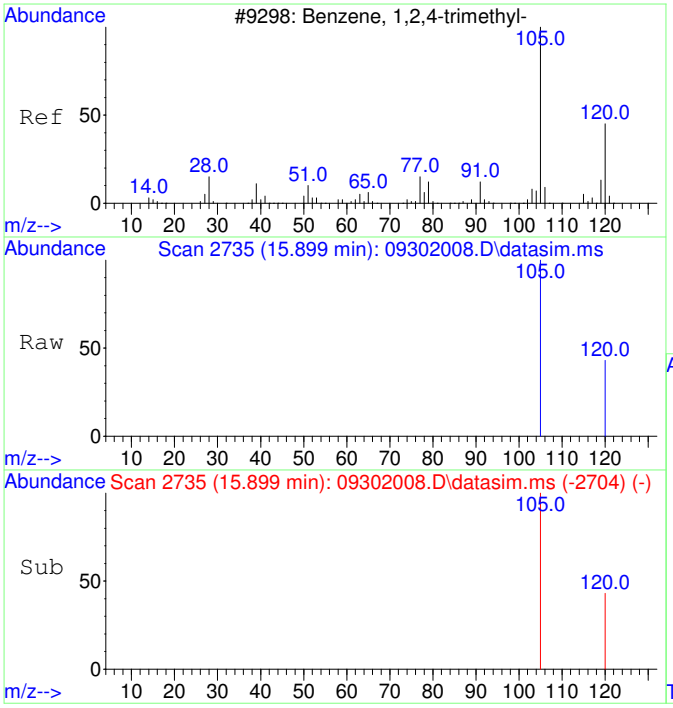


#22
1,3,5-Trimethylbenzene
Concen: 51.19 ug/L
RT: 15.343 min Scan# 2623
Delta R.T. -0.001 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:105 Resp: 14392

Ion	Ratio	Lower	Upper
105	100		
120	48.7	21.1	81.1

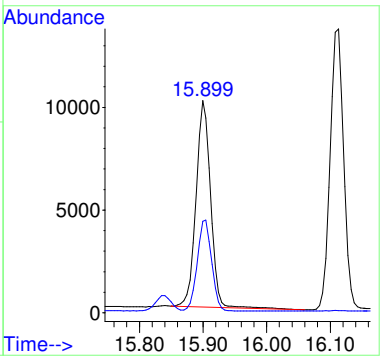


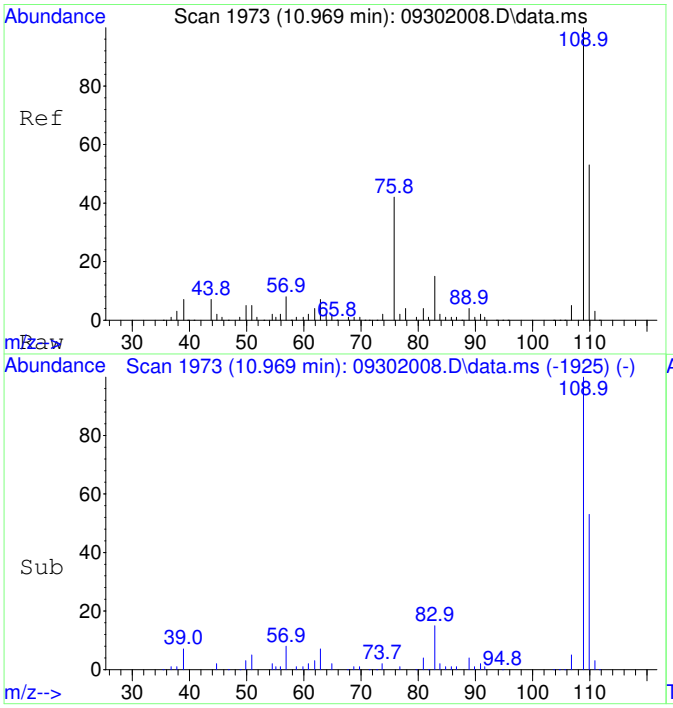


#23
1,2,4-Trimethylbenzene
Concen: 54.74 ug/L
RT: 15.899 min Scan# 2735
Delta R.T. 0.004 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:105 Resp: 15985

Ion	Ratio	Lower	Upper
105	100		
120	42.3	17.2	77.2

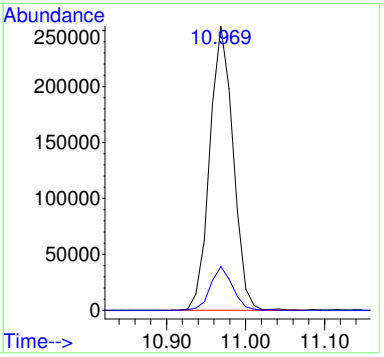


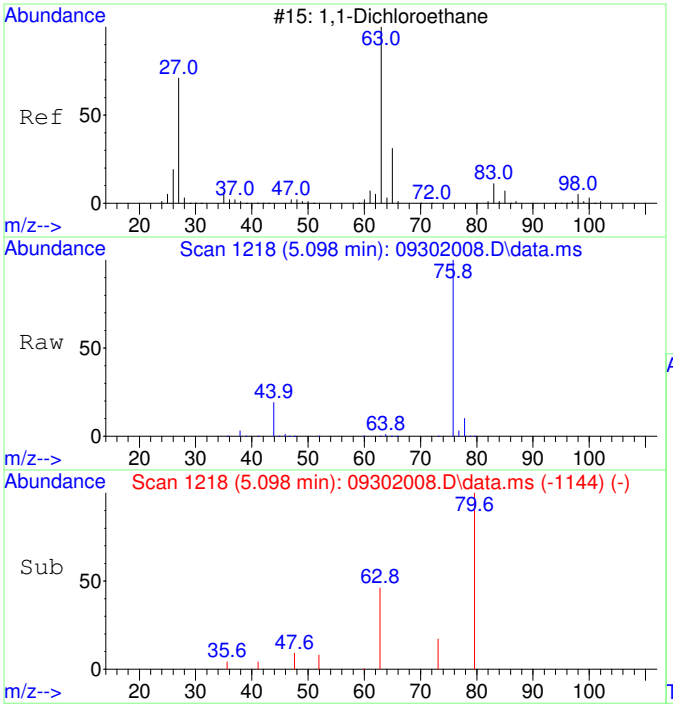


#25
2-Fluorotoluene SCAN
Concen: 5147.21 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:109 Resp: 522467

Ion	Ratio	Lower	Upper
109	100		
83	14.6	0.0	43.8

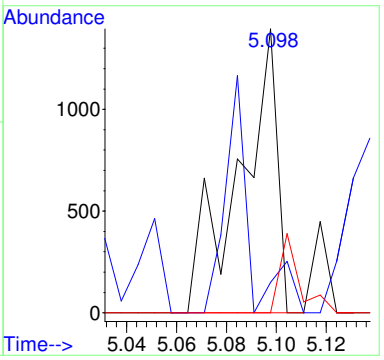


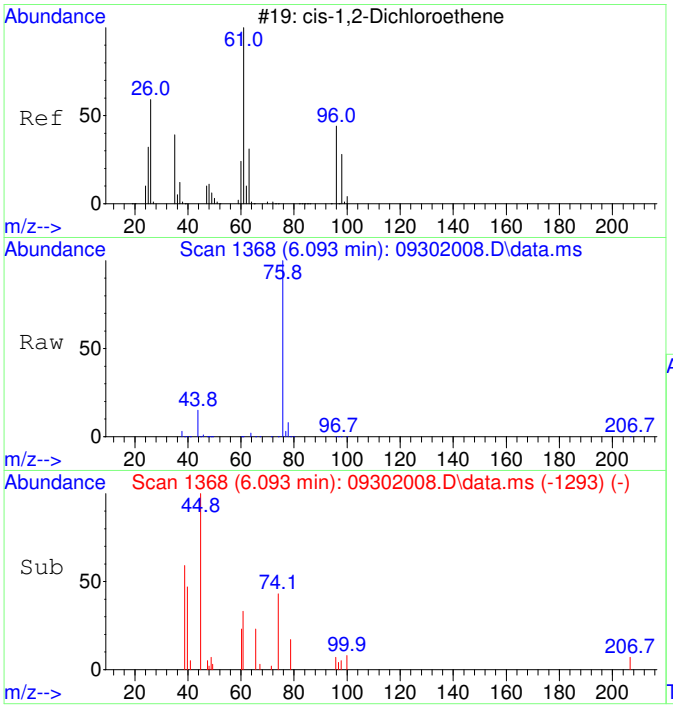


#28
1,1-Dichloroethane SCAN
Concen: 47.29 ug/L
RT: 5.098 min Scan# 1218
Delta R.T. -0.007 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 63 Resp: 1460

Ion	Ratio	Lower	Upper
63	100		
65	53.2	1.3	61.3
83	14.5	0.0	45.9

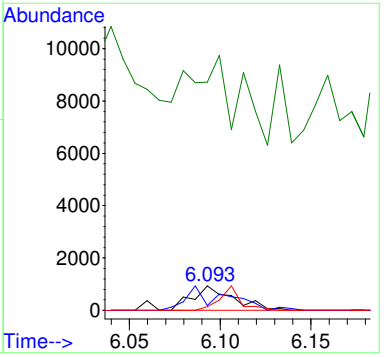


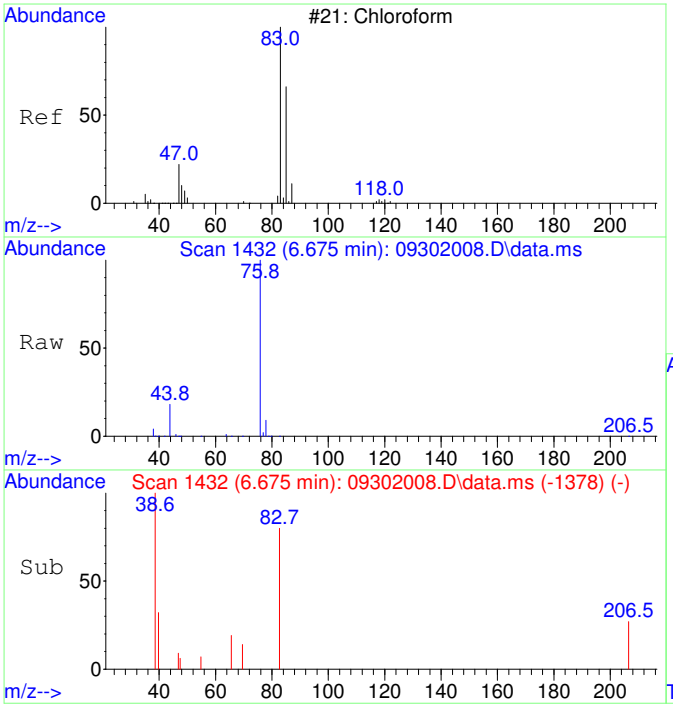


#29
cis-1,2-Dichloroethene SCAN
Concen: 44.53 ug/L
RT: 6.093 min Scan# 1368
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 61 Resp: 1473

Ion	Ratio	Lower	Upper
61	100		
96	97.9	39.9	99.9
98	49.5	13.5	73.5
64	165.0	4.5	64.5#

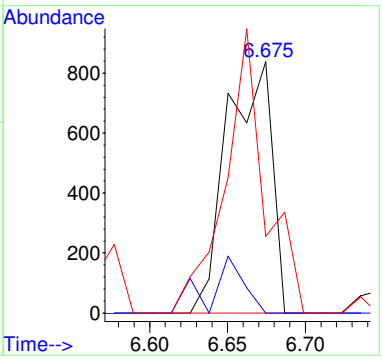


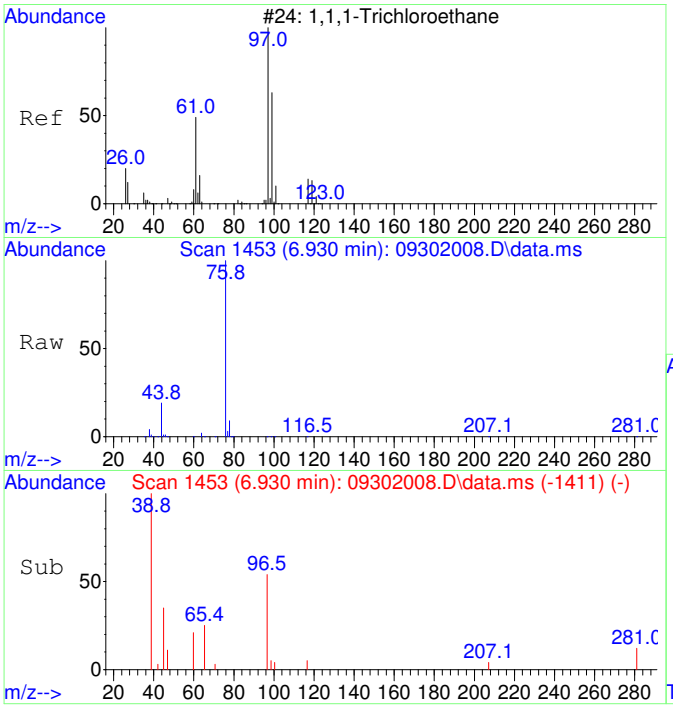


#30
Chloroform SCAN
Concen: 47.19 ug/L
RT: 6.675 min Scan# 1432
Delta R.T. 0.012 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 83 Resp: 1693

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

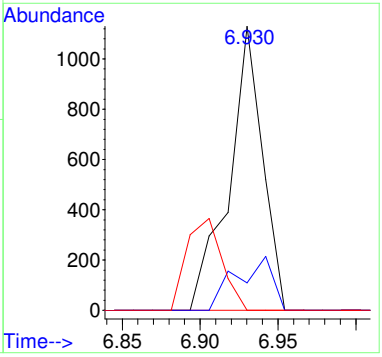


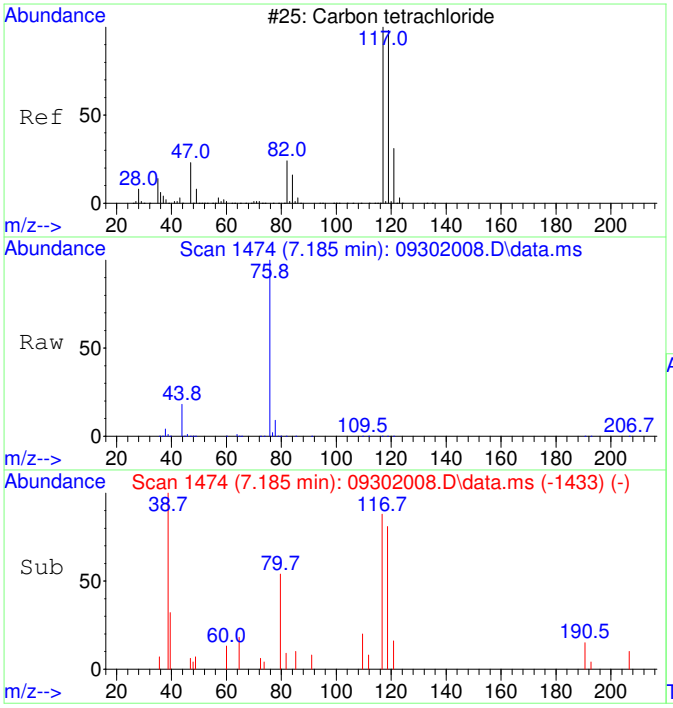


#31
1,1,1-Trichloroethane SCAN
Concen: 52.12 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. 0.012 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 97 Resp: 1704

Ion	Ratio	Lower	Upper
97	100		
99	20.5	43.6	103.6#
61	0.0	18.0	78.0#

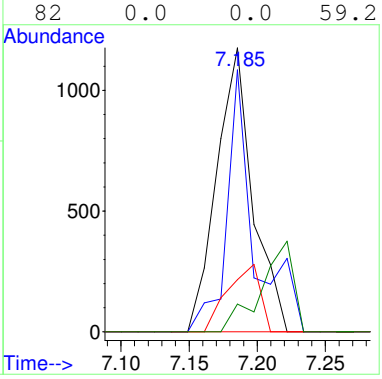


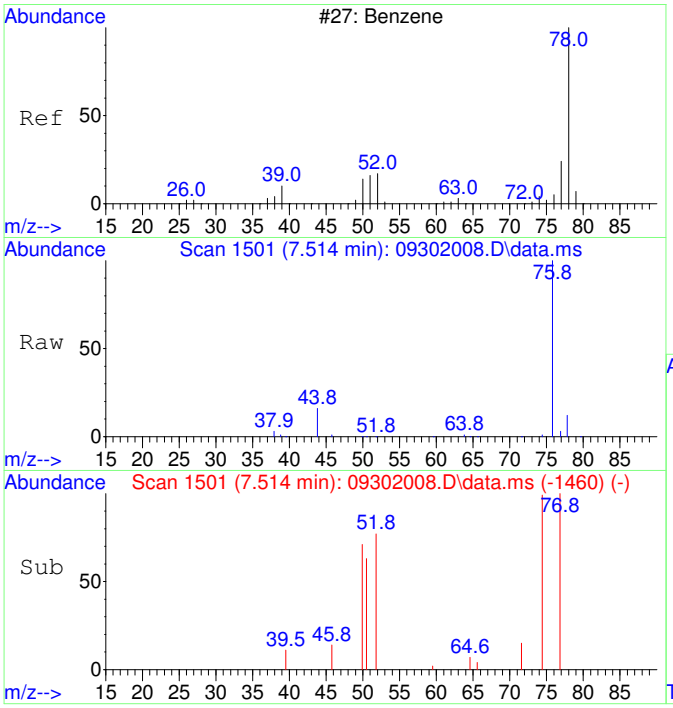


#32
Carbon tetrachloride SCAN
Concen: 63.43 ug/L
RT: 7.185 min Scan# 1474
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:117 Resp: 2163

Ion	Ratio	Lower	Upper
117	100		
119	69.7	75.5	135.5#
121	21.5	0.0	58.8
82	0.0	0.0	59.2

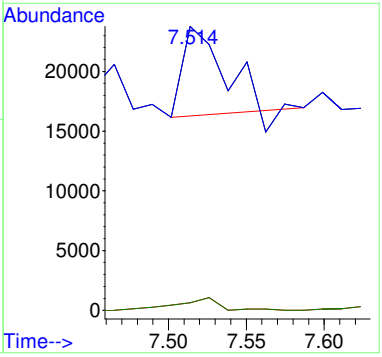


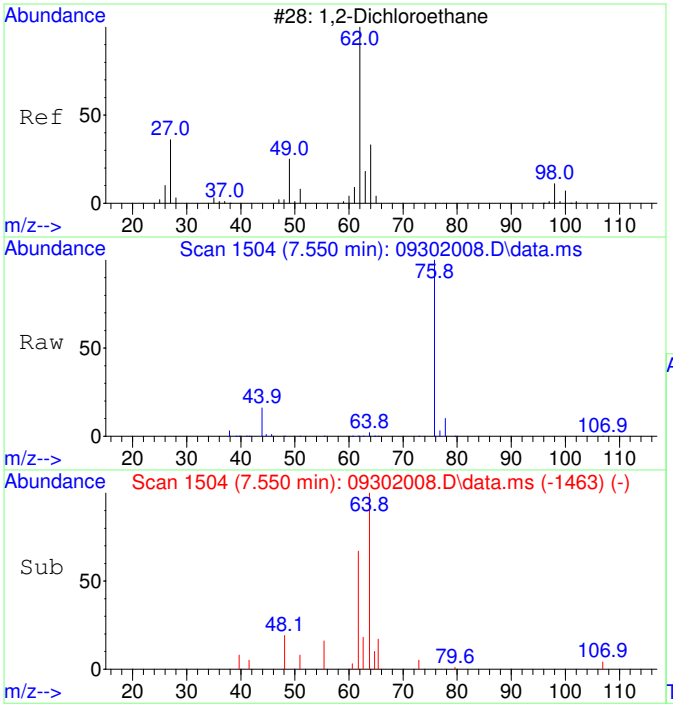


#33
Benzene SCAN
Concen: 149.54 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 78 Resp: 13461

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	15.0	0.0	47.9
51	15.0	0.0	44.1

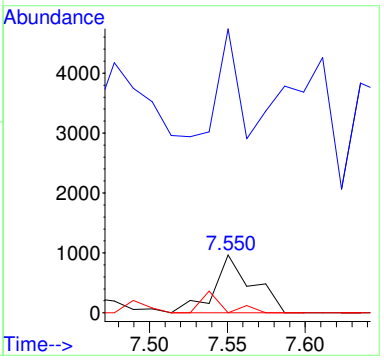


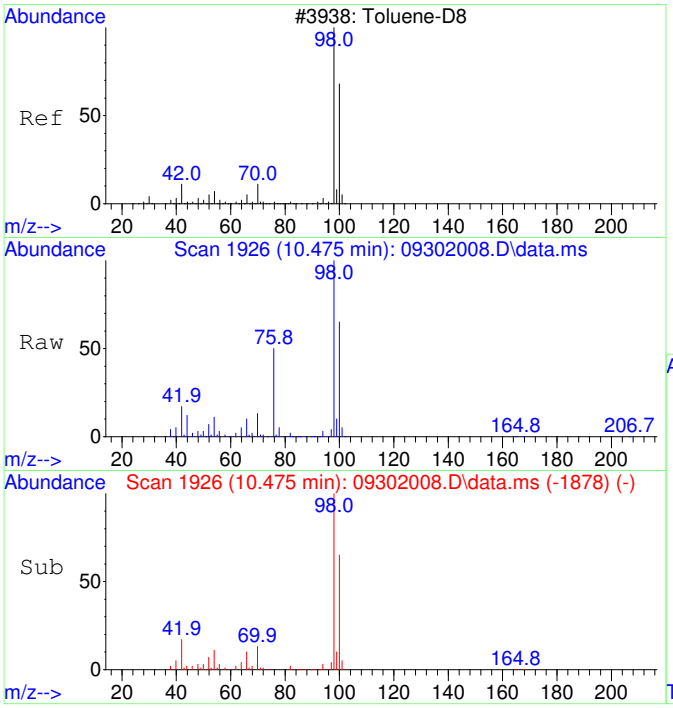


#34
1,2-Dichloroethane SCAN
Concen: 49.46 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 62 Resp: 1644

Ion	Ratio	Lower	Upper
62	100		
64	67.0	5.2	65.2#
49	21.4	3.9	63.9

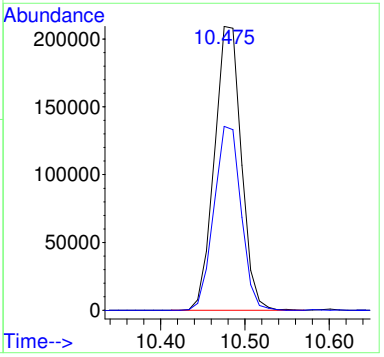


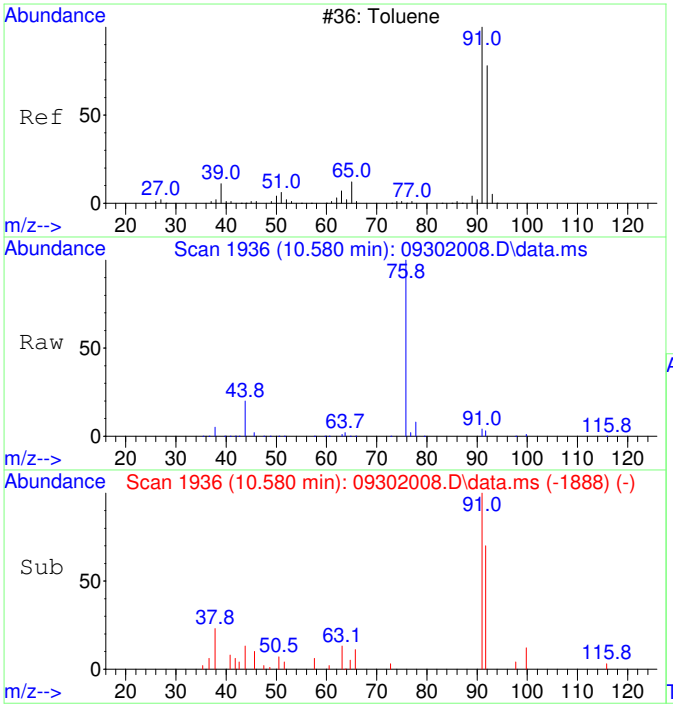


#36
Toluene-d8 SCAN
Concen: 4693.48 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 98 Resp: 465915

Ion	Ratio	Lower	Upper
98	100		
100	65.3	40.0	100.0

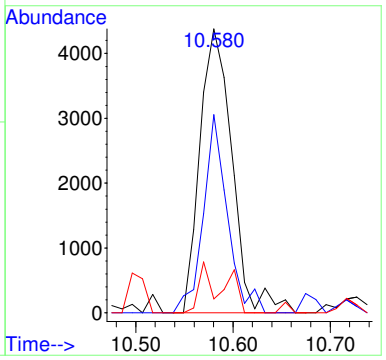


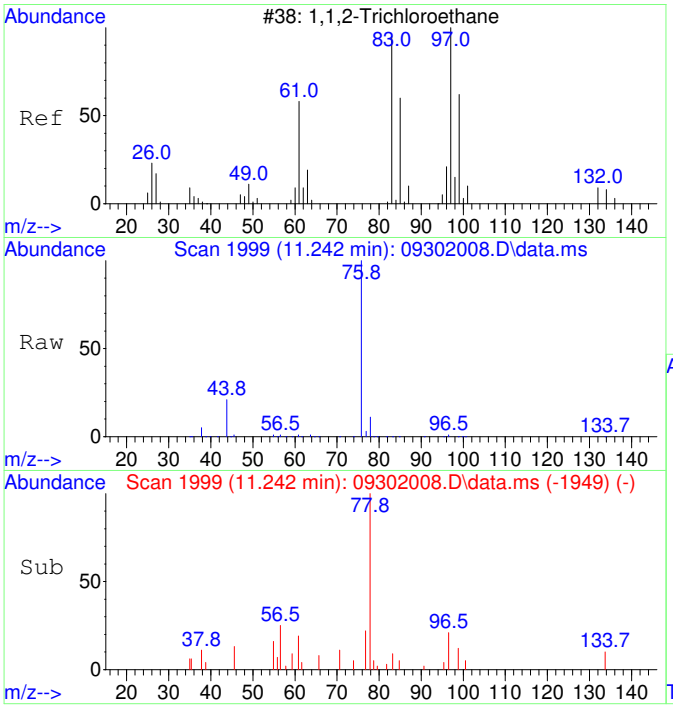


#37
Toluene SCAN
Concen: 79.54 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 10112

Ion	Ratio	Lower	Upper
91	100		
92	52.1	28.3	88.3
65	13.1	0.0	41.0

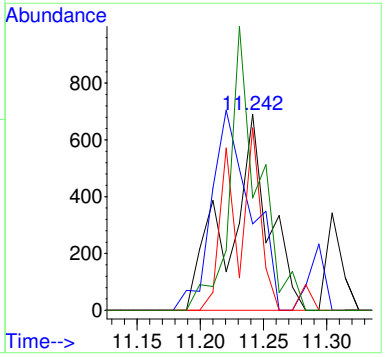


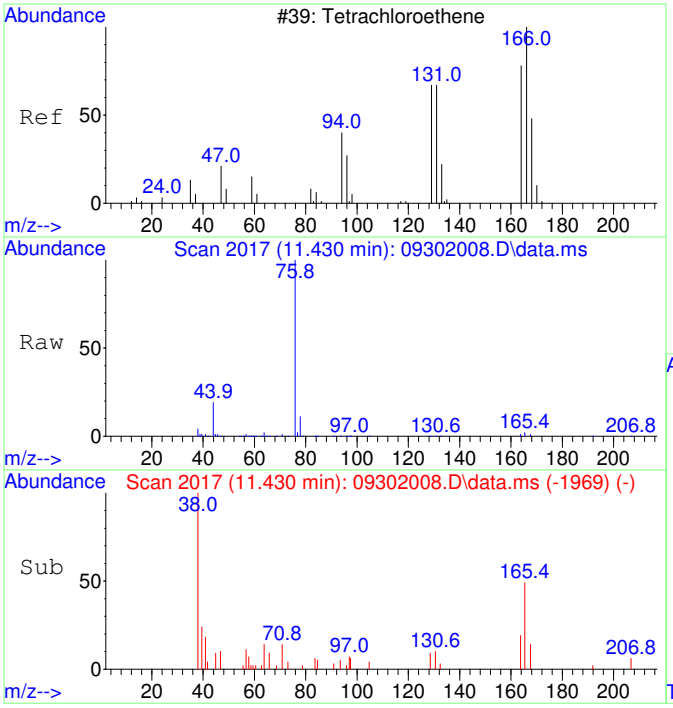


#38
1,1,2-Trichloroethane SCAN
Concen: 52.74 ug/L
RT: 11.242 min Scan# 1999
Delta R.T. 0.021 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 97 Resp: 1505

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	64.5	32.1	92.1
99	104.3	36.7	96.7#

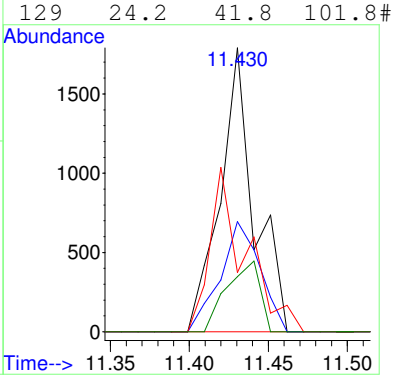


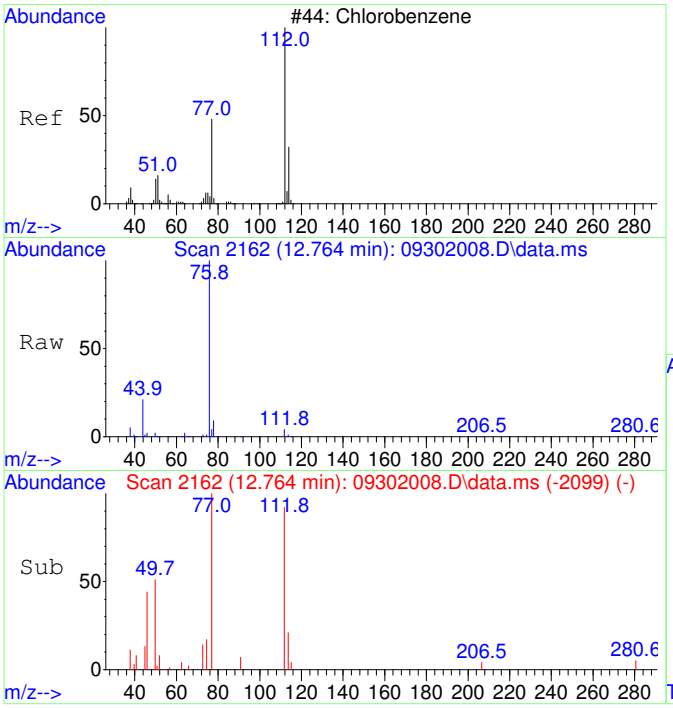


#39
Tetrachloroethene SCAN
Concen: 88.11 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:166 Resp: 2691

Ion	Ratio	Lower	Upper
166	100		
164	45.3	50.9	110.9#
131	0.0	38.7	98.7#
129	24.2	41.8	101.8#

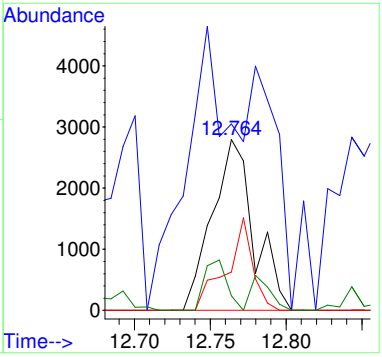


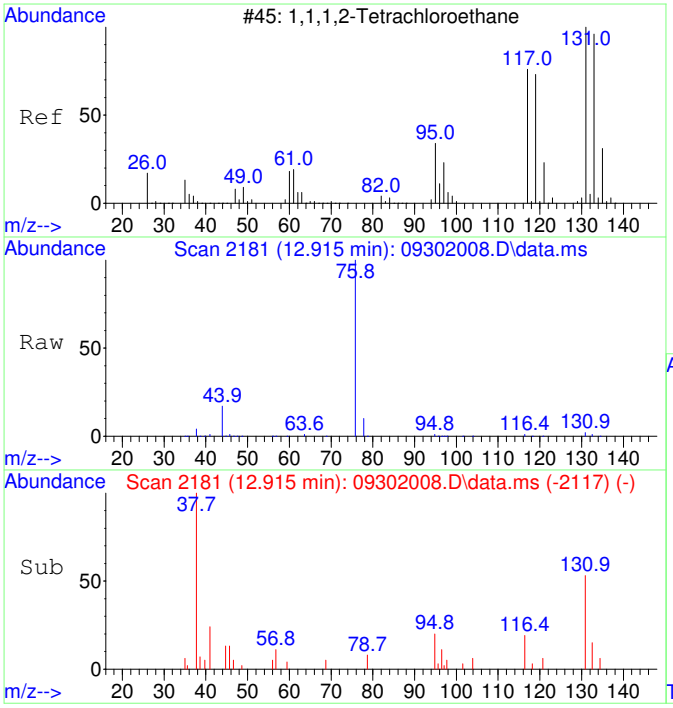


#40
Chlorobenzene SCAN
Concen: 61.71 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:112 Resp: 5361

Ion	Ratio	Lower	Upper
112	100		
77	0.0	28.2	88.2#
114	33.9	2.3	62.3
51	9.4	0.0	50.1

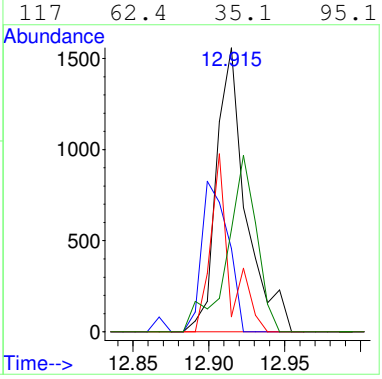


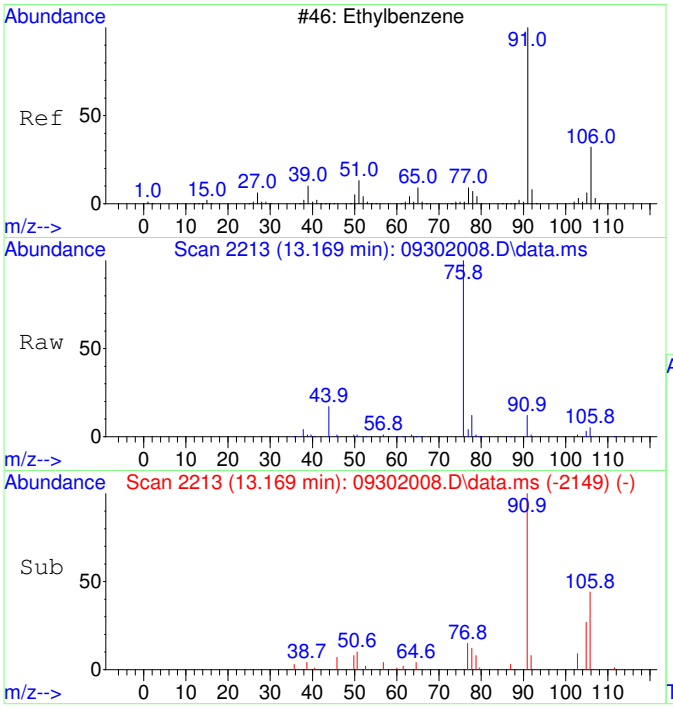


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 65.42 ug/L
RT: 12.915 min Scan# 2181
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:131 Resp: 2103

Ion	Ratio	Lower	Upper
131	100		
133	0.0	66.9	126.9#
119	41.2	40.4	100.4
117	62.4	35.1	95.1

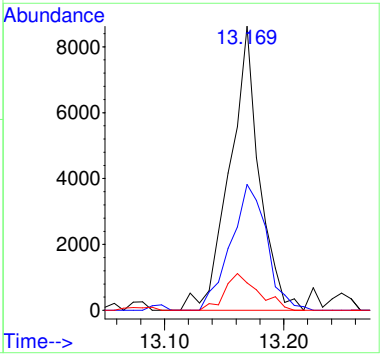


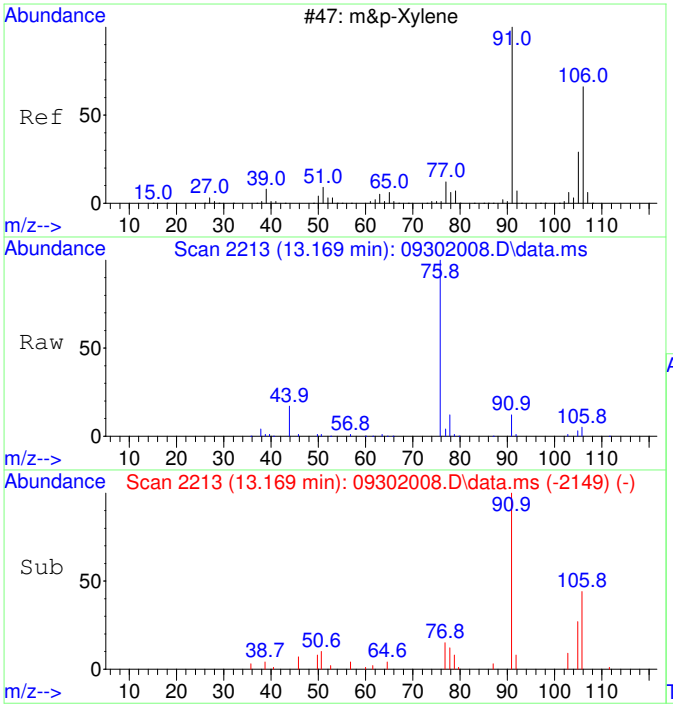


#42
Ethylbenzene SCAN
Concen: 64.24 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 14879

Ion	Ratio	Lower	Upper
91	100		
106	54.3	23.1	83.1
51	14.6	0.0	40.1

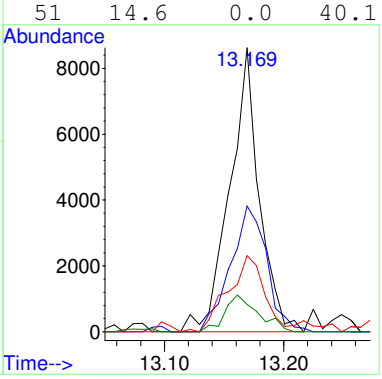


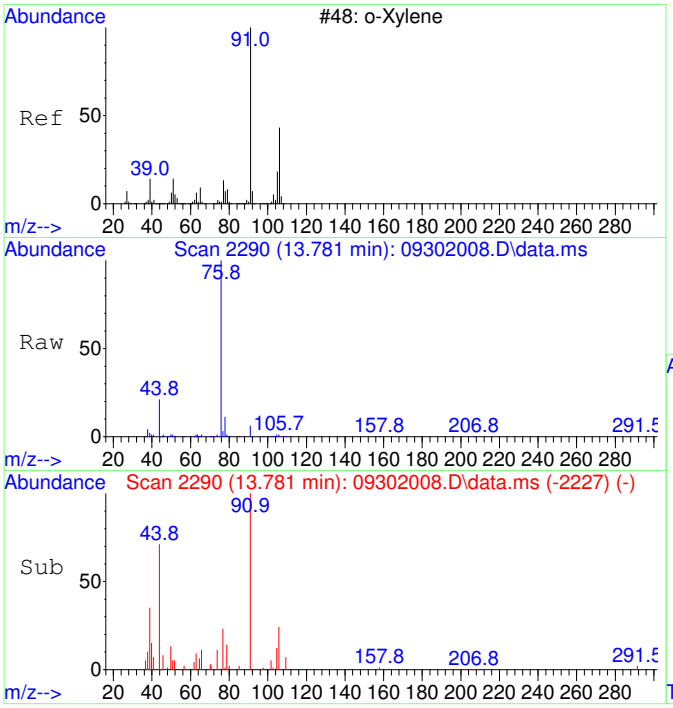


#43
m&p-Xylene SCAN
Concen: 64.24 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.008 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 14879

Ion	Ratio	Lower	Upper
91	100		
106	54.3	23.1	83.1
105	30.0	0.0	54.7
51	14.6	0.0	40.1

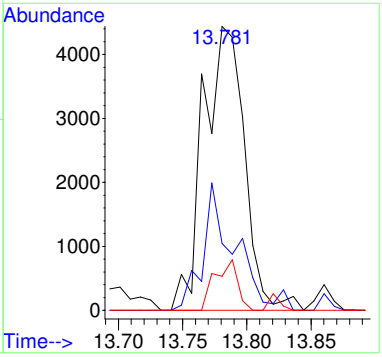


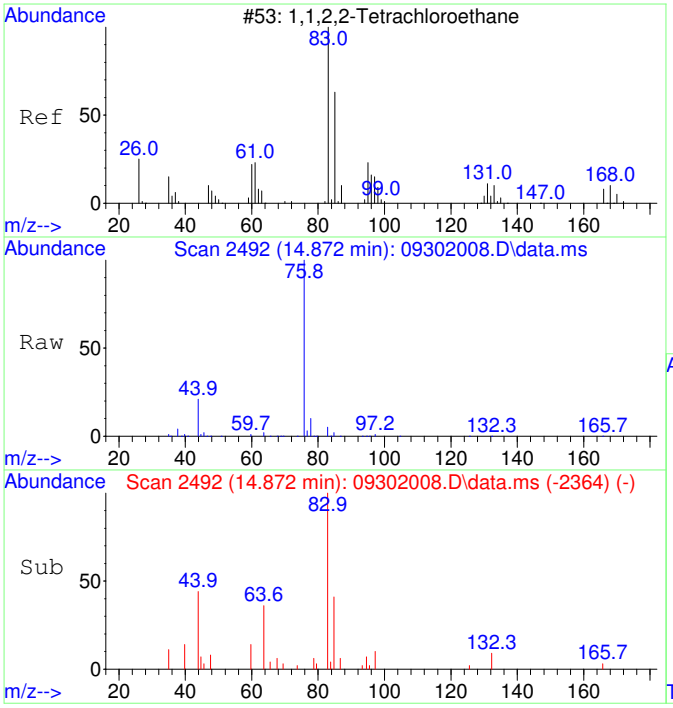


#44
o-Xylene SCAN
Concen: 79.90 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 91 Resp: 9905

Ion	Ratio	Lower	Upper
91	100		
106	34.9	18.0	78.0
105	9.9	0.0	56.6

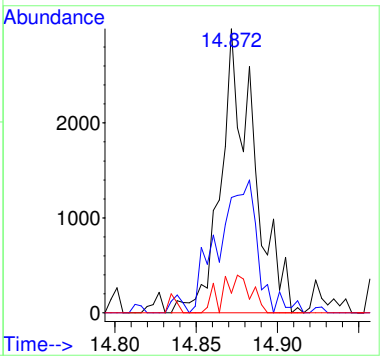


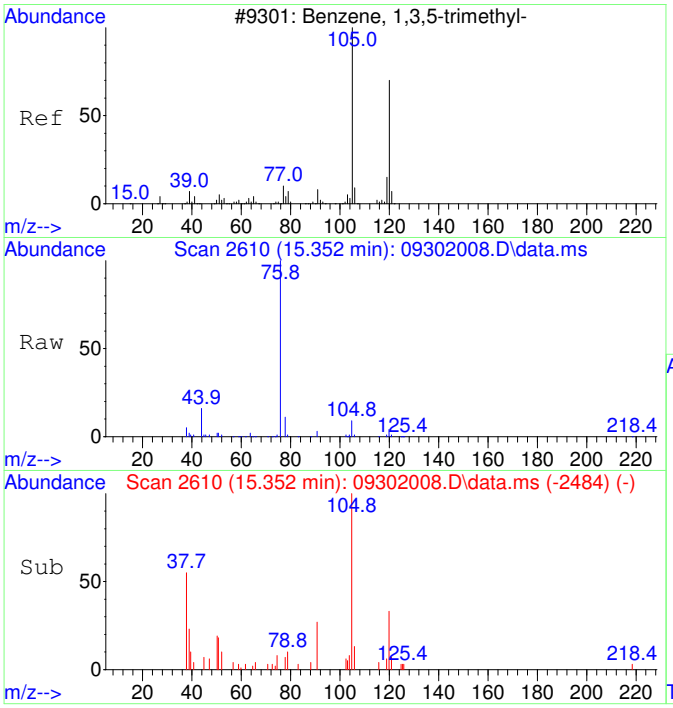


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 69.92 ug/L
RT: 14.872 min Scan# 2492
Delta R.T. -0.000 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion: 83 Resp: 4227

Ion	Ratio	Lower	Upper
83	100		
85	55.8	35.9	95.9
95	9.7	0.0	47.4

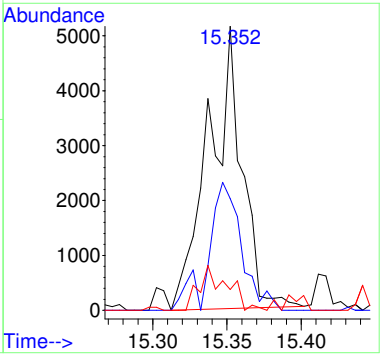


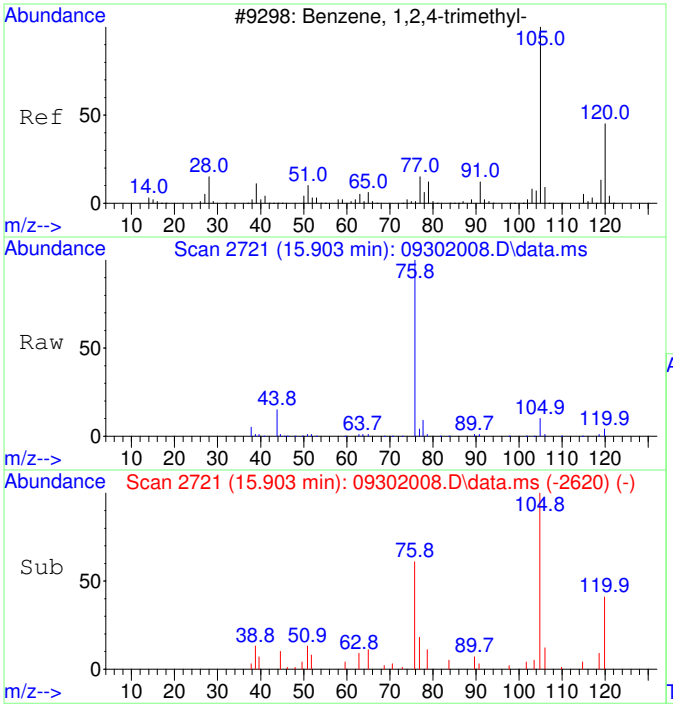


#46
1,3,5-Trimethylbenzene SCAN
Concen: 61.44 ug/L
RT: 15.352 min Scan# 2610
Delta R.T. 0.009 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:105 Resp: 8028

Ion	Ratio	Lower	Upper
105	100		
120	45.1	18.3	78.3
119	13.3	0.0	43.1

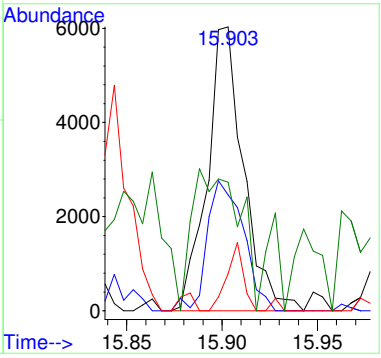




#47
1,2,4-Trimethylbenzene SCAN
Concen: 59.66 ug/L
RT: 15.903 min Scan# 2721
Delta R.T. 0.004 min
Lab File: 09302008.D
Acq: 30 Sep 2020 16:10

Tgt Ion:105 Resp: 7976

Ion	Ratio	Lower	Upper
105	100		
120	46.0	16.9	76.9
119	10.8	0.0	41.9
77	0.0	0.0	42.3



CRDL STANDARD

Radiello D1

Laboratory: EPA Region 9 Laboratory
SDG: 20274A
Client: California Site Cleanup Section 3
Project: MEW OU1 FY2020 Vapor Intrusion Investigation
Instrument ID: AG5975CV
Calibration: 2008017
Sequence: S20I029

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
S20I029-CRL1	1,1-Dichloroethene	50.0	51.7	103	ug/L	60 - 140
	trans-1,2-Dichloroethene	50.0	51.8	104	ug/L	60 - 140
	1,1-Dichloroethane	50.0	51.4	103	ug/L	60 - 140
	cis-1,2-Dichloroethene	50.0	51.6	103	ug/L	60 - 140
	Chloroform	50.0	47.9	96	ug/L	60 - 140
	Trichloroethene	50.0	48.8	98	ug/L	60 - 140
	Tetrachloroethene	50.0	49.0	98	ug/L	60 - 140
	Toluene-d8	50.0	50.9	102	ug/L	60 - 140

QLS REPORT

Instrument Name: AG5975C
Sample Name: S20I029-CRL1
Misc Info: 2030073 0.05 mg/L
Date Acquired: 9/30/20 14:31
QLast Update: Fri Aug 21 08:33:54 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.970	5000.0	5000.00	100%	60	140	pass
2)	1,1-Dichloroethene	3.090	50.0	51.66	103%	60	140	pass
3)	trans-1,2-Dichloroethene	4.396	50.0	51.83	104%	60	140	pass
4)	1,1-Dichloroethane	5.099	50.0	51.45	103%	60	140	pass
5)	cis-1,2-Dichloroethene	6.094	50.0	51.62	103%	60	140	pass
6)	Chloroform	6.664	50.0	47.88	96%	60	140	pass
7)	1,1,1-Trichloroethane	6.919	50.0	46.92	94%	60	140	pass
8)	Carbon tetrachloride	7.187	50.0	45.99	92%	60	140	pass
10)	1,2-Dichloroethane	7.552	50.0	49.49	99%	60	140	pass
11)	Trichloroethene	8.569	50.0	48.78	98%	60	140	pass
12)	Toluene-d8	10.477	50.0	50.93	102%	60	140	pass
13)	Toluene	10.571	50.0	50.87	102%	60	140	pass
14)	1,1,2-Trichloroethane	11.222	50.0	48.51	97%	60	140	pass
15)	Tetrachloroethene	11.421	50.0	49.02	98%	60	140	pass
16)	Chlorobenzene	12.757	50.0	52.02	104%	60	140	pass
17)	1,1,1,2-Tetrachloroethane	12.908	50.0	51.23	102%	60	140	pass
18)	Ethylbenzene	12.964	50.0	52.06	104%	60	140	pass
19)	m&p-Xylene	13.162	100.0	103.84	104%	60	140	pass
20)	o-Xylene	13.774	50.0	50.90	102%	60	140	pass
21)	1,1,2,2-Tetrachloroethane	14.873	50.0	52.58	105%	60	140	pass
22)	1,3,5-Trimethylbenzene	15.345	50.0	52.98	106%	60	140	pass
23)	1,2,4-Trimethylbenzene	15.896	50.0	52.53	105%	60	140	pass
24)	Naphthalene	17.903	50.0	51.70	103%	60	140	pass

Quantitation Report (Not Reviewed)

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302004.D
Acq On : 30 Sep 2020 14:31
InstName : AG5975C
Operator : TD
Sample : S20I029-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 30 14:49:56 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

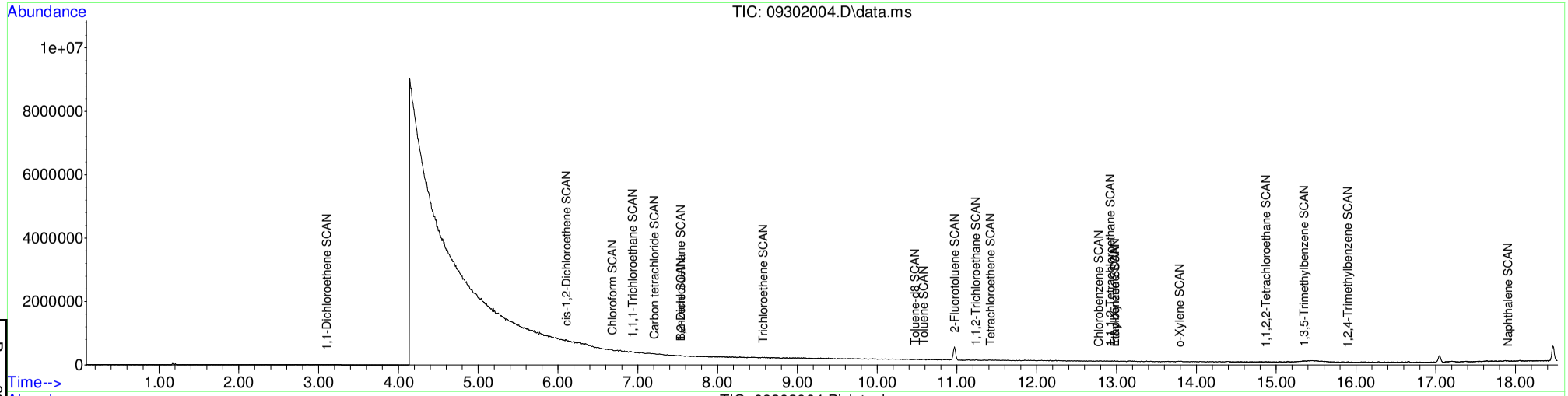
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	681597	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	6795	50.93 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery =	1.02%#	
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.093	61	1852	68.05 ug/L #	56
3] trans-1,2-Dichloroethene	4.422	61	1630	51.83 ug/L	71
4] 1,1-Dichloroethane	5.112	63	2014	51.45 ug/L	67
5] cis-1,2-Dichloroethene	6.101	61	2133	51.62 ug/L	98
6] Chloroform	6.664	83	2025	47.88 ug/L	99
7] 1,1,1-Trichloroethane	6.919	97	2155	46.92 ug/L	99
8] Carbon tetrachloride	7.199	117	1988	45.99 ug/L	99
9] Benzene	7.515	78	5721	49.40 ug/L #	22
10] 1,2-Dichloroethane	7.552	62	2046	49.49 ug/L #	7
11] Trichloroethene	8.575	130	1701	48.78 ug/L	93
13] Toluene	10.571	91	8653	50.87 ug/L	98
14] 1,1,2-Trichloroethane	11.222	97	1798	48.51 ug/L	97
15] Tetrachloroethene	11.432	166	2413	49.02 ug/L	97
16] Chlorobenzene	12.765	112	6336	52.02 ug/L	91
17] 1,1,1,2-Tetrachloroethane	12.916	131	2236	51.23 ug/L	99
18] Ethylbenzene	12.972	91	10780	52.06 ug/L	96
19] m&p-Xylene	13.162	91	16804	103.84 ug/L	93
20] o-Xylene	13.782	91	8801	50.90 ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.877	83	4029	52.58 ug/L	99
22] 1,3,5-Trimethylbenzene	15.345	105	9750	52.98 ug/L	96
23] 1,2,4-Trimethylbenzene	15.901	105	10041	52.53 ug/L	93
24] Naphthalene	17.902	128	15619	51.70 ug/L	99
25) 2-Fluorotoluene SCAN	10.969	109	330598	4975.65 ug/L	94
26) 1,1-Dichloroethene SCAN	3.103	61	372	26.36 ug/L #	39
29) cis-1,2-Dichloroethene...	6.106	61	1158	53.49 ug/L #	53
30) Chloroform SCAN	6.675	83	1521	64.77 ug/L	83
31) 1,1,1-Trichloroethane ...	6.930	97	1026	47.94 ug/L #	38
32) Carbon tetrachloride SCAN	7.210	117	1170	52.41 ug/L #	20
33) Benzene SCAN	7.538	78	13597	230.77 ug/L #	91
34) 1,2-Dichloroethane SCAN	7.538	62	723	33.23 ug/L #	1
35) Trichloroethene SCAN	8.574	130	485	29.95 ug/L #	19
36) Toluene-d8 SCAN	10.475	98	3472	53.43 ug/L	90
37) Toluene SCAN	10.580	91	4822	57.95 ug/L #	53
38) 1,1,2-Trichloroethane ...	11.231	97	663	35.50 ug/L #	18
39) Tetrachloroethene SCAN	11.420	166	1081	54.07 ug/L #	57
40) Chlorobenzene SCAN	12.772	112	3248	57.12 ug/L #	42
41) 1,1,1,2-Tetrachloroeth...	12.915	131	1262	59.97 ug/L	79
42) Ethylbenzene SCAN	12.978	91	5384	35.51 ug/L	88
43) m&p-Xylene SCAN	12.978	91	5384	35.51 ug/L	83
44) o-Xylene SCAN	13.789	91	4448	54.81 ug/L	95
45) 1,1,2,2-Tetrachloroeth...	14.872	83	1266	31.99 ug/L	72
46) 1,3,5-Trimethylbenzene...	15.343	105	3959	46.29 ug/L	75
47) 1,2,4-Trimethylbenzene...	15.894	105	5286	60.40 ug/L #	30
48) Naphthalene SCAN	17.905	128	7044	53.20 ug/L	93

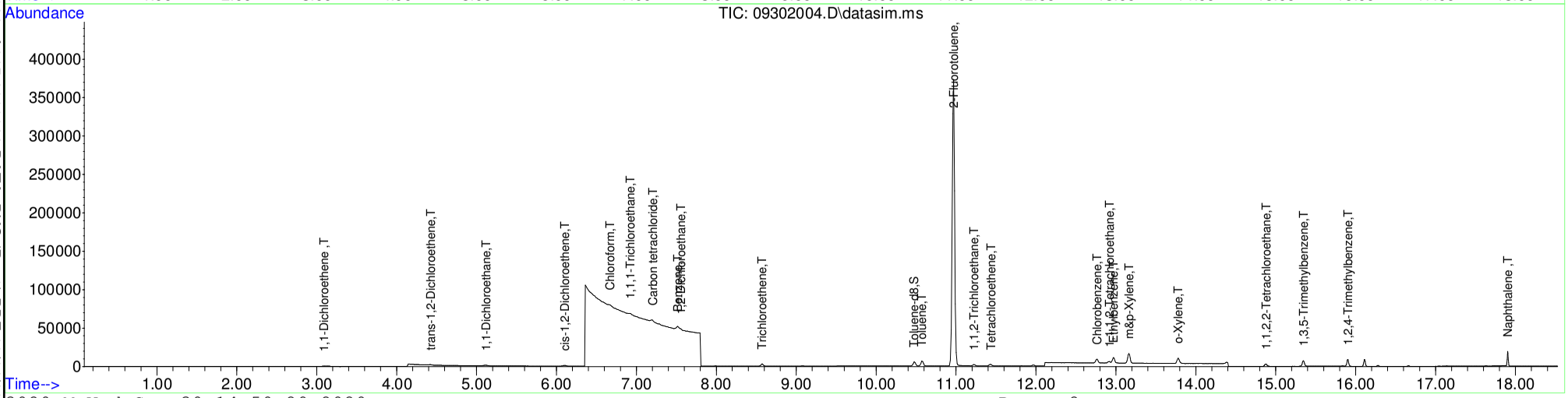
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302004.D
Acq On : 30 Sep 2020 14:31
InstName : AG5975C
Operator : TD
Sample : S20I029-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 30 14:49:56 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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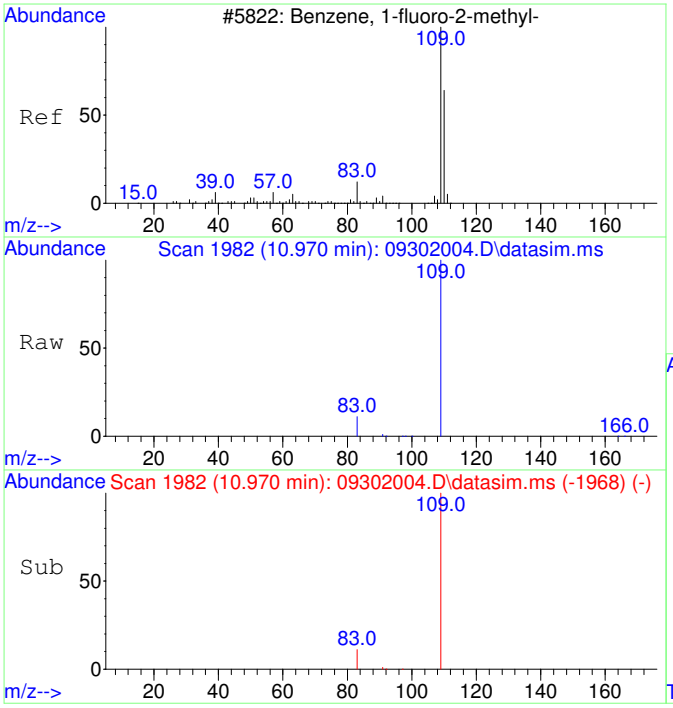
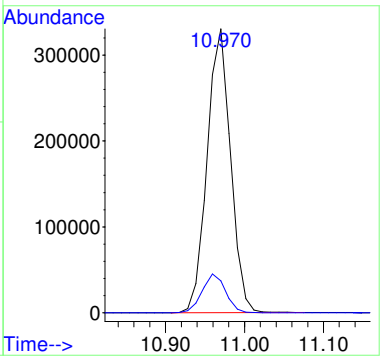
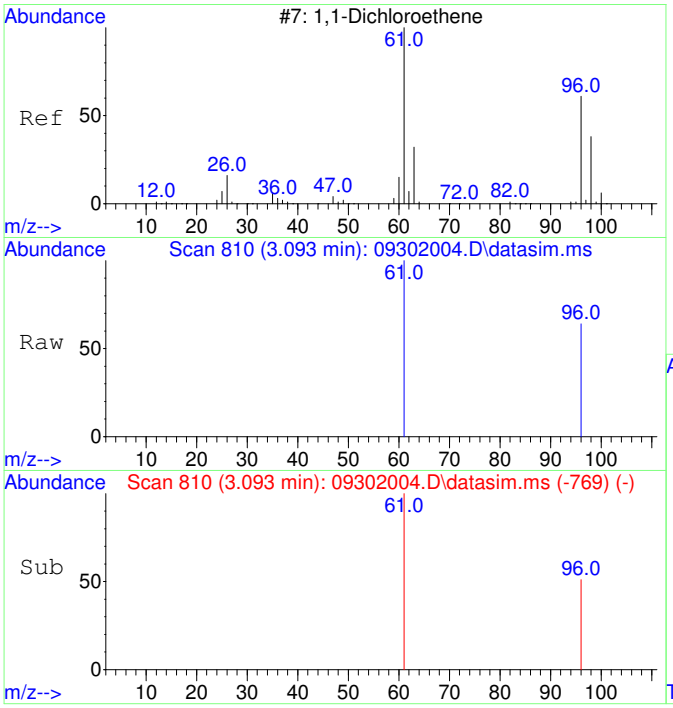


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:109 Resp: 681597

Ion	Ratio	Lower	Upper
109	100		
83	13.7	0.0	42.3

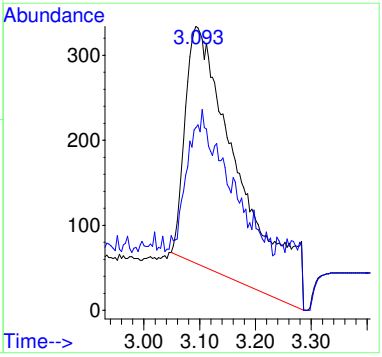




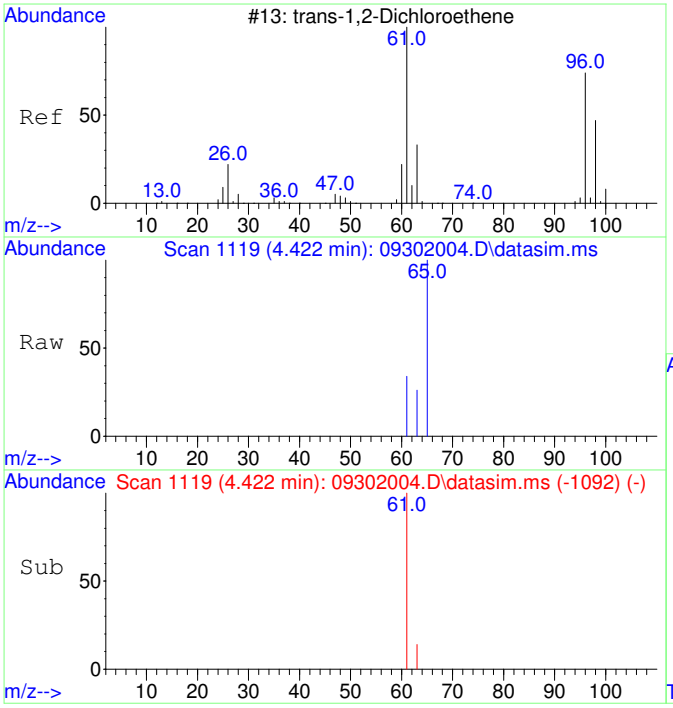
#2
1,1-Dichloroethene
Concen: 68.05 ug/L
RT: 3.093 min Scan# 810
Delta R.T. 0.004 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 61 Resp: 1852

Ion	Ratio	Lower	Upper
61	100		
96	31.7	37.2	97.2#



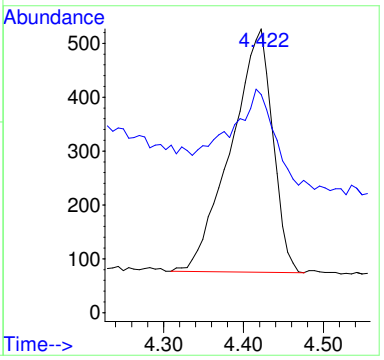
Before MI:
IMPROPER
BASELINE

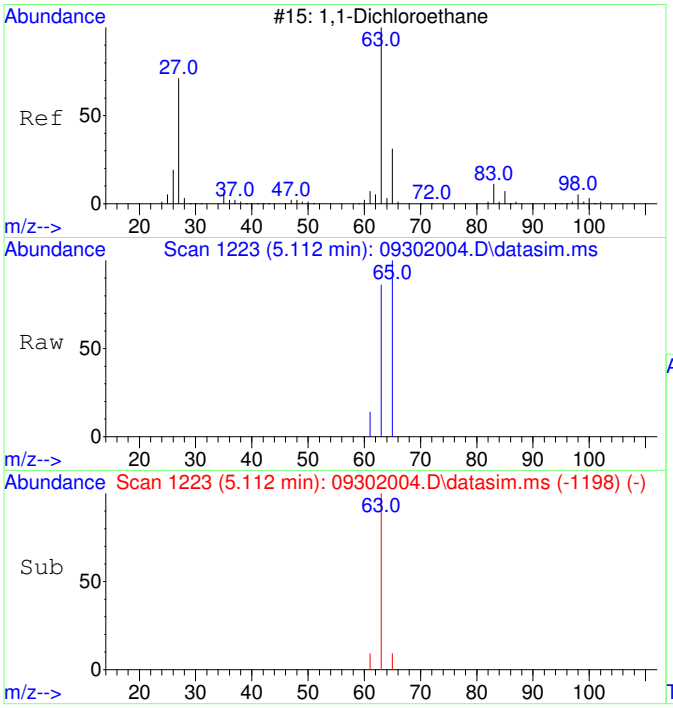


#3
trans-1,2-Dichloroethene
Concen: 51.83 ug/L
RT: 4.422 min Scan# 1119
Delta R.T. 0.027 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 61 Resp: 1630

Ion	Ratio	Lower	Upper
61	100		
63	48.8	2.4	62.4

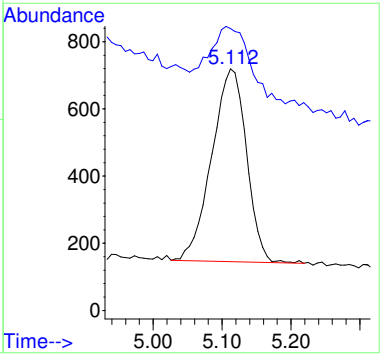


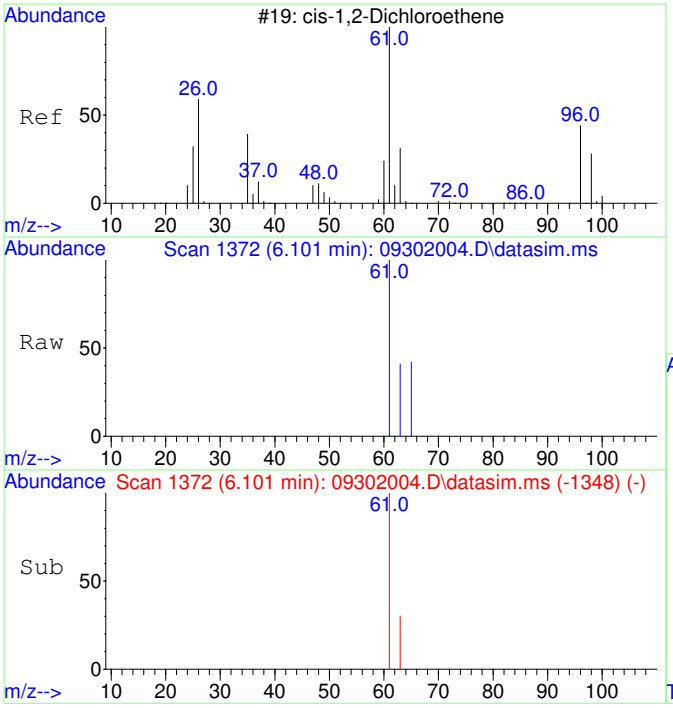


#4
1,1-Dichloroethane
Concen: 51.45 ug/L
RT: 5.112 min Scan# 1223
Delta R.T. 0.013 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 63 Resp: 2014

Ion	Ratio	Lower	Upper
63	100		
65	50.2	1.8	61.8

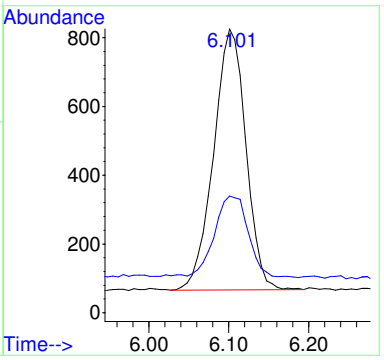


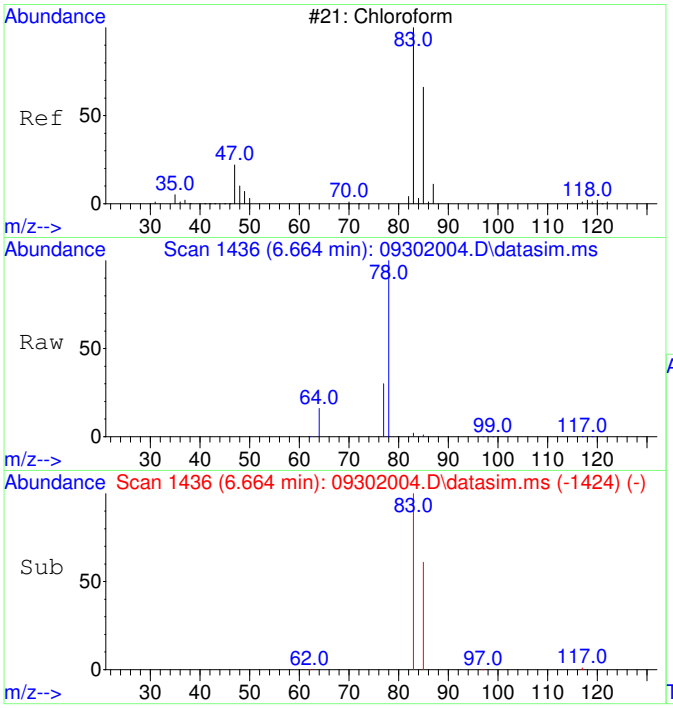


#5
cis-1,2-Dichloroethene
Concen: 51.62 ug/L
RT: 6.101 min Scan# 1372
Delta R.T. 0.007 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 61 Resp: 2133

Ion	Ratio	Lower	Upper
61	100		
63	33.6	2.5	62.5

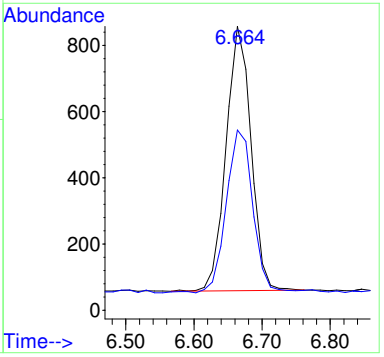


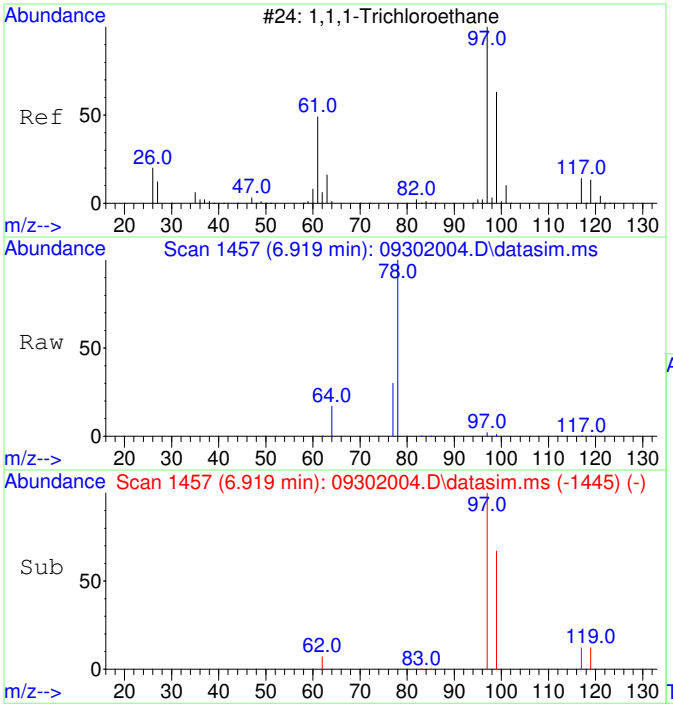


#6
Chloroform
Concen: 47.88 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 83 Resp: 2025

Ion	Ratio	Lower	Upper
83	100		
85	65.6	35.1	95.1

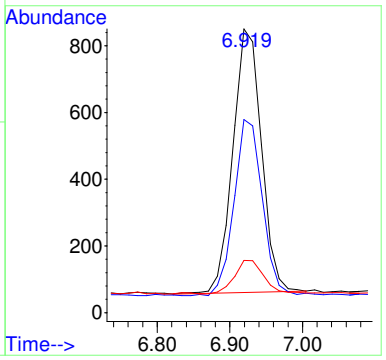


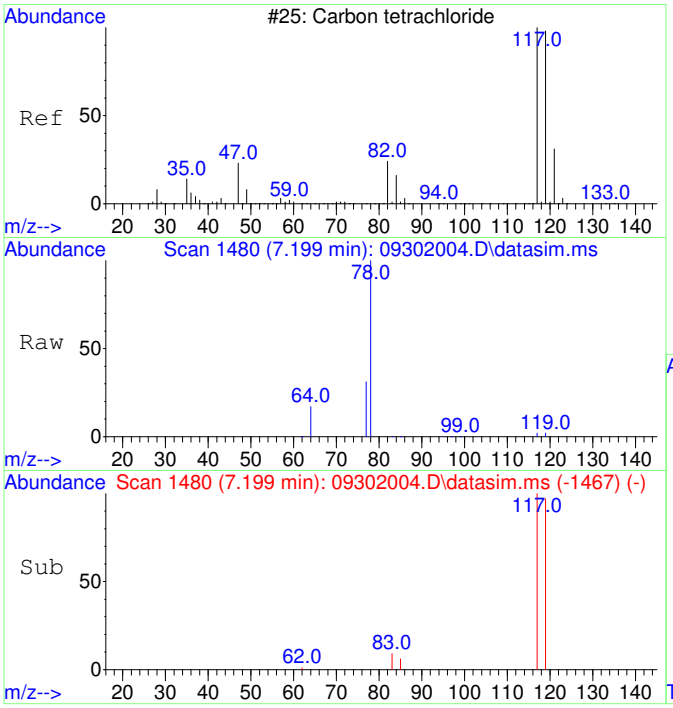


#7
1,1,1-Trichloroethane
Concen: 46.92 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 97 Resp: 2155

Ion	Ratio	Lower	Upper
97	100		
99	65.6	34.6	94.6
117	13.5	0.0	43.2

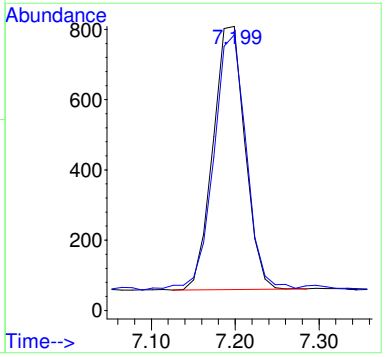


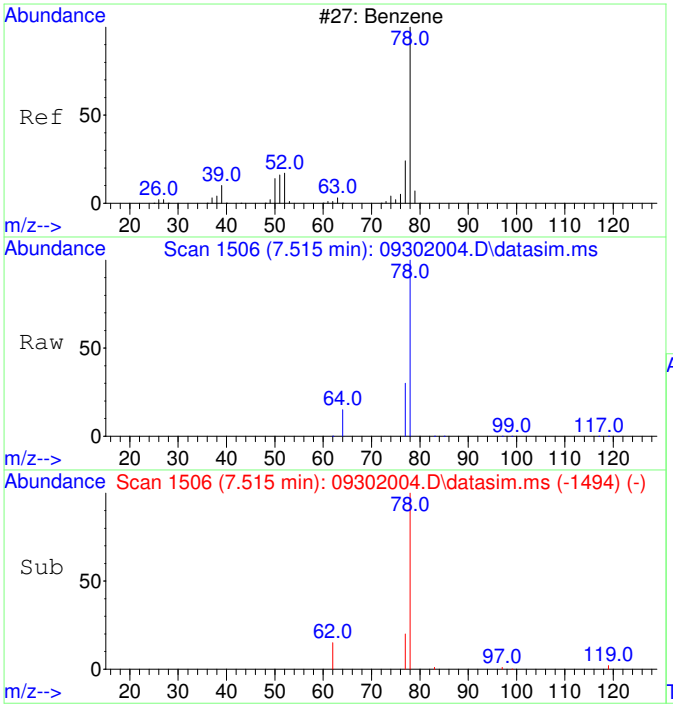


#8
Carbon tetrachloride
Concen: 45.99 ug/L
RT: 7.199 min Scan# 1480
Delta R.T. 0.012 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:117 Resp: 1988

Ion	Ratio	Lower	Upper
117	100		
119	97.6	66.4	126.4

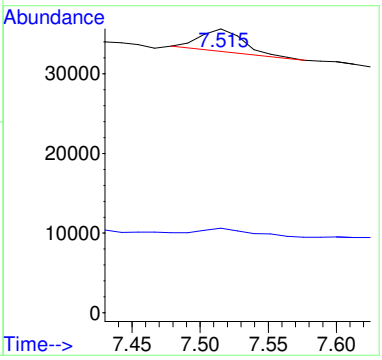


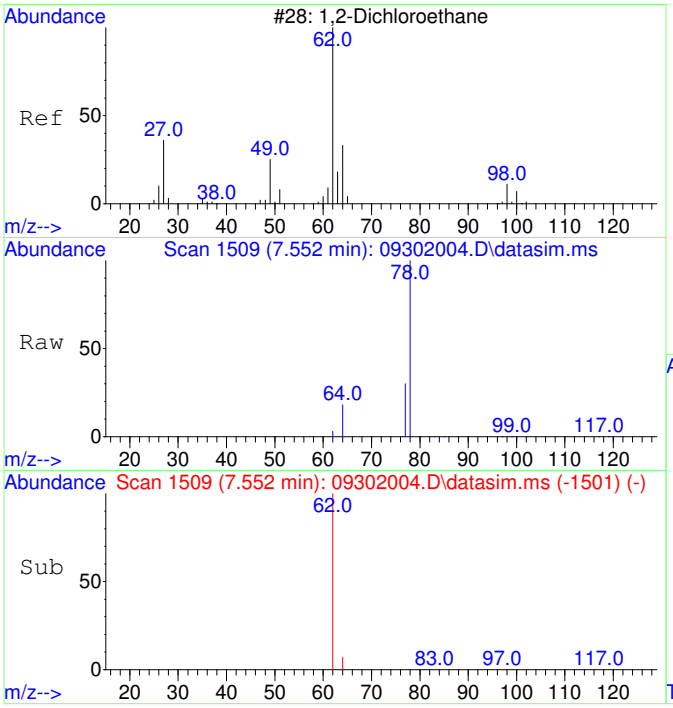


#9
Benzene
Concen: 49.40 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 78 Resp: 5721

Ion	Ratio	Lower	Upper
78	100		
77	61.2	0.0	53.2#

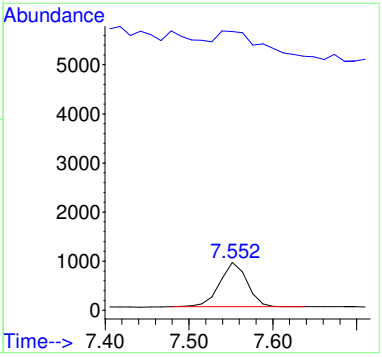


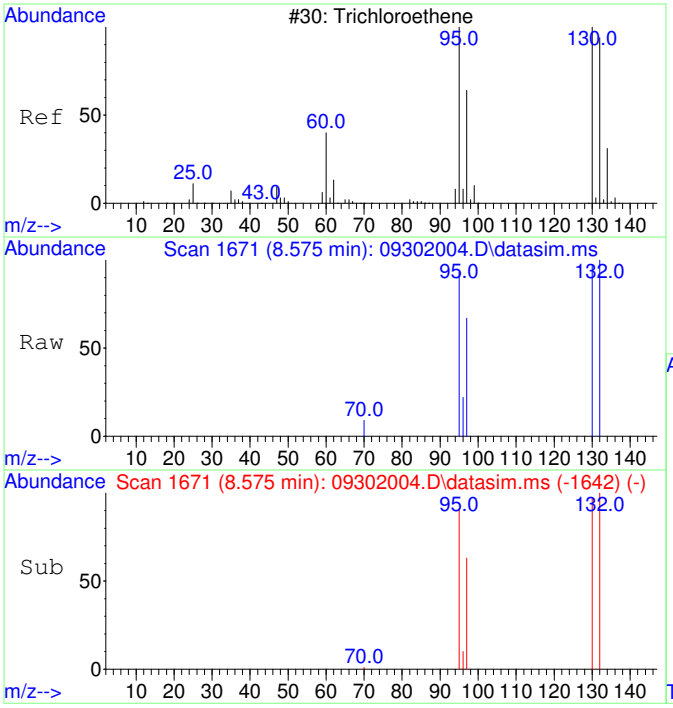


#10
1,2-Dichloroethane
Concen: 49.49 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 62 Resp: 2046

Ion	Ratio	Lower	Upper
62	100		
64	84.5	2.3	62.3#

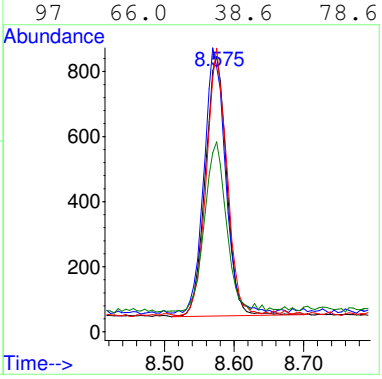


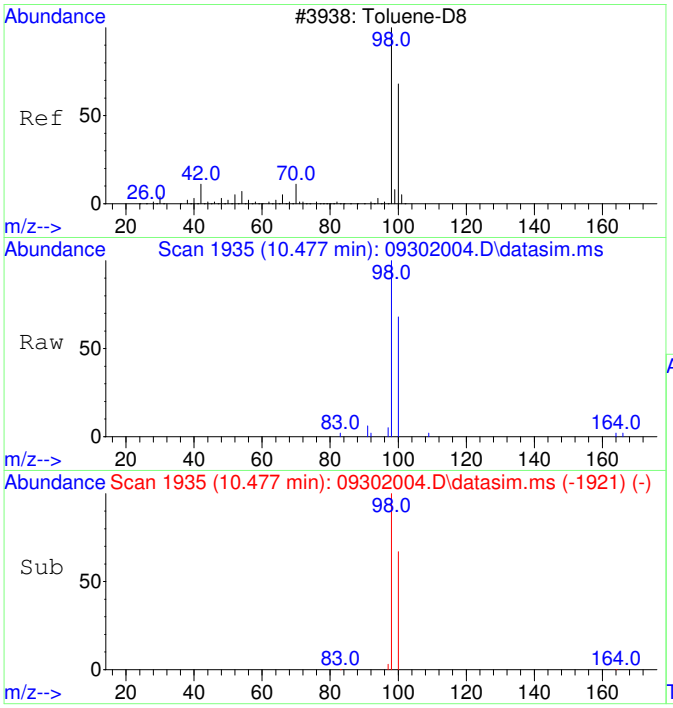


#11
Trichloroethene
Concen: 48.78 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:130 Resp: 1701

Ion	Ratio	Lower	Upper
130	100		
95	101.2	60.7	120.7
132	97.7	76.0	116.0
97	66.0	38.6	78.6

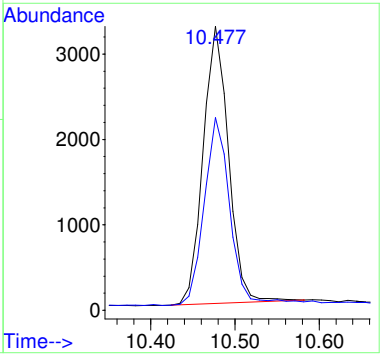


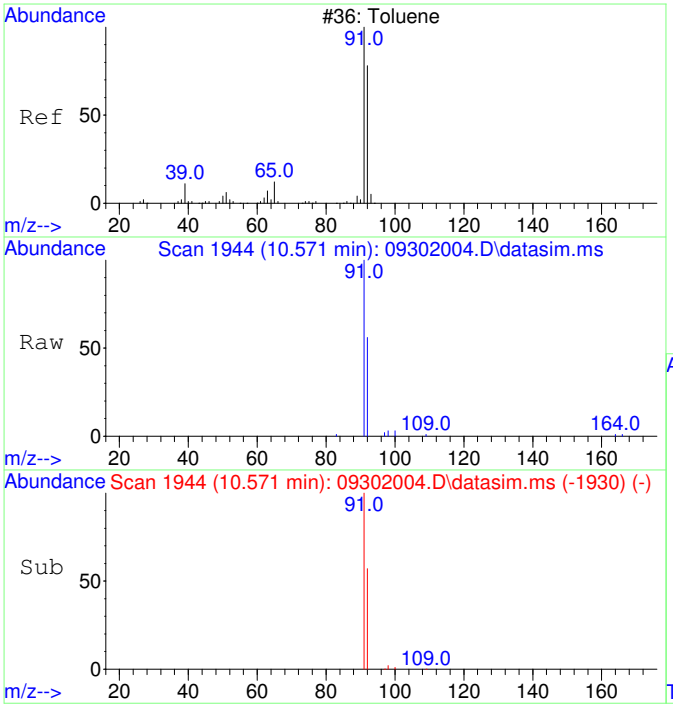


#12
Toluene-d8
Concen: 50.93 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 98 Resp: 6795

Ion	Ratio	Lower	Upper
98	100		
100	69.9	37.1	97.1

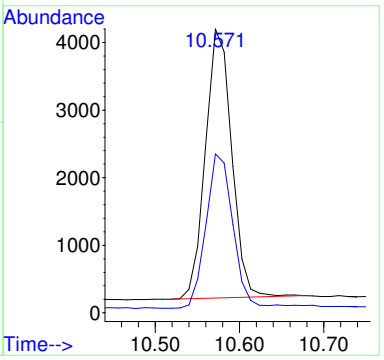


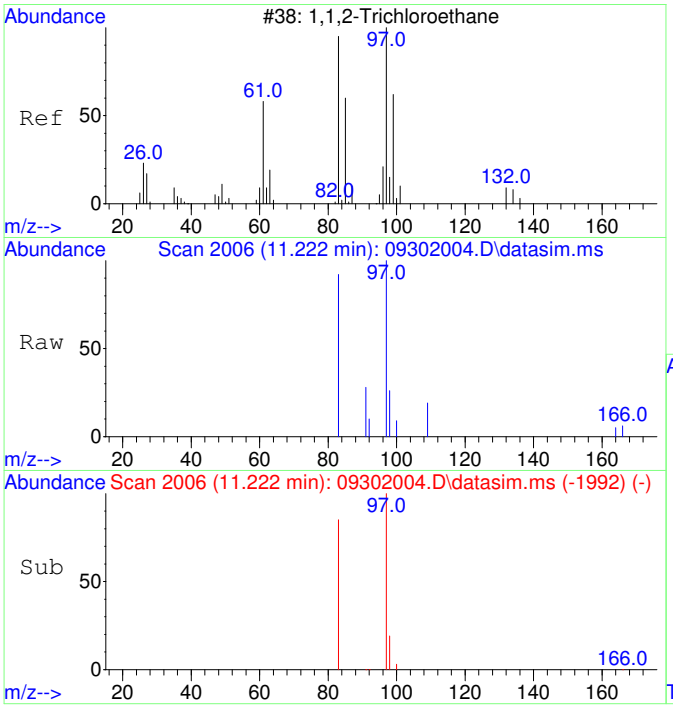


#13
Toluene
Concen: 50.87 ug/L
RT: 10.571 min Scan# 1944
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 8653

Ion	Ratio	Lower	Upper
91	100		
92	58.4	29.9	89.9

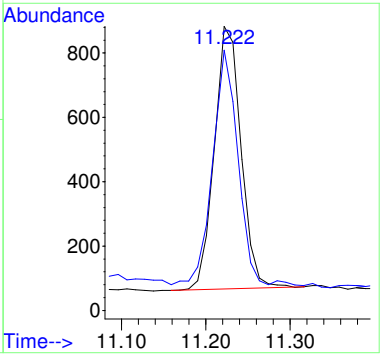


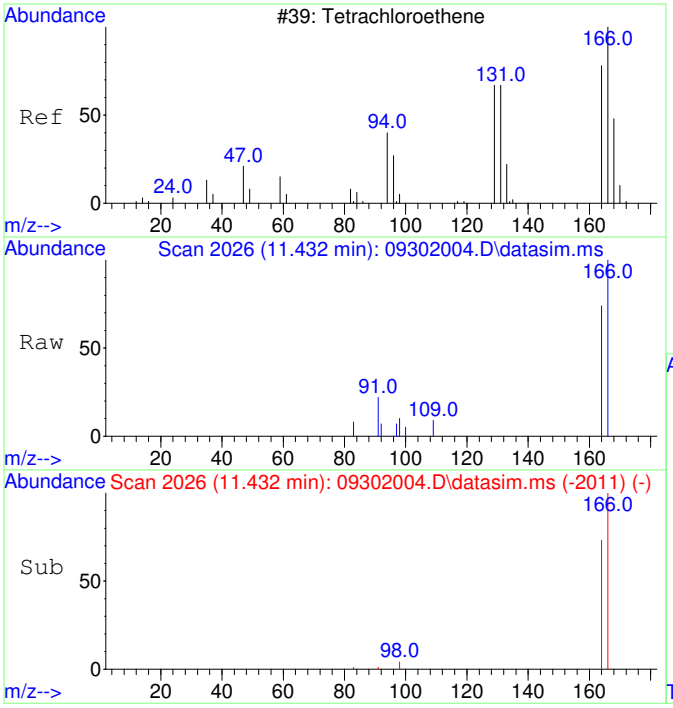


#14
1,1,2-Trichloroethane
Concen: 48.51 ug/L
RT: 11.222 min Scan# 2006
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 97 Resp: 1798

Ion	Ratio	Lower	Upper
97	100		
83	83.4	51.2	111.2

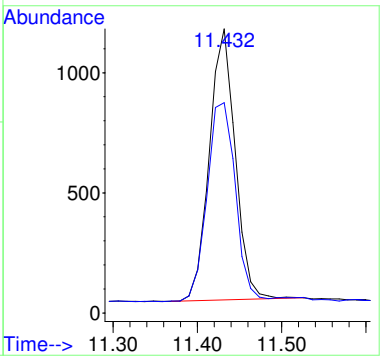


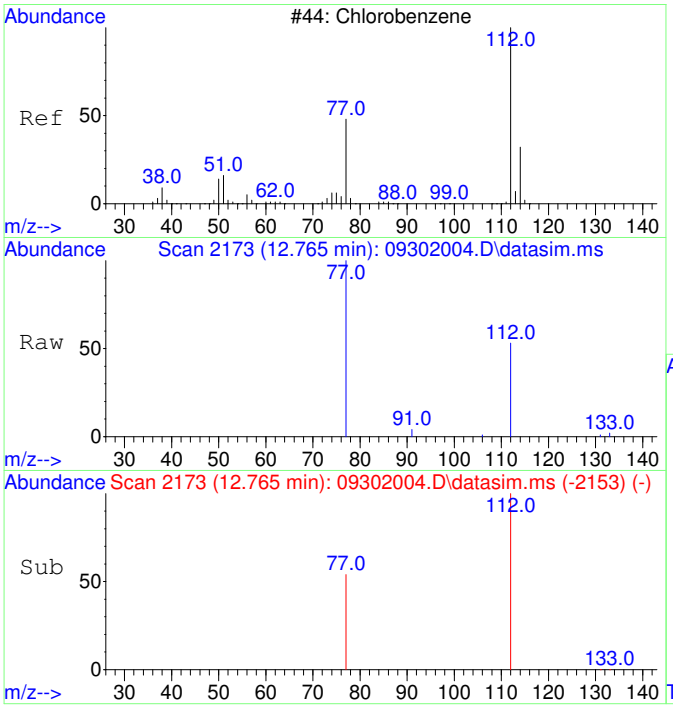


#15
Tetrachloroethene
Concen: 49.02 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:166 Resp: 2413

Ion	Ratio	Lower	Upper
166	100		
164	80.7	47.8	107.8

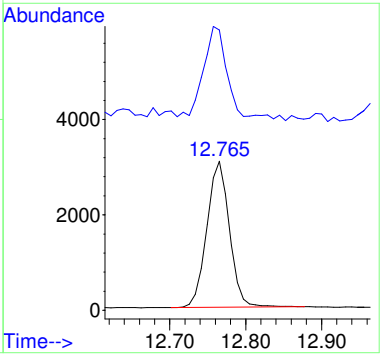


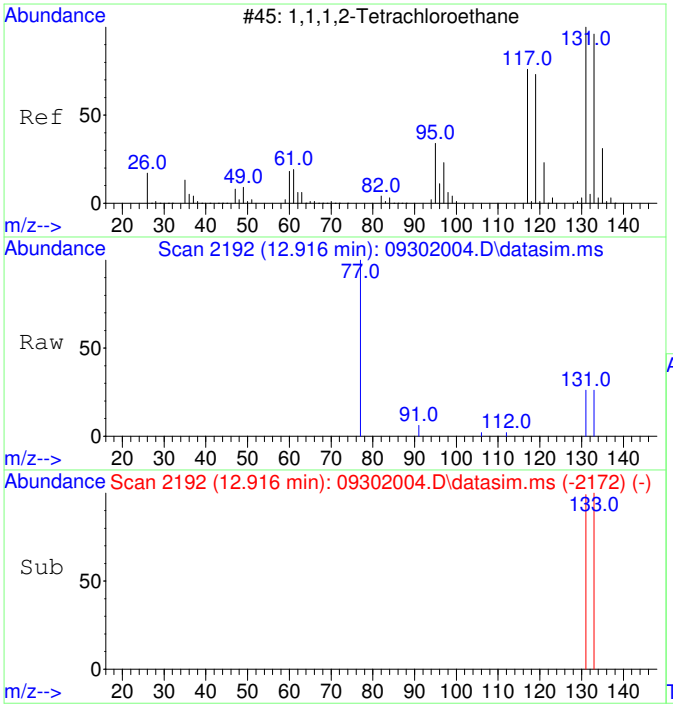


#16
Chlorobenzene
Concen: 52.02 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:112 Resp: 6336

Ion	Ratio	Lower	Upper
112	100		
77	60.1	23.6	83.6

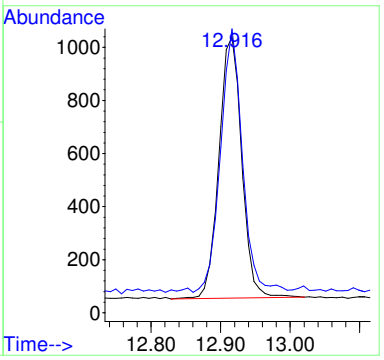


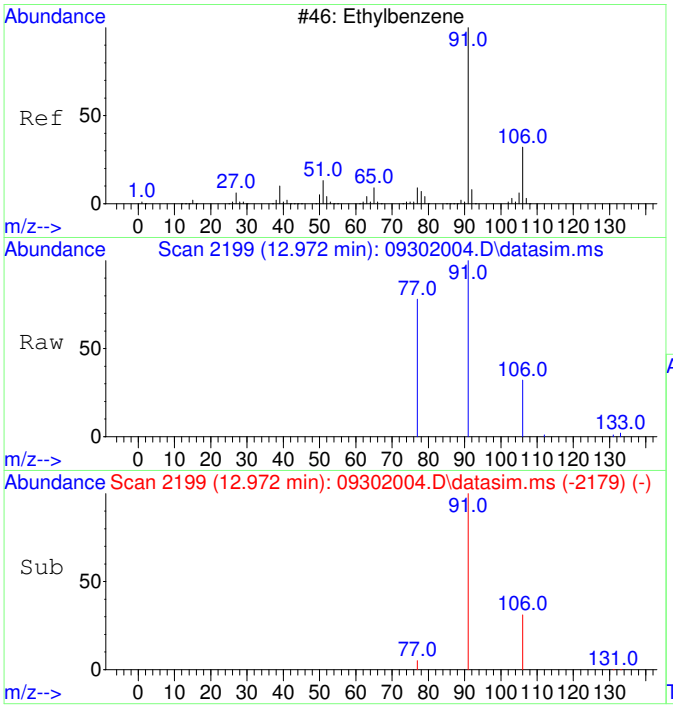


#17
1,1,1,2-Tetrachloroethane
Concen: 51.23 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:131 Resp: 2236

Ion	Ratio	Lower	Upper
131	100		
133	95.6	66.3	126.3

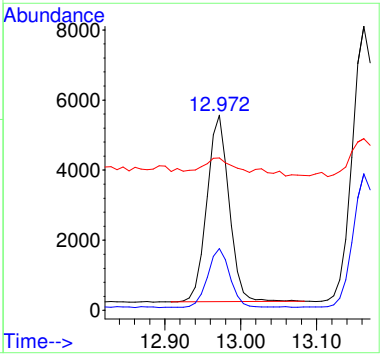


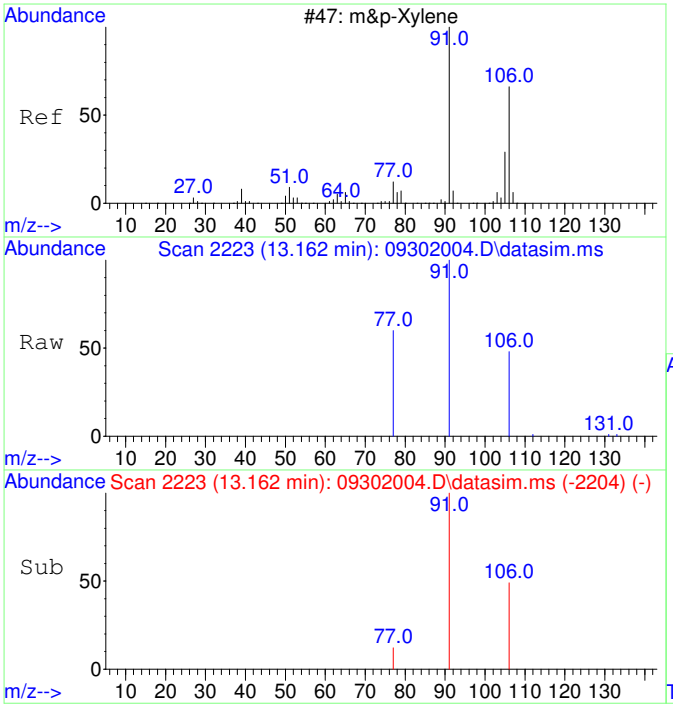


#18
Ethylbenzene
Concen: 52.06 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 10780

Ion	Ratio	Lower	Upper
91	100		
106	31.2	3.0	63.0
77	9.9	0.0	38.2

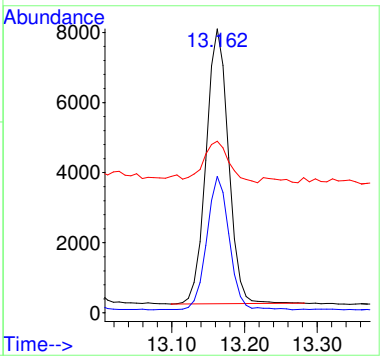


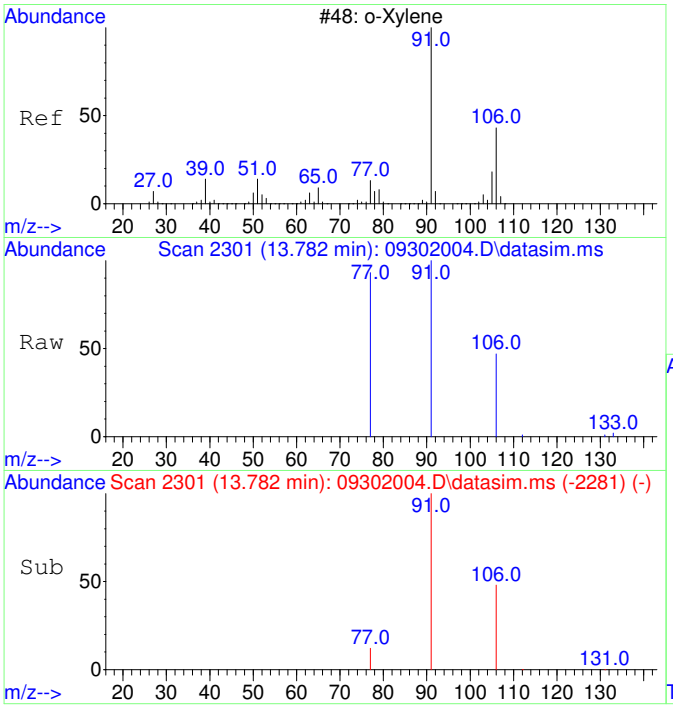


#19
m&p-Xylene
Concen: 103.84 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 16804

Ion	Ratio	Lower	Upper
91	100		
106	48.5	22.2	82.2
77	17.3	0.0	42.4

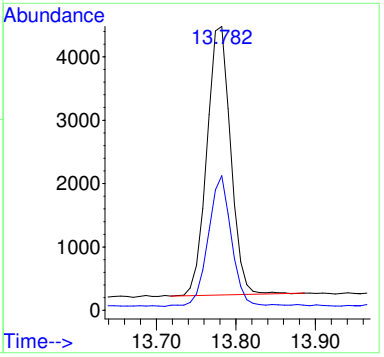


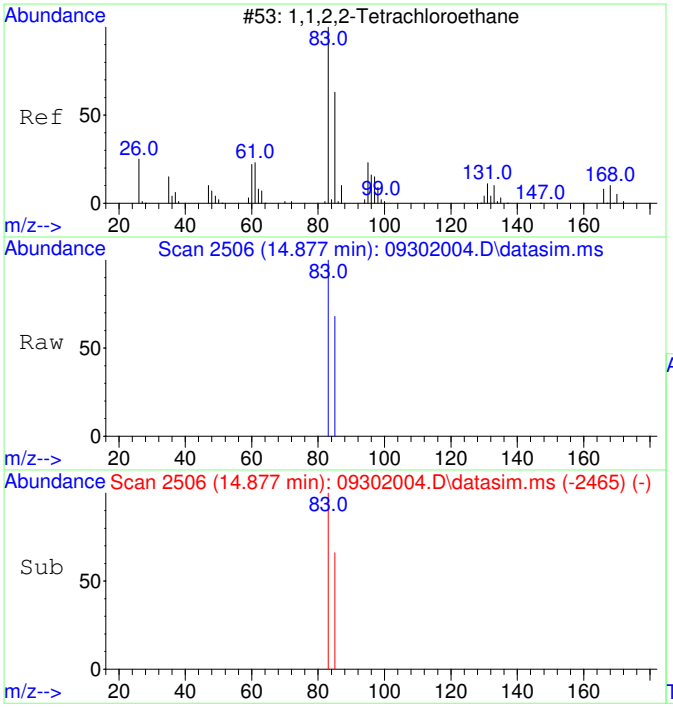


#20
o-Xylene
Concen: 50.90 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 8801

Ion	Ratio	Lower	Upper
91	100		
106	47.2	19.2	79.2

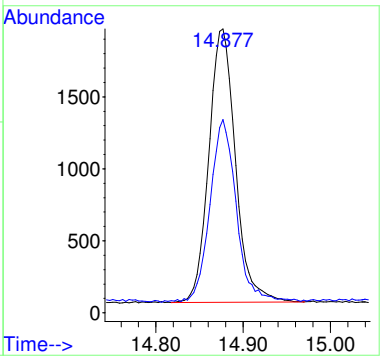


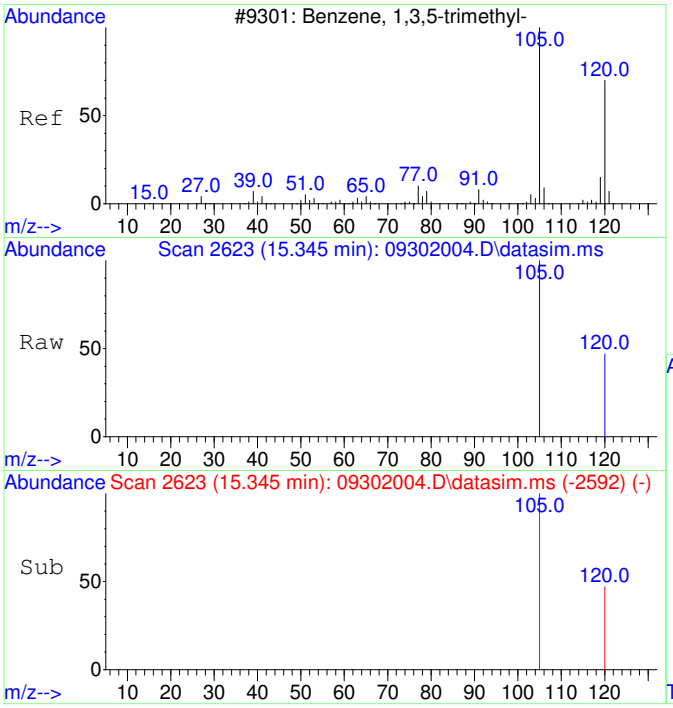


#21
1,1,2,2-Tetrachloroethane
Concen: 52.58 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. 0.004 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 83 Resp: 4029

Ion	Ratio	Lower	Upper
83	100		
85	65.7	34.8	94.8

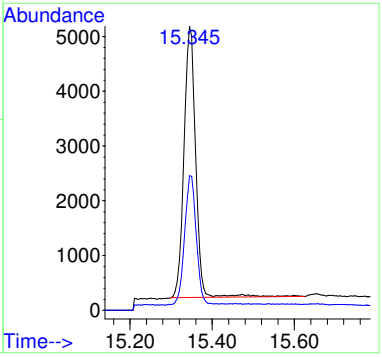


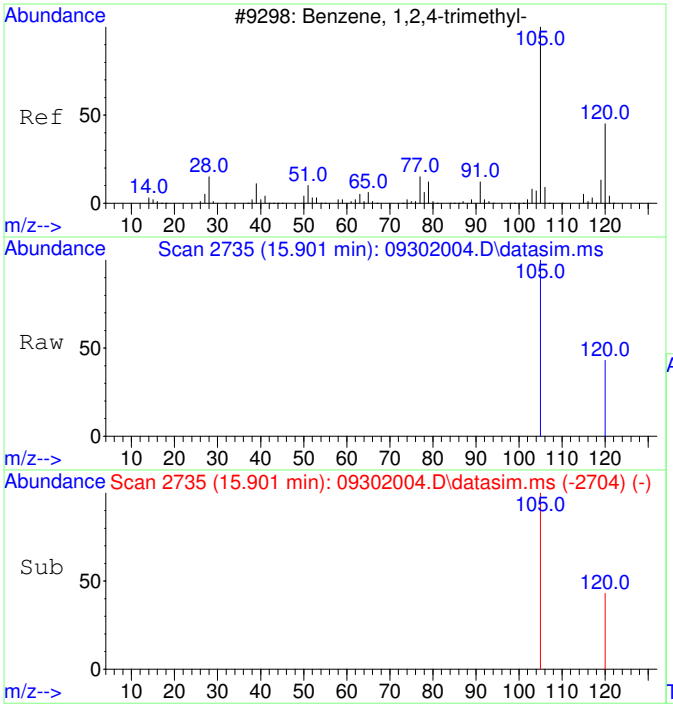


#22
1,3,5-Trimethylbenzene
Concen: 52.98 ug/L
RT: 15.345 min Scan# 2623
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:105 Resp: 9750

Ion	Ratio	Lower	Upper
105	100		
120	48.0	21.1	81.1

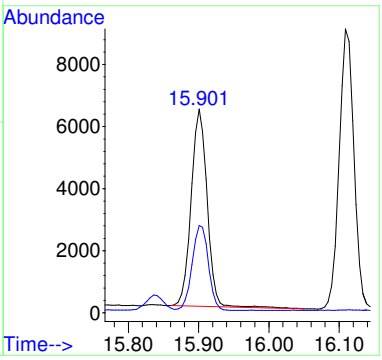


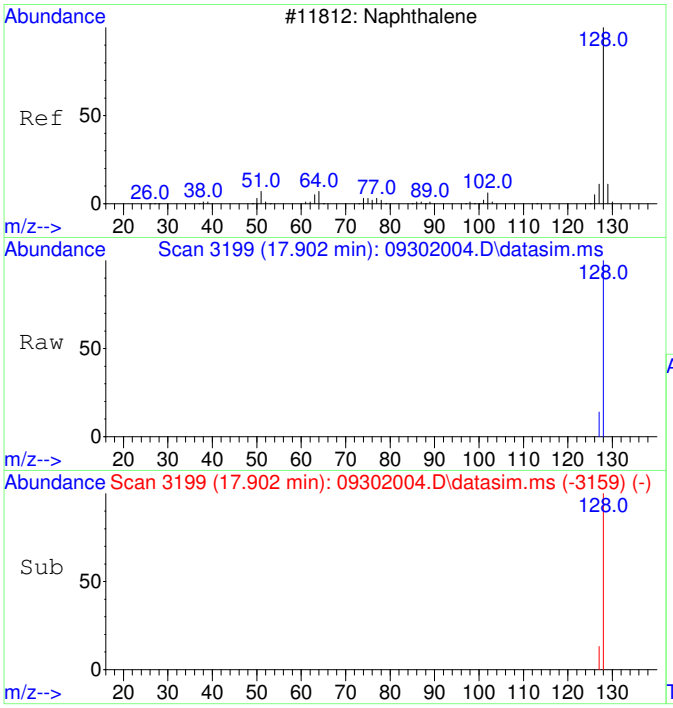


#23
1,2,4-Trimethylbenzene
Concen: 52.53 ug/L
RT: 15.901 min Scan# 2735
Delta R.T. 0.005 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:105 Resp: 10041

Ion	Ratio	Lower	Upper
105	100		
120	42.8	17.2	77.2

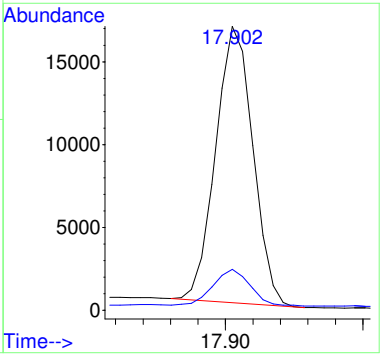


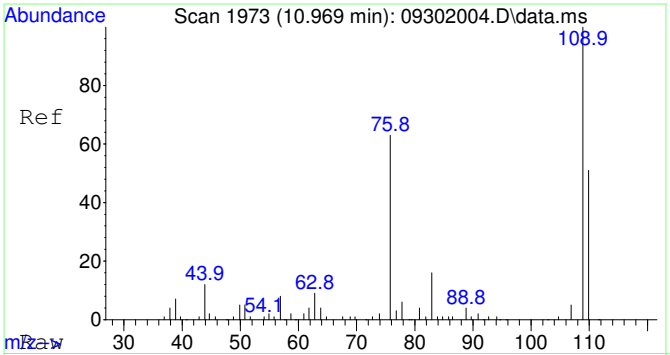


#24
Naphthalene
Concen: 51.70 ug/L
RT: 17.902 min Scan# 3199
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:128 Resp: 15619

Ion	Ratio	Lower	Upper
128	100		
127	13.0	0.0	42.5

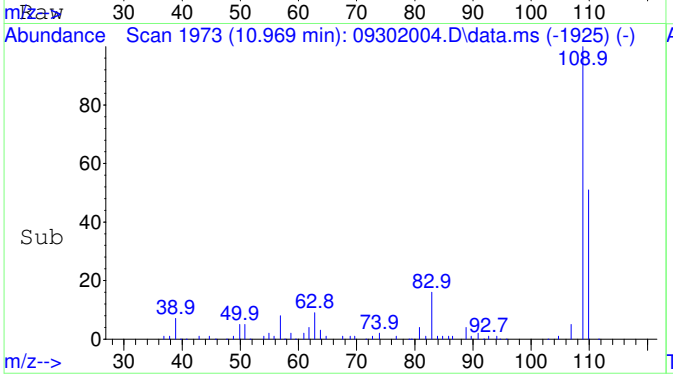


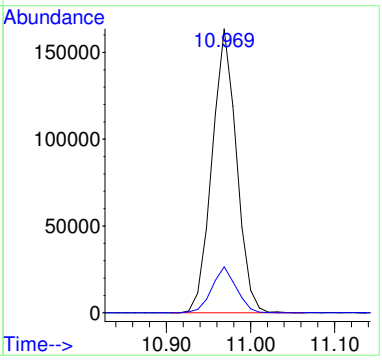


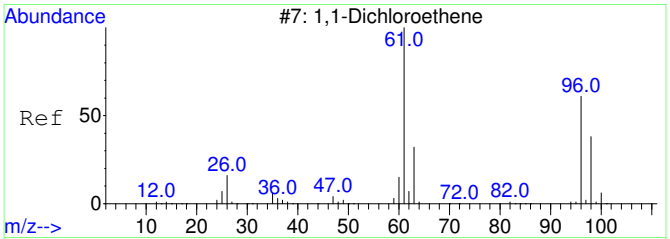
#25
2-Fluorotoluene SCAN
Concen: 4975.65 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:109 Resp: 330598

Ion	Ratio	Lower	Upper
109	100		
83	16.2	0.0	43.8



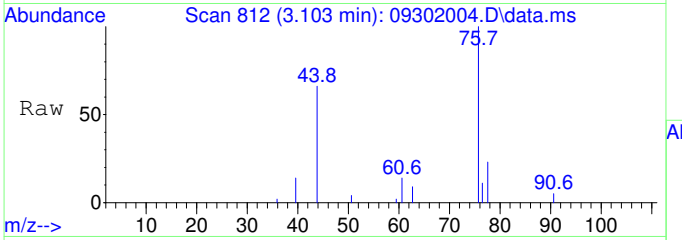


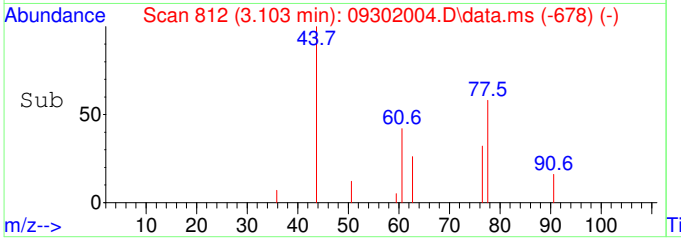


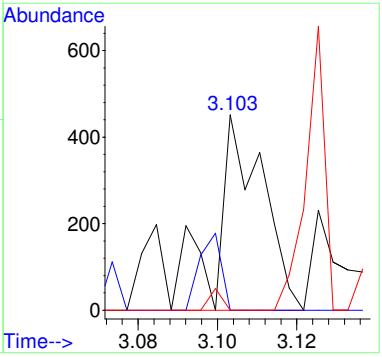
#26
1,1-Dichloroethene SCAN
Concen: 26.36 ug/L
RT: 3.103 min Scan# 812
Delta R.T. -0.004 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

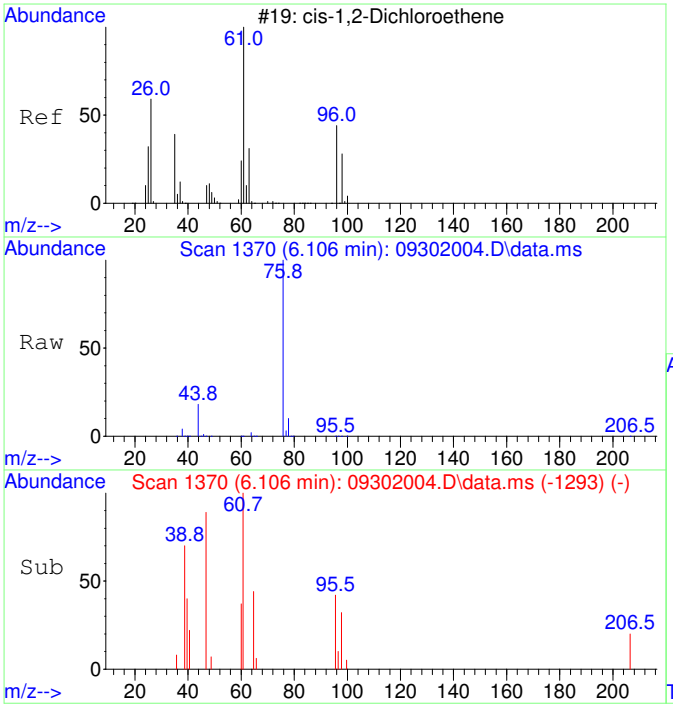
Tgt Ion: 61 Resp: 372

Ion	Ratio	Lower	Upper
61	100		
96	18.3	33.1	93.1#
98	0.0	11.2	71.2#





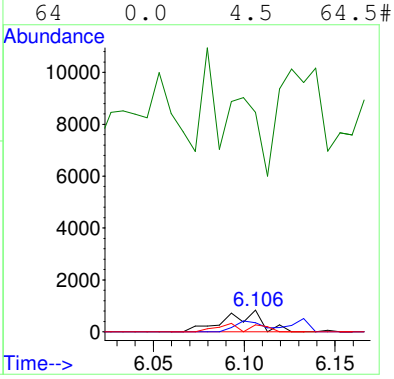


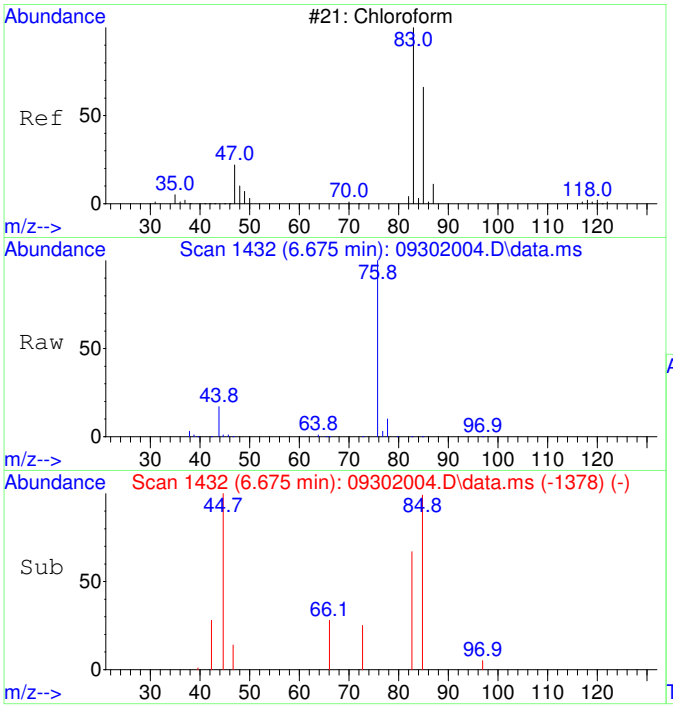


#29
cis-1,2-Dichloroethene SCAN
Concen: 53.49 ug/L
RT: 6.106 min Scan# 1370
Delta R.T. 0.013 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 61 Resp: 1158

Ion	Ratio	Lower	Upper
61	100		
96	29.5	39.9	99.9#
98	21.5	13.5	73.5
64	0.0	4.5	64.5#

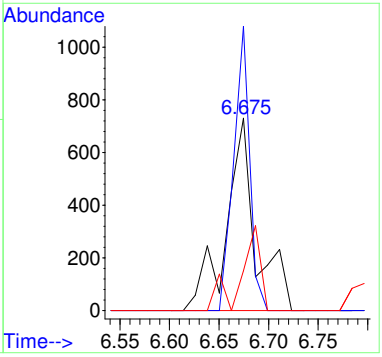


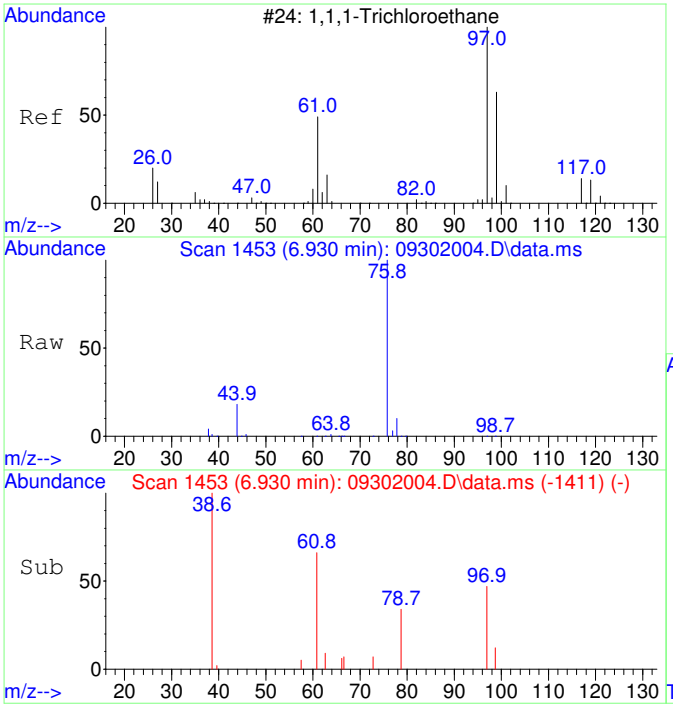


#30
Chloroform SCAN
Concen: 64.77 ug/L
RT: 6.675 min Scan# 1432
Delta R.T. 0.012 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 83 Resp: 1521

Ion	Ratio	Lower	Upper
83	100		
85	79.8	34.6	94.6
47	29.3	0.0	53.4

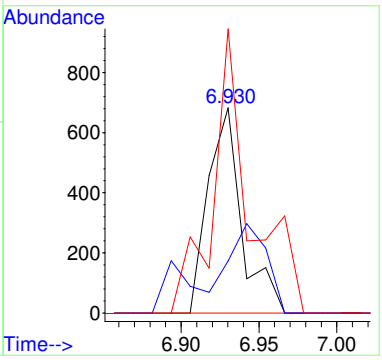


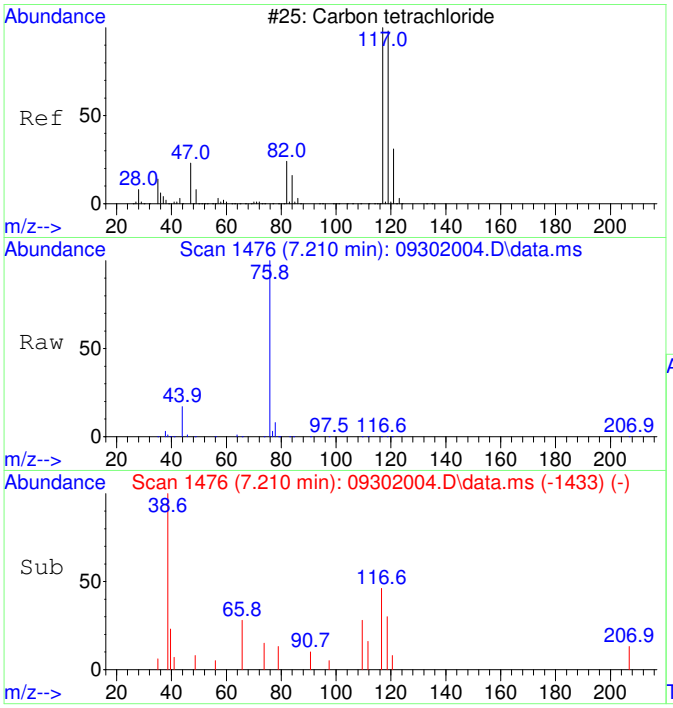


#31
1,1,1-Trichloroethane SCAN
Concen: 47.94 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. 0.012 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 97 Resp: 1026

Ion	Ratio	Lower	Upper
97	100		
99	72.4	43.6	103.6
61	153.2	18.0	78.0#

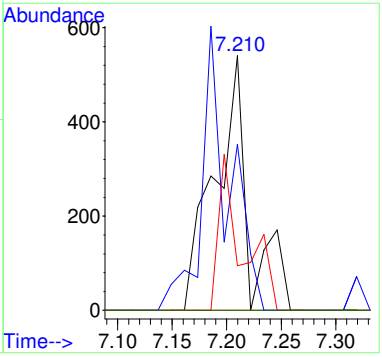


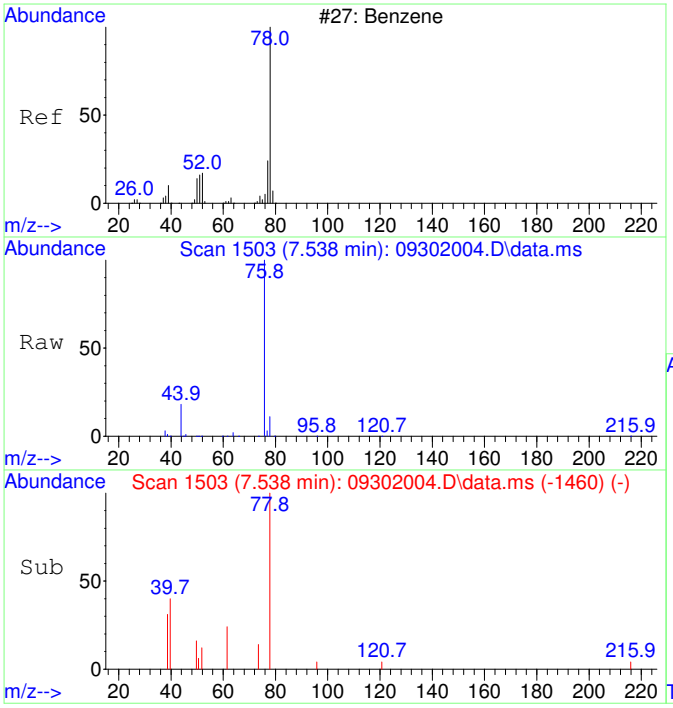


#32
Carbon tetrachloride SCAN
Concen: 52.41 ug/L
RT: 7.210 min Scan# 1476
Delta R.T. 0.024 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:117 Resp: 1170

Ion	Ratio	Lower	Upper
117	100		
119	0.0	75.5	135.5#
121	43.0	0.0	58.8
82	0.0	0.0	59.2

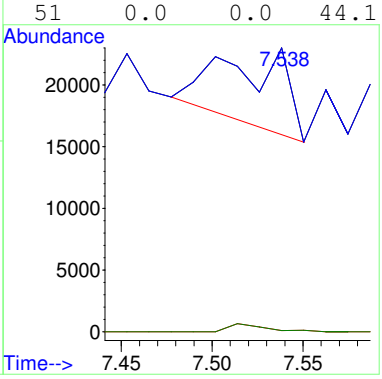


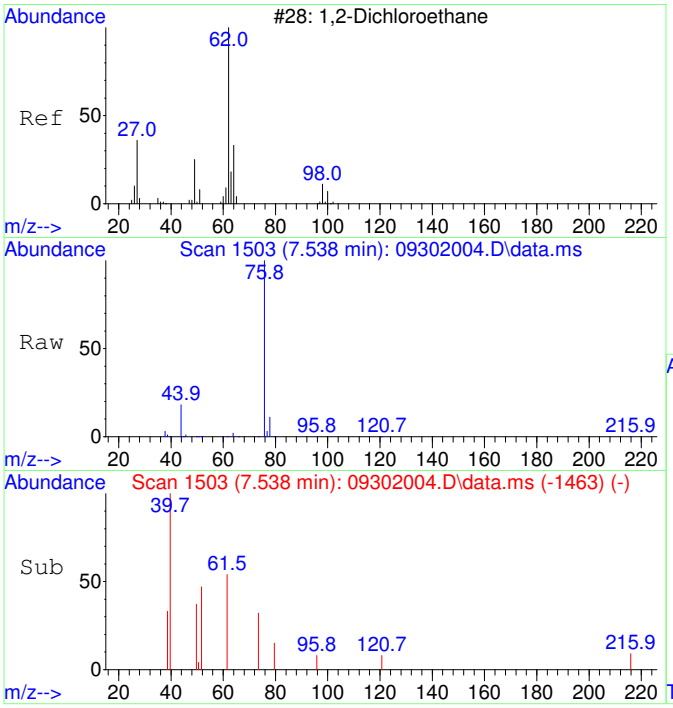


#33
Benzene SCAN
Concen: 230.77 ug/L
RT: 7.538 min Scan# 1503
Delta R.T. 0.024 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 78 Resp: 13597

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

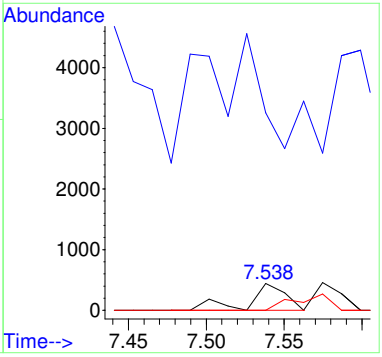


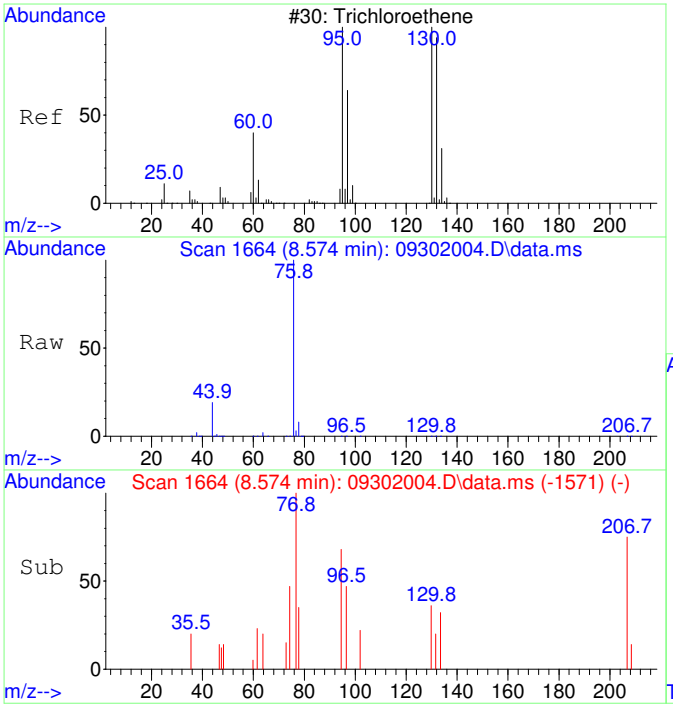


#34
1,2-Dichloroethane SCAN
Concen: 33.23 ug/L
RT: 7.538 min Scan# 1503
Delta R.T. -0.012 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 62 Resp: 723

Ion	Ratio	Lower	Upper
62	100		
64	688.4	5.2	65.2#
49	0.0	3.9	63.9#

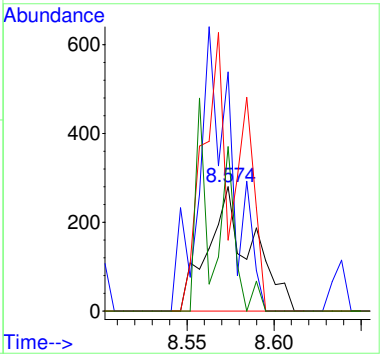


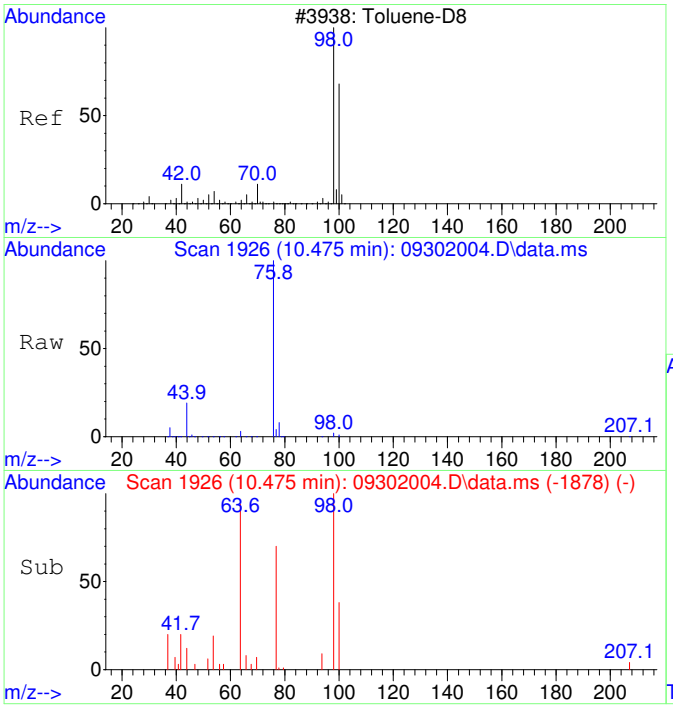


#35
Trichloroethene SCAN
Concen: 29.95 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.005 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:130 Resp: 485

Ion	Ratio	Lower	Upper
130	100		
95	170.9	60.5	120.5#
132	179.2	59.6	119.6#
97	19.6	28.2	88.2#

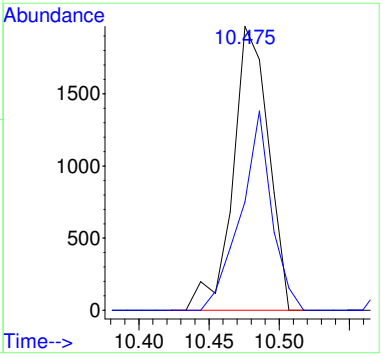


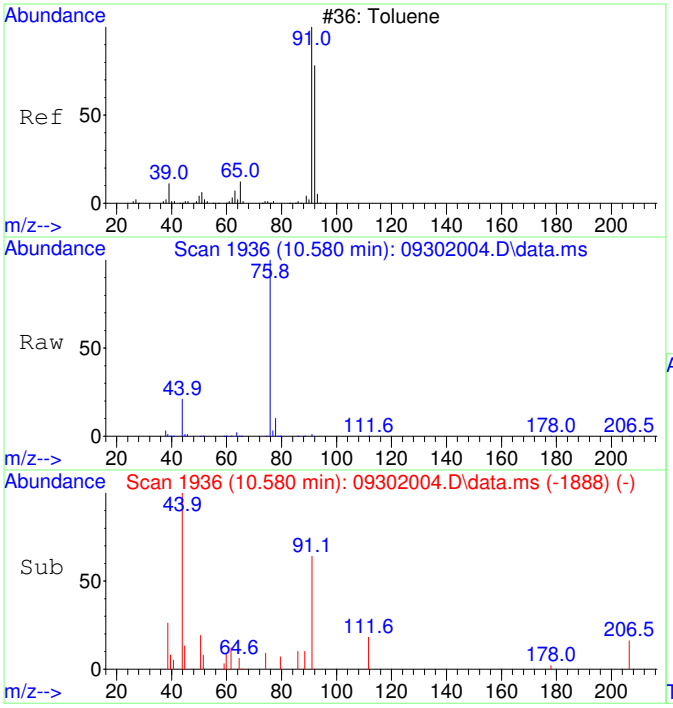


#36
Toluene-d8 SCAN
Concen: 53.43 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 98 Resp: 3472

Ion	Ratio	Lower	Upper
98	100		
100	61.5	40.0	100.0

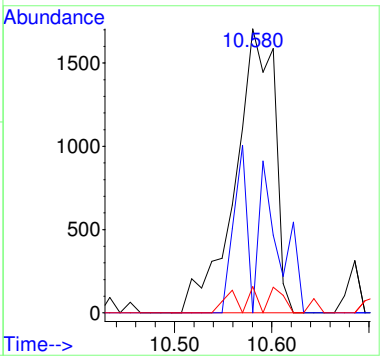


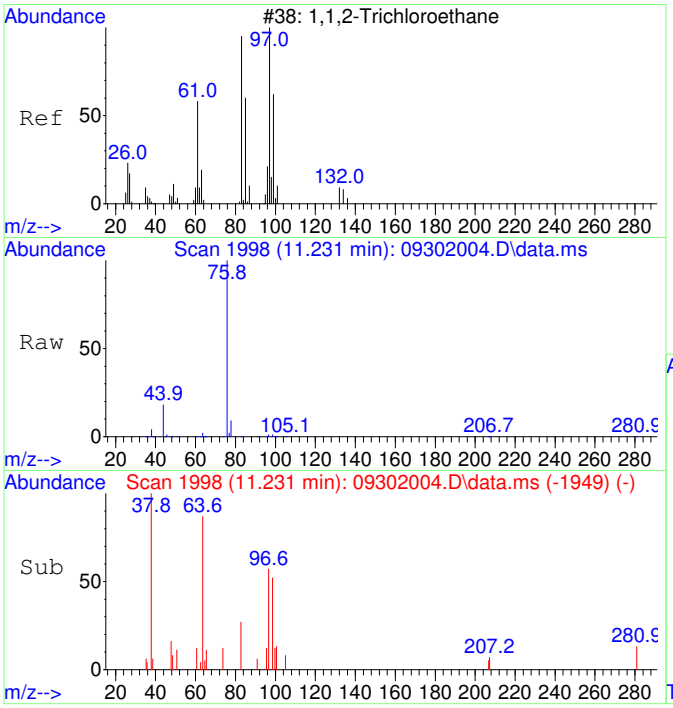


#37
Toluene SCAN
Concen: 57.95 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 4822

Ion	Ratio	Lower	Upper
91	100		
92	19.7	28.3	88.3#
65	2.1	0.0	41.0

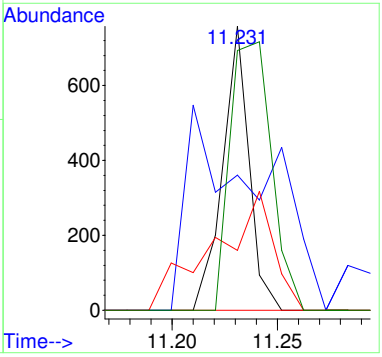


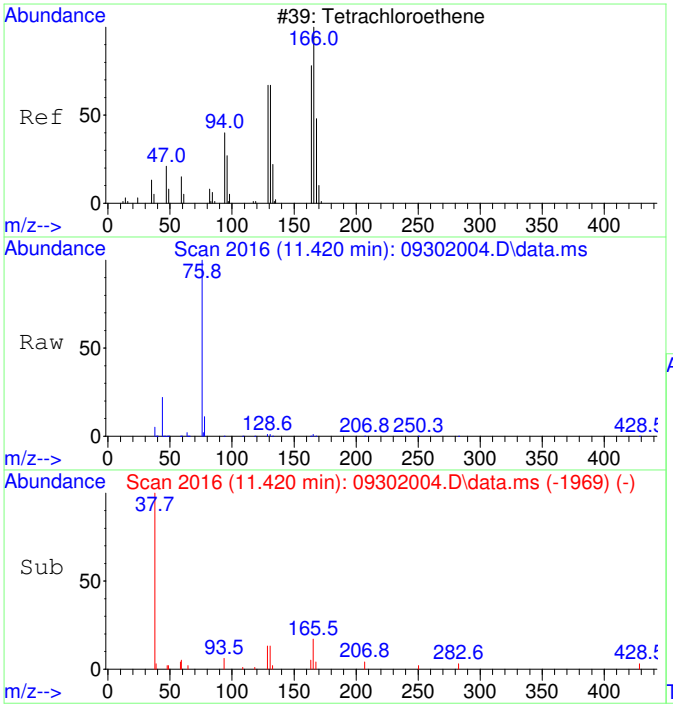


#38
1,1,2-Trichloroethane SCAN
Concen: 35.50 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. 0.010 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 97 Resp: 663

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	94.4	32.1	92.1#
99	149.2	36.7	96.7#

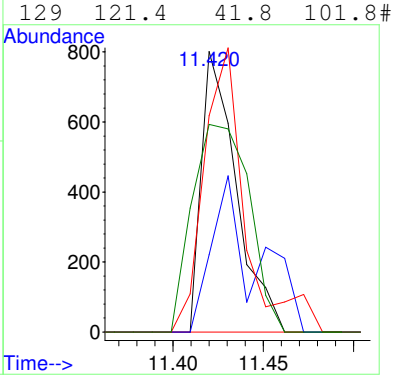


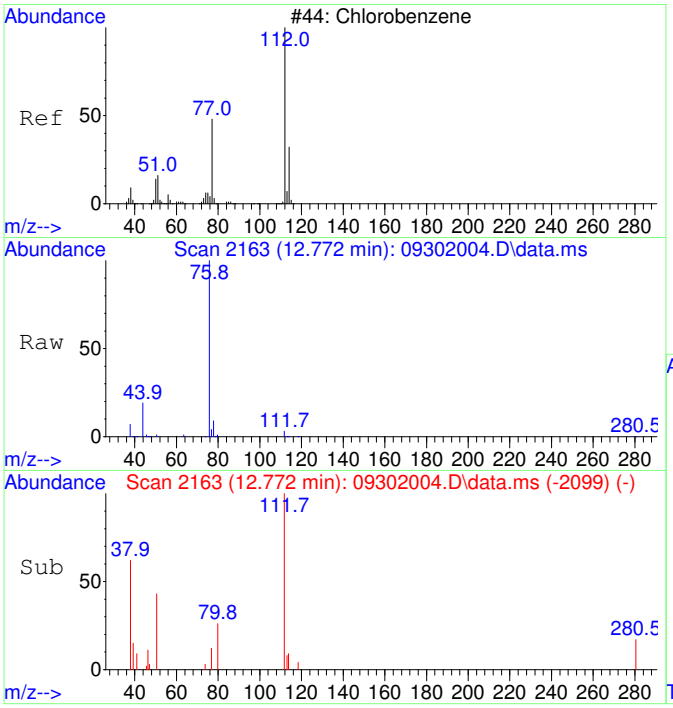


#39
Tetrachloroethene SCAN
Concen: 54.07 ug/L
RT: 11.420 min Scan# 2016
Delta R.T. -0.011 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:166 Resp: 1081

Ion	Ratio	Lower	Upper
166	100		
164	70.1	50.9	110.9
131	118.7	38.7	98.7#
129	121.4	41.8	101.8#

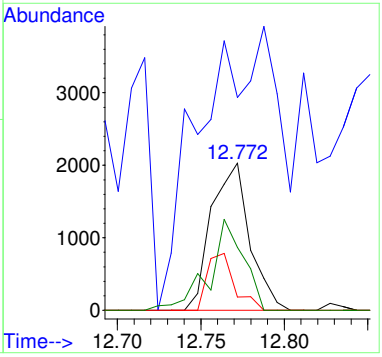


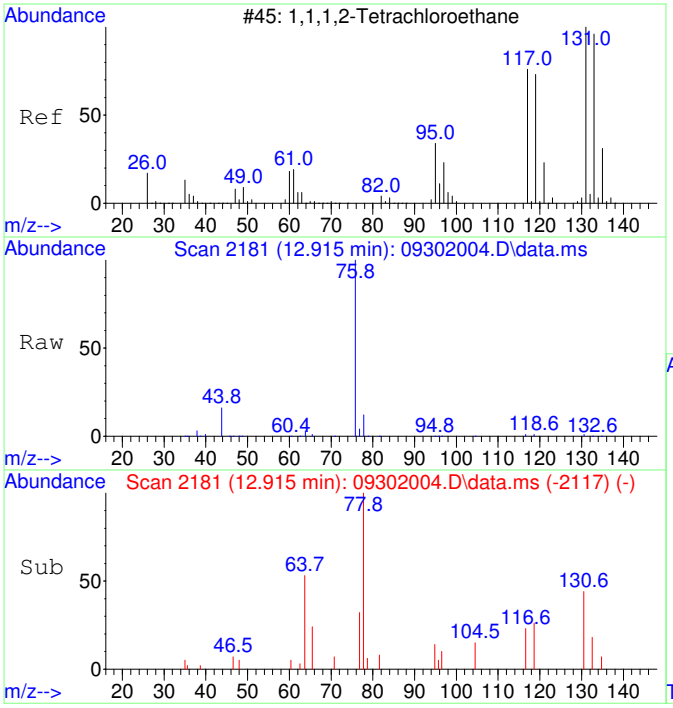


#40
Chlorobenzene SCAN
Concen: 57.12 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:112 Resp: 3248

Ion	Ratio	Lower	Upper
112	100		
77	0.0	28.2	88.2#
114	27.4	2.3	62.3
51	55.2	0.0	50.1#

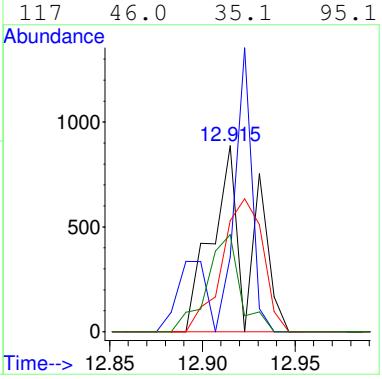


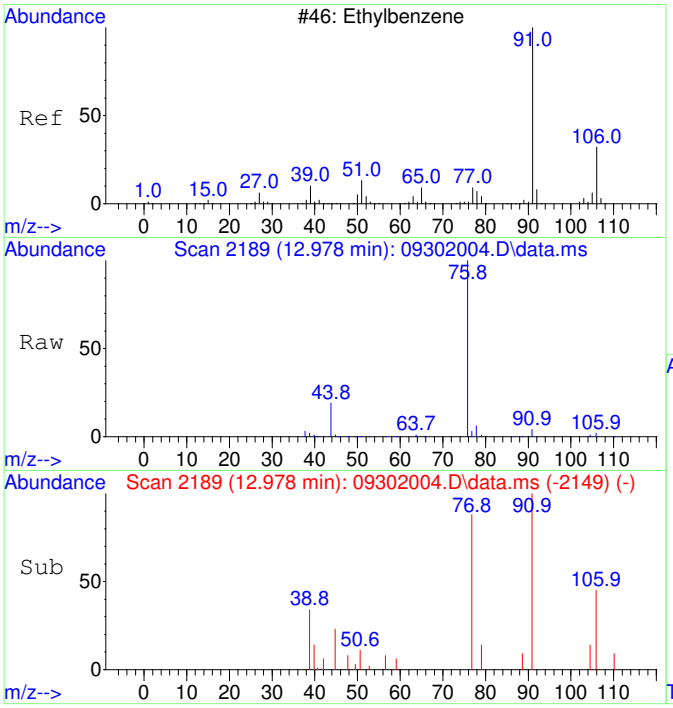


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 59.97 ug/L
RT: 12.915 min Scan# 2181
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:131 Resp: 1262

Ion	Ratio	Lower	Upper
131	100		
133	68.8	66.9	126.9
119	77.7	40.4	100.4
117	46.0	35.1	95.1

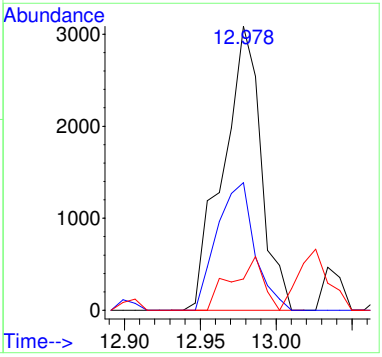


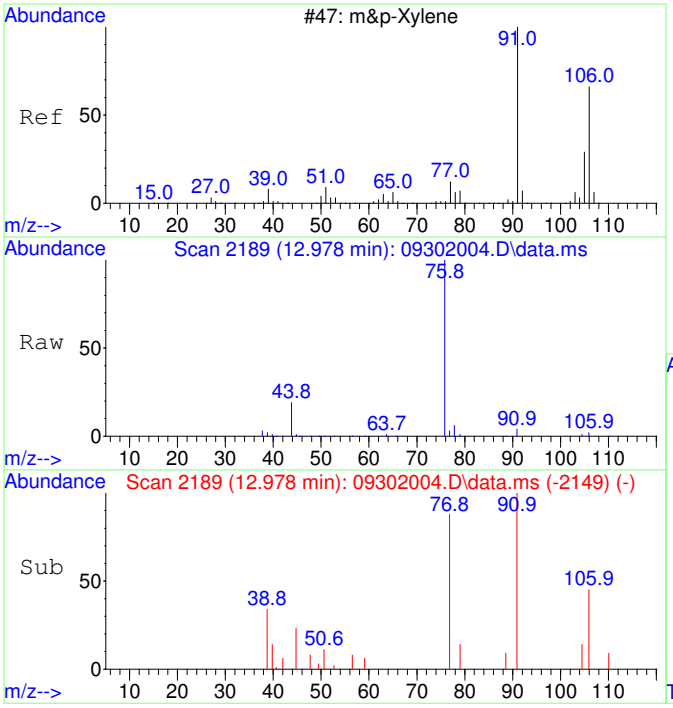


#42
Ethylbenzene SCAN
Concen: 35.51 ug/L
RT: 12.978 min Scan# 2189
Delta R.T. -0.183 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 5384

Ion	Ratio	Lower	Upper
91	100		
106	44.8	23.1	83.1
51	15.8	0.0	40.1

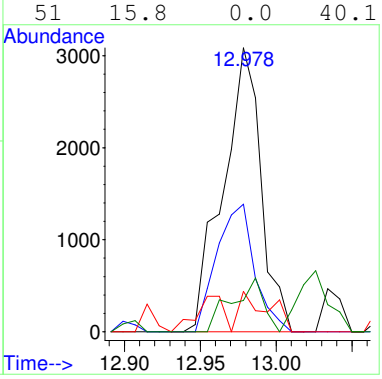


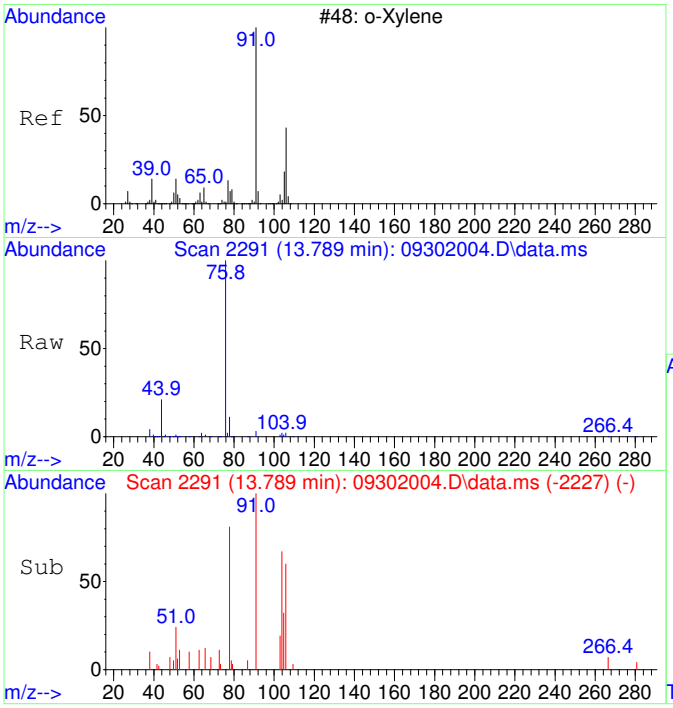


#43
m&p-Xylene SCAN
Concen: 35.51 ug/L
RT: 12.978 min Scan# 2189
Delta R.T. -0.183 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 5384

Ion	Ratio	Lower	Upper
91	100		
106	44.8	23.1	83.1
105	10.9	0.0	54.7
51	15.8	0.0	40.1

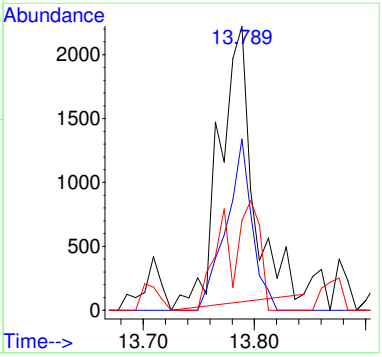


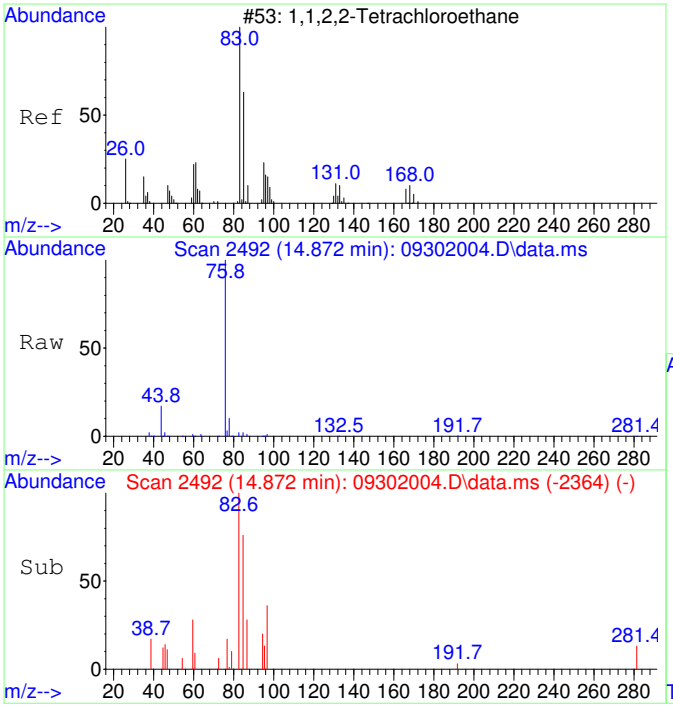


#44
o-Xylene SCAN
Concen: 54.81 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 4448

Ion	Ratio	Lower	Upper
91	100		
106	48.7	18.0	78.0
105	20.1	0.0	56.6

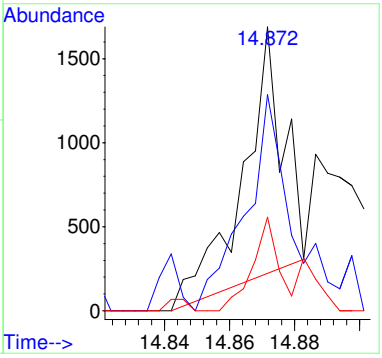


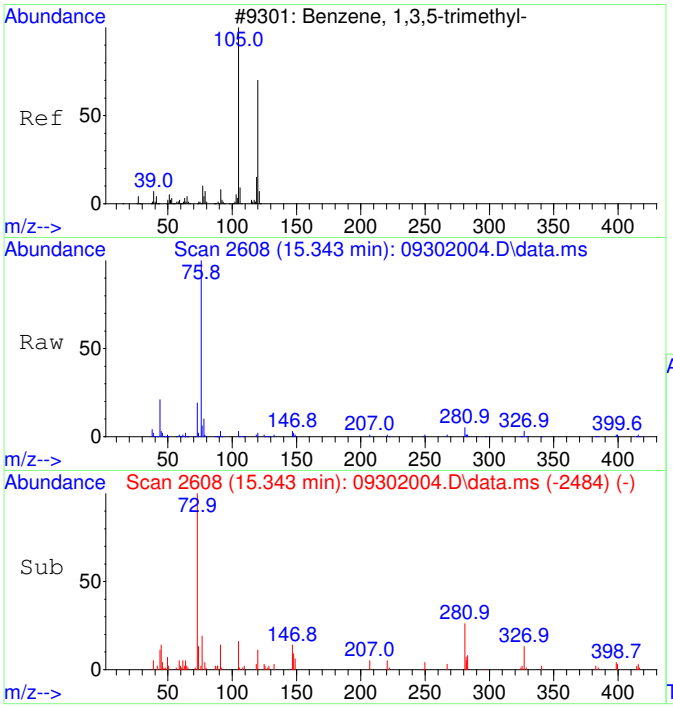


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 31.99 ug/L
RT: 14.872 min Scan# 2492
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 83 Resp: 1266

Ion	Ratio	Lower	Upper
83	100		
85	92.8	35.9	95.9
95	19.9	0.0	47.4

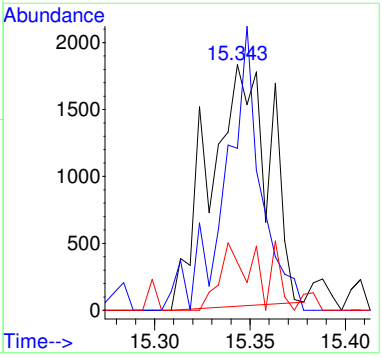


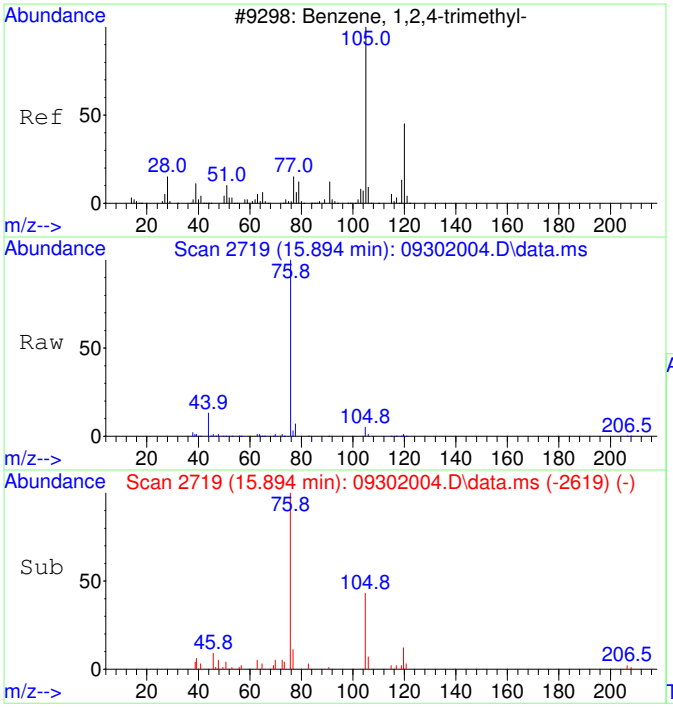


#46
1,3,5-Trimethylbenzene SCAN
Concen: 46.29 ug/L
RT: 15.343 min Scan# 2608
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:105 Resp: 3959

Ion	Ratio	Lower	Upper
105	100		
120	69.1	18.3	78.3
119	14.1	0.0	43.1

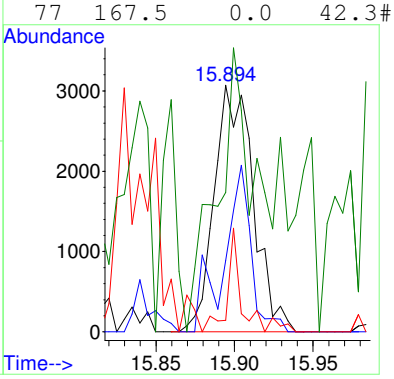


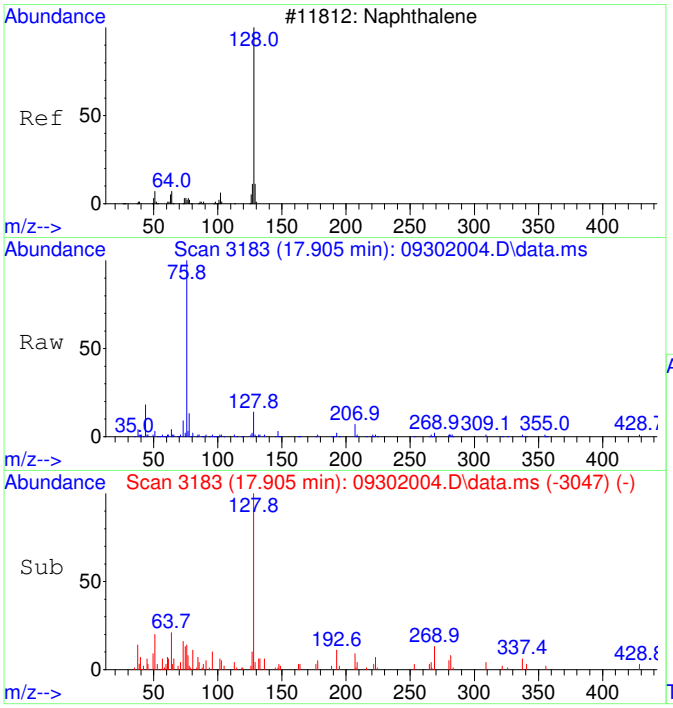


#47
1,2,4-Trimethylbenzene SCAN
Concen: 60.40 ug/L
RT: 15.894 min Scan# 2719
Delta R.T. -0.005 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:105 Resp: 5286

Ion	Ratio	Lower	Upper
105	100		
120	47.4	16.9	76.9
119	13.5	0.0	41.9
77	167.5	0.0	42.3#

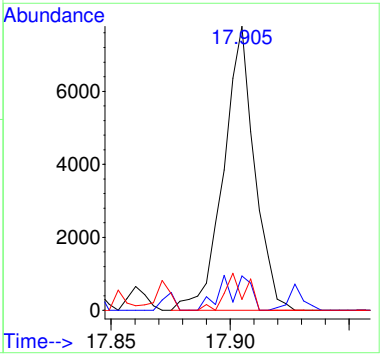




#48
Naphthalene SCAN
Concen: 53.20 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.004 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:128 Resp: 7044

Ion	Ratio	Lower	Upper
128	100		
127	10.8	0.0	44.0
129	8.9	0.0	40.8



Quantitation Report (QT Reviewed)

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Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302004.D
Acq On : 30 Sep 2020 14:31
InstName : AG5975C
Operator : TD
Sample : S20I029-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

M.I. Performed By:
TD at 2:53 pm, Sep 30, 2020

M.I. Approved By:
ZR at 3:58 pm, Oct 02, 2020

Quant Time: Sep 30 14:49:56 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

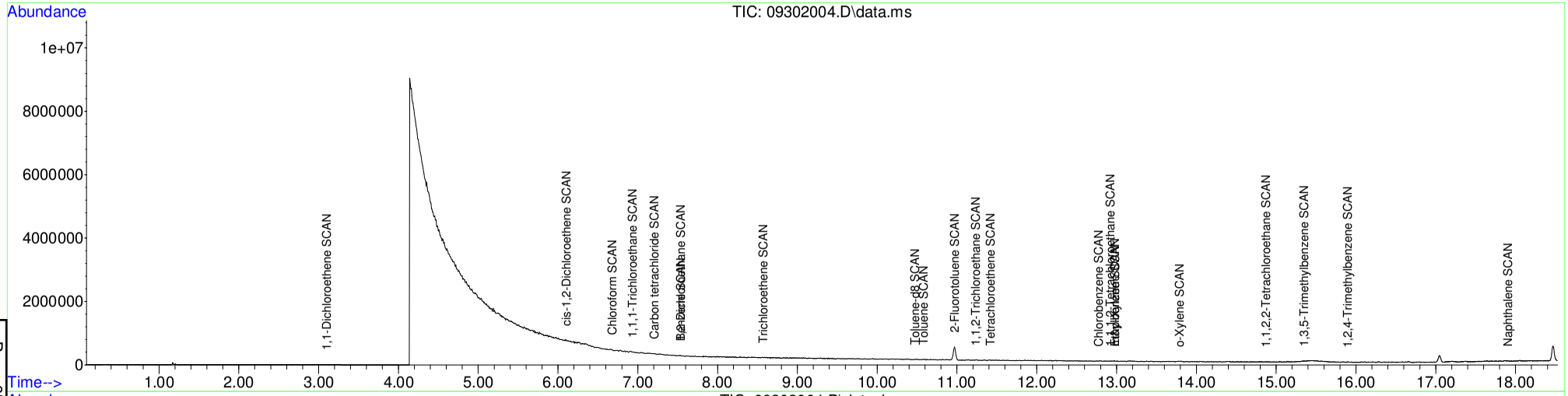
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	681597	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	6795	50.93	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery =	1.02%#		
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.093	61	1406m	51.66	ug/L	
3] trans-1,2-Dichloroethene	4.422	61	1630	51.83	ug/L	71
4] 1,1-Dichloroethane	5.112	63	2014	51.45	ug/L	67
5] cis-1,2-Dichloroethene	6.101	61	2133	51.62	ug/L	98
6] Chloroform	6.664	83	2025	47.88	ug/L	99
7] 1,1,1-Trichloroethane	6.919	97	2155	46.92	ug/L	99
8] Carbon tetrachloride	7.199	117	1988	45.99	ug/L	99
9] Benzene	7.515	78	5721	49.40	ug/L #	22
10] 1,2-Dichloroethane	7.552	62	2046	49.49	ug/L #	7
11] Trichloroethene	8.575	130	1701	48.78	ug/L	93
13] Toluene	10.571	91	8653	50.87	ug/L	98
14] 1,1,2-Trichloroethane	11.222	97	1798	48.51	ug/L	97
15] Tetrachloroethene	11.432	166	2413	49.02	ug/L	97
16] Chlorobenzene	12.765	112	6336	52.02	ug/L	91
17] 1,1,1,2-Tetrachloroethane	12.916	131	2236	51.23	ug/L	99
18] Ethylbenzene	12.972	91	10780	52.06	ug/L	96
19] m&p-Xylene	13.162	91	16804	103.84	ug/L	93
20] o-Xylene	13.782	91	8801	50.90	ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.877	83	4029	52.58	ug/L	99
22] 1,3,5-Trimethylbenzene	15.345	105	9750	52.98	ug/L	96
23] 1,2,4-Trimethylbenzene	15.901	105	10041	52.53	ug/L	93
24] Naphthalene	17.902	128	15619	51.70	ug/L	99
25) 2-Fluorotoluene SCAN	10.969	109	330598	4975.65	ug/L	94
26) 1,1-Dichloroethene SCAN	3.103	61	372	26.36	ug/L #	39
29) cis-1,2-Dichloroethene...	6.106	61	1158	53.49	ug/L #	53
30) Chloroform SCAN	6.675	83	1521	64.77	ug/L	83
31) 1,1,1-Trichloroethane ...	6.930	97	1026	47.94	ug/L #	38
32) Carbon tetrachloride SCAN	7.210	117	1170	52.41	ug/L #	20
33) Benzene SCAN	7.538	78	13597	230.77	ug/L #	91
34) 1,2-Dichloroethane SCAN	7.538	62	723	33.23	ug/L #	1
35) Trichloroethene SCAN	8.574	130	485	29.95	ug/L #	19
36) Toluene-d8 SCAN	10.475	98	3472	53.43	ug/L	90
37) Toluene SCAN	10.580	91	4822	57.95	ug/L #	53
38) 1,1,2-Trichloroethane ...	11.231	97	663	35.50	ug/L #	18
39) Tetrachloroethene SCAN	11.420	166	1081	54.07	ug/L #	57
40) Chlorobenzene SCAN	12.772	112	3248	57.12	ug/L #	42
41) 1,1,1,2-Tetrachloroeth...	12.915	131	1262	59.97	ug/L	79
42) Ethylbenzene SCAN	12.978	91	5384	35.51	ug/L	88
43) m&p-Xylene SCAN	12.978	91	5384	35.51	ug/L	83
44) o-Xylene SCAN	13.789	91	4448	54.81	ug/L	95
45) 1,1,2,2-Tetrachloroeth...	14.872	83	1266	31.99	ug/L	72
46) 1,3,5-Trimethylbenzene...	15.343	105	3959	46.29	ug/L	75
47) 1,2,4-Trimethylbenzene...	15.894	105	5286	60.40	ug/L #	30
48) Naphthalene SCAN	17.905	128	7044	53.20	ug/L	93

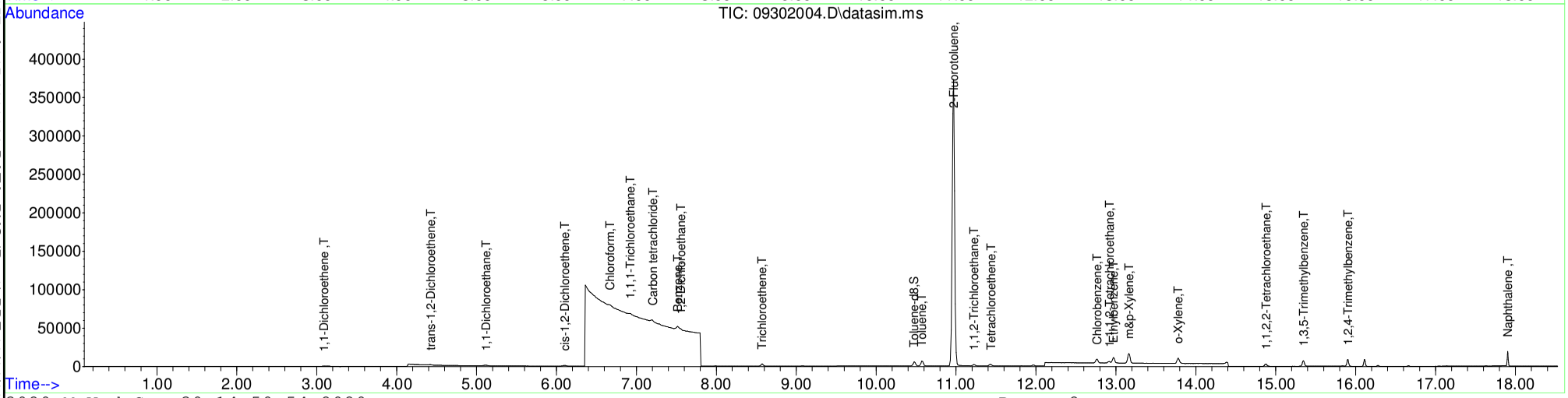
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\093020\
Data File : 09302004.D
Acq On : 30 Sep 2020 14:31
InstName : AG5975C
Operator : TD
Sample : S20I029-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 30 14:49:56 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\093020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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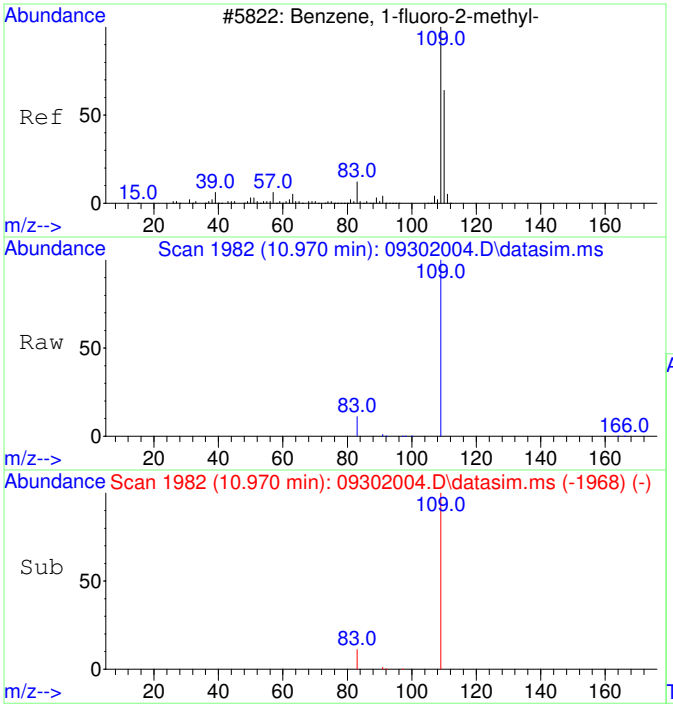
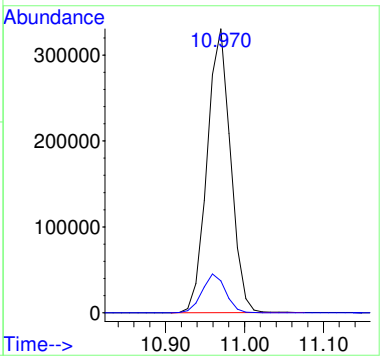
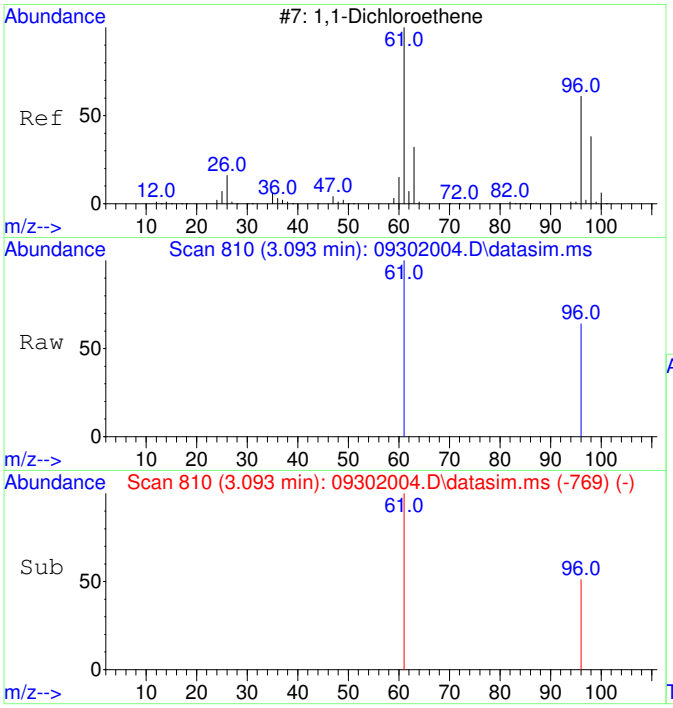


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:109 Resp: 681597

Ion	Ratio	Lower	Upper
109	100		
83	13.7	0.0	42.3

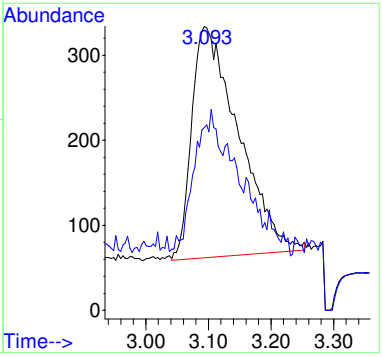


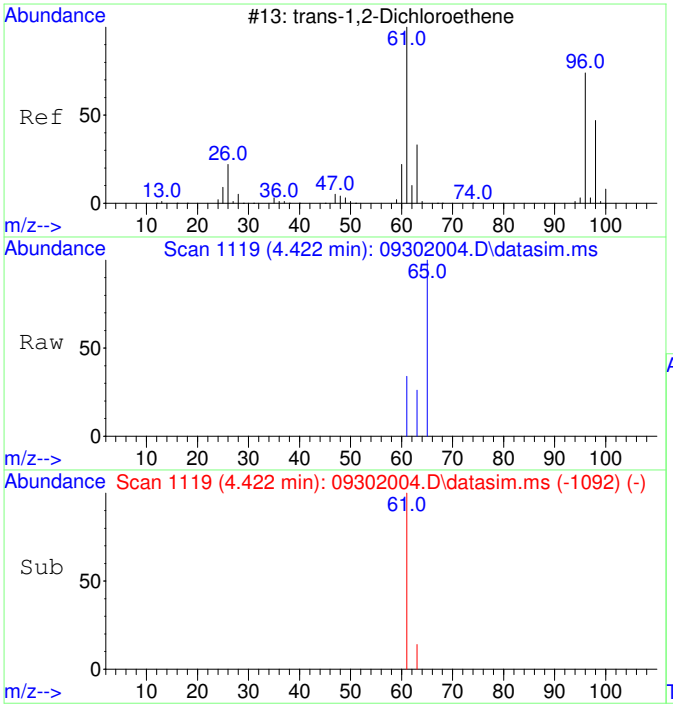


#2
1,1-Dichloroethene
Concen: 51.66 ug/L m
RT: 3.093 min Scan# 810
Delta R.T. 0.004 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 61 Resp: 1406

Ion	Ratio	Lower	Upper
61	100		
96	41.8	37.2	97.2

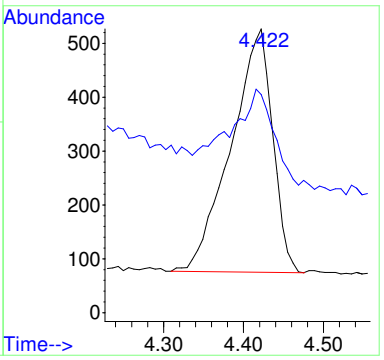


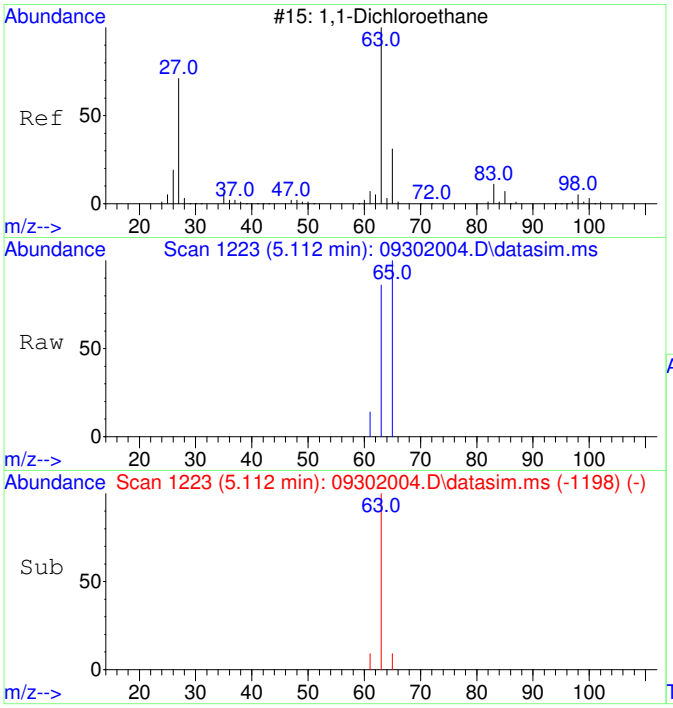


#3
trans-1,2-Dichloroethene
Concen: 51.83 ug/L
RT: 4.422 min Scan# 1119
Delta R.T. 0.027 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 61 Resp: 1630

Ion	Ratio	Lower	Upper
61	100		
63	48.8	2.4	62.4

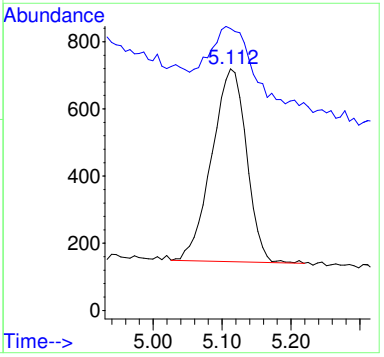


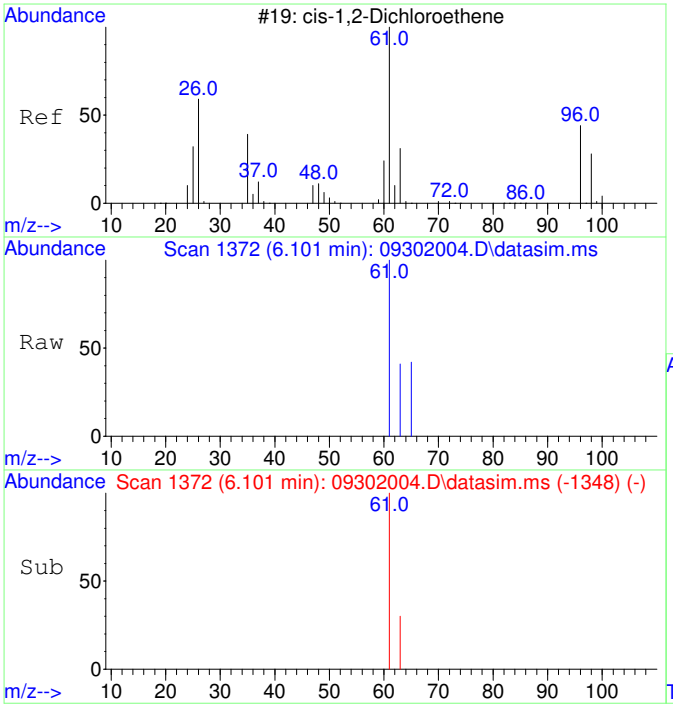


#4
1,1-Dichloroethane
Concen: 51.45 ug/L
RT: 5.112 min Scan# 1223
Delta R.T. 0.013 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 63 Resp: 2014

Ion	Ratio	Lower	Upper
63	100		
65	50.2	1.8	61.8

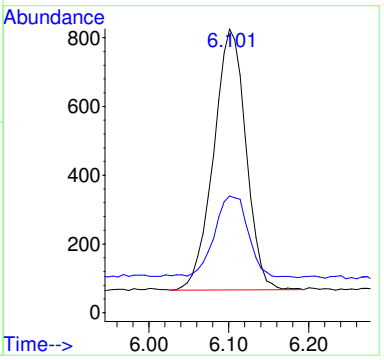


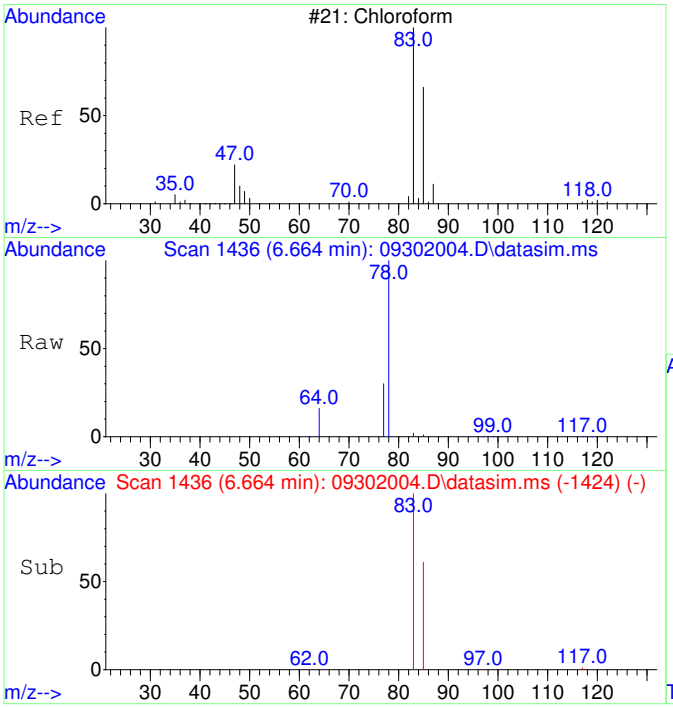


#5
cis-1,2-Dichloroethene
Concen: 51.62 ug/L
RT: 6.101 min Scan# 1372
Delta R.T. 0.007 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 61 Resp: 2133

Ion	Ratio	Lower	Upper
61	100		
63	33.6	2.5	62.5

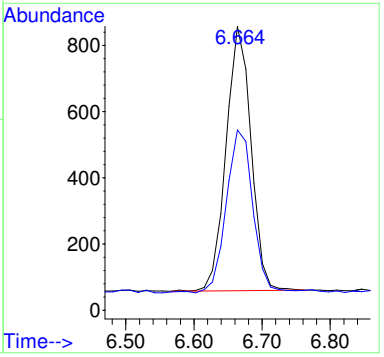


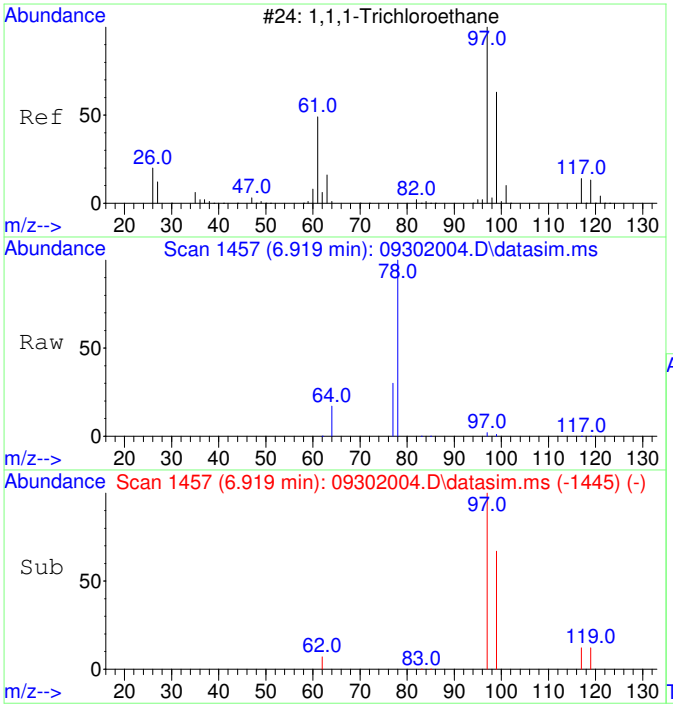


#6
Chloroform
Concen: 47.88 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 83 Resp: 2025

Ion	Ratio	Lower	Upper
83	100		
85	65.6	35.1	95.1

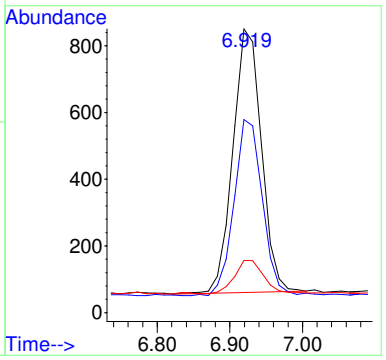


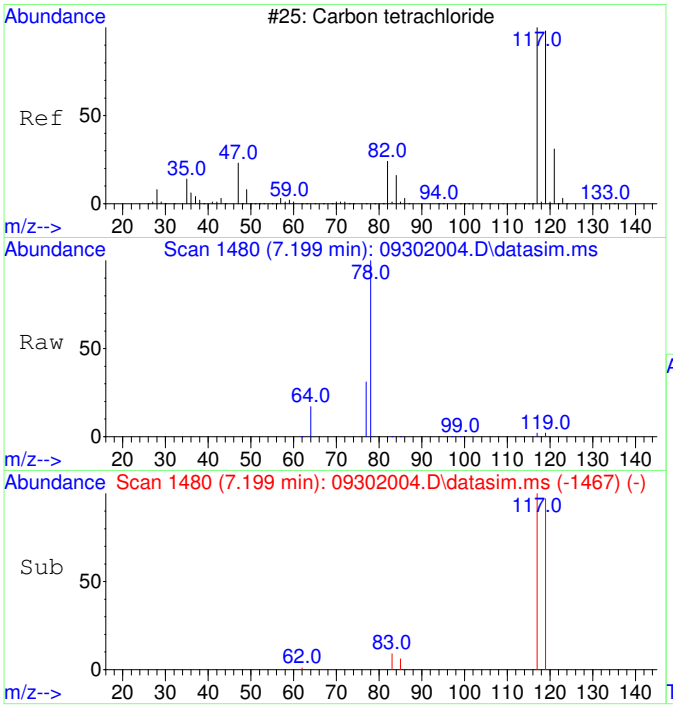


#7
1,1,1-Trichloroethane
Concen: 46.92 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 97 Resp: 2155

Ion	Ratio	Lower	Upper
97	100		
99	65.6	34.6	94.6
117	13.5	0.0	43.2

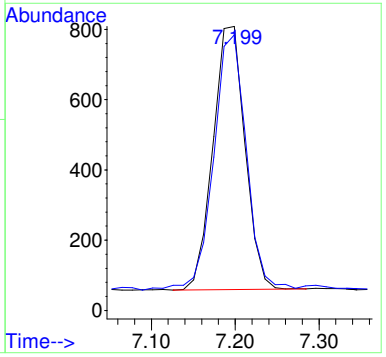


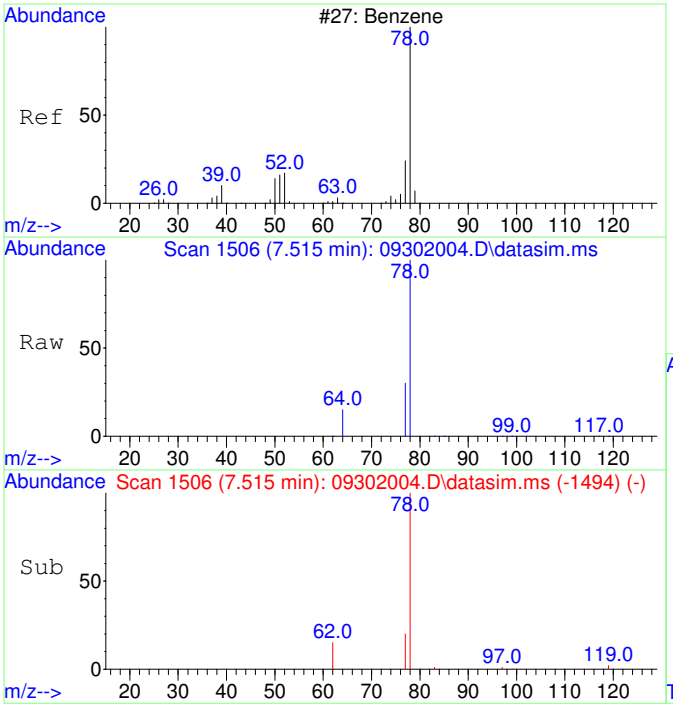


#8
Carbon tetrachloride
Concen: 45.99 ug/L
RT: 7.199 min Scan# 1480
Delta R.T. 0.012 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:117 Resp: 1988

Ion	Ratio	Lower	Upper
117	100		
119	97.6	66.4	126.4

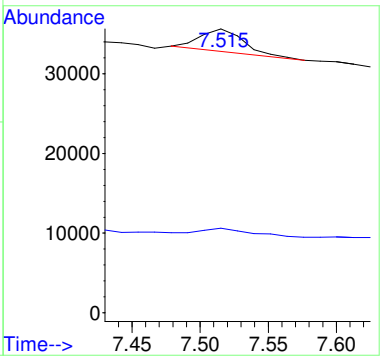


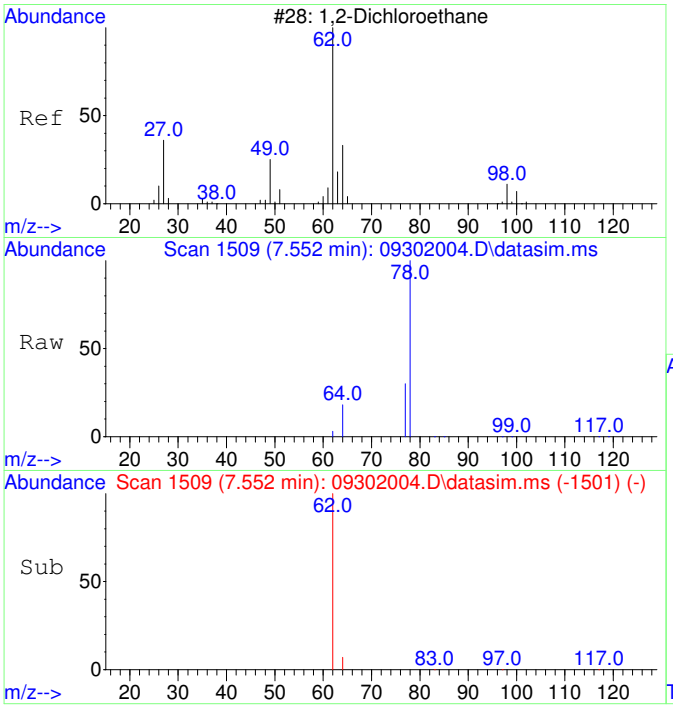


#9
Benzene
Concen: 49.40 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 78 Resp: 5721

Ion	Ratio	Lower	Upper
78	100		
77	61.2	0.0	53.2#

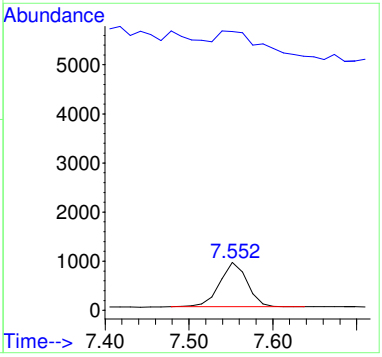


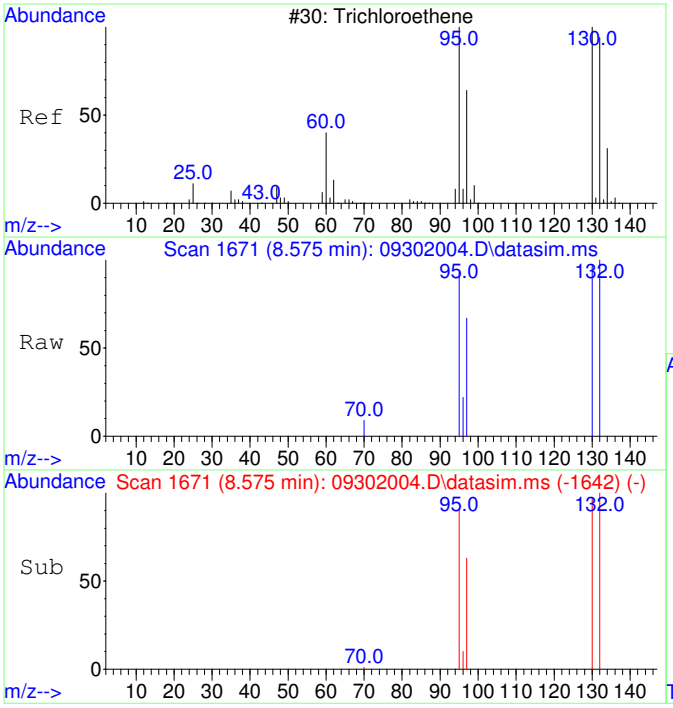


#10
1,2-Dichloroethane
Concen: 49.49 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 62 Resp: 2046

Ion	Ratio	Lower	Upper
62	100		
64	84.5	2.3	62.3#

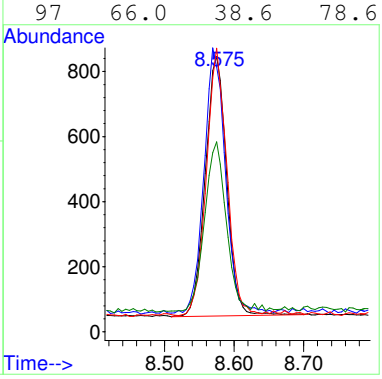


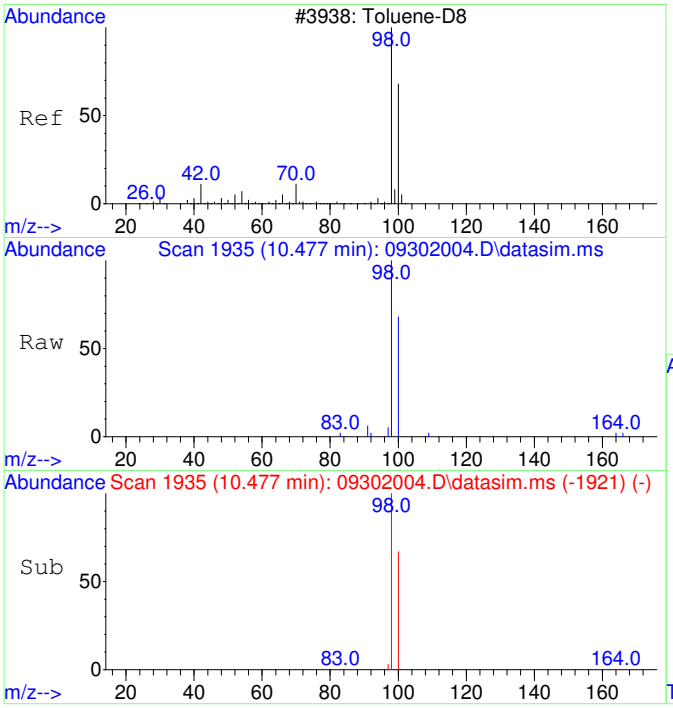


#11
Trichloroethene
Concen: 48.78 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.005 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:130 Resp: 1701

Ion	Ratio	Lower	Upper
130	100		
95	101.2	60.7	120.7
132	97.7	76.0	116.0
97	66.0	38.6	78.6

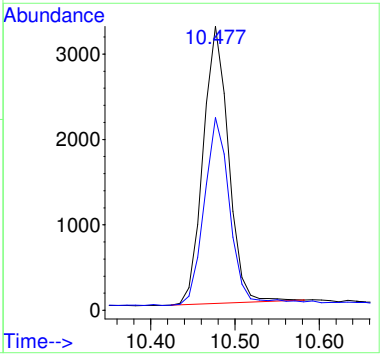


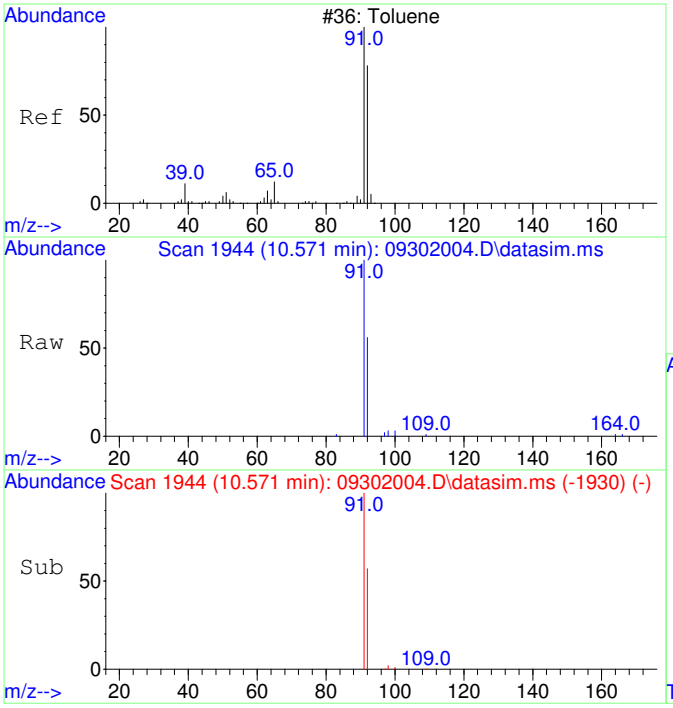


#12
Toluene-d8
Concen: 50.93 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 98 Resp: 6795

Ion	Ratio	Lower	Upper
98	100		
100	69.9	37.1	97.1

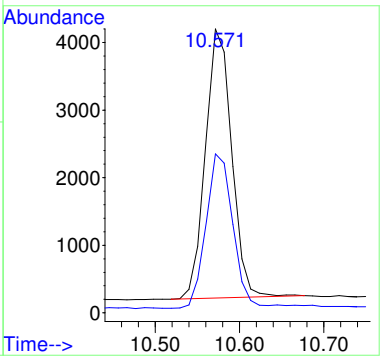


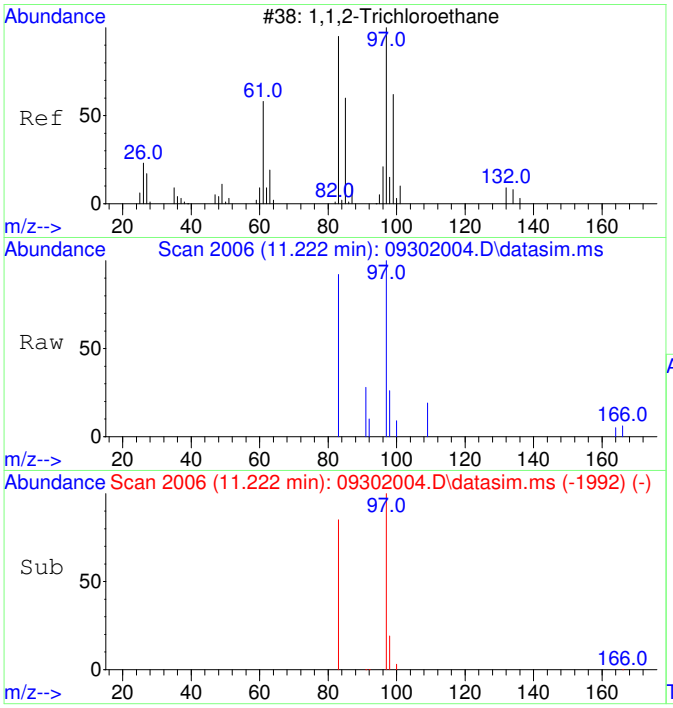


#13
Toluene
Concen: 50.87 ug/L
RT: 10.571 min Scan# 1944
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 8653

Ion	Ratio	Lower	Upper
91	100		
92	58.4	29.9	89.9

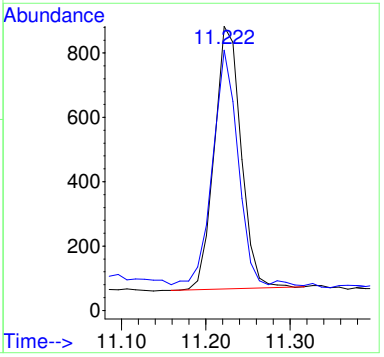


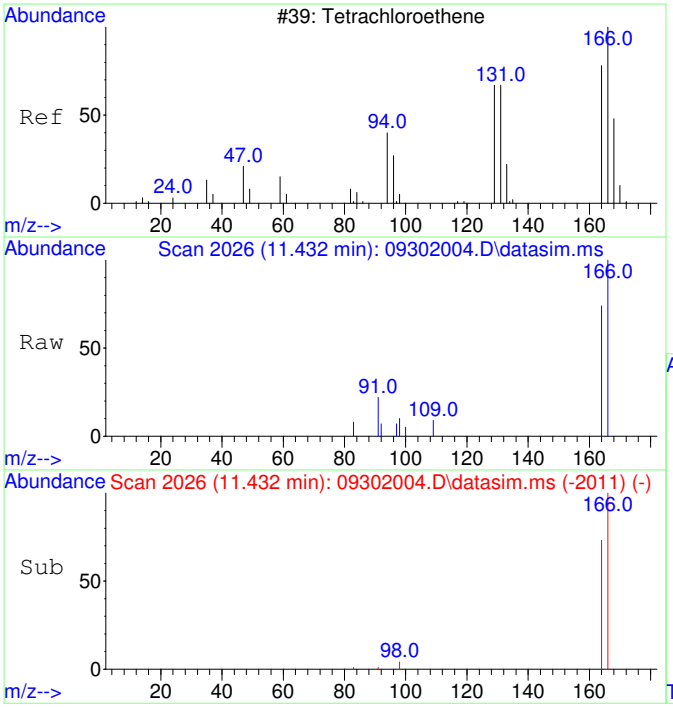


#14
1,1,2-Trichloroethane
Concen: 48.51 ug/L
RT: 11.222 min Scan# 2006
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 97 Resp: 1798

Ion	Ratio	Lower	Upper
97	100		
83	83.4	51.2	111.2

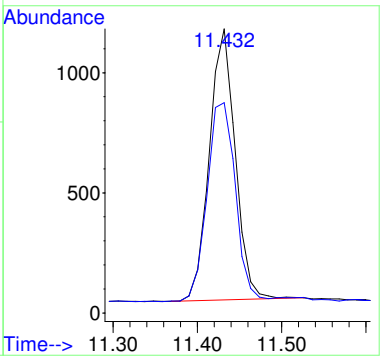


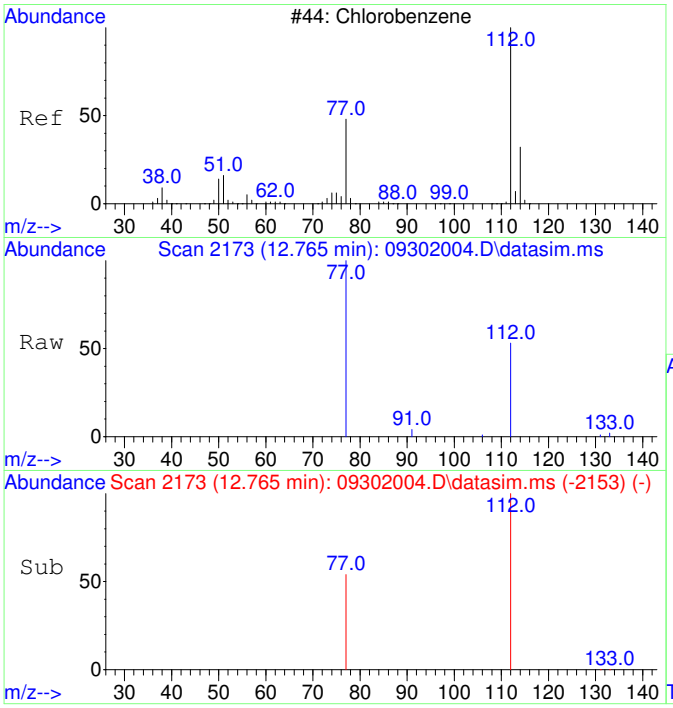


#15
Tetrachloroethene
Concen: 49.02 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:166 Resp: 2413

Ion	Ratio	Lower	Upper
166	100		
164	80.7	47.8	107.8

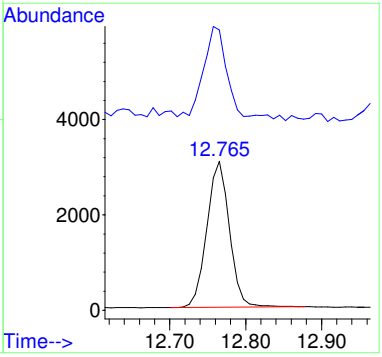


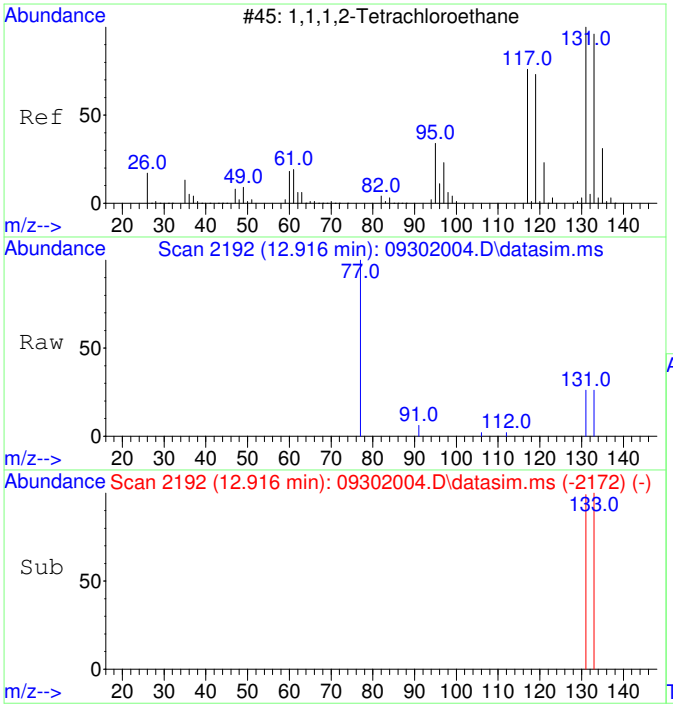


#16
Chlorobenzene
Concen: 52.02 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:112 Resp: 6336

Ion	Ratio	Lower	Upper
112	100		
77	60.1	23.6	83.6

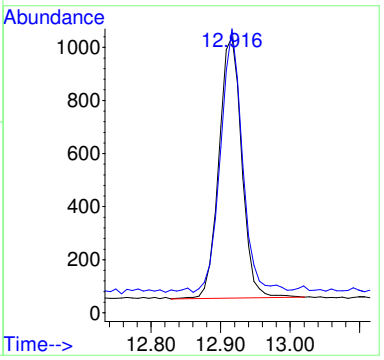


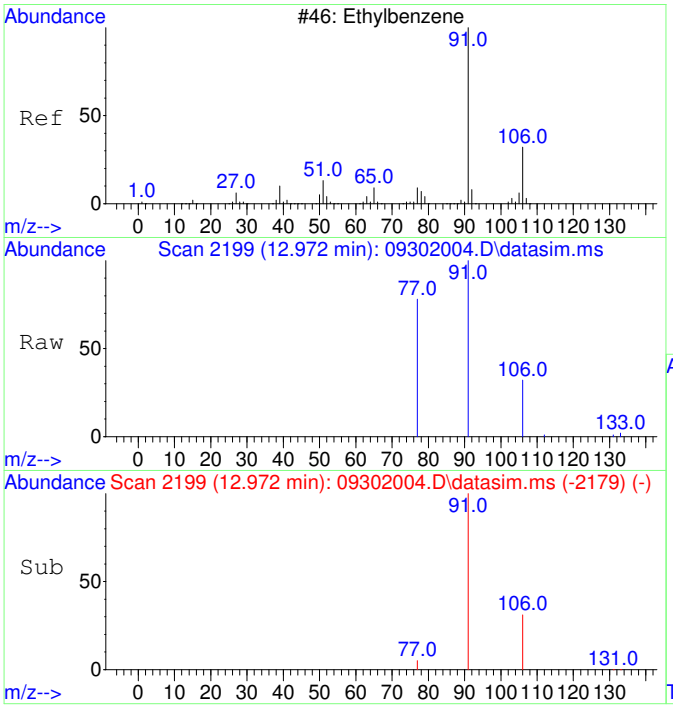


#17
1,1,1,2-Tetrachloroethane
Concen: 51.23 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:131 Resp: 2236

Ion	Ratio	Lower	Upper
131	100		
133	95.6	66.3	126.3

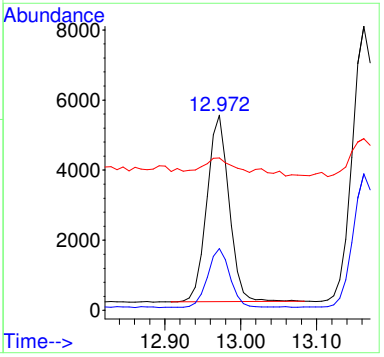


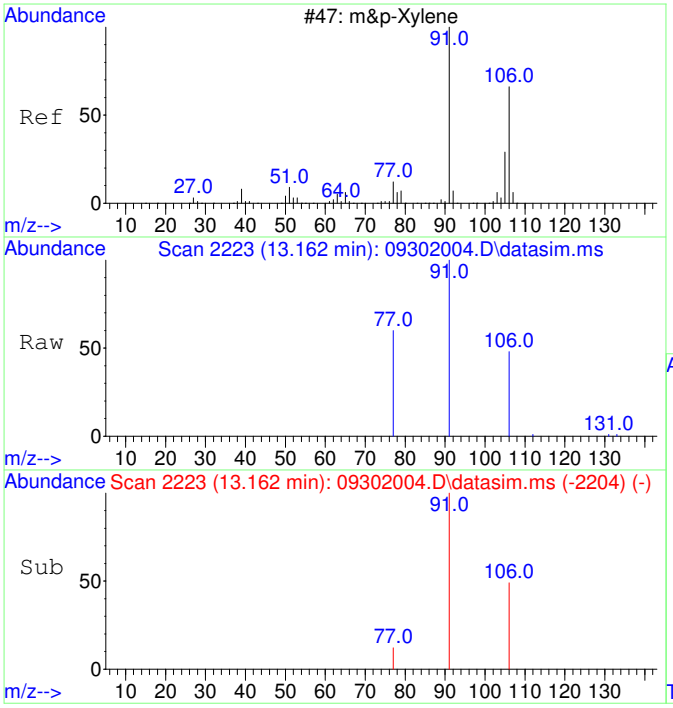


#18
Ethylbenzene
Concen: 52.06 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 10780

Ion	Ratio	Lower	Upper
91	100		
106	31.2	3.0	63.0
77	9.9	0.0	38.2

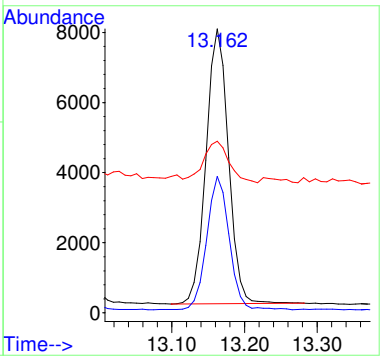


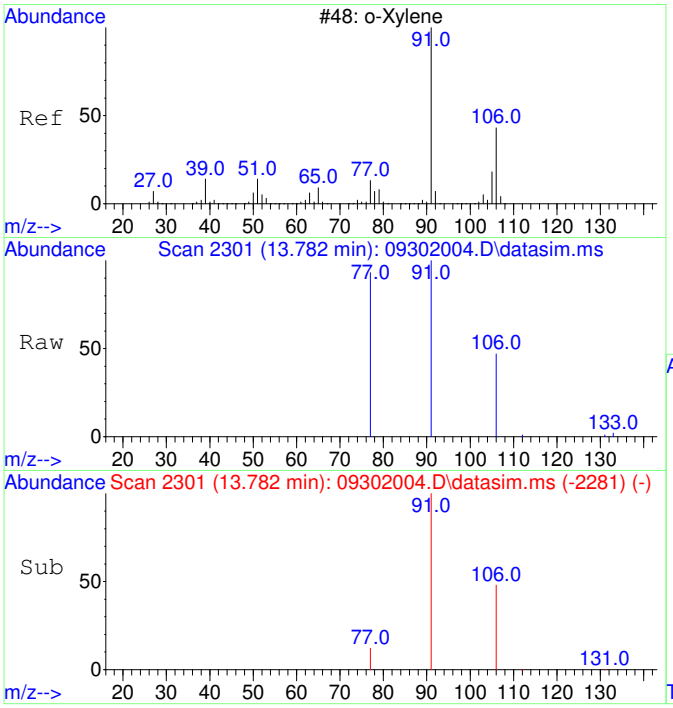


#19
m&p-Xylene
Concen: 103.84 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 16804

Ion	Ratio	Lower	Upper
91	100		
106	48.5	22.2	82.2
77	17.3	0.0	42.4

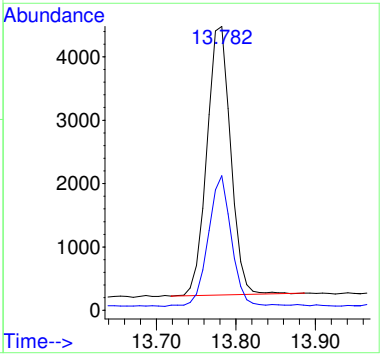


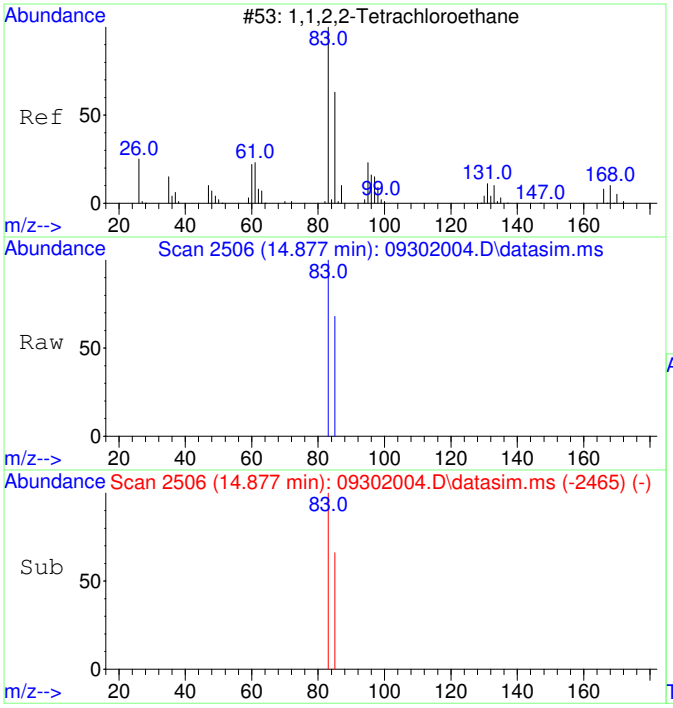


#20
o-Xylene
Concen: 50.90 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 8801

Ion	Ratio	Lower	Upper
91	100		
106	47.2	19.2	79.2

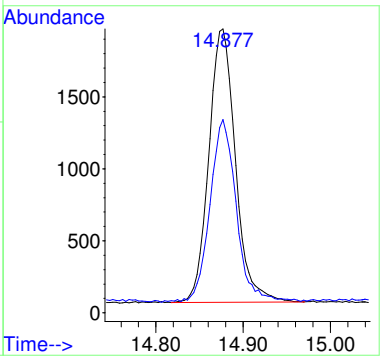


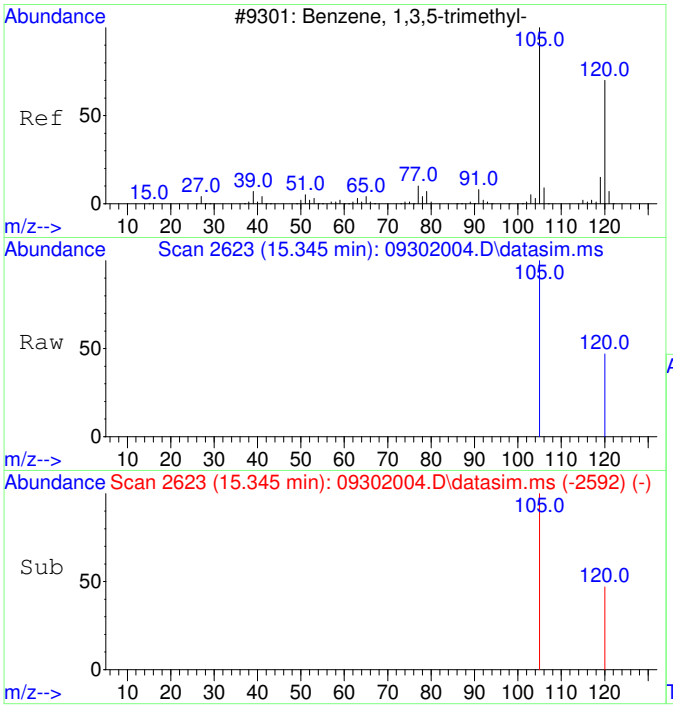


#21
1,1,2,2-Tetrachloroethane
Concen: 52.58 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. 0.004 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 83 Resp: 4029

Ion	Ratio	Lower	Upper
83	100		
85	65.7	34.8	94.8

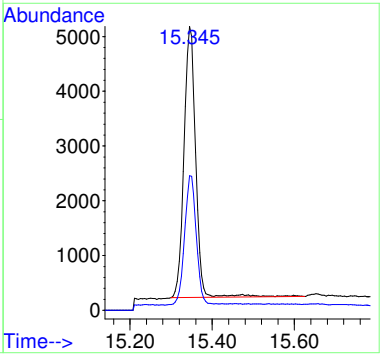


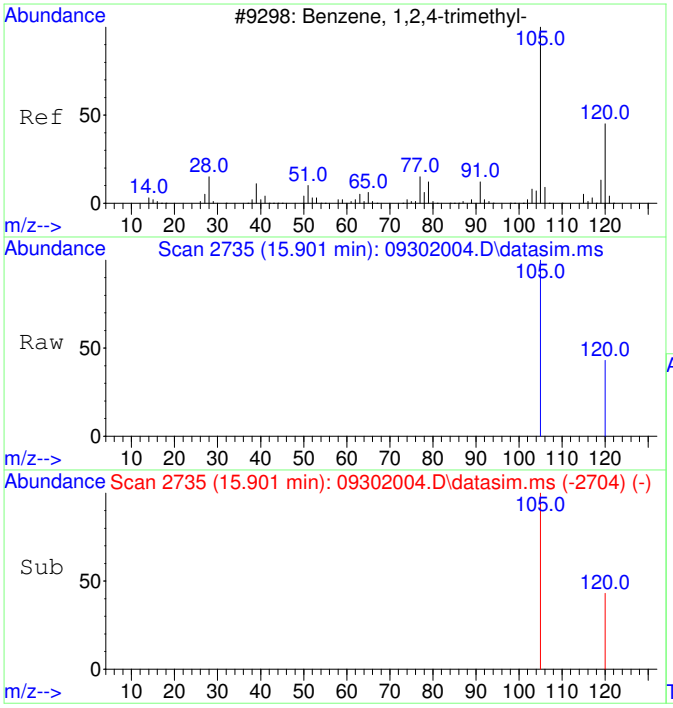


#22
1,3,5-Trimethylbenzene
Concen: 52.98 ug/L
RT: 15.345 min Scan# 2623
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:105 Resp: 9750

Ion	Ratio	Lower	Upper
105	100		
120	48.0	21.1	81.1

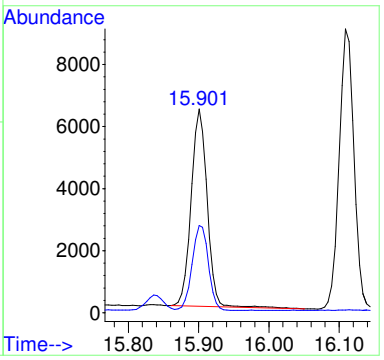


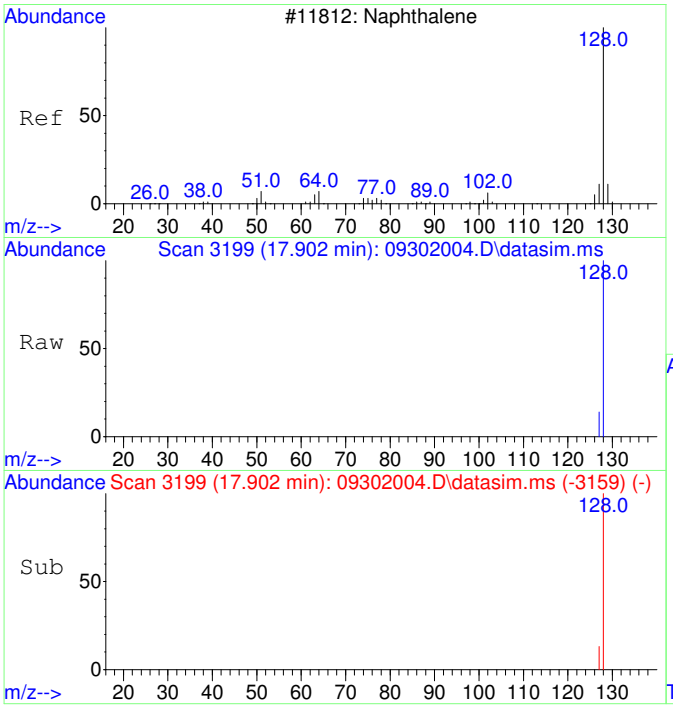


#23
1,2,4-Trimethylbenzene
Concen: 52.53 ug/L
RT: 15.901 min Scan# 2735
Delta R.T. 0.005 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:105 Resp: 10041

Ion	Ratio	Lower	Upper
105	100		
120	42.8	17.2	77.2

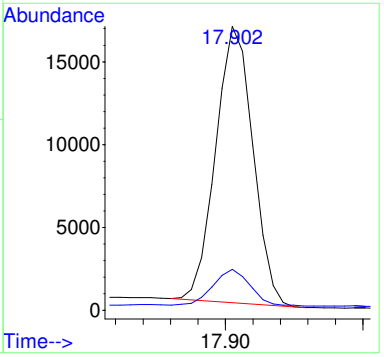


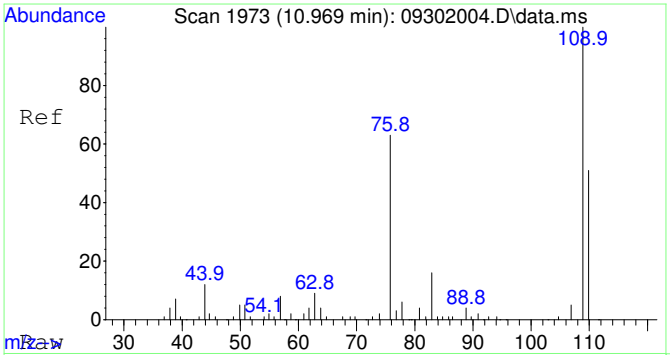


#24
Naphthalene
Concen: 51.70 ug/L
RT: 17.902 min Scan# 3199
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:128 Resp: 15619

Ion	Ratio	Lower	Upper
128	100		
127	13.0	0.0	42.5

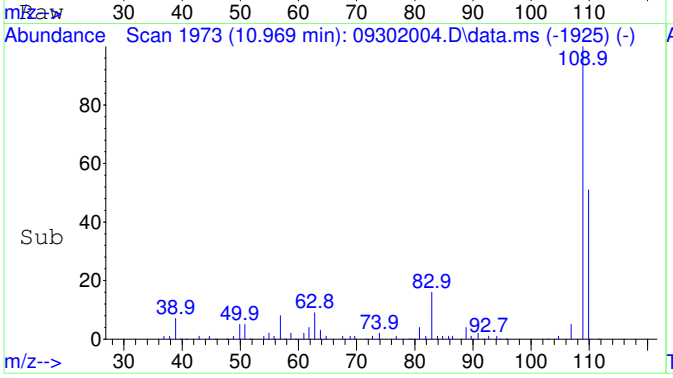


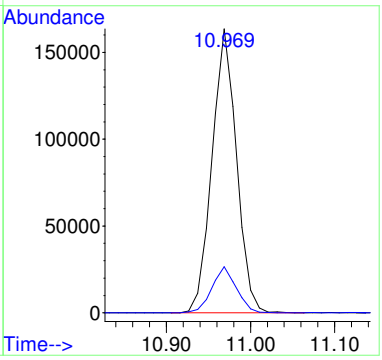


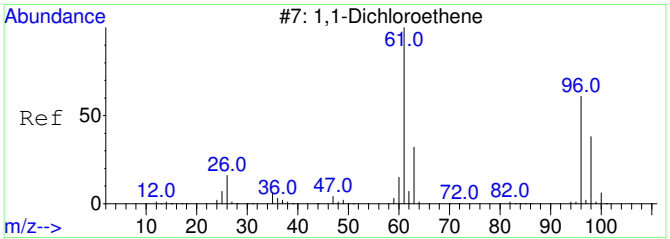
#25
2-Fluorotoluene SCAN
Concen: 4975.65 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:109 Resp: 330598

Ion	Ratio	Lower	Upper
109	100		
83	16.2	0.0	43.8



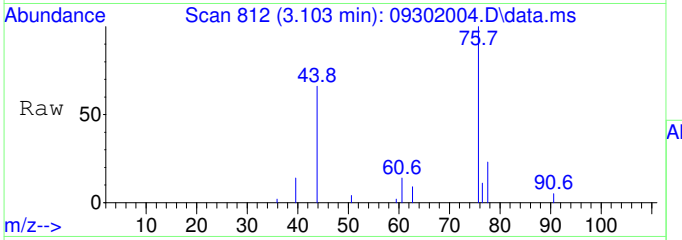


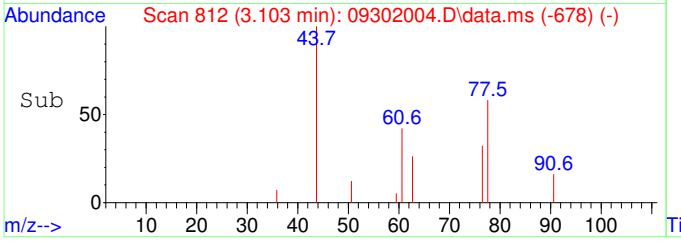


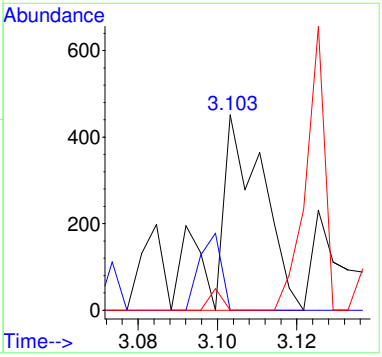
#26
1,1-Dichloroethene SCAN
Concen: 26.36 ug/L
RT: 3.103 min Scan# 812
Delta R.T. -0.004 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

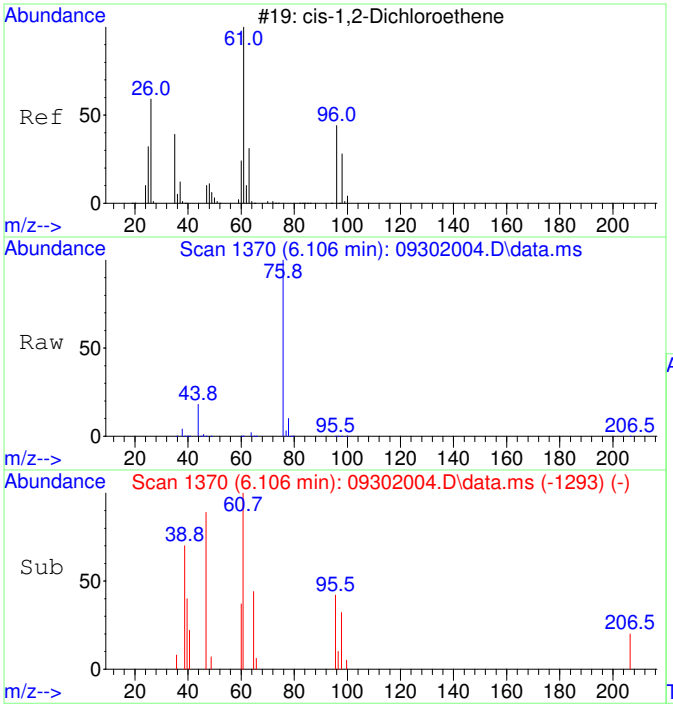
Tgt Ion: 61 Resp: 372

Ion	Ratio	Lower	Upper
61	100		
96	18.3	33.1	93.1#
98	0.0	11.2	71.2#





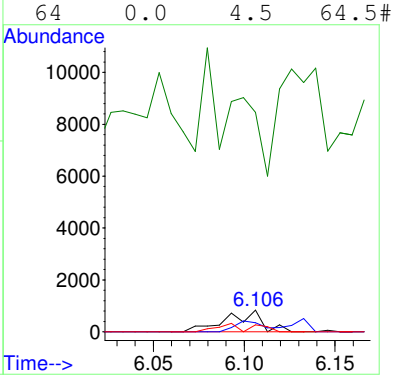


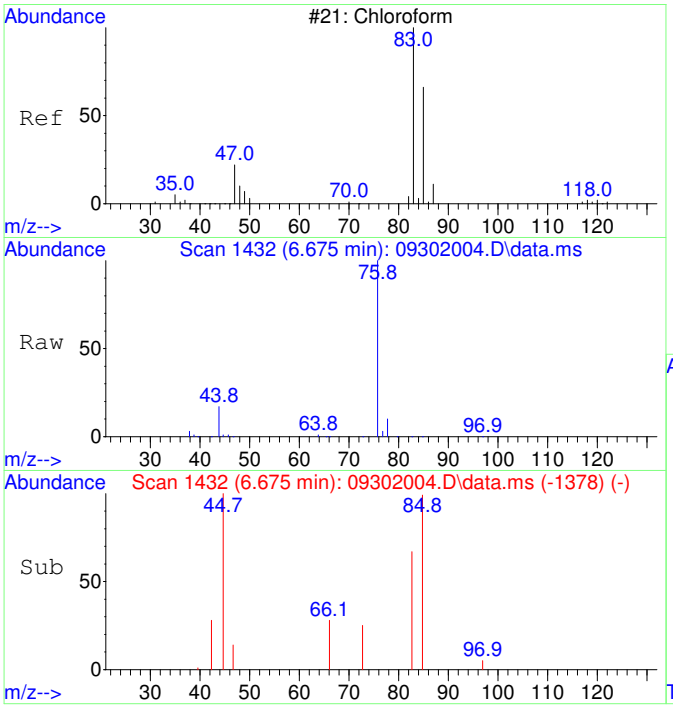


#29
cis-1,2-Dichloroethene SCAN
Concen: 53.49 ug/L
RT: 6.106 min Scan# 1370
Delta R.T. 0.013 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 61 Resp: 1158

Ion	Ratio	Lower	Upper
61	100		
96	29.5	39.9	99.9#
98	21.5	13.5	73.5
64	0.0	4.5	64.5#

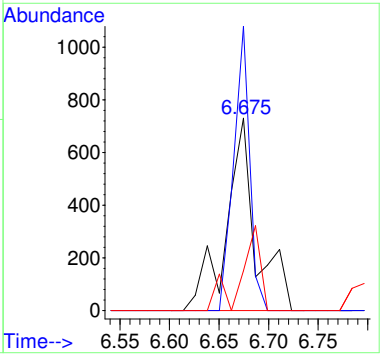


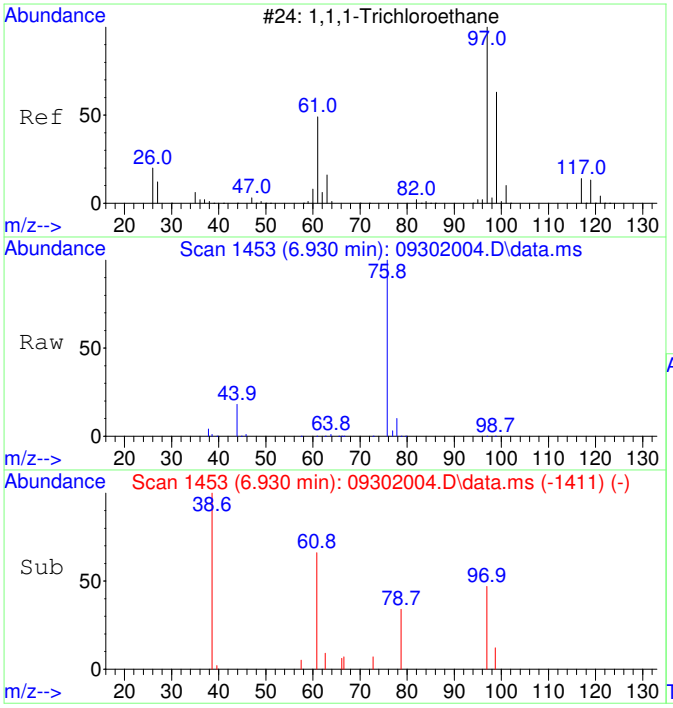


#30
Chloroform SCAN
Concen: 64.77 ug/L
RT: 6.675 min Scan# 1432
Delta R.T. 0.012 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 83 Resp: 1521

Ion	Ratio	Lower	Upper
83	100		
85	79.8	34.6	94.6
47	29.3	0.0	53.4

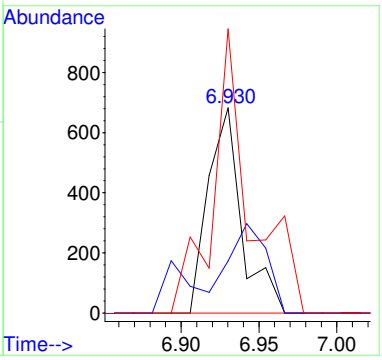


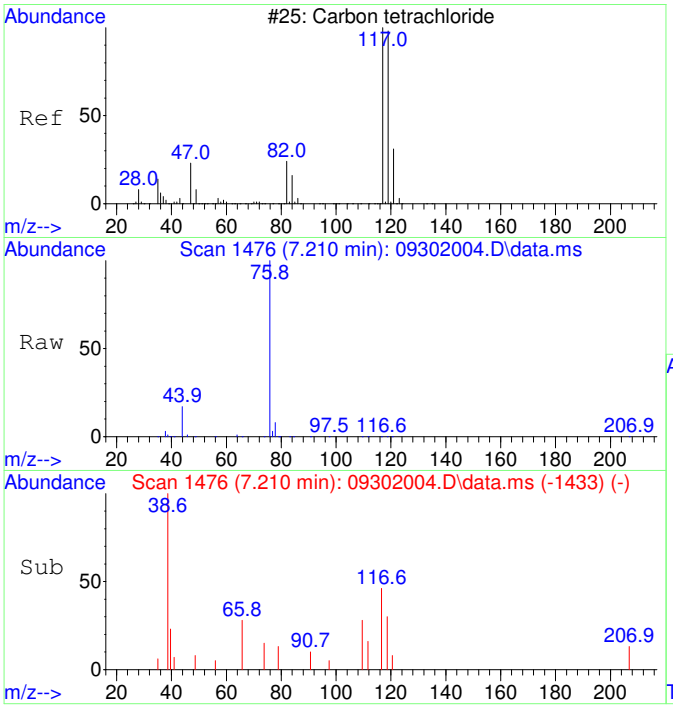


#31
1,1,1-Trichloroethane SCAN
Concen: 47.94 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. 0.012 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 97 Resp: 1026

Ion	Ratio	Lower	Upper
97	100		
99	72.4	43.6	103.6
61	153.2	18.0	78.0#

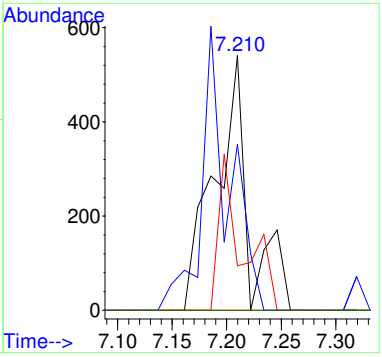


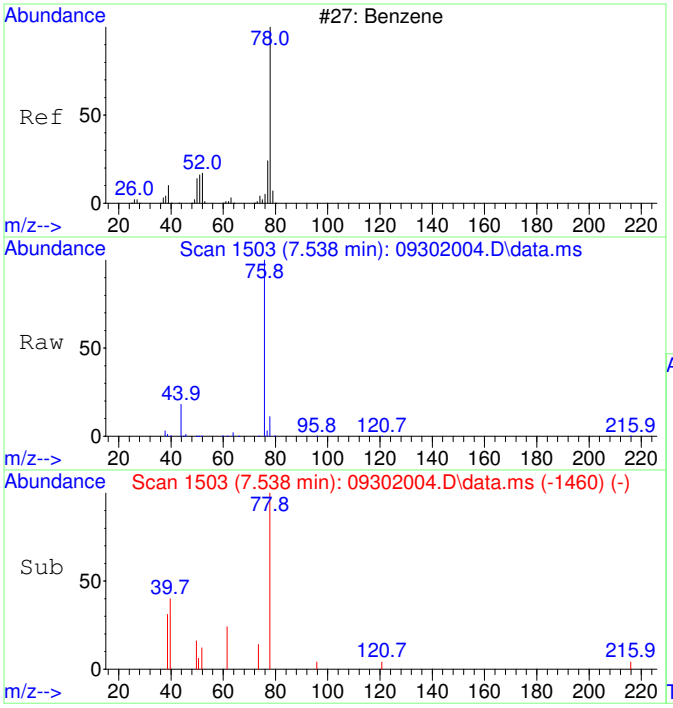


#32
Carbon tetrachloride SCAN
Concen: 52.41 ug/L
RT: 7.210 min Scan# 1476
Delta R.T. 0.024 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:117 Resp: 1170

Ion	Ratio	Lower	Upper
117	100		
119	0.0	75.5	135.5#
121	43.0	0.0	58.8
82	0.0	0.0	59.2

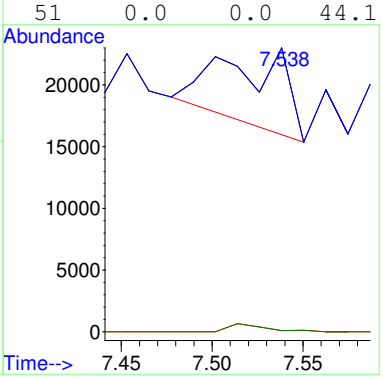


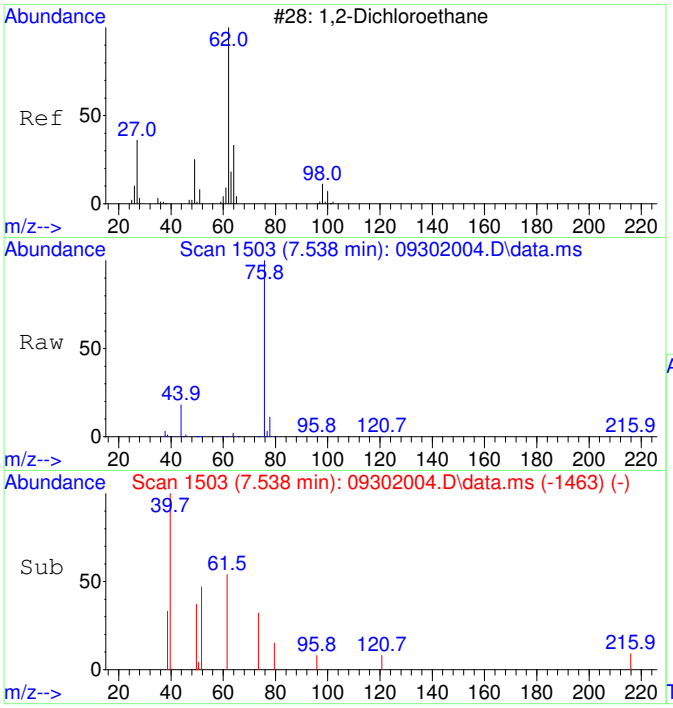


#33
Benzene SCAN
Concen: 230.77 ug/L
RT: 7.538 min Scan# 1503
Delta R.T. 0.024 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 78 Resp: 13597

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

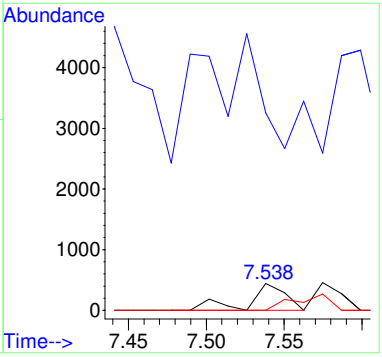


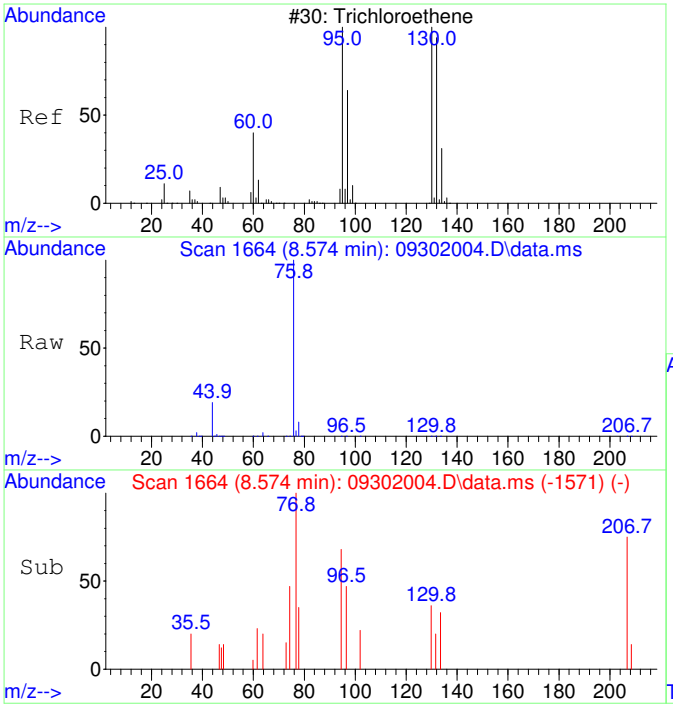


#34
1,2-Dichloroethane SCAN
Concen: 33.23 ug/L
RT: 7.538 min Scan# 1503
Delta R.T. -0.012 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 62 Resp: 723

Ion	Ratio	Lower	Upper
62	100		
64	688.4	5.2	65.2#
49	0.0	3.9	63.9#

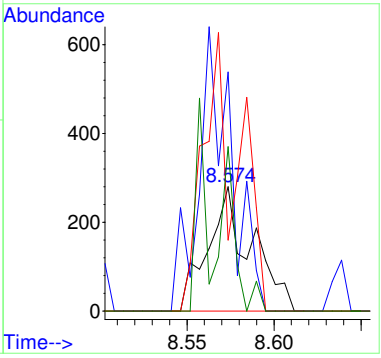


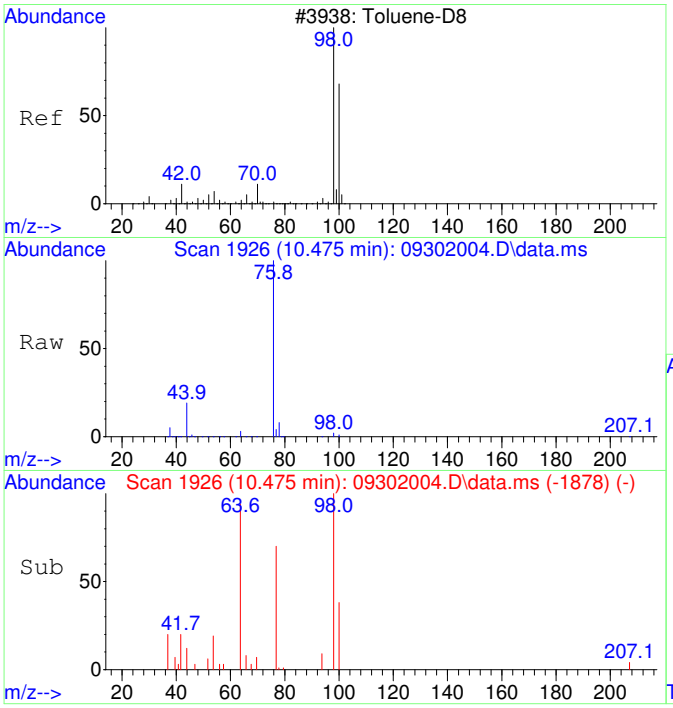


#35
Trichloroethene SCAN
Concen: 29.95 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.005 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:130 Resp: 485

Ion	Ratio	Lower	Upper
130	100		
95	170.9	60.5	120.5#
132	179.2	59.6	119.6#
97	19.6	28.2	88.2#

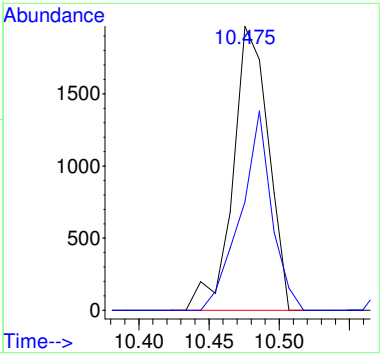


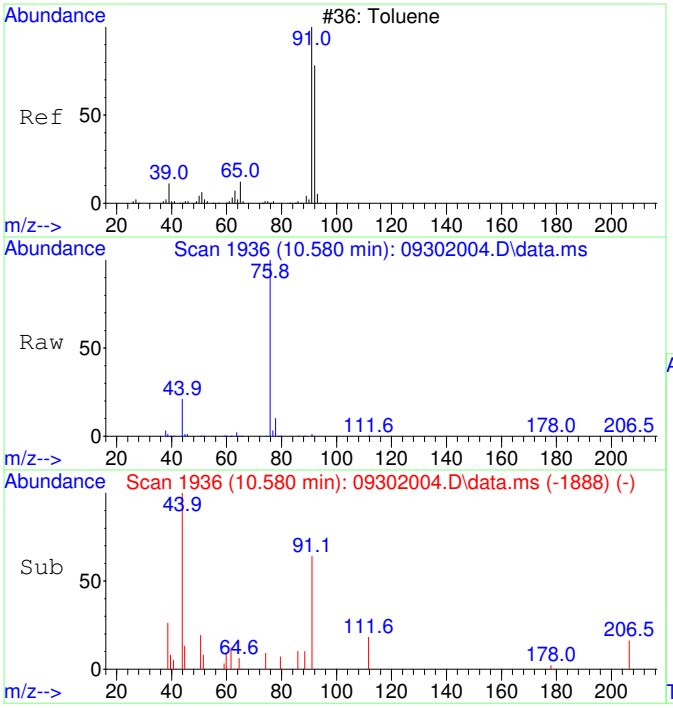


#36
Toluene-d8 SCAN
Concen: 53.43 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 98 Resp: 3472

Ion	Ratio	Lower	Upper
98	100		
100	61.5	40.0	100.0

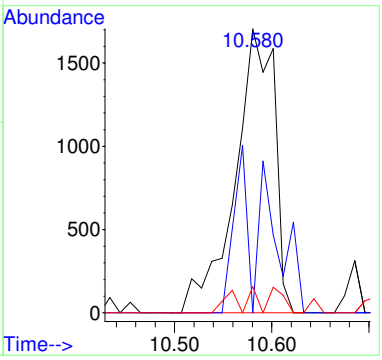


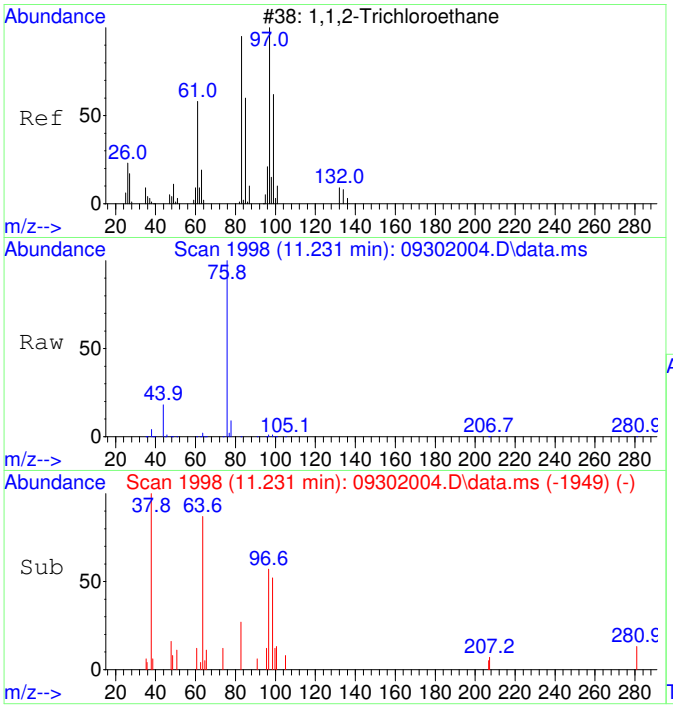


#37
Toluene SCAN
Concen: 57.95 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 4822

Ion	Ratio	Lower	Upper
91	100		
92	19.7	28.3	88.3#
65	2.1	0.0	41.0

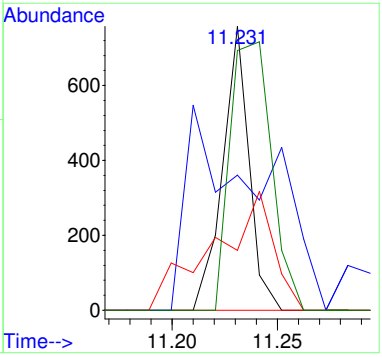


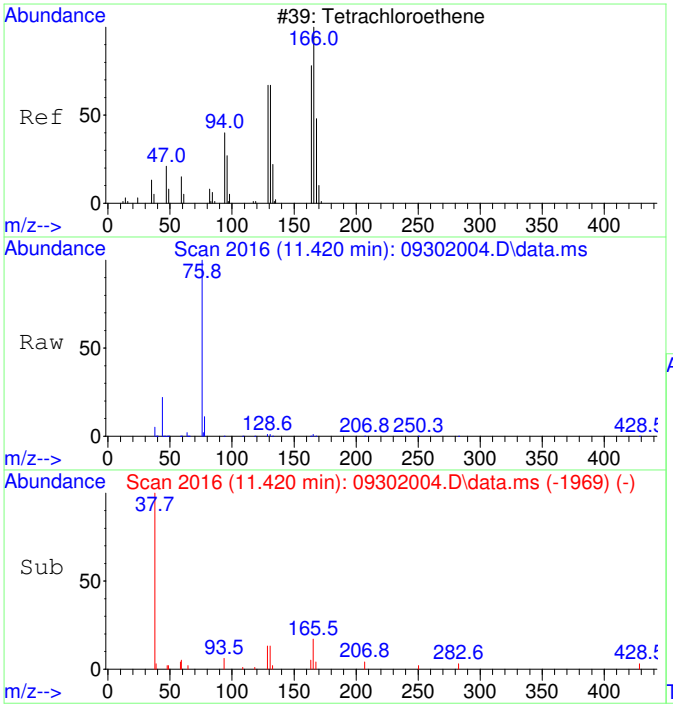


#38
1,1,2-Trichloroethane SCAN
Concen: 35.50 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. 0.010 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 97 Resp: 663

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	94.4	32.1	92.1#
99	149.2	36.7	96.7#

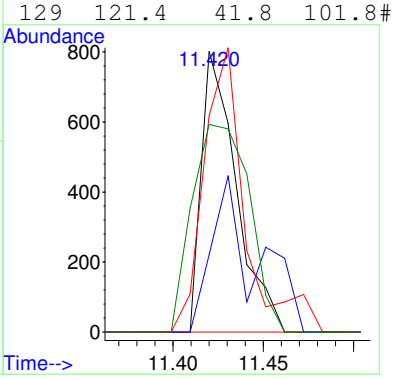


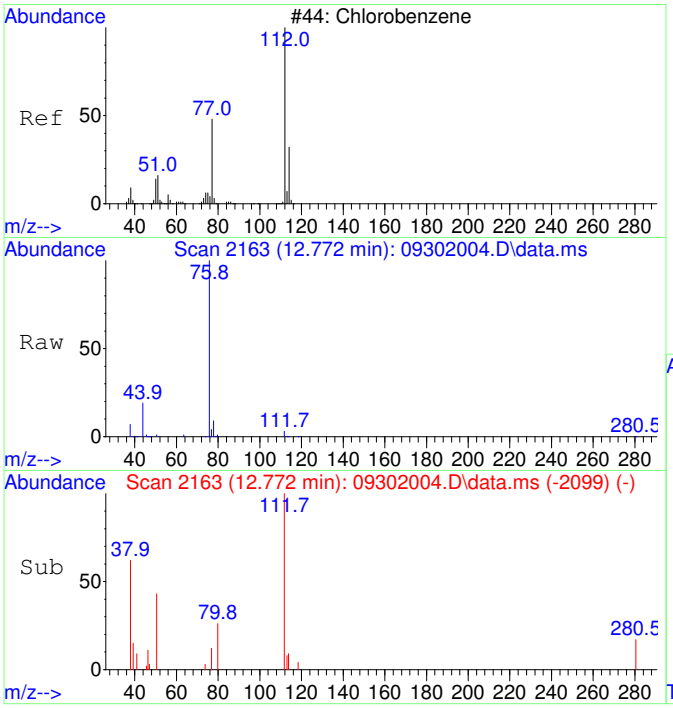


#39
Tetrachloroethene SCAN
Concen: 54.07 ug/L
RT: 11.420 min Scan# 2016
Delta R.T. -0.011 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:166 Resp: 1081

Ion	Ratio	Lower	Upper
166	100		
164	70.1	50.9	110.9
131	118.7	38.7	98.7#
129	121.4	41.8	101.8#

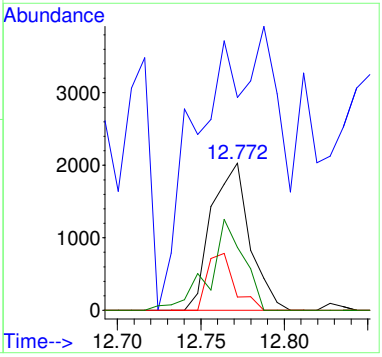


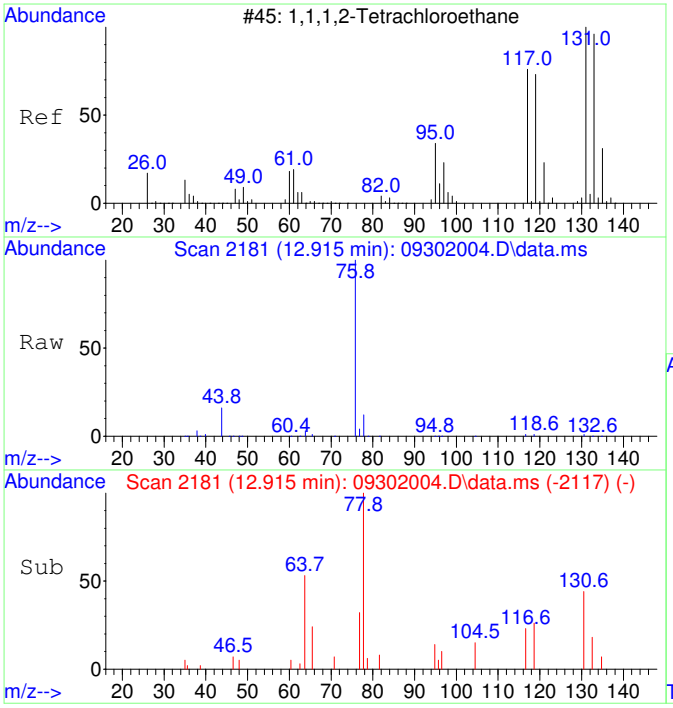


#40
Chlorobenzene SCAN
Concen: 57.12 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:112 Resp: 3248

Ion	Ratio	Lower	Upper
112	100		
77	0.0	28.2	88.2#
114	27.4	2.3	62.3
51	55.2	0.0	50.1#

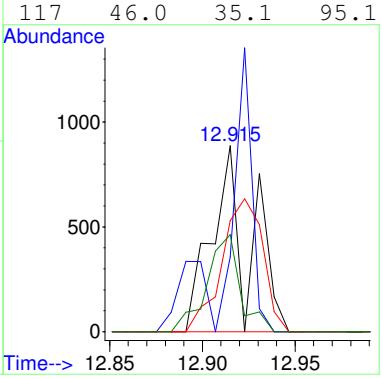


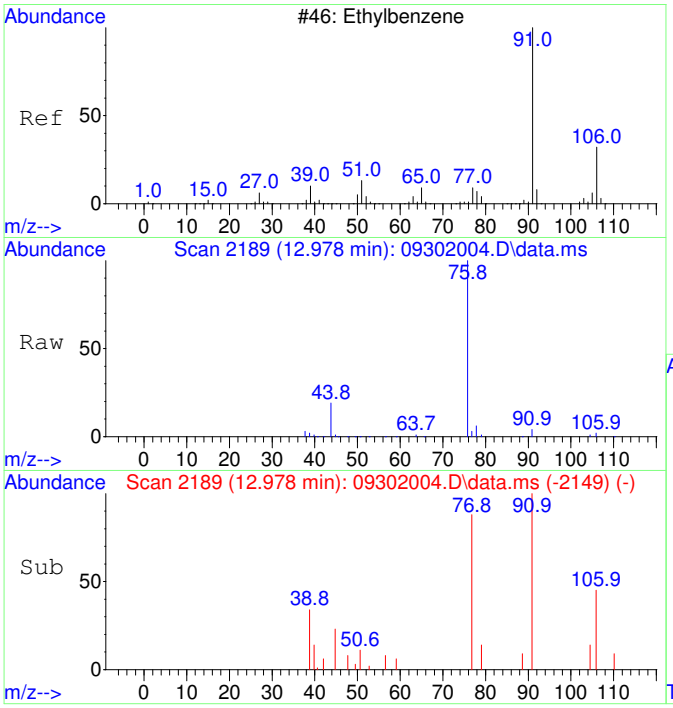


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 59.97 ug/L
RT: 12.915 min Scan# 2181
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:131 Resp: 1262

Ion	Ratio	Lower	Upper
131	100		
133	68.8	66.9	126.9
119	77.7	40.4	100.4
117	46.0	35.1	95.1

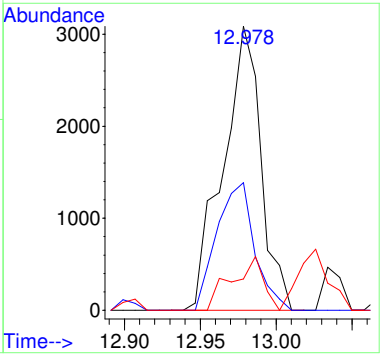


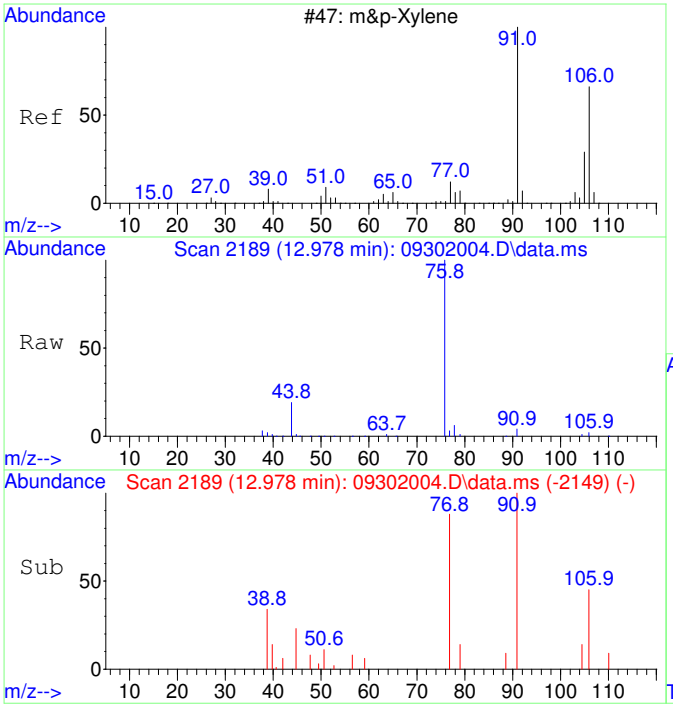


#42
Ethylbenzene SCAN
Concen: 35.51 ug/L
RT: 12.978 min Scan# 2189
Delta R.T. -0.183 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 5384

Ion	Ratio	Lower	Upper
91	100		
106	44.8	23.1	83.1
51	15.8	0.0	40.1

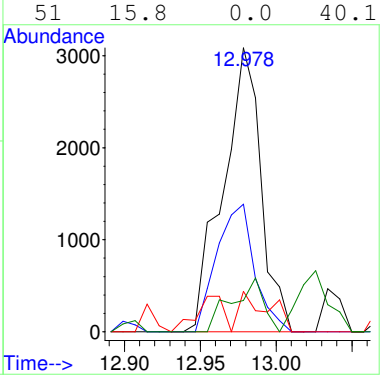


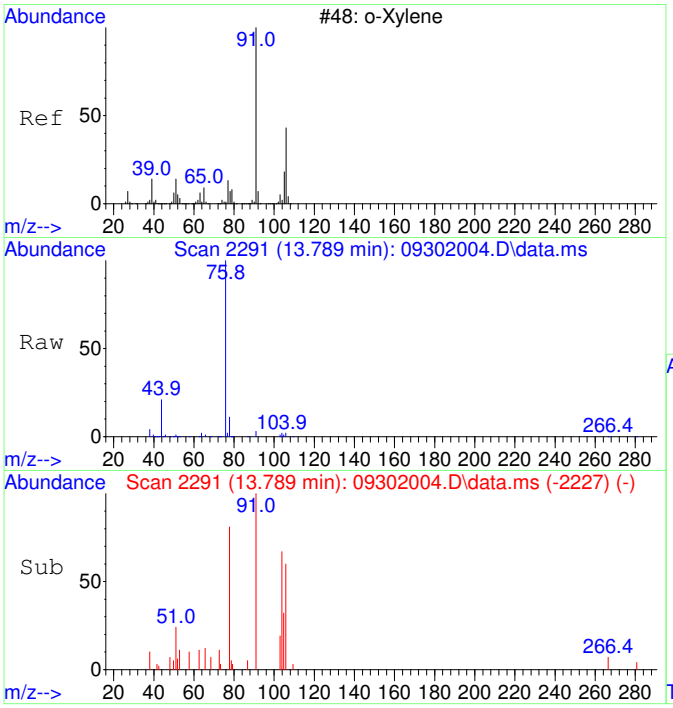


#43
m&p-Xylene SCAN
Concen: 35.51 ug/L
RT: 12.978 min Scan# 2189
Delta R.T. -0.183 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 5384

Ion	Ratio	Lower	Upper
91	100		
106	44.8	23.1	83.1
105	10.9	0.0	54.7
51	15.8	0.0	40.1

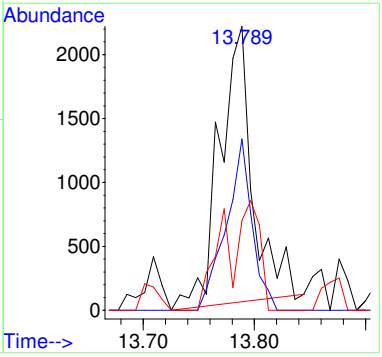


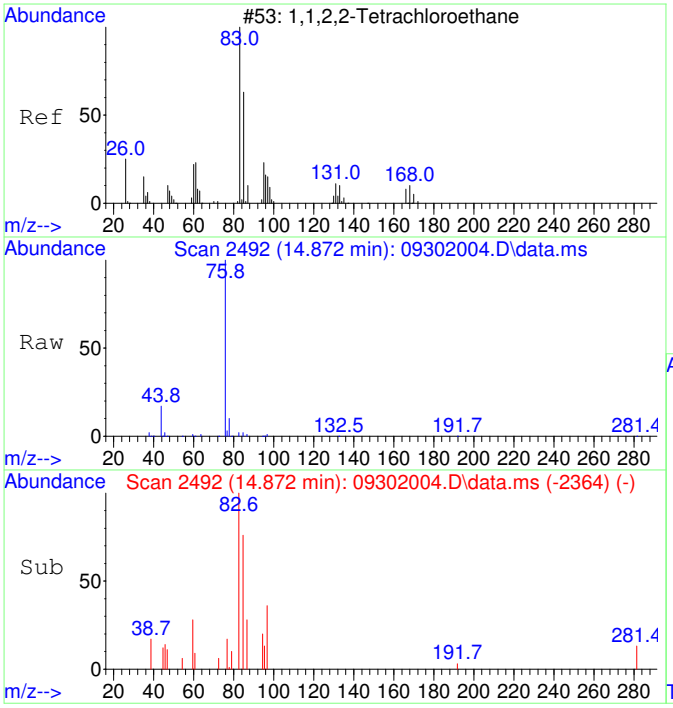


#44
o-Xylene SCAN
Concen: 54.81 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.008 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 91 Resp: 4448

Ion	Ratio	Lower	Upper
91	100		
106	48.7	18.0	78.0
105	20.1	0.0	56.6

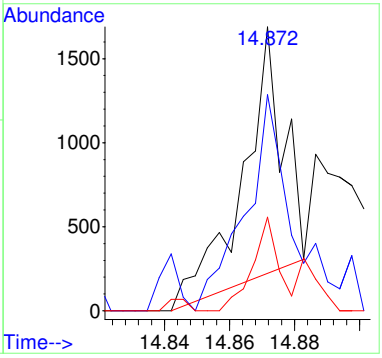


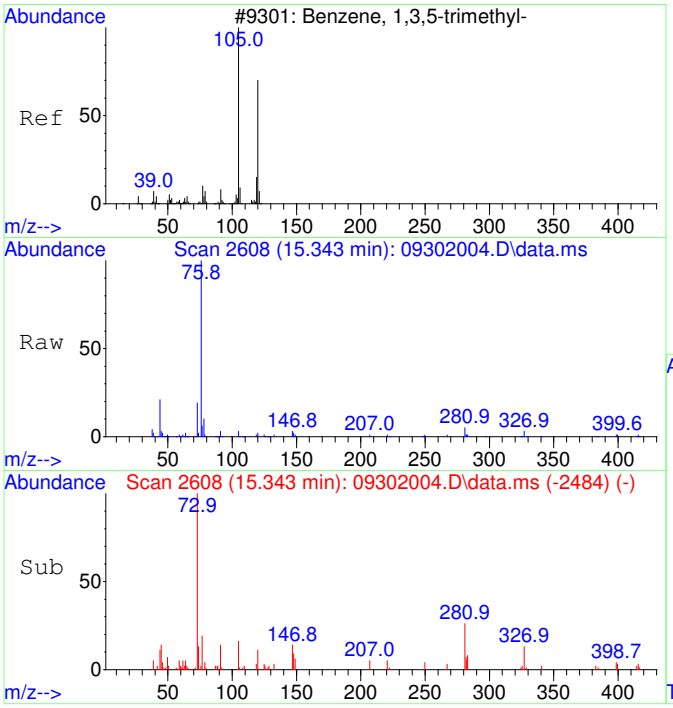


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 31.99 ug/L
RT: 14.872 min Scan# 2492
Delta R.T. 0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion: 83 Resp: 1266

Ion	Ratio	Lower	Upper
83	100		
85	92.8	35.9	95.9
95	19.9	0.0	47.4

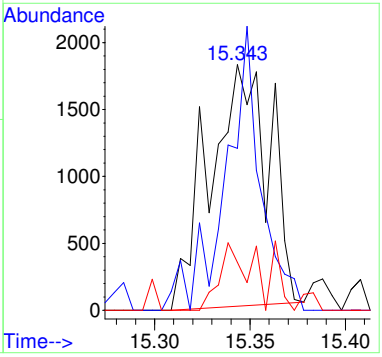


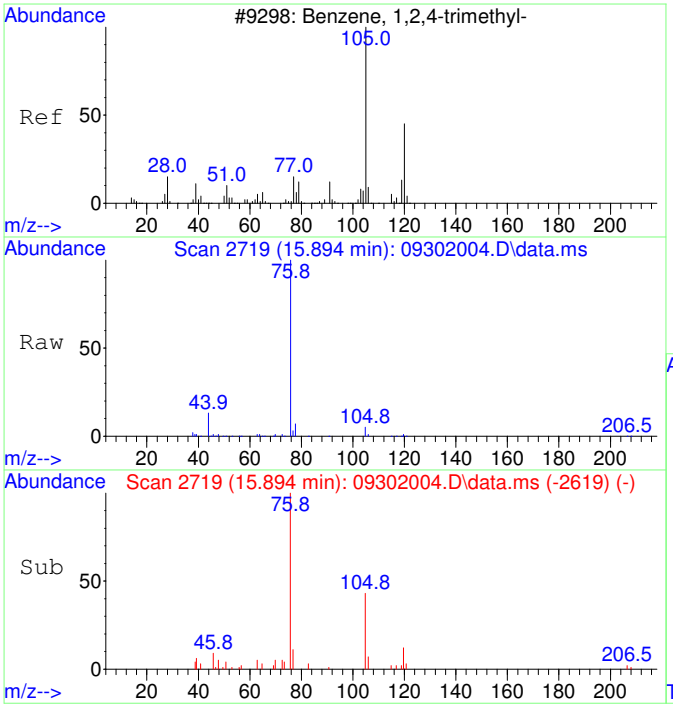


#46
1,3,5-Trimethylbenzene SCAN
Concen: 46.29 ug/L
RT: 15.343 min Scan# 2608
Delta R.T. -0.000 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:105 Resp: 3959

Ion	Ratio	Lower	Upper
105	100		
120	69.1	18.3	78.3
119	14.1	0.0	43.1

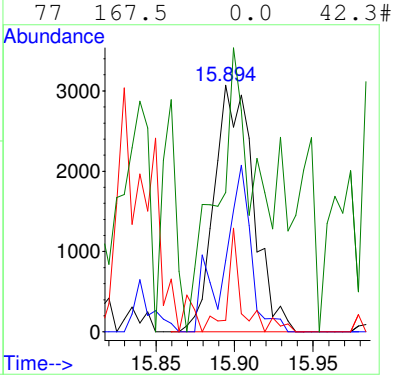


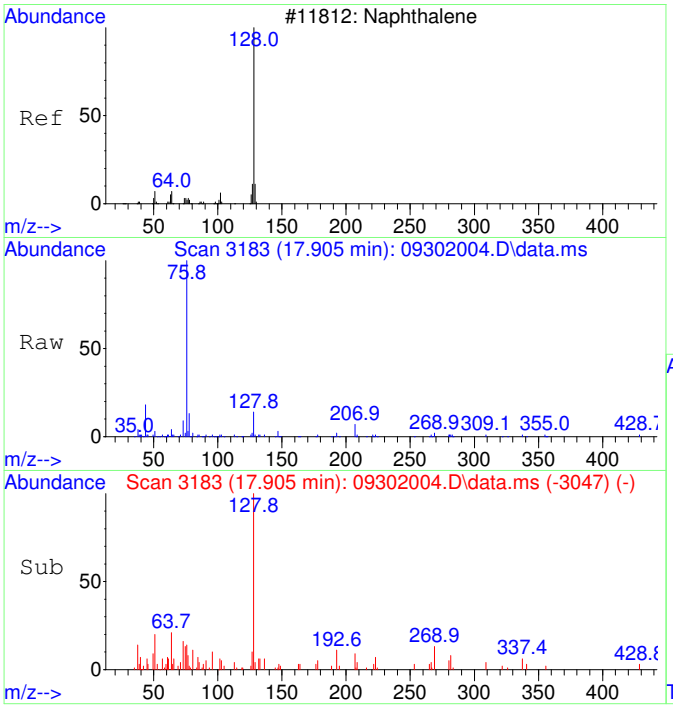


#47
1,2,4-Trimethylbenzene SCAN
Concen: 60.40 ug/L
RT: 15.894 min Scan# 2719
Delta R.T. -0.005 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:105 Resp: 5286

Ion	Ratio	Lower	Upper
105	100		
120	47.4	16.9	76.9
119	13.5	0.0	41.9
77	167.5	0.0	42.3#

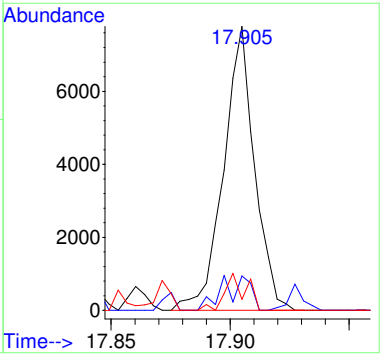




#48
Naphthalene SCAN
Concen: 53.20 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.004 min
Lab File: 09302004.D
Acq: 30 Sep 2020 14:31

Tgt Ion:128 Resp: 7044

Ion	Ratio	Lower	Upper
128	100		
127	10.8	0.0	44.0
129	8.9	0.0	40.8



CRDL STANDARD

Radiello D1

Laboratory: EPA Region 9 Laboratory
SDG: 20274A
Client: California Site Cleanup Section 3
Project: MEW OU1 FY2020 Vapor Intrusion Investigation
Instrument ID: AG5975CV
Calibration: 2008017
Sequence: S20J003

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
S20J003-CRL1	1,1-Dichloroethene	50.0	44.8	90	ug/L	60 - 140
	trans-1,2-Dichloroethene	50.0	47.6	95	ug/L	60 - 140
	1,1-Dichloroethane	50.0	47.9	96	ug/L	60 - 140
	cis-1,2-Dichloroethene	50.0	47.9	96	ug/L	60 - 140
	Chloroform	50.0	44.7	89	ug/L	60 - 140
	Trichloroethene	50.0	46.9	94	ug/L	60 - 140
	Tetrachloroethene	50.0	49.3	99	ug/L	60 - 140
	Toluene-d8	50.0	50.5	101	ug/L	60 - 140

QLS REPORT

Instrument Name: AG5975C
Sample Name: S20J003-CRL1
Misc Info: 2030073 0.05 mg/L
Date Acquired: 10/1/20 12:56
QLast Update: Fri Aug 21 08:33:54 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.970	5000.0	5000.00	100%	60	140	pass
2)	1,1-Dichloroethene	3.090	50.0	44.84	90%	60	140	pass
3)	trans-1,2-Dichloroethene	4.396	50.0	47.57	95%	60	140	pass
4)	1,1-Dichloroethane	5.099	50.0	47.93	96%	60	140	pass
5)	cis-1,2-Dichloroethene	6.094	50.0	47.87	96%	60	140	pass
6)	Chloroform	6.664	50.0	44.68	89%	60	140	pass
7)	1,1,1-Trichloroethane	6.919	50.0	44.49	89%	60	140	pass
8)	Carbon tetrachloride	7.187	50.0	44.50	89%	60	140	pass
10)	1,2-Dichloroethane	7.552	50.0	47.41	95%	60	140	pass
11)	Trichloroethene	8.569	50.0	46.91	94%	60	140	pass
12)	Toluene-d8	10.477	50.0	50.47	101%	60	140	pass
13)	Toluene	10.571	50.0	51.21	102%	60	140	pass
14)	1,1,2-Trichloroethane	11.222	50.0	49.76	100%	60	140	pass
15)	Tetrachloroethene	11.421	50.0	49.26	99%	60	140	pass
16)	Chlorobenzene	12.757	50.0	52.98	106%	60	140	pass
17)	1,1,1,2-Tetrachloroethane	12.908	50.0	51.06	102%	60	140	pass
18)	Ethylbenzene	12.964	50.0	53.81	108%	60	140	pass
19)	m&p-Xylene	13.162	100.0	107.97	108%	60	140	pass
20)	o-Xylene	13.774	50.0	52.91	106%	60	140	pass
21)	1,1,2,2-Tetrachloroethane	14.873	50.0	53.86	108%	60	140	pass
22)	1,3,5-Trimethylbenzene	15.345	50.0	56.18	112%	60	140	pass
23)	1,2,4-Trimethylbenzene	15.896	50.0	55.77	112%	60	140	pass
24)	Naphthalene	17.903	50.0	53.45	107%	60	140	pass

Quantitation Report (Not Reviewed)

Table of Contents

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012004.D
Acq On : 1 Oct 2020 12:56
InstName : AG5975C
Operator : TD
Sample : S20J003-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 01 13:14:58 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

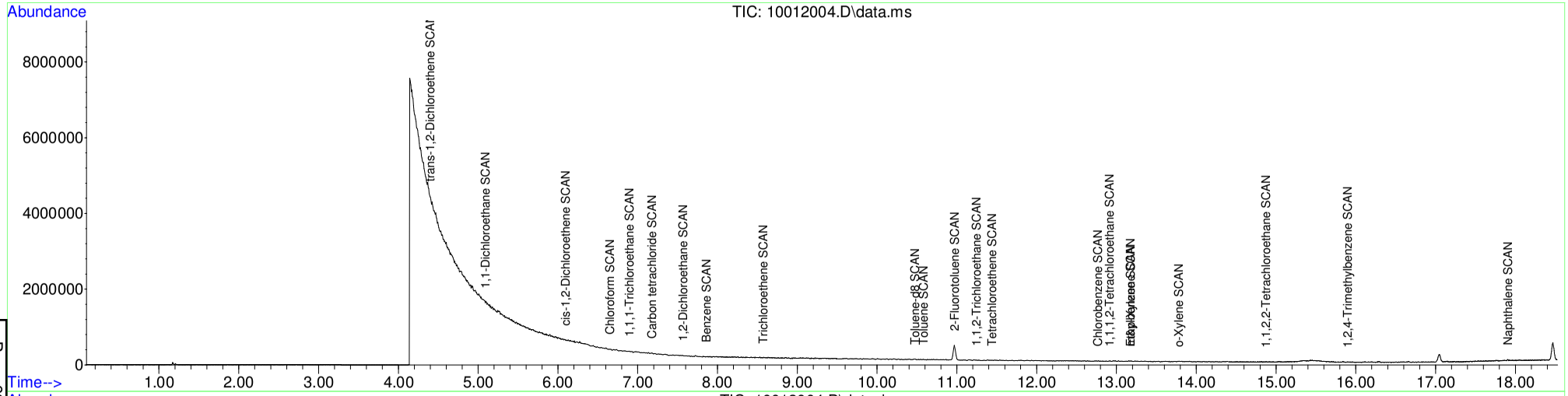
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	603773	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	5965	50.47 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery =	1.01%#	
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.101	61	1517	62.92 ug/L	95
3] trans-1,2-Dichloroethene	4.389	61	1325	47.57 ug/L	70
4] 1,1-Dichloroethane	5.092	63	1662	47.93 ug/L	53
5] cis-1,2-Dichloroethene	6.088	61	1752	47.87 ug/L	99
6] Chloroform	6.651	83	1674	44.68 ug/L	99
7] 1,1,1-Trichloroethane	6.919	97	1810	44.49 ug/L	100
8] Carbon tetrachloride	7.187	117	1704	44.50 ug/L	97
9] Benzene	7.503	78	5164	50.34 ug/L #	1
10] 1,2-Dichloroethane	7.552	62	1736	47.41 ug/L #	1
11] Trichloroethene	8.569	130	1449	46.91 ug/L	91
13] Toluene	10.571	91	7716	51.21 ug/L	98
14] 1,1,2-Trichloroethane	11.222	97	1634	49.76 ug/L	92
15] Tetrachloroethene	11.432	166	2148	49.26 ug/L	97
16] Chlorobenzene	12.765	112	5716	52.98 ug/L	74
17] 1,1,1,2-Tetrachloroethane	12.916	131	1974	51.06 ug/L	100
18] Ethylbenzene	12.972	91	9869	53.81 ug/L	94
19] m&p-Xylene	13.162	91	15478	107.97 ug/L	93
20] o-Xylene	13.774	91	8103	52.91 ug/L	96
21] 1,1,2,2-Tetrachloroethane	14.877	83	3656	53.86 ug/L	100
22] 1,3,5-Trimethylbenzene	15.345	105	9158	56.18 ug/L	95
23] 1,2,4-Trimethylbenzene	15.901	105	9443	55.77 ug/L	94
24] Naphthalene	17.904	128	14305	53.45 ug/L	89
25) 2-Fluorotoluene SCAN	10.969	109	302650	5142.15 ug/L	97
27) trans-1,2-Dichloroethe...	4.394	61	593	38.34 ug/L #	32
28) 1,1-Dichloroethane SCAN	5.091	63	414	23.13 ug/L #	38
29) cis-1,2-Dichloroethene...	6.093	61	390	20.34 ug/L #	61
30) Chloroform SCAN	6.650	83	449	21.58 ug/L #	27
31) 1,1,1-Trichloroethane ...	6.893	97	2047	107.99 ug/L #	19
32) Carbon tetrachloride SCAN	7.173	117	625	31.61 ug/L #	15
33) Benzene SCAN	7.860	78	1960	37.55 ug/L	93
34) 1,2-Dichloroethane SCAN	7.562	62	1492	77.42 ug/L #	1
35) Trichloroethene SCAN	8.568	130	606	42.25 ug/L #	41
36) Toluene-d8 SCAN	10.475	98	2676	46.49 ug/L	98
37) Toluene SCAN	10.580	91	6871	93.21 ug/L	78
38) 1,1,2-Trichloroethane ...	11.241	97	479	28.95 ug/L #	38
39) Tetrachloroethene SCAN	11.441	166	1049	59.23 ug/L #	22
40) Chlorobenzene SCAN	12.764	112	3421	67.92 ug/L #	90
41) 1,1,1,2-Tetrachloroeth...	12.907	131	710	38.09 ug/L #	16
42) Ethylbenzene SCAN	13.177	91	10015	74.57 ug/L	81
43) m&p-Xylene SCAN	13.177	91	10015	74.57 ug/L	84
44) o-Xylene SCAN	13.781	91	5154	71.70 ug/L	92
45) 1,1,2,2-Tetrachloroeth...	14.872	83	2194	62.59 ug/L #	29
47) 1,2,4-Trimethylbenzene...	15.899	105	5213	67.25 ug/L #	88
48) Naphthalene SCAN	17.903	128	8107	69.11 ug/L	80

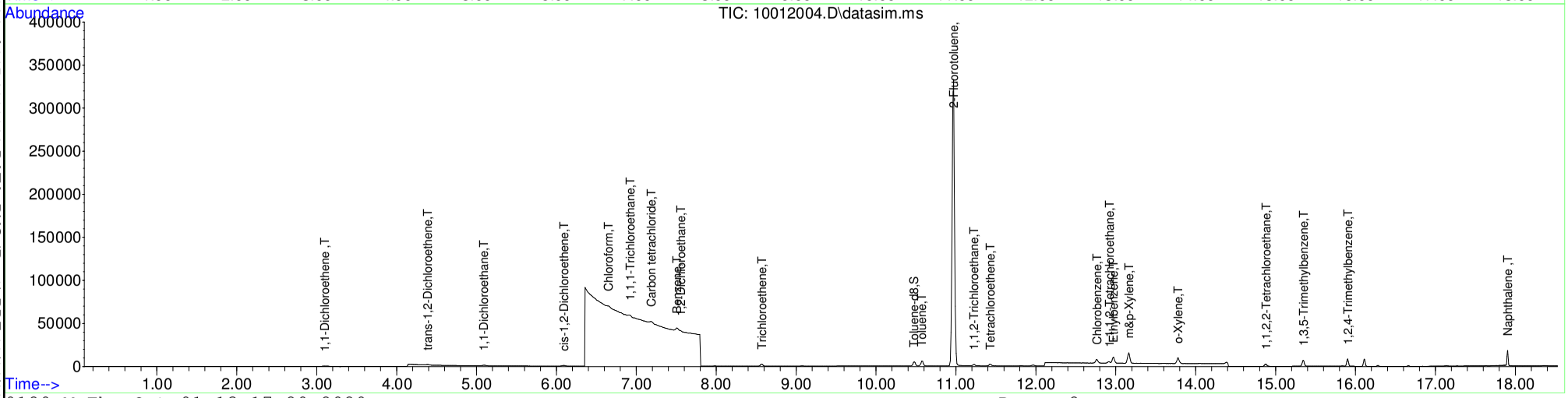
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012004.D
Acq On : 1 Oct 2020 12:56
InstName : AG5975C
Operator : TD
Sample : S20J003-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 01 13:14:58 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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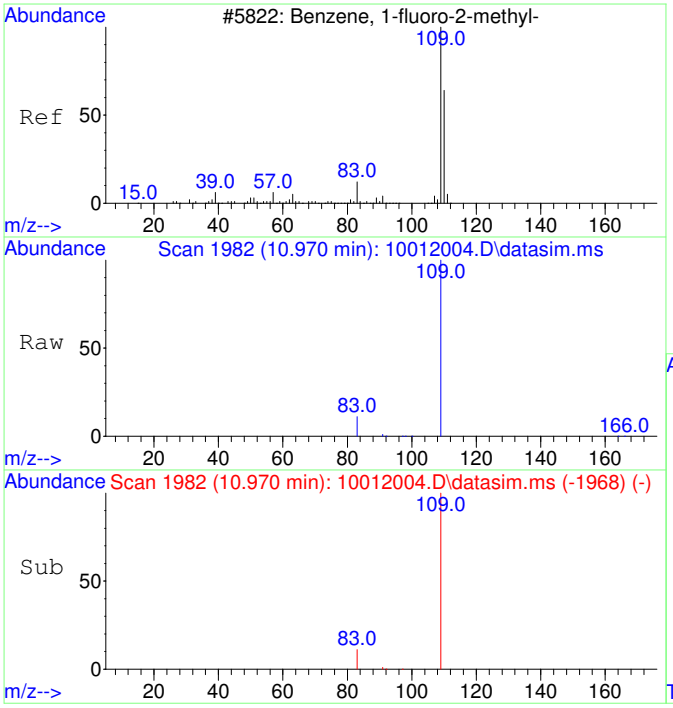
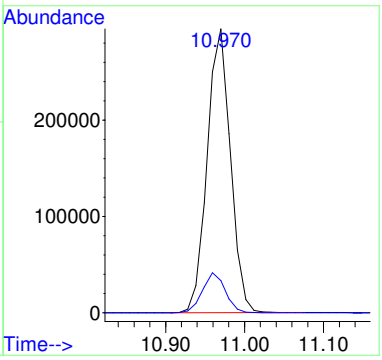
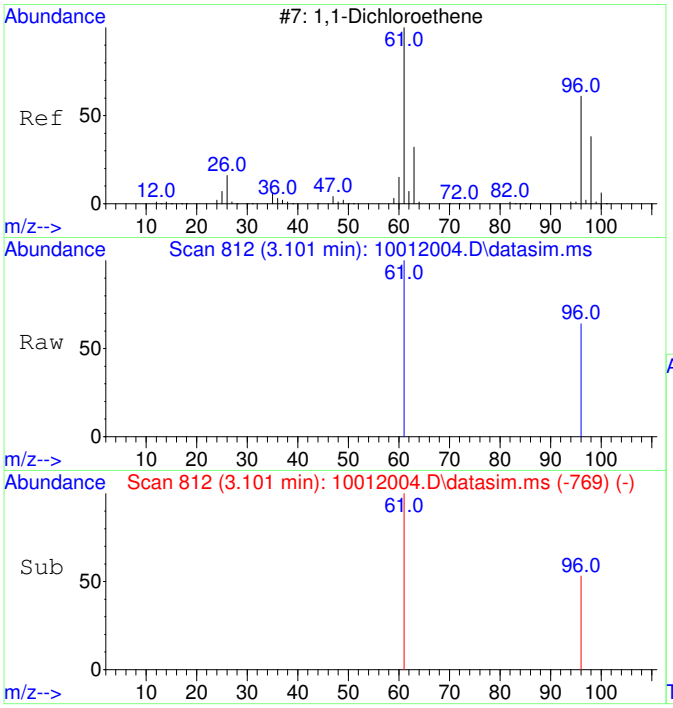


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:109 Resp: 603773

Ion	Ratio	Lower	Upper
109	100		
83	13.8	0.0	42.3

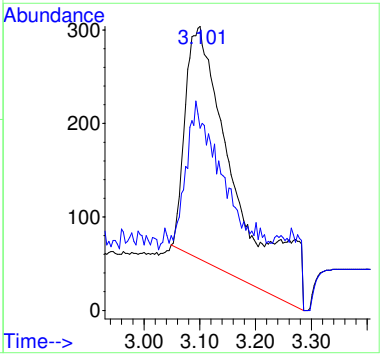




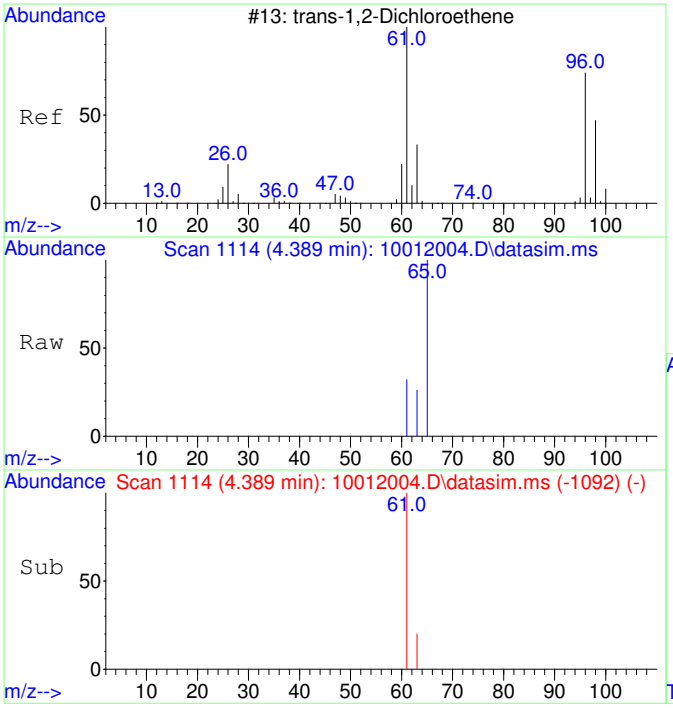
#2
1,1-Dichloroethene
Concen: 62.92 ug/L
RT: 3.101 min Scan# 812
Delta R.T. 0.011 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 61 Resp: 1517

Ion	Ratio	Lower	Upper
61	100		
96	63.2	37.2	97.2



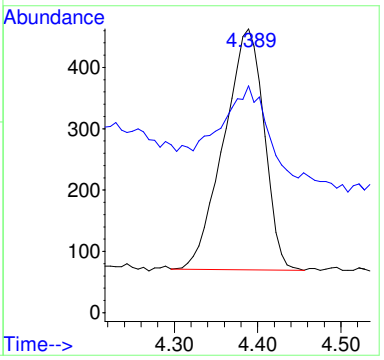
Before MI:
IMPROPER
BASELINE

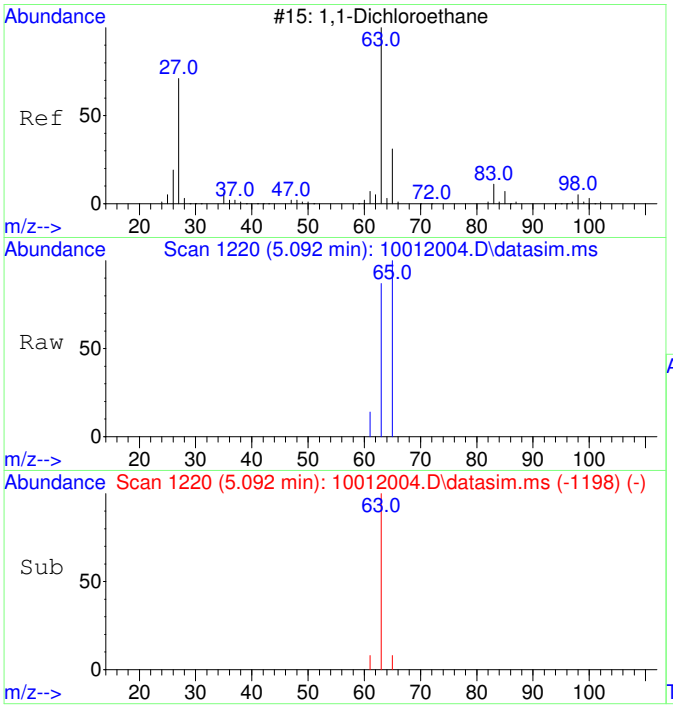


#3
trans-1,2-Dichloroethene
Concen: 47.57 ug/L
RT: 4.389 min Scan# 1114
Delta R.T. -0.007 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 61 Resp: 1325

Ion	Ratio	Lower	Upper
61	100		
63	49.4	2.4	62.4

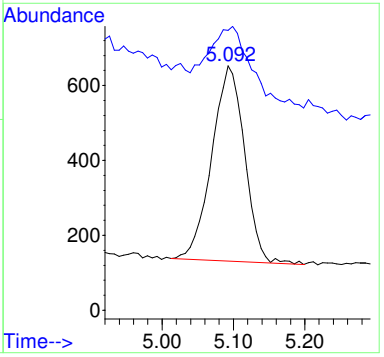


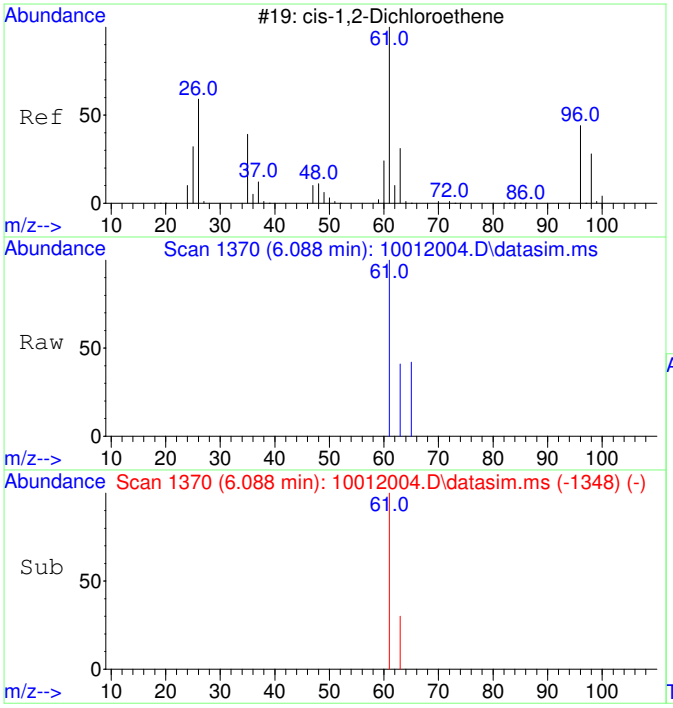


#4
1,1-Dichloroethane
Concen: 47.93 ug/L
RT: 5.092 min Scan# 1220
Delta R.T. -0.007 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 63 Resp: 1662

Ion	Ratio	Lower	Upper
63	100		
65	58.1	1.8	61.8

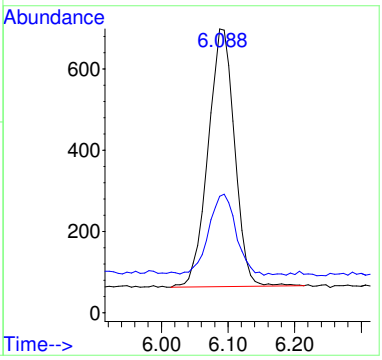


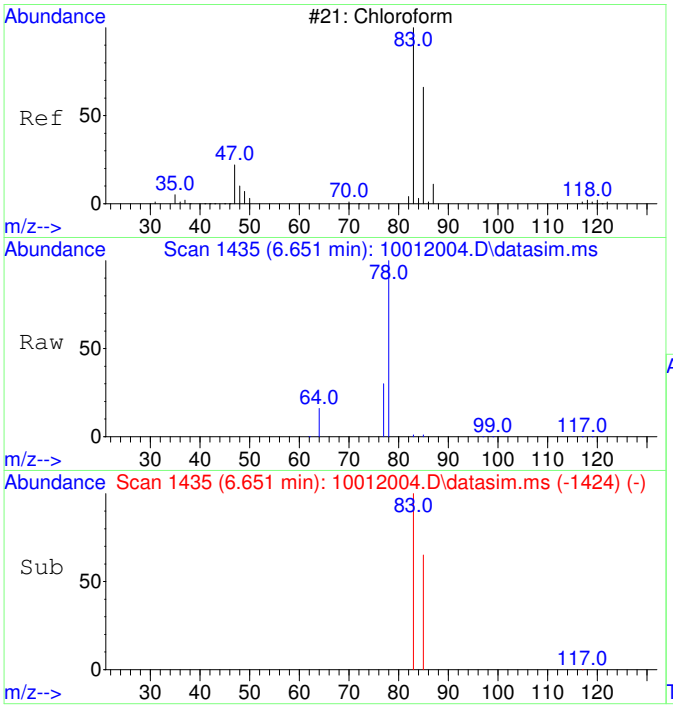


#5
cis-1,2-Dichloroethene
Concen: 47.87 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. -0.007 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 61 Resp: 1752

Ion	Ratio	Lower	Upper
61	100		
63	32.1	2.5	62.5

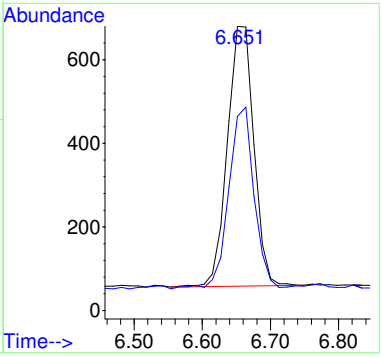


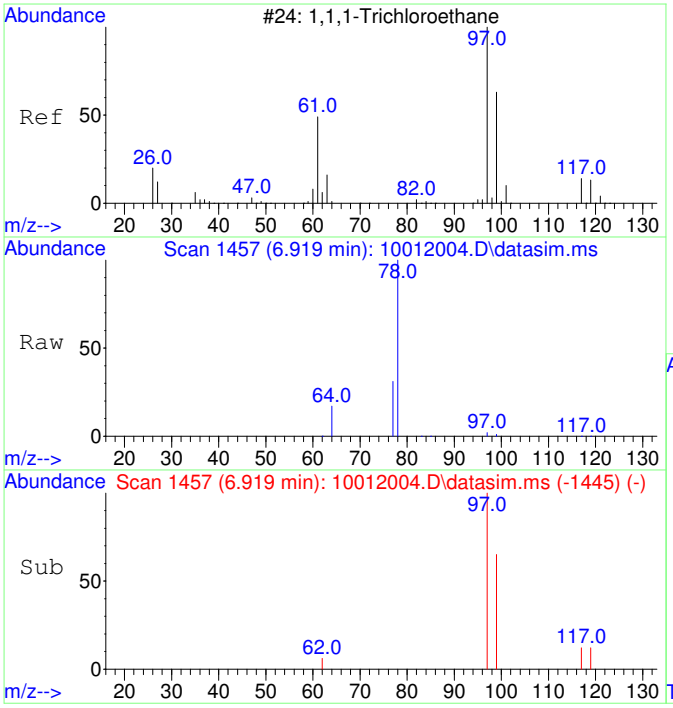


#6
Chloroform
Concen: 44.68 ug/L
RT: 6.651 min Scan# 1435
Delta R.T. -0.012 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 83 Resp: 1674

Ion	Ratio	Lower	Upper
83	100		
85	65.9	35.1	95.1

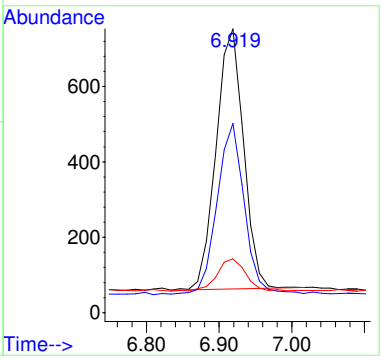


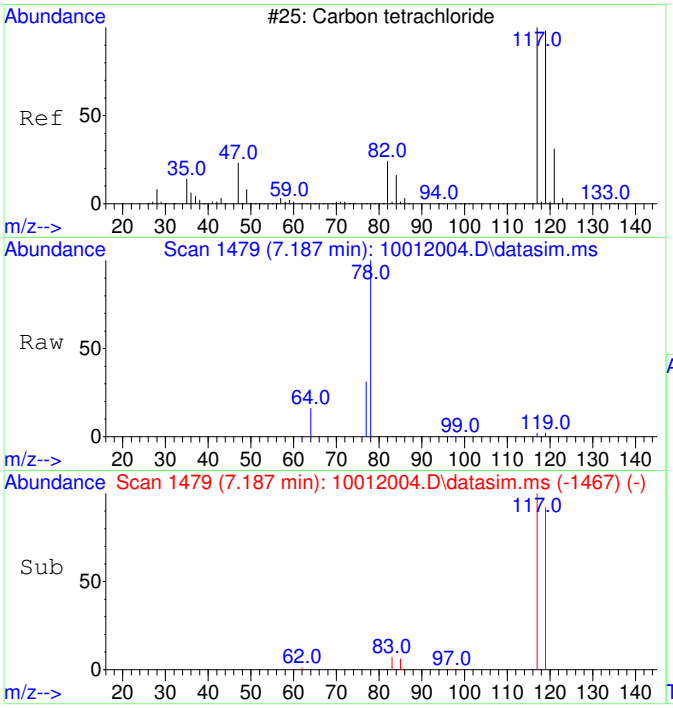


#7
1,1,1-Trichloroethane
Concen: 44.49 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 97 Resp: 1810

Ion	Ratio	Lower	Upper
97	100		
99	64.5	34.6	94.6
117	13.2	0.0	43.2

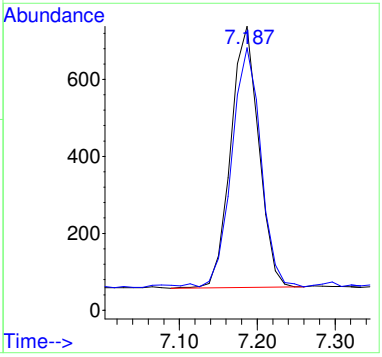


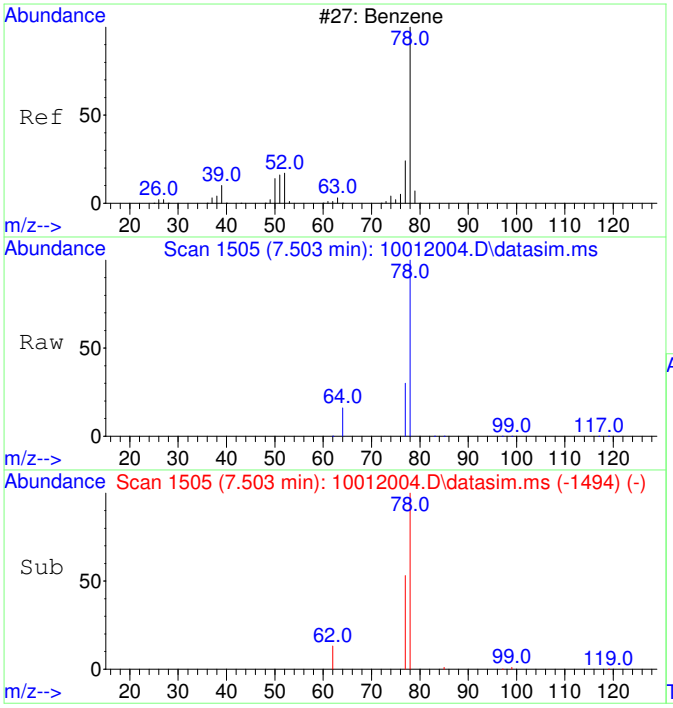


#8
Carbon tetrachloride
Concen: 44.50 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:117 Resp: 1704

Ion	Ratio	Lower	Upper
117	100		
119	93.8	66.4	126.4

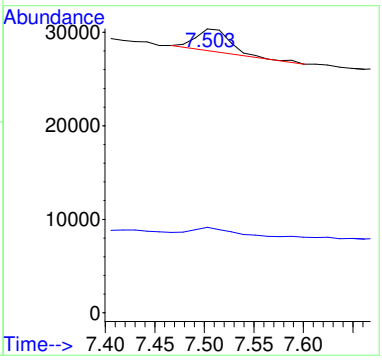


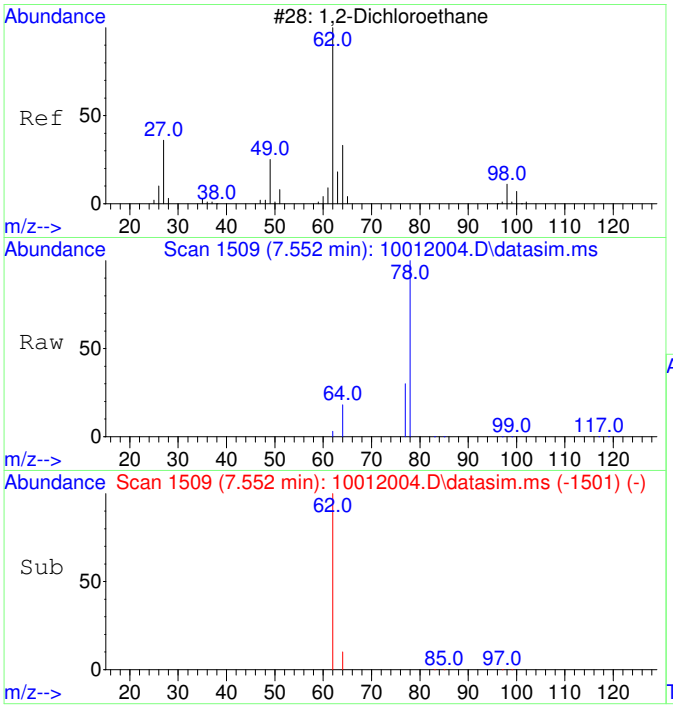


#9
Benzene
Concen: 50.34 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 78 Resp: 5164

Ion	Ratio	Lower	Upper
78	100		
77	71.2	0.0	53.2#

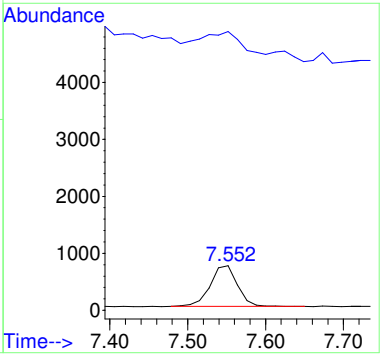


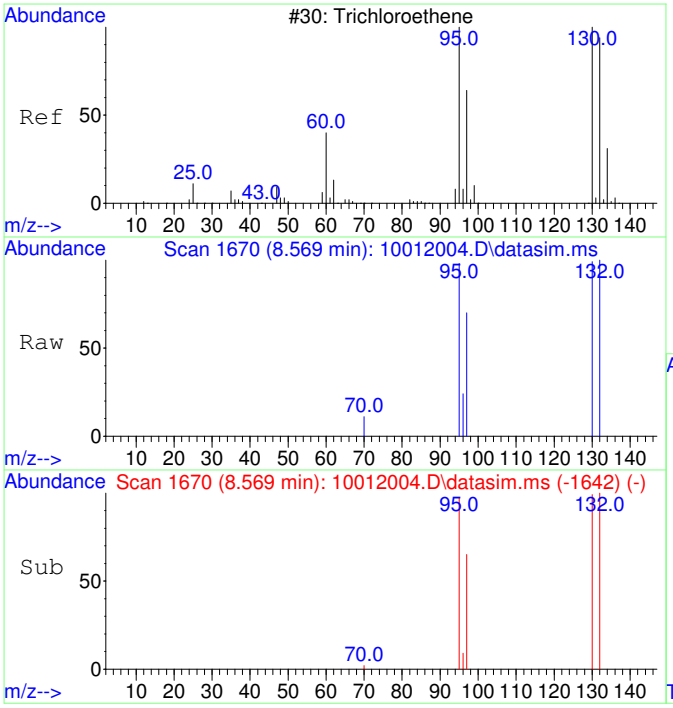


#10
1,2-Dichloroethane
Concen: 47.41 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 62 Resp: 1736

Ion	Ratio	Lower	Upper
62	100		
64	88.6	2.3	62.3#

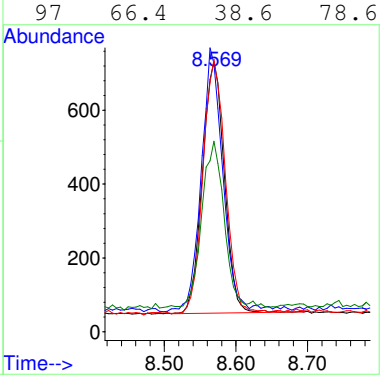


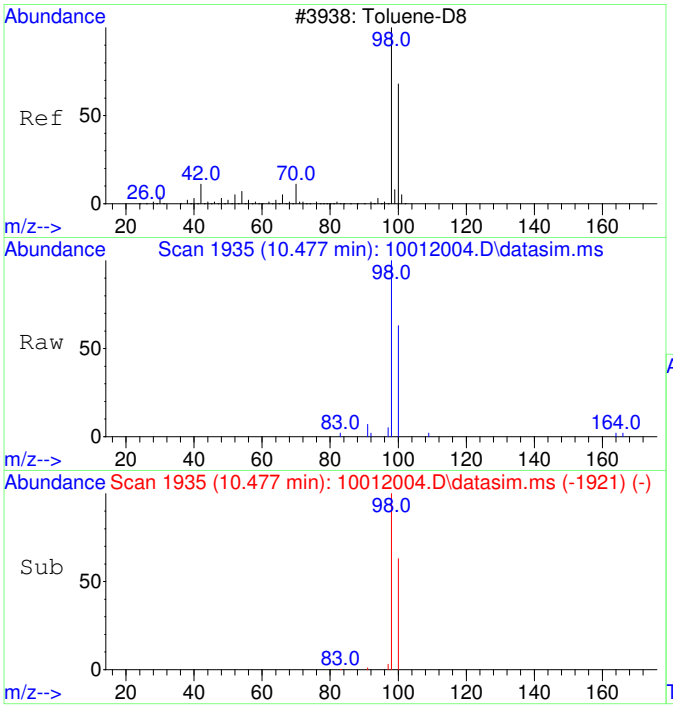


#11
Trichloroethene
Concen: 46.91 ug/L
RT: 8.569 min Scan# 1670
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:130 Resp: 1449

Ion	Ratio	Lower	Upper
130	100		
95	101.4	60.7	120.7
132	101.9	76.0	116.0
97	66.4	38.6	78.6

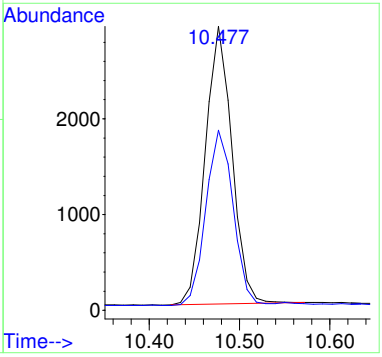


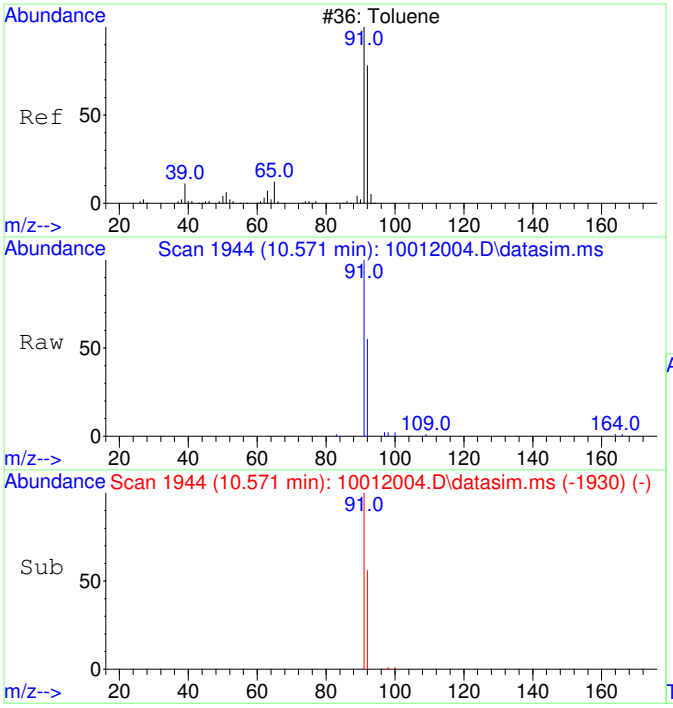


#12
Toluene-d8
Concen: 50.47 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 98 Resp: 5965

Ion	Ratio	Lower	Upper
98	100		
100	64.9	37.1	97.1

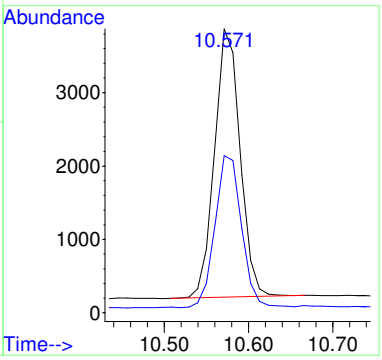


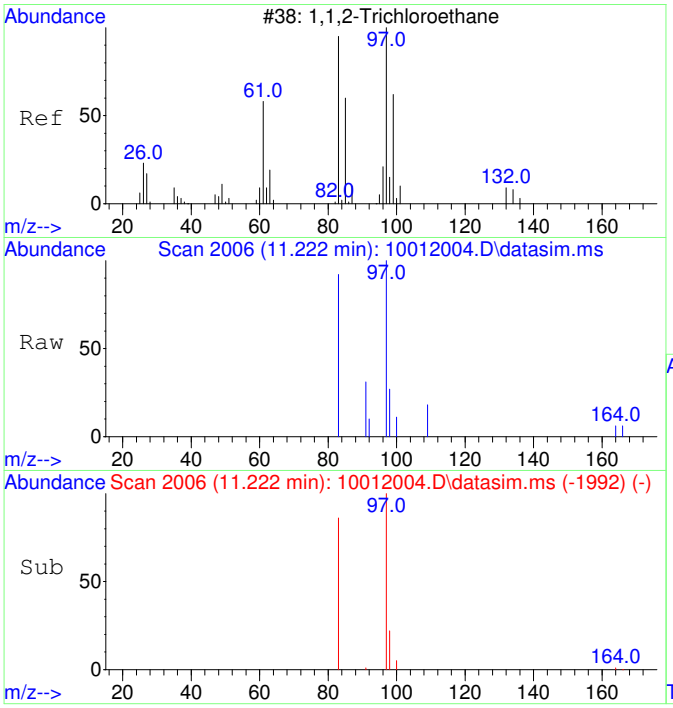


#13
Toluene
Concen: 51.21 ug/L
RT: 10.571 min Scan# 1944
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 7716

Ion	Ratio	Lower	Upper
91	100		
92	58.4	29.9	89.9

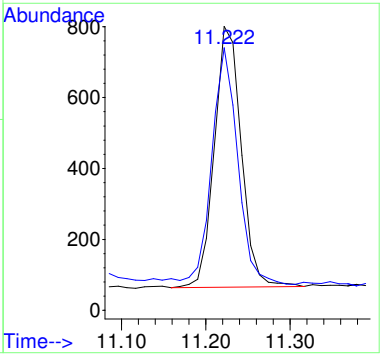


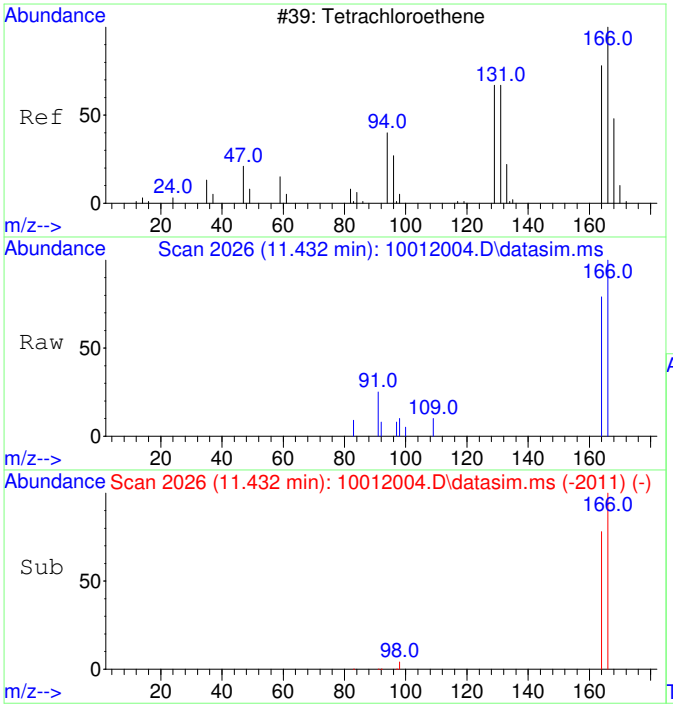


#14
1,1,2-Trichloroethane
Concen: 49.76 ug/L
RT: 11.222 min Scan# 2006
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 97 Resp: 1634

Ion	Ratio	Lower	Upper
97	100		
83	88.1	51.2	111.2

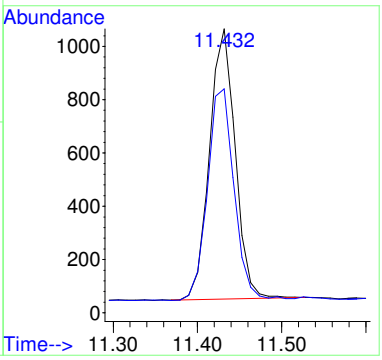


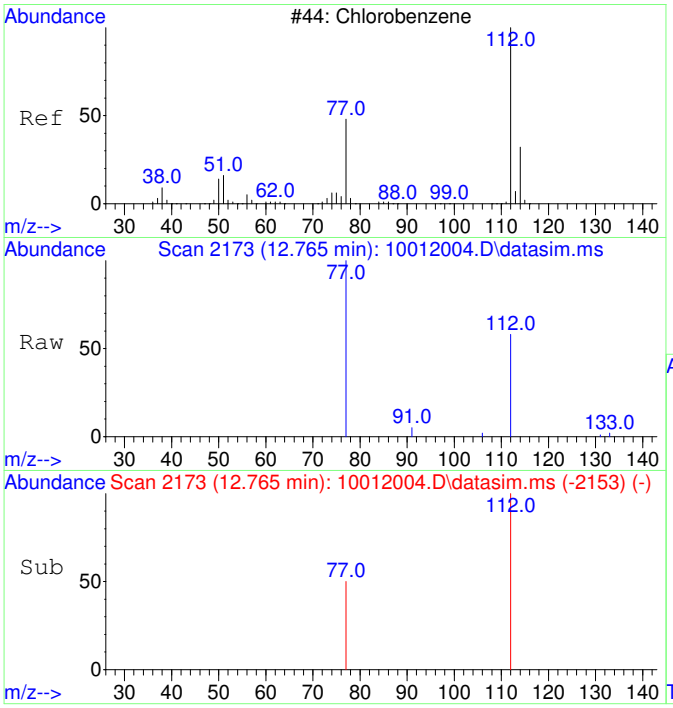


#15
Tetrachloroethene
Concen: 49.26 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:166 Resp: 2148

Ion	Ratio	Lower	Upper
166	100		
164	80.2	47.8	107.8

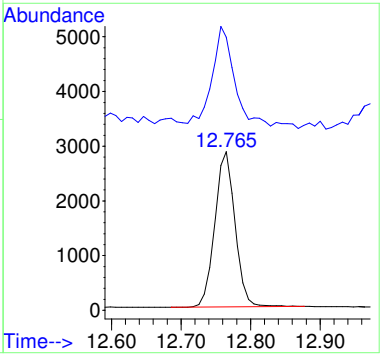


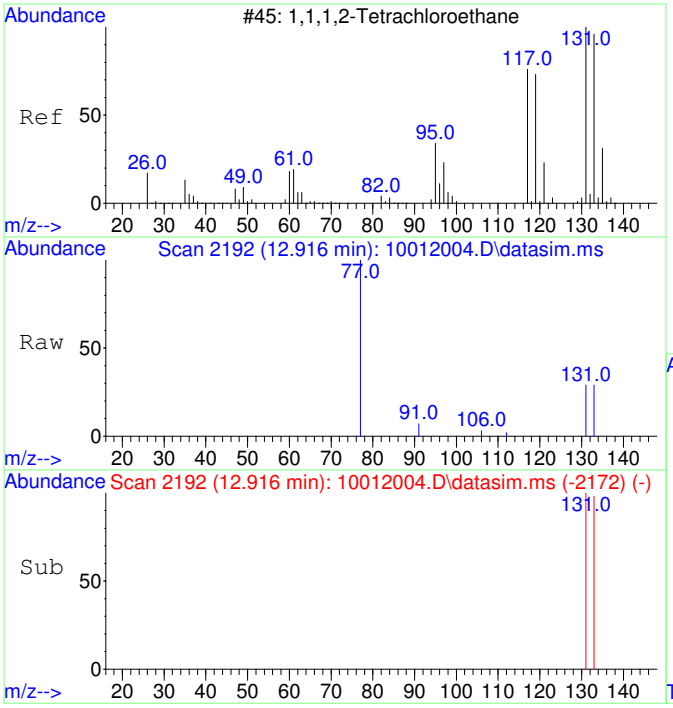


#16
Chlorobenzene
Concen: 52.98 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. 0.008 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:112 Resp: 5716

Ion	Ratio	Lower	Upper
112	100		
77	72.4	23.6	83.6

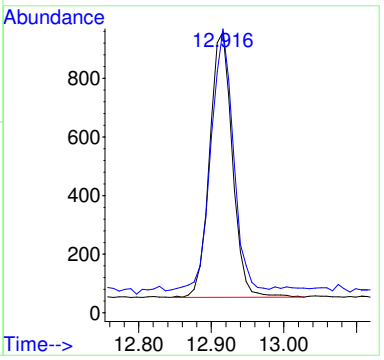


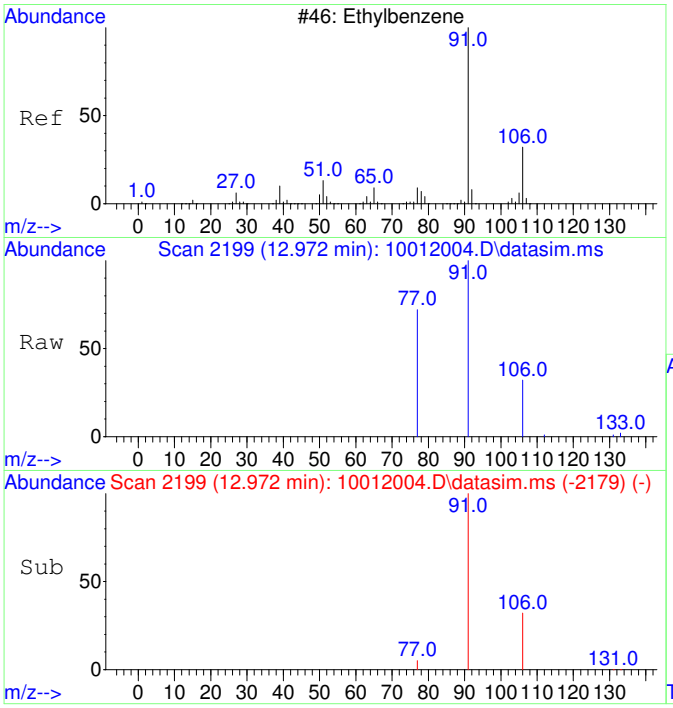


#17
1,1,1,2-Tetrachloroethane
Concen: 51.06 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.008 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:131 Resp: 1974

Ion	Ratio	Lower	Upper
131	100		
133	96.3	66.3	126.3

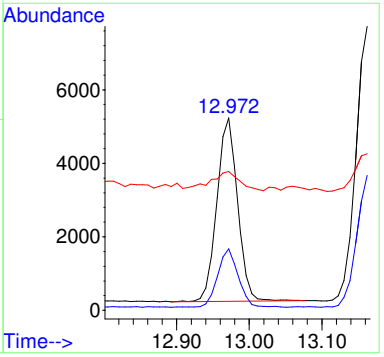


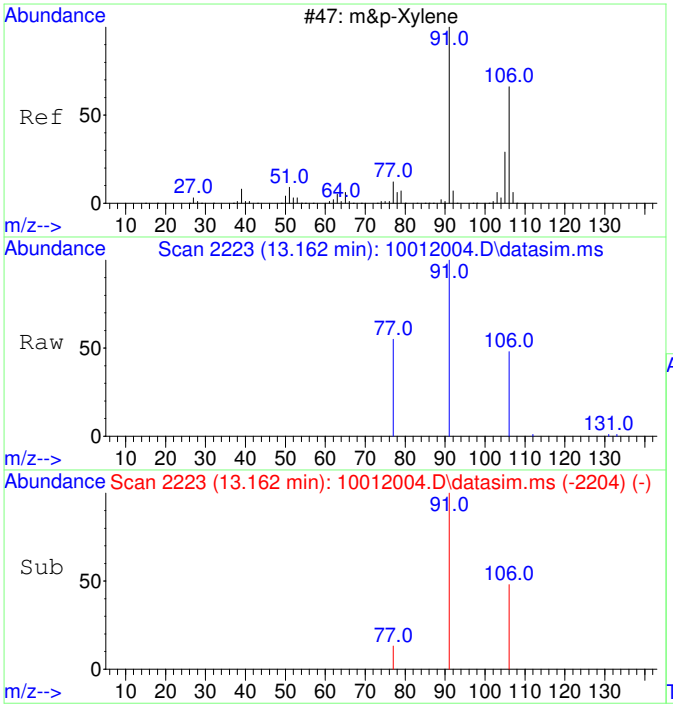


#18
Ethylbenzene
Concen: 53.81 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.008 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 9869

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

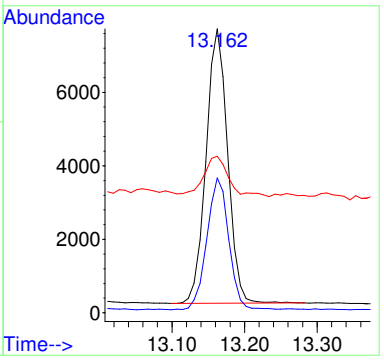


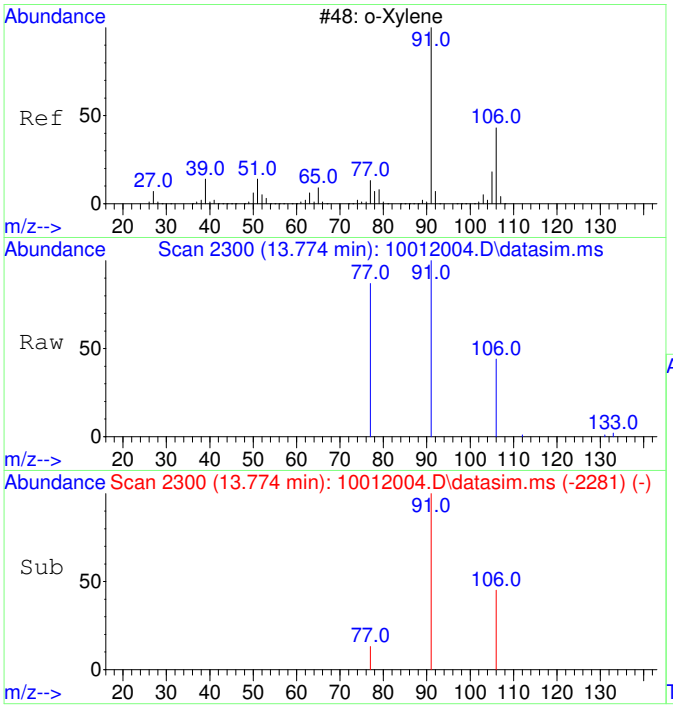


#19
m&p-Xylene
Concen: 107.97 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 15478

Ion	Ratio	Lower	Upper
91	100		
106	48.3	22.2	82.2
77	17.2	0.0	42.4

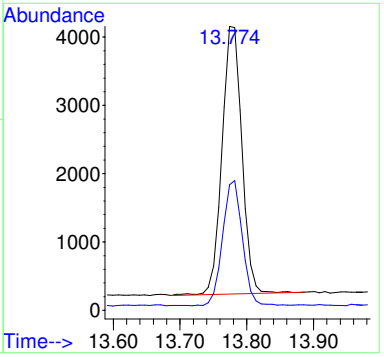


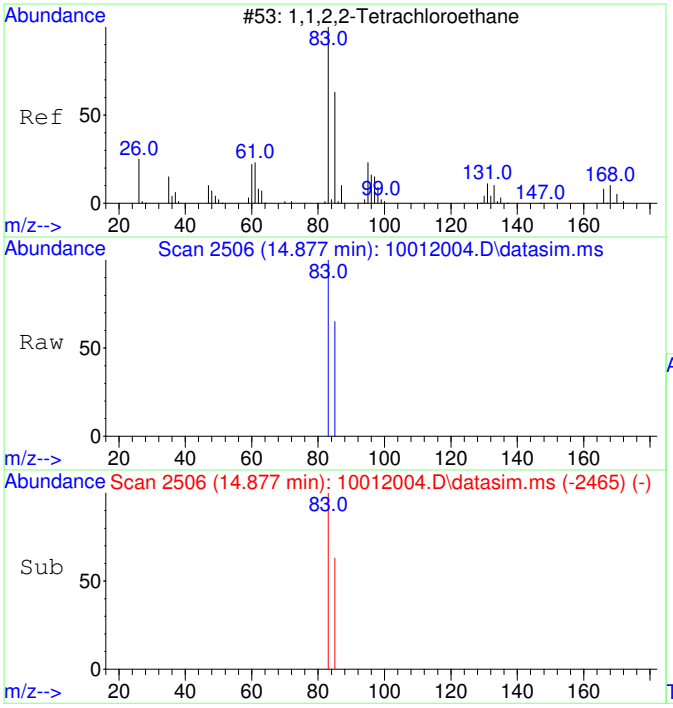


#20
o-Xylene
Concen: 52.91 ug/L
RT: 13.774 min Scan# 2300
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 8103

Ion	Ratio	Lower	Upper
91	100		
106	46.3	19.2	79.2

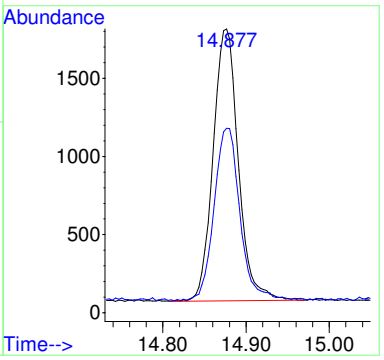


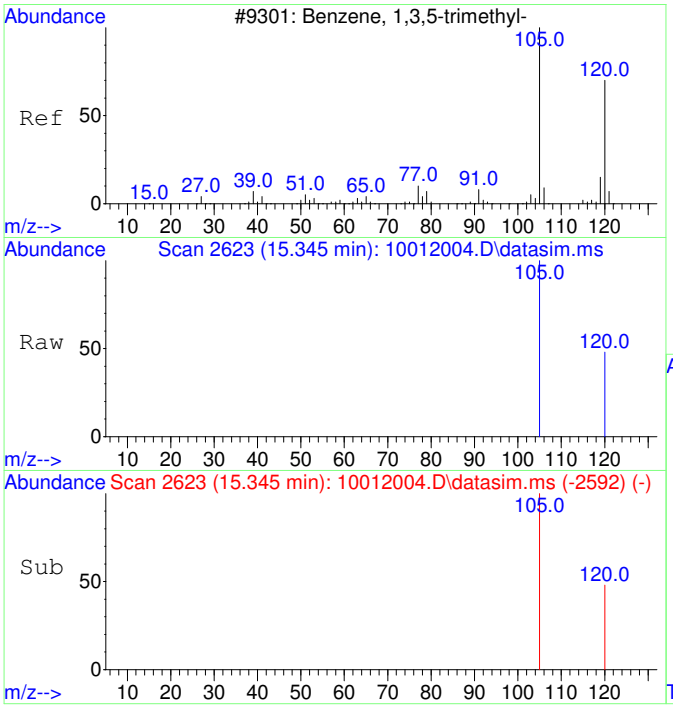


#21
1,1,2,2-Tetrachloroethane
Concen: 53.86 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. 0.004 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 83 Resp: 3656

Ion	Ratio	Lower	Upper
83	100		
85	64.4	34.8	94.8

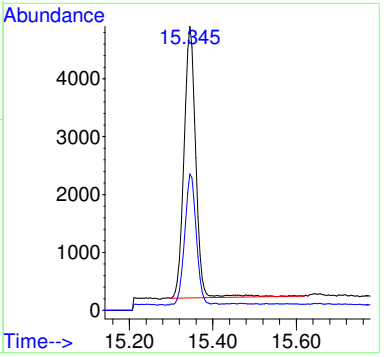


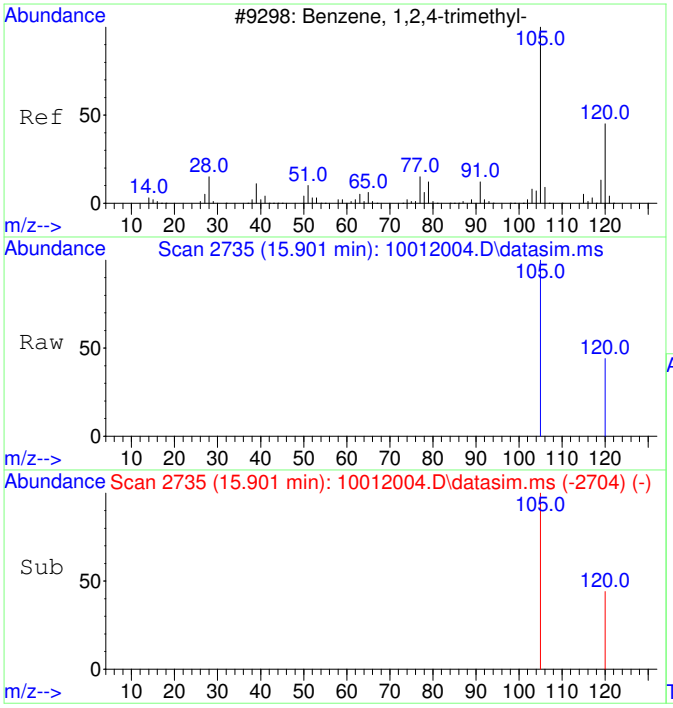


#22
1,3,5-Trimethylbenzene
Concen: 56.18 ug/L
RT: 15.345 min Scan# 2623
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:105 Resp: 9158

Ion	Ratio	Lower	Upper
105	100		
120	47.4	21.1	81.1

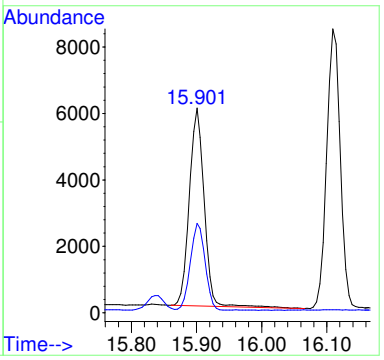


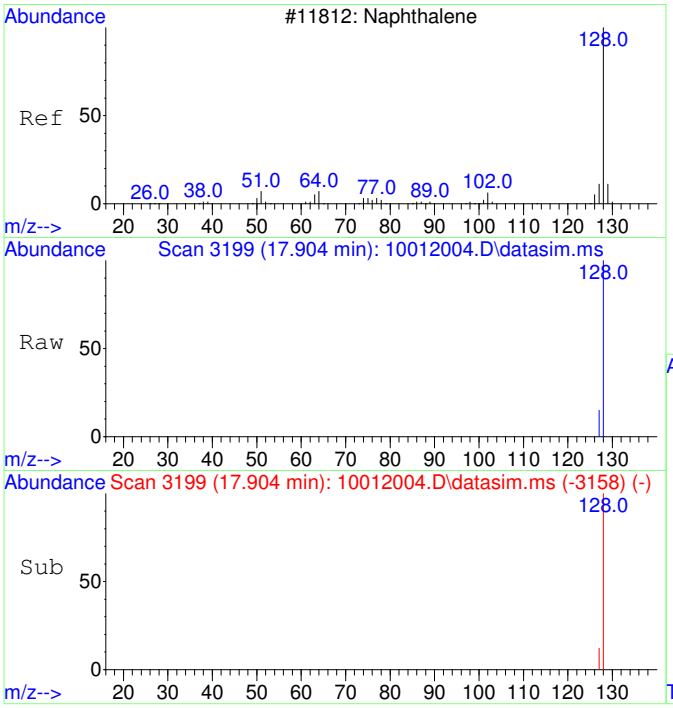


#23
1,2,4-Trimethylbenzene
Concen: 55.77 ug/L
RT: 15.901 min Scan# 2735
Delta R.T. 0.005 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:105 Resp: 9443

Ion	Ratio	Lower	Upper
105	100		
120	42.9	17.2	77.2

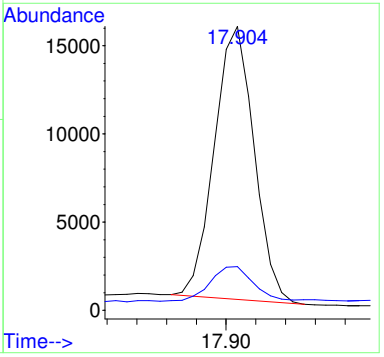


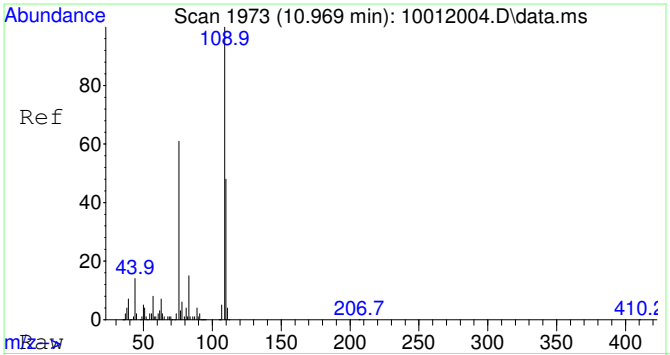


#24
Naphthalene
Concen: 53.45 ug/L
RT: 17.904 min Scan# 3199
Delta R.T. 0.001 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:128 Resp: 14305

Ion	Ratio	Lower	Upper
128	100		
127	17.0	0.0	42.5

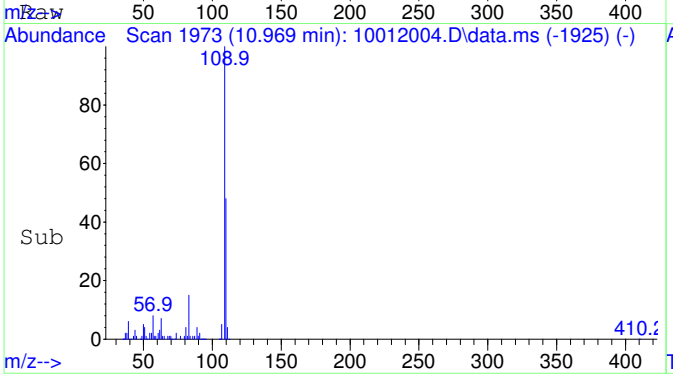


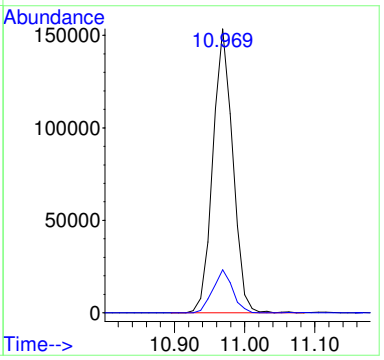


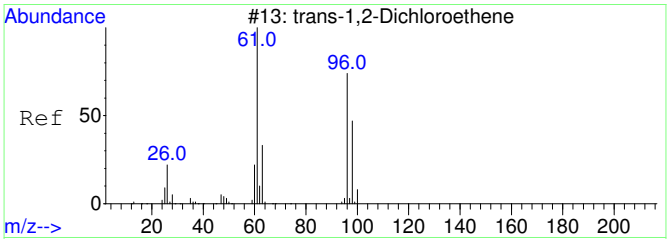
#25
2-Fluorotoluene SCAN
Concen: 5142.15 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

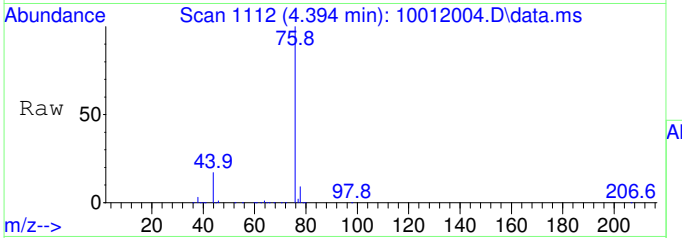
Tgt Ion:109 Resp: 302650

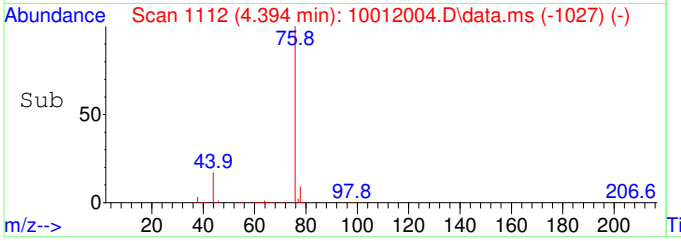
Ion	Ratio	Lower	Upper
109	100		
83	15.0	0.0	43.8







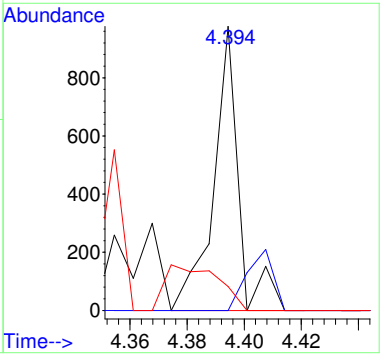


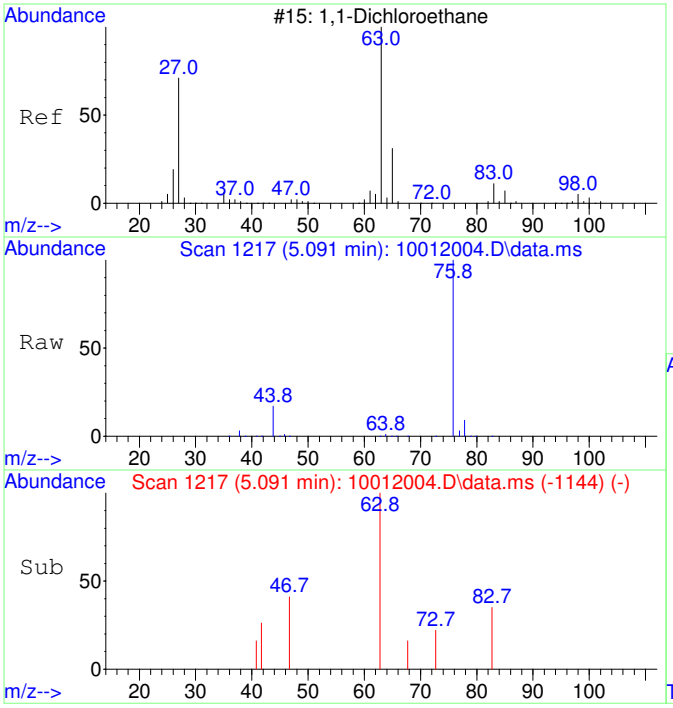


#27
trans-1,2-Dichloroethene SCAN
Concen: 38.34 ug/L
RT: 4.394 min Scan# 1112
Delta R.T. -0.007 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 61 Resp: 593

Ion	Ratio	Lower	Upper
61	100		
96	22.8	49.0	109.0#
98	0.0	20.5	80.5#

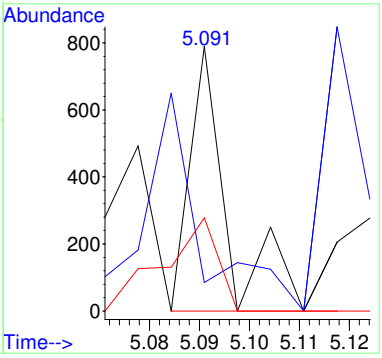


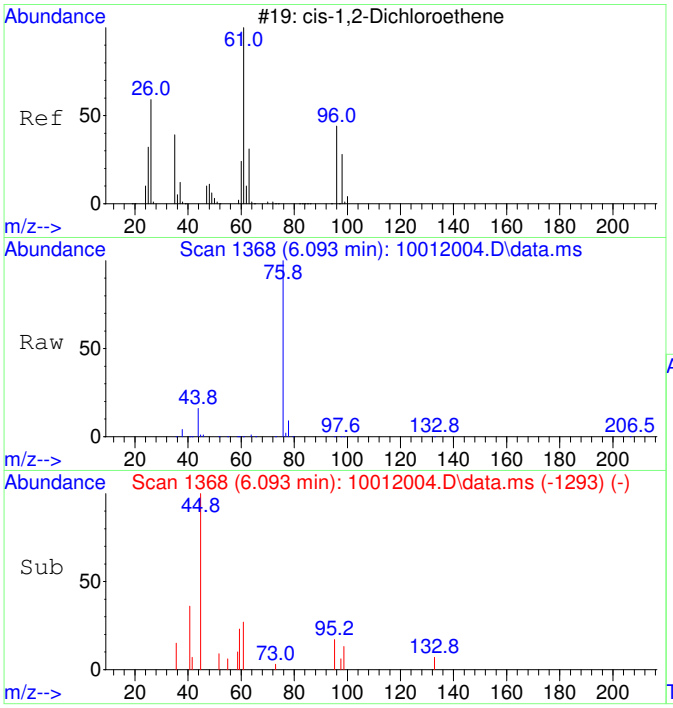


#28
1,1-Dichloroethane SCAN
Concen: 23.13 ug/L
RT: 5.091 min Scan# 1217
Delta R.T. -0.013 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 63 Resp: 414

Ion	Ratio	Lower	Upper
63	100		
65	59.4	1.3	61.3
83	51.4	0.0	45.9#

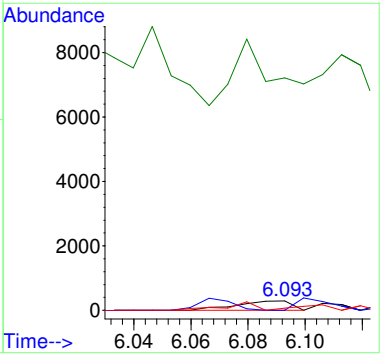


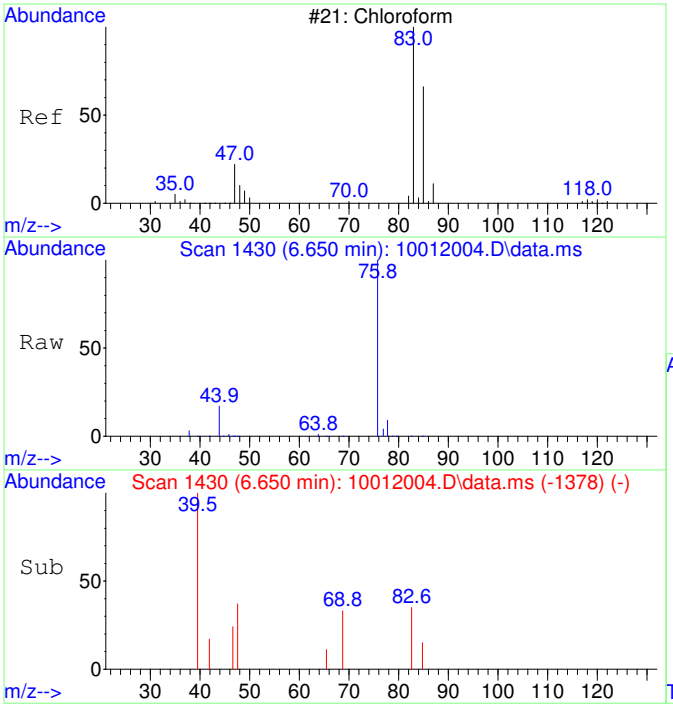


#29
cis-1,2-Dichloroethene SCAN
Concen: 20.34 ug/L
RT: 6.093 min Scan# 1368
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 61 Resp: 390

Ion	Ratio	Lower	Upper
61	100		
96	94.6	39.9	99.9
98	20.0	13.5	73.5
64	0.0	4.5	64.5#

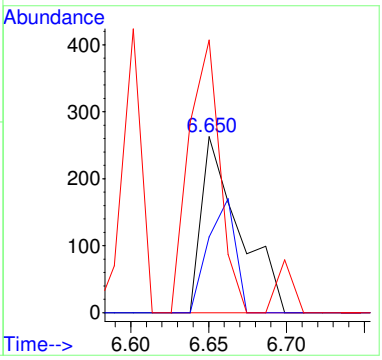


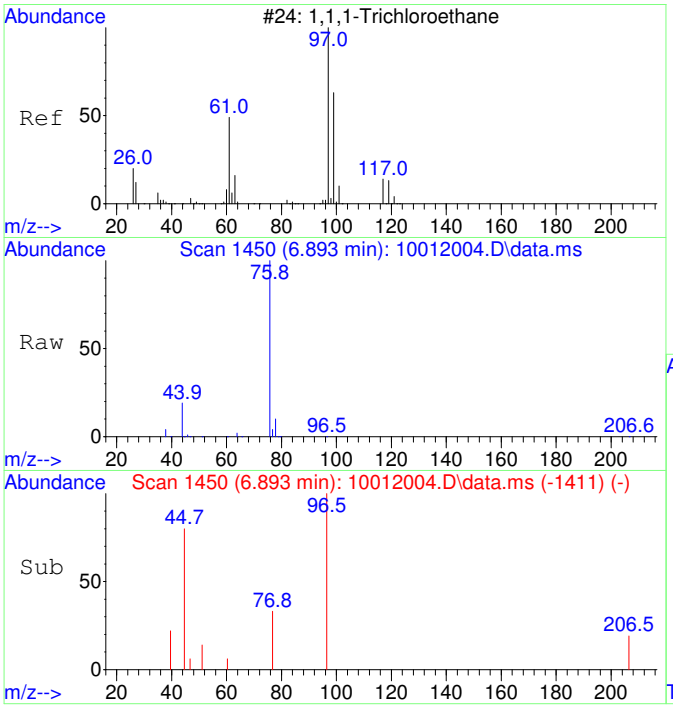


#30
Chloroform SCAN
Concen: 21.58 ug/L
RT: 6.650 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 83 Resp: 449

Ion	Ratio	Lower	Upper
83	100		
85	46.1	34.6	94.6
47	126.5	0.0	53.4#

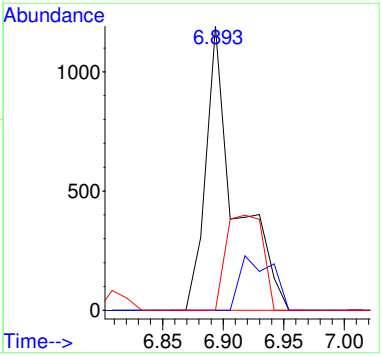


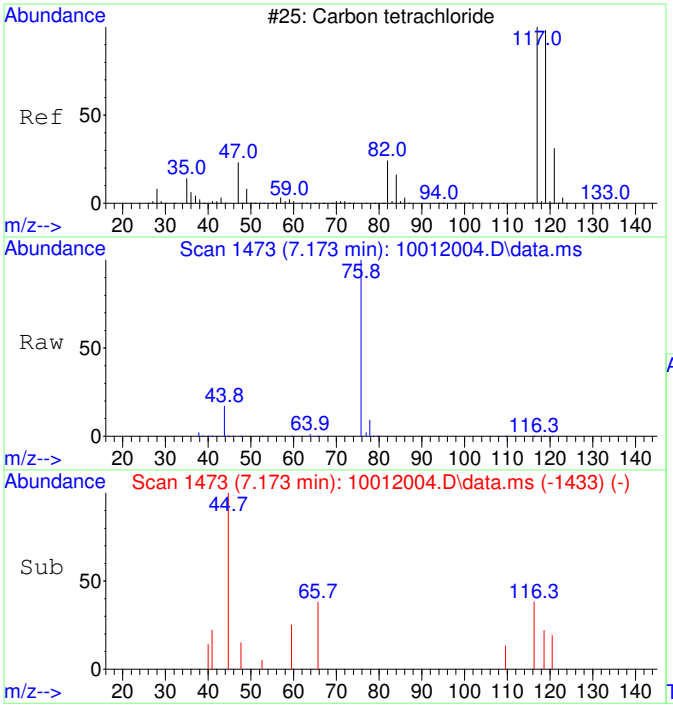


#31
1,1,1-Trichloroethane SCAN
Concen: 107.99 ug/L
RT: 6.893 min Scan# 1450
Delta R.T. -0.024 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 97 Resp: 2047

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

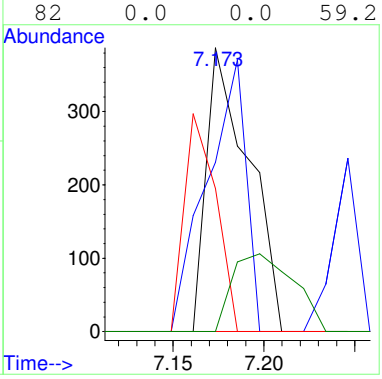


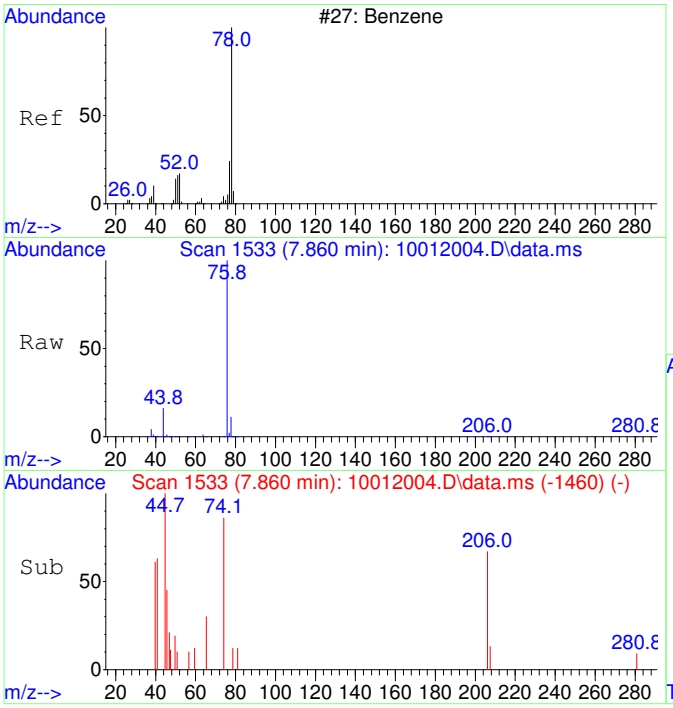


#32
Carbon tetrachloride SCAN
Concen: 31.61 ug/L
RT: 7.173 min Scan# 1473
Delta R.T. -0.012 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:117 Resp: 625

Ion	Ratio	Lower	Upper
117	100		
119	0.0	75.5	135.5#
121	57.4	0.0	58.8
82	0.0	0.0	59.2

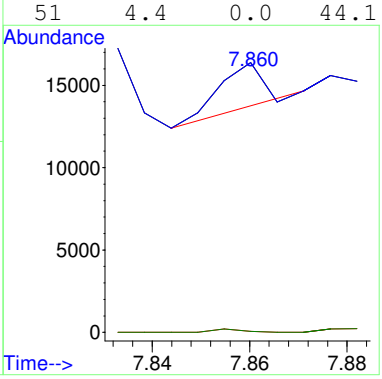


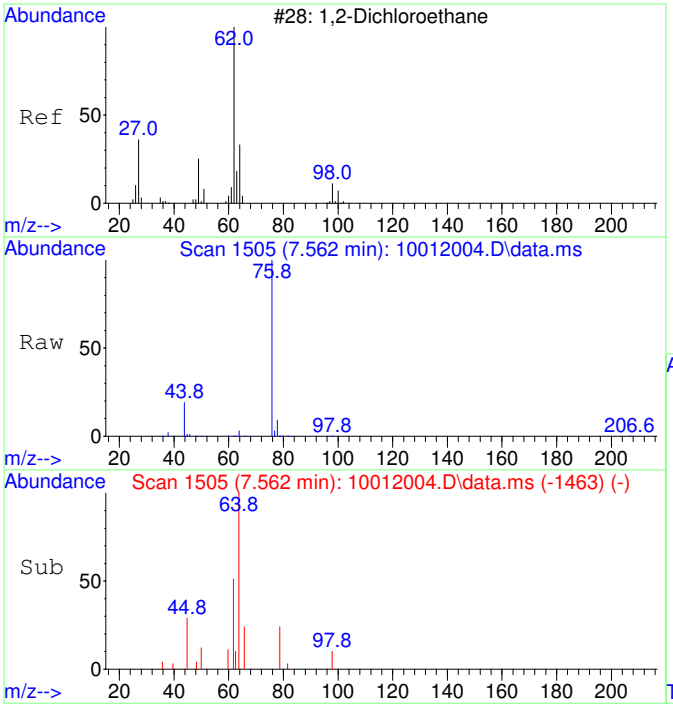


#33
Benzene SCAN
Concen: 37.55 ug/L
RT: 7.860 min Scan# 1533
Delta R.T. 0.346 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 78 Resp: 1960

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	4.4	0.0	47.9
51	4.4	0.0	44.1

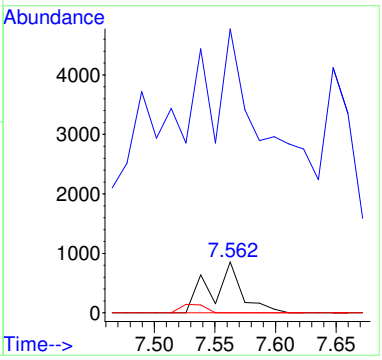


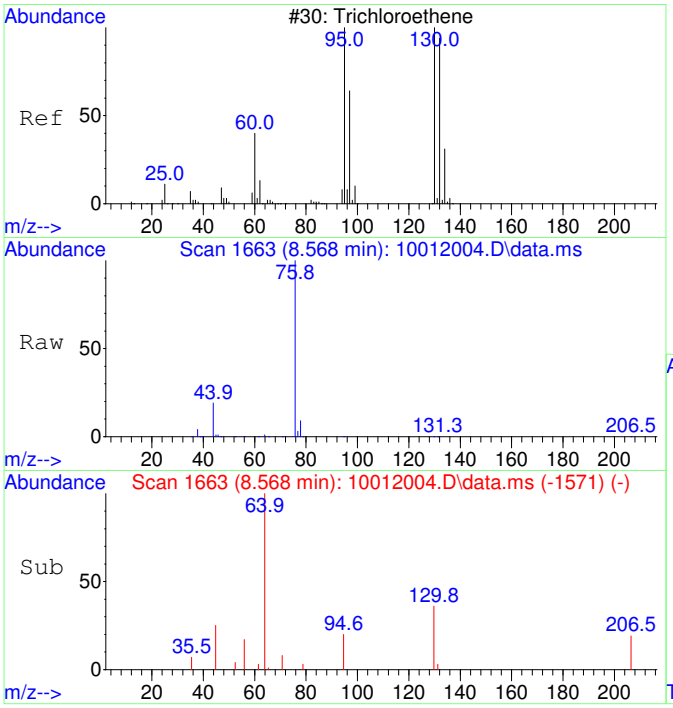


#34
1,2-Dichloroethane SCAN
Concen: 77.42 ug/L
RT: 7.562 min Scan# 1505
Delta R.T. 0.012 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 62 Resp: 1492

Ion	Ratio	Lower	Upper
62	100		
64	306.0	5.2	65.2#
49	0.0	3.9	63.9#

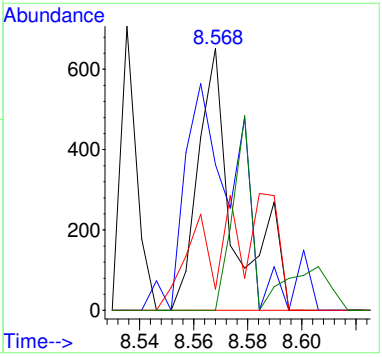


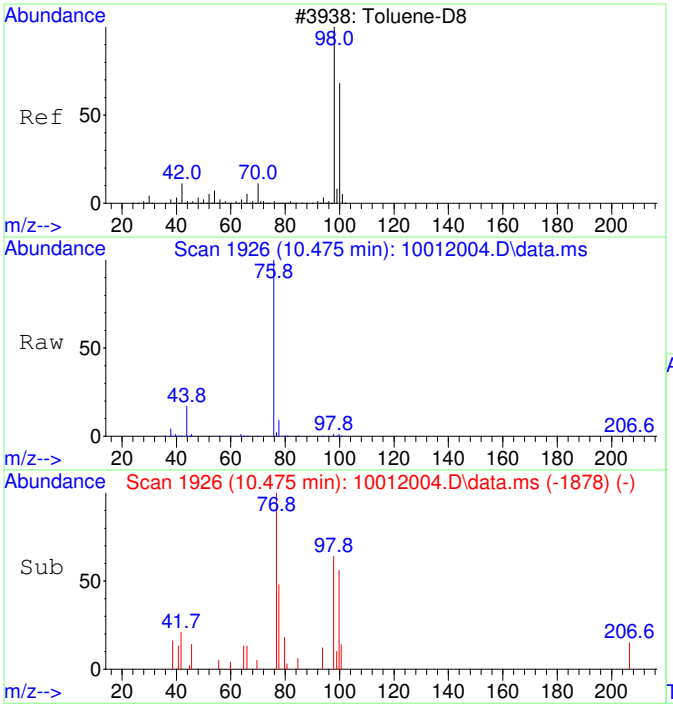


#35
Trichloroethene SCAN
Concen: 42.25 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:130 Resp: 606

Ion	Ratio	Lower	Upper
130	100		
95	120.5	60.5	120.5
132	20.5	59.6	119.6#
97	0.0	28.2	88.2#

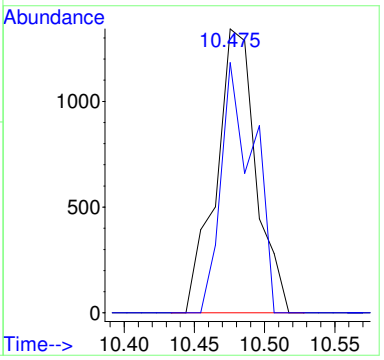


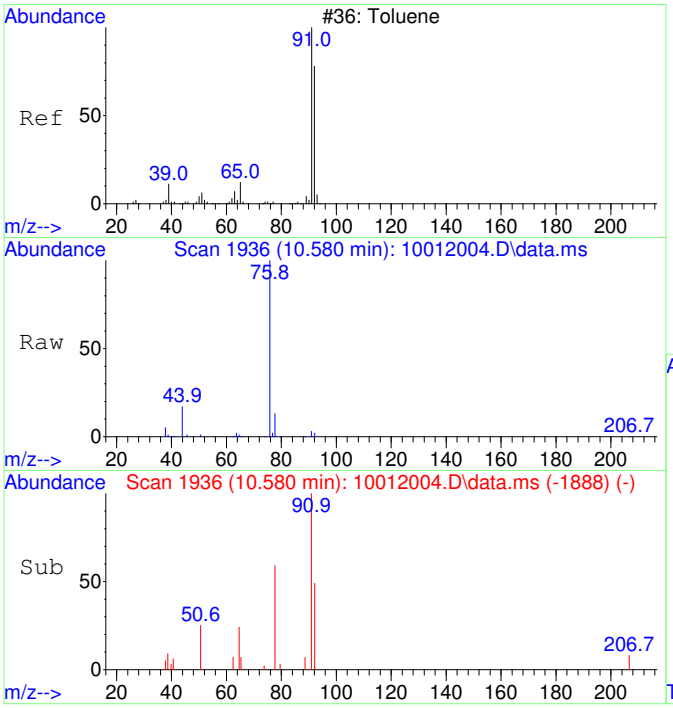


#36
Toluene-d8 SCAN
Concen: 46.49 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 98 Resp: 2676

Ion	Ratio	Lower	Upper
98	100		
100	71.7	40.0	100.0

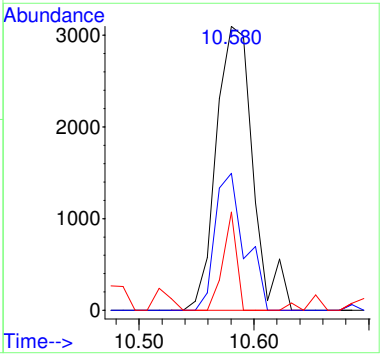


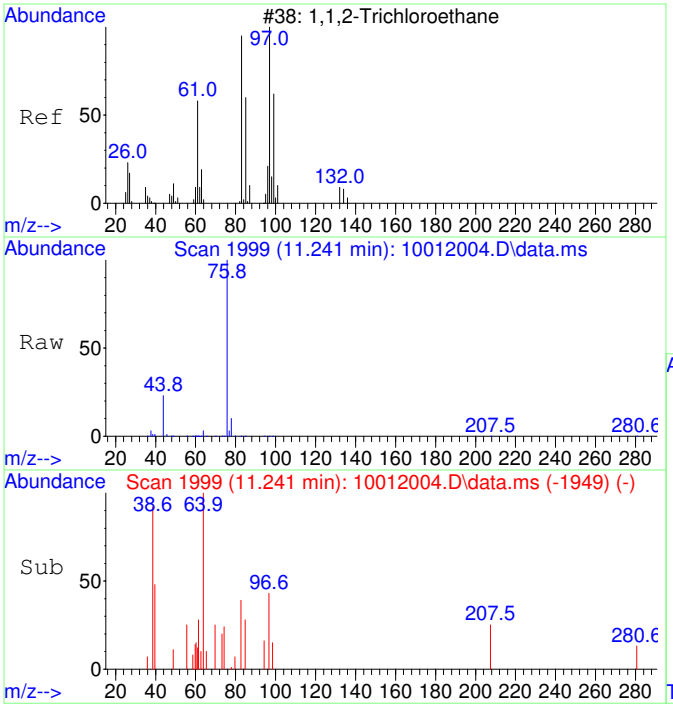


#37
Toluene SCAN
Concen: 93.21 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 6871

Ion	Ratio	Lower	Upper
91	100		
92	39.2	28.3	88.3
65	12.8	0.0	41.0

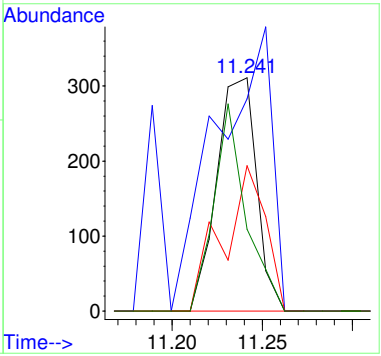


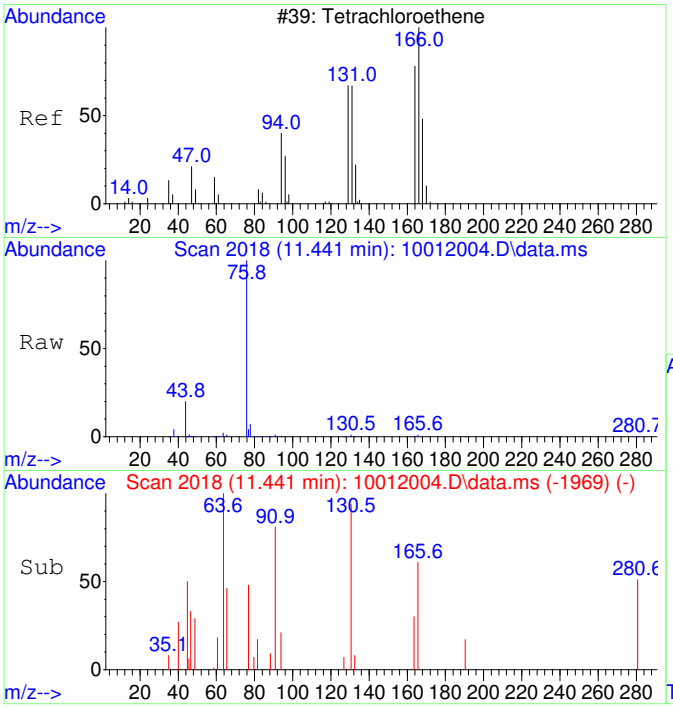


#38
1,1,2-Trichloroethane SCAN
Concen: 28.95 ug/L
RT: 11.241 min Scan# 1999
Delta R.T. 0.021 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 97 Resp: 479

Ion	Ratio	Lower	Upper
97	100		
83	167.6	57.7	117.7#
61	66.6	32.1	92.1
99	0.0	36.7	96.7#

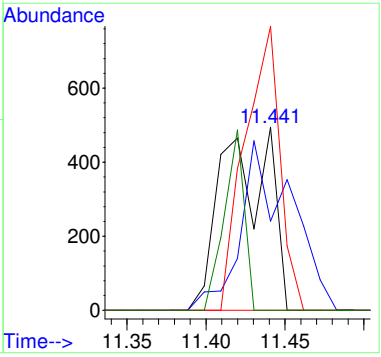


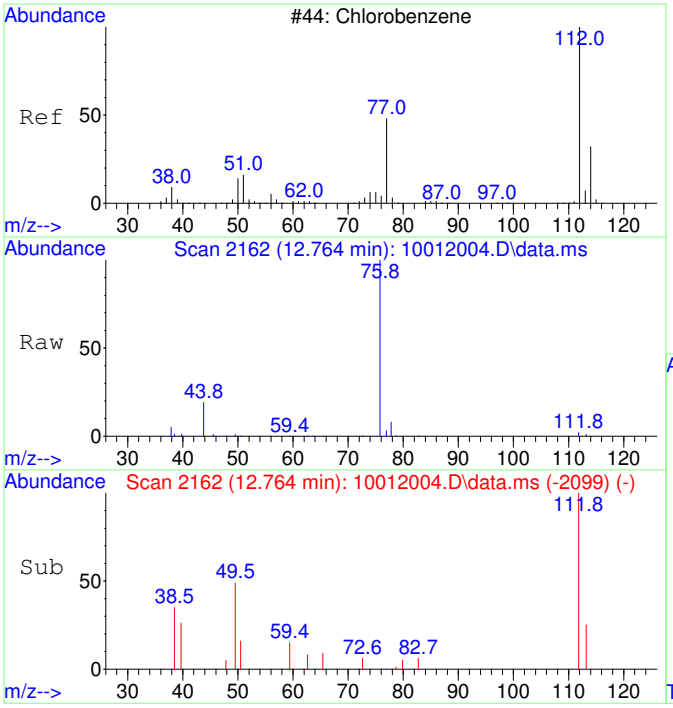


#39
Tetrachloroethene SCAN
Concen: 59.23 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.010 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:166 Resp: 1049

Ion	Ratio	Lower	Upper
166	100		
164	0.0	50.9	110.9#
131	113.1	38.7	98.7#
129	0.0	41.8	101.8#

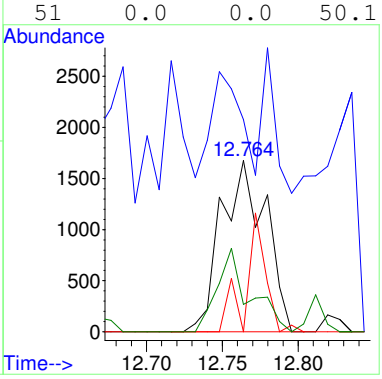


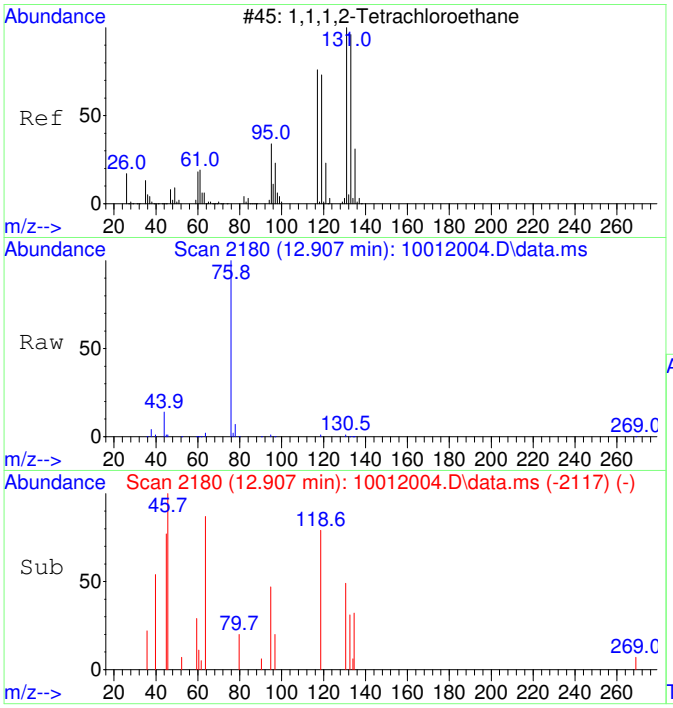


#40
Chlorobenzene SCAN
Concen: 67.92 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:112 Resp: 3421

Ion	Ratio	Lower	Upper
112	100		
77	56.1	28.2	88.2
114	31.0	2.3	62.3
51	0.0	0.0	50.1

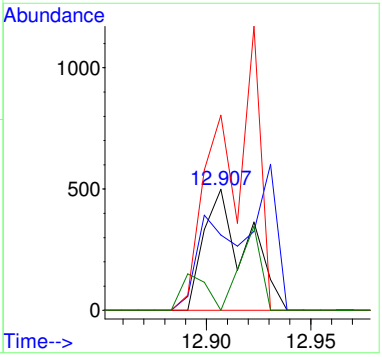


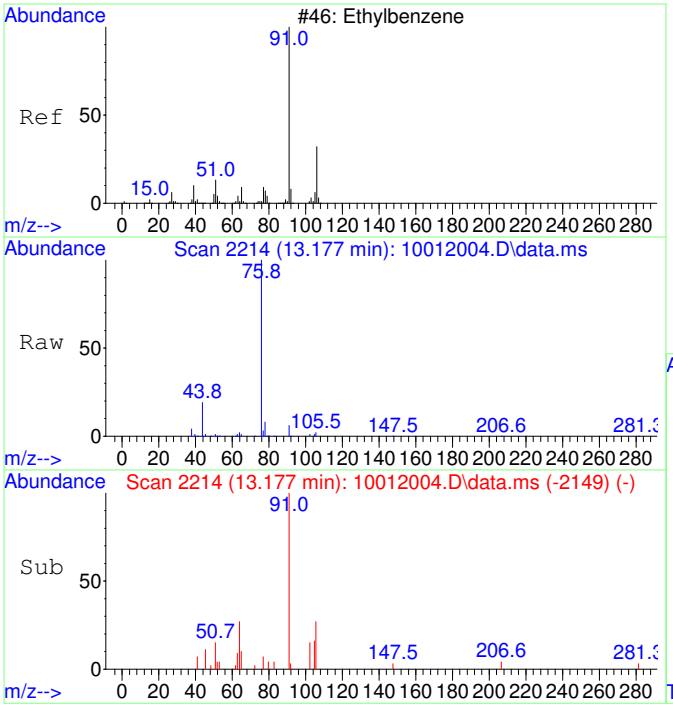


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 38.09 ug/L
RT: 12.907 min Scan# 2180
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:131 Resp: 710

Ion	Ratio	Lower	Upper
131	100		
133	0.0	66.9	126.9#
119	0.0	40.4	100.4#
117	17.9	35.1	95.1#

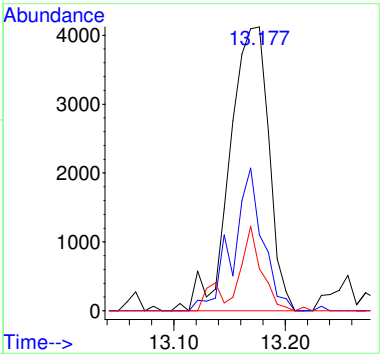


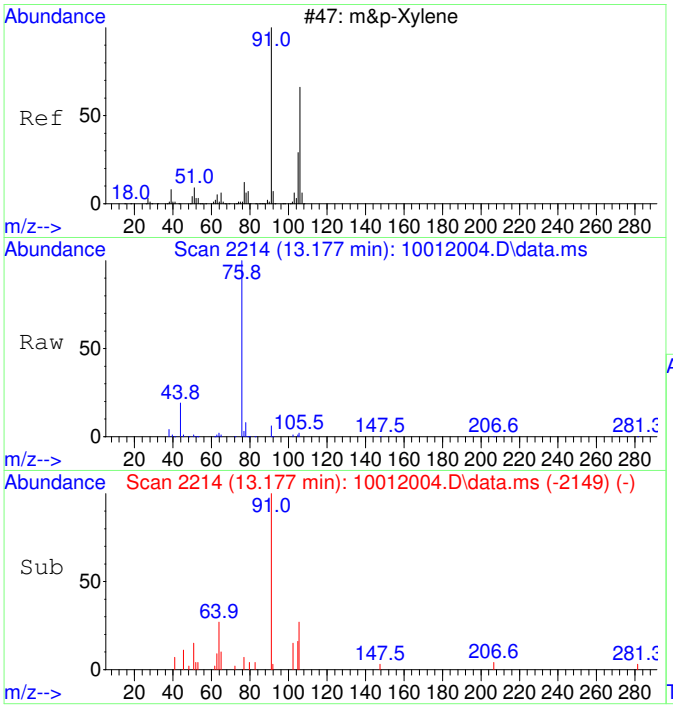


#42
Ethylbenzene SCAN
Concen: 74.57 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 10015

Ion	Ratio	Lower	Upper
91	100		
106	38.5	23.1	83.1
51	13.3	0.0	40.1

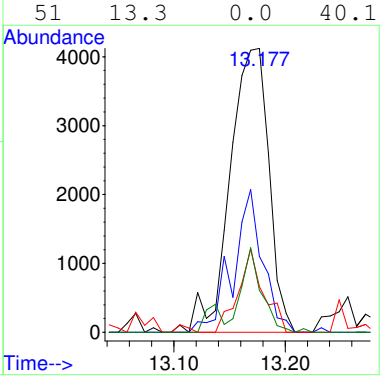


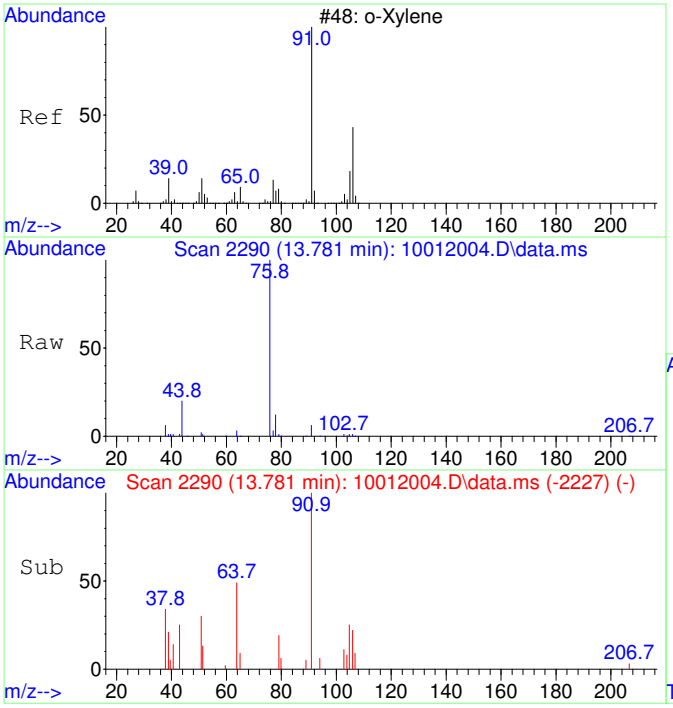


#43
m&p-Xylene SCAN
Concen: 74.57 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 10015

Ion	Ratio	Lower	Upper
91	100		
106	38.5	23.1	83.1
105	19.3	0.0	54.7
51	13.3	0.0	40.1

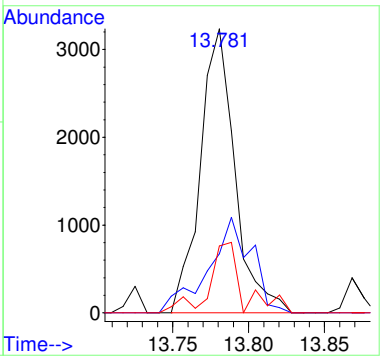


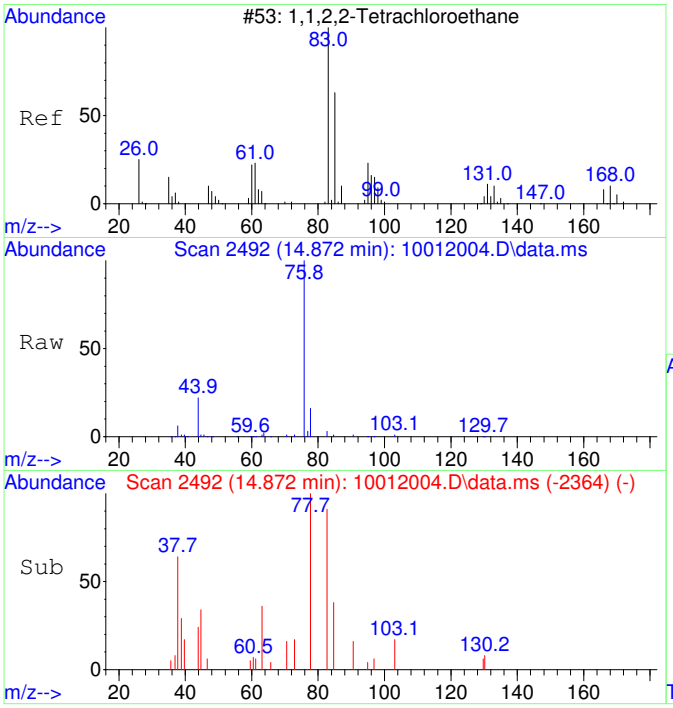


#44
o-Xylene SCAN
Concen: 71.70 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 5154

Ion	Ratio	Lower	Upper
91	100		
106	41.5	18.0	78.0
105	23.8	0.0	56.6

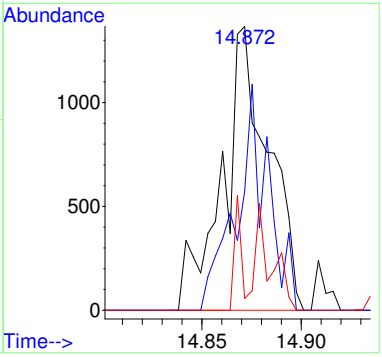


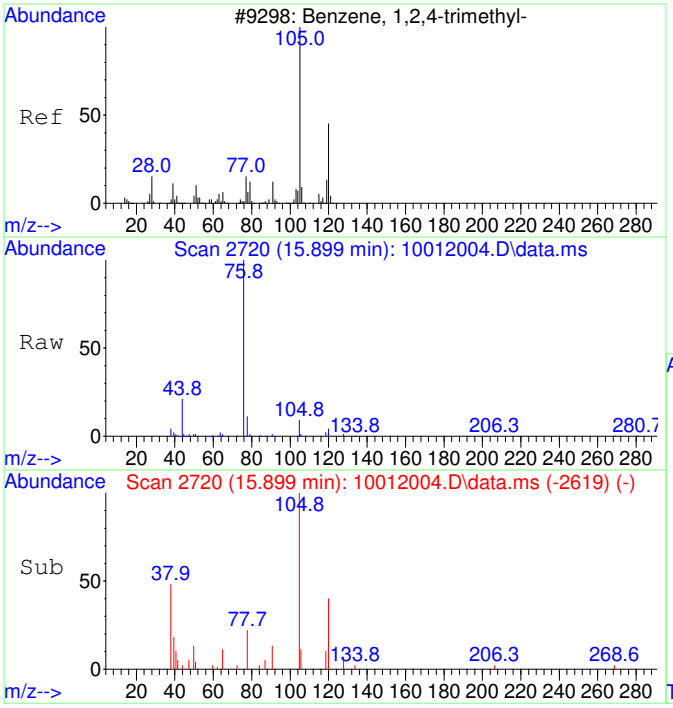


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 62.59 ug/L
RT: 14.872 min Scan# 2492
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 83 Resp: 2194

Ion	Ratio	Lower	Upper
83	100		
85	0.0	35.9	95.9#
95	5.7	0.0	47.4

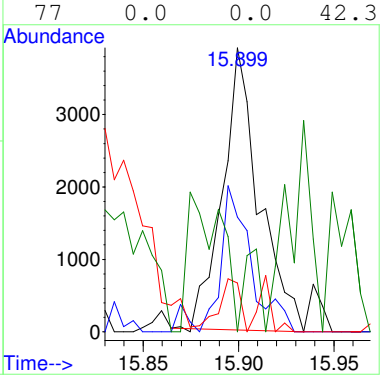


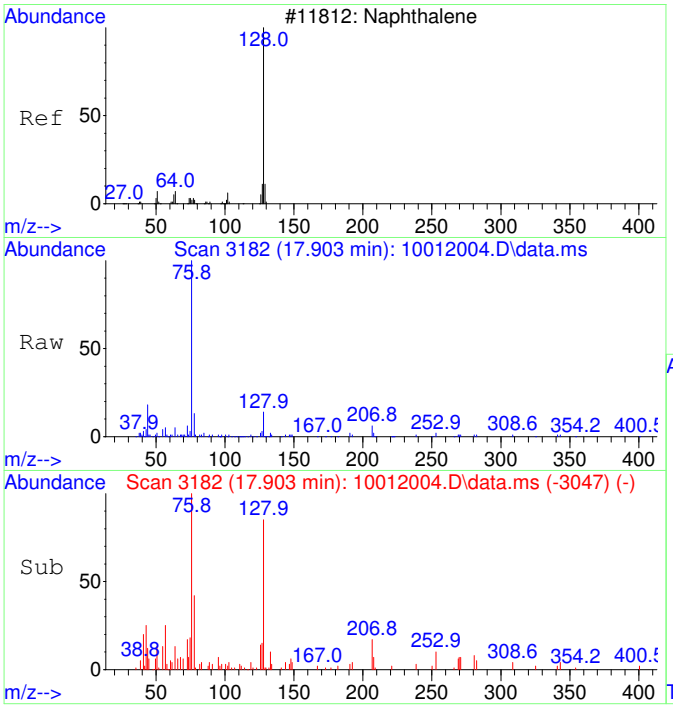


#47
1,2,4-Trimethylbenzene SCAN
Concen: 67.25 ug/L
RT: 15.899 min Scan# 2720
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:105 Resp: 5213

Ion	Ratio	Lower	Upper
105	100		
120	41.5	16.9	76.9
119	9.5	0.0	41.9
77	0.0	0.0	42.3

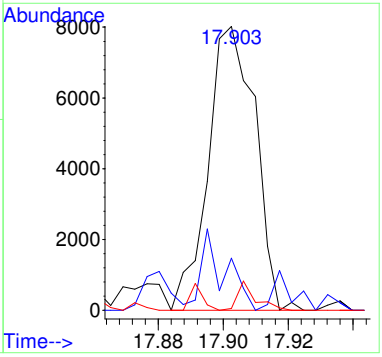




#48
Naphthalene SCAN
Concen: 69.11 ug/L
RT: 17.903 min Scan# 3182
Delta R.T. 0.001 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:128 Resp: 8107

Ion	Ratio	Lower	Upper
128	100		
127	5.6	0.0	44.0
129	3.9	0.0	40.8



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012004.D
Acq On : 1 Oct 2020 12:56
InstName : AG5975C
Operator : TD
Sample : S20J003-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

M.I. Performed By:
TD at 1:24 pm, Oct 01, 2020

M.I. Approved By:
ZR at 3:32 pm, Oct 07, 2020

Quant Time: Oct 01 13:14:58 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration

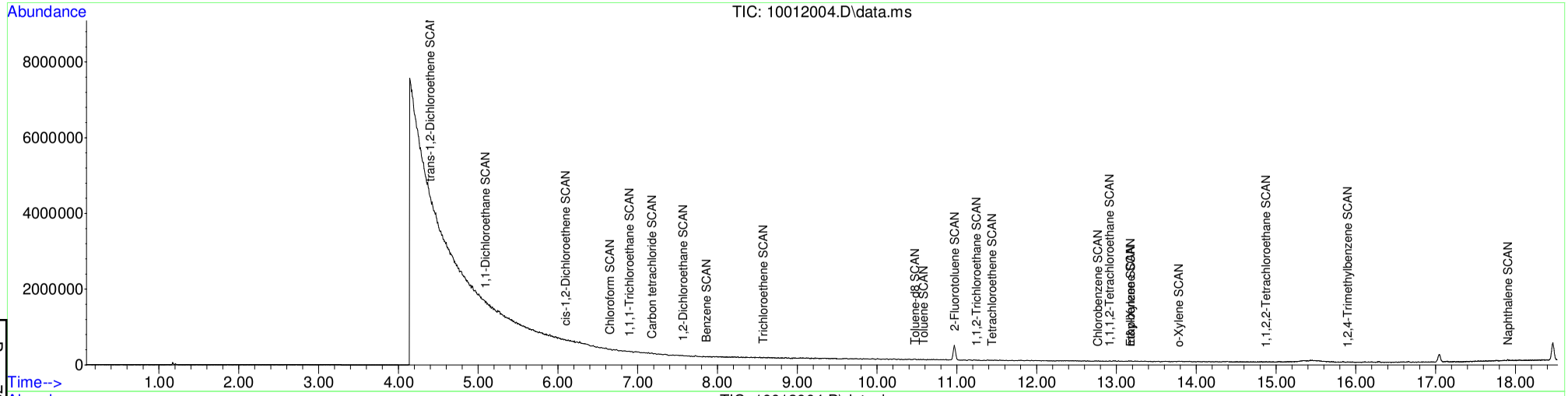
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	603773	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	5965	50.47 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery =	1.01%#	
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.101	61	1081m	44.84 ug/L	
3] trans-1,2-Dichloroethene	4.389	61	1325	47.57 ug/L	70
4] 1,1-Dichloroethane	5.092	63	1662	47.93 ug/L	53
5] cis-1,2-Dichloroethene	6.088	61	1752	47.87 ug/L	99
6] Chloroform	6.651	83	1674	44.68 ug/L	99
7] 1,1,1-Trichloroethane	6.919	97	1810	44.49 ug/L	100
8] Carbon tetrachloride	7.187	117	1704	44.50 ug/L	97
9] Benzene	7.503	78	5164	50.34 ug/L #	1
10] 1,2-Dichloroethane	7.552	62	1736	47.41 ug/L #	1
11] Trichloroethene	8.569	130	1449	46.91 ug/L	91
13] Toluene	10.571	91	7716	51.21 ug/L	98
14] 1,1,2-Trichloroethane	11.222	97	1634	49.76 ug/L	92
15] Tetrachloroethene	11.432	166	2148	49.26 ug/L	97
16] Chlorobenzene	12.765	112	5716	52.98 ug/L	74
17] 1,1,1,2-Tetrachloroethane	12.916	131	1974	51.06 ug/L	100
18] Ethylbenzene	12.972	91	9869	53.81 ug/L	94
19] m&p-Xylene	13.162	91	15478	107.97 ug/L	93
20] o-Xylene	13.774	91	8103	52.91 ug/L	96
21] 1,1,2,2-Tetrachloroethane	14.877	83	3656	53.86 ug/L	100
22] 1,3,5-Trimethylbenzene	15.345	105	9158	56.18 ug/L	95
23] 1,2,4-Trimethylbenzene	15.901	105	9443	55.77 ug/L	94
24] Naphthalene	17.904	128	14305	53.45 ug/L	89
25) 2-Fluorotoluene SCAN	10.969	109	302650	5142.15 ug/L	97
27) trans-1,2-Dichloroethe...	4.394	61	593	38.34 ug/L #	32
28) 1,1-Dichloroethane SCAN	5.091	63	414	23.13 ug/L #	38
29) cis-1,2-Dichloroethene...	6.093	61	390	20.34 ug/L #	61
30) Chloroform SCAN	6.650	83	449	21.58 ug/L #	27
31) 1,1,1-Trichloroethane ...	6.893	97	2047	107.99 ug/L #	19
32) Carbon tetrachloride SCAN	7.173	117	625	31.61 ug/L #	15
33) Benzene SCAN	7.860	78	1960	37.55 ug/L	93
34) 1,2-Dichloroethane SCAN	7.562	62	1492	77.42 ug/L #	1
35) Trichloroethene SCAN	8.568	130	606	42.25 ug/L #	41
36) Toluene-d8 SCAN	10.475	98	2676	46.49 ug/L	98
37) Toluene SCAN	10.580	91	6871	93.21 ug/L	78
38) 1,1,2-Trichloroethane ...	11.241	97	479	28.95 ug/L #	38
39) Tetrachloroethene SCAN	11.441	166	1049	59.23 ug/L #	22
40) Chlorobenzene SCAN	12.764	112	3421	67.92 ug/L #	90
41) 1,1,1,2-Tetrachloroeth...	12.907	131	710	38.09 ug/L #	16
42) Ethylbenzene SCAN	13.177	91	10015	74.57 ug/L	81
43) m&p-Xylene SCAN	13.177	91	10015	74.57 ug/L	84
44) o-Xylene SCAN	13.781	91	5154	71.70 ug/L	92
45) 1,1,2,2-Tetrachloroeth...	14.872	83	2194	62.59 ug/L #	29
47) 1,2,4-Trimethylbenzene...	15.899	105	5213	67.25 ug/L #	88
48) Naphthalene SCAN	17.903	128	8107	69.11 ug/L	80

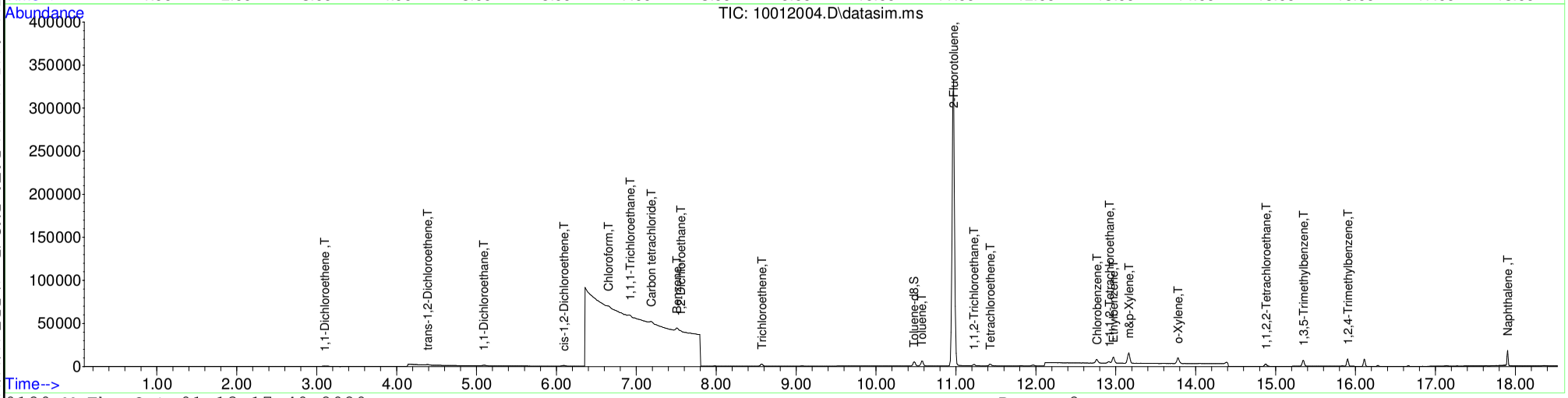
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\100120\
Data File : 10012004.D
Acq On : 1 Oct 2020 12:56
InstName : AG5975C
Operator : TD
Sample : S20J003-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 01 13:14:58 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\100120.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Fri Aug 21 08:33:54 2020
Response via : Initial Calibration





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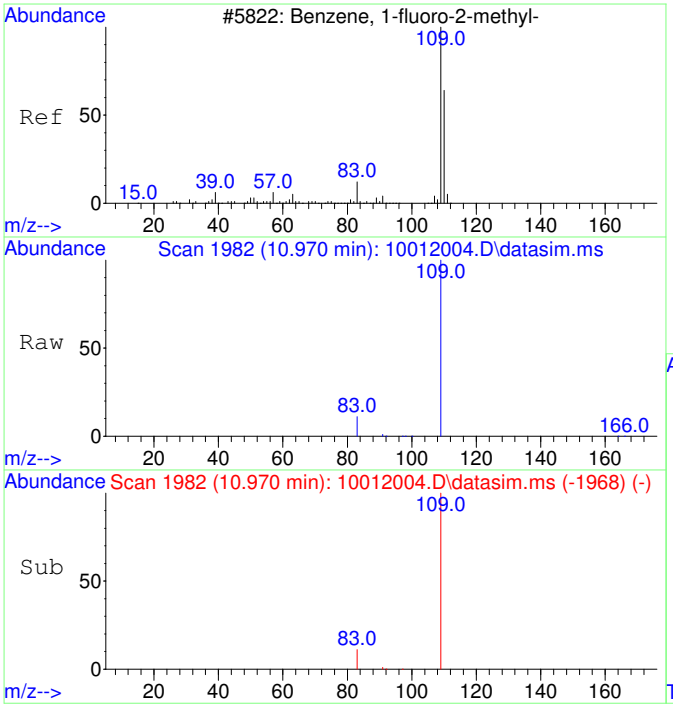
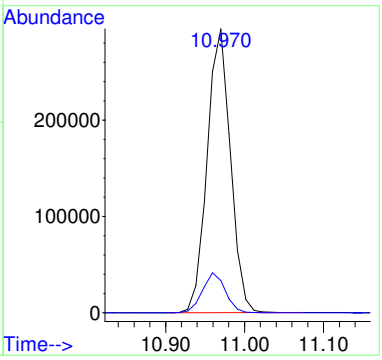
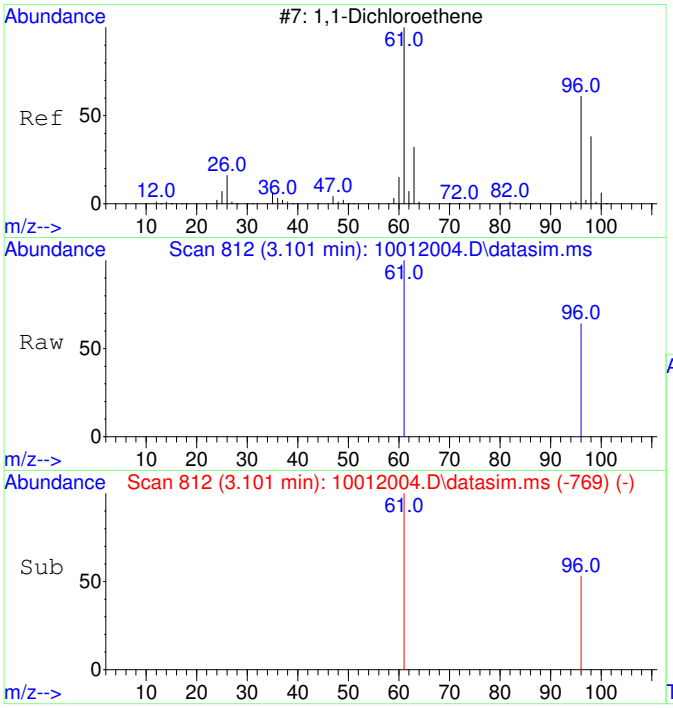


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:109 Resp: 603773

Ion	Ratio	Lower	Upper
109	100		
83	13.8	0.0	42.3

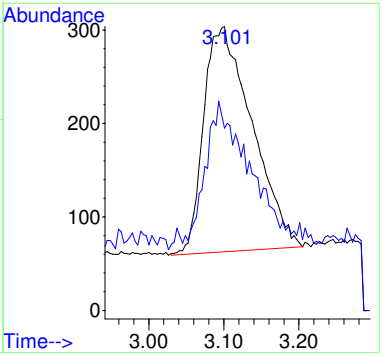


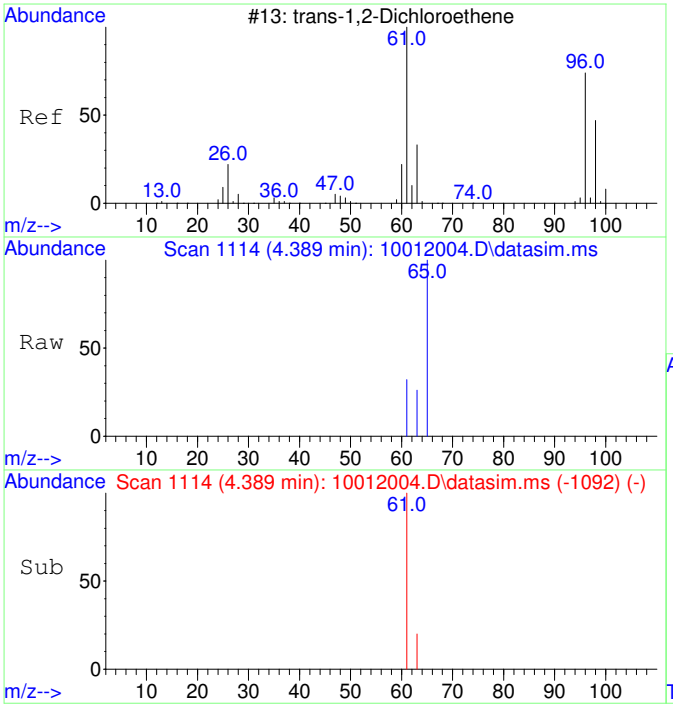


#2
1,1-Dichloroethene
Concen: 44.84 ug/L m
RT: 3.101 min Scan# 812
Delta R.T. 0.011 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 61 Resp: 1081

Ion	Ratio	Lower	Upper
61	100		
96	88.7	37.2	97.2

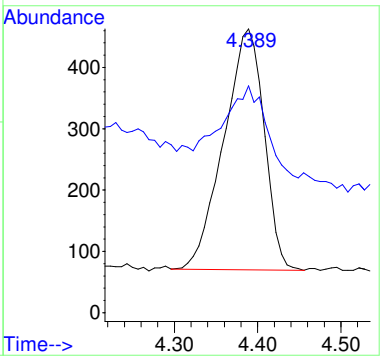


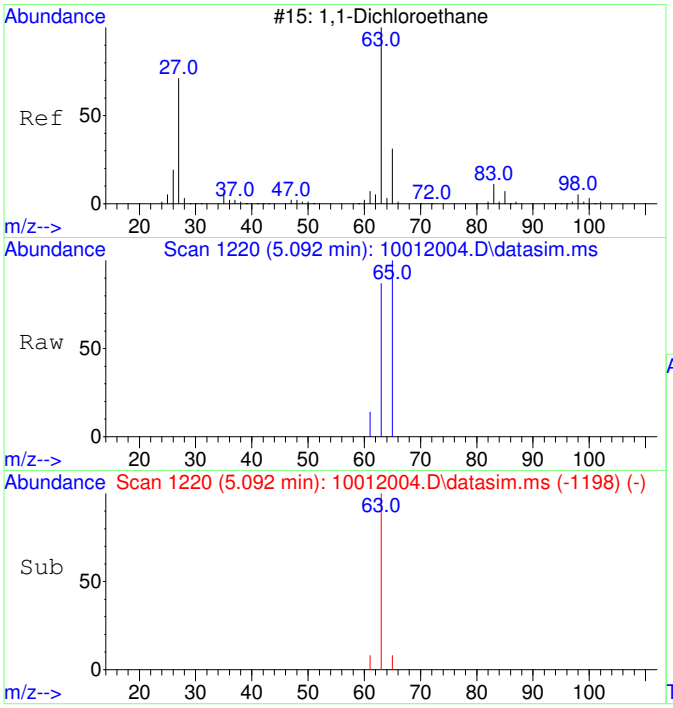


#3
trans-1,2-Dichloroethene
Concen: 47.57 ug/L
RT: 4.389 min Scan# 1114
Delta R.T. -0.007 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 61 Resp: 1325

Ion	Ratio	Lower	Upper
61	100		
63	49.4	2.4	62.4

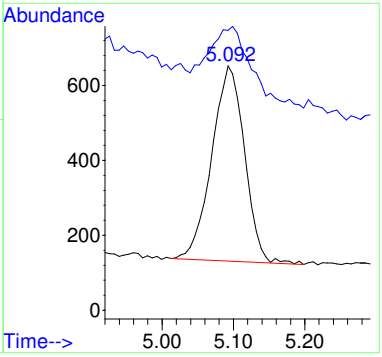


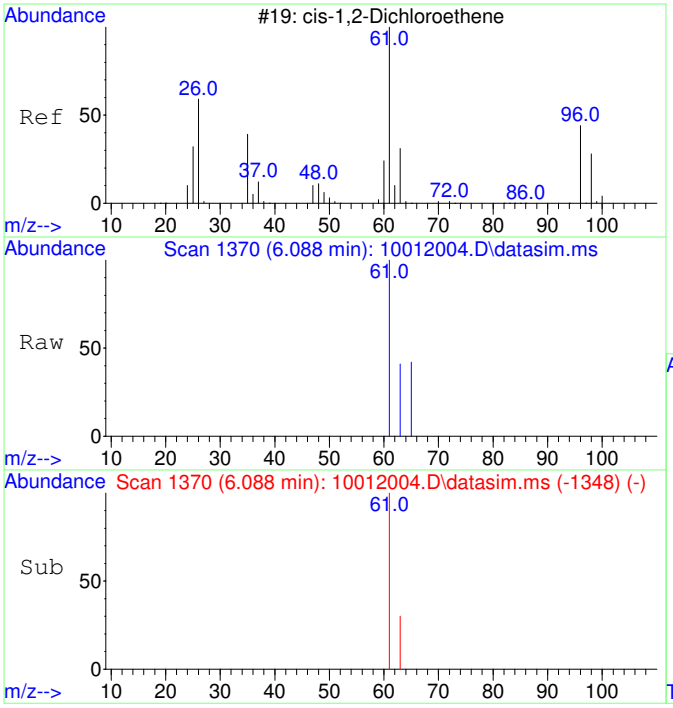


#4
1,1-Dichloroethane
Concen: 47.93 ug/L
RT: 5.092 min Scan# 1220
Delta R.T. -0.007 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 63 Resp: 1662

Ion	Ratio	Lower	Upper
63	100		
65	58.1	1.8	61.8

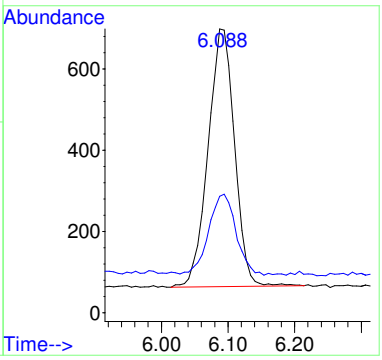


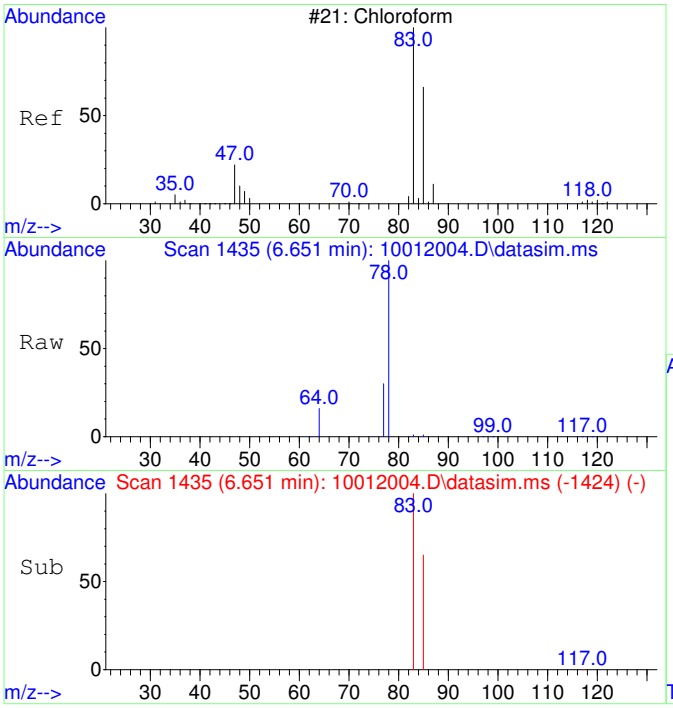


#5
cis-1,2-Dichloroethene
Concen: 47.87 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. -0.007 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 61 Resp: 1752

Ion	Ratio	Lower	Upper
61	100		
63	32.1	2.5	62.5

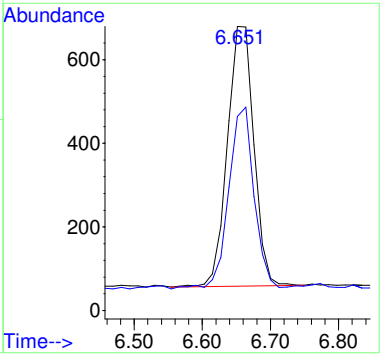


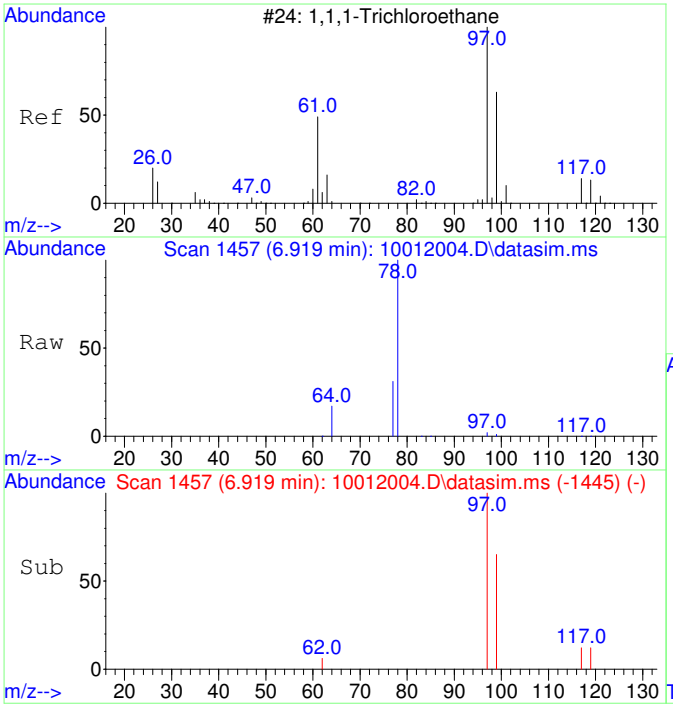


#6
Chloroform
Concen: 44.68 ug/L
RT: 6.651 min Scan# 1435
Delta R.T. -0.012 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 83 Resp: 1674

Ion	Ratio	Lower	Upper
83	100		
85	65.9	35.1	95.1

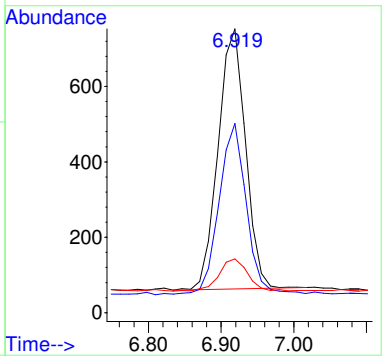


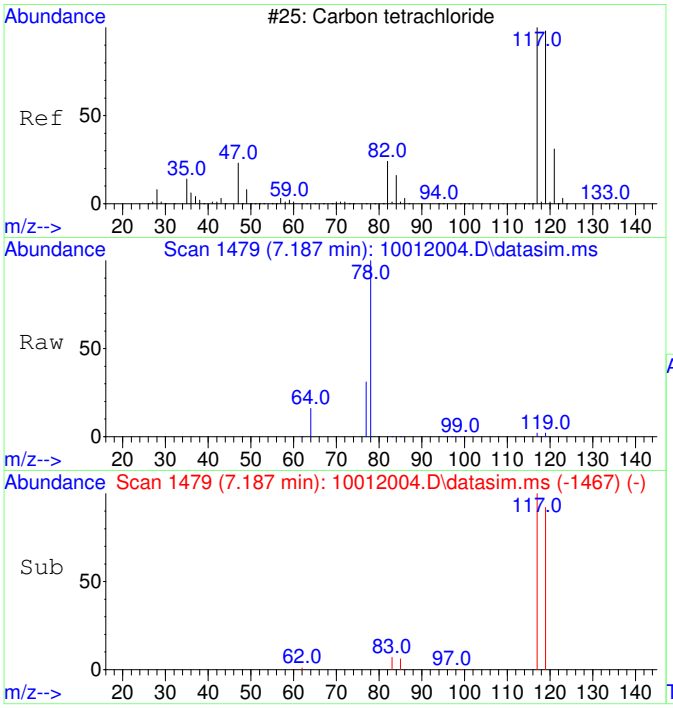


#7
1,1,1-Trichloroethane
Concen: 44.49 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 97 Resp: 1810

Ion	Ratio	Lower	Upper
97	100		
99	64.5	34.6	94.6
117	13.2	0.0	43.2

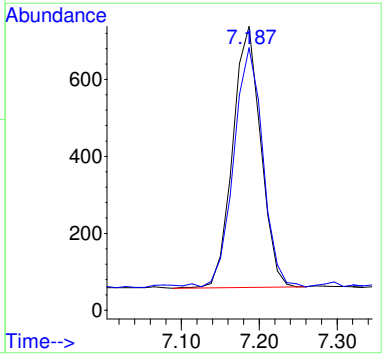


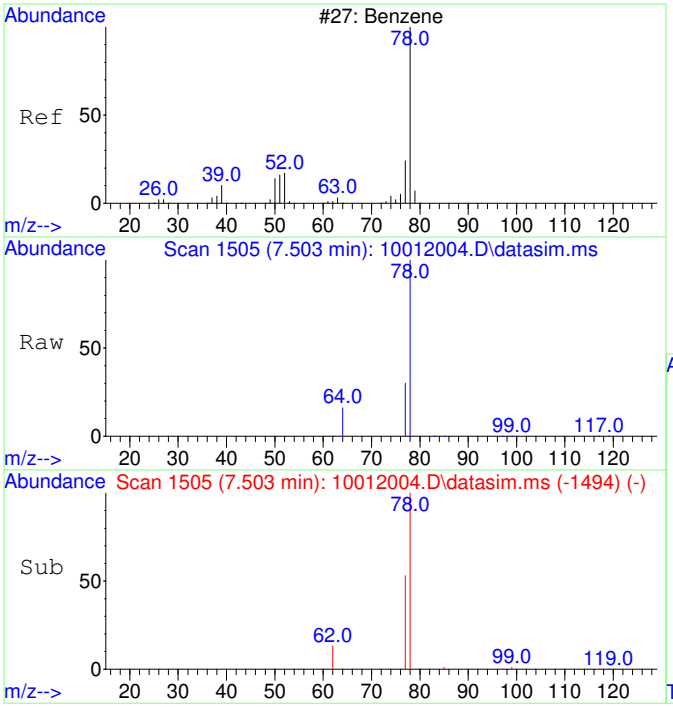


#8
Carbon tetrachloride
Concen: 44.50 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:117 Resp: 1704

Ion	Ratio	Lower	Upper
117	100		
119	93.8	66.4	126.4

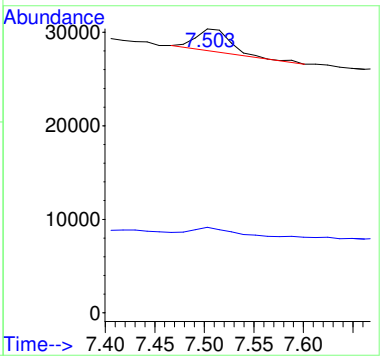


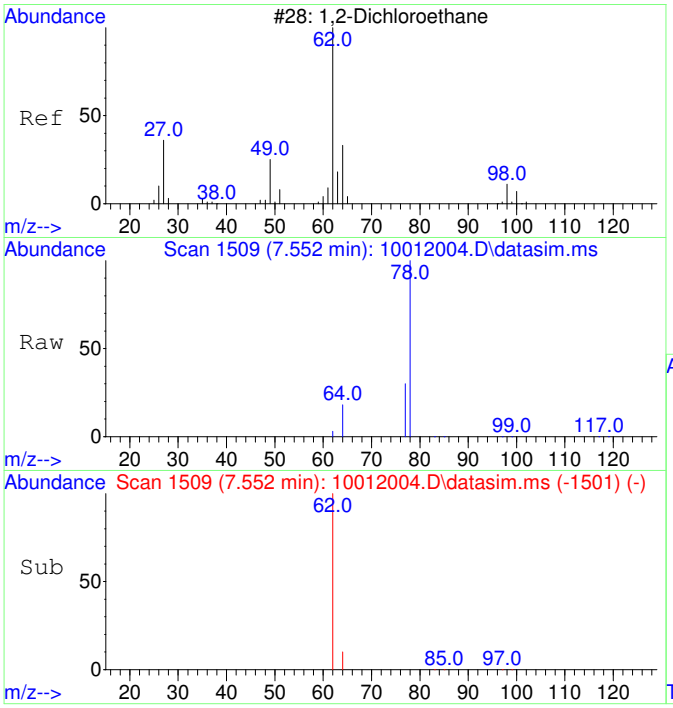


#9
Benzene
Concen: 50.34 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 78 Resp: 5164

Ion	Ratio	Lower	Upper
78	100		
77	71.2	0.0	53.2#

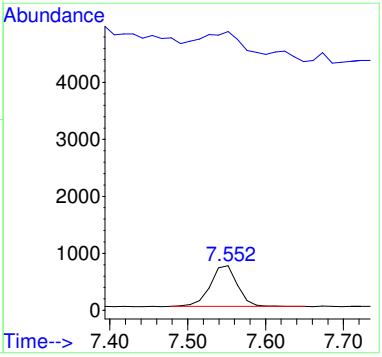


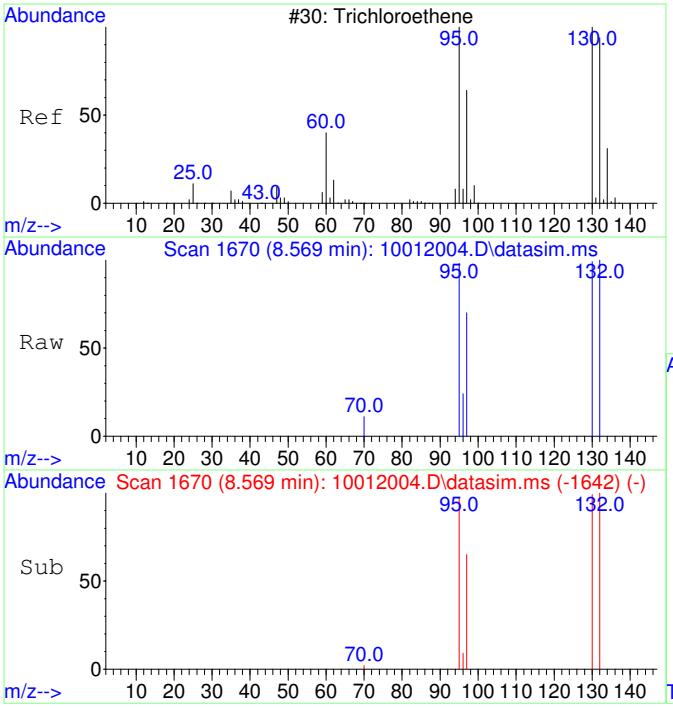


#10
1,2-Dichloroethane
Concen: 47.41 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 62 Resp: 1736

Ion	Ratio	Lower	Upper
62	100		
64	88.6	2.3	62.3#

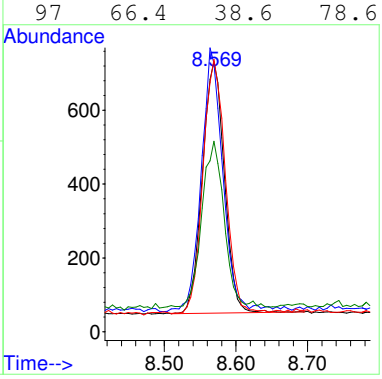


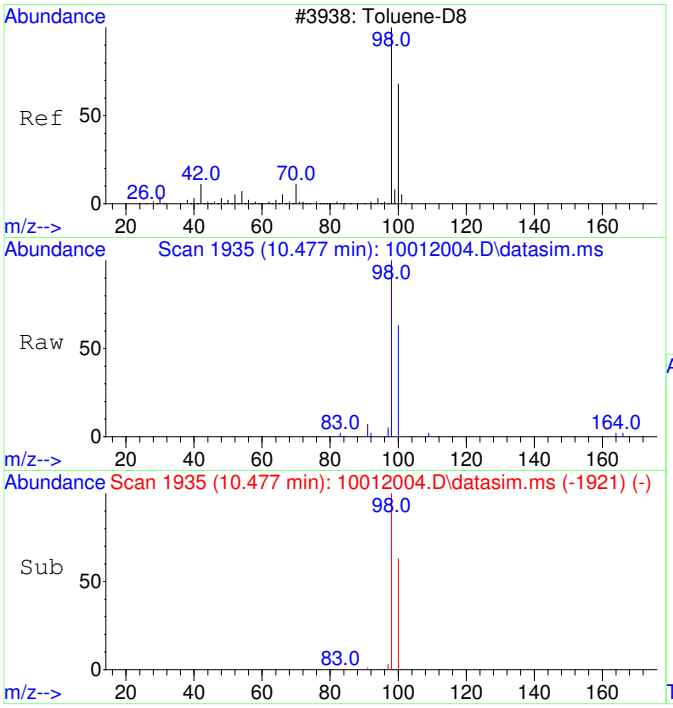


#11
Trichloroethene
Concen: 46.91 ug/L
RT: 8.569 min Scan# 1670
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:130 Resp: 1449

Ion	Ratio	Lower	Upper
130	100		
95	101.4	60.7	120.7
132	101.9	76.0	116.0
97	66.4	38.6	78.6

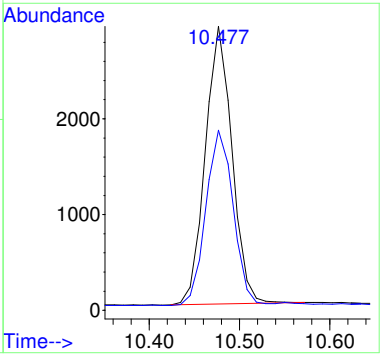


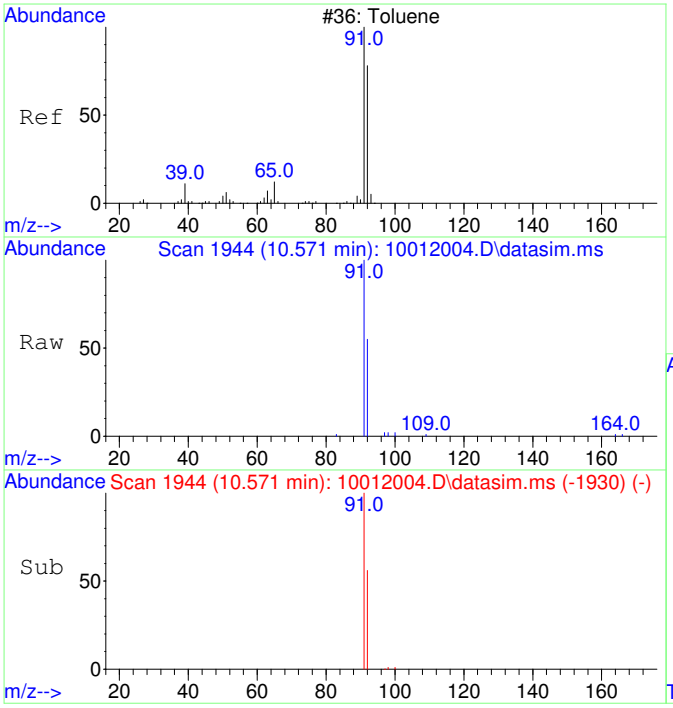


#12
Toluene-d8
Concen: 50.47 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 98 Resp: 5965

Ion	Ratio	Lower	Upper
98	100		
100	64.9	37.1	97.1

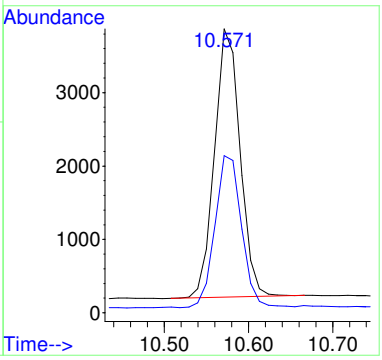


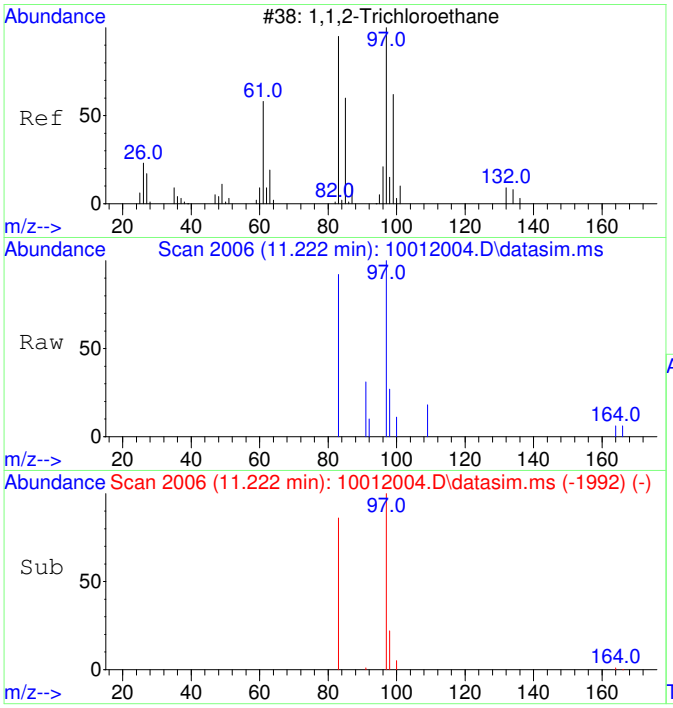


#13
Toluene
Concen: 51.21 ug/L
RT: 10.571 min Scan# 1944
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 7716

Ion	Ratio	Lower	Upper
91	100		
92	58.4	29.9	89.9

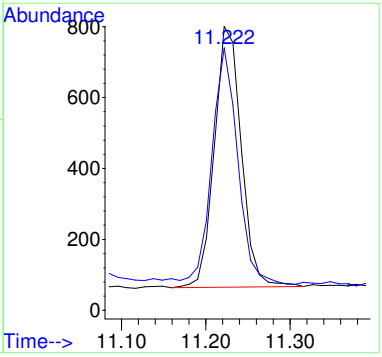


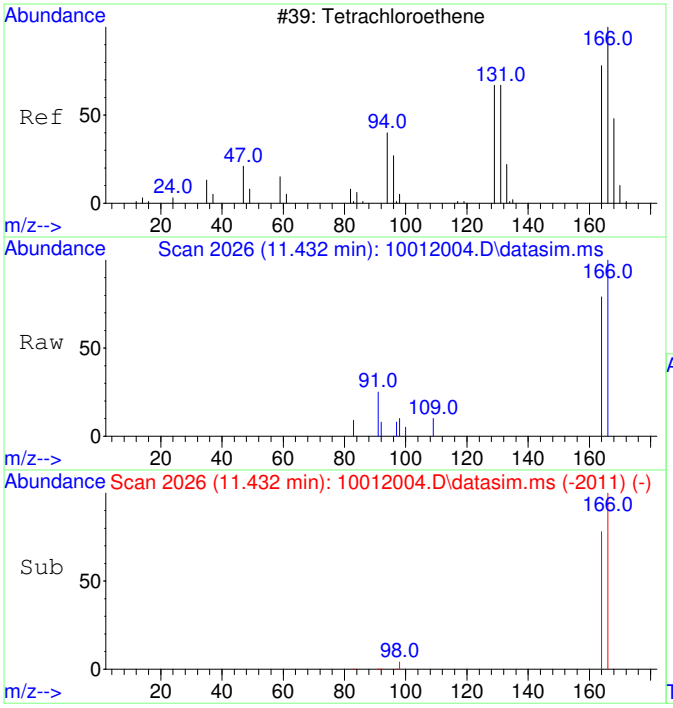


#14
1,1,2-Trichloroethane
Concen: 49.76 ug/L
RT: 11.222 min Scan# 2006
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 97 Resp: 1634

Ion	Ratio	Lower	Upper
97	100		
83	88.1	51.2	111.2

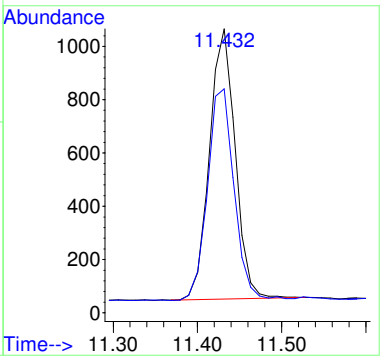


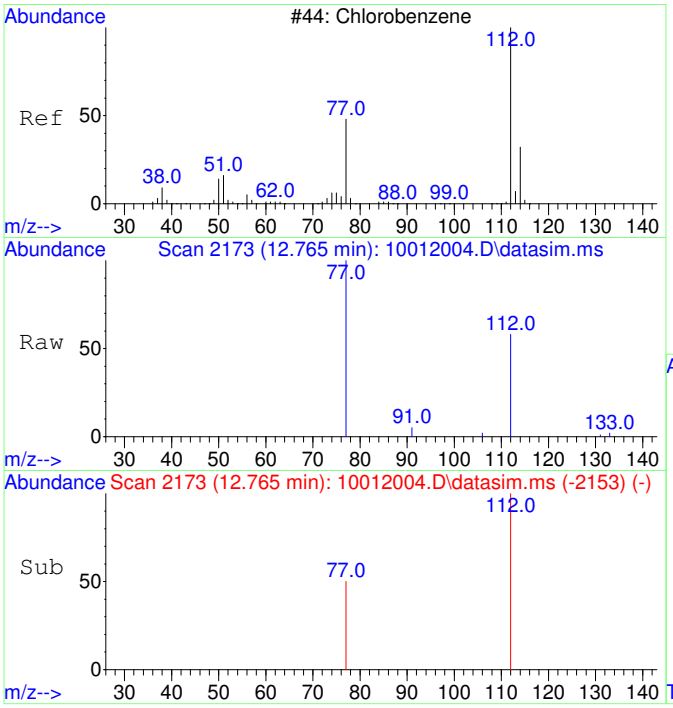


#15
Tetrachloroethene
Concen: 49.26 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.010 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:166 Resp: 2148

Ion	Ratio	Lower	Upper
166	100		
164	80.2	47.8	107.8

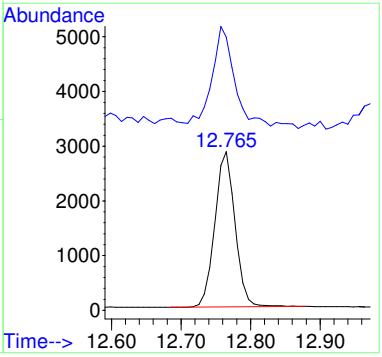


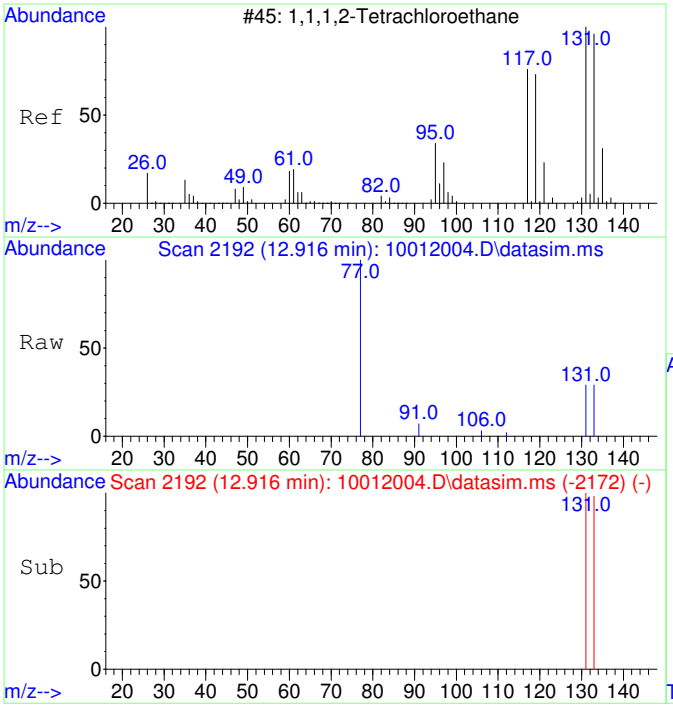


#16
Chlorobenzene
Concen: 52.98 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. 0.008 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:112 Resp: 5716

Ion	Ratio	Lower	Upper
112	100		
77	72.4	23.6	83.6

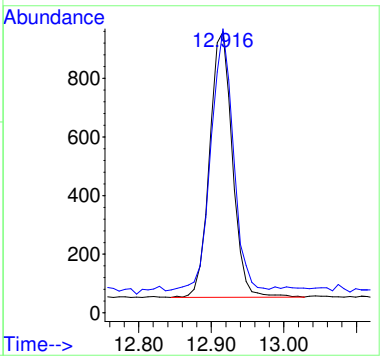


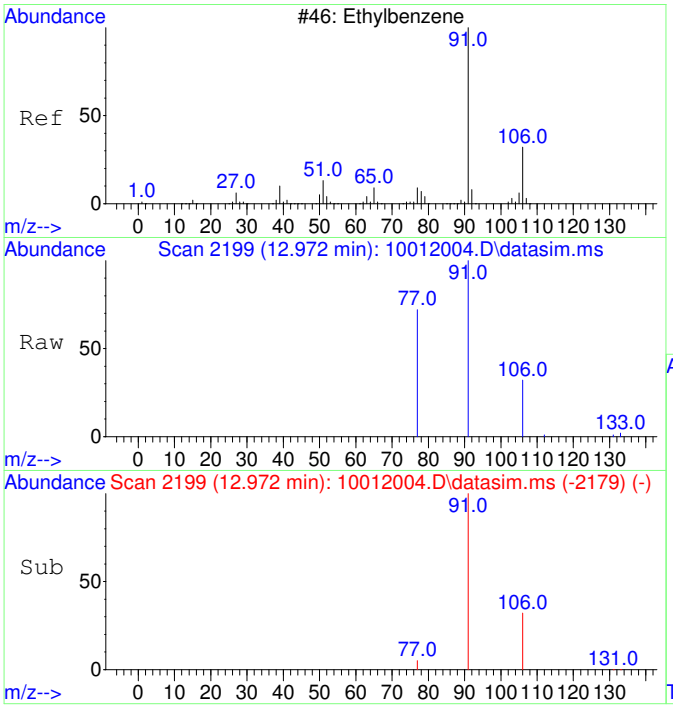


#17
1,1,1,2-Tetrachloroethane
Concen: 51.06 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.008 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:131 Resp: 1974

Ion	Ratio	Lower	Upper
131	100		
133	96.3	66.3	126.3

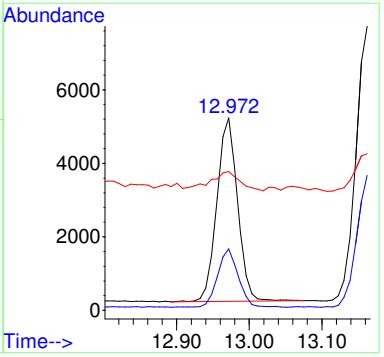


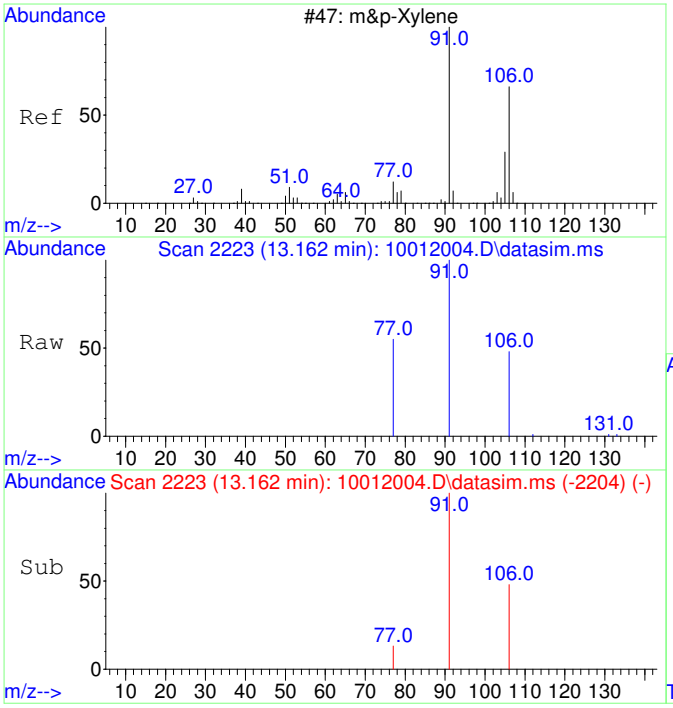


#18
Ethylbenzene
Concen: 53.81 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.008 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 9869

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

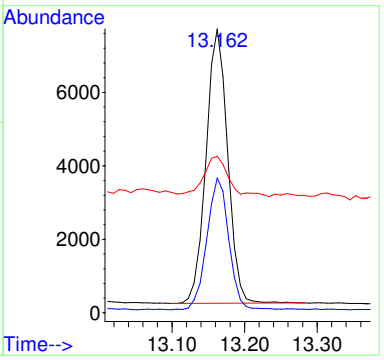


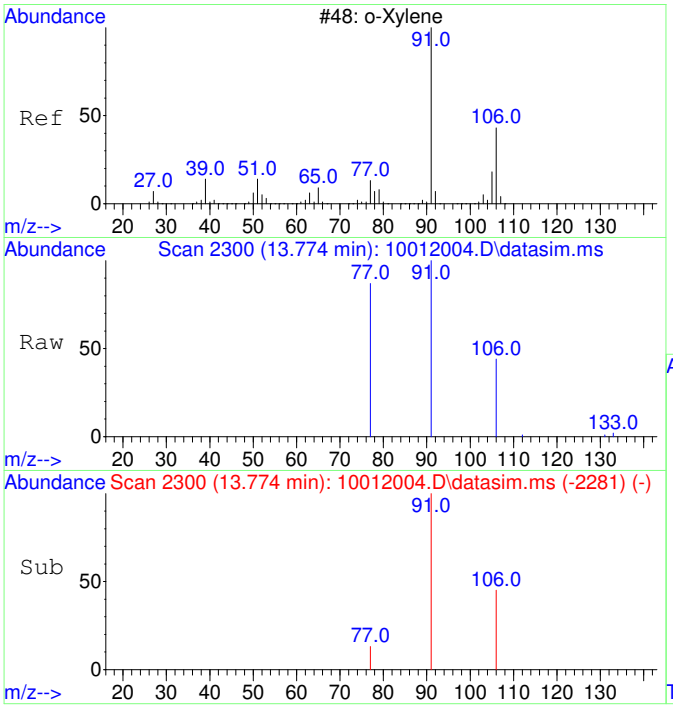


#19
m&p-Xylene
Concen: 107.97 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 15478

Ion	Ratio	Lower	Upper
91	100		
106	48.3	22.2	82.2
77	17.2	0.0	42.4

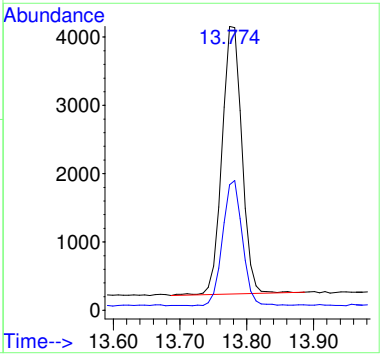


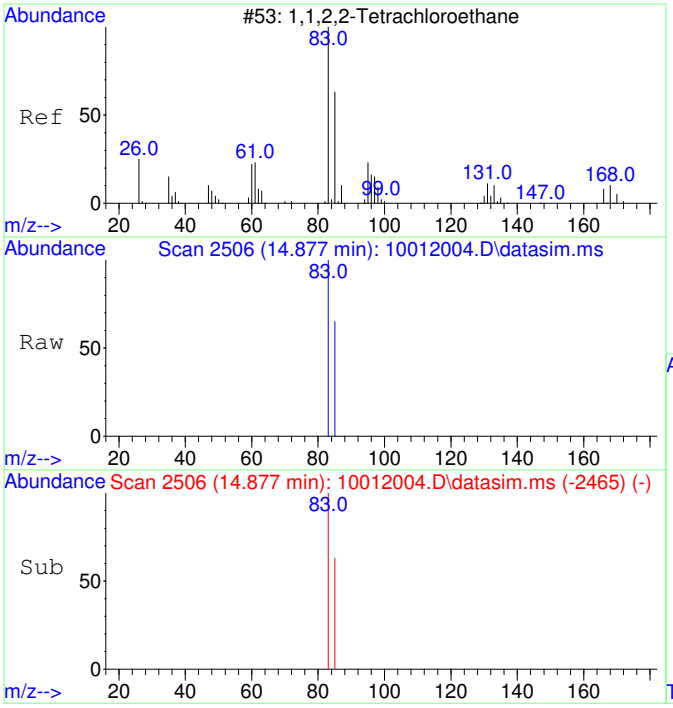


#20
o-Xylene
Concen: 52.91 ug/L
RT: 13.774 min Scan# 2300
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 8103

Ion	Ratio	Lower	Upper
91	100		
106	46.3	19.2	79.2

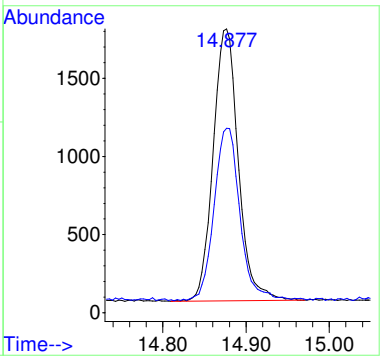


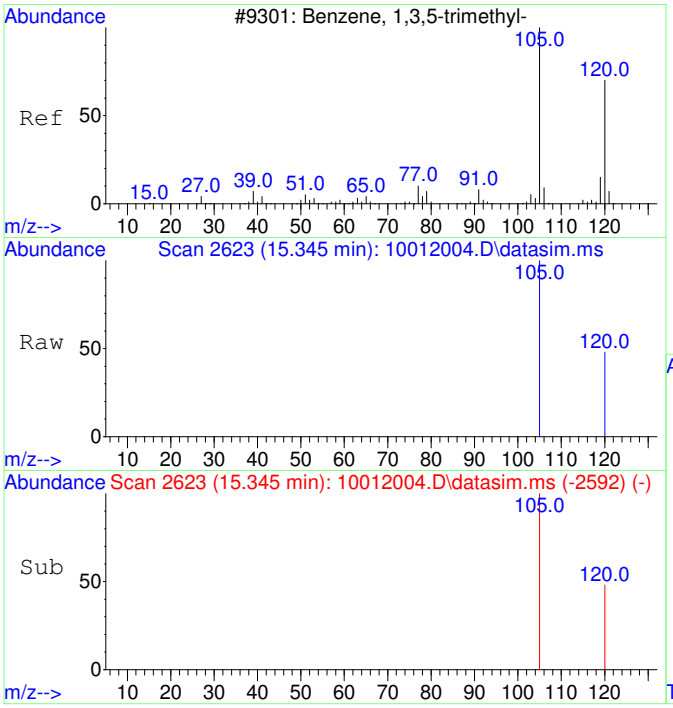


#21
1,1,2,2-Tetrachloroethane
Concen: 53.86 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. 0.004 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 83 Resp: 3656

Ion	Ratio	Lower	Upper
83	100		
85	64.4	34.8	94.8

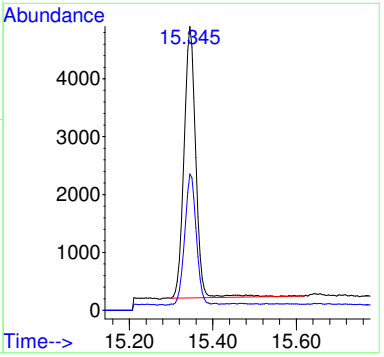


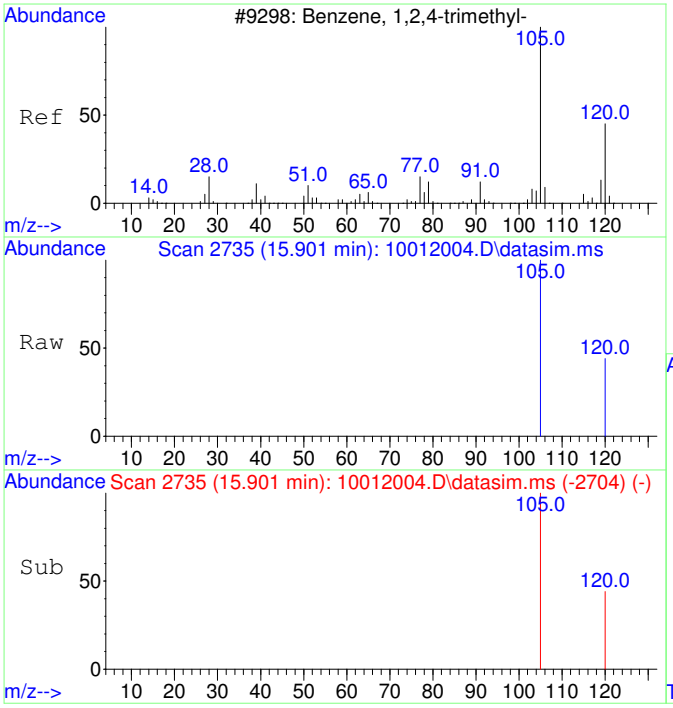


#22
1,3,5-Trimethylbenzene
Concen: 56.18 ug/L
RT: 15.345 min Scan# 2623
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:105 Resp: 9158

Ion	Ratio	Lower	Upper
105	100		
120	47.4	21.1	81.1

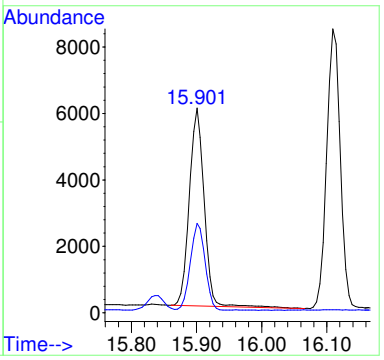


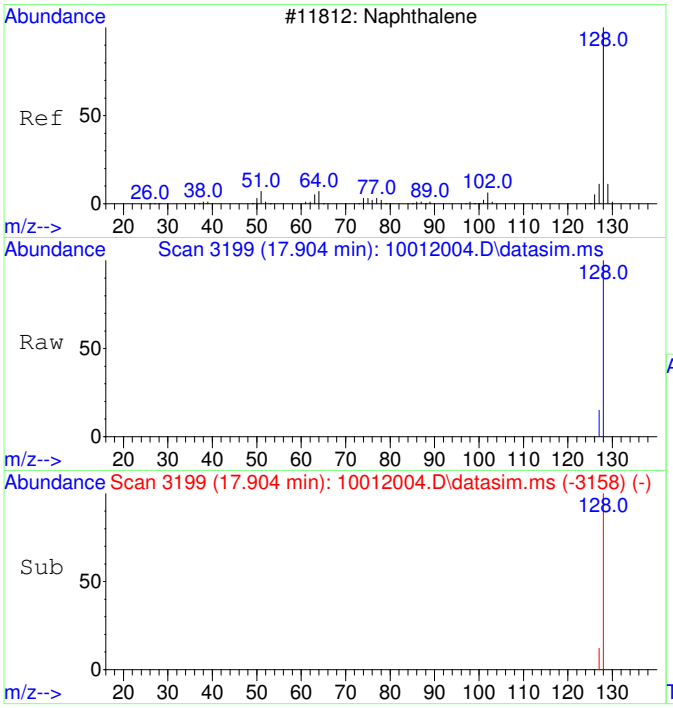


#23
1,2,4-Trimethylbenzene
Concen: 55.77 ug/L
RT: 15.901 min Scan# 2735
Delta R.T. 0.005 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:105 Resp: 9443

Ion	Ratio	Lower	Upper
105	100		
120	42.9	17.2	77.2

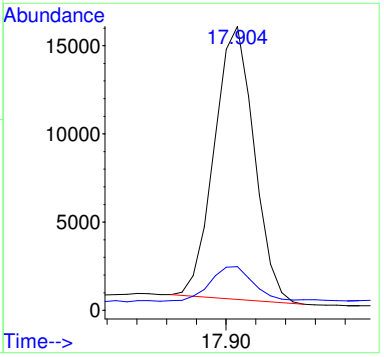


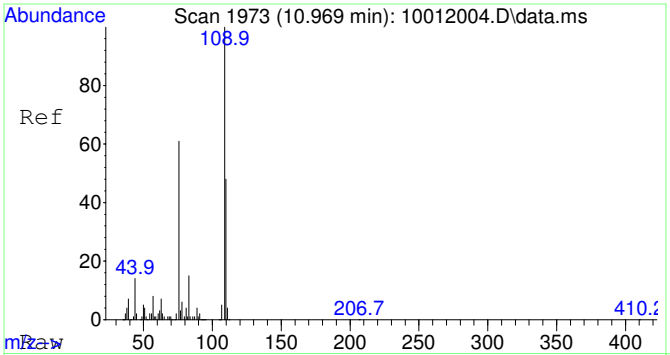


#24
Naphthalene
Concen: 53.45 ug/L
RT: 17.904 min Scan# 3199
Delta R.T. 0.001 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:128 Resp: 14305

Ion	Ratio	Lower	Upper
128	100		
127	17.0	0.0	42.5

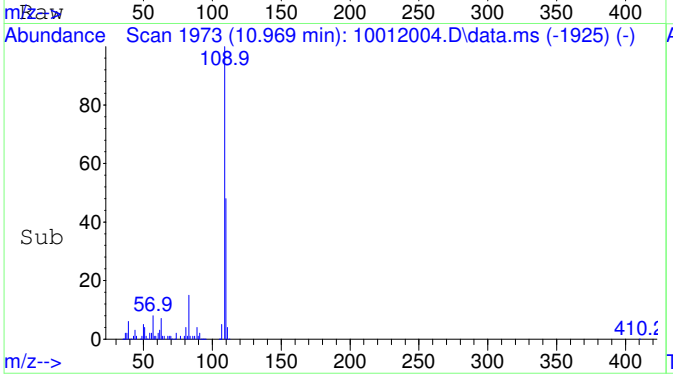


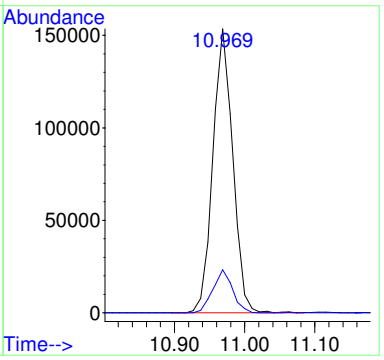


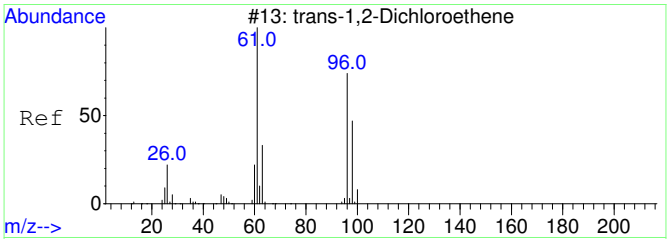
#25
2-Fluorotoluene SCAN
Concen: 5142.15 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:109 Resp: 302650

Ion	Ratio	Lower	Upper
109	100		
83	15.0	0.0	43.8



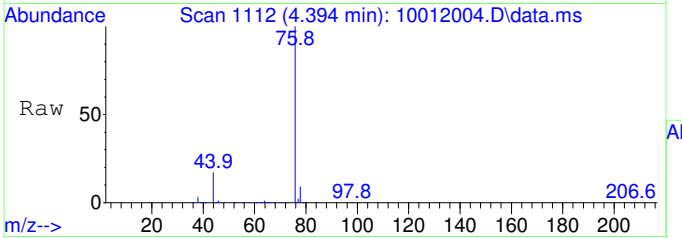


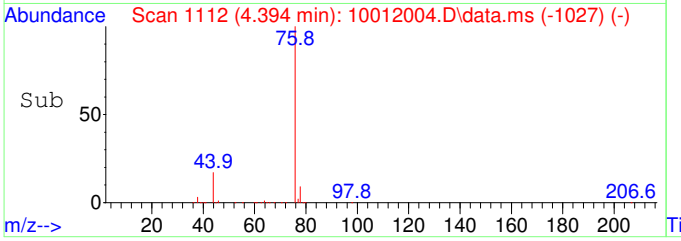


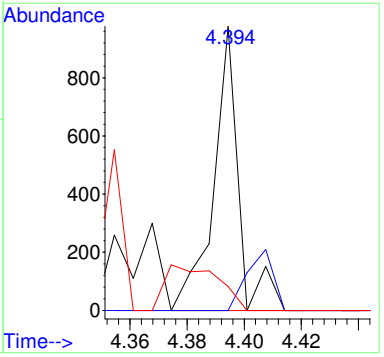
#27
trans-1,2-Dichloroethene SCAN
Concen: 38.34 ug/L
RT: 4.394 min Scan# 1112
Delta R.T. -0.007 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

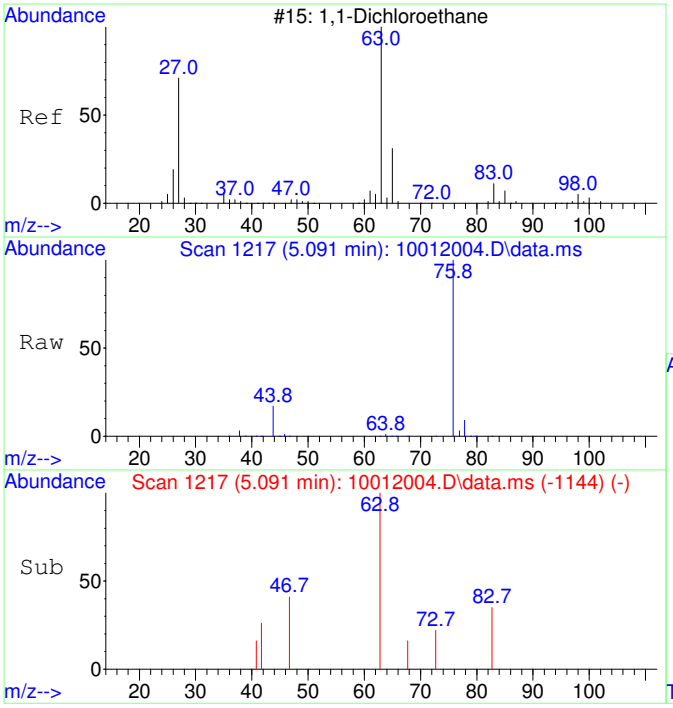
Tgt Ion: 61 Resp: 593

Ion	Ratio	Lower	Upper
61	100		
96	22.8	49.0	109.0#
98	0.0	20.5	80.5#





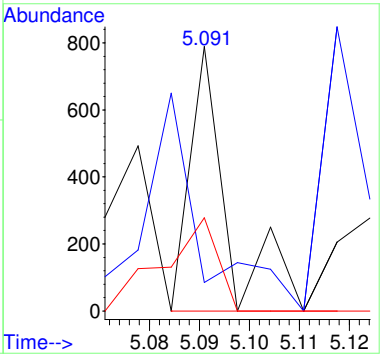


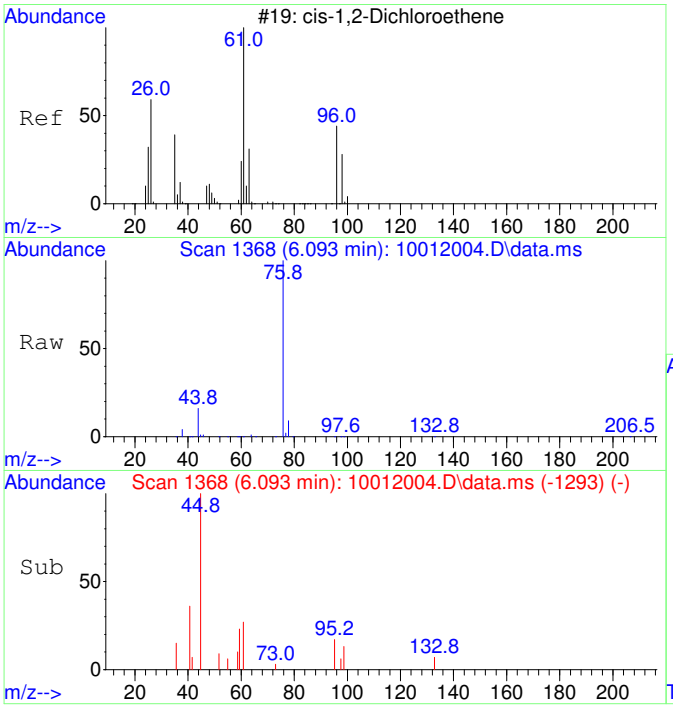


#28
1,1-Dichloroethane SCAN
Concen: 23.13 ug/L
RT: 5.091 min Scan# 1217
Delta R.T. -0.013 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 63 Resp: 414

Ion	Ratio	Lower	Upper
63	100		
65	59.4	1.3	61.3
83	51.4	0.0	45.9#

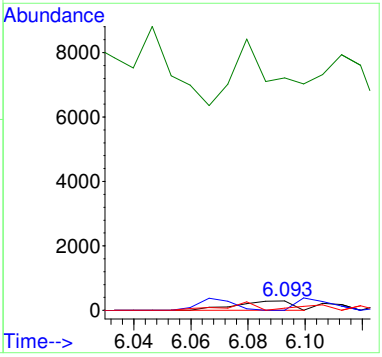


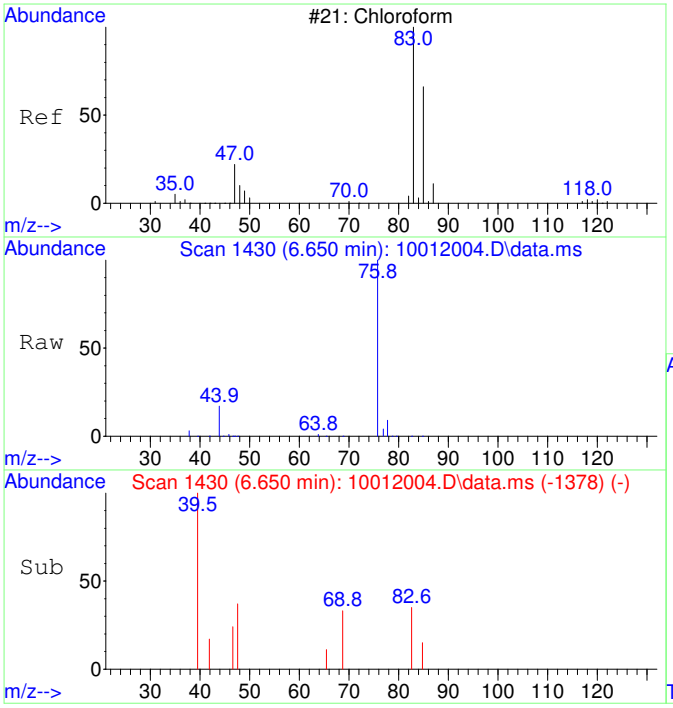


#29
cis-1,2-Dichloroethene SCAN
Concen: 20.34 ug/L
RT: 6.093 min Scan# 1368
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 61 Resp: 390

Ion	Ratio	Lower	Upper
61	100		
96	94.6	39.9	99.9
98	20.0	13.5	73.5
64	0.0	4.5	64.5#

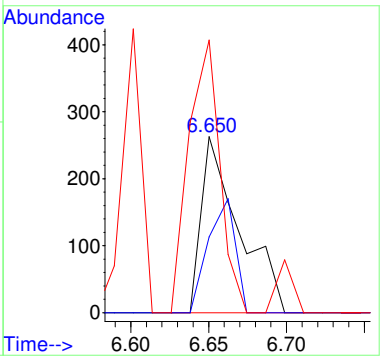


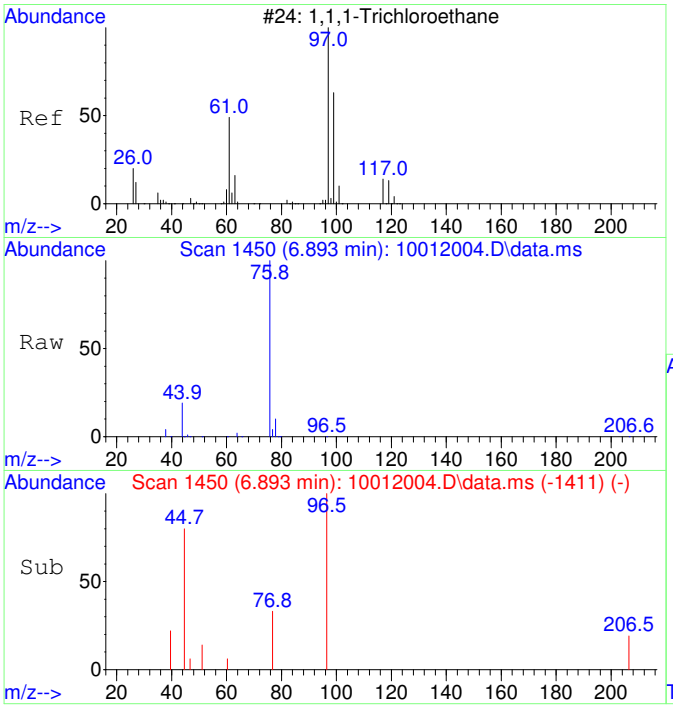


#30
Chloroform SCAN
Concen: 21.58 ug/L
RT: 6.650 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 83 Resp: 449

Ion	Ratio	Lower	Upper
83	100		
85	46.1	34.6	94.6
47	126.5	0.0	53.4#

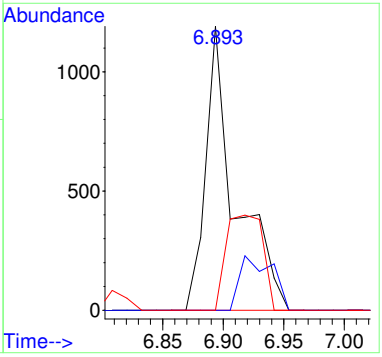


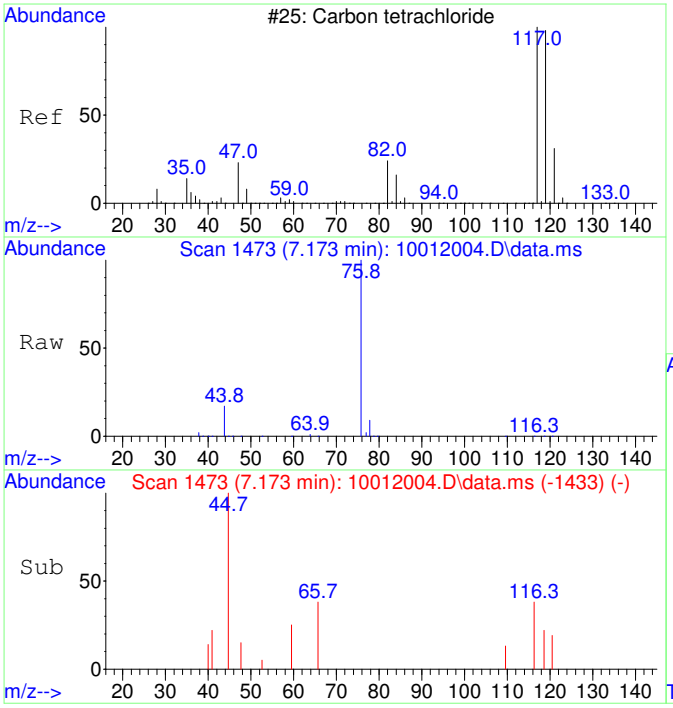


#31
1,1,1-Trichloroethane SCAN
Concen: 107.99 ug/L
RT: 6.893 min Scan# 1450
Delta R.T. -0.024 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 97 Resp: 2047

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

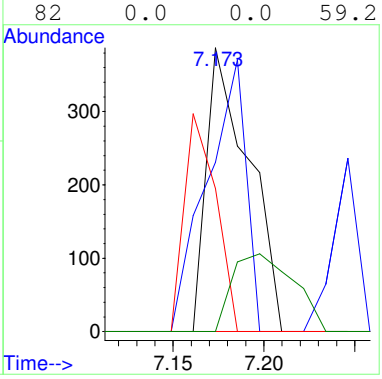


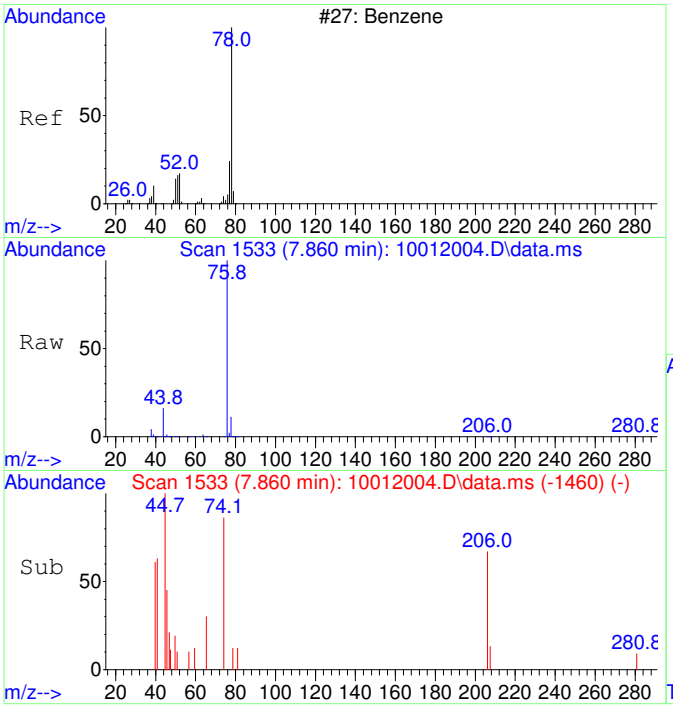


#32
Carbon tetrachloride SCAN
Concen: 31.61 ug/L
RT: 7.173 min Scan# 1473
Delta R.T. -0.012 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:117 Resp: 625

Ion	Ratio	Lower	Upper
117	100		
119	0.0	75.5	135.5#
121	57.4	0.0	58.8
82	0.0	0.0	59.2

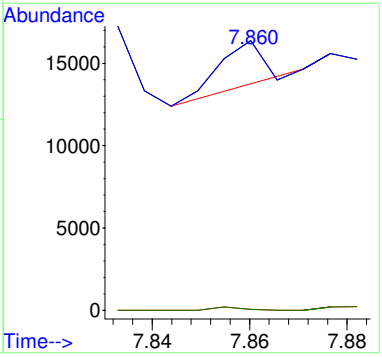


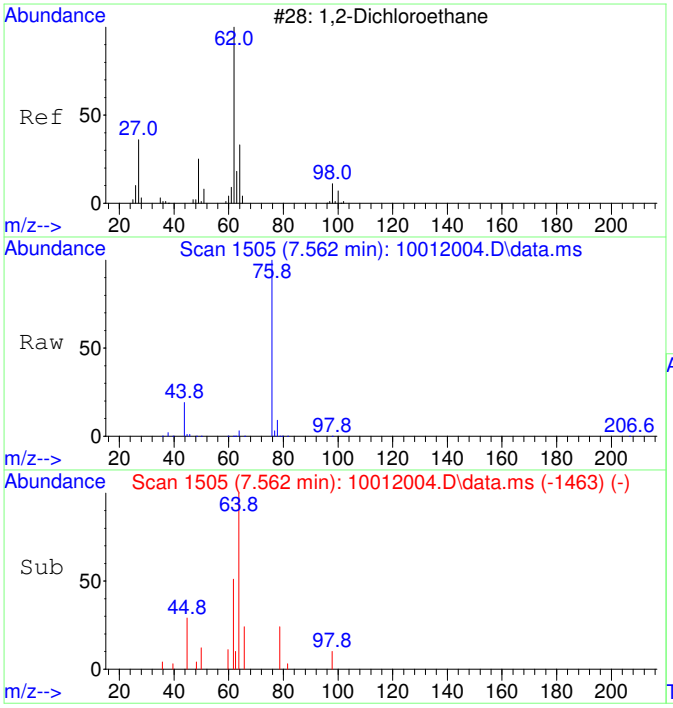


#33
Benzene SCAN
Concen: 37.55 ug/L
RT: 7.860 min Scan# 1533
Delta R.T. 0.346 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 78 Resp: 1960

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	4.4	0.0	47.9
51	4.4	0.0	44.1

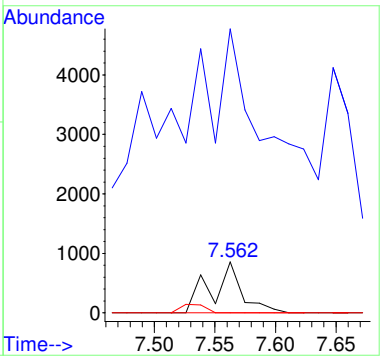


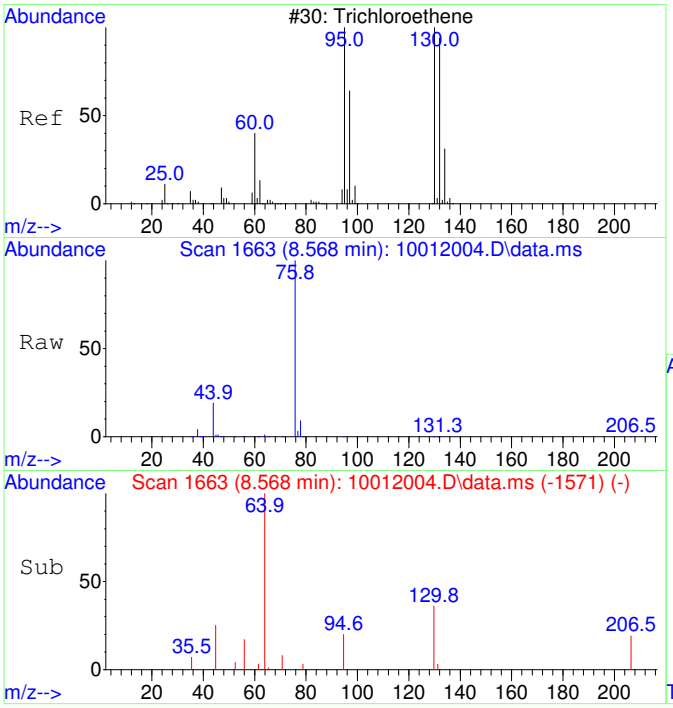


#34
1,2-Dichloroethane SCAN
Concen: 77.42 ug/L
RT: 7.562 min Scan# 1505
Delta R.T. 0.012 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 62 Resp: 1492

Ion	Ratio	Lower	Upper
62	100		
64	306.0	5.2	65.2#
49	0.0	3.9	63.9#

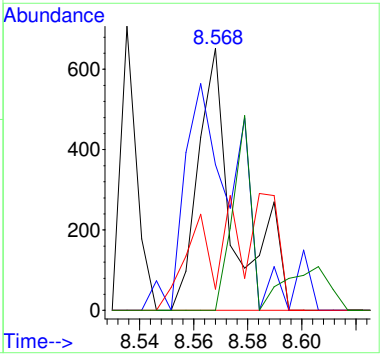


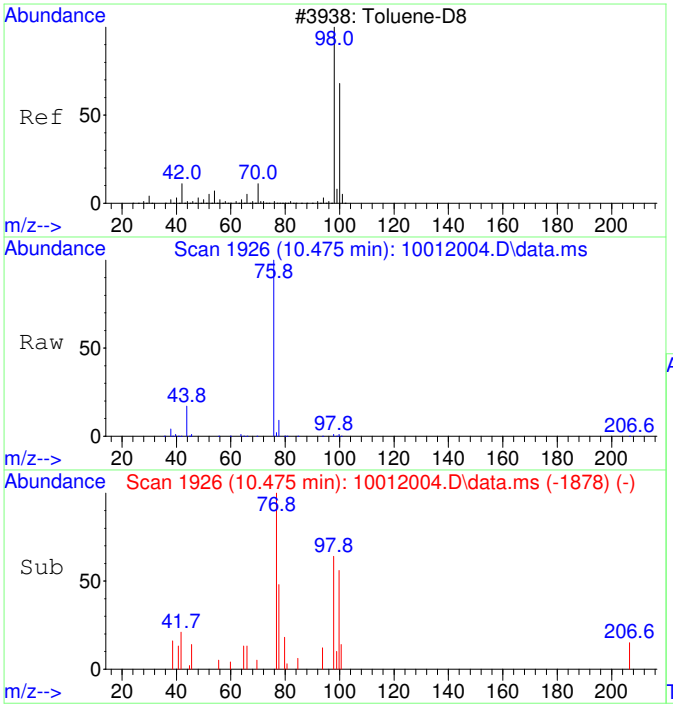


#35
Trichloroethene SCAN
Concen: 42.25 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:130 Resp: 606

Ion	Ratio	Lower	Upper
130	100		
95	120.5	60.5	120.5
132	20.5	59.6	119.6#
97	0.0	28.2	88.2#

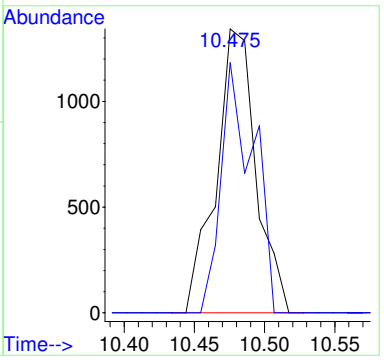


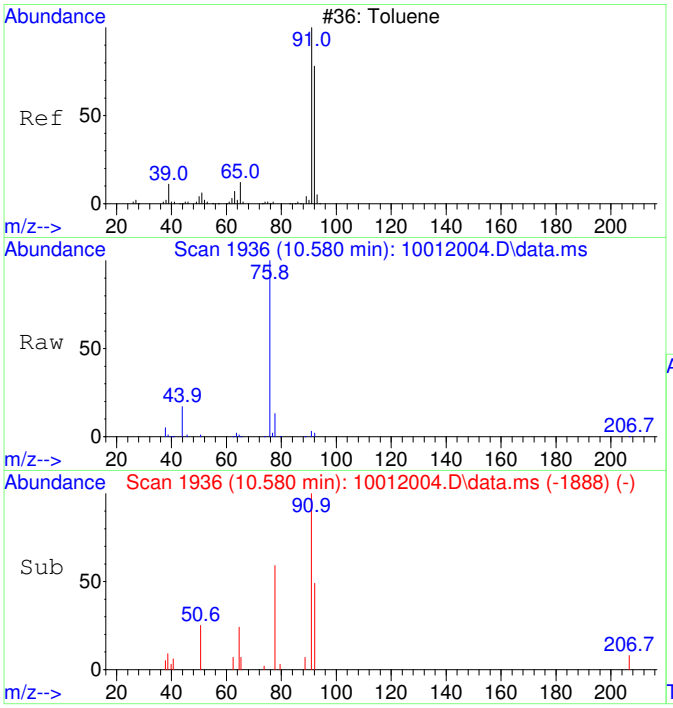


#36
Toluene-d8 SCAN
Concen: 46.49 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 98 Resp: 2676

Ion	Ratio	Lower	Upper
98	100		
100	71.7	40.0	100.0

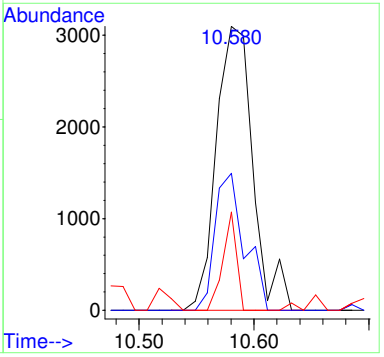


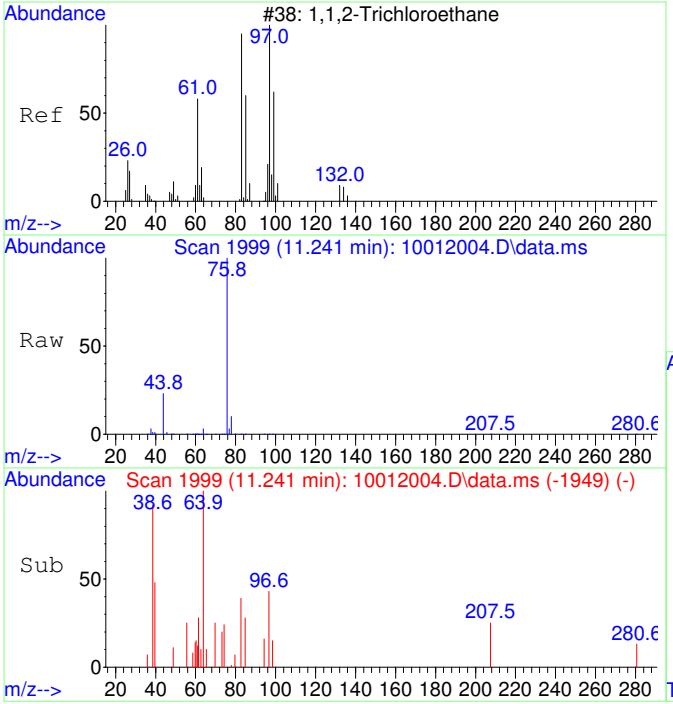


#37
Toluene SCAN
Concen: 93.21 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 6871

Ion	Ratio	Lower	Upper
91	100		
92	39.2	28.3	88.3
65	12.8	0.0	41.0

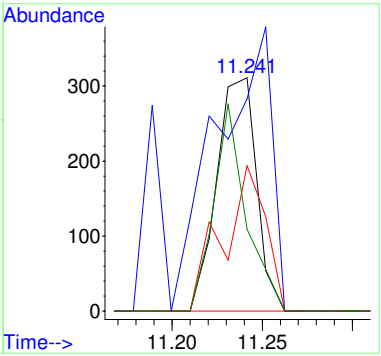


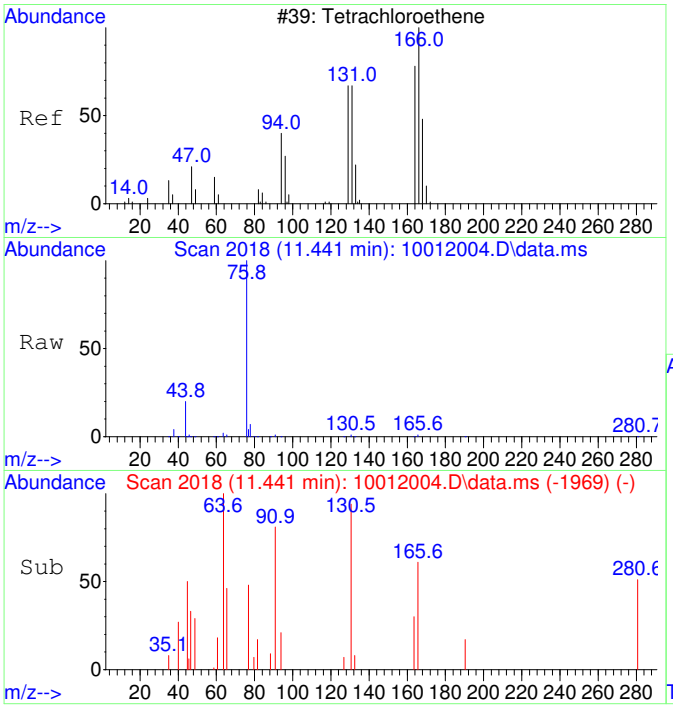


#38
1,1,2-Trichloroethane SCAN
Concen: 28.95 ug/L
RT: 11.241 min Scan# 1999
Delta R.T. 0.021 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 97 Resp: 479

Ion	Ratio	Lower	Upper
97	100		
83	167.6	57.7	117.7#
61	66.6	32.1	92.1
99	0.0	36.7	96.7#

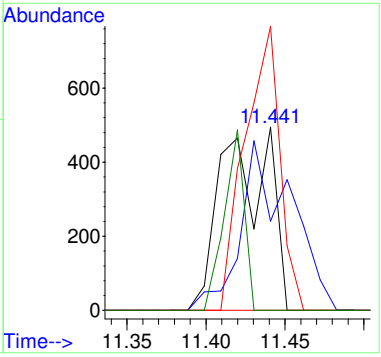


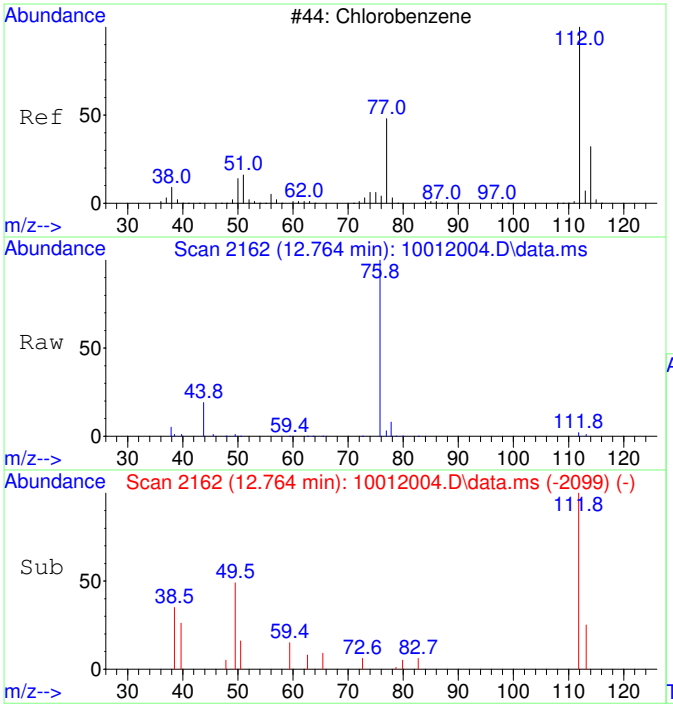


#39
Tetrachloroethene SCAN
Concen: 59.23 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.010 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:166 Resp: 1049

Ion	Ratio	Lower	Upper
166	100		
164	0.0	50.9	110.9#
131	113.1	38.7	98.7#
129	0.0	41.8	101.8#

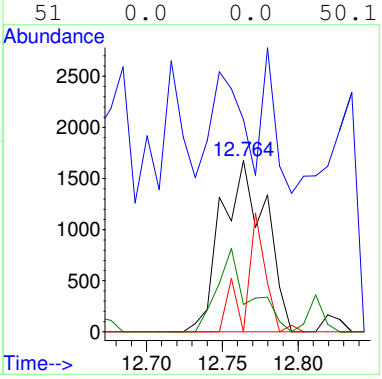


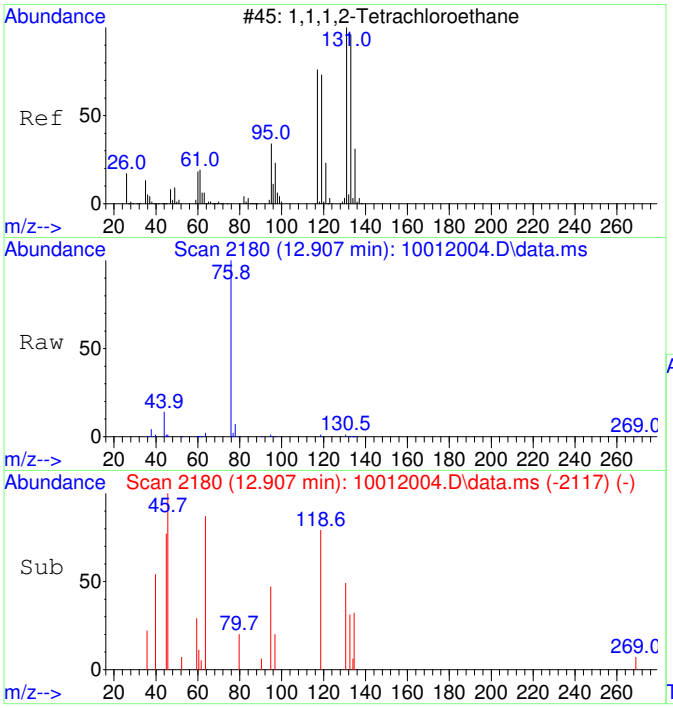


#40
Chlorobenzene SCAN
Concen: 67.92 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:112 Resp: 3421

Ion	Ratio	Lower	Upper
112	100		
77	56.1	28.2	88.2
114	31.0	2.3	62.3
51	0.0	0.0	50.1

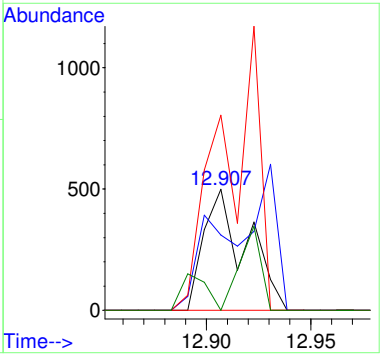


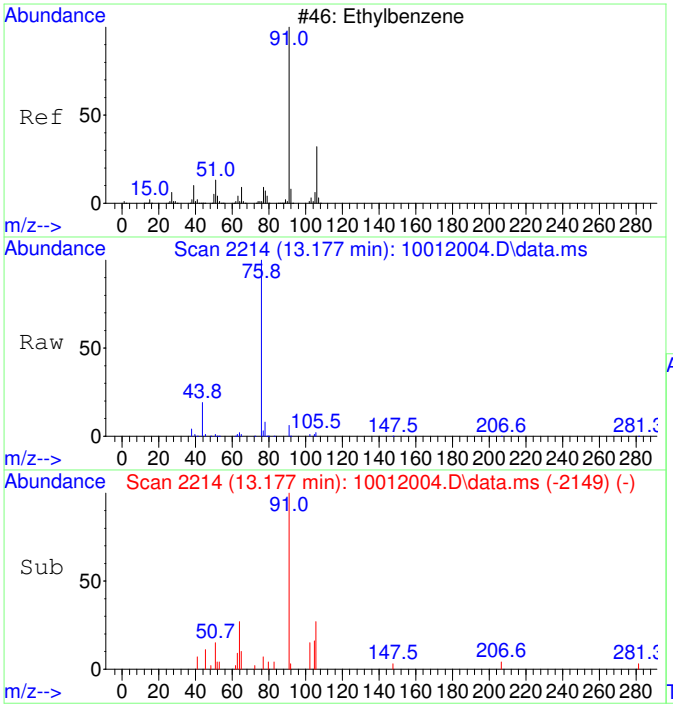


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 38.09 ug/L
RT: 12.907 min Scan# 2180
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:131 Resp: 710

Ion	Ratio	Lower	Upper
131	100		
133	0.0	66.9	126.9#
119	0.0	40.4	100.4#
117	17.9	35.1	95.1#

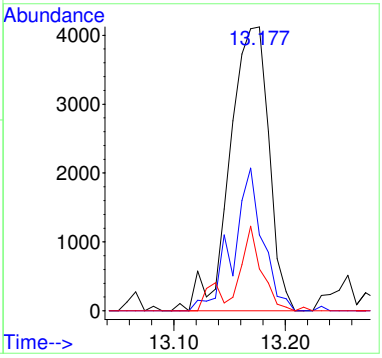


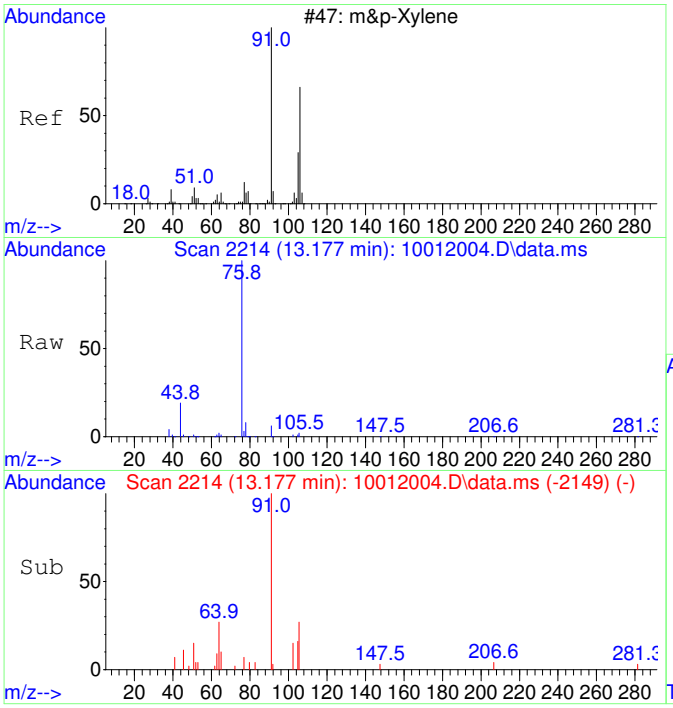


#42
Ethylbenzene SCAN
Concen: 74.57 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 10015

Ion	Ratio	Lower	Upper
91	100		
106	38.5	23.1	83.1
51	13.3	0.0	40.1

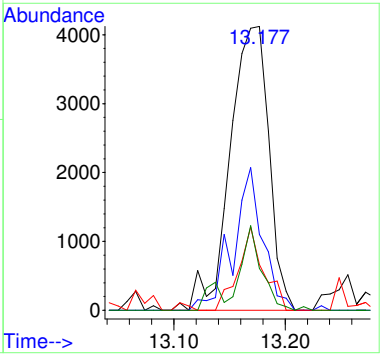


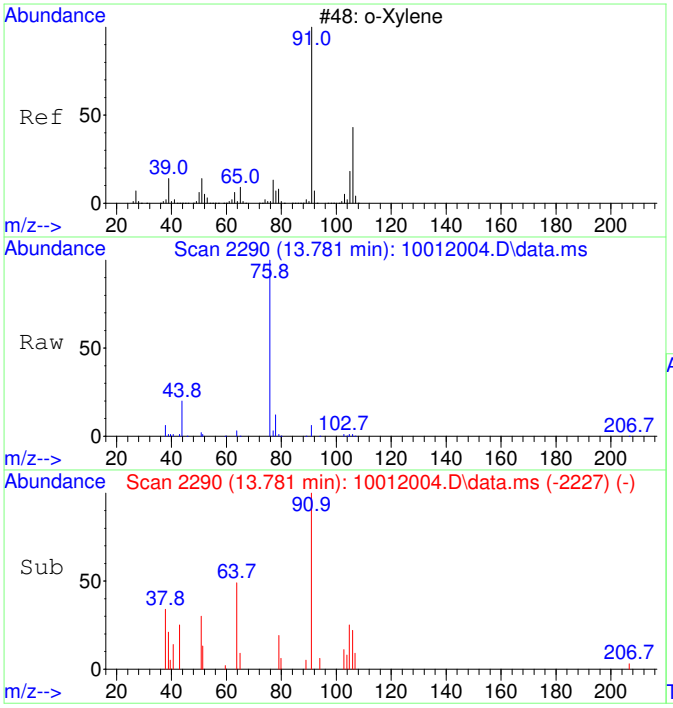


#43
m&p-Xylene SCAN
Concen: 74.57 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.016 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 10015

Ion	Ratio	Lower	Upper
91	100		
106	38.5	23.1	83.1
105	19.3	0.0	54.7
51	13.3	0.0	40.1

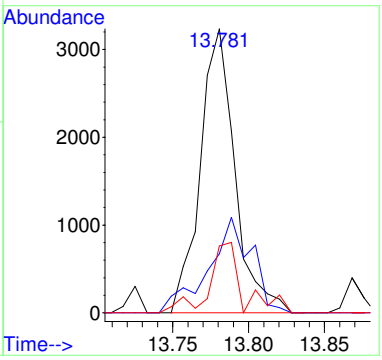


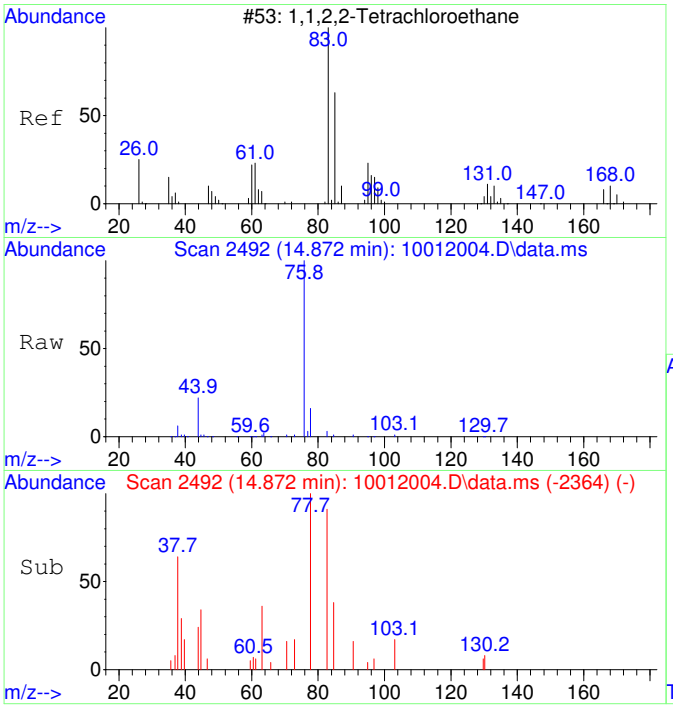


#44
o-Xylene SCAN
Concen: 71.70 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 91 Resp: 5154

Ion	Ratio	Lower	Upper
91	100		
106	41.5	18.0	78.0
105	23.8	0.0	56.6

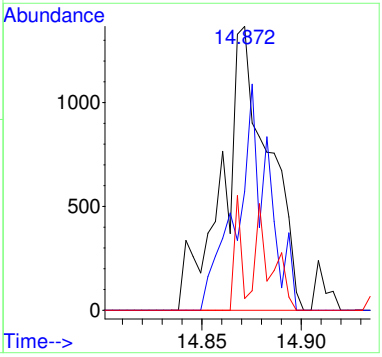


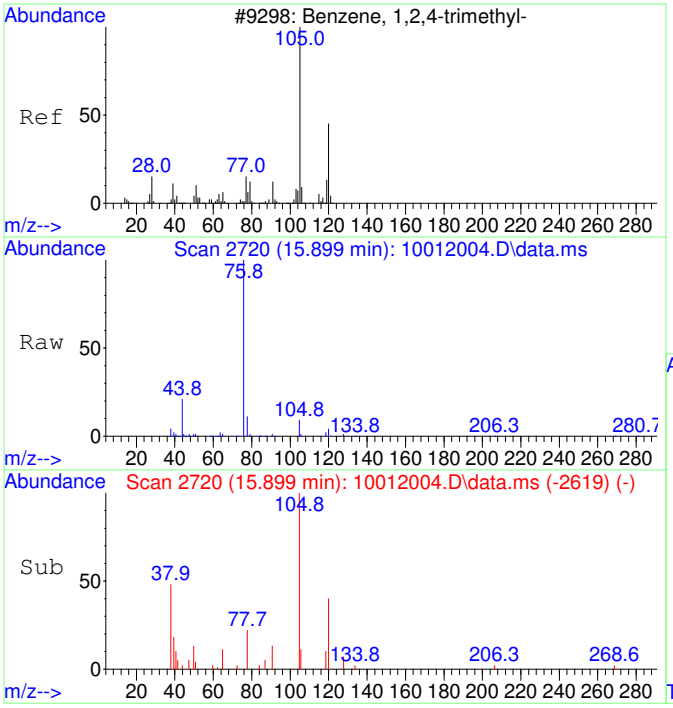


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 62.59 ug/L
RT: 14.872 min Scan# 2492
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion: 83 Resp: 2194

Ion	Ratio	Lower	Upper
83	100		
85	0.0	35.9	95.9#
95	5.7	0.0	47.4

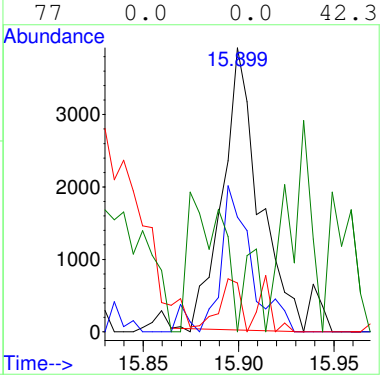


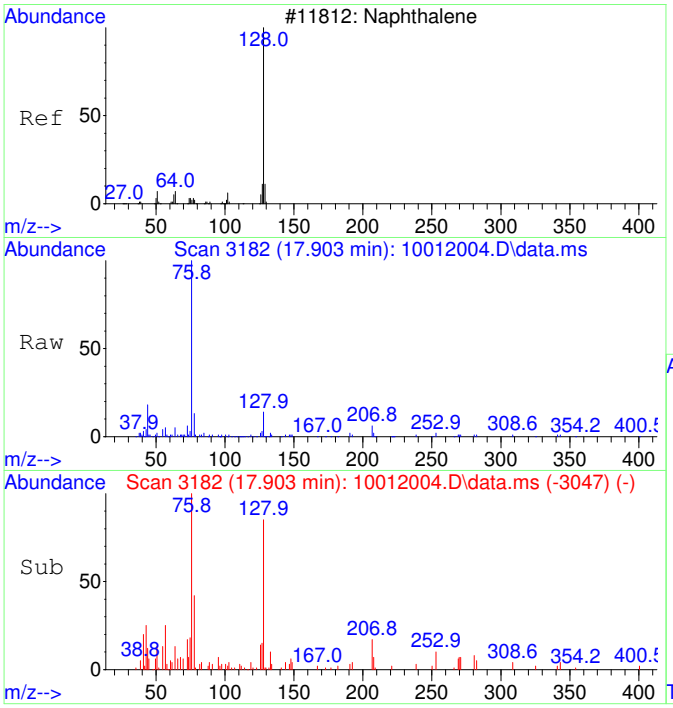


#47
1,2,4-Trimethylbenzene SCAN
Concen: 67.25 ug/L
RT: 15.899 min Scan# 2720
Delta R.T. -0.000 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:105 Resp: 5213

Ion	Ratio	Lower	Upper
105	100		
120	41.5	16.9	76.9
119	9.5	0.0	41.9
77	0.0	0.0	42.3

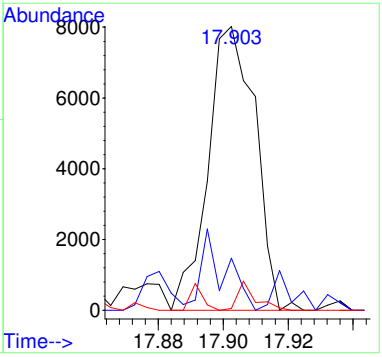




#48
Naphthalene SCAN
Concen: 69.11 ug/L
RT: 17.903 min Scan# 3182
Delta R.T. 0.001 min
Lab File: 10012004.D
Acq: 1 Oct 2020 12:56

Tgt Ion:128 Resp: 8107

Ion	Ratio	Lower	Upper
128	100		
127	5.6	0.0	44.0
129	3.9	0.0	40.8



SECOND SOURCE CALIBRATION CHECK

Laboratory:

Client:

Instrument ID:

Lab File ID:

Sequence:

Lab Sample ID:

SDG:

Project:

Calibration:

Calibration Date:

Injection Date:

Injection Time:

COMPOUND	TYPE			RESPONSE FACTOR			% DIFF / DRIFT	
		STD	SCV	ICAL	SCV	MIN (#)	SCV	LIMIT (#)

Analytical Standard Record

EPA Region 9 Laboratory

1639096

Description:	2-Fluorotlouene	**Expires:**	12/31/29
Standard Type:	Other Solution	**Prepared:**	09/22/16
Solvent:	na	**Prepared By:**	** Vendor **
Final Volume (mls):	100	**Department:**	Volatiles
Vials:	1	**Last Edit:**	09/22/16 11:46 by RH
Vendor:		**Lot Numbe**	STBF8552V

Aldrich; Cat # F15323-100G, bar code #AU008468

Analyte	CAS Number	Concentration (ppm)
2-Fluorotoluene	95-52-3	1000000

SIGMA-ALDRICH®

3050 Spruce Street, Saint Louis, MO 63103 USA
Email USA: techserv@sial.com Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:	2-FLUOROTOLUENE
	>= 99 %
Product Number:	F15323
Batch Number:	STBF8552V
Brand:	Aldrich
CAS Number:	95-52-3
Formula:	$CH_3C_6H_4F$
Formula Weight:	110.13
Quality Release Date:	14 SEP 2015

TEST	SPECIFICATION	RESULT
APPEARANCE (COLOR)	COLORLESS TO VERY FAINT YELLOW	VERY FAINT YELLOW
APPEARANCE (FORM)	LIQUID	LIQUID
COLOR (IN APHA)	≤ 50 APHA	40 APHA
PURITY (GC AREA %)	≥ 99.0 %	99.9 %
INFRARED SPECTRUM	CONFORMS TO STRUCTURE	CONFORMS

Dr. Claudia Geitner
Manager Quality Control
Steinheim, Germany

Sigma-Aldrich warrants that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Analytical Standard Record

EPA Region 9 Laboratory

1740054

Description:	VOA BFB tuning mix, stock STD.	**Expires:**	11/30/22
Standard Type:	Other Solution	**Prepared:**	10/03/17
Solvent:	Solvent Lot #	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	10/03/17 14:37 by YNB
Vendor:	Restek	**Lot Numbe**	A0129653

RESTEK Cat No. 30003, LOT # A0129653, Bar code #AU009457

Analyte	CAS Number	Concentration (ppm)
4-Bromofluorobenzene	460-00-4	5000

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 Guide 34 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. : 30003 **Lot No.:** A0129653

Description : VOA Tuning Compound Mix

VOA Tuning Compound Mix 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KOV) **Purity** 99%	5,002.0 µg/mL	+/- 29.3545	µg/mL	Gravimetric
			+/- 280.4856	µg/mL	Unstressed
			+/- 287.0473	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

A4009453	1740050
54	51
55	52
56	53
57	54

Analytical Standard Record

EPA Region 9 Laboratory

1843069

Description:	VOA 502/524 VOC Mix, Stock	**Expires:**	09/30/20
Standard Type:	Other Solution	**Prepared:**	10/24/18
Solvent:	MeOH	**Prepared By:**	** Vendor **
Final Volume (mls):	1.15	**Department:**	Volatiles
Vials:	1	**Last Edit:**	10/24/18 12:14 by YNB
Vendor:	Sigma Aldrich	**Lot Numbe**	LRAC0242

Sigma-Aldrich (Supelco), Cat # 502111, Lot# LRAC0242, bar code AU010582

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromo-3-chloropropane	96-12-8	2000
1,1,1,2-Tetrachloroethane	630-20-6	2000
Benzene	71-43-2	2000
4-Chlorotoluene	106-43-4	2000
2-Chlorotoluene	95-49-8	2000
2,2-Dichloropropane	594-20-7	2000
1,4-Dichlorobenzene	106-46-7	2000
1,3-Dichloropropane	142-28-9	2000
1,3-Dichlorobenzene	541-73-1	2000
1,3,5-Trimethylbenzene	108-67-8	2000
1,2-Dichloropropane	78-87-5	2000
1,2-Dichloroethane	107-06-2	2000
Bromochloromethane	74-97-5	2000
1,2-Dibromoethane (EDB)	106-93-4	2000
Bromodichloromethane	75-27-4	2000
1,2,4-Trimethylbenzene	95-63-6	2000
1,2,4-Trichlorobenzene	120-82-1	2000
1,2,3-Trimethylbenzene	526-73-8	2000
1,2,3-Trichloropropane	96-18-4	2000
1,2,3-Trichlorobenzene	87-61-6	2000
1,1-Dichloropropene	563-58-6	2000
1,1-Dichloroethene	75-35-4	2000
1,1-Dichloroethane	75-34-3	2000
1,1,2-Trichloroethane	79-00-5	2000
1,1,2,2-Tetrachloroethane	79-34-5	2000
1,1,1-Trichloroethane	71-55-6	2000
1,2-Dichlorobenzene	95-50-1	2000
Hexachlorobutadiene	87-68-3	2000
trans-1,3-Dichloropropene	10061-02-6	2000
trans-1,2-Dichloroethene	156-60-5	2000

Analytical Standard Record

EPA Region 9 Laboratory

1843069

Toluene	108-88-3	2000
Tetrachloroethene	127-18-4	2000
tert-Butylbenzene	98-06-6	2000
Styrene	100-42-5	2000
sec-Butylbenzene	135-98-8	2000
Propylbenzene	103-65-1	2000
p-Isopropyltoluene	99-87-6	2000
o-Xylene	95-47-6	2000
Naphthalene	91-20-3	2000
Bromobenzene	108-86-1	2000
Isopropylbenzene	98-82-8	2000
Trichloroethene	79-01-6	2000
Ethylbenzene	100-41-4	2000
Dichloromethane	75-09-2	2000
Dibromomethane	74-95-3	2000
cis-1,3-Dichloropropene	10061-01-5	2000
cis-1,2-Dichloroethene	156-59-2	2000
Chloroform	67-66-3	2000
Chlorodibromomethane	124-48-1	2000
Chlorobenzene	108-90-7	2000
Carbon tetrachloride	56-23-5	2000
Butylbenzene	104-51-8	2000
Bromoform	75-25-2	2000
m&p-Xylene	179601-23-1	4000

Certificate of Analysis

502/524 VOLATILE ORGANICS CALIBRATION

Certified Reference Material

Product ID 502111
Lot **LRAC0242**
Expiration Date September 2020
MFG Date September 2018
Storage Conditions Freeze
Solvent/Matrix METHANOL

Analyte	*Units*	*Certified Value* [1,4]	*Analytical Value*	*Raw Material Purity,%*	*Raw Material lot*	*Elution order*	*CAS*
1,1-DICHLOROETHYLENE	µg/ml	2000 ± 170	2120	99.9998	LC08188	1	75-35-4
DICHLOROMETHANE	µg/ml	2000 ± 140	2040	99.99	SHBK1353	2	75-09-2
TRANS-1,2-DICHLOROETHYLENE	µg/ml	2000 ± 140	2040	99.7	MKBH9850V	3	156-60-5
1,1-DICHLOROETHANE	µg/ml	2001 ± 130	1980	99.9	LB68167	4	75-34-3
2,2-DICHLOROPROPANE	µg/ml	2000 ± 135	2010	98.4	BCBR0622V	5	594-20-7
CIS-1,2-DICHLOROETHYLENE	µg/ml	2001 ± 130	2010	99.9	LB73428	6	156-59-2
CHLOROFORM	µg/ml	2000 ± 120	2000	99.94	MKBV7632V	7	67-66-3
BROMOCHLOROMETHANE	µg/ml	2001 ± 110	1990	98.9	LB39040	8	74-97-5
1,1,1-TRICHLOROETHANE	µg/ml	2000 ± 140	2020	97.2	LC06533	9	71-55-6
1,1-DICHLOROPROPYLENE	µg/ml	2001 ± 125	1990	99.5	7738900	10	563-58-6
CARBON TETRACHLORIDE	µg/ml	2000 ± 140	1990	99.97	02041MB	11	56-23-5
1,2-DICHLOROETHANE	µg/ml	2001 ± 110	2010	99.9	LB74294	12	107-06-02
BENZENE	µg/ml	2000 ± 120	1970	99.99	SHBJ5344	13	71-43-2
TRICHLOROETHYLENE	µg/ml	2001 ± 110	2010	98.6	LB86674	14	79-01-6
1,2-DICHLOROPROPANE	µg/ml	2001 ± 120	1980	99.9	LC14320	15	78-87-5
BROMODICHLOROMETHANE	µg/ml	2001 ± 120	1980	97.9	MKCF8470	16	75-27-4
DIBROMOMETHANE	µg/ml	2001 ± 110	2030	98.8	LB81118	17	74-95-3
TRANS 1,3-DICHLOROPROPENE	µg/ml	2002 ± 120	1970	99	ZDMSLEK	18	10061-02-06
TOLUENE	µg/ml	2000 ± 110	2010	99.98	MKCF0747	19	108-88-3
CIS 1,3-DICHLOROPROPENE	µg/ml	2001 ± 120	1990	99.3	MKBZ5000V	20	10061-01-5
1,1,2-TRICHLOROETHANE	µg/ml	2000 ± 110	2010	99.9	LB87978	21	79-00-5
1,3-DICHLOROPROPANE	µg/ml	2000 ± 110	1990	99.9	LC10811	22	142-28-9
TETRACHLOROETHYLENE	µg/ml	2000 ± 110	2010	99.9	LB67182	23	127-18-4
DIBROMOCHLOROMETHANE	µg/ml	2000 ± 120	2020	96.5	LB89245	24	124-48-1

ANAB ACCREDITED ISO GUIDE 34 REFERENCE MATERIAL PRODUCER

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

SIGMA-ALDRICH®
2931 Soldier Springs Rd. Laramie, Wyoming 82070 USA
307-742-5452
rctechgroup@sial.com www.sigma-aldrich.com

Lot **LRAC0242**
Expiration Date September 2020
MFG Date September 2018
Storage Conditions Freeze
Solvent/Matrix METHANOL

1,2-DIBROMOETHANE	µg/ml	2003 ± 110	2020	99.1	LB42792	25	106-93-4
CHLOROBENZENE	µg/ml	2000 ± 94	1990	99.9	LB93949	26	108-90-7
1,1,1,2-TETRACHLOROETHANE	µg/ml	2000 ± 110	1980	99.9	LC14810	27	630-20-6
ETHYLBENZENE	µg/ml	2000 ± 110	1980	99.87	SHBK2389	28	100-41-4
M-XYLENE	µg/ml	2002 ± 110	2000	99.8	LB87531	29	108-38-3
P-XYLENE	µg/ml	2000 ± 110	2000	99.9	LB73203	29	106-42-3
O-XYLENE	µg/ml	2000 ± 110	2000	99.5	LB92424	30	95-47-6
STYRENE	µg/ml	2000 ± 98	1990	99.9	LC17632	31	100-42-5
CUMENE	µg/ml	2000 ± 99	2010	99.9	LB89580	32	98-82-8
BROMOFORM	µg/ml	2001 ± 120	2050	96.1	67996PJ	33	75-25-2
1,1,2,2-TETRACHLOROETHANE	µg/ml	2000 ± 100	1990	99.9	LB51327	34	79-34-5
1,2,3-TRICHLOROPROPANE	µg/ml	2001 ± 99	2020	99	BCBH8722V	35	96-18-4
N-PROPYLBENZENE	µg/ml	2000 ± 100	1990	99.9	T2HFC	36	103-65-1
BROMOBENZENE	µg/ml	2001 ± 98	1980	99.5	LB99843	37	108-86-1
1,2,4-TRIMETHYLBENZENE	µg/ml	2000 ± 100	2020	98.9	LB97224	38	95-63-6
2-CHLOROTOLUENE	µg/ml	2001 ± 98	2010	99.9	LC01464	39	95-49-8
4-CHLOROTOLUENE	µg/ml	2001 ± 92	2000	99.9	LC02742	40	106-43-4
TERT-BUTYLBENZENE	µg/ml	2000 ± 93	2000	99.9	LB40373	41	98-06-6
1,3,5-TRIMETHYLBENZENE	µg/ml	2000 ± 94	1980	99.3	LB82157	42	108-67-8
SEC-BUTYLBENZENE	µg/ml	2000 ± 93	1990	99.4	LB77150	43	135-98-8
P-ISOPROPYLTOLUENE	µg/ml	2000 ± 88	1960	98.7	LB40003	44	99-87-6
1,4-DICHLOROBENZENE	µg/ml	2000 ± 88	2000	99.9	LB90630	45	106-46-7
1,3-DICHLOROBENZENE	µg/ml	2001 ± 94	2010	99.9	LC17654	46	541-73-1
N-BUTYLBENZENE	µg/ml	2000 ± 91	2010	99.9	LB81630	47	104-51-8
1,2-DICHLOROBENZENE	µg/ml	2001 ± 82	2010	99.4	LB58923	48	95-50-1
1,2-DIBROMO-3-CHLOROPROPANE	µg/ml	2000 ± 89	2060	96.8	LB06608	49	96-12-8
1,2,3-TRICHLOROBENZENE	µg/ml	2000 ± 73	2010	99.9	LC20450	50	87-61-6
HEXACHLOROBUTADIENE	µg/ml	2000 ± 81	2060	97.4	MKCD4346	51	87-68-3

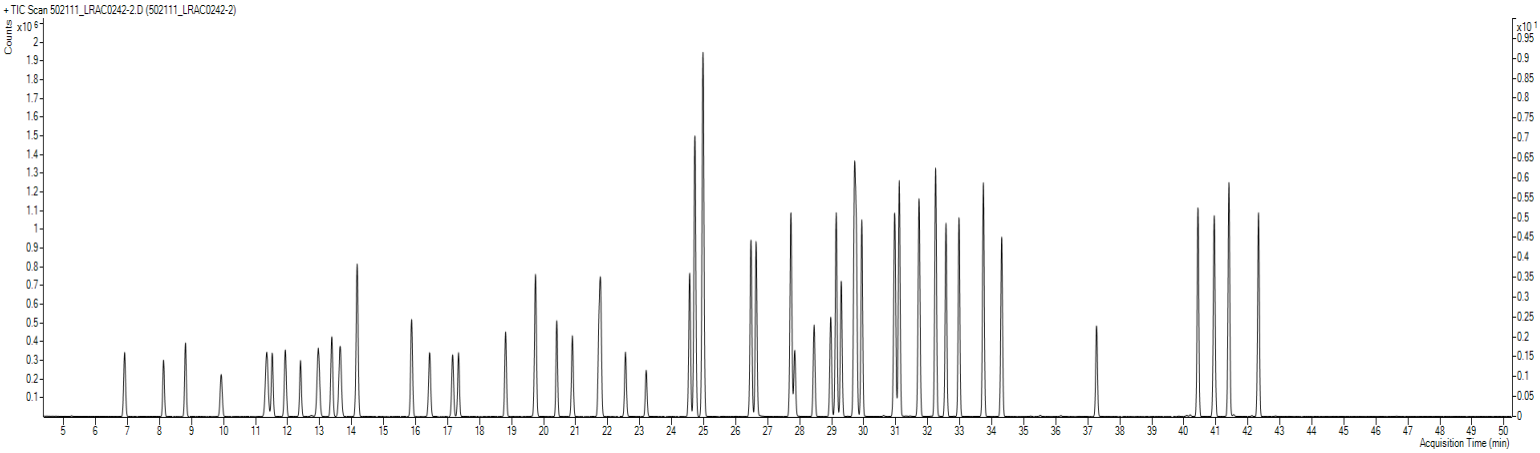
Certificate of Analysis

502/524 VOLATILE ORGANICS CALIBRATION

Certified Reference Material

Product ID 502111
Lot **LRAC0242**
Expiration Date September 2020
MFG Date September 2018
Storage Conditions Freeze
Solvent/Matrix METHANOL

NAPHTHALENE	µg/ml	2000 ± 81	1990	99.9	16412TN	52	91-20-3
1,2,4-TRICHLOROBENZENE	µg/ml	2001 ± 67	2020	99.4	LB48083	53	120-82-1



Additional Information:

Analytical Method Parameters:

Column: VOCOL, 60 m x 0.25 mm x 1.5 µm df
35°C (4 min) to 200°C (5 min) at 4°C/min
Detector: MSD, 200°C
Injection Volume: 1 µL

ANAB ACCREDITED ISO GUIDE 34 REFERENCE MATERIAL PRODUCER

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

SIGMA-ALDRICH®
2931 Soldier Springs Rd. Laramie, Wyoming 82070 USA
307-742-5452
rtctechgroup@sial.com www.sigma-aldrich.com

Lot **LRAC0242**
Expiration Date September 2020
MFG Date September 2018
Storage Conditions Freeze
Solvent/Matrix METHANOL

1 Certified value - based on the gravimetric preparation and analytically verified by RTC with associated uncertainties from the preparation and analytical procedures.

4 Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

Traceability: The standard was manufactured under an ISO/IEC 17025:2005 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were preformed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Homogeneity: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared using a one-way analysis of variance approach as described by TNI EL-V3-2009 Appendix A.2. See Instructions for minimum sub-sample size.

Expiration is at end of month given on certificate and label.

THIS PRODUCT WAS DESIGNED, PRODUCED AND VERIFIED FOR ACCURACY AND STABILITY IN ACCORDANCE WITH ISO/IEC 17025:2005 (ANAB Cert AT-1467) and ISO GUIDE 34:2009 (ANAB Cert AR-1470).

MSDS reports for components comprising greater than 1.0% of the solution or 0.1% for components known to be carcinogens are available upon request.

Robert O'Brien - QC Supervisor

Mark Pooler - QA Supervisor

Certification Date October 04, 2018
Version -1042018

Analytical Standard Record

EPA Region 9 Laboratory

1920044

Description:	Toluene-d8	Expires:	05/15/29
Standard Type:	Calibration Standa	Prepared:	05/15/19
Solvent:	na	Prepared By:	** Vendor **
Final Volume (mls):	0.1	Department:	Volatiles
Vials:	1	Last Edit:	05/15/19 13:00 by TD

Supelco; POS # 18C-262, bar code #AU0010912

Experation date changed, neat standard, per ZAR

Analyte	CAS Number	Concentration	Units
Toluene-d8	2037-26-5	1000000	ppm

Reviewed By Date

CERTIFICATE OF ANALYSIS

FROM VENDOR

IS NOT AVAILABLE.

Analytical Standard Record

EPA Region 9 Laboratory

1920045

Description:	Toluene-d8	Expires:	05/15/29
Standard Type:	Calibration Standa	Prepared:	05/15/19
Solvent:	na	Prepared By:	** Vendor **
Final Volume (mls):	0.1	Department:	Volatiles
Vials:	1	Last Edit:	05/15/19 13:00 by TD

Supelco; POS # 18C-262, bar code #AU0010913

Experation date changed, neat standard, per ZAR

Analyte	CAS Number	Concentration	Units
Toluene-d8	2037-26-5	1000000	ppm

Reviewed By Date

CERTIFICATE OF ANALYSIS

FROM VENDOR

IS NOT AVAILABLE.

Analytical Standard Record

EPA Region 9 Laboratory

1937061

Description:	VOA 502.2 CAL 2000 MEGA MIX, Stock	**Expires:**	03/31/21
Standard Type:	Other Solution	**Prepared:**	09/10/19
Solvent:	MeOH	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	09/10/19 13:18 by YNB
Vendor:	Restek	**Lot Numbe**	A0146957

RESTEK, catalog # 30431, Barcode AU011277

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	2000
Bromobenzene	108-86-1	2000
Benzene	71-43-2	2000
4-Chlorotoluene	106-43-4	2000
2-Chlorotoluene	95-49-8	2000
2,2-Dichloropropane	594-20-7	2000
1,4-Dichlorobenzene	106-46-7	2000
1,3-Dichloropropane	142-28-9	2000
1,3-Dichlorobenzene	541-73-1	2000
1,3,5-Trimethylbenzene	108-67-8	2000
1,2-Dichloropropane	78-87-5	2000
1,1,1,2-Tetrachloroethane	630-20-6	2000
1,2-Dichlorobenzene	95-50-1	2000
Bromoform	75-25-2	2000
1,2-Dibromo-3-chloropropane	96-12-8	2000
1,2,4-Trimethylbenzene	95-63-6	2000
1,2,4-Trichlorobenzene	120-82-1	2000
1,2,3-Trichloropropane	96-18-4	2000
1,2,3-Trichlorobenzene	87-61-6	2000
1,1-Dichloropropene	563-58-6	2000
1,1-Dichloroethene	75-35-4	2000
1,1-Dichloroethane	75-34-3	2000
1,1,2-Trichloroethane	79-00-5	2000
1,1,2,2-Tetrachloroethane	79-34-5	2000
1,1,1-Trichloroethane	71-55-6	2000
1,2-Dichloroethane	107-06-2	2000
Hexachlorobutadiene	87-68-3	2000
trans-1,3-Dichloropropene	10061-02-6	2000
trans-1,2-Dichloroethene	156-60-5	2000
Toluene	108-88-3	2000

Analytical Standard Record

EPA Region 9 Laboratory

1937061

Tetrachloroethene	127-18-4	2000
tert-Butylbenzene	98-06-6	2000
Styrene	100-42-5	2000
sec-Butylbenzene	135-98-8	2000
Propylbenzene	103-65-1	2000
p-Isopropyltoluene	99-87-6	2000
o-Xylene	95-47-6	2000
Naphthalene	91-20-3	2000
Bromochloromethane	74-97-5	2000
Isopropylbenzene	98-82-8	2000
Bromodichloromethane	75-27-4	2000
Ethylbenzene	100-41-4	2000
Dichloromethane	75-09-2	2000
Dibromomethane	74-95-3	2000
cis-1,3-Dichloropropene	10061-01-5	2000
cis-1,2-Dichloroethene	156-59-2	2000
Chloroform	67-66-3	2000
Chlorodibromomethane	124-48-1	2000
Chlorobenzene	108-90-7	2000
Carbon tetrachloride	56-23-5	2000
Butylbenzene	104-51-8	2000
Trichloroethene	79-01-6	2000
m&p-Xylene	179601-23-1	4000

CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30431 **Lot No.:** A0146957

Description : 502.2 CAL2000 Mega-Mix

502.2 CAL2000 Mega-Mix 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2021 **Storage:** 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,1-dichloroethene		2,008.6 µg/mL	+/- 12.7358	µg/mL	Gravimetric
	CAS # 75-35-4	(Lot SHBG8609V)		+/- 90.6111	µg/mL	Unstressed
	Purity 99%			+/- 100.5146	µg/mL	Stressed
2	Methylene chloride (dichloromethane)		2,007.1 µg/mL	+/- 12.7263	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBK5095)		+/- 90.5435	µg/mL	Unstressed
	Purity 99%			+/- 100.4395	µg/mL	Stressed
3	trans-1,2-Dichloroethene		2,005.2 µg/mL	+/- 12.7140	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)		+/- 90.4563	µg/mL	Unstressed
	Purity 99%			+/- 100.3427	µg/mL	Stressed
4	1,1-Dichloroethane		2,003.1 µg/mL	+/- 12.7009	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 462600)		+/- 90.3630	µg/mL	Unstressed
	Purity 99%			+/- 100.2393	µg/mL	Stressed
5	2,2-Dichloropropane		2,000.3 µg/mL	+/- 12.6830	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBT5124)		+/- 90.2358	µg/mL	Unstressed
	Purity 99%			+/- 100.0982	µg/mL	Stressed
6	cis-1,2-Dichloroethene		2,002.5 µg/mL	+/- 12.6972	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBX5945V)		+/- 90.3369	µg/mL	Unstressed
	Purity 99%			+/- 100.2103	µg/mL	Stressed
7	chloroform		2,004.8 µg/mL	+/- 12.7115	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBJ9076)		+/- 90.4382	µg/mL	Unstressed
	Purity 99%			+/- 100.3227	µg/mL	Stressed

8	Bromochloromethane			2,000.7	µg/mL	+/-	12.6854	µg/mL	Gravimetric
	CAS #	74-97-5	(Lot 00008541)			+/-	90.2525	µg/mL	Unstressed
	Purity	98%				+/-	100.1167	µg/mL	Stressed
9	1,1,1-trichloroethane			2,000.9	µg/mL	+/-	12.6872	µg/mL	Gravimetric
	CAS #	71-55-6	(Lot 190123CG)			+/-	90.2652	µg/mL	Unstressed
	Purity	98%				+/-	100.1308	µg/mL	Stressed
10	1,1-Dichloropropene			2,004.3	µg/mL	+/-	12.7084	µg/mL	Gravimetric
	CAS #	563-58-6	(Lot 190122JLM)			+/-	90.4163	µg/mL	Unstressed
	Purity	99%				+/-	100.2984	µg/mL	Stressed
11	carbon tetrachloride			2,004.5	µg/mL	+/-	12.7100	µg/mL	Gravimetric
	CAS #	56-23-5	(Lot SHBJ2110)			+/-	90.4277	µg/mL	Unstressed
	Purity	99%				+/-	100.3110	µg/mL	Stressed
12	1,2-Dichloroethane			2,007.5	µg/mL	+/-	12.7290	µg/mL	Gravimetric
	CAS #	107-06-2	(Lot SHBJ6510)			+/-	90.5630	µg/mL	Unstressed
	Purity	99%				+/-	100.4612	µg/mL	Stressed
13	Benzene			2,004.2	µg/mL	+/-	12.7079	µg/mL	Gravimetric
	CAS #	71-43-2	(Lot SHBJ5344)			+/-	90.4126	µg/mL	Unstressed
	Purity	99%				+/-	100.2944	µg/mL	Stressed
14	Trichloroethene			2,003.4	µg/mL	+/-	12.7030	µg/mL	Gravimetric
	CAS #	79-01-6	(Lot SHBH1955V)			+/-	90.3781	µg/mL	Unstressed
	Purity	99%				+/-	100.2560	µg/mL	Stressed
15	1,2-Dichloropropane			2,007.7	µg/mL	+/-	12.7299	µg/mL	Gravimetric
	CAS #	78-87-5	(Lot BCBR0882V)			+/-	90.5690	µg/mL	Unstressed
	Purity	99%				+/-	100.4678	µg/mL	Stressed
16	bromodichloromethane			2,016.1	µg/mL	+/-	12.7833	µg/mL	Gravimetric
	CAS #	75-27-4	(Lot MKCF8470)			+/-	90.9495	µg/mL	Unstressed
	Purity	99%				+/-	100.8899	µg/mL	Stressed
17	Dibromomethane			2,002.3	µg/mL	+/-	12.6960	µg/mL	Gravimetric
	CAS #	74-95-3	(Lot 10201030)			+/-	90.3278	µg/mL	Unstressed
	Purity	99%				+/-	100.2003	µg/mL	Stressed
18	cis-1,3-Dichloropropene			2,005.6	µg/mL	+/-	12.7170	µg/mL	Gravimetric
	CAS #	10061-01-5	(Lot 25076)			+/-	90.4773	µg/mL	Unstressed
	Purity	99%				+/-	100.3661	µg/mL	Stressed
19	Toluene			2,000.7	µg/mL	+/-	12.6856	µg/mL	Gravimetric
	CAS #	108-88-3	(Lot SHBJ5659)			+/-	90.2539	µg/mL	Unstressed
	Purity	99%				+/-	100.1182	µg/mL	Stressed
20	trans-1,3-Dichloropropene			2,004.3	µg/mL	+/-	12.7083	µg/mL	Gravimetric
	CAS #	10061-02-6	(Lot C797620)			+/-	90.4155	µg/mL	Unstressed
	Purity	98%				+/-	100.2975	µg/mL	Stressed
21	1,1,2-Trichloroethane			2,007.0	µg/mL	+/-	12.7254	µg/mL	Gravimetric
	CAS #	79-00-5	(Lot FGB01)			+/-	90.5375	µg/mL	Unstressed
	Purity	99%				+/-	100.4328	µg/mL	Stressed
22	1,3-Dichloropropane			2,001.5	µg/mL	+/-	12.6909	µg/mL	Gravimetric
	CAS #	142-28-9	(Lot BCBG2162V)			+/-	90.2918	µg/mL	Unstressed
	Purity	99%				+/-	100.1603	µg/mL	Stressed
23	Tetrachloroethene			2,005.1	µg/mL	+/-	12.7136	µg/mL	Gravimetric
	CAS #	127-18-4	(Lot SHBH9691)			+/-	90.4533	µg/mL	Unstressed
	Purity	99%				+/-	100.3394	µg/mL	Stressed

24	dibromochloromethane			2,003.7	µg/mL	+/-	12.7046	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCC0877)				+/-	90.3890	µg/mL	Unstressed
	Purity 98%					+/-	100.2681	µg/mL	Stressed
25	1,2-Dibromoethane (EDB)			2,000.7	µg/mL	+/-	12.6858	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBP2268V)				+/-	90.2557	µg/mL	Unstressed
	Purity 99%					+/-	100.1202	µg/mL	Stressed
26	Chlorobenzene			2,005.3	µg/mL	+/-	12.7147	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBH4459V)				+/-	90.4608	µg/mL	Unstressed
	Purity 99%					+/-	100.3477	µg/mL	Stressed
27	1,1,1,2-Tetrachloroethane			2,001.7	µg/mL	+/-	12.6919	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)				+/-	90.2990	µg/mL	Unstressed
	Purity 99%					+/-	100.1683	µg/mL	Stressed
28	Ethylbenzene			2,001.6	µg/mL	+/-	12.6917	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBJ4278)				+/-	90.2972	µg/mL	Unstressed
	Purity 99%					+/-	100.1663	µg/mL	Stressed
29	m-Xylene			2,003.4	µg/mL	+/-	12.7031	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBJ2338)				+/-	90.3784	µg/mL	Unstressed
	Purity 99%					+/-	100.2563	µg/mL	Stressed
30	p-Xylene			2,001.8	µg/mL	+/-	12.6927	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBJ7329)				+/-	90.3044	µg/mL	Unstressed
	Purity 99%					+/-	100.1743	µg/mL	Stressed
31	o-Xylene			2,004.6	µg/mL	+/-	12.7102	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH7231)				+/-	90.4289	µg/mL	Unstressed
	Purity 99%					+/-	100.3124	µg/mL	Stressed
32	Styrene			2,001.4	µg/mL	+/-	12.6899	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCC9766)				+/-	90.2845	µg/mL	Unstressed
	Purity 99%					+/-	100.1522	µg/mL	Stressed
33	Isopropylbenzene (cumene)			2,001.3	µg/mL	+/-	12.6894	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot P15E008)				+/-	90.2809	µg/mL	Unstressed
	Purity 99%					+/-	100.1482	µg/mL	Stressed
34	bromoform			2,004.6	µg/mL	+/-	12.7102	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBJ4835)				+/-	90.4292	µg/mL	Unstressed
	Purity 99%					+/-	100.3127	µg/mL	Stressed
35	1,1,2,2-Tetrachloroethane			2,005.5	µg/mL	+/-	12.7161	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)				+/-	90.4713	µg/mL	Unstressed
	Purity 99%					+/-	100.3594	µg/mL	Stressed
36	1,2,3-Trichloropropane			2,002.0	µg/mL	+/-	12.6942	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)				+/-	90.3152	µg/mL	Unstressed
	Purity 99%					+/-	100.1863	µg/mL	Stressed
37	n-Propylbenzene			2,001.2	µg/mL	+/-	12.6891	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot WXBC3346V)				+/-	90.2791	µg/mL	Unstressed
	Purity 99%					+/-	100.1462	µg/mL	Stressed
38	Bromobenzene			2,003.2	µg/mL	+/-	12.7016	µg/mL	Gravimetric
	CAS # 108-86-1	(Lot WXBC5147V)				+/-	90.3675	µg/mL	Unstressed
	Purity 99%					+/-	100.2443	µg/mL	Stressed
39	1,3,5-Trimethylbenzene			2,001.4	µg/mL	+/-	12.6904	µg/mL	Gravimetric
	CAS # 108-67-8	(Lot BCBS7648V)				+/-	90.2881	µg/mL	Unstressed
	Purity 99%					+/-	100.1562	µg/mL	Stressed

40	2-Chlorotoluene		2,003.5	µg/mL	+/-	12.7033	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKBW5554V)			+/-	90.3802	µg/mL	Unstressed
	Purity 99%				+/-	100.2583	µg/mL	Stressed
41	4-Chlorotoluene		2,002.8	µg/mL	+/-	12.6990	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKBL7753V)			+/-	90.3495	µg/mL	Unstressed
	Purity 99%				+/-	100.2243	µg/mL	Stressed
42	tert-Butylbenzene		2,002.2	µg/mL	+/-	12.6950	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot STBD6954V)			+/-	90.3206	µg/mL	Unstressed
	Purity 99%				+/-	100.1923	µg/mL	Stressed
43	1,2,4-Trimethylbenzene		2,001.6	µg/mL	+/-	12.6911	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot MKBJ6229V)			+/-	90.2932	µg/mL	Unstressed
	Purity 98%				+/-	100.1619	µg/mL	Stressed
44	sec-Butylbenzene		2,002.0	µg/mL	+/-	12.6939	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKBR9260V)			+/-	90.3134	µg/mL	Unstressed
	Purity 99%				+/-	100.1843	µg/mL	Stressed
45	p-Isopropyltoluene (p-Cymene)		2,000.4	µg/mL	+/-	12.6835	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKCB7536)			+/-	90.2394	µg/mL	Unstressed
	Purity 99%				+/-	100.1022	µg/mL	Stressed
46	1,3-Dichlorobenzene		2,008.3	µg/mL	+/-	12.7339	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBQ7100V)			+/-	90.5976	µg/mL	Unstressed
	Purity 99%				+/-	100.4995	µg/mL	Stressed
47	1,4-Dichlorobenzene		2,000.4	µg/mL	+/-	12.6836	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS4401V)			+/-	90.2397	µg/mL	Unstressed
	Purity 99%				+/-	100.1025	µg/mL	Stressed
48	n-Butylbenzene		2,000.3	µg/mL	+/-	12.6833	µg/mL	Gravimetric
	CAS # 104-51-8	(Lot 09804AE)			+/-	90.2376	µg/mL	Unstressed
	Purity 99%				+/-	100.1002	µg/mL	Stressed
49	1,2-Dichlorobenzene		2,005.0	µg/mL	+/-	12.7128	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBG3111V)			+/-	90.4472	µg/mL	Unstressed
	Purity 99%				+/-	100.3327	µg/mL	Stressed
50	1,2-Dibromo-3-chloropropane		2,000.1	µg/mL	+/-	12.6820	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot FBL01)			+/-	90.2286	µg/mL	Unstressed
	Purity 99%				+/-	100.0902	µg/mL	Stressed
51	1,2,4-Trichlorobenzene		2,002.0	µg/mL	+/-	12.6939	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBJ9215)			+/-	90.3134	µg/mL	Unstressed
	Purity 99%				+/-	100.1843	µg/mL	Stressed
52	Hexachlorobutadiene		2,004.0	µg/mL	+/-	12.7064	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	90.4018	µg/mL	Unstressed
	Purity 99%				+/-	100.2824	µg/mL	Stressed
53	Naphthalene		2,003.9	µg/mL	+/-	12.7061	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBZ8680V)			+/-	90.4000	µg/mL	Unstressed
	Purity 99%				+/-	100.2804	µg/mL	Stressed
54	1,2,3-Trichlorobenzene		2,003.9	µg/mL	+/-	12.7061	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)			+/-	90.4000	µg/mL	Unstressed
	Purity 99%				+/-	100.2804	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

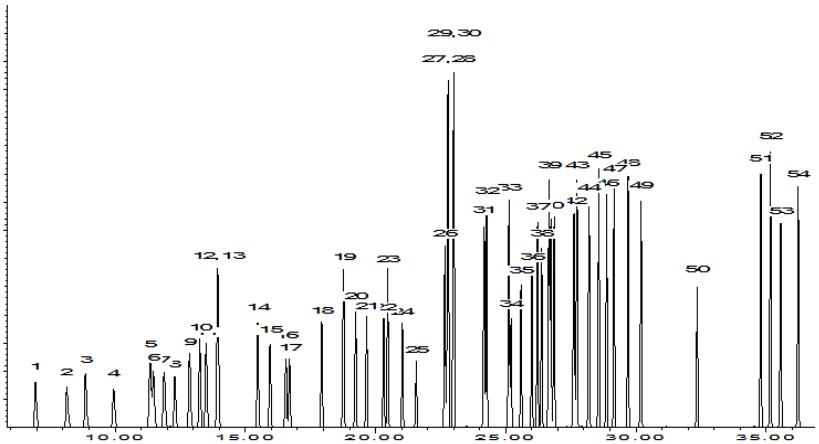
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Date Mixed: 12-Mar-2019 **Balance:** 1126342624

Date Passed: 20-Mar-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Analytical Standard Record

EPA Region 9 Laboratory

1937062

Description:	VOA 502.2 CAL 2000 MEGA MIX, Stock	**Expires:**	03/31/21
Standard Type:	Other Solution	**Prepared:**	09/10/19
Solvent:	MeOH	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	09/10/19 13:18 by YNB
Vendor:	Restek	**Lot Numbe**	A0146957

RESTEK, catalog # 30431, Barcode AU011278

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	2000
Bromobenzene	108-86-1	2000
Benzene	71-43-2	2000
4-Chlorotoluene	106-43-4	2000
2-Chlorotoluene	95-49-8	2000
2,2-Dichloropropane	594-20-7	2000
1,4-Dichlorobenzene	106-46-7	2000
1,3-Dichloropropane	142-28-9	2000
1,3-Dichlorobenzene	541-73-1	2000
1,3,5-Trimethylbenzene	108-67-8	2000
1,2-Dichloropropane	78-87-5	2000
1,1,1,2-Tetrachloroethane	630-20-6	2000
1,2-Dichlorobenzene	95-50-1	2000
Bromoform	75-25-2	2000
1,2-Dibromo-3-chloropropane	96-12-8	2000
1,2,4-Trimethylbenzene	95-63-6	2000
1,2,4-Trichlorobenzene	120-82-1	2000
1,2,3-Trichloropropane	96-18-4	2000
1,2,3-Trichlorobenzene	87-61-6	2000
1,1-Dichloropropene	563-58-6	2000
1,1-Dichloroethene	75-35-4	2000
1,1-Dichloroethane	75-34-3	2000
1,1,2-Trichloroethane	79-00-5	2000
1,1,2,2-Tetrachloroethane	79-34-5	2000
1,1,1-Trichloroethane	71-55-6	2000
1,2-Dichloroethane	107-06-2	2000
Hexachlorobutadiene	87-68-3	2000
trans-1,3-Dichloropropene	10061-02-6	2000
trans-1,2-Dichloroethene	156-60-5	2000
Toluene	108-88-3	2000

Analytical Standard Record

EPA Region 9 Laboratory

1937062

Tetrachloroethene	127-18-4	2000
tert-Butylbenzene	98-06-6	2000
Styrene	100-42-5	2000
sec-Butylbenzene	135-98-8	2000
Propylbenzene	103-65-1	2000
p-Isopropyltoluene	99-87-6	2000
o-Xylene	95-47-6	2000
Naphthalene	91-20-3	2000
Bromochloromethane	74-97-5	2000
Isopropylbenzene	98-82-8	2000
Bromodichloromethane	75-27-4	2000
Ethylbenzene	100-41-4	2000
Dichloromethane	75-09-2	2000
Dibromomethane	74-95-3	2000
cis-1,3-Dichloropropene	10061-01-5	2000
cis-1,2-Dichloroethene	156-59-2	2000
Chloroform	67-66-3	2000
Chlorodibromomethane	124-48-1	2000
Chlorobenzene	108-90-7	2000
Carbon tetrachloride	56-23-5	2000
Butylbenzene	104-51-8	2000
Trichloroethene	79-01-6	2000
m&p-Xylene	179601-23-1	4000

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

C E R T I F I E D V A L U E S

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,1-dichloroethene		2,008.6 µg/mL	+/- 12.7358	µg/mL	Gravimetric
	CAS # 75-35-4	(Lot SHBG8609V)		+/- 90.6111	µg/mL	Unstressed
	Purity 99%			+/- 100.5146	µg/mL	Stressed
2	Methylene chloride (dichloromethane)		2,007.1 µg/mL	+/- 12.7263	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBK5095)		+/- 90.5435	µg/mL	Unstressed
	Purity 99%			+/- 100.4395	µg/mL	Stressed
3	trans-1,2-Dichloroethene		2,005.2 µg/mL	+/- 12.7140	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)		+/- 90.4563	µg/mL	Unstressed
	Purity 99%			+/- 100.3427	µg/mL	Stressed
4	1,1-Dichloroethane		2,003.1 µg/mL	+/- 12.7009	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 462600)		+/- 90.3630	µg/mL	Unstressed
	Purity 99%			+/- 100.2393	µg/mL	Stressed
5	2,2-Dichloropropane		2,000.3 µg/mL	+/- 12.6830	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBT5124)		+/- 90.2358	µg/mL	Unstressed
	Purity 99%			+/- 100.0982	µg/mL	Stressed
6	cis-1,2-Dichloroethene		2,002.5 µg/mL	+/- 12.6972	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBX5945V)		+/- 90.3369	µg/mL	Unstressed
	Purity 99%			+/- 100.2103	µg/mL	Stressed
7	chloroform		2,004.8 µg/mL	+/- 12.7115	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBJ9076)		+/- 90.4382	µg/mL	Unstressed
	Purity 99%			+/- 100.3227	µg/mL	Stressed

8	Bromochloromethane			2,000.7	µg/mL	+/-	12.6854	µg/mL	Gravimetric
	CAS #	74-97-5	(Lot 00008541)			+/-	90.2525	µg/mL	Unstressed
	Purity	98%				+/-	100.1167	µg/mL	Stressed
9	1,1,1-trichloroethane			2,000.9	µg/mL	+/-	12.6872	µg/mL	Gravimetric
	CAS #	71-55-6	(Lot 190123CG)			+/-	90.2652	µg/mL	Unstressed
	Purity	98%				+/-	100.1308	µg/mL	Stressed
10	1,1-Dichloropropene			2,004.3	µg/mL	+/-	12.7084	µg/mL	Gravimetric
	CAS #	563-58-6	(Lot 190122JLM)			+/-	90.4163	µg/mL	Unstressed
	Purity	99%				+/-	100.2984	µg/mL	Stressed
11	carbon tetrachloride			2,004.5	µg/mL	+/-	12.7100	µg/mL	Gravimetric
	CAS #	56-23-5	(Lot SHBJ2110)			+/-	90.4277	µg/mL	Unstressed
	Purity	99%				+/-	100.3110	µg/mL	Stressed
12	1,2-Dichloroethane			2,007.5	µg/mL	+/-	12.7290	µg/mL	Gravimetric
	CAS #	107-06-2	(Lot SHBJ6510)			+/-	90.5630	µg/mL	Unstressed
	Purity	99%				+/-	100.4612	µg/mL	Stressed
13	Benzene			2,004.2	µg/mL	+/-	12.7079	µg/mL	Gravimetric
	CAS #	71-43-2	(Lot SHBJ5344)			+/-	90.4126	µg/mL	Unstressed
	Purity	99%				+/-	100.2944	µg/mL	Stressed
14	Trichloroethene			2,003.4	µg/mL	+/-	12.7030	µg/mL	Gravimetric
	CAS #	79-01-6	(Lot SHBH1955V)			+/-	90.3781	µg/mL	Unstressed
	Purity	99%				+/-	100.2560	µg/mL	Stressed
15	1,2-Dichloropropane			2,007.7	µg/mL	+/-	12.7299	µg/mL	Gravimetric
	CAS #	78-87-5	(Lot BCBR0882V)			+/-	90.5690	µg/mL	Unstressed
	Purity	99%				+/-	100.4678	µg/mL	Stressed
16	bromodichloromethane			2,016.1	µg/mL	+/-	12.7833	µg/mL	Gravimetric
	CAS #	75-27-4	(Lot MKCF8470)			+/-	90.9495	µg/mL	Unstressed
	Purity	99%				+/-	100.8899	µg/mL	Stressed
17	Dibromomethane			2,002.3	µg/mL	+/-	12.6960	µg/mL	Gravimetric
	CAS #	74-95-3	(Lot 10201030)			+/-	90.3278	µg/mL	Unstressed
	Purity	99%				+/-	100.2003	µg/mL	Stressed
18	cis-1,3-Dichloropropene			2,005.6	µg/mL	+/-	12.7170	µg/mL	Gravimetric
	CAS #	10061-01-5	(Lot 25076)			+/-	90.4773	µg/mL	Unstressed
	Purity	99%				+/-	100.3661	µg/mL	Stressed
19	Toluene			2,000.7	µg/mL	+/-	12.6856	µg/mL	Gravimetric
	CAS #	108-88-3	(Lot SHBJ5659)			+/-	90.2539	µg/mL	Unstressed
	Purity	99%				+/-	100.1182	µg/mL	Stressed
20	trans-1,3-Dichloropropene			2,004.3	µg/mL	+/-	12.7083	µg/mL	Gravimetric
	CAS #	10061-02-6	(Lot C797620)			+/-	90.4155	µg/mL	Unstressed
	Purity	98%				+/-	100.2975	µg/mL	Stressed
21	1,1,2-Trichloroethane			2,007.0	µg/mL	+/-	12.7254	µg/mL	Gravimetric
	CAS #	79-00-5	(Lot FGB01)			+/-	90.5375	µg/mL	Unstressed
	Purity	99%				+/-	100.4328	µg/mL	Stressed
22	1,3-Dichloropropane			2,001.5	µg/mL	+/-	12.6909	µg/mL	Gravimetric
	CAS #	142-28-9	(Lot BCBG2162V)			+/-	90.2918	µg/mL	Unstressed
	Purity	99%				+/-	100.1603	µg/mL	Stressed
23	Tetrachloroethene			2,005.1	µg/mL	+/-	12.7136	µg/mL	Gravimetric
	CAS #	127-18-4	(Lot SHBH9691)			+/-	90.4533	µg/mL	Unstressed
	Purity	99%				+/-	100.3394	µg/mL	Stressed

24	dibromochloromethane			2,003.7	µg/mL	+/-	12.7046	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCC0877)				+/-	90.3890	µg/mL	Unstressed
	Purity 98%					+/-	100.2681	µg/mL	Stressed
25	1,2-Dibromoethane (EDB)			2,000.7	µg/mL	+/-	12.6858	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBP2268V)				+/-	90.2557	µg/mL	Unstressed
	Purity 99%					+/-	100.1202	µg/mL	Stressed
26	Chlorobenzene			2,005.3	µg/mL	+/-	12.7147	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBH4459V)				+/-	90.4608	µg/mL	Unstressed
	Purity 99%					+/-	100.3477	µg/mL	Stressed
27	1,1,1,2-Tetrachloroethane			2,001.7	µg/mL	+/-	12.6919	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)				+/-	90.2990	µg/mL	Unstressed
	Purity 99%					+/-	100.1683	µg/mL	Stressed
28	Ethylbenzene			2,001.6	µg/mL	+/-	12.6917	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBJ4278)				+/-	90.2972	µg/mL	Unstressed
	Purity 99%					+/-	100.1663	µg/mL	Stressed
29	m-Xylene			2,003.4	µg/mL	+/-	12.7031	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBJ2338)				+/-	90.3784	µg/mL	Unstressed
	Purity 99%					+/-	100.2563	µg/mL	Stressed
30	p-Xylene			2,001.8	µg/mL	+/-	12.6927	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBJ7329)				+/-	90.3044	µg/mL	Unstressed
	Purity 99%					+/-	100.1743	µg/mL	Stressed
31	o-Xylene			2,004.6	µg/mL	+/-	12.7102	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH7231)				+/-	90.4289	µg/mL	Unstressed
	Purity 99%					+/-	100.3124	µg/mL	Stressed
32	Styrene			2,001.4	µg/mL	+/-	12.6899	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCC9766)				+/-	90.2845	µg/mL	Unstressed
	Purity 99%					+/-	100.1522	µg/mL	Stressed
33	Isopropylbenzene (cumene)			2,001.3	µg/mL	+/-	12.6894	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot P15E008)				+/-	90.2809	µg/mL	Unstressed
	Purity 99%					+/-	100.1482	µg/mL	Stressed
34	bromoform			2,004.6	µg/mL	+/-	12.7102	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBJ4835)				+/-	90.4292	µg/mL	Unstressed
	Purity 99%					+/-	100.3127	µg/mL	Stressed
35	1,1,2,2-Tetrachloroethane			2,005.5	µg/mL	+/-	12.7161	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)				+/-	90.4713	µg/mL	Unstressed
	Purity 99%					+/-	100.3594	µg/mL	Stressed
36	1,2,3-Trichloropropane			2,002.0	µg/mL	+/-	12.6942	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)				+/-	90.3152	µg/mL	Unstressed
	Purity 99%					+/-	100.1863	µg/mL	Stressed
37	n-Propylbenzene			2,001.2	µg/mL	+/-	12.6891	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot WXBC3346V)				+/-	90.2791	µg/mL	Unstressed
	Purity 99%					+/-	100.1462	µg/mL	Stressed
38	Bromobenzene			2,003.2	µg/mL	+/-	12.7016	µg/mL	Gravimetric
	CAS # 108-86-1	(Lot WXBC5147V)				+/-	90.3675	µg/mL	Unstressed
	Purity 99%					+/-	100.2443	µg/mL	Stressed
39	1,3,5-Trimethylbenzene			2,001.4	µg/mL	+/-	12.6904	µg/mL	Gravimetric
	CAS # 108-67-8	(Lot BCBS7648V)				+/-	90.2881	µg/mL	Unstressed
	Purity 99%					+/-	100.1562	µg/mL	Stressed

40	2-Chlorotoluene		2,003.5	µg/mL	+/-	12.7033	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKBW5554V)			+/-	90.3802	µg/mL	Unstressed
	Purity 99%				+/-	100.2583	µg/mL	Stressed
41	4-Chlorotoluene		2,002.8	µg/mL	+/-	12.6990	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKBL7753V)			+/-	90.3495	µg/mL	Unstressed
	Purity 99%				+/-	100.2243	µg/mL	Stressed
42	tert-Butylbenzene		2,002.2	µg/mL	+/-	12.6950	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot STBD6954V)			+/-	90.3206	µg/mL	Unstressed
	Purity 99%				+/-	100.1923	µg/mL	Stressed
43	1,2,4-Trimethylbenzene		2,001.6	µg/mL	+/-	12.6911	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot MKBJ6229V)			+/-	90.2932	µg/mL	Unstressed
	Purity 98%				+/-	100.1619	µg/mL	Stressed
44	sec-Butylbenzene		2,002.0	µg/mL	+/-	12.6939	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKBR9260V)			+/-	90.3134	µg/mL	Unstressed
	Purity 99%				+/-	100.1843	µg/mL	Stressed
45	p-Isopropyltoluene (p-Cymene)		2,000.4	µg/mL	+/-	12.6835	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKCB7536)			+/-	90.2394	µg/mL	Unstressed
	Purity 99%				+/-	100.1022	µg/mL	Stressed
46	1,3-Dichlorobenzene		2,008.3	µg/mL	+/-	12.7339	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBQ7100V)			+/-	90.5976	µg/mL	Unstressed
	Purity 99%				+/-	100.4995	µg/mL	Stressed
47	1,4-Dichlorobenzene		2,000.4	µg/mL	+/-	12.6836	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS4401V)			+/-	90.2397	µg/mL	Unstressed
	Purity 99%				+/-	100.1025	µg/mL	Stressed
48	n-Butylbenzene		2,000.3	µg/mL	+/-	12.6833	µg/mL	Gravimetric
	CAS # 104-51-8	(Lot 09804AE)			+/-	90.2376	µg/mL	Unstressed
	Purity 99%				+/-	100.1002	µg/mL	Stressed
49	1,2-Dichlorobenzene		2,005.0	µg/mL	+/-	12.7128	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBG3111V)			+/-	90.4472	µg/mL	Unstressed
	Purity 99%				+/-	100.3327	µg/mL	Stressed
50	1,2-Dibromo-3-chloropropane		2,000.1	µg/mL	+/-	12.6820	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot FBL01)			+/-	90.2286	µg/mL	Unstressed
	Purity 99%				+/-	100.0902	µg/mL	Stressed
51	1,2,4-Trichlorobenzene		2,002.0	µg/mL	+/-	12.6939	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBJ9215)			+/-	90.3134	µg/mL	Unstressed
	Purity 99%				+/-	100.1843	µg/mL	Stressed
52	Hexachlorobutadiene		2,004.0	µg/mL	+/-	12.7064	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	90.4018	µg/mL	Unstressed
	Purity 99%				+/-	100.2824	µg/mL	Stressed
53	Naphthalene		2,003.9	µg/mL	+/-	12.7061	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBZ8680V)			+/-	90.4000	µg/mL	Unstressed
	Purity 99%				+/-	100.2804	µg/mL	Stressed
54	1,2,3-Trichlorobenzene		2,003.9	µg/mL	+/-	12.7061	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)			+/-	90.4000	µg/mL	Unstressed
	Purity 99%				+/-	100.2804	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

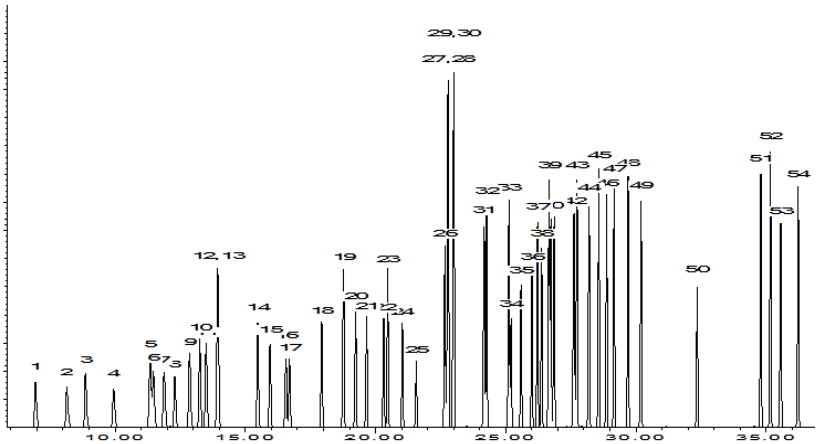
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Date Mixed: 12-Mar-2019 **Balance:** 1126342624

Fang-Yun Lo - QC Analyst

Date Passed: 20-Mar-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Analytical Standard Record

EPA Region 9 Laboratory

1937063

Description:	VOA 502.2 CAL 2000 MEGA MIX, Stock	**Expires:**	03/31/21
Standard Type:	Other Solution	**Prepared:**	09/10/19
Solvent:	MeOH	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	09/10/19 13:18 by YNB
Vendor:	Restek	**Lot Numbe**	A0146957

RESTEK, catalog # 30431, Barcode AU011279

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	2000
Bromobenzene	108-86-1	2000
Benzene	71-43-2	2000
4-Chlorotoluene	106-43-4	2000
2-Chlorotoluene	95-49-8	2000
2,2-Dichloropropane	594-20-7	2000
1,4-Dichlorobenzene	106-46-7	2000
1,3-Dichloropropane	142-28-9	2000
1,3-Dichlorobenzene	541-73-1	2000
1,3,5-Trimethylbenzene	108-67-8	2000
1,2-Dichloropropane	78-87-5	2000
1,1,1,2-Tetrachloroethane	630-20-6	2000
1,2-Dichlorobenzene	95-50-1	2000
Bromoform	75-25-2	2000
1,2-Dibromo-3-chloropropane	96-12-8	2000
1,2,4-Trimethylbenzene	95-63-6	2000
1,2,4-Trichlorobenzene	120-82-1	2000
1,2,3-Trichloropropane	96-18-4	2000
1,2,3-Trichlorobenzene	87-61-6	2000
1,1-Dichloropropene	563-58-6	2000
1,1-Dichloroethene	75-35-4	2000
1,1-Dichloroethane	75-34-3	2000
1,1,2-Trichloroethane	79-00-5	2000
1,1,2,2-Tetrachloroethane	79-34-5	2000
1,1,1-Trichloroethane	71-55-6	2000
1,2-Dichloroethane	107-06-2	2000
Hexachlorobutadiene	87-68-3	2000
trans-1,3-Dichloropropene	10061-02-6	2000
trans-1,2-Dichloroethene	156-60-5	2000
Toluene	108-88-3	2000

Analytical Standard Record

EPA Region 9 Laboratory

1937063

Tetrachloroethene	127-18-4	2000
tert-Butylbenzene	98-06-6	2000
Styrene	100-42-5	2000
sec-Butylbenzene	135-98-8	2000
Propylbenzene	103-65-1	2000
p-Isopropyltoluene	99-87-6	2000
o-Xylene	95-47-6	2000
Naphthalene	91-20-3	2000
Bromochloromethane	74-97-5	2000
Isopropylbenzene	98-82-8	2000
Bromodichloromethane	75-27-4	2000
Ethylbenzene	100-41-4	2000
Dichloromethane	75-09-2	2000
Dibromomethane	74-95-3	2000
cis-1,3-Dichloropropene	10061-01-5	2000
cis-1,2-Dichloroethene	156-59-2	2000
Chloroform	67-66-3	2000
Chlorodibromomethane	124-48-1	2000
Chlorobenzene	108-90-7	2000
Carbon tetrachloride	56-23-5	2000
Butylbenzene	104-51-8	2000
Trichloroethene	79-01-6	2000
m&p-Xylene	179601-23-1	4000

CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30431 **Lot No.:** A0146957

Description : 502.2 CAL2000 Mega-Mix

502.2 CAL2000 Mega-Mix 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,1-dichloroethene	2,008.6 µg/mL	+/- 12.7358	µg/mL	Gravimetric
	CAS # 75-35-4 (Lot SHBG8609V)		+/- 90.6111	µg/mL	Unstressed
	Purity 99%		+/- 100.5146	µg/mL	Stressed
2	Methylene chloride (dichloromethane)	2,007.1 µg/mL	+/- 12.7263	µg/mL	Gravimetric
	CAS # 75-09-2 (Lot SHBK5095)		+/- 90.5435	µg/mL	Unstressed
	Purity 99%		+/- 100.4395	µg/mL	Stressed
3	trans-1,2-Dichloroethene	2,005.2 µg/mL	+/- 12.7140	µg/mL	Gravimetric
	CAS # 156-60-5 (Lot MKBH9850V)		+/- 90.4563	µg/mL	Unstressed
	Purity 99%		+/- 100.3427	µg/mL	Stressed
4	1,1-Dichloroethane	2,003.1 µg/mL	+/- 12.7009	µg/mL	Gravimetric
	CAS # 75-34-3 (Lot 462600)		+/- 90.3630	µg/mL	Unstressed
	Purity 99%		+/- 100.2393	µg/mL	Stressed
5	2,2-Dichloropropane	2,000.3 µg/mL	+/- 12.6830	µg/mL	Gravimetric
	CAS # 594-20-7 (Lot BCBT5124)		+/- 90.2358	µg/mL	Unstressed
	Purity 99%		+/- 100.0982	µg/mL	Stressed
6	cis-1,2-Dichloroethene	2,002.5 µg/mL	+/- 12.6972	µg/mL	Gravimetric
	CAS # 156-59-2 (Lot MKBX5945V)		+/- 90.3369	µg/mL	Unstressed
	Purity 99%		+/- 100.2103	µg/mL	Stressed
7	chloroform	2,004.8 µg/mL	+/- 12.7115	µg/mL	Gravimetric
	CAS # 67-66-3 (Lot SHBJ9076)		+/- 90.4382	µg/mL	Unstressed
	Purity 99%		+/- 100.3227	µg/mL	Stressed

8	Bromochloromethane			2,000.7	µg/mL	+/-	12.6854	µg/mL	Gravimetric
	CAS #	74-97-5	(Lot 00008541)			+/-	90.2525	µg/mL	Unstressed
	Purity	98%				+/-	100.1167	µg/mL	Stressed
9	1,1,1-trichloroethane			2,000.9	µg/mL	+/-	12.6872	µg/mL	Gravimetric
	CAS #	71-55-6	(Lot 190123CG)			+/-	90.2652	µg/mL	Unstressed
	Purity	98%				+/-	100.1308	µg/mL	Stressed
10	1,1-Dichloropropene			2,004.3	µg/mL	+/-	12.7084	µg/mL	Gravimetric
	CAS #	563-58-6	(Lot 190122JLM)			+/-	90.4163	µg/mL	Unstressed
	Purity	99%				+/-	100.2984	µg/mL	Stressed
11	carbon tetrachloride			2,004.5	µg/mL	+/-	12.7100	µg/mL	Gravimetric
	CAS #	56-23-5	(Lot SHBJ2110)			+/-	90.4277	µg/mL	Unstressed
	Purity	99%				+/-	100.3110	µg/mL	Stressed
12	1,2-Dichloroethane			2,007.5	µg/mL	+/-	12.7290	µg/mL	Gravimetric
	CAS #	107-06-2	(Lot SHBJ6510)			+/-	90.5630	µg/mL	Unstressed
	Purity	99%				+/-	100.4612	µg/mL	Stressed
13	Benzene			2,004.2	µg/mL	+/-	12.7079	µg/mL	Gravimetric
	CAS #	71-43-2	(Lot SHBJ5344)			+/-	90.4126	µg/mL	Unstressed
	Purity	99%				+/-	100.2944	µg/mL	Stressed
14	Trichloroethene			2,003.4	µg/mL	+/-	12.7030	µg/mL	Gravimetric
	CAS #	79-01-6	(Lot SHBH1955V)			+/-	90.3781	µg/mL	Unstressed
	Purity	99%				+/-	100.2560	µg/mL	Stressed
15	1,2-Dichloropropane			2,007.7	µg/mL	+/-	12.7299	µg/mL	Gravimetric
	CAS #	78-87-5	(Lot BCBR0882V)			+/-	90.5690	µg/mL	Unstressed
	Purity	99%				+/-	100.4678	µg/mL	Stressed
16	bromodichloromethane			2,016.1	µg/mL	+/-	12.7833	µg/mL	Gravimetric
	CAS #	75-27-4	(Lot MKCF8470)			+/-	90.9495	µg/mL	Unstressed
	Purity	99%				+/-	100.8899	µg/mL	Stressed
17	Dibromomethane			2,002.3	µg/mL	+/-	12.6960	µg/mL	Gravimetric
	CAS #	74-95-3	(Lot 10201030)			+/-	90.3278	µg/mL	Unstressed
	Purity	99%				+/-	100.2003	µg/mL	Stressed
18	cis-1,3-Dichloropropene			2,005.6	µg/mL	+/-	12.7170	µg/mL	Gravimetric
	CAS #	10061-01-5	(Lot 25076)			+/-	90.4773	µg/mL	Unstressed
	Purity	99%				+/-	100.3661	µg/mL	Stressed
19	Toluene			2,000.7	µg/mL	+/-	12.6856	µg/mL	Gravimetric
	CAS #	108-88-3	(Lot SHBJ5659)			+/-	90.2539	µg/mL	Unstressed
	Purity	99%				+/-	100.1182	µg/mL	Stressed
20	trans-1,3-Dichloropropene			2,004.3	µg/mL	+/-	12.7083	µg/mL	Gravimetric
	CAS #	10061-02-6	(Lot C797620)			+/-	90.4155	µg/mL	Unstressed
	Purity	98%				+/-	100.2975	µg/mL	Stressed
21	1,1,2-Trichloroethane			2,007.0	µg/mL	+/-	12.7254	µg/mL	Gravimetric
	CAS #	79-00-5	(Lot FGB01)			+/-	90.5375	µg/mL	Unstressed
	Purity	99%				+/-	100.4328	µg/mL	Stressed
22	1,3-Dichloropropane			2,001.5	µg/mL	+/-	12.6909	µg/mL	Gravimetric
	CAS #	142-28-9	(Lot BCBG2162V)			+/-	90.2918	µg/mL	Unstressed
	Purity	99%				+/-	100.1603	µg/mL	Stressed
23	Tetrachloroethene			2,005.1	µg/mL	+/-	12.7136	µg/mL	Gravimetric
	CAS #	127-18-4	(Lot SHBH9691)			+/-	90.4533	µg/mL	Unstressed
	Purity	99%				+/-	100.3394	µg/mL	Stressed

24	dibromochloromethane			2,003.7	µg/mL	+/-	12.7046	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCC0877)				+/-	90.3890	µg/mL	Unstressed
	Purity 98%					+/-	100.2681	µg/mL	Stressed
25	1,2-Dibromoethane (EDB)			2,000.7	µg/mL	+/-	12.6858	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBP2268V)				+/-	90.2557	µg/mL	Unstressed
	Purity 99%					+/-	100.1202	µg/mL	Stressed
26	Chlorobenzene			2,005.3	µg/mL	+/-	12.7147	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBH4459V)				+/-	90.4608	µg/mL	Unstressed
	Purity 99%					+/-	100.3477	µg/mL	Stressed
27	1,1,1,2-Tetrachloroethane			2,001.7	µg/mL	+/-	12.6919	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)				+/-	90.2990	µg/mL	Unstressed
	Purity 99%					+/-	100.1683	µg/mL	Stressed
28	Ethylbenzene			2,001.6	µg/mL	+/-	12.6917	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBJ4278)				+/-	90.2972	µg/mL	Unstressed
	Purity 99%					+/-	100.1663	µg/mL	Stressed
29	m-Xylene			2,003.4	µg/mL	+/-	12.7031	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBJ2338)				+/-	90.3784	µg/mL	Unstressed
	Purity 99%					+/-	100.2563	µg/mL	Stressed
30	p-Xylene			2,001.8	µg/mL	+/-	12.6927	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBJ7329)				+/-	90.3044	µg/mL	Unstressed
	Purity 99%					+/-	100.1743	µg/mL	Stressed
31	o-Xylene			2,004.6	µg/mL	+/-	12.7102	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH7231)				+/-	90.4289	µg/mL	Unstressed
	Purity 99%					+/-	100.3124	µg/mL	Stressed
32	Styrene			2,001.4	µg/mL	+/-	12.6899	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCC9766)				+/-	90.2845	µg/mL	Unstressed
	Purity 99%					+/-	100.1522	µg/mL	Stressed
33	Isopropylbenzene (cumene)			2,001.3	µg/mL	+/-	12.6894	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot P15E008)				+/-	90.2809	µg/mL	Unstressed
	Purity 99%					+/-	100.1482	µg/mL	Stressed
34	bromoform			2,004.6	µg/mL	+/-	12.7102	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBJ4835)				+/-	90.4292	µg/mL	Unstressed
	Purity 99%					+/-	100.3127	µg/mL	Stressed
35	1,1,2,2-Tetrachloroethane			2,005.5	µg/mL	+/-	12.7161	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)				+/-	90.4713	µg/mL	Unstressed
	Purity 99%					+/-	100.3594	µg/mL	Stressed
36	1,2,3-Trichloropropane			2,002.0	µg/mL	+/-	12.6942	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)				+/-	90.3152	µg/mL	Unstressed
	Purity 99%					+/-	100.1863	µg/mL	Stressed
37	n-Propylbenzene			2,001.2	µg/mL	+/-	12.6891	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot WXBC3346V)				+/-	90.2791	µg/mL	Unstressed
	Purity 99%					+/-	100.1462	µg/mL	Stressed
38	Bromobenzene			2,003.2	µg/mL	+/-	12.7016	µg/mL	Gravimetric
	CAS # 108-86-1	(Lot WXBC5147V)				+/-	90.3675	µg/mL	Unstressed
	Purity 99%					+/-	100.2443	µg/mL	Stressed
39	1,3,5-Trimethylbenzene			2,001.4	µg/mL	+/-	12.6904	µg/mL	Gravimetric
	CAS # 108-67-8	(Lot BCBS7648V)				+/-	90.2881	µg/mL	Unstressed
	Purity 99%					+/-	100.1562	µg/mL	Stressed

40	2-Chlorotoluene		2,003.5	µg/mL	+/-	12.7033	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKBW5554V)			+/-	90.3802	µg/mL	Unstressed
	Purity 99%				+/-	100.2583	µg/mL	Stressed
41	4-Chlorotoluene		2,002.8	µg/mL	+/-	12.6990	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKBL7753V)			+/-	90.3495	µg/mL	Unstressed
	Purity 99%				+/-	100.2243	µg/mL	Stressed
42	tert-Butylbenzene		2,002.2	µg/mL	+/-	12.6950	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot STBD6954V)			+/-	90.3206	µg/mL	Unstressed
	Purity 99%				+/-	100.1923	µg/mL	Stressed
43	1,2,4-Trimethylbenzene		2,001.6	µg/mL	+/-	12.6911	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot MKBJ6229V)			+/-	90.2932	µg/mL	Unstressed
	Purity 98%				+/-	100.1619	µg/mL	Stressed
44	sec-Butylbenzene		2,002.0	µg/mL	+/-	12.6939	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKBR9260V)			+/-	90.3134	µg/mL	Unstressed
	Purity 99%				+/-	100.1843	µg/mL	Stressed
45	p-Isopropyltoluene (p-Cymene)		2,000.4	µg/mL	+/-	12.6835	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKCB7536)			+/-	90.2394	µg/mL	Unstressed
	Purity 99%				+/-	100.1022	µg/mL	Stressed
46	1,3-Dichlorobenzene		2,008.3	µg/mL	+/-	12.7339	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBQ7100V)			+/-	90.5976	µg/mL	Unstressed
	Purity 99%				+/-	100.4995	µg/mL	Stressed
47	1,4-Dichlorobenzene		2,000.4	µg/mL	+/-	12.6836	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS4401V)			+/-	90.2397	µg/mL	Unstressed
	Purity 99%				+/-	100.1025	µg/mL	Stressed
48	n-Butylbenzene		2,000.3	µg/mL	+/-	12.6833	µg/mL	Gravimetric
	CAS # 104-51-8	(Lot 09804AE)			+/-	90.2376	µg/mL	Unstressed
	Purity 99%				+/-	100.1002	µg/mL	Stressed
49	1,2-Dichlorobenzene		2,005.0	µg/mL	+/-	12.7128	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBG3111V)			+/-	90.4472	µg/mL	Unstressed
	Purity 99%				+/-	100.3327	µg/mL	Stressed
50	1,2-Dibromo-3-chloropropane		2,000.1	µg/mL	+/-	12.6820	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot FBL01)			+/-	90.2286	µg/mL	Unstressed
	Purity 99%				+/-	100.0902	µg/mL	Stressed
51	1,2,4-Trichlorobenzene		2,002.0	µg/mL	+/-	12.6939	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBJ9215)			+/-	90.3134	µg/mL	Unstressed
	Purity 99%				+/-	100.1843	µg/mL	Stressed
52	Hexachlorobutadiene		2,004.0	µg/mL	+/-	12.7064	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	90.4018	µg/mL	Unstressed
	Purity 99%				+/-	100.2824	µg/mL	Stressed
53	Naphthalene		2,003.9	µg/mL	+/-	12.7061	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBZ8680V)			+/-	90.4000	µg/mL	Unstressed
	Purity 99%				+/-	100.2804	µg/mL	Stressed
54	1,2,3-Trichlorobenzene		2,003.9	µg/mL	+/-	12.7061	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)			+/-	90.4000	µg/mL	Unstressed
	Purity 99%				+/-	100.2804	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

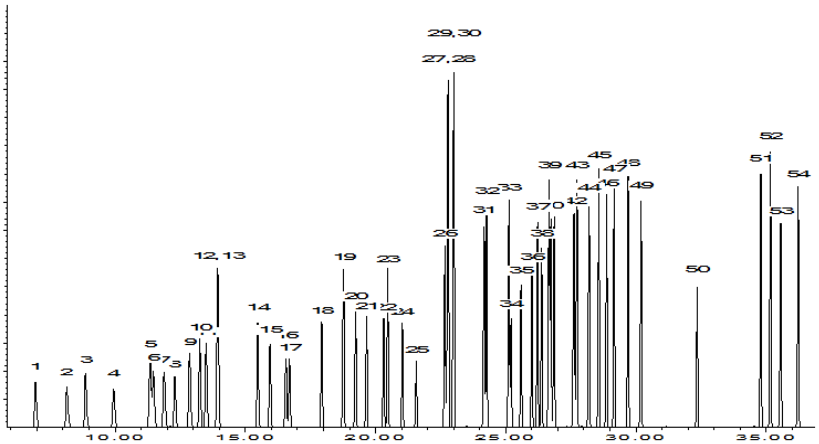
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Date Mixed: 12-Mar-2019 **Balance:** 1126342624

Date Passed: 20-Mar-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Analytical Standard Record

EPA Region 9 Laboratory

2004018

Description:	Passive indoor air Surrogate Stock	Expires:	07/21/20
Standard Type:	Calibration Standa	Prepared:	01/21/20
Solvent:	CS2	Prepared By:	Tatyana Dadiomov
Final Volume (mls):	2	Department:	Volatiles
Vials:	1	Last Edit:	01/21/20 09:38 by TD

Analyte	CAS Number	Concentration	Units
Toluene-d8	2037-26-5	10000	ug/mL

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1920044	Toluene-d8	05/15/19	** Vendor **	07/21/20	01/21/20 09:34 by TD	0.02

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2004019

Description:	Passive indoor air Internal Standard Stock	Expires:	07/21/20
Standard Type:	Internal Standard	Prepared:	01/21/20
Solvent:	CS2	Prepared By:	Tatyana Dadiomov
Final Volume (mls):	2	Department:	Volatiles
Vials:	1	Last Edit:	01/21/20 09:38 by TD

Analyte	CAS Number	Concentration	Units
2-Fluorotoluene	95-52-3	10000	ug/mL

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1639096	2-Fluorotoluene	09/22/16	** Vendor **	12/31/29	09/22/17 11:57 by TD	0.02

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2004021

Description:	Passive indoor air stock std 50	Expires:	07/21/20
Standard Type:	Analyte Spike	Prepared:	01/21/20
Solvent:	CS2	Prepared By:	Tatyana Dadiomov
Final Volume (mls):	20	Department:	Volatiles
Vials:	1	Last Edit:	01/21/20 10:10 by TD

Analyte	CAS Number	Concentration	Units
1,2-Dibromoethane (EDB)	106-93-4	50	ug/mL
1,1,1,2-Tetrachloroethane	630-20-6	50	ug/mL
Bromobenzene	108-86-1	50	ug/mL
Benzene	71-43-2	50	ug/mL
4-Chlorotoluene	106-43-4	50	ug/mL
2-Chlorotoluene	95-49-8	50	ug/mL
2,2-Dichloropropane	594-20-7	50	ug/mL
1,4-Dichlorobenzene	106-46-7	50	ug/mL
1,3-Dichloropropane	142-28-9	50	ug/mL
1,3-Dichlorobenzene	541-73-1	50	ug/mL
1,3,5-Trimethylbenzene	108-67-8	50	ug/mL
1,2-Dichloropropane	78-87-5	50	ug/mL
Bromodichloromethane	75-27-4	50	ug/mL
1,2-Dichlorobenzene	95-50-1	50	ug/mL
Bromoform	75-25-2	50	ug/mL
1,2-Dibromo-3-chloropropane	96-12-8	50	ug/mL
1,2,4-Trimethylbenzene	95-63-6	50	ug/mL
1,2,4-Trichlorobenzene	120-82-1	50	ug/mL
1,2,3-Trichloropropane	96-18-4	50	ug/mL
1,2,3-Trichlorobenzene	87-61-6	50	ug/mL
1,1-Dichloropropene	563-58-6	50	ug/mL
1,1-Dichloroethene	75-35-4	50	ug/mL
1,1-Dichloroethane	75-34-3	50	ug/mL
1,1,2-Trichloroethane	79-00-5	50	ug/mL
1,1,2,2-Tetrachloroethane	79-34-5	50	ug/mL
1,1,1-Trichloroethane	71-55-6	50	ug/mL
1,2-Dichloroethane	107-06-2	50	ug/mL
Isopropylbenzene	98-82-8	50	ug/mL
trans-1,3-Dichloropropene	10061-02-6	50	ug/mL
trans-1,2-Dichloroethene	156-60-5	50	ug/mL

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EPA Region 9 Laboratory

2004021

Toluene-d8	2037-26-5	50	ug/mL
Toluene	108-88-3	50	ug/mL
Tetrachloroethene	127-18-4	50	ug/mL
tert-Butylbenzene	98-06-6	50	ug/mL
Styrene	100-42-5	50	ug/mL
sec-Butylbenzene	135-98-8	50	ug/mL
Propylbenzene	103-65-1	50	ug/mL
p-Isopropyltoluene	99-87-6	50	ug/mL
o-Xylene	95-47-6	50	ug/mL
Bromochloromethane	74-97-5	50	ug/mL
m&p-Xylene	179601-23-1	100	ug/mL
Trichloroethene	79-01-6	50	ug/mL
Hexachlorobutadiene	87-68-3	50	ug/mL
Ethylbenzene	100-41-4	50	ug/mL
Dichloromethane	75-09-2	50	ug/mL
Dibromomethane	74-95-3	50	ug/mL
cis-1,3-Dichloropropene	10061-01-5	50	ug/mL
cis-1,2-Dichloroethene	156-59-2	50	ug/mL
Chloroform	67-66-3	50	ug/mL
Chlorodibromomethane	124-48-1	50	ug/mL
Chlorobenzene	108-90-7	50	ug/mL
Carbon tetrachloride	56-23-5	50	ug/mL
Butylbenzene	104-51-8	50	ug/mL
Naphthalene	91-20-3	50	ug/mL

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2004018	Passive indoor air Surrogate Stock	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 09:38 by TD	0.1
1937061	VOA 502.2 CAL 2000 MEGA MIX, St	09/10/19	** Vendor **	07/21/20	01/21/20 10:04 by TD	0.5

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2004023

Description:	Passive indoor air 10	Expires:	07/21/20
Standard Type:	Calibration Standa	Prepared:	01/21/20
Solvent:	CS2	Prepared By:	Tatyana Dadiomov
Final Volume (mls):	10	Department:	Volatiles
Vials:	1	Last Edit:	01/21/20 10:10 by TD

Analyte	CAS Number	Concentration	Units
1,2-Dibromoethane (EDB)	106-93-4	10	ug/mL
Bromobenzene	108-86-1	10	ug/mL
Benzene	71-43-2	10	ug/mL
4-Chlorotoluene	106-43-4	10	ug/mL
2-Fluorotoluene	95-52-3	5	ug/mL
2-Chlorotoluene	95-49-8	10	ug/mL
2,2-Dichloropropane	594-20-7	10	ug/mL
1,4-Dichlorobenzene	106-46-7	10	ug/mL
1,3-Dichloropropane	142-28-9	10	ug/mL
1,3-Dichlorobenzene	541-73-1	10	ug/mL
1,3,5-Trimethylbenzene	108-67-8	10	ug/mL
1,2-Dichloropropane	78-87-5	10	ug/mL
1,1,1,2-Tetrachloroethane	630-20-6	10	ug/mL
1,2-Dichlorobenzene	95-50-1	10	ug/mL
Bromoform	75-25-2	10	ug/mL
1,2-Dibromo-3-chloropropane	96-12-8	10	ug/mL
1,2,4-Trimethylbenzene	95-63-6	10	ug/mL
1,2,4-Trichlorobenzene	120-82-1	10	ug/mL
1,2,3-Trichloropropane	96-18-4	10	ug/mL
1,2,3-Trichlorobenzene	87-61-6	10	ug/mL
1,1-Dichloropropene	563-58-6	10	ug/mL
1,1-Dichloroethene	75-35-4	10	ug/mL
1,1-Dichloroethane	75-34-3	10	ug/mL
1,1,2-Trichloroethane	79-00-5	10	ug/mL
1,1,2,2-Tetrachloroethane	79-34-5	10	ug/mL
1,1,1-Trichloroethane	71-55-6	10	ug/mL
1,2-Dichloroethane	107-06-2	10	ug/mL
Isopropylbenzene	98-82-8	10	ug/mL
trans-1,3-Dichloropropene	10061-02-6	10	ug/mL
trans-1,2-Dichloroethene	156-60-5	10	ug/mL

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EPA Region 9 Laboratory

2004023

Toluene-d8	2037-26-5	10	ug/mL
Toluene	108-88-3	10	ug/mL
Tetrachloroethene	127-18-4	10	ug/mL
tert-Butylbenzene	98-06-6	10	ug/mL
Styrene	100-42-5	10	ug/mL
sec-Butylbenzene	135-98-8	10	ug/mL
Propylbenzene	103-65-1	10	ug/mL
p-Isopropyltoluene	99-87-6	10	ug/mL
o-Xylene	95-47-6	10	ug/mL
Bromochloromethane	74-97-5	10	ug/mL
m&p-Xylene	179601-23-1	20	ug/mL
Bromodichloromethane	75-27-4	10	ug/mL
Hexachlorobutadiene	87-68-3	10	ug/mL
Ethylbenzene	100-41-4	10	ug/mL
Dichloromethane	75-09-2	10	ug/mL
Dibromomethane	74-95-3	10	ug/mL
cis-1,3-Dichloropropene	10061-01-5	10	ug/mL
cis-1,2-Dichloroethene	156-59-2	10	ug/mL
Chloroform	67-66-3	10	ug/mL
Chlorodibromomethane	124-48-1	10	ug/mL
Chlorobenzene	108-90-7	10	ug/mL
Carbon tetrachloride	56-23-5	10	ug/mL
Butylbenzene	104-51-8	10	ug/mL
Trichloroethene	79-01-6	10	ug/mL
Naphthalene	91-20-3	10	ug/mL

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2004021	Passive indoor air stock std 50	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 10:10 by TD	2
2004019	Passive indoor air Internal Standard Sto	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 09:38 by TD	0.005

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2004024

Description:	Passive indoor air 5	Expires:	07/21/20
Standard Type:	Calibration Standa	Prepared:	01/21/20
Solvent:	CS2	Prepared By:	Tatyana Dadiomov
Final Volume (mls):	10	Department:	Volatiles
Vials:	1	Last Edit:	01/21/20 10:10 by TD

Analyte	CAS Number	Concentration	Units
1,2-Dibromoethane (EDB)	106-93-4	5	ug/mL
Bromobenzene	108-86-1	5	ug/mL
Benzene	71-43-2	5	ug/mL
4-Chlorotoluene	106-43-4	5	ug/mL
2-Fluorotoluene	95-52-3	5	ug/mL
2-Chlorotoluene	95-49-8	5	ug/mL
2,2-Dichloropropane	594-20-7	5	ug/mL
1,4-Dichlorobenzene	106-46-7	5	ug/mL
1,3-Dichloropropane	142-28-9	5	ug/mL
1,3-Dichlorobenzene	541-73-1	5	ug/mL
1,3,5-Trimethylbenzene	108-67-8	5	ug/mL
1,2-Dichloropropane	78-87-5	5	ug/mL
1,1,1,2-Tetrachloroethane	630-20-6	5	ug/mL
1,2-Dichlorobenzene	95-50-1	5	ug/mL
Bromoform	75-25-2	5	ug/mL
1,2-Dibromo-3-chloropropane	96-12-8	5	ug/mL
1,2,4-Trimethylbenzene	95-63-6	5	ug/mL
1,2,4-Trichlorobenzene	120-82-1	5	ug/mL
1,2,3-Trichloropropane	96-18-4	5	ug/mL
1,2,3-Trichlorobenzene	87-61-6	5	ug/mL
1,1-Dichloropropene	563-58-6	5	ug/mL
1,1-Dichloroethene	75-35-4	5	ug/mL
1,1-Dichloroethane	75-34-3	5	ug/mL
1,1,2-Trichloroethane	79-00-5	5	ug/mL
1,1,2,2-Tetrachloroethane	79-34-5	5	ug/mL
1,1,1-Trichloroethane	71-55-6	5	ug/mL
1,2-Dichloroethane	107-06-2	5	ug/mL
Isopropylbenzene	98-82-8	5	ug/mL
trans-1,3-Dichloropropene	10061-02-6	5	ug/mL
trans-1,2-Dichloroethene	156-60-5	5	ug/mL

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2004024

Toluene-d8	2037-26-5	5	ug/mL
Toluene	108-88-3	5	ug/mL
Tetrachloroethene	127-18-4	5	ug/mL
tert-Butylbenzene	98-06-6	5	ug/mL
Styrene	100-42-5	5	ug/mL
sec-Butylbenzene	135-98-8	5	ug/mL
Propylbenzene	103-65-1	5	ug/mL
p-Isopropyltoluene	99-87-6	5	ug/mL
o-Xylene	95-47-6	5	ug/mL
Bromochloromethane	74-97-5	5	ug/mL
m&p-Xylene	179601-23-1	10	ug/mL
Bromodichloromethane	75-27-4	5	ug/mL
Hexachlorobutadiene	87-68-3	5	ug/mL
Ethylbenzene	100-41-4	5	ug/mL
Dichloromethane	75-09-2	5	ug/mL
Dibromomethane	74-95-3	5	ug/mL
cis-1,3-Dichloropropene	10061-01-5	5	ug/mL
cis-1,2-Dichloroethene	156-59-2	5	ug/mL
Chloroform	67-66-3	5	ug/mL
Chlorodibromomethane	124-48-1	5	ug/mL
Chlorobenzene	108-90-7	5	ug/mL
Carbon tetrachloride	56-23-5	5	ug/mL
Butylbenzene	104-51-8	5	ug/mL
Trichloroethene	79-01-6	5	ug/mL
Naphthalene	91-20-3	5	ug/mL

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2004021	Passive indoor air stock std 50	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 10:10 by TD	1
2004019	Passive indoor air Internal Standard Sto	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 09:38 by TD	0.005

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2004025

Description:	Passive indoor air 1	Expires:	07/21/20
Standard Type:	Calibration Standa	Prepared:	01/21/20
Solvent:	CS2	Prepared By:	Tatyana Dadiomov
Final Volume (mls):	10	Department:	Volatiles
Vials:	1	Last Edit:	01/21/20 10:10 by TD

Analyte	CAS Number	Concentration	Units
1,2-Dibromoethane (EDB)	106-93-4	1	ug/mL
Bromobenzene	108-86-1	1	ug/mL
Benzene	71-43-2	1	ug/mL
4-Chlorotoluene	106-43-4	1	ug/mL
2-Fluorotoluene	95-52-3	5	ug/mL
2-Chlorotoluene	95-49-8	1	ug/mL
2,2-Dichloropropane	594-20-7	1	ug/mL
1,4-Dichlorobenzene	106-46-7	1	ug/mL
1,3-Dichloropropane	142-28-9	1	ug/mL
1,3-Dichlorobenzene	541-73-1	1	ug/mL
1,3,5-Trimethylbenzene	108-67-8	1	ug/mL
1,2-Dichloropropane	78-87-5	1	ug/mL
1,1,1,2-Tetrachloroethane	630-20-6	1	ug/mL
1,2-Dichlorobenzene	95-50-1	1	ug/mL
Bromoform	75-25-2	1	ug/mL
1,2-Dibromo-3-chloropropane	96-12-8	1	ug/mL
1,2,4-Trimethylbenzene	95-63-6	1	ug/mL
1,2,4-Trichlorobenzene	120-82-1	1	ug/mL
1,2,3-Trichloropropane	96-18-4	1	ug/mL
1,2,3-Trichlorobenzene	87-61-6	1	ug/mL
1,1-Dichloropropene	563-58-6	1	ug/mL
1,1-Dichloroethene	75-35-4	1	ug/mL
1,1-Dichloroethane	75-34-3	1	ug/mL
1,1,2-Trichloroethane	79-00-5	1	ug/mL
1,1,2,2-Tetrachloroethane	79-34-5	1	ug/mL
1,1,1-Trichloroethane	71-55-6	1	ug/mL
1,2-Dichloroethane	107-06-2	1	ug/mL
Isopropylbenzene	98-82-8	1	ug/mL
trans-1,3-Dichloropropene	10061-02-6	1	ug/mL
trans-1,2-Dichloroethene	156-60-5	1	ug/mL

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2004025

Toluene-d8	2037-26-5	1	ug/mL
Toluene	108-88-3	1	ug/mL
Tetrachloroethene	127-18-4	1	ug/mL
tert-Butylbenzene	98-06-6	1	ug/mL
Styrene	100-42-5	1	ug/mL
sec-Butylbenzene	135-98-8	1	ug/mL
Propylbenzene	103-65-1	1	ug/mL
p-Isopropyltoluene	99-87-6	1	ug/mL
o-Xylene	95-47-6	1	ug/mL
Bromochloromethane	74-97-5	1	ug/mL
m&p-Xylene	179601-23-1	2	ug/mL
Bromodichloromethane	75-27-4	1	ug/mL
Hexachlorobutadiene	87-68-3	1	ug/mL
Ethylbenzene	100-41-4	1	ug/mL
Dichloromethane	75-09-2	1	ug/mL
Dibromomethane	74-95-3	1	ug/mL
cis-1,3-Dichloropropene	10061-01-5	1	ug/mL
cis-1,2-Dichloroethene	156-59-2	1	ug/mL
Chloroform	67-66-3	1	ug/mL
Chlorodibromomethane	124-48-1	1	ug/mL
Chlorobenzene	108-90-7	1	ug/mL
Carbon tetrachloride	56-23-5	1	ug/mL
Butylbenzene	104-51-8	1	ug/mL
Trichloroethene	79-01-6	1	ug/mL
Naphthalene	91-20-3	1	ug/mL

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2004021	Passive indoor air stock std 50	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 10:10 by TD	0.2
2004019	Passive indoor air Internal Standard Sto	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 09:38 by TD	0.005

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2004026

Description:	Passive indoor air 0.15	Expires:	07/21/20
Standard Type:	Calibration Standa	Prepared:	01/21/20
Solvent:	CS2	Prepared By:	Tatyana Dadiomov
Final Volume (mls):	10	Department:	Volatiles
Vials:	1	Last Edit:	01/21/20 10:10 by TD

Analyte	CAS Number	Concentration	Units
1,2-Dibromoethane (EDB)	106-93-4	0.15	ug/mL
Bromobenzene	108-86-1	0.15	ug/mL
Benzene	71-43-2	0.15	ug/mL
4-Chlorotoluene	106-43-4	0.15	ug/mL
2-Fluorotoluene	95-52-3	5	ug/mL
2-Chlorotoluene	95-49-8	0.15	ug/mL
2,2-Dichloropropane	594-20-7	0.15	ug/mL
1,4-Dichlorobenzene	106-46-7	0.15	ug/mL
1,3-Dichloropropane	142-28-9	0.15	ug/mL
1,3-Dichlorobenzene	541-73-1	0.15	ug/mL
1,3,5-Trimethylbenzene	108-67-8	0.15	ug/mL
1,2-Dichloropropane	78-87-5	0.15	ug/mL
1,1,1,2-Tetrachloroethane	630-20-6	0.15	ug/mL
1,2-Dichlorobenzene	95-50-1	0.15	ug/mL
Bromoform	75-25-2	0.15	ug/mL
1,2-Dibromo-3-chloropropane	96-12-8	0.15	ug/mL
1,2,4-Trimethylbenzene	95-63-6	0.15	ug/mL
1,2,4-Trichlorobenzene	120-82-1	0.15	ug/mL
1,2,3-Trichloropropane	96-18-4	0.15	ug/mL
1,2,3-Trichlorobenzene	87-61-6	0.15	ug/mL
1,1-Dichloropropene	563-58-6	0.15	ug/mL
1,1-Dichloroethene	75-35-4	0.15	ug/mL
1,1-Dichloroethane	75-34-3	0.15	ug/mL
1,1,2-Trichloroethane	79-00-5	0.15	ug/mL
1,1,2,2-Tetrachloroethane	79-34-5	0.15	ug/mL
1,1,1-Trichloroethane	71-55-6	0.15	ug/mL
1,2-Dichloroethane	107-06-2	0.15	ug/mL
Isopropylbenzene	98-82-8	0.15	ug/mL
trans-1,3-Dichloropropene	10061-02-6	0.15	ug/mL
trans-1,2-Dichloroethene	156-60-5	0.15	ug/mL

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2004026

Toluene-d8	2037-26-5	0.15	ug/mL
Toluene	108-88-3	0.15	ug/mL
Tetrachloroethene	127-18-4	0.15	ug/mL
tert-Butylbenzene	98-06-6	0.15	ug/mL
Styrene	100-42-5	0.15	ug/mL
sec-Butylbenzene	135-98-8	0.15	ug/mL
Propylbenzene	103-65-1	0.15	ug/mL
p-Isopropyltoluene	99-87-6	0.15	ug/mL
o-Xylene	95-47-6	0.15	ug/mL
Bromochloromethane	74-97-5	0.15	ug/mL
m&p-Xylene	179601-23-1	0.3	ug/mL
Bromodichloromethane	75-27-4	0.15	ug/mL
Hexachlorobutadiene	87-68-3	0.15	ug/mL
Ethylbenzene	100-41-4	0.15	ug/mL
Dichloromethane	75-09-2	0.15	ug/mL
Dibromomethane	74-95-3	0.15	ug/mL
cis-1,3-Dichloropropene	10061-01-5	0.15	ug/mL
cis-1,2-Dichloroethene	156-59-2	0.15	ug/mL
Chloroform	67-66-3	0.15	ug/mL
Chlorodibromomethane	124-48-1	0.15	ug/mL
Chlorobenzene	108-90-7	0.15	ug/mL
Carbon tetrachloride	56-23-5	0.15	ug/mL
Butylbenzene	104-51-8	0.15	ug/mL
Trichloroethene	79-01-6	0.15	ug/mL
Naphthalene	91-20-3	0.15	ug/mL

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2004021	Passive indoor air stock std 50	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 10:10 by TD	0.03
2004019	Passive indoor air Internal Standard Sto	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 09:38 by TD	0.005

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2004027

Description:	Passive indoor air 0.05	Expires:	07/21/20
Standard Type:	Calibration Standa	Prepared:	01/21/20
Solvent:	CS2	Prepared By:	Tatyana Dadiomov
Final Volume (mls):	10	Department:	Volatiles
Vials:	1	Last Edit:	01/21/20 10:10 by TD

Analyte	CAS Number	Concentration	Units
1,2-Dibromoethane (EDB)	106-93-4	0.05	ug/mL
Bromobenzene	108-86-1	0.05	ug/mL
Benzene	71-43-2	0.05	ug/mL
4-Chlorotoluene	106-43-4	0.05	ug/mL
2-Fluorotoluene	95-52-3	5	ug/mL
2-Chlorotoluene	95-49-8	0.05	ug/mL
2,2-Dichloropropane	594-20-7	0.05	ug/mL
1,4-Dichlorobenzene	106-46-7	0.05	ug/mL
1,3-Dichloropropane	142-28-9	0.05	ug/mL
1,3-Dichlorobenzene	541-73-1	0.05	ug/mL
1,3,5-Trimethylbenzene	108-67-8	0.05	ug/mL
1,2-Dichloropropane	78-87-5	0.05	ug/mL
1,1,1,2-Tetrachloroethane	630-20-6	0.05	ug/mL
1,2-Dichlorobenzene	95-50-1	0.05	ug/mL
Bromoform	75-25-2	0.05	ug/mL
1,2-Dibromo-3-chloropropane	96-12-8	0.05	ug/mL
1,2,4-Trimethylbenzene	95-63-6	0.05	ug/mL
1,2,4-Trichlorobenzene	120-82-1	0.05	ug/mL
1,2,3-Trichloropropane	96-18-4	0.05	ug/mL
1,2,3-Trichlorobenzene	87-61-6	0.05	ug/mL
1,1-Dichloropropene	563-58-6	0.05	ug/mL
1,1-Dichloroethene	75-35-4	0.05	ug/mL
1,1-Dichloroethane	75-34-3	0.05	ug/mL
1,1,2-Trichloroethane	79-00-5	0.05	ug/mL
1,1,2,2-Tetrachloroethane	79-34-5	0.05	ug/mL
1,1,1-Trichloroethane	71-55-6	0.05	ug/mL
1,2-Dichloroethane	107-06-2	0.05	ug/mL
Isopropylbenzene	98-82-8	0.05	ug/mL
trans-1,3-Dichloropropene	10061-02-6	0.05	ug/mL
trans-1,2-Dichloroethene	156-60-5	0.05	ug/mL

Reviewed By Date

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2004027

Toluene-d8	2037-26-5	0.05	ug/mL
Toluene	108-88-3	0.05	ug/mL
Tetrachloroethene	127-18-4	0.05	ug/mL
tert-Butylbenzene	98-06-6	0.05	ug/mL
Styrene	100-42-5	0.05	ug/mL
sec-Butylbenzene	135-98-8	0.05	ug/mL
Propylbenzene	103-65-1	0.05	ug/mL
p-Isopropyltoluene	99-87-6	0.05	ug/mL
o-Xylene	95-47-6	0.05	ug/mL
Bromochloromethane	74-97-5	0.05	ug/mL
m&p-Xylene	179601-23-1	0.1	ug/mL
Bromodichloromethane	75-27-4	0.05	ug/mL
Hexachlorobutadiene	87-68-3	0.05	ug/mL
Ethylbenzene	100-41-4	0.05	ug/mL
Dichloromethane	75-09-2	0.05	ug/mL
Dibromomethane	74-95-3	0.05	ug/mL
cis-1,3-Dichloropropene	10061-01-5	0.05	ug/mL
cis-1,2-Dichloroethene	156-59-2	0.05	ug/mL
Chloroform	67-66-3	0.05	ug/mL
Chlorodibromomethane	124-48-1	0.05	ug/mL
Chlorobenzene	108-90-7	0.05	ug/mL
Carbon tetrachloride	56-23-5	0.05	ug/mL
Butylbenzene	104-51-8	0.05	ug/mL
Trichloroethene	79-01-6	0.05	ug/mL
Naphthalene	91-20-3	0.05	ug/mL

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2004021	Passive indoor air stock std 50	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 10:10 by TD	0.01
2004019	Passive indoor air Internal Standard Sto	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 09:38 by TD	0.005

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2016028

Description:	passive air WORKING BFB 50 mg/L	**Expires:**	09/15/20
Standard Type:	Other Solution	**Prepared:**	04/15/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	5	**Department:**	Volatiles
Vials:	1	**Last Edit:**	04/17/20 12:22 by TD
Vendor:	*Prepared*	**Lot Numbe**	1748145

Analyte	CAS Number	Concentration (ppm)
4-Bromofluorobenzene	460-00-4	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1740054	VOA BFB tuning mix, stock STD.	10/03/17	** Vendor **	11/30/22	10/03/17 14:37 by YNB	0.05

Analytical Standard Record

EPA Region 9 Laboratory

2017002

Description:	Passive indoor air 25	**Expires:**	07/21/20
Standard Type:	Other Solution	**Prepared:**	04/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	04/22/20 10:13 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	25
Bromobenzene	108-86-1	25
Benzene	71-43-2	25
4-Chlorotoluene	106-43-4	25
2-Fluorotoluene	95-52-3	5
2-Chlorotoluene	95-49-8	25
2,2-Dichloropropane	594-20-7	25
1,4-Dichlorobenzene	106-46-7	25
1,3-Dichloropropane	142-28-9	25
1,3-Dichlorobenzene	541-73-1	25
1,3,5-Trimethylbenzene	108-67-8	25
1,2-Dichloropropane	78-87-5	25
1,1,1,2-Tetrachloroethane	630-20-6	25
1,2-Dichlorobenzene	95-50-1	25
Bromoform	75-25-2	25
1,2-Dibromo-3-chloropropane	96-12-8	25
1,2,4-Trimethylbenzene	95-63-6	25
1,2,4-Trichlorobenzene	120-82-1	25
1,2,3-Trichloropropane	96-18-4	25
1,2,3-Trichlorobenzene	87-61-6	25
1,1-Dichloropropene	563-58-6	25
1,1-Dichloroethene	75-35-4	25
1,1-Dichloroethane	75-34-3	25
1,1,2-Trichloroethane	79-00-5	25
1,1,2,2-Tetrachloroethane	79-34-5	25
1,1,1-Trichloroethane	71-55-6	25
1,2-Dichloroethane	107-06-2	25
Isopropylbenzene	98-82-8	25
trans-1,3-Dichloropropene	10061-02-6	25
trans-1,2-Dichloroethene	156-60-5	25

Analytical Standard Record

EPA Region 9 Laboratory

2017002

Toluene-d8	2037-26-5	25
Toluene	108-88-3	25
Tetrachloroethene	127-18-4	25
tert-Butylbenzene	98-06-6	25
Styrene	100-42-5	25
sec-Butylbenzene	135-98-8	25
Propylbenzene	103-65-1	25
p-Isopropyltoluene	99-87-6	25
o-Xylene	95-47-6	25
Bromochloromethane	74-97-5	25
m&p-Xylene	179601-23-1	50
Bromodichloromethane	75-27-4	25
Hexachlorobutadiene	87-68-3	25
Ethylbenzene	100-41-4	25
Dichloromethane	75-09-2	25
Dibromomethane	74-95-3	25
cis-1,3-Dichloropropene	10061-01-5	25
cis-1,2-Dichloroethene	156-59-2	25
Chloroform	67-66-3	25
Chlorodibromomethane	124-48-1	25
Chlorobenzene	108-90-7	25
Carbon tetrachloride	56-23-5	25
Butylbenzene	104-51-8	25
Trichloroethene	79-01-6	25
Naphthalene	91-20-3	25

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2004021	Passive indoor air stock std 50	01/21/20	Tatyana Dadiomov	07/21/20	01/29/20 06:58 by TD	5
2004019	Passive indoor air Internal Standard Sto	01/21/20	Tatyana Dadiomov	07/21/20	01/21/20 09:38 by TD	0.005

Analytical Standard Record

EPA Region 9 Laboratory

2020011

Description:	Passive indoor air MRL Spike	**Expires:**	11/13/20
Standard Type:	Analyte Spike	**Prepared:**	05/13/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	2	**Department:**	Volatiles
Vials:	1	**Last Edit:**	05/13/20 10:46 by TD
Vendor:	*Prepared*	**Lot Numbe**	1748145

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	20
Bromobenzene	108-86-1	20
Benzene	71-43-2	20
4-Chlorotoluene	106-43-4	20
2-Chlorotoluene	95-49-8	20
2,2-Dichloropropane	594-20-7	20
1,4-Dichlorobenzene	106-46-7	20
1,3-Dichloropropane	142-28-9	20
1,3-Dichlorobenzene	541-73-1	20
1,3,5-Trimethylbenzene	108-67-8	20
1,2-Dichloropropane	78-87-5	20
1,1,1,2-Tetrachloroethane	630-20-6	20
1,2-Dichlorobenzene	95-50-1	20
Bromoform	75-25-2	20
1,2-Dibromo-3-chloropropane	96-12-8	20
1,2,4-Trimethylbenzene	95-63-6	20
1,2,4-Trichlorobenzene	120-82-1	20
1,2,3-Trichloropropane	96-18-4	20
1,2,3-Trichlorobenzene	87-61-6	20
1,1-Dichloropropene	563-58-6	20
1,1-Dichloroethene	75-35-4	20
1,1-Dichloroethane	75-34-3	20
1,1,2-Trichloroethane	79-00-5	20
1,1,2,2-Tetrachloroethane	79-34-5	20
1,1,1-Trichloroethane	71-55-6	20
1,2-Dichloroethane	107-06-2	20
Hexachlorobutadiene	87-68-3	20
trans-1,3-Dichloropropene	10061-02-6	20
trans-1,2-Dichloroethene	156-60-5	20
Toluene	108-88-3	20

Analytical Standard Record

EPA Region 9 Laboratory

2020011

Tetrachloroethene	127-18-4	20
tert-Butylbenzene	98-06-6	20
Styrene	100-42-5	20
sec-Butylbenzene	135-98-8	20
Propylbenzene	103-65-1	20
p-Isopropyltoluene	99-87-6	20
o-Xylene	95-47-6	20
Naphthalene	91-20-3	20
Bromochloromethane	74-97-5	20
Isopropylbenzene	98-82-8	20
Bromodichloromethane	75-27-4	20
Ethylbenzene	100-41-4	20
Dichloromethane	75-09-2	20
Dibromomethane	74-95-3	20
cis-1,3-Dichloropropene	10061-01-5	20
cis-1,2-Dichloroethene	156-59-2	20
Chloroform	67-66-3	20
Chlorodibromomethane	124-48-1	20
Chlorobenzene	108-90-7	20
Carbon tetrachloride	56-23-5	20
Butylbenzene	104-51-8	20
Trichloroethene	79-01-6	20
m&p-Xylene	179601-23-1	40

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1937062	VOA 502.2 CAL 2000 MEGA MIX, St	09/10/19	** Vendor **	11/13/20	05/13/20 10:46 by TD	0.02

Analytical Standard Record

EPA Region 9 Laboratory

2030064

Description:	Passive indoor air Surrogate Stock	**Expires:**	01/22/21
Standard Type:	Other Solution	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	2	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 08:52 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
Toluene-d8	2037-26-5	10000

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1920045	Toluene-d8	05/15/19	** Vendor **	01/22/21	07/22/20 08:49 by TD	0.02

Analytical Standard Record

EPA Region 9 Laboratory

2030065

Description:	Passive indoor air Internal Standard Stock	**Expires:**	01/22/21
Standard Type:	Other Solution	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	2	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 08:52 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
2-Fluorotoluene	95-52-3	10000

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1639096	2-Fluorotoluene	09/22/16	** Vendor **	12/31/29	09/22/17 11:57 by TD	0.02

Analytical Standard Record

EPA Region 9 Laboratory

2030066

Description:	Passive indoor air stock std 50	**Expires:**	01/22/21
Standard Type:	Analyte Spike	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	20	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 08:55 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	50
1,1,1,2-Tetrachloroethane	630-20-6	50
Bromobenzene	108-86-1	50
Benzene	71-43-2	50
4-Chlorotoluene	106-43-4	50
2-Chlorotoluene	95-49-8	50
2,2-Dichloropropane	594-20-7	50
1,4-Dichlorobenzene	106-46-7	50
1,3-Dichloropropane	142-28-9	50
1,3-Dichlorobenzene	541-73-1	50
1,3,5-Trimethylbenzene	108-67-8	50
1,2-Dichloropropane	78-87-5	50
Bromodichloromethane	75-27-4	50
1,2-Dichlorobenzene	95-50-1	50
Bromoform	75-25-2	50
1,2-Dibromo-3-chloropropane	96-12-8	50
1,2,4-Trimethylbenzene	95-63-6	50
1,2,4-Trichlorobenzene	120-82-1	50
1,2,3-Trichloropropane	96-18-4	50
1,2,3-Trichlorobenzene	87-61-6	50
1,1-Dichloropropene	563-58-6	50
1,1-Dichloroethene	75-35-4	50
1,1-Dichloroethane	75-34-3	50
1,1,2-Trichloroethane	79-00-5	50
1,1,2,2-Tetrachloroethane	79-34-5	50
1,1,1-Trichloroethane	71-55-6	50
1,2-Dichloroethane	107-06-2	50
Isopropylbenzene	98-82-8	50
trans-1,3-Dichloropropene	10061-02-6	50
trans-1,2-Dichloroethene	156-60-5	50

Analytical Standard Record

EPA Region 9 Laboratory

2030066

Toluene-d8	2037-26-5	50
Toluene	108-88-3	50
Tetrachloroethene	127-18-4	50
tert-Butylbenzene	98-06-6	50
Styrene	100-42-5	50
sec-Butylbenzene	135-98-8	50
Propylbenzene	103-65-1	50
p-Isopropyltoluene	99-87-6	50
o-Xylene	95-47-6	50
Bromochloromethane	74-97-5	50
m&p-Xylene	179601-23-1	100
Trichloroethene	79-01-6	50
Hexachlorobutadiene	87-68-3	50
Ethylbenzene	100-41-4	50
Dichloromethane	75-09-2	50
Dibromomethane	74-95-3	50
cis-1,3-Dichloropropene	10061-01-5	50
cis-1,2-Dichloroethene	156-59-2	50
Chloroform	67-66-3	50
Chlorodibromomethane	124-48-1	50
Chlorobenzene	108-90-7	50
Carbon tetrachloride	56-23-5	50
Butylbenzene	104-51-8	50
Naphthalene	91-20-3	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1937063	VOA 502.2 CAL 2000 MEGA MIX, St	09/10/19	** Vendor **	01/22/21	07/22/20 08:48 by TD	0.5
2030064	Passive indoor air Surrogate Stock	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:52 by TD	0.1

Analytical Standard Record

EPA Region 9 Laboratory

2030067

Description:	Passive air Surrogate/I.S. Working solutio	**Expires:**	01/22/21
Standard Type:	Surrogate Spike	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	25	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 08:56 by TD
Vendor:	Restek	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
Toluene-d8	2037-26-5	200
2-Fluorotoluene	95-52-3	200

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2030064	Passive indoor air Surrogate Stock	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:52 by TD	0.5
2030065	Passive indoor air Internal Standard Sto	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:52 by TD	0.5

Analytical Standard Record

EPA Region 9 Laboratory

2030068

Description:	Passive indoor air 25	**Expires:**	01/22/21
Standard Type:	Other Solution	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 08:58 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	25
Bromobenzene	108-86-1	25
Benzene	71-43-2	25
4-Chlorotoluene	106-43-4	25
2-Fluorotoluene	95-52-3	5
2-Chlorotoluene	95-49-8	25
2,2-Dichloropropane	594-20-7	25
1,4-Dichlorobenzene	106-46-7	25
1,3-Dichloropropane	142-28-9	25
1,3-Dichlorobenzene	541-73-1	25
1,3,5-Trimethylbenzene	108-67-8	25
1,2-Dichloropropane	78-87-5	25
1,1,1,2-Tetrachloroethane	630-20-6	25
1,2-Dichlorobenzene	95-50-1	25
Bromoform	75-25-2	25
1,2-Dibromo-3-chloropropane	96-12-8	25
1,2,4-Trimethylbenzene	95-63-6	25
1,2,4-Trichlorobenzene	120-82-1	25
1,2,3-Trichloropropane	96-18-4	25
1,2,3-Trichlorobenzene	87-61-6	25
1,1-Dichloropropene	563-58-6	25
1,1-Dichloroethene	75-35-4	25
1,1-Dichloroethane	75-34-3	25
1,1,2-Trichloroethane	79-00-5	25
1,1,2,2-Tetrachloroethane	79-34-5	25
1,1,1-Trichloroethane	71-55-6	25
1,2-Dichloroethane	107-06-2	25
Isopropylbenzene	98-82-8	25
trans-1,3-Dichloropropene	10061-02-6	25
trans-1,2-Dichloroethene	156-60-5	25

Analytical Standard Record

EPA Region 9 Laboratory

2030068

Toluene-d8	2037-26-5	25
Toluene	108-88-3	25
Tetrachloroethene	127-18-4	25
tert-Butylbenzene	98-06-6	25
Styrene	100-42-5	25
sec-Butylbenzene	135-98-8	25
Propylbenzene	103-65-1	25
p-Isopropyltoluene	99-87-6	25
o-Xylene	95-47-6	25
Bromochloromethane	74-97-5	25
m&p-Xylene	179601-23-1	50
Bromodichloromethane	75-27-4	25
Hexachlorobutadiene	87-68-3	25
Ethylbenzene	100-41-4	25
Dichloromethane	75-09-2	25
Dibromomethane	74-95-3	25
cis-1,3-Dichloropropene	10061-01-5	25
cis-1,2-Dichloroethene	156-59-2	25
Chloroform	67-66-3	25
Chlorodibromomethane	124-48-1	25
Chlorobenzene	108-90-7	25
Carbon tetrachloride	56-23-5	25
Butylbenzene	104-51-8	25
Trichloroethene	79-01-6	25
Naphthalene	91-20-3	25

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2030066	Passive indoor air stock std 50	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:55 by TD	5
2030065	Passive indoor air Internal Standard Sto	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:52 by TD	0.005

Analytical Standard Record

EPA Region 9 Laboratory

2030069

Description:	Passive indoor air 10	**Expires:**	01/22/21
Standard Type:	Other Solution	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 08:59 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	10
Bromobenzene	108-86-1	10
Benzene	71-43-2	10
4-Chlorotoluene	106-43-4	10
2-Fluorotoluene	95-52-3	5
2-Chlorotoluene	95-49-8	10
2,2-Dichloropropane	594-20-7	10
1,4-Dichlorobenzene	106-46-7	10
1,3-Dichloropropane	142-28-9	10
1,3-Dichlorobenzene	541-73-1	10
1,3,5-Trimethylbenzene	108-67-8	10
1,2-Dichloropropane	78-87-5	10
1,1,1,2-Tetrachloroethane	630-20-6	10
1,2-Dichlorobenzene	95-50-1	10
Bromoform	75-25-2	10
1,2-Dibromo-3-chloropropane	96-12-8	10
1,2,4-Trimethylbenzene	95-63-6	10
1,2,4-Trichlorobenzene	120-82-1	10
1,2,3-Trichloropropane	96-18-4	10
1,2,3-Trichlorobenzene	87-61-6	10
1,1-Dichloropropene	563-58-6	10
1,1-Dichloroethene	75-35-4	10
1,1-Dichloroethane	75-34-3	10
1,1,2-Trichloroethane	79-00-5	10
1,1,2,2-Tetrachloroethane	79-34-5	10
1,1,1-Trichloroethane	71-55-6	10
1,2-Dichloroethane	107-06-2	10
Isopropylbenzene	98-82-8	10
trans-1,3-Dichloropropene	10061-02-6	10
trans-1,2-Dichloroethene	156-60-5	10

Analytical Standard Record

EPA Region 9 Laboratory

2030069

Toluene-d8	2037-26-5	10
Toluene	108-88-3	10
Tetrachloroethene	127-18-4	10
tert-Butylbenzene	98-06-6	10
Styrene	100-42-5	10
sec-Butylbenzene	135-98-8	10
Propylbenzene	103-65-1	10
p-Isopropyltoluene	99-87-6	10
o-Xylene	95-47-6	10
Bromochloromethane	74-97-5	10
m&p-Xylene	179601-23-1	20
Bromodichloromethane	75-27-4	10
Hexachlorobutadiene	87-68-3	10
Ethylbenzene	100-41-4	10
Dichloromethane	75-09-2	10
Dibromomethane	74-95-3	10
cis-1,3-Dichloropropene	10061-01-5	10
cis-1,2-Dichloroethene	156-59-2	10
Chloroform	67-66-3	10
Chlorodibromomethane	124-48-1	10
Chlorobenzene	108-90-7	10
Carbon tetrachloride	56-23-5	10
Butylbenzene	104-51-8	10
Trichloroethene	79-01-6	10
Naphthalene	91-20-3	10

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2030066	Passive indoor air stock std 50	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:55 by TD	2
2030065	Passive indoor air Internal Standard Sto	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:52 by TD	0.005

Analytical Standard Record

EPA Region 9 Laboratory

2030070

Description:	Passive indoor air 5	**Expires:**	01/22/21
Standard Type:	Other Solution	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 08:59 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	5
Bromobenzene	108-86-1	5
Benzene	71-43-2	5
4-Chlorotoluene	106-43-4	5
2-Fluorotoluene	95-52-3	5
2-Chlorotoluene	95-49-8	5
2,2-Dichloropropane	594-20-7	5
1,4-Dichlorobenzene	106-46-7	5
1,3-Dichloropropane	142-28-9	5
1,3-Dichlorobenzene	541-73-1	5
1,3,5-Trimethylbenzene	108-67-8	5
1,2-Dichloropropane	78-87-5	5
1,1,1,2-Tetrachloroethane	630-20-6	5
1,2-Dichlorobenzene	95-50-1	5
Bromoform	75-25-2	5
1,2-Dibromo-3-chloropropane	96-12-8	5
1,2,4-Trimethylbenzene	95-63-6	5
1,2,4-Trichlorobenzene	120-82-1	5
1,2,3-Trichloropropane	96-18-4	5
1,2,3-Trichlorobenzene	87-61-6	5
1,1-Dichloropropene	563-58-6	5
1,1-Dichloroethene	75-35-4	5
1,1-Dichloroethane	75-34-3	5
1,1,2-Trichloroethane	79-00-5	5
1,1,2,2-Tetrachloroethane	79-34-5	5
1,1,1-Trichloroethane	71-55-6	5
1,2-Dichloroethane	107-06-2	5
Isopropylbenzene	98-82-8	5
trans-1,3-Dichloropropene	10061-02-6	5
trans-1,2-Dichloroethene	156-60-5	5

Analytical Standard Record

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

2030074

Description:	Passive indoor air SCV	**Expires:**	09/30/20
Standard Type:	Other Solution	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 09:03 by TD
Vendor:	*Prepared*	**Lot Numbe**	1811012

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	5
1,1,1,2-Tetrachloroethane	630-20-6	5
Benzene	71-43-2	5
4-Chlorotoluene	106-43-4	5
2-Fluorotoluene	95-52-3	5
2-Chlorotoluene	95-49-8	5
2,2-Dichloropropane	594-20-7	5
1,4-Dichlorobenzene	106-46-7	5
1,3-Dichloropropane	142-28-9	5
1,3-Dichlorobenzene	541-73-1	5
1,3,5-Trimethylbenzene	108-67-8	5
1,2-Dichloropropane	78-87-5	5
Bromochloromethane	74-97-5	5
1,2-Dichlorobenzene	95-50-1	5
Bromodichloromethane	75-27-4	5
1,2-Dibromo-3-chloropropane	96-12-8	5
1,2,4-Trimethylbenzene	95-63-6	5
1,2,4-Trichlorobenzene	120-82-1	5
1,2,3-Trimethylbenzene	526-73-8	5
1,2,3-Trichloropropane	96-18-4	5
1,2,3-Trichlorobenzene	87-61-6	5
1,1-Dichloropropene	563-58-6	5
1,1-Dichloroethene	75-35-4	5
1,1-Dichloroethane	75-34-3	5
1,1,2-Trichloroethane	79-00-5	5
1,1,2,2-Tetrachloroethane	79-34-5	5
1,1,1-Trichloroethane	71-55-6	5
1,2-Dichloroethane	107-06-2	5
Isopropylbenzene	98-82-8	5
trans-1,3-Dichloropropene	10061-02-6	5

Analytical Standard Record

EPA Region 9 Laboratory

2030074

trans-1,2-Dichloroethene	156-60-5	5
Toluene-d8	2037-26-5	5
Toluene	108-88-3	5
Tetrachloroethene	127-18-4	5
tert-Butylbenzene	98-06-6	5
Styrene	100-42-5	5
sec-Butylbenzene	135-98-8	5
Propylbenzene	103-65-1	5
p-Isopropyltoluene	99-87-6	5
o-Xylene	95-47-6	5
Bromobenzene	108-86-1	5
m&p-Xylene	179601-23-1	10
Trichloroethene	79-01-6	5
Hexachlorobutadiene	87-68-3	5
Ethylbenzene	100-41-4	5
Dichloromethane	75-09-2	5
Dibromomethane	74-95-3	5
cis-1,3-Dichloropropene	10061-01-5	5
cis-1,2-Dichloroethene	156-59-2	5
Chloroform	67-66-3	5
Chlorodibromomethane	124-48-1	5
Chlorobenzene	108-90-7	5
Carbon tetrachloride	56-23-5	5
Butylbenzene	104-51-8	5
Bromoform	75-25-2	5
Naphthalene	91-20-3	5

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1843069	VOA 502/524 VOC Mix, Stock	10/24/18	** Vendor **	09/30/20	07/22/20 08:50 by TD	0.025
2030067	Passive air Surrogate/I.S. Working solu	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:56 by TD	0.25

Analytical Standard Record

EPA Region 9 Laboratory

2039024

Description:	VOA BFB tuning mix, stock STD.	**Expires:**	10/31/25
Standard Type:	Other Solution	**Prepared:**	09/24/20
Solvent:	Solvent Lot #	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	09/24/20 11:26 by EM
Vendor:	Restek	**Lot Numbe**	A0162498

RESTEK Cat No. 30003, LOT # A0162498 Bar code #AU012127

Analyte	CAS Number	Concentration (ppm)
4-Bromofluorobenzene	460-00-4	5000

CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30003 **Lot No.:** A0162498

Description : VOA Tuning Compound Mix

VOA Tuning Compound Mix 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2025 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1-Bromo-4-fluorobenzene (BFB)	5,012.0 µg/mL	+/- 29.4132 µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KO)		+/- 281.0463 µg/mL	Unstressed
	Purity 99%		+/- 287.6211 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

AU012127/2039024
AU012128/2039025
AU012129/2039026
AU012130/2039027
AU012131/2039028

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

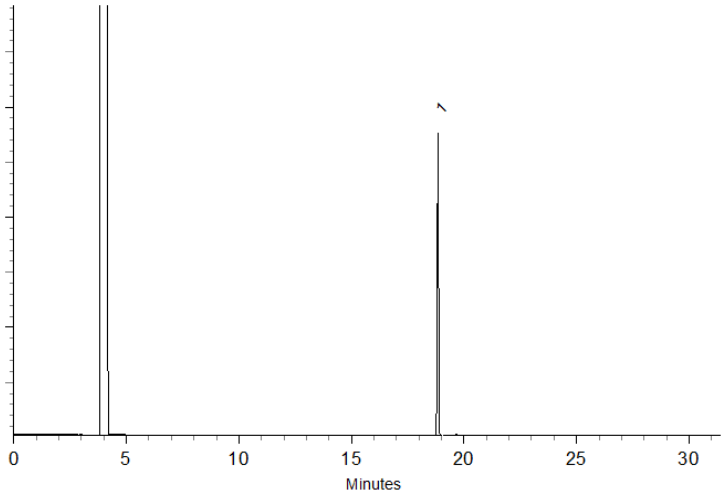
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Kylie Struble - Operations Technician I

Date Mixed: 13-Jul-2020 **Balance:** B707717271

Justine Albertson - Operations Tech-ARM QC

Date Passed: 14-Jul-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Analytical Standard Record

EPA Region 9 Laboratory

2040028

Description:	passive air WORKING BFB 50 mg/L	**Expires:**	03/30/21
Standard Type:	Other Solution	**Prepared:**	09/30/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	5	**Department:**	Volatiles
Vials:	1	**Last Edit:**	10/05/20 08:43 by TD
Vendor:	*Prepared*	**Lot Numbe**	1748145

Analyte	CAS Number	Concentration (ppm)
4-Bromofluorobenzene	460-00-4	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2039024	VOA BFB tuning mix, stock STD.	09/24/20	** Vendor **	10/31/25	09/24/20 11:26 by EM	0.05